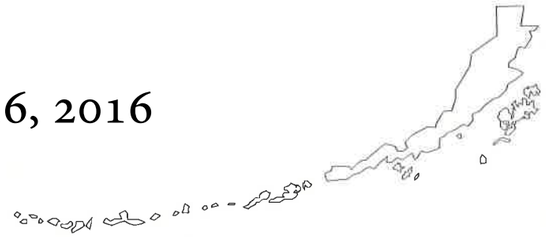
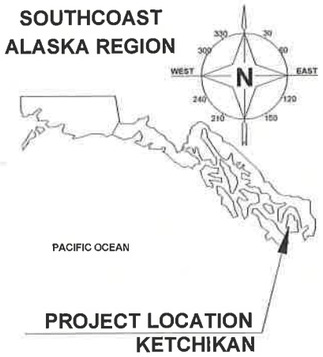
State of Alaska

Department of Transportation and Public Facilities Southcoast Region

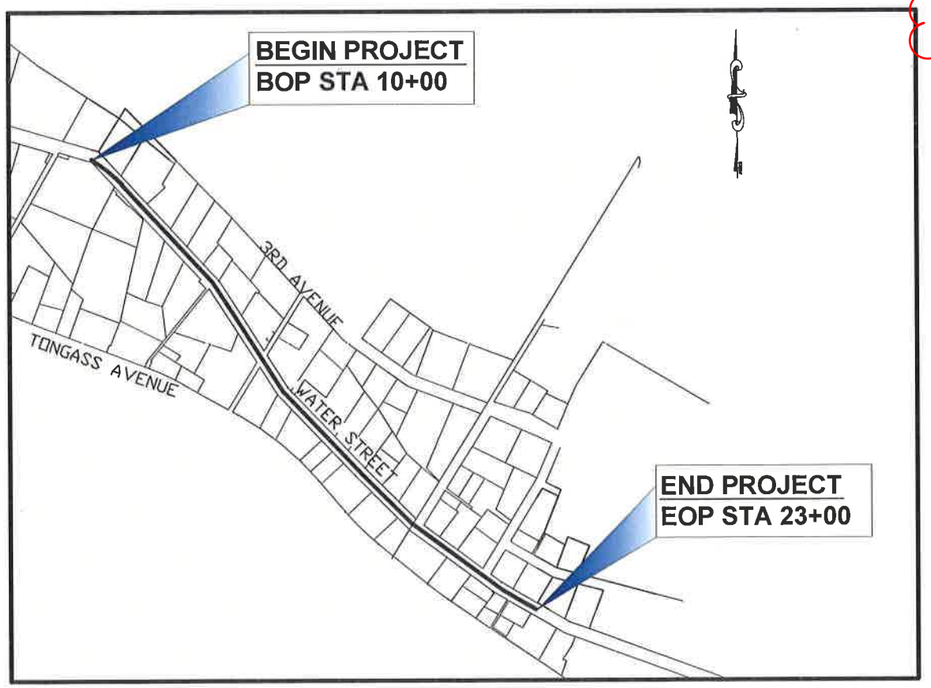
March 16, 2016





KETCHIKAN, ALASKA
WATER STREET

REHABILITATION / REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT NO BR-000S(735)~69534
68738 WATER STREET TRESTLE #2 REPLACEMENT - REIMBURSABLE



VICINITY MAP

Project Engineer : John Scott (HDR)
Contractor: Dawson Construction
Project Complete 6/28/19

AS-BUILT SET

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Engineer: John Scott Date: 9/4/2019

DESIGN DESIGNATION

FUNCTIONAL CLASS	=	URBAN LOCAL ROAD
ADT 2010	=	726
ADT 2034	=	818
DHV (10.7%) 2010	=	60
DHV (10.7%) 2034	=	70
% T	=	5.5
V	=	25
EAL	=	50,000

PROJECT SUMMARY

CDS ROUTE NO	=	291404
CDS MILEPOINT		MP 0.035 TO MP 0.574
LENGTH OF PROJECT	=	1300 FT
LENGTH OF BRIDGE	=	981 FT
LENGTH OF PAVING	=	1300 FT
WIDTH OF PAVING	=	18 FT

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

D-01.02	E-13.00	S-05.01
D-20.03	L-03.10	S-20.10
D-22.01	L-23.01	S-30.03
D-35.00	L-26.00	S-32.00
E-00.00	S-00.11	U-03.00
E-09.00	S-01.00	

INDEX

SHEET NO.	DESCRIPTION
A01	TITLE SHEET
A02	SCHEMATIC LAYOUT
A03 - A04	DEMOLITION PLANS
A05 - A07	SURVEY CONTROL SHEETS
B01	TYPICAL SECTIONS
C01 - C02	ESTIMATE OF □UANTITIES
D01 - D07	SUMMARY TABLES
E01 - E10	DETAILS
F01 - F07	PLAN & PROFILE
F08 - F19	DRIVEWAY PLAN & PROFILE
H01 - H04	SIGNING & STRIPING
H05 - H09	ILLUMINATION PLAN
N01 - N110	BRIDGE STRUCTURES
P01 - P08	EROSION & SEDIMENT CONTROL PLANS
RIGHT OF WAY PLANS ARE A SEPARATE DOCUMENT	
S01 - S16	TRAFFIC CONTROL
U01 - U56	ELECTRICAL PLANS
V01 - V16	KPU TELEPHONE
V20 - V25	CABLE TV
W01 - W09	UTILITY STORM DRAIN PLANS
W10 - W17	UTILITY SEWER PLANS
W18 - W22	UTILITY WATER PLANS
Z01 - Z03	CHURCH PARKING LOT

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET V\ADUCT\CIVIL\ACAD\1744-A01.DWG TAB:A01

Friday, No□□□ □□r 20, 2015 11:33:50 AM

PLOT: PSPACE OR MSPACE: 1□1(F)

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

STATE OF ALASKA — 49TH — Ryan D. Fredrick — No. CE 12799 — REGISTERED PROFESSIONAL ENGINEER

APPROVED: _____ 11/23/15
REGIONAL PRE-CONSTRUCTION ENGINEER — DATE
L. PAT CARROLL, P.E.

APPROVED: _____ 11/23/15
REGIONAL DIRECTOR OF DESIGN & CONSTRUCTION — DATE
CHUCK CORREA, P.E.

CERTIFIED TRUE & CORRECT AS-BUILT OF ACTUAL FIELD CONDITION:

CONSTRUCTION PROJECT MANAGER — DATE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	A01	~~292~~

GENERAL NOTES

OVERVIEW

1. ALL CONSTRUCTION OPERATIONS REQUIRED FOR THIS PROJECT SHALL REMAIN WITHIN EXISTING RIGHTS-OF-WAY AND EASEMENTS, UNLESS OTHERWISE APPROVED IN WRITING BY THE ENGINEER AND THE AFFECTED PROPERTY OWNER.
2. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO BEGINNING CONSTRUCTION. THE PERMITS SHALL BE MAINTAINED AT THE JOB SITE.
3. THE DESIGN SURVEY, WHICH ESTABLISHED EXISTING GROUND AND EXISTING IMPROVEMENTS, WAS PERFORMED FROM NOVEMBER 2012 TO DECEMBER 2012. FIELD CONDITIONS MAY HAVE CHANGED THAT ARE NOT REPRESENTED IN THIS PLANSET.
4. CONTRACTOR SHALL RECORD SURVEY NOTES FOR SUBMITTAL WITH AS-BUILT PLANS, INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD, CONTRACTOR SHALL RECORD ALL DEVIATIONS FROM THE PLANS.
5. WHEN PAVING ADJACENT TO CURB LINE, THE CONTRACTOR SHALL ENSURE THAT THE ASPHALT SURFACE BE 1/8"-1/4" HIGHER THAN THE LIP OF THE GUTTER PAN.
6. WIRE CROSSING ELEVATIONS SHOWN ON PROFILES ARE THE APPROXIMATE ELEVATION WHERE THE WIRE CROSSES THE PROPOSED CENTERLINE.
7. ROW LOCATION IS SHOWN FOR ORIENTATION PURPOSES ONLY. SEED DISTURBED AREAS NOT IMPROVED BY RAP, PAVEMENT, CONCRETE OR STRUCTURE.

EXISTING UTILITIES:

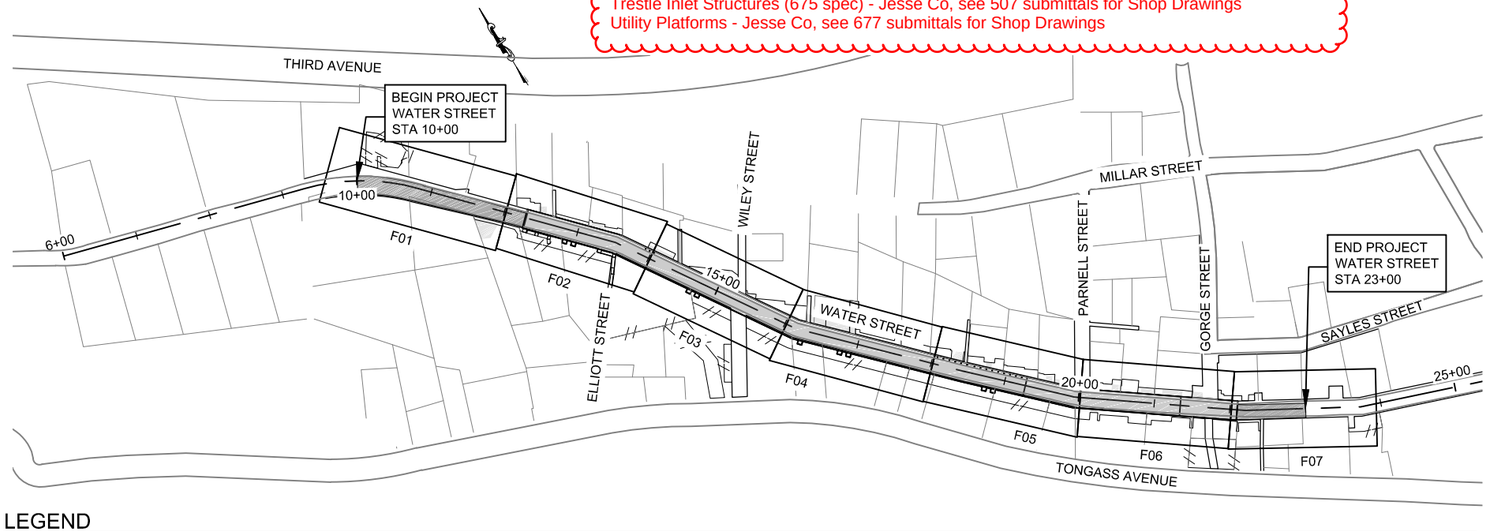
1. LOCATIONS DEPICTED FOR THE UTILITIES AND OTHER EXISTING FEATURES ARE APPROXIMATE. SOME UTILITIES HAVE BEEN LOCATED FROM AS-BUILT DRAWINGS AND SOME FROM UTILITY COMPANY LOCATES, AND THEREFORE MAY NOT BE VISIBLE. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES AND PERFORMING ANY NECESSARY VERIFICATION PRIOR TO CONSTRUCTION.
2. SHORING OF UTILITY POLES IS SUBSIDIARY TO THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
3. (OVERHEAD) UNDERGROUND ELECTRICAL AND TELECOMMUNICATION LINES (AND POLES) OCCUR WITHIN THE PROJECT AREA; CONTRACTOR SHALL COORDINATE WORK ACCORDINGLY. ALL WORK IN CLOSE PROXIMITY TO EXISTING (OVERHEAD) UNDERGROUND LINES (AND POLES) SHALL COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL STATUTES, CODES AND GUIDELINES, AND THE ELECTRICAL FACILITY CLEARANCE REQUIREMENTS OF THE GOVERNING UTILITY. HAND DIGGING IS REQUIRED WITHIN TWO FEET OF BURIED ELECTRICAL CABLE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2018

List of Major Project Specific Fabricators:

Precast Panels - Concrete Technology Corporation, see 502 submittals for Shop Drawings
Precast Girders - Concrete Technology Corporation, see 502 submittals for Shop Drawings
Reinforcing Steel (Rebar) - JD Steel, see 503 submittals for Shop Drawings
Structural Steel - Jesse Co. see 504 submittals for Shop Drawings
Soldier Piles - Richards Pipe and Steel see 505 submittals for Shop Drawings
Steel and Timber Bridge Rail - Jesse Co. see 507 submittals for Shop Drawings
Sidewalk Pedestrian Rail - Jesse Co. see 507 submittals for Shop Drawings
Pedestrian Rail - PFC, see 677 submittals for Shop Drawings
Expansion Joints - D.S. Brown, see 516 submittals for Shop Drawings
Precast Manholes and Catch Basins - Quality Concrete Products, see 604 for Shop Drawings
Wet Utility Hangers - Tripac, see 627 submittals for Shop Drawings
Street Lights - Valmont Poles, General Electric luminare, see 660 submittals for Shop Drawings
Luminare Mounting Bracket (676 spec) - Jesse Co. see 507 submittals for Shop Drawings
Freestanding Pole P10 - Valmont, see 662 submittals for Shop Drawings
Precast Electrical Vaults - Old Castle, see 662 submittals for Shop Drawings
Rock Anchors - Williams Form Engineering Corporation, see 673 submittals for Shop Drawings
Trestle Inlet Structures (675 spec) - Jesse Co, see 507 submittals for Shop Drawings
Utility Platforms - Jesse Co, see 677 submittals for Shop Drawings



ABBREVIATIONS

Δ	DELTA ANGLE
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ADT	AVERAGE DAILY TRAFFIC
ATB	ASPHALT TREATED BASE
BOP	BEGINNING OF PROJECT
CB	CATCH BASIN
CF	CUBIC FOOT
CI	CAST IRON
℄, CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CPEP	CORRUGATED POLYETHYLENE PIPE
CPPP	CORRUGATED POLYPROPYLENE PIPE
CY	CUBIC YARD
D	DEGREE OF CURVATURE, DIAMETER
DI	DUCTILE IRON
DHV	DESIGN HOURLY VOLUME
Ø	DIAMETER
DOT&PF	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
DR	DIMENSION RATIO
DW	DRIVEWAY
DWG	DRAWING
E	EAST, EASTING
EA	EACH
EAL	EQUIVALENT AXLE LOAD
EB	EASTBOUND
EG	EXISTING GROUND
EL, ELEV	ELEVATION
EOP	END OF PROJECT
ESCP	EROSION & SEDIMENT CONTROL PLAN
E/T	ELECTRIC/TELEPHONE
FF	FINISHED FLOOR
FT	FEET, FOOT
GA	GAUGE
GAL	GALLON
HDPE	HIGH DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
ID	INSIDE DIAMETER
IN	INCH
L	LENGTH
LB	POUND
LT	LEFT
MAX	MAXIMUM
ME	MATCH EXISTING
MI	MILE
MIN	MINIMUM
MP	MILEPOST
N	NORTH, NORTHING
NTS	NOT TO SCALE
OD	OUTSIDE DIAMETER
OC	ON CENTER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PG	PROFILE GRADE
PI	POINT OF INTERSECTION
POR	POINT OF ROTATION
POT	POINT ON TANGENT
PRC	POINT OF REVERSE CURVATURE
PST	PERFORATED STEEL TUBE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
R/W	RIGHT-OF-WAY
R	RADIUS
RP	RADIUS POINT
RT	RIGHT
S	SOUTH
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FEET
SHLD	SHOULDER
SS	SANITARY SEWER, STAINLESS STEEL
SSHC	STANDARD SPECS FOR HIGHWAY CONSTRUCTION
SSMH	SANITARY SEWER MANHOLE
STA	STATION
SY	SQUARE YARD
T	TANGENT, TRUCKS
% T	PERCENT TRUCKS
TYP	TYPICAL
V	DESIGN SPEED
VB	VALVE BOX
VC	VERTICAL CURVE
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
VPT	VERTICAL POINT OF TANGENCY
W	WEST, WATER
W/	WITH
WB	WESTBOUND

LEGEND

- BOLLARD/POST
- BRIDGE BENT No. (TYP.)
- BUILDING DESIGNATION (TYP.)
- CATCH BASIN
- DECIDUOUS / CONIFER / BUSH
- DRAIN (FLOOR DRAIN)
- ELECTRIC METER
- FIRE HYDRANT
- GATE POST
- GUTTER / DOWNSPOUT
- GUTTER - UNDERGROUND
- DRAINAGE FLOW ARROW
- TELEPHONE PEDESTAL
- WATER VALVE / KEYBOX
- FENCE
- RIGHT OF WAY
- EASEMENT
- TEMPORARY CONSTRUCTION EASEMENT
- GUARDRAIL
- TREE / BRUSH LINE
- OVERHEAD CABLE TELEVISION LINE
- OVERHEAD ELECTRIC LINE
- OVERHEAD ELECTRIC / TELEPHONE LINE
- SEDIMENT BARRIER
- GUY WIRE
- LIGHT POLE / LIGHT POLE W/MASTARM
- MAIL BOX
- POWER POLE / POWER POLE W/LIGHT
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- SIGN
- STORM DRAIN MANHOLE
- TELEPHONE MANHOLE
- INLET PROTECTION
- OVERHEAD TELEPHONE
- OVERHEAD TELEPHONE / TELEVISION LINE
- UNDERGROUND CABLE TELEVISION LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND FUEL LINE
- UNDERGROUND SANITARY SEWER LINE
- UNDERGROUND STORM DRAIN
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND WATER LINE

HATCH PATTERN LEGEND

- EXISTING ASPHALT
- BEDROCK
- EXISTING BUILDING
- EXISTING CONCRETE
- EXISTING DRIVEWAY - WOOD
- EXISTING GRAVEL
- EXISTING LANDING PLATFORM / DECK
- EXISTING STAIRS - BRICK
- EXISTING STAIRS - METAL / WOOD
- ROAD ASPHALT
- SIDEWALK & DRIVEWAYS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick, No. CE 12799, REGISTERED PROFESSIONAL ENGINEER — 9/4/15

DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

SCHEMATIC LAYOUT

TAB: A02 Friday, November 20, 2015 11:38:20 AM JOSEPH HORAZDOVSKY

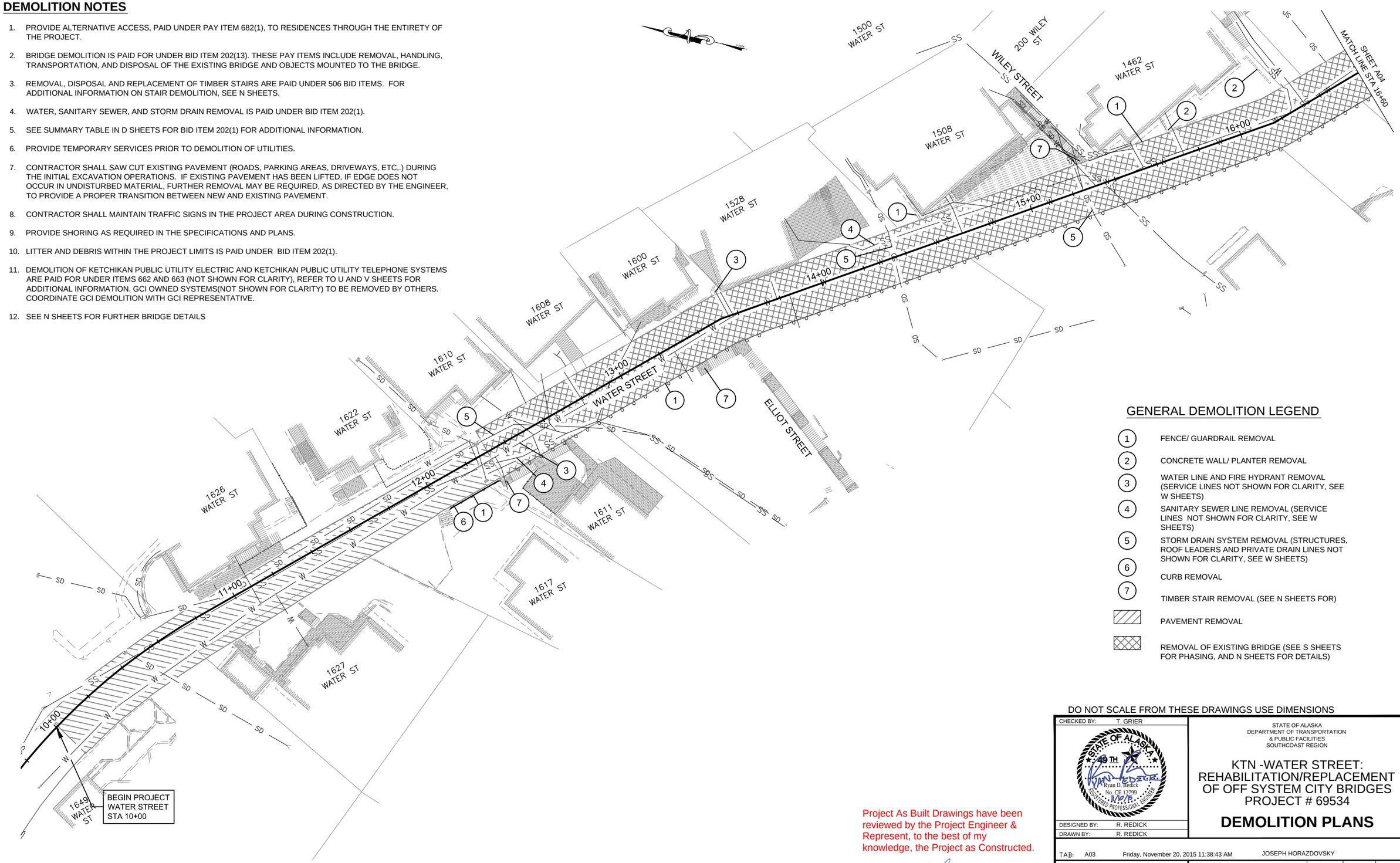
REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**A02**	A07

PATH: Z:\PROJECT\TL1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-A02.DWG

DEMOLITION NOTES

1. PROVIDE ALTERNATIVE ACCESS, PAID UNDER PAY ITEM 682(1), TO RESIDENCES THROUGH THE ENTIRETY OF THE PROJECT.
2. BRIDGE DEMOLITION IS PAID FOR UNDER BID ITEM 202(13). THESE PAY ITEMS INCLUDE REMOVAL, HANDLING, TRANSPORTATION, AND DISPOSAL OF THE EXISTING BRIDGE AND OBJECTS MOUNTED TO THE BRIDGE.
3. REMOVAL, DISPOSAL AND REPLACEMENT OF TIMBER STAIRS ARE PAID UNDER 506 BID ITEMS. FOR ADDITIONAL INFORMATION ON STAIR DEMOLITION, SEE N SHEETS.
4. WATER, SANITARY SEWER, AND STORM DRAIN REMOVAL IS PAID UNDER BID ITEM 202(1).
5. SEE SUMMARY TABLE IN D SHEETS FOR BID ITEM 202(1) FOR ADDITIONAL INFORMATION.
6. PROVIDE TEMPORARY SERVICES PRIOR TO DEMOLITION OF UTILITIES.
7. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT (ROADS, PARKING AREAS, DRIVEWAYS, ETC.,) DURING THE INITIAL EXCAVATION OPERATIONS. IF EXISTING PAVEMENT HAS BEEN LIFTED, IF EDGE DOES NOT OCCUR IN UNDISTURBED MATERIAL, FURTHER REMOVAL MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, TO PROVIDE A PROPER TRANSITION BETWEEN NEW AND EXISTING PAVEMENT.
8. CONTRACTOR SHALL MAINTAIN TRAFFIC SIGNS IN THE PROJECT AREA DURING CONSTRUCTION.
9. PROVIDE SHORING AS REQUIRED IN THE SPECIFICATIONS AND PLANS.
10. LITTER AND DEBRIS WITHIN THE PROJECT LIMITS IS PAID UNDER BID ITEM 202(1).
11. DEMOLITION OF KETCHIKAN PUBLIC UTILITY ELECTRIC AND KETCHIKAN PUBLIC UTILITY TELEPHONE SYSTEMS ARE PAID FOR UNDER ITEMS 662 AND 663 (NOT SHOWN FOR CLARITY), REFER TO U AND V SHEETS FOR ADDITIONAL INFORMATION. GCI OWNED SYSTEMS(NOT SHOWN FOR CLARITY) TO BE REMOVED BY OTHERS. COORDINATE GCI DEMOLITION WITH GCI REPRESENTATIVE.
12. SEE N SHEETS FOR FURTHER BRIDGE DETAILS



GENERAL DEMOLITION LEGEND

1	FENCE/ GUARDRAIL REMOVAL
2	CONCRETE WALL/ PLANTER REMOVAL
3	WATER LINE AND FIRE HYDRANT REMOVAL (SERVICE LINES NOT SHOWN FOR CLARITY, SEE W SHEETS)
4	SANITARY SEWER LINE REMOVAL (SERVICE LINES NOT SHOWN FOR CLARITY, SEE W SHEETS)
5	STORM DRAIN SYSTEM REMOVAL (STRUCTURES, ROOF LEADERS AND PRIVATE DRAIN LINES NOT SHOWN FOR CLARITY, SEE W SHEETS)
6	CURB REMOVAL
7	TIMBER STAIR REMOVAL (SEE N SHEETS FOR)
	PAVEMENT REMOVAL
	REMOVAL OF EXISTING BRIDGE (SEE S SHEETS FOR PHASING, AND N SHEETS FOR DETAILS)

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 11/07/15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DEMOLITION PLANS

TAB: A03 Friday, November 20, 2015 11:38:43 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	A03	A07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-A03.DWG

RFI-007 Stair demo not req'd unless contractor needs for access

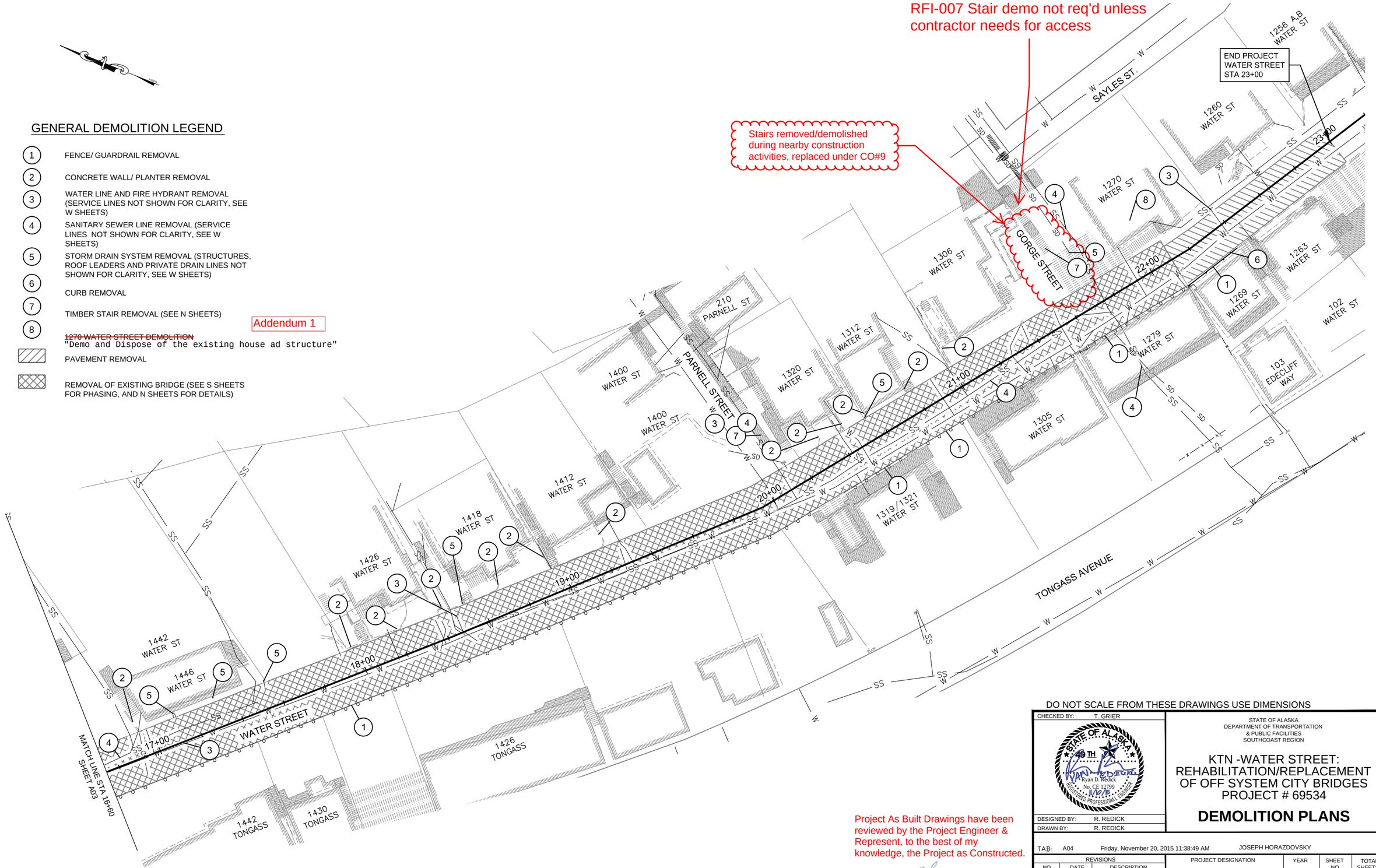
Stairs removed/demolished during nearby construction activities, replaced under CO#9

GENERAL DEMOLITION LEGEND

1. FENCE/ GUARDRAIL REMOVAL
2. CONCRETE WALL/ PLANTER REMOVAL
3. WATER LINE AND FIRE HYDRANT REMOVAL (SERVICE LINES NOT SHOWN FOR CLARITY, SEE W SHEETS)
4. SANITARY SEWER LINE REMOVAL (SERVICE LINES NOT SHOWN FOR CLARITY, SEE W SHEETS)
5. STORM DRAIN SYSTEM REMOVAL (STRUCTURES, ROOF LEADERS AND PRIVATE DRAIN LINES NOT SHOWN FOR CLARITY, SEE W SHEETS)
6. CURB REMOVAL
7. TIMBER STAIR REMOVAL (SEE N SHEETS)
8. ~~1270 WATER STREET DEMOLITION~~ "Demo and Dispose of the existing house ad structure" Addendum 1

PAVEMENT REMOVAL

REMOVAL OF EXISTING BRIDGE (SEE S SHEETS FOR PHASING, AND N SHEETS FOR DETAILS)



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY:	T. GRIER
DESIGNED BY:	R. REDICK
DRAWN BY:	R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

DEMOLITION PLANS

TAB: A04 Friday, November 20, 2015 11:38:49 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	A04	A07

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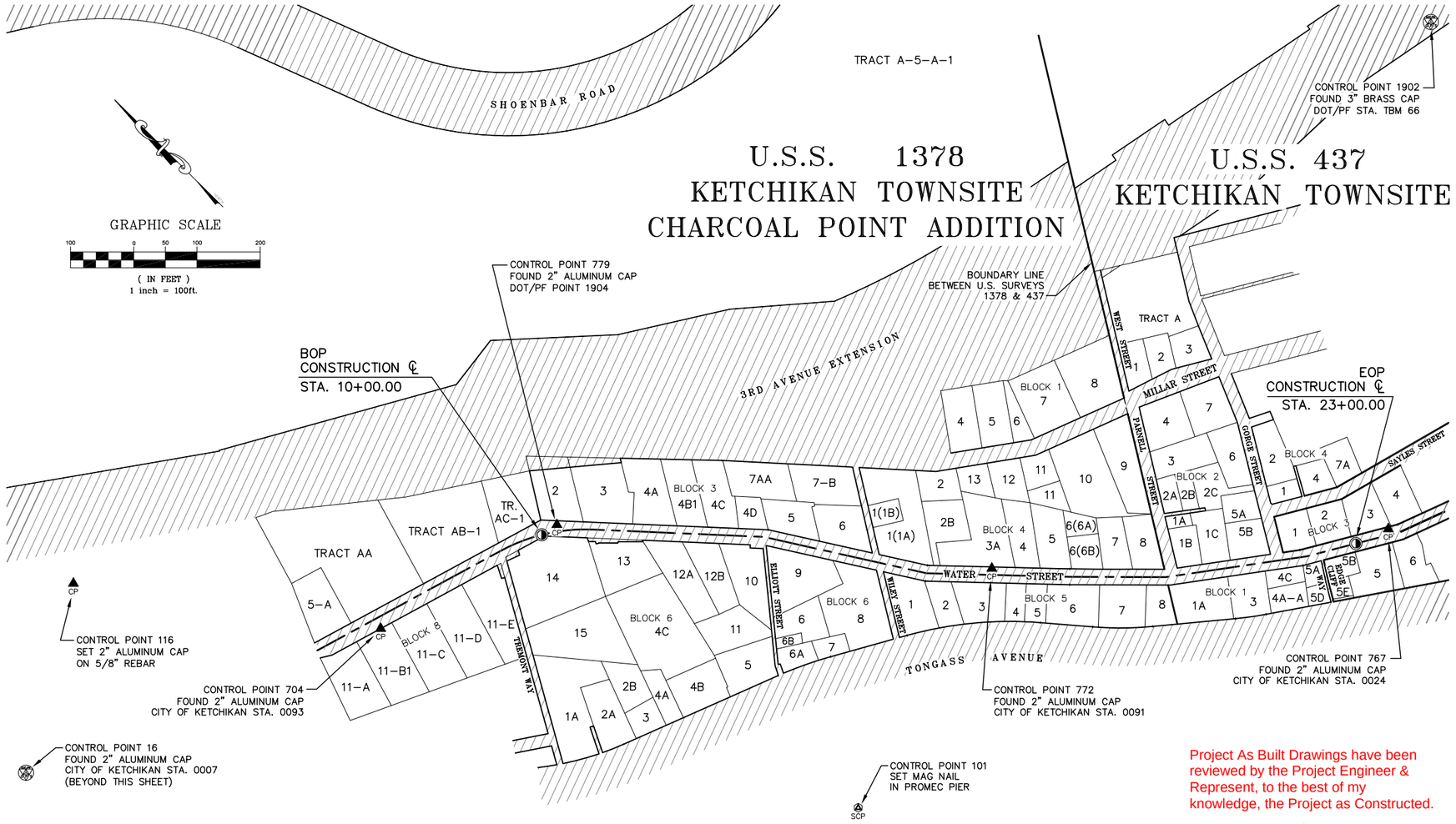


Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: _____ Date: 9/4/2019

VERTICAL CONTROL STATEMENT

Historical Basis of Vertical Control Statement:

KGB control monument 1015 (Tongass Ave. Project point No. 3012), a DOH monument in a case in front of 2324 Tongass Ave. was held as the Basis of Vertical Control with an elevation of 21.90' above MLLW from the Ketchikan Gateway Borough Control Network of 1984 (KGBCN84).

Historical Vertical Control Note:

KGBCN84 monument 1015 is also Monument "I", a Tongass Avenue centerline monument originally depicted on "Coordinate Map of Ketchikan, Alaska", Plat V1-112 (see note Basis of Bearing). The monument no longer exists. Much of Tongass Avenue has experienced recent re-construction.

Basis of Vertical Control:

Basis of Vertical Control is vertical datum KGBCN84. DOT&PF drawing "tongass_ave09.dwg" shows point nos. 1648-1650, along Tongass Avenue, near this project and with KGBCN84 elevations. 1648-1650 are R&M Eng. Ketchikan monuments TA-19, TA-20 & TA-21, respectively. All three 2" aluminum cap monuments were recovered and examined for relative elevations with respect to record. Station TA-21 (1650) was held for elevation: Elev. = 21.94'. Note: additional stations shown in "tongass_ave09.dwg" southeast of TA-19 (1648) and within the project arena were not found and are assumed destroyed by recent construction.

Station	Measured Elev.	Record Elev.
TA-21 (1650)	21.940'	21.940' (Held)
TA-20 (1649)	21.764'	21.760'
TA-19 (1648)	21.530'	21.540'

Elevations were transferred to primary horizontal control and benchmarks using differential levels. Topography and planimetrics were measured using optical instrumentation and trigonometric methods.

NOTES

1. Whether listed or not, All monuments or property markers, corners, or accessories, which will be disturbed or buried, shall be referenced or re-established in their original position (A.S. 19.10.260) and recorded (A.S. 34.65.040).
2. ROW location is shown for orientation purpose only. Refer to AKDOT ROW Maps for ROW information.
3. Horizontal and Vertical Control must be field verified by the contractor. Discrepancies of note will be reported to the contracting agency.

LEGEND

DOT&PF GPS CONTROL	PRIMARY PROPERTY MONUMENT
PRIMARY PROJECT CONTROL (CP)	SECONDARY PROPERTY MONUMENT
SECONDARY PROJECT CONTROL (SCP)	CONSTRUCTION ℄ (NOT SET)
BLM/GLO MONUMENT	(123) SURVEY POINT NUMBER

SURVEYOR'S CERTIFICATE

I hereby certify that I am properly registered and licensed to practice land surveying in the State of Alaska, and that this plat was made by me or under my direct supervision. I declare that this plat is based on information compiled from record data and controlled by recovered monuments, and that all dimensions and other details are correct.

Randal H. Brinker — 8/14/15

RANDAL H. BRINKER, L.S. 8852 — Date

HORIZONTAL CONTROL STATEMENT

Control Methodology:

Primary horizontal control was established using Static GPS techniques with Trimble dual frequency receivers. The GPS vectors were adjusted by simultaneous least squares methods using Trimble Business Center software. All vectors were constrained to DOT&PF Control Stations #1902 and #16. Note: A free adjustment, holding #1902 produced a radial error at #16 of 0.020' (5 ppm).

Coordinate System:

This project is located entirely within the "Gravina" coordinate system; a U.S. Survey Feet, local grid established by State of Alaska, Department of Transportation and Public Facilities, Southeast Region, Right-of-Way Section, for a select, specific area of Ketchikan, Alaska. All measurements, dimensions, coordinates and elevations on this map are in U.S. Survey Feet as related to, and associated with Gravina Grid.

Basis of Coordinates:

Basis of Coordinates is Point "TBM-66" (a 3" diameter domed brass disk grouted flush on a bedrock outcrop along the southerly side of 3rd Avenue Extension). Said point has Gravina Grid coordinates of 89745.1673 N, 104488.6036 E. (DOT reference point #1902.)

Basis of Bearings:

Basis of Bearings is the "Ketchikan Gateway Borough Control Network of 1984" (KGBCN84) NAD27 bearing between monuments "J" and "I" (KGBCN84 pt. nos. 1014 & 1015). Monuments "J" and "I" are Tongass Avenue monuments originally depicted on "Coordinate Map of Ketchikan, Alaska", Plat V1-112. Said KGBCN84 NAD27 bearing between monuments "J" and "I" is S88°29'20"W.

Translation Parameters:

To convert Alaska State Plane Zone 1, NAD83(CORS96)(EPOCH: 2003.0000), U.S Survey Feet coordinates to the local project U.S. Survey Feet coordinates:

Step 1: Scale by 1.000099310 (1/.9999007) (base point 0,0).
Step 2: Rotate -00°00'18" (base point 0,0).
Step 3: Translate using -1199866.83352 N, -3000134.77840 E.

To convert local project coordinates to Alaska State Plane Zone 1, NAD83(CORS96)- (EPOCH: 2003.0000), U.S. Survey Feet coordinates:

Step 1: Scale by .9999007 (base point 0,0).
Step 2: Rotate +00°00'18" (base point 0,0).
Step 3: Translate using +1199485.89702 N, +2999941.55133 E.

PROJECT PRIMARY CONTROL POINTS

POINT	LOCAL COORDINATES		AKSPC ZONE 1		GEOGRAPHIC COORDINATES		ELEVATION
	NORTHING	EASTING	NORTHING	EASTING	NORTH LATITUDE	WEST LONGITUDE	
16	90429.1907	100406.7659	1289897.3465	3100346.2371	55° 20' 57.87348"	131° 40' 31.30090"	
101	89506.0125	102969.0892	1288974.0364	3102908.2254	55° 20' 48.04424"	131° 39' 47.46419"	22.28
116	90634.5691	102342.0505	1290102.5356	3102281.3474	55° 20' 59.34278"	131° 39' 57.73657"	
704	90240.4331	102635.4499	1289708.4131	3102574.6834	55° 20' 55.37555"	131° 39' 52.86230"	136.80
767	89225.4608	103874.0745	1288693.4336	3103813.0963	55° 20' 45.01992"	131° 39' 31.95998"	74.84
772	89624.4952	103386.3961	1289092.4709	3103325.5012	55° 20' 49.09154"	131° 39' 40.18970"	92.68
779	90159.7076	102948.6286	1289627.6683	3102887.8239	55° 20' 54.49028"	131° 39' 47.48828"	128.80
1902	89745.1673	104488.6036	1289213.0348	3104427.6098	55° 20' 49.96293"	131° 39' 21.07280"	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: RHB
DESIGNED BY: RHB
DRAWN BY: RHB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

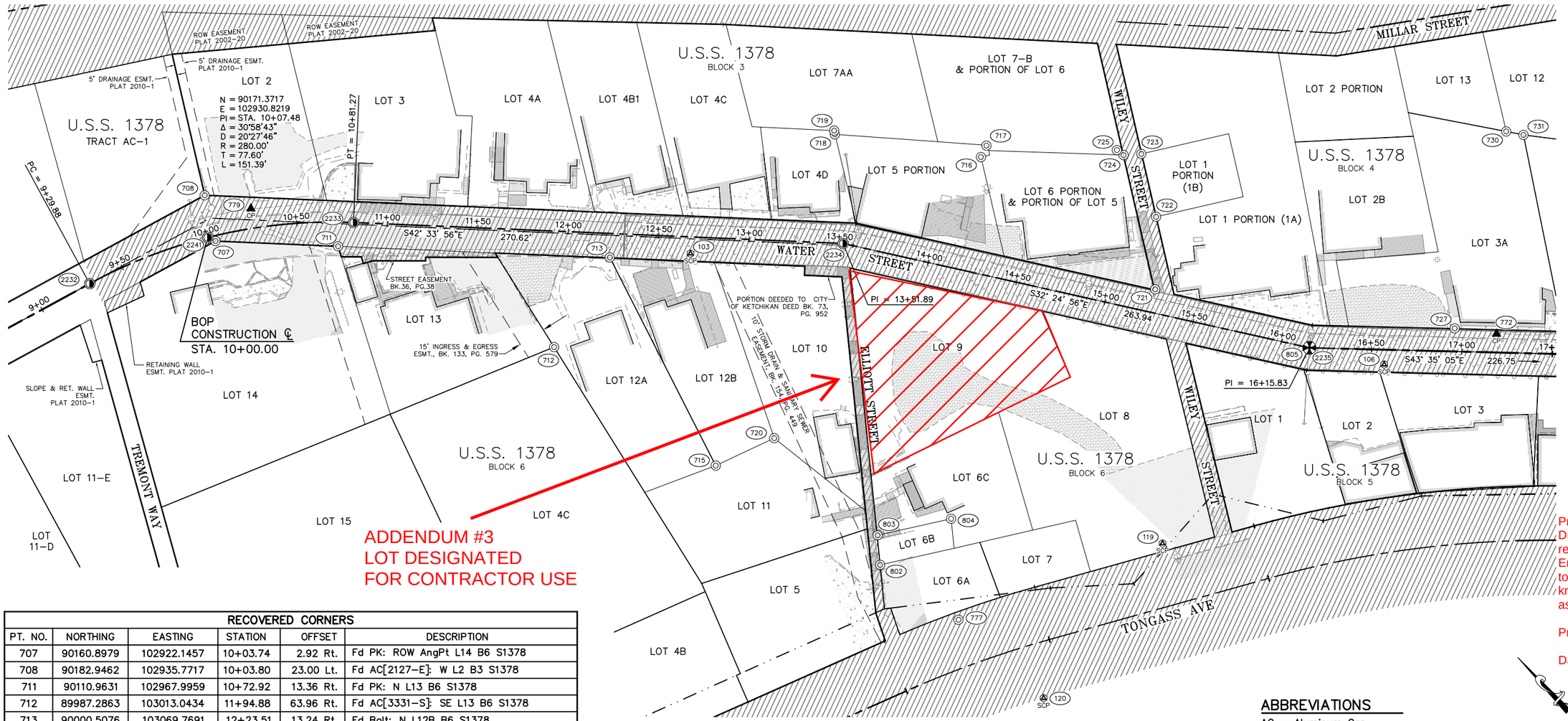
KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

SURVEY CONTROL SHEETS

TAB: A05 Thursday, August 13, 2015 3:54:32 PM HANK BRINKER

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	A05	A07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\SURVEY\ACAD\WATER STREET_SCS V2014.DWG



ADDENDUM #3
LOT DESIGNATED
FOR CONTRACTOR USE

RECOVERED CORNERS					
PT. NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
707	90160.8979	102922.1457	10+03.74	2.92 Rt.	Fd PK: ROW AngPt L14 B6 S1378
708	90182.9462	102935.7717	10+03.80	23.00 Lt.	Fd AC[2127-E]: W L2 B3 S1378
711	90110.9631	102967.9959	10+72.92	13.36 Rt.	Fd PK: N L13 B6 S1378
712	89987.2863	103013.0434	11+94.88	63.96 Rt.	Fd AC[3331-S]: SE L13 B6 S1378
713	90000.5076	103069.7691	12+23.51	13.24 Rt.	Fd Bolt: N L12B B6 S1378
715	89877.9560	103029.9934	12+86.86	125.44 Rt.	Fd PC[4110-S]: SE 12A B6 S1378
720	89865.8062	103063.5305	13+18.50	108.95 Rt.	Fd Rbr: SE 12B B6 S1378
719	89962.4293	103206.8921	13+44.31	61.99 Lt.	Fd PC[3408-S]: E L4D B3 S1378
718	89960.6878	103205.7150	13+44.80	59.95 Lt.	Fd PC[3408-S]: N L5 B3 S1378
803	89787.5449	103066.0335	14+05.63	152.97 Rt.	Fd Nail/Washer[6269-S]: N L6B B6 S1378
802	89775.0241	103055.4475	14+10.52	168.62 Rt.	Fd Rbr: N L6A S1378
716	89894.7884	103253.9246	14+15.82	63.13 Lt.	Fd Rbr: NNW L6 B3 S1378
717	89897.1232	103260.5275	14+17.38	69.96 Lt.	Fd IP: E L5 B3 S1378
804	89765.2997	103101.1812	14+43.25	135.23 Rt.	Fd PlgTk: E L6B B6 S1378
777	89723.8986	103065.5515	14+59.10	187.50 Rt.	Fd AC[3491-S]: WC2 C1 TRE ATS 1641
725	89844.4545	103309.7335	14+88.22	83.26 Lt.	Fd IP: S L7B B3 S1378
724	89839.9281	103310.4230	14+92.41	81.42 Lt.	Fd Rbr: E L6 B3 S1378
723	89833.4241	103317.8035	15+01.86	84.16 Lt.	Fd PC[3248-S]: N L1B B4 S1378
722	89803.1136	103299.0295	15+17.39	52.06 Lt.	Fd PC[3248-S]: W L1B B4 S1378
721	89775.1845	103270.3755	15+25.60	12.90 Lt.	Fd PK: S L6 B3 S1378
805	89692.1009	103307.8478	16+15.83	0.00 Rt,	Fd BC[GLO]: CL Water Street PI
727	89642.9834	103372.1650	16+95.75	12.73 Lt.	Fd PC: ROW L3A B4 S1378
730	89699.7260	103469.0986	17+21.47	122.06 Lt.	Fd IP: S L13 B4 S1378
731	89691.6394	103474.4735	17+31.04	120.38 Lt.	Fd IP: N L4 B4 S1378

PROJECT CONTROL POINTS						
PT. NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
779	90159.7076	102948.6286	10+26.08	10.86 Lt.	128.80	Fd AC[DOT]: DOT Pt.No. 1904
103	89970.5539	103102.8251	12+67.93	9.16 Rt.	108.73	Set MAG: CP103
120	89659.1832	103067.3977	15+14.72	220.63 Rt.	21.90	Set Survey Spike: CP120
119	89673.1207	103174.1836	15+60.20	123.01 Rt.	21.74	Set MAG: CP119
106	89656.3965	103330.5564	16+57.35	8.17 Rt.	92.30	Set MAG: CP106
772	89624.4952	103386.3961	17+18.95	10.29 Lt.	92.68	Fd AC [COK]: Pt. No. 0091

CONSTRUCTION CENTERLINE ALIGNMENT					
POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
2232	90193.3525	102856.4058	9+29.88	0.00 Rt.	Not Set: Construction CL PC
2241	90165.3212	102920.4758	10+00.00	0.00 Rt.	Not Set: Construction CL BOP
2233	90114.2229	102983.3094	10+81.27	0.00 Rt.	Not Set: Construction CL PT
2234	89914.9125	103166.3630	13+51.89	0.00 Rt.	Not Set: Construction CL PI
2235	89692.1009	103307.8478	16+15.83	0.00 Rt.	Not Set: Construction CL PI (see no. 805)

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.:

Date: 9/4/2019

ABBREVIATIONS

AC = Aluminum Cap
BC = Brass Cap
GLO = General Land Office
IP = Iron Pipe
MAG = Mag Nail
PC = Plastic Cap
PK = PK Nail
PlgTk = Lead Plug with Tack
POR = Portion
Rbr = Rebar
SI = Street Intersection

GRAPHIC SCALE

30 0 15 30 60
(IN FEET)
1 inch = 30ft.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: RHB

STATE OF ALASKA
49TH
Randal H. Brinker
LS 8852
8/14/15
Registered Professional Land Surveyor

DESIGNED BY: RHB
DRAWN BY: RHB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

SURVEY CONTROL SHEETS

TAB: A06 Thursday, August 13, 2015 4:02:18 PM HANK BRINKER

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735)	2015	A06	A07

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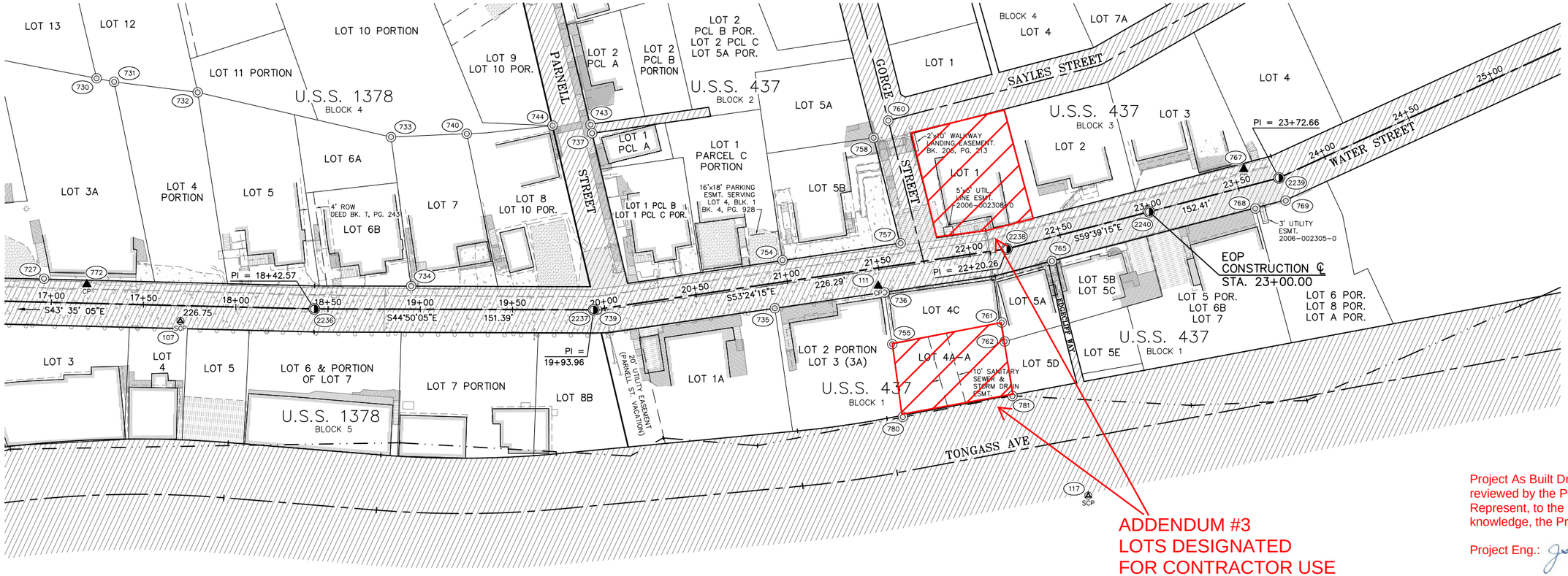

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

RECOVERED CORNERS

PT. NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
727	89642.9834	103372.1650	16+95.75	12.73 Lt.	Fd PC: ROW L3A B4 S1378
730	89699.7260	103469.0986	17+21.47	122.06 Lt.	Fd IP: S L13 B4 S1378
731	89691.6394	103474.4735	17+31.04	120.38 Lt.	Fd IP: N L4 B4 S1378
732	89655.6075	103502.4619	17+76.43	115.81 Lt.	Fd Rbr: N L5 B4 S1378
733	89564.4019	103559.4576	18+83.84	93.34 Lt.	Fd AC[6269-S]: N L7 B4 S1378
734	89499.5624	103510.0425	18+94.98	12.58 Lt.	Fd AC[3491]: W L7 B4 S1378
740	89536.6649	103589.7547	19+24.87	95.27 Lt.	Fd AC[3491]: N L8 B4 S1378
744	89506.9110	103625.7677	19+71.36	99.83 Lt.	Fd AC[3491]: E L8 B4 S1378
739	89419.0696	103572.2380	19+95.88	0.36 Rt.	Fd BC: dated 1962
743	89492.7477	103640.6579	20+06.89	99.59 Lt.	Fd IP: W L2 PA B2 S437
737	89488.7847	103637.9949	20+07.11	94.82 Lt.	Fd IP: N L1 PA B2 S437
735	89351.7356	103640.9350	20+91.18	13.46 Rt.	Fd AC[7213-S]: E L1A B1 S437
754	89367.1673	103662.3034	20+99.13	11.67 Lt.	Fd PK: W L5B B2 S437
780	89261.0029	103648.3349	21+51.21	81.90 Rt.	Fd PlgTk: W L4AA B1 S437
755	89292.9578	103672.1489	21+51.28	42.04 Rt.	Fd PC[4742-S]: N L4AA B1 S437
736	89315.7472	103689.0751	21+51.28	13.66 Rt.	Fd AC[7213-S]: N L4C B1 S437
758	89379.2603	103744.1553	21+57.64	70.17 Lt.	Fd PK: S L5A B2 S437
757	89328.4537	103714.0422	21+63.75	11.43 Lt.	Fd PK: S L5B B2 S437
760	89380.2484	103756.3511	21+66.84	78.24 Lt.	Fd PlgTk: SI Sayles and Gorge Streets
781	89227.0272	103698.3734	22+11.64	79.34 Rt.	Fd PlgTk: S L4AA B1 S437
761	89259.3125	103722.4511	22+11.72	39.07 Rt.	Fd PC[4742-S]: S L4C B1 S437
762	89250.9263	103716.2818	22+11.77	49.48 Rt.	Fd AC[6269-S]: N L5D B1 S437
765	89263.6646	103765.2549	22+42.26	12.53 Rt.	Fd PlgTk: CL ROW Edgcliff Way
768	89205.9202	103863.3268	23+56.07	12.81 Rt.	Fd PlgTk: N L6 POR B1 S437
769	89197.2964	103877.9906	23+73	12.5 Rt.	Fd PlgTk: ROW AngPt L6 POR B1 S437

ABBREVIATIONS

AC = Aluminum Cap
BC = Brass Cap
GLO = General Land Office
IP = Iron Pipe
MAG = Mag Nail
PC = Plastic Cap
PK = PK Nail
PlgTk = Lead Plug with Tack
POR = Portion
Rbr = Rebar
SI = Street Intersection

PROJECT CONTROL POINTS

PT. NO.	NORTHING	EASTING	STATION	OFFSET	ELEVATION	DESCRIPTION
772	89624.4952	103386.3961	17+18.95	10.29 Lt.	92.68	Fd AC [COK]: Pt. No. 0091
107	89574.6061	103408.2109	17+70.13	8.31 Rt.	92.24	Set MAG: CP107
111	89320.7299	103689.1449	21+48.37	9.61 Rt.		Set MAG: CP111
767	89225.4608	103874.0745	23+55.47	9.48 Lt.	74.84	Fd AC [COK]: Pt. No. 0024
769	89197.	103878.	23+73	12.5 Rt.	74.40	Fd PlgTk: ROW AngPt Ret. Wall
117	89159.7964	103689.2897	22+29.18	140.54 Rt.	22.41	Set Survey Spike: CP117

CONSTRUCTION CENTERLINE ALIGNMENT

POINT	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
2236	89527.8560	103464.1724	18+42.57	0.00 Rt.	Not Set: Construction CL PI
2237	89420.5000	103570.9106	19+93.96	0.00 Rt.	Not Set: Construction CL PI
2238	89285.5909	103752.5927	22+20.26	0.00 Rt.	Not Set: Construction CL PI
2240	89245.3022	103821.4120	23+00.00	0.00 Rt.	Not Set: Construction CL EOP
2239	89208.5916	103884.1191	23+72.66	0.00 Rt.	Not Set: Construction CL PI

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: RHB
DESIGNED BY: RHB
DRAWN BY: RHB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

SURVEY CONTROL SHEETS

TAB: A07 Thursday, August 13, 2015 4:14:33 PM HANK BRINKER

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	A07	A07

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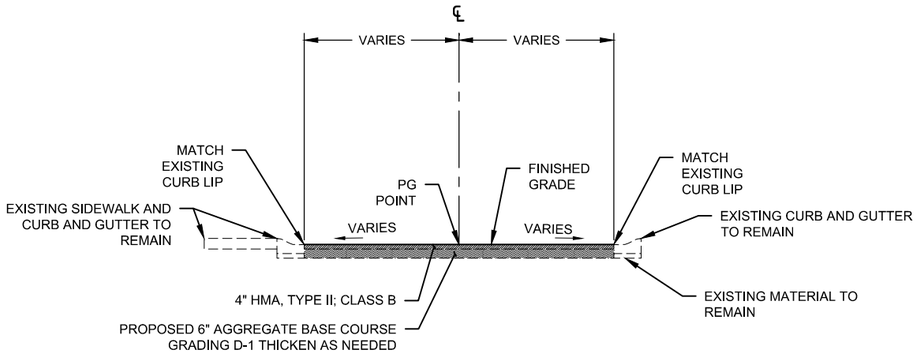
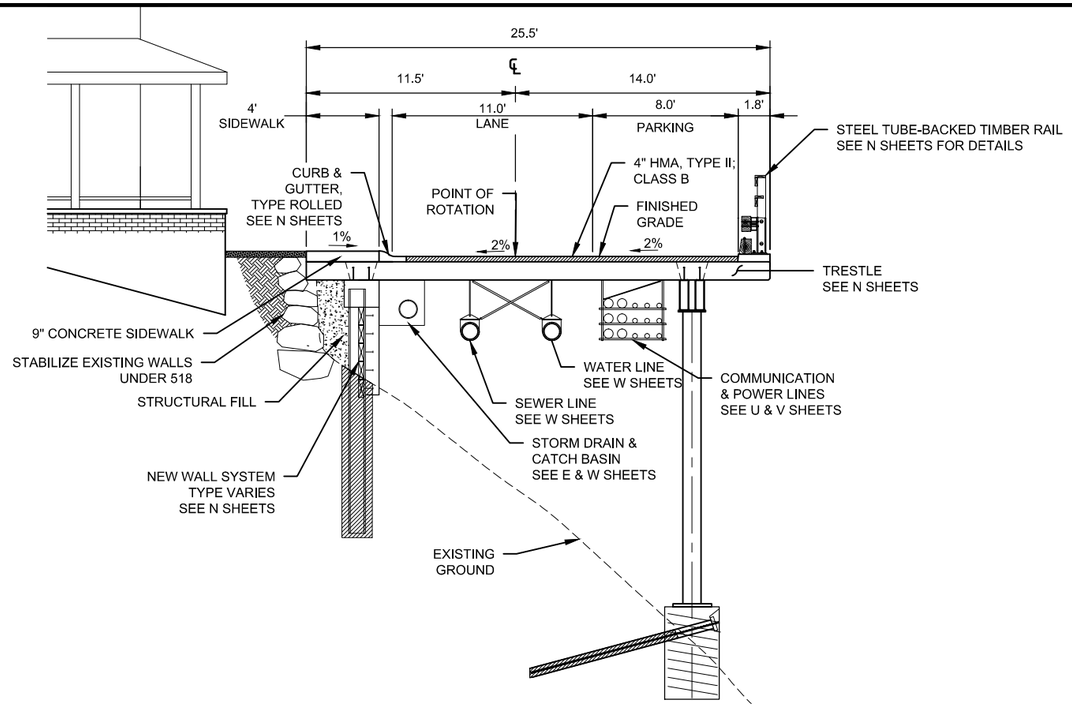


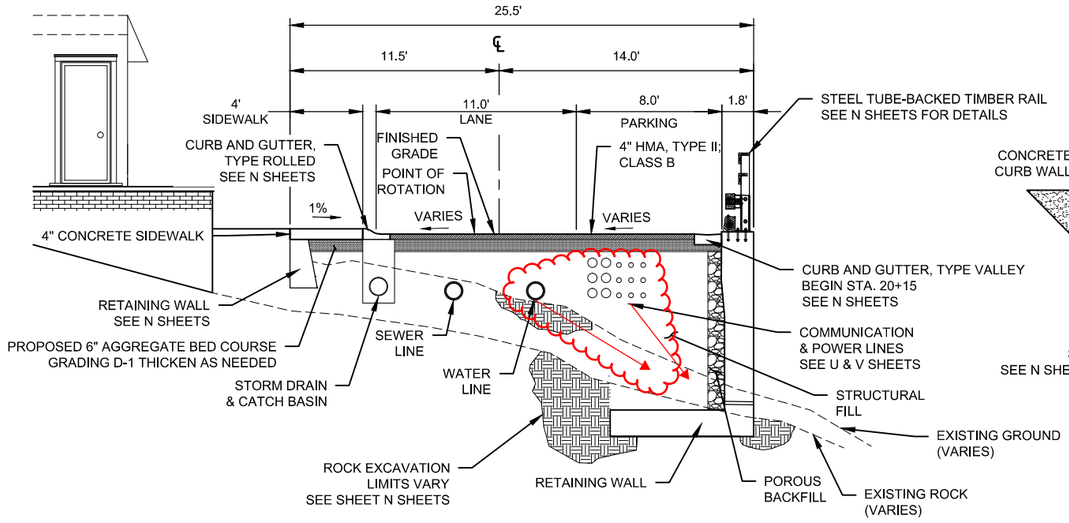
BRIDGE APPROACH

STA 10+00.00 TO STA 12+28.25
STA 22+09.50 TO STA 23+00.00
NTS



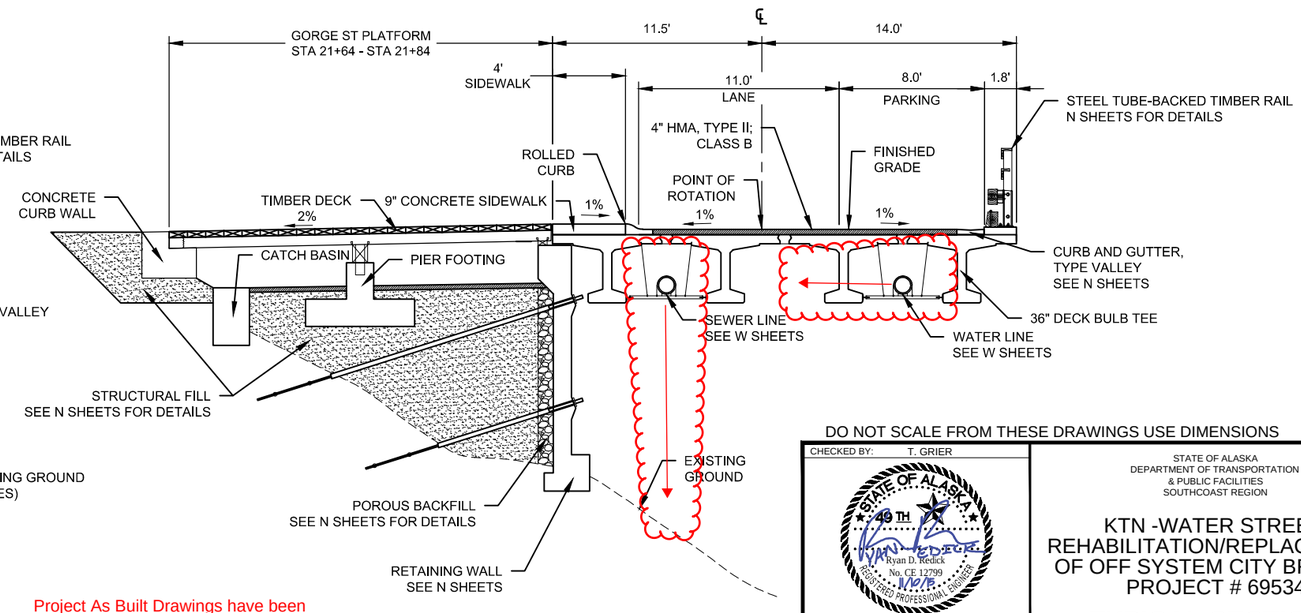
BRIDGE, TRANSVERSE FRAMING W/ EXISTING WALL

STA 12+28.25 TO STA 19+27.75
NTS



EARTHEN RETAINING WALL

STA 19+27.75 TO STA 21+34.50
NTS



BULB TEE BRIDGE

STA 21+34.5 TO STA 22+09.50
NTS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

TYPICAL SECTIONS

TAB: B01 Friday, November 20, 2015 11:38:59 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735)	2015	**B01**	B01

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744B SHEETS.DWG

FINAL

~~ESTIMATE OF~~ QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
202(13)	REMOVAL OF EXISTING BRIDGE NO. 446	LUMP SUM	ALL REQUIRED
202(14)	REMOVAL AND DISPOSAL OF ASBESTOS AND/OR LEAD BASED PAINTS CONTAINING MATERIAL	CONTINGENT SUM	ALL REQUIRED
203(7)	BORROW	CUBIC YARD VEHICLE MEASURE	~~100~~ 16.70
204(1)	STRUCTURE EXCAVATION	CUBIC YARD	~~500~~ 690.47
205(1)	EXCAVATION FOR STRUCTURES	CUBIC YARD	~~982~~ 1354.96
205(3)	STRUCTURAL FILL	CUBIC YARD VEHICLE MEASURE	~~2,005~~ 3020.80
205(4)	POROUS BACKFILL MATERIAL	CUBIC YARD	~~307~~ 245.39
205(5)	EXCAVATION FOR STRUCTURES (ROCK)	CUBIC YARD	~~257~~ 774.7
205(6)	ROCK SOCKET (24" DIAM)	LINEAR FOOT	~~507~~ 598.19
~~205(7)~~	~~ROCK SOCKET (48" DIAM)~~ CO#38 Eliminated	~~LINEAR FOOT~~	~~15~~
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	~~425~~ 461.18
401(1b)	HMA, TYPE II: CLASS B	TON	~~675~~ 757.88
401(4)	ASPHALT BINDER, GRADE PG 58-28	TON	~~50~~ 38.65
402(1)	STE-1 ASPHALT FOR TACK COAT	TON	~~1.25~~ 0.41
501(2)	CLASS A-A CONCRETE (TRESTLE)	LUMP SUM	ALL REQUIRED
501(3)	CLASS A CONCRETE	CUBIC YARD	~~768~~ 1172.11
501(7a)	PRECAST CONCRETE MEMBER (12" DECK PANEL)	EACH	114
501(7b)	PRECAST CONCRETE MEMBER (35" X 73'-01/4" PRESTRESSED DECKED BULB TEE GIRDER)	EACH	4
502(1)	POST-TENSIONING (1 ¼" BAR)	LUMP SUM	ALL REQUIRED
503(1)	REINFORCING STEEL	POUND	~~153,400~~ 162,489.03
503(2)	EPOXY-COATED REINFORCING STEEL	POUND	~~53,400~~ 54,234.21
504(1)	STRUCTURAL STEEL	LUMP SUM	ALL REQUIRED
505(5a)	FURNISH SOLDIER PILE W12X79	LINEAR FOOT	~~648~~ 608
505(5b)	FURNISH SOLDIER PILE W12X96	LINEAR FOOT	~~517~~ 530
505(5c)	FURNISH SOLDIER PILE W12X120	LINEAR FOOT	~~153~~ 286.67
~~505(7)~~	~~FURNISH SHAFT FOOTING CASING (48" DIAM)~~ CO#38 Eliminated	~~LINEAR FOOT~~	~~125~~

FINAL

~~ESTIMATE OF~~ QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
~~505(8)~~	~~SET SHAFT FOOTING CASING (48" DIAM)~~ CO#38 Eliminated	~~EACH~~	~~5~~
506(5a)	TIMBER STAIRS 1611 WATER STREET	LUMP SUM	ALL REQUIRED
506(5b)	TIMBER STAIRS ELLIOTT STREET	LUMP SUM	ALL REQUIRED
506(5c)	TIMBER STAIRS WILEY STREET	LUMP SUM	ALL REQUIRED
506(5d)	TIMBER STAIRS PARNELL STREET	LUMP SUM	ALL REQUIRED
506(5e)	GORGE STREET PLATFORM	LUMP SUM	ALL REQUIRED
507(7)	STEEL AND TIMBER BRIDGE RAILING	LINEAR FOOT	~~999~~ 980.92
507(8)	SIDEWALK PEDESTRIAN RAILING	LINEAR FOOT	~~54~~ 53.45
507(9)	PEDESTRIAN RAILING	LINEAR FOOT	~~296~~ 286.67
508(1)	WATERPROOFING MEMBRANE	LUMP SUM	ALL REQUIRED
516(1)	EXPANSION JOINT (STRIP SEAL)	LINEAR FOOT	~~177~~ 169.83
516(2a)	BEARINGS (ELASTOMERIC BEARING PAD) (TRESTLE)	EACH	2
516(2b)	BEARINGS (ELASTOMERIC BEARING PAD) (BRIDGE)	EACH	8
516(4)	BEARINGS (EDGE BEAM ELASTOMERIC PAD)	LINEAR FOOT	~~1,400~~ 1,394.66
518(1)	STRUCTURAL SHORING	LUMP SUM	ALL REQUIRED
603(21-6)	6 INCH CORRUGATED POLYETHYLENE PIPE	LINEAR FOOT	~~567~~ 656.99
603(22-12)	12 INCH CORRUGATED POLYPROPYLENE PIPE	LINEAR FOOT	~~253~~ 318.83
603(22-18)	18 INCH CORRUGATED POLYPROPYLENE PIPE	LINEAR FOOT	~~771~~ 754.90
603(22-24)	24 INCH CORRUGATED POLYPROPYLENE PIPE	LINEAR FOOT	~~161~~ 160.95
603(23)	STORM DRAIN SERVICE	PROPERTY	~~15~~ 19
603(24)	REPLACE STORM DRAIN PIPE UNDER 1279 WATER STREET	LUMP SUM	ALL REQUIRED
604(1)	STORM SEWER MANHOLE, 48 INCH	EACH	1
604(1a)	STORM SEWER CATCH BASIN, TYPE III	EACH	~~5~~ 7
604(1b)	STORM SEWER CATCH BASIN, TYPE IV	EACH	6
604(1c)	STORM SEWER CATCH BASIN, TYPE 20	EACH	~~13~~ 17
604(2)	SANITARY SEWER MANHOLE, 48 INCH	EACH	~~7~~ 6
608(1a)	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	~~75~~ 6

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM	ESTIMATING FACTOR
301(1)	AGGREGATE BASE COURSE, GRADING D-1	145 LB/CF
401(1B)	HMA, TYPE II; CLASS B	150 LB/CF
401(4)	ASPHALT BINDER, GRADE PG 58-28	JMD = 5.1% ~~6%~~ OF 401(1B)
402(1)	STE-1 ASPHALT FOR TACK COAT	01 GAL/SY (240 GAL/TON)
618(2)	SEEDING	52 LB/ACRE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER

STATE OF ALASKA · 49TH · Ryan D. Redick · No. CE 12799 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

ESTIMATE OF QUANTITIES

TAB: C01 Wednesday, January 13, 2016 3:51:49 PM RYAN REDICK

REVISIONS NO.	DATE	DESCRIPTION
5 AB	1/14/16	Addendum #5 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**C01**	C02

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-C SHEETS.DWG

FINAL

~~ESTIMATE OF~~ QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
608(1c)	CONCRETE SIDEWALK, 9 INCHES THICK	SQUARE YARD	~~377~~ 448.76
609(2a)	CURB AND GUTTER, TYPE 1 ROLLED	LINEAR FOOT	~~998~~ 998.85
609(2d)	CURB AND GUTTER, TYPE 1 VALLEY	LINEAR FOOT	~~202~~ 212
615(1)	STANDARD SIGN	SQUARE FOOT	~~100~~ 79.83
618(2)	SEEDING	POUND	~~40~~ 27.5
626(1-8a)	SANITARY SEWER CONDUIT, 8 INCH PVC C900 PIPE	LINEAR FOOT	~~351~~ 325
626(1-8b)	SANITARY SEWER CONDUIT, 8 INCH PVC C900 INSULATED PIPE	LINEAR FOOT	~~678~~ 680.42
626(2)	SEWER SERVICE CONNECTION	EACH	~~19~~ 21.5
626(5)	CONNECT TO EXISTING SEWER	EACH	~~5~~ 6
626(6)	TEMPORARY SEWER SYSTEM	LUMP SUM	ALL REQUIRED
626(7)	REPLACE SEWER CONDUIT UNDER 1279 WATER STREET	LUMP SUM	ALL REQUIRED
627(2-6)	WATER CONDUIT, 6 INCH HDPE INSULATED PIPE	LINEAR FOOT	~~14~~ 42.5
627(2-8a)	WATER CONDUIT, 8 INCH HDPE PIPE	LINEAR FOOT	~~235~~ 243.5
627(2-8b)	WATER CONDUIT, 8 INCH HDPE INSULATED PIPE	LINEAR FOOT	~~792~~ 808.02
627(3a)	FIRE HYDRANT INSTALLATION, SUSPENDED	EACH	2
627(3b)	FIRE HYDRANT INSTALLATION, BURIED	EACH	2
627(4)	WATER SERVICE CONNECTION	EACH	~~28~~ 22
627(5-6)	INSTALL 6 INCH GATE VALVE	EACH	1
627(5-8)	INSTALL 8 INCH GATE VALVE	EACH	~~9~~ 10
627(6)	CONNECT TO EXISTING WATER SYSTEM	EACH	3
628(1)	TEMPORARY WATER SYSTEM	LUMP SUM	ALL REQUIRED
639(3)	APPROACH	EACH	~~28~~ 29
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
640(4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQUIRED
641(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641(3)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
641(5) Not Used	TEMPORARY EROSION SEDIMENT AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
641(6) Not Used	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
641(7)	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643(15)	FLAGGING	CONTINGENT SUM	ALL REQUIRED
643(23) Not Used	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED

FINAL

~~ESTIMATE OF~~ QUANTITIES

ITEM NO.	ITEM	UNIT	QUANTITY
643(25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
643(31)	PUBLIC LIAISON	LUMP SUM	ALL REQUIRED
644(1)	FIELD OFFICE	LUMP SUM	ALL REQUIRED
644(17)	IMAGE DOCUMENTATION	LUMP SUM	ALL REQUIRED
645(1)	TRAINING PROGRAM, 3 TRAINEES/APPRENTICES	HRS	1500
646(1)	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
648(1)	NOISE MONITORING AND CONTROL	LUMP SUM	ALL REQUIRED
648(2) Not Used	SUPPLEMENTAL NOISE MITIGATION	CONTINGENT SUM	ALL REQUIRED
660(3)	HIGHWAY LIGHTING SYSTEM COMPLETE	LUMP SUM	ALL REQUIRED
661(3)	LOAD CENTER, TYPE 2	EACH	1
662(1)	POWER DISTRIBUTION SYSTEMS CONSTRUCTION	LUMP SUM	ALL REQUIRED
662(2)	POWER DISTRIBUTION SYSTEMS CONSTRUCTION - KPU TELECOMM RACEWAYS:	LUMP SUM	ALL REQUIRED
662(3)	POWER DISTRIBUTION SYSTEMS CONSTRUCTION - GCI RACEWAYS:	LUMP SUM	ALL REQUIRED
663(1)	TELECOMMUNICATION CONSTRUCTION	LUMP SUM	ALL REQUIRED
670(1)	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED
672(1)	CONSTRUCTION MONITORING PROGRAM	EACH	~~17~~ 18
673(1)	SOLDIER PILE WALL TIE BACK ANCHOR	EACH	~~10~~ 8
673(2)	GORGE STREET WALL TIE BACK ANCHOR	EACH	~~8~~ 7
673(3)	ABUTMENT ANCHOR	EACH	13
673(4)	FOOTING ANCHOR	EACH	~~12~~ 70
673(5)	STUB WALL ANCHOR	EACH	18
673(6) Not Used	CORBEL ANCHOR	EACH	~~12~~ 0
673(7)	SHAFT FOOTING ANCHOR	EACH	~~10~~ 6
673(8)	RETAINING WALL ANCHOR	EACH	~~26~~ 25
673(9)	ROCK DOWEL	EACH	~~478~~ 348
673(10)	STABILIZATION ANCHOR	EACH	~~40~~ 4
675(1a)	INLET STRUCTURE (TYPE 1)	EACH	7
675(1b)	INLET STRUCTURE (TYPE 2)	EACH	~~2~~ 3
676(1)	LUMINAIRE MOUNTING BRACKET	EACH	6
677(1)	UTILITY PLATFORM TYPE 1	EACH	3
677(2)	UTILITY PLATFORM TYPE 2	EACH	1
678(1)	RESTORATION OF PRIVATE & PUBLIC PROPERTY	CONTINGENT SUM	ALL REQUIRED
678(2)	CHURCH PARKING LOT IMPROVEMENTS	LUMP SUM	ALL REQUIRED
682(1)	MAINTENANCE OF PUBLIC ACCESS	LUMP SUM	ALL REQUIRED
683(1)	BEDROCK SURVEY	LUMP SUM	ALL REQUIRED

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER

STATE OF ALASKA 49 TH — Ryan D. Redick — No. CE 12799 — 9/14/15 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

ESTIMATE OF QUANTITIES

TAB: C02 Monday, January 04, 2016 11:57:44 AM NICOLE KNOX

REVISIONS		
NO.	DATE	DESCRIPTION
1 AB	12/14/15	Addendum #1 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**C02**	C02

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Change Order Item Quantities

Item No.	Description	Unit	Unit Price	Quantity	CO #
201(6)	Selective Tree Removal	CS	12,000.00	All Req'd	22
202(15)	Saw Cutting Deck Panels	EA	500.00	5	2
203(3)	Unclassified Excavation	CS	17,000.00	All Req'd	11
203(19)	Exploratory Utility Locate	CS	10,000.00	All Req'd	10
203(20)	Exploratory Excavation at 1446 Water St	LS	3,391.71	All Req'd	23
205(2)	Controlled Low Strength Material	CY	297.92	26	8
205(8)	Additional Gorge Excavation	LS	16,928.00	All Req'd	21
501(7c)	Transformer Precast Panel Inserts	LS	10,463.00	All Req'd	18
501(8)	Additional Gorge Concrete	LS	26,819.00	All Req'd	21
501(9)	Concrete Retaining Wall at Wiley Street	LS	136,961.58	All Req'd	30
501(11)	Cold Wather Concrete for 2018/2019 Winter	CS	30,000.00	All Req'd	40
502(2)	Post Tensioning Duct Grout	LS	20,217.00	All Req'd	19
505(5d)	Advancing Soldier Pile Work	LS	119,456.00	All Req'd	28
506(5b-1)	Additional Timber Stairs Elliott St	LS	27,913.00	All Req'd	34
506(5f)	Timber Stairs Gorge St	LS	24,590.00	All Req'd	9
506(6)	CREDIT to Change Stair Treads from Expanded Metal to Shingles	LS	-1,306.00	All Req'd	16
507(7a)	Timber Rail Splice	EA	478.25	8	6
507(7b)	Timber Rail Block	LS	7,692.00	All Req'd	6
507(7c)	Steel Br Rail - Slotted Holes	LS	2,769.00	All Req'd	12
507(7d)	Modifications to Bull Rail	LS	4,240.45	All Req'd	31
507(7e)	Steel Bridge Rail Splice	EA	3,439.15	3	32
507(9a)	Modifications to Pedestrian Railing	LS	8,374.00	All Req'd	43
518(2)	Structural Shoring at 1446 Water St	LS	11,760.53	All Req'd	23
518(3)	Pilaster Supports at 1446 Water St	LS	14,510.15	All Req'd	23
603(24a)	Enlarge Penetration for Storm Pipe at 1279 Water St	LS	340.20	All Req'd	17
603(25)	Pipe Supports	CS	110,000.00	All Req'd	33
604(1d)	Parnell St Storm Outfall Structure	LS	75,290.36	All Req'd	13
604(1e)	Changes to MH S-11	LS	6,554.00	All Req'd	17
604(8)	Concrete Apron for Inlet S-18	CS	28,000.00	All Req'd	11
609(2)	Standard Curb and Gutter	LF	96.00	122.7 ~~140~~	47
626(1-8c)	Sanitary Sewer Cleanout	CS	35,000.00	All Req'd	37
626(5a)	Sanitary Sewer Connection at Parnell St	LS	19,811.00	All Req'd	14
626(6a)	Adjust Temporary Sewer in Phase 3	LS	1,758.00	All Req'd	17
627(4a)	Water Service Connection-Suspended	LS	34,345.00	All Req'd	25
627(6a)	Relocate Water Mains W-10 and W-20	LS	11,765.00	All Req'd	20
640(5)	Overhead, Delay Costs and Schedule Impacts for Change Orders 1-32	LS	519,000.00	All Req'd	39
640(5a)	Overhead, Delay Costs and Schedule Impacts for Change Order #45	LS	156,203.00	All Req'd	50
640(5b)	Overhead, Delay Costs and Schedule Impacts for Extension of Time for 2019 Paving	LS	121,752.00	All Req'd	50
640(5c)	Adjustment for Failing Concrete	LS	-18,632.00	All Req'd	52
641(8)	CREDIT to delete Permanent Erosion, Sediment and Pollution Control under Gorge Bridge	LS	-1,247.00	All Req'd	16
643(3a)	Addition Perm. Const. Signs	LS	2,398.13	All Req'd	4
643(32)	Taxi Service	CS	20,000.00	All Req'd	3
~~662(1a)~~	~~P-10 Pole Revisions~~	~~LS~~	~~209,389.66~~	~~All Req'd~~	~~26~~
662(1a-1)	Pole P10 Revisions	LS	227,517.86	All Req'd	35
662(1b)	Modification to Power Distribution System	LS	85,841.00	All Req'd	46

Completely Replaced By CO#35

Change Order Item Quantities

Item No.	Description	Unit	Unit Price	Quantity	CO #
662(1c)	Additional Electric Meter Bases	LS	23,335.00	All Req'd	48
662(4)	Temporary Guy Pole	LS	61,296.00	All Req'd	5
662(5)	Stabilize Existing Utility Poles	CS	90,000.00	All Req'd	15
662(6)	Relocate Existing Utility Poles	LS	494,243.43	All Req'd	27
670(1a)	Credit for Revised Stripe	LS	-3,870.00	All Req'd	51
672(2)	Modified Preconstruction Inspection	EA	4,975.20	10	1
673(1a)	Abandon Casing for Soldier Wall Anchor	EA	9,453.50	3 ~~2~~	45
673(1b)	Blister for Soldier Wall Anchor	EA	4,897.50	3 ~~2~~	45
673(1c)	Added Casing for Soldier Wall Anchor	EA	2,777.00	5 ~~3~~	44
673(11)	Dead Man Anchor	LS	43,359.00	All Req'd	7
673(11a)	Anchor test for Platform Footings	CS	70,000.00	All Req'd	36
673(12)	Additional Gorge Rock Anchors	LS	18,406.00	All Req'd	21
673(13)	Platform Footings	EA	120,980.00	3	38
673(13a)	Modifications to Footing #1	LS	60,751.00	All Req'd	42
673(14)	Platform Foundation, MH SS-31	LS	81,952.00	All Req'd	41
677(3)	Utility Platforms - Additional Engineering	LS	6,507.00	All Req'd	24
683(2)	CREDIT Bedrock Survey	LS	-28,249.00	All Req'd	29

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY:

DESIGNED BY:

DRAWN BY: Jason R.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

Change Order QUANTITIES

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735)	2015	C03	C02

202(1) REMOVAL OF STRUCTURES & OBSTRUCTIONS - LUMP SUM

BEGIN		END		QUANTITY	DESCRIPTION
STATION	OFFSET	STATION	OFFSET		
11+90	RT	13+00	RT	110 LF	SANITARY SEWER
12+00	RT	12+30	RT	30 LF	CURB REMOVAL
12+00	RT	12+30	RT	30 LF	W-BEAM GUARDRAIL REMOVAL
12+15	RT	22+40	RT	1025 LF	WATER
12+25	LT	13+00	RT	75 LF	STORM DRAIN
12+30	RT	12+46	RT	16 LF	TIMBER STAIRCASE
12+35	RT	13+30	RT	95 LF	TIMBER GUARDRAIL
13+32	RT	13+53	RT	21 LF	TIMBER STAIRCASE
13+35	RT	20+15	RT	680 LF	TIMBER GUARDRAIL
13+54	LT			1 EA	FIRE HYDRANT
14+15	LT	15+50	LT	135 LF	SANITARY SEWER
14+35			CROSSING	90 LF	STORM DRAIN (TWO INLETS)
14+45	LT	14+50	LT	20 LF	PEDESTRIAN RAILING / GUARDRAIL
15+25			CROSSING	120 LF	STORM DRAIN, WILEY STREET
15+28	LT			12 LF	TIMBER STAIRCASE
15+30	LT	15+70	LT	40 LF	PEDESTRIAN RAILING / GUARDRAIL
15+35	RT	17+50	LT	215 LF	SANITARY SEWER
15+65	LT	15+95	LT	30 LF	CONCRETE WALL / PLANTER, LOT 1462
16+10	LT	16+25	LT	20 LF	CONCRETE WALL / PLANTER, LOT 1462
16+90	LT	16+95	LT	15 LF	CONCRETE WALL / PLANTER, LOT 1446
17+10	LT				PROPERTY DRAIN, LOT 1446
17+30	LT				PROPERTY DRAIN, LOT 1446
17+55	LT				PROPERTY DRAIN, LOT 1446
17+85	LT	18+05	LT	35 LF	CONCRETE WALL / PLANTER, LOT 1426
18+05	LT	18+30	LT	40 LF	CONCRETE WALL / PLANTER, LOT 1426
18+35	LT	18+55	LT	30 LF	CONCRETE WALL / PLANTER, LOT 1426
18+40	LT	21+75	RT	335 LF	SANITARY SEWER
18+47	LT			1 EA	FIRE HYDRANT
18+50	LT				PROPERTY DRAIN, LOT 1418
18+55	LT	18+70	LT	25 LF	CONCRETE WALL / PLANTER, LOT 1418
18+90	LT	18+95	LT	20 LF	CONCRETE WALL / PLANTER, LOT 1418
19+00	LT	19+20	LT	40 LF	CONCRETE WALL / PLANTER, LOT 1412
19+90	LT	20+00	RT	55 LF	WATER, PARNELL ST
20+10	LT	20+10	LT	15 LF	SANITARY SEWER, PARNELL ST
20+11	LT			7 LF	TIMBER STAIRCASE
20+15	LT				STORM DRAIN INLET
20+20	LT	20+35	LT	25 LF	CONCRETE WALL / PLANTER, LOT 1320
20+30	RT	20+60	RT	30 LF	TIMBER GUARDRAIL
20+40	LT	20+45	LT	25 LF	CONCRETE WALL / PLANTER, LOT 1320
20+55	LT			5 LF	CONCRETE WALL / PLANTER, LOT 1312
20+55	LT				PROPERTY DRAIN, LOT 1312
20+65	RT	21+00	RT	35 LF	TIMBER GUARDRAIL
20+75	LT			5 LF	CONCRETE WALL / PLANTER, LOT 1312
21+00	LT			10 LF	CONCRETE WALL / PLANTER, LOT 1306
21+05	RT	21+55	RT	50 LF	TIMBER GUARDRAIL
21+60	RT	22+10	RT	50 LF	TIMBER GUARDRAIL
21+70	RT	21+70	LT	55 LF	STORM DRAIN, GORGE STREET
21+70	LT	21+70	LT	45 LF	SANITARY SEWER, GORGE STREET
21+75	RT			25 LF	SANITARY SEWER, IN BASEMENT OF 1279
21+75	LT			500 SQ. FT	TIMBER PLATFORM, GORGE STREET
22+00	LT			1 EA	1270 WATER STREET DEMOLITION
22+10	LT	22+40	LT	30 LF	CURB
22+10	RT	22+40	RT	30 LF	TIMBER GUARDRAIL
22+38	LT			1 EA	FIRE HYDRANT

NOTES

1) LOCATIONS ARE APPROXIMATE AND TYPICALLY ROUNDED TO THE NEAREST 5 FEET.

2) IN ADDITION TO THE STRUCTURES & OBSTRUCTIONS SHOWN IN THIS SUMMARY TABLE THERE IS A SIGNIFICANT QUANTITY OF DEBRIS, PIPING, AND OTHER STRUCTURES TO BE REMOVED. BASED ON VISUAL INSPECTION AND CITY OF KETCHIKAN AS-BUILTS THE FOLLOWING ADDITIONAL LENGTH OF PIPE EXISTS:

STORM DRAIN	1,200 LF
SANITARY SEWER	2,200 LF
WATER	2,000 LF

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER — 9/4/19

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

TAB: D01 Friday, November 20, 2015 11:39:30 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735)	2015	**D01**	D07

PATH: Z:\PROJECT\11744.00 DOT_SE WATER STREET VA\DUCT\CIVIL\ACAD\11744-D SHEETS.DWG

301(1) AGGREGATE BASE COURSE, GRADING D-1

SHEET	STATION RANGE			AREA (SF)	WEIGHT (TONS)
F01	10+00	TO	12+28.25	4985	60
F05	19+27.75	TO	20+00		120
F06	20+00	TO	21+34.50		220
F07	22+09.50	TO	23+00	1780	25
			TOTAL	4985	425

401(1b) HMA, TYPE II; CLASS B

SHEET	STATION RANGE			AREA (SF)	WEIGHT (TONS)
F01	10+00	TO	12+00	4425	110
F02	12+00	TO	14+00	4030	100
F03	14+00	TO	16+00	4075	100
F04	16+00	TO	18+00	4085	105
F05	18+00	TO	20+00	4100	105
F06	20+00	TO	22+00	4075	105
F07	22+00	TO	23+00	1975	50
			TOTAL	26765	675

608(1a) CONCRETE SIDEWALK, 4 INCHES THICK

SHEET	STATION RANGE			AREA (SF)	AREA (SY)
F05	19+27.75	TO	20+00	195	22
F06	20+00	TO	21+34.50	480	53
					Near Pole P-01 ~Sta 10+00 BOP. 6
			TOTAL	~~675~~	~~75~~

9" sidewalk installed these Stations.

608(1c) CONCRETE SIDEWALK, 9 INCHES THICK

SHEET	STATION RANGE			AREA (SF)	AREA (SY)
F02	12+28.25	TO	14+00	750	83
F03	14+00	TO	16+00	800	89
F04	16+00	TO	18+00	800	89
F05	18+00	TO	19+27.75	640	71
F06	21+34.50	TO	22+00	300	33
F07	22+00	TO	22+09.50	100	11
			TOTAL	~~3390~~	~~377~~

448.46

609(2a) CURB & GUTTER, TYPE 1 ROLLED

SHEET(S)	STATION RANGE			LINEAR FEET
F02 - F07	12+28.25	TO	22+09.50	~~998~~ 998.85
			TOTAL	~~998~~ 998.85

609(2d) CURB & GUTTER, TYPE 1 VALLEY

SHEET(S)	STATION RANGE			LINEAR FEET
F06 - F07	20+15	TO	~~22+09.50~~ 22+25.75	212 ~~202~~
				212
			TOTAL	~~202~~

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick, No. CE 12799, REGISTERED PROFESSIONAL ENGINEER — 11/6/15

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

TAB: D02 Friday, November 20, 2015 11:39:38 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	**D02**	D07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-D SHEETS.DWG

603(22) CPPP STORM DRAIN PIPE - LINEAR FOOT

SYSTEM	PIPE NO.	SIZE [IN]	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
See sheet W01A, CO#47 add P-01B STORM SYSTEM 1	RFI-013 P-01	12	~~14.8~~	S-01	~~107.26~~ ~~109.26~~	S-02A	~~107.11~~ ~~109.11~~	~~1.16%~~	PIPE UNDER CONC. APPROACH SLAB
	RFI-013 P-02	12	~~66.5~~	S-02R	~~106.96~~ 108.96	S-03	104.36	~~4.04%~~	COORDINATE WITH ABUTMENT BLOCKOUT
	P-03	12	~~28.0~~	S-03	104.26	CLEAN OUT @ Existing Inlet	~~85.03~~		INSTALL PIPE ANCHORS, SLOPE TO MATCH EXIST GROUND
	~~P-04~~	~~12~~	~~23.0~~	~~CLEAN OUT~~	~~85.03~~	EXISTING SURFACE INLET	~~74.30~~		INSTALL PIPE ANCHORS, SLOPE TO MATCH EXIST GROUND
STORM SYSTEM 2	P-05	18	145.4	S-04	100.34	S-05	94.41	4.20%	PIPE DEFLECTION AT BRIDGE DEFLECTION
	P-06	18	45.1	S-05	94.11	S-06	87.30	16.40%	
	P-07	18	76.7	S-07	87.52	S-06	87.11	0.56%	
	P-08	18	132.7	S-08	88.25	S-07	87.53	0.56%	
	P-09	24	109.0	S-06	87.00	S-19	17.60		INSTALL PIPE ANCHORS, SLOPE TO MATCH EXIST GROUND
	P-10	24	51.7	S-19	17.50	EXISTING SYSTEM	17.00	1.00%	BURIED PIPE
STORM SYSTEM 3	P-11	18	68.7	S-09	88.27	S-10	87.13	1.73%	
	RFI-013 P-12	18	~~65.8~~	S-10	86.96	S-11	~~84.67~~ 83.6	~~2.77%~~ 3.9%	COORDINATE WITH ABUTMENT BLOCKOUT
	RFI-013 P-13	18	120.0	S-11	~~84.54~~ 83.50	Parnell Outfall ~~EXISTING SYSTEM~~ CO#13	20.07		INSTALL PIPE ANCHORS, SLOPE TO MATCH EXIST GROUND
STORM SYSTEM 4	P-18	12	~~24.9~~	S-12	75.82	P-19	74.73	4.66%	
	RFI-013R1 P-19	12	~~26.5~~	P-18	74.73	S-13	65.00	41.82%	
	P-20	12	~~25.0~~	P-21	~~76.65~~ 76.60	S-13	65.00	56.02%	
	P-21	12	~~26.5~~	S-14	~~76.77~~ ~~76.80~~ 76.65	P-20	76.65	~~0.47%~~	COORDINATE WITH ABUTMENT BLOCKOUT
	P-22	~~12~~	~~18.2~~ 17.4	S-15	~~76.80~~ ~~76.90~~ 76.70	S-14	~~76.80~~ 76.21	~~0.55%~~	8" C900 used to stay under appr. slab
	P-23	18	51.7	S-16	84.70	S-17	72.60	25.34%	COORDINATE WITH PLATFORM WALL BLOCKOUT
	P-24	18	18.4	S-17	72.30	S-13	65.00	50.36%	COORDINATE WITH PLATFORM WALL BLOCKOUT
	P-25	18	26.8	S-13	64.90	S-18	49.00	90.60%	
	P-26	18	30.3	S-18	48.78	EXISTING SYSTEM	35.00		REPLACE PIPE UNDER 1279 WATER STREET. PAID UNDER 603(24)
TOTALS	603(22-12) 12" CPPP		~~253~~ 318.83						
	603(22-18) 18" CPPP		~~771~~ 754.90						
	603(22-24) 24" CPPP		161						

603(21-6) CPEP STORM DRAIN PIPE - LINEAR FOOT

SYSTEM	PIPE NO.	SIZE [IN]	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
Varies significantly, see W sheets, Pipe routing adjusted in field to accommodate other utilities/structures RESIDENTIAL STORM DRAIN SYSTEM	P-101	6"	57.63	EXISTING SYSTEM	108.62	TP-1	105.45	5.50%	
	TP-1	6"	4.85	New P-101	105.45	S-03	105.35	2.06%	H-PILE WALL PENETRATION
	P-102	6"	30.41	~~EXISTING~~ SYSTEM	103.00	TP-2	101.95	3.45%	
	P-103	6"	11.70	~~S-19~~ S-20	102.50	TP-2	101.95	4.70%	
	TP-2	6"	4.83	P-102	101.95	S-04	101.85	2.07%	H-PILE WALL PENETRATION
	P-104	6"	19.37	~~S-20~~ Existing	98.90	~~S-21~~ S-22R	98.50	2.06%	Adjusted to be within Utility Easement
	TP-3	6"	4.83	~~S-22~~ S-23	96.00	S-05	95.90	2.07%	H-PILE WALL PENETRATION
	P-105	6"	55.41	~~S-21~~ S-22R	98.50	~~S-22~~ S-23	96.00	4.51%	
	TP-4	6"	4.46	~~S-23~~ S-24R	88.78	S-06	88.68	2.24%	H-PILE WALL PENETRATION
	~~P-106~~	~~6"~~	~~68.48~~	~~EXISTING SYSTEM~~	~~90.44~~	~~TP-5~~	~~89.10~~	~~1.95%~~	
	TP-5	6"	4.33	~~P-106~~ New	89.10	S-07	89.00	2.31%	H-PILE WALL PENETRATION
	~~P-107~~	~~6"~~	~~40.49~~	~~EXISTING SYSTEM~~	~~90.35~~	~~S-24~~	~~90.10~~	~~0.62%~~	
	P-108	6"	49.09	~~S-24~~ S-25	90.10	TP-6	89.85	0.51%	
	TP-6	6"	4.83	P-108	89.85	S-08	89.75	2.07%	H-PILE WALL PENETRATION
	P-109	6"	56.95	EXISTING SYSTEM	91.00	TP-7	89.90	1.93%	
	TP-7	6"	4.83	P-109	89.90	S-09	89.80	2.07%	H-PILE WALL PENETRATION
	P-110	6"	23.97	~~S-25~~ S-26	89.07	TP-8	88.70	1.54%	
	TP-8	6"	4.83	P-110	88.70	S-10	88.60	2.07%	H-PILE WALL PENETRATION
	~~P-111~~	~~6"~~	~~27.35~~	~~S-26~~	~~87.00~~	~~TP-9~~	~~86.00~~	~~3.66%~~	
	P-112	6"	~~8.26~~	~~S-27~~ S-28	~~86.10~~	~~TP-9~~ P-13	~~86.00~~	~~1.21%~~	
	~~TP-9~~	~~6"~~	~~4.83~~	~~P-111~~	~~86.00~~	~~S-11~~	~~85.90~~	~~2.16%~~	H-PILE WALL PENETRATION
	P-113	6"	40.71	~~S-28~~ S-29	83.50	~~S-29~~ S-12	81.00	6.14%	
	P-114	6"	23.38	~~S-29~~ S-30	80.75	~~TP-10~~ P-113	76.85	16.67%	
	~~TP-10~~	~~6"~~	~~4.00~~	~~P-114~~	~~76.85~~	~~S-12~~	~~76.75~~	~~2.50%~~	H-PILE WALL PENETRATION
	~~P-115~~	~~6"~~	~~7.08~~	~~EXISTING SYSTEM~~	~~78.35~~	~~EXISTING SYSTEM~~	~~78.00~~	~~5.00%~~	FROM 1306 WATER ST.
TOTALS	TOTAL	603(21-6)	~~656.99~~ ~~567~~						

604(1)STORM SEWER STRUCTURES - EACH

SYSTEM	STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE STATION	CENTER OF STRUCTURE OFFSET	RIM ELEVATION [FT]	INVERTS	REMARKS
							Valley Gutter
See sheet W01A, CO#47 add S-02A STORM SYSTEM 1	RFI-013 S-01	TYPE III CB	~~12+26.25~~ ~~12+13.30~~ 11+95	10.00 RT	~~111.29~~ ~~111.09~~	P-01=~~107.26~~ ~~109.26~~	~~FLAT~~ GRATE INLET. ~~ADJUST TO CONC APPROACH SLAB~~
	RFI-013 S-02	TYPE III CB	~~12+26.50~~ ~~12+13.30~~ 12+26.50	4.75 LT	~~111.01~~ ~~111.76~~	P-01=~~107.11~~ ~~109.11~~ P-02=~~106.96~~ ~~108.96~~	6" Side Inlet ~~FLAT GRATE INLET~~ ADJUST TO CONC APPROACH SLAB
	S-03	WALL MOUNTED CB	12+92.90	6.75 LT	107.64	P-02=104.36 P-03=104.26 TP-1=105.35	TYPE 1 INLET STRUCTURE
Added Type III near S-19 to collect surface flows STORM SYSTEM 2	S-04	WALL MOUNTED CB	13+40.90	6.75 LT	105.25	P-05=100.34 TP-2=101.85	TYPE 1 INLET STRUCTURE
	S-05	WALL MOUNTED CB	14+85.00	6.75 LT	97.88	P-05=94.41 P-06=94.11 TP-3= 95.90	TYPE 1 INLET STRUCTURE
	S-06	TYPE IV CB	15+29.52	6.75 LT	90.43	P-06=87.30 P-07=87.11 P-09=87.00 TP-4=88.68	INSTALL FLAT CONCRETE LID AND SOLID MH COVER
	S-07	WALL MOUNTED CB	16+06.19	6.75 LT	92.62	P-07=87.52 P-08=87.53 TP-5=89.00	TYPE 1 INLET STRUCTURE
	S-08	WALL MOUNTED CB	17+40.21	6.75 LT	92.26	P-08=88.25 TP-6=89.75	TYPE 1 INLET STRUCTURE
	S-19	48" SDMH	~~15+62.84~~	~~70.11 RT~~	22.40	P-09=17.60 P-10=17.52	SOLID MANHOLE COVER (SEE SHEET W07)
STORM SYSTEM 3	S-09	WALL MOUNTED CB	18+48.92	6.75 LT	91.99	P-11=88.27 TP-7=89.80	TYPE 1 INLET STRUCTURE
	S-10	WALL MOUNTED CB	19+17.63	6.75 LT	90.77	P-11=87.13 P-12=86.96 TP-8=88.60	TYPE 1 INLET STRUCTURE
	RFI-013 S-11	TYPE IV CB	~~20+04.46~~ 19+96.29	6.75 LT RFI-123	~~88.33~~ 88.56	P-12=~~84.67~~ 83.6 P-13=~~84.54~~ 83.5 TP-9=~~85.90~~ 84.6	TYPE 2 INLET STRUCTURE
STORM SYSTEM 4	S-12	TYPE III CB	21+19.96	6.75 LT	81.94	P-18=75.84 TP-10=76.75	TYPE 2 INLET STRUCTURE
RFI#59	S-13	TYPE IV CB	~~21+69.47~~ 21+69.25	~~6.75 LT~~ 3.90 LT	N/A	P-19= 61.60 P-20= 61.32 P-24= 61.27 P-25= 61.09	MANHOLE ACCESS BELOW BRIDGE, INSTALL FLAT LID AND SOLID MH COVER
	S-14	TYPE III CB	~~22+18.13~~ 22+25.75	~~6.75 LT~~ 6.45 LT	~~79.57~~ 79.24	P-21= 76.65 P-22= 76.65	~~FLAT GRATE INLET~~ Type 2 Inlet Structure
	S-15	TYPE III CB	~~22+14.96~~ 22+25.75	~~11.12 RT~~ 10.95 RT	~~79.49~~ 79.09	P-22= 76.70	FLAT GRATE INLET
RFI-013R1 RFI#28	S-16	TYPE IV CB 21+71.87 ~~21+69.46~~	48.77 ~~73.71~~ LT		~~91.51~~	P-23= 78.66	SOLID MH LID
	S-17	TYPE IV CB	~~21+68.71~~ ~~21+69.46~~	23.49 ~~23.58~~ LT	*	P-23= 72.25 P-24= 72.04	FLAT GRATE INLET
	S-18	TYPE IV CB	~~21+70.50~~ ~~21+71.29~~	12.17 ~~13.05~~ RT	53.25	P-25= 49.56 P-26= 48.76	FLAT GRATE INLET
Varies, see W sheets, some structures added in strategic locations identified in field RESIDENTIAL STORM DRAIN SYSTEM	S-20	TYPE 20 CB	~~13+51.89~~	13.00 LT	106.64	P-103=102.50	FLAT GRATE INLET
	~~S-21~~	~~TYPE 20 CB~~	~~14+33.67~~	~~31.72 LT~~	~~101.12~~	~~P-104=98.90~~	~~FLAT GRATE INLET~~
	S-22	TYPE 20 CB	~~14+28.68~~	13.00 LT	101.11	P-104=98.50 P-105=98.50	FLAT GRATE INLET
	S-23 CO#30	TYPE 20 CB	14+84.08	13.00 LT	~~98.31~~ 98.26	P-105=96.00 TP-3=96.00	FLAT GRATE INLET
	S-24 CO#30	TYPE 20 CB	15+~~29.52~~ 13.64	16.35 ~~12.63~~ LT	96.70 ~~94.15~~	~~TP-4=88.40~~ TP11= 95.39	FLAT GRATE INLET
	S-25	TYPE 20 CB	16+90.08	13.00 LT	92.70	P-107=90.10 P-108=90.10	FLAT GRATE INLET
	S-26	TYPE 20 CB	18+93.66	13.00 LT	91.87	P-110=89.07	FLAT GRATE INLET
	S-27	TYPE 20 CB	19+75.12	13.00 LT	89.92	P-111=87.00	FLAT GRATE INLET
	S-28	TYPE 20 CB	20+12.74	12.78 LT	88.55	P-112=86.10	FLAT GRATE INLET
	S-29	TYPE 20 CB	20+55.58	11.50 LT	86.60	P-113=83.50	FLAT GRATE INLET
	S-30	TYPE 20 CB	20+96.27	12.50 LT	83.80	P-113=81.00 P-114=80.75	FLAT GRATE INLET

TOTALS		
	604(1) 48" SDMH	1
	604(1A) TYPE III CB	~~5~~ 7
	604(1B) TYPE IV CB	6
	604(1C) TYPE 20 CB	~~11~~ 17
	WALL MOUNTED CB	7

* SET RIM AT SURFACE UNDER GORGE STREET PLATFORM

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

TAB: D03 Monday, June 13, 2016 1:59:42 PM NICOLE KNOX

REVISIONS NO.	DATE	DESCRIPTION
1 AB	06/10/16	RFI-13 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	D03	D07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET V\ADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\1744.01_WATER STREET V\ADUCT - D SHEETS\1744-D SHEETS.DWG

626(1-8A), 626(1-8B) SANITARY SEWER PIPE - LINEAR FOOT

SYSTEM	PIPE NO.	SIZE [IN]	MATERIAL	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
SANITARY SYSTEM 1	SE-01	8	PVC C900	35.2	S-E2	109.04	SE-02	106.36	8.1%	CONNECT AT EXISTING SEWER MANHOLE
	SE-02	8	INSULATED PVC C900	5.1	SE-01	106.36	SE-03	106.30	1.2%	COORDINATE WITH ABUTMENT BLOCKOUT
	SE-03	8	INSULATED PVC C900	47.5	SE-02	106.30	S-31	Raised~0.75' ~~100.53~~ ~101.28	~~12.8%~~ Less	DROP CONNECT AT MH S-31
	SE-04	8	INSULATED PVC C900	42	S-31	Raised~0.75' ~~97.00~~ ~97.75	EXISTING SYSTEM	75.40	~~0.0%~~ More	WYE-CLEANOUT AT ~~MANHOLE~~ OUTLET CTE
SANITARY SYSTEM 2	SE-05	8	INSULATED PVC C900	116.7	S-32	88.60	S-33	82.97	5.0%	DROP CONNECT INTO MH S-33
	SE-06	8	INSULATED PVC C900	80.5	SE-07	83.67	S-33	82.85	1.0%	DROP CONNECT INTO MH S-33
	SE-07	8	INSULATED PVC C900	138.1	~~S-34~~ C.O.	85.03	SE-06	83.67	1.0%	
	SE-19	8	INSULATED PVC C900	46	N/A	~~98.00~~ N/A	S-33	82.90	0.0%	~~PLUG UPSTREAM END~~
	SE-08	8	INSULATED PVC C900	28	S-33	79.70	SE-20	52.00	0.0%	~~WYE-CLEANOUT AT MANHOLE OUTLET~~
	SE-20	8	Insulated PVC C900	80	SE-08	52.00	EXISTING SYSTEM	16.70	0.0%	~~TRANSITION FROM INS TO NON-INS BURIED PIPE~~
SANITARY SYSTEM 3	SE-09	8	INSULATED PVC C900	79.9	S-35	88.05	SE-10	85.88	2.8%	
	SE-10	8	PVC C900	70.3	SE-09	85.88	SE-11	83.91	2.8%	COORDINATE WITH ABUTMENT BLOCKOUT
	SE-11	8	PVC C900	15.3	SE-10	83.91	S-36	83.54	2.8%	
	SE-12	8	PVC C900	40.6	S-36	83.25	SE-13	80.77	6.5%	
	SE-13	8	PVC C900	82.7	SE-12	80.77	SE-14	75.42	6.5%	
	SE-14	8	INSULATED PVC C900	9.4	SE-13	75.42	SE-15	75.02	4.3%	COORDINATE WITH ABUTMENT BLOCKOUT
	SE-15	8	INSULATED PVC C900	35.2	SE-14	75.02	SE-37	~~63.30~~ 60.41	49.3%	STEEP PIPE CONNECTION AT MANHOLE INLET
	SE-16	8	INSULATED PVC C900	29.3	EXISTING SYSTEM	~~76.38~~ 77.63	SE-37	~~63.40~~ 60.41	35.3%	STEEP PIPE CONNECTION AT MANHOLE INLET
	SE-17	8	INSULATED PVC C900	20.0	S-37	~~63.20~~ 60.24	CLEANOUT	56.43	39.8%	STEEP PIPE CONNECTION AT MANHOLE OUTLET
	SE-18	8	PVC C900	26.6	CLEANOUT	56.43	EXISTING SYSTEM	34.15	0.0%	REPLACE PIPE UNDER 1279 WATER STREET
TOTALS	626(1-8A) ~~INSULATED~~	~~351~~ 325								
	626(1-8B) ~~UN~~-INSULATED	~~678~~ 680.415								

RFI 29

626(5) CONNECT TO EXISTING SEWER - EACH

STATION	OFFSET	REMARKS
11+92.30	0.7' RT	EXISTING MANHOLE IN WATER STREET ROW
12+97.04	28.6' RT	ELLIOT STREET UTILITY EASEMENT
15+75.47	71.8' RT	EXISTING MANHOLE IN WILEY STREET UTILITY ESMT
21+73.81	38.2' RT	GORGE STREET ROW - DOWNHILL FROM WATER ST.
21+~~77.64~~ 74.21	48.59' ~~21.9'~~ LT	GORGE STREET ROW - UPHILL FROM WATER ST.
TOTAL	~~5~~ 6	

Additional CTE discovered near sta.12+05LT, likely for 1622 service, not enough room to install normal service equip. wye into SE-01

Connect to existing 8" CMP at Parnell St. Appx. Sta 20+05, 25' LT, paid under CO#14

626(2) SEWER SERVICE CONNECTION - EACH

STATION[1]	OFFSET[2]	INVERT[3] [FT]	SIZE [IN]	MATERIAL	ADDRESS	REMARKS
~12+53.67~~12+46.33~~	3.0' LT	~~105.4~~	6	PVC	1610 WATER STREET	CONNECT TO MAIN
12+79.40	3.0' LT	~~101.5~~ ~102.3	6	PVC	1608 WATER STREET	CONNECT TO S-31, NE SIDE
12+79.40	3.0' LT	~~101.5~~ ~102.3	6	PVC	1600 WATER STREET	CONNECT TO S-31, SE SIDE
~14+34.42~~14+18.50~~	3.0' LT	~~90.3~~	6	PVC	1528 WATER STREET	~~CONNECT TO S-32~~ Connect to Main
~14+70.75~~14+68.00~~	3.0' LT	~~87.6~~	6	PVC	1508 WATER STREET	CONNECT TO MAIN
15+18.30 +/-	+/- 39.8' LT	98.6 ±	6	PVC	1500 WATER STREET	CONNECT TO SE-19
15+31.29 +/-	+/- 16.7' LT	90.4 ±	6	PVC	1508 WATER STREET	CONNECT TO SE-19
15+36.05	3.0' LT	84.0	6	PVC	WILEY STREET	CONNECT TO S-33, N SIDE
15+52.05 +/-	3.0' LT	+/- 84.0	6	PVC	1462 WATER STREET	CONNECT TO MAIN
16+27.43 +/-	3.0' LT	+/- 84.8	6	PVC	1454 WATER STREET	CONNECT TO MAIN
16+84.52 +/-	3.0' LT	+/- 85.3	6	PVC	MILAR STREET	CONNECT TO MAIN
~16+90 ~~16+94.29~~	3.0' LT	+/- 85.4	6	PVC	1446 WATER STREET	CONNECT TO MAIN
~17+47.25~~17+54.25~~	3.0' LT	~~+/- 86.0~~	6	PVC	1442+MILAR STREET	~~CONNECT TO S-34, N SIDE~~ Connect to Main
18+43.61	3.0' LT	88.7	6	PVC	1418 + 1426 WATER STREET	CONNECT TO S-35, NE SIDE
~19+42.67~~19+28.10~~	3.0' LT	~~87.0~~	6	PVC	1412 WATER STREET	CONNECT TO MAIN
20+09.47	3.0' LT	85.3	6	PVC	PARNELL STREET	CONNECT TO S-36, N SIDE
~20+52.17~~20+45.05~~	3.0' LT	~~84.2~~	6	PVC	1320 WATER STREET	CONNECT TO MAIN
20+98.15	3.0' LT	80.6	6	PVC	1312 WATER STREET	CONNECT TO MAIN
21+74.34 ~~21+44.28~~	45.51' ~~3.0'~~ LT	~~76.4~~ 74.16	6	PVC	1306 WATER STREET	CONNECT TO MAIN
TOTAL	~~10~~ 21.5					one service counted for connecting 1305 and 1279 to main underneath 1279.

Added service to SE-19 for 1462, did not count SE-19 as service

Added service for vacant lot, capped, same sta/elev as this

2 services combined here plus abandoned wye intended for 1418.5 total counted 2.5Ea

Parnell St. Main not counted as service, CO#14

626(2) SEWER SERVICE CONNECTION NOTES

1 WATER STREET STATIONING
2 OFFSET FROM WATER STREET ALIGNMENT
3 INVERT OF SEWER MAIN AT SERVICE CONNECTION

604(2) SANITARY SEWER MANHOLE - EACH

SYSTEM	STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE		RIM ELEVATION [FT]	INVERTS	REMARKS
			STATION	OFFSET			
SANITARY SYSTEM 1	S-31	48" SANITARY SEWER MANHOLE	12+79.40	3.00 LT	108.34	~101.28 SE-03=~~100.53~~ SE-04=~~97.00~~ ~97.75	ROTATE CONE AND WATERTIGHT LID TO MATCH CONC PANEL BLOCKOUT. Raised Manhole~0.75', CO#41+Field Fit
SANITARY SYSTEM 2	S-32	48" SANITARY SEWER MANHOLE	14+18.5	3.00 LT	101.35	SE-05=88.60	ROTATE CONE AND WATERTIGHT LID TO MATCH CONC PANEL BLOCKOUT
	S-33	48" SANITARY SEWER MANHOLE	15+35.05	3.00 LT	95.57	SE-05=82.97 SE-06=83.67 SE-07=79.70	ROTATE CONE AND WATERTIGHT LID TO MATCH CONC PANEL BLOCKOUT
	~~S-34~~	~~48" SANITARY SEWER MANHOLE~~	~~17+54.25~~	~~3.00 LT~~	~~92.25~~	~~SE-07=85.03~~	~~ROTATE CONE AND WATERTIGHT LID TO MATCH CONC PANEL BLOCKOUT~~
SANITARY SYSTEM 3	S-35	48" SANITARY SEWER MANHOLE	18+43.61	3.00 LT	92.03	SE-09=88.05	ROTATE CONE AND WATERTIGHT LID TO MATCH CONC PANEL BLOCKOUT
	S-36	48" SANITARY SEWER MANHOLE	20+09.47	3.00 LT	88.17	SE-11=83.54 SE-12=83.25	BURIED MANHOLE
	S-37	48" SANITARY SEWER MANHOLE	21+74.58 ~~21+75.05~~	1.83 LT ~~3.00 LT~~	N/A	SE-15=~~63.30~~ 60.41 SE-16=~~63.40~~ 60.41 SE-17=~~63.20~~ 60.24	MANHOLE ACCESS BELOW BRIDGE. INSTALL FLAT LID AND WATERTIGHT SOLID MH COVER
TOTAL	~~7~~ 6						

Replaced S-34 with Cleanout, CO#37

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

TAB: D04 Friday, November 20, 2015 11:39:54 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	**D04**	D07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET V\ADUCT\CIVIL\ACAD\1744 D SHEETS.DWG

627(2-8A), 627(2-8B) 8 INCH HDPE WATER CONDUIT - LINEAR FOOT

PIPE NO.	SIZE (IN.)	MATERIAL	START STATION	OFFSET	START BOP ELEVATION	END STATION	OFFSET	END BOP ELEVATION	LENGTH (FT.)	SLOPE	REMARKS
W-10	8	HDPE	~~12+17.73~~ 11+87.71	~~4.05~~ 5.38 RT	~~107.17~~	12+27.25	2.17 RT	106.32	~~9.7~~ 38	8.7%	CONNECT TO EXISTING ~~6"~~ 8" ~~DIP~~ CIP
W-11	8	HDPE INSULATED	12+27.25	2.17 RT	106.10	13+51.67	2.17 RT	99.88	124.6	5.0%	COORDINATE WITH ABUTMENT BLOCKOUT
W-12	8	HDPE INSULATED	13+51.70	2.17 RT	99.88	16.15.83	2.17 RT	86.68	264.3	5.0%	
W-13	8	HDPE INSULATED	16+15.83	2.17 RT	86.68	18+42.57	2.17 RT	86.68	227.0	0.0%	
W-14	8	HDPE INSULATED	18+42.57	2.17 RT	86.90	19+30.63	2.17 RT	85.80	88.1	1.0%	COORDINATE WITH ABUTMENT BLOCKOUT
W-15	8	HDPE	19+30.63	2.17 RT	86.00	19+40.63	7.70 RT	85.49	11.4	4.6%	
W-16	8	HDPE	19+40.63	7.70 RT	85.49	19+93.96	7.70 RT	83.88	53.9	3.0%	
W-17	8	HDPE	19+93.96	7.70 RT	83.88	21+26.21	7.70 RT	76.57	~~133.0~~ less	5.5%	
W-18	8	HDPE INSULATED	~~21+26.21~~ ~21+13.25	7.70 RT	76.35	~~21+32.50~~ ~21+28.25	1.25 RT	78.48	~~9.2~~ more	23.7%	
W-19	8	HDPE INSULATED	21+32.50	1.25 RT	78.48	22+11.50	1.25 RT	76.78	79.0	2.2%	COORDINATE WITH ABUTMENT BLOCKOUTS
W-20	8	~~HDPE~~ DIP see CO #20	22+11.50	1.25 RT	76.78	22+38.16	4.22 RT	74.69	27.1	7.7%	CONNECT TO EXISTING 6" ~~DIP~~ CIP
TOTALS		627(2-8A) UNINSULATED	~~235~~ 243.50								
		627(2-8B) INSULATED	~~792~~ 808.02								

627(2-6) 6" HDPE INSULATED PIPE - LF

STATION	LENGTH	REMARKS
20+00.00 LT	~~14~~ 42.5'	NEW PIPE CONNECTION AT PARNELL STREET. BETWEEN NEW 8" HDPE MAIN AND EXIST. 6" CI AT PARNELL STREET.
TOTAL	~~14~~ 42.5'	

627(3A), 627 (3B) FIRE HYDRANT INSTALLATION - EACH

TEE STATION	TEE OFFSET	FH STATION	FH OFFSET	REMARKS
12+67.90	2.17' RT	12+~~65.29~~ 63.33	15.1' ~~14.2'~~ LT	SUSPENDED
16+91.46	2.17' RT	16+~~90.68~~ 88.50	24.0' ~~15.5'~~ LT	SUSPENDED
19+88.75	7.70' RT	19+88.94	15.5' LT	BURIED
22+35.15	3.78' RT	22+34.44	15.5' LT	BURIED
TOTALS	627(3A) - SUSPENDED	2		
	627(3B) - BURIED	2		

627(5-6) INSTALL 6 INCH GATE VALVE - EACH

STATION	OFFSET	REMARKS
20+00.00	5.20' RT	BURIED
TOTAL	627(5-6)	1

627(4) WATER SERVICE CONNECTION EACH

STATION	SIDE	LENGTH± [FT]	BOP AT MAIN	SIZE (IN)	MATERIAL	ADDRESS	NOTES
~12+20	LT	12		MATCH EXISTING	COPPER	1622 WATER STREET	BURIED SERVICE DISCOVERED, NOT SHOWN ON ORIGINAL PLANS
12+32.88	RT	18	105.8	MATCH EXISTING	COPPER	1617 WATER STREET	SUSPENDED TO ROW, BURIED SERVICE VALVE BOX
12+40.83	LT	26	105.4	MATCH EXISTING	COPPER	1610 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
12+51.04	RT	14	104.9	MATCH EXISTING	COPPER	1611 WATER STREET	SUSPENDED TO ROW, BURIED SERVICE VALVE BOX
12+74.51	LT	20	103.7	MATCH EXISTING	COPPER	1608 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
13+~~23.13~~ ~53.0	LT	22	101.3	MATCH EXISTING	COPPER	1600 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
~~13+26.69~~	~~RT~~	~~14~~	~~101.1~~	~~3/4"~~	~~COPPER~~	~~USS 1378, BK 10, LT 10~~	~~SUSPENDED TO ROW, BURIED SERVICE VALVE BOX, CAP END~~
13+~~78.84~~ ~71.3	LT	15	98.5	MATCH EXISTING	COPPER	1528 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
~~13+83.81~~	~~RT~~	~~13~~	~~98.3~~	~~3/4"~~	~~COPPER~~	~~USS 1378, BK 10, LT 9~~	~~SUSPENDED TO ROW, BURIED SERVICE VALVE BOX, CAP END~~
+/- 14+65.~~46~~	LT	20	94.2	MATCH EXISTING	COPPER	1508 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
15+25.70	LT	15	91.2	MATCH EXISTING	COPPER	WILEY STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
15+~~31.40~~ ~26.7	LT	25	90.9	MATCH EXISTING	COPPER	WILEY STREET	SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX
+/- 15+71.~~79~~	LT	16	88.9	MATCH EXISTING	COPPER	1462 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
16+30.64	LT	15	86.7	MATCH EXISTING	COPPER	1454 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
+/- 16+97.~~58~~	LT	15	86.7	MATCH EXISTING	COPPER	1446 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
17+~~79.72~~ ~70.7	LT	15	86.7	MATCH EXISTING	COPPER	USS 1378, BK 4, LT 4	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX, CAP END
18+~~15.63~~ ~32.5	LT	15	86.7	MATCH EXISTING	COPPER	1426 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
18+~~37.55~~ ~34.0	LT	15	86.7	MATCH EXISTING	COPPER 1418.5 ~~1426~~	WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
18+~~74.46~~ ~35.5	LT	22	86.4	MATCH EXISTING	COPPER	1418 WATER STREET	SUSPENDED TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
19+~~21.68~~ ~44.5	LT	20	85.9	MATCH EXISTING	COPPER	1412 WATER STREET	Buried ~~SUSPENDED~~ TO ROW, PILE WALL PENETRATION, BURIED SERVICE VALVE BOX
20+38.46	RT	6	81.5	MATCH EXISTING	COPPER	1319 WATER STREET	SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX
20+43.42	LT	20	81.2	MATCH EXISTING	COPPER	1320 WATER STREET	BURIED SERVICE CONNECTION. BURIED SERVICE VALVE BOX
20+88.65	LT	20	78.7	MATCH EXISTING	COPPER	1312 WATER STREET	BURIED SERVICE CONNECTION. BURIED SERVICE VALVE BOX
21+33.50	LT	18	78.5	MATCH EXISTING	COPPER	1306 WATER STREET	BURIED SERVICE CONNECTION. BURIED SERVICE VALVE BOX
21+40.22	RT	13	78.3	MATCH EXISTING	COPPER	1305 WATER STREET	SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX
21+57.63	RT	13	77.9	MATCH EXISTING	COPPER	1279 WATER STREET	SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX
~~21+77.33~~	~~RT~~	~~13~~	~~77.5~~	~~MATCH EXISTING~~	~~COPPER~~	~~1279 WATER STREET~~	~~SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX~~
~~21+92.29~~	~~LT~~	~~18~~	~~77.2~~	~~MATCH EXISTING~~	~~COPPER~~	~~1270 WATER STREET~~	~~SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX~~
22+03.95	RT	25	76.9	MATCH EXISTING	COPPER	1269 WATER STREET	SUSPENDED SERVICE CONNECTION, SUSPENDED VALVE, NO VALVE BOX
TOTAL	~~28~~ 22						

Added second service at 1508

627(5-8) INSTALL 8 INCH GATE VALVE - EACH

STATION	OFFSET	REMARKS
~~12+17.73~~ 11+87.71	5.38 ~~4.05~~' RT	BURIED
12+64.90	2.17' RT	SUSPENDED
12+70.90	2.17' RT	SUSPENDED
16+88.46	2.17' RT	SUSPENDED
16+94.46	2.17' RT	SUSPENDED
~~19+85.75~~ ~19+97	7.70' RT	Relocated from FH-3 Tee to Parnell BURIED
~~19+91.75~~ ~20+03	7.70' RT	Relocated from FH-3 Tee to Parnell BURIED
22+32.15	4.7' RT	BURIED
22+38.15	4.2' RT	BURIED
TOTAL	~~9~~ 10	Added a valve at ~19+41, 7.70' RT Buried.

627(6) CONNECT TO EXISTING WATER SYSTEM - EACH

STATION	OFFSET	REMARKS
~~12+17.73~~ 11+77.77	5.85 ~~4.1~~' RT	NEW 8" HDPE, INSTALL 8" GV & VB, CONNECT TO EXIST. 8" CI
20+00.00	14' LT	NEW 6" HDPE, CONNECT TO EXIST. 6" CI AT ROW
22+38.20	4.4' RT	NEW 8" HDPE, INSTALL 8" GV & VB, CONNECT TO EXIST. 6" CI
TOTAL	3	

CO#25 Replaced pay item qty

CO#25 Replaced pay item qty
CO#25 Replaced pay item qty
Combined 1279 Services CO#25
House demolished by project
CO#25 Replaced pay item qty

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/4/2019

CHECKED BY: T. GRIER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

TAB: D05 Monday, January 04, 2016 11:45:22 AM NICOLE KNOX

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	D05	D07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-D SHEETS.DWG

639(3) APPROACH SUMMARY - EACH

ADDRESS NUMBER	SHEET	STATION	OFFSET	WIDTH FT	TYPE OF DW	REMARKS
1610	F08	12+51.48	LT	38.5	FILL	CONCRETE SURFACING
1608	F08	12+88.02	LT	22.1	STRUCTURE / FILL	~~SHORE EXISTING DRIVEWAY SUPPORT STRUCTURE.~~ CONCRETE SURFACING
1600	F09	13+25.52	LT	25.6	FILL	CONCRETE SURFACING
1528	F09	13+77.21	LT	7.8	FILL	CONCRETE SURFACING
1528	F10	14+10.38	LT		FILL	CONCRETE SURFACING
1508	F10	14+49.66	LT		FILL	AGGREGATE BASE COURSE GRADING D-1 SURFACING
1508	F11	15+06.59	LT	71.3	STRUCTURE	~~SHORE EXISTING DRIVEWAY SUPPORT STRUCTURE. WOODEN SURFACING~~
1462	F11	16+08.71	LT	52.6	FILL	CONCRETE SURFACING
1454	F12	16+61.64	LT	68.1	FILL	ASPHALT SURFACING
1446	F12	17+62.92	LT	48.0	FILL	ASPHALT SURFACING
1442	F13	17+19.81	LT		FILL	CONCRETE SURFACING
1426	F13	18+35.45	LT	24.4	FILL	CONCRETE SURFACING
1418	F14	18+76.98	LT	26.4	FILL	CONCRETE SURFACING
1418	F14	18+89.14	LT		FILL	CONCRETE SURFACING
1412	F14	19+33.89	LT	21.7	FILL	CONCRETE SURFACING
1400	F14	19+60.40	LT	13.2	FILL	CONCRETE SURFACING
1400	F15	19+79.21	LT	21.4	FILL	~~AGGREGATE BASE COURSE GRADING D-1 SURFACING~~
PARNELL ST.	F15	20+01.82	LT	26.4	FILL	CONCRETE SURFACING, PUBLIC APPROACH
1319/1321	F16	20+21.13	RT	13.1	STRUCTURE	SHORE EXISTING DRIVEWAY STRUCTURE. WOODEN SURFACING
1316	F16	20+36.61	LT	10.9	FILL	CONCRETE SURFACING
1316	F16	20+47.44	LT	11.3	FILL	CONCRETE SURFACING
1312	F17	20+66.14	LT	20.9	FILL	~~ASPHALT SURFACING~~
1312	F17	20+90.14	LT	15.8	FILL	AGGREGATE BASE COURSE GRADING D-1 SURFACING
1306	F17	21+22.59	LT	56.6	FILL	CONCRETE SURFACING
1306	F17	21+53.21	LT		FILL	~~AGGREGATE BASE COURSE GRADING D-1 SURFACING~~
GORGE ST.	F18	21+76.03	LT	22.9	FILL	~~ASPHALT SURFACING, PUBLIC APPROACH~~
1305	F18	21+03.55	RT		STRUCTURE	WOODEN SURFACING
1279	F19	21+57.60	RT		STRUCTURE	WOODEN SURFACING
				TOTAL	29 ~~28~~	

-See RFI 187

Asphalt - See CO #30

Asphalt

Concrete

Asphalt

Concrete

Added 1617 Concrete driveway, garage built after design survey

APPROACH SUMMARY NOTES:

1. ALL APPROACHES ARE RESIDENTIAL UNLESS NOTED IN REMARKS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CHECKED BY: T. GRIER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

TAB: D06 Friday, November 20, 2015 11:40:08 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**D06**	D07

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744 D SHEETS.DWG

615(1) STANDARD SIGN SUMMARY

SIGN NO.	STATION	OFFSET RT	OFFSET LT	CODE NO. ASDS	LEGEND	SIZE (INCHES) W	SIZE (INCHES) H	AREA SQ. FT	SIGN FACES	POST TYPE	REMARKS
1 *	11+02 OK	X		R7P-101	NO PARKING ANY TIME	12	18	1.50	N	2 ½" PST	
2	12+03 12+04.76	X		CUSTOM	YIELD TO UPHILL TRAFFIC	36	36	9.00	N	2 ½" PST	
3				R7P-101L	NO PARKING ANY TIME	12	18	1.50	N		
4	12+57 12+54.34	X		CUSTOM	CAUTION SLOW	24	24	4.00	N	2 ½" PST	
5	12+82 12+83.92	X		R7P-101RL	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
6	13+29 13+30.92	X		D3-1D	ELLIOTT ST 100	49 36	8 8	2.72	S	2 ½" PST	DOUBLE SIDED
7	13+30.92			D3-1D	WATER ST 1600	49 36	8 8	2.72	E		
8	13+30.92			CUSTOM	NO PARKING NON MOTORIZED VEHICLES THIS BLOCK	12	18	1.50	N		
9	13+30.92			R7P-101RL	NO PARKING ANY TIME	12	18	1.50	E		
10	14+26 14+28.00	X		R7P-101R	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
11 *	14+51 OK		X	CUSTOM	CAUTION SLOW	24	24	4.00	S	2 ½" PST	
12	14+51			R7P-101	NO PARKING ANY TIME	12	18	1.50	S		
13	14+96 14+94.00	X		R7P-101L	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
14 **	15+23 OK		X	D3-1D	WILEY ST 200 BLOCK	67 36	8 8	3.72	S	2 ½" PST	DOUBLE SIDED
15 **	15+23			R7P-101	NO PARKING ANY TIME	12	18	1.50	S		
16	15+34 15+36.00	X		R7P-101R	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
17	15+84 OK	X		R7P-101L	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
18	16+44 16+46.46	X		R7P-101RL	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
19	16+88 16+88.46	X		R7P-101RL	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
20	17+45 17+45.37	X		R7P-101R	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
21	18+50 18+48.63	X		R7P-101L	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
22	18+85 18+84.63	X		R7P-101R	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
23	19+48 19+46.25	X		R7P-101L	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
24	19+61 19+58.25	X		CUSTOM	CAUTION SLOW	24	24	4.00	N	2 ½" PST	
25	19+58.25			CUSTOM	NO PARKING NON MOTORIZED VEHICLES THIS BLOCK	12	18	1.50	N		
26 **	20+07 OK		X	D3-1D	PARNELL ST 200	59 36	12 8	4.92	W	2 ½" PST	DOUBLE SIDED
27 *	20+27 OK		X	R7P-101	NO PARKING ANY TIME	12	18	1.50	E	2 ½" PST	
28	20+73 20+74.74	X		R7P-101RL	NO PARKING ANY TIME	12	18	1.50	N	2 ½" PST	
29	21+48 21+48.17	X		R7P-101RL	NO PARKING ANY TIME	12	18	1.50	N	2 ½" PST	
30	21+99 22+01.67	X		R7P-101R	NO PARKING ANY TIME	12	18	1.50	N	2 ½" PST	
31	22+34 22+32.11	X		D3-1D	EDGECLIFF WAY 100	67	8	3.72	W	2 ½" PST	DOUBLE SIDED
32	22+32.11			D3-1D	WATER ST 1200	49	8	2.72	N		DOUBLE SIDED
33	22+32.11			R7P-106	NO PARKING LOADING ZONE	12	18	1.50	W		
34	22+35	X		W14-1	DEAD END	30	30	6.25	N		HANG ON WOODEN FENCE
**	21+66.50		X	D3-1D	GORGE ST STAIRWAY	36	8				

Refer to Dwg S-30.03 For Post Anchor Details per Notice #7

ORIGINAL STATIONS IN GREEN, STATIONS IN RED MATCH BRIDGE RAIL SHOP DRAWING LAYOUT
UNO, MOUNT SIGN POST TO BRIDGE RAIL WOOD POST PER DETAIL ON SHT E01

* MOUNT SIGN POST ON GRADE WITH SLEEVE PER STD. DETAILS S-32.00 & S-30.03

** MOUNT SIGN POST TO STAIR RAIL WOOD POST PER DETAIL ON SHT E01

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA · 49 TH · Ryan D. Redick · No. CE 12799 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SUMMARY TABLES

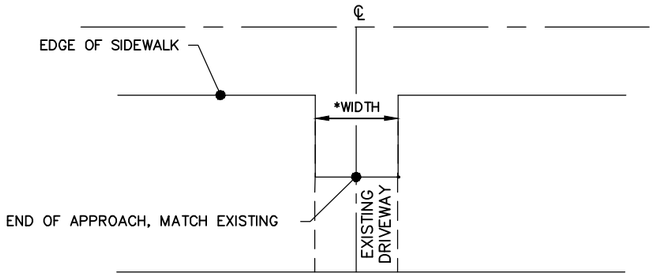
TAB: D07 Friday, November 20, 2015 11:40:14 AM JOSEPH HORAZDOVSKY

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	**D07**	D07

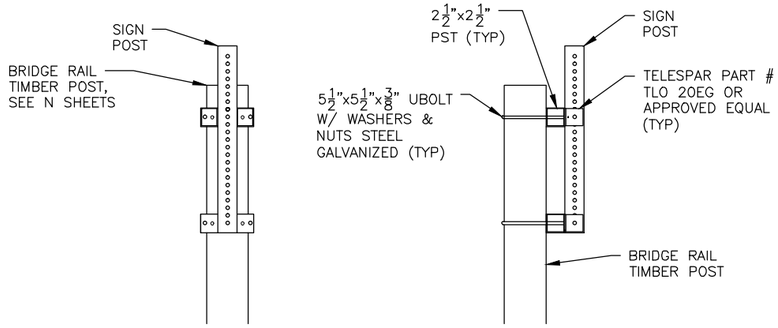
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-D SHEETS.DWG



TYPICAL APPROACH LAYOUT–PLAN

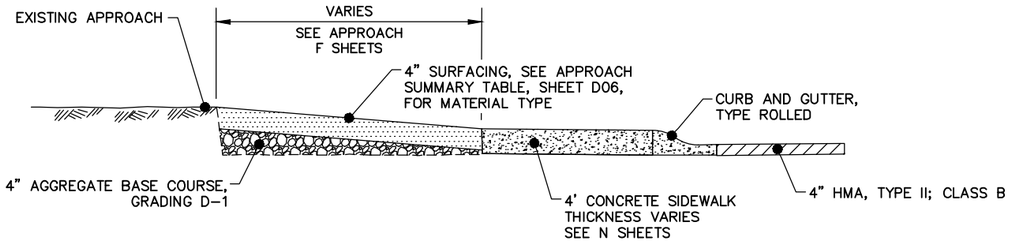
NTS

* MATCH EXISTING APPROACH WIDTH OR AS DIRECTED BY THE ENGINEER.



SIGN POST TO BRIDGE RAIL ANCHOR DETAIL

NTS



APPROACH PROFILE

NTS

NOTES

1) THE CONTRACTOR SHALL REPLACE THE EXISTING DRIVEWAYS AS NEEDED TO PROVIDE THE BEST TRANSITION TO EXISTING CONDITIONS

2) BLEND 4" AGGREGATE BASE COURSE, GRADING D–1 TO END OF APPROACH

3) APPROACH SURFACING MATERIALS:
ASPHALT IS HMA, TYPE II; CLASS B
CONCRETE IS CLASS A

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CHECKED BY: T. GRIER

STATE OF ALASKA – 49TH – Ryan D. Redick, No. CE 12799 – REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DETAILS

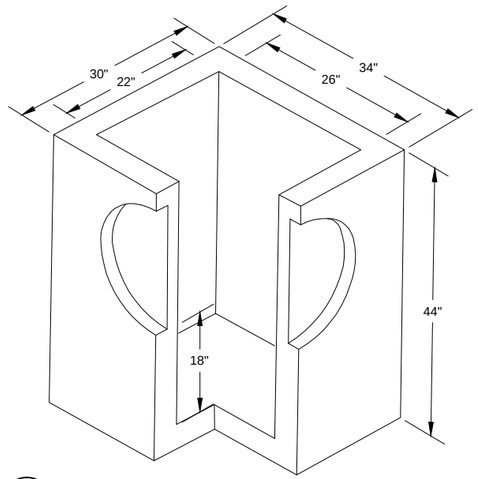
TAB: E01 Thursday, January 14, 2016 8:51:42 AM RYAN REDICK

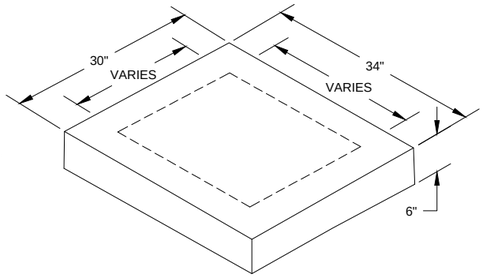
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
1 AB	01/12/16	Addendum #5 As-Built Set	BR-000S(735)	2015	**E01**	E10

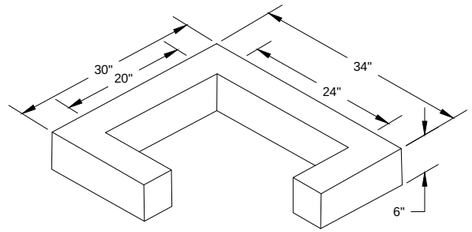
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-E SHEETS.DWG

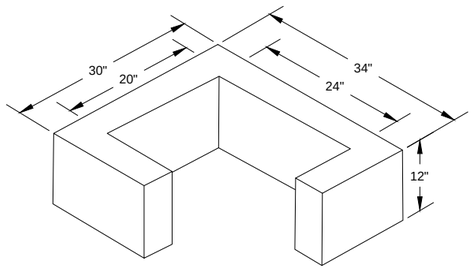
TYPE III PRE–CAST CONCRETE CATCH BASIN NOTES:

1. CATCH BASIN HAS KNOCKOUTS ON FOUR SIDES TO ACCOMMODATE 12" PIPE SIZE.
2. EXTENSION RISERS AVAILABLE IN 6", AND 12" HEIGHTS.
3. GROUT OPENINGS WATERTIGHT WITH "JETSET" OR OTHER APPROVED GROUT.
4. INSTALL FLAT CONCRETE LID WITH BLOCKOUT TO ACCOMMODATE INLET FRAME AND GRATE.
5. FRAME AND GRATE TO BE HEAVY DUTY IRON, RECTANGULAR TO FIT CATCH BASIN.
6. CONTRACTOR SHALL REMOVE KNOCKOUTS AS PER MANUFACTURES RECOMMENDATIONS, DAMAGE INCURRED TO THE STRUCTURE DURING KNOCKOUT REMOVAL SHALL BE EVALUATED BY THE ENGINEER TO DETERMINE WHETHER INTEGRITY OF STRUCTURE HAS BEEN COMPROMISED. STRUCTURES DAMAGED BY THE CONTRACTOR AND DEEMED UN–USABLE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
7. CATCH BASINS SHALL BE SET ON A MIN. 6" THICK BEDDING THAT IS LEVEL, WELL COMPACTED AND ORIENTED TO THE AXIS OF THE ROAD. BURIED CATCH BASINS SHALL BE BACKFILLED WITH D–1 PLACED IN MAX. LIFTS OF 6", COMPACTED TO 95% DRY DENSITY.







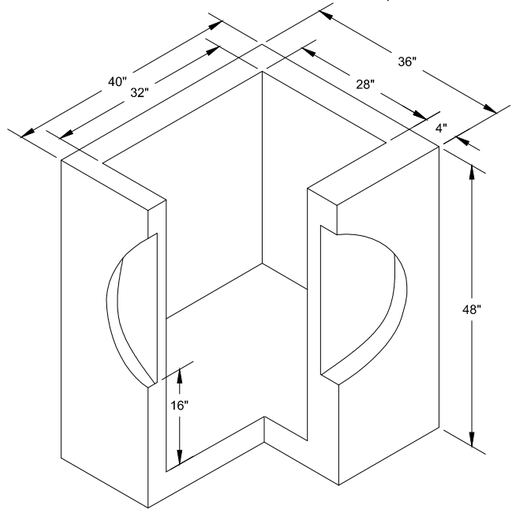


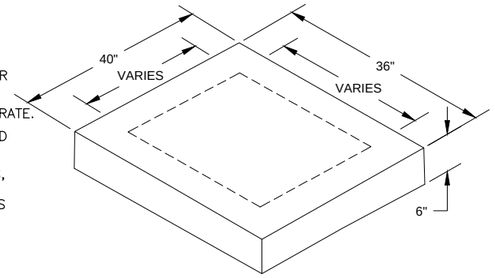
1 E02 TYPE III CATCH BASIN

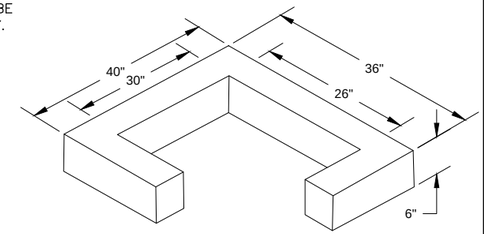
NTS

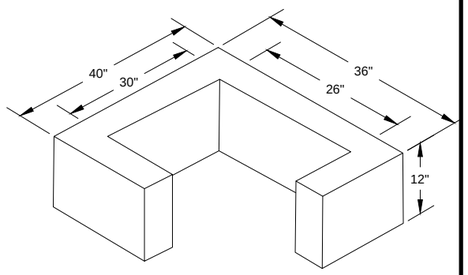
TYPE IV PRE–CAST CONCRETE CATCH BASIN NOTES:

1. CATCH BASINS HAVE KNOCKOUTS ON FOUR SIDES TO ACCOMMODATE 18" PIPE SIZE.
2. EXTENSION RISERS AVAILABLE IN 6" AND 12" HEIGHTS.
3. GROUT INLET, OUTLET AND PICK HOLE PENETRATIONS WATERTIGHT WITH "JET–SET" OR OTHER APPROVED GROUT.
4. INSTALL FLAT CONCRETE LID WITH BLOCKOUT TO ACCOMMODATE INLET FRAME AND GRATE.
5. FRAME AND GRATE TO BE HEAVY DUTY IRON, RECTANGULAR TO FIT CATCH BASIN AND CURB TYPE.
6. CONTRACTOR SHALL REMOVE KNOCKOUTS AS PER MANUFACTURES RECOMMENDATIONS, DAMAGE INCURRED TO THE STRUCTURE DURING KNOCKOUT REMOVAL SHALL BE EVALUATED BY THE ENGINEER TO DETERMINE WHETHER INTEGRITY OF STRUCTURE HAS BEEN COMPROMISED. STRUCTURES DAMAGED BY THE CONTRACTOR AND DEEMED UN–USABLE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
7. CATCH BASINS SHALL BE SET ON A MIN. 6" THICK BEDDING THAT IS LEVEL, WELL COMPACTED AND ORIENTED TO THE AXIS OF THE ROAD. BURIED CATCH BASINS SHALL BE BACKFILLED WITH D–1 PLACED IN MAX. LIFTS OF 6", COMPACTED TO 95% DRY DENSITY.



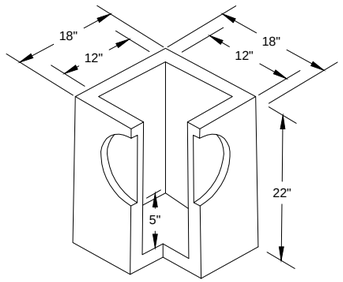






2 E02 TYPE IV CATCH BASIN

NTS

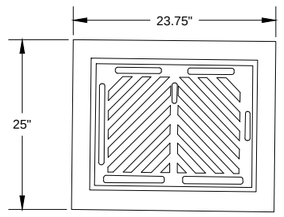


TYPE 20 PRE–CAST CONCRETE CATCH BASIN NOTES:

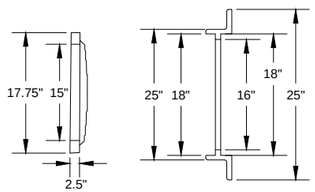
1. CATCH BASIN HAS 10" KNOCKOUTS ON FOUR SIDES TO ACCOMMODATE 6" PIPE SIZE.
2. EXTENSION RISERS AVAILABLE IN 6" AND 12" HEIGHTS. OUTSIDE DIMENSIONS ARE 18"X18".
3. GROUT INLET, OUTLET, AND PICK HOLE PENETRATIONS WATERTIGHT WITH "JETSET" OR OTHER APPROVED GROUT.
4. FRAME AND GRATE TO BE HEAVY DUTY IRON, SQUARE TO FIT CATCH BASIN.
5. CONTRACTOR SHALL REMOVE KNOCKOUTS AS PER MANUFACTURES RECOMMENDATIONS, DAMAGE INCURRED TO THE STRUCTURE DURING KNOCKOUT REMOVAL SHALL BE EVALUATED BY THE ENGINEER TO DETERMINE WHETHER INTEGRITY OF STRUCTURE HAS BEEN COMPROMISED. STRUCTURES DAMAGED BY THE CONTRACTOR AND DEEMED UN–USABLE BY THE ENGINEER SHALL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.
7. CATCH BASINS SHALL BE SET ON A MIN. 6" THICK BEDDING THAT IS LEVEL, WELL COMPACTED AND ORIENTED TO THE AXIS OF THE ROAD. BURIED CATCH BASINS SHALL BE BACKFILLED WITH D–1 PLACED IN MAX. LIFTS OF 6", COMPACTED TO 95% DRY DENSITY.

3 E02 TYPE 20 CATCH BASIN

NTS

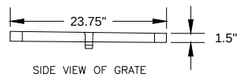


PLAN VIEW

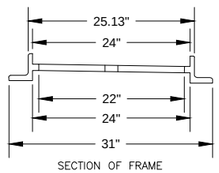


END VIEW

SECTION OF FRAME



SIDE VIEW OF GRATE



SECTION OF FRAME

4 E02 FLAT GRATE AND FRAME ASSEMBLY

NTS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA · 49 TH · Ryan D. Redick · No. CE 12799 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

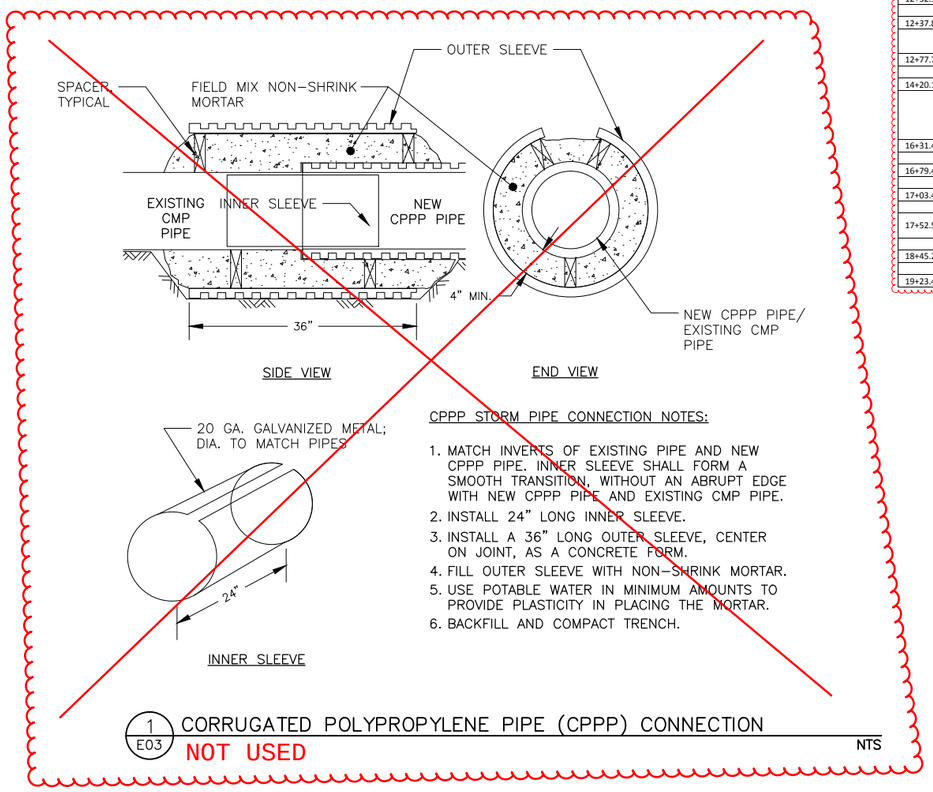
DETAILS

TAB: E02 Friday, November 20, 2015 11:40:28 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**E02**	E10

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-E SHEETS.DWG



1 / E03 CORRUGATED POLYPROPYLENE PIPE (CPPP) CONNECTION — NTS

NOT USED

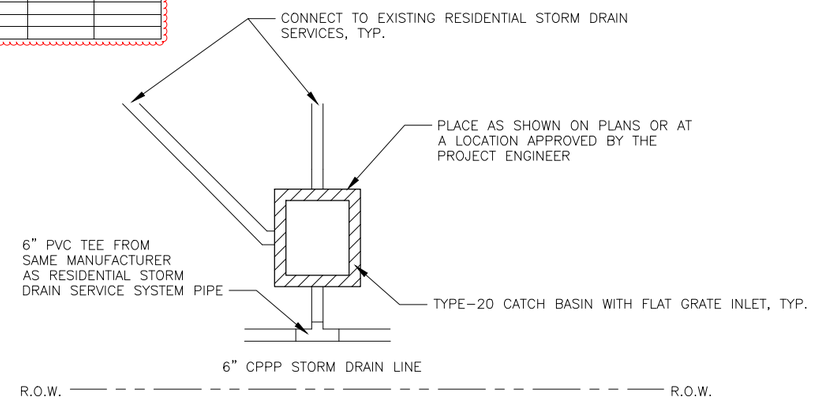
Main Line

STA	Hangers or Pipe Saddles	Length, ft	Station Locations				
12+32.50							
	Pipe Saddle (1 EA) or buried	N/A					
12+37.88							
	Hangers Required (3 EA)	7.4	12+50.4 (1.6 ft)	12+61.9 (2.4 ft)	12+73.9 (3.4 ft)		
12+77.73							
	Gap in SS						
14+20.17							
	Hangers Required (20 EA)	139.3	14+24.5 (8.4 ft)	14+31.0 (8.4 ft)	14+43.0 (8.3 ft)	14+55.0 (8.2 ft)	14+67.0 (8.3 ft)
			14+73.0 (8.3 ft)	14+85.0 (8.3 ft)	14+93.5 (8.4 ft)	15+05.5 (8.4 ft)	15+17.5 (8.4 ft)
			15+29.5 (8.5 ft)	15+41.9 (7.3 ft)	15+52.2 (6.7 ft)	15+64.2 (6.0 ft)	**15+76.2 (5.4 ft)**
			15+88.2 (4.8 ft)	16+00.2 (4.2 ft)	16+12.0 (4.0 ft)	**16+19.0 (3.9 ft)**	16+25.5 (3.8 ft)
16+31.46							
	Pipe Saddles (5 EA) or buried	N/A					
16+79.46							
	Hangers Required (2 EA)	7.1	16+85.5 (3.0 ft)	**16+97.5 (2.9 ft)**			
17+03.46							
	Pipe Saddles (5 EA) or buried	N/A					
17+52.58							
	Gap in SS						
18+45.28							
	Pipe Saddles or buried	N/A					
19+23.43							

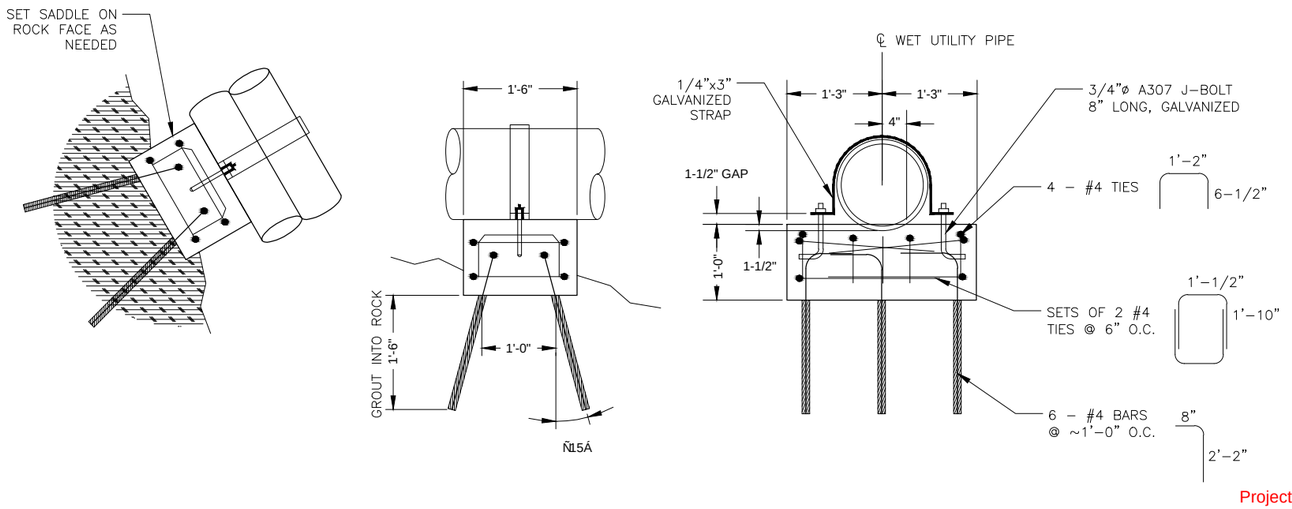
RFI-128

Add'l Sewer

Pipe	STA	OFF, ft	Inlet Structure	Outlet Structure	Pipe in Ground or Pipe Saddles
	12+80.22	-1.54	S-31		
SE-04					Pipe Saddles (3) + (1) Past existing connection
	12+97.04	28.58		Existing System	
	15+17.59	-41.08	N/A		
SE-19					Pipe Saddles (4) or buried
	15+34.81	-4.65		S-33	
	15+35.67	-1.45	S-33		
SE-08					Pipe Saddles (3) or buried
	15+42.32	15.2		SE-20-I	
	15+42.32	15.2	SE-08-O		
SE-20					Pipe Saddles or buried
	15+74.54	70.46		Existing System	



2 / E03 TYPE 20 CATCH BASIN FOR 6" RESIDENTIAL STORM DRAIN SERVICE — NTS



3 / E03 WET UTILITY PIPE SADDLE — NTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CHECKED BY: T. GRIER
DESIGNED BY: N. KNOX
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DETAILS

TAB: E03 Thursday, December 31, 2015 3:26:15 PM NICOLE KNOX

REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**E03**	E10

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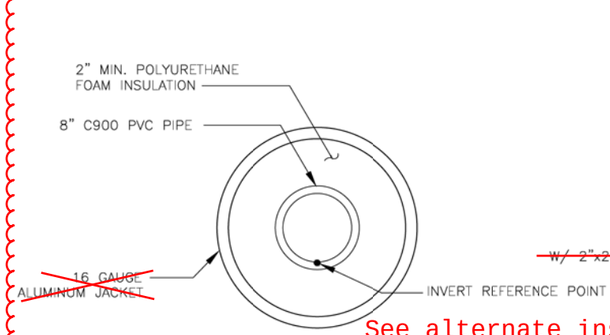
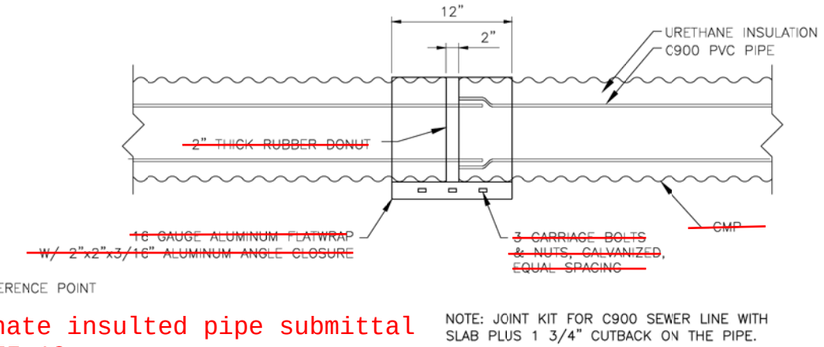


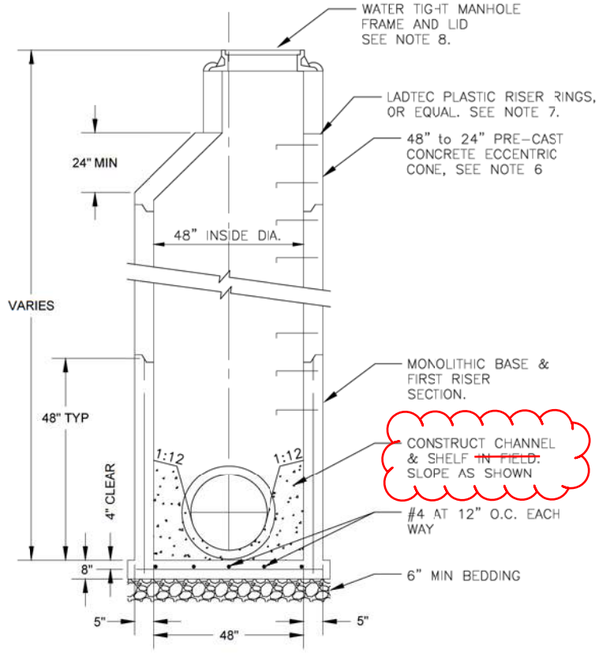
1 E04 INSULATED C900 PVC SEWER MAIN END SECTION NTS



See alternate insulted pipe submittal 627 - 2 RFI 19

NOTE: JOINT KIT FOR C900 SEWER LINE WITH SLAB PLUS 1 3/4" CUTBACK ON THE PIPE.

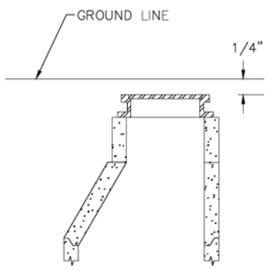
2 E04 INSULATED SEWER PIPE JOINT NTS



3 E04 SEWER MANHOLE NTS

SANITARY SEWER NOTES:

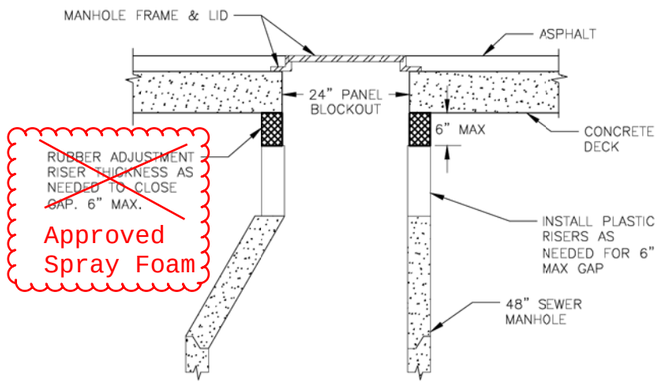
1. ALL MANHOLE SECTIONS SHALL CONFORM TO ASTM C-478, LATEST EDITION, INCLUDING MINIMUM STEEL REQUIREMENTS. STEEL SHALL BE EMBEDDED IN BASE SO THAT FIRST RISER SECTION IS CONNECTED TO BASE.
2. ALL JOINTS SHALL INCLUDE A PRE-MOLDED RUBBER GASKET SUCH AS "RAM-NEK," OR EQUAL. THE EXTERIOR OF ALL JOINTS SHALL BE PLASTERED WITH AT LEAST 1" OF BENTONITE CEMENT SEALING PLASTER.
3. CHANNEL DEPTH SHALL BE EQUAL TO THE PIPE DIAMETER OR GREATER. CHANNEL AND SHELF SHALL HAVE A BROOM FINISH.
4. ENDS OF PIPE SHALL EXTEND BETWEEN 1" AND 3" INTO THE MANHOLE.
5. SEAL MANHOLE AT PIPE CONNECTIONS AS RECOMMENDED BY THE SEAL MANUFACTURER. NO STEEL REINFORCEMENT SHALL EXTEND INTO PIPE OPENINGS.
6. WHEN MANHOLE HEIGHT IS LESS THAN 7', REPLACE CONCRETE CONE SECTION WITH PRE-CAST REDUCING SLAB.
7. MANHOLE RISER RINGS SHALL BE LADTEC PLASTIC RISERS, OR EQUAL. JOINTS ON RISER SHALL BE WATERTIGHT USING BUTYL SET IN BED OF MORTAR.
8. MANHOLE FRAME AND LID SHALL BE EJCO 2615APTGS 2615ZPT, OR EQUAL. NON-LOCKING LIDS MAY BE USED IN NON-TRAFFIC AREAS.



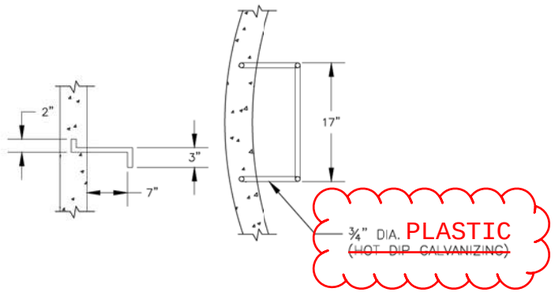
MANHOLE HEIGHT NOTES:

1. WHERE INSTALLED IN PAVED ROADWAYS OR PAVED PARKING AREAS, MANHOLE LID SHALL CONFORM TO THE GRADE AND CROSS SLOPE OF THE PAVEMENT. DIMENSION IS TO THE TOP OF EMBOSSED LETTERING IF LETTERING IS HIGHER THAN THE FRAME.
2. TYPICAL MANHOLE HEIGHTS SHALL BE APPLIED TO THE TOP OF ANY SANITARY SEWER CLEANOUT COVERS INSTALLED.

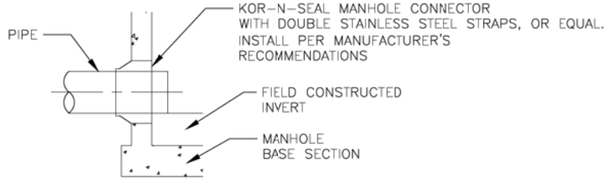
4 E04 TYPICAL MANHOLE HEIGHTS IN PAVED ROADWAYS NTS



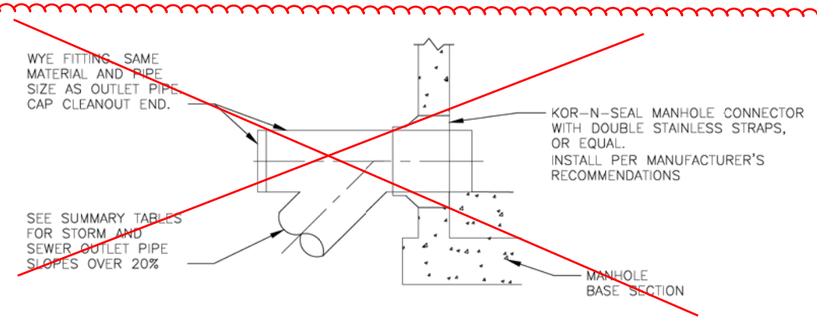
5 E04 TYPICAL MANHOLE HEIGHTS AT TRESTLE BRIDGE PANEL NTS



8 E04 MANHOLE STEP NTS



6 E04 MANHOLE PIPE CONNECTION NTS



7 E04 MANHOLE PIPE CONNECTION FOR OUTLET PIPES WITH SLOPES GREATER THAN 20% NTS

Not Used

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHCOAST REGION
DESIGNED BY: N. KNOX	KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534
DRAWN BY: R. REDICK	**DETAILS**

STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

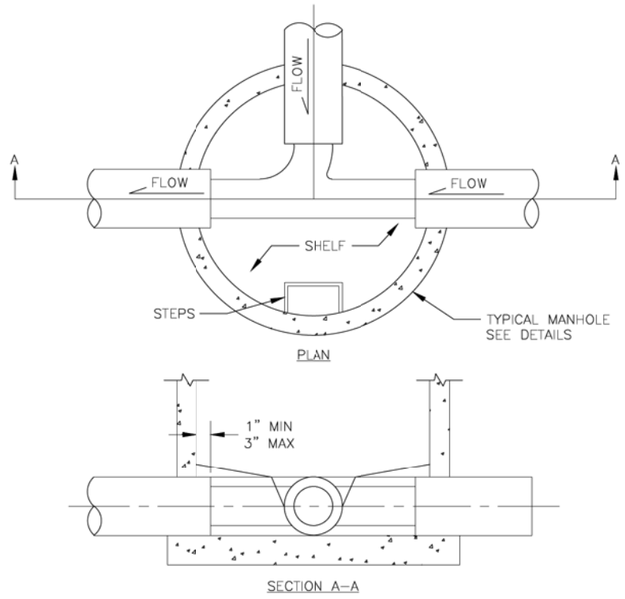
TAB: E04 Wednesday, December 16, 2015 2:06:29 PM RYAN REDICK

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
1 AB	12/14/15	Addendum #1 As-Built Set	BR-000S(735)	2015	**E04**	E10

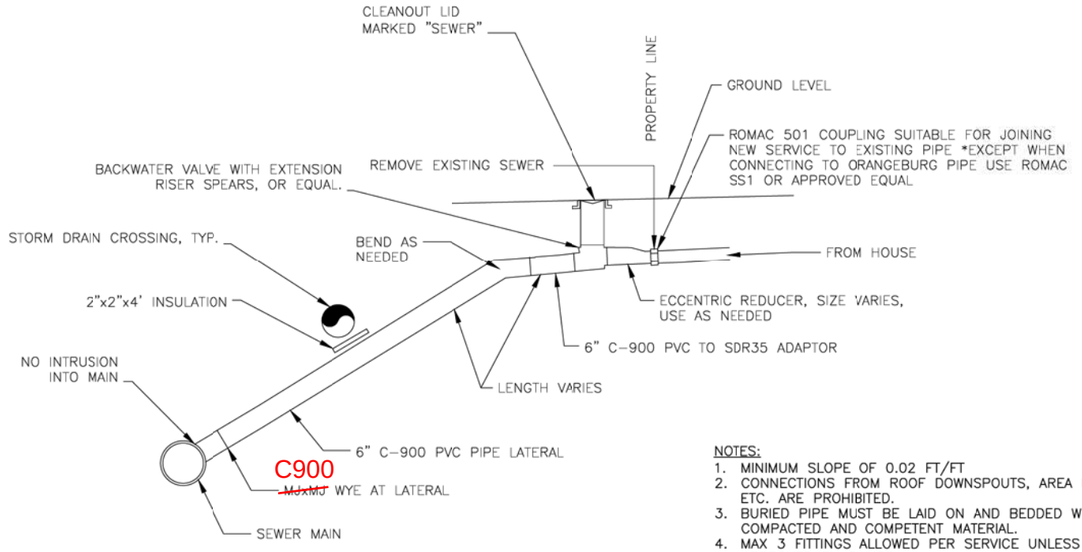
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\11744.00 DOT_SE WATER STREET VIADUCT\CIV\LACAD\11744-E SHEETS.DWG

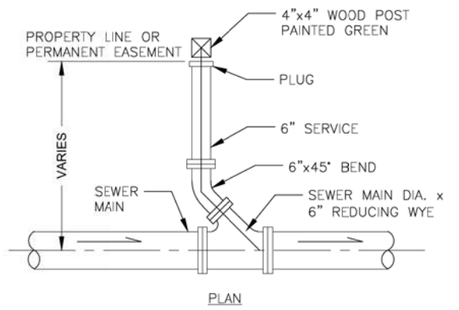


1 / E05 SEWER MANHOLE CHANNELING NTS



NOTES:
1. MINIMUM SLOPE OF 0.02 FT/FT
2. CONNECTIONS FROM ROOF DOWNSPOUTS, AREA DRAINS, ETC. ARE PROHIBITED.
3. BURIED PIPE MUST BE LAID ON AND BEDDED WITH COMPACTED AND COMPETENT MATERIAL.
4. MAX 3 FITTINGS ALLOWED PER SERVICE UNLESS APPROVED BY OWNER.
5. UNDER BRIDGE SEWER SERVICES SHALL BE INSULATED PIPE WITH SAME PIPING CONFIGURATION AND WYE'S USED.
6. SUPPORT UNDER BRIDGE SEWER SERVICES WITH UTILITY HANGER SYSTEM PER STRUCTURAL. SEE N SHEETS.

2 / E05 SEWER LATERAL PROFILE – CONNECT TO EXISTING NTS



3 / E05 VACANT SEWER SERVICE NTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHCOAST REGION
STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER	KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534
DESIGNED BY: N. KNOX	**DETAILS**
DRAWN BY: R. REDICK	

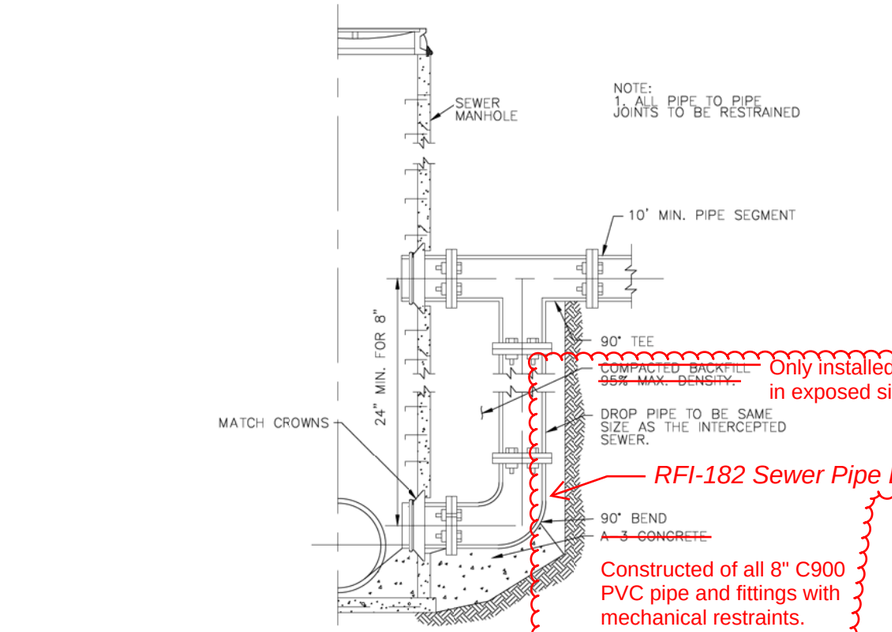
TAB: E05 Wednesday, December 16, 2015 2:06:34 PM RYAN REDICK

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
1 AB	12/14/15	Addendum #1 As-Built Set	BR-000S(735)	2015	**E05**	E10

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-E SHEETS.DWG



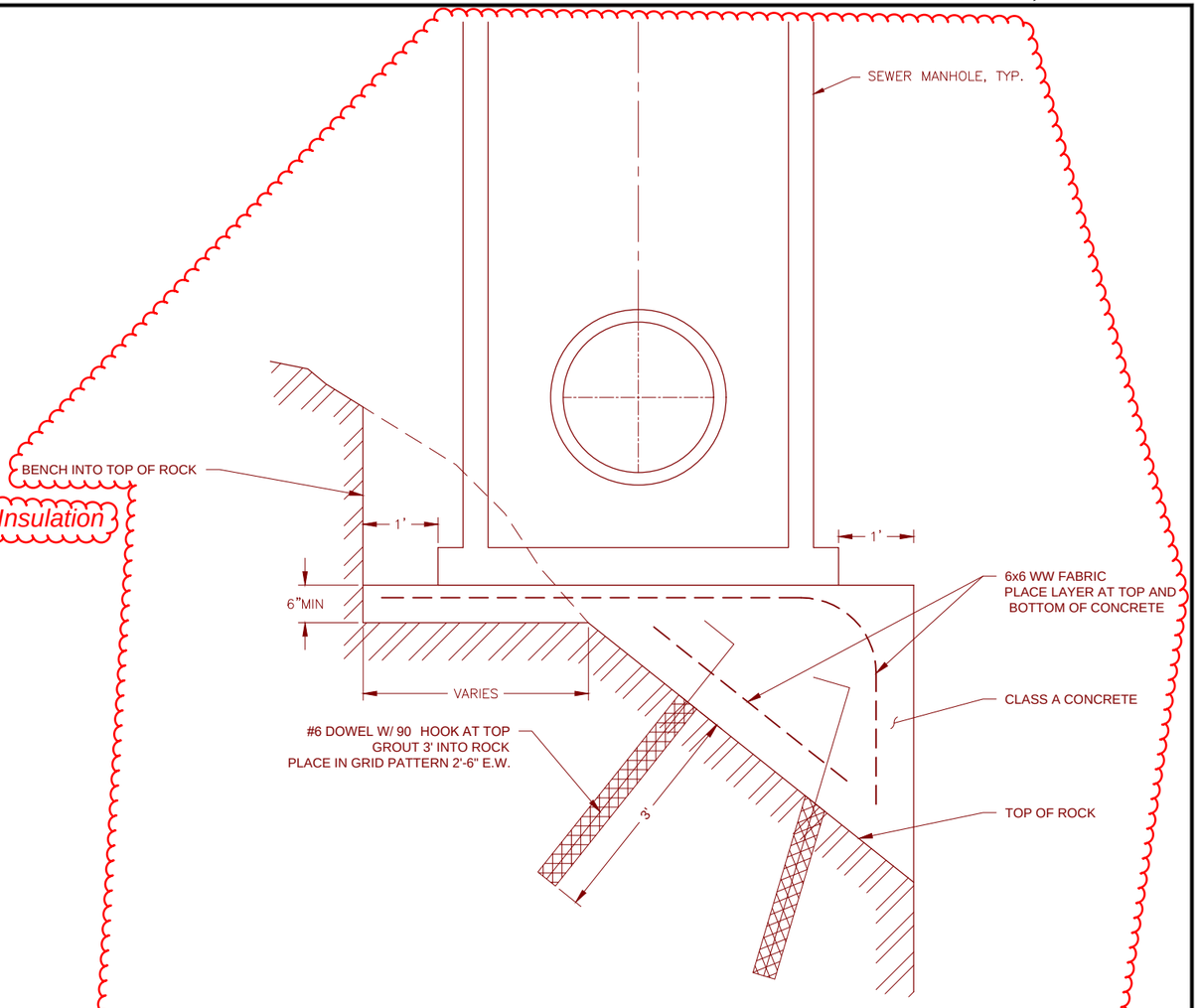
Only installed drop connections in exposed situations

RFI-182 Sewer Pipe Drop Connection Insulation

Constructed of all 8" C900 PVC pipe and fittings with mechanical restraints.

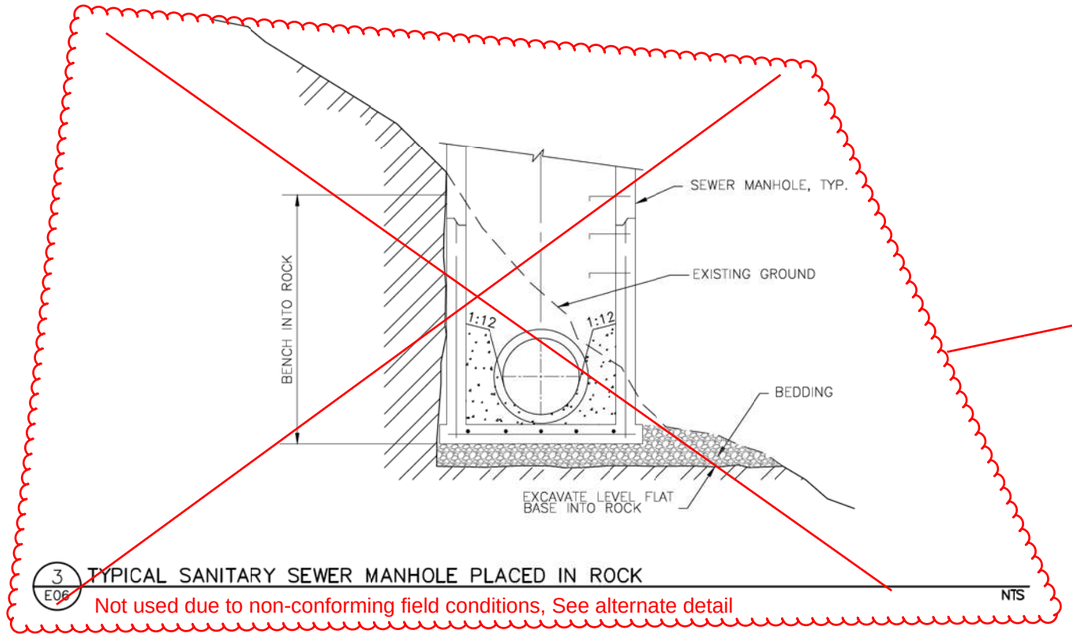
1 / E06 SEWER MANHOLE EXTERNAL DROP CONNECTION

NTS



1 / E__ TYPICAL SANITARY SEWER MANHOLE PLACED IN ROCK

NTS



3 / E06 TYPICAL SANITARY SEWER MANHOLE PLACED IN ROCK

NTS

Not used due to non-conforming field conditions, See alternate detail

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHCOAST REGION
DESIGNED BY: N. KNOX	KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534
DRAWN BY: R. REDICK	**DETAILS**

STATE OF ALASKA 49 TH — Ryan D. Redick No. CE 12799 — REGISTERED PROFESSIONAL ENGINEER

TAB: E06 Wednesday, December 16, 2015 2:06:41 PM RYAN REDICK

REVISIONS NO.	DATE	DESCRIPTION
1 AB	12/14/15	Addendum #1 As-Built Set

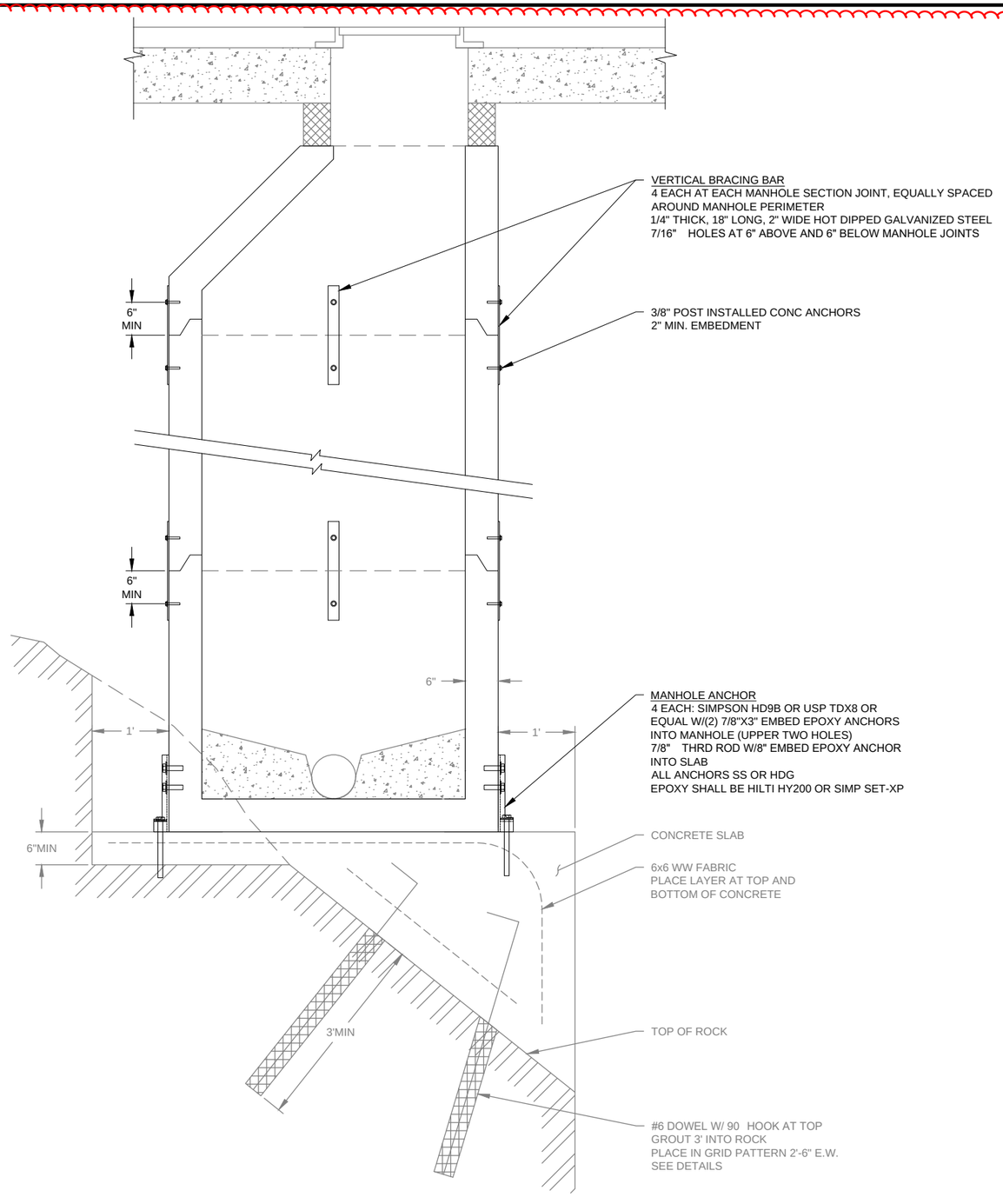
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**E06**	E10

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

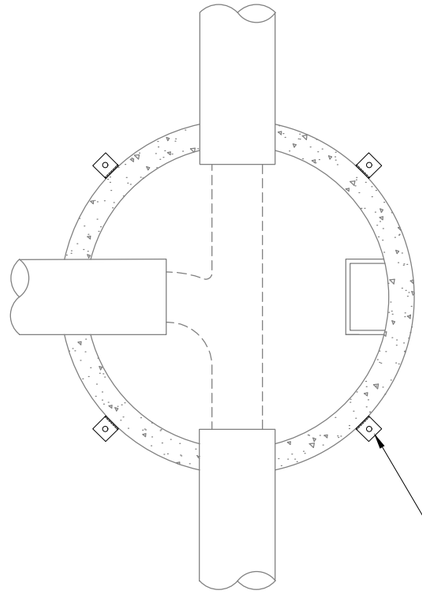
Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-E SHEETS.DWG

AS BUILT
Work tracked and paid under CO#33



SECTION VIEW



PLAN VIEW - MANHOLE BASE

1 / E13 ANCHORING & BRACING DETAILS FOR SEWER MANHOLES S-32 AND S-33

NTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CHECKED BY:	T. GRIER/J. ZELLMER
DESIGNED BY:	N. KNOX
DRAWN BY:	N. KNOX

STATE OF ALASKA
Nicole Knox
No. CE 11896
4/19/2018
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

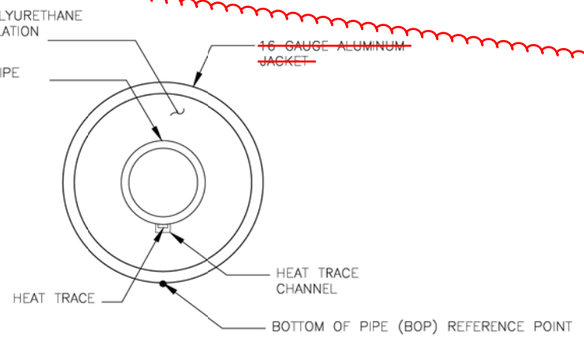
DETAILS

TAB: E13 Thursday, April 19, 2018 12:25:40 PM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	~~E13~~	E10

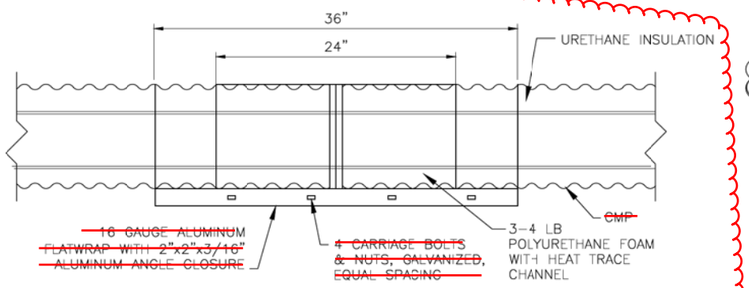
E06A

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\DESIGN TEAM RESEARCH\STABILITY ANALYSIS OF TALL SSMH\S1744-SSMH S-32 S-33 ANCHOR DETAILS.DWG



WATER PIPE NOTES:
HEAT TRACING CABLE TO BE 5W/FT SELF REGULATING CHROMALUX SRL 5-1CT WITH FLOUROPOLYMER COATING.
MOUNT BOX FOR END SEAL KIT ON 4"x4" AS SHOWN.

1 E07 INSULATED HDPE WATER MAIN END SECTION NTS

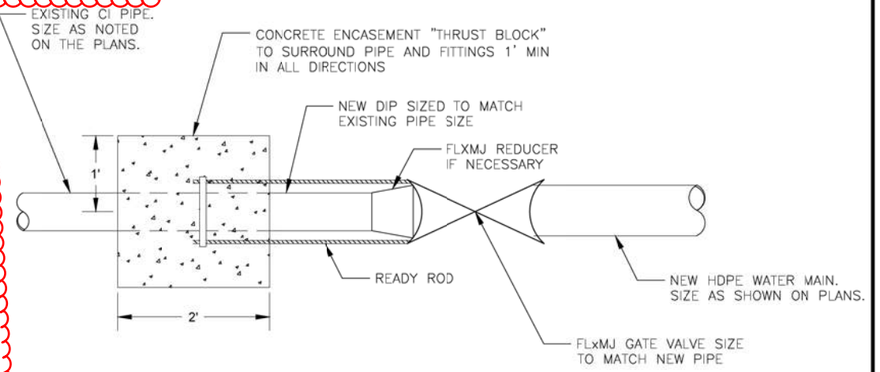


NOTE:
JOINT KIT FOR HDPE WATER LINE WITH 12" CUTBACK ON THE PIPE.

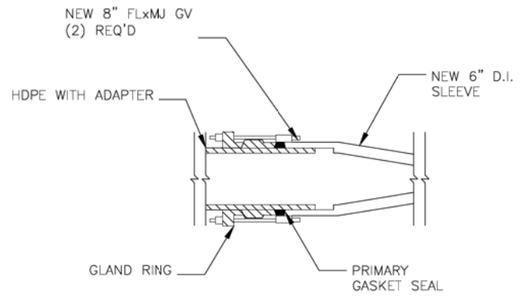
2 E04 INSULATED WATER MAIN JOINT NTS

RFI-019 See Submittal 627-2.0 for Material Substitutions

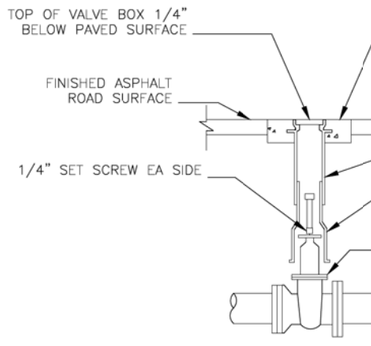
RFI - 088
FOR W-20 Connection



2 E07 CONNECTION TO EXISTING WATER MAIN NTS



3 E07 DIPS & IPS MJ ADAPTER: HDPE TO DI CONNECTION NTS



Not used at FH-4 or N. BOP valve, paved to can

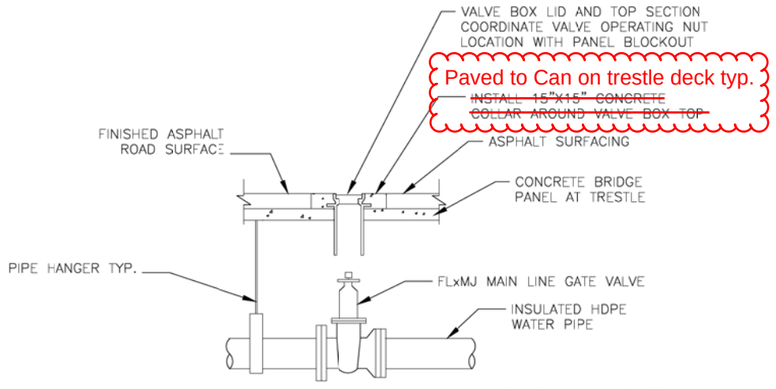
15" x 15" x 6" CONCRETE COLLAR 4X NO. 4 REBAR

RESTRAIN ALL JOINTS

BURIED VALVE NOTES:

1. NEW VALVE BOX TO ALLOW FOR 12" MINIMUM VERTICAL ADJUSTMENT
2. THREADED VALVE BOX SECTIONS ARE NOT ALLOWED. CONTRACTOR SHALL REMOVE THREADED PORTIONS OF THE VALVE BOX WITH CUT-OFF SAW.
3. CONTRACTOR SHALL APPLY GREASE TO ALL INTERFACES BETWEEN VALVE BOX SECTIONS.
4. COMPACTION AROUND VALVE BOX INSTALLATION IS CRITICAL. CONTRACTOR SHALL EMPLOY MECHANICAL TAMPING METHODS TO ENSURE THAT MATERIAL AROUND VALVE BOX REACHES 95% OF MAXIMUM COMPACTION.
5. CONTRACTOR SHALL INSTALL A 6" MINIMUM THICKNESS OF D-1 BEDDING AROUND VALVE BOX DURING BACKFILL.
6. EXTENSION IS REQUIRED ON ALL VALVES WHERE OPERATING NUT IS 6' OR MORE BELOW FINISHED SURFACE.

4 E07 TYP. BURIED MAIN LINE VALVE WITH OPERATING ROD NTS



RESTRAIN ALL JOINTS

SUSPENDED VALVE NOTES:

1. NEW VALVE BOX MUST ALIGN WITH THE WATER MAIN LINE VALVE BELOW.
2. VALVE BOX TOP SECTION AND LID TO BE INSTALLED AS SHOWN. VALVE BOX BOTTOM SECTION NOT REQUIRED.

5 E07 TYP. SUSPENDED MAIN LINE VALVE AT TRESTLE NTS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHCOAST REGION
DESIGNED BY: N. KNOX	KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534
DRAWN BY: R. REDICK	**DETAILS**

STATE OF ALASKA 49 TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER 8/14/15

TAB: E07 Wednesday, December 16, 2015 2:06:48 PM RYAN REDICK

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
1 AB	12/14/15	Addendum #1 As-Built Set	BR-000S(735)	2015	**E07**	E10

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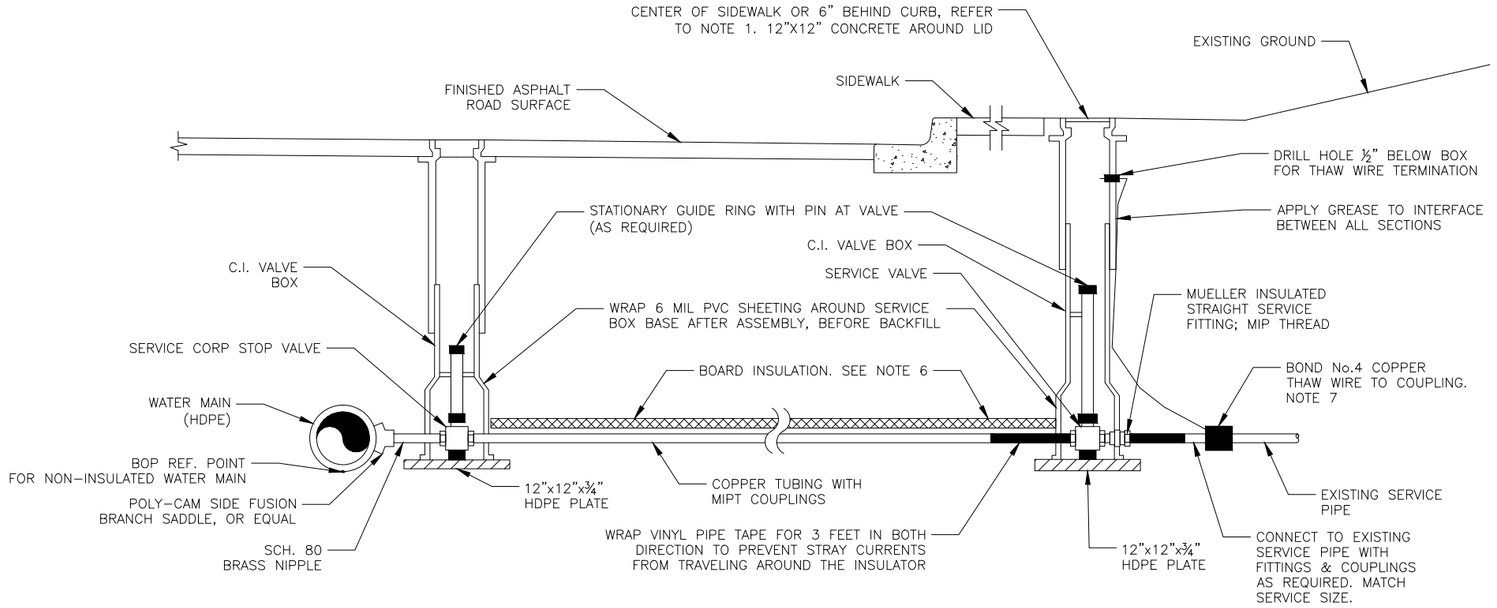


1 / E08 BURIED WATER SERVICE DETAIL

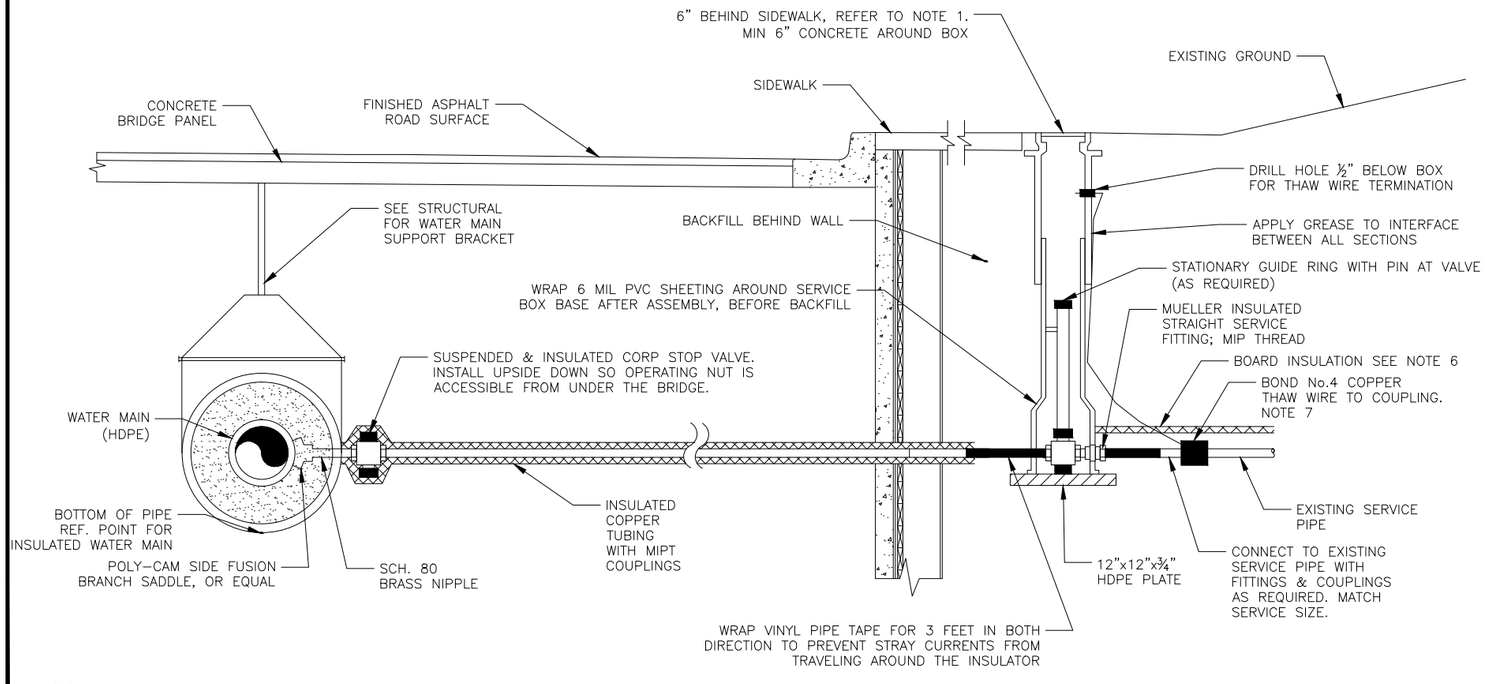
NTS

BURIED WATER SERVICE NOTES:

1. INSTALL TOP OF VALVE BOX BEHIND SIDEWALK AS SHOWN. 1/4" BELOW PAVED SURFACE OR 3" BELOW UNPAVED SURFACES.
2. ALLOW 12" FOR RAISING VALVE BOX. GREASE THE OVERLAPPING PORTION.
3. ENLARGED BASE IS REQUIRED FOR 1" SERVICES AND LARGER.
4. A SERVICE VALVE ROD EXTENSION IS REQUIRED ON ALL SERVICE VALVES 6' OR MORE BELOW FINISHED GRADE.
5. EXTEND SERVICE PAST SERVICE VALVE AS REQUIRED TO ESTABLISH SERVICE OR AS INDICATED ON THE PLANS.
6. PLACE INSULATION BOARD W/ BURIED UTILITY WARNING TAPE ABOVE AS REQUIRED.
7. SECURE THE COPPER THAW WIRE TO THE COUPLING USING A BRASS ELECTRICAL GROUND CLAMP, ROUTE THE COPPER THAW WIRE ALONG THE OUTSIDE OF THE VALVE BOX, THROUGH THE HOLE AT TOP. SECURE WIRE TO OUTSIDE OF BOX WITH BRASS ELECTRICAL GROUND CLAMP OR FIBER TAPE.

RFI-101 Add'l Hanger Notes

RFI-165
CORPORATION VAVLE BOXES TO REMAIN BELOW GRADE



2 / E08 SUSPENDED WATER SERVICE DETAIL – SERVICE TO PROJECT LEFT

NTS

SUSPENDED WATER SERVICE NOTES:

1. INSTALL TOP OF VALVE BOX BEHIND SIDEWALK AS SHOWN. 1/4" BELOW PAVED SURFACE OR 3" BELOW UNPAVED SURFACES.
2. ALLOW 12" FOR RAISING VALVE BOX. GREASE THE OVERLAPPING PORTION.
3. ENLARGED BASE IS REQUIRED FOR 1" SERVICES AND LARGER.
4. A SERVICE VALVE ROD EXTENSION IS REQUIRED ON ALL SERVICE VALVES 6' OR MORE BELOW FINISHED GRADE.
5. EXTEND SERVICE PAST SERVICE VALVE AS REQUIRED TO ESTABLISH SERVICE OR AS INDICATED ON THE PLANS. WHERE SERVICE EXTENSION IS ABOVE GROUND, PIPE SHALL BE INSULATED WITH 2" OF FOAM INSULATION WITH PROTECTIVE COATING.
6. PLACE INSULATION BOARD W/ BURIED UTILITY WARNING TAPE ABOVE AS REQUIRED.
7. SECURE THE COPPER THAW WIRE TO THE COUPLING USING A BRASS ELECTRICAL GROUND CLAMP, ROUTE THE COPPER THAW WIRE ALONG THE OUTSIDE OF THE VALVE BOX, THROUGH THE HOLE AT TOP AND LEAVE 4"–6" OF PIGTAIL COILED WIRE IN BOX. SECURE WIRE TO OUTSIDE OF BOX WITH BRASS ELECTRICAL GROUND CLAMP OR FIBER TAPE.
8. CLEAN SAND MUST BE PLACED AROUND ALL VALVE BOXES
9. THREADED VALVE BOX SECTIONS ARE NOT ALLOWED. CONTRACTOR SHALL REMOVE THREADED PORTIONS OF THE VALVE BOX WITH CUT–OFF SAW.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CHECKED BY:	T. GRIER
DESIGNED BY:	R. REDICK
DRAWN BY:	R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

DETAILS

TAB: E08 Friday, November 20, 2015 11:40:58 AM JOSEPH HORAZDOVSKY

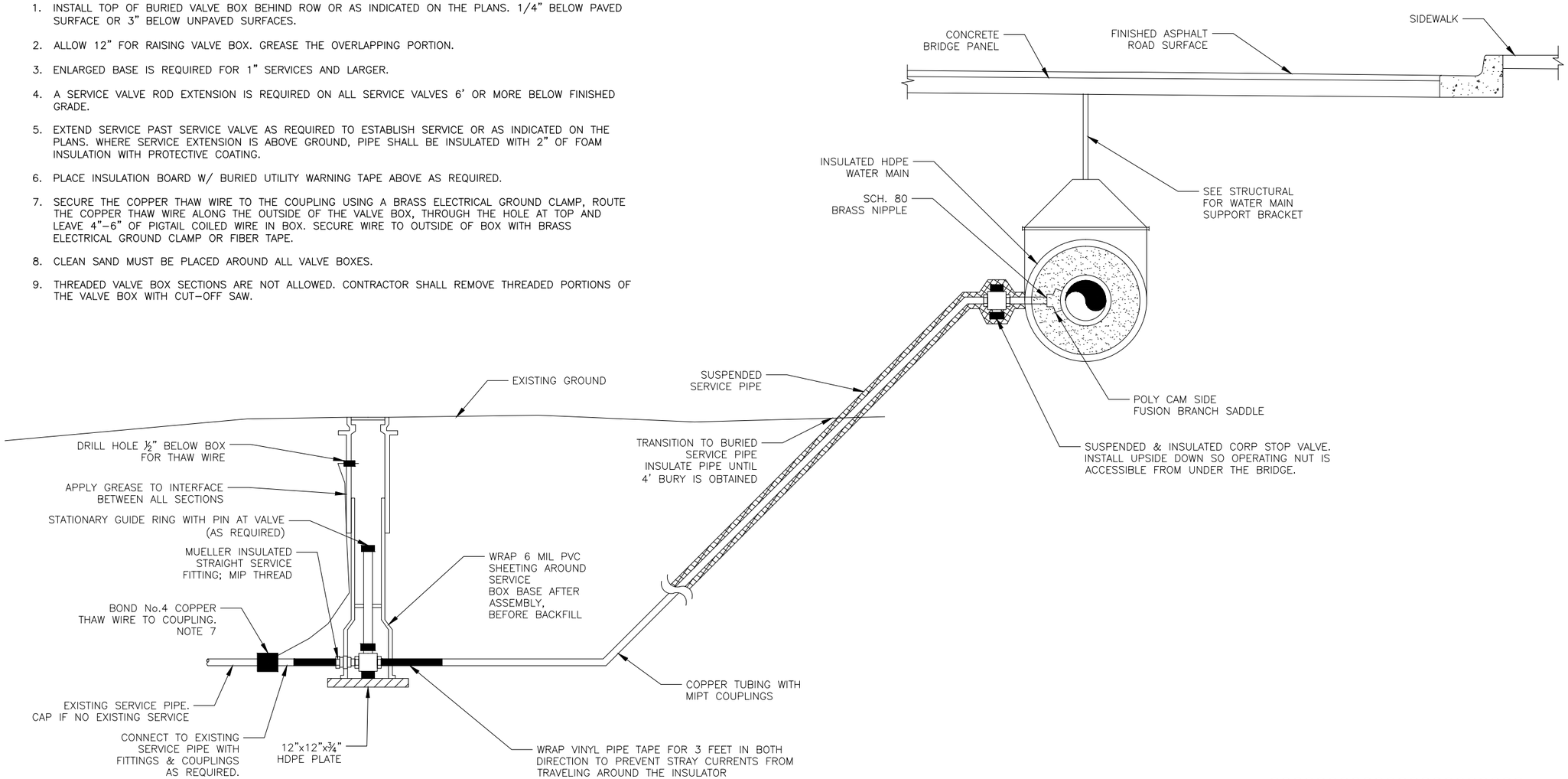
REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**E08**	E10

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744E SHEETS.DWG

SUSPENDED WATER SERVICE NOTES:

1. INSTALL TOP OF BURIED VALVE BOX BEHIND ROW OR AS INDICATED ON THE PLANS. 1/4" BELOW PAVED SURFACE OR 3" BELOW UNPAVED SURFACES.
2. ALLOW 12" FOR RAISING VALVE BOX. GREASE THE OVERLAPPING PORTION.
3. ENLARGED BASE IS REQUIRED FOR 1" SERVICES AND LARGER.
4. A SERVICE VALVE ROD EXTENSION IS REQUIRED ON ALL SERVICE VALVES 6' OR MORE BELOW FINISHED GRADE.
5. EXTEND SERVICE PAST SERVICE VALVE AS REQUIRED TO ESTABLISH SERVICE OR AS INDICATED ON THE PLANS. WHERE SERVICE EXTENSION IS ABOVE GROUND, PIPE SHALL BE INSULATED WITH 2" OF FOAM INSULATION WITH PROTECTIVE COATING.
6. PLACE INSULATION BOARD W/ BURIED UTILITY WARNING TAPE ABOVE AS REQUIRED.
7. SECURE THE COPPER THAW WIRE TO THE COUPLING USING A BRASS ELECTRICAL GROUND CLAMP, ROUTE THE COPPER THAW WIRE ALONG THE OUTSIDE OF THE VALVE BOX, THROUGH THE HOLE AT TOP AND LEAVE 4"–6" OF PIGTAIL COILED WIRE IN BOX. SECURE WIRE TO OUTSIDE OF BOX WITH BRASS ELECTRICAL GROUND CLAMP OR FIBER TAPE.
8. CLEAN SAND MUST BE PLACED AROUND ALL VALVE BOXES.
9. THREADED VALVE BOX SECTIONS ARE NOT ALLOWED. CONTRACTOR SHALL REMOVE THREADED PORTIONS OF THE VALVE BOX WITH CUT–OFF SAW.



1 / E09 SUSPENDED WATER SERVICE DETAIL – SERVICE TO PROJECT RIGHT

NTS

Change Order #25 and RFI#101 provide further details/clarification to this design, see next couple sheets E09A-E09B, and N94A.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

DETAILS

TAB: E09 Friday, November 20, 2015 11:41:03 AM JOSEPH HORAZDOVSKY

REVISIONS		
NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**E09**	E10

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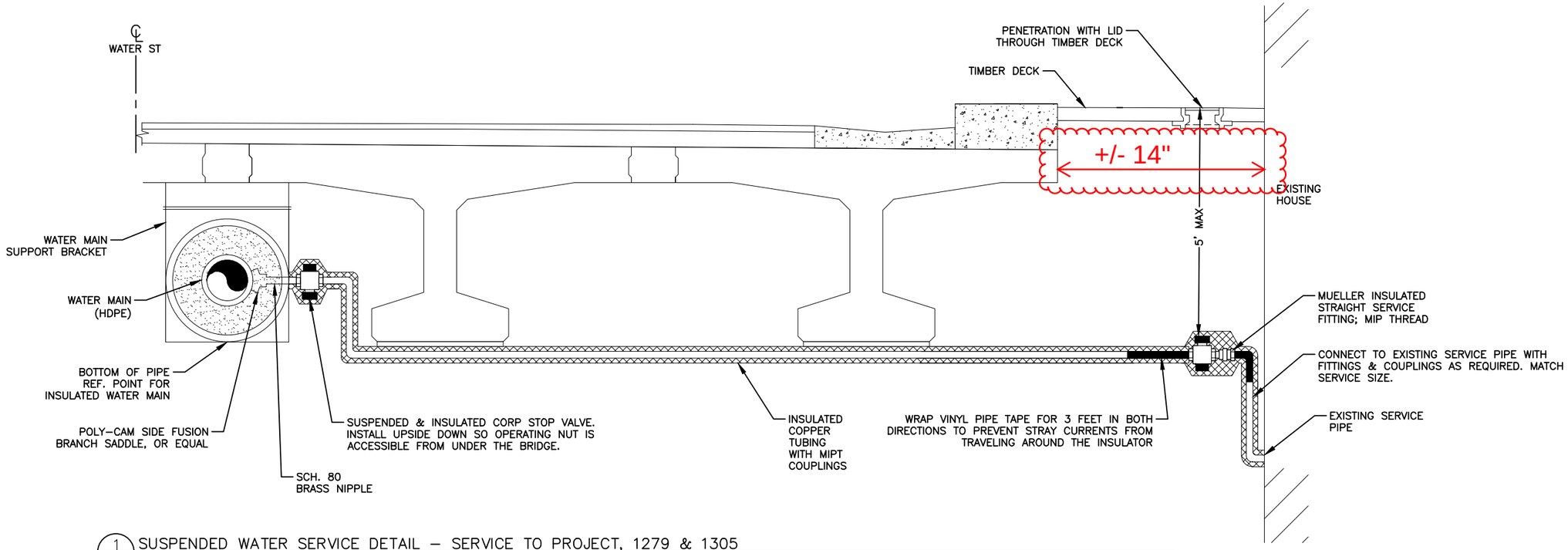
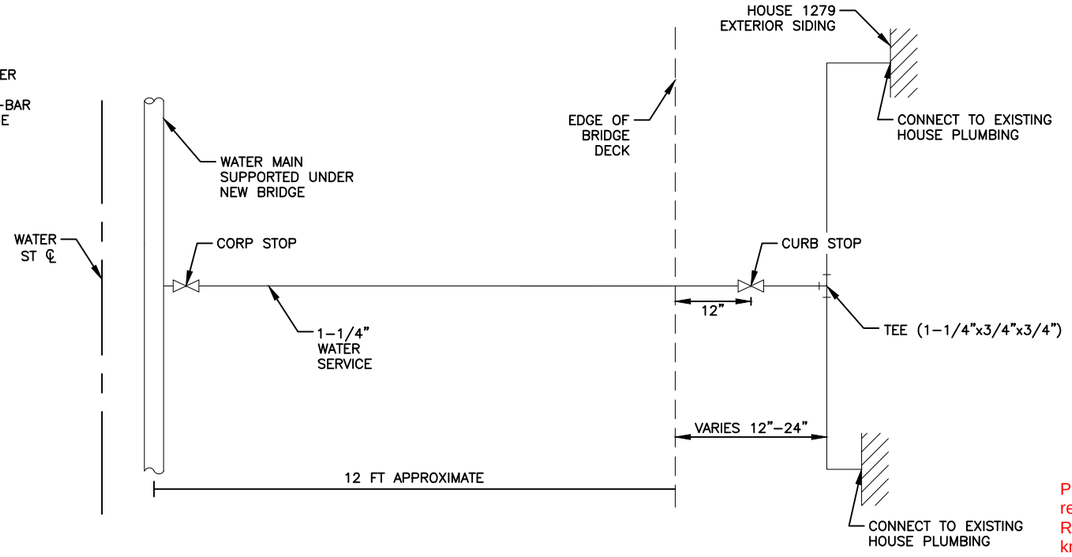


1 SUSPENDED WATER SERVICE DETAIL – SERVICE TO PROJECT, 1279 & 1305

NTS

HOUSE 1279 WATER SERVICE NOTES:

1. PROVIDE PIPE, FITTINGS, AND SUPPORTS AS NEEDED TO CONNECT TO EXISTING HOUSE WATER SERVICE LOCATIONS.
2. FIELD VERIFY FINAL INSTALLATION TO ALLOW T-BAR OPERATION OF CURB STOP VALVE FROM BRIDGE DECK.



2 HOUSE 1279 WATER SERVICE SCHEMATIC

NTS

RFI-108

Response from Jason Rein (HDR, Inc.) at 11:48 AM on 11/23/2016

See the attached detail supplied by R&M for suspended water service connections beneath the Bulb Tee bridge. The detail is intended to provide general guidance on water service routing, support hangers at each building identified will need to be custom fit to the structure to allow for valve operation from the roadway surface. It is anticipated that these support details will be provided with the 1279 deck design.

Attachments:
1744-Water Services suspended-E80.pdf

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: N. KNOX
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

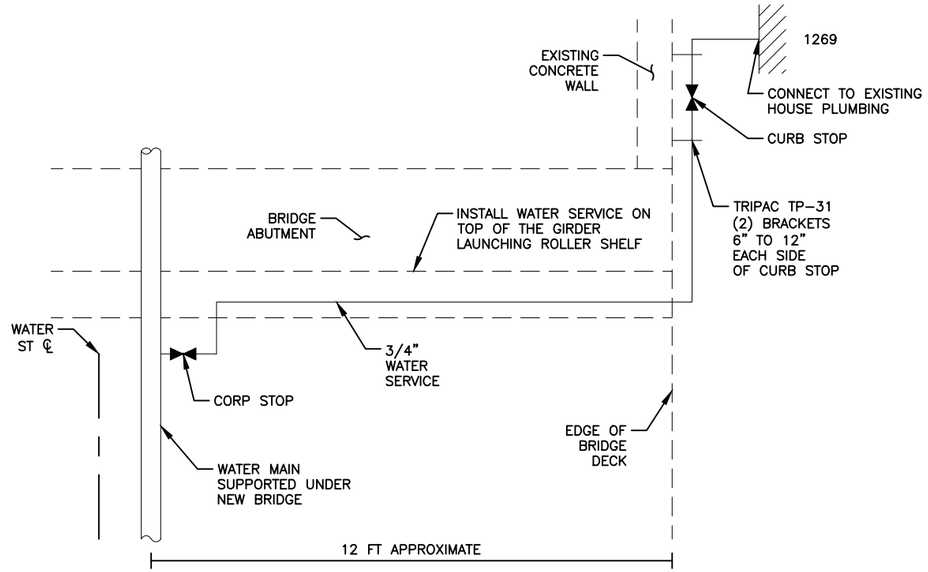
KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DETAILS

TAB: E80 Wednesday, November 23, 2016 8:23:48 AM RYAN REDICK

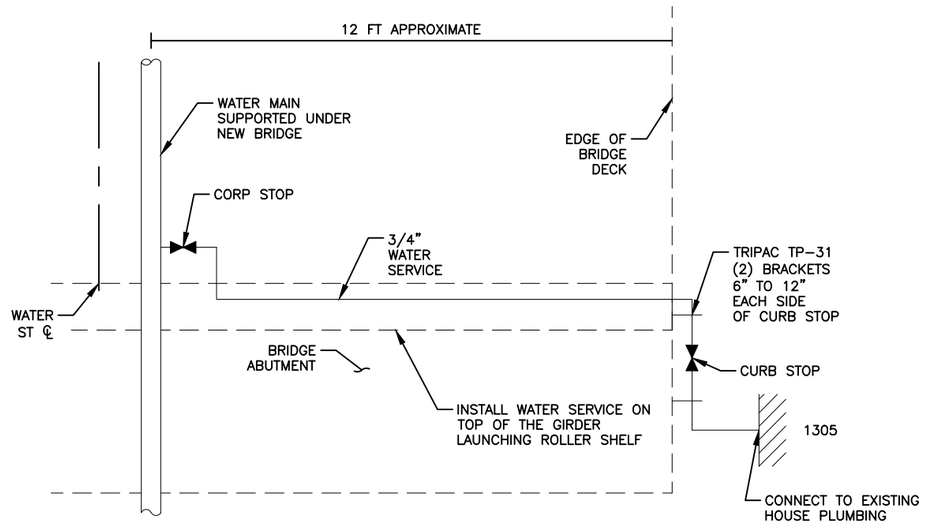
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	~~E80~~ E09A	

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\1744.01_WATER STREET VIADUCT - E SHEETS\1744-WATER SERVICES SUSPENDED.DWG



1 HOUSE 1269 WATER SERVICE SCHEMATIC

NTS



2 HOUSE 1305 WATER SERVICE SCHEMATIC

NTS

HOUSE 1269 & 1305 WATER SERVICE NOTES:

1. PROVIDE PIPE, FITTINGS, AND SUPPORTS AS NEEDED TO CONNECT TO EXISTING HOUSE WATER SERVICE LOCATIONS.
2. USE EPOXY ANCHOR TO ATTACH BRACKETS AND SUPPORTS TO THE ABUTMENTS AND CONCRETE WALL. DO NOT ATTACH THE SERVICE LINES SUPPORTS TO THE BRIDGE GIRDERS.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

Included on CO#25

DESIGNED BY: N. KNOX

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

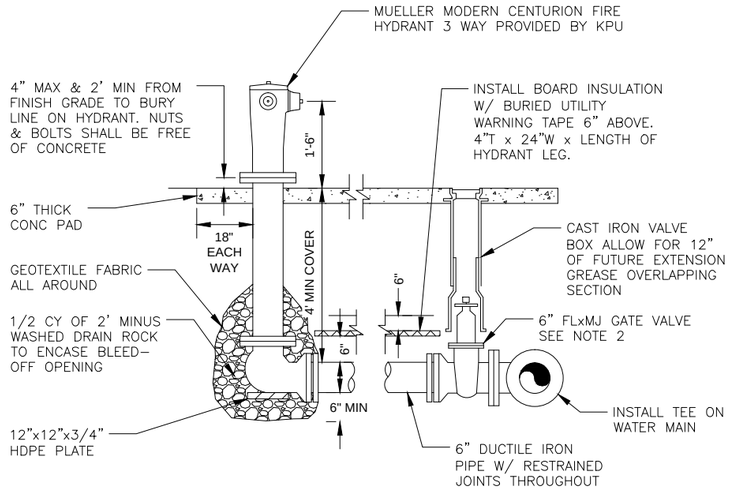
KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DETAILS

TAB: E81 Monday, December 5, 2016 11:15:13 AM JAI CHANG

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735)	2015	~~E81~~ E09B	

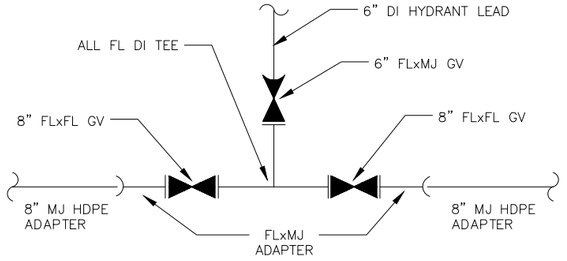
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\17444.01_WATER STREET VIADUCT - E SHEETS\1744-WATER SERVICES SUSPENDED.DWG



HYDRANT NOTES:

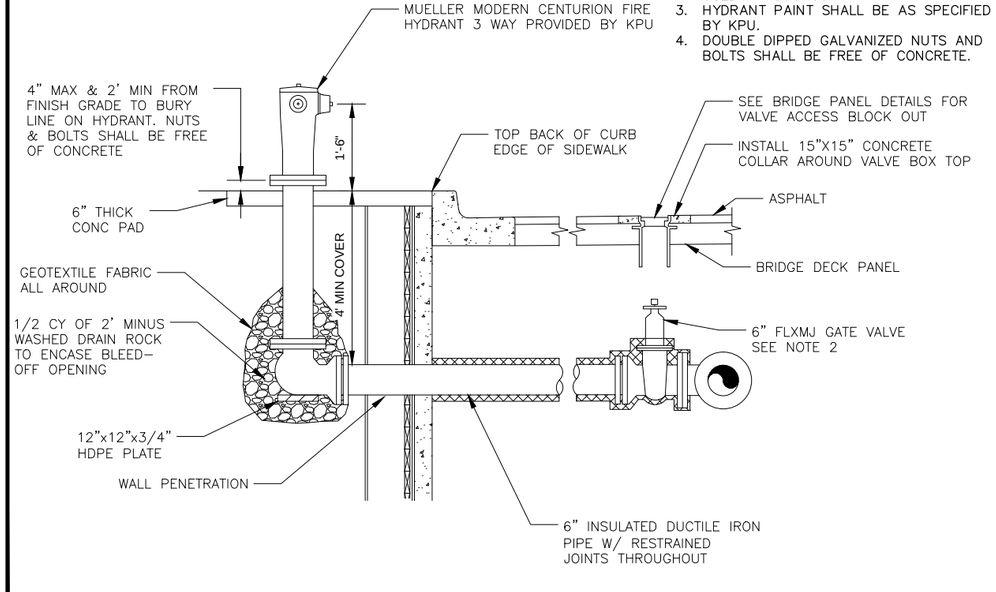
1. ALL BOLT THREADS TO BE GREASED PRIOR TO INSTALLATION.
2. MECHANICAL RESTRAINED JOINTS TO BE USED THROUGHOUT.
3. HYDRANT PAINT SHALL BE SPECIFIED BY KPU.
4. DOUBLE DIPPED GALVANIZED NUTS AND BOLTS SHALL BE FREE OF CONCRETE.
5. PLACE BURIED UTILITY WARNING TAPE 1' ABOVE THE HYDRANT LEAD.
6. THRUST BLOCK MAY BE OMITTED IF PIPE BEYOND VALVE IS CONNECTED TOGETHER W/ RESTRAINED JOINTS 40 FEET EACH WAY.
7. D-1 BEDDING MUST BE PLACED AROUND ALL VALVE BOXES

1 E10 FIRE HYDRANT AT BURIED WATER MAIN
NTS



RESTRAINED JOINTS THROUGHOUT
FIRE HYDRANT CONNECTION TYP.

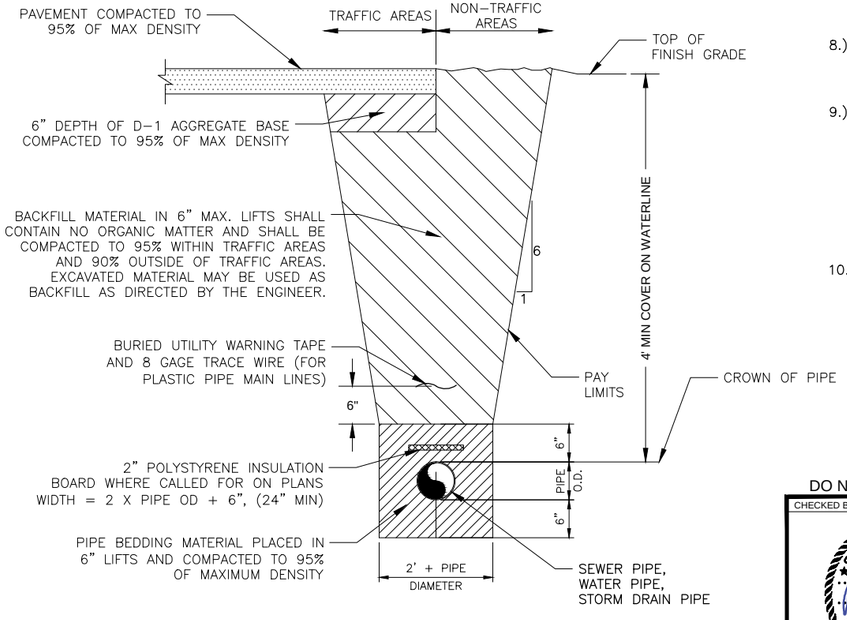
3 E10 HYDRANT ASSEMBLY LINE DIAGRAM
NTS



HYDRANT NOTES:

1. ALL BOLT THREADS TO BE GREASED PRIOR TO INSTALLATION.
2. MECHANICAL RESTRAINED JOINTS TO BE USED THROUGHOUT.
3. HYDRANT PAINT SHALL BE AS SPECIFIED BY KPU.
4. DOUBLE DIPPED GALVANIZED NUTS AND BOLTS SHALL BE FREE OF CONCRETE.

2 E10 FIRE HYDRANT AT SUSPENDED WATER MAIN
NTS



NOTES:
1. TRENCH EXCAVATION AND SHORING SHALL COMPLY WITH LOCAL, STATE, AND OSHA REQUIREMENTS.
2. INSULATION BOARD JOINTS SHALL BE LAPPED.
3. ALL INSULATION BOARD SHALL BE DOW HI-60 EXTRUDED POLYSTYRENE (BLUE BOARD) OR EQUIVALENT.

4 E10 TYPICAL BURIED WET UTILITY TRENCH SECTION
NTS

ADEC WATER MAIN REQUIREMENTS:

1.) WHERE BURIED, THE WATER LINE, SEWER LINE, AND STORM DRAIN LINE WILL BE IN SEPARATE TRENCHES.

2.) AT LOCATIONS WHERE SEWER/ STORM DRAIN AND BURIED WATER LINES MUST CROSS, SEWER/ STORM DRAIN LINE USES AWWA TYPE 4 OR TYPE 5 OR EQUIVALENT BEDDING.

3.) IN BURIED LOCATIONS, IF THE DISTANCE BETWEEN WATER LINES AND SEWER & STORM LINES IS LESS THAN 10' HORIZONTAL & 1.5' VERTICAL SEPARATION, A SEPARATION WAIVER IS REQUIRED.

4.) AT LOCATIONS WHERE BURIED SEWER/ STORM DRAIN AND WATER LINES MUST CROSS AND WHERE THE ELEVATION OF A WATER LINE IS BELOW SEWER/ STORM DRAIN LINE.
- 6.A): PERFORM BENT STRAP TEST FOR WATER PIPE PER PLASTIC PIPE INSTITUTE (PPI) PROCEDURE.
- 6.B): SHRINK WRAP THE WATER LINE JOINTS.
- 6.C): PLACE SEWER/STORM DRAIN LINE IN AWWA TYPE 4/ TYPE 5 OR EQUIVALENT BEDDING.

5.) THE BENT STRAP TEST WILL BE PERFORMED IN ACCORDANCE WITH THE PPI BENT STRAP TEST BY CUTTING OUT A 1é WIDE SECTION OF THE JOINT FOR AT LEAST 6é EITHER SIDE OF THE JOINT, ASTM D 2657. THE JOINT WILL BE BENT UNTIL THE ENDS MEET PER PERFORMANCE PIPE JOINT PROCEDURES OF PPI. IF A STRAP TEST FAILS, THE PROBLEM IN THE PROCESS SHALL BE IDENTIFIED, AND THE OPERATOR WILL BE RETRAINED AND REQUIRED TO MAKE AN ADDITIONAL SET OF TEST JOINTS. THIS PROCESS WILL BE CONTINUED UNTIL A SET OF TEST JOINTS PASSES THE TEST.

6.) CONTRACTOR SHALL SCHEDULE SEWER PRESSURE TESTS W/ OWNER AND SUBMIT THE DESCRIPTION OF THE ACTUAL PRESSURE TEST AND THE RESULTS OF TESTING FOR THE SEWER PIPE. FOR EXAMPLE, HOW THE PRESSURE TEST WAS ACTUALLY DONE, WHETHER AIR OR WATER WAS USED FOR THE TEST, MAXIMUM PRESSURE APPLIED, PRESSURE LOSS, AND ALLOWABLE EX-FILTRATION RATE VS. ACTUAL RATE.

7.) STORM DRAIN PIPES SHALL BE HANCOR AND/ OR ADVANCED DRAINAGE SYSTEMS (ADS) STORM DRAIN PIPES OFFERING DUAL WALL CORRUGATED CORRUGATE POLYPROPYLENE (CPP) PIPE CLAIMING TO BE TESTED FOR WATERTIGHTNESS TO 10.8 PSI AT THE JOINTS, OR APPROVED EQUAL.

8.) CONTRACTOR MUST PROVIDE TO THE OWNER VERIFICATION THAT ONLY LEAD-FREE PIPE, FLUX, AND SOLDER WAS USED IN THE CONSTRUCTION OF THE WATER SYSTEM.

9.) VERIFICATION THAT THE NEW WATER MAINS HAVE BEEN DISINFECTED AND FLUSHED IN ACCORDANCE WITH THE MOST RECENT VERSION OF AWWA STANDARD 651. PROVIDE COPIES OF THE ANALYTICAL TEST REPORTS FOR SAMPLES TAKEN FROM THE FINISHED WATER CONFIRMING THAT THE SYSTEM IS FREE FROM COLIFORM BACTERIA AND THAT THE TREATMENT SYSTEM EFFECTIVELY REDUCES THE CONCENTRATION OF ANY RAW WTAER CONTAMINANT TO MEET THE FINISHED MCL REQUIREMENTS. TEST REPORTS SHALL STATE LOCATION OF PIPE TESTED.

10.) PROVIDE VERIFICATION THAT ALL PIPES AND ALL MATERIAL IN CONTACT WITH POTABLE WATER ARE NSF 61 CERTIFIED.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

DETAILS

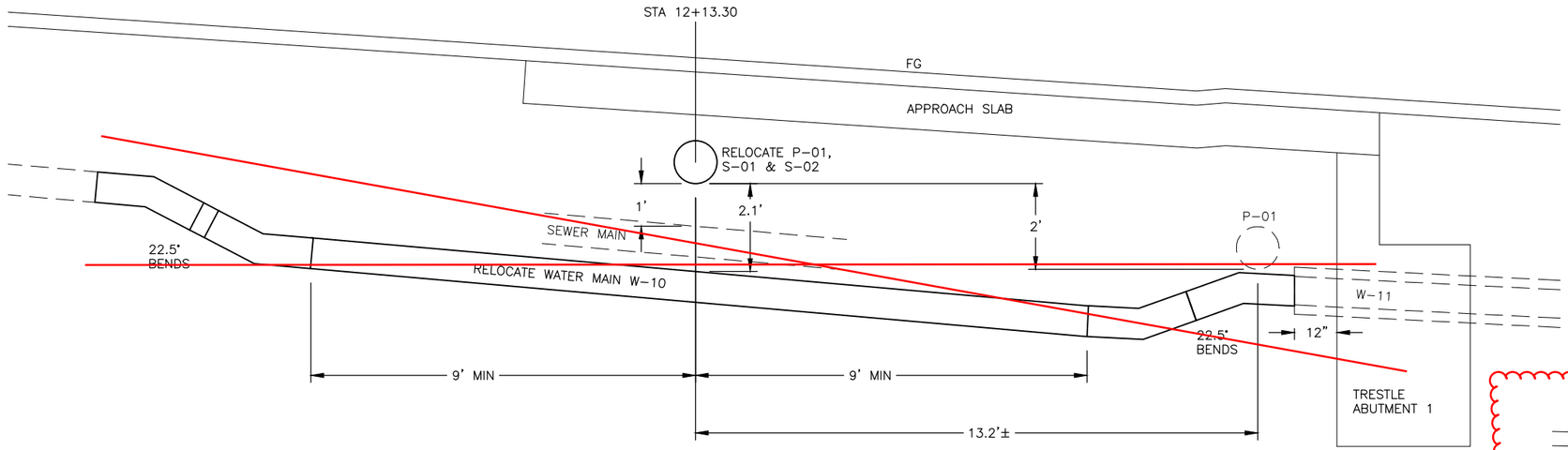
TAB: E10 Friday, November 20, 2015 11:41:08 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	**E10**	E10

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VAD\CTC\CIVIL\ACAD\1744-E SHEET5.DWG

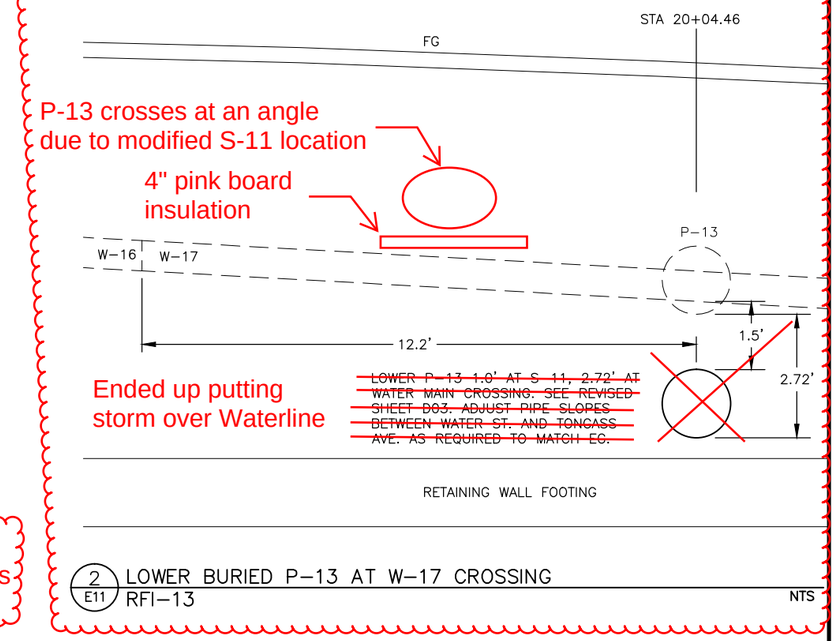
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019



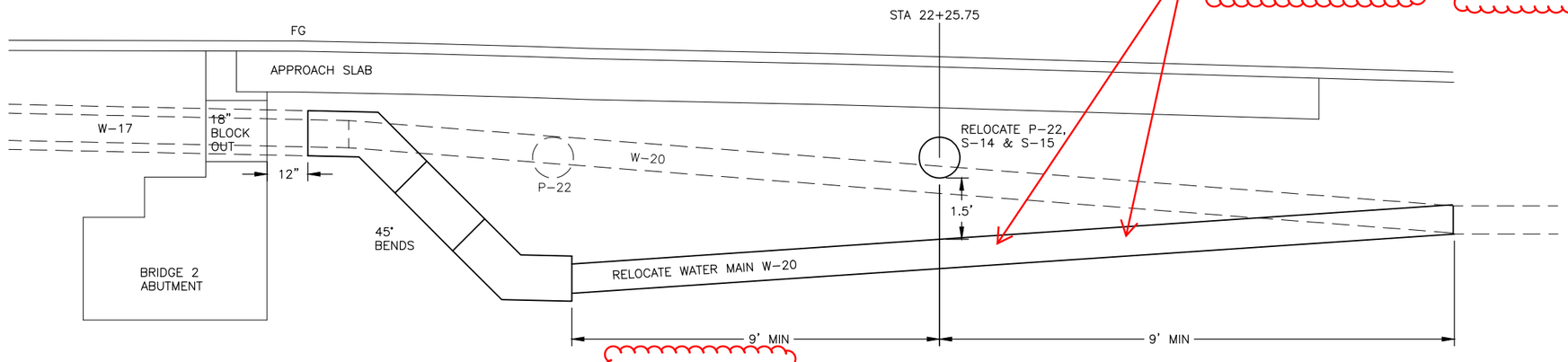
1 / E11 RELOCATE BURIED WATER MAIN W-10 AT S-01 CROSSING
RFI-13
NTS

RFI 13 modified by CO 47



2 / E11 LOWER BURIED P-13 AT W-17 CROSSING
RFI-13
NTS

2 additional 45 deg.angle points added.



3 / E11 RELOCATE BURIED P-22 AT W-20 CROSSING
RFI-13
NTS

ALL DIP USED

Sheet provided in response to RFI#13, included under CO#20

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: N. KNOX
DRAWN BY: R. REDICK

STATE OF ALASKA
Ryan D. Redick
No. CE 12799
04/17/17
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DETAILS

TAB: E11 Monday, June 13, 2016 2:06:56 PM NICOLE KNOX

REVISIONS		
NO.	DATE	DESCRIPTION
1 AB	06/10/16	RFI-13 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**E11**	E10

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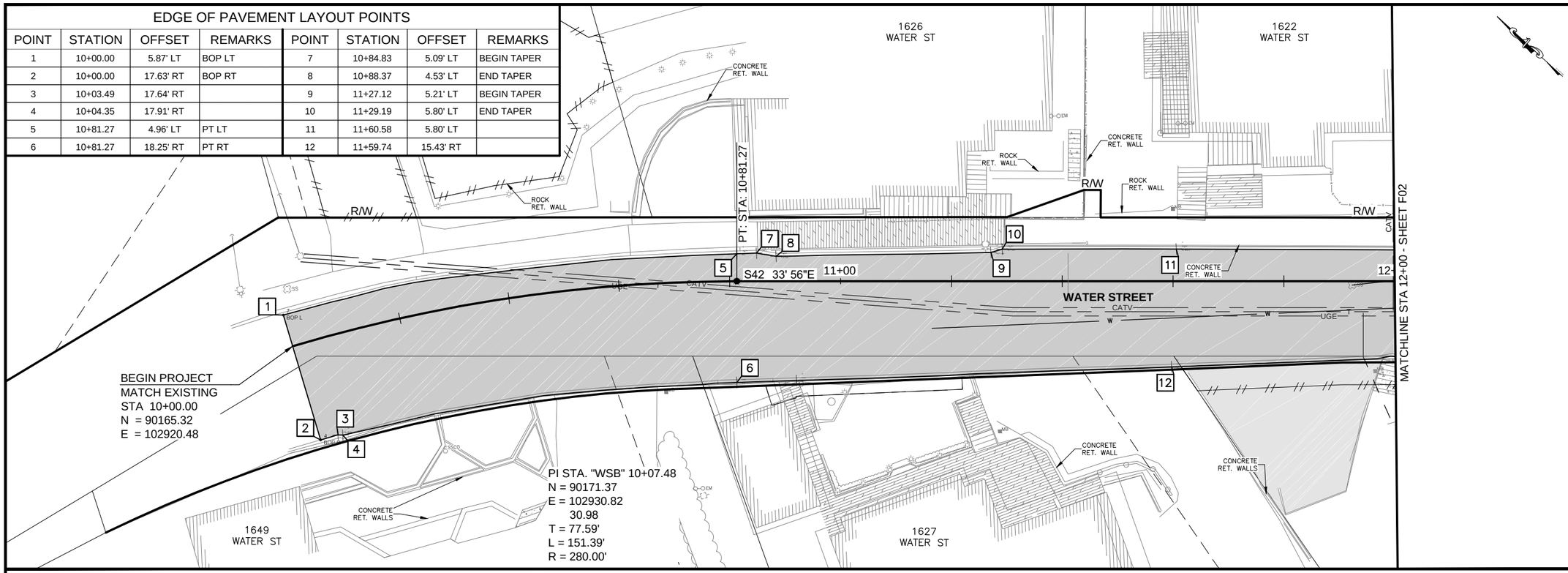
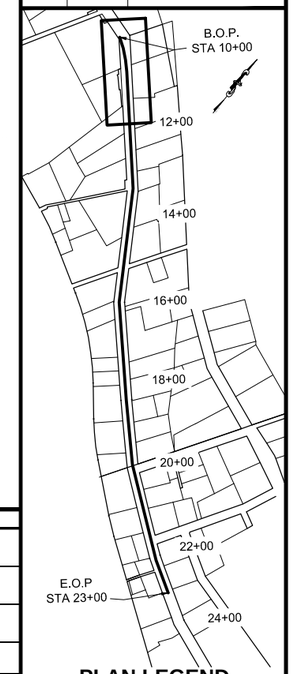
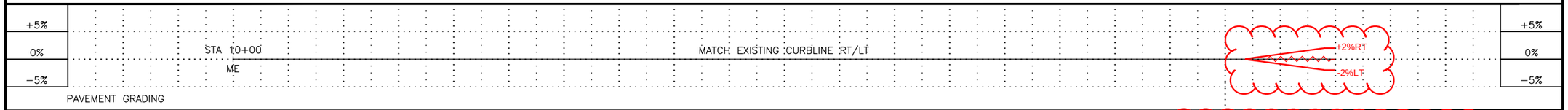
EDGE OF PAVEMENT LAYOUT POINTS

POINT	STATION	OFFSET	REMARKS	POINT	STATION	OFFSET	REMARKS
1	10+00.00	5.87' LT	BOP LT	7	10+84.83	5.09' LT	BEGIN TAPER
2	10+00.00	17.63' RT	BOP RT	8	10+88.37	4.53' LT	END TAPER
3	10+03.49	17.64' RT		9	11+27.12	5.21' LT	BEGIN TAPER
4	10+04.35	17.91' RT		10	11+29.19	5.80' LT	END TAPER
5	10+81.27	4.96' LT	PT LT	11	11+60.58	5.80' LT	
6	10+81.27	18.25' RT	PT RT	12	11+59.74	15.43' RT	





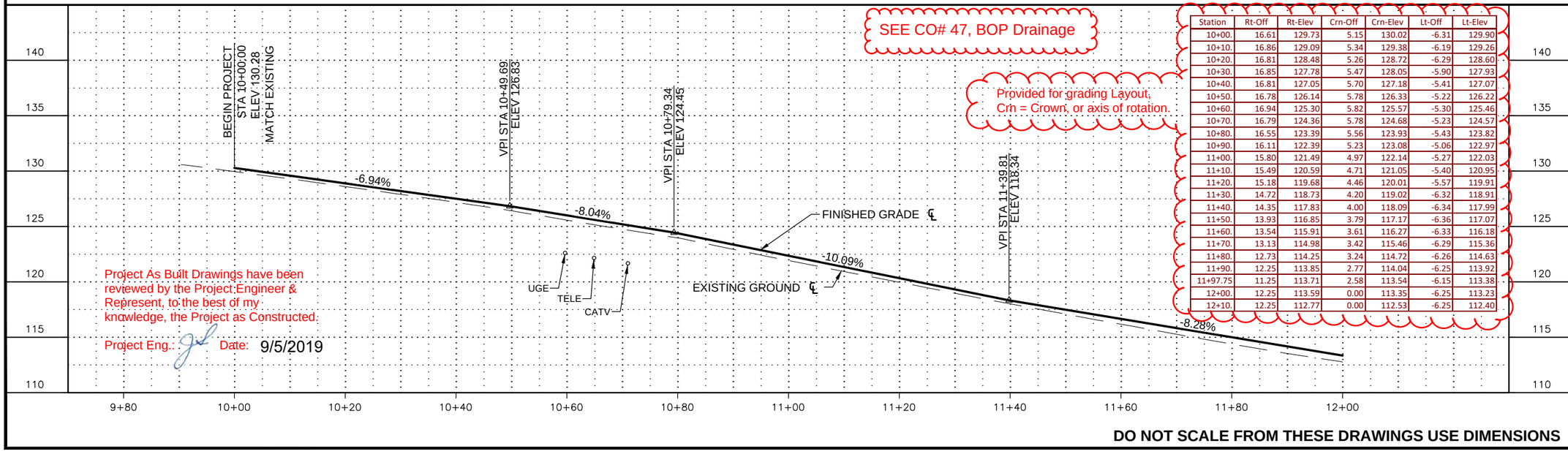
PLAN LEGEND



SEE CO# 47, BOP Drainage

Provided for grading Layout,
Crn = Crown, or axis of rotation

Station	Rt-Off	Rt-Elev	Crn-Off	Crn-Elev	Lt-Off	Lt-Elev
10+00.	16.61	129.73	5.15	130.02	-6.31	129.90
10+10.	16.86	129.09	5.34	129.38	-6.19	129.26
10+20.	16.81	128.48	5.26	128.72	-6.29	128.60
10+30.	16.85	127.78	5.47	128.05	-5.90	127.93
10+40.	16.81	127.05	5.70	127.18	-5.41	127.07
10+50.	16.78	126.14	5.78	126.33	-5.22	126.22
10+60.	16.94	125.30	5.82	125.57	-5.30	125.46
10+70.	16.79	124.36	5.78	124.68	-5.23	124.57
10+80.	16.55	123.39	5.56	123.93	-5.43	123.82
10+90.	16.11	122.39	5.23	123.08	-5.06	122.97
11+00.	15.80	121.49	4.97	122.14	-5.27	122.03
11+10.	15.49	120.59	4.71	121.05	-5.40	120.95
11+20.	15.18	119.68	4.46	120.01	-5.57	119.91
11+30.	14.72	118.73	4.20	119.02	-6.32	118.91
11+40.	14.35	117.83	4.00	118.09	-6.34	117.99
11+50.	13.93	116.85	3.79	117.17	-6.36	117.07
11+60.	13.54	115.91	3.61	116.27	-6.33	116.18
11+70.	13.13	114.98	3.42	115.46	-6.29	115.36
11+80.	12.73	114.25	3.24	114.72	-6.26	114.63
11+90.	12.25	113.85	2.77	114.04	-6.25	113.92
11+97.75	11.25	113.71	2.58	113.54	-6.15	113.38
12+00.	12.25	113.59	0.00	113.35	-6.25	113.23
12+10.	12.25	112.77	0.00	112.53	-6.25	112.40



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: F01 11/20/2015 11:41 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PLAN & PROFILE

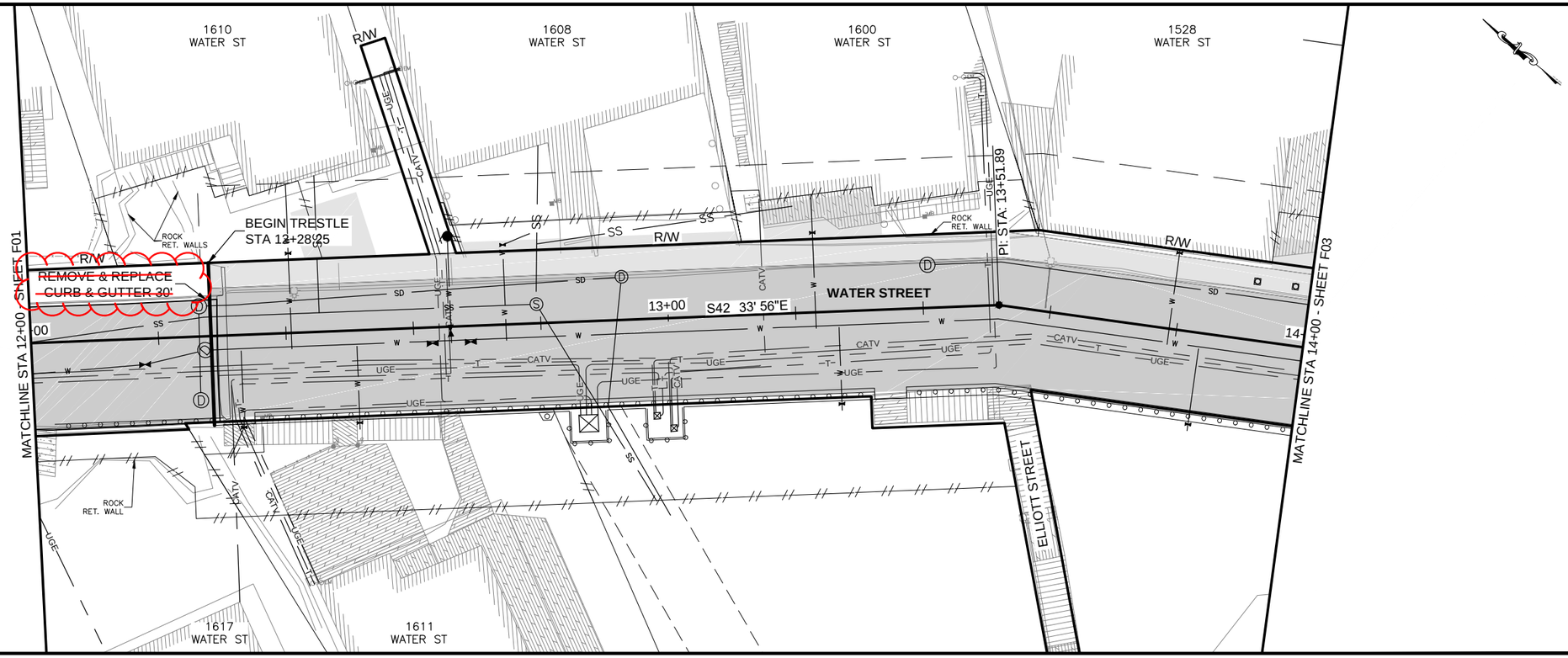
PROJECT DESIGNATION

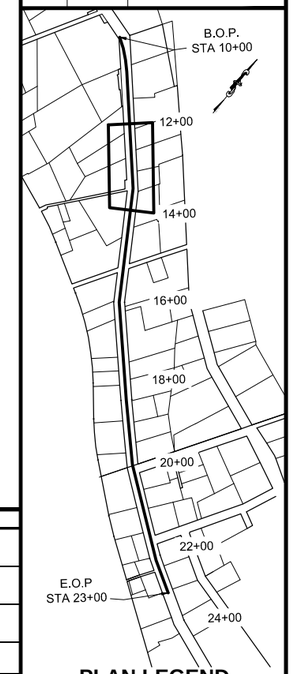
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
F01	F19

SEE CO #47





PLAN LEGEND

PAVEMENT GRADING

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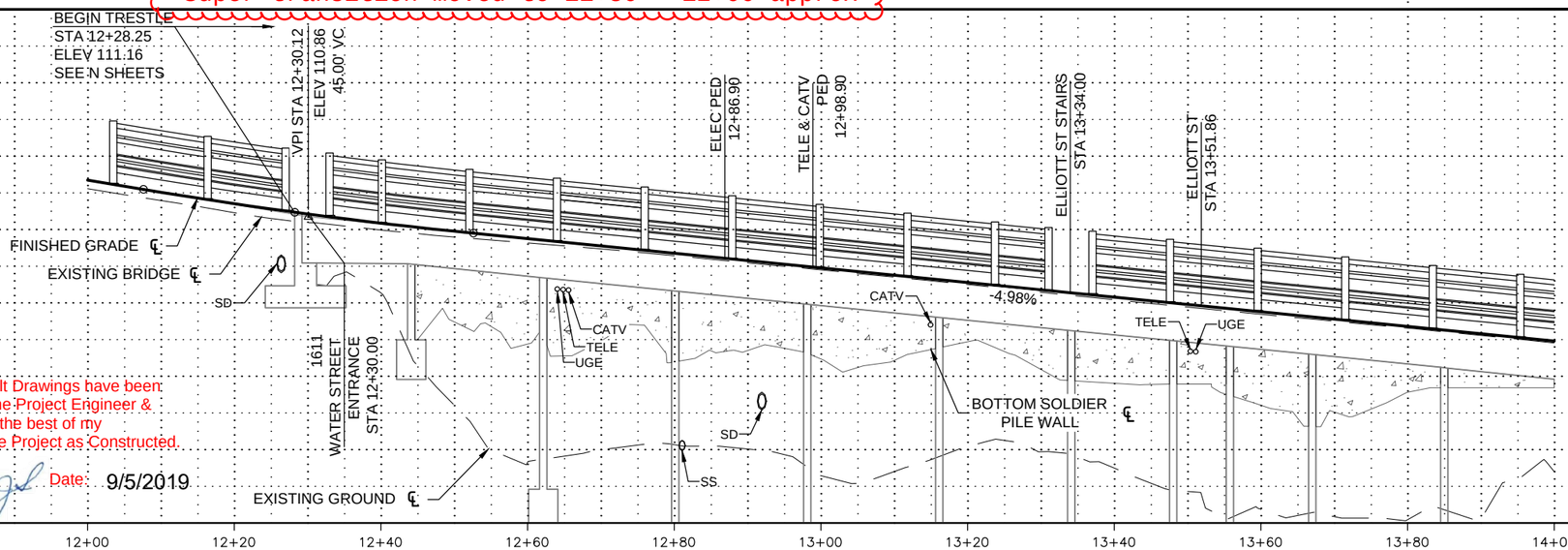
Super transition moved to 11+80 - 12+00 approx



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

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PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: F02 11/20/2015 11:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH Ryan D. Redick No. CE-12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

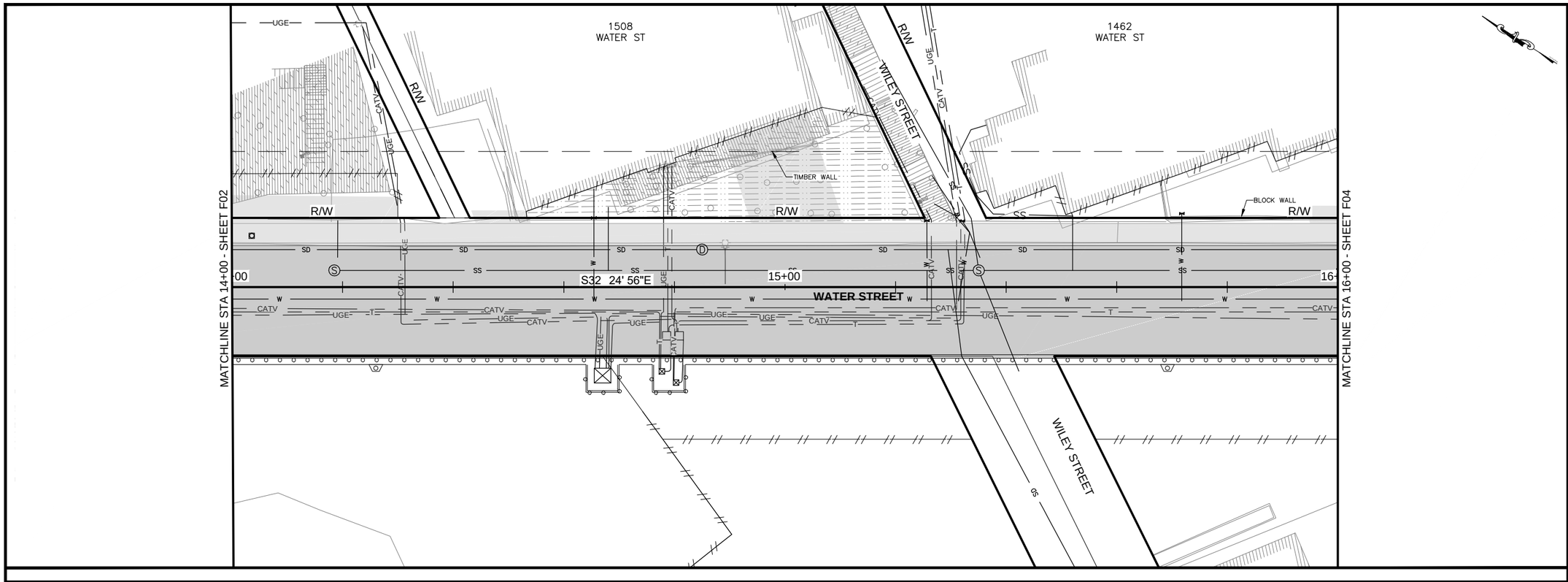
DRAWN BY: B. MAXWELL

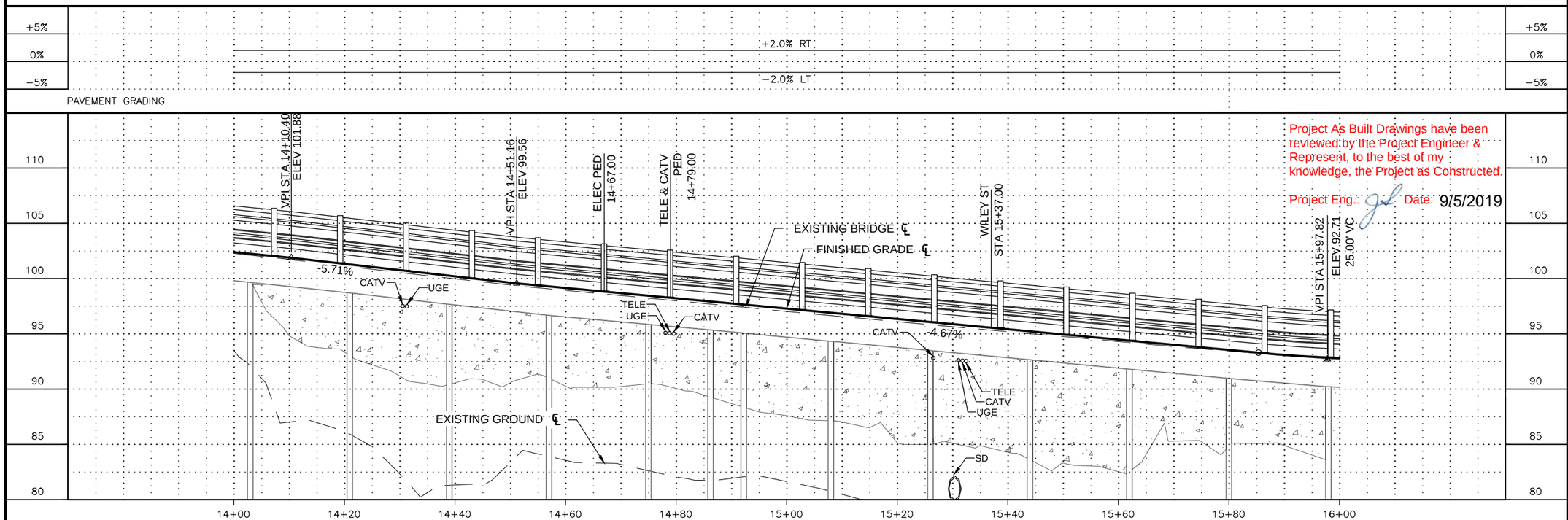
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PLAN & PROFILE

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F02	F19





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

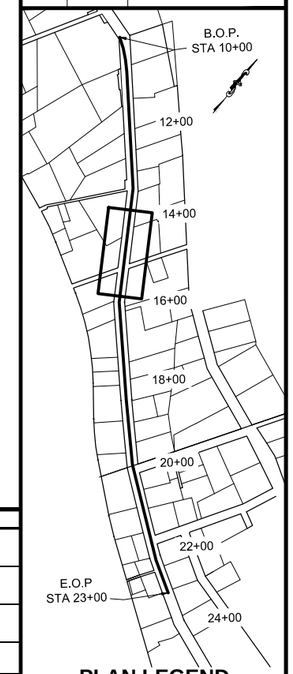
TAB: F03 11/20/2015 11:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA
49TH
Ryan D. Redick
No. CE-12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

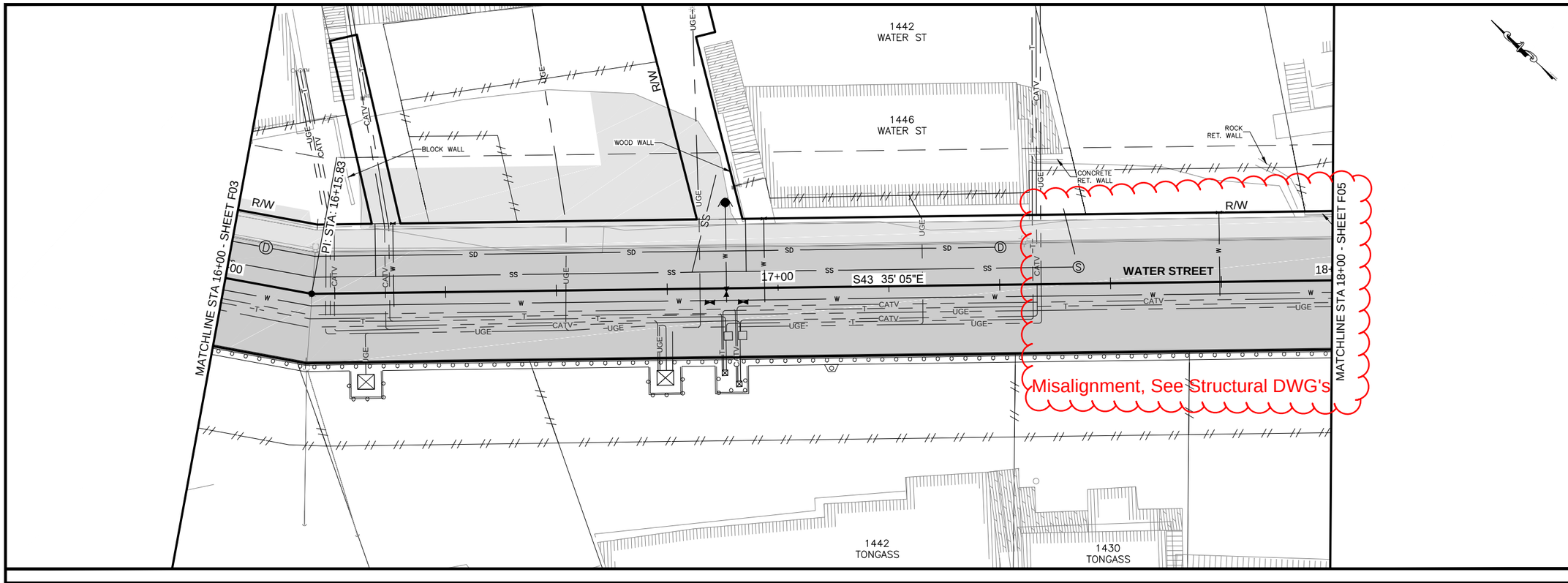
DRAWN BY: B. MAXWELL

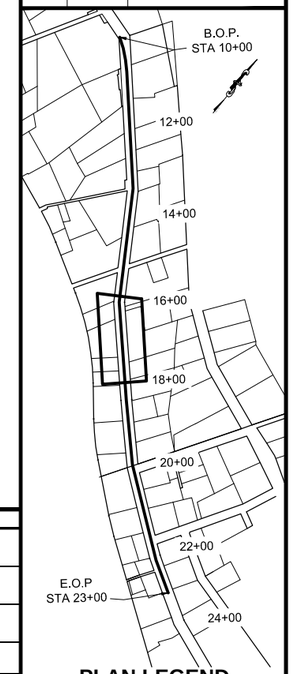
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PLAN & PROFILE

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F03	F19





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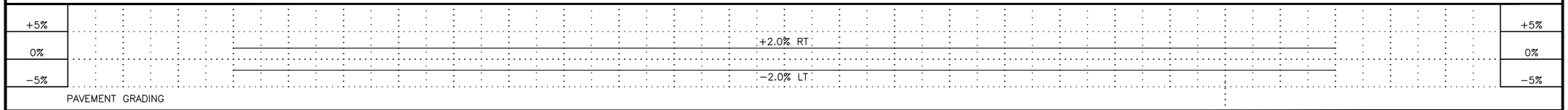

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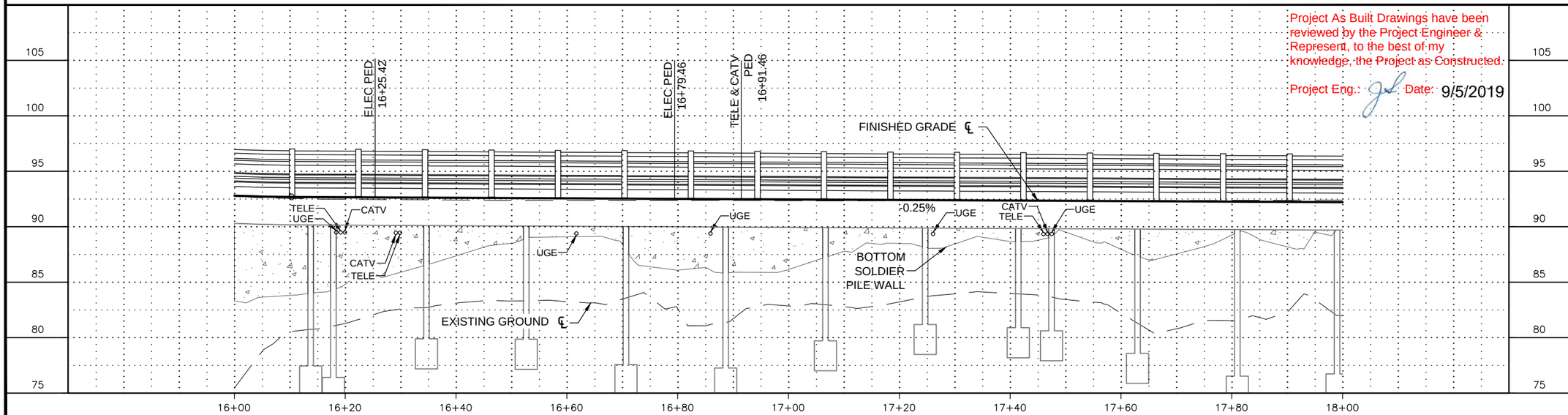


Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: F04 11/20/2015 11:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

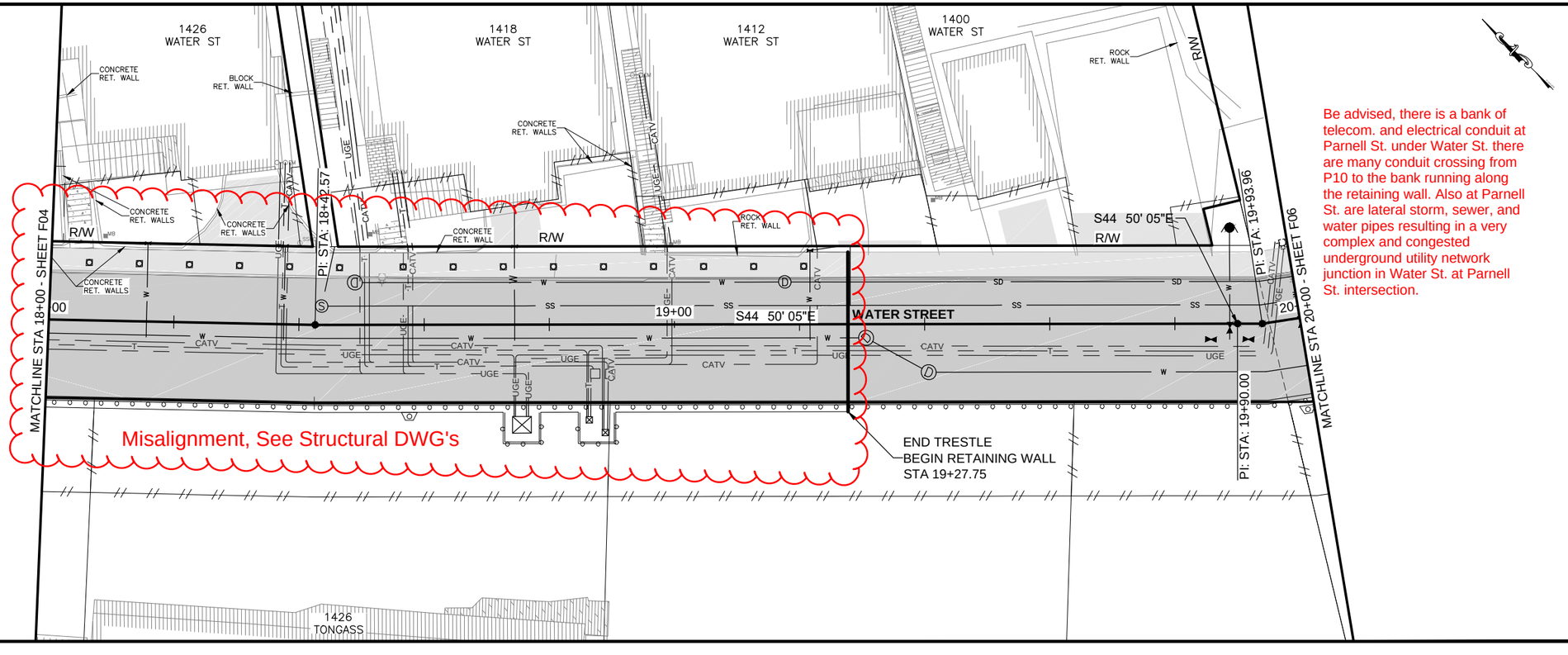
PLAN & PROFILE

PROJECT DESIGNATION

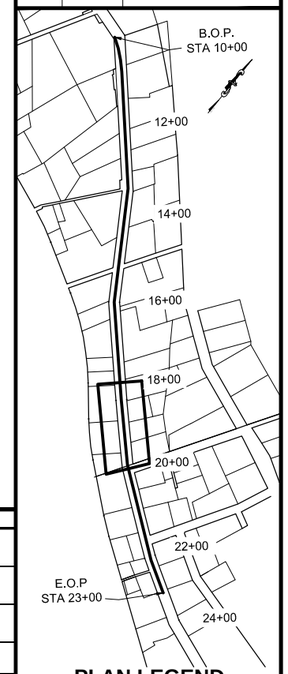
BR-000S(735)

STATE	YEAR
ALASKA	2015

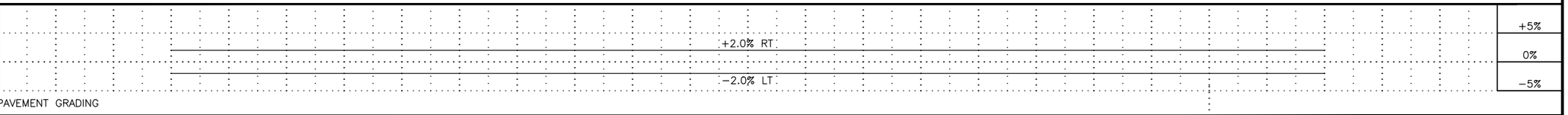
SHEET NUMBER	TOTAL SHEETS
F04	F19



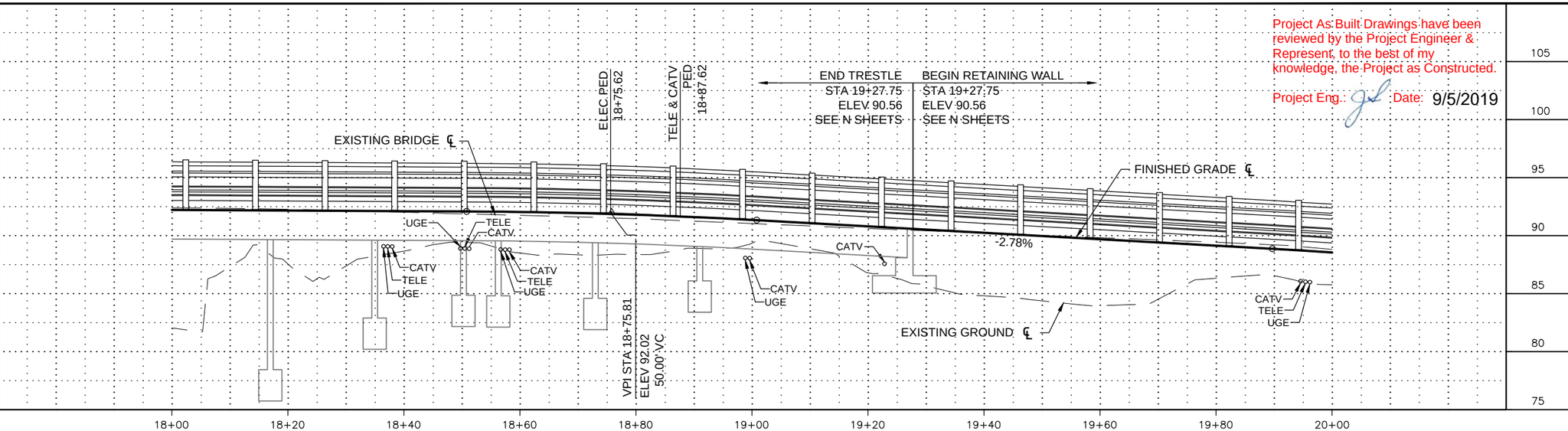
Be advised, there is a bank of telecom. and electrical conduit at Parnell St. under Water St. there are many conduit crossing from P10 to the bank running along the retaining wall. Also at Parnell St. are lateral storm, sewer, and water pipes resulting in a very complex and congested underground utility network junction in Water St. at Parnell St. intersection.



PLAN LEGEND



PAVEMENT GRADING



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: F05 11/20/2015 11:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick No. CE-12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PLAN & PROFILE

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
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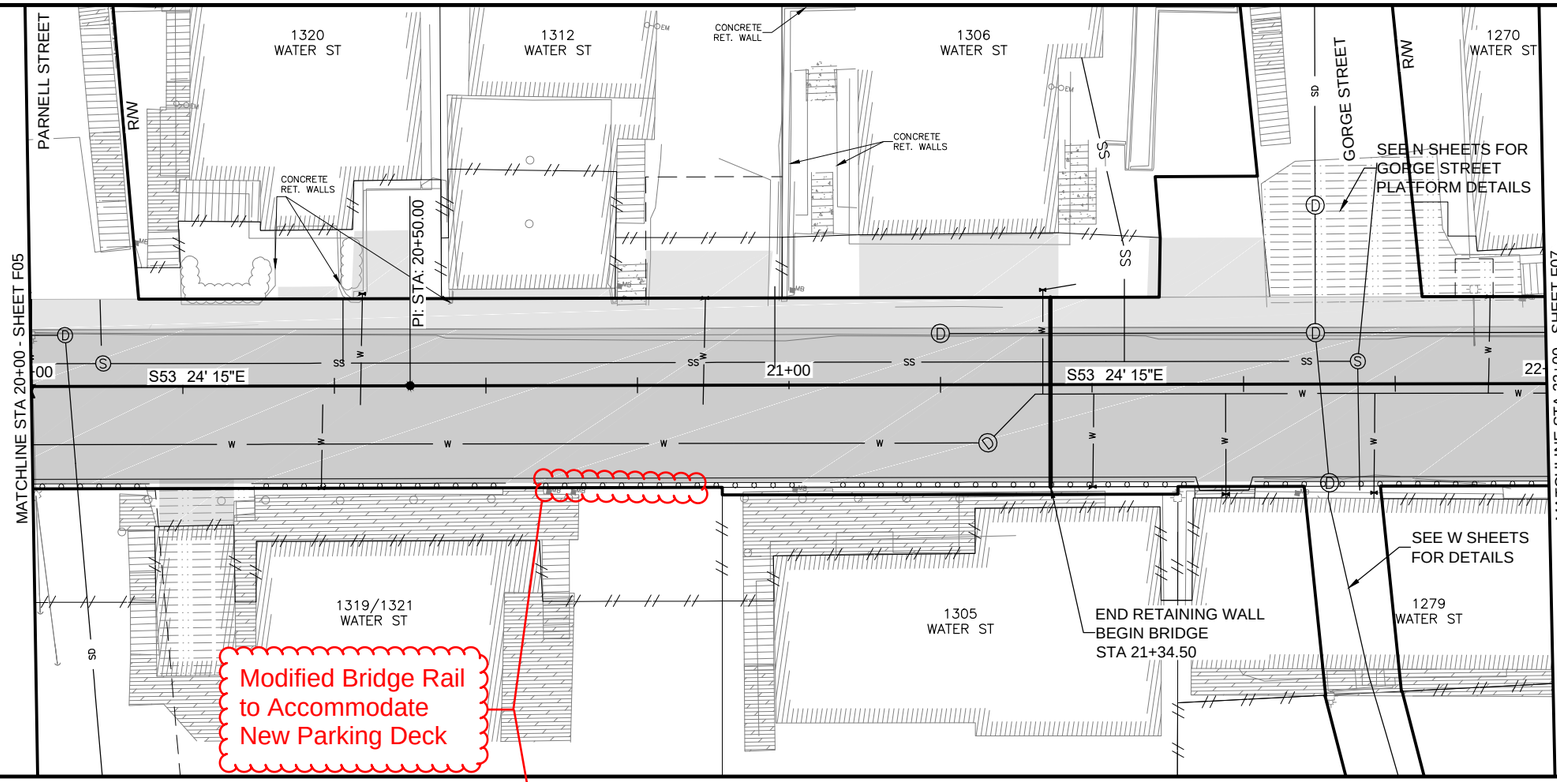
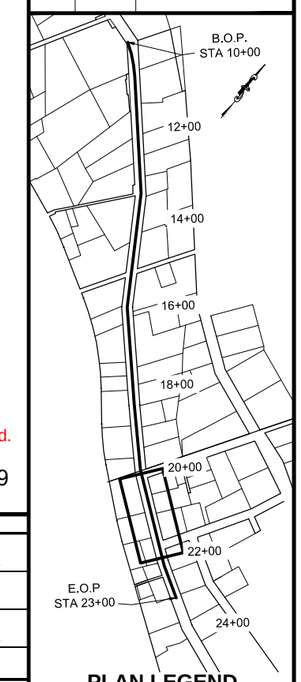
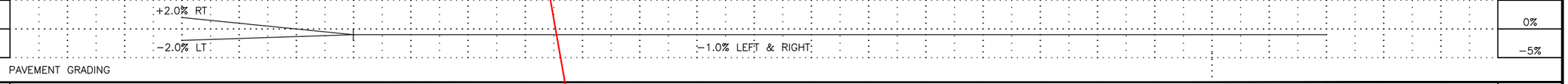
F05	F19

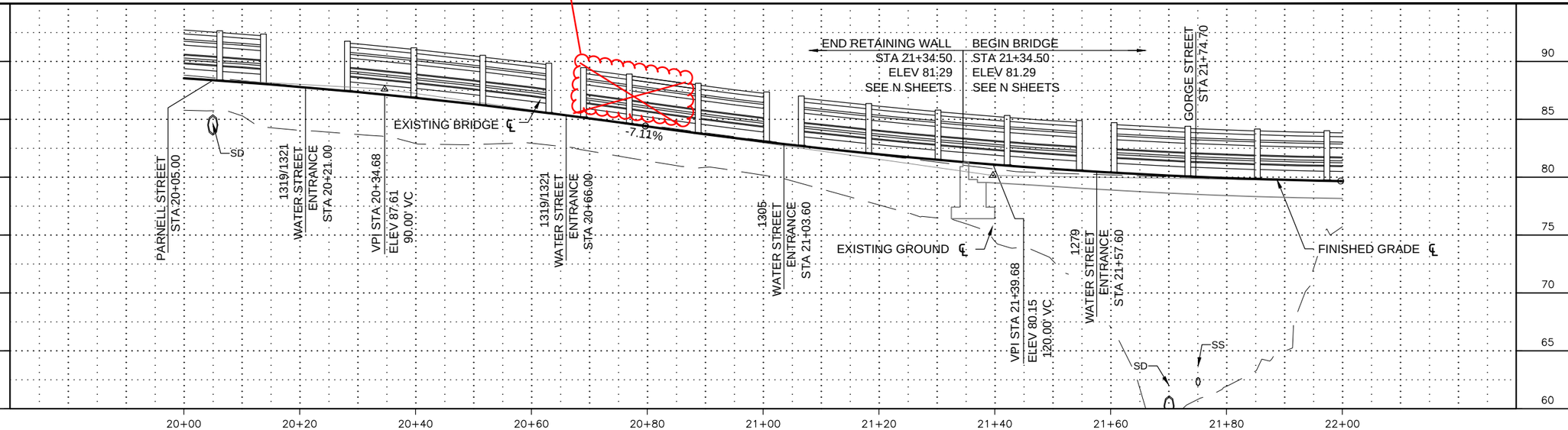
Be advised, there is a bank of telecom. and electrical conduit at Parnell St. under Water St. there are many conduit crossing from P10 to the bank running along the retaining wall. Also at Parnell St. are lateral storm, sewer, and water pipes resulting in a very complex and congested underground utility network junction in Water St. at Parnell St. intersection.





PLAN LEGEND





DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: F06 11/20/2015 11:43 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH RYAN REDECKI Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

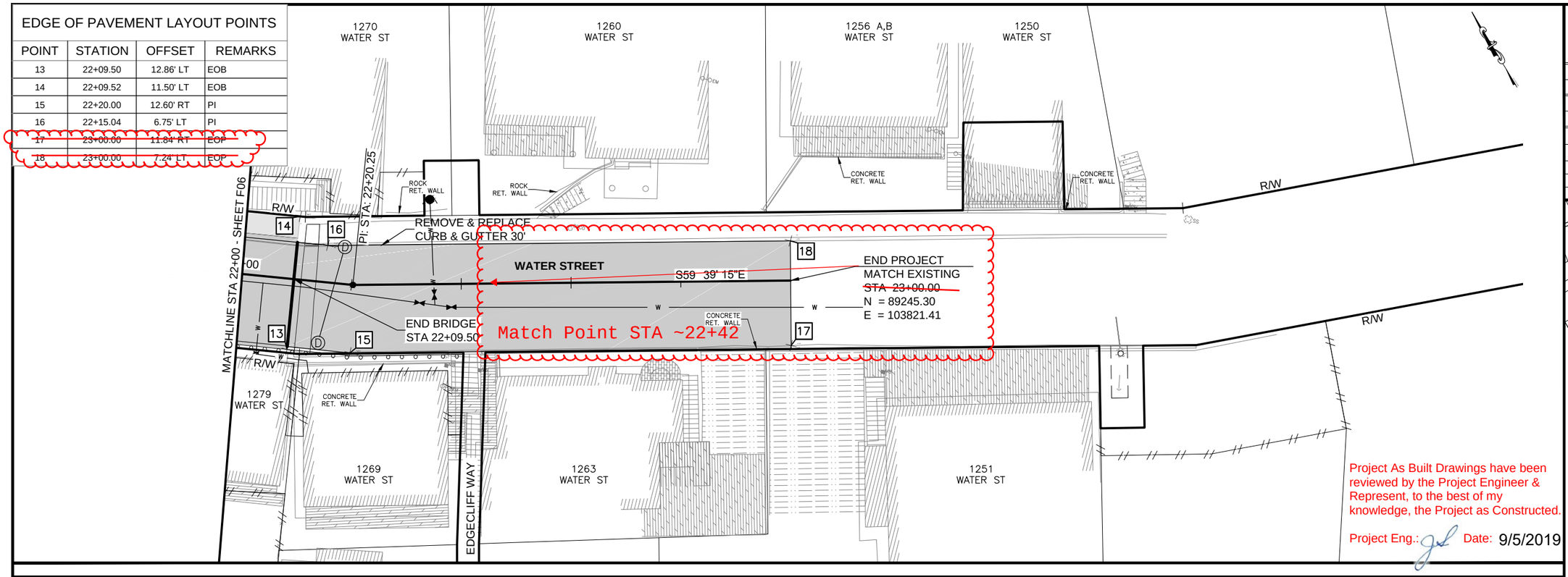
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PLAN & PROFILE

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F06	F19

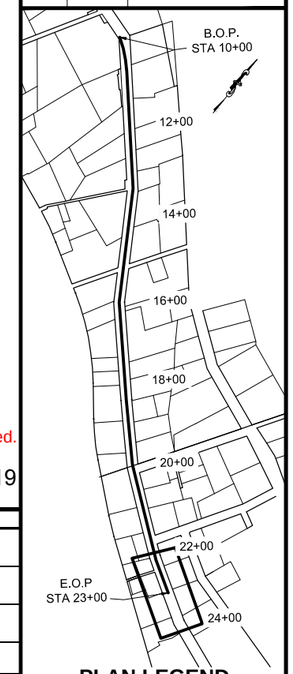
EDGE OF PAVEMENT LAYOUT POINTS

POINT	STATION	OFFSET	REMARKS
13	22+09.50	12.86' LT	EOB
14	22+09.52	11.50' LT	EOB
15	22+20.00	12.60' RT	PI
16	22+15.04	6.75' LT	PI
~~17~~	~~23+00.00~~	~~11.84' RT~~	~~EOP~~
~~18~~	~~23+00.00~~	~~7.24' LT~~	~~EOP~~

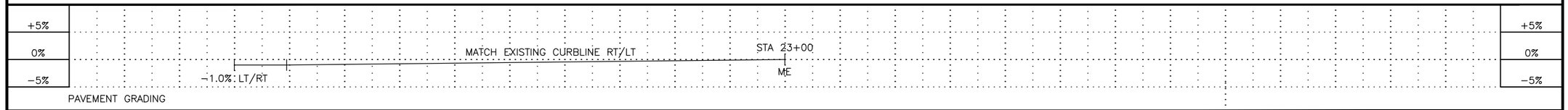


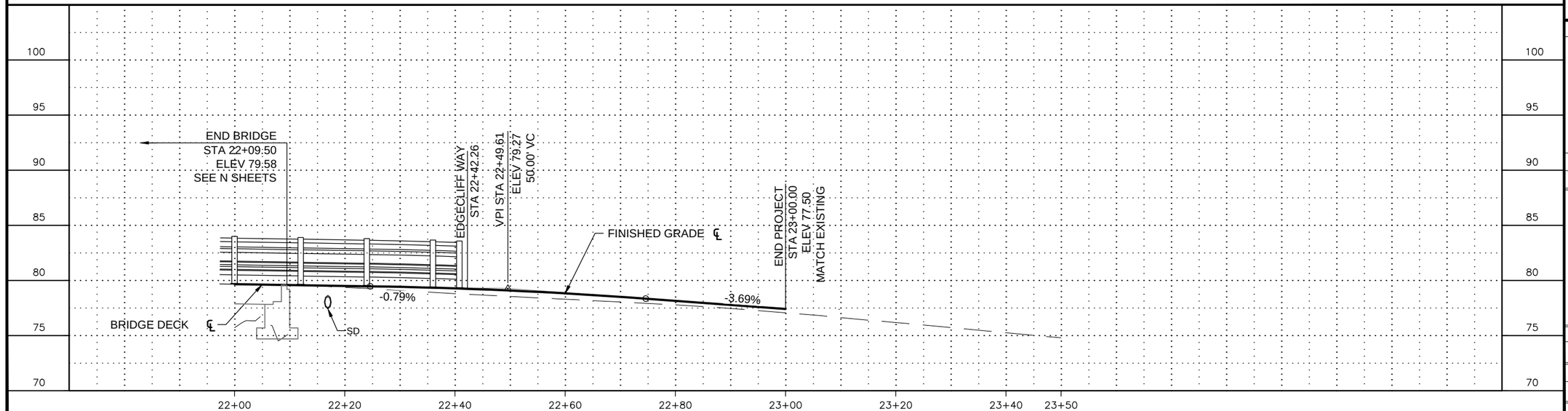
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019



PLAN LEGEND





DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: F07 11/20/2015 11:43 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA
49 TH
Ryan D. Redick
No. CE-12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

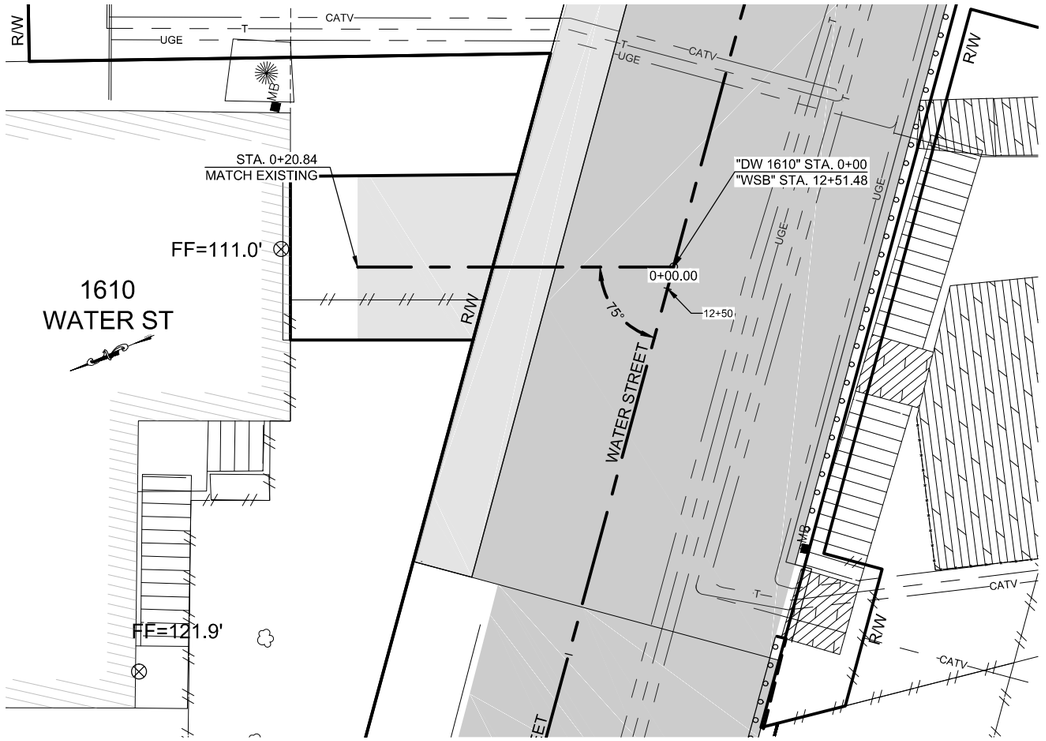
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

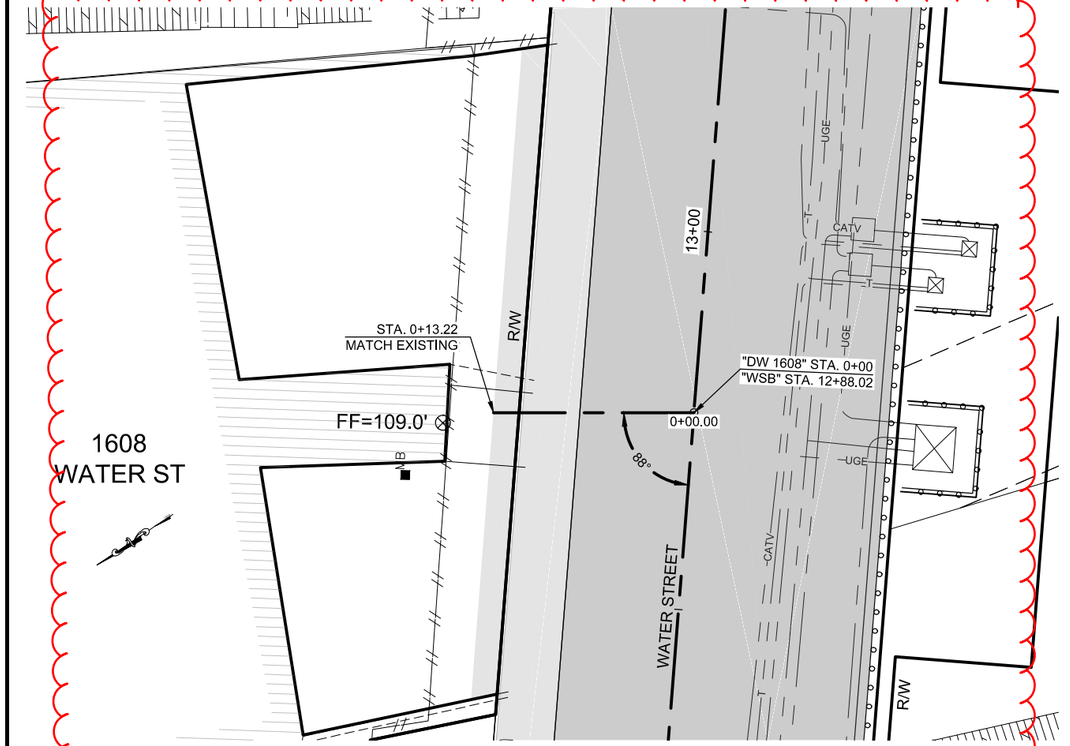
PLAN & PROFILE

PROJECT DESIGNATION
BR-000S(735)

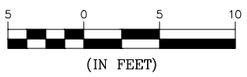
STATE	YEAR
ALASKA	2015

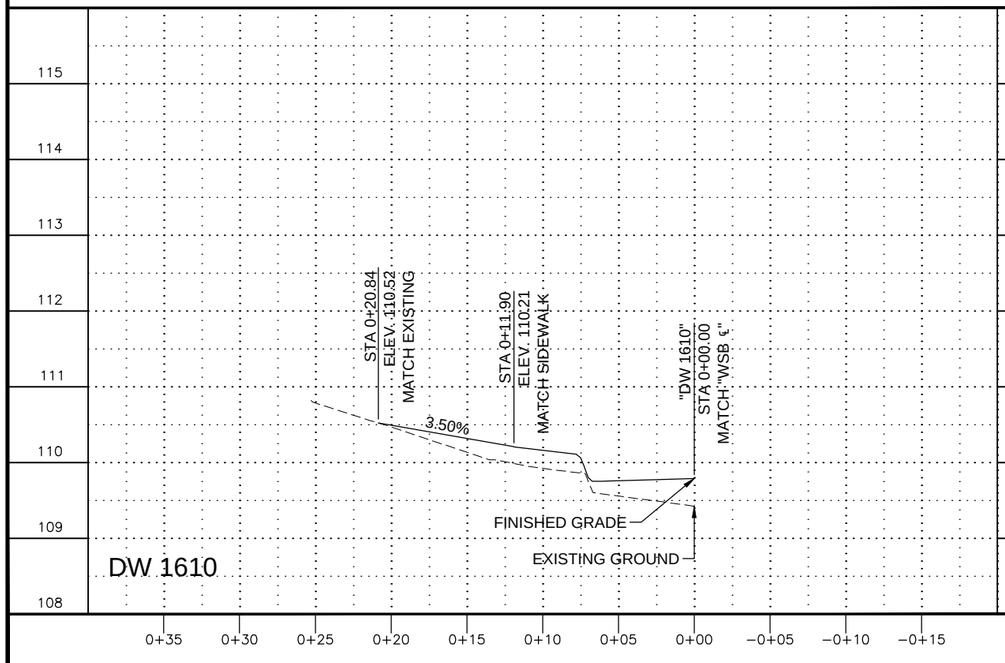
SHEET NUMBER	TOTAL SHEETS
F07	F19

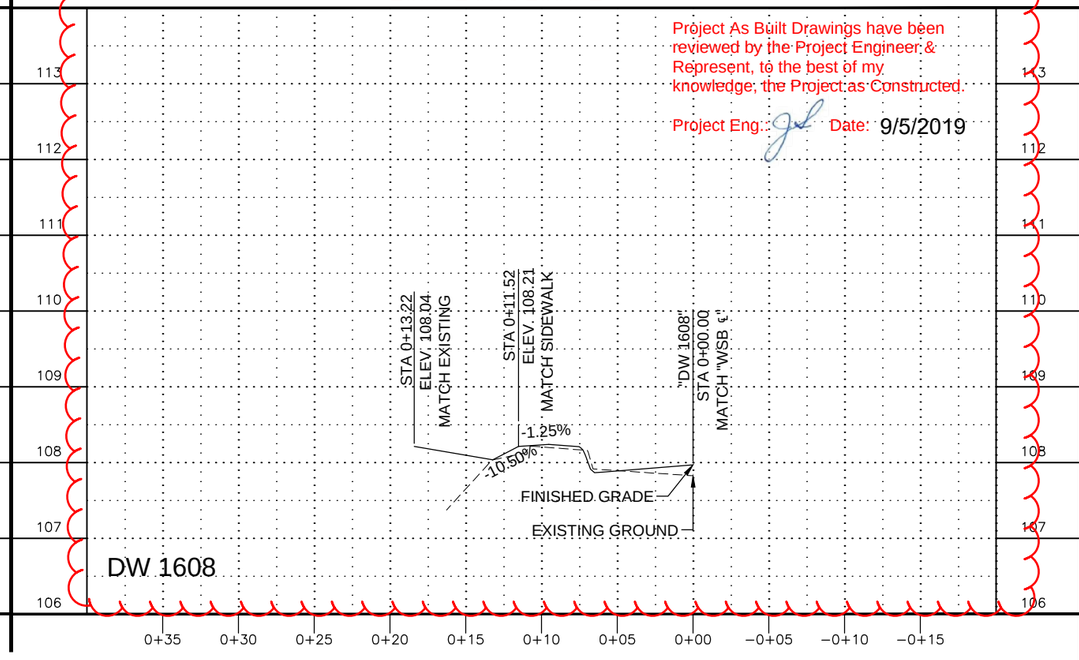




See RFI-187, and next several dwgs.
1608-1 and 1608-2







Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

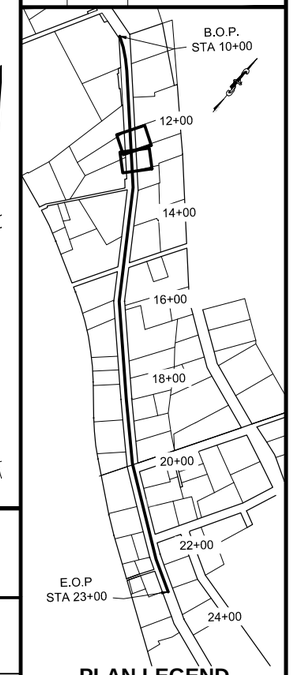
TAB: F08 11/20/2015 2:05 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA
49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DRIVEWAY PLAN & PROFILE

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

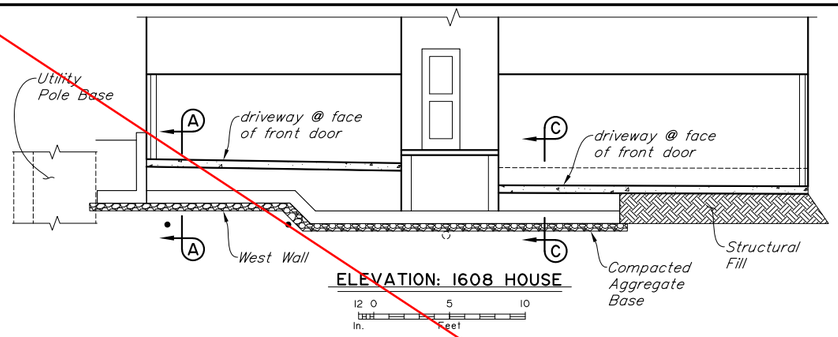
SHEET NUMBER	TOTAL SHEETS
F08	F19

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	1	2

See as built changes next page

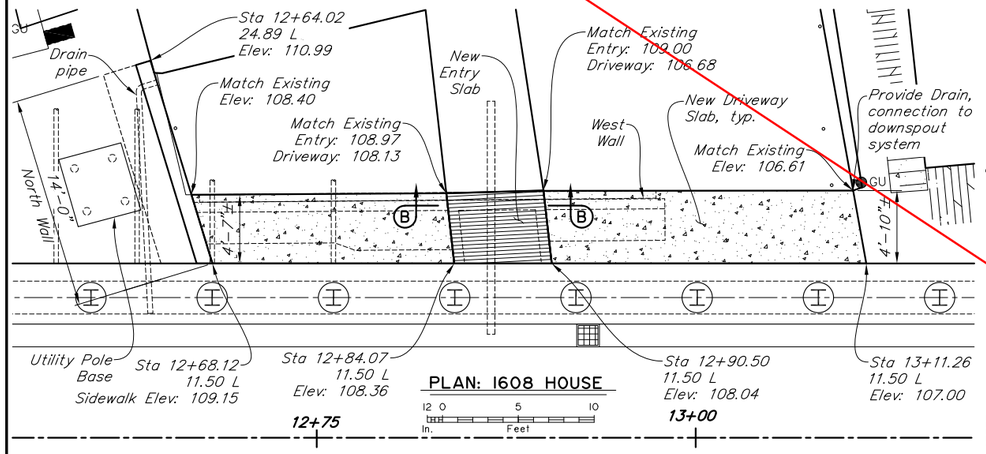
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng. Date: 9/5/2019



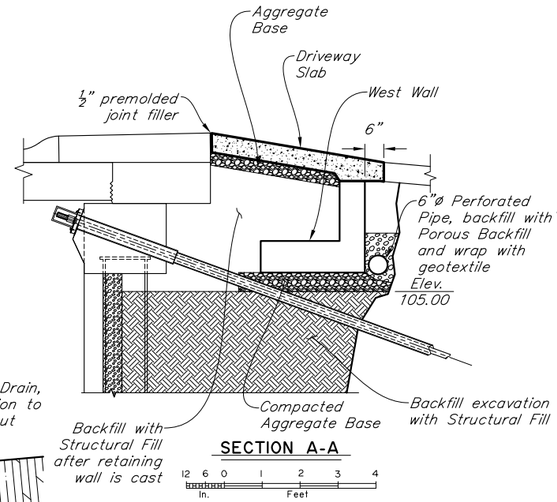
ELEVATION: 1608 HOUSE

12 0 5 10 In. Feet



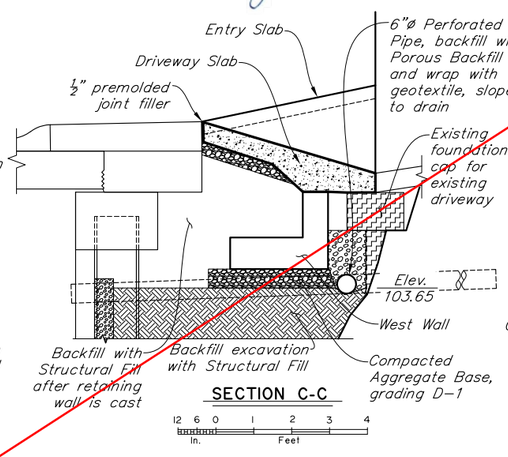
PLAN: 1608 HOUSE

12 0 5 10 In. Feet



SECTION A-A

12 6 0 1 2 3 4 In. Feet



SECTION C-C

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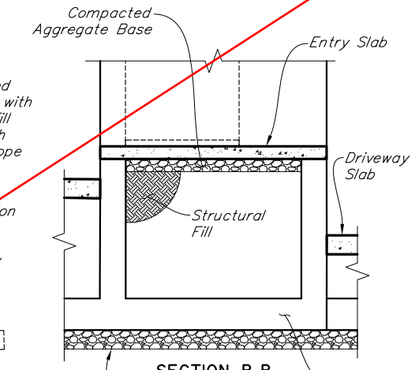
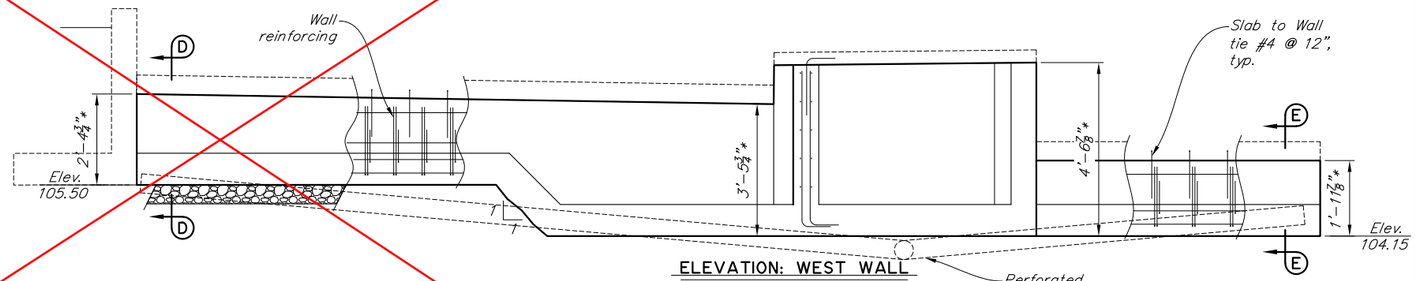


SECTION B-B

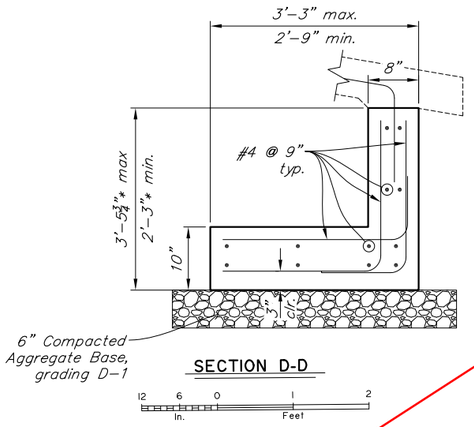
12 6 0 1 2 3 4 In. Feet

View at front door



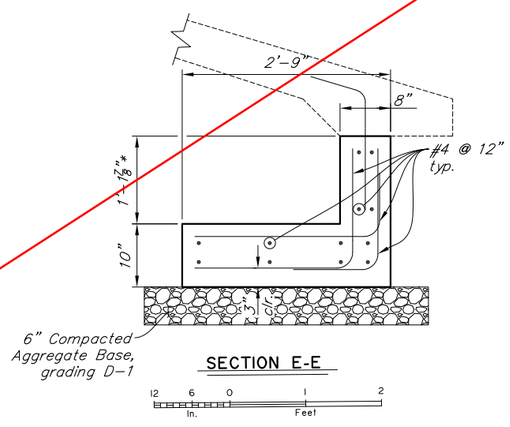
ELEVATION: WEST WALL

12 6 0 1 2 3 4 In. Feet



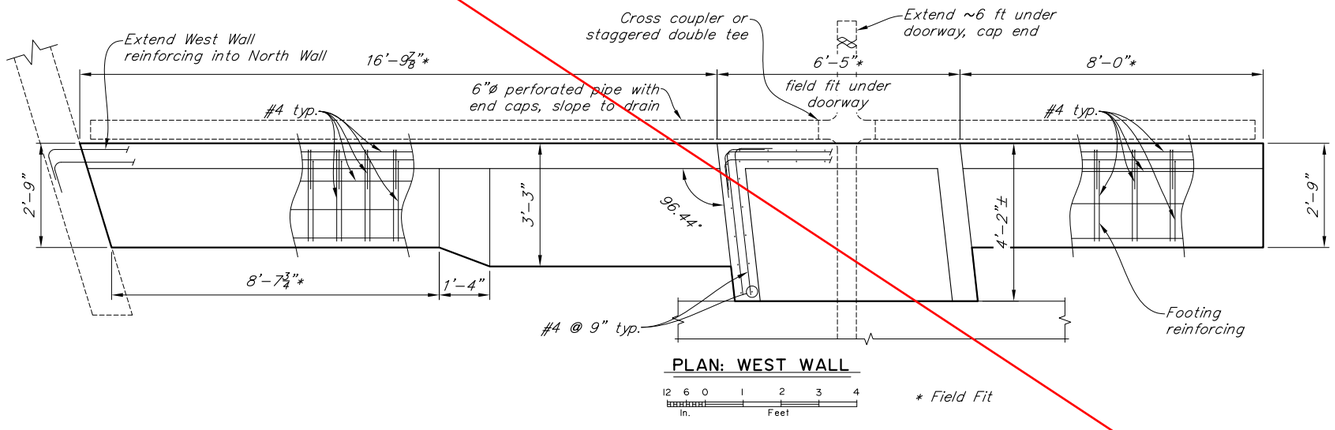
SECTION D-D

12 6 0 1 2 In. Feet



SECTION E-E

12 6 0 1 2 In. Feet



PLAN: WEST WALL

12 6 0 1 2 3 4 In. Feet

* Field Fit

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	RFI-187 / CSM 259
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	AB
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

As-Built Set

STATE OF ALASKA 49TH DAVID R SHEARER CE 6/14/16 REGISTERED PROFESSIONAL ENGINEER

WATER STREET BRIDGE No. 2

WATER STREET

1608 DRIVEWAY LAYOUT

1608-1

BRIDGE NO. 2313

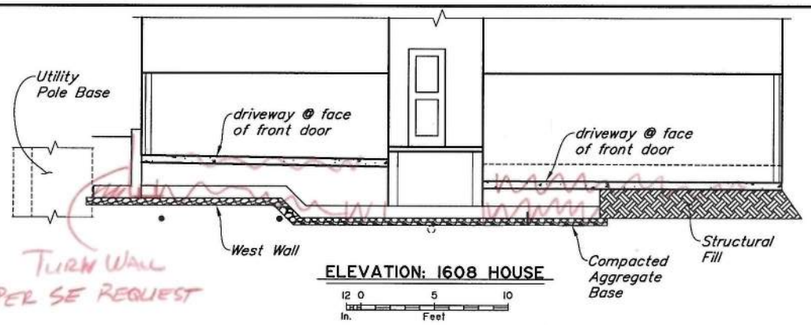
DWG. NO. 1

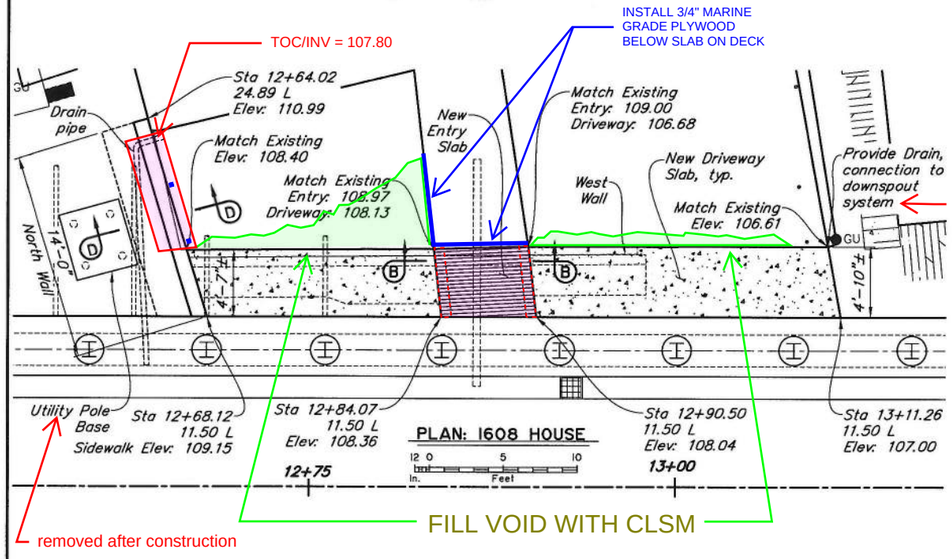
Jun 14, 2016 - 12:42pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1608 Wall\1608 DRIVEWAY LAYOUT.dwg Layout Name: 1608 House Layout

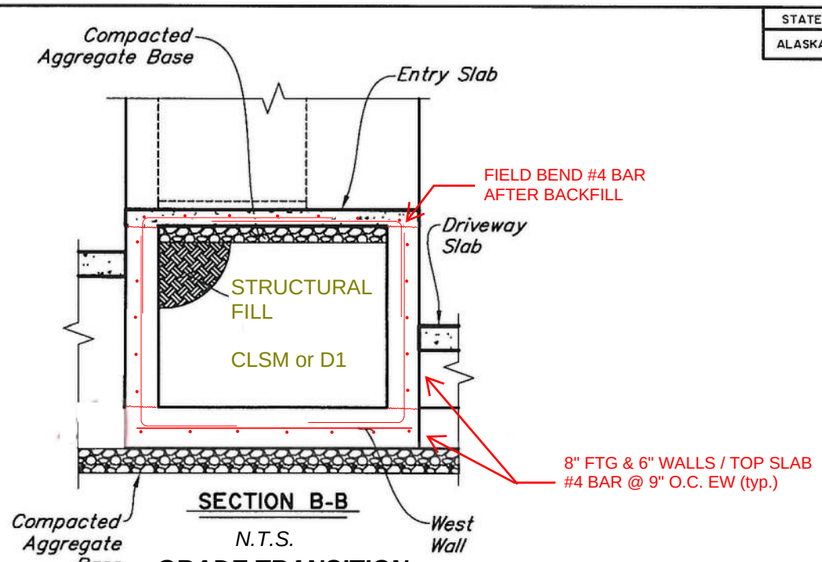
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	1	2

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

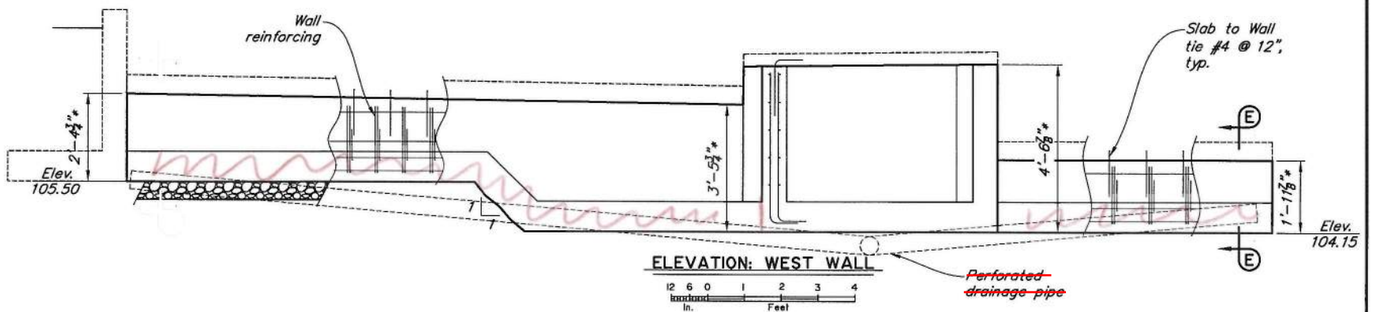
Project Eng.: Date: 9/5/2019

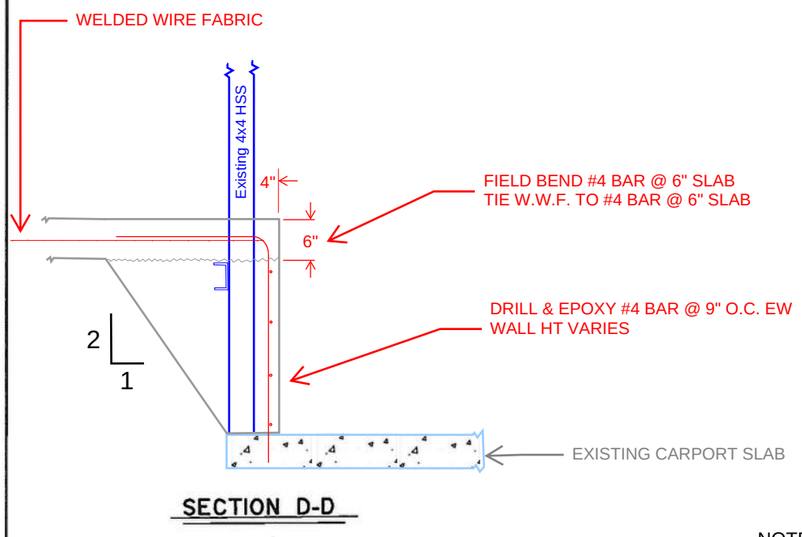






GRADE TRANSITION WALLS @ ENTRANCE





THICKENED EDGE @ N. END OF CARPORT

NOTE:
WRAP F.H. PIPE W/ 1/2" THICK INSULATION BOND BREAK PRIOR TO PLACEMENT OF SLAB

Work covered under 678(1)

WATER STREET BRIDGE No. 2

WATER STREET

1608 DRIVEWAY LAYOUT

1608-1R

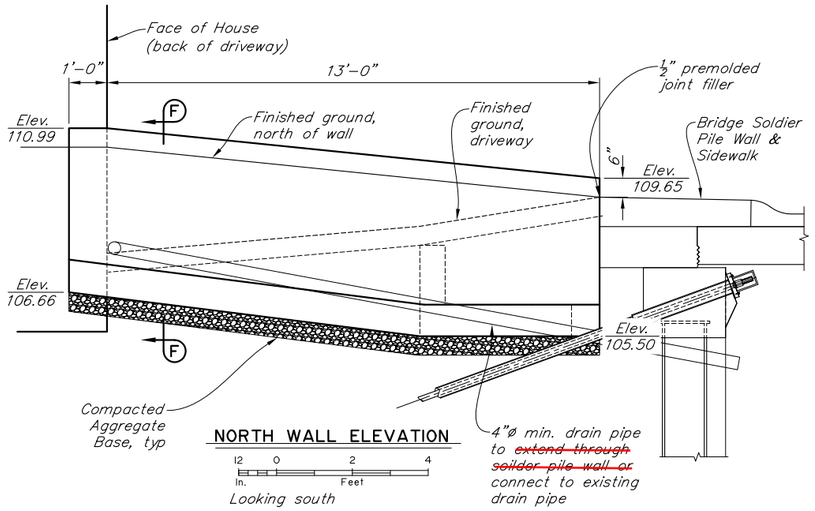
BRIDGE NO. 2313

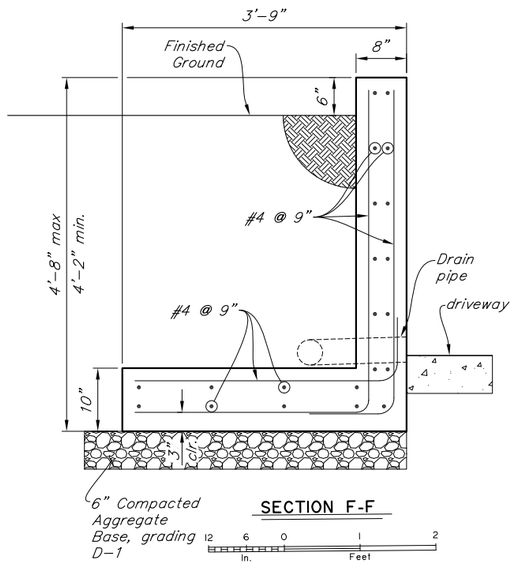
DWG. NO. 1

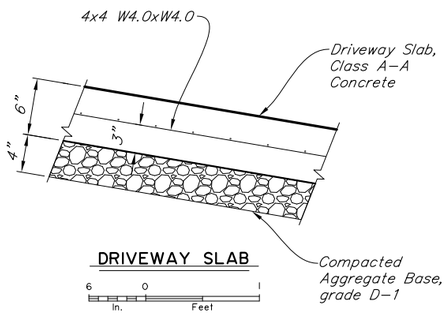
AB As-Built Set

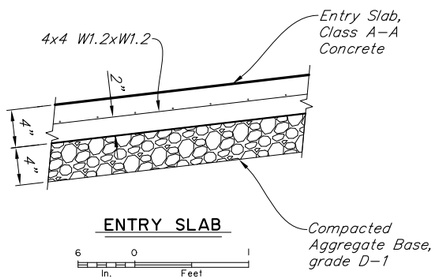
Jun 14, 2018 - 12:42pm bvlen \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1608 Walls\1608 DRIVEWAY LAYOUT.dwg Layout Name: 1608 House Layout

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	2	2









GENERAL NOTES:

- Retaining Wall Concrete shall be Class A, the driveway and entry slab concrete shall be Class A-A, the reinforcing shall be ASTM 615 Gr 60, and welded wire reinforcing shall be per ASTM A-1064 gr 65. The concrete cover shall be 3" when cast on the ground and 2" at all other locations. ¾" chamfer on all exposed concrete edges.
- Form & sub-grade inspection required before pouring concrete.
- The Driveway Slabs and the Entry Slab shall have a textured finish.
- Adjust elevations as needed to fit the existing driveway, front door, and new trestle sidewalk.

Construction Support Memorandum: 259

June 14, 2018

To: John Scott, HDR

Subject: 1608 Driveway

Directive

The attached sheets detail restoring the driveway and entry at 1608 Water Street.

Thank you,

Brien Lindstrom, S.E.WA

Bridge Engineer
SHEARER DESIGN

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

RFI-187 / CSM 259

AB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

As-Built Set

STATE OF ALASKA 49TH DAVID R SHEARER CE 6/14/18 REGISTERED PROFESSIONAL ENGINEER

WATER STREET BRIDGE No. 2

WATER STREET

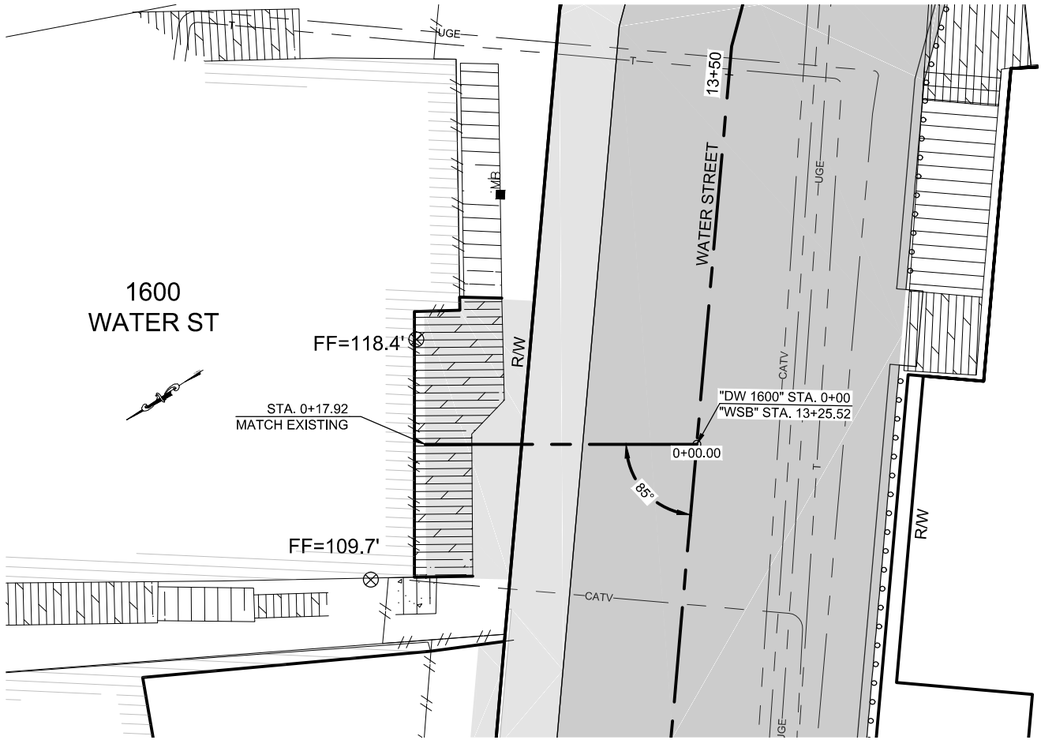
1608 DRIVEWAY DETAILS

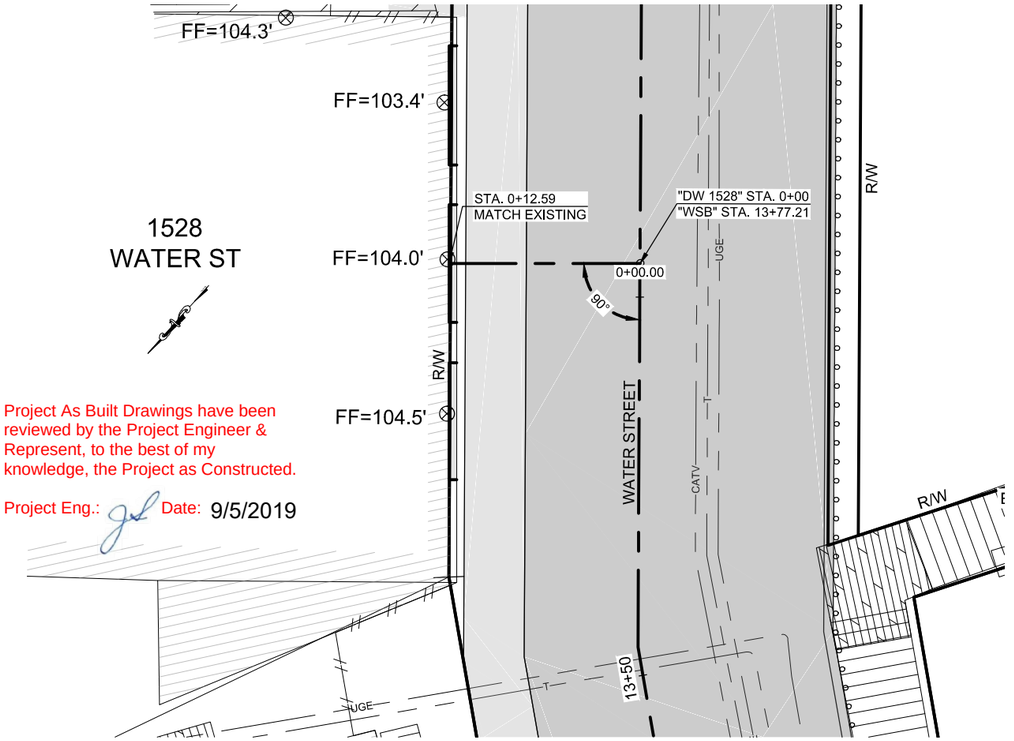
1608-2

BRIDGE NO. 2313

DWG. NO. 2

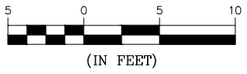
Jun 14, 2018 - 12:43pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1608 Wall\1608 DRIVEWAY LAYOUT.dwg Layout Name: 1608 Details

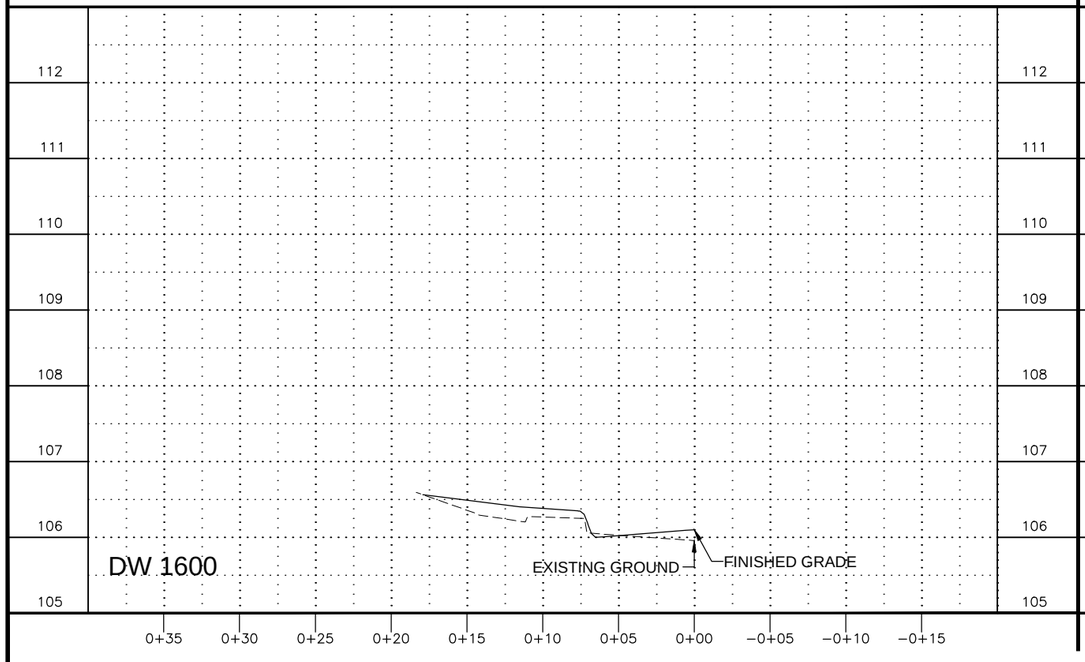


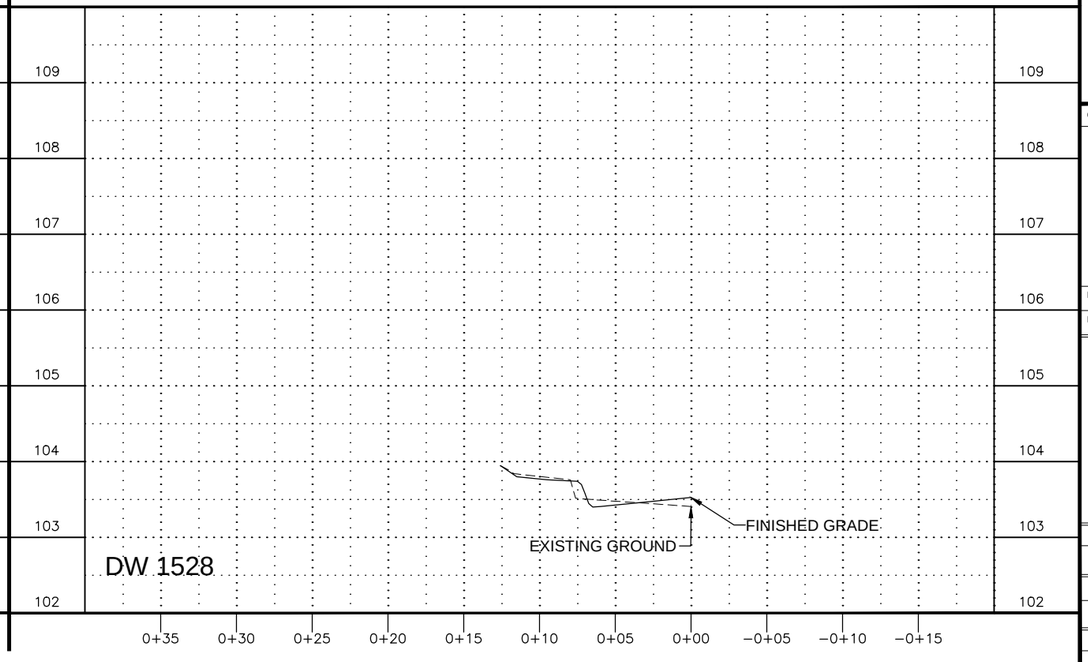


Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019







PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

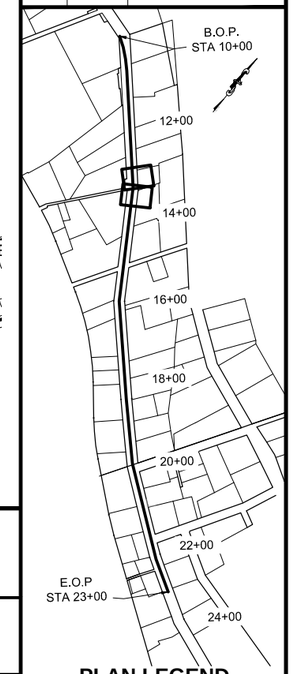
TAB: F09 11/20/2015 2:05 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA
49TH
RYAN D. REDICK
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

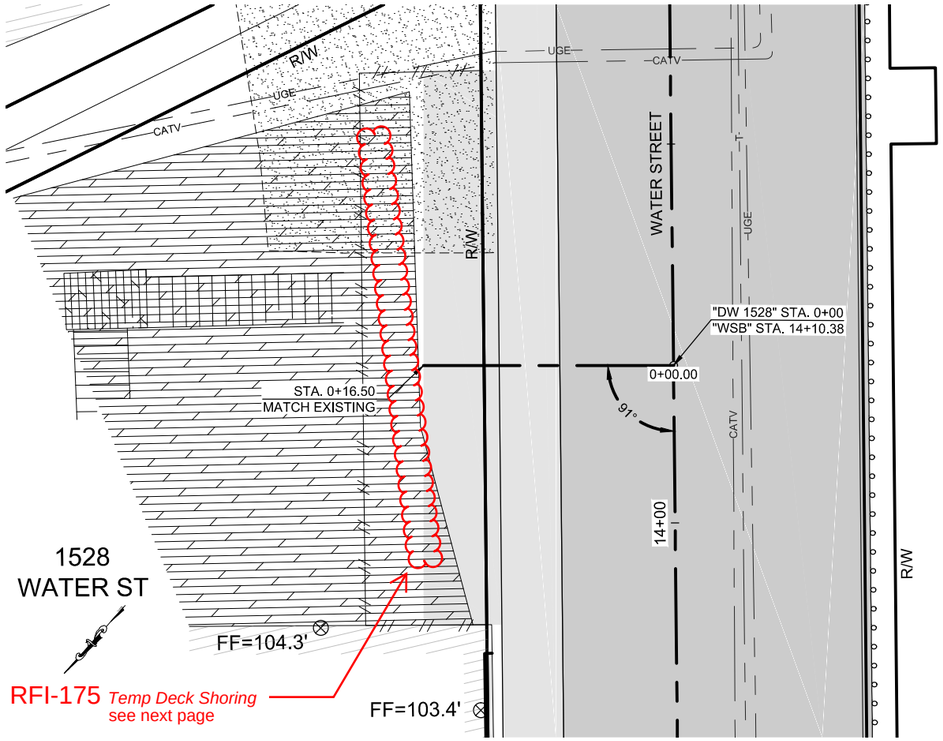
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

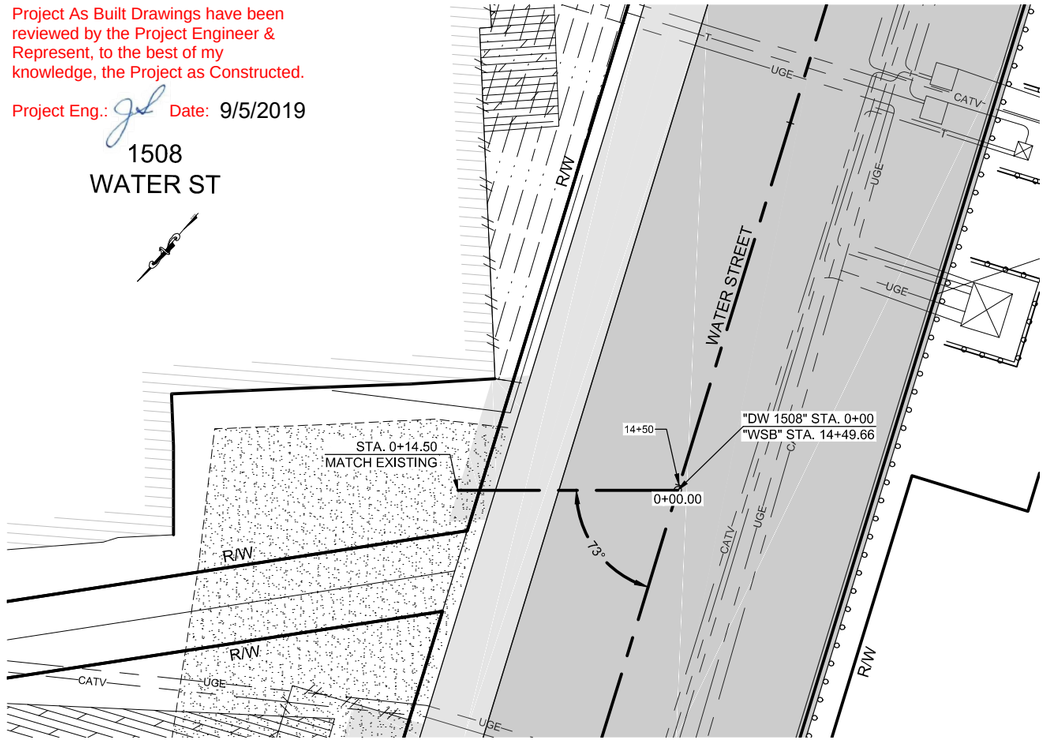
DRIVEWAY PLAN & PROFILE

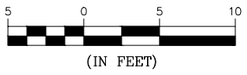
PROJECT DESIGNATION

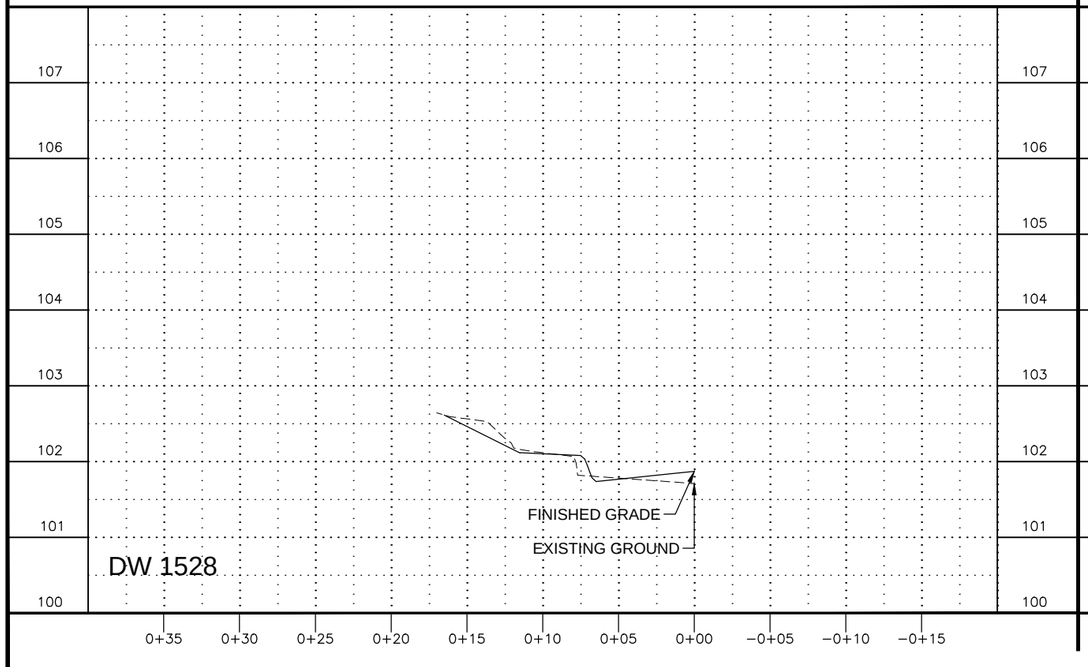
BR-000S(735)

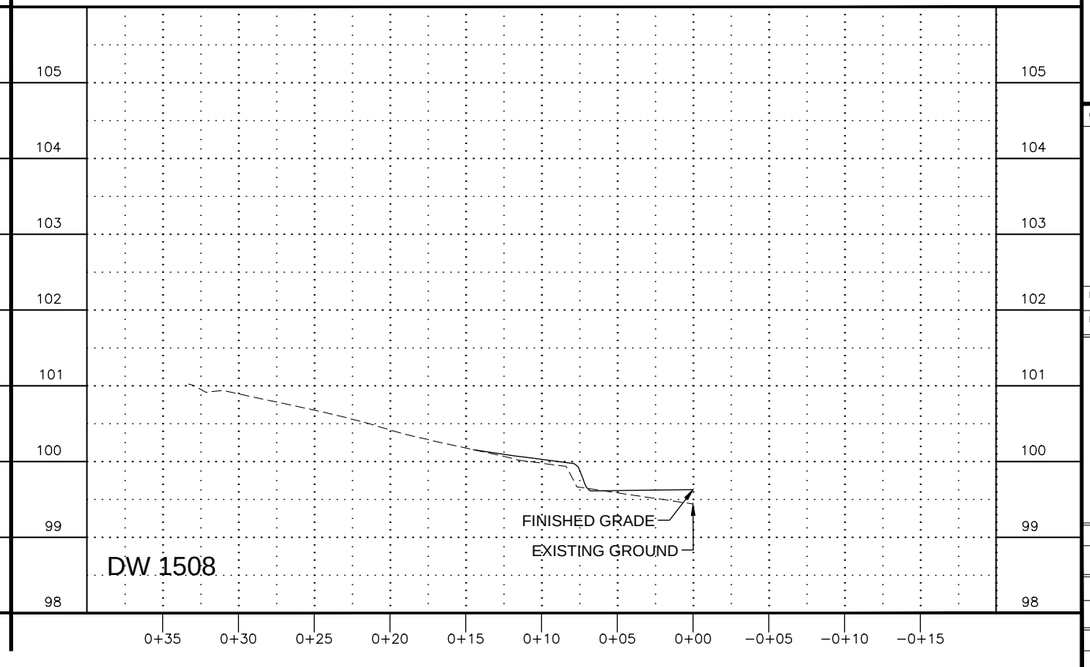
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F09	F19











PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

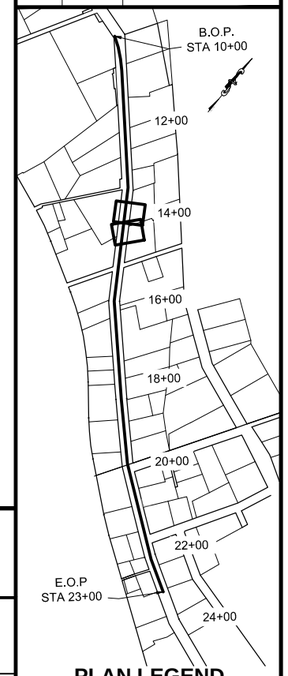
TAB: F10 11/20/2015 2:05 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DRIVEWAY PLAN & PROFILE

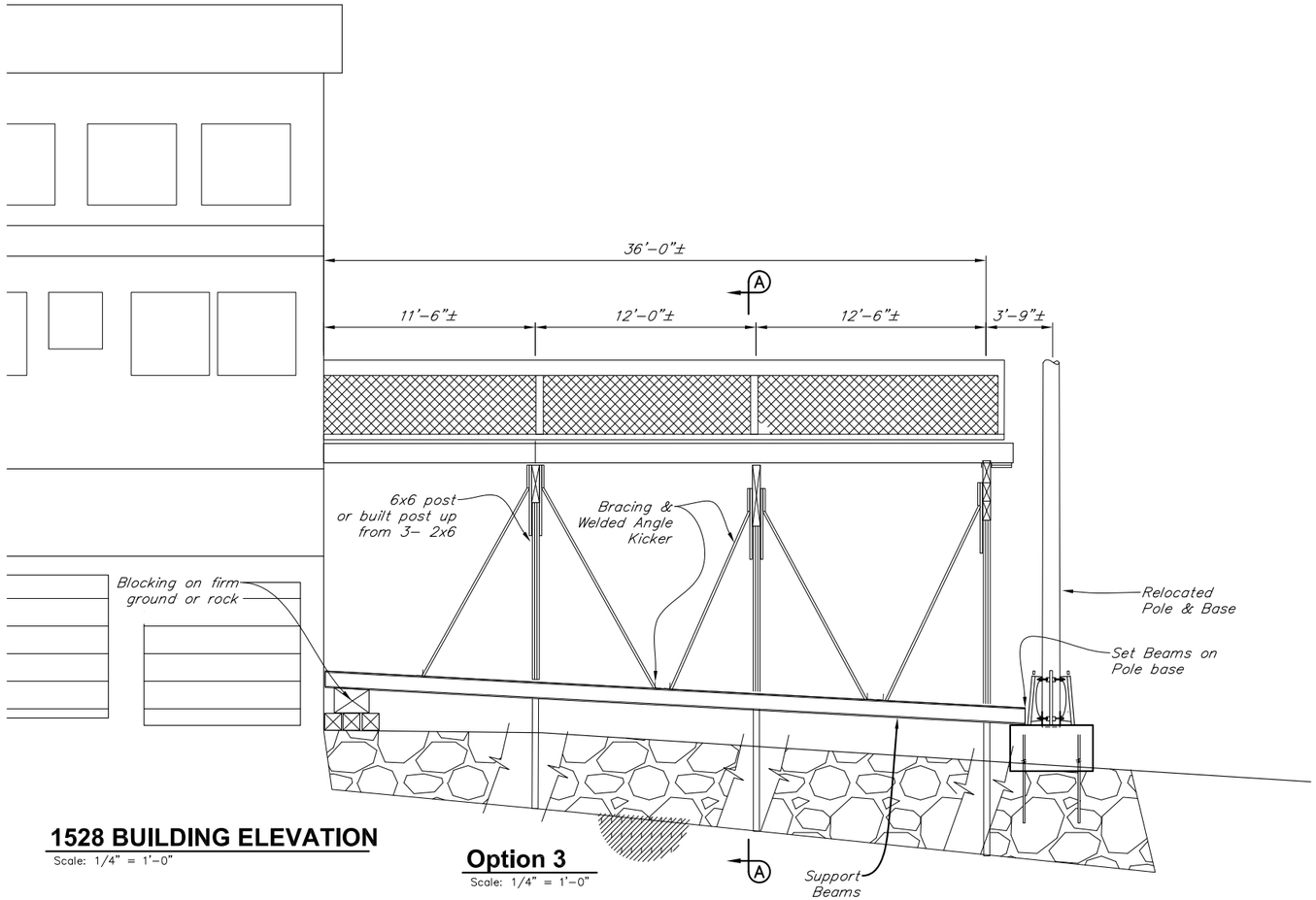
PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

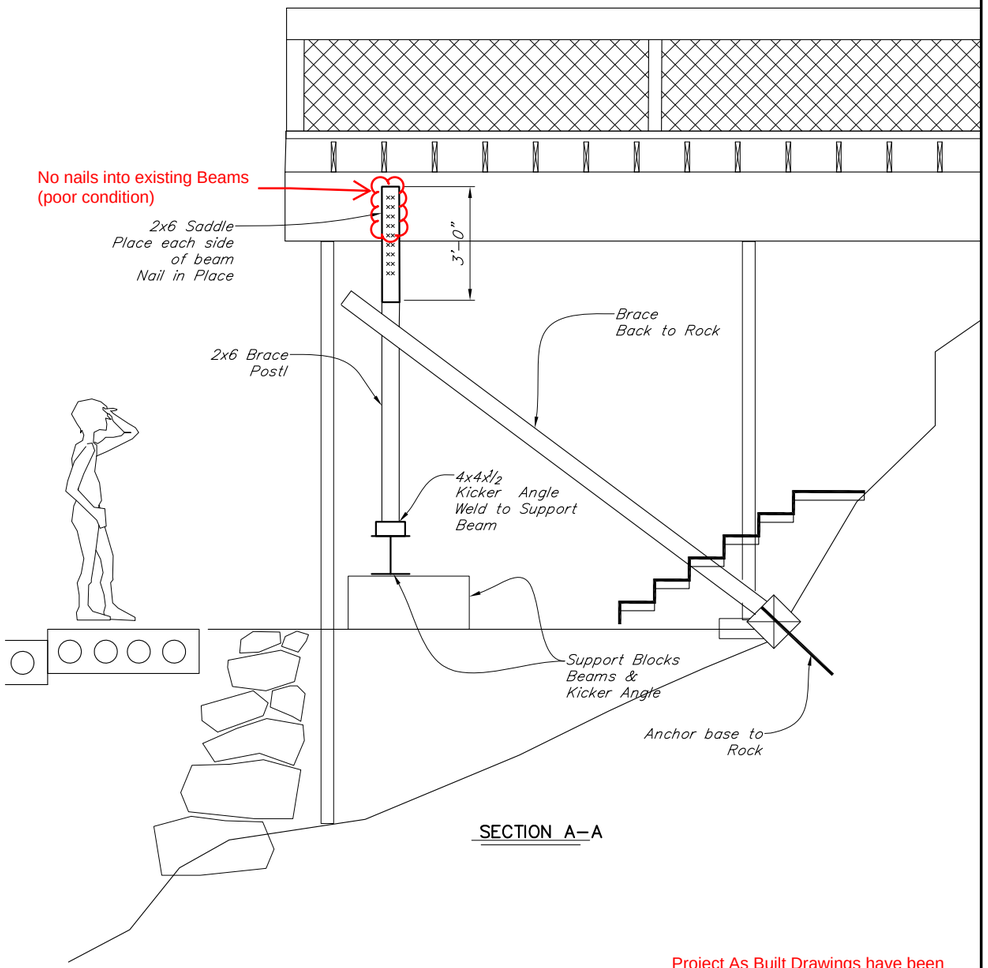
SHEET NUMBER	TOTAL SHEETS
F10	F19

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	11.03	4



1528 BUILDING ELEVATION
Scale: 1/4" = 1'-0"

Option 3
Scale: 1/4" = 1'-0"

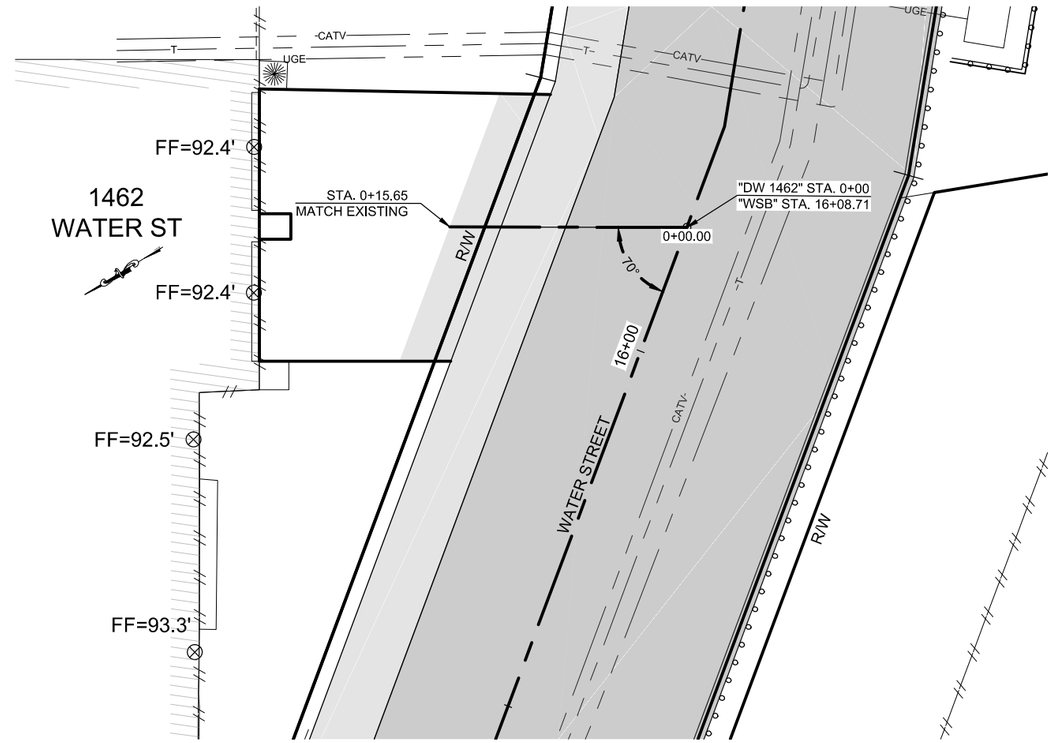


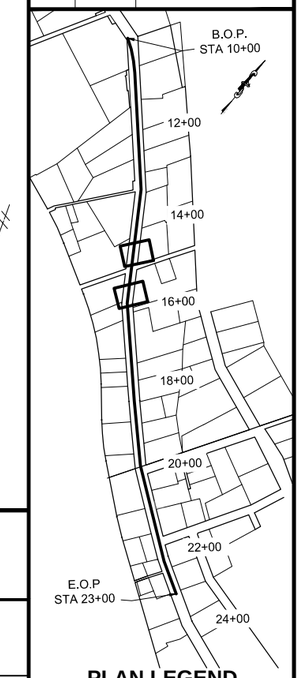
SECTION A-A

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: ----	CHECKED: David Shearer	Work covered under 678(1) AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set		WATER STREET BRIDGE No2 WATER STREET BUILDING FRONT SHORING PLAN 1528-3
DRAWN BY: ----	CHECKED: David Shearer				BRIDGE NO. 0446 DWG. NO. 3
QUANTITIES BY:	CHECKED:				

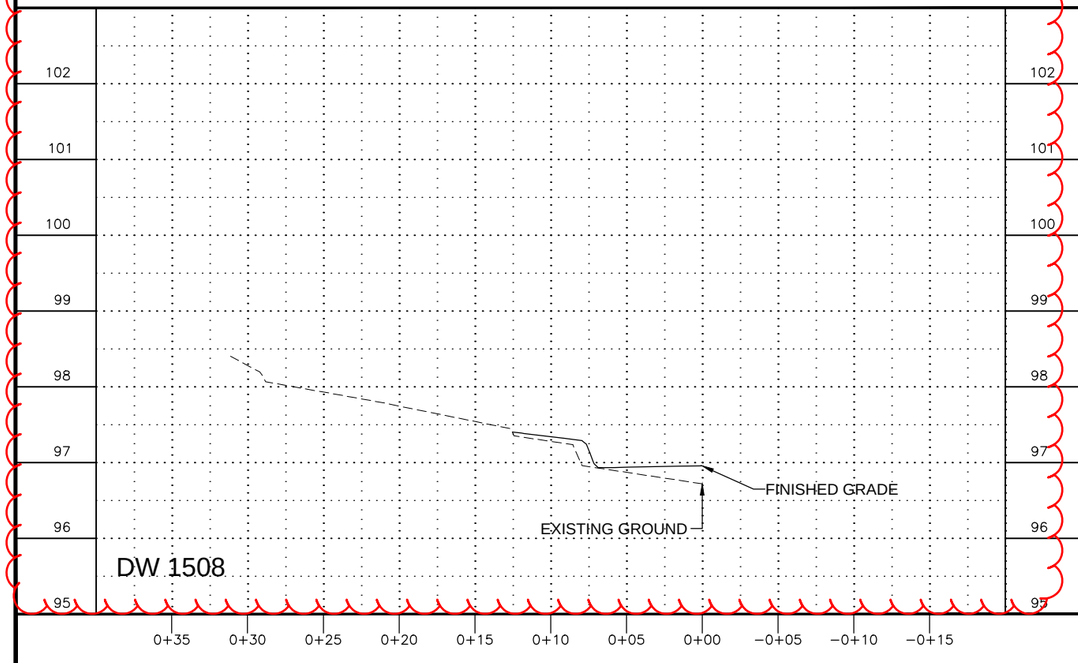


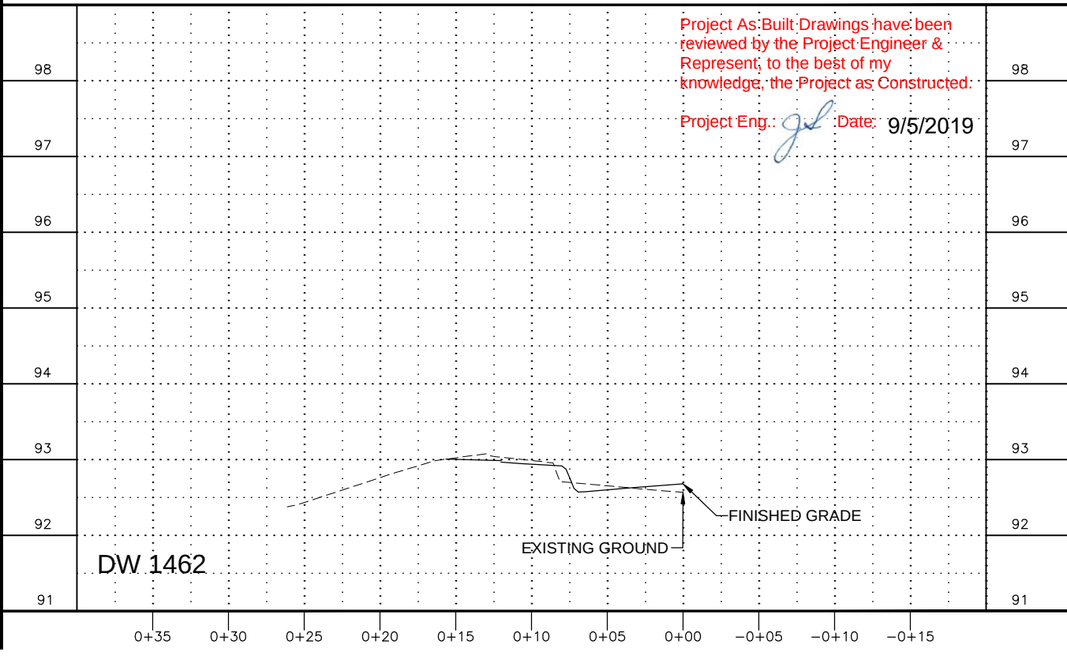


PLAN LEGEND

5 0 5 10
(IN FEET)

See CO#30, See WW1-7 located after N20A





Project As-Built Drawings have been reviewed by the Project Engineer & Represent. to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

TAB: F11 11/20/2015 2:06 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

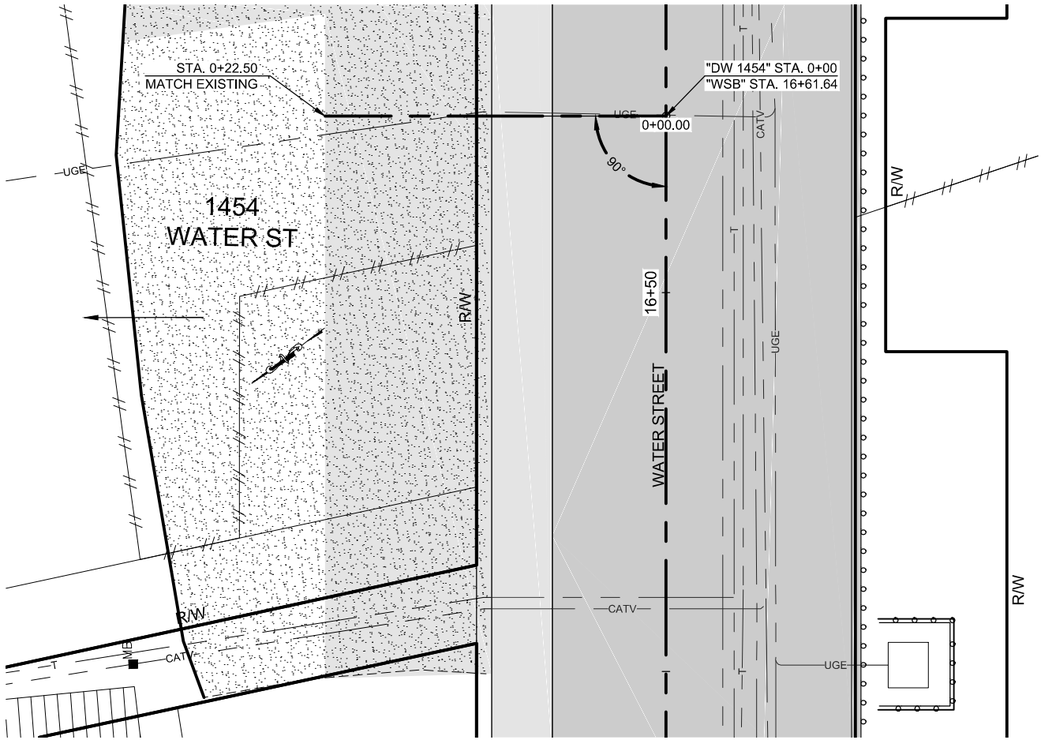
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

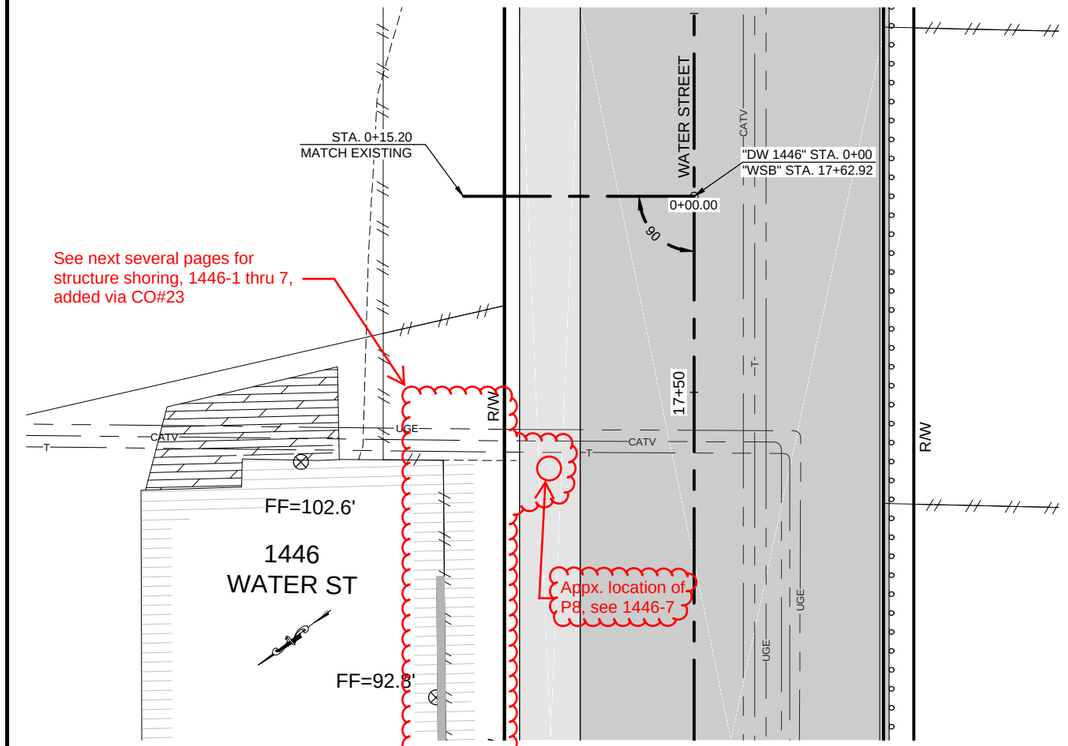
DRIVEWAY PLAN & PROFILE

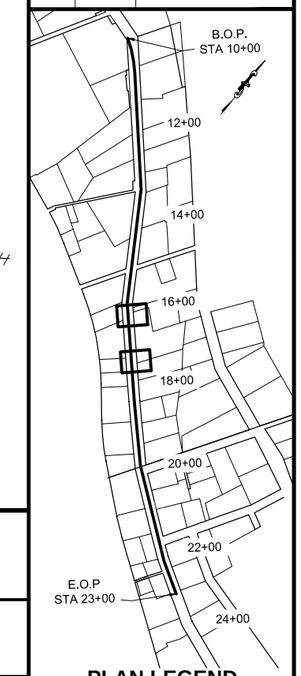
PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
F11	F19







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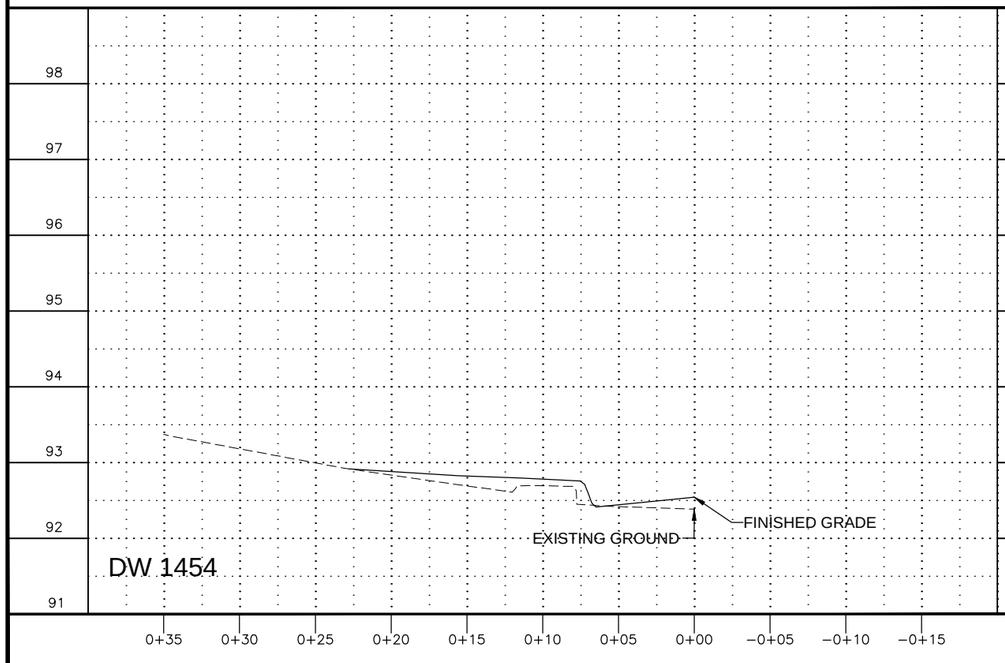
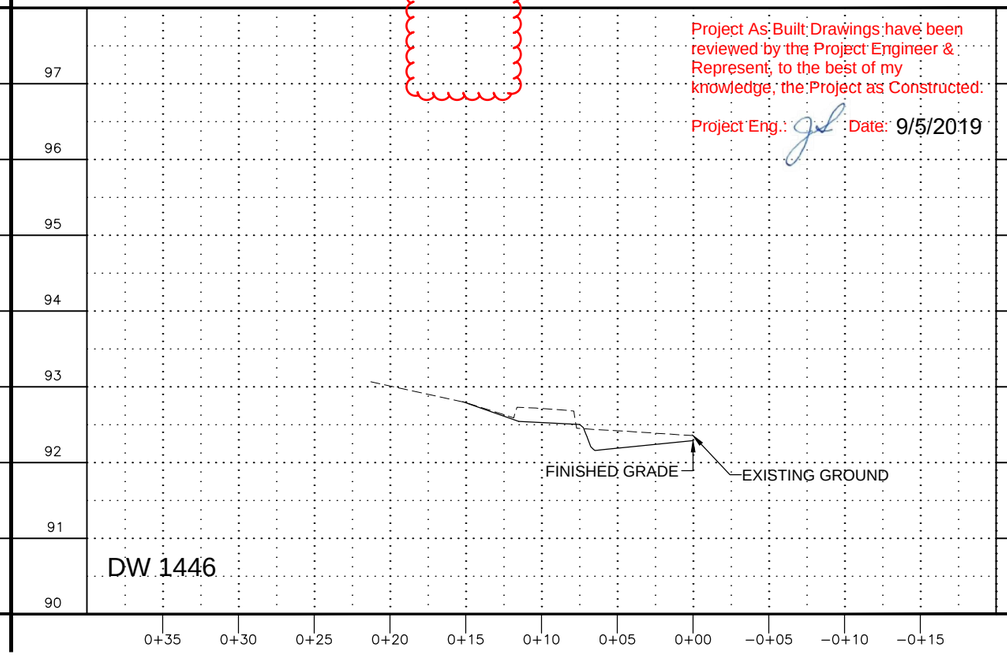
(IN FEET)





Project As Built Drawings have been reviewed by the Project Engineer & Represent. to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

TAB: F12 11/20/2015 2:06 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DRIVEWAY PLAN & PROFILE

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F12	F19

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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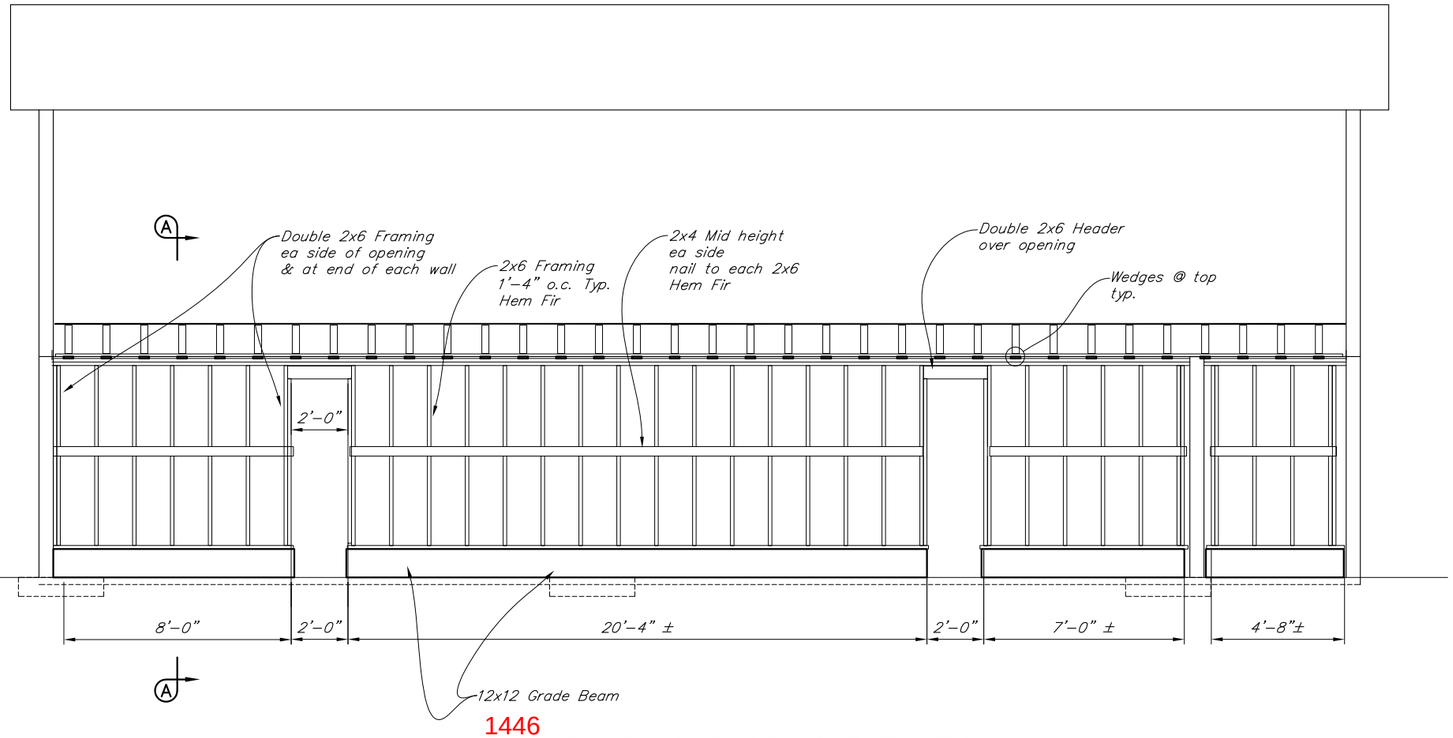
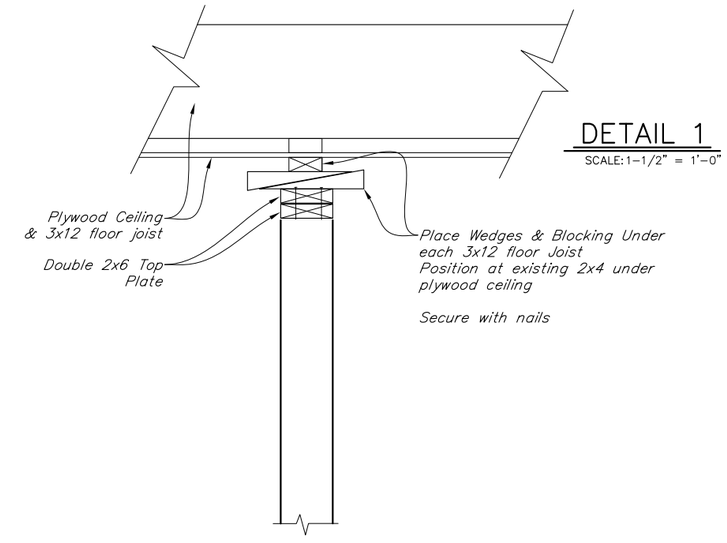


1446 ~~1442~~ BUILDING SHORING ELEVATION

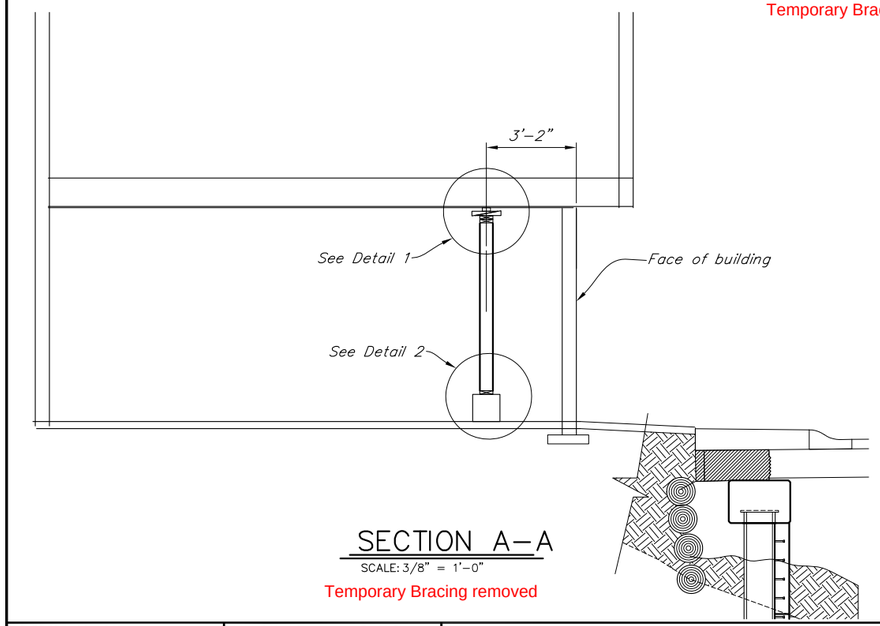
SCALE: 3/8" = 1'-0"

Temporary Bracing removed



DETAIL 1

SCALE: 1-1/2" = 1'-0"



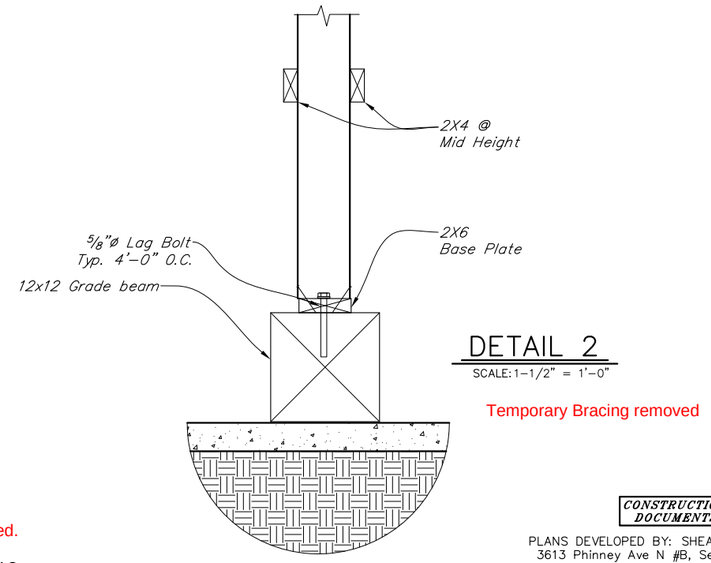
SECTION A-A

SCALE: 3/8" = 1'-0"

Temporary Bracing removed

GENERAL NOTES

1. All timber material:
   Hem Fir (North) No 2 or Construction Grade.
2. Nail per Building code
3. Drive wedges for tight fit
4. Use salvaged materal for 12x12 grade beam



DETAIL 2

SCALE: 1-1/2" = 1'-0"

Temporary Bracing removed

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer	Work tracked under IWA#4, Paid under CO#23 AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 3/30/17 Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

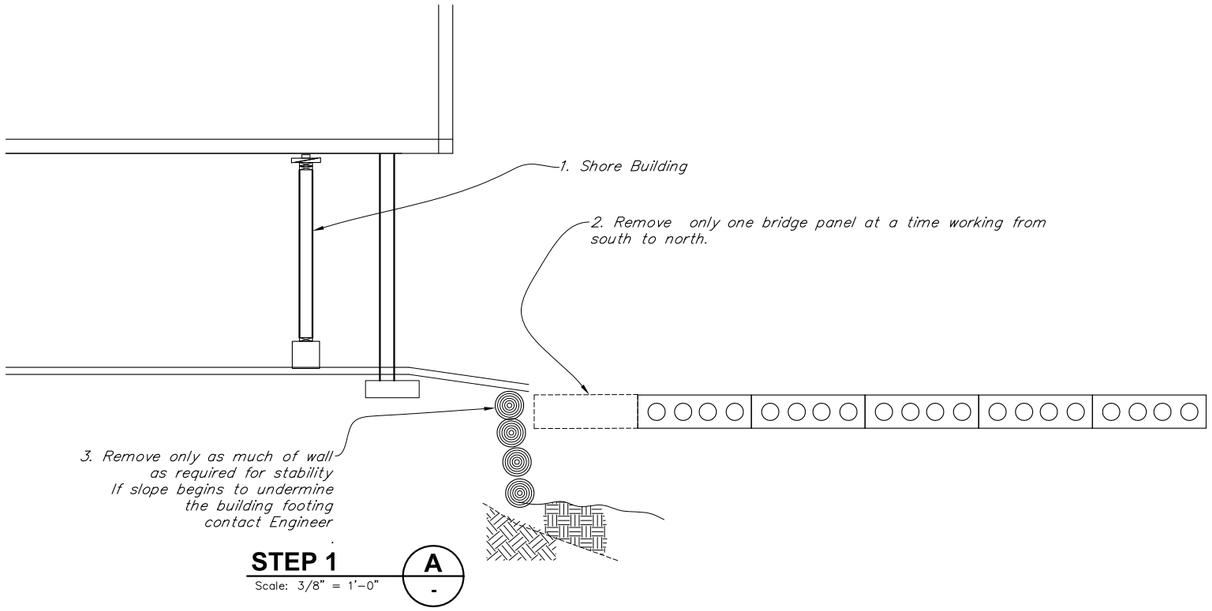
BUILDING SHORING PLAN REV 1 1446-1

BRIDGE NO. 0446

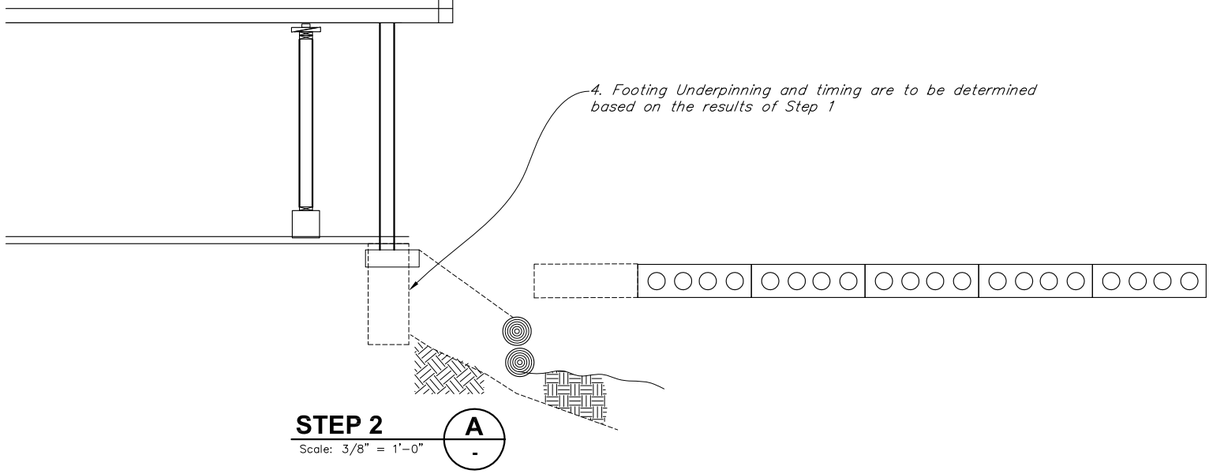
DWG. NO. 1

Mar 30, 2017 - 2:37pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 shoring.dwg Layout Name: 1 BUILDING SHORING PLAN REV 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	11.02	3



STEP 1 A / -
Scale: 3/8" = 1'-0"



STEP 2 A / -
Scale: 3/8" = 1'-0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer	Work tracked under IWA#4&5, Paid under CO#23
DRAWN BY: ----	CHECKED: David Shearer	AB
QUANTITIES BY:	CHECKED:	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

As-Built Set

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
3/30/17
Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

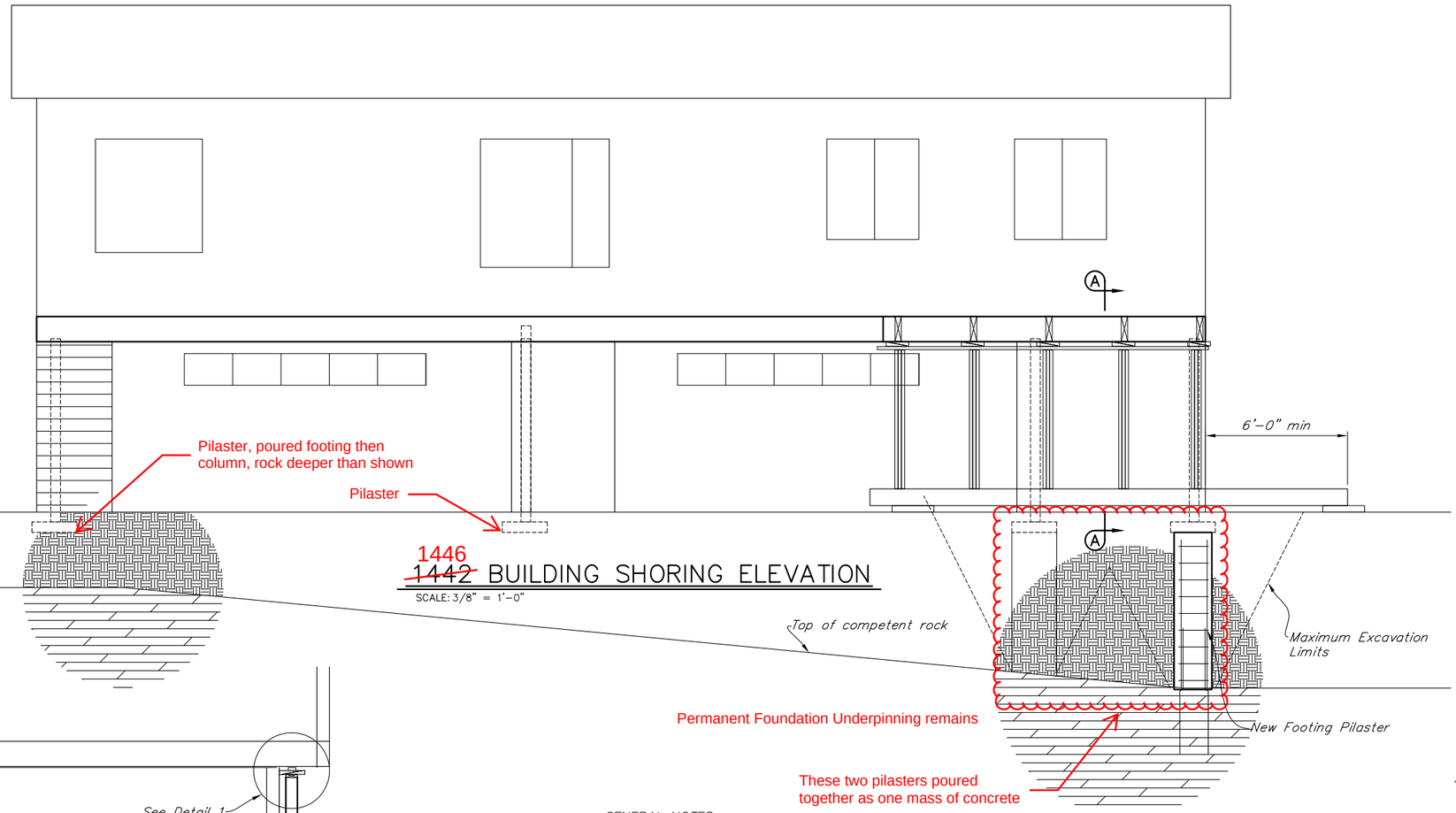
DETAILS

1446-2

BRIDGE NO. 0446
DWG. NO. 2

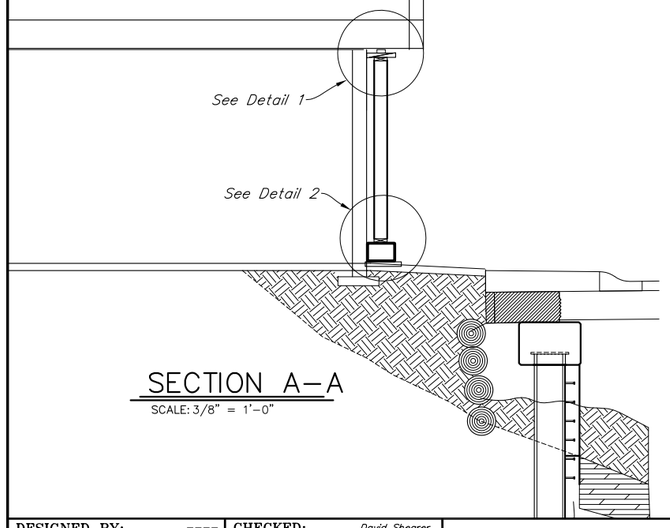
Mar 30, 2017 - 2:38pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 shoring.dwg Layout Name: 2 DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	11.03	4



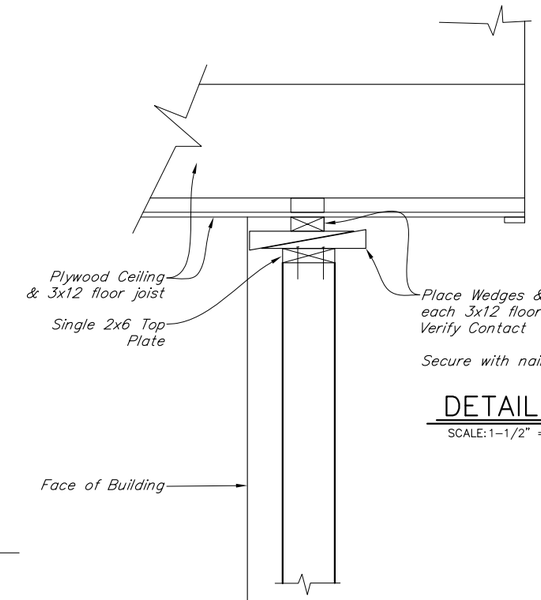
1446 ~~1442~~ BUILDING SHORING ELEVATION

SCALE: 3/8" = 1'-0"



SECTION A-A

SCALE: 3/8" = 1'-0"

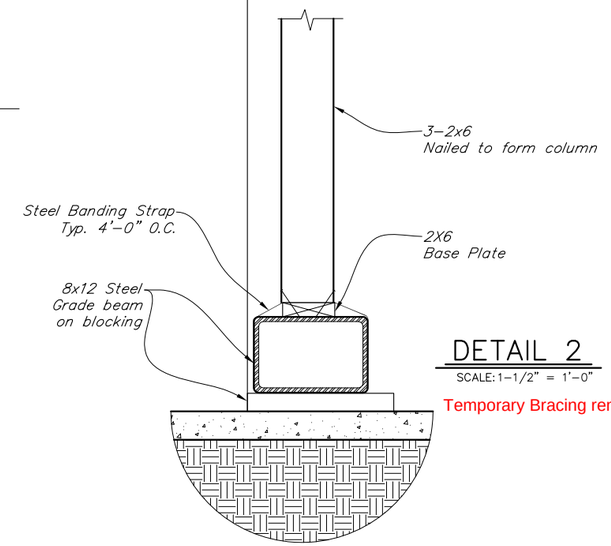


DETAIL 1

SCALE: 1-1/2" = 1'-0"

DETAIL 1

SCALE: 1-1/2" = 1'-0"



DETAIL 2

SCALE: 1-1/2" = 1'-0"

Temporary Bracing removed

GENERAL NOTES

1. All timber material:
   Hem Fir (North) No 2 or Construction Grade.
2. Nail per Building code
3. Drive wedges for tight fit
4. Use salvaged material for steel grade beam
5. Concrete Class A

CONSTRUCTION NOTES

1. Keep extents of excavation to minimum.
2. Contact Engineer if support footings begin to undermine
3. Have all rebar ready before beginning excavation.
4. Minimize the time excavation is open to the shortest possible.
5. Repeat shoring at center and north ends after south end is completed
6. Contact Engineer if building north end is to be raised

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer	Work tracked under IWA#4&5, Paid under CO#23 AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 4/27/17

WATER STREET BRIDGE No2

WATER STREET

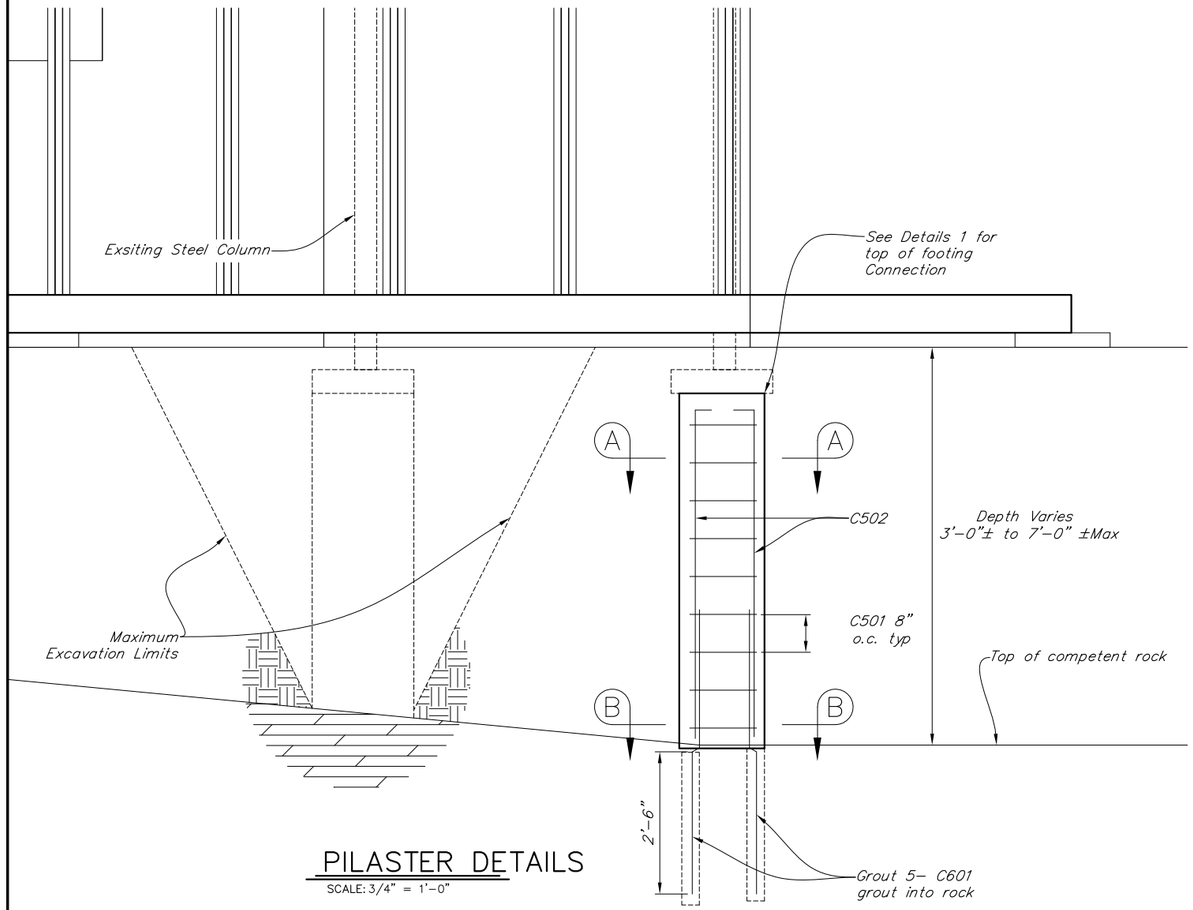
BUILDING FRONT SHORING PLAN 1446-3

BRIDGE NO. 0446

DWG. NO. 3

Apr 07, 2017 - 3:30pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 shoring 2.dwg Layout Name: 3 BUILDING FRONT SHORING PLAN

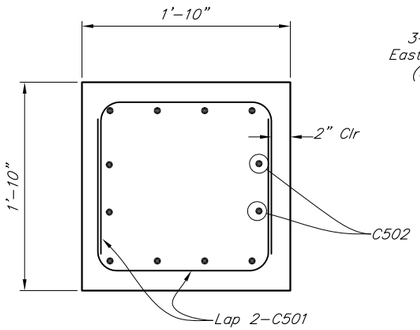
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	11.04	4



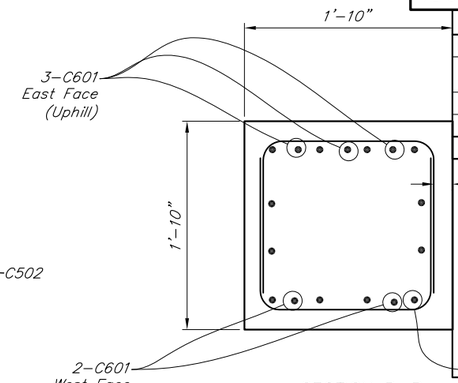
PILASTER DETAILS

SCALE: 3/4" = 1'-0"

Permanent Foundation Underpinning remains



SECTION A-A

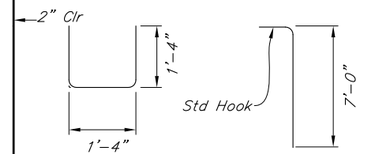


SECTION B-B

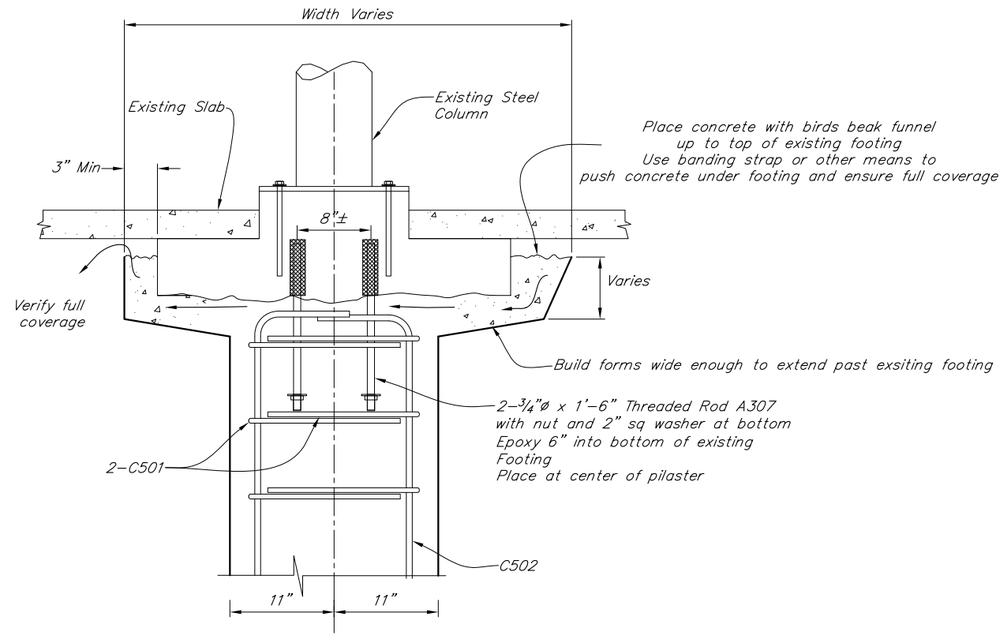
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C501		5	Varies	14'-5"	bent
C502	F	5	12	Varies	bent
C601	dowel	6	6	5'-0"	–

BENDING DIAGRAM



F= Field Cut to fit



DETAIL 1

SCALE: 1-1/2" = 1'-0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer	Work tracked under IWA#5, Paid under CO#23 AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 4/27/17

WATER STREET BRIDGE No2

WATER STREET

PILASTER DETAILS

1446-4

BRIDGE NO. 0446

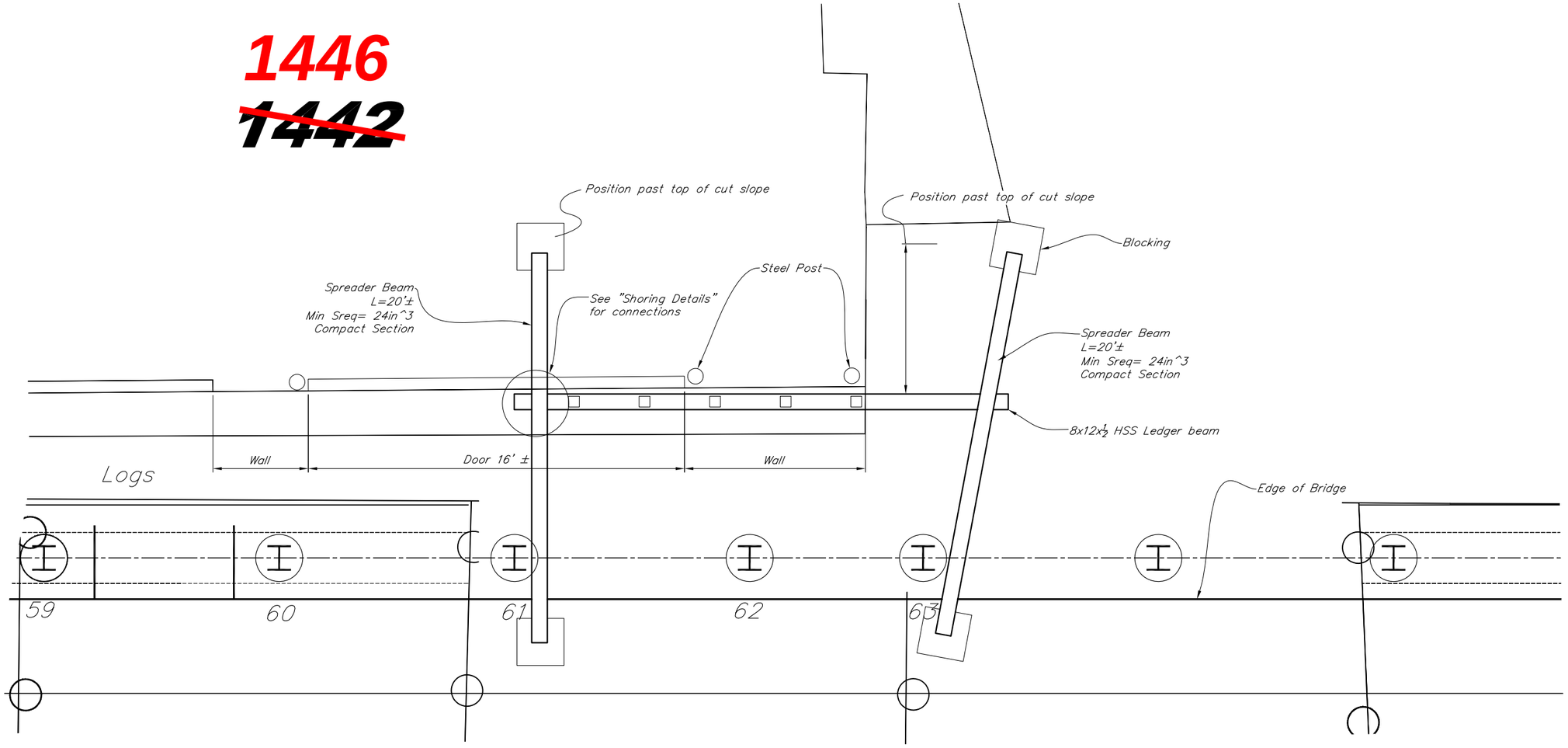
DWG. NO. 4

Apr 20, 2017 - 11:13am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 shoring 2.dwg Layout Name:4 PILASTER DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	N5	4

1446

~~**1442**~~



WALL SHORING PLAN: ~~1442~~ 1446

Temporary Bracing removed

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: _____ Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer		
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

Work tracked under IWA#4,
Paid under CO#23

AB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

As-Built Set

STATE OF ALASKA
49TH
DAVID R. SHEARER
CE 8373
4/27/17
Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

WALL SHORING PLAN ~~1442~~ 1446

1446-5

BRIDGE NO. 0446

DWG. NO. 5

Apr 12, 2017 - 10:46am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 Plan DATA Alt5.dwg Layout Name: 5 WALL SHORING PLAN 1442

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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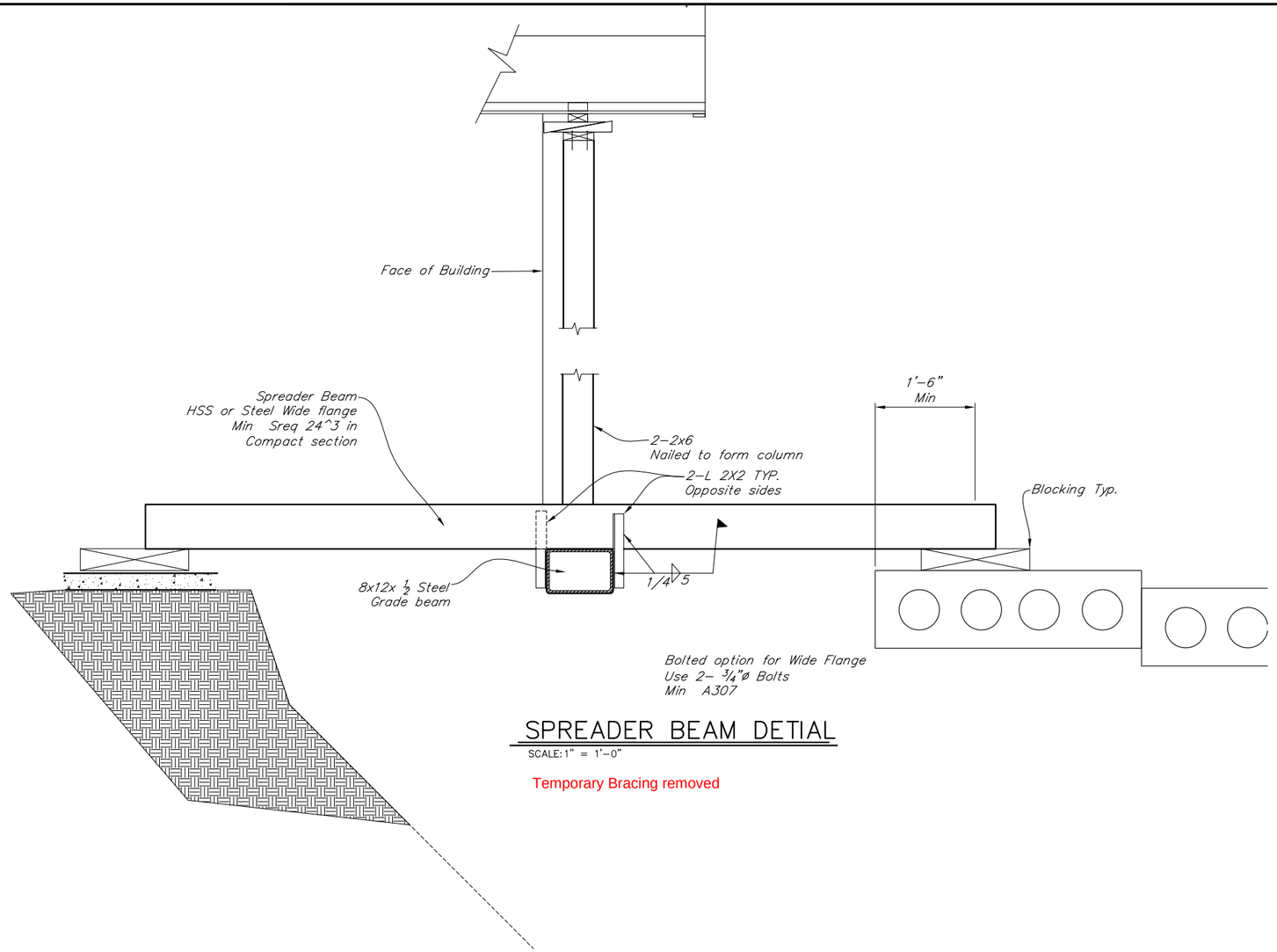

SPREADER BEAM DETIAL

SCALE: 1" = 1'-0"

Temporary Bracing removed

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer	Work tracked under IWA#4, Paid under CO#23 AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA 49TH — DAVID R. SHEARER CE 8373 4/27/17 Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

SHORING DETAILS

1446-6

BRIDGE NO. 0446

DWG. NO. 6

Apr 12, 2017 - 10:47am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 shoring 2.dwg Layout Name: 6 SHORING DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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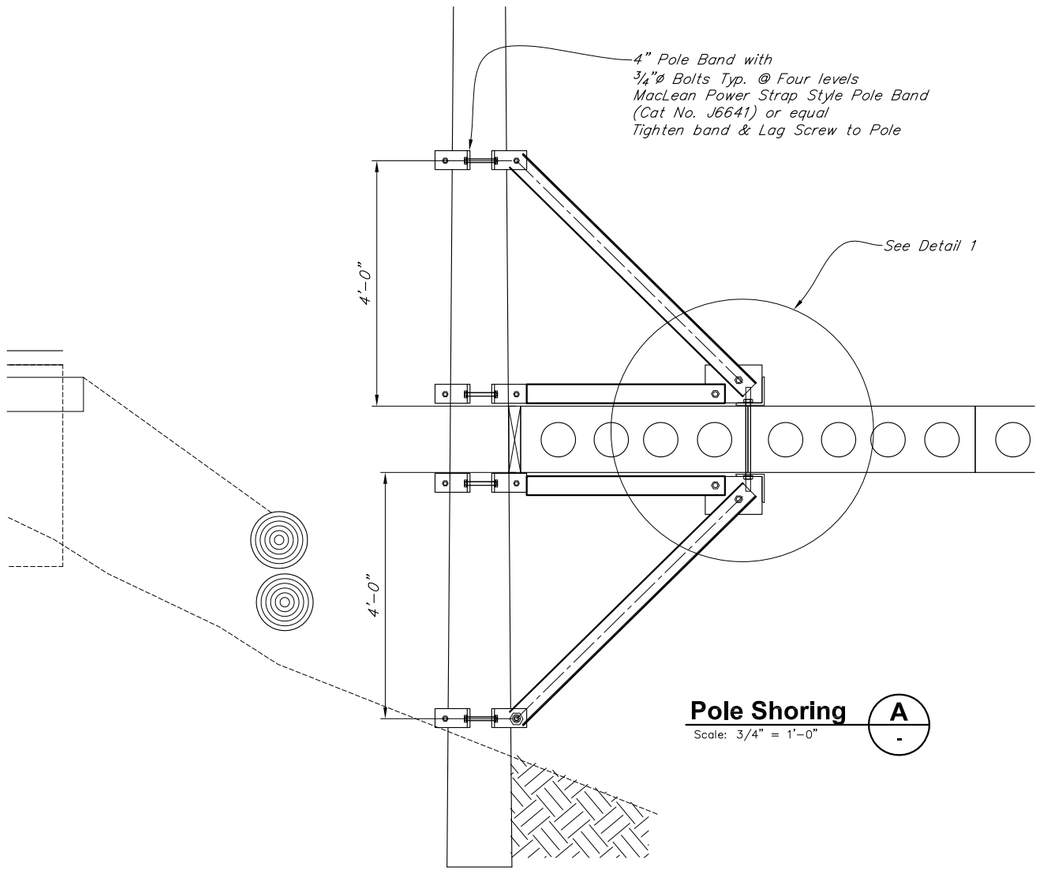
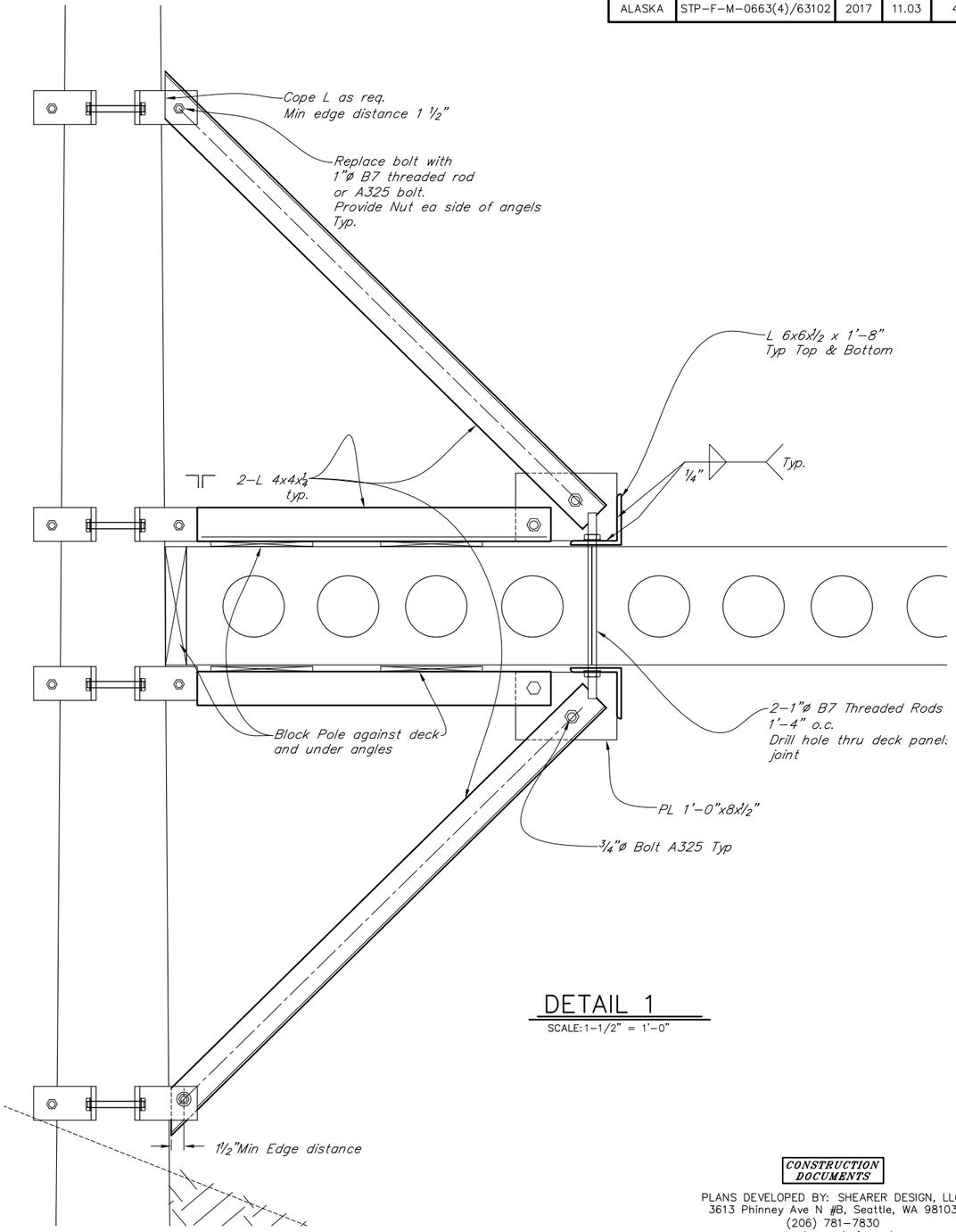


Pole Shoring A

Scale: 3/4" = 1'-0"



DETAIL 1

SCALE: 1-1/2" = 1'-0"

GENERAL NOTES

1. All Steel A36
2. Welding per AWS D1.1

CONSTRUCTION NOTES

1. Keep extents of excavation to minimum.
2. Contact Engineer if support under pole begin to undermine
3. Bracing in place maximum 3 weeks

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer	This work covered under CO#15, Temporary Bracing Removed. AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 4/27/17 Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

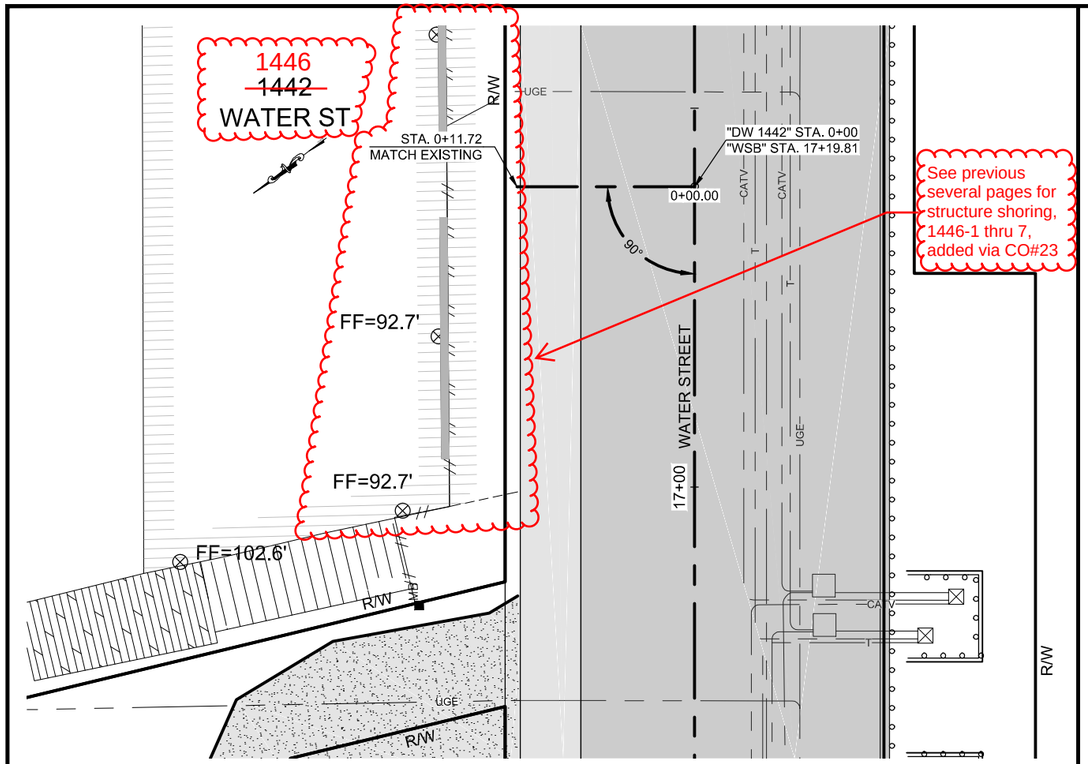
P 8 BRACING

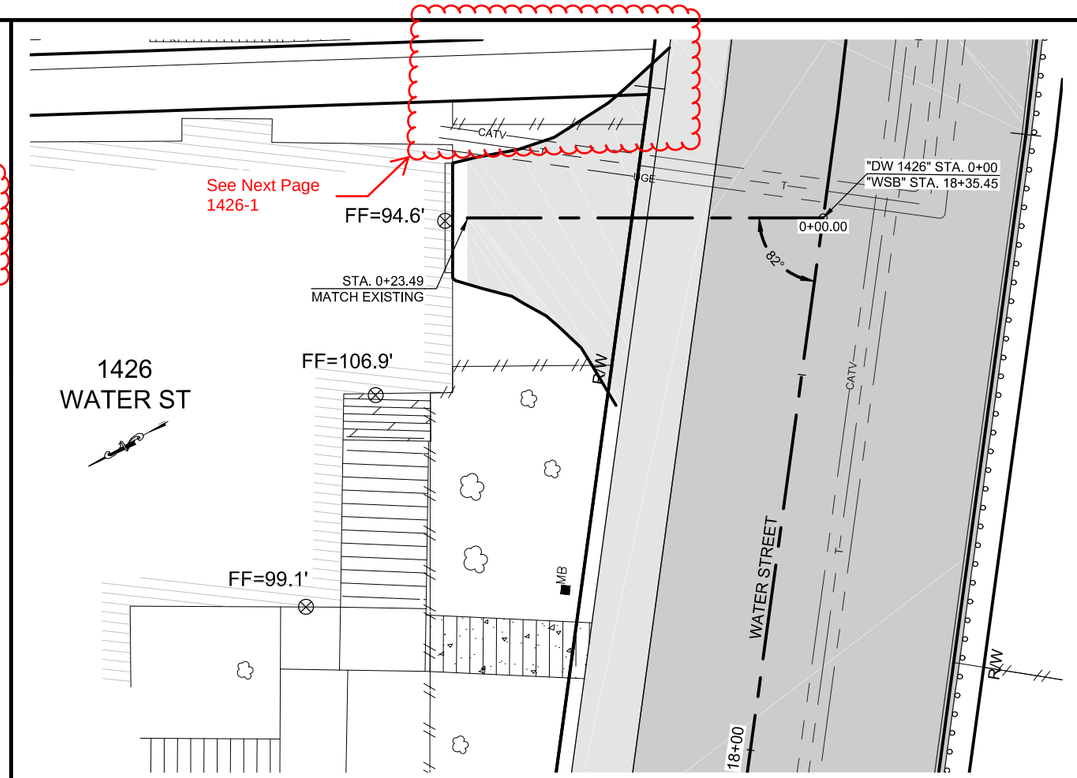
1446-7

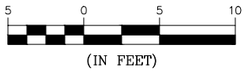
BRIDGE NO. 0446

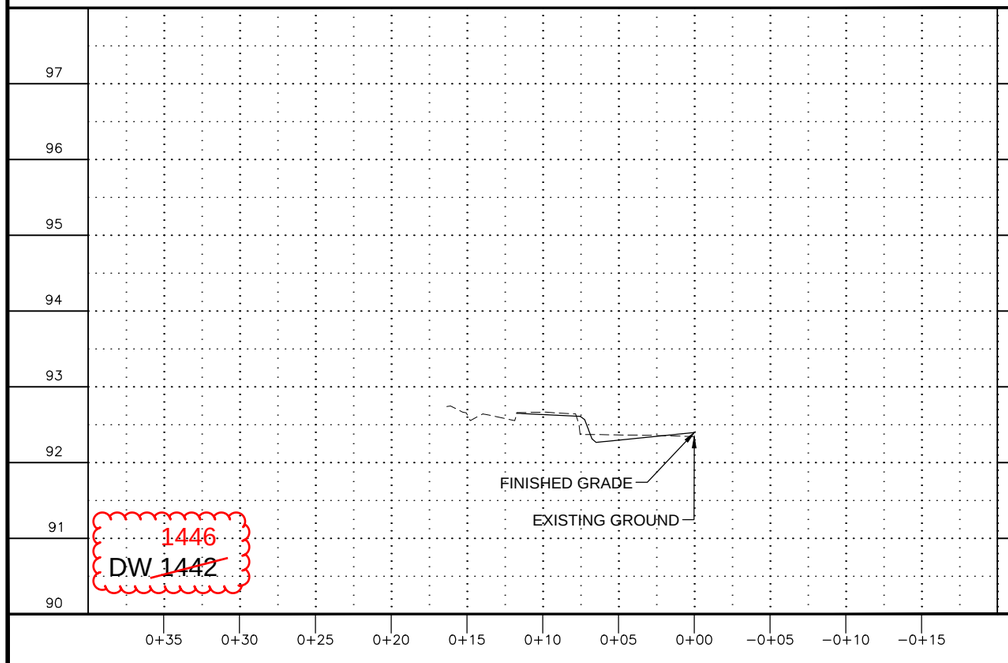
DWG. NO. 3

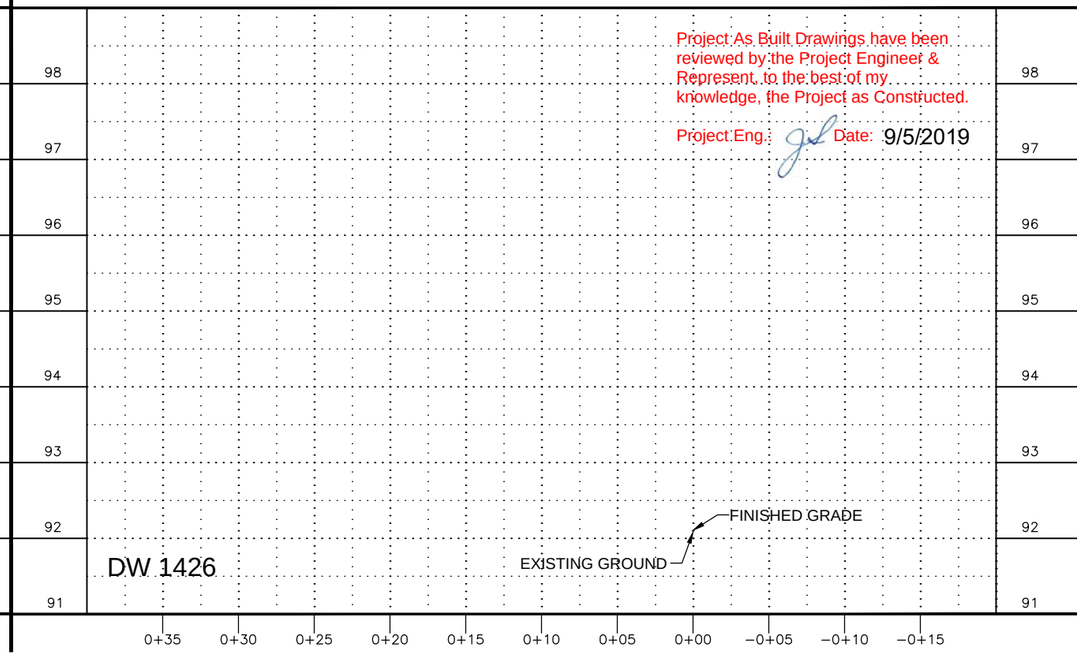
Apr 17, 2017 - 1:47pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\1442 shoring 3.dwg Layout Name: 3 P-9 SHORING PLAN











Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng. Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

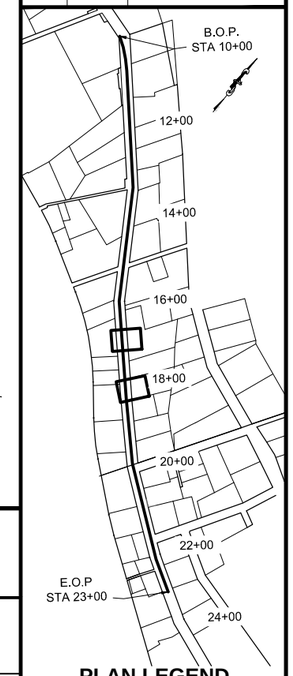
TAB: F13 11/20/2015 2:07 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DRIVEWAY PLAN & PROFILE

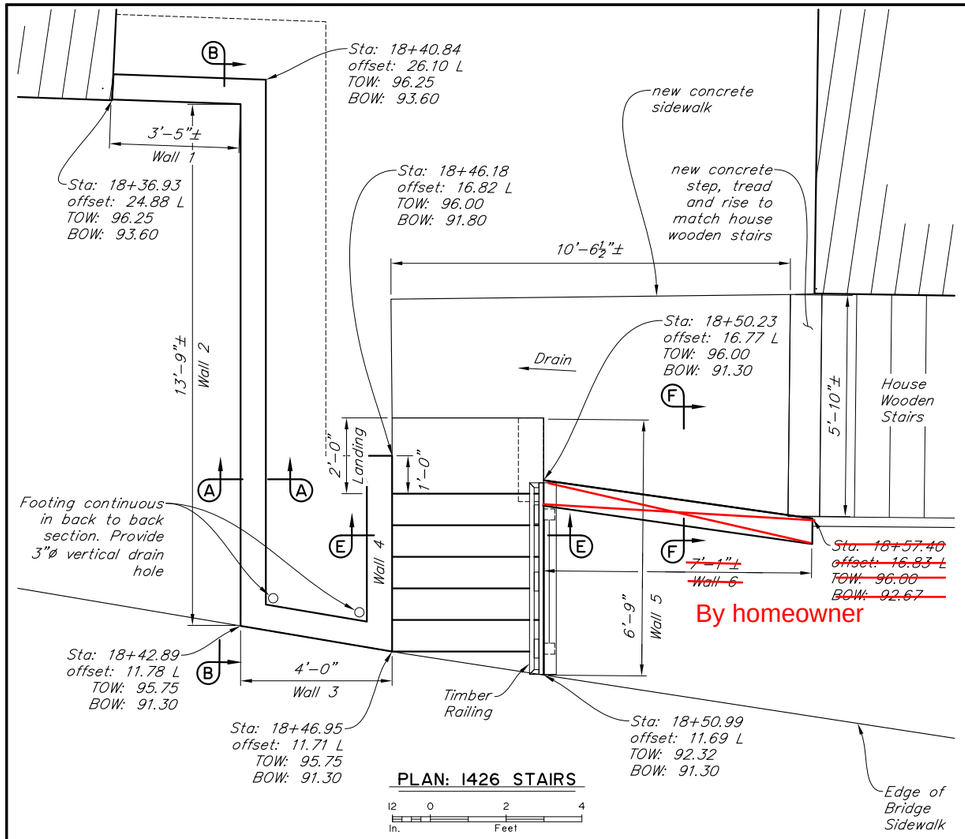
PROJECT DESIGNATION

BR-000S(735)

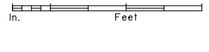
STATE	YEAR
ALASKA	2015

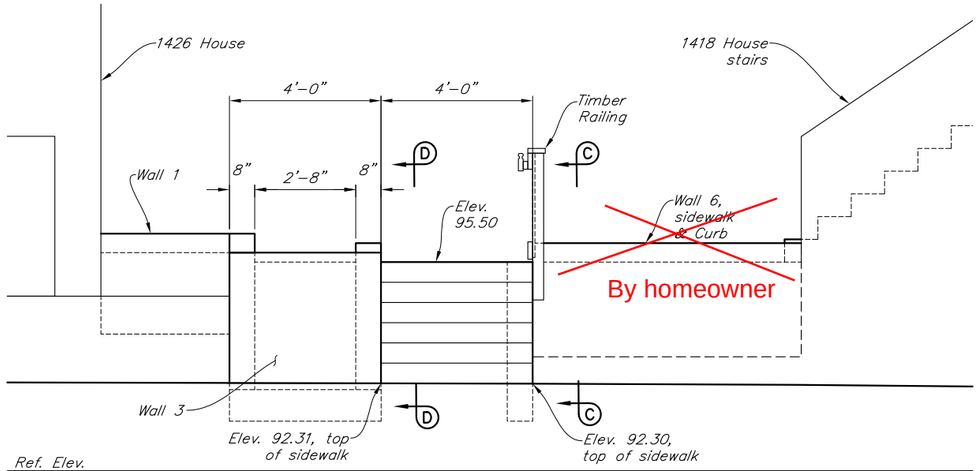
SHEET NUMBER	TOTAL SHEETS
F13	F19

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	1	1

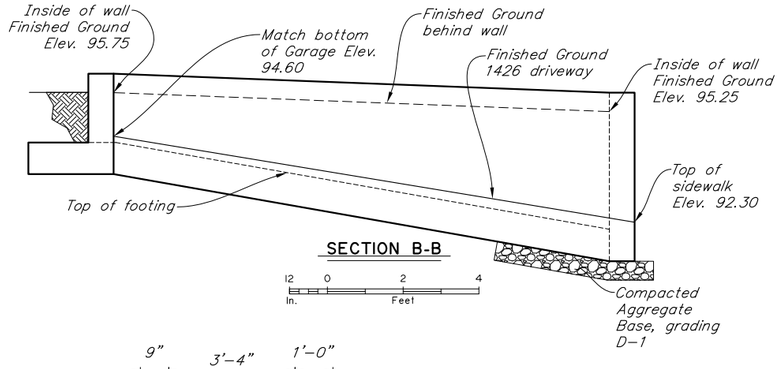


PLAN: 1426 STAIRS





ELEVATION: 1426 STAIRS



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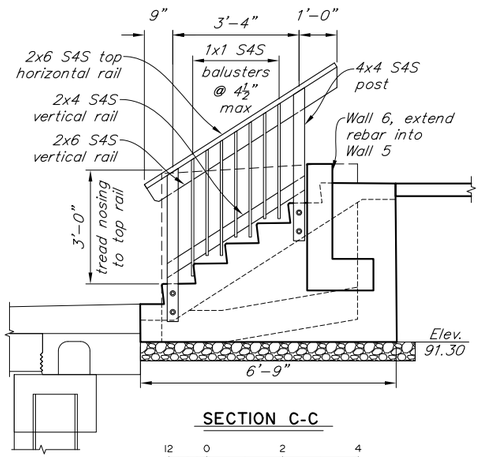

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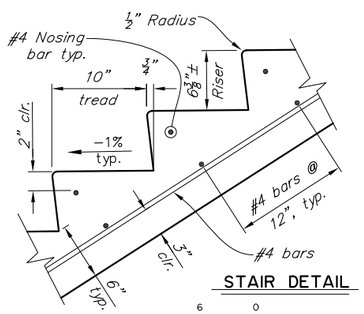
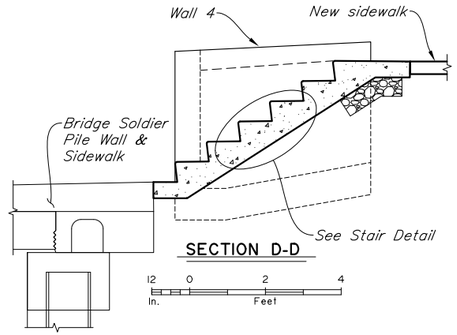


STAIR DETAIL



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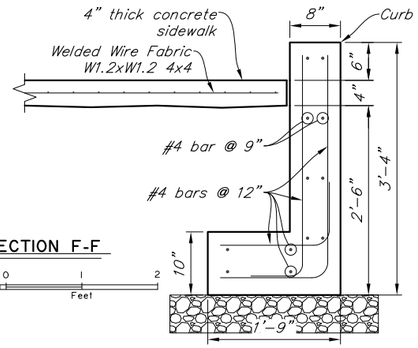

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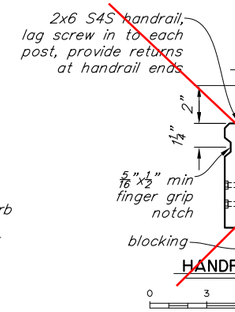
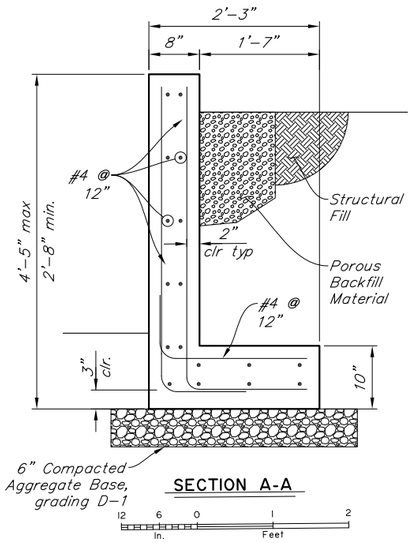
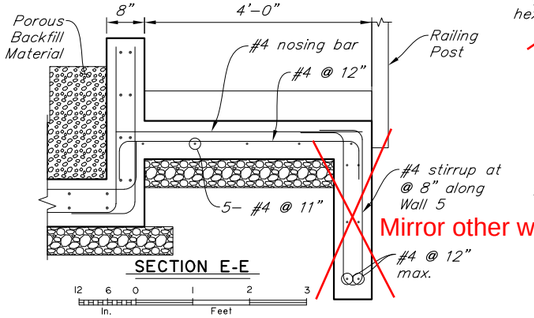


HANDRAIL DETAIL



SECTION A-A



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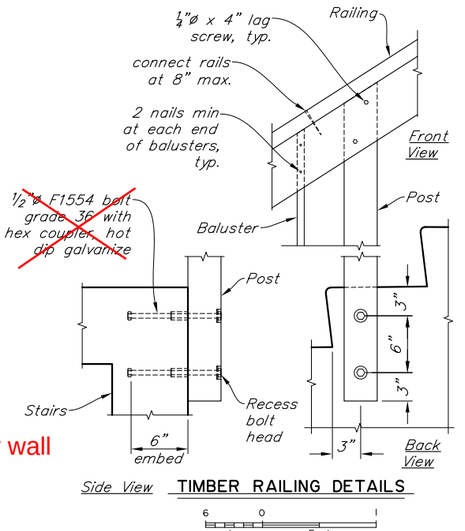


TIMBER RAILING DETAILS

GENERAL NOTES:

- Timber Posts and Rails shall be Douglas Fir No 1, pressure treated. Treat all cut ends.
- Concrete shall be Class A, reinforcing shall be ASTM 615 Gr 60. The concrete cover shall be 3" when cast on the ground and 2" at all other locations. ¾" chamfer on all exposed concrete edges.
- Form & sub-grade inspection required before pouring concrete.
- The stair treads and landing shall have a textured impress finish.
- Adjust elevations as needed to fit final ground contours and existing house stairs.
- All railing hardware shall be hot-dip galvanized.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Work covered under 678(1)
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019 AB

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

As-Built Set

STATE OF ALASKA 49TH DAVID R SHEARER CE 5/9/16 REGISTERED PROFESSIONAL ENGINEER

WATER STREET BRIDGE No. 2

WATER STREET

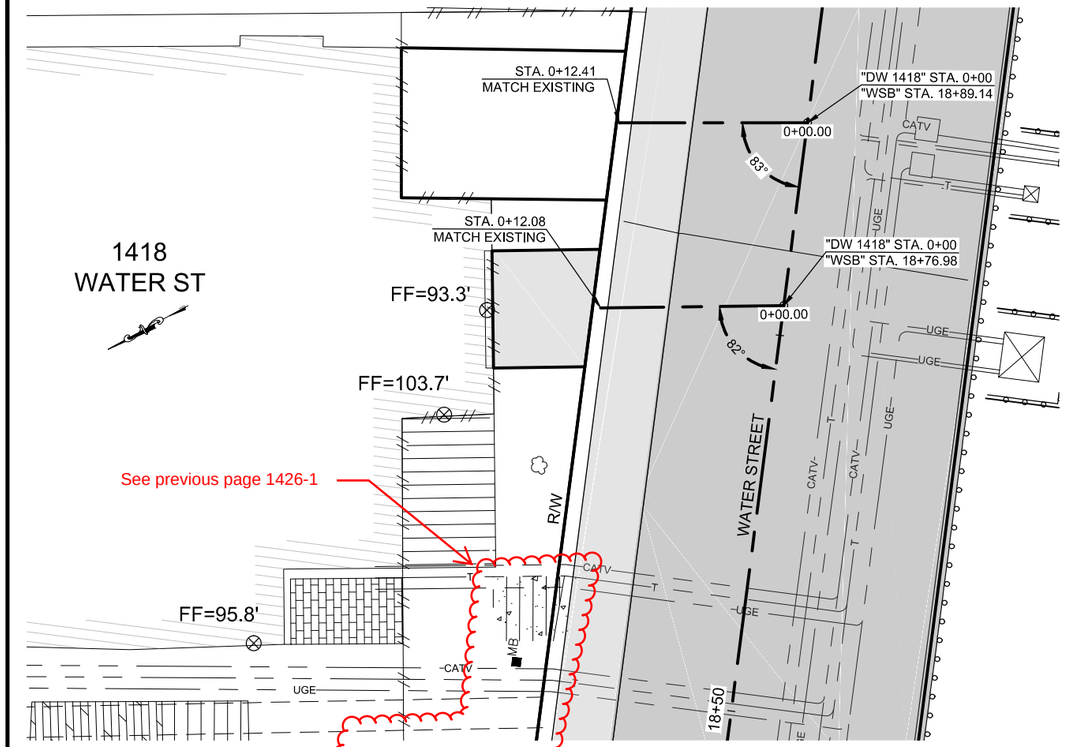
1426 WALLS & STAIR

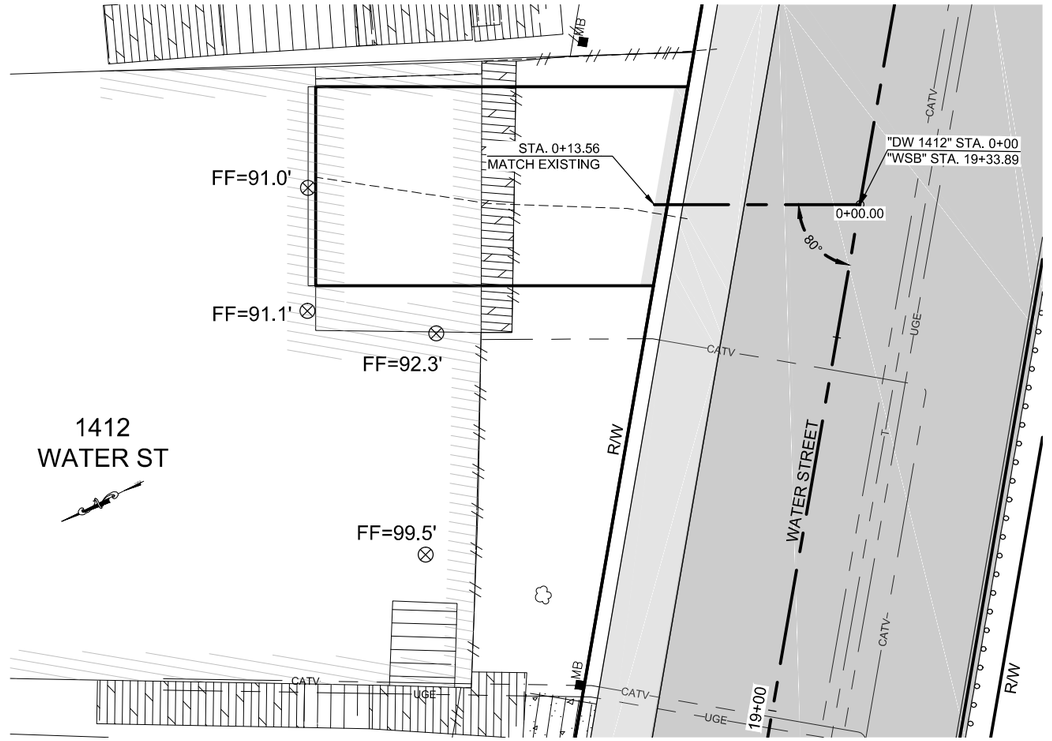
1426-1

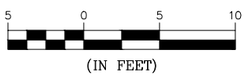
BRIDGE NO. 2313

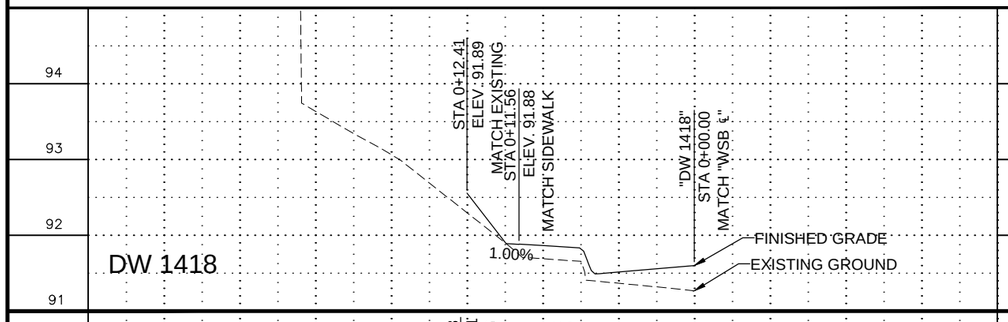
DWG. NO. 1

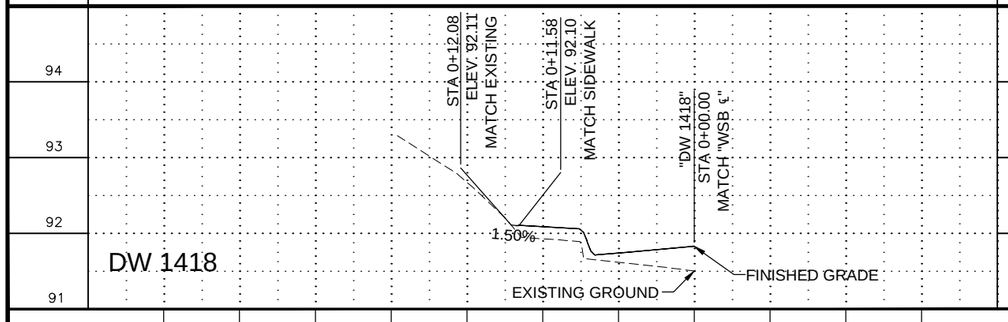
May 29, 2018 - 11:34am brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1426 Wall\DWG\1426 WALL LAYOUT.dwg Layout Name: 1406 WALL

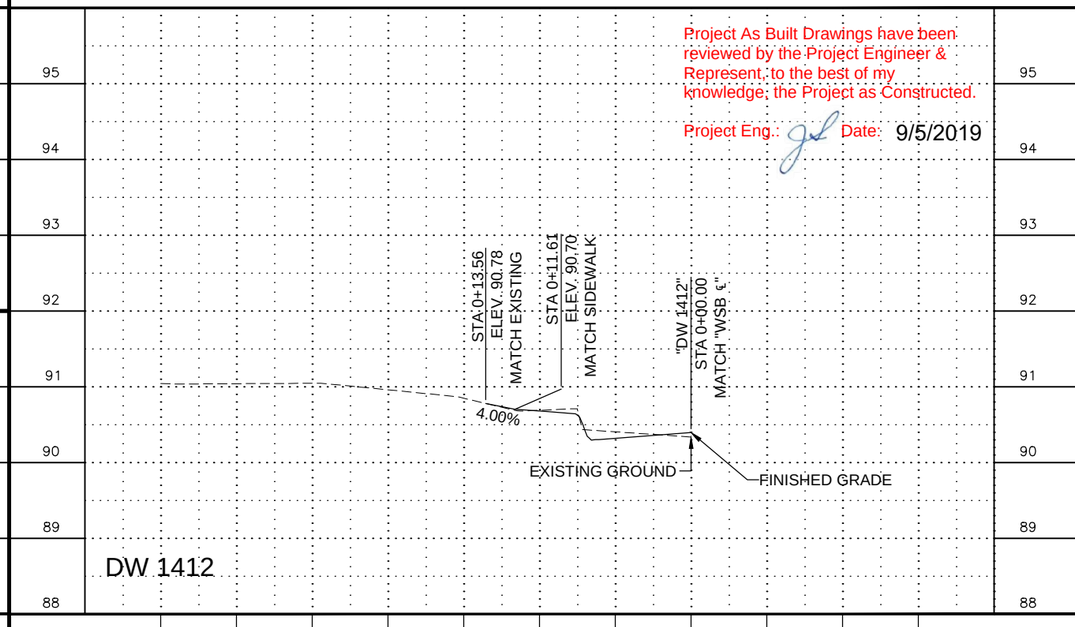












Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

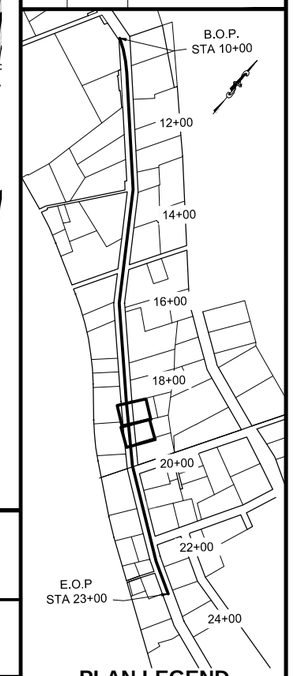
TAB: F14 11/20/2015 2:07 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

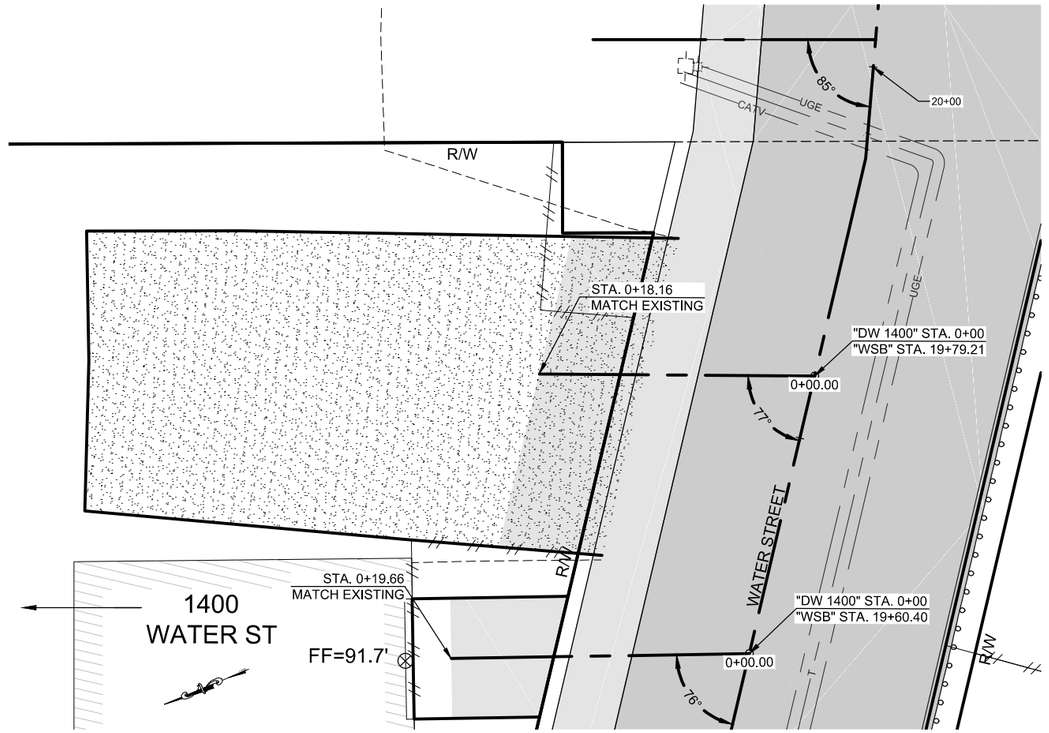
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

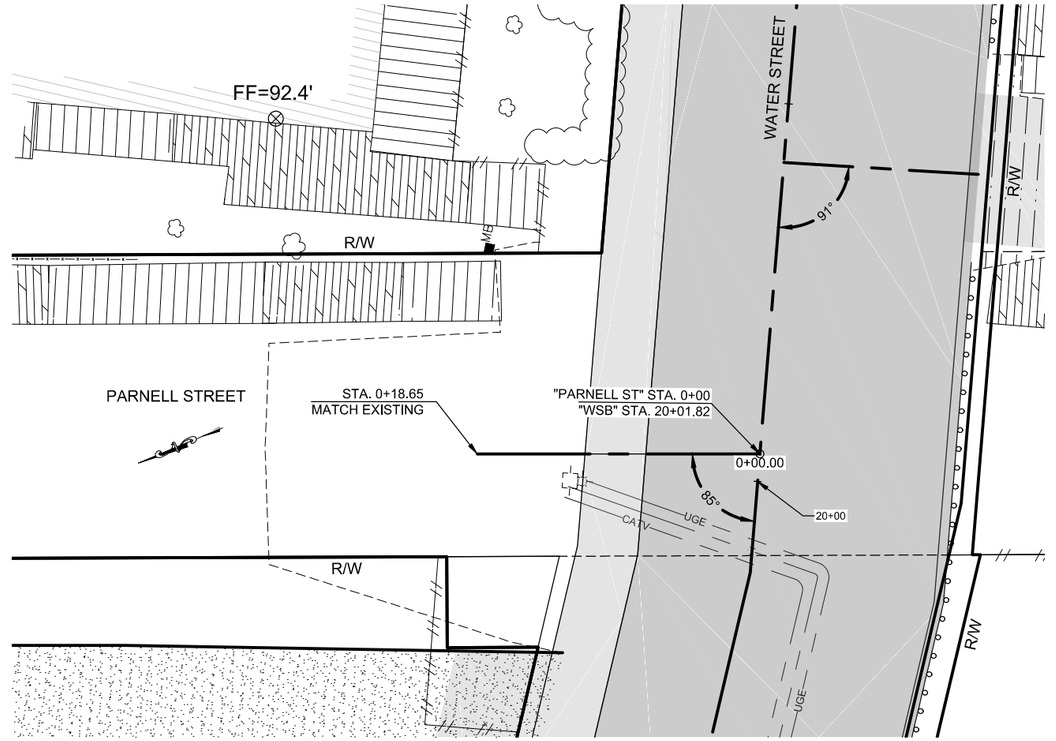
DRIVEWAY PLAN & PROFILE

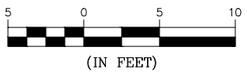
PROJECT DESIGNATION

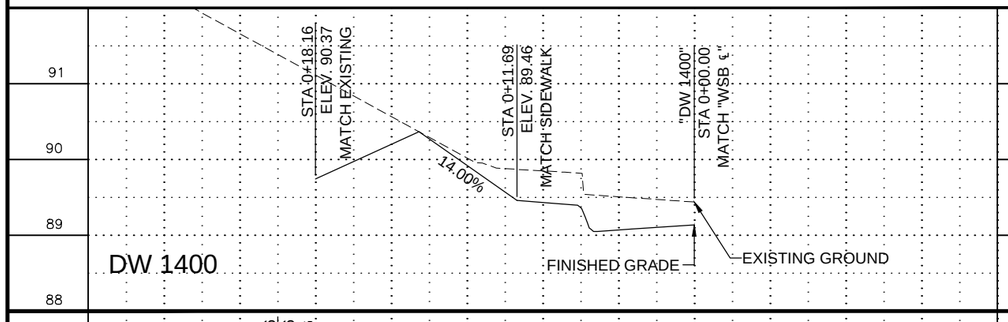
BR-000S(735)

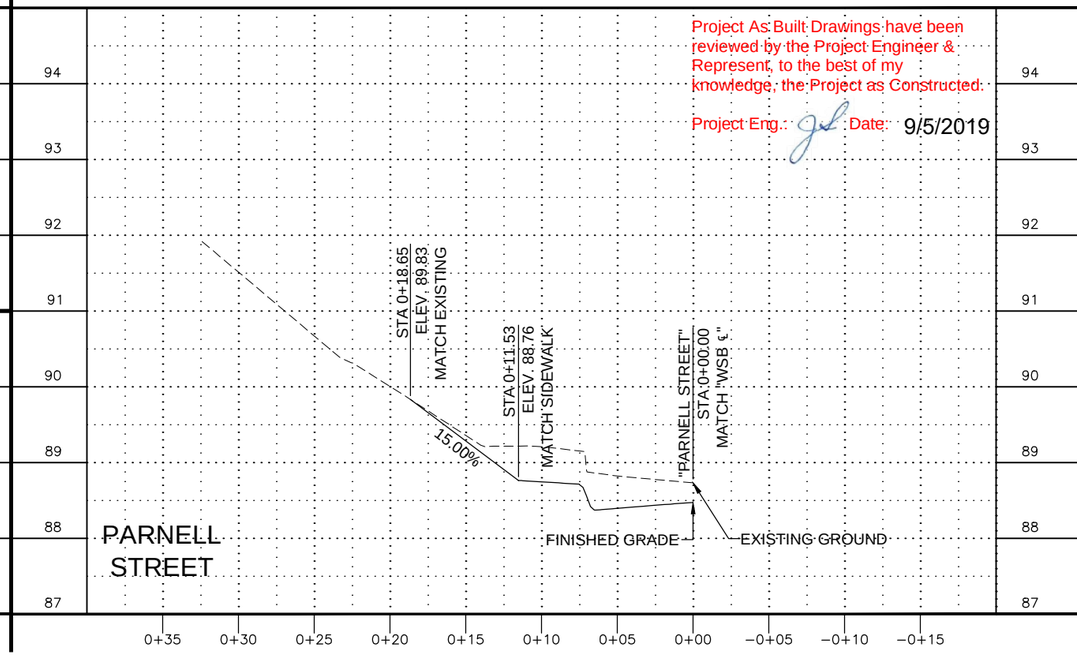
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F14	F19











Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

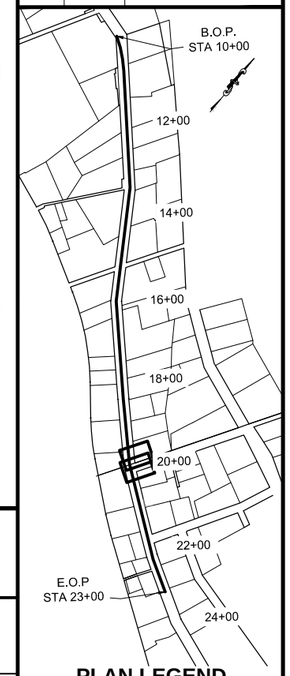
TAB: F15 11/20/2015 2:08 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA
49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

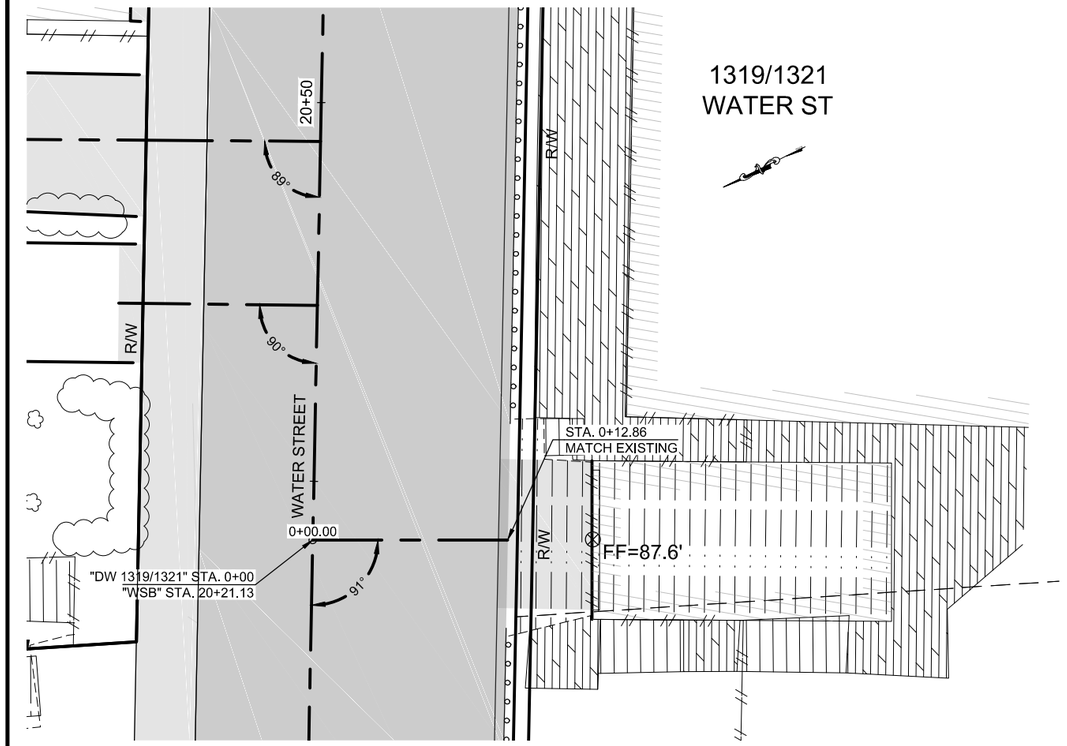
DRAWN BY: B. MAXWELL

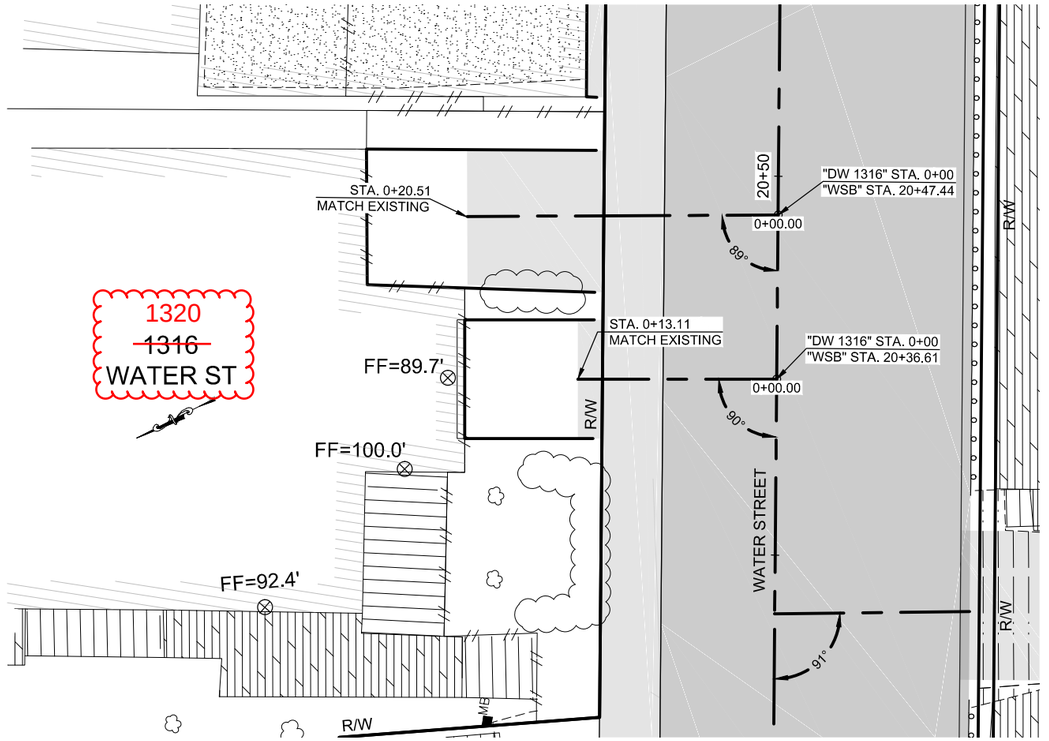
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

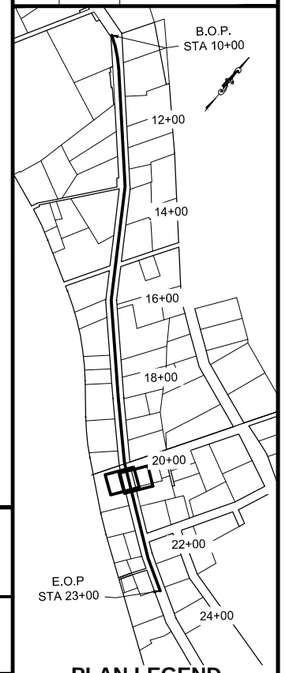
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DRIVEWAY PLAN & PROFILE

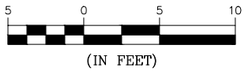
PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F15	F19





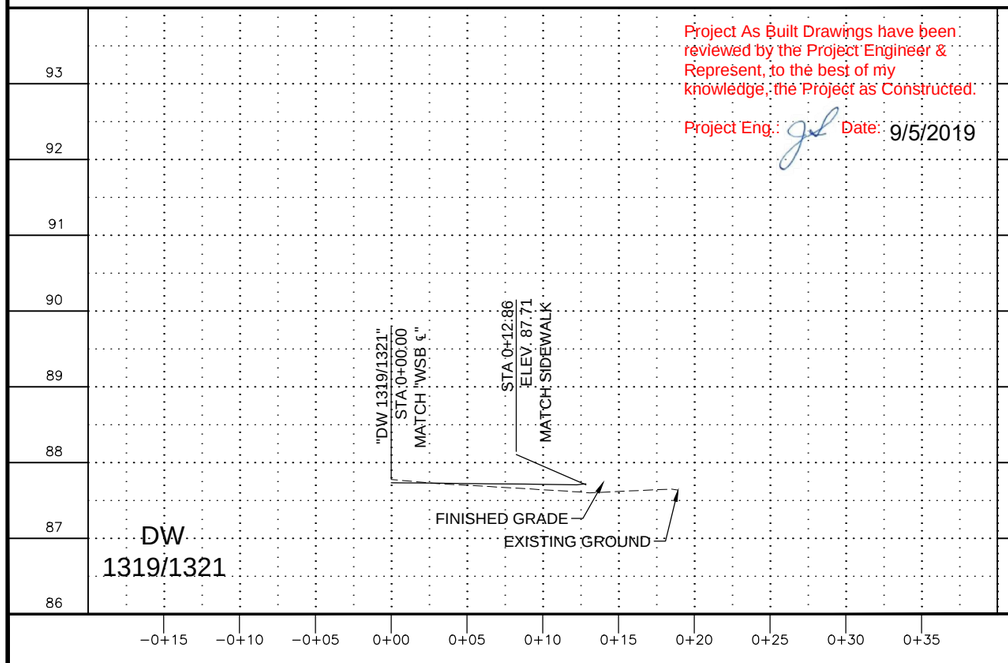


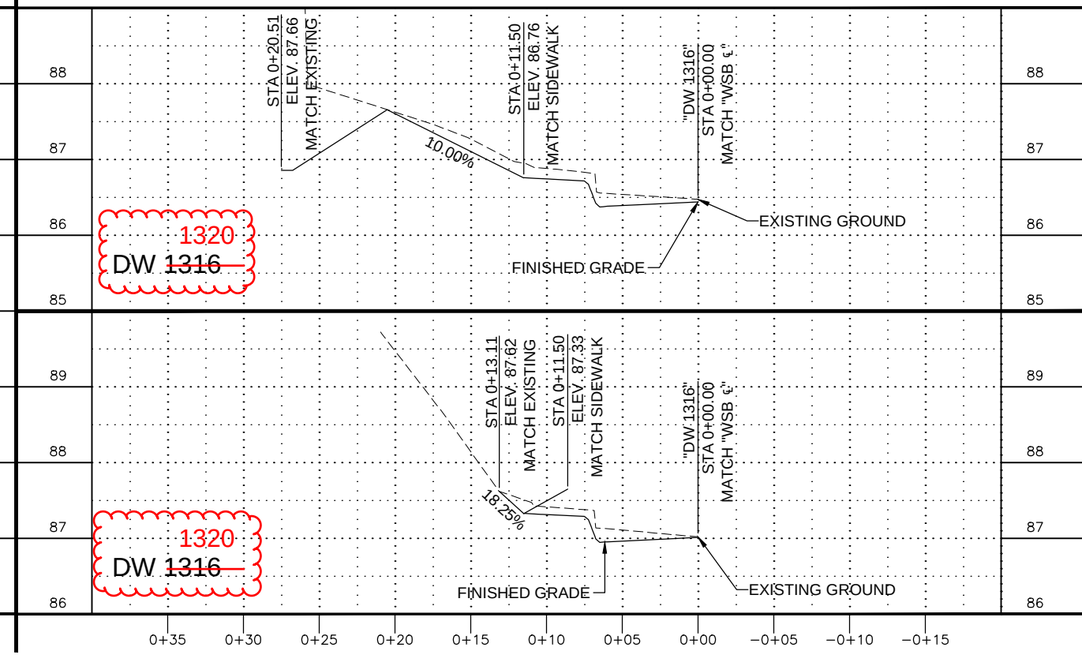
PLAN LEGEND



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019





PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

TAB: F16 11/20/2015 2:08 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
MRE ENGINEERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

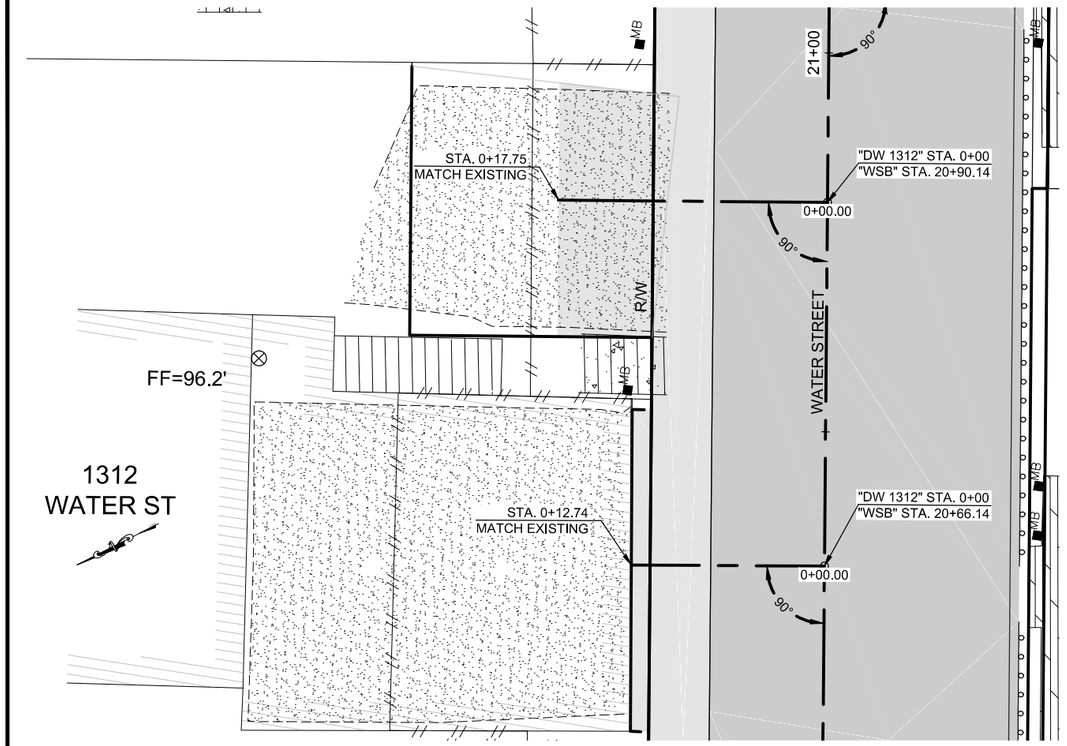
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

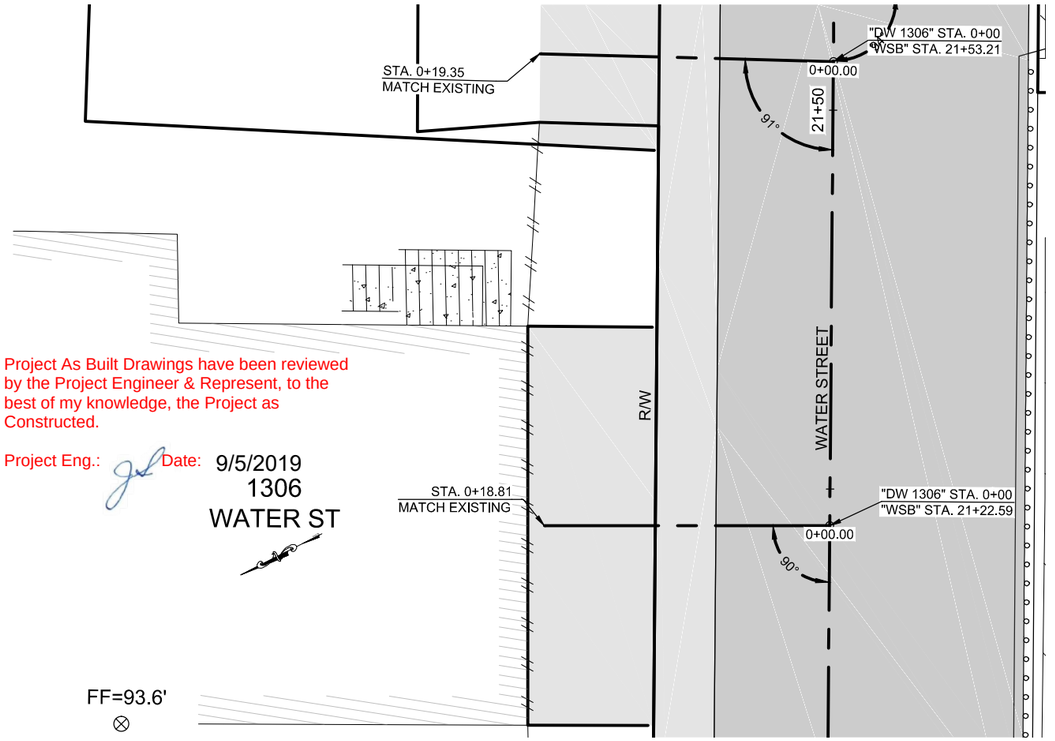
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

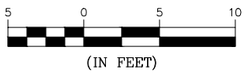
DRIVEWAY PLAN & PROFILE

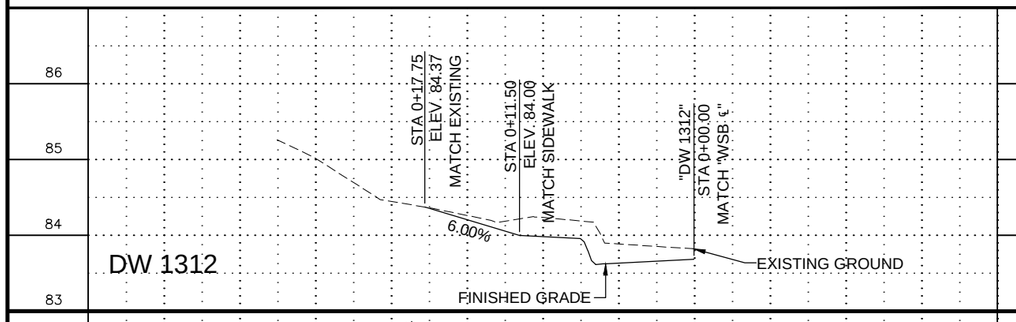
PROJECT DESIGNATION
BR-000S(735)

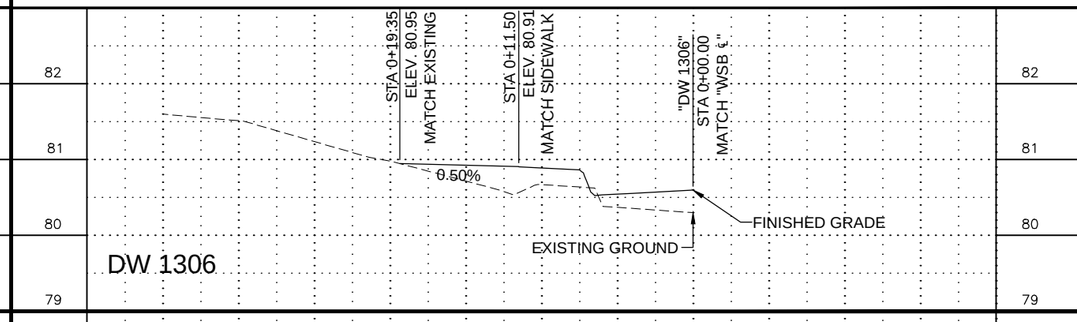
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F16	F19

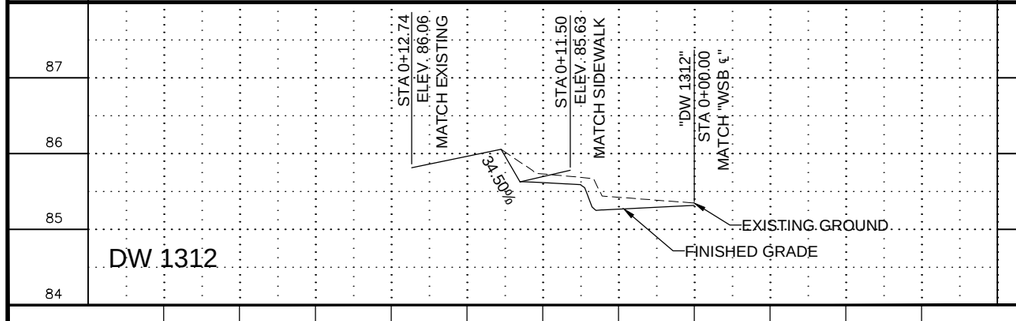


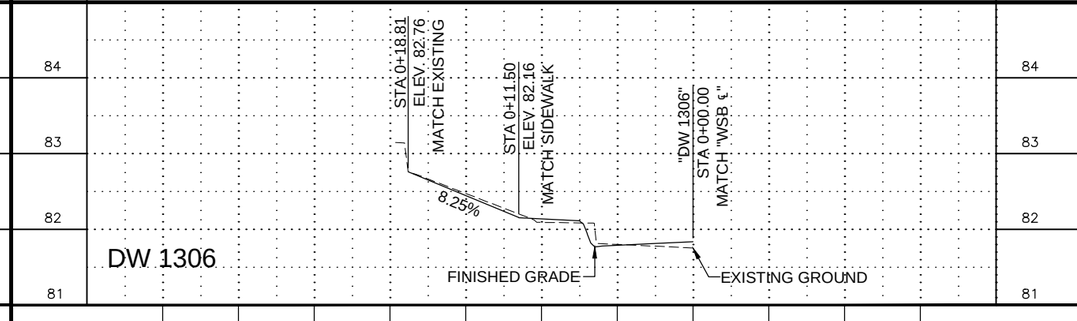












0+35 0+30 0+25 0+20 0+15 0+10 0+05 0+00 −0+05 −0+10 −0+15

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

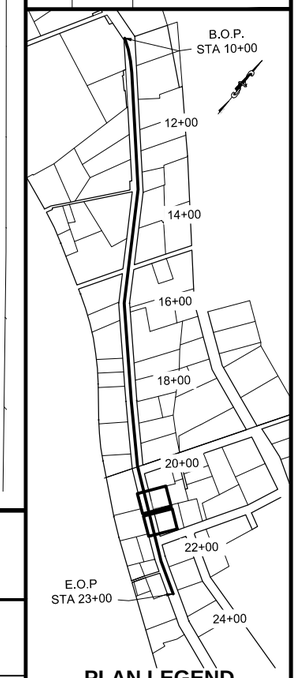
TAB: F17 11/20/2015 2:09 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

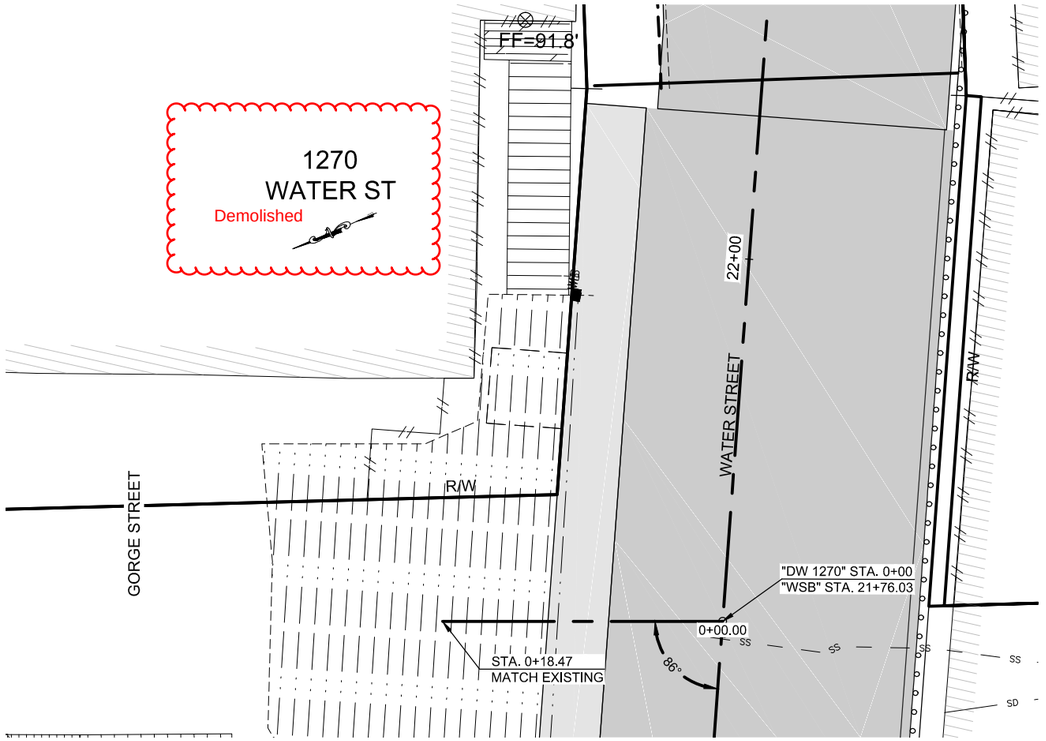
DRIVEWAY PLAN & PROFILE

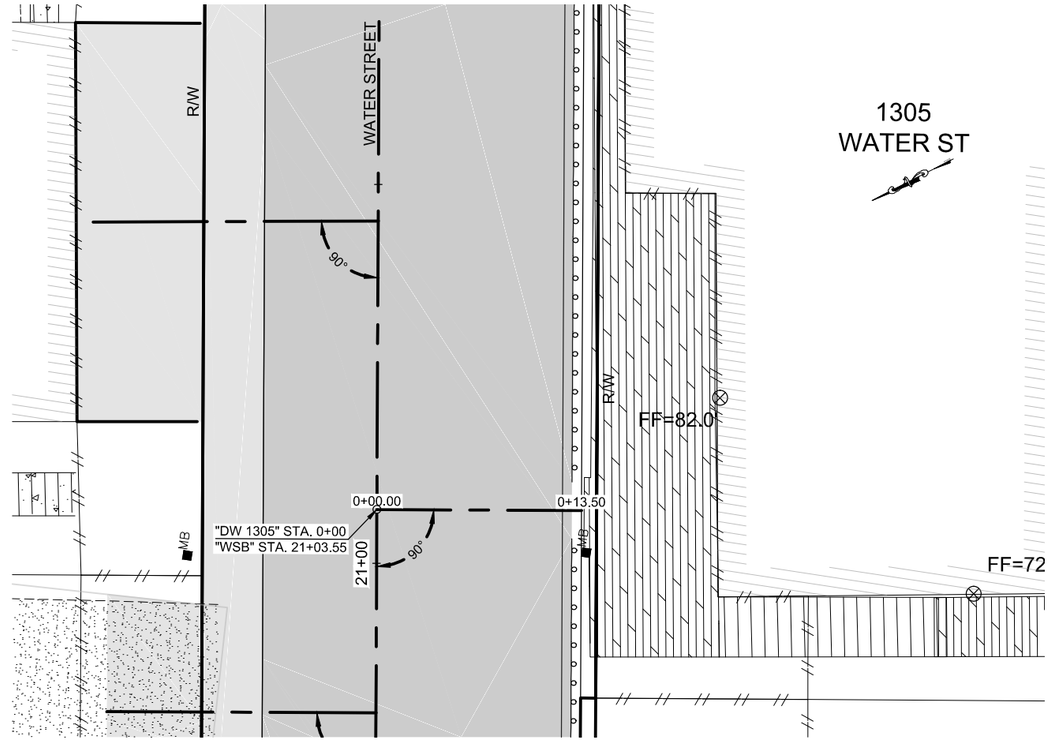
PROJECT DESIGNATION

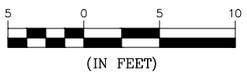
BR-000S(735)

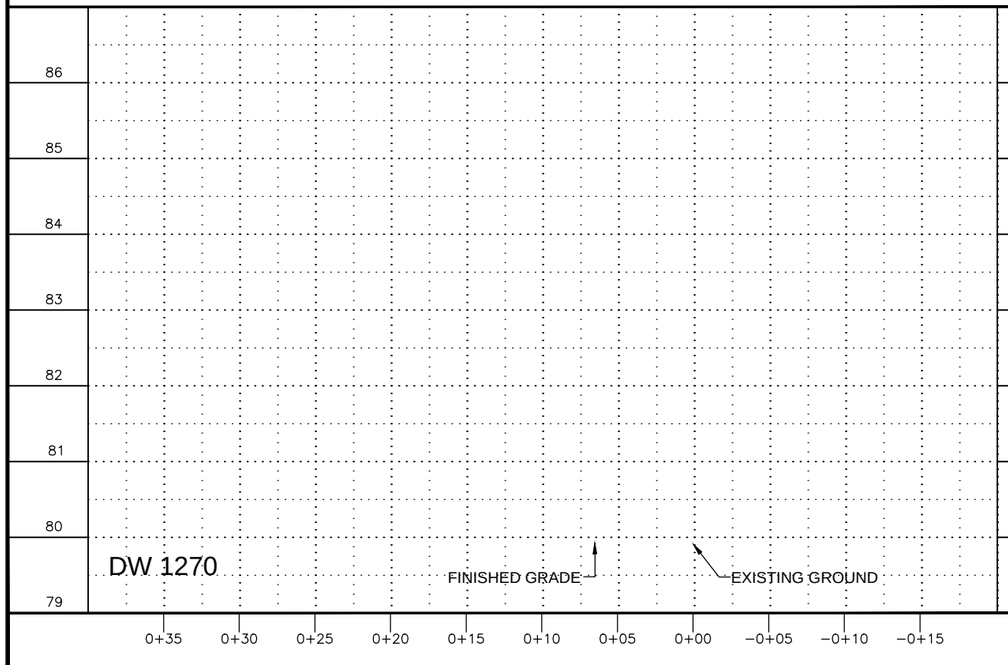
STATE	YEAR
ALASKA	2015

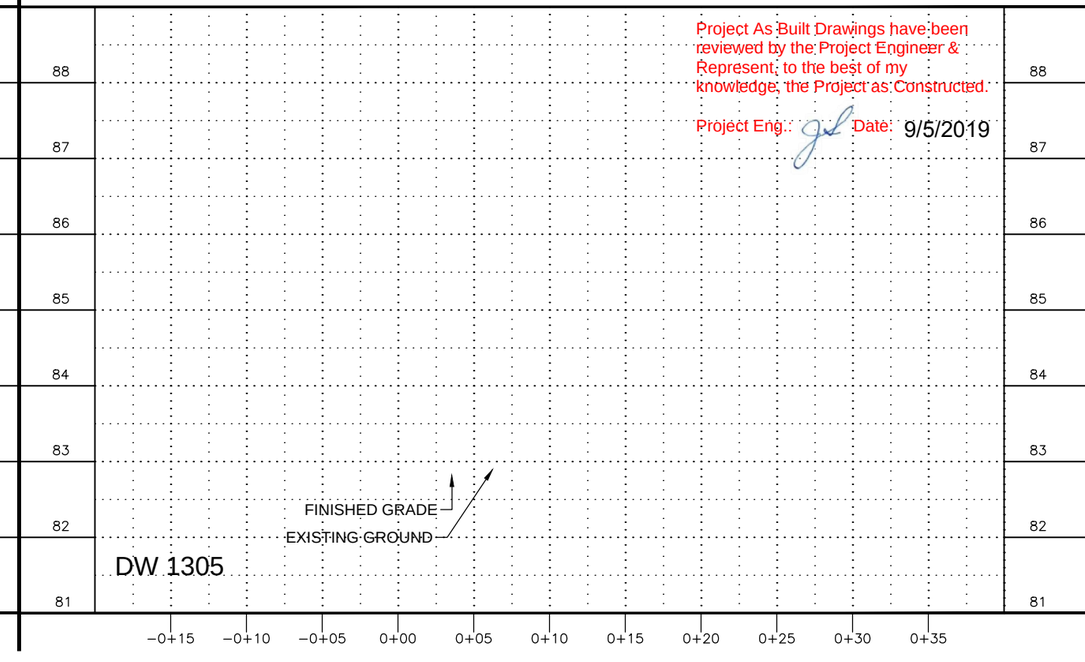
SHEET NUMBER	TOTAL SHEETS
F17	F19











Project As Built Drawings have been reviewed by the Project Engineer & Represent. to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

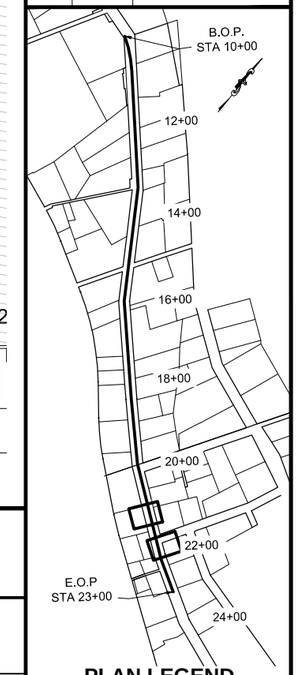
TAB: F18 11/20/2015 2:09 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
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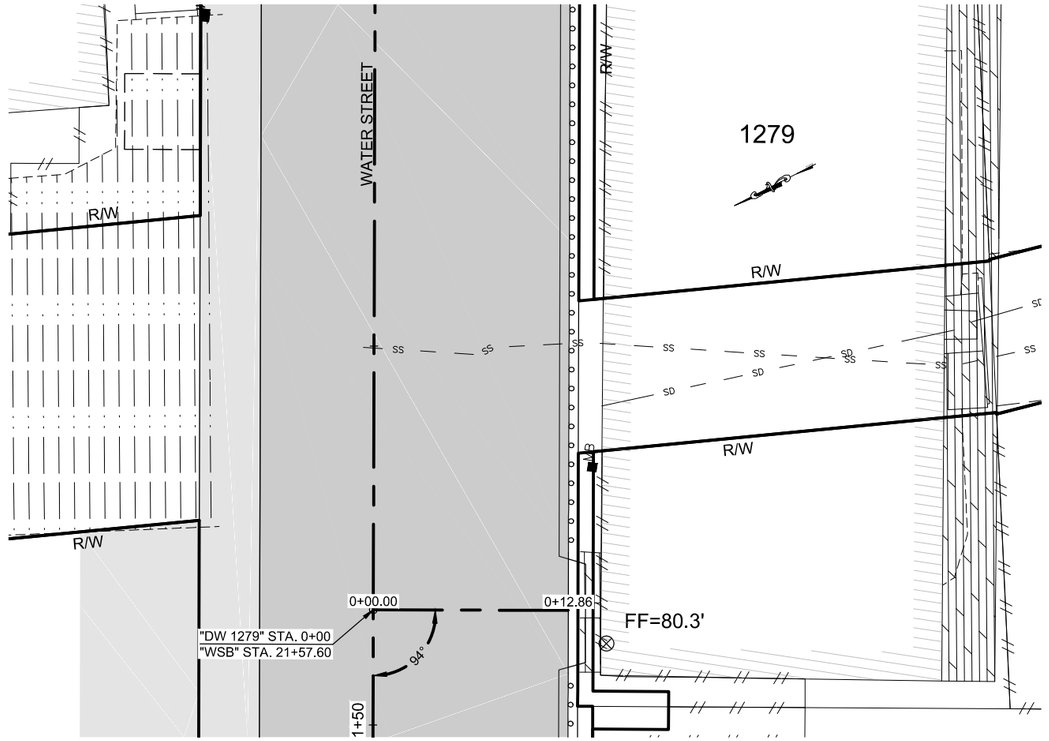
DRIVEWAY PLAN & PROFILE

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F18	F19



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(IN FEET)

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-F SHEETS - DRIVEWAYS.DWG

JOSEPH HORAZDOVSKY

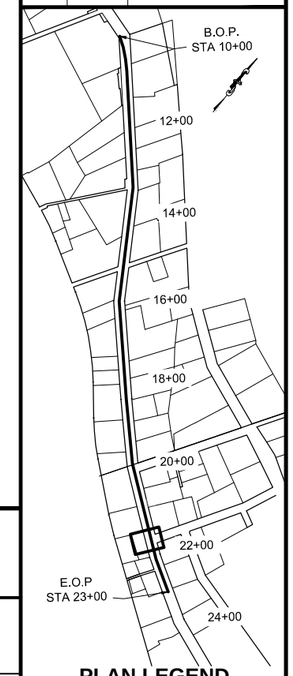
TAB: F19 11/20/2015 2:09 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PYEATT

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
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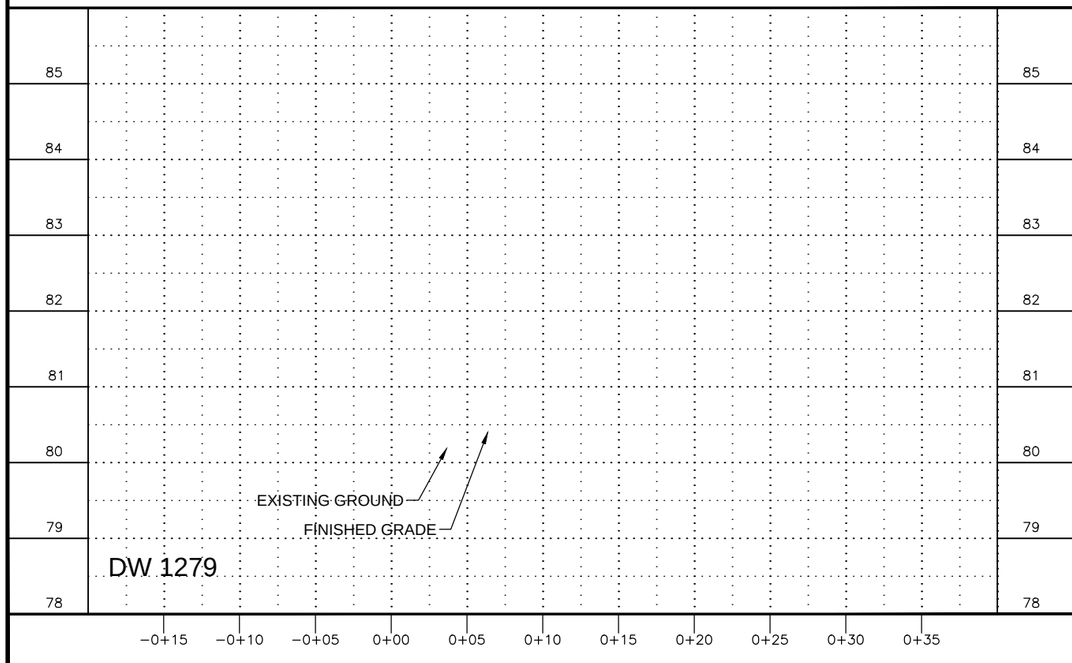
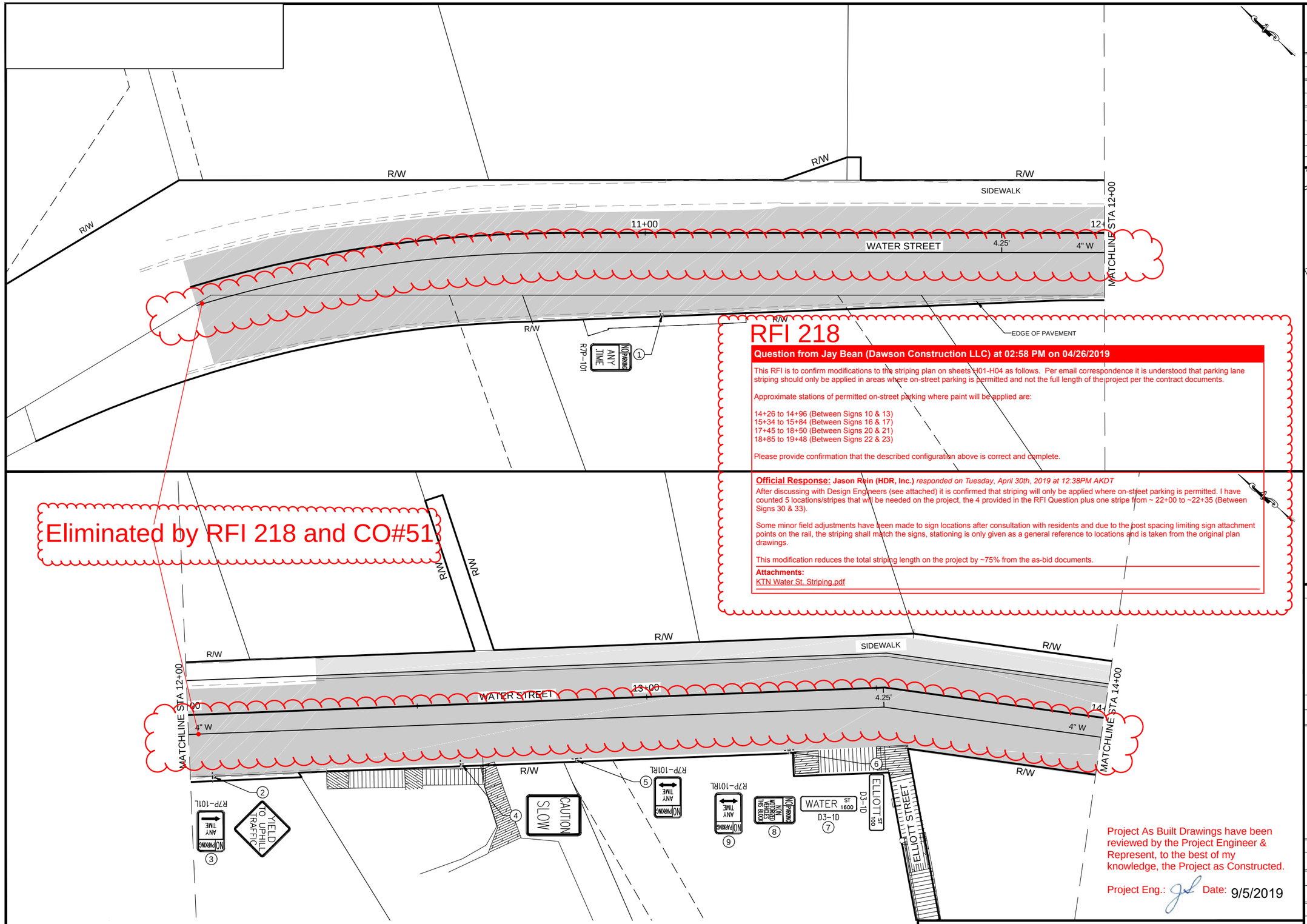
PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
F19	F19





RFI 218

Question from Jay Bean (Dawson Construction LLC) at 02:58 PM on 04/26/2019

This RFI is to confirm modifications to the striping plan on sheets H01-H04 as follows. Per email correspondence it is understood that parking lane striping should only be applied in areas where on-street parking is permitted and not the full length of the project per the contract documents.

Approximate stations of permitted on-street parking where paint will be applied are:

14+26 to 14+96 (Between Signs 10 & 13)
15+34 to 15+84 (Between Signs 16 & 17)
17+45 to 18+50 (Between Signs 20 & 21)
18+85 to 19+48 (Between Signs 22 & 23)

Please provide confirmation that the described configuration above is correct and complete.

Official Response: **Jason Rain (HDR, Inc.)** *responded on Tuesday, April 30th, 2019 at 12:38PM AKDT*

After discussing with Design Engineers (see attached) it is confirmed that striping will only be applied where on-street parking is permitted. I have counted 5 locations/stripes that will be needed on the project, the 4 provided in the RFI Question plus one stripe from ~ 22+00 to ~22+35 (Between Signs 30 & 33).

Some minor field adjustments have been made to sign locations after consultation with residents and due to the post spacing limiting sign attachment points on the rail, the striping shall match the signs, stationing is only given as a general reference to locations and is taken from the original plan drawings.

This modification reduces the total striping length on the project by ~75% from the as-bid documents.

Attachments:
KTN Water St. Striping.pdf

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-H SHEETS.DWG

JOSEPH HORAZDOVSKY

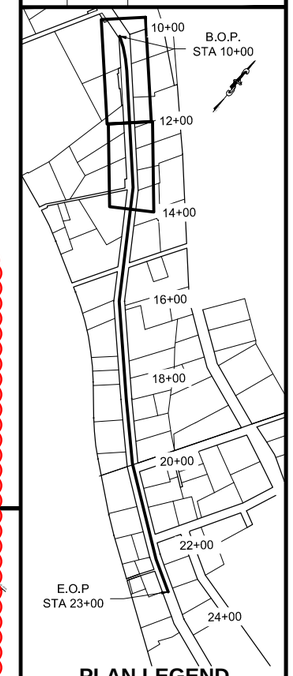
TAB: H01 11/20/2015 11:48 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

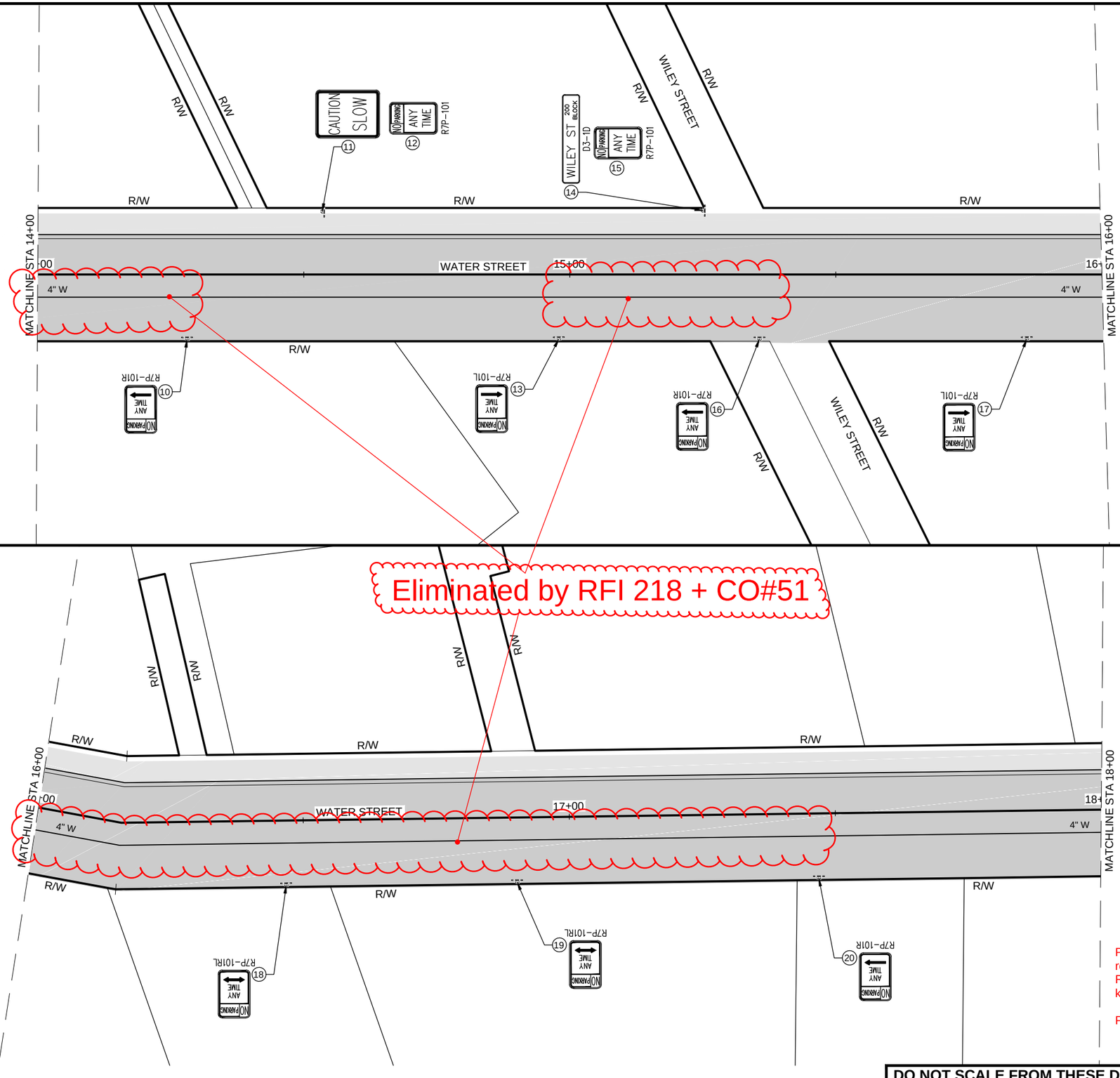
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

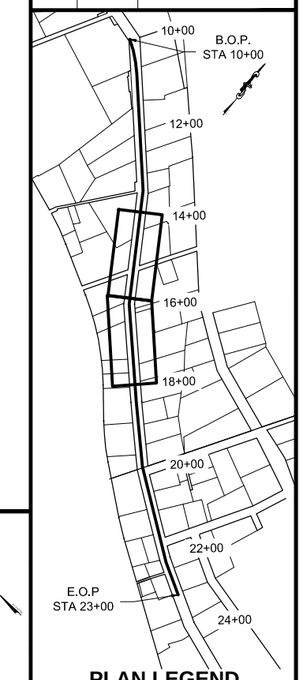
SIGNING & STRIPING

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
H01	H09





PLAN LEGEND

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

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PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-H SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: H02 11/20/2015 11:49 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

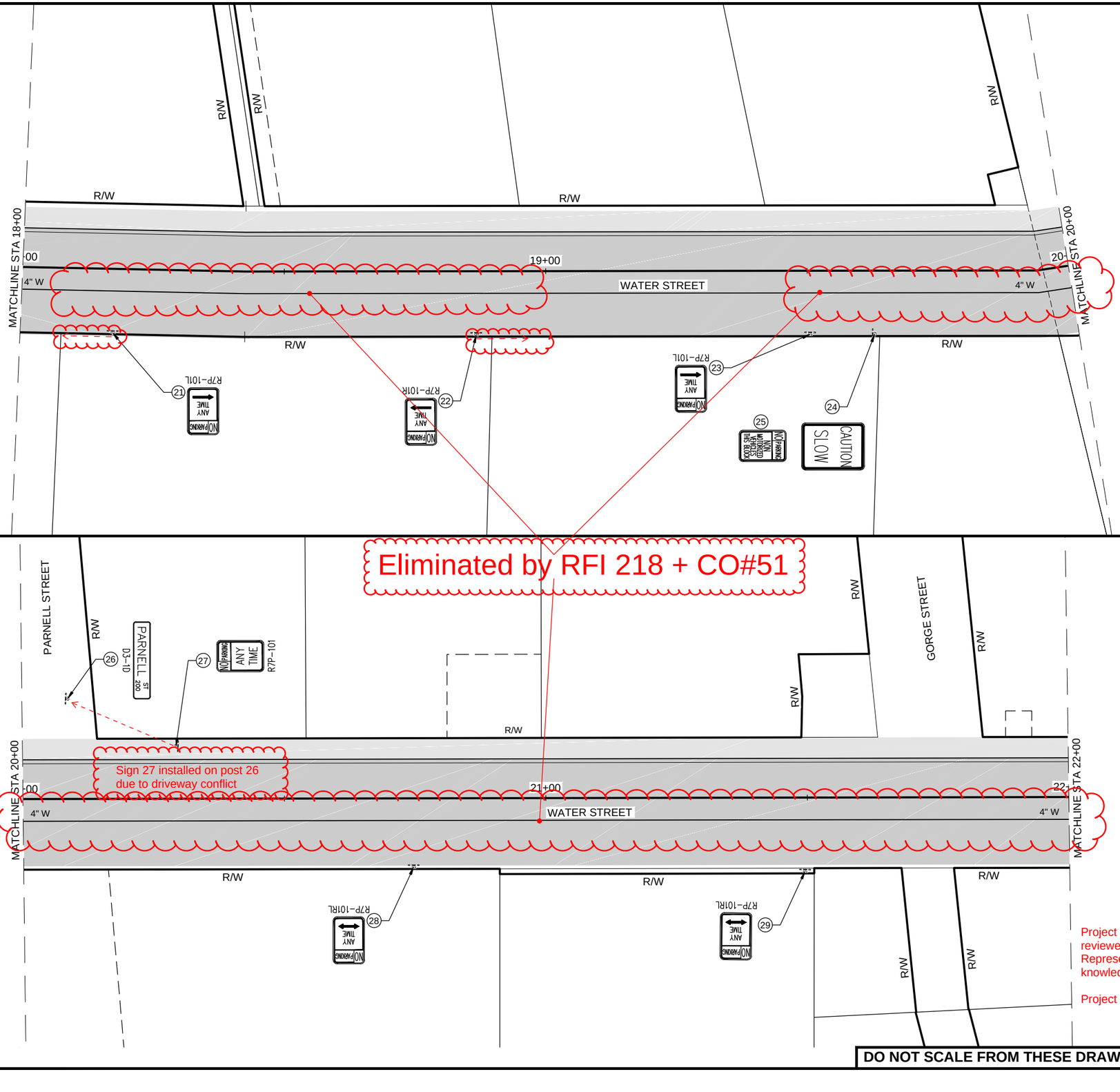
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

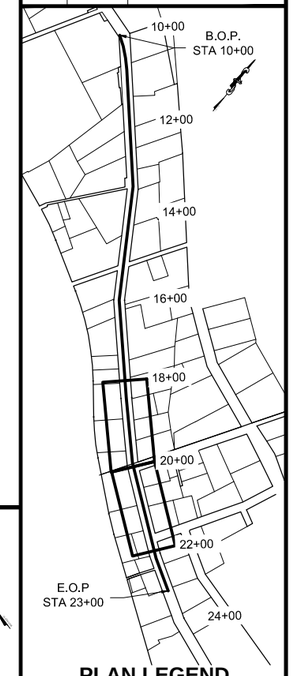
SIGNING & STRIPING

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
H02	H09





PLAN LEGEND

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-H SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: H03 11/20/2015 11:49 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick No. CE 12799 — REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SIGNING & STRIPING

PROJECT DESIGNATION

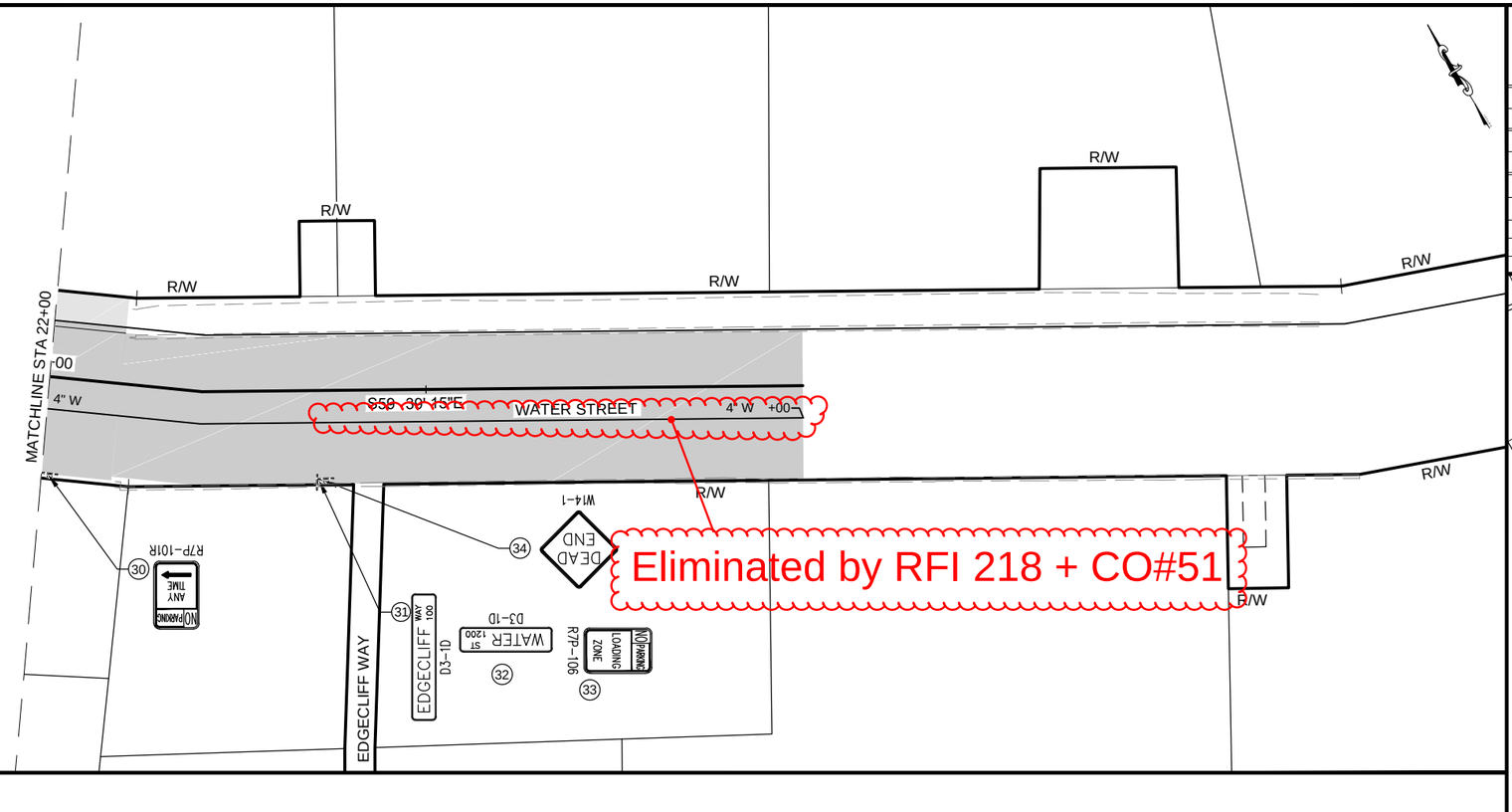
BR-000S(735)

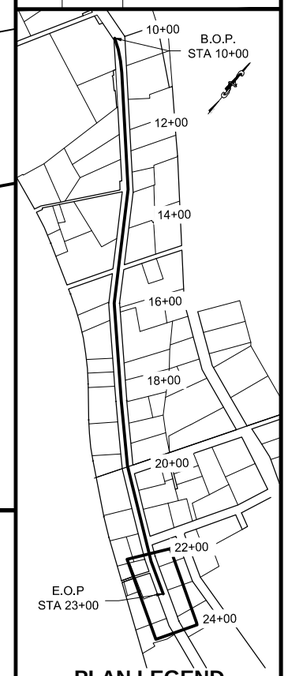
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
H03	H09

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS





PLAN LEGEND

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

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PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-H SHEETS.DWG

JOSEPH HORAZDOVSKY

TAB: H04 11/20/2015 11:49 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

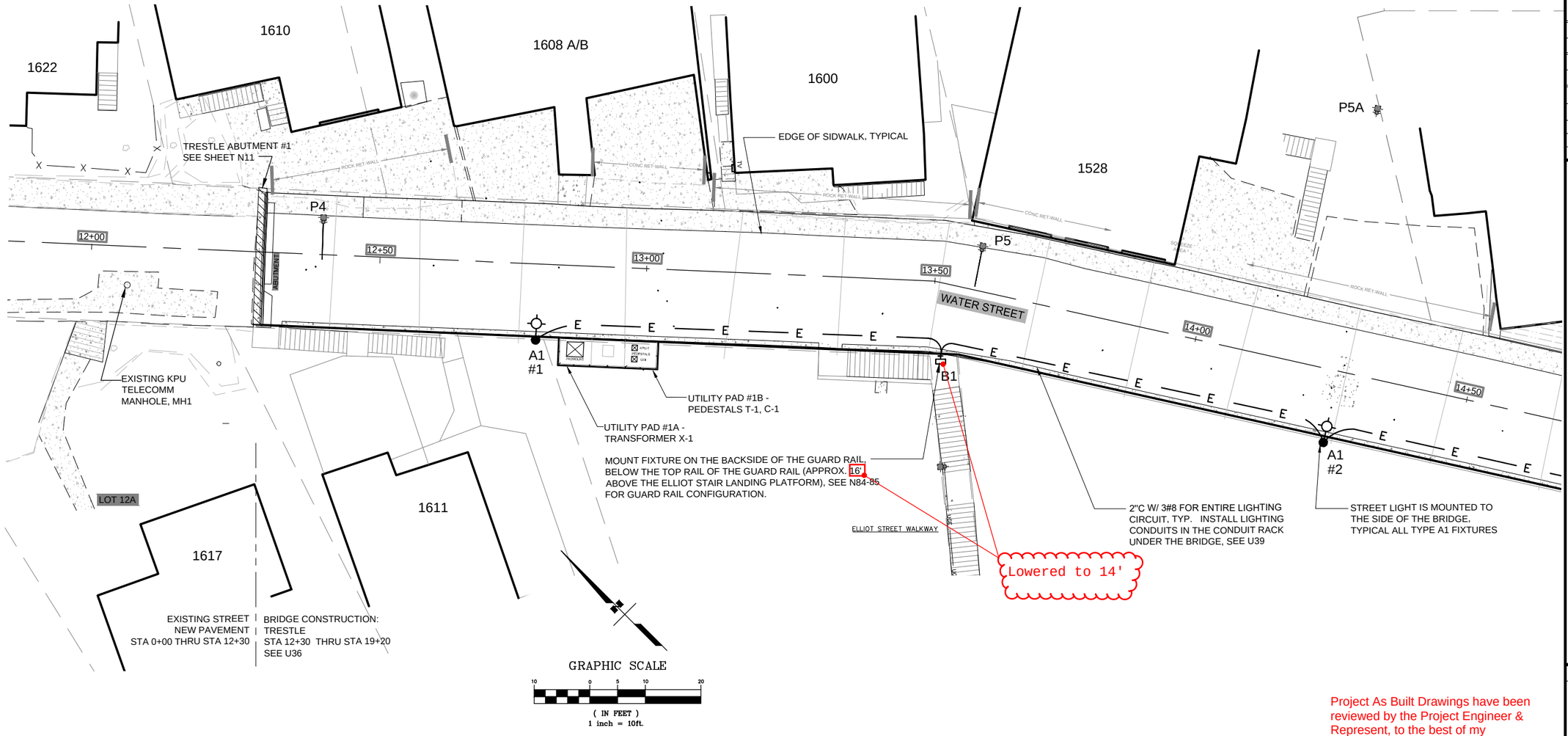
SIGNING & STRIPING

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
H04	H09



SYMBOLS AND LEGEND

- PADMOUNT TRANSFORMER
- JUNCTION BOX
- RECEPTACLE, GROUND FAULT INTERRUPTER
- PULL BOX, HANDHOLE
- PANELBOARD
- P8 — POWER POLE / POWER POLE W/LIGHT. POLE #
- A1 #1 — NEW LIGHT POLE & FIXTURE, TYPE AND POLE #
- NEW WALLPACK LIGHT FIXTURE
- E — LIGHTING CIRCUIT
- GROUND, NEUTRAL, HOT CONDUCTORS - #10 UNLESS OTHERWISE NOTED. INSTALL EQUIPMENT GROUNDING CONDUCTOR IN EACH BRANCH CIRCUIT. MINIMUM BRANCH CIRCUIT SIZE IS 2#10 W/ 1#10G. EACH CIRCUIT IN A MULTIWIRE CIRCUIT SHALL HAVE ITS OWN NEUTRAL. IN GENERAL, BRANCH CIRCUITS SHALL BE TYPE XHHW RUN IN PVC SCHEDULE 80. 1"C MINIMUM HOMERUN SIZE. SEE SECTION 662 FOR ADDITIONAL INFO.

  WHERE WIRE SIZE IS SHOWN BY HOMERUN THAT SIZE WIRE SHALL BE USED FOR THE ENTIRE CIRCUIT WITH THE CONDUIT SIZED PER THE WIRE COUNT.

  DASHED EQUIPMENT INDICATES EXISTING OR FUTURE EQUIPMENT, REFER TO DRAWING NOTES.

ABBREVIATIONS

AUR	ADVANCE UTILITY RELOCATION PROJECT
C	CABLE TV PEDESTAL (GCI)
CoK	CITY OF KETCHIKAN
EC	ELECTRICAL CONTRACTOR
GCI	GCI (CABLE TV COMPANY)
GEC	GROUNDING ELECTRODE CONDUCTOR
GFI	GROUND FAULT INTERRUPTER
KPU-E	KPU ELECTRICAL DIVISION
KPU-T	KPU TELECOMMUNICATIONS DIVISION
KV	KILOVOLT
NID	NETWORK INTERFACE DEVICE
ONT	OPTICAL NETWORK TERMINAL (KPU-T)
PED	PEDESTAL
T	TELEPHONE/TELECOMM (KPU-T)
TV	CABLE TV (GCI)
WP	WEATHERPROOF

GENERAL NOTES

A SEE H09 FOR ONE LINE DIAGRAM, LIGHTING FIXTURES AND PANELBOARD SCHEDULES.

B THE LIGHTING FIXTURES AND CIRCUITING TO PANEL A AS SHOWN ON SHEETS H05-H09 SHALL BE BID AS WORK ITEM 660(3). PANEL A AND ITS FEEDER SHALL BE BID AS WORK ITEM 661(3).

C THE TYPE A1 POLE MOUNTED LIGHT FIXTURES ARE MOUNTED TO LUMINAIRE MOUNTING BRACKETS WHICH ARE ATTACHED TO THE SIDE OF THE BRIDGE, SEE SHEET N59.

D POLES P4-P9 TYPICAL
THE EXISTING WOOD UTILITY POLES ARE SHOWN TO INDICATE THEIR LOCATION. THE POLES HAVE EXISTING STREET LIGHTS, THE EXISTING STREET LIGHTING CIRCUIT SHALL REMAIN MAINTAIN OPERATIONAL DURING CONSTRUCTION,. AFTER THE NEW LIGHTING SYSTEM IS OPERATIONAL THE EXISTING STREET LIGHTING SYSTEM SHALL BE DEMOLISHED.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB H5-9 PSE.DWG

KCN12_000

TAB: H05

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

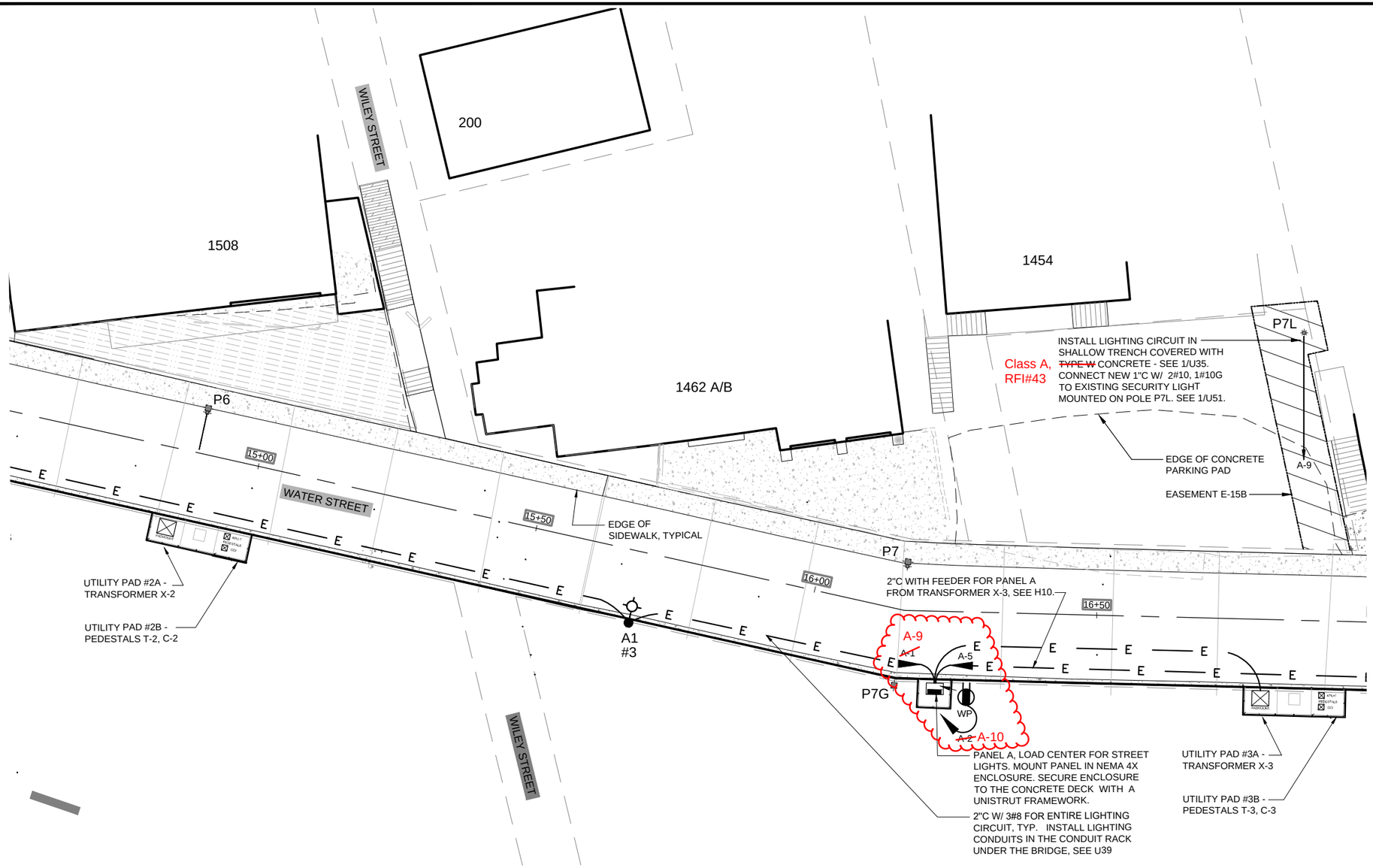
KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

ILLUMINATION PLAN

PROJECT DESIGNATION

BR-000S(735) ~69354

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
H05	H09



GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

GENERAL NOTES

A SEE H09 FOR ONE LINE DIAGRAM, LIGHTING FIXTURES AND PANELBOARD SCHEDULES.

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Project Eng.: Date: 9/5/2019

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KCN12_000

TAB: H06

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON 08-7855 8-1-15

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

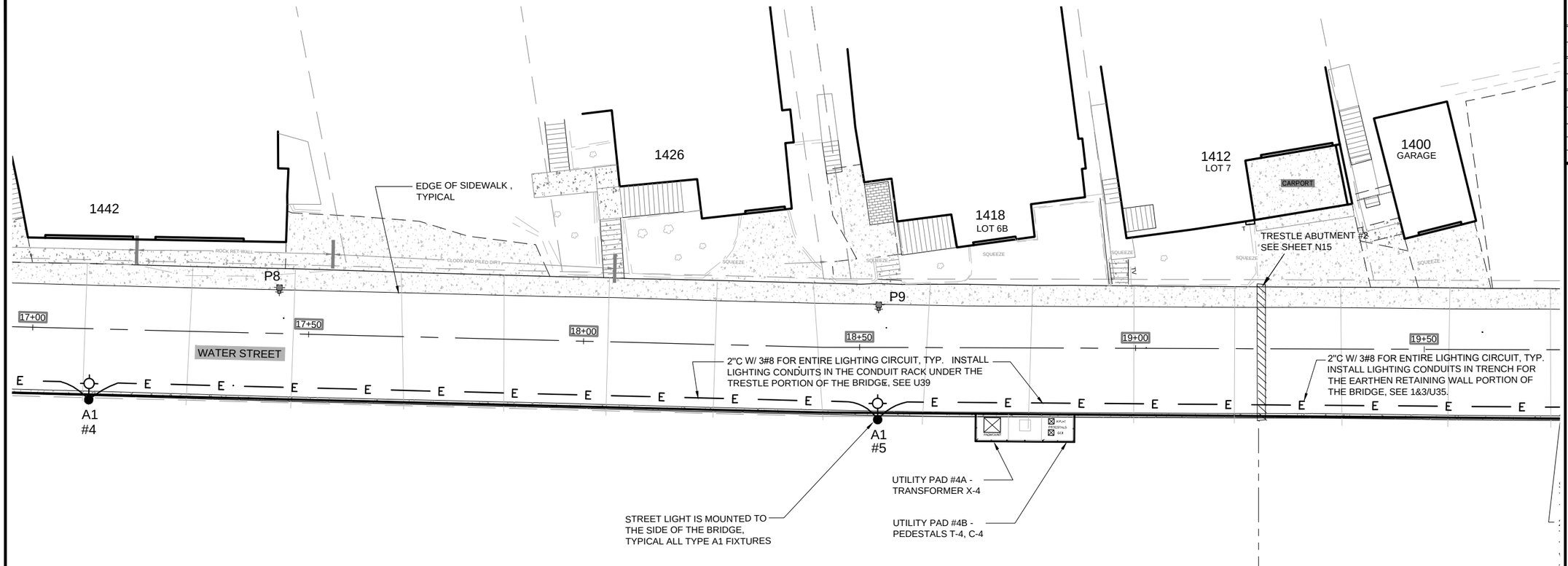
KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
69534

ILLUMINATION PLAN

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
H06	H09



GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

GENERAL NOTES

A SEE H09 FOR ONE LINE DIAGRAM, LIGHTING FIXTURES AND PANELBOARD SCHEDULES.

B THE LIGHTING FIXTURES AND CIRCUITING TO PANEL A AS SHOWN ON SHEETS H05-H09 SHALL BE BID AS WORK ITEM 660(3). PANEL A AND ITS FEEDER SHALL BE BID AS WORK ITEM 661(3).

C THE TYPE A1 POLE MOUNTED LIGHT FIXTURES ARE MOUNTED TO LUMINAIRE MOUNTING BRACKETS WHICH ARE ATTACHED TO THE SIDE OF THE BRIDGE, SEE SHEET N59.

D POLES P4-P9 TYPICAL
THE EXISTING WOOD UTILITY POLES ARE SHOWN TO INDICATE THEIR LOCATION. THE POLES HAVE EXISTING STREET LIGHTS, THE EXISTING STREET LIGHTING CIRCUIT SHALL REMAIN MAINTAIN OPERATIONAL DURING CONSTRUCTION,. AFTER THE NEW LIGHTING SYSTEM IS OPERATIONAL THE EXISTING STREET LIGHTING SYSTEM SHALL BE DEMOLISHED.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

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KCN12_000

TAB: H07

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
69534

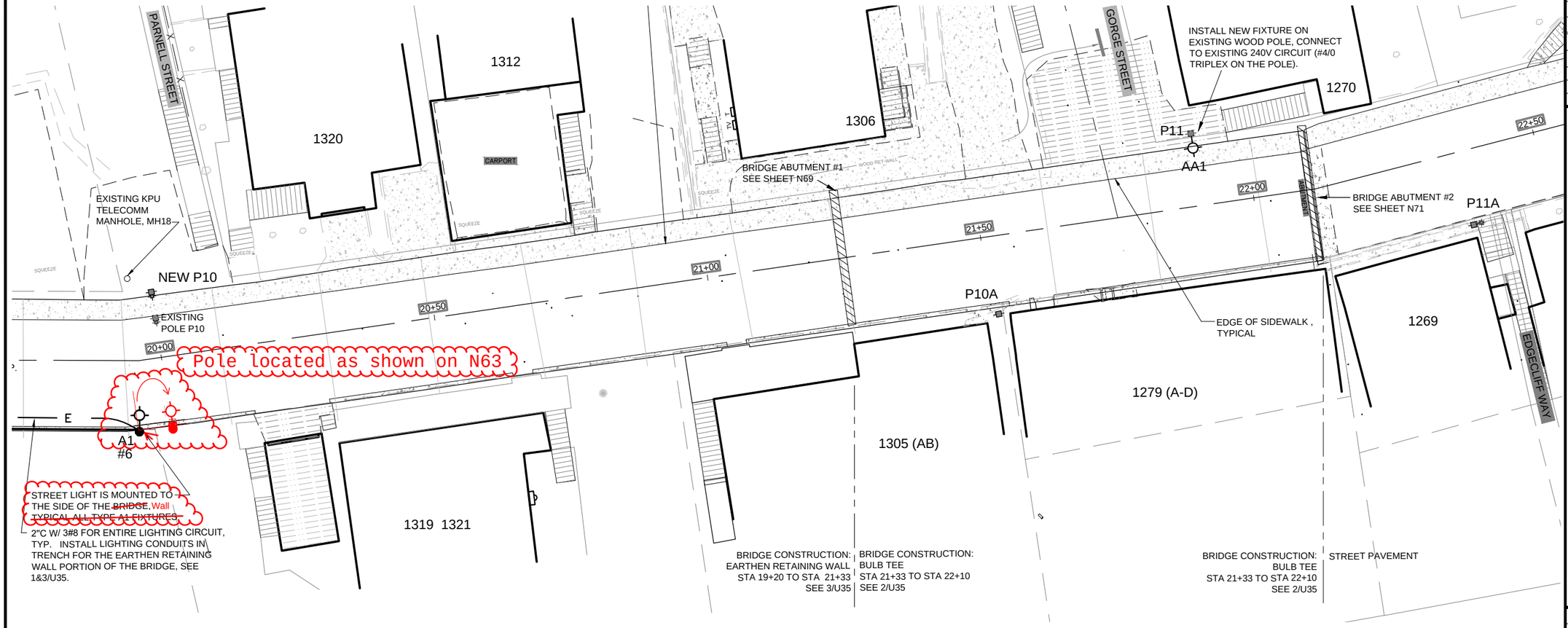
ILLUMINATION PLAN

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
H07	H09



GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

GENERAL NOTES

A SEE H09 FOR ONE LINE DIAGRAM, LIGHTING FIXTURES AND PANELBOARD SCHEDULES.

B THE LIGHTING FIXTURES AND CIRCUITING TO PANEL A AS SHOWN ON SHEETS H05-H09 SHALL BE BID AS WORK ITEM 660(3). PANEL A AND ITS FEEDER SHALL BE BID AS WORK ITEM 661(3).

C TYPE A1 LIGHT FIXTURES ARE MOUNTED TO BRACKETS WHICH ARE ATTACHED TO THE SIDE OF THE BRIDGE, SEE SHEET N59.

D EXISTING POLES P10-P11 TYPICAL
THE EXISTING WOOD UTILITY POLES ARE SHOWN TO INDICATE THEIR LOCATION. EXISTING POLE 10 HAS AN EXISTING STREET LIGHT. THE EXISTING STREET LIGHTING CIRCUIT SHALL REMAIN MAINTAIN OPERATION AL DURING CONSTRUCTION,. AFTER THE NEW LIGHTING SYSTEM IS OPERATIONAL THE EXISTING STREET LIGHTING SYSTEM SHALL BE DEMOLISHED.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

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KCN12_000

TAB: H08

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
H08	H09

LIGHTING FIXTURE SCHEDULE:

TYPE	LAMPS	MOUNTING	DESCRIPTION	MANUFACTURER
A1	120-LED 6000K	POLE MOUNT 30' POLE ROADWAY ARM	LED ROADWAY FIXTURE WITH 8 TYPE II DISTRIBUTION, FULL CUTOFF, WET LABEL, GASKETED, TGIC POWDER COAT SILVER FINISH, FLAT GLASS LENS, DOUBLE FUSES & HOLDER, TILT DOWN 5°, IP66 ENCLOSURE RATING, 4G VIBRATION, TEST, 240 VOLT DRIVER, CUSTOM FAB HOUSE SIDE SHIELDS, 130MPH W/ 30% GUST, INTEGRAL PHOTOCELL 30 FOOT, 5" ROUND TAPERED, 7 GAUGE GALVANIZED STEEL POLE WITH HANDHOLE, SINGLE ROUND TAPERED 4" ARM FOR FIXTURE, 130MPH W/ 30% GUST	~~BETALED~~ ~~STR LWY SERIES~~ Evolve LED Roadway Lighting ERX1 VALMONT ~~DS218 SERIES~~ DS32 SERIES
AA1	120-LED 6000K	EXISTING WOOD POLE	LED ROADWAY FIXTURE, SAME AS TYPE A1 EXCEPT NO METAL POLE, PROVIDE MOUNTING HARDWARE FOR A WOOD POLE.	~~BETALED~~ ~~STR LWY SERIES~~ Evolve LED Roadway Lighting ERX1
B1	40W LED 4000 LUMEN 4000K	GUARD RAIL ~~18' ABOVE LANDING~~ 14' Above Landing	COMPACT LED RECTANGULAR WALL PACK. FULL CUTOFF W/ POLYCARB LENS, GASKETED, WET LABEL, DARK BRONZE FINISH,-30C DRIVER, PHOTOCELL, DARK SKY COMPLIANT, 120V	LUMARK WP SERIES

NOTES:

1. MANUFACTURER'S LISTED ARE TO ESTABLISH QUALITY. PRIOR TO ORDERING THE FIXTURES THE OWNER AND ENGINEER SHALL SELECT THE TYPES OF FIXTURES, MOUNTING TYPES/ACCESSORIES, COLORS AND FINISHES. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE LAMPS AND ALL MOUNTING AND OPERATING ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION. ALL FIXTURES SHALL HAVE AN EQUIPMENT GROUNDING CONDUCTOR INSTALLED FROM IT'S JBOX TO THE FIXTURE GROUND. FIXTURES SHALL BE INSTALLED PER MANUFACTURER'S REQUIREMENTS.
3. FIXTURE AND POLE SHALL HAVE FINISH SUITABLE FOR A MARINE ENVIRONMENT AND THE FINISH SHALL HAVE A 10 YEAR WARRANTY.
4. LED FIXTURE AND DRIVER SHALL BE SUITABLE FOR OUTDOOR, MARINE INSTALLATION AND RATED FOR -20F STARTING, UNDERWRITERS' LABORATORIES LISTING. BALLASTS SHALL BE SUITABLE FOR OUTDOOR INSTALLATION, HIGH POWER FACTOR, CONSTANT WATTAGE AUTOTRANSFORMER TYPE BALLAST AND RATED FOR -20F STARTING, BEAR THE SEAL OF THE CERTIFIED BALLAST MANUFACTURERS AND UNDERWRITERS' LABORATORIES, INC. IN ACCORDANCE WITH UL 1029, CLASS C SOUND RATING.
5. LUMINAIRE SHALL BE APPROVED BY DARK SKY ASSOCIATION OR SIMILAR ORGANIZATION.
6. POLE SHALL BE WELDED TO THE TOP AND BOTTOM OF THE BASE PLATE. COORDINATE THE POLE BASE BOLT MOUNTING PATTERN WITH THE MOUNTING BRACKET WHICH IS ATTACHED TO THE SIDE OF THE BRIDGE (SEE SHEET N59).

SHORT CIRCUIT CURRENT INFO:

120/240 VOLT DISTRIBUTION SHORT CIRCUIT CURRENT:
PANEL A 100 AMP : 15,761AMPS

PANEL SHALL HAVE 22,000 AMP SHORT CIRCUIT CURRENT RATING .

PRELIMINARY ARC FLASH ANALYSIS INFO:

120/240V VOLT DISTRIBUTION SYSTEM EQUIPMENT:

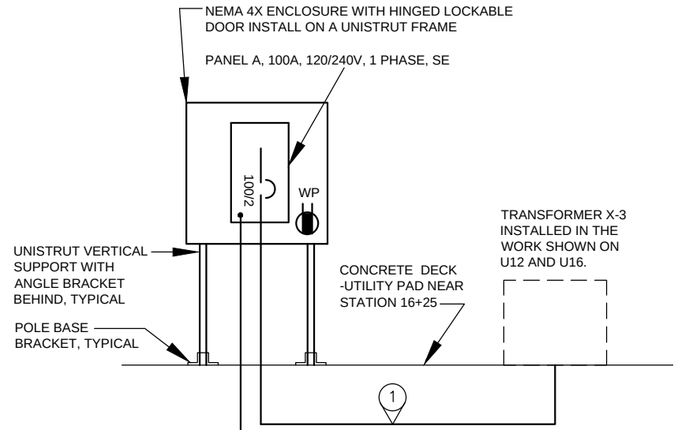
FLASH PROTECTION BOUNDARY	4' - 0"
LIMITED APPROACH BOUNDARY	3' - 6"
RESTRICTED APPROACH BOUNDARY	1' - 0"
PROHIBITED APPROACH BOUNDARY	0" - 1"
SHOCK HAZARD	240VAC

FEEDER NUMBER	CONDUIT AND WIRE SIZE
1 2	2-1/2"C W/ 3#2 #6 ~~BARE~~ CU GEC

NEC LOAD CALCULATION PANEL A

LOAD TYPE	VA
LIGHTING @1.25	3,500
RECEPTACLES	180
TOTAL	3,680
	18 AMPS

A 100A, 120/240V SERVICE WILL HANDLE THE LOAD



1 ELECTRICAL ONE LINE DIAGRAM
NO SCALE

GENERAL NOTES:

A ALL SERVICE WORK SHALL COMPLY WITH KPU REQUIREMENTS.

B COORDINATE THE LOCATION OF THE INSERTS FOR SECURING THE UNISTRUT FRAMEWORK FOR PANEL A TO THE UTILITY PAD CONCRETE DECK: COORDINATE THE LOCATIONS OF THE INSERTS WITH THE BRIDGE DECK MANUFACTURER DURING THE SUBMITTAL PHASE. (DURING THE CONSTRUCTION PHASE, SHOOTING OR DRILLING FASTENERS INTO THE CONCRETE IS NOT ALLOWED.)

PANEL 'A' SCHEDULE

CKT. NO.	P	TRIP	LOAD SERVED	LOAD A	WATTS B	LOAD TYPE	CKT. NO.	P	TRIP	LOAD SERVED	LOAD A	WATTS B	LOAD TYPE
1	2	20	Bridge Lighting	700		L	2	1	20	Receptacle	180		G
3			" "		700	L	4	1	20	Spare		0	S
5	2	20	Bridge Lighting	700		L	6	1	20	Spare	0		S
7			" "		700	L	8	1	20	Space		0	H
9	2	20	Security Light near 1442	75		L	10	1	20	Space	0		H
11			" "		75	L	12	1	20	Space		0	S
13	2	20	Spare	0		S	14	1	20	Space	0		S
15			" "		0	S	16	2	50	Future Main CB for Split Bus		0	F
17				0		S	18			"	0		F
SPLIT BUS													
19	1	20	Space		0	S	20	1	20	Spare		0	S
21	1	20	Space	0		S	22	1	20	Space - Future Heat Tape	0		S
23	1	20	Space		0	S	24	1	20	Space - Future Heat Tape		0	S
25	1	20	Space	0		S	26	1	20	Space - Future Heat Tape	0		S
27	1	20	Space		0	S	28	1	20	Space		0	S
29	1	20	Space	0		S	30	1	20	Space	0		S
31	1	20	Space		0	S	32	1	20	Space		0	S

See Updated Schedule

225 AMP PANEL -MLO, 120/240, 1 PH, 3W
10,000 AIC, SURFACE MOUNTED, NEMA 1
SPLIT BUS 30 & 18 CKTS, GROUND BUS
BOTTOM CIRCUITS ARE FOR FUTURE HEAT TAPE CIRCUITS.
WHICH WILL BE FED FROM A SEPARATE ELECTRICAL SERVICE & METER

Panel 'A' Schedule
Main (Left Side)

Ckt No.	P	TRIP	SERVICE	Ckt No.	P	TRIP	SERVICE
1	2	100	Panel A Main Feed	2	2	20	Spare
3			" "	4			" "
5	2	20	Street Lts South-Poles 4,5,6	6	2	20	Spare
7			" "	8			" "
9	2	20	Street Lts North-Poles 1,2,3	10	1	20	Receptacle below panel
11			" "	12	1	20	Spare
13			Empty	14	1	20	Spare
15			Empty	19			Empty
17			Empty	21			Empty

SubMain (Right Side)

Ckt No.	P	TRIP	SERVICE	Ckt No.	P	TRIP	SERVICE
1	2	50	Panel Sub Feed	2	1	20	Spare
3			" "	4			Empty
5			Empty	6			Empty
7			Empty	8			Empty
9			Empty	10			Empty
11			Empty	12			Empty
13			Empty	14			Empty
15			Empty	16			Empty
17			Empty	18			Empty

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

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KCN12_000
TAB: H09

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
69534

ILLUMINATION PLAN

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
H09	H09

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N1	N110

Index As-Built notations:

if A, or A+B, A-C, etc. precedes N##, this indicates supplemental sheets related to the referenced N## sheet were added, labeled N##A etc.

if R succeeds the N##, this indicates the sheet was revised and replaced.

Added DCI-1 Bolt-down panel off loader

Insert CO#30 WW1 - WW7 here

Added DCI-2 Deep S.P. Shoring Method

BRIDGE DRAWING INDEX

	SHEET NO.	SHEET TITLE
		GENERAL
	N1	BRIDGE DRAWING INDEX
	N2	PROJECT GENERAL NOTES
		TRESTLE
	N3	TRESTLE GENERAL LAYOUT
	N4	TRESTLE ERECTION SCHEME
	N5	TRESTLE TYPICAL SECTIONS
	N6	TRESTLE SITE PLAN 1
	N7	TRESTLE SITE PLAN 2
	N8	TRESTLE ABUTMENT 1 LAYOUT
	N9	TRESTLE ABUTMENT 1 DETAILS
	N10	TRESTLE ABUTMENT 1 RETAINING WALL
	N11	TRESTLE ABUTMENT 2 LAYOUT
	N12	TRESTLE ABUTMENT 2 DETAILS
	N13	SOLDIER PILE WALL TABLE
	N14	WALL ELEVATION UNIT 1
	N15	WALL ELEVATION UNIT 2
	N16	WALL ELEVATION UNIT 3
	N17	WALL ELEVATION UNIT 4
	N18	WALL ELEVATION UNIT 5 & 6
	N19	SOLDIER PILE WALL FACE
A	N20	SOLDIER PILE WALL OPEN FACE
A	N21	SOLDIER PILE WALL SECTIONS
A	N22	SOLDIER PILE WALL CAP BEAM
A	N23	STUB WALL DETAILS
	N24	WALL MOUNTED CATCH BASIN DETAILS
A-D	N25	FOOTING DETAILS 1
	N26	FOOTING DETAILS 2
A-H	N27	FOOTING DETAILS 3
	N28	SOLDIER PILE WALL TIE BACK ANCHOR
A	N29	CORBEL ANCHOR
	N30	SHAFT FOOTING ANCHOR
A+B	N31	TRESTLE FRAMING PLAN
	N32	COLUMN DETAILS 1
	N33	COLUMN DETAILS 2
	N34	COLUMN FIELD EXTENSION DETAILS
	N35	EDGE BEAM DETAILS 1
	N36	EDGE BEAM DETAILS 2
A	N37	EDGE BEAM SPLICE DETAILS
	N38	EDGE BEAM EXPANSION JOINT DETAILS
	N39	EDGE BEAM ABUTMENT BEARINGS
	N40	DECK PANEL LAYOUT 1
	N41	DECK PANEL LAYOUT 2
	N42	DECK PANEL A
	N43	DECK PANEL B
	N44	DECK PANEL C
	N45	DECK PANEL D
	N46	DECK PANEL E
	N47	DECK PANEL F
	N48	DECK PANEL G
	N49	DECK PANEL H
	N50	DECK PANEL I
	N51	DECK PANEL J
	N52	DECK PANEL K
	N53	DECK PANEL L
	N54	DECK PANEL M
	N55	DECK PANEL N
A	N56	DECK PANEL DETAILS 1
	N57 R	DECK PANEL DETAILS 2
	N58	DECK PANEL DETAILS 3
	N59	LUMINAIRE MOUNTING BRACKET
	N60	TRESTLE APPROACH SLAB
	N61	STRIP SEAL
	N62	EXPANSION JOINT LAYOUT
		RETAINING WALL
	N63	RETAINING WALL LAYOUT
	N64	RETAINING WALL NOTES & SECTION
	N65	RETAINING WALL DETAILS
		BRIDGE
	N66	BRIDGE GENERAL LAYOUT
	N67	BRIDGE ERECTION SCHEME
	N69	BRIDGE SITE PLAN
	N70	BRIDGE ABUTMENT 1 LAYOUT
	N71	BRIDGE ABUTMENT 1 DETAILS
	N72	BRIDGE ABUTMENT 2 LAYOUT
	N73	BRIDGE ABUTMENT 2 DETAILS
	N74 R	GORGE STREET WALL LAYOUT
	N68	GORGE STREET WALL ERECTION SCHEME
A+B	N75 R2	GORGE STREET WALL REINFORCING LAYOUT
	N76 R	GORGE STREET WALL REINFORCING DETAILS
	N77	GORGE STREET PLATFORM DETAILS 1
	N78	GORGE STREET PLATFORM DETAILS 2
	N79	GORGE STREET PLATFORM DETAILS 3
	N80	FRAMING PLAN & TYPICAL SECTION
	N81	GIRDERS
	N82	GIRDER CONNECTION DETAILS
	N83	UNDER BRIDGE ACCESS
	N84	BRIDGE APPROACH SLAB
		MISCELLANEOUS
	N85	ROCK ANCHOR
PND	N86	STEEL AND TIMBER BRIDGE RAILING 1
	N87	STEEL AND TIMBER BRIDGE RAILING 2
A-D	N88 R	STEEL AND TIMBER BRIDGE RAILING 3
A	N89	STEEL AND TIMBER BRIDGE RAILING 4
	N90	SIDEWALK PEDESTRIAN RAILING
A	N91	INLET STRUCTURE
	N92	SIDEWALK, CURB AND GUTTER
A	N93	UTILITY HANGERS 1
A	N94 R	UTILITY HANGERS 2
	N95	UTILITY PLATFORM PLAN
	N96	UTILITY PLATFORM ELEVATION
	N97	UTILITY PLATFORM SECTION
	N98	UTILITY PLATFORM DETAILS 1
	N99	UTILITY PLATFORM DETAILS 2
	N100	UTILITY PLATFORM DETAILS 3
	N101	UTILITY PLATFORM DETAILS 4
	N102	DECK PANEL OVERHANG PLAN 1
	N103	DECK PANEL OVERHANG PLAN 2
A+B	N104	OVERHANG EDGE PLATE DETAILS
A-C	N105	PEDESTRIAN RAILING DETAILS
	N106	TIMBER STAIR PLAN
	N107	TIMBER STAIR DETAILS 1
A+B	N108	TIMBER STAIR DETAILS 2
	N109	TIMBER STAIR DETAILS 3
	N110	DECK SHORING

Added DCI-4 Utility Platforms RFI#158

Added DCI-3 Girder Launcher Anchors in Abt.1

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer		
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer		
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

WATER STREET BRIDGE No. 2

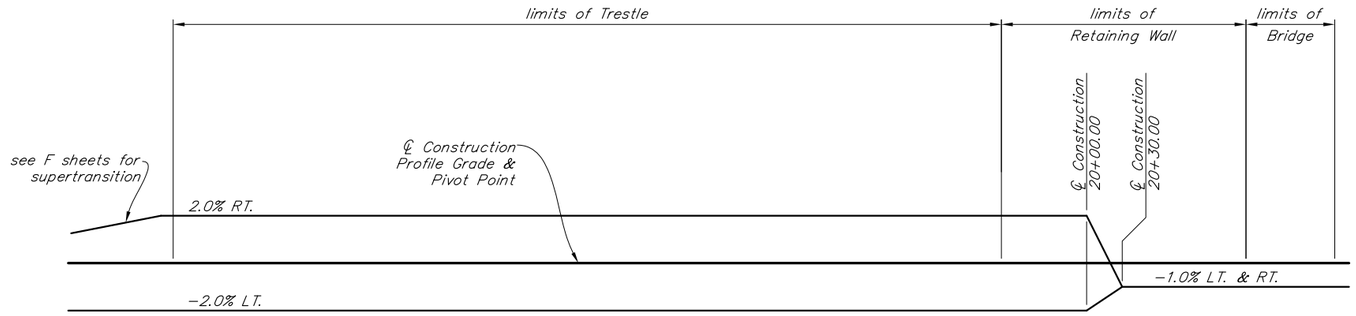
WATER STREET

BRIDGE DRAWING INDEX

BRIDGE NO. 0446
DWG. NO. 1

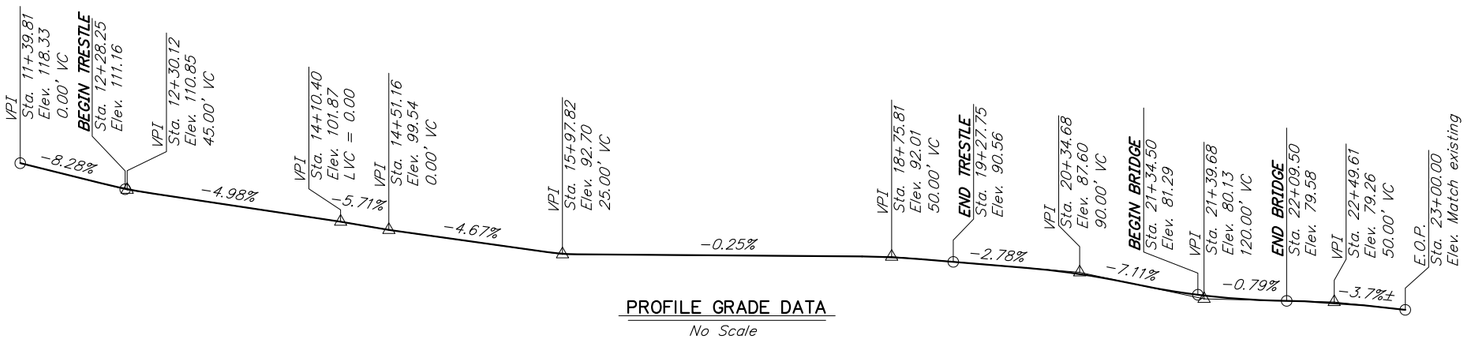
Oct 14, 2015 - 3:43pm bhen \\shearerserver\jobs\0226 water street ps&e\DWG\dataset ados\plt\69534_N BRIDGE DRAWINGS INDEX.dwg Layout Name: BRIDGE DRAWING INDEX

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N2	N110



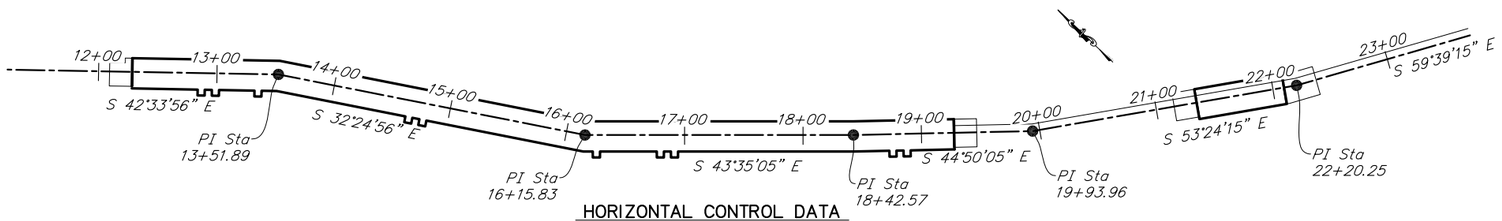
SUPERELEVATION DIAGRAM

No Scale



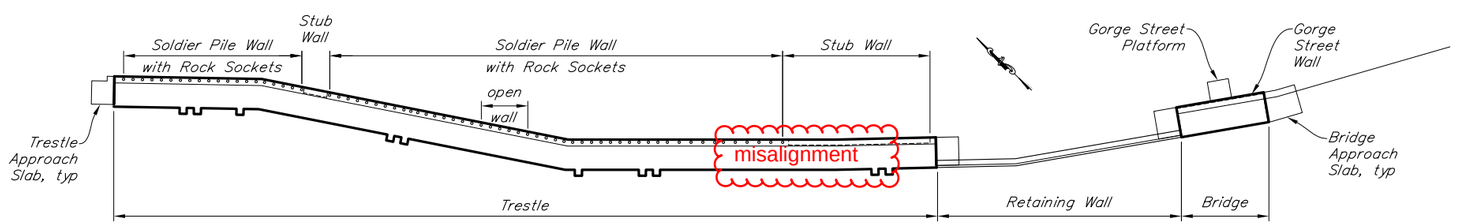
PROFILE GRADE DATA

No Scale



HORIZONTAL CONTROL DATA

No Scale



PROJECT COMPONENT LAYOUT

No Scale

PROJECT GENERAL NOTES

1. For survey control information see the "A" series drawings.
2. The contractor shall maintain public access to residences along project for the duration of the project.
3. The Erection Schemes depict one possible construction sequence concept for each location, other erection schemes are permissible. Full erection plans must be approved by the Engineer prior to construction.
4. Physical Site Conditions:
   A. Expect bedrock to vary in degree of weathering and hardness laterally and vertically.
   B. Expect soil overburden above the bedrock will vary in depth.
   C. Expect long periods of rainfall. The average annual precipitation is 155 inches.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

AB

As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER CE 8373 10/4/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

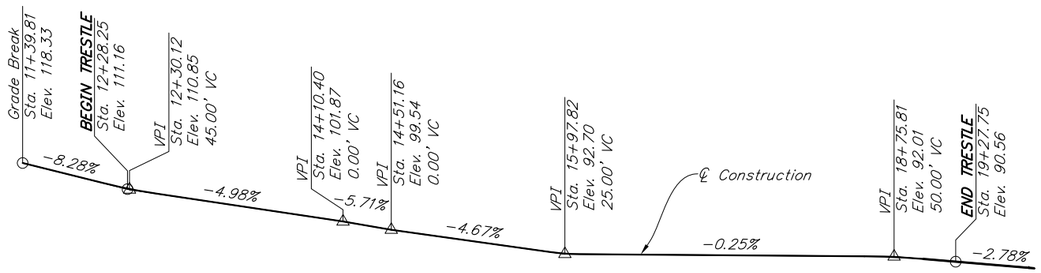
PROJECT GENERAL NOTES

BRIDGE NO. 0446

DWG. NO. 2

Oct 14, 2015 - 3:43pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N PROJECT GENERAL NOTES.dwg Layout Name: PROJECT GENERAL NOTES

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N3	N110



PROFILE GRADE DATA

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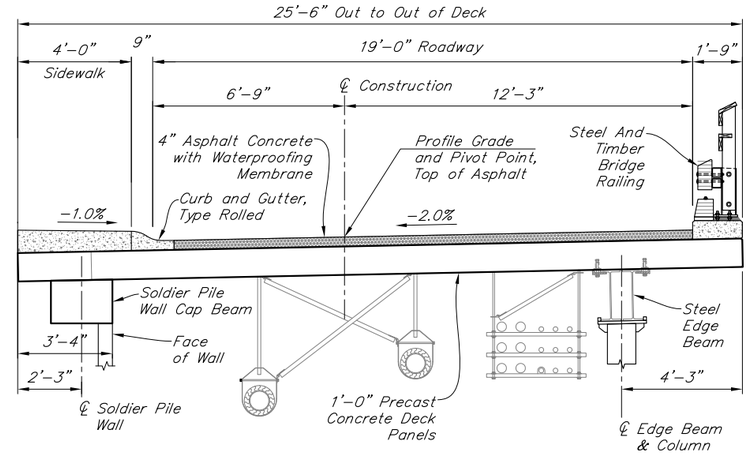
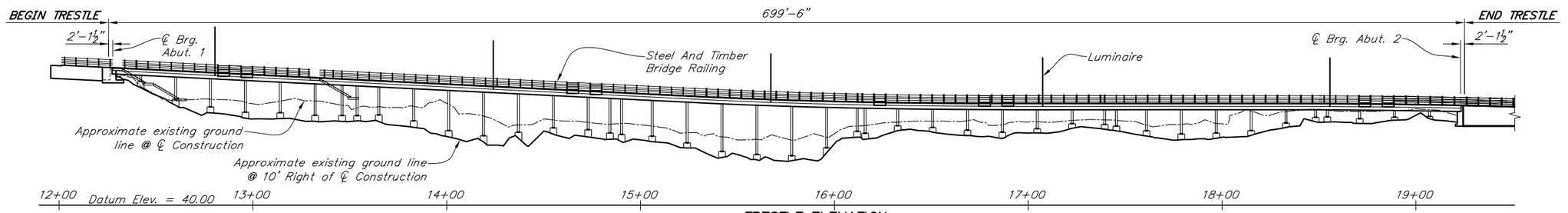


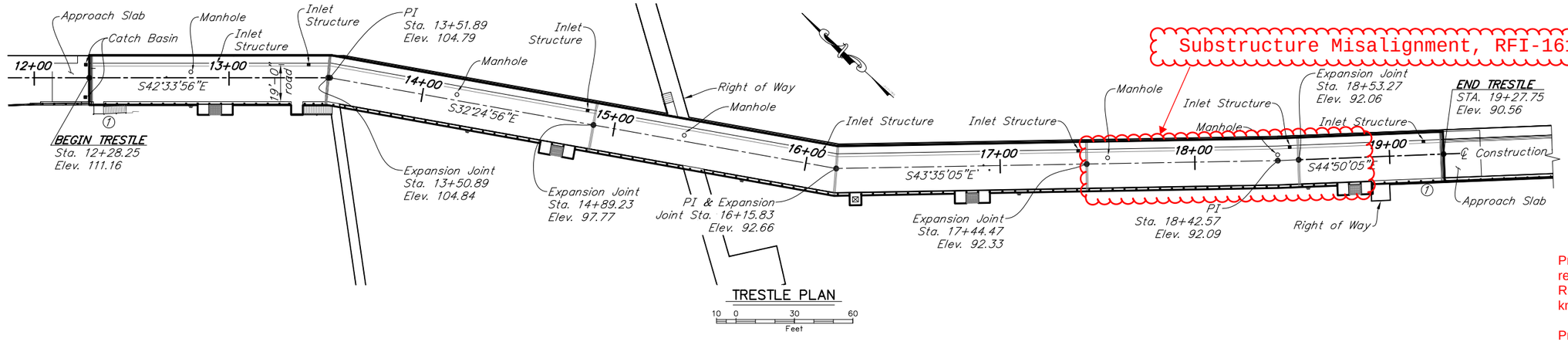
TYPICAL TRESTLE SECTION

12 0 2 4 6
In. Feet



TRESTLE ELEVATION

10 0 30 60
Feet



Substructure Misalignment, RFI-161, N31A+N31B

TRESTLE PLAN

10 0 30 60
Feet

① APPROXIMATE LOCATION OF BRIDGE NUMBER PLATE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	LAYOUT BY: Joshua Pruitt	CHECKED BY: David Shearer
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	SPECIFICATIONS BY: David Shearer	P S & E COMPARED:
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	APPROVAL RECOMMENDED BY:	

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

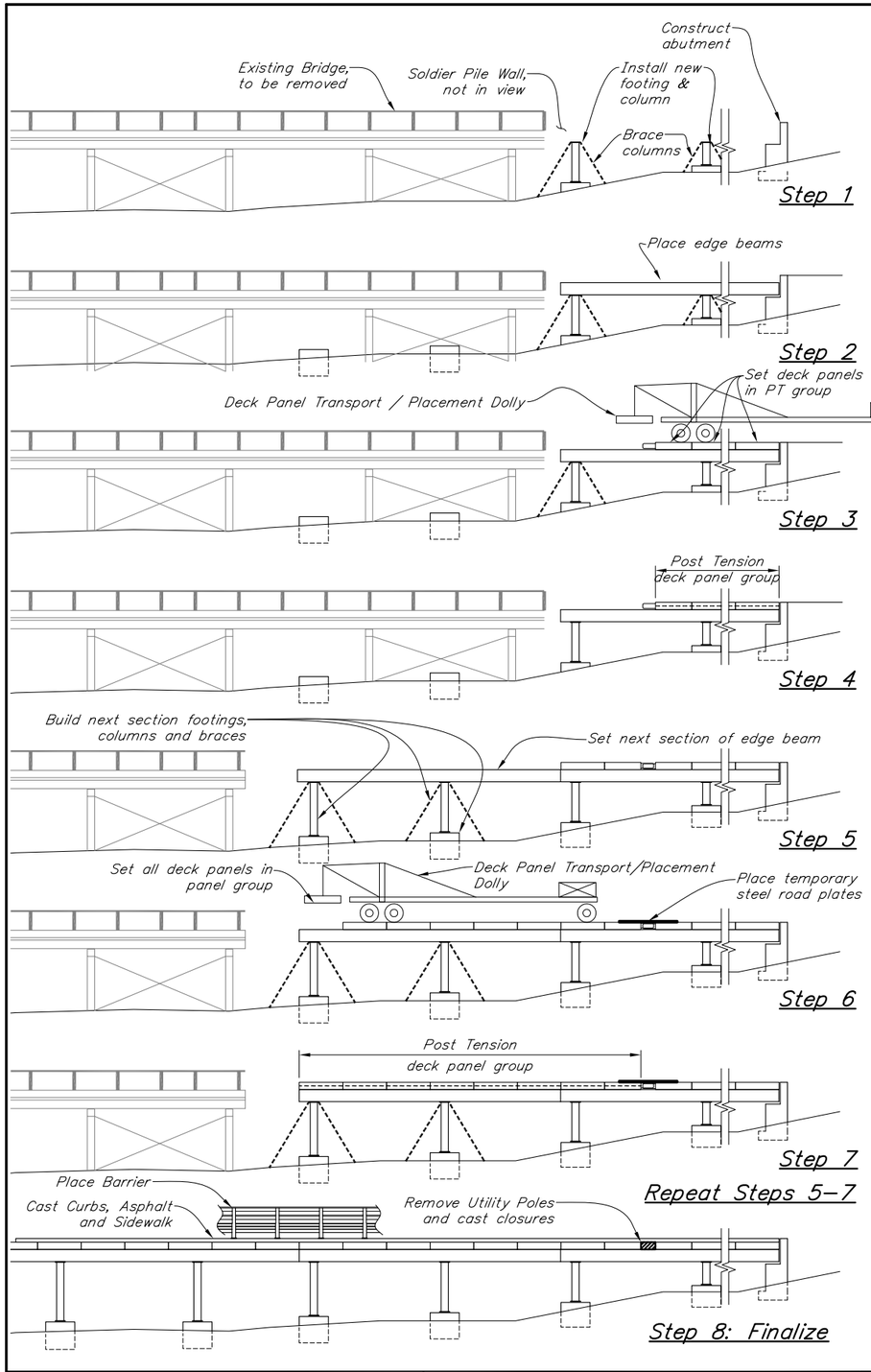
WATER STREET

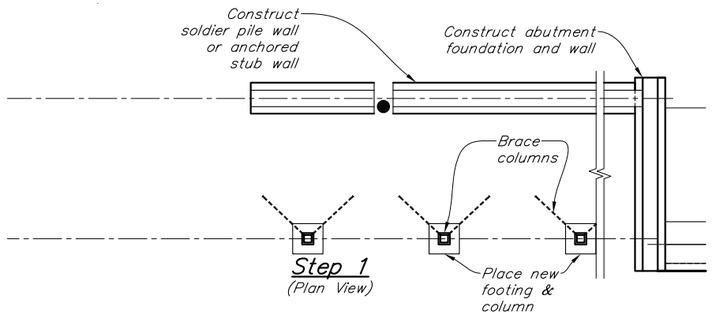
TRESTLE GENERAL LAYOUT

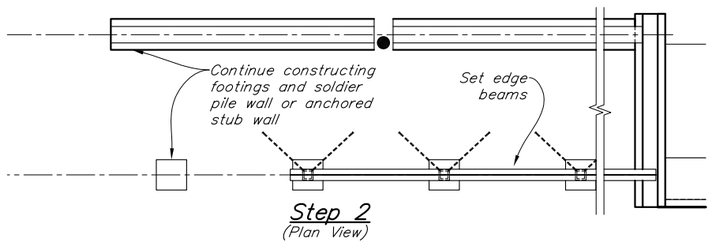
BRIDGE NO. 0446
DWG. NO. 3

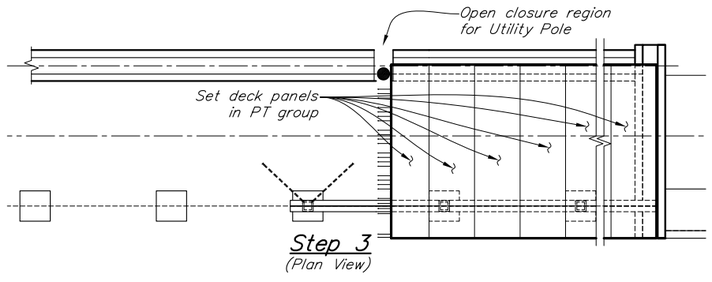
Oct 14, 2015 - 3:43pm bfein \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\ado\fi69534_N20 TRESTLE LAYOUT.dwg Layout Name: TRESTLE GENERAL LAYOUT

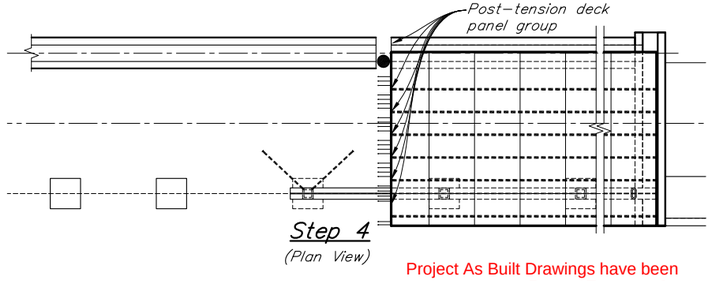
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N4	N110





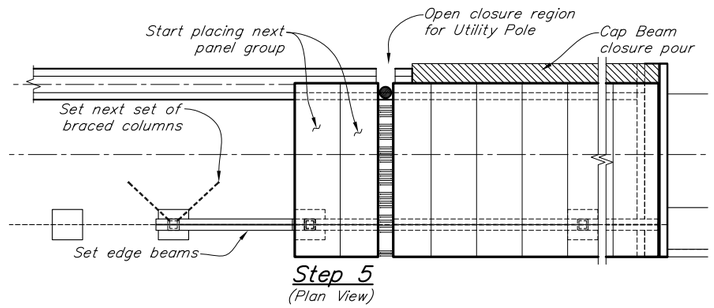


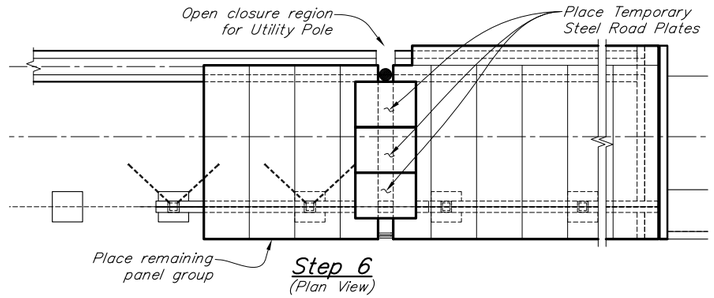


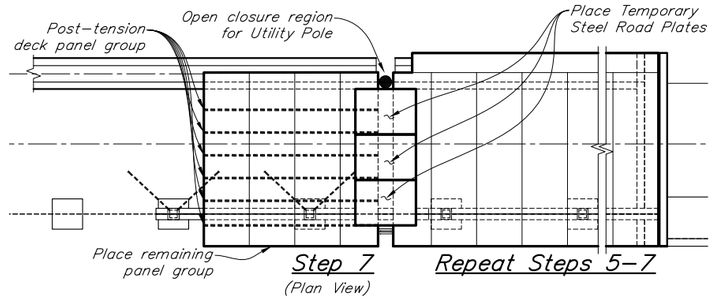


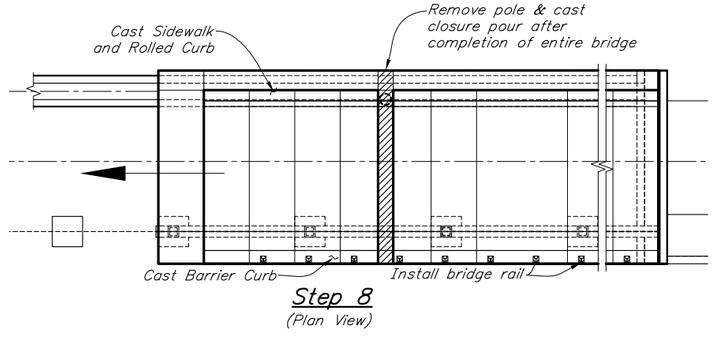
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019









RFI-145 Bolt Down Details for P/C Panel Offloader *See next page*

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

TRESTLE ERECTION SCHEME

BRIDGE NO. 0446
DWG. NO. 4

Oct 14, 2015 - 3:43pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset addi&pf\69534 N22 TRESTLE ERECT.dwg Layout Name: TRESTLE ERECTION SCHEME

SHEARER DESIGN LLC.
Bridge Design, Construction Engineering and Infrastructure Aesthetics
3613 Phinney Ave N #B
Seattle, WA 98103
(206) 781-7830

Water Street Trestle #2 Replacement

Construction Support Memorandum: 181

February 24, 2017

To: John Scott, HDR

RFI #145

Subject: Bolt down for Off loader

Response:

Four sets of 2- ¾" dia holes may be drilled in the approach slab or panel joints for the proposed equipment at two locations:

- ~~South approach slab~~ Only used at Bulb Tee Girder Bridge Abutment #1 Approach Slab
- ~~One other location on the bridge deck~~. Not done

Dawson should request additional locations if needed.

Holes should not be located on the prestressed panels but placed in the joint between the panels.

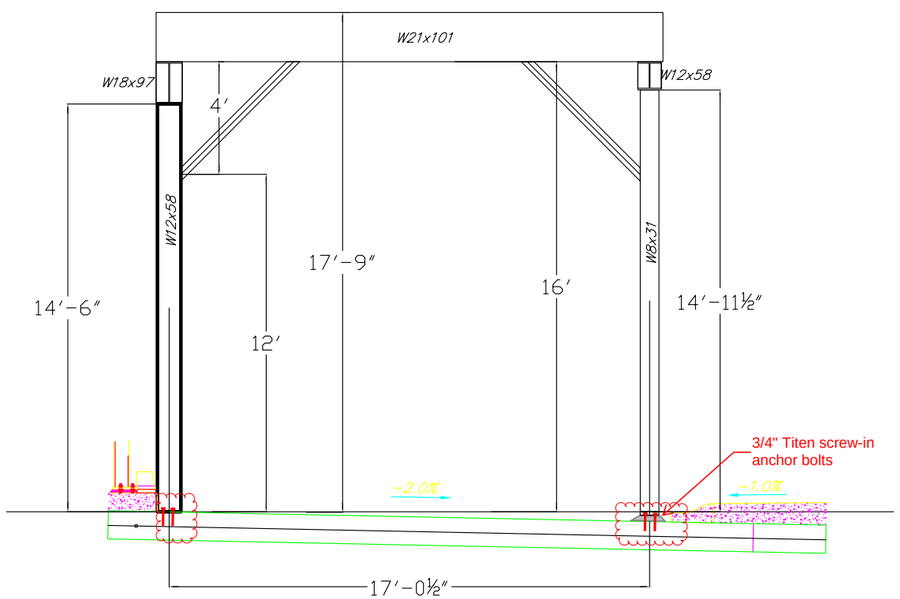
Holes in the approach slab should be located to miss any reinforcement.

After removal of the anchor bolts, the holes should be filled with an approved epoxy.

David Shearer, S.E.

Bridge Engineer
SHEARER DESIGN

Panel offloader Frame



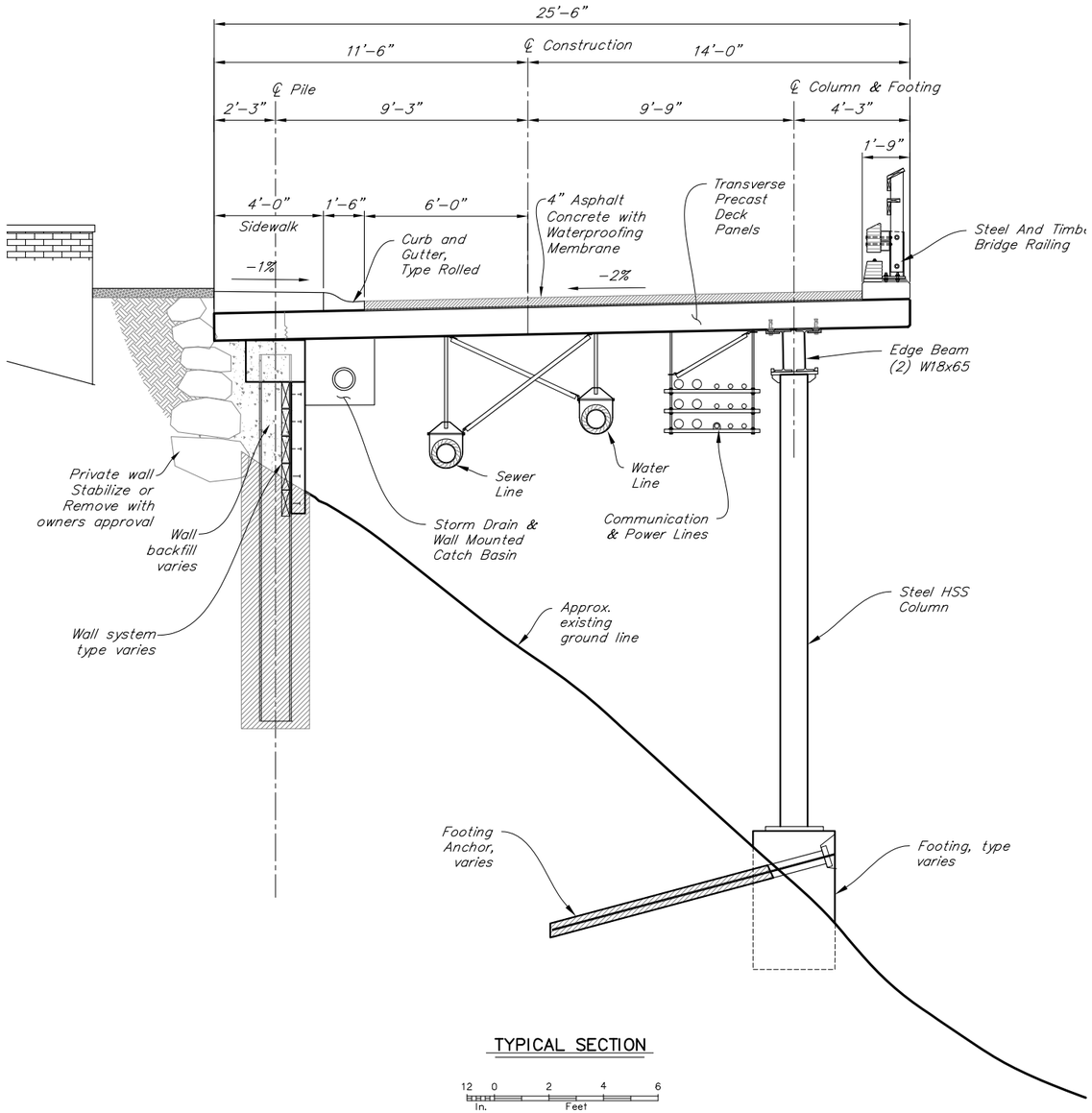
AB As-Built Set

DCI-1

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

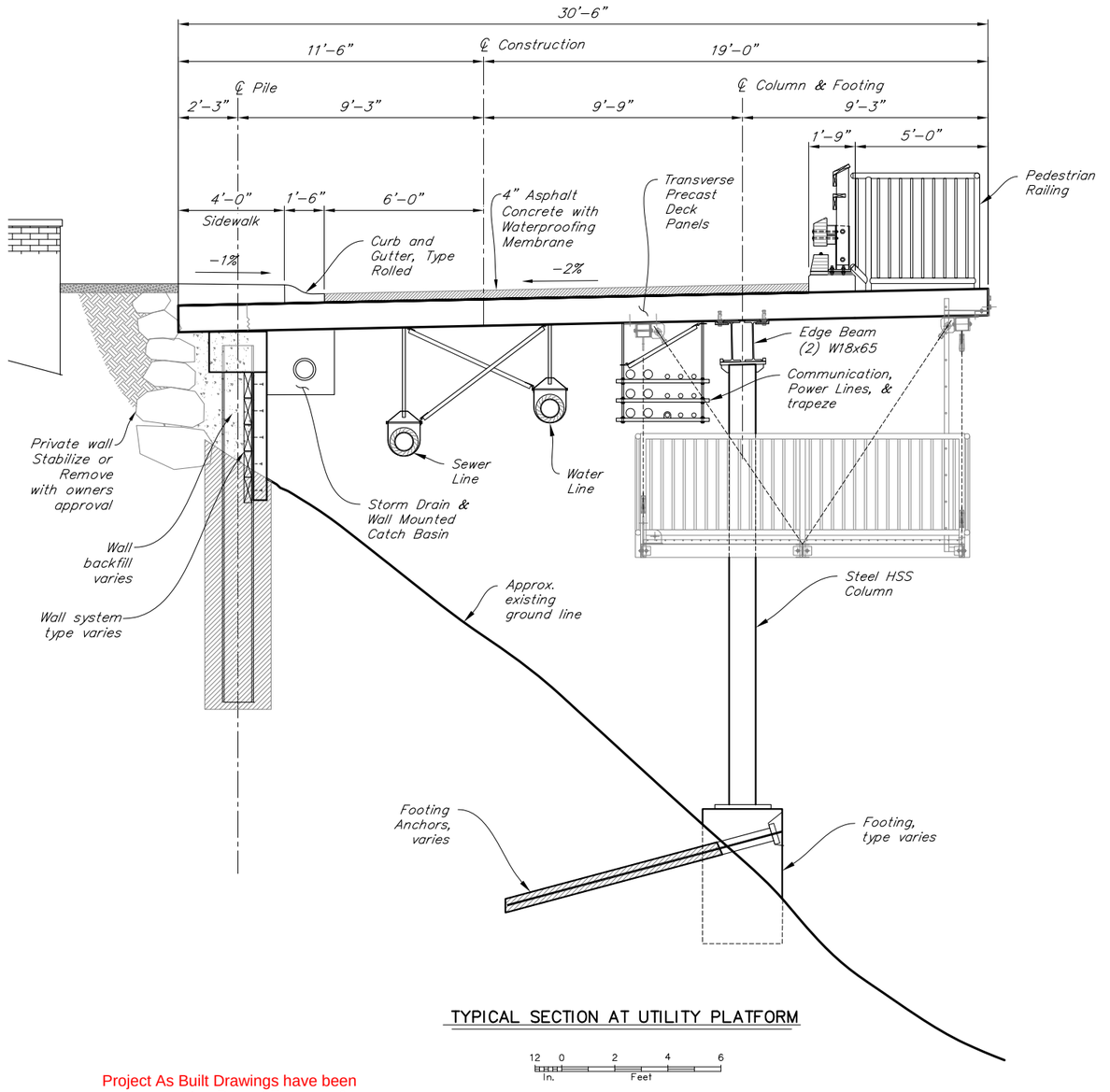
Project Eng.: Date: 9/5/2019

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N5	N110



TYPICAL SECTION

12 0 2 4 6
In. Feet



TYPICAL SECTION AT UTILITY PLATFORM

12 0 2 4 6
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom		
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB	As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
10/14/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

TRESTLE TYPICAL SECTIONS

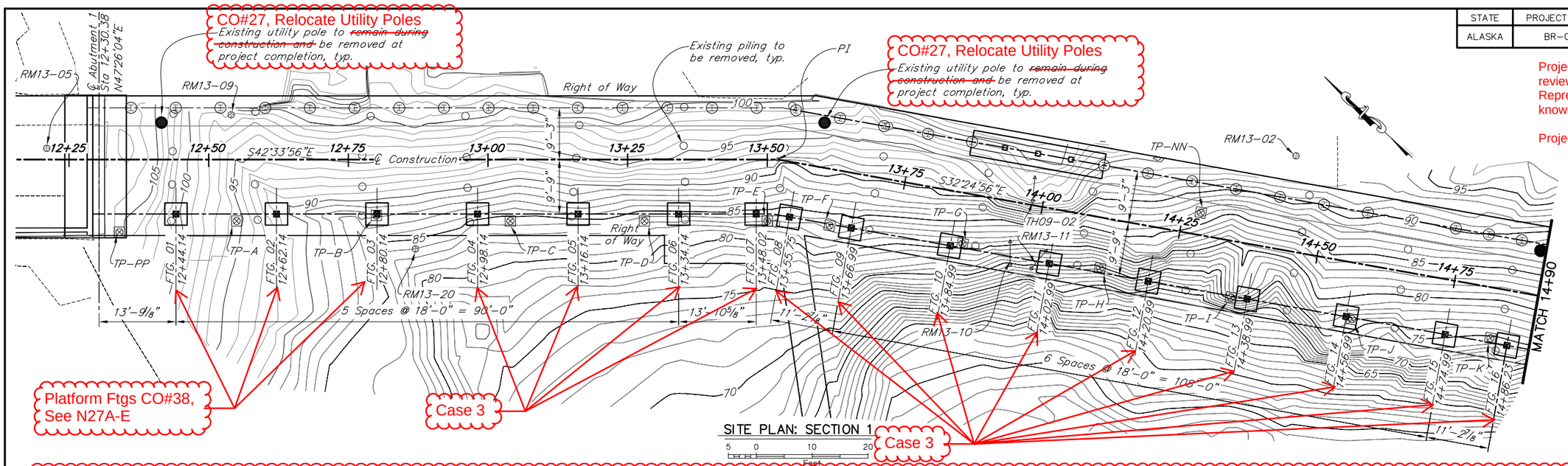
BRIDGE NO. 0446
DWG. NO. 5

Oct 14, 2015 - 3:43pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\605534_N Trestle Typical Sections.dwg Layout Name: TRESTLE TYPICAL SECTIONS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N6	N110

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019



TRESTLE BASIS OF ESTIMATE

ITEM NO.	ITEM	PAY UNIT	EST. UNIT	SUBST.	SUPERST.	TOTAL
202(13)	Removal of Existing Bridge No. 446	LS	SF	–	16,597	16,597
205(1)	Excavation For Structures	CY	CY	~~626~~ +/-680	–	~~626~~ +/-680
205(3)	Structural Fill	CY	CY	~~800~~ +/-1320	–	~~800~~ +/-1320
205(4)	Porous Backfill Material	CY	CY	~~200~~ 165.89	–	~~200~~ 165.89
205(5)	Excavation For Structures (Rock)	CY	CY	~~120~~ +/-400	–	~~120~~ +/-400
205(6)	Rock Socket (24" Diam)	LF	LF	~~507~~ 598.19	–	~~507~~ 598.19
~~205(7)~~	~~Rock Socket (48" Diam)~~	~~LF~~	~~LF~~	~~15~~		~~15~~
401(1)	Asphalt Concrete, Type II; Class B	Tons	Tons	–	+/-332	+/-332
501(2)	Class A-A Concrete	CY	CY	–	126	126
501(3)	Class A Concrete	CY	CY	~~448~~ +/-700	– +/-700	~~448~~
501(7)	Precast Concrete Member (12" Deck Panel)	EA	EA	–	114	114
502(1)	Post-Tensioning (1 1/4" Bar)	LBS	LBS	–	22,600	22,600
503(1)	Reinforcing Steel	LBS	LBS	~~98,200~~ ← 103,155.22 →		~~98,200~~
503(2)	Epoxy-Coated Reinforcing Steel	LBS	LBS	36,542.07 →	~~34,500~~	~~34,500~~
504(1)	Structural Steel	LS	LBS	–	191,000	191,000
505(5a)	Furnish Soldier Pile W12x79 552.85' actually installed	LF	LF	~~648~~ 608	–	~~648~~ 608
505(5b)	Furnish Soldier Pile W12x96 463.02' actually installed	LF	LF	~~517~~ 530	–	~~517~~ 530
505(5c)	Furnish Soldier Pile W12x120 227.67' actually installed	LF	LF	~~153~~ 286.67	– 286.67	~~153~~
~~505(7)~~	~~Furnish Shaft Footing Casing (48" Diam)~~	~~LF~~	~~LF~~	~~125~~	–	~~125~~
~~505(8)~~	~~Set Shaft Footing Casing (48" Diam)~~	~~EA~~	~~EA~~	~~5~~		~~5~~
507(7)	Steel And Timber Bridge Railing	LF	LF	–	+/-714	+/-714
507(8)	Sidewalk Pedestrian Railing	LF	LF	–	~~54~~ 53.45	~~54~~
507(9)	Pedestrian Railing	LF	LF	–	~~296~~ 298.57	~~296~~
508(1)	Waterproofing Membrane	LS	SY	–	1,526	1,526
516(1)	Expansion Joint (Strip Seal)	LF	LF	–	~~177~~ 169.83	~~177~~
516(2)	Bearings (Elastomeric Bearing Pad)	EA	EA	–	2	2
673(1)	Soldier Pile Wall Tie Back Anchor	EA	EA	~~10~~ 8	–	~~10~~ 8
673(3)	Abutment Anchor	EA	EA	3	–	3
673(4)	Footing Anchor	EA	EA	~~12~~ 70	–	~~12~~ 70

CO#38 Eliminates item
CO#38 Eliminates item
CO#38 Eliminates item

ITEM NO.	ITEM	PAY UNIT	EST. UNIT	SUBST.	SUPERST.	TOTAL
673(5)	Stub Wall Anchor	EA	EA	18	–	18
673(6)	Corbel Anchor	EA	EA	~~12~~ 0	–	~~12~~ 0
673(7)	Shaft Footing Anchor	EA	EA	~~10~~ 6	–	~~10~~ 6
673(9)	Rock Dowel	EA	EA	~~456~~ 300	–	~~456~~ 300
673(10)	Stabilization Anchor	EA	EA	~~40~~ 6	–	~~40~~ 6

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2012 6th Edition, with latest interim specifications.

CONSTRUCTION SPECIFICATION:..... The Bridge Engineering Specifications shall be governed by the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2015.

LIVE LOAD:..... HL-93

DEAD LOAD:..... Includes 50 PSF for Wearing Surface (4" Asphalt).

SEISMIC PARAMETERS:..... PGA = 0.085g (0.0 sec.)
Ss = 0.185g (0.2 sec.)
S1 = 0.141g (1.0 sec.)
Site Class "D" at Abutment 1, "B" everywhere else
Liquefaction Potential = negligible
AASHTO 7% probability of exceedance in 75 years.

REINFORCEMENT:..... ASTM A706, fy = 60,000 psi
Space reinforcing steel evenly unless otherwise noted. Reinforcement is not drawn to scale for clarity. Epoxy coat reinforcing where noted.

CONCRETE:..... CLASS A f'c = 4,000 psi. CLASS A-A f'c= 5,000 psi unless noted otherwise
See Section 501-2.02 for f'cr requirements
Revise General Note: Concrete: "Unless noted otherwise concrete shall be Class A."

Addendum 2

PRECAST CONCRETE:..... See deck panel drawings.

STRUCTURAL STEEL:..... Soldier Pile Wall: ASTM A709, fy 50,000 psi.
Columns & Edge Beams: See Trestle Framing Plan.

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

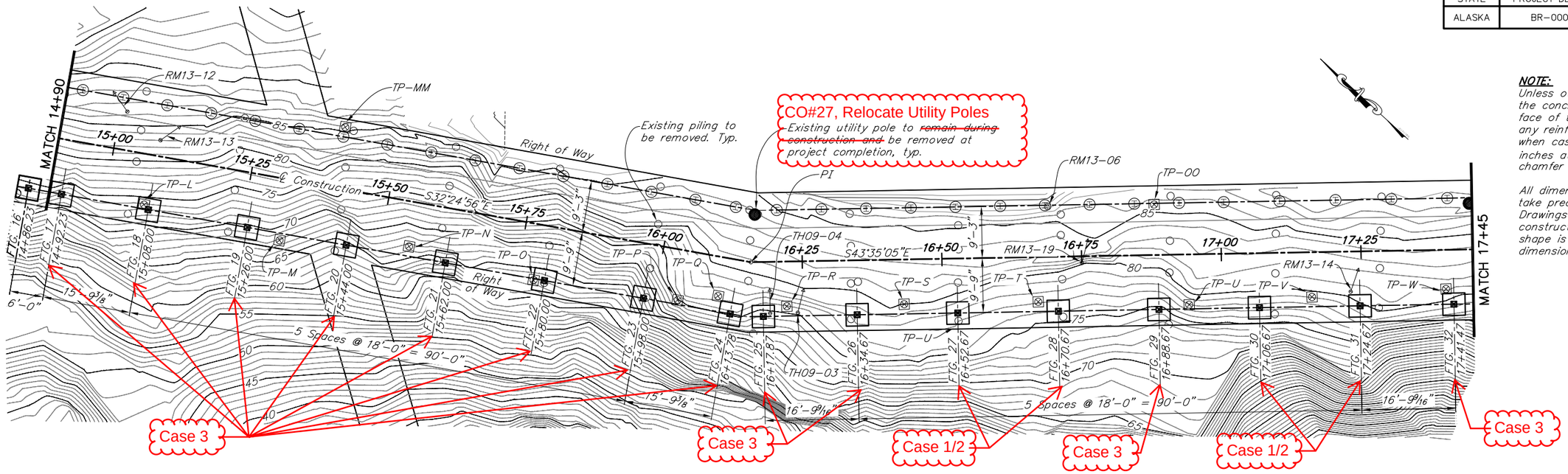
WATER STREET

TRESTLE SITE PLAN 1

BRIDGE NO. 0446
DWG. NO. 6

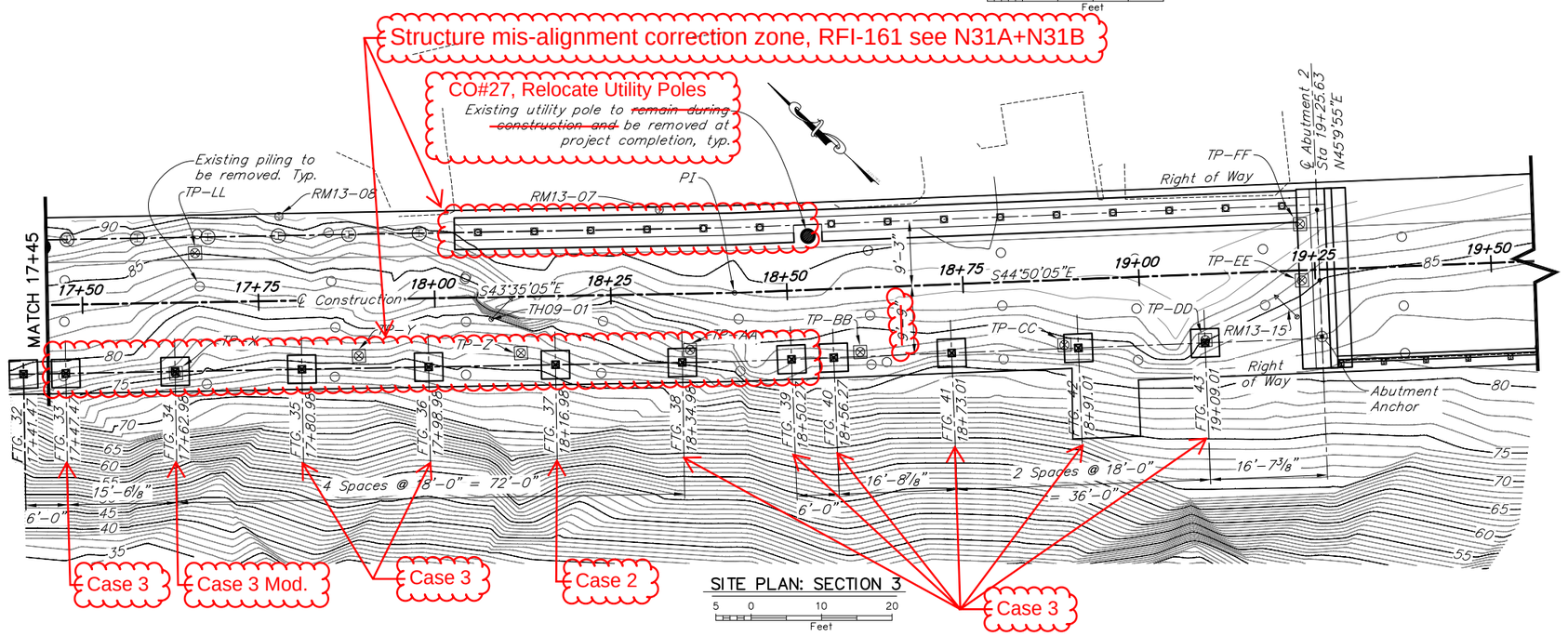
Oct 14, 2015 - 3:43pm bfen \\shearerserver\jobs\0226 water street ps&e\DWG\planset ao\bfp\69534_N20 TRESTLE SITE PLAN.dwg Layout Name: TRESTLE SITE PLAN 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N7	N110



SITE PLAN: SECTION 2

5 0 10 20 Feet



SITE PLAN: SECTION 3

5 0 10 20 Feet

NOTE:
Unless otherwise shown in the plans, the concrete cover measured from the face of the concrete to the face of any reinforcing steel shall be 3 inches when cast against the ground, and 2 inches at all other locations. 3/4 inch chamfer on all exposed edges.

All dimensions on these drawing shall take precedence over indicated scale. Drawings shall not be scaled for construction purposes. No length or shape is implied unless it is dimensioned.

SYMBOLS & ABBREVIATIONS

℄	= Centerline	Lb	= pound
P	= Plate	LF	= linear foot
&	= and	LS	= lump sum
@	= at	Lt.	= left
ø	= diameter	max.	= maximum
Approx.	= approximate	min.	= minimum
Abut.	= Abutment	n.a.	= not applicable
bot.	= bottom	N.I.C.	= not in contract
Br.	= Bridge	n.c.	= not calculated
btwn.	= between	n.f.	= near face
Brg.	= Bearings	No.	= number
C.I.P.	= cast in place	O.H.W.	= Ordinary High Water
Clr.	= clear, clearance	PVC	= Point of Vertical Curve
Col.	= column	PVI	= Point of Vertical Intersection
C.J.	= construction joint	PVT	= Point of Vertical Tangent
CY	= cubic yard	Rt.	= right
Dia	= diameter	Sch.	= schedule
Dwg.	= drawing	Spa.	= space, spaces
Ea	= each	Sta.	= station
Elev.	= elevation	Str.	= straight
E.F.	= each face	SY	= square yard
E.W.	= each way	Symm.	= symmetric
F.F.	= far face	Typ.	= typical
FTG.	= footing		= Vertical Boring
Galv.	= galvanize, galvanized		= Angled Boring
Hwy.	= highway		= Test Pit
H.S.	= high strength		
Kip	= 1,000 lb.		

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer		
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer		
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer		

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 9/9/15

WATER STREET BRIDGE No. 2

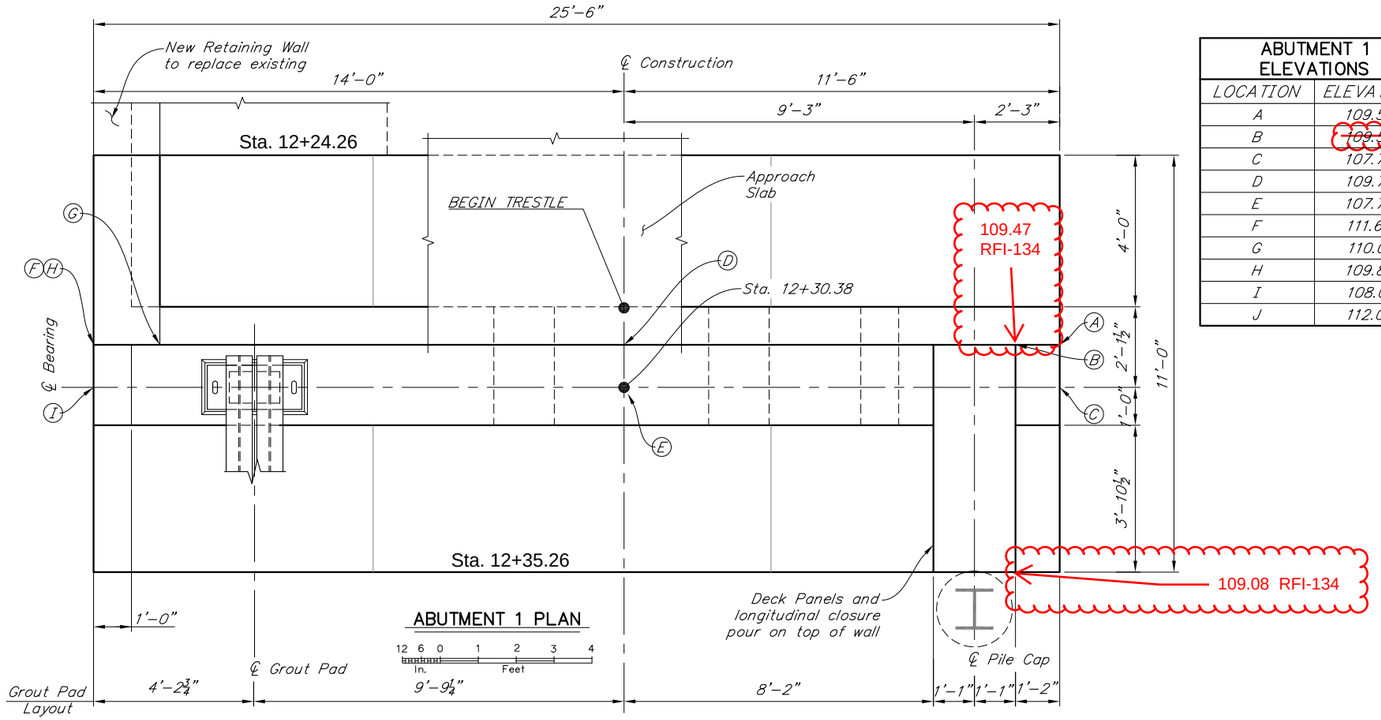
WATER STREET

TRESTLE SITE PLAN 2

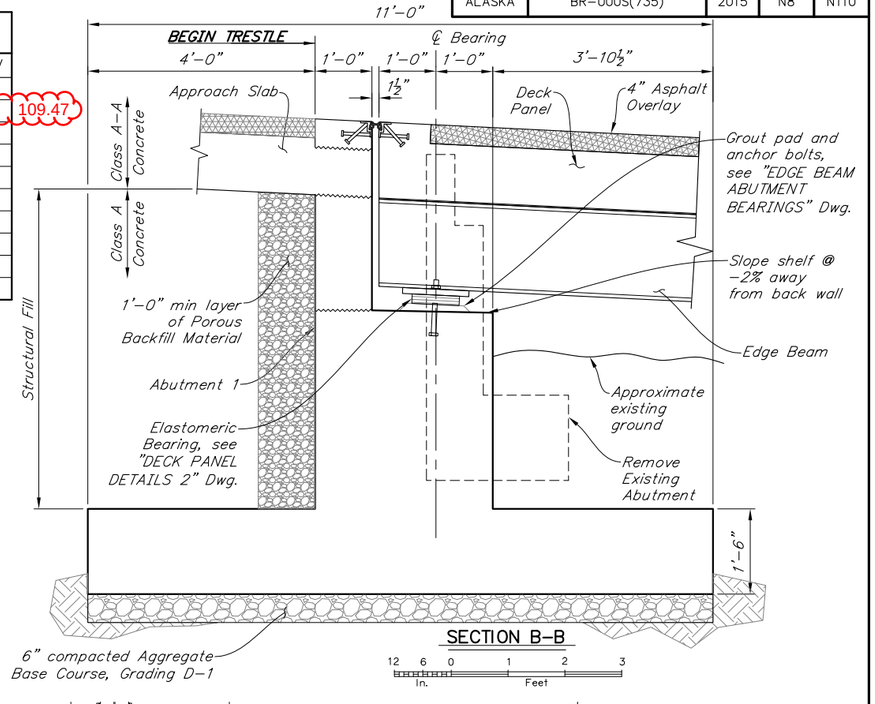
BRIDGE NO. 0446
DWG. NO. 7

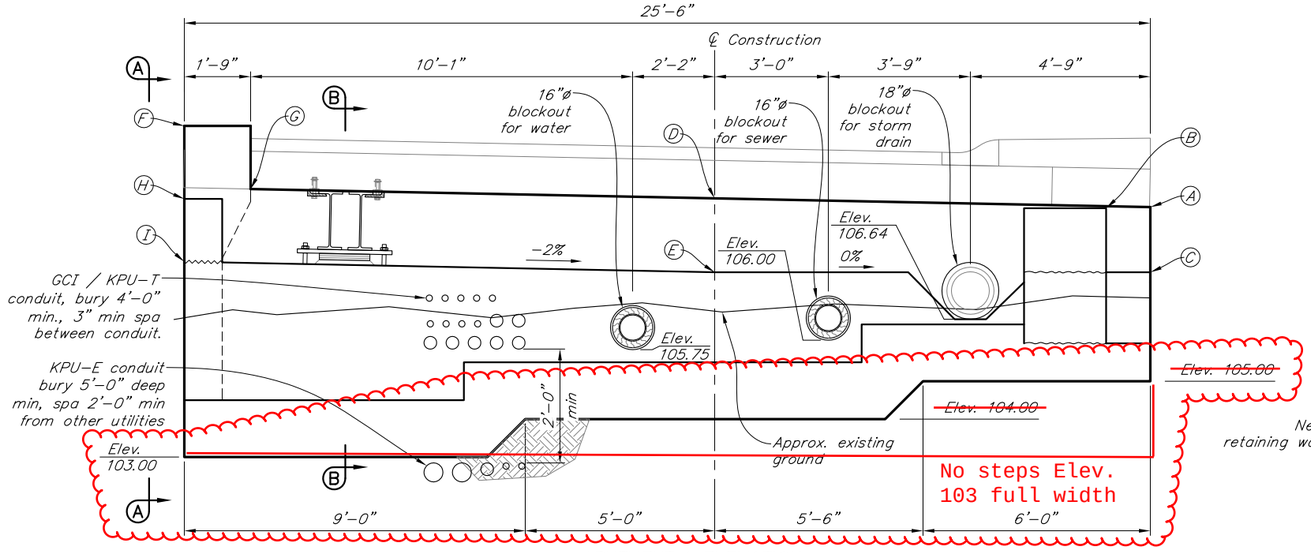
Oct 14, 2015 - 3:43pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N20 TRESTLE SITE PLAN.dwg Layout Name: TRESTLE SITE PLAN 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N8	N110



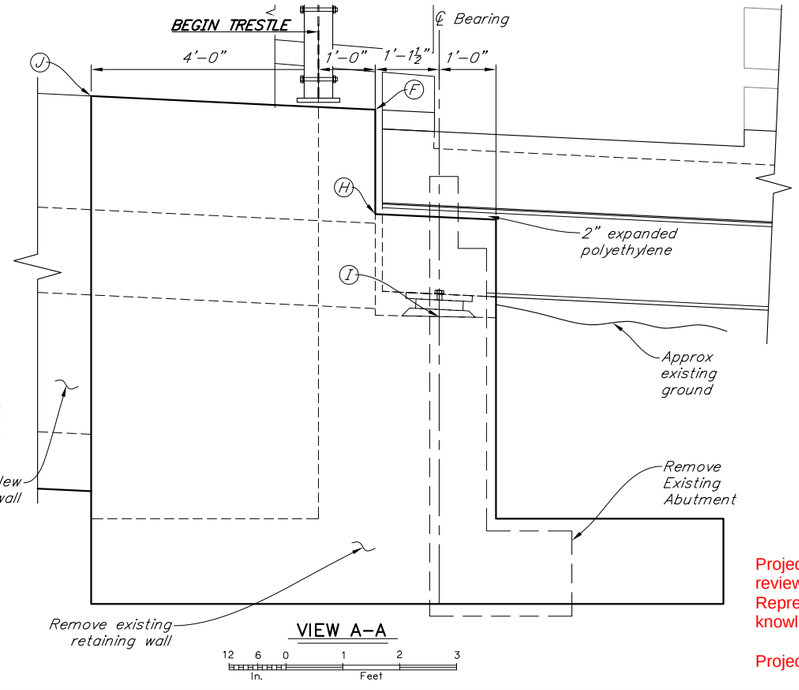
ABUTMENT 1 ELEVATIONS	
LOCATION	ELEVATION
A	109.53
B	~~109.56~~ 109.47
C	107.73
D	109.76
E	107.73
F	111.67
G	110.01
H	109.88
I	108.01
J	112.02





Blockout elevations on front face of abutment wall

Coordinate conduit quantity and location prior to casting abutment wall



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer		
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

AB As-Built Set

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

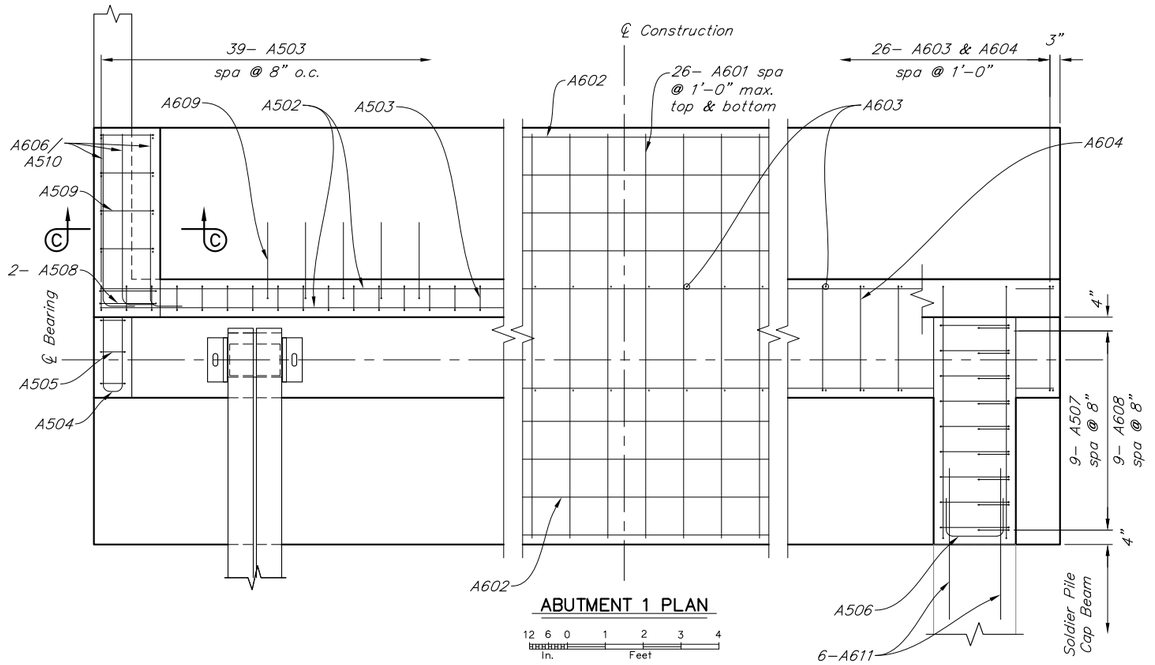
TRESTLE ABUTMENT 1 LAYOUT

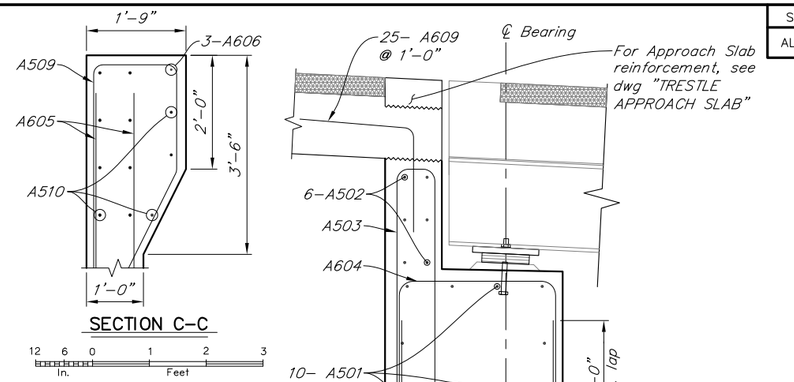
BRIDGE NO. 0446

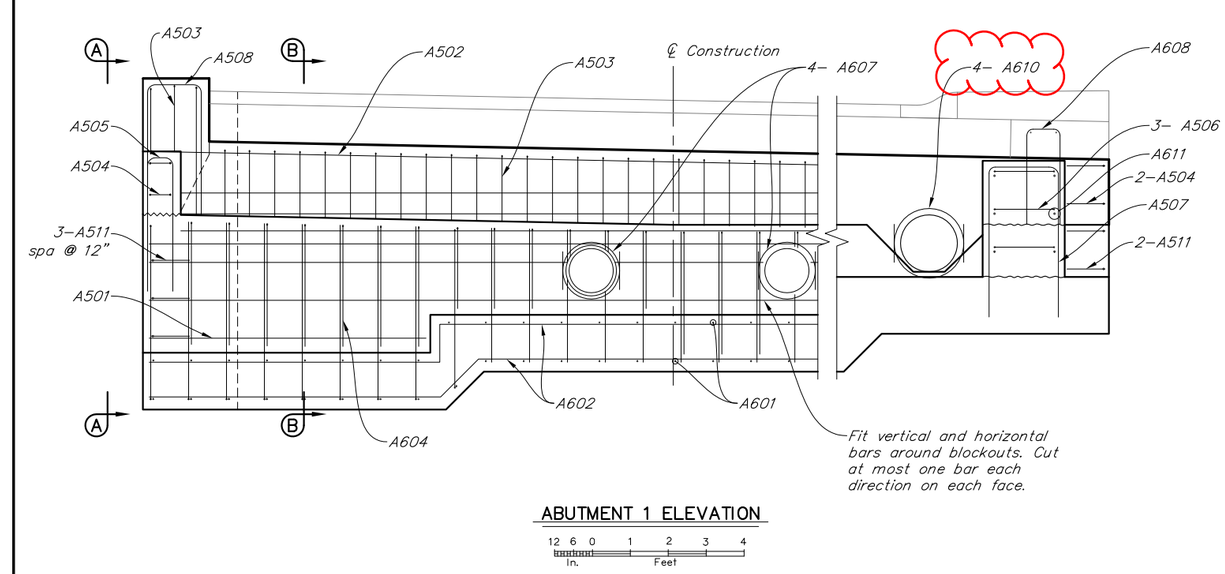
DWG. NO. 8

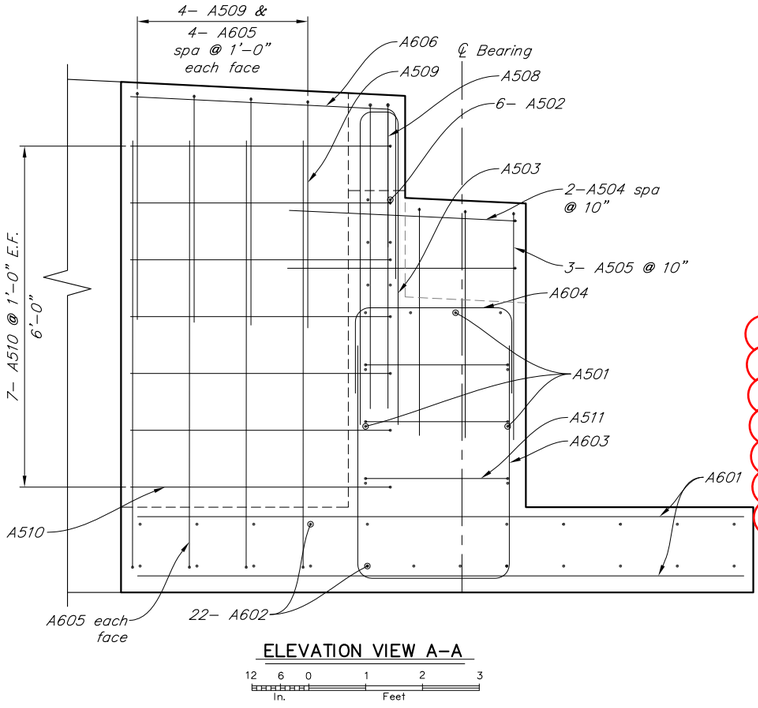
Oct 14, 2015 - 3:44pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset aotobp\f69534_N TRESTLE ABUTMENTS.dwg Layout Name: TRESTLE ABUTMENT 1 LAYOUT

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\danset ado6&pf\69534_N TRESTLE ABUTMENTS.dwg Layout Name: TRESTLE ABUTMENT 1 DETAILS







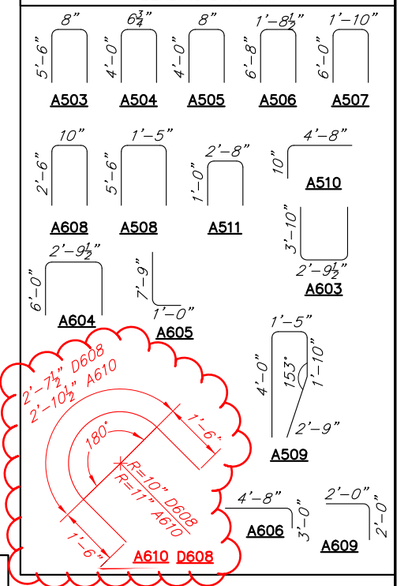


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR–000S(735)	2015	N9	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
A501	F	5	10	25'–2"	–
A502	E	5	6	25'–2"	–
A503	E	5	39	11'–8"	bent
A504		5	4	8'–6¾"	bent
A505		5	3	8'–8"	bent
A506		5	3	15'–0½"	bent
A507	F	5	9	13'–10"	bent
A508	E	5	2	12'–5"	bent
A509	E	5	4	10'–0"	bent
A510	E	5	17	5'–6"	bent
A511		5	5	4'–8"	bent
A601	F	6	55	10'–8"	–
A602	F	6	22	36'–0"	–
A603	F	6	26	10'–5½"	bent
A604	F	6	26	14'–9½"	bent
A605		6	8	8'–9"	bent
A606	E	6	3	7'–8"	bent
A607		6	12	5'–10½"	bent
A608		6	9	5'–10"	bent
A609	E	6	25	4'–0"	bent
RFI-004 A610		6	4	5'–10¼"	bent
A611		6	6	5'–0"	–

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
10/4/15
Registered Professional Engineer

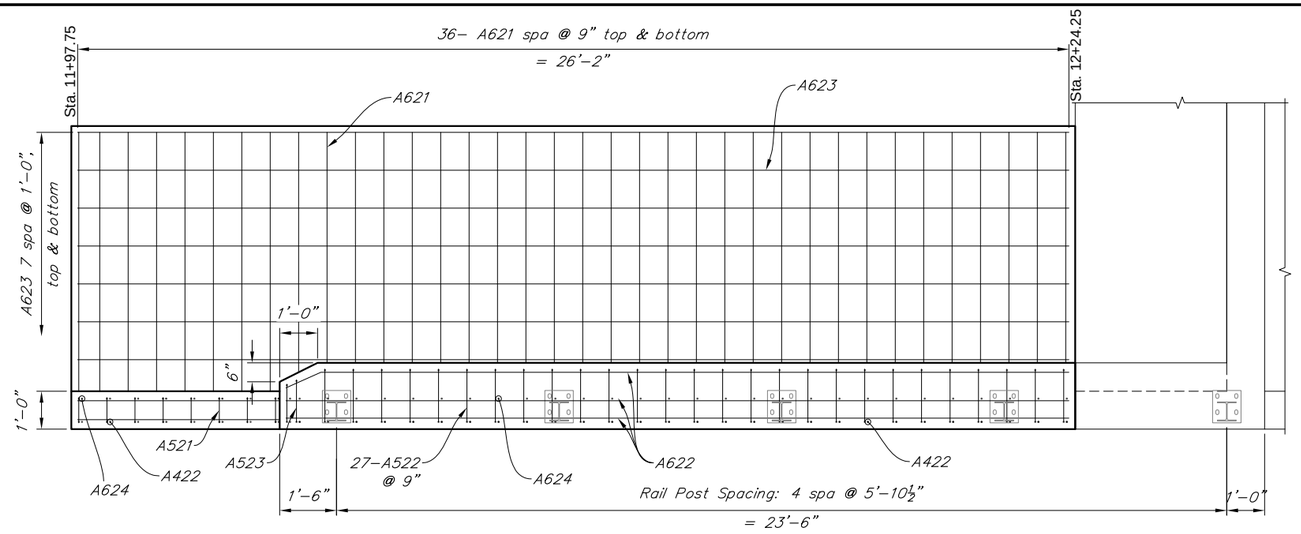
WATER STREET BRIDGE No. 2

WATER STREET

TRESTLE ABUTMENT 1 DETAILS

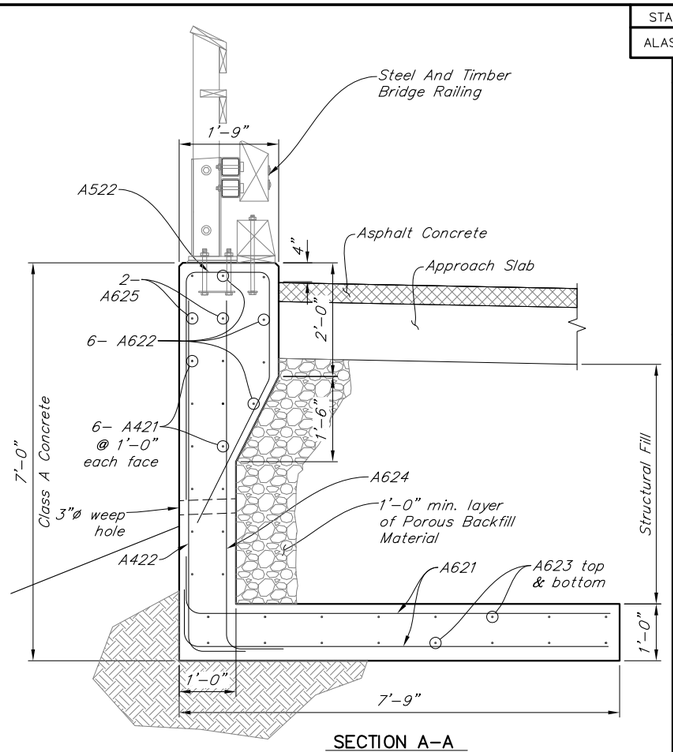
BRIDGE NO. 0446
DWG. NO. 9

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N10	N110



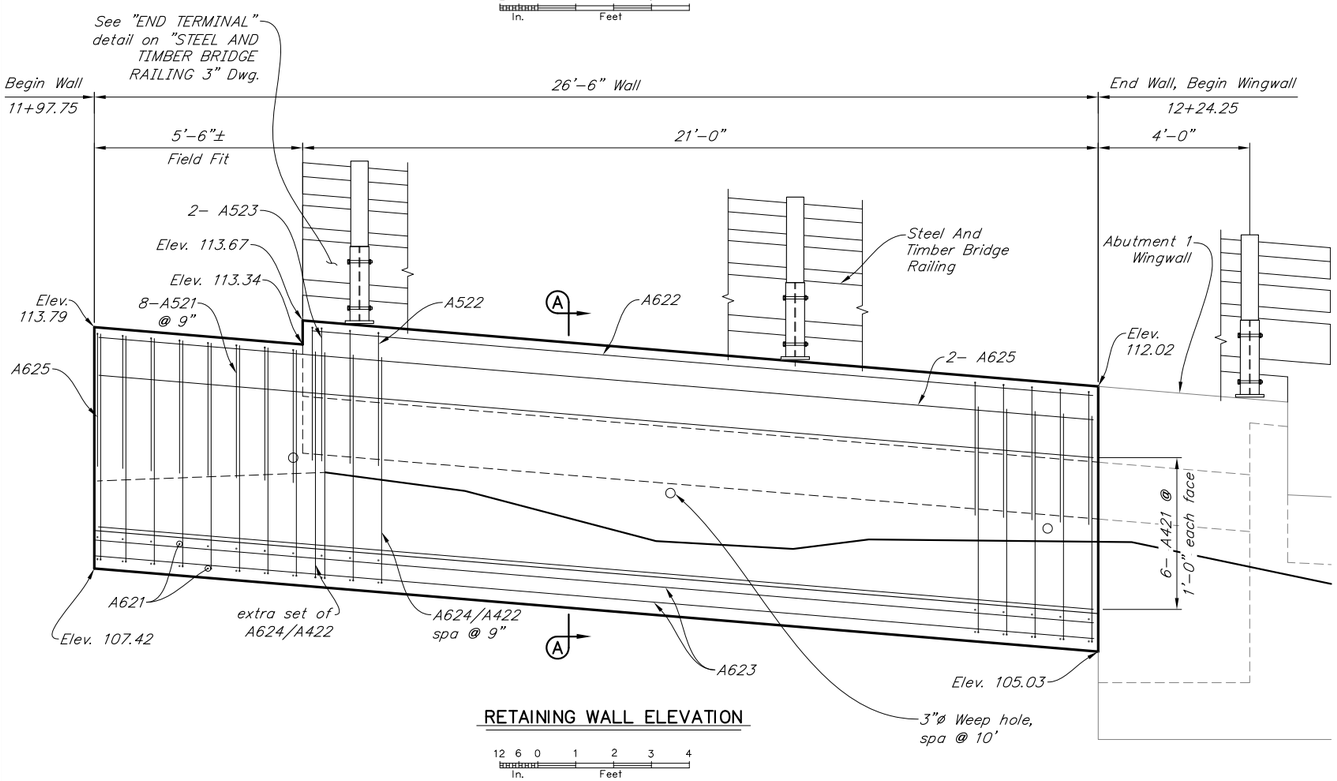
RETAINING WALL PLAN

12 6 0 1 2 3 4
In. Feet



SECTION A-A

12 6 0 1 2 3
In. Feet



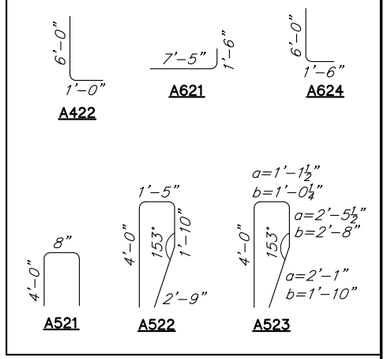
RETAINING WALL ELEVATION

12 6 0 1 2 3 4
In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
A421		4	12	26'-2"	–
A422		4	36	7'-0"	bent
A521	E	5	8	8'-8"	bent
A522	E	5	27	10'-0"	bent
A523	E	5	2	varies	bent
A621		6	72	8'-11"	bent
A622	E,F	6	6	20'-8"	–
A623		6	16	26'-2"	–
A624		6	36	7'-6"	bent
A625	E	6	2	26'-2"	–

BENDING DIAGRAM



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DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer		

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

WATER STREET BRIDGE No. 2

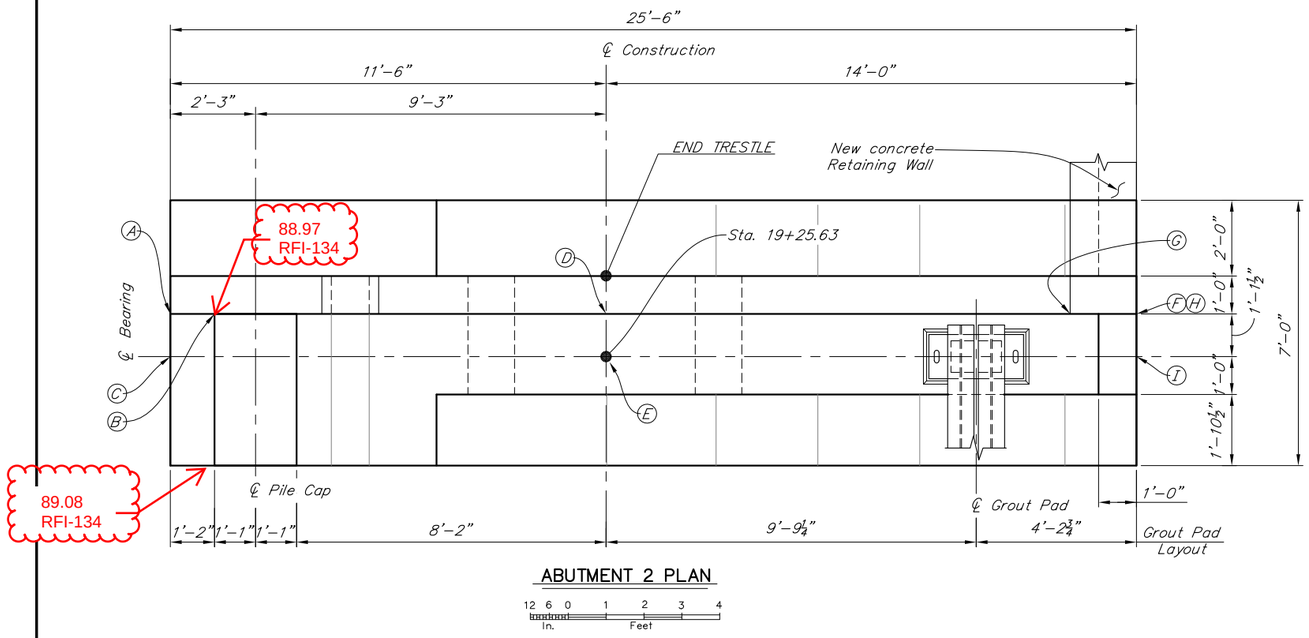
WATER STREET

TRESTLE ABUTMENT 1 RETAINING WALL

BRIDGE NO. 0446
DWG. NO. 10

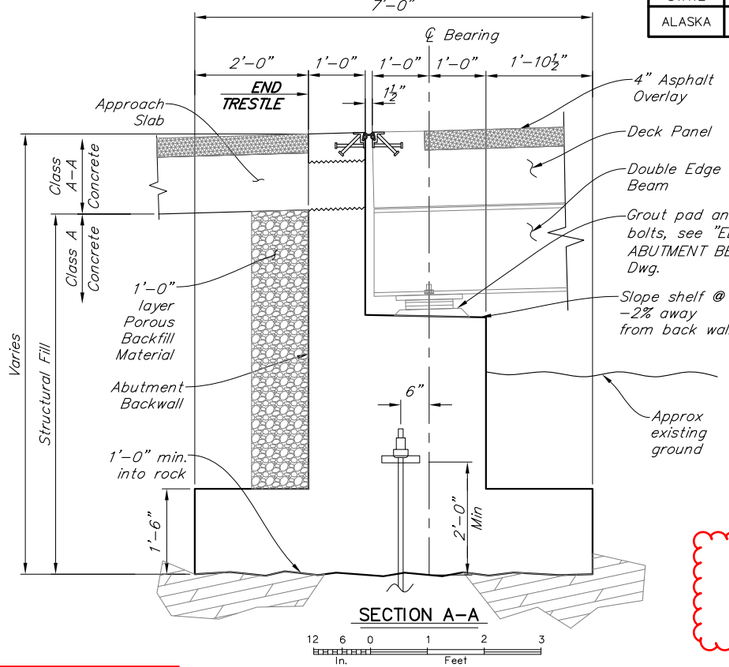
Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset.ado\sht\69534_N TRESTLE ABUTMENTS.dwg Layout Name: TRESTLE ABUTMENT 1 RETAINING WALL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N11	N110



ABUTMENT 2 PLAN

12 6 0 1 2 3 4 In. Feet

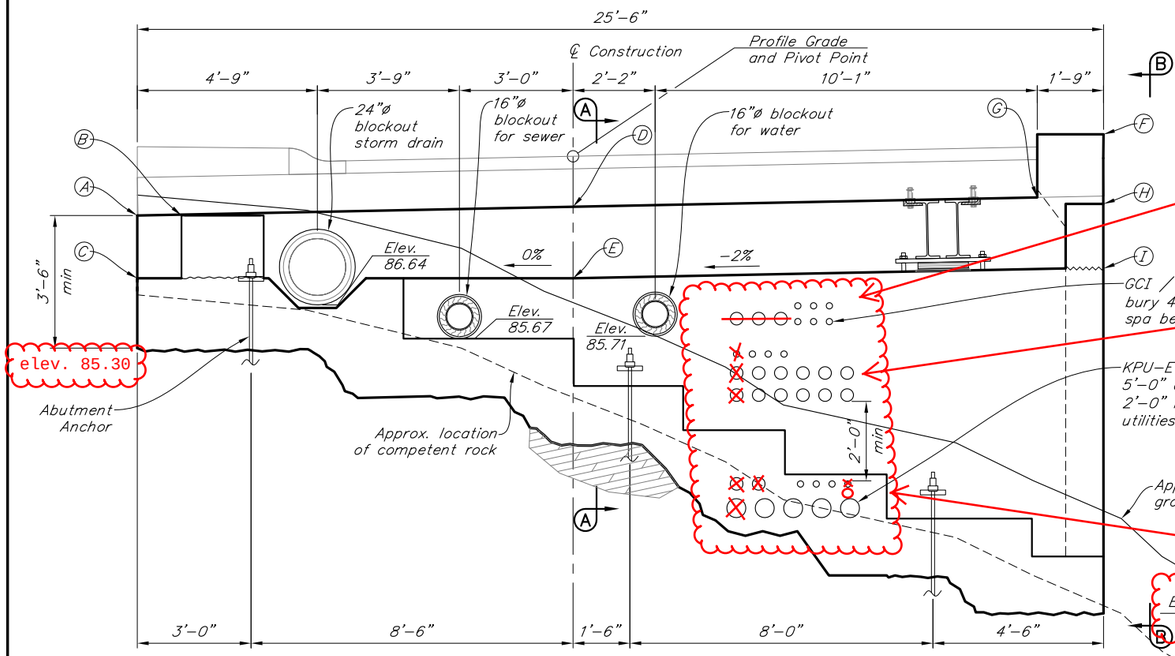


SECTION A-A

12 6 0 1 2 3 In. Feet

ABUTMENT 2 ELEVATIONS	
LOCATION	ELEVATION
A	89.03
B	88.97 RFI-134
C	87.34
D	89.26
E	87.34
F	91.17
G	89.50
H	89.37
I	87.62

RFI-120
REVISED PER KEITH NELSON COMMENTS



GCI
3-2" to Pole P10
3-2" to Bulb T

KPU Telecom
3-2" to Pole P10
3-4" to Bulb T
2-4" to Pole P10
6-4" to Manhole-18

KPU Electric
3-6" to Bulb T
2-2.5" to Bulb T
1-1" to Heat trace Panel
1-2" to Street light
2-6" to Pole P10
2-4" to Pole P10

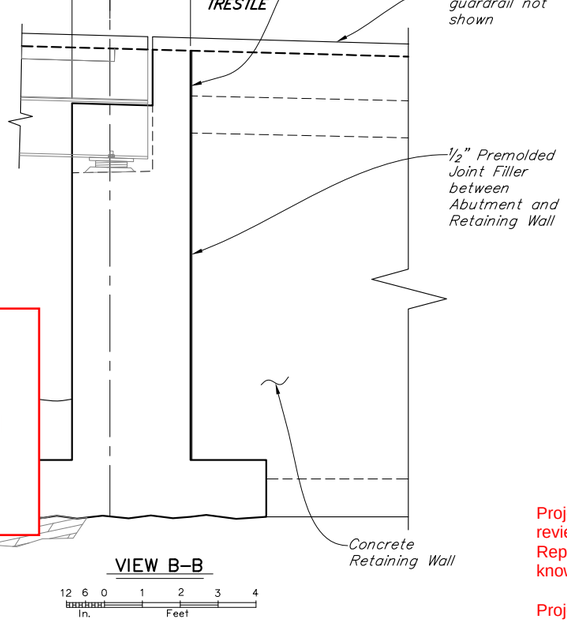
Field fit the base of the abutment to the rock. Locations and number of the steps may vary.

ABUTMENT 2 ELEVATION

12 6 0 1 2 3 4 In. Feet

Facing Up Station

Coordinate conduit quantity and location prior to casting abutment wall



VIEW B-B

12 6 0 1 2 3 4 In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
9/4/19
Registered Professional Engineer

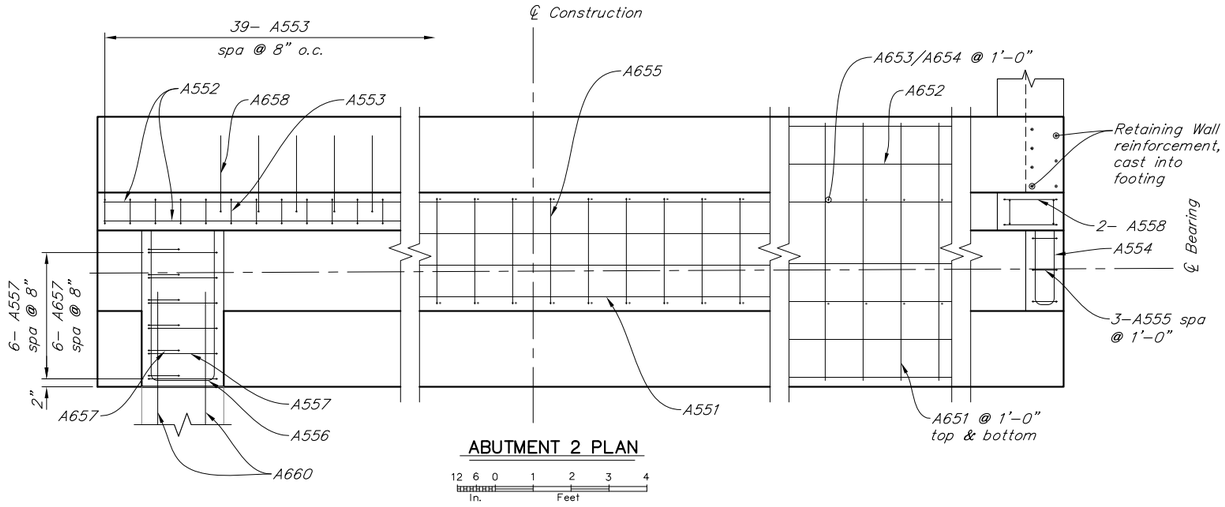
WATER STREET BRIDGE No. 2

WATER STREET

TRESTLE ABUTMENT 2 LAYOUT

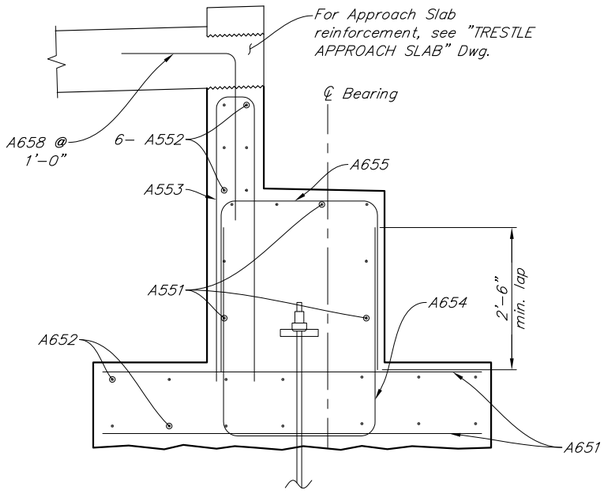
BRIDGE NO. 0446
DWG. NO. 11

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\danset ado\&plt\69534_N TRESTLE ABUTMENTS.dwg Layout Name: TRESTLE ABUTMENT 2 LAYOUT



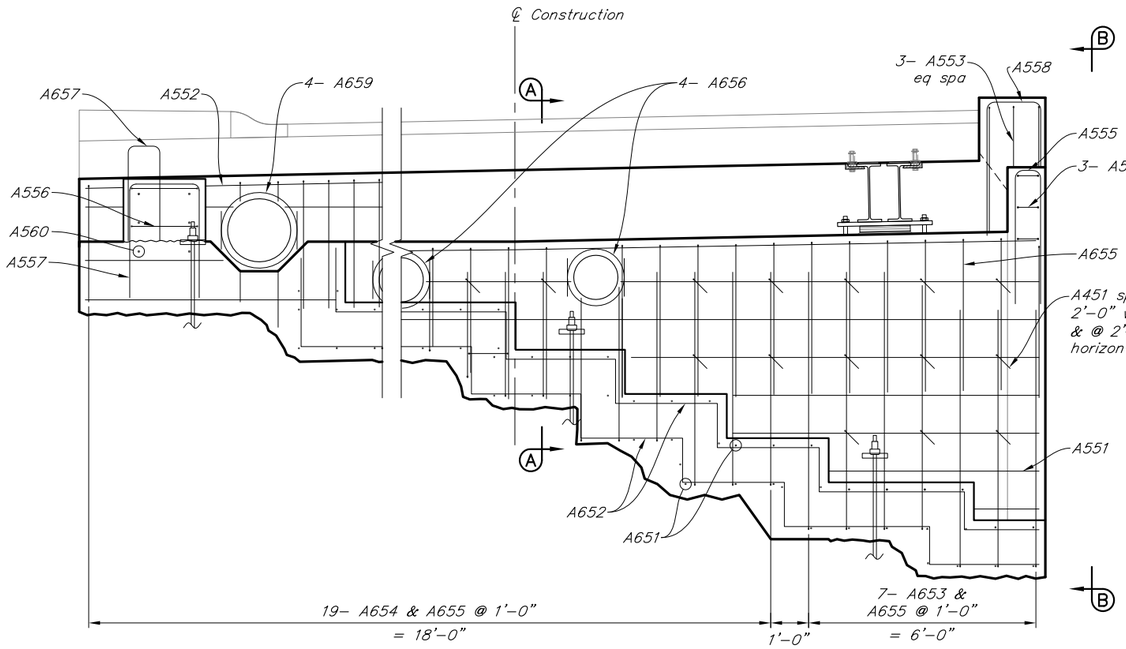
ABUTMENT 2 PLAN

12 6 0 1 2 3 4
In. Feet



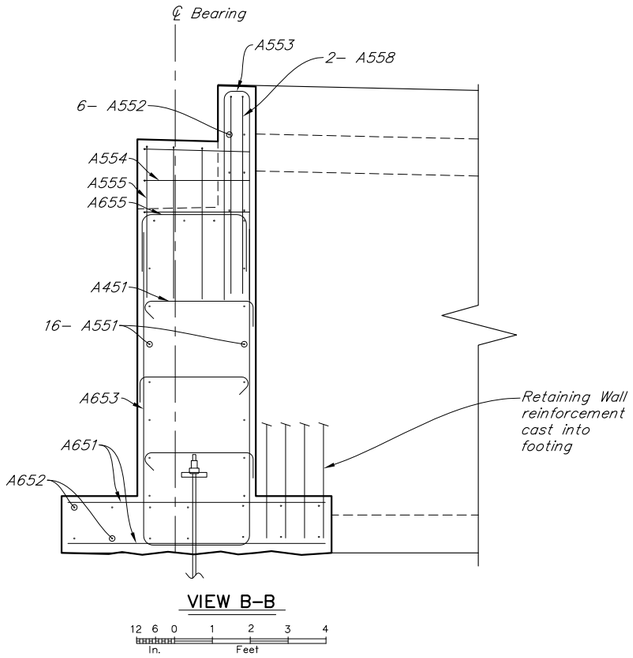
SECTION A–A

12 6 0 1 2 3
In. Feet



ABUTMENT 2 ELEVATION

12 6 0 1 2 3 4
In. Feet



VIEW B–B

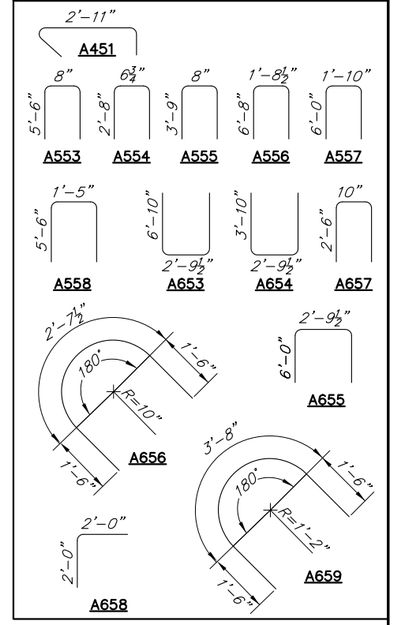
12 6 0 1 2 3 4
In. Feet

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR–000S(735)	2015	N12	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
A451		4	17	3'–8"	bent
A551	F	5	16	25'–2"	–
A552	E	5	6	25'–2"	–
A553	E,F	5	39	11'–8"	bent
A554		5	3	5'–10¾"	bent
A555		5	3	8'–2"	bent
A556		5	2	15'–0½"	bent
A557		5	6	13'–10"	bent
A558	E	5	2	12'–5"	bent
A651	F	6	52	6'–8"	–
A652	F	6	14	40'–0"	–
A653	F	6	7	16'–5½"	bent
A654	F	6	19	10'–5½"	bent
A655	F	6	26	14'–9"	bent
A656		6	8	5'–7½"	bent
A657		6	6	5'–10"	bent
A658	E	6	25	4'–0"	bent
A659	E	6	4	6'–8"	bent
A660		6	6	5'–0"	–

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
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Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
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AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/14/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

TRESTLE ABUTMENT 2 DETAILS

BRIDGE NO. 0446
DWG. NO. 12

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N TRESTLE ABUTMENTS.dwg Layout Name: TRESTLE ABUTMENT 2 DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N13	N110

FILL WALLS

Wall Height ≤ 6'-0"				Wall Height > 6'-0" and ≤ 8'-0"				Wall Height > 8'-0" and ≤ 10'-0"				Wall Height > 10'-0" and ≤ 12'-0"				Wall Height > 12'-0" and ≤ 14'-0"				Wall Height > 14'-0" and ≤ 16'-0"			
Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3
0 to 2.0	6.00	W12x79	107	0 to 2.0	6.00	W12x79	107	0 to 2.0	6.00	W12x79	107	0 to 2.0	7.50	W12x96	131	0 to 2.0	9.00	W12x120	163	0 to 2.0	5.00	W12x79	Anchor
2.08 to 4.0	7.00	W12x79	107	2.08 to 4.0	7.00	W12x79	107	2.08 to 4.0	7.00	W12x79	107	2.08 to 4.0	9.60	W12x96	131	2.08 to 4.0	10.50	W12x120	163	2.08 to 4.0	5.00	W12x79	Anchor
4.08 to 6.0	7.50	W12x79	107	4.08 to 6.0	8.00	W12x79	107	4.08 to 6.0	8.00	W12x79	107	4.08 to 6.0	5.00	W12x79	Anchor	4.08 to 6.0	5.00	W12x79	Anchor	4.08 to 6.0	5.00	W12x79	Anchor
6.08 to 8.0	8.75	W12x79	107	6.08 to 8.0	9.50	W12x79	107	6.08 to 8.0	10.50	W12x96	131	6.08 to 8.0	5.00	W12x79	Anchor	6.08 to 8.0	5.00	W12x79	Anchor	6.08 to 8.0	5.00	W12x96	Anchor
8.08 to 10.0	9.50	W12x79	107	8.08 to 10.0	10.50	W12x96	131	8.08 to 10.0	5.00	W12x79	Anchor	8.08 to 10.0	5.00	W12x79	Anchor	8.08 to 10.0	5.00	W12x96	Anchor				
10.08 to 12.0	9.50	W12x79	107	10.08 to 12.0	11.50	W12x96	131	10.08 to 12.0	5.00	W12x79	Anchor	10.08 to 12.0	5.00	W12x79	Anchor								
> 12.0	5.00	W12x79	Anchor	> 12.0	4.00	W12x79	Anchor	> 12.0	Contact Engineer			> 12.0	Contact Engineer			> 10.0	Contact Engineer			> 8.0	Contact Engineer		

OPEN WALLS (Sta 15+28 to Sta 15+68)

Wall Height ≤ 6'-0"				Wall Height > 6'-0" and ≤ 8'-0"				Wall Height > 8'-0" and ≤ 10'-0"				Wall Height > 10'-0" and ≤ 12'-0"				Wall Height >12'-0" and ≤ 14'-0"				Wall Height > 14'-0" and ≤ 16'-0"			
Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3	Depth to Rock Below Exsitng Ground	Min Socket Depth	Pile Section	Minimum S in^3
0 to 2.0	5.00	W12x79	107	0 to 2.0	5.00	W12x79	107	0 to 2.0	6.00	W12x79	107	0 to 2.0	6.00	W12x79	107	0 to 2.0	6.00	W12x79	107	0 to 2.0	7.00	W12x79	107
2.08 to 4.0	6.50	W12x79	107	2.08 to 4.0	6.50	W12x79	107	2.08 to 4.0	7.25	W12x79	107	2.08 to 4.0	7.50	W12x79	107	2.08 to 4.0	7.50	W12x79	107	2.08 to 4.0	8.00	W12x79	107
4.08 to 6.0	7.00	W12x79	107	4.08 to 6.0	5.50	W12x79	107	4.08 to 6.0	7.50	W12x79	107	4.08 to 6.0	8.25	W12x79	107	4.08 to 6.0	8.25	W12x79	107	4.08 to 6.0	8.75	W12x79	107
6.08 to 8.0	7.00	W12x79	107	6.08 to 8.0	7.00	W12x79	107	6.08 to 8.0	8.50	W12x79	107	6.08 to 8.0	9.00	W12x79	107	6.08 to 8.0	9.00	W12x96	131	6.08 to 8.0	9.50	W12x96	131
8.08 to 10.0	7.50	W12x79	107	8.08 to 10.0	8.25	W12x79	107	8.08 to 10.0	9.25	W12x79	107	8.08 to 10.0	9.50	W12x96	131	8.08 to 10.0	9.75	W12x96	131	8.08 to 10.0	10.25	W12x96	131
10.08 to 12.0	8.00	W12x79	107	10.08 to 12.0	9.00	W12x79	107	10.08 to 12.0	10.00	W12x79	107	10.08 to 12.0	10.25	W12x96	131	10.08 to 12.0	10.50	W12x96	131	> 10.0	Contact Engineer		

Notes:
1. Wall height measured from elevation at back of sidewalk to 1'-0" below existing ground.
2. Hot-Dip Galvanize ~~the Upper 16' 0" of~~ all Piles
3. Socket depth defined as from the top rim edge (lowest point) to bottom of excavation in competent rock.

Galvanized entire length

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

SOLDIER PILE WALL TABLE

BRIDGE NO. 0446
DWG. NO. 13

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\dataset adot&pf\69534_N SOLDIER PILE WALL ELEVATION.dwg Layout Name: SOLDIER PILE WALL TABLE

Construction Support Memorandum: 196

RFI-159

June 5, 2017
To: John Scott, HDR

Subject: Solider Pile Splicing RFI 159

Response:

Dawson has requested splicing of the solider pile in cases where the required pile length exceeds the pile length supplied. The supplied pile lengths are based on Dawson's top of rock survey.

In general we prefer not to splice extra lengths on to the soldier piles. The loads at the bottom of the pile typically are high in shear and a complete section is required.

On a case by case basis, a spliced pile may be used with the following provisions:

- Both the web and flange receive complete penetration welds.
- The welds are inspected by a certified weld inspector and weld Inspection Company.
- All welds are inspected by UT.
- Any questionable welds are repaired by an approved procedure.
- Summary inspection reports are provided and approved by the Engineer prior to installing the spliced pile.
- Prior to splicing the pile, the Contractor provide their proposed splice detail and welding procedure for review by the Engineer.
- All welding is done in accordance with AWS D1.1
- Additional spliced section is 3'-0" minimum length.

Construction Support Memorandum: 257

RFI-189

June 7, 2018

To: John Scott, HDR

RFI #189

Subject: SP-4 Anchor Conflict

The wall height and depth to rock at Soldier Pile #4 requires it to have a tie-back anchor. Directly to the east of this soldier pile is power pole P4R. The vertical anchors that are supporting pole P4 are in conflict with the trajectory of the tie-back anchor that is to be installed on Soldier Pile #4. Soldier Piles #3 and #5 will also require tie back anchors.

Is there an alternate provision that could eliminate this anchor? Attached is the drill data sheet for Soldier Pile #4

Response:

The anchors are needed to restrain the lateral forces, and because of the wall height and height of the adjacent walls the tieback anchor cannot be eliminated.

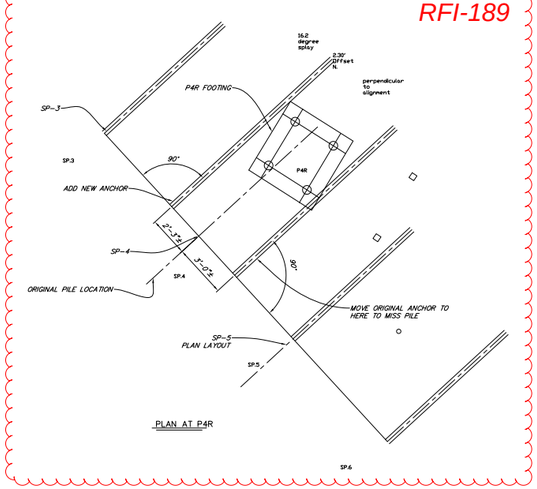
In order to rectify this conflict please do the following:

- Move the original anchor to the south enough to miss the vertical legs of P4R
- Install one additional tieback anchor to the north at this location.

See the attached sketch. Note the offset dimensions should be field verified to ensure the new anchor location will not conflict with the legs of P4R.

Any modifications to the soldier pile cap beam will be addressed in future memos.

RFI-189

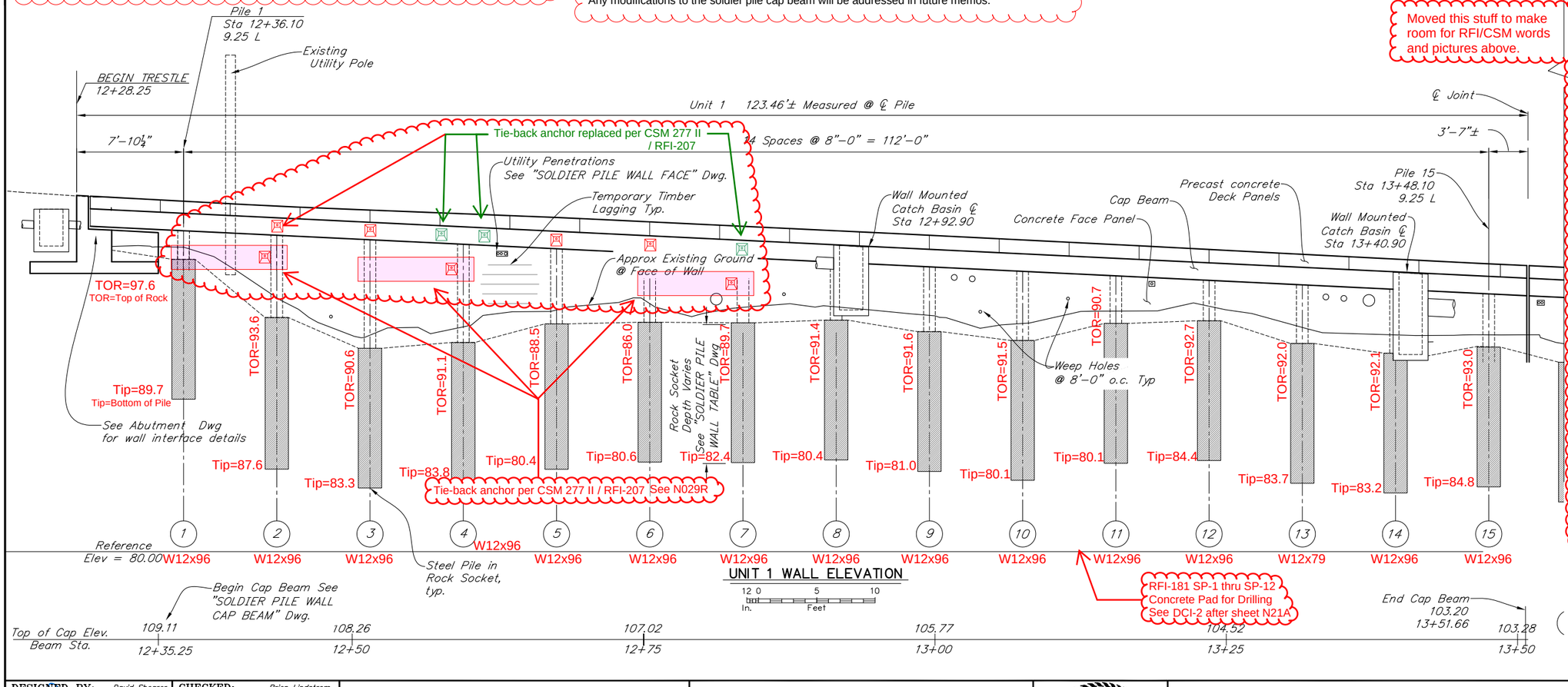


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N14	N110

SOLDIER PILE DATA

Pile No.	Approximate Wall Height Feet	Wall Type
1	~~6~~ 8.44	Fill
2	~~11~~ 9.28	Fill Anc.v2
3	~~13~~ 10.59	Fill Anc.
4	~~12~~ 11.62	Fill Anc.v2
5	~~10~~ 11.68	Fill Anc.
6	~~10~~ 12.73	Fill Anc.
7	~~9~~ 12.66	Fill Anc.v2
8	~~8~~ 11.12	Fill
9	~~10~~ 10.07	Fill
10	~~10~~ 10.05	Fill
11	~~8~~ 10.12	Fill
12	~~6~~ 10.13	Fill
13	~~9~~ 9.99	Fill
14	~~9~~ 9.96	Fill
15	~~8~~ 9.93	Fill

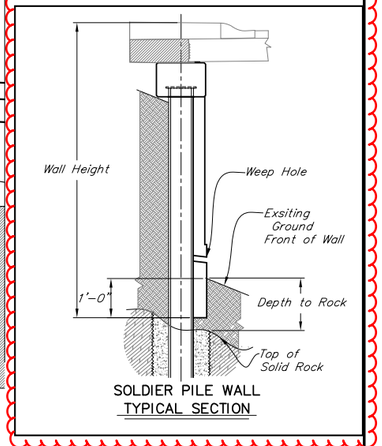
Moved this stuff to make room for RFI/CSM words and pictures above.



Note:
Wall height and depth to rock varies at each pile location due to erratic top of rock surface.

Final wall height and socket length to be determined per wall table on the "SOLDIER PILE WALL TABLE" Dwg based on the actual depth of rock encountered below the existing overburden. Typical all Units

All Rock Sockets filled with Class A Concrete



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

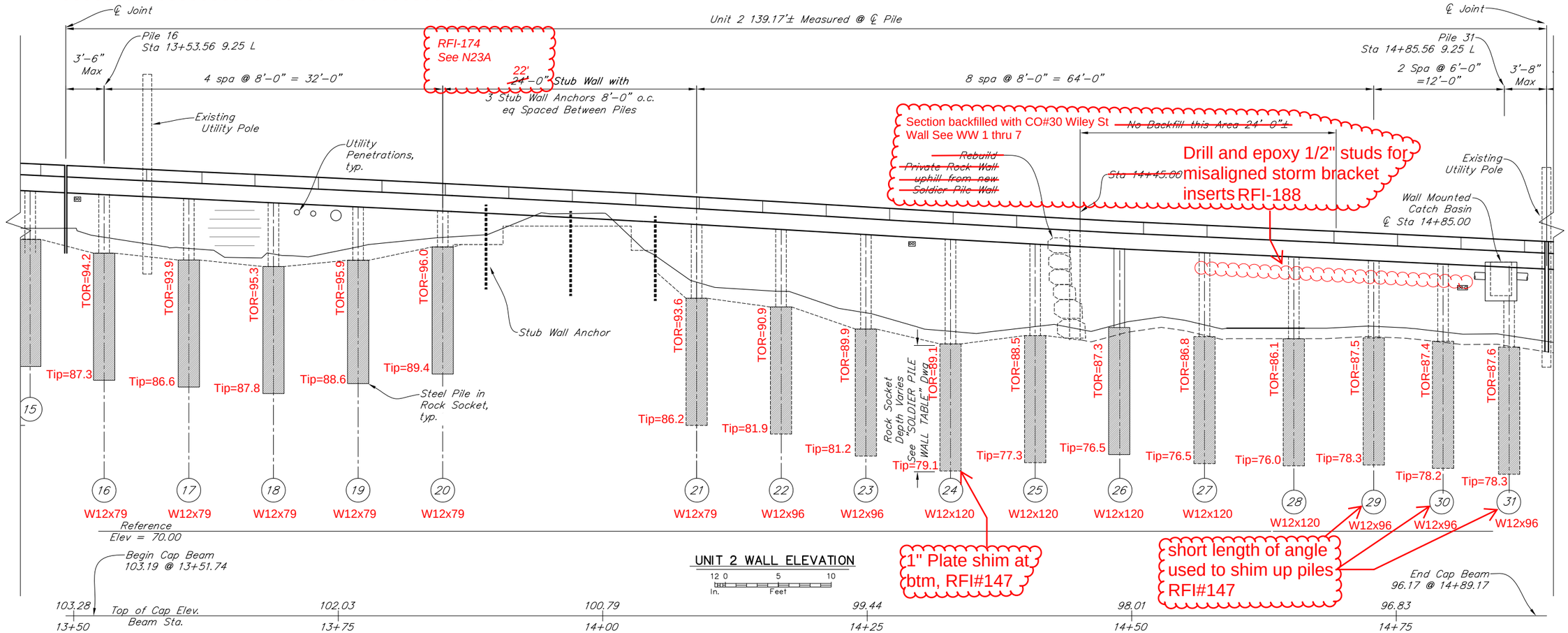
DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	WATER STREET BRIDGE No. 2 WATER STREET WALL ELEVATION UNIT 1
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	BRIDGE NO. 0446 DWG. NO. 14

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/4/15

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\planset ado6\pf60534_N SOLDIER PILE WALL ELEVATION.dwg Layout Name: WALL ELEVATION UNIT 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N15	N110

SOLDIER PILE DATA			SOLDIER PILE DATA		
Pile No.	Approximate Wall Height Feet	Wall Type	Pile No.	Approximate Wall Height Feet	Wall Type
16	~~9~~ 10.60	Fill	26	~~11~~ 13.11	Fill
17	~~9~~ 10.75	Fill	27	~~12~~ 13.30	Fill
18	~~10~~ 8.99	Fill	28	~~12~~ 13.11	Fill
19	~~9~~ 8.00	Fill	29	~~11~~ 12.39	Fill
20	~~7~~ 7.40	Fill	30	~~11~~ 11.85	Fill
21	~~11~~ 8.47	Fill	31	~~11~~ 11.51	Fill
22	~~11~~ 10.71	Fill			
23	13	Fill			
24	~~14~~ 13.02	Fill			
25	~~13~~ 12.66	Fill			



UNIT 2 WALL ELEVATION

12 0 5 10
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

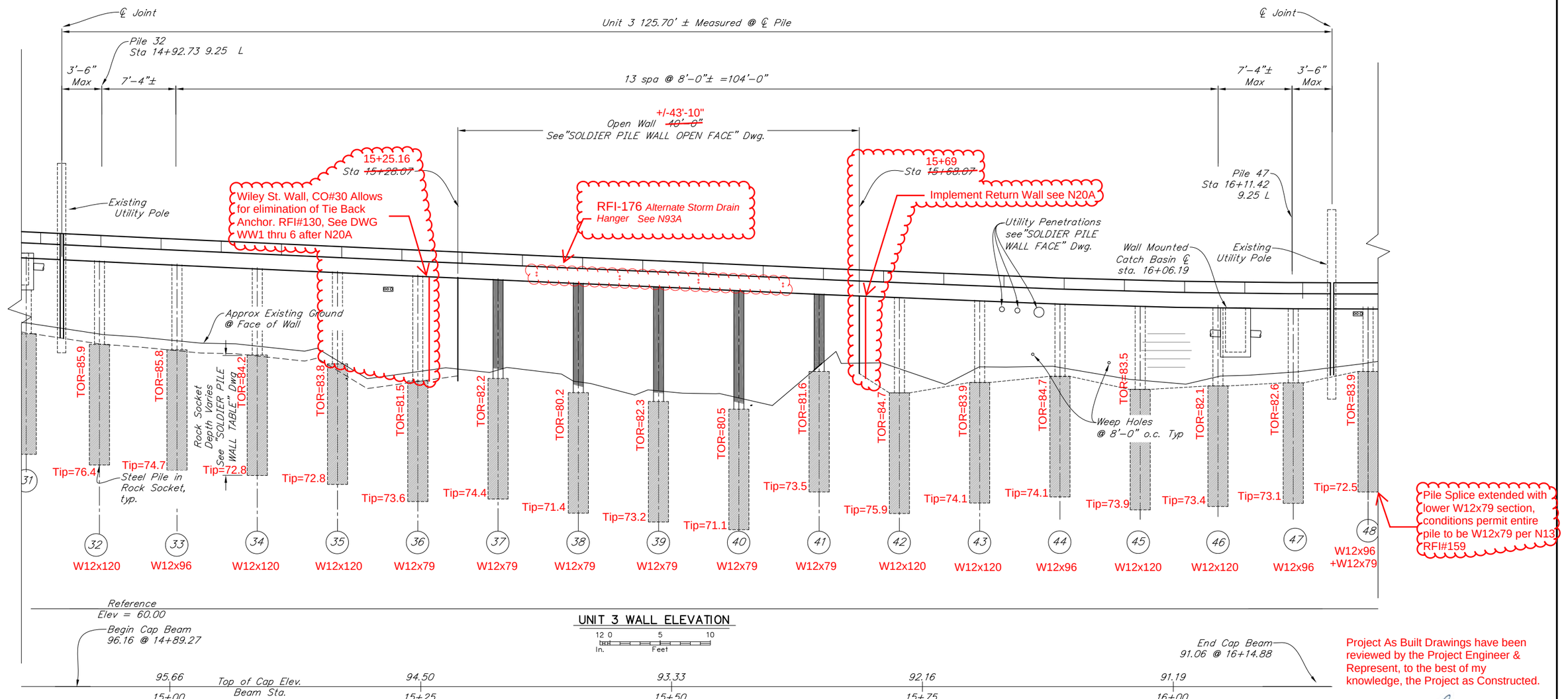
Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	WATER STREET BRIDGE No. 2 WATER STREET WALL ELEVATION UNIT 2
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom		STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer	BRIDGE NO. 0446 DWG. NO. 15

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N SOLDIER PILE WALL ELEVATION.dwg Layout Name: WALL ELEVATION UNIT 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N16	N110

	SOLDIER PILE DATA			SOLDIER PILE DATA		
	Pile No.	Approximate Wall Height Feet	Wall Type	Pile No.	Approximate Wall Height Feet	Wall Type
	32	~~12~~ 12.59	Fill	40	~~16~~ 14.34	Open
	33	~~12~~ 12.30	Fill	41	~~12~~ 12.90	Open
	34	~~13~~ 12.52	Fill	42	~~13~~ 9.65	Fill
Wiley St. Wall	35	~~13~~ 12.97	Fill	43	~~12~~ 9.87	Fill
Wiley St. Wall	36	~~14~~ 14.47	Fill	44	~~11~~ 9.57	Fill
	37	~~14~~ 13.79	Open	45	~~12~~ 9.60	Fill
	38	~~15~~ 15.45	Open	46	~~12~~ 9.86	Fill
	39	~~15~~ 14.55	Open	47	~~11~~ 10.22	Fill



UNIT 3 WALL ELEVATION

12 0 5 10
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

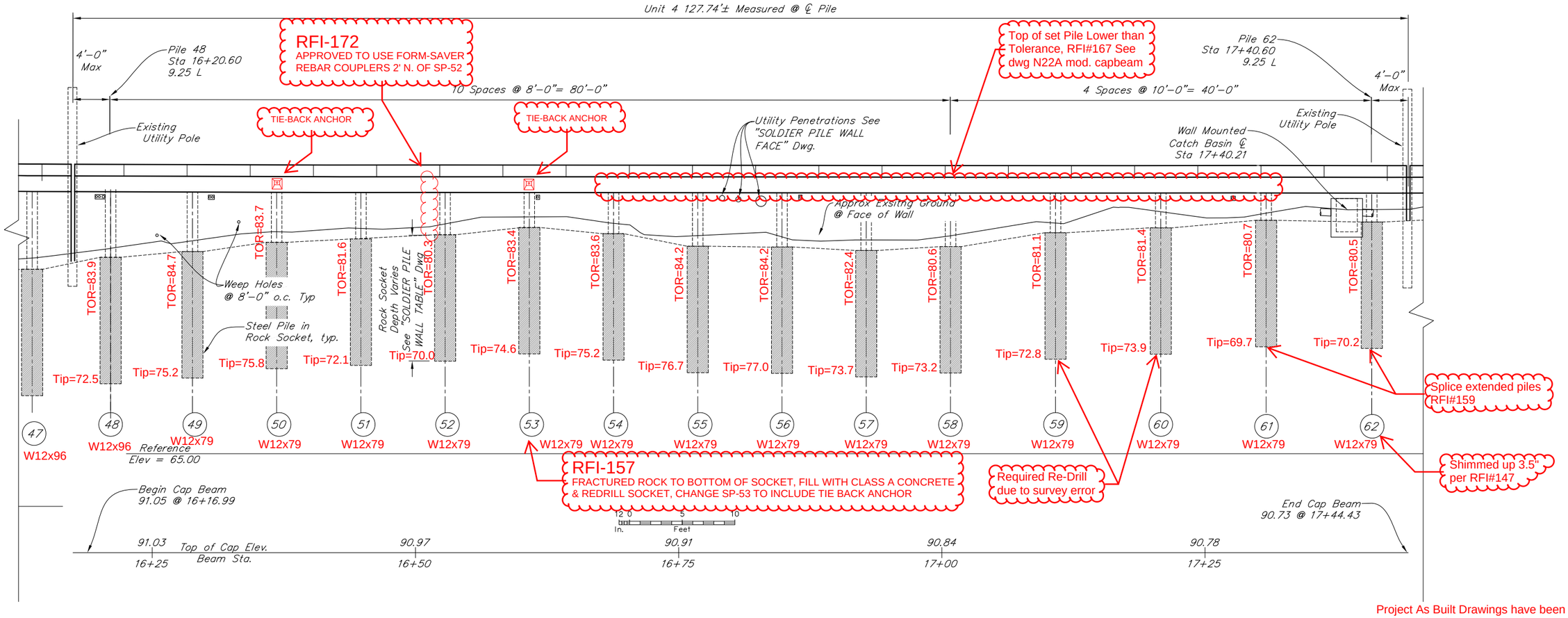
DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	WATER STREET BRIDGE No. 2 WATER STREET WALL ELEVATION UNIT 3
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	BRIDGE NO. 0446 DWG. NO. 16

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

Oct 14, 2015 - 3:44pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\planset ado6&pl69534_N SOLDIER PILE WALL ELEVATION.dwg Layout Name: WALL ELEVATION UNIT 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N17	N110

SOLDIER PILE DATA			SOLDIER PILE DATA		
Pile No.	Approximate Wall Height Feet	Wall Type	Pile No.	Approximate Wall Height Feet	Wall Type
48	~~10~~ 9.23	Fill	56	~~9~~ 8.23	Fill
49	~~9~~ 7.95	Fill	57	~~9~~ 9.59	Fill
50	~~9~~ 8.74	Fill Anc.	58	~~9~~ 9.54	Fill
51	~~8~~ 9.64	Fill	59	~~8~~ 9.28	Fill
52	~~8~~ 9.93	Fill	60	~~7~~ 9.83	Fill
53	~~7~~ 9.19	Fill Anc.	61	~~7~~ 9.74	Fill
54	~~7~~ 8.72	Fill	62	~~6~~ 9.69	Fill
55	~~9~~ 8.09	Fill			



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

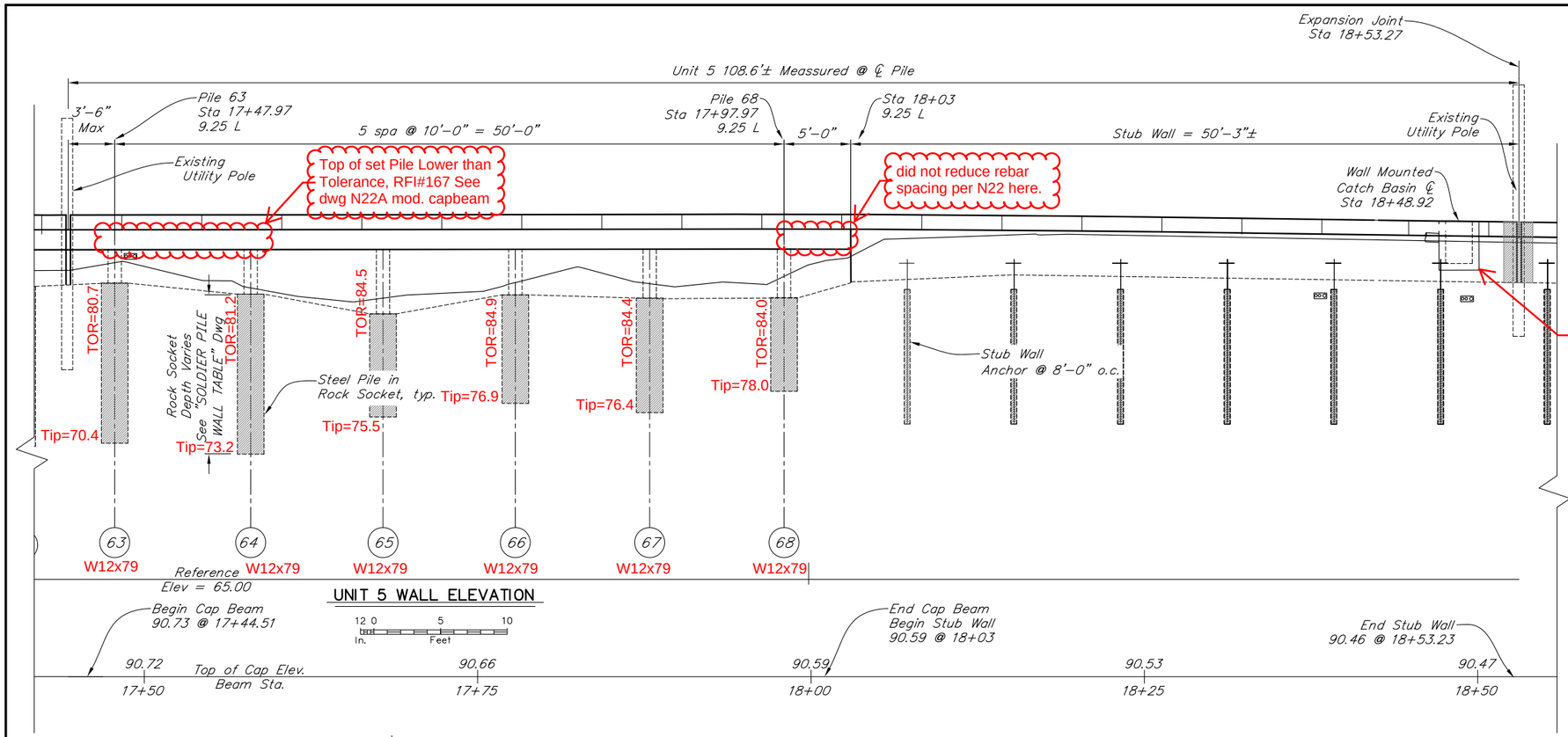
WALL ELEVATION UNIT 4

BRIDGE NO. 0446

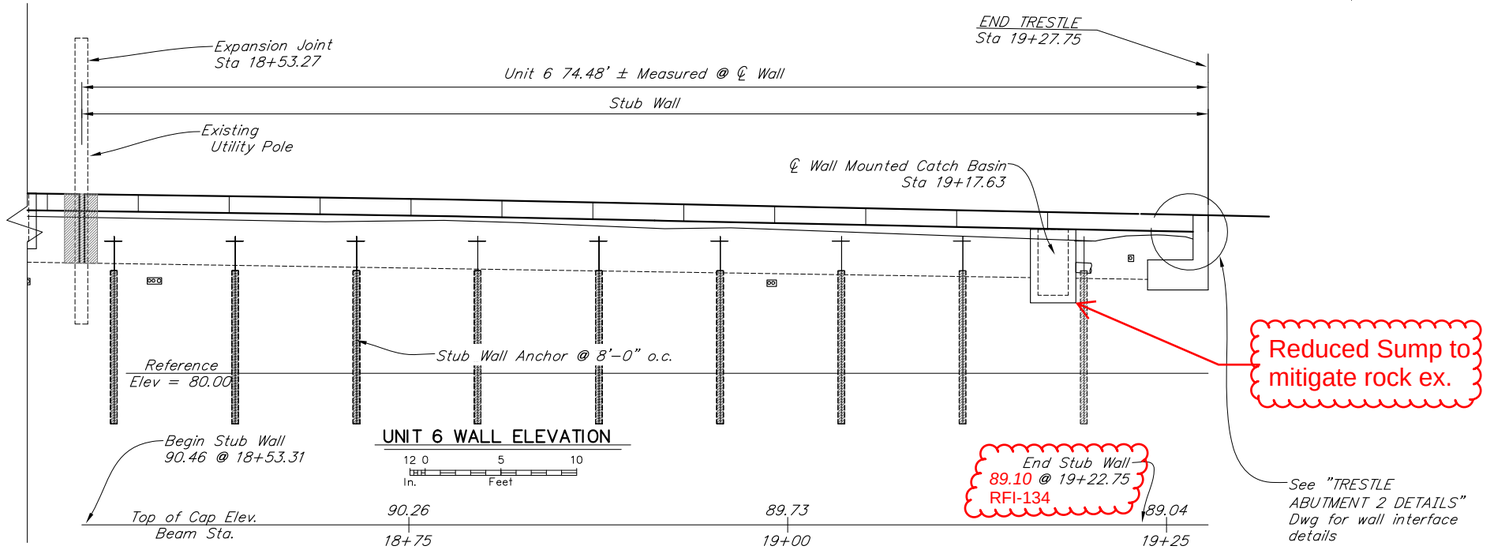
DWG. NO. 17

Oct 14, 2015 - 3:45pm bfen \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\fdp\fd9534_N SOLDIER PILE WALL ELEVATION.dwg Layout Name: WALL ELEVATION UNIT 4

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N18	N110



SOLDIER PILE DATA		
Pile No.	Approximate Wall Height Feet	Wall Type
63	~~6~~ 9.26	Fill
64	~~7~~ 7.41	Fill
65	~~8~~ 7.57	Fill
66	~~8~~ 6.89	Fill
67	~~7~~ 7.23	Fill
68	~~7~~ 7.81	Fill



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
10TH
DAVID R. SHEARER
CE 8373
9/5/19
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

WALL ELEVATION UNIT 5 & 6

BRIDGE NO. 0446

DWG. NO. 18

Oct 14, 2015 - 3:45pm brlen \\sheareserver\jobs\0226 water street ps&e\DWG\danset adot&pf\69534_N SOLDIER PILE WALL ELEVATION.dwg Layout Name: WALL ELEVATION UNIT 5 & 6

Oversized PVC Blockouts installed

4"ø PVC Sleeve for Water & 8"ø PVC Sleeve for sewer
Cut only one horizontal bar
Add four #4 x 2'-6" bars as shown

~~#4 x 6" Blockout for~~
2"ø or 2 ½" ø PVC Sleeve for Electrical
Place between horizontal bars as shown

W401 @ 1'-0" o.c. Typ
Vertical Reinforcing

W401@ 1'-0"
o.c. typ.

Steel Pile
in
Rock Socket
filled with
Class A Concrete
Typ.

1'-0" min
embedment at
base of wall

2'-0" Lap splice
Min three rows vertical
seperation

Precast Concrete
Deck Panels &
Sidewalk

Cap Beam Reinforcement
See "SOLDIER PILE WALL
CAP BEAM" Dwg.

Bottom of
edge beam

2'-6" W505 @ 8" o.c. 6" Wall Thickness

4'-0" W505 @ 6"o.c. 6" Wall Thickness

7'-0" W505 @ 6"o.c. 7" Wall Thickness

Greater than 7'-0" Contact Engineer

Finished
Ground

3" ø PVC
Weep Hole @ 8'-0" o.c.

Welded Studs

3" Clr.

W506 Continous
along bottom edge
typ.

W505

Note;
Elevation show represents general wall reinforcing requirements. Spacing of horizontal and vertical and edge steel reinforcement are to be based on final wall height above exsiting ground at each location

TYPICAL WALL REINFORCING

12 6 0 1 2 3 4
In. Feet

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N19	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W401		4	As Req	Varies	–
W505		5	As Req	Varies	–
W506		5	As Req	Varies	bent

BENDING DIAGRAM

20'-0"Min 60'-0" Max
2'-0"Lap
W401 & W501

2'-0"Lap
15'-0" Min
W506

¾"ø x 4½"
3" 3"
8"
4½"

RFI-100
8" VERTICAL
STUD SPACING

WELDED STUD DETAIL

Abutment Backwall
Abutment Footing
C.J.
See Abutment Dwgs. For Reinforcement

4" Thick Timber Lagging (Optional)
Steel Pile in Rock Socket filled with Class A Concrete
W505
W401
See "WELDED STUD DETAIL"

℄ Joint
4'-0" Max Unit X
4'-0" Max Unit Y
2'-0" Wide Layer of Geotextile Bond to Face of concrete
1 ½" Gap
Fill with premolded joint filler
6"

SECTION B-B

12 6 0 1 2 3
In. Feet

E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/14/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

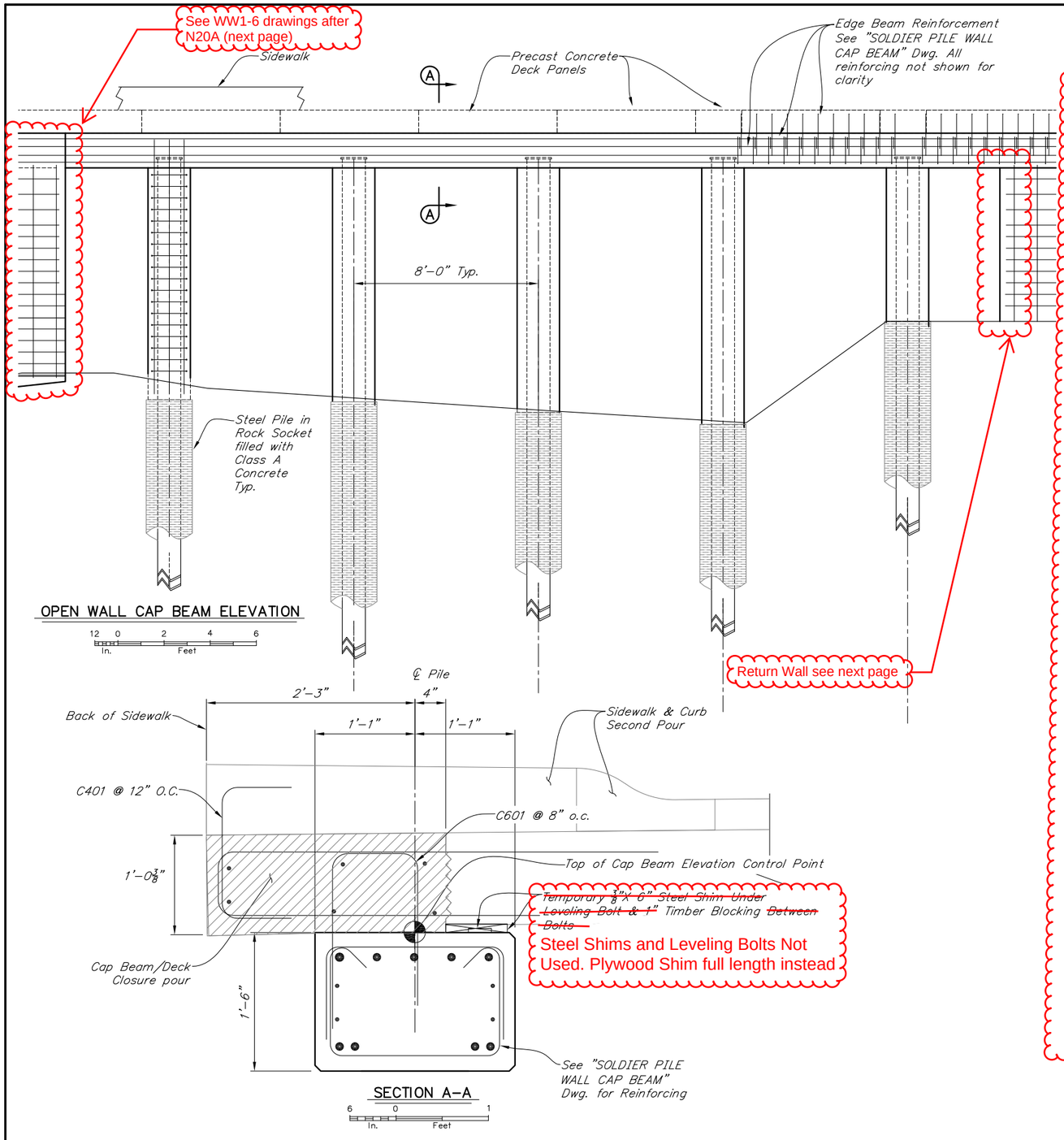
SOLDIER PILE WALL FACE

BRIDGE NO. 0446
DWG. NO. 19

Oct 14, 2015 - 3:45pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\&#if69534 Nxx Soldier Pile Wall Face.dwg Layout Name: SOLDIER PILE WALL FACE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N20	N110

See WW1-6 drawings after N20A (next page)

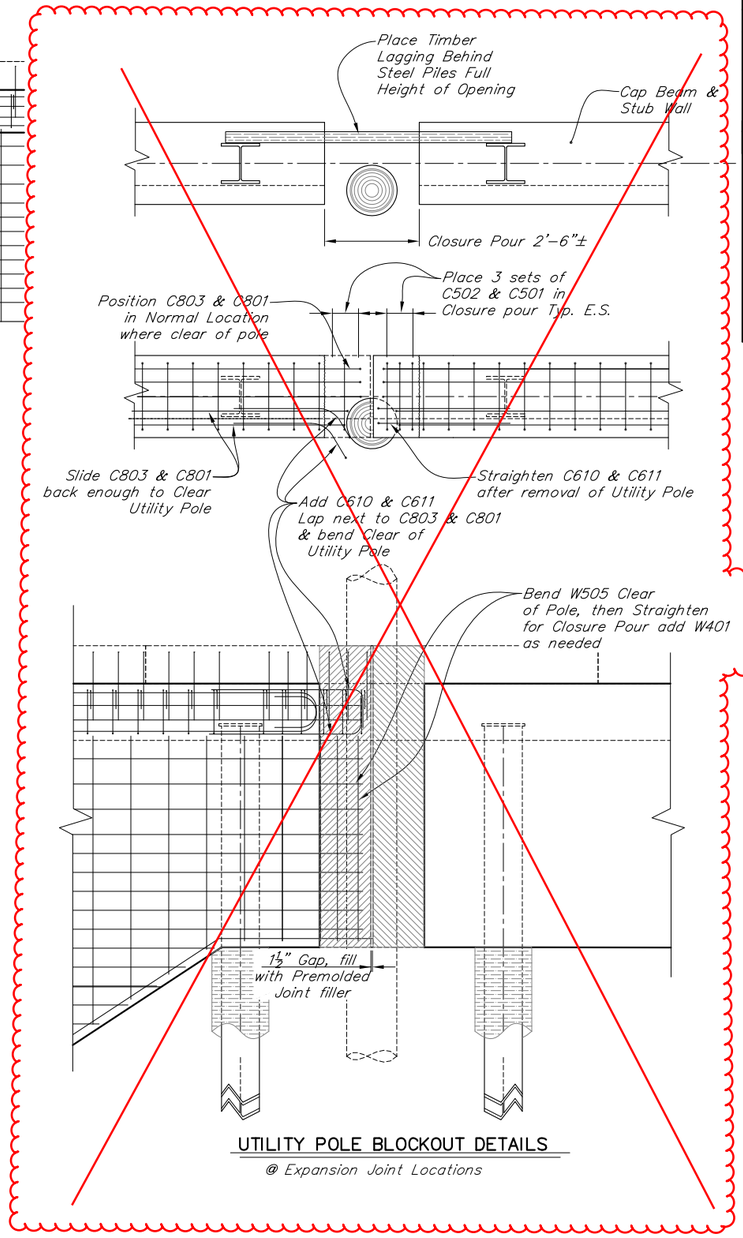


OPEN WALL CAP BEAM ELEVATION

12 0 2 4 6 In. Feet

SECTION A-A

6 0 1 In. Feet



UTILITY POLE BLOCKOUT DETAILS

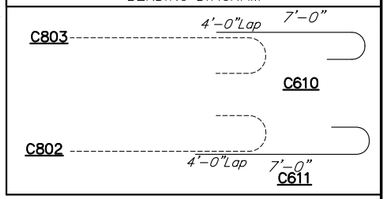
@ Expansion Joint Locations

Power Poles Relocated. Closure Pours not needed. See CO 27

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C610	C *	6	As Req	7'-8"	bent
C611	C *	6	As Req	7'-8"	bent

BENDING DIAGRAM



C = Provide splice & field cut off excess leg
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.
* =Field Bend Angle to fit location

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom		
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom		

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/9/15

WATER STREET BRIDGE No. 2

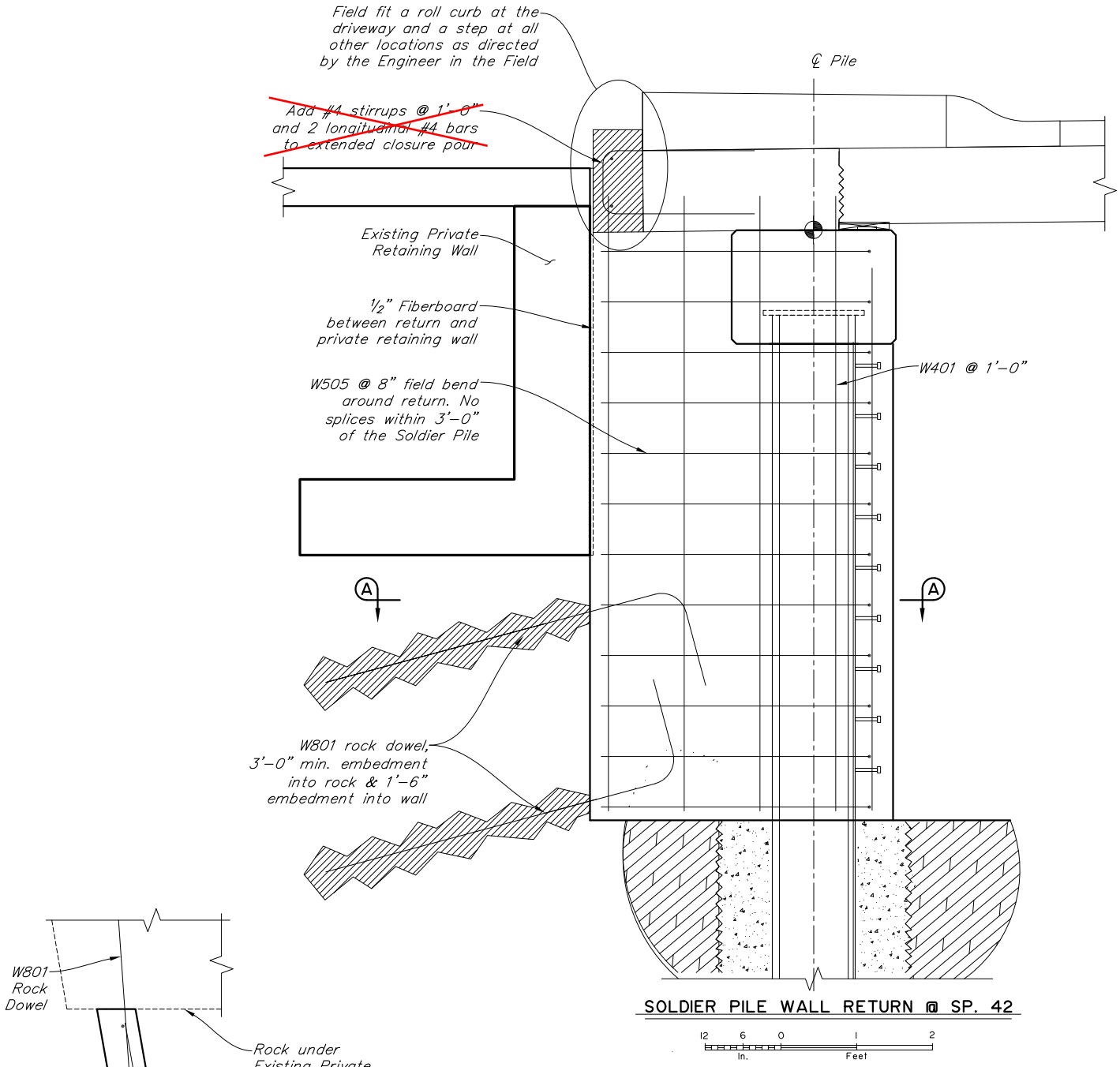
WATER STREET

SOLDIER PILE WALL OPEN FACE

BRIDGE NO. 0446

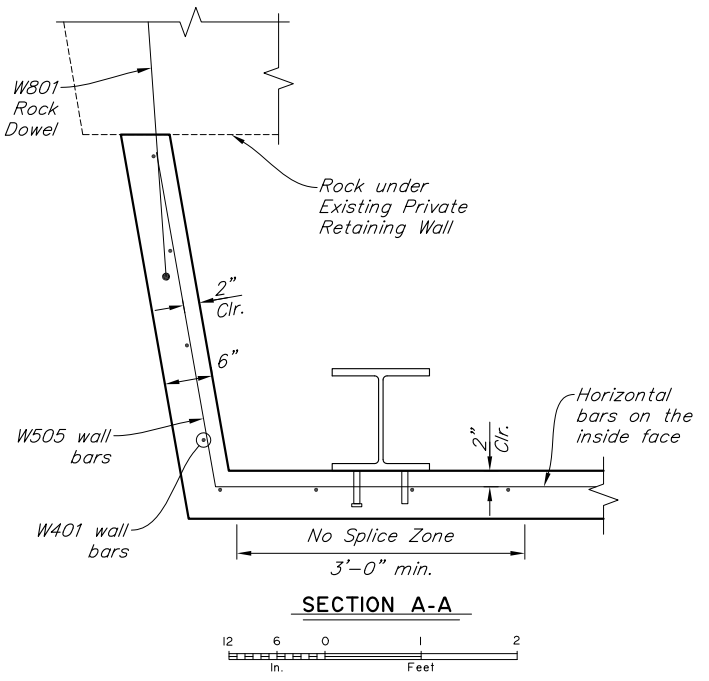
DWG. NO. 20

Oct 14, 2015 - 3:45pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534 Nxx Soldier Pile Wall Faces.dwg Layout Name: SOLDIER PILE WALL OPEN FACE



SOLDIER PILE WALL RETURN @ SP. 42

12 6 0 1 2
In. Feet



SECTION A-A

12 6 0 1 2
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

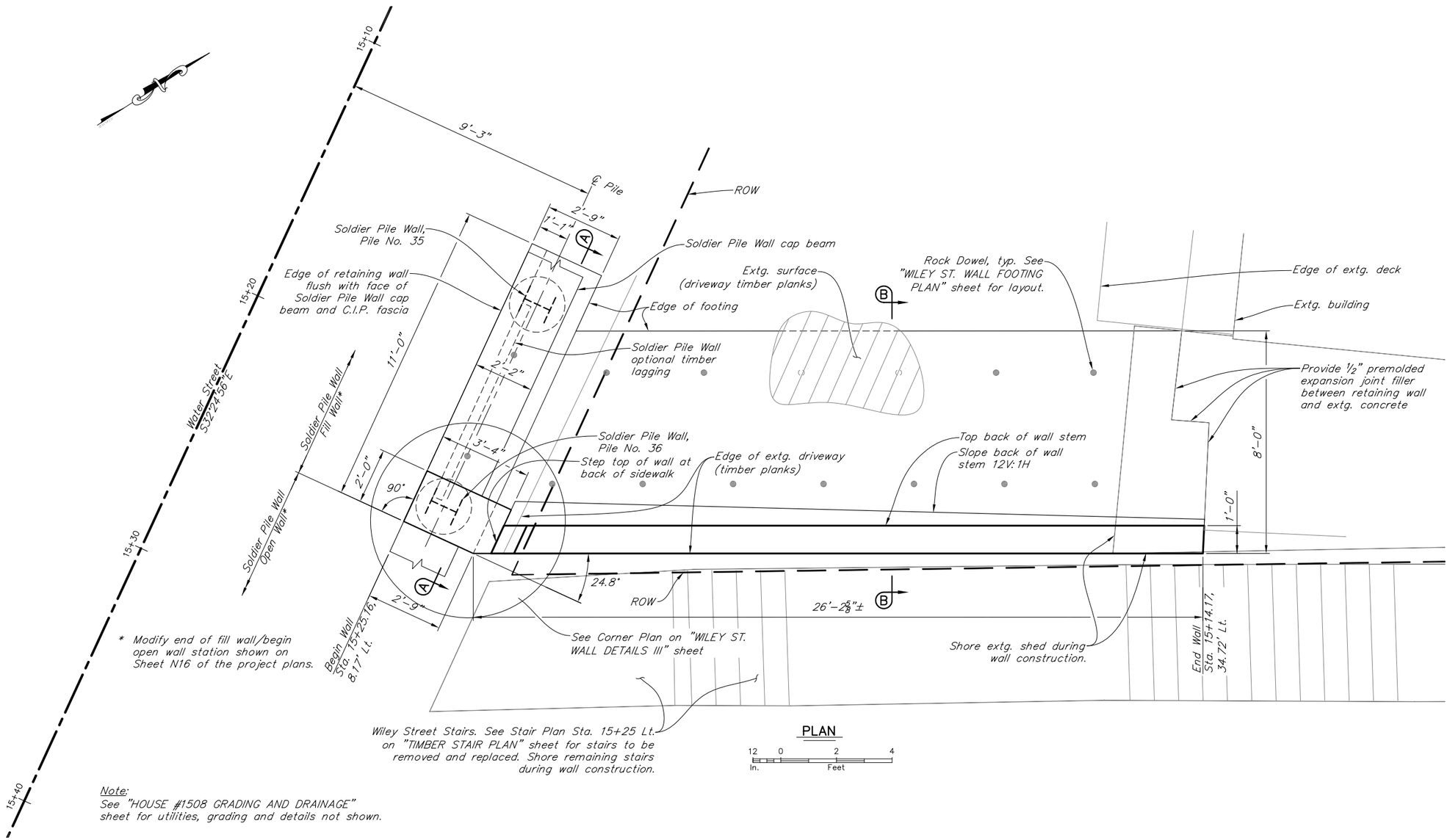
SHEARER DESIGN L.L.C.
Bridge Design, Construction Engineering, Infrastructure Aesthetics
3613 Phinney Ave N. # B
Seattle WA 98103
(206) 781-7830
SHEARERDESIGN@QWESTOFFICE.NET

WATER STREET BRIDGDE NO. 2
WATER STREET
SOLDIER PILE WALL RETURN @ Pile 42

SHEET 1 N20A OF 1
FILE NO. 0278

Dec 15, 2017 - 11:18am brien \\SHEARERSERVER\Jobs\0278 Water Street\Construction\Directives\2017-12-14 1462 SPW Retain\16853A Soldier Pile Wall Facing Layout Name: Layout1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	WW1	N110



Note:
See "HOUSE #1508 GRADING AND DRAINAGE" sheet for utilities, grading and details not shown.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

Added via CO#30

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

WILEY ST. WALL LAYOUT

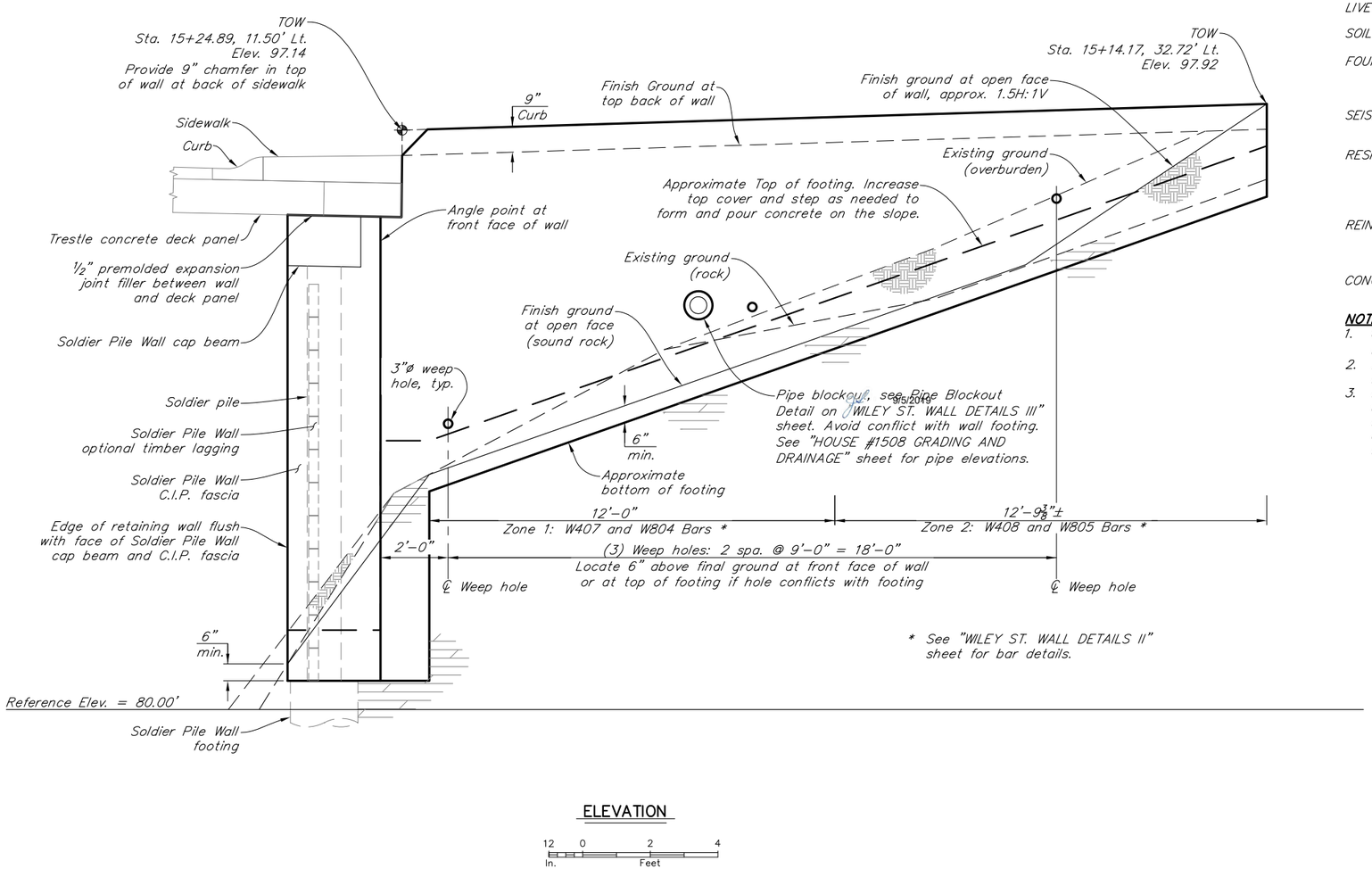
WW1

BRIDGE NO. 0446

DWG. NO. 1

Feb 23, 2017 - 2:32pm robert \\SHEARERSERVER\D-Drive\Jobs\0278 Water Street Construction\Misc\Wiley St Stair Wall\Dwg\0278 WILEY ST STAIR WALL.dwg Layout Name: 1 WILEY ST. WALL LAYOUT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	WW2	N110



ELEVATION

12 0 2 4
In. Feet

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2012 6th Edition, with latest interim specifications.

CONSTRUCTION SPECIFICATION: The Bridge Engineering Specifications shall be governed by the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2004.

DEAD LOAD:..... Concrete unit weight = 160 pcf
Soil unit weight = 135 pcf
Ashpalt wearing surface unit weight = 140 pcf

LIVE LOAD SURCHARGE:..... Equivalent height of 2 feet of soil. Lateral pressure uniformly distributed

SOIL LATERAL PRESSURE:..... Wall design for at-rest lateral pressure, ko = 0.44

FOUNDATION PARAMETERS:..... Wall footing founded on rock
Nominal bearing resistance = 25 ksf
Friction angle for sliding stability = 30°; Passive resistance is neglected

SEISMIC PARAMETERS:..... Wall design for at-rest seismic lateral pressure, Koe = 0.36
Horizontal seismic acceleration coefficient, kh = 0.1

RESISTANCE FACTORS:.....

Bearing Resistance		Lateral Sliding		Rock Anchor Bond	
Strength	= 0.55	Strength	= 1.00	Strength	= 0.50
Service	= 1.00	Service	= 1.00	Service	= 1.00
Extreme Event	= 0.80	Extreme Event	= 0.90	Extreme Event	= 1.00

REINFORCEMENT:..... ASTM A706, fy = 60,000 psi
Space reinforcing steel evenly unless otherwise noted. Reinforcement is not drawn to scale for clarity. Epoxy coat reinforcement where noted.

CONCRETE:..... CLASS A, f'c = 4,000 psi, unless noted otherwise

NOTE:

1. Unless otherwise shown in the plans, the concrete cover measured from the face of the concrete to the face of any reinforcing steel shall be 2 inches. ¾ inch chamfer on all exposed edges.
2. All dimensions on these drawings shall take precedence over the indicated scale. Drawings shall not be scaled for construction purposes. No length or shape is implied unless it is dimensioned.
3. Dimensions shown, including reinforcing bar lengths and bend dimensions, are base on limited topographic information. Actual dimensions are dependent on location of sound rock, which can be known only after rock excavation is complete. Field verify all dimensions. Reinforcement may be field cut and bent. Damage to epoxy coated reinforcing bars, including cut ends, shall be repaired by liberal application of epoxy repair paint.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

Added via CO#30

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
9/5/19

WATER STREET BRIDGE No. 2

WATER STREET

WILEY ST. WALL ELEVATION AND NOTES

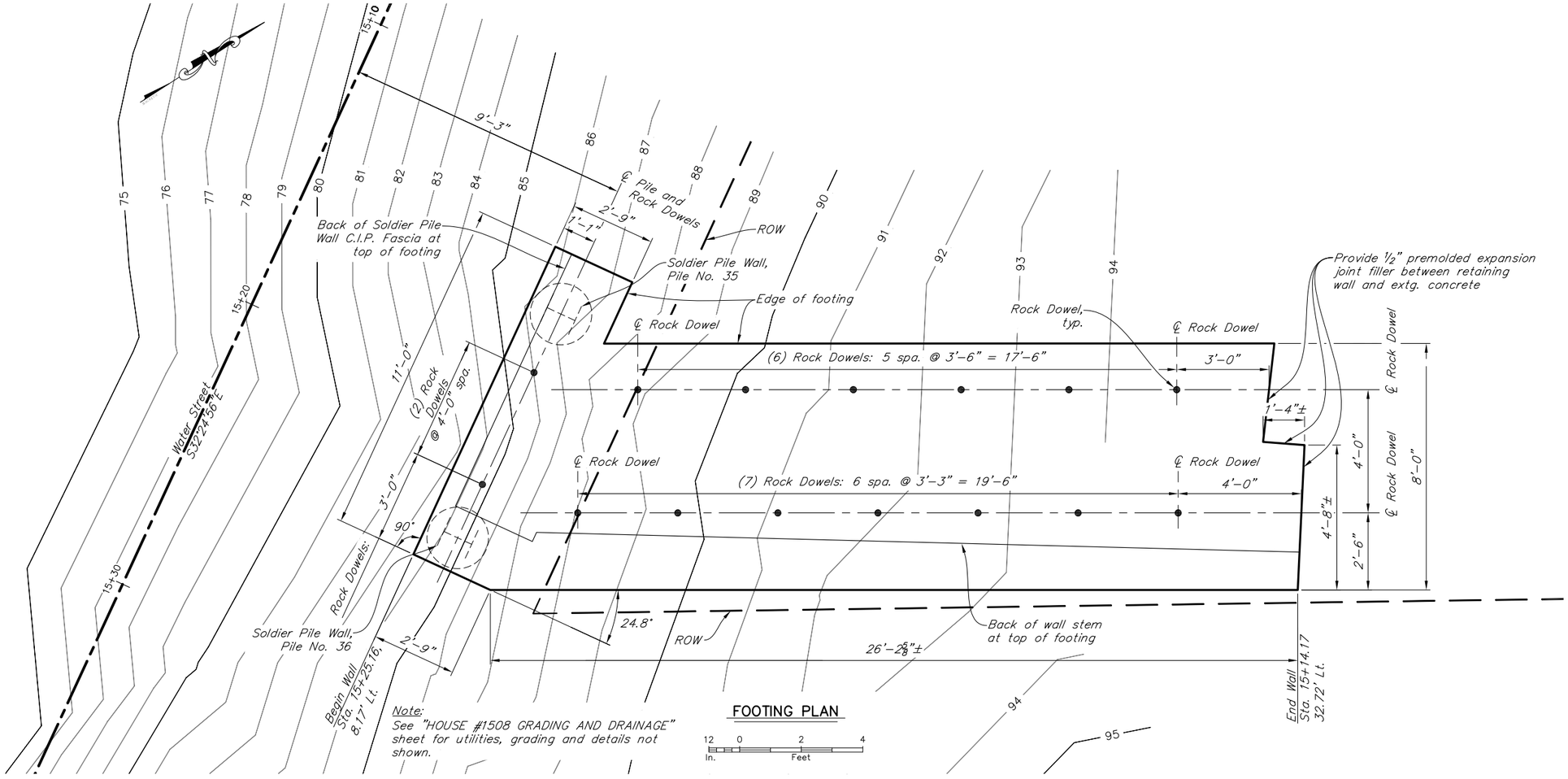
WW2

BRIDGE NO. 0446

DWG. NO. 2

Feb 23, 2017 - 2:36pm robert \\SHEARERSERVER\D-Drive\Jobs\0278 Water Street Construction\Misc\Wiley St Stair WallDwg\0278 WILEY ST STAIR WALL.dwg Layout Name: 2 WILEY ST. WALL ELEVATION AND NOTES

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	WW3	N110



Note:
See "HOUSE #1508 GRADING AND DRAINAGE" sheet for utilities, grading and details not shown.

FOOTING PLAN

12 0 2 4
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

Added via CO#30

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

WILEY ST. WALL FOOTING PLAN

WW3

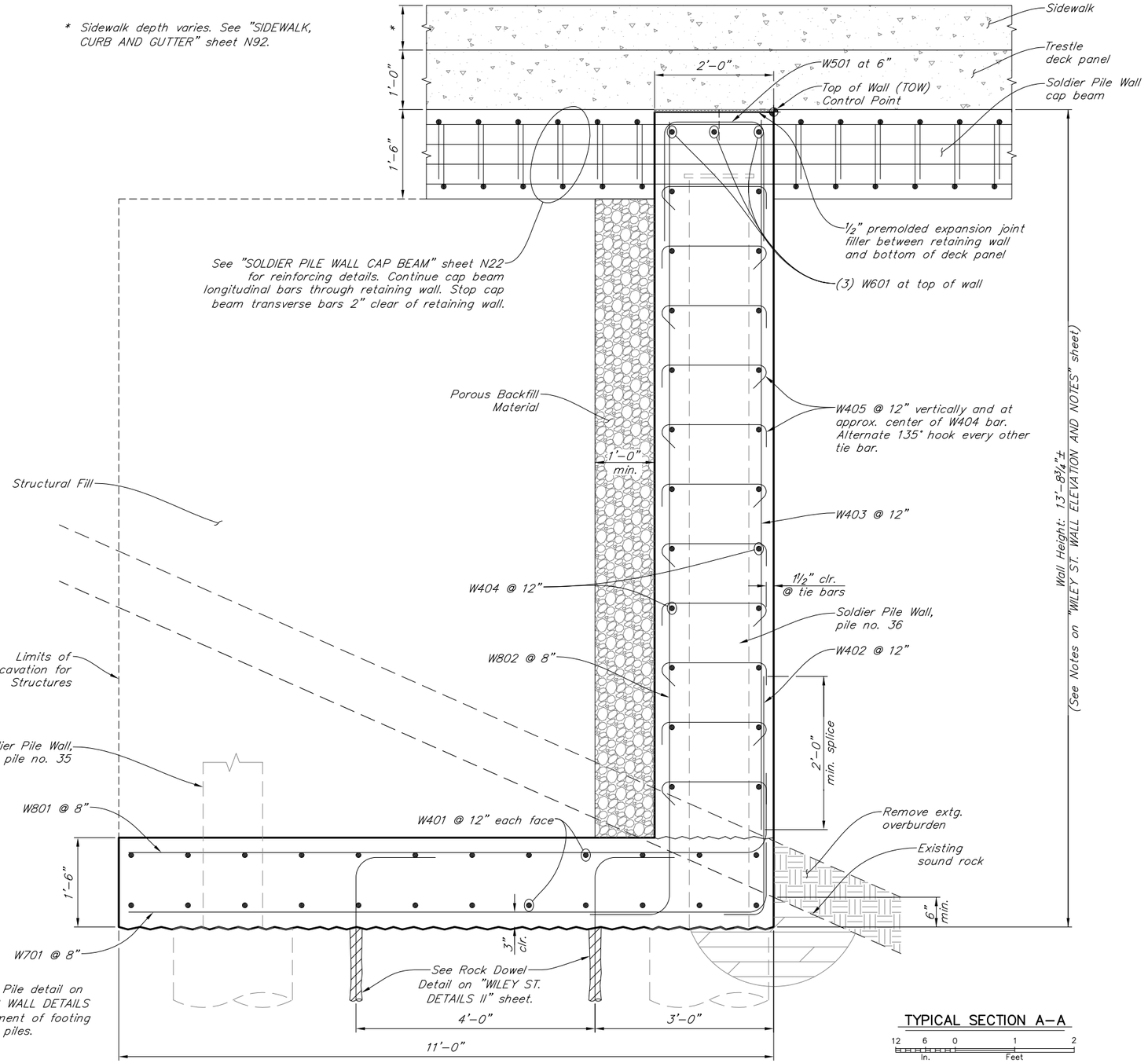
BRIDGE NO. 0446

DWG. NO. 3

Feb 23, 2017 - 2:36pm robert \\shearerserver\d-drive\Jobs\0278 water street construction\Misc\wiley st stair wall\Dwg\0278 WILEY ST WALL FOOTING PLAN.dwg Layout Name: 3 WILEY ST. WALL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	WW4	N110

* Sidewalk depth varies. See "SIDEWALK, CURB AND GUTTER" sheet N92.



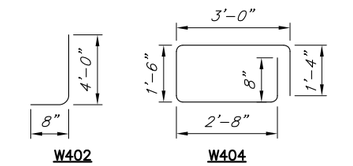
TYPICAL SECTION A-A

12 6 0 1 2 In. Feet

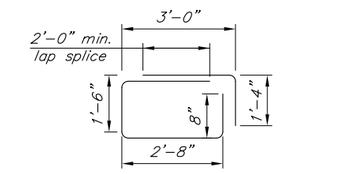
Note:
See Footing Plan at Pile detail on "WILEY STREET STAIR WALL DETAILS III" sheet for adjustment of footing bars in conflict with piles.

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W401	S,X,F	4	24	Cont.	–
W402	–	4	4	4'-8"	Bent
W403	F	4	4	16'-0"	–
W404	–	4	12	9'-2"	Bent
W405	–	4	11	2'-6"	Bent
W501	–	5	7	7'-8"	Bent
W601	–	6	3	4'-8"	Bent
W701	–	7	6	11'-10"	Bent
W801	–	8	6	12'-0"	Bent
W802	F	8	6	19'-0"	Bent

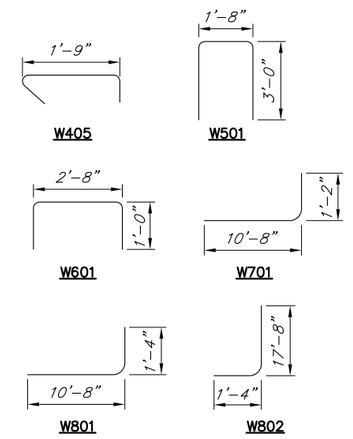


W402 W404



W404 (alt.)

Alternate bar to be used if optional timber lagging is used for Soldier Pile Wall



W405 W501 W601 W701 W801 W802

E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.

Note:
See "WILEY ST. WALL DETAILS III" sheet for additional bars.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

Added via CO#30

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

WILEY ST. WALL DETAILS I

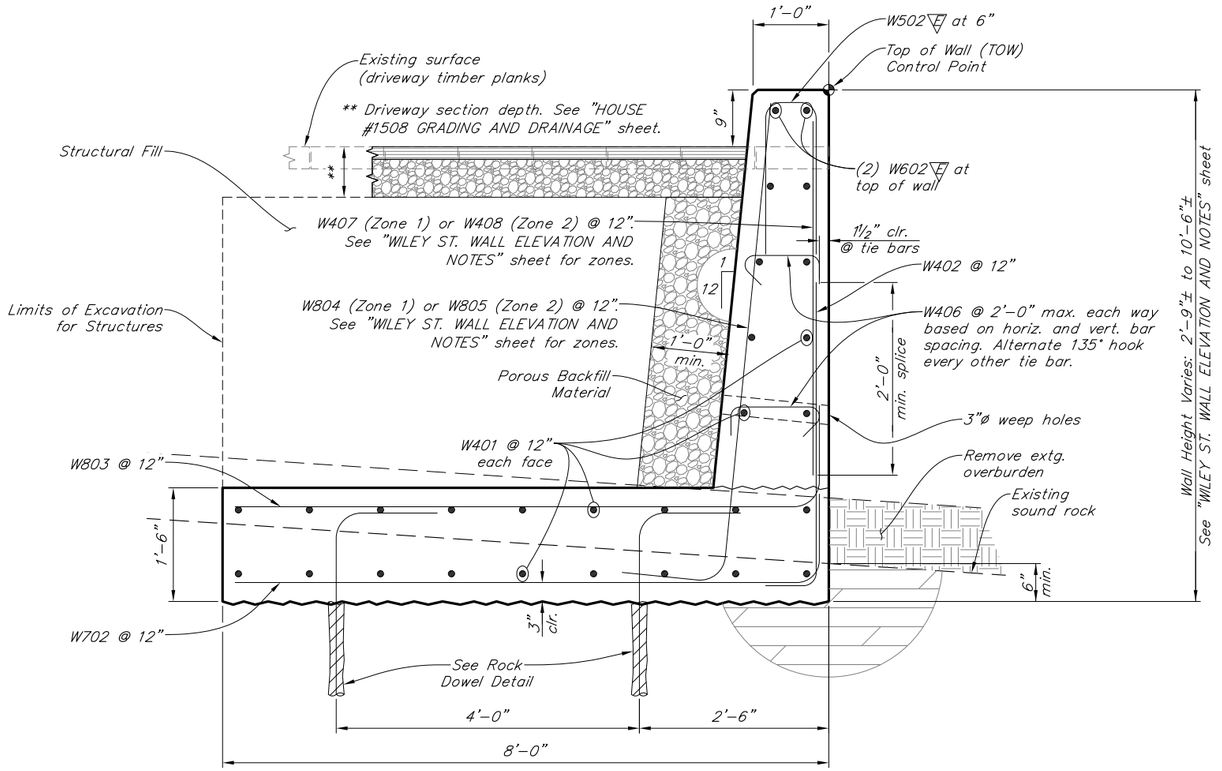
WW4

BRIDGE NO. 0446

DWG. NO. 4

Feb 23, 2017 - 2:37pm robert \\shearerserver\d-drive\Jobs\0278 water street construction\Mlsc\wiley st stair wall\Dwg\0278 WILEY ST STAIR WALL DETAILS.dwg Layout Name: 4 WILEY ST. WALL DETAILS I

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	WW5	N110

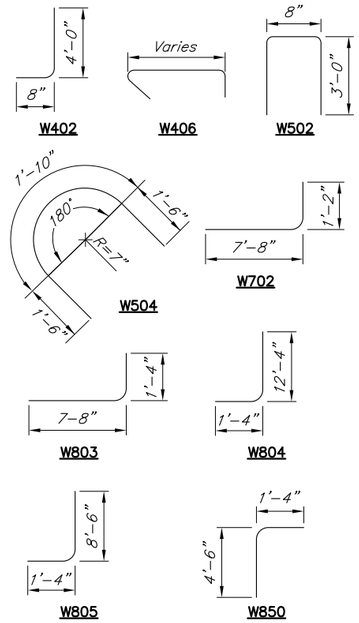


TYPICAL SECTION B–B

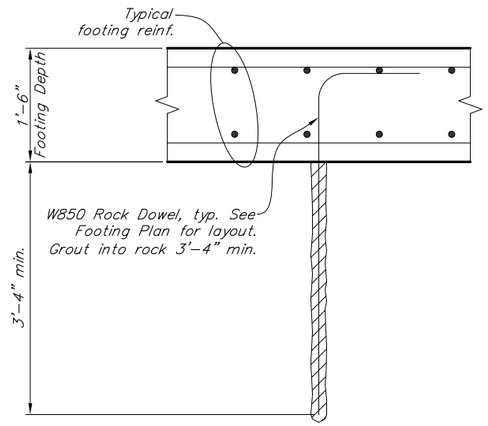
12 6 0 1 2
In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W401	S,X,F	4	–	Cont.	–
W402	–	4	26	4'-8"	Bent
W406	–	4	64	Varies	–
W407	F	4	15	10'-11"	–
W408	F	4	13	7'-1"	–
W502	E	5	47	6'-8"	Bent
W504	–	5	4	4'-10"	Bent
W602	E	6	2	22'-0"	–
W702	–	7	24	8'-10"	Bent
W803	–	8	24	9'-0"	Bent
W804	F	8	15	12'-3"	Bent
W805	F	8	13	8'-5"	Bent
W850	–	8	14	5'-10"	Bent

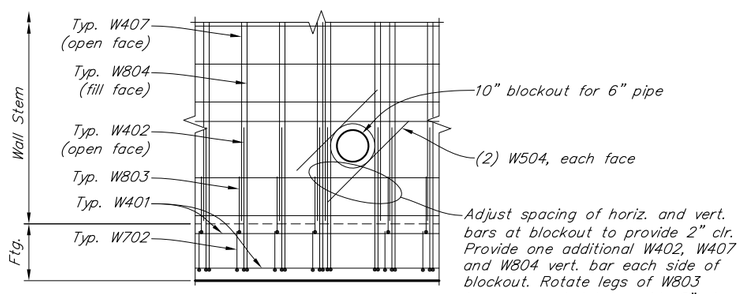


E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.



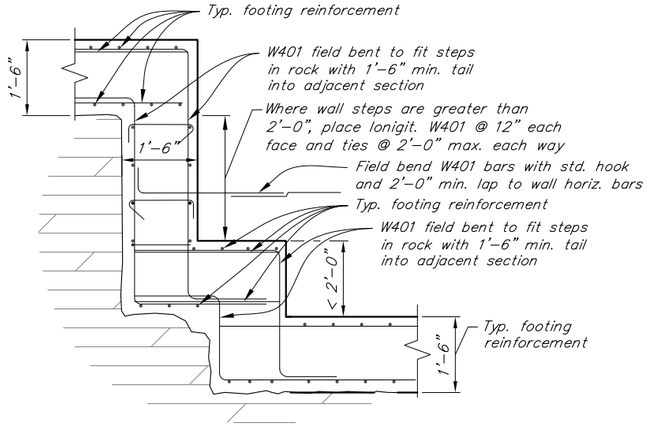
ROCK DOWEL DETAIL

12 6 0 1 2
In. Feet



PIPE BLOCKOUT DETAIL

12 6 0 1 2 3 4
In. Feet



FOOTING STEP DETAIL

12 6 0 1 2 3 4
In. Feet

Wall reinforcing not shown for clarity.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

Note:
See "WILEY ST. WALL DETAILS III" sheet for additional bars.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Added via CO#30
DRAWN BY: Robert Doherty	CHECKED: David Shearer	
QUANTITIES BY:	CHECKED:	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

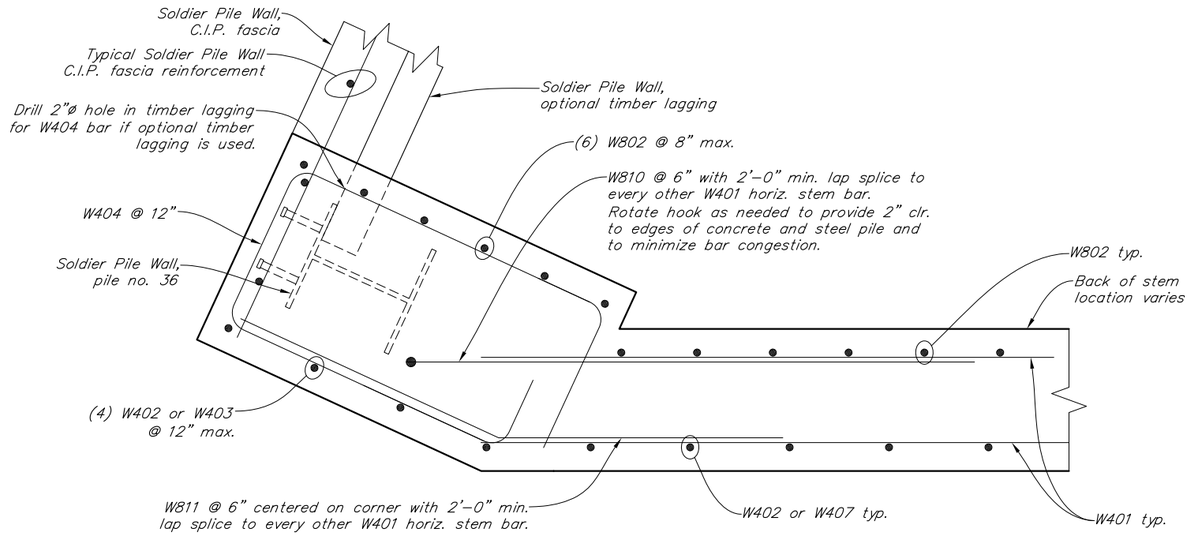
WILEY ST. WALL DETAILS II

WW5

BRIDGE NO. 0446
DWG. NO. 5

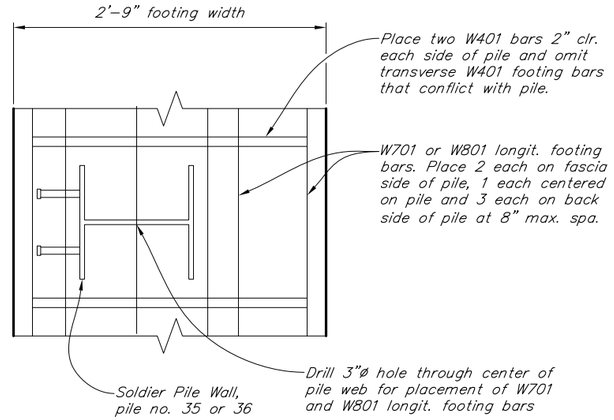
Feb 23, 2017 - 2:37pm robert \\shearerserver\d-drive\Jobs\0278 water street construction\Mss\wiley st stair wall\Dwg\0278 WILEY ST STAIR WALL DETAILS.dwg Layout Name:5 WILEY ST. WALL DETAILS II

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	WW6	N110



CORNER PLAN – TYPICAL

6 0 1
In. Feet

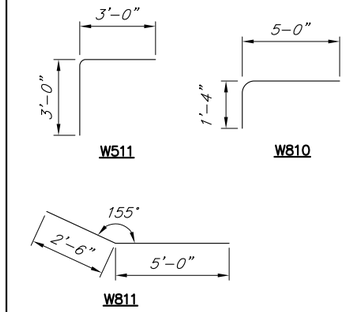


FOOTING PLAN AT PILE

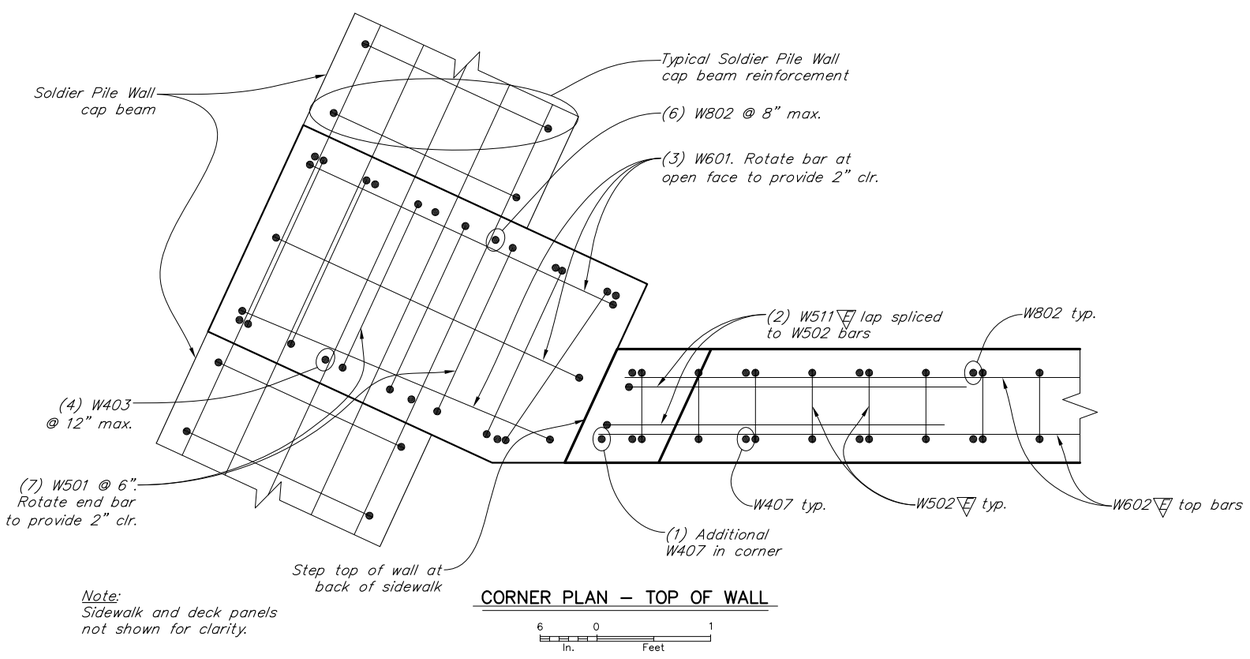
6 0 1
In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W511	E	5	2	6'-0"	Bent
W810	–	8	20	6'-4"	Bent
W811	–	8	20	7'-6"	Bent



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.



Note:
Sidewalk and deck panels not shown for clarity.

CORNER PLAN – TOP OF WALL

6 0 1
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

Note:
See "WILEY ST. WALL DETAILS I" and "WILEY ST. WALL DETAILS II" sheets for typical wall bars.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

Added via CO#30

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

WATER STREET BRIDGE No. 2

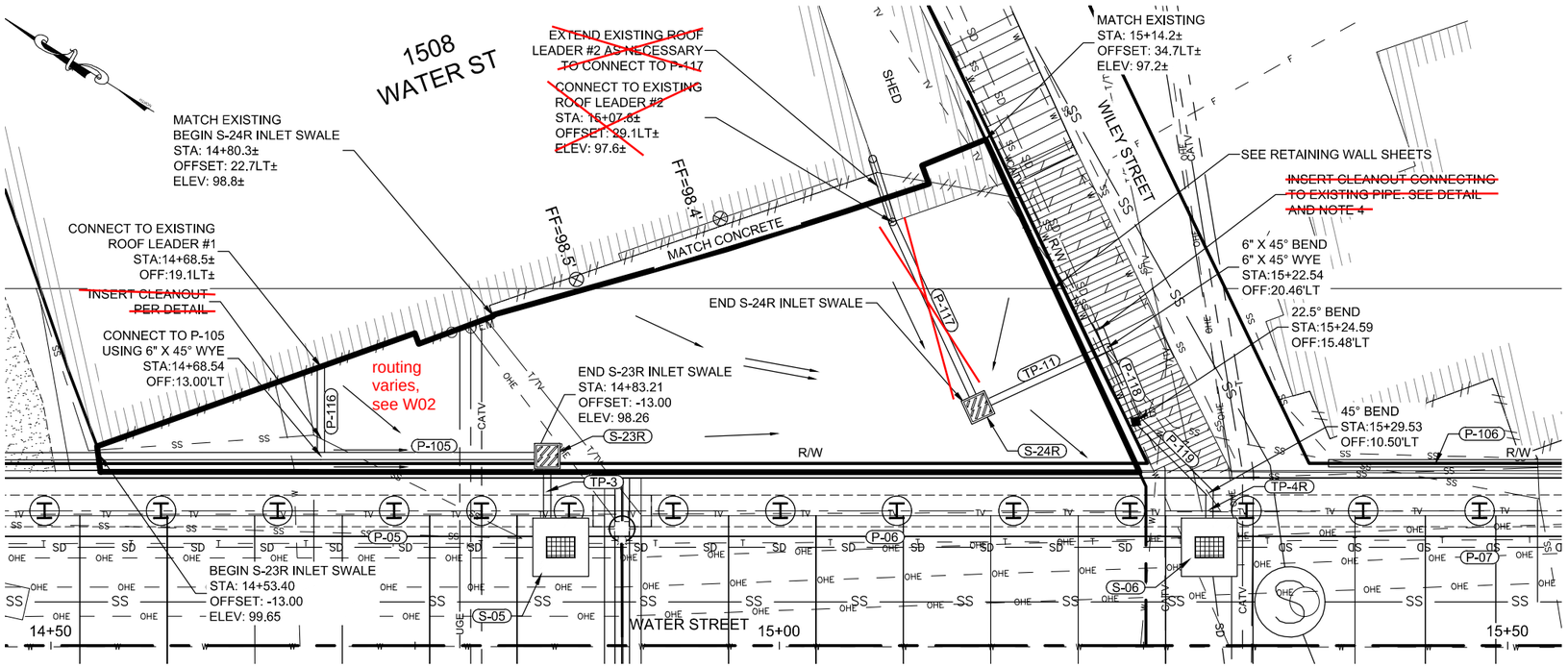
WATER STREET

WILEY ST. WALL DETAILS III

WW6

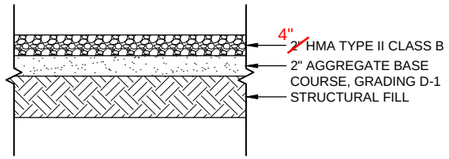
BRIDGE NO. 0446
DWG. NO. 6

Feb 23, 2017 - 2:37pm robert \\shearerserver\d-drive\Jobs\0278 water street construction\Misc\wiley st stair wall\Dwg\0278 WILEY ST STAIR WALL DETAILS.dwg Layout Name: 6 WILEY ST. WALL DETAILS III

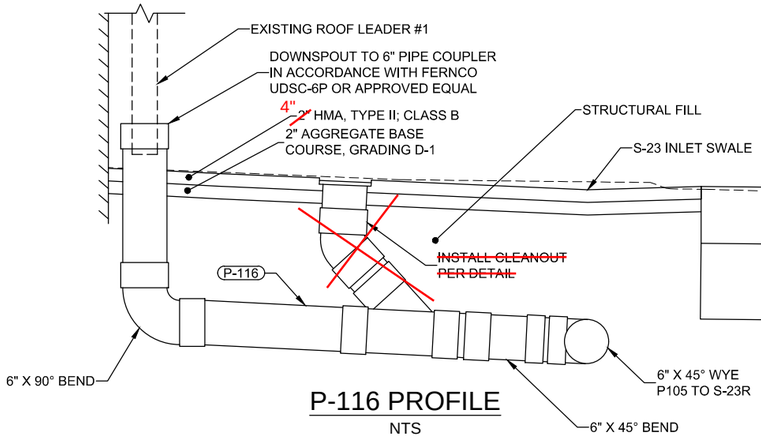


SHEET NOTES:

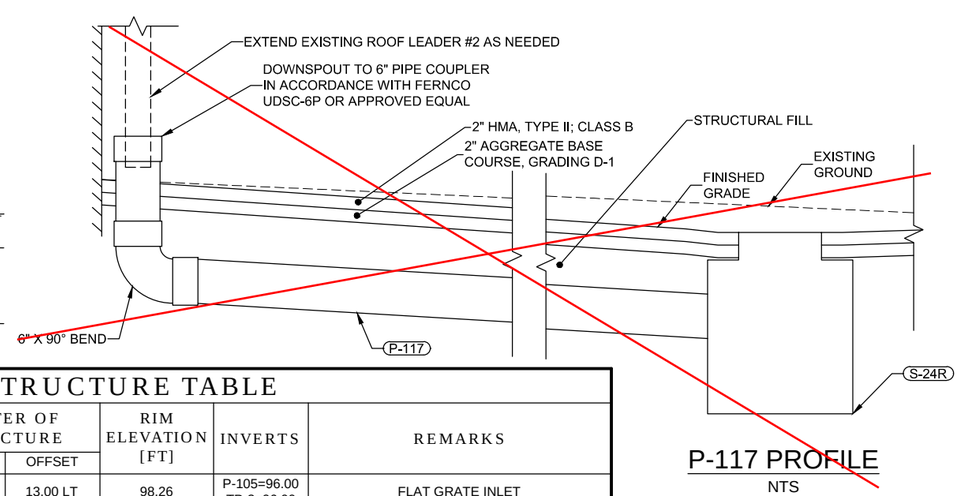
1. REMOVE TIMBER DRIVEWAY STRUCTURE AND DECKING. BACKFILL VOID UP TO BOTTOM OF PAVEMENT SECTION WITH SELECTED MATERIAL TYPE A.
2. MATCH EXISTING DRIVEWAY ELEVATIONS ALONG HOUSE 1508 AND SMALL CONCRETE RAMP IN FRONT OF THE GARAGE.
3. DISCUSS WITH HOMEOWNER PREFERRED ROOF LEADER #2 ALIGNMENT TO TIE INTO P-117. - Decided to keep existing configuration
4. ~~INSTALL CLEANOUT CONNECTING TP-11 AND P-118 TO EXISTING STORM DRAIN PIPE AT A LOCATION WHICH ALLOWS SUFFICIENT CLEARANCE BETWEEN PROPOSED CONNECTION JOINT AND NEAREST EXISTING STORM DRAIN JOINT.~~
5. REFER TO D SHEETS FOR ADDITIONAL PIPE INFORMATION.



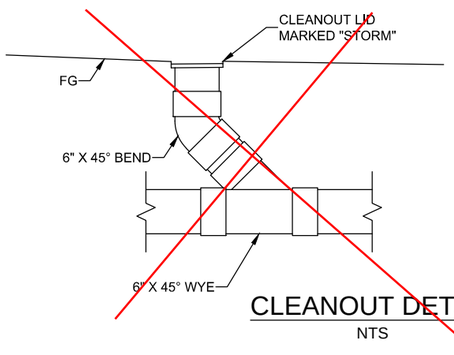
PAVEMENT SECTION
NTS



P-116 PROFILE
NTS



P-117 PROFILE
NTS



CLEANOUT DETAIL
NTS

STRUCTURE TABLE

STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE		RIM ELEVATION [FT]	INVERTS	REMARKS
		STATION	OFFSET			
S-23R	TYPE 20 CB	14+84.08	13.00 LT	98.26	P-105=96.00 TP-3=96.00	FLAT GRATE INLET
S-24R	TYPE 20 CB	15+13.64	16.35 LT	96.70	P-117=95.44 TP-11=95.39	FLAT GRATE INLET

PIPE TABLE

PIPE NO.	PIPE TYPE	SIZE [IN]	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
P-116	CPEP	6	6.13	ROOF LEADER #1	97.0	P-105	96.70	5.00%	~~INSTALL CLEANOUT~~
~~P-117~~	~~CPEP~~	~~6~~	~~14.00~~	~~ROOF LEADER #2~~	~~96.2~~	~~S-24R~~	~~95.39~~	~~5.55%~~	~~CONNECT TO LEADER #2 WITH ADDITIONAL BENDS AND PIPE~~
TP-11	CPEP	6	9.80	S-24R	95.39	P-118	90.53	49.58%	CAST-IN-PLACE WALL PENETRATION, INVERT ELEVATION 91.71
P-118	CPEP	6	5.39	TP-11	90.53	P-119	89.85	12.55%	BENEATH WILEY STREET STAIRCASE/INSTALL ~~CLEANOUT UPSTREAM OF 45° WYE~~
P-119	CPEP	6	7.02	P-118	89.85	TP-4R	88.97	12.55%	BENEATH WILEY STREET STAIRCASE
TP-4R	CPEP	6	2.33	P-119	88.97	S-06	88.68	12.43%	H-PILE WALL PENETRATION

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\1744-1508 RETAINING WALL - STANDARD\1744-1508 RETAINING WALL.DWG

JOSEPH HORAZDOVSKY

TAB: WW 7 3/8/2017 9:57 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.:

Date: 9/5/2019

Added via CO#30

CHECKED BY:

STATE OF ALASKA 49 TH Ryan D. Redick No. CE 12799 03/08/17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY:

DRAWN BY:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

HOUSE #1508 GRADING & DRAINAGE

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2017
SHEET NUMBER	TOTAL SHEETS
WW 7	WW 7

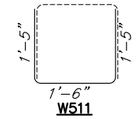
RFI-115 Timber Lagging Does Not Need to be PT Lumber. Must Meet Req'ments of Douglas Fir (North) Stud Grade fb = 775 psi

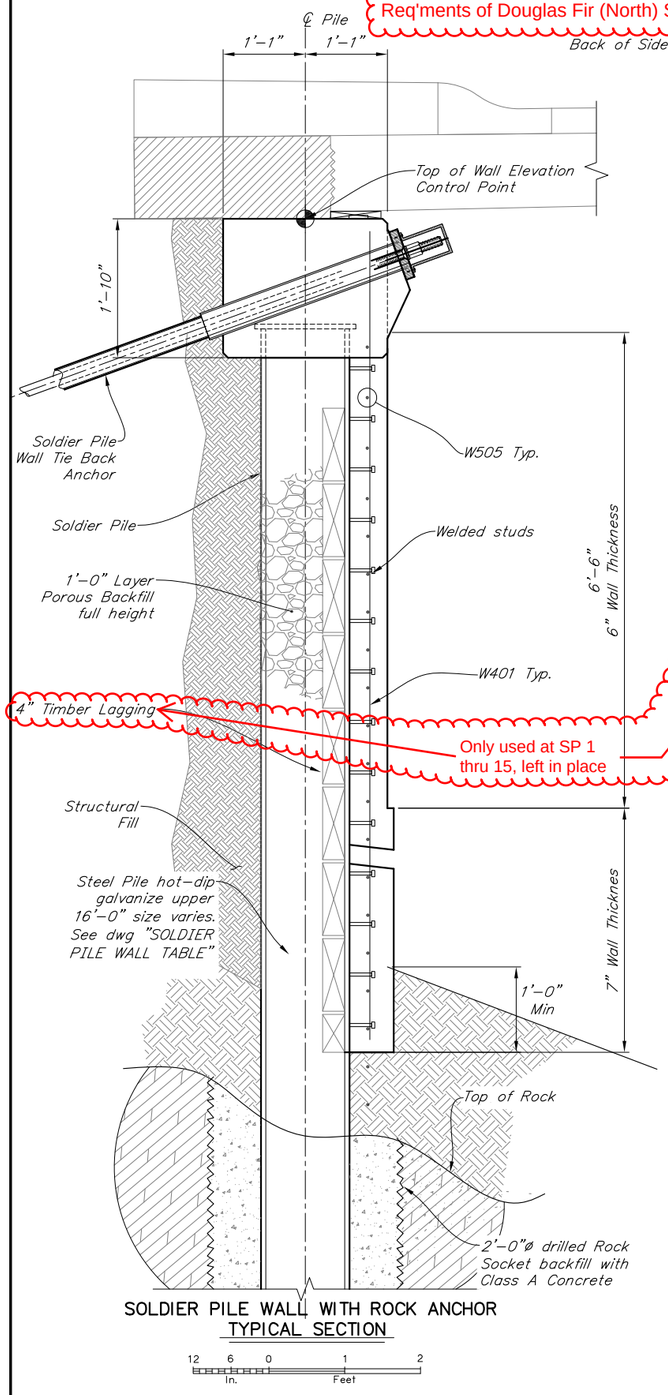
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N21	N110

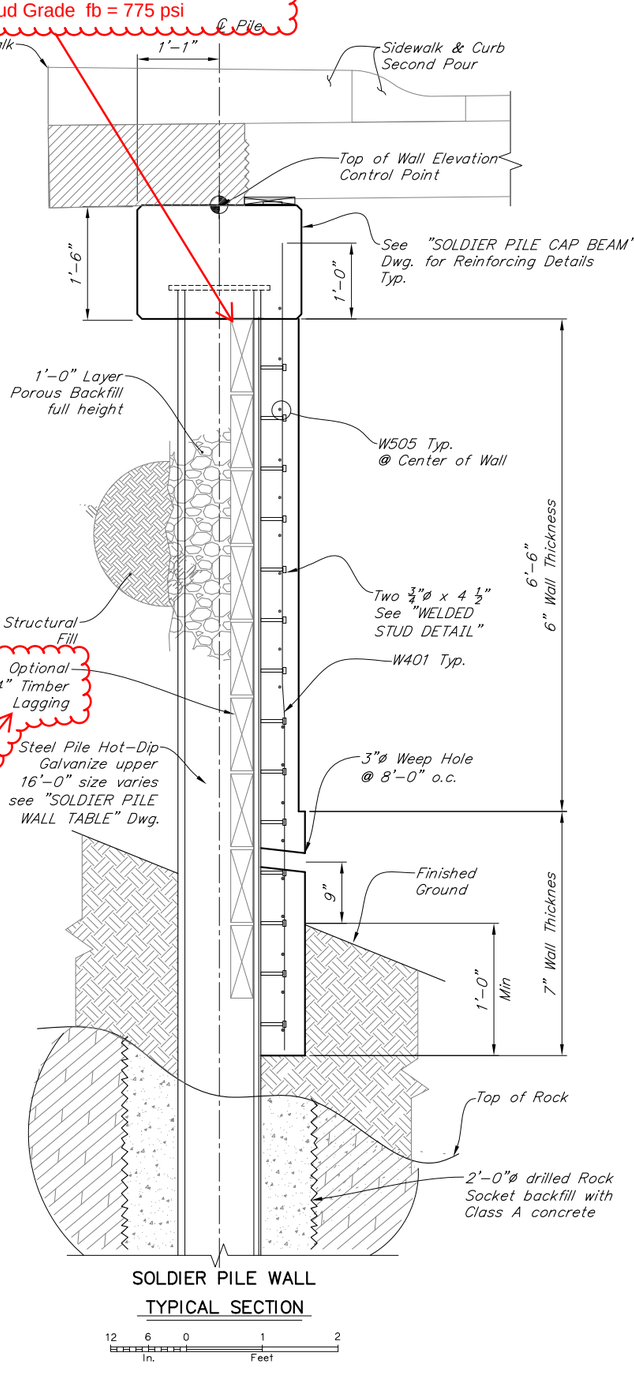
REINFORCING STEEL

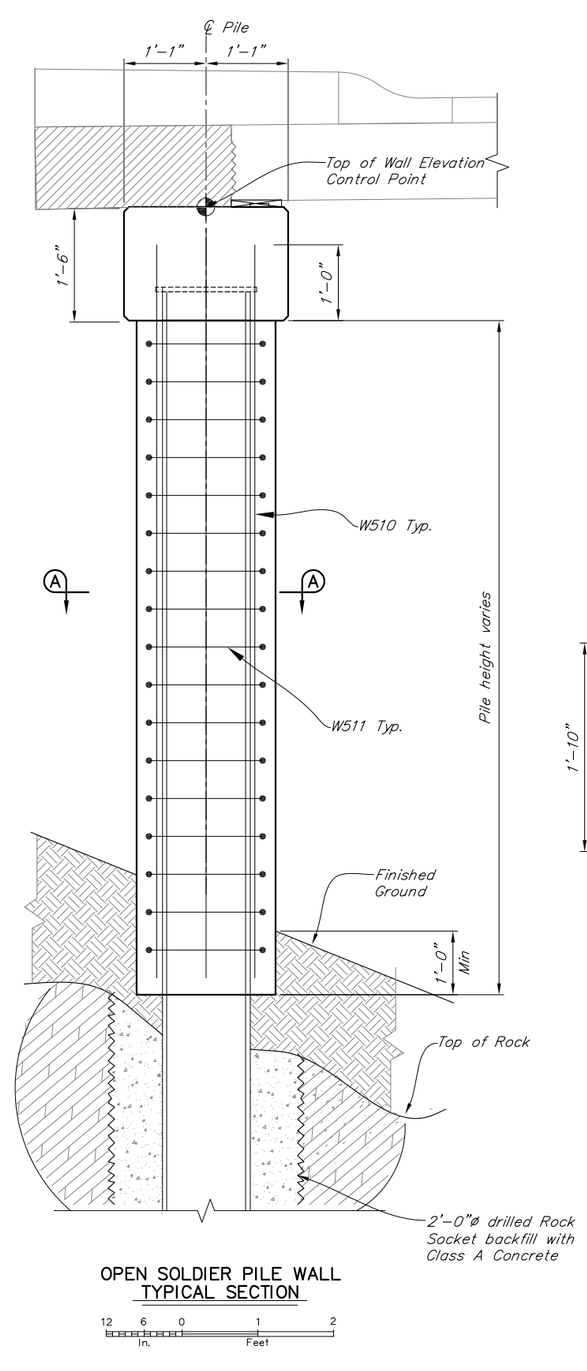
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W510		5	8	Varies	–
W511		5	As Req.	4'-4"	bent

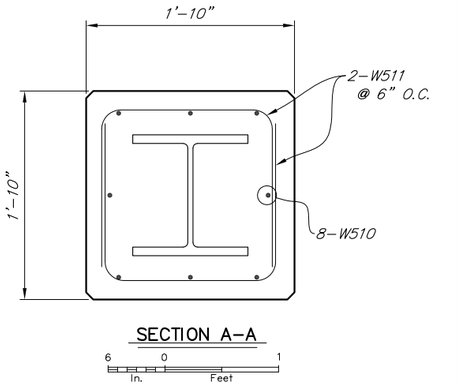
BENDING DIAGRAM











Note:
With permission from the home owner stabilize or remove all existing private wall systems for wall construction of Soldier Pile Wall.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

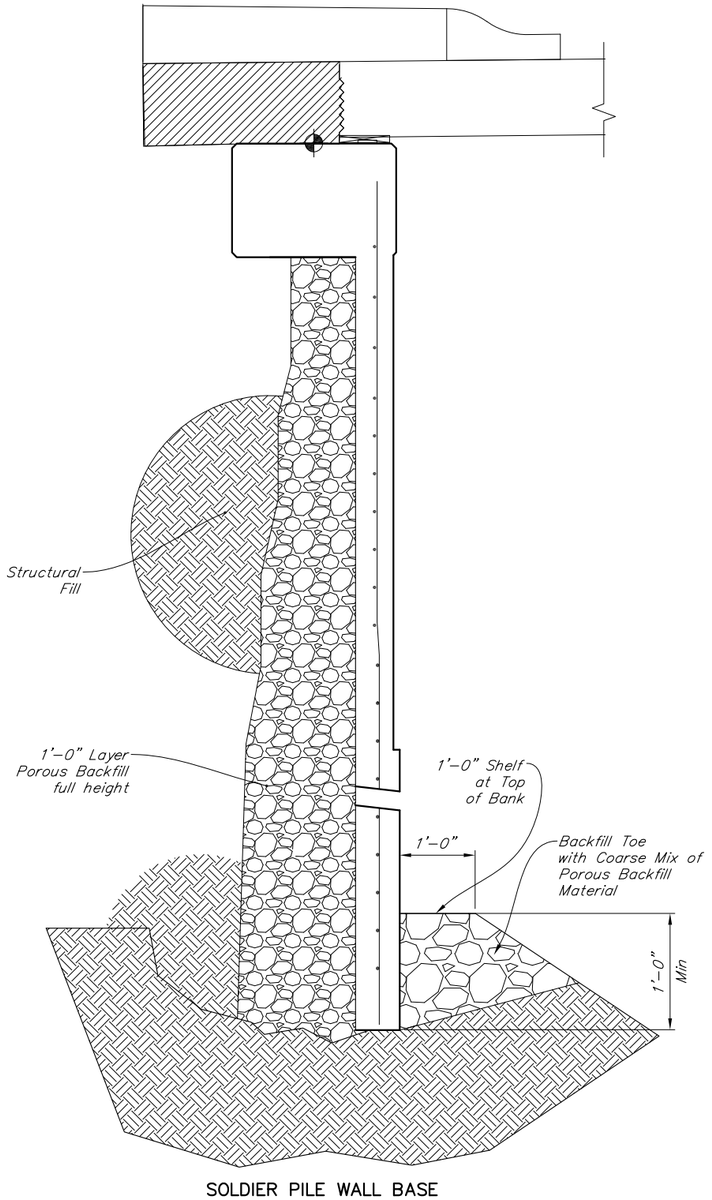
Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	WATER STREET BRIDGE No. 2 WATER STREET SOLDIER PILE WALL SECTIONS
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	BRIDGE NO. 0446 DWG. NO. 21

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

Oct 14, 2015 - 3:45pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\damset adot&pf\69534 Nxx Soldier Pile Wall Face.dwg Layout Name: SOLDIER PILE WALL SECTIONS

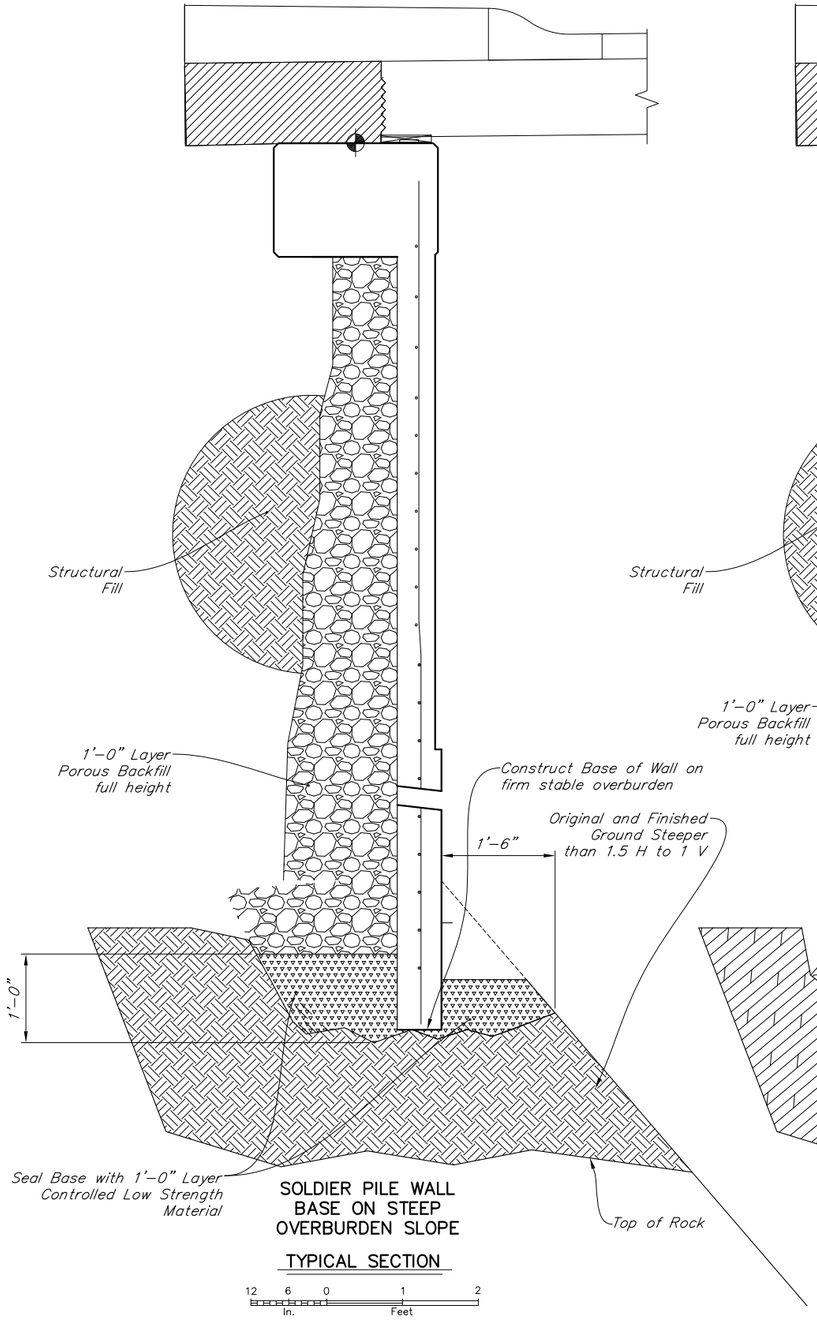
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N----	1



SOLDIER PILE WALL BASE ON OVERBURDEN SLOPE LESS THAN 1.5H : 1 V

TYPICAL SECTION

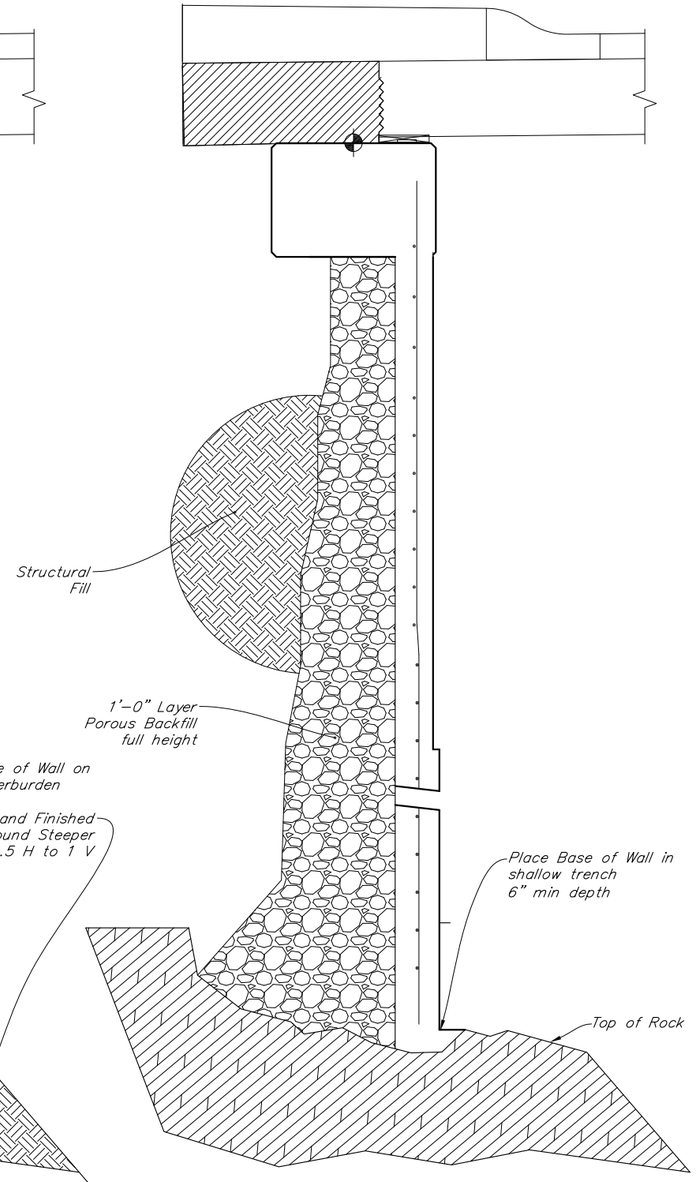
12 6 0 1 2
In. Feet



SOLDIER PILE WALL BASE ON STEEP OVERBURDEN SLOPE

TYPICAL SECTION

12 6 0 1 2
In. Feet



SOLDIER PILE WALL BASE ON ROCK TYPICAL SECTION

12 6 0 1 2
In. Feet

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY:	CHECKED: Brien Lindstrom	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
9/5/19
Registered Professional Engineer

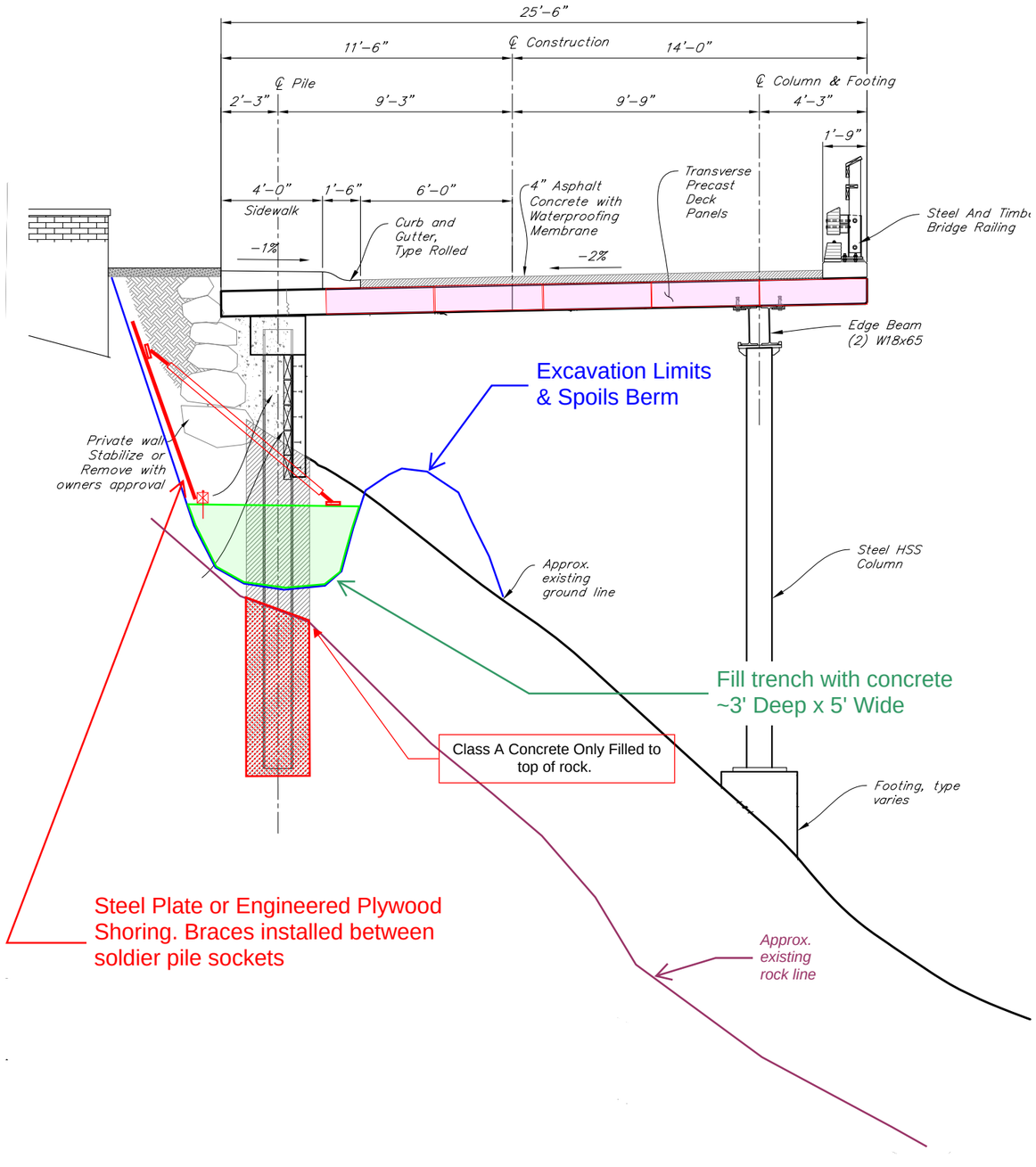
WATERSTREET BRIDGE No. 2

WATER STREET

SOLDIER PILE WALL BASE

BRIDGE NO. 0446
DWG. NO. N21A

Sep 15, 2017 - 2:09pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Davids Stuff\Sketches\69534 Nxx Soldier Pile Wall Face base.dwg Layout Name: SOLDIER PILE WALL BASE

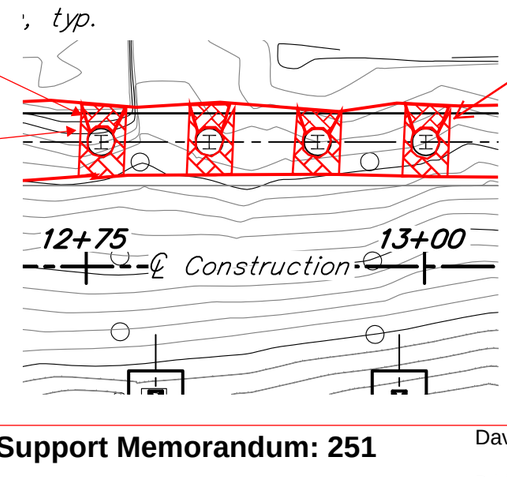


NOTES:

1) Excavate as much as JD75 excavator can reach at SP-16 thru SP-13.
2) Placing concrete in trench eliminates the need for rock chip prep.
3) Install steel plate or plywood shoring with braces.
4) Set soldier pile cans directly to concrete with Titan bolts or pins
5) Drill thru concrete for SP sockets
6) Set & cast H-piles
7) Leave shoring in place or switch out with timber lagging
8) All temporary concrete is to be buried in place.
9) Relief areas will be be cut/pulverized 3 ft. east/west of each SP after placement, and dispersed to the engineer's satisfaction prior to backfill.

Relief Zones In Concrete Fill.

Pulverize Temp Concrete East and West of SP Sockets After Piles are Placed.



Remove and displace all concrete on the up hill side of the soldier pile. 3'-0" width

Construction Support Memorandum: 251

David Shearer S.E.

Bridge Engineer

SHEARER DESIGN

March 28, 2018

To: John Scott, HDR

RFI #181

Subject: Phase 8 drilling plan.

Response:

The approach is acceptable with the following provisions:

The concrete trench fill must not be in contact with the soldier pile in the final configuration. This is to prevent additional load transfer to the soldier piles.

Completely remove all the pulverized concrete on the uphill (east) side of the pile.

Measure and determine the top of rock elevation during the drilling process. Use this information when determining the appropriate socket depth and pile section in accordance with sheet N13.

The bottom edge of the concrete soldier pile wall panel shall be backfilled /buried to provide the minimum cover as shown on the plans.

Any shoring and bank stabilization design to be the responsibility of Dawson and are not part of this memo.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

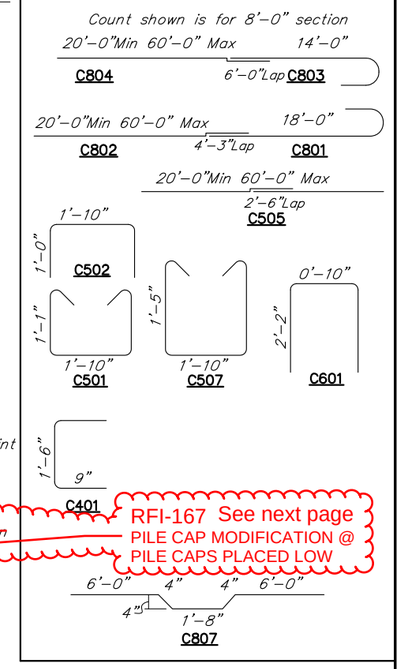
DCI-2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N22	N110

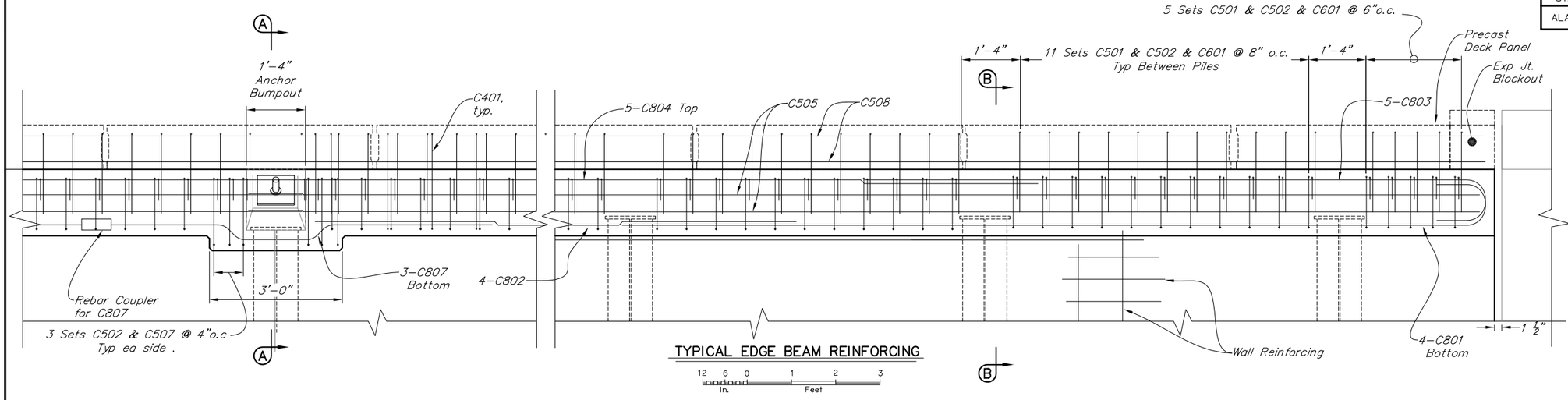
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C401	E	4		3'-0"	bent
C501		5	11	4'-9"	bent
C502		6	11	3'-8"	bent
C505		5	4	Varies	–
C507		5	6	5'-5"	bent
C508	E	5	6	Varies	–
C601	E	6	11	5'-2"	bent
C801		8	4	18'-11"	–
C802		8	4	Varies	–
C803		8	5	14'-11"	bent
C804		8	5	Varies	bent
C807		8	3	14'-8"	bent

BENDING DIAGRAM



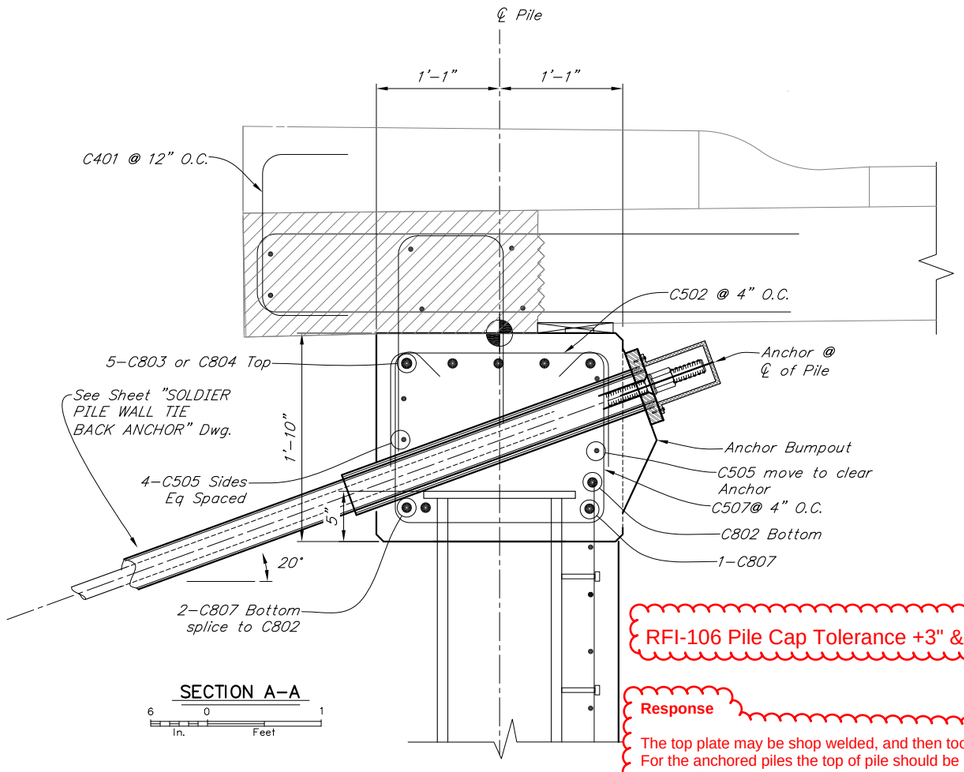
C = Provide splice & field cut off excess leg
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.
* =Field Bend Angle to fit location



TYPICAL EDGE BEAM REINFORCING

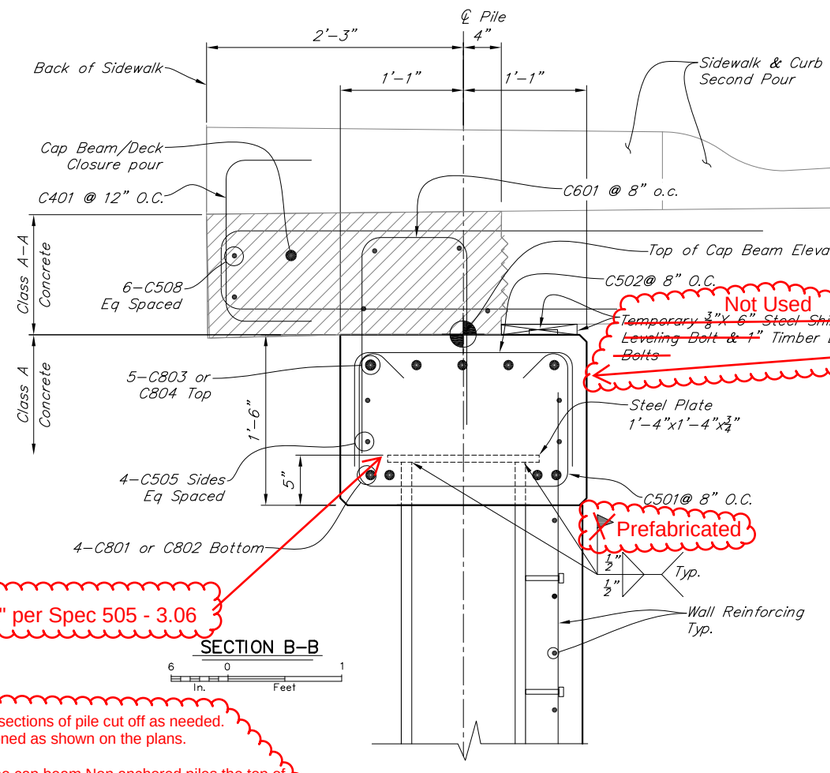
12 6 0 1 2 3
In. Feet

View from Front Side of Wall



SECTION A-A

6 0 1
In. Feet



SECTION B-B

6 0 1
In. Feet

RFI-106 Pile Cap Tolerance +3" & -1/2" per Spec 505 - 3.06

Response

The top plate may be shop welded, and then too long sections of pile cut off as needed. For the anchored piles the top of pile should be positioned as shown on the plans.

In order to minimize the potential for shear cracks in the cap beam Non anchored piles the top of the pile may be raised no more than one inch.

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

SOLDIER PILE WALL CAP BEAM

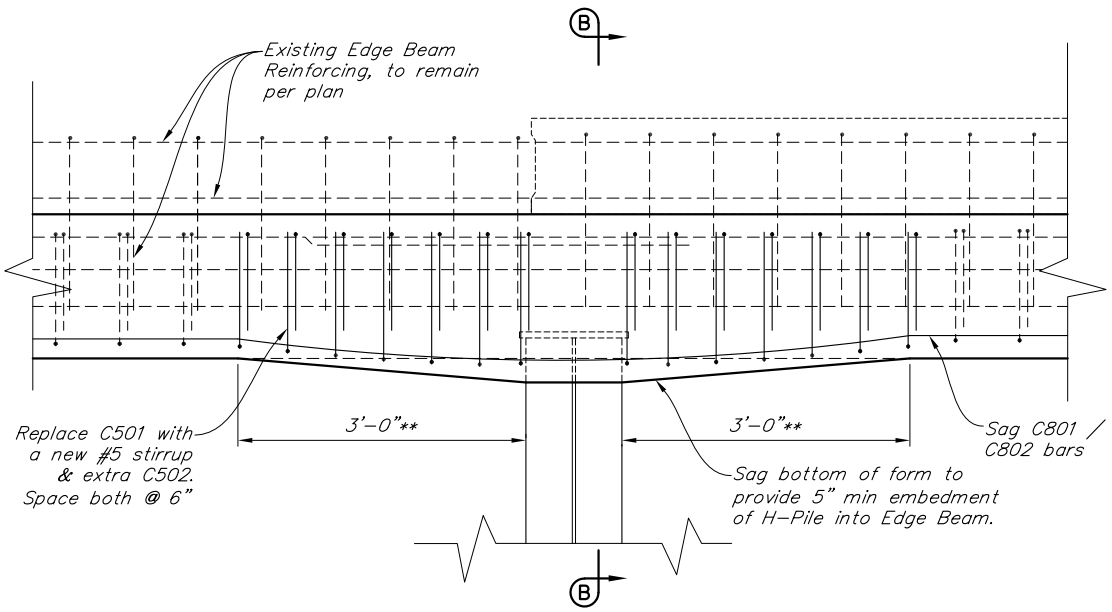
BRIDGE NO. 0446
DWG. NO. 22

Oct 14, 2015 - 3:45pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534 Nxx Soldier Pile Wall Face.dwg Layout Name: SOLDIER PILE WALL CAP BEAM

SHEARER DESIGN LLC
Bridge Design, Construction Engineering, Infrastructure Aesthetics

JOB NO. 0278
DATE 10/18/17
COMPUTED BY B. LINDSTROM
CHECKED BY D. SHEARER

PROJECT WATER STREET #2
SUBJECT RFI 167, H-PILE HEAD ELEVATIONS REVISION 1



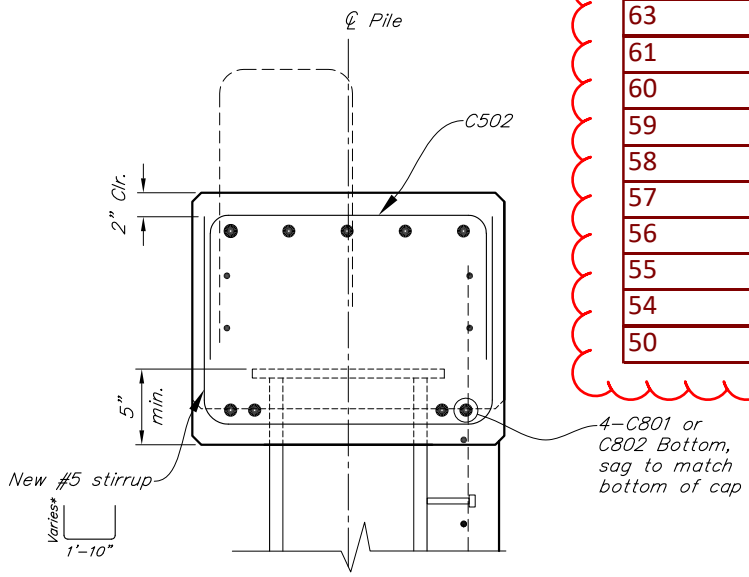
EDGE BEAM AT LOW H-PILE

12 6 0 1 2
In. Feet

Wall not shown for clarity.

**As an alternate, chord the bottom of the Cap Beam between the low Soldier Piles to simplify forming

Soldier Pile #	Design Pile Head EL	Actual Pile Head EL	Diff.
64	89.62	89.52	0.10 Low
63	89.64	89.45	0.19 Low
61	89.69	89.51	0.18 Low
60	89.71	89.61	0.10 Low
59	89.73	89.60	0.13 Low
58	89.76	89.61	0.15 Low
57	89.78	89.66	0.12 Low
56	89.80	89.71	0.09 Low
55	89.83	89.74	0.09 Low
54	89.85	89.72	0.13 Low
50	89.59	89.46	0.13 Low



* Extend vertical leg to 2" from top of Soldier Pile Wall Cap Beam

SECTION B-B

6 0 1
In. Feet

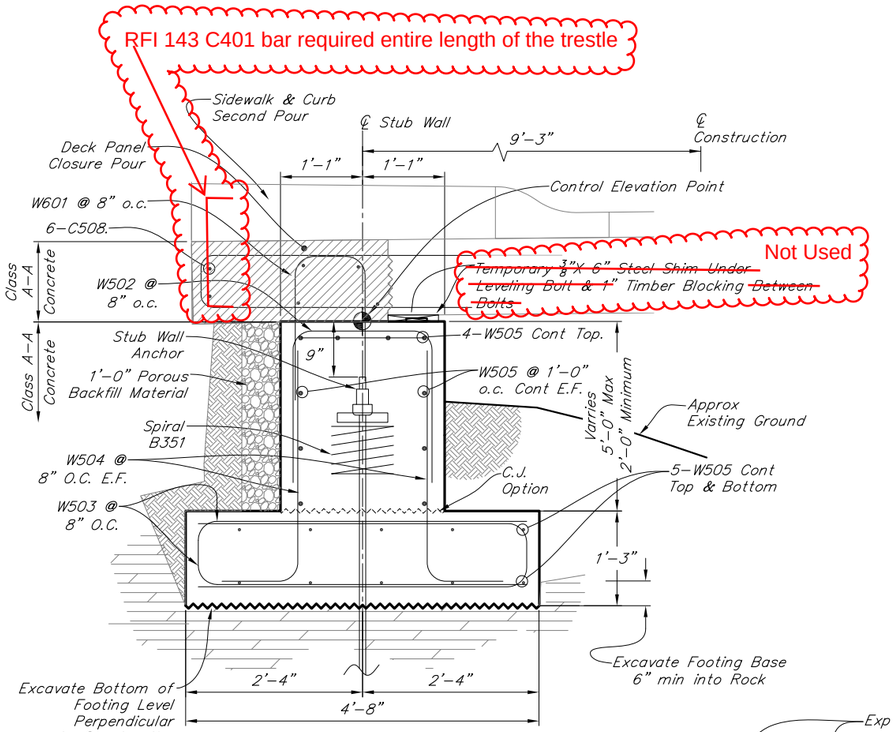
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

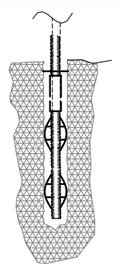
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N23	N110

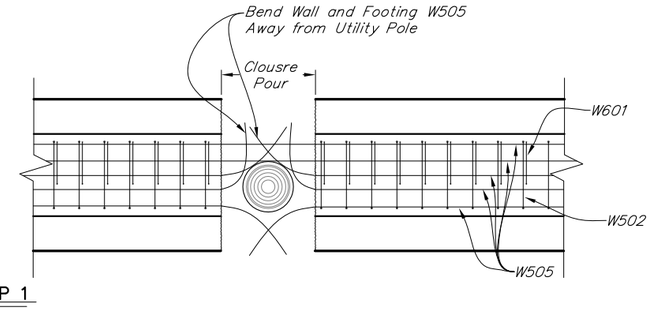
RFI 143 C401 bar required entire length of the trestle



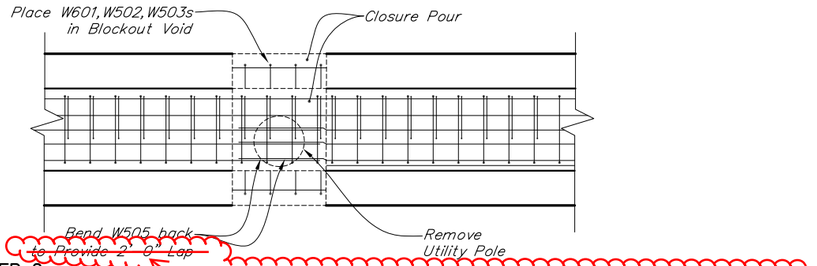
STUB WALL TYPICAL SECTION

12 6 0 1 2 In. Feet





STEP 1

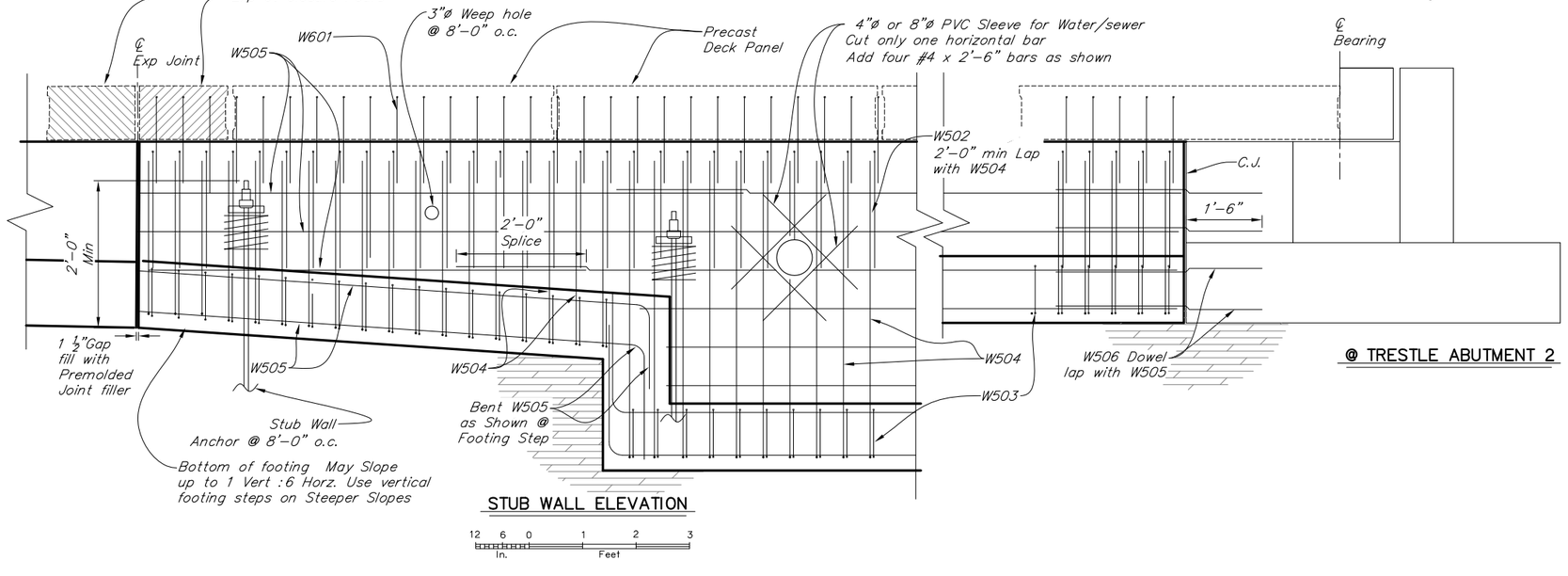


STEP 2

Located at Expansion Joint, closure bar not lapped

STUB WALL PLAN @ UTILITY POLE

12 6 0 1 2 3 4 In. Feet



STUB WALL ELEVATION

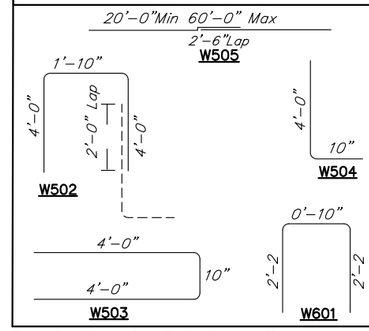
12 6 0 1 2 3 In. Feet

@ TRESTLE ABUTMENT 2

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W505	s	5	As Req.	Varies	–
W601	E	6	As Req.	5'-2"	bent
W502	c	5	As Req.	9'-10"	bent
W503		5	As Req.	8'-10"	bent
W504	c	5	As Req.	4'-10"	bent
C508	E	5	As Req.	Varies	–

BENDING DIAGRAM



C = Provide splice & field cut off excess leg
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.
* =Field Bend Angle to fit location

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

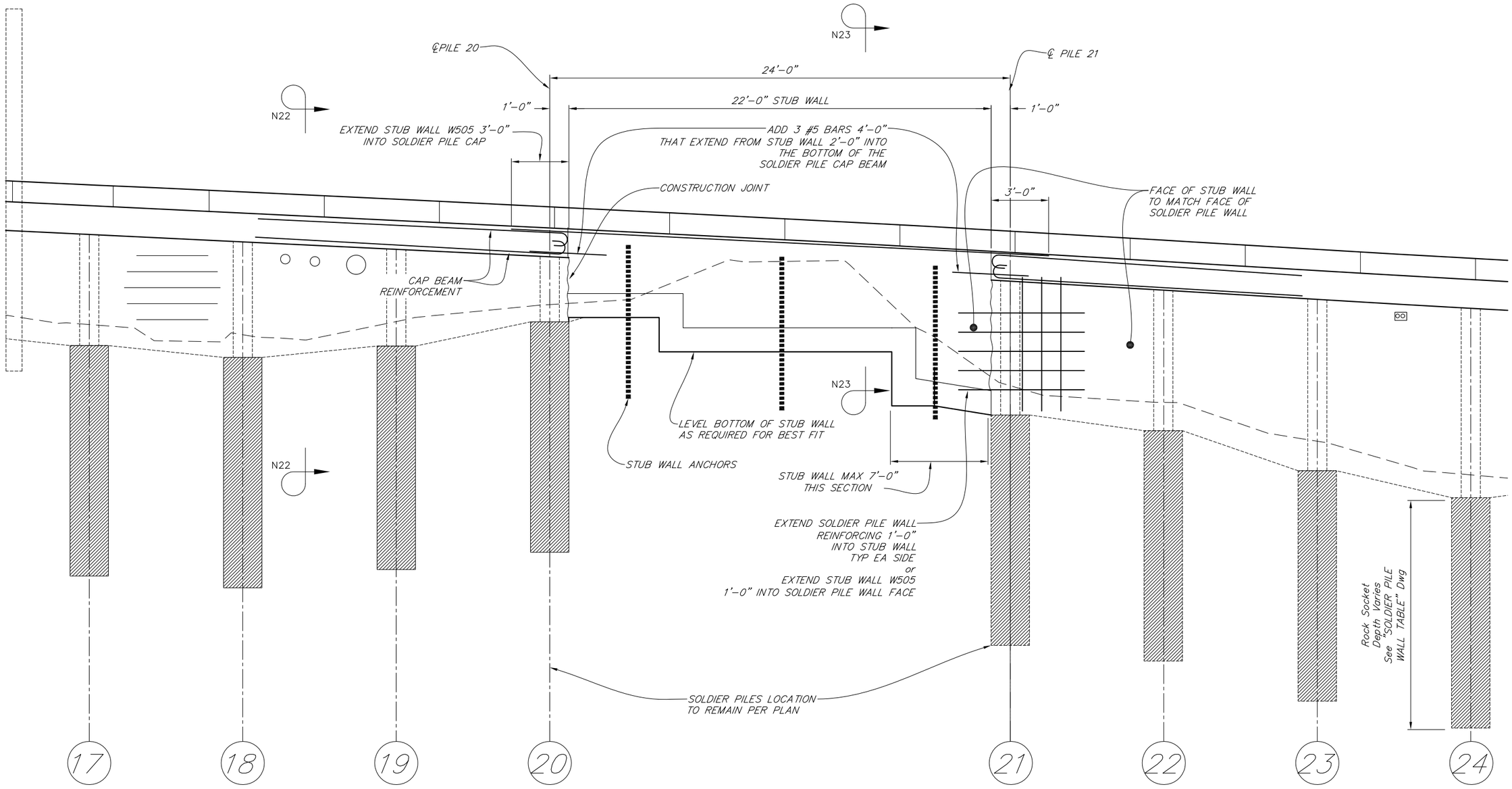
STUB WALL DETAILS

BRIDGE NO. 0446

DWG. NO. 23

Oct 14, 2015 - 3:45pm brien \\SHEARERSERVER\Jobs\0226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534 Nox Soldier Pile Wall Face.dwg Layout Name: STUB WALL DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N----	1



STUB WALL/ SP WALL INTERFACE

SCALE: 3/8" = 1'-0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	Sheet provided with response to RFI-174 in CSM 232	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY:	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA 48TH DAVID R. SHEARER CE 8373 11/7/19 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

WATER STREET

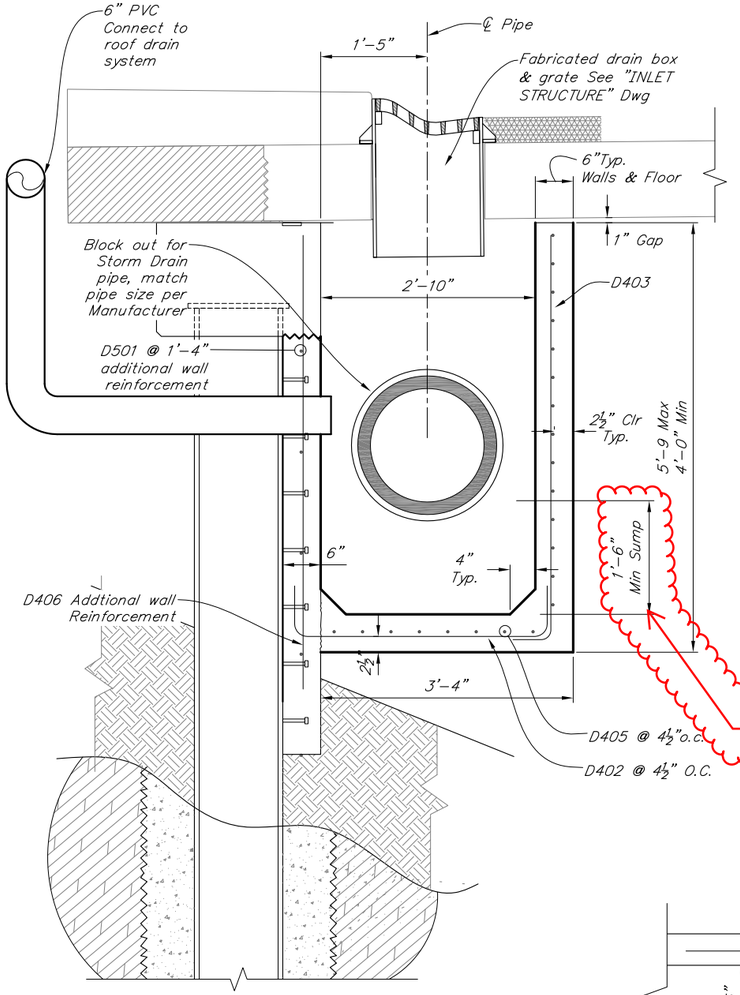
STUB WALL PILE 20-21

BRIDGE NO. 0446

DWG. NO. 23A

Nov 18, 2017 - 12:16pm david \\shearerserver\jobs\0278 water street construction\davids stuff\Sketches\69534_Stub Wall Pile 20-21.dwg Layout Name: STUB WALL PILE 20-21

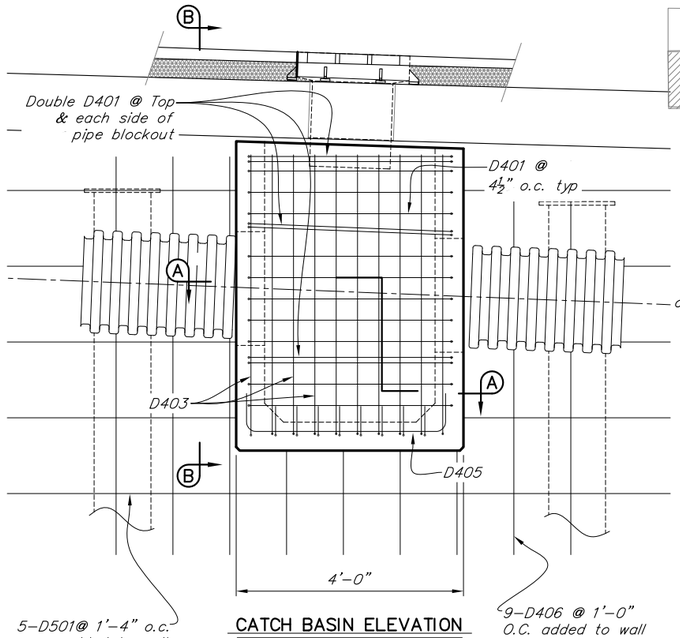
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N24	N110



CATCH BASIN
TYPICAL SECTION

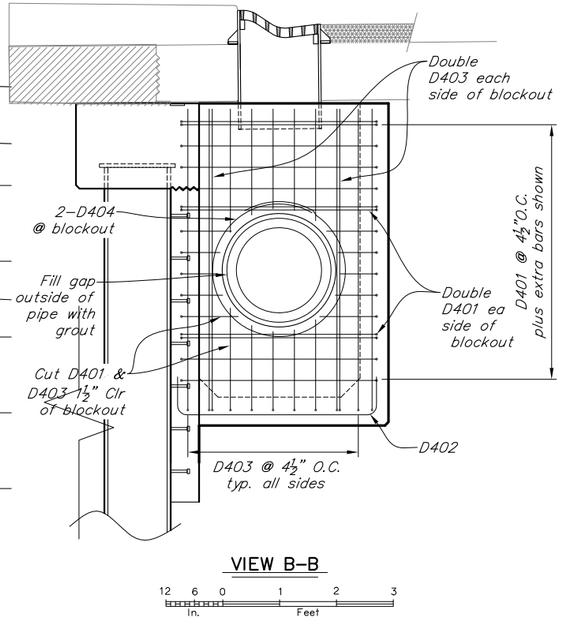
12 6 0 1 2 In. Feet

Typical wall reinforcing not shown for clarity



CATCH BASIN ELEVATION

12 6 0 1 2 3 In. Feet



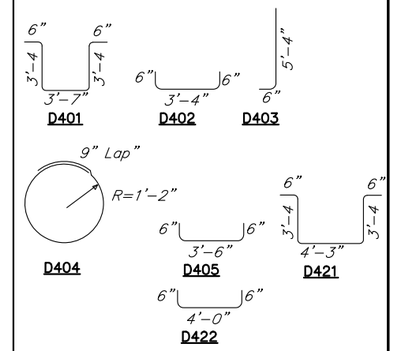
VIEW B-B

12 6 0 1 2 3 In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D401	E	4	16	11'-3"	bent
D402	E	4	8	4'-4"	bent
D403	E	4	30	5'-10"	bent
D404	E,C	4	4	8'- 1"	bent
D405	E	4	8	4'-6"	bent
D406	E	4	9	7'-0"	–
D501	E	5	5	12'-0"	–

BENDING DIAGRAM



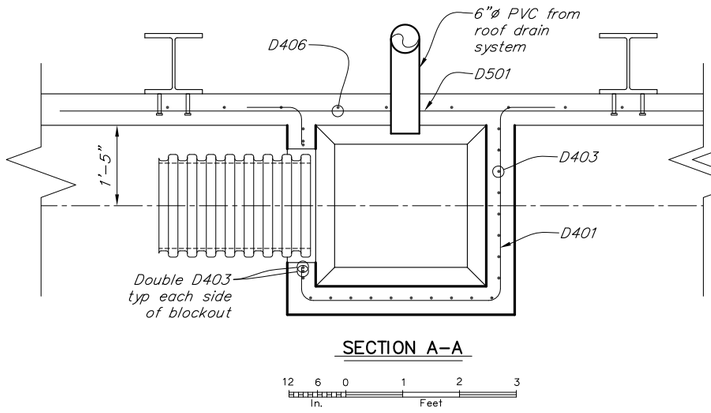
Reinforcing Shown is for One 5'-9" catch basin

E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.
C= Verifiy size with pipe manufacturer

Wall reinforcing not shown

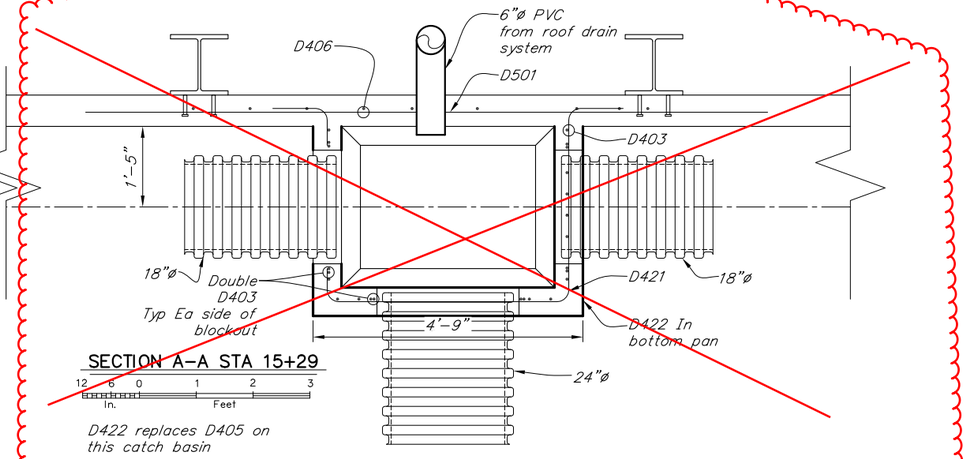
Same reinforcing applies at STUB WALL.

Used Type 4 CB in Open Wall Section per D03



SECTION A-A

12 6 0 1 2 3 In. Feet



SECTION A-A STA 15+29

12 6 0 1 2 3 In. Feet

D422 replaces D405 on this catch basin

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

WATER STREET BRIDGE No. 2

WATER STREET

WALL MOUNTED CATCH BASIN DETAILS

BRIDGE NO. 0446
DWG. NO. 24

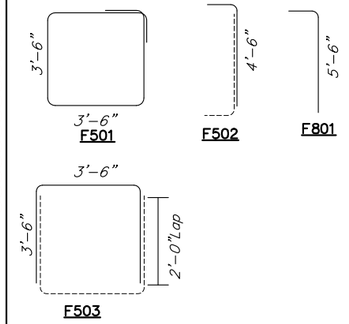
Oct 14, 2015 - 3:45pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534 N Catch basin details.dwg Layout Name: WALL MOUNTED CATCH BASIN DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N25	N110

REINFORCING STEEL

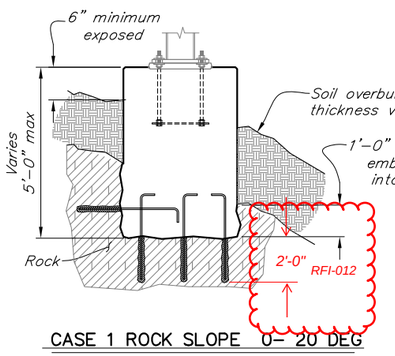
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
Quantity for one 4'-9" tall footing Case 1 or 2					
F501		5	9	15'-4"	bent
F502	C	5	56	5'-4"	bent
F801		8	18	6'-10"	bent
Quantity for one 4'-9" tall footing Case 3					
F501		5	5	15'-4"	bent
F502	C	5	56	5'-4"	bent
F503	C	5	10	10'-6"	bent
F801	X	8	3	6'-10"	bent

BENDING DIAGRAM

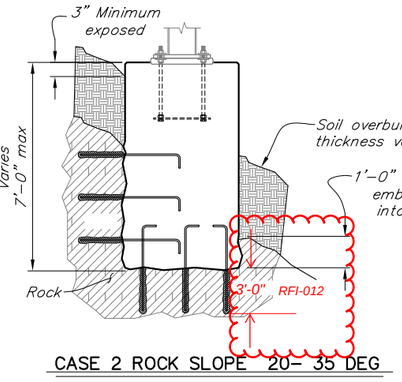


C = Provide splice & field cut off excess leg
E = Epoxy coated reinforcing steel
X = Place Rock Dowel in drilled & grouted hole 3'-0" deep.

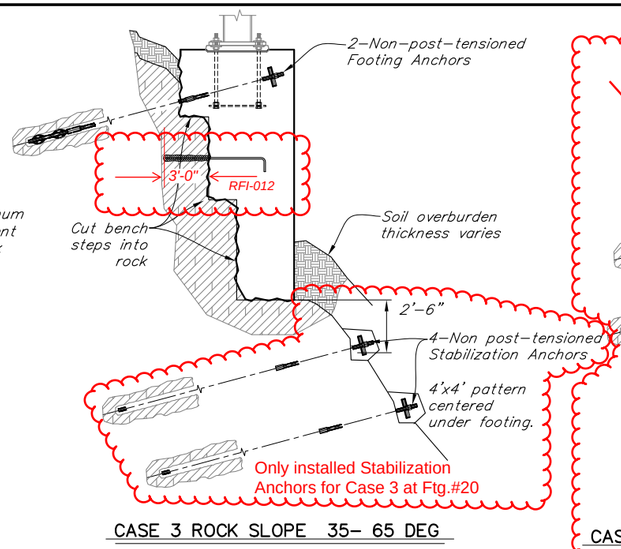
RFI-139 CASE 2-3 HYBRID FTG
Will only be approved on a case by case basis



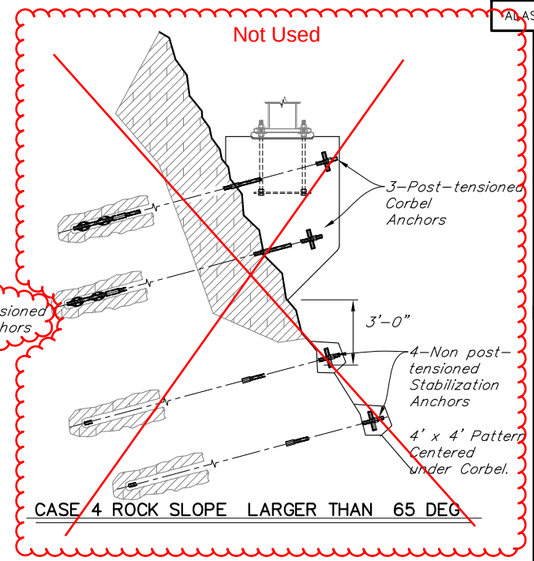
CASE 1 ROCK SLOPE 0- 20 DEG



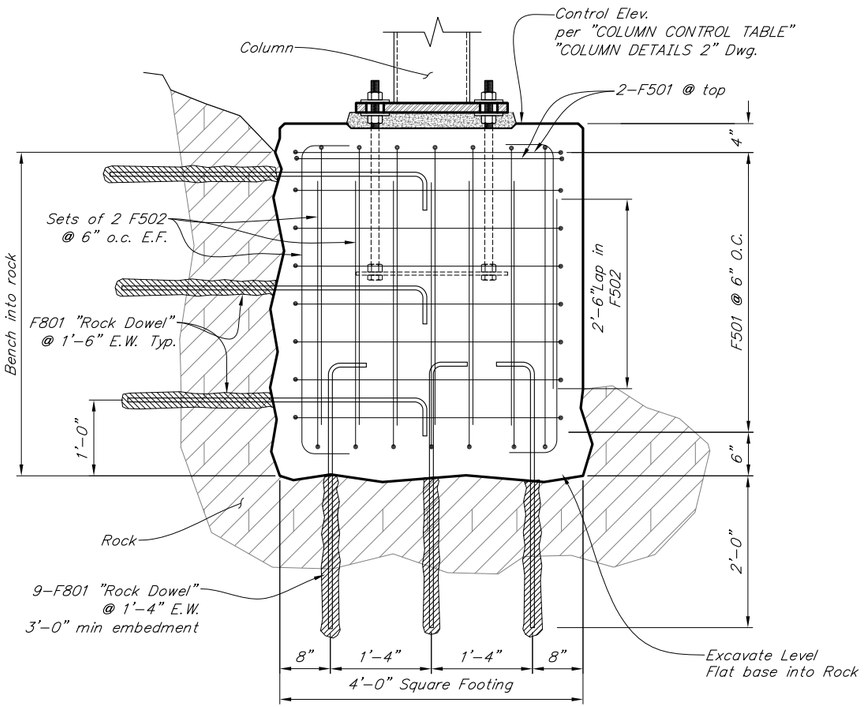
CASE 2 ROCK SLOPE 20- 35 DEG



CASE 3 ROCK SLOPE 35- 65 DEG

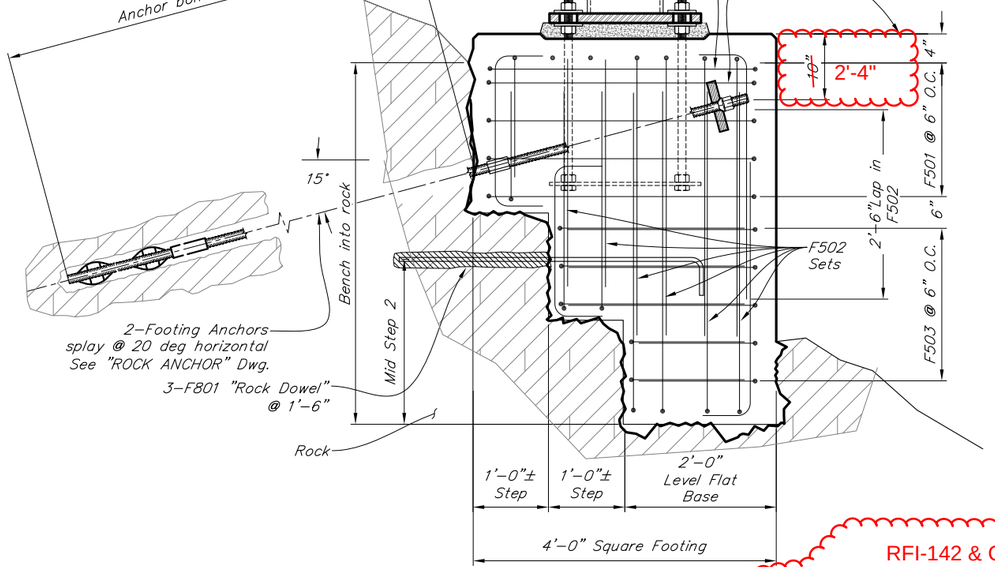


CASE 4 ROCK SLOPE LARGER THAN 65 DEG



CASE 1 & 2 FOOTING SECTION WITH ROCK DOWELS

12 6 0 1 2
In. Feet



CASE 3 FOOTING SECTION WITH FOOTING ANCHORS

12 6 0 1 2
In. Feet

RFI-142 & CSM 174 SEE DETAILS NEXT 2 PAGES

- Place the end of the anchor 2'-4" form the top of the footing
- Place the end of the anchor 10" side of center line of the front face.
- Move the F801 dowels up.
- Add additional rows of F801 for footings over 5'-0" tall on the exposed face.

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom	Project Eng.: Date: 9/5/2019 AB As-Built Set
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 10TH · DAVID R. SHEARER · CE 8373 · 10/14/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

FOOTING DETAILS 1

BRIDGE NO. 0446
DWG. NO. 25

Oct 14, 2015 - 3:45pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset.ado\&pf#69534_N FOOTING DETAILS.dwg Layout Name: FOOTING DETAILS 1

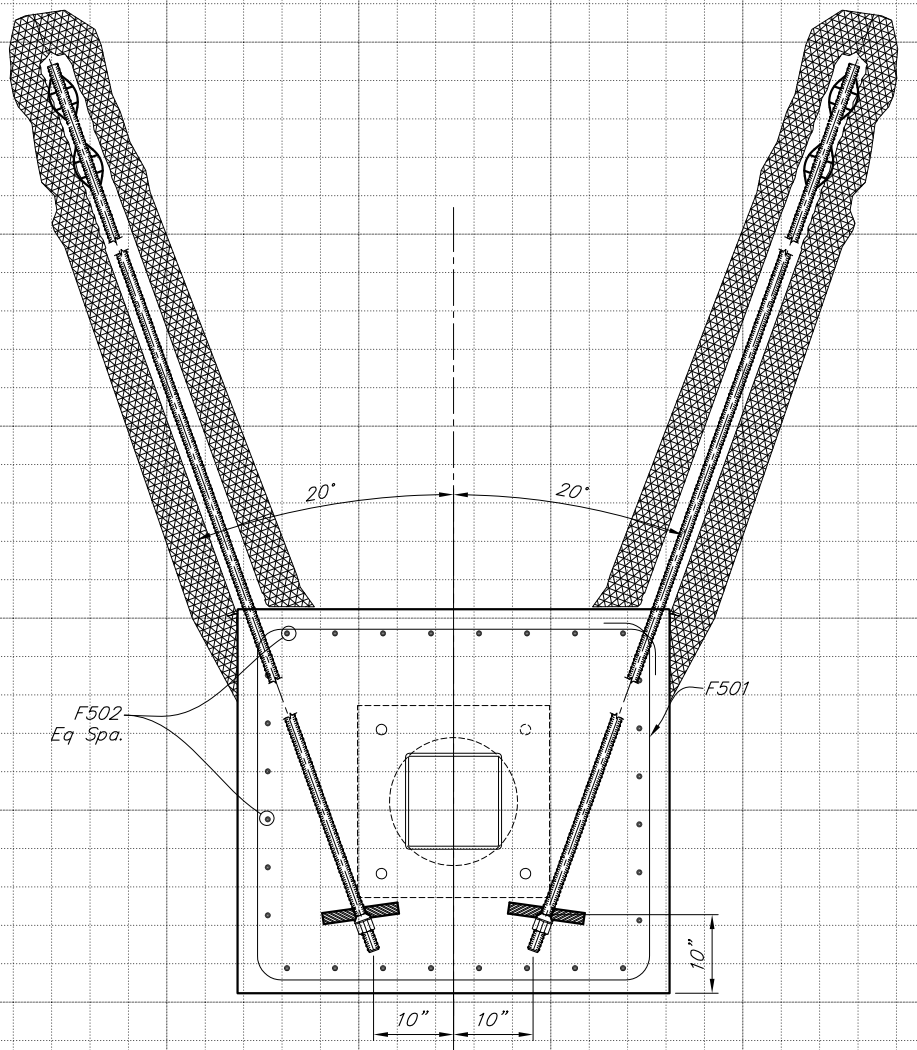
SHEARER DESIGN LLC

Bridge Design, Construction Engineering, Infrastructure Aesthetics

SHEET	N25A #### OF ####
JOB NO.	####
DATE	####
COMPUTED BY	####
CHECKED BY	####

PROJECT WATER STREET #2

SUBJECT #### RFI #142 Case 3 Anchor Conflicts, CSM 171



CASE 3 ANCHORS

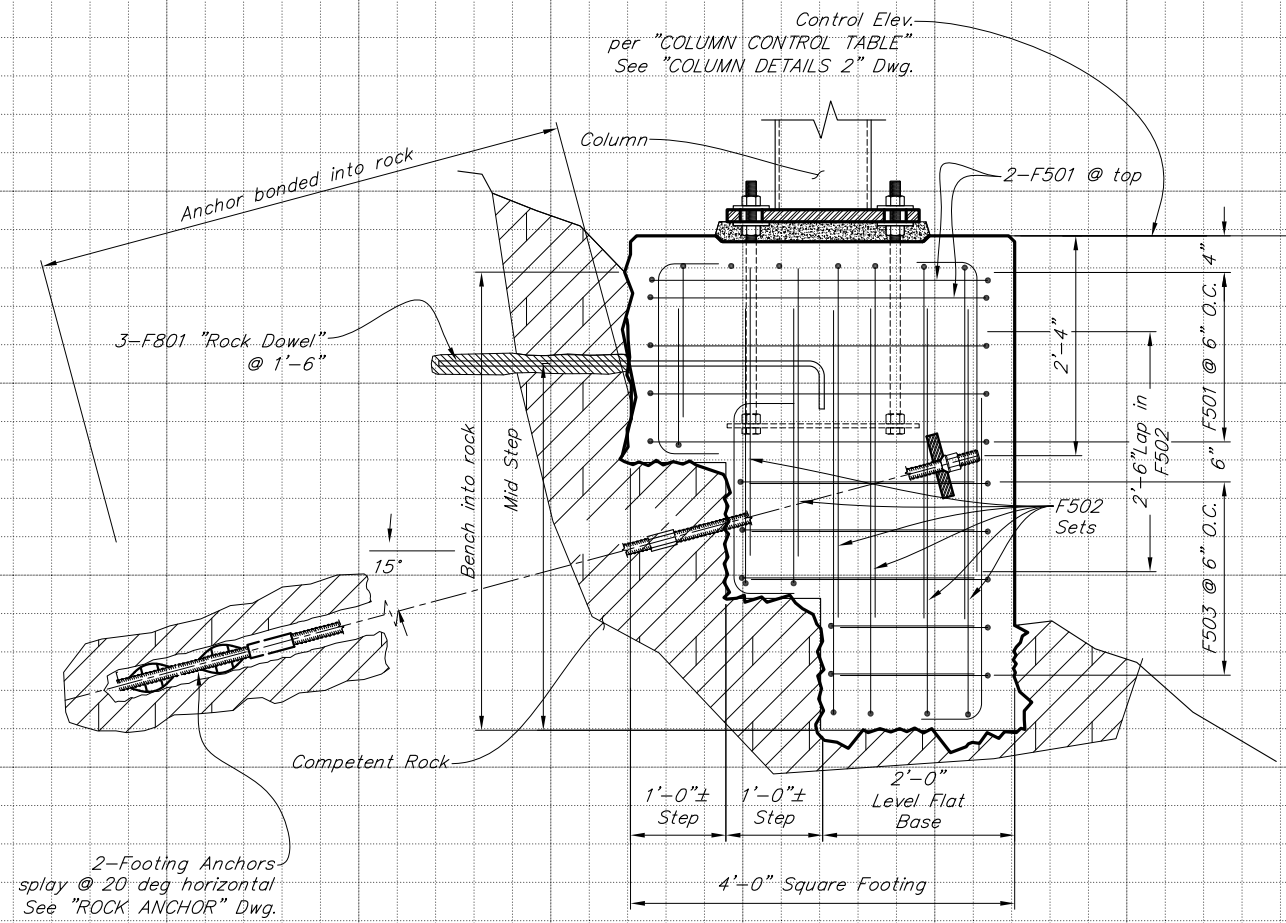
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.Project Eng.:
Date:

9/5/2019

AB As-Built Set

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019



CASE 3 FOOTING SECTION WITH FOOTING ANCHORS

12 6 0 1 2
In. Feet

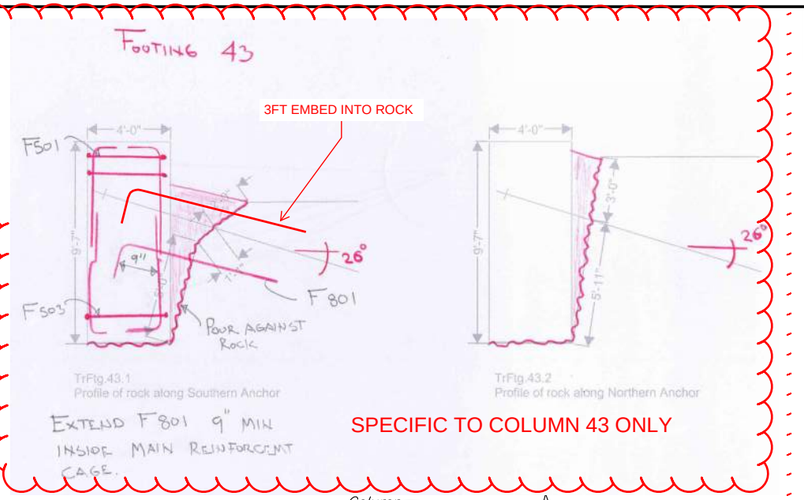
- Place the end of the anchor 2'-4" form the top of the footing
- Place the end of the anchor 10" side of center line of the front face.
- Move the F801 dowels up.
- Add additional rows of F801 for footings over 5'-0" tall on the exposed face.

AB As-Built Set

For the rock conditions at footing #43 make the following adjustments;

- Pour the back side of the footing directly against rock.
- Drill the rock anchors at 26 deg from horizontal
- Place bars F801 with the hook a minimum of 9 inches inside the main reinforcement cage.

9/5/2019



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N----	1

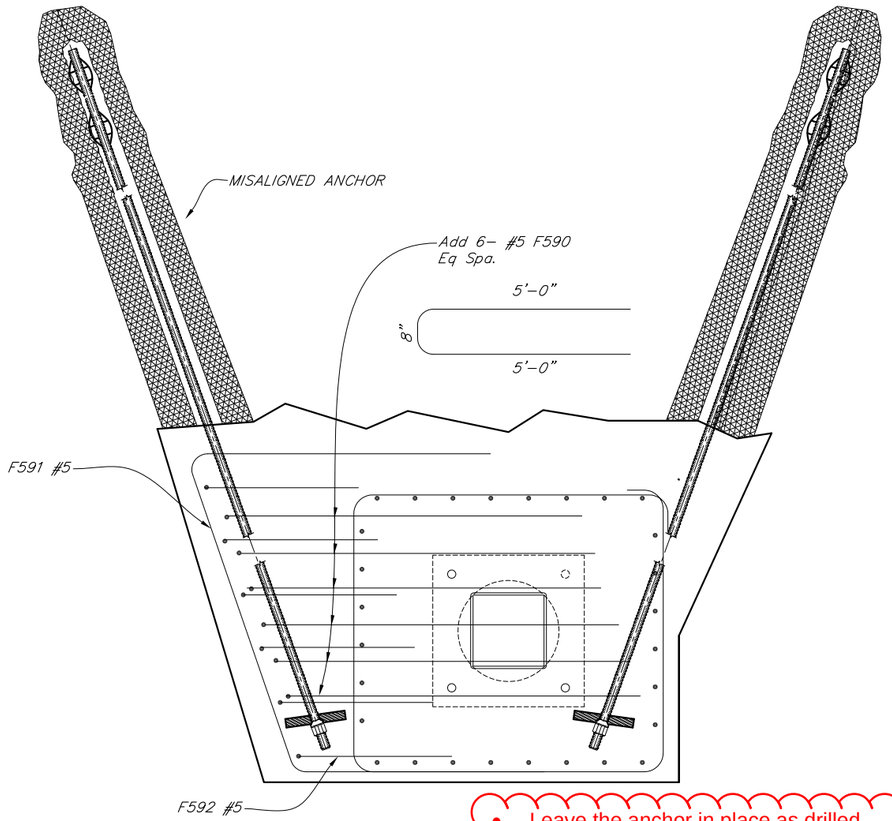
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
F5901		5	6	Varies	bent
F591		5	5	Varies	bent
F592		5	6	Varies	bent

BENDING DIAGRAM

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

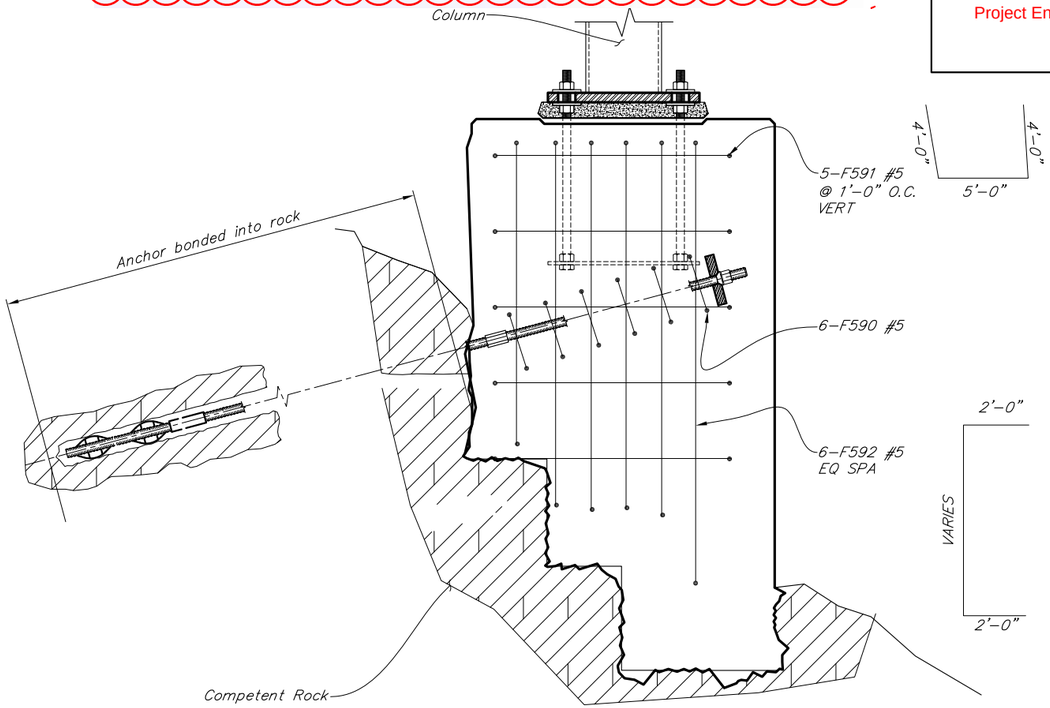
Project Eng.: Date: 9/5/2019



- Leave the anchor in place as drilled.
- Add additional reinforcing around the anchor as shown in the attached drawing.
- All other reinforcing and dowels to remain per previous details

FOOTING 35 MISPLACED ANCHOR

ADDITIONAL REBAR SHOWN



ADDITIONAL REBAR SHOWN

FOOTING # 35 ANCHOR

12 6 0 1 2
In. Feet

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	RFI#168 CSM 214	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY:	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA — 49TH — DAVID R. SHEARER CE 8373 9/9/17 — Registered Professional Engineer

WATERSTREET BRIDGE No. 2

WATER STREET

FOOTING #35 MODIFICATION DETAILS

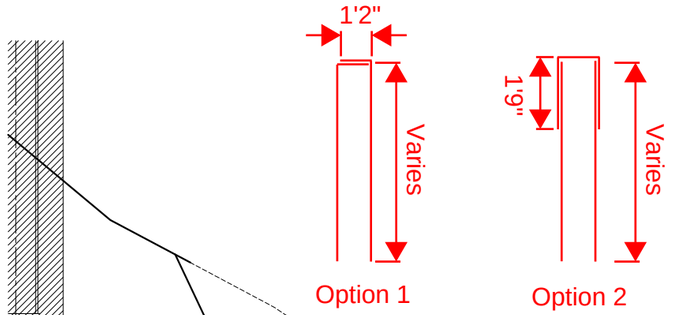
BRIDGE NO. 0446
DWG. NO. N25C

Sep 05, 2017 - 5:40pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Davids Stuff\Sketches\69534_N FOOTING DETAILS Anchor.dwg Layout Name: FOOTING #35 MODIFICATION DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N----	1

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

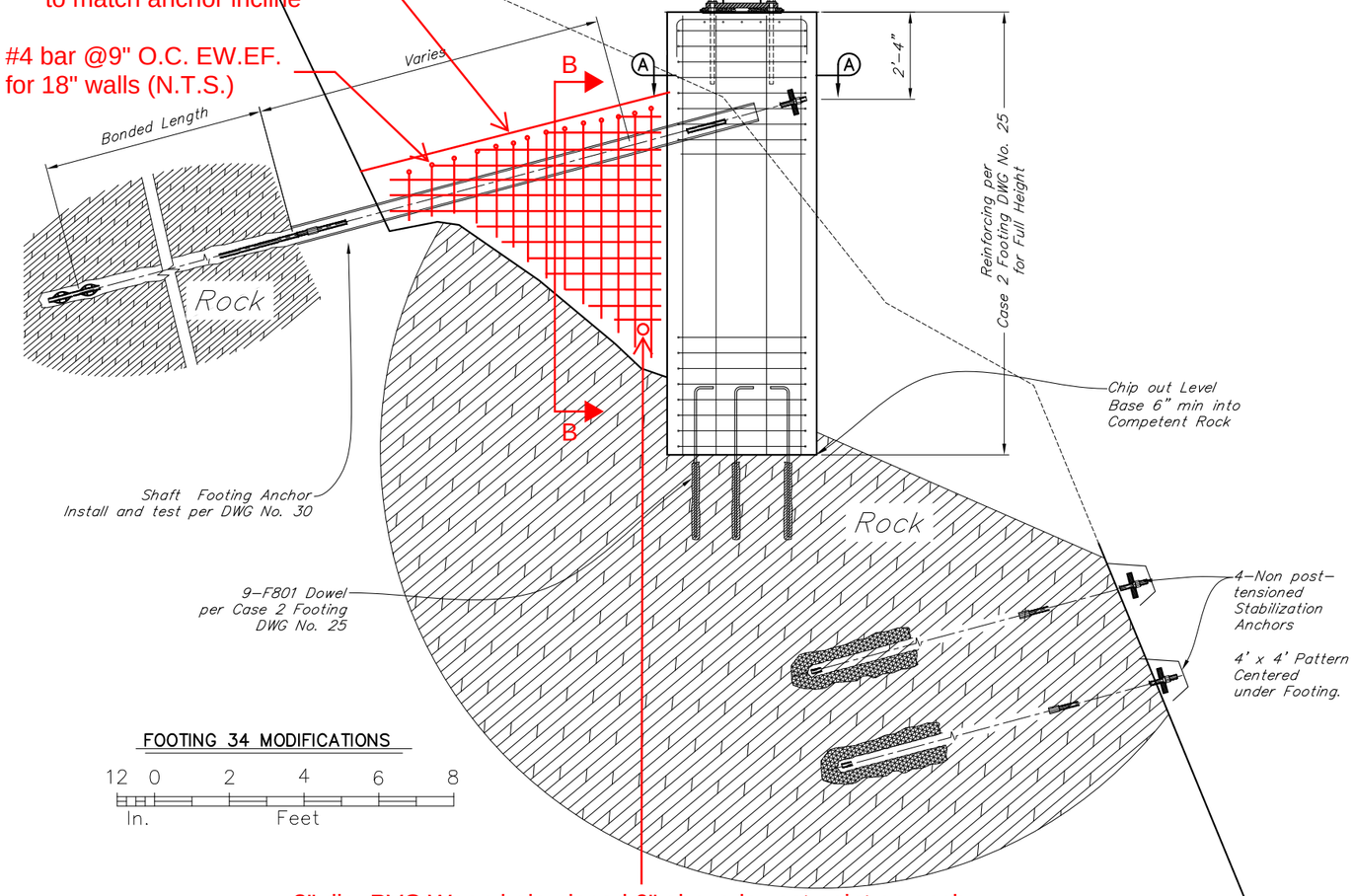


Vertical Reinforcing bar

Section B-B

Provide 6" cover over top of anchor, slope concrete to match anchor incline

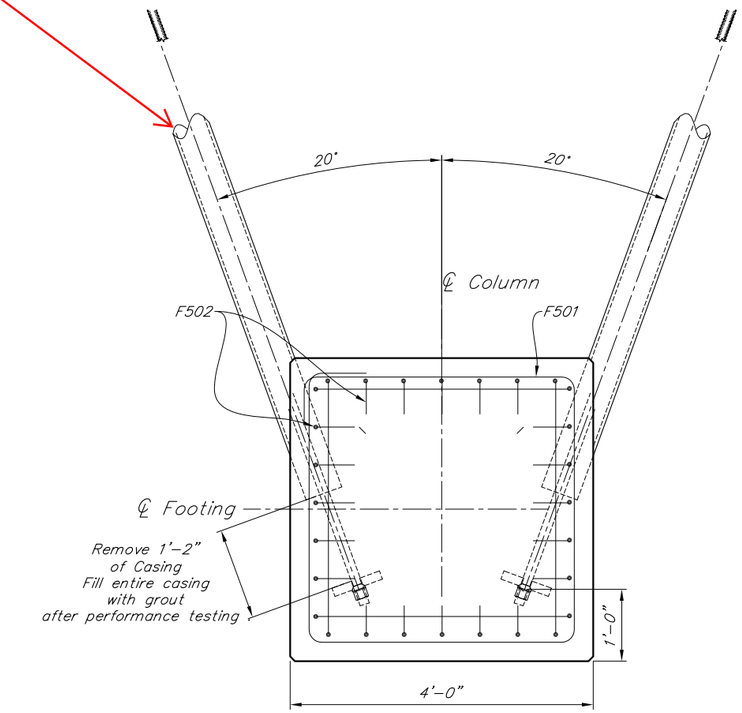
#4 bar @9" O.C. EW.EF. for 18" walls (N.T.S.)



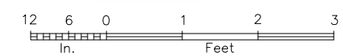
FOOTING 34 MODIFICATIONS

3" dia. PVC Weep hole placed 6" above lowest point on each wall, place to ensure any exterior regrading will not cover outlet

To replace 6" high strength casing, form 18" walls along the length of each anchor rod.



SECTION A-A



CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS
DRAWN BY:	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

RFI-169

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 9/5/19

WATERSTREET BRIDGE No. 2

WATER STREET

FOOTING #34

BRIDGE NO. 0446

DWG. NO. N25D

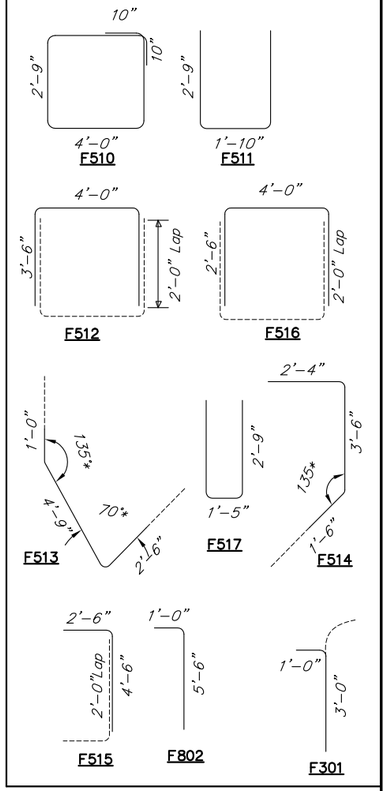
Sep 18, 2017 - 10:16am david \\shearerserver\jobs\0278 water street construction\davids stuff\Sketches\69534_N FOOTING DETAILS Anchor.dwg Layout Name: FOOTING #34

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N26	N110

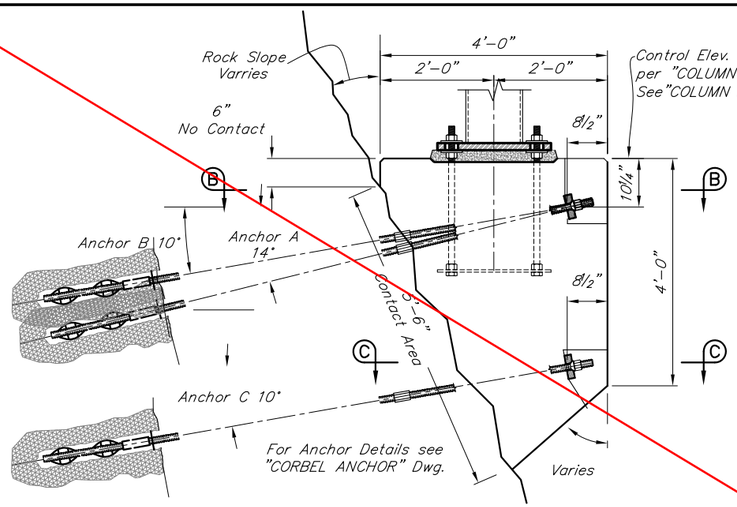
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
Quantity for one 5'-6" High footing Case 4					
F301		3	8	4'-0"	bent
F510		5	4	15'-2"	bent
F511		5	4	7'-4"	bent
F512	C	5	10	11'-0"	bent
F513	C*	5	8	8'-3"	bent
F514	C*	5	12	7'-4"	bent
F515	C	5	16	7'-0"	bent
F516	C	5	6	9'-0"	bent
F517	C	5	6	6'-11"	bent
F802	x	8	9	6'-6"	bent

BENDING DIAGRAM

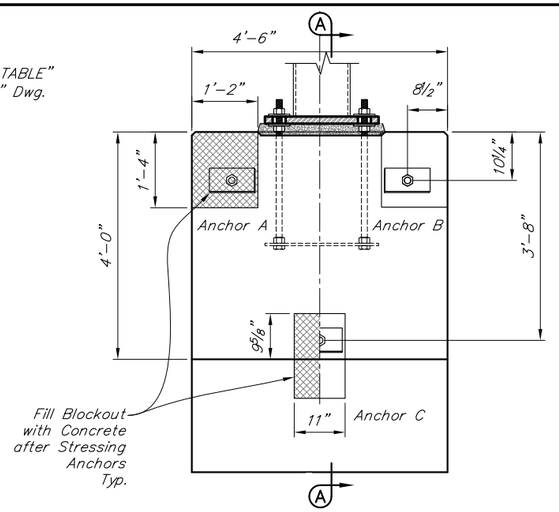


C = Provide splice & field cut off excess leg
E = Epoxy coated reinforcing steel
X = Place Rock Dowel in drilled and grouted hole 3'-0" deep
* = Field Bend Angle to fit location



SIDE VIEW ANCHOR & BLOCKOUTS

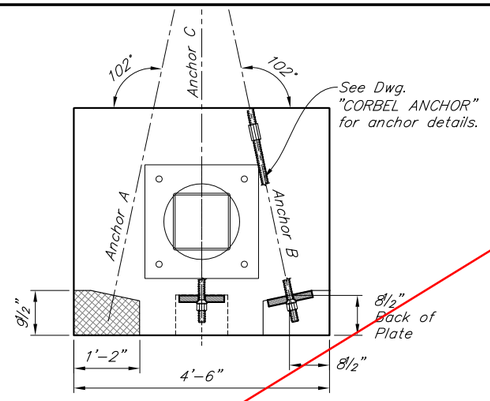
12 6 0 1 2 3
In. Feet



ANCHOR BLOCKOUTS ELEVATION

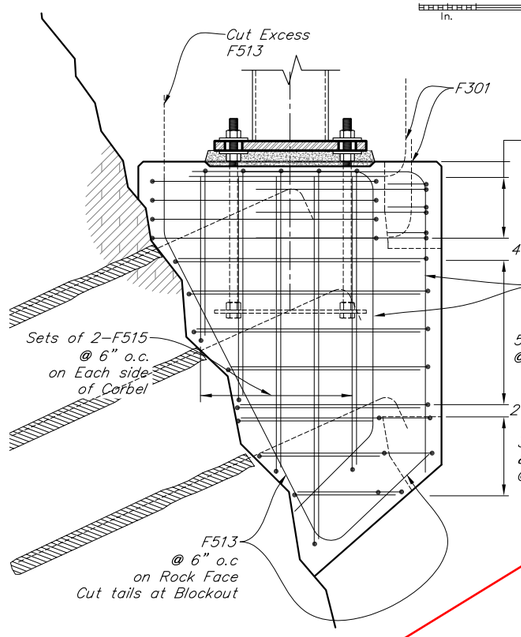
12 6 0 1 2 3
In. Feet

Not Used



ANCHOR & BLOCKOUTS PLAN

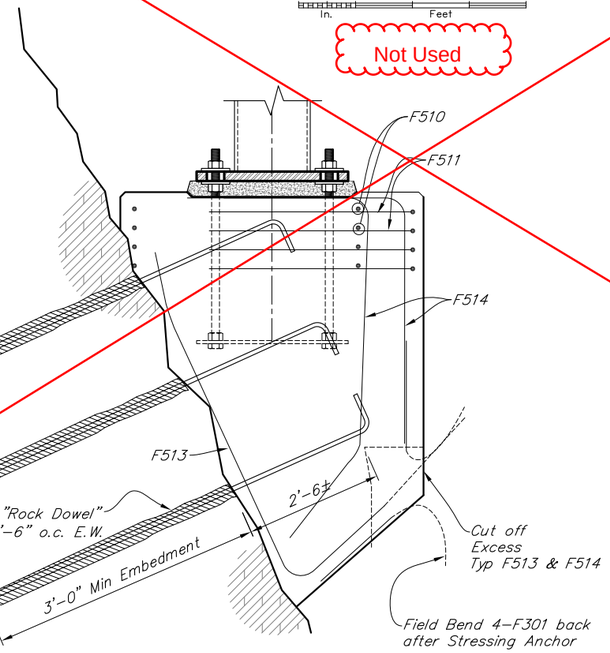
12 6 0 1 2 3
In. Feet



CORBEL REINFORCING SIDE VIEW

12 6 0 1 2
In. Feet

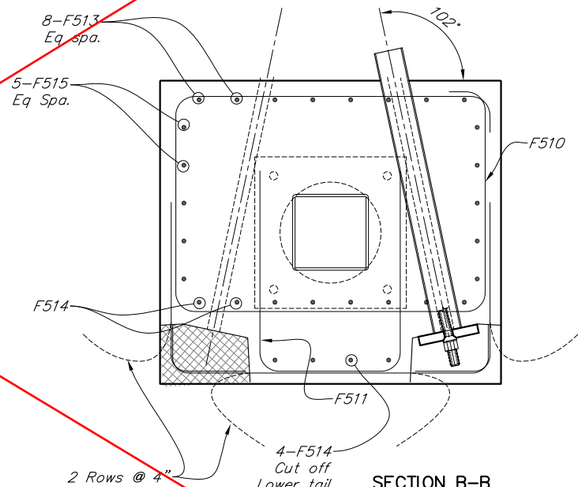
Corbel Anchors not Shown



SECTION A-A

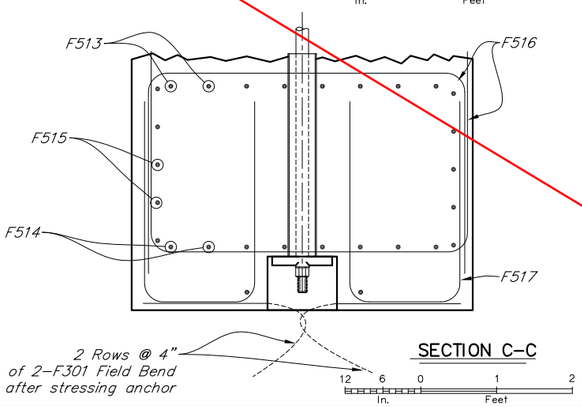
12 6 0 1 2
In. Feet

Corbel Anchors not Shown



SECTION B-B

12 6 0 1 2
In. Feet



SECTION C-C

12 6 0 1 2
In. Feet

FOOTING CASE 4 DETAILS

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/9/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

FOOTING DETAILS 2

BRIDGE NO. 0446
DWG. NO. 26

Oct 14, 2015 - 3:46pm bfein \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N FOOTING DETAILS.dwg Layout Name: FOOTING DETAILS 2

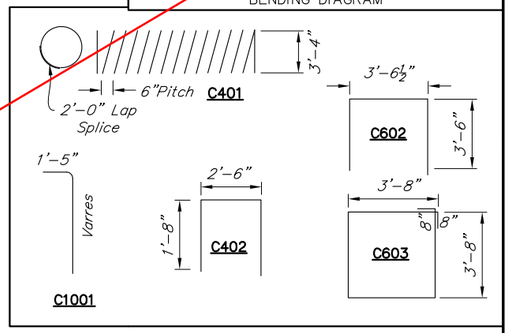
Shaft Footings Eliminated with CO #38; See Replacement Platform Footings next four pages

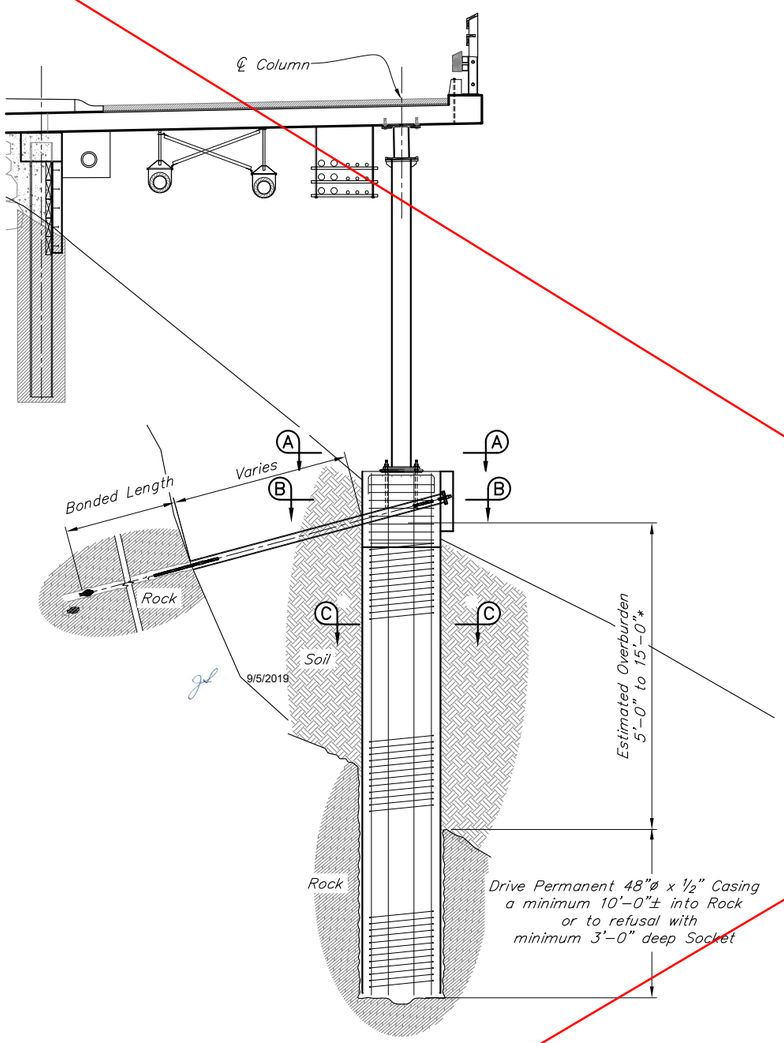
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N27	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
C401		4	1	Varies	---
C402		4	6	5'-10"	bent
C602		6	14	10'-6½"	bent
C603		6	8	16'-0"	bent
C1001		10	14	Varies	bent

BENDING DIAGRAM

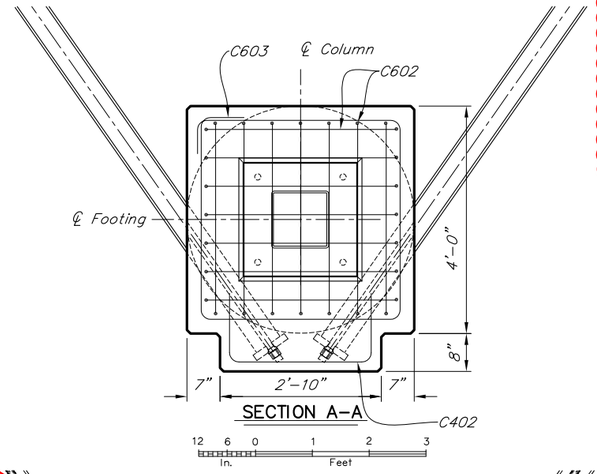


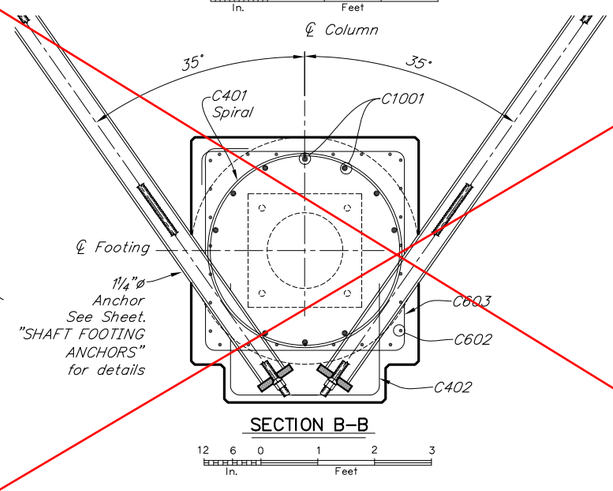


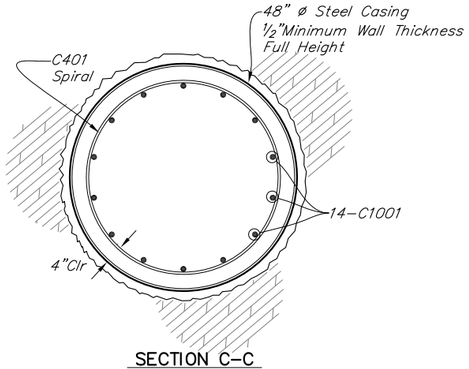
ELEVATION SHAFT FOOTING *

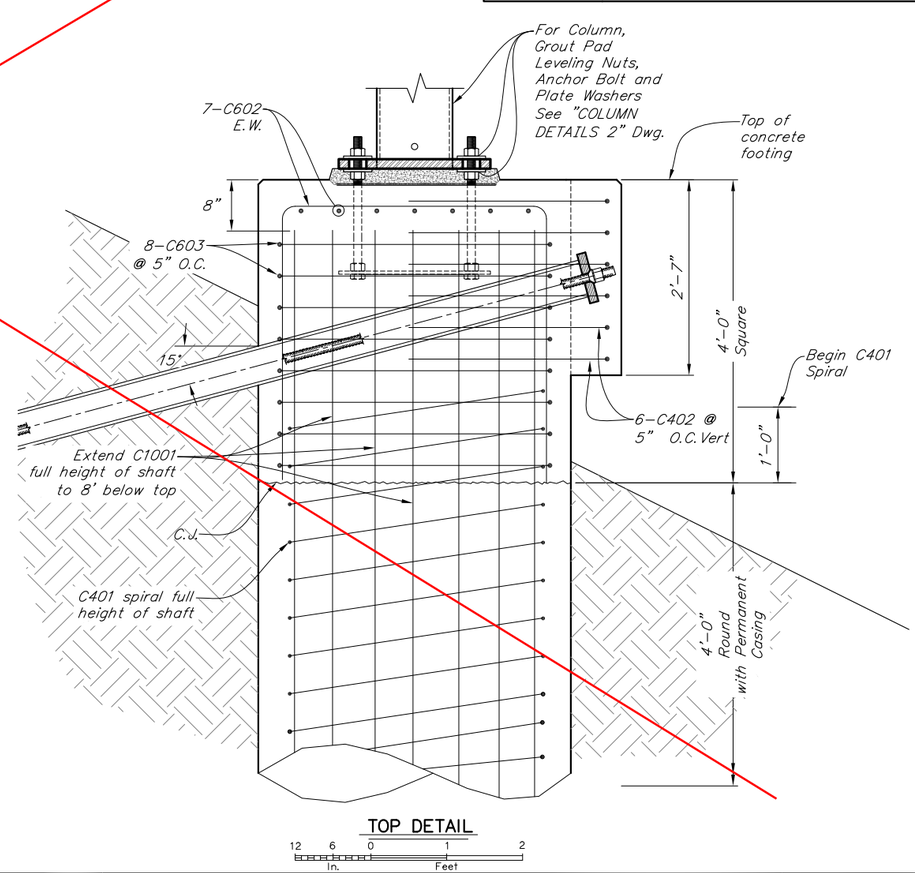
12 0 2 4 6 8
In. Feet

*Use this footing type for soil depths over 5'-0" contact Engineer for soil depths over 15'-0"









DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

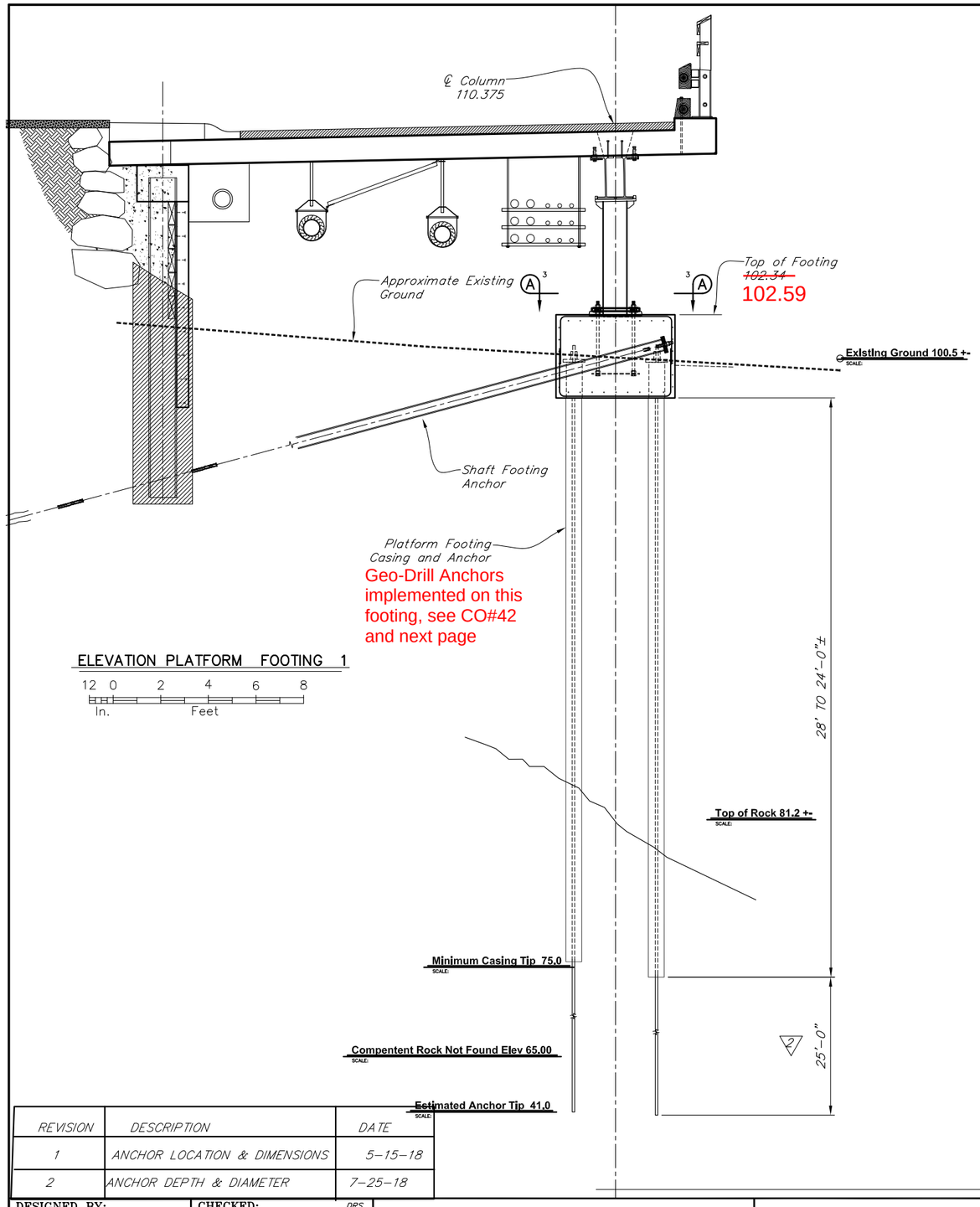
WATER STREET

FOOTING DETAILS 3

BRIDGE NO. 0446
DWG. NO. 27

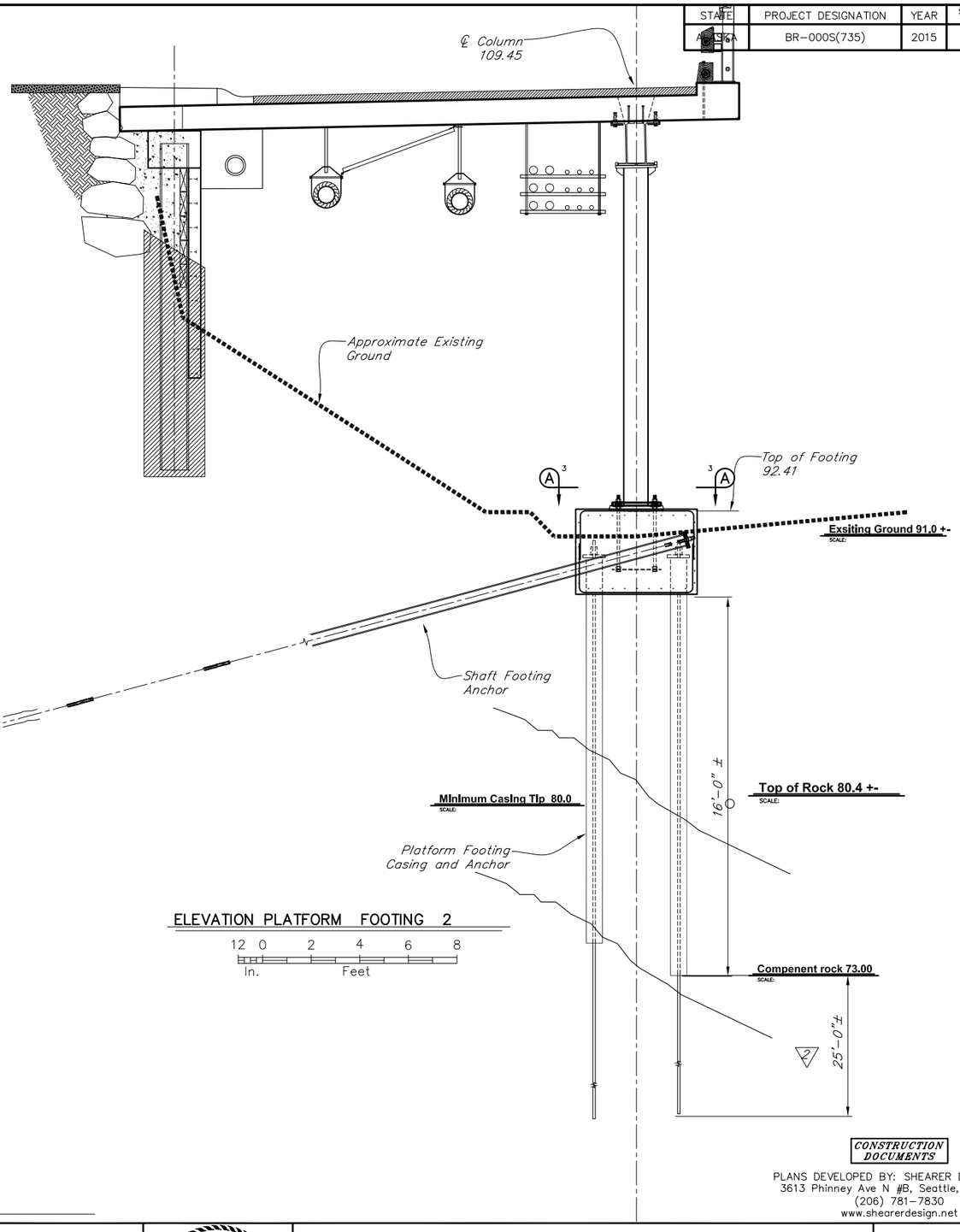
Oct 14, 2015 - 3:46pm brlen \\shearerserver\jobs\0226 water street ps&e\DWG\danset ados\ph\69534_N FOOTING DETAILS.dwg Layout Name: FOOTING DETAILS 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N1	3



ELEVATION PLATFORM FOOTING 1

12 0 2 4 6 8
In. Feet



ELEVATION PLATFORM FOOTING 2

12 0 2 4 6 8
In. Feet

REVISION	DESCRIPTION	DATE
1	ANCHOR LOCATION & DIMENSIONS	5-15-18
2	ANCHOR DEPTH & DIAMETER	7-25-18

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	
DRAWN BY:	CHECKED: Brien Lindstrom	
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	

CO #38

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 48TH DAVID R. SHEARER CE 8373 7/25/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

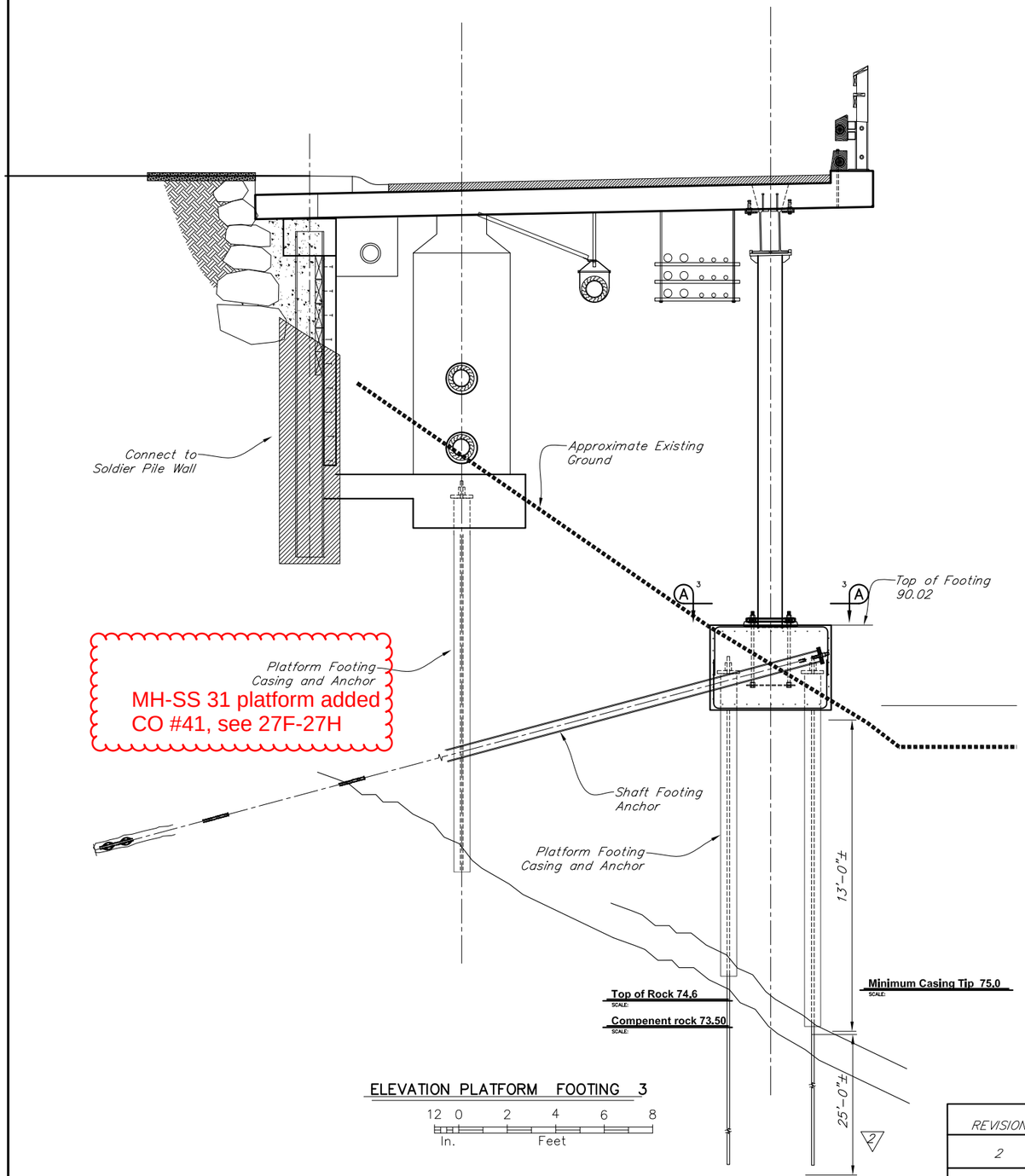
WATER STREET

PLATFORM FOOTING 1 & 2

BRIDGE NO. 0446
DWG. NO. 1 N27A

Jul 25, 2018 - 10:34am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Footings 1-7\dwg\Platform Footing 1.dwg Layout Name: 1 PLATFORM FOOTING 1 & 2

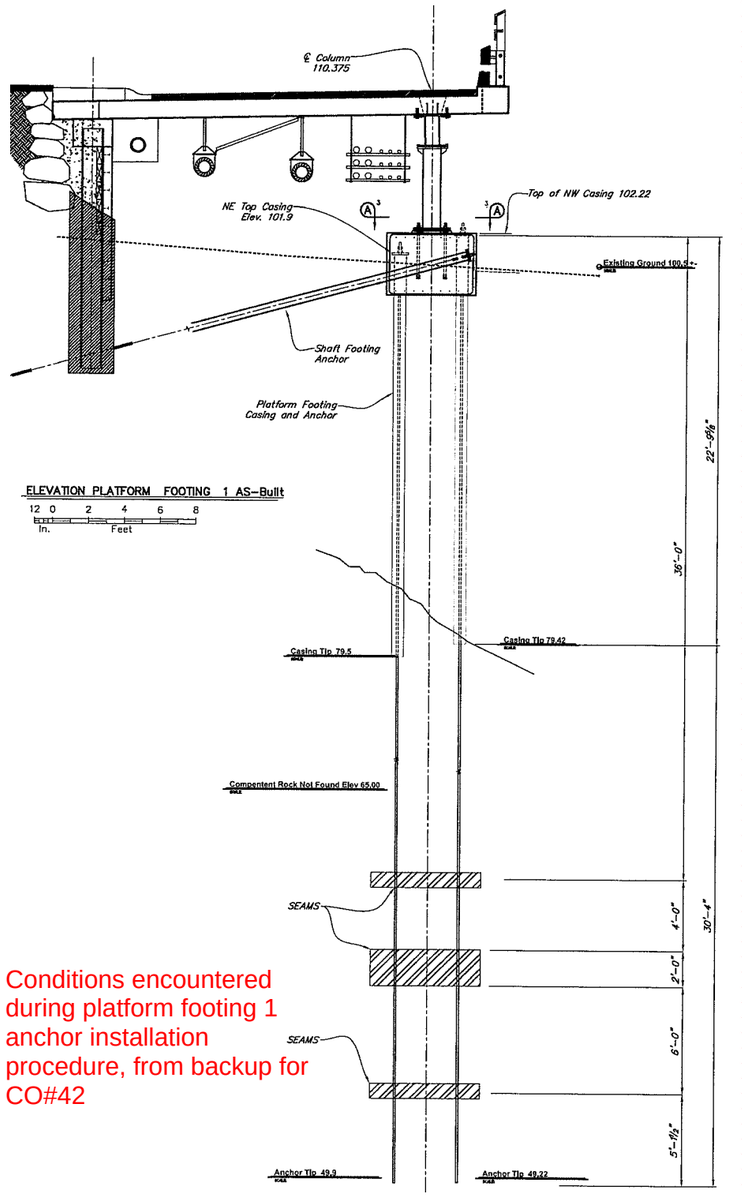
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N2	3



MH-SS 31 platform added
CO #41, see 27F-27H

ELEVATION PLATFORM FOOTING 3

12 0 2 4 6 8
In. Feet



ELEVATION PLATFORM FOOTING 1 AS-Built

12 0 2 4 6 8
In. Feet

Conditions encountered during platform footing 1 anchor installation procedure, from backup for CO#42

REVISION	DESCRIPTION	DATE
2	ANCHOR DEPTH & DIAMETER	7-25-18

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS
DRAWN BY:	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

CO #38 Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

DAVID R. SHEARER CE 8373 7/25/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

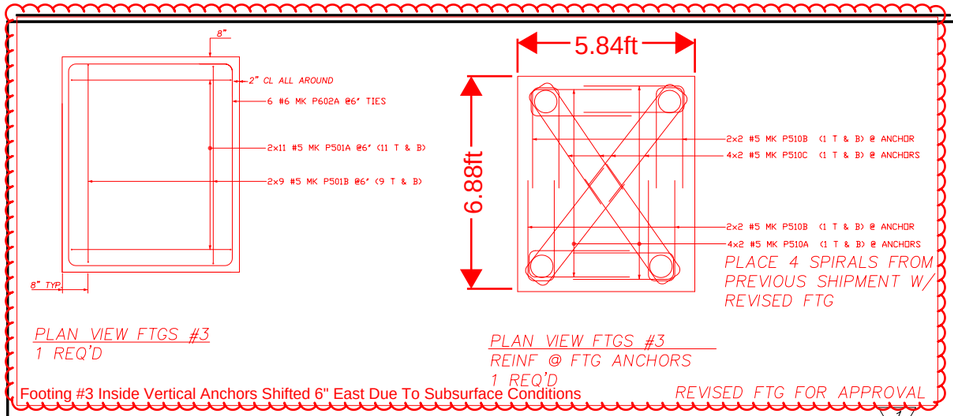
WATER STREET

PLATFORM FOOTING 3

BRIDGE NO. 0446

DWG. NO. 2 N27B

Jul 25, 2018 - 10:34am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Footings 1-7.dwg\Platform Footing II.dwg Layout Name: 2 PLATFORM FOOTING 3

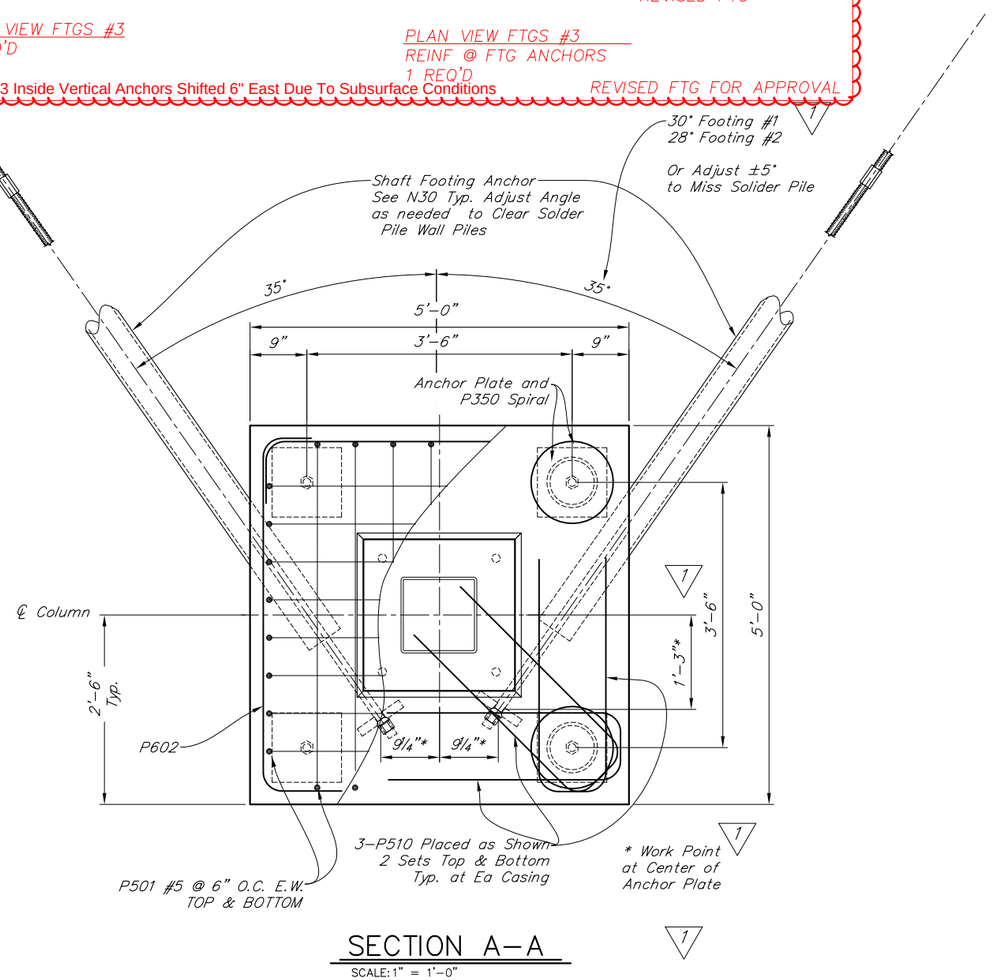


PLAN VIEW FTGS #3
1 REQ'D

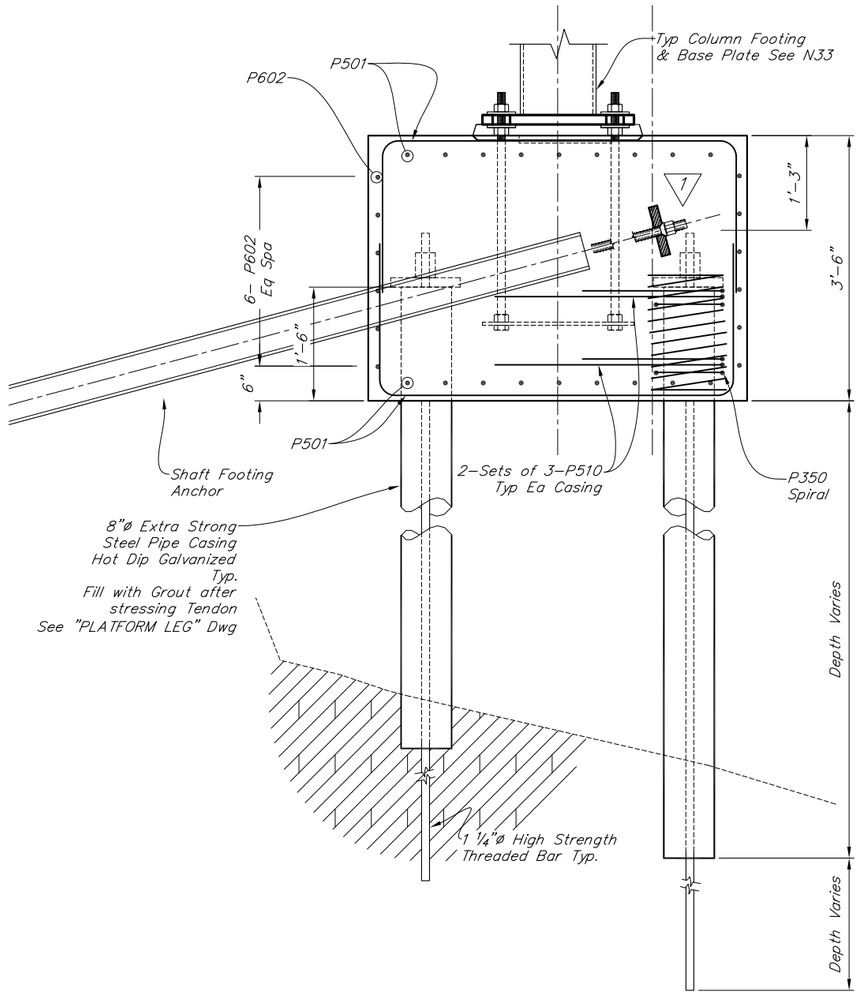
PLAN VIEW FTGS #3
REINF @ FTG ANCHORS
1 REQ'D

Footing #3 Inside Vertical Anchors Shifted 6" East Due To Subsurface Conditions

REVISED FTG FOR APPROVAL



SECTION A-A
SCALE: 1" = 1'-0"

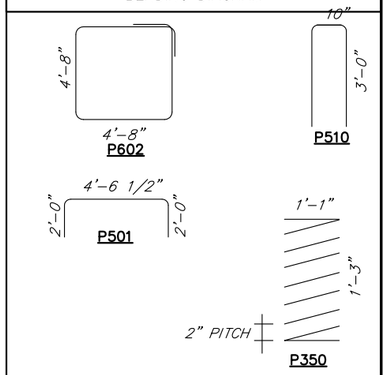


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N3	3

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
Quantity for one 5'-0" x 5'-0" Platform Footing					
P501		5	32	8'- 6 1/2"	bent
P602		6	6	20'-4"	bent
P510		5	24	6'-10"	bent
P350		3	4	30'-7"	Spiral

BENDING DIAGRAM



REVISION	DESCRIPTION	DATE
1	ANCHOR LOCATION & DIMENSIONS	5-15-18
2	ANCHOR DEPTH & DIAMETER	7-25-18

COLUMN PLATFORM FOOTING ON OVERBURDEN

SCALE: 1" = 1'-0"

CONSTRUCTION DOCUMENTS

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DESIGNED BY:	CHECKED: DRS	CO #38
DRAWN BY:	CHECKED: Brien Lindstrom	
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 7/25/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

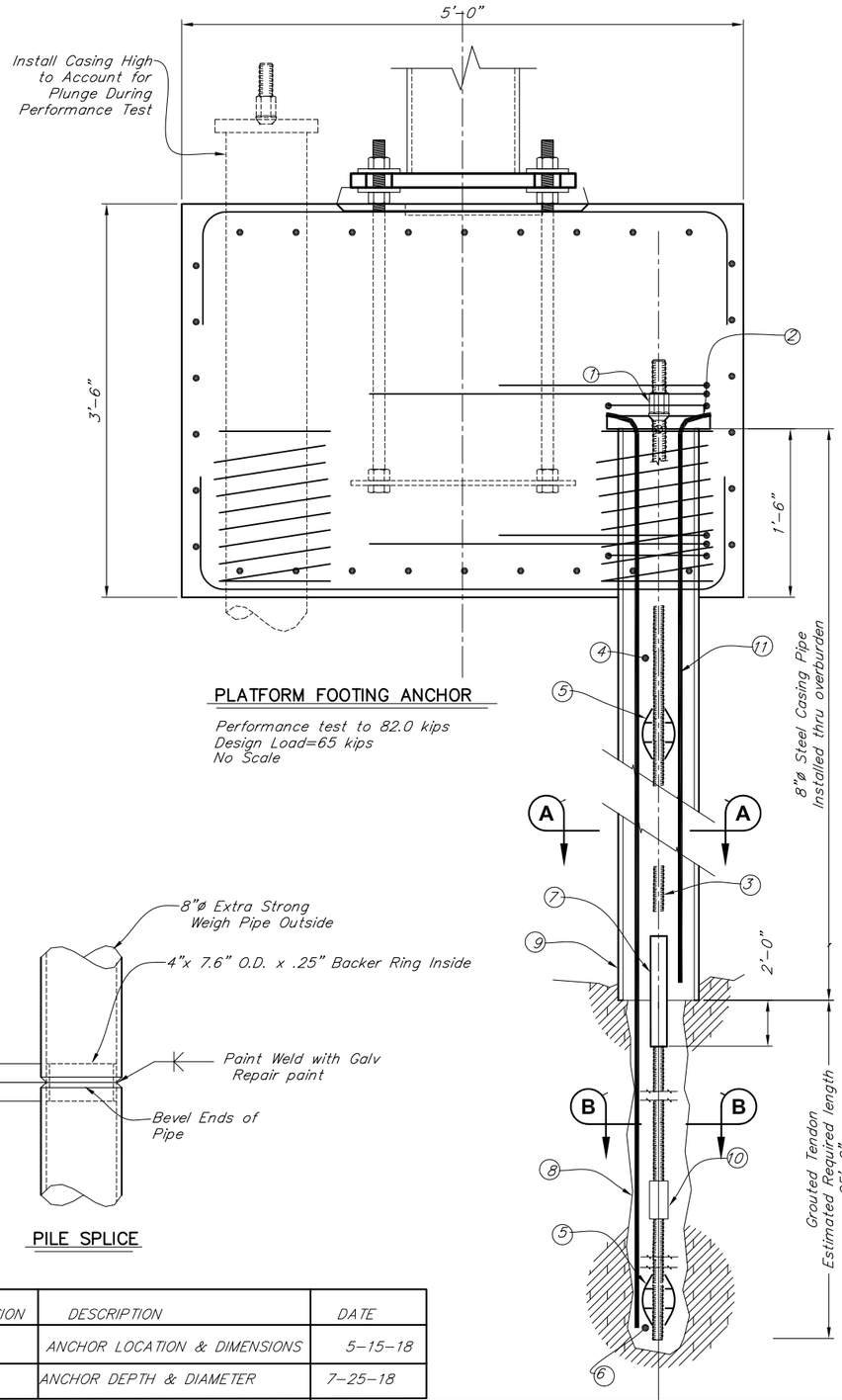
WATER STREET

PLATFORM FOOTING DETAILS 1

BRIDGE NO. 0446
DWG. NO. 3 N27C

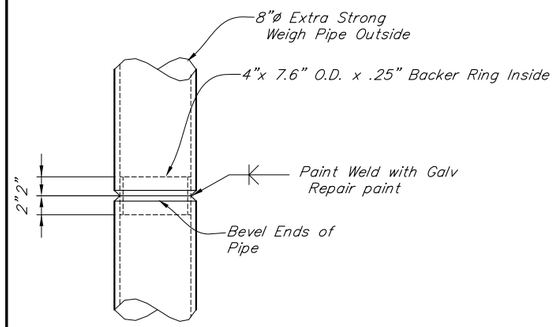
Jul 25, 2018 - 10:35am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Footings 1-7.dwg\Platform Footing II.dwg Layout Name: 3 PLATFORM FOOTING DETAILS 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N4	3



PLATFORM FOOTING ANCHOR

Performance test to 82.0 kips
Design Load=65 kips
No Scale

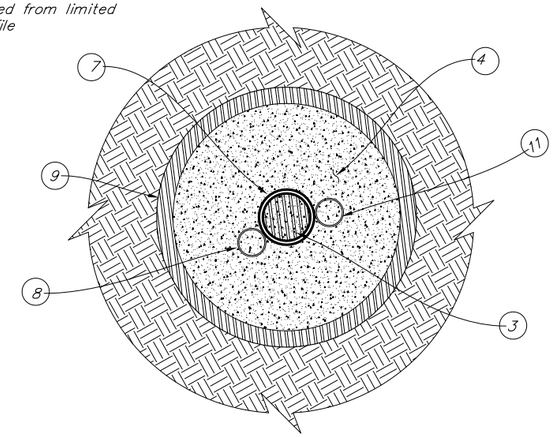


PILE SPLICE

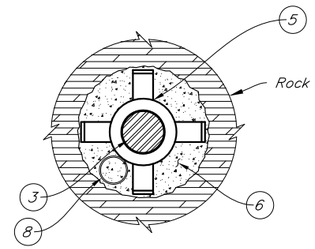
REVISION	DESCRIPTION	DATE
1	ANCHOR LOCATION & DIMENSIONS	5-15-18
2	ANCHOR DEPTH & DIAMETER	7-25-18

GENERAL NOTES

1. Tendon Anchor Per Section 673 ASTM A722 Fy 150 ksi
2. Installation and testing Per Section 673 of the Contract Specifications except as noted below.
3. Pipe Pile 8" ø Extra Strong ASTM A53 Grade B Hot Dip Galvanized
4. Concrete Class A
5. 2" Min Cover on Reinforcement
6. Elevations shown for existing ground, top of rock and competent rock are estimated from limited data. These will vary due to the nature of the ground topography and the rock profile



SECTION A-A



SECTION B-B

COMPONENTS

1. Nut & beveled washers
2. 11"x11"X 1.5" HDG bearing plate(ASTM A36)
3. 1.25"ø galvanized threaded bar 150 ksi
4. Encapsulation PT grout Section 701-2.08
5. Centralizers
6. Phase I Anchor grout
7. 6'-0" PVC casing pipe bond breaker. Seal tape ends
8. Anchor grout tube (Phase 1 grouting)
9. 8."ø Extra Strong galvanized steel casing pipe min length 12'-0"
10. Coupler for bars over 25'-0"
11. 0 Phase II grout tube for upper casing

INSTALLATION SEQUENCE

Due to alternate installation method at footing #1, phase II grouting occured simultaneous with phase 1 grout so anchor testing could not be done, CO#42.

1. Install 8"ø casing pipe through the overburden to embed the tip 3'-0" min into the weak rock or 6" into the competent rock. The tip elevations shown are estimates and are to be verified or modified in the field during the installation.
2. Clean out spoils from inside pipe.
3. Drill 4"ø hole below the lower tip of the pipe casing for tendon anchor to required depth and clean out.
   ** The required depth for the tendon anchorage will be based on the results of the weak rock grout bond test.
2. 4. Install 1.25 ø galvanized thread bar and centralizers.
5. Install Phase I Grout for only thread bar that is below the tip of the casing pipe. Do not let Phase I grout extend into the casing.
6. When grout has reached a minimum 4000 psi compressive strength, and is at least 5 days old, do a performance test anchor to specified load, jacking against steel casing. Casing may plunge during the test. Allow for a minimum of 4' of plunge into the rock pushing the tip of the casing lower.
7. Increase the jack pressure until the casing stabilizes and the performance load has been reached.
   Notify the Engineer if performance load in the tendon cannot be reached.
   If the tendon moves or begins to pull out, remove the entire tendon then redrill and grout in a deeper hole and retest.
8. After a successful performance test Install Phase II Grout the upper casing.
9. Install top anchor plate and complete the footing construction.

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	CO #38
DRAWN BY:	CHECKED: Brien Lindstrom	
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 48TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 7/25/18

WATERSTREET BRIDGE No. 2

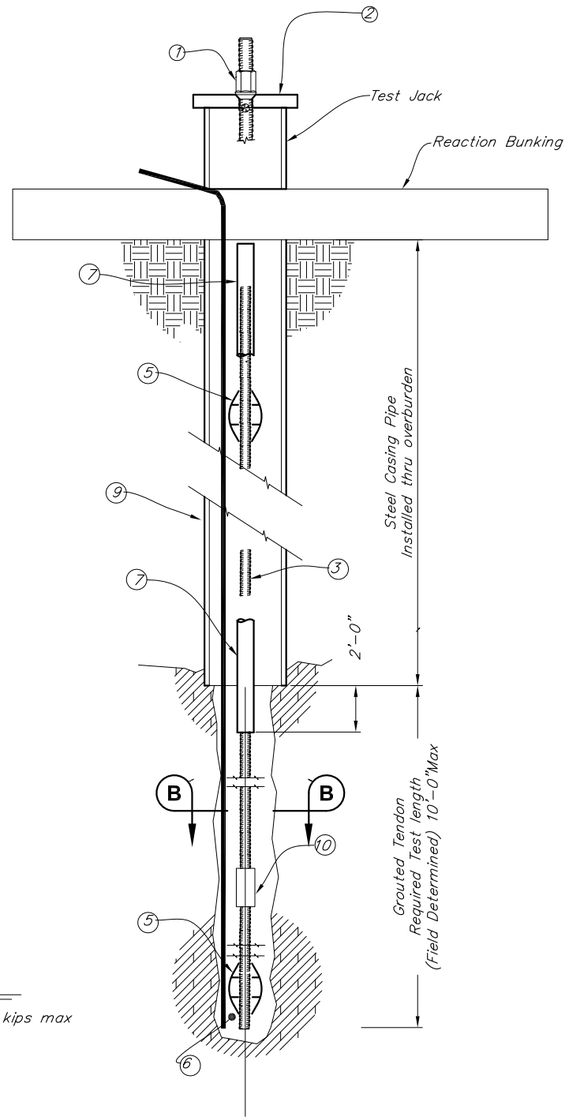
WATER STREET

PLATFORM FOOTING LEG

BRIDGE NO. 0446
DWG. NO. 4 N27D

Jul 25, 2018 - 10:38am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Footings 1-7\dwg\Platform Footing II.dwg Layout Name: 4 PLATFORM FOOTING LEG

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N----	4



TEST ANCHOR

Proof Test 125.0 kips max

No Scale

GENERAL NOTES

1. Tendon Anchor Per Section 673 ASTM A722 Fy 150 ksi
2. Installation and testing Per Section 673 of the Contract Specifications except as noted below.

ANCHOR GROUT TEST

Prior to construction of the platform footings, the Contractor shall construct a grout bond test to verify the capacity of the tendon anchors in the weak rock zone below the casing.

Hole location and installation

A test anchor shall be installed in the weak rock down station from Abutment 1 at Sta 12+21 and 3 to 5 ft right of centerline.

The 8" casing shall be advanced to bedrock and left in place for the entire test. Top of bed rock is estimated to be 26 to 30 feet below the existing pavement.

Drill through the overburden to the weak rock layer. The entire length of the anchor hole should be drilled using equipment and procedures that will produce a near continuous core. The core does not have to be the full 6" diameter and may initially be drilled using BX-size or similar coring tools. A second pass should be used to open the hole to 6 inch diameter.

The design team geologist will be on site to inspect the cores and verify the rock condition/ quality . Based on the recovered core the design team geologist will dictate the test length of the anchor to be grouted.

Anchor Test Load 125. Kips

Install the PVC bond breaker in the required length and location to control where the gout to rock bond zone will be. Install the 1.25 ø tendon in the open hole and grout the lower section in the identified rock zone.

After grout has reached a minimum 5000 psi strength (No sooner than 7 days) apply the test load to failure. Apply the test load in six steps as defined in the special provisions for Proof Test. Hold the load for 10 minutes at each step and record any movement.

Failure is defined as when anchor moves in excess of .5 inch

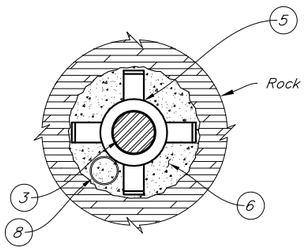
Suspend the test if the test load exceeds 125 kips, regardless of if failure has been observed.

If the anchor fails at loads less than the test level, continue pulling the anchor completely out of the ground so that the actual grout length can be measured and inspected.

The results of the Test anchor will be used to determine the required depth of the tendons below the footing casings.

COMPONENTS

1. Nut & beveled washers
2. 11"x11"X 1.5" HDG bearing plate(ASTM A36)
3. 1.25"ø galvanized threaded bar 150 ksi
4. --
5. Centralizers
6. Anchor grout in 6 inch diameter hole.
7. PVC casing pipe bond breaker. Seal tape ends
8. Anchor grout tube
9. 8."ø Extra Strong galvanized steel casing
10. Coupler for bars over 25'-0"
11.0 --



SECTION B-B

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS
DRAWN BY:	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

CO #36

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
2/21/18
Registered Professional Engineer

WATERSTREET BRIDGE No. 2

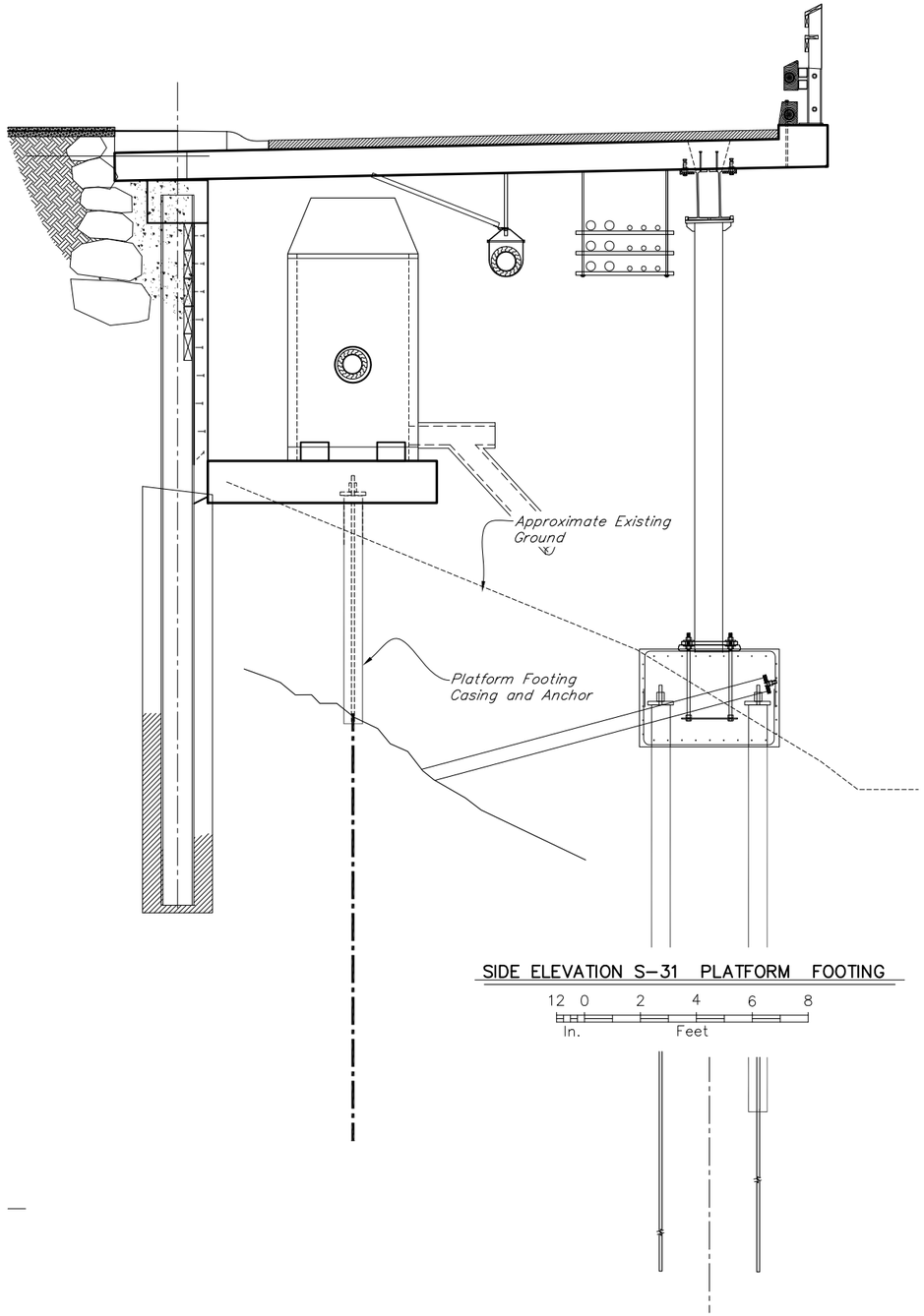
WATER STREET

ANCHOR TEST

BRIDGE NO. 0446
DWG. NO. N27E

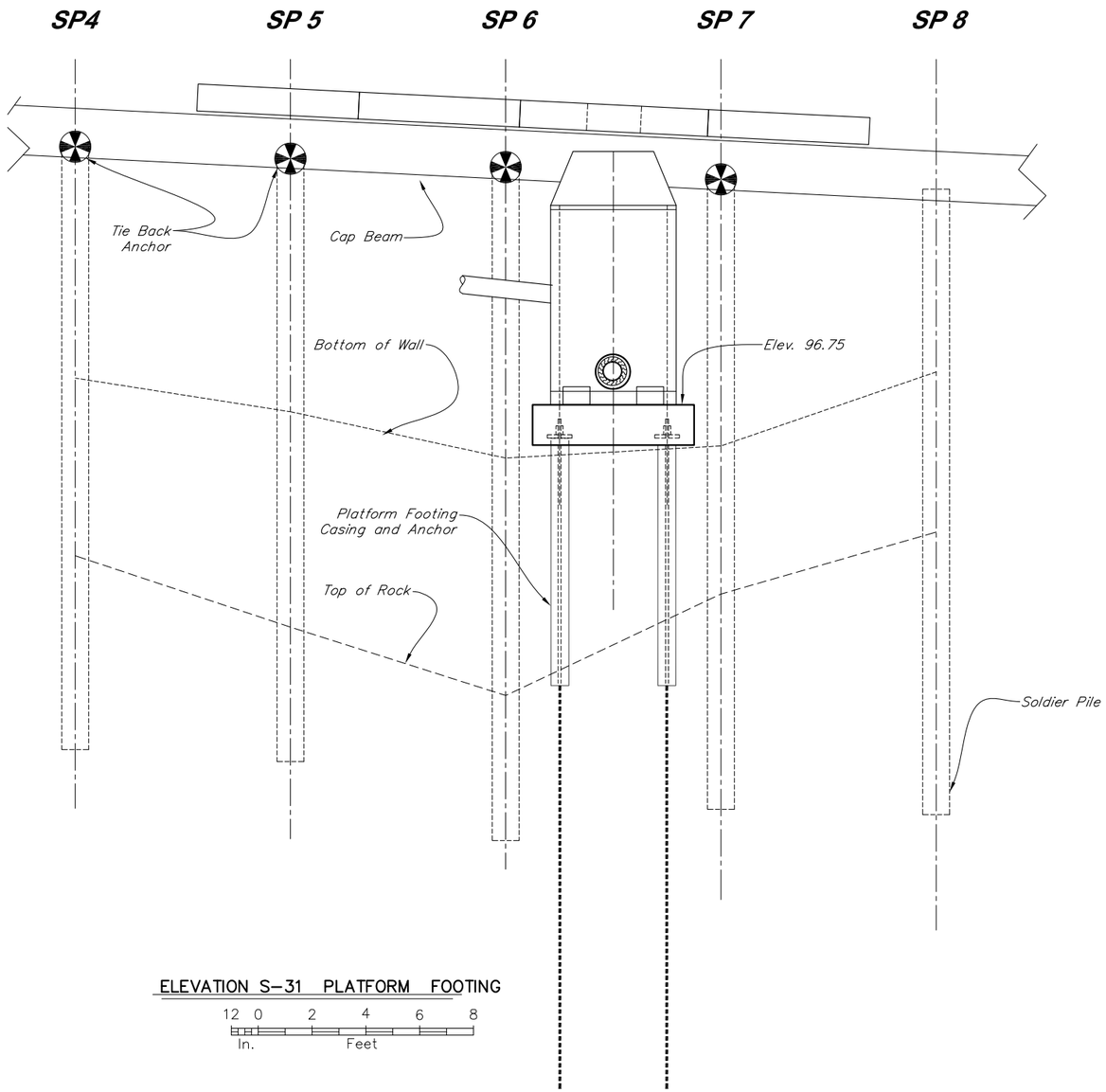
Apr 16, 2018 - 9:59am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Footings 1-7\dwg\Platform Footing II.dwg Layout Name: ANCHOR TEST

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N1	3



SIDE ELEVATION S-31 PLATFORM FOOTING

12 0 2 4 6 8
In. Feet



ELEVATION S-31 PLATFORM FOOTING

12 0 2 4 6 8
In. Feet

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS
DRAWN BY:	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

CO#41

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 7/3/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

WATER STREET

MAN HOLE -31 PLATFORM FOOTING

BRIDGE NO. 0446

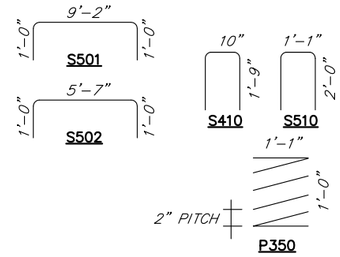
DWG. NO. 1 N27F

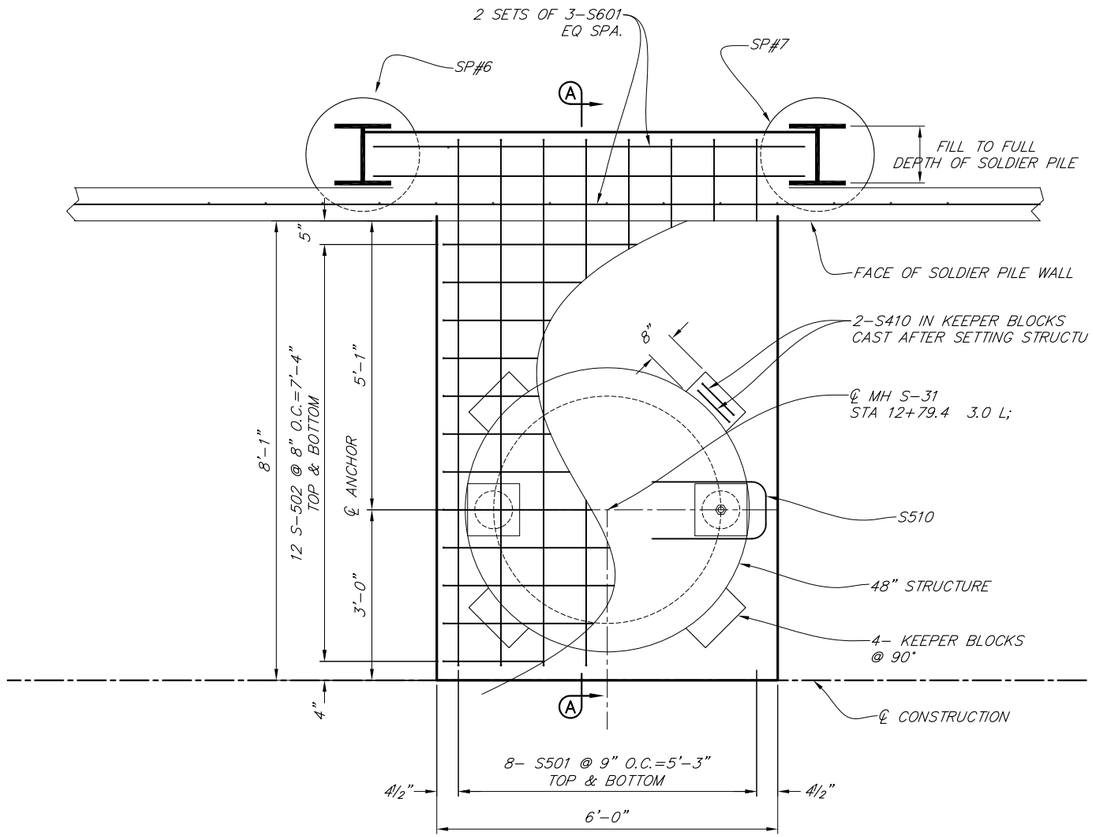
Jul 03, 2018 - 1:57pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\MH 31 Base\sewer platform.dwg Layout Name: MAN HOLE -31 PLATFORM FOOTING

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N2	3

REINFORCING STEEL

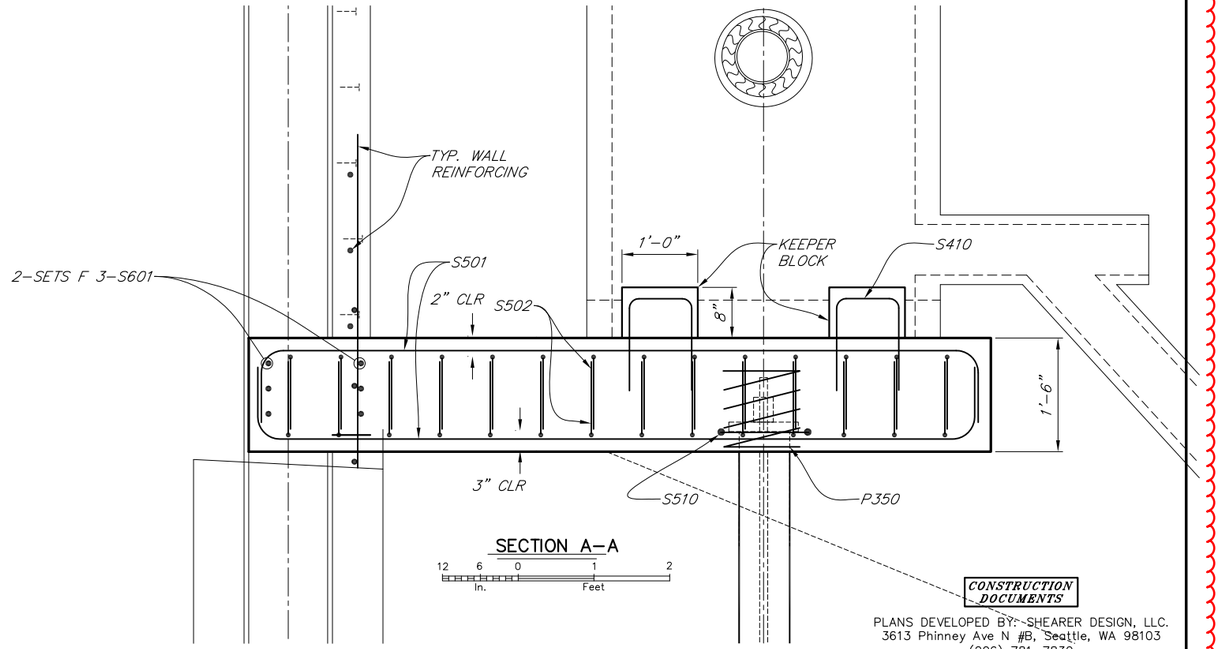
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
Quantity for one Platform Footing					
P350		3	4	27'-0"	spiral
S410		4	8	4'-4"	bent
S601		6	6	7'- 8"	Str
S501		5	16	11'-2"	bent
S510		5	4	5'-1"	bent
S502		5	24	7'-7"	bent





PLAN S-31 PLATFORM

12 6 0 1 2 3
In. Feet



SECTION A-A

12 6 0 1 2
In. Feet

CONSTRUCTION DOCUMENTS

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www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS
DRAWN BY:	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

CO#41

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 48TH DAVID R. SHEARER CE 8373 7/3/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

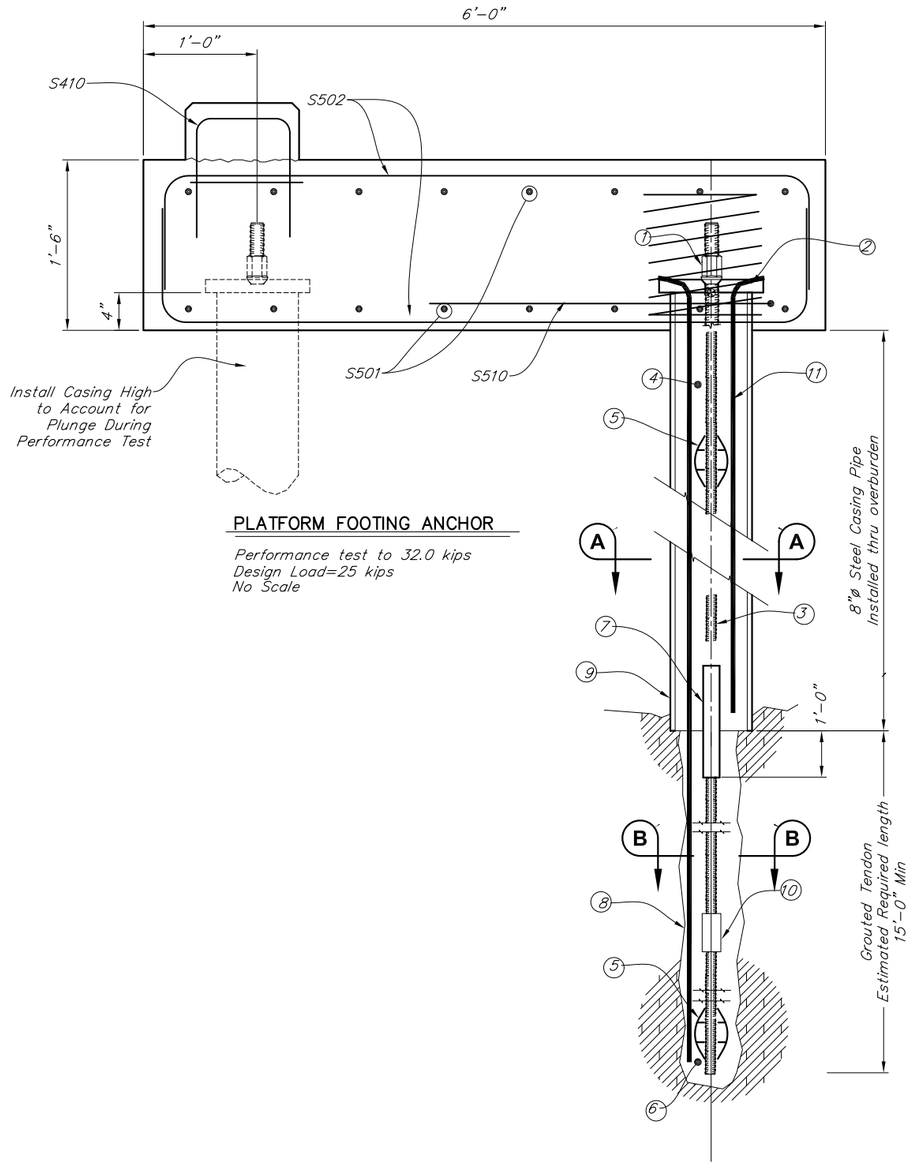
WATER STREET

FOOTING DETAILS

BRIDGE NO. 0446
DWG. NO. 2 N27G

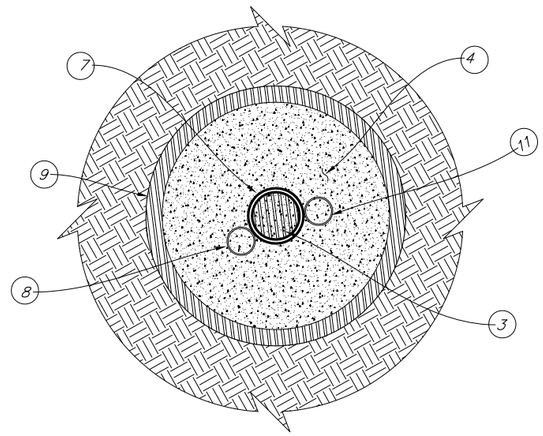
Jul 03, 2018 - 1:58pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\MH 31 Base\sewer platform.dwg Layout Name: FOOTING DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N3	3

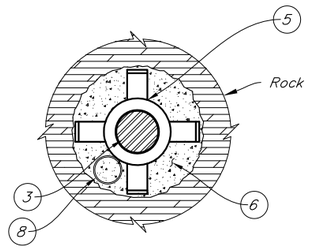


PLATFORM FOOTING ANCHOR

Performance test to 32.0 kips
Design Load=25 kips
No Scale



SECTION A-A



SECTION B-B

ANCHOR INSTALLATION

Prior to construction of the platform, the Contractor shall install and performance test the two support legs. Section 673-3.06

1. *The 8" casing shall be advanced to bedrock.*
2. *Drill 4" diameter hole below the casing a minimum of 15'-0." Install and grout the 1.25 ø anchor rod. Grout only the length of anchor rod below the casing.*
3. *Performance test the anchor rod to 32 kips. The casing may plunge during the performance loading operation Increase the load until the casing vertical depth stabilizes and the performance load can be maintained.*
4. *After the anchor has been performance tested grout the upper section in the casing.*
5. *Complete the platform construction.*

COMPONENTS

1. *Nut & beveled washers*
2. *11"x11"X 1.5" HDG bearing plate(ASTM A36)*
3. *1.25"ø galvanized threaded bar 150 ksi*
4. *Encapsulation Grout*
5. *Centralizes*
6. *Anchor grout in 4 inch diameter hole.*
7. *PVC casing pipe bond breaker. Seal tape ends*
8. *Anchor grout tube*
9. *8."ø Extra Strong galvanized steel casing*
10. *Coupler for bars over 25'-0"*
11. *Casing Grout Tube*

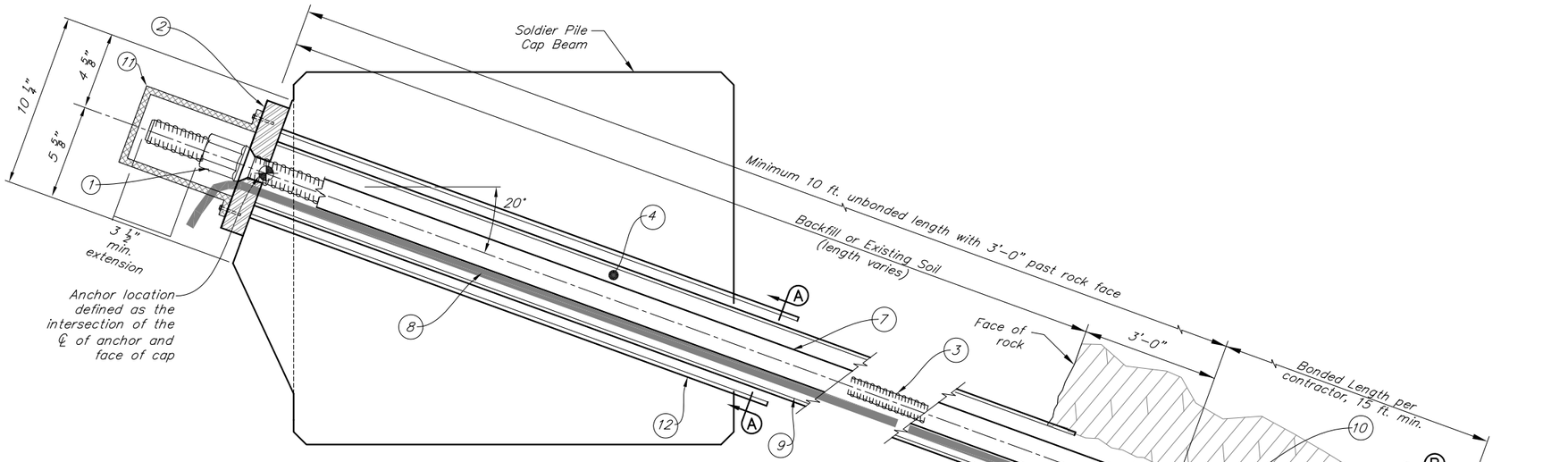
CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	CO#41	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	WATERSTREET BRIDGE No. 2 WATER STREET ANCHOR
DRAWN BY:	CHECKED: Brien Lindstrom	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed. Project Eng.: Date: 9/5/2019 AB As-Built Set		BRIDGE NO. 0446 DWG. NO. 3 N27H
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom		STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 7/3/18 Registered Professional Engineer	

Jul 03, 2018 - 1:39pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\MH 31 Base\sewer platform.dwg Layout Name: ANCHOR

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N28	N110

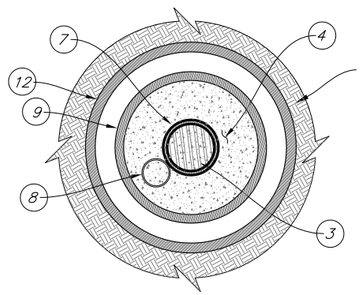


COMPONENTS

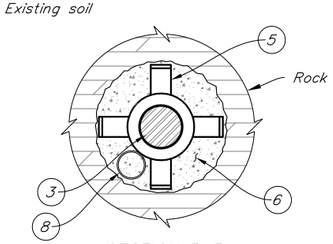
1. Nut & beveled washer
2. 8"x8"X 1.5" HDG bearing plate with grout port (ASTM A36)
3. 1.25"ø Galvanized threaded bar 150 ksi
4. Encapsulation PT grout Section 701-2.08
5. Centralizers
6. Anchor grout
7. PVC casing pipe with anti corrosion grease inside
8. Anchor grout tube
9. 3.5"ø Std galvanized steel casing pipe
10. Coupler for bars over 25'-0"
11. Steel galvanized anchorage Cover with Anti-Corrosion Grease
12. 5"ø Std galvanized steel sleeve in cast into Cap Beam

SOLDIER PILE WALL TIE BACK ANCHOR

Performance test to 82.0 kips
Design Load=65 kips
No Scale



SECTION A-A



SECTION B-B

INSTALLATION SEQUENCE

1. Construct Cap Beam with Steel Sleeve for anchor
2. Drill thru sleeve into existing private retaining wall/ soil & rock (provide casing thru soil zone into rock)
2. Install anchor and grout
3. Backfill wall
4. Proof test anchor against casing
5. Lock off anchor at 50% design load

Anchoring details and methods shown are minimum requirements and may be modified at the request of the Contractor. Any modifications must be approved by the Engineer in advance of construction.

Addendum 1

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
10TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

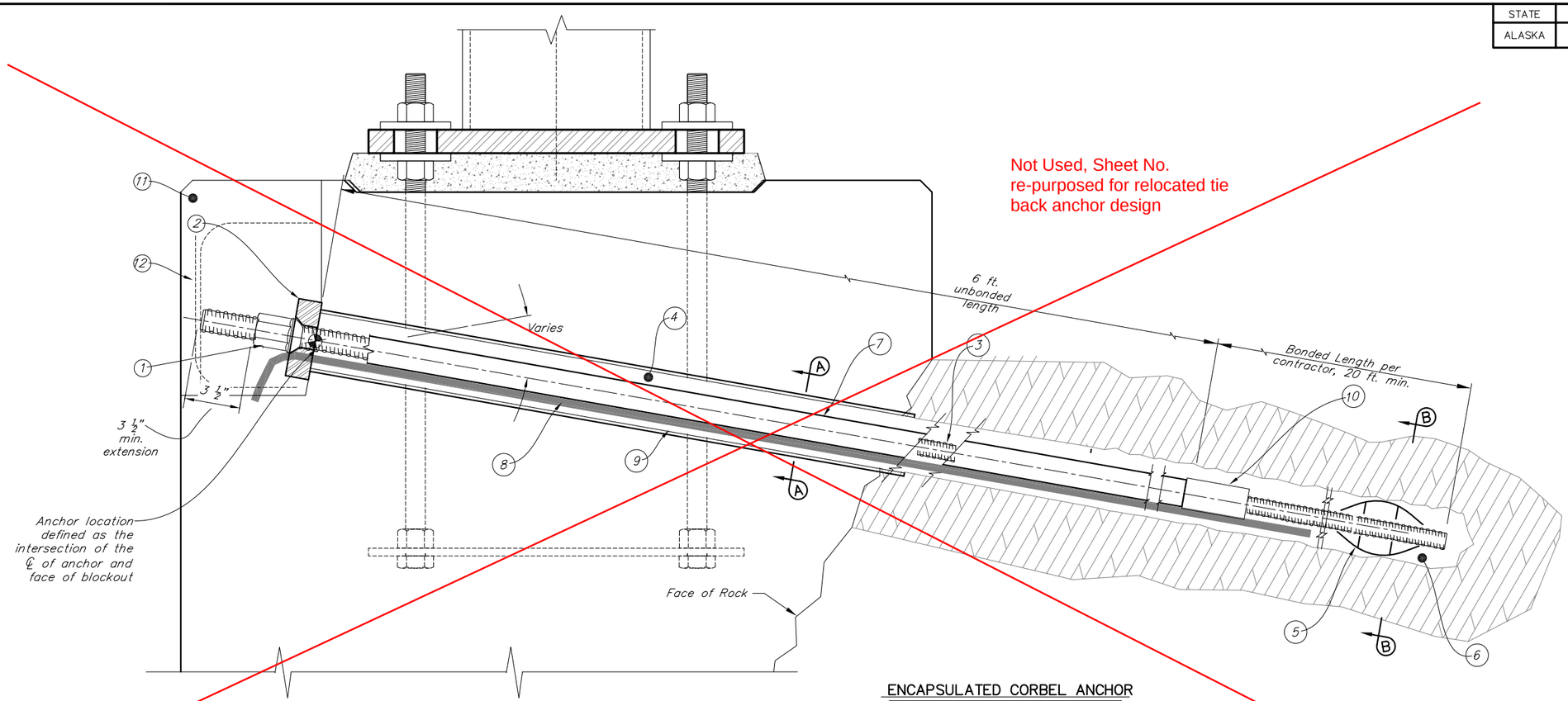
SOLDIER PILE WALL TIE BACK ANCHOR

BRIDGE NO. 0446
DWG. NO. 28

Oct 14, 2015 - 3:46pm brlen \\sheareserver\jobs\0226 water street ps&e\DWG\danset adot&pf\69534_Anchor Details.dwg Layout Name: SOLDIER PILE WALL TIE BACK ANCHOR

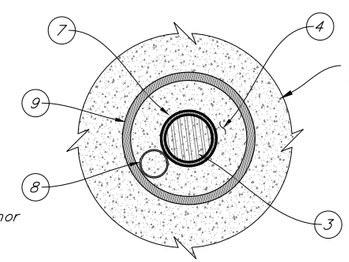
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N29	N110

Not Used, Sheet No.
re-purposed for relocated tie back anchor design

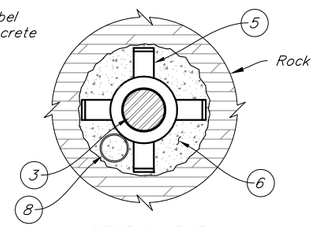


ENCAPSULATED CORBEL ANCHOR

Performance test to 100.0 kips
Design Load=80 kips
No Scale



SECTION A–A
No Scale



SECTION B–B
No Scale

COMPONENTS

1. Nut & beveled washers
2. 5"x8"X 1.5" HDG bearing plate with grout port (ASTM A36)
3. 1.25"ø Galvanized threaded bar 150 ksi
4. Encapsulation PT grout Section 701-2.08
5. Centralizers
6. Anchor grout
7. PVC casing pipe with anti corrosion grease inside
8. Anchor Grout tube
9. 3.5"ø Std Galvanized steel casing pipe cast into corbel concrete
10. Coupler for bars over 25'-0"
11. Blockout Concrete Class A
12. Re-bend Blockout rebar

INSTALLATION SEQUENCE

1. Construct Corbel concrete with Steel Sleeve for anchor
2. Drill thru Sleeve & rock to required depth
3. Install anchor and grout
4. Proof test anchor against new corbel
5. Lock off anchor at design load
6. Place concrete in blockouts
7. Install column

Anchoring details and methods shown are minimum requirements and may be modified at the request of the Contractor. Any modifications must be approved by the Engineer in advance of construction.

Addendum 1

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/4/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

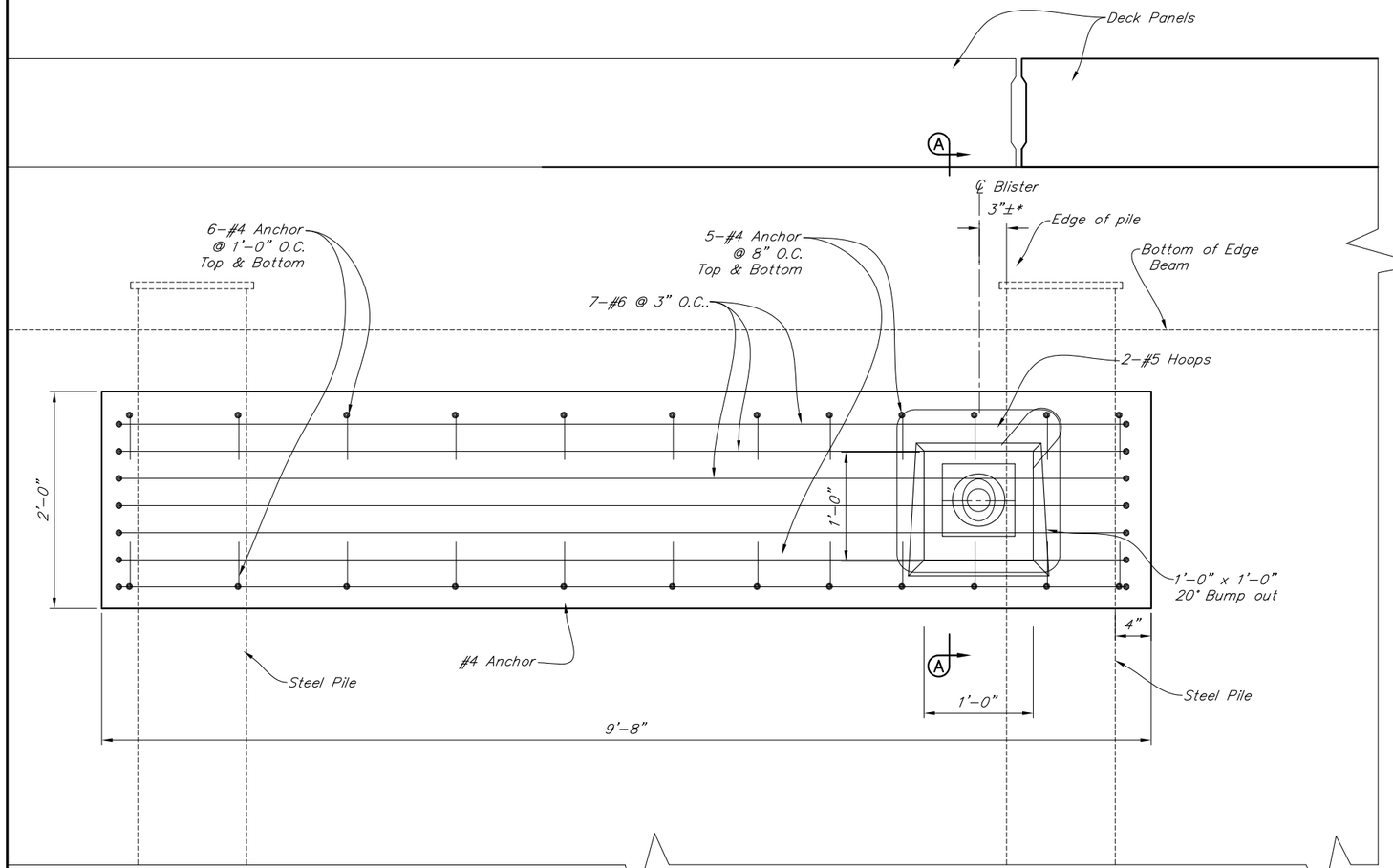
WATER STREET

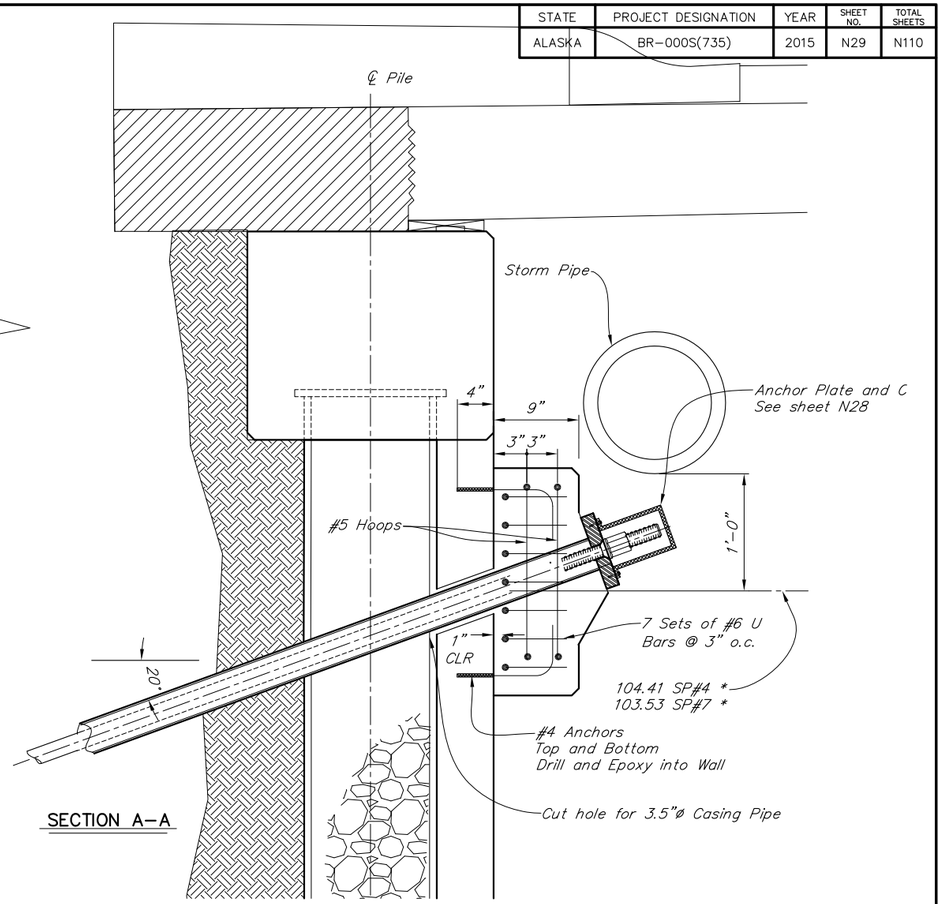
CORBEL ANCHOR

BRIDGE NO. 0446
DWG. NO. 29

Oct 14, 2015 - 3:46pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset.ado\bpf#69534_Anchor Details.dwg Layout Name: CORBEL ANCHOR

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N29	N110





SECTION A-A

RELOCATED TIE BACK ANCHOR

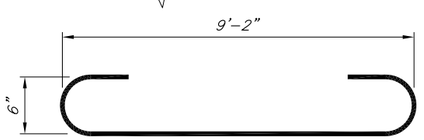
6 0 1
In. Feet

Set Blister on the Side of the Pile
that will provide the most clearance from house foundation.
Horizontal rotate tie back 8 deg Max if needed
to clear house foundation.

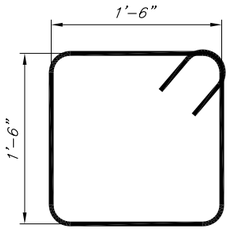
** Set anchor casing as close as possible to edge of pile.*
Verify Clearance to Storm Drain pipe.

Notify Engineer before cutting existing rebar.

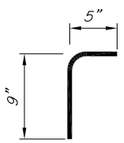
Materials
Concrete Class A Reinforcement ASTM A706
ADOT & PF Approved Epoxy



#6 Reinforcement "U"
(7 Required)



#5 Reinforcement Hoop
(2 Required)



#4 Anchor
(22 Required)

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

See CO#45

This detail was applied at Soldier Piles 2, 4, and 7

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	RFI-207 / CSM 277	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA
10TH
DAVID R. SHEARER
CE 8373
11/19/18
Registered Professional Engineer

WATER STREET BRIDGE No. 2

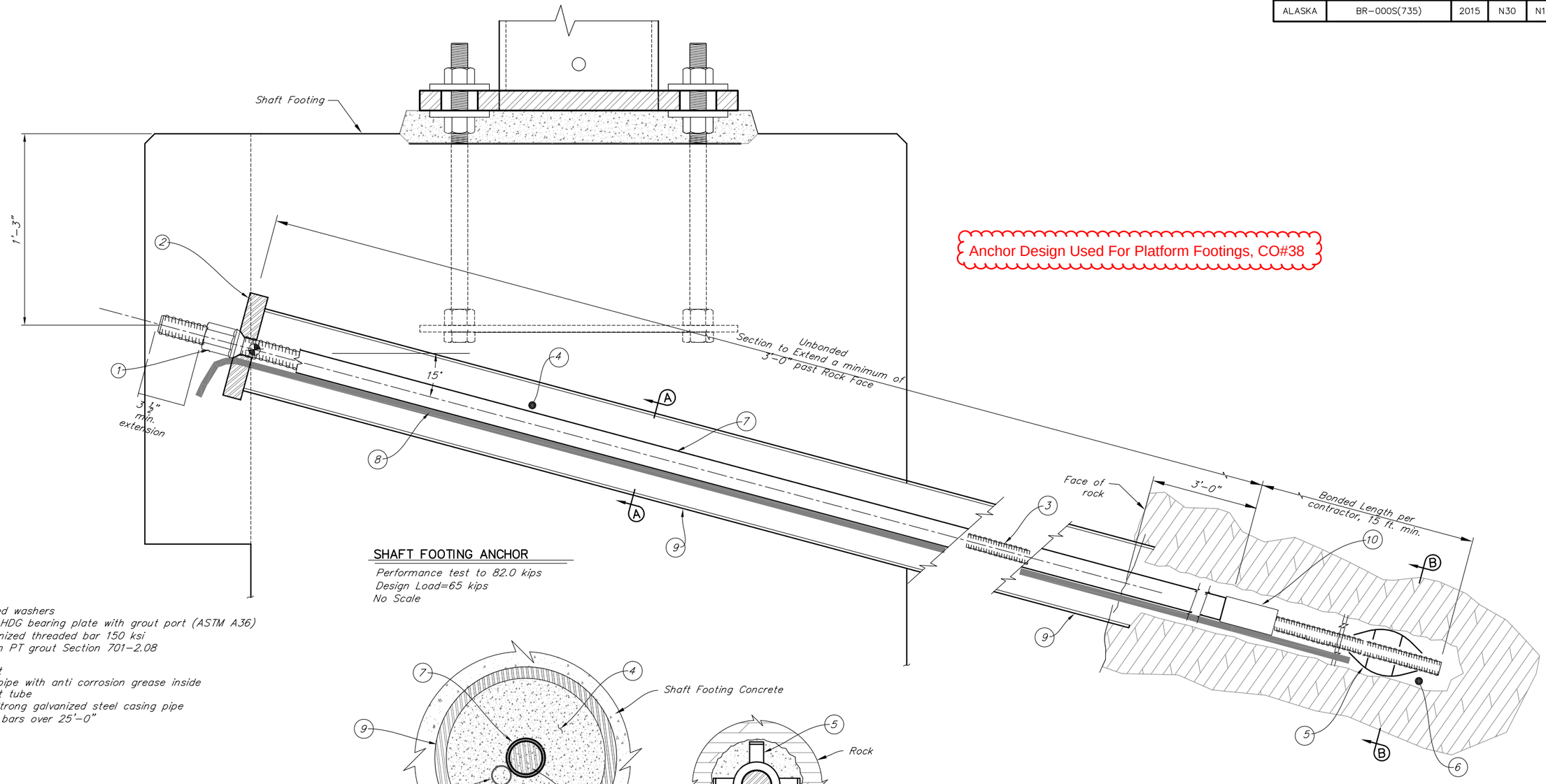
WATER STREET

RELOCATED TIE-BACK ANCHOR

BRIDGE NO. 0446
DWG. NO. 29A

Nov 15, 2018 - 11:44am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\SP Anchor Relocation_Relocated Anchor Details III.dwg Layout Name: RELOCATED ANCHOR

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N30	N110



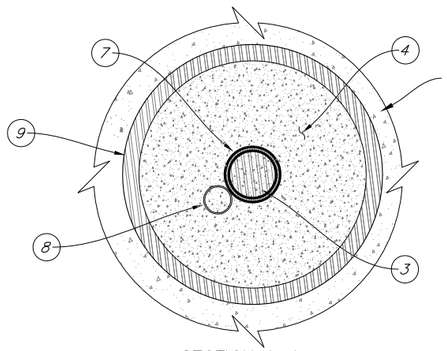
Anchor Design Used For Platform Footings, CO#38

SHAFT FOOTING ANCHOR

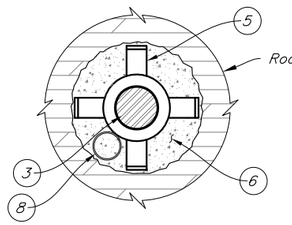
Performance test to 82.0 kips
Design Load=65 kips
No Scale

COMPONENTS

1. *Nut & beveled washers*
2. *8"x8"X 1.5" HDG bearing plate with grout port (ASTM A36)*
3. *1.25"ø galvanized threaded bar 150 ksi*
4. *Encapsulation PT grout Section 701-2.08*
5. *Centralizers*
6. *Anchor grout*
7. *PVC casing pipe with anti corrosion grease inside*
8. *Anchor grout tube*
9. *6."ø Extra Strong galvanized steel casing pipe*
10. *Coupler for bars over 25'-0"*



SECTION A-A



SECTION B-B

INSTALLATION SEQUENCE

1. *Construct lower section of Shaft Footing (4'ø)*
2. *Install Shaft Anchor with casing thru overburden into rock*
3. *Grout and performance test anchor, jacking against ateel casing.*
4. *Construct upper half of shaft footing. 4' square with embed bearing plate*

Anchoring details and methods shown are minimum requirements and may be modified at the request of the Contractor. Any modifications must be approved by the Engineer in advance of construction.

Addendum 1

Assume unbonded length = 10 ft.

Addendum 1

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom		
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom		

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/1/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

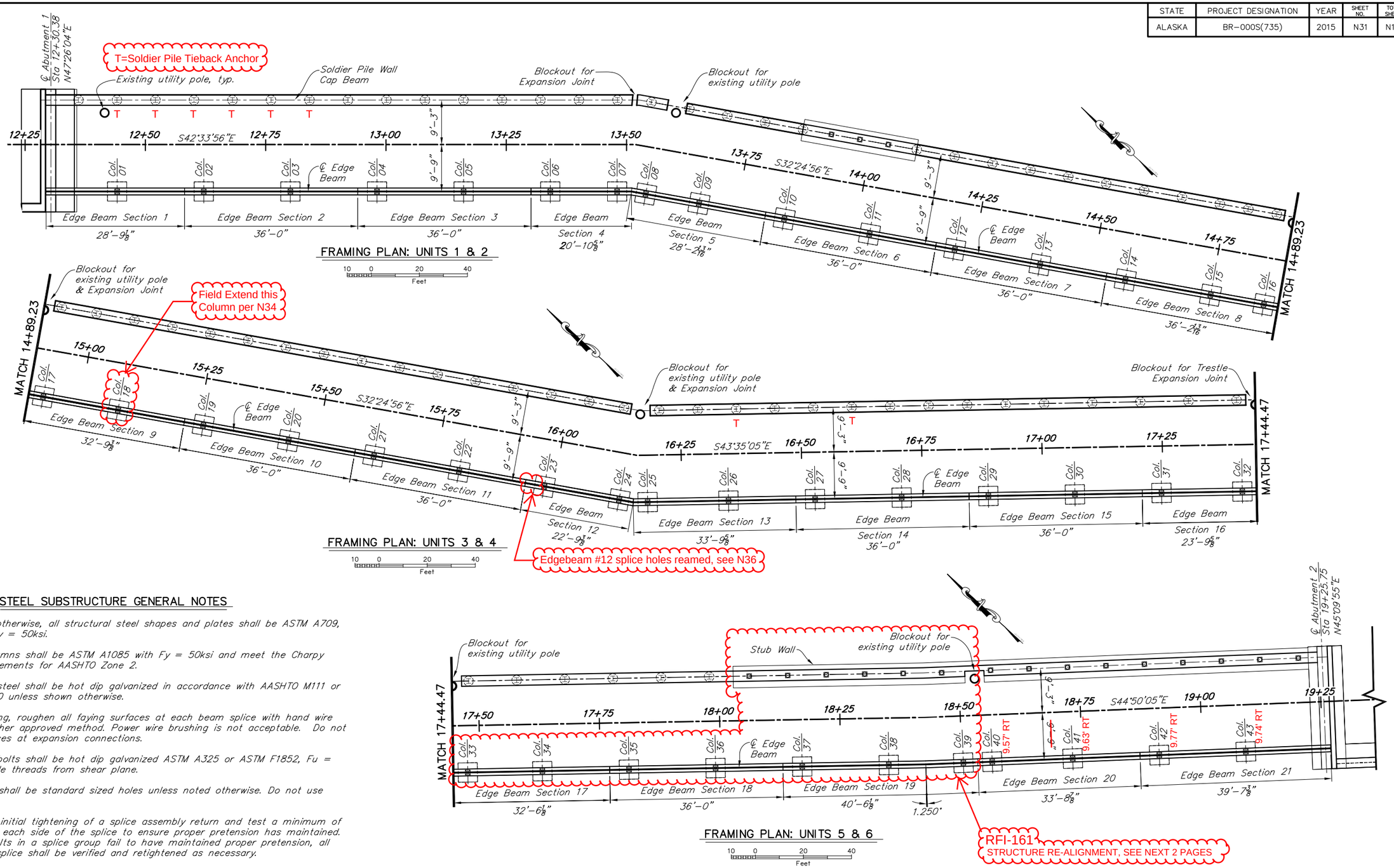
SHAFT FOOTING ANCHOR

BRIDGE NO. 0446

DWG. NO. 30

Oct 14, 2015 - 3:46pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_Anchor Details.dwg Layout Name: SHAFT FOOTING ANCHOR

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N31	N110



STEEL SUBSTRUCTURE GENERAL NOTES

- *Unless noted otherwise, all structural steel shapes and plates shall be ASTM A709, Grade 50T2, Fy = 50ksi.*
- *Steel HSS columns shall be ASTM A1085 with Fy = 50ksi and meet the Charpy V-notch requirements for AASHTO Zone 2.*
- *All structural steel shall be hot dip galvanized in accordance with AASHTO M111 or SSPC CS 23.00 unless shown otherwise.*
- *After galvanizing, roughen all faying surfaces at each beam splice with hand wire brushing or other approved method. Power wire brushing is not acceptable. Do not roughen surfaces at expansion connections.*
- *All structural bolts shall be hot dip galvanized ASTM A325 or ASTM F1852, Fu = 120ksi. Exclude threads from shear plane.*
- *All bolt holes shall be standard sized holes unless noted otherwise. Do not use punched holes.*
- *90 days after initial tightening of a splice assembly return and test a minimum of three bolts on each side of the splice to ensure proper pretension has maintained. If any test bolts in a splice group fail to have maintained proper pretension, all bolts in that splice shall be verified and retightened as necessary.*

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/14/15
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

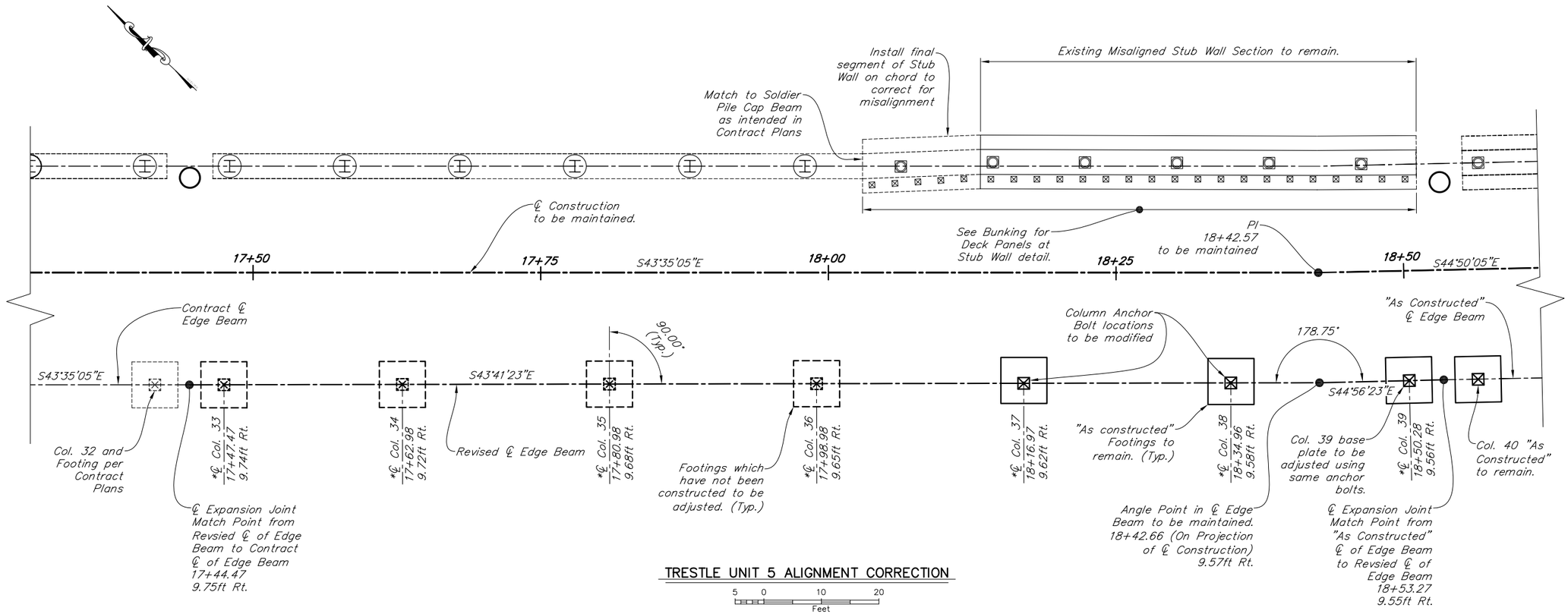
TRESTLE FRAMING PLAN

BRIDGE NO. 0446

DWG. NO. 31

Oct 14, 2015 - 3:46pm bvlen \\shearerserver\jobs\0226 water street pss&e\DWG\planset adot&pf\60534_N22 TRESTLE FRAMING PLAN.dwg Layout Name: TRESTLE FRAMING PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	1	2



TRESTLE UNIT 5 ALIGNMENT CORRECTION

5 0 10 20
Feet

* The station and/or offset for the centerline of Column has been modified to fit the Revised ℄ of Edge Beam.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	RFI-161 COLUMN MIS-ALIGNMENT FIX	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA DAVID R. SHEARER CE 8373 9/5/19 Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

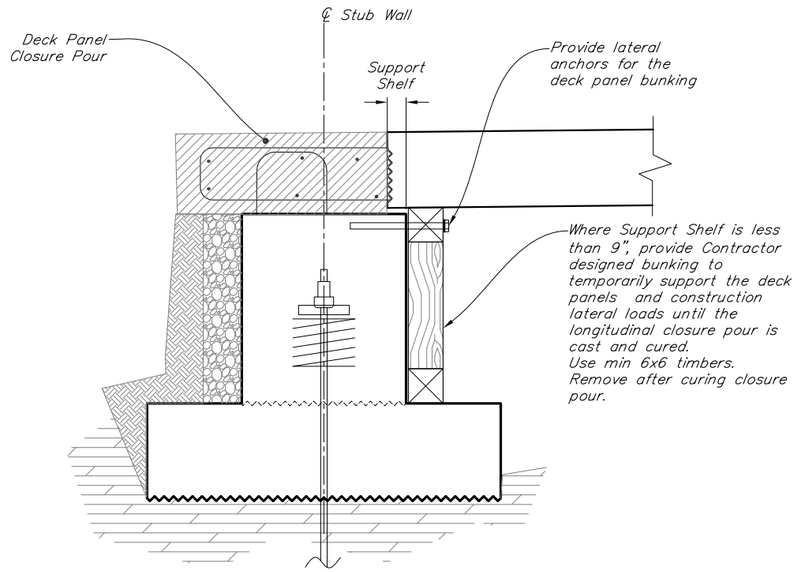
TRESTLE ALIGNMENT CORRECTION

BRIDGE NO. 0446

DWG. NO. 1 N31A

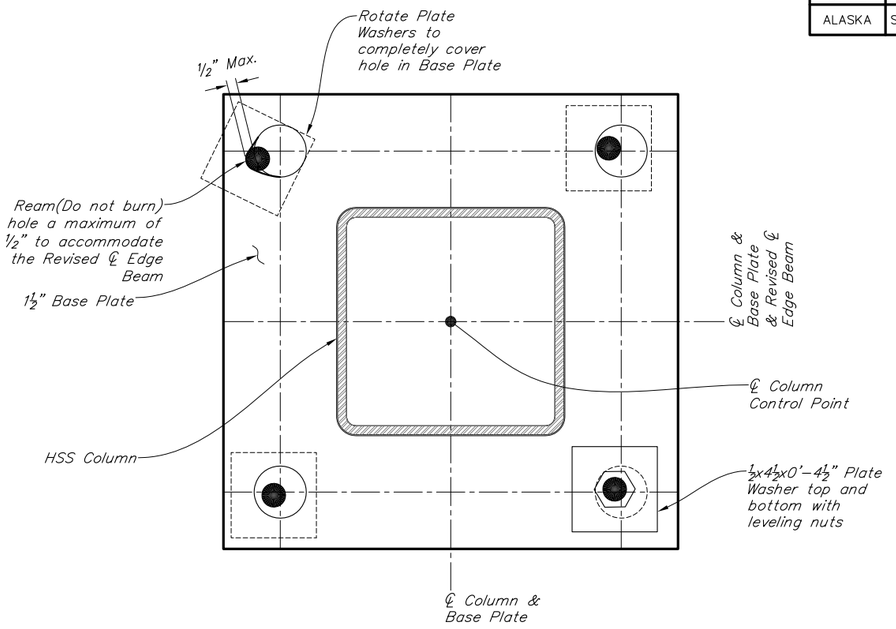
Jun 14, 2017 - 8:48am david \\shearerserver\jobs\0278 water street construction\construction engineering\structure misalignment\Misalignment Fix Plan.dwg Layout Name: 1 TRESTLE ALIGNMENT CORRECTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	2	2



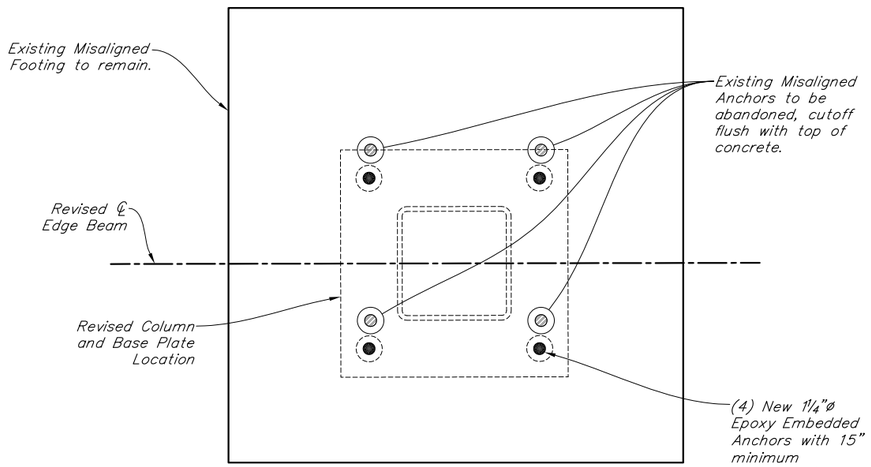
BUNKING FOR DECK PANELS AT STUB WALL

12 6 0 1 2
In. Feet



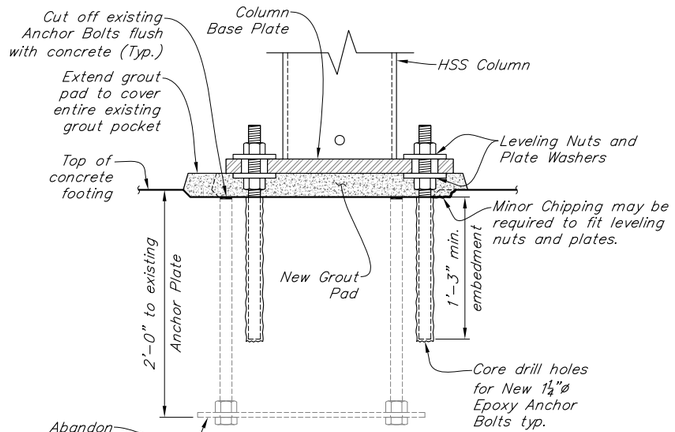
COLUMN BASE PLATE MODIFICATION

0 3 6 9 1'-0"
Inches



FOOTING ANCHOR MODIFICATION

6 0 1
In. Feet



BASE PLATE ANCHORAGE MODIFICATION

6 0 1
In. Feet

RFI-161
COLUMN MIS-ALIGNMENT FIX

GENERAL NOTES

- Anchor Bolts shall meet the requirements of ASTM A307 Grade A, or ASTM F1554 Grade 36 and be hot-dip galvanized per AASHTO M 232.
- New holes for epoxy anchors shall be made by core drilling. Rotohammer holes shall not be accepted.
- Epoxy shall be per the Project Specifications.
- If base plate holes are reamed, apply two coats of galvanizing repair paint to the reamed area.

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	DAVID R. SHEARER CE 8373 6/9/17 Registered Professional Engineer
QUANTITIES BY:	CHECKED:	AB As-Built Set	

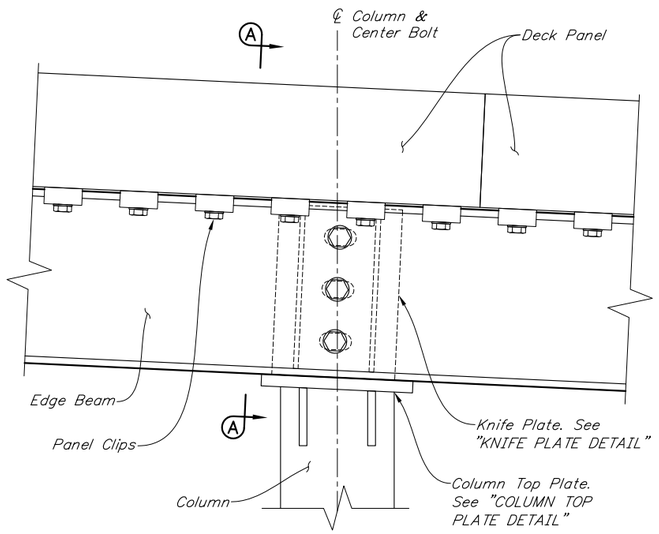
WATER STREET BRIDGE No2

WATER STREET

ALIGNMENT CORRECTION DETAILS

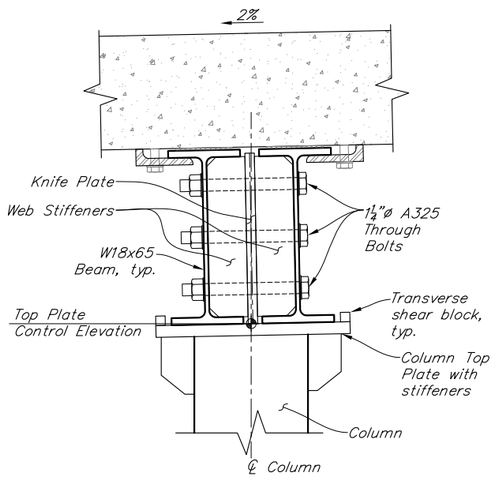
BRIDGE NO. 0446
DWG. NO. 2 N31B

Jun 14, 2017 - 8:28am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Structure Misalignment\Alignment Correction Details.dwg Layout Name: 2 ALIGNMENT CORRECTION DETAILS



COLUMN TO EDGE BEAM CONNECTION ELEVATION

6 0 1
In. Feet



EDGE BEAM SECTION A–A NEAR COLUMN

6 0 1
In. Feet

RFI-132 & CSM-161

The three 1.25" bolts that connect the edge beams to the columns shall be tightened snug tight plus a minimum one third turn of the nut.

We recommend the following tightening sequence:

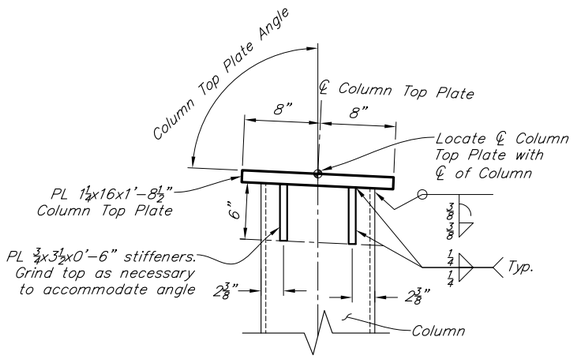
1. Connect components and snug tight all nuts.
2. Match mark original position of nut with crayon or paint.
3. Turn the center nut 1/6 turn.
4. Turn the top and bottom nuts 1/6 turn.
5. Turn the center nut 1/6 additional turn to achieve final tightening of 1/3.
6. Turn the top and bottom nuts 1/6 additional turn to achieve final tightening of 1/3.

This tightening may result in small inward deflections of the web at the center bolt. This is expected and should not exceed an indentation of 1/16" over 8" of length on either the bolt head side or nut side of the connection. If excessive bending of the web is encountered after all nuts have been turned 1/3 of a rotation, back off the center bolt and contact the Engineer.

Joshua Pruitt, P.E., S.E.

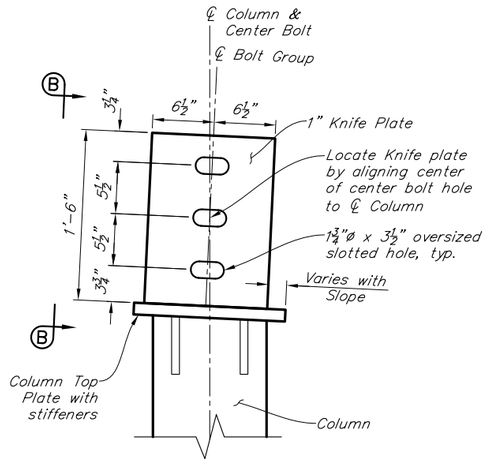
Bridge Engineer
SHEARER DESIGN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N32	N110



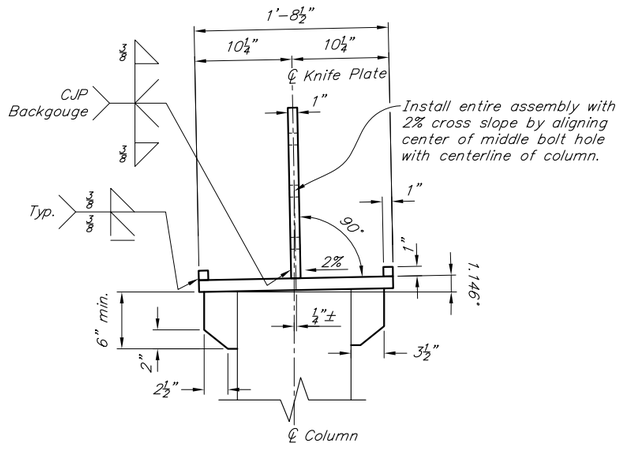
COLUMN TOP PLATE DETAIL

6 0 1
In. Feet



KNIFE PLATE DETAIL

6 0 1
In. Feet



VIEW B–B

6 0 1
In. Feet

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

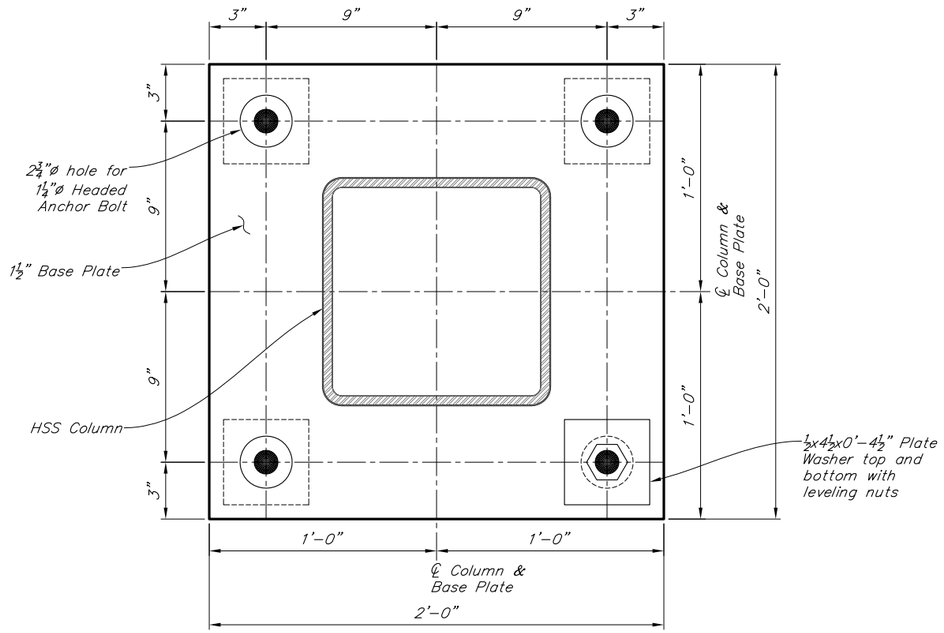
WATER STREET

COLUMN DETAILS 1

BRIDGE NO. 0446
DWG. NO. 32

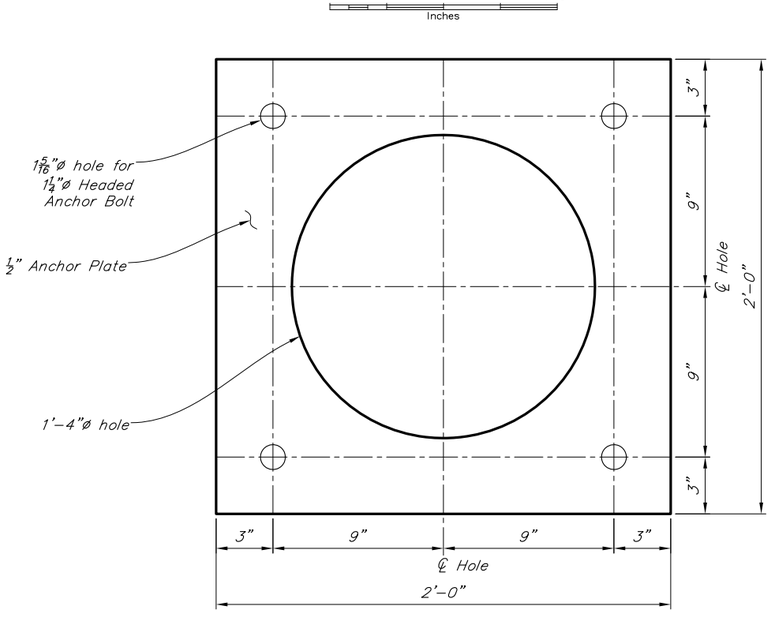
Oct 14, 2015 - 3:46pm bilen \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\bpf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: COLUMN DETAILS 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N33	N110



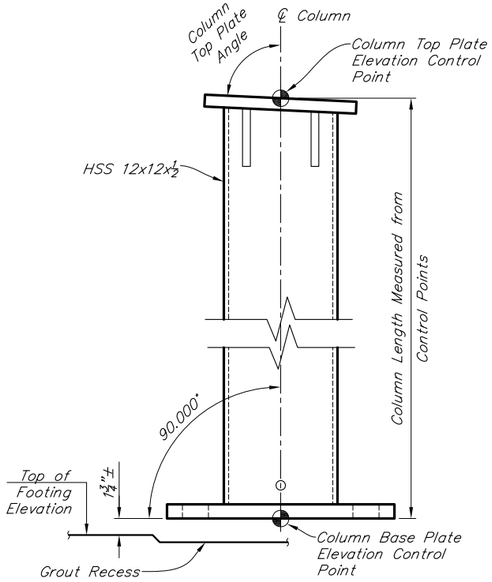
COLUMN BASE PLATE DETAIL

0 3 6 9 1'-0"
Inches



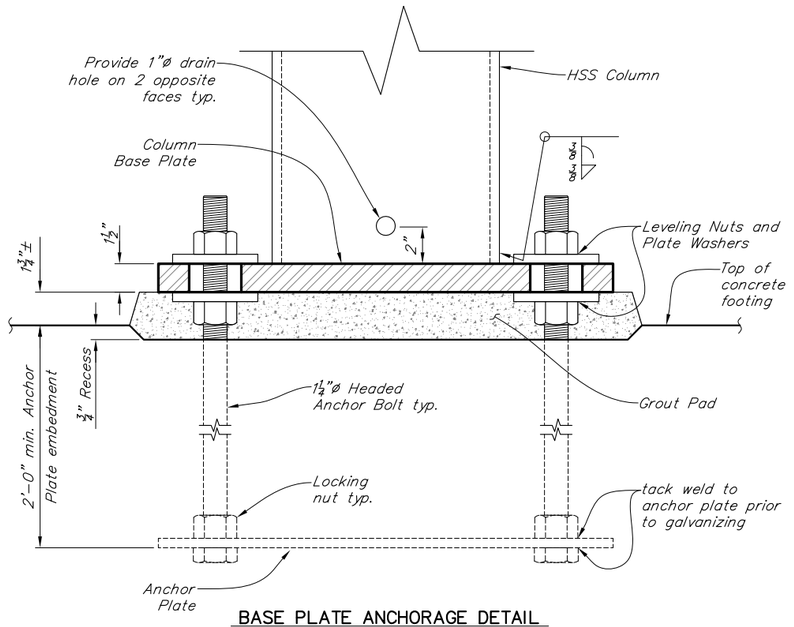
ANCHOR PLATE DETAIL

0 3 6 9 1'-0"
Inches



COLUMN CONTROL DIAGRAM

6 0 1
In. Feet



BASE PLATE ANCHORAGE DETAIL

0 3 6 9 1'-0"
Inches

HSS 12x12x½" COLUMN CONTROL TABLE

Number	Length	Column Top Plate Angle*	Column Top Plate Elevation	Column Bot Plate Elevation	Top of Footing Elevation**
1	5.000	86.78	107.49	102.74	102.59
2	14.000	87.15	106.56	92.56	92.41
3	15.500	87.15	105.67	90.17	90.02
4	16.500	87.15	104.77	87.52	87.37
5	15.500	87.15	103.87	88.37	88.22
6	16.000	87.15	102.98	86.98	86.83
7	15.750	87.15	102.28	87.03	86.88
8	16.000	87.15	101.90	86.40	86.25
9	16.000	87.15	101.34	85.34	85.19
10	17.250	87.15	100.44	82.69	82.54
11	20.500	87.15	99.55	81.05	80.90
12	21.250	86.73	98.57	77.82	77.67
13	18.750	86.73	97.54	77.54	70.39
14	16.750	87.33	96.58	70.54	70.39
15	18.500	87.33	95.74	71.58	71.43
16	19.000	87.33	95.21	75.71	75.56
17	18.500	87.33	94.93	76.93	76.78
18 +	18.750	87.33	94.20	73.16	73.01
19	21.750	87.33	93.36	71.11	70.96
20	24.500	87.33	92.52	68.52	68.37
21	24.750	87.33	91.68	66.18	66.03
22	25.250	87.33	90.84	66.09	65.94
23	18.750	88.65	90.14	67.89	67.74
24	12.500	89.86	89.97	77.97	77.82
25	13.500	89.86	89.96	75.96	75.81
26	10.000	89.86	89.92	80.42	80.27
27	10.000	89.86	89.87	80.12	79.97
28	12.250	89.86	89.83	76.83	76.68
29	12.500	89.86	89.78	78.03	77.88
30	10.000	89.86	89.74	77.99	77.84
31	8.500	89.86	89.69	81.19	81.04
32	8.500	89.86	89.65	81.40	81.25
33	9.000	89.86	89.63	82.63	82.48
34	11.000	89.86	89.60	78.85	78.70
35	13.000	89.86	89.55	76.05	75.90
36	12.750	89.86	89.51	78.26	78.11
37	10.750	89.85	89.46	77.96	77.81
38	6.500	89.85	89.41	83.16	83.01
39	4.500	89.85	89.37	84.37	84.22
40	4.250	89.70	89.35	85.35	85.20
41	4.500	89.20	89.20	84.20	84.05
42	2.750	88.69	88.87	86.12	85.97
43	2.000	88.41	88.39	86.89	86.74

* Top Plate Angle is the angle in the longitudinal direction of the trestle following the vertical profile. All top plates shall also be fabricated to the columns with a 2% cross slope transversely to accommodate the deck panels. This will result in a compound miter at the top of each column.

** Top of Footing determined using a nominal 1¼" grout pad.

\+ Field Extended Column 18

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/1/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

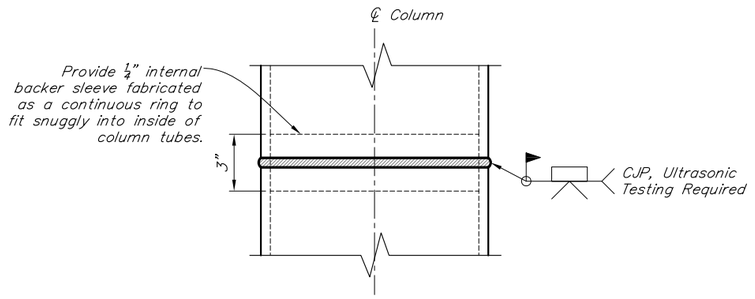
COLUMN DETAILS 2

BRIDGE NO. 0446

DWG. NO. 33

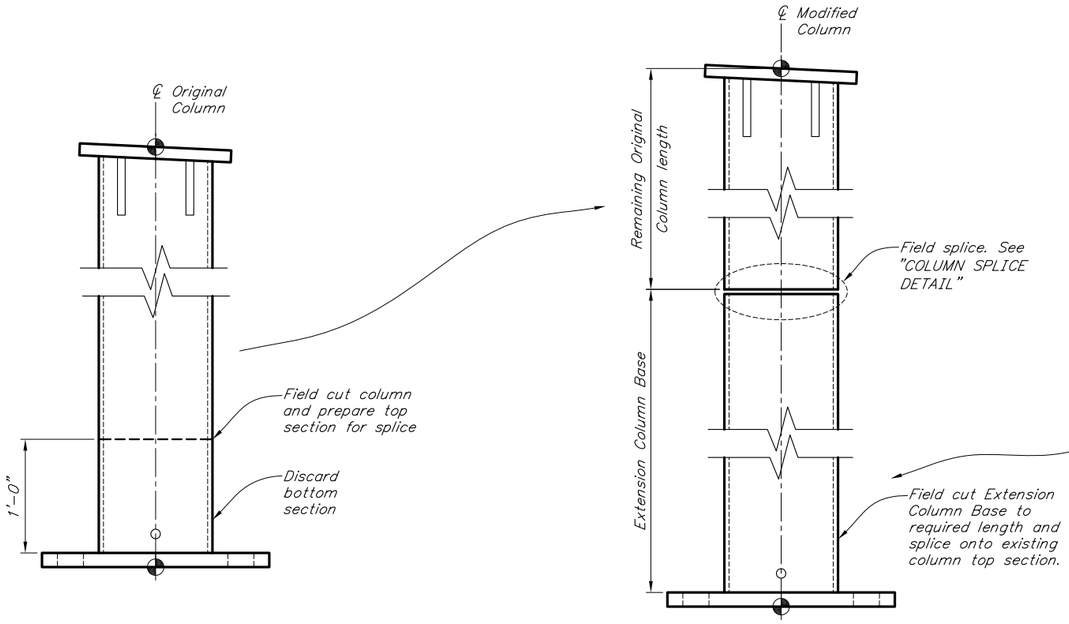
Oct 14, 2015 - 3:46pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: COLUMN DETAILS 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N34	N110

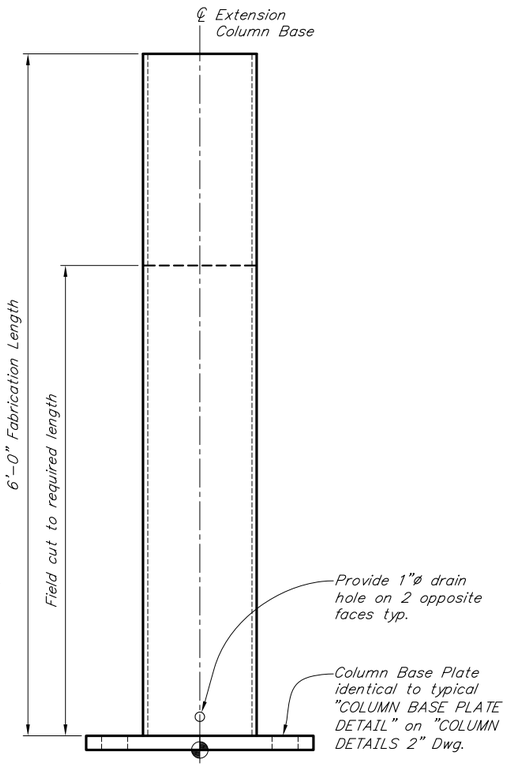


COLUMN SPLICE DETAIL

Ensure proper alignment before welding so that finished column is plumb. Spray finished weld with zinc galvanizing repair paint.

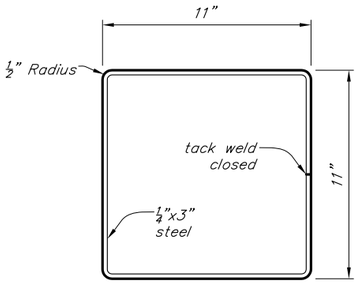


COLUMN FIELD EXTENTION DETAIL



EXTENSION COLUMN BASE

Hot-dip galvanize



COLUMN BACKER SLEEVE

Do not hot-dip galvanize sleeve

CONSTRUCTION NOTES

This detail is intended to address the possible scenario where the existing overburden and depth to rock are deeper than anticipated. Best efforts have been made to provide accurate column lengths, but in the case where deviations in existing rock are substantial, this detail shall be used to lengthen the supplied column.

Fabricate & furnish two Extension Column Base units to have on hand. Additional units may be required based on encountered conditions.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Only used at Column #18
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

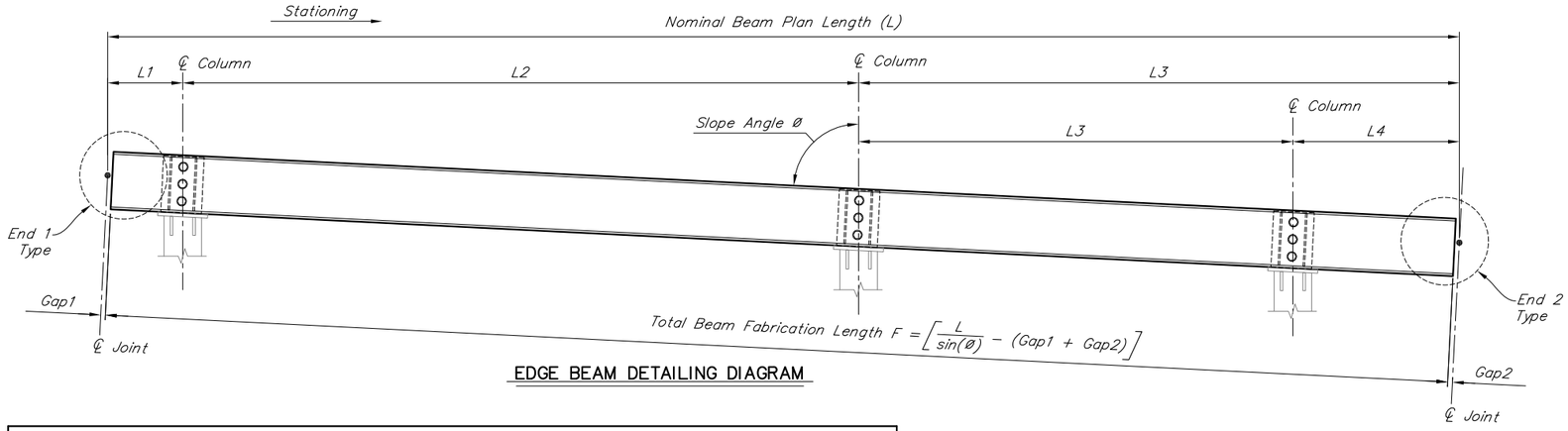
WATER STREET

COLUMN FIELD EXTENSION DETAILS

BRIDGE NO. 0446
DWG. NO. 34

Oct 14, 2015 - 3:46pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: COLUMN FIELD EXTENSION DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N35	N110



EDGE BEAM DETAILING DIAGRAM

W18x65 EDGE BEAM SCHEDULE

Edge Beam Section	Nominal Plan Length L (ft)	Slope Angle Ø (deg)	End 1 Type	Gap 1 (in)	L1 (ft)	L2 (ft)	L3 (ft)	L4 (ft)	End 2 Type	Gap 2 (in)
1*	28.762	86.78	A	0.00	1.000	13.762	14.000	–	S	0.25
2	36.000	87.15	S	0.25	4.000	18.000	14.000	–	S	0.25
3	36.000	87.15	S	0.25	4.000	18.000	14.000	–	S	0.25
4	20.887	87.15	S	0.25	4.000	13.887	3.000	–	E	1.00
5	28.235	87.15	E	1.00	3.000	11.235	14.000	–	S	0.25
6*	36.000	87.15	S	0.25	4.000	18.000	14.000	–	S	0.25
7*	36.000	86.73	S	0.25	4.000	18.000	14.000	–	S	0.25
8	36.235	87.33	S	0.25	4.000	18.000	11.235	3.000	E	1.00
9	32.777	87.33	E	1.00	3.000	15.777	14.000	–	S	0.25
10	36.000	87.33	S	0.25	4.000	18.000	14.000	–	S	0.25
11*	36.000	87.33	S	0.25	4.000	18.000	14.000	–	S	0.25
12*	22.777	89.86	S	0.25	4.000	15.777	3.000	–	E	1.00
13	33.798	89.86	E	1.00	3.000	16.798	14.000	–	S	0.25
14	36.000	89.86	S	0.25	4.000	18.000	14.000	–	S	0.25
15	36.000	89.86	S	0.25	4.000	18.000	14.000	–	S	0.25
16	23.798	89.86	S	0.25	4.000	16.798	3.000	–	E	1.00
17	32.507	89.86	E	1.00	3.000	15.507	14.000	–	S	0.25
18	36.000	89.86	S	0.25	4.000	18.000	14.000	–	S	0.25
19**	40.509	89.85	S	0.25	4.000	18.000	15.509	3.000	E	1.00
20*	33.739	89.20	E	1.00	3.000	16.739	14.000	–	S	0.25
21*	39.614	88.41	S	0.25	4.000	18.000	16.614	1.000	A	0.00

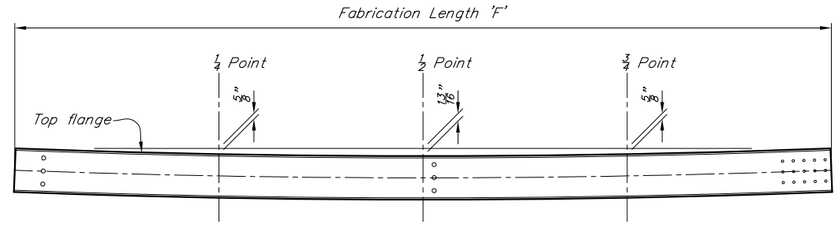
Edge Beam consists of two W18x65 Wide Flange Steel Beams.

BEAM 12 SPLICE END HOLES REAMED TO ALIGN WITH BEAM 11

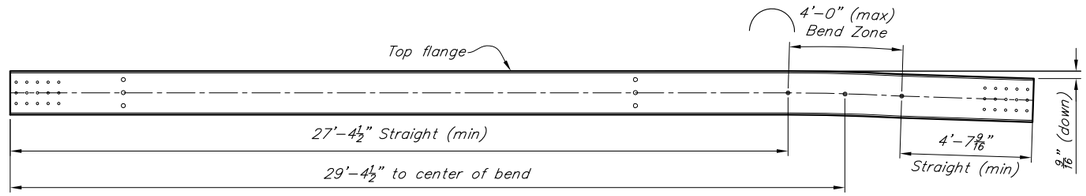
* Edge Beam Section 1, 6, 7, 11, 12, 20, & 21 shall be precambered per corresponding details on this sheet and "EDGE BEAM DETAILS 2" Dwg. Bend details are exaggerated for clarity. The bends shall be fabricated into the beams evenly over the entire length of the bend zones indicated.

** Edge Beam Section 19 shall have a horizontal bend. See "EDGE BEAM SECTION 19 BEND DETAIL" on "EDGE BEAM DETAILS 2" Dwg.

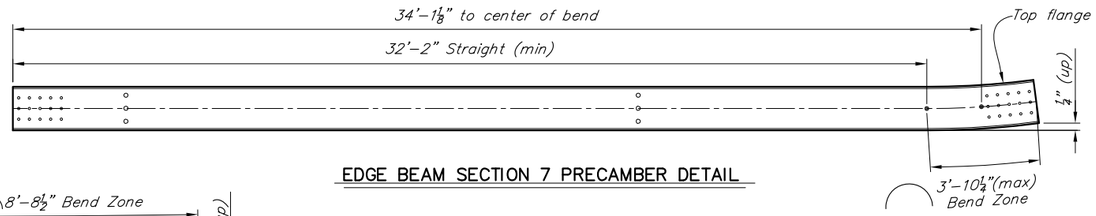
End Types:
A – See "ABUTMENT BEARING PLATE DETAIL" on "EDGE BEAM ABUTMENT BEARINGS" Dwg.
S – See "EDGE BEAM SPLICE DETAIL" on "EDGE BEAM SPLICE DETAILS" Dwg.
E – See "EDGE BEAM EXPANSION JOINT DETAIL"on "EDGE BEAM EXPANSION JOINT DETAILS" Dwg.



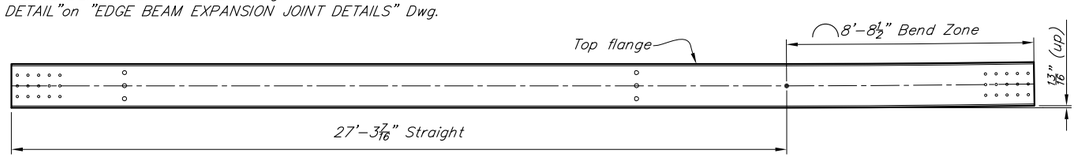
EDGE BEAM SECTION 1 PRECAMBER DETAIL



EDGE BEAM SECTION 6 PRECAMBER DETAIL



EDGE BEAM SECTION 7 PRECAMBER DETAIL



EDGE BEAM SECTION 11 PRECAMBER DETAIL

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 10TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 09/05
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

EDGE BEAM DETAILS 1

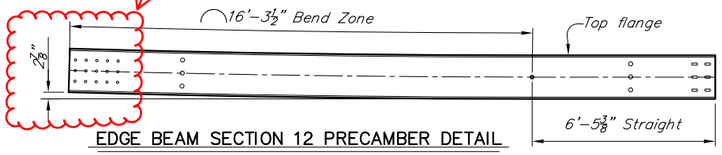
BRIDGE NO. 0446

DWG. NO. 35

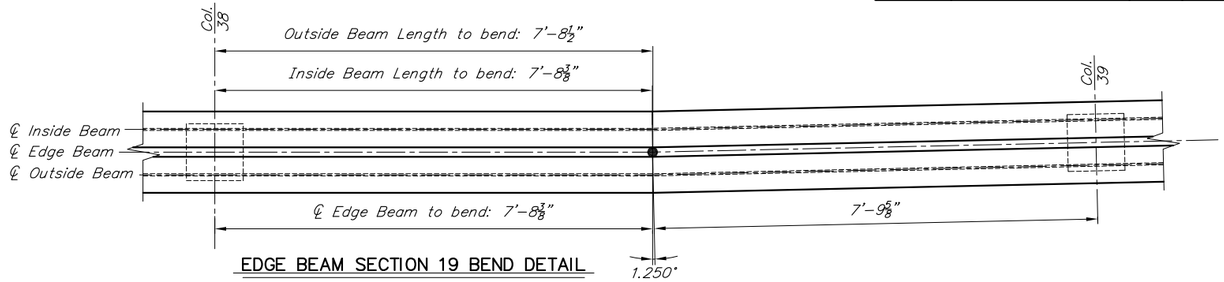
Oct 14, 2015 - 3:47pm brken \\shearerserver\jobs\0226 water street ps&e\DWG\dataset adot&pf\69534_N22 TRESTLE EDGE BEAMS.dwg Layout Name: EDGE BEAM DETAILS 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N36	N110

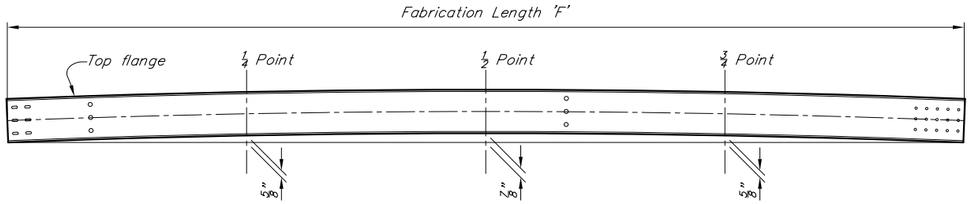
REAMED BOLT HOLES AFTER SPLICE PLATE WOULD NOT ALIGN TO BEAM #11, THIS LEAD TO A NEED TO SHIM BETWEEN PANEL AND EDGEBEAM USING UV STABLE PLASTIC, ACCEPTED BY DESIGN TEAM AFTER DRILLING, THIS JOINT HAS LESS DEMAND THAN OTHERS, DUE TO SPECIFIC BEAM LOCATION/LAYOUT STILL HAVE 1% OVER DESIGN CAPACITY, SPLICE PLATE HOLES NOT REAMED, ONLY EDGEBEAMS



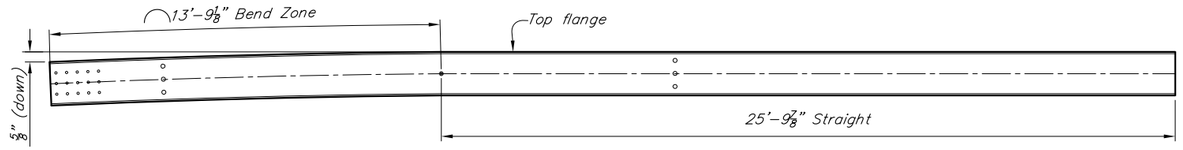
EDGE BEAM SECTION 12 PRECAMBER DETAIL



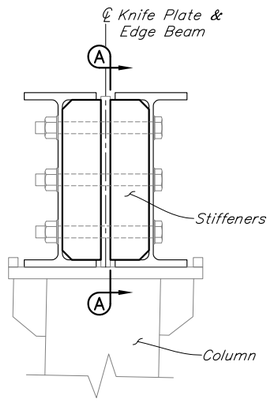
EDGE BEAM SECTION 19 BEND DETAIL



EDGE BEAM SECTION 20 PRECAMBER DETAIL

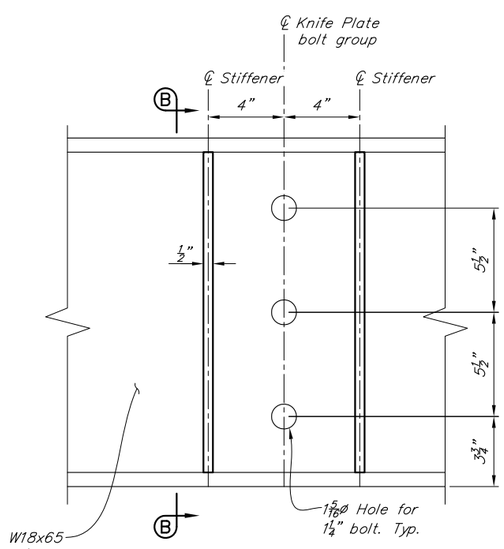


EDGE BEAM SECTION 21 PRECAMBER DETAIL



EDGE BEAM STIFFENERS AT COLUMN

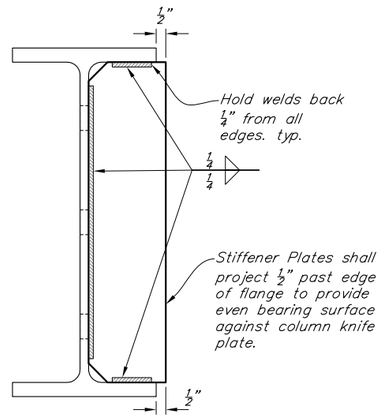
6 0 1
In. Feet



VIEW A-A: EDGE BEAM STIFFENERS DETAIL

Single W18x65 beam of Edge Beam shown.
Typical both W18x65 beams.

0 3 6 9 1'-0"
Inches



SECTION B-B: STIFFENER PLATE

0 3 6 9 1'-0"
Inches

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
10/14/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

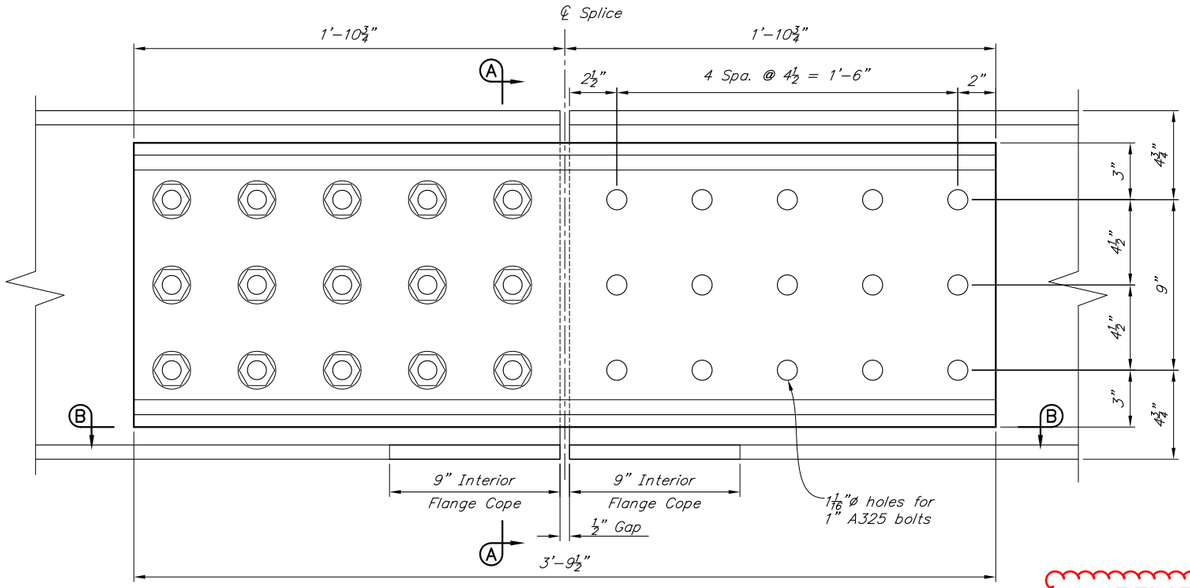
WATER STREET

EDGE BEAM DETAILS 2

BRIDGE NO. 0446
DWG. NO. 36

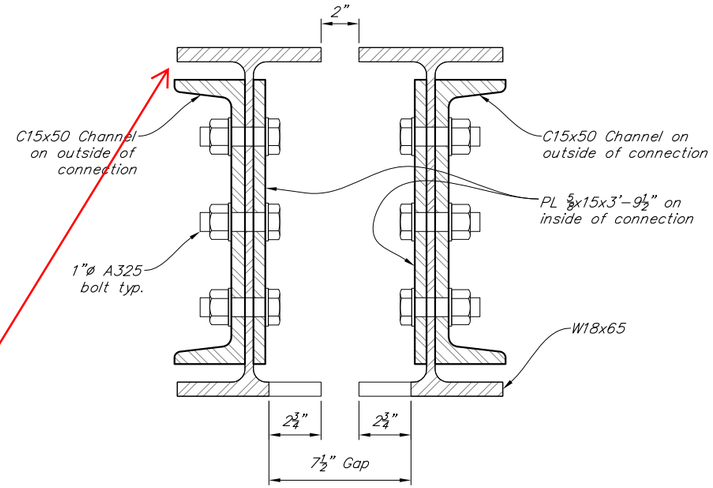
Oct 14, 2015 - 3:47pm brken \\shearerserver\jobs\0226 water street ps&e\DWG\gdanset adot&pf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: EDGE BEAM DETAILS 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N37	N110



EDGE BEAM SPLICE DETAIL

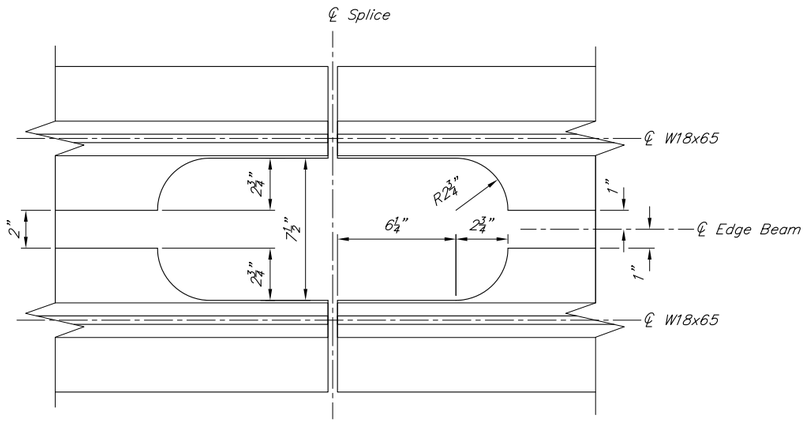
0 3 6 9 1'-0"
Inches



SECTION A-A: EDGE BEAM SPLICE

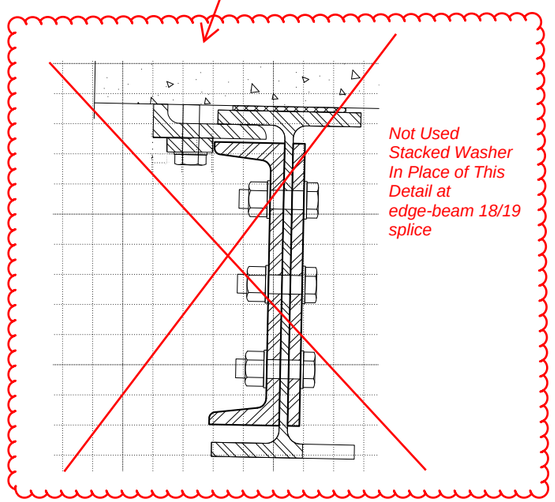
0 3 6 9 1'-0"
Inches

RFI-170
STACKED WASHERS ON PANEL CLIPS AT SPLICE CONNECTION PLATE



SECTION B-B: BOTTOM FLANGE COPING

0 3 6 9 1'-0"
Inches



DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

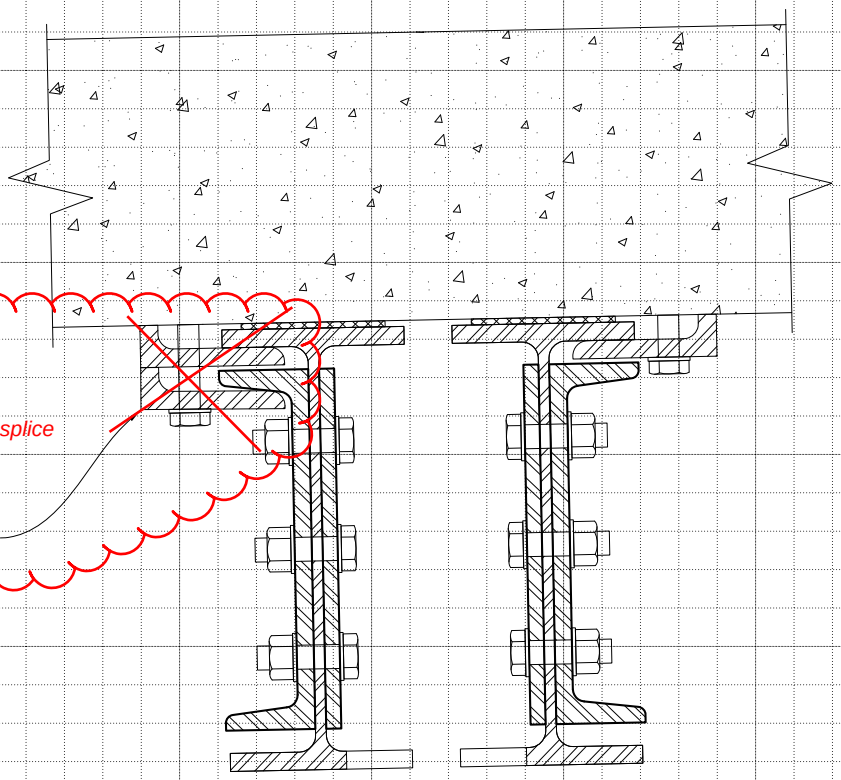
WATER STREET

EDGE BEAM SPLICE DETAILS

BRIDGE NO. 0446
DWG. NO. 37

Oct 14, 2015 - 3:47pm bfien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: EDGE BEAM SPLICE DETAILS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019



Not Used
Stacked Washer
In Place of This
Detail at edge-beam 18/19 splice

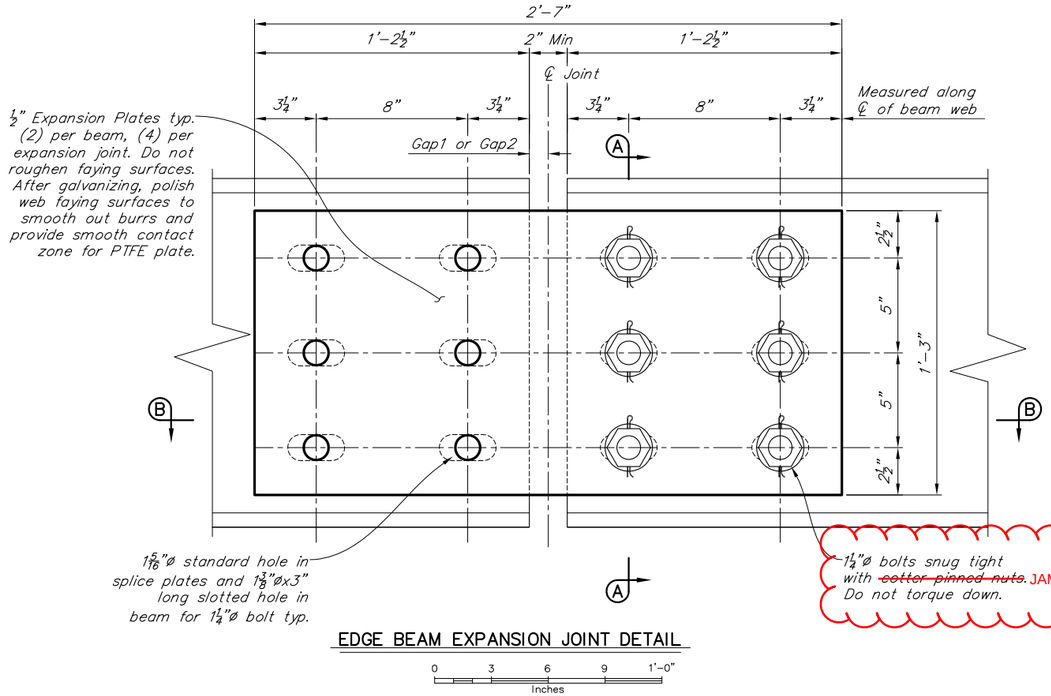
Add Second Clip
Tighten Bolt to Snug Plus ½ Turn

CLIP ADJUSTMENT
SCALE: 3" = 1'-0"

Response from John Scott (HDR, Inc.) at 07:58 AM on 10/04/2017
The proposal to utilize trimmed washers is approved.
Attachments:

AB As-Built Set

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N38	N110

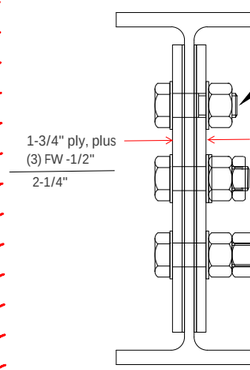


EDGE BEAM EXPANSION JOINT DETAIL

0 3 6 9 1'-0"
Inches

RFI-121 Double Nut Connection in Lieu of Cotter Pin & Drilled Bolts/Nuts

USED

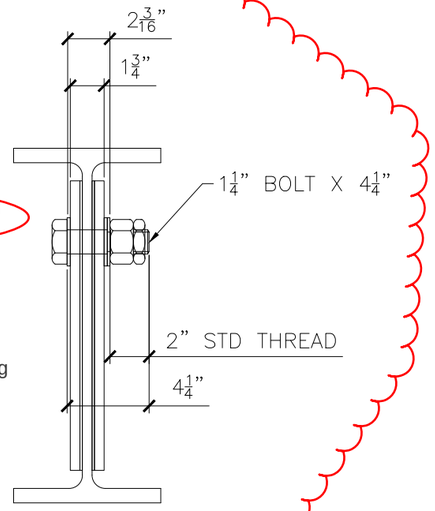


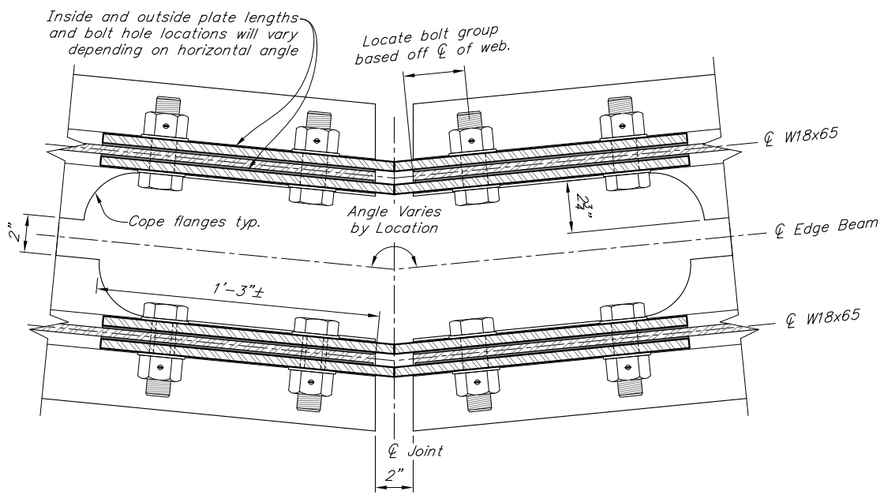
$1\frac{1}{4}$"X$3\frac{1}{2}$" BOLT

1-1/4" x 4-1/4" BOLT, 2-1/4" Shank w/2" Thread
1-1/4" Nut - 1-1/4" & 1-1/4" J-Nut - 9/16"

$1\frac{1}{4}$"X$4\frac{3}{4}$" BOLT

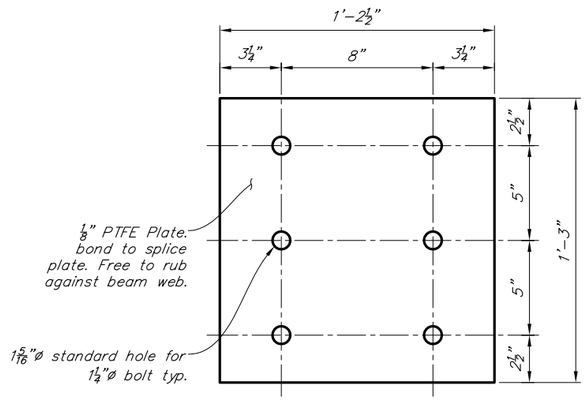
2-3/4" Shank w/2" Thread
Too much Shank, nut will contact before snug





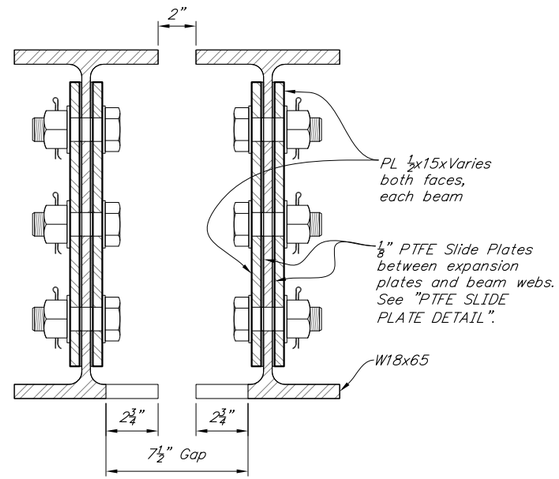
EDGE BEAM EXPANSION SECTION B-B

0 3 6 9 1'-0"
Inches



PTFE SLIDE PLATE DETAIL

0 3 6 9 1'-0"
Inches



SECTION A-A: EDGE BEAM SPLICE

0 3 6 9 1'-0"
Inches

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer		
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer		
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer		

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Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 10TH · DAVID R. SHEARER · CE 8373 · 10/14/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

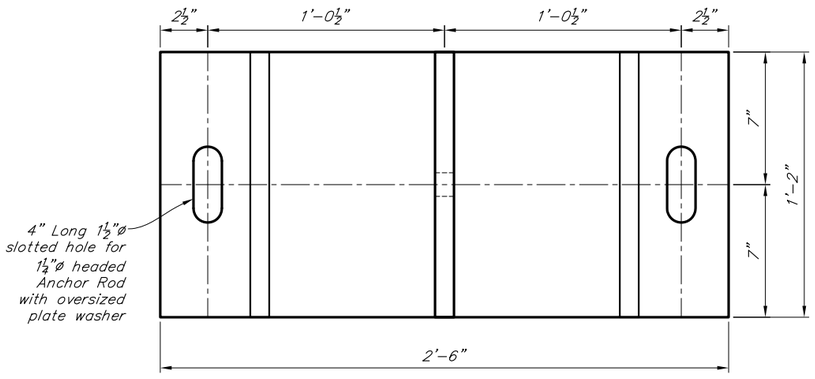
EDGE BEAM EXPANSION JOINT DETAILS

BRIDGE NO. 0446

DWG. NO. 38

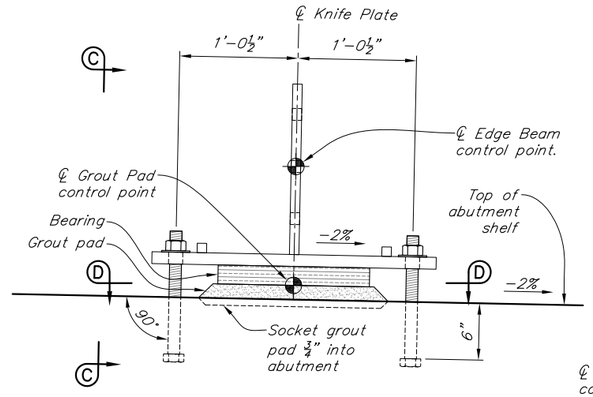
Oct 14, 2015 - 3:47pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: EDGE BEAM EXPANSION JOINT DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N39	N110



ABUTMENT BEARING PLATE PLAN VIEW A-A

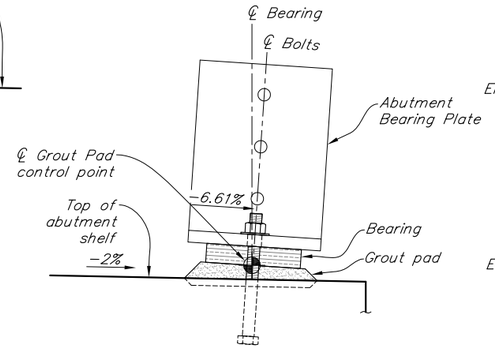
0 3 6 9 1'-0"
Inches



ANCHORAGE DETAIL

6 0 1
In. Feet

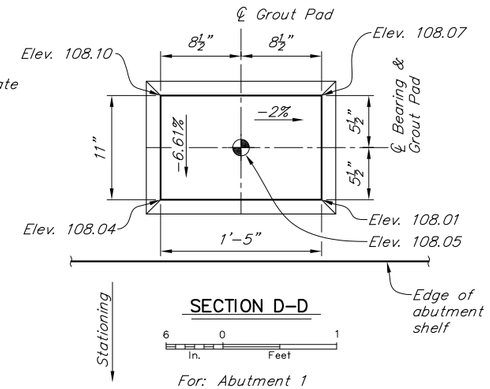
Abutment 1 shown,
Abutment 2 similar



SECTION C-C

6 0 1
In. Feet

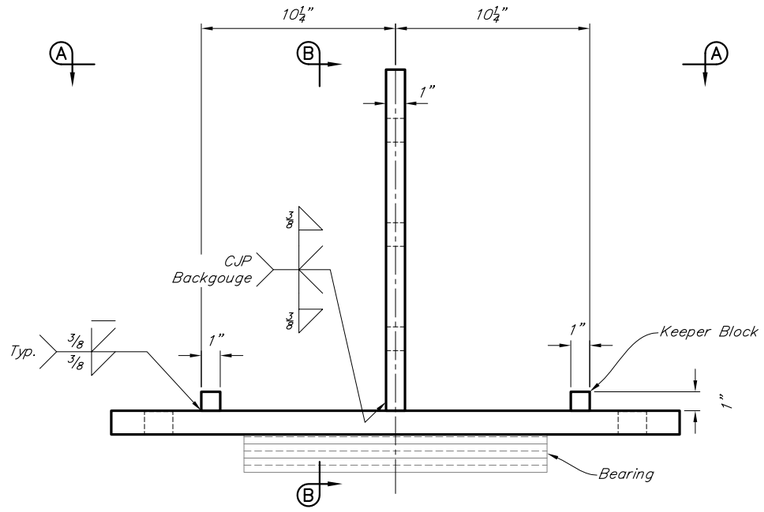
For: Abutment 1



SECTION D-D

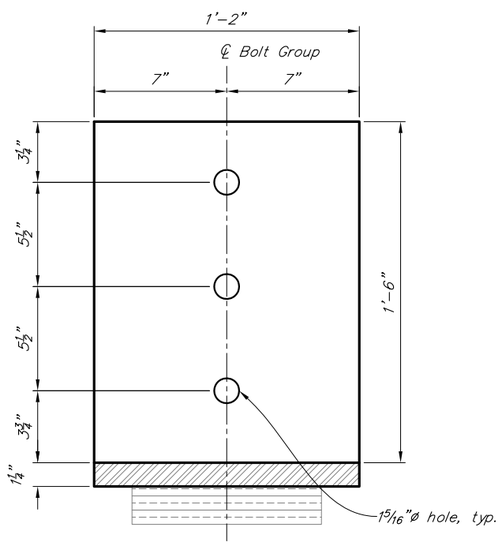
6 0 1
In. Feet

For: Abutment 1



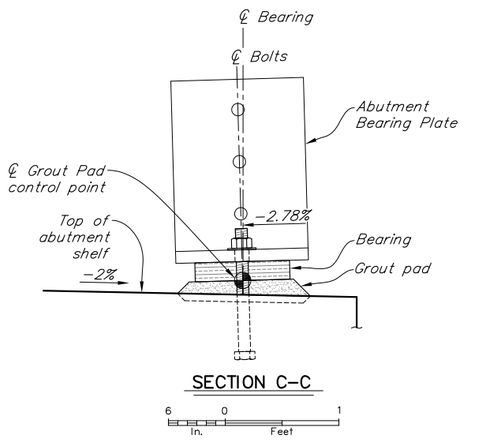
ABUTMENT BEARING PLATE DETAIL

0 3 6 9 1'-0"
Inches



ABUTMENT BEARING PLATE SECTION B-B

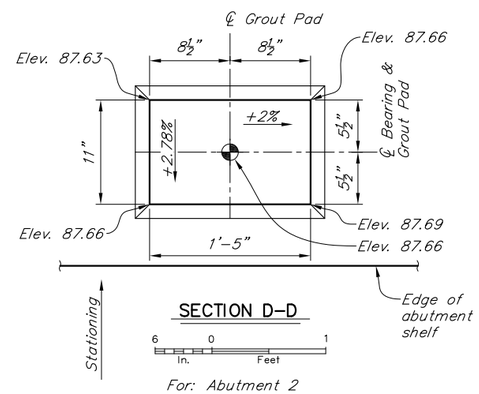
0 3 6 9 1'-0"
Inches



SECTION C-C

6 0 1
In. Feet

For: Abutment 2



SECTION D-D

6 0 1
In. Feet

For: Abutment 2

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

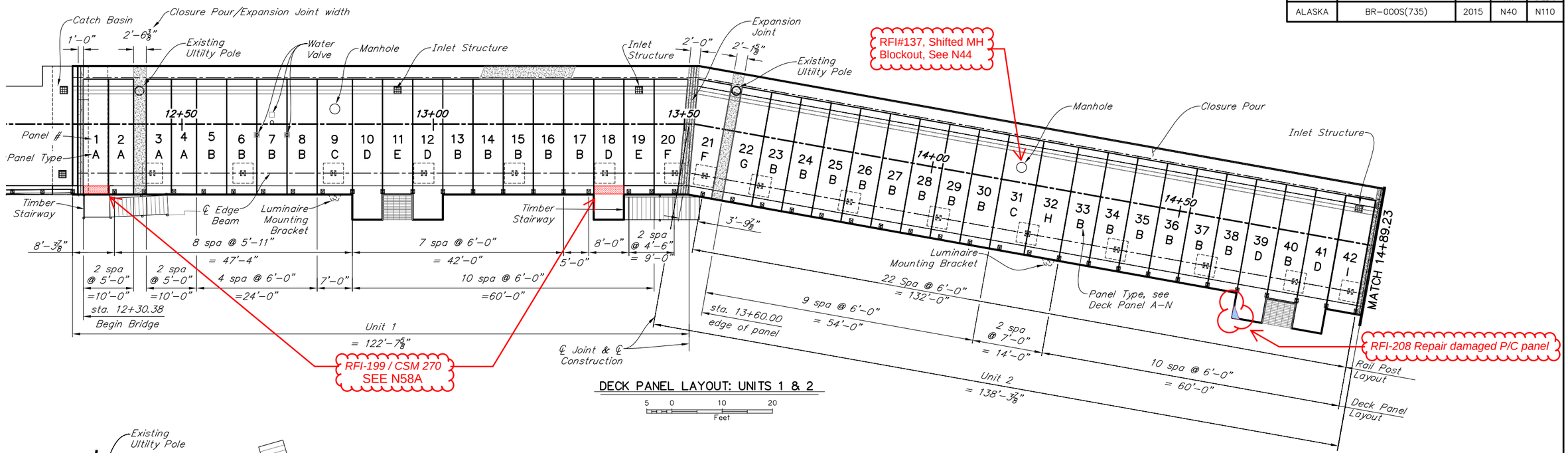
WATER STREET

EDGE BEAM ABUTMENT BEARINGS

BRIDGE NO. 0446
DWG. NO. 39

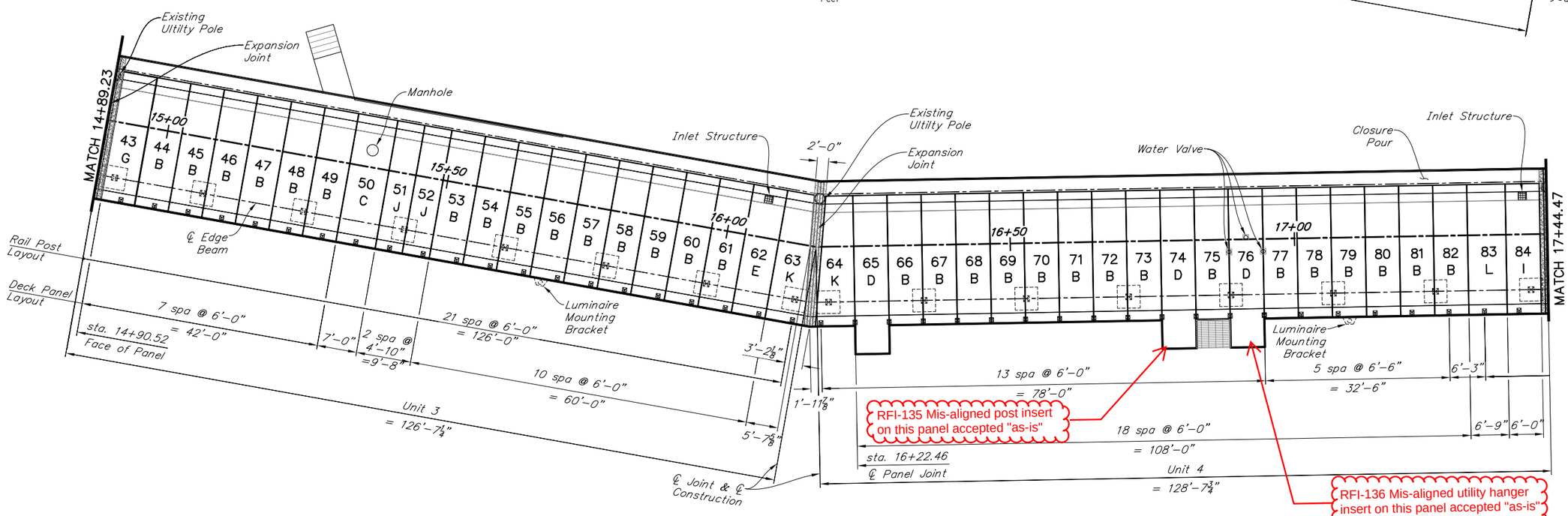
Oct 14, 2015 - 3:47pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N COLUMN AND EDGE BEAM DETAILS.dwg Layout Name: EDGE BEAM ABUTMENT BEARINGS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N40	N110



DECK PANEL LAYOUT: UNITS 1 & 2

5 0 10 20 Feet



DECK PANEL LAYOUT: UNITS 3 & 4

5 0 10 20 Feet

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
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QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

DECK PANEL LAYOUT 1

BRIDGE NO. 0446
DWG. NO. 40

Oct 14, 2015 - 3:47pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\bpl\69834_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL LAYOUT 1

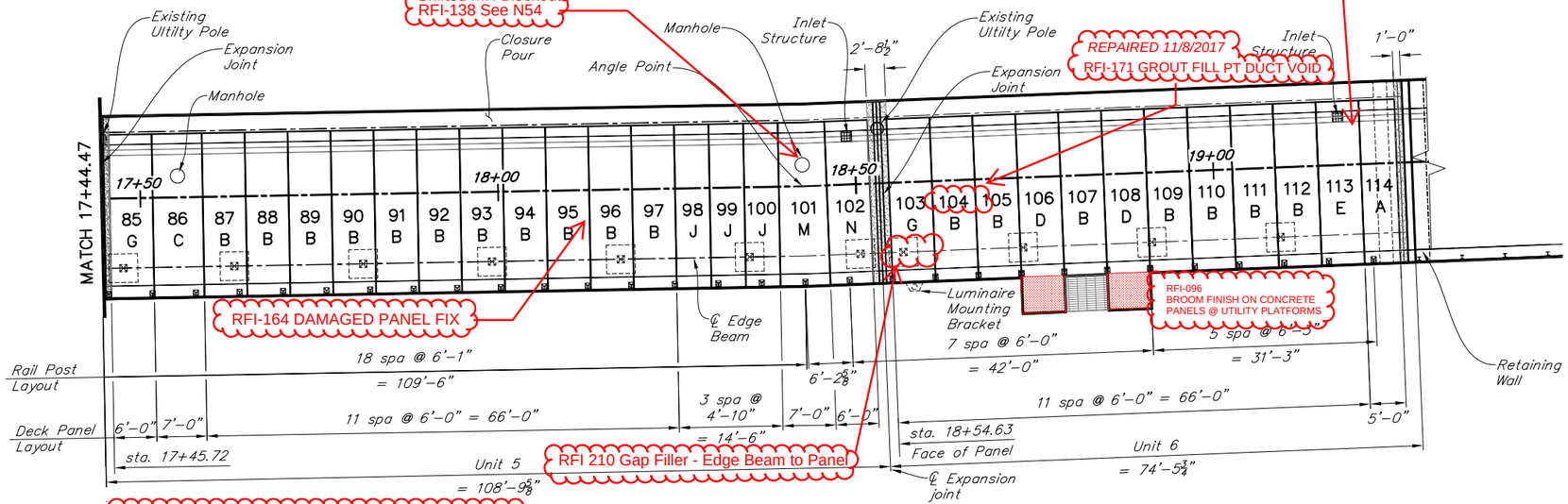
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N41	N110

RFI-129 EPOXY COATING ON PT BAR

Shifted MH Blockout RFI-138 See N54

RFI-141 Patch chipped panel

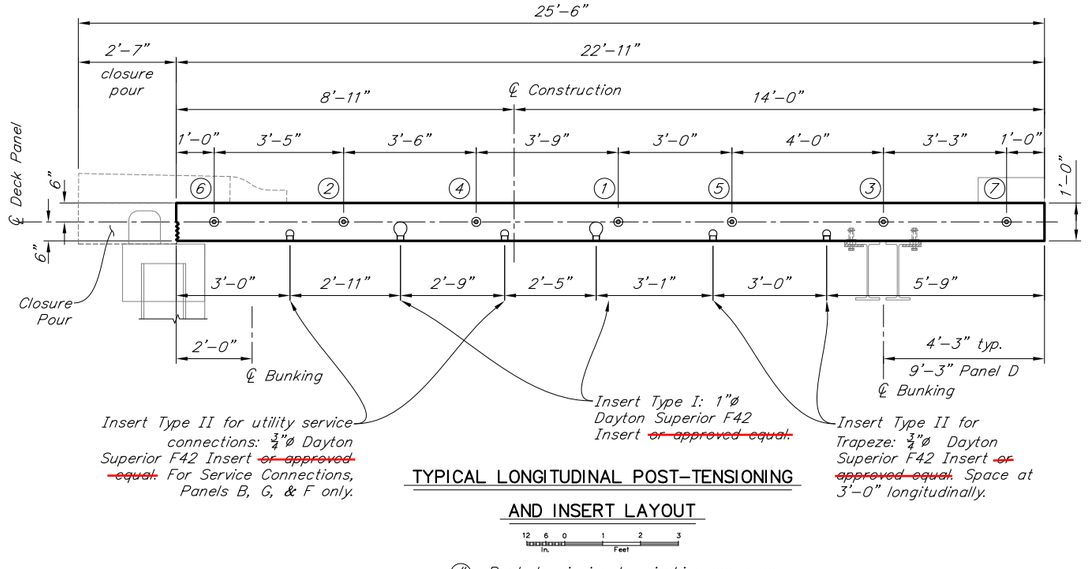
REPAIRED 11/8/2017
RFI-171 GROUT FILL PT DUCT VOID



See N31A for substructure mis-alignment correction applied to trestle segment shown on this sheet. RFI#161

DECK PANEL LAYOUT: UNITS 5 & 6

5 0 10 20
Feet



TYPICAL LONGITUDINAL POST-TENSIONING AND INSERT LAYOUT

12 6 0 1 2 3
In. Feet

(#) Post-tensioning bar jacking sequence

DECK PANEL INSTALLATION SEQUENCE

1. Clean surfaces of the transverse keyways and post-tensioning pockets to increase bond.
2. ~~Preset the leveling bolts to the anticipated height. Note: it is easier lower the panels by turning the leveling bolts than it is to raise it.~~
3. ~~Set shim plate and backer rod~~ on Soldier Pile Wall Cap Beam. Set neoprene pads on double edge beams.
4. Set Panel.
5. ~~Adjust leveling bolts on panel to provide even distribution of load.~~ Install wood shims.
6. Install Retention Clips, bolts tightened to finger tight.
7. Install longitudinal post-tensioning bars loosely (untensioned) in ducts.
8. Place a flowable non-shrink grout in the transverse shear ways and cure. The grout shall be rodded or vibrated to ensure all voids are filled.
9. Once the grout in the transverse joints has reached at least 1000 psi, stress the longitudinal post-tensioning bars per the jacking sequence. ~~(5 panel minimum)~~
10. Grout post-tensioning ducts and post-tensioning pockets. Tighten Retention Clip bolts ~~by turn-of-the-nut method~~.
11. Cast longitudinal Closure Pour at Soldier Pile Wall
12. Remove leveling bolts and grout leveling bolt pockets.
13. Cast sidewalks and barrier curb.

see N56A for adjustments needed to cast sidewalk and barrier curb before PT grouting.

DECK PANEL NOTES

1. Deck Panels: Use Concrete Class P having the following strengths:
   - at stress transfer f'ci = 5,000 psi
   - at 28 days f'c = 6,000 psi
   - non shrink grout f'c = 6,000 psi
2. Closure Pour and Expansion Joint concrete shall be Class A-A Concrete.
3. Use ½"ø low relaxation strands having an ultimate strength of 270 ksi and a cross section area of 0.153 in². Recess the ends of the strands 1" and pack with grout.
4. Prestress design is based on the following steel strand stresses:
   - pretensioning - jacking stress 202.5 ksi
   - after initial losses - 198.3 ksi
   - after all losses - 177.4 ksi
5. Provide 1" clear cover on all reinforcing except as noted.
6. The nominal gap between panels is ½" on the bottom of the joint and 1" on the top. Adjust this gap as needed for proper panel alignment and fit up at expansion joints. See "TRANSVERSE KEYWAY" detail on "DECK PANEL DETAILS 1" Dwg.
7. Provide a magnesium float finish on the roadway surface of the precast member. Roughen the surface under the sidewalks & curbs.
8. The surface of keyways and post-tensioning pockets shall be sand or water blasted in the shop and water cleaned prior to installation.
9. Grout for keyways and post-tensioning pockets shall be rodded or vibrated to ensure that all voids are filled.
10. Longitudinal Post-Tensioning bars shall be 1¼" 150 ksi threaded bar meeting ASTM A722 with bar deformations meeting ASTM A615.
11. Jack post-tensioning bars in two stages per the sequence shown on this page. Stage 1: jack each bar to 50% of the design load. Stage 2: jack each bar to the final design load. Design Load: minimum final post-tensioning stress of 97.5 ksi per bar. Tighten anchor nut and lock off bar at the Design Load.
12. Post-Tensioning Pockets are shown at transverse joints for ease of construction during jacking and splicing the threaded rod. Post-Tensioning Pockets may be omitted at transverse joints where the threaded rod is continuous and unspliced across the joint.
13. The longitudinal post-tensioning shall run between expansion joints/closure pours and shall uniformly stress all the deck panels in each unit. During construction, the number of adjacent deck panels stressed at one time shall be determined by the Contractor. No less than 5 panels shall be stressed in a given sequence.
14. If an existing utility pole conflicts with installing the post-tensioning bar, the post-tensioning in that bar may be anchored one panel short of the utility pole at the discretion of the Engineer.
15. Prior to fabrication, coordinate with the electrical /communication utilities the following:
    - 15.1. electrical trapeze insert locations
    - 15.2. transformer and pedestal throat sizes, mounting bracket dimensions, and mounting bolt locations
16. Maximum construction load = ~~22~~ 24.91 kip single axle per deck panel prior to post-tensioning and wheel must remain at least 2'-0" from face of traffic barrier curb. See Special Provisions.

Submittal 502-6.2

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DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
09/5

WATER STREET BRIDGE No. 2

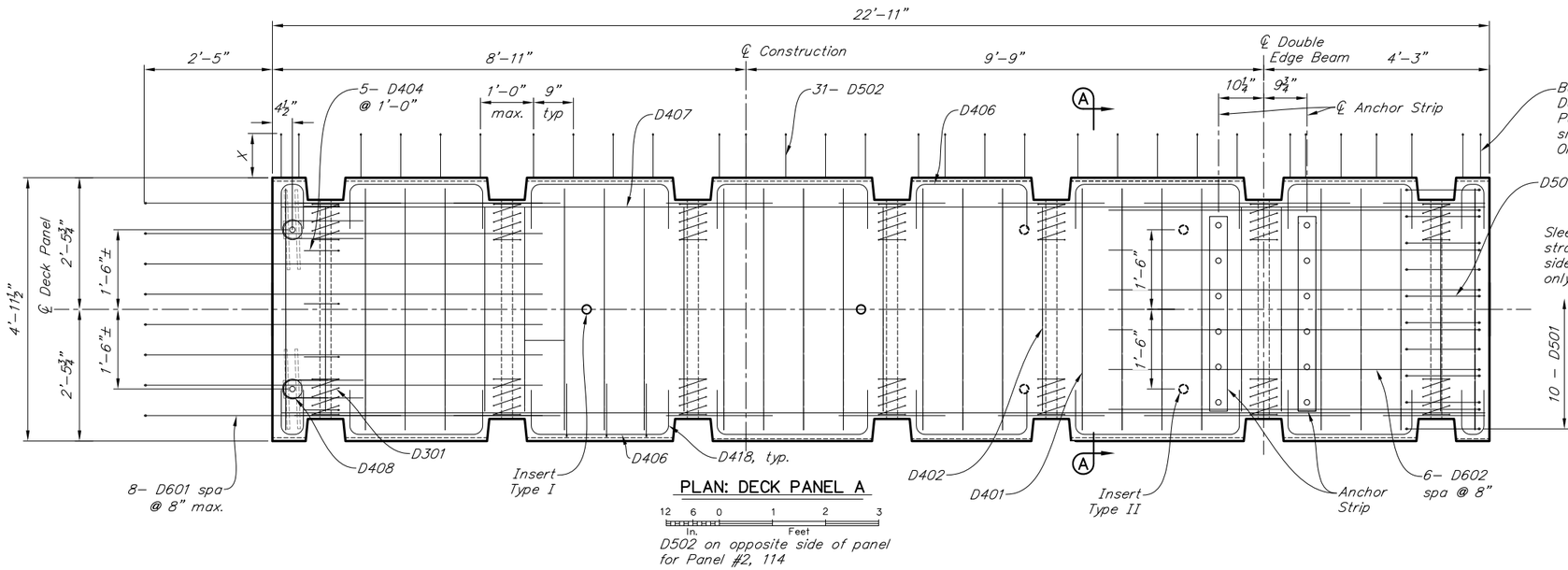
WATER STREET

DECK PANEL LAYOUT 2

BRIDGE NO. 0446
DWG. NO. 41

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL LAYOUT 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N42	N110



PLAN: DECK PANEL A

12 6 0 1 2 3
In. Feet

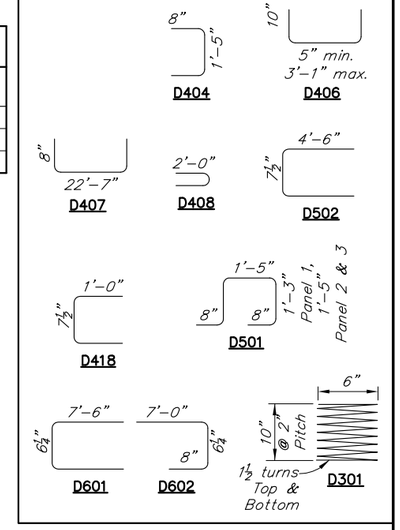
D502 on opposite side of panel for Panel #2, 114

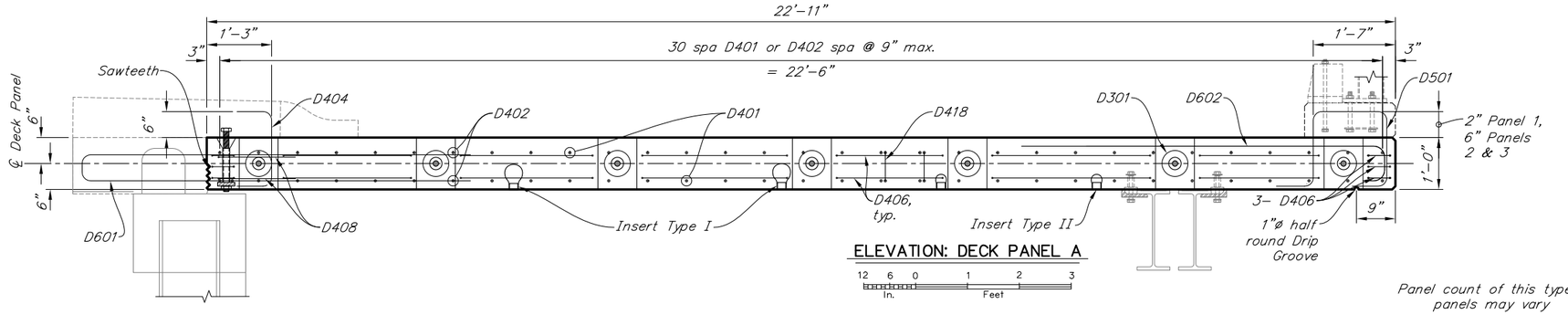
BAR EXTENSION	
PANEL #	X
1, 114	0'-10"
2, 3	2'-0"
4	0'-0"

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D401	E	4	44	4'-6"	–
D402	E	4	18	3'-8"	–
D404	E	4	5	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	4	4'-3"	bent
D418	E	4	22	2'-7½"	bent
D501	E	5	10	varies	bent
D502	E	5	31	9'-7½"	bent
D601	E	6	8	15'-6¼"	bent
D602	E	6	6	8'-2¼"	bent

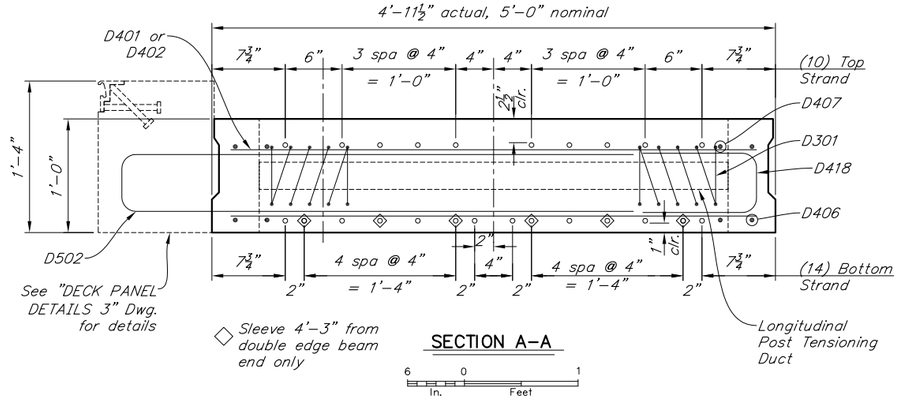
BENDING DIAGRAM





ELEVATION: DECK PANEL A

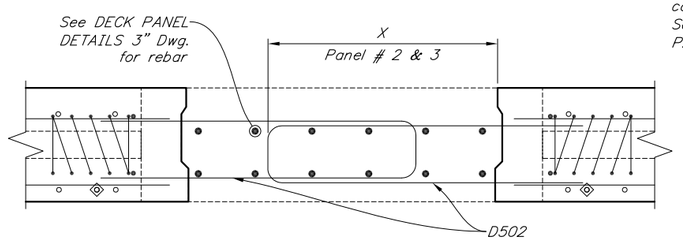
12 6 0 1 2 3
In. Feet



◇ Sleeve 4'-3" from double edge beam end only

SECTION A-A

6 0 1
In. Feet



INTERMEDIATE CLOSURE POUR

6 0 1
In. Feet

Omit D502 on Panel #4

Panel count of this type = 5, individual panels may vary

Omit D502 on Panel 4

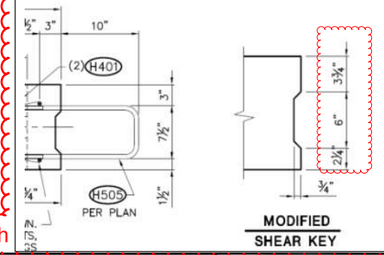
Provide Anchor Strip with 6 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

CTC is requesting to modify the shear key at panels adjacent to cast-in-place closures. Panels effected by this proposal would be: 1, 2, 3, 20, 21, 22, 42, 43, 63, 64, 102, 103, & 114.

The modified shear key facilitates better tooling/forming



RFI-103 Modified Panel Shear Key @ Panels See Sketch

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

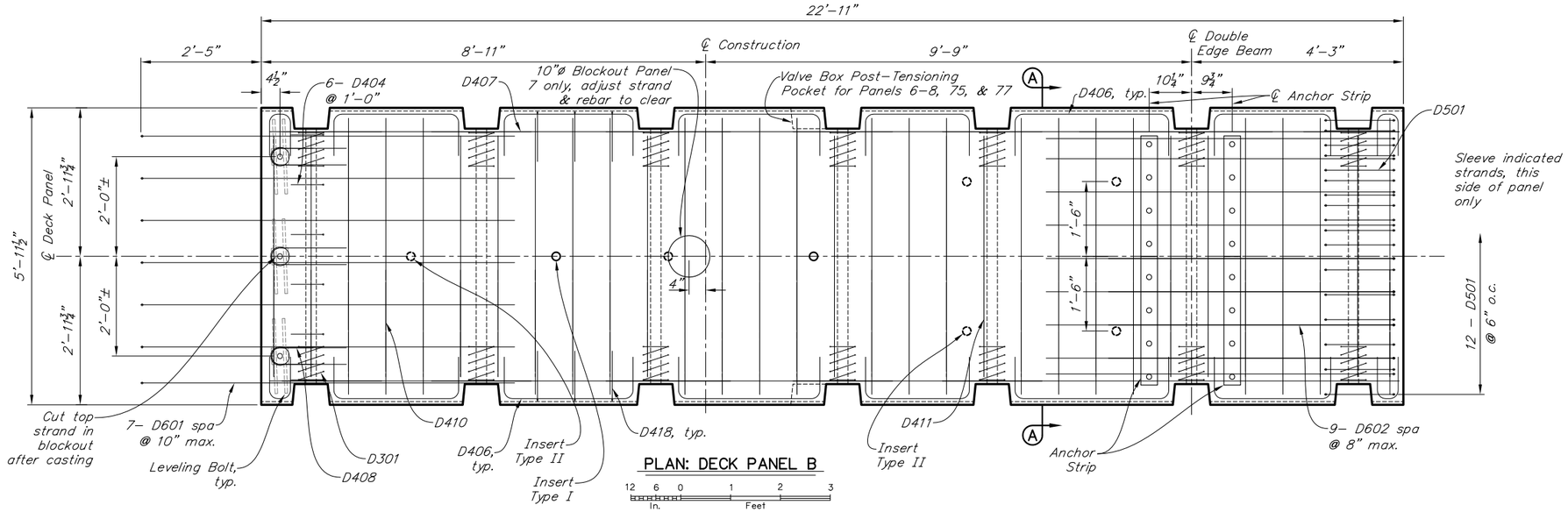
DECK PANEL A

BRIDGE NO. 0446

DWG. NO. 42

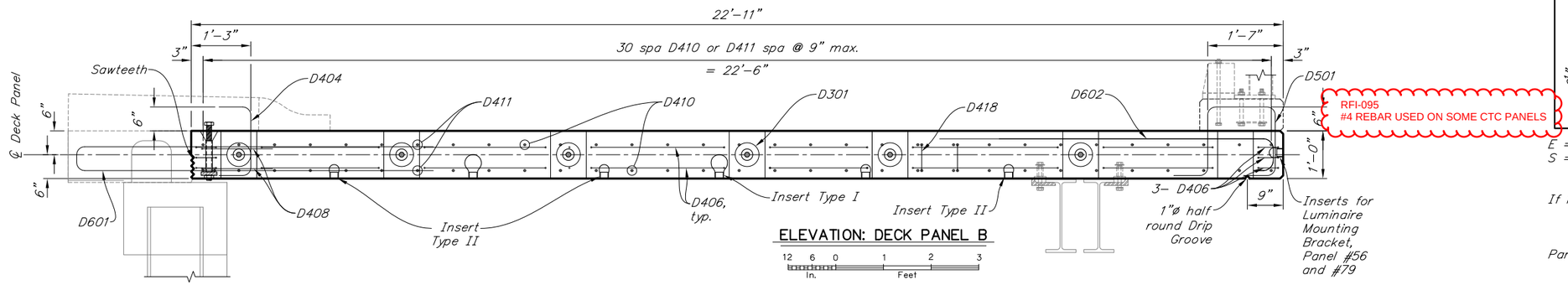
Oct 14, 2015 - 3:48pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\fcp\fcp69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL A

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N43	N110



PLAN: DECK PANEL B

12 6 0 1 2 3
In. Feet



ELEVATION: DECK PANEL B

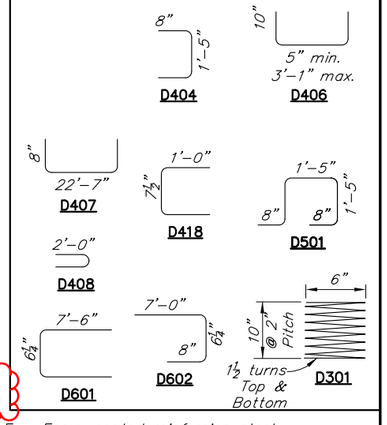
12 6 0 1 2 3
In. Feet

RFI-095
#4 REBAR USED ON SOME CTC PANELS

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D410	E	4	44	5'-6"	–
D411	E	4	18	4'-8"	–
D418	E	4	44	2'-7½"	bent
D501	E	5	12	5'-6"	bent
D601	E	6	7	15'-6¼"	bent
D602	E	6	9	8'-2¾"	bent

BENDING DIAGRAM

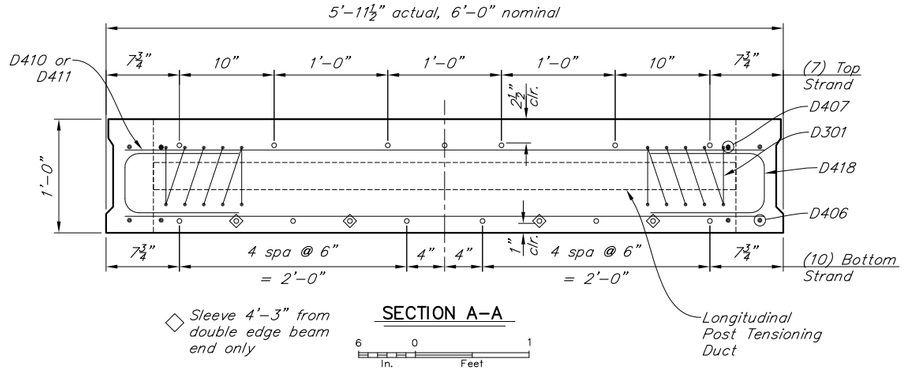


E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

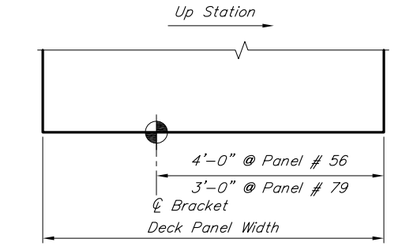
Panel count of this type = 72, individual panels may vary

Provide Anchor Strip with 8 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.



SECTION A-A

6 0 1
In. Feet



LUMINAIRE MOUNTING BRACKET LOCATION

12 6 0 1 2 3
In. Feet

SERVICE UTILITY INSERT LOCATIONS
Panel #
7
15
35
48
66
77
93
110

RFI-112 Panel Spawl Repair

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/4/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

DECK PANEL B

BRIDGE NO. 0446
DWG. NO. 43

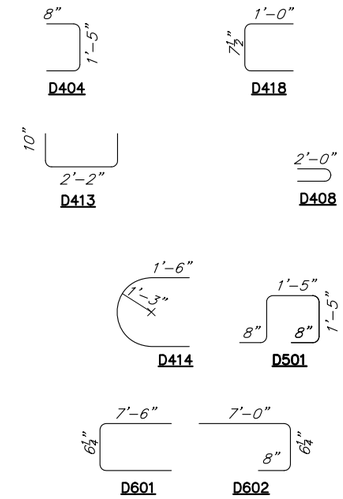
Oct 14, 2015 - 3:48pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL B

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N44	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D404	E	4	7	2'-9"	bent
D408	E	4	6	4'-3"	bent
D412	E	4	58	6'-6"	–
D413	E	4	8	3'-10"	bent
D414	E	4	4	6'-11⅛"	bent
D418	E	4	62	2'-7½"	bent
D501	E	5	14	5'-7"	bent
D503	E	5	6	15'-6"	–
D601	E	6	8	15'-6¼"	bent
D602	E	6	11	8'-2¼"	bent

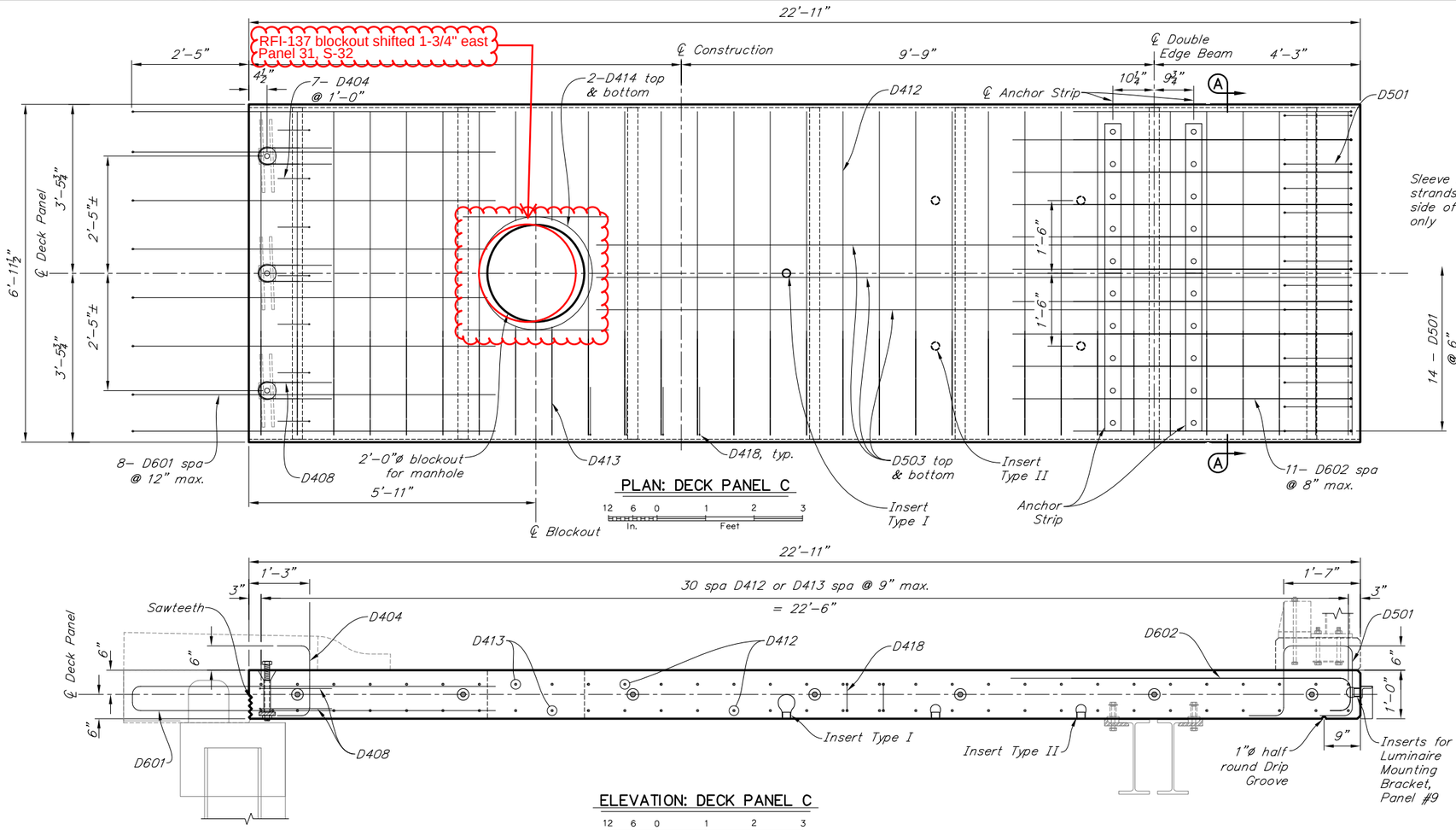
BENDING DIAGRAM

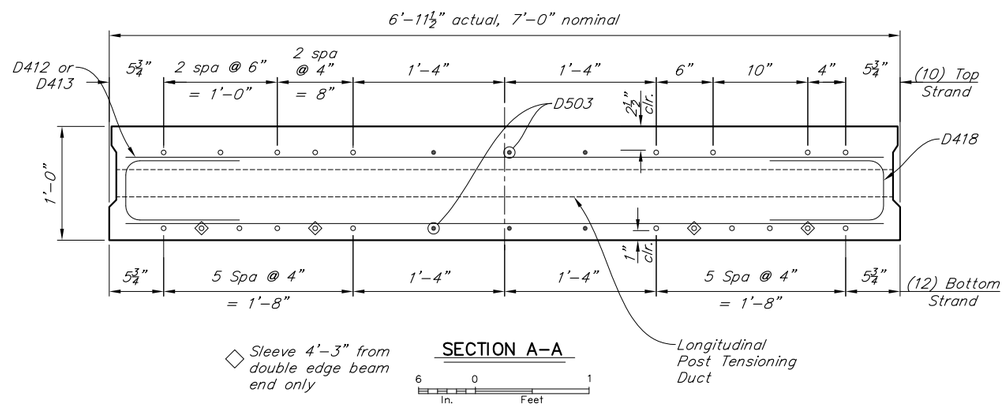


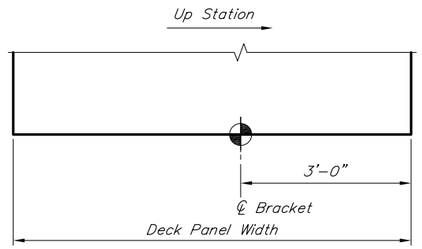
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

Panel count of this type = 4, individual panels may vary

Provide Anchor Strip with 10 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.







LUMINAIRE MOUNTING BRACKET LOCATION
12 6 0 1 2 3
In. Feet
Panel # 9

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB | As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
49TH
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
09/5

WATER STREET BRIDGE No. 2

WATER STREET

DECK PANEL C

BRIDGE NO. 0446
DWG. NO. 44

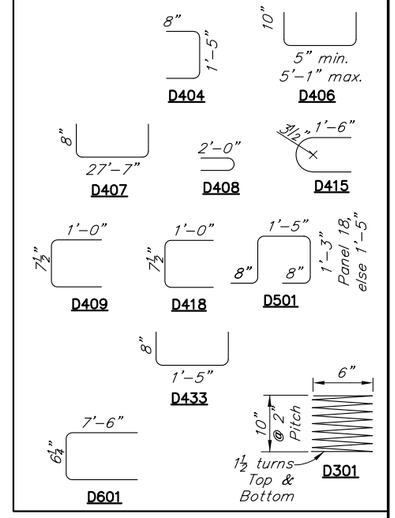
Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street pse&e\DWG\planset adot&pf69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL C

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N45	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	28'-11"	bent
D408	E	4	6	4'-3"	bent
D409	E	4	4	2'-7½"	bent
D410	E	4	58	5'-6"	–
D411	E	4	18	4'-8"	–
D415	E	4	9	3'-11"	bent
D418	E	4	58	2'-7½"	bent
D433	E	4	6	2'-9"	bent
D501	E	5	12	varies	bent
D601	E	6	6	15'-6¼"	bent

BENDING DIAGRAM



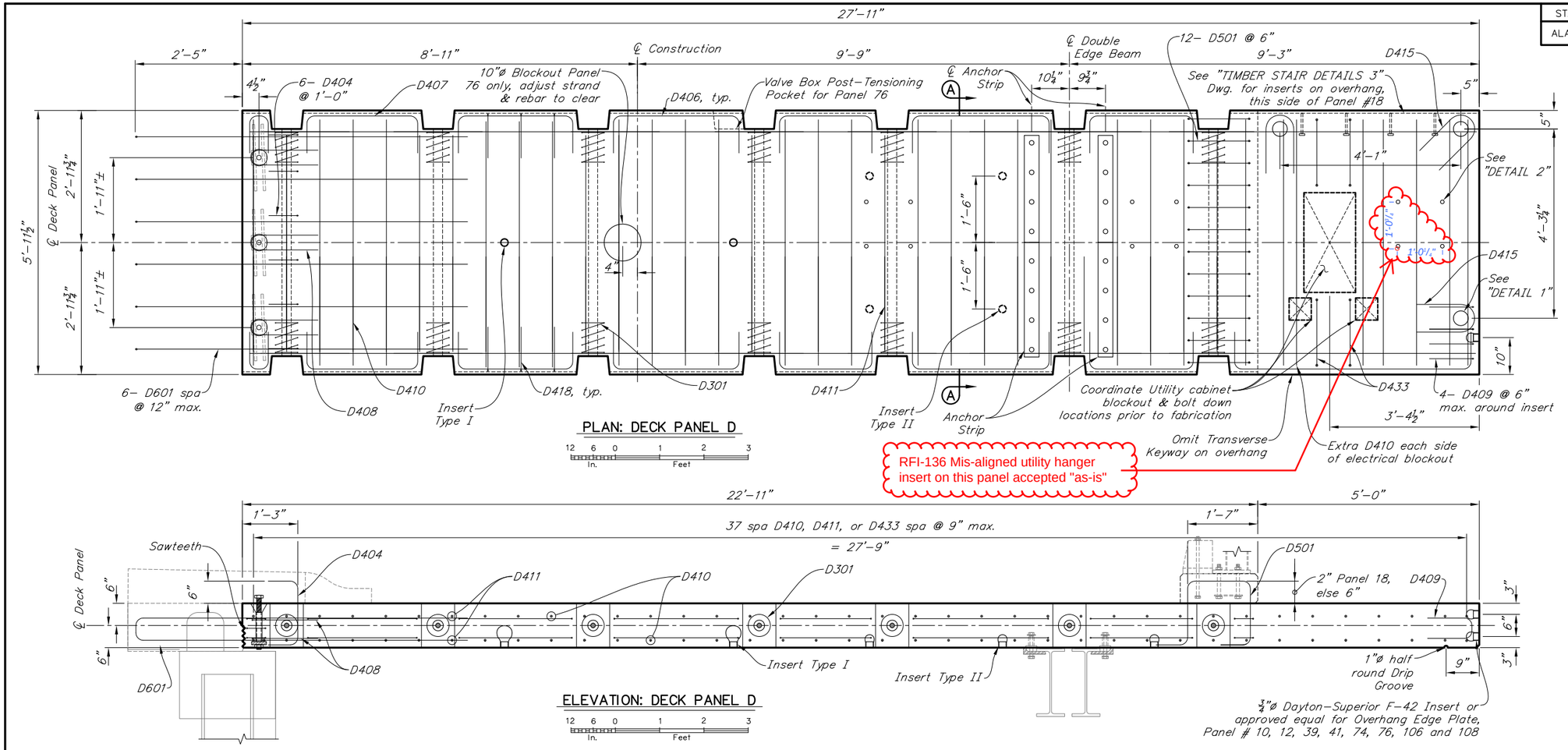
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 10, individual panels may vary

Provide Anchor Strip with 8 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

Burn off strand passing through utility blockouts after casting and recess ½" min., pack hole with grout.

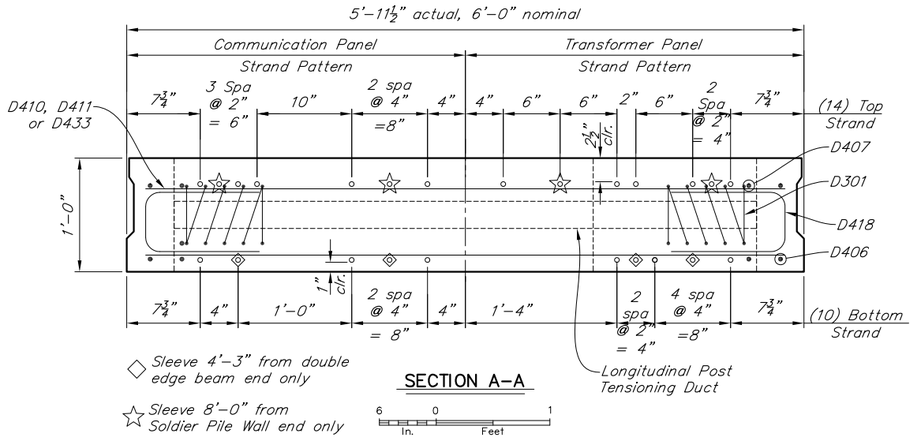


PLAN: DECK PANEL D

12 6 0 1 2 3
In. Feet

ELEVATION: DECK PANEL D

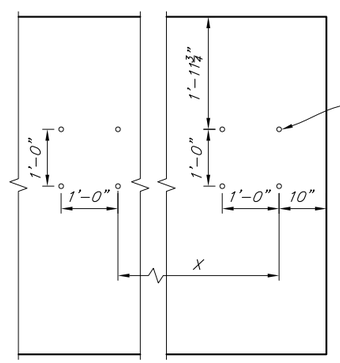
12 6 0 1 2 3
In. Feet



SECTION A-A

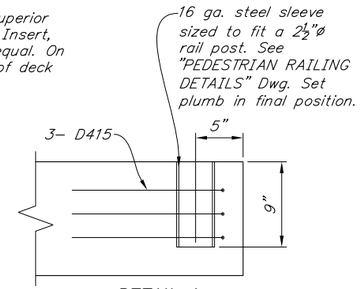
6 0 1
In. Feet

INSERT LAYOUT	
PANEL #	X
10, 12, 39, 41, 74, 76	12'-0"
106, 108	6'-0"



DETAIL 2

12 6 0 1 2 3
In. Feet



DETAIL 1

6 0 1
In. Feet

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA · 30TH · DAVID R. SHEARER · CE 8373 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

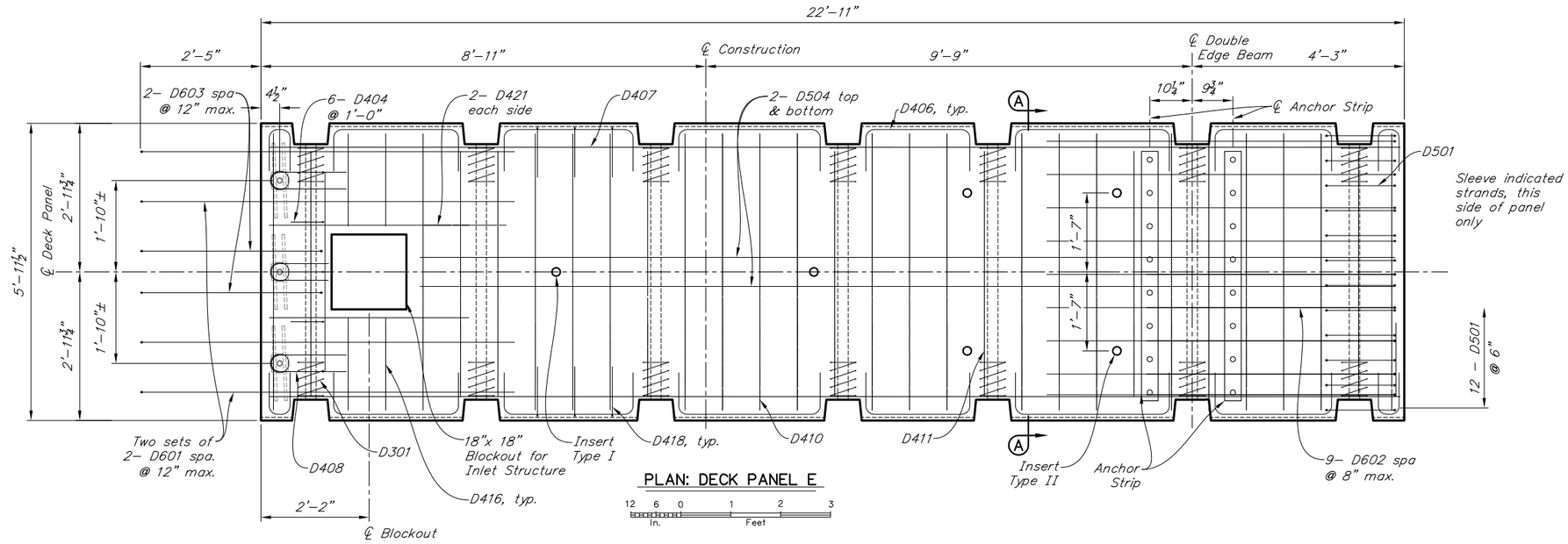
DECK PANEL D

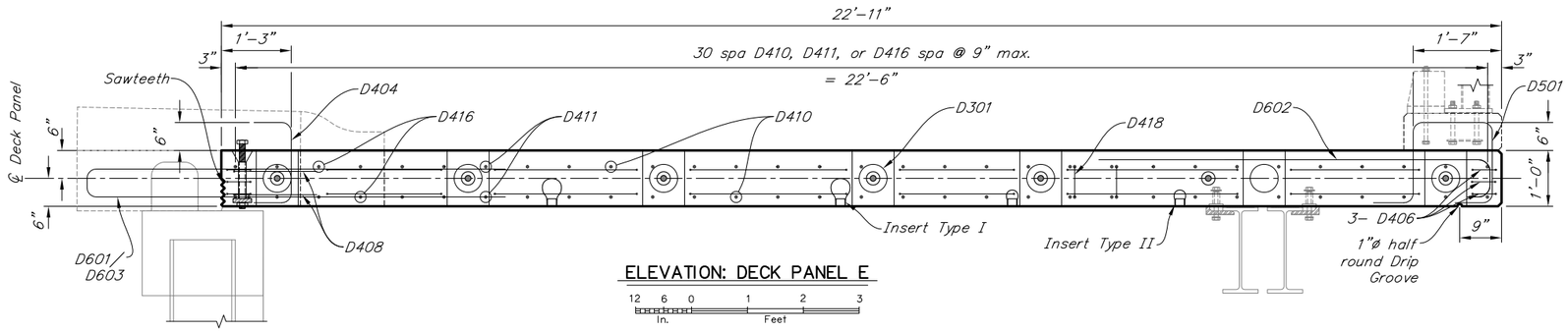
BRIDGE NO. 0446

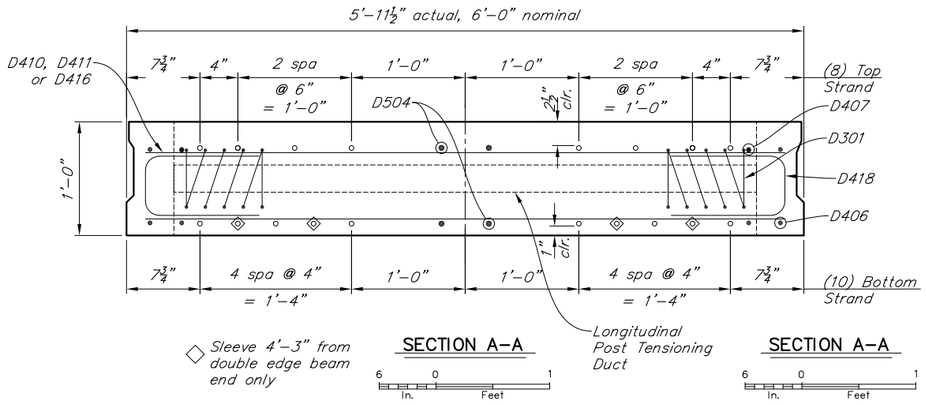
DWG. NO. 45

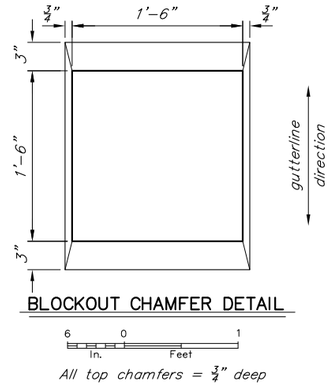
Oct 14, 2015 - 3:48pm brlen \\shearerserver\jobs\0226 water street ps&e\DWG\danset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL D

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N46	N110





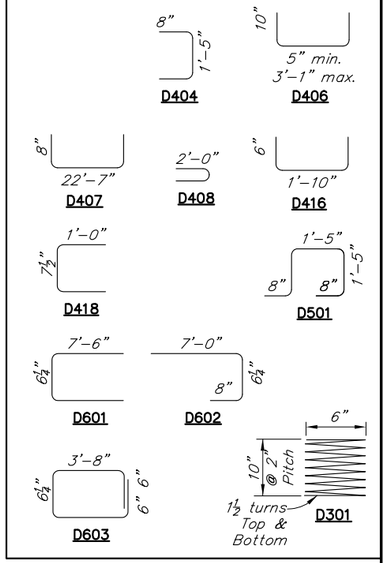




REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D410	E	4	40	5'-6"	–
D411	E	4	18	4'-8"	–
D416	E	4	8	2'-10"	bent
D418	E	4	44	2'-7½"	bent
D421	E	4	8	5'-0"	–
D501	E	5	12	5'-7"	bent
D504	E	5	4	19'-6"	–
D601	E	6	4	15'-6¼"	bent
D602	E	6	9	8'-2¾"	bent
D603	E	6	2	8'-10¼"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 4, individual panels may vary

Provide Anchor Strip with 8 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
11/1/15

WATER STREET BRIDGE No. 2

WATER STREET

DECK PANEL E

BRIDGE NO. 0446
DWG. NO. 46

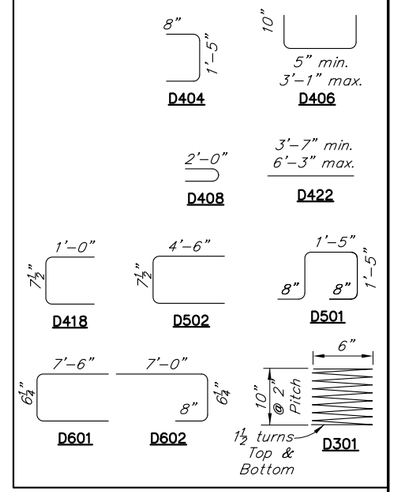
Oct 14, 2015 - 3:48pm brlen \\shearerserver\jobs\0226 water street ps&e\DWG\danset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL E

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N47	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	36	varies	bent
D408	E	4	6	4'-3"	bent
D418	E	4	22	2'-7½"	bent
D422	E	4	62	varies	–
D501	E	5	9	5'-7"	bent
D502	E	5	31	9'-7½"	bent
D505	E	5	2	22'-5"	–
D506	E	5	2	21'-5"	–
D601	E	6	9	15'-6¼"	bent
D602	E	6	6	8'-2¼"	bent

BENDING DIAGRAM



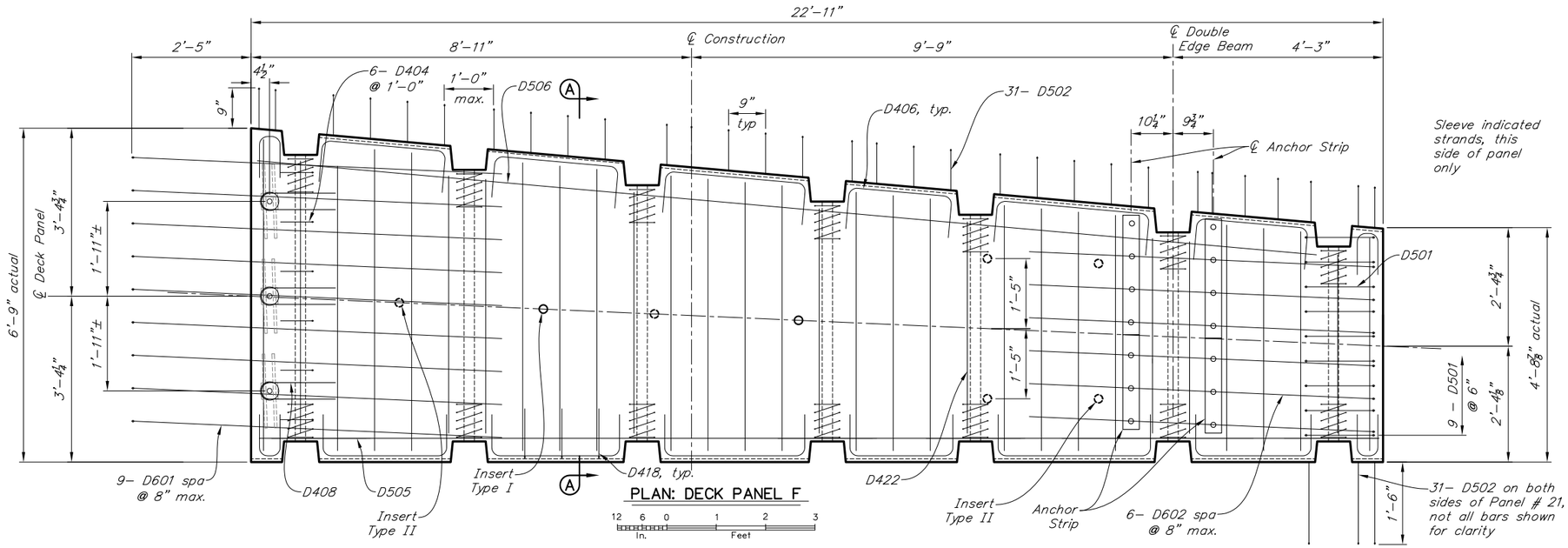
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 2, individual panels may vary

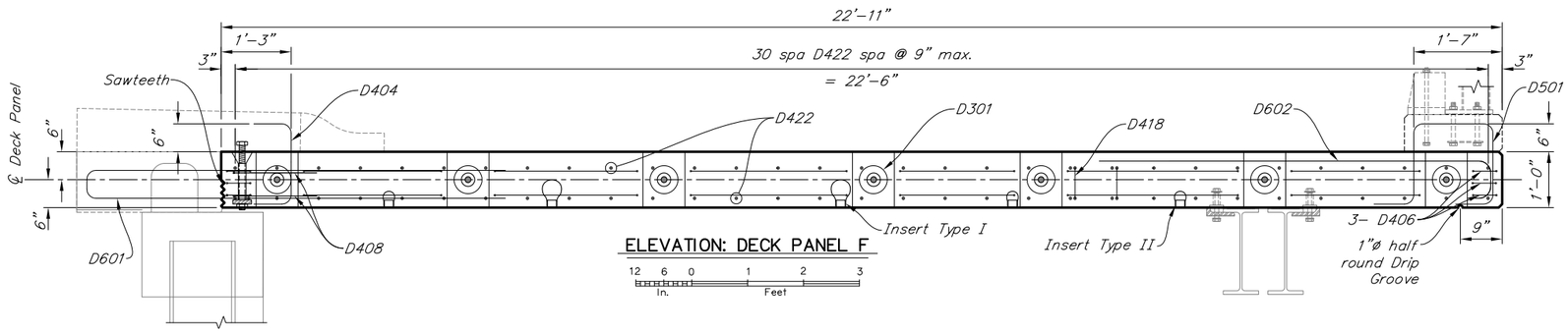
Provide Anchor Strip with 7 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

Panel # 20 shown, Panel # 21 mirror opposite



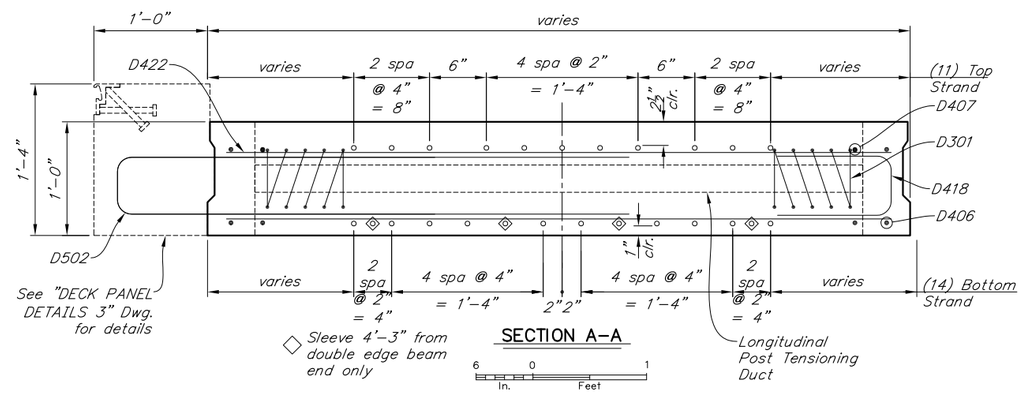
PLAN: DECK PANEL F

12 6 0 1 2 3
In. Feet



ELEVATION: DECK PANEL F

12 6 0 1 2 3
In. Feet

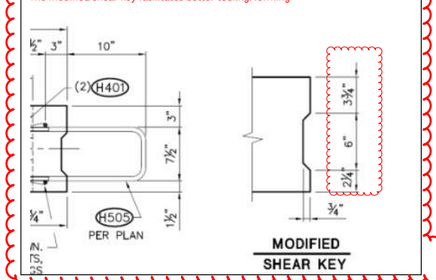


SECTION A-A

6 0 1
In. Feet

CTC is requesting to modify the shear key at panels adjacent to cast-in-place closures. Panels effected by this proposal would be: 1, 2, 3, 20, 21, 22, 42, 43, 63, 64, 102, 103, & 114.

The modified shear key facilitates better tooling/forming



RFI-103 Modified Panel Shear Key @ Panels See Sketch

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
10/4/15

WATER STREET BRIDGE No. 2

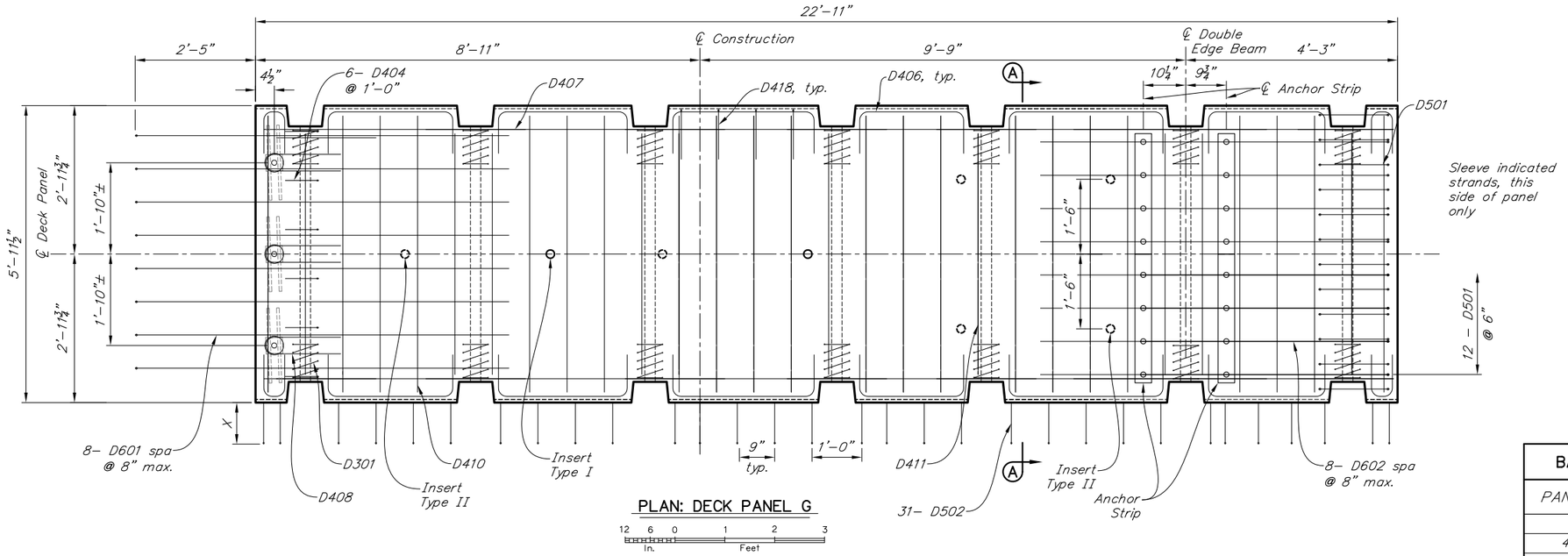
WATER STREET

DECK PANEL F

BRIDGE NO. 0446
DWG. NO. 47

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL F

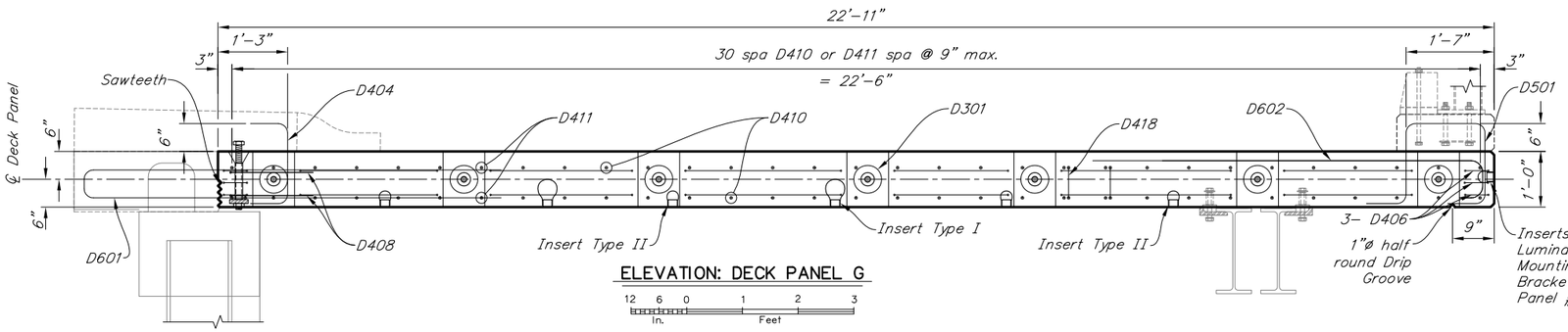
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N48	N110



PLAN: DECK PANEL G

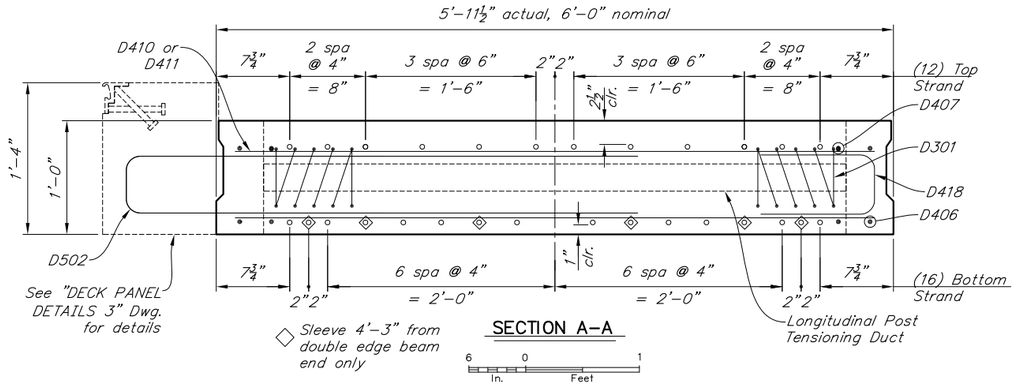
12 6 0 1 2 3
In. Feet

BAR EXTENSION	
PANEL STA.	X
22	1'-6"
43, 85	1'-0"
103	1'-1"



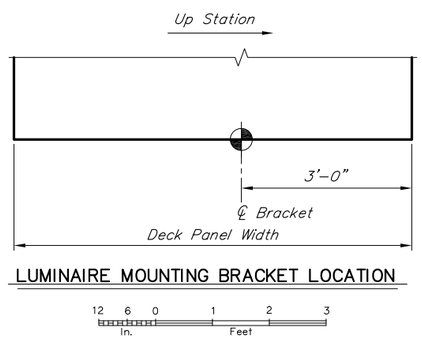
ELEVATION: DECK PANEL G

12 6 0 1 2 3
In. Feet



SECTION A-A

6 0 1
In. Feet



LUMINAIRE MOUNTING BRACKET LOCATION

12 6 0 1 2 3
In. Feet

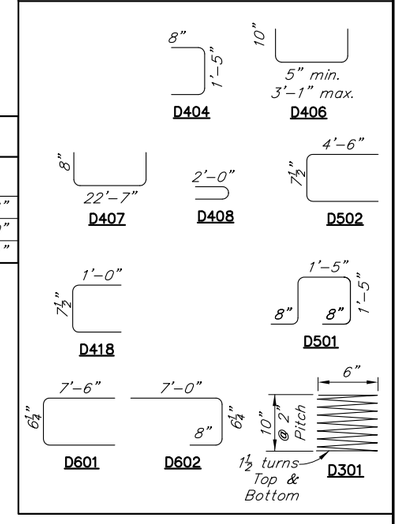
At Panel # 103

Provide Anchor Strip with 8 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D410	E	4	44	5'-7"	–
D411	E	4	18	4'-8"	–
D418	E	4	22	2'-7½"	bent
D501	E	5	12	5'-6"	bent
D502	E	5	31	9'-7½"	bent
D601	E	6	8	15'-6¼"	bent
D602	E	6	8	8'-2¼"	bent

BENDING DIAGRAM



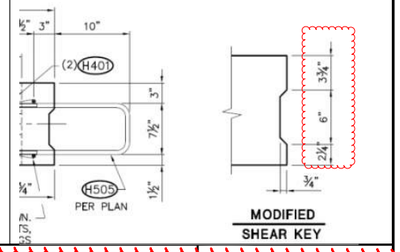
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 4, individual panels may vary

CTC is requesting to modify the shear key at panels adjacent to cast-in-place closures. Panels effected by this proposal would be: 1, 2, 3, 20, 21, 22, 42, 43, 63, 64, 102, 103, & 114.

The modified shear key facilitates better tooling/forming



RFI-103 Modified Panel Shear Key @ Panels See Sketch

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
10/4/5

WATER STREET BRIDGE No. 2

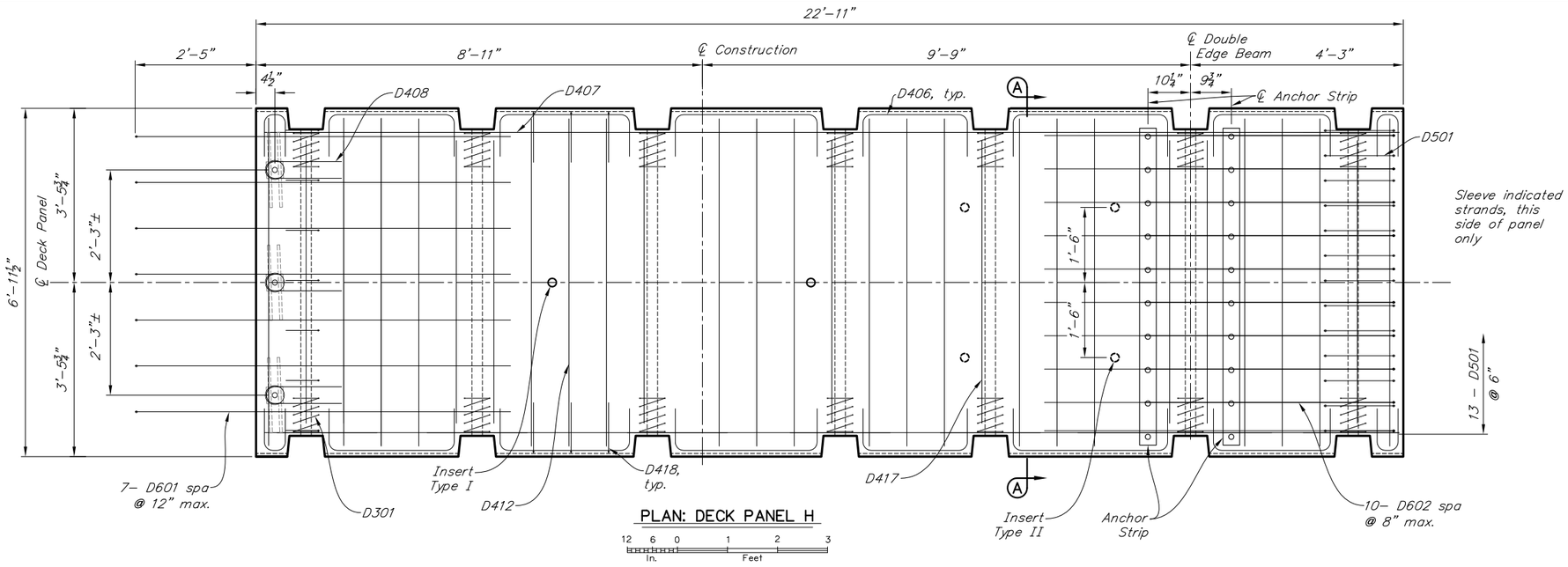
WATER STREET

DECK PANEL G

BRIDGE NO. 0446
DWG. NO. 48

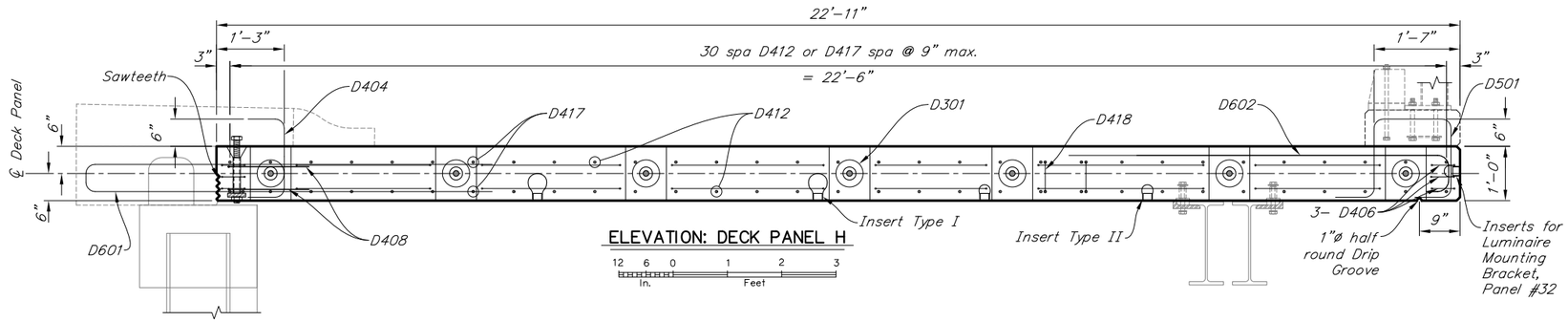
Oct 14, 2015 - 3:48pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL G

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N49	N110



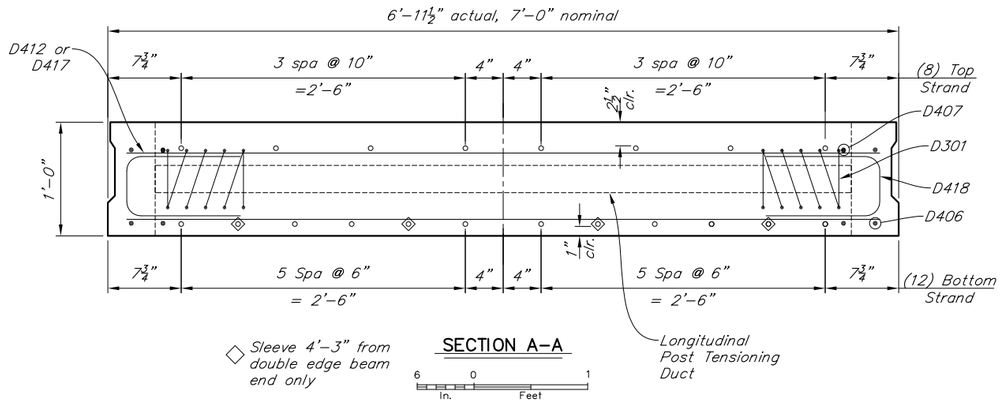
PLAN: DECK PANEL H

12 6 0 1 2 3 In. Feet



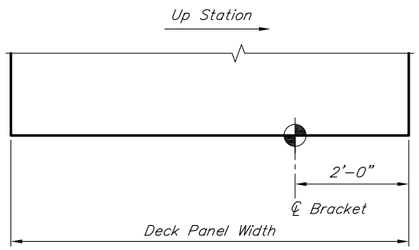
ELEVATION: DECK PANEL H

12 6 0 1 2 3 In. Feet



SECTION A–A

6 0 1 In. Feet



LUMINAIRE MOUNTING BRACKET LOCATION

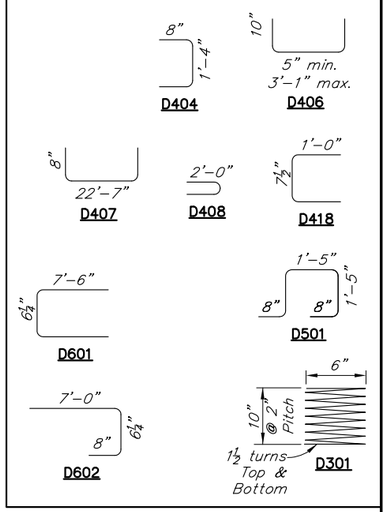
12 6 0 1 2 3 In. Feet

At Panel # 32

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	7	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D412	E	4	44	6'-6"	–
D417	E	4	18	5'-8"	–
D418	E	4	44	2'-7½"	bent
D501	E	5	13	5'-7"	bent
D601	E	6	7	15'-6¼"	bent
D602	E	6	10	8'-2¼"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 1, individual panels may vary

Provide Anchor Strip with 10 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

DECK PANEL H

BRIDGE NO. 0446

DWG. NO. 49

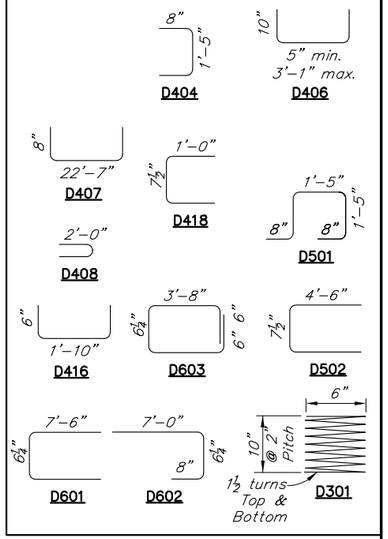
Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL H

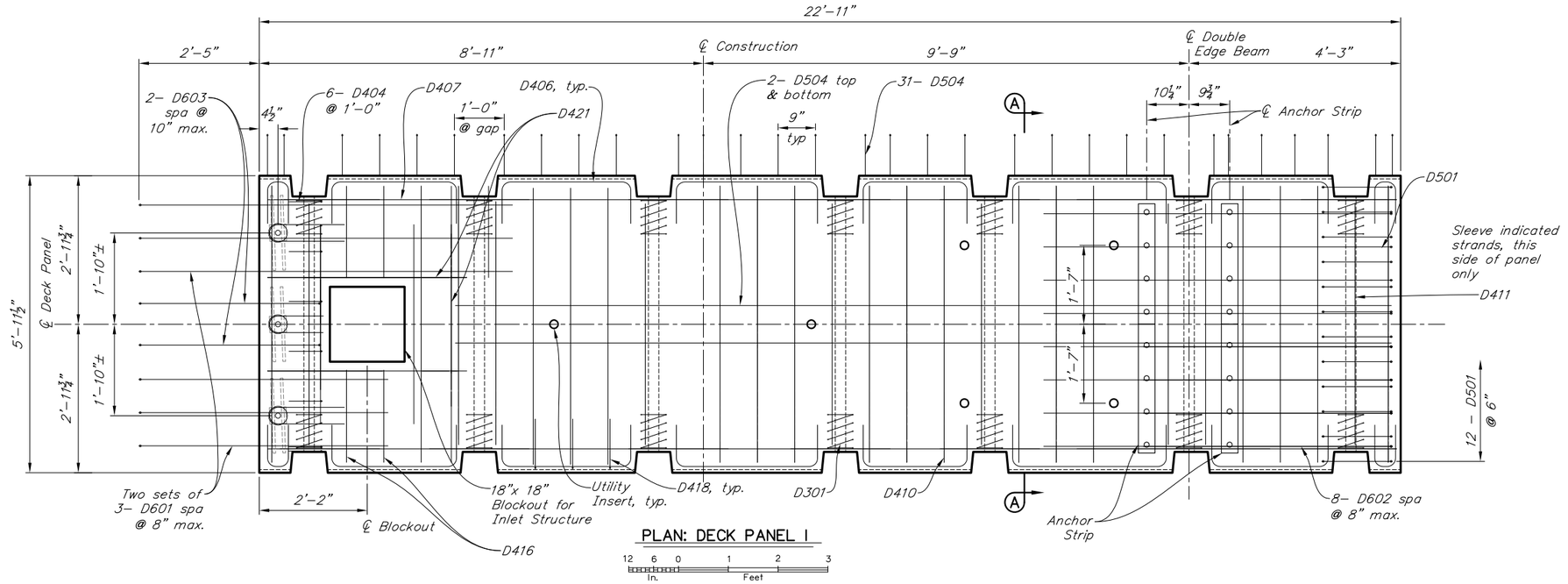
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N50	N110

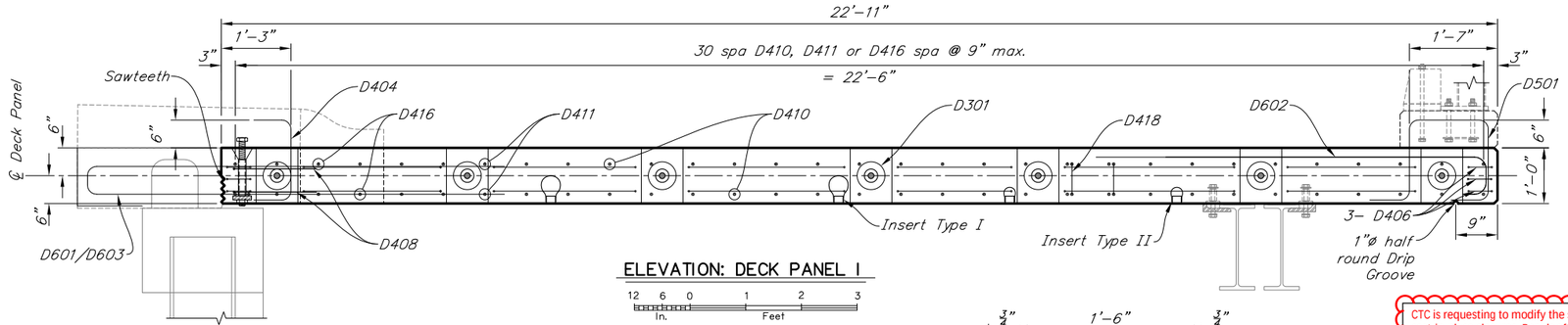
REINFORCING STEEL

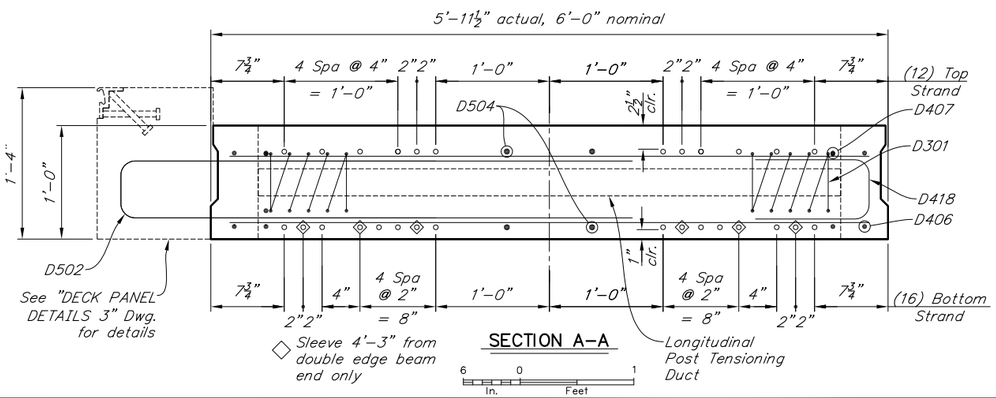
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D410	E	4	40	5'-6"	–
D411	E	4	18	4'-8"	–
D416	E	4	8	2'-10"	bent
D418	E	4	22	2'-7½"	bent
D421	E	4	8	5'-0"	–
D501	E	5	12	5'-7"	bent
D502	E	5	31	9'-7½"	bent
D504	E	5	4	19'-6"	–
D601	E	6	6	15'-6¼"	bent
D602	E	6	8	8'-2¼"	bent
D603	E	6	2	8'-10½"	bent

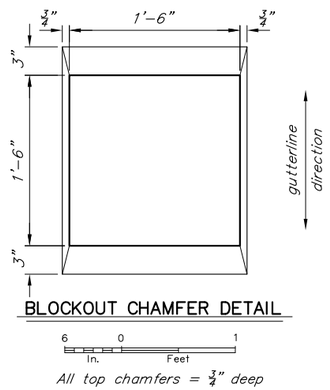
BENDING DIAGRAM





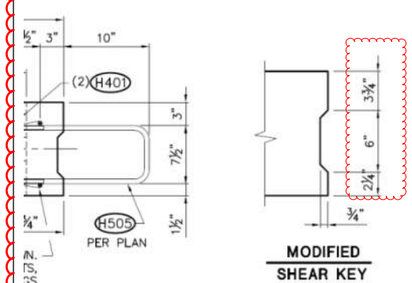






CTC is requesting to modify the shear key at panels adjacent to cast-in-place closures. Panels effected by this proposal would be: 1, 2, 3, 20, 21, 22, 42, 43, 63, 64, 102, 103, & 114.

The modified shear key facilitates better tooling/forming



RFI-103 Modified Panel Shear Key @ Panels See Sketch

E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 2, individual panels may vary

Provide Anchor Strip with 8 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

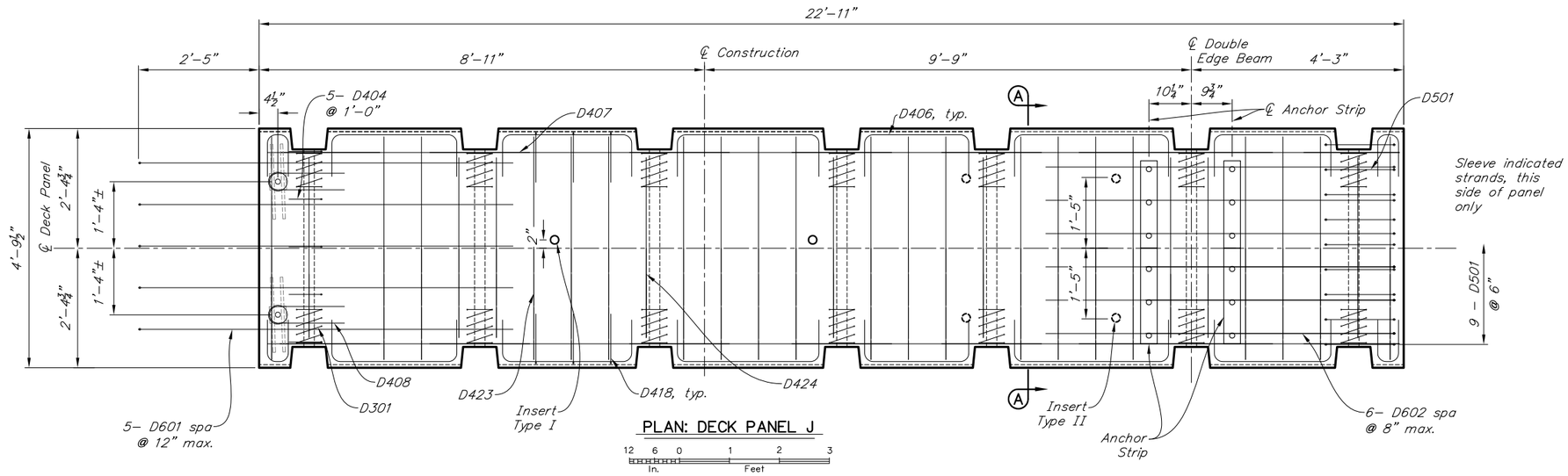
DECK PANEL I

BRIDGE NO. 0446

DWG. NO. 50

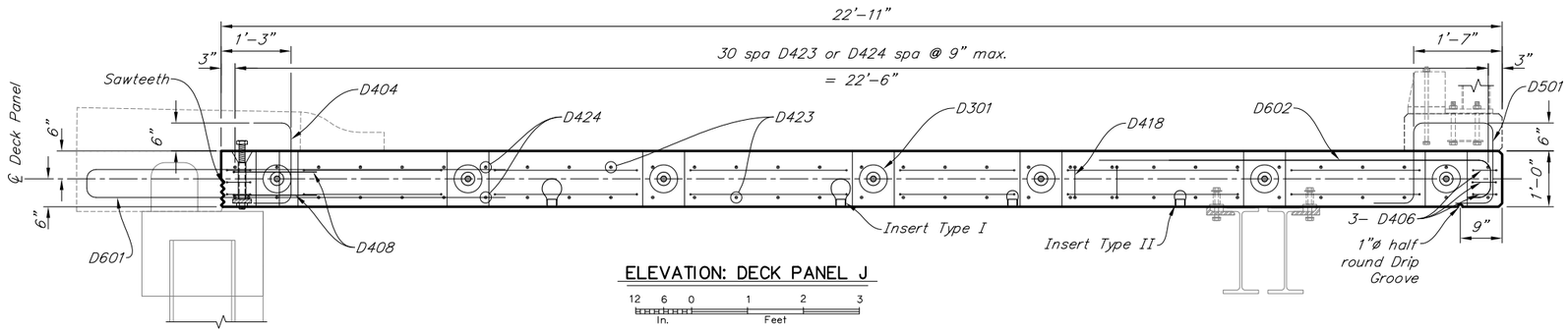
Oct 14, 2015 - 3:48pm brlen \\shearerserver\jobs\02226 water street ps&e\DWG\planset ado\&pf\169534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL I

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N51	N110



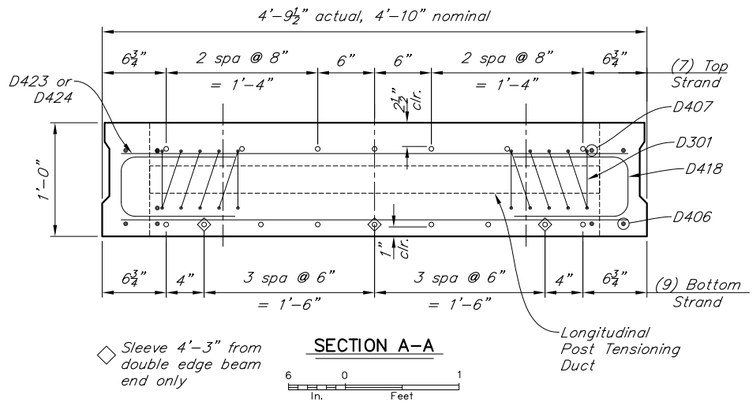
PLAN: DECK PANEL J

12 6 0 1 2 3
In. Feet



ELEVATION: DECK PANEL J

12 6 0 1 2 3
In. Feet



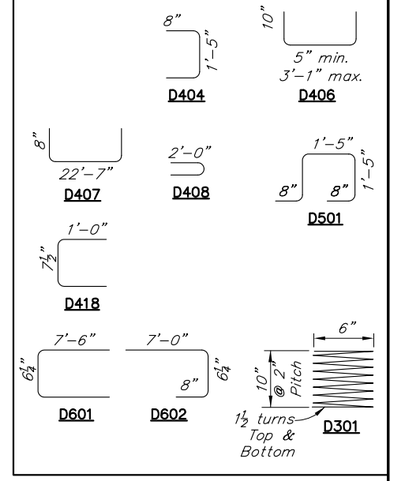
SECTION A-A

6 0 1
In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	5	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	4	4'-3"	bent
D418	E	4	44	2'-7½"	bent
D423	E	4	44	4'-4"	–
D424	E	4	18	3'-6"	–
D501	E	5	9	5'-7"	bent
D601	E	6	5	15'-6¼"	bent
D602	E	6	6	8'-2¼"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 5, individual panels may vary

Provide Anchor Strip with 6 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

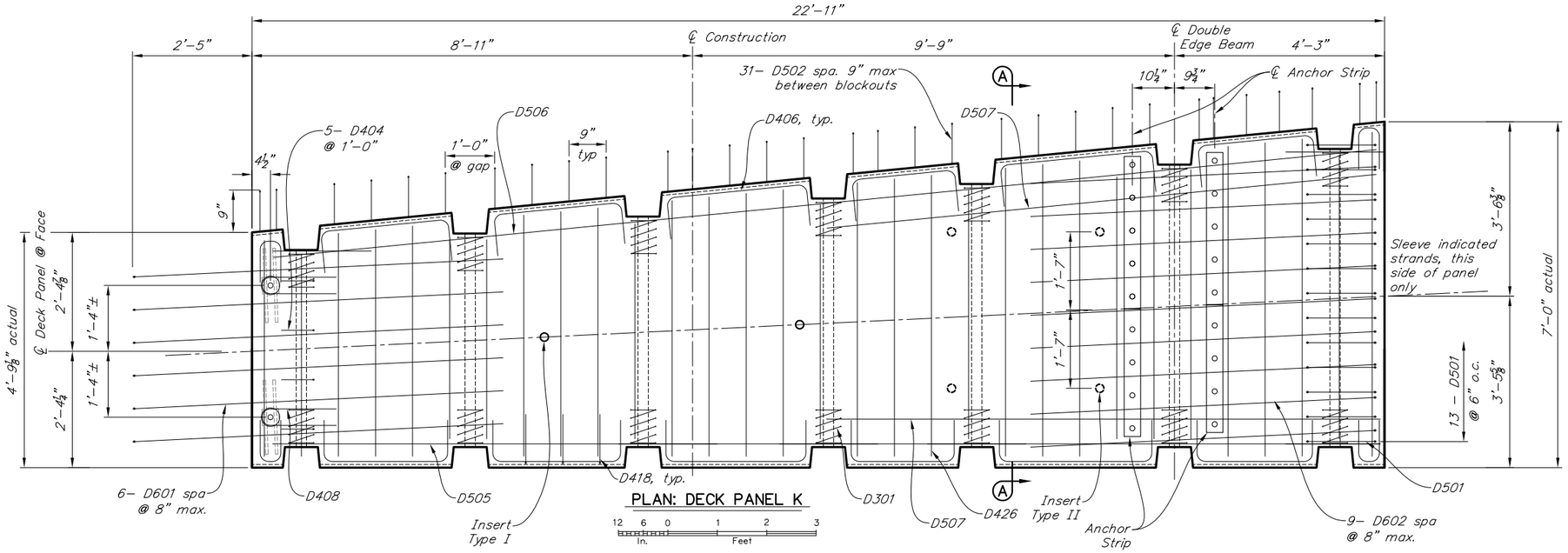
DECK PANEL J

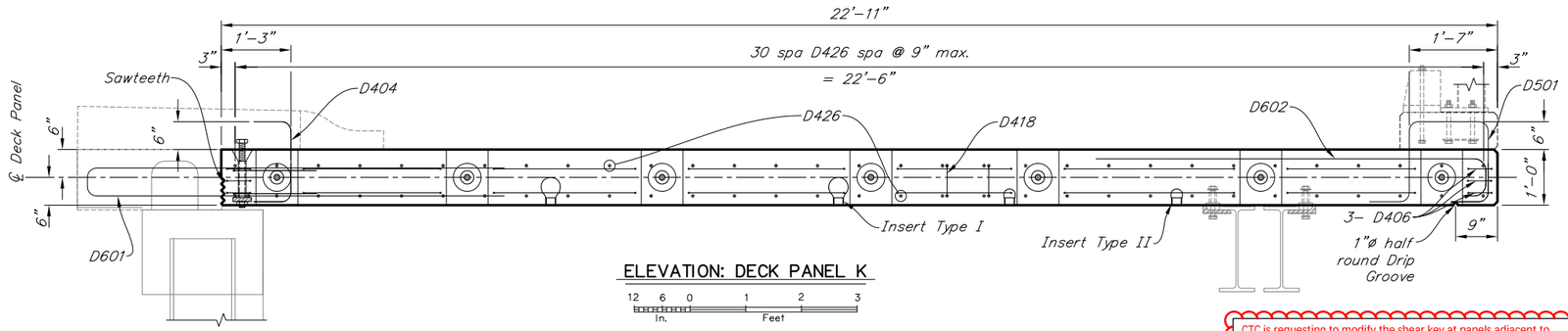
BRIDGE NO. 0446

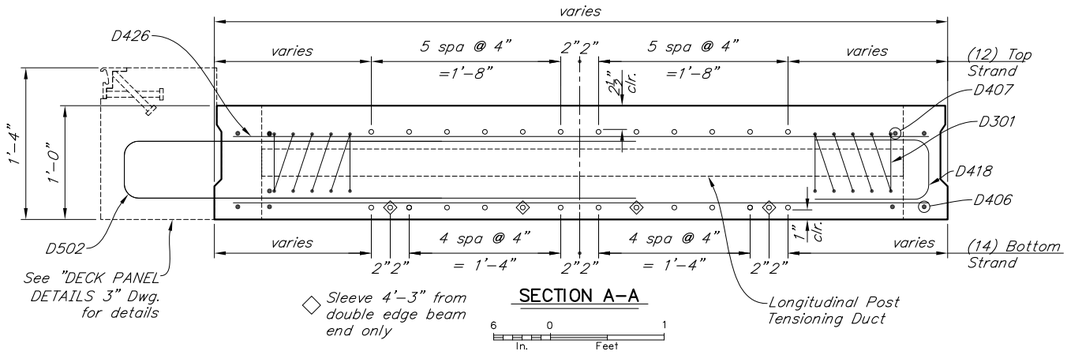
DWG. NO. 51

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL J

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N52	N110



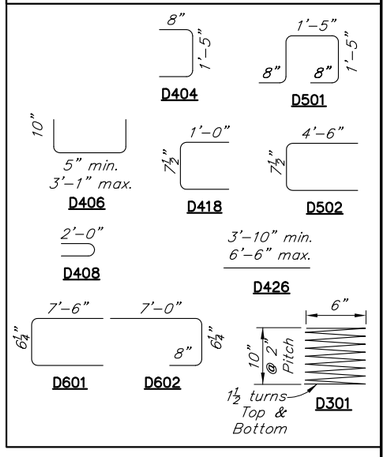




REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D403	E	4	13	2'-9"	bent
D404	E	4	5	2'-9"	bent
D406	E	4	36	varies	bent
D408	E	4	4	4'-3"	bent
D418	E	4	22	2'-7½"	bent
D426	E	4	62	varies	–
D501	E	5	13	5'-7"	bent
D502	E	5	31	9'-7½"	bent
D505	E	5	2	22'-5"	–
D506	E	5	2	21'-5"	–
D507	E	5	4	11'-0"	–
D601	E	6	6	15'-6¼"	bent
D602	E	6	9	8'-2¼"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

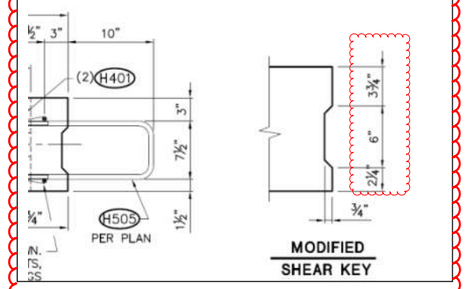
Panel count of this type = 2, individual panels may vary.

Provide Anchor Strip with 9 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

Panel # 63 shown, Panel # 64 mirror opposite.

CTC is requesting to modify the shear key at panels adjacent to cast-in-place closures. Panels effected by this proposal would be: 1, 2, 3, 20, 21, 22, 42, 43, 63, 64, 102, 103, & 114.

The modified shear key facilitates better tooling/forming



RFI-103 Modified Panel Shear Key @ Panels See Sketch

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB | As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
9/9/15

WATER STREET BRIDGE No. 2

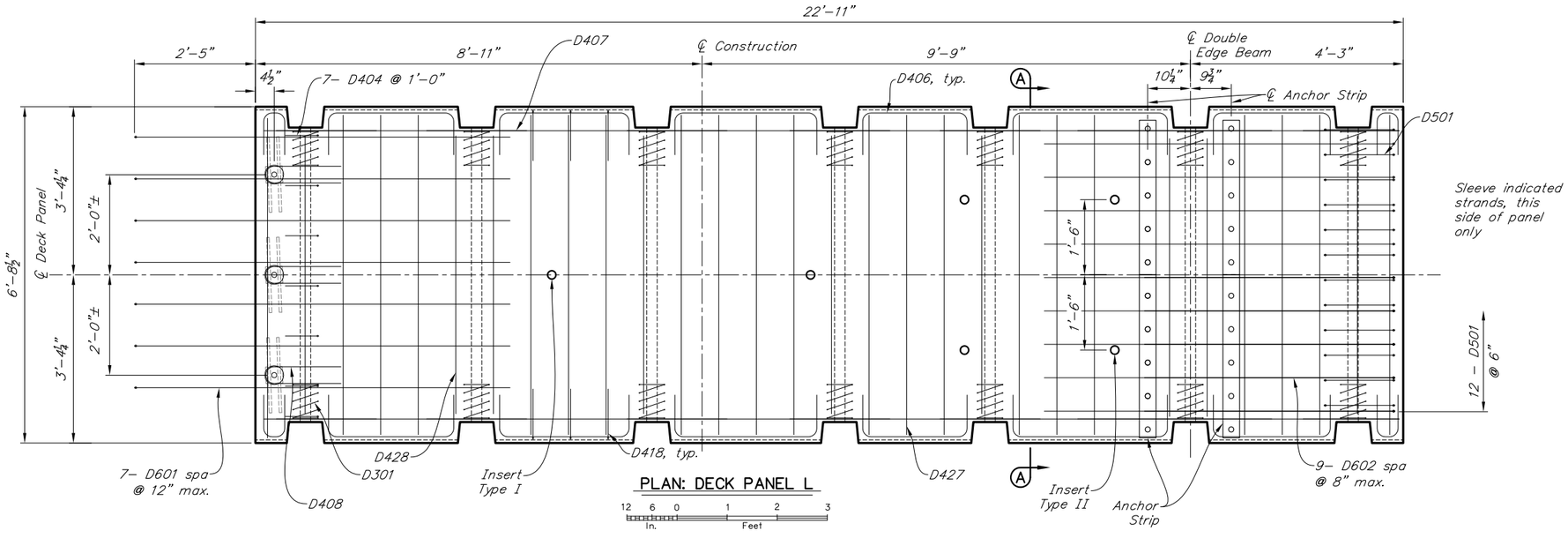
WATER STREET

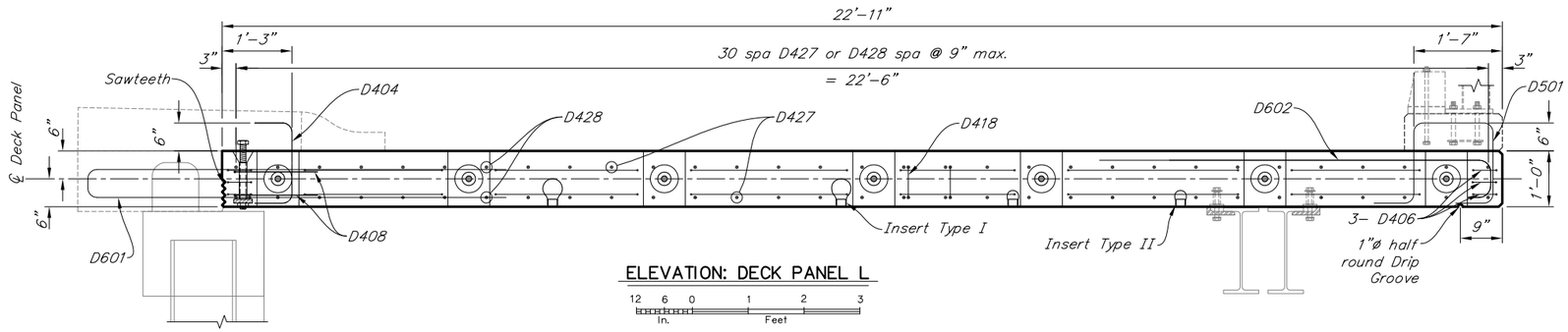
DECK PANEL K

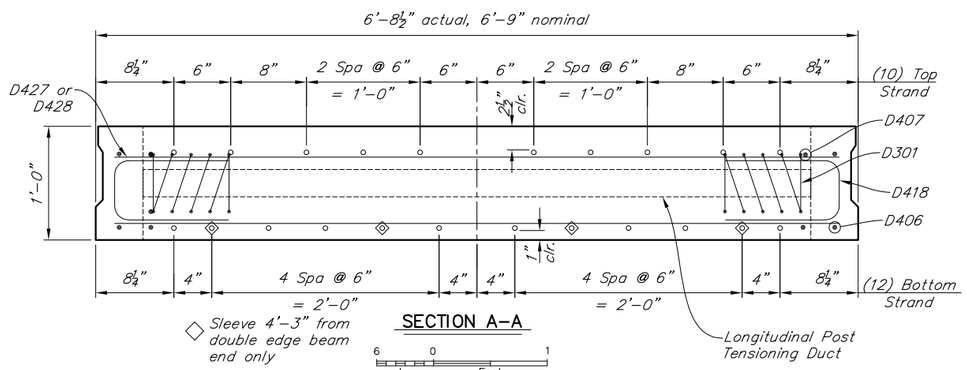
BRIDGE NO. 0446
DWG. NO. 52

Oct 14, 2015 - 3:49pm bilen \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL K

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N53	N110



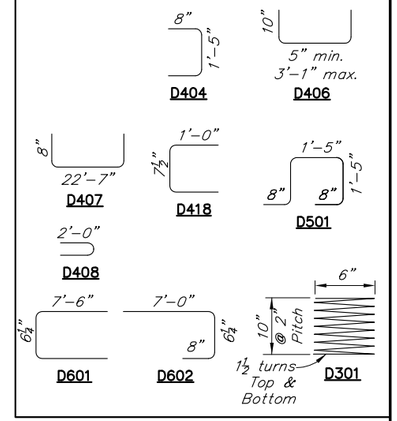




REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	7	2'-9"	bent
D406	E	4	36	varies	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D418	E	4	44	2'-7½"	bent
D427	E	4	44	6'-3"	–
D428	E	4	18	5'-5"	–
D501	E	5	12	5'-7"	bent
D601	E	6	7	15'-6¼"	bent
D602	E	6	9	8'-2¼"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

If Post-Tensioning Pockets are not used, omit D406 and move D407 to edge of panel.

Panel count of this type = 1, individual panels may vary

Provide Anchor Strip with 10 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
10/14/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

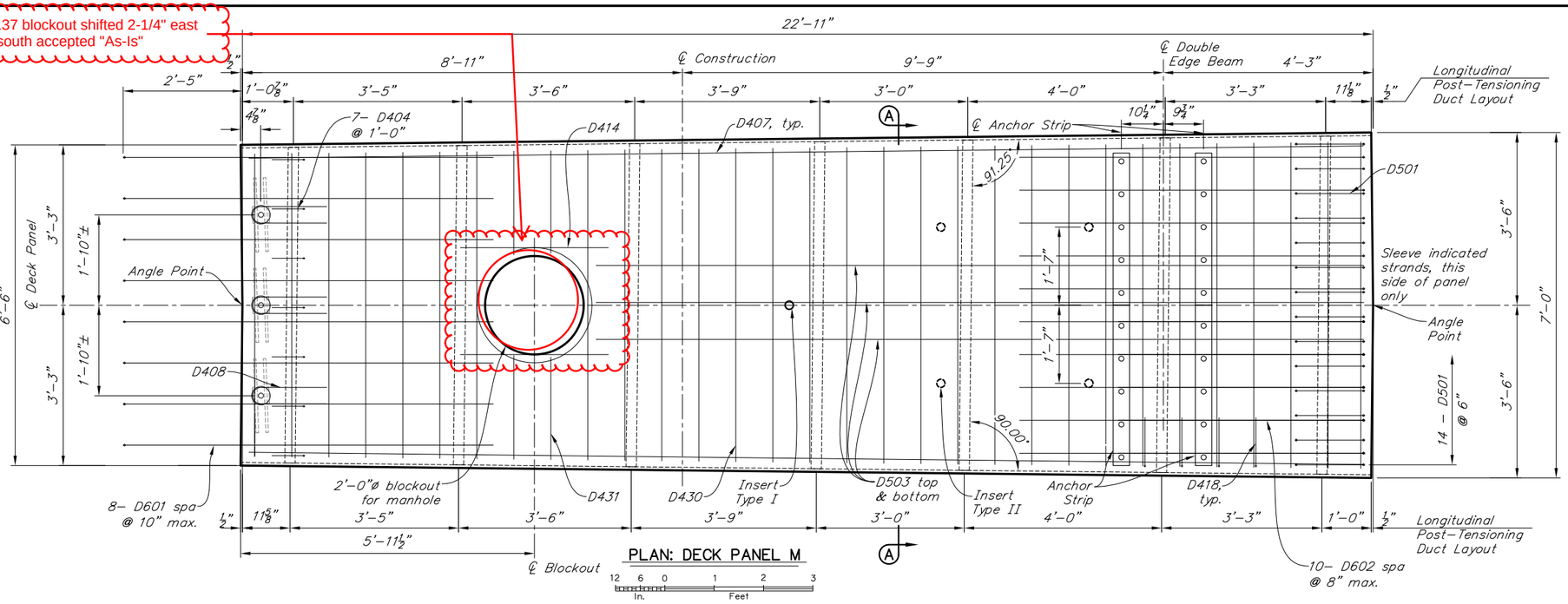
WATER STREET

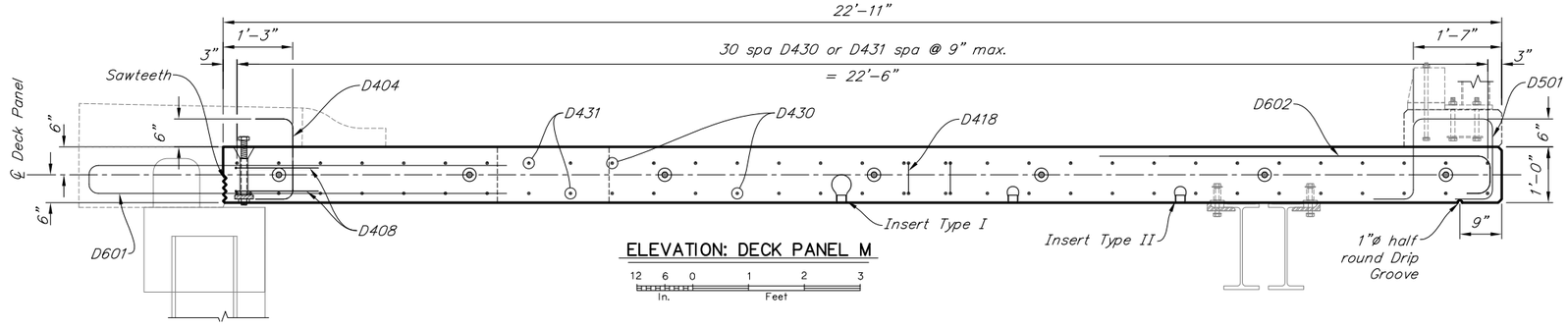
DECK PANEL L

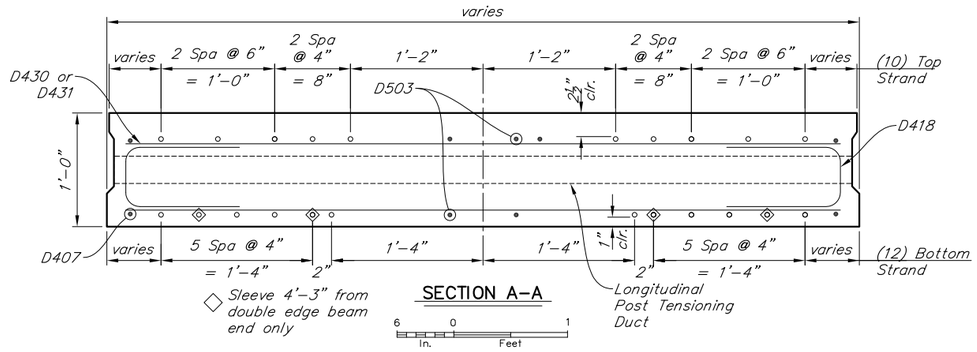
BRIDGE NO. 0446
DWG. NO. 53

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\datset.ado\&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL L

RFI-137 blockout shifted 2-1/4" east & 2" south accepted "As-Is"





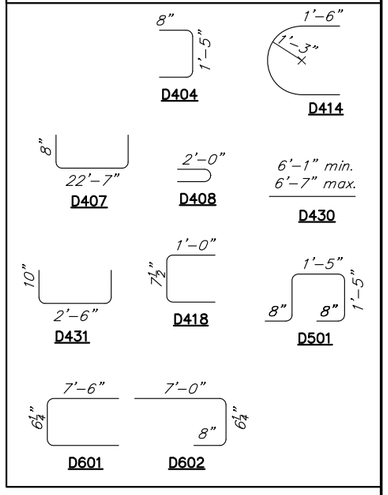


STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N54	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D404	E	4	7	2'-9"	bent
D407	E	4	4	23'-11"	bent
D408	E	4	6	4'-3"	bent
D414	E	4	4	6'-11 1/8"	bent
D418	E	4	62	2'-7 1/2"	bent
D430	E	4	58	varies	–
D431	E	4	8	4'-2"	bent
D501	E	5	14	5'-7"	bent
D503	E	5	6	15'-6"	–
D601	E	6	8	15'-6 1/4"	bent
D602	E	6	10	8'-2 1/4"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

Panel count of this type = 1, individual panels may vary

Provide Anchor Strip with 10 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

Longitudinal Post-Tentioning Ducts are straight and are aligned with up station panels

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

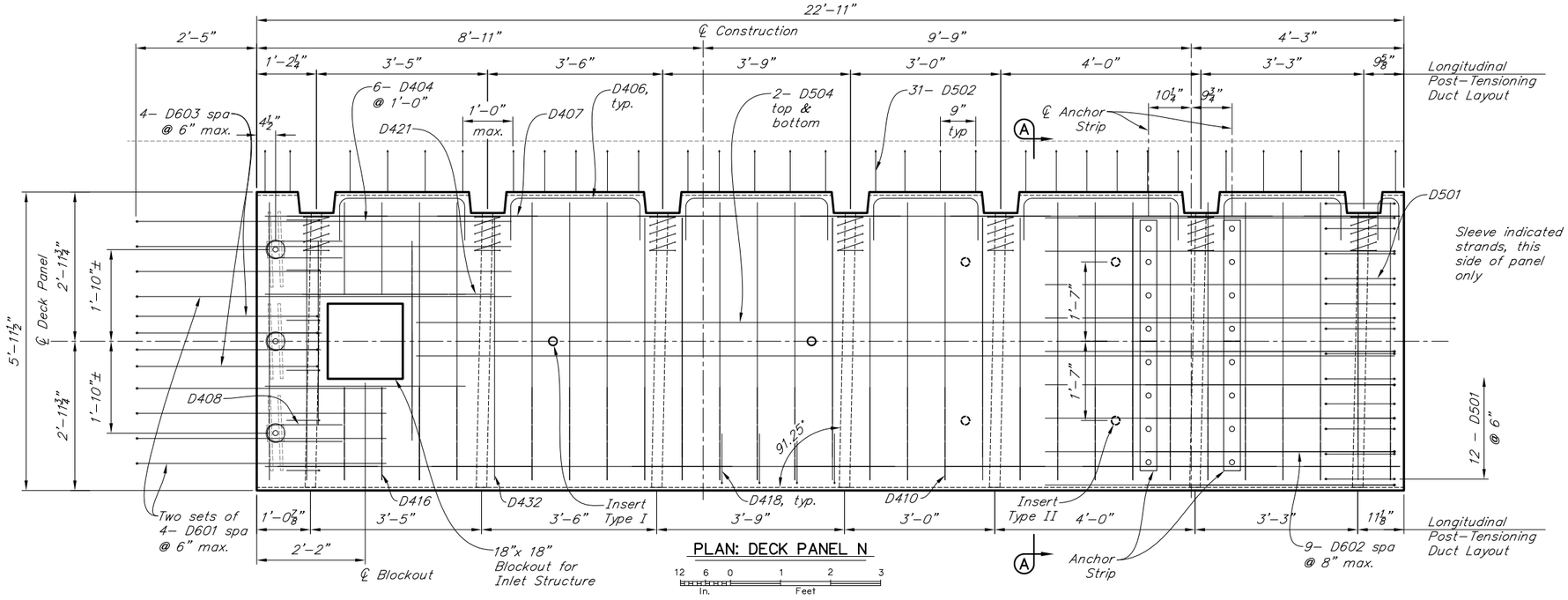
WATER STREET

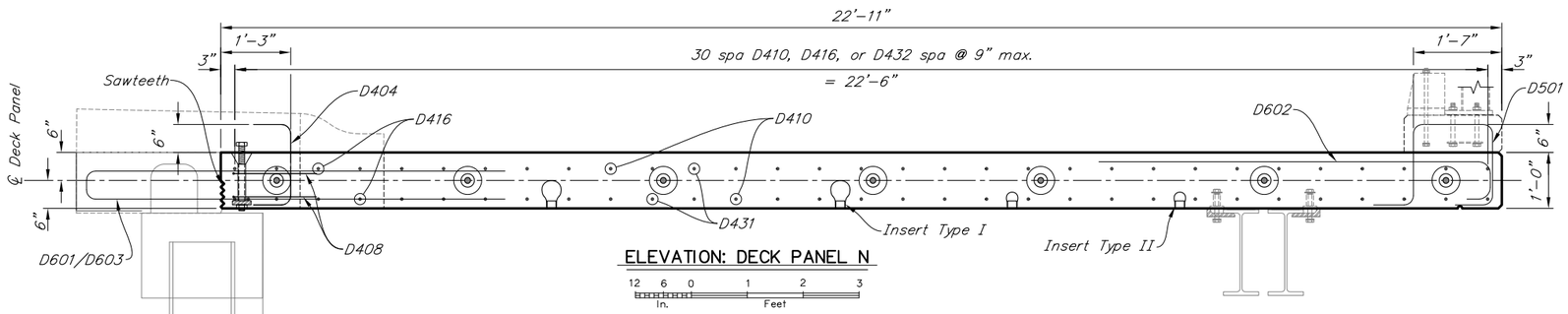
DECK PANEL M

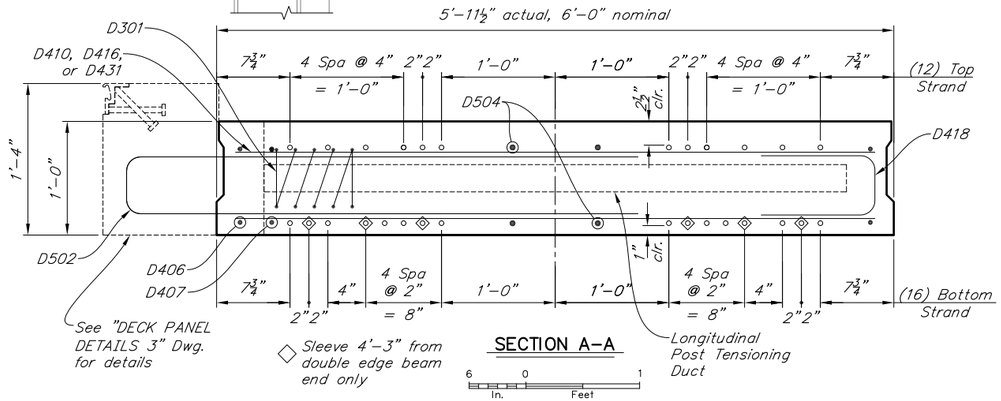
BRIDGE NO. 0446
DWG. NO. 54

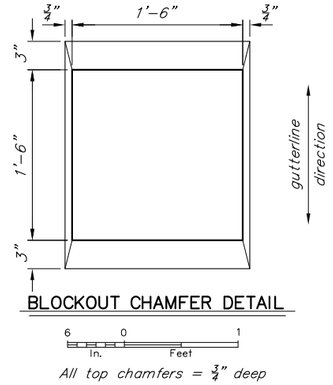
Oct 14, 2015 - 3:49pm biten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL M

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N55	N110





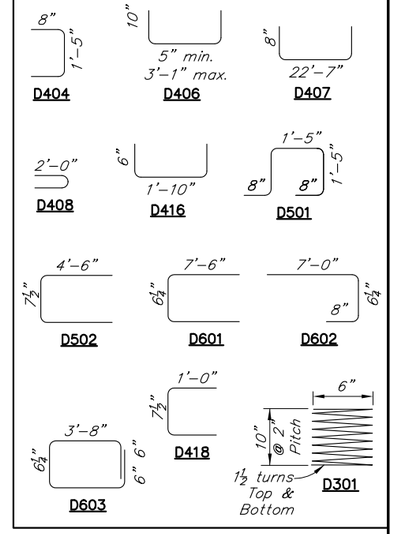




REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D301	E	3	14	11'-0"	bent
D404	E	4	6	2'-9"	bent
D406	E	4	18	varies	bent
D407	E	4	4	23'-11"	–
D408	E	4	6	4'-3"	bent
D410	E	4	40	5'-6"	–
D416	E	4	8	2'-10"	–
D418	E	4	31	2'-7½"	bent
D421	E	4	8	5'-0"	–
D432	E	4	18	5'-1"	–
D501	E	5	12	5'-7"	bent
D502	E	5	31	9'-7½"	bent
D504	E	5	4	19'-6"	–
D601	E	6	8	15'-6¼"	bent
D602	E	6	9	8'-2¼"	bent
D603	E	6	4	8'-10¼"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

Panel count of this type = 1, individual panels may vary

Provide Anchor Strip with 8 bolts and couplers per strip for this Panel Type. See "ANCHOR STRIP" detail on "DECK PANEL DETAILS 1" Dwg.

Longitudinal Post-Tentioning Ducts slightly skewed and are aligned with up station panels

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/5

WATER STREET BRIDGE No. 2

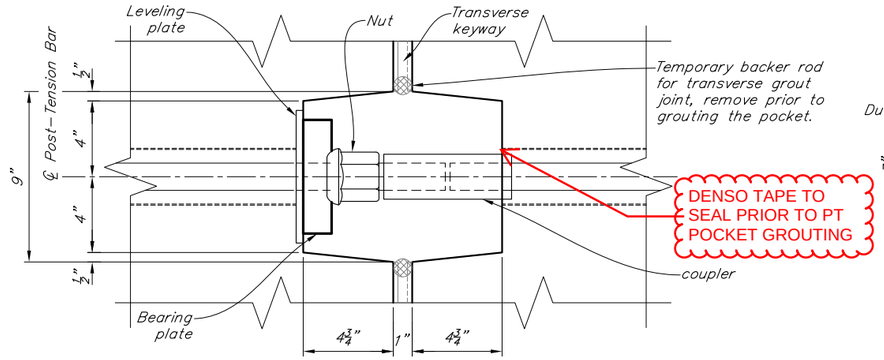
WATER STREET

DECK PANEL N

BRIDGE NO. 0446
DWG. NO. 55

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL N

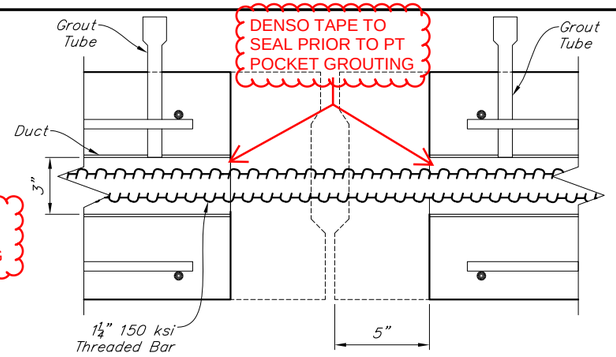
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N56	N110



PLAN: POST-TENSIONING POCKET (JACKING LOCATION)

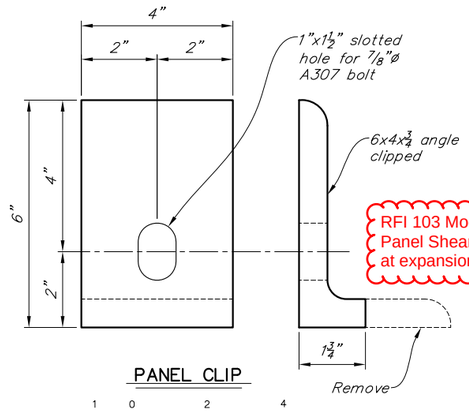
0 3 6 9 1'-0" Inches

Post-Tensioning bar jacked against one panel. Other post-tensioning joints similar. Grout not shown for clarity, typ.



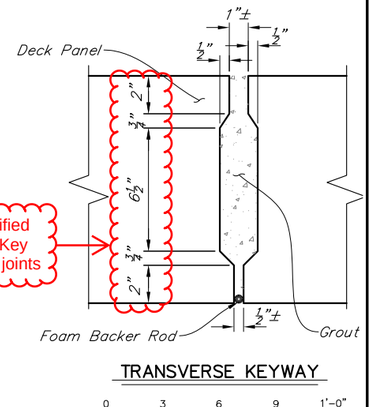
SECTION: POST-TENSIONING POCKET (CONTINUOUS)

0 3 6 9 1'-0" Inches



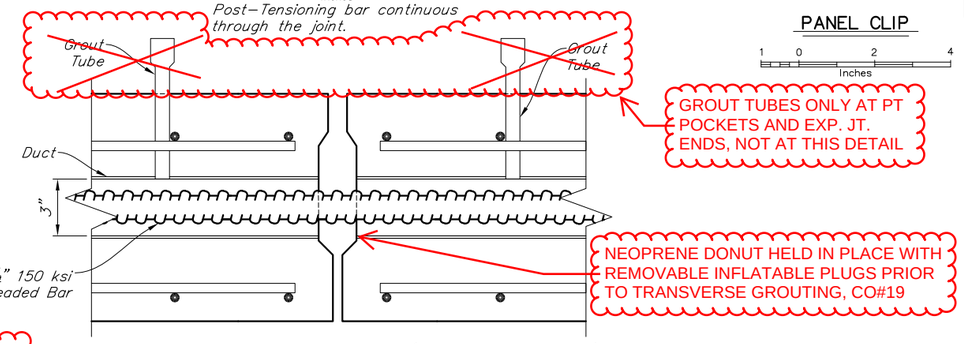
PANEL CLIP

1 0 2 4 Inches



TRANSVERSE KEYWAY

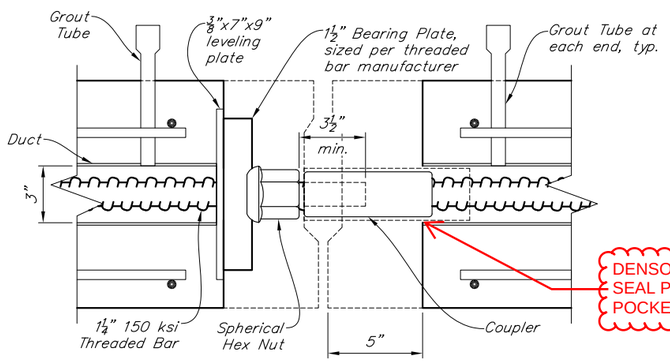
0 3 6 9 1'-0" Inches



SECTION: POST-TENSIONING POCKET (NO POCKET OPTION)

0 3 6 9 1'-0" Inches

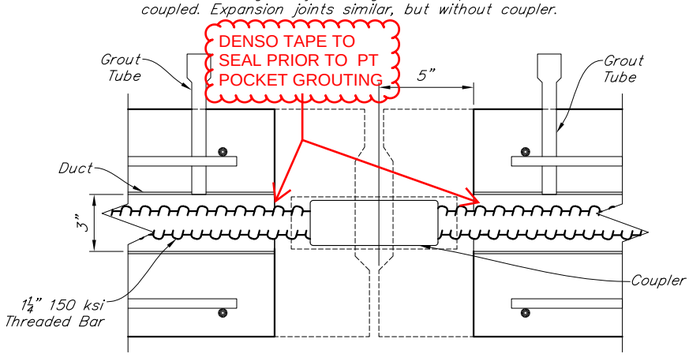
Post-Tensioning bar continuous through the joint.



SECTION: POST-TENSIONING POCKET (JACKING LOCATION)

0 3 6 9 1'-0" Inches

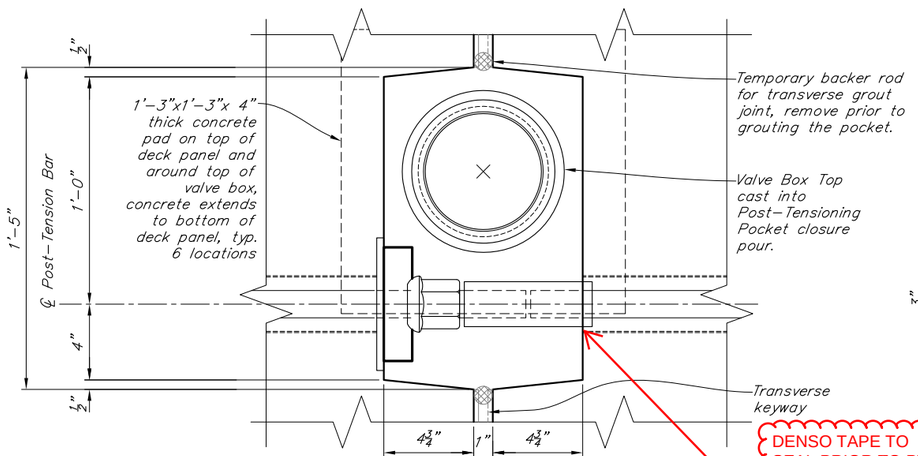
Post-Tensioning bar jacked against one panel and then coupled. Expansion joints similar, but without coupler.



SECTION: POST-TENSIONING POCKET (COUPLING)

0 3 6 9 1'-0" Inches

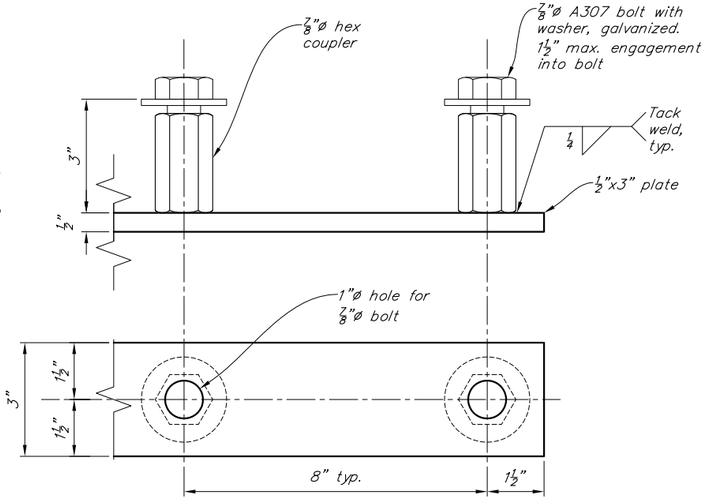
Post-Tensioning bar coupled at the joint, but not jacked against a panel at the joint.



PLAN: VALVE BOX POST-TENSIONING POCKET

0 3 6 9 1'-0" Inches

Valve Box Pocket at joint between panel 6-7, 7-8, 75-76, 76-77 at waterline only. All other pockets standard size. Grout not shown for clarity, typ.



ANCHOR STRIP

1 0 2 4 Inches

Hot-dip galvanize the plate, then weld galvanized coupler to plate

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

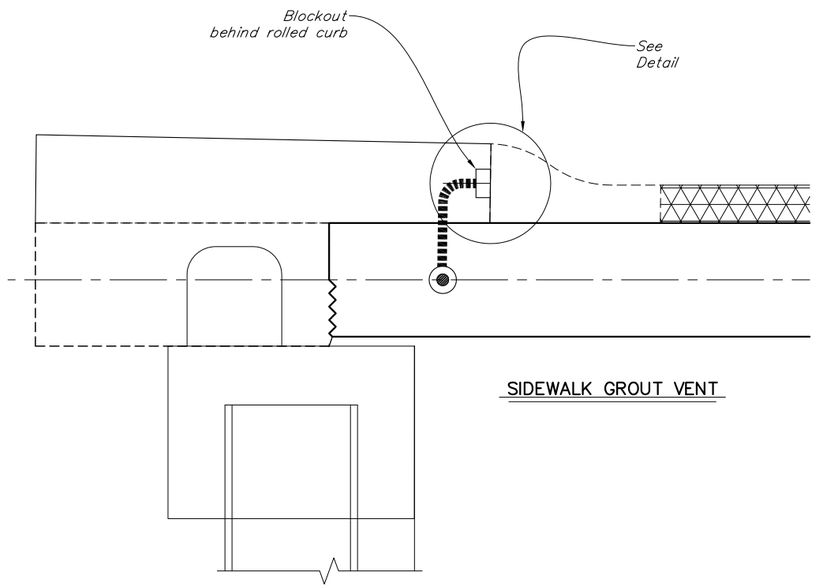
DECK PANEL DETAILS 1

BRIDGE NO. 0446

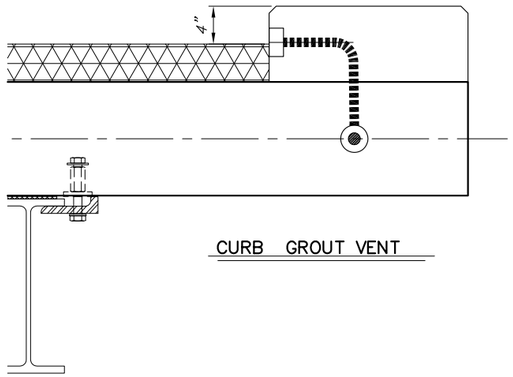
DWG. NO. 56

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset ao\sheet\ph69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL DETAILS 1

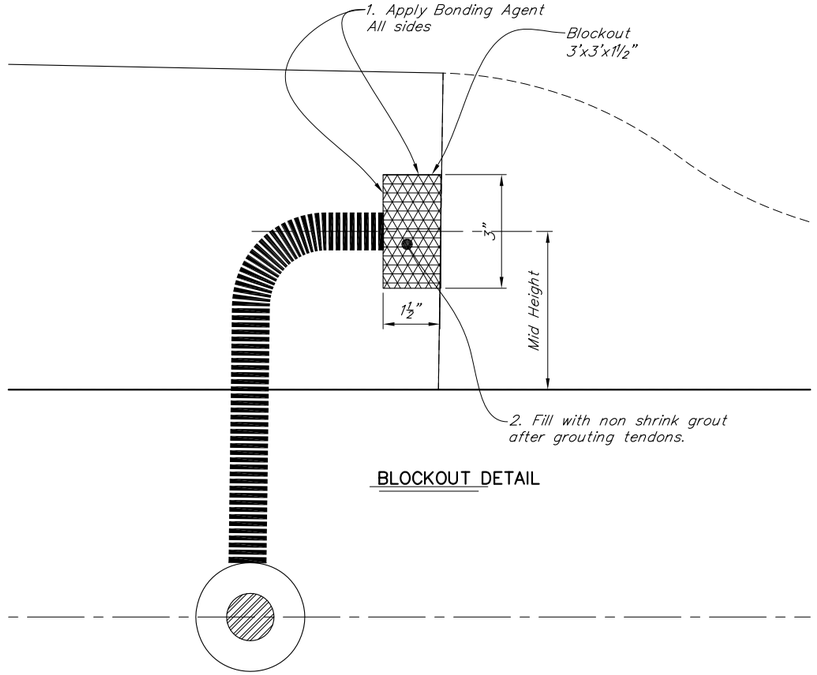
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N8	N110



SIDEWALK GROUT VENT



CURB GROUT VENT



BLOCKOUT DETAIL

Construction Support Memorandum: 190

April 12, 2017, 2017

To: John Scott, HDR

RFI #152

Subject: Grout Hose Stubout Locations

Response:

Casting of the sidewalk, curb, or gutter may occur before grouting of the longitudinal PT ducts provided the end of the grout ducts are in sealed block outs. See the attached drawing.

Thanks,

David Shearer, P.E., S.E.

Bridge Engineer
SHEARER DESIGN

RFI-152

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 48TH
DAVID R. SHEARER
CE 8373
9/5/19
Registered Professional Engineer

WATER STREET BRIDGE No. 2

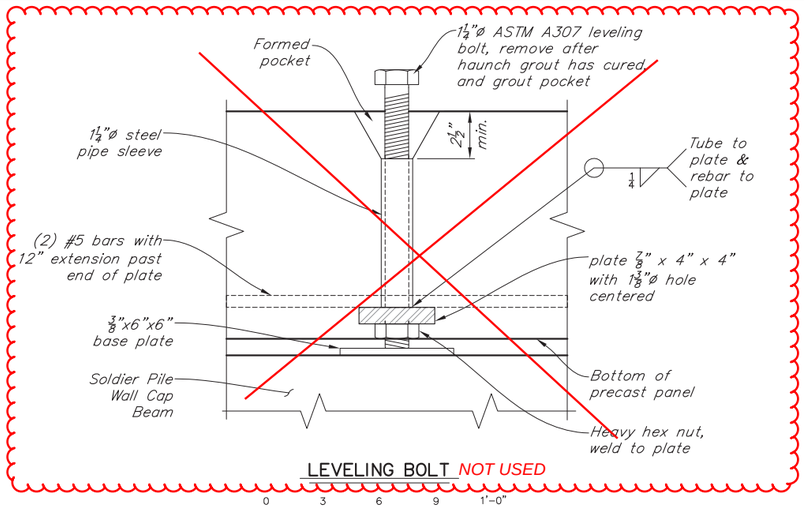
WATER STREET

Grout Vents

BRIDGE NO. 0446
DWG. NO. N56A

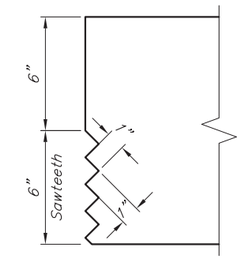
Apr 12, 2017 - 3:01pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Davids Stuff\Sketches\PT grout vents.dwg Layout Name: P10 BASE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N57	N110



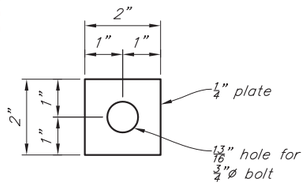
LEVELING BOLT *NOT USED*

0 3 6 9 1'-0" Inches



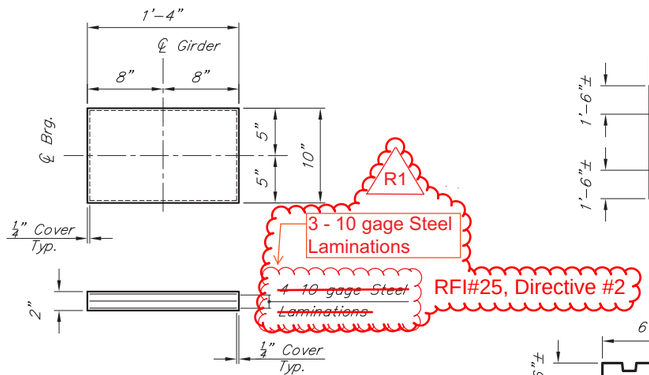
SAWTEETH

0 3 6 9 1'-0" Inches



ANCHOR PLATE

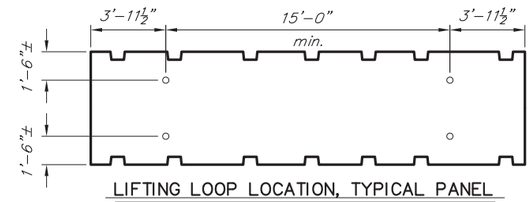
1 0 2 4 Inches



BEARING DETAIL

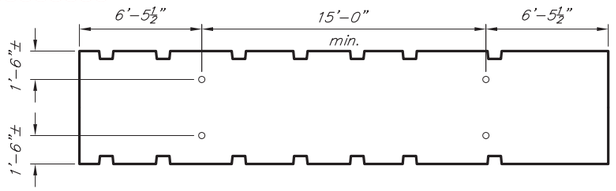
6 0 1 In. Feet

Shear Modulus = 115 psi
Dead Load = 27 kip
Live Load = 56 kip



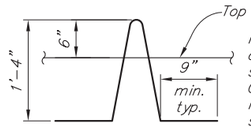
LIFTING LOOP LOCATION, TYPICAL PANEL

12 0 2 4 6 8 In. Feet



LIFTING LOOP LOCATION, PANEL "D"

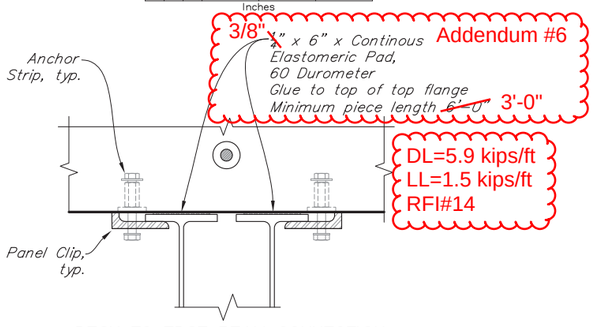
12 0 2 4 6 8 In. Feet



Precast manufacturer to determine quantity and size of strand lifting loop. Other pick point lifting hardware shall be submitted for approval.

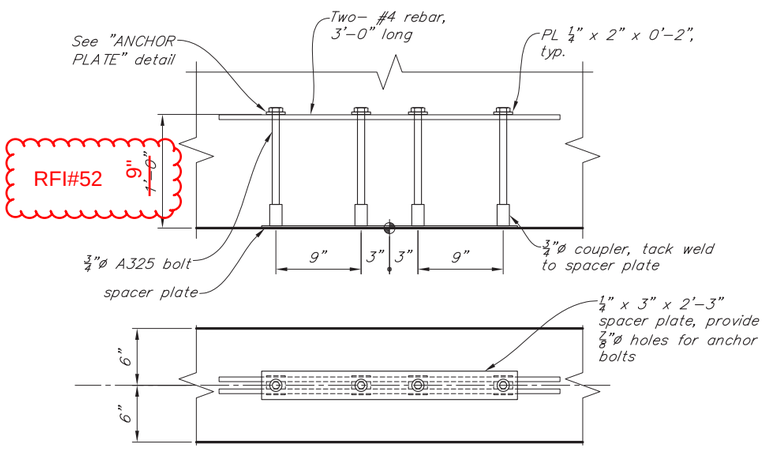
LIFTING LOOP

12 6 0 1 2 In. Feet



DECK TO EDGE BEAM CONNECTION

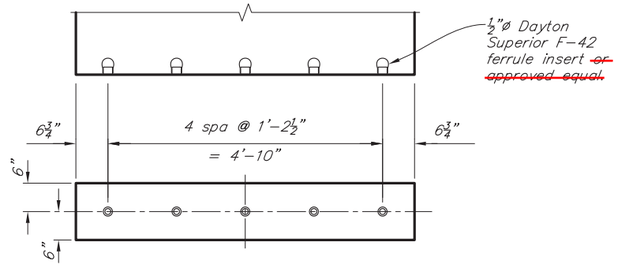
0 3 6 9 1'-0" Inches



LUMINAIRE BRACKET INSERTS

6 0 1 In. Feet

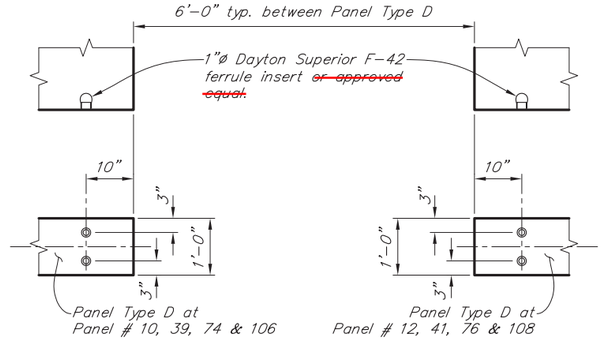
Panel Type C at Panel # 9,
Panel Type H at Panel # 32,
Panel Type B at panel # 56 & 79
Panel Type G at panel # 103



PANEL END INSERT LOCATIONS

12 6 0 1 2 3 In. Feet

Panel Type B at Panel # 40, 75, & 107
Panel Type E at Panel # 11



PANEL END INSERT LOCATIONS: OVERHANG EDGE PLATE

12 6 0 1 2 3 In. Feet

Note: Inserts are for Overhang Edge Plate that spans between Panel Type D at Utility Platform Locations. See "DECK PANEL OVERHANG PLAN" Dwg. and "OVERHANG EDGE PLATE DETAILS" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng. Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH FELLOW DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

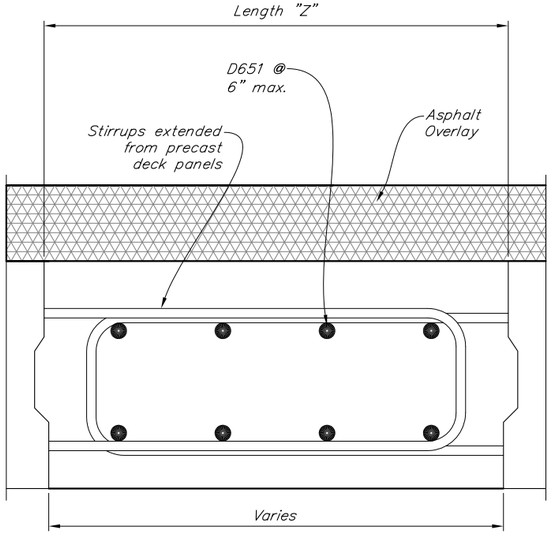
WATER STREET

DECK PANEL DETAILS 2

BRIDGE NO. 0446
DWG. NO. 57

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\danset ado\&pn\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL DETAILS 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N58	N110



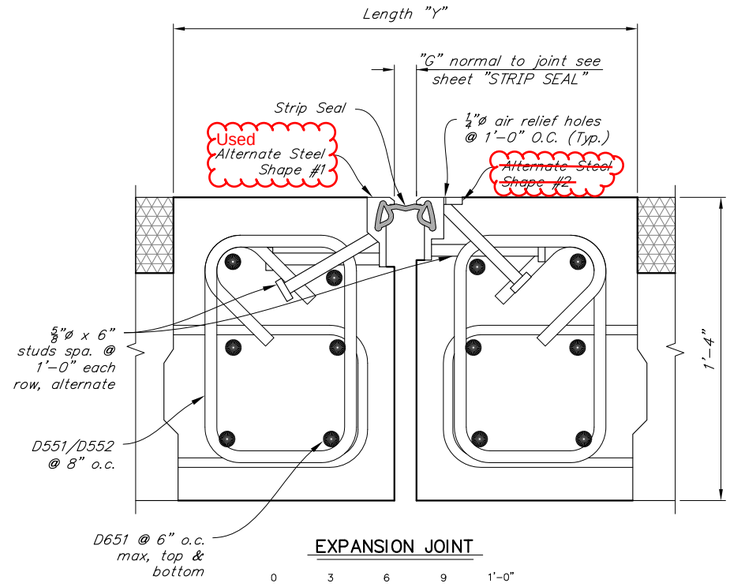
TRANSVERSE CLOSURE POUR

0 3 6 9 1'-0"
Inches

TRANSVERSE CLOSURE POUR WIDTH		
STATION	*LENGTH "Z"	PANELS
12+42	2'-6⅜"	A-A
13+59	2'-1⅜"	F-G

EXPANSION JOINT WIDTH		
STATION	*LENGTH "Y"	PANELS
12+29	1'-0"	A
13+51	2'-0"	F-F
14+48	2'-6¼"	I-G
16+16	2'-0"	K-K
17+44	2'-6⅛"	I-G
18+53	2'-8½"	I-G
19+26	1'-0"	A

* The Transverse Closure Pour and Expansion Joint widths listed are the ideal spacing. Final spacing may vary slightly, see Section 674 for placement tolerances.



EXPANSION JOINT

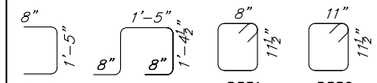
0 3 6 9 1'-0"
Inches

Recess front face of the Strip Seal channel so the top front edge of the channel aligns with the face of the Deck Panel

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
D404	E	4	32	2'-9"	bent
D501	E	5	32	5'-6"	bent
D551	E	5	234	4'-3"	bent
D552	E	5	234	4'-9"	bent
D651	E	6	88	25'-2"	–

BENDING DIAGRAM

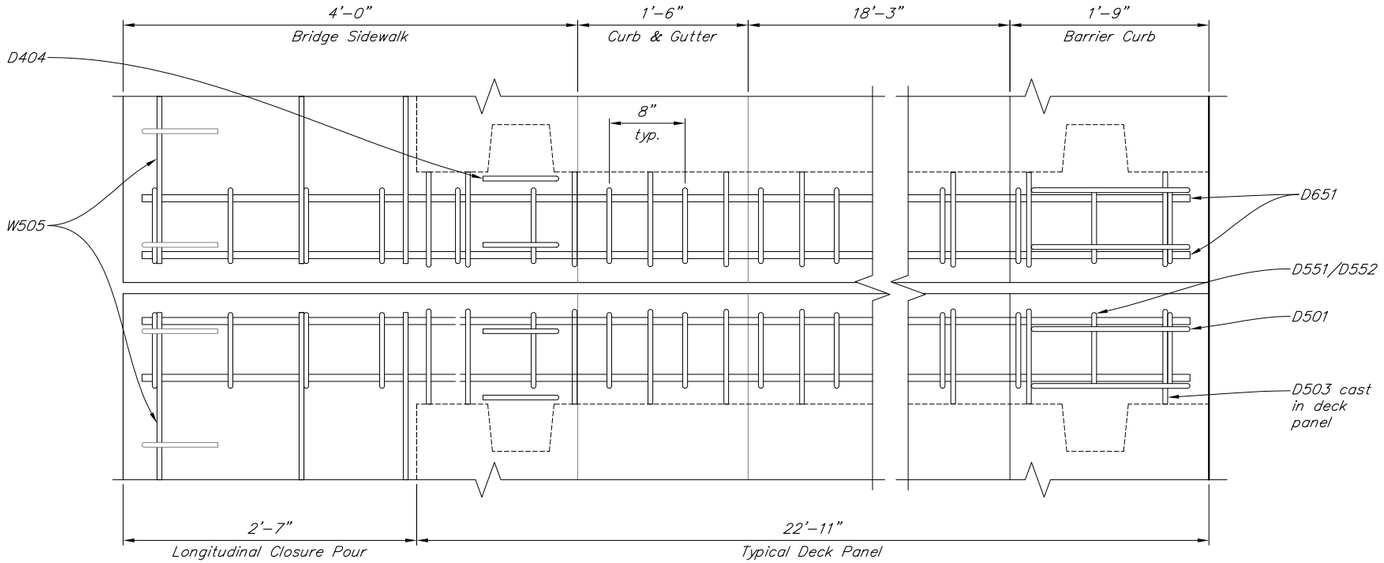


E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

Include D403 & D501 curb bars as needed

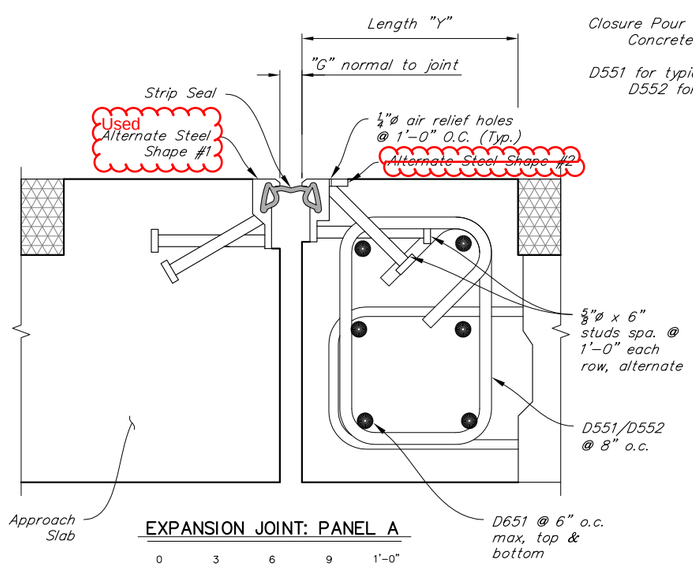
Closure Pour & Expansion Joint: Class A-A Concrete

D551 for typical width expansion joints, D552 for wider expansion joints.



PLAN: EXPANSION JOINT

6 0 1
In. Feet



EXPANSION JOINT: PANEL A

0 3 6 9 1'-0"
Inches

Recess Strip Seal so the front edge of the strip aligns with the face of the Deck Panel

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
9/5/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

DECK PANEL DETAILS 3

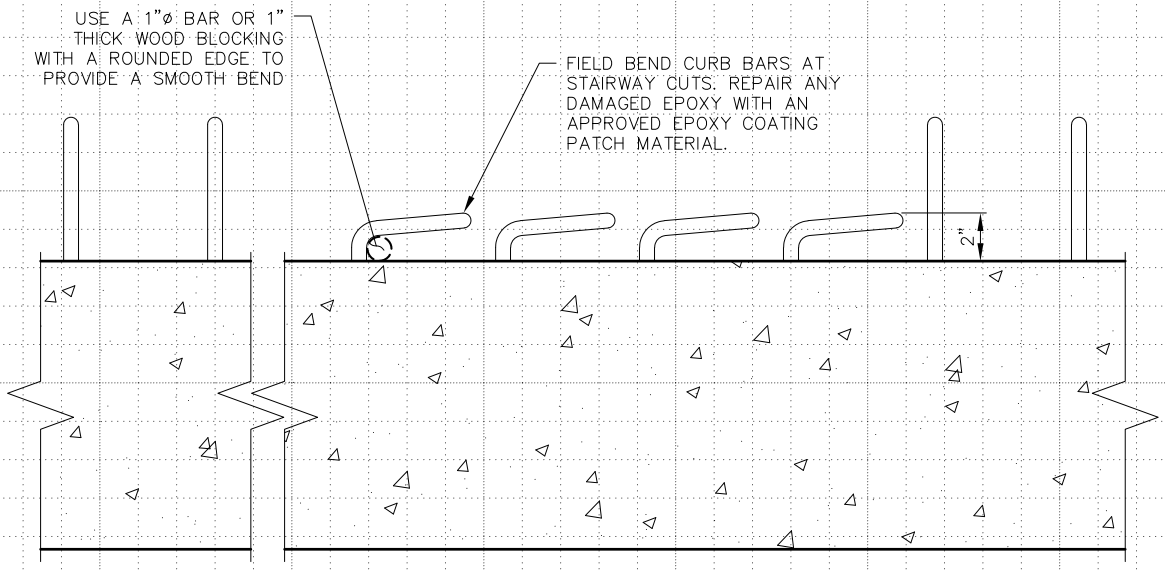
BRIDGE NO. 0446
DWG. NO. 58

Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\danset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: DECK PANEL DETAILS 3

SHEARER DESIGN LLC
Bridge Design, Construction Engineering, Infrastructure Aesthetics

SHEET N58A 1 OF 1
JOB NO. 0278
DATE 9/20/18
COMPUTED BY BJL
CHECKED BY DRS

PROJECT WATER STREET #2
SUBJECT RFI 199 - CURB REBAR ISSUE AT PRECAST PANELS 1 & 18



CURB REBAR AT STAIR ACCESS POINTS

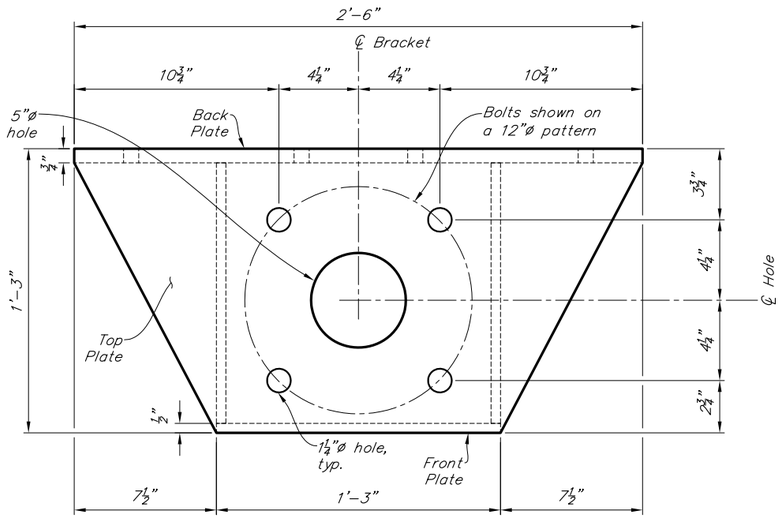
Scale: 3" = 1'-0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

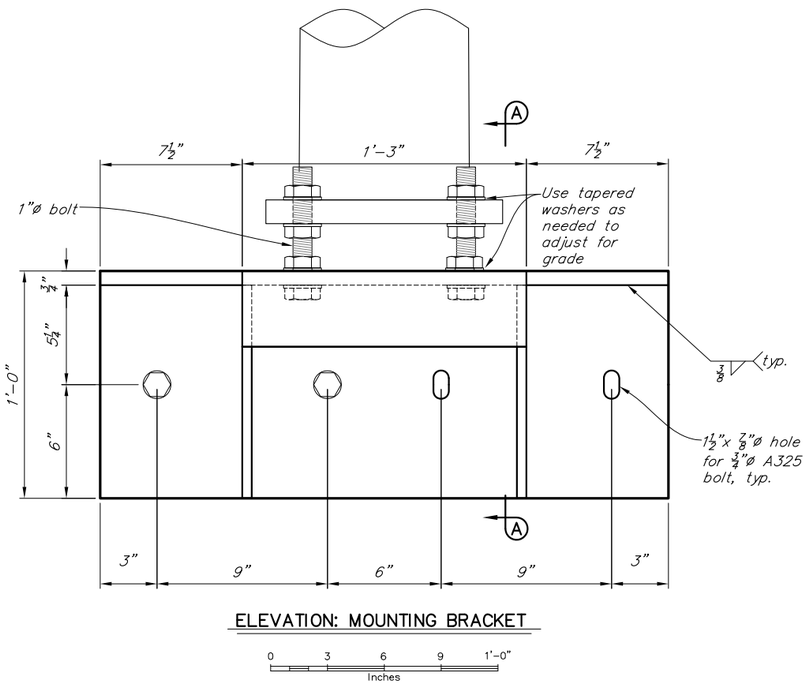
AB As-Built Set

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N59	N110



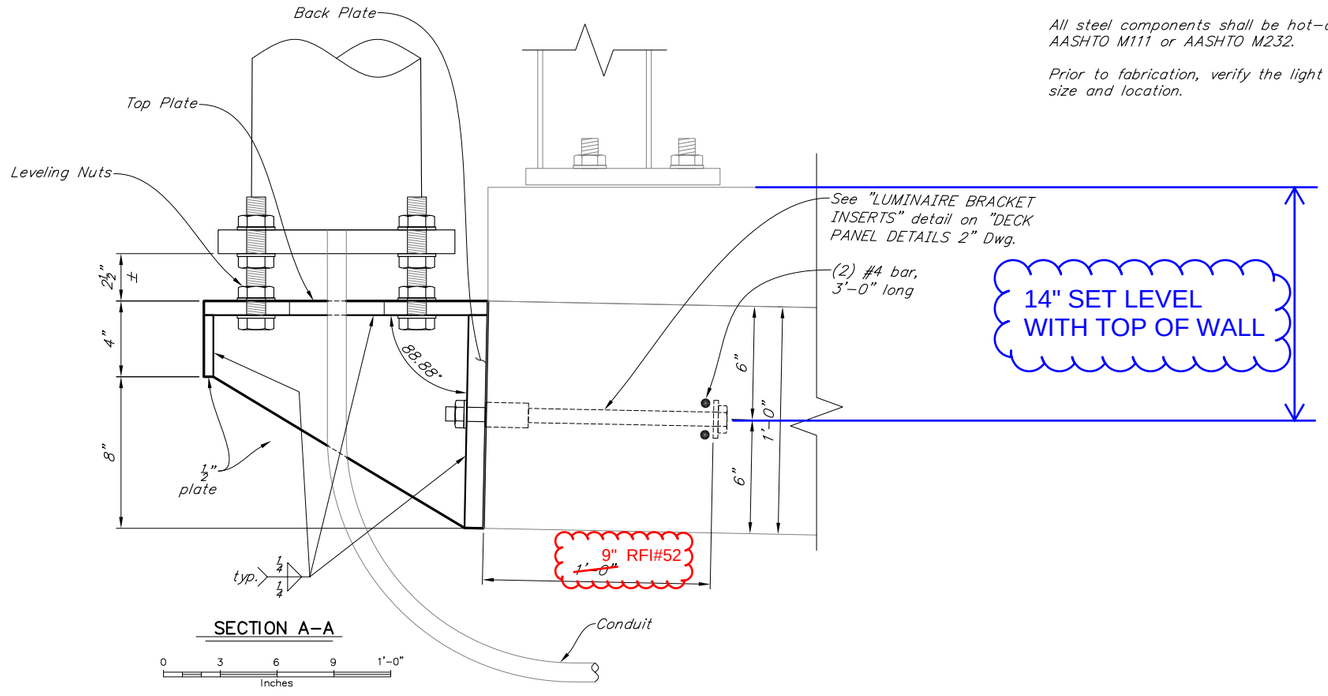
PLAN: MOUNTING BRACKET

0 3 6 9 1'-0"
Inches



ELEVATION: MOUNTING BRACKET

0 3 6 9 1'-0"
Inches



SECTION A-A

0 3 6 9 1'-0"
Inches

CONSTRUCTION NOTES

Structural Steel plates..... ASTM A709 grade 36
Bolts, nuts & washers ..... AASHTO M164

All steel components shall be hot-dip galvanized per AASHTO M111 or AASHTO M232.

Prior to fabrication, verify the light pole anchor bolt size and location.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

WATER STREET BRIDGE No. 2

WATER STREET

LUMINAIRE MOUNTING BRACKET

BRIDGE NO. 0446
DWG. NO. 59

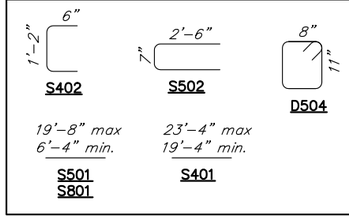
Oct 14, 2015 - 3:49pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_TRESTLE DECK PANELS.dwg Layout Name: LUMINARE MOUNTING BRACKET

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N60	N110

REINFORCING STEEL

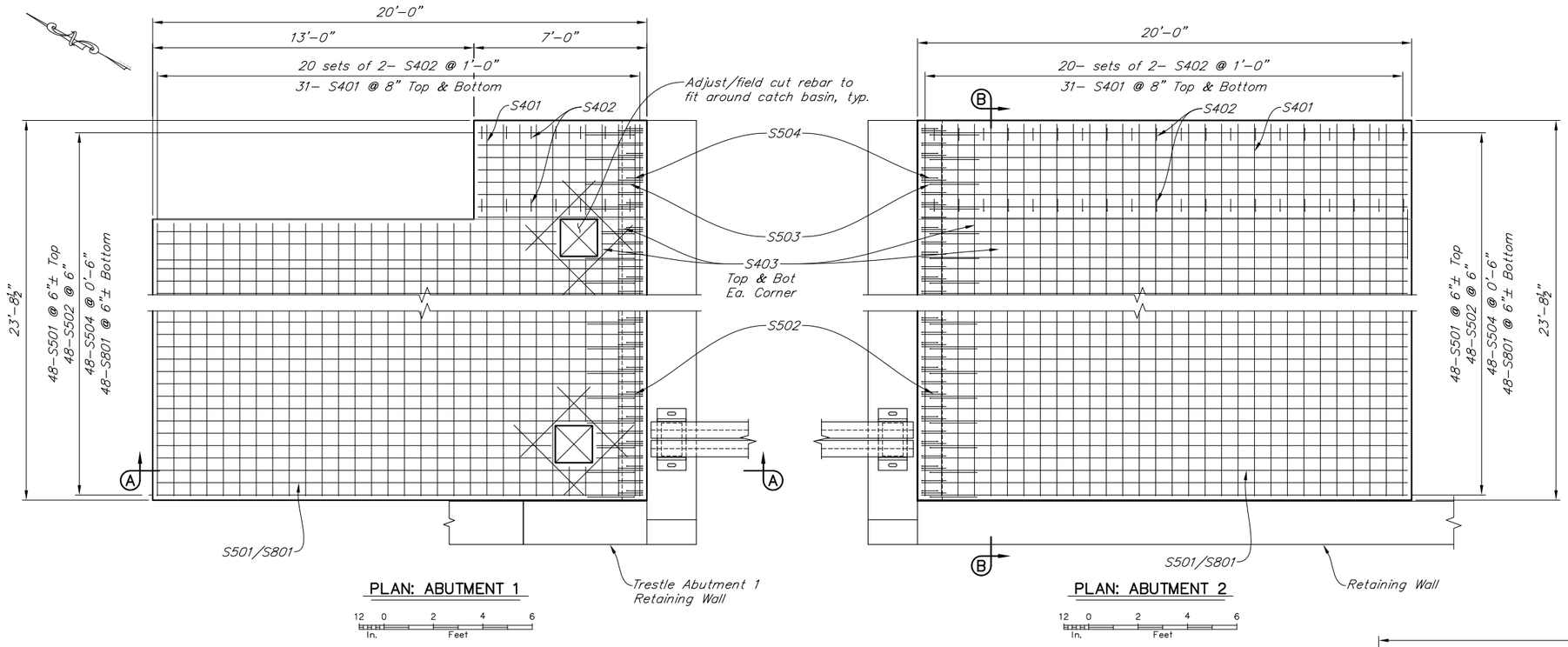
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S401	E	4	124	varies	–
S402	E	4	80	2'-2"	bent
S403	E	4	16	4'-0"	–
S501	E	5	96	varies	–
S502	E	5	96	5'-7"	bent
S504	E	5	96	3'-8"	bent
S601	E	6	4	23'-6"	–
S801	E	8	96	varies	–

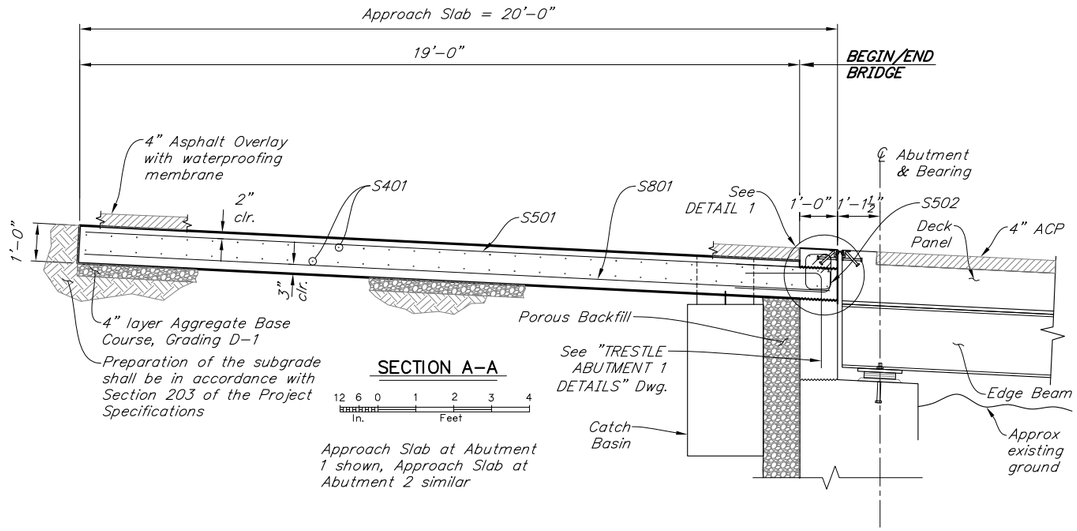
BENDING DIAGRAM

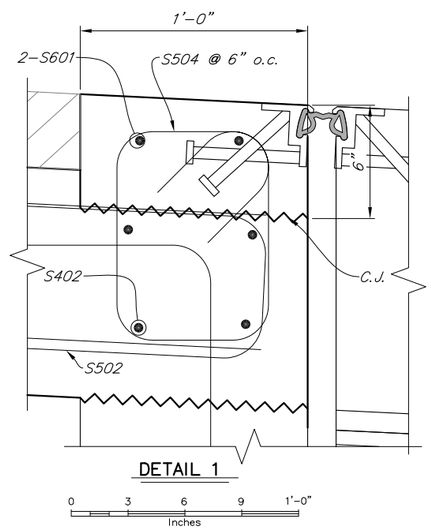


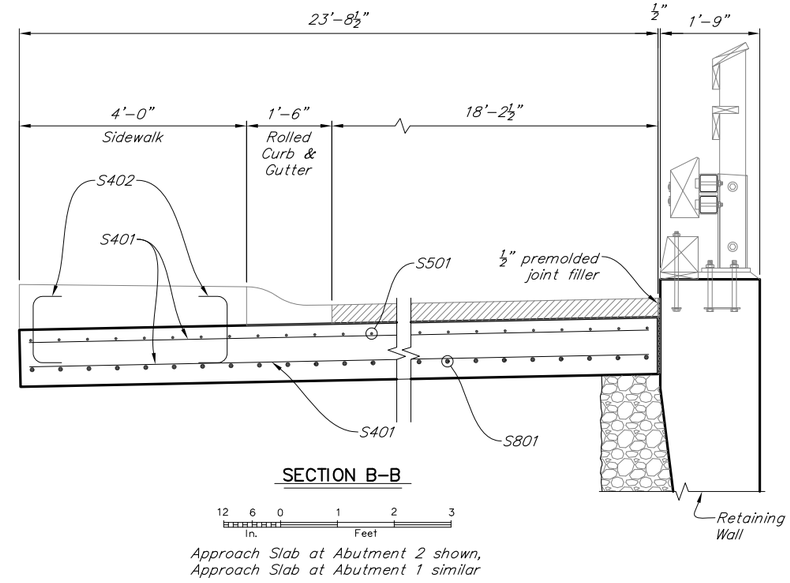
E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.

Class A-A Concrete









DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB | As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 09/5

WATER STREET BRIDGE No. 2

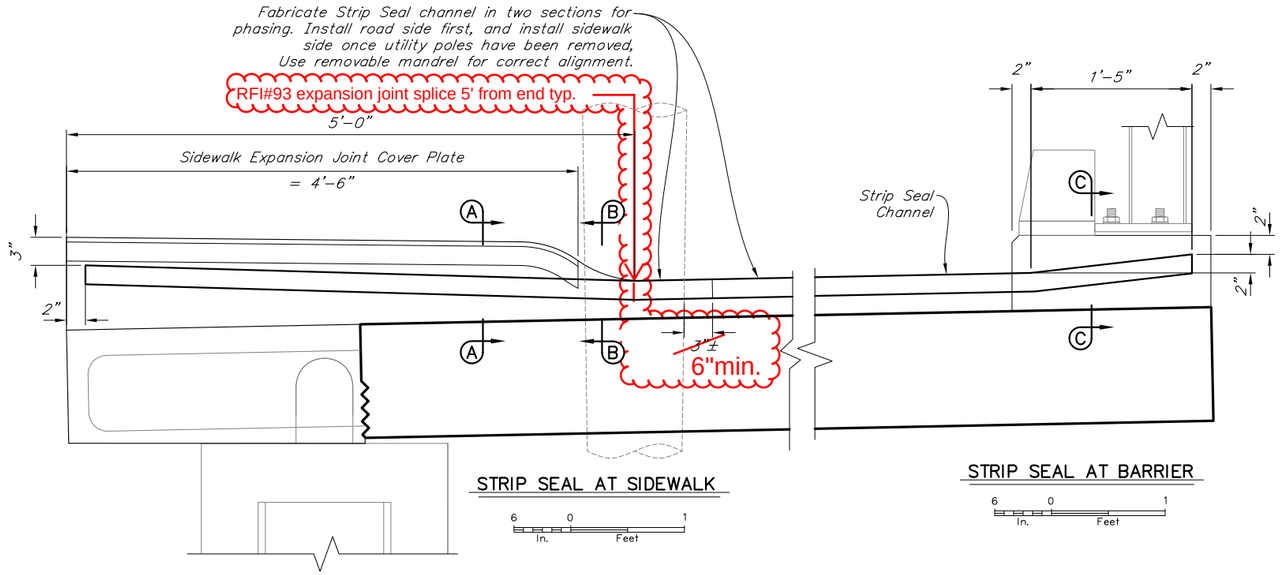
WATER STREET

TRESTLE APPROACH SLAB

BRIDGE NO. 0446
DWG. NO. 60

Oct 14, 2015 - 3:49pm bklen \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N APPROACH SLAB.dwg Layout Name: TRESTLE APPROACH SLAB

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N61	N110

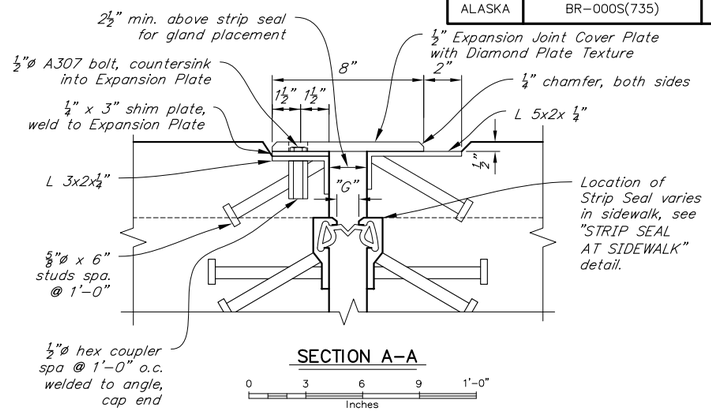


STRIP SEAL AT SIDEWALK

6 0 1
In. Feet

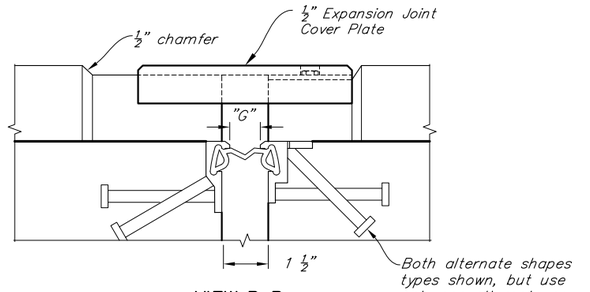
STRIP SEAL AT BARRIER

6 0 1
In. Feet



SECTION A-A

0 3 6 9 1'-0"
Inches



VIEW B-B

0 3 6 9 1'-0"
Inches

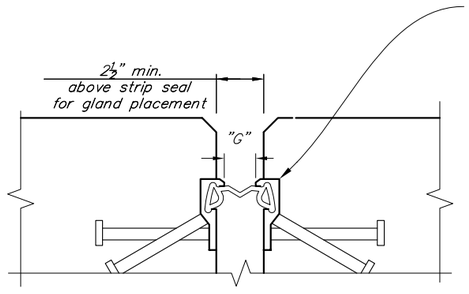
Manufacturer	Item Name	Opening "G" Normal to Joint					
		Min.	Max.	Min. Installation Width	@40°F	@64°F	@80°F
D.S. Brown	DSB Strip Seal A2R-400	½"	4½"	1½"	1.95	1.75	1.62
~~Watson Bowman~~	~~WABO Strip Seal SE-300~~	~~0"~~	~~3"~~	~~1½"~~	~~1.95~~	~~1.75~~	~~1.62~~
~~R. J. Watson, Inc~~	~~RJ Strip Seal 300~~	~~0"~~	~~3"~~	~~1½"~~	~~1.95~~	~~1.75~~	~~1.62~~
~~Fyfe Co. LLC~~	~~Tyfo Strip Seal FS400~~	~~¼"~~	~~4¾"~~	~~1½"~~	~~1.95~~	~~1.75~~	~~1.62~~

STEEL SHAPE TYPES

Manufacturer	Item Name	S/T			V/W			X/Y		
		TYPE	S	T	TYPE	V	W	TYPE	X	Y
D.S. Brown	DSB Strip Seal	SSCM2	1¼"	3¾"	~~SSA2, *~~	~~1¼"~~	~~2"~~	~~SSE2, *~~	~~1"~~	~~1½"~~
~~Watson Bowman~~	~~WABO Strip Seal~~	~~M, R, P~~	~~2¾"~~	~~3¼"~~	~~A~~	~~1¼"~~	~~2"~~	~~E~~	~~1½"~~	~~1½"~~
~~R. J. Watson, Inc~~	~~RJ Strip Seal~~	~~RJM~~	~~2¾"~~	~~3¼"~~	~~RJA~~	~~1¼"~~	~~2"~~	~~RJE~~	~~1¼"~~	~~1½"~~
~~Fyfe Co. LLC~~	~~Tyfo Strip Seal~~	~~C~~	~~2½"~~	~~3"~~	~~A~~	~~1¼"~~	~~2"~~	~~E~~	~~1⅜"~~	~~1½"~~

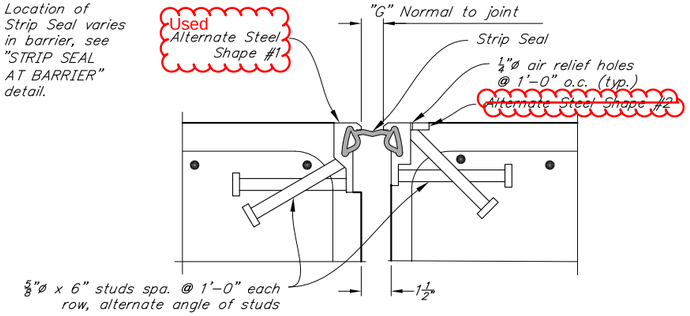
Do not use steel shapes with horizontal legs in curb or barrier region

* Trim vertial leg of SSCM2 shape for use in traffic barrier



SECTION C-C

0 3 6 9 1'-0"
Inches



STRIP SEAL

See "EXPANSION JOINT LAYOUT" Dwg. for plan view.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH — DAVID R. SHEARER CE 8373 — 10/1/15 — Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

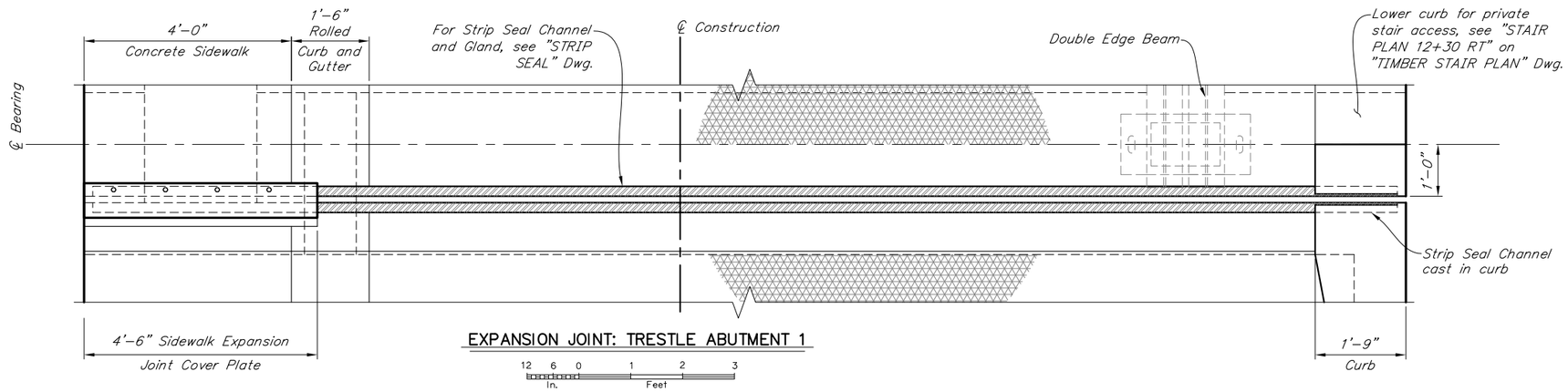
STRIP SEAL

BRIDGE NO. 0446

DWG. NO. 61

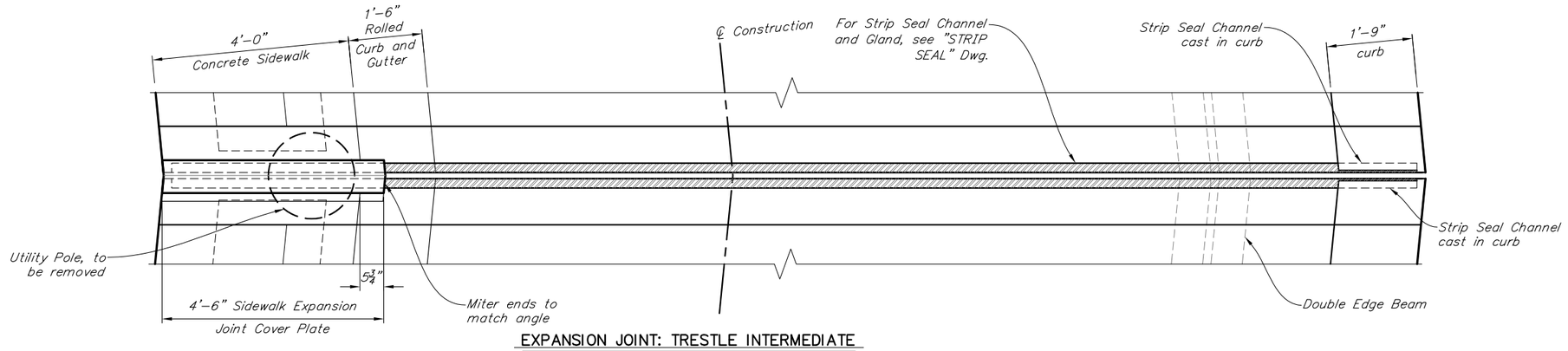
Oct 14, 2015 - 3:49pm brien \\sheareserver\jobs\0226 water street ps&e\DWG\planset addit&ptf\69534_N STRIP SEAL.dwg Layout Name: STRIP SEAL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N62	N110



EXPANSION JOINT: TRESTLE ABUTMENT 1

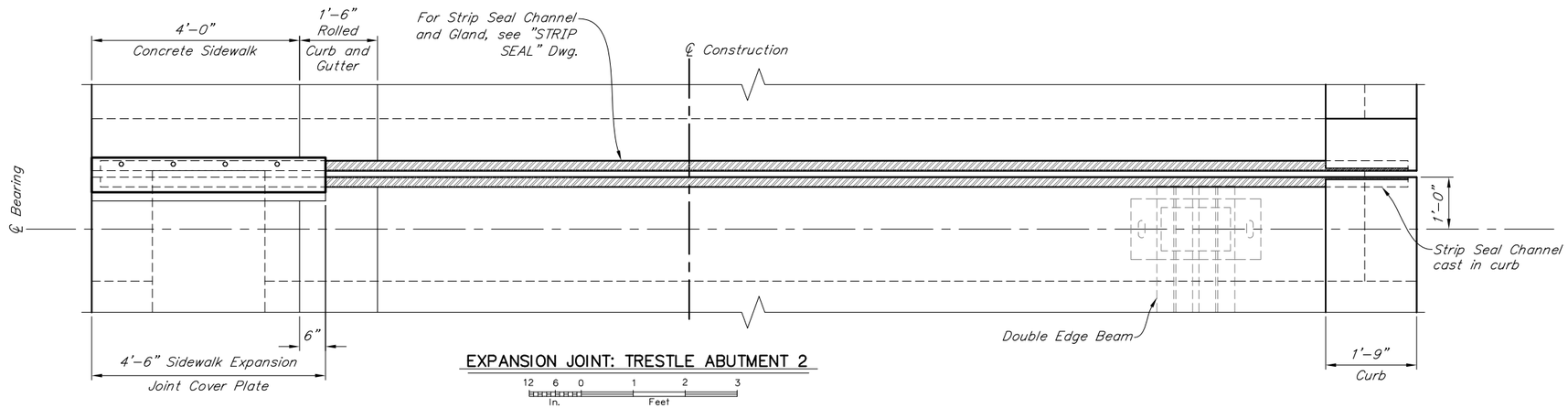
12 6 0 1 2 3
In. Feet



EXPANSION JOINT: TRESTLE INTERMEDIATE

12 6 0 1 2 3
In. Feet

Shown at sta. 16+16, other interior expansion joints similar.



EXPANSION JOINT: TRESTLE ABUTMENT 2

12 6 0 1 2 3
In. Feet

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/4/15

WATER STREET BRIDGE No. 2

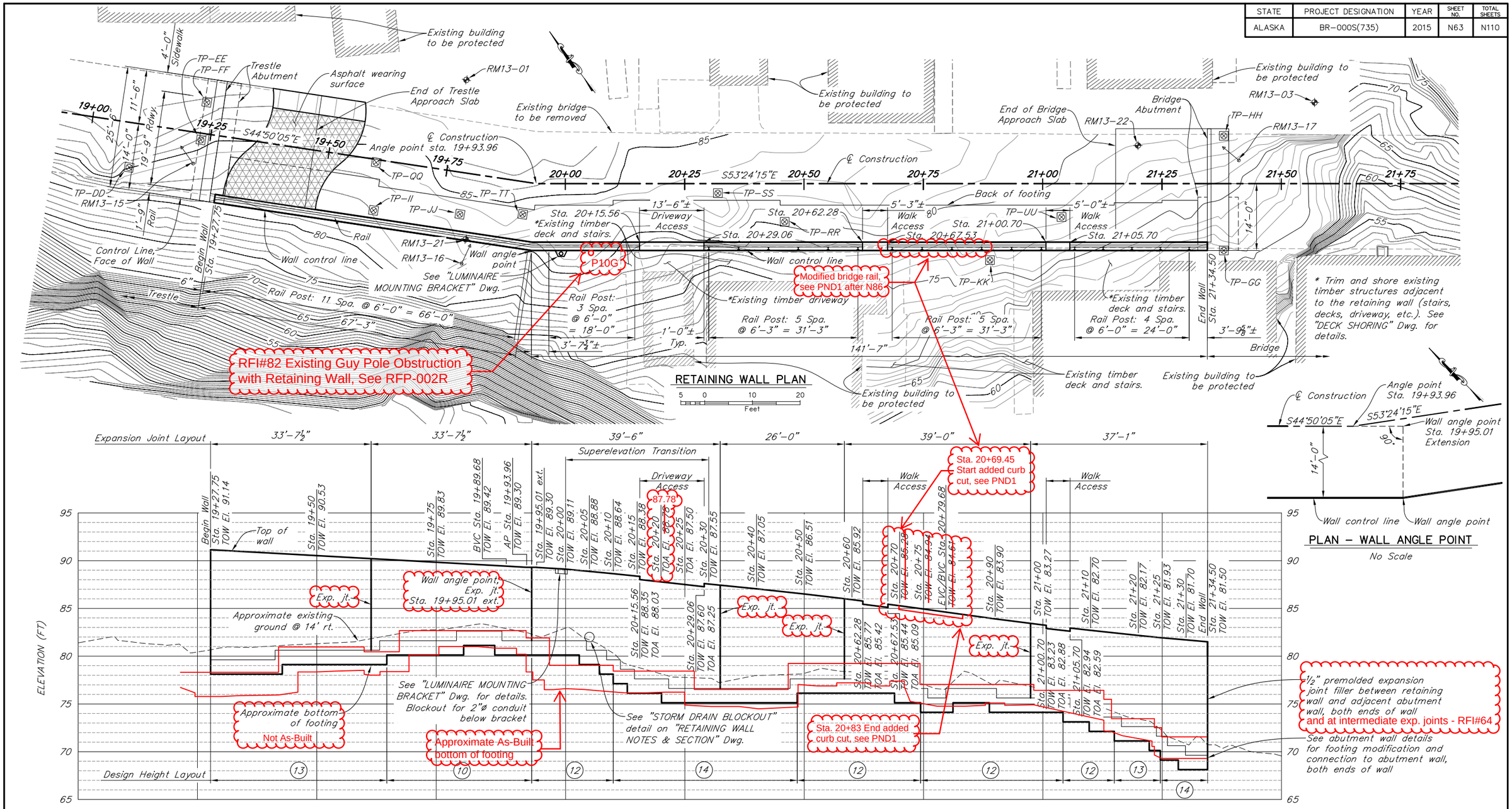
WATER STREET

EXPANSION JOINT LAYOUT

BRIDGE NO. 0446
DWG. NO. 62

Oct 14, 2015 - 3:49pm brlen \\SHEARERSERVER\ID-Drive\Jobs\0226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534_N TRESTLE ABUTMENTS.dwg Layout Name: EXPANSION JOINT LAYOUT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N63	N110



Notes:

Contractor may adjust expansion joint locations, except at the wall angle point, such that the joint spacing is no less than 25'–0" and no more than 48'–0" in order to accommodate footing step layout based on actual sound rock elevations, upon approval of the Engineer.

TOW = Top of Wall

TOA = Top of Access

Rail not shown for clarity on Retaining Wall Elevation. See "RETAINING WALL PLAN" for post layout. See "STEEL AND TIMBER BRIDGE RAILING" Dwgs. for details.

(#) Indicates design wall height "H" for selecting reinforcing steel. These heights are for reference only. Actual wall heights will depend on actual bottom of footing elevations. Wall footing is shown stepped but may be sloped where the foundation grade is 6H:1V or shallower. The contractor shall excavate to sound rock and submit shop drawings for approval which shall include all relevant construction information, including bottom of footing elevations, wall height, and wall reinforcement in accordance with these plans and the specifications.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Robert Doherty	CHECKED: David Shearer		
DRAWN BY: Robert Doherty	CHECKED: David Shearer		
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer		

Be advised, there is a bank of telecom. and electrical conduit running down the length of the wall, generally located about 1' to 6' from inside face of wall. At Parnell St. under Water St. there are additional conduit crossing from P10 to the bank. Also at Parnell St. are lateral storm, sewer, and water pipes resulting in a very complex and congested underground utility network at this junction.

AB

As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · Registered Professional Engineer · 10/4/15

WATER STREET BRIDGE No. 2

WATER STREET

RETAINING WALL LAYOUT

BRIDGE NO. 0446

DWG. NO. 63

Oct 14, 2015 - 3:50pm bvlen \\sheareserver\jobs\02226 water street pss&e\DWG\planset ado\&pf\f69534 RETAINING WALL DETAILS.dwg Layout Name: RETAINING WALL LAYOUT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N64	N110

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2012 6th Edition, with latest interim specifications.

CONSTRUCTION SPECIFICATION: ..... The Bridge Engineering Specifications shall be governed by the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2004.

DEAD LOAD:..... Concrete unit weight = 160 pcf
Soil unit weight = 135 pcf
Ashpalt wearing surface unit weight = 140 pcf

LIVE LOAD SURCHARGE:..... Equivalent height of 2 feet of soil. Lateral pressure uniformly distributed

SOIL LATERAL PRESSURE:..... Wall design for at-rest lateral pressure, ko = 0.44

FOUNDATION PARAMETERS:..... Wall footing founded on rock
Nominal bearing resistance = 25 ksf
Friction angle for sliding stability = 30°, Passive resistance is neglected

SEISMIC PARAMETERS:..... Wall design for at-rest seismic lateral pressure, Koe = 0.36
Horizontal seismic acceleration coefficient, kh = 0.1

VEHICULAR COLLISION:..... Wall design for Test Level 3 (TL-3)
Collision forces are distributed at a 45° angle into the wall from the edge of the rail post base plate. The maximum distribution width is equal to the minimum expansion joint spacing of 25 feet.

ROCK ANCHORS:..... ASTM A722, Grade 150 ksi
Grout-rock nominal bond strength = 25 ksf

RESISTANCE FACTORS:..... Bearing Resistance
Strength = 0.55
Service = 1.00
Extreme Event = 0.80
Rock Anchor Bond
Strength = 0.50
Service = 1.00
Extreme Event = 1.00
Lateral Sliding
Strength = 1.00
Service = 1.00
Extreme Event = 0.90

REINFORCEMENT:..... ASTM A706, fy = 60,000 psi
Space reinforcing steel evenly unless otherwise noted. Reinforcement is not drawn to scale for clarity. Epoxy coat reinforcement where noted.

CONCRETE:..... CLASS A, f'c = 4,000 psi, unless noted otherwise

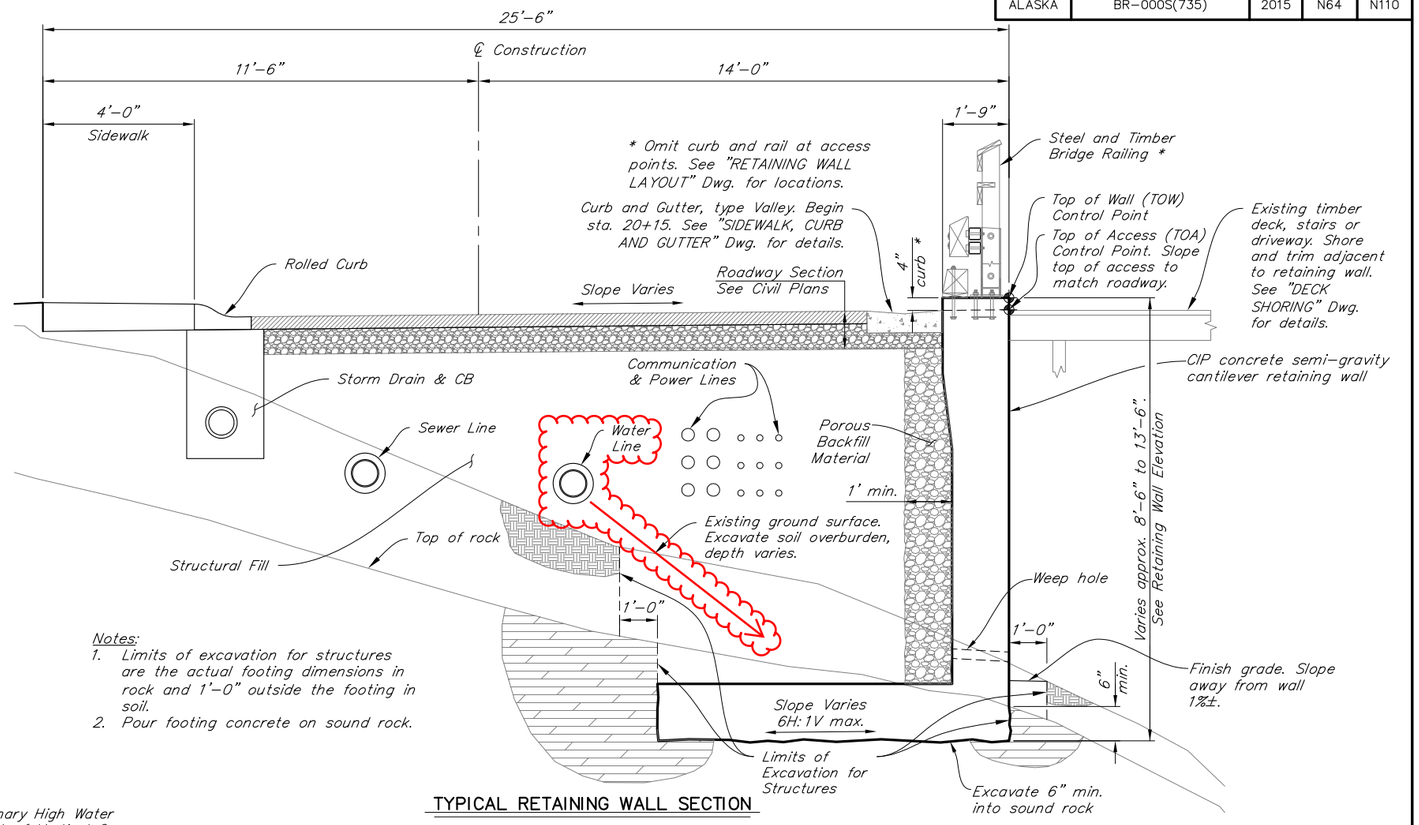
NOTE:
Unless otherwise shown in the plans, the concrete cover measured from the face of the concrete to the face of any reinforcing steel shall be 2 inches. ¾ inch chamfer on all exposed edges.

All dimensions on these drawing shall take precedence over indicated scale. Drawings shall not be scaled for construction purposes. No length or shape is implied unless it is dimensioned.

℄	= Centerline	Clr.	= clear, clearance	H.S.	= high strength	O.H.W.	= Ordinary High Water
ℙ	= Plate	Col.	= Column	Kip	= 1,000 lb.	PVC	= Point of Vertical Curve
&	= and	CY	= cubic yard	Lb	= pound	PVI	= Point of Vertical Intersection
@	= at	Dia	= Diameter	LF	= linear foot	PVT	= Point of Vertical Tangent
ø	= diameter	Dwg.	= drawing	LS	= lump sum	Rt.	= right
Approx.	= approximate	Ea	= each	Lt.	= left	Sch.	= schedule
Abut.	= Abutment	Elev.	= elevation	max.	= maximum	Spa.	= space, spaces
bot.	= bottom	E.F.	= each face	min.	= minimum	Sta.	= station
Br.	= Bridge	E.W.	= each way	n.a.	= not applicable	Str.	= straight
btwn.	= between	F.F.	= far face	n.c.	= not calculated	Symm.	= symmetric
Brg.	= Bearings	Galv.	= galvanize, galvanized	n.f.	= near face	Typ.	= typical
C.I.P.	= cast in place	Hwy.	= highway	No.	= number		

RETAINING WALL BASIS OF ESTIMATE

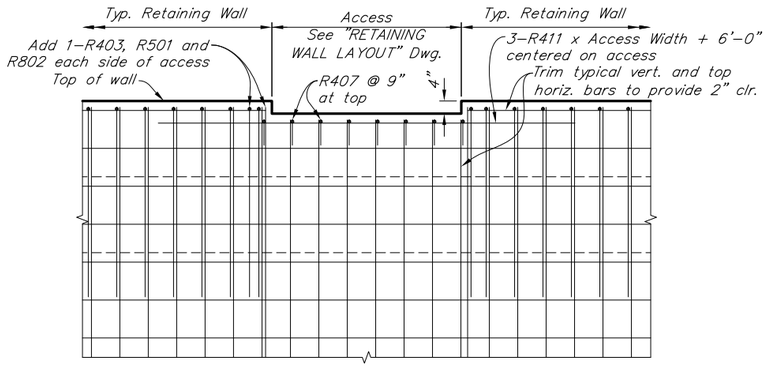
ITEM NO.	ITEM	PAY UNIT	EST. UNIT	SUBST.	SUPERST.	TOTAL
202(13)	Removal of Existing Bridge No. 446	LS	SF	–	4,962	4,962
205(1)	Excavation For Structures	CY	CY	~~227~~ ← 139.48 →		~~227~~
205(3)	Structural Fill	CY	CY	~~1,015~~ ← 1,137.20 →		~~1,015~~
205(4)	Porous Backfill Material	CY	CY	~~76~~ ← 57.62 →		~~76~~
205(5)	Excavation For Structures (Rock)	CY	CY	~~93~~ ← 298 →		~~93~~
401(1)	Asphalt Concrete, Type II; Class B	Tons	Tons	–	+/- 76	+/- 76
501(3)	Class A Concrete	CY	CY	~~224~~ ← 268.70 →		~~224~~
503(1)	Reinforcing Steel	LBS	LBS	~~37,400~~ ← 38,751.01 →		~~37,400~~
503(2)	Epoxy-Coated Reinforcing Steel	LBS	LBS	5,169.01 →	~~3,400~~	~~3,400~~
507(7)	Steel And Timber Bridge Railing	LF	LF	–	~~185~~ ~170	~~185~~ ~170
673(8)	Retaining Wall Anchor	EA	EA	~~26~~ 25	–	~~26~~ 25



Notes:
1. Limits of excavation for structures are the actual footing dimensions in rock and 1'-0" outside the footing in soil.
2. Pour footing concrete on sound rock.

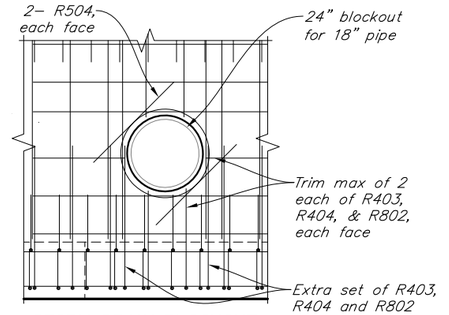
TYPICAL RETAINING WALL SECTION

12 6 0 1 2 3 4
In. Feet



PARTIAL ELEVATION AT ACCESS

12 6 0 1 2 3 4
In. Feet



STORM DRAIN BLOCKOUT

12 6 0 1 2 3 4
In. Feet

DESIGNED BY: Robert Doherty — CHECKED: David Shearer
DRAWN BY: Robert Doherty — CHECKED: David Shearer
QUANTITIES BY: Robert Doherty — CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/4/15

WATER STREET BRIDGE No. 2

WATER STREET

RETAINING WALL NOTES & SECTION

BRIDGE NO. 0446

DWG. NO. 64

Oct 14, 2015 - 3:56pm brien \\shearerserver\jobs\02226 water street pss&e\DWG\gdanset adot&pf\69534 RETAINING WALL DETAILS.dwg Layout Name: RETAINING WALL NOTES & SECTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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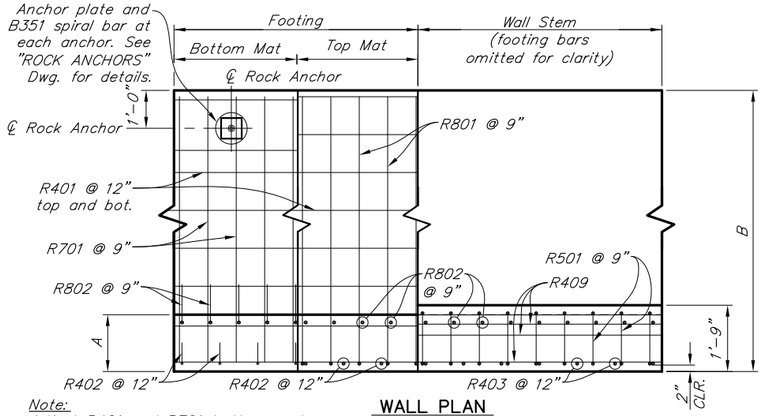
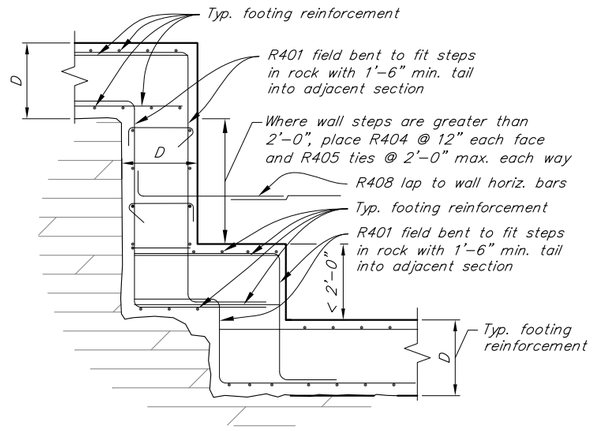


Note:
Adjust R401 and R701 bottom mat bars to avoid conflict with R407, R410 and R601 bars at rock anchors.

WALL PLAN

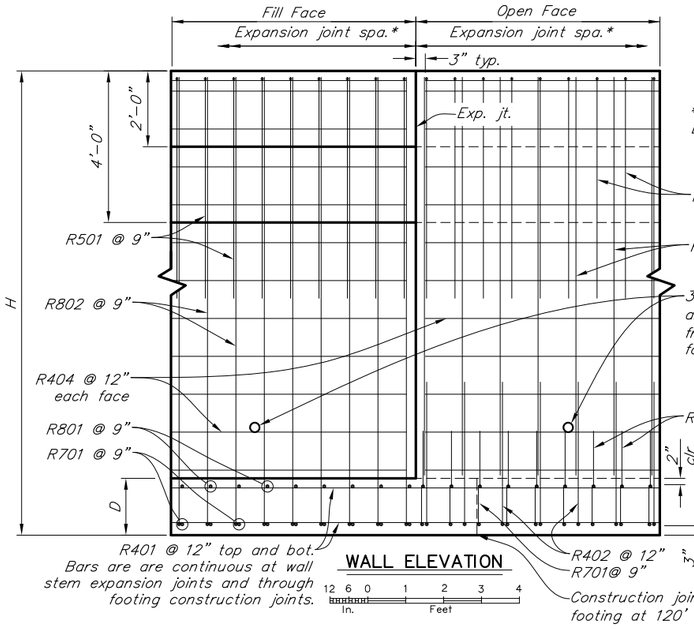
12 6 0 1 2 3 4
In. Feet



FOOTING STEP DETAIL

12 6 0 1 2 3 4
In. Feet

Wall reinforcing not shown for clarity



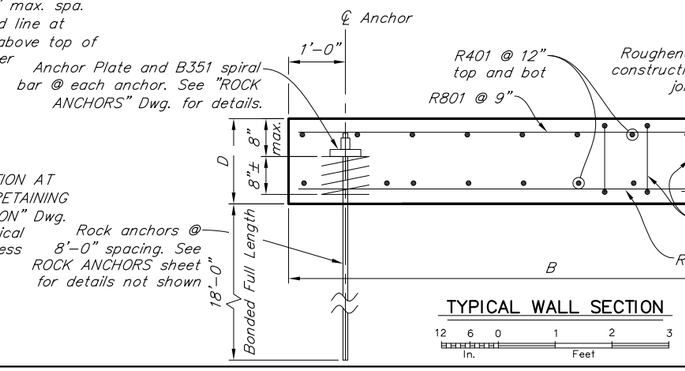
* See "RETAINING WALL LAYOUT" Dwg. for joint spacing

3" dia. weep holes at 12' max. spa. and 6" above final ground line at front face of wall or 6" above top of footing, whichever is higher

Note:
See "PARTIAL ELEVATION AT ACCESS" detail on "RETAINING WALL NOTES & SECTION" Dwg. for alterations to typical reinforcement at access locations.

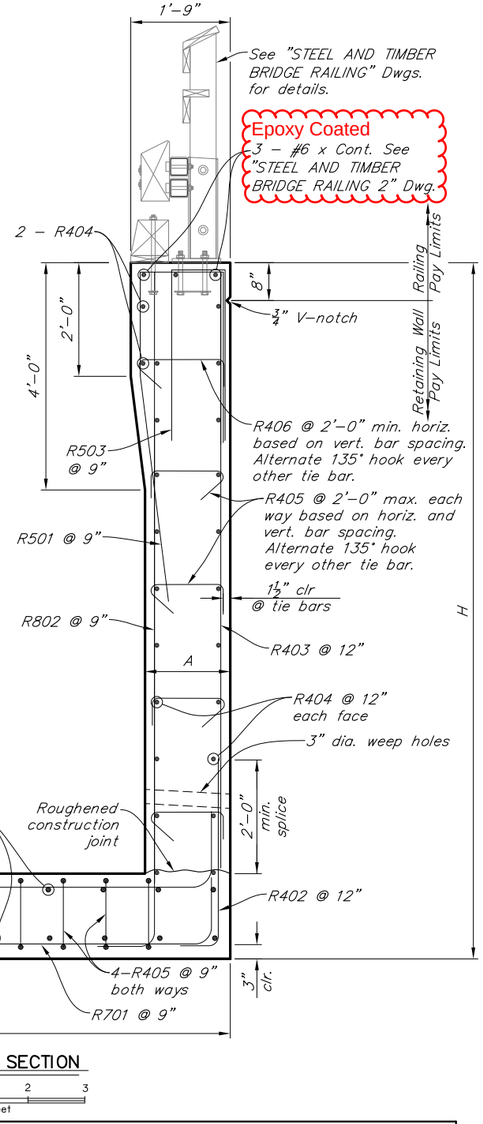
WALL ELEVATION

12 6 0 1 2 3 4
In. Feet



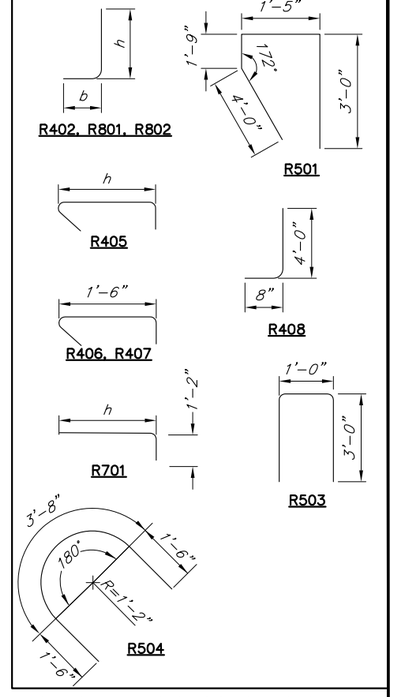
TYPICAL WALL SECTION

12 6 0 1 2 3
In. Feet



REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
R401	S,X,F	4	–	Cont.	–
R402	–	4	–	Var.	bent
R403	–	4	–	Var.	–
R404	S	4	–	Cont.	–
R405	–	4	–	Var.	bent
R406	–	4	–	2'-3"	bent
R407	E	4	–	2'-3"	bent
R408	–	4	–	4'-8"	bent
R411	E	4	–	Var.	–
R501	E	5	–	10'-2"	bent
R503	E	5	–	7'-0"	bent
R504	–	5	4	6'-8"	bent
R701	–	7	–	Var.	–
R801	–	8	–	Var.	bent
R802	–	8	–	Var.	bent



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.

WALL HT	DIMENSIONS			REINFORCING STEEL																	
				R402				R403		R405			R701		R801				R802			
H	B	D	A	SIZE	LENGTH	h	b	SIZE	LENGTH	SIZE	LENGTH	h	SIZE	h	SIZE	LENGTH	h	b	SIZE	LENGTH	h	b
8'	6'-0"	1'-6"	1'-6"	#4	4'-6"	3'-9"	8"	#4	6'-5"	#4	2'-0"	1'-3"	#7	5'-8"	#8	7'-2"	5'-8"	1'-6"	#8	8'-11"	7'-7"	1'-4"
9'	~~6'-3"~~	1'-6"	1'-6"	#4	4'-6"	3'-9"	8"	#4	7'-5"	#4	2'-0"	1'-3"	#7	5'-11"	#8	7'-5"	5'-11"	1'-6"	#8	9'-11"	8'-7"	1'-4"
10'	~~6'-9"~~	1'-6"	1'-6"	#4	4'-6"	3'-9"	8"	#4	8'-5"	#4	2'-0"	1'-3"	#7	6'-5"	#8	7'-11"	6'-5"	1'-6"	#8	10'-11"	9'-7"	1'-4"
11'	~~7'-3"~~	1'-6"	1'-6"	#4	4'-6"	3'-9"	8"	#4	9'-5"	#4	2'-0"	1'-3"	#7	6'-11"	#8	8'-5"	6'-11"	1'-6"	#8	11'-11"	10'-7"	1'-4"
12'	~~7'-9"~~	1'-6"	1'-6"	#4	4'-6"	3'-9"	8"	#4	10'-5"	#4	2'-0"	1'-3"	#7	7'-5"	#8	8'-11"	7'-5"	1'-6"	#8	12'-11"	11'-7"	1'-4"
13'	~~8'-3"~~	1'-6"	1'-6"	#4	4'-6"	3'-9"	8"	#4	11'-5"	#4	2'-0"	1'-3"	#7	7'-11"	#8	9'-5"	7'-11"	1'-6"	#8	13'-11"	12'-7"	1'-4"
14'	8'-9"	1'-9"	1'-9"	#4	4'-8"	4'-0"	8"	#4	12'-2"	#4	2'-3"	1'-6"	#7	8'-5"	#8	9'-11"	8'-5"	1'-6"	#8	14'-11"	13'-7"	1'-4"
15'	9'-3"	1'-9"	1'-9"	#4	4'-8"	4'-0"	8"	#4	13'-2"	#4	2'-3"	1'-6"	#7	8'-11"	#8	10'-5"	8'-11"	1'-6"	#8	15'-11"	14'-7"	1'-4"
16'	9'-9"	2'-0"	2'-0"	#4	4'-11"	4'-3"	8"	#4	13'-11"	#4	2'-6"	1'-9"	#7	9'-5"	#8	10'-11"	9'-5"	1'-6"	#8	16'-11"	15'-7"	1'-4"

RFI#80
B = 7'-0"
B = 7'-0"
B = 8'-0"
B = 8'-0"
B = 8'-0"

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

RETAINING WALL DETAILS

BRIDGE NO. 0446
DWG. NO. 65

Oct 14, 2015 - 3:57pm brien \\SHEARERSERVER\Jobs\0226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534 RETAINING WALL DETAILS.dwg Layout Name: RETAINING WALL DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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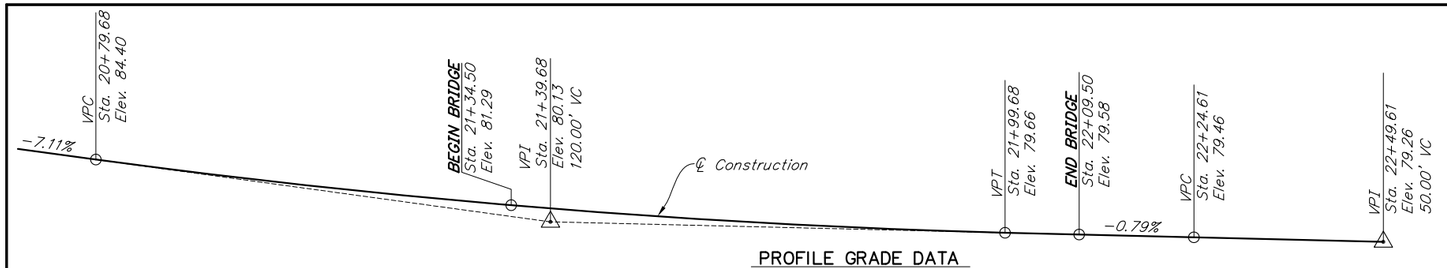
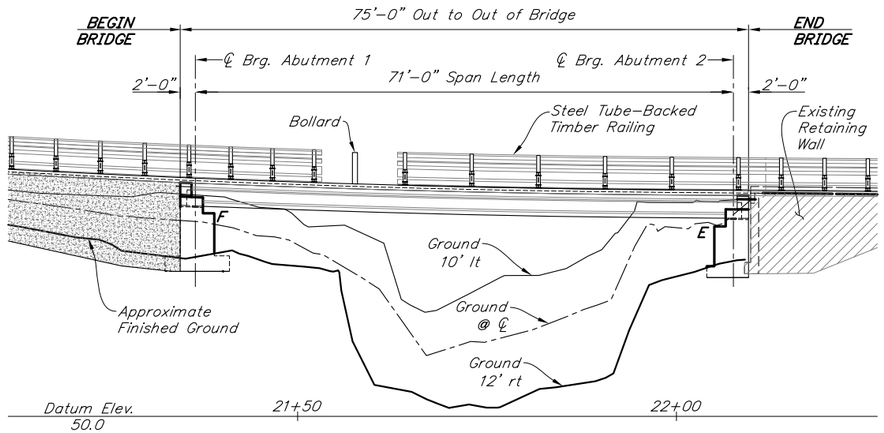


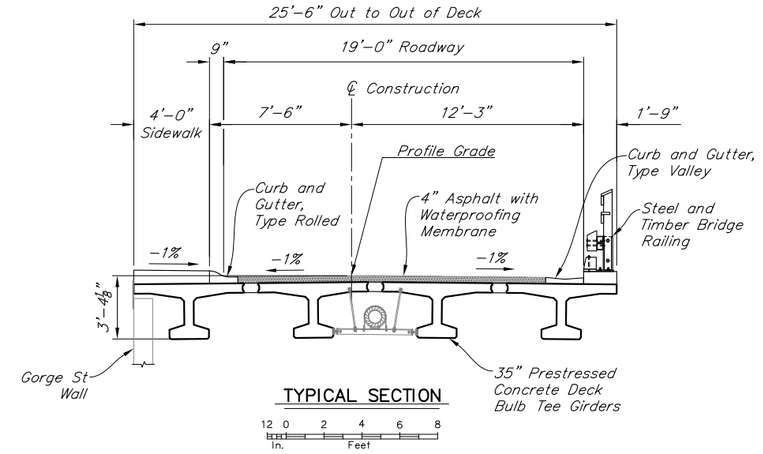
PROFILE GRADE DATA

No Scale



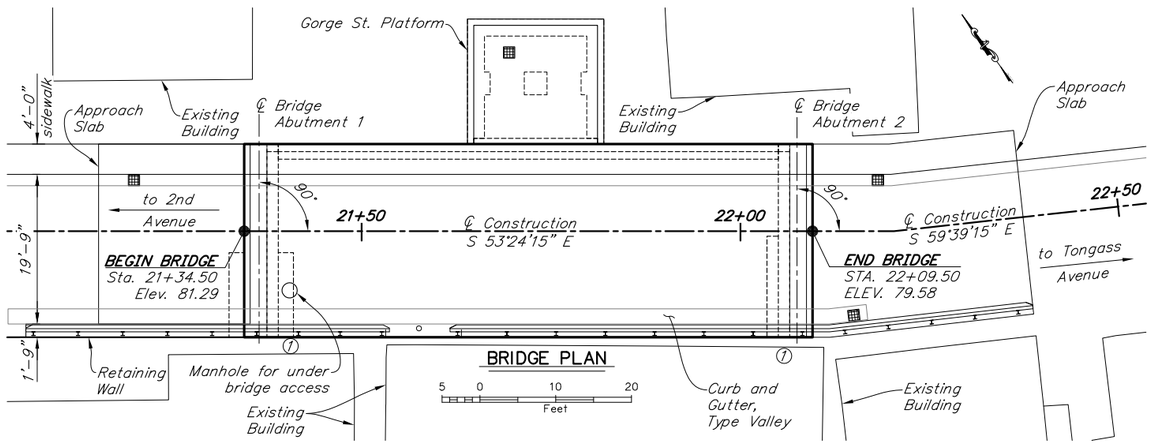
BRIDGE ELEVATION

DATUM: KGBCN84



TYPICAL SECTION

12 0 2 4 6 8
In. Feet



BRIDGE PLAN

5 0 10 20
Feet

① APPROXIMATE LOCATION OF BRIDGE NUMBER PLATE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	LAYOUT BY: Brien Lindstrom	CHECKED BY: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	SPECIFICATIONS BY: David Shearer	P S & E COMPARED:
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	APPROVAL RECOMMENDED BY:	

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

BRIDGE GENERAL LAYOUT

BRIDGE NO. 2313
DWG. NO. 66

Oct 14, 2015 - 3:57pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N60 BRIDGE GENERAL LAYOUT.dwg Layout Name: BRIDGE GENERAL LAYOUT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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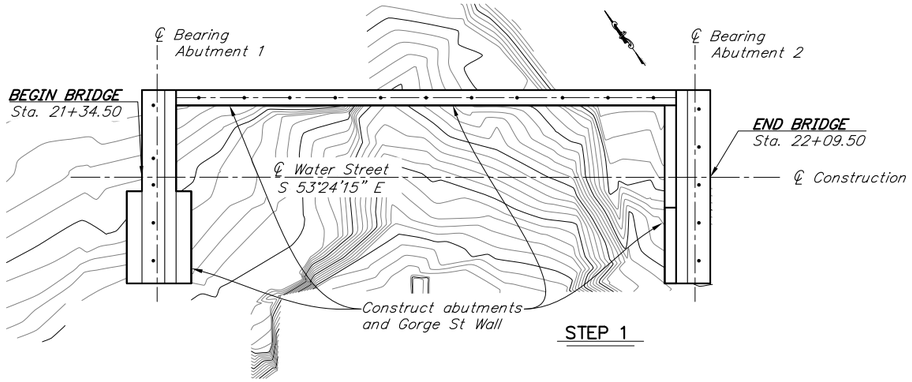
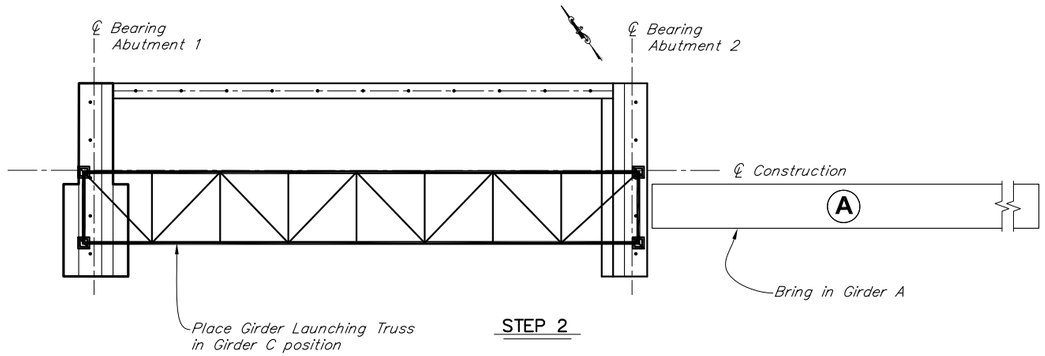
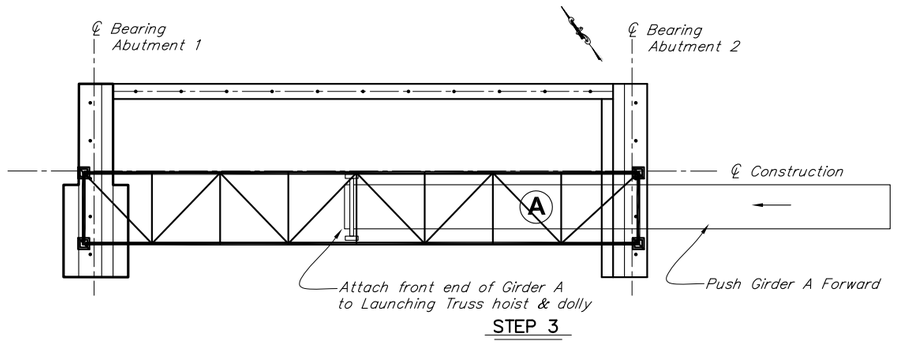


STEP 1



STEP 2



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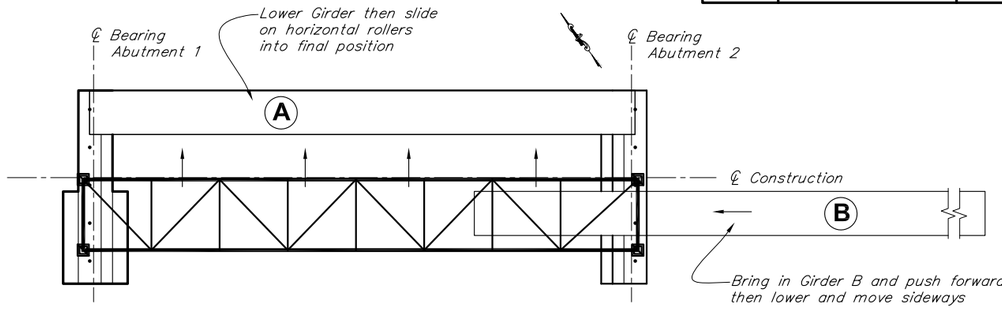

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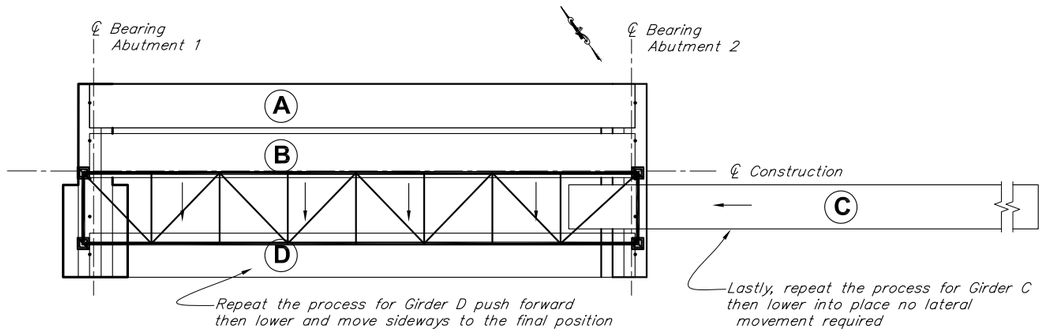

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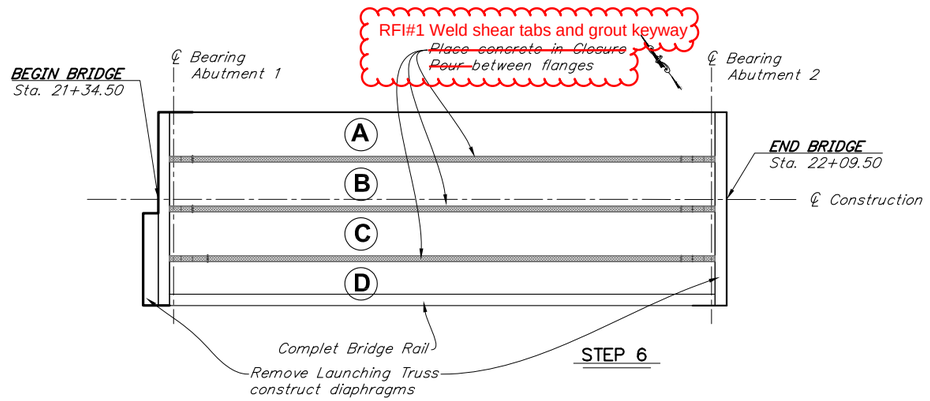


STEP 6

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 09/5

WATER STREET BRIDGE No. 2

WATER STREET

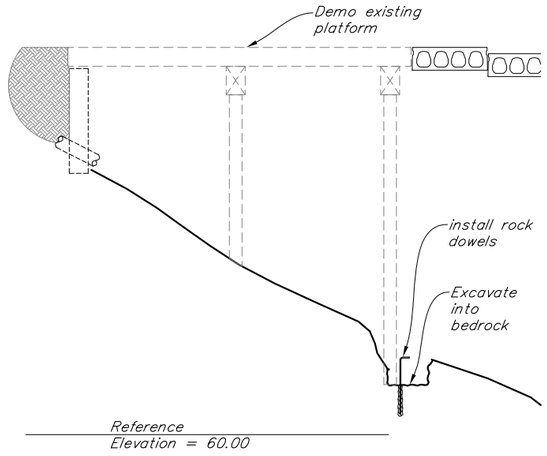
BRIDGE ERECTION SCHEME

BRIDGE NO. 2313

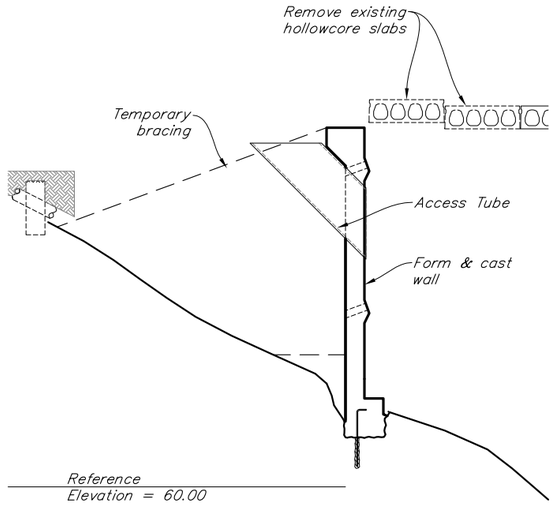
DWG. NO. 67

Oct 14, 2015 - 3:57pm bklen \\SHEARERSERVER\Jobs\0226 Water Street PS&E\DWG\PLANS\ET ADOT&PF\69534_N61 BRIDGE ERECTION PLAN.dwg Layout Name: BRIDGE ERECTION SCHEME

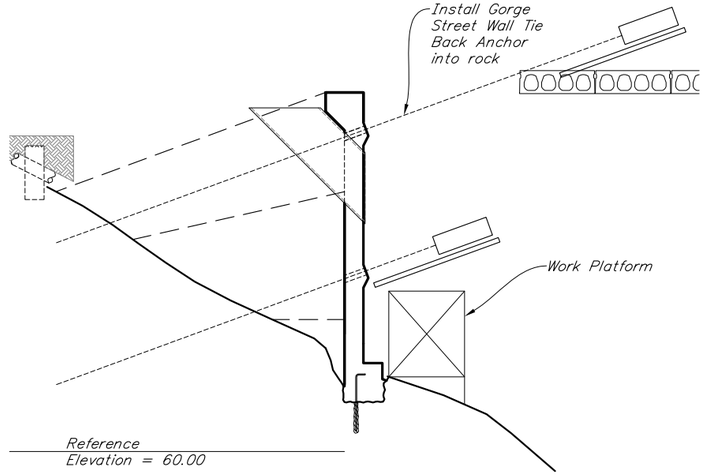
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N68	N110



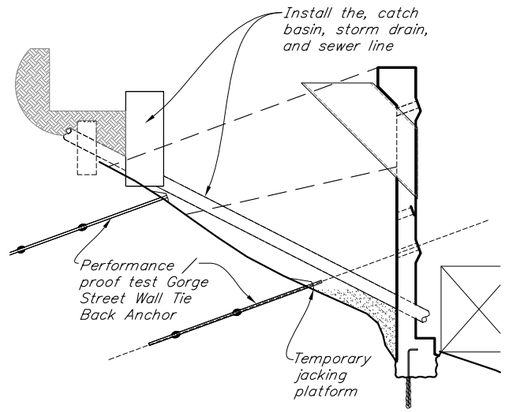
STEP 1



STEP 2

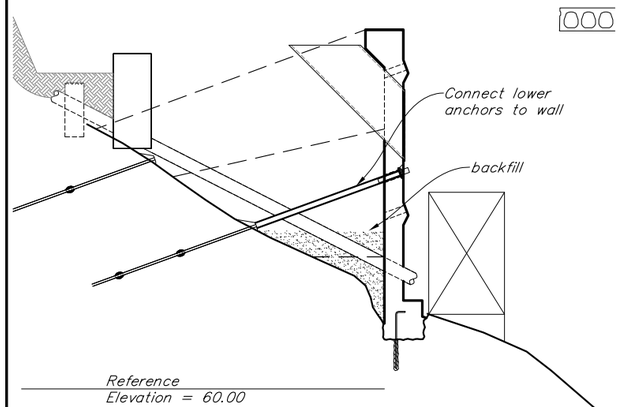


STEP 3

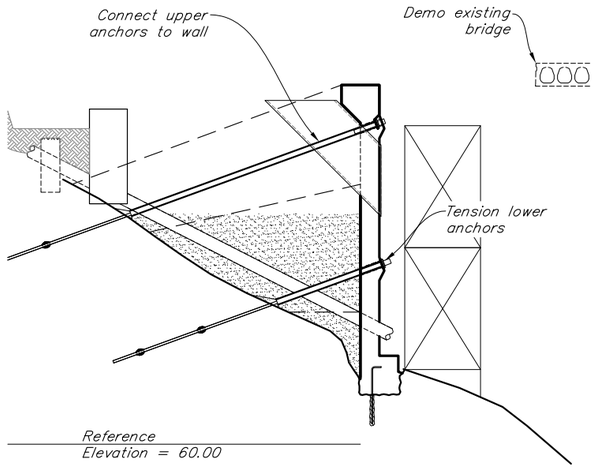


STEP 4

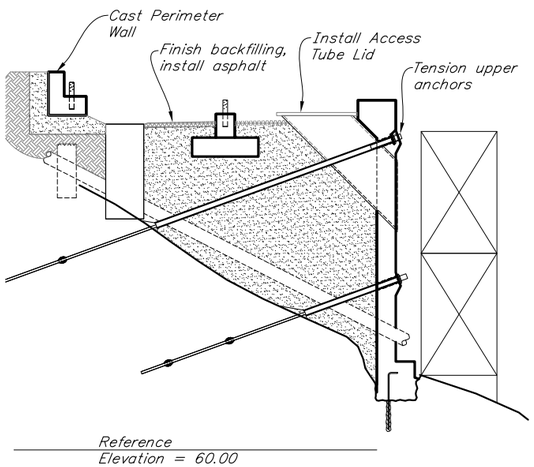
Actual order of operations:
Remove existing platform and trestle deck
Excavate down to rock for wall footing and anchor intercept points
Install Anchors, Test against rock/built up platform grout pad.
Form and Cast Wall, extend anchors and casings thru wall before pouring
Strip West face and Launch Girders
Backfill and Tension Anchors per specifications



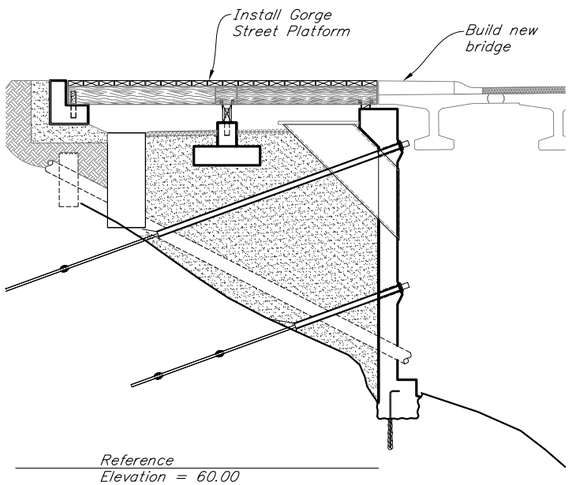
STEP 5



STEP 6



STEP 7



STEP 8

Install Structural Fill and Porous Backfill in lifts. Do not damage or deflect anchors or anchor ducts.

SHEET N68
Add the following General Note "Anchoring details and methods shown are minimum requirements and may be modified at the request of the Contractor. Any modifications must be approved by the Engineer in advance of construction."

Addendum 2

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/4/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

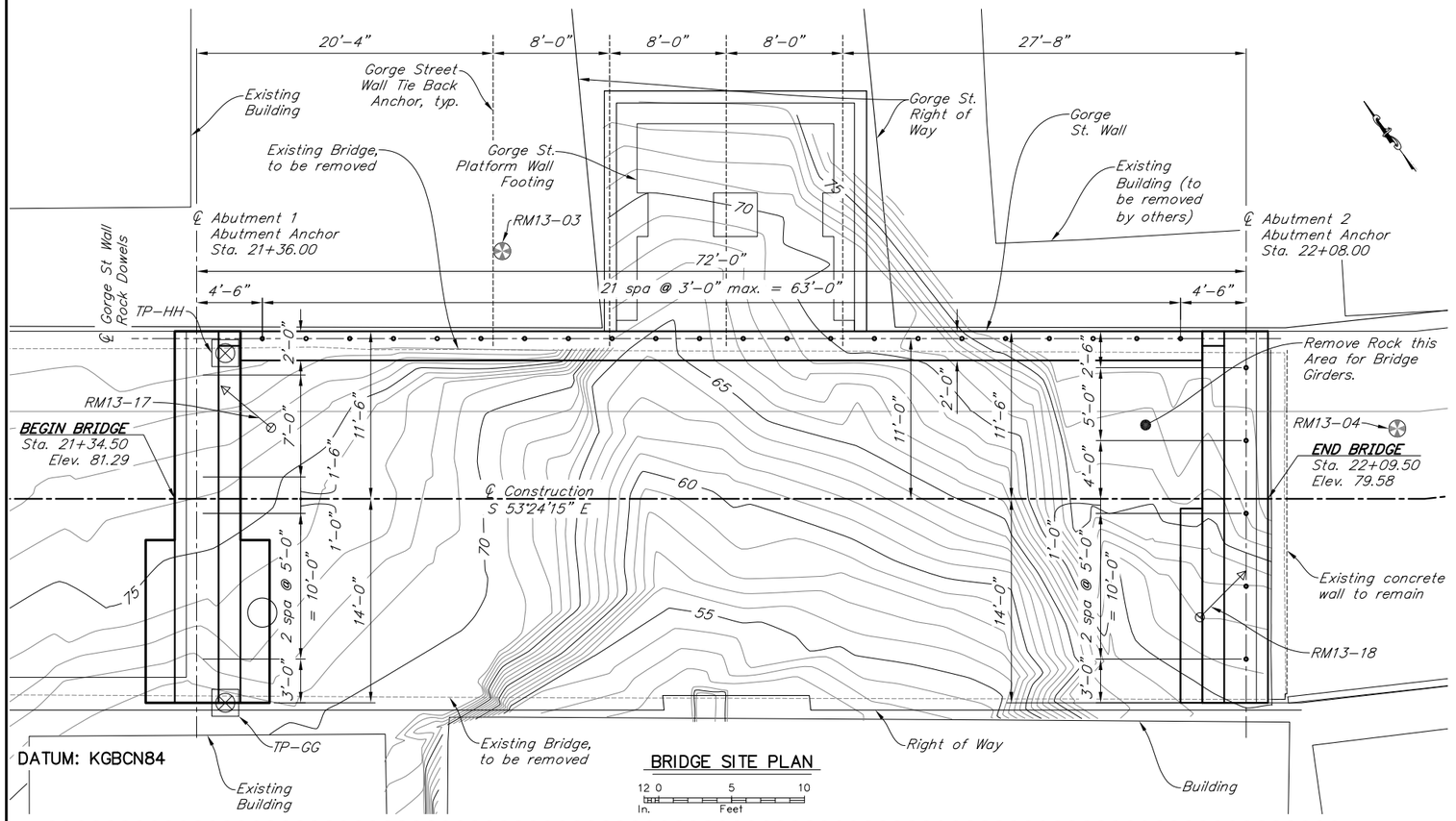
GORGE STREET WALL ERECTION SCHEME

BRIDGE NO. 2313

DWG. NO. 68

Oct 14, 2015 - 3:58pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\glanset adot&pf\69534_N GORGE ST PLATFORM.dwg Layout Name: GORGE STREET WALL ERECTION SCHEME

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N69	N110



BRIDGE SITE PLAN

12 0 5 10
In. Feet

GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2012 6th Edition, with latest interim specifications.

CONSTRUCTION SPECIFICATION: ..... The Bridge Engineering Specifications shall be governed by the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2004.

LIVE LOAD:..... HL-93

DEAD LOAD:..... Includes 50 PSF for Wearing Surface (4" Asphalt).

SEISMIC PARAMETERS:..... PGA = 0.085g (0.0 sec.)
Ss = 0.185g (0.2 sec.)
S1 = 0.141g (1.0 sec.)
Site Class "B"
Liquefaction Potential = negligible
AASHTO 7% probability of exceedance in 75 years.

REINFORCEMENT:..... ASTM A706, fy = 60,000 psi
Space reinforcing steel evenly unless otherwise noted. Reinforcement is not drawn to scale for clarity. Epoxy coat reinforcement where noted.

CONCRETE:..... CLASS A, f'c = 4,000 psi, CLASS A-A f'c=5,000 psi, unless noted otherwise

PRECAST CONCRETE:..... See girder drawings

STRUCTURAL STEEL:..... ASTM A709, grade 50, fy = 50,000 psi.
Galvanize according to SSPC Coating Guide No. 23.00 or AASHTO M111 after fabrication.

NOTE:
Unless otherwise shown in the plans, the concrete cover measured from the face of the concrete to the face of any reinforcing steel shall be 2 inches. ¾ inch chamfer on all exposed edges.

All dimensions on these drawing shall take precedence over indicated scale. Drawings shall not be scaled for construction purposes. No length or shape is implied unless it is dimensioned.

SYMBOLS & ABBREVIATIONS

℄	= Centerline	Elev.	= elevation	No.	= number
ℙ	= Plate	E.F.	= each face	O.H.W.	= Ordinary High Water
&	= and	E.W.	= each way	PVC	= Point of Vertical Curve
@	= at	F.F.	= far face	PVI	= Point of Vertical Intersection
ø	= diameter	Galv.	= galvanize, galvanized	PVT	= Point of Vertical Tangent
Approx.	= approximate	Hwy.	= highway	Rt.	= right
Abut.	= Abutment	H.S.	= high strength	Sch.	= schedule
bot.	= bottom	Kip	= 1,000 lb.	Spa.	= space, spaces
Br.	= Bridge	Lb	= pound	Sta.	= station
btwn.	= between	LF	= linear foot	Str.	= straight
Brg.	= Bearings	LS	= lump sum	SY	= square yard
C.I.P.	= cast in place	Lt.	= left	Symm.	= symmetric
Clr.	= clear, clearance	max.	= maximum	Typ.	= typical
Col.	= Column	min.	= minimum	⊕	= Vertical Boring
CY	= cubic yard	n.a.	= not applicable	⟶	= Angled Boring
Dia	= Diameter	N.I.C.	= not in contract	⊠	= Test Pit
Dwg.	= drawing	n.c.	= not calculated		
Ea	= each	n.f.	= near face		

BRIDGE BASIS OF ESTIMATE

ITEM NO.	ITEM	PAY UNIT	EST. UNIT	SUBST.	SUPERST.	TOTAL
202(13)	Removal of Existing Bridge No. 446	LS	SF	–	1,816	1,816
205(1)	Excavation For Structures	CY	CY	~~109~~ ← 379.27 → ~~109~~		
205(3)	Structural Fill	CY	CY	~~190~~ ← +/-450 → ~~190~~		
205(4)	Porous Backfill Material	CY	CY	~~31~~ ← 21.38 → ~~31~~		
205(5)	Excavation For Structures (Rock)	CY	CY	~~35~~ ← 61.17 → ~~35~~		
401(1)	Asphalt Concrete, Type II; Class B	Tons	Tons	–	+/-55	+/-55
501(2)	Class A-A Concrete	CY	CY	–	+/-55	+/-55
501(3)	Class A Concrete	CY	CY	~~96~~ ← 102.6 → ~~96~~		
501(7a)	Precast Concrete Member (35" x73'-0 1/4" Prestressed Decked Bulb Tee Girder)	EA	EA	–	4	4
503(1)	Reinforcing Steel	LBS	LBS	~~17,800~~ ← 20,924 → ~~17,800~~		
503(2)	Epoxy-Coated Reinforcing Steel	LBS	LBS	17,171 → ~~15,500~~		~~15,500~~
507(7)	Steel And Timber Bridge Railing	LF	LF	–	100	100
508(1)	Waterproofing Membrane	LS	SY	–	232	232
516(2)	Bearings (Elastomeric Bearing Pad)	EA	EA	8	–	8
673(3)	Abutment Anchor	EA	EA	10	–	10
673(2)	Gorge Street Wall Tie Back Anchor	EA	EA	~~8~~ 7	–	~~8~~ 7
673(9)	Rock Dowel	EA	EA	~~22~~ 25	–	~~22~~ 25

CO#7 Dead-man Anchor replaces eliminated Tie-Back Anchor

DESIGNED BY: Brien Lindstrom — CHECKED: David Shearer
DRAWN BY: Brien Lindstrom — CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom — CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

BRIDGE SITE PLAN

BRIDGE NO. 2313
DWG. NO. 69

Oct 14, 2015 - 3:58pm brien \\sherererserver\jobs\0226 water street ps&e\DWG\planset addit&pit\69534_N61 BRIDGE SITE PLAN.dwg Layout Name: BRIDGE SITE PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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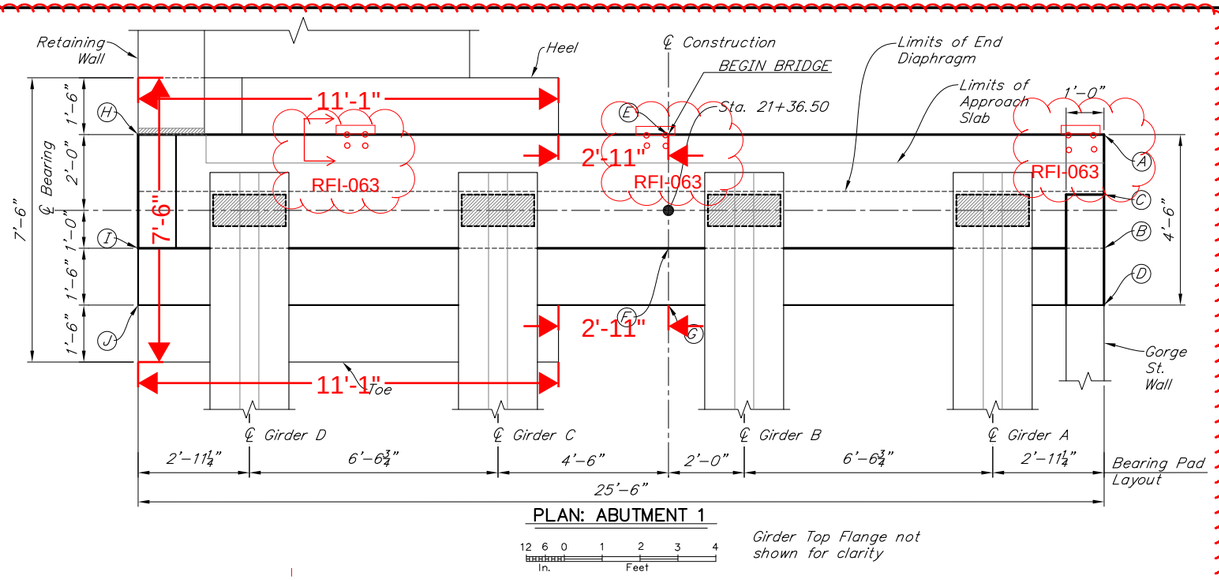
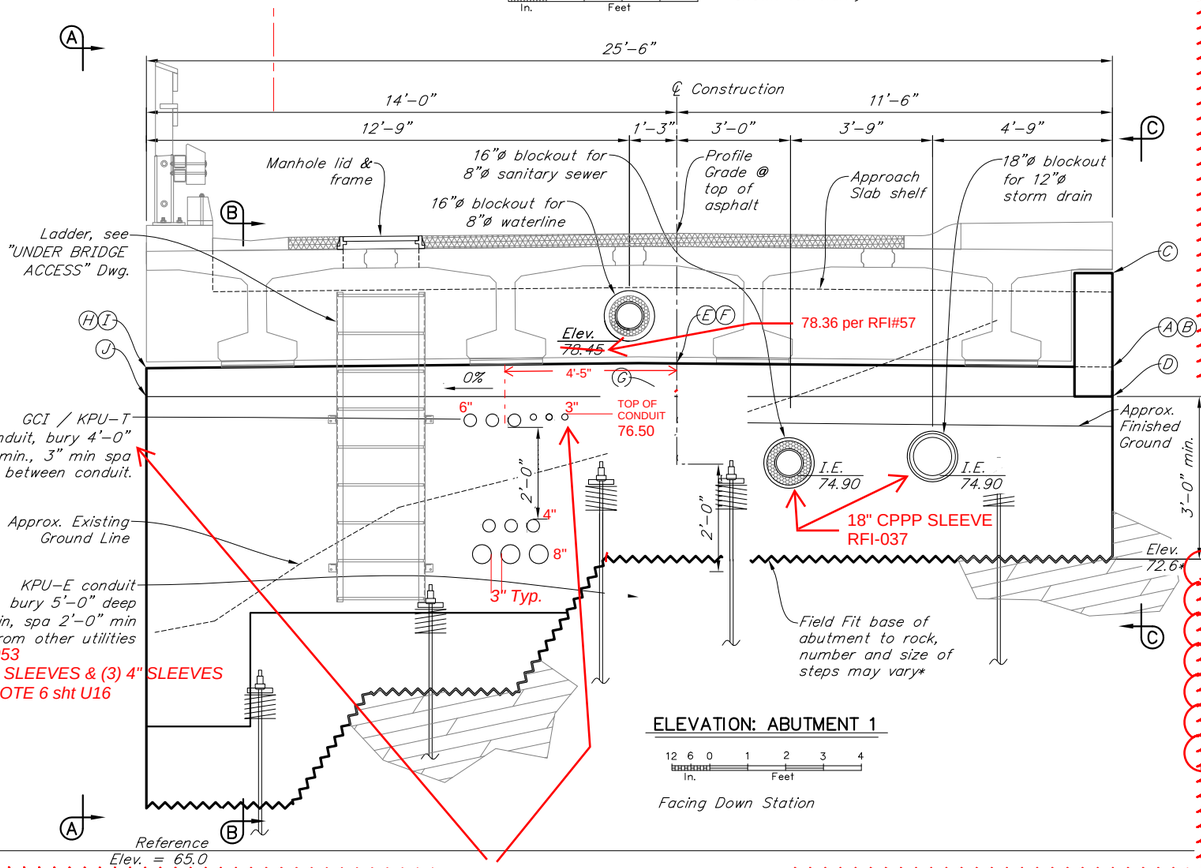


PLAN: ABUTMENT 1

12 6 0 1 2 3 4 In. Feet

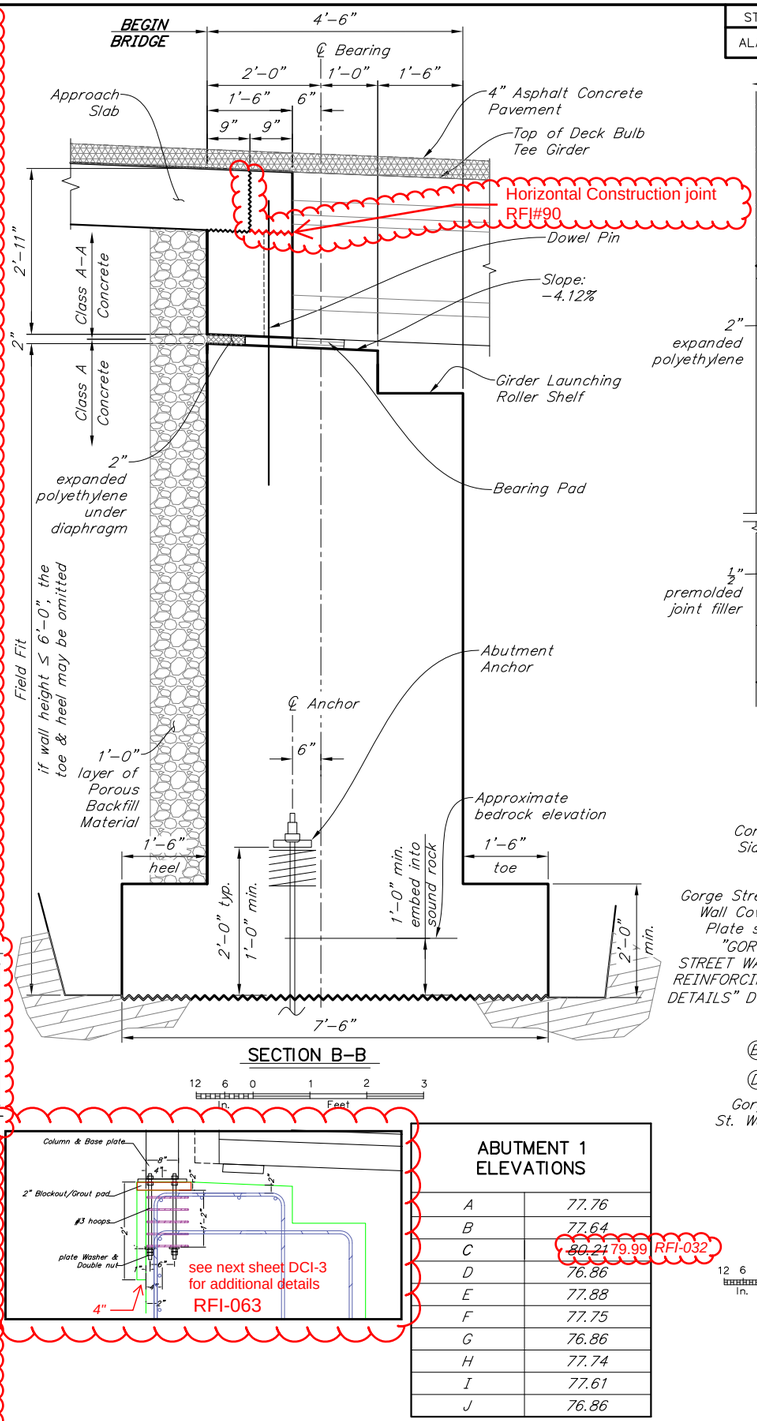
Girder Top Flange not shown for clarity



ELEVATION: ABUTMENT 1

12 6 0 1 2 3 4 In. Feet

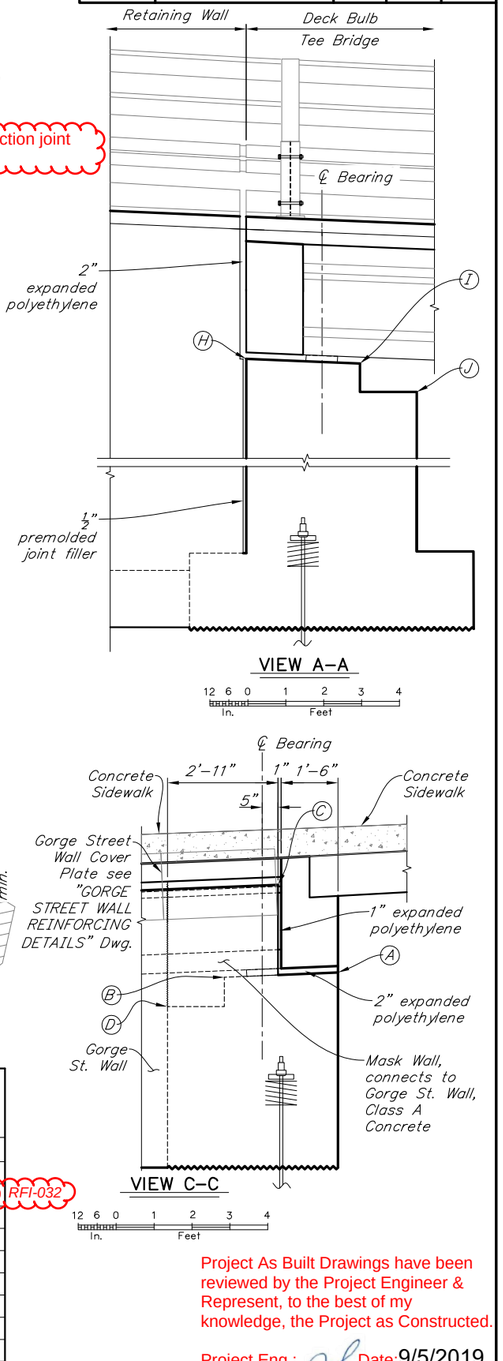
Facing Down Station



SECTION B-B

12 6 0 1 2 3 In. Feet

ABUTMENT 1 ELEVATIONS	
A	77.76
B	77.64
C	~~80.21~~79.99 RFI-032
D	76.86
E	77.88
F	77.75
G	76.86
H	77.74
I	77.61
J	76.86



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	

RFI-053
(3) 6" SLEEVES per NOTE 10 sht U17
(3) 3" SLEEVES per NOTE 9 sht U18
Center conduits over web of this girder per note 4 Keith Nelson response

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/9/15

WATER STREET BRIDGE No. 2

WATER STREET

BRIDGE ABUTMENT 1 LAYOUT

BRIDGE NO. 2313

DWG. NO. 70

Oct 14, 2015 - 3:59pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N65 BRIDGE ABUTMENTS.dwg Layout Name: BRIDGE ABUTMENT 1 LAYOUT

SHEARER DESIGN LLC.
Bridge Design, Construction Engineering and Infrastructure Aesthetics
3613 Phinney Ave N #B
Seattle, WA 98103
(206) 781-7830

Water Street Trestle #2 Replacement

Construction Support Memorandum: 055

August 17, 2016

To: John Scott, HDR

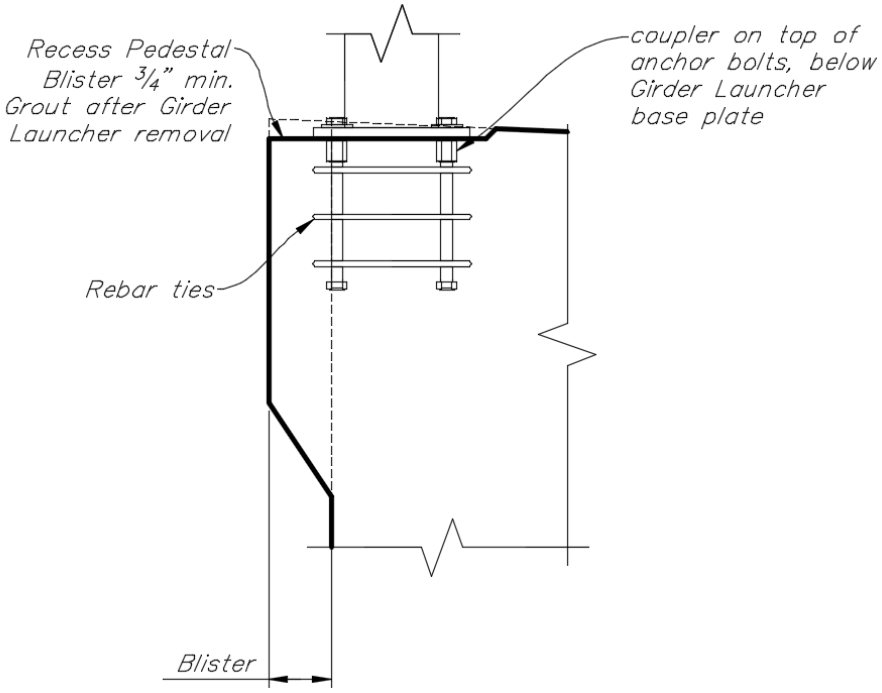
Subject: RFI #63 – Girder Launch Anchors in Abutment 1

Response:

Adding the proposed blisters on the back side of Abutment 1 is a reasonable modification to accommodate the Contractor's girder launcher.

Once the launcher is removed, there should be no exposed steel from the anchor bolts. One way to achieve this is to recess the anchor plate during girder launching and use couplers on the underside of the anchor plate.

As a reminder, top of the abutment is sloped to match the profile, and there the also the Dowel Pin A608 bars. You may want to drill and epoxy anchor the A608 bars after girder installation.



Thanks,

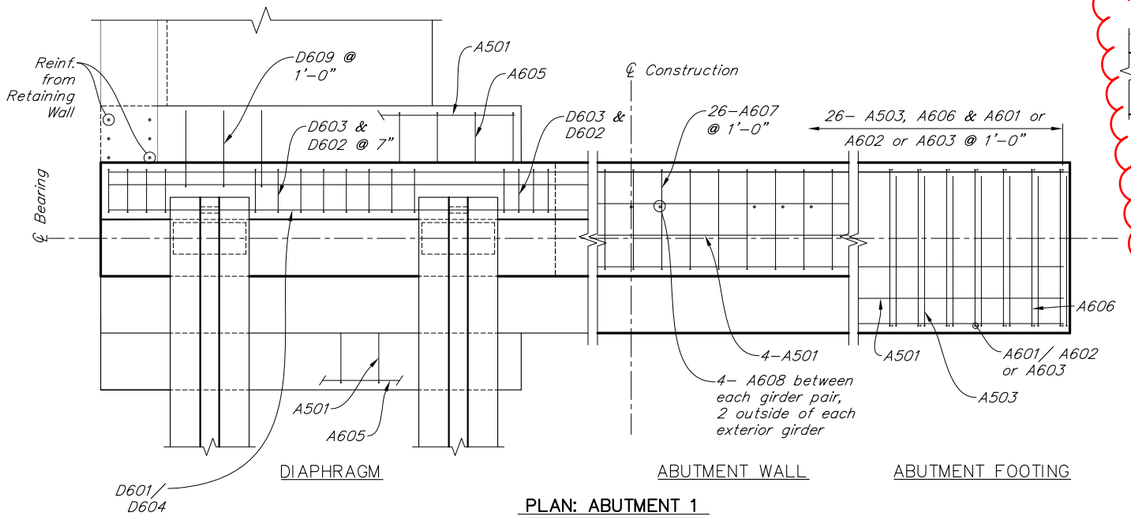
Brien Lindstrom, P.E.

Bridge Engineer
Shearer Design

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

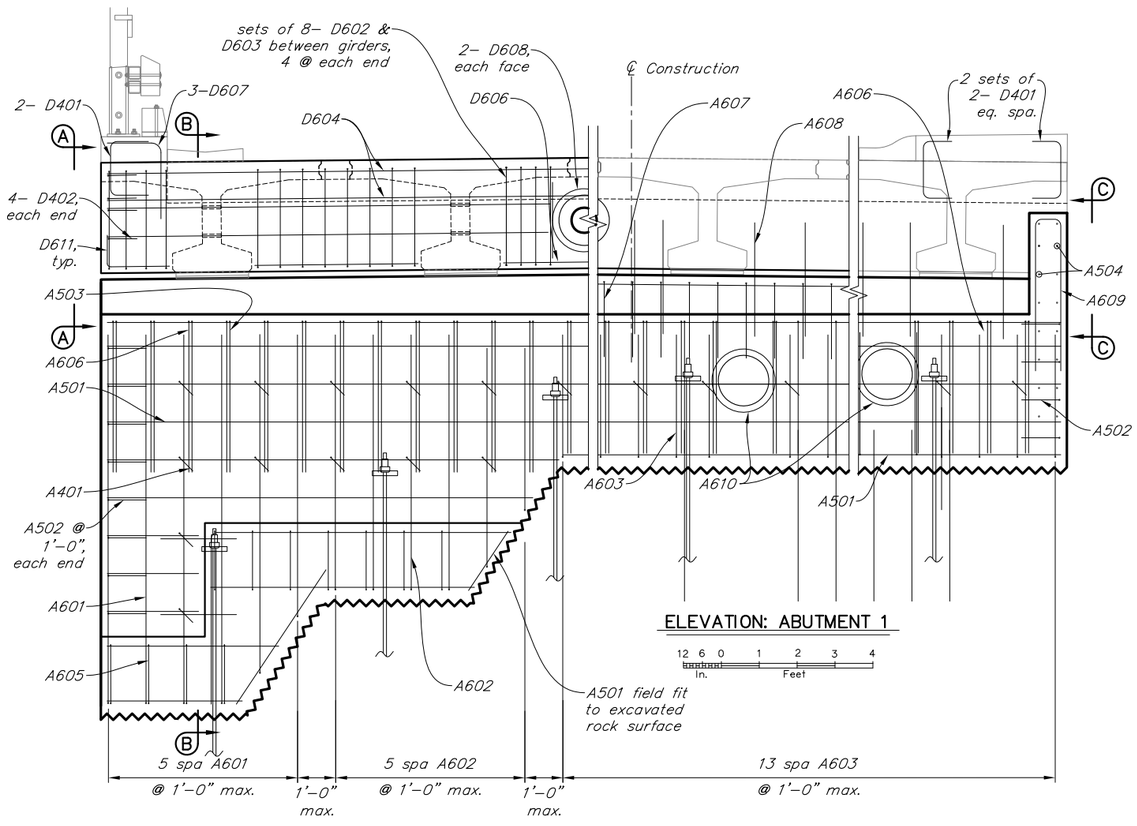
Project Eng.: Date: 9/6/2019

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N71	N110



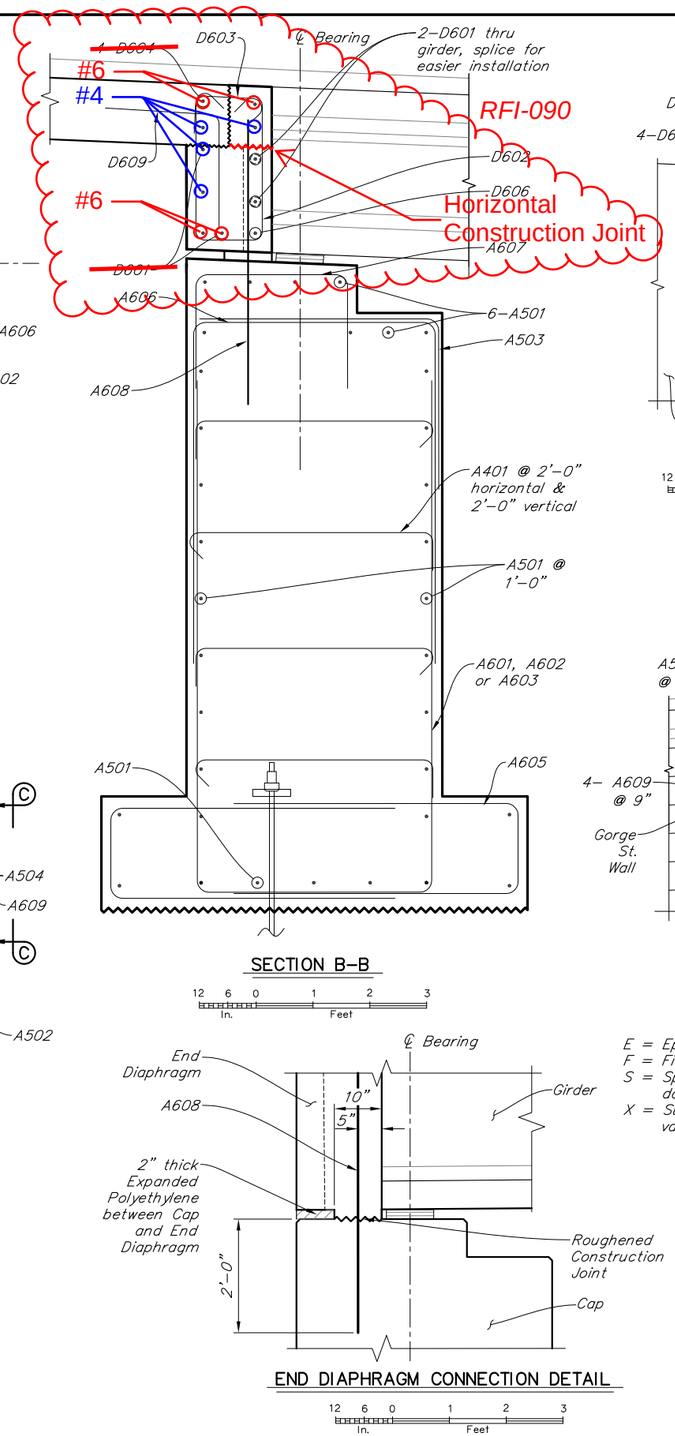
PLAN: ABUTMENT 1

12 6 0 1 2 3 4 In. Feet



ELEVATION: ABUTMENT 1

12 6 0 1 2 3 4 In. Feet

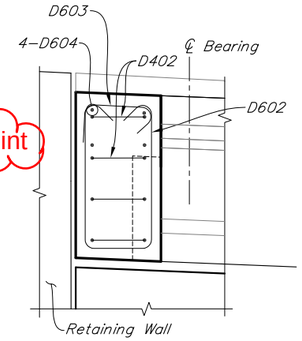


SECTION B-B

12 6 0 1 2 3 In. Feet

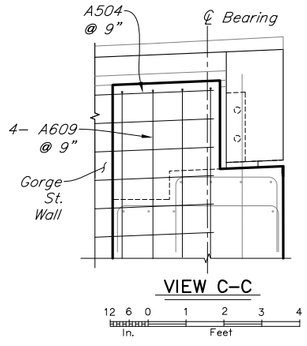
END DIAPHRAGM CONNECTION DETAIL

12 6 0 1 2 3 In. Feet



VIEW A-A

12 6 0 1 2 3 In. Feet



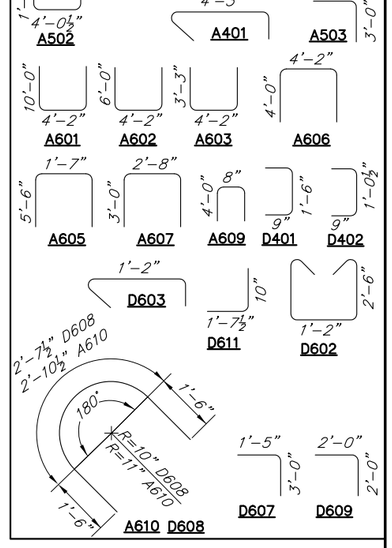
VIEW C-C

12 6 0 1 2 3 4 In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
A401		4	19	5'-0"	bent
A501	F,X	5	32	25'-2"	–
A502		5	12	7'-0½"	bent
A503		5	26	7'-0"	bent
A504		5	16	5'-0"	–
A601	F,X	6	6	24'-2"	bent
A602	F,X	6	6	16'-2"	bent
A603	F	6	14	10'-8"	bent
A605	X	6	22	12'-7"	bent
A606		6	26	12'-2"	bent
A607		6	26	8'-8"	bent
A608		6	16	5'-0"	–
A609		6	4	8'-8"	bent
A610		6	4	5'-10½"	bent
D401	E	4	6	3'-0"	bent
D402	E,F	4	8	2'-6½"	bent
D601	E,S	6	6	25'-2"	–
D602	E	6	32	7'-2"	bent
D603	E	6	32	2'-8"	bent
D604	E	6	4	25'-2"	–
D606	E	6	3	4'-1¾"	–
D607	E	6	3	4'-5"	bent
D608	E	6	4	5'-10½"	bent
D609	E	6	25	4'-0"	bent
D611	E	6	2	2'-5½"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA · 40TH · DAVID R. SHEARER · CE 8373 · 10/4/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

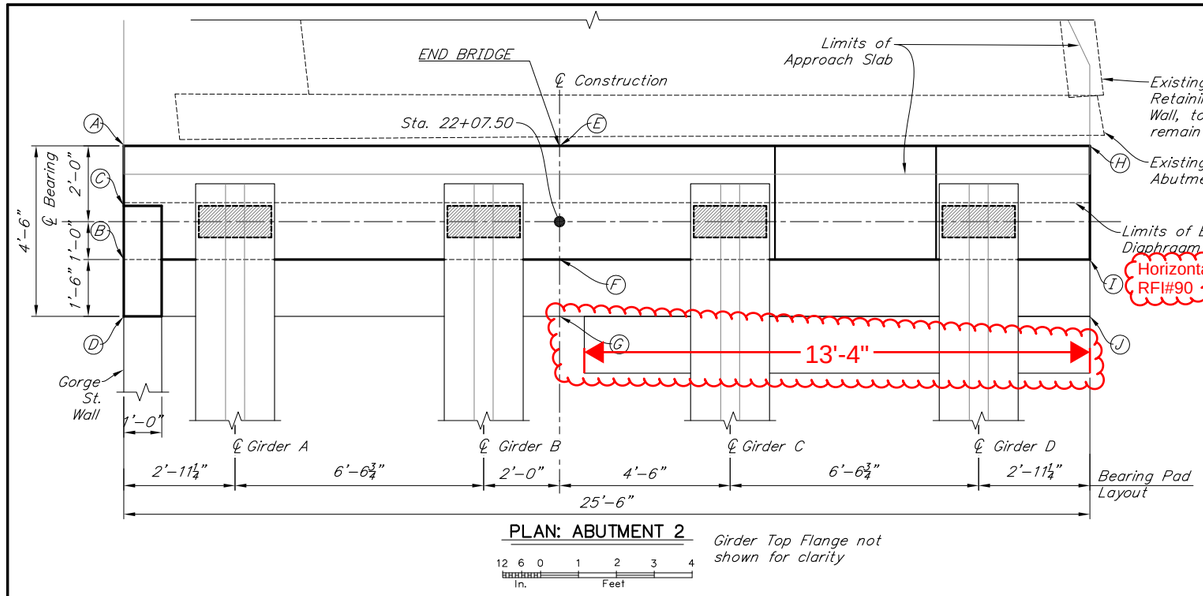
BRIDGE ABUTMENT 1 DETAILS

BRIDGE NO. 2313

DWG. NO. 71

Oct 14, 2015 - 3:59pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\60534_N65 BRIDGE ABUTMENTS.dwg Layout Name: BRIDGE ABUTMENT 1 DETAILS

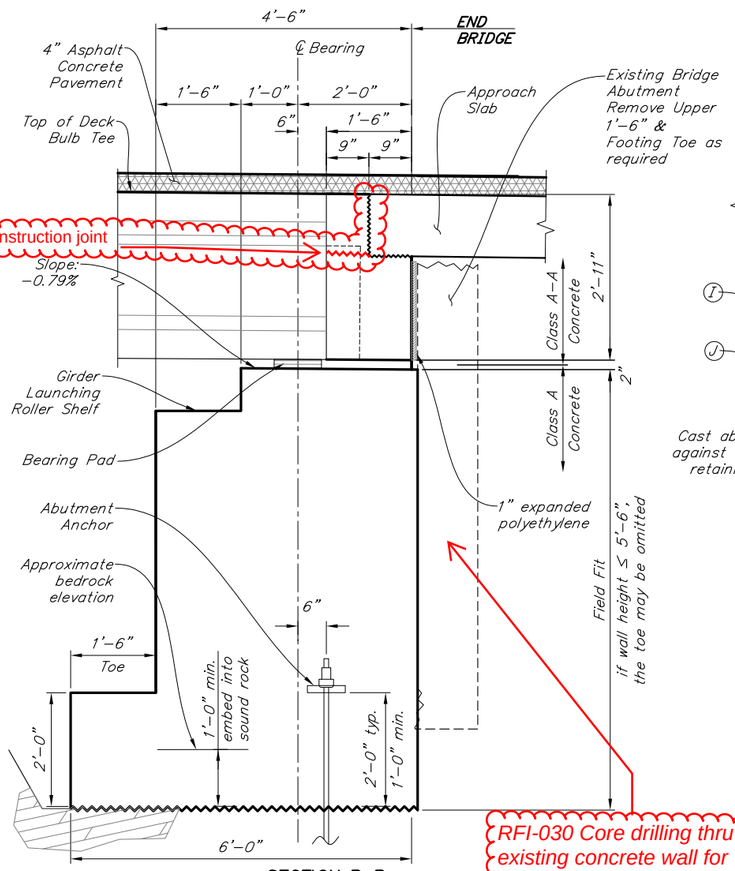
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N72	N110



PLAN: ABUTMENT 2

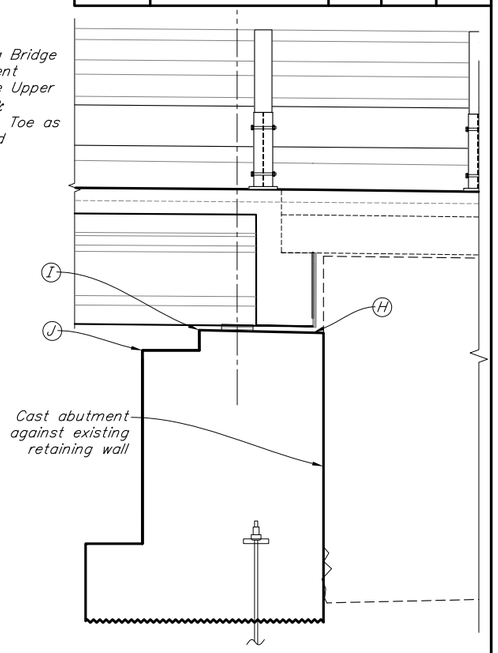
12 6 0 1 2 3 4 In. Feet

Girder Top Flange not shown for clearance



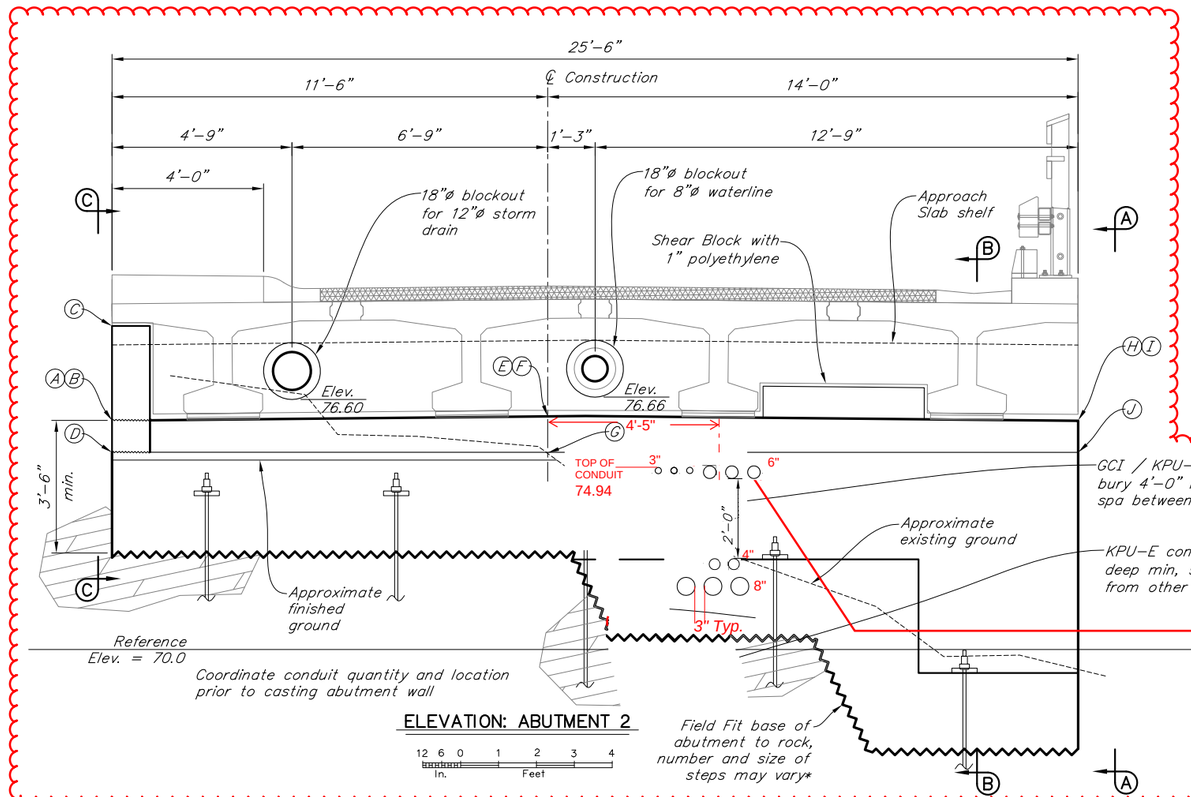
SECTION B-B

12 6 0 1 2 3 In. Feet



VIEW A-A

12 6 0 1 2 3 4 In. Feet

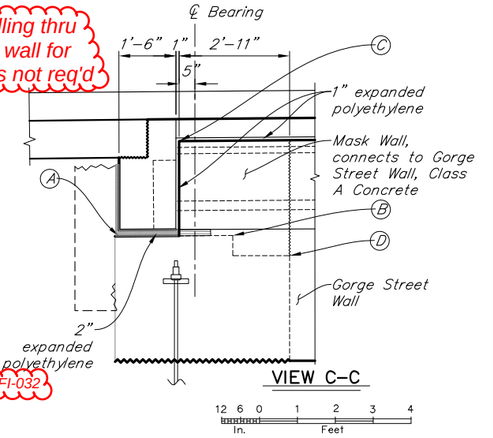


ELEVATION: ABUTMENT 2

12 6 0 1 2 3 4 In. Feet

ABUTMENT 2 ELEVATIONS	
A	76.05
B	76.07
C	78.57 78.40 RFI-032
D	75.30
E	76.16
F	76.19
G	75.30
H	76.02
I	76.05
J	75.30

RFI-030 Core drilling thru existing concrete wall for conduit sleeves is not req'd



VIEW C-C

12 6 0 1 2 3 4 In. Feet

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

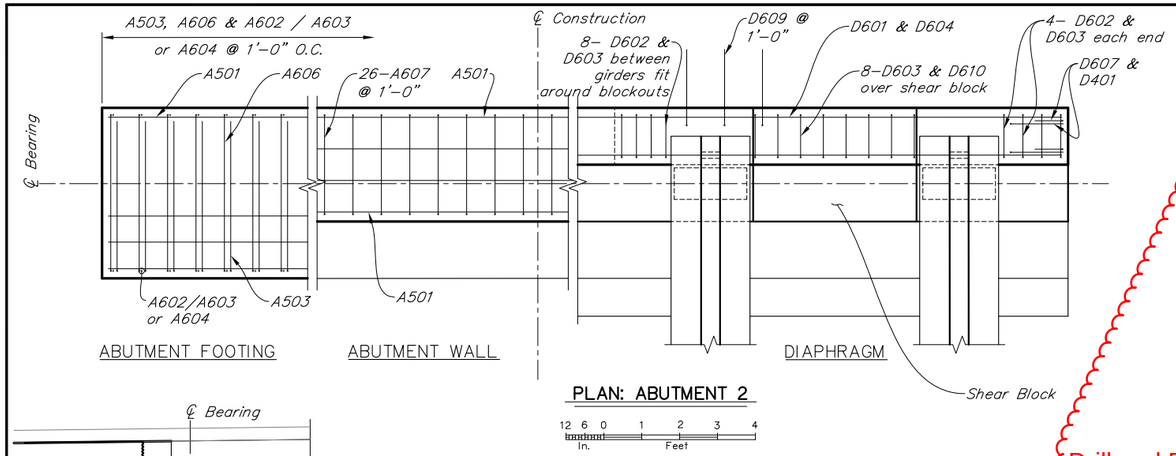
BRIDGE ABUTMENT 2 LAYOUT

BRIDGE NO. 2313

DWG. NO. 72

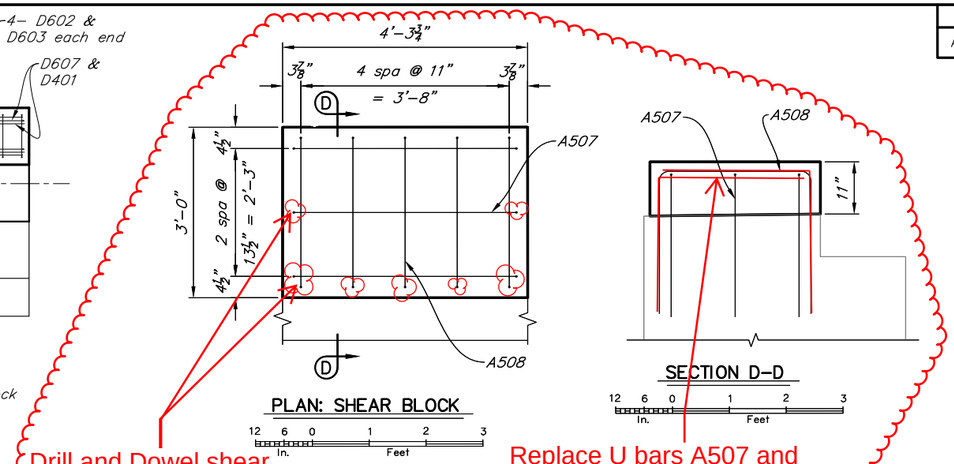
Oct 14, 2015 - 3:59pm brlen \\sherererserver\jobs\0226 water street ps&e\DWG\planset.ado\&pif\69534_N65 BRIDGE ABUTMENTS.dwg Layout Name: BRIDGE ABUTMENT 2 LAYOUT

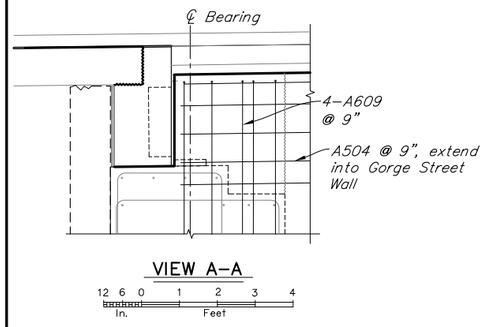
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N73	N110



PLAN: ABUTMENT 2

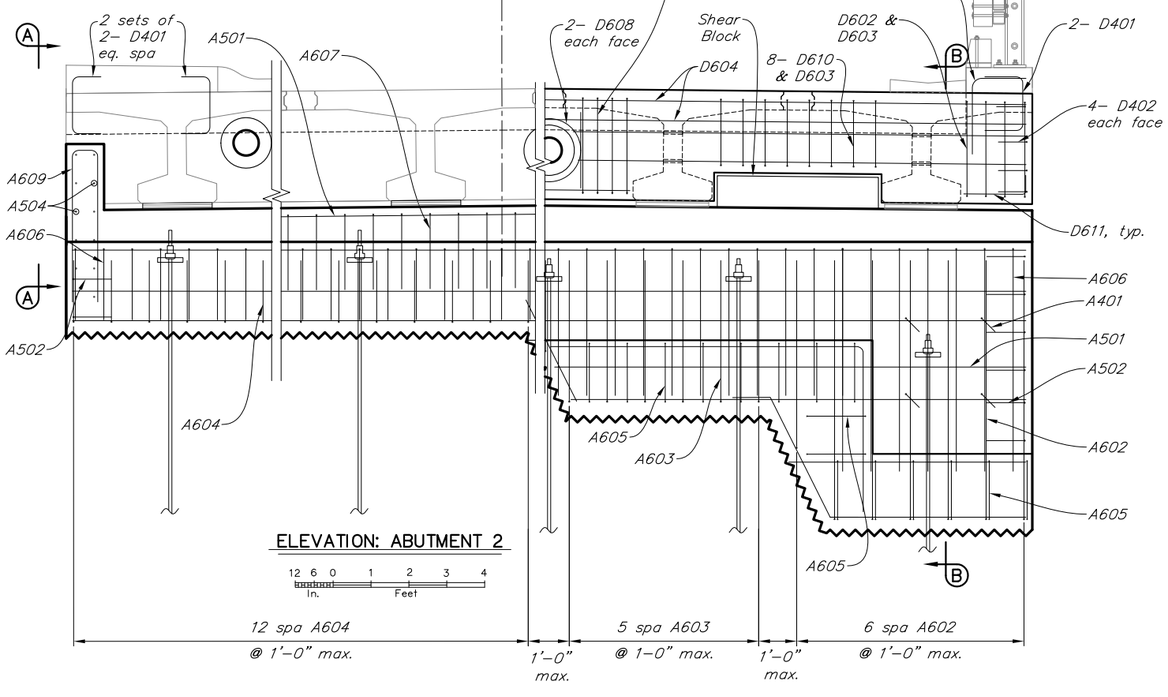
12 6 0 1 2 3 4 In. Feet





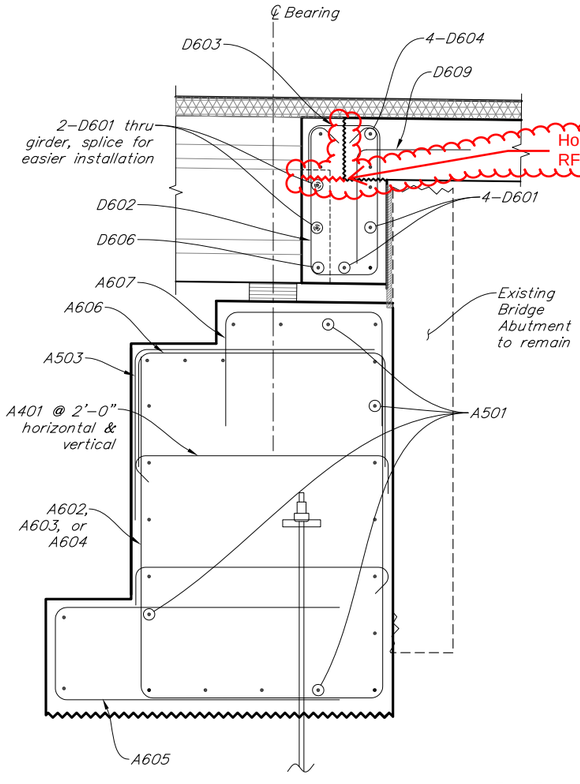
VIEW A-A

12 6 0 1 2 3 4 In. Feet



ELEVATION: ABUTMENT 2

12 6 0 1 2 3 4 In. Feet



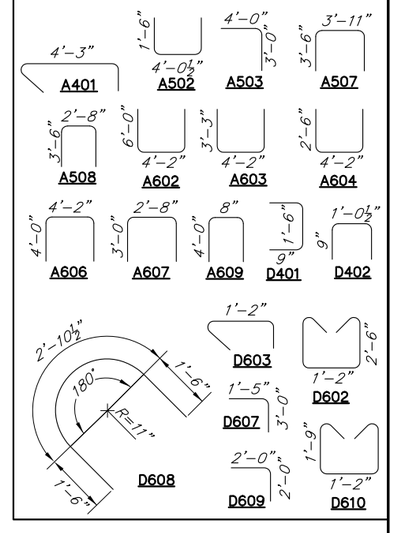
SECTION B-B

12 6 0 1 2 3 In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
A401		4	4	5'-0"	bent
A501	F,X	5	25	25'-2"	–
A502		5	8	7'-0½"	bent
A503		5	26	7'-0"	bent
A504		5	12	5'-0"	–
A507		5	3	10'-11"	bent
A508		5	5	9'-8"	bent
A602	F,X	6	7	16'-2"	bent
A603	F,X	6	6	10'-8"	bent
A604	F	6	13	9'-2"	bent
A605	X	6	16	12'-7"	bent
A606		6	26	12'-2"	bent
A607		6	26	8'-8"	bent
A609		6	4	8'-8"	bent
D401	E	4	6	3'-0"	bent
D402	E,F	4	8	2'-6½"	bent
D601	E,S,F	6	6	25'-2"	–
D602	E	6	24	7'-2"	bent
D603	E	6	32	2'-8"	bent
D604	E	6	4	25'-2"	–
D606	E	6	3	4'-1¾"	–
D607	E	6	3	4'-5"	bent
D608	E	6	8	5'-10½"	bent
D609	E	6	25	4'-0"	bent
D610	E	6	8	5'-4"	bent

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

BRIDGE ABUTMENT 2 DETAILS

BRIDGE NO. 2313

DWG. NO. 73

Oct 14, 2015 - 3:59pm brlen \\shearerserver\jobs\0226 water street ps&e\DWG\planset addt&ptf\69534_N65 BRIDGE ABUTMENTS.dwg Layout Name: BRIDGE ABUTMENT 2 DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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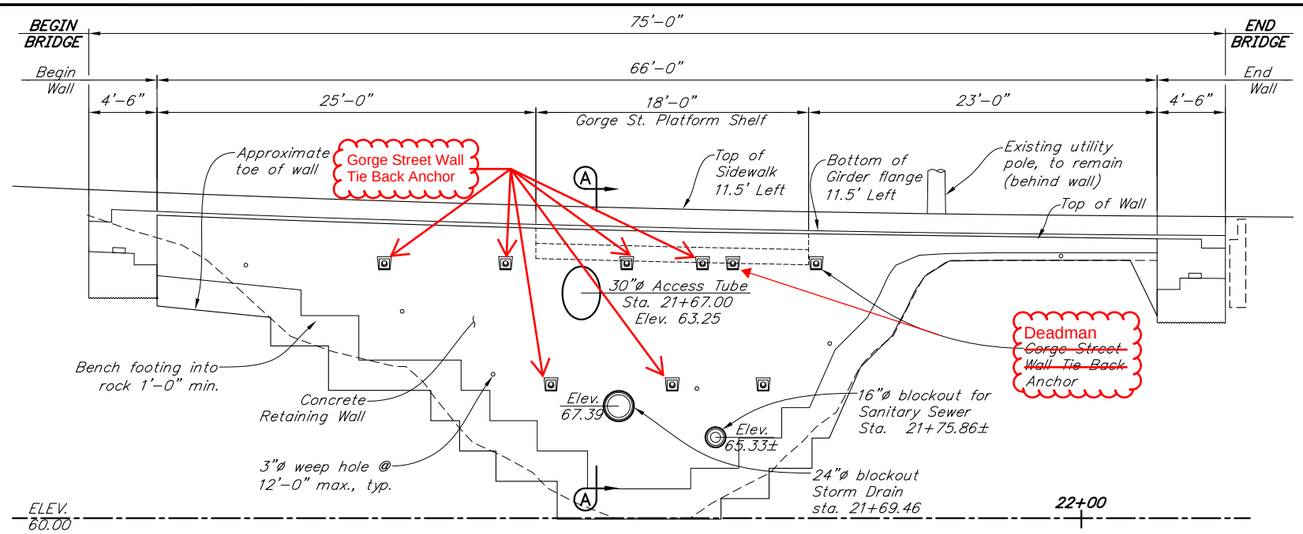
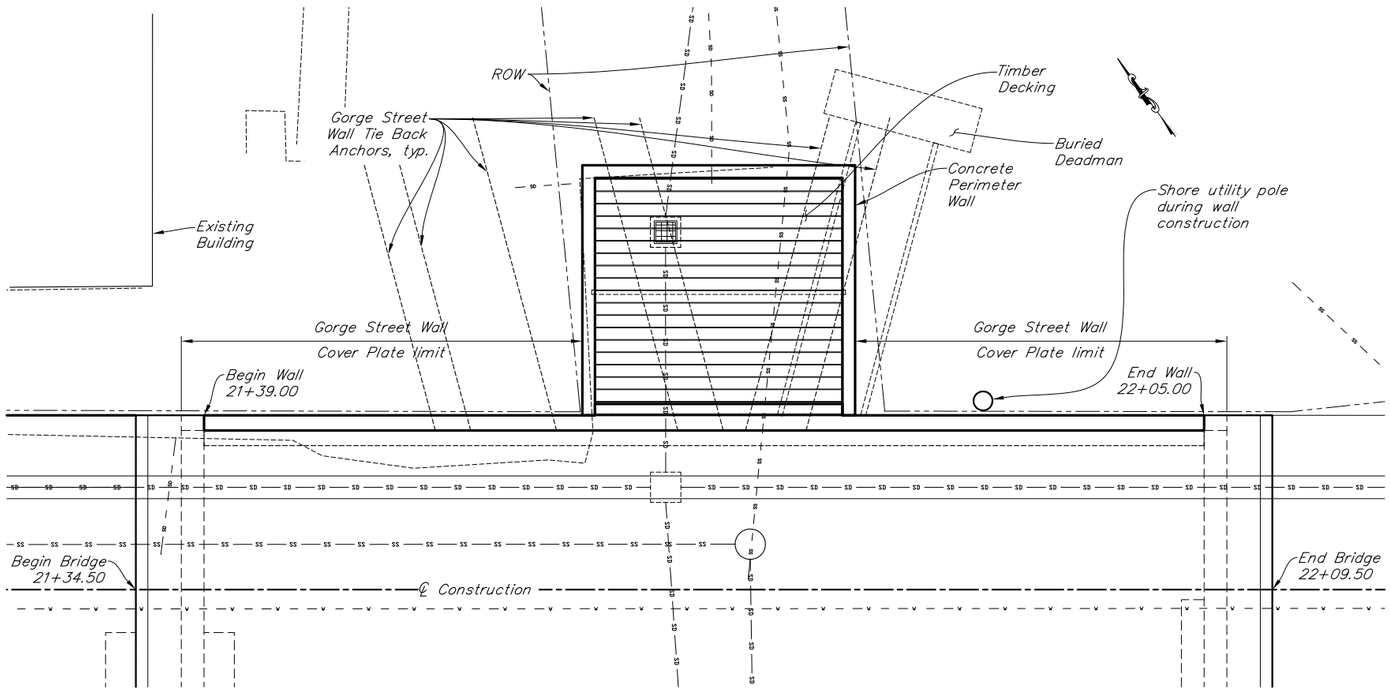


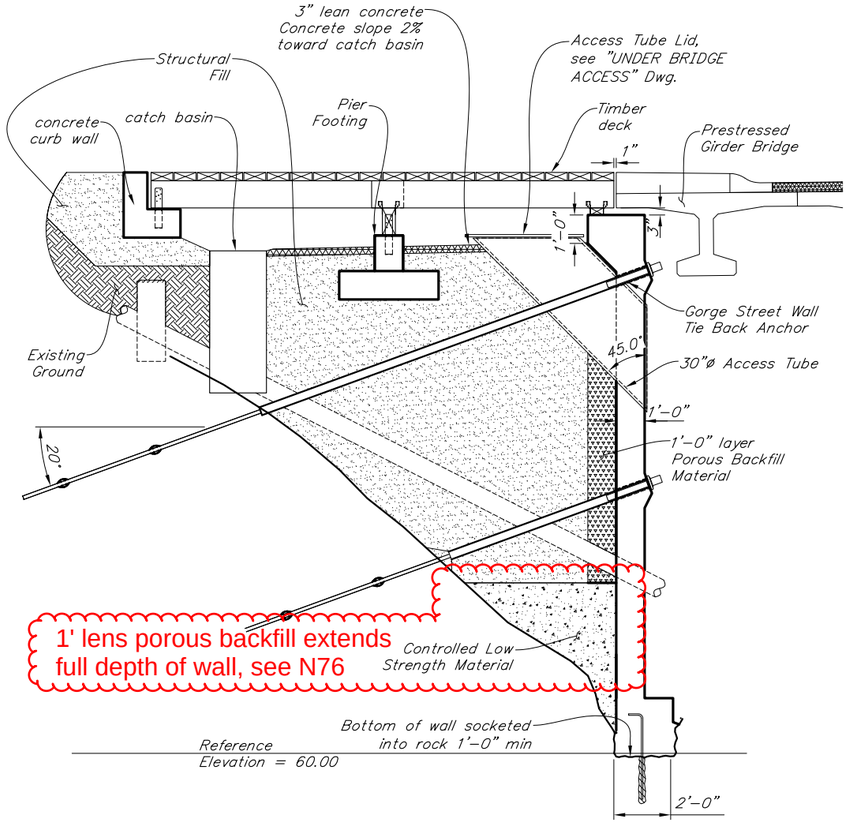
GORGE STREET PLATFORM WALLS ELEVATION

12 0 5 10
In. Feet



GORGE STREET PLATFORM WALLS PLAN

12 0 5 10
In. Feet



SECTION A-A

12 0 2 4 6
In. Feet

Revision issued for RFI #72/CSM #71

- Install shortened anchors in the drilled holes for #3 & #5. Plug the end of the hole to control grout flow to provide a 8-9 foot bonded length. Proof test these anchors to 40 kips.
- Anchor location #8 will be abandoned and replaced with a deadman with two anchors 20 feet back from the face of the wall.

Revision issued for RFI #69/CSM #70:

In order to accommodate the girder launching schedule, lift off test can be performed on the accessible anchors. Loads and or positive tension in other anchors with limited access shall be verified with approved wrench tightening method.

Balancing and monitoring of the wall movement per 673-30.6 is still required to prevent damage to the wall during the back fill operation.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	Sheet Revision 1 fully replaces the existing sheet N74. Revision date: September 14, 2016

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

GORGE STREET WALL LAYOUT

BRIDGE NO. 2313

DWG. NO. 74

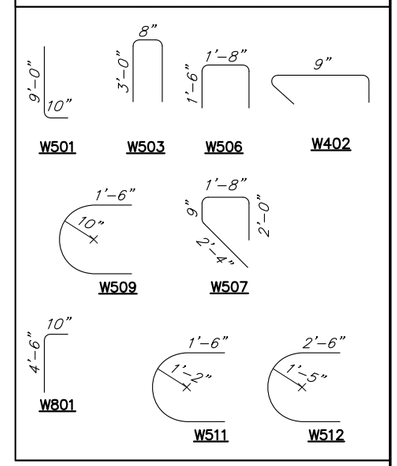
Sep 14, 2016 - 5:59pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2016-09-09 Gorge St Wall Deadman\DWG\69534_N GORGE ST PLATFORM.dwg Layout Name: GORGE STREET WALL LAYOUT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N75	N110

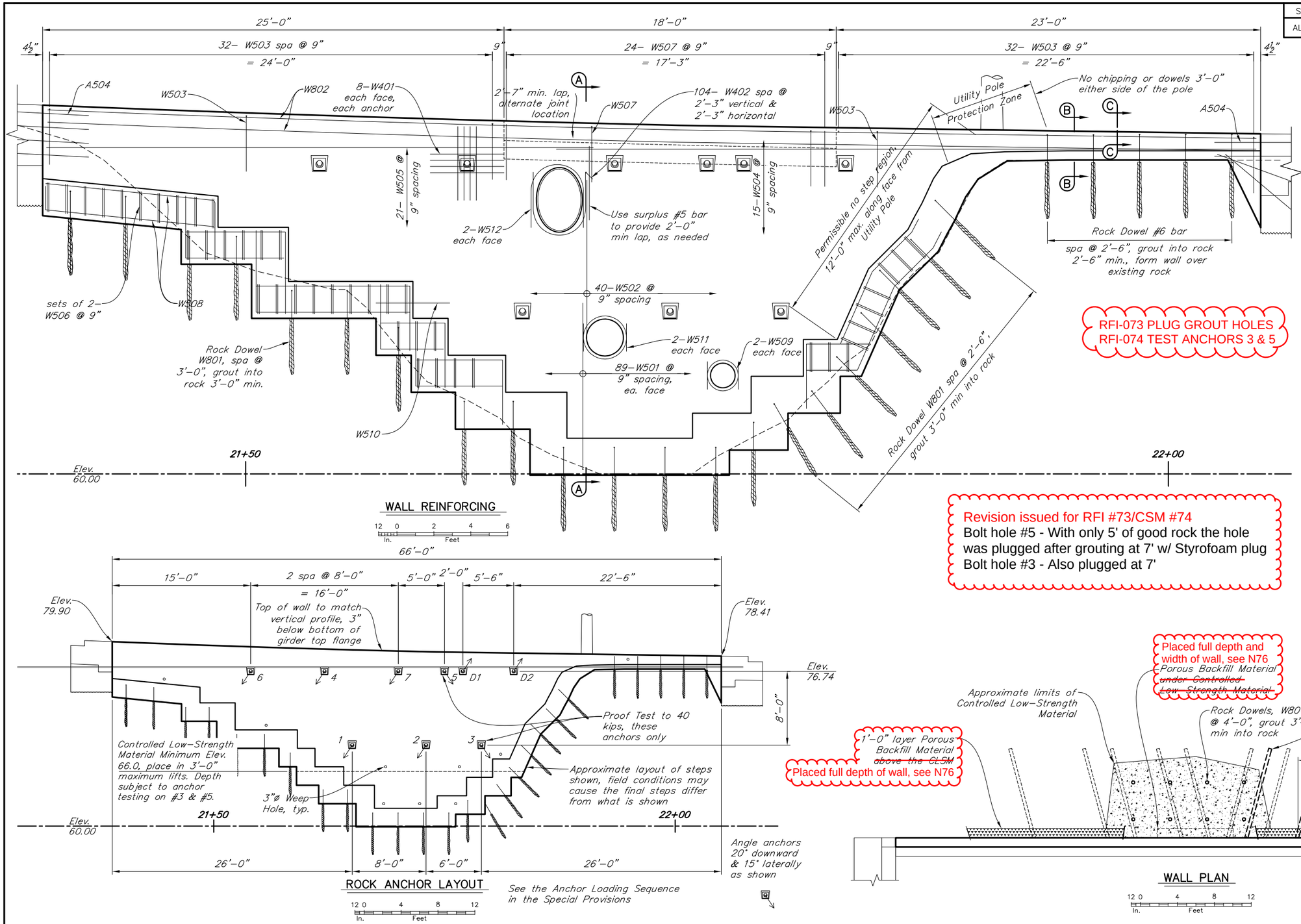
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W401		4	128	4'-0"	–
W402		4	104	1'-9"	bent
W501		5	178	9'-10"	bent
W502		5	80	10'-0"	–
W503		5	67	6'-8"	
W504	F	5	30	40'-0"	–
W505		5	42	28'-0"	–
W506		5	250	5'-2"	bent
W507		5	21	6'-9"	bent
W508	F	5	30	20'-0"	–
W509		5	4	5'-7½"	bent
W510		5	32	4'-0"	–
W511		5	4	6'-8"	bent
W512		5	4	9'-5½"	bent
W801	X	8	22	5'-4"	bent
W802	S	8	4	65'-8"	–

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.



WALL REINFORCING

12 0 2 4 6
In. Feet

RFI-073 PLUG GROUT HOLES
RFI-074 TEST ANCHORS 3 & 5

Revision issued for RFI #73/CSM #74
Bolt hole #5 - With only 5' of good rock the hole was plugged after grouting at 7' w/ Styrofoam plug
Bolt hole #3 - Also plugged at 7'

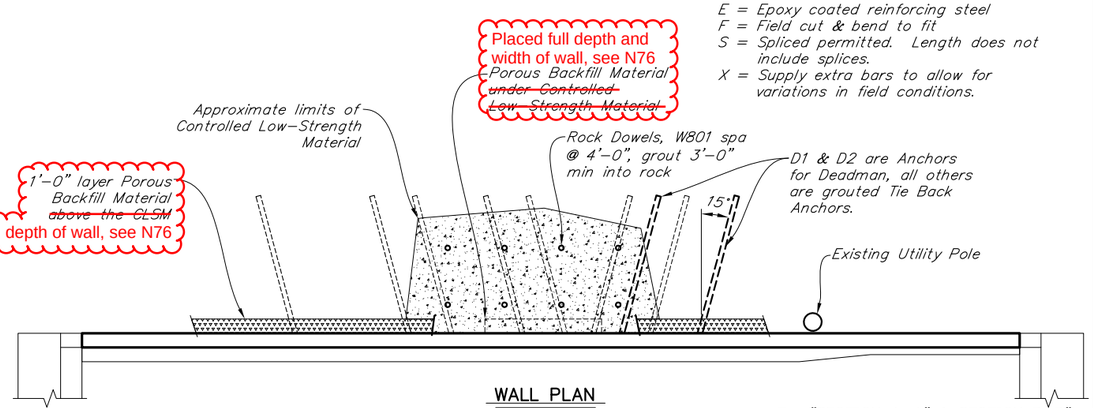
ROCK ANCHOR LAYOUT

12 0 4 8 12
In. Feet

See the Anchor Loading Sequence in the Special Provisions

Placed full depth and width of wall, see N76
Porous Backfill Material ~~under Controlled Low–Strength Material~~

Placed full depth of wall, see N76
1'-0" layer Porous Backfill Material ~~above the CLSM~~



WALL PLAN

12 0 4 8 12
In. Feet

For "SECTION A–A" & SECTION B–B" see "GORGE STREET WALL REINFORCING DETAILS" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

Sheet Revision 2 fully replaces the existing sheet N75.
Revision date: September 14, 2016

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 20TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 9/9/15

WATER STREET BRIDGE No. 2

WATER STREET

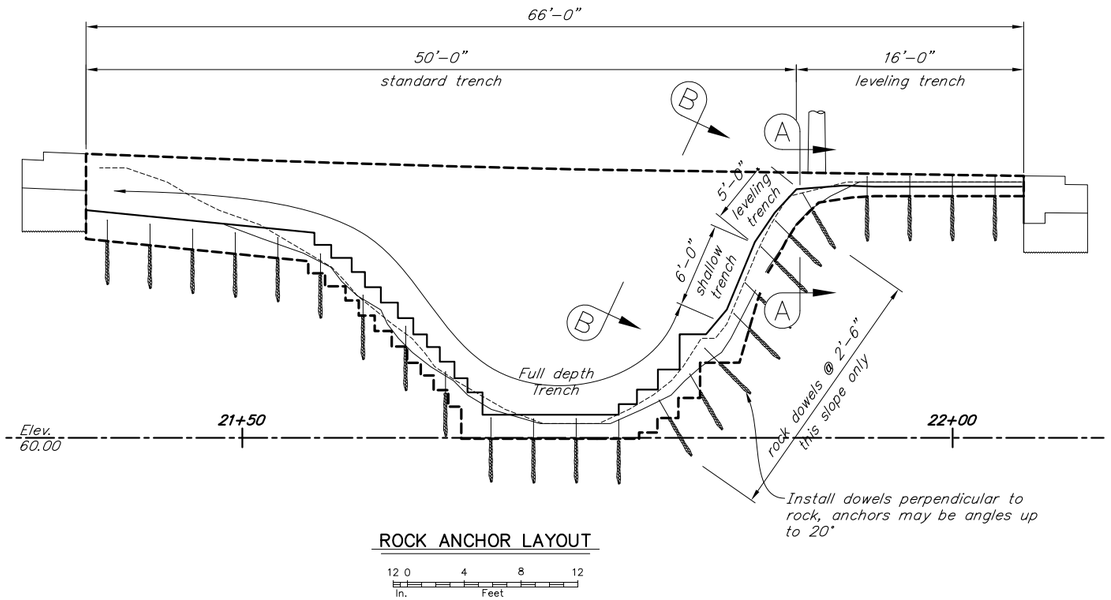
GORGE STREET WALL REINFORCING LAYOUT

BRIDGE NO. 2313

DWG. NO. 75

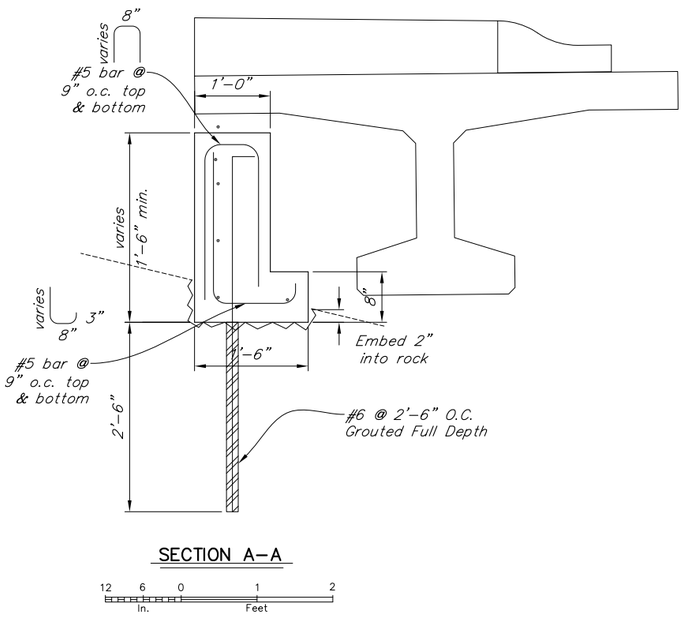
Sep 14, 2016 - 6:15pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2016-09-09 Gorge St Wall Deadman\DWG\69534_N GORGE ST WALL MOD Deadman.dwg Layout Name: GORGE STREET WALL REINFORCING LAYOUT

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015		



ROCK ANCHOR LAYOUT

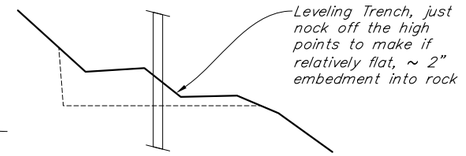
12 0 4 8 12
In. Feet



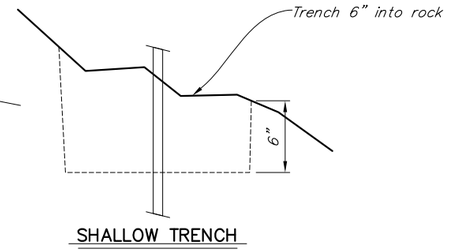
SECTION A-A

12 6 0 1 2
In. Feet

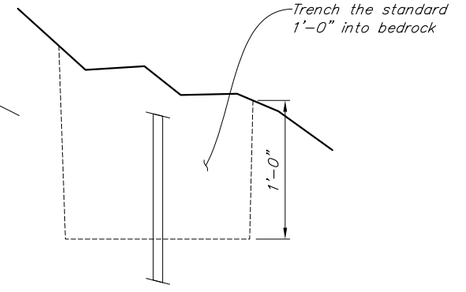
VIEW B-B



LEVELING TRENCH



SHALLOW TRENCH



STANDARD TRENCH

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Received drawing with response to RFI#60 in CSM#58	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

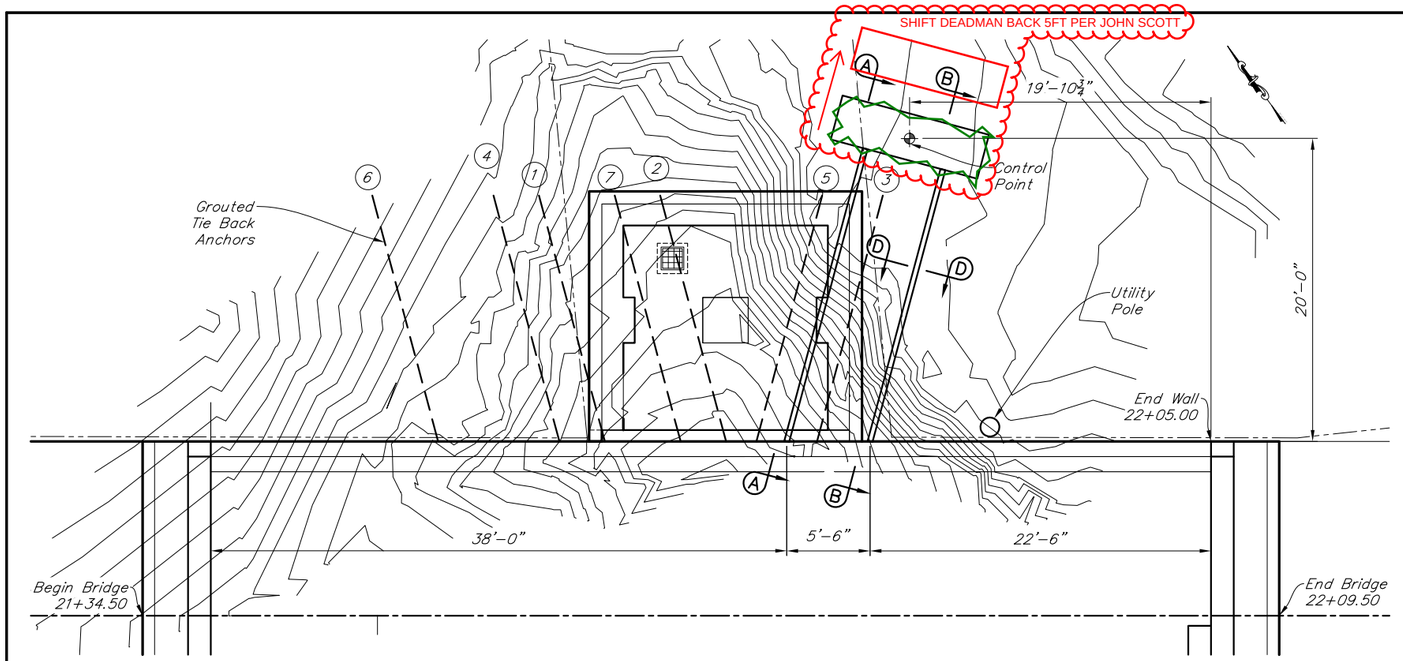
WATER STREET BRIDGE No. 2

WATER STREET

GORGE STREET WALL ROCK TRENCHING

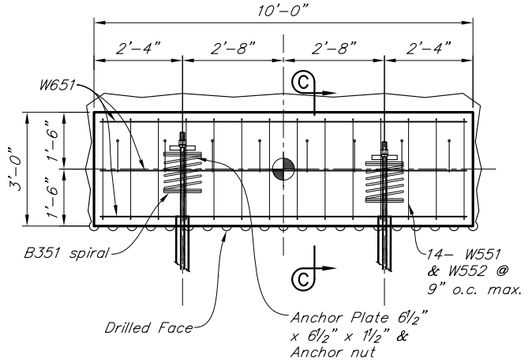
BRIDGE NO. 2313

DWG. NO. 1 N75A



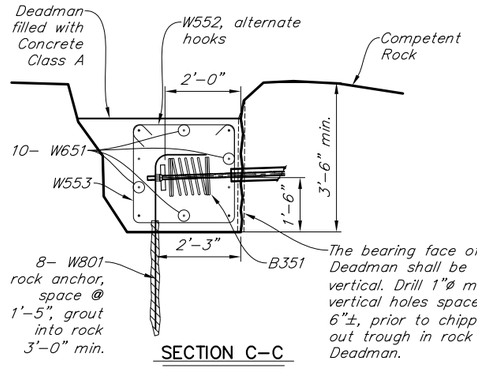
DEADMAN LAYOUT

12 0 5 10
In. Feet



PLAN: DEADMAN

12 6 0 1 2 3 4
In. Feet

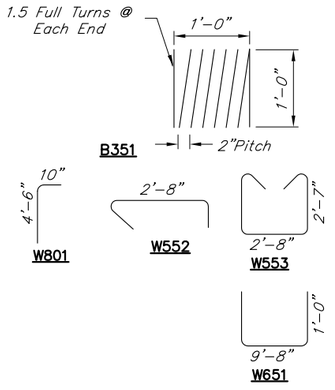


SECTION C–C

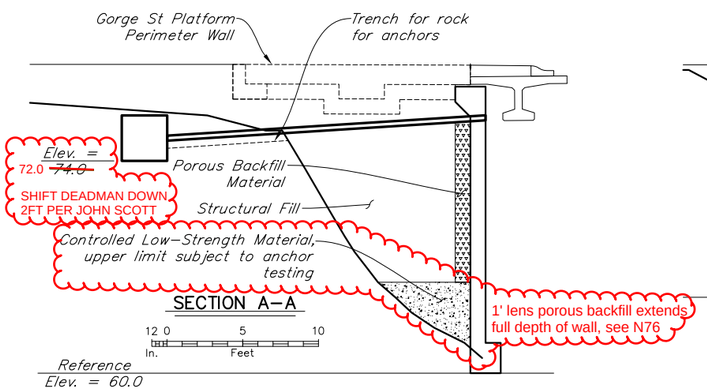
12 6 0 1 2 3 4
In. Feet

REINFORCING STEEL					
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
B351		3	2	28'–4"	bent
W552		5	14	3'–11"	bent
W553		5	14	9'–4"	bent
W651		6	10	11'–8"	bent
W801		8	8	5'–4"	bent

BENDING DIAGRAM

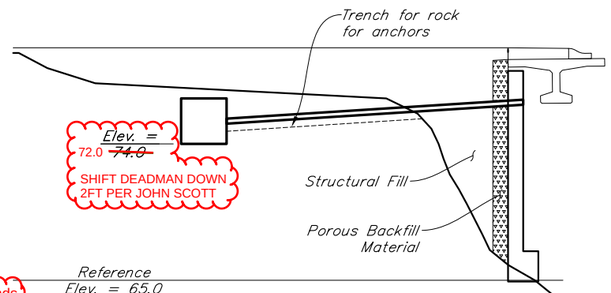


E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.



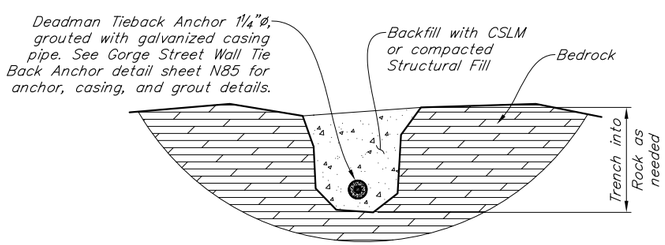
SECTION A–A

12 0 5 10
In. Feet



SECTION B–B

12 0 5 10
In. Feet



SECTION D–D

12 6 0 1 2 3
In. Feet

Trench rock for anchor

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

New Sheet supplements sheets N74–N76. Issue date: September 14, 2016

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

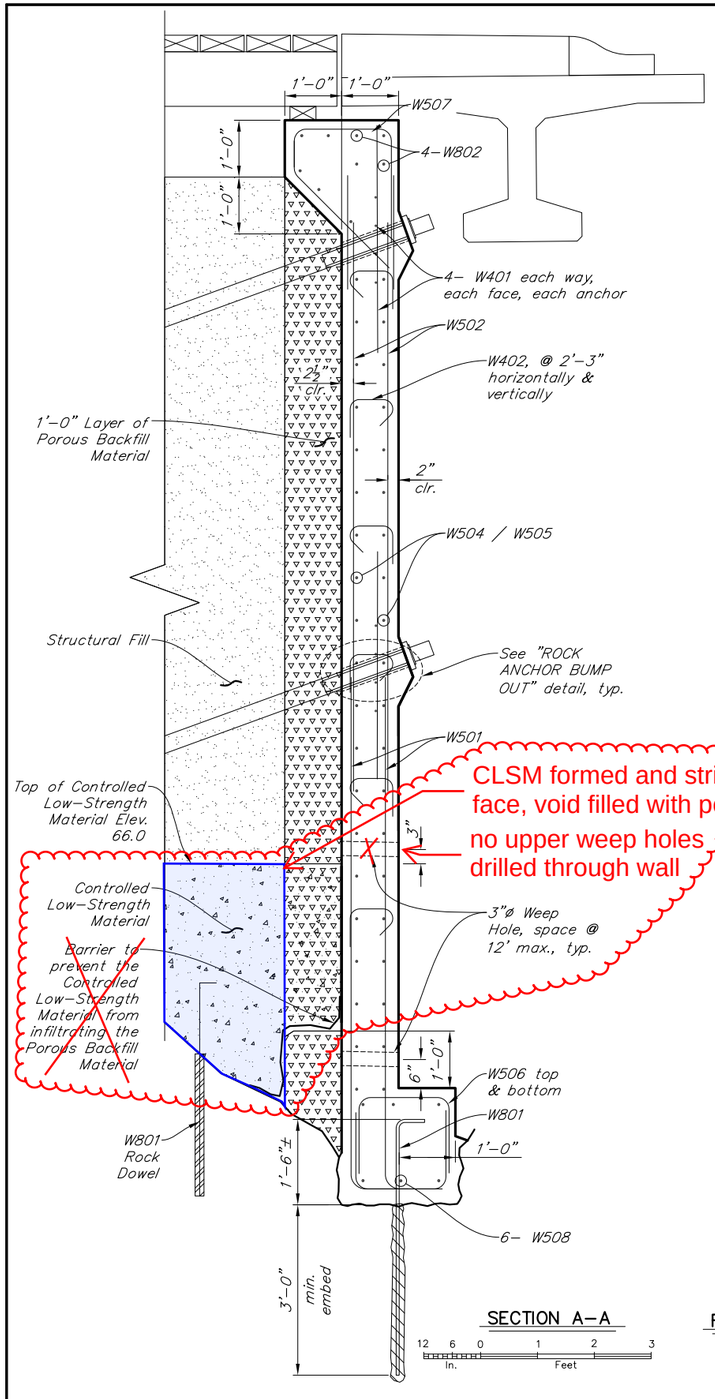
GORGE STREET WALL DEADMAN DETAILS

BRIDGE NO. 2313
DWG. NO. 75B

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR–000S(735)	2015	N76	N110

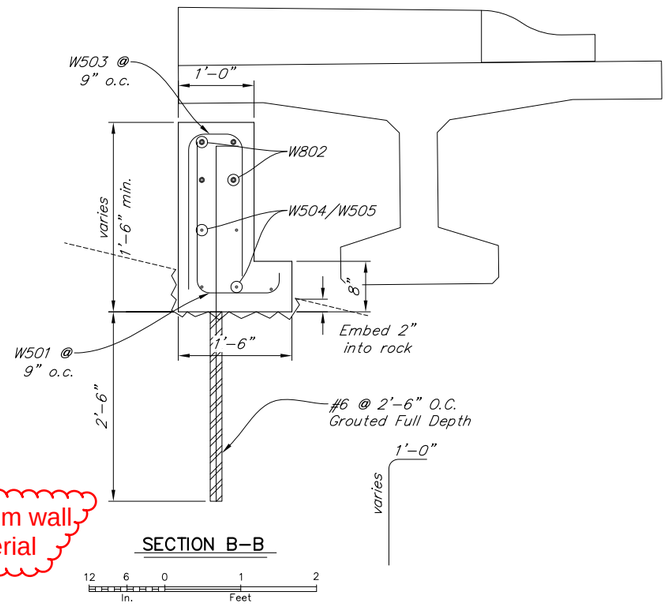
Sep 14, 2016 - 6:19pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2016-09-09 Gorge St Wall Deadman\DWG\69534_N GORGE ST WALL MOD Deadman.dwg Layout Name: DEADMAN

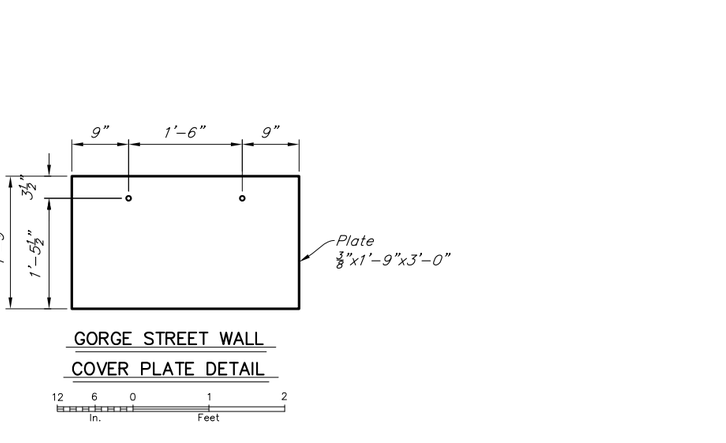
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N76	N110



CLSM formed and stripped 1' from wall face, void filled with porous material

no upper weep holes drilled through wall





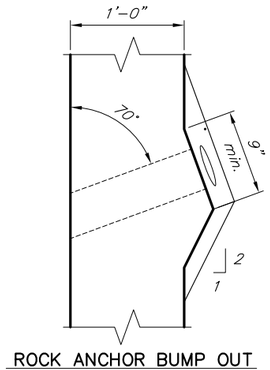
TYPICAL FOOTING REINFORCEMENT

12 6 0 1 2 3 4
In. Feet

Wall reinforcing not shown for clarity

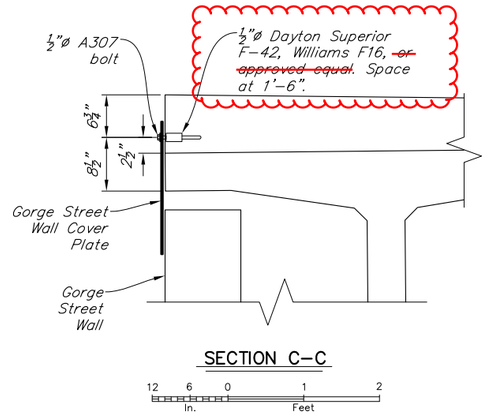
Bottom of footing may slope up to 1 vertical : 6 horizontal. Use vertical footing steps on steeper slopes

For wall sections with heights greater than 4'-0", the maximum step shall be ½ the wall height



ROCK ANCHOR BUMP OUT

6 0 1
In. Feet



SECTION C-C

12 6 0 1 2
In. Feet

Grind wall & sidewalk as needed for Gorge Street Wall Cover Plates to hang flush

GORGE STREET WALL COVER PLATE DETAIL

12 6 0 1 2
In. Feet

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	Sheet Revision 1 fully replaces the existing sheet N76. Revision date: August 25, 2016 AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 9/5/19 Registered Professional Engineer

WATER STREET BRIDGE No. 2

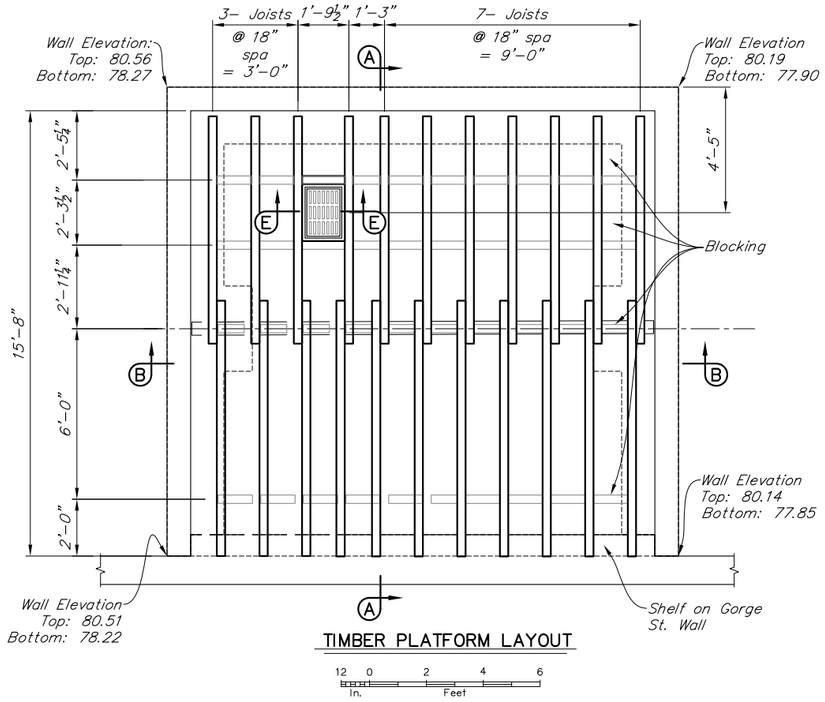
WATER STREET

GORGE STREET WALL REINFORCING DETAILS

BRIDGE NO. 2313
DWG. NO. 76

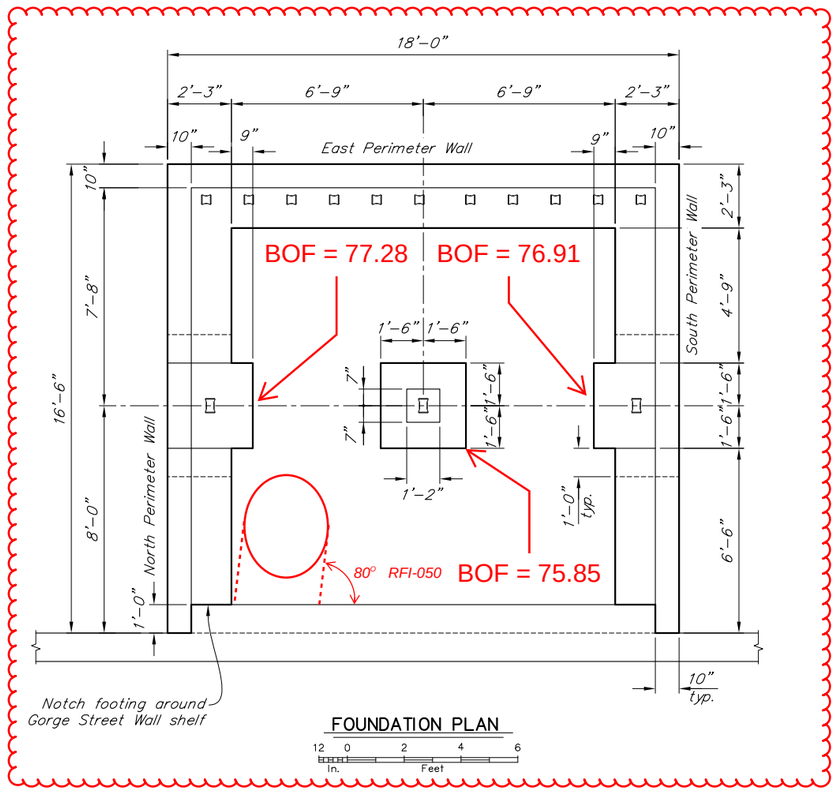
Aug 25, 2016 - 12:00pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2016-08-22 Gorge St wall Rock surface\DWG\69534_N GORGE ST WALL MOD.dwg Layout Name: GORGE STREET WALL REINFORCING DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N77	N110



TIMBER PLATFORM LAYOUT

12 0 2 4 6 In. Feet



FOUNDATION PLAN

12 0 2 4 6 In. Feet

CONSTRUCTION NOTES

GENERAL

Protect existing buildings in project work area from damage during construction

DESIGN LOADS

Vehicle: 10,000 lb max axle load

MATERIALS

Concrete: per Section 506.

Timber: per Section 713.

Preservatives for Timber: per Section 714.

Steel Parts and Hardware: Hot-dip galvanize unless noted otherwise.

Manhole Lid and Frame: Neenah Foundry R-1878-~~B1L or approved equal~~ B1G

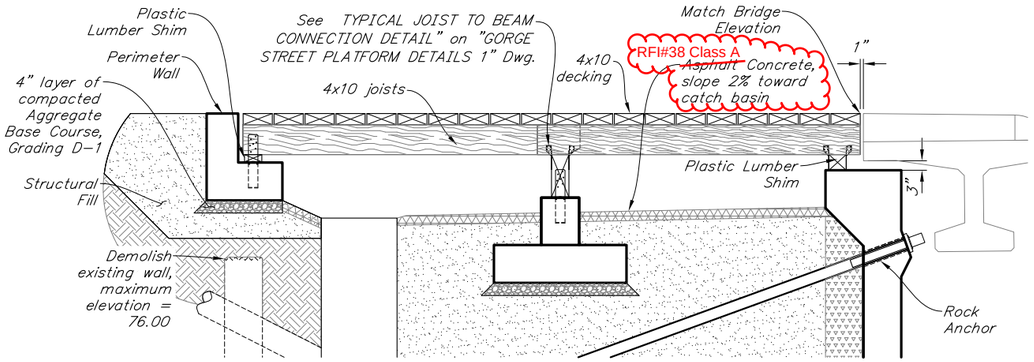
Plastic Lumber: all plastic meeting ASTM D7568.

INSTALLATION

Beams and joists: place crown up. Tops of joists shall not vary from a plane more than will permit bearing of the decking on joists. Lap joists 4" past the opposite face of the midspan beam as indicated. Block at midspan as indicated.

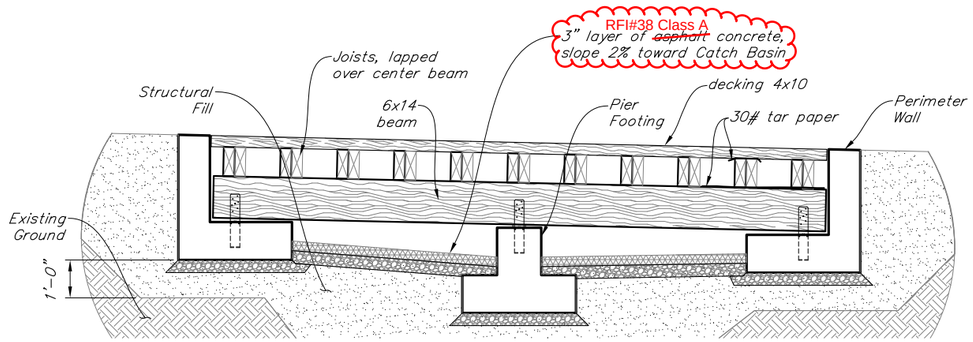
Decking: lay deck planks with heart side down (unless board would have wane on top, then lay wane side down). Fasten decking as indicated on this sheet. Cut ends of planks parallel to joists, or to required contour of adjacent obstruction.

Fastening: bolt members together when they are installed, and retighten immediately prior to final completion.



SECTION A-A

12 6 0 1 2 3 4 In. Feet



SECTION B-B

12 6 0 1 2 3 4 In. Feet

For "SECTION E-E" see "GORGE STREET WALL PLATFORM DETAILS 3" Dwg.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/4/5

WATER STREET BRIDGE No. 2

WATER STREET

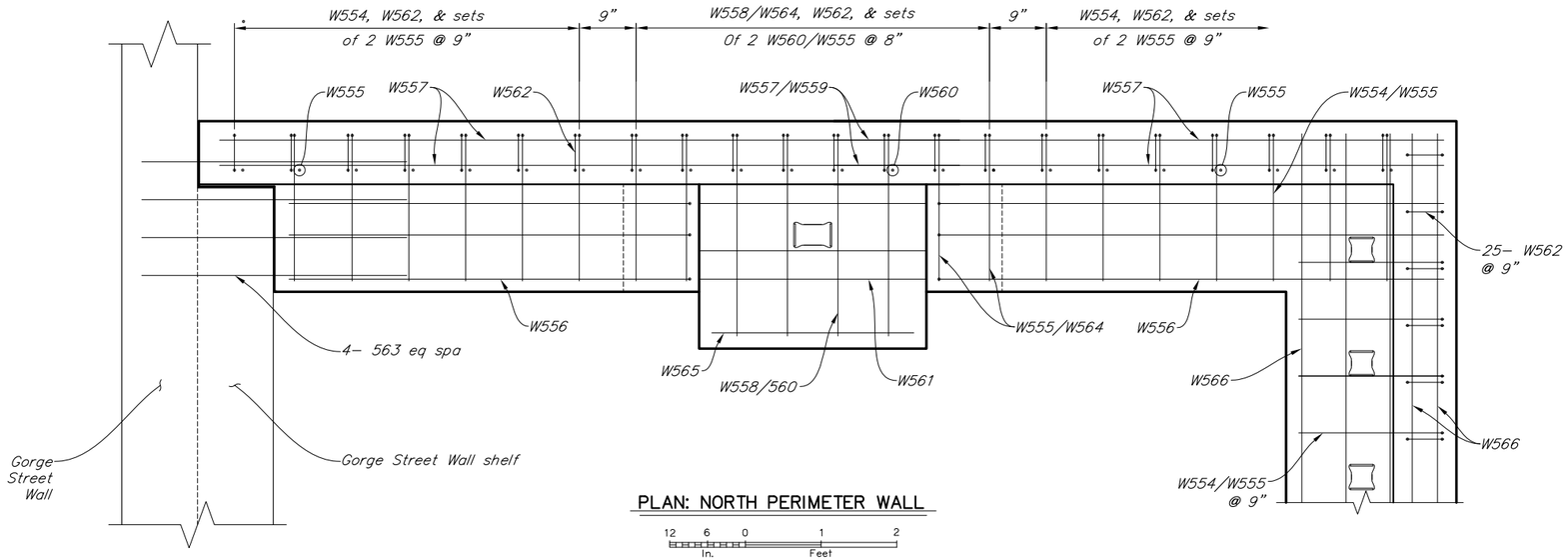
GORGE STREET PLATFORM DETAILS 1

BRIDGE NO. 2313

DWG. NO. 77

Oct 14, 2015 - 4:02pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N GORGE ST PLATFORM.dwg Layout Name: GORGE STREET PLATFORM DETAILS 1

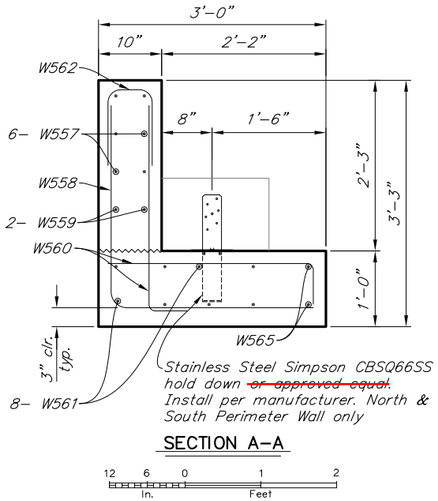
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N78	N110



PLAN: NORTH PERIMETER WALL

12 6 0 1 2 In. Feet

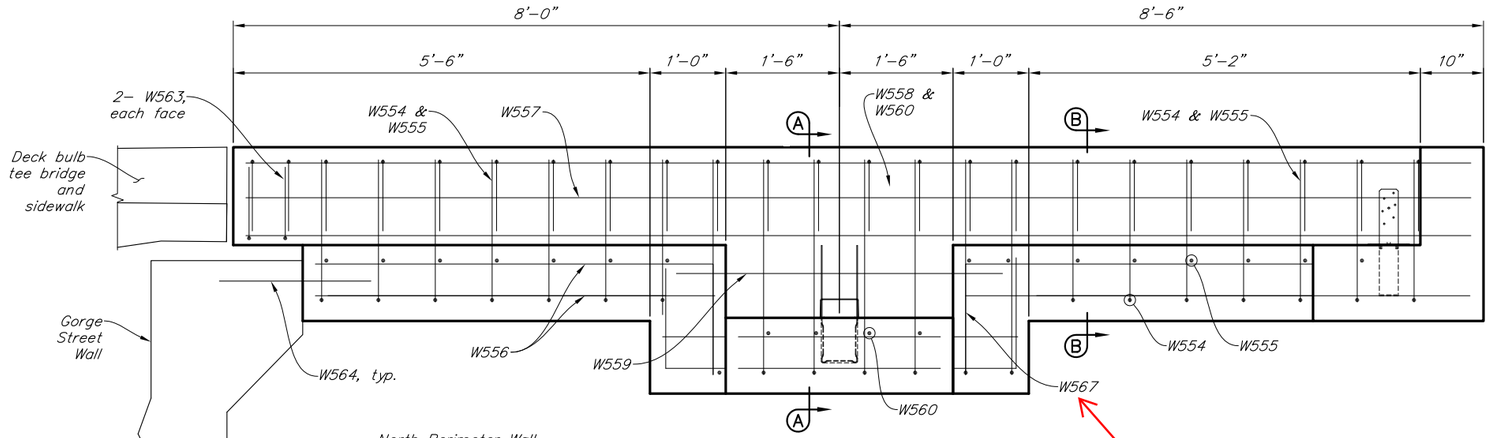
South Perimeter Wall mirror opposite, east Perimeter Wall similar



Stainless Steel Simpson CBSQ66SS hold down ~~or approved equal~~. Install per manufacturer. North & South Perimeter Wall only

SECTION A-A

12 6 0 1 2 In. Feet

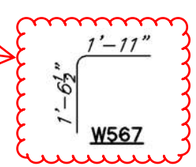


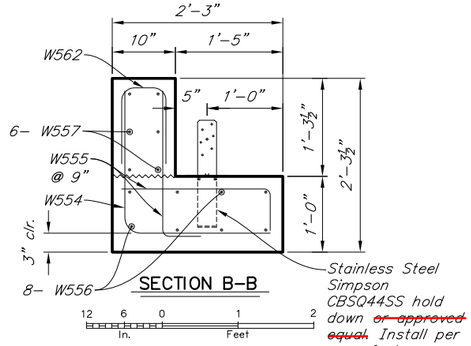
North Perimeter Wall shown, East & South Perimeter walls similar.

ELEVATION: NORTH PERIMETER WALL

12 6 0 1 2 In. Feet

RFI-011





SECTION B-B

12 6 0 1 2 In. Feet

Stainless Steel Simpson CBSQ44SS hold down ~~or approved equal~~. Install per manufacturer. East Perimeter Wall only.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 09/05

WATER STREET BRIDGE No. 2

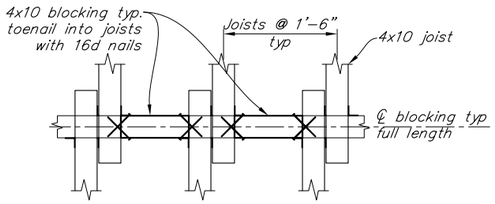
WATER STREET

GORGE STREET PLATFORM DETAILS 2

BRIDGE NO. 2313
DWG. NO. 78

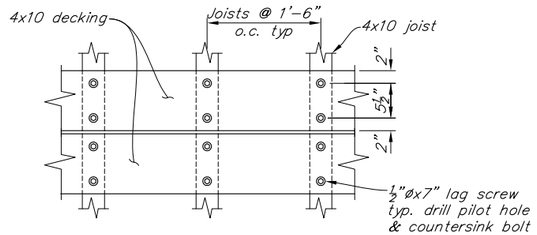
Oct 14, 2015 - 4:03pm bitten \\SHEARERSERVER\D-Drive\Jobs\0226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534_N GORGE ST PLATFORM.dwg Layout Name: GORGE STREET PLATFORM DETAILS 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N79	N110



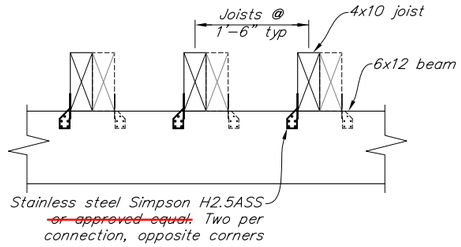
TYPICAL JOIST BLOCKING PLAN

12 6 0 1 2 In. Feet



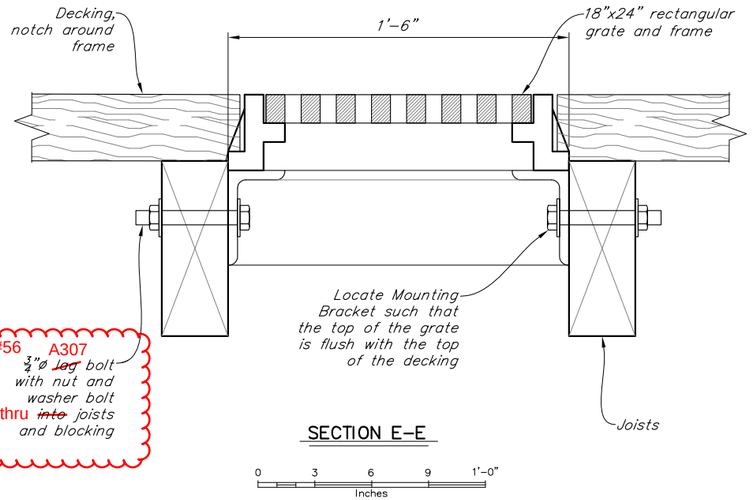
TYPICAL DECKING BOLT DOWN

12 6 0 1 2 In. Feet



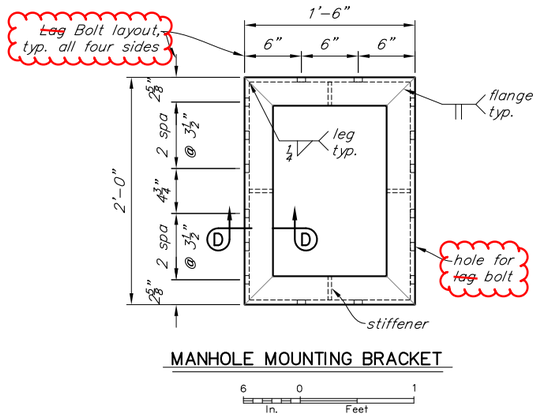
TYPICAL JOIST TO BEAM CONNECTION

12 6 0 1 2 In. Feet



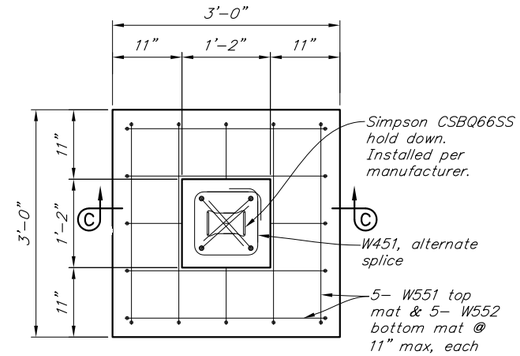
SECTION E-E

0 3 6 9 1'-0" Inches



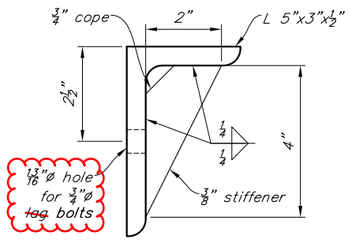
MANHOLE MOUNTING BRACKET

6 0 1 In. Feet



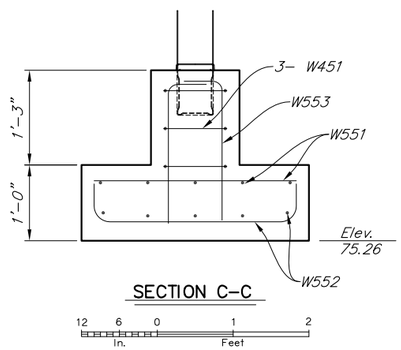
PLAN: PIER FOOTING

12 6 0 1 2 In. Feet



SECTION D-D

1 0 2 4 Inches



SECTION C-C

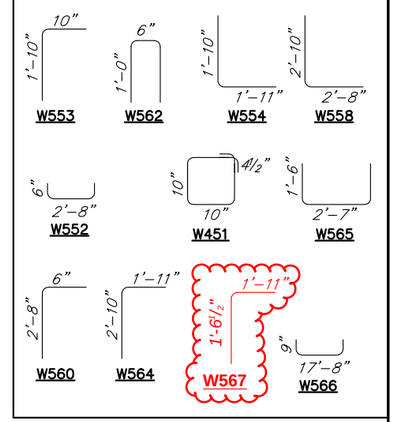
12 6 0 1 2 In. Feet

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
W451		4	3	4'-1"	bent
W551		5	10	2'-8"	–
W552		5	10	3'-10"	bent
W553		5	4	2'-8"	bent
W554	X	5	57	3'-9"	bent
W555	X	5	106	2'-7"	–
W556	F,X	5	32	9'-0"	–
W557	F,X	5	12	16'-2"	–
W558		5	8	5'-5"	bent
W559		5	4	5'-0"	–
W560		5	20	3'-4"	–
W561	F	5	16	4'-8"	–
W562		5	73	2'-6"	bent
W563		5	8	3'-6"	–
W564		5	8	4'-9"	bent
W565		5	4	5'-7"	bent
W566		5	14	17'-8"	bent
W567		5	8		bent

RFI-011

BENDING DIAGRAM



E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 09/5/19

WATER STREET BRIDGE No. 2

WATER STREET

GORGE STREET PLATFORM DETAILS 3

BRIDGE NO. 2313
DWG. NO. 79

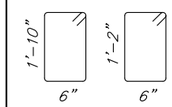
Oct 14, 2015 - 4:04pm brien \\SHEARERSERVER\ID-Drive\Jobs\0226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534_N GORGE ST PLATFORM.dwg Layout Name: GORGE STREET PLATFORM DETAILS 3

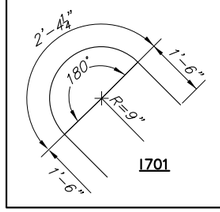
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N80	N110

REINFORCING STEEL INT. DIAPHRAGM

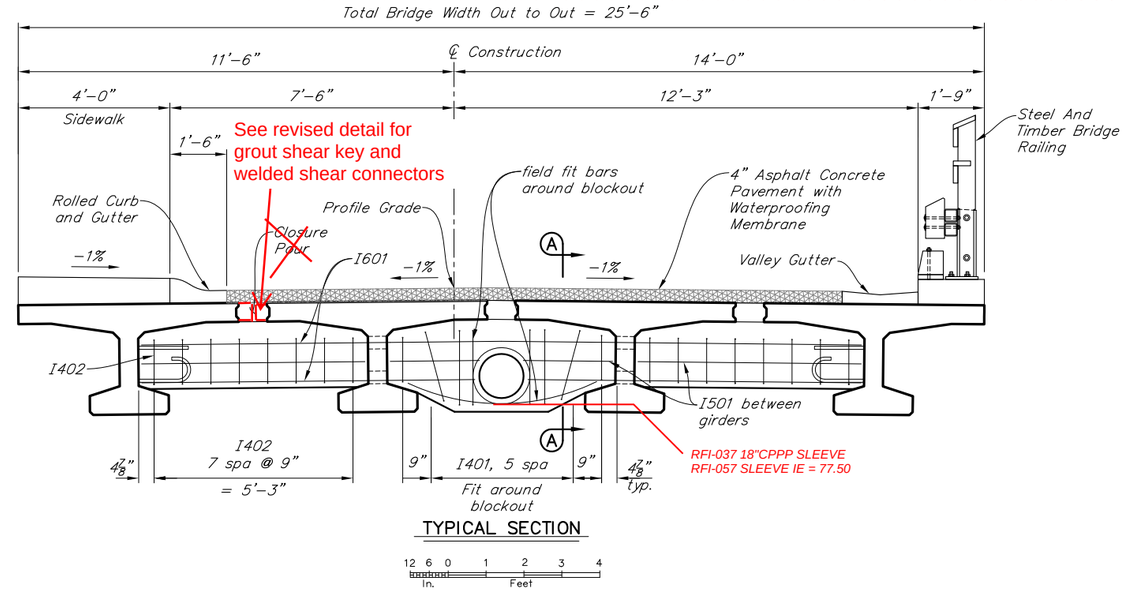
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
I401	E	4	18	5'-5"	bent
I402	E	4	6	4'-1"	bent
I501	E,F	5	12	5'-8"	–
I601	E,S	6	4	18'-10"	–
I701	E	7	8	5'-4½"	bent

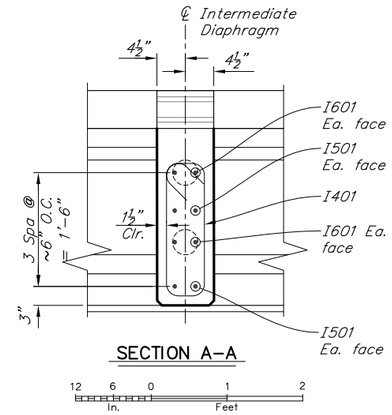
BENDING DIAGRAM



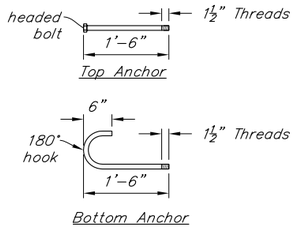


E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.



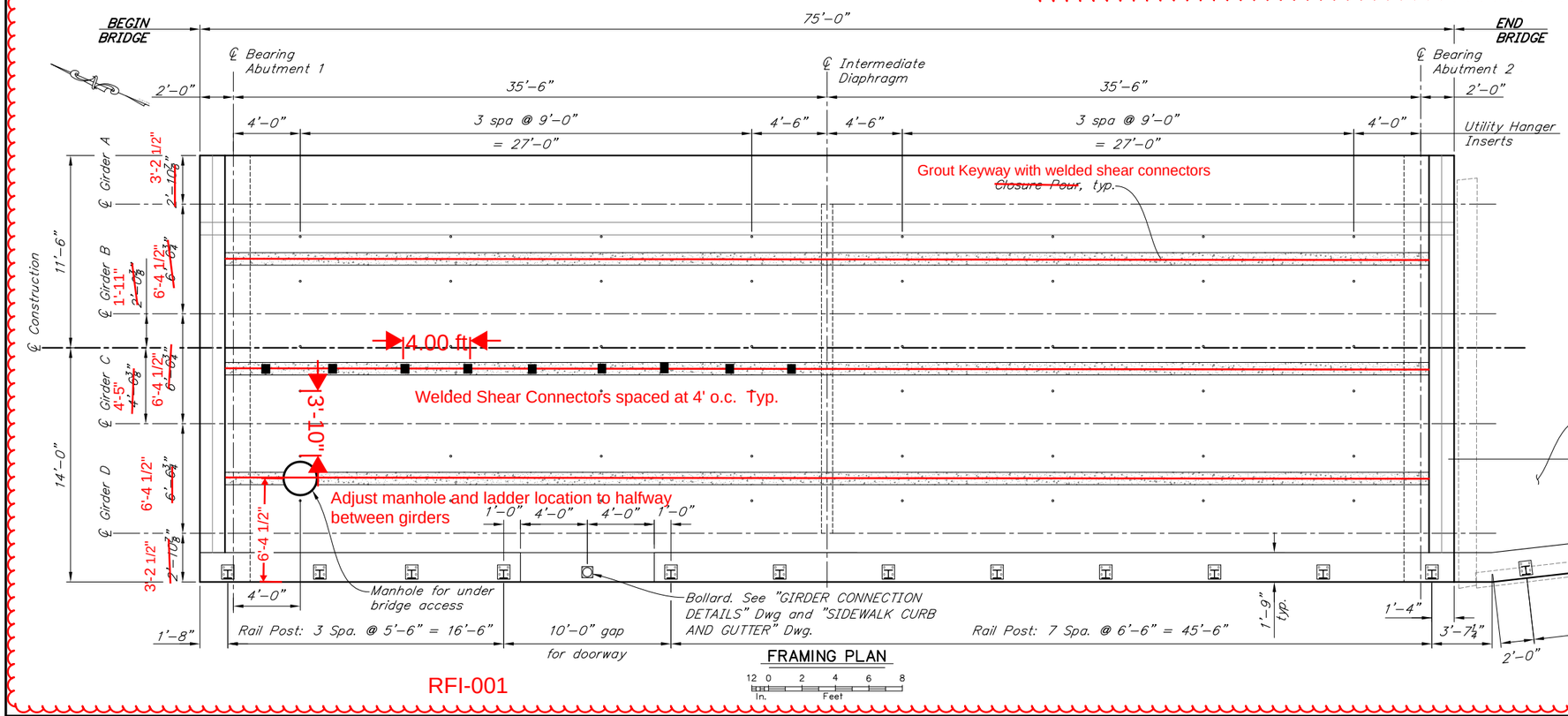


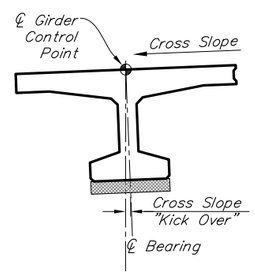
Section drawn perpendicular to diaphragm face



1"ø ASTM A307 galvanized

Provide top and bottom anchor at inside face of exterior girders in Intermediate Diaphragms





RFI-001

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA · 40TH · DAVID R. SHEARER · CE 8373 · 10/14/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

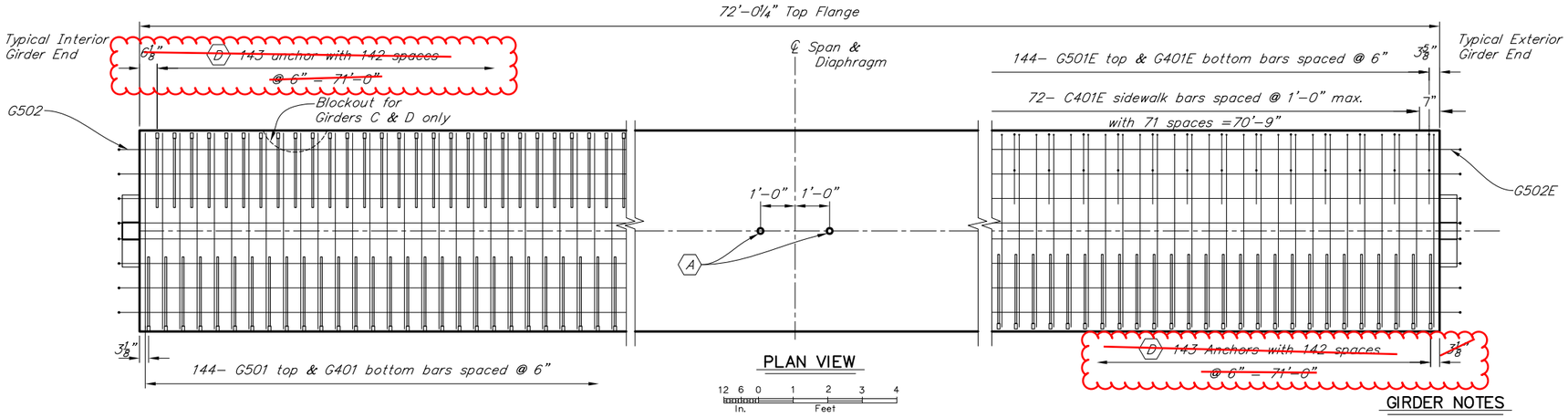
FRAMING PLAN & TYPICAL SECTION

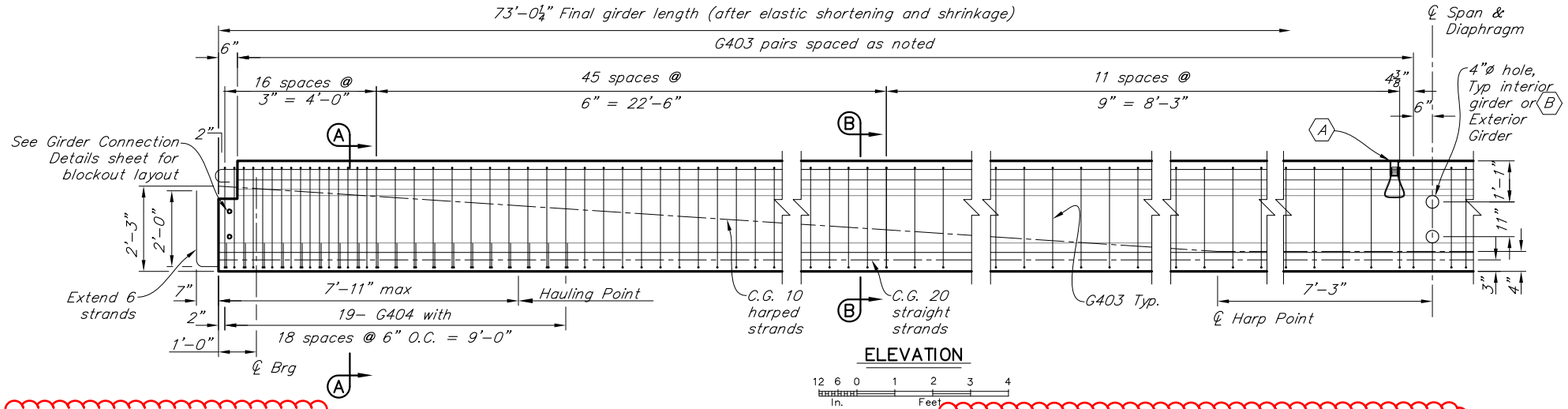
BRIDGE NO. 2313

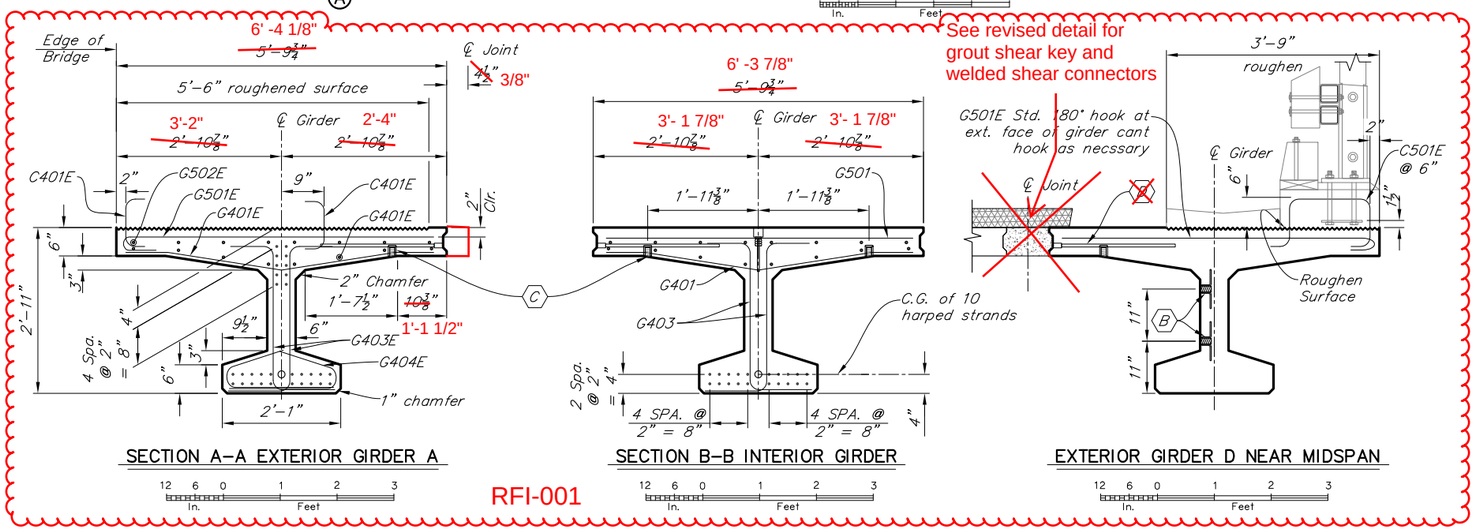
DWG. NO. 80

Oct 14, 2015 - 4:04pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\planset ado\&pf69534_N69 FRAMING PLAN.dwg Layout Name: FRAMING PLAN & TYPICAL SECTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N81	N110







GIRDER NOTES

1. Use normal weight concrete having the following strengths:
   at stress transfer f'ci = 7,500 psi
   at 28 days f'c = 9,000 psi
2. Use 0.6"ø low relaxation strands having an ultimate strength of 270 ksi and a cross section area of 0.217 in².
3. Design is based on the following steel stresses:

   pretensioning – jacking stress 189 ksi
   after initial losses – 166.5 ksi
   after all losses – 150.6 ksi
   fpe with LL = 163.3 ksi

   ADTT Adjusted Multiple Presence Factor = 1.08 one lane, 0.90 two lanes, included in Distribution Factors. ADTT = 61 one direction (future)

   Distribution Factor = 0.927 exterior girder on sidewalk side for moment & shear, 0.565 and 0.664 interior girder for moment & shear respectively.
4. 1" clear on all reinforcing except as noted.
5. Deflect forms to compensate for camber and roadway grade, see Specifications.
6. Provide a magnesium float finish on the roadway surface of the precast member.
7. Roughen the surface under the sidewalks, curbs, & barriers.
8. Omit shear keys and shear connectors on outside edge of exterior girders.
9. Cast girder ends plumb with respect to roadway grade

(A) 1"øx1'-0" Coil Anchor Insert for vertical adjustment of girders. Recess 2" and prevent concrete from filling recess.

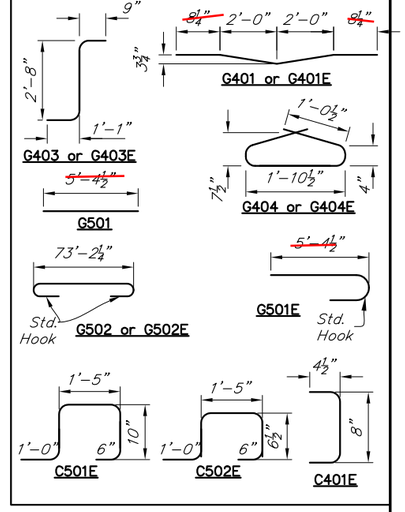
(B) 1"øx4½" flared threaded insert, interior face., exterior girders.

(C) Utility Hanger Inserts. 2-¾"ø thin slab threaded inserts, layout as shown on Framing Plan

~~(D) 5"ø coupler with 5" threaded rod for girder connections.~~ RFI-001

REINFORCING STEEL ONE GIRDER

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
G401	E	4	144	5'-5"	Bent
G401E	E	4	144	5'-5"	Bent
G402	E,S	4	8	72'-8"	–
G402E	E,S	4	8	72'-8"	–
G403	E	4	296	4'-6"	Bent
G403E	E	4	296	4'-6"	Bent
G404	E	4	38	4'-7½"	Bent
G501	E	5	144	5'-7"	–
G501E	E	5	144	5'-2"	Bent
G502	E,S	5	8	75'-4"	Bent
G502E	E	5	8	75'-4"	Bent
G603	E	6	4	3'-1"	Bent
C401E	E	4	72	1'-0½"	Bent
C501E	E	5	112	4'-7"	Bent
C502E	E	5	16	4'-0"	Bent



E – Epoxy coat all girder reinforcing

S – Length does not include splices. minimum lap splice length for splices shall be:
2'-0" for #4 bars,
2'-6" for #5 bars.

X – Exterior Girder Only
L – Ship Loose

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/4/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

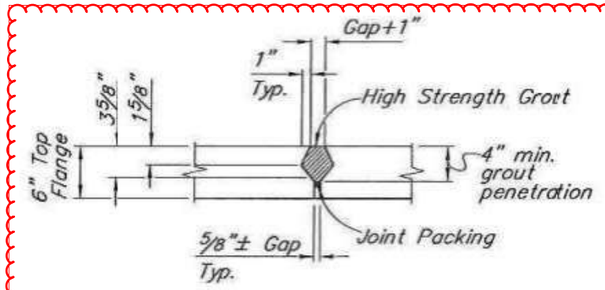
WATER STREET

GIRDERS

BRIDGE NO. 2313
DWG. NO. 81

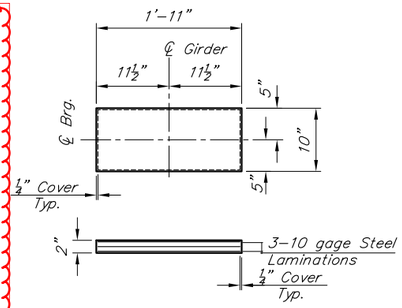
Oct 14, 2015 - 4:04pm brien \\sheareserver\jobs\0226 water street ps&e\DWG\planset.ado\sht69534_N70 GIRDERS.dwg Layout Name: GIRDERS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N82	N110



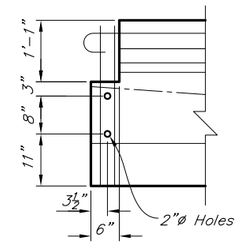
REVISED per RFI#1

SHEAR KEY DETAIL



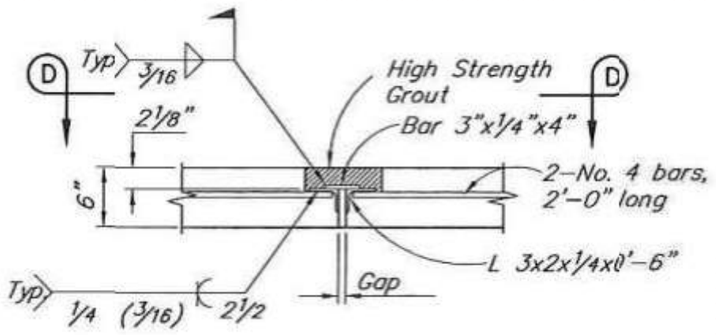
BEARING DETAIL

Shear Modulus = 115 psi
Dead Load = 57 kip
Live Load = 106 kip



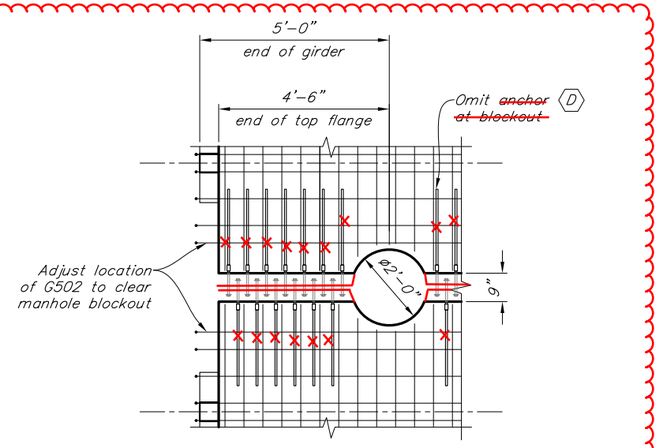
END DIAPHRAGM BLOCKOUT DETAIL

Blockouts are measured at centerline of girder.

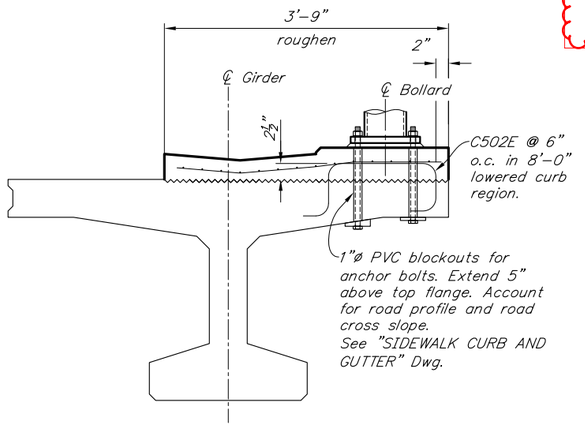


REVISED per RFI#1

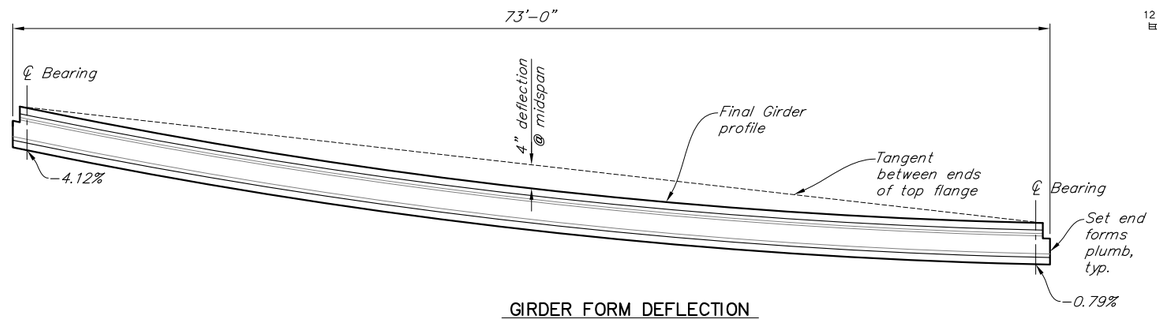
SHEAR CONNECTOR DETAIL



MANHOLE BLOCKOUT



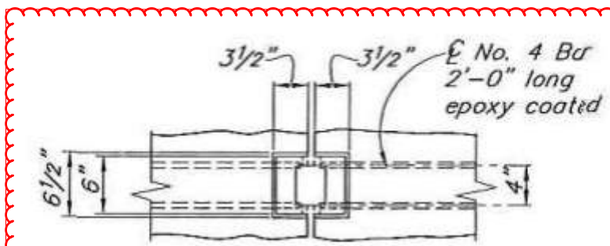
EXTERIOR GIRDER D NEAR BOLLARD



GIRDER FORM DEFLECTION

Vertical Scale exaggerated for clarity

Assumed Prestress Camber @ 120 days = 3.60"



REVISED per RFI#1

VIEW D-D

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

WATER STREET BRIDGE No. 2

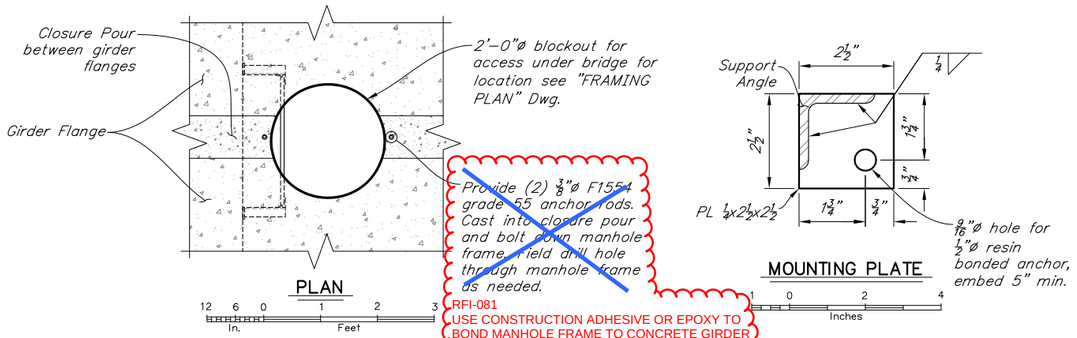
WATER STREET

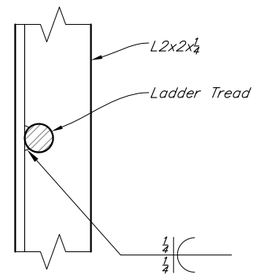
GIRDER CONNECTION DETAILS

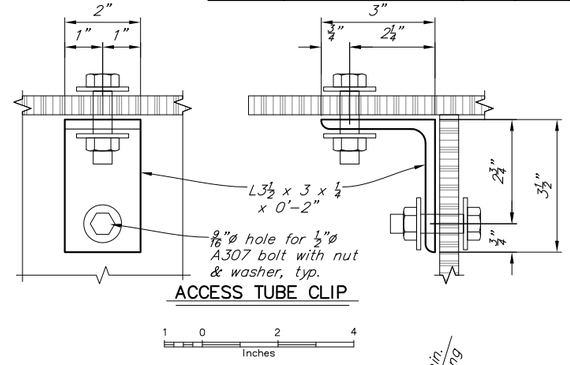
BRIDGE NO. 2313
DWG. NO. 82

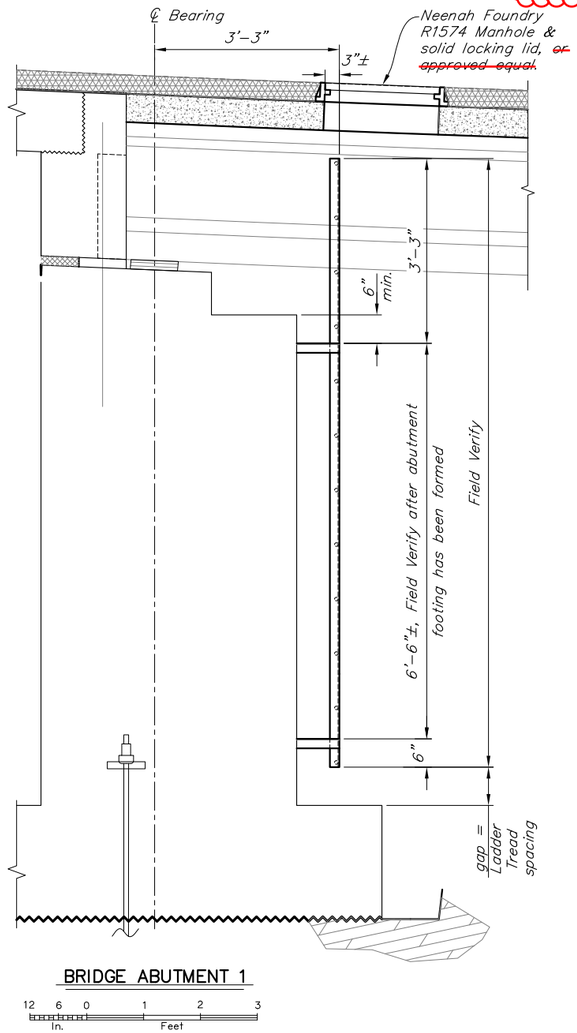
Oct 14, 2015 - 4:04pm bhen \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\fdp\69534_N70 GIRDERS.dwg Layout Name: GIRDER CONNECTION DETAILS

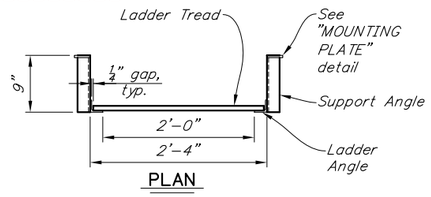
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N83	N110

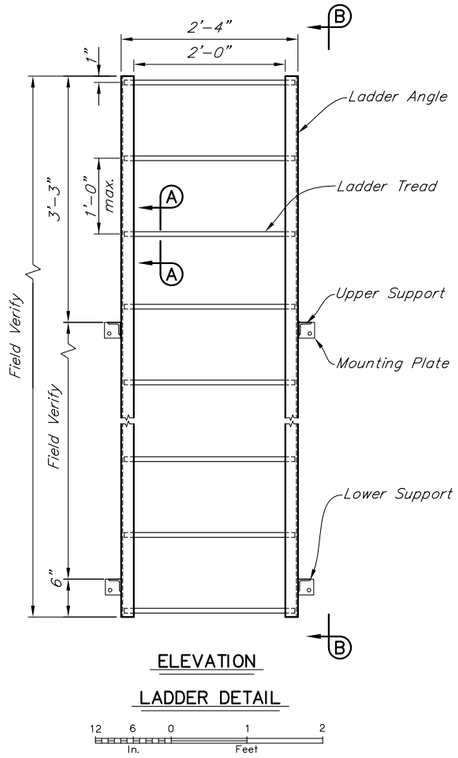






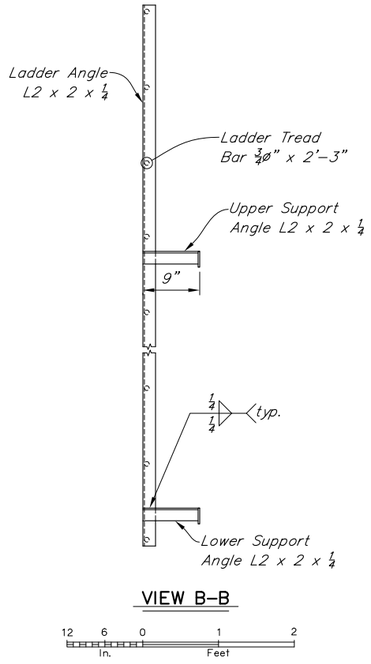


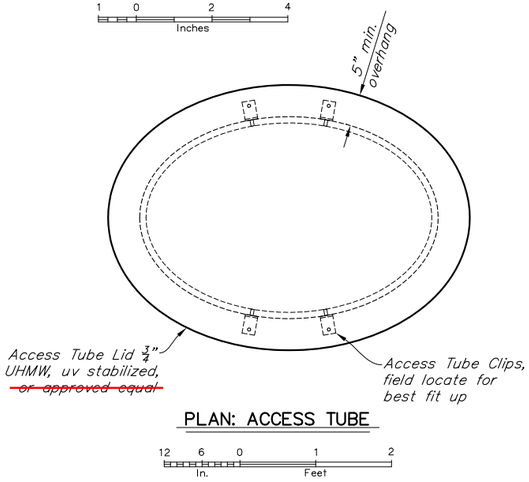


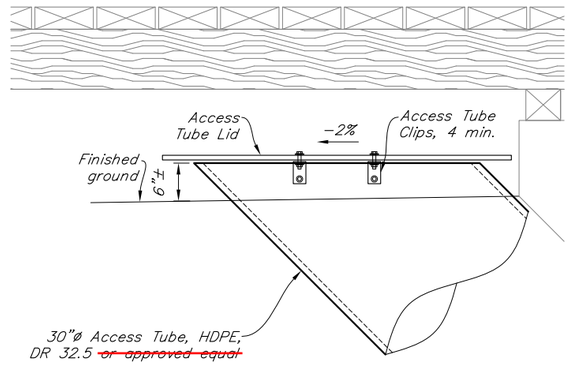


Materials:

All fabricated steel shall be ASTM A709 grade 36. All steel components shall be hot-dip galvanized after fabrication.







DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

UNDER BRIDGE ACCESS

BRIDGE NO. 2313
DWG. NO. 83

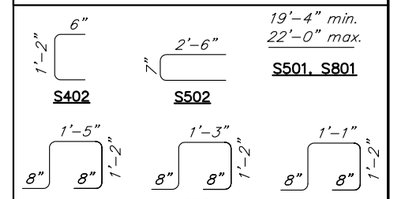
Oct 14, 2015 - 4:04pm brien \\SHEARERSERVER\D-Drive\Jobs\02226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534_N69 FRAMING PLAN.dwg Layout Name: UNDER BRIDGE ACCESS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N84	N110

REINFORCING STEEL

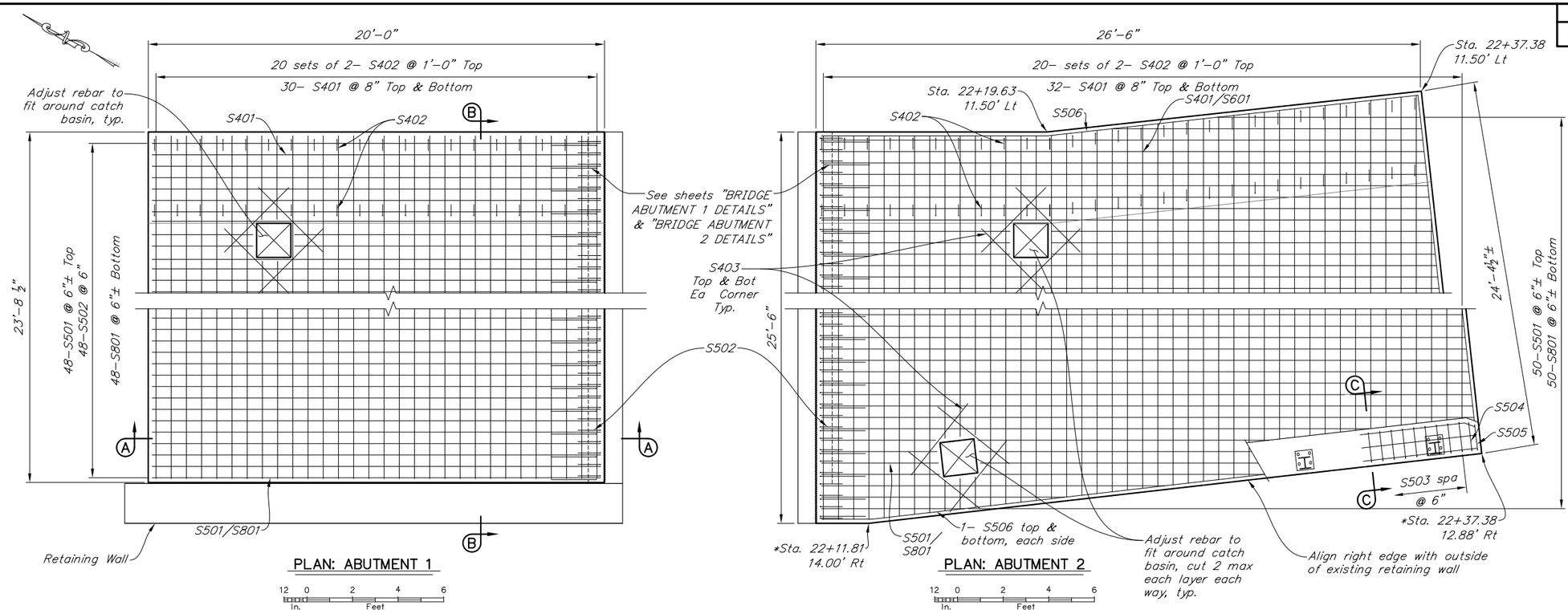
MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S401	E	4	124	23'-4"	–
S402	E	4	80	2'-2"	bent
S403	E	4	16	4'-0"	–
S501	E	5	98	varies	–
S502	E	5	49	2'-7"	bent
S503	E	5	53	4'-3"	bent
S504	E	5	1	4'-1"	bent
S505	E	5	1	3'-11"	bent
S506	E,F	5	4	32'-0"	–
S601	E,F	6	3	27'-0"	–
S801	E	8	98	varies	–

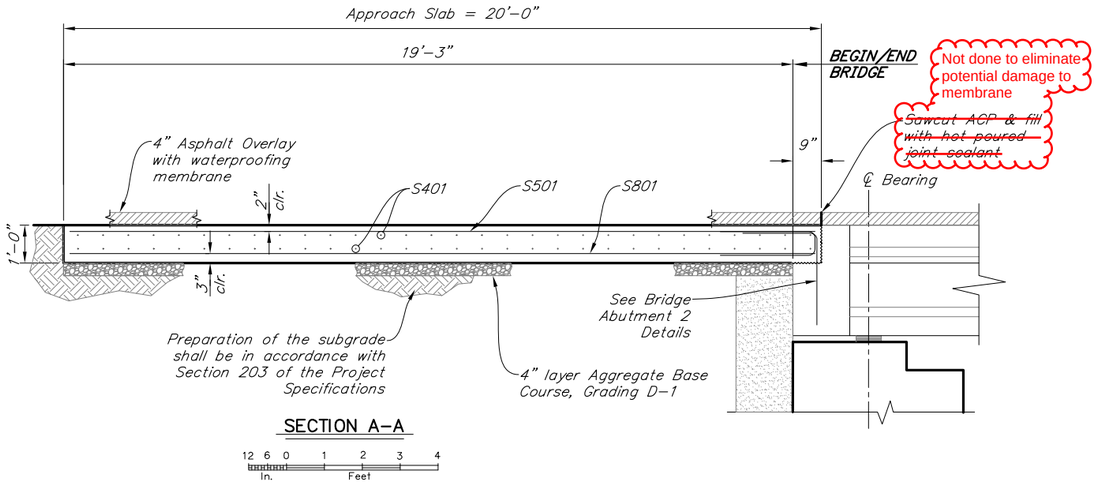
BENDING DIAGRAM

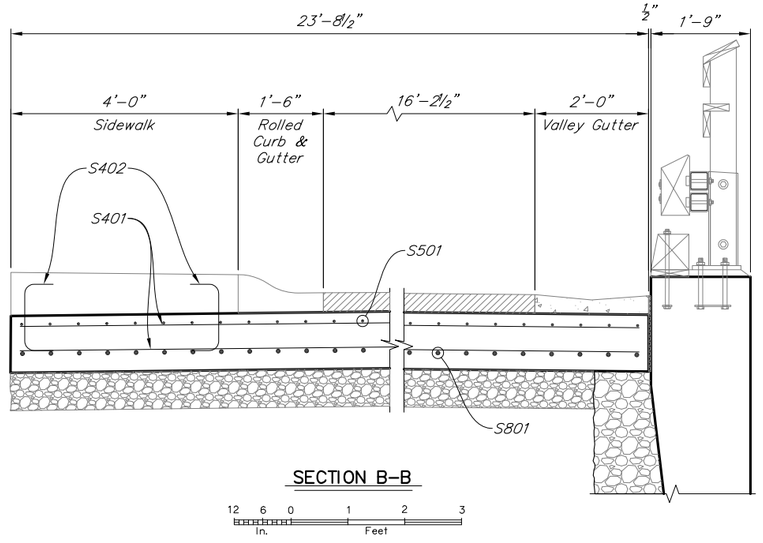


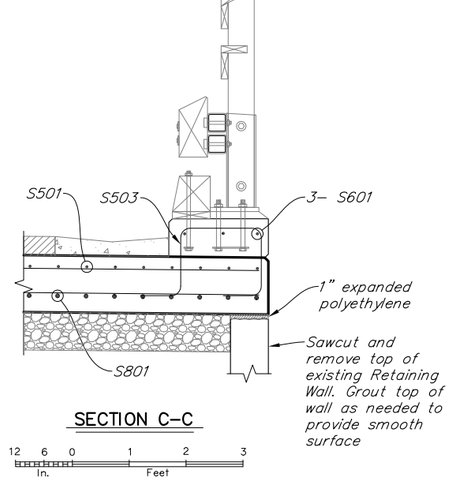
E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.

Approach Slab concrete shall be Class A-A









DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer		
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer		

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

BRIDGE APPROACH SLAB

BRIDGE NO. 2313
DWG. NO. 84

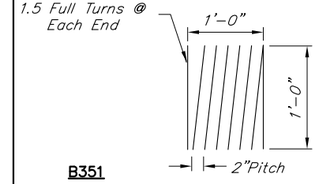
Oct 14, 2015 - 4:04pm bfien \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\fpf\69534_N APPROACH SLAB.dwg Layout Name: BRIDGE APPROACH SLAB

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N85	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
B351		3	1	Varies	bent

BENDING DIAGRAM



RFI-148 / CSM 183

The anchor nuts on each anchor should never be loosened or removed at any time. Loosing of the nuts will cause a redistribution of the loads in the entire wall anchor system. The corresponding shift in loads could cause damage to the wall or overloading of a single anchor.

Any nuts that have been removed the following should be implemented immediately:

- Replace the nut to full contact.
- Tighten the nuts ½ turn from the initial contact.

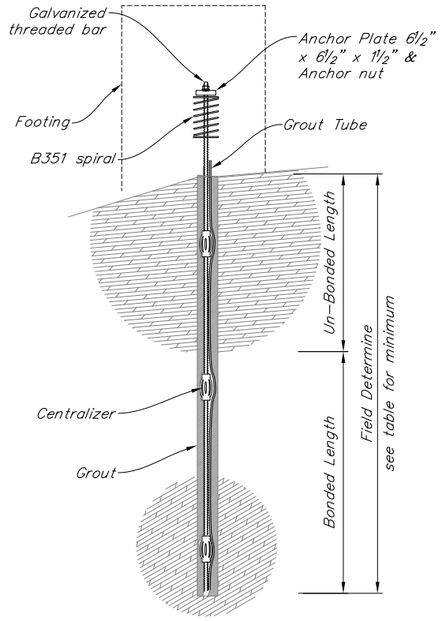
If the nuts cannot be turned with a reasonable amount of force (40 lbs) on a 3'-0" extension arm take no further action. Then grout and install the protective anchor caps.

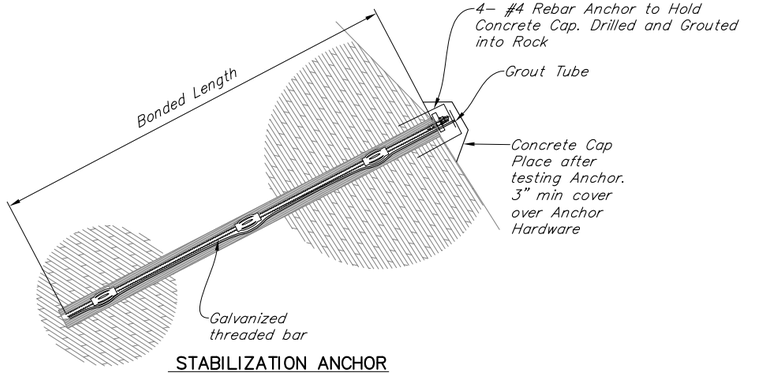
Check all remaining anchorages as follows:

- Check to see if the nuts can be turned ½ turn. with a reasonable amount of force (40 lbs) on a 3'-0" extension arm.

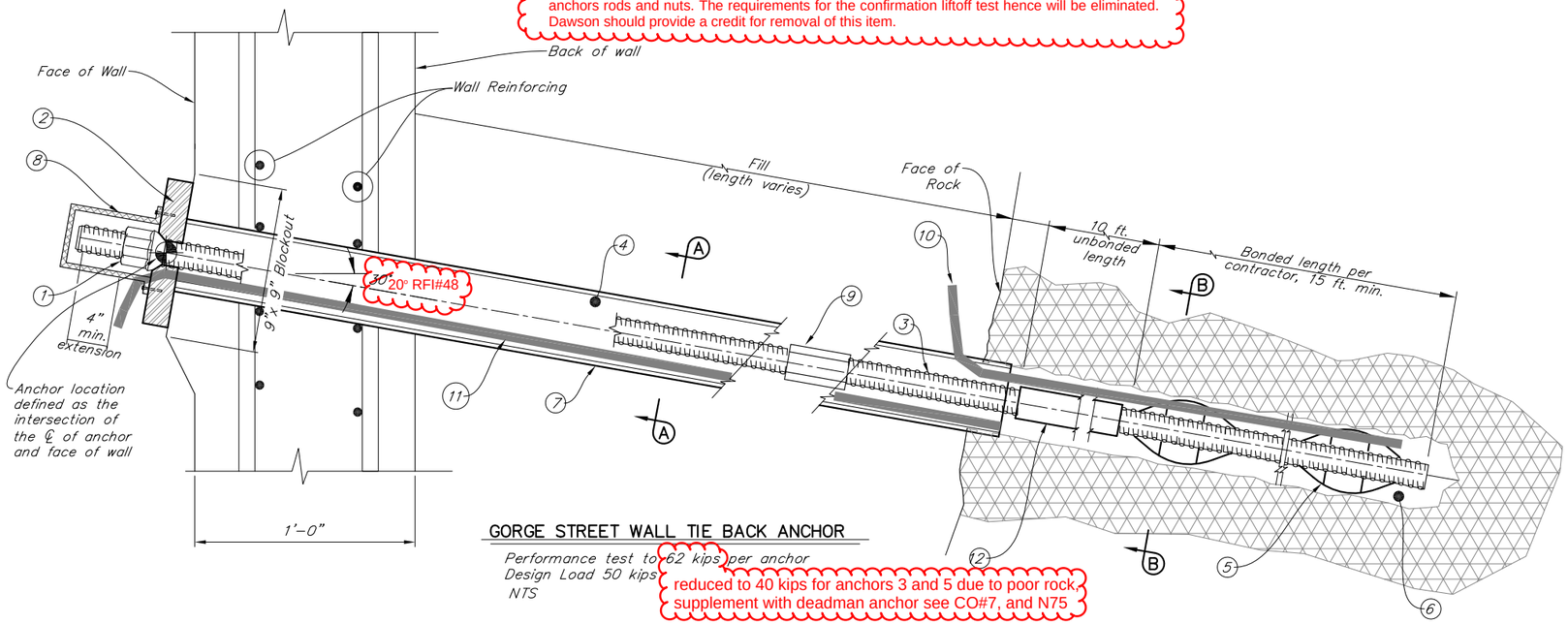
If the nuts cannot be turned take no further action. Then grout and install the protective anchor caps.

The proposed lift off procedure is not recommended due to damage concerns to the existing anchors rods and nuts. The requirements for the confirmation liftoff test hence will be eliminated. Dawson should provide a credit for removal of this item.





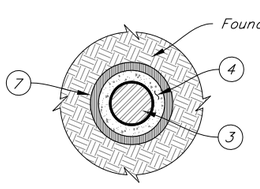
STABILIZATION ANCHOR



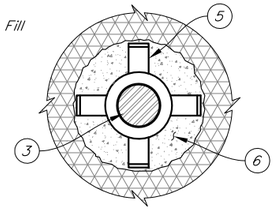
GORGE STREET WALL TIE BACK ANCHOR

Performance test to 62 kips per anchor
Design Load 50 kips
NTS

reduced to 40 kips for anchors 3 and 5 due to poor rock, supplement with deadman anchor see CO#7, and N75



SECTION A-A



SECTION B-B

NOTE:
Provide permanent steel casing between back face of wall and face of rock. Fill with encapsulation grout (Stage 2) after proof testing anchor against rock or casing.

Stress each anchor to 5000 lbs when backfill reaches 2'-0" above anchor level at wall face.

1. Nut
2. 8"x8"X1.75" HDG bearing plate with grout port
3. 1.25"ø galvanized threaded bar 150 ksi
4. Encapsulation PT grout (stage 2) Section 701-2.08
5. Centralizers
6. Anchor grout (stage 1)
7. 3.5"ø xStd wall, galvanized steel casing pipe
8. Steel galvanized anchorage cover with anticorrosion grease
9. Coupler
10. Stage 1 grout tube
11. Stage 2 grout tube
12. PVC Casing pipe with anti corrosion grease inside

Details shown applY to;
FOOTING ANCHORS
RETAINING WALL ANCHORS
STUB WALL ANCHORS

ROCK ANCHOR DETAILS

12 6 0 1 2 3 4
In. Feet

ROCK ANCHOR TABLE				
LOCATION	ANCHOR SIZE	UNBONDED LENGTH (FEET)	MINIMUM BONDED LENGTH (FEET)	DESIGN LOAD (KIPS)
STUB WALL ANCHOR	1¼"ø	10	15	64
ABUTMENT ANCHOR	1¼"ø	5	12	50
RETAINING WALL ANCHOR	1¼"ø	0	18	20
STABILIZATION ANCHOR	1¼"ø	0	25	40
FOOTING ANCHOR	1¼"ø	0	15	40

ROCK ANCHOR GENERAL NOTES

GROUT: ..... Grout. 701-2.03 AK Standard Specs.

ROCK ANCHOR:..... ASTM A722, 150 KSI Galvanized

Drilled Hole Diameter:..... ¾" cover on the anchor rods but not less than 2 x nominal bar diameter or greater than 2.5 x nominal bar diameter.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

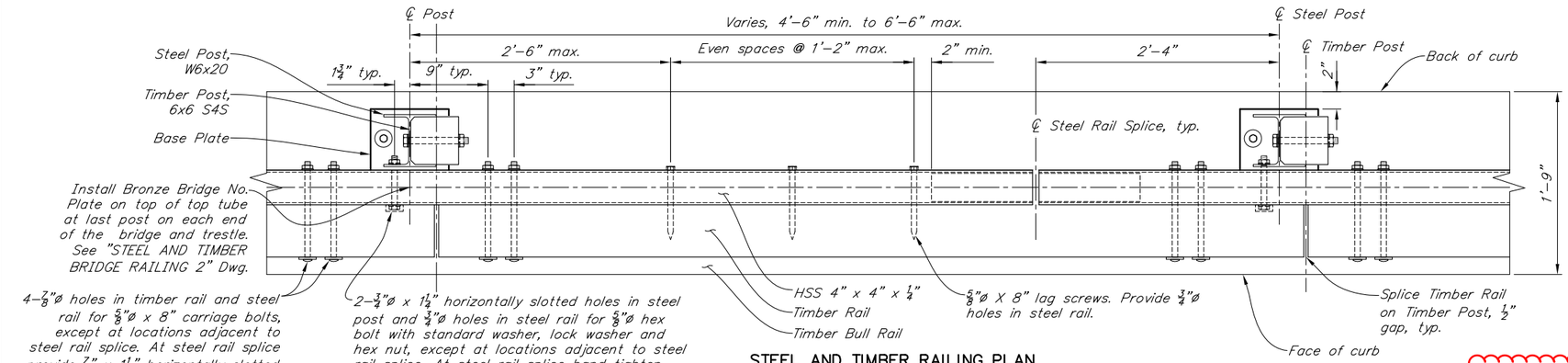
WATER STREET

ROCK ANCHOR

BRIDGE NO. 0446
DWG. NO. 85

Oct 14, 2015 - 4:04pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N ROCK ANCHORS.dwg Layout Name: ROCK ANCHOR

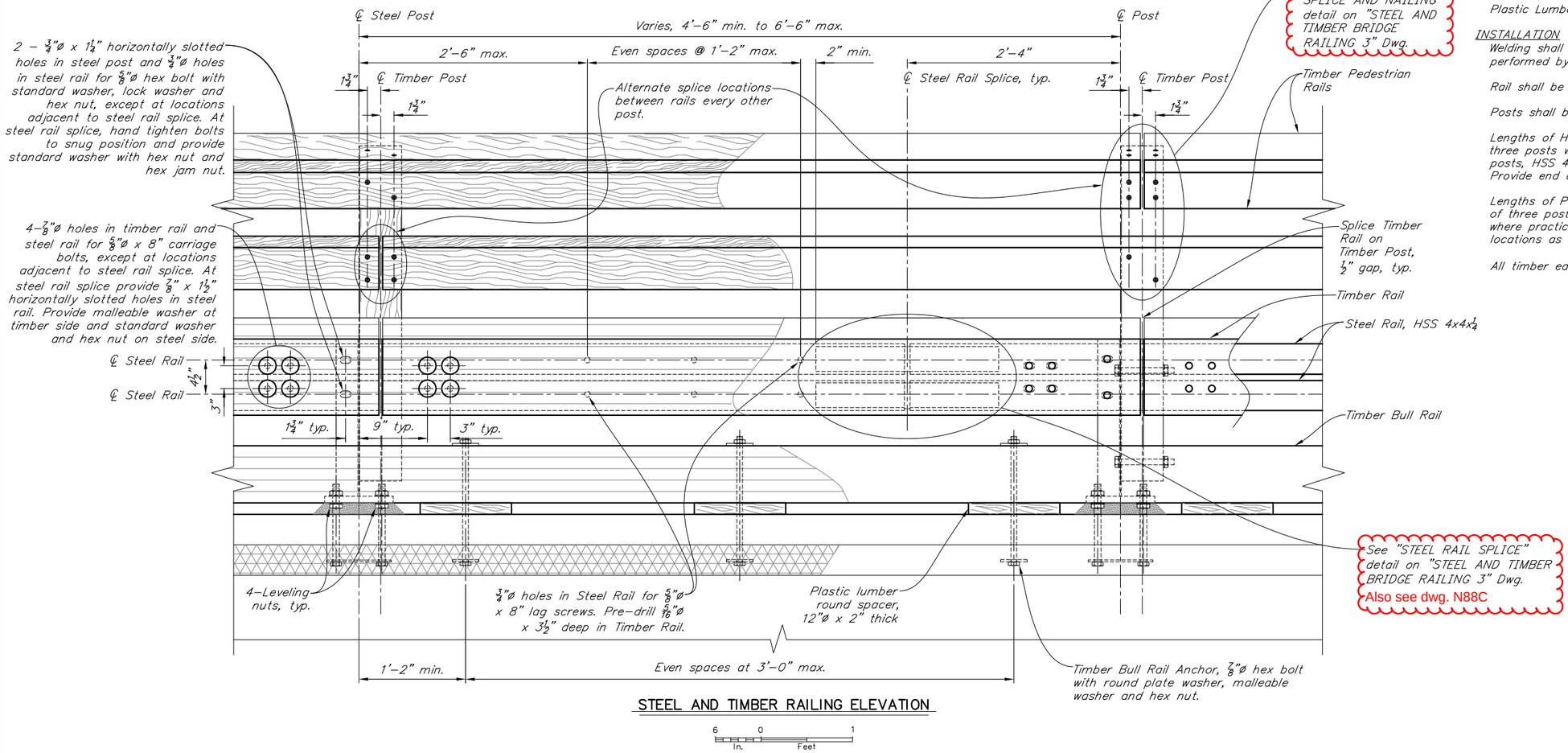
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N86	N110



STEEL AND TIMBER RAILING PLAN

Timber pedestrian rail not shown for clarity

6 0 1
In. Feet



Also see dwg. N88A and N88B

See "TIMBER RAIL SPLICE AND NAILING" detail on "STEEL AND TIMBER BRIDGE RAILING 3" Dwg.

See "STEEL RAIL SPLICE" detail on "STEEL AND TIMBER BRIDGE RAILING 3" Dwg.

Also see dwg. N88C

STEEL AND TIMBER RAILING ELEVATION

6 0 1
In. Feet

RAILING NOTES

GENERAL

Structural steel shall be shop fabricated.

Submit shop drawings to the Engineer for approval prior to fabrication. Provide drawings showing rail section lengths, splice locations, roil post spacing, and fastener lengths.

MATERIALS

All metal components of the bridge rail shall be hot-dip galvanized.

Hex bolts shall be ASTM F1554 grade 105

All steel shall be fabricated before being galvanized.

Steel Railing and Posts: per Section 722

Timber Railing: per Section 713. Provide Timber Pedestrian Railing as Dimension Lumber. Provide Timber Posts as Posts and Timbers. Provide Timber Rail and Timber Bull Rail as glued-laminated timber.

Preservatives for Timber: ~~per Section 714~~ All Copper Napthenate RFI#118

Plastic Lumber: all plastic meeting ASTM D7568.

INSTALLATION

Welding shall conform to ANSI/AASHTO/AWS D1.5, and shall be performed by a certified welder.

Rail shall be parallel to grade.

Posts shall be plumb.

Lengths of HSS 4x4 rails shall be continuous over a minimum of three posts where possible. Where run of rail connects to only two posts, HSS 4x4 rails shall be continuous between each post. Provide end caps at each opening in the rail.

Lengths of Pedestrian Rails shall be continuous over a minimum of three posts and splices shall be limited to every other post where practicable. Splices in top and lower rails shall alternate locations as shown.

All timber edges shall receive ½" chamfer or radius.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 10TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

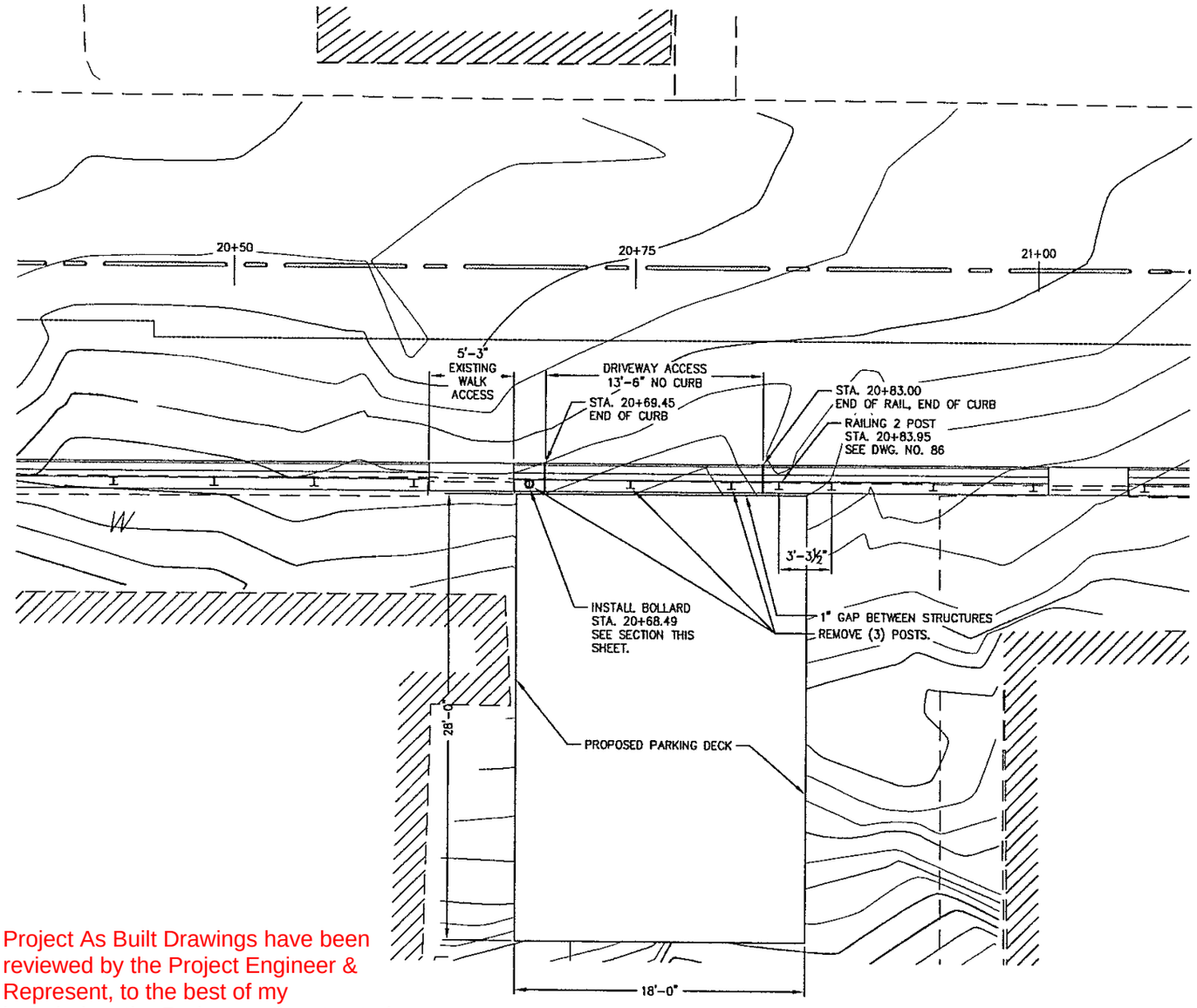
WATER STREET BRIDGE No. 2

WATER STREET

STEEL AND TIMBER BRIDGE RAILING 1

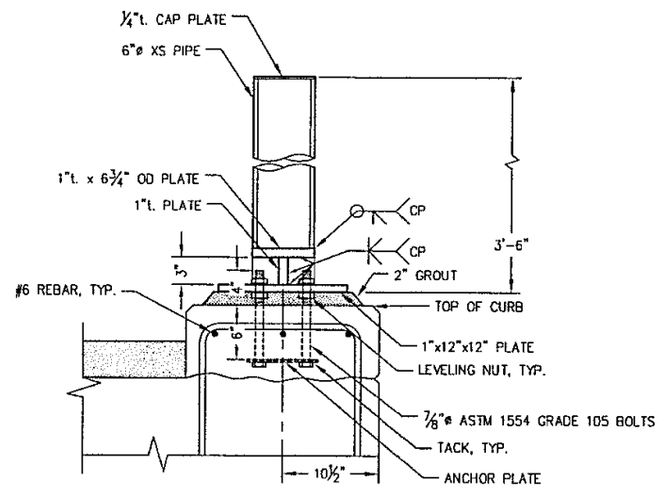
BRIDGE NO. 0446
DWG. NO. 86

Oct 14, 2015 - 4:05pm brien \\sheererserver\jobs\0226 water street ps&e\DWG\planset addit&pf\69534_N STEEL TUBE-BACKED TIMBER RAIL.dwg Layout Name: STEEL AND TIMBER BRIDGE RAILING 1

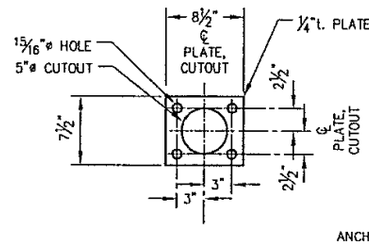


A RAILING MODIFICATION PLAN

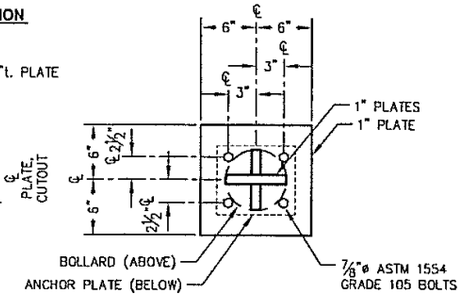
SCALE IN FEET 0 2 4 8



SECTION



ANCHOR PLATE PLAN



BOTTOM PLATE PLAN

B BOLLARD AND BASE CONNECTION DETAILS

SCALE IN INCHES 0 6 12 IN

NOTE:
1. PLATES SHALL CONFORM TO ASTM A572 GRADE 50.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

REVISIONS

REV.	DATE	DESCRIPTION	DWN.	CKD.	APP.
AB		As-Built Set			

P N D ENGINEERS, INC.
9360 Glacier Highway Suite 100
Juneau, Alaska 99801
Phone: 907 586 2093
Fax: 907 586 2099
www.pndengineers.com

DESIGN: CMG CHECKED: CMG
DRAWN: WRB APPROVED: CMG
SCALE:

STATE OF ALASKA 49TH Christopher M. Gerace SE-14256 REGISTERED STRUCTURAL ENGINEER
DATE: 2/27/17

DAWSON PROPERTY
1321 WATER STREET
PARKING DECK

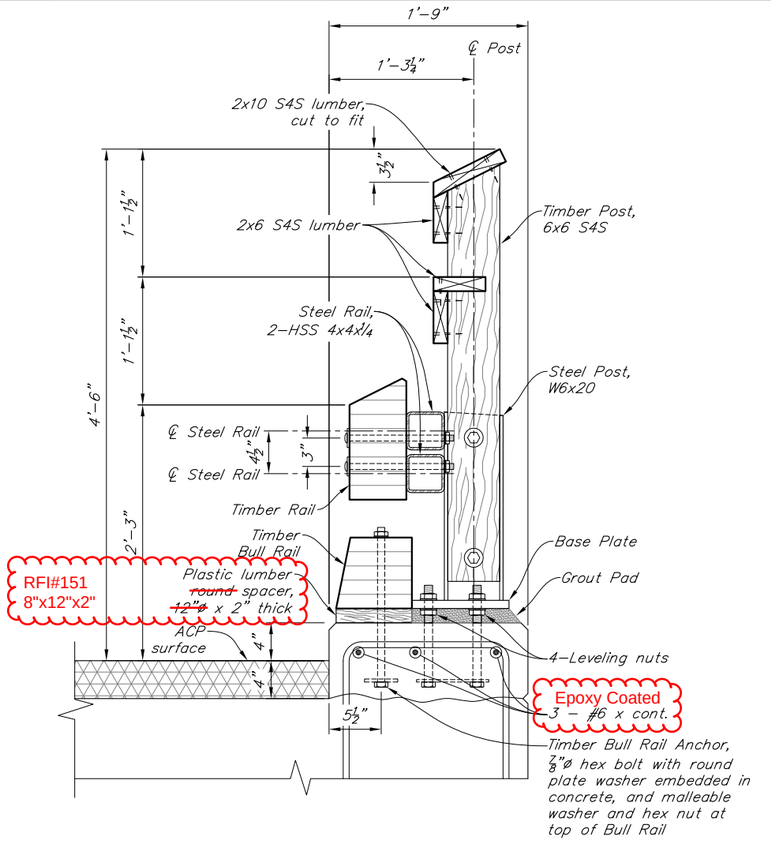
SHEET TITLE: RAILING MODIFICATION

PND PROJECT #: 172015

10F1

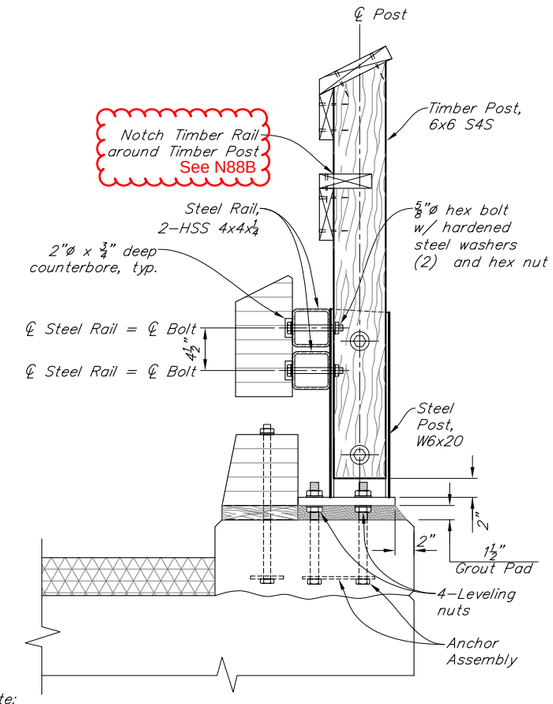
PND 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N87	N110



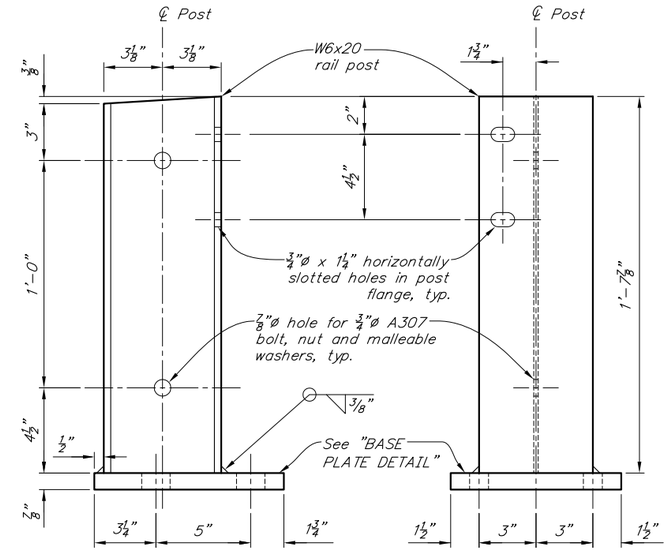
TYPICAL SECTION

6 0 1
In. Feet



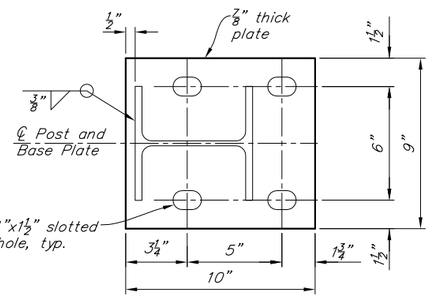
TYPICAL SECTION AT POST

6 0 1
In. Feet



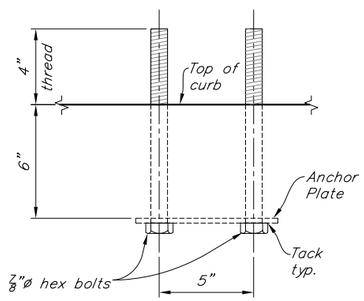
STEEL POST ASSEMBLY

0 3 6 9 1'-0"
Inches



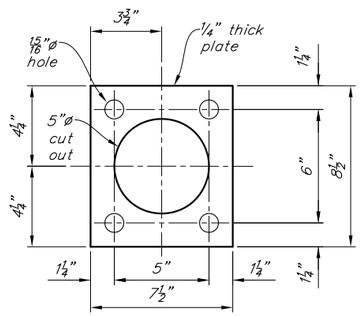
BASE PLATE DETAIL

0 3 6 9 1'-0"
Inches



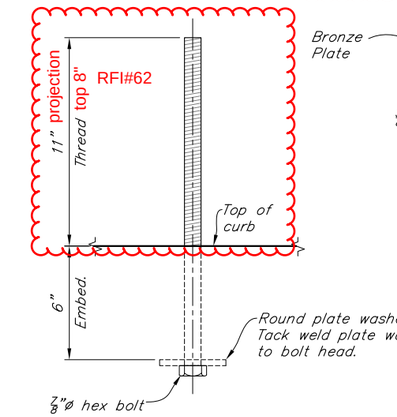
ANCHOR ASSEMBLY ELEVATION

0 3 6 9 1'-0"
Inches



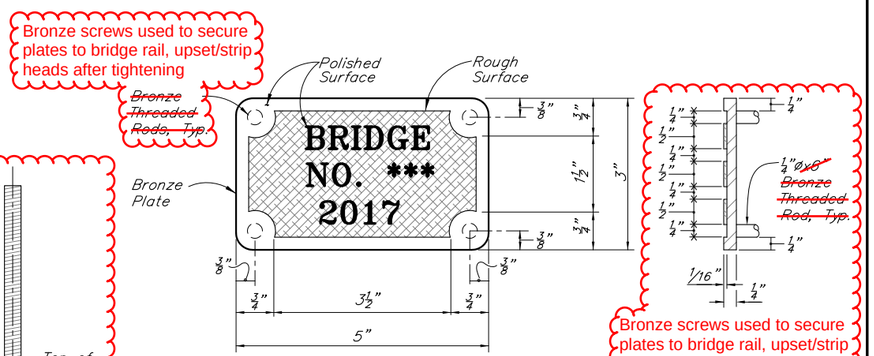
ANCHOR PLATE DETAIL

0 3 6 9 1'-0"
Inches



TIMBER BULL RAIL ANCHOR ELEVATION

0 3 6 9 1'-0"
Inches



BRONZE BRIDGE NO. PLATE

No Scale

*** 446 for Trestle,
2313 for Bridge

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer

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Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

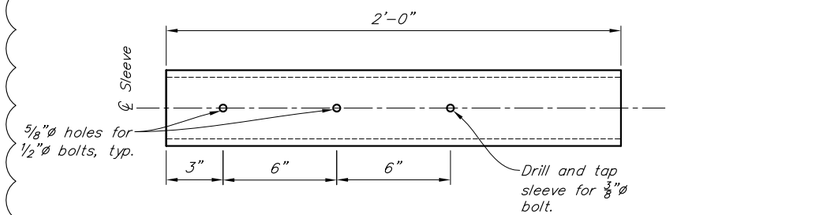
WATER STREET

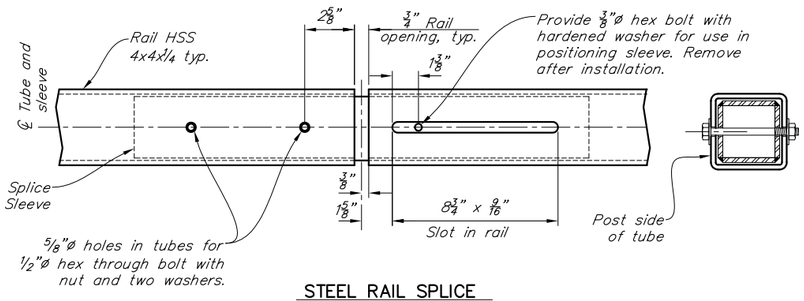
STEEL AND TIMBER BRIDGE RAILING 2

BRIDGE NO. 0446
DWG. NO. 87

Oct 14, 2015 - 4:05pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N STEEL TUBE-BACKED TIMBER RAIL.dwg Layout Name: STEEL AND TIMBER BRIDGE RAILING 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N88	110

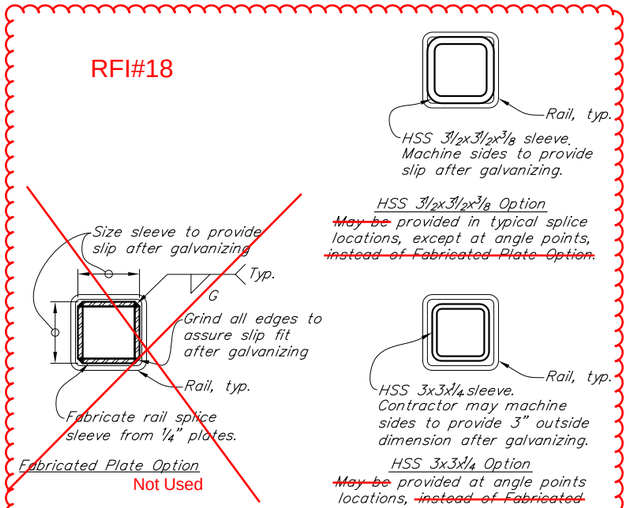




STEEL RAIL SPLICE

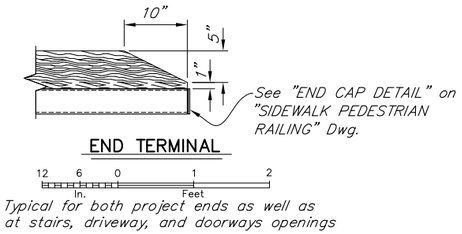
0 3 6 9 1'-0"
Inches

RFI#18



SLEEVE

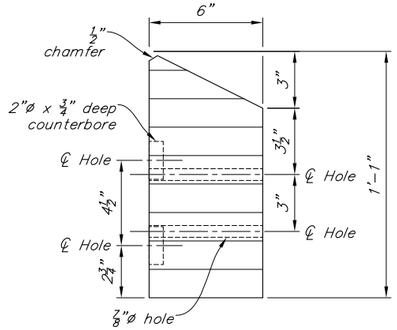
0 3 6 9 1'-0"
Inches



END TERMINAL

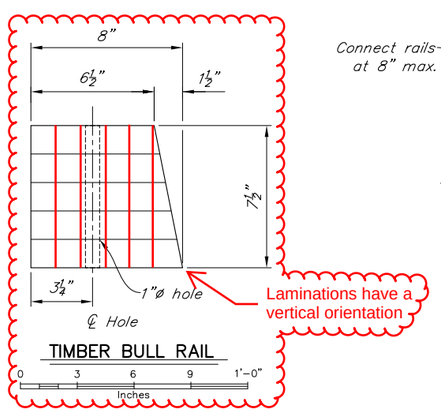
12 6 0 1 2
In. Feet

Typical for both project ends as well as at stairs, driveway, and doorways openings



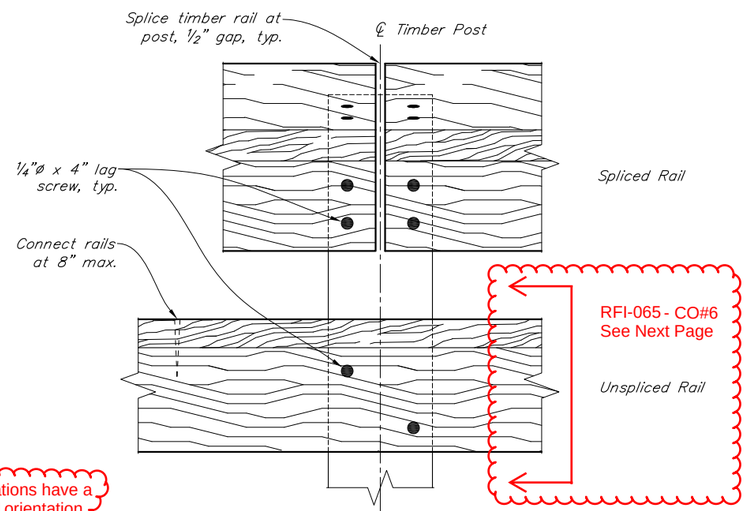
TIMBER RAIL

0 3 6 9 1'-0"
Inches



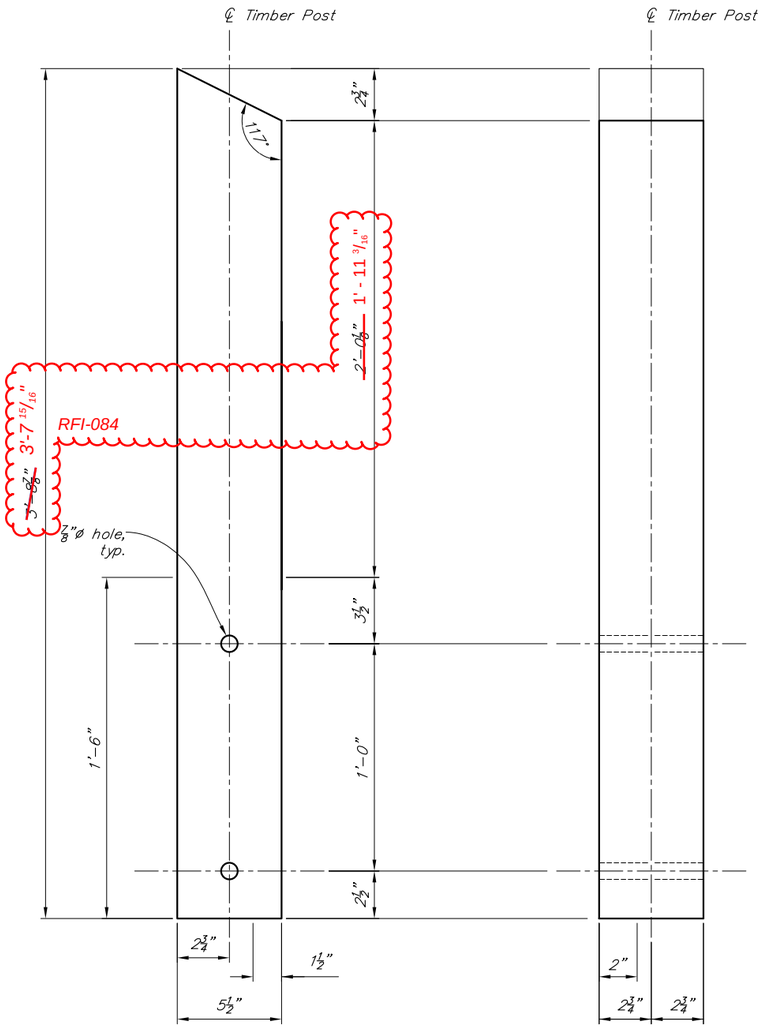
TIMBER BULL RAIL

0 3 6 9 1'-0"
Inches



TIMBER RAIL SPLICE AND NAILING

0 3 6 9 1'-0"
Inches



TIMBER POST

0 3 6 9 1'-0"
Inches

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Revised sheet provided with RFI#49 response	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
9/5/19
Registered Professional Engineer

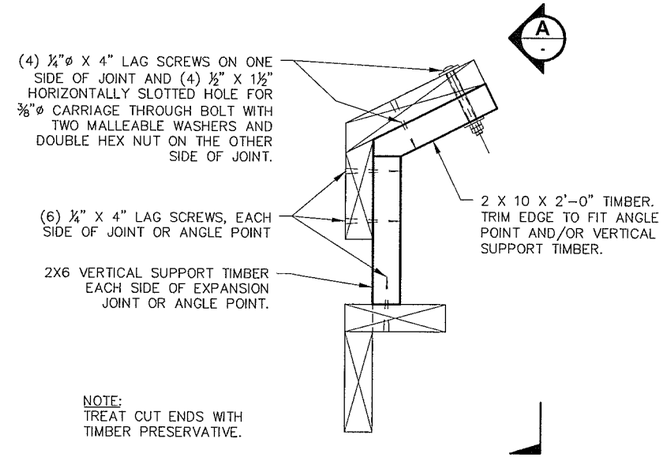
WATER STREET BRIDGE No. 2

WATER STREET

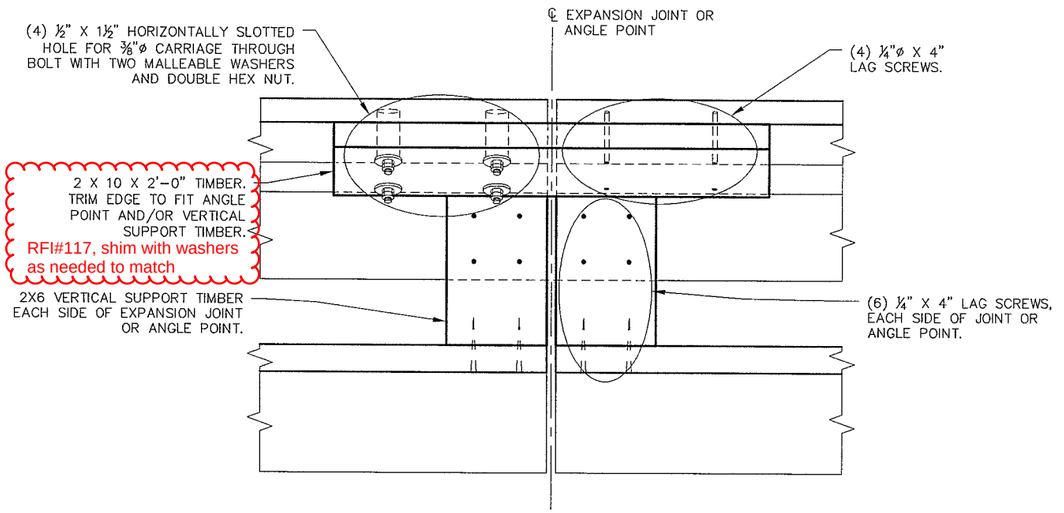
STEEL AND TIMBER BRIDGE RAILING 3

BRIDGE NO. 0446
DWG. NO. 88

Jul 22, 2016 - 12:48pm robert \\SHEARERSERVER\D-Drive\Jobs\0278 Water Street Construction\Directives\2016-07-21 Rail Splice Detail\69534_N STEEL TUBE-BACKED TIMBER RAIL.dwg Layout Name: STEEL TUBE-BACKED TIMBER RAILING 3



UPPER TIMBER RAIL SECTION AT EXPANSION JOINT AND ANGLE POINTS



Added under CO#6

AB As-Built Set

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
11/8/16
Registered Professional Engineer

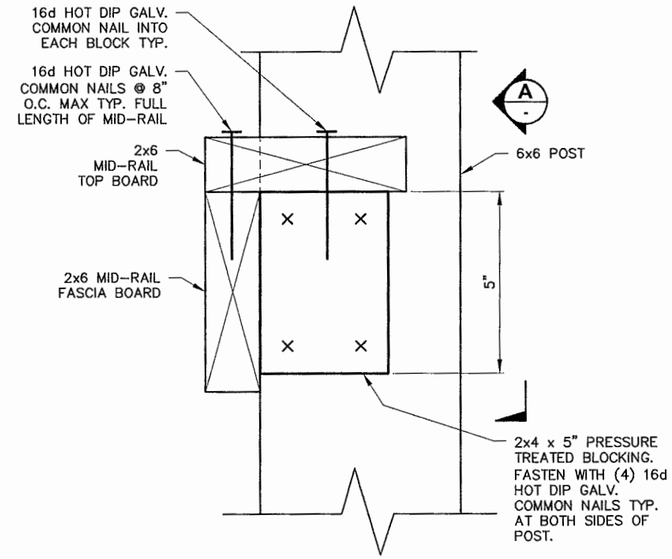
BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"
SHEARER DESIGN LLC.
Bridge Design, Construction Engineering, Infrastructure Aesthetics
3613 Phinney Ave N. # B
Seattle WA 98103
(206) 781-7830
SHEARERDESIGN@QWESTOFFICE.NET

WATER STREET BRIDGDE NO. 2
WATER STREET
RFI #55 – UPPER TIMBER RAIL

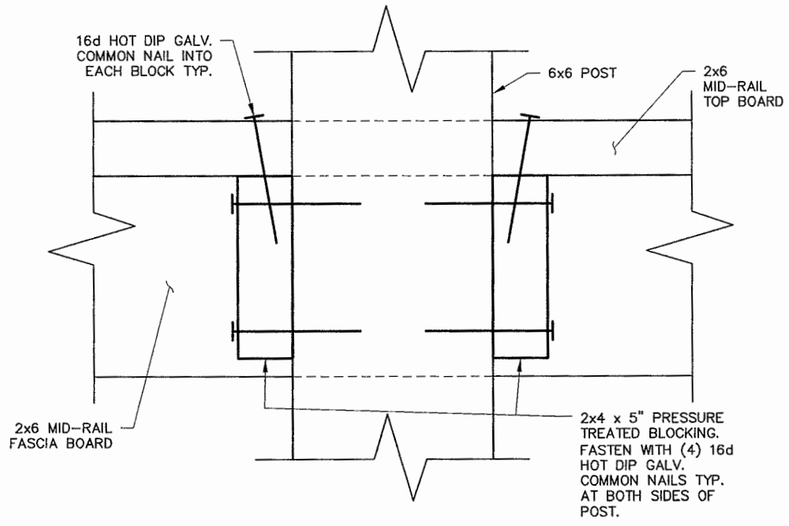
SHEET 1 OF 1
FILE NO. 0278

N88A

Nov 08, 2016 - 9:43am robert \\SHEARERSERVER\D-Drive\Jobs\0278 Water Street Construction\RFI's\RFI-055 Timber Railing Splice\0278 UPPER TIMBER RAIL.dwg Layout Name: UPPER TIMBER RAIL



TYPICAL MID-RAIL SECTION AT POST



BACK OF POST VIEW A -

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
11/8/16
Registered Professional Engineer

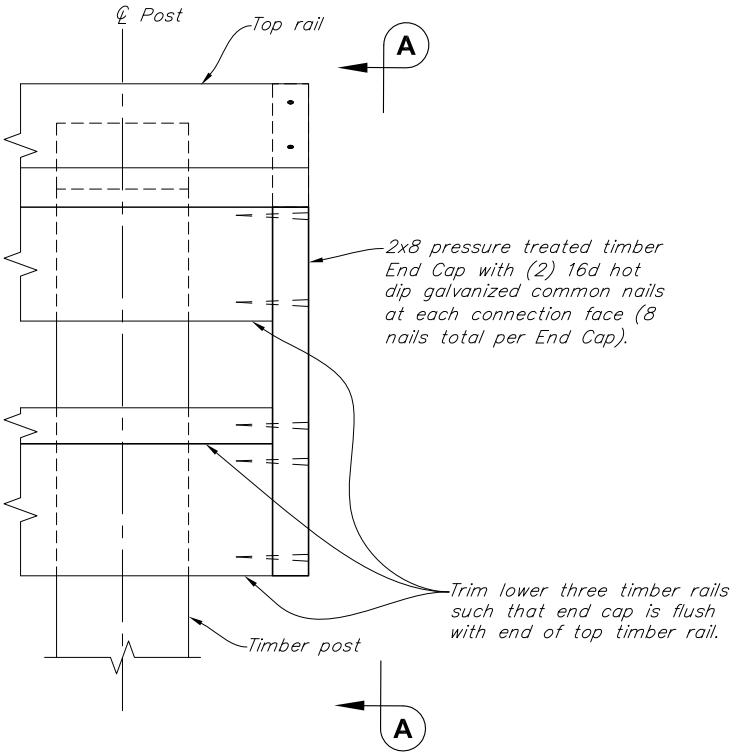
9/5/2019

BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"
SHEARER DESIGN LLC.
Bridge Design, Construction Engineering, Infrastructure Aesthetics
3613 Phinney Ave N. # B
Seattle WA 98103
(206) 781-7830
SHEARERDESIGN@QWESTOFFICE.NET

WATER STREET BRIDGE NO. 2
WATER STREET
RFI #65 – MID-RAIL CONNECTION

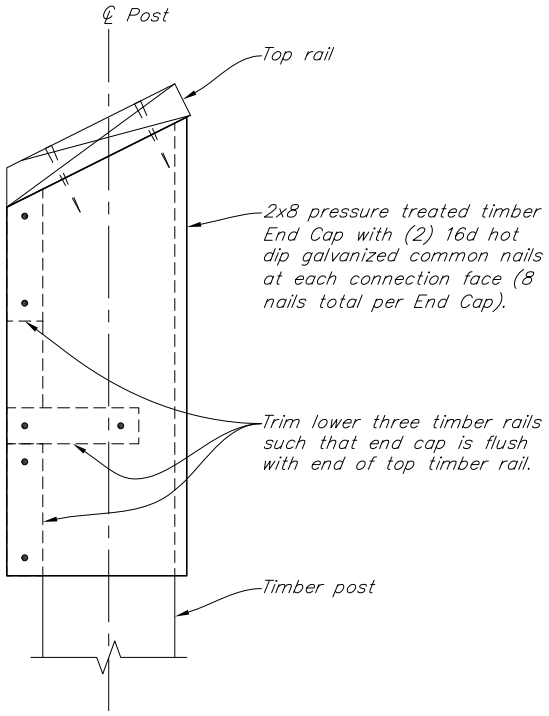
SHEET 1 OF 1
FILE NO. 0278

Nov 08, 2016 - 9:36am robert \\SHEARERSERVER\D-Drive\Jobs\0278 Water Street Construction\RFI's\RFI-065 Timber 2x6 Railing\Mid-Rail Clarification.dwg Layout Name: MID-RAIL CONNECTION



TIMBER RAIL END CAP ELEVATION

0 3 6 9 1'–0"
Inches



VIEW A–A

0 3 6 9 1'–0"
Inches

NOTES:
1. Detail provided for clarification of note to provide timber End Cap for the timber bridge railing ends at the Elliot St. stairs, approx. sta. 13+30 Rt., as shown on Sheet N103 of the project plans.
2. Provide timber End Cap flush with end of top rail and traffic face of timber rails.
3. Typical connection details for railing not shown for clarity.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

Provided with RFI#140 response

AB As-Built Set

Feb 02, 2017 - 12:53pm robert: \\SHEARERSERVER\Jobs\0278 Water Street Construction\RFIs\RFI-140 Timber Rail End Caps\DWG\Timber Rail End Cap.dwg Layout Name: 8.5x11 Portrait

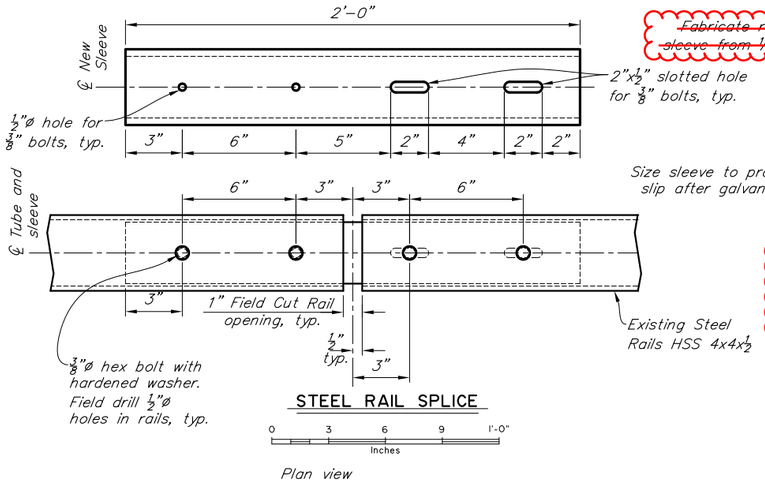
BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

SHEARER DESIGN L.L.C.
Bridge Design, Construction Engineering, Infrastructure Aesthetics
3613 Phinney Ave N. # B
Seattle WA 98103
(206) 781-7830
SHEARERDESIGN@QWESTOFFICE.NET

WATER STREET BRIDGDE NO. 2
WATER STREET
RFI #140 – TIMBER RAIL END CAP

SHEET 1 OF 1
N88C
FILE NO. 0278

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2017	1	1



~~Fabricate rail splice sleeve from 1/4" plates~~

Typ.

G

Grind all edges to assure slip fit after galvanizing

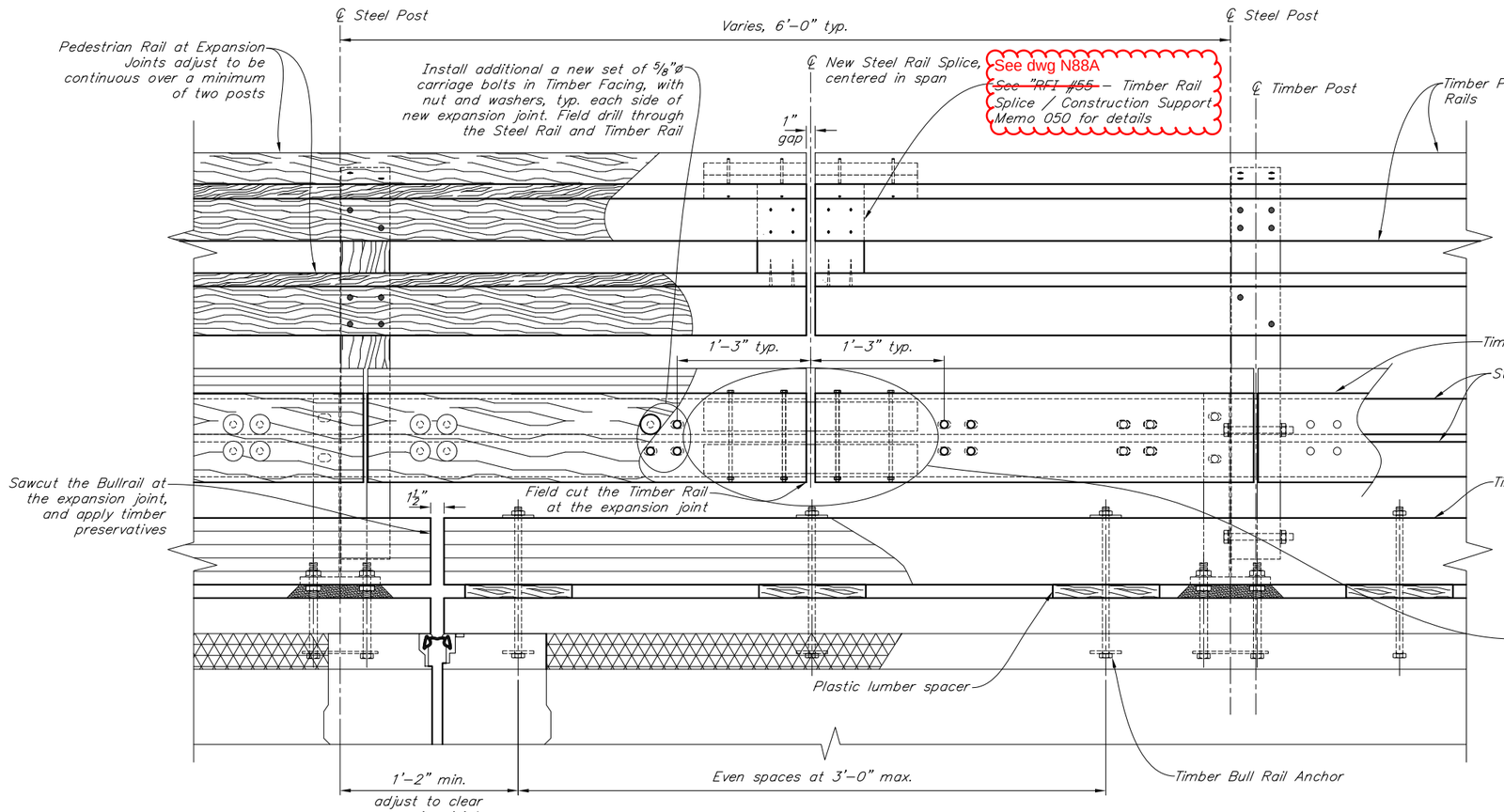
Size sleeve to provide slip after galvanizing

SLEEVE

0 3 6 9 1'-0"

Inches

~~As an alternate, may be~~ substituted, machine edges to $3\frac{5}{16}$x$3\frac{5}{16}$ to allow the sleve to easily slide inside the Rail after galvanizing



STEEL AND TIMBER RAILING ELEVATION AT EXPANSION JOINT

6 0

In. Feet

Additional Expansion Joints splices in rail at sta. 14+89, 17+44, and 18+53

RAILING NOTES

GENERAL

Structural steel sleeves shall be shop fabricated.

MATERIALS

All metal components of the bridge rail shall be hot-dip galvanized.

Hex bolts shall be ASTM F1554 grade 105

All steel shall be fabricated before being galvanized.

Steel Railing: per Section 722

Timber Railing: per Section 713. Provide Timber Pedestrian Railing as Dimension Lumber.

Preservatives for Timber: ~~per Section 714~~ All Copper Napthenate RFI#118

Plastic Lumber: all plastic meeting ASTM D7568.

INSTALLATION

Field cut the HSS rail to provide 1" gap centered between the posts. Field drill the holes in the rail to align with the sleeve. Paint all freshly cut or exposed steel per AASHTO M 36, Section 11. Use inorganic zinc rich primer meeting Subsection 708-2.01.

Field cut Bullrail and Timber Rails to provide 1" expansion joint, treat all ends and drilled holes with an approved wood preservative.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Added under CO#32
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R SHEARER CE 12/13/17 REGISTERED PROFESSIONAL ENGINEER

WATER STREET BRIDGE No. 2

WATER STREET

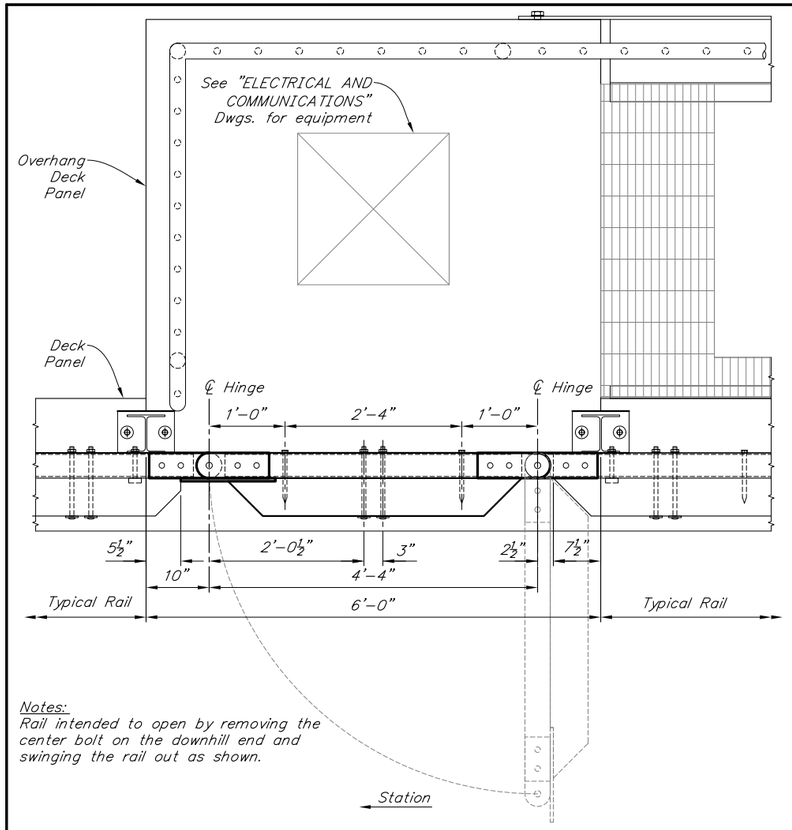
BRIDGE RAIL SPLICE

BRIDGE NO. 0446

DWG. NO. N88D

Dec 13, 2017 - 1:11pm brien \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2017-12-11 Rail Expansion Joints\DWG\69534_N STEEL TUBE-BACKED TIMBER RAIL - EXP JOINT MOD.dwg Layout Name: STEEL AND TIMBER BRIDGE RAILING 1

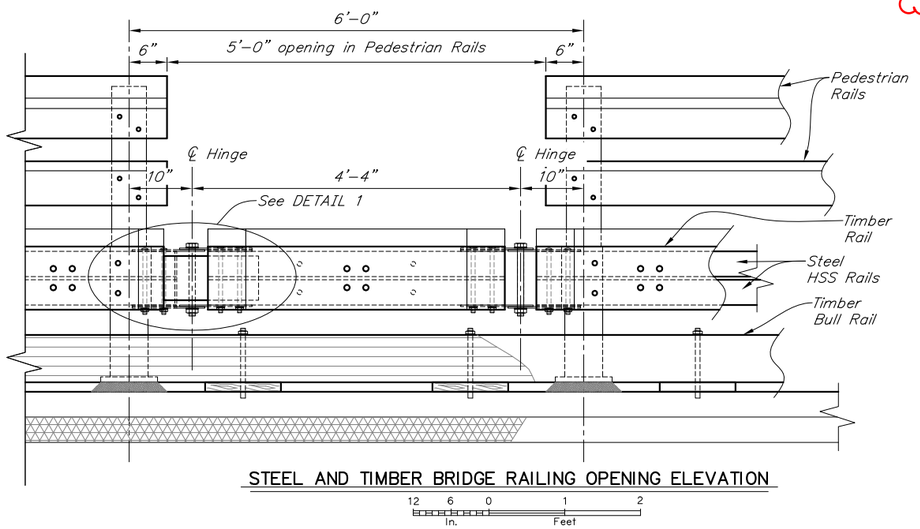
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N89	N110



Notes:
Rail intended to open by removing the center bolt on the downhill end and swinging the rail out as shown.

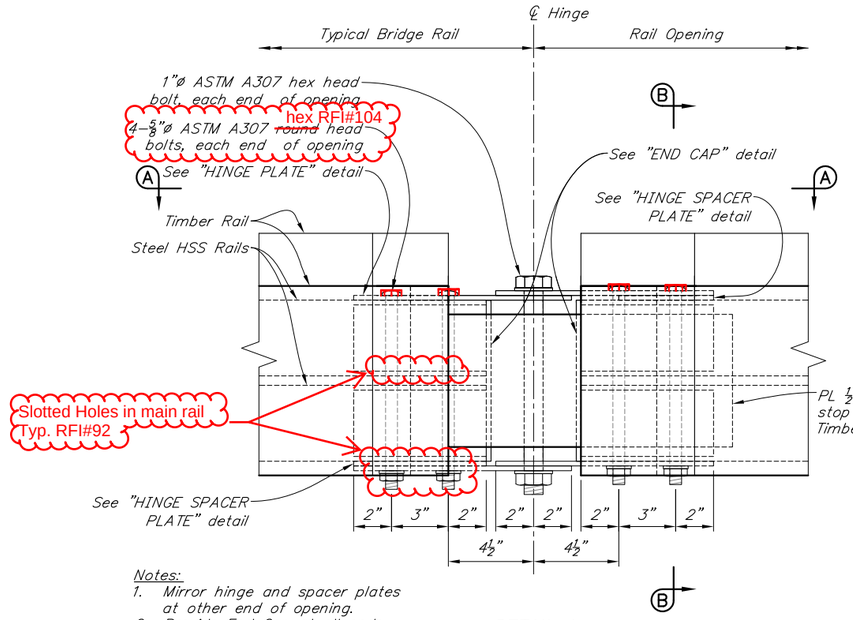
STEEL AND TIMBER BRIDGE RAILING OPENING PLAN

12 6 0 1 2 In. Feet



STEEL AND TIMBER BRIDGE RAILING OPENING ELEVATION

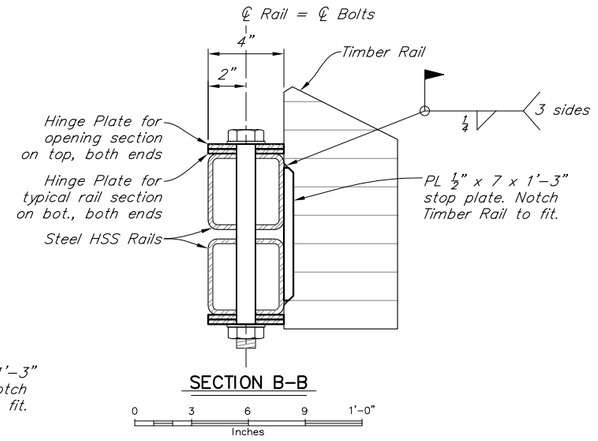
12 6 0 1 2 In. Feet



Notes:
1. Mirror hinge and spacer plates at other end of opening.
2. Provide End Cap at all ends, four locations per opening.
3. Provide Stop Plate at downhill end only. Weld to Rail Opening side.

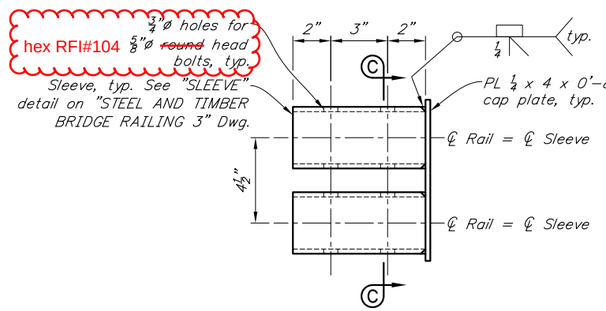
DETAIL 1

0 3 6 9 1'-0" Inches



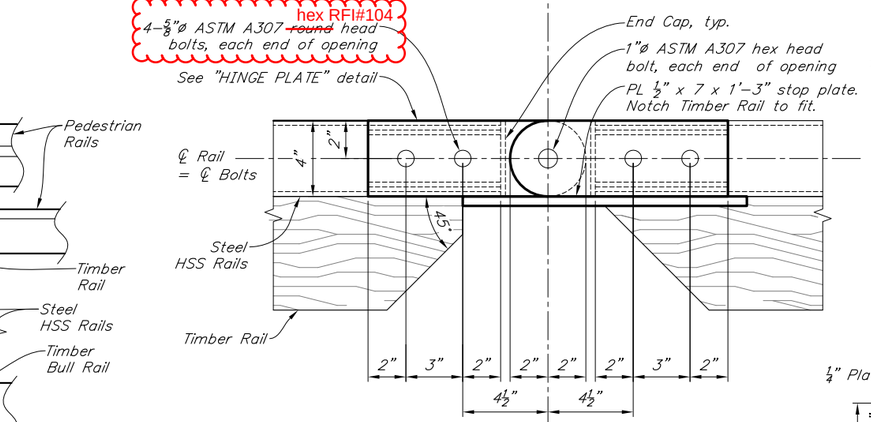
SECTION B-B

0 3 6 9 1'-0" Inches



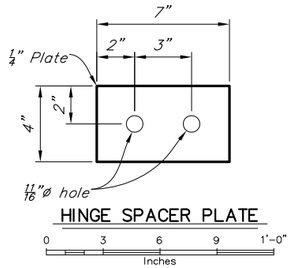
END CAP

0 3 6 9 1'-0" Inches



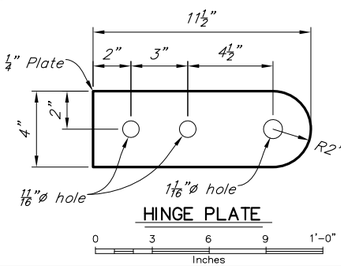
VIEW A-A

0 3 6 9 1'-0" Inches



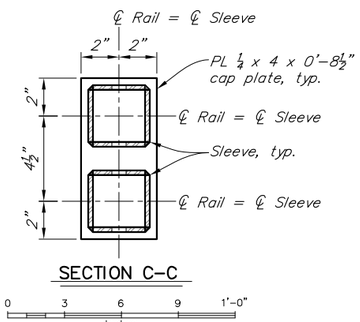
HINGE SPACER PLATE

0 3 6 9 1'-0" Inches



HINGE PLATE

0 3 6 9 1'-0" Inches



SECTION C-C

0 3 6 9 1'-0" Inches

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 40TH YEAR DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

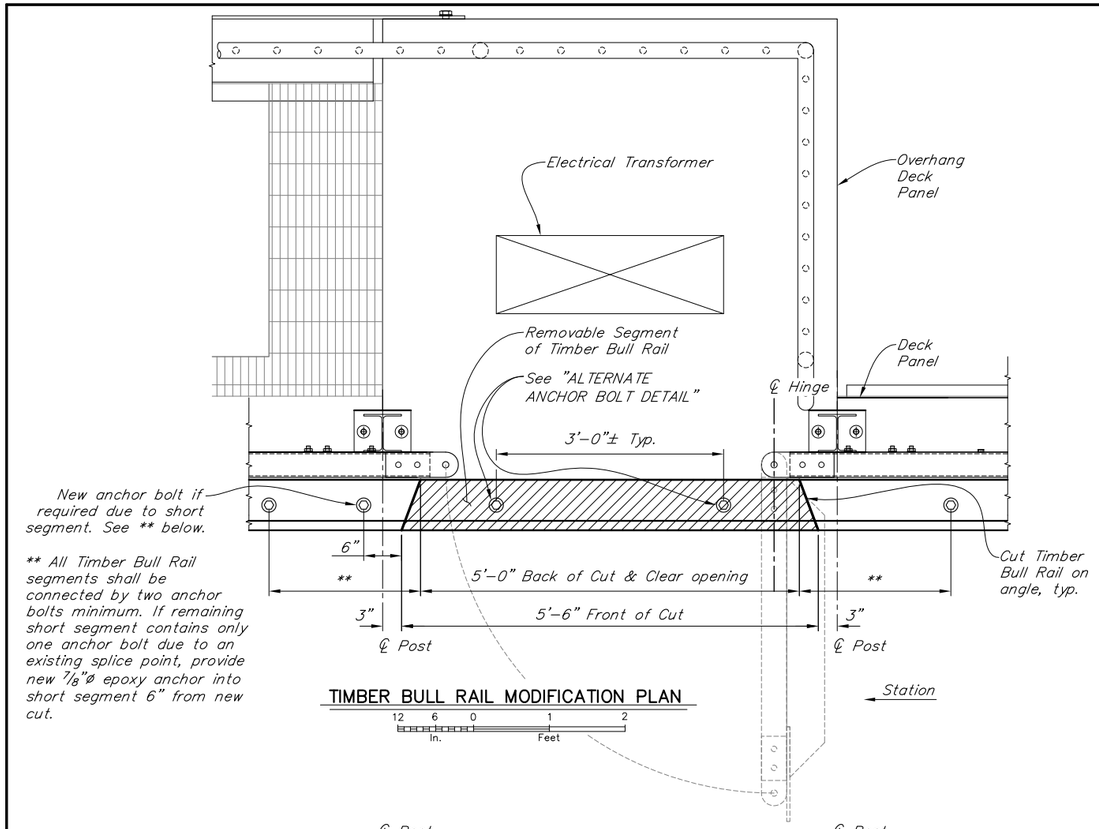
STEEL AND TIMBER BRIDGE RAILING 4

BRIDGE NO. 0446

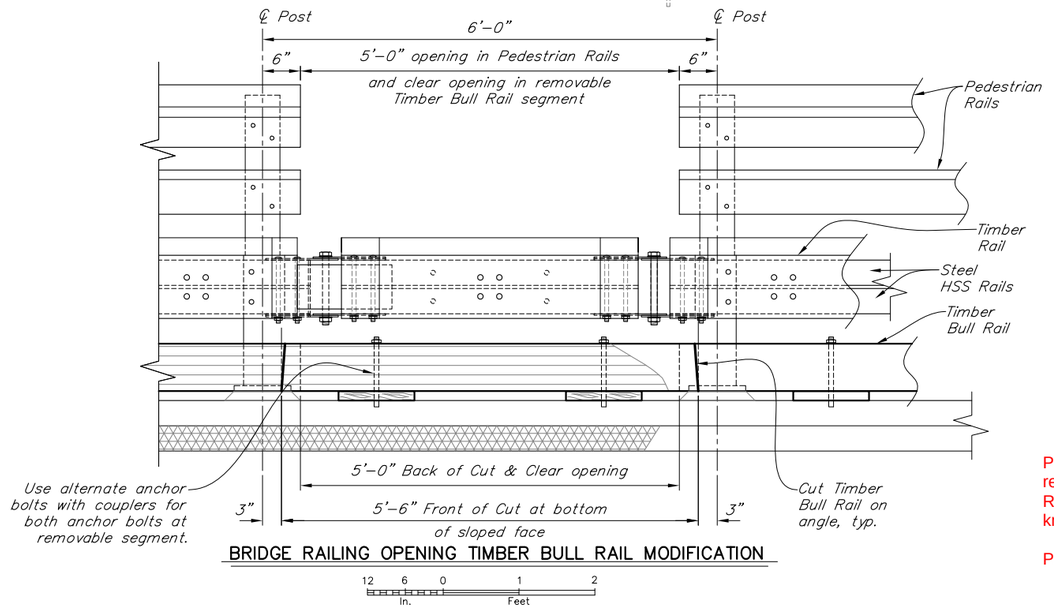
DWG. NO. 89

Oct 14, 2015 - 4:05pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\planset.ddo\kpf#69534_N STEEL AND TIMBER BRIDGE RAIL 4.dwg Layout Name: STEEL AND TIMBER BRIDGE RAILING 4

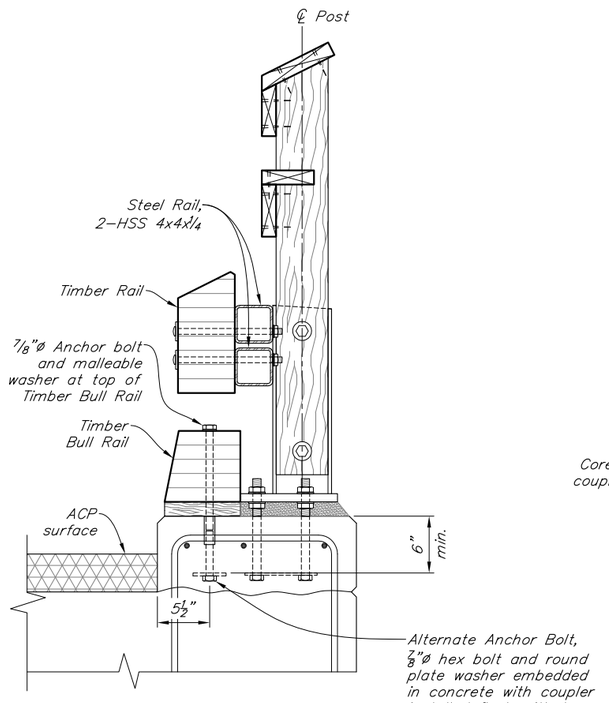
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N----	N110



TIMBER BULL RAIL MODIFICATION PLAN

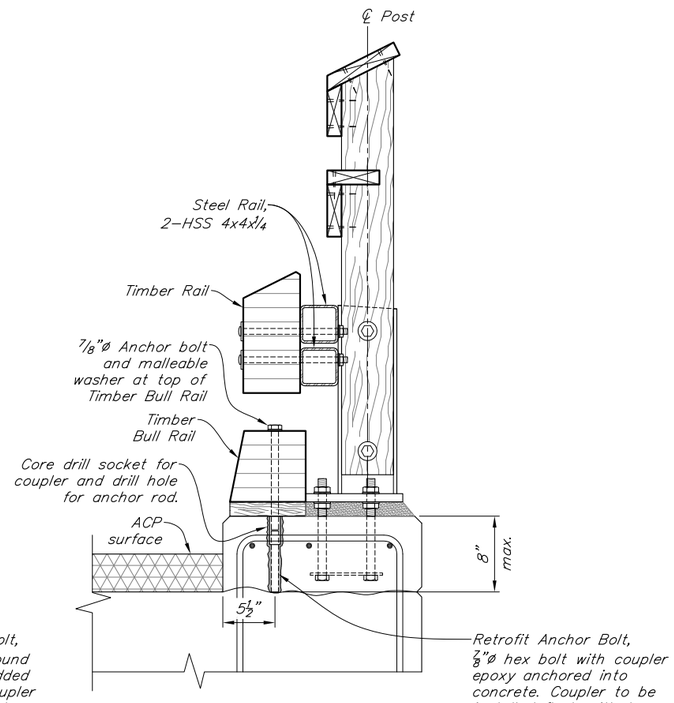


BRIDGE RAILING OPENING TIMBER BULL RAIL MODIFICATION



ALTERNATE ANCHOR BOLT DETAIL

6 0 1
In. Feet



RETROFIT ANCHOR BOLT DETAIL

6 0 1
In. Feet

GENERAL NOTES

- These details are only applicable to rail openings for electrical transformers. This change is not applicable to rail openings for telecom or other utilities.
- All steel hardware shall be hot-dip galvanized per ASTM A153
- Treat cut ends of Timber Bull Rail with wood preservative.
- In locations were anchor bolts have already been installed into a cast concrete curb install Retrofit Anchor Bolt:
  1. Remove existing installed Timber Bull Rail.
  2. Cut existing two anchor bolts in the removable segment region flush with the top of concrete and abandon.
  3. Core drill a socket in the concrete deep enough to install the 7/8"ø coupler. Offset the center of socket a minimum of 3 inches from the abandoned anchors. Do not cut curb reinforcement.
  4. Drill two new holes for 7/8" epoxy anchors in the bottom of the core drilled socket and clean hole per epoxy manufacturer's instructions. Total depth from top of curb to bottom of hole shall not exceed 8 inches.
  5. Install threaded rod and coupler as a unit into hole with epoxy per manufacturer's instructions.
  6. Drill new holes in the removable bull rail segment and reinstall the Timber Bull Rail.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

KTN Water St Trestle #2
Contract # 69534 & 68738
Change Order #31
Page 3 of 3

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · DAVID R. SHEARER · CE 8373 · 9/1/17 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

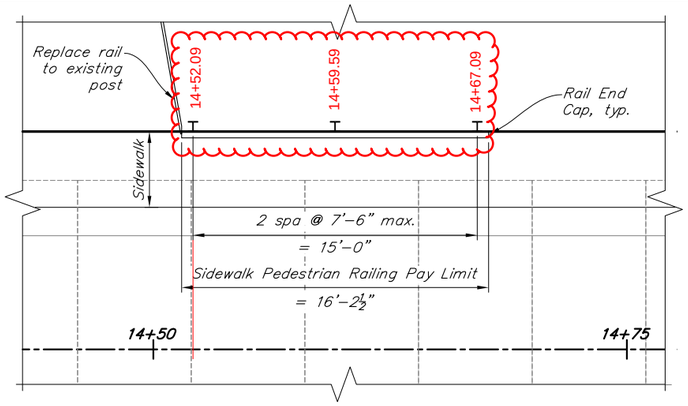
WATER STREET

TIMBER BULL RAIL OPENING MODIFICATION

BRIDGE NO. 0446
DWG. NO. N89A

Sep 11, 2017 - 5:32pm joshua \\shearerserver\jobs\0278 water street construction\construction engineering\bull rail openings\DWG\69534_N STEEL AND TIMBER BRIDGE RAILING 4.dwg Layout Name: STEEL AND TIMBER BRIDGE RAILING 4

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N90	N110



RAIL SECTION 1

12 0 2 4 6 8 In. Feet

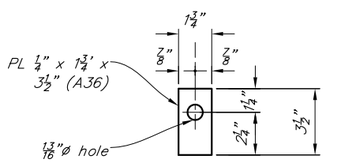


PLATE WASHER "A"

0 3 6 9 1'-0" Inches

Position washer to completely cover slotted hole.

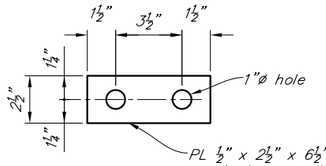


PLATE WASHER "B"

0 3 6 9 1'-0" Inches

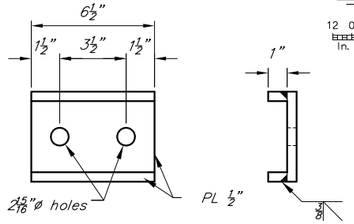
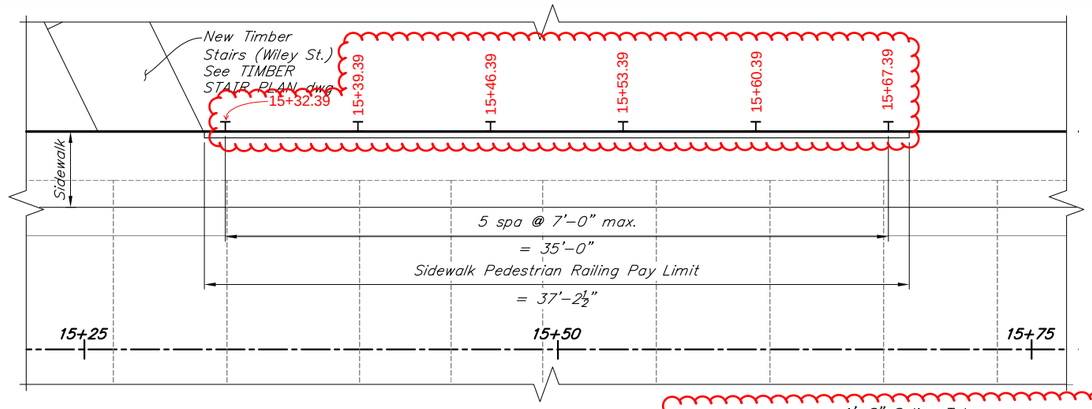


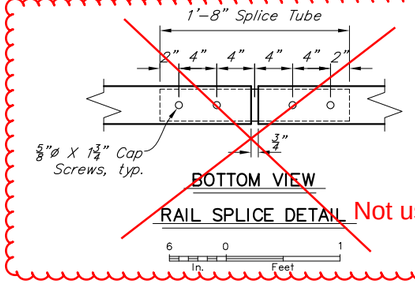
PLATE WASHER "D"

0 3 6 9 1'-0" Inches



RAIL SECTION 2

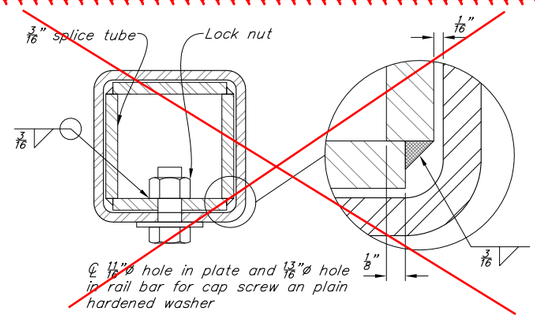
12 0 2 4 6 8 In. Feet



BOTTOM VIEW

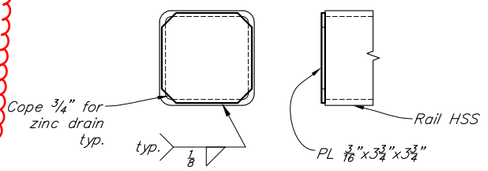
RAIL SPLICE DETAIL Not used

6 0 1 In. Feet



RAIL SPLICE SECTION Not used

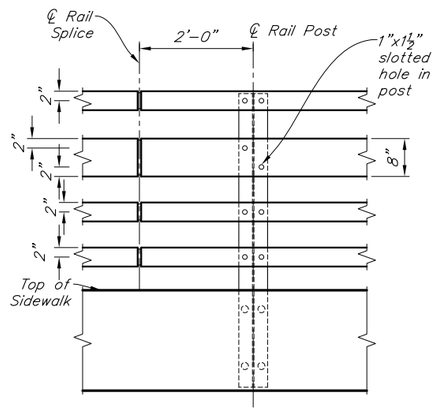
1 0 2 4 Inches



END CAP DETAIL

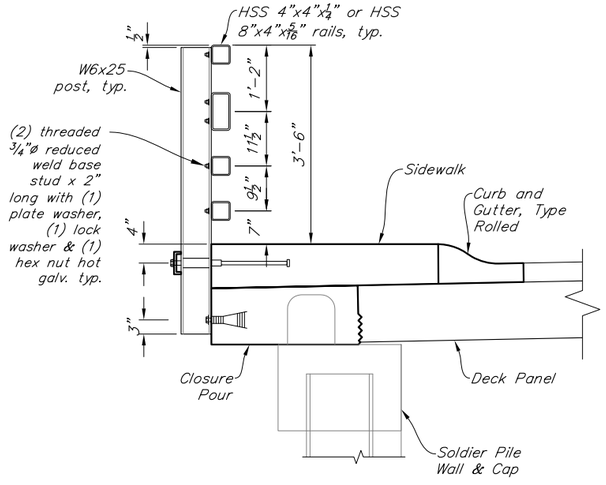
0 3 6 9 1'-0" Inches

Typical for HSS 4x4, HSS 8x4 similar



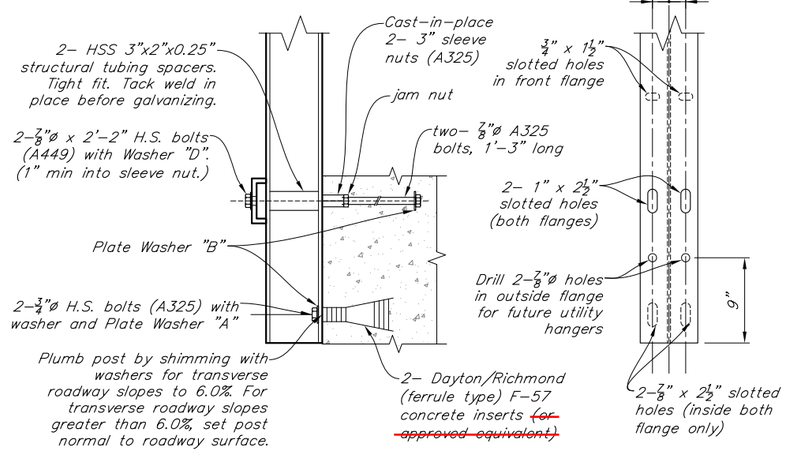
ELEVATION

12 6 0 1 2 3 In. Feet



TYPICAL SECTION

12 6 0 1 2 3 In. Feet



POST DETAILS

6 0 1 In. Feet

NOTES

1. All exposed cuts or sheared edges shall be rounded and free of burrs.
2. Rail posts shall be set plumb.
3. Length of rail tube shall be attached to a minimum of two rail posts.
4. Rail post anchoring bolts shall be tightened to a snug fit and given an additional ⅛ turn for the top bolts and ⅓ for the bottom bolts.
5. All steel components and hardware shall be hot-dip galvanized after fabrication. Holes in posts for rail bar attachment may be field drilled. Holes shall be coated with an approved zinc-rich paint prior to erection.
6. Provide steel posts and plates conforming to AASHTO Specification M183 (ASTM A36) unless noted otherwise.

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer		
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer		

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/4/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

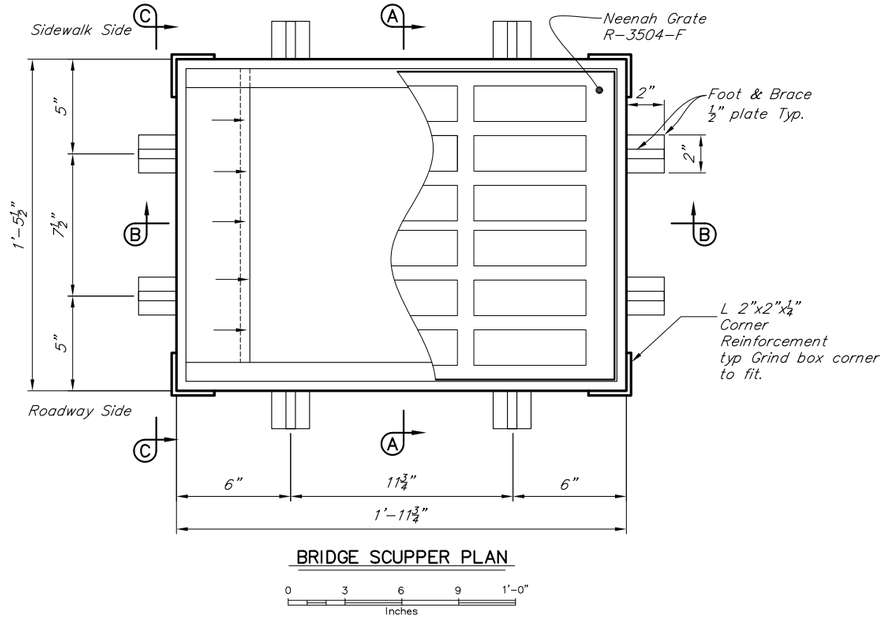
SIDEWALK PEDESTRIAN RAILING

BRIDGE NO. 0446

DWG. NO. 90

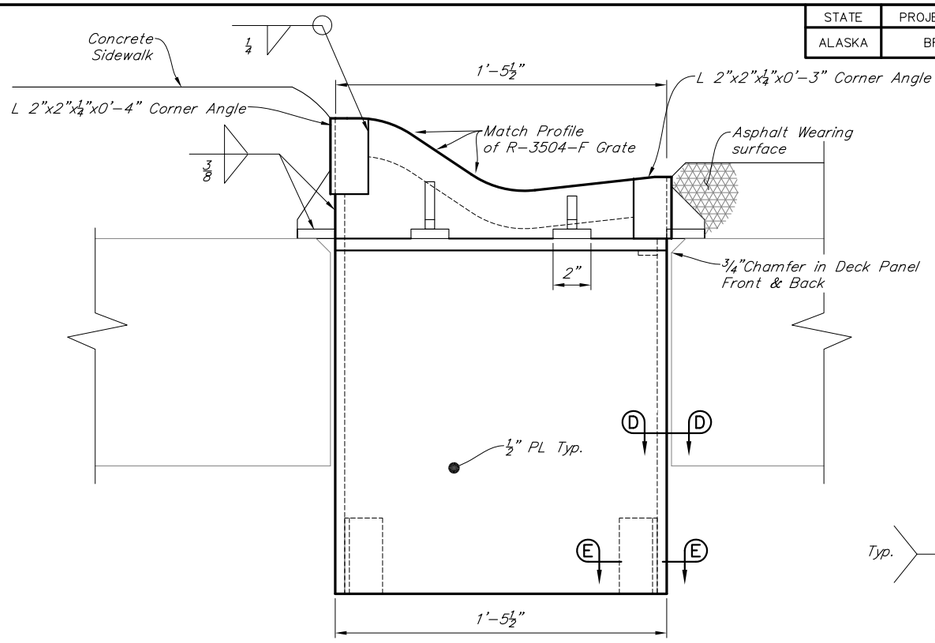
Oct 14, 2015 - 4:06pm brlen \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N STEEL TUBE-BACKED TIMBER RAIL.dwg Layout Name: SIDEWALK PEDESTRIAN RAILING

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N91	N110



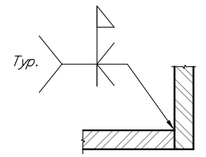
BRIDGE SCUPPER PLAN

0 3 6 9 1'-0"
Inches

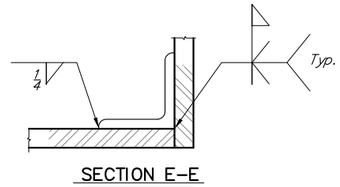


VIEW C-C

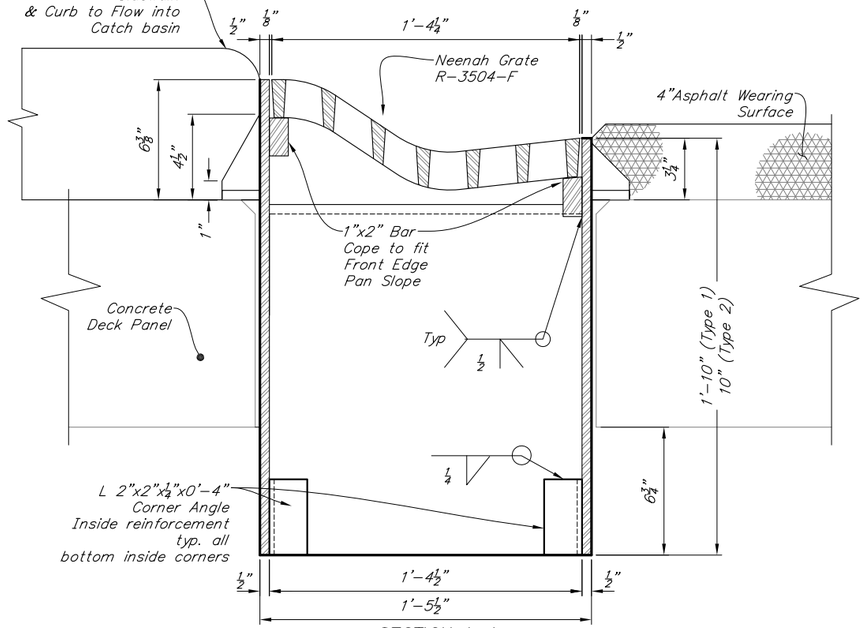
0 3 6 9 1'-0"
Inches



SECTION D-D

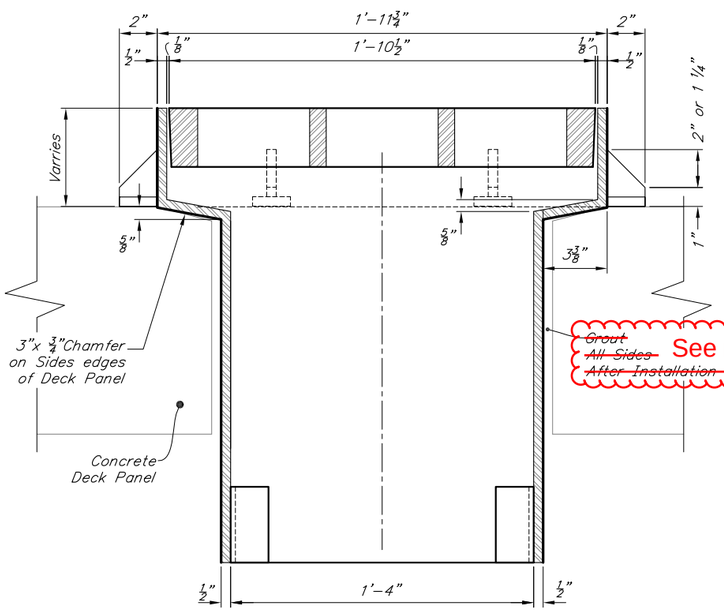


SECTION E-E



SECTION A-A

0 3 6 9 1'-0"
Inches



SECTION B-B

0 3 6 9 1'-0"
Inches

MATERIALS & FABRICATION
See Special Provisions

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom	Project Eng.: Date: 9/5/2019
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/1/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

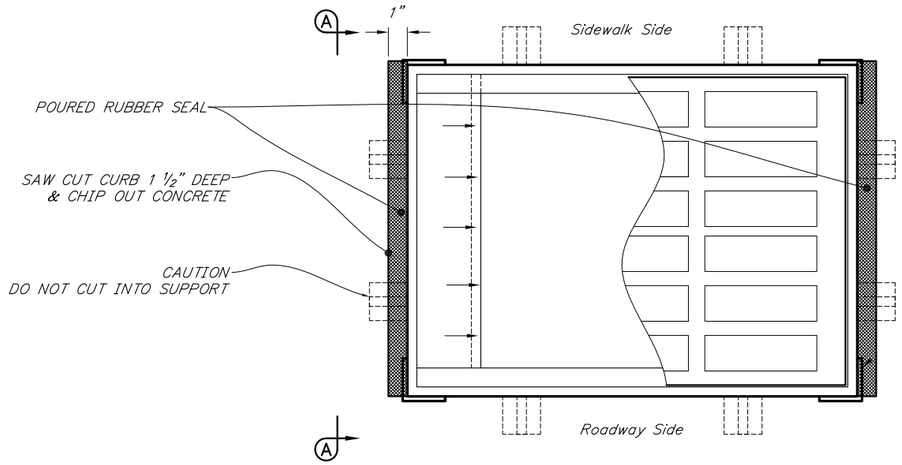
WATER STREET

INLET STRUCTURE

BRIDGE NO. 0446
DWG. NO. 91

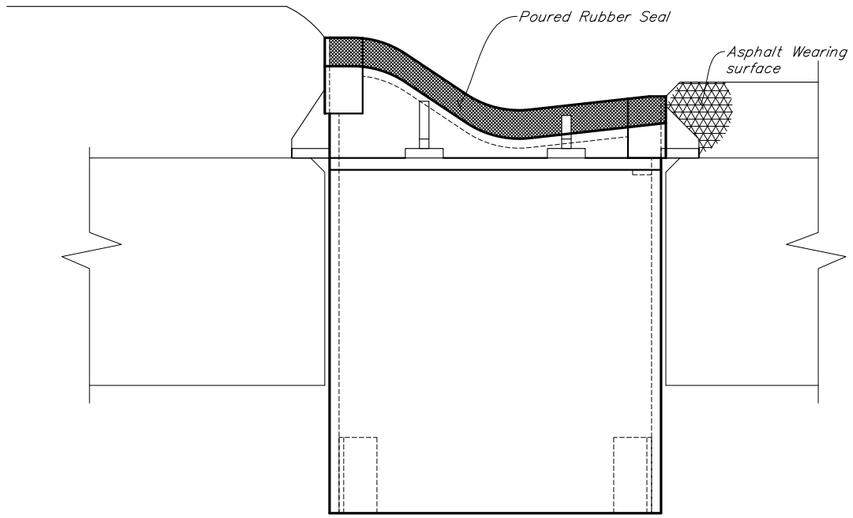
Oct 14, 2015 - 4:06pm brien \\SHEARERSERVER\Jobs\0226 Water Street PS&E\DWG\PLAN\SET ADOT&PF\69534_N Catch Basin.dwg Layout Name: INLET STRUCTURE

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N91	N110



BRIDGE SCUPPER PLAN

0 3 6 9 1'-0"
Inches



VIEW A-A

0 3 6 9 1'-0"
Inches

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: David Shearer	CHECKED: Brien Lindstrom	Provided with CSM 285 to address punch list concerns	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION		WATER STREET BRIDGE No. 2 WATER STREET INLET STRUCTURE
DRAWN BY: David Shearer	CHECKED: Brien Lindstrom				BRIDGE NO. 0446 DWG. NO. 91A
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set			

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N92	N110

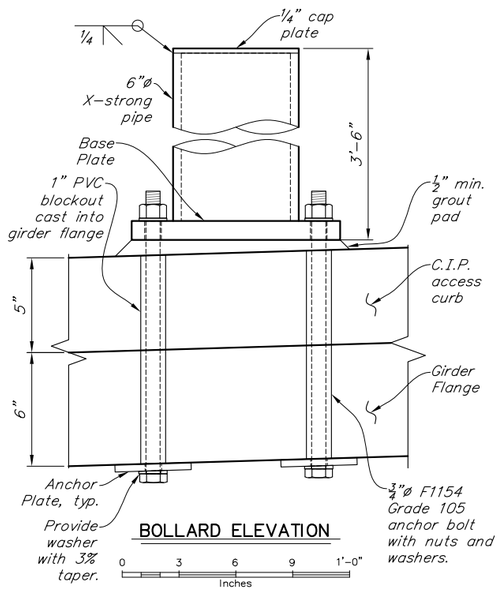
REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S401	E	4	5	1075'-0"	–
S402	E	4	1022	4'-3"	bent
S404	E,S	4	2	1075'-0"	–

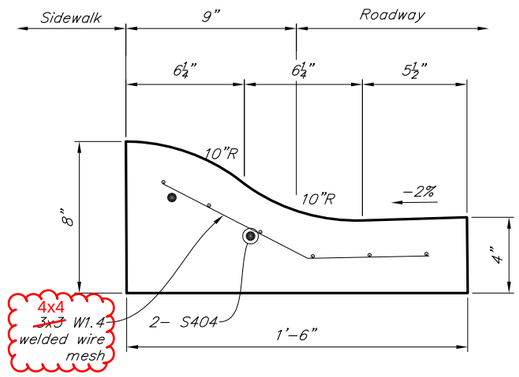
BENDING DIAGRAM

S402

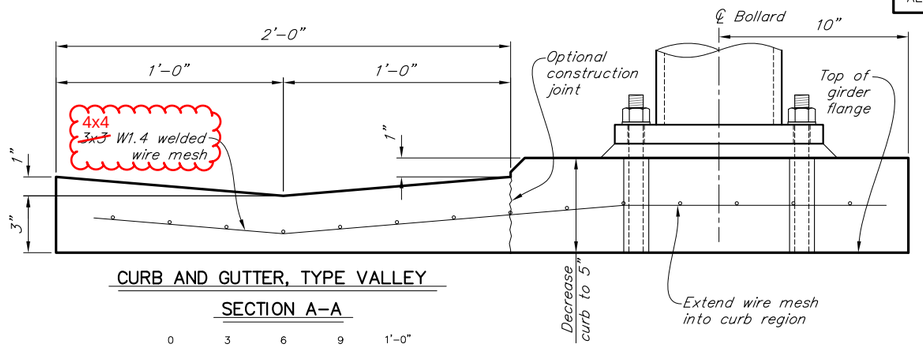
E = Epoxy coated reinforcing steel
S = Spliced permitted. Length does not include splices.



BOLLARD ELEVATION



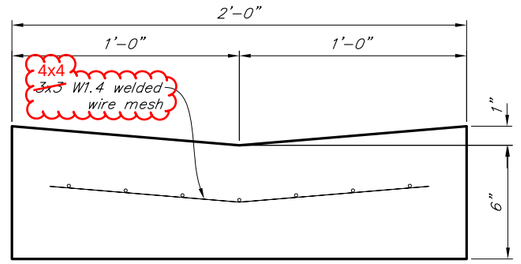
CURB AND GUTTER, TYPE ROLLED



CURB AND GUTTER, TYPE VALLEY
SECTION A-A

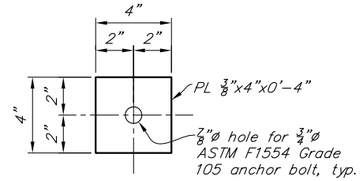
On the Bridge and Bridge Approach Slabs

RFI#113 - Full depth expansion joints at each end of bridge. Dummy joints in sidewalk and gutter @ 5'-0" O.C

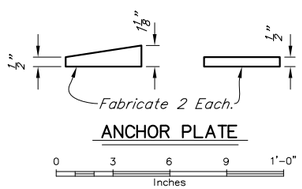


CURB AND GUTTER, TYPE VALLEY

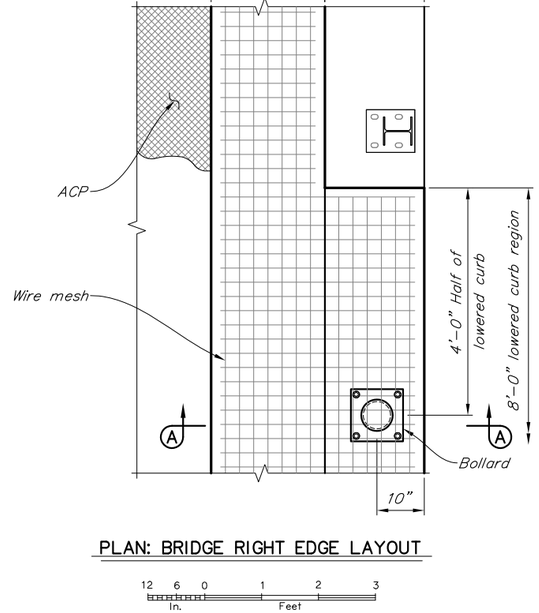
On soil in the Retaining Wall section



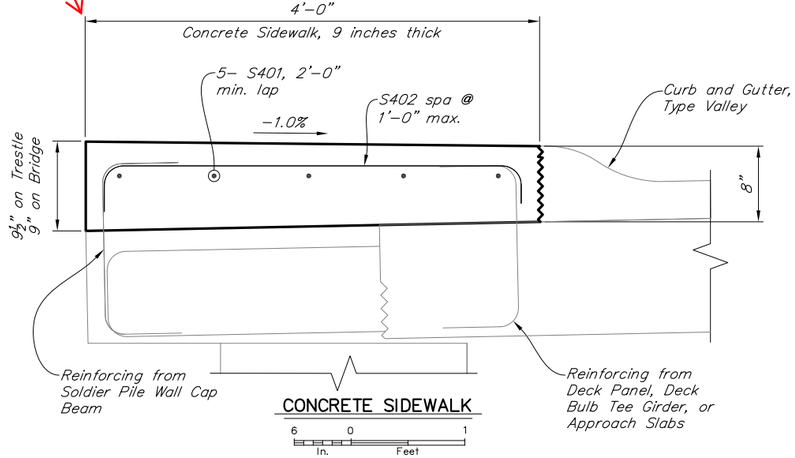
BOLLARD PLAN



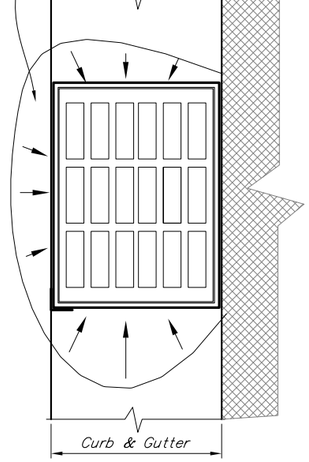
ANCHOR PLATE



PLAN: BRIDGE RIGHT EDGE LAYOUT



CONCRETE SIDEWALK



PLAN: CATCH BASIN

No Scale

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

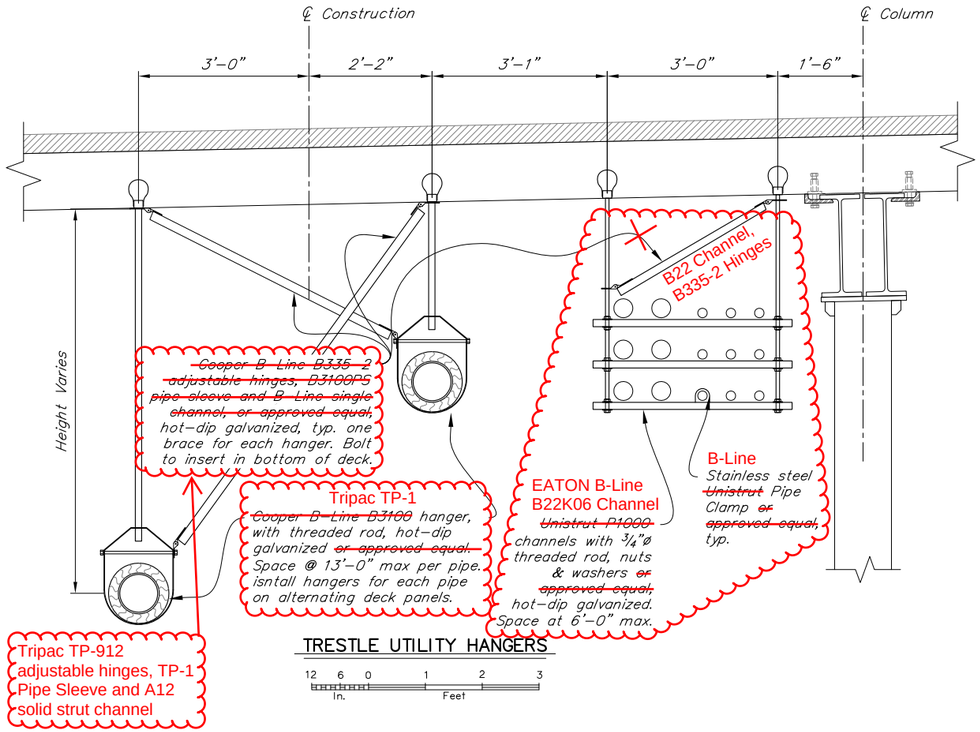
WATER STREET

SIDEWALK, CURB AND GUTTER

BRIDGE NO. 0446
DWG. NO. 92

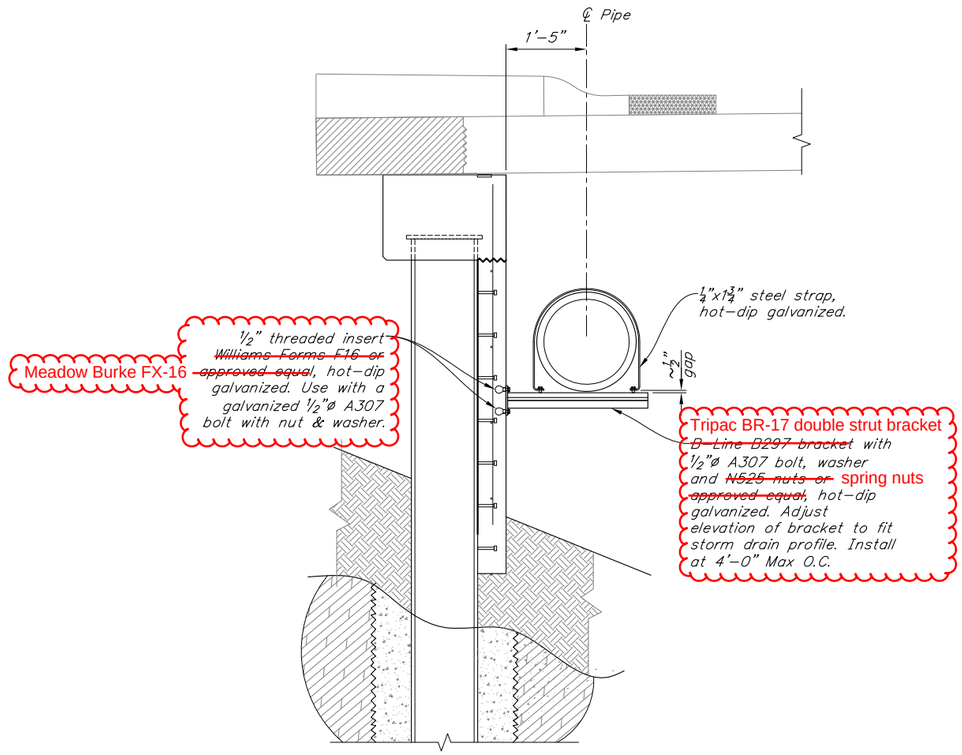
Oct 14, 2015 - 4:08pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\&pw\169534_N CURB & SIDEWALK.dwg Layout Name: SIDEWALK CURB AND GUTTER

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N93	N110



TRESTLE UTILITY HANGERS

12 6 0 1 2 3
In. Feet



STORM DRAIN BRACKET TYPICAL SECTION

12 6 0 1 2
In. Feet

See next sheet for open wall section modifications

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	STATE OF ALASKA · DAVID R. SHEARER · CE 8373 · 10/4/15 · Registered Professional Engineer
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set	

WATER STREET BRIDGE No. 2

WATER STREET

UTILITY HANGERS 1

BRIDGE NO. 0446

DWG. NO. 93

Oct 14, 2015 - 4:08pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N UTILITY HANGERS.dwg Layout Name: UTILITY HANGERS 1

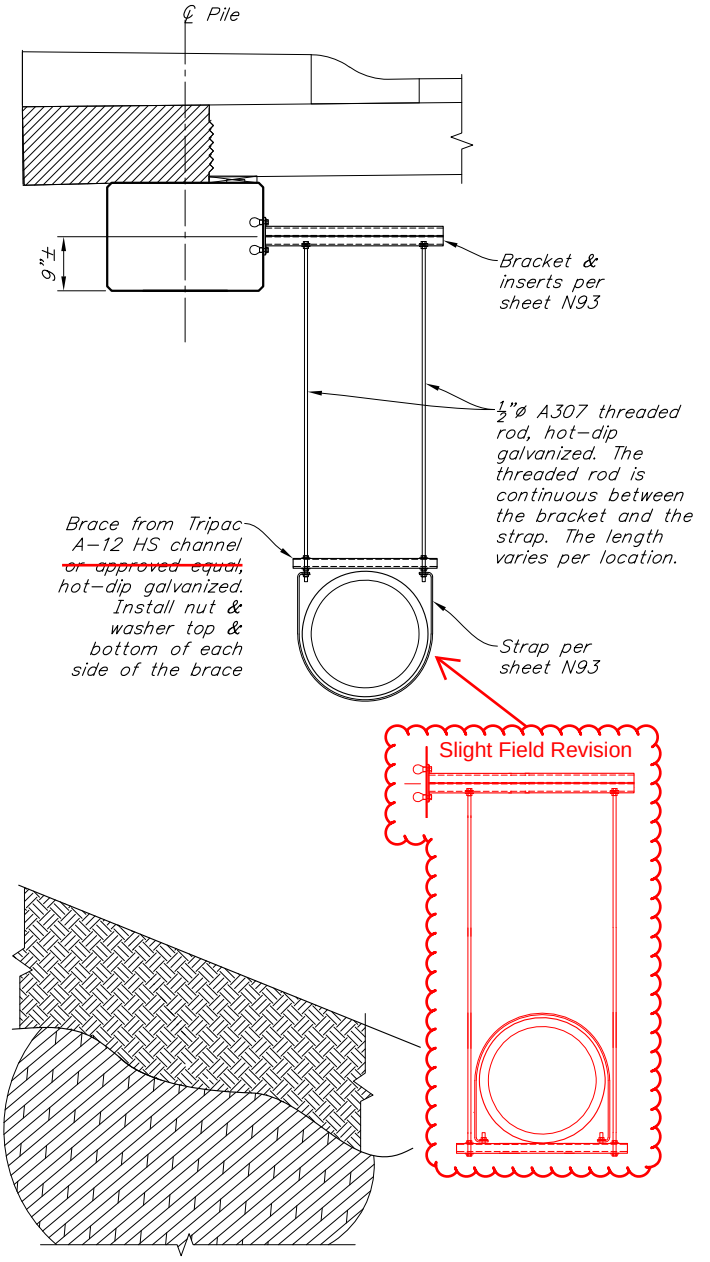
SHEARER DESIGN LLC

Bridge Design, Construction Engineering, Infrastructure Aesthetics

SHEET	N93A 1 OF 1
JOB NO.	0278
DATE	12/28/17
COMPUTED BY	B. LINDSTROM
CHECKED BY	D. SHEARER

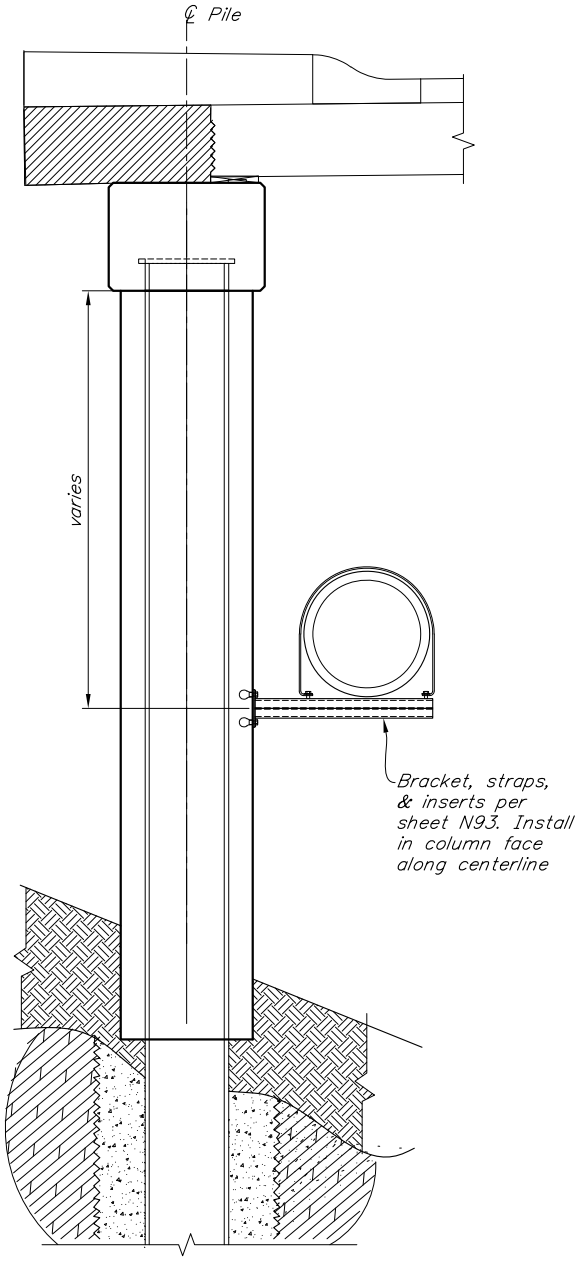
PROJECT WATER STREET #2

SUBJECT RFI 176, OPEN SECTION STORM DRAIN SUPPORT



TYPICAL SECTION BETWEEN PILES

Alternate between hanger types as required in the open section.



TYPICAL SECTION @ PILE

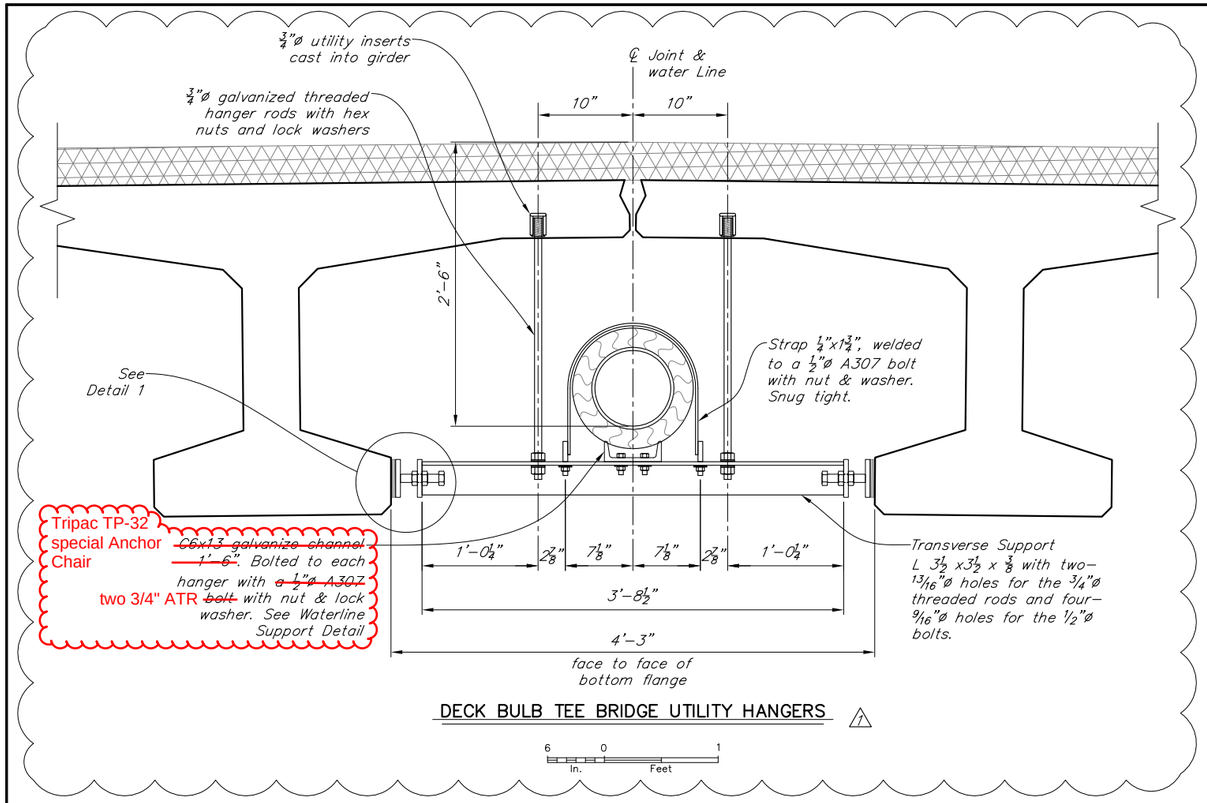
12 6 0 1 2 3
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

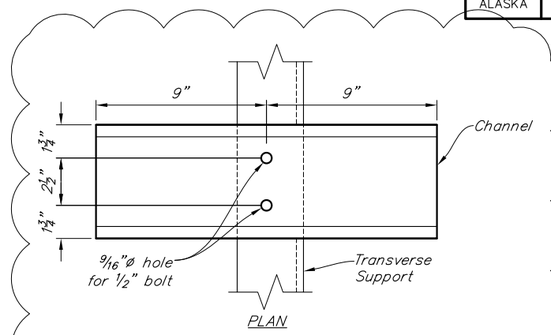
AB As-Built Set

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N94	N110



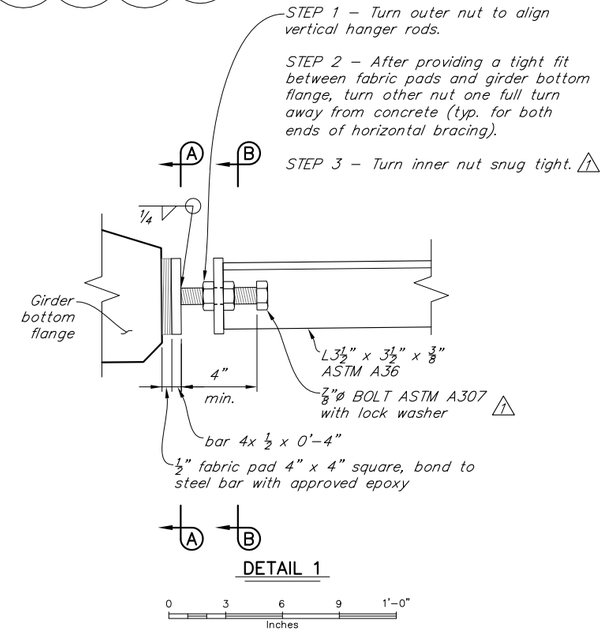
DECK BULB TEE BRIDGE UTILITY HANGERS ⚠1

6 0 1
In. Feet



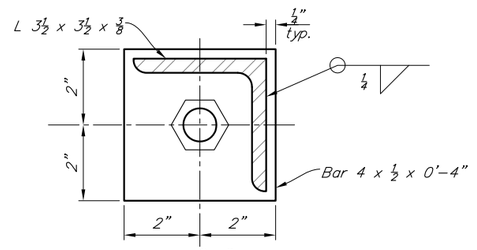
WATERLINE SUPPORT DETAIL ⚠1

0 3 6 9 1'-0"
Inches



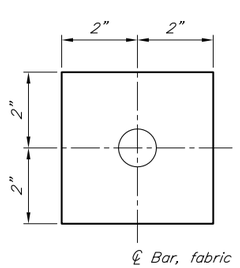
DETAIL 1

0 3 6 9 1'-0"
Inches



SECTION B-B

1 0 2 4
Inches



SECTION A-A

1 0 2 4
Inches

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer

Sheet issued with Directive #3

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/4/19

WATER STREET BRIDGE No. 2

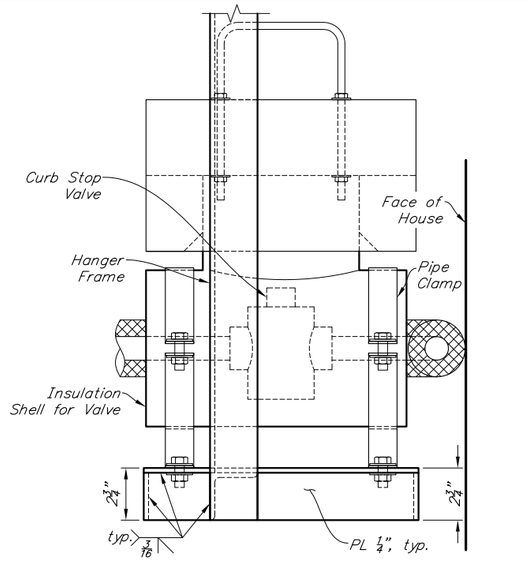
WATER STREET

UTILITY HANGERS 2

BRIDGE NO. 0446
DWG. NO. 94

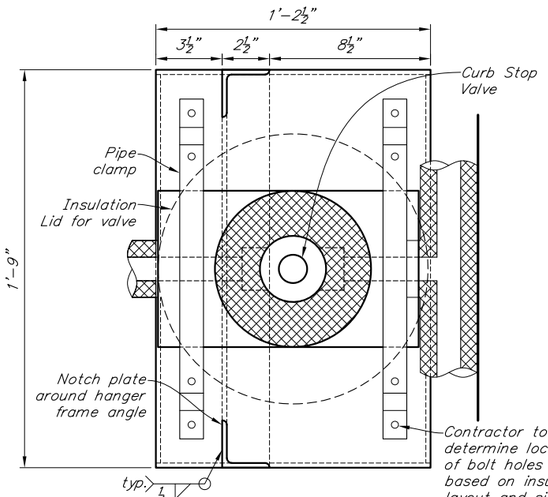
May 25, 2016 - 5:20pm bnen \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2016-05-25 Bridge Utility Hanger Revision\69534_N UTILITY HANGERS.dwg Layout Name: UTILITY HANGERS 2

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N94A	N110



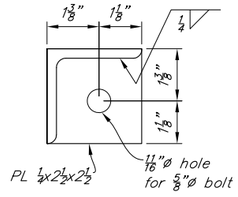
ELEVATION: VALVE SHELF

0 3 6 9 1'-0" Inches



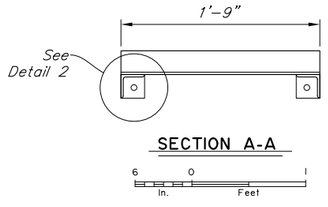
PLAN: VALVE SHELF

0 3 6 9 1'-0" Inches



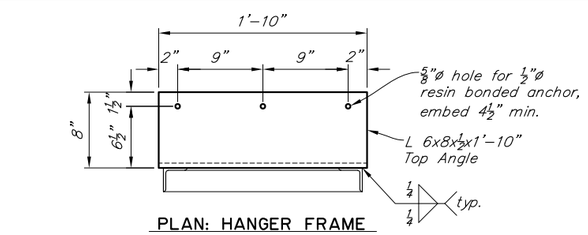
DETAIL 2

1 0 2 4 Inches



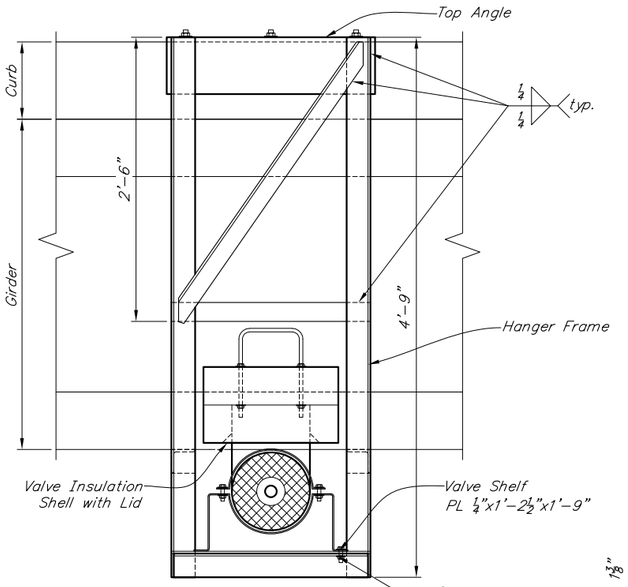
SECTION A-A

6 0 1 In. Feet



PLAN: HANGER FRAME

6 0 1 In. Feet

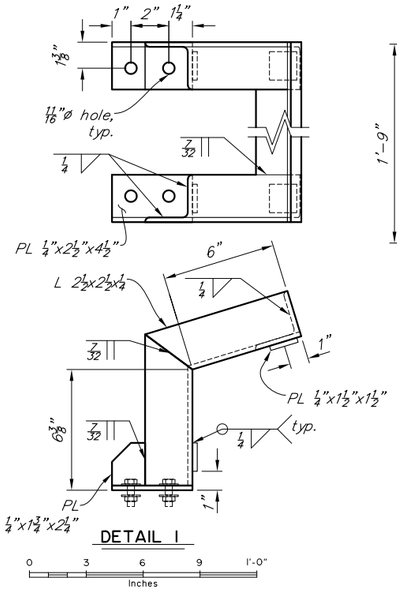


ELEVATION: HANGER FRAME

6 0 1 In. Feet

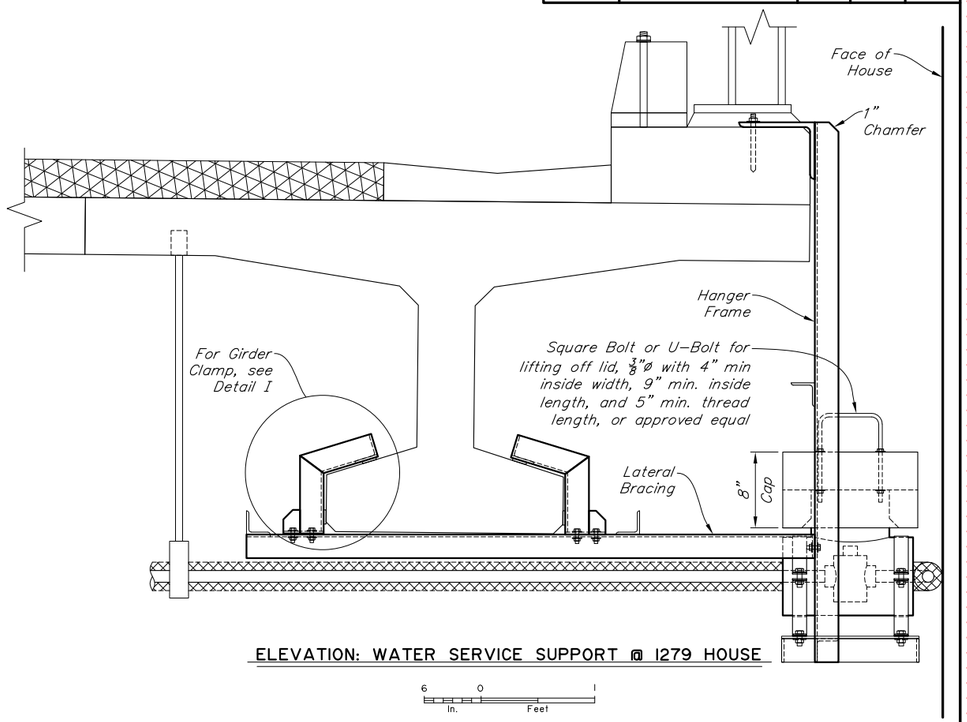
Notes:

- All fabricated parts, bolts, and pipe clamps shall be hot-dip galvanized. All bolts ASTM A307 unless noted otherwise.
- Locate curb stop valve to facilitate T-Bar ease of use from bridge deck, as well as pipe connections.
- See supplemental E80 sheet for House 1279 Water Service Schematic.
- Contractor to determine Pipe Clamp size and spacing based on insulation O.D. Install the Pipe Clamps as close to the valve as possible.
- Submit the proposed insulation shell around the curb stop valve with the steel shop drawings to confirm fit up.



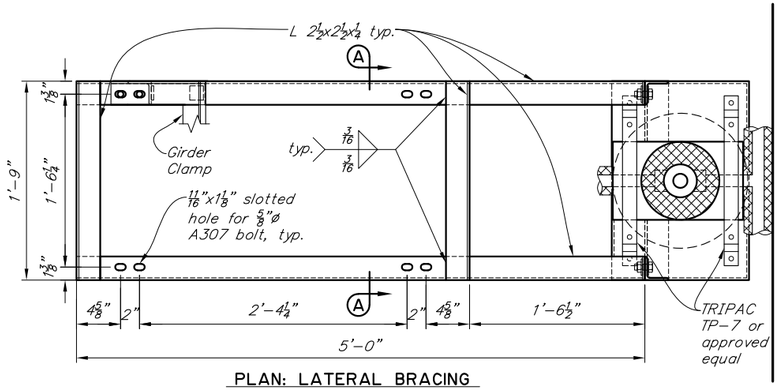
DETAIL I

0 3 6 9 1'-0" Inches



ELEVATION: WATER SERVICE SUPPORT @ 1279 HOUSE

6 0 1 In. Feet



PLAN: LATERAL BRACING

6 0 1 In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: JL Date: 9/5/2019

CSM 176 SUPPLEMENT TO RFI-108 & DRAWING E80

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Added with CO#25	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer		
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer		

AB As-Built Set

WATER STREET BRIDGE No. 2

WATER STREET

CURB STOP VALVE @ 1279 HOUSE

BRIDGE NO. 2313

DWG. NO. 94A

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N95	N110

Utility Platform General Notes:

1. *Utility platforms are labeled A through D which coincide with deck panel overhangs at the following approximate locations. See "DECK PANEL LAYOUT" Dwg. for deck panel layout.*
   Location A: 12+90
   Location B: 14+75
   Location C: 16+85
   Location D: 18+80

2. *Contractor shall verify the following information prior to shop drawing submittal and fabrication:*
   a. *Dimensions and notes marked thus * vary and/or shall be field verified.*
   b. *Dimensions and notes marked thus ** shall be verified with the steel grating manufacturer.*

3. *Details provided are typical. Information may need to be adjusted and/or mirrored to fit all cases.*

4. *Utility platform shall be level and vertical supports shall be plumb in final position.*

5. *Fabricate Support Plates to provide 3" min. clearance from center of hole to edge of plate unless noted otherwise.*

6. *Steel grate shall be galvanized, banded at all ends, and capable of supporting the following minimum loads:*
   a. *Self weight*
   b. *Dead Load = 40 psf*
   c. *Live Load = 60 psf or 300 pound concentrated load at any point, whichever produces the larger effect.*
   These loads are service level (unfactored) loads. Contractor shall provide manufacturer's cut sheets or design calculations which include factors of safety or load factors applied to these loads.

9. *Provide structural steel and hardware according to the following:*

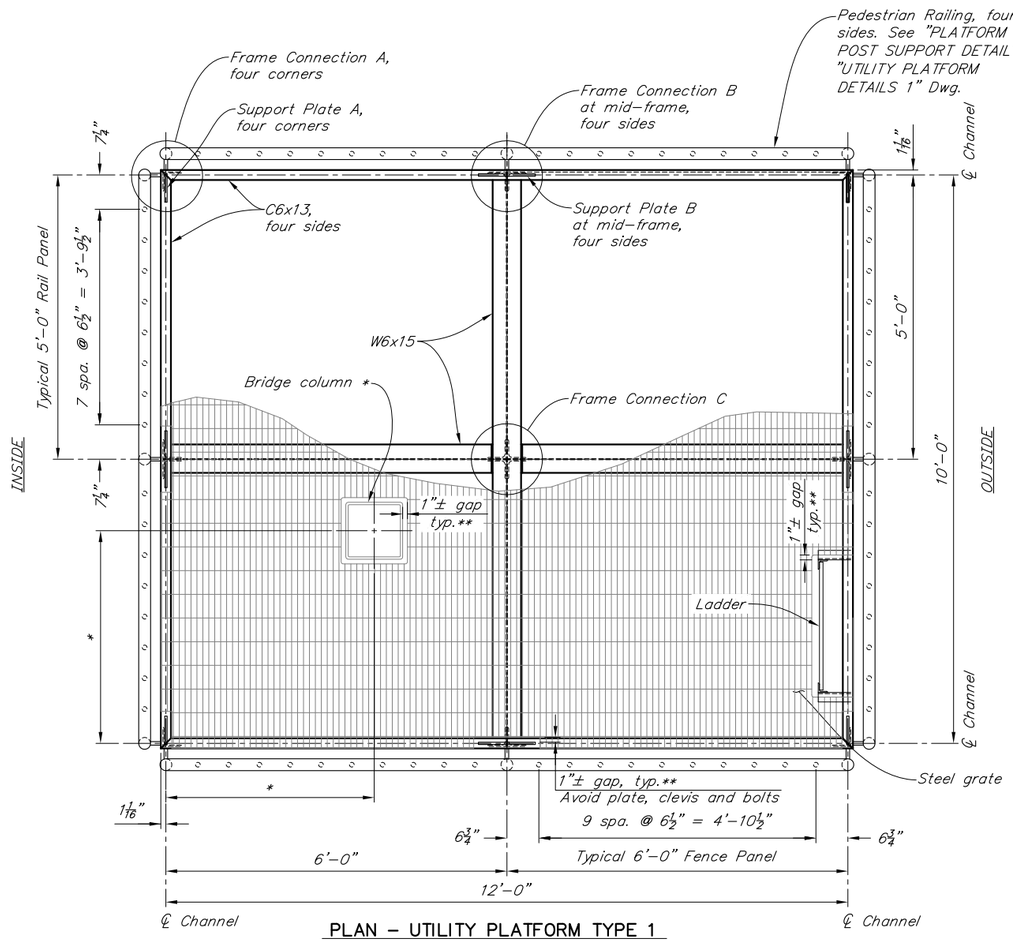
a.	W, C & L shapes and plates	ASTM A709, Grade 50
b.	HSS	ASTM A500, Grade B
c.	Bolts	ASTM A325, Type 1
d.	Nuts	ASTM A563, Grade DH for A325 bolts ASTM A563, Grade A for A307 rod
e.	Washers	ASTM F436 for A325 bolts ASTM F844 for A307 rod
f.	Threaded rod	ASTM A307, Grade A or B
g.	Clevis	ASTM A668, Class A
h.	Turnbuckle	ASTM F1145, Type 1, Grade 1

10. *Hot-dip galvanize steel shapes, plates and hardware after fabrication according to the following:*

a.	W, C & L shapes and plates	ASTM A123
b.	Hardware	ASTM A153

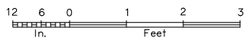
11. *Provide welds according to the latest edition of AWS D1.1*

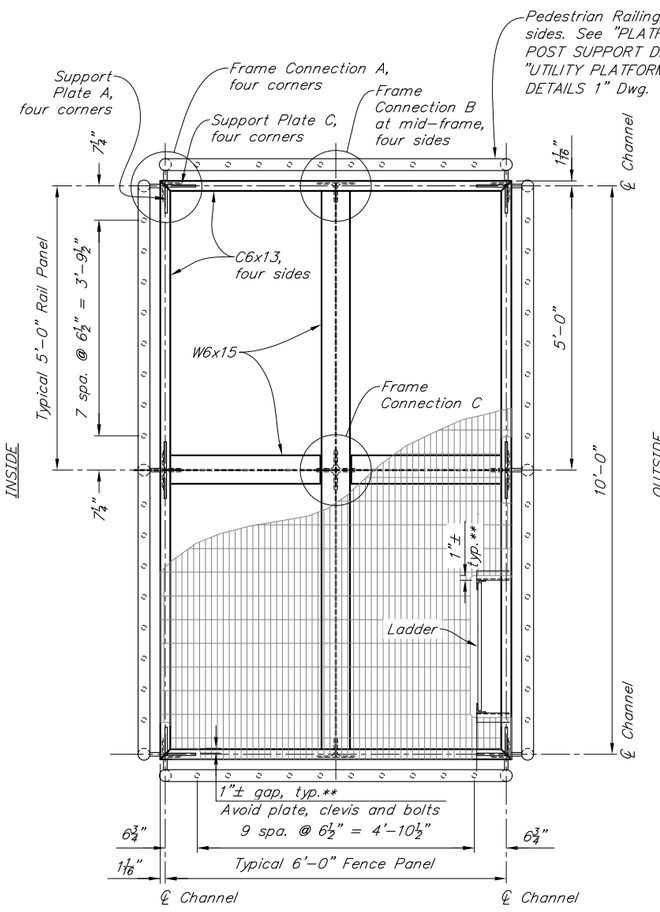
12. *Provide all details and dimensions on shop drawings, including manufacturer's information and details for attachment of ladders and steel grate to the structure.*



PLAN – UTILITY PLATFORM TYPE 1

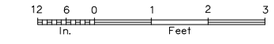
PLATFORM LOCATIONS "A", "B" AND "C"





PLAN – UTILITY PLATFORM TYPE 2

PLATFORM LOCATION "D"



DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

UTILITY PLATFORM PLAN

BRIDGE NO. 0446
DWG. NO. 95

Oct 14, 2015 - 4:07pm bhen \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\fdot69534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM PLAN

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N96	N110

RFI-158

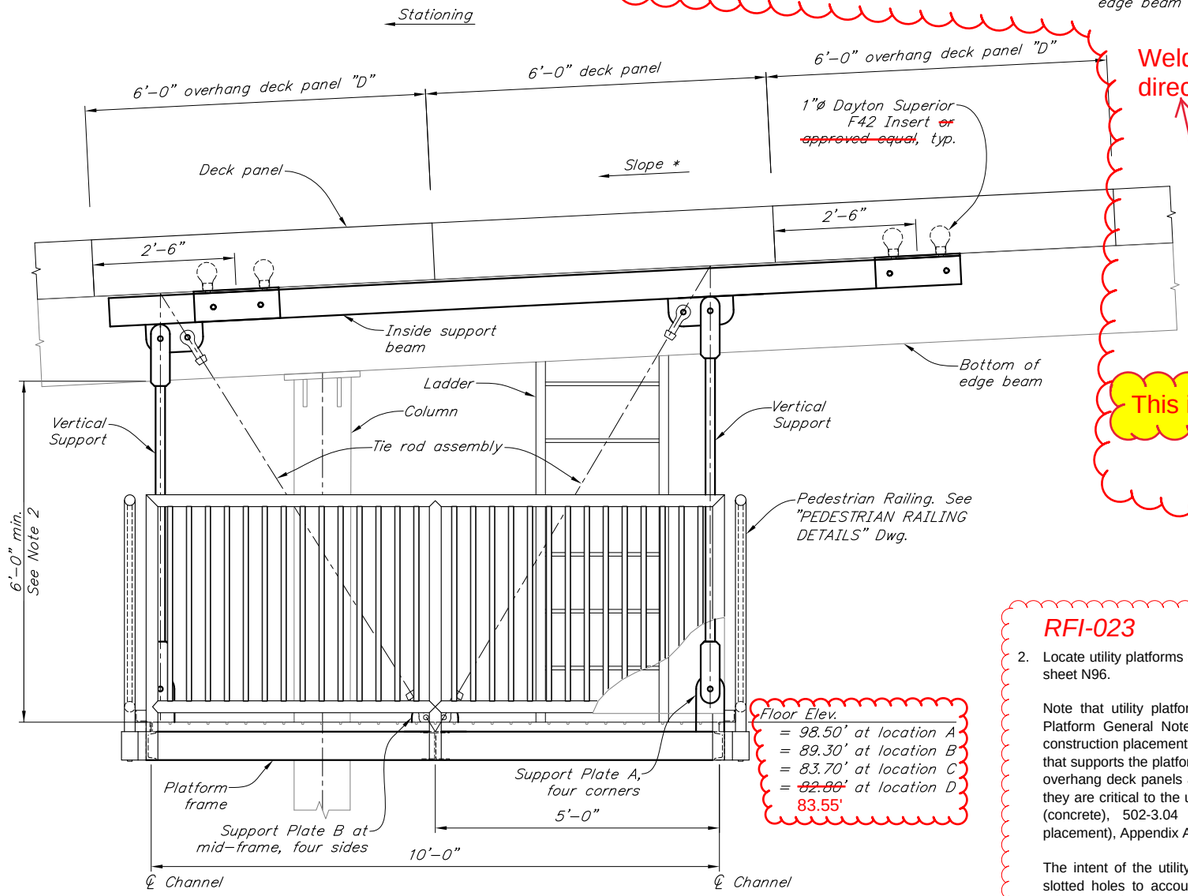
This is acceptable.

Field drill holes in Hss 6x6

Weld hanger padeyes directly to HSS 6x6

This is acceptable.

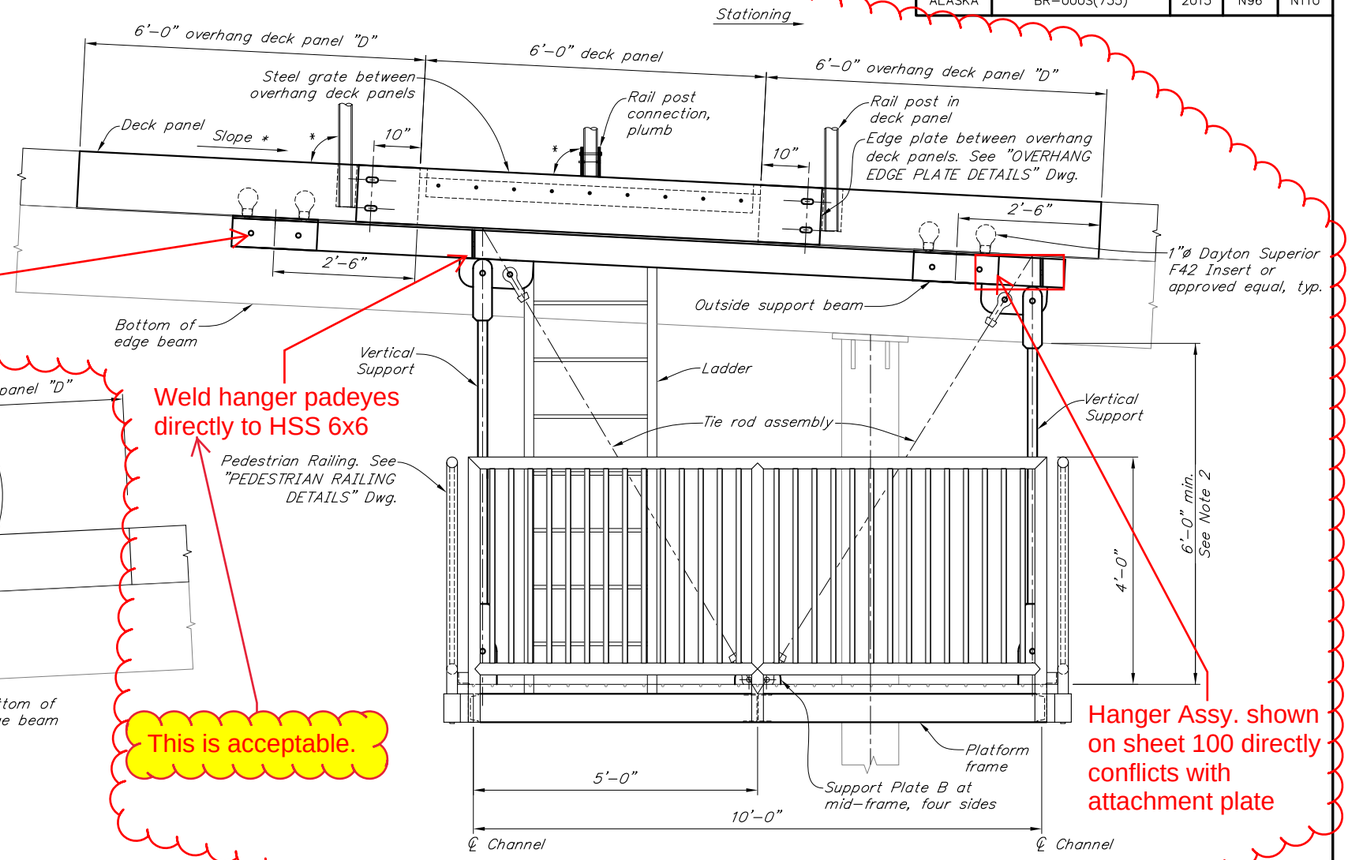
Hanger Assy. shown on sheet 100 directly conflicts with attachment plate



ELEVATION – UTILITY PLATFORM (INSIDE)

(FACING WEST)

12 6 0 1 2 3
In. Feet



ELEVATION – UTILITY PLATFORM (OUTSIDE)

(FACING EAST)

12 6 0 1 2 3
In. Feet

RFI-023

2. Locate utility platforms relative to inserts in the overhang deck panels as dimensioned on sheet N96.

Note that utility platform dimensions marked thus * shall be field verified per Utility Platform General Notes, #2, on sheet N95. These dimensions may be affected by construction placement tolerances and survey accuracy for the construction of the trestle that supports the platforms. Special care should be taken in the placement location of the overhang deck panels and placement of the inserts within the overhang deck panels as they are critical to the utility platform supports. See the specifications (sections 501-3.10 (concrete), 502-3.04 (prestressed concrete), 504 (steel), 674-3.02 (deck panel placement), Appendix A (survey), etc.) for construction tolerances and survey accuracy.

The intent of the utility support details is to provide some adjustment capability using slotted holes to account for possible variation of dimensions. However, the available adjustment does not guarantee that an accumulation of tolerances would not exceed this amount for some of the dimensions. For this reason, the dimensions are required to be field verified. Sequence of work and shop drawing submittal should be scheduled to accommodate the potential variability in the trestle construction and the required field verification of utility platform dimensions. Fabrication without accommodation of variability of dimensions and/or without field verification is at the risk of the contractor and fabricator.

Notes:
1. Elevation views apply to Utility Platforms Type 1 and Utility Platform Type 2.
2. Minimum height is from top of grating to bottom of edge beam. Excavate soil and rock as needed to avoid conflict with platform.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer 10/1/15

WATER STREET BRIDGE No. 2

WATER STREET

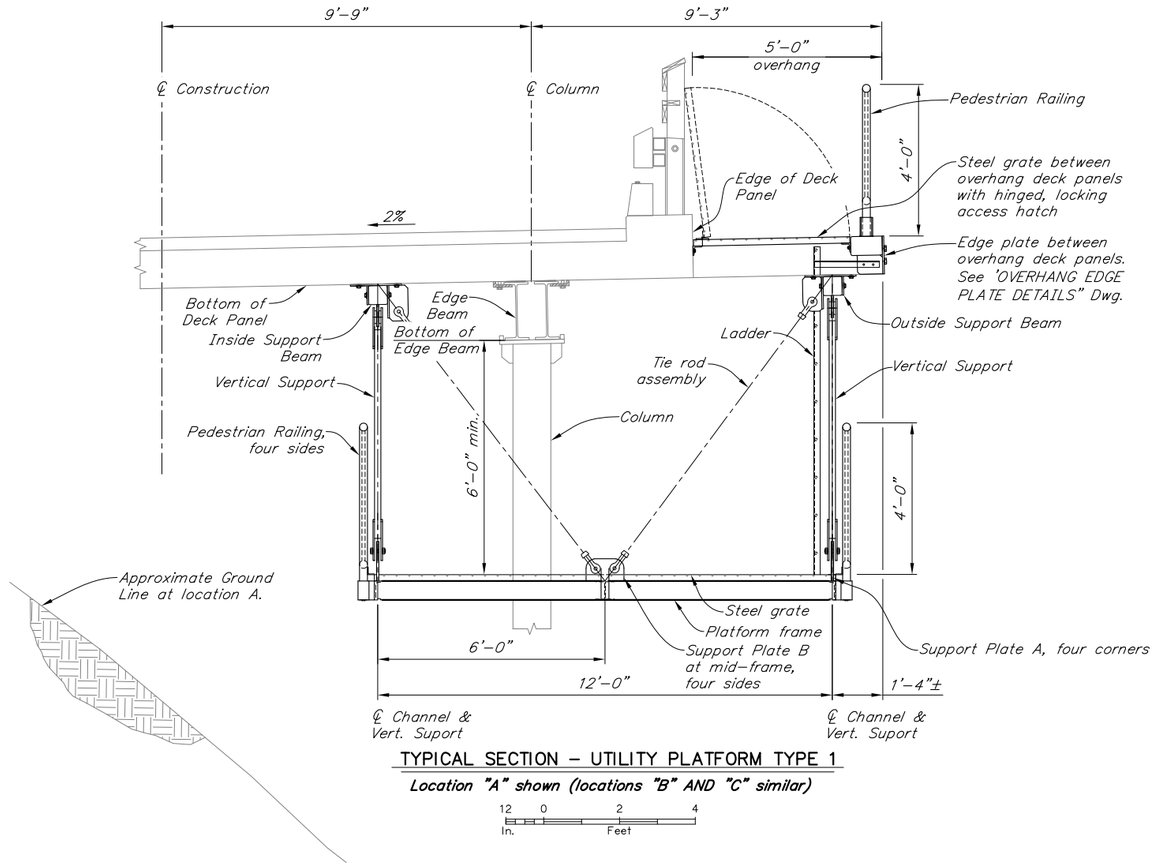
UTILITY PLATFORM ELEVATION

BRIDGE NO. 0446

DWG. NO. 96

Oct 14, 2015 - 4:07pm brien \\shareserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM ELEVATION

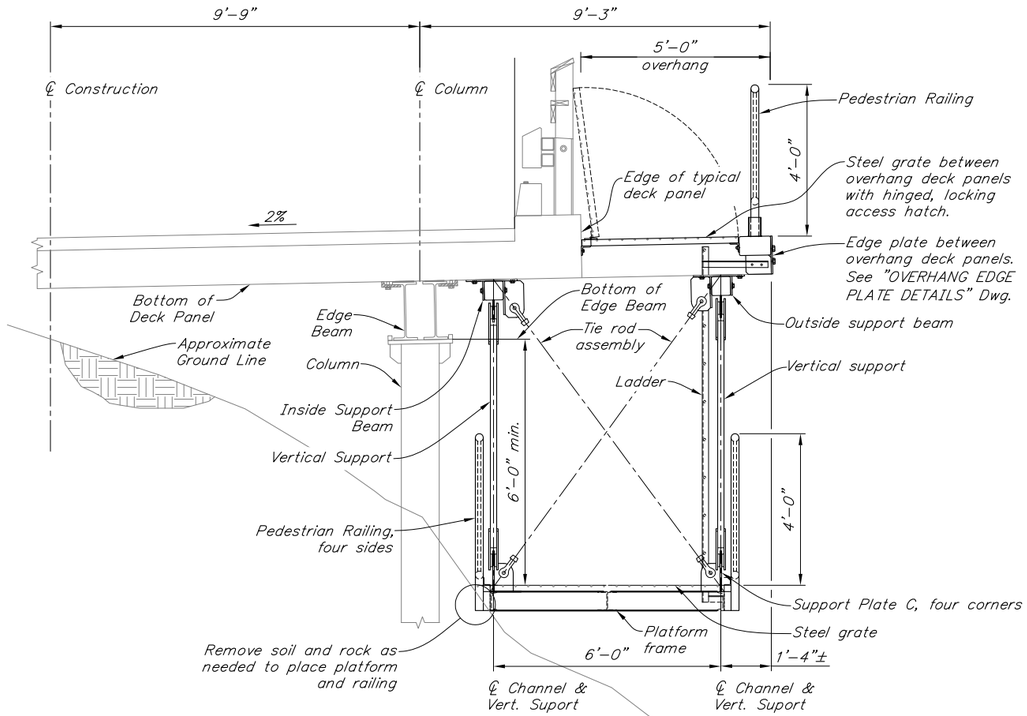
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N97	N110



TYPICAL SECTION – UTILITY PLATFORM TYPE 1

Location "A" shown (locations "B" AND "C" similar)

12 0 2 4
In. Feet



TYPICAL SECTION – UTILITY PLATFORM TYPE 2

Location "D"

12 0 2 4
In. Feet

Note:
Existing ground line varies across each platform location. Ground line shown represents approximate highest ground elevation at locations "A" and "D". Contractor shall verify ground line at all locations. Excavate soil and rock as needed to avoid conflict with platform.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

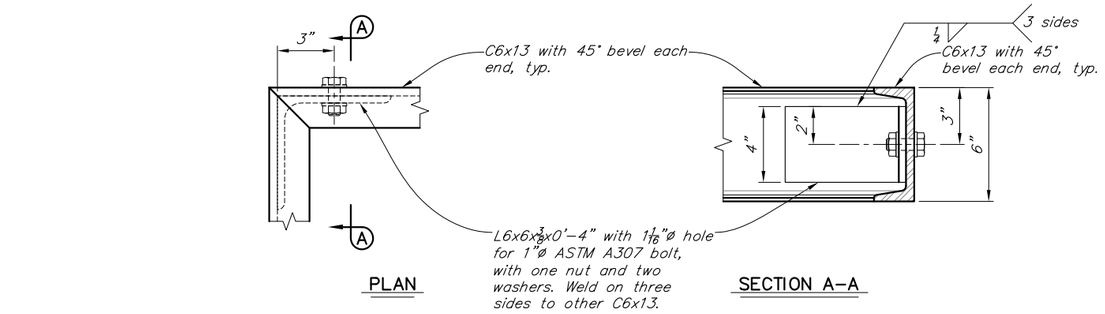
WATER STREET

UTILITY PLATFORM SECTION

BRIDGE NO. 0446
DWG. NO. 97

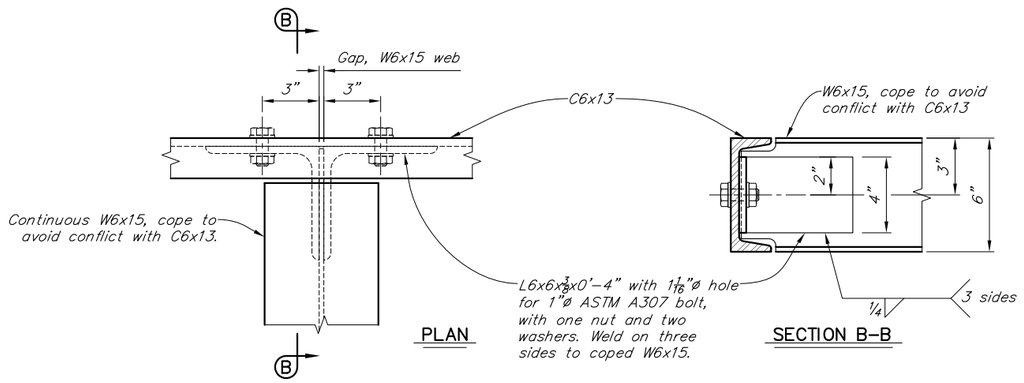
Oct 14, 2015 - 4:07pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM SECTION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N98	N110



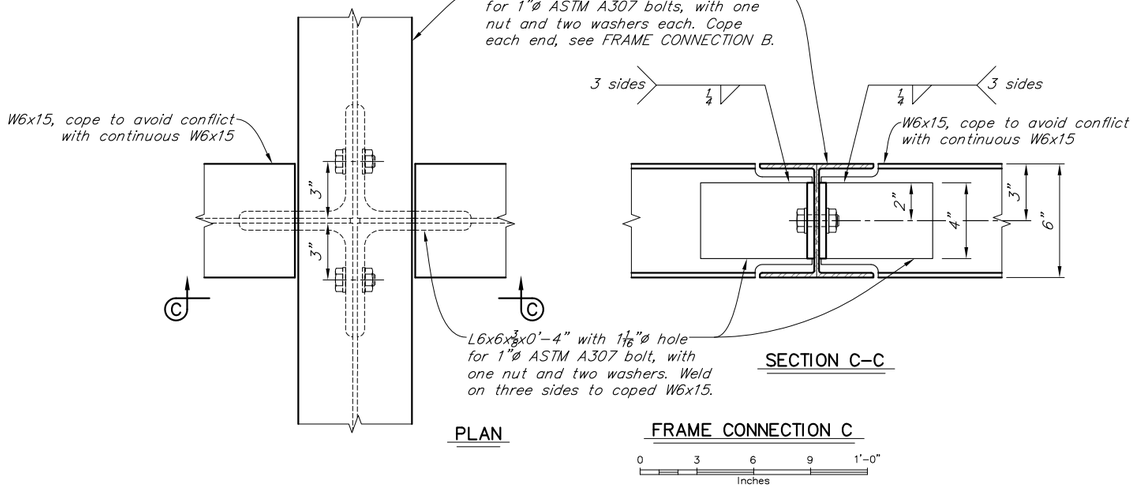
FRAME CONNECTION A

0 3 6 9 1'-0"
Inches



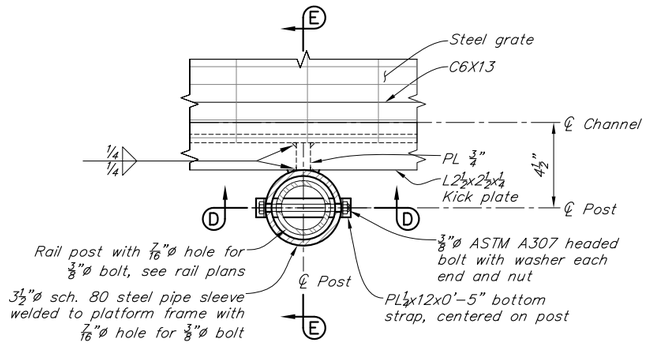
FRAME CONNECTION B

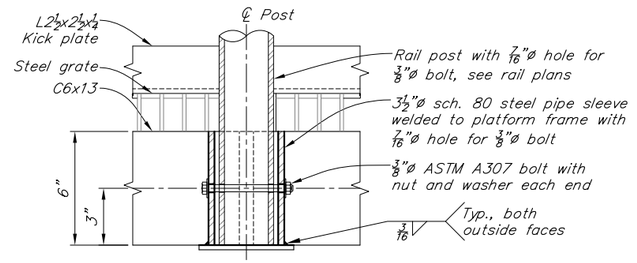
0 3 6 9 1'-0"
Inches

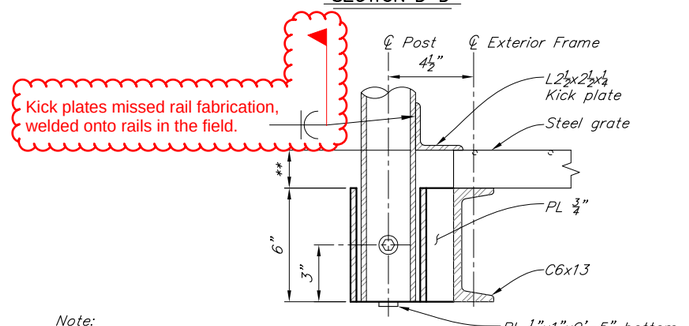


FRAME CONNECTION C

0 3 6 9 1'-0"
Inches







Note:
See "PEDESTRIAN RAILING DETAILS" Dwg. for railing information not shown.

PLATFORM RAIL POST SUPPORT DETAIL

0 3 6 9 1'-0"
Inches

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

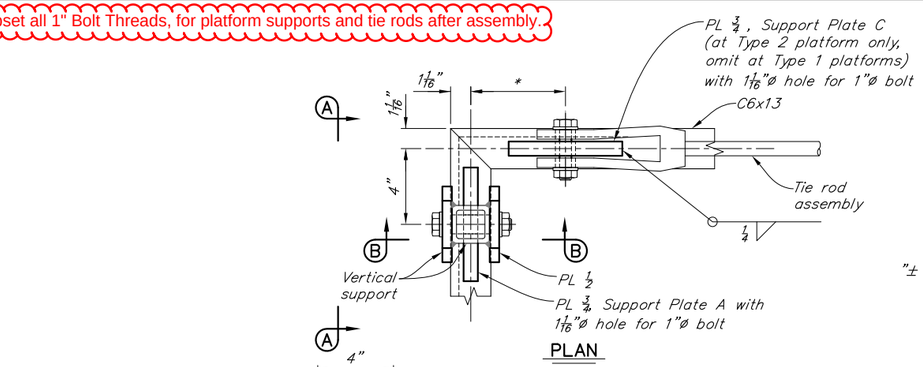
UTILITY PLATFORM DETAILS 1

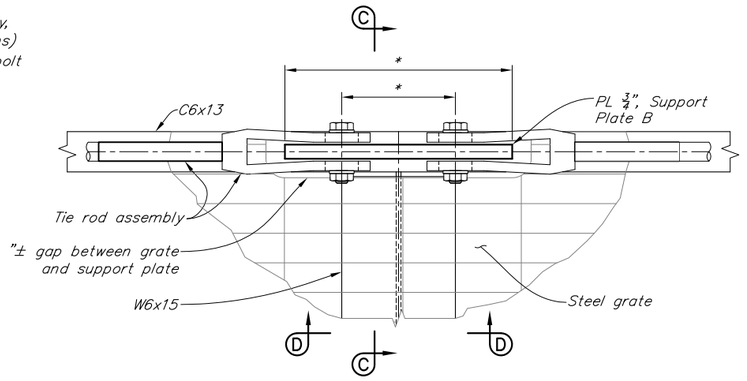
BRIDGE NO. 0446
DWG. NO. 98

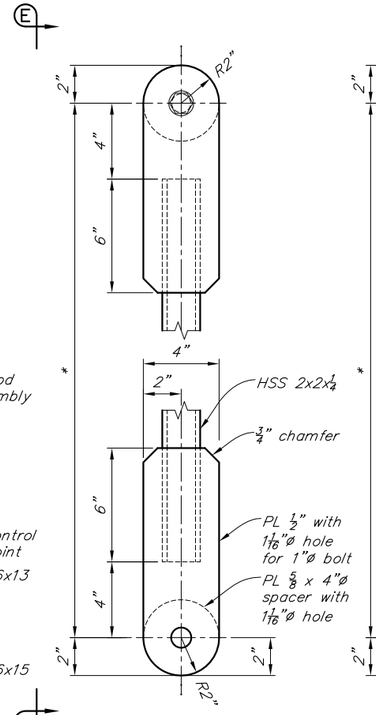
Oct 14, 2015 - 4:37pm bflen \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM DETAILS 1

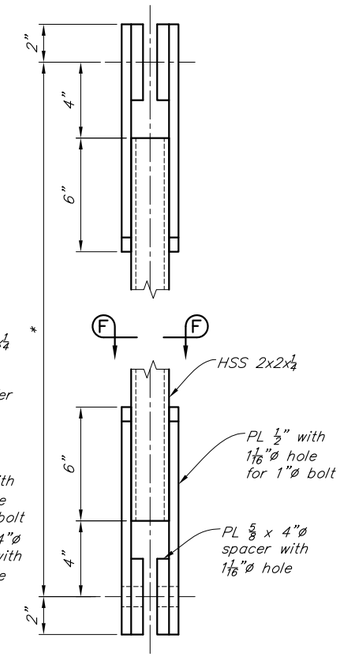
Upset all 1" Bolt Threads, for platform supports and tie rods after assembly.

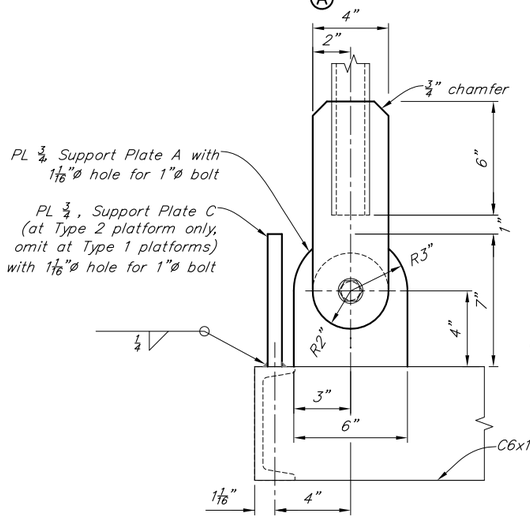
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N99	N110

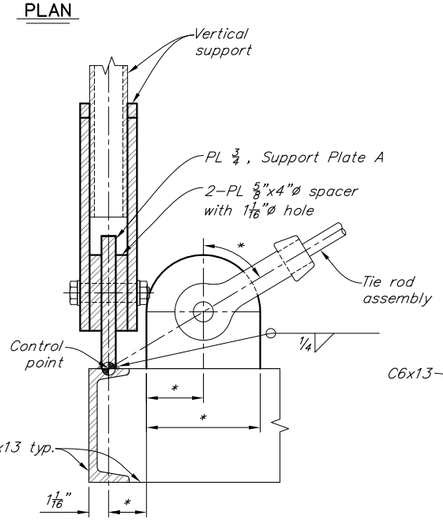


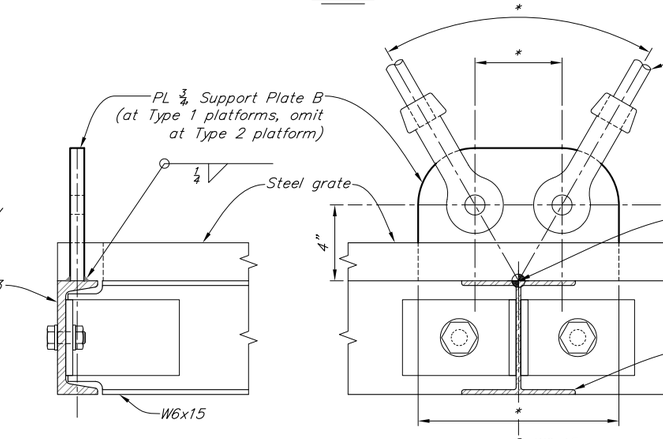










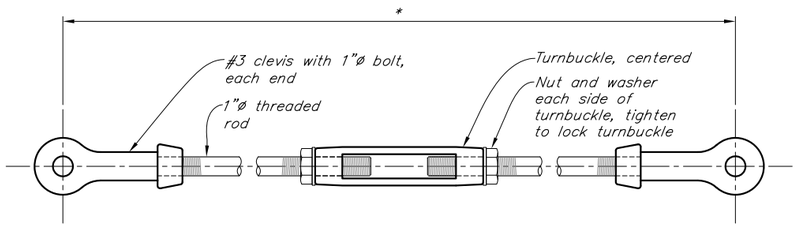


SUPPORT PLATE A AND C

0 3 6 9 1'-0"

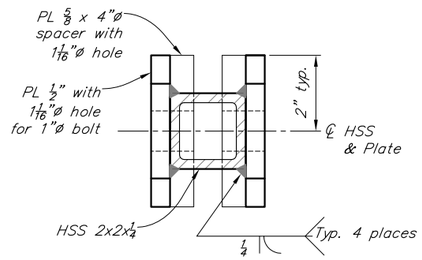
SUPPORT PLATE B

0 3 6 9 1'-0"



VERTICAL SUPPORT

0 3 6 9 1'-0"
Inches



DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 10/14/15 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

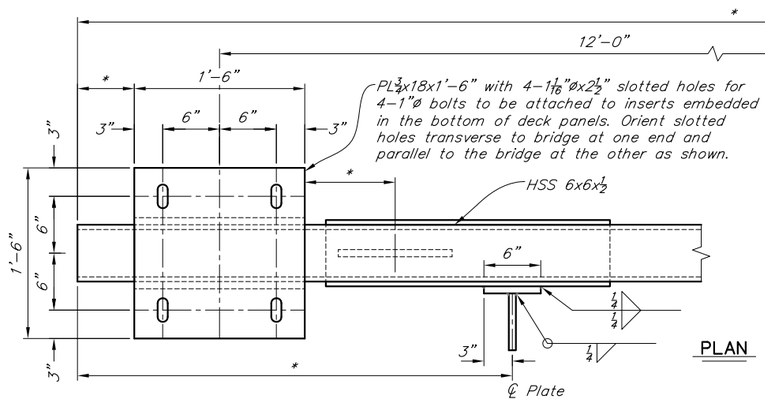
UTILITY PLATFORM DETAILS 2

BRIDGE NO. 0446

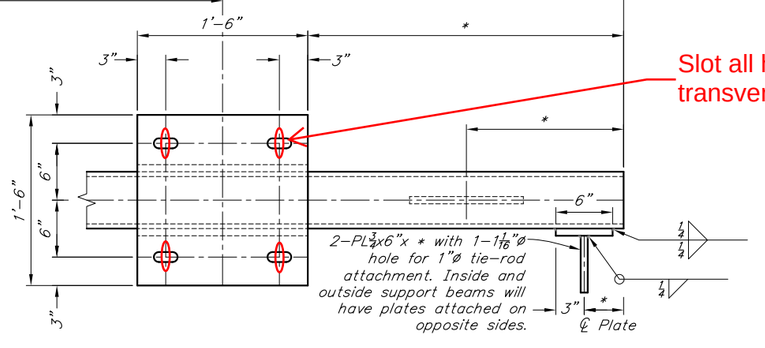
DWG. NO. 99

Oct 14, 2015 - 4:07pm brken \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\&pf#69534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM DETAILS 2

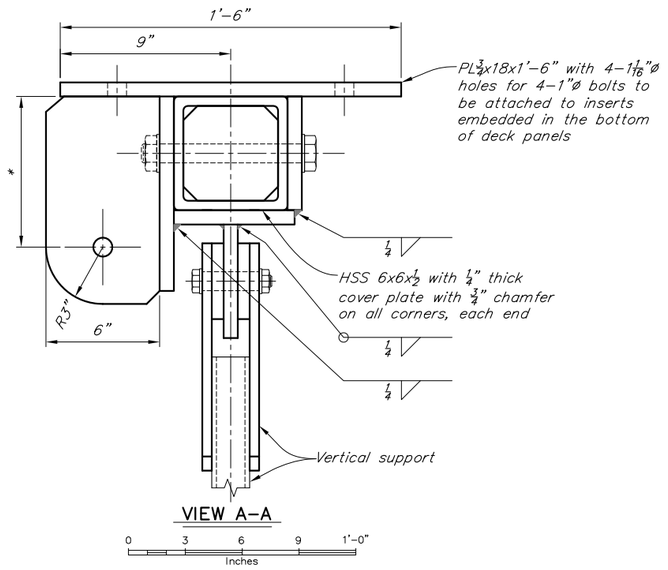
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N100	N110



PLAN



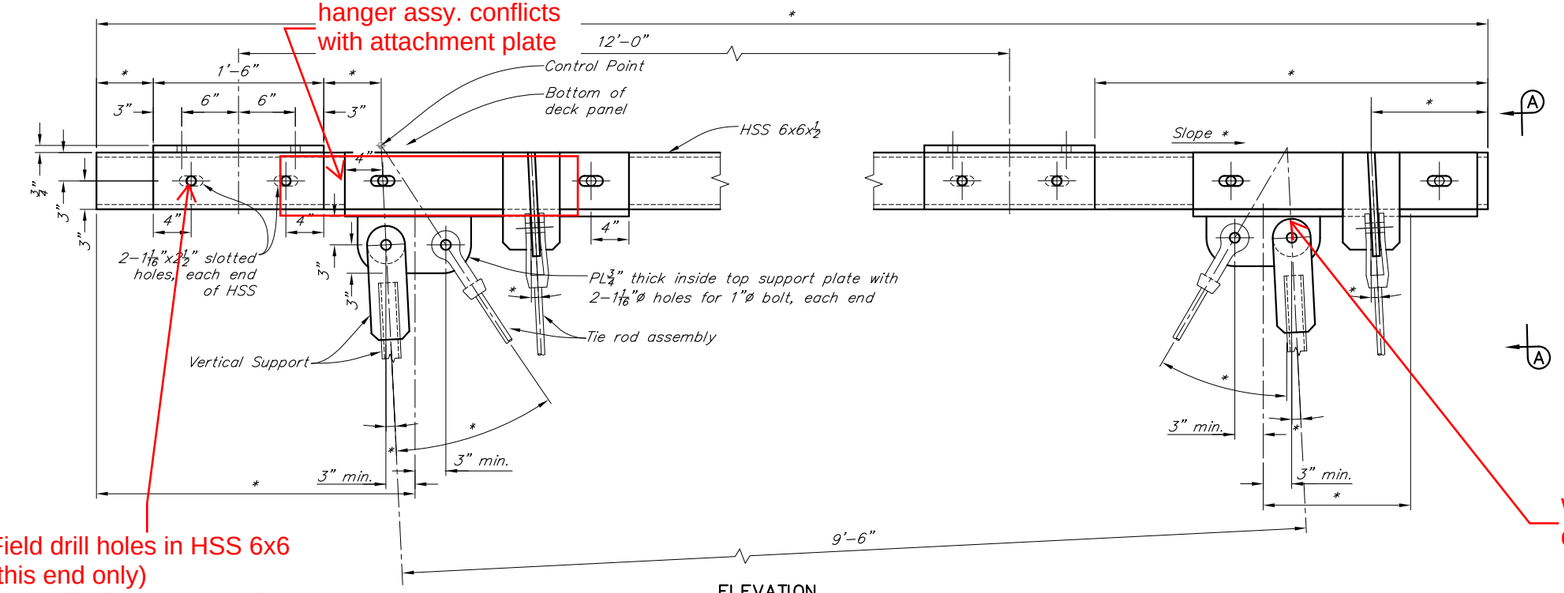
This is acceptable



VIEW A-A

0 3 6 9 1'-0"
Inches

hanger assy. conflicts with attachment plate



ELEVATION

SUPPORT BEAM

6 0 1
In. Feet

Field drill holes in HSS 6x6 (this end only)
Slotted holes in connection plates

Field drilled holes in HSS are acceptable. Holes may be field drilled at both ends of HSS. Slotted holes in connection plate shall per per plans.

Weld hanger padeyes directly to HSS 6x6

This is acceptable

Note:
See "UTILITY PLATFORM ELEVATION" Dwg. and "UTILITY PLATFORM SECTION" Dwg. for layout information not shown.

RFI-158
SEE DETAILS & CSM 198 NEXT PAGE

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/3/2019	WATER STREET BRIDGE No. 2 WATER STREET UTILITY PLATFORM DETAILS 3
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	BRIDGE NO. 0446 DWG. NO. 100

STATE OF ALASKA · DAVID R. SHEARER · CE 8373 · 10/14/15 · Registered Professional Engineer

Oct 14, 2015 - 4:07pm brken \\shearerserver\jobs\0226 water street ps&e\DWG\planset ado\&pif60534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM DETAILS 3

SHEARER DESIGN LLC.
Bridge Design, Construction Engineering and Infrastructure Aesthetics
3613 Phinney Ave N #B
Seattle, WA 98103
(206) 781-7830

Water Street Trestle #2 Replacement

Construction Support Memorandum: 198

June 6, 2017
To: John Scott, HDR

Subject: RFI #158 - Utility Platforms

Response:

The Contractor has requested the following regarding utility platform details shown in the plans. These items were also discussed in a phone conference in which the contractor and fabrication detailer were present and took place on 6/1/2017, 2-3 pm PST.

1. Orient slotted holes in all plates connected to the deck panels perpendicular to HSS support beams.

   This change is acceptable.

2. Provide 4" long slotted holes in vertical plates welded to deck panel connection plate.

   This change is not acceptable. Provide slotted holes in accordance with the plans. Field drilling holes in the HSS 6x6x1/2 support beams (per #3 below) will allow the necessary adjustment.

3. Field drill holes in each end of HSS 6x6x1/2 support beams at connection with deck panel connection plate assemblies.

   This change is acceptable. The contractor shall apply galvanizing repair paint in accordance with WSDOT Std. Specification 9-08.1(2)B.

4. Change bolted connection between 6x6x1/2" HSS support beams and vertical and diagonal members to shop welded connections. Both vertical and diagonal support plates are to be welded directly to the HSS6x6x1/2 support beams.

   This change is acceptable. Welds should be ¼" min. fillet welds. Provide weld all around the connected plate at vertical support plates and 4 inch min. length both sides of diagonal support plates.

5. Clarify how to handle conflicts between Platform D and new footings at column 41 and/or column 42.

   The platform may be shifted away from column 41 ahead on station (toward column 42) such that the distance between the centerline of column 41 and the centerline of the near side platform supports is between 3 ft. and 5 ft. It appears that providing this dimension as 4 ft. (i.e. platform centered between columns) will avoid conflict between the platform and the footing and avoid conflicts between the deck panel support plate assembly and the vertical and diagonal support plates. The contractor should verify this dimension with the as-built footing dimensions and elevations and as-built deck panel insert locations.

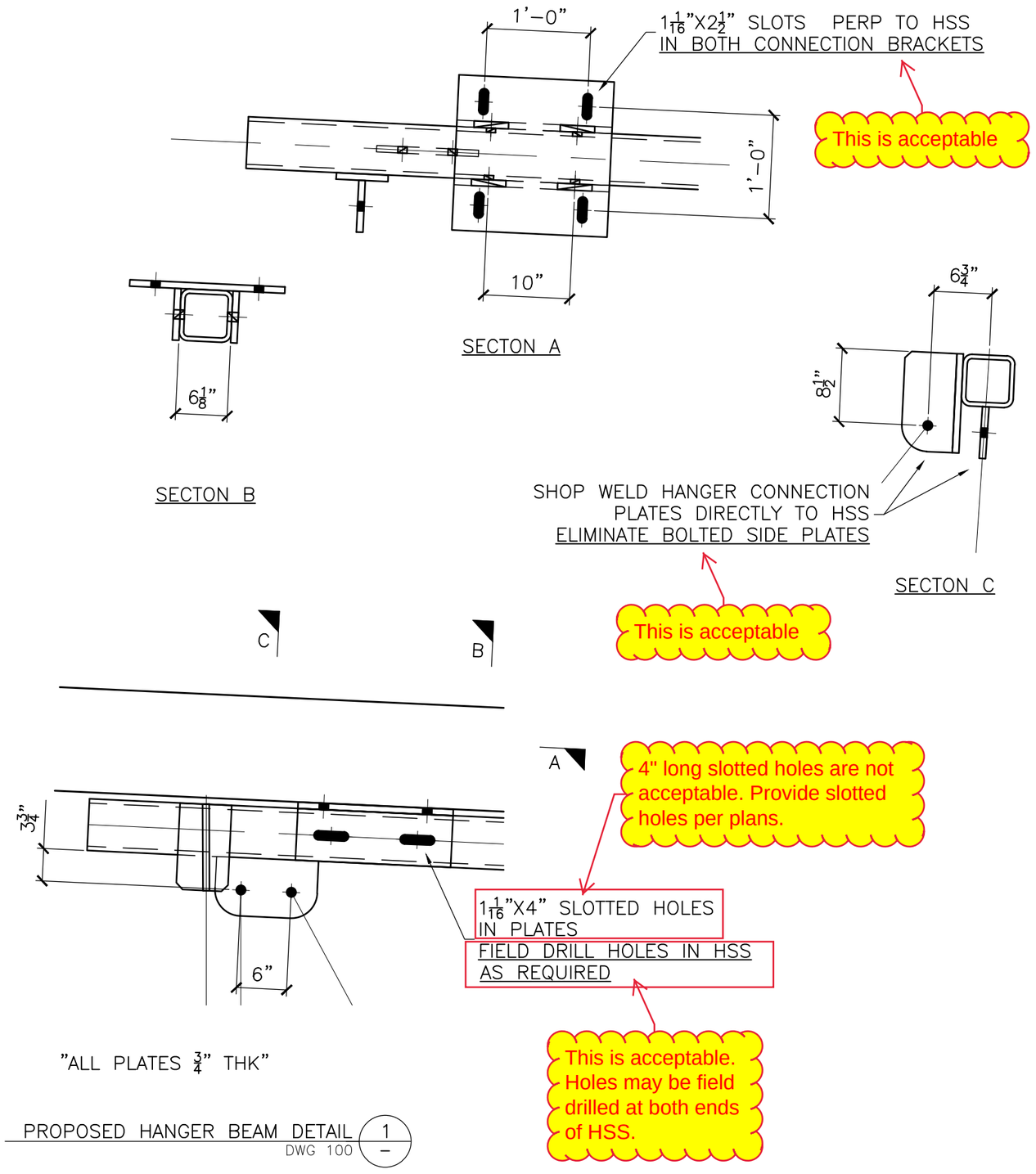
Thanks,
Bob Doherty, P.E.

Bridge Engineer
SHEARER DESIGN

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set



STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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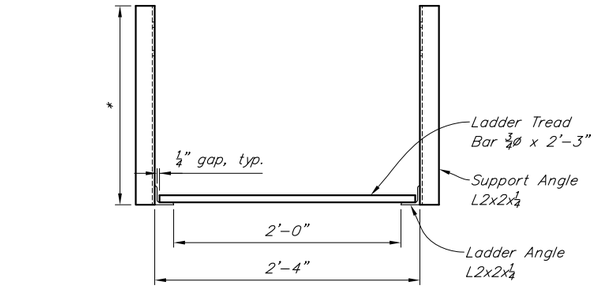
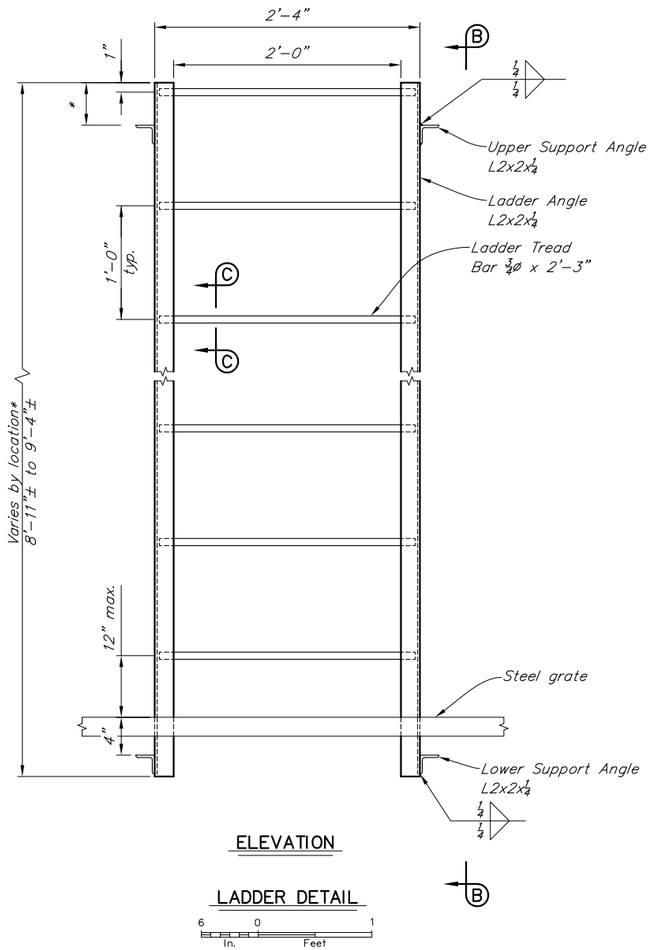


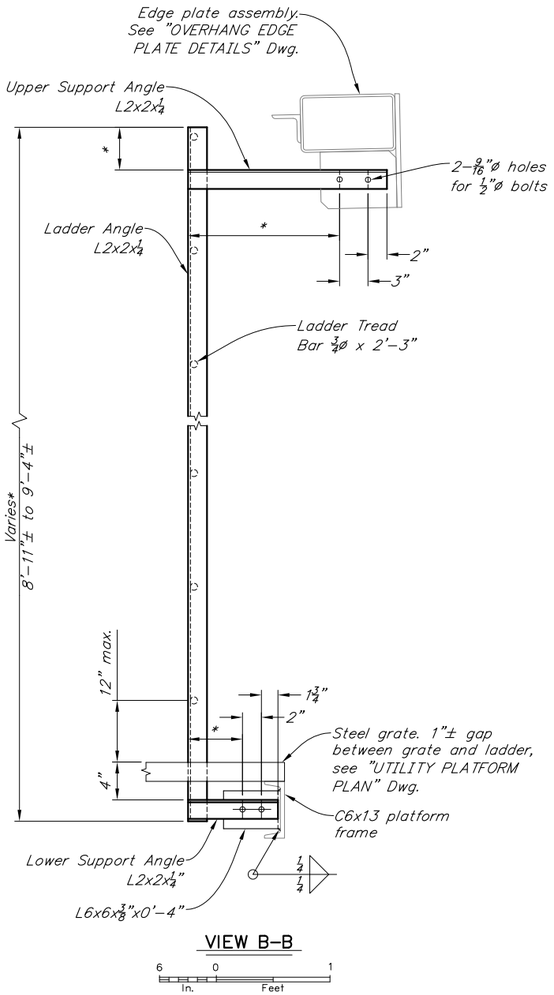
PLAN



ELEVATION

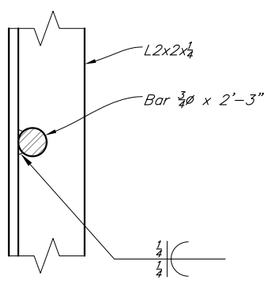
LADDER DETAIL

6 0 1
In. Feet



VIEW B-B

6 0 1
In. Feet



SECTION C-C

1 0 2 4
Inches

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
10/4/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

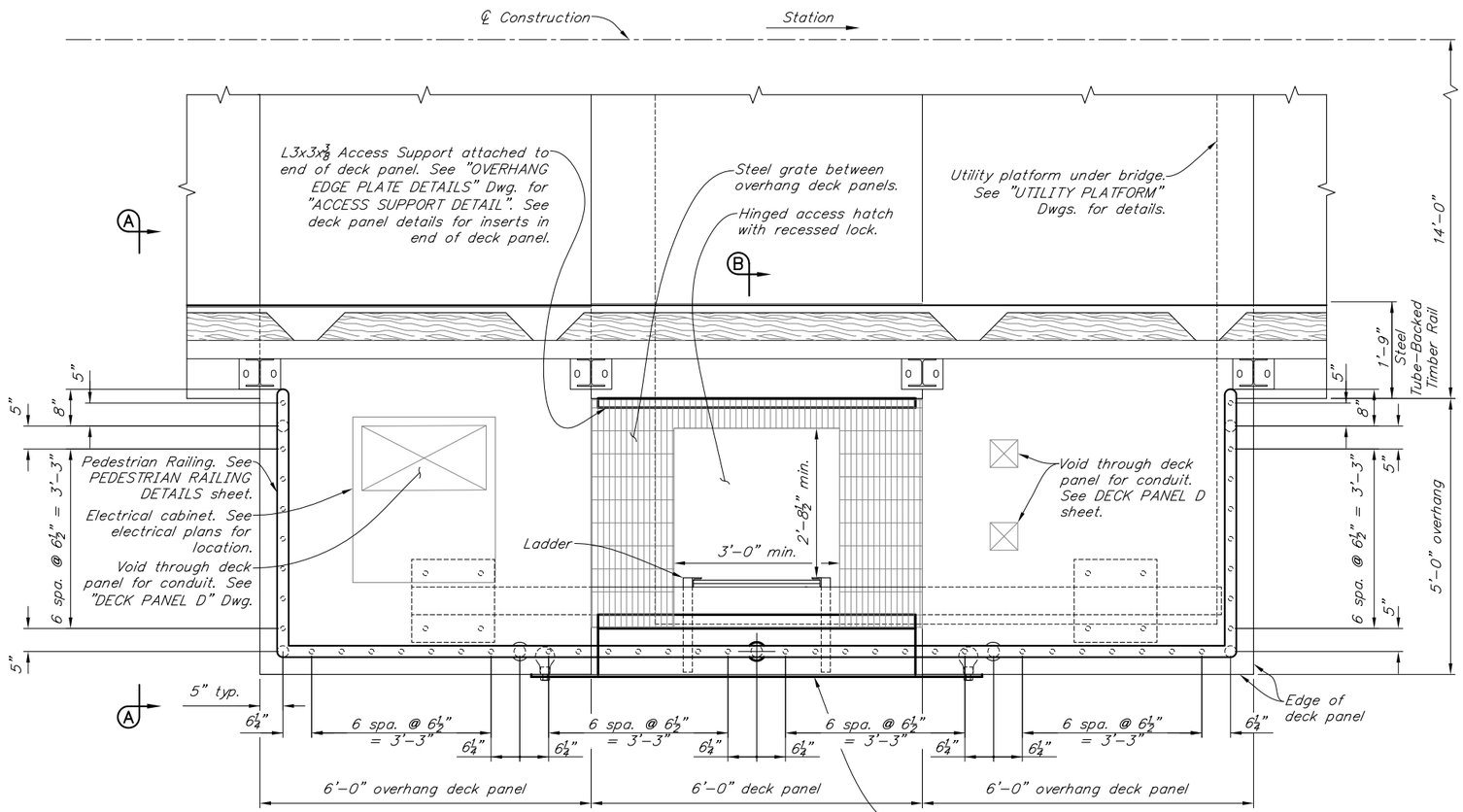
WATER STREET

UTILITY PLATFORM DETAILS 4

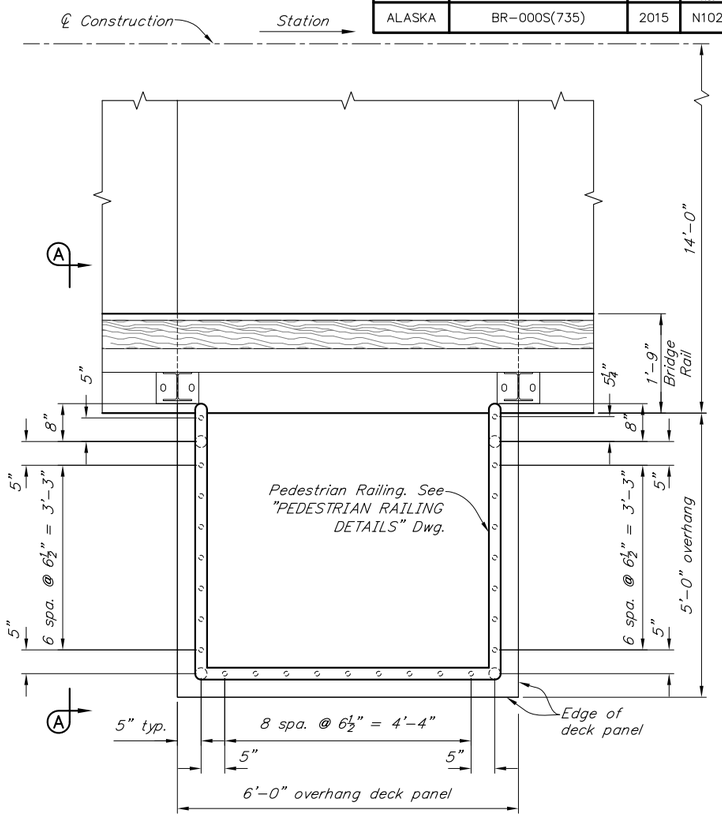
BRIDGE NO. 0446
DWG. NO. 101

Oct 14, 2015 - 4:07pm brken \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N Utility Platform.dwg Layout Name: UTILITY PLATFORM DETAILS 4

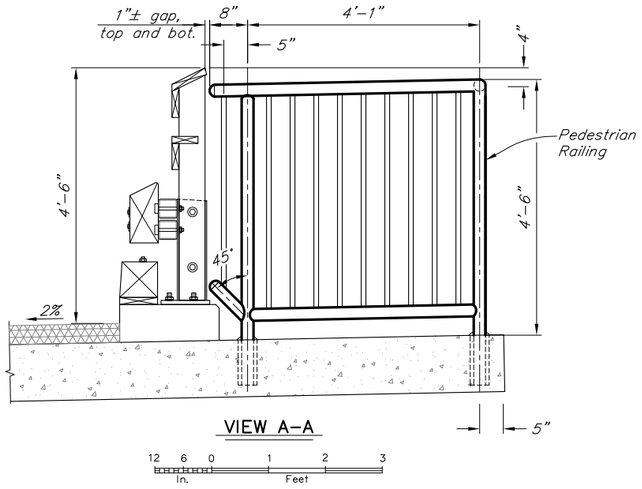
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N102	N110



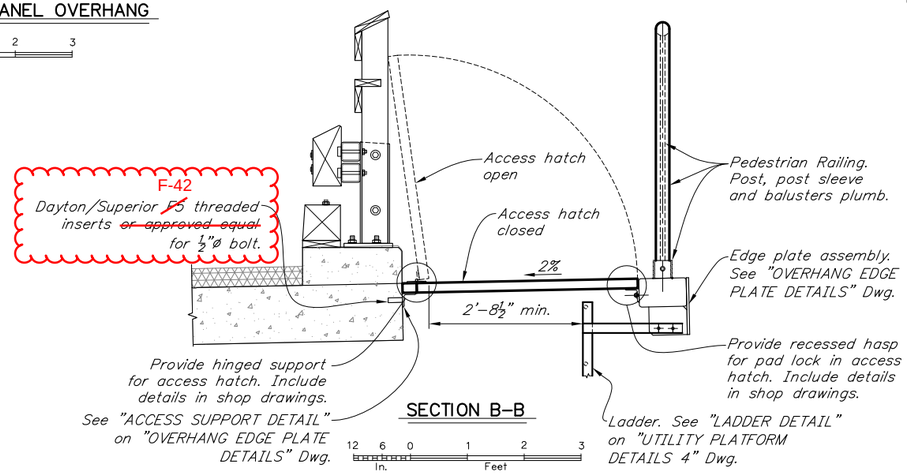
PLAN – TYPICAL DECK PANEL OVERHANG



PLAN – SINGLE DECK PANEL OVERHANG, STA. 16+25



VIEW A-A



SECTION B-B

Notes:
1. Hinged access hatch shall be fabricated from the same grate size and style as used between the overhang deck panels. Provide grate, hinge and lock recess details on the shop drawings.
2. Grate, including hatch shall be banded at all ends.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/4/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

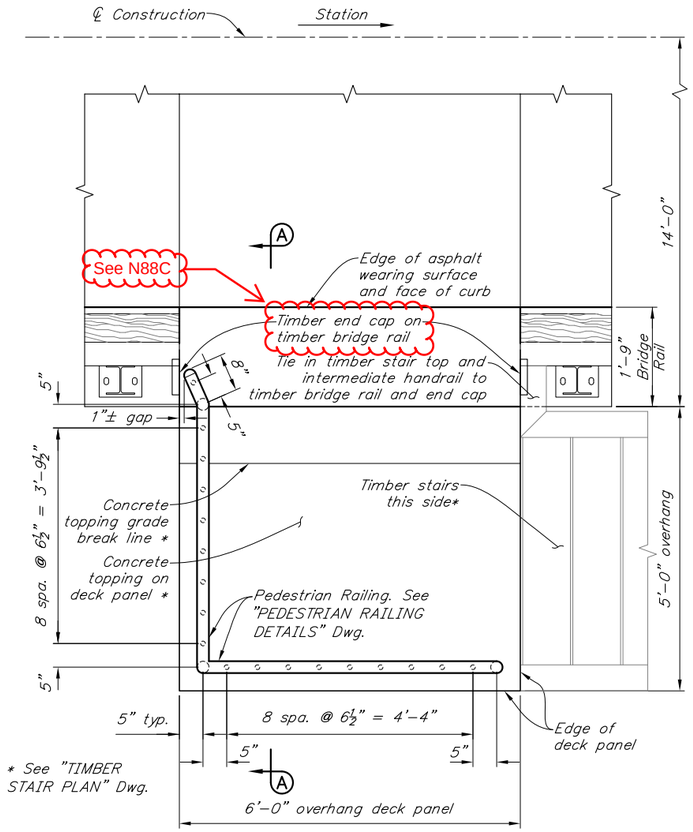
DECK PANEL OVERHANG PLAN 1

BRIDGE NO. 0446

DWG. NO. 102

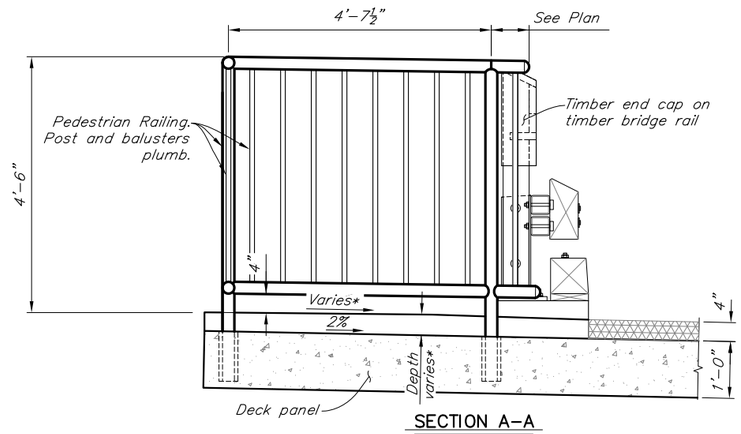
Oct 14, 2015 - 4:07pm brien \\shearerserver\jobs\0226 water street pss&e\DWG\planset adot&pf\69534_N Utility Platform.dwg Layout Name: DECK PANEL OVERHANG PLAN 1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N103	N110



PLAN – SINGLE DECK PANEL OVERHANG, STA. 13+30

12 6 0 1 2 3
In. Feet



SECTION A-A

* See "TIMBER STAIR PLAN" Dwg.

12 6 0 1 2 3
In. Feet

Oct 14, 2015 - 4:07pm brien \\SHEARERSERVER\Jobs\0226 Water Street PS&E\DWG\PLANSET ADOT&PF\69534_N Utility Platform.dwg Layout Name: DECK PANEL OVERHANG PLAN 2

DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/3/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
10TH
DAVID R. SHEARER
CE 8373
10/14/15
Registered Professional Engineer

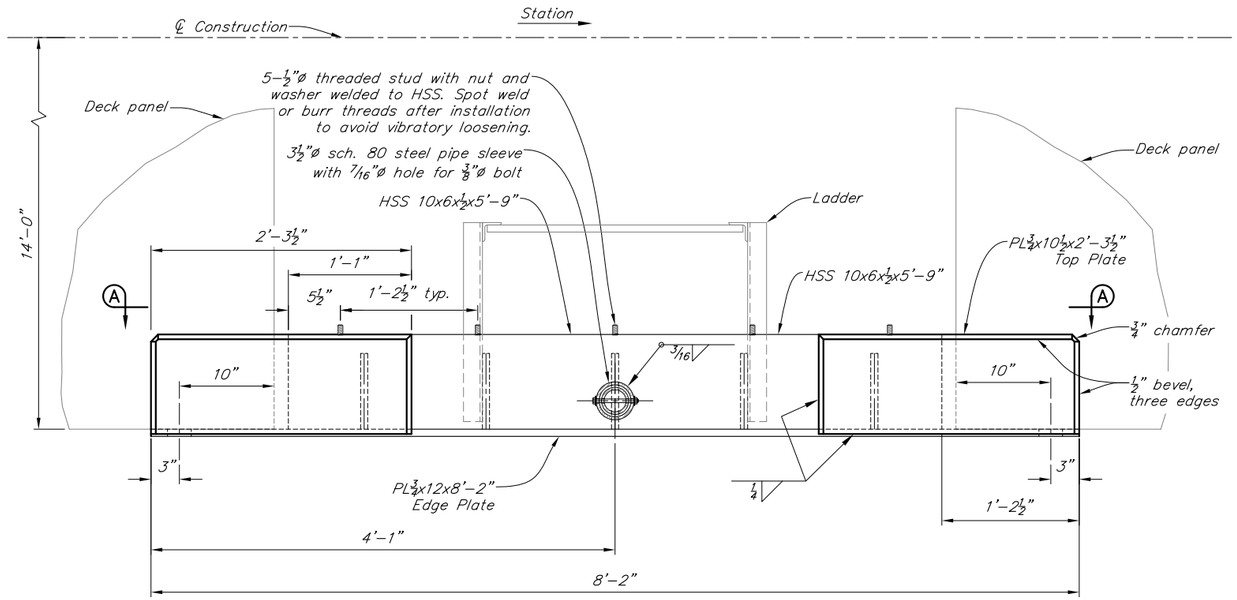
WATER STREET BRIDGE No. 2

WATER STREET

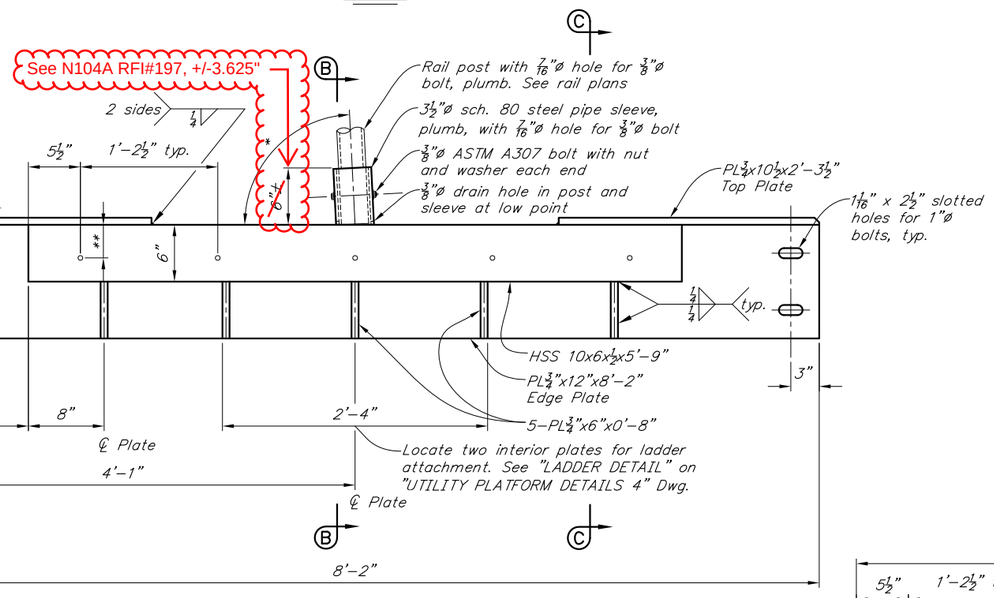
DECK PANEL OVERHANG PLAN 2

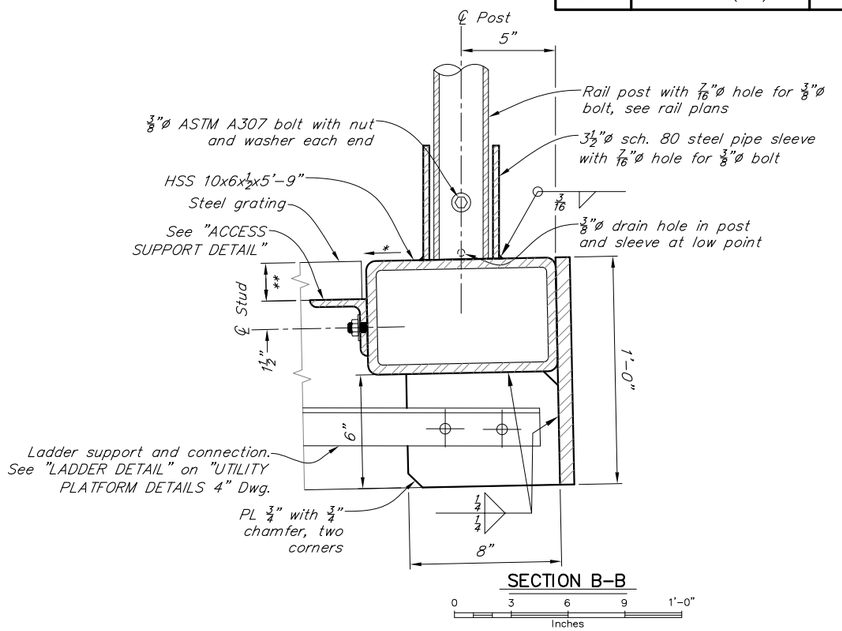
BRIDGE NO. 0446
DWG. NO. 103

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N104	N110



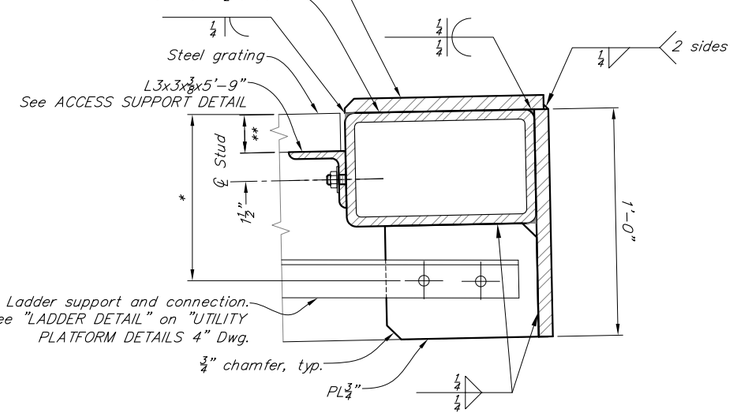
PLAN





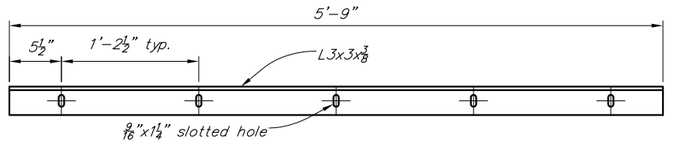
SECTION B-B

0 3 6 9 1'-0"
Inches



SECTION C-C

0 3 6 9 1'-0"
Inches



ACCESS SUPPORT DETAIL

6 0 1
In. Feet

VIEW A-A

EDGE PLATE DETAIL

6 0 1
In. Feet

Notes:

1. Contractor shall verify dimensions with field measurements and according to manufacturer information prior to shop drawing submittal and fabrication.
   a. Dimensions and notes marked thus * vary and/or shall be field verified.
   b. Dimensions and notes marked thus ** shall be verified with the steel grating manufacturer.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 40TH DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

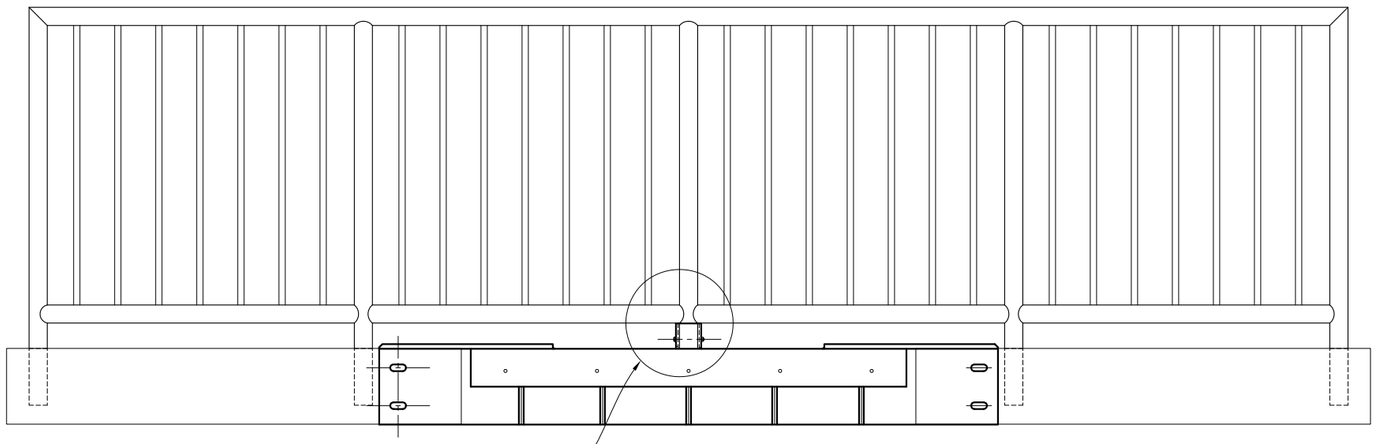
OVERHANG EDGE PLATE DETAILS

BRIDGE NO. 0446

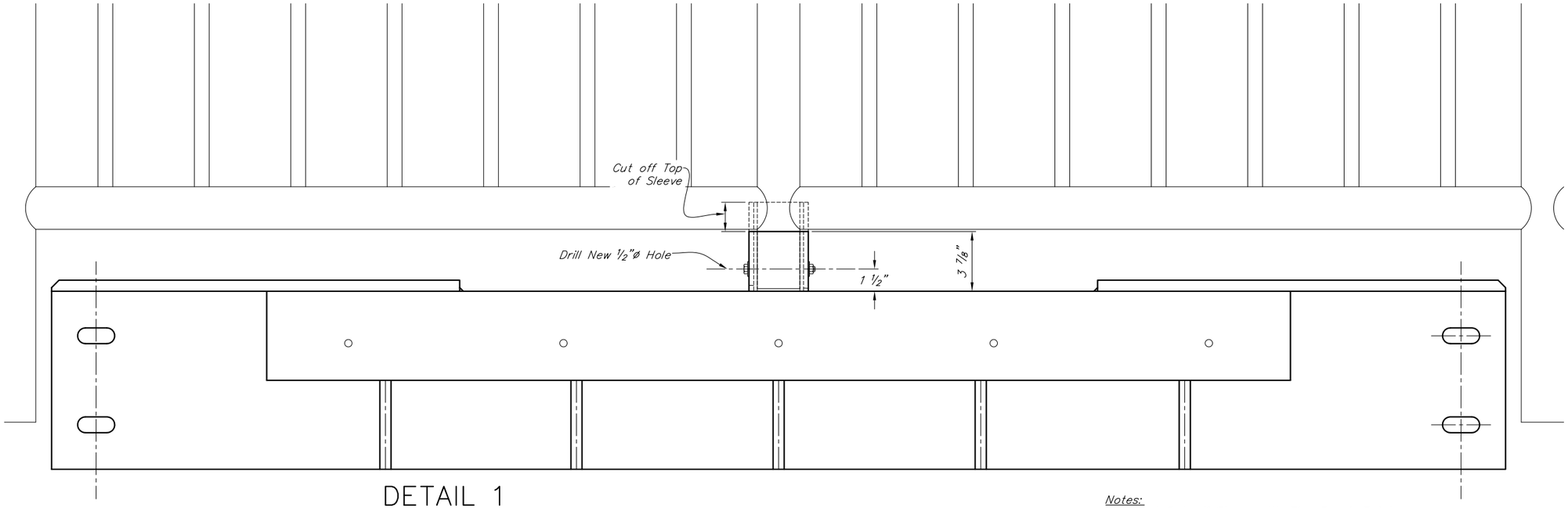
DWG. NO. 104

Oct 14, 2015 - 4:08pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\60534_N Utility Platform.dwg Layout Name: OVERHANG EDGE PLATE DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N104	N110



RAIL ELEVATION



DETAIL 1

Notes:
1. Paint Cut off Sleeve with Zinc Repair Paint

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Received with CSM 248 in response to Submittal 677-2.2 AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer		As-Built Set
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer		

STATE OF ALASKA · 48TH · DAVID R. SHEARER · CE 8373 · 2/21/18 · Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

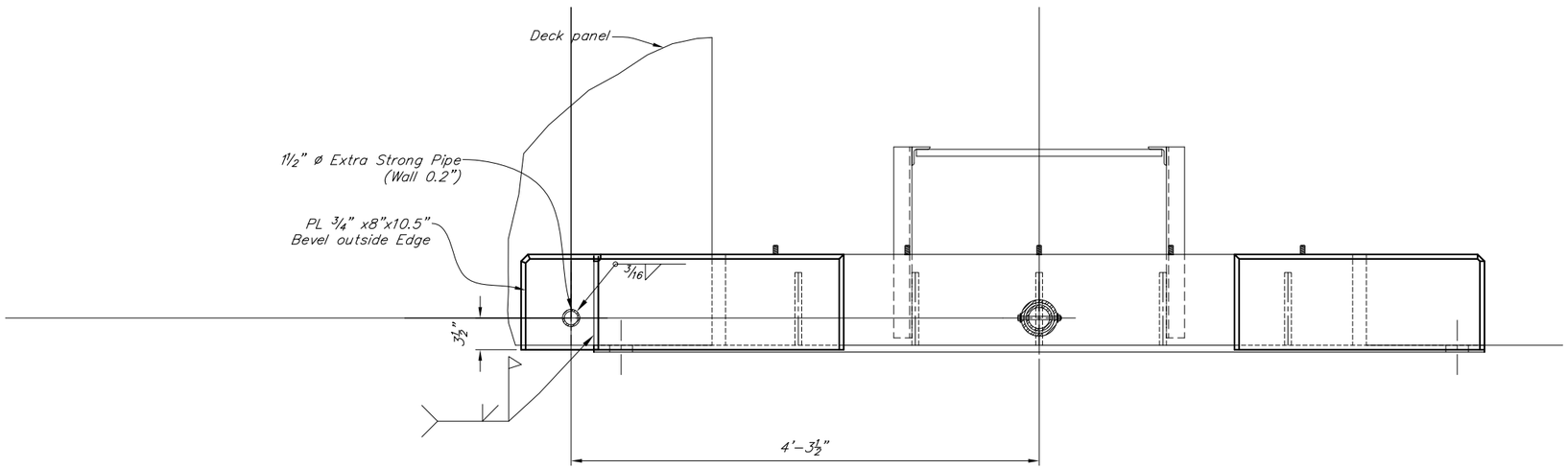
OVERHANG EDGE PLATE DETAILS

BRIDGE NO. 0446

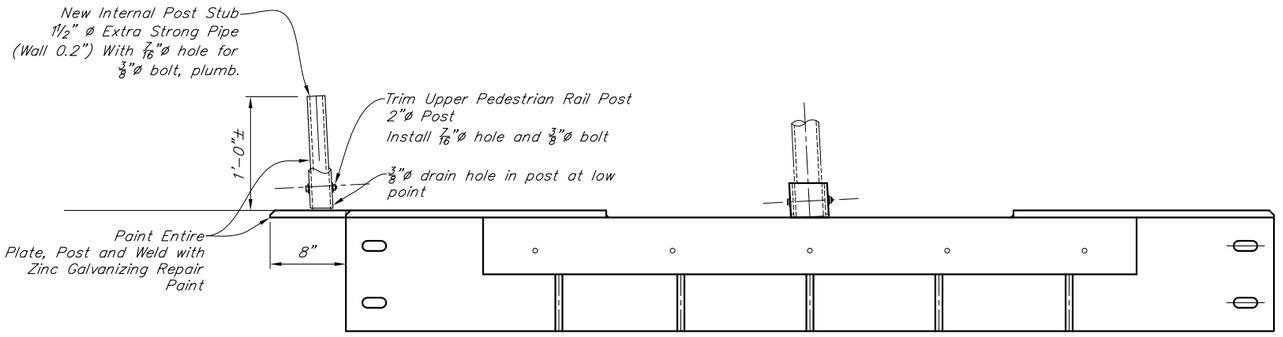
DWG. NO. 104A

Feb 21, 2018 - 9:56am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Submittals\677-Utility Platforms\677-2.1 Platform Hand Rail\677-2.2 Utility Pla89534_N Utility Platform rail Shop dwg check.dwg Layout Name: OVERHANG EDGE PLATE DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N104	N110



PLAN



EDGE PLATE DETAIL

6 0 1
In. Feet

VIEW A-A

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

Notes:
1. All Materials and Hardware per Sheet N95

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Provided with response to RFI#197, applies to Platform C only	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer		
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
7/25/18
Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

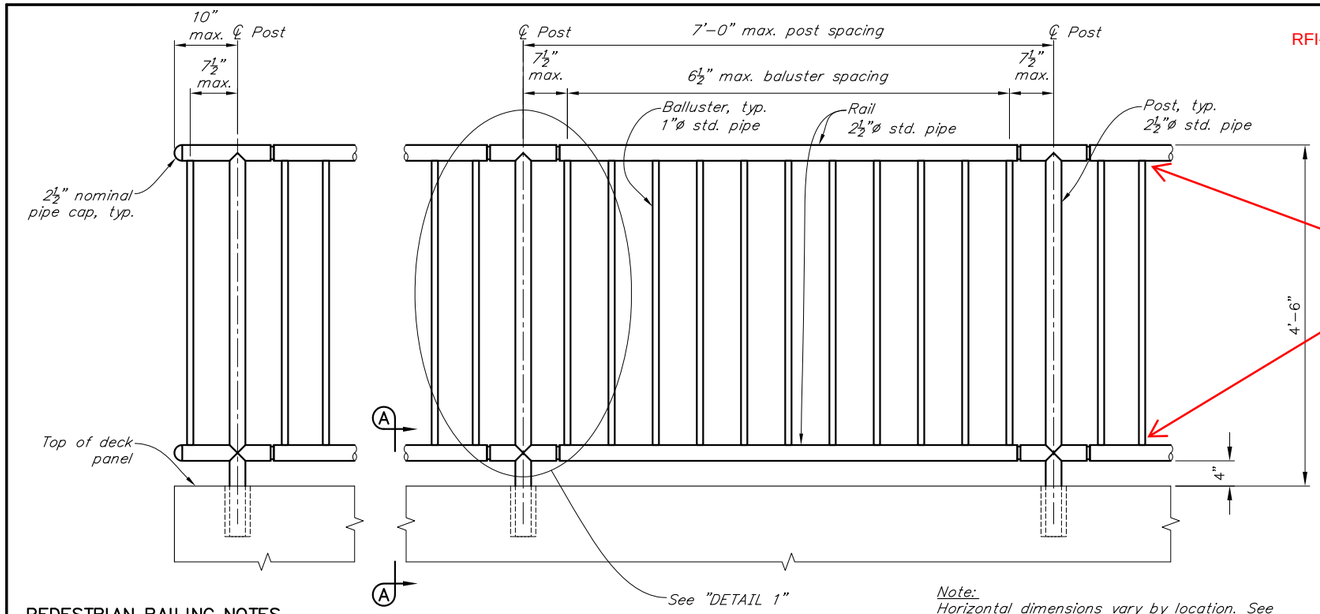
OVERHANG EDGE PLATE DETAILS

BRIDGE NO. 0446
DWG. NO. 104B

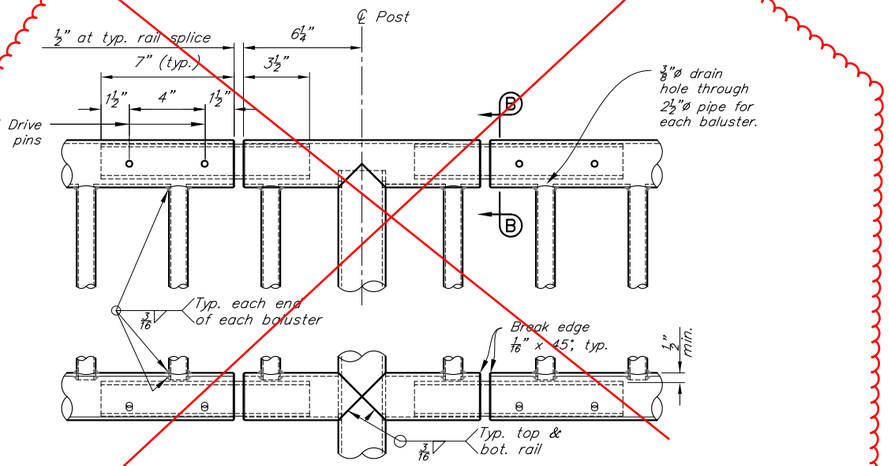
Aug 01, 2018 - 2:50pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\RFIs\RFI-197 Rail Post\Utility Platform Hanrail Post.dwg Layout Name: OVERHANG EDGE PLATE DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N105	N110

RFI-196 Vent Holes 3/8" Ø for HDG



Note:
Horizontal dimensions vary by location. See "DECK PANEL OVERHANG PLAN" Dwg. and "UTILITY PLATFORM PLAN" Dwg. for layout information.



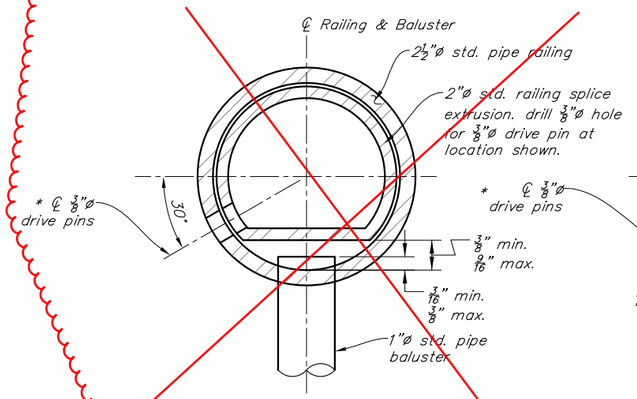
DETAIL 1 Not used, see next page

PEDESTRIAN RAILING NOTES

1. Posts and balusters shall be plumb. Top and bottom rails shall be parallel to grade. Pipe railing, and pipe railing splices, shall be bent to the horizontal curve where the radius of curvature is less than 200 feet.
2. Shop drawings of railing shall be submitted for approval showing complete dimensions and details of fabrication, galvanizing and including an erection diagram. Materials being used shall be specified in the shop drawings.
3. Railing shall be hot dip galvanized after fabrication per AASHTO M 111. All components of rail panel, posts, and splice sleeves shall have all surfaces hot-dip galvanized prior to assembly.
4. Cutting shall be done by sawing or milling and all cuts shall be true and smooth.
5. Pipe railing, pipe balusters and pipe railing splices shall be adequately wrapped to ensure surface protection during handling and transportation to the job site.
6. Welding shall done in accordance with AWS D1.1.
7. Pipe railing and splices may be heated to facilitate forming or bending.
8. The contractor shall repair all galvanized steel surfaces damaged by field operations by painting the damaged areas with two coats of paint conforming to Federal Specification MIL-P-21035B.
9. Post length below the bottom rail shall be adjusted for variable depth concrete topping at the Elliot Street stairs. Provide min. embedment into deck panel and max. distance between top of concrete and bottom of bottom rail as shown in details, this sheet. See "STAIR PLAN STA. 13+30 RT" on "TIMBER STAIR PLAN" Dwg. for concrete topping.
10. Post length below the bottom rail shall be adjusted for connection at utility platforms and on edge plates between overhanging deck panels. See "UTILITY PLATFORM DETAILS 1" Dwg. and "OVERHANG EDGE PLATE DETAILS" Dwg.

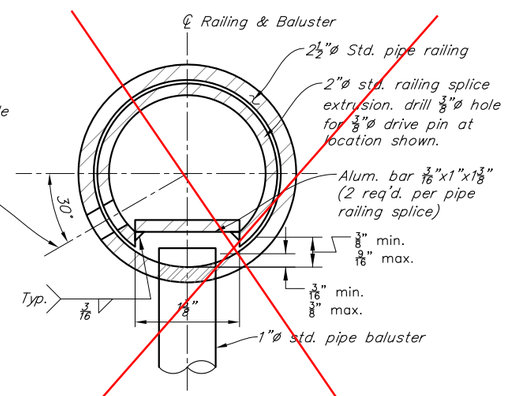
ELEVATION
12 6 0 1 2
In. Feet

Mat'l	PART	MATERIAL SPECIFICATION
Steel	Pipes	ASTM A53 Grade B Schedule 40 (std. pipe) galvanized in accordance with AASHTO M111
	Plates/Bar	ASTM A36 galvanized in accordance with AASHTO M111
	Drive Pins	ASTM A276 Type 302 Stainless Steel



SECTION B-B
Option #1 Not used
½ 0 1 2
Inches

* Locate on opposite side of traffic. Drive pins shall be driven flush with the outside face of the railing.

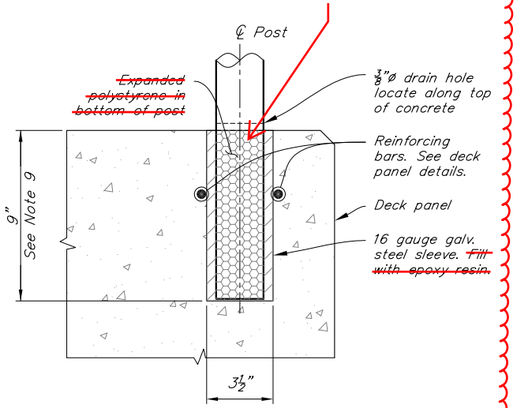


SECTION B-B
Option #2 Not used
½ 0 1 2
Inches

* Locate on opposite side of traffic. Drive pins shall be driven flush with the outside face of the railing.

Not used, see next page

RFI-202
Wet set rail post in grout in lieu of foam infill & epoxy resin



SECTION A-A

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA
DAVID R. SHEARER
CE 8373
Registered Professional Engineer
09/05

WATER STREET BRIDGE No. 2

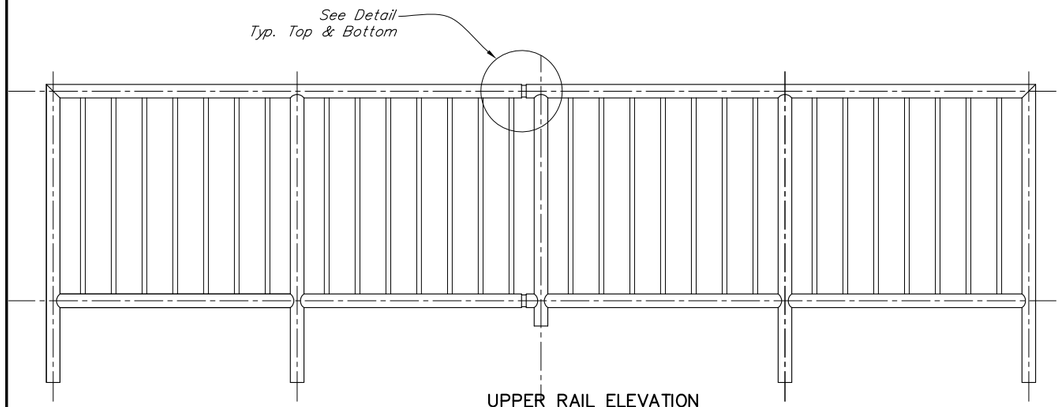
WATER STREET

PEDESTRIAN RAILING DETAILS

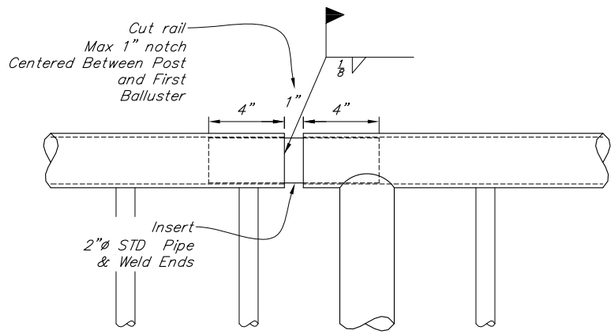
BRIDGE NO. 0446
DWG. NO. 105

Oct 14, 2015 - 4:08pm brlen \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534_N UTILITY PLATFORM FENCE.dwg Layout Name: PEDESTRIAN RAILING DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N1	2

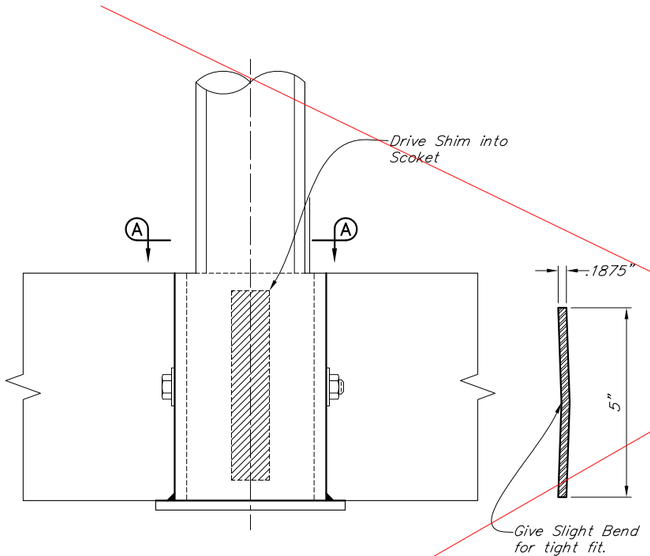


UPPER RAIL ELEVATION

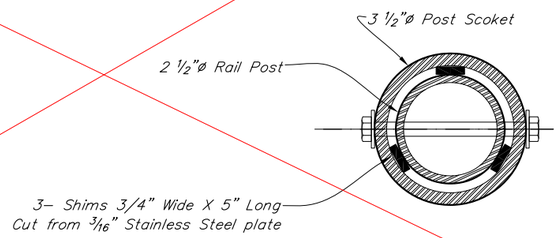


DETAIL 1

#1 As-Built Socket spacing does not match fabricated rail post



RAIL POST SOCKET SHIMS



SECTION A-A

(48) Lower Rail Posts x 3 shims
= 144 shims Req'd

#3 Lower rail attachment is loose.

This issue was resolved by field welding kick plates to posts and grating, this detail not used.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: JL Date: 9/5/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS
DRAWN BY:	CHECKED: Brien Lindstrom
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom

Added via CO# 43

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 8/29/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

WATER STREET

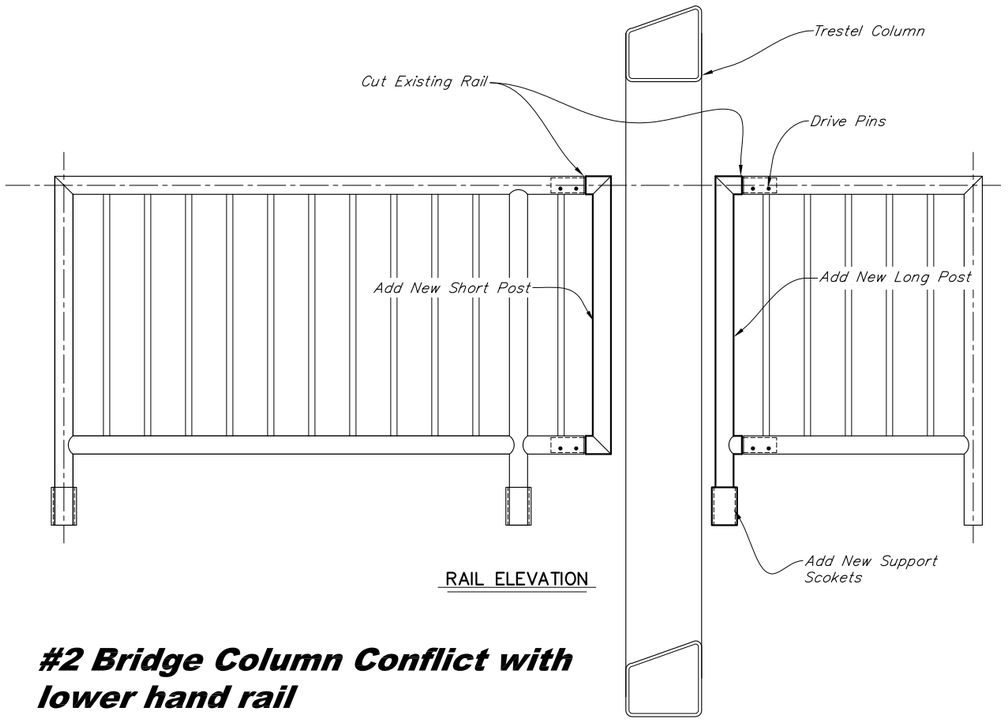
Platform Rail Modification I

BRIDGE NO. 0446

DWG. NO. 1 N105A

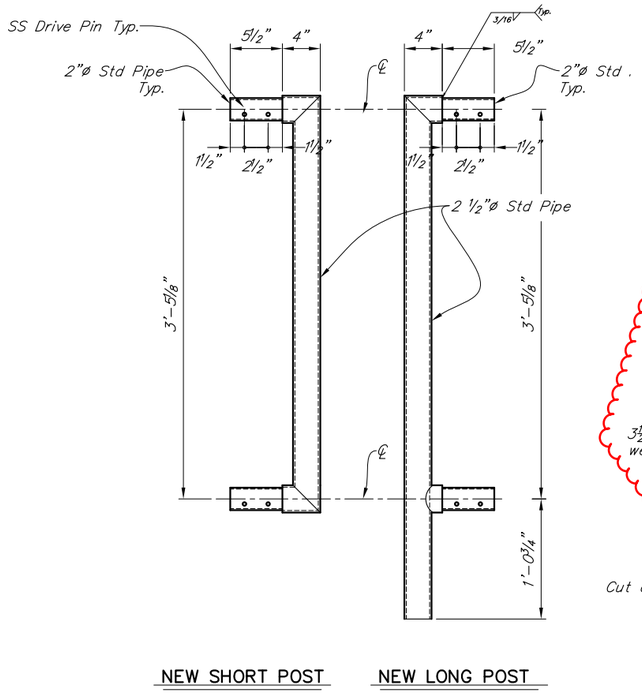
Aug 29, 2018 - 10:53am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Davids Stuff\Sketches\Hand Rail Mods.dwg Layout Name: Platform Rail Modification I

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N2	2

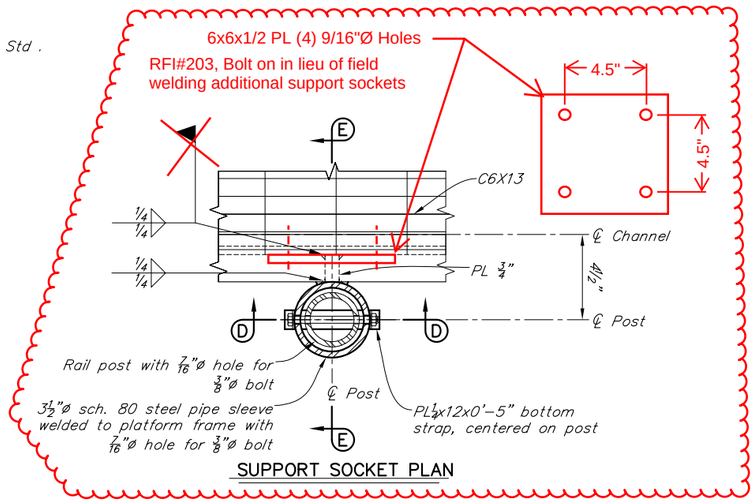


RAIL ELEVATION

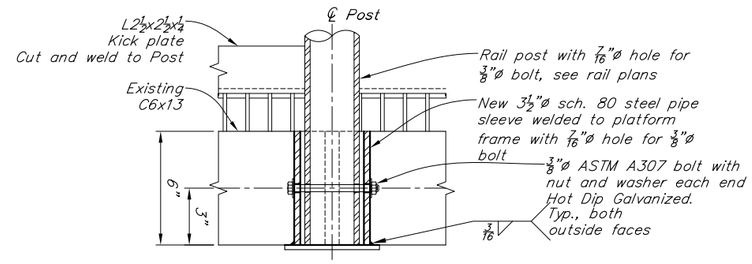
#2 Bridge Column Conflict with lower hand rail



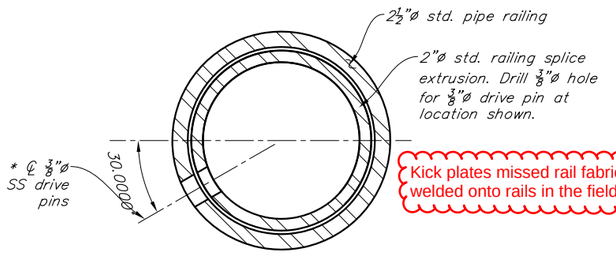
NEW SHORT POST NEW LONG POST



SUPPORT SOCKET PLAN



SECTION D-D

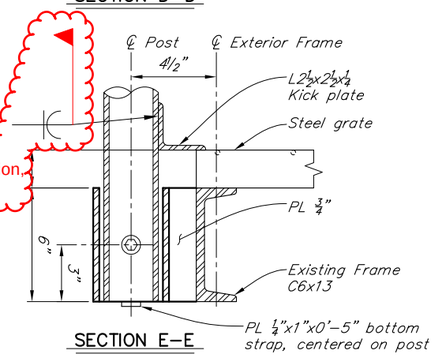


DRIVE PIN SECTION

½ 0 1 2 Inches

* Locate on opposite side of work area. Drive pins shall be driven flush with the outside face of the railing.

Kick plates missed rail fabrication, welded onto rails in the field.



SECTION E-E

PLATFORM RAIL POST SUPPORT SOCKET DETAIL

0 3 6 9 1'-0" Inches

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PEDESTRIAN RAILING NOTES

1. Shop drawings of railing shall be submitted for approval showing complete dimensions and details of fabrication, galvanizing and including an erection diagram. Materials being used shall be specified in the shop drawings.
2. Railing shall be hot dip galvanized after fabrication per AASHTO M 111. All components of rail panel, posts, and splice sleeves shall have all surfaces hot-dip galvanized prior to assembly.
3. Cutting shall be done by sawing or milling and all cuts shall be true and smooth.
4. Welding shall done in accordance with AWS D1.1.
5. The contractor shall repair all galvanized steel surfaces damaged by field operations by painting the damaged areas with two coats of paint conforming to Federal Specification MIL-P-21035B.

Mat'l	PART	MATERIAL SPECIFICATION
Steel	Pipes	ASTM A53 Grade B Schedule 40 (std. pipe) galvanized in accordance with AASHTO M111
	Plates/Bar	ASTM A36 galvanized in accordance with AASHTO M111
	Drive Pins	ASTM A276 Type 302 Stainless Steel
	Shims	Type 304 Stainless Steel

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY:	CHECKED: DRS	Added via CO# 43	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY:	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 8/25/18 Registered Professional Engineer

WATERSTREET BRIDGE No. 2

WATER STREET

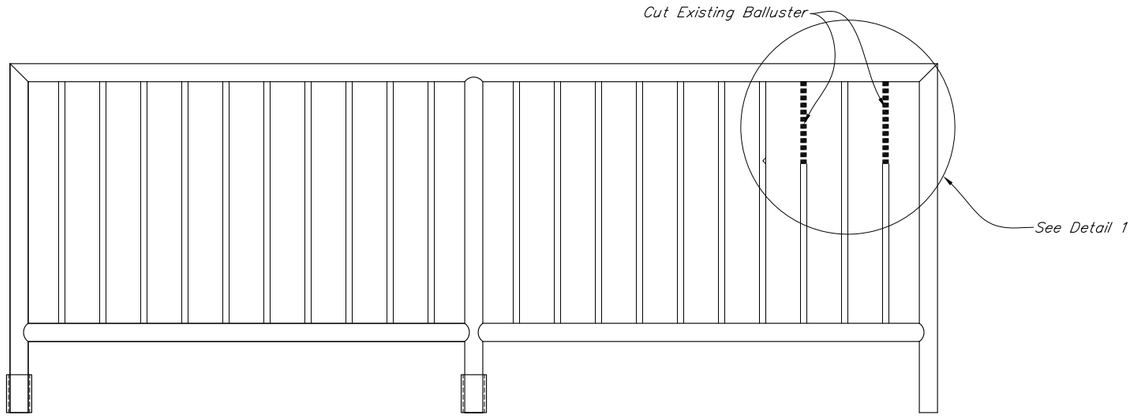
Platform Rail Modification II

BRIDGE NO. 0446

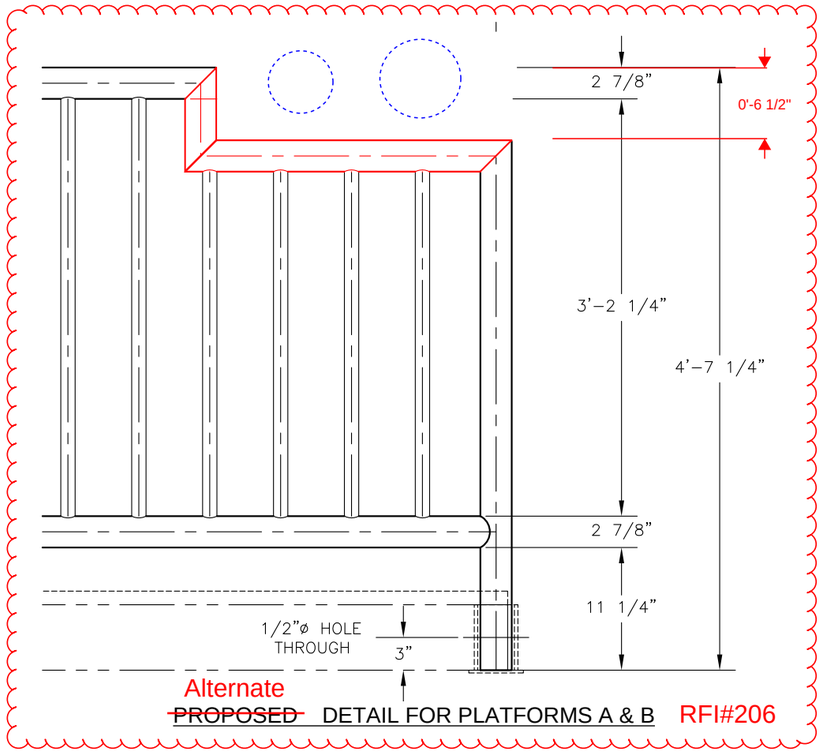
DWG. NO. 2 N105B

Aug 29, 2018 - 10:44am david \\shearerserver\jobs\0278 water street construction\davids stuff\Sketches\Hand Rail Mods.dwg Layout Name: Platform Rail Modification II

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N1	2

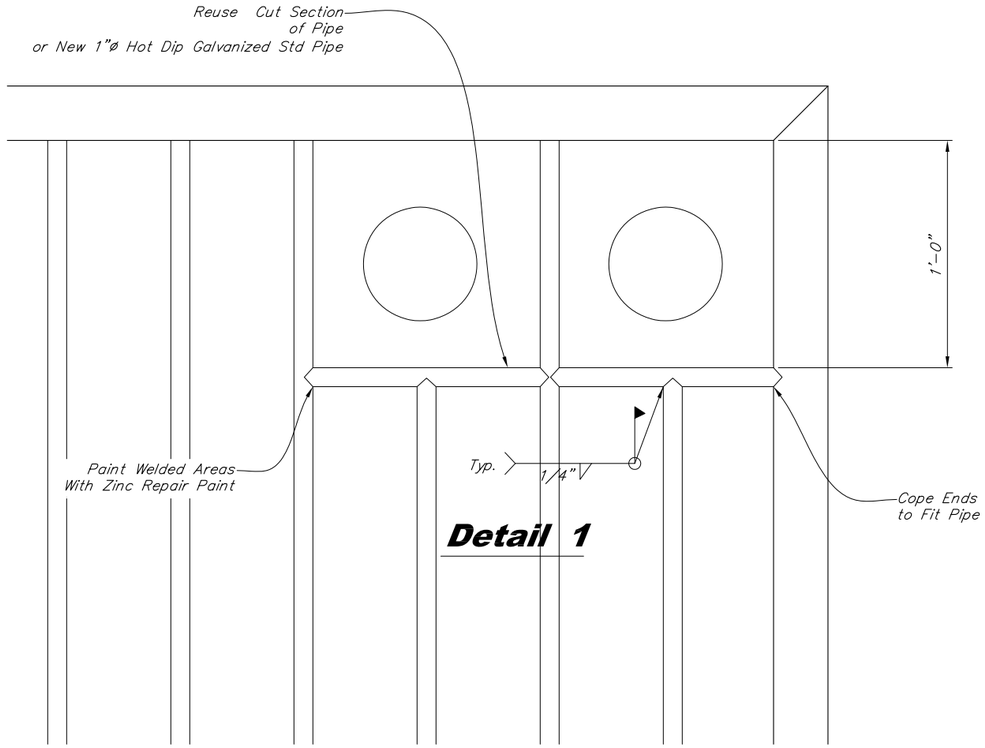


Conduit conflict with lower hand rail



Alternate

~~PROPOSED~~ DETAIL FOR PLATFORMS A & B RFI#206



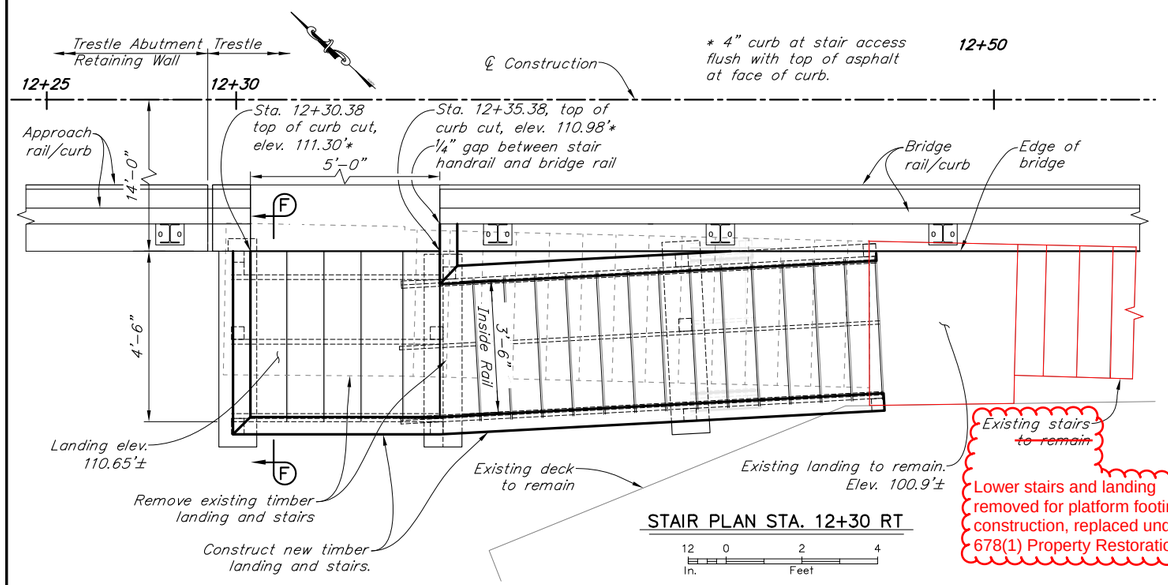
Detail 1

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

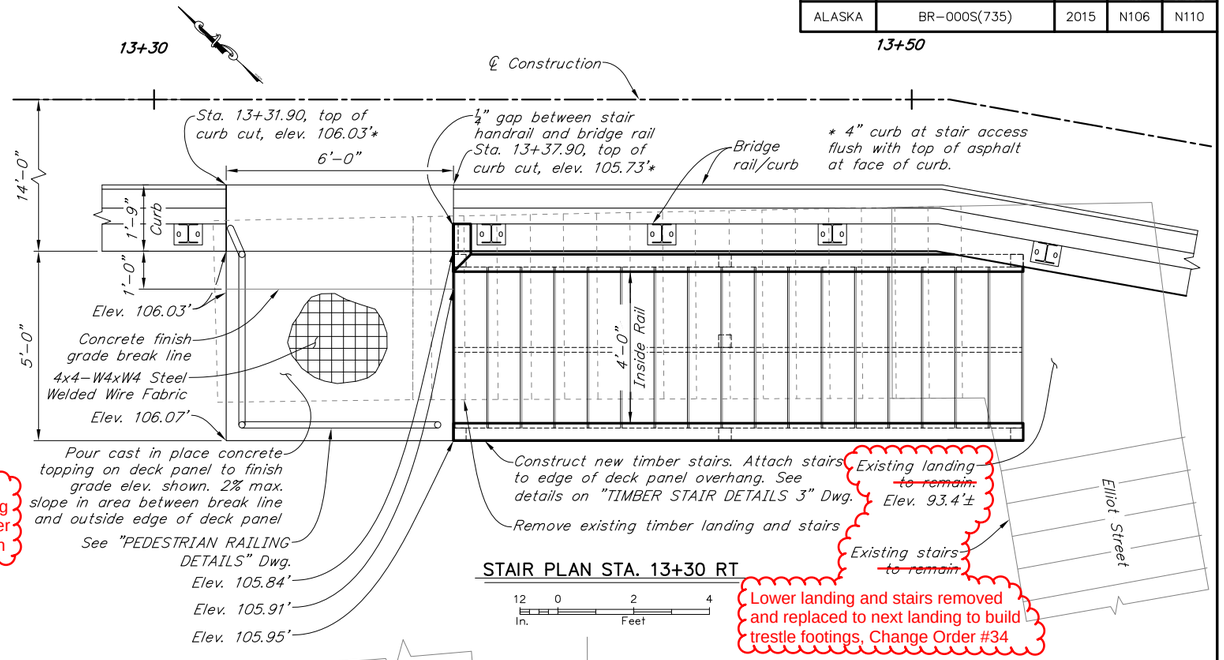
DESIGNED BY:	CHECKED: DRS	Added via CO# 43	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION		WATERSTREET BRIDGE No. 2 WATER STREET Platform Rail Modification III
DRAWN BY:	CHECKED: Brien Lindstrom				BRIDGE NO. 0446 DWG. NO. 1N105C
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom	AB	As-Built Set		

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N106	N110



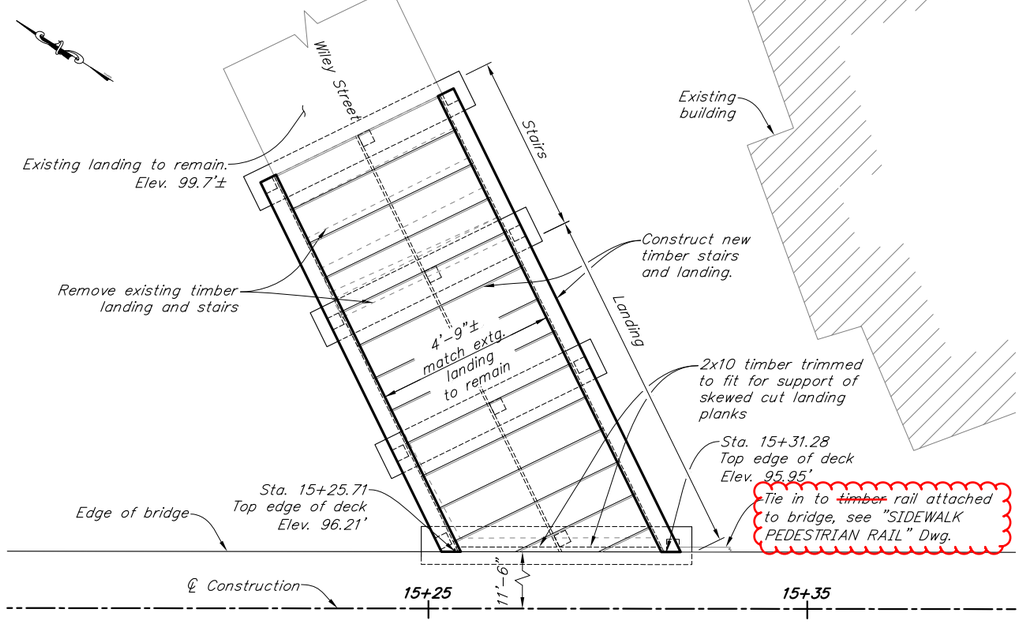
STAIR PLAN STA. 12+30 RT

12 0 2 4
In. Feet



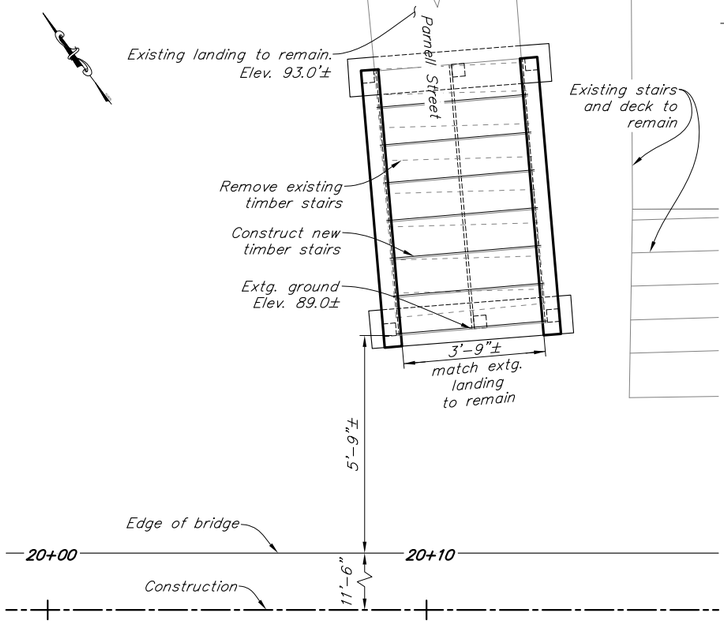
STAIR PLAN STA. 13+30 RT

12 0 2 4
In. Feet



STAIR PLAN STA. 15+25 LT

12 0 2 4
In. Feet



STAIR PLAN STA. 20+10 LT

12 0 2 4
In. Feet

TIMBER STAIR NOTES

GENERAL

Stairs shall be constructed in accordance with the latest National Design Specifications for Wood Construction.

Dimensions provided in these plans are informational, except for rail height. The intent is that stairs will be constructed to fit the new as-constructed bridge elevations and existing landings that remain. Rail height shall be as shown.

The Contractor shall verify dimensions and elevations prior to construction of stairs.

MATERIALS

Timber: per Section 713

Preservatives for Timber: per Section 714

Steel Parts and Hardware: Hot-dip galvanize unless noted otherwise. Provide materials per Section 506 and these plans.

INSTALLATION

Stair widths shall match existing landings. Approximate stair widths between inside of rails are shown in these plans. Treads shall be constructed of single timbers. Tread depth and riser height shall not vary by more than ⅜" in any flight of stairs and shall fall within the following limits:

Tread depth: Min. = 11"
Max. = 12"
Riser height: Min. = 4"
Max. = larger of 7" or the existing riser height

Note: For "SECTION F-F", see "TIMBER STAIRS DETAILS 2" Dwg.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/1/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

TIMBER STAIR PLAN

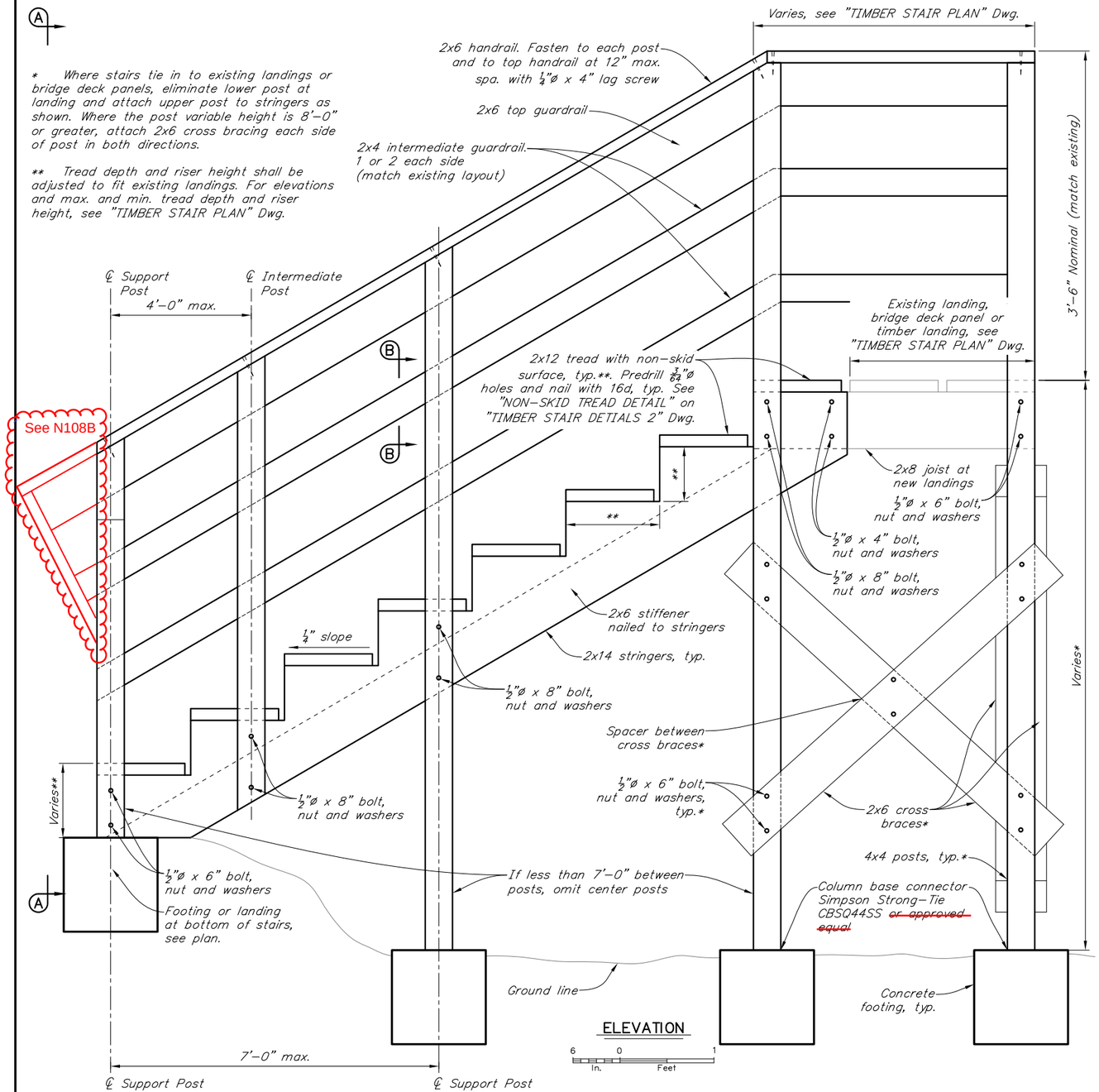
BRIDGE NO. 0446
DWG. NO. 106

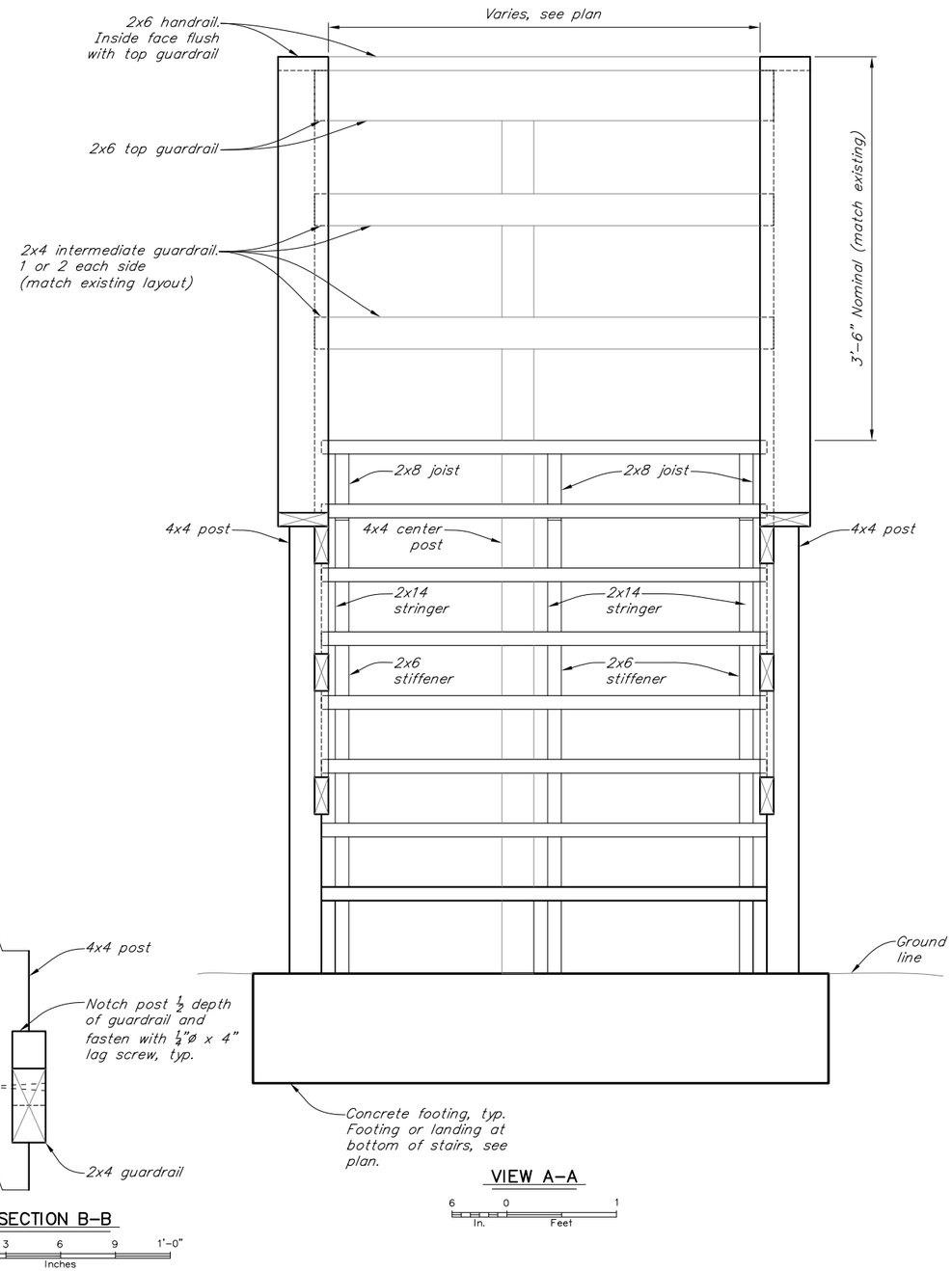
Oct 14, 2015 - 4:08pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534 Timber Stairs.dwg Layout Name: TIMBER STAIR PLAN

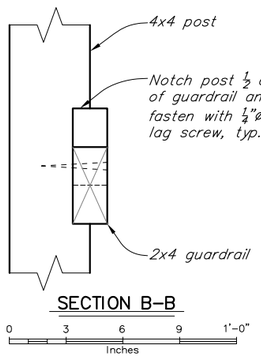
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N107	N110

* Where stairs tie in to existing landings or bridge deck panels, eliminate lower post at landing and attach upper post to stringers as shown. Where the post variable height is 8'-0" or greater, attach 2x6 cross bracing each side of post in both directions.

** Tread depth and riser height shall be adjusted to fit existing landings. For elevations and max. and min. tread depth and riser height, see "TIMBER STAIR PLAN" Dwg.







DESIGNED BY: Robert Doherty	CHECKED: David Shearer
DRAWN BY: Robert Doherty	CHECKED: David Shearer
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/14/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

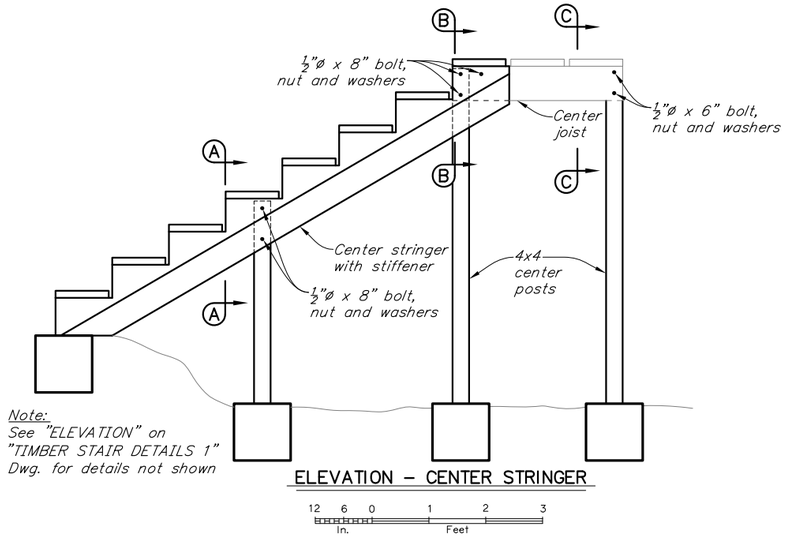
WATER STREET

TIMBER STAIR DETAILS 1

BRIDGE NO. 0446
DWG. NO. 107

Oct 14, 2015 - 4:08pm bitten \\shearerserver\jobs\0226 water street ps&e\DWG\planset adot&pf\69534 Timber Stairs.dwg Layout Name: TIMBER STAIR DETAILS 1

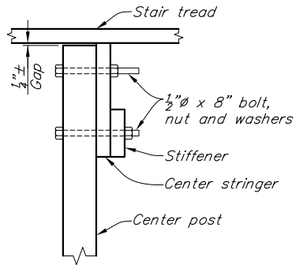
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N108	N110



Note:
See "ELEVATION" on "TIMBER STAIR DETAILS 1" Dwg. for details not shown

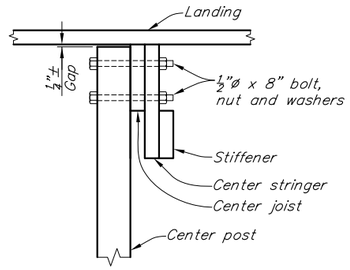
ELEVATION – CENTER STRINGER

12 6 0 1 2 3
In. Feet



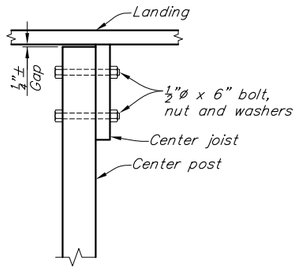
SECTION A–A

6 0 1
In. Feet



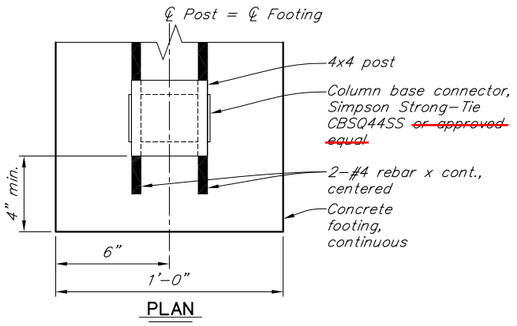
SECTION B–B

6 0 1
In. Feet

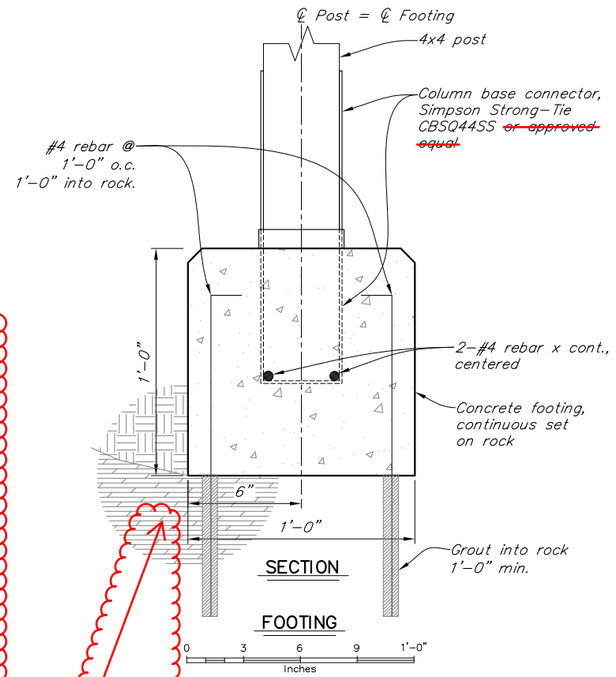


SECTION C–C

6 0 1
In. Feet



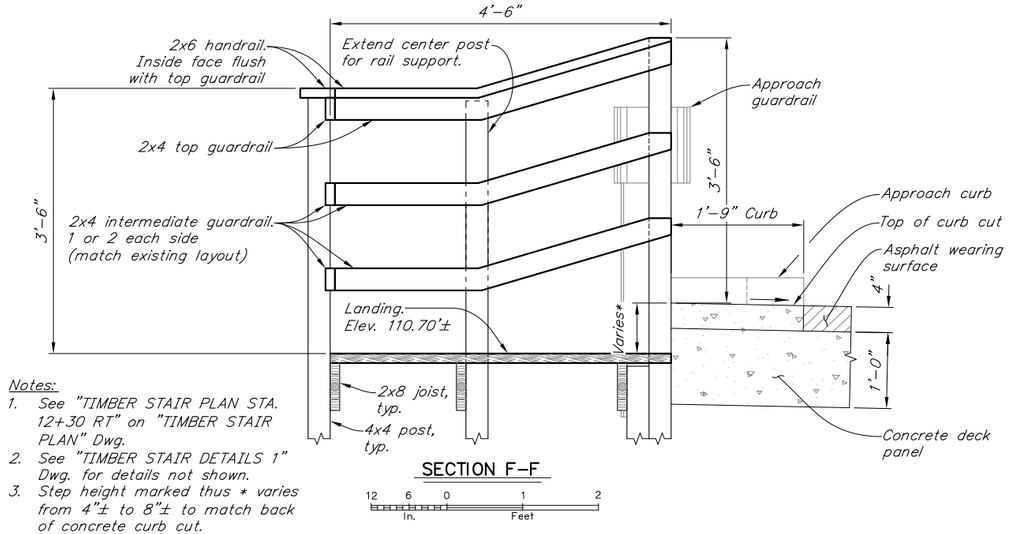
PLAN



SECTION

FOOTING

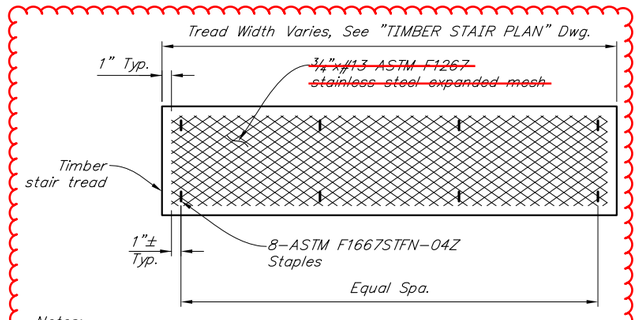
0 3 6 9 1'-0"
Inches



Notes:
1. See "TIMBER STAIR PLAN STA. 12+30 RT" on "TIMBER STAIR PLAN" Dwg.
2. See "TIMBER STAIR DETAILS 1" Dwg. for details not shown.
3. Step height marked thus * varies from 4"± to 8"± to match back of concrete curb cut.

SECTION F–F

12 6 0 1 2
In. Feet



Notes:
1. Apply non-skid detail to new stair and landing treads.
2. ~~Orient expanded steel mesh with long direction of diamonds in line with long dimension of timber treads.~~

NON-SKID TREAD DETAIL

Replace SS expanded mesh with asphalt shingle material, CO#16

SEE NEXT PAGE FOR FOOTING ON SOIL DETAIL

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019	
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set	

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 10/9/15 Registered Professional Engineer

WATER STREET BRIDGE No. 2

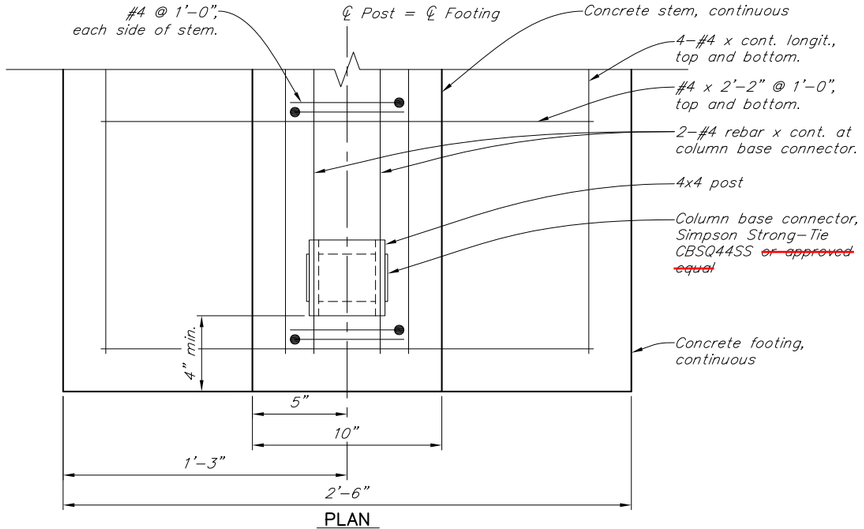
WATER STREET

TIMBER STAIR DETAILS 2

BRIDGE NO. 0446

DWG. NO. 108

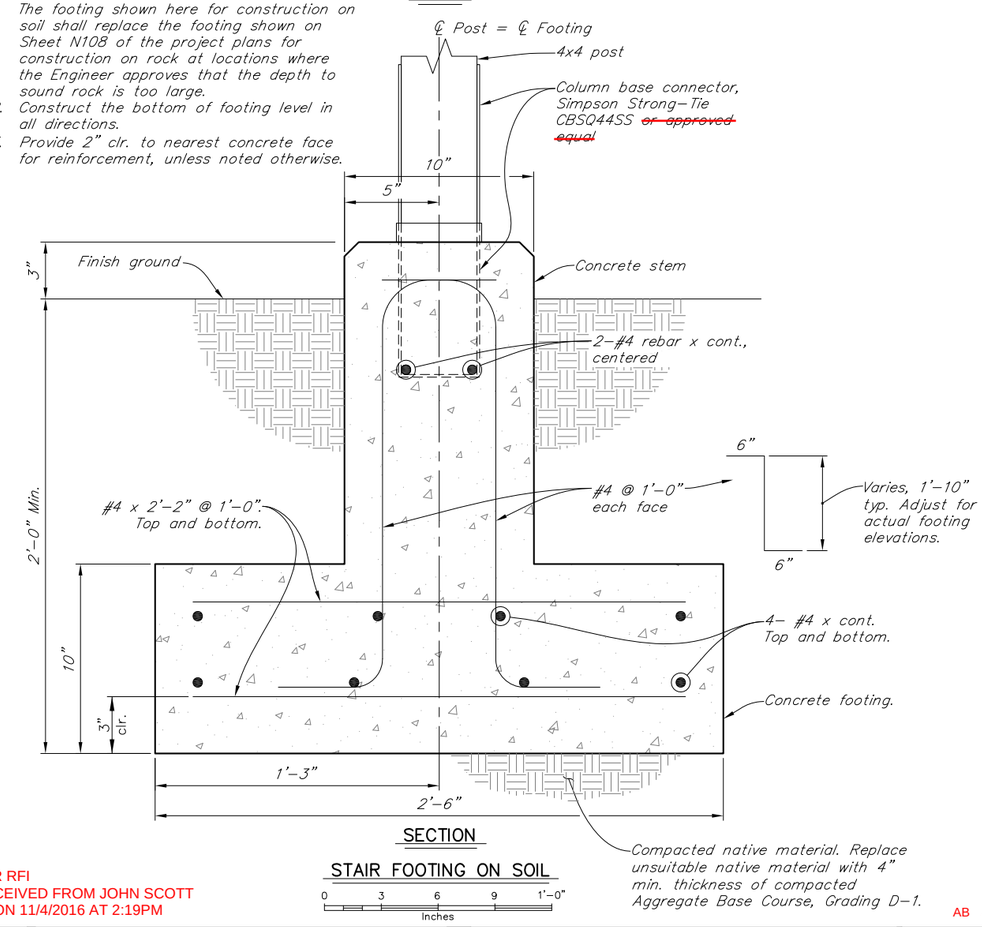
Oct 14, 2015 - 4:08pm biten \\shearerserver\jobs\02226 water street ps&e\DWG\planset adot&pf\69534 Timber Stairs.dwg Layout Name: TIMBER STAIR DETAILS 2



PLAN

Note:

1. *The footing shown here for construction on soil shall replace the footing shown on Sheet N108 of the project plans for construction on rock at locations where the Engineer approves that the depth to sound rock is too large.*
2. *Construct the bottom of footing level in all directions.*
3. *Provide 2" clr. to nearest concrete face for reinforcement, unless noted otherwise.*



SECTION

STAIR FOOTING ON SOIL

0 3 6 9 1'-0"
Inches

NO CSM OR RFI
DETAIL RECEIVED FROM JOHN SCOTT
VIA EMAIL ON 11/4/2016 AT 2:19PM

AB As-Built Set

BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

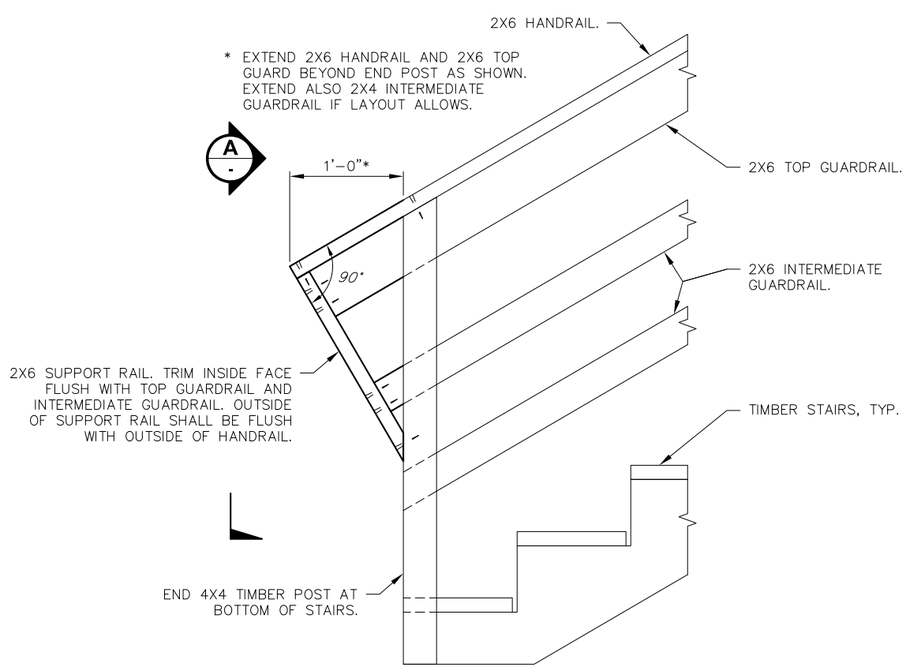
SHEARER DESIGN L.L.C.
Bridge Design, Construction Engineering, Infrastructure Aesthetics

3613 Phinney Ave N, # B
Seattle WA 98103
(206) 781-7830
SHEARERDESIGN@QWESTOFFICE.NET

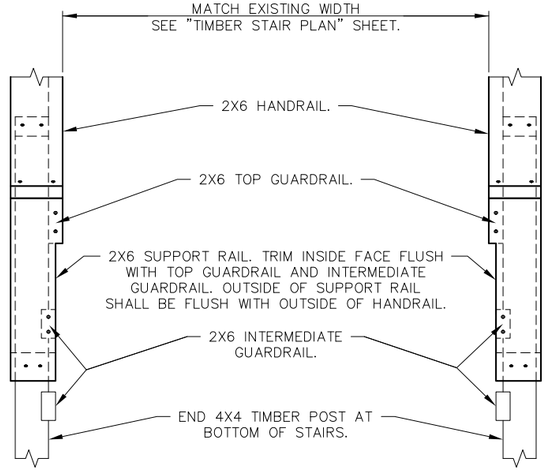
WATER STREET BRIDGE NO. 2
WATER STREET
STAIR FOOTING ON SOIL

SHEET N108A
1 OF 1
FILE NO. SD0278

Nov 04, 2016 - 12:32pm robert \\SHEARERSERVER\DATA-Drive\Jobs\0278 Water Street Construction\Misc\Stair Footing\Stair Footing On Soil.dwg Layout Name: Stair Footing On Soil



TIMBER STAIR - RAIL EXTENSION



VIEW A-A

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

NOTES

1. RAIL EXTENSION APPLIES AT THE PARNELL STREET STAIRS (20+10 LT) WHERE RAIL DOES NOT TIE IN TO A RUN OF RAIL AT THE BOTTOM OF THE STAIRS.
2. FASTEN RAIL EXTENSION WITH ¼"ø X 4" LAG SCREWS.
3. SEE "TIMBER STAIR PLAN" AND "TIMBER STAIR DETAILS 1" SHEETS FOR DETAILS NOT SHOWN.

CSM-150
Design change was created to maintain conformance with IBC section 1012.6.

AB As-Built Set

BAR IS ONE INCH ON ORIGINAL DRAWING ADJUST SCALES ACCORDINGLY
0" 1"

SHEARER DESIGN L.L.C.
Bridge Design, Construction Engineering, Infrastructure Aesthetics

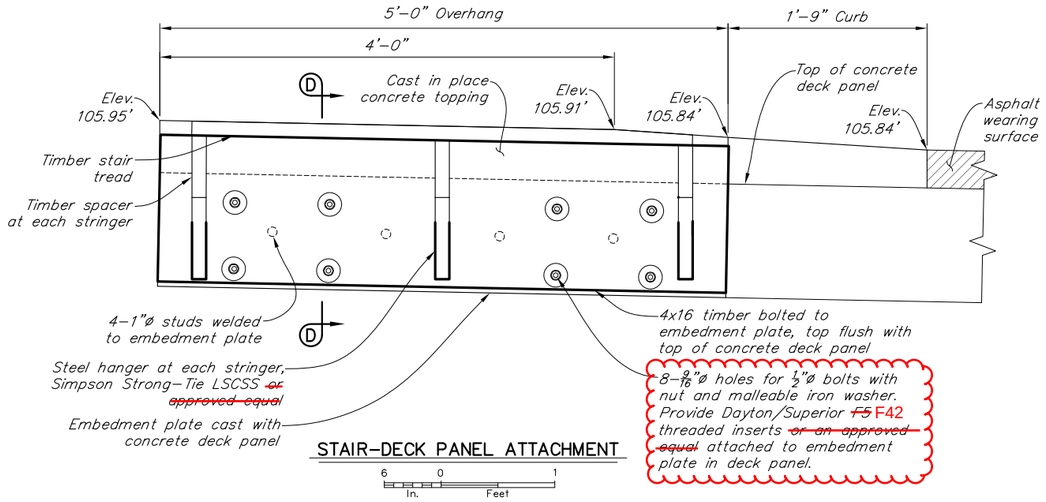
3613 Phinney Ave N, # B
Seattle WA 98103
(206) 781-7830
SHEARERDESIGN@QWESTOFFICE.NET

WATER STREET BRIDGDE NO. 2
WATER STREET
TIMBER STAIR RAIL EXTENSION

SHEET N108B
1 OF 1
FILE NO. 0278

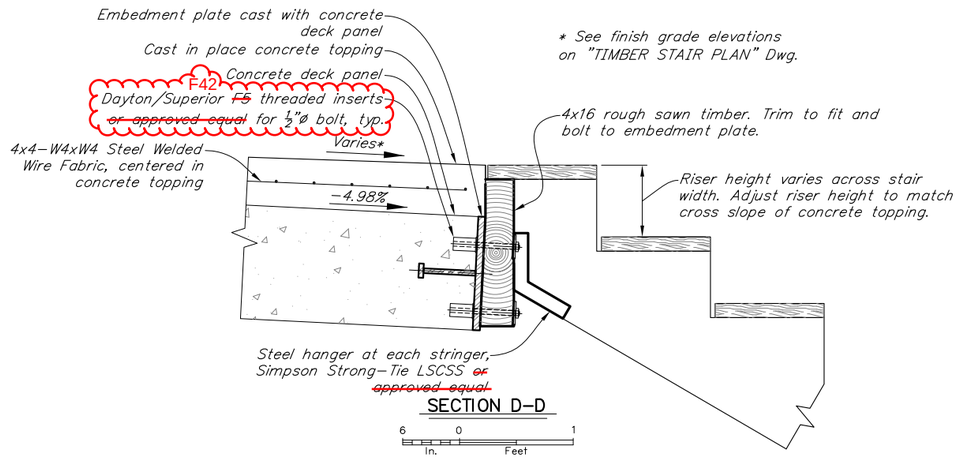
Jan 04, 2017 - 8:08am robert \\SHEARERSERVER\Jobs\0278 Water Street Construction\Directives\2017-01-04 Timber Stair Rail Extension\0278 TIMBER STAIR RAIL EXTENSION.dwg Layout Name: TIMBER STAIR RAIL EXTENSION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N109	N110



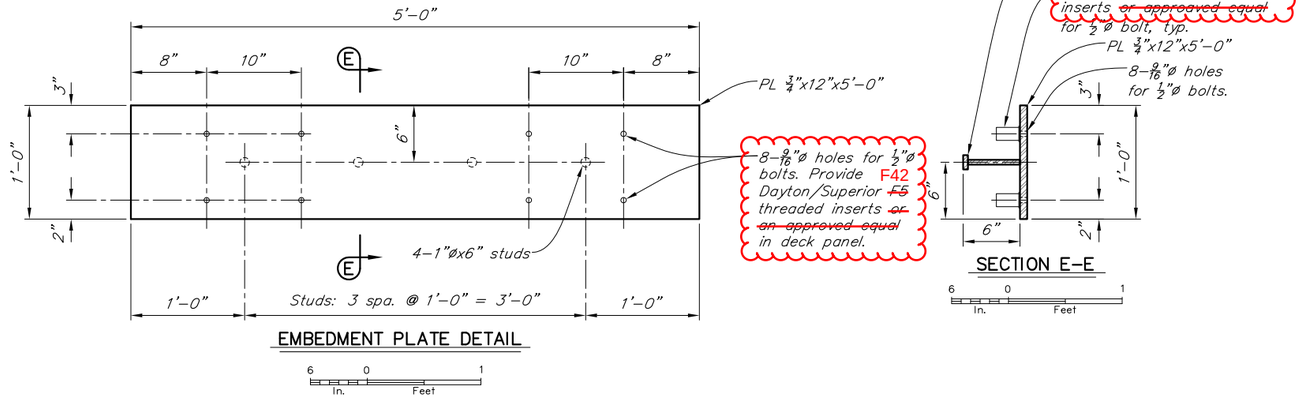
STAIR-DECK PANEL ATTACHMENT

6 0 1
In. Feet



SECTION D-D

6 0 1
In. Feet



EMBEDMENT PLATE DETAIL

6 0 1
In. Feet

SECTION E-E

6 0 1
In. Feet

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Robert Doherty	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH
DAVID R. SHEARER
CE 8373
10/1/15
Registered Professional Engineer

WATER STREET BRIDGE No. 2

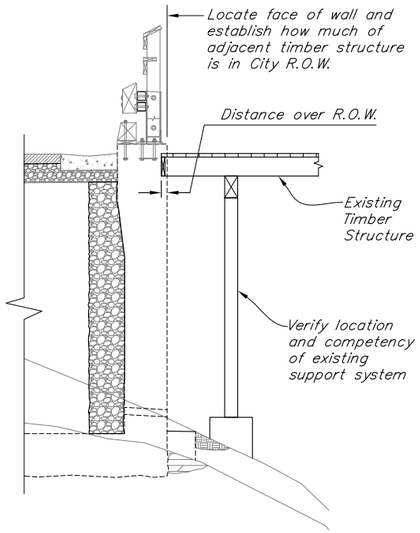
WATER STREET

TIMBER STAIR DETAILS 3

BRIDGE NO. 0446
DWG. NO. 109

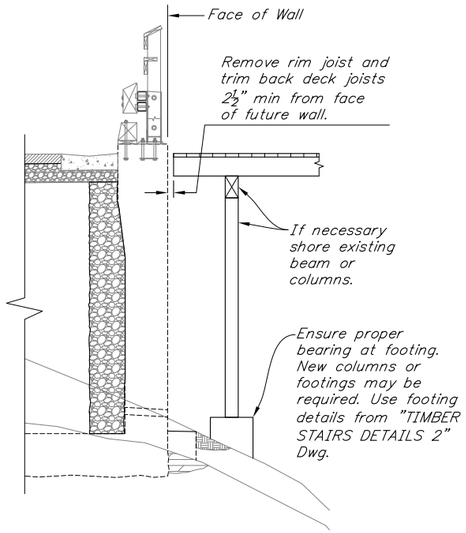
Oct 14, 2015 - 4:08pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\planset.ado\fig69534 Timber Stairs.dwg Layout Name: TIMBER STAIR DETAILS 3

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N110	N110



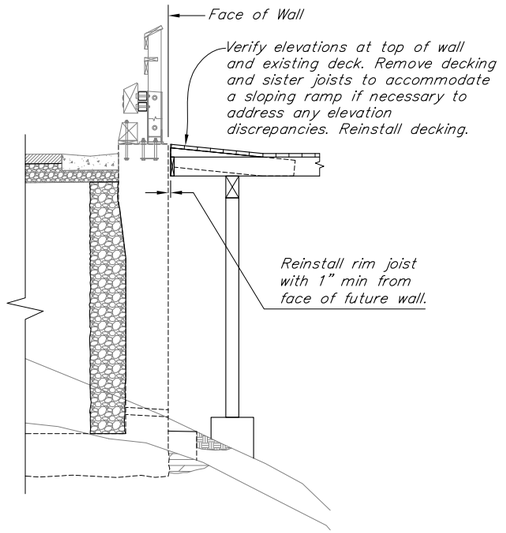
STEP 1: VERIFY EXISTING CONDITIONS

12 0 2 4 6
In. Feet



STEP 2: SHORE AND TRIM BACK STRUCTURE

12 0 2 4 6
In. Feet



STEP 3: FINALIZE CONFIGURATION

12 0 2 4 6
In. Feet

APPROXIMATE ANTICIPATED VERTICAL DIFFERENCES		
Location	*Vertical*	*Horizontal*
Driveway Sta. 20+20	*2"*	*6"*
Deck Sta. 20+65	*< 1"*	*6"*
Deck Sta. 21+02.50	*11"*	*6"*

Oct 14, 2015 - 4:08pm brien \\shearerserver\jobs\0226 water street ps&e\DWG\dansset addit&pif\69534_N DECK SHORING.dwg Layout Name: DECK SHORING

DESIGNED BY: Joshua Pruitt	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
DRAWN BY: Joshua Pruitt	CHECKED: David Shearer	Project Eng.: Date: 9/5/2019
QUANTITIES BY: Joshua Pruitt	CHECKED: David Shearer	AB As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
10TH
DAVID R. SHEARER
CE 8373
10/14/15
Registered Professional Engineer

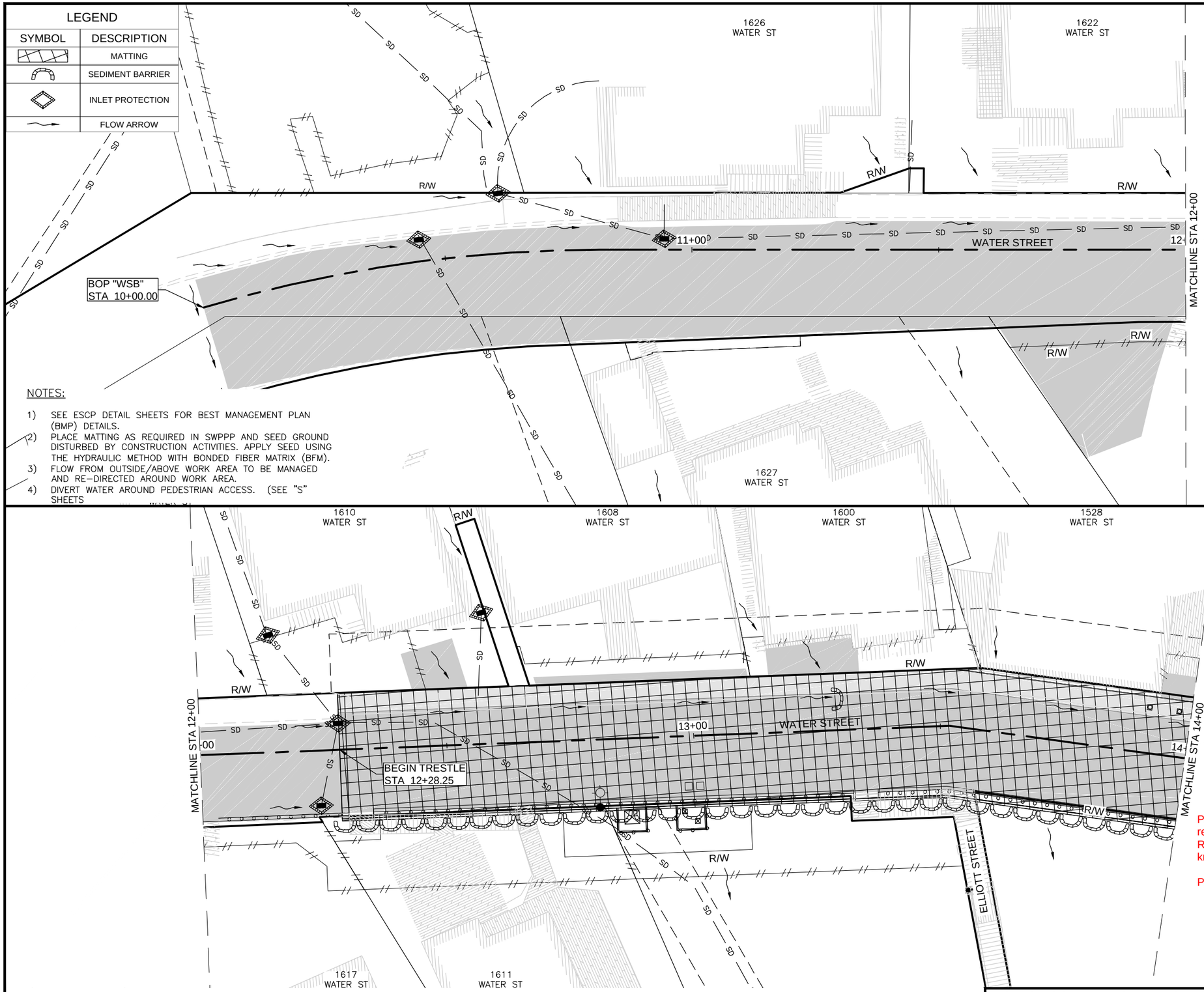
WATER STREET BRIDGE No. 2

WATER STREET

DECK SHORING

BRIDGE NO. 0446
DWG. NO. 110

LEGEND	
SYMBOL	DESCRIPTION
	MATTING
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW



NOTES:

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4) DIVERT WATER AROUND PEDESTRIAN ACCESS. (SEE "S" SHEETS

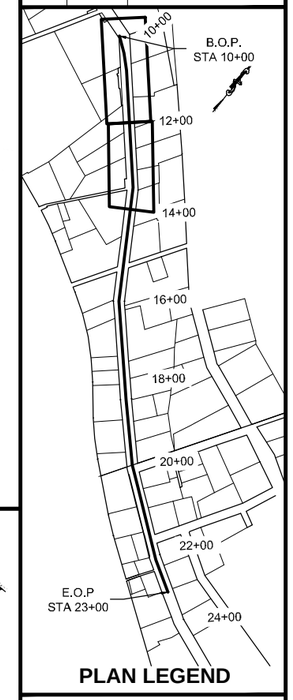
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-P SHEETS.DWG
RYAN REDICK
TAB: P01 1/14/2016 8:30 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
5	1/14/16	Addendum #5
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA
49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
P01	P08

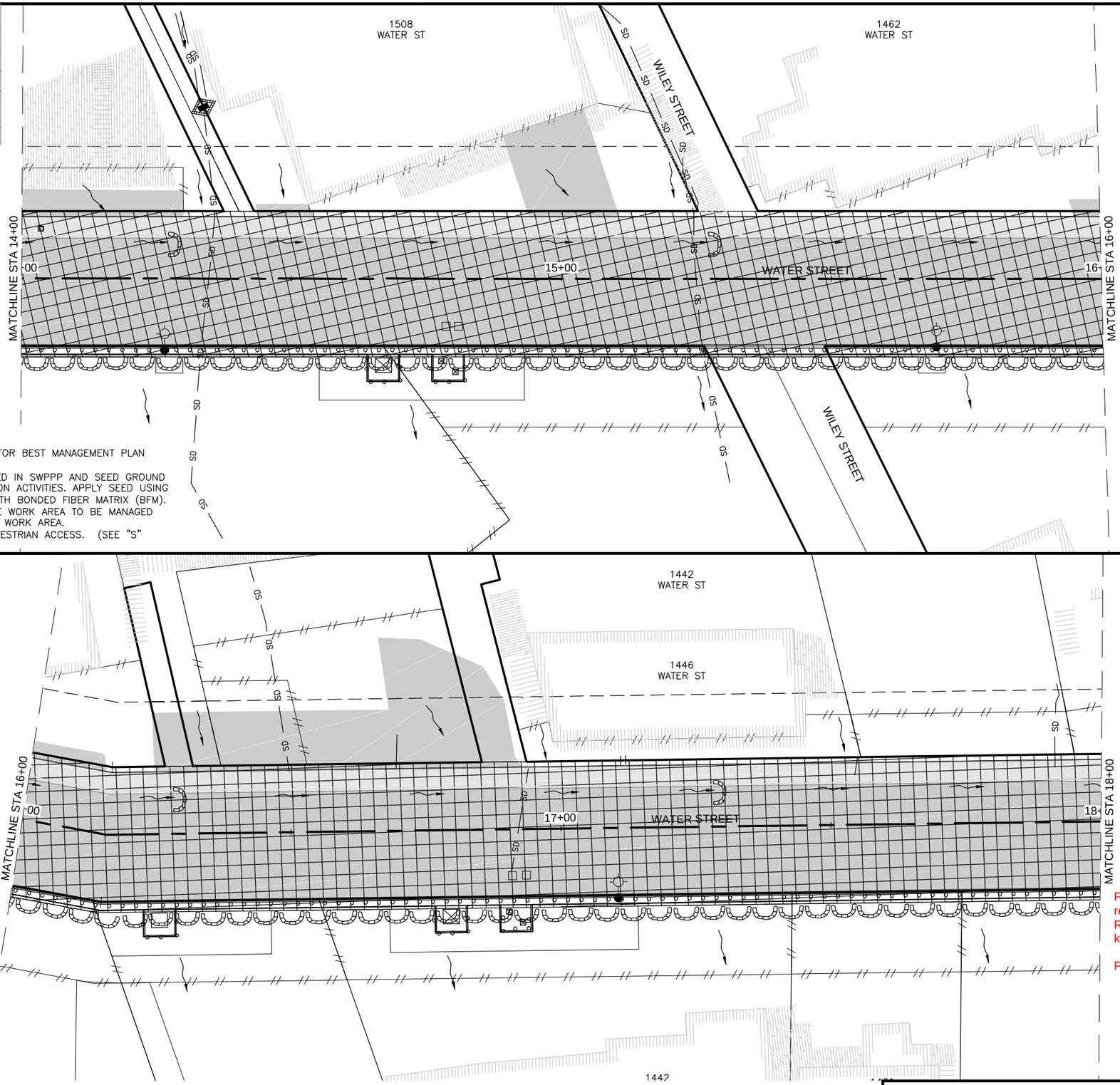
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

See Final SWPPP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LEGEND	
SYMBOL	DESCRIPTION
	MATTING
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW



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PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-P SHEETS.DWG
RYAN REDICK
TAB: P02 1/14/2016 8:31 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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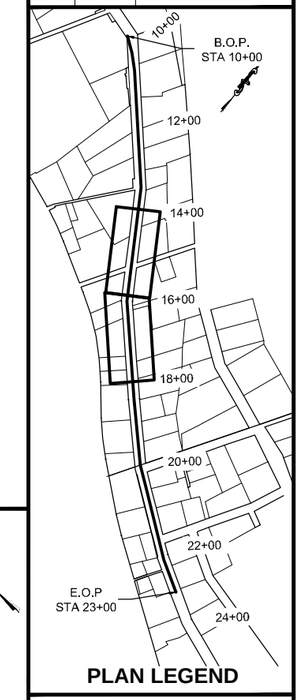
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

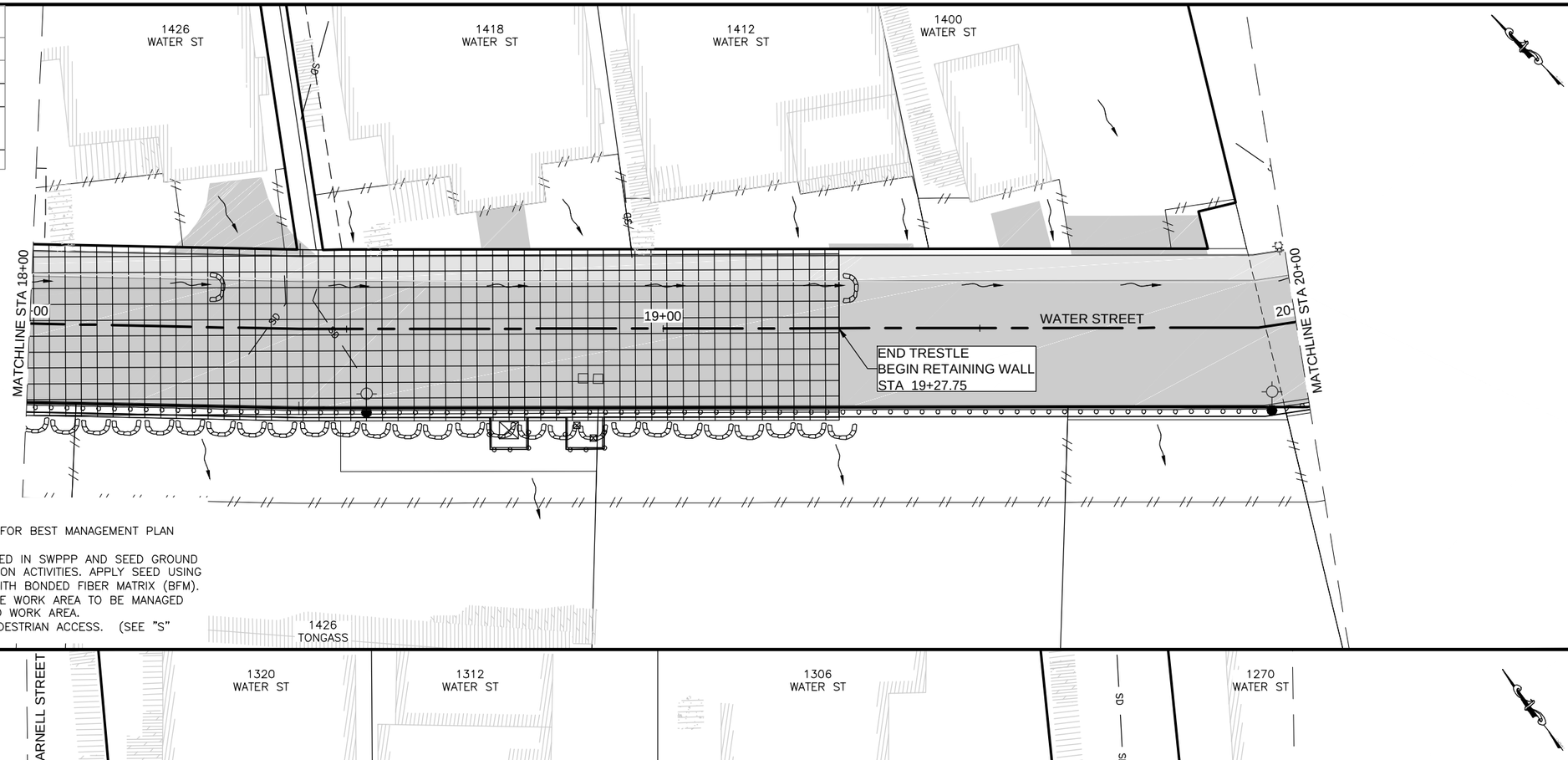
Project Eng.: Date: 9/5/2019

See Final SWPPP

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
P02	P08

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

LEGEND	
SYMBOL	DESCRIPTION
	MATTING
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW



NOTES:

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Project Eng.: Date: 9/5/2019

See Final SWPPP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-P SHEETS.DWG

RYAN REDICK

TAB: P03 1/14/2016 8:31 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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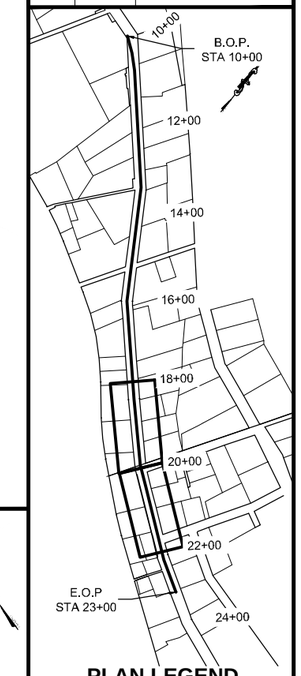
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

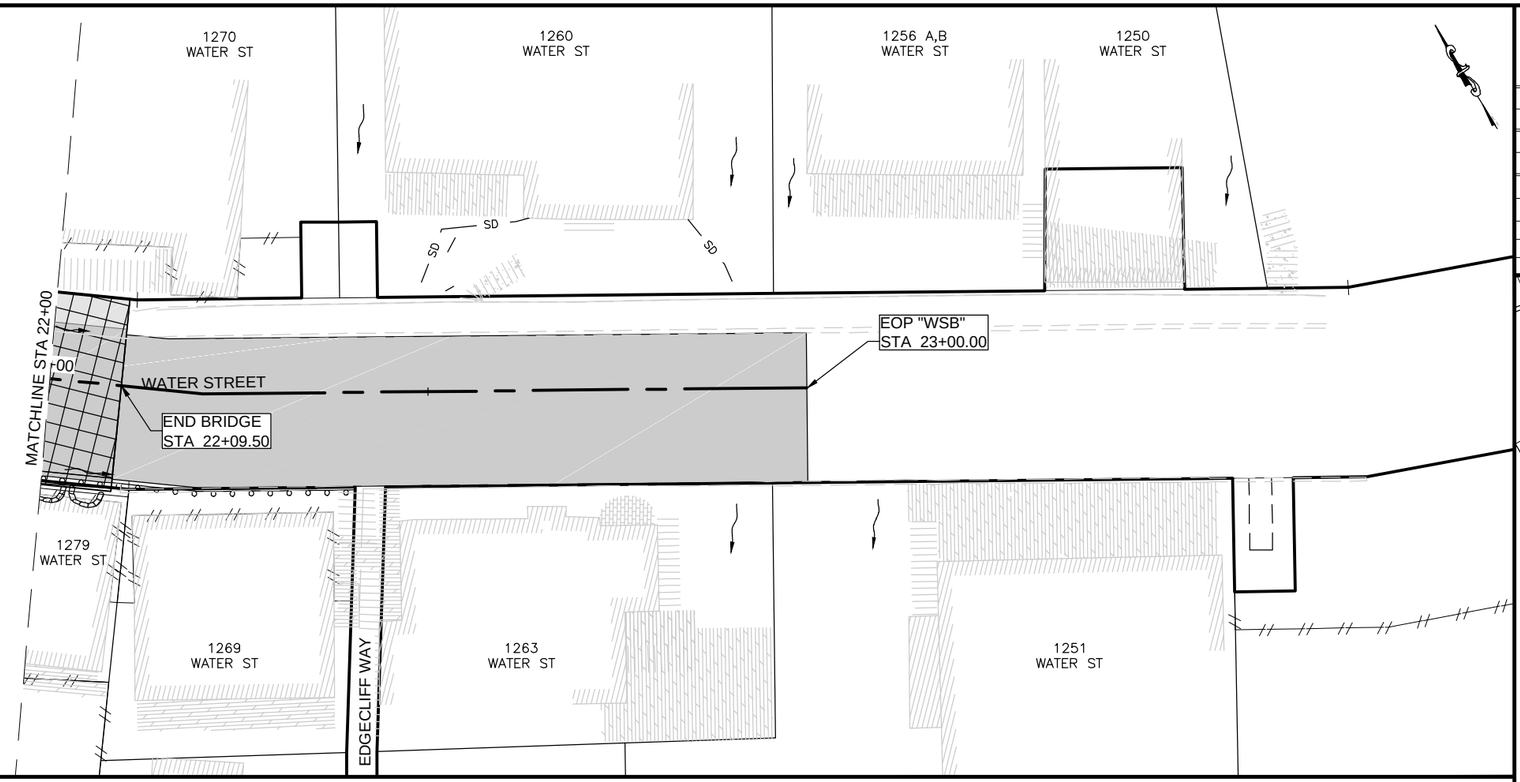
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
P03	**P08**

LEGEND	
SYMBOL	DESCRIPTION
	MATTING
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW



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Project Eng.: Date: 9/5/2019

See Final SWPPP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: **Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-P SHEETS.DWG**

RYAN REDICK

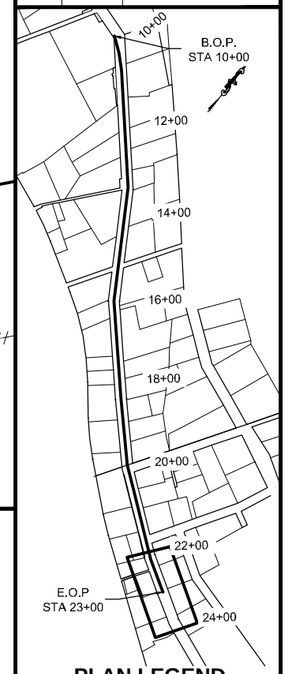
TAB: **P04** **1/14/2016 8:31 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
5	1/14/16	Addendum #5
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA
49 TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

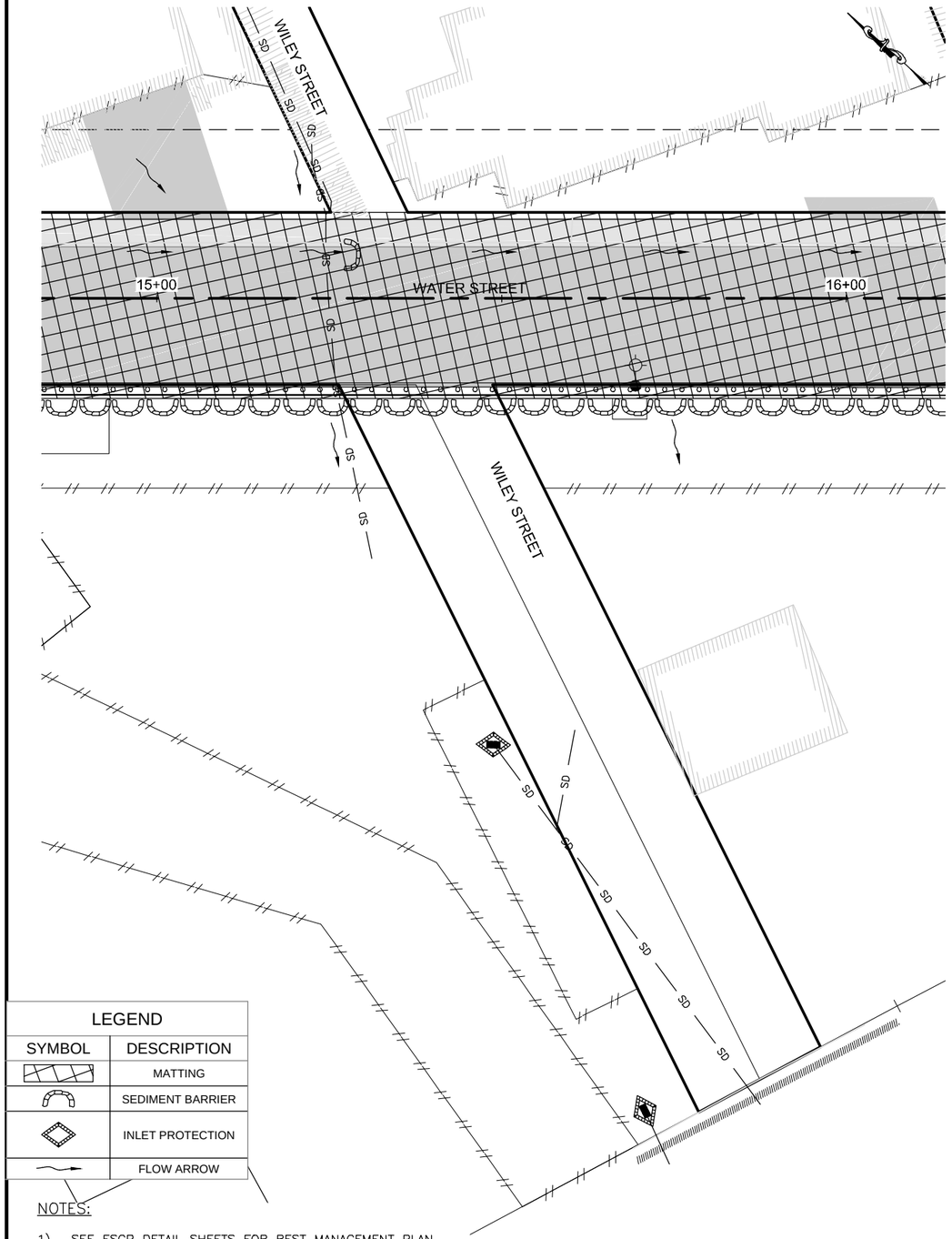
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
P04	**P08**



LEGEND	
SYMBOL	DESCRIPTION
	MATTING
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW

NOTES:

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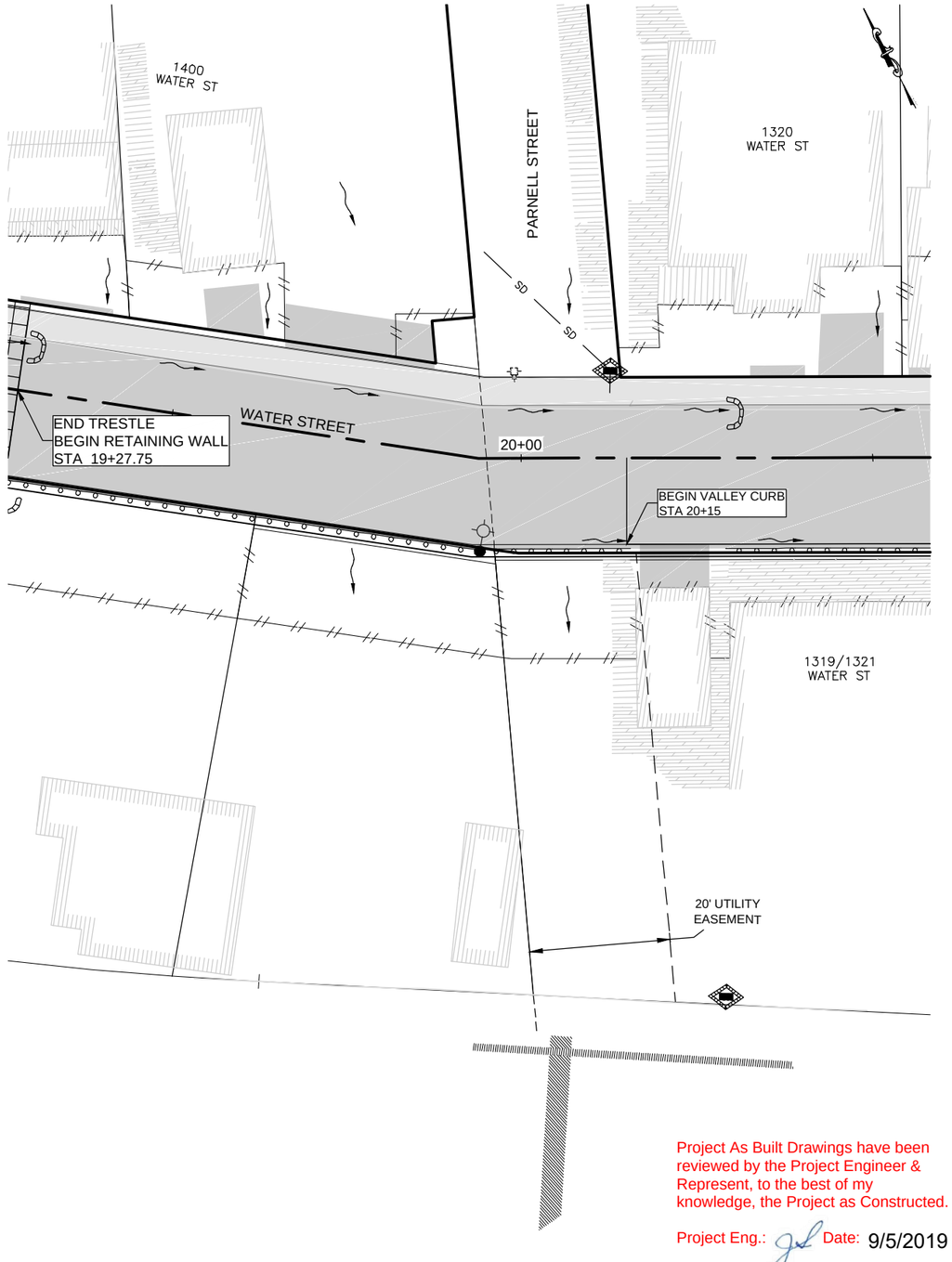


Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

See Final SWPPP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET V\ADUCT\CIVIL\ACAD\1744-P SHEETS.DWG

RYAN REDICK

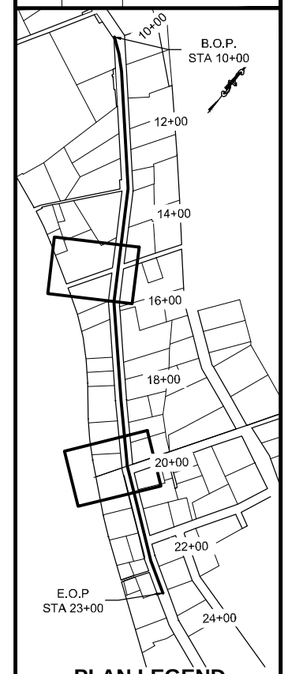
TAB: P05 1/14/2016 8:31 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
5	1/14/16	Addendum #5
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA
49 TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

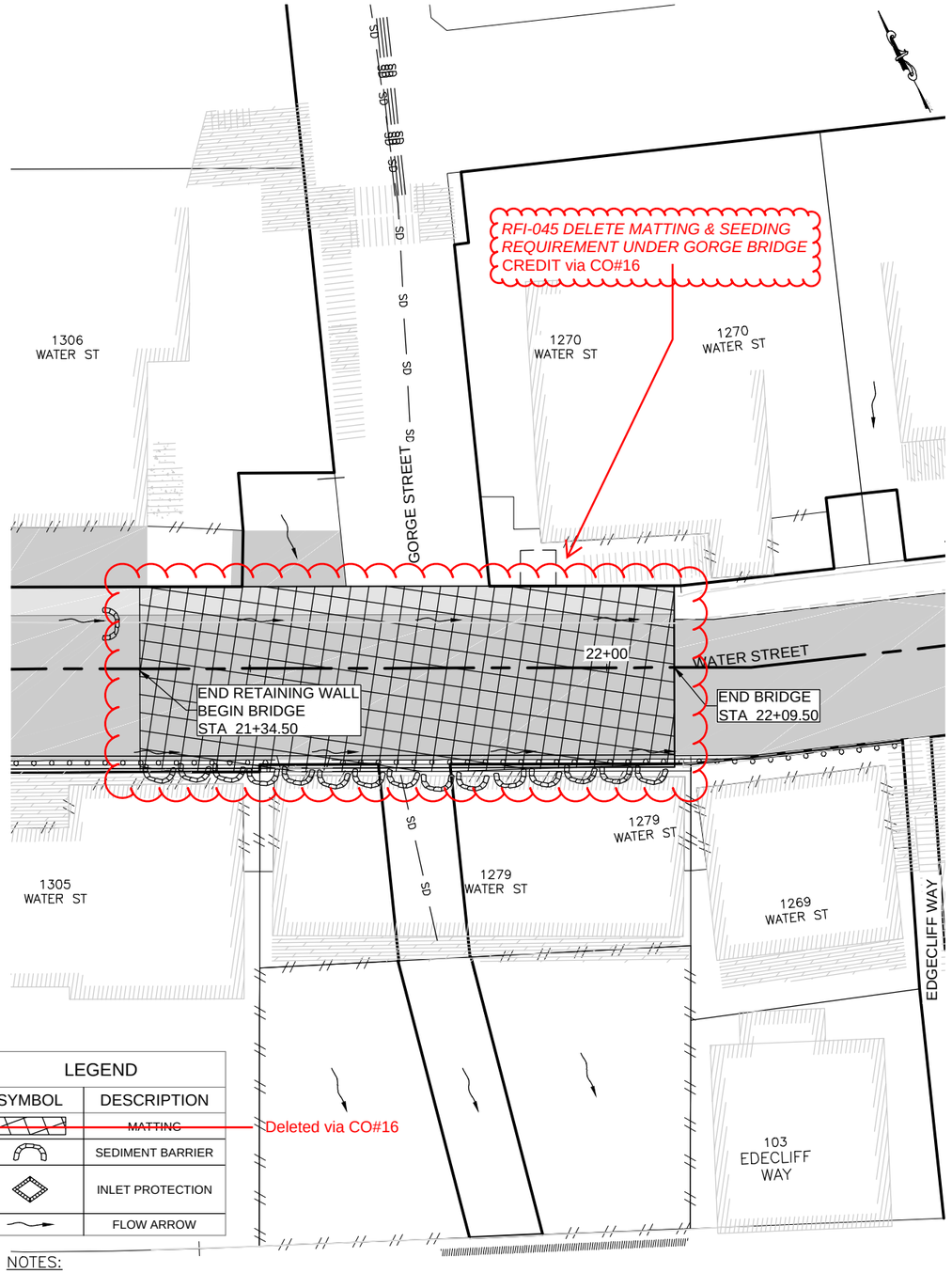
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
P05	P08



LEGEND	
SYMBOL	DESCRIPTION
	~~MATTING~~ Deleted via CO#16
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW

NOTES:

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Project Eng.: Date: 9/5/2019

See Final SWPPP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-P SHEETS.DWG

RYAN REDICK

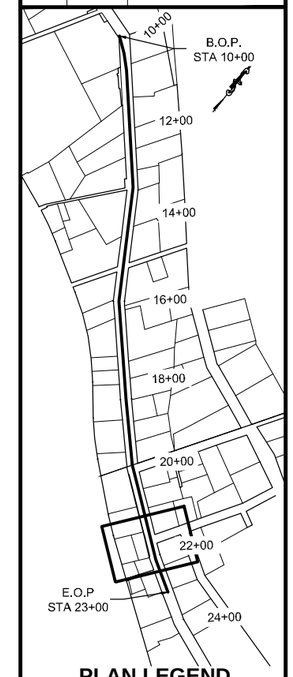
TAB: P06 1/14/2016 8:31 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
5	1/14/16	Addendum #5
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

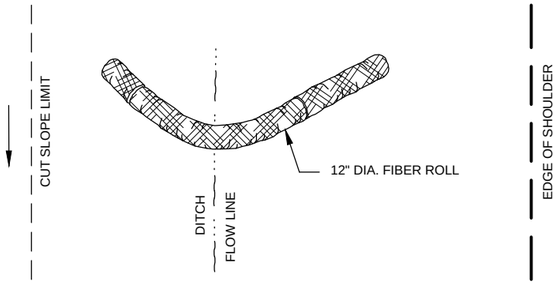
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

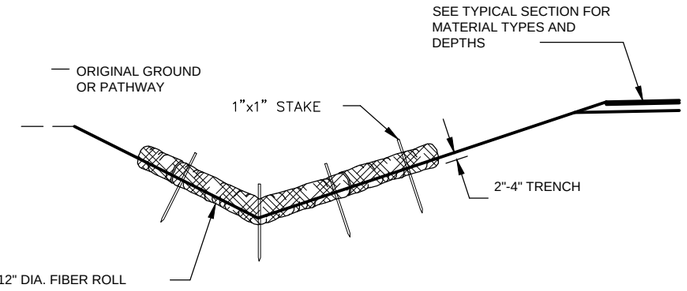
PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
P06	**P08**

EROSION & SEDIMENT CONTROL NOTES:

1) REFER TO THE CONTRACT DOCUMENTS FOR THE ENVIRONMENTAL COMMITMENTS
2) THE LOCATIONS OF TEMPORARY EROSION & SEDIMENT POLLUTION CONTROLS SHOWN ON THE P SHEETS ARE RECOMMENDATIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PREPARE AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ACCORDING TO SECTION 641 OF THE SPECIFICATIONS
3) INSTALL EROSION AND SEDIMENT CONTROL DEVICES BEFORE BEGINNING EARTH DISTURBING ACTIVITIES
4) IF INSPECTION REVEALS SEDIMENT IS DISCHARGED BEYOND THE PROJECT WORK LIMITS, IMMEDIATELY IMPLEMENT CORRECTIVE ACTION. ADDITIONAL BMP'S MAY BE REQUIRED



FIBER ROLL CHECK DAM PLAN VIEW
NTS



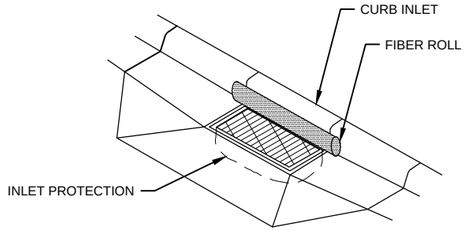
FIBER ROLL CHECK DAM ELEVATION VIEW
NTS

NOTES:

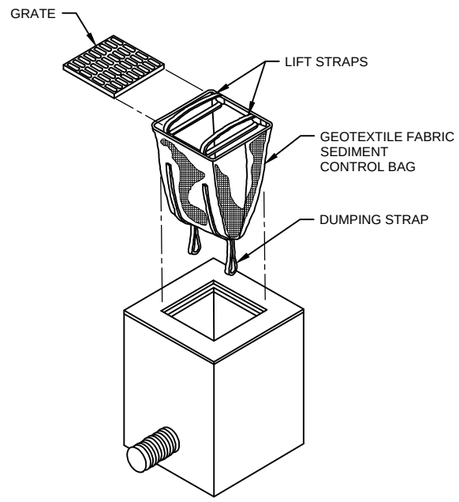
1) FIBER ROLL CHECK DAMS SHALL BE CONSTRUCTED AT LOCATIONS AS INDICATED ON PLANS OR AS REQUIRED BY THE SWPPP IMMEDIATELY AFTER THE DITCH FLOW LINE HAS BEEN ESTABLISHED
2) SPACE CHECK DAMS ON 100 FOOT CENTERS FOR GRADES BETWEEN 2% AND 5 %. USE CLOSER SPACING FOR STEEPER GRADES UP TO 5% AS REQUIRED BY THE SWPPP
3) FIBER ROLL INSTALLATION FOR CHECK DAMS REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH 2"-4" DEEP. RUNOFF MUST NOT BE ALLOWED TO FLOW UNDER THE ROLL

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019



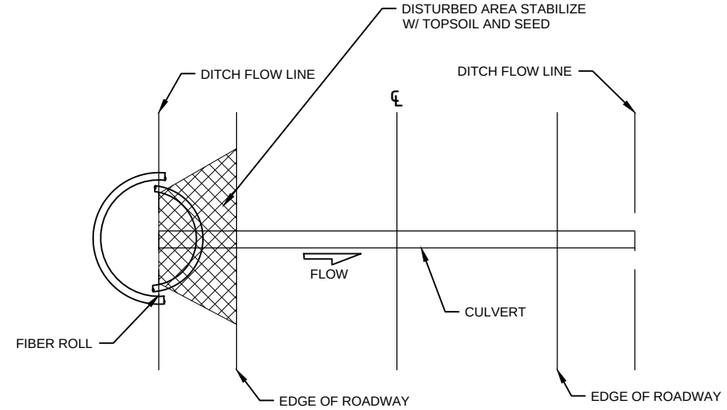
ABOVE GRATE INLET PROTECTION DETAIL
NTS



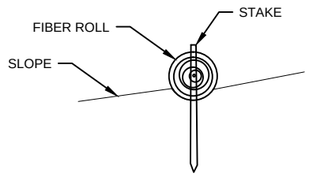
BELOW GRATE INLET PROTECTION DETAIL
NTS

INLET PROTECTION INSTALLATION AND MAINTENANCE:

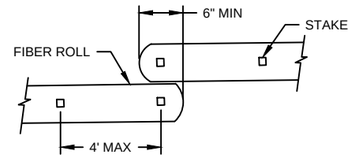
1) INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENT; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE LIFT STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE SEDIMENT BAGS SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET
2) MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE SEDIMENT BAG. IF THE CONTAINMENT AREA IS MORE THAT 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION
3) INSTALL INLET PROTECTION AT LOCATIONS PRIOR TO EARTH DISTURBING ACTIVITIES



FIBER ROLL PLACEMENT AT CULVERT REPAIRS
NTS



SECTION



FIBER ROLL

FIBER ROLL
NTS

NOTES:

1) THE LOCATION AND LENGTH OF FIBER ROLLS IS DEPENDENT ON THE CONDITION OF THE SITE
2) LAP ADJACENT FIBER ROLLS TO PREVENT SEDIMENT BYPASS
3) ANCHOR AS NECESSARY TO FIRMLY SECURE FIBER ROLLS AND PROVIDE CONTINUOUS CONTACT WITH THE SURFACE ON WHICH IT IS INSTALLED

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA · 49TH · Ryan D. Redick · No. CE 12799 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

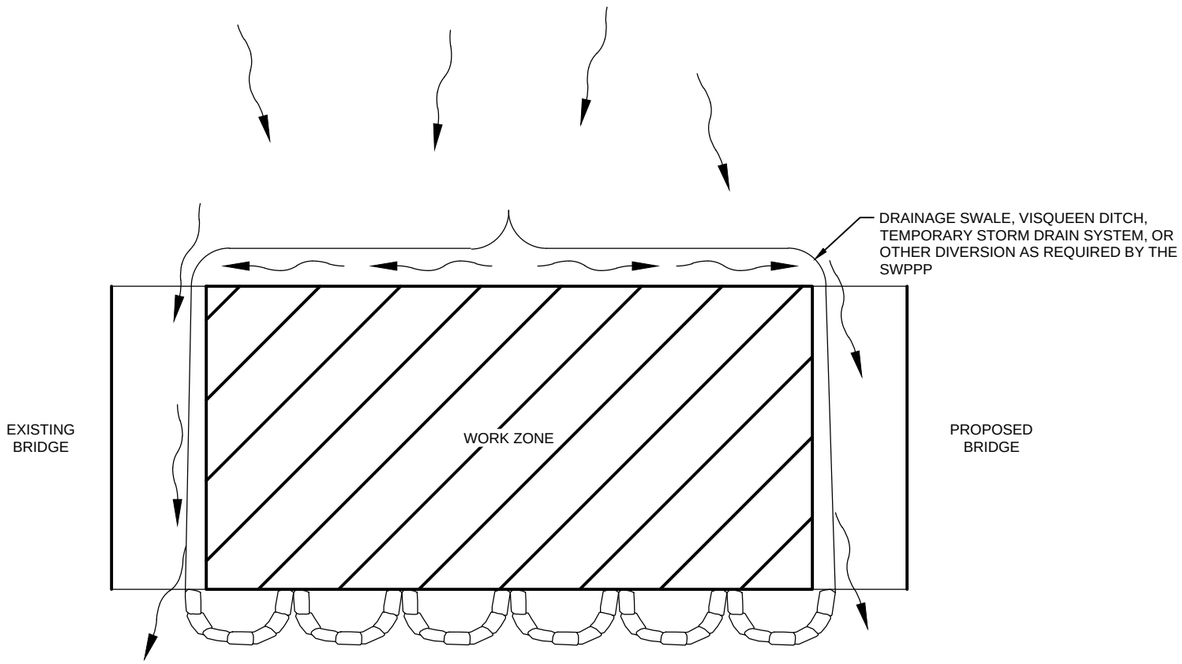
KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

TAB: P07 Friday, November 20, 2015 11:50:55 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735)	2015	**P07**	P08

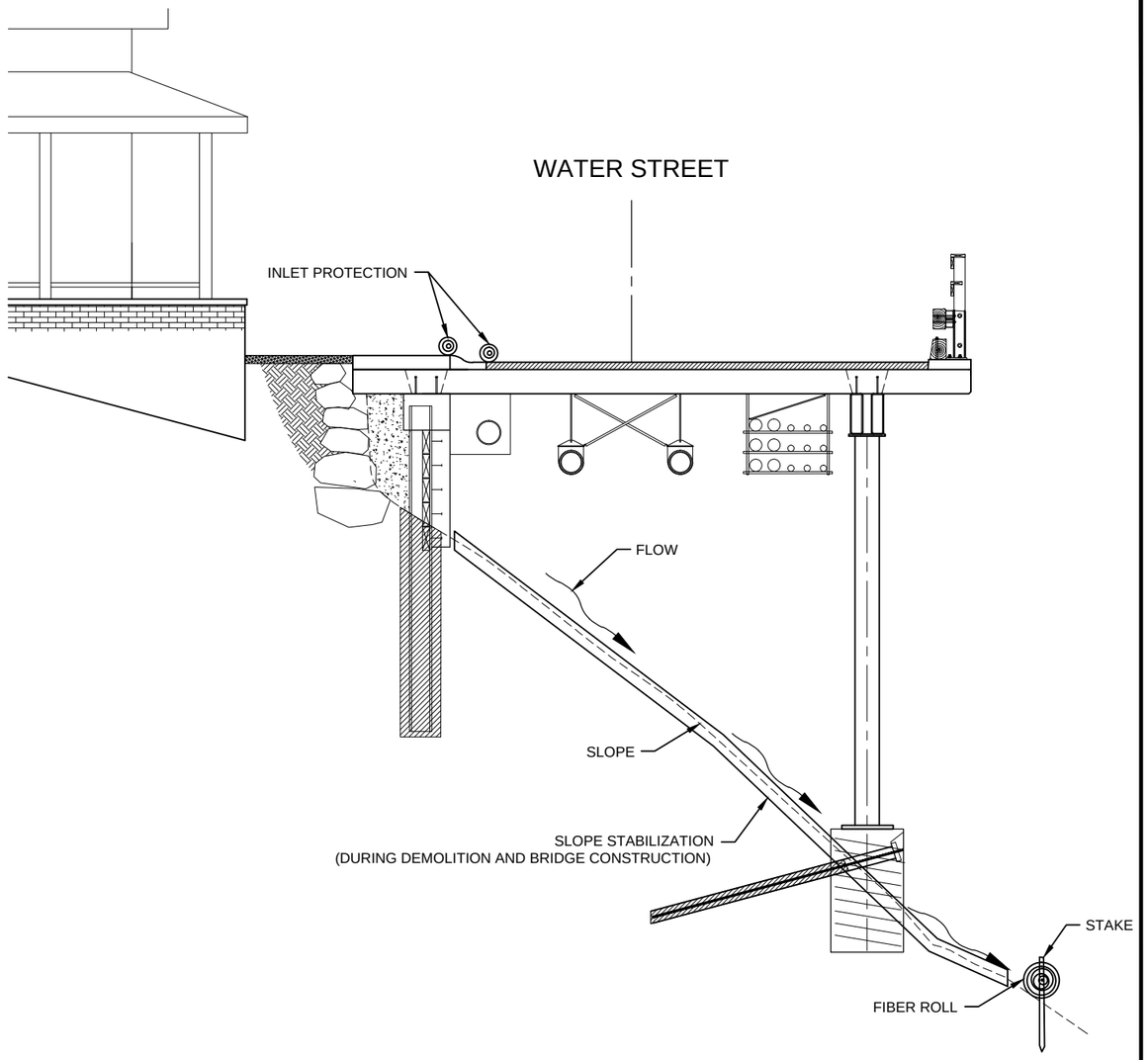
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET V\ADUCT\CIVIL\ACAD\1744-P SHEETS.DWG



NOTES:

1) DIVERT OFFSITE FLOW AROUND WORK AREA WHERE PRACTICABLE
2) OUTLET TO EXISTING
3) DIVERT WATER AROUND PEDESTRIAN ACCESS. (SEE "S" SHEETS)

PHASED TYPICAL BMP PLAN VIEW



BMP SECTION

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-P SHEETS.DWG

CHECKED BY: T. GRIER

STATE OF ALASKA – 49TH – Ryan D. Redick – No. CE 12799 – REGISTERED PROFESSIONAL ENGINEER – 11/20/15

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EROSION & SEDIMENT CONTROL PLAN

TAB: P08 Friday, November 20, 2015 11:50:59 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
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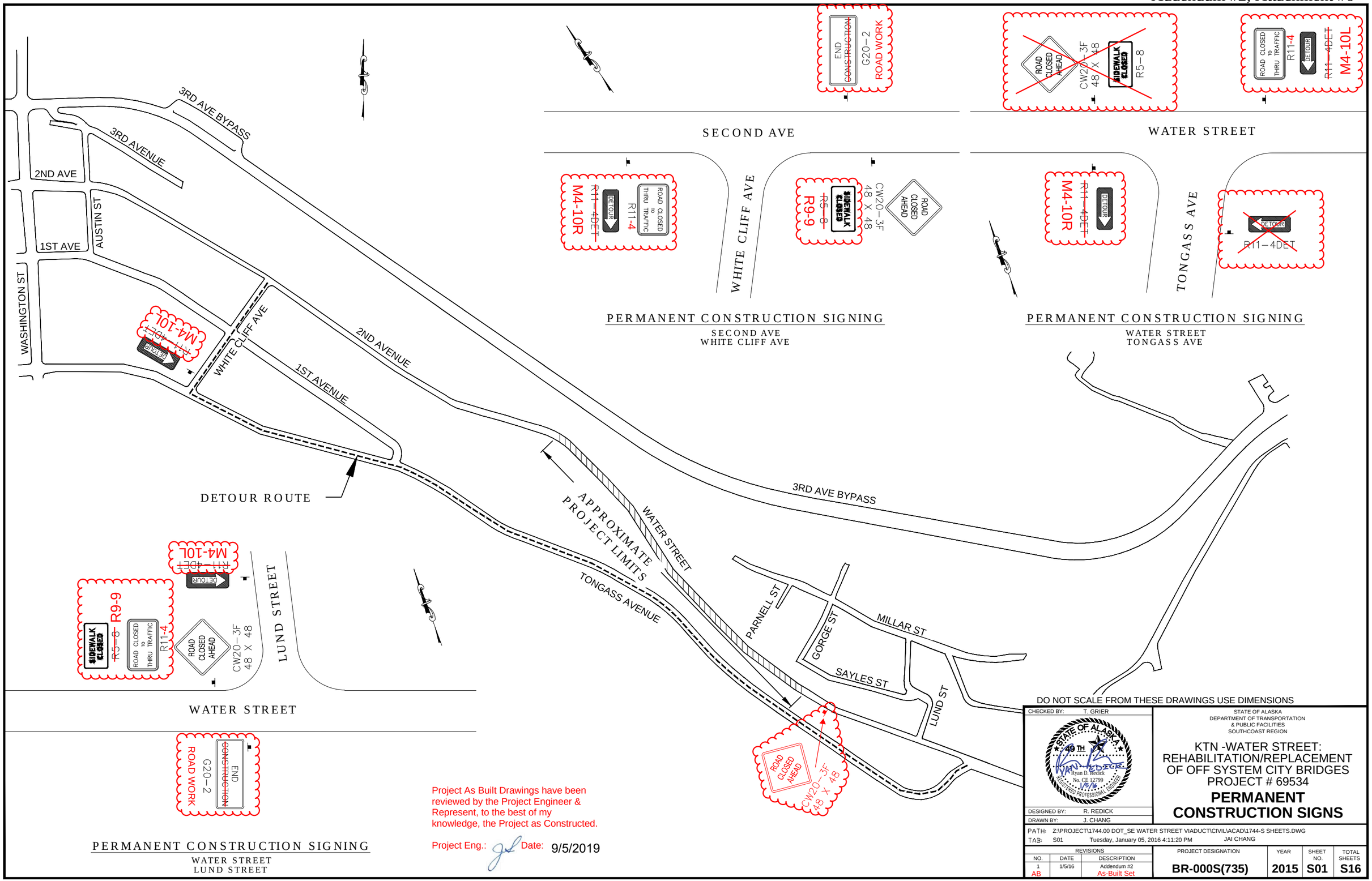


PERMANENT CONSTRUCTION SIGNING
SECOND AVE
WHITE CLIFF AVE

PERMANENT CONSTRUCTION SIGNING
WATER STREET
TONGASS AVE

PERMANENT CONSTRUCTION SIGNING
WATER STREET
LUND STREET

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/5/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY:	T. GRIER
DESIGNED BY:	R. REDICK
DRAWN BY:	J. CHANG

STATE OF ALASKA
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER
1/5/16

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

PERMANENT CONSTRUCTION SIGNS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-S SHEETS.DWG
TAB: S01 Tuesday, January 05, 2016 4:11:20 PM JAI CHANG

REVISIONS		
NO.	DATE	DESCRIPTION
1 AB	1/5/16	Addendum #2 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	S01	S16

CONSTRUCTION PHASING NOTES:

1) DESIGNATED TURNAROUNDS AND ADDITIONAL PARKING AREA WORK PER BID ITEMS 678(2) AND 678(3) SHALL BE CONSTRUCTED PRIOR TO START OF ANY DEMOLITION OR DISRUPTION OF EXISTING TRAFFIC OR PARKING PATTERNS.

2) IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME BUT NOT ALL OF THE TRAFFIC CONTROL CONFIGURATIONS THAT WILL BE REQUIRED BY THIS PROJECT. TRAFFIC CONTROL PLANS FOR CONFIGURATION NOT COVERED BY THIS TCP SHALL BE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL, PRIOR TO USE.

3) THE CONTRACTOR SHALL KEEP THE PUBLIC INFORMED OF HIS/HER CONSTRUCTION ACTIVITIES THROUGH THE USE OF THE LOCAL NEWS MEDIA. NEWS RELEASES SHALL BE APPROVED BY THE PROJECT ENGINEER PRIOR TO THEIR RELEASE.

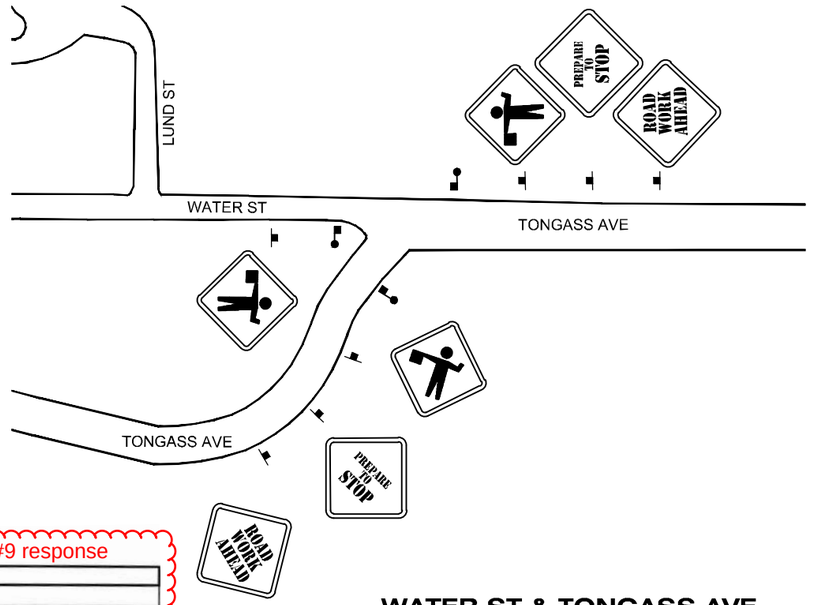
4) MAINTAIN PEDESTRAIN ACCESS SIMILAR TO EXISTING PEDESTRIAN ROUTES WHEN POSSIBLE.

5) TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".

6) WARNING LIGHTS SHALL BE USED ON ALL CHANNELIZING DEVICES PLACED ALONG OR AROUND ROADWAY HAZARDS.

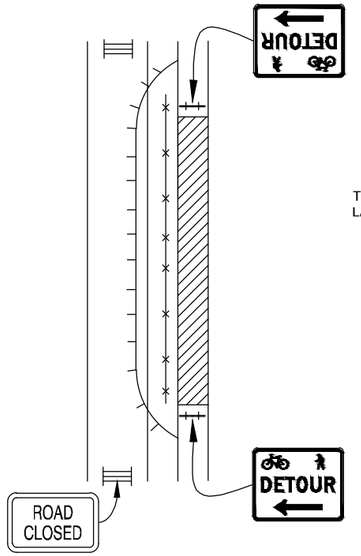
7) MAINTAIN 4' WIDTH FOR PEDESTRIAN ACCESS PATHWAYS. PATHWAYS MAY BE 3' MINIMUM WITH ENGINEERS APPROVAL.

8) DRILLED ROCK ANCHORS ARE ANTICIPATED IN THE VICINITY OF STATION 12 20 TO 18 00 FOR THE UPHILL SOLDIER PILE WALL (REFERENCE SHEETS N21, N22 AND N28). THE DEPARTMENT IS IN THE PROCESS OF SECURING ADDITIONAL ROW EASEMENTS FROM THESE PROPERTY OWNERS FOR THE UNDERGROUND PLACEMENT OF THESE ANCHORS. THE CONTRACTOR MAY NOT INSTALL ANY SOLDIER PILE WALL ANCHORS WITHIN THESE LIMITS UNTIL SUCH EASEMENTS ARE SECURED. BIDS SHALL BE PREMISED ON THE BASIS THAT THESE EASEMENTS WILL NOT BE SECURED UNTIL JULY 1, 2016.

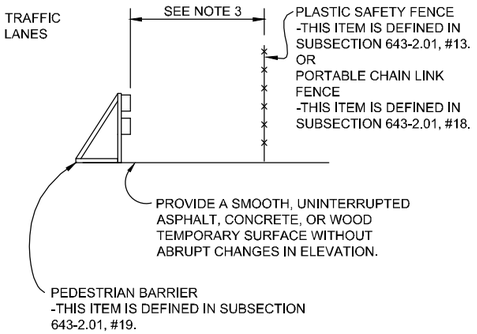


WATER ST & TONGASS AVE INTERSECTION TCP

FOR USE WHEN DELIVERING OR REMOVING MATERIALS AND EQUIPMENT TO THE PROJECT.



DETAIL A: DETOUR TO SHOULDER OR TRAVEL LANE



DETAIL B: PEDESTRIAN DETOUR TYPICAL SECTION

MID-BLOCK SIDEWALK, PATHWAY OR SHOULDER CLOSURE

Designated Turnarounds

From RFI#9 response

	Address	Asphalt (2")	Sign	Stripe	Comments
1	1610		X	X	
2	1528 / 1508	X	X	X	
3	1454		X		In lieu of striping place traffic candle to delineate turnaround area
4	1426		X		
5	1400	X	X	X	
6	1306	X	X	X	Complete after Phase 1
7	1254 / 1256		X	X	

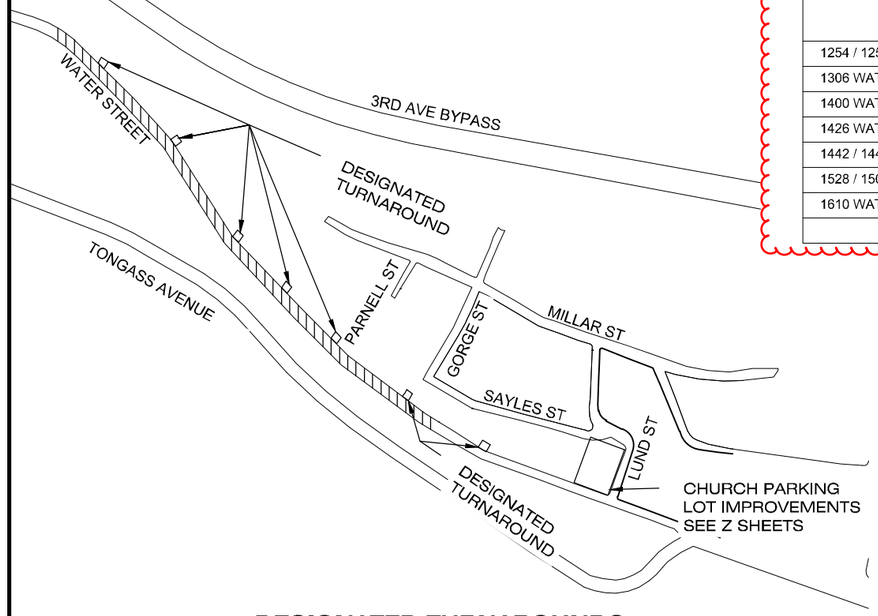
NOTES:

1) SEE S03 TO SO7 FOR DETAILED DESIGNATED TURNAROUND LOCATIONS

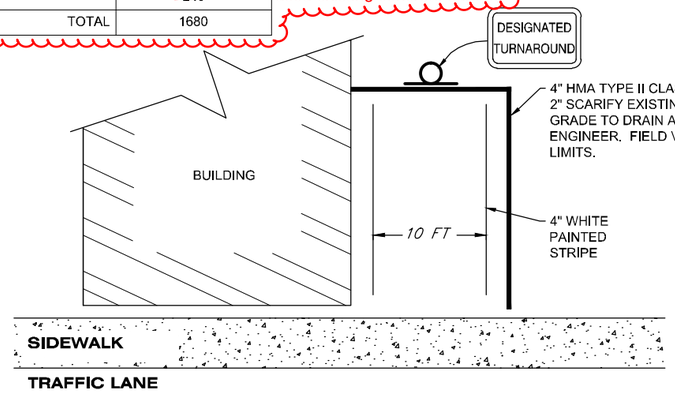
678(3) DESIGNATED TURNAROUNDS

PAVING SCHEDULE

PROPERTY	PAVING AREA (SQFT)	
1254 / 1256 WATER STREET (TCE 40)	~~290~~	used existing concrete surface
1306 WATER STREET (TCE 29B)	220	
1400 WATER STREET (TCE 26B)	250	
1426 WATER STREET (TCE 16C)	~~180~~	used existing concrete surface
1442 / 1446 WATER STREET (TCE 15C)	250	
1528 / 1508 WATER STREET (TCE 8A & 12A)	250	
1610 WATER STREET (TCE 5A)	~~240~~	used existing concrete surface
TOTAL	1680	



DESIGNATED TURNAROUNDS



TYPICAL TURNAROUND

Legend

DESCRIPTION	SYMBOL
PEDESTRIAN ACCESS	
TEMPORARY CONSTRUCTION EASEMENT	
SIGN	
TYPE III BARRICADE	
WOODEN DECKS & STAIRCASES	

① ROAD CLOSED AHEAD — CW20–3F 48 X 48
LOCAL TRAFFIC ONLY — R11–2B

② ROAD CLOSED — R11–2 48 X 30

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: J. CHANG

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET: REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

DESIGNATED TURNAROUND TRAFFIC CONTROL

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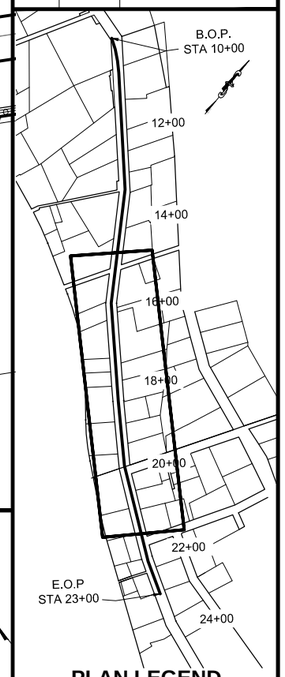
TAB: S02 Wednesday, January 13, 2016 1:48:52 PM RYAN REDICK

REVISIONS		
NO.	DATE	DESCRIPTION
1	1/5/16	Addendum #2
2	1/12/16	Addendum #5

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	S02	S16

AB As-Built Set

Not Updated for As-Built Set



PLAN LEGEND

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JOSEPH HORAZDOVSKY

TAB: S04 11/20/2015 11:52 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick, No. CE 12799, REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

TRAFFIC CONTROL

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
S04	S16

Not Updated for As-Built Set

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JOSEPH HORAZDOVSKY

TAB: S05 11/20/2015 11:52 AM

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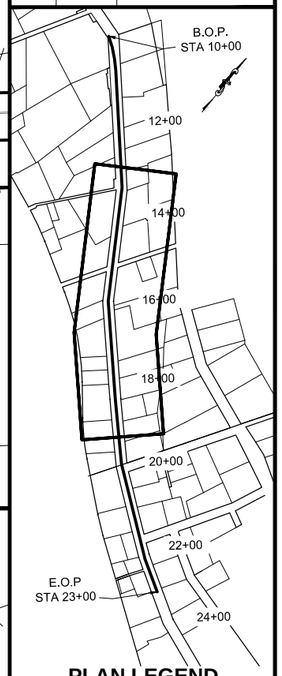


PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER
11/20/15

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

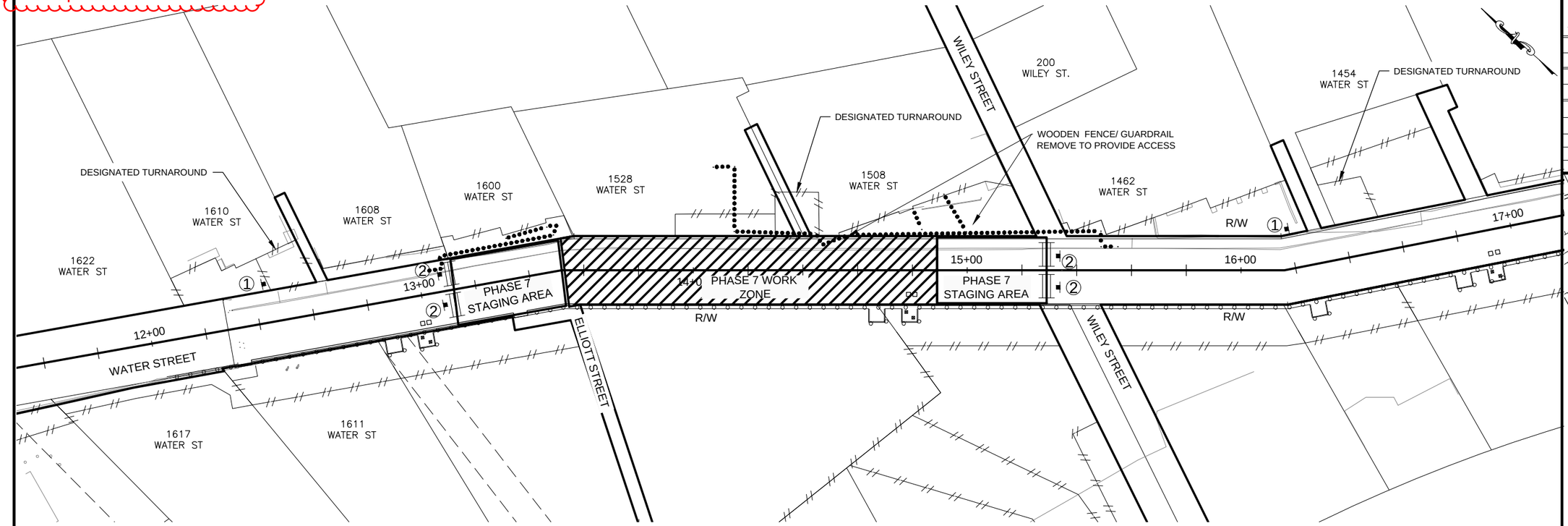
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

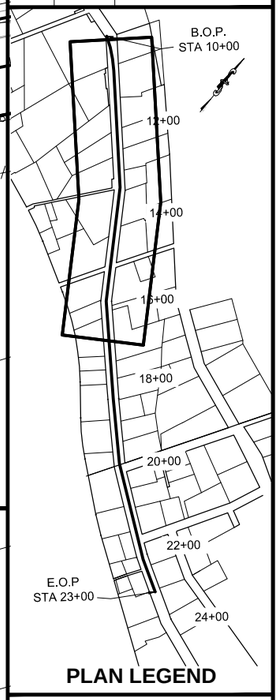
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

TRAFFIC CONTROL

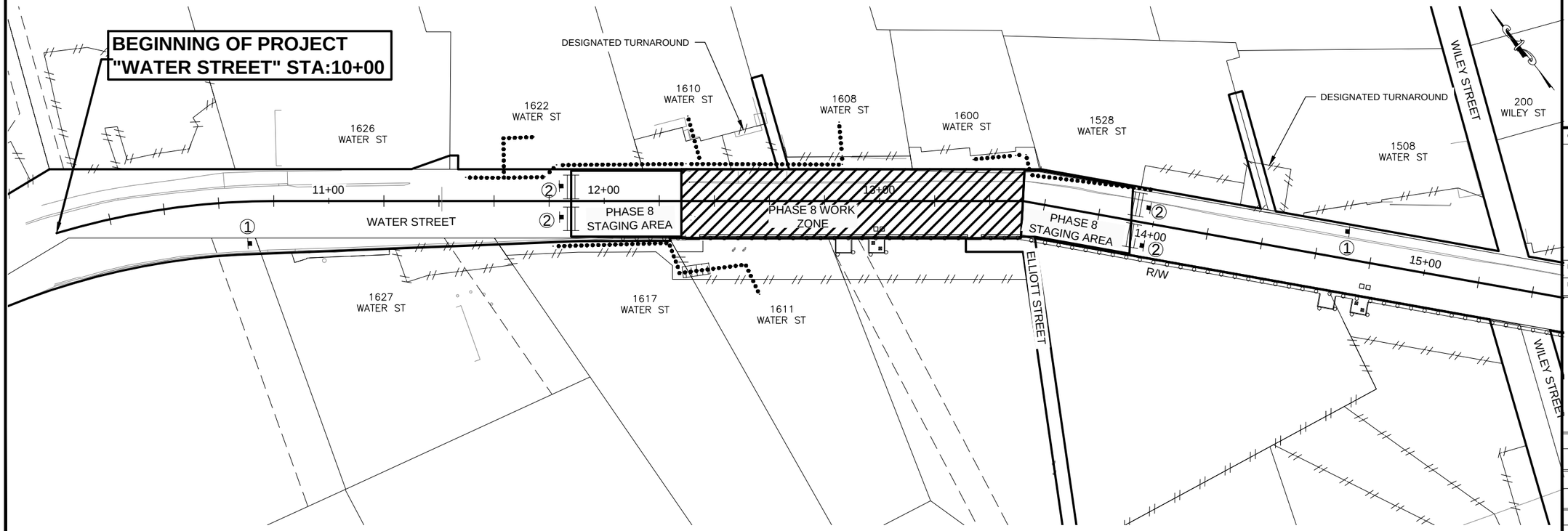
PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
S05	S16

Not Updated for As-Built Set





PLAN LEGEND



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JOSEPH HORAZDOVSKY

TAB: S06 11/20/2015 11:52 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER
11/27/15

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

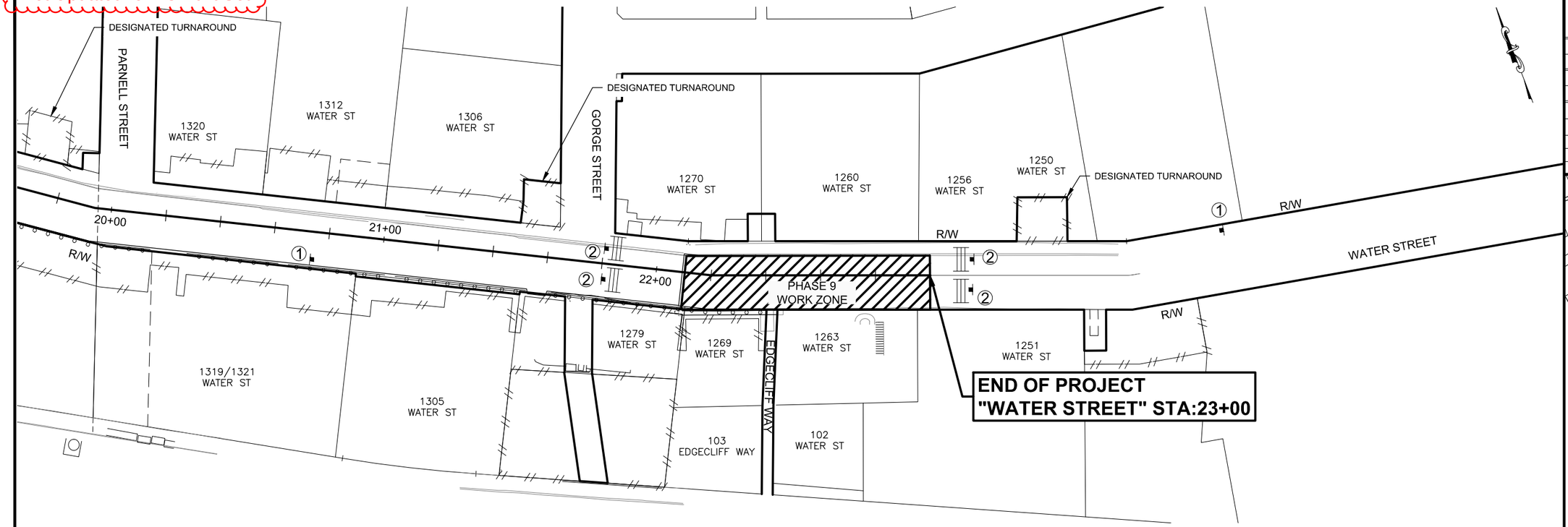
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

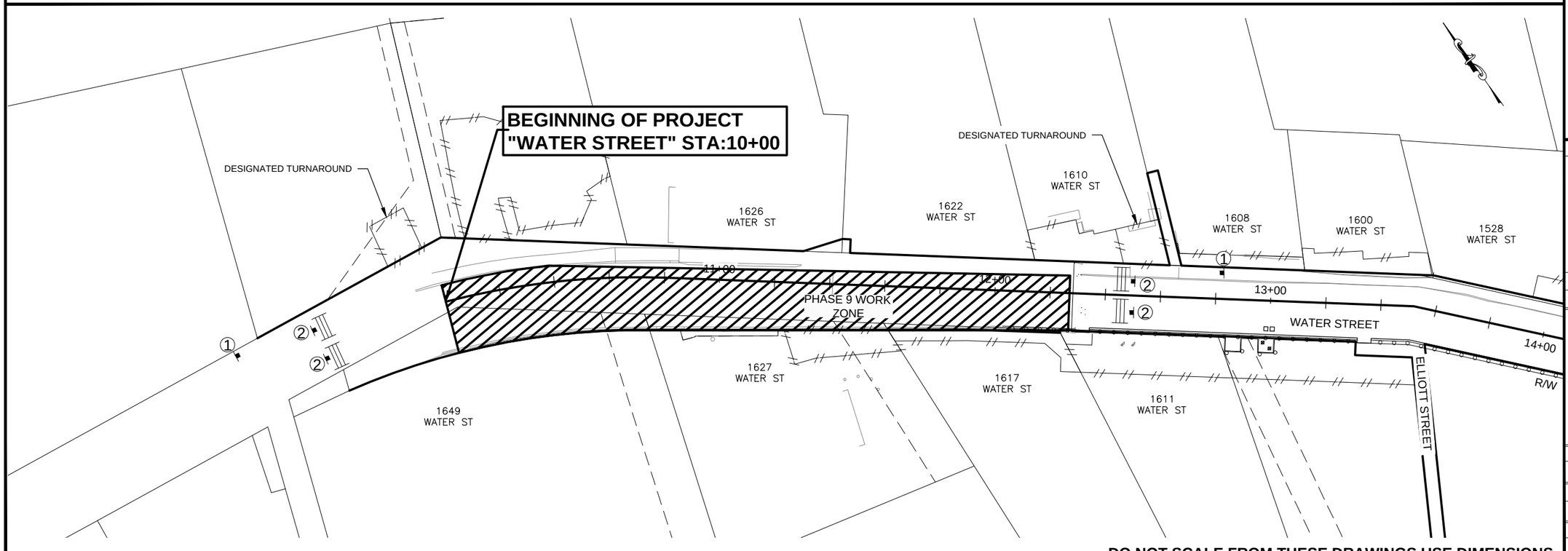
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

TRAFFIC CONTROL

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
S06	S16

Not Updated for As-Built Set





DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-S SHEETS.DWG

JOSEPH HORAZDOVSKY

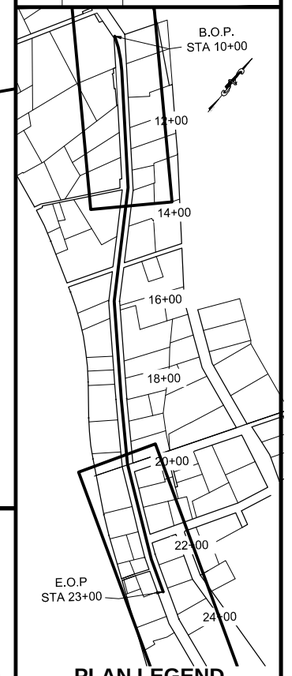
TAB: S07 11/20/2015 11:52 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: T. GRIER

DESIGNED BY: R. REDICK

DRAWN BY: B. MAXWELL

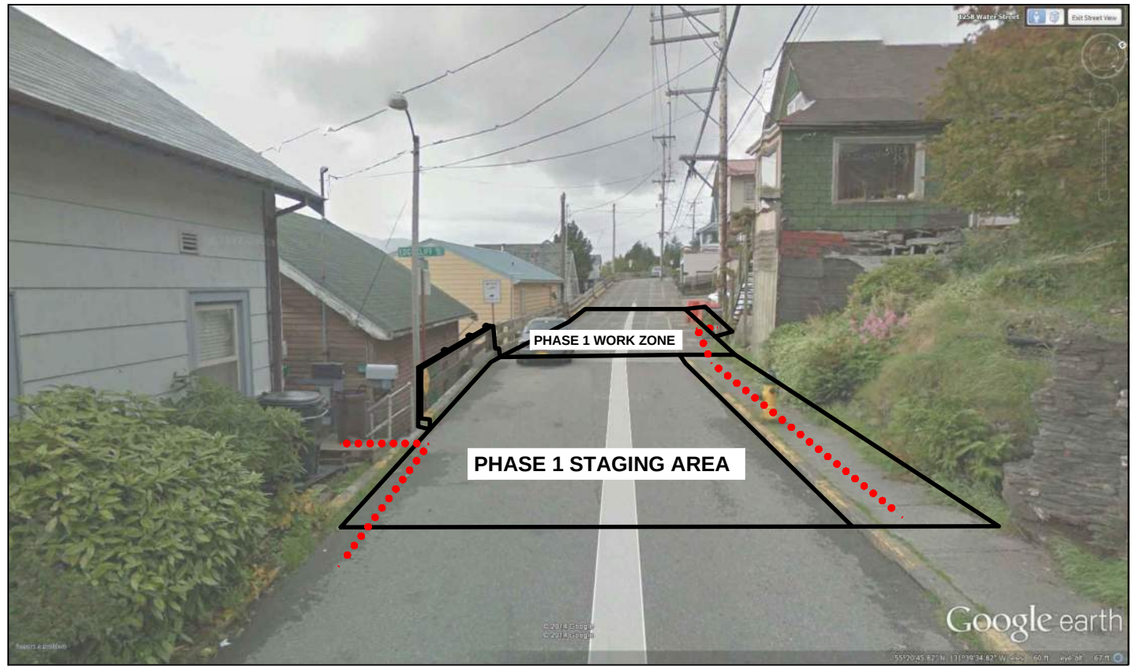
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

TRAFFIC CONTROL

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
S07	S16

Not Updated for As-Built Set



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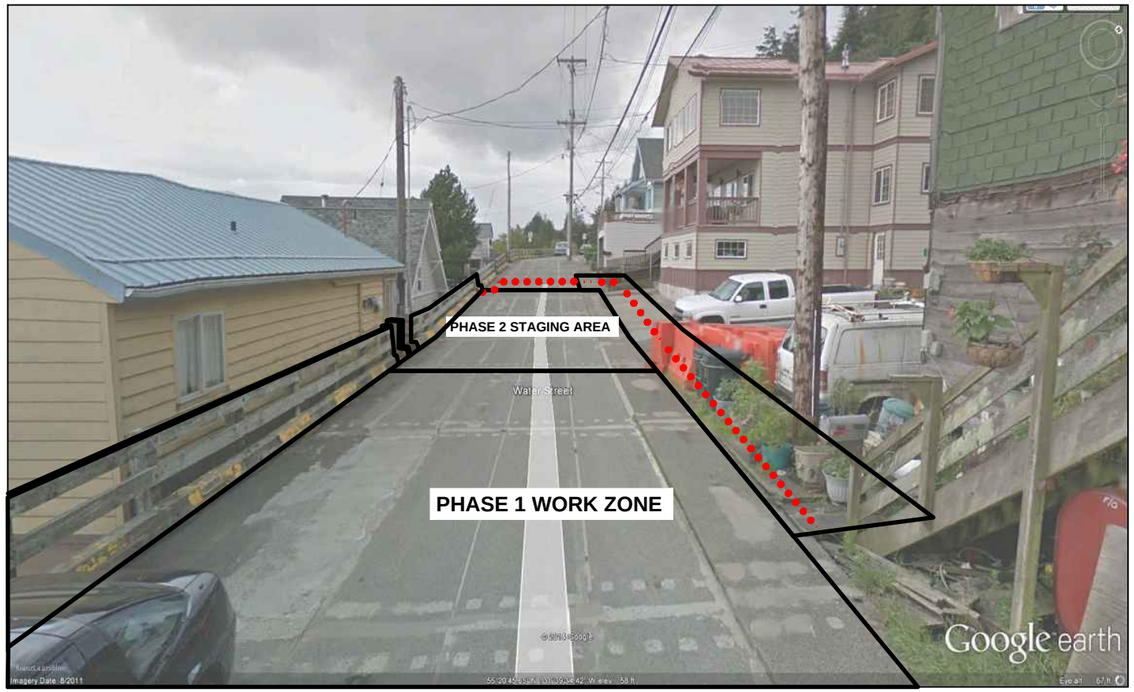

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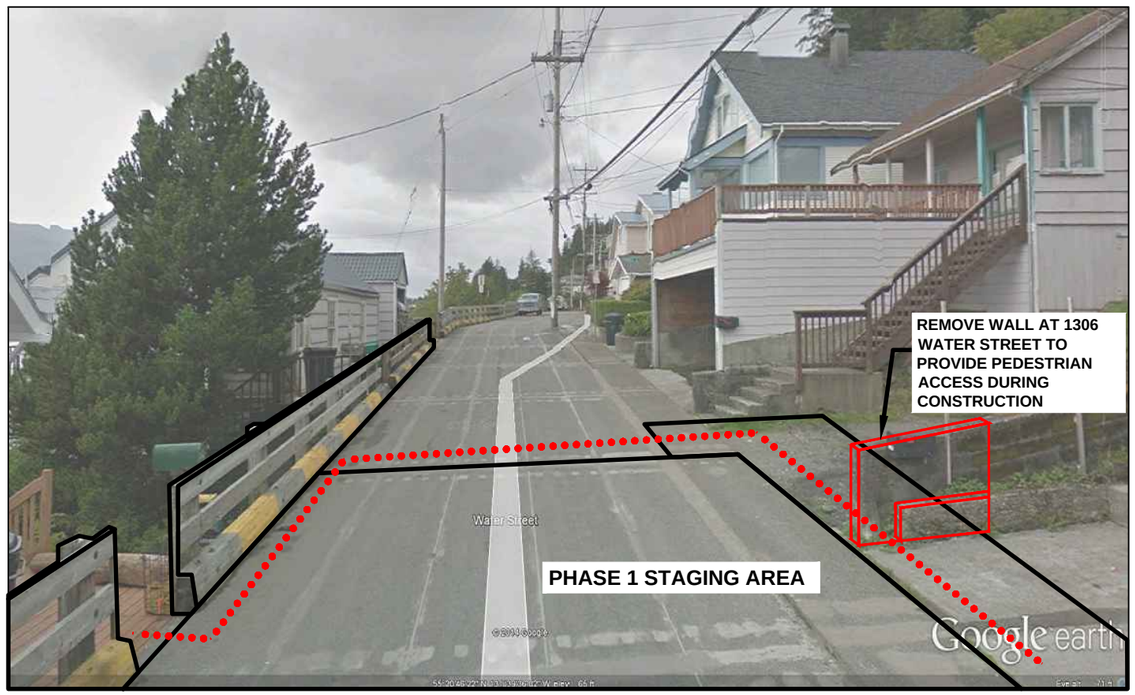


APPROXIMATE STA 21+00

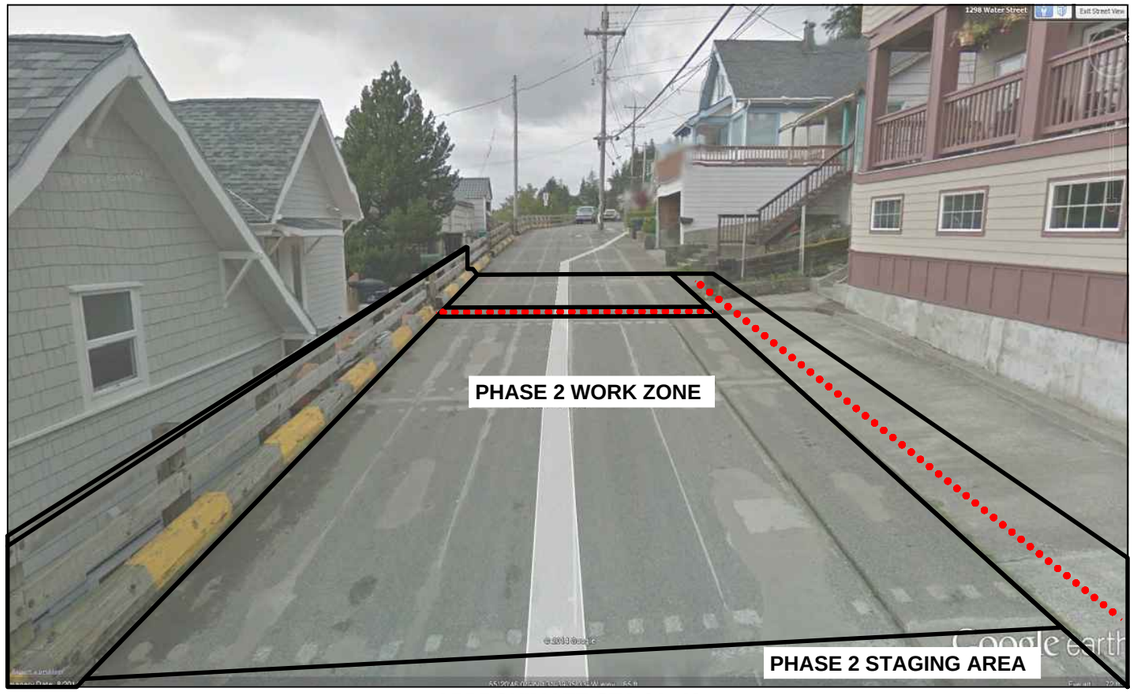
NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND	
PEDESTRIAN ACCESS ROUTE	••••••

Not Updated for As-Built Set



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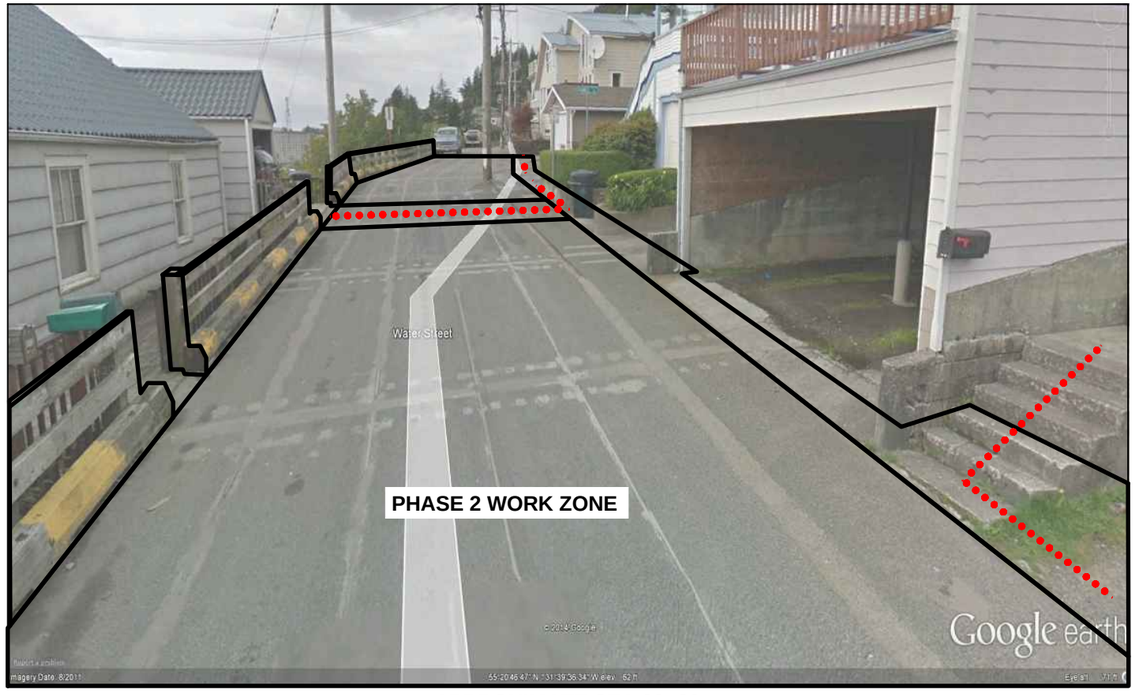

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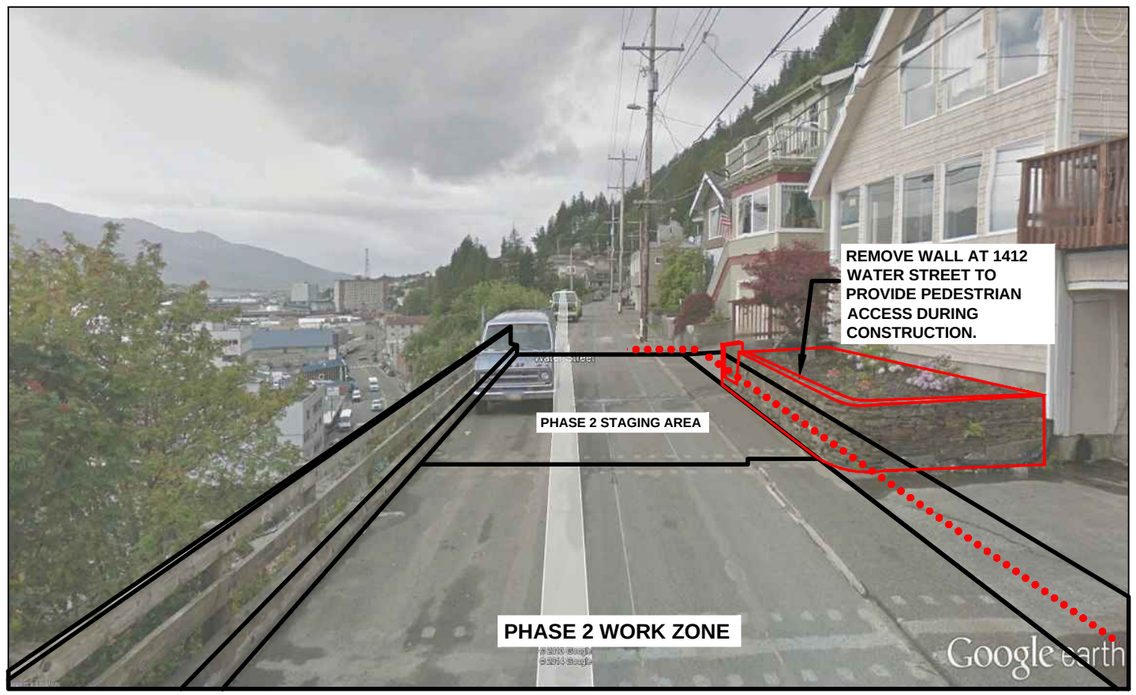


APPROXIMATE STA 19+40

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION
2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND

PEDESTRIAN ACCESS ROUTE	•••••••••••••••••••••••••••••
REMOVAL OF STRUCTURE	———————————

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PHASE 2 "STREET VIEW"

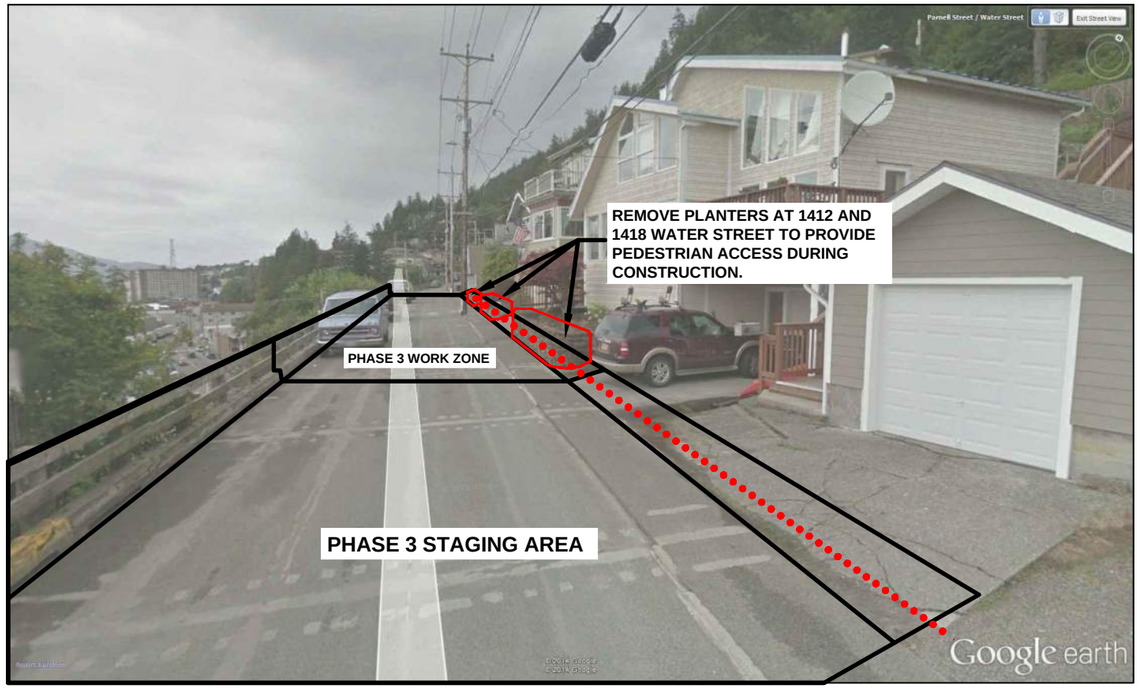
TAB: S09 Friday, November 20, 2015 11:52:53 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**S09**	S16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-STREET VIEW-PEDESTRIAN ACCESS.DWG

Not Updated for As-Built Set



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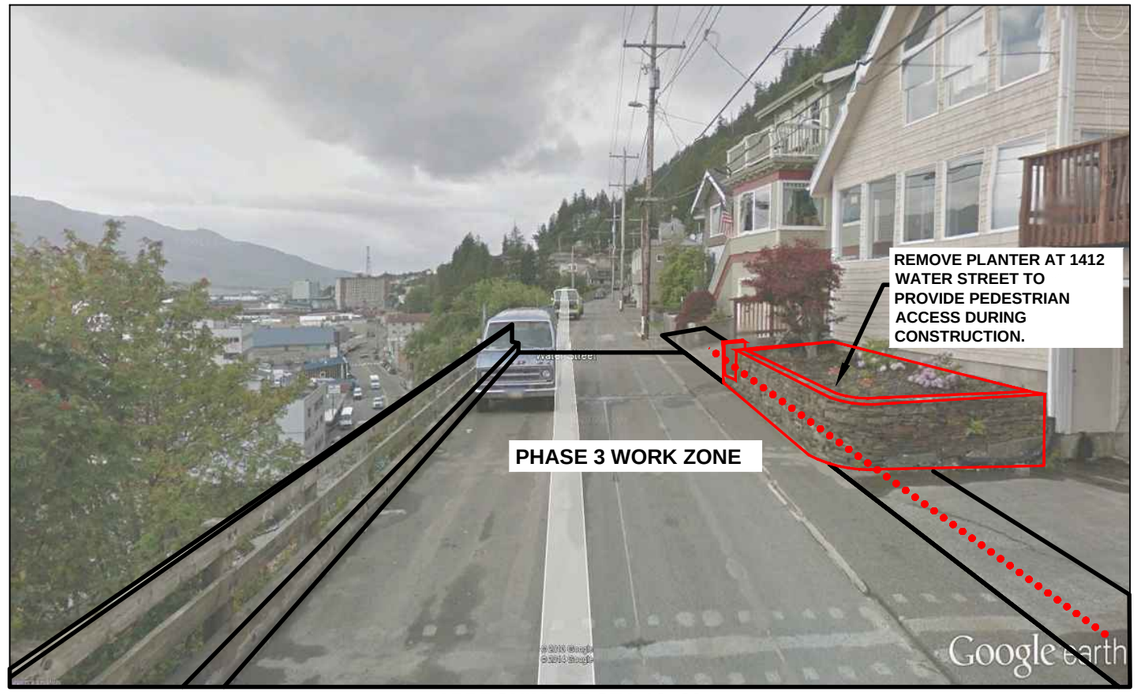

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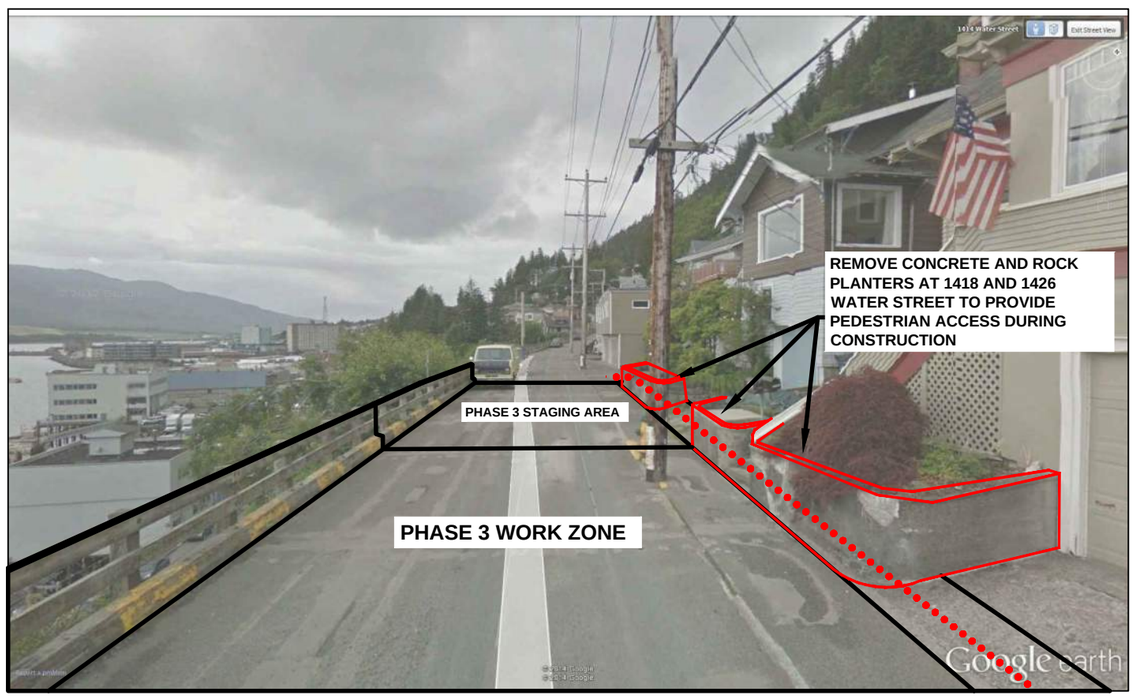

APPROXIMATE STA 18+60

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND

PEDESTRIAN ACCESS ROUTE	•••••••••••••••••••••••••••••
REMOVAL OF STRUCTURE	———————————

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER
40TH

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PHASE 3 "STREET VIEW"

TAB: S10 Friday, November 20, 2015 11:52:58 AM JOSEPH HORAZDOVSKY

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735)	2015	**S10**	S16

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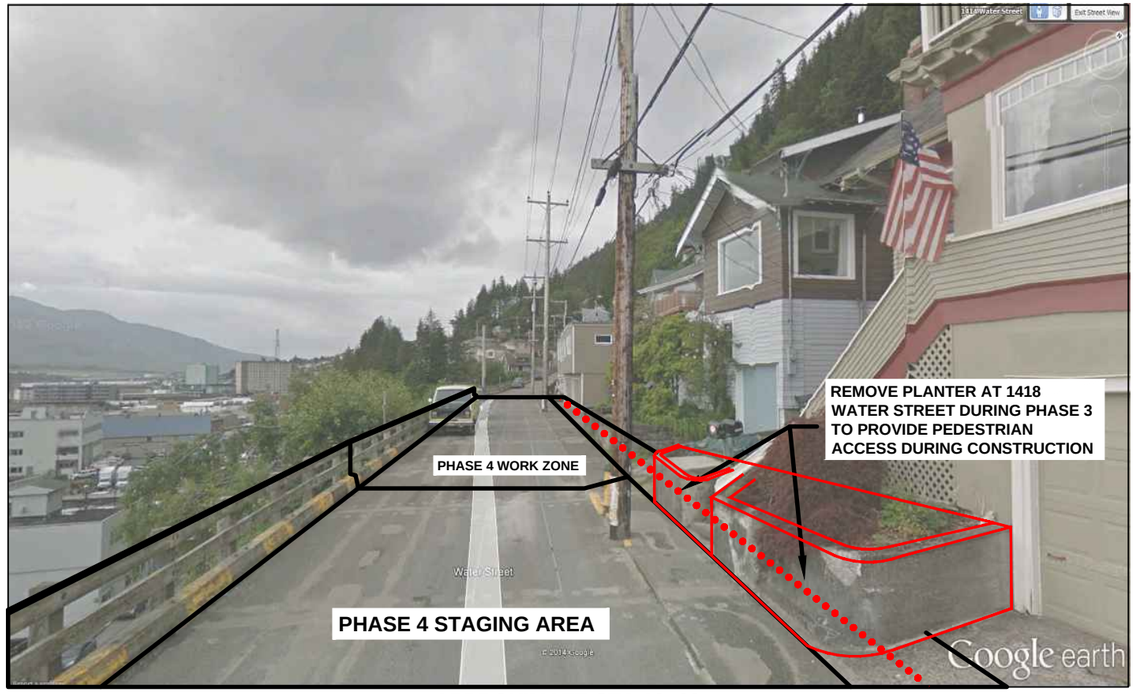

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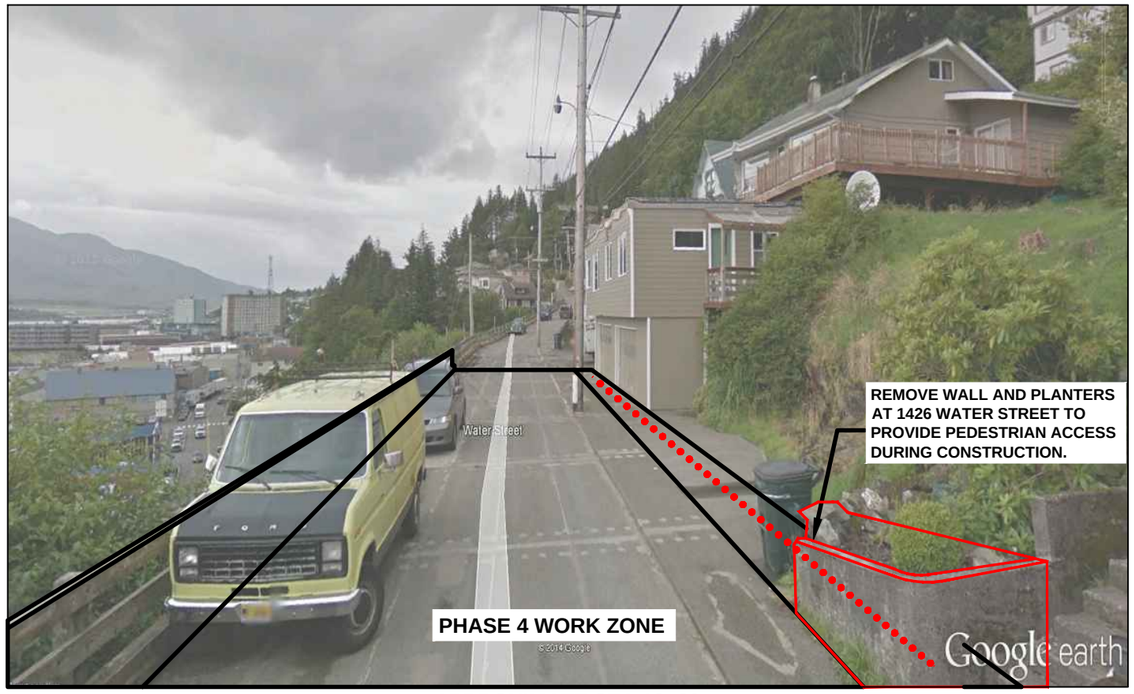

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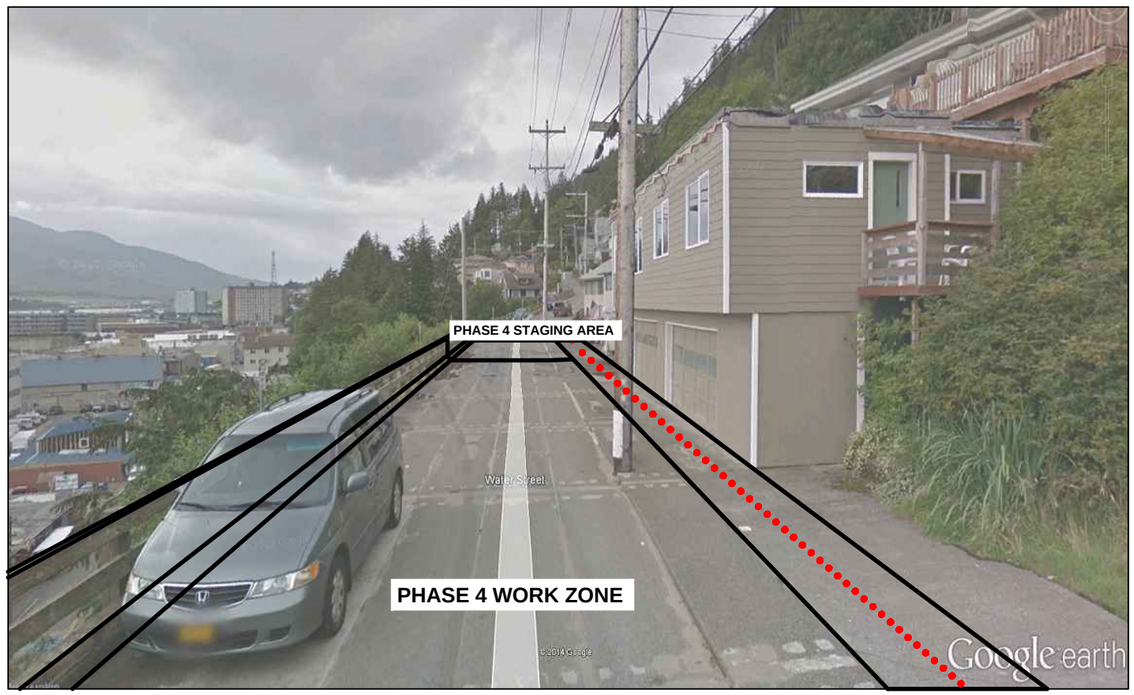


APPROXIMATE STA 17+80

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND	
PEDESTRIAN ACCESS ROUTE	
REMOVAL OF STRUCTURE	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA
49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

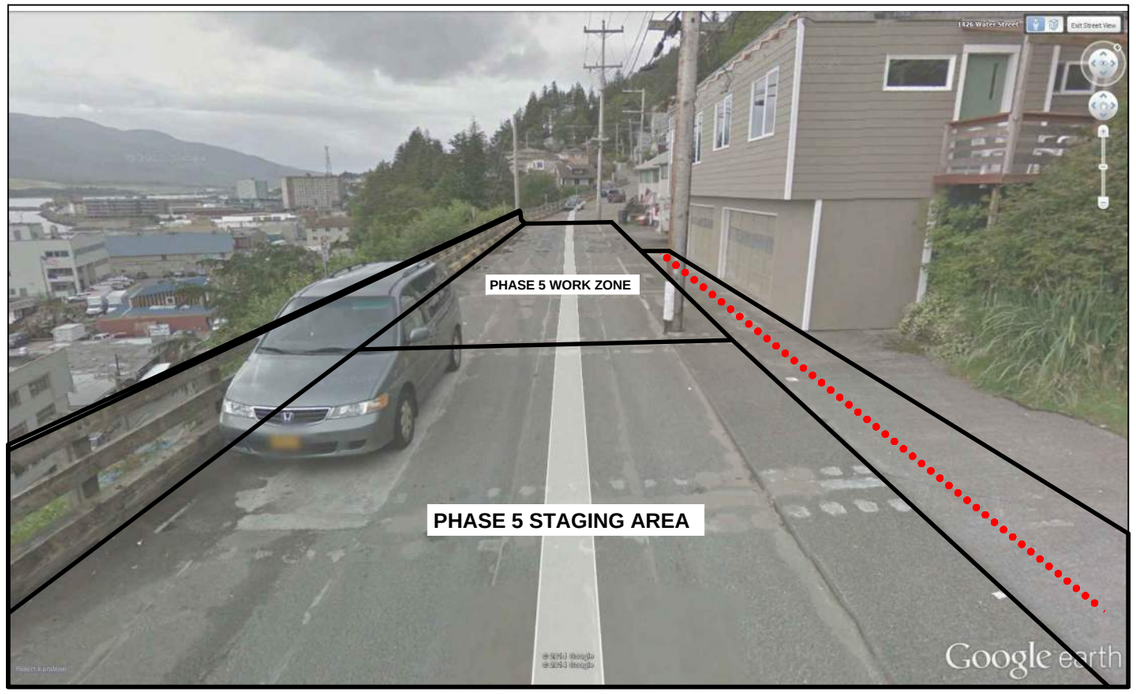
PHASE 4 "STREET VIEW"

TAB: S11 Friday, November 20, 2015 11:53:03 AM JOSEPH HORAZDOVSKY

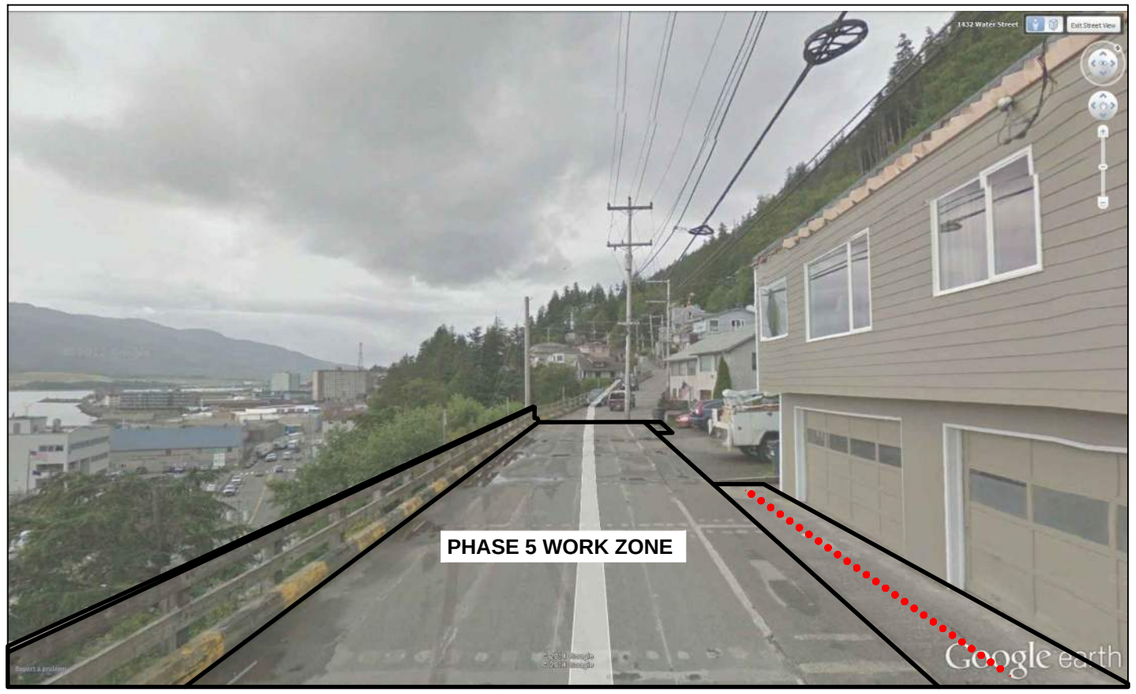
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735)	2015	**S11**	S16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-STREET VIEW-PEDESTRIAN ACCESS.DWG

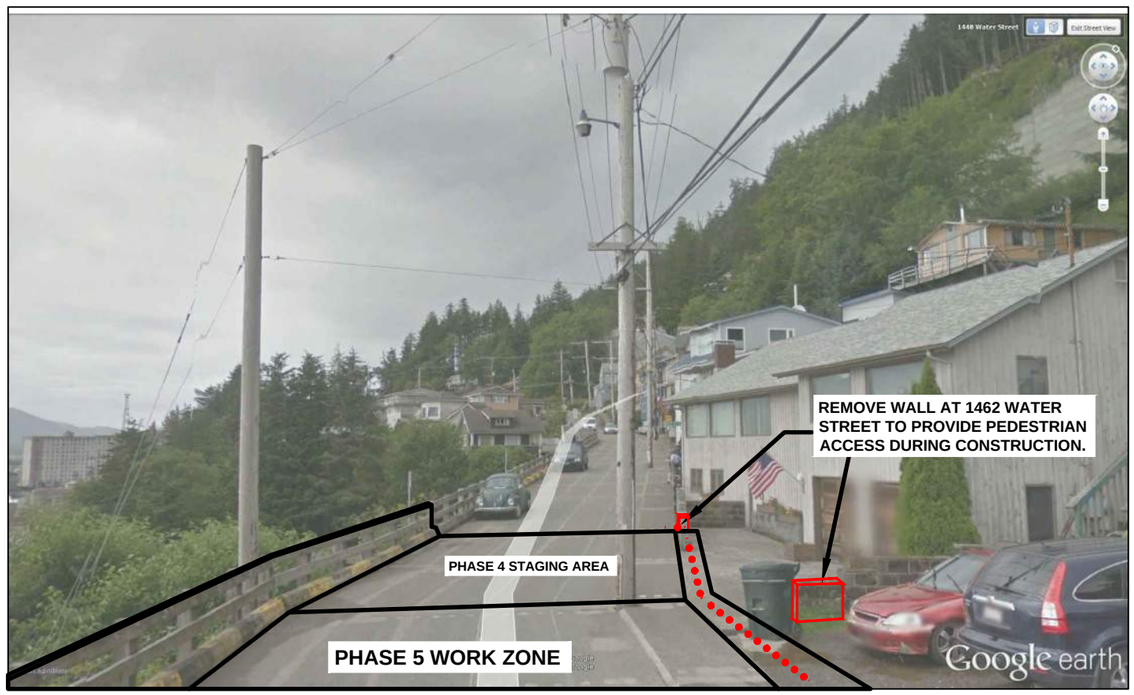
Not Updated for As-Built Set



APPROXIMATE STA 17+60



APPROXIMATE STA 17+20



APPROXIMATE STA 16+40

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND	
PEDESTRIAN ACCESS ROUTE	
REMOVAL OF STRUCTURE	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

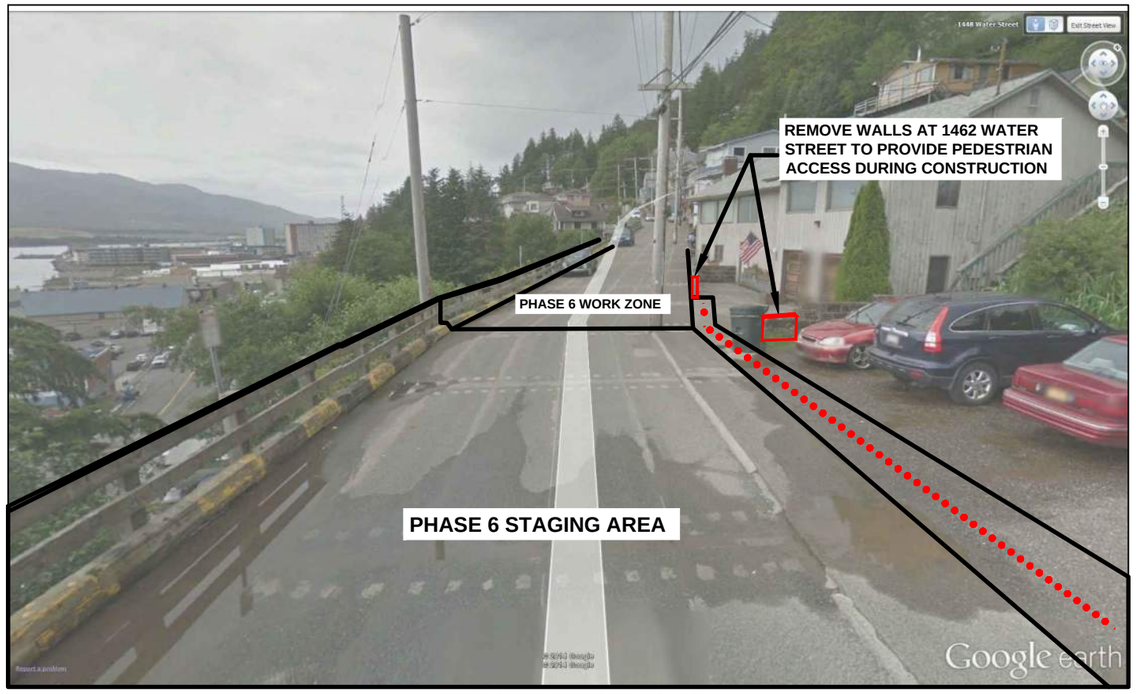
PHASE 5 "STREET VIEW"

TAB: S12 Friday, November 20, 2015 11:53:08 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-000S(735)	2015	**S12**	S16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-STREET VIEW-PEDESTRIAN ACCESS.DWG

Not Updated for As-Built Set



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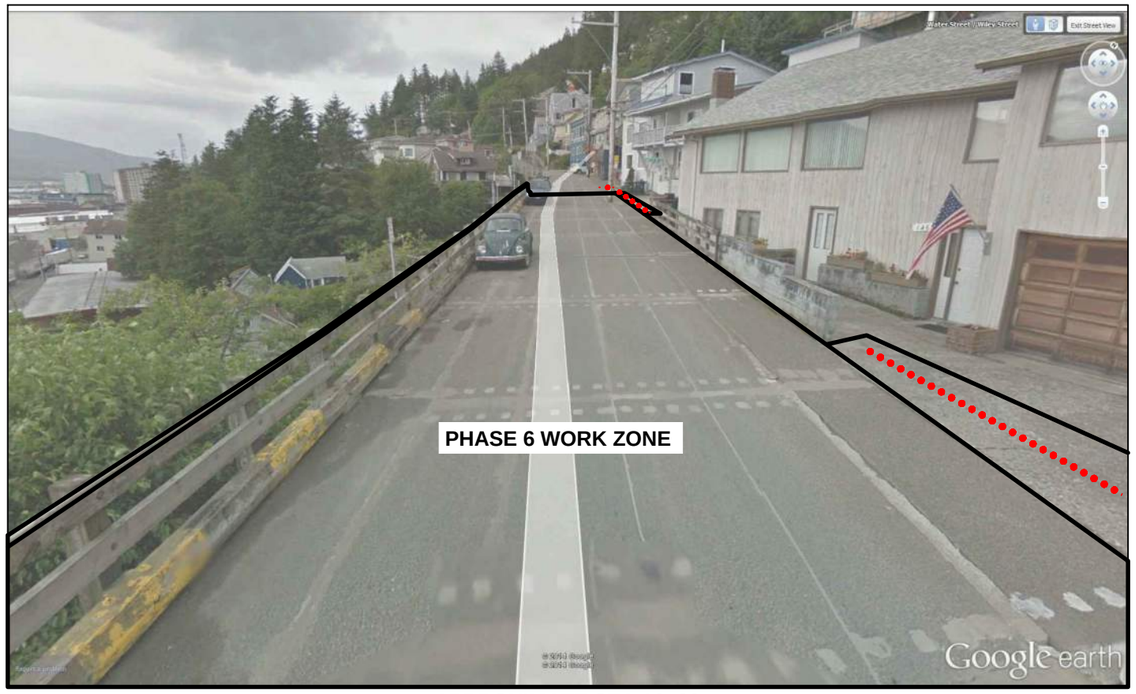
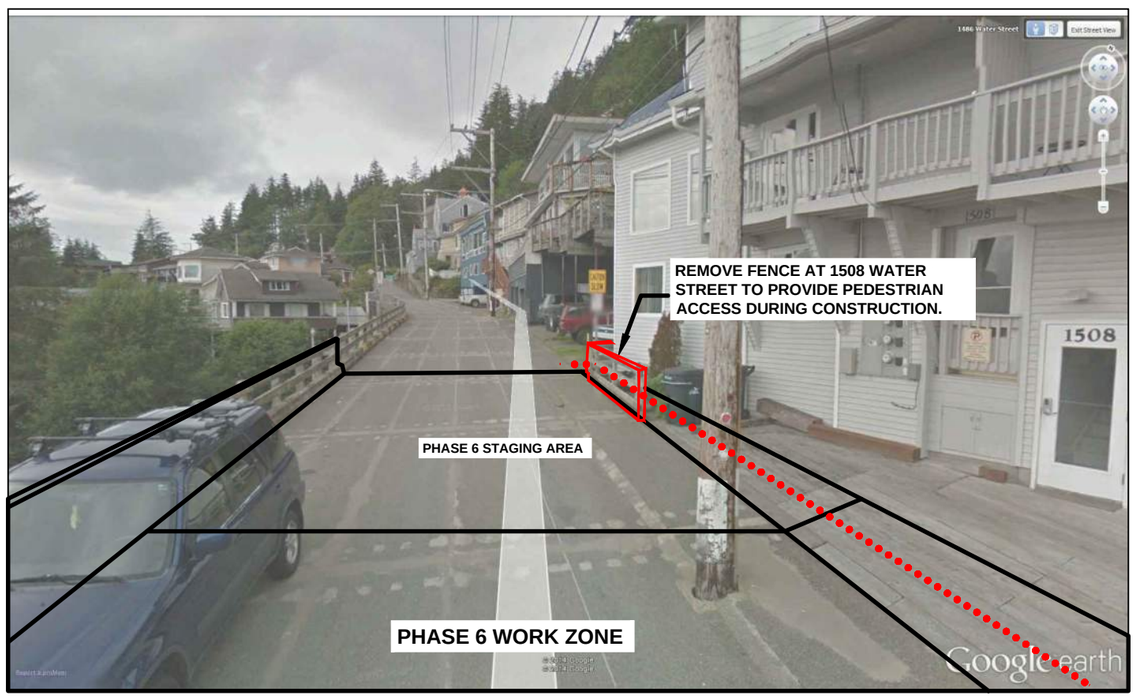


APPROXIMATE STA 16+00



APPROXIMATE STA 15+00

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS SO3-S07 FOR PLAN VIEWS

LEGEND

PEDESTRIAN ACCESS ROUTE	•••••••••••••••••••••••••••••
REMOVAL OF STRUCTURE	———————————

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH — Ryan D. Redick No. CE 12799 — REGISTERED PROFESSIONAL ENGINEER — 11/20/15

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

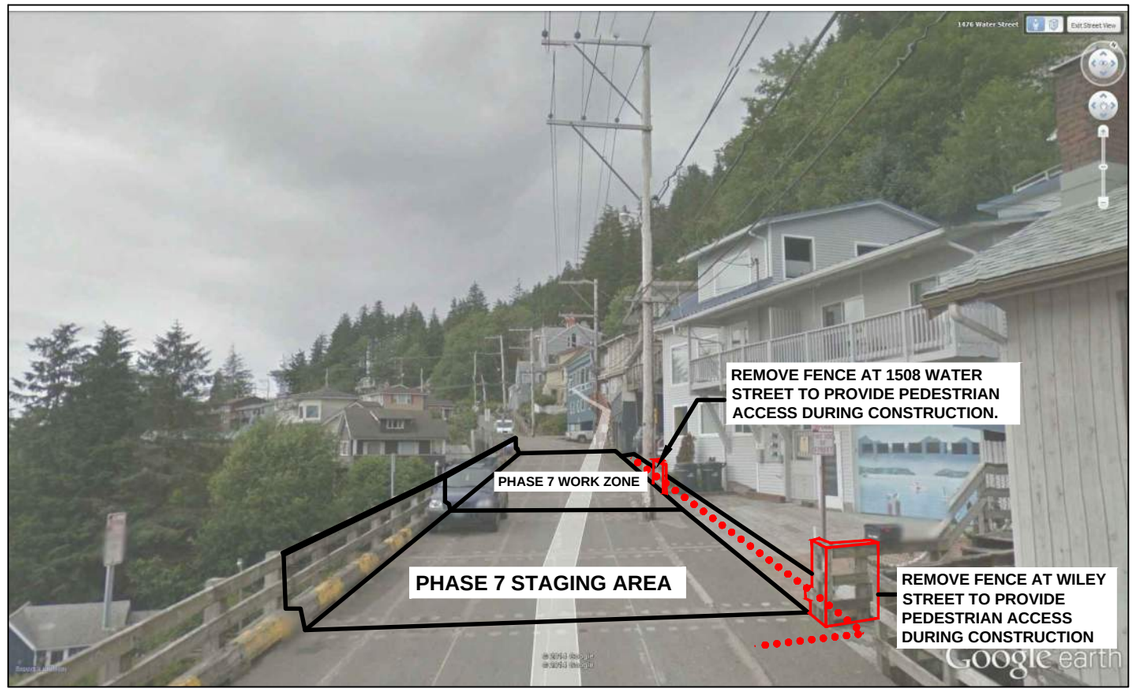
PHASE 6 "STREET VIEW"

TAB: S13 Friday, November 20, 2015 11:53:13 AM JOSEPH HORAZDOVSKY

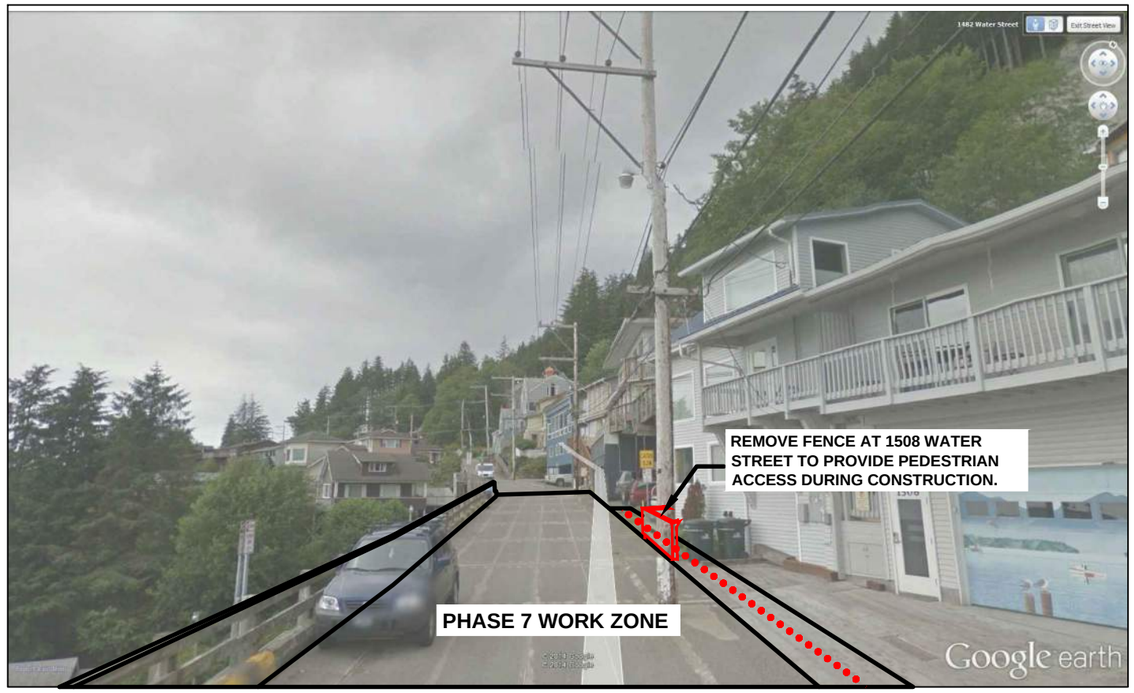
REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			BR-000S(735)	2015	**S13**	S16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-STREET VIEW-PEDESTRIAN ACCESS.DWG

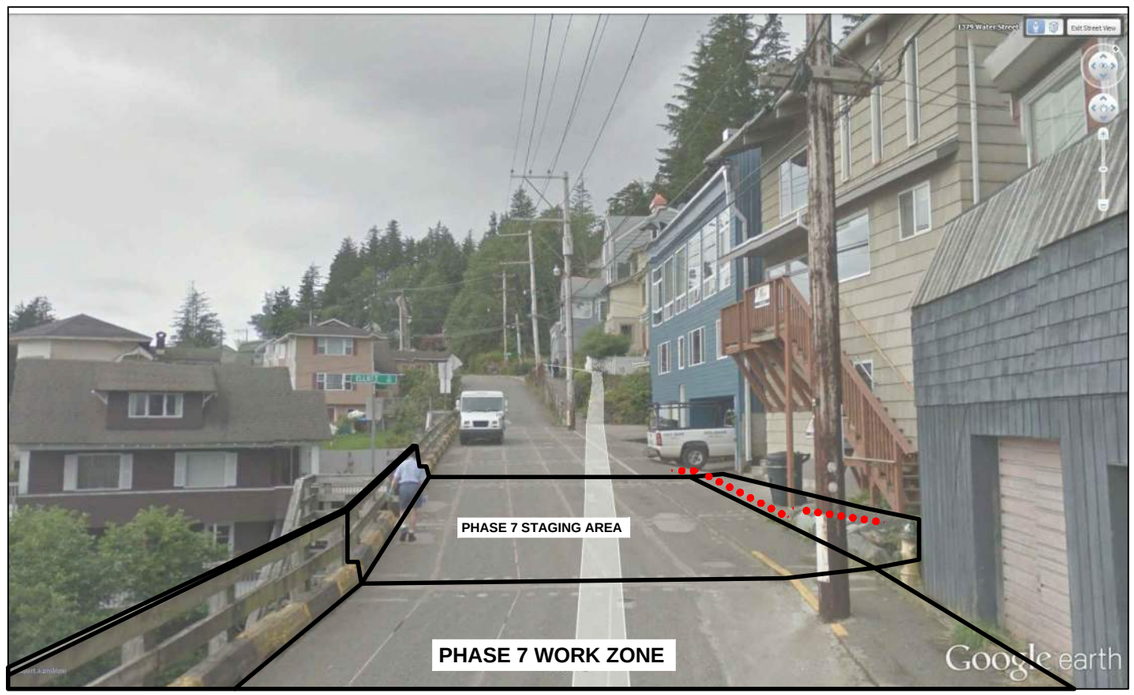
Not Updated for As-Built Set



APPROXIMATE STA 15+40



APPROXIMATE STA 14+60



APPROXIMATE STA 13+80

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND	
PEDESTRIAN ACCESS ROUTE	
REMOVAL OF STRUCTURE	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA · 49TH · Ryan D. Redick · No. CE 12799 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

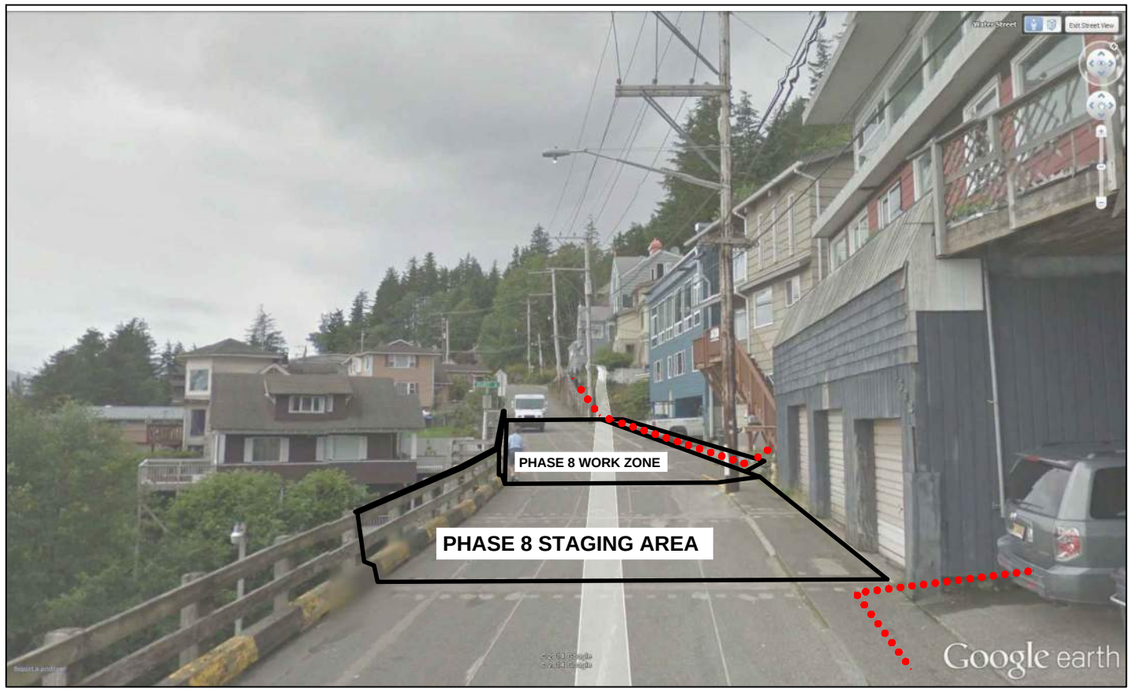
PHASE 7 "STREET VIEW"

TAB: S14 Friday, November 20, 2015 11:53:18 AM JOSEPH HORAZDOVSKY

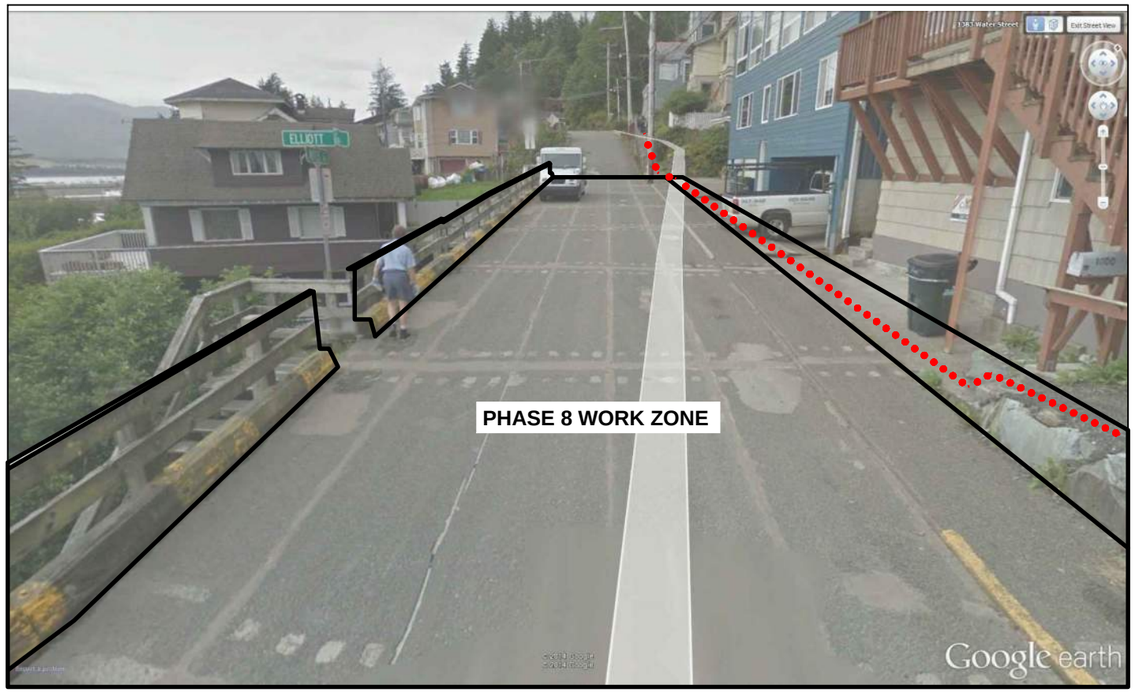
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-000S(735)	2015	**S14**	S16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-STREET VIEW-PEDESTRIAN ACCESS.DWG

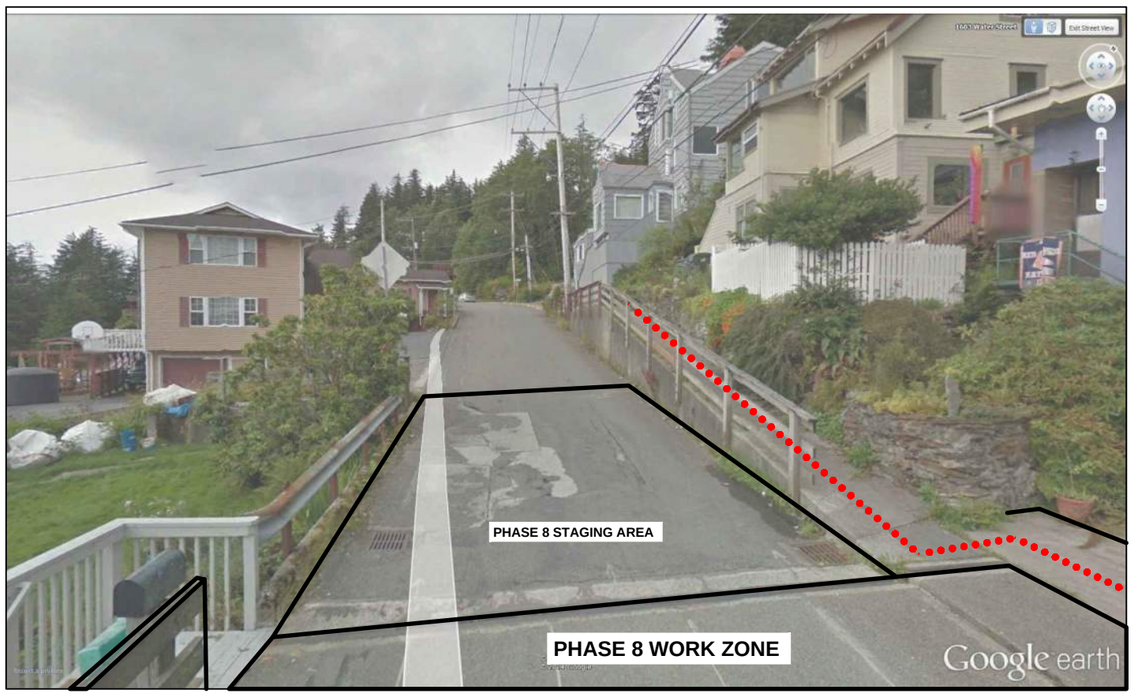
Not Updated for As-Built Set



APPROXIMATE STA 14+00



APPROXIMATE STA 13+50



APPROXIMATE STA 12+40

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION
2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND	
PEDESTRIAN ACCESS ROUTE	
REMOVAL OF STRUCTURE	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PHASE 8 "STREET VIEW"

TAB: S15 Friday, November 20, 2015 11:53:23 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-000S(735)	2015	**S15**	S16

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-STREET VIEW-PEDESTRIAN ACCESS.DWG

Not Updated for As-Built Set

APPROXIMATE STA 23+00

APPROXIMATE STA 12+20

NOTES:

1) ALL VIEWS LOOKING DOWNSTATION

2) SEE SHEETS S03-S07 FOR PLAN VIEWS

LEGEND	
PEDESTRIAN ACCESS ROUTE	
REMOVAL OF STRUCTURE	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER

STATE OF ALASKA
49TH
Ryan D. Redick
No. CE 12799
11/15
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

PHASE 9 "STREET VIEW"

TAB: S16 Friday, November 20, 2015 11:53:28 AM JOSEPH HORAZDOVSKY

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			BR-000S(735)	2015	**S16**	S16

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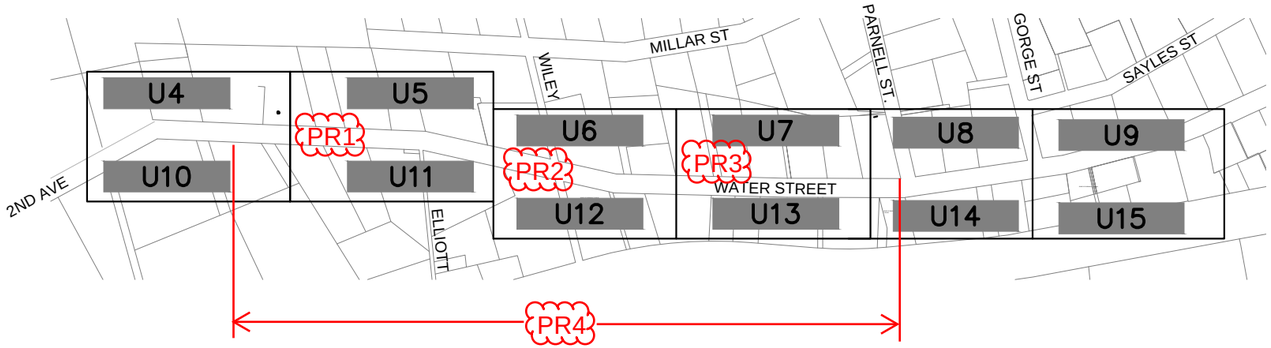

WATER STREET
KEY PLAN

Added CO#27 Pole Relocation Plans (PR0 thru PR14) At end of U sheets (after U56).

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: TED	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHCENTRAL REGION
STATE OF ALASKA 49th KEITH NELSON FE-7855 9-7-15 REGISTERED PROFESSIONAL ENGINEER	KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534
DESIGNED BY: KCN	**UTILITY KEY PLAN**
DRAWN BY: KCN	

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGEWSB U1+4-9 PSE.DWG

TAB:

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
AB		As-Built Set	BR-000S(735) ~69534	2015	**U01**	U56

SYMBOLS AND LEGEND

EM — EXISTING ELECTRIC METER

OPTICAL NETWORK TERMINAL, ONT
NETWORK INTERFACE DEVICE, NID
T = TELEPHONE, TV = CABLE TV

T — PADMOUNT TRANSFORMER

COMBINATION METER MAIN / METER PACK

DISCONNECT, CIRCUIT BREAKER TYPE

PANELBOARD

POWER POLE / POWER POLE W/LIGHT

P8 — POWER POLE W/ SIDEWALK ARM & POLE #

EXIST LIGHT POLE W/ SIDEWALK BOX & POLE #

EXIST LIGHT POLE / LIGHT POLE W/MASTARM

A1
#3 — NEW LIGHT POLE FIXTURE TYPE AND POLE #

GUY

GROUND, NEUTRAL, HOT CONDUCTORS - #10 UNLESS OTHERWISE NOTED. INSTALL EQUIPMENT GROUNDING CONDUCTOR IN EACH BRANCH CIRCUIT. MINIMUM BRANCH CIRCUIT SIZE IS 2#10 W/ 1#10G. EACH CIRCUIT IN A MULTIWIRE CIRCUIT SHALL HAVE ITS OWN NEUTRAL. IN GENERAL, INDOOR BRANCH CIRCUITS SHALL BE TYPE THHN/THWN RUN IN PVC SCHEDULE 80. 1"C MINIMUM HOMERUN SIZE. SEE SECTION 662 FOR ADDITIONAL INFO.

WHERE WIRE SIZE IS SHOWN BY HOMERUN THAT SIZE WIRE SHALL BE USED FOR THE ENTIRE CIRCUIT WITH THE CONDUIT SIZED PER THE WIRE COUNT.

DASHED EQUIPMENT INDICATES EXISTING OR FUTURE EQUIPMENT, REFER TO DRAWING NOTES.

TV — CABLE TELEVISION LINE -GCI

E — ELECTRIC UNDERGROUND - KPU ELECTRIC

OHE — ELECTRIC OVERHEAD - KPU ELECTRIC

T — TELEPHONE - KPU TELECOMM

W — WATER LINE

JUNCTION BOX

HEAT TAPE CONNECTION
A=BEGINNING OF HEAT TAPE RUN, B=END OF RUN

HEAT TAPE DISCONNECT SWITCH

RECEPTACLE (SEE SPEC FOR NEMA TYPE)

RECEPTACLE GROUND FAULT INTERRUPTER

PULL BOX, HANDHOLE

HEAT TAPE END OF HEAT TAPE RUN

WATER VALVE

CULVERT

HYDRANT

HATCH PATTERN LEGEND

- ASPHALT
- BEDROCK
- BUILDING
- CONCRETE
- DRIVEWAY - WOOD
- GRAVEL
- LANDING PLATFORM / DECK
- STAIRS - BRICK
- STAIRS - METAL / WOOD

ABBREVIATIONS

AUR	ADVANCE UTILITY RELOCATION PROJECT
C	CABLE TV PEDESTAL (GCI)
CN	CONCENTRIC NEUTRAL
CoK	CITY OF KETCHIKAN
EC	ELECTRICAL CONTRACTOR
GCI	GCI (CABLE TV COMPANY)
GEC	GROUNDING ELECTRODE CONDUCTOR
GFI	GROUND FAULT INTERRUPTER
KPU-E	KPU ELECTRICAL DIVISION
KPU-T	KPU TELECOMMUNICATIONS DIVISION
KV	KILOVOLT
NID	NETWORK INTERFACE DEVICE
ONT	OPTICAL NETWORK TERMINAL (KPU-T)
PEX	POLYETHYLENE RACEWAY (HEAT TAPE)
T	TELEPHONE PEDESTAL (KPU-T)
TV	CABLE TV (GCI)
WP	WEATHERPROOF

U and V Sheets Project Notes:

General Information:

- The intent of the project is to install a new under the bridge distribution system, underground services to the homes and demolish existing overhead distribution system after the new services are energized.
- Prior to the start of the work the Contractor shall meet with the DOT, KPU-E, KPU-T, GCI and the City to discuss project schedule, sequence of work, and methods to handle outages. Work cannot proceed until the issues are agreed upon.
- All electrical work shall comply with KPU safety programs including OSHA clearances and fire protective clothing policy. All electrical installation work shall comply with KPU and RUS construction details and specifications. Coordinate with KPU to obtain their latest requirements.
- GCI will install and terminate all cabling and NIDs associated with their infrastructure. The contractor shall coordinate the project work schedules with GCI to allow GCI adequate time to perform their work.
- The DOT has issued an Advance Utility Relocation (AUR) project in a separate contract. The AUR contract relocated the 34.5kV aerial circuit out of the project work area up to 3rd Avenue, move the 12.47kV from the middle tier on the existing poles to the upper tier (formerly occupied by the 34.5kV circuit), raise the overhead service drops to the homes and arrange the remaining existing Water Street aerial infrastructure to provide additional working clearance for the heavy equipment to operate during the bridge construction project. It is anticipated that the AUR project will be completed by the time the work on the bridge construction contract begins. The drawings reflect the field conditions as of August 2015, field confirm the installation prior to beginning construction.

Electrical Scope of Work:

Water Street

Allowed drilled/epoxy inserts only into transverse grout joints between PT bars

- The sequence of electrical work shall coincide with the bridge construction phasing.
- All inserts and fasteners in the bridge deck will be installed by the bridge deck fabricator. The use of shot or drilled fasteners in the bridge deck is not allowed. During the submittal phase, coordinate with the bridge deck fabricator the location of all inserts in the bridge deck for mounting electrical equipment and conduit racks.
- Raise aerial infrastructure as required by bridge construction equipment to provide additional clearance for bridge construction project as needed: CO#27, Temporarily Relocates power Poles P4 thru P8 to accommodate trestle construction.
- Install new under bridge electrical distribution system complete with new service laterals to the homes in the project work area. Install new freestanding Pole P10. Install the heat tape on the water line; heat tape and connections are provided in Section 627. The electrical installation is installed as work item 662(1). See H05-09 for street light installation.
- Install new under bridge telepcommunication distribution system complete with new service laterals to the homes in the project work area. Work is performed for KPU Telecommunications. The raceway systems are installed as work item 662(2); the cabling and terminations are installed as work item 663(1).
- Revise service to KPU Telecommunications VDSL cabinet at Parnell Street Stairs. The raceway systems are installed as work item 662(2); the cabling and terminations are installed as work item 663(1).
- Install new under bridge cable TV distribution raceway system complete with new service raceway to the homes in the project work area. Work is performed for GCI. GCI will install cabling in the raceways; install their pedestals and NIDs and make all terminations. The raceway systems are installed as work item 662(3). Noticed many GCI conduit did not have putty, this is not corrected by project as the work is incidental to running the cabling.
- After the new distribution and 120/240V systems are installed and accepted, remove the existing overhead distribution system from Pole P4-P10. Work includes demolition of poles, guys, conductors, transformers, street lights. Turn over the salvaged infrastructure per KPU Electric.
- Remove the existing 12.47kV jumpers from the middle to the top tier at Poles P1, P10 and P1P.
- Coordinate with GCI to have them remove their cable plant including overhead drops to their NIDs on the homes.
- See V sheets for KPU Telecommunication cabling and termination info.
- Install new air core pipe and tie into existing air system. Test system per spec 663 requirements. See V sheets for additional info.
- Demo existing KPU-T telephone infrastructure per V sheets. Turn over the salvaged infrastructure per KPU Telecommunications.
- See H05-H09 for lighting installation.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

CHECKED BY: TED

STATE OF ALASKA · 49th · KEITH NELSON · EE-7655 · 8-1-15 · REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U2-3 OVERALL PLAN PSE.DWG

TAB: U02

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM BRIDGES
PROJECT #69534

SYMBOLS & NOTES

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735)	2015	U02	U56

GENERAL NOTES

IN GENERAL THE PROJECT SHALL INSTALL NEW UNDER BRIDGE DISTRIBUTION SYSTEMS WITH UNDERGROUND SERVICES TO HOMES FROM POLE P3-P10.

A INSTALL NEW FREESTANDING POLE P10.
B INSTALL NEW 12.47KV & 7.2KV RISERS ON POLE P1 AND P10.
C INSTALL DEADENDS AND JUMPERS ON POLE P00.
D INSTALL NEW KPU-TELEPHONE RISERS ON POLE P2 AND P10.
E REVISE KPU TELECOMMUNICATION CABLING AT VDSL CABINET AT PARNELL & P10. SEE V SHEETS FOR ADDITIONAL KPU TELECOMMUNICATION WIRING INCLUDING REVISIONS TO VDSL CABINET AT PARNELL STAIRS.
F INSTALL NEW GCI RISERS ON POLE P2 AND P10.
G INSTALL RACEWAYS SYSTEMS UNDER THE BRIDGE FOR KPU-E, KPU-T AND GCI SYSTEMS.
H INSTALL NEW TRANSFORMERS AT UTILTY PADS, DISTRIBUTION AND SERVICE CABLES. CONNECT SERVICES TO EXISTING SERVICE ENTRANCES AT THE HOME.
I FOR KPU-T SYSTEM: INSTALL NEW PEDESTALS AT UTILTY PADS, FIBER OPTIC DISTRIBUTION AND SERVICE CABLES, AND CONNECT SERVICES TO EXISTING ONT AT THE HOME.
J USING THE EMPTY CONDUIT SYSTEMS INSTALLED IN ITEM G, GCI WILL INSTALL THEIR PEDESTALS, CABLING AND MAKE CONNECTIONS TO THE NID AT THE HOME
K INSTALL HEAT TAPE SYSTEM ON WATER LINE AND ILLUMINATION SYSTEM PER H05-H09

AFTER THE NEW SYSTEMS ARE OPERATIONAL:
L REMOVE EXISTING OVERHEAD DISTRIBUTION SYSTEM RUNNING P4-P10: WOOD POLES, 12.47KV, 120/240V DISTRIBUTION, SYSTEM NEUTRAL, STREET LIGHTS, TRANSFORMERS, AND OVERHEAD SERVICE DROPS. REMOVE 12.47KV CONDUCTORS P1-P3, REMOVE 12.47KV DISTRIBUTION ON THE MIDDLE TIER BETWEEN P00 AND P1 AND TOP TIER FROM P10-P1P-P1M. REMOVE EXISTING JUMPERS AT POLES P1, P10, P1P.
M REMOVE EXISTING POLE P10T AND RETURN TO KPU-E.
N REMOVE KPU-T OVERHEAD FIBER OPTIC DISTRIBUTION CABLE AND DROPS P3-P10.
O REMOVE EXISTING KPU-T OVERHEAD FIBER OPTIC DISTRIBUTION AND OVERHEAD FIBER DROPS P3-P10.
P COORDINATE WITH GCI TO HAVE THEM REOMVE THEIR OVERHEAD INFRASTRUCTURE AND SERVICE DROPS TO THE HOMES P3-P10

ELLECTRICAL NOTES:

(1) INSTALL NEW FREESTANDING POLE P10 (BASE OF PARNELL STAIRS) WITH RISERS AND MIGRATE EXISTING DISTRIBUTION FROM EXISTING POLES P10, -10T, P1P, AND P11. REMOVE EXISTING POLE P10, P10G AND P10T. SEE U14, U16, U23-28, V13-14.

(2) MODIFY EXISTING POLE P1, INSTALL NEW CROSSARMS, INSULATOR, SEE U04, U10, U41-42.

install sidewalk guy

(3) MODIFY EXISTING POLE P00, INSTALL NEW CROSSARMS, INSULATOR, DISCONNECT MIDDLE TIER 12.47KV BETWEEN P00 AND P1, SEE U04, U10, U42.

(4) REMOVE JUMPERS FROM EXISTING POLE P1P AND TOP TIER 12.47KV (35KV CONSTRUCTION) BETWEEN EXISTING POLES P10-P1P-P1M.

(5) INSTALL NEW RISER CONDUITS FOR GCI CABLING. AT EXISTING POLE P2 , SEE U18, V20.

P1

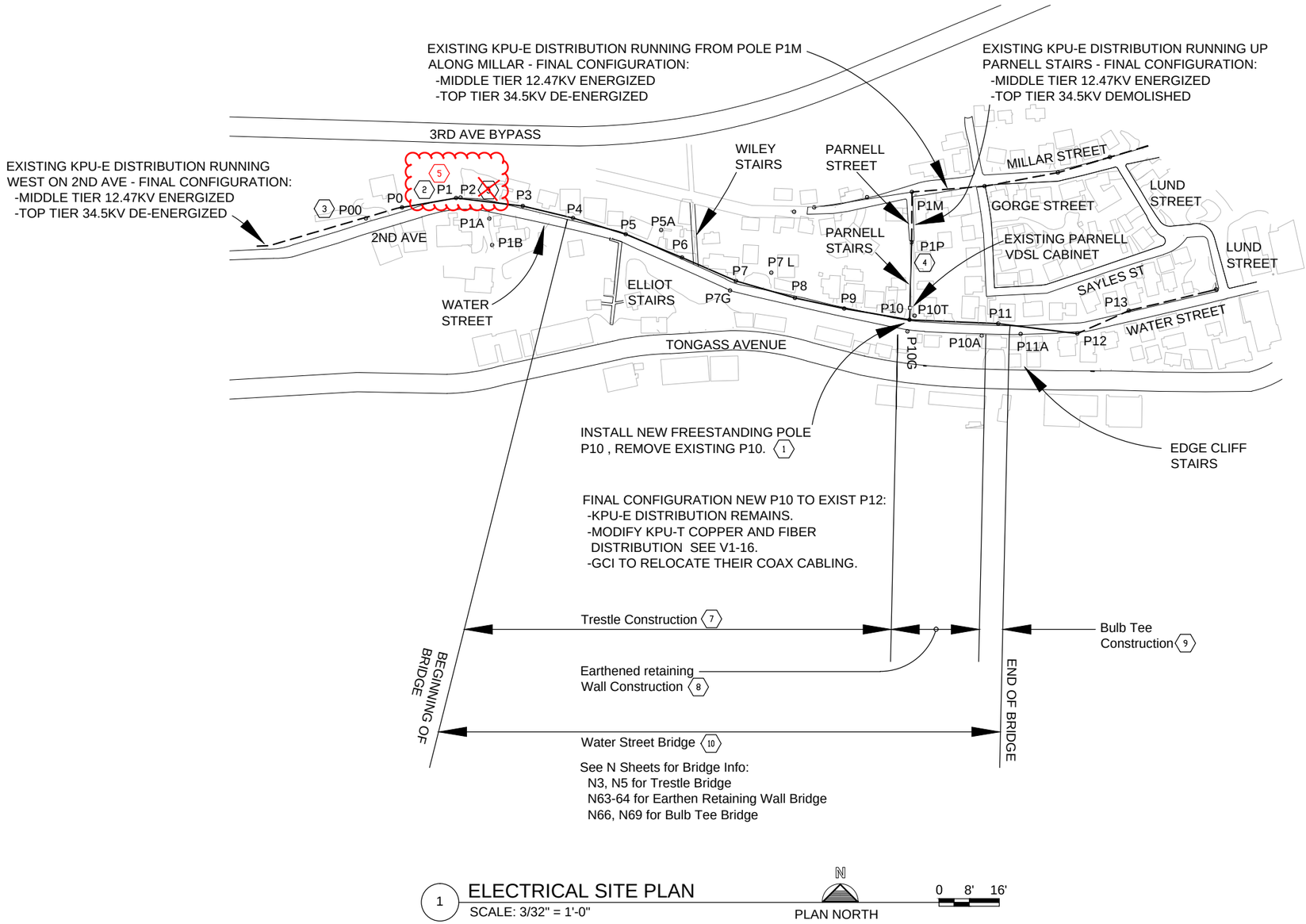
(6) INSTALL NEW SERVICE POLE P3S FOR SERVICES TO 1622, 1626/1628, SEE U 11, V2, V11, V20

(7) TRESTLE BRIDGE -INSTALL CONDUIT SYSTEM UNDER THE BRIDGE FOR KPU-E, KPU--T, GCI DISTRIBUTION , SEE U39

(8) EARTHEN RETAINING WALL BRIDGE -INSTALL CONDUIT SYSTEM FOR KPU-E, KPU--T, GCI DISTRIBUTION IN A TRENCH, SEE 1/U35.

(9) INSTALL CONDUIT STUBS THRU ABUTMENTS TO ALLOW FOR FUTURE DISTRIBUTION SYSTEMS., SEE U16-18.

(10) AFTER THE NEW SYSTEMS ARE INSTALLED AND ACCEPTED DEMOLISH THE EXISTING POLES P4-P10 AND ATTACHED OVERHEAD SYSTEM. U5-15.



See N Sheets for Bridge Info:
N3, N5 for Trestle Bridge
N63-64 for Earthen Retaining Wall Bridge
N66, N69 for Bulb Tee Bridge

(1) ELECTRICAL SITE PLAN
SCALE: 3/32" = 1'-0"

N
PLAN NORTH
0 8' 16'

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

CHECKED BY: TED
DESIGNED BY: KCN
DRAWN BY: KCN

STATE OF ALASKA
49th
KEITH NELSON
KE-7655
9-1-15
REGISTERED PROFESSIONAL ENGINEER

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U2-3 OVERALL PLAN PSE.DWG
TAB: U03
KCN12_000

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM BRIDGES
PROJECT #69534

ELECTRICAL SITE PLAN

REVISIONS NO.	DATE	DESCRIPTION
AB		As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	U03	U56

RFI 193

Question from Jay Bean (Dawson Construction) at 09:01 AM on 06/26/2018:

Pole P00 is mentioned in drawing U03 as install new crossarms, insulator, disconnect middle tier 12.47kv between Pole 00 and P1. General note C on U03 states Install new deadends and jumpers on P00. More details are needed for Pole 00.

Installing deadends on pole 00 will require the pole to be guyed and anchored. Please provide a detail drawing for how we need to complete pole 00 including location of deadends and KPU units, guying detail and anchor detail.

Pole #P1 is currently guyed to the bottom of pole #P2. There is no detail on updating the guys on Pole #P1 to accommodate the risers. Please advise any guying and anchor requirements for Pole #P1.

Attachments:

Pole 00 and P2.pdf

All Replies:

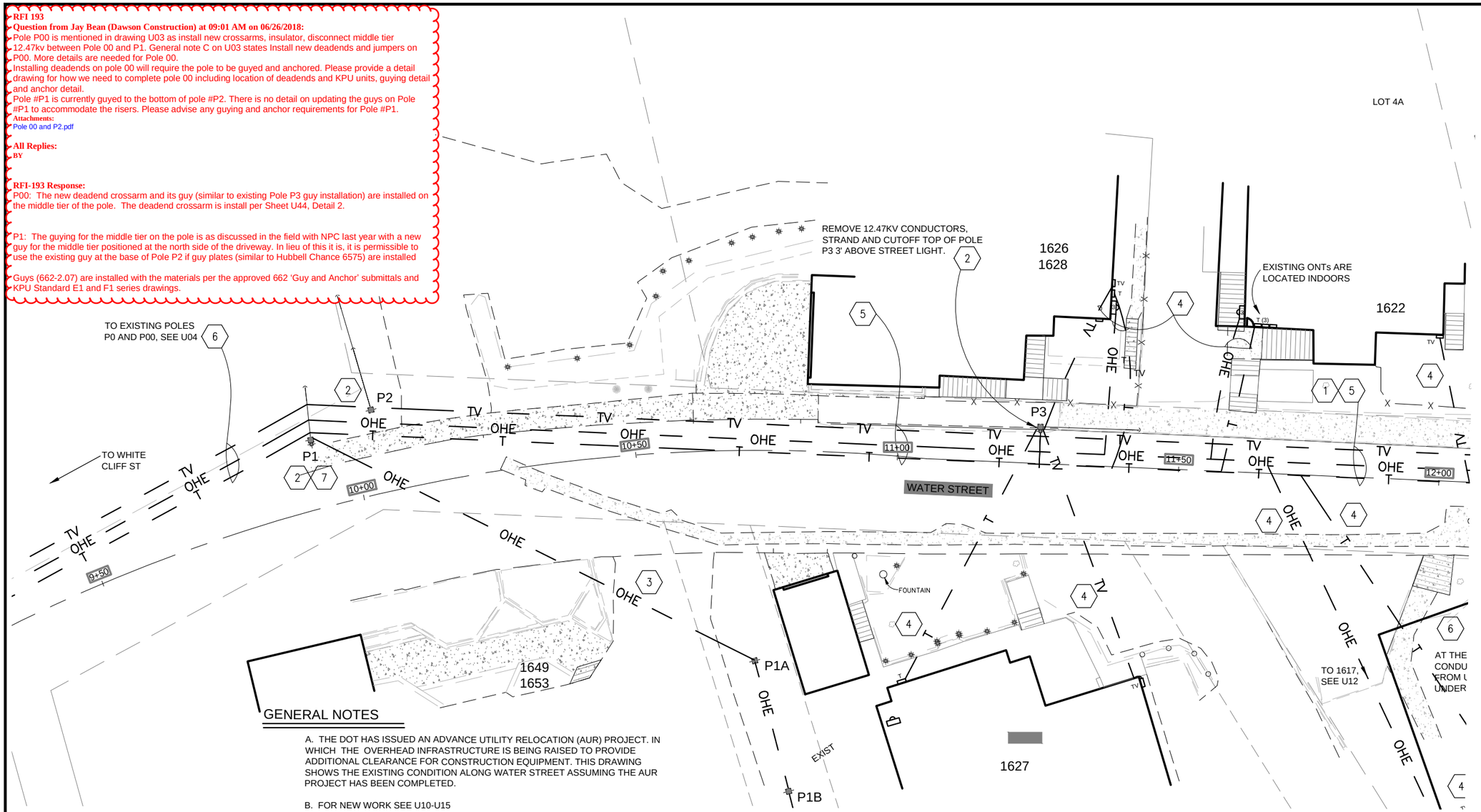
BY

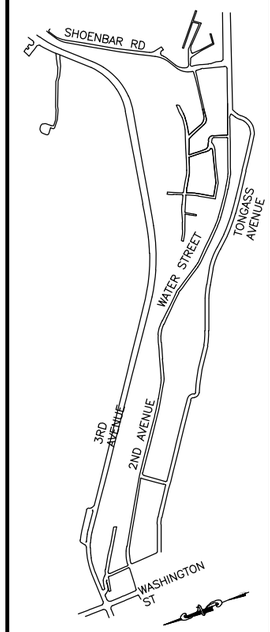
RFI-193 Response:

P00: The new deadend crossarm and its guy (similar to existing Pole P3 guy installation) are installed on the middle tier of the pole. The deadend crossarm is install per Sheet U44, Detail 2.

P1: The guying for the middle tier on the pole is as discussed in the field with NPC last year with a new guy for the middle tier positioned at the north side of the driveway. In lieu of this it is, it is permissible to use the existing guy at the base of Pole P2 if guy plates (similar to Hubbell Chance 6575) are installed

Guys (662-2.07) are installed with the materials per the approved 662 'Guy and Anchor' submittals and KPU Standard E1 and F1 series drawings.





GENERAL NOTES

A. THE DOT HAS ISSUED AN ADVANCE UTILITY RELOCATION (AUR) PROJECT. IN WHICH THE OVERHEAD INFRASTRUCTURE IS BEING RAISED TO PROVIDE ADDITIONAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. THIS DRAWING SHOWS THE EXISTING CONDITION ALONG WATER STREET ASSUMING THE AUR PROJECT HAS BEEN COMPLETED.

B. FOR NEW WORK SEE U10-U15

C. FOR PHOTOS & DETAILS OF THE POLES SEE U26-U27.

D. For Mid-Project Temporary Pole Relocation CO#27, see PR0-PR14 after U56

ELECTRICAL NOTES

1. AFTER THE UNDER BRIDGE DISTRIBUTION SYSTEM AND NEW UNDERGROUND SERVICES ARE ENERGIZED, REMOVE POLES P4 TO P10 AND THE ASSOCIATED OVERHEAD SYSTEM.
2. ~~EXISTING POLE TO REMAIN.~~ Remove Pole P2. Route new conduits for KPU-T and GCI to Pole P1, See U10 and V sheets.
3. EXISTING SERVICE DROP TO REMAIN
4. AFTER NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE OVERHEAD KPU ELECTRIC AND TELECOMMUNICATIONS SERVICE DROPS. GCI IS TO REMOVE THE CABLE TV SERVICE DROP - COORDINATE WITH GCI TO PERFORM THE WORK.
5. EXISTING OVERHEAD DISTRIBUTION: 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING.
6. EXISTING CONDITION OF OVERHEAD DISTRIBUTION: TOP TIER DE-ENERGIZED (CONSTRUCTED AT 34.5KV 3 PHASE), MIDDLE TIER 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING. MODIFY TOP AND MIDDLE TIER - SEE NOTE 7.
7. MODIFY POLE P1: INSTALL RISERS, REMOVE EXISTING JUMPERS FROM TOP TO MIDDLE TIER AT POLE P1, RE-ENERGIZE TOP TIER AT 12.47KV, 3 PHASE (PRESENTLY DE-ENERGIZED), REMOVE MIDDLE TIER 12.47KV, 3 PHASE FROM POLE P00 TO P1, SEE U10 U41-42

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U1+4-9 PSE.DWG

KCN12_000

TAB: U04

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON 16-7655 8-1-18 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES PROJECT #69534

EXISTING UTILITY ELECTRICAL PLAN

PROJECT DESIGNATION
BR-000S(735) ~69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U04	U56

RFI-042

LOT 7-A

LOT 4A

LOT 4B1

EXISTING OVHD TEL & TV SERVICE CABLES ARE ROUTED BETWEEN HOUSES TO MIDSPAN TAP NEAR POLE P4. THE CABLES ARE FASTENED TO 2ND FLOOR METAL GRATE, THEN RUN DOWN ON THE GROUND AND FASTENED TO HOUSE. NIDS ARE NOT VISIBLE ON EXTERIOR OF HOUSE.

CABLES ROUTED INTO THE HOME

1610

1622

1608 A/B
LOT 4C

RAISE EXISTING GUYS TO BE REMOVED.

(2) DROPS

1600
LOT 4D

EXISTING POLE W/ OVERHEAD DROPS TO 1500 & 1528 TO REMAIN.

EQUIPMENT LOCATED UPSTAIRS/DECK BEHIND HOUSE

NIDs LOCATED AT GRADE LEVEL IN CARPORT

1528
LOT 5

1500
LOT 7-B

EXISTING TV SERVICE IS ROUTED ON THE GROUND OVER TO THE WILEY STREET STAIRS.

P4

P5

P5A

12+00

12+50

13+00

13+50

14+00

14+50

WATER STREET

EXISTING TEL DROP FASTENED TO DECK AND ROUTED UNDER DECK TO NIDs

EXISTING KPU TELECOMM MANHOLE, MH17
removed

(2) TEL DROPS

1611

1617

LOT 10

ELLIOT STREET WALKWAY

EDGE OF SIDWALK, TYPICAL

LOT 9

EXISTING STREET
STA 0+00 THRU STA 12+28

BRIDGE TRESTLE:
STA 12+28 TO STA 22+10

LOT 12A

LOT 12B

LOT 10

LOT 4A

GENERAL NOTES

A. THE DOT HAS ISSUED AN ADVANCE UTILITY RELOCATION (AUR) PROJECT. IN WHICH THE OVERHEAD INFRASTRUCTURE IS BEING RAISED TO PROVIDE ADDITIONAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. THIS DRAWING SHOWS THE EXISTING CONDITION ALONG WATER STREET ASSUMING THE AUR PROJECT HAS BEEN COMPLETED.

B. FOR NEW WORK SEE U10-U15

C. FOR PHOTOS & DETAILS OF THE POLES SEE U26-U27.

D. For Mid-Project Temporary Pole Relocation CO#27, see PR0-PR14 after U56

ELECTRICAL NOTES

1. AFTER THE UNDER BRIDGE DISTRIBUTION SYSTEM AND NEW UNDERGROUND SERVICES ARE ENERGIZED, REMOVE POLES P4 TO P10 AND THE ASSOCIATED OVERHEAD SYSTEM.
2. EXISTING POLE TO REMAIN.
3. EXISTING SERVICE DROP TO REMAIN
4. AFTER NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE OVERHEAD KPU ELECTRIC AND TELECOMMUNICATIONS SERVICE DROPS. GCI IS TO REMOVE THE CABLE TV SERVICE DROP - COORDINATE WITH GCI TO PERFORM THE WORK.
5. EXISTING OVERHEAD DISTRIBUTION: 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING.
6. 1617 HAS AN ADDITION BEING CONSTRUCTED IN FRONT OF THE EXISTING HOUSE. CONFIRM LOCATION OF THE METER AND NIDS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: U05

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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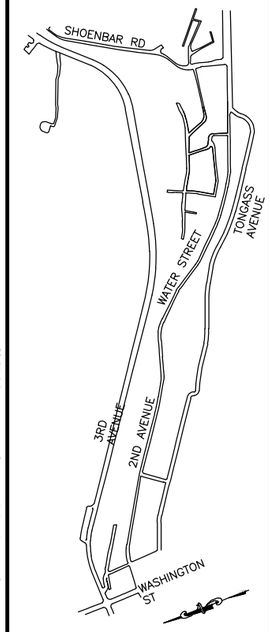
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

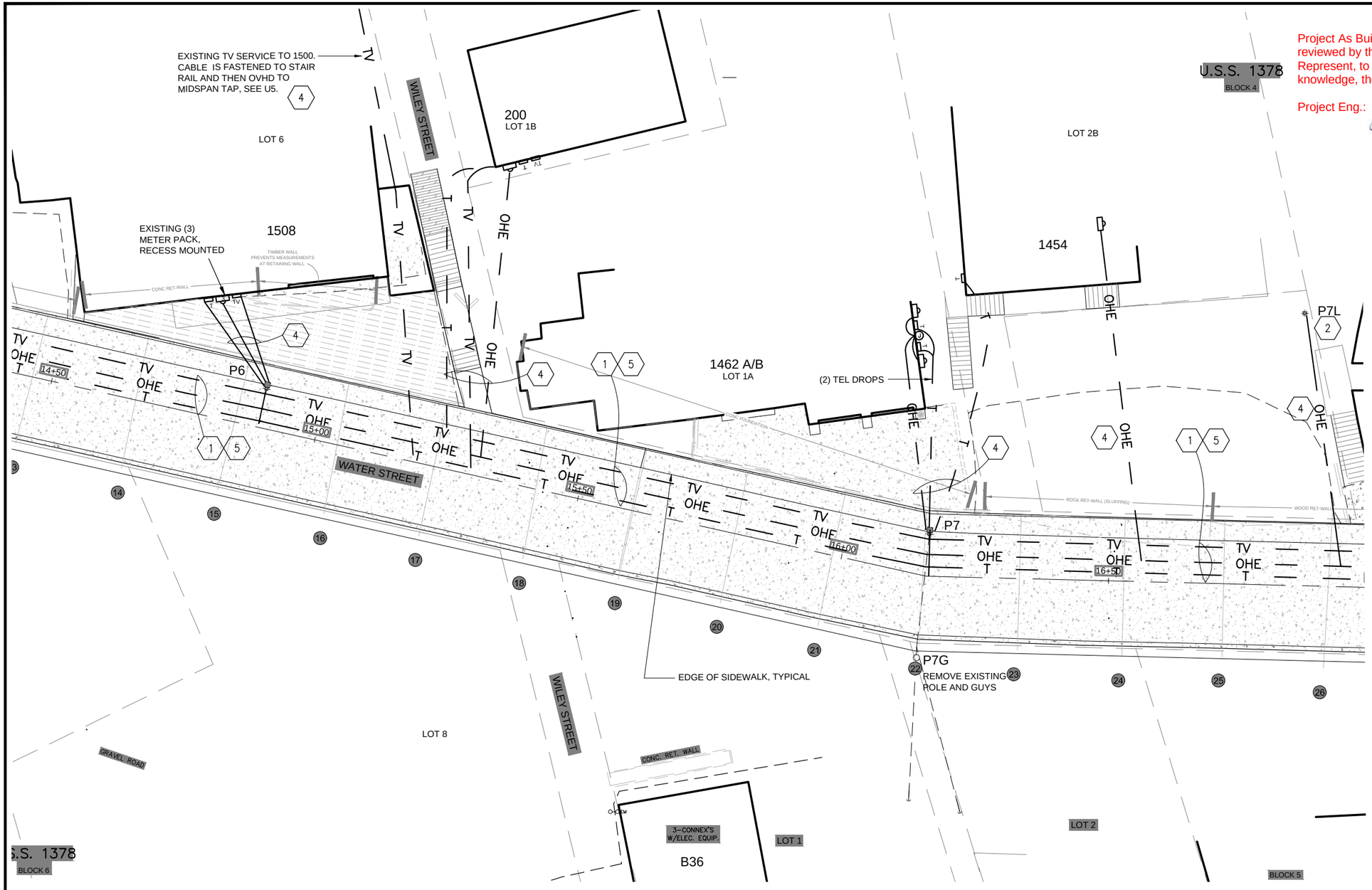
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EXISTING UTILITY ELECTRICAL PLAN

PROJECT DESIGNATION	
BR-000S(735) ~69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U05	U56



ELECTRICAL NOTES

1. AFTER THE UNDER BRIDGE DISTRIBUTION SYSTEM AND NEW UNDERGROUND SERVICES ARE ENERGIZED, REMOVE POLES P4 TO P10 AND THE ASSOCIATED OVERHEAD SYSTEM.
2. EXISTING POLE TO REMAIN.
3. EXISTING SERVICE DROP TO REMAIN
4. AFTER NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE OVERHEAD KPU ELECTRIC AND TELECOMMUNICATIONS SERVICE DROPS. GCI IS TO REMOVE THE CABLE TV SERVICE DROP - COORDINATE WITH GCI TO PERFORM THE WORK.
5. EXISTING OVERHEAD DISTRIBUTION: 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING.

GENERAL NOTES

A. THE DOT HAS ISSUED AN ADVANCE UTILITY RELOCATION (AUR) PROJECT. IN WHICH THE OVERHEAD INFRASTRUCTURE IS BEING RAISED TO PROVIDE ADDITIONAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. THIS DRAWING SHOWS THE EXISTING CONDITION ALONG WATER STREET ASSUMING THE AUR PROJECT HAS BEEN COMPLETED.

B. FOR NEW WORK SEE U10-U15

C. FOR PHOTOS & DETAILS OF THE POLES SEE U26-U27.

D. For Mid-Project Temporary Pole Relocation CO#27, see PR0-PR14 after U56

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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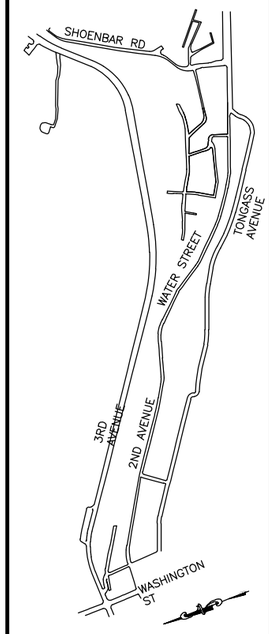
TAB: U06

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

DESIGNED BY: KCN

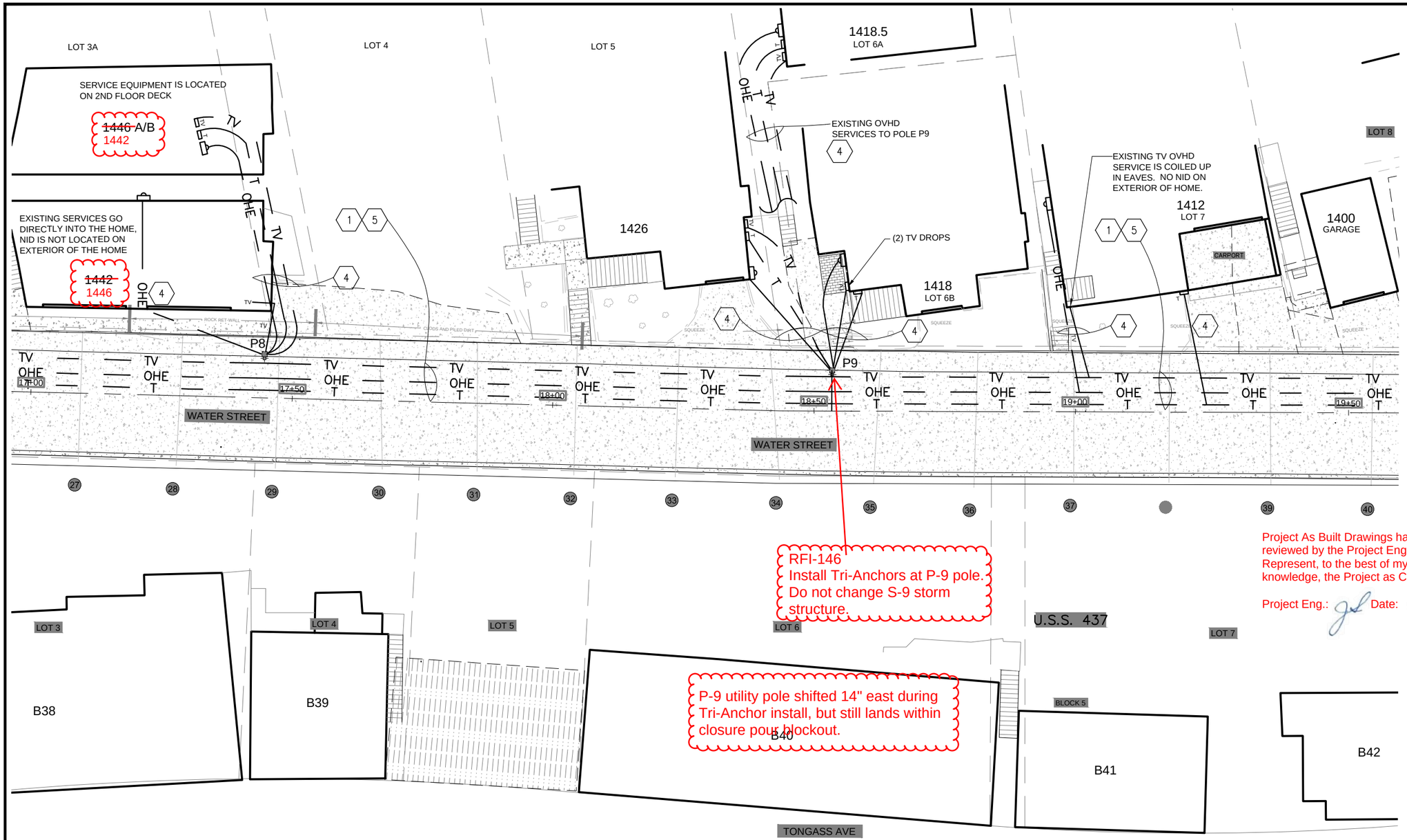
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EXISTING UTILITY ELECTRICAL PLAN

PROJECT DESIGNATION	
BR-000S(735) ~69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U06	U56



ELECTRICAL NOTES

1. AFTER THE UNDER BRIDGE DISTRIBUTION SYSTEM AND NEW UNDERGROUND SERVICES ARE ENERGIZED, REMOVE POLES P4 TO P10 AND THE ASSOCIATED OVERHEAD SYSTEM.
2. EXISTING POLE TO REMAIN.
3. EXISTING SERVICE DROP TO REMAIN
4. AFTER NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE OVERHEAD KPU ELECTRIC AND TELECOMMUNICATIONS SERVICE DROPS. GCI IS TO REMOVE THE CABLE TV SERVICE DROP - COORDINATE WITH GCI TO PERFORM THE WORK.
5. EXISTING OVERHEAD DISTRIBUTION: 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING.

GENERAL NOTES

A. THE DOT HAS ISSUED AN ADVANCE UTILITY RELOCATION (AUR) PROJECT. IN WHICH THE OVERHEAD INFRASTRUCTURE IS BEING RAISED TO PROVIDE ADDITIONAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. THIS DRAWING SHOWS THE EXISTING CONDITION ALONG WATER STREET ASSUMING THE AUR PROJECT HAS BEEN COMPLETED.

B. FOR NEW WORK SEE U10-U15

C. FOR PHOTOS & DETAILS OF THE POLES SEE U26-U27.

D. For Mid-Project Temporary Pole Relocation CO#27, see PR0-PR14 after U56

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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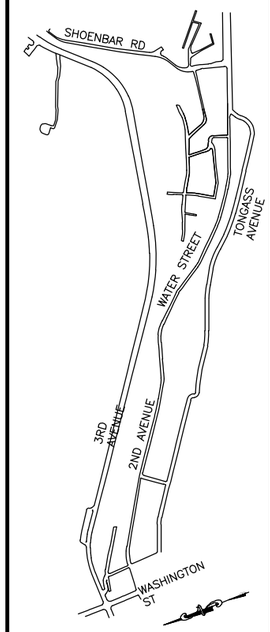
TAB: U07

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

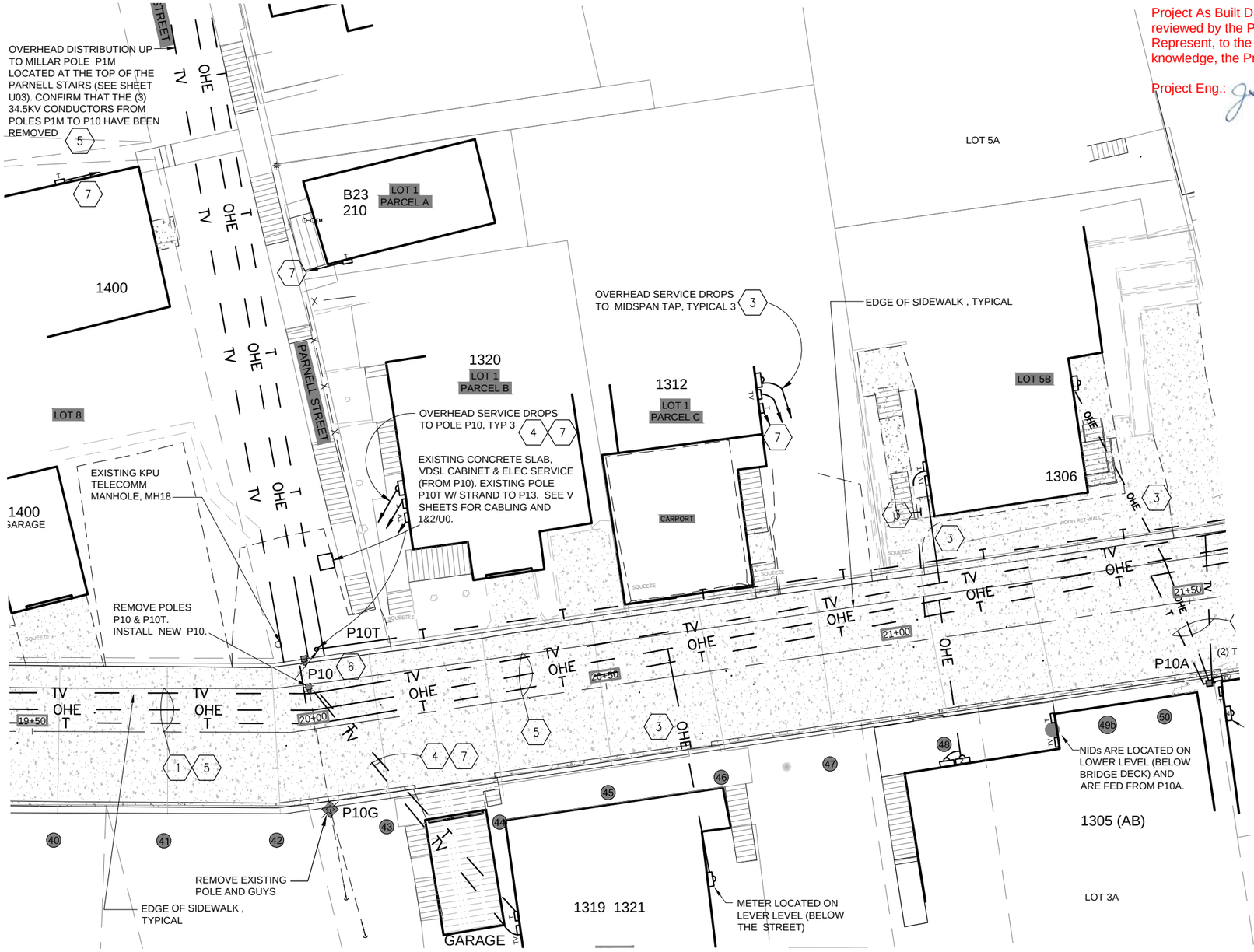
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EXISTING UTILITY ELECTRICAL PLAN

PROJECT DESIGNATION
BR-000S(735) ~69534

STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
U07	**U56**



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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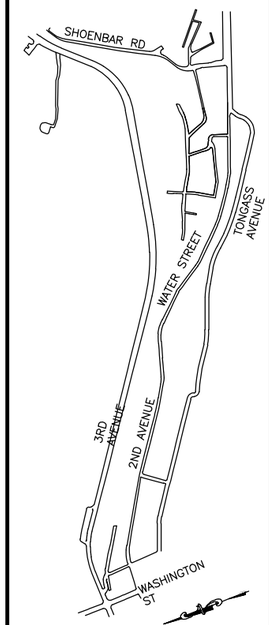
TAB: U08

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCENTRAL REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

EXISTING UTILITY ELECTRICAL PLAN

PROJECT DESIGNATION

BR-000S(735) ~69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U08	U56

ELECTRICAL NOTES

1. AFTER THE UNDER BRIDGE DISTRIBUTION SYSTEM AND NEW UNDERGROUND SERVICES ARE ENERGIZED, REMOVE POLES P4 TO P10 AND THE ASSOCIATED OVERHEAD SYSTEM.
2. EXISTING POLE TO REMAIN.
3. EXISTING SERVICE DROP TO REMAIN, ADJUST SLACK AS REQUIRED BY NEW OVERHEAD LINE WORK
4. AFTER NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE OVERHEAD KPU ELECTRIC AND TELECOMMUNICATIONS SERVICE DROPS. GCI IS TO REMOVE THE CABLE TV SERVICE DROP - COORDINATE WITH GCI TO PERFORM THE WORK.
5. EXISTING OVERHEAD DISTRIBUTION: 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING.
6. REMOVE POLE, TRANSFER OVERHEAD TO NEW FREESTANDING POLE SEE U14
7. RECONNECT EXISTING OVERHEAD KPU-T DROP TO NEW TERMINAL AT POLE P10, SEE V SHEETS.

GENERAL NOTES

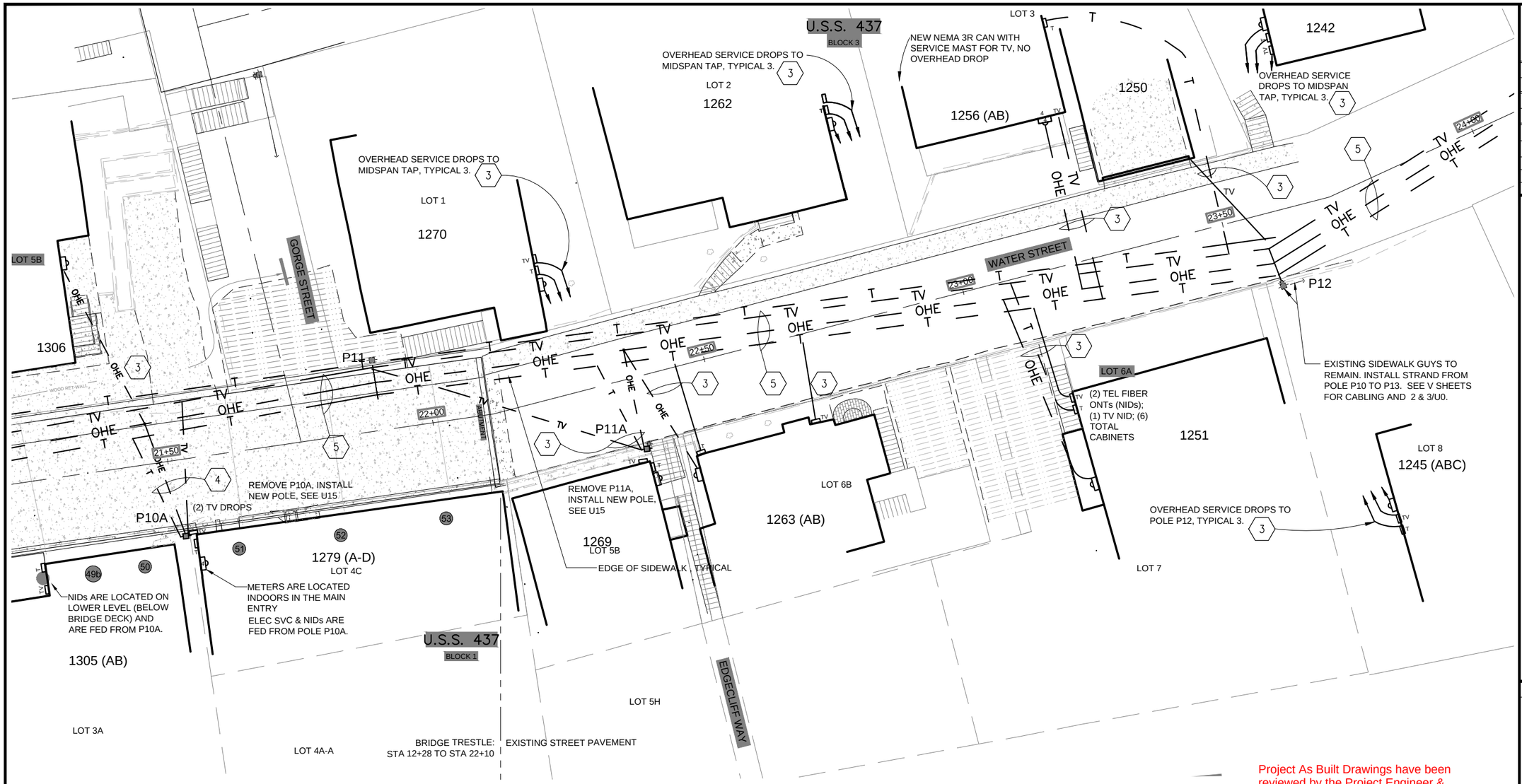
A. THE DOT HAS ISSUED AN ADVANCE UTILITY RELOCATION (AUR) PROJECT. IN WHICH THE OVERHEAD INFRASTRUCTURE IS BEING RAISED TO PROVIDE ADDITIONAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. THIS DRAWING SHOWS THE EXISTING CONDITION ALONG WATER STREET ASSUMING THE AUR PROJECT HAS BEEN COMPLETED.

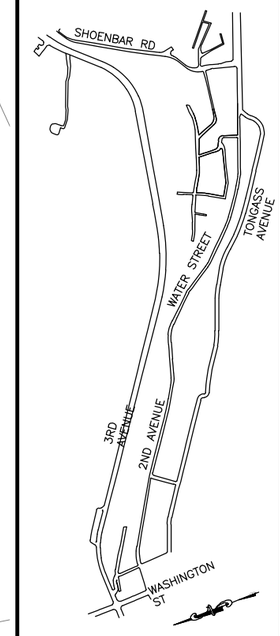
B. FOR NEW WORK SEE U10-U15

C. FOR PHOTOS & DETAILS OF THE POLES SEE U26-U27.

D. For Mid-Project Temporary Pole Relocation CO#27, see PR0-PR14 after U56

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS





PLAN LEGEND

ELECTRICAL NOTES

1. AFTER THE UNDER BRIDGE DISTRIBUTION SYSTEM AND NEW UNDERGROUND SERVICES ARE ENERGIZED, REMOVE POLES P4 TO P10 AND THE ASSOCIATED OVERHEAD SYSTEM.
2. EXISTING POLE TO REMAIN.
3. EXISTING SERVICE DROP TO REMAIN, ADJUST SLACK AS REQUIRED BY NEW OVERHEAD LINE WORK
4. AFTER NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE OVERHEAD KPU ELECTRIC AND TELECOMMUNICATIONS SERVICE DROPS. GCI IS TO REMOVE THE CABLE TV SERVICE DROP - COORDINATE WITH GCI TO PERFORM THE WORK.
5. EXISTING OVERHEAD DISTRIBUTION: 12.47KV 3 PHASE, SYSTEM NEUTRAL, 120/240 V FOR SERVICE TO THE HOMES & STREET LIGHTING, KPU TELEPHONE FIBER OPTIC CABLING, GCI COAXIAL AND FIBER OPTIC CABLING.

GENERAL NOTES

A. THE DOT HAS ISSUED AN ADVANCE UTILITY RELOCATION (AUR) PROJECT. IN WHICH THE OVERHEAD INFRASTRUCTURE IS BEING RAISED TO PROVIDE ADDITIONAL CLEARANCE FOR CONSTRUCTION EQUIPMENT. THIS DRAWING SHOWS THE EXISTING CONDITION ALONG WATER STREET ASSUMING THE AUR PROJECT HAS BEEN COMPLETED.

B. FOR NEW WORK SEE U10-U15

C. FOR PHOTOS & DETAILS OF THE POLES SEE U26-U27.

D. For Mid-Project Temporary Pole Relocation CO#27, see PR0-PR14 after U56

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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TAB: U09

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCENTRAL REGION

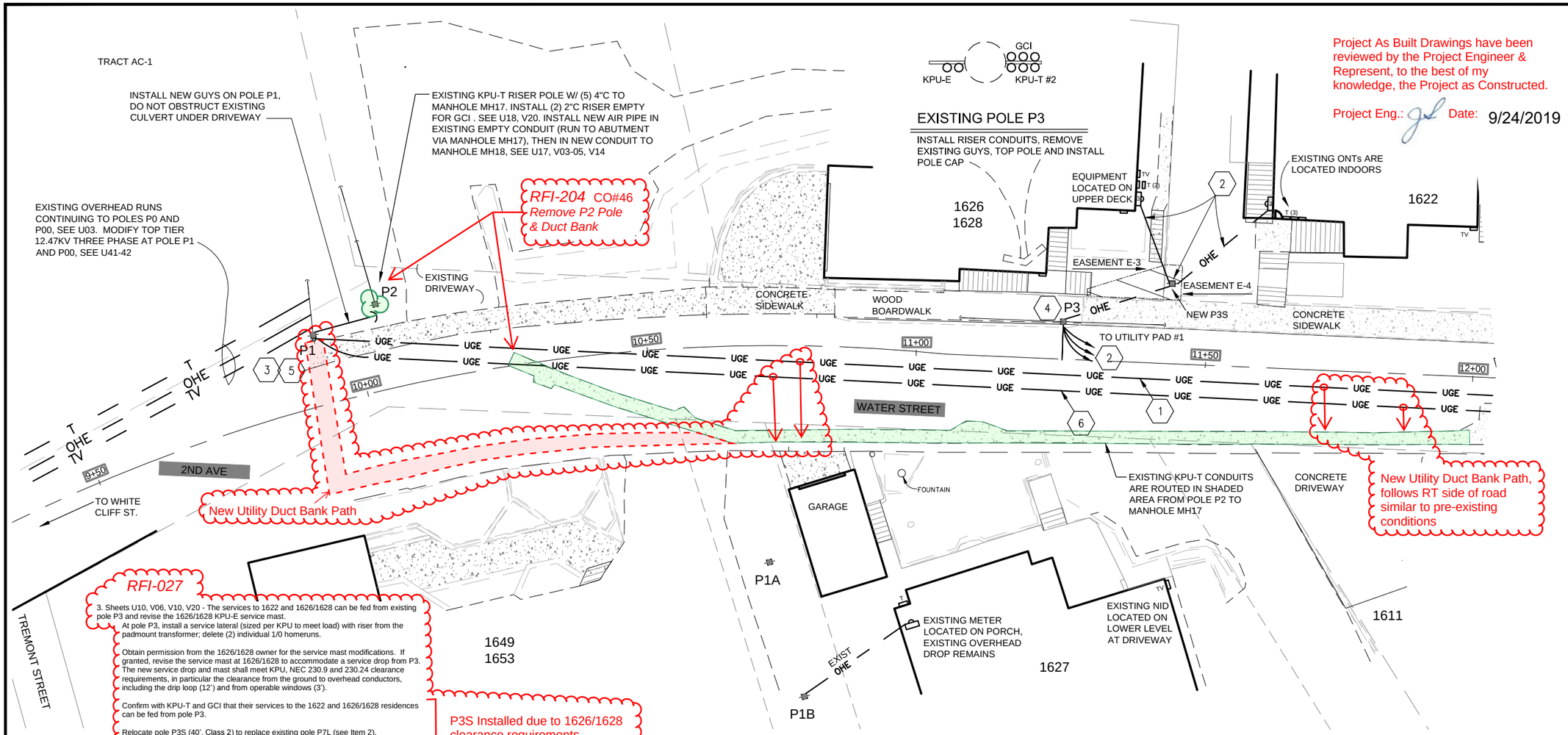
KTN WATER STRET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT # 69534

EXISTING UTILITY ELECTRICAL PLAN

PROJECT DESIGNATION

BR-000S(735) ~69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U09	U56



RFI-027

3. Sheets U10, V06, V10, V20 - The services to 1622 and 1626/1628 can be fed from existing pole P3 and revise the 1626/1628 KPU-E service mast.

At pole P3, install a service lateral (sized per KPU to meet load) with riser from the padmount transformer; delete (2) individual 1/0 homeruns.

Obtain permission from the 1626/1628 owner for the service mast modifications. If granted, revise the service mast at 1626/1628 to accommodate a service drop from P3. The new service drop and mast shall meet KPU, NEC 230.9 and 230.24 clearance requirements, in particular the clearance from the ground to overhead conductors, including the drip loop (12') and from operable windows (3').

Confirm with KPU-T and GCI that their services to the 1622 and 1626/1628 residences can be fed from pole P3.

Relocate pole P3S (40', Class 2) to replace existing pole P7L (see Item 2). Determine with KPU-E the height of the pole for its new location. (The 662 submittal approved the pole based on providing the proper size pole.)

P3S Installed due to 1626/1628 clearance requirements

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10ft.

ELECTRICAL NOTES

1. INSTALL NEW UNDERGROUND/UNDER BRIDGE CONDUITS FROM POLE P1 TO P10: 6"C W/ 3#4/0 15KV CN; AND (1) 6"C SPARE. THE CIRCUITS RUN FROM POLE P1 TO P10 VIA UNDER THE BRIDGE FROM P10 TO THE TRESTLE ABUTMENT #1 AT 12+28 AND THEN IN A TRENCH UNDER THE PAVED STREET ON TO POLE P1. AT THE ABUTMENT, STUB OUT THE SPARE CONDUIT UNDER THE BRIDGE, INSTALL PULL STRING WITH LABELS AND CAP CONDUIT. PAINT CONDUIT ID INFO ON THE ABUTMENT WALL.

2. INSTALL SERVICE POLE P3S IN EASEMENT #E-3 AND E-2. INSTALL NEW SERVICE RISER CONDUITS AT EXISTING POLE P3: (2) 2-1/2"C FOR POWER, (3) 2"C FOR KPU-T, (3) 2"C FOR GCI. CONDUIT RUNS ORIGINATE AT UTILITY PAD 1A & 1B.

   THE 1622, 1626 AND 1627 SERVICE DROPS ARE FED FROM TRANSFORMER X-1 ON UTILITY PAD 1A AND THE TELECOM CIRCUITS ORIGINATE AT THE PEDESTALS ON PAD 1B.

   THE KPU-E, GCI AND KPU-T SERVICES FOR 1626 AND 1622 ARE ROUTED OVERHEAD FROM P3 TO P3S, THEN ON TO THE METER AND ONT.

   THE GCI AND KPU-T SERVICES FOR 1627 ARE ROUTED OVERHEAD FROM P3 TO THE HOME. 1627 ELECTRICAL SERVICE REMAINS FED FROM POLE P1B.

   INSTALL NEW KPU-T OVERHEAD FIBER CABLES IN THE TELEPHONE 2"C, SEE V04.

   AFTER NEW SERVICES ARE ENERGIZED REMOVE EXISTING ELECTRICAL OVERHEAD SERVICES AND KPU-T FIBER OPTIC DROPS; SEE V 20.

   COORDINATE WITH GCI -THEY WILL INSTALL NEW COAXIAL SERVICES IN THE TV 2"C AND THEN DEMO THEIR EXISTING DROPS.

3. AFTER PROJECT COMPLETION FROM POLE P3 UPHILL (TOWARDS POLE P1 AND P2) REMOVE THE EXISTING OVERHEAD 12.47KV THREE PHASE SYSTEM INCLUDING SYSTEM NEUTRAL FROM P1 TO P3. REMOVE KPU-T CABLE PLANT RUNNING FROM P2 TO P3. COORDINATE WITH GCI FOR THEM TO REMOVE THEIR CABLE PLANT RUNNING FROM P1 TO P3.

4. AFTER NEW DISTRIBUTION SYSTEM IS OPERATIONAL AND EXISTING OVERHEAD LINES ARE CUT FROM POLE P3 - CUT OFF THE TOP OF POLE P3 THREE FEET ABOVE THE INSTALLATION HEIGHT FOR A STREET LIGHT, INSTALL POLE CAP, REMOVE (2) GUYS, PATCH SIDEWALK.

5. MODIFY POLE P1 - INSTALL NEW RISER CONDUITS: (2) 6"C - ONE SPARE AND ONE WITH 12.47KV , 3 PHASE CIRCUIT AND A 4"C FOR 7.2KV, SINGLE PHASE TRANSFORMER CIRCUIT. INSTALL DEADEND CROSSARMS AND GUYS. AFTER NEW CIRCUITS ARE ENEGIZED REMOVE EXISTING JUMPERS AND CONDUCTORS FROM P00 TO P1. ALSO SEE NOTE 3 AND U41-42.

6. INSTALL 4"C W/ #1/0 15KV, FULL CN , SINGLE PHASE CIRCUIT FROM TRANSFORMER X-1 ON UTILITY PAD PAD #1A TO POLE P1 TRENCHED UNDER THE PAVED STREET TO THE TRESTLE ABUTMENT #1 AND THEN UNDER THE BRIDGE TO THE UTILITY PAD.

RFI-204 eliminate empty conduit bank and concrete cap, route all new conduit to P-01, additional work covered under CO#46

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U10-15 PSE.DWG

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ADDENDUM NUMBER

ATTACHMENT NUMBER

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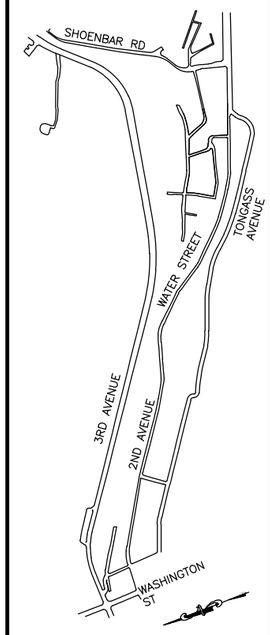


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 9-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT #69534

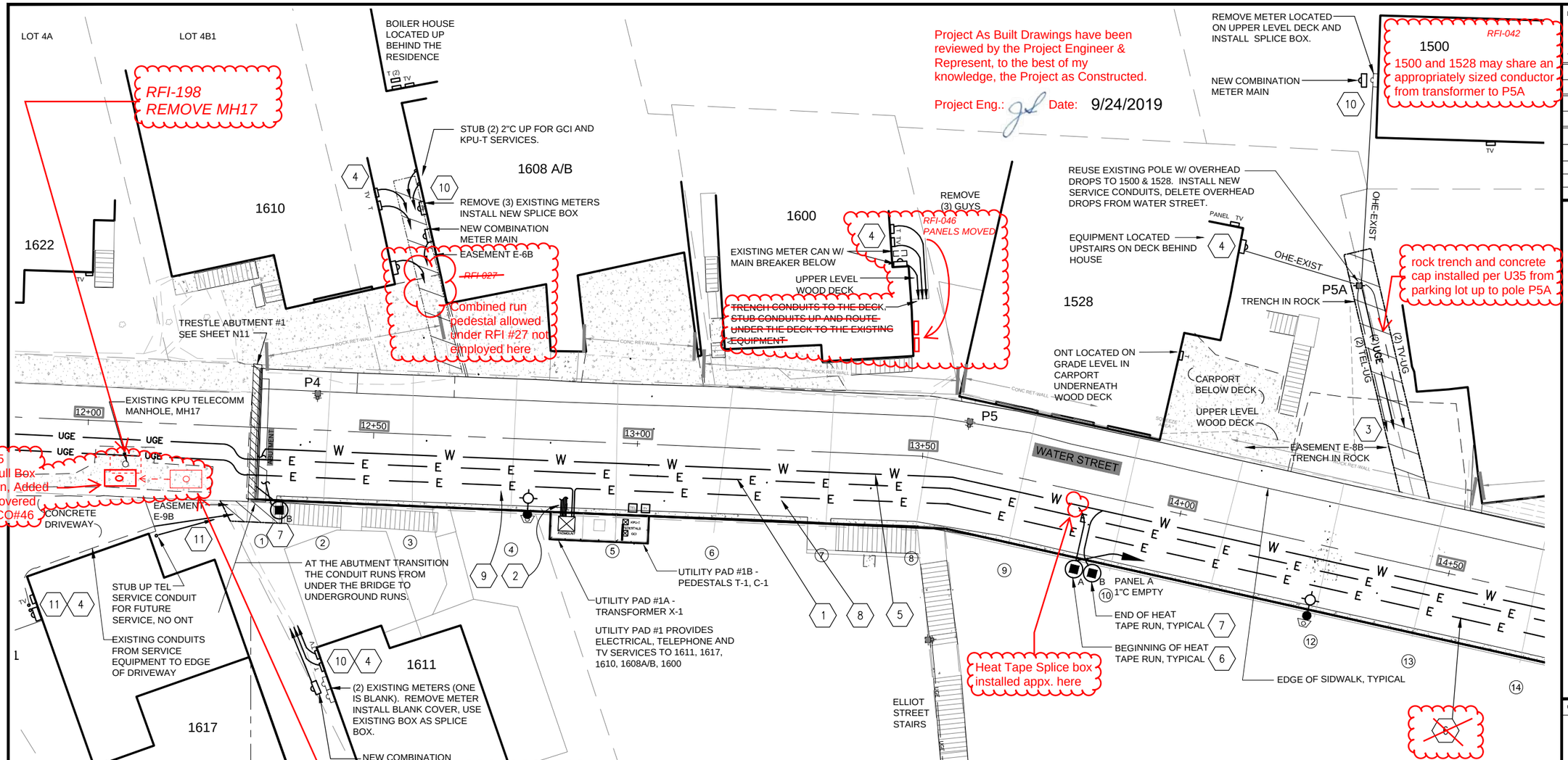
UTILITY PLAN ELECTRICAL

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U10	U56



GENERAL NOTES

A. POLES P4-P9 TYPICAL: POLES ARE SHOWN TO INDICATE THEIR LOCATION. MAINTAIN OVHD SERVICES DURING CONSTRUCTION UNTIL THE NEW SERVICES ARE ENERGIZED. REMOVE OVHD LINES, DROPS AND POLES AT THE COMPLETION OF EACH CONSTRUCTION PHASE AND AS THE COMPLETION OF THE UTILITY PADS ALLOWS.

B. SEE U16-18 FOR ELECTRICAL, TELECOMM AND CABLE TV ONE LINE DIAGRAMS; U30-34 FOR UTILITY PAD INFO; U36 & U37 FOR BRIDGE CONSTRUCTION TYPES AND TRENCH DETAIL; U39 FOR CONDUIT RACK INFO.

C. SEE H05-H09 FOR STREET LIGHT CIRCUITING. AND V SHEETS FOR KPU-T CABLING AND TERMINATIONS.

D. IN GENERAL, ALL SERVICE CONDUITS SHALL BE INSTALLED ENTIRELY ON ONE PROPERTY UNLESS AN EASEMENT IS SHOWN ON THE PLANS INDICATING THAT CONDUITS CAN BE INSTALLED ON ADJOINING PROPERTIES.

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

TRICAL NOTES

RFI#190, only install 6" spare in fill sections, not under trestle.

1. INSTALL NEW UNDERGROUND/UNDER BRIDGE CONDUITS FROM POLE P1 TO P10: 6"C W/ 3#4/0 15KV CN; AND ~~(1) 6"C SPARE~~. THE CIRCUITS RUN FROM POLE P1 TO P10 VIA UNDER THE BRIDGE FROM P10 TO THE TRESTLE ABUTMENT #1 AT 12+28 AND THEN IN A TRENCH UNDER THE PAVED STREET ON TO POLE P1. AT THE ABUTMENT, STUB OUT THE SPARE CONDUIT UNDER THE BRIDGE, INSTALL PULL STRING WITH LABELS AND CAP CONDUIT. PAINT CONDUIT ID INFO ON THE ABUTMENT WALL.
2. ELECTRICAL SERVICE CIRCUITS TO HOMES, SEE U32, U35, U36
3. REUSE EXISTING POLE P5A W/ ELECTRICAL DROPS SERVING 1500 & 1528, GCI DROP TO 1528 AND KPU-T FIBER DROP TO 1500. DELETE THE OVERHEAD DROPS FROM WATER STREET POLE LINE TO P5A. INSTALL (2) 2-1/2"C W/ 3#1/0 FROM TRANSFORMER X-2, SERVICE MASTS ON POLE AND MAKE COMPLETE CONNECTION TO EXISTING DROPS TO 1500 AND 1528. INSTALL (4) 2"C FROM PEDESTALS ON UTILITY PAD 1B TO SERVE 1500 AND 1528 (TWO FOR KPU-T, TWO FOR GCI - GCI WILL INSTALL COAXIAL CABLE IN THE CONDUIT.) SEE V SHEETS FOR KPU-T CABLING TO 1500 AND 1528. POLE IS LOCATED ON A ROCK OUTCROP - THE TRENCH INSTALLED ON THE OUTCROP SHALL BE A SHALLOW TRENCH AND FILLED WITH ~~TYPE W~~ CONCRETE, SEE 1/U35 TRENCH DETAIL.
4. INSTALL UNDERGROUND ELECTRICAL SERVICE IN 2-1/2"C W/ 3#1/0 FROM UTILITY PAD TRANSFORMER TO EXISTING SERVICE EQUIPMENT; MAKE CONNECTION TO EQUIPMENT AND REMOVE EXISTING OVERHEAD SERVICE DROP AND CONDUCTORS IN SERVICE MAST. UPGRADE SERVICE GROUND ROD AND CONDUCTOR. INSTALL (2) 2"C FROM PEDESTALS ON UTILITY PAD TO NID AND ONT (ONE CONDUIT FOR KPU-T, ONE FOR GCI - GCI WILL INSTALL SERVICE CABLE IN THE CONDUIT.) SEE V SHEETS FOR KPU-T CABLING. SEE 1/U35 TRENCH DETAIL. PATCH AND PAINT TO MATCH EXIST SURFACES. SEE U19.

Class A, RFI#43

5. INSTALL HEAT TAPE, POWER CONNECTION & END FITTING PROVIDED IN SECTION 627. PULL TAPE IN CHANNEL LOCATED ON THE BOTTOM SIDE OF THE MAIN WATER LINE ARCTIC PIPE. BOTH ENDS OF THE TAPE SHALL TERMINATE IN A NEMA 4X BOXES THAT ARE MOUNTED TO THE THE GUARD RAIL. INSTALL THE TAPE IN HDPE CONDUIT FROM THE CHANNEL ON THE WATER LINE TO THE BOXES LOCATED AT THE BEGINNING AND END OF THE RUN. SEE U29.
6. INSTALL HEAT TAPE DEVICES IN NEMA 4X BOX WITH CIRCUIT DIAGRAM AND LABELS PER SECTION 662. AT THE BEGINNING OF HEAT TAPE RUN: INSTALL FLANGED INLET FOR HEAT TAPE CONNECTION TO CITY GENERATOR, SWITCH, HEAT TAPE POWER CONNECTION. FOR THE END OF THE HEAT TAPE RUN: INSTALL HEAT TAPE END FITTING ~~WITH PILOT LIGHT~~. SEE U29.
7. END OF HEAT TAPE RUN INSTALL NEMA 4X BOX WITH END FITTING & ~~PILOT LIGHT~~, U29.
8. INSTALL 4"C W/ 1#1/0 15KV, FULL CN -SINGLE PHASE CIRCUIT FROM TRANSFORMERS ON UTILITY PADS #1A & #2A.
9. INSTALL 4"C W/ #1/0 15KV, FULL CN , SINGLE PHASE CIRCUIT FROM TRANSFORMER X-1 ON UTILITY PAD PAD #1A TO POLE P1 TRENCHED UNDER THE PAVED STREET TO THE TRESTLE ABUTMENT #1 AND THEN UNDER THE BRIDGE TO THE UTILITY PAD.
10. INSTALL NEW COMBINATION METER MAIN, SEE U20 FOR WORK AT 1611 AND U22 FOR 1608.
11. TRANSITIONS CONDUITS FROM RACK AT THE ABUTMENT INTO A COMMON TRENCH FOR 1611 AND 1617. CONDUITS SERVING 1617 SHALL BE ROUTED ACROSS 1611 USING EASEMENT 9B. THERE ARE (2) EXISTING 2"C FROM THE METER AND GCI CAN ROUTED UNDER THE DRIVEWAY TERMINATED NEAR A 2X4 STAKE. CONNECT THE NEW KPU-E AND GCI CONDUITS TO THE EXISTING CONDUITS. STUB UP THE KPU-T AT THE EXTERIOR WALL.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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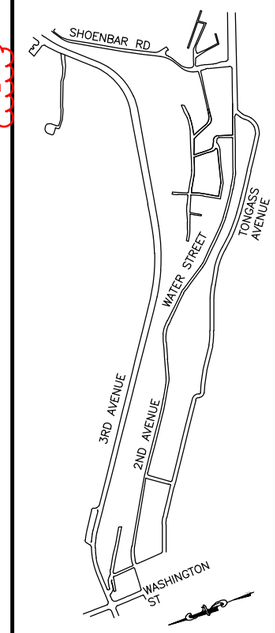
TAB: U11

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT #69534

UTILITY PLAN ELECTRICAL

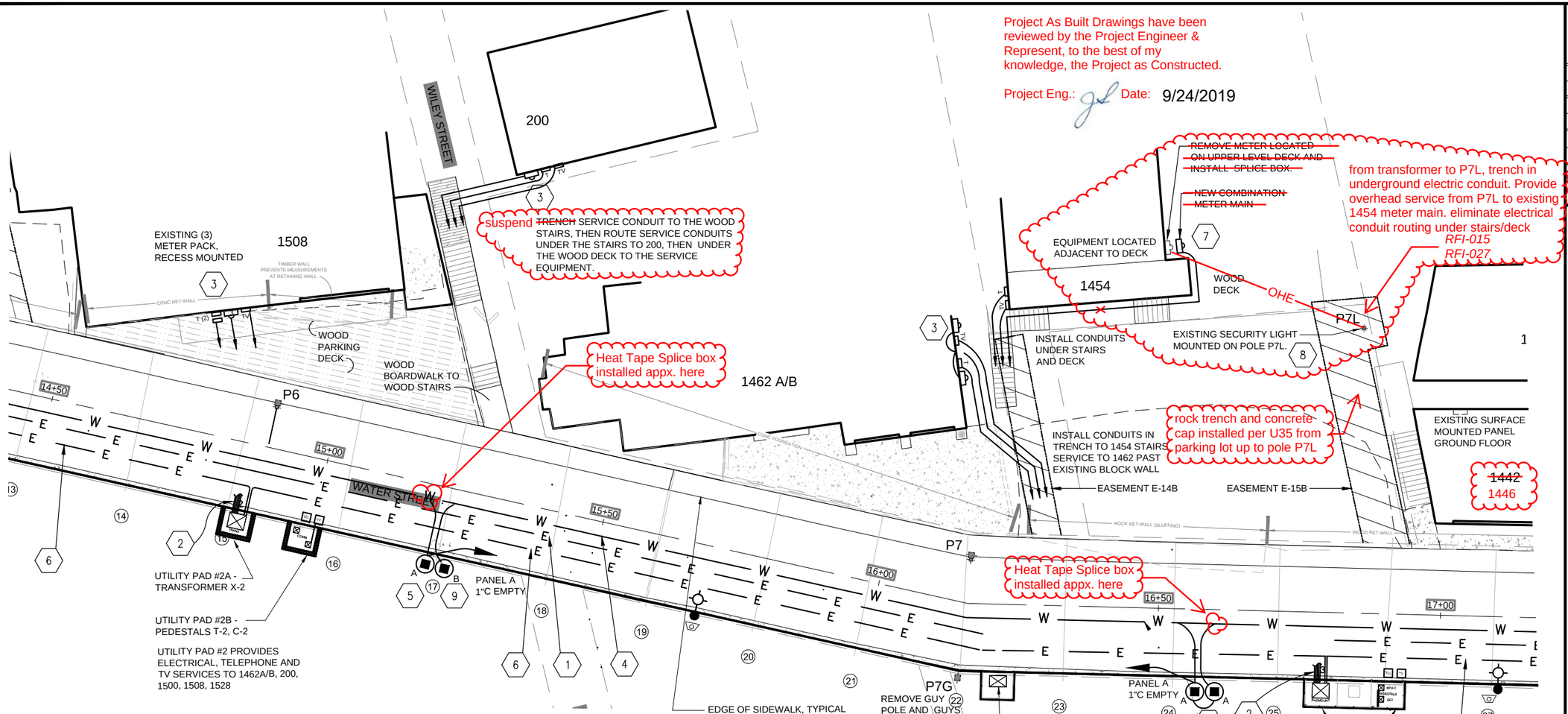
PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U11	U56

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019



ELECTRICAL NOTES

1. INSTALL NEW UNDERGROUND CONDUITS FROM BULKHEAD TO POLE P1: 6"C W/ 3#4/0 15KV. 1/3 CN ~~AND (1) 6"C SPARE~~. THE CIRCUIT RUNS FROM POLE P1 TO P10 . FROM THE BULKHEAD TO POLE P10, THE CIRCUITS ARE INSTALLED UNDER THE BRIDGE, SEE U16, U31 & U35.
2. ELECTRICAL SERVICE CIRCUITS TO HOMES, SEE U32, U35, U36
3. INSTALL UNDERGROUND ELECTRICAL SERVICE IN 2-1/2"C W/ 3#1/0 FROM UTILITY PAD TRANSFORMER TO EXISTING SERVICE EQUIPMENT; MAKE CONNECTION TO EQUIPMENT AND REMOVE EXISTING OVERHEAD SERVICE DROP AND CONDUCTORS IN SERVICE MAST. UPGRADE SERVICE GROUND ROD AND CONDUCTOR. INSTALL (2) 2"C FROM PEDESTALS ON UTILITY PAD TO NID AND ONT (ONE CONDUIT FOR KPU-T, ONE FOR GCI - GCI WILL INSTALL SERVICE CABLE IN THE CONDUIT.) SEE V SHEETS FOR KPU-T CABLING. SEE 1/U35 TRENCH DETAIL. PATCH AND PAINT TO MATCH EXIST SURFACES. SEE U19.
4. INSTALL HEAT TAPE, POWER CONNECTION & END FITTING PROVIDED IN SECTION 627. PULL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM SIDE OF THE MAIN WATER LINE ARCTIC PIPE . BOTH ENDS OF THE TAPE SHALL TERMINATE IN A NEMA 4X BOXES THAT ARE MOUNTED TO THE THE GUARD RAIL. INSTALL THE TAPE IN HDPE CONDUIT FROM THE CHANNEL ON THE WATER LINE TO THE BOXES LOCATED AT THE BEGINNING AND END OF THE RUN. SEE U29.
5. INSTALL HEAT TAPE DEVICES IN NEMA 4X BOX WITH CIRCUIT DIAGRAM AND LABELS PER SECTION 662. AT THE BEGINNING OF HEAT TAPE RUN: INSTALL FLANGED INLET FOR HEAT TAPE CONNECTION TO CITY GENERATOR, SWITCH, HEAT TAPE POWER CONNECTION. FOR THE END OF THE HEAT TAPE RUN: INSTALL HEAT TAPE END FITTING ~~WITH PILOT LIGHT~~. SEE U29.
6. INSTALL 4"C W/ 1#1/0 15KV, FULL CN -SINGLE PHASE CIRCUIT CONNECTING TRANSFORMERS ON UTILITY PADS PAD #1A, 2A & 3A.
7. ~~NSTALL NEW COMBINATION~~ METER MAIN, SEE U20 FOR WORK FOR HOME AT 1454,
8. SEE H07 NEW UNDERGROUND SERVICE TO EXISTING SECURITY LIGHT ON POLE P7A INSTALLED IN EASEMENT E-15B.
9. END OF HEAT TAPE RUN, INSTALL END FITTING WITH PILOT LIGHT IN A NEMA 4X BOX ATTACHED TO GUARD RAIL. INSTALL CIRCUIT DIAGRAM AND LABELS PER SPEC. SEE U29.

2. Sheet U12 & U20 - It is acceptable to replace the street light pole (P7L) with the pole P3S (see Item 3) and install an overhead service to 1454 from the pole.
   At the pole, reinstall the light fixture (or a replacement as provided by KPU-E); install a service lateral (sized per KPU to meet load) with riser from the padmount transformer, and make connections to the light fixture and an overhead drop to the existing 1454 service mast.

   Delete the underground/under the stairs KPU-E service to 1454, combination meter main and Nema 3R splice box.

   RFI-027

GENERAL NOTES

A. POLES P4-P9 TYPICAL: POLES ARE SHOWN TO INDICATE THEIR LOCATION. MAINTAIN OVHD SERVICES DURING CONSTRUCTION UNTIL THE NEW SERVICES ARE ENERGIZED. REMOVE OVHD LINES, DROPS AND POLES AT THE COMPLETION OF EACH CONSTRUCTION PHASE AND AS THE COMPLETION OF THE UTILITY PADS ALLOWS.

B. SEE U16-18 FOR ELECTRICAL, TELECOMM AND CABLE TV ONE LINE DIAGRAMS; U30-34 FOR UTILITY PAD INFO; U36 & U37 FOR BRIDGE CONSTRUCTION TYPES AND TRENCH DETAIL; U39 FOR CONDUIT RACK INFO.

C. SEE H05-H09 FOR STREET LIGHT CIRCUITING. AND V SHEETS FOR KPU-T CABLING AND TERMINATIONS.

D. IN GENERAL, ALL SERVICE CONDUITS SHALL BE INSTALLED ENTIRELY ON ONE PROPERTY UNLESS AN EASEMENT IS SHOWN ON THE PLANS INDICATING THAT CONDUITS CAN BE INSTALLED ON ADJOINING PROPERTIES.

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U10-15 PSE.DWG

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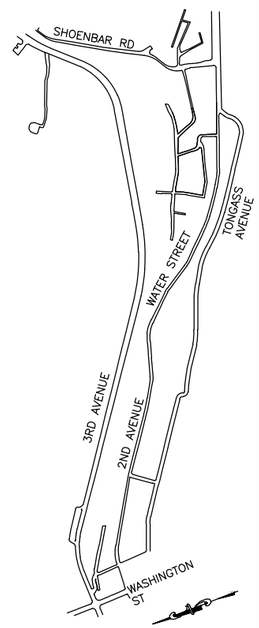
TAB: U12

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

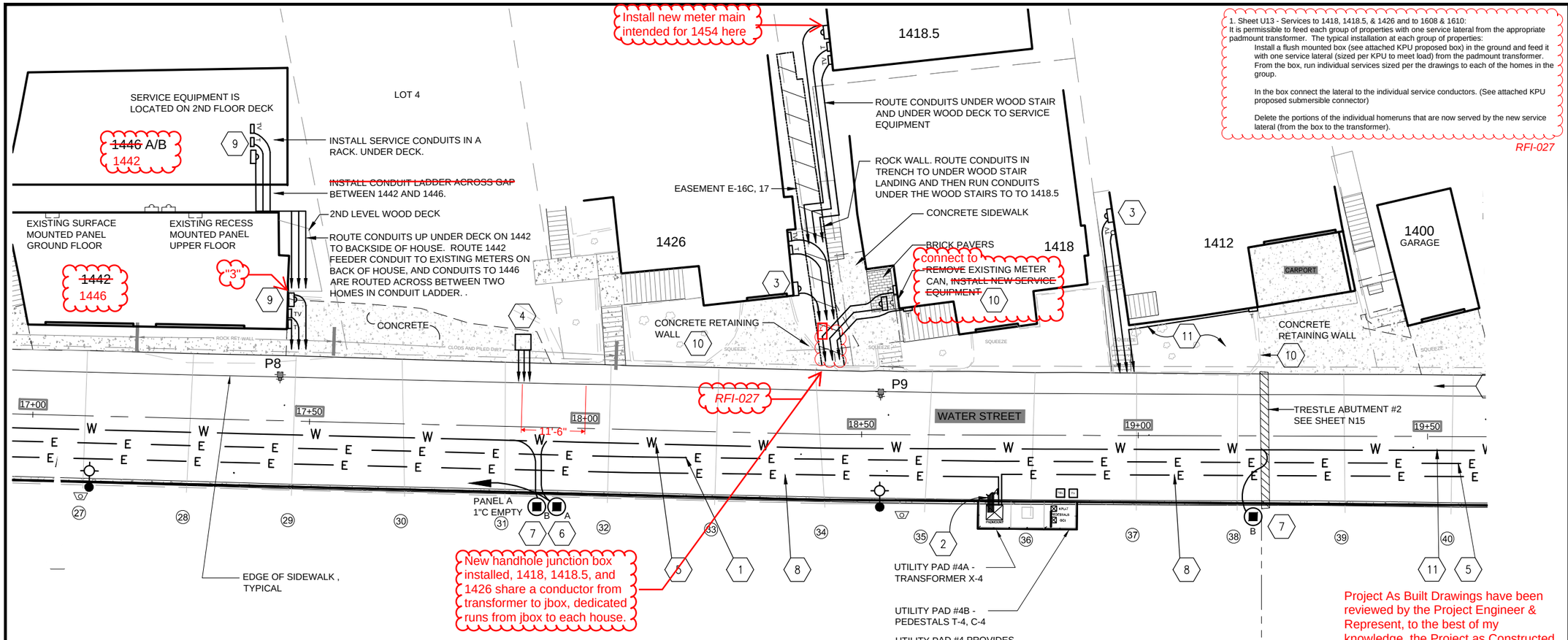
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT #69534

UTILITY PLAN ELECTRICAL

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U12	U56



1. Sheet U13 - Services to 1418, 1418.5, & 1426 and to 1608 & 1610:
It is permissible to feed each group of properties with one service lateral from the appropriate padmount transformer. The typical installation at each group of properties:

Install a flush mounted box (see attached KPU proposed box) in the ground and feed it with one service lateral (sized per KPU to meet load) from the padmount transformer. From the box, run individual services sized per the drawings to each of the homes in the group.

In the box connect the lateral to the individual service conductors. (See attached KPU proposed submersible connector)

Delete the portions of the individual homeruns that are now served by the new service lateral (from the box to the transformer).

RFI-027

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

GENERAL NOTES

A. POLES P4-P9 TYPICAL: POLES ARE SHOWN TO INDICATE THEIR LOCATION. MAINTAIN OVHD SERVICES DURING CONSTRUCTION UNTIL THE NEW SERVICES ARE ENERGIZED. REMOVE OVHD LINES, DROPS AND POLES AT THE COMPLETION OF EACH CONSTRUCTION PHASE AND AS THE COMPLETION OF THE UTILITY PADS ALLOWS.

B. SEE U16-18 FOR ELECTRICAL, TELECOMM AND CABLE TV ONE LINE DIAGRAMS; U30-34 FOR UTILITY PAD INFO; U36 & U37 FOR BRIDGE CONSTRUCTION TYPES AND TRENCH DETAIL; U39 FOR CONDUIT RACK INFO.

C. SEE H05-H09 FOR STREET LIGHT CIRCUITING. AND V SHEETS FOR KPU-T CABLING AND TERMINATIONS.

D. IN GENERAL, ALL SERVICE CONDUITS SHALL BE INSTALLED ENTIRELY ON ONE PROPERTY UNLESS AN EASEMENT IS SHOWN ON THE PLANS INDICATING THAT CONDUITS CAN BE INSTALLED ON ADJOINING PROPERTIES.

ELECTRICAL NOTES

RFI#190, only install 6" spare in fill sections, not under trestle.

1. INSTALL NEW UNDERGROUND CONDUITS FROM POLE POLE P1 TO P10: 6"C W/ 3#4/0 15KV. 1/3 CN ~~AND (1) 6"C SPARE.~~ THE CIRCUITS ARE INSTALLED UNDER THE BRIDGE, SEE U16, U31 & 2/U35 (RETAINING WALL), U36 (TRESTLE).
2. ELECTRICAL SERVICE CIRCUITS TO HOMES, SEE U32, U35, U36
3. INSTALL UNDERGROUND ELECTRICAL SERVICE IN 2-1/2"C W/ 3#1/0 FROM UTILITY PAD TRANSFORMER TO EXISTING SERVICE EQUIPMENT; MAKE CONNECTION TO EQUIPMENT AND REMOVE EXISTING OVERHEAD SERVICE DROP AND CONDUCTORS IN SERVICE MAST. UPGRADE SERVICE GROUND ROD AND CONDUCTOR. INSTALL (2) 2"C FROM PEDESTALS ON UTILITY PAD TO NID AND ONT (ONE CONDUIT FOR KPU-T, ONE FOR GCI - GCI WILL INSTALL SERVICE CABLE IN THE CONDUIT.) SEE V SHEETS FOR KPU-T CABLING. SEE 1/U35 TRENCH DETAIL. PATCH AND PAINT TO MATCH EXIST SURFACES. SEE U19.
4. EMPTY LOT - FUTURE SERVICE. INSTALL HANDHOLE AND UNDERGROUND CONDUITS TO UTILITY PAD: 2-1/2"C TO TRANSFORMER X-3 AND (2) 2"C ONE EACH TO THE PEDESTALS ON PAD 3B. INSTALL PULL STRING AND LABEL IN EACH CONDUIT - "FUTURE SERVICE TO LOT 4 (LOCATED BETWEEN 1442 AND 1454)"
5. INSTALL HEAT TAPE, POWER CONNECTION & END FITTING PROVIDED IN SECTION 627. PULL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM SIDE OF THE MAIN WATER LINE ARCTIC PIPE . BOTH ENDS OF THE TAPE SHALL TERMINATE IN A NEMA 4X BOXES THAT ARE MOUNTED TO THE THE GUARD RAIL. INSTALL THE TAPE IN HDPE CONDUIT FROM THE CHANNEL ON THE WATER LINE TO THE BOXES LOCATED AT THE BEGINNING AND END OF THE RUN. SEE U29.
6. INSTALL HEAT TAPE DEVICES IN NEMA 4X BOX WITH CIRCUIT DIAGRAM AND LABELS PER SECTION 662. AT THE BEGINNING OF HEAT TAPE RUN: INSTALL FLANGED INLET FOR HEAT TAPE CONNECTION TO CITY GENERATOR, SWITCH, HEAT TAPE POWER CONNECTION. FOR THE END OF THE HEAT TAPE RUN: INSTALL HEAT TAPE END FITTING ~~WITH PILOT LIGHT~~. SEE U29.
7. END OF HEAT TAPE RUN, INSTALL END FITTING ~~WITH PILOT LIGHT~~ IN A NEMA 4X BOX ATTACHED TO GUARD RAIL. INSTALL CIRCUIT DIAGRAM AND LABELS PER SPEC. SEE U29.
8. INSTALL 4"C W/ 1#1/0 15KV, FULL CN -SINGLE PHASE CIRCUIT CONNECTING TRANSFORMERS ON UTILITY PADS PAD #3A, 4A & POLE P10.
9. ROUTE SERVICES FOR 1442 AND 1446 IN A COMMON TRENCH TO SERVICE EQUIPMENT AT 1442, INSTALL NEW COMBINATION METER MAIN AT 1442. CONTINUE THE 1446 SERVICE CONDUITS UP UNDER THE 1442 2ND FLOOR DECK TO THE BACKSIDE OF THE HOUSE, THEN OVER TO 1446 VIA A CONDUIT LADDER AND CONNECT THE 1446 NEW SERVICES TO EXISTING SERVICE EQUIPMENT, SEE U21.
10. EXISTING RETAINING WALL TO BE REMOVED DURING CONSTRUCTION BY GENERAL CONTRACTOR. AFTER WALL IS REMOVED INSTALL TRENCH FOR CONDUITS.
11. ROUTE CONDUITS IN PLANTER FROM STAIRS TO ONT.

RFI-027

4. Sheet U13 & U21 - The 1442 and 1446 services can be fed with one service lateral (sized per KPU to meet load) run from the transformer to a meter center located at 1442.
Install a meter center in lieu of the 200A combination meter main at 1442. The meter center will have two meters and two 200A/2P breakers (see 662-2.21) and size Feeder 3 (NEC Table 250.66) according to the new service lateral conductors. Label the meters with addresses per KPU-E requirements.

Connect Feeder 4 to the 200 amp breaker at 1446; turn over the meter to KPU-E; install blank coverplate over meter opening.

Delete the 200A combination meter main at 1442 and the individual 1/0 feeders from the padmount transformer serving 1442 and 1446.

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 inch = 10ft.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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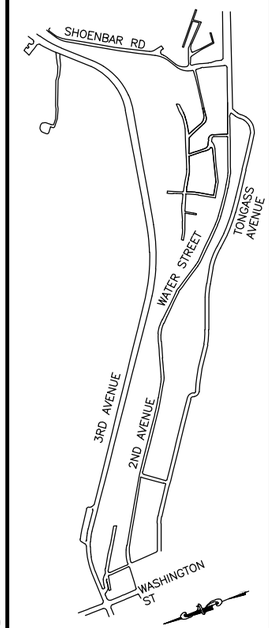
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

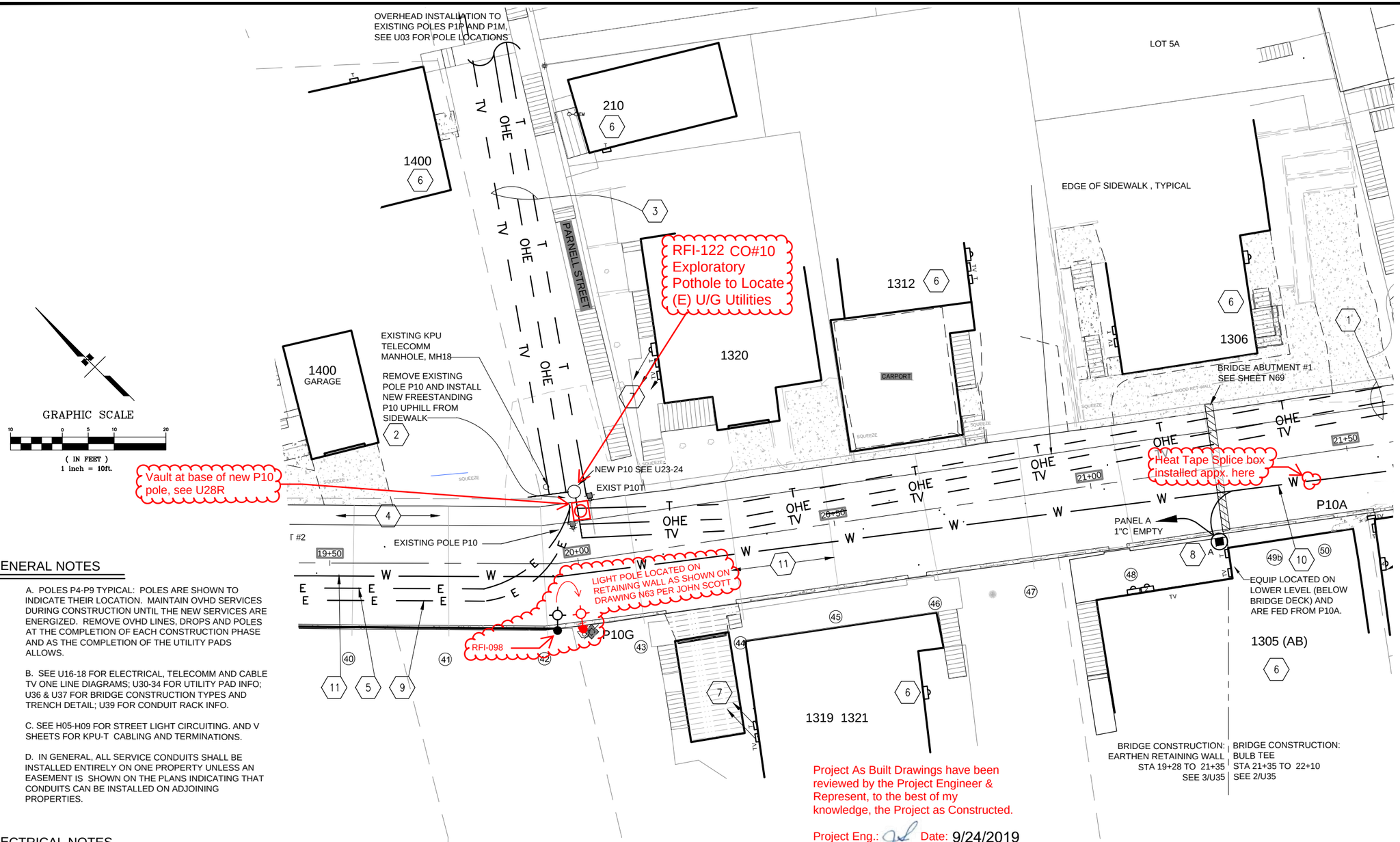
KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT #69534

UTILITY PLAN ELECTRICAL

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U13	U56



GRAPHIC SCALE

10 0 5 10 20

(IN FEET)

1 inch = 10ft.

GENERAL NOTES

A. POLES P4-P9 TYPICAL: POLES ARE SHOWN TO INDICATE THEIR LOCATION. MAINTAIN OVHD SERVICES DURING CONSTRUCTION UNTIL THE NEW SERVICES ARE ENERGIZED. REMOVE OVHD LINES, DROPS AND POLES AT THE COMPLETION OF EACH CONSTRUCTION PHASE AND AS THE COMPLETION OF THE UTILITY PADS ALLOWS.

B. SEE U16-18 FOR ELECTRICAL, TELECOMM AND CABLE TV ONE LINE DIAGRAMS; U30-34 FOR UTILITY PAD INFO; U36 & U37 FOR BRIDGE CONSTRUCTION TYPES AND TRENCH DETAIL; U39 FOR CONDUIT RACK INFO.

C. SEE H05-H09 FOR STREET LIGHT CIRCUITING. AND V SHEETS FOR KPU-T CABLING AND TERMINATIONS.

D. IN GENERAL, ALL SERVICE CONDUITS SHALL BE INSTALLED ENTIRELY ON ONE PROPERTY UNLESS AN EASEMENT IS SHOWN ON THE PLANS INDICATING THAT CONDUITS CAN BE INSTALLED ON ADJOINING PROPERTIES.

ELECTRICAL NOTES

1. AFTER PROJECT COMPLETION FROM POLE P10 DOWNHILL (TOWARDS POLE P11) THE EXISTING OVERHEAD DISTRIBUTION SYSTEM SHALL REMAIN OPERATIONAL. THE EXISTING OVERHEAD SYSTEM INCLUDES 12.47KV, 120/240V, CABLE TV, AND TEL DISTRIBUTION.

2. INSTALL RISER CONDUITS ON NEW FREESTANDING POLE P10 IN NEW LOCATION. SWING EXISTING OVERHEAD DISTRIBUTION SYSTEM ON PARNELL AND SOUTH OF P10 OVER TO THE NEW POLE LOCATION. CONNECT THE UNDER BRIDGE 12KV SINGLE AND THREE PHASE CIRCUITS TO THE EXISTING OVERHEAD 12KV SYSTEM. INSTALL RISER CONDUITS FOR KPU-T AND GCI DISTRIBUTION, SEE U16-U18.

3. AFTER THE NEW DISTRIBUTION SYSTEM IS ENERGIZED REMOVE THE TOP TIER 12.47KV (FORMERLY 35KV) CONDUCTORS FROM POLE P10 -P1P-P1M. AT POLE P1P REMOVE JUMPERS CONNECTING THE TOP TIER TO THE MIDDLE TIER. THE REMAINING OVERHEAD DISTRIBUTION ABOVE PARNELL STAIRS P10-P1M SHALL REMAIN OPERATIONAL. THE EXISTING OVERHEAD SYSTEM INCLUDES 12KV, 120/240V, CABLE TV, AND TEL DISTRIBUTION. ADJUST SERVICE DROPS TO THE HOMES TO ACCOMMODATE REVISED ROUTE FOR THE CONDUCTORS CONNECTED TO NEW POLE P10 TO EXISTING P1P. SEE U03 FOR P1P AND P1M LOCATIONS.

4. AFTER THE NEW UNDER BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, REMOVE THE POLES P4-P9, GUYS AND OVERHEAD CONDUCTORS FROM POLES P3-P10. SEE U0. EXISTING OVERHEAD SYSTEM: 12.47KV, 120/240V, CABLE TV, AND TEL DISTRIBUTION.

6. EXISTING ELECTRICAL SERVICE TO HOME REMAINS.

7. INSTALL OVERHEAD DROPS FROM EXISTING SERVICE MAST TO NEW P1O. REMOVE EXISTING DROPS TO P10. SEE V SHEETS FOR KPU-T CABLING. GCI WILL REMOVE AND REPLACE THEIR CABLING.

8. INSTALL HEAT TAPE DEVICES IN NEMA 4X BOX WITH CIRCUIT DIAGRAM AND LABELS PER SECTION 662. AT THE BEGINNING OF HEAT TAPE RUN: INSTALL FLANGED INLET FOR HEAT TAPE CONNECTION TO CITY GENERATOR, SWITCH, HEAT TAPE POWER CONNECTION. FOR THE END OF THE HEAT TAPE RUN: INSTALL HEAT TAPE END FITTING ~~WITH PILOT LIGHT~~. SEE U29 & 1&3/U35.

9. INSTALL 4"C W/ 1#1/0 15KV, FULL CN -SINGLE PHASE CIRCUIT FROM TRANSFORMERS ON UTILITY PADS PAD #4A & POLE P10. THE CIRCUIT IS INSTALLED IN A TRENCH , SEE 1&3/U35

10. INSTALL HEAT TAPE, POWER CONNECTION & END FITTING PROVIDED IN SECTION 627. PULL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM SIDE OF THE MAIN WATER LINE ARCTIC PIPE . BOTH ENDS OF THE TAPE SHALL TERMINATE IN A NEMA 4X BOXES THAT ARE MOUNTED TO THE THE GUARD RAIL. INSTALL THE TAPE IN HDPE CONDUIT FROM THE CHANNEL ON THE WATER LINE TO THE BOXES LOCATED AT THE BEGINNING AND END OF THE RUN. SEE U29 & 1&2/U35.

11. NO HEAT TAPE IS INSTALLED ON THE EARTHEN RETAINING WALL PORTION OF THE WATER LINE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ATTACHMENT NUMBER

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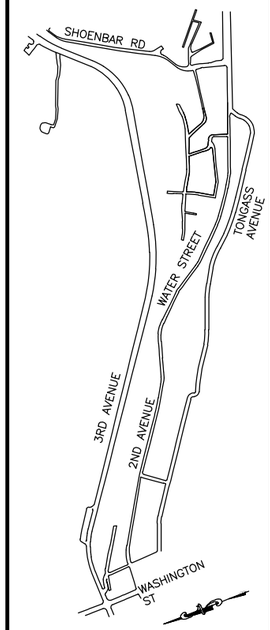


PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER

KEITH NELSON EE-7655 8-7-15

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT #69534

UTILITY PLAN ELECTRICAL

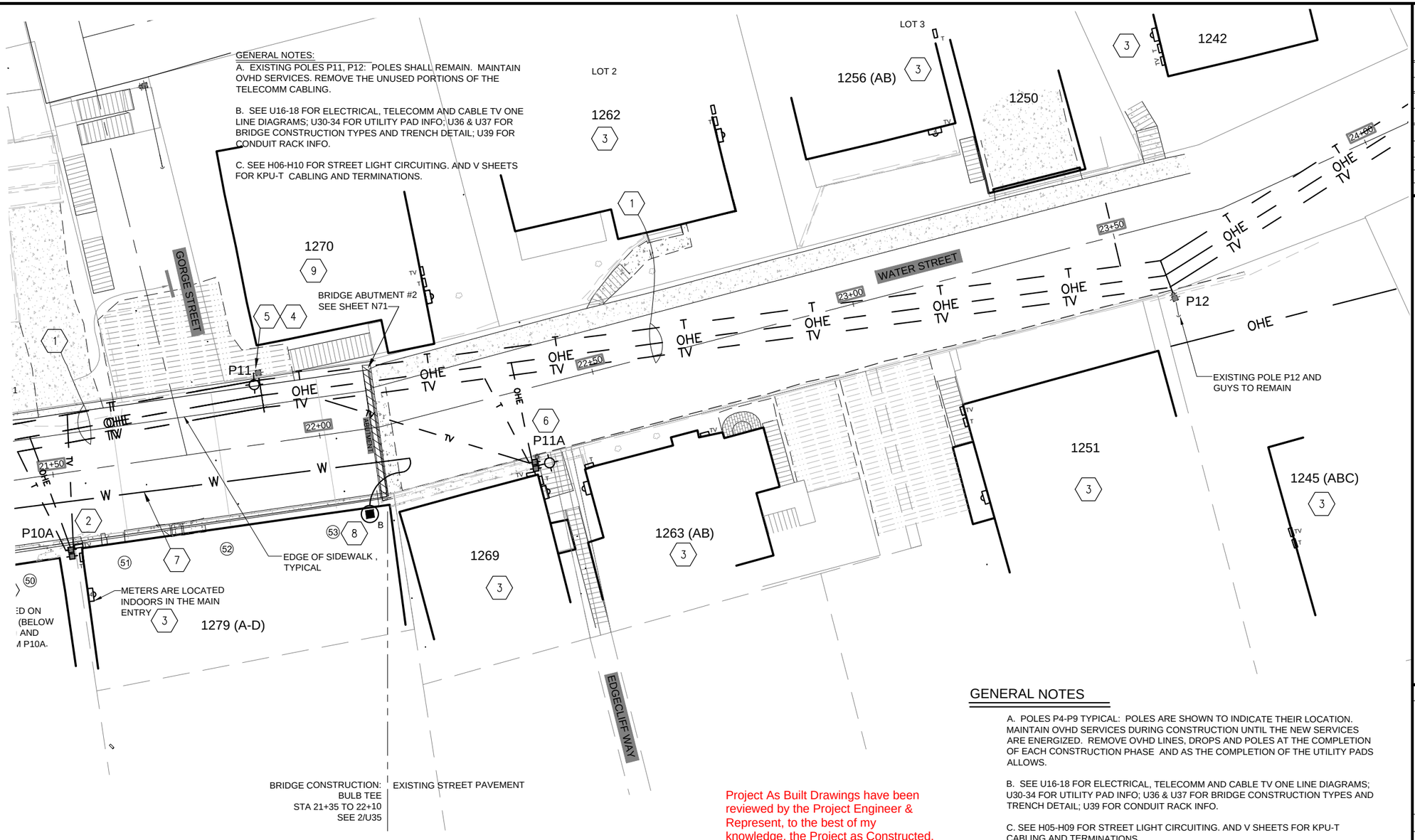
PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U14	U56

GENERAL NOTES:

A. EXISTING POLES P11, P12: POLES SHALL REMAIN. MAINTAIN OVHD SERVICES. REMOVE THE UNUSED PORTIONS OF THE TELECOMM CABLING.

B. SEE U16-18 FOR ELECTRICAL, TELECOMM AND CABLE TV ONE LINE DIAGRAMS; U30-34 FOR UTILITY PAD INFO; U36 & U37 FOR BRIDGE CONSTRUCTION TYPES AND TRENCH DETAIL; U39 FOR CONDUIT RACK INFO.

C. SEE H06-H10 FOR STREET LIGHT CIRCUITING. AND V SHEETS FOR KPU-T CABLING AND TERMINATIONS.



BRIDGE CONSTRUCTION: BULB TEE
STA 21+35 TO 22+10
SEE 2/U35

EXISTING STREET PAVEMENT

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

GENERAL NOTES

A. POLES P4-P9 TYPICAL: POLES ARE SHOWN TO INDICATE THEIR LOCATION. MAINTAIN OVHD SERVICES DURING CONSTRUCTION UNTIL THE NEW SERVICES ARE ENERGIZED. REMOVE OVHD LINES, DROPS AND POLES AT THE COMPLETION OF EACH CONSTRUCTION PHASE AND AS THE COMPLETION OF THE UTILITY PADS ALLOWS.

B. SEE U16-18 FOR ELECTRICAL, TELECOMM AND CABLE TV ONE LINE DIAGRAMS; U30-34 FOR UTILITY PAD INFO; U36 & U37 FOR BRIDGE CONSTRUCTION TYPES AND TRENCH DETAIL; U39 FOR CONDUIT RACK INFO.

C. SEE H05-H09 FOR STREET LIGHT CIRCUITING. AND V SHEETS FOR KPU-T CABLING AND TERMINATIONS.

D. IN GENERAL, ALL SERVICE CONDUITS SHALL BE INSTALLED ENTIRELY ON ONE PROPERTY UNLESS AN EASEMENT IS SHOWN ON THE PLANS INDICATING THAT CONDUITS CAN BE INSTALLED ON ADJOINING PROPERTIES.

GRAPHIC SCALE

10 0 5 10 20

(IN FEET)
1 inch = 10ft.

ELECTRICAL NOTES

1. AFTER PROJECT COMPLETION FROM POLE P10 DOWNHILL (TOWARDS POLE P11) THE EXISTING OVERHEAD DISTRIBUTION SYSTEM SHALL REMAIN OPERATIONAL. THE EXISTING OVERHEAD SYSTEM INCLUDES 12.47KV, 120/240V, CABLE TV, AND TEL DISTRIBUTION.
2. PROTECT EXISTING POLE P10A DURING CONSTRUCTION. THE POLE HAS EXISTING ELECTRIC SERVICE DROP TO 1279, A KPU-T DROP TO A POLE MOUNTED NID WHICH SERVES 1279 AND 1305 AND (2) GCI DROPS -ONE EACH TO 1279 AND 1305. RAISE DROPS ACROSS WATER STREET AS NEEDED TO ACCOMODATE HEAVY EQUIPMENT INSTALLING THE BULB TEE BRIDGE.
3. EXISTING ELECTRICAL SERVICE TO HOME REMAINS.
4. SHORE UP POLE P11 (AN OPEN CAVERN IS LOCATED BELOW THE BRIDGE DECK) DURING CONSTRUCTION OF THE BULB TEE PORTION OF THE BRIDGE AND DURING GORGE STREET PARKING DECK. ADJUST COMMUNICATION LINES AND OVERHEAD SERVICE DROPS TO ALLOW CONSTRUCTION EQUIPMENT ACCESS.
5. INSTALL NEW STREET LIGHT, SEE H09.
6. EXISTING POLE P11A TO REMAIN. COORDINATE NEW GUARD RAIL INSTALLATION TO MAINTAIN INTEGRITY OF EXISTING POLE. POLE IS FASTENED TO EXISTING CONCRETE RETAINING WALL WITH (3) MOUNTING BOLTS. ADJUST OVERHEAD DROPS AS NEEDED TO ACCOMMODATE HEAVY EQUIPMENT DURING BRIDGE CONSTRUCTION .
7. INSTALL HEAT TAPE, POWER CONNECTION & END FITTING PROVIDED IN SECTION 627. PULL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM SIDE OF THE MAIN WATER LINE ARCTIC PIPE . BOTH ENDS OF THE TAPE SHALL TERMINATE IN A NEMA 4X BOXES THAT ARE MOUNTED TO THE THE GUARD RAIL. INSTALL THE TAPE IN HDPE CONDUIT FROM THE CHANNEL ON THE WATER LINE TO THE BOXES LOCATED AT THE BEGINNING AND END OF THE RUN. SEE U29 & 1&2/U35.
8. END OF HEAT TAPE RUN, INSTALL END FITTING ~~WITH PILOT LIGHT~~ IN A NEMA 4X BOX ATTACHED TO GUARD RAIL. INSTALL CIRCUIT DIAGRAM AND LABELS PER SPEC. SEE U29.
9. EXISTING HOME TO BE DEMOLISHED. CONFIRM EXISTING SERVICES HAVE BEEN REMOVED.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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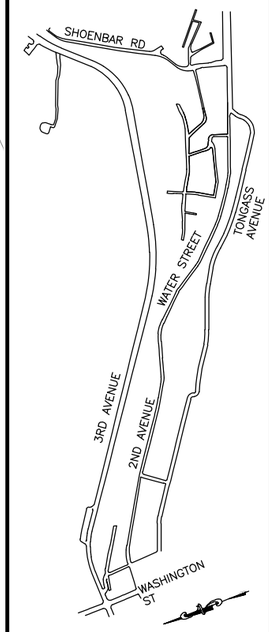
ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

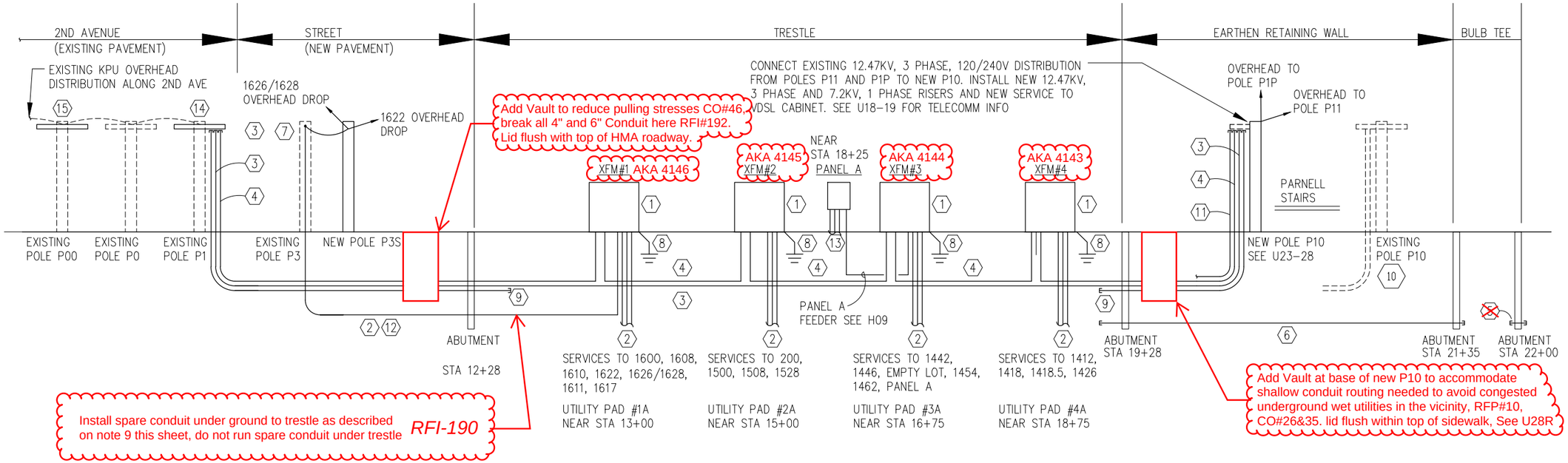
KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT #69534

UTILITY PLAN ELECTRICAL

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U15	U56



1 ELECTRICAL ONE LINE DIAGRAM

NO SCALE

DETAIL GENERAL NOTES:

A COORDINATE THE ENTIRE INSTALLATION INCLUDING THE EXISTING OVERHEAD SYSTEM WITH KPU ELECTRIC.

B CONDUITS ROUTED IN THE RETAINING WALL PORTION OF THE PROJECT AND IN THE STREET PAST ABUTMENT AT STATION 12+28 ARE INSTALLED IN A TRENCH, SEE 1/U25. CONDUITS IN THE TRESTLE PORTION OF THE PROJECT ARE INSTALLED IN A CONDUIT RACK, SEE U36-39.

C SEE U4-9 FOR EXISTING INFO, U10-U15, U30-32 FOR NEW WORK AND EQUIPMENT LOCATIONS, U54-56 FOR SERVICE AND POLE INFO.

D INSTALL CONDUIT LABELS PER SECTION 662. AT ABUTMENT PENETRATIONS PAINT CONDUIT ID INFO ON CONCRETE ADJACENT TO CONDUIT PENETRATION.

TRANSFORMER SCHEDULE

NAME	KVA	PRIMARY	SECONDARY	BONDING JUMPER	NOTES
X-1	75	7200V, 1PH	120/240V, 1PH, 3W	#1/0	LOOP FEED
X-2	75	7200V, 1PH	120/240V, 1PH, 3W	#1/0	" "
X-3	75	7200V, 1PH	120/240V, 1PH, 3W	#1/0	" "
X-4	75	7200V, 1PH	120/240V, 1PH, 3W	#1/0	" "

DETAIL ELECTRICAL NOTES

1. PADMOUNT TRANSFORMER, SEE U40.
2. 2-1/2"PVC CONDUIT FOR KPU ELECTRIC SERVICE – ONE PER HOME. ROUTE ONE CONDUIT TO EACH HOME FED FROM THE TRANSFORMER AND INSTALL SERVICE LATERAL. SEE U10-15 SHEETS FOR METER LOCATION AT HOMES AND U54-55 FEEDER INFO, TYPICAL.
3. 6"PVC W/ 3#4/0, 15KV 1/3 CONCENTRIC NEUTRAL (POLE P1 TO P10)
4. 4"PVC W/ 1#1/0, 1C 15KV FULL CONCENTRIC NEUTRAL (POLE P1 TO P10 VIA EACH PADMOUNT TRANSFORMER)
5. ~~(3) 6"C & (2) 2-1/2"C STUBBED THRU NEW ABUTMENT (ONE FOOT EACH SIDE), FOR FUTURE USE. CAP ALL ENDS.~~ Installed block-out sleeves thru new abt., eliminated conduit stubs via RFI#30
6. (3) 6"C, (2) 2-1/2"C EMPTY CONDUITS AND (1) 1"C FOR HEAT TAPE STUBBED THRU THE ABUTMENTS ASSOCIATED WITH THE EARTH WALL PORTION OF THE PROJECT. EXTEND SPARE CONDUITS 1' PAST THE ABUTMENT INSTALL PULL STRING WITH LABEL AT EACH END: ELECTRICAL SPARE CONDUIT
7. INSTALL NEW SERVICE LATERAL IN TRENCH TO NEAR POLE P3. ROUTE CONDUIT UP THE SIDE OF P3 (BEYOND THE CONCRETE RETAINING WALL ALONG THE STREET) AND INSTALL SERVICE MAST AND SERVICE CONDUCTORS. FROM THE SERVICE MAST INSTALL NEW OVERHEAD DROPS VIA POLE P3S TO EXISTING SERVICE MASTS AT 1626/1628 AND 1622. AFTER THE NEW SERVICES ARE ENERGIZED, DISCONNECT AND REMOVE THE EXISTING CONNECTION TO 120/240V OVERHEAD DISTRIBUTION SYSTEM AND AT POLE P3 CUT POLE AT 3' ABOVE STREET LIGHT AND INSTALL POLE CAP.
8. INSTALL NEW GROUNDING ELECTRODE SYSTEM: GROUND ROD, #1/0 BARE CU CONNECTED TO GROUND RING LOOPED AROUND THE PERIMETER OF THE FOOTING BELOW THE UTILITY PAD. TIE THE 12.47KV CONCENTRIC NEUTRALS TOGETHER AND CONNECT THEM TO THE GROUND ELECTRODE SYSTEM W/ #1/0 BARE CU, SEE U40 FOR ADDITIONAL DETAIL.
9. 4" & 6"C EMPTY CONDUIT STUBBED THRU THE ABUTMENT. EXTEND CONDUITS 1' PAST THE ABUTMENT INSTALL PULL STRING WITH LABEL AT EACH END: ELECTRICAL SPARE CONDUIT
10. EXISTING POLE TO BE DEMOLISHED. MIGRATE EXISTING OVERHEAD DISTRIBUTION FROM EXISTING POLE TO NEW POLE P10, SEE U25-27.
11. 2-1/2"C FOR VDSL CABINET ELECTRICAL SERVICE
12. INSTALL (2) 2-1/2"C IN A TRENCH TO POLE P3. ROUTE CONDUITS UP THE SIDE OF P3 (BEYOND THE CONCRETE RETAINING WALL ALONG THE STREET) AND INSTALL SERVICE MASTS WITH OVERHEAD DROPS VIA POLE P3S TO 1622 AND 1626. AFTER THE NEW SERVICES ARE ENERGIZED, DISCONNECT AND REMOVE EXISTING OVERHEAD DROPS.
13. STREET LIGHTING CIRCUITS, SEE H05-H09
14. REVISE LAYOUT OF POLE P1: CONNECT EXISTING 12.47KV, 3 PHASE TOP TOP TIER FROM POLE P00 (FORMERLY 34.5KV). INSTALL NEW 12.47KV, 3 PHASE AND 7.2KV, 1 PHASE RISERS. DEMOLISH TELECOMM STRANDS TO POLE P3 (STRAND TO P2 REMAINS). SEE U41-42.
15. REVISE LAYOUT OF POLE P00, RUN 12.47KV, 3 PHASE FROM P1 TO P00 ON THE TOP TIER (FORMERLY 34.5KV), SEE U41-42.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

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TAB: U16

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 9-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

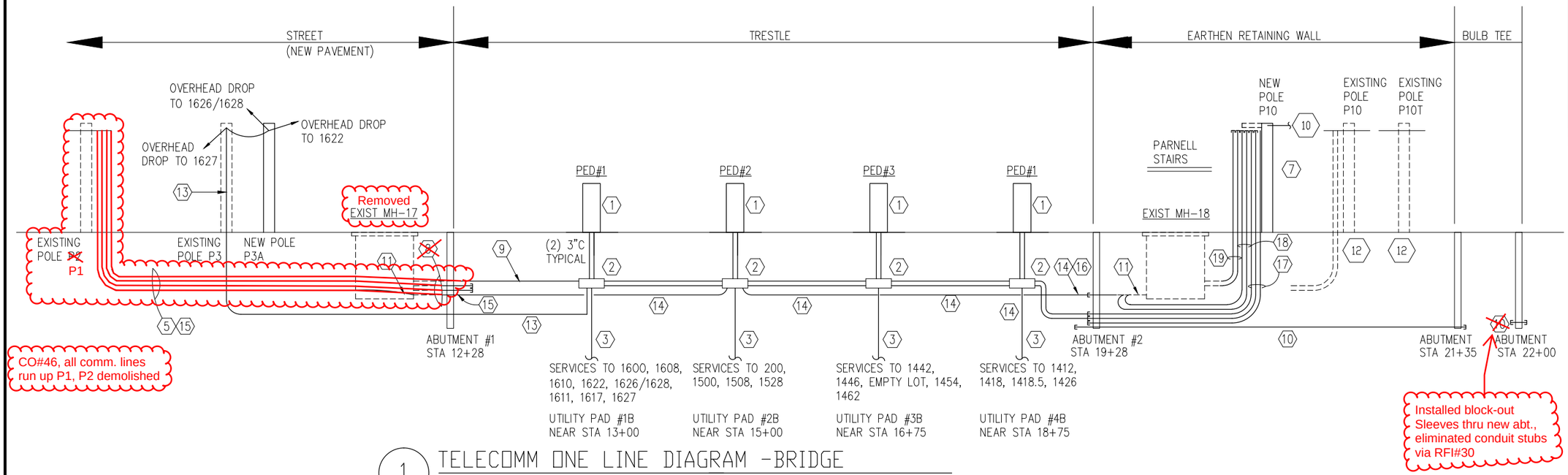
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

ELECTRICAL ONE LINE DIAGRAM

PROJECT DESIGNATION	
BR000(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U16	U56



1 TELECOMM ONE LINE DIAGRAM -BRIDGE

NO SCALE

DETAIL ELECTRICAL NOTES

1. KPU-T PEDESTAL SEE V01-V16 SHEETS.
2. 2'X2' PULL BOX MOUNTED IN CONDUIT RACK, ACCESS DOOR MOUNTED ON TOP. DRILL (4) WEEP HOLES IN BOTTOM OF THE BOX, SEE U39, V15.
3. 2"PVC CONDUIT AND (1) FIBER OPTIC SERVICE CABLE FOR TELEPHONE SERVICE – ONE PER HOME. ROUTE ONE CONDUIT AND CABLE TO EACH HOME FED FROM THE PEDESTAL, SEE V02 FOR LIST OF HOMES SERVED BY THE PEDESTAL, TYPICAL
4. NOTE NOT USED
5. EXISTING (4) 4"PVC EMPTY TO POLE P2 TO MANHOLE MH17 ~~TO REMAIN~~, INSTALL AIR PIPE ~~IN ONE OF THE CONDUITS~~. Removed. All new conduit run from P1 thru abutment onto conduit rack under trestle.
6. EXISTING (2) 4"PVC TO EXISTING POLE P10T INTERCEPT AND EXTEND TO NEW P10.
7. EXISTING (2) 4"PVC TO EXISTING POLE P10 INTERCEPT AND EXTEND TO NEW P10.
8. ~~EXISTING (4) 4"C STUBBED THRU EXISTING ABUTMENT, SEE 3/U47. PROTECT CONDUITS DURING THE DEMOLITION OF THE EXISTING ABUTMENT. EXTEND THE EXISTING CONDUITS THRU TRESTLE ABUTMENT #1 (STATION 12+28). INSTALL AIR PIPE IN ONE OF THE CONDUITS (TRANSITION FROM THE 2"C RUN IN CONDUIT RACK), EXTEND ONE OF THE CONDUITS TO THE PULL BOX AT UTILITY PAD 1B. CAP THE OTHER (2) CONDUITS 1' FROM THE ABUTMENT WALL~~.
9. (1) 4"C FROM PULL BOX, ~~CONNECT TO CONDUIT STUBBED THRU THE NEW ABUTMENT.~~ to Pole P1
10. (3) 4"C EMPTY CONDUITS STUBBED THRU THE ABUTMENTS ASSOCIATED WITH THE EARTH WALL AND BULB TEE PORTION OF THE PROJECT. EXTEND CONDUITS 1' PAST THE ABUTMENT INSTALL PULL STRING WITH LABEL AT EACH END: TELECOMM SPARE CONDUIT
11. ~~EXISTING (6) 4"C STUBBED UNDER THE TRESTLE BRIDGE, SEE 2/U53. PROTECT CONDUITS DURING BRIDGE CONSTRUCTION. EXTEND THE EXISTING CONDUITS: (2) TO POLE P10 AND (4) STUBBED THRU TRESTLE ABUTMENT #2 (STATION 19+28) IN ONE OF THE CONDUITS INSTALL AIR PIPE (TRANSITION FROM THE 2"C RUN IN CONDUIT RACK), CAP THE OTHER (3) 1' FROM THE ABUTMENT WALL.~~ All new conduits installed as needed directly into MH18, existing conduits not re-used. Total (4) 4'C" from MH18 thru Abutment 2
12. EXISTING POLE TO BE DEMOLISHED. MIGRATE EXISTING KPU-T CABLING FROM EXISTING POLE TO NEW POLE P10, SEE U25-27, V02,05,13,15 SHEETS.
13. INSTALL (3) 2"C IN TRENCH TO POLE P3. ROUTE CONDUITS UP P3 ON THE SIDE OF THE POLE THAT HAS A WOOD BOARDWALK, BEYOND THE CONCRETE RETAINING WALL ALONG THE STREET. INSTALL SERVICE MASTS AND SERVICE CABLES. FROM THE SERVICE MASTS INSTALL NEW OVERHEAD DROPS: VIA POLE P3 TO SERVE 1627, AND VIA POLE P3S TO SERVE 1626/1628 AND 1622. AFTER THE NEW SERVICES ARE ENERGIZED, DISCONNECT AND REMOVE THE EXISTING OVERHEAD TELECOMM SYSTEM.
14. 2"C WITH AIR PIPE INSTALLED IN CONDUIT RACK FROM TRESTLE ABUTMENT #1 TO ABUTMENT #2. THE COMPLETE RUN IS FROM POLE ~~P2~~ P1 TO MANHOLE MH18. TRANSITION TO 4"C AT ABUTMENTS.
15. INSTALL AIR PIPE IN ~~EXISTING EMPTY~~ 4"C FROM POLE P2 ~~THRU MANHOLE MH17 AND THEN IN EXISTING 4"C~~ THRU ABUTMENT. TRANSITION TO NEW 2"C RUN INSTALLED IN CONDUIT RACK.
16. INSTALL AIR PIPE IN 4"C FROM TRESTLE ABUTMENT #2 TO MANHOLE ~~MH17~~ MH18 (EXTEND EXISTING 4"C FROM MANHOLE THRU ABUTMENT #2). TRANSITION TO NEW 2"C RUN INSTALLED IN CONDUIT RACK.
17. (3) 2"C –ONE STUBBED THRU ABUTMENT #2, THE OTHER TWO CONDUITS RUN TO PED#1, ONE EMPTY CONDUIT, THE OTHER WITH (1) 36 STRAND FIBER CABLE TO PED #3 AND (2) LONG TAIL FIBER CABLES–ONE EACH TO PED #1 AND PED #2,
18. (2) 4"C EXTENDED FROM MH18 TO P10: ONE EMPTY CONDUIT, THE OTHER WITH (1) 900 PAIR COPPER CABLE TO POLE P10.
19. ~~INTERCEPT EXISTING (2) 4"C MH18 TO P10T: ONE EMPTY CONDUIT, THE OTHER WITH EXISTING 900 PAIR COPPER CABLE TO POLE P10. DEMO 900 PAIR, EXTEND CONDUITS EMPTY TO P1, SEE U23-24.~~ New conduit run from MH18 to P10 contains new 900 pair.

DETAIL GENERAL NOTES:

A COORDINATE THE RACEWAY SYSTEM INSTALLATION WITH KPU-T.

B CONDUITS ROUTED IN THE RETAINING WALL PORTION OF THE PROJECT AND IN THE STREET PAST ABUTMENT AT STATION 12+28 ARE INSTALLED IN A TRENCH, SEE 1/U25. CONDUITS IN THE TRESTLE PORTION OF THE PROJECT ARE INSTALLED IN A CONDUIT RACK, SEE U36-39.

C SEE U5-9 FOR EXISTING EQUIPMENT LOCATIONS, U10-U15, U30, U33, V01-16 FOR NEW WORK.

D INSTALL CONDUIT LABELS PER SECTION 662. AT ABUTMENT PENETRATIONS PAINT CONDUIT ID INFO ON CONCRETE ADJACENT TO CONDUIT PENETRATION.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000

TAB: U17

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

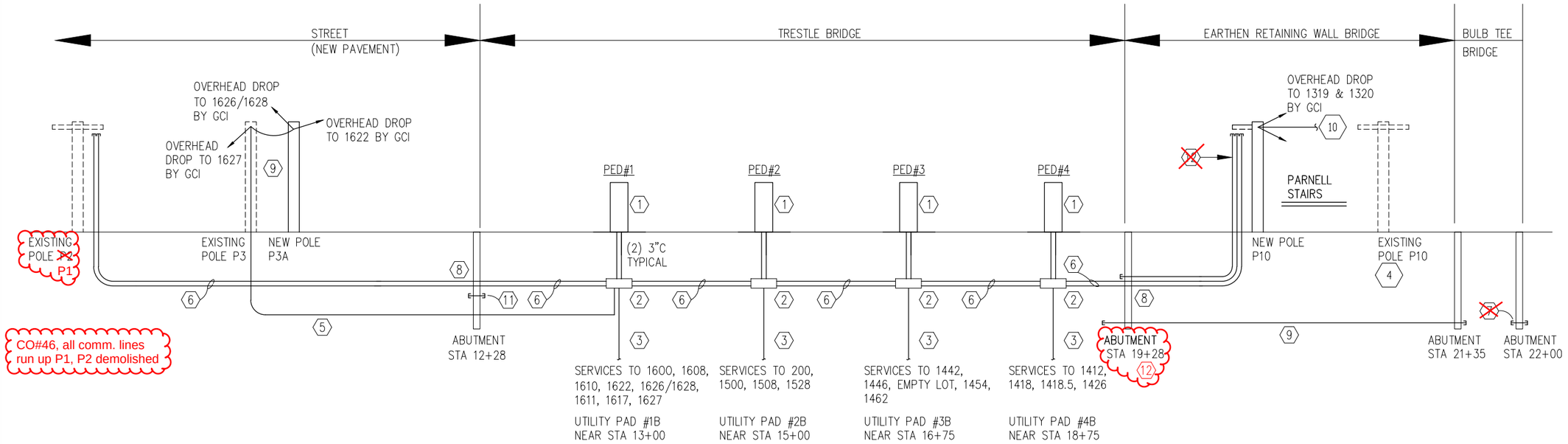
KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

TELECOMM ONE LINE DIAGRAM

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U17	U56



1 CABLE TV ONE LINE DIAGRAM -BRIDGE

NO SCALE

ELECTRICAL NOTES

1. PEDESTAL INSTALLED BY GCI. DURING THE SUBMITTAL PHASE COORDINATE WITH GCI, DETERMINE THE TYPE AND SIZE OF THEIR PEDESTAL; PROVIDE BRACKET TO MOUNT THE PEDESTAL TO THE CONCRETE DECK, COORDINATE WITH THE BRIDGE DECK FABRICATOR THE LOCATION AND SIZE OF THE INSERTS FOR THE BRACKET. SEE V25.
2. PULL BOX MOUNTED IN CONDUIT RACK, ACCESS DOOR MOUNTED ON TOP. DRILL (4) WEEP HOLES IN BOTTOM OF THE BOX, SEE U39 AND V24.
3. 2"PVC CONDUIT FOR GCI SERVICE – INSTALL ONE CONDUIT PER HOME. ROUTE ONE CONDUIT TO EACH HOME FED FROM THE PEDESTAL, SEE U10–15 AND V20–25 FOR NID LOCATION AT HOMES AND CONDUIT ROUTES TYPICAL. CABLE AND NID INSTALLED AND TERMINATED BY GCI
4. EXISTING POLE TO BE DEMOLISHED. COORDINATE WITH GCI FOR THEM TO MIGRATE EXISTING GCI CABLING FROM EXSITING POLE TO NEW POLE P10, SEE U25–27, V2 SHEETS.
5. INSTALL (3) 2"C IN A TRENCH TO POLE P3. ROUTE CONDUITS UP THE SIDE OF P3 (BEYOND THE CONCRETE RETAINING WALL ALONG THE STREET) AND INSTALL SERVICE MASTS. COORDINATE WITH GCI, GCI WILL INSTALL CABLING FROM PEDESTAL TO 1627, 1626/1628 AND 1622, AND AFTER THE NEW SERVICES ARE ENERGIZED, DISCONNECT AND REMOVE THEIR OVERHEAD DISTRIBUTION SYSTEM.
6. (2) 2"PVC RUN FROM POLE ~~P2~~ P1 TO NEW POLE P10 VIA PULL BOXES: ONE FOR COAX DISTRIBUTION CABLES, ONE SPARE. INSTALL PULL STRING AND LABELS. GCI WILL INSTALL CABLING.
7. ~~(3) 2"C STUBBED THRU NEW ABUTMENT (ONE FOOT EACH SIDE), FOR FUTURE USE. CAP ALL ENDS.~~ block-out Sleeves thru new abt., eliminated conduit stubs via RFI#30
8. TRANSITION CONDUITS FROM UNDERGROUND RUNS THRU THE ABUTMENT AND INTO THE CONDUIT RACK.
9. (3) 2"C EMPTY CONDUITS STUBBED THRU THE ABUTMENTS ASSOCIATED WITH THE EARTHEN RETAINING WALL PORTION OF THE PROJECT. EXTEND CONDUITS 1' PAST THE ABUTMENT. INSTALL PULL STRING WITH LABEL AT EACH END: CABLE TV SPARE CONDUIT; CAP CONDUITS.
10. INSTALL 16M STRAND FROM P10 TO P12 ON SIDEWALK ARMS FOR GCI TO INSTALL AERIAL CABLING.
11. (1) 2"C STUBBED THRU NEW ABUTMENT (ONE FOOT EACH SIDE), FOR FUTURE USE. CAP ALL ENDS.

Addendum 2

Add Note: "12) (1) 2"C Stubbed thru new abutment 19+28 for future use.

GENERAL NOTES:

A IN GENERAL, INSTALL AN EMPTY RACEWAY SYSTEM FOR DISTRIBUTION AND SERVICE CABLING COMPLETE WITH PULL STRING AND LABELS. GCI WILL INSTALL AND TERMINATE THEIR CABLING SYSTEM. COORDINATE THE INSTALLATION WITH GCI. RACEWAYS ARE PVC SCHEDULE 80. THE WORK SHALL BE BID AS WORK ITEM 662(3).

B CONDUITS ROUTED IN THE RETAINING WALL PORTION OF THE PROJECT AND IN THE STREET PAST ABUTMENT AT STATION 12+28 ARE INSTALLED IN A TRENCH, SEE 1/U25. CONDUITS IN THE TRESTLE PORTION OF THE PROJECT ARE INSTALLED IN A CONDUIT RACK, SEE U36–39.

C SEE U5–9 FOR EXISTING EQUIPMENT LOCATIONS, U10–U15, U30, U34, V20–25 FOR NEW WORK.

D INSTALL CONDUIT LABELS PER SECTION 662. AT ABUTMENT PENETRATIONS PAINT CONDUIT ID INFO ON CONCRETE ADJACENT TO CONDUIT PENETRATION.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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TAB: U18

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

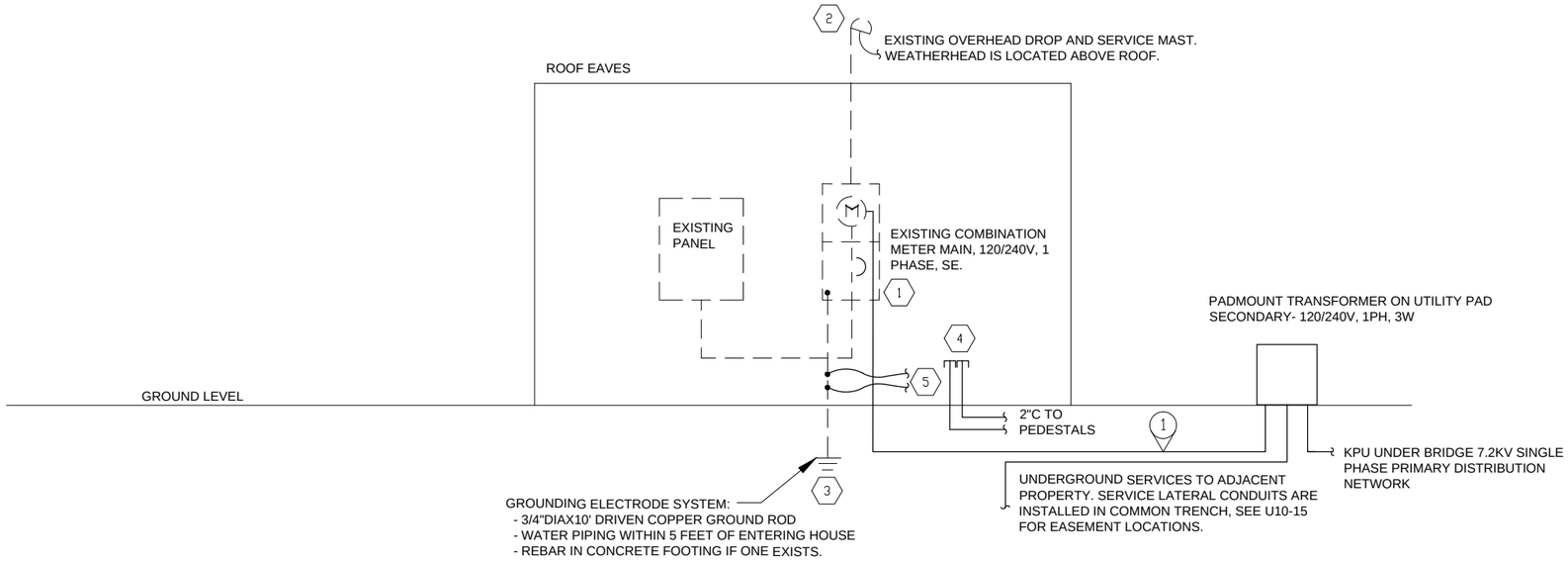
KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

CABLE TV ONE LINE DIAGRAM

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U18	U56



1 SERVICE ONE LINE DIAGRAM

NO SCALE

FEEDER NUMBER	CONDUIT AND WIRE SIZE
1 2	SEE U54-55 (2-1/2"C 3#1/0 MINIMUM) #6 BARE COPPER MINIMUM

GENERAL NOTES:

A SERVICE WORK SHALL COMPLY WITH THE LATEST KPU INSTALLATION STANDARDS.

B PRIOR TO BEGINNING THE INSTALLATION WORK, MEET WITH THE OWNER TO COORDINATE THE WORK EFFORT INCLUDING SCHEDULING THE OUTAGES, THE NEW EQUIPMENT LOCATIONS AND CONDUIT ROUTES ON THE HOME, ROOF AND SIDING REPAIR, TRENCHING ROUTE AND FINISH MATERIAL.

C THIS DETAIL ILLUSTRATES THE BASIC CONCEPT FOR CONNECTING NEW SERVICES TO EXISTING EQUIPMENT. PATCH ALL EXISTING OPENINGS IN ROOFS AND WALLS TO MATCH EXISTING SURFACES. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION AT EACH PROPETY. SEE U4-9 AND U10-15 SHEETS FOR EQUIPMENT LOCATIONS, V SHEETS FOR ONT & NIDS LOCATIONS. SEE PHOTOS U47-53 FOR ADDITIONAL INFO.

D FIELD CONFIRM EXISTING EQUIPMENT LAYOUT, FEEDER CONNECTIONS PRIOR TO ORDERING NEW MATERIALS.

ELECTRICAL NOTES:

1. EXISTING COMBINATION METER MAIN(S) SHALL REMAIN. CONNECT NEW UNDERGROUND SERVICE TO THE EXISTING EQUIPMENT. SEE U10-15 FOR METER QUANTITIES AND U FOR FEEDER INFO.
2. EXISTING OVERHEAD DROP AND MAST HEAD LOCATED ABOVE ROOF. AFTER NEW SERVICE IS ENERGIZED REMOVE EXISTING DROP, CONDUIT, MAST AND CONDUCTORS. PLUG CONDUIT HOLE IN EAVES, PATCH EXISTING ROOF, PATCH AND PAINT SIDING. CAP THE METER CAN.
3. FIELD CONFIRM THE EXISTING GROUNDING ELECTRODE SYSTEM MEETS NEC AND KPU REQUIREMENTS. CORRECT ANY DEFICIENCIES. MINIMUM INSTALLATION SHALL BE SUITABLE FOR A 200A SERVICE WITH #6 BARE COPPER GEC CONNECTED TO GROUND ROD.
4. CONDUITS FOR KPU-T AND GCI SERVICES. STUB UP CONDUITS 1' BELOW EXISTING KPU-T ONT AND GCI NID. SEE V SHEETS FOR ONT AND NID LOCATIONS.
5. INSTALL #10 INSULATED GREEN TELECOMM GROUND WIRE ONE FOR KPU-T AND ONE FOR GCI. CONFIRM WITH KPU-T AND GCI IF WIRE IS NEEDED.

NEC LOAD CALC:
THE NEW UTILITY SERVICE LATERAL IS SIZED PER KPU ELECTRIC STANDARD SERVICE CONDUCTOR SIZE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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TAB: U19

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 9-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

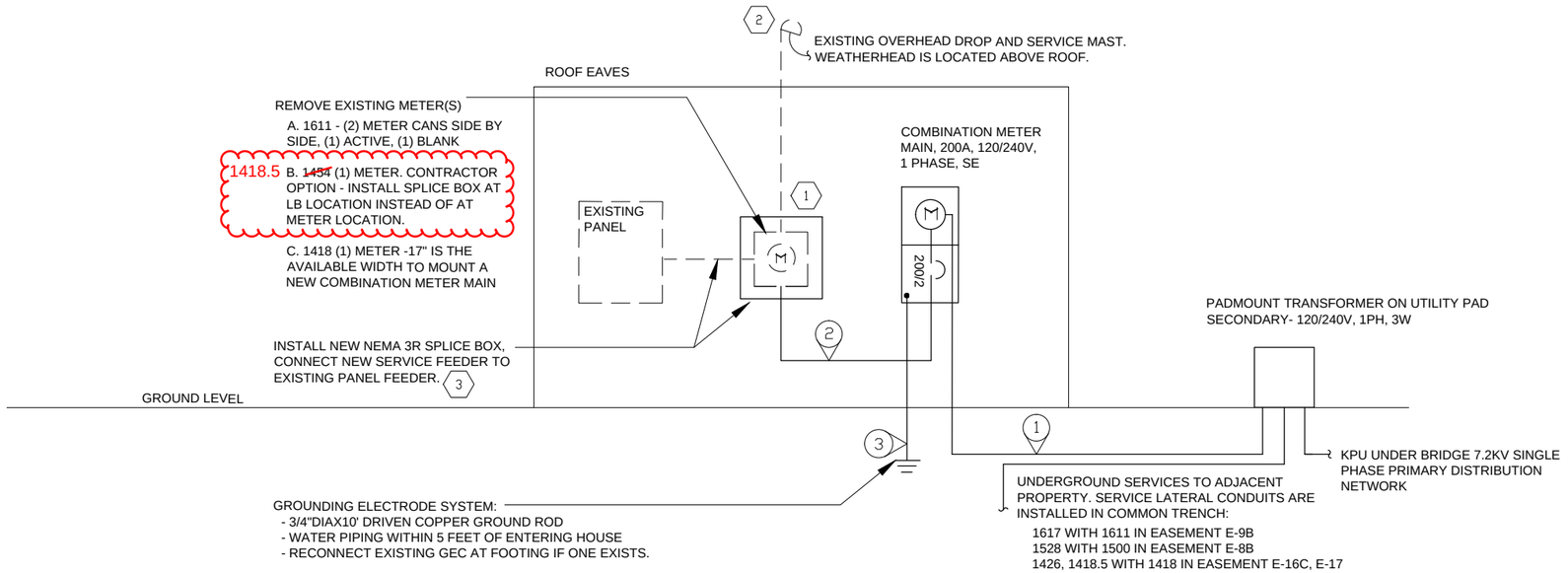
SERVICE ONE LINE EXISTING METER

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U19	U56



1 SERVICE ONE LINE DIAGRAM

NO SCALE

FEEDER NUMBER	CONDUIT AND WIRE SIZE
1 2 3	2-1/2"C W/ ~~3#1/0~~ 3#2/0, AL 2"C W/ 3 #3/0, 1#6G #4 BARE CU GEC 1-1/4"C W/ 3 #2, 1#8G

NEC LOAD CALC:
THE UTILITY SERVICE LATERAL IS SIZED PER KPU ELECTRIC STANDARD SERVICE CONDUCTOR SIZE.

GENERAL NOTES:

A SERVICE WORK SHALL COMPLY WITH THE LATEST KPU INSTALLATION STANDARDS.

B PRIOR TO BEGINNING THE INSTALLATION WORK, MEET WITH THE OWNER TO COORDINATE THE WORK EFFORT INCLUDING SCHEDULING THE OUTAGES, THE NEW EQUIPMENT LOCATIONS AND CONDUIT ROUTES ON THE HOME, ROOF AND SIDING REPAIR, TRENCHING ROUTE AND FINISH MATERIAL.

C THIS DETAIL ILLUSTRATES THE BASIC CONCEPT FOR INSTALLING NEW SERVICE EQUIPMENT AT ADDRESSES 1418, ~~1454~~, 1500 AND 1418.5 1611. PATCH ALL EXISTING OPENINGS IN ROOFS AND WALLS TO MATCH EXISTING SURFACES. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION AT EACH PROPETY. SEE U4-9 AND U10-15 SHEETS FOR EQUIPMENT LOCATIONS. SEE PHOTOS U47-53 FOR ADDITIONAL INFO

D FIELD CONFIRM EXISTING EQUIPMENT LAYOUT, FEEDER CONNECTIONS PRIOR TO ORDERING NEW SERVICE EQUIPMENT

ELECTRICAL NOTES:

1 REMOVE EXISTING METERS. THE EXISTING METER CANS ARE SURFACE MOUNTED. INSTALL NEW NEMA 3R SPLICE BOX SIZED TO COVER THE EXISTING OPENING AND CONNECT NEW FEEDERS TO THE EXISTING PANELS.

2 EXISTING OVERHEAD DROP AND MAST HEAD LOCATED ABOVE ROOF. AFTER NEW SERVICE IS ENERGIZED REMOVE EXISTING DROP, CONDUIT, MAST AND CONDUCTORS. PLUG CONDUIT HOLE IN EAVES, PATCH EXISTING SHINGLE ROOF, PATCH AND PAINT SIDING. AT 16XX EXISTING MAST CONDUIT AND WEATHERHEAD SHALL REMAIN IN PLACE, CAP THE END ABOVE THE EXISTING METER CAN.

3 SIZE NEW BOX TO BE AT LEAST NEXT NOMINAL SIZED BOX LARGER THAN THE EXISTING METER CAN(S)

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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TAB: U20

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

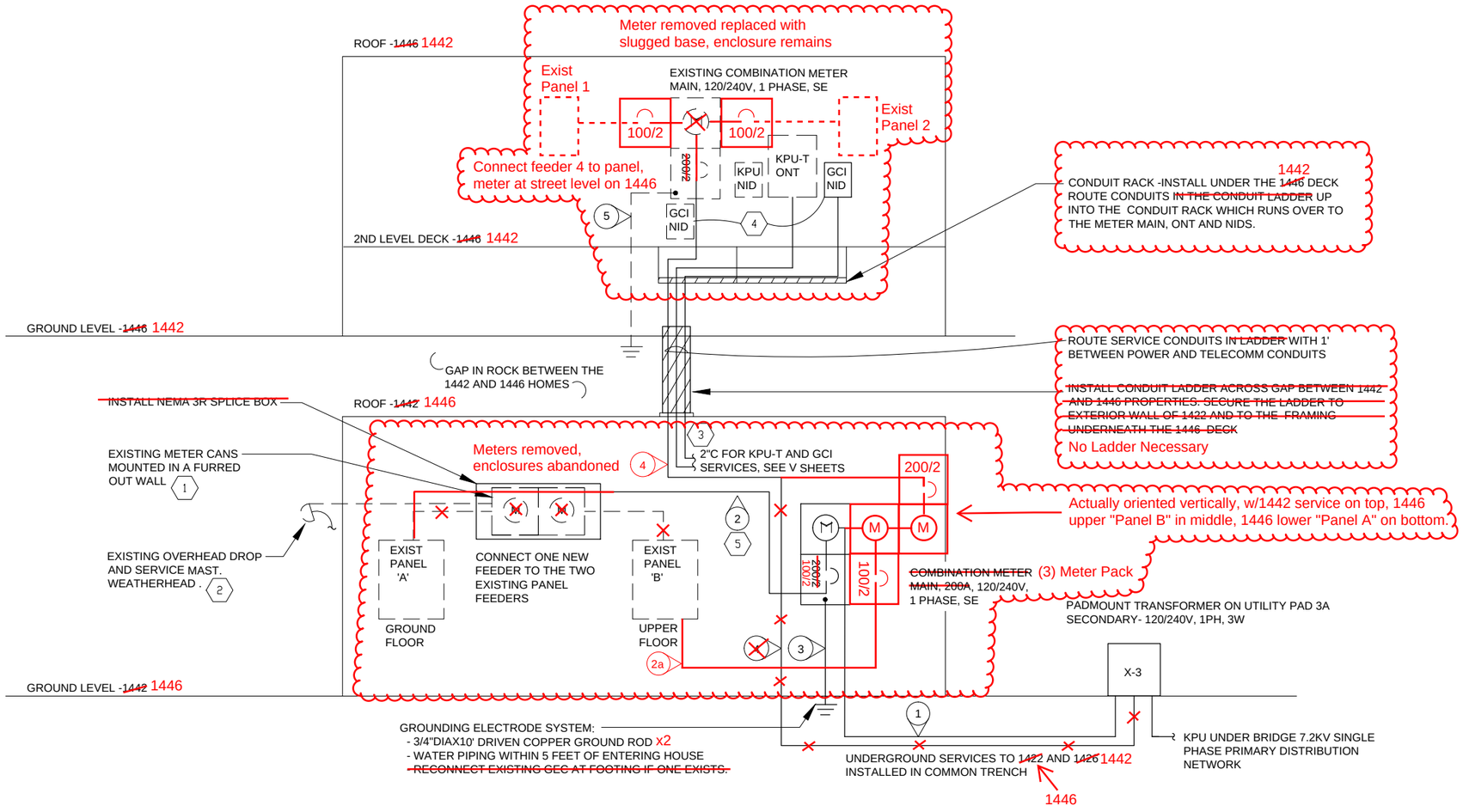
SERVICE ONE LINE ONE METER

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U20	U56



1 ONE LINE DIAGRAM -1442 & 1446

NO SCALE

GENERAL NOTES:

A SERVICE WORK SHALL COMPLY WITH THE LATEST KPU INSTALLATION STANDARDS.

B PRIOR TO BEGINNING THE INSTALLATION WORK, MEET WITH THE OWNER TO COORDINATE THE WORK EFFORT INCLUDING SCHEDULING THE OUTAGES, THE NEW EQUIPMENT LOCATIONS AND CONDUIT ROUTES ON THE HOME, ROOF AND SIDING REPAIR, TRENCHING ROUTE AND FINISH MATERIAL.

C THIS DETAIL ILLUSTRATES THE BASIC CONCEPT FOR INSTALLING NEW SERVICE EQUIPMENT AT ADDRESSES 1442 AND 1446. PATCH ALL EXISTING OPENINGS IN ROOFS AND WALLS TO MATCH EXISTING SURFACES. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION AT EACH PROPETY. SEE U4-9 AND U10-15 SHEETS FOR EQUIPMENT LOCATIONS. SEE PHOTOS U51 FOR ADDITIONAL INFO

D FIELD CONFIRM EXISTING EQUIPMENT LAYOUT, FEEDER CONNECTIONS PRIOR TO ORDERING NEW SERVICE EQUIPMENT

Abandon existing meter enclosures in place, feeds run directly from new meter to panels, accepted by homeowner

ELECTRICAL NOTES:

1 ~~REMOVE~~ EXISTING METER CANS ~~WHICH~~ ARE MOUNTED IN A FURRED OUT SECTION OF THE EXTERIOR SIDING, THE METER FACE IS FLUSH WITH THE SURFACE OF THE FURRED OUT WALL. ~~INSTALL NEW NEMA 3R SPLICE BOX SIZED TO COVER THE EXISTING METER CANS AND~~ CONNECT NEW FEEDERS TO THE EXISTING PANELS. ~~SIZE NEW BOX TO BE AT LEAST THE NEXT NOMINAL SIZED BOX LARGER THAN THE EXISTING METER CAN(S). REVISE OPENING IN FURRED OUT WALL TO PROVIDE NEC ACCESS TO THE SPLICE BOX.~~

2 EXISTING OVERHEAD DROP AND MAST HEAD LOCATED IN 2ND STORY WALL . AFTER NEW SERVICE IS ENERGIZED REMOVE EXISTING DROP AND CONDUCTORS IN CONDUIT, MAST AND CONDUIT SHALL REMAIN. PATCH AND SEAL OPENING IN SIDING.

3 ROUTE TELECOMM AND CABLE TV SERVICE CONDUITS IN THE SAME TRENCH AS THE ELECTRICAL SERVICE. MAINTAIN 1' SEPARATION FROM THE POWER CONDUITS.

4 COORDINATE WITH GCI TO RELOCATE THE EXISTING GCI NID TO ALLOW ROOM TO INSTALL NEW SERVICE CONDUIT

5 ROUTE CONDUIT UNDER THE 1442 DECK AND THEN ON THE NORTH WALL TO

FEEDER NUMBER	CONDUIT AND WIRE SIZE
1	2-1/2"C W/ ~~3#1/0~~ 2#4/0(Hot)+1#2/0(Neutral), AL
2 = 2a	2"C W/ 3 #3/0, 1#6G
3	#4 BARE CU GEC
4	2-1/2"C W/ 3~~#4/0~~ #2/0, AL
5	~~1-1/4"C W/ 3 #2~~, 1#8G

NEC LOAD CALC:
THE UTILITY SERVICE LATERAL IS SIZED PER KPU ELECTRIC STANDARD SERVICE CONDUCTOR SIZE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\13DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U21

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 9-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

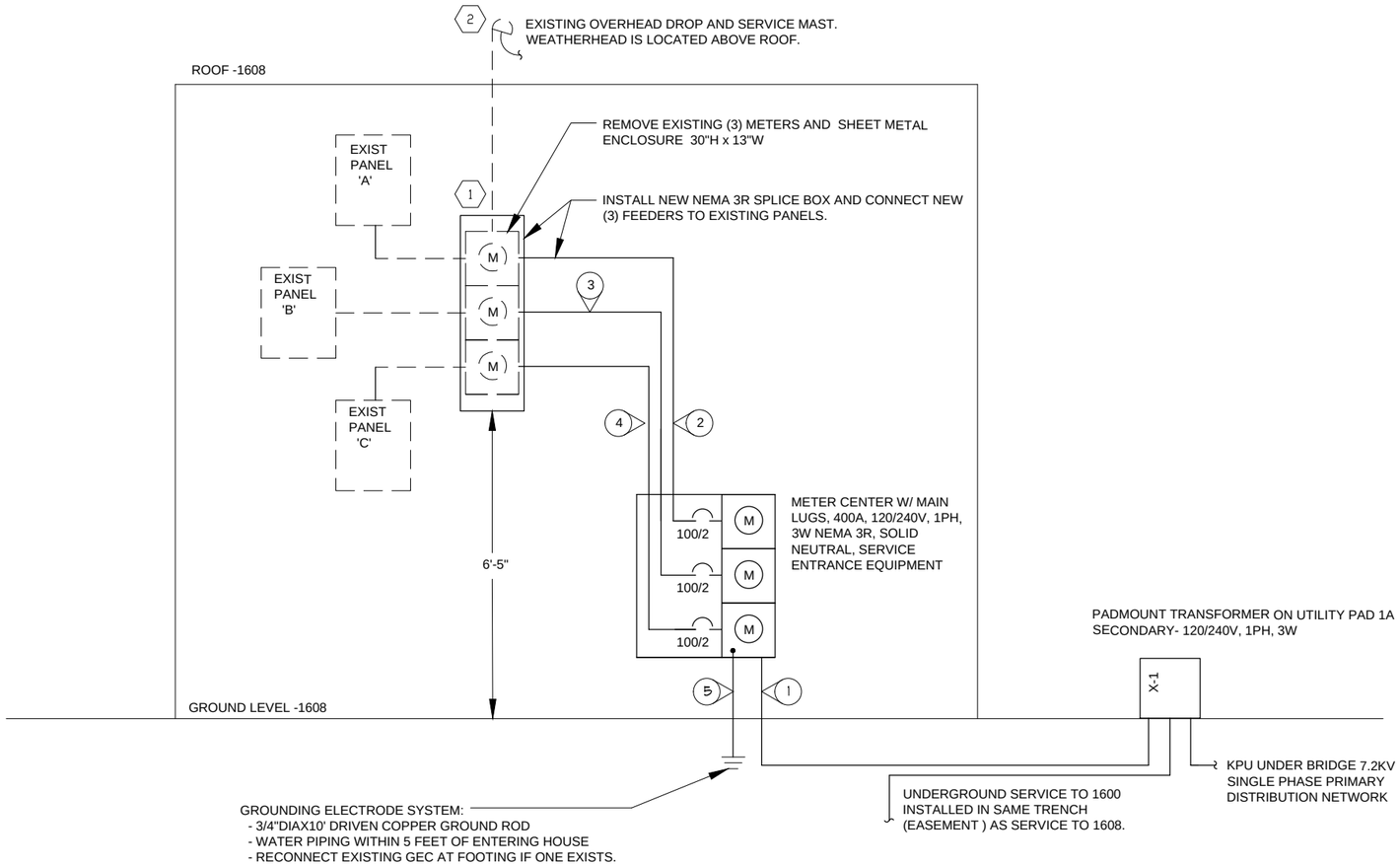
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

SERVICE ONE LINE 1442 & 1446

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U21	U56



1 ONE LINE DIAGRAM - 1608

NO SCALE

GENERAL NOTES:

A SERVICE WORK SHALL COMPLY WITH THE LATEST KPU INSTALLATION STANDARDS.

B PRIOR TO BEGINNING THE INSTALLATION WORK, MEET WITH THE OWNER TO COORDINATE THE WORK EFFORT INCLUDING SCHEDULING THE OUTAGES, THE NEW EQUIPMENT LOCATIONS AND CONDUIT ROUTES ON THE HOME, ROOF AND SIDING REPAIR, TRENCHING ROUTE AND FINISH MATERIAL.

C THIS DETAIL ILLUSTRATES THE BASIC CONCEPT FOR INSTALLING NEW SERVICE EQUIPMENT AT ADDRESS 1608. PATCH ALL EXISTING OPENINGS IN ROOFS AND WALLS TO MATCH EXISTING SURFACES. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION AT EACH PROPETY. SEE U4-9 AND U10-15 SHEETS FOR EQUIPMENT LOCATIONS. SEE PHOTOS U48 FOR ADDITIONAL INFO

D FIELD CONFIRM EXISTING EQUIPMENT LAYOUT, FEEDER CONNECTIONS PRIOR TO ORDERING NEW SERVICE EQUIPMENT

ELECTRICAL NOTES:

1 REMOVE EXISTING (3) METERS AND 12" X 24" SHEET METAL ENCLOSURE FRAMED INTO THE EXTERIOR SIDING. THE EXISTING METER CANS ARE MOUNTED FLUSH IN EXTERIOR WALL. INSTALL NEW NEMA 3R SPLICE BOX SIZED TO COVER THE EXISTING OPENING AND CONNECT NEW (3) FEEDERS TO EXISTING PANELS.

2 EXISTING OVERHEAD DROP FROM MIDSPAN TAP BETWEEN POLES P4-P5. MAST HEAD IS LOCATED ABOVE ROOF. AFTER NEW SERVICE IS ENERGIZED REMOVE EXISTING DROP AND CONDUCTORS IN THE MAST. EXISTING MAST CONDUIT AND WEATHERHEAD SHALL REMAIN.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: jl Date: 9/24/2019

SHORT CIRCUIT CURRENT INFO:

120/240 VOLT DISTRIBUTION SHORT CIRCUIT CURRENT:
METER CENTER 5,960 AMPS

STANDARD 10,000 AIC RATING IS SUITABLE FOR ALL DISTRIBUTION EQUIPMENT.

PRELIMINARY ARC FLASH ANALYSIS INFO:

120/240V VOLT DISTRIBUTION SYSTEM EQUIPMENT:

FLASH PROTECTION BOUNDARY	4' - 0"
LIMITED APPROACH BOUNDARY	3' - 6"
RESTRICTED APPROACH BOUNDARY	1' - 0"
PROHIBITED APPROACH BOUNDARY	0" - 1"
SHOCK HAZARD	240 VAC

FEEDER NUMBER	CONDUIT AND WIRE SIZE
1	2-1/2"C W/ 3#4/0
2	1-1/4"C W/ 3#2, 1#8G
3	1-1/4"C W/ 3#2, 1#8G
4	1-1/4"C W/ 3#2, 1#8G
5	1#2 BARE CU GEC

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U22

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

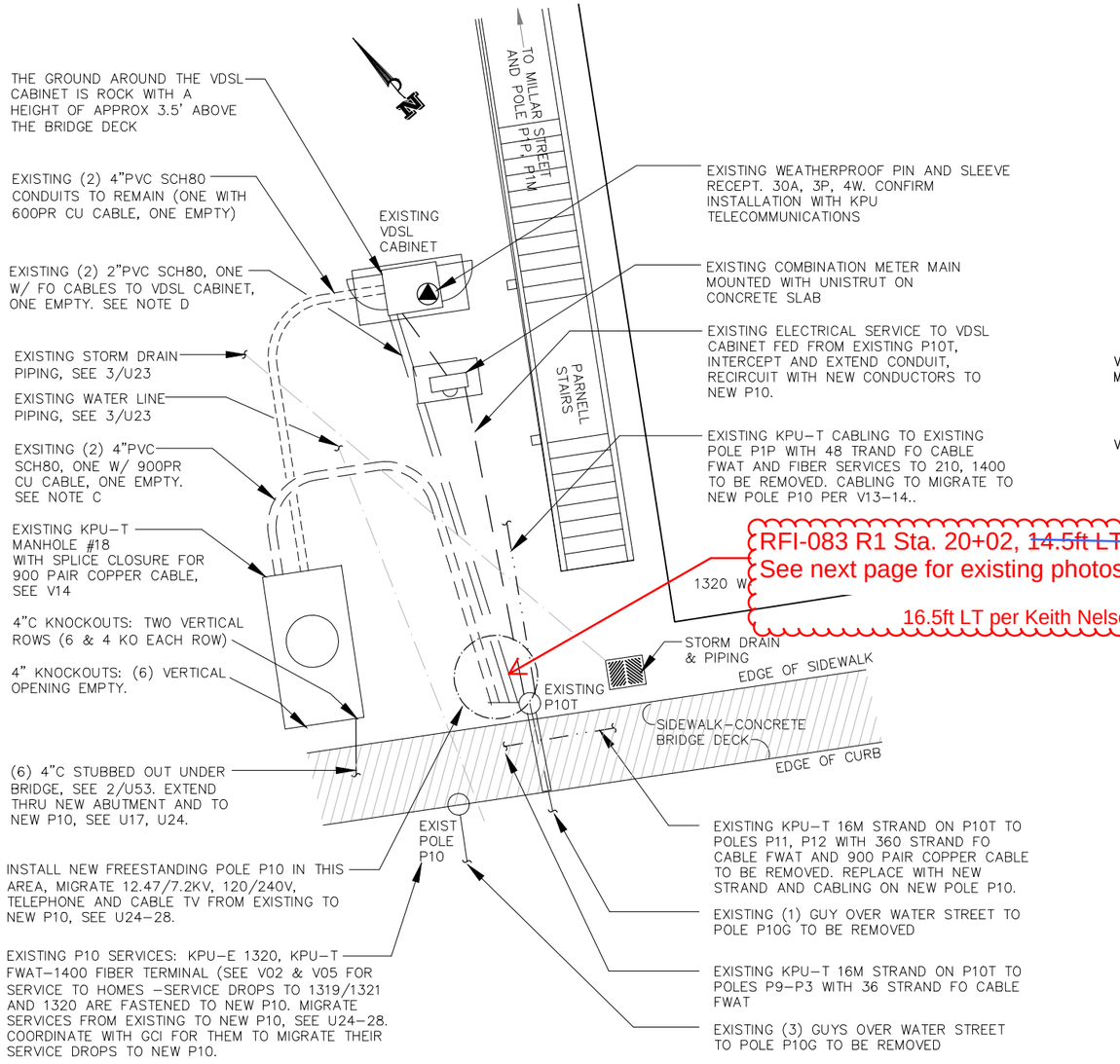
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

SERVICE ONE LINE 1608

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U22	U56



1 PARNELL STAIRS -EXISTING PLAN

SCALE: 1/4" = 1'-0"

DETAIL NOTES:

A. SEE 1/U24 FOR NEW LAYOUT AND V13-14 FOR ADDITIONAL TELECOMM CABLING INFORMATION. SEE 2 & 3/U23 FOR EXISTING PHOTOS OF THE SITE

B. AFTER NEW POWER, TELE AND TV SYSTEMS ARE OPERATIONAL REMOVE EXISTING POLES P10, P10T, P10G, GUYS AND ALL UNUSED EXISTING CONDUIT AND WIRE.

C. INTERCEPT AND EXTEND 4"C SPARE TO NEW P10. AFTER NEW SYSTEM IS OPERATIONAL, REMOVE THE EXISTING 900 PAIR CABLE FROM THE OTHER 4"C AND EXTEND THE CONDUIT TO P10.

D. INTERCEPT AND EXTEND 2"C SPARE TO NEW P10. AFTER NEW SYSTEM IS OPERATIONAL, REMOVE THE EXISTING FIBER CABLES FROM THE OTHER 2"C AND EXTEND THE CONDUIT TO P10.

See U28R for additional details, U28R takes precedents in any conflicting drawing or language.

RFI-144
RFP #10 / CO#26 issued for P-10 Pole & conduit routing
CO#26 later replaced with CO#35

RFI-083 R1 Sta. 20+02, ~~14.5ft LT~~
See next page for existing photos
16.5ft LT per Keith Nelson

2 P10, P10T & VDSL CABINET LOCATION

NO SCALE

3 MANHOLE MH18 & EXISTING PIPING

NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U23

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

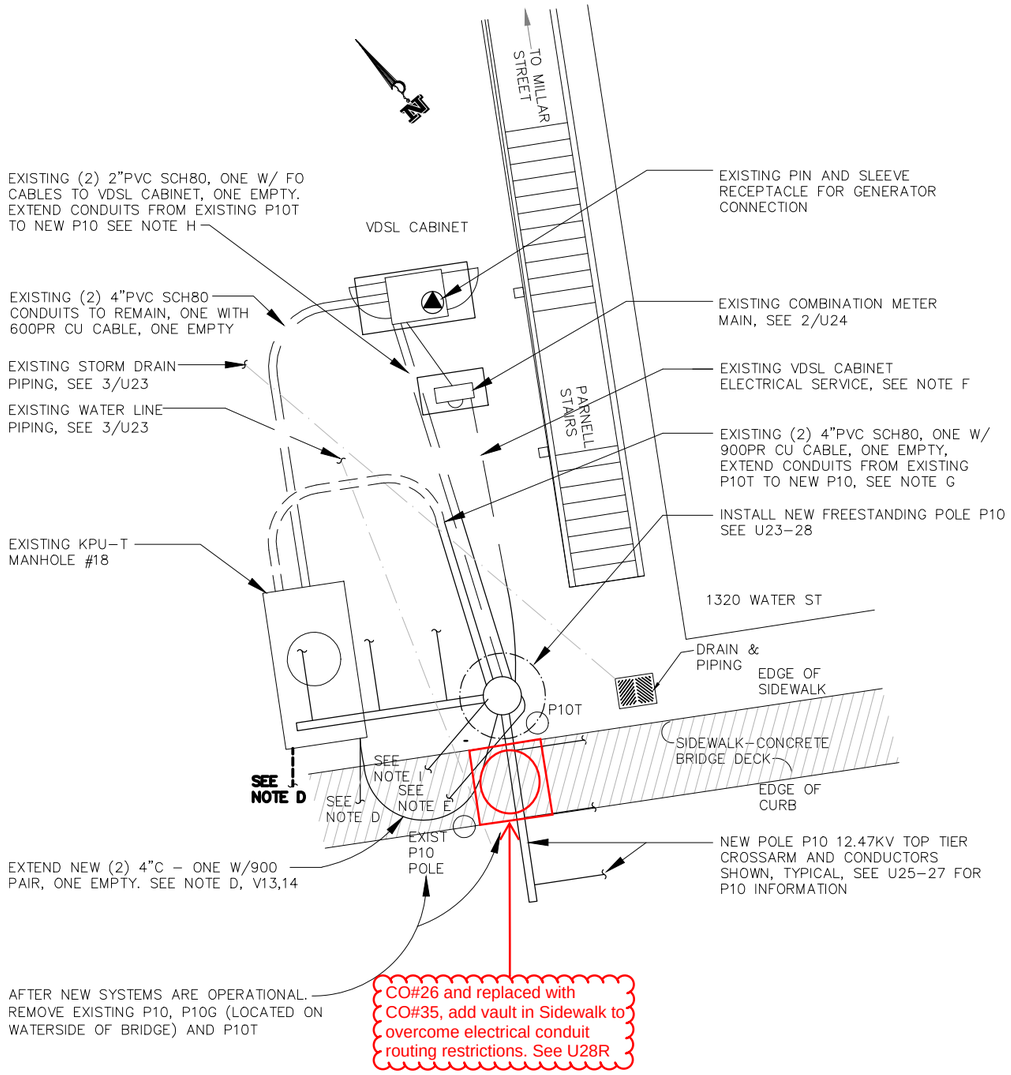
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

PARNELL STAIRS DETAILS

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U23	U56



1 PARNELL STAIRS -NEW PLAN
SCALE: 1/4" = 1'-0"

DETAIL NOTES:

A. THE DETAIL SHOWS THE GENERRAL INSTALLATION INFORMATION FOR POLE P10 – NOT ALL CONDUIT AND CABLING IS SHOWN, SEE U17–19, U23–27, V13,14,23 DETAILS FOR ADDTIONAL INFORMATION.

B. COORDINATE THE TELEPHONE CONDUIT INSTALLATION AND MANHOLE MODIFICATIONS WITH KPU–T PRIOR TO INSTALLATION. SEE U17, 23–27, V13,14 SHEETS FOR ADDITIONAL INFO ON THE TELECOMM WIRING INSTALLATION.

C. GCI WILL INSTALL NEW CABLE TV INFRASTRUCTURE AND DEMOLISH EXISTING PLANT ASSOCIATED WITH THE INSTALLATION OF NEW P10 AND THE REMOVAL OF POLES P10 AND P10T. COORDINATE THE ELECTRICAL & TELECOMMUNICATION WORK EFFORT WITH GCI TO ENABLE GCI TO ACCOMPLISH THEIR WORK WITHOUT IMPACTING THE PROJECT SCHEDULE. SEE U18, 23–27, V23 FOR ADDITIONAL INFO ON THE TELECOMM WIRING INSTALLATION.

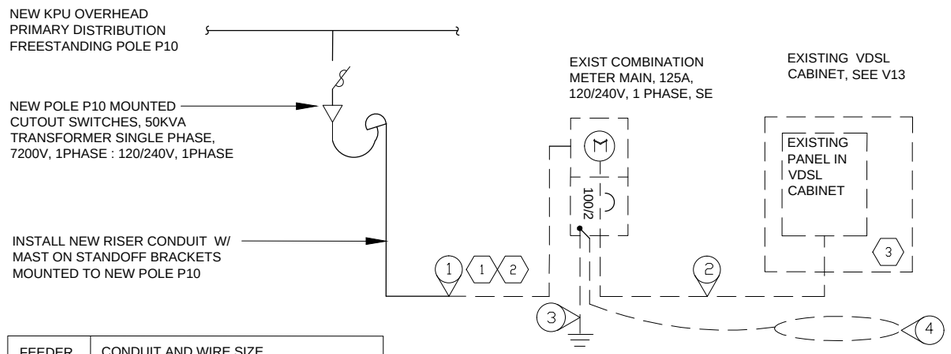
D. ~~EXTEND~~ Replace THE EXISTING (6) 4"C (SEE 2/U53) FROM MANHOLE MH18 THAT ARE STUBBED UNDER THE EXISTING TRESTLE: STUB (4) THRU THE NEW TRESTLE ABUTMENT #2 CONCRETE WALL – THE AIR PIPE SHALL BE INSTALLED IN ONE OF THESE CONDUITS. EXTEND THE OTHER (2) CONDUITS TO POLE P10 – ONE SHALL HAVE THE 900 PAIR COPPER CABLE INSTALLED IN IT. SEE U17, U27

E. INSTALL (3) NEW 2"CONDUITS: (2) 2"PVC FOR KPU–T FROM P10 TO PULL BOX SERVING PEDESTAL T–4 AT UTILITY PAD 4B AND (1) 2"C STUB THRU ABUTMENT #2 CONCRETE WALL FOR SPARE. INSTALL (2) 4" CONDUITS FROM POLE P10 THRU NEW TRESTLE ABUTMENT #2 CONCRETE WALL. SEE U17, U27.

F. EXISTING VDSL CABINET ELECTRICAL SERVICE FED FROM EXISTING P10T: INTERCEPT EXISTING UNDERGROUND 2"PVC RUN, REMOVE CONDUCTORS, EXTEND EXISTING RACEWAY TO NEW P10, INSTALL NEW SERVICE CONDUCTORS. REMOVE UNUSED CONDUIT AND WIRE. PROVIDE GENERATOR TO KEEP VDSL SYSTEM OPERATION DURING SERVICE INTERRUPTION. SEE ONE LINE DIAGRAM

G. AFTER SYSTEM IS OPERATIONAL, REMOVE EXISTING 900PAIR COPPER CABLING FROM MH 18 TO P10T. REMOVE UNUSED CABLING AND CONDUIT. EXTEND (2) EXISTING 4"C SPARE TO NEW P10

H. EXTEND EXISTING 2"C SPARE TO NEW P10 AND INSTALL NEW FO CABLE IN THE CONDUIT TO PROVIDE SERVICE TO VDSL CABINET. AFTER SYSTEM IS OPERATIONAL, REMOVE EXISTING FO CABLING FROM THE CONDUIT ORIGINATING AT P10T AND EXTEND THE CONDUIT TO POLE P10.



FEEDER NUMBER	CONDUIT AND WIRE SIZE
1 2 3 4	2-1/2"C AS NEEDED W/ 3#2 TRIPLEX (1) EX 2"C W/ 3#2, 1#8G EX #6 BARE CU GEC EX #1/0 BARE CU GROUND RING

EXISTING GROUNDING ELECTRODE SYSTEM
- (2) - 3/4"DIAX10' DRIVEN COPPER GROUND ROD
- CONNECTION TO 20' OF GROUND RING ENCIRCLING THE VDSL CABINET SLAB

NEC LOAD CALC:
A MINIMUM SERVICE SIZE OF 60A, 120/240V, 1 PHASE, 3 WIRE IS BASED ON THE VDSL CABINET MANUFACTURER'S INSTALLATION REQUIREMENTS. THE INSTALLED SERVICE IS 100 AMP AND CAN HANDLE THE VDSL LOAD.

2 ELECTRICAL ONE LINE DIAGRAM
NO SCALE

ELECTRICAL NOTES:

1. INTERCEPT EXISTING 2"C W/ 3#2 TRIPLEX. REMOVE EXISTING CONDUCTORS, EXTEND EXISTING CONDUIT TO NEW POLE AND INSTALL NEW SERVICE CONDUCTORS TO THE METER. REMOVED UNUSED EXISTING CONDUIT AND WIRE.
2. AFTER NEW SERVICE IS OPERATIONAL, REMOVE THE EXISTING SERVICE CONDUIT AND WIRE FROM EXISTING POLE P10 T.
3. DURING THE SWITCHOVER FROM THE EXISTING TO NEW SERVICE PROVIDE TEMPORARY POWER TO KEEP THE VDSL SYSTEM OPERATIONAL. THE EXISTING VDSL CABINET HAS A GENERATOR RECEPTACLE: 30A, 120/240V, NEMA L14-30 MALE CONNECTOR - CONFIRM CONNECTION REQUIREMENTS WITH KPU -T.

GENERAL NOTES:

A. ALL SERVICE WORK SHALL COMPLY WITH KPU REQUIREMENTS.

See U28R for additional details, U28R takes precedents in any conflicting drawing or language.

Be advised, there is a bank of telecom. and electrical conduit at Parnell St. under Water St. there are many conduit crossing from P10 to the bank running along the retaining wall. Also at Parnell St. are lateral storm, sewer, and water pipes resulting in a very complex and congested underground utility network junction in Water St. at Parnell St. intersection.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000
TAB: U24

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

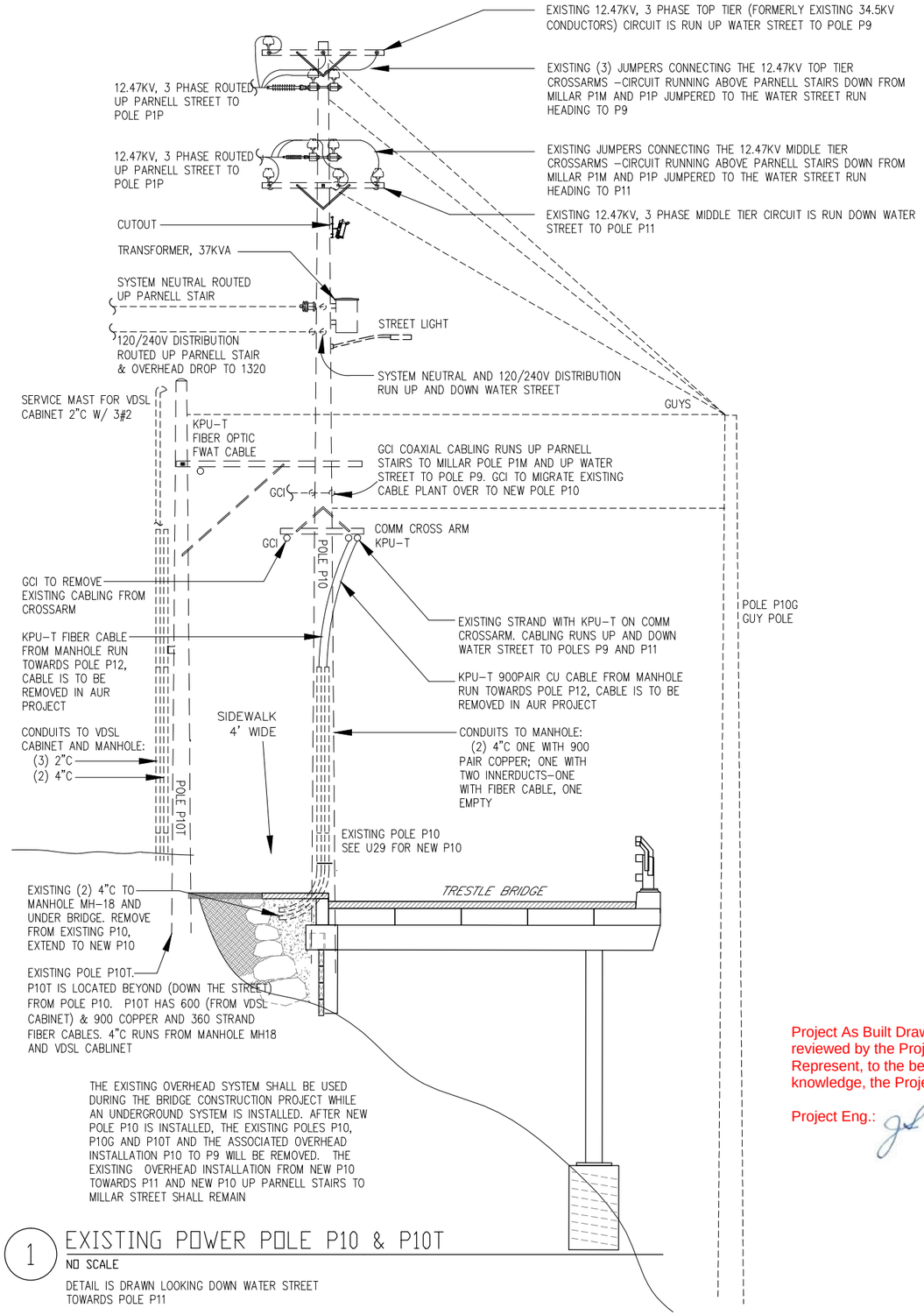
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

PARNELL STAIRS DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U24	U56



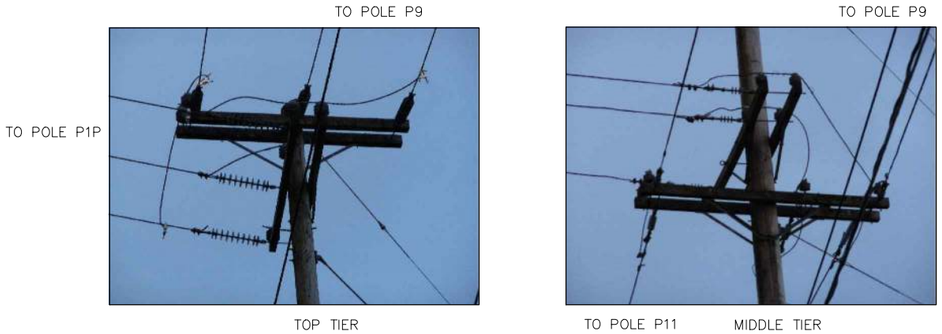
1 EXISTING POWER POLE P10 & P10T

NO SCALE

DETAIL IS DRAWN LOOKING DOWN WATER STREET TOWARDS POLE P11

1 POLE P10 & P10T

NO SCALE



2 POLE P10 JUMPERS

NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

3 POLE P10 & P10T

NO SCALE

4 POLE P1P JUMPERS

NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U25

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KEITH NELSON EE–7605 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

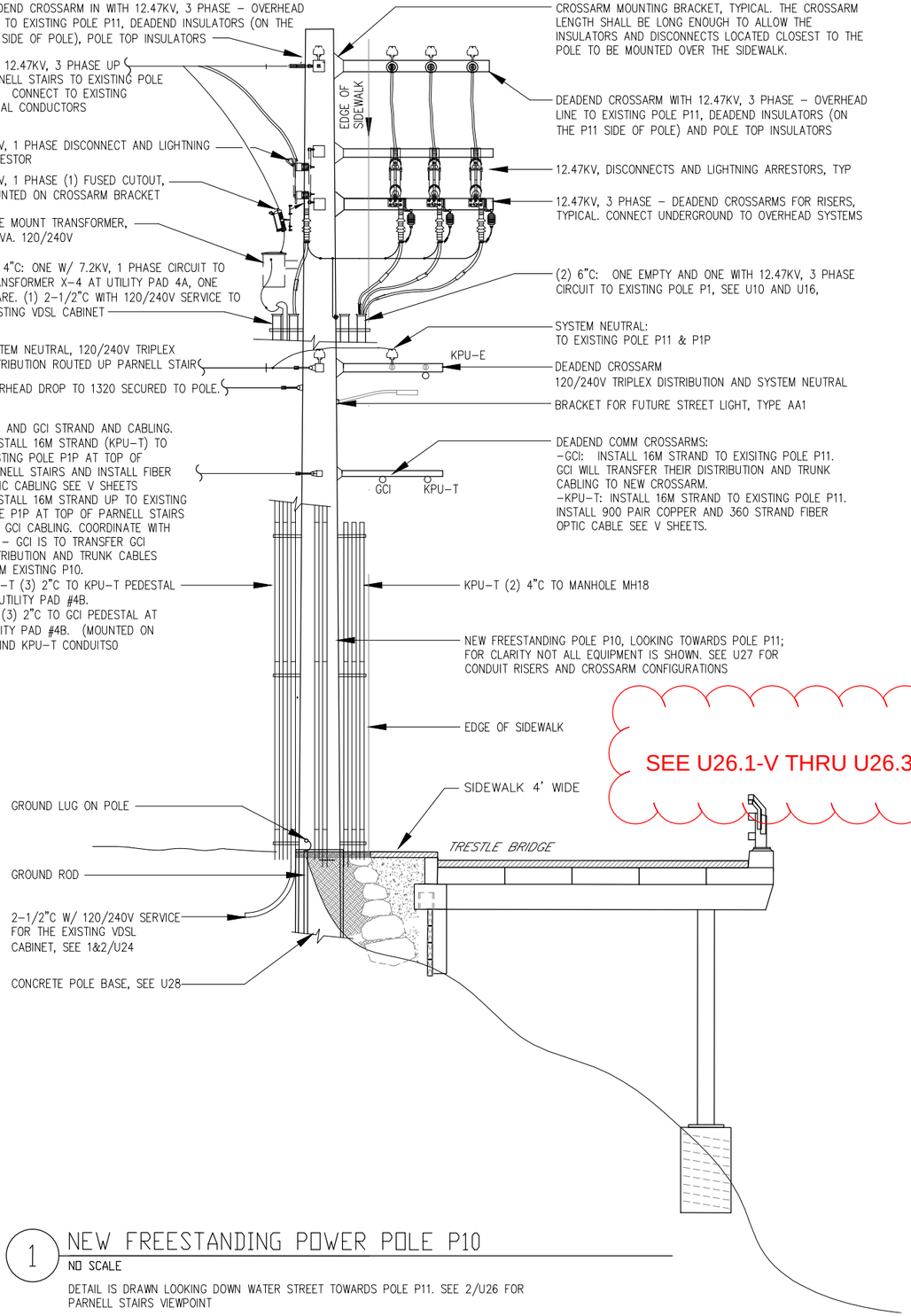
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

POLE P10 DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U25	U56

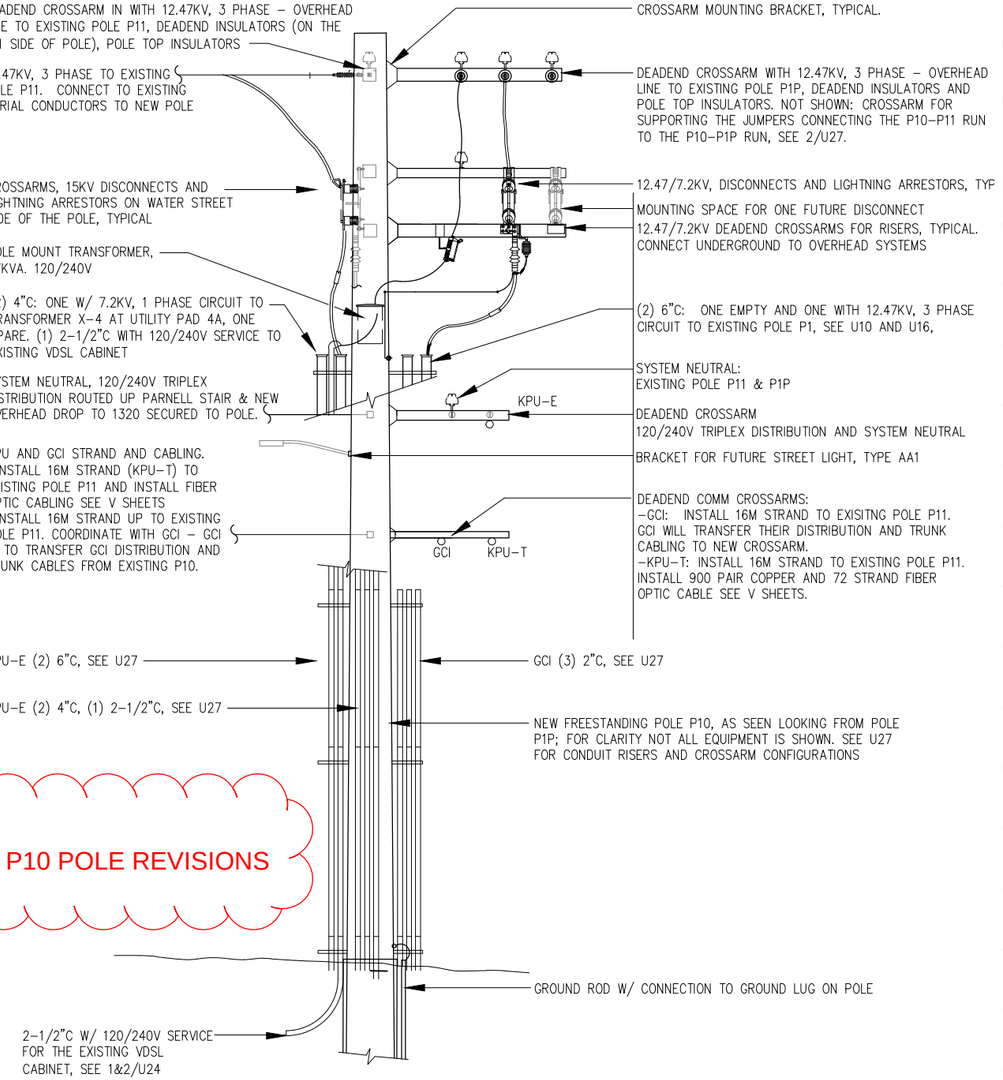


SEE U26.1-V THRU U26.3-V P10 POLE REVISIONS

1 NEW FREESTANDING POWER POLE P10

NO SCALE

DETAIL IS DRAWN LOOKING DOWN WATER STREET TOWARDS POLE P11. SEE 2/U26 FOR PARNELL STAIRS VIEWPOINT



2 NEW FREESTANDING POWER POLE P10

NO SCALE

DETAIL IS DRAWN DOWN PARNELL STAIRS FROM POLE P1P TOWARDS P10. SEE 1/U26 FOR WATER STREET VIEWPOINT

U26 GENERAL NOTES:

A THE EXISTING OVERHEAD SYSTEM SHALL BE USED DURING THE BRIDGE CONSTRUCTION PROJECT WHILE NEW FREESTANDING POLE P10 AND THE UNDERGROUND SYSTEM IS INSTALLED. AFTER NEW POLE P10 IS INSTALLED, TRANSFER THE EXISTING OVERHEAD INFRASTURE FROM EXISTING POLES P10 AND P10T TO THE NEW P10 (KPU-E, KPU-T) GCI WILL TRANSFER THEIR CABLING OVER TO THE NEW P10. AFTER THE NEW SYSTEMS ARE OPERATIONAL ON P10. DEMOLISH EXISTING P10, P10T AND P10G. THE EXISTING OVERHEAD INSTALLATION P10 TO P9 SHALL BE REMOVED. IN GENERAL, THE EXISTING OVERHEAD INSTALLATION FROM P10 TOWARDS P11 AND P10 UP PARNELL STAIRS TO MILLAR STREET VIA POLE P1P SHALL REMAIN IN SERVICE (CONNECTED TO NEW POLE P10).

B THE OVERHEAD CONDUCTORS/CABLING RUNNING ALONG WATER STREET SHALL BE LOCATED OVER THE SIDEWALK OR STREET.

C SEE U27 FOR ADDITIONAL CROSSARM AND RISER CONDUIT INFORMATION

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

W.P.: U26

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.:

Date: 9/24/2019

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 9-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

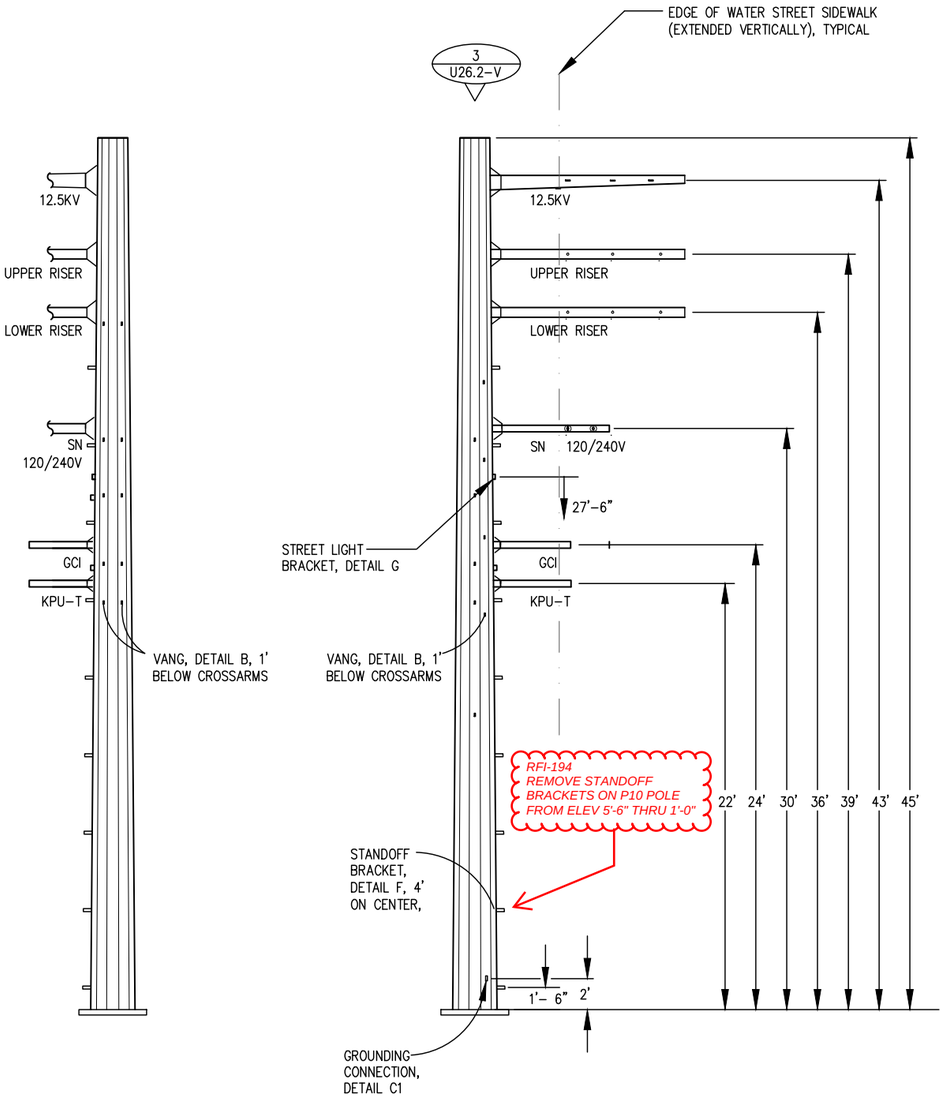
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE P10 DETAILS

PROJECT DESIGNATION

BR000(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U26	U56



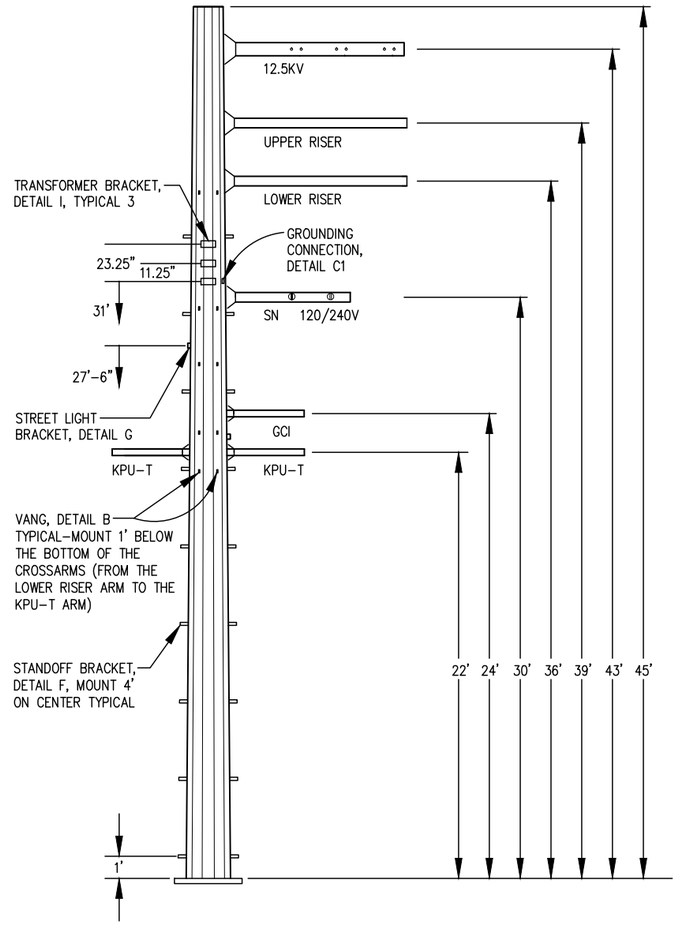
1A BACKSIDE OF POLE LOOKING UP WATER STREET TOWARDS POLE P9.

1B VIEW OF POLE LOOKING DOWN WATER STREET TOWARDS POLE P11.

1 POWER POLE P10 WATER STREET ELEVATION

NO SCALE

SEE 2/U26-V FOR PARNELL STAIRS VIEWPOINT



2 POLE P10 PARNELL STAIRS ELEVATION

NO SCALE

DETAIL IS DRAWN DOWN PARNELL STAIRS FROM POLE P1P TOWARDS P10. SEE 1/U26.1-V FOR WATER STREET VIEWPOINT

U26 GENERAL NOTES:

A SHEETS U26.1-V, U26.2-V & U26.3-V ARE ISSUED FOR COORDINATION WITH THE VALMONT SHOP DRAWING SUBMITTAL. THE VALMONT SUBMITTAL #3 DRAWINGS DATED APRIL 12, 2018 SUPERCEDE THE INFO SHOWN ON U26.1-V, U26.2-V & U26.3-V

B SEE U26.2-V FOR ADDITIONAL POLE SECTIONS AND ATTACHMENT INFORMATION. DETAILS A-C ARE ON U26.2-V, DETAILS D1-I ARE ON U26.3-V.

C FOR CLARITY THE ENDS OF CROSSARMS ON THE PARNELL SIDE OF THE POLE ARE NOT SHOWN ON THE WATER STREET ELEVATION; SIMILARLY THE CROSSARMS ON THE WATER STREET SIDE OF THE POLE ARE NOT SHOWN ON THE PARNELL STAIR ELEVATION

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KNEE\DOCUMENTS\170-PSE BRIDGE CAD\DWG\P10\WSB18 U26.1-26.3-V CO-35 180501.DWG

TAB: **U26.1-V**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	5/1/18	CO-35 FOR VALMONT SHOP DWG
AB		As-Built Set

CHECKED BY: TED

5-1-18

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

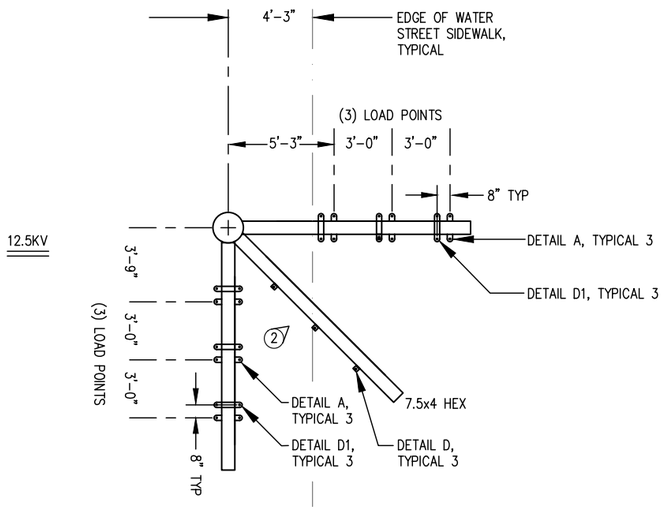
KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

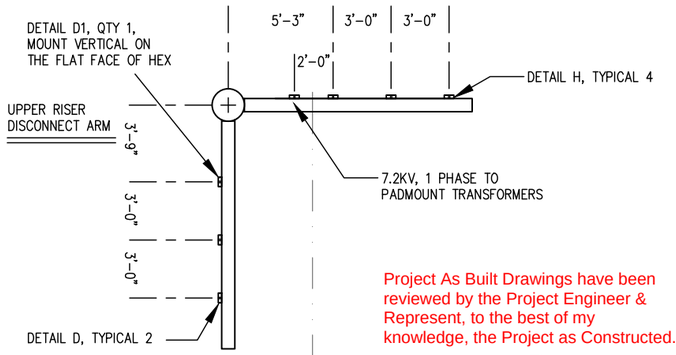
POLE P10 DETAILS

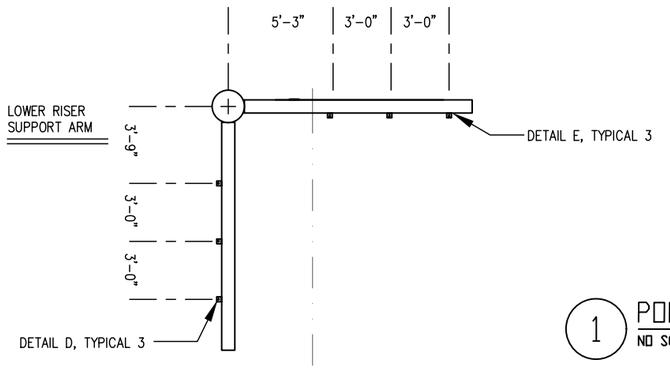
PROJECT DESIGNATION

BR000(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U26.1-V	U56

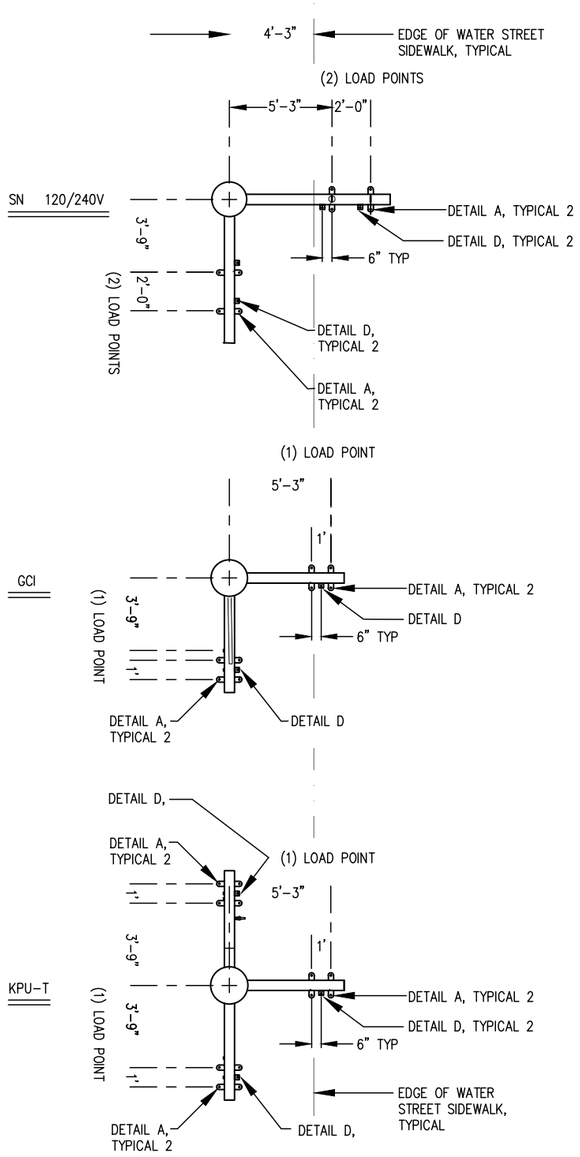


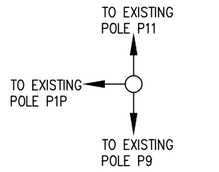




Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

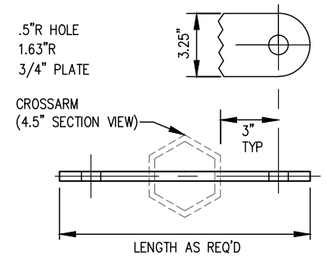
Project Eng.: Date: 9/24/2019





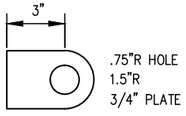
1 POLE P10 - SECTIONS
NO SCALE

ORIENTATION FOR SHEET U26.2

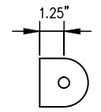


A DEADEND VANG

THE TOP CROSSARM IS ORIENTED WITH THE FLAT PORTION OF THE HEXAGON. INSTALL THE VANG THRU THE POINTS OF THE HEXAGON



B SERVICE VANG



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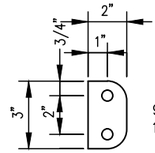
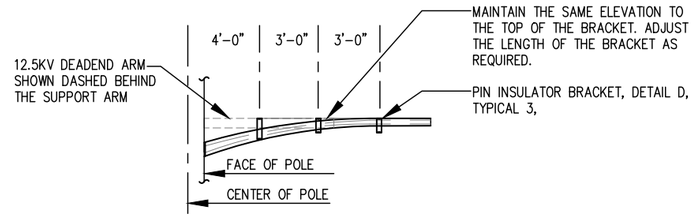
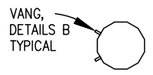


C1 GROUNDING TAB



2 12.5KV SUPPORT ARM ELEVATION
NO SCALE

THE DETAIL IS DRAWN LOOKING DIRECTLY AT THE SUPPORT ARM TOWARDS THE WATER STREET DEADEND ARM



MISC VANGS

INSTALL (4) VANGS 2' BELOW THE BOTTOM OF THE LOWEST TRANSFORMER BRACKET AND BOTTOM OF THE GCI AND KPU-T CROSSARMS

GROUNDING TABS

VANGS LOCATED BELOW CROSSARMS

INSTALL (4) VANGS 1' BELOW THE BOTTOM OF THE CROSSARMS. TYPICAL FROM LOWER RISER ARM, SN-120/240, GCI AND KPU-T

3 MISC ATTACHMENTS
NO SCALE

DETAIL IS DRAWN LOOKING DOWN AT THE TOP OF THE POLE AS ORIENTED AS SHOWN ON 1/U26.2-V

PATH: C:\USERS\KNEE\DOCUMENTS\1710-PSE BRIDGE CA\DWG\P10\WSB18 U26.1-26.2-V CO-35 180501.DWG

TAB: **U26.2-V**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	5/1/18	CO-35 FOR VALMONT SHOP DWG
AB		As-Built Set

CHECKED BY: TED

5-1-18

DESIGNED BY: KCN

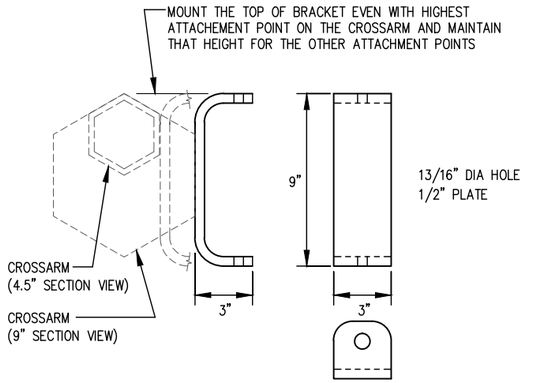
DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

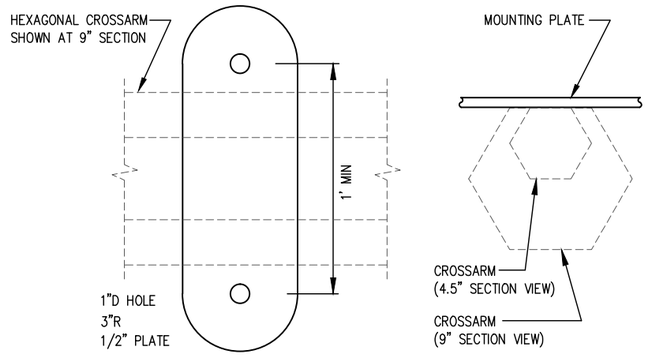
KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE P10 DETAILS

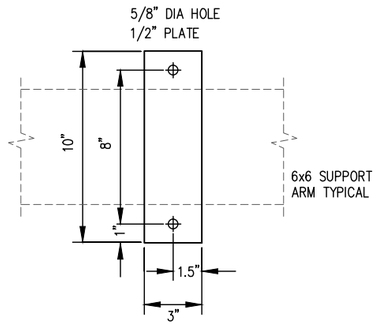
PROJECT DESIGNATION	
BR000(735) ~ 69534	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
U26.2-V	**U56**



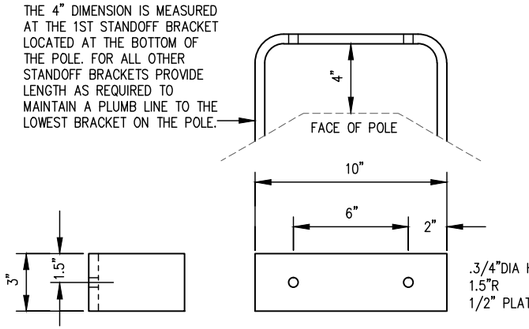
D PIN INSULATOR – VERTICAL PLATE



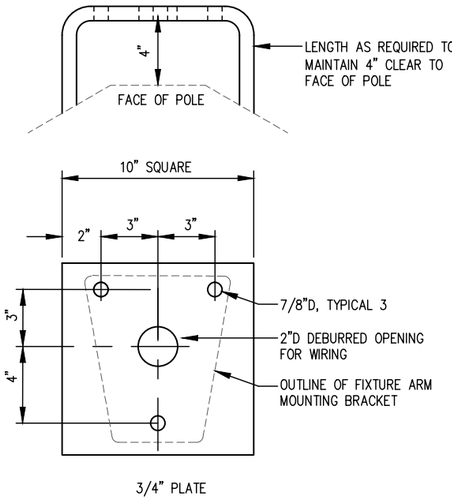
D1 TOP TIER INSULATOR –HORIZONTAL PLATE



E UNISTRUT MOUNTING PLATE

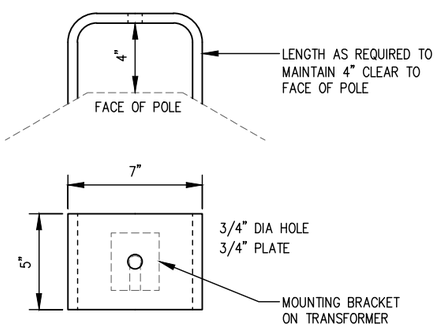


F STANDOFF BRACKET MOUNTING PLATE

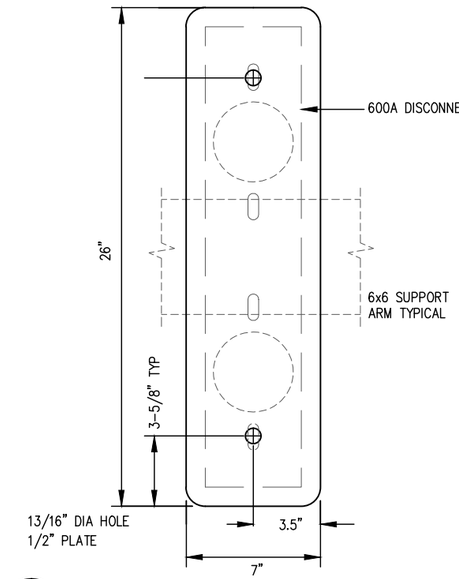


G STREET LIGHT MOUNTING BRACKET

THE THREE HOLE BRACKET IS BASED ON ALASKA DOT L–03.10 AND AASHTO M 164. VALMONT IS ONE MFR THAT PROVIDES FIXTURE ARMS WITH THE THREE HOLE PATTERN.



I TRANSFORMER MOUNTING PLATE



H DISCONNECT MOUNTING PLATE

HOLE SPACING SHALL MATCH MOUNTING REQUIREMENTS OF S&C LOADBUSTER DISCONNECT

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

GENERAL NOTES:

A ALL HOLES: CHAMFER BOTH SIDES

B WELDS, END PLATES, MOUNING BRACKETS, WEEP HOLES, ETC. BY FABRICATOR

PATH: C:\USERS\KNEE\DOCUMENTS\17\0-PSE BRIDGE CA\DWG\P10\WSB18 U26.1-26.3-V CO-35 180501.DWG

TAB: **U26.3-V**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	5/1/18	CO–35 FOR VALMONT SHOP DWG
AB		As-Built Set

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE P10 DETAILS

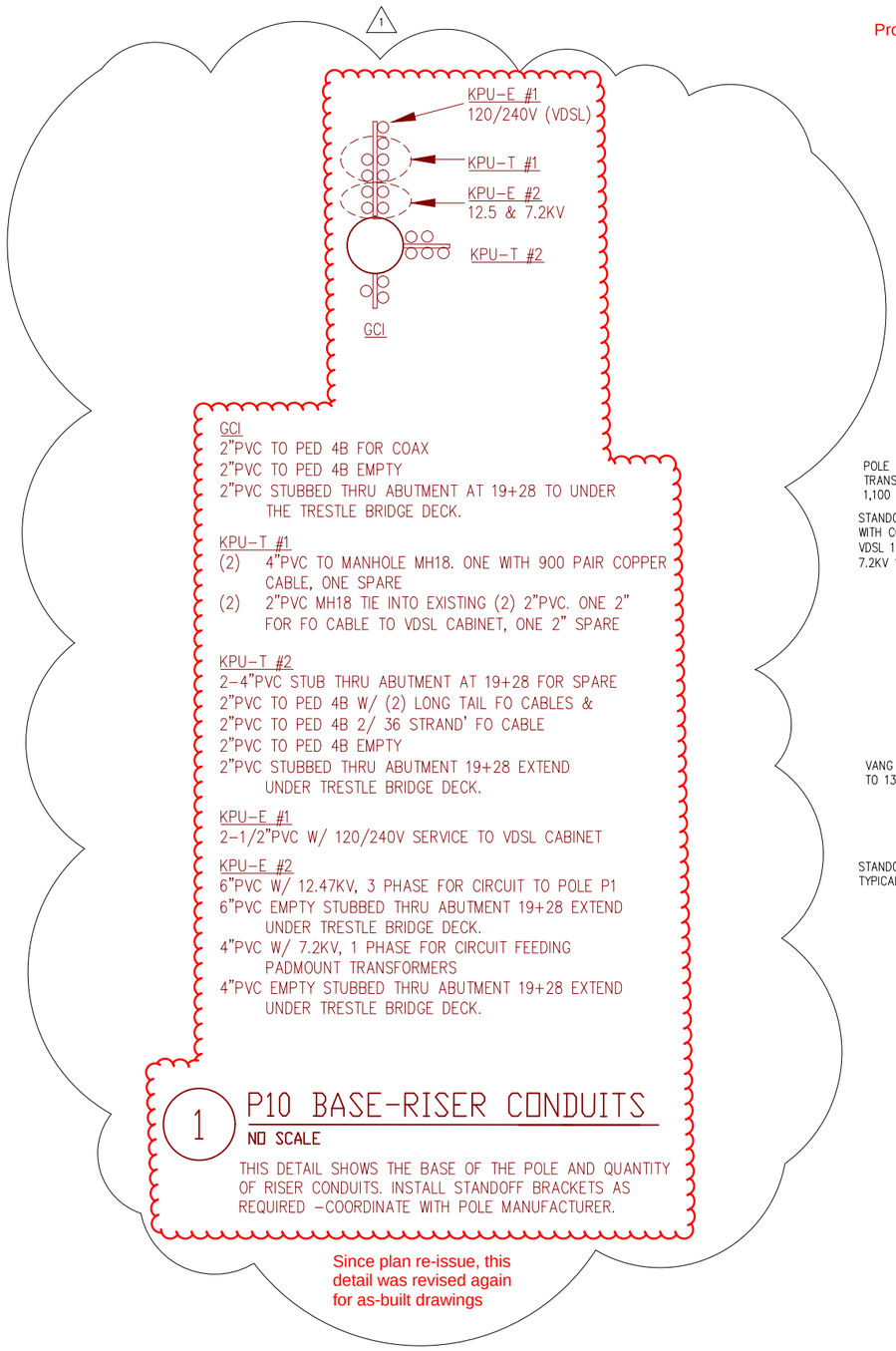
PROJECT DESIGNATION

BR000(735) ~ 69534

STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
U26.3-V	**U56**

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

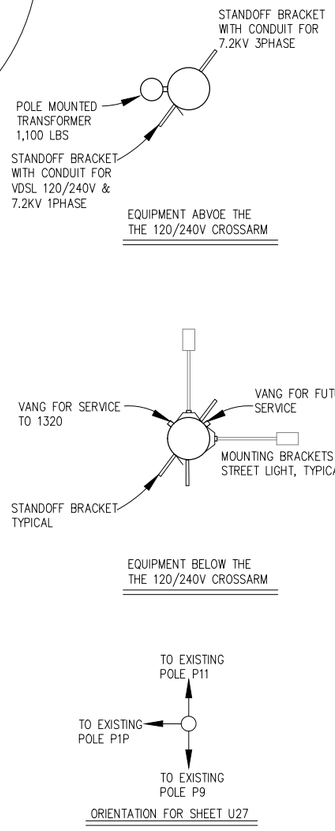


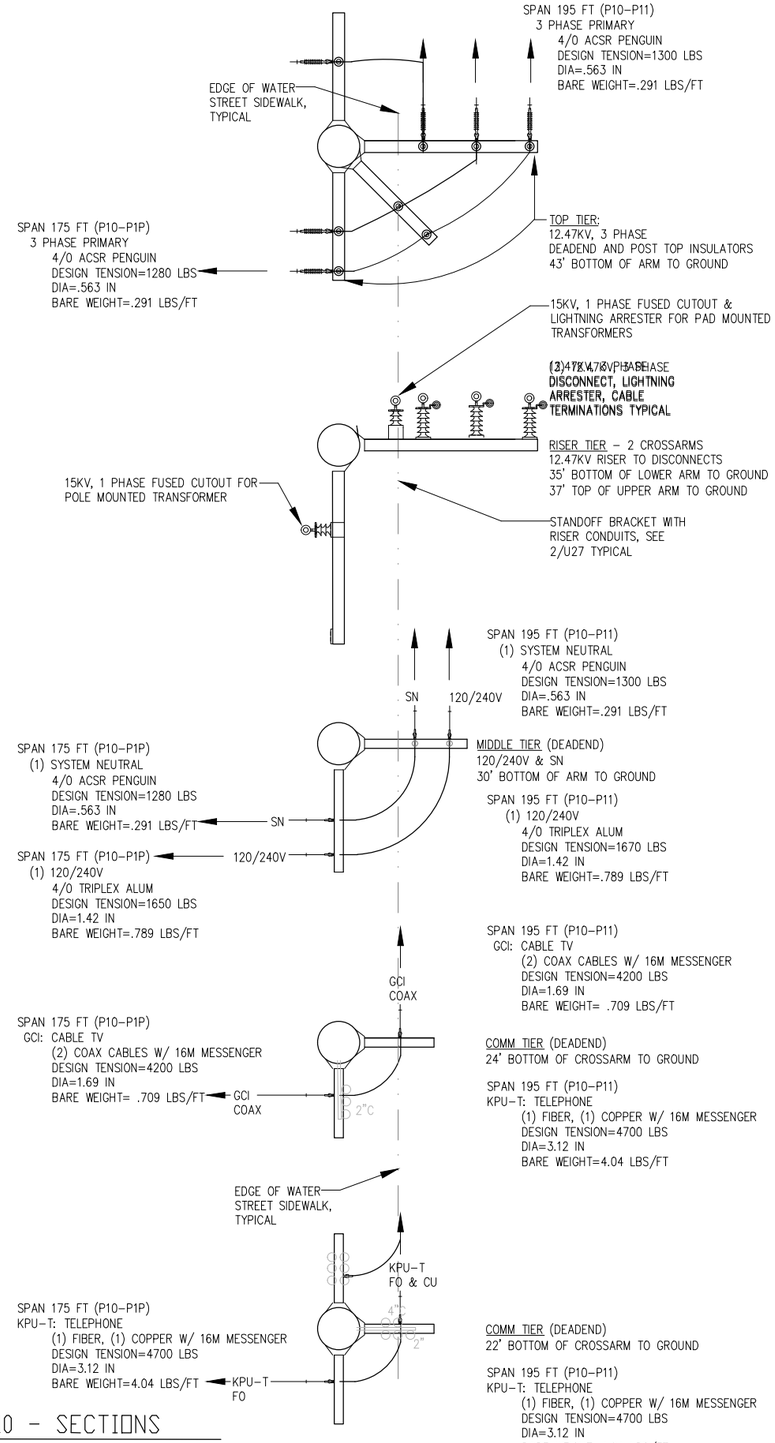
1 P10 BASE-RISER CONDUITS

NO SCALE

THIS DETAIL SHOWS THE BASE OF THE POLE AND QUANTITY OF RISER CONDUITS. INSTALL STANDOFF BRACKETS AS REQUIRED -COORDINATE WITH POLE MANUFACTURER.

Since plan re-issue, this detail was revised again for as-built drawings





2 POLE P10 - SECTIONS

NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE CA\WSB U16-29 38-54 PSE DETAILS -CA-P10 BASE.DWG

KCN12_000

TAB: U27-R

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	2/10/17	REISSUE FOR RFP-10
AB		As-Built Set

CO#26 was technically deleted and replaced by CO#35 which does not include this sheet however this version of the drawing best portrays actual installation, deleting this revised sheet was not intended with the CO replacement.

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE P10 DETAILS

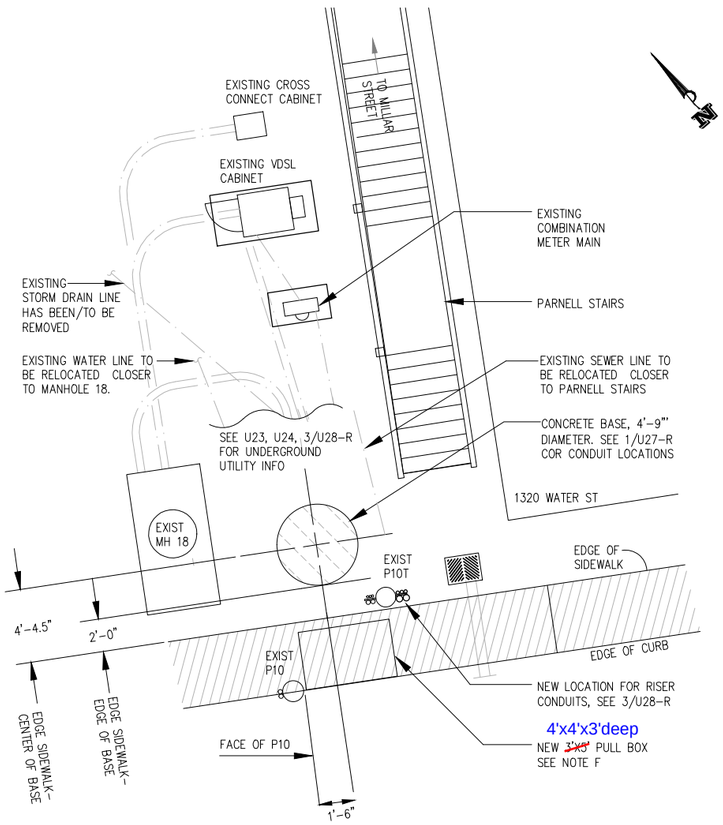
PROJECT DESIGNATION	
BR000(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U27-R	U56

DELETE THE CONCRETE BASE DETAIL SHOWN ON 1/U28 OF THE CONSTRUCTION SET. FOR THE CONCRETE BASE DETAIL SEE DAVID SHEARER DRAWING #1 "POLE P10 BASE".

AKA U28A (next sheet)

1 POLE P10 CONCRETE BASE

NO SCALE



2 PARNELL STAIRS -LOCATION P10 CONCRETE BASE

DETAIL NOTES:

A. THE DETAIL IS PART OF RFP-10. IT OUTLINES THE LOCATION OF P10 CONCRETE BASE AND SUPPLEMENTS THE INFORMATION DESCRIBED IN RFI-83. THE CENTER OF THE CONCRETE BASE IS LOCATED AT STATION 20+02.75 MIN, 15.9L MAX. FREESTANDING POLE P10 IS TO BE INSTALLED IN 2018

AKA U28A (next sheet)

B. SEE SHEARER DESIGN DRAWING #1 "POLE P10 BASE" FOR CONCRETE BASE AND BEDROCK INFO. SEE 3/U28-R A KPU-T RELOCATION DRAWING FOR REROUTE OF EXISTING KPU-T INFRASTRUCTURE FROM THE EXCAVATED AREA WHERE THE CONCRETE BASE IS TO BE INSTALLED, SEE 2/U27-R THE P10 BASE-RISER CONDUITS DETAIL FOR CONDUIT LOCATIONS AT THE CONCRETE BASE.

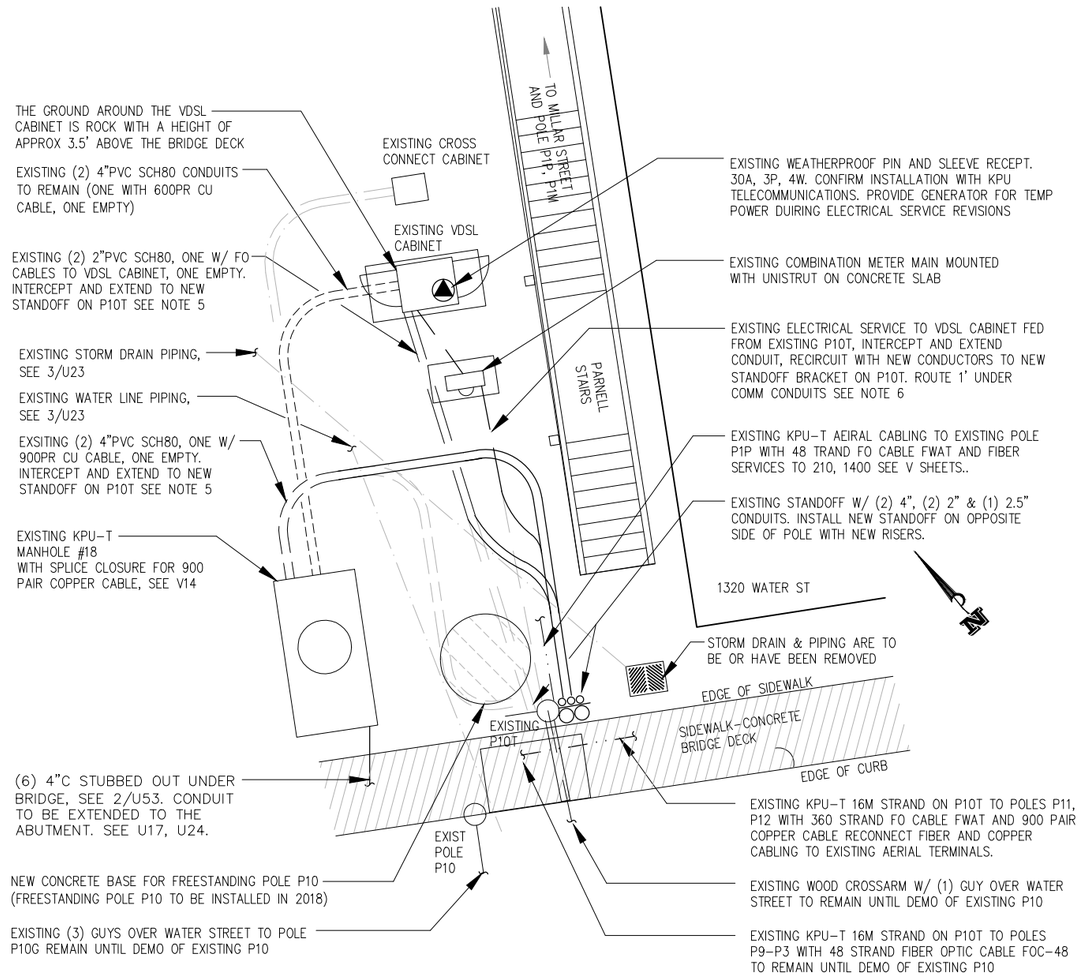
C. PRIOR TO EXCAVATING, USE THE CONTRACTOR AS-BUILT INFO FROM THE 2015 ADVANCE UTILITY RELOCATION (AUR) PROJECT TO DETERMINE THE LOCATION OF AND REROUTE THE UNDERGROUND TELEPHONE AND POWER ASSOCIATED WITH THE VDSL CABINET INSTALLATION,

D.. FIELD CONFIRM EXISTING SITE CONDITIONS INCLUDING THE LOCATION OF STAIRS, MH18, P10 AND P10T.

E. AFTER EXPOSING THE EXISTING UNDERGROUND UTILITIES CONFIRM THE FINAL LOCATION OF THE P10 BASE PRIOR TO EXCAVATING BEDROCK, DETERMINE THE CONDUIT ROUTES FROM THE POLE P10 TO ABUTMENT AND SHORE UP POLES P10 AND P10T (TRI-ANCHORS) AS NEEDED.

F. PULL BOX SHALL BE ~~3'X5' QUAZITE OR EQUAL~~ FRP OR PG SERIES, TIER 22 TRAFFIC RATED WITH PENTA BOLTS AND "ELECTRICAL" EMBOSSED ON THE LIDS. MOUNT BOX TIGHT TO THE BACKSIDE OF THE CONCRETE CURB.

4'x4'x3'deep concrete box with steel lid (made by Oldcastle ~~or approved equal~~)



3 PARNELL STAIRS - KPU-T RELOCATION PLAN

SCALE: 1/4" = 1'-0"

DETAIL NOTES:

1. THE DRAWING IS PART OF RFP-10 TO INSTALL THE POLE P10 CONCRETE BASE. THE DRAWING IS DIAGRAMMATIC AND SHOWS THE RELOCATION OF THE KPU-T COMM LINES THAT WERE INSTALLED BY NPC IN THE SUMMER OF 2015. FIELD CONFIRM THE EXISTING FIELD CONDITION, USE THE CONTRACTOR'S AS-BUILTS FROM THE 2015 PROJECT AND ROUTE THE NEW CONDUITS AS FIELD CONDITIONS PERMIT. SUPPORT THE EXISTING WATER PIPING AND PARNELL STAIRS AS NEEDED.
2. INSTALL NEW STANDOFFS ON THE OPPOSITE SIDE OF THE EXISTING P10T STANDOFFS. INTERCEPT THE EXISTING SPARE (EMPTY) 2" AND 4" CONDUITS AND EXTEND THEM TO THE NEW STANDOFFS; THE ROUTE SHALL AVOID THE NEW P10 CONCRETE BASE.
3. IN THE NEW 4"C PULL A NEW 900 PAIR COPPER CABLE. SPLICE THE CABLE AT EXISTING TERMINALS LOCATED IN THE MANHOLE AND AERIAL AT P10T. COORDINATE W/ KPU-T; ROLLOVER THE PAIRS PER KPU-T INSTRUCTIONS; MINIMIZE THE LENGTH OF THE SERVICE OUTAGE
4. AFTER THE NEW CABLE IS SPLICED, TESTED AND ACCEPTED, REMOVE THE EXISTING 900 PAIR CABLE. INTERCEPT ITS EXISTING CONDUIT AND ROUTE NEW CONDUIT PARALLEL TO THE CONDUIT IN ITEM 2.
5. SIMILAR TO ITEMS 2-4: INTERCEPT AND EXTEND THE 2" CONDUITS ASSOCIATED WITH THE 48 STRAND AND 1 STRAND FIBER OPTIC CABLES AND 1 STRAND FIBER OPTIC DROP CABLE; SPLICE NEW CABLES AT EXISTING TERMINALS IN MANHOLE AND P10T..
6. INTERCEPT AND EXTEND POWER CONDUIT FROM THE METER MAIN (SERVING THE VDSL CABINET), FOLLOW THE ROUTE OF THE COMM CONDUITS MAINTAINING A 1' SEPARATION. PROVIDE GENERATOR POWER AT THE VDSL CABINET DURING THE CUTOVER.
7. COORDINATE THE INSTALLATION, TESTING AND ACCEPTANCE WITH KPU-T. CONTACT VICTOR ESPOSITO 907-228-5404 FOR INFO AND TO SCHEDULE OUTAGES.
8. NEW CONDUITS SHALL NOT INTERFERE WITH THE INSTALLATION OF THE P10 CONCRETE BASE. REMOVE UNUSED PORTIONS OF CONDUIT AND CABLING.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE CA\WSB U16-29 38-54 PSE DETAILS -CA-P10 BASE.DWG

KCN12_000

TAB: U28-R

ADDENDUM NUMBER
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	2/10/17	REISSUE FOR RFP-10
AB		As-Built Set

CO#26 was technically deleted and replaced by CO#35 which does not include this sheet however this version of the drawing best portrays actual installation, deleting this revised sheet was not intended with the CO replacement.

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES PROJECT #69534

POLE P10 DETAILS

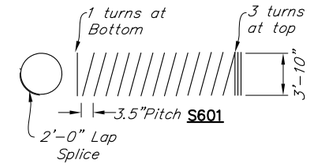
PROJECT DESIGNATION	
BR000(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U28-R	U56

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N8	N110

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
S601		6	1	16'-5"	Spiral
S401		4	8	16'-5"	–

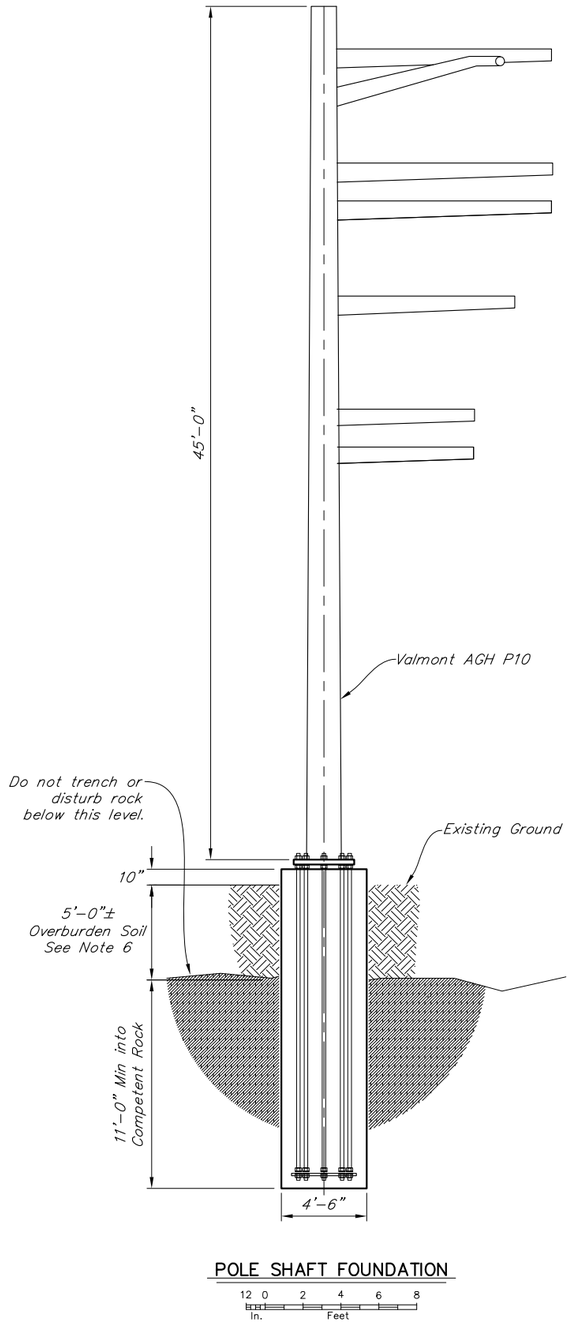
BENDING DIAGRAM



Used 18J Bars meeting A615 GR75, Accepted by EOR via 662-3.0 submittal review

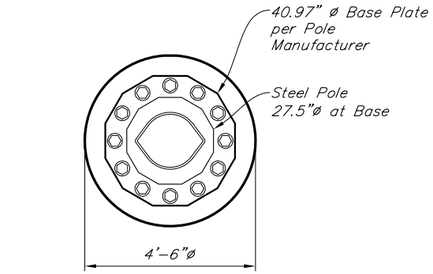
GENERAL NOTES

1. Shaft Concrete Class A-A Concrete
2. Reinforcement ASTM A706 fy = 60,000 psi
3. Anchor Bolts assumed to be (12) 2.25"ø x 17'-3" A615 GR 75 hot dip galvanized. Anchorage supplied by the Pole Manufacturer. Verify anchor bolt type and configuration and alert the Engineer if the supplied product differs from the assumed configuration described on these plans.
4. Anchor Plate A588 GR 50 (By Pole Manufacturer)
5. Factored Shaft Foundation Design Loads (1.65 Tension, 2.5 Wind, 1.5 Vertical) Per Valmont #315016 P10-A1 dated 1-23-2018
   - Axial: 15.655 K
   - Shear: 57.087 K
   - Moment: 1806.33 K-Ft
6. Notify Engineer if overburden exceeds 6'-0"



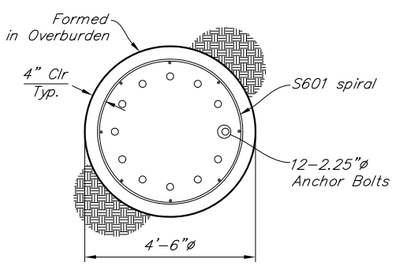
POLE SHAFT FOUNDATION

12 0 2 4 6 8 In. Feet



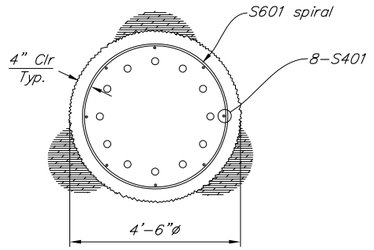
SECTION A-A

12 6 0 1 2 3 4 In. Feet



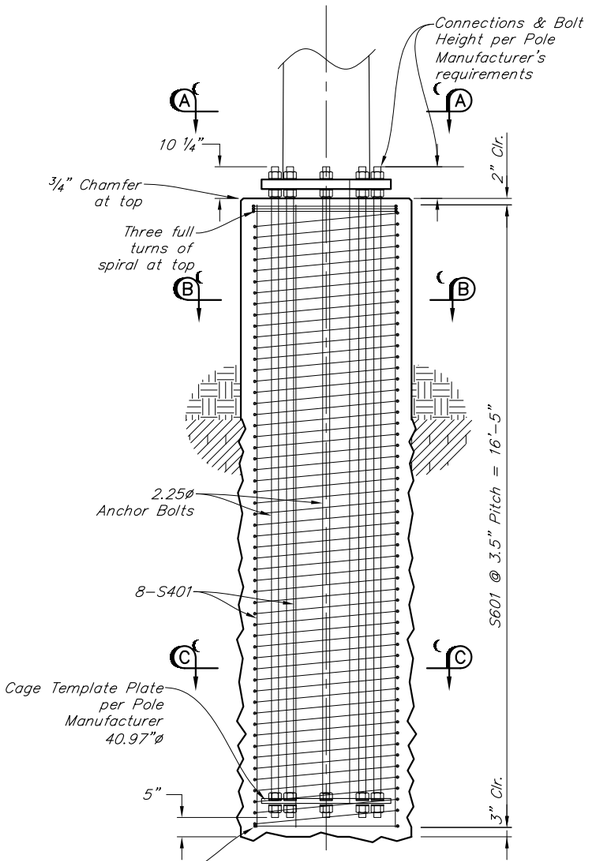
SECTION B-B

12 6 0 1 2 3 4 In. Feet



SECTION C-C

12 6 0 1 2 3 4 In. Feet



SHAFT REINFORCEMENT

12 6 0 1 2 3 4 In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: D Shearer	CHECKED: David Shearer	Original U28A added under CO#26, this sheet replaces original which is part of the reason that CO#35 had to be issued to replace CO#26. AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: D Shearer	CHECKED: David Shearer		
QUANTITIES BY: D Shearer	CHECKED: David Shearer		

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 1/24/18 Registered Professional Engineer

WATER STREET BRIDGE No. 2

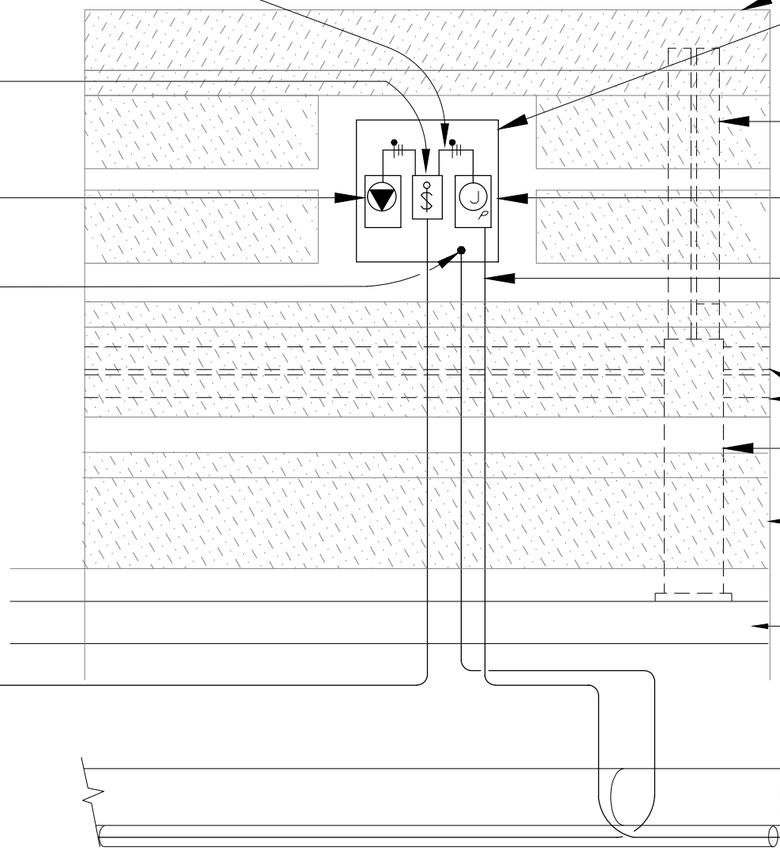
WATER STREET

POLE P10 BASE

BRIDGE NO. 0446

DWG. NO. 1 U28A

Jan 24, 2018 - 4:01pm davidi \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\Pole P10\69534_Pole p10 base Ver H.dwg Layout Name: P10 BASE (shaft)



DETAIL NOTES:

A HEAT TAPE, POWER CONNECTION AND END FITTINGS ARE PROVIDE IN SECTION 627.

B THE START AND END OF EACH RUN OF HEAT TAPE SHALL BE LOCATED IN A BREAKOUT BOX MOUNTED ON THE GUARD RAIL. THE HEAT TAPE CABLE SHALL BE INSTALLED COMPLETE FROM THE POWER CONNECTION FITTING TO THE END FITTING. INSTALL HEAT TAPE IN CHANNEL LOCATED ON THE BOTTOM OF INSULATED ARCTIC WATER PIPE, SEE SECTION 627.

C FROM THE WATER LINE TO THE BREAKOUT BOX INSTALL THE HEAT TAPE IN 3/4" ~~PEX OR~~ HDPE RACEWAY. ROUTE THE RACEWAY IN THE CONDUIT RACK WHEREVER POSSIBLE AND FROM UNISTRUT SUPPORTS LOCATED BETWEEN THE DECK PANELS.

D LABEL THE RUN OF HEAT TAPE CABLE AND PROVIDE CIRCUIT DIAGRAM PER SECTION 662. LABEL COVER OF BOX: WATER LINE HEAT TAPE, PROVIDE OTHER LABELS PER SECTION 662.

E SEE N84-86 FOR GUARD RAIL DETAILS

F COORDINATE LOCATION OF THE BREAKOUT BOX AND INSTALLATION METHODS WITH THE ENGINEER PRIOR TO COMMENCING WITH THE ROUGH-IN WORK

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

See RFI 209: Heat Trace Breakout Openings in Timber Rail
Next Page

1 HEAT TAPE BREAKOUT BOX DETAIL
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000
TAB: U29

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

ELECTRICAL DETAILS

PROJECT DESIGNATION
BR000(735) ~ 69534

STATE	YEAR
ALASKA	**2015**

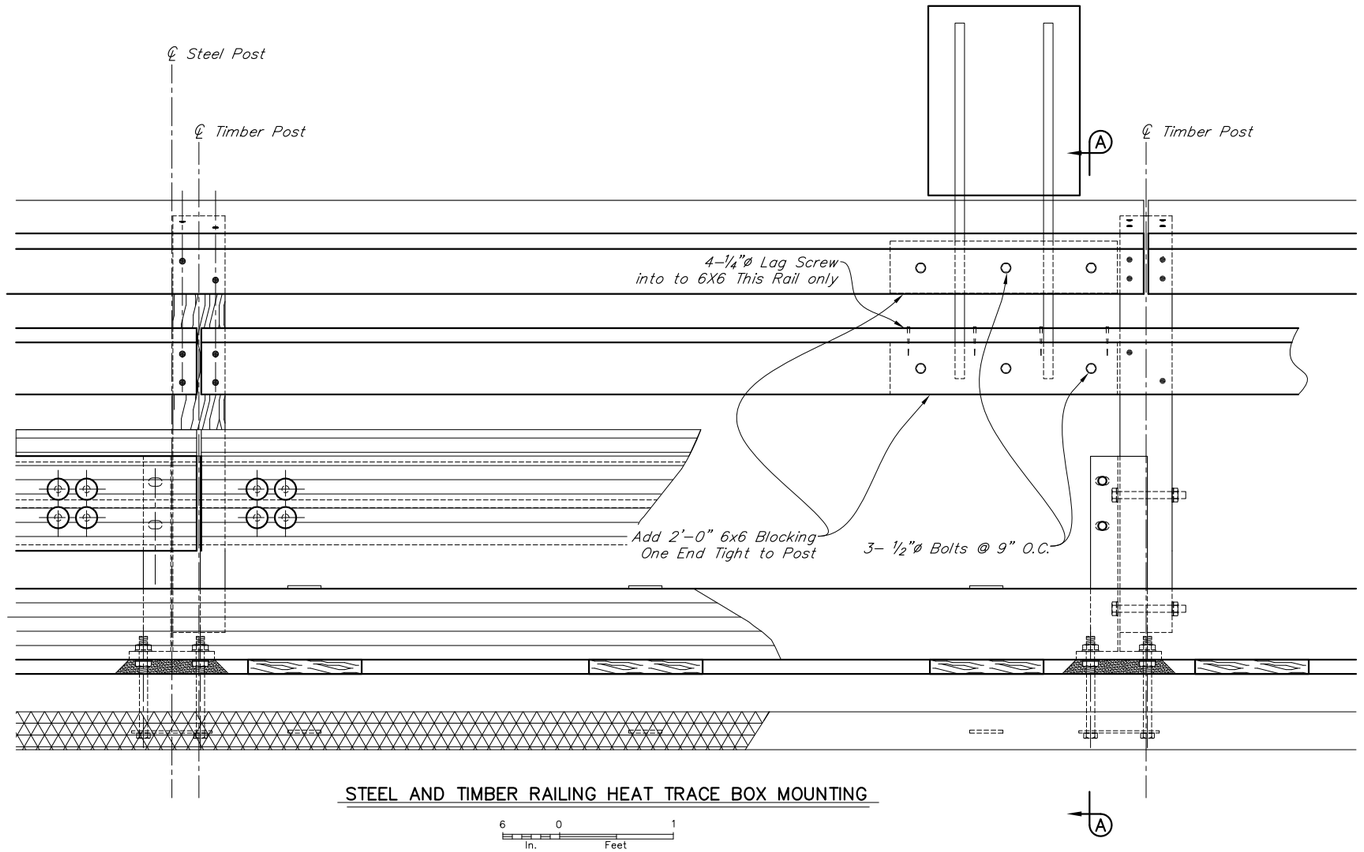
SHEET NUMBER	TOTAL SHEETS
U29	**U56**

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N86	N110

RAILING NOTES

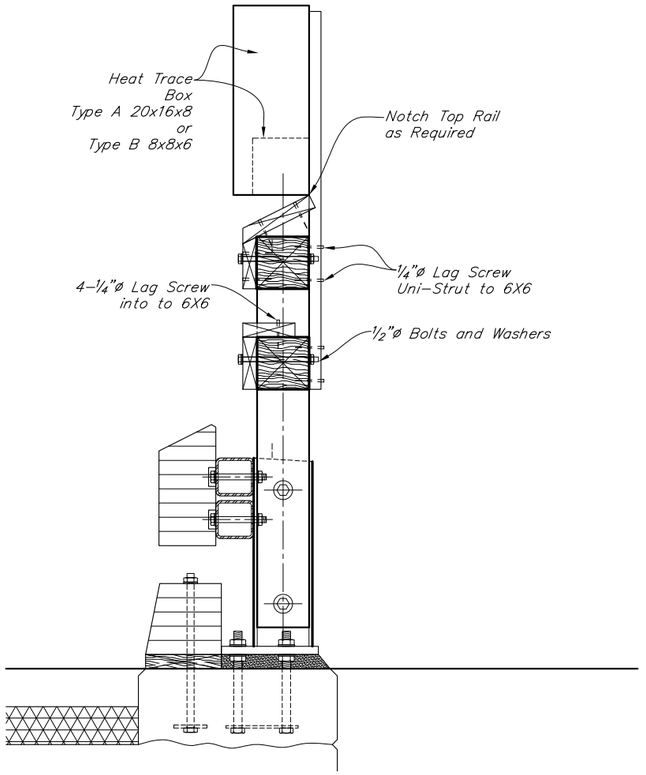
GENERAL

For Materials and Fabrication See Sheet N86



STEEL AND TIMBER RAILING HEAT TRACE BOX MOUNTING

6 0 1
In. Feet



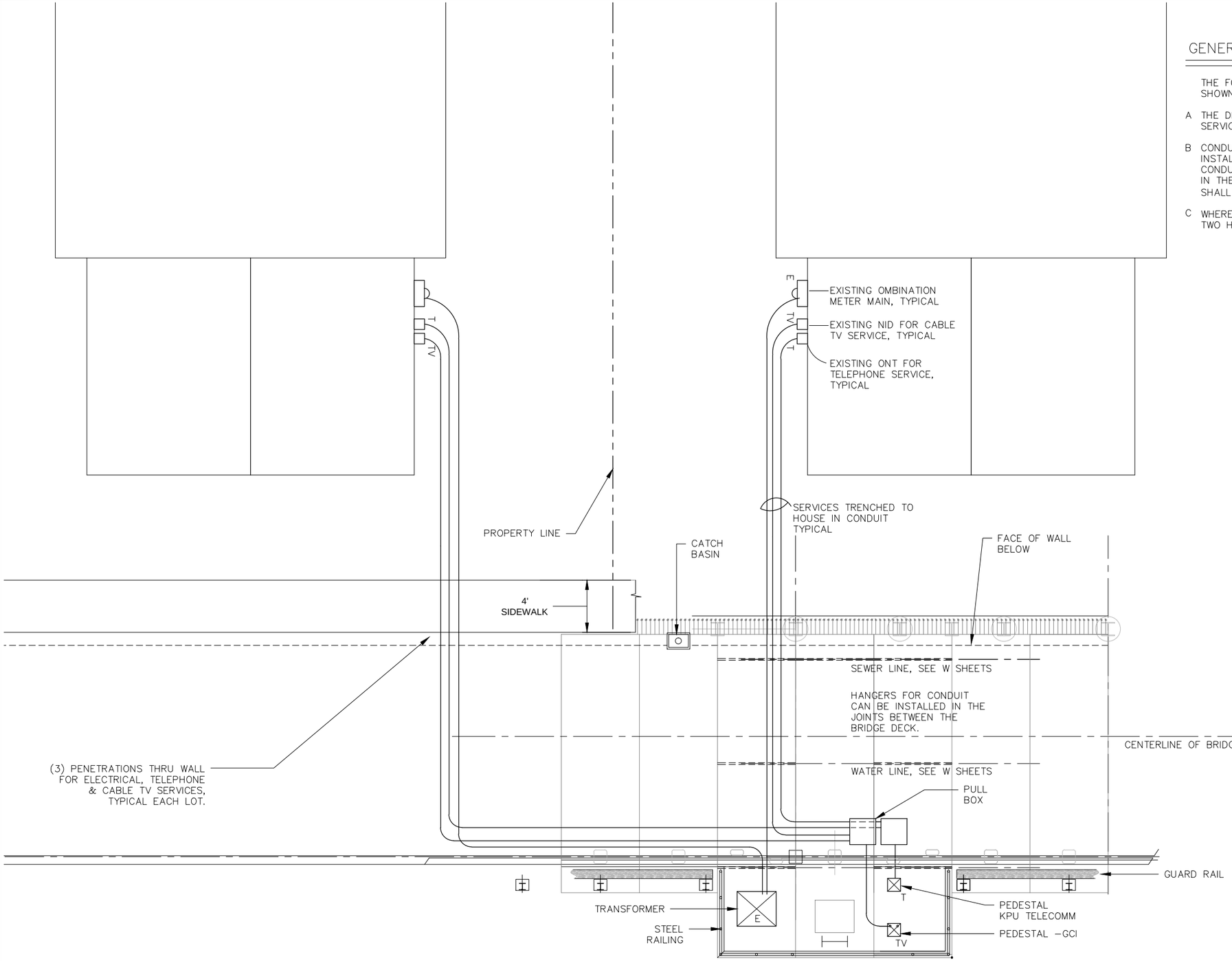
SECTION A-A AT HEAT TRACE BOX

6 0 1
In. Feet

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

DESIGNED BY: Brien Lindstrom	CHECKED: David Shearer	Sheet provided with response to RFI#209 AB As-Built Set	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION	WATER STREET BRIDGE No. 2 WATER STREET STEEL AND TIMBER BRIDGE RAILING 1
DRAWN BY: Brien Lindstrom	CHECKED: David Shearer			BRIDGE NO. 0446 DWG. NO. ~~86~~U29A
QUANTITIES BY: Brien Lindstrom	CHECKED: David Shearer			



PLAN VIEW - ELECTRICAL SERVICE -2 LOTS

Scale: 1/4" = 1'-0"

GENERAL NOTES FOR U30–U34.

THE FOLLOWING NOTES APPLY TO THE DETAILS SHOWN ON U30–U34.

A THE DETAILS SHOWS THE GENERAL LAYOUT FOR SERVICES TO THE HOMES

B CONDUITS UNDER THE TRESTLE BRIDGE SHALL BE INSTALLED IN A CONDUIT RACK, SEE U39. CONDUITS INSTALLED ON PRIVATE PROPERTY AND IN THE EARTHEN WALL PORTION OF THE BRIDGE SHALL BE INSTALLED IN A TRENCH, SEE 1/U35.

C WHERE EASEMENTS ARE PROVIDED SERVICES TO TWO HOMES CAN BE COMBINED IN ONE TRENCH.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U30-37 PSE UNDER BRIDGE E-T-TV LAYOUTS.DWG

KCN12_000

TAB: U30

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON 12-7655 8-1-15 STRUCTURAL PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

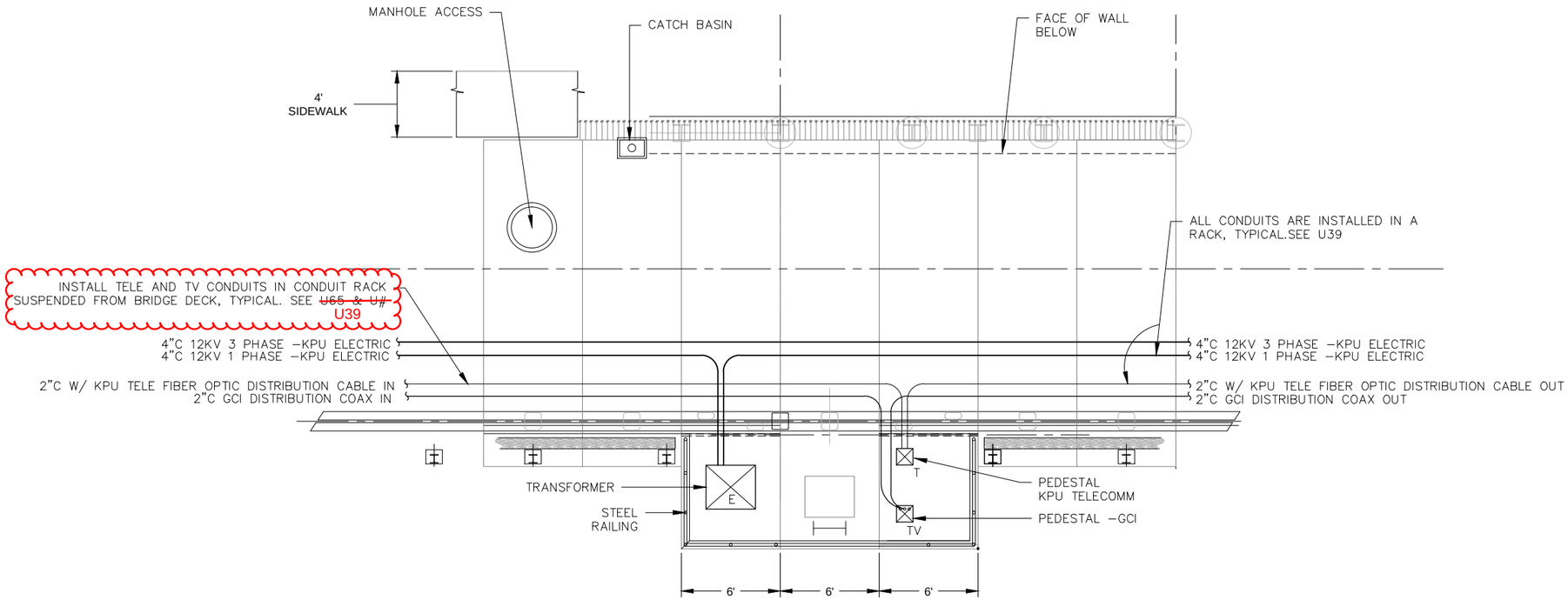
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735) ~69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U30	U56



PLAN VIEW - DISTRIBUTION

Scale: 1/4" = 1'–0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U30-37 PSE UNDER BRIDGE E-T-TV LAYOUTS.DWG

KCN12_000

TAB: U31

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

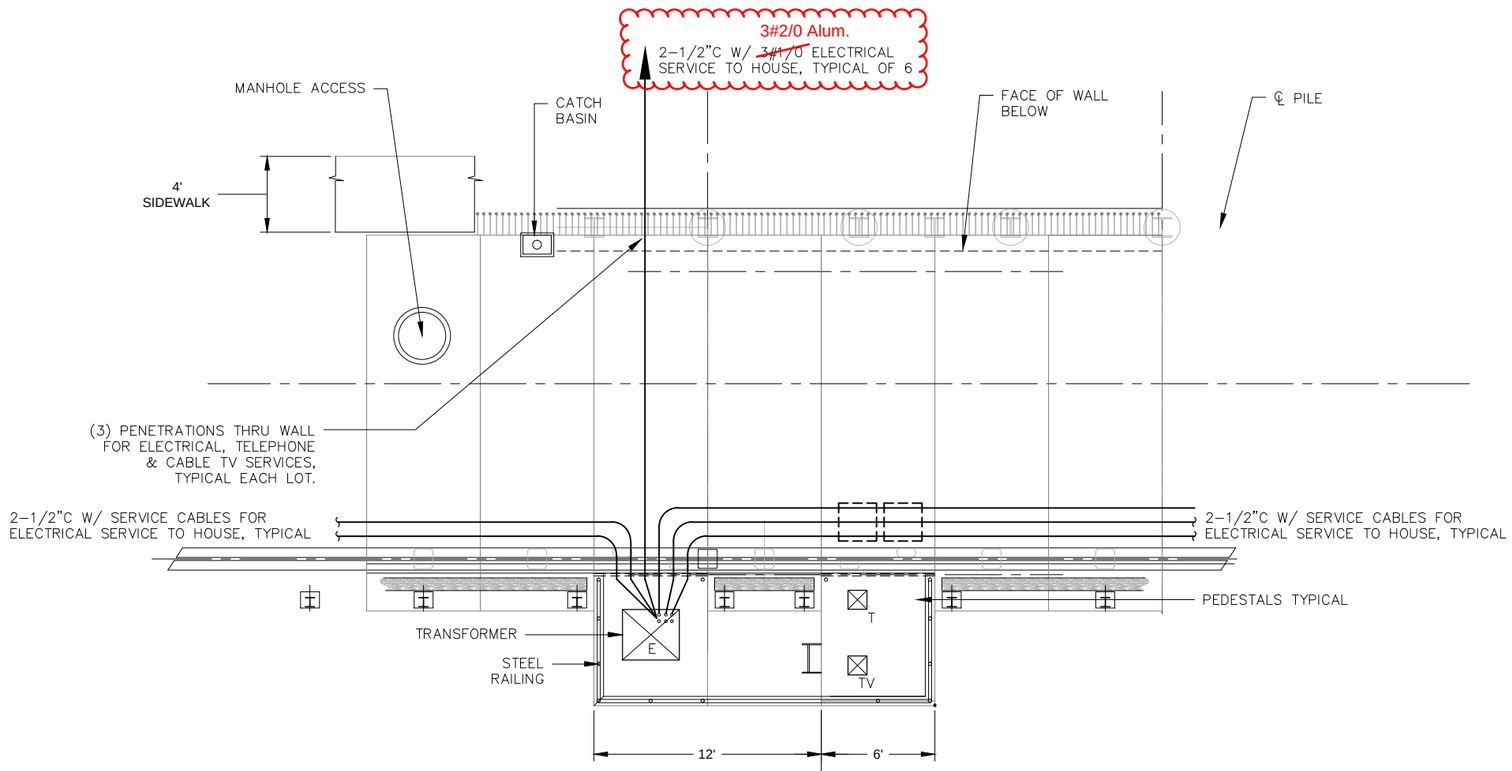
ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U31	U56



PLAN VIEW ℄ ELECTRICAL SERVICE

Scale: 1/4" = 1'-0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U30-37 PSE UNDER BRIDGE E-T-TV LAYOUTS.DWG

KCN12_000

TAB: U32

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON FE-7656 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

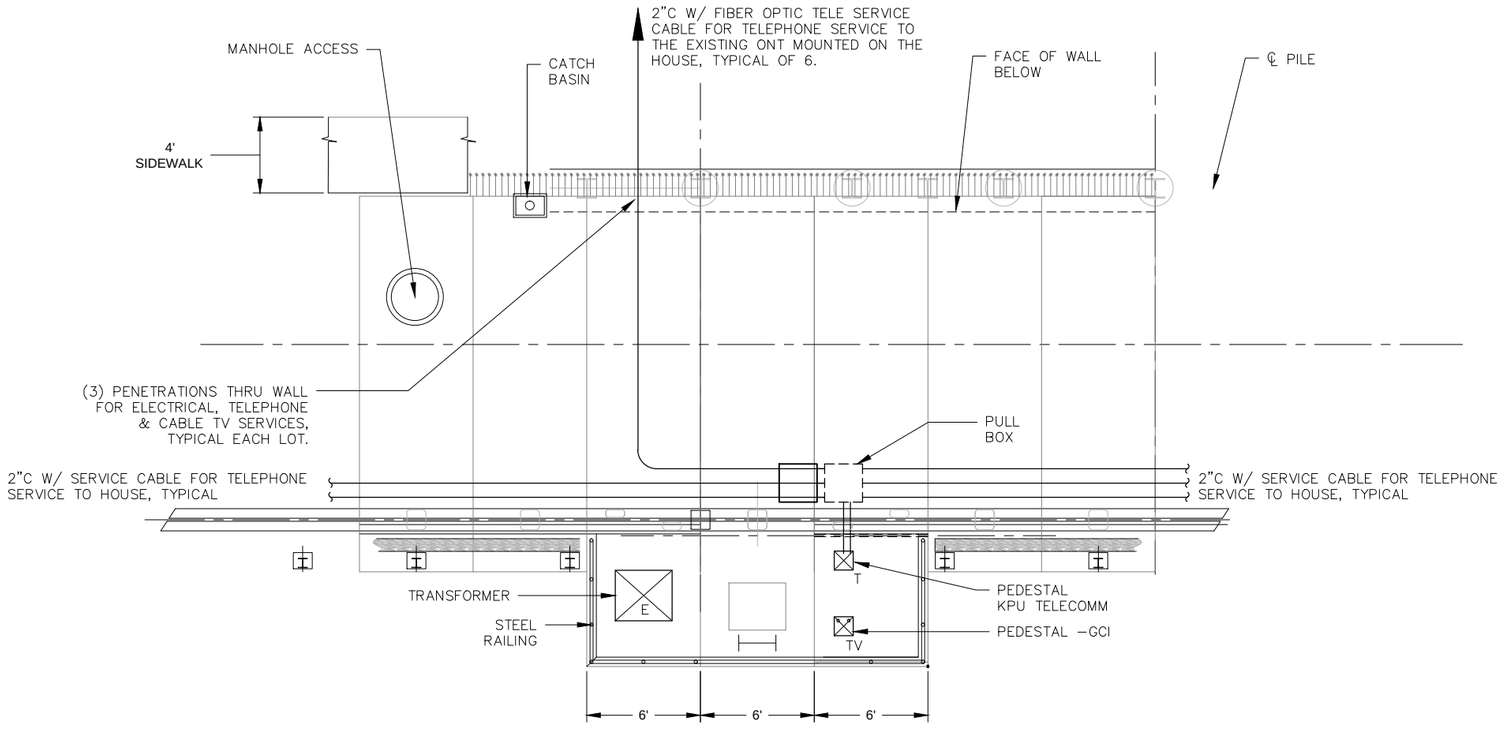
ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U32	U56



PLAN VIEW - TELEPHONE SERVICE

Scale: 1/4" = 1'–0"

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U30-37 PSE UNDER BRIDGE E-T-TV LAYOUTS.DWG

KCN12_000

TAB: U33

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

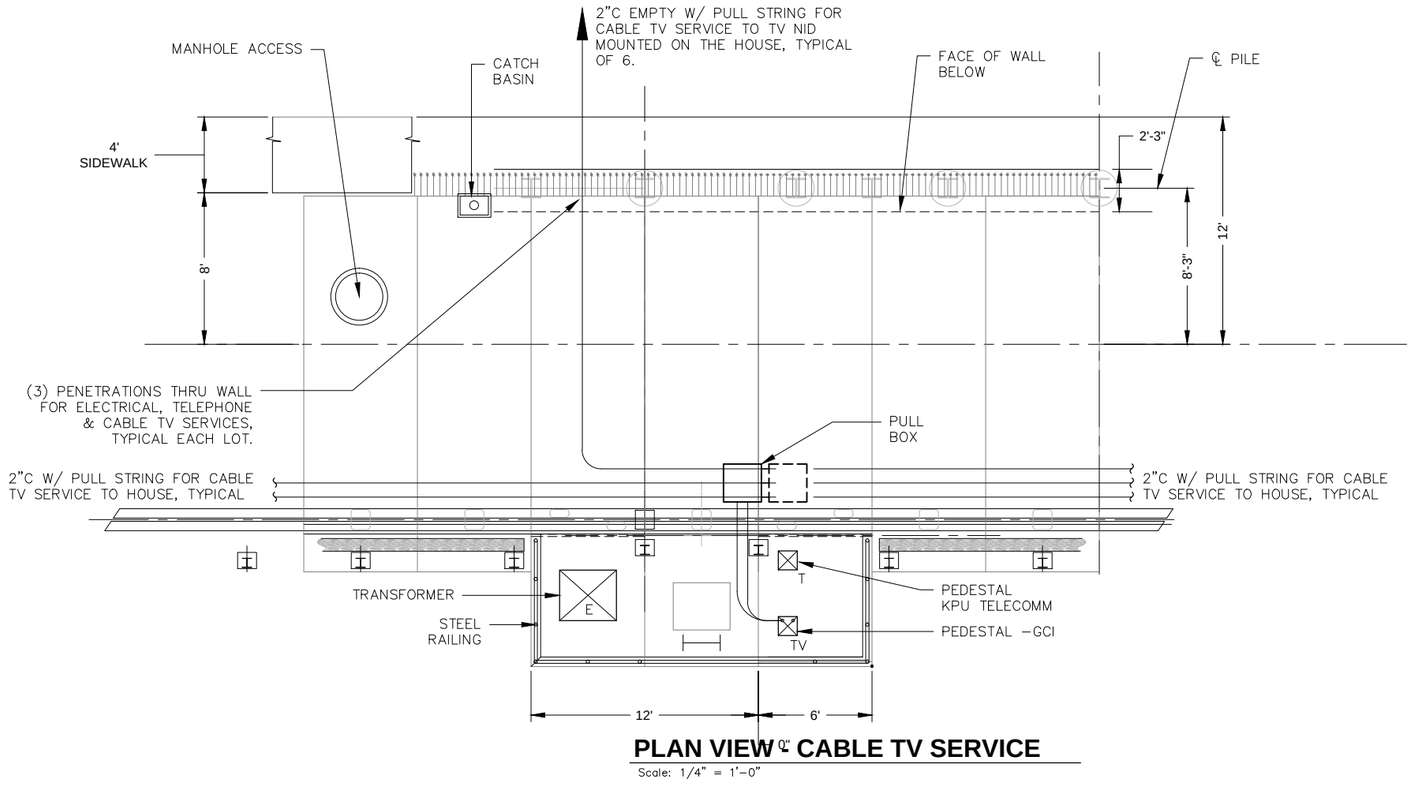
ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U33	U56



PLAN VIEW OF CABLE TV SERVICE

Scale: 1/4" = 1'–0"

A. CONTRACTOR SHALL INSTALL AN EMPTY RACEWAY SYSTEM WITH PULL STRINGS. GCI, THE LOCAL CABLE TV UTILITY, WILL INSTALL THE CABLING AFTER THE CONDUIT SYSTEM IS COMPLETE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U30-37 PSE UNDER BRIDGE E-T-TV LAYOUTS.DWG

KCN12_000

TAB: U34

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

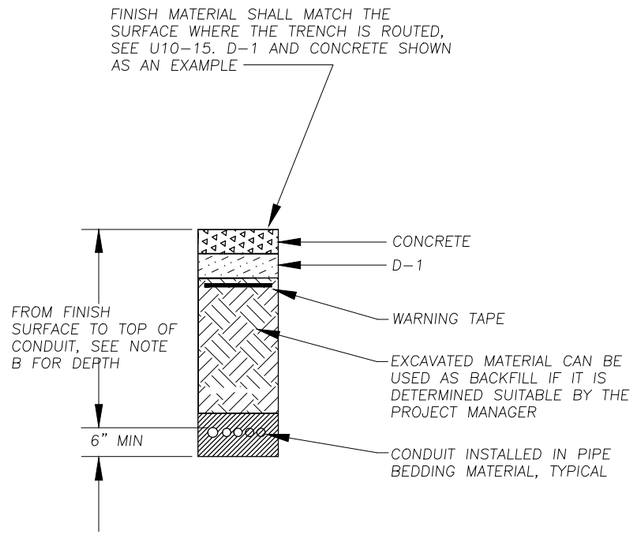
ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U34	U56



1 TRENCH DETAIL

NO SCALE

GENERAL NOTES:

A. SEE SPECIFICATIONS FOR TYPES OF MATERIALS AND SECTION 501 FOR CONCRETE. FINISH MATERIALS INCLUDE BACKFILL, EXCAVATED MATERIAL, TOP SOIL WITH GRASS, CONCRETE, COORDINATE INSTALLATION WITH ENGINEER.

B BURIAL DEPTHS TO THE TOP OF CONDUIT SHALL BE:
- 5' 12.47/7.2KV CIRCUITS UNDER ROADWAY
- 4' 120/240V CIRCUITS UNDER ROADWAY
- 4' TELECOMM AND CABLE TV UNDER ROADWAY
- 2' PRIVATE PROPERTY – 120/240V, TELECOMM, CABLE TV
- 6" STEEP SLOPE ROCK W/ ~~TYPE W~~ CONCRETE

Class A, RFI#43

C ON PRIVATE PROPERTY, WHEREVER A TRENCH CONTAINS SERVICE CONDUITS FOR MORE THAN ONE HOME, THE TRENCH SHALL BE ROUTED WITHIN AN AREA DEFINED BY AN EASEMENT.

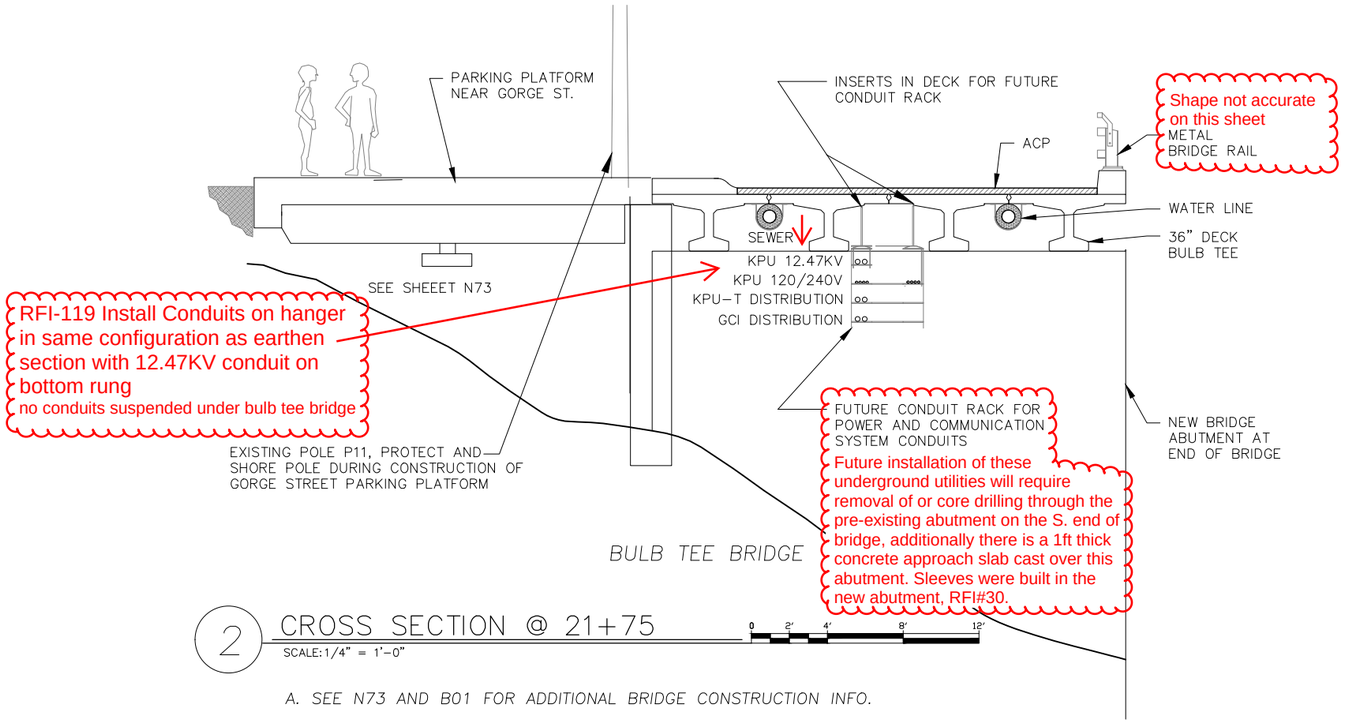
Class A, RFI#43

D ~~TYPE W~~ CONCRETE SHALL BE USED FOR TRENCHES IN STEEP SLOPED ROCK SURFACES. COLOR AND TEXTURE TO MATCH EXISTING ROCK PER SECTION 501.

RFI-124 identifies that comm. burial depth will not be meet at station 20+97 due to limited depth to retaining wall footing and specified separation between conduits. The RFI response indicates that If Burial Depth cannot be achieved, 4" Class W concrete may be placed appx. 1' above top layer of conduit covering the width of conduit run plus 6" on each side. The use of a concrete cap for shallow conduit was only used for runs up rock trenches to P5A and P7L (see U11 and U12) per note D above. The cap was not installed at the station identified in RFI-124 in part because the conduit identified are empty, should future improvements attempt to use these conduit it is recommended they first verify depths of the conduit and (if necessary) add concrete as described, separation issues between conduit were resolved with RFI-125.

RFI-125, Conduit separation not required between lines of like systems (comm, 120/240V, and 12.47kV) but maintained between those systems.

See Next page for original and complete versions of these RFI's.

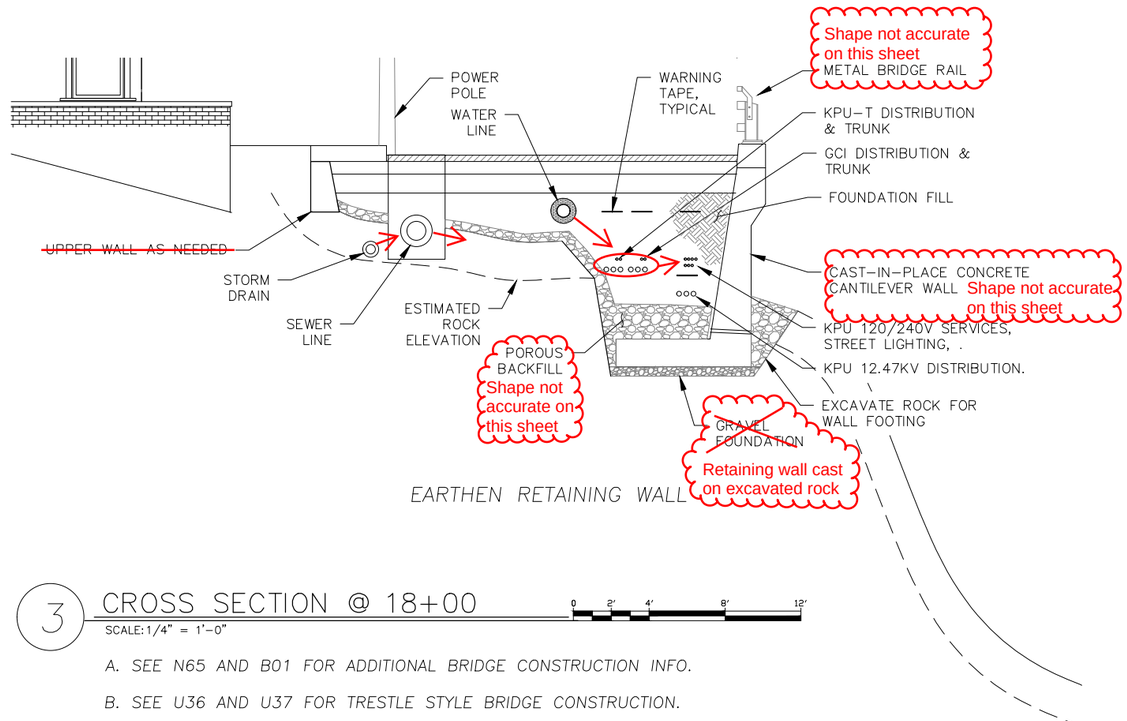


2 CROSS SECTION @ 21+75

SCALE: 1/4" = 1'–0"

A. SEE N73 AND B01 FOR ADDITIONAL BRIDGE CONSTRUCTION INFO.

B. SEE U36 AND U37 FOR TRESTLE STYLE BRIDGE CONSTRUCTION.



EARTHEN RETAINING WALL

3 CROSS SECTION @ 18+00

SCALE: 1/4" = 1'–0"

A. SEE N65 AND B01 FOR ADDITIONAL BRIDGE CONSTRUCTION INFO.

B. SEE U36 AND U37 FOR TRESTLE STYLE BRIDGE CONSTRUCTION.

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KCN12_000

TAB: U35

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.:

Date: 9/24/2019

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE–7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

ELECTRICAL DETAILS

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U35	U56

RFI 124
Question from Andrew Kolanko (Dawson Construction) at 06:19 PM on 12/19/2016
In order to install the future use electrical and communication conduit in a common trench in the location shown on the plans over the phase 2 retaining wall footing the minimum burial depth will not be achieve. The top of retaining wall footing at approximately 20+97 is at a depth of 5' below finished grade leaving the top row of communication conduit with slightly over 2' of cover.

Is it acceptable to proceed with the installation of the future use conduits with the intent of maintaining maximum burial depths as controlled by the retaining wall footing while maintaining vertical separation of the power and communication conduits as defined in the plans.

All Replies:
BY DATE

Attachments:

RFI-124 Response:
1. Yes, install a concrete cover, Type W, 4" thick over the portion of the communication conduit runs that do not meet the burial depths listed in the trench detail 1/U35:

- The concrete shall cover the width of the conduit runs, plus 6" on each side of the outer communications conduits in the trench.

- The concrete shall be located approximately 1' above the top of the communications conduits in the trench.

- Provide as-built drawing with dimensions that locate the concrete cover.

Keith Nelson — December 21, 2016
By — Date

RFI 125
Question from Andrew Kolanko (Dawson Construction) at 09:10 AM on 12/23/2016:
Note B gives the utility depth and details for the conduits. NESC 320,B,2-C states a minimum of 12" separation of power supply lines and communication lines in direct buried applications.
NESC 354,E States when in duct, power supply lines, communication, water, and sewer lines of the non-metalic type of ducts, may be buried together with no required separation.

NPC would like to route KPU-T and GCI conduits at the same elevation in the trench at 4' depth and the power conduits at 5' Depth. This configuration will carry through to the abutment and KPU-T and GCI conduits will roll into hanger system to the correct shelves.

The separation of 3" for the conduits coming through the abutment could be decreased to accomidate the routing into the hanger system. According to NESC rule 354,E there is no required separation of the conduits.

Can we install the conduit sleeves less than 3" of separation through abutment #2?
Can the power and communication conduit have less than 2' separation?

All Replies:
BY DATE

Attachments:
RFI - 13 Conduit Seperation.docx

RFI-125 Response:
1. The conduit sleeves can be installed with less than 3" of separation through abutment #2 for conduits of like systems. (Comm to comm; 120/240 to 120/240V; 12.47kV to 12.47kV). At the abutment, the bridge designer requires 1.5" minimum between the conduit sleeves. The conduit penetrations will need to accommodate the 12"x12" rebar grid in the abutment. Coordinate with the bridge designer if blockouts larger than 12"x12" are to be installed as the bridge designer will need to adjust the rebar configuration.

2. There are other constraints besides the NESC on the power and comm conduits separation requirements. The one and two foot separations are based on City of Ketchikan requirements and shall be maintained. (The two foot separation is between the high voltage and comm conduits.)

-It is permissible to run the GCI and KPU-T comm conduits in the same layer in the trench with a one foot separation between the two systems, and then upon exiting the underground installation separate the two systems onto their dedicated tiers within the conduit rack.

-The 120/240 volt and high voltage systems can be run in the same layer with a one foot separation between the two systems, and then upon exiting the underground installation separate the two systems onto their dedicated tiers within the conduit rack.

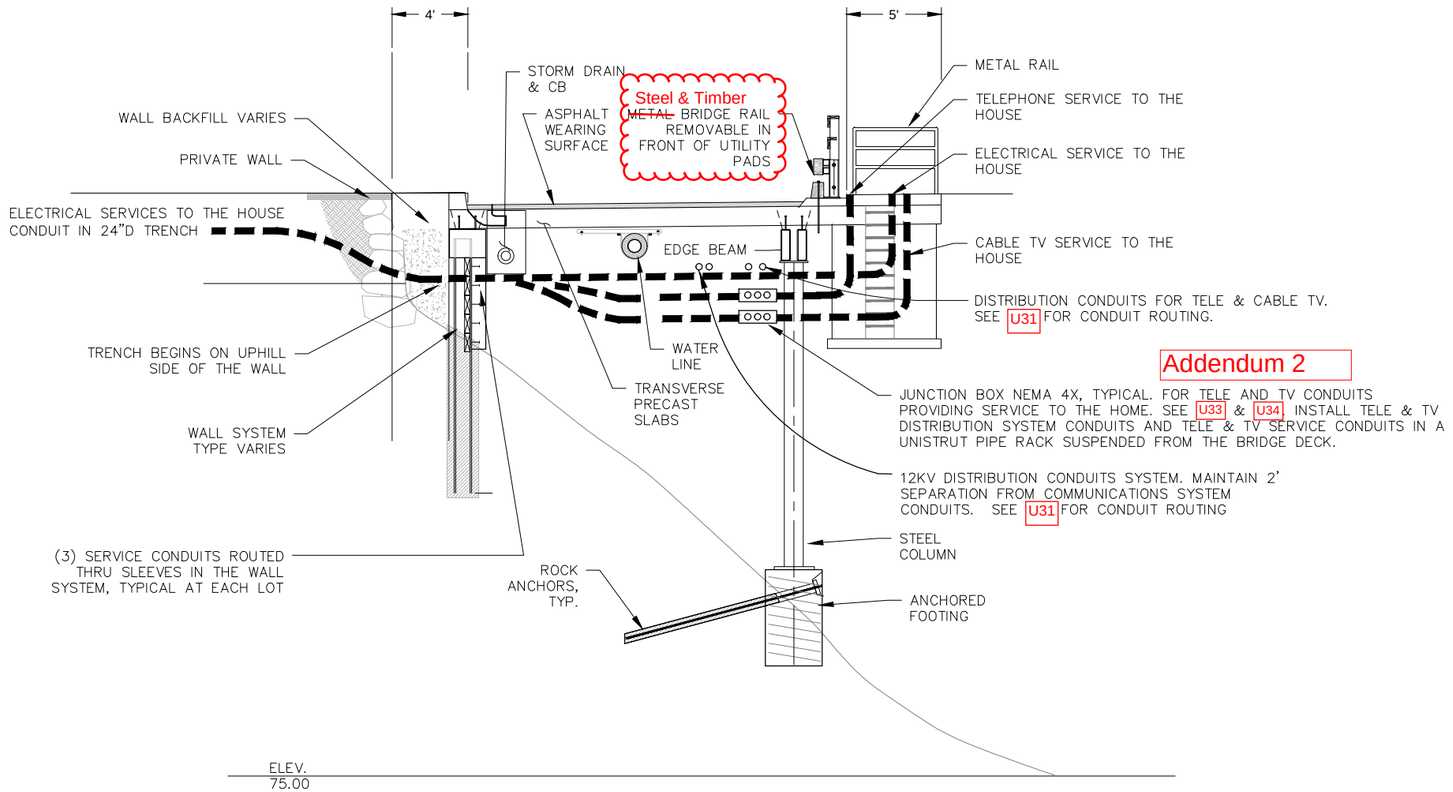
3. Please note, per RFI-124 it is permissible to install a concrete cap/cover for burial depths less than those listed in the trench detail 1/U35. This method can be used to help match the underground installation with tiers in the conduit rack.

4. Similar to RFI-119, provide a sketch showing the proposed conduit penetrations at abutment #2 for final approval.

Keith Nelson — January 3, 2017
By — Date

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019



Addendum 2

BRIDGE ELEVATION

Scale: 1/4" = 1'-0"

0 2' 4' 8' 12'

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000

TAB: U36

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

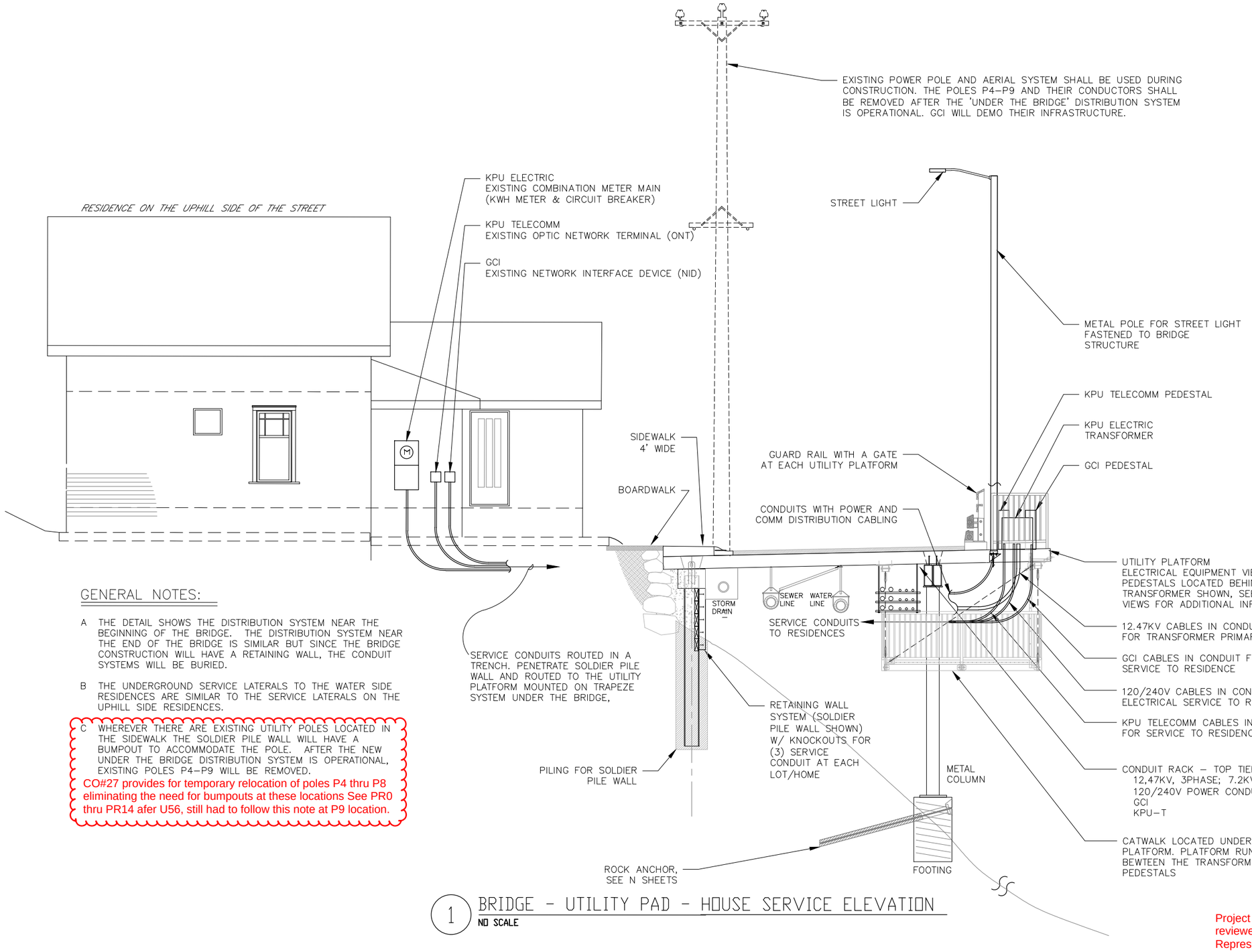
ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U36	U56



GENERAL NOTES:

A THE DETAIL SHOWS THE DISTRIBUTION SYSTEM NEAR THE BEGINNING OF THE BRIDGE. THE DISTRIBUTION SYSTEM NEAR THE END OF THE BRIDGE IS SIMILAR BUT SINCE THE BRIDGE CONSTRUCTION WILL HAVE A RETAINING WALL, THE CONDUIT SYSTEMS WILL BE BURIED.

B THE UNDERGROUND SERVICE LATERALS TO THE WATER SIDE RESIDENCES ARE SIMILAR TO THE SERVICE LATERALS ON THE UPHILL SIDE RESIDENCES.

C WHEREVER THERE ARE EXISTING UTILITY POLES LOCATED IN THE SIDEWALK THE SOLDIER PILE WALL WILL HAVE A BUMPOUT TO ACCOMMODATE THE POLE. AFTER THE NEW UNDER THE BRIDGE DISTRIBUTION SYSTEM IS OPERATIONAL, EXISTING POLES P4–P9 WILL BE REMOVED.

CO#27 provides for temporary relocation of poles P4 thru P8 eliminating the need for bumpouts at these locations See PR0 thru PR14 afer U56, still had to follow this note at P9 location.

1 BRIDGE - UTILITY PAD - HOUSE SERVICE ELEVATION

NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U30-37 PSE UNDER BRIDGE E-T-TV LAYOUTS.DWG

KCN12_000

TAB: U37

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON 10-7655 REGISTERED PROFESSIONAL ENGINEER 8-1-15

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

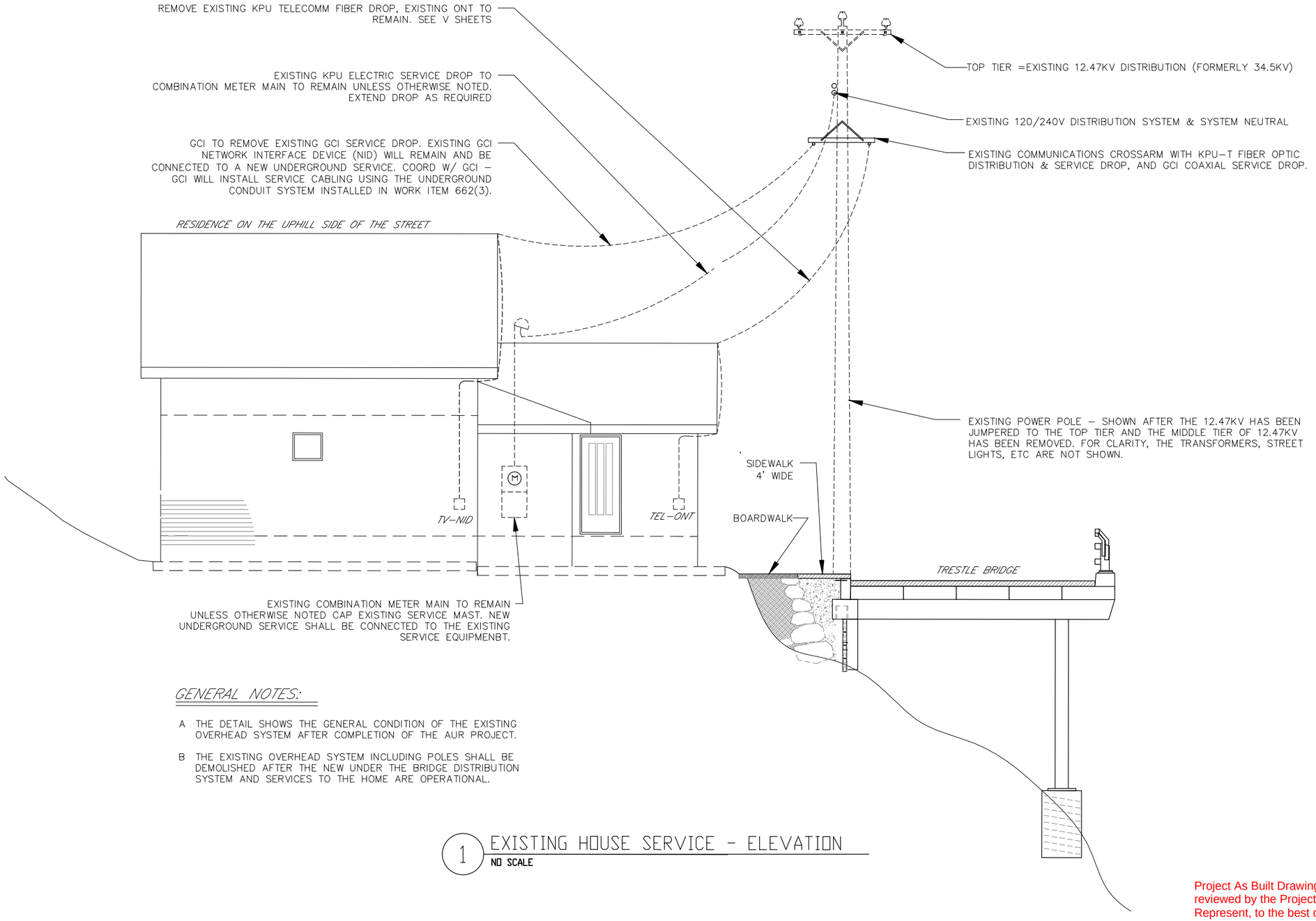
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

ELECTRICAL DETAILS

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U37	U56



GENERAL NOTES:

A THE DETAIL SHOWS THE GENERAL CONDITION OF THE EXISTING OVERHEAD SYSTEM AFTER COMPLETION OF THE AUR PROJECT.

B THE EXISTING OVERHEAD SYSTEM INCLUDING POLES SHALL BE DEMOLISHED AFTER THE NEW UNDER THE BRIDGE DISTRIBUTION SYSTEM AND SERVICES TO THE HOME ARE OPERATIONAL.

1 EXISTING HOUSE SERVICE - ELEVATION
NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN\13DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U38

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

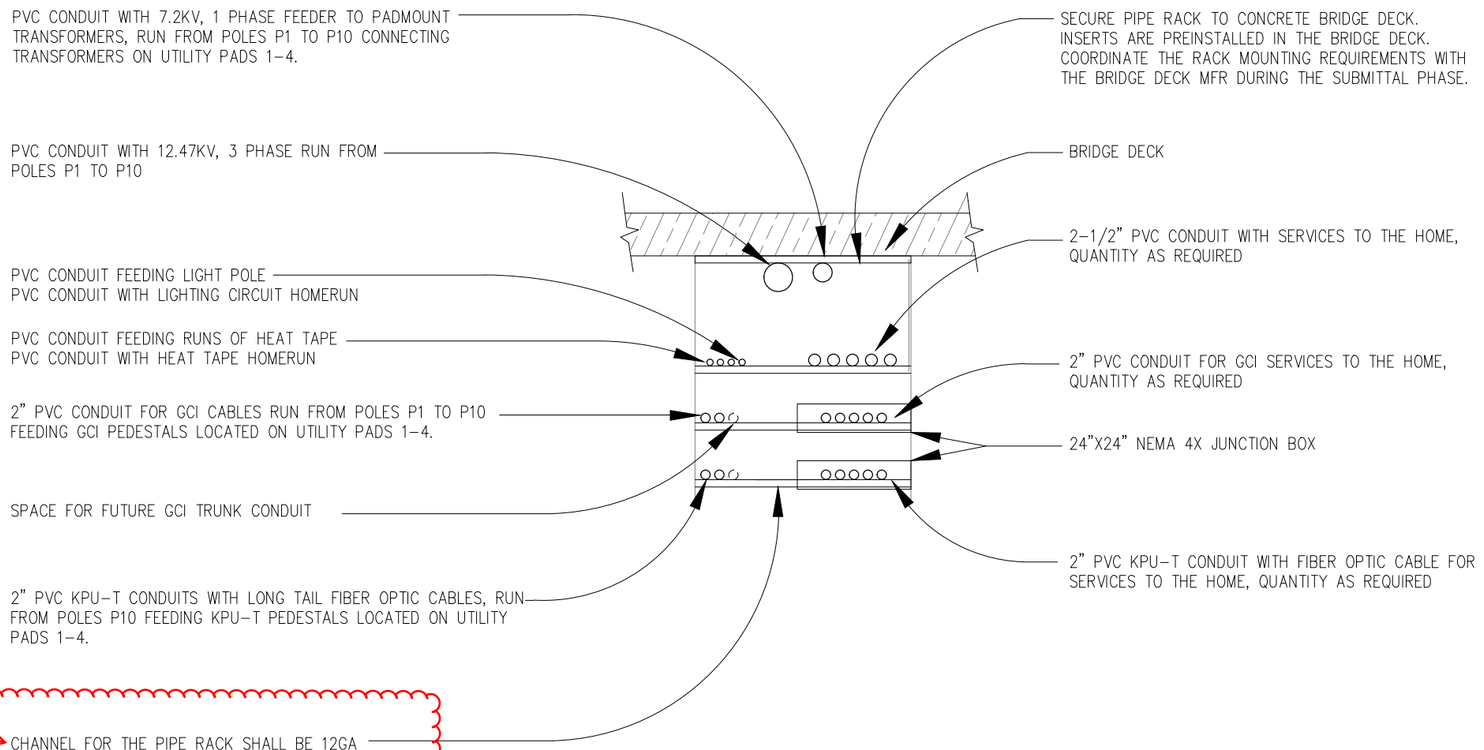
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

POLE DETAILS

PROJECT DESIGNATION

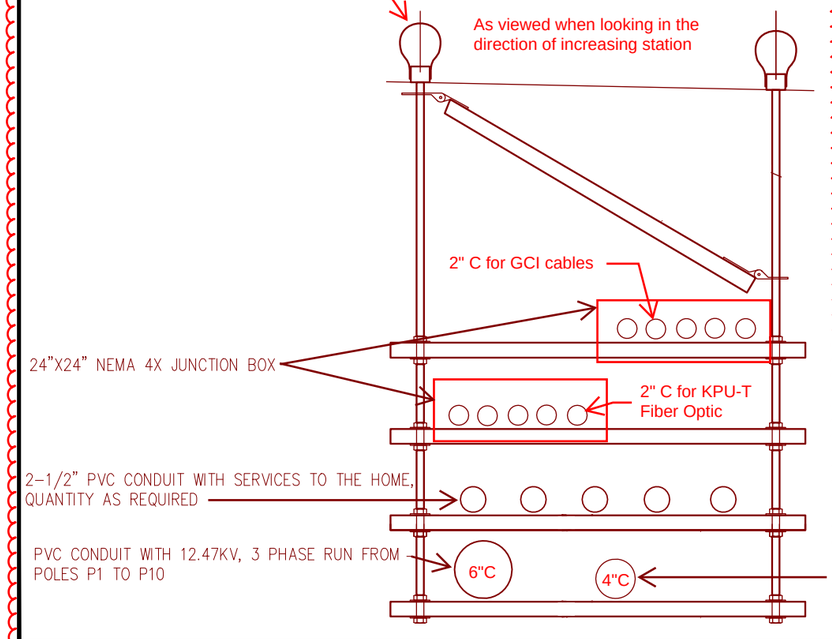
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U38	U56



See N93 for conduit rack component details

CHANNEL FOR THE PIPE RACK SHALL BE 12GA 1–5/8"D MINIMUM, ~~UNISTRUT P1000 SERIES OR EQUAL.~~



1 CONDUIT RACK –TRESTLE BRIDGE

NO SCALE

Layers re-arranged to allow room for 4" diameter conduit to sweep up to power transformers at utility platforms, power had to be on bottom tier.

GENERAL NOTES:

A DETAIL SHOWS A GENERIC SECTION OF THE PIPE RACK. NOT ALL CONDUITS OR COMPONENTS ARE SHOWN. SEE PLANS FOR CONDUIT QUANTITIES.

B SEE ~~N94~~ N93 FOR SEISMIC BRACING.

C INSERTS ARE PREINSTALLED AND CANNOT BE INSTALLED IN THE BRIDGE DECK PIPE IN THE FIELD. RACK HANGERS CAN BE INSTALLED IN THE JOINTS BETWEEN THE DECK PANELS AND SHALL BE USED TO SUPPORT THE LATERAL CONDUIT RUNS FOR SERVICES TO THE HOME. See U39A, next sheet for field drill hanger allowance on service laterals.

D GCI WILL INSTALL THEIR PEDESTALS AND INSTALL THEIR CABLING IN THE RACEWAY SYSTEM.

E INSTALL EXPANSION JOINTS IN CONDUIT RUNS AT EACH BRIDGE EXPANSION JOINT.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U39

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

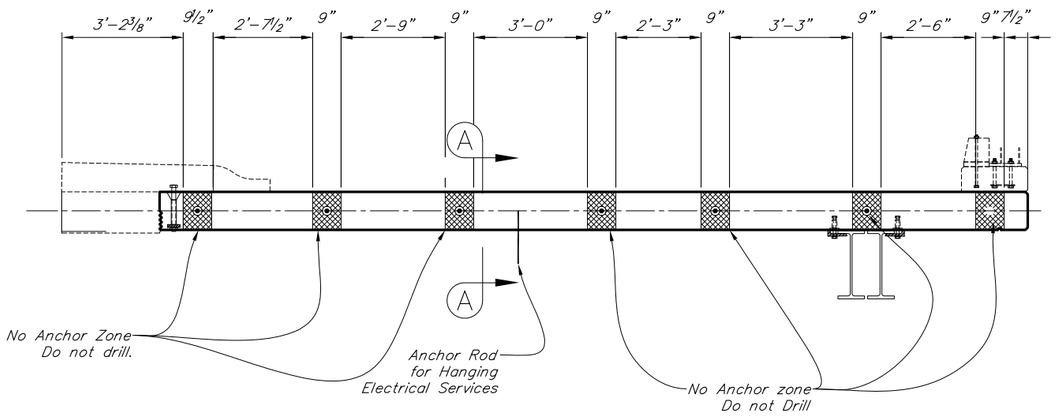
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEMS CITY BRIDGES
PROJECT #69534

CONDUIT RACK DETAILS

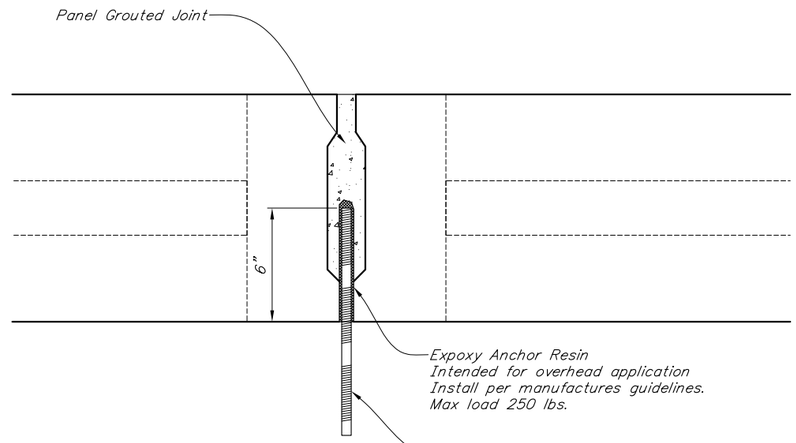
PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U39	U56

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2015	N1	1



PANEL SECTION

12 6 0 1 2 3 4
In. Feet



SECTION A-A

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ?	CHECKED: DRS		
DRAWN BY: ?	CHECKED: Brien Lindstrom		
QUANTITIES BY: David Shearer	CHECKED: Brien Lindstrom		

Received via E-mail 8/2/18

AB

As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA
48TH
DAVID R. SHEARER
CE 8373
7/25/18
Registered Professional Engineer

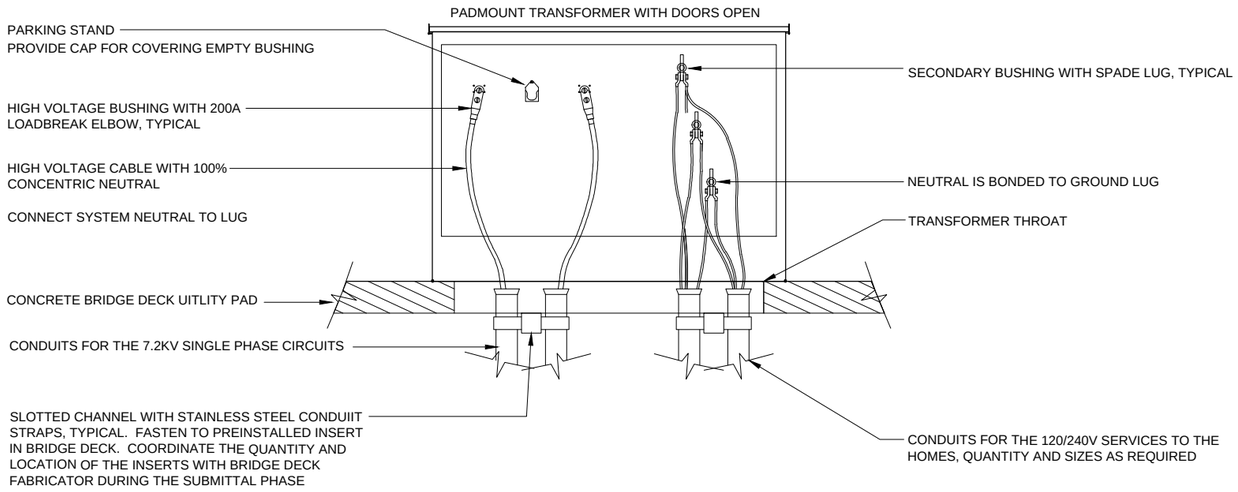
WATERSTREET BRIDGE No. 2

WATER STREET

Utility Hanger

BRIDGE NO. 0446
DWG. NO. 1 U39A

Aug 02, 2018 - 12:09pm david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Davids Stuff\Sketches\Utility hanger in Joint Detail.dwg Layout Name: Utility Hanger



1 PADMOUNT TRANSFORMER DETAIL

NO SCALE

GROUNDING ELECTRODE SYSTEM
CONNECT TO THE FOLLOWING:
-STRUCTURAL STEEL COLUMN
-(2) 3/4" DIA X 10 FT DRIVEN GROUND RODS
-REBAR IN CONCRETE FOOTING OF THE BRIDGE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

RFI 195

Question from Jay Bean (Dawson Construction) at 04:36 PM on 07/16/2018:

Sheet U16, Note 8 describes the new grounding electrode system for the padmount transformers. Sheet U40, Detail 1 calls for connecting the ground wire from the padmount transformers to the structural steel column. A method of connecting the ground wire to the structural steel column is not mentioned. Is there a preferred method of connecting the ground wire to the steel columns? If not, contractor suggestion is to use a bronze, single bolt bonding clamp with a drilled and tapped hole to make the connection.

Attachments:

U40 Detail 1.JPG U16, Note 8.JPG

All Replies:

BY

RFI-195 Response:

Per David Shearer, the bridge designer, the columns and beams cannot be drilled.

A. There are two methods can be used to make the grounding electrode conductor (GEC) connection:

1. Cadweld (662-2.15 exothermic weld) the GEC to the base plate.
2. Drill and tap a single bolt, aluminum ground lug to the base plate. - used this method

B: It is permissible to use an aluminum beam clamp to fasten the GEC to the flange of the beam for the run from the utility pad bumpout to the column.

C. Prior to installing the electrical devices, clean the metal surface of the beam flange and base plate, but do not remove the galvanizing.

Keith Nelson — July 23, 2018
By — Date

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KCN12_000

TAB: U40

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON FE-7656 8-1-18 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

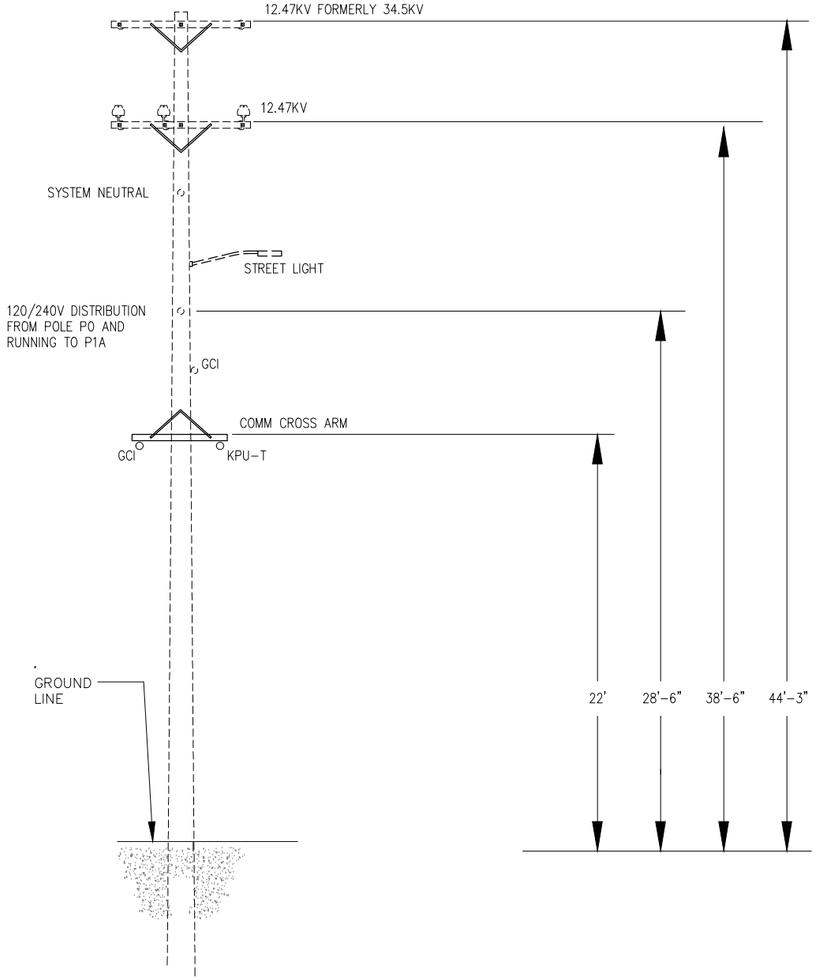
UTILITY PAD DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U40	U56



ELEVATION OF P1 IS LOOKING DOWN WATER STREET TOWARDS POLE P2

1 EXISTING POWER POLE P1
NO SCALE

POLE PO

POLE P3 – P10

EXISTING CONFIGURATION

A = TOP TIER NOW HAS DEADEND INSULATORS ON BOTH CROSSARMS. THE RUN TOWARDS POLE P1 IS ENERGIZED AT 12.47KV. THE RUN TOWARDS PO IS DEENERGIZED (FORMERLY 35KV).

B. MIDDLE TIER: HAS DEADEND INSULATORS THE PO SIDE OF THE EXISTING CROSSARM

C. THE EXISTING 12.47KV ON THE TOP TIER (RUNNING FROM P1 TO P10 ARE JUMPERED DOWN TO THE MIDDLE TIER CONNECTING TO THE RUN TOWARDS PO MIDDLE TIER IS 12.47KV.

D. POLE P1 IS GUYED TO POLE P2

2 POLE P1 & P2
NO SCALE

TO POLE P3 – P10

TO POLE PO

3 POLE P1 JUMPERS
NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000
TAB: U41

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

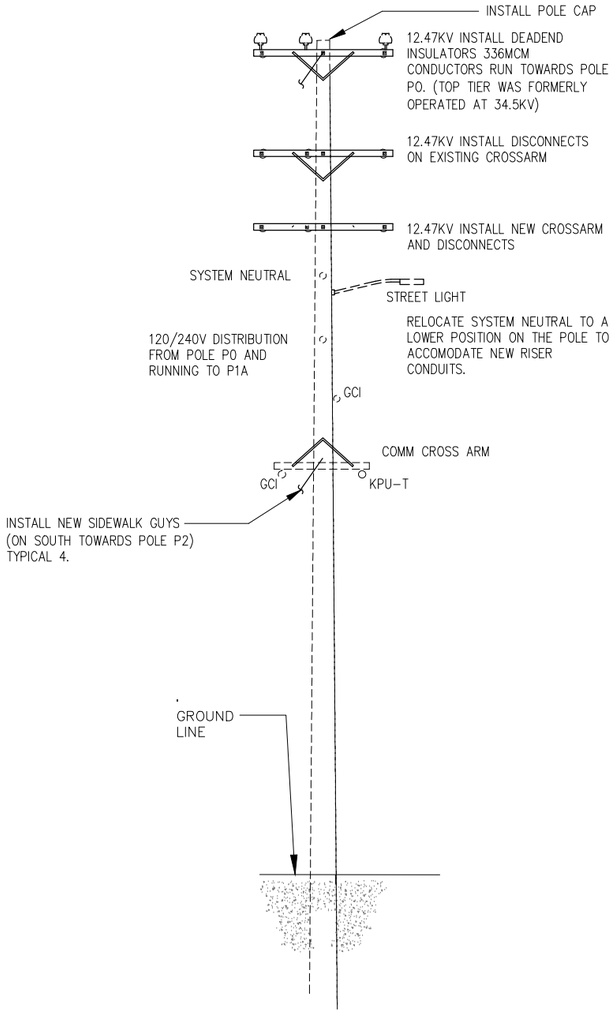
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE P1 DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	20145

SHEET NUMBER	TOTAL SHEETS
U41	U56

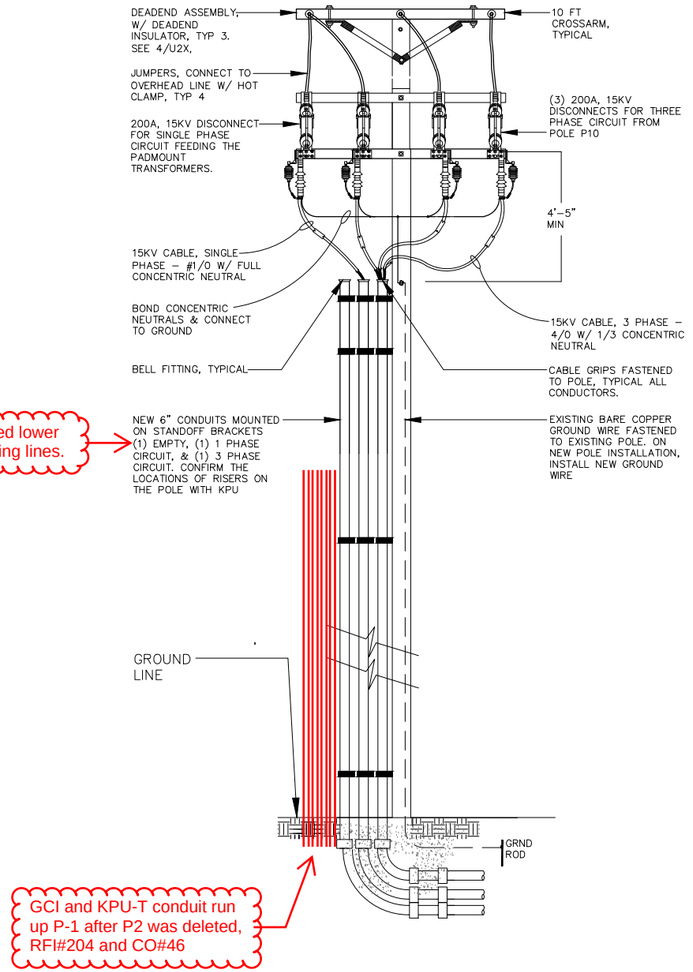


ELEVATION OF P1 IS LOOKING DOWN WATER STREET TOWARDS POLE P2

Removed P2 with project

1 REVISED POLE P1

NO SCALE



Empty conduit capped lower than conduit containing lines.

GCI and KPU-T conduit run up P-1 after P2 was deleted, RFI#204 and CO#46

KPU STANDARD RISER POLE FOR 12.47KV DISTRIBUTION MODIFY AS REQUIRED FOR POLE P1. SEE 1/U

FOR CLARITY NOT ALL EXISTING POWER AND COMMUNICATIONS CONDUCTORS AND EQUIPMENT ARE SHOWN

2 P1 RISER POLE - 12.47KV INFO

NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000

TAB: U42

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON ER-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

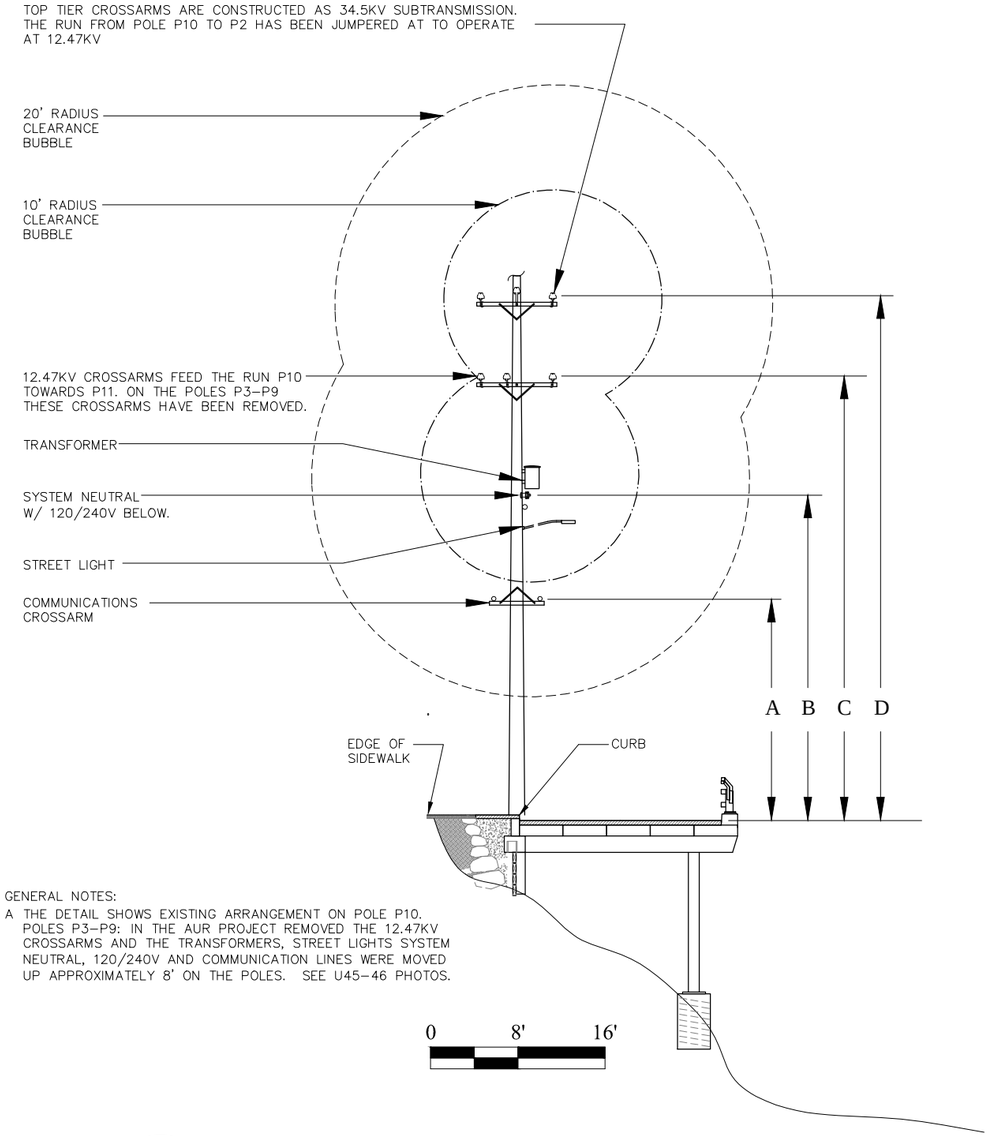
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

POLE P1 DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	20145
SHEET NUMBER	TOTAL SHEETS
U42	U56



GENERAL NOTES:

A THE DETAIL SHOWS EXISTING ARRANGEMENT ON POLE P10. POLES P3–P9: IN THE AUR PROJECT REMOVED THE 12.47KV CROSSARMS AND THE TRANSFORMERS, STREET LIGHTS SYSTEM NEUTRAL, 120/240V AND COMMUNICATION LINES WERE MOVED UP APPROXIMATELY 8' ON THE POLES. SEE U45–46 PHOTOS.

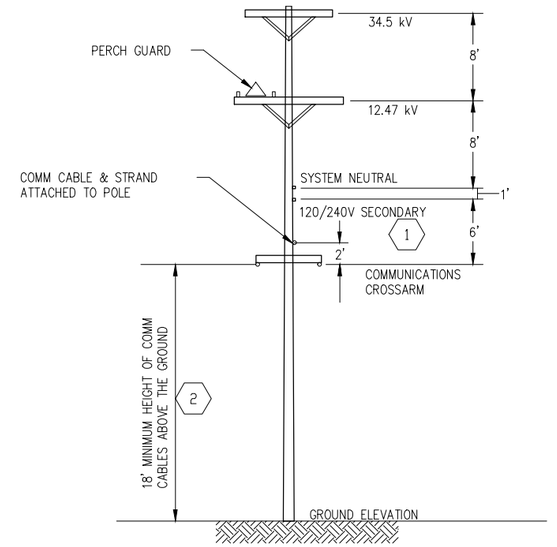
1 OSHA CLEARANCE BUBBLE @ POLE P10

SCALE: 1/4" = 1'–0"

EXISTING INSTALLATION

Conductor Heights Above The Street

	At Pole P10	Midspan P9-P10	Midspan P10-P11
A (Communication Lines)	19'-10"	15'-10"	16'-11"
B (System Neutral)	33'-8"	28'-4"	27'-6"
C (12.47kV)	40'-8"		
D (34.5kV)	48'-8"		



THE DETAIL SHOWS THE GENERAL FRAMING REQUIREMENTS FOR KPU POWER POLES.

2 KPU GENERAL FRAMING GUIDE

NO SCALE

ELECTRICAL NOTES

1. ALONG WATER STREET WHERE THE OVERHEAD SYSTEM IS BEING RAISED, THE MINIMUM DISTANCE BETWEEN ANY OF THE COMM LINES AND THE 120/240V DISTRIBUTION SYSTEM IS 48"
2. RAISE THE COMM LINES ALONG WATER STREET TO THE MAXIMUM LEVEL WHILE MAINTAINING 48" SEPARATION BETWEEN ANY OF THE COMM LINES AND THE 120/240V DISTRIBUTION SYSTEM

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000

TAB: U43

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

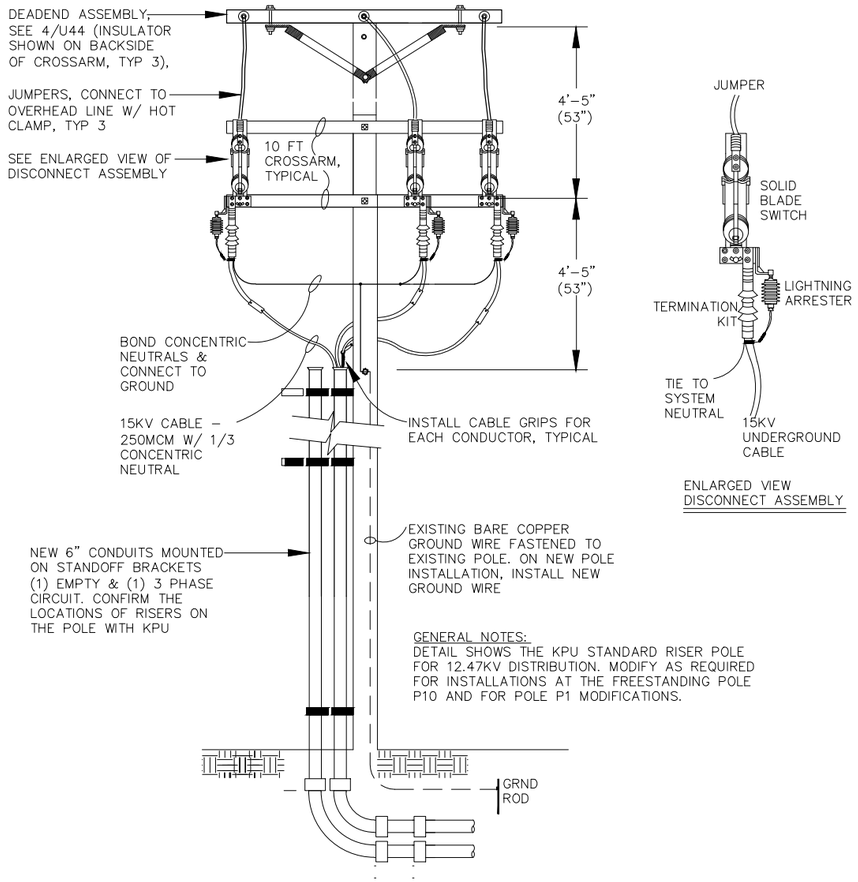
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

KPU POLE DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U43	U56

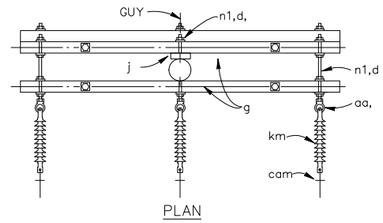


ENLARGED VIEW
DISCONNECT ASSEMBLY

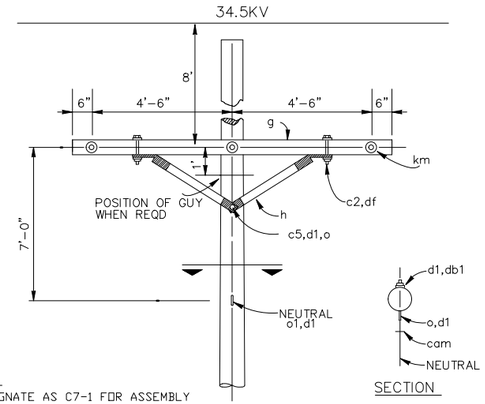
GENERAL NOTES:
DETAIL SHOWS THE KPU STANDARD RISER POLE FOR 12.47KV DISTRIBUTION. MODIFY AS REQUIRED FOR INSTALLATIONS AT THE FREESTANDING POLE P10 AND FOR POLE P1 MODIFICATIONS.

1 KPU 12.47KV RISER POLE
NO SCALE

MATERIAL LIST – RISER POLE					
KPU NUMBER	QTY	DESCRIPTION – 3 PHASE		QTY	DESCRIPTION – 1 PHASE (SEE GENERAL NOTES)
17173.58	3	TERMINATION KIT FOR 250 MCM (TYCO RAYCHEM cat#TFT-353E)		1	KIT FOR #1/0 (TYCO RAYCHEM cat#TFT-352E)
17897.10	3	SOLID BLADE SWITCH (S&C cat#4942R9-E-D2-J)			
11612	3	POWER TAP GRIP (UTILCO cat#SCH-397)			
19240		INSULATED JUMPER 250MCM (TO LENGTH) (use-2 or RHH or RHW-2 INSULATION)			INSULATED JUMPER #4/0
10828	2	BOLT MACHINE 5/8" x 14" (or as reqd)			
18358	4	WASHER, 2 1/4"x2 1/4"x2 1/4"x 9/16" hole			
10354	2	CROSS ARM, LIGHT 3 3/4"x4 3/4"x10'-0"(HUGHES BRO. TYPE 5 DRILL PATTERN)			
	3	KELLEMS GRIP (HUBBELL cat#02206013)			
12052		CONDUIT 6" PVC SCH 80 (as req)			CONDUIT 4" PVC SCH 80 (as req)
12052.30		CONDUIT 6" 90 ELBOW (as req)			CONDUIT 4" 90 ELBOW (as req)
16388		STAND-OFF BRACKETS 12" (2 PER SECTION CONDUIT)			
10456.30	3	LIGHTNING ARRESTER 15KV (COOPER cat#URS3614-0A1A-0A1A)		1	
18220.10	3	1/2" GROUNDED BRAID WITH EYELETS (ELECTRIC MOTION cat#EM12435)		1	
11613	3	#8-2/0 STR CU ARRESTER LINE CONNECTORS (HUBBELL/FARGO cat#GH-201D)		1	
NOI		UNDERGROUND 15KV, 1/3 CONCENTRIC NEUTRAL CABLE, 250 MCM			UNDERGROUND 15KV, FULL CONCENTRIC NEUTRAL CABLE, #1/0
NOI	3	BRONZE TAP LUG (T-BOLTS) 1/0-500 (ANDERSON cat#TLD-52-L)		1	
13114	3	LUGS-500 1/2"BOLT (T&B HOMAC cat#AL-500-NTN)		1	
16566	1	GROUND ROD (JOSLYN cat#J8338)			
	3	PLATE PARALLEL CIRCUIT CU BUS		1	
	3	ARRESTER FLAG BRACKET P/L 600AMP		1	
	3	DISCONNECT SW LEAD COVER		1	



PLAN



SECTION

NOTES:
1 DESIGNATE AS C7-1 FOR ASSEMBLY WITH THREE CROSSARMS.

2 SIMILAR LAYOUT FOR 35KV CROSSARM DEADEND. ITEM km BECOMES MACLEAN DS-35M

2 KPU 7.2/12.47KV CROSSARM DEADEND
NO SCALE

C-7, C-7-1

MATERIAL LIST – DEADEND CROSSARM			
ITEM	KPU NUMBER	QTY	DESCRIPTION
aa	15690	3	Nut, eye 5/8" JOSLYN: J1092
c2	10770	4	Bolt, machine 1/2" x 8" (or as reqd)
c5	10828	1	Bolt, machine 5/8" x 14" (or as reqd)
cam	11610	3	Deadend Assm-primary, Anderson336-3/0ADE70N
cam	11610	1	Deadend Assm-neutral, Anderson336-3/0ADE70N
d1	18358	12	Washer, 2 1/4"x2 1/4"x2 1/4"x 9/16" hole
g	10355	2	Crossarm, heavy 5 3/4"x 43/4"x 10'-0"
h	11180	4	Brace, wood, HUGHES BROS 2045D45-11-13
j	14999	1	Arm Gain Plastic Radar Enterprises #601
km	15730	3	Deadend Insulator -MacLean DS-15M
n1	10861	3	Bolt, double arming, 5/8" x 24" (or as reqd)
o1	10690	2	Bolt, Eye 5/8" x 12" (or as reqd)
df		4	1/2" flat washers

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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TAB: U44

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

KPU POLE DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U44	U56

Not Updated for As-Built Set

1 POLE P00
NO SCALE

2 POLE P0
NO SCALE

3 POLE P1 & P2
NO SCALE

4 POLE P3
NO SCALE

5 POLE P4
NO SCALE

6 POLE P5
NO SCALE

7 POLE P6
NO SCALE

8 POLE P7
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000
TAB: U45

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U45	U56

Not Updated for As-Built Set

1 POLE P8
NO SCALE

2 POLE P9
NO SCALE

3 POLE P10
NO SCALE

4 POLE P10A
NO SCALE

5 POLE P11
NO SCALE

6 POLE P11A
NO SCALE

7 POLE P12
NO SCALE

8 POLE P13
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000
TAB: U46

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE PHOTOS

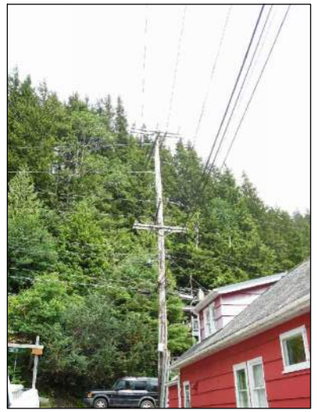
PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U46	U56

Not Updated for As-Built Set

1 POLE P1P
NO SCALE
TOP OF PARNELL STAIRS LOOKING TOWARDS P10 ON WATER STREET



2 POLE P1M
NO SCALE
MILLAR STREET AND PARNELL STAIRS

3 MH17 CONDUITS-ABUTMENT 1
NO SCALE
(4) EXISTING 4"C

GCI DROP KPU-T DROP KPU-E SERVICE POLE AND DROP

4 1627 SERVICES
NO SCALE

5 1626-1628 SERVICES
NO SCALE

KPU-E DROP GCI DROP KPU-T DROP

6 1622 SERVICES
NO SCALE

7 1617 SERVICES
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000
TAB: U47

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

POLE & SERVICE PHOTOS

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U47	U56

Not Updated for As-Built Set

1611

1617

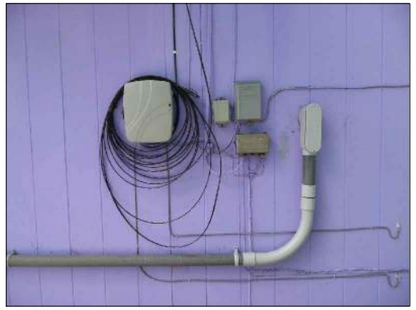
EASEMENT 9B

1 1611 SERVICES
NO SCALE

1608 METER ENCLOSURE SEE 3/U

EASEMENT 6B

1610



2 1610 SERVICES
NO SCALE

SEE DETAIL 2 FOR ADDITIONAL INFO

3 1608 SERVICES
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U48

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

SERVICE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U48	U56

Not Updated for As-Built Set

1600 P5 1528

KPU–T NID & ONT

2ND FLOOR DECK

1608 1600–GCI

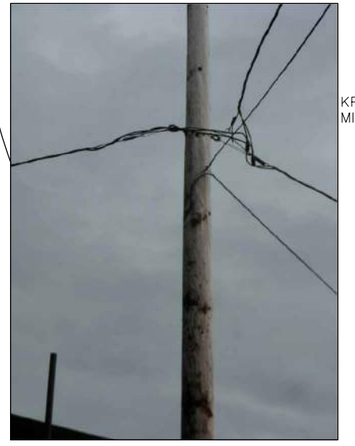
1 1600 SERVICES
NO SCALE

POLE P5A

SERVICE DROP UP TO 1500

1528 EASEMENT 8B 1508

POLE P5A DROP TO 1508 KPU–E GCI



KPU–E, GCI TO MIDSPAN DROPS

KPU–T ONT & NID

PANEL W/ MAIN

GCI NID

2ND FLOOR DECK

2 1528 SERVICES
NO SCALE

3 1508 SERVICES
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U49

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON KE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

SERVICE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U49	U56

Not Updated for As-Built Set

1600 P5 1528

GCI NID FED FROM WILEY STAIRS SEE 2/U

KPU–T NID & ONT

METER MAIN

KPU–E DROP FROM POLE P5A 2ND FLOOR DECK

1 1500 SERVICES
NO SCALE

1500 GCI DROP – FASTENED TO RAILING AT 1500, THEN RUN ON GROUND TO HOUSE

200 GCI & KPU–T DROPS (YELLOW HOUSE)

200 KPU–E DROP

KPU–T & GCI DROPS

GCI NID

KPU–T DROP DIRECT INTO HOUSE

1508 WILEY STAIRS

2 200 SERVICES
NO SCALE

1454 KPU–T & GCI DROPS & NIDS

1462 KPU–E DROP & MAST, KPU–T & GCI DROPS

3 1462 SERVICES
NO SCALE

1462 EASEMENT 14B POLE P7 1454

4 1454 SERVICES
NO SCALE

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U50

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

SERVICE PHOTOS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U50	U56

Not Updated for As-Built Set

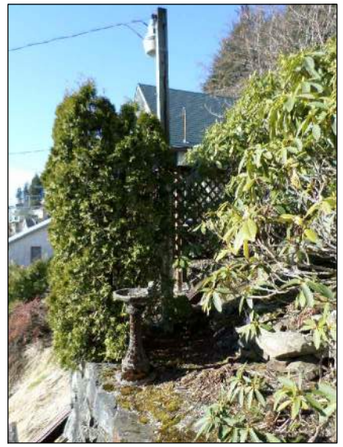
METER MAIN

GCI NID KPU–T NID

DECK BELOW THE METER MAIN AND NIDS

POLE 7L

POLE 7L



1442

POLE 7L

1 1446 AND POLE P7L SERVICES

NO SCALE

1442 – (2) EXISTING KPU METERS IN FURRED OUT WALL.

1446

INSTALL CONDUIT LADDER TO SPAN THE GAP BETWEEN 1442 AND 1446.

POLE P8, KPU–E DROP DIRECT INTO 1442. KPU–T FIBER DROP COILED

1446

1442

1446 SERVICES

2 1442 SERVICES

NO SCALE

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KCN12_000

TAB: U51

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

SERVICE PHOTOS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U51	U56

Not Updated for As-Built Set

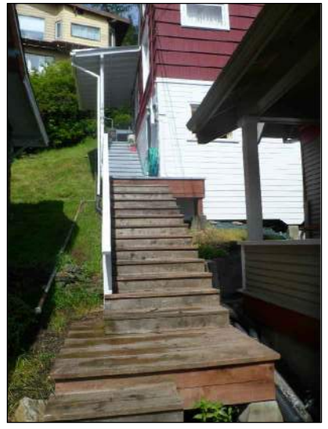
1418.5

1426 EASEMENT 1418
16C, 17

PLANTER WALL TO BE DEMOLISHED AS PART PHASE 3 WORK (SEE SHEET S10). INSTALL UNDERGROUND SERVICE CONDUITS AFTER WALL IS DEMOLISHED.

1 1426 SERVICES
NO SCALE

2 1418 SERVICES
NO SCALE



3 1418.5 SERVICES
NO SCALE

1418.5

PLANTER WALL TO BE DEMOLISHED AS PART PHASE 2 WORK (SEE SHEET S09). INSTALL UNDERGROUND SERVICE CONDUITS AFTER WALL IS DEMOLISHED.

1426 EASEMENT 1418
16C, 17

1ST ROCK WALL

4 EASEMENT 16C, 17
NO SCALE SERVICES: 1418, 1418.5, 1422

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KCN12_000
TAB: U52

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

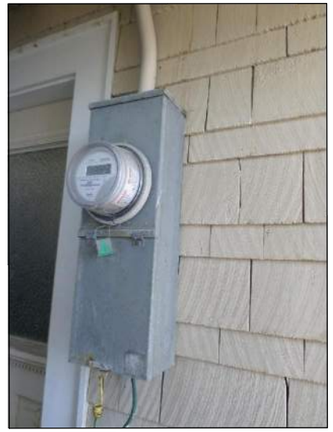
SERVICE PHOTOS

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
U52	**U56**

Not Updated for As-Built Set

COMBINATION METER MAIN

PLANTER WALL TO BE DEMOLISHED AS PART PHASE 2 WORK (SEE SHEET S09). INSTALL UNDERGROUND SERVICE CONDUITS AFTER WALL IS DEMOLISHED.



KPU–T ONT

1 1412 SERVICES
NO SCALE

EXTEND EXISTING (6) 4" CONDUITS THRU NEW TRESTLE ABUTMENT

2 MANHOLE MH18 CONDUITS UNDER BRIDGE
NO SCALE

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KCN12_000
TAB: U53

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON KE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

SERVICE PHOTOS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	**2015**

SHEET NUMBER	TOTAL SHEETS
U53	**U56**

SERVICE INFORMATION
120/240V, Single Phase, Three Wire Distribution

	Address	Street	# Existing Meters	Existing Triplex (Alum)	Existing Drop	New Service 3#2/0 Alum. typ.	New Service Origin	Comments	Existing Electric Service Equipment	New Electric Service Equipment
1	1626 / 1628	Water Street	AB	#2	Poles P3, P3S	2-1/2"C w/ ~~3#1/0~~	Utility Pad 1	Install new P3S and underground runs from Utility Pad to Pole P3; install new overhead drops via P3 via P3S to 1628/1626 & 1622; reconnect at existing service mast. Remove existing drops from P3 to 1628/1626 & 1622.	Existing service equipment remains; Square D meter pack with (2) meters, (1) space	
2	1627	Water Street		#2	Pole P1A			Service is fed from Pole P1 B and remains; no work required on overhead drop	Existing service equipment remains	
3	1622	Water Street	ABC	#2	Poles P3, P3S	2-1/2"C w/ ~~3#1/0~~	Utility Pad 1	See 1626 / 1628 Comments	Existing service equipment remains	
4	1617	Water Street		#2	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 1	See Note C; connect to existing Square D SC816D series 200A Combination Meter Main; Install conduits crossing 1611 property in Easement 9B	~~Existing service equipment remains~~	New Combination meter Main, U20, CO#48
5	1611	Water Street		#2	Pole P4	2-1/2"C w/ ~~3#1/0~~	Utility Pad 1	See Note C; install new service equipment, splice into new jbox at existing (2) meters can; Easement 9B is located on property, see 1617.	Remove existing duplex meter cans; install new Nema 3R spice box and make connection to inside wiring	New 200A, Combination Meter Main, See U20
6	1610	Water Street		#2	Pole P4	2-1/2"C w/ ~~3#1/0~~	Utility Pad 1	See Note C; connect to existing Square D SC816D 200A Combination Meter Main; Install conduits crossing 1608 property in Easement 6B	Existing service equipment remains	
7	1608	Water Street	AB	#2	Pole P4	3"C w/ 3#500MCM	Utility Pad 1	See Note C; connect to existing (3) meter cans recess mounted in siding end with sheet metal housing. Easement 6B is located on property, see 1610.	Remove existing duplex (3) meter cans; install new Nema 3R spice box and make connection to inside wiring	New 400A, (3) Meter Pack, See U22
8	1600	Water Street		#2	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 1	See Note C; connect to existing meter can with 125A CB can below, equipment located on 2nd floor landing; Easement 9B is located on property, see 1617.	~~Existing service equipment remains~~	New Combination meter Main, U20, CO#48
9	1528	Water Street		#1/0	Midspan Tap to Pole P5A	2-1/2"C w/ ~~3#1/0~~	Utility Pad 2	See Note C; existing service equipment on 2nd floor landing; reuse existing #2 drop from P5A to mast; install service in trench to P5A (including up rock face), rise up and connect to existing overhead drop; Easement 8B is located on property, see 1500.	Existing service equipment remains	
10	1508	Water Street	AB	#2	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 2	See Note C; connect to existing Siemens UniPak 400A w/ (3) meters, (2)-125/2, (1)-200/2 circuit breakers,	Existing service equipment remains	
11	1500	Water Street		#2	Midspan Tap to Pole P5A	2-1/2"C w/ ~~3#1/0~~	Utility Pad 2	House is located above 1528 Water; See Note C; reuse existing #2 drop from P5A to mast; install service in trench to P5A (including up rock face), rise up and connect to existing overhead drop; Install conduits crossing 1528 property in Easement 8B.	Remove existing meter; install new Nema 3R spice box and make connection to inside wiring	New 200A, Combination Meter Main; coordinate location with Owner, See U20
12	200	Wiley Stairs		#2	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 2	House is located above 1462 Water; See Note C; connect to existing Milbank 100A combination meter main; install service conduits under Wiley Stairs to 200 property, then trench to service equipment.	~~Existing service equipment remains~~	New Combination meter Main, U20, CO#48
13	1462	Water Street	AB	#1/0	P7	2-1/2"C w/ ~~3#1/0~~	Utility Pad 3	See Note C; connect to existing junction box between (2) meter cans; install service conduits in trench to the home using Easement 14B (share trench with 1454 services), exit the common trench after it passes the existing CMU block wall.	~~Existing service equipment remains~~	New Combination meter Main, U20, CO#48
14	1454	Water Street		#2	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 3	House is located one lot above Water St. on a rock outcrop; See Note C; connect to existing meter can located adjacent to deck on south side of home; install service conduits in trench to the home using Easement 14B (share trench with 1462 services). From P7L used to maintain overhead electric drop	Remove existing meter; install new Nema 3R spice box and make connection to inside wiring.	New 200A, Combination Meter Main; coordinate location with Owner. See U20
15	Pole P7L	Water Street		#4 Duplex	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 3	Existing Pole P7L has a security light (an inactive KPU account); to provide for future service: install empty 1"C from transformer to box with pull string and labels, run conduit using Easement 12B.		Pole used to maintain overhead drop to 1454
16	1442 ~~1446~~	Water Street		#4/0 drop parleyed: 1446 = #2 Triplex; 1442 = #1/0 Triplex.	P8	2-1/2"C w/ ~~3#1/0~~	Utility Pad 3	House is located above 1442 Water St. on a rock outcrop; See Note C; connect to existing combination meter can located at deck on southside of home; install service conduits in trench to the under side of the stairs using Easement 12B (share trench with 1	Existing service equipment remains	See U21 for as-built modifications
17	1446 ~~1442~~	Water Street	AB	#1/0 tapped from a #4/0 drop to 1446	P8	2-1/2"C w/ ~~3#1/0~~	Utility Pad 3	See Note C; connect to existing (2) meters located on the backside of the house; install service conduits in trench to the under side of the 1446 stairs using Easement 12B (share trench with 1446 and Pole P7L services), then route the conduits from under	Remove existing (2) meter; ~~install new Nema 3R spice box and~~ make connection to inside wiring. Remove existing service drop into 2nd floor; patch hole to match existing finish	New (3) Meter Pack, CO#48 ~~New 200A, (2) Combination Meter Main;~~ coordinate location with Owner. See U21 See U21 for as-built modifications
	Empty Lot 4						Utility Pad 4	See Note C; install handhole with (3) empty conduits, pull strings and labels for future service to the lot.		
18	1426	Water Street		#2	P9	2-1/2"C w/ ~~3#1/0~~	Utility Pad 4	See Note C; connect to existing 100A combination meter can located at southside of home; install service conduits to the 1426 sidewalk using Easement 16C & 17 (share trench with 1418 &1418.5 services). From the soldier pile wall trench thru concrete reta	~~Existing service equipment remains~~	New Combination meter Main, U20, CO#48
19	1418.5	Water Street		#2	P9	2-1/2"C w/ ~~3#1/0~~	Utility Pad 4	House is located above 1418 Water St.; See Note C; connect to existing 100A/2P combination meter can located at northside of home; install service conduits in trench to the under side of the stairs using Easement 16C & 17 (share trench with 1426 &1418 ser	~~Existing service equipment remains~~	New Combination meter Main, U20, CO#48
20	1418	Water Street		#2	P9	2-1/2"C w/ ~~3#1/0~~	Utility Pad 4	See Note C; connect to existing meter can located at northside of home; install service conduits to the 1418 concrete sidewalk using Easement 16C & 17 (share trench with 1426 &1418.5 services). From the soldier pile wall trench thru concrete retaining wa	Remove existing meter; install new Nema 3R spice box and make connection to inside wiring	New 200A, Combination Meter Main; coordinate location with Owner, See U20
21	1412	Water Street		#2	Midspan tap	2-1/2"C w/ ~~3#1/0~~	Utility Pad 4	See Note C; connect to existing 100A/2P combination meter can located at northside of home; install service conduits in trench to the under side of the stairs -from the soldier pile wall trench thru concrete retaining wall thru the dirt area to the landin	Existing service equipment remains	

A. SEE U55 FOR GENERAL NOTES

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000

TAB: U54

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th — KEITH NELSON EE-7655 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

SERVICE INFORMATION

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U54	U56

SERVICE INFORMATION
120/240V, Single Phase, Three Wire Distribution

	Address	Street	# Existing Meters	Existing Triplex (Alum)	Existing Drop	New Service	New Service Origin	Comments	Existing Electric Service Equipment	New Electric Service Equipment
22	1400	Water Street		#4	Midspan tap	#2 Triplex		Existing overhead service fed from Parnell Stairs Overhead System shall remain; adjust drop as required by overhead line work.	Existing service equipment remains	
23	210	Parnell Stairs		#2	Midspan tap	#2 Triplex		Existing overhead service fed from Parnell Stairs Overhead System shall remain; adjust drop as required by overhead line work.	Existing service equipment remains	
24	Base of Parnell Stairs	Water Street		#2	P10	2-1/2"C w/ 3#6		Revise underground service for VDSL Cabinet; extend existing conduit; install service mast on new Pole P10; install new conductors.	Existing service equipment remains	
25	1320	Water Street		#2	P10	#2 Triplex		New overhead service drop from new Pole P10.	Existing service equipment remains	
26	1319	Water Street		#2	P10	#2 Triplex		Existing overhead service fed from Water Street Overhead System shall remain; adjust drop as required by overhead line work	Existing service equipment remains	
27	1312	Water Street		#2	Midspan tap			Existing overhead service fed from Water Street Overhead System shall remain; adjust drop as required by overhead line work	Existing service equipment remains	
28	1306	Water Street		#2	Midspan tap			Existing overhead service fed from Water Street Overhead System shall remain; adjust drop as required by overhead line work	Existing service equipment remains	
29	1305	Water Street	ABC	#2	Midspan tap			Two combination meter mains with one overhead service drop. The existing overhead service fed from Water Street Overhead System is to remain; adjust drop as required by overhead line work. GCI service drop is via Pole P10A is to remain. KPU-T service originates at a NID located on P10A is to remain.	Existing service equipment remains	
30	1279	Water Street	A-D	#1/0	Midspan tap			The existing overhead service fed via Pole P10A from Water Street Overhead System is to remain; adjust drop as required by overhead line work. 1279 meters are located in the street level entry hallway. Protect Pole P10A as new bulb tee bridge and guard rail is constructed.	Existing service equipment remains	
31	1269	Water Street		#1/0	Midspan tap	#2 Triplex		The existing overhead service fed via Pole P11A from Water Street Overhead System is to remain; adjust drop as required by overhead line work. Protect Pole P11A as new guard rail is installed.	Existing service equipment remains	
32	1263	Water Street		#1/0	Midspan tap			The existing overhead service fed from Water Street Overhead System is to remain; adjust drop as required by overhead line work. No service mast; the drop is attached to the eaves; then conduit from the eaves is run to meters.	Existing service equipment remains	
33	1262	Water Street		#2	Midspan tap			Existing overhead service fed from Water Street Overhead System shall remain; adjust drop as required by overhead line work	Existing service equipment remains	
34	1256	Water Street		#2	Midspan tap			Existing overhead service fed from Water Street Overhead System shall remain; adjust drop as required by overhead line work	Existing service equipment remains	
35	1251	Water Street		#2	Midspan tap			Existing overhead service fed from Water Street Overhead System shall remain; adjust drop as required by overhead line work	Existing service equipment remains	
36	1250	Water Street		#2	P12			Existing overhead service fed from Water Street Overhead System shall remain.	Existing service equipment remains	
37	1245	Water Street	ABC	#1/0	P12			1/0 is parlayed with 1242 service. The existing overhead service fed from Water Street Overhead System is to remain.	Existing service equipment remains	
38	1242	Water Street		#4/0	P12			4/0 is parlayed with 1245 service. The existing overhead service fed from Water Street Overhead System is to remain.	Existing service equipment remains	

GENERAL NOTES:

A. DURING PROJECT CONSTRUCTION, RAISE THE EXISTING OVERHEAD DROPS TO THE HOME AS REQUIRED BY THE OPERATION OF BRIDGE CONSTRUCTION EQUIPMENT SUCH AS CRANES.

B. AT THE SERVICE ENTRANCE ON A HOUSE BY HOUSE BASIS: BRING THE NEW UNDERGROUND SERVICE INTO THE BOTTOM OF THE EXISTING SERVICE EQUIPMENT. WHERE THIS IS NOT POSSIBLE BRING THE NEW SERVICE INTO THE TOP OR SIDE OF THE EXISTING EQUIPMENT – REMOVE EXISTING RISER CONDUIT AS REQUIRED TO ACCOMPLISH THE INSTALLATION. PAINT AND PATCH EXISTING SURFACES OF THE HOME TO MATCH EXISTING FINISHES.

C. INSTALL NEW UNDERGROUND SERVICE LATERAL FROM UTILITY PAD AND CONNECT TO EXISTING SERVICE EQUIPMENT. REMOVE EXISTING OVERHEAD DROP, CONDUCTORS IN THE METER MAST; METER MAST CONDUIT SHALL REMAIN AND SHALL BE CAPPED. SEE U10–15 FOR EASEMENT LOCATIONS.

D. UNLESS NOTED OTHERWISE REMOVE THE EXISTING OVERHEAD DROP AFTER THE NEW UNDER BRIDGE DISTRIBUTION SYSTEM AND SERVICES TO THE HOME ARE OPERATIONAL.

E. COORDINATE WITH THE OWNER AND ENGINEER TO SCHEDULE OUTAGES, LOCATION OF EQUIPMENT, CONDUIT AND TRENCH ROUTES, REPAIR OF EXISTING SIDING AND ROOF,

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

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KCN12_000

TAB: U55

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

SERVICE INFORMATION

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
U55	U56

POLE INFORMATION

						Information for the Existing Installation									
Pole	KPU #	Status	Height	Class	Xfm	Xfm #	Xfm Phase	RUS Xfm Detail	Street Light	Guy	12.47kV (Formerly 34.5kV	12.47kV	120/240V Distribution	Comments
00	1334-C3-2	R	55	2					Y	N	336MCM ACSR	4/0 CUWP	#4/0 Triplex	Reenergize top tier at 12.47kV poles P1 to P00. Install jumpers connecting top tier P0 side to the middle tier. Remove existing middle tier 12.47kV pole P1 to P00.
0	T-111	R	55	2	50	3023			Y	N	336MCM ACSR	4/0 CUWP	#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms; reenergize top tier at 12.47kV poles P1 to P00. Remove middle tier 12.47kV.
1	1334-B3-1	M	60	2	N				Y	Y	336MCM ACSR	4/0 CUWP	#4/0 Triplex	Modify existing 12.47kV top, middle tier and system neutral; install new 12.47kV three phase and 7.2kV single phase risers; remove existing jumpers. See U16-18, U41-42.
RFI#204, CO#46 2	1334-B3-	M ~~/ D~~	?	2	N				N	Y				Telecomm riser pole; no power. Pull new KPU-T fiber cables in existing 4" conduits; install (2) 2"C new GCI riser conduits; GCI to install cabling.
3	1334-B4-1	M	60	2	75	38 7			N	Y	336MCM ACSR			Exist. top tier 12.47kV alley arms; pole located on a raised concrete sidewalk; install risers for services 4to 1627, 1626 and 1622. Remove all aerial running P3-P2-P1 and P3-P4. Install pole cap; cut top of pole; remove (2) guys in sidewalk.
3S	New Pole	N	40	2	N				N				## Triplex	New pole installed in easement at 1622 Water Street. Install, 120/240V and KPU-T services 1626 and 1622. See U10
4	1342-D3-2	D	60	2	50	1404	B	G39	Y	N	336MCM ACSR		#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms
5	1334-A4-1	D	60	2	N				Y	Y	336MCM ACSR		#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms; also remove uphill guys.
5A		M	40	2	N				N	N			#4/0 Triplex	Service pole to 1508, 1500; install new risers
6	1342-C4-4	D	60	2	N				Y	N	336MCM ACSR		#4/0 Triplex	Exist. 34.5 & 12.47kV alley arms
7	E00465	D	60	2	50	1405	C	G39	Y	Y	336MCM ACSR		#4/0 Triplex	Exist. 34.5 & 12.47kV double crossarm, post top insulators
7G		D												Guy Pole for P7 with guys over the roadway
7L		R			N				N	N			#2 Triplex	Security Light; install new riser for new underground service to light.
8	1342-B4-5	D	55	2	N				Y	N	336MCM ACSR		#4/0 Triplex	Ex. 34.5 & 12.47kV double crossarm, post top insulators; hydrant uphill
9	1342-B4-4	D	55	2	50	3749	A	G39	Y	N	336MCM ACSR		#4/0 Triplex	Ex. 34.5 & 12.47kV double crossarm, post top insulators; hydrant uphill
10	1342-B4-3	D	70	2	37	3536	NA	G39	Y	3	336MCM ACSR	4/0 CUWP	#4/0 Triplex	Exist. 34.5 & 12.47kV double crossarm deadends; migrate overhead distribution, 120/240V, GCI & KPU-T from existing to new Pole P10.
10	New Pole	N	55	2	37	3536	NA	G39	Y			4/0 CUWP	#4/0 Triplex	New freestanding pole and concrete base. Install riser conduits, 120/240V service to VDSL cabine, conduits from manhole MH18. Migrate GCI and KPU-T cabling from existing Pole P10 & P19T to new P10. See U16-18, U25-U28, V13-14, V23.
10G	E00461	D		2										Guy Pole for P10 with guy over the roadway
10T	Comm Pole	D	45	2	N		NA		N	Y				Migrate existing overhead GCI & KPU-T cabling to new Pole P10.
10A	1342-A4-4	R		2	N				N	Y			#1/0 Triplex	Service pole with 120/240V to 1279; (2) GCI drops - 1305 & 1279; (1) KPU-T drop to NID on pole which serves 1279 and 1305. Protect pole during bridge construction. Adjust drops over the street to provide clearance for construction equipment.
11	T-117	M	50	2	N				N	N		4/0 CUWP	#4/0 Triplex	Alley arms: (3) 12.47kV, (1) 120/240V & (1) Comm.
11A	T-278	R			N				Y	N			#1/0 Triplex	Service pole (4x6) to remain; (House address 102/103 services are fed from Tongass St). Protect pole as new guard rail is installed; reattach wood pole as required-the pole is secured using (3) mounting bolts into the concrete retaining wall.
12	2116	M	65	2	75	3762	A	G39	Y	2		4/0 CUWP	#4/0 Triplex	Pole on south side of Water Steet. Adjust location of KPU-T 900 pair copper and 360 strand fiber; coordinate with GCI to relocate their cabling.
P1P	1342-A4-1	R		2	N				Y	Y	336MCM ACSR	4/0 CUWP	#4/0 Triplex	Millar Street at top Parnell Stairs; adjust drops to 1400, 200 & stair light to accommodate new pole P10; after new systems are operational, remove 12.47kV jumpers (top to middle tier); remove top tier conductors running from exist pole P10-P1P-P1M.
P1M	1342-A3-2	R		2	N				Y	Y	336MCM ACSR	4/0 CUWP	#4/0 Triplex	Millar Street at top Parnell Stairs. Remove top tier conductors bewteen existing pole P10-P1P-P1M.

POLE NOTES:

D – DEMOLISH POLE
M – MODIFY EXISTING POLE
R – POLE SHALL REMAIN
N – NEW POLE

See CO#27 for temporary pole relocation of P4 thru P8.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/24/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\WSB U16-29 38-54 PSE DETAILS.DWG

KCN12_000

TAB: U56

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE INFORMATION

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
U56	U56

GENERAL SCOPE OF WORK:

The work consists of installing new poles P4R - P8R with overhead systems for power, street lighting telephone, and cable TV system from poles P3 to P9. After the new system is operational, demolish existing poles P4-P8, P7G and the existing overhead systems and equipment attached to those poles.

P3-P9 SCOPE OF WORK:

Install concrete bases for new poles P4R-P7R.

Pole P8R: Install pole per 'Bridge No. 0446, Sheet 11'. Install rock anchor and guy in rock face on the uphill side of the pole. Swing the existing 12.5kV three phase primary, 120/240V triplex, KPU-T fiber cabling from existing Pole P8 to new pole P8R. Relocate existing HPS fixture head on pole P8; on P8R, install existing head on new 6' arm. After the overhead systems are operational, remove existing Pole P8.

Pole P3: Remove 12.5kV alley arm, install new deadend crossarms; deadend the 12.5kV primary run from P1. Install new 75kVA transformer and cutout. Install new guy to metal plate attached to the existing concrete retaining wall.

Pole P9: Install deadend crossarms; deadend the 12.5kV primary run from P10. Remove and replace existing transformer with new 75kVA transformer. Install new guys in rock face; maintain clearance to allow use of the turnaround at 1426.

Poles P4R-P7R: Install secondary poles on concrete bases per 'Bridge No. 0446, Sheet 9'. See Sheets 6 and 10 for pole electrical/telephone/cable TV installation info.

Relocate existing HPS fixture head on pole P8. On P8R, install existing HPS head on a new 6' arm.

Install new 120/240 volt triplex. When new transformers on P3 and P9 are connected, reconnect existing service drops to new triplex; adjust cable lengths as needed..

The new runs of triplex from existing Poles P3-P9 (via P4$-P8R) shall be connected as follows:

P3 thru P7R. Connect to T1 transformer on Pole P3

P7R thru P9 Connect to T2 transformer on Pole P9

At P9, jumper to the existing P9-P10 run to the new transformer

KPU-T: Install new messenger and relocate existing KPU-T fiber distribution cable and service drops from existing pole line to new. Attach existing service drops to relocated fiber closure terminal; coil spare cable. Adjust cable lengths as needed.

GCI: Install new messenger for GCI cabling. Coordinate with GCI for a schedule to have GCI relocate their infrastructure from the existing pole line to the new messenger.

After the overhead systems are operational, remove existing poles P4-P8, associated cabling and guys.

Miscellaneous: Prior to start of installation work, conduct a Utility Coordination Meeting (similar to 662-1.07) to determine the schedule, methods of installation, procedures for notifying residents of work on their property and scheduling for outages, switching KPU-E primary circuits, etc. Coordinate with KPU-T to arrange for their supervision and assistance in transferring their line to the new poles. Acceptance test is based on restoring the services to each home.

POLE RELOCATION: P4R TO P8R

SHEET #	SHEET TITLE
0	GENERAL PROJECT INFO
1	P3 TO P9 UTILITY RELOCATIONS: PLAN AND PROFILE
2	P3 TO P9 UTILITY RELOCATIONS: PLAN AND PROFILE
3	P3 TO P9 UTILITY RELOCATIONS: PLAN AND PROFILE
4	POLE P4R-P8R SITE PLAN
5	ALLEY ARM POLE DETAILS
6	EXISTING POLE P3, P9 DETAILS
7	POLE P8R DETAILS
8	ELECTRICAL ONE LINE DIAGRAM
9	TEL & TV ONE LINE DIAGRAMS
10	PHOTOS
11	PHOTOS
12	POLE INFO
0446 #9	SHORING DETAILS
0446 #11	SUPPORT FOR NEW POLE P8R

LIGHTING FIXTURE SCHEDULE:

TYPE	LAMPS	MOUNTING	DESCRIPTION	MANUFACTURER
C1	EXIST 100W HPS	POLE MOUNT	EXISTING HPS FIXTURE. RELOCATE HEAD AND PHOTOCELL FROM EXISTING POLE TO NEW POLE. DEMO EXISTING ARM INSTALL NEW ARM.	EXISTING GE M2AC-10S SERIES
			6' ALUMINUM ARM FOR GE FIXTURE HEAD, KPU-E INFO INDICATES THE FIXTURE CAN HANDLE A 1-1/4" TO 2" DIA. ARM CONFIRM THE FIXTURE HEAD MOUNTING REQMTS PRIOR TO ORDERING THE ARM	SALCO WP-125-6-A

NOTES:

1. THE MANUFACTURERS LISTED ARE TO ESTABLISH QUALITY. OTHER MFRS CAN BE SUBMITTED FOR ACCEPTANCE
2. PRIOR TO ORDERING THE NEW ARMS, FIELD CONFIRM THE PROPER ARM DIAMETER TO MATE WITH THE EXISTING FIXTURE HOUSING.
3. PROVIDE ALL MOUNTING AND OPERATING ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION.
4. CONFIRM THAT THE EXISTING TYPE C1 LAMPS AND BALLASTS ARE OPERATIONAL PRIOR TO REMOVING THE FIXTURES FROM THE EXISTING POLES. AFTER THE FIXTURES ARE RELOCATED AND CONNECTED TO THE NEW CIRCUITING, CONFIRM THE PROPER OPERATION OF THE FIXTURES. FOR ANY FIXTURES THAT ARE NOT PROPERLY FUNCTIONING, PROVIDE NEW LAMPS AND/OR BALLASTS TO BRING THE FIXTURE INTO WORKING CONDITION.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

△1

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TAB: 0

ADDENDUM NUMBER

Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
△1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-1-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

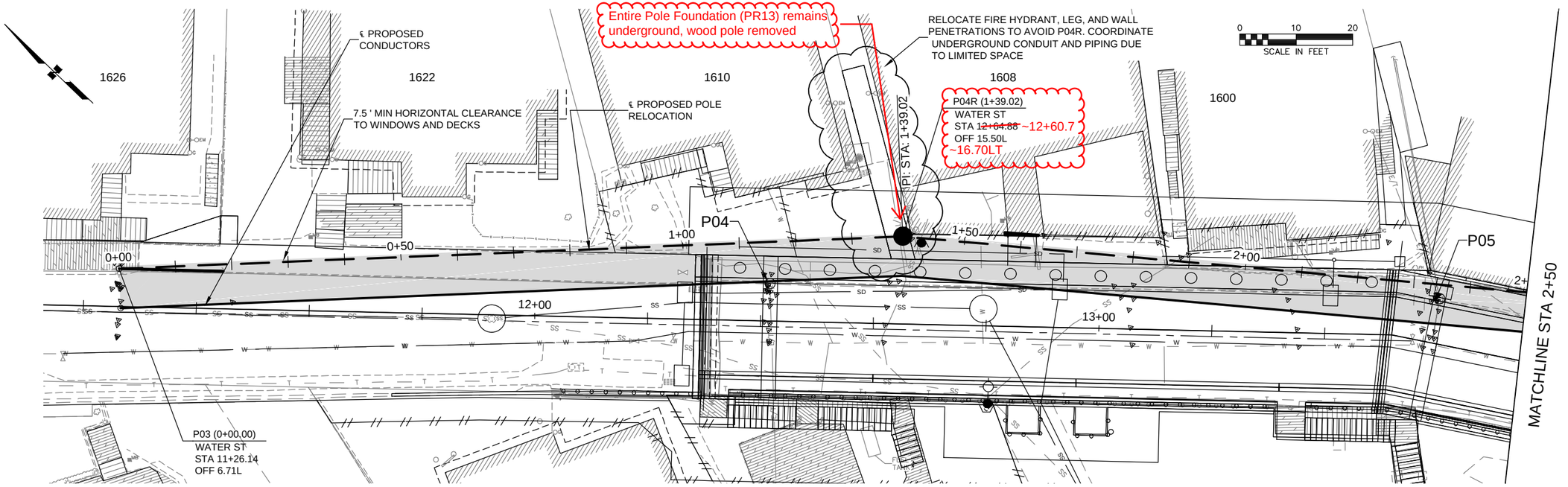
GENERAL PROJECT INFO

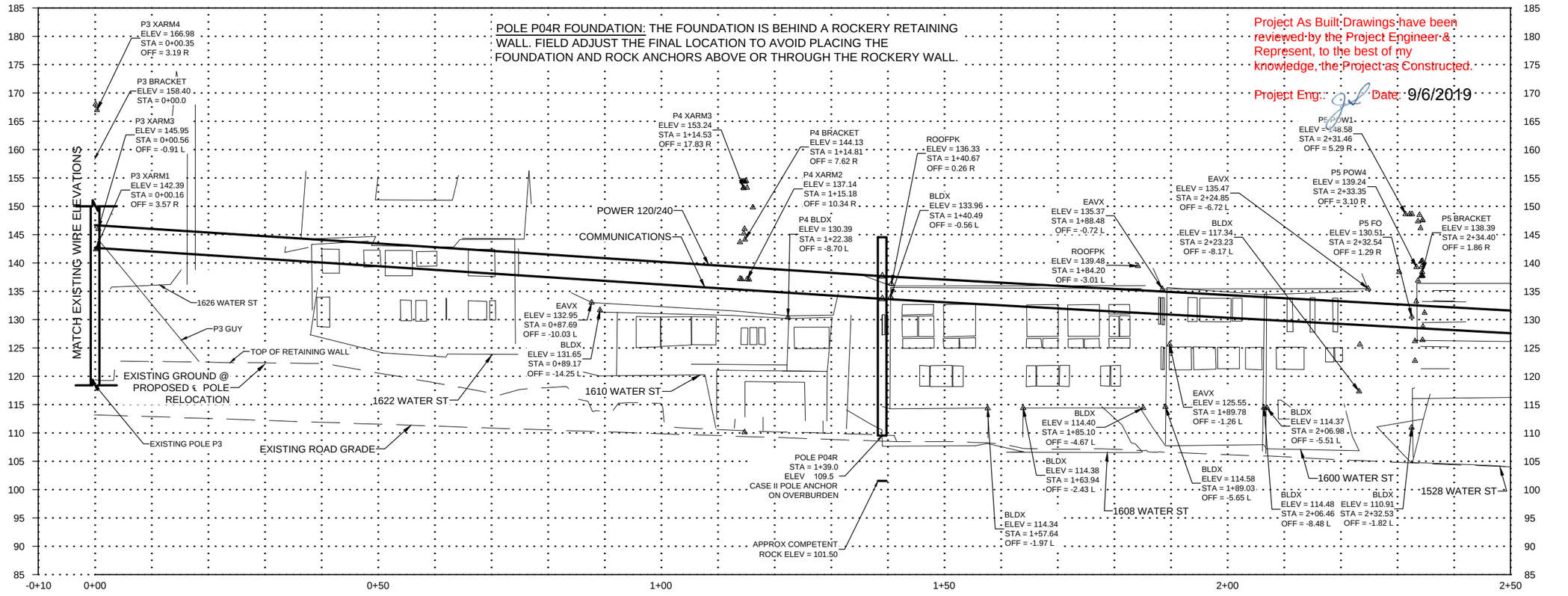
PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 0	~~15~~ 14





POLE P04R FOUNDATION: THE FOUNDATION IS BEHIND A ROCKERY RETAINING WALL. FIELD ADJUST THE FINAL LOCATION TO AVOID PLACING THE FOUNDATION AND ROCK ANCHORS ABOVE OR THROUGH THE ROCKERY WALL.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Engr: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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ADDENDUM NUMBER

Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: R. REDICK

STATE OF ALASKA 49 TH
Ryan D. Redick
No. CE 12799
6/12/15
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: J. CHANG

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

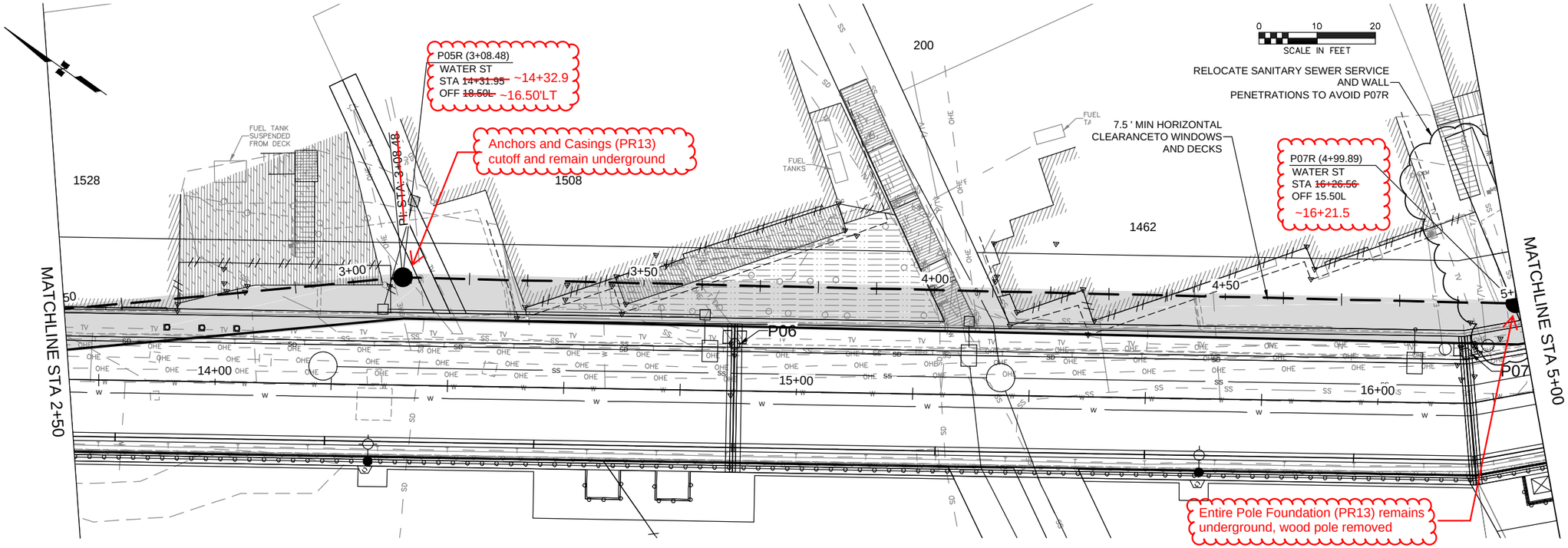
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

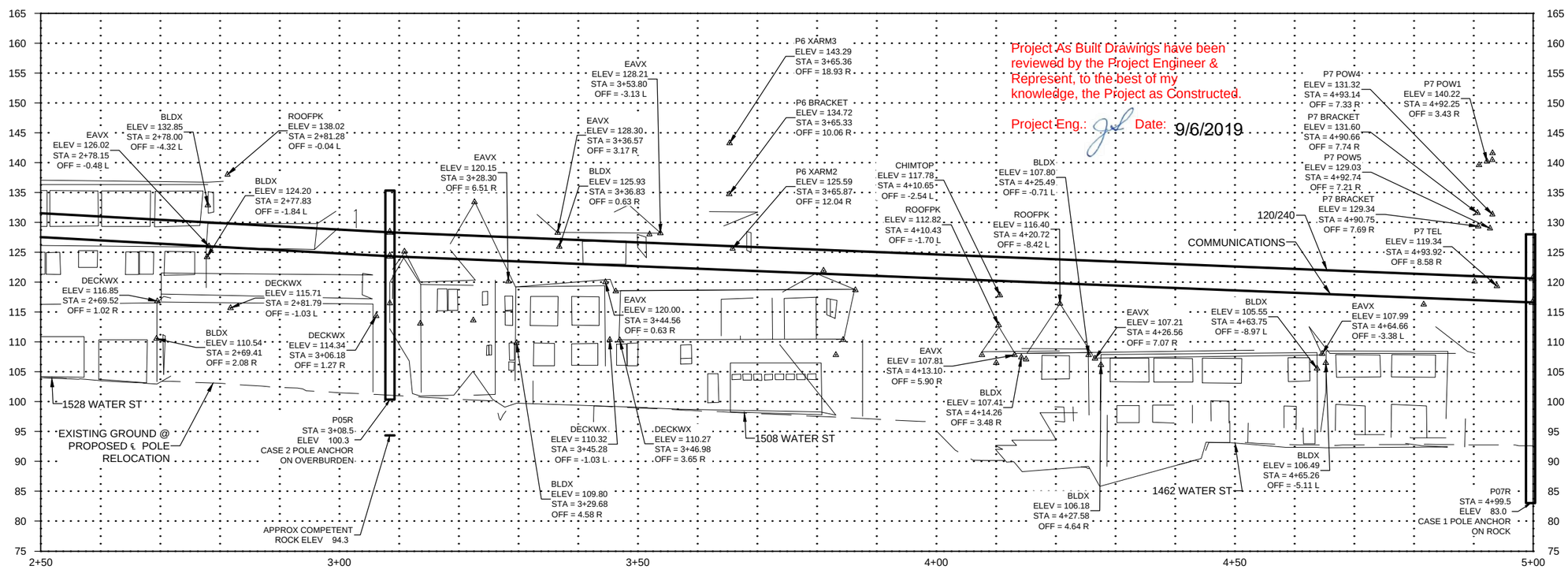
P3 TO P9 UTILITY RELOCATIONS PLAN & PROFILE

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2017
SHEET NUMBER	TOTAL SHEETS
PR 1	~~15~~ 14





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

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ADDENDUM NUMBER

Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: R. REDICK

STATE OF ALASKA 49 TH
Ryan D. Redick
No. CE 12799
6/12/15
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: J. CHANG

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

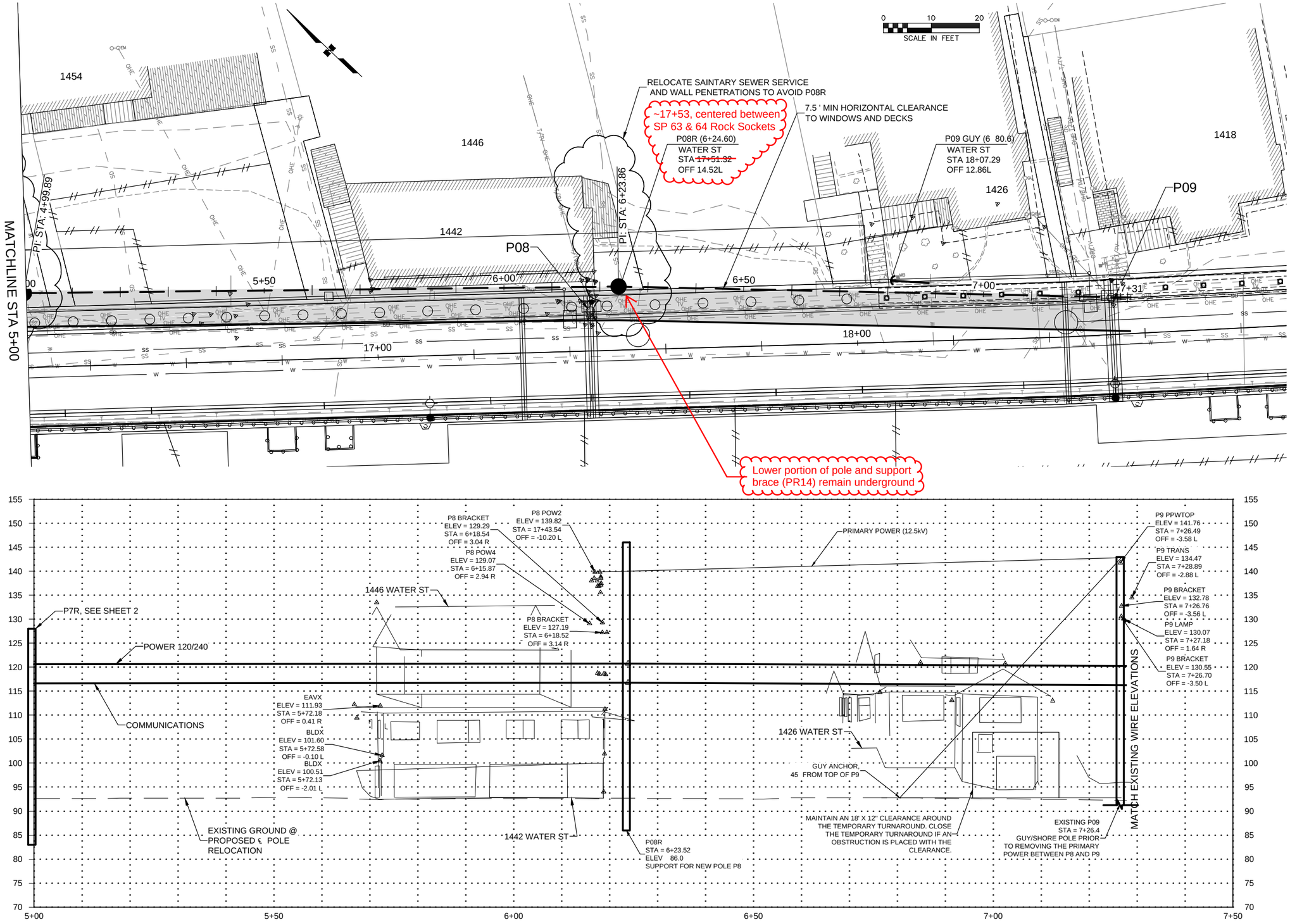
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

P3 TO P9 UTILITY RELOCATIONS PLAN & PROFILE

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2017
SHEET NUMBER	TOTAL SHEETS
PR 2	~~15~~ 14



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ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.:

Date: 9/6/2019

PLAN LEGEND

CHECKED BY: R. REDICK

STATE OF ALASKA 49 TH — Ryan D. Redick No. CE 12799 6/12/15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: J. CHANG

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

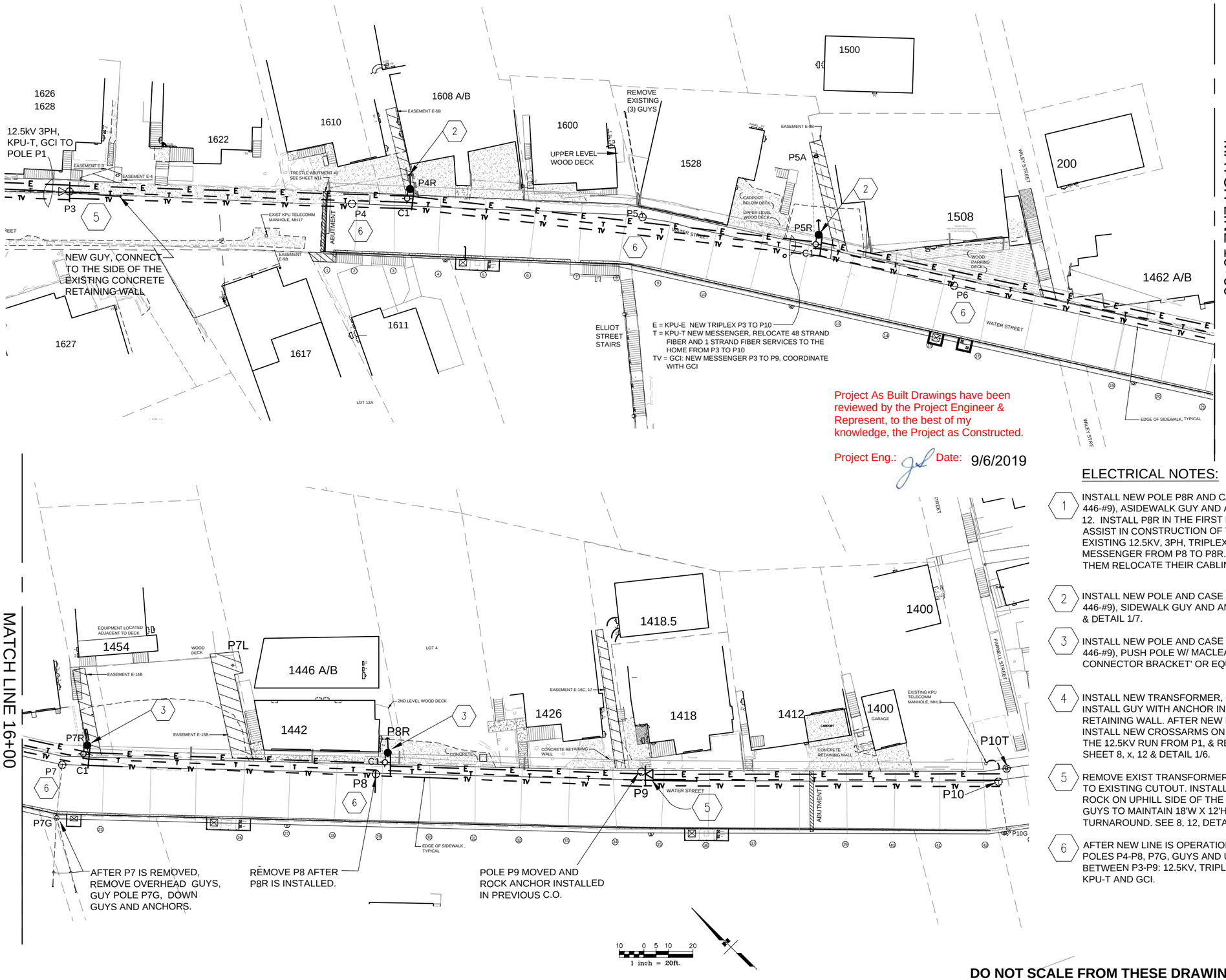
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

P3 TO P9 UTILITY RELOCATIONS PLAN & PROFILE

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2017
SHEET NUMBER	TOTAL SHEETS
PR 3	~~15~~ 14



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

ELECTRICAL NOTES:

1. INSTALL NEW POLE P8R AND CASE 1 POLE ANCHOR (SHEET 446-#9), ASIDEWALK GUY AND ANCHOR. SEE SHEET 7, 8, & 12. INSTALL P8R IN THE FIRST PART OF THE PROJECT TO ASSIST IN CONSTRUCTION OF THE BRIDGE: EXTEND EXISTING 12.5KV, 3PH, TRIPLEX, KPU-T FIBER & MESSENGER FROM P8 TO P8R. COORD W/ GCI TO HAVE THEM RELOCATE THEIR CABLING TO P8R.
2. INSTALL NEW POLE AND CASE 1 POLE ANCHOR (SHEET 446-#9), SIDEWALK GUY AND ANCHOR. SEE SHEETS 5, 8, 12 & DETAIL 1/7.
3. INSTALL NEW POLE AND CASE 2 POLE ANCHOR (SHEET 446-#9), PUSH POLE W/ MACLEAN 'POLE BRACE CONNECTOR BRACKET' OR EQUAL. SEE SHEETS 5, 8, & 12
4. INSTALL NEW TRANSFORMER, CUTOUT, PRIMARY FROM P1. INSTALL GUY WITH ANCHOR IN EXIST CONCRETE RETAINING WALL. AFTER NEW LINE IS OPERATIONAL INSTALL NEW CROSSARMS ON THE TOP TIER, DEADEND THE 12.5KV RUN FROM P1, & REMOVE SIDEWALK ARM. SEE SHEET 8, x, 12 & DETAIL 1/6.
5. REMOVE EXIST TRANSFORMER, INSTALL NEW, CONNECT TO EXISTING CUTOUT. INSTALL GUYS WITH ANCHOR IN ROCK ON UPHILL SIDE OF THE STUB WALL. FIELD LOCATE GUYS TO MAINTAIN 18'W X 12'H ACCESS TO 1412 TURNAROUND. SEE 8, 12, DETAIL 2/6.
6. AFTER NEW LINE IS OPERATIONAL, REMOVE EXISTING POLES P4-P8, P7G, GUYS AND UNUSED LINES RUNNING BETWEEN P3-P9: 12.5KV, TRIPLEX, MESSENGERS FOR KPU-T AND GCI.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: 4

ADDENDUM NUMBER

Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6-7-17	NEW SHEET POLE P4R-P8R
AB		As-Built Set

GENERAL NOTES:

A. THIS PLAN SHOWS THE GENERAL LAYOUT FOR INSTALLATION OF NEW POLES P4R-P8R

B. SEE SHEETS 1-3 FOR PLAN AND PROFILE VIEW OF POLE LOCATIONS.

C. SEE SHEET 0 FOR INFORMATION ON THE SCOPE OF WORK. SEE SHEETS 5, 6 FOR POWER, TEL, TV ONE LINE DIAGRAMS

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

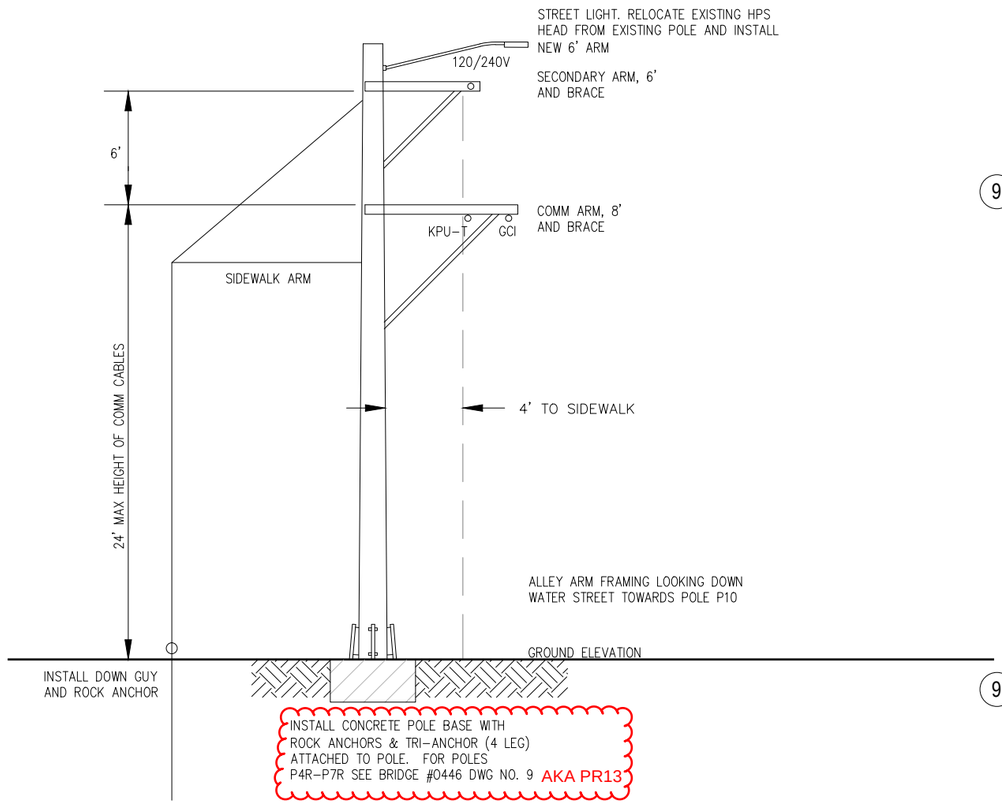
KTN-WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT #69534

POLE P4R-P8R SITE PLAN

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2017
SHEET NUMBER	TOTAL SHEETS
PR 4	~~15~~ 14



1 POWER POLE -ALLEY ARM CONSTRUCTION

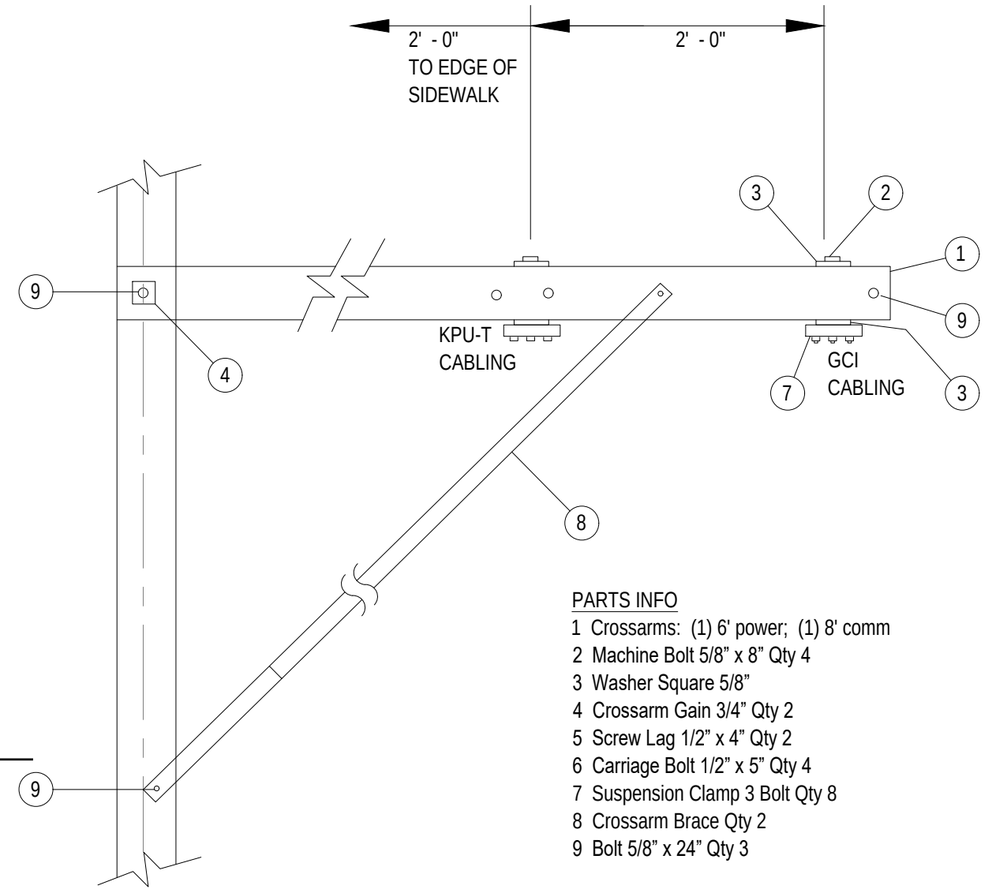
NO SCALE

DETAIL NOTES:

A. POLE SHOWN IS SIMILAR FOR POLE P4R-P7R EXCEPT P7R HAS A BRACE POLE (NO SIDEWALK ARM).

B. RELOCATE EXISTING OVERHEAD SYSTEM TO THE NEW POLES LOCATED OFF OF THE SIDEWALK TO AVOID SOLDIER PILE WALL CONSTRUCTION CONFLICTS. REMOVE EXISTING POLES AFTER NEW LINE IS ENERGIZED. AFTER THE BRIDGE CONSTRUCTION IS COMPLETE, THE POLES AND OVERHEAD INSTALLATION WILL BE REMOVED PER THE U SHEETS.

C. SEE GUY DETAILS FOR INFO ON ANCHORS AND GUYING.



PARTS INFO

1 Crossarms: (1) 6' power; (1) 8' comm
2 Machine Bolt 5/8" x 8" Qty 4
3 Washer Square 5/8"
4 Crossarm Gain 3/4" Qty 2
5 Screw Lag 1/2" x 4" Qty 2
6 Carriage Bolt 1/2" x 5" Qty 4
7 Suspension Clamp 3 Bolt Qty 8
8 Crossarm Brace Qty 2
9 Bolt 5/8" x 24" Qty 3

COMM ARM SHOWN, SECONDARY ARM IS SIMILAR EXCEPT 6; LONG CROSSARM WITH TRIPLEX SUSPENSION CLAMP IN LIEU OF KPU-T COMM SUSPENSION CLAMP

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

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TAB: 5

ADDENDUM NUMBER
Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT #69534

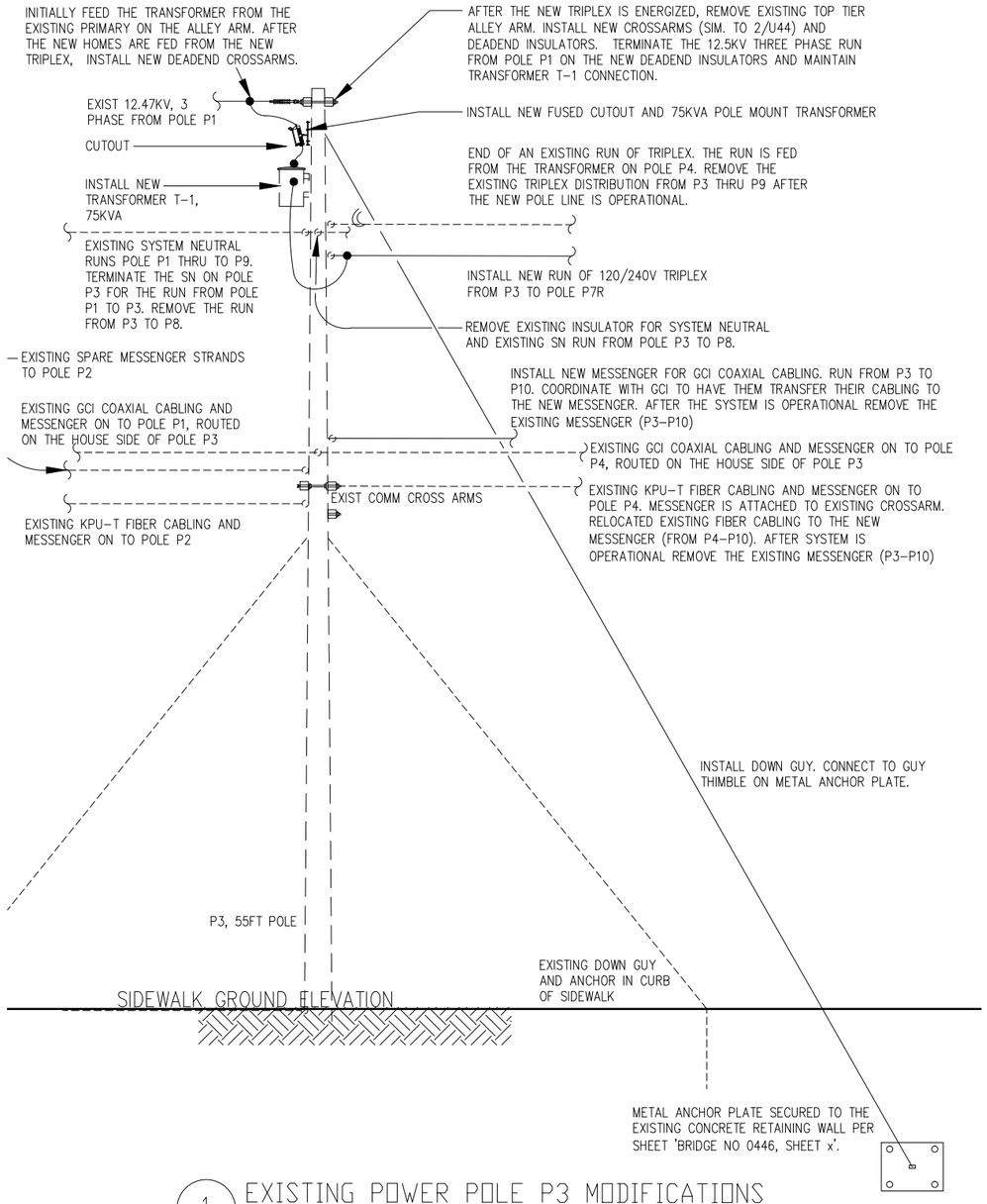
ALLEY ARM POLE DETAILS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 5	~~15~~ 14

1



1 EXISTING POWER POLE P3 MODIFICATIONS

NO SCALE

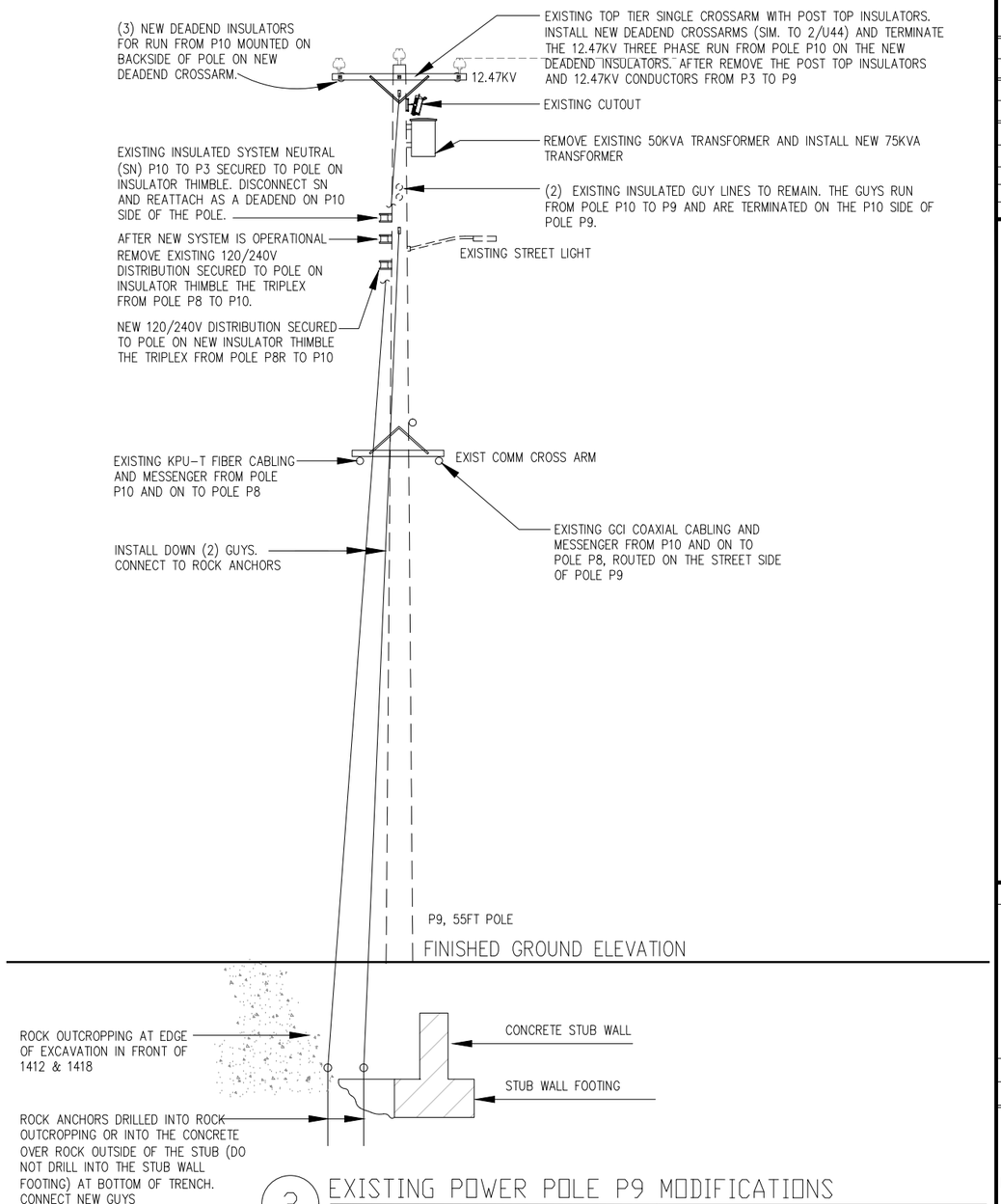
DETAIL NOTES:

A. DETAIL IS DRAWN LOOKING FROM THE STREET UP TOWARDS 1622.

B. SEE PHOTO OF EXISTING POLE P3, SHEET 10

C. SEE 2/U44 FOR 12.5KV CROSSARM INSTALLATION.

D. FOR THE PRIMARY 7200V CONNECTION TO THE TRANSFORMER ON P3, RUN THE CONDUCTOR ON THE WATER SIDE OF P1 TO P3. RECONFIRM WHICH PHASE WITH KPU-E SHOULD BE USED PRIOR TO INSTALLATION.



2 EXISTING POWER POLE P9 MODIFICATIONS

NO SCALE

DETAIL NOTES:

A. DETAIL IS DRAWN LOOKING DOWN THE STREET TOWARDS POLE P10.

B. SEE PHOTO OF EXISTING POLE P9, SHEET 11.

C. SEE 2/U44 FOR 12.5KV CROSSARM INSTALLATION.

D. FOR THE PRIMARY 7.2KV CONNECTION TO THE TRANSFORMER ON P3, RUN THE CONDUCTOR ON THE WATER SIDE OF P10 TO P9. RECONFIRM WHICH PHASE WITH KPU-E SHOULD BE USED PRIOR TO INSTALLATION.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

PATH: C:\USERS\KNEE\ONEDRIVE\DOCUMENTS\0-PSE BRIDGE CA\WSB17 P4-P8 RELOCATION -U4+U6-12 -CA 1706012.DWG

KNEE

TAB: 6

ADDENDUM NUMBER

Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

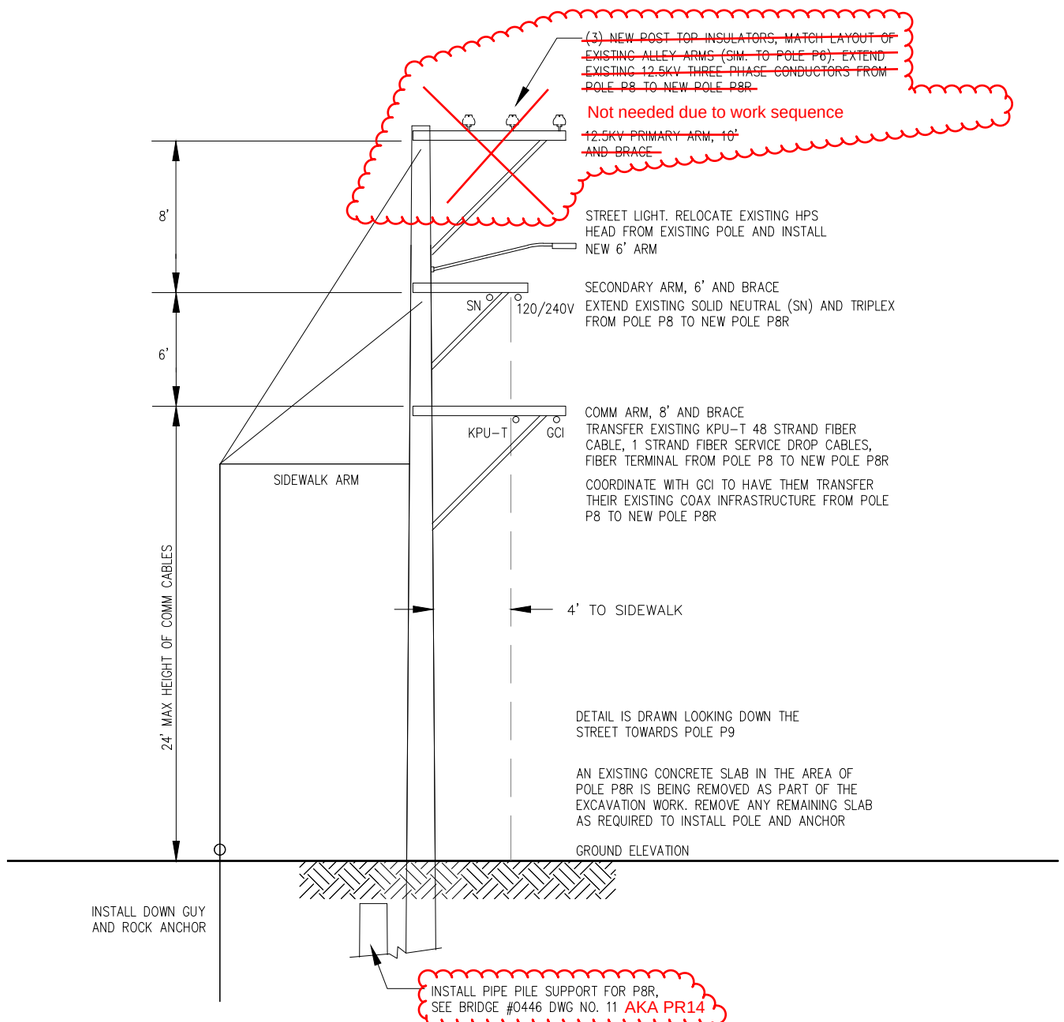
EXISTING POLE P3, P9 DETAILS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 6	~~15~~ 14



1 POLE P8R -ALLEY ARM CONSTRUCTION

NO SCALE

DETAIL NOTES:

A. SEE SHEET 5 FOR ADDITIONAL CROSSARM INFO. SEE KPU/RUS DETAILS FOR THE DOWN GUY AND ANCHOR INSTALLATION.

B. CONTRACTOR'S OPTION: IN LIEU OF SIDEWALK GUY, IT IS PERMISSIBLE TO INSTALL THE ROCK ANCHORS IN THE ROCK FACE LOCATED UPHILL FROM THE POLE LOCATION. Used

C. POLE P8R IS SECURED USING A PIPE PILE. SEE BRIDGE NO. 0446, DWG NO. 11 "SUPPORT FOR NEW POLE P8" FOR POLE INSTALLATION INFORMATION.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

1

PATH: C:\USERS\KNEE\ONEDRIVE\DOCUMENTS\0-PSE BRIDGE CA\WSB17 P4-P8 RELOCATION -U4+U6-12 -CA 1706012.DWG

KNEE
TAB: 7

ADDENDUM NUMBER

Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

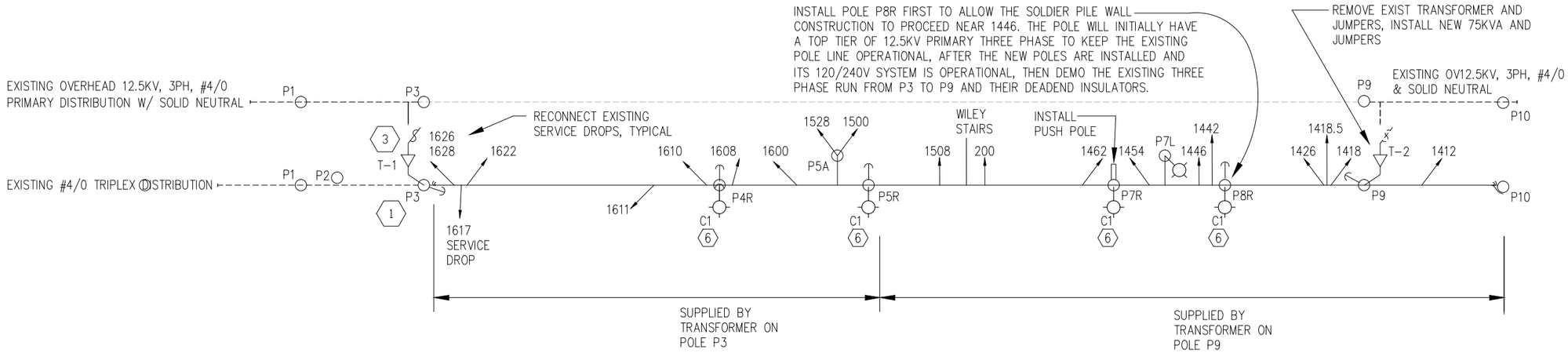
POLE P8R DETAILS

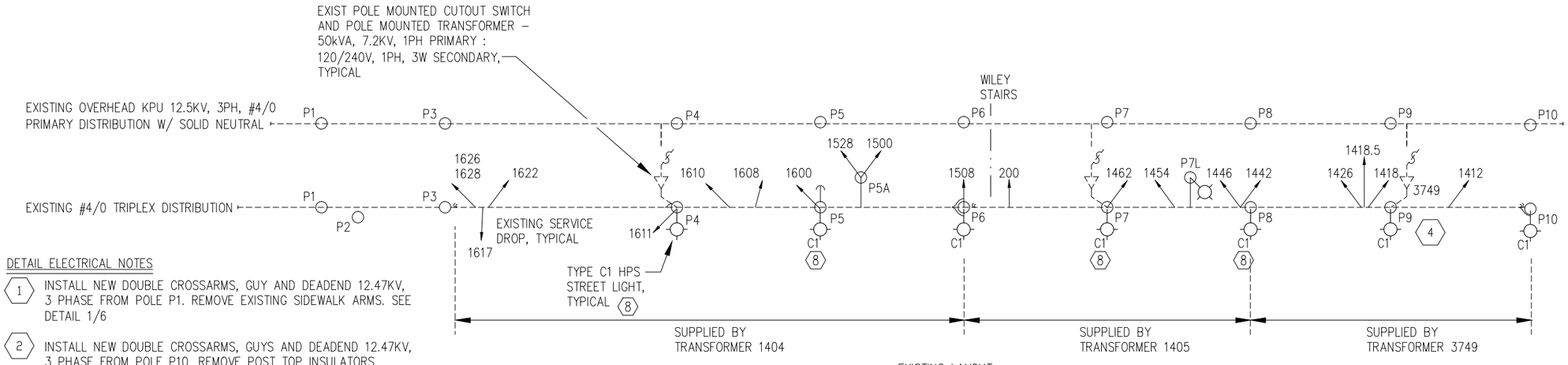
PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 7	~~15~~ 14





1 ELECTRICAL ONE LINE DIAGRAM

NO SCALE

TRANSFORMER SCHEDULE

NAME	KVA	PRIMARY	SECONDARY	BONDING JUMPER	NOTES
T-1	75	7200V, 1PH	120/240V, 1PH, 3W	#1/0	
T-2	75	7200V, 1PH	120/240V, 1PH, 3W	#1/0	REMOVE EXISTING 50KVA

DETAIL ELECTRICAL NOTES

1. INSTALL NEW DOUBLE CROSSARMS, GUY AND DEADEND 12.47KV, 3 PHASE FROM POLE P1. REMOVE EXISTING SIDEWALK ARMS. SEE DETAIL 1/6
2. INSTALL NEW DOUBLE CROSSARMS, GUYS AND DEADEND 12.47KV, 3 PHASE FROM POLE P10. REMOVE POST TOP INSULATORS. SEE DETAIL 2/6
3. INSTALL NEW TRANSFORMER, CUTOUT AND JUMPERS.
4. REMOVE EXISTING TRANSFORMER. INSTALL NEW TRANSFORMER AND CONNECT TO EXISTING CUTOUT.
5. INSTALL NEW POLE W/ GUY OR PUSH POLE AT P4R–P7R, SEE SHEET 5 FOR P4R–P7R & DETAIL 1/7 FOR P8R. POLE P8R SHALL BE INSTALLED FIRST.
6. INSTALL EXISTING HPS FIXTURES HEAD WITH NEW ARM AND HOUSE SHIELD ON NEW POLE . CONNECT TO 120/240V DISTRIBUTION
7. RELOCATE HPS STREET LIGHT FIXTURE HEAD TO NEW POLE. INSTALL HOUSE SHIELD.
8. AFTER NEW SYSTEM IS OPERATIONAL, REMOVE EXISTING POLES P4–P8 AND ALL ASSOCIATED UNUSED CONDUCTORS BETWEEN P3–P9.

DETAIL GENERAL NOTES:

A COORDINATE THE ENTIRE INSTALLATION INCLUDING THE EXISTING OVERHEAD SYSTEM WITH KPU ELECTRIC.

B SEE CONSTRUCTION DRAWING SET SHEETS 4–9 FOR EXISTING INFO, CONSTRUCTION SET U10–U15, U30–32 FOR NEW WORK AND EQUIPMENT LOCATIONS, U54–56 FOR SERVICE AND POLE INFO.

C EXISTING POLES P4 THRU P8 TO BE DEMOLISHED. MIGRATE EXISTING OVERHEAD SERVICES THAT ARE CONNECTED TO THE OVERHEAD TRIPLEX RUN FROM EXISTING POLES P3 TO P9 TO THE NEW POLES P4R–P8R.

D ADJUST THE LENGTH OF THE EXISTING SERVICE DROPS TO ACCOMODATE THE ROUTE OF THE NEW OVERHEAD DISTRIBUTION.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

PATH: C:\USERS\KNEE\ONEDRIVE\DOCUMENTS\0-PSE BRIDGE CA\WSB17 P4-P8 RELOCATION -U4+U6-12 -CA 1706012.DWG

KNEE
TAB: 8

ADDENDUM NUMBER
Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

GENERAL SEQUENCE

A INSTALL POLE P8R TO ACCOMDATE SOLDIER PILE WALL CONSTRUCTION EFFORT. TRANSFER EXISTING 12.5KV, SOLID NEUTRAL, 120/240V, KPU–T & GCI INFRASTRUCTURE FROM P8 TO P8R,

B. INSTALL CONCRETE BASES AND POLES P4R–P7R, TRIPLEX P3–P9, STREET LIGHT ARMS.

C. INSTALL CROSSARMS, TRANSFORMERS AT P3 AND P9. REVISE 12.5KV AT P3 & P9. REMOVE 12.5KV

D. REMOVE HPS STREET LIGHT HEADS, REINSTALL ON P4R–P8R.

E. SEE SHEET 9 FOR KPU–T & GCI WORK.

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

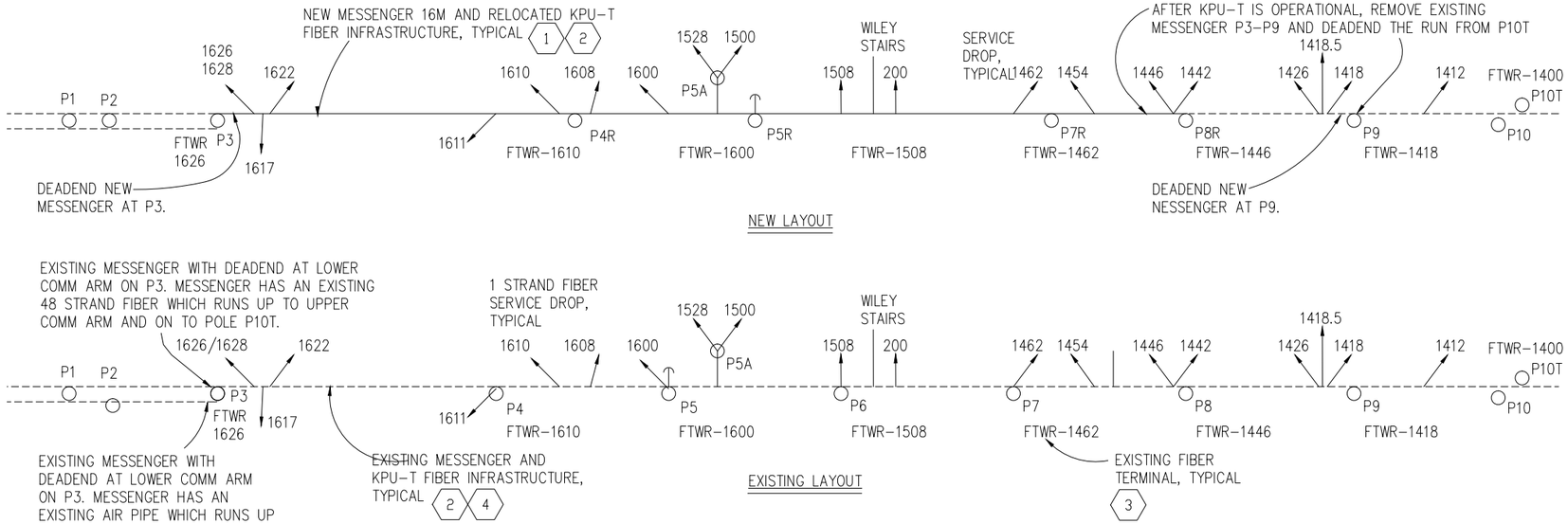
KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

ELECTRICAL ONE LINE DIAGRAM

PROJECT DESIGNATION
BR000(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 8	~~15~~ 14

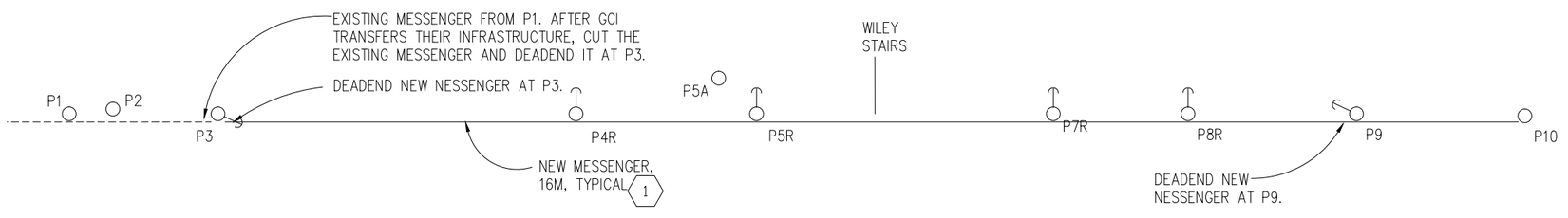


NEW LAYOUT

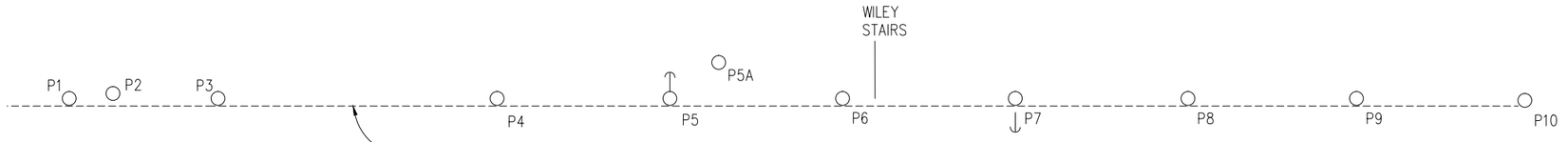
EXISTING LAYOUT

1 KPU TELEPHONE - ONE LINE DIAGRAM

NO SCALE



NEW LAYOUT



EXISTING LAYOUT

GCI GENERAL NOTES

A INSTALL NEW MESSENGER CABLE FROM P3 TO P10 VIA P4R-P8R AND P9. COORDINATE WITH GCI TO HAVE THEM TRANSFER THEIR EXISTING COAX CABLING AND EQUIPMENT BETWEEN POLES P3 TO P10 OVER TO THE NEW MESSENGER.

B AFTER THE NEW SYSTEM IS OPERATIONAL REMOVE THE EXISTING MESSENGER THAT RUNS FROM P3 TO P10 VIA POLES P4-P9

2 GCI CABLE TV - ONE LINE DIAGRAM

NO SCALE

GCI ELECTRICAL NOTES

1 INSTALL NEW MESSENGER FROM P3-P9. SEE SHEETS 4-7. COORDINATE WITH GCI TO HAVE THEM TRANSFER THEIR EXISTING INFRASTRUCTURE TO THE NEW POLE LINE BETWEEN POLES P3-P9

2 AFTER THE GCI SYSTEM IS OPERATIONAL, REMOVE THE EXISTING MESSENGER THAT RUNS BETWEEN EXISTING POLES BETWEEN P3-P9.

KPU-T GENERAL NOTES

A COORDINATE THE ENTIRE INSTALLATION INCLUDING THE EXISTING OVERHEAD SYSTEM WITH KPU TELECOMMUNICATIONS.

B INSTALL NEW MESSENGER CABLE FROM P3 TO P10 VIA P4R-P8R AND P9. TRANSFER THE EXISTING KPU-T FIBER OPTIC CABLING AND SERVICE DROPS TO THE NEW MESSENGER.

C AFTER THE NEW SYSTEM IS OPERATIONAL REMOVE THE EXISTING MESSENGER THAT RUNS FROM P3 TO P10 VIA POLES P4-P9

D ADJUST THE LENGTH OF THE EXISTING SERVICE DROPS TO ACCOMODATE THE ROUTE OF THE NEW OVERHEAD DISTRIBUTION.

E FOR EXISTING CABLING INFO AND EQUIPMENT LOCATIONS: SEE SHEETS 4-9, CONSTRUCTION SET V02-V09, ADVANCE UTILITY RELOCATION AS-BUILT DRAWINGS (CITY ELECTRIC 8-11-15) V2, V16-17

F CONTRACTOR'S OPTION: IN LIEU OF INSTALLING NEW MESSENGER CABLE, IF THE EXISITNG MESSENGER CABLE LENGTH IS ADEQUATE IT IS PERMISSIBLE TO TRANSFER THE EXISTING MESSENGER AND THE FIBER INFRASTRUCTURE INTACT. ADJUST SAG TO MAINTAIN 22' MIN. AND ADJUST CABLING LENGTHS TO ACCOMODATE THE NEW LAYOUT

KPU-T ELECTRICAL NOTES

1 INSTALL NEW MESSENGER FROM P3-P9.

2 RELOCATE THE EXISTING 1/4" AIR PIPE, FIBER CABLING AND FIBER TERMINALS BETWEEN POLES P3 TO P8R OVER TO THE NEW POLES P4R-P8R. THE OVERHEAD FIBER CABLES INCLUDE A 48 STRAND FIBER CABLE AND A MINIMUM OF 1 STRAND SERVICE DROPS TO EACH HOME. THE SERVICE DROPS ORIGINATE AT AN EXISTING AERIAL FIBER TERMINAL AND TERMINATE ON AN ONT MOUNTED ON THE HOUSE. THERE IS COILED SPARE CABLE AT THE ONTs AND THE 48 STRAND CABLE HAS SPARE CABLE ON SNOWHOES ON THE OVERHEAD LINE.

3 EXISTING FIBER TERMINAL, FTWR-#. SEE BID SET SHEET V02 NOTE 20 FOR THE HOMES SERVED BY EACH TERMINAL, TYPICAL.

4 AFTER THE KPU-T SYSTEM IS OPERATIONAL, REMOVE THE EXISTING MESSENGER THAT RUNS BETWEEN EXISTING POLES BETWEEN P3-P9.

5 ADJUST CABLE LENGTHS TO ADAPT TO THE NEW OVERHEAD LINE ROUTE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

1

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KNEE
TAB: 9

ADDENDUM NUMBER
Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

TEL & TV ONE LINE DIAGRAM

PROJECT DESIGNATION
BR000(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 9	~~15~~ 14

1 POLE P3
NO SCALE

2 POLE P4
NO SCALE

3 POLE P5
NO SCALE

4 POLE P6
NO SCALE

5 POLE P7
NO SCALE

6 POLE P8
NO SCALE

7 POLE P9
NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

1

PATH: C:\USERS\KNEE\ONEDRIVE\DOCUMENTS\0-PSE BRIDGE CA\WSB17 P4-P8 RELOCATION -U4+U6-12 -CA 1706012.DWG

KNEE
TAB: 10

ADDENDUM NUMBER
Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA
49th
KEITH NELSON
KEITH NELSON
EE-7655
6-7-17
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 10	~~15~~ 14

1 POLE P8 BRACING
NO SCALE

AREA IN FOREGROUND, RIGHT SIDE OF THE PHOTO IS APPROX LOCATION OF POLE P8R

2 POLE P9 TRI-ANCHOR
NO SCALE

3 STUB WALL, ROCK FACE NEAR P9
NO SCALE

FIELD COORDINATE BEST LOCATION FOR ANCHORS TO MAINTAIN ACCESS TO TURNAROUND AT 1426.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

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KNEE
TAB: 11

ADDENDUM NUMBER
Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7655 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE PHOTOS

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR 11	~~15~~ 14

Information for the Installation of New Poles P4R-P8R

Pole	KPU #	Status	Height	Class	Pole Anchor (Dwg #)	Xfm	Xfm #	Xfm Phase	RUS Xfm Detail	Street Light	12.47kV	120/240V Distribution	Guy	RUS Guy Detail	Anchor	RUS Anchor Detail	Grounding	Comments
3	1334-B4-1	M	55	2		75 (N)	5	A	G39		336MCM ACSR	#4/0 Triplex	1	E1-3	1	Plate in concrete wall		Remove exist. top tier 12.47kV alley arms. Install deadend crossarm, 75kVA transformer and cutott, LA, down guy. Connect new 120/240V distribution to P4. Existing KPU-T and GCI terminations on pole and crossarm remain. Install new guy connect to plate installed in exist concrete retaining wall
4	1342-D3-2	D	60	2		50 (D)	1404	B	G39	M	336MCM ACSR	#4/0 Triplex						Exist. 12.47kV alley arm. Relocate HPS fixture head to new pole. Remove pole after new overhead relocation work is completed.
4R		N	35	2	Dwg 446 #9 Case 2					E, N		#4/0 Triplex	1	S/W	1	F5-3	M2-11	Alley arms: (1) 120/240V & (1) Comm. New 120/240V distribution; relocate KPU-T. Coordinate with GCI to relocate their distribution. Relocate HPS fixture head with new arm.
5	1334-A4-1	D	60	2						M	336MCM ACSR	#4/0 Triplex	3	(D)				Exist. 12.47kV alley arm. Relocate HPS fixture head to new pole. Remove pole after new overhead relocation work is completed; also remove uphill guys. Anchors can remain
5A		R	40	2								#4/0 Triplex						Service pole to 1508, 1500. Reconnect overhead drops; modify length as required.
5R		N	35	2	Dwg 446 #9 Case 2					E, N		#4/0 Triplex	1	S/W	1	F5-3	M2-11	Alley arms: (1) 120/240V & (1) Comm. New 120/240V distribution; relocate KPU-T. Coordinate with GCI to relocate their distribution. Relocate HPS fixture head with new arm.
6	1342-C4-4	D	60	2						M	336MCM ACSR	#4/0 Triplex						Exist. 12.47kV alley arm. Relocate HPS fixture head to new pole. Remove pole after new overhead relocation work is completed.
7	E00465	D	60	2		50 (D)	1405	C	G39	M	336MCM ACSR	#4/0 Triplex	3	(D)				Exist. 12.47kV single crossarm, post top insulators. Relocate HPS fixture head to new pole. Remove pole after new overhead relocation work is completed. Also see Pole P7G.
7R		N	45	2	Dwg 446 #9 Case 1					E, N		#4/0 Triplex	1	S/W	1	F5-3	M2-11	Alley arms: (1) 120/240V & (1) Comm. New 120/240V distribution; relocate KPU-T. Coordinate with GCI to relocate their distribution. Relocate HPS fixture head with new arm.
7G		D											3	(D)				Exist. Guy Pole for P7 with guys over the roadway. Remove poles, guys, anchors after new overhead relocation work is completed
7L		R								E		#2 Triplex	E					Existing Security Light. Reconnect overhead drop; modify length as required
8	1342-B4-5	D	55	2						M	336MCM ACSR	#4/0 Triplex		S/W				Ex. 12.47kV crossarm, post top insulators. Relocate HPS fixture head to new pole. Remove pole after new overhead relocation work is completed.
8R		N	55	2	Dwg 446-11 Pipe Pile					E, N	336MCM ACSR	#4/0 Triplex	1	S/W	1	F5-3	M2-11	Alley arms: (1) 12.47kV, 3 phase, (1) 120/240V & (1) Comm. New 120/240V distribution; relocate KPU-T. Coordinate with GCI to relocate their distribution cabling and drops. Install down guy. Relocate HPS fixture head with new arm. Remove 12.47kV after new 120/240V distribution system is operational and new 12.47kV deadends are installed at P3 and P9.
9	1342-B4-4	M	55	2		50 (D); 75 (N)	3749 (E)	A	G39	E	336MCM ACSR	#4/0 Triplex	N	E1-3	1	F5-3		Ex. 12.47kV crossarm, post top insulators. Install deadend crossarms and overhead guys to P8. Remove & replace existing 50 kVA transformer with 75kVA, reconnect to exist cutout. Reconnect to existing 120/240V run from P9-P10. Remove pole after new overhead relocation work is completed. Install new guy into rock outcropping.

POLE NOTES:

D – DEMOLISH
E – EXISTING
M – MODIFY
N – NEW
R – RECONNECT
S/W – SIDEWALK GUY

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

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KNEE
TAB: 12

ADDENDUM NUMBER
Sheet added via CO#27

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/7/17	NEW SHEET - POLE P4R-P8R
AB		As-Built Set

CHECKED BY: TED

STATE OF ALASKA 49th KEITH NELSON EE-7855 6-7-17 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: KCN

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT .OF OFF SYSTEM CITY BRIDGES
PROJECT #69534

POLE INFORMATION

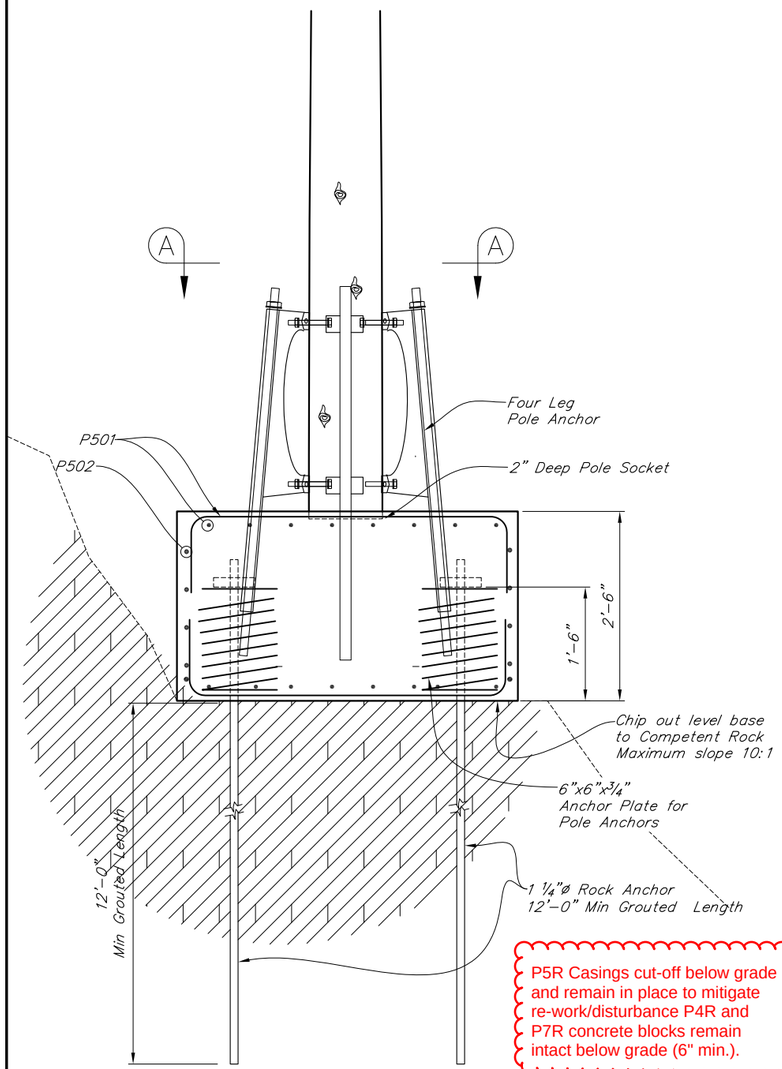
PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2017

SHEET NUMBER	TOTAL SHEETS
PR12	~~12~~ 14

1

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	11.09	4

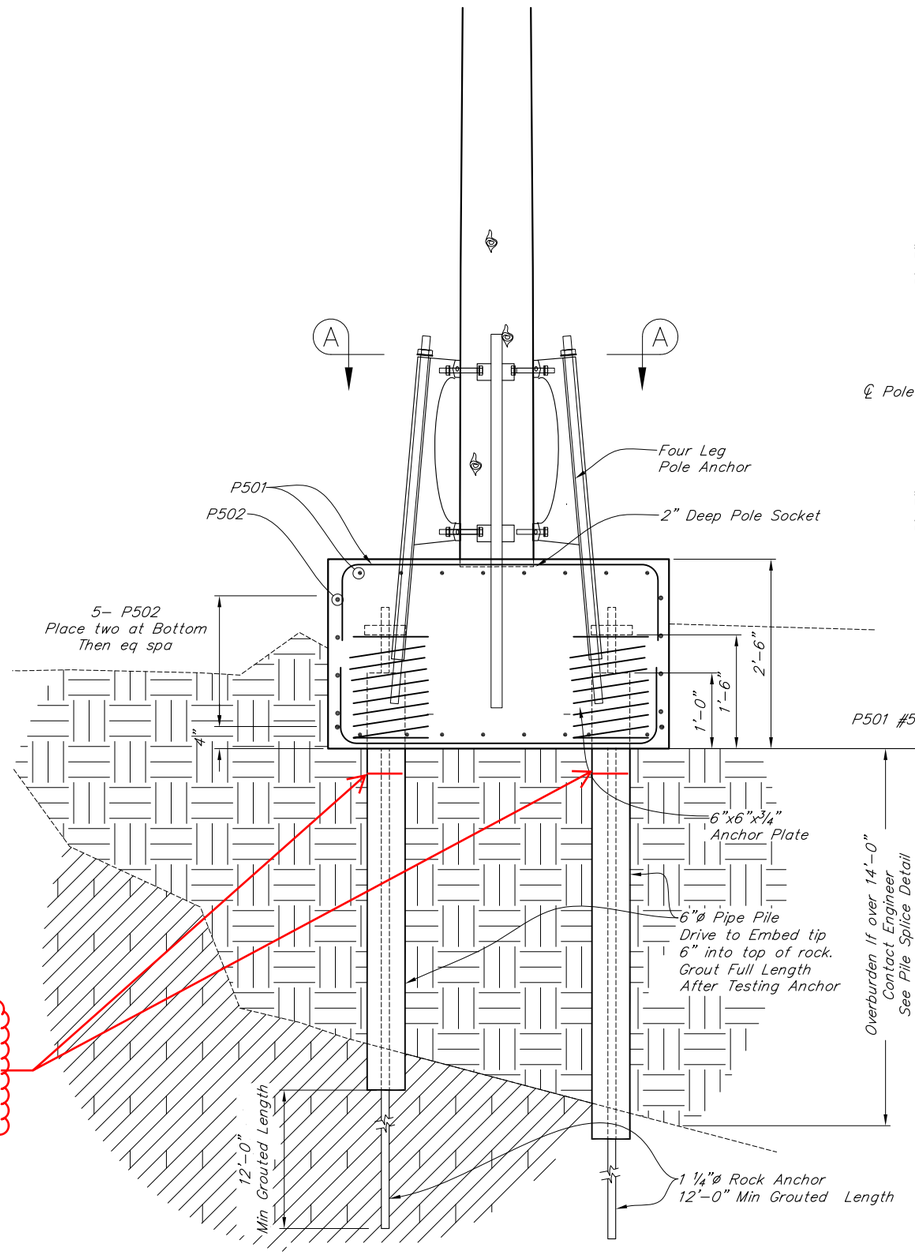


P5R Casings cut-off below grade and remain in place to mitigate re-work/disturbance P4R and P7R concrete blocks remain intact below grade (6" min.).

CASE 1 POLE ANCHOR ON ROCK

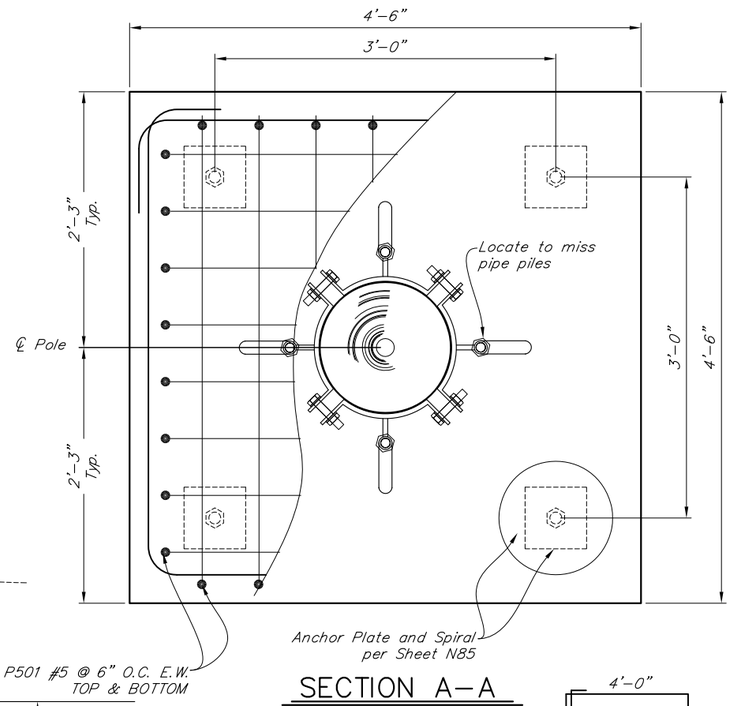
SCALE: 1" = 1'-0"

Not Used



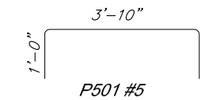
CASE 2 POLE ANCHOR ON OVERBURDEN

SCALE: 1" = 1'-0"



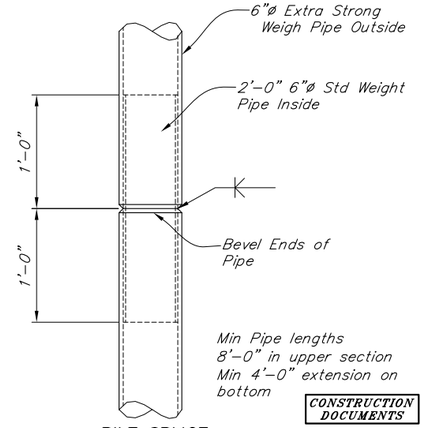
SECTION A-A

SCALE: 1-1/2" = 1'-0"



P501 #5

P502 #5



PILE SPLICE

GENERAL NOTES

1. Pole Anchor 120 k ft Min Ultimate Moment Capacity
   Star Pole 4 Anchor SPA-2I or equal.
   Install per Manufactures Instructions
2. Rock Anchor Per Section 673 ASTM A722 Fy 150 ksi
   Non Galvanized Performance test to 50 Kips
3. Pipe Pile 6" ø Extra Strong ASTM A53 Grade B
4. Concrete Class A
5. 2" Min Cover on Reinforcement
6. Reinforcement Similar Case 1 and Case 2

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781-7830
www.shearerdesign.net

DESIGNED BY: ----	CHECKED: David Shearer
DRAWN BY: ----	CHECKED: David Shearer
QUANTITIES BY:	CHECKED:

Sheet added via CO#27 AB

As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA 49TH DAVID R. SHEARER CE 8373 Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

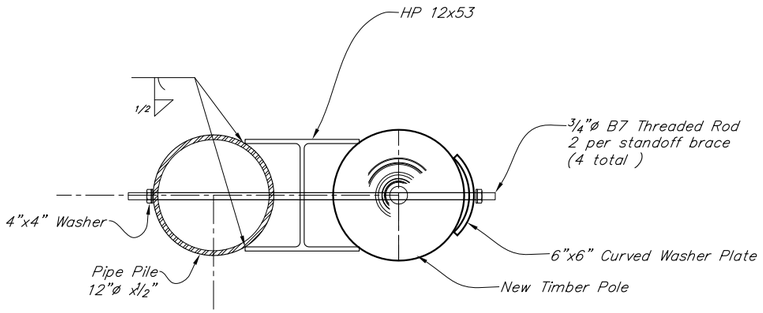
8 Tri Anchor SHORING DETAILS

BRIDGE NO. 0446

DWG. NO. 9 PR13

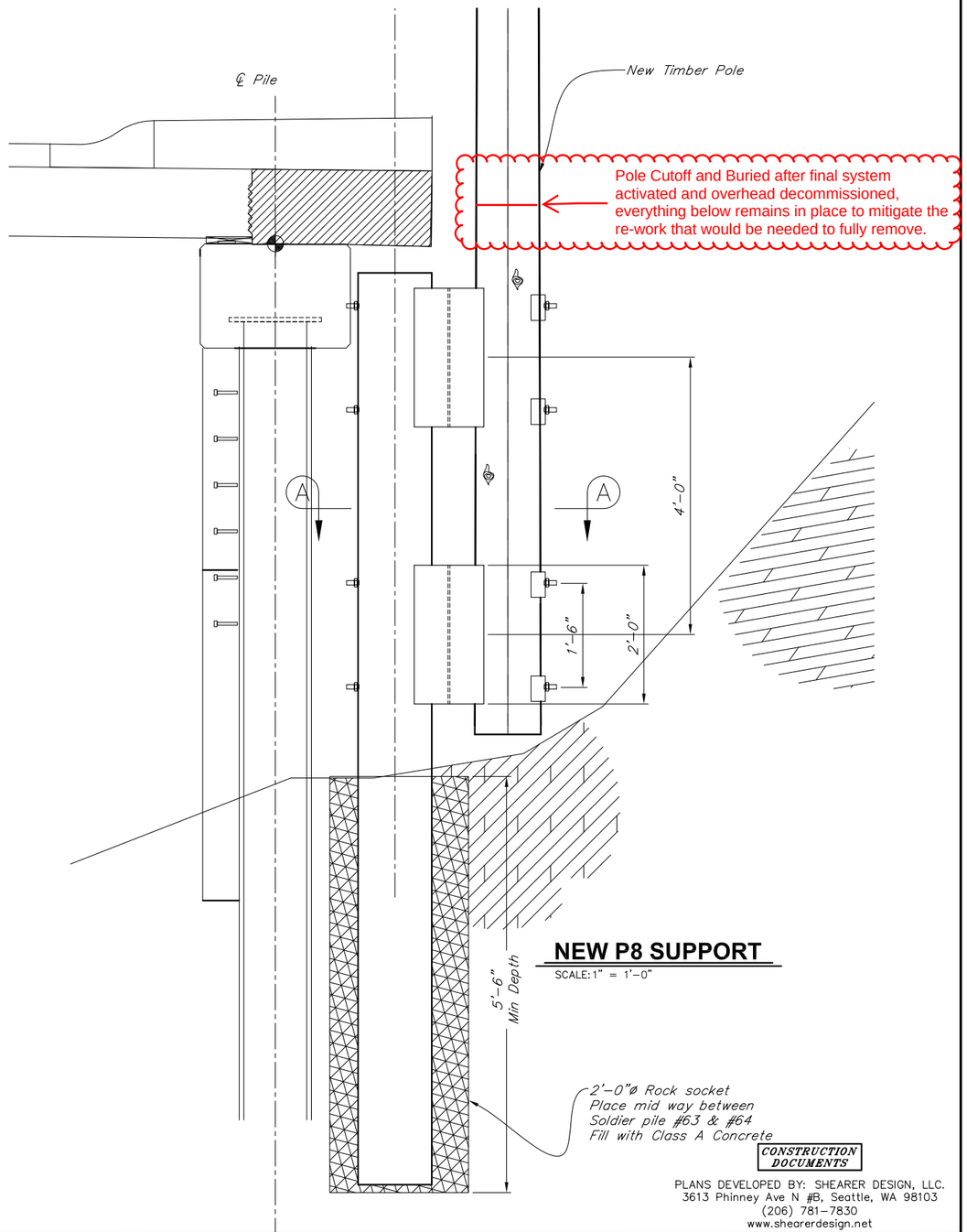
Jun 05, 2017 - 10:39am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\Pole shoring 2.dwg Layout Name: 9 8 Tri Anchor SHORING DETAILS

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	STP-F-M-0663(4)/63102	2017	11.011	4



SECTION A–A

SCALE: 1–1/2" = 1'–0"



NEW P8 SUPPORT

SCALE: 1" = 1'–0"

CONSTRUCTION DOCUMENTS

PLANS DEVELOPED BY: SHEARER DESIGN, LLC.
3613 Phinney Ave N #B, Seattle, WA 98103
(206) 781–7830
www.shearerdesign.net

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

GENERAL NOTES

1. See Electrical Drawings for Timber Pole Specifications
2. Pipe Pile 12"x 1/2 " ASTM A252 Grade 3
3. Concrete Class A

OPTION Not Done

1. Install timber pole directly in rock socket.
2. Provide Block out in deck panel closure pour for pole clearance.
3. Leave gap in sidewalk and place after pile is removed.

DESIGNED BY: ----	CHECKED: David Shearer	Sheet added via CO#27 AB	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION As-Built Set
DRAWN BY: ----	CHECKED: David Shearer		
QUANTITIES BY:	CHECKED:		

STATE OF ALASKA · 49TH · DAVID R. SHEARER · CE 8373 · 9/6/17 · Registered Professional Engineer

WATER STREET BRIDGE No2

WATER STREET

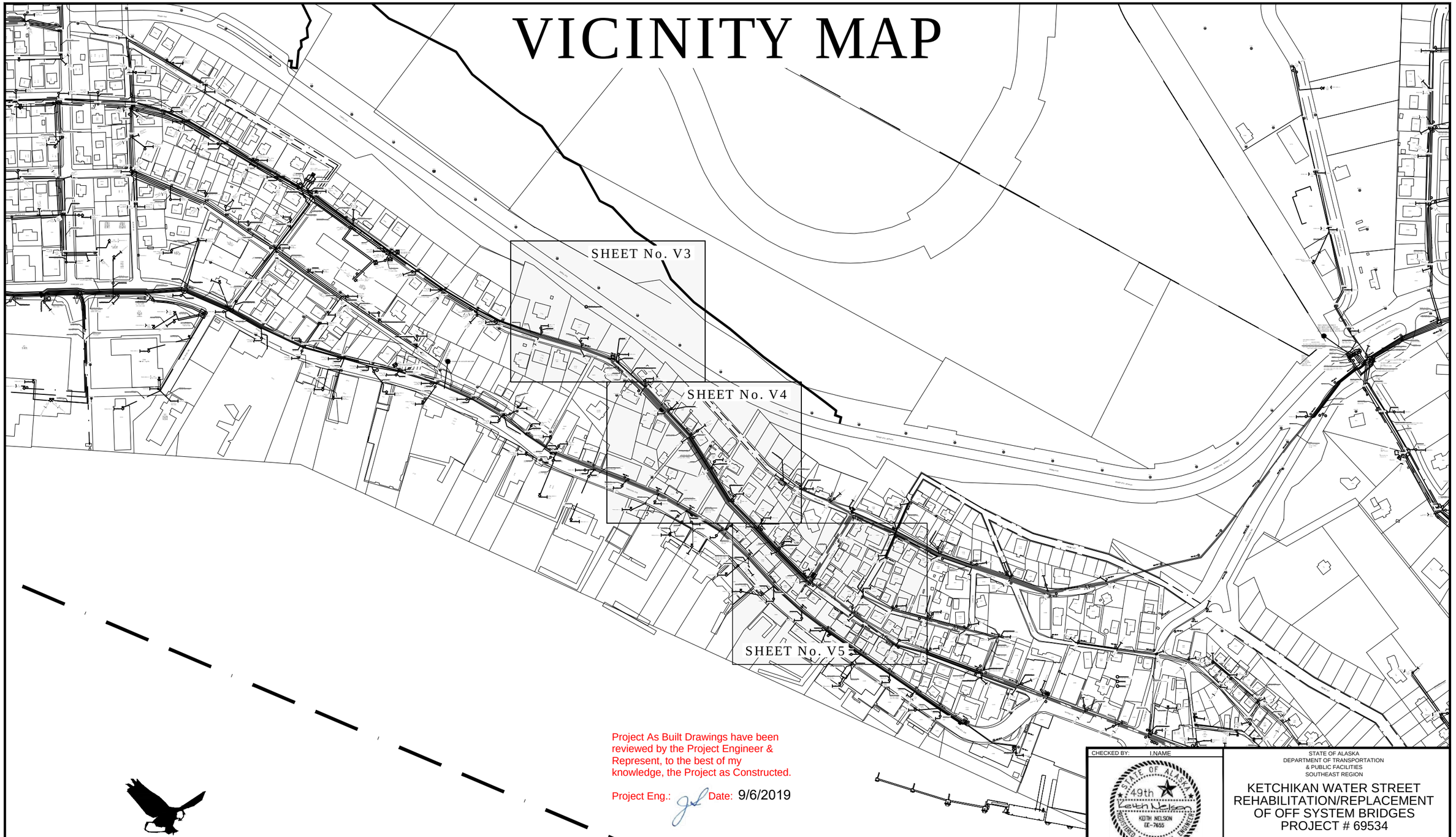
SUPPORT FOR NEW POLE P8

BRIDGE NO. 0446

DWG. NO. 11 PR14

Jun 05, 2017 - 10:38am david \\SHEARERSERVER\Jobs\0278 Water Street Construction\Construction Engineering\1442 Shoring\Pole shoring 2.dwg Layout Name: 11 SUPPORT FOR NEW POLE P8

VICINITY MAP



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

KETCHIKAN PUBLIC UTILITIES
KETCHIKAN, ALASKA

0 200 500 1000
HOR. SCALE IN FEET

N

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: I.NAME
DESIGNED BY: R. MOJE
DRAWN BY: R. MOJE

STATE OF ALASKA
49th
KEITH NELSON
CE-7655
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KETCHIKAN WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSE\JOI\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015

PLOT DATE: 8/17/2015 10:10 AM

REVISIONS NO.	DATE	DESCRIPTION	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
AB		As-Built Set	BR-000S(735) ~ 69534	2015	V01	22

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL INSTALL THE FOLLOWING PROPOSED AERIAL AND UNDERGROUND TELEPHONE CABLE FACILITIES AT WATER STREET BRIDGE :
   a) 900-24 AIR-CORE COPPER CABLE (X019,1-400+500D'd)
   b) 36-CORE FIBER OPTIC CABLE SINGLEMODE (FWAT,8D'd+45-64+8D'd);
   c) AIR PIPE 1/2" HDPE BLACK POLYETHYLENE;
   d) FIBER PEDESTAL TERMINALS AND A FIBER POLE TERMINAL;
   e) COPPER POLE TERMINALS;
   f) EMERSON PEDESTALS CCP1016;
   g) VARIOUS TYPE OF FIBER DROPS FROM PEDESTALS TO DIFFERENT HOUSES ALONG WATER STREET BRIDGE; AND
   h) 16M MESSENGER WIRE AT WATER STREET FROM PARNELL STREET SOUTHWARD TO POLE 1341-D4-5.
2. THE CONTRACTOR SHALL ALSO REMOVE THE FOLLOWING EXISTING AERIAL TELEPHONE CABLE FACILITIES, WHICH ARE ALL IN THE HEIGHT OF 26- TO 30-FOOT CLEARANCE ALONG WATER STREET BRIDGE:
   a) AIR CORE PIPE 1/2" HDPE BLACK POLYETHYLENE;
   b) 48-CORE FIBER OPTIC CABLE (F02,27-28+2D'd+31-48);
   c) 6-PORT FIBER TERMINALS;
   d) 25-PAIR COPPER TERMINALS;
   e) 900-24 AIR-CORE COPPER CABLE (X019, 1-400+500D'd);
   f) DOUBLE ARM 10-PIN ALLEY; AND
   g) 16M MESSENGER FROM POLE 1334-B4-1 SOUTHWARD TO POLE 1341-D4-5.
3. ALL CALL OUTS AND STATEMENTS IN THESE TELEPHONE ENGINEERING PLANS WITH THE WORD "PROP." OR "PROPOSED" MEAN NEW AND SHALL BE INSTALLED OR CONSTRUCTED IN THE FIELD.
4. WHERE NEW CABLE LENGTHS ARE CALLED OUT, THIS IS A PRELIMINARY LENGTH - ADD 10% SPARE LENGTH FOR ESTIMATING PURPOSES. PROVIDE ACTUAL CABLE LENGTH AS REQUIRED FOR CONSTRUCTION.
5. THE CONTRACTOR SHALL INSTALL 100' OF NEW UG 900-24 AIR CORE COPPER CABLE FROM MH-18 TO 4" RISER CONDUIT ON FREE STANDING POLE AT PARNELL ST. AND, SHALL BE RESPONSIBLE TO INSTALL 400' OF NEW AERIAL 900-24 AIR CORE COPPER CABLE FROM THE SAID FREE STANDING POLE TO POLE 1341-D4-5 SOUTHWARD OF WATER STREET.
6. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL MORE OR LESS 1800' OF PROPOSED AIR PIPE 1/2" HDPE BLACK POLYETHYLENE FROM RISER POLE 1334-B3-1 DOWN TO EXISTING RISER CONDUIT THROUGH MH-17 AT WATER STREET TO MH-18 AT PARNELL STREET. **NOTE TO CONTRACTOR: COORDINATE WITH KPU-TEL SPLICE HEAD CREW, KEN BERRY OR OSP CONSTRUCTION FOREMAN, JOHN BECK, BEFORE MAKING ANY TERMINATION OR CONNECTION OF NEW AIR PIPE TO EXISTING AERIAL COPPER SPLICE ENCLOSURE ON RISER POLE 1334-B3-1 AND TO EX. UG COPPER SPLICE ENCLOSURE AT MH-18. NO TERMINATION/CONNECTION SHALL BE DONE WITHOUT THE PRESENCE OF THE ABOVE-MENTIONED KPU-TEL STAFF ON BOTH ENDS OF NEW AIR PIPE**.
7. THE CONTRACTOR SHALL INSTALL 4 EMERSON PEDESTALS, MODEL NO. CCP1016, IN ALL BUMPOUTS ALLOCATED FOR KPU TELECOM USE AT WATER STREET BRIDGE.
8. THE CONTRACTOR SHALL INSTALL THE FOLLOWING VARIOUS LONG STUB FIBER TERMINAL INTO NEW EMERSON PEDESTAL FROM SPLICE POINT AT FREE STANDING POLE AT PARNELL ST TO VARIOUS BUMPOUT LOCATIONS ALONG WATER STREET BRIDGE:
   a) BUMPOUT-1, 12-PORT FIBER TERMINAL WITH STUB LENGTH OF 500';
   b) BUMPOUT-2, 8-PORT FIBER TERMINAL WITH STUB LENTGTH OF 100';
   c) BUMPOUT-3, 8-PORT FIBER TERMINAL WITH STUB LENGTH OF 500'; AND
   d) BUMPOUT-4, 6-PORT FIBER TERMINAL WITH STUB LENGTH OF 500'.
9. THE CONTRACTOR SHALL ALSO INSTALL 1 EACH OF 8-PORT FIBER POLE TERMINAL AND 1-EACH OF 25-PAIR COPPER POLE TERMINAL ON FREE STANDING POLE AT PARNELL ST AND 1-EACH OF 25-PAIR COPPER POLE TERMINAL ON POLE 1342-A4-3 AT WATER & GORGE STREETS.
10. THE CONTRACTOR SHALL INSTALL VARIOUS FIBER (1-CORE, 2-CORE, & 4-CORE) SERVICE DROPS TO DIFFERENT HOUSES AT WATER STREET AS SHOWN HEREON, TABLE V-2. SEE ALSO SHEETS V10-V13.
11. THE CONTRACTOR SHALL COORDINATE WITH KPU-TELECOM BEFORE MIGRATING/CONVERTING ANY TELEPHONE SERVICE TO NEW SERVICE BOTH IN COPPER OR FIBER SYSTEM INCLUDING SERVICE DROPS REMOVAL THAT THERE **SHALL BE NO SERVICE INTERRUPTIONS** IN THE AREA.

    KPU-TELECOM STAFF TO BE CONTACTED FOR MAINTENANCE WINDOW:
    a) KEITH WADLEY - PLANT MANAGER
    b) JOHN BECK - OSP FOREMAN
    c) CARYN HOMAN - ISP FORMAN
    d) JEFF HENDRICKSON - SENIOR C.O.N.T.
    e) KEN BERRY - SPLICER HEAD CREW
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THE REMOVAL OF CUT CABLES (BOTH COPPER & FIBER) BUT NOT LIMITED TO SERVICE DROPWIRES, STRAND WIRES AND OTHER POLE LINE HARDWARES.
13. ALL NEW OR PROPOSED CONDUITS (2" & 4") SHOWN ON SHEETS V6-V9 FOR TELECOM WILL BE CONSTRUCTED PER U SHEETS NO. _____ .
14. THE CONTRACTOR SHALL INSTALL 400' OF PROP. 16M MESSENGER WIRE FROM FREE STANDING POLE AT PARNELL ST TO POLE 1341-D4-5 AS SHOWN ON SHEET V5.
15. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY AND TEST IN THE FIELD ALL CABLE PAIRS/COUNTS IF THERE'S NO ACTIVE WORKER(S) IN THE CABLE BEFORE CUTTING IT OFF FOR REMOVAL.
16. THE CONTRACTOR SHALL INSTALL 3 EACH OF PROPOSED DOUBLE ARM ALLEY ARM 10-PIN ALLEY ON THE FOLLOWING POLES (SEE SHEET V5):
    a) FREE STANDING POLE AT PARNELL/WATER S;
    b) POLE 1342-A4-3 AT GORGE/WATER ST; AND
    c) POLE 1342-D4-5 LOCATED BETWEEN 1245 & 1251 WATER ST.
17. ALL NEW INSTALLED TELEPHONE FACILITIES INCLUDING ALL NEW SPLICED CABLES (COPPER & FIBER) SHALL BE DONE PER KPU-TELECOM STANDARD.
18. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CUT-OVER OF EXISTING FIBER SERVICE DROPS WORKING IN CABLE F02 ALONG WATER STREET BRIDGE TO NEW WORKING FIBER CABLE FWAT PER TABLE V-2.
19. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL PERFORM A CABLE (COPPER & FIBER) TESTING WITH KPU-TELECOM INSPECTOR AND A 100% PASSED ON CABLE TESTING SHALL BE SUBMITTED TO KPU-TELECOM FOR ACCEPTANCE & APPROVAL OF THE PROJECT INCLUDING REDLINE AS-BUILT PLANS SIGNED BY THE KPU-TELECOM INSPECTOR, CONTRACTOR MANAGER AND DOT PROJECT ENGINEER/REPRESENTATIVE.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF EX. AERIAL FIBER SERVICE DROPS FROM THE FOLLOWING ADDRESS PER TERMINAL NO. INCLUDING THE TERMINAL ITSELF (SEE SHEETS V3-V5):
    a. FWTR-1626 (6-PORT) ON POLE 1334-B4-1:
    1) 1628 WATER STREET
    2) 1626 WATER STREET
    3) 1622-A WATER STREET
    4) 1622-B WATER STREET
    5) 1622-C WATER STREET

    b. FWTR-1610 (6-PORT) ON POLE 1334-A4-2:
    1) 1617 WATER STREET
    2) 1611 WATER STREET
    3) 1610 WATER STREET
    4) 1608-A WATER STREET
    5) 1608-B WATER STREET

    c. FWTR-1600 (6-PORT) ON POLE 1334-A4-1:
    1) 1600 WATER STREET
    2) 1528 WATER STREET

    d. FWTR-1508 (6-PORT) ON POLE 1334-A5-5:
    1) 1508-A WATER STREET
    2) 1508-B WATER STREET
    3) 200 WILEY STREET
    4) 1500 WATER STREET

    e. FWTR-1462 (6-PORT) ON POLE 1334-A5-4:
    1) 1462-A WATER STREET
    2) 1462-B WATER STREET
    3) 1454 WATER STREET

    f. FWTR-1446 (6-PORT) ON POLE 1342-B4-5:
    1) 1446-A WATER STREET
    2) 1446-B WATER STREET
    3) 1442 WATER STREET

    g. FWTR-1418 (6-PORT) ON POLE 1342-B4-4:
    1) 1426 WATER STREET
    2) 1418 WATER STREET
    3) 1418.5 WATER STREET

    h. FWTR-1400 (6-PORT) ON POLE 1342-B4-3:
    1) 1412 WATER STREET
    2) 1320 WATER STREET
    3) 1321 WATER STREET
    4) VDSL CABINET

    i. FPAR-0302 ON POLE 1342-A4-1 (<u>TERMINAL NOT TO BE REMOVED</u>):
    1) 210 PARNELL ST
    2) 1400 WATER ST
21. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PLACEMENT OF NEW UG & AERIAL FIBER DROPS FROM NEW FIBER PED & POLE TERM.'s TO ALL HOUSES INDICATED ON TABLE V-2, SEE ALSO SHEETS V10-V13.
22. FROM ONT, KPU TELECOM WILL BE RESPONSIBLE TO TROUBLESHOOT, IF NECESSARY, IN THE CUSTOMER'S HOUSE (ADDRESSES SHOWN ON TABLE V-2) DUE TO CUT-OVER FROM OLD TO NEW FIBER SERVICE DROPS.
23. THE CONTRACTOR SHALL SPLICE THE FOLLOWING (SEE SHEET V5):
    a) ON BOAT 1, SPLICE NEW UG 900-24 COPPER CABLE TO EX. SPLICE POINT IN MH-18 (SEE PRINT V15) USING PAIR COUNTS X019,1-400;
    b) ON BOAT 2, SPLICE NEW 25-PAIR COPPER TERMINAL TO NEW UG 900-24 ON FREE STANDING POLE USING PAIR COUNTS X019,393-400 AND SPLICE NEW AERIAL 900-24 FOR PAIR COUNTS X019,1-392;
    c) ON BOAT 4, OPEN THE CABLE SHEATH OF NEW AERIAL 900-24 ON POLE 1342-A4-3 AT GORGE/WATER ST AND SPLICE-IN NEW 25-PAIR COPPER TERMINAL USING PAIR COUNTS X019,388-392; AND
    d) ON BOAT 5, SPLICE/HALF-TAP NEW AERIAL 900-24 TO EXISTING 900-24 FOR WORKING PAIR COUNTS X019,1-387 ON 1341-D4-5 AT 1245/1251 WATER ST; AND
    e) ON BOAT 3, SPLICE-IN THE FOLLOWING PROPOSED FIBER CABLES TO EXISTING SPLICE POINT OF 360FOC, FWAT,1-156+204D'd ON FREE STANDING POLE AT PARNELL ST (SEE SHEETS V10-V13):
       i.1) NEW 36FOC USING FIBER COUNTS FWAT,45-64;
       i.2) NEW 8-PORT FIBER TERMINAL STUB USING FWAT,65-72, FOR TERM. NO. FWTR-1442 ON BUMPOUT-3;
       i.3) NEW 6-PORT FIBER TERMINAL STUB USING FWAT,73-76, FOR TERM. NO. FWTR-1418 ON BUMPOUT-4; AND
       i.4) NEW 8-PORT FIBER TERMINAL STUB USING FWAT,77-84, FOR TERM. NO. FWTR-1400 ON FREE STANDING POLE.
24. THE CONTRACTOR SHALL BE RESPONSIBLE TO INSTALL 820' OF PROP. 36-CORE FIBER OPTIC CABLE SINGLEMODE FROM FREE STANDING POLE TO PULLBOX (PB) NO. 2 LOCATED OPPOSITE 1508 WATER STREET.
25. ON BOAT 6 (SEE SHEET V11), SPLICE THE FOLLOWING FIBER CABLES:
    a. NEW 12-PORT FIBER TERMINAL STUB USING FWAT,45-56, FOR TERM. NO. FWTR-1611 ON BUMPOUT-1; AND
    b. NEW 8-PORT FIBER TERMINAL STUB USING FWAT,57-64, FOR TERM. NO. FWTR-1508 ON BUMPOUT-2.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: _____ Date: 9/6/2019

NOMENCLATURE

NOTE: ALL STATEMENTS WITH THE WORD "PROP." OR "PROPOSED" IN THIS ENG'G. PLAN MEAN NEW AND SHALL BE INSTALLED.

PROP. POLE TERM. FWTR-1626 | 6P | 41-44 +2D'd

, TERMINAL SYMBOL; BOLD LINE MEANS PROPOSED.

2421.1, A 2421 NUMBER IS AN FCC CODE THAT MEANS AERIAL FACILITIES & DOT (.) 1 MEANS FIBER SYSTEM.

PROP. POLE TERM., A DESCRIPTION OF PROPOSED TERMINAL TYPE TO BE INSTALLED.

FWTR-1626, ASSIGNED TERMINAL NUMBER, THE VERY FIRST LETTER "F" MEANS FIBER.

6P, NUMBER OF TERMINAL FIBER PORT

41-44+2D'd, FIBER COUNTS 41 TO 44 TO BE SPLICED INTO THE TERMINAL & 2 PORTS WOULD NOT BE USED.

PROP. POLE TERM. TWTR-1320 | 25 | 17D'd+ 393-400 | P

2421.2, A 2421 NUMBER IS AN FCC CODE THAT MEANS AERIAL FACILITIES & DOT (.) 2 MEANS COPPER SYSTEM.

PROP. POLE TERM., A DESCRIPTION OF PROPOSED TERMINAL TYPE TO BE USED.

TWTR-1320, PROPOSED ASSIGNED TERMINAL NUMBER, THE VERY FIRST LETTER "T" MEANS COPPER.

25, A 25-PAIR COPPER TERMINAL

17D'd+393-400, 17 PAIRS DEAD MEANS WILL NOT BE USED & COPPER PAIRS 393 TO 400 TO BE SPLICED INTO THE TERMINAL.

P, SYMBOL FOR CABLE PLUG STUB, EP-10A1.

2, SPLICING ACTIVITY NUMBER

[FWTR-1626 | 4 | 53-56] , EX. TERMINAL TO BE REMOVED OR TAKEN DOWN.
TO BE REMOVED

[2422.2 AE1800-26 (16M) / C03,1-1800]
TO BE REMOVED

2422.2, A 2422 NUMBER IS AN FCC CODE THAT MEANS U.G. FACILITIES & DOT (.) 1 MEANS FIBER CABLE; .2 MEANS COPPER.

AE1800-26, EXISTING CABLE SIZE & GAUGE TO BE REMOVED.

(16M), MESSENGER WIRE SIZE WHERE CABLE IS PRESENTLY LASHED.

C03,1-1800, C03 IS CABLE NUMBER & 1-1800 WORKING PAIRS.

[ ], BOLD BRACKETS MEANS FOR REMOVAL.

MB AEF25-24 [K37,251-268+D'd] X019,20D'd+171-175

MB AEF25-24, TYPE OF EXISTING CABLE, SIZE & GAGE TO BE RE-SPLICED TO NEW CABLE NUMBER OR PAIRS.

[K37,251-268+D'd], EXISTING CABLE NUMBER & PAIRS TO BE CHANGED.

X019,20D'd+171-175, PROP. CABLE NUMBER & PAIRS TO BE USED.

TABLE V-2. COVERED ADDRESSES PER NEW PEDESTAL FIBER TERMINAL

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1611 (12-PORT) FWAT, 45-56	TELEPHONE PEDESTAL AT BUMPOUT-1, BESIDE 1611 WATER ST	1628 WATER STREET
		1626 WATER STREET
		1622-A WATER STREET
		1622-B WATER STREET
		1622-C WATER STREET
		1617 WATER STREET
		1611 WATER STREET
		1610 WATER STREET
		1608-A WATER STREET
		1608-B WATER STREET
		1600 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1508 (8-PORT) FWAT, 57-64	TELEPHONE PEDESTAL AT BUMPOUT-2, OPPOSITE OF 1508 WATER ST	1528 WATER STREET
		1508-A WATER STREET
		1508-B WATER STREET
		1500 WATER STREET
		200 WILEY STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1442 (8-PORT) FWAT, 65-72	TELEPHONE PEDESTAL AT BUMPOUT-3, OPPOSITE OF 1442 WATER ST	1462-A WATER STREET
		1462-B WATER STREET
		1454 WATER STREET
		1446-A WATER STREET
		1446-B WATER STREET
		1442 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1418 (6-PORT) FWAT, 73-76+2D'd	TELEPHONE PEDESTAL AT BUMPOUT-4, OPPOSITE OF 1418 WATER ST	1426 WATER STREET
		1418.5 WATER STREET
		1418 WATER STREET
		1412 WATER STREET

NEW TERMINAL NO.	TERM. LOCATION	COVERED ADDRESSES
FWTR-1400 (8-PORT) FWAT, 77-84	FREE STANDING POLE AT WATER STREET CORNER PARNELL ST	1400 WATER STREET
		1321 WATER STREET
		1320 WATER STREET
		1319 WATER STREET
		1312 WATER STREET
		210 PARNELL STREET
		EXISTING VDSL CABINET

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSE\JOI\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: V02 Monday, August 17, 2015 10:11:05 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD (L=21')
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
F120-002 305+48 | 4P | 49-52 EX. AER. FIBER TERMINAL
T120-002 305+48 | 25 | 1-25 EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON EE-7655

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

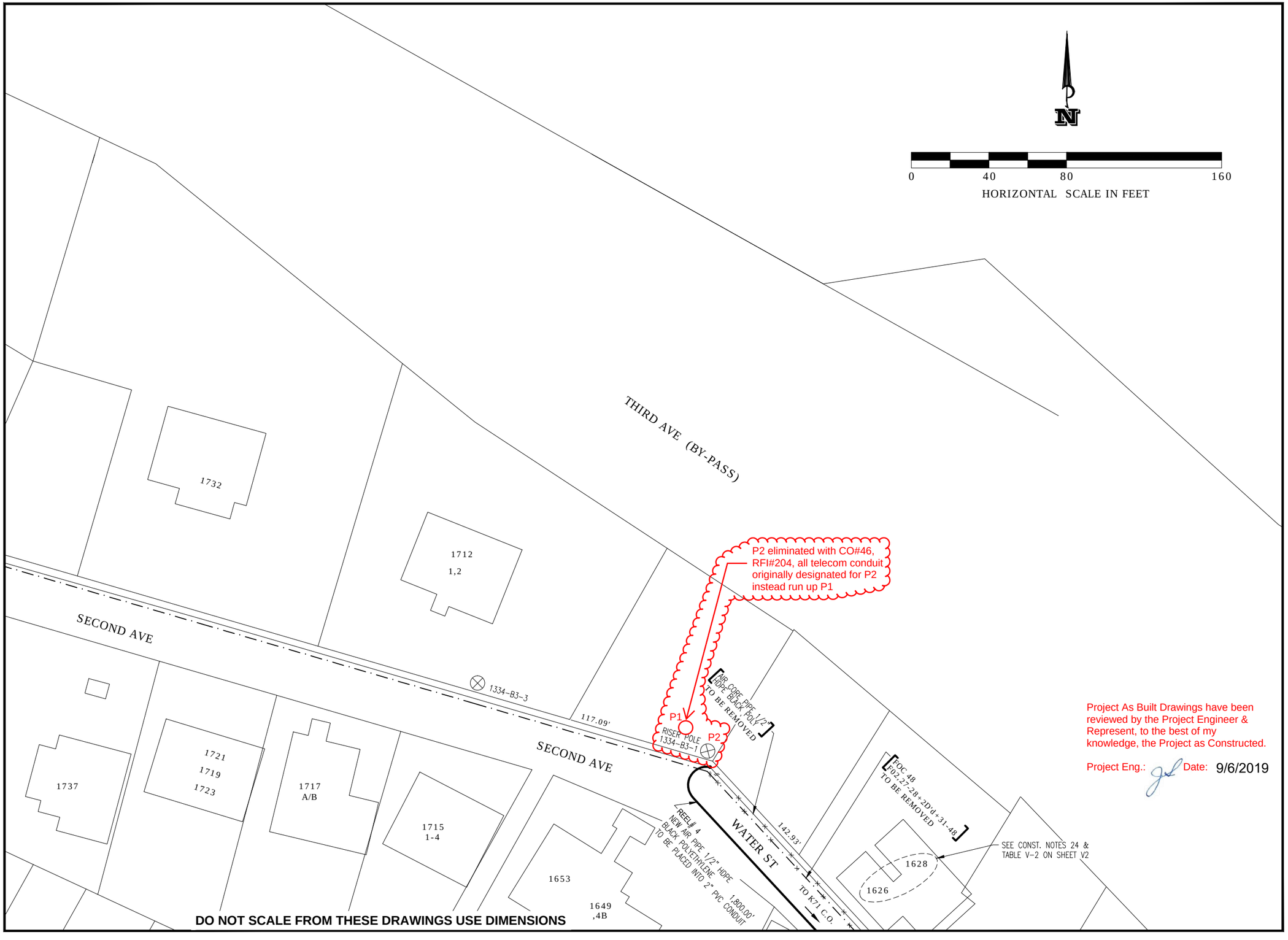
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
V02	22



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSE\JOI\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: V03 Monday, August 17, 2015 10:11:13 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
- F120-002 305+48 | 4P 49-52 — EX. AER. FIBER TERMINAL
- T120-002 305+48 | 25 1-25 — EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

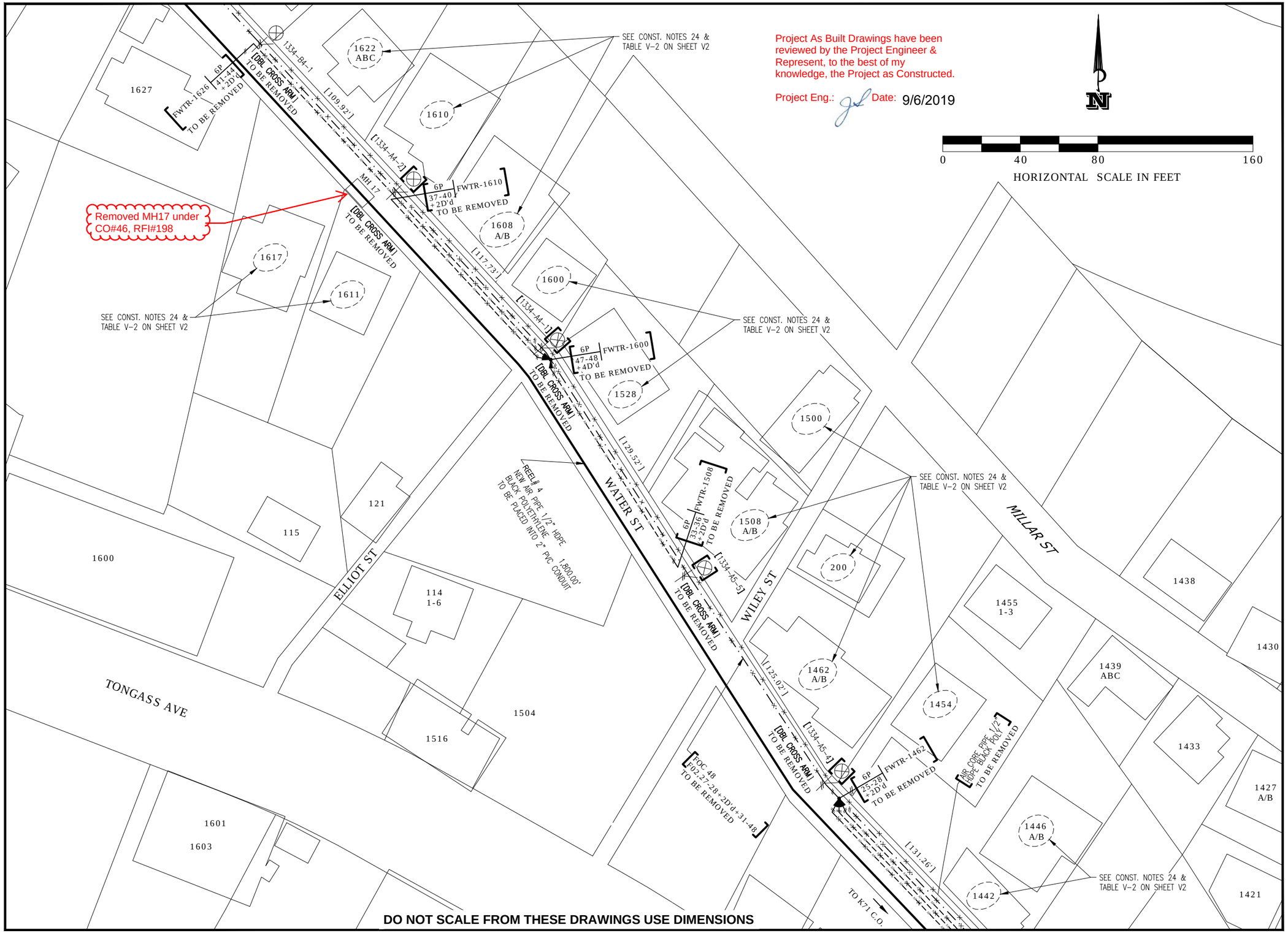
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V03	22



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: **V04 Monday, August 17, 2015 10:11:24 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
- EX. AER. FIBER TERMINAL (F120-002 305+48 4P 49-52)
- EX. AER. COPPER TERMINAL (T120-002 305+48 2S 1-25)
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

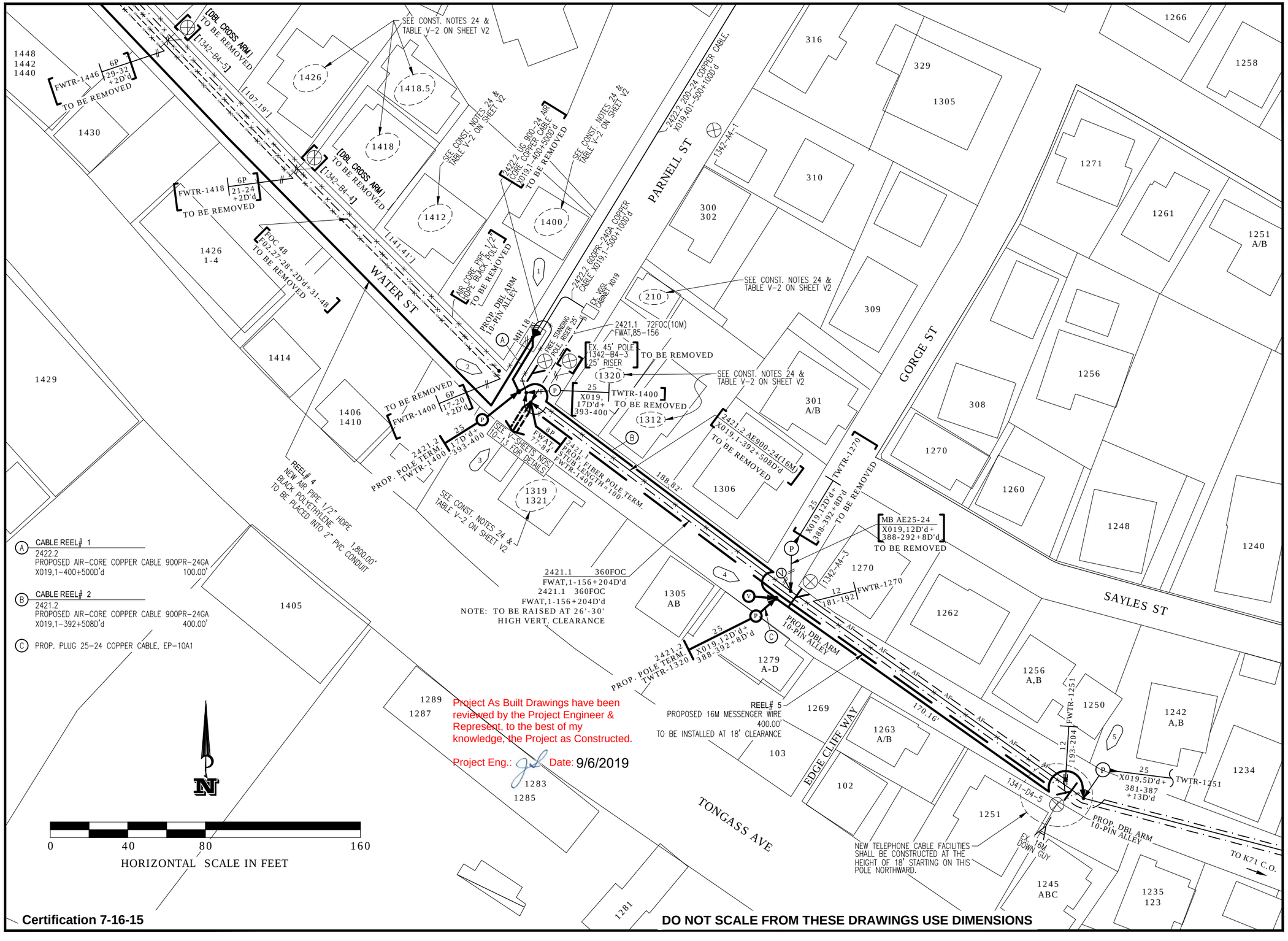
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
V04	**22**



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TAB: V05 Monday, August 17, 2015 10:11:34 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
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- T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V05	22

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

3. Sheets U10, V06, V10, V20 - The services to 1622 and 1626/1628 can be fed from existing pole P3 and revise the 1626/1628 KPU-E service mast.
At pole P3, install a service lateral (sized per KPU to meet load) with riser from the padmount transformer; delete (2) individual 1/0 homeruns.

Obtain permission from the 1626/1628 owner for the service mast modifications. If granted, revise the service mast at 1626/1628 to accommodate a service drop from P3. The new service drop and mast shall meet KPU, NEC 230.9 and 230.24 clearance requirements, in particular the clearance from the ground to overhead conductors, including the drip loop (12') and from operable windows (3').

Confirm with KPU-T and GCI that their services to the 1622 and 1626/1628 residences can be fed from pole P3.

Relocate pole P3S (40', Class 2) to replace existing pole P7L (see Item 2). Determine with KPU-E the height of the pole for its new location. (The 662 submittal approved the pole based on providing the proper size pole.)

Ended up installing and using P3S per original design due to clearance concerns

RFI-027

Overhead Drops

Re-purposed Pole P3

New pole 3S

P3S

P1 RISER POLE 1334-B3-1

P2

P2 eliminated with CO#46, RFI#204, all telecom conduit originally designated for P2 instead run up P1

1334-B4-1

1628

1626

1622 ABC

1610

1627

1649 4B

1653

1617

1611

EX. ONT

1-2" PVC DUCT, 8.00'

1-2" PVC DUCT, 23.00'

1-2" PVC DUCT, 9.00'

2-2" PVC DUCT, 31.00'

1-2" PVC DUCT, 143.00'

3-2" PVC DUCT, 18.00'

2-2" PVC DUCT, 65.00'

1-2" PVC DUCT, 61.00'

1-2" PVC DUCT, 35.00

MH 17

Removed MH17 under CO#46, RFI#198

142.93'

117.09'

WATER ST

SECOND AVE

0 40 80 160

HORIZONTAL SCALE IN FEET

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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TAB: **V06 Monday, August 17, 2015 10:11:44 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
PROP. GUY & ANCHOR with PROP. LEAD (L=21')
EXISTING FIBER SLACK LOOP
PROP. FIBER SLACK LOOP
EX. AER. FIBER TERMINAL
EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

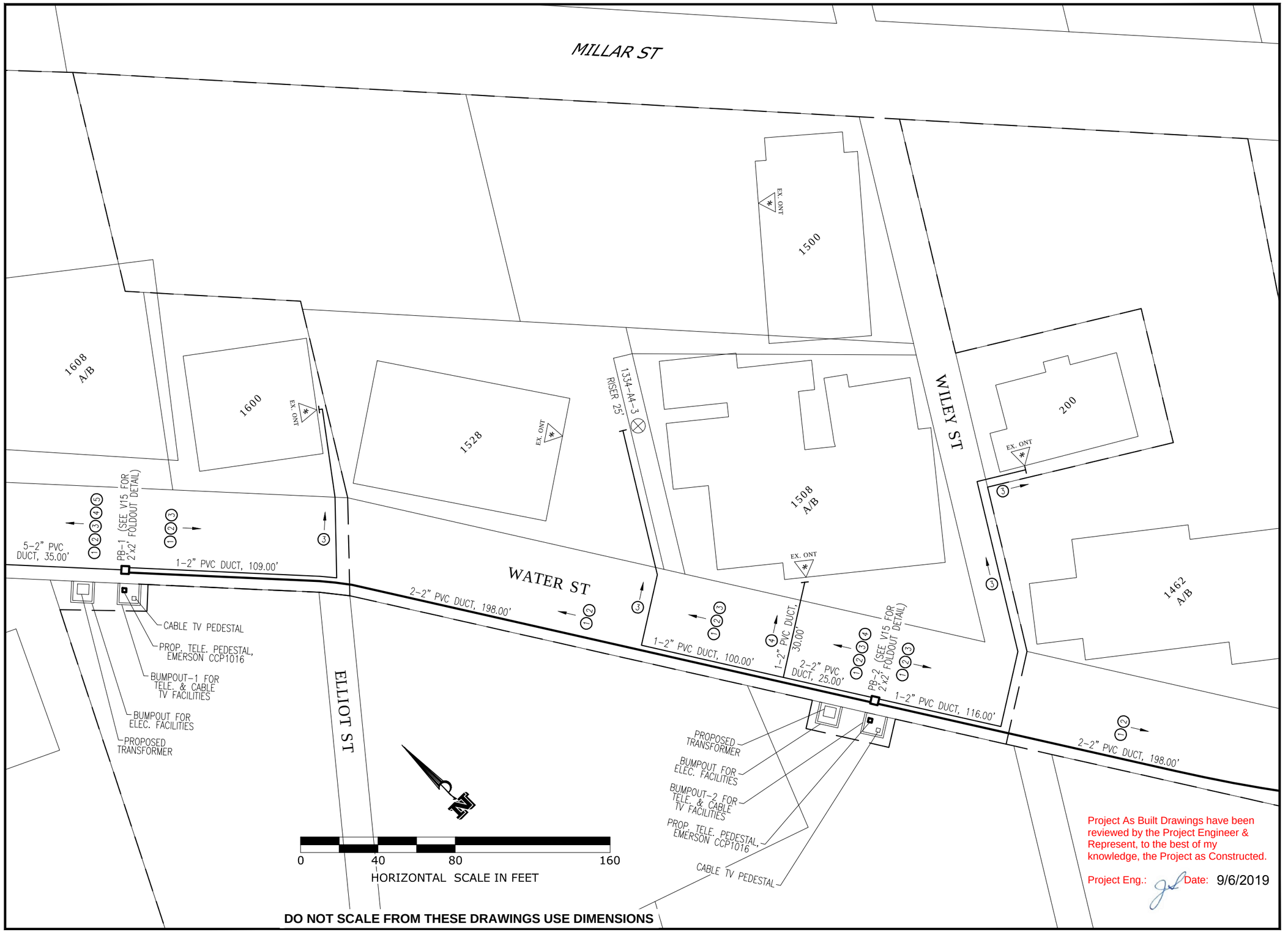
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V06	22



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSE\JOI\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: **V07 Monday, August 17, 2015 10:11:54 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
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- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
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- T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th Keith Nelson KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

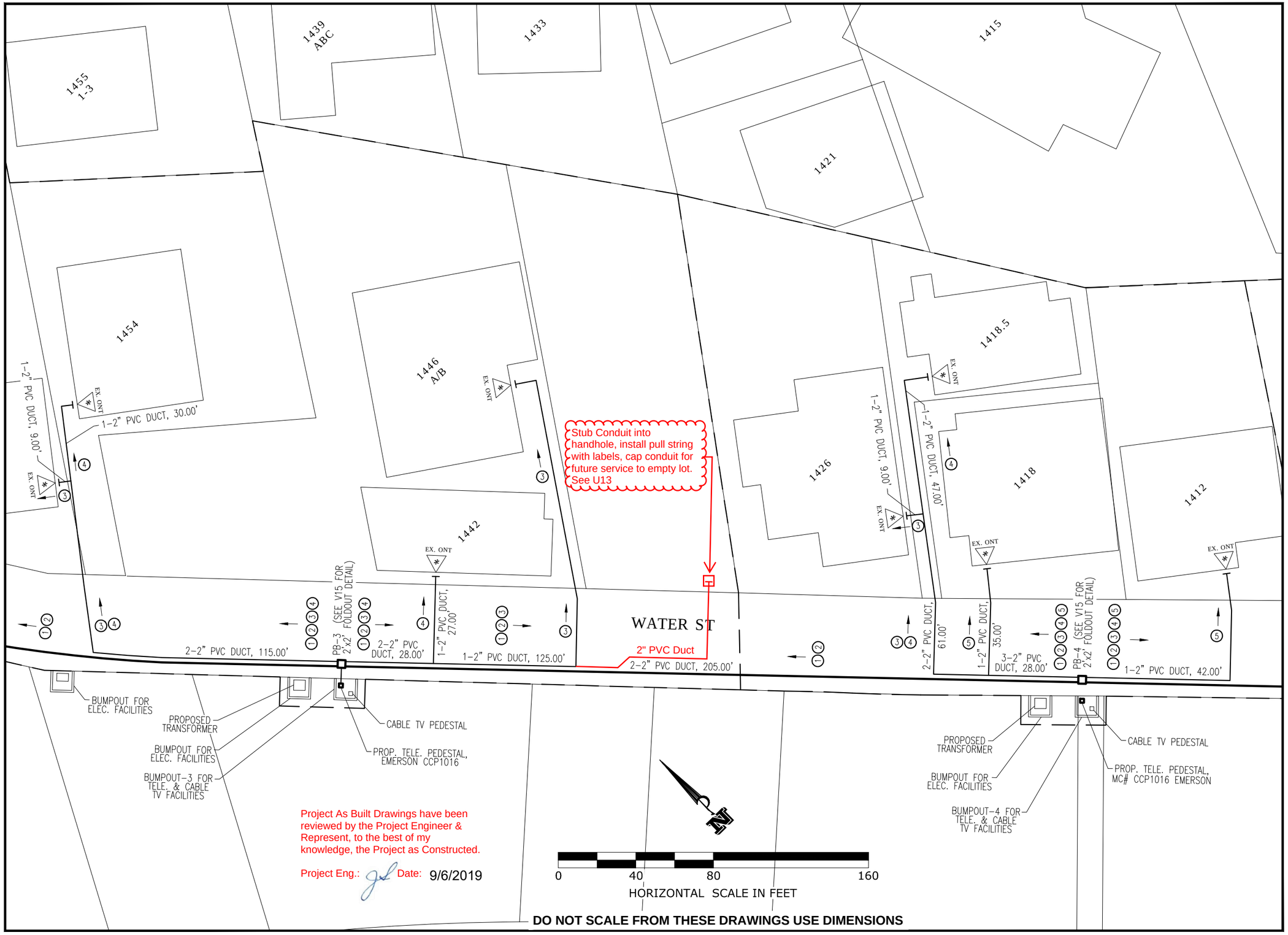
DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
V07	**22**



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSELIO\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: V08 Monday, August 17, 2015 10:12:04 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
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- EX. FOC LONG TAIL TO BE REMOVED
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- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP
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- F120-002 305+48 4P 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON EE-7655

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

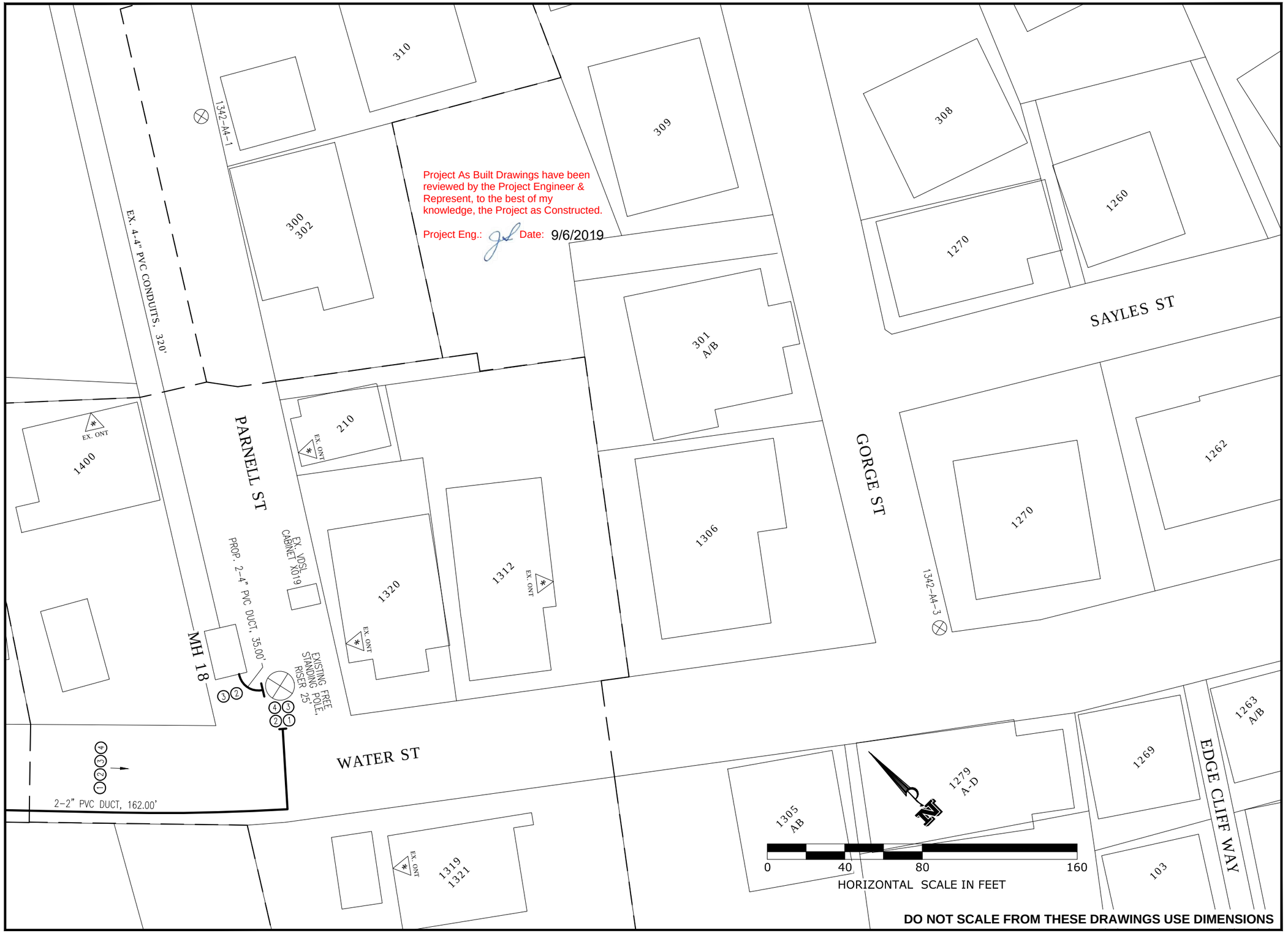
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V08	22



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TAB: **V09 Monday, August 17, 2015 10:12:14 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
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- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
V09	**22**

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

3. Sheets U10, V06, V10, V20 - The services to 1622 and 1626/1628 can be fed from existing pole P3 and revise the 1626/1628 KPU-E service mast.
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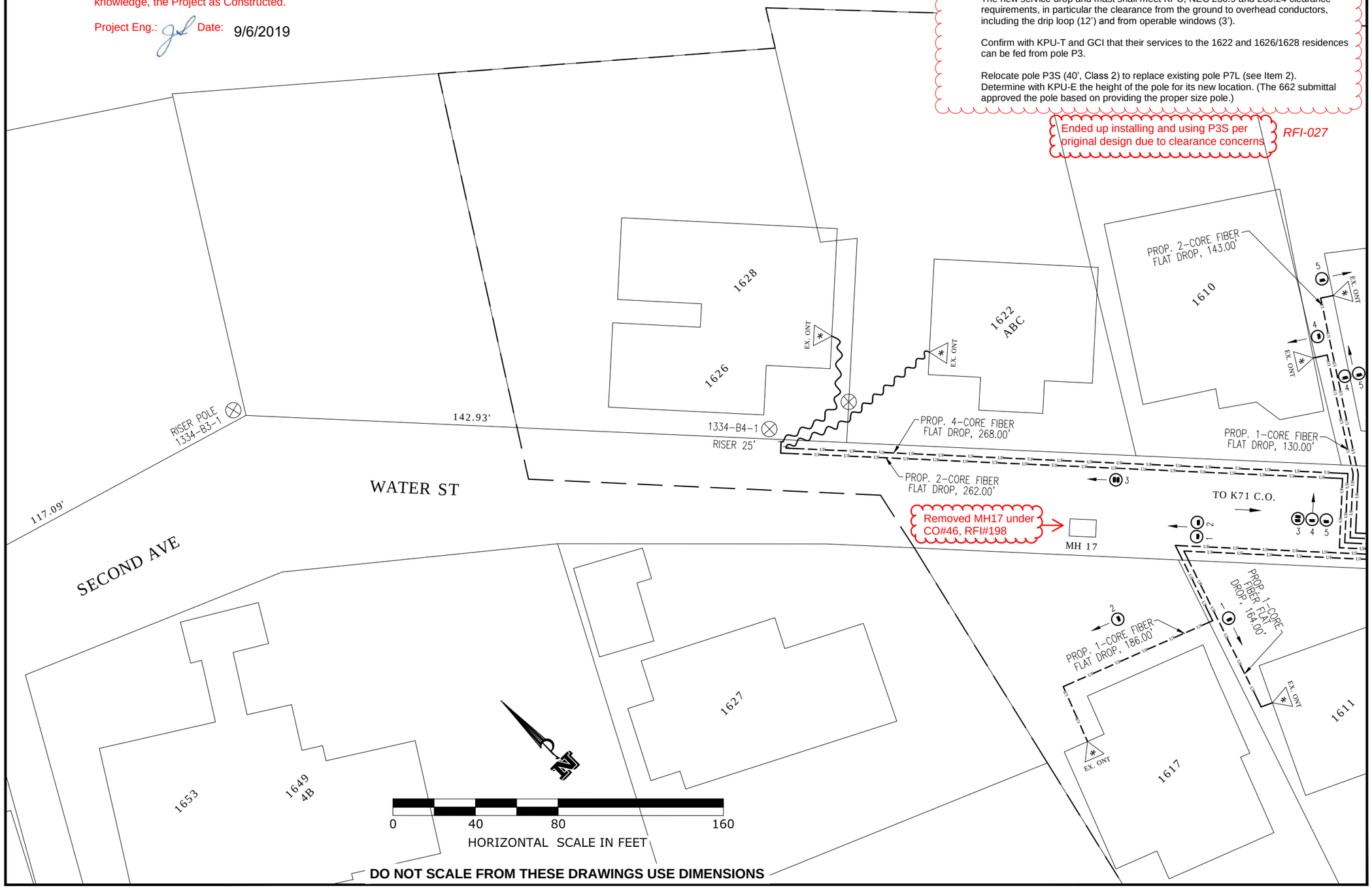
Confirm with KPU-T and GCI that their services to the 1622 and 1626/1628 residences can be fed from pole P3.

Relocate pole P3S (40', Class 2) to replace existing pole P7L (see Item 2). Determine with KPU-E the height of the pole for its new location. (The 662 submittal approved the pole based on providing the proper size pole.)

Ended up installing and using P3S per original design due to clearance concerns

RFI-027



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TAB: **V10 Monday, August 17, 2015 10:12:24 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
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EX. AER. COPPER TERMINAL (T120-002 305+48 25 1-25)
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM BRIDGES
PROJECT # 69534

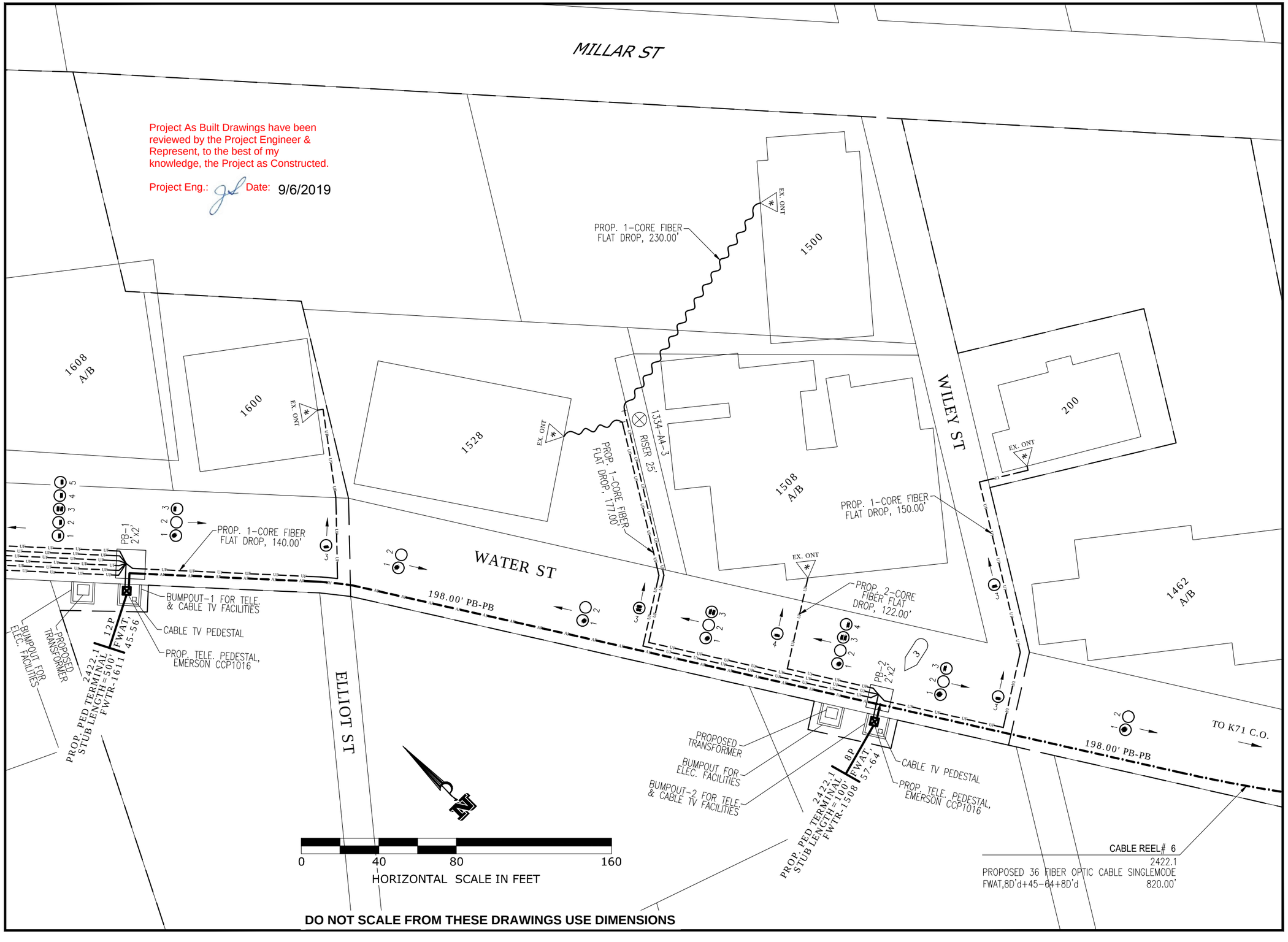
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
V10	22



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TAB: **V11 Monday, August 17, 2015 10:12:34 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
- F120-002 4P 305+48 49-52 — EX. AER. FIBER TERMINAL
- T120-002 25 305+48 1-25 — EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON EE-7655

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

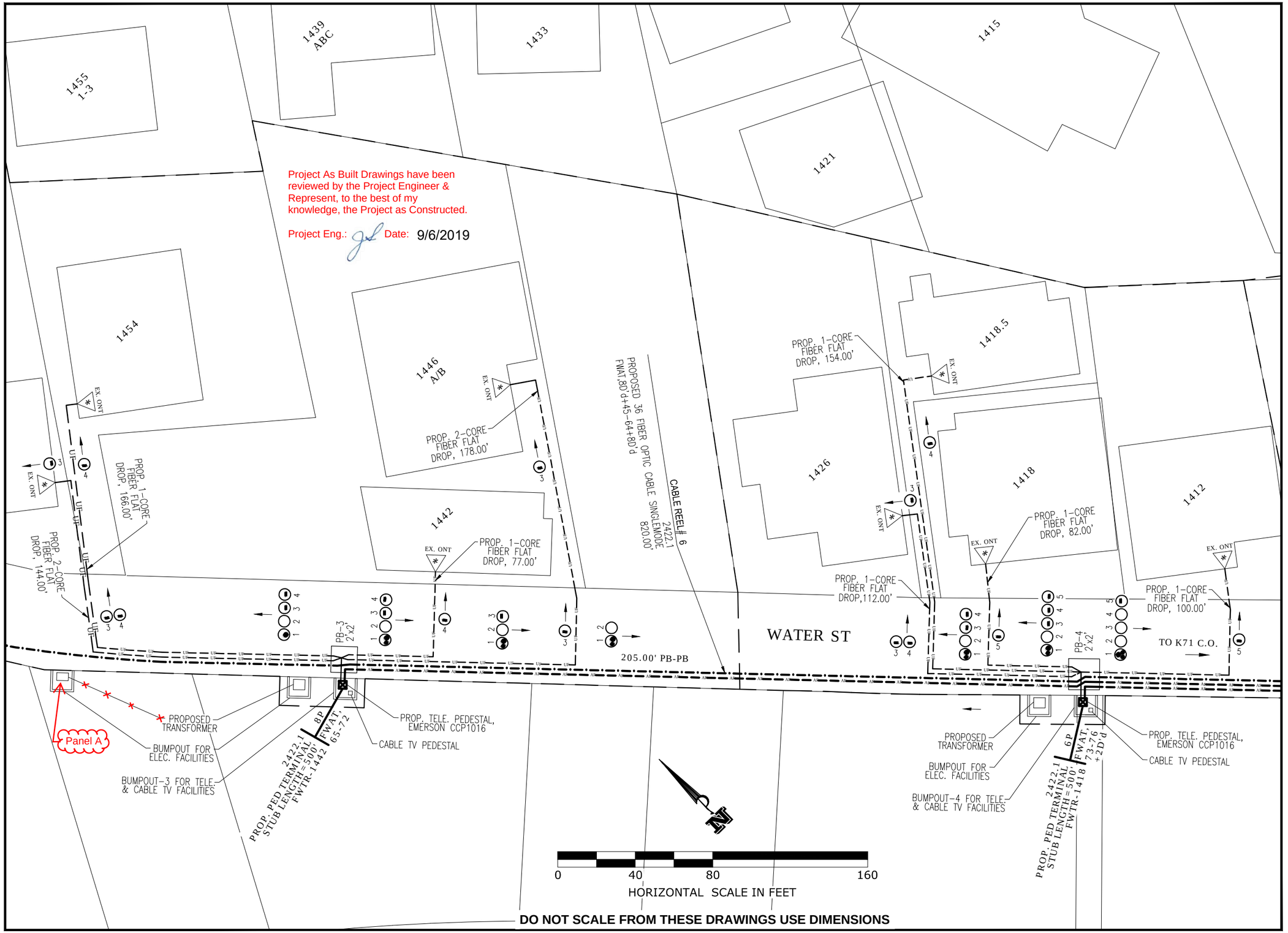
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	**2015**

SHEET NUMBER	TOTAL SHEETS
V11	**22**



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSE\JOI\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: **V12 Monday, August 17, 2015 10:12:44 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120)
- PROP. FIBER SLACK LOOP (120)
- F120-002 305+48 4P 49-52 EX. AER. FIBER TERMINAL
- T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th
KEITH NELSON EE-7655
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

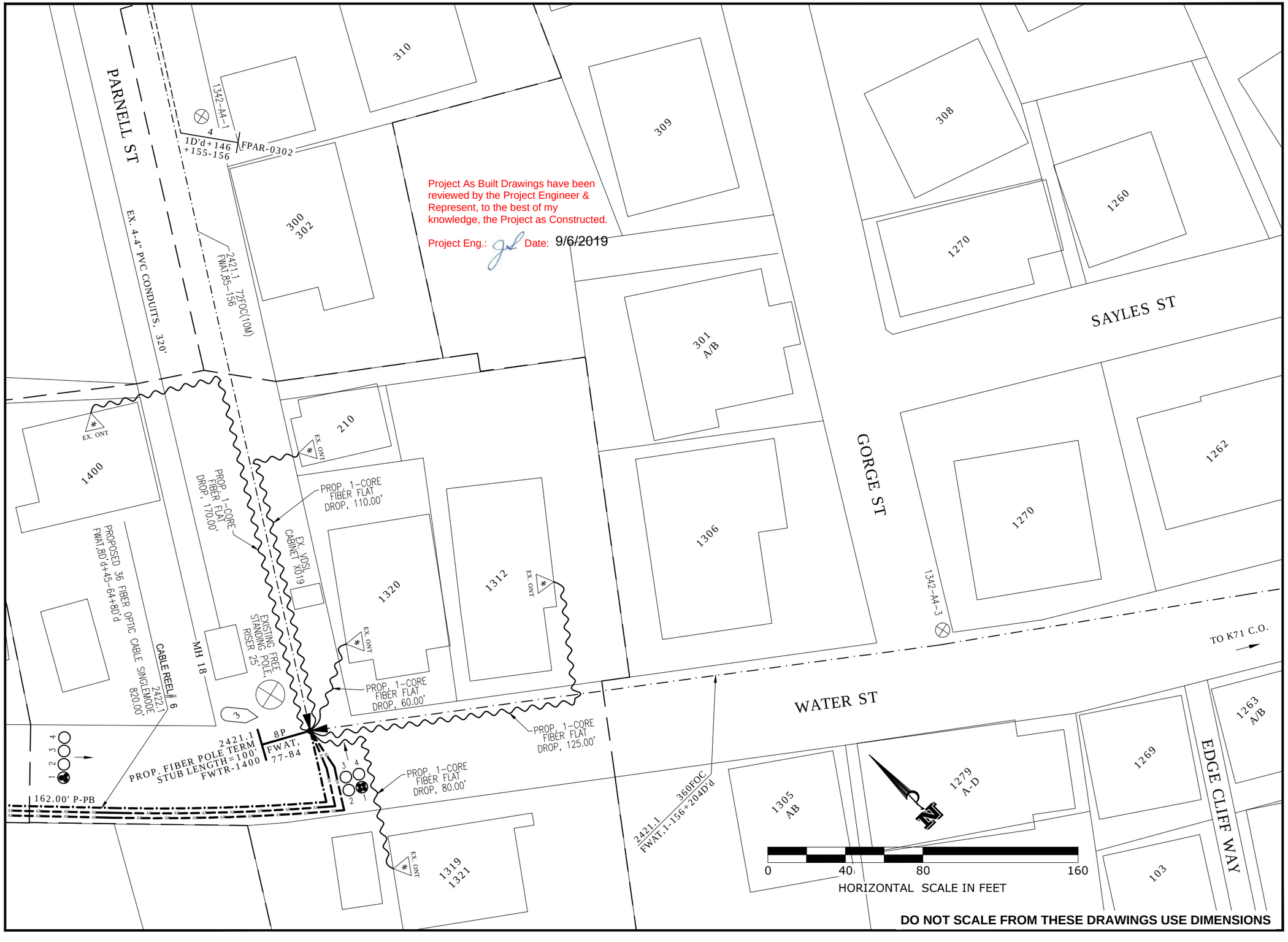
KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V12	22



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSE\JOI\2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: V13 Monday, August 17, 2015 10:12:54 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
- EX. AER. FIBER TERMINAL (F120-002 305+48 4P 49-52)
- EX. AER. COPPER TERMINAL (T120-002 305+48 25 1-25)
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

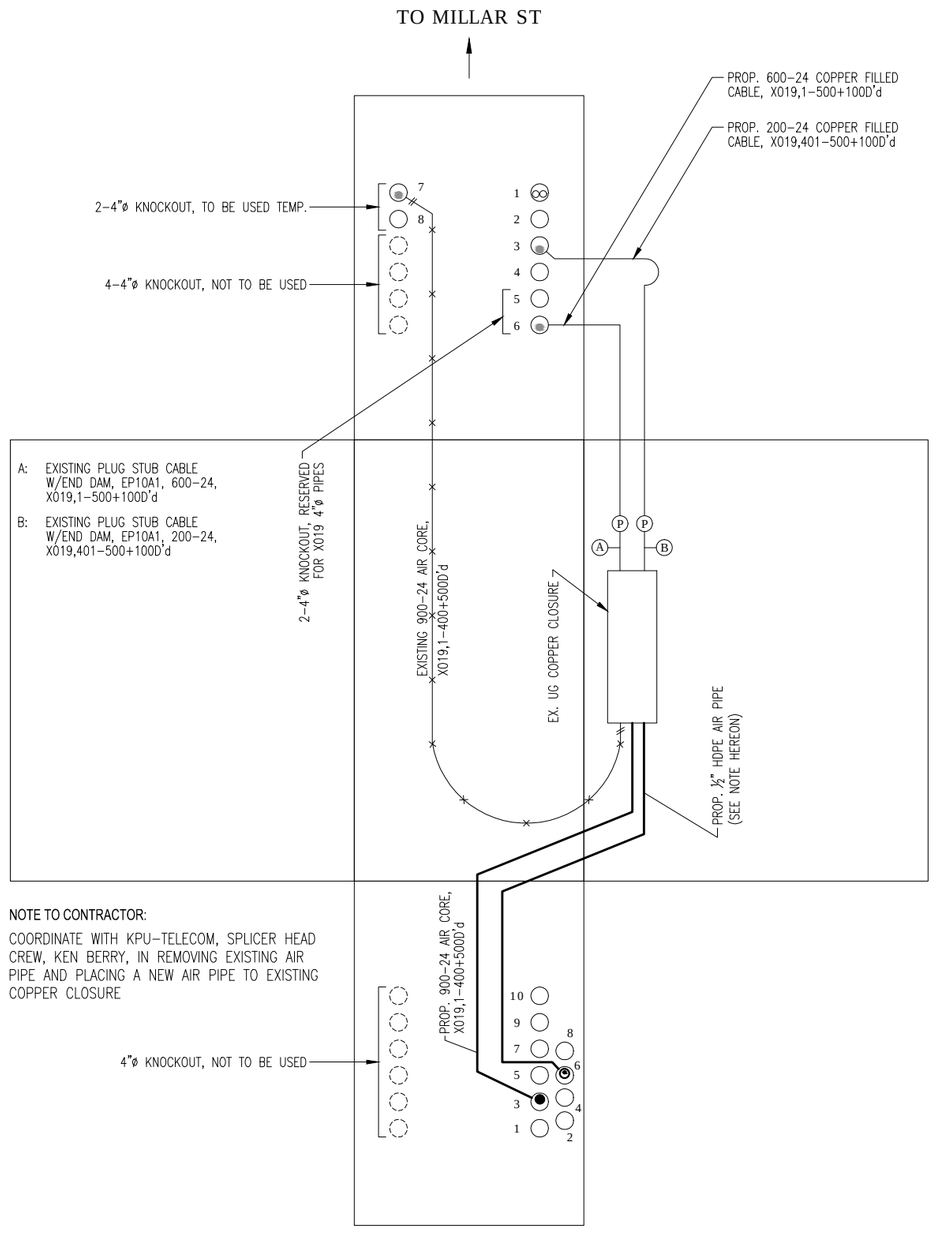
KTN WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V13	22



NOTE TO CONTRACTOR:

COORDINATE WITH KPU-TELECOM, SPLICER HEAD CREW, KEN BERRY, IN REMOVING EXISTING AIR PIPE AND PLACING A NEW AIR PIPE TO EXISTING COPPER CLOSURE

EXISTING VACANT CONDUITS AT SOUTH END (TO RISER/TO MAIN C.O.)

- 1 NO CONDUIT PLUG
- 2 NO CONDUIT PLUG
- 3 NO CONDUIT PLUG
- 9 WITH CONDUIT PLUG
- 10 WITH CONDUIT PLUG

MANHOLE-18 FOLDOUT

NOT TO SCALE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSEL|O#2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: **V14 Monday, August 17, 2015 10:13:03 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

- PROP. AERIAL FOC
- PROP. FOC LONG TAIL TERM.
- PROP. AERIAL COPPER CA.
- EXISTING AERIAL FOC
- EX. FOC LONG TAIL TERM.
- EX. AERIAL COPPER CA.
- EX. AER. FOC TO BE REMOVED
- EX. FOC LONG TAIL TO BE REMOVED
- EX. COPPER CABLE TO BE REMOVED
- PROPOSED POLE
- EXISTING POLE
- PROP. DOUBLE X-ARM ON PROP. POLE
- EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
- EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
- EX. DOUBLE X-ARM ON EX. POLE
- EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
- EX. GUY & ANCHOR TO BE REMOVED
- PROP. GUY & ANCHOR with PROP. LEAD (L=21')
- EXISTING FIBER SLACK LOOP (120')
- PROP. FIBER SLACK LOOP (120')
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- T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
- EX. FOC SPLICE POINT
- PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

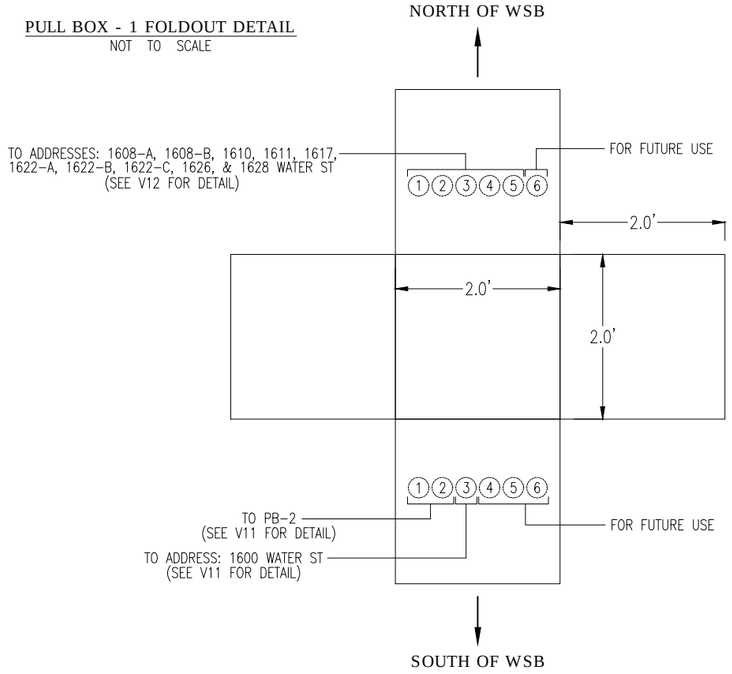
TELEPHONE CABLE LAYOUT

PROJECT DESIGNATION

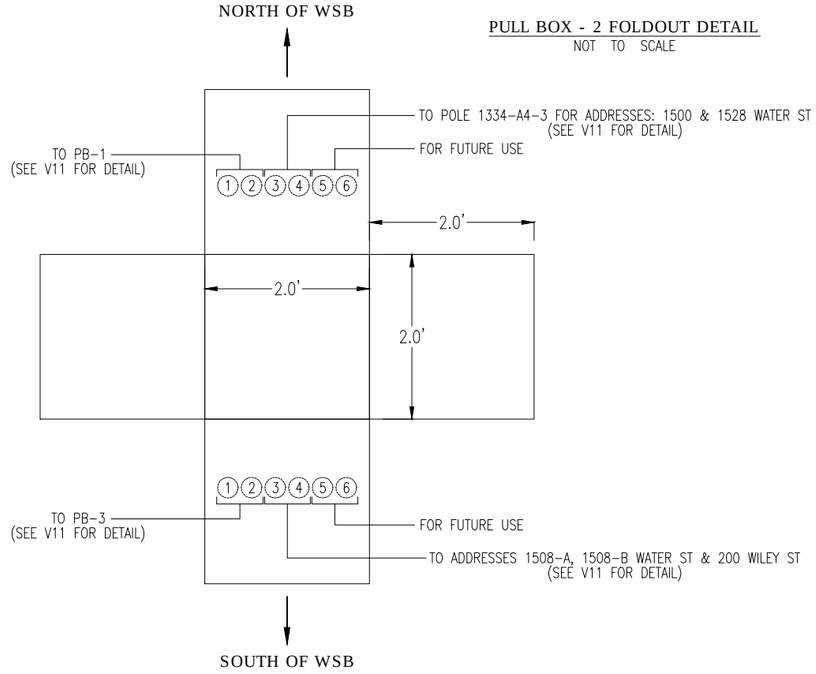
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V14	22

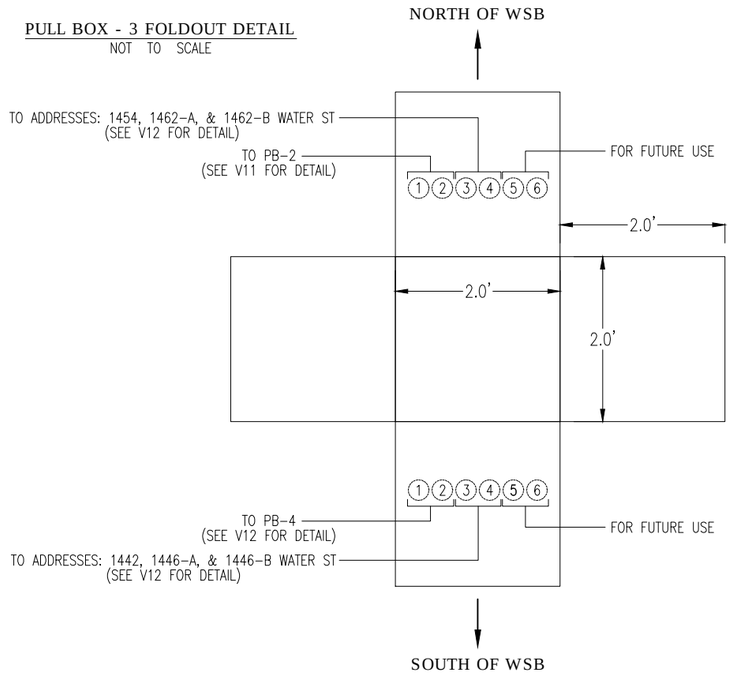
PULL BOX - 1 FOLDOUT DETAIL
NOT TO SCALE



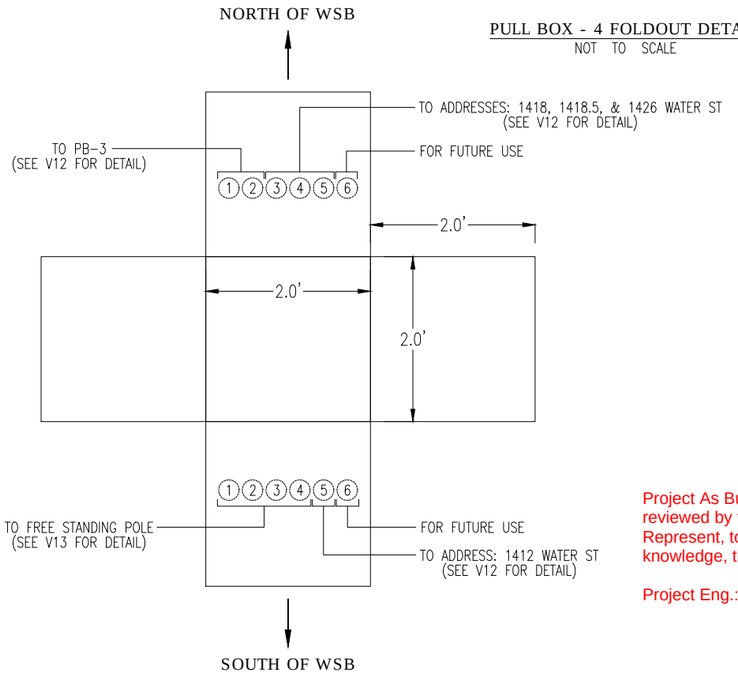
PULL BOX - 2 FOLDOUT DETAIL
NOT TO SCALE



PULL BOX - 3 FOLDOUT DETAIL
NOT TO SCALE



PULL BOX - 4 FOLDOUT DETAIL
NOT TO SCALE



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\KPU-T V1-16 PSEJO#2013-2410-100-86 FIBER PLACEMENT AT WATER ST BRIDGE P-2 CONST_17MAR2015.DWG

TAB: **V15 Monday, August 17, 2015 10:13:09 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PROP. AERIAL FOC
PROP. FOC LONG TAIL TERM.
PROP. AERIAL COPPER CA.
EXISTING AERIAL FOC
EX. FOC LONG TAIL TERM.
EX. AERIAL COPPER CA.
EX. AER. FOC TO BE REMOVED
EX. FOC LONG TAIL TO BE REMOVED
EX. COPPER CABLE TO BE REMOVED
PROPOSED POLE
EXISTING POLE
PROP. DOUBLE X-ARM ON PROP. POLE
EX. POLE & EX. DOUBLE X-ARM TO BE REMOVED
EX. POLE & EX. SINGLE X-ARM OR ALLEY-ARM TO BE REMOVED
EX. DOUBLE X-ARM ON EX. POLE
EX. SINGLE X-ARM OR ALLEY-ARM ON EX. POLE
EX. GUY & ANCHOR TO BE REMOVED
L=21' PROP. GUY & ANCHOR with PROP. LEAD
120' EXISTING FIBER SLACK LOOP
120' PROP. FIBER SLACK LOOP
F120-002 305+48 4P 49-52 EX. AER. FIBER TERMINAL
T120-002 305+48 25 1-25 EX. AER. COPPER TERMINAL
EX. FOC SPLICE POINT
PROP. SPLICE ON EX. FIBER SPLICE POINT

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON REGISTERED PROFESSIONAL ENGINEER KEITH NELSON EE-7655

DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

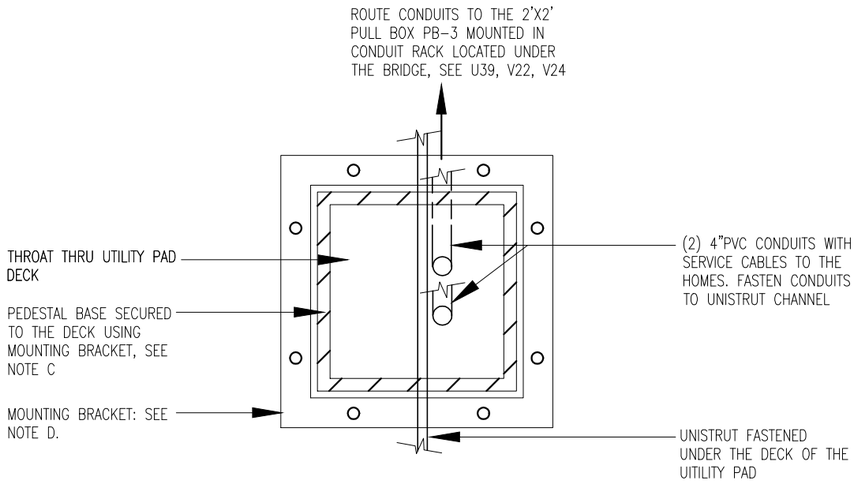
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE CABLE LAYOUT

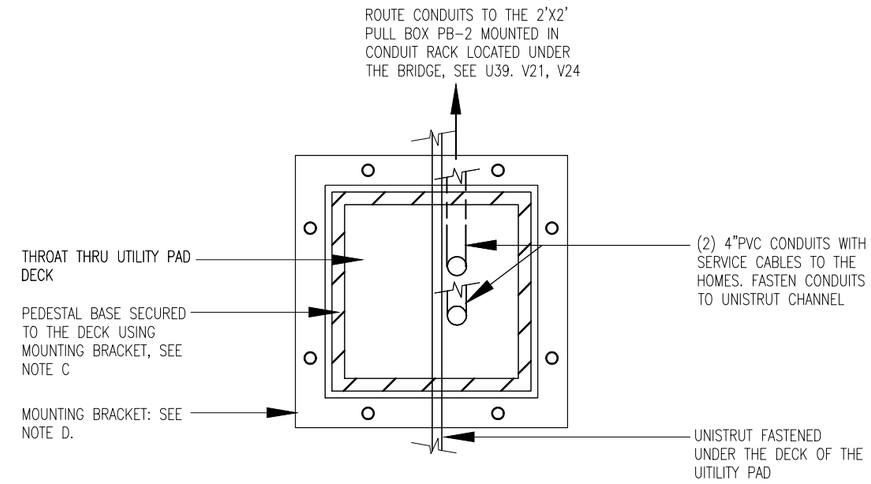
PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V15	22



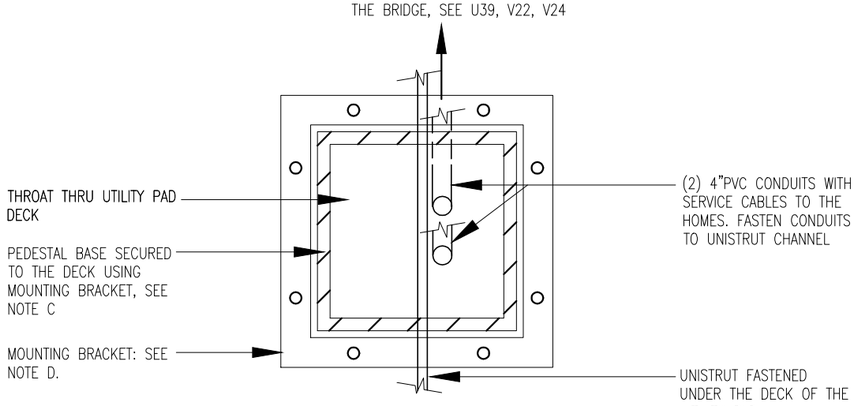
UTILITY PAD 1 – PEDESTAL

NO SCALE



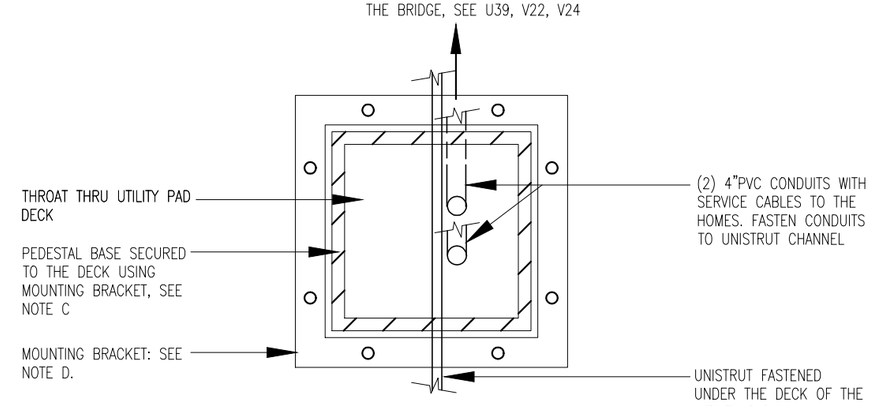
UTILITY PAD 2 – PEDESTAL

NO SCALE



UTILITY PAD 3 – PEDESTAL

NO SCALE



UTILITY PAD 4 – PEDESTAL

NO SCALE

GENERAL NOTES:

A. THE DETAILS SHOW THE BASIC LAYOUT FOR THE PEDESTAL INSTALLATION. CONFIRM THE PEDESTAL SIZE AND MOUNTING BRACKET DIMENSIONS WITH GCI, THEN COORDINATE THE THROAT SIZE AND INSERT LOCATION FOR THE MOUNTING BRACKET AND THE UNISTRUT UNDER THE DECK WITH THE CONCRETE DECK FABRICATOR WHO WILL PLACE THE THROAT AND INSERTS IN THE DECK.

B. UNLESS OTHERWISE NOTED, THE CONDUIT SIZES ARE 4"PVC SCHEDULE 80.

C. KPU–T ANTICIPATES THAT PED–1 THRU PED–4 WILL FIT OVER THE THROAT SIZE SHOWN. COORDINATE THE FINAL THROAT SIZE WITH THE BRIDGE DECK FABRICATOR.

D. MOUNTING BRACKETS: FABRICATE BRACKET TO FIT AROUND THE PERIMETER OF THE PEDESTAL HOUSING USING HOT DIPPED GALVANIZED 2"X2", 1/4" THICK ANGLE.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V16 Monday, August 17, 2015 10:22:21 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

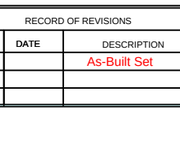
No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE

⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY: KCN



DESIGNED BY: R. MOJE

DRAWN BY: R. MOJE

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

TELEPHONE PEDESTALS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V16	22

GENERAL NOTES

A. THE CONDUIT INSTALLATION SHOWN ON THIS SHEET ARE FOR THE CABLE TV SYSTEM; THE WORK SHALL BE DONE AS WORK ITEM 662(3). GCI WILL INSTALL THEIR CABLING USING THE CONDUIT SYSTEM AND WILL TERMINATE THEIR INFRASTRUCTURE.

B. SEE ONE LINE DIAGRAM ON SHEET U18 FOR GENERAL LAYOUT INFORMATION.

C. CONDUITS LOCATED UNDER THE TRESTLE BRIDGE SHALL BE INSTALLED IN A CONDUIT RACK, SEE U36–39.

D. CONDUITS LOCATED IN THE EARTHEN RETAINING WALL PORTION OF THE BRIDGE AND THE PAVED STREET BEYOND THE ABUTMENT AT STATION 12+28 SHALL BE INSTALLED IN A TRENCH, SEE 1&3/U35.

E. THE SERVICES TO THE HOME SHALL BE INSTALLED IN A TRENCH LOCATED ON PRIVATE PROPERTY UPHILL FROM THE SOLDIER PILE WALL, SEE 1/U35. STUB CONDUIT UP 8" BELOW THE NID, INSTALL END BUSHING ON CONDUIT AND A PULL STRING FROM THE NID TO THE PEDESTAL WITH LABELS AT EACH END OF THE STRING INDICATING THE HOUSE ADDRESS. SEE PHOTOS ON U45–47 FOR POLE INFORMATION AND U47–53 FOR SERVICE EQUIPMENT AND TERRAIN INFORMATION AT EACH ADDRESS.

F. WHERE HOMES ON ADJACENT PROPERTIES ARE FED IN A COMMON TRENCH, THE CONDUITS SHALL BE INSTALLED WITHIN THE EASEMENT.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

3. Sheets U10, V06, V10, V20 - The services to 1622 and 1626/1628 can be fed from existing pole P3 and revise the 1626/1628 KPU-E service mast.
At pole P3, install a service lateral (sized per KPU to meet load) with riser from the padmount transformer; delete (2) individual 1/0 homeruns.

Obtain permission from the 1626/1628 owner for the service mast modifications. If granted, revise the service mast at 1626/1628 to accommodate a service drop from P3. The new service drop and mast shall meet KPU, NEC 230.9 and 230.24 clearance requirements, in particular the clearance from the ground to overhead conductors, including the drip loop (12') and from operable windows (3').

Confirm with KPU-T and GCI that their services to the 1622 and 1626/1628 residences can be fed from pole P3.

Relocate pole P3S (40', Class 2) to replace existing pole P7L (see Item 2). Determine with KPU-E the height of the pole for its new location. (The 662 submittal approved the pole based on providing the proper size pole.)

RFI-027

Ended up installing and using P3S per original design due to clearance concerns

INSTALL (2) 2"C RISERS ON POLE ~~P2~~ P1 ONE WILL BE USED FOR GCI DISTRIBUTION CABLING, ONE SPARE. GCI WILL INSTALL THEIR CABLING.

INSTALL (3) 2"C RISERS ON POLE P3 FOR OVERHEAD SERVICES TO 1622, 1627, 1628

P2 eliminated with CO#46, RFI#204, all telecom conduit originally designated for P2 instead run up P1

P1 ~~P2~~

RISER POLE 1334–B3–1

142.93'

1334–B4–1 P3

3–2" PVC

FOR OVERHEAD SERVICES TO 1622, 1627, 1628

P3S

BOILER HOUSE LOCATED BEHIND THE 1608 RESIDENCE

EX. GCI NID

1–2" PVC STUB UP NEAR ROCK RETAINING WALL. GCI WILL SURFACE MOUNT CABLE FROM CONDUIT TO THE NID LOCATION

1–2" PVC

2–2" PVC EASEMENT E–6B

3–2" PVC

WATER ST

2–2" PVC FOR DISTRIBUTION INSTALLED IN TRENCH, SEE U18

NEW PAVEMENT

Removed MH17 under CO#46, RFI#198

MH 17

2–2" PVC

117.09'

SECOND AVE

AT THE ABUTMENT TRANSITION THE CONDUIT RUNS FROM UNDER THE BRIDGE TO UNDERGROUND RUNS. ROUTE 1617 CONDUIT IN EASEMENT ACROSS A611 PROPERTY

2–2" PVC EASEMENT E–9B

1–2" PVC

0 40 80 160

HORIZONTAL SCALE IN FEET

EXISTING 2"C RUN UNDERGROUND FROM NID LOCATION TO THE EDGE OF DRIVEWAY (END OF RUN MARKED WITH 2X4). CONNECT THE NEW 2"C TO EXISTING 2"C AND INSTALL PULL STRING WITH LABELS.

1628 1626 1622 ABC 1610 1627 1649 4B 1653 1617 1611

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V20 Monday, August 17, 2015 10:06:58 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE

⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: TED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

CABLE TV LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
V20	22

GENERAL NOTES

A. THE CONDUIT INSTALLATION SHOWN ON THIS SHEET ARE FOR THE CABLE TV SYSTEM; THE WORK SHALL BE DONE AS WORK ITEM 662(3). GCI WILL INSTALL THEIR CABLING USING THE CONDUIT SYSTEM AND WILL TERMINATE THEIR INFRASTRUCTURE.

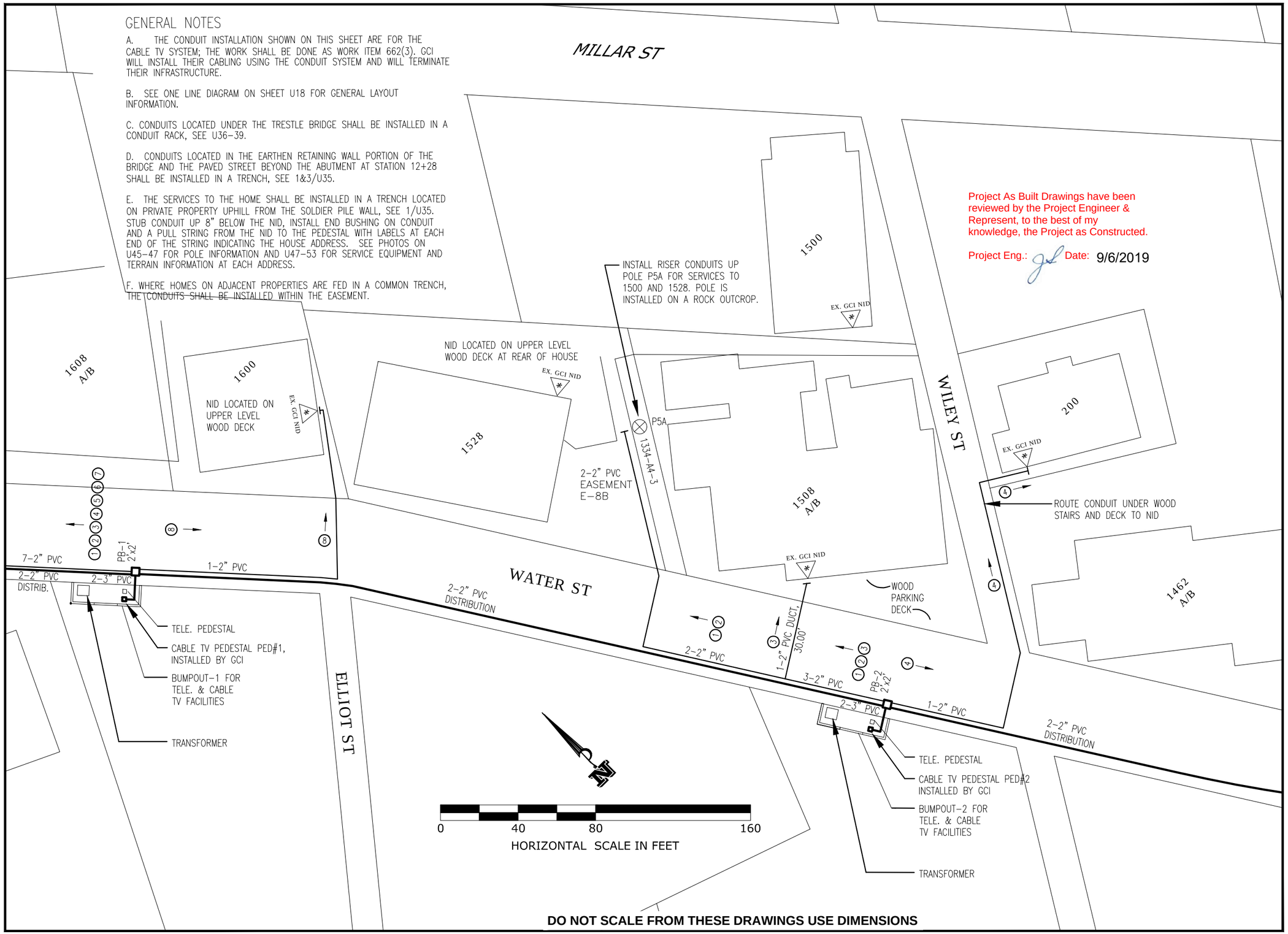
B. SEE ONE LINE DIAGRAM ON SHEET U18 FOR GENERAL LAYOUT INFORMATION.

C. CONDUITS LOCATED UNDER THE TRESTLE BRIDGE SHALL BE INSTALLED IN A CONDUIT RACK, SEE U36–39.

D. CONDUITS LOCATED IN THE EARTHEN RETAINING WALL PORTION OF THE BRIDGE AND THE PAVED STREET BEYOND THE ABUTMENT AT STATION 12+28 SHALL BE INSTALLED IN A TRENCH, SEE 1&3/U35.

E. THE SERVICES TO THE HOME SHALL BE INSTALLED IN A TRENCH LOCATED ON PRIVATE PROPERTY UPHILL FROM THE SOLDIER PILE WALL, SEE 1/U35. STUB CONDUIT UP 8" BELOW THE NID, INSTALL END BUSHING ON CONDUIT AND A PULL STRING FROM THE NID TO THE PEDESTAL WITH LABELS AT EACH END OF THE STRING INDICATING THE HOUSE ADDRESS. SEE PHOTOS ON U45–47 FOR POLE INFORMATION AND U47–53 FOR SERVICE EQUIPMENT AND TERRAIN INFORMATION AT EACH ADDRESS.

F. WHERE HOMES ON ADJACENT PROPERTIES ARE FED IN A COMMON TRENCH, THE CONDUITS SHALL BE INSTALLED WITHIN THE EASEMENT.



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V21 Monday, August 17, 2015 10:07:06 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE

⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: TED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

CABLE TV LAYOUT

PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
V21	22

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

GENERAL NOTES

A. THE CONDUIT INSTALLATION SHOWN ON THIS SHEET ARE FOR THE CABLE TV SYSTEM; THE WORK SHALL BE DONE AS WORK ITEM 662(3). GCI WILL INSTALL THEIR CABLING USING THE CONDUIT SYSTEM AND WILL TERMINATE THEIR INFRASTRUCTURE.

B. SEE ONE LINE DIAGRAM ON SHEET U18 FOR GENERAL LAYOUT INFORMATION.

C. CONDUITS LOCATED UNDER THE TRESTLE BRIDGE SHALL BE INSTALLED IN A CONDUIT RACK, SEE U36–39.

D. CONDUITS LOCATED IN THE EARTHEN RETAINING WALL PORTION OF THE BRIDGE AND THE PAVED STREET BEYOND THE ABUTMENT AT STATION 12+28 SHALL BE INSTALLED IN A TRENCH, SEE 1&3/U35.

E. THE SERVICES TO THE HOME SHALL BE INSTALLED IN A TRENCH LOCATED ON PRIVATE PROPERTY UPHILL FROM THE SOLDIER PILE WALL, SEE 1/U35. STUB CONDUIT UP 8" BELOW THE NID, INSTALL END BUSHING ON CONDUIT AND A PULL STRING FROM THE NID TO THE PEDESTAL WITH LABELS AT EACH END OF THE STRING INDICATING THE HOUSE ADDRESS. SEE PHOTOS ON U45–47 FOR POLE INFORMATION AND U47–53 FOR SERVICE EQUIPMENT AND TERRAIN INFORMATION AT EACH ADDRESS.

F. WHERE HOMES ON ADJACENT PROPERTIES ARE FED IN A COMMON TRENCH, THE CONDUITS SHALL BE INSTALLED WITHIN THE EASEMENT.

1439
1433
1454
1462 A/B
1446 A/B
1442
1426
1418.5
1418
1412
EX. GCI NID
EX. GCI NIDs
NID LOCATED ON UPPER LEVEL WOOD DECK
ROUTE CONDUIT UNDER WOOD STAIR AND WOOD DECK TO THE NID, SEE U13
STUB CONDUIT INTO HANDHOLE, INSTALL PULL STRING WITH LABELS, CAP CONDUIT FOR FUTURE SERVICE TO EMPTY LOT. SEE U13.
1–2" PVC
2–2" PVC
3–2" PVC
2–2" PVC DISTRIBUTION
EASEMENT E–16C
ROUTE GOES THRU CONCRETE PAST THE CMU WALL TO THE 1454 WOOD STAIRS – BRANCH OFF IN TO FEED 1462. ROUTE TO 1454 CONTINUES FASTEN UNDER WOOD STAIRS AND LANDINGS TO THE NID
1–2" PVC ROUTE GOES THRU CONCRETE SIDEWALK AND BRICK PAVERS.
3–2" PVC EASEMENT E–16C
1–2" PVC ROUTE GOES THRU CONCRETE STEPS WITH ROCK RISERS THEN ROUTE THE CONDUIT UNDER WOOD LANDINGS AND STAIRS TO THE NID.
PB–3 2'x2'
PB–4 (SEE V25 FOR 2'x2' FOLDOUT DETAIL)
WATER ST
BUMPOUT FOR LIGHTING PANEL
TELE. PEDESTAL
CABLE TV PEDESTAL PED#3 INSTALLED BY GCI
BUMPOUT–3 FOR TELE. & CABLE TV FACILITIES
TRANSFORMER
1–2" PVC TO POLE P10. STUB THRU ABUTMENT. INSTALL PULL STRING WITH LABELS AND CAP CONDIT
CABLE TV PEDESTAL PED#4 INSTALLED BY GCI
BUMPOUT–4 FOR TELE. & CABLE TV FACILITIES

0 40 80 160
HORIZONTAL SCALE IN FEET

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V22 Monday, August 17, 2015 10:07:16 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE
⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE–7655 8–7–15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

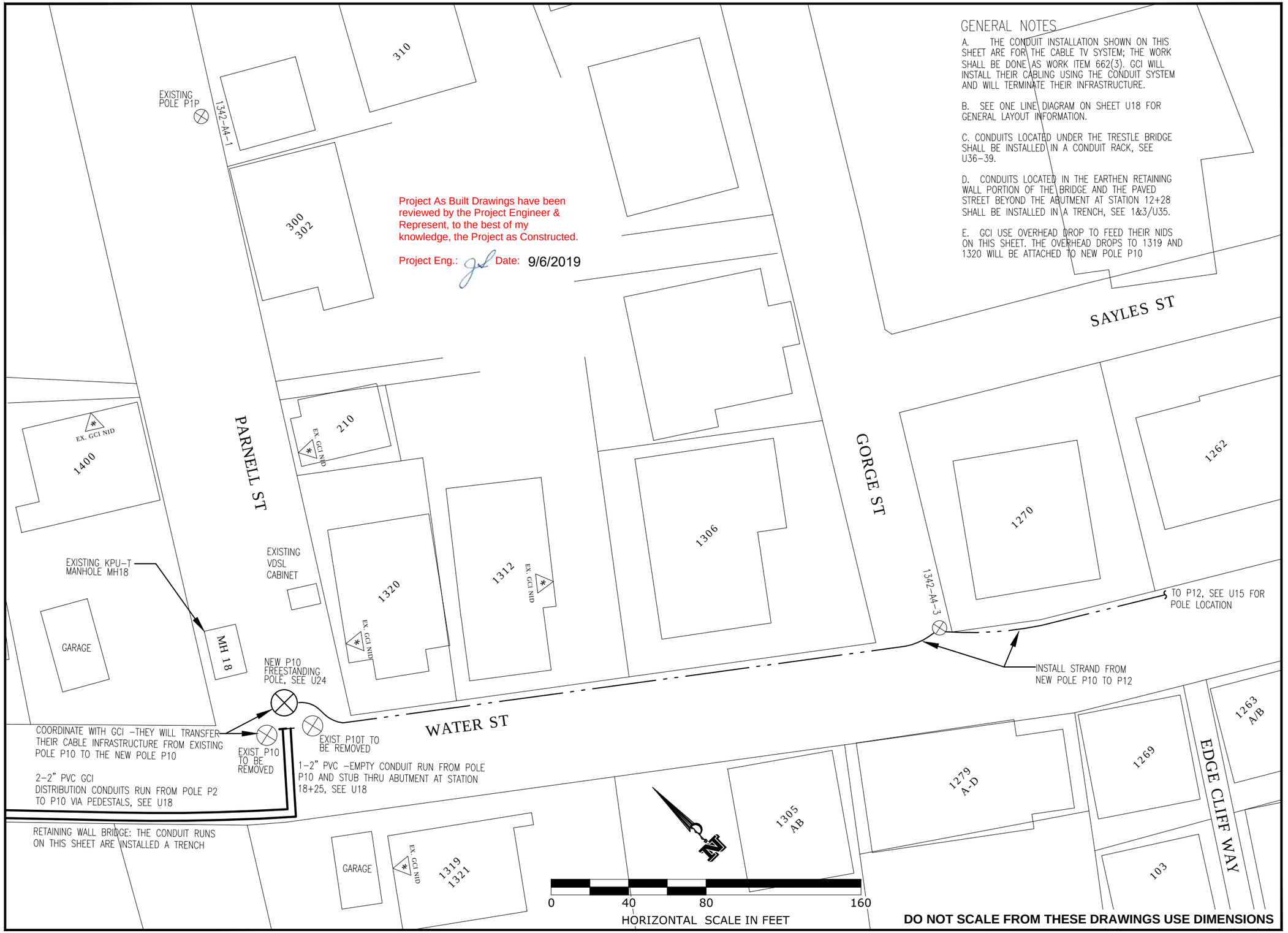
DRAWN BY: TED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

CABLE TV LAYOUT

PROJECT DESIGNATION	
BR-000S(735) ~ 69534	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V22	22



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

GENERAL NOTES

A. THE CONDUIT INSTALLATION SHOWN ON THIS SHEET ARE FOR THE CABLE TV SYSTEM; THE WORK SHALL BE DONE AS WORK ITEM 662(3). GCI WILL INSTALL THEIR CABLING USING THE CONDUIT SYSTEM AND WILL TERMINATE THEIR INFRASTRUCTURE.

B. SEE ONE LINE DIAGRAM ON SHEET U18 FOR GENERAL LAYOUT INFORMATION.

C. CONDUITS LOCATED UNDER THE TRESTLE BRIDGE SHALL BE INSTALLED IN A CONDUIT RACK, SEE U36-39.

D. CONDUITS LOCATED IN THE EARTHEN RETAINING WALL PORTION OF THE BRIDGE AND THE PAVED STREET BEYOND THE ABUTMENT AT STATION 12+28 SHALL BE INSTALLED IN A TRENCH, SEE 1&3/U35.

E. GCI USE OVERHEAD DROP TO FEED THEIR NIDS ON THIS SHEET. THE OVERHEAD DROPS TO 1319 AND 1320 WILL BE ATTACHED TO NEW POLE P10

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V23 Monday, August 17, 2015 10:07:26 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE

⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON EE-7655 8-7-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: TED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT # 69534

CABLE TV LAYOUT

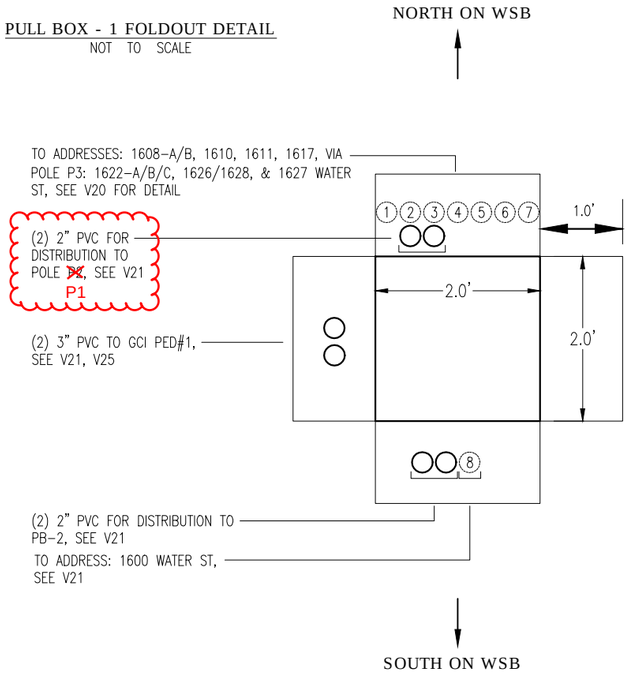
PROJECT DESIGNATION

BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V23	22

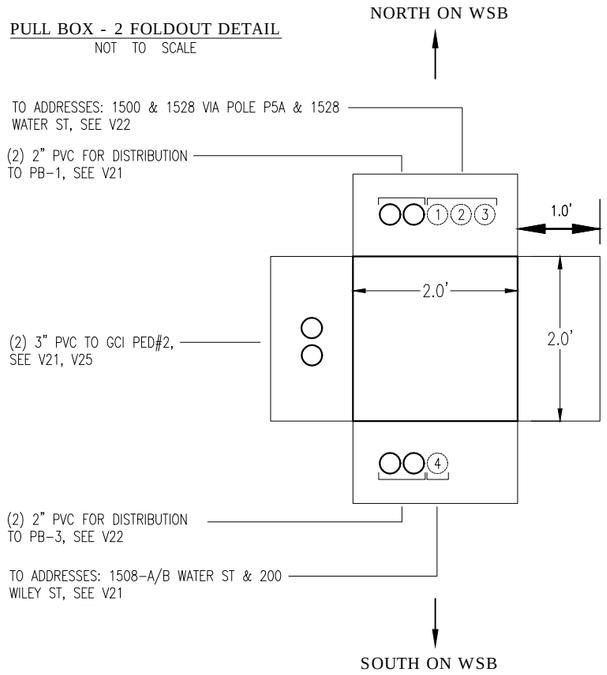
PULL BOX - 1 FOLDOUT DETAIL

NOT TO SCALE



PULL BOX - 2 FOLDOUT DETAIL

NOT TO SCALE



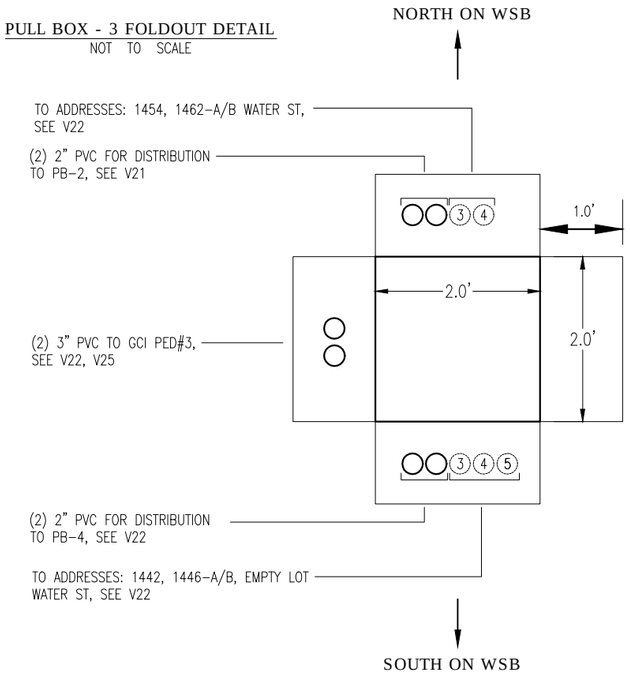
GENERAL NOTES:

A. THE DETAILS SHOW THE BASIC LAYOUT FOR THE PULL BOXES. CONFIRM QUANTITIES AND SIZES IN THE FIELD WITH GCI AND ARRANGE CONDUITS FOR BEST CABLE ROUTING.

B. UNLESS OTHERWISE NOTED, THE CONDUIT SIZES ARE 2"PVC SCHEDULE 80.

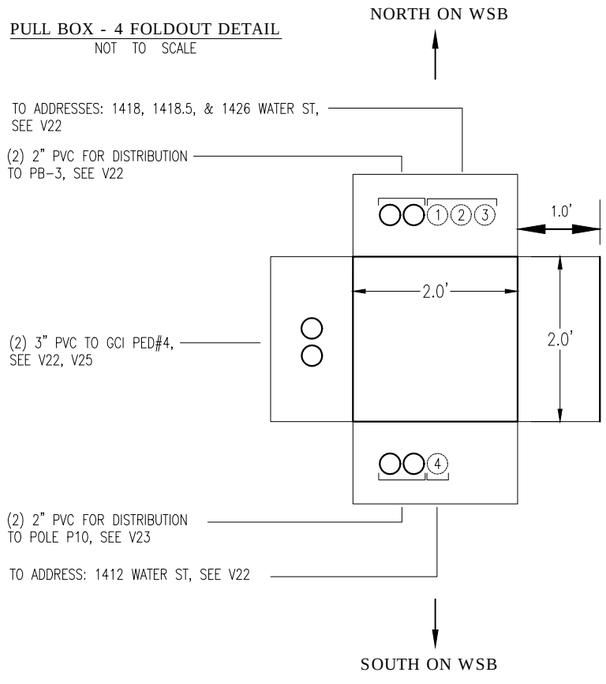
PULL BOX - 3 FOLDOUT DETAIL

NOT TO SCALE



PULL BOX - 4 FOLDOUT DETAIL

NOT TO SCALE



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V24 Monday, August 17, 2015 10:07:37 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

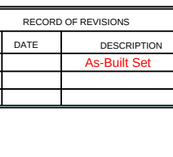
No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE

⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY:



DESIGNED BY: KCN

DRAWN BY: TED

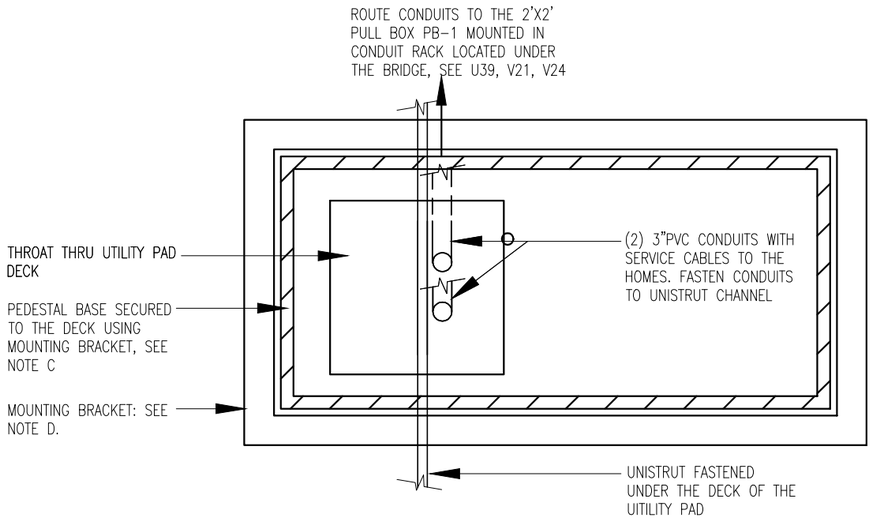
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES
PROJECT # 69534

CABLE TV PULL BOXES

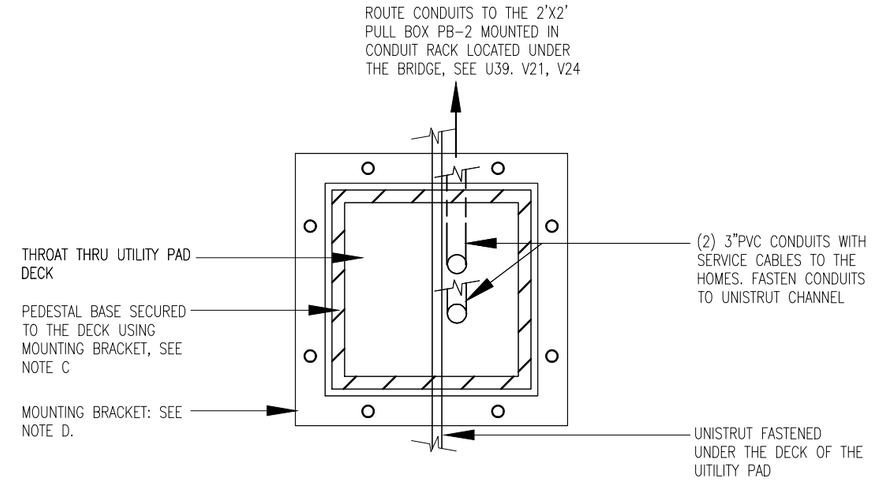
PROJECT DESIGNATION
BR-000S(735) ~ 69534

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V24	22



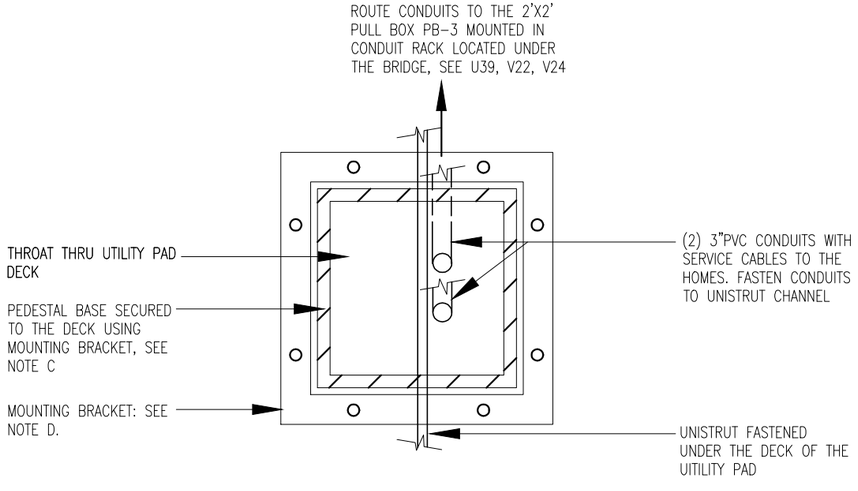
UTILITY PAD 1 – PEDESTAL

NO SCALE



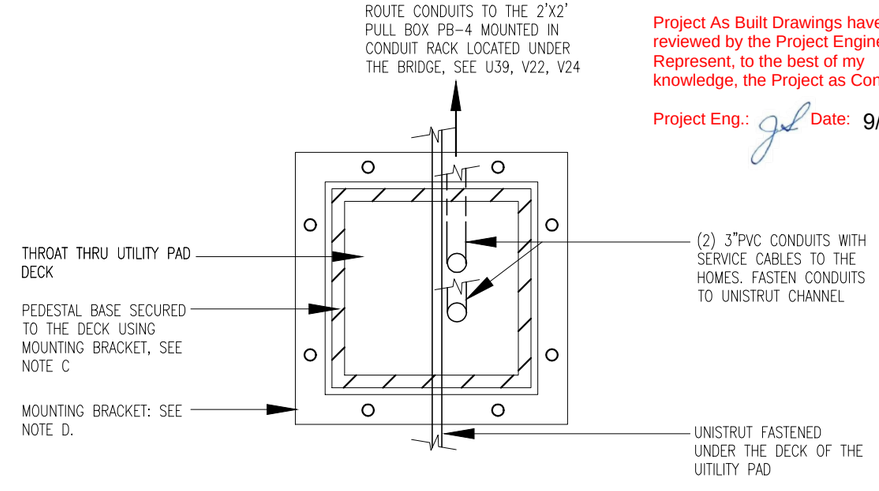
UTILITY PAD 2 – PEDESTAL

NO SCALE



UTILITY PAD 3 – PEDESTAL

NO SCALE



UTILITY PAD 4 – PEDESTAL

NO SCALE

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

GENERAL NOTES:

A. THE DETAILS SHOW THE BASIC LAYOUT FOR THE PEDESTAL INSTALLATION. CONFIRM THE PEDESTAL SIZE AND MOUNTING BRACKET DIMENSIONS WITH GCI, THEN COORDINATE THE THROAT SIZE AND INSERT LOCATION FOR THE MOUNTING BRACKET AND THE UNISTRUT UNDER THE DECK WITH THE CONCRETE DECK FABRICATOR WHO WILL PLACE THE THROAT AND INSERTS IN THE DECK.

B. UNLESS OTHERWISE NOTED, THE CONDUIT SIZES ARE 3"PVC SCHEDULE 80.

C. GCI ANTICIPATES THAT PED-2 THRU PED-4 WILL BE CORNING CABLE SYSTEMS NLVP-104 PEDESTALS, 12X11 FOOTPRINT. PED-1 WILL BE CORNING CABLE SYSTEM PEDESTAL WITH A 37X11 FOOTPRINT.

D. MOUNTING BRACKETS: FABRICATE BRACKET TO FIT AROUND THE PERIMETER OF THE PEDESTAL HOUSING USING HOT DIPPED GALVANIZED 2"X2", 1/4" THICK ANGLE.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: C:\USERS\KCN12_000\DOCUMENTS\0-KNEE\2013\WSB DESIGN13\DWG\0-PSE BRIDGE\GCI V20-25\WSB V20-25 GCI PSE.DWG

KCN12_000

TAB: V25 Monday, August 17, 2015 10:07:45 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

⊗ PROPOSED POLE

⊗ EXISTING POLE

PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49th KEITH NELSON 12-7455 8-1-15 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: KCN

DRAWN BY: TED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM BRIDGES PROJECT # 69534

CABLE TV PULL PEDESTALS

PROJECT DESIGNATION

BR-000S(735) ~ 69534

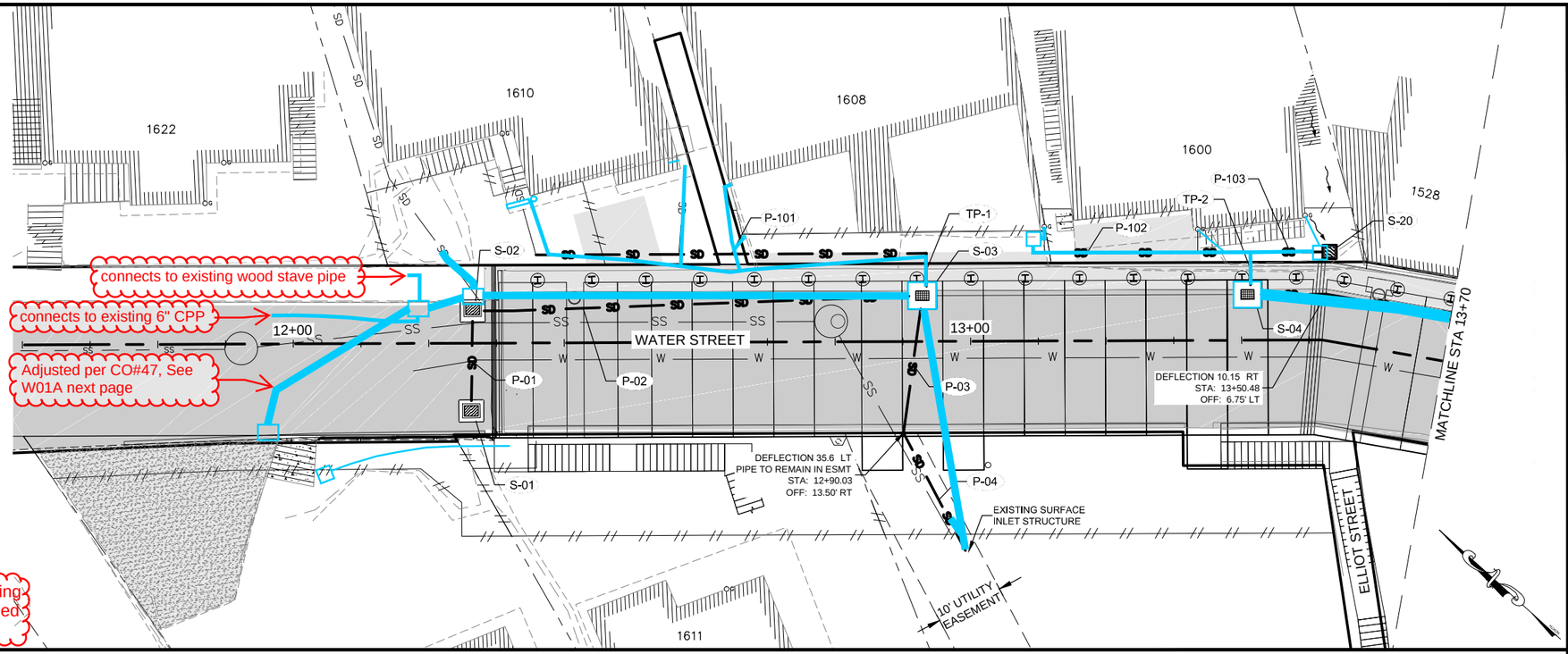
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
V25	22

STORM DRAIN CONSTRUCTION NOTES:

1. STORM DRAIN MAIN STATIONING REFERENCES WATER STREET STATIONING.
2. EXISTING STORM DRAIN MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY CONTRACTOR. SEE DEMOLITION SHEETS A3 AND A4.
3. EXISTING SEWER AND WATER MAINS NOT SHOWN IN PLAN OR PROFILE VIEW FOR CLARITY.
4. EXISTING UTILITY LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
5. CONNECT EXISTING RESIDENTIAL STORM DRAIN SERVICES TO NEW STORM DRAIN SERVICES MAIN. AT WALL MOUNTED CATCH BASINS REMOVE AND REPLACE EXISTING RESIDENTIAL STORM DRAIN SERVICES AS REQUIRED.
6. ALL STORM DRAIN MAINS SHALL BE DUAL WALL CORRUGATED POLYPROPYLENE PIPE (CPPP) TYPE S UNLESS OTHERWISE NOTED IN THE PLANS.
7. ALL RESIDENTIAL STORM DRAIN SERVICES SHALL BE CORRUGATED POLYETHYLENE PIPE (CPEP) UNLESS OTHERWISE NOTED IN THE PLANS.
8. HORIZONTAL DISTANCES FOR STORM DRAIN ARE MEASURED FROM CENTER OF MANHOLE OR CATCH BASIN. PIPE INVERT ELEVATIONS ARE AT THE INSIDE OF MANHOLE WALL.
9. ALL STORM DRAIN CATCH BASINS AND MANHOLES SHALL BE CONSTRUCTED ACCORDING TO THE PROJECT DETAILS AND SPECIFICATIONS UNLESS OTHERWISE NOTED IN THE PLANS.
10. SEE D SHEETS FOR PIPE AND STRUCTURE INFORMATION TABLES
11. SEE N SHEETS FOR WALL MOUNTED CATCH BASINS, AND INLET STRUCTURE DETAILS.
12. SEE N SHEETS FOR PIPE SUPPORT DETAILS UNDER TRESTLE BRIDGE SEGMENTS.

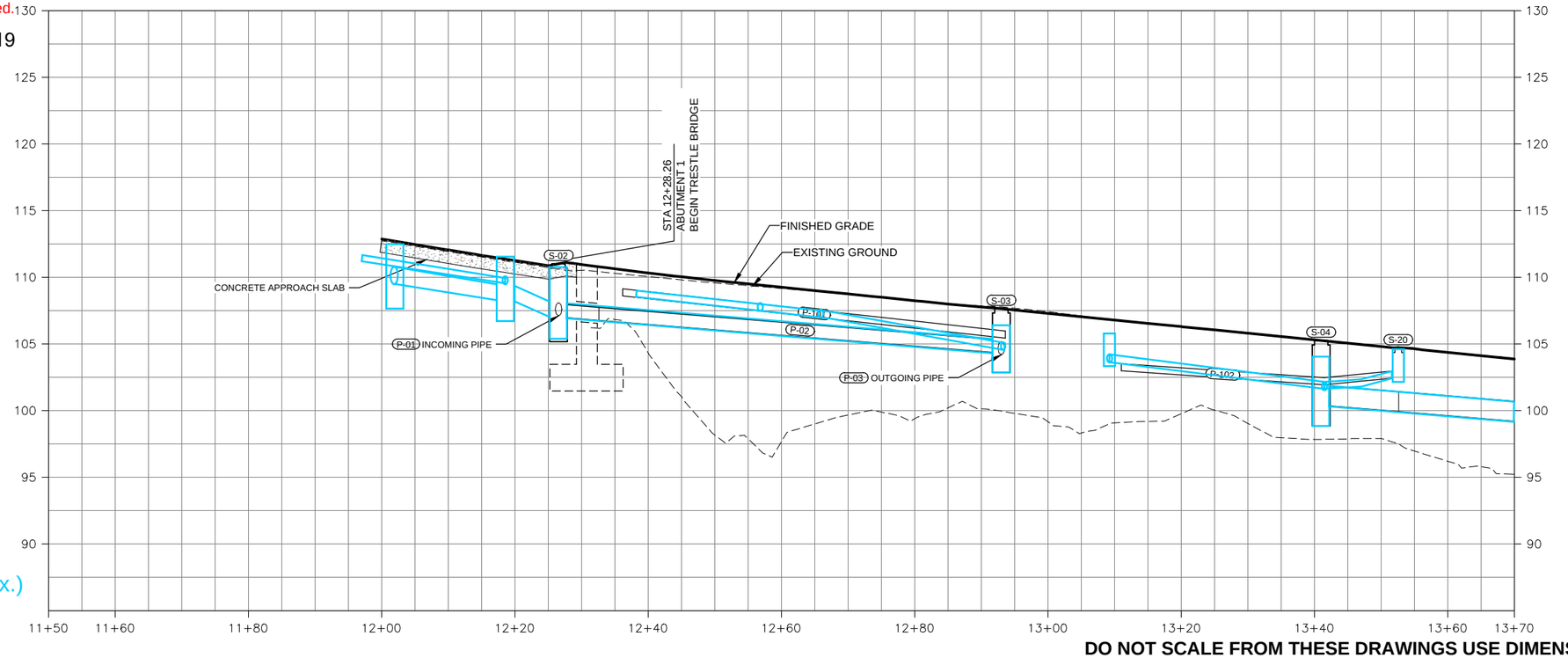
As-Built Drawing markups most clear when viewed in color (all W sheets).

Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019



As Installed (appx.)

SD As Designed

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

TAB: W01 8/14/2015 8:38 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11896 8/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

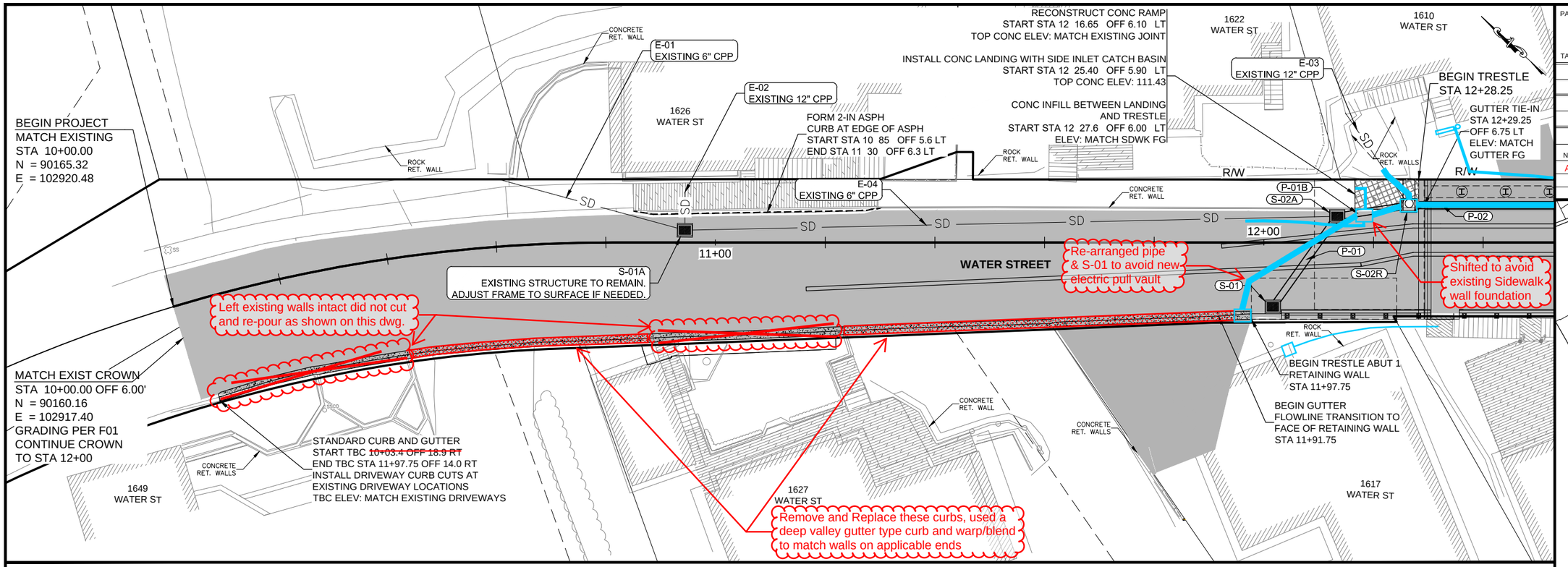
DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

STORM P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W01	W22

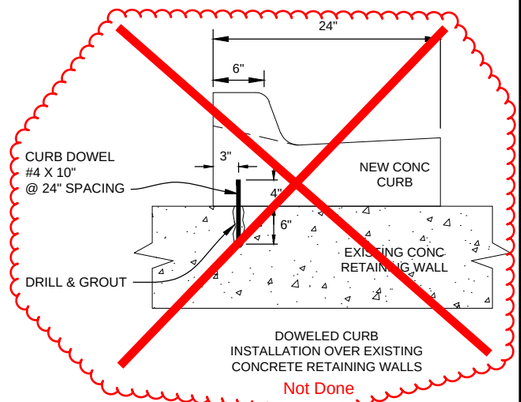


603(22) CPPP STORM DRAIN PIPE - LINEAR FOOT REVISIONS

SYSTEM	PIPE NO.	SIZE [IN]	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
STORM SYSTEM 1	P-01	12	20.25	S-01	109.70	S-02A	109.10	2.96%	PREVIOUSLY ADJUSTED BY RFI 13
	E-04	6	119.54	S-01A	-	S-02A	109.10	9.41%	EXISTING PIPE TO REMAIN IN PLACE
	P-01B	12	13.32	S-02R	109.00	S-02R	107.60	10.57%	SPLIT P-02 (EXTENDED PER RFI 13) INTO TWO PIPES P-01B & P-02
	P-02	12	66.46	S-02R	107.00	S-03	104.36	4.07%	SPLIT P-02 (EXTENDED PER RFI 13) INTO TWO PIPES P-01B & P-02
	E-01	6	35.05	---	-	S-01A	120.80	9.75%	EXISTING PIPE TO REMAIN IN PLACE
	E-02	12	6.92	---	-	S-01A	121.00	1.44%	EXISTING PIPE TO REMAIN IN PLACE
	E-03	12	21.35	---	-	S-02R	108.80	29.29%	EXISTING PIPE TO REMAIN IN PLACE

604(1) MANHOLES & INLETS - REVISIONS

SYSTEM	STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE		RIM ELEVATION [FT]	INVERTS	REMARKS
			STATION	OFFSET			
STORM SYSTEM 1	S-01	TYPE III CB	~~12+01.66~~	~~11.75 RT~~	~~112.47~~ 113.59	P-01 = 109.26	PREVIOUSLY ADJUSTED BY RFI 13 Valley inlet Grate
	S-01A	EXISTING	11+96.19 -	12.95 RT -	ADJUST TO FG	-	EXISTING STRUCTURE TO REMAIN
	S-02A	TYPE III CB	~~12+13.40~~ 12+18.14	~~4.75 LT~~ 5.50 LT	~~111.70~~ 111.48	P-01A = 109.10 P-01 = 109.11 P-01B = 109.00	PREVIOUSLY ADJUSTED BY RFI 13 Flat inlet Grate
	S-02R	TYPE III CB	~~12+26.40~~ 12+26.79	~~6.75 LT~~ 6.70 LT	~~110.93~~ 111.08 (1" BELOW FG. GRADE ASPH TO DRAIN INTO INLET)	P-01B = 107.60 E-03 = 108.80 P-02 = 106.96	ORIGINAL S-02, REQUIRED TO RECONNECT E-03. INLET FRAME: 6" SIDE INLET NEENAH S-3333-A ~~OR EQUAL~~ SET INLET GRATE FACE AT OFF ~~5.00' LT~~ 6.38' LT
	S-03	---	---	---	---	---	PER CONFORMED CONTRACT DOCUMENTS



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\1744.01_WATER STREET VIADUCT -BOP DRAINAGE\1744-BOP DRAINAGE.DWG
TAB: BOP SD 5/18/2018 11:42 AM

ADDENDUM NUMBER
Sheet Added via CO#47

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Nicole Knox
No. CE 11896
5/18/2018
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: N. KNOX

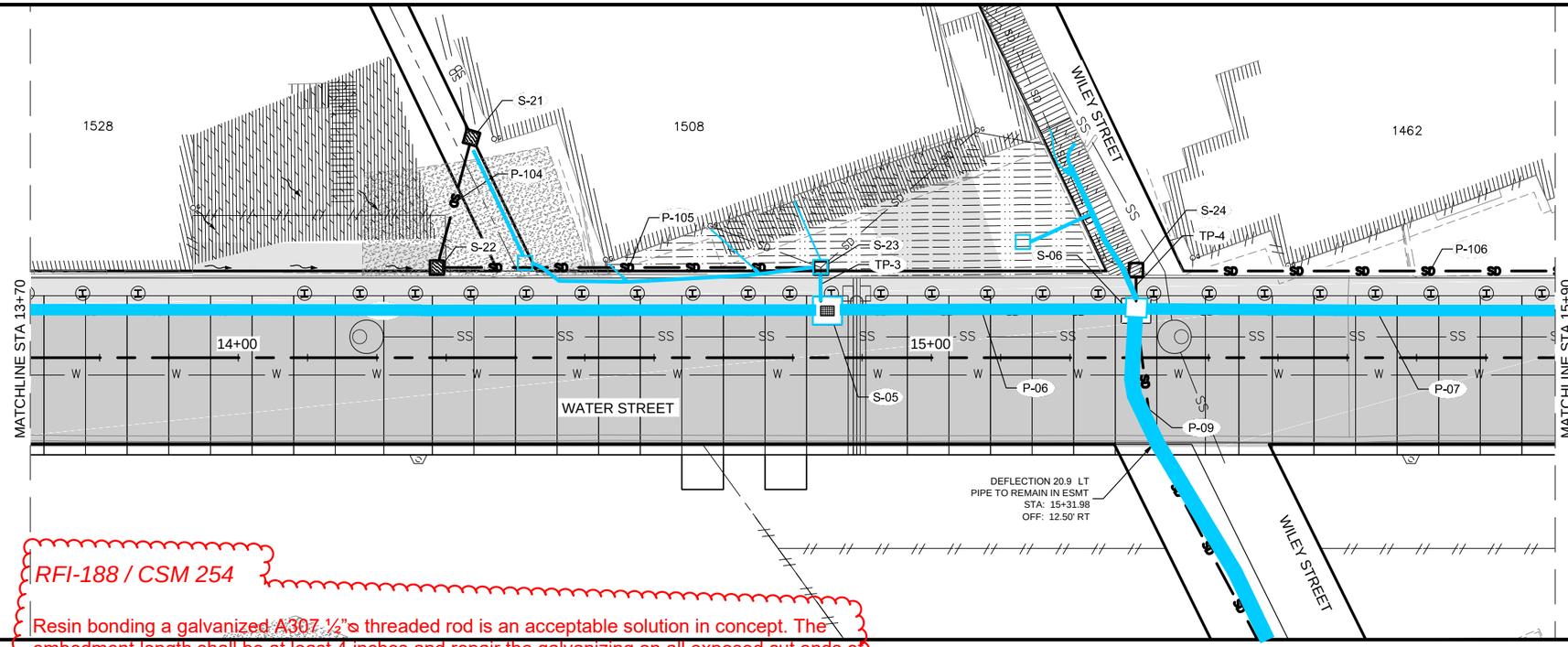
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

BOP - STORM DRAIN SYSTEM 1

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
1 W01A	1

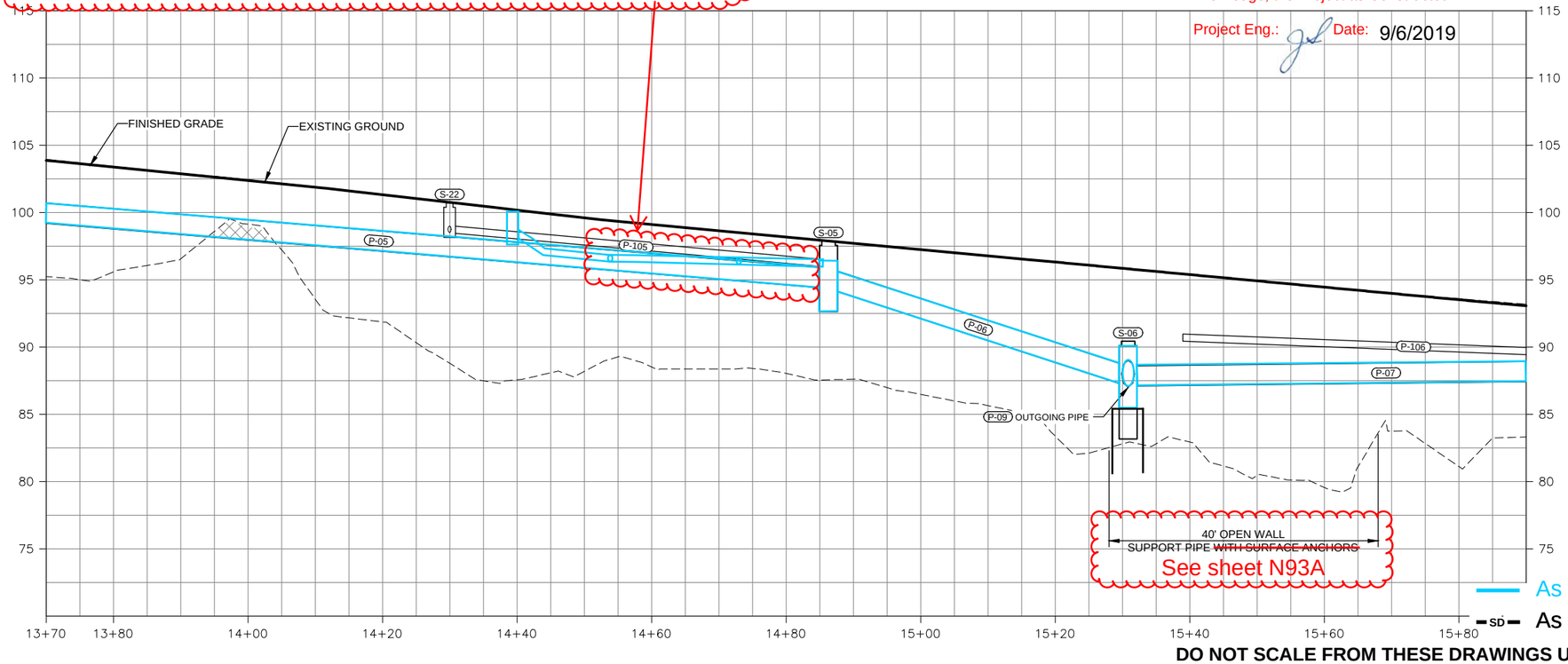


RFI-188 / CSM 254

Resin bonding a galvanized A307 ½"ø threaded rod is an acceptable solution in concept. The embedment length shall be at least 4 inches and repair the galvanizing on all exposed cut ends of the threaded rod. Also, the upper epoxy anchor will be in constant tension and therefore the resin bonding material shall be specifically recommended by the resin manufacturer for used in overhead and horizontal applications. Submit the proposed resin for approval.

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

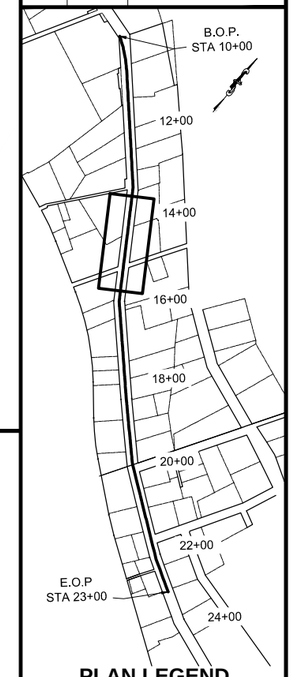
TAB: W02 8/14/2015 8:38 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11996 9/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

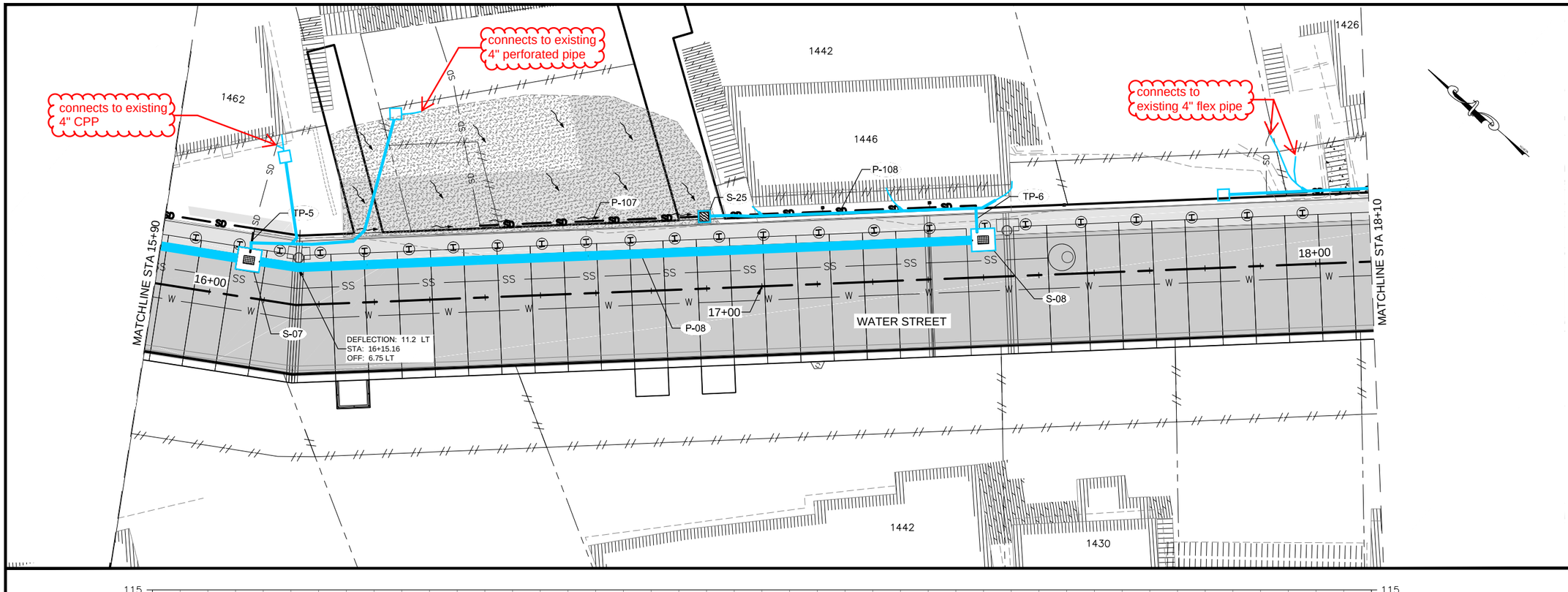
DRAWN BY: B. MAXWELL

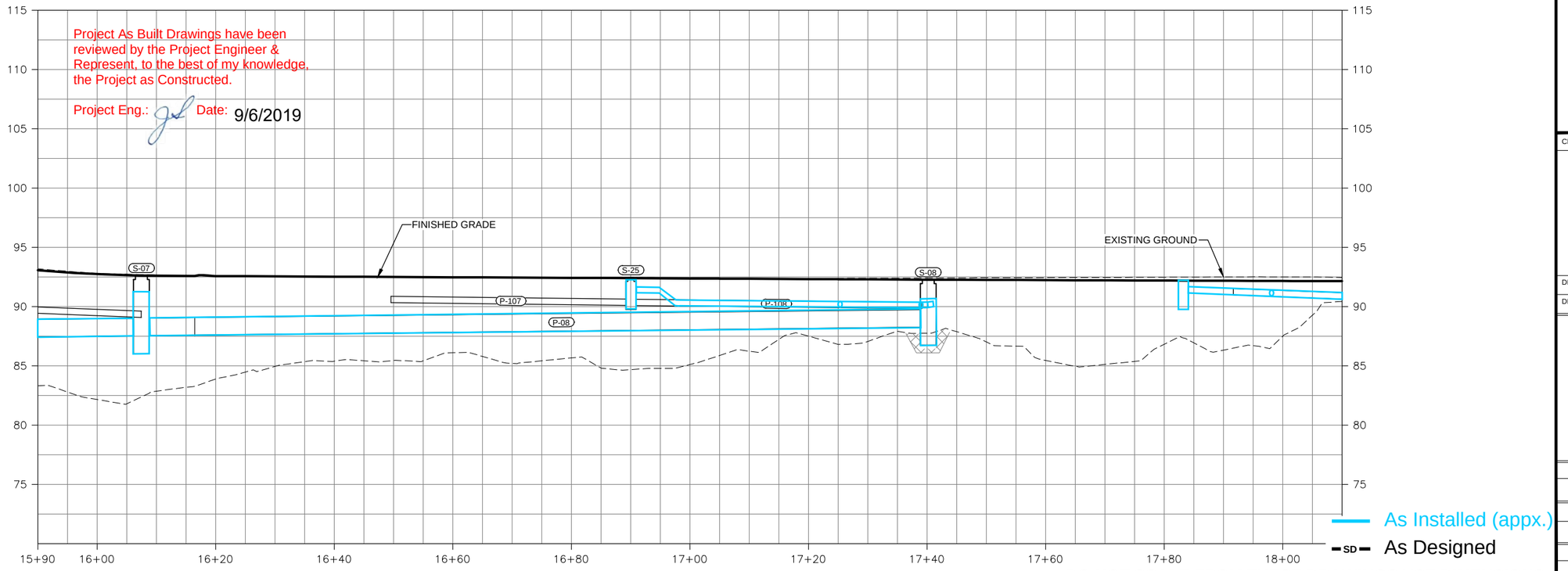
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES PROJECT # 69534

STORM P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W02	W22





DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

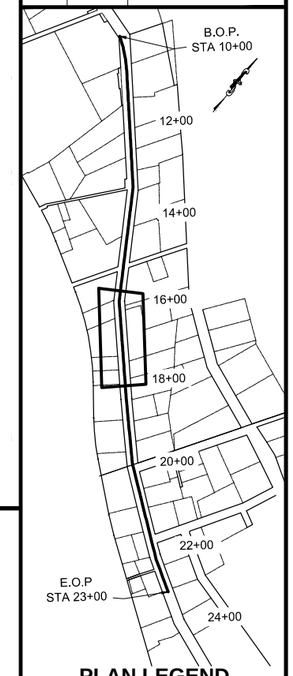
TAB: W03 8/14/2015 8:38 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

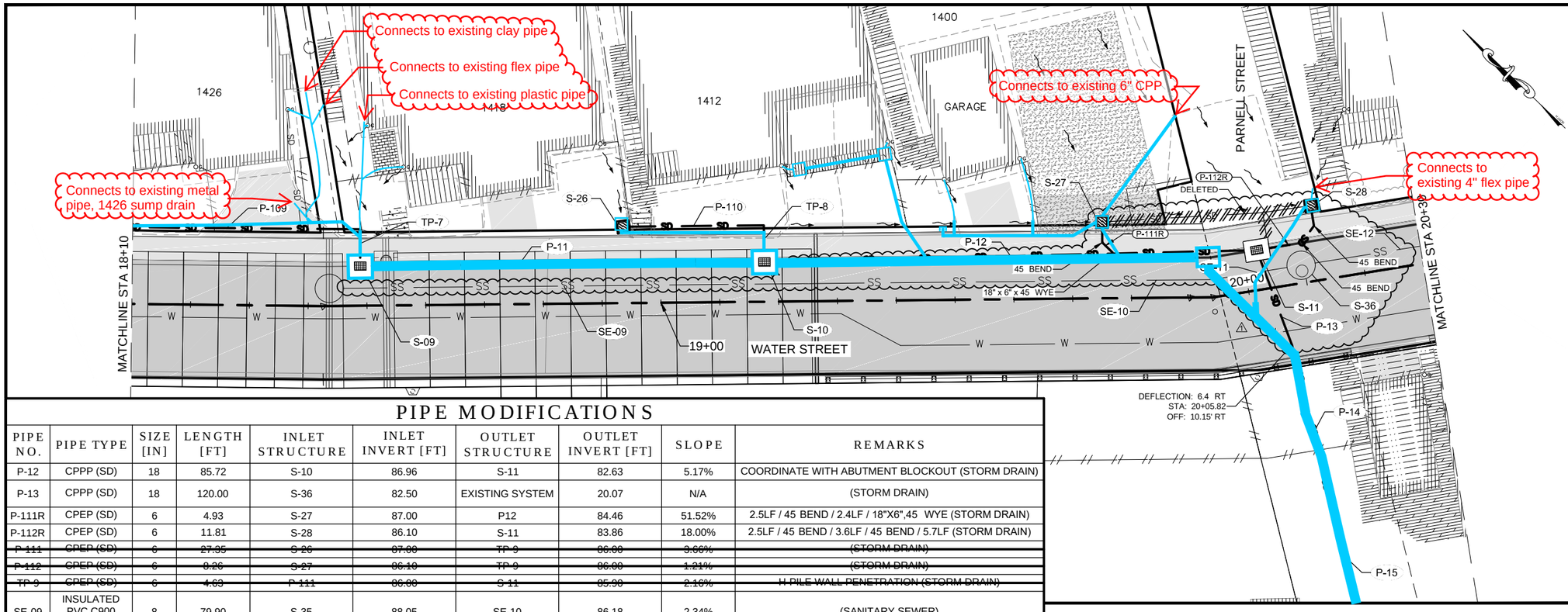
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

STORM P&P

PROJECT DESIGNATION

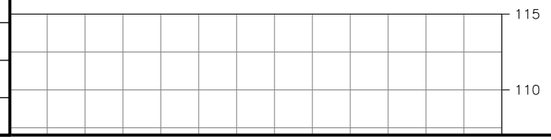
BR-000S(735)

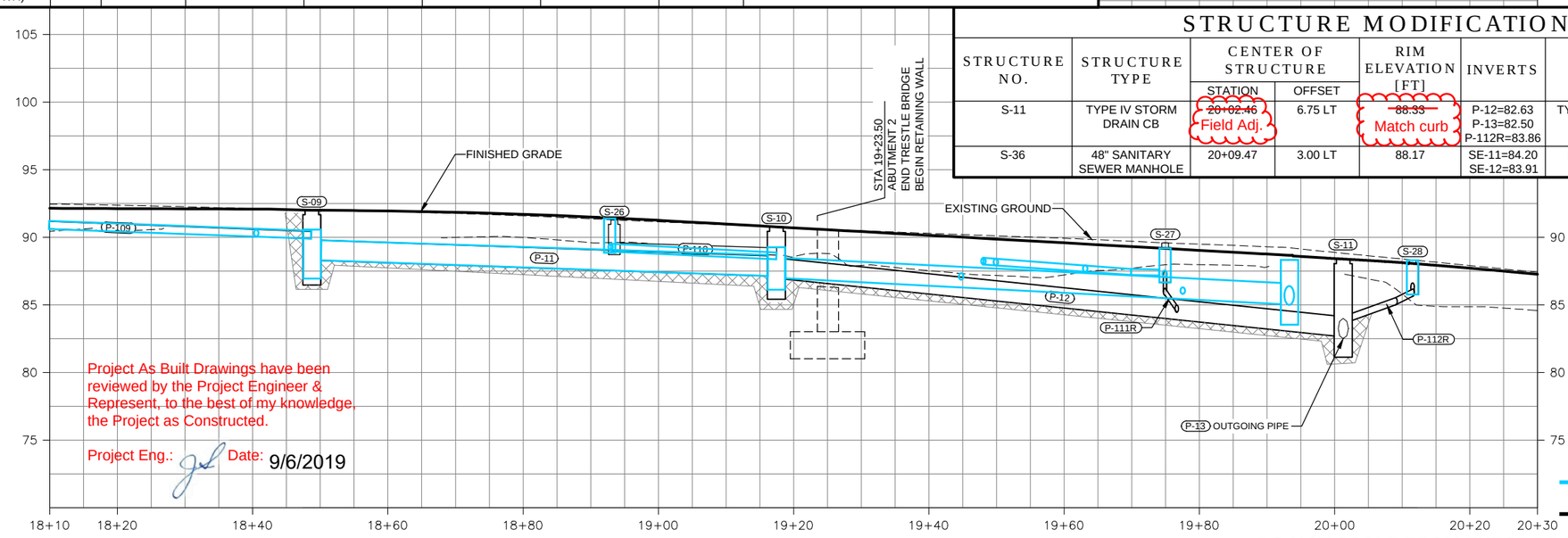
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W03	W22



PIPE MODIFICATIONS

PIPE NO.	PIPE TYPE	SIZE [IN]	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
P-12	CPPP (SD)	18	85.72	S-10	86.96	S-11	82.63	5.17%	COORDINATE WITH ABUTMENT BLOCKOUT (STORM DRAIN)
P-13	CPPP (SD)	18	120.00	S-36	82.50	EXISTING SYSTEM	20.07	N/A	(STORM DRAIN)
P-111R	CPEP (SD)	6	4.93	S-27	87.00	P12	84.46	51.52%	2.5LF / 45 BEND / 2.4LF / 18"X6",45 WYE (STORM DRAIN)
P-112R	CPEP (SD)	6	11.81	S-28	86.10	S-11	83.86	18.00%	2.5LF / 45 BEND / 3.6LF / 45 BEND / 5.7LF (STORM DRAIN)
~~P-111~~	~~CPEP (SD)~~	~~6~~	~~27.35~~	~~S-26~~	~~87.00~~	~~TP-9~~	~~86.00~~	~~3.66%~~	~~(STORM DRAIN)~~
~~P-112~~	~~CPEP (SD)~~	~~6~~	~~8.26~~	~~S-27~~	~~86.10~~	~~TP-9~~	~~86.00~~	~~1.21%~~	~~(STORM DRAIN)~~
~~TP-9~~	~~CPEP (SD)~~	~~6~~	~~4.63~~	~~P-111~~	~~86.00~~	~~S-11~~	~~85.90~~	~~2.16%~~	~~H-PILE WALL PENETRATION (STORM DRAIN)~~
SE-09	INSULATED PVC C900 (SSWR)	8	79.90	S-35	88.05	SE-10	86.18	2.34%	(SANITARY SEWER)
SE-10	PVC C900 (SSWR)	8	70.30	SE-09	86.18	SE-11	84.55	2.32%	COORDINATE WITH ABUTMENT BLOCKOUT (SANITARY SEWER)
SE-11	PVC C900 (SSWR)	8	15.30	SE-10	84.55	S-36	84.20	2.32%	(SANITARY SEWER)
SE-12	PVC C900 (SSWR)	8	40.60	S-36	83.91	SE-13	80.77	7.73%	(SANITARY SEWER)





STRUCTURE MODIFICATIONS

STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE		RIM ELEVATION [FT]	INVERTS	REMARKS
		STATION	OFFSET			
S-11	TYPE IV STORM DRAIN CB	~~20+02.46~~ Field Adj.	6.75 LT	~~88.33~~ Match curb	P-12=82.63 P-13=82.50 P-112R=83.86	TYPE 2 INLET STRUCTURE (STORM DRAIN)
S-36	48" SANITARY SEWER MANHOLE	20+09.47	3.00 LT	88.17	SE-11=84.20 SE-12=83.91	BURIED MANHOLE (SANITARY SEWER)

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

As Installed (appx.)

As Designed

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\1744.01_WATER STREET VIADUCT - W04R\1744-W SHEETS-STORM.DWG

JOSEPH HORAZDOVSKY

TAB: W04R 12/19/2016 2:38 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
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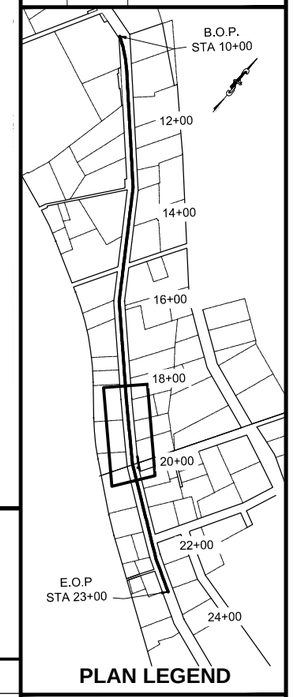
AB		As-Built Set



PLAN LEGEND

CHECKED BY:

Provided in response to RFI#123, additional work covered under CO#17

DESIGNED BY:

DRAWN BY:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

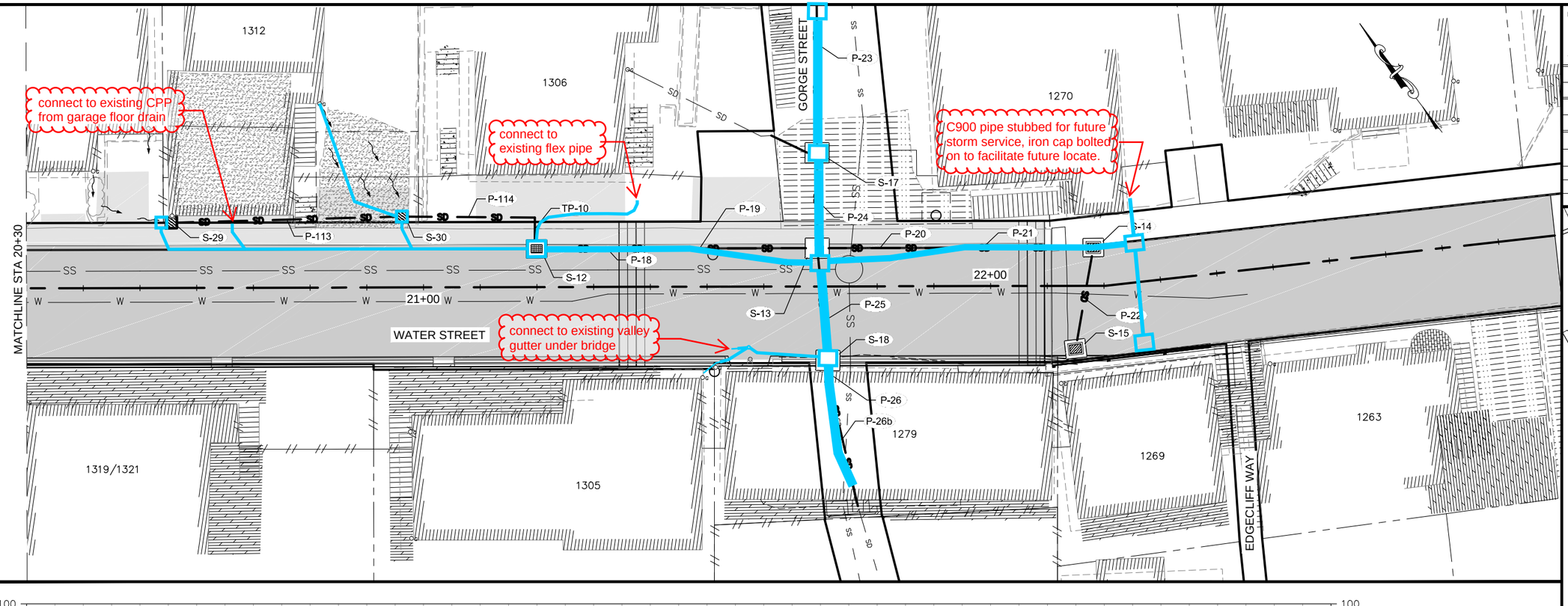
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

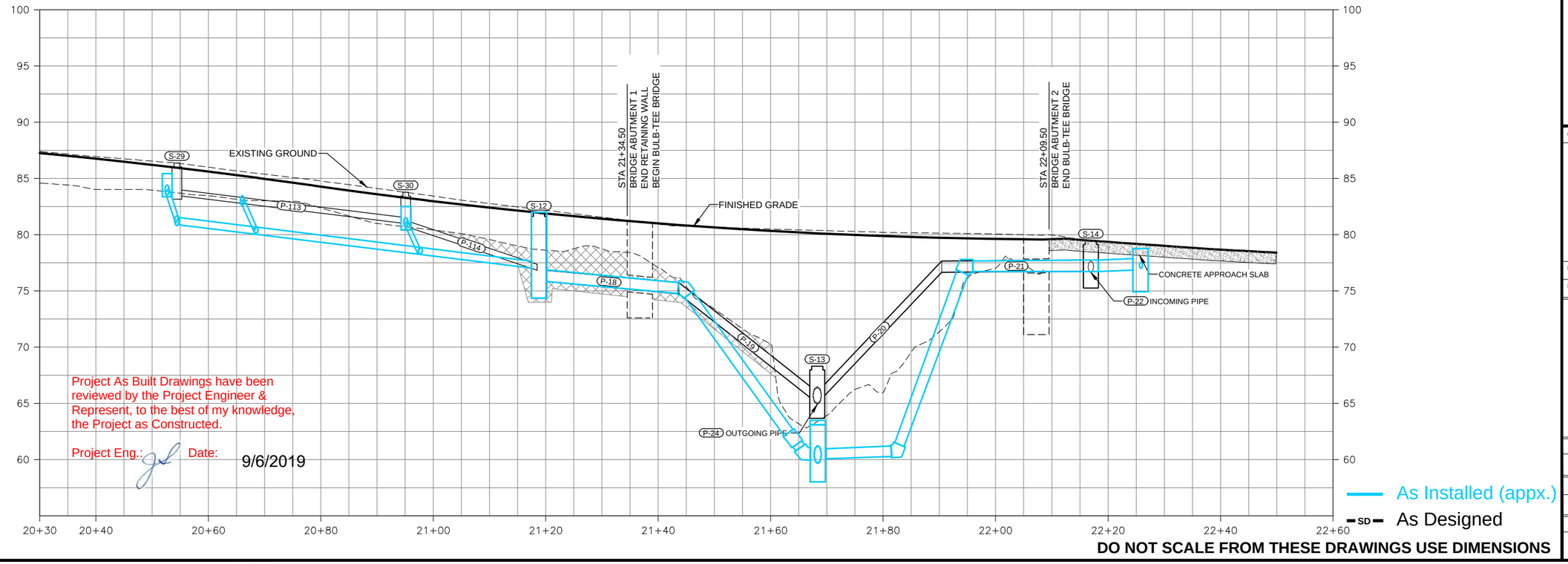
STORM P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
W04R	W22





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

As Installed (appx.)

SD As Designed

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

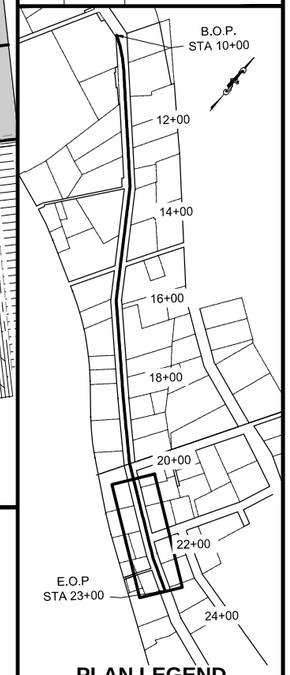
TAB: W05 8/14/2015 8:39 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA NICOLE A. KNOX CE-11696 8/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

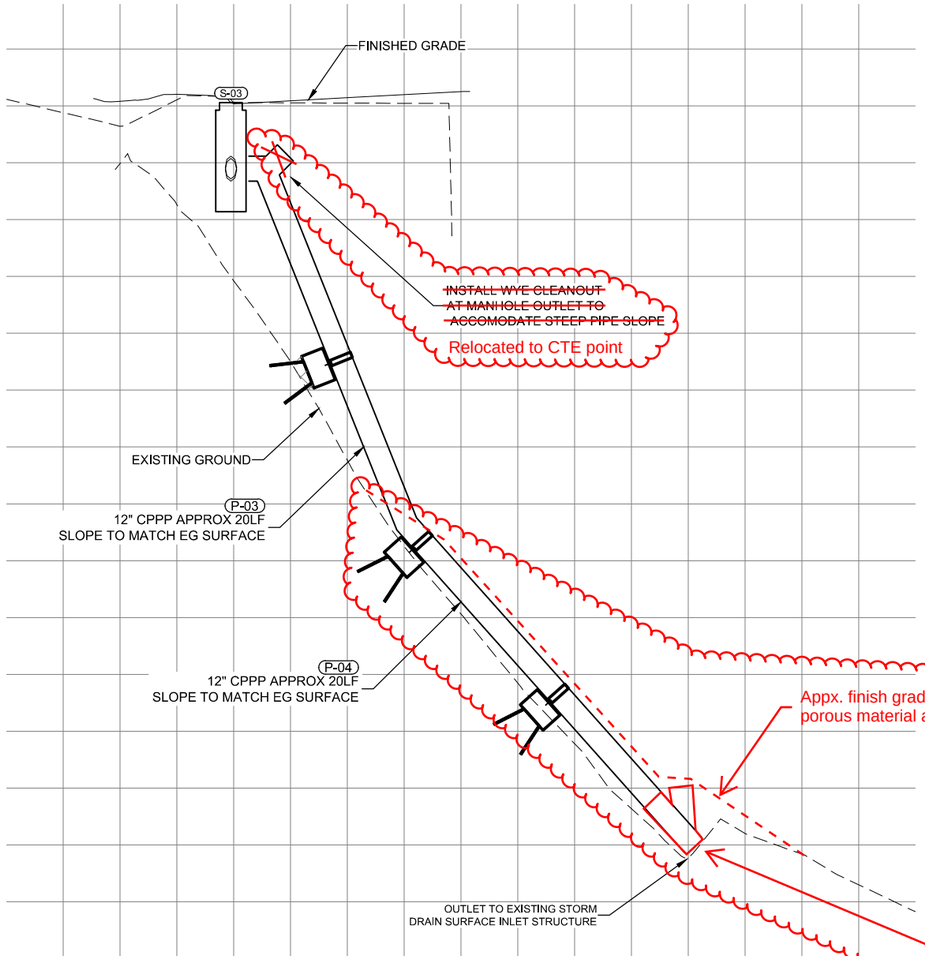
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

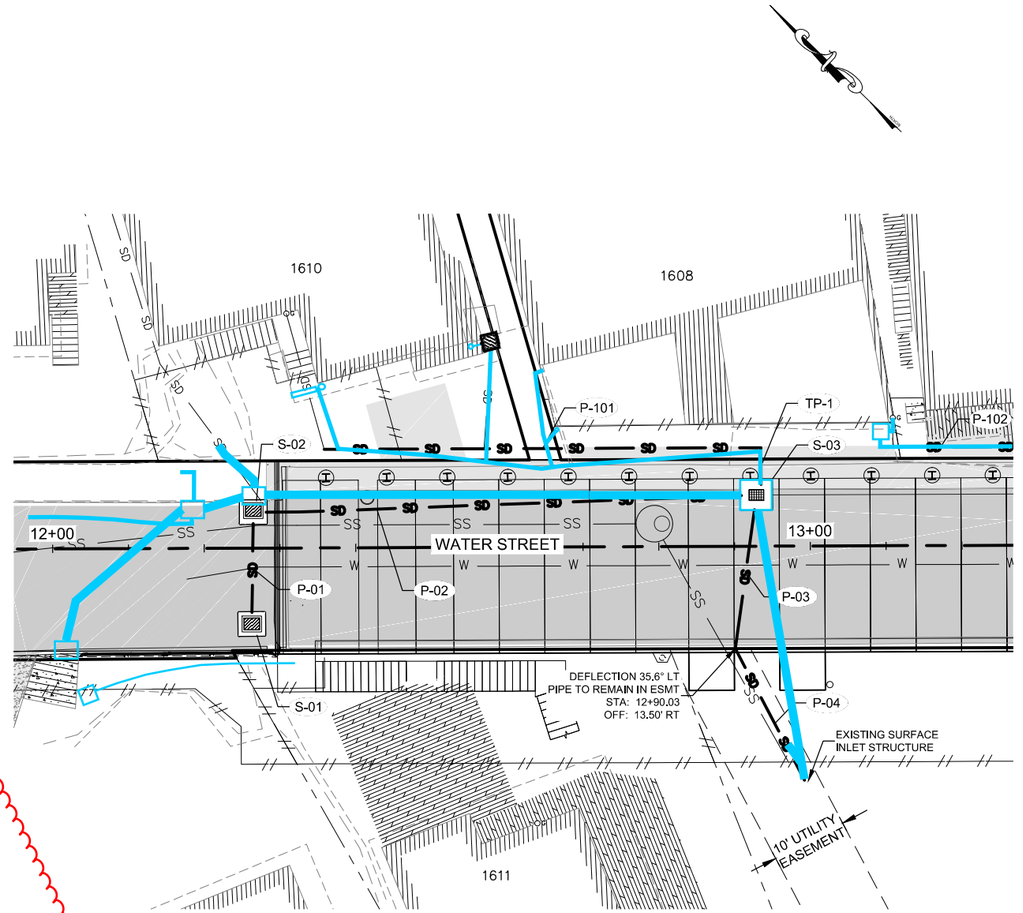
STORM P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W05	W22



Clean out Wye relocated to CTE point, tight pipe connection made into existing inlet, cap of relocated Wye clean-out replaced with wire mesh/grate to continue allowing surface water in the area to flow into the pipe system



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions

As Installed (appx.)

SD As Designed

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

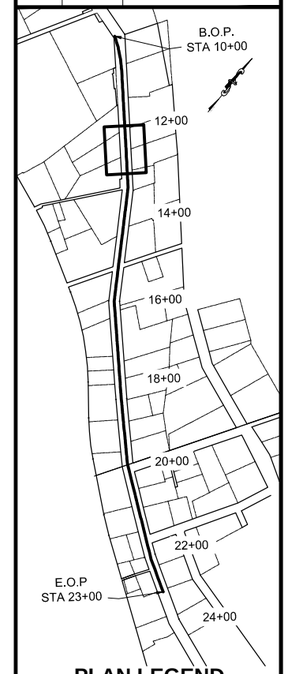
TAB: W06 8/14/2015 8:39 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
NICOLE A. KNOX
CE-11896
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

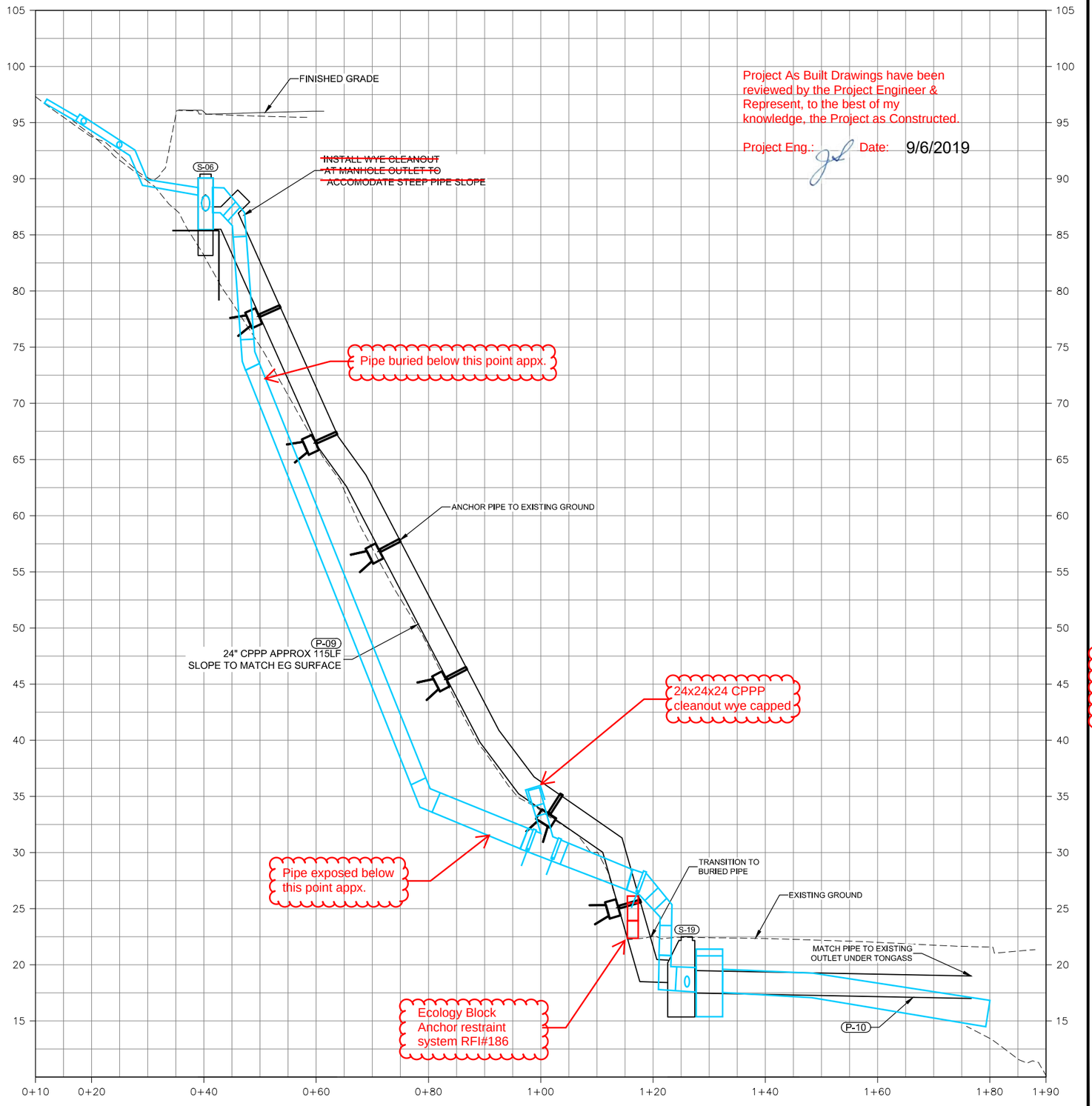
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

STORM P&P

PROJECT DESIGNATION

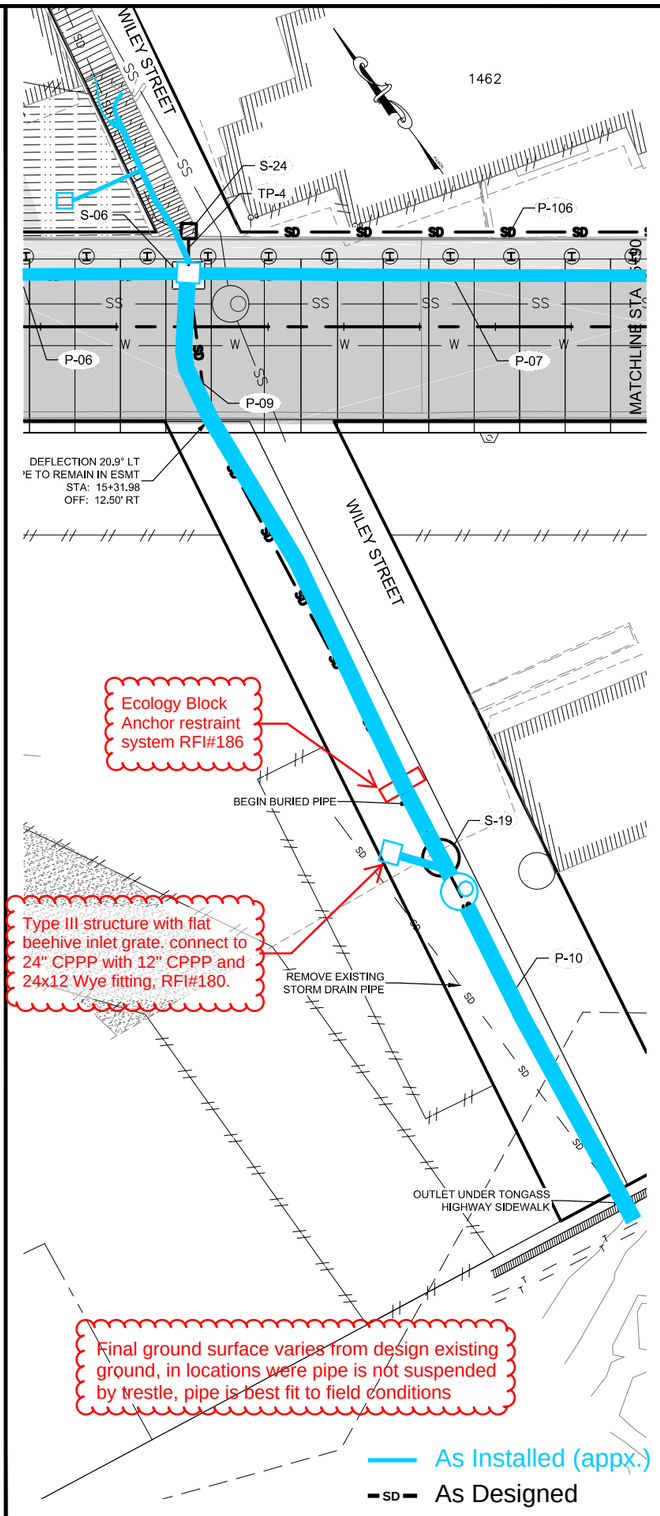
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W06	W22

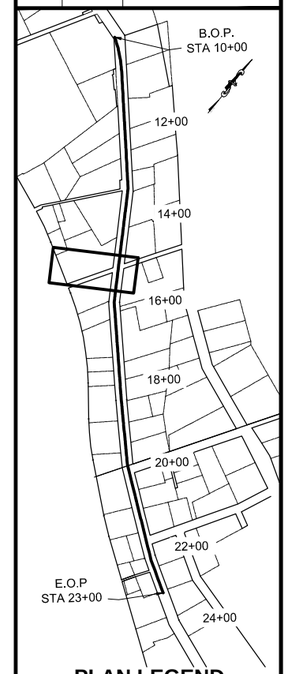


Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



PLAN LEGEND

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NICOLE KNOX

TAB: W07 8/14/2015 8:39 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A. KNOX
CE-11996
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

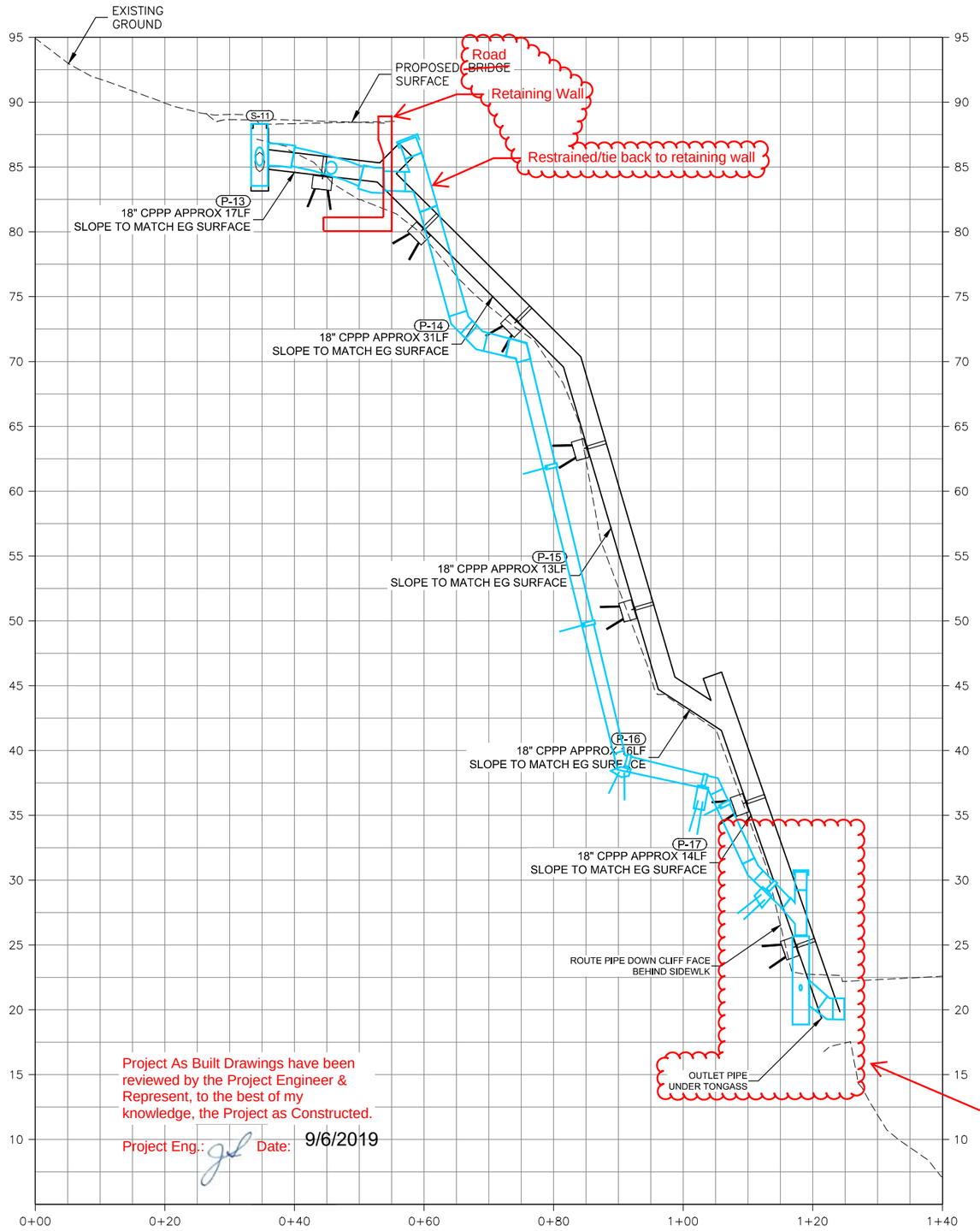
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

STORM P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W07	W22



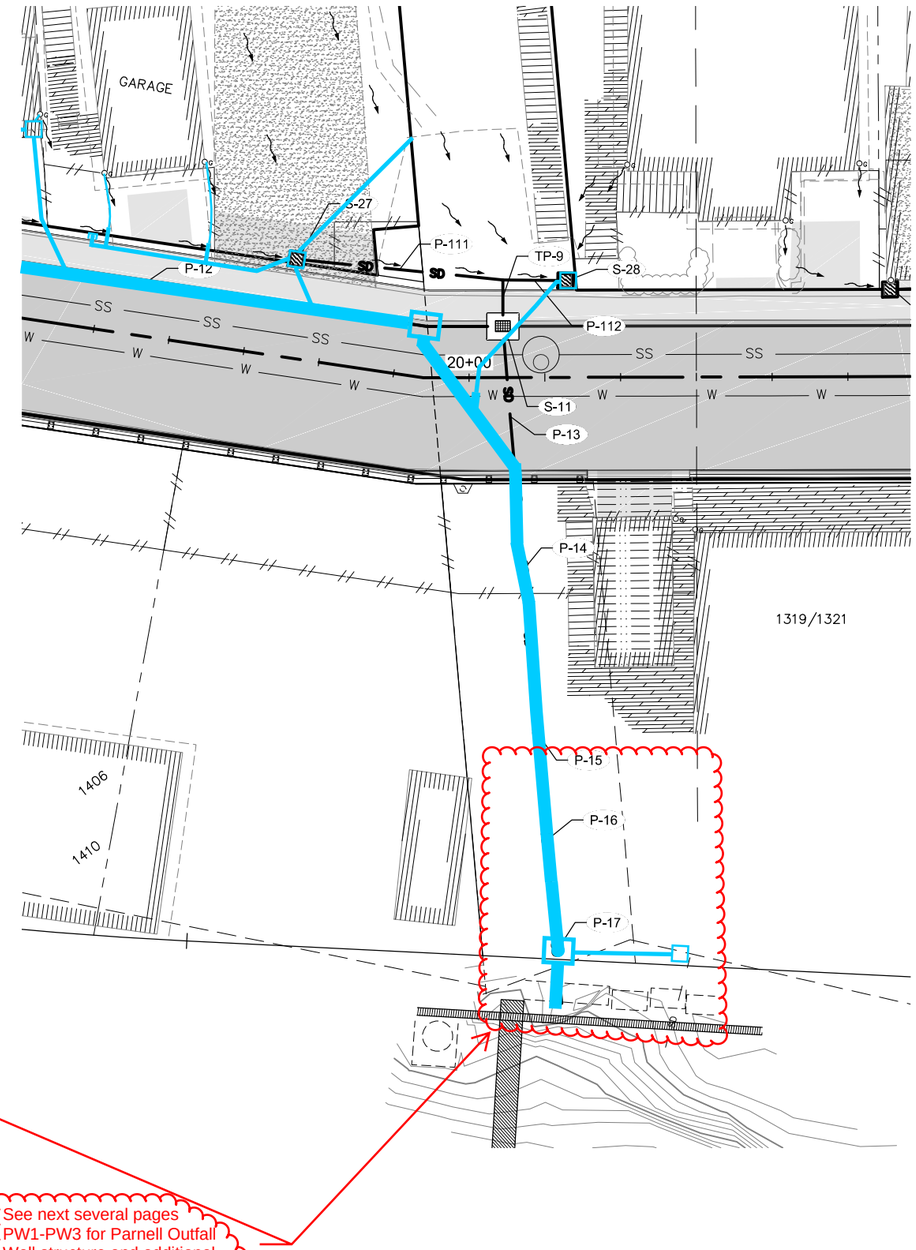
Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

As Installed (appx.)

SD As Designed

Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions



See next several pages PW1-PW3 for Parnell Outfall Wall structure and additional storm design information. CO#13

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

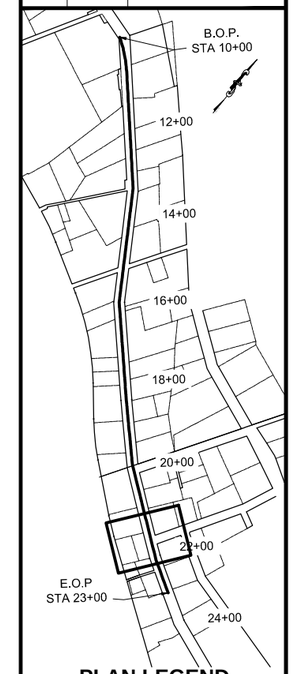
TAB: W08 8/14/2015 8:40 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11898 8/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

STORM P&P

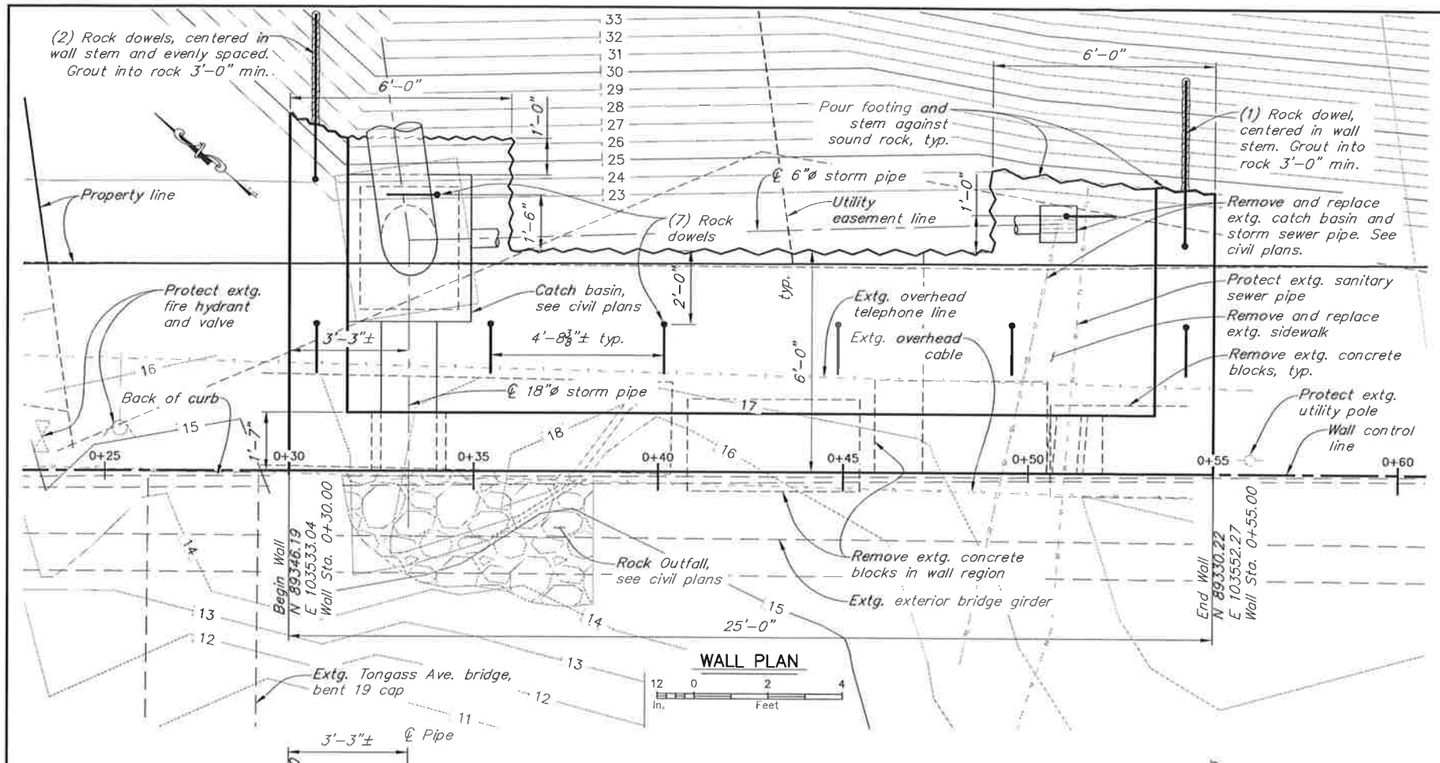
PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
W08	W22

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2016	PW1	PW2



GENERAL NOTES

DESIGN:..... AASHTO LRFD Bridge Design Specifications, 2012 6th Edition, with latest interim specifications.

CONSTRUCTION SPECIFICATION: ..... The Bridge Engineering Specifications shall be governed by the Alaska Department of Transportation and Public Facilities Standard Specifications for Highway Construction, 2004.

DEAD LOAD:..... Concrete unit weight = 160 pcf.
Soil unit weight = 135 pcf.
Ashpalt wearing surface unit weight = 140 pcf.

LIVE LOAD SURCHARGE:..... Equivalent height of 2 feet of soil. Lateral pressure uniformly distributed.

SOIL LATERAL PRESSURE:..... Wall design for at-rest lateral pressure, ko = 0.44.

FOUNDATION PARAMETERS:..... Wall footing founded on rock.
Nominal bearing resistance = 25 ksf.
Friction angle for sliding stability = 30°; Passive resistance is neglected.

SEISMIC PARAMETERS:..... Wall design for at-rest seismic lateral pressure, Koe = 0.36.
Horizontal seismic acceleration coefficient, kh = 0.1.

RESISTANCE FACTORS:.....

Bearing Resistance		Lateral Sliding		Rock Anchor Bond	
Strength	= 0.55	Strength	= 1.00	Strength	= 0.50
Service	= 1.00	Service	= 1.00	Service	= 1.00
Extreme Event	= 0.80	Extreme Event	= 0.90	Extreme Event	= 1.00

REINFORCEMENT:..... ASTM A706, fy = 60,000 psi.
Space reinforcing steel evenly unless otherwise noted. Reinforcement is not drawn to scale for clarity. Epoxy coat reinforcement where noted.

CONCRETE:..... CLASS A, f'c = 4,000 psi, unless noted otherwise.

NOTE:

1. Unless otherwise shown in the plans, the concrete cover measured from the face of the concrete to the face of any reinforcing steel shall be 2 inches. ¾ inch chamfer on all exposed edges.
2. All dimensions on these drawings shall take precedence over the indicated scale. Drawings shall not be scaled for construction purposes. No length or shape is implied unless it is dimensioned.
3. Dimensions shown, including reinforcing bar lengths and bend dimensions, are base on limited topographic information. Actual dimensions are dependent on location of sound rock, which can be known only after rock excavation is complete. Field verify all dimensions. Reinforcement may be field cut and bent. Damage to epoxy coated reinforcing bars, including cut ends, shall be repaired by liberal application of epoxy repair paint.

Notes:

1. Limits of excavation for structures are the actual footing dimensions in rock, 1'-0" outside the footing in soil and 1'-0" outside the new catch basin.
2. Pour footing concrete on sound rock.

DESIGNED BY: Robert Doherty	CHECKED: David Shearer	Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES BRIDGE SECTION
DRAWN BY: Robert Doherty	CHECKED: David Shearer	Project Eng.: Date: 9/6/2019	
QUANTITIES BY:	CHECKED:	AB As-Built Set	

STATE OF ALASKA — DAVID R. SHEARER — CE 8373 — 2/1/19 — REGISTERED PROFESSIONAL ENGINEER

WATER STREET BRIDGE No. 2

WATER STREET

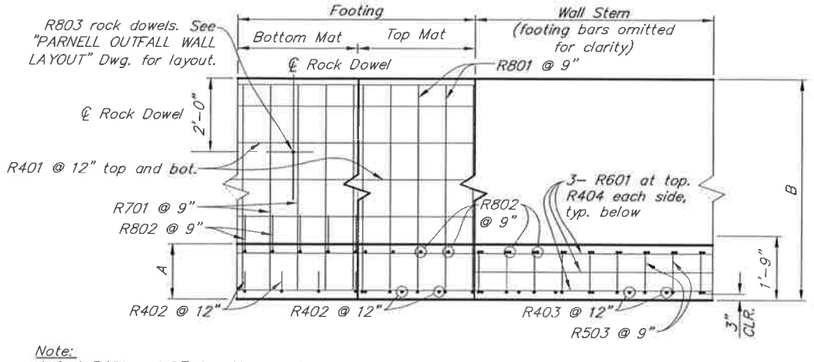
PARNELL OUTFALL WALL LAYOUT

BRIDGE NO. 0446

DWG. NO. 1 PW1

Feb 17, 2017 - 2:44pm robert \\sheanerserver\d-drive\Jobs\02278 water street construction\change orders\2017-02-17 parnell outfall wall\DWG\02278 PARNELL OUTFALL WALL.dwg Layout: Name: 1 PARNELL OUTFALL WALL LAYOUT

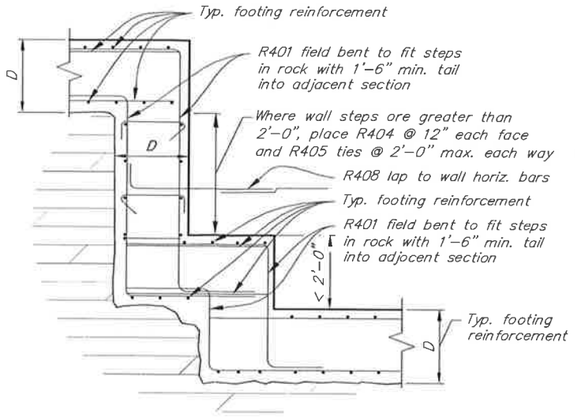
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	BR-000S(735)	2016	PW2	PW2



Note:
Adjust R401 and R701 bottom mat bars to avoid conflict with R407, R410 and R601 bars at rock anchors.

WALL PLAN

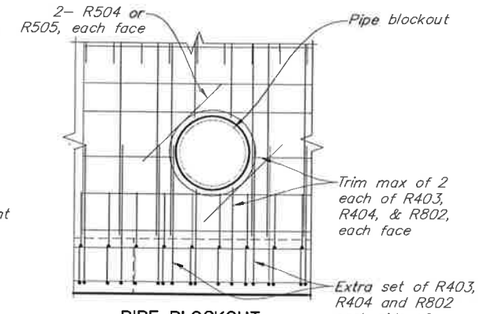
12 6 0 1 2 3 4
In. Feet



FOOTING STEP DETAIL

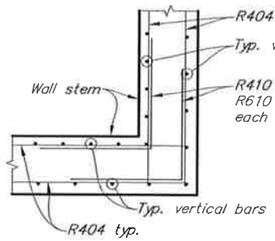
12 6 0 1 2 3 4
In. Feet

Wall reinforcing not shown for clarity

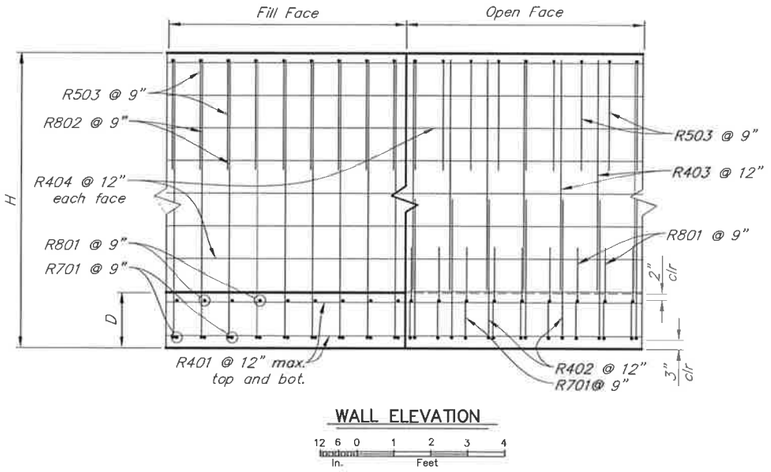


PIPE BLOCKOUT

12 6 0 1 2 3 4
In. Feet

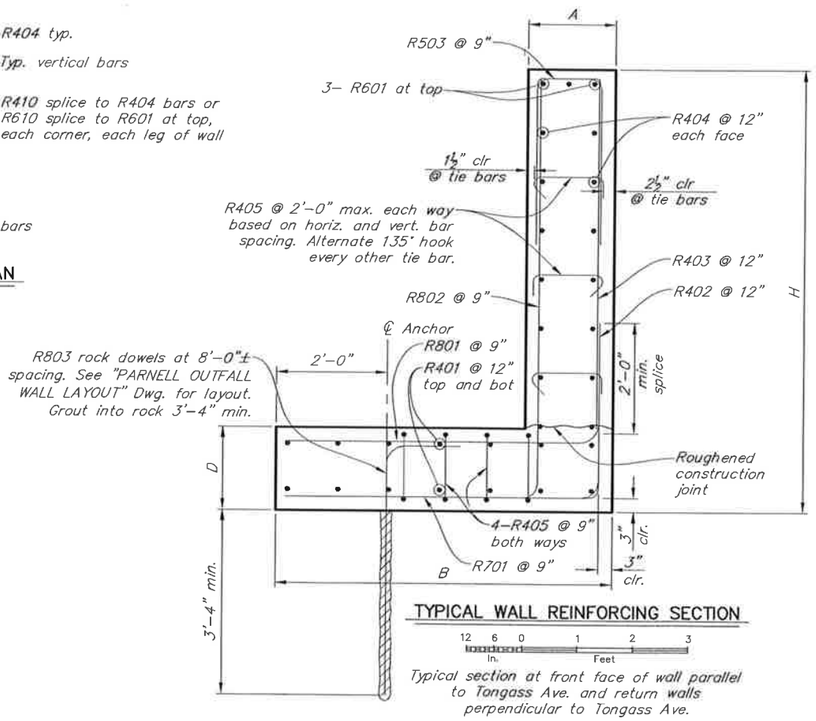


CORNER PLAN



WALL ELEVATION

12 6 0 1 2 3 4
In. Feet



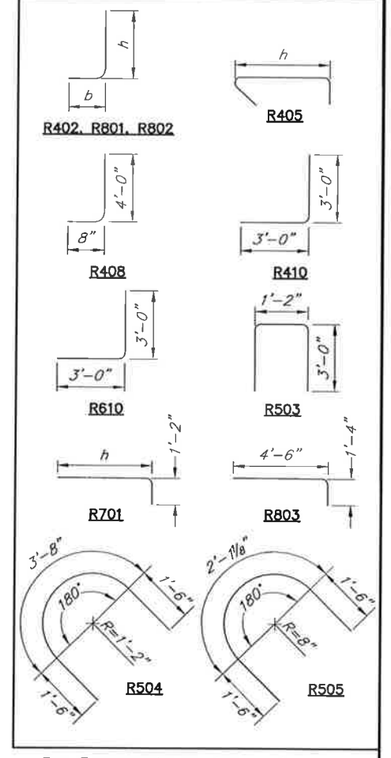
TYPICAL WALL REINFORCING SECTION

12 6 0 1 2 3
In. Feet

Typical section at front face of wall parallel to Tongass Ave. and return walls perpendicular to Tongass Ave.

REINFORCING STEEL

MARK	NOTE	SIZE	NO.	LENGTH	TYPE
R401	E,S,X,F	4	–	Cont.	–
R402	E	4	–	4'-6"	bent
R403	E	4	–	6'-5"	–
R404	S	4	–	Cont.	–
R405	E	4	–	2'-0"	bent
R408	E	4	–	4'-8"	bent
R410	E	4	–	6'-0"	bent
R503	E	5	–	7'-2"	bent
R504	E	5	4	6'-8"	bent
R505	E	5	8	5'-1⅛"	bent
R601	E	6	–	Cont.	–
R610	E	6	–	6'-0"	bent
R701	E	7	–	6'-10"	–
R801	E	8	–	7'-2"	bent
R802	E	8	–	8'-11"	bent
R803	E	8	8	5'-10"	bent



E = Epoxy coated reinforcing steel
F = Field cut & bend to fit
S = Spliced permitted. Length does not include splices.
X = Supply extra bars to allow for variations in field conditions.

WALL HT	DIMENSIONS			REINFORCING STEEL																			
				R402				R403		R405			R701		R801				R802				
H	B	D	A	SIZE	LENGTH	h	b	SIZE	LENGTH	SIZE	LENGTH	h	SIZE	h	SIZE	LENGTH	h	b	SIZE	LENGTH	h	b	
8'	6'-0"	1'-6"	1'-7"	#4	4'-6"	3'-9"	8"	#4	6'-5"	#4	2'-0"	1'-3"	#7	5'-8"	#8	7'-2"	5'-8"	1'-6"	#8	8'-11"	7'-7"	1'-4"	

DESIGNED BY: Robert Doherty — CHECKED: David Shearer
DRAWN BY: Robert Doherty — CHECKED: David Shearer
QUANTITIES BY: — CHECKED:

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.:
Date: 9/6/2019
AB
As-Built Set

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
BRIDGE SECTION

STATE OF ALASKA — DAVID R. SHEARER — CE 8373 — Professional Engineer

WATER STREET BRIDGE No. 2

WATER STREET

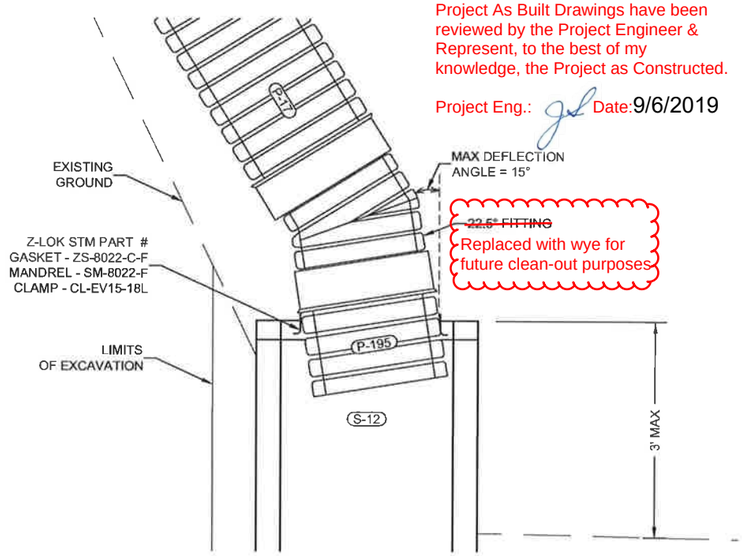
PARNELL OUTFALL WALL DETAILS

BRIDGE NO. 0446
DWG. NO. 2 PW2

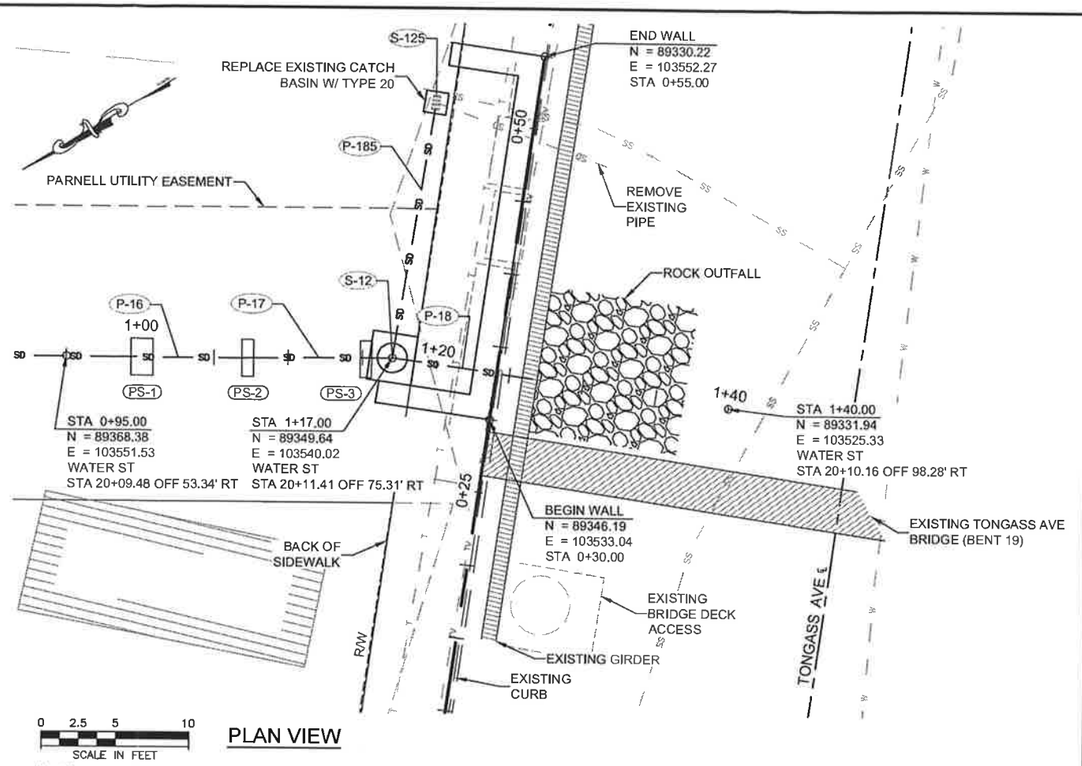
Feb 17, 2017 - 2:44pm robert \\hsearsense\d-drive\Jobs\0278 water street construction\change orders\2017-02-17 parnell outfall wall\DWG\0278 PARNELL OUTFALL WALL.dwg Layout Name: 2 PARNELL OUTFALL WALL DETAILS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

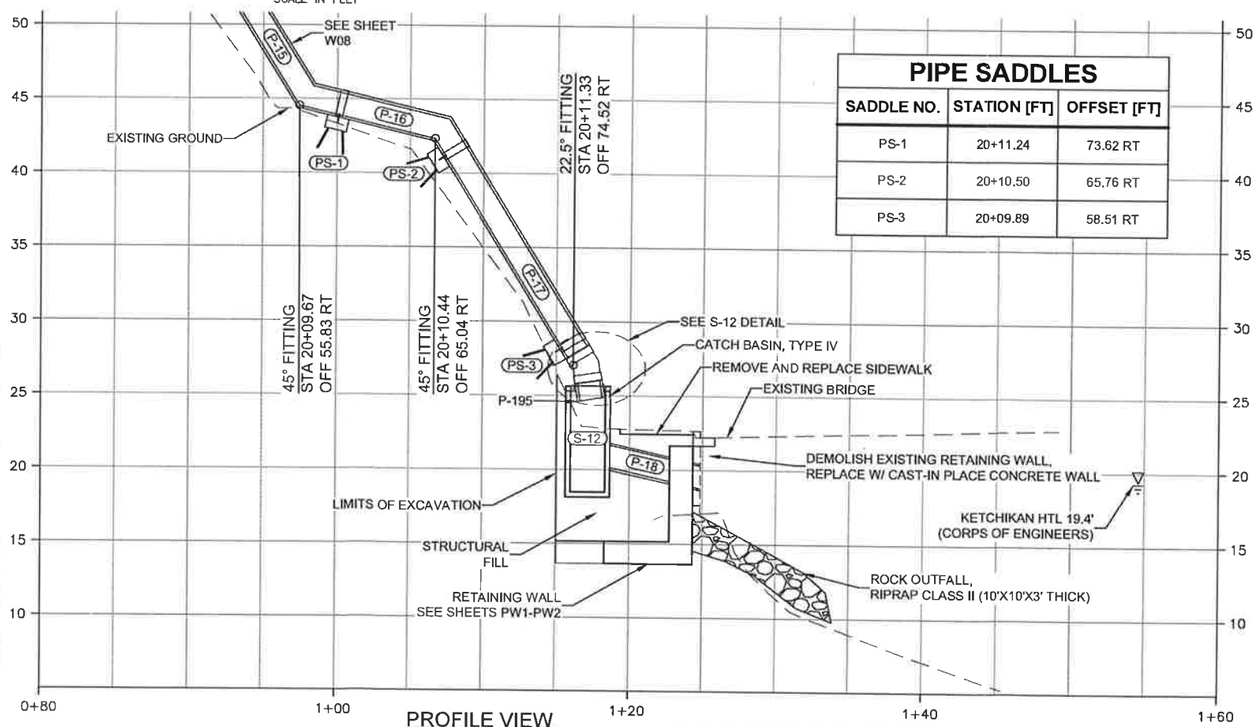


S-12 DETAIL
NTS



0 2.5 5 10
SCALE IN FEET

PLAN VIEW



PROFILE VIEW

STRUCTURES TABLE

STRUCTURE NO.	STRUCTURE TYPE	CENTER OF STRUCTURE WATER STREET		RIM ELEVATION [FT]	INVERTS [FT]	REMARKS
		STATION [FT]	OFFSET [FT]			
S-12	TYPE IV CB	20+11.41	75.31 RT	25.65	P-18=20.22 P-185=20.57 P-195=25.65	SEE S-12 DETAIL
S-125	TYPE 20 CB	20+28.97	76.59 RT	22.00	P-185=21.23	

PIPE TABLE

PIPE NO.	SIZE [IN]	LENGTH [FT]	INLET STRUCTURE	INLET INVERT [FT]	OUTLET STRUCTURE	OUTLET INVERT [FT]	SLOPE	REMARKS
P-16	18	9.5	P-15	44.54	P-17	42.34	23.81%	
P-17	18	18.8	P-16	42.34	S-12	27.03	160.82%	
P-18	18	9.8	S-12	20.22	STA 20+11.00 OFF 82.91	18.42	27.3%	ROCK OUTFALL
P-185	6	17.6	S-12	21.23	S-125	20.57	4.26%	
P-195	18	1.2	S-12	25.78	S-12	NEAR VERTICAL	80.87%	

PIPE SADDLES

SADDLE NO.	STATION [FT]	OFFSET [FT]
PS-1	20+11.24	73.62 RT
PS-2	20+10.50	65.76 RT
PS-3	20+09.89	58.51 RT

PATH: Z:\PROJECTS\1744.00 DOT_SC WATER STREET VIADUCT\CIVIL\CONSTRUCTION ASSISTANCE\CAD\PARNELL OUTFALL\1744.01_WATER STREET VIADUCT - STANDARD\1744-W SHEETS-STORM.DWG

JAI CHANG

TAB: PW 3 1/11/2017 4:38 PM

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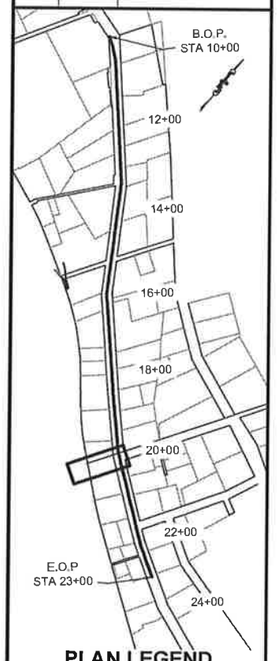
ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: T. GRIER

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: J. CHANG

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

REVISED PARNELL OUTFALL

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2017
SHEET NUMBER	TOTAL SHEETS
PW3	PW3

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

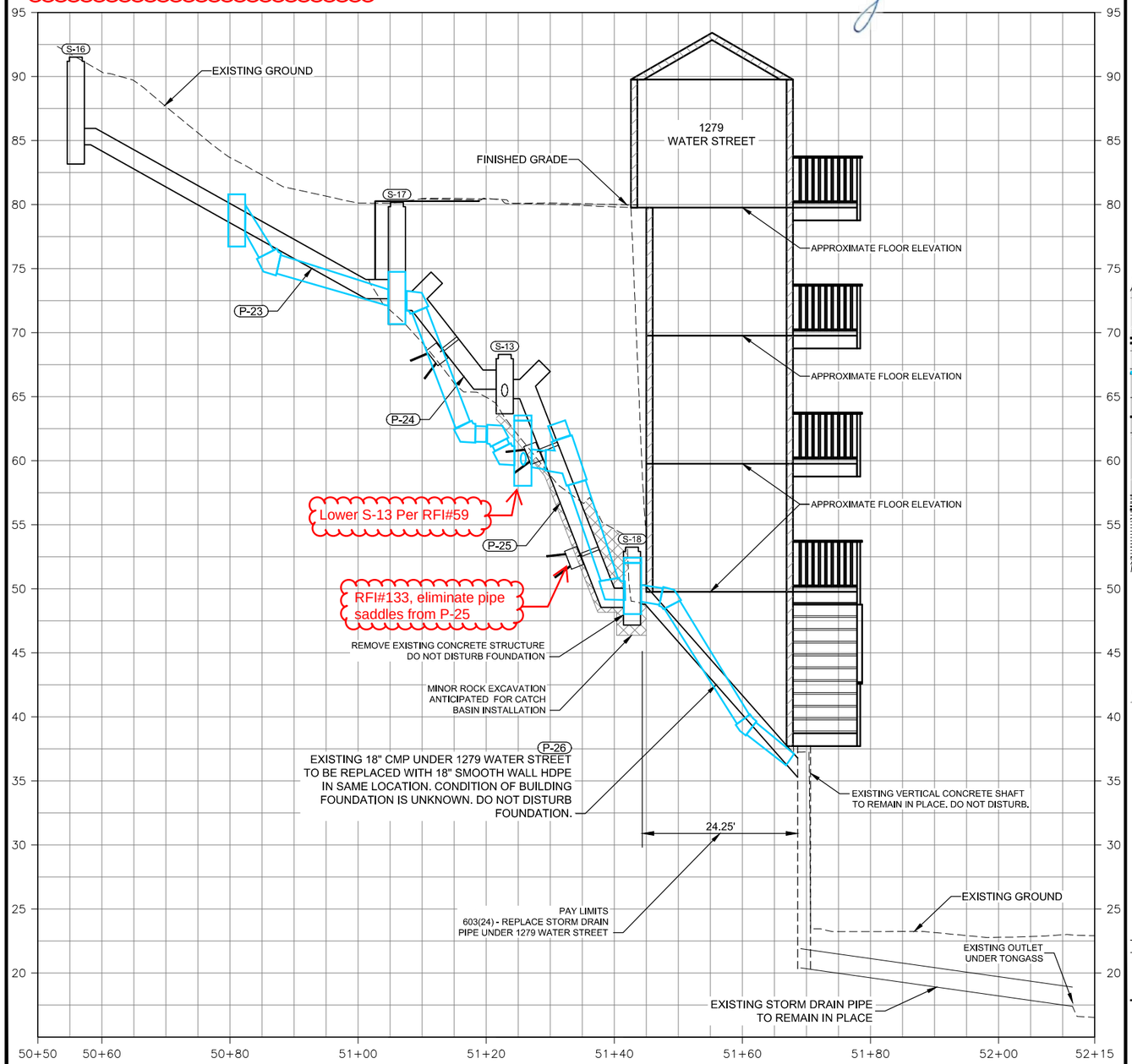
As Installed (appx.)

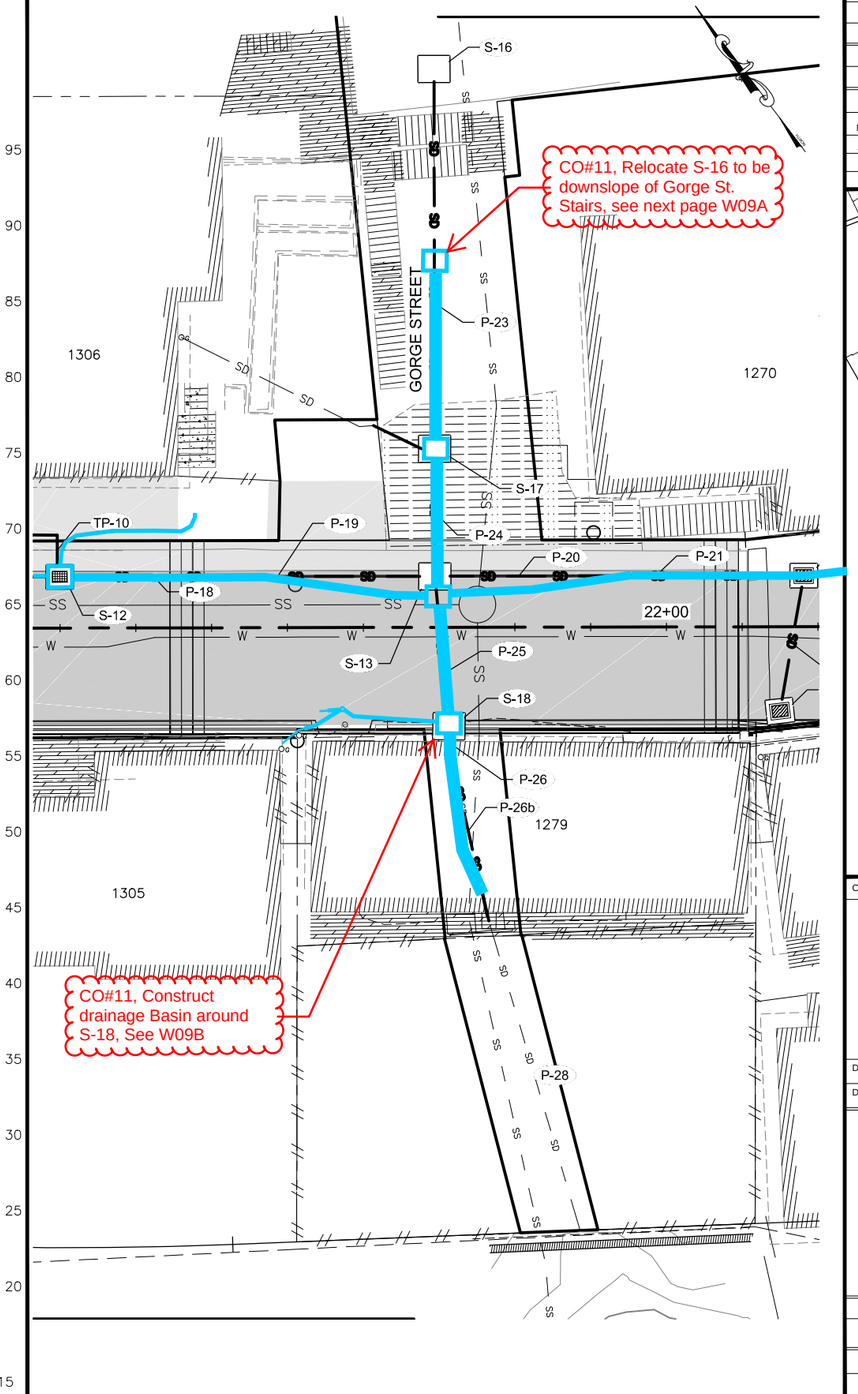
SD As Designed

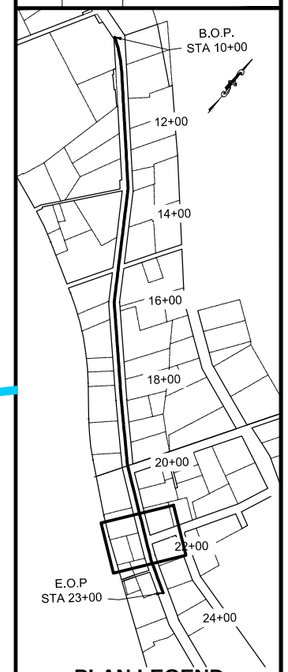
Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019







PLAN LEGEND

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-STORM.DWG

NICOLE KNOX

TAB: W09 8/14/2015 8:40 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11896 8/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

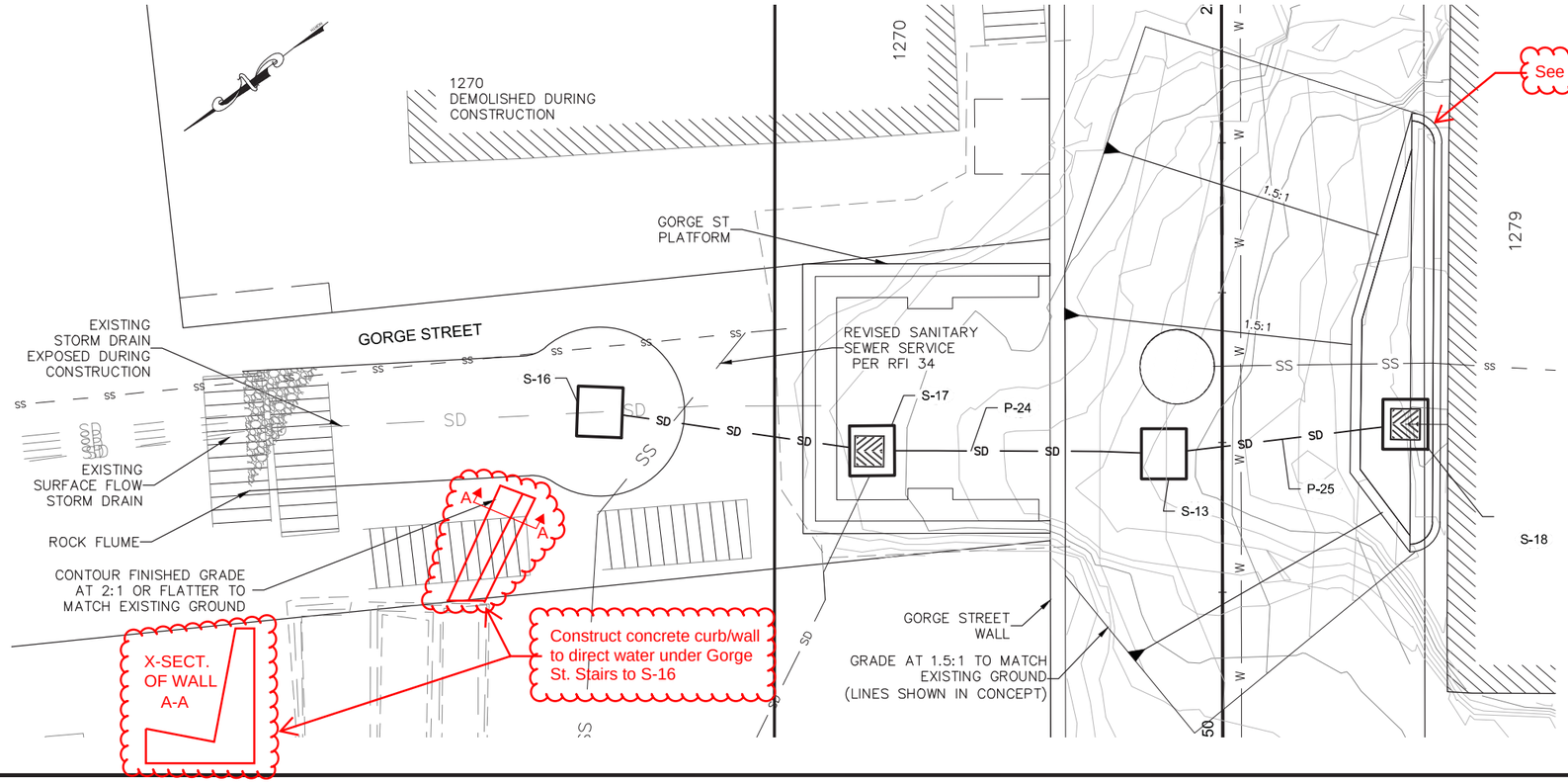
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

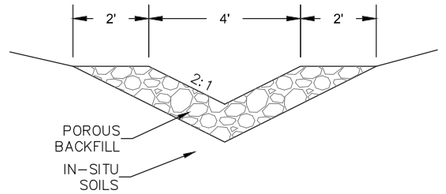
STORM P&P

PROJECT DESIGNATION

BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W09	W22





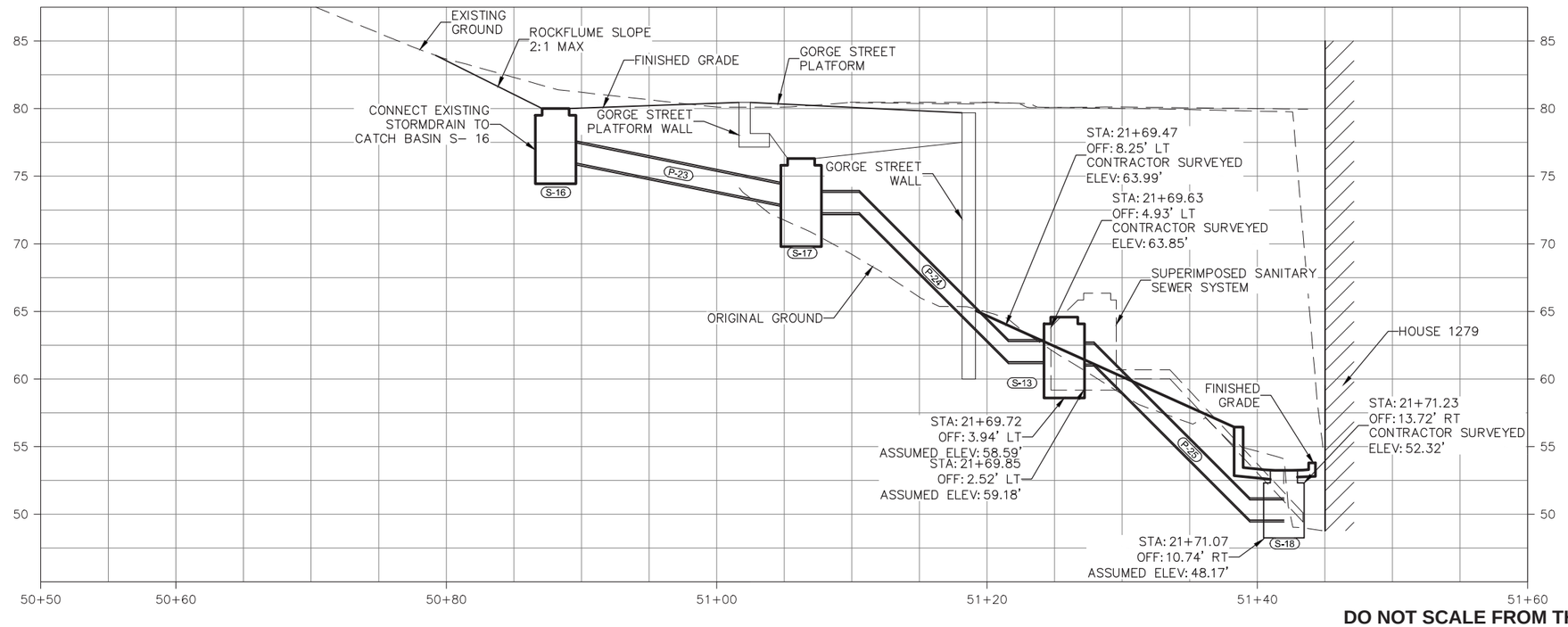
ROCK FLUME DITCH

STRUCTURES TABLE

STRUCTURE NO.	STRUCTURE TYPE	LOCATION	RIM ELEV
S-16	TYPE 20 CB	STA 21+72.12 OFF -41.56	80.00'

PIPE TABLE

PIPE NO.	INLET	OUTLET	SLOPE
P-23	S-16 INVERT 76.27'	S-17 INVERT 72.60	20.00%



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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RYAN REDICK
TAB: P&P 10/17/2016 4:11 PM

ADDENDUM NUMBER
Sheet added via CO#11

ATTACHMENT NUMBER

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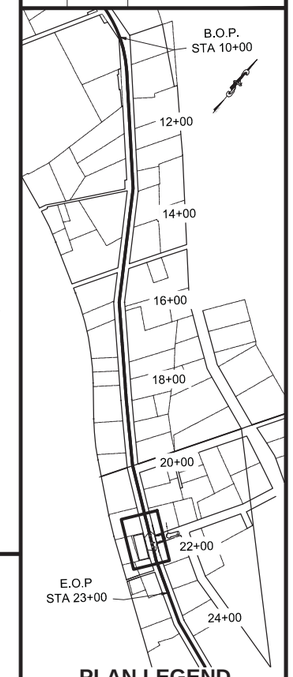
AB		As-Built Set



PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK

DRAWN BY: J. HORAZDOVSKY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

GORGE STREET S-16 REVISION

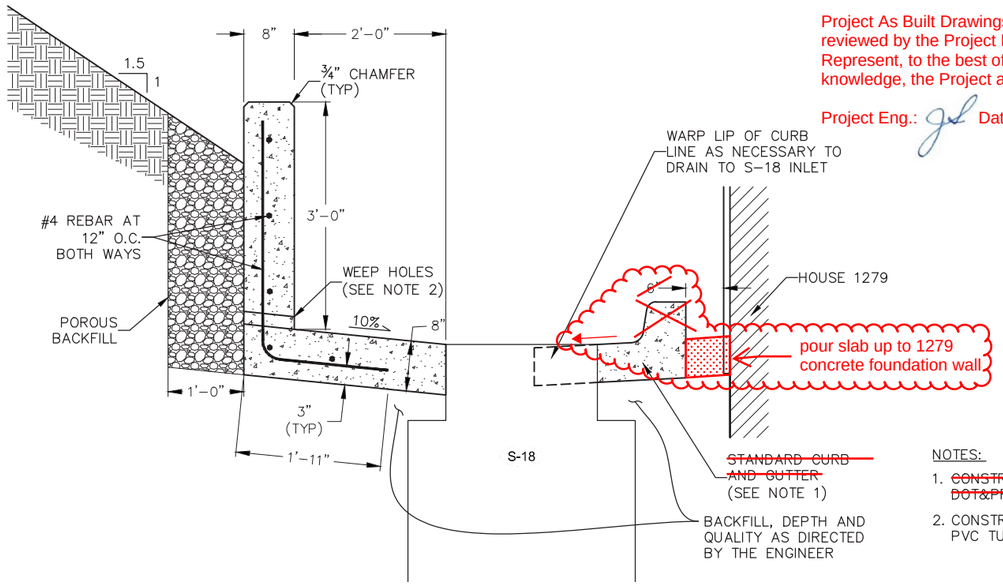
PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
~~RFP~~ W09A	_OF _

CO #11 Page 5 of 5

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

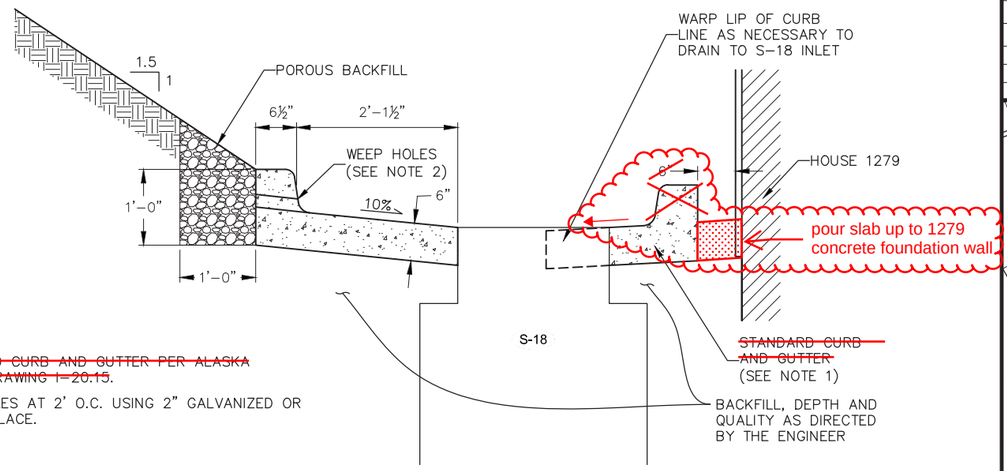
Project Eng.: JL Date: 9/6/2019



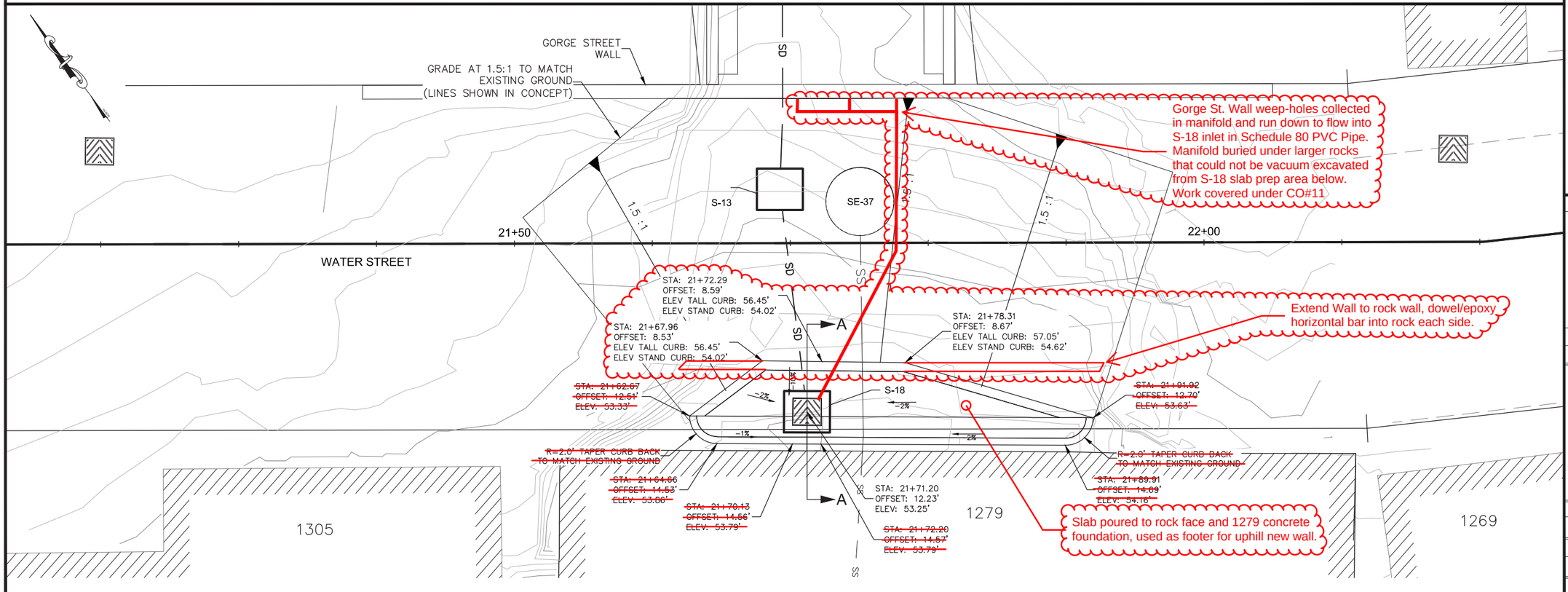
SECTION A-A
TALL CURB

NOTES:

1. ~~CONSTRUCT STANDARD CURB AND GUTTER PER ALASKA DOT&PF STANDARD DRAWING 1-20.15.~~
2. CONSTRUCT WEEP HOLES AT 2' O.C. USING 2" GALVANIZED OR PVC TUBE, CAST IN PLACE.



SECTION A-A
STANDARD CURB



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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RYAN REDICK
TAB: DETAIL 10/15/2016 12:28 PM

ADDENDUM NUMBER
Sheet added via CO#11

ATTACHMENT NUMBER

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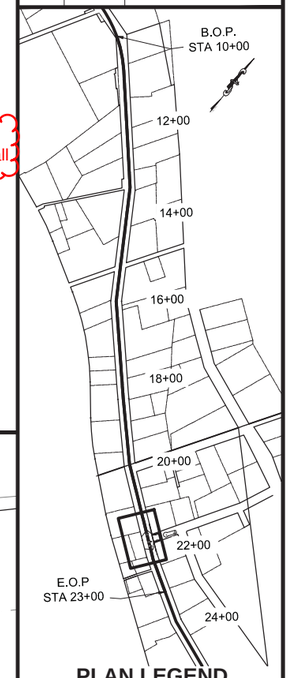
AB		As-Built Set



PLAN LEGEND

CHECKED BY:

STATE OF ALASKA 49TH
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK
DRAWN BY: J. HORAZDOVSKY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

GORGE STREET DRAINAGE DETAIL

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
~~DETAIL~~ W09B	~~W22~~

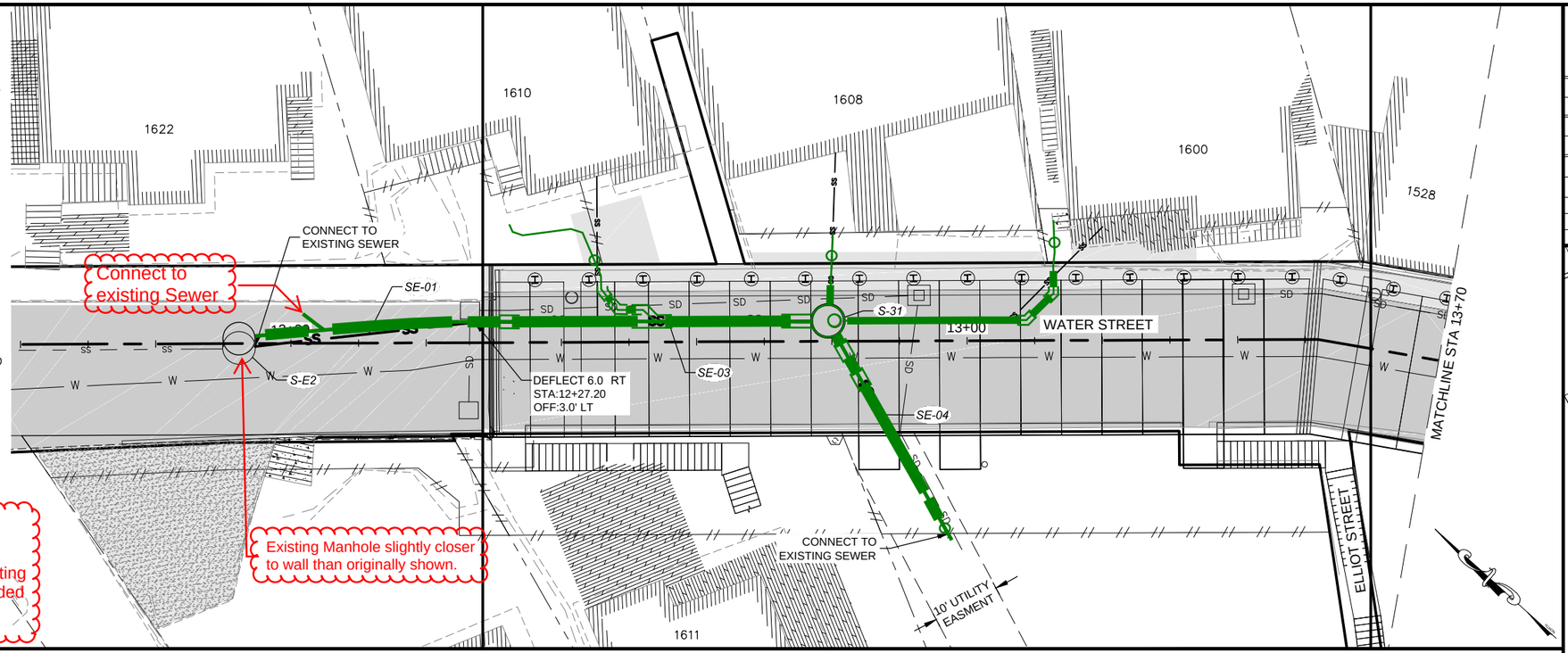
CO #11 Page 4 of 5

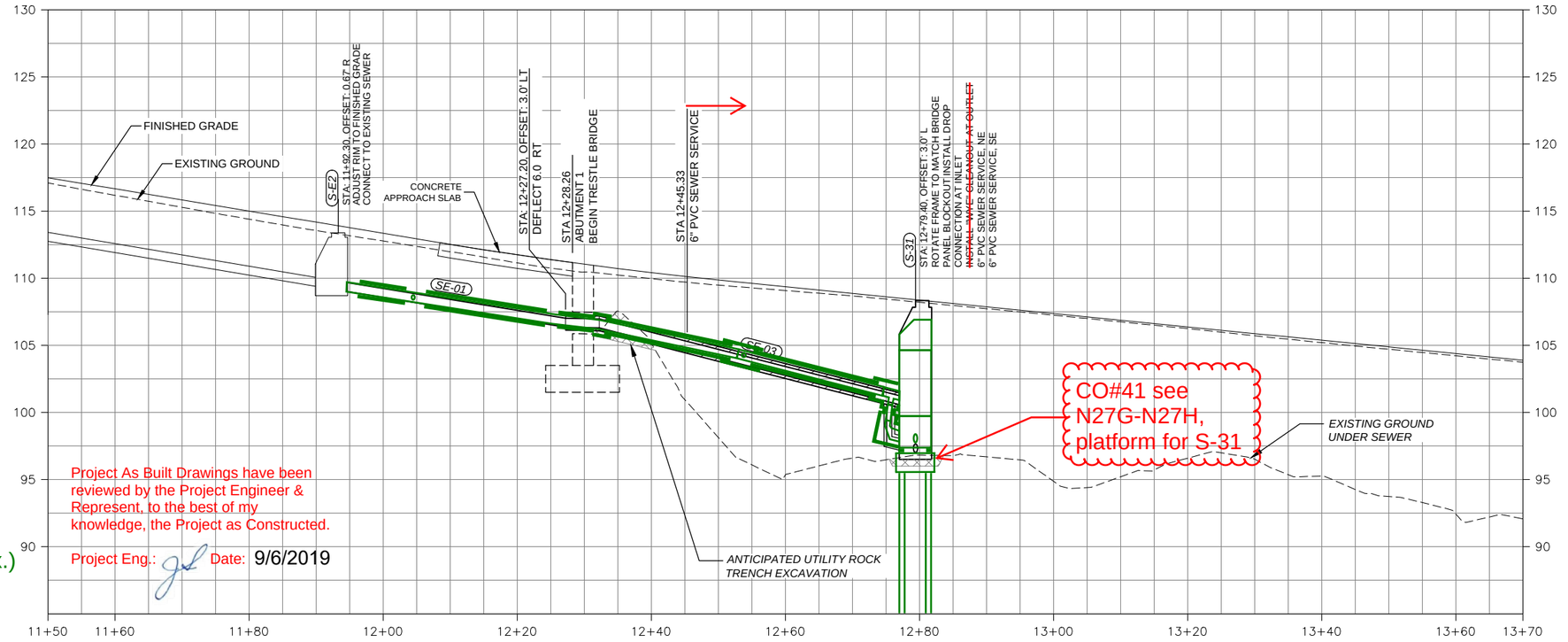
SANITARY SEWER CONSTRUCTION NOTES:

1. CITY OF KETCHIKAN AND EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY–TWO (72) HOURS IN ADVANCE OF SEWER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SEWER SERVICE TO EXISTING CUSTOMERS IF THE OUTAGE EXCEEDS 6–HOURS OR IF DEEMED NECESSARY BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A TEMPORARY SEWER SERVICE PLAN REVIEWED AND APPROVED BY ADEC.
2. SEWER MAIN STATIONING REFERENCES WATER STREET STATIONING.
3. REPLACE ALL SEWER SERVICES TO THE EDGE OF RIGHT–OF–WAY OR TO RESIDENCE AS SHOWN.
4. REPLACE ALL SEWER SERVICE CLEAN OUTS.
5. EXISTING SEWER MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. SEE DEMOLITION SHEET A3 AND A4.
6. EXISTING WATER & STORM MAINS NOT SHOWN IN PLAN VIEW FOR CLARITY.
7. EXISTING UTILITY LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
8. BURIED SEWER MAINS SHALL HAVE 4' MINIMUM COVER. WHERE MINIMUM COVER IS NOT POSSIBLE, INSTALL 4" RIGID INSULATION AS REQUIRED.
9. TRACE WIRE SHALL BE INSTALLED 12" ABOVE BURIED SEWER MAINS. USE 8 GAGE WIRE ABOVE MAINS.
10. ALL NEW SEWER MAINS SHALL BE PVC 900 PIPE.
11. SEWER SERVICES SHALL BE 6" PVC C900, WITH 1% MINIMUM SLOPE, UNLESS OTHERWISE NOTED ON PLANS.
12. ALL SEWER MAIN AND SERVICE TRENCHES AND BEDDING SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.

As-Built Drawing markups most clear when viewed in color (all W sheets).

Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

As Installed (appx.)

As Designed

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCTICIVIL\ACAD\1744-W SHEETS-SEWER.DWG

NICOLE KNOX

TAB: W10 8/14/2015 8:41 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A. KNOX
CE-11896
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

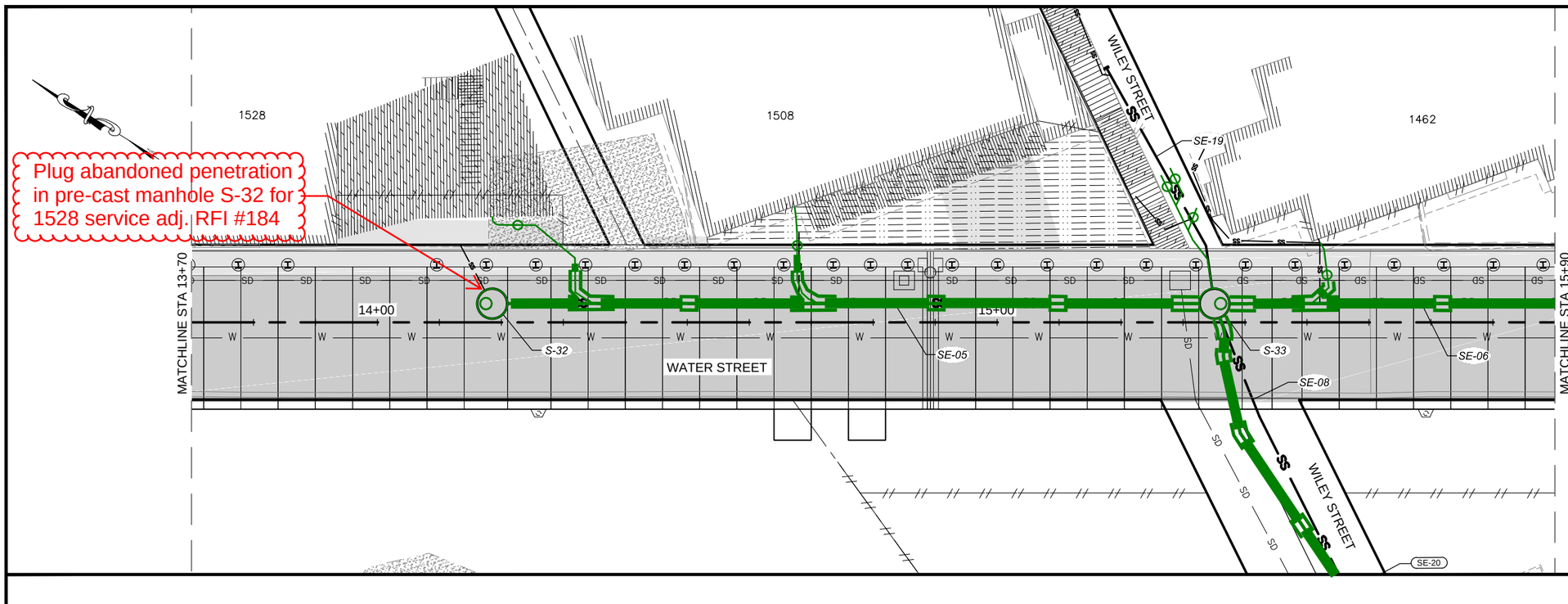
DRAWN BY: B. MAXWELL

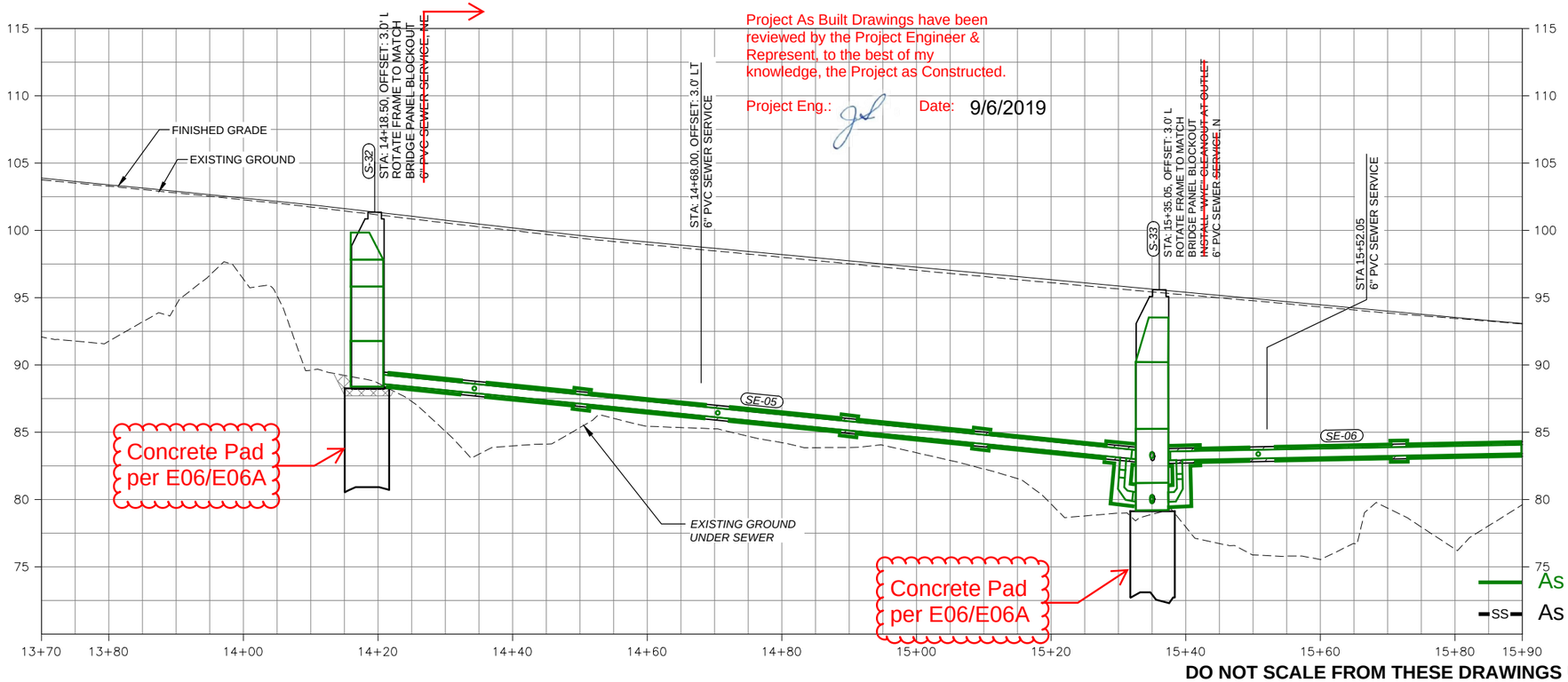
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W10	W22





DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-SEWER.DWG

NICOLE KNOX

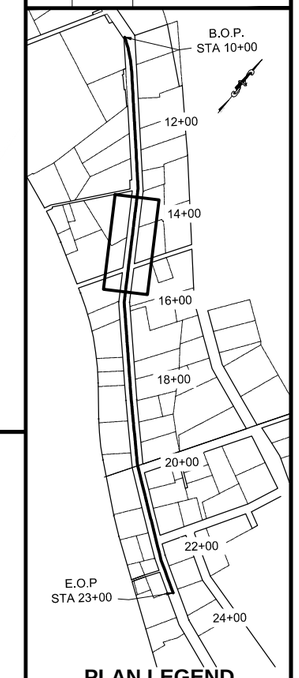
TAB: W11 8/14/2015 8:41 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A. KNOX
CE-11996
9/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

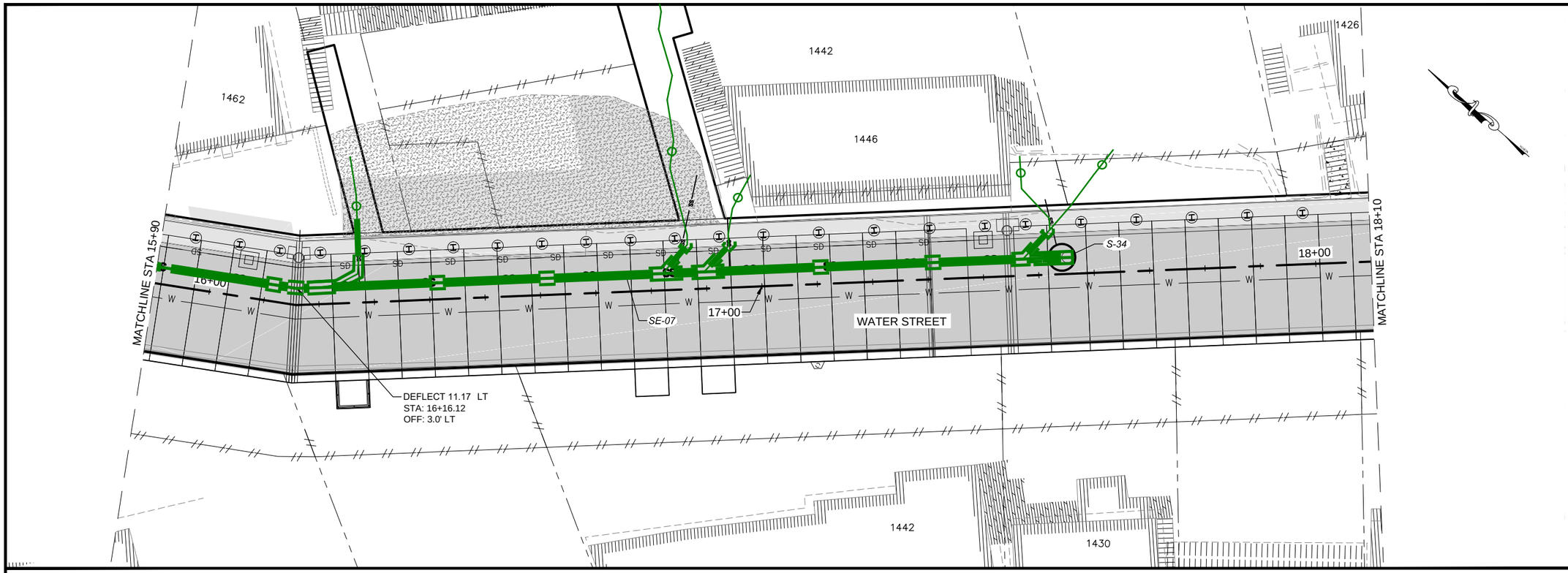
DRAWN BY: B. MAXWELL

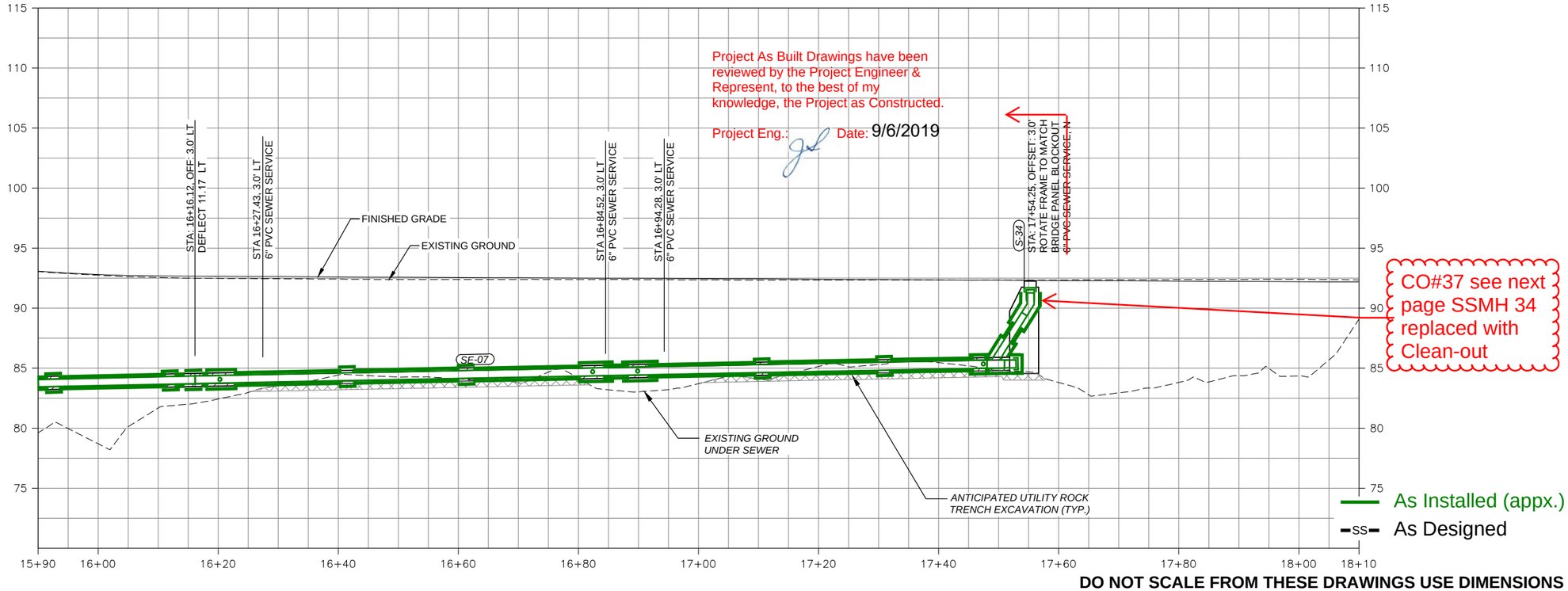
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W11	W22





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

CO#37 see next page SSMH 34 replaced with Clean-out

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-SEWER.DWG

NICOLE KNOX

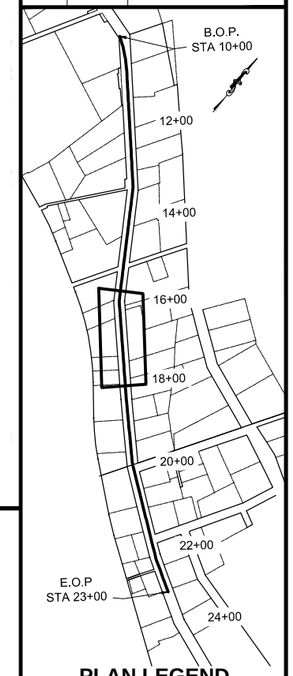
TAB: W12 8/14/2015 8:41 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
NICOLE A KNOX
CE-11696
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

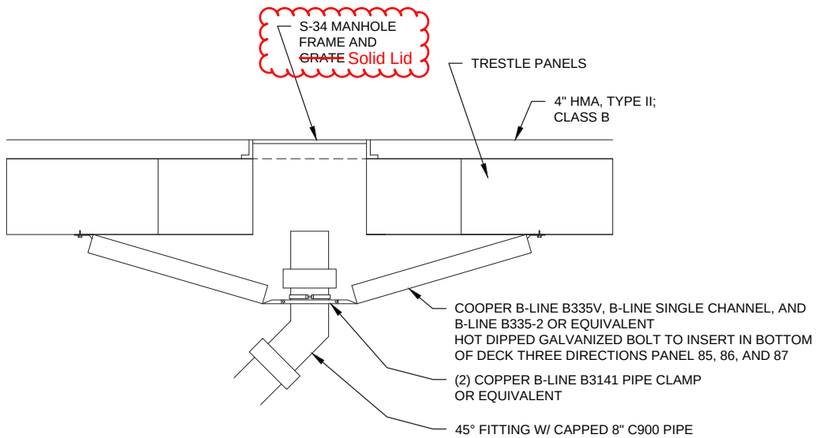
DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

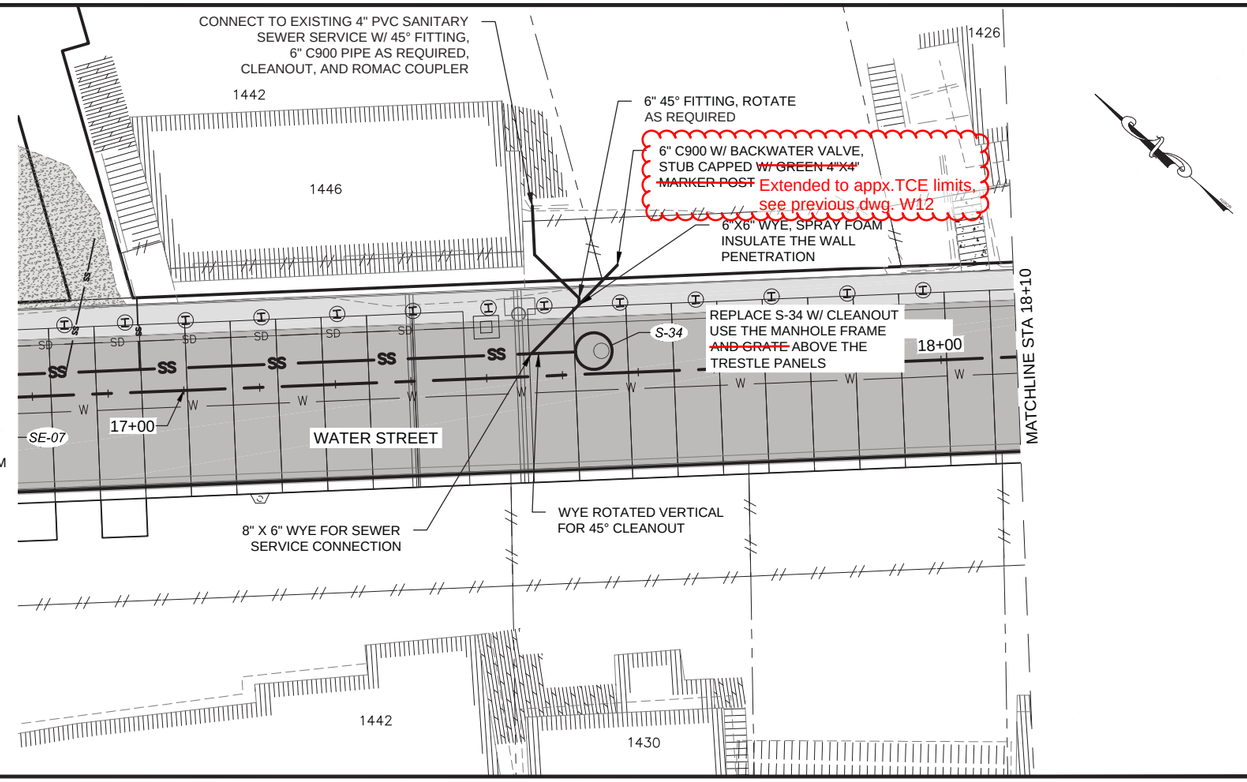
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

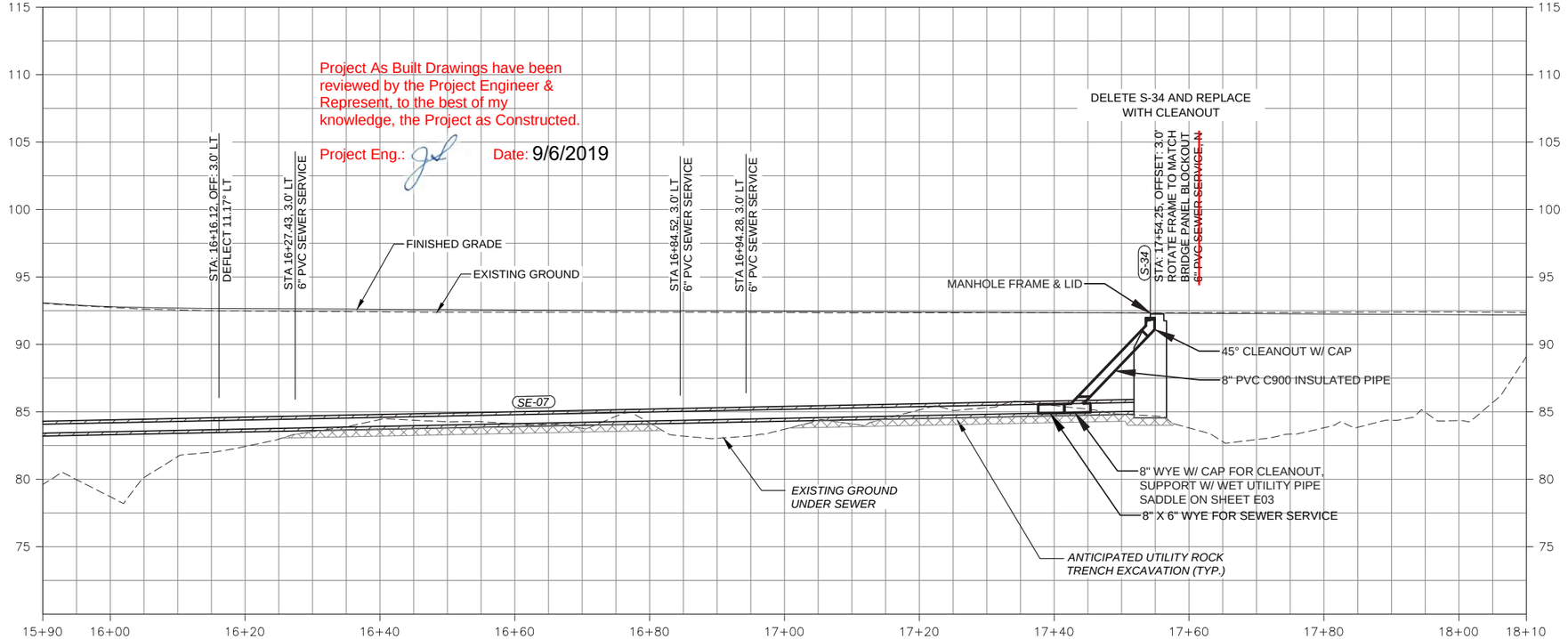
SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
W12	**W22**



SSMH 34 - CLEANOUT HANGER DETAIL





CO#37

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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PLAN REVISED
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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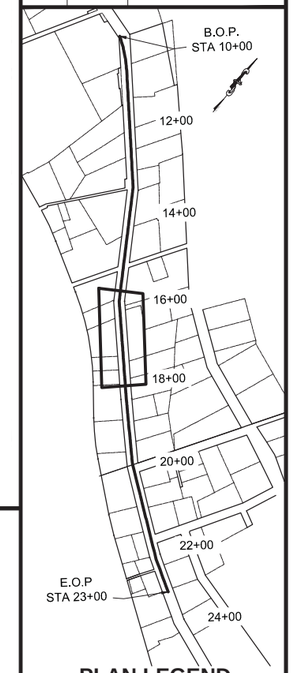


PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49 TH Ryan D. Redick No. CE 12799 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

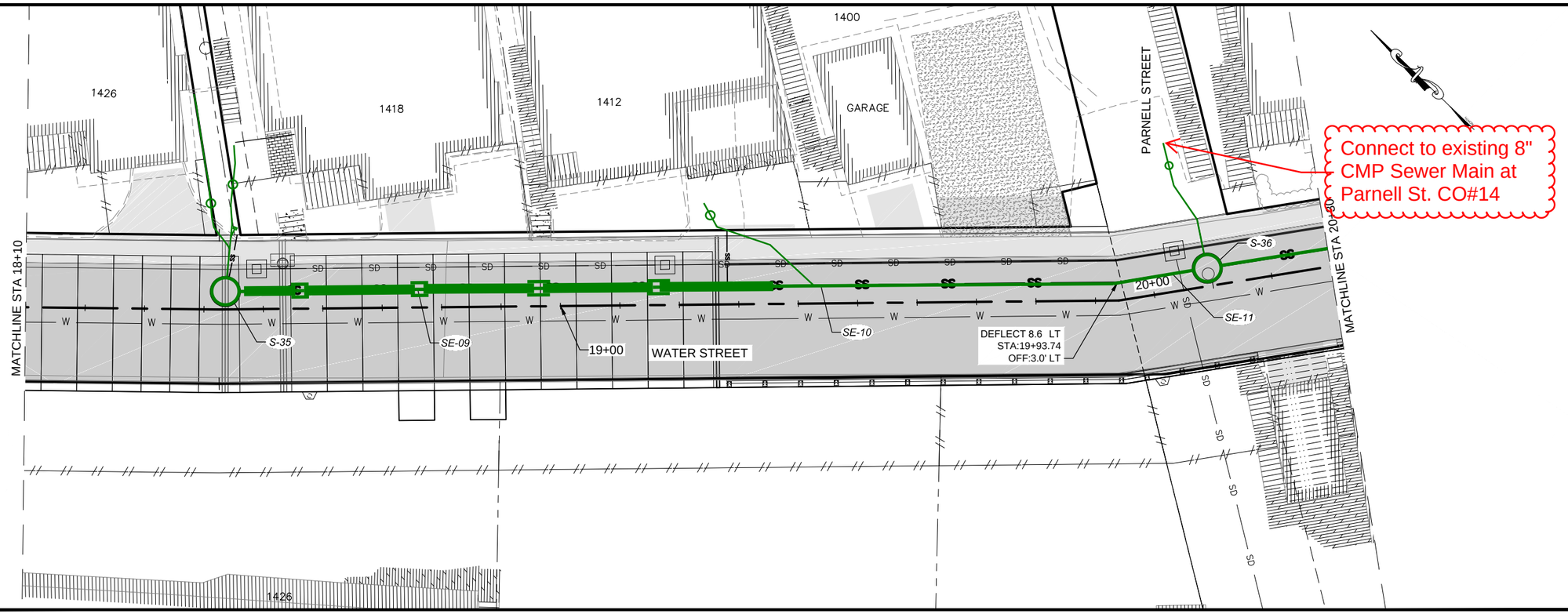
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

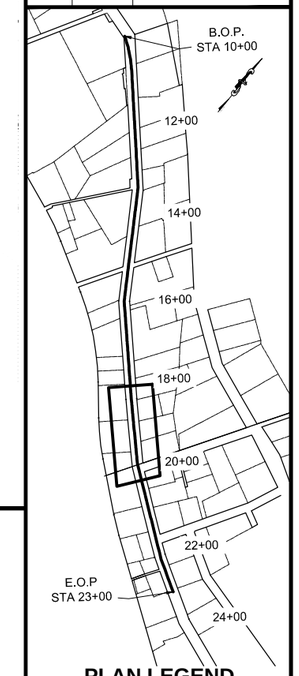
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SSMH 34 & SERVICE CONNECTIONS

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
SSMH 34	W22





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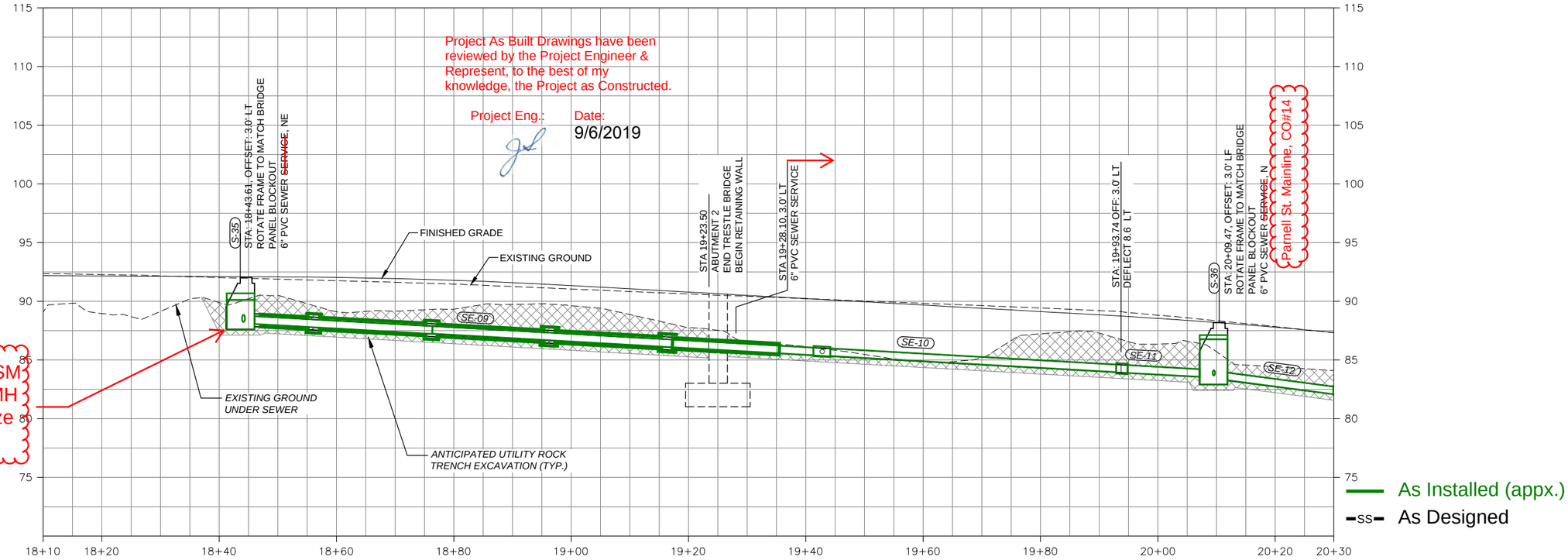


DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCTICIVIL\ACAD\1744-W SHEETS-SEWER.DWG

NICOLE KNOX

TAB: W13 8/14/2015 8:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11696 8/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

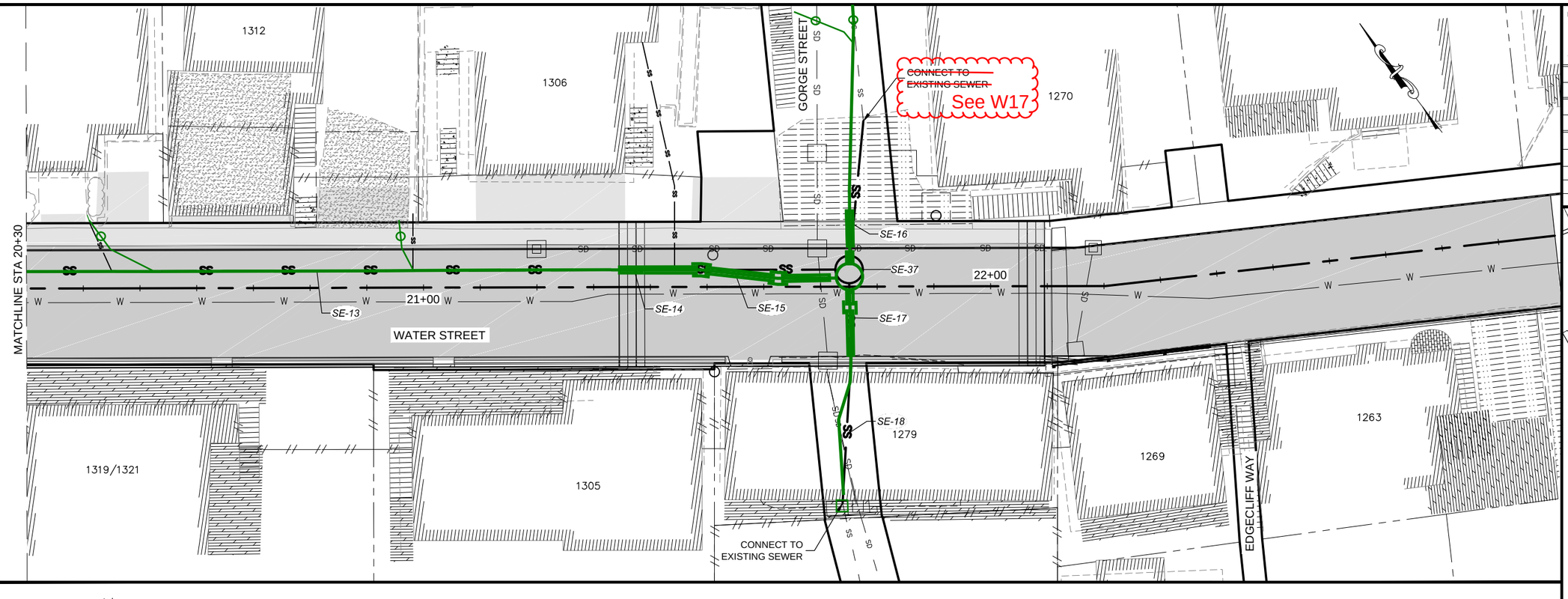
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

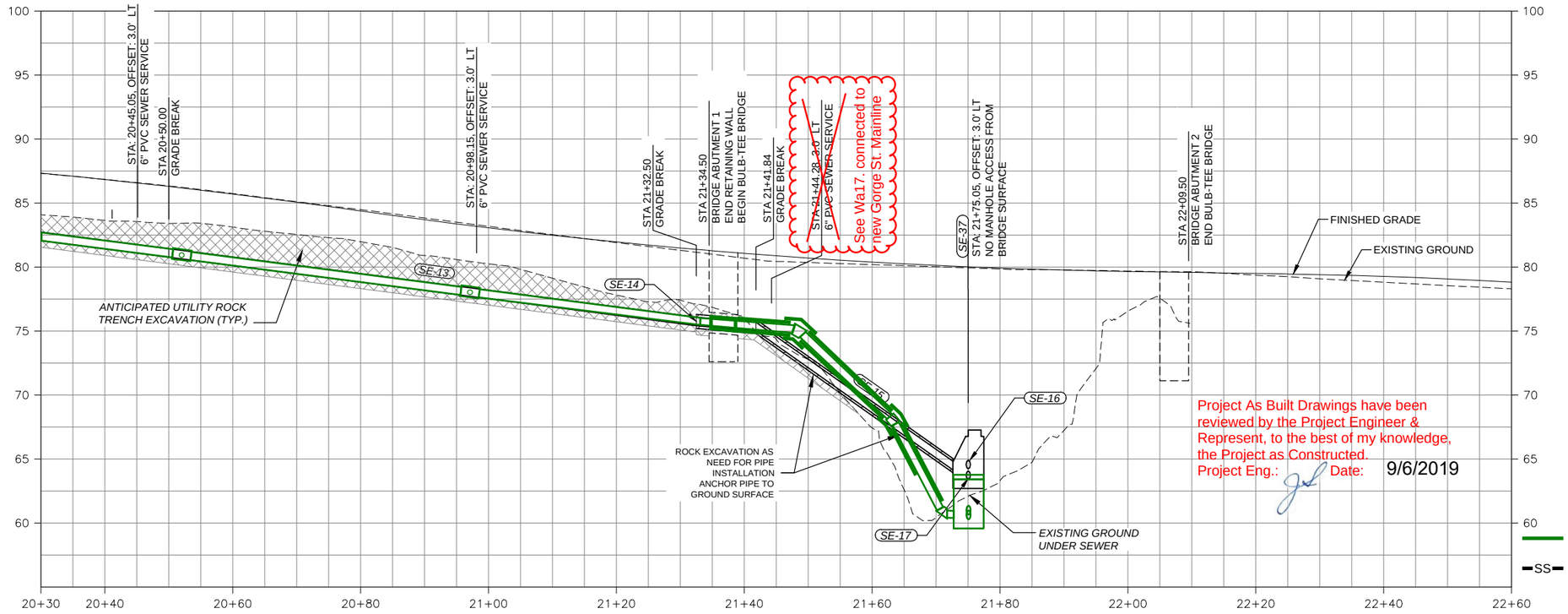
SEWER P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
W13	W22





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

As Installed (appx.)
As Designed

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-SEWER.DWG
NICOLE KNOX
TAB: W14 8/14/2015 8:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A KNOX
CE-11696
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

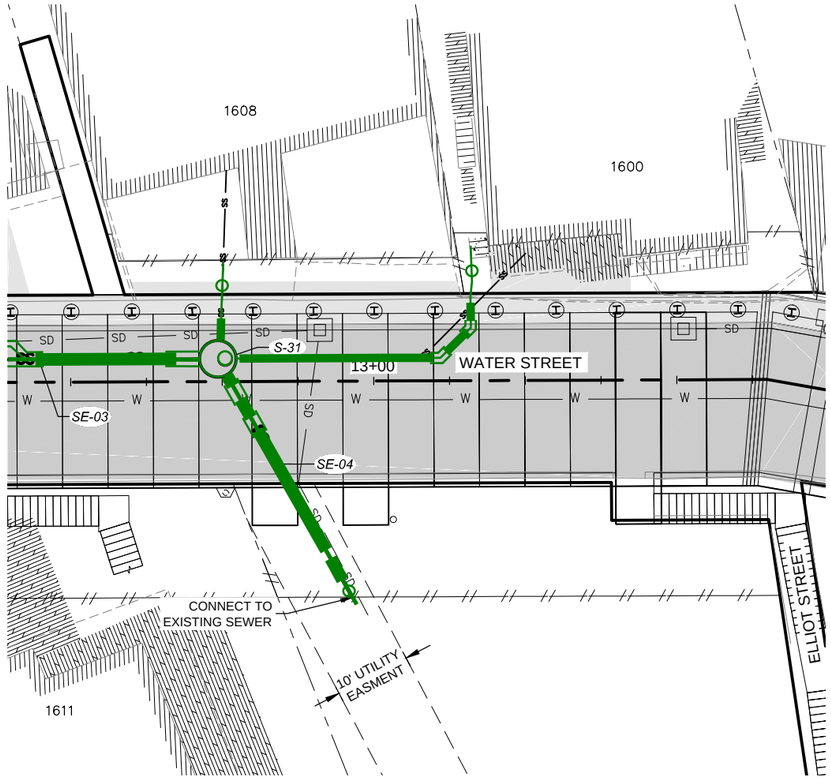
DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

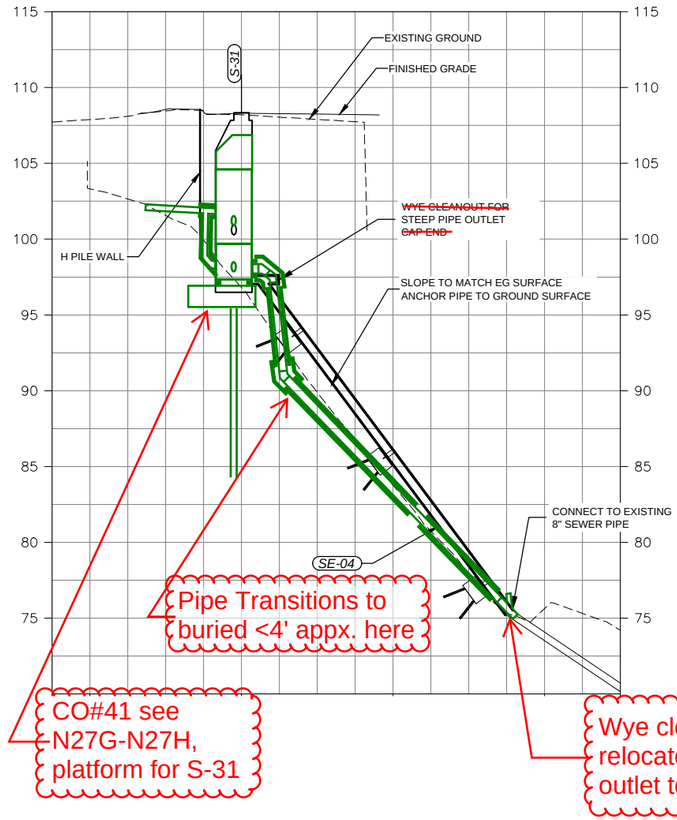
SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
W14	**W22**



As Installed (appx.)

SS As Designed



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: **Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-SEWER.DWG**

NICOLE KNOX

TAB: **W15** **8/14/2015 8:42 AM**

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

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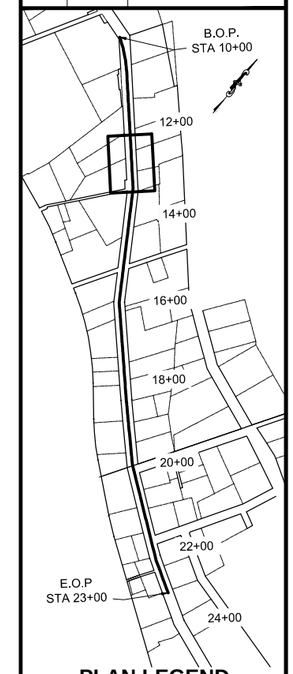
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A. KNOX
CE-11996
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

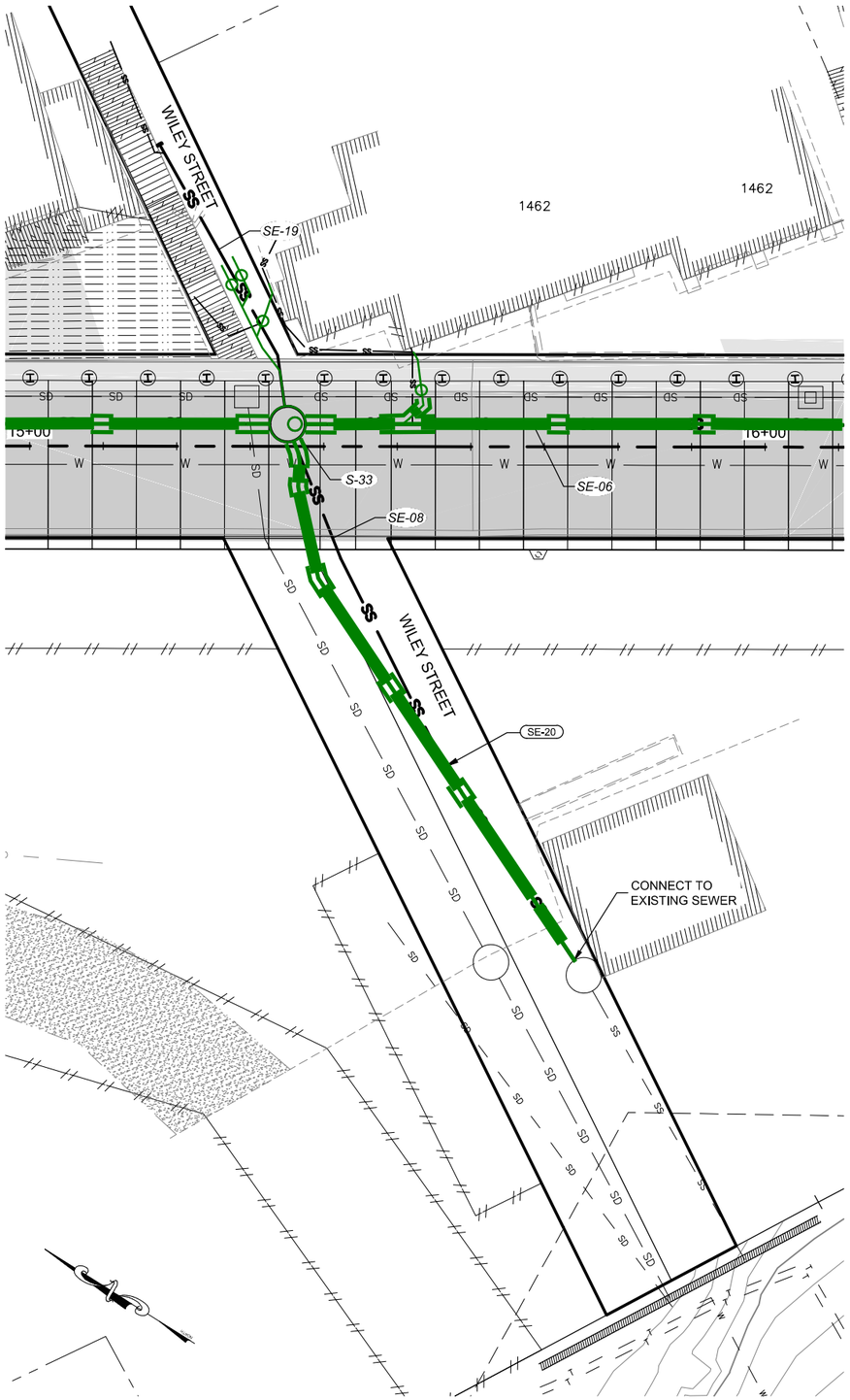
DRAWN BY: B. MAXWELL

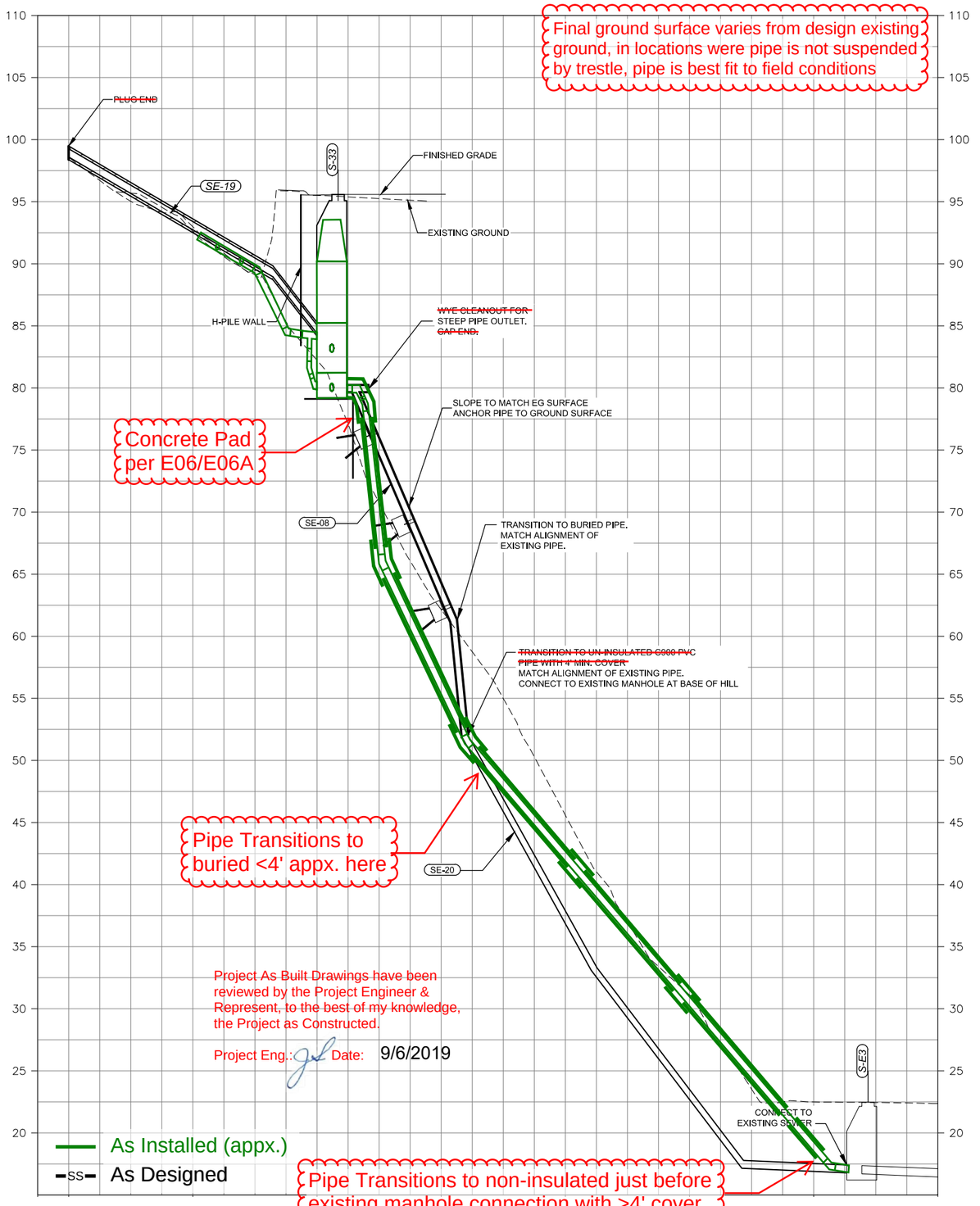
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
W15	**W22**





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NICOLE KNOX

TAB: W16 8/14/2015 8:42 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
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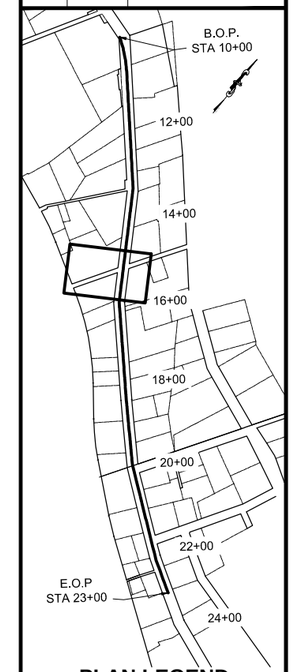


PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A. KNOX
CE-11996
8/14/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

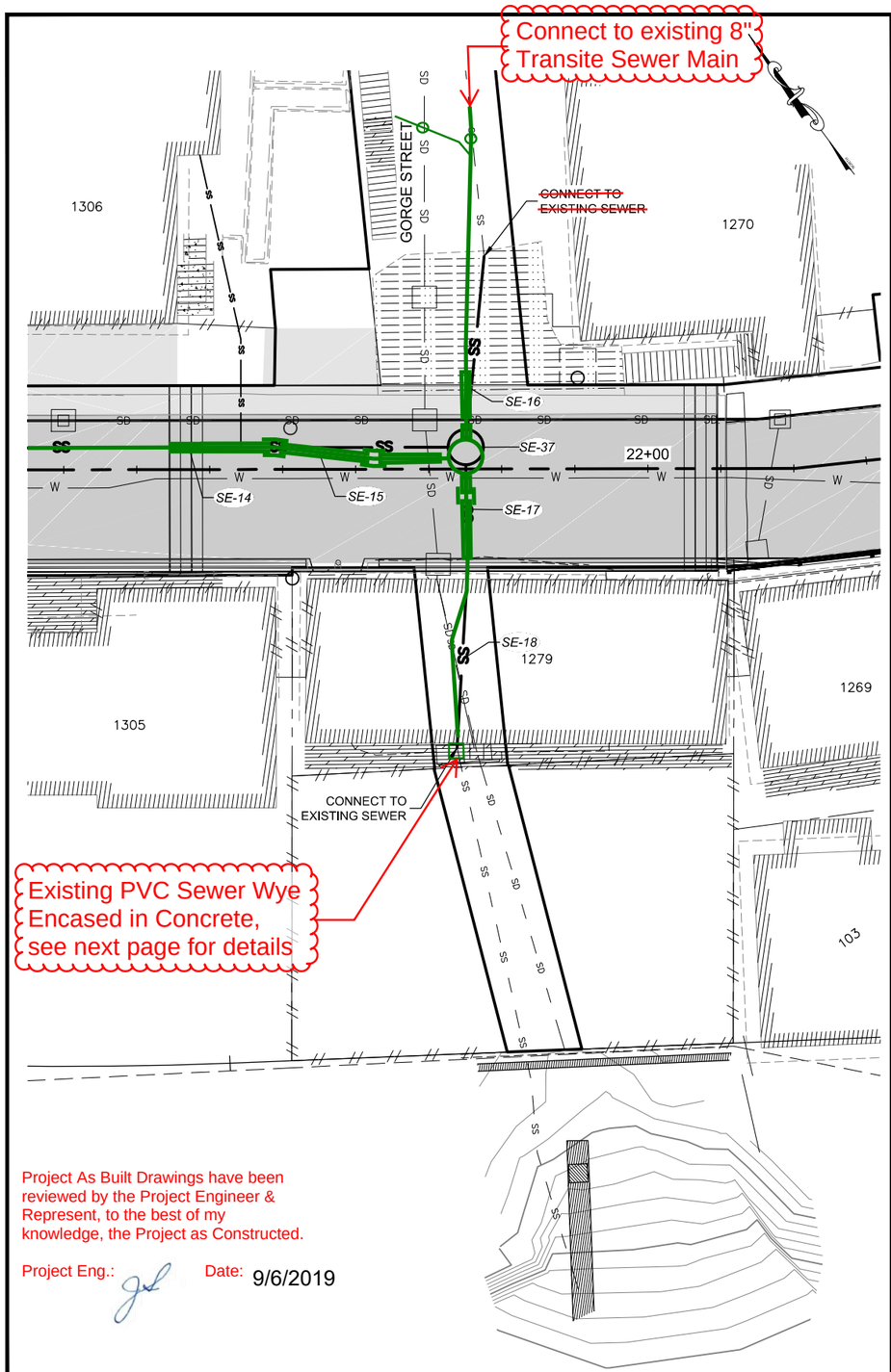
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
W16	**W22**

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

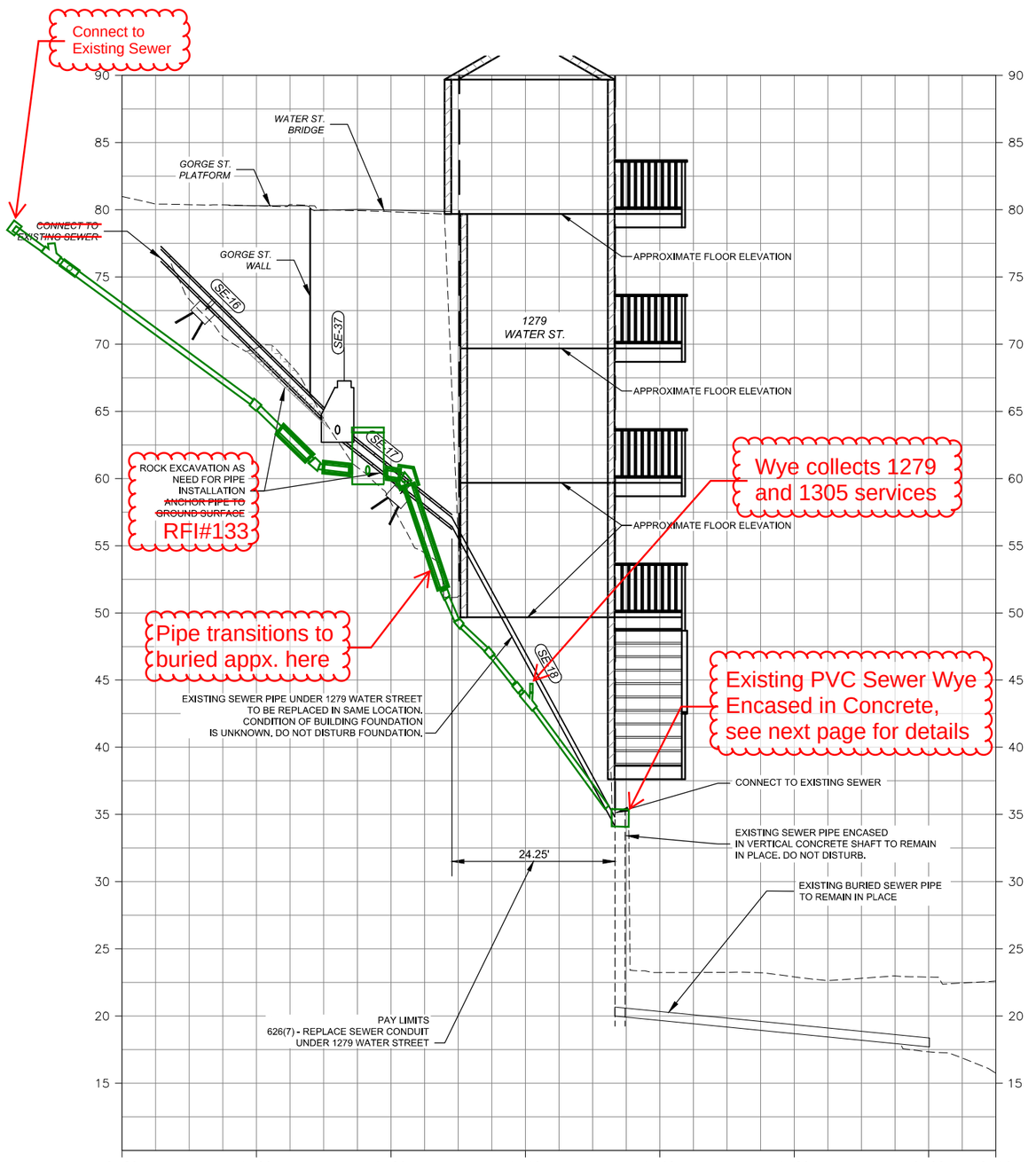


Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

As Installed (appx.)

As Designed



Final ground surface varies from design existing ground, in locations were pipe is not suspended by trestle, pipe is best fit to field conditions

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-SEWER.DWG

NICOLE KNOX

TAB: W17 8/14/2015 8:43 AM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
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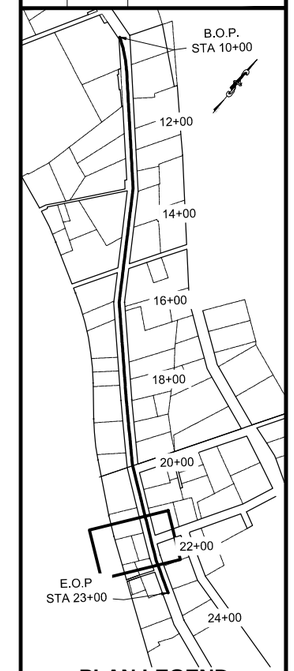


PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11898 8/14/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

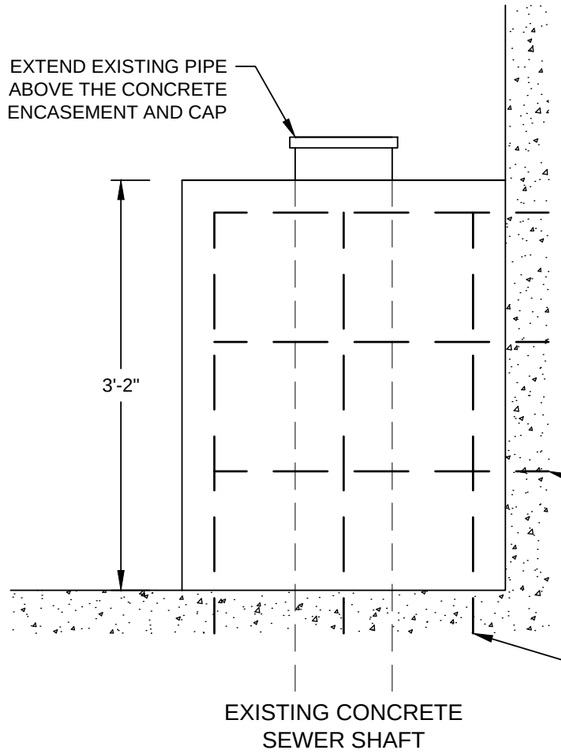
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

SEWER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	**2015**
SHEET NUMBER	TOTAL SHEETS
W17	**W22**

Tracked and paid under 678(1) “ Restoration of Private & Public Property”



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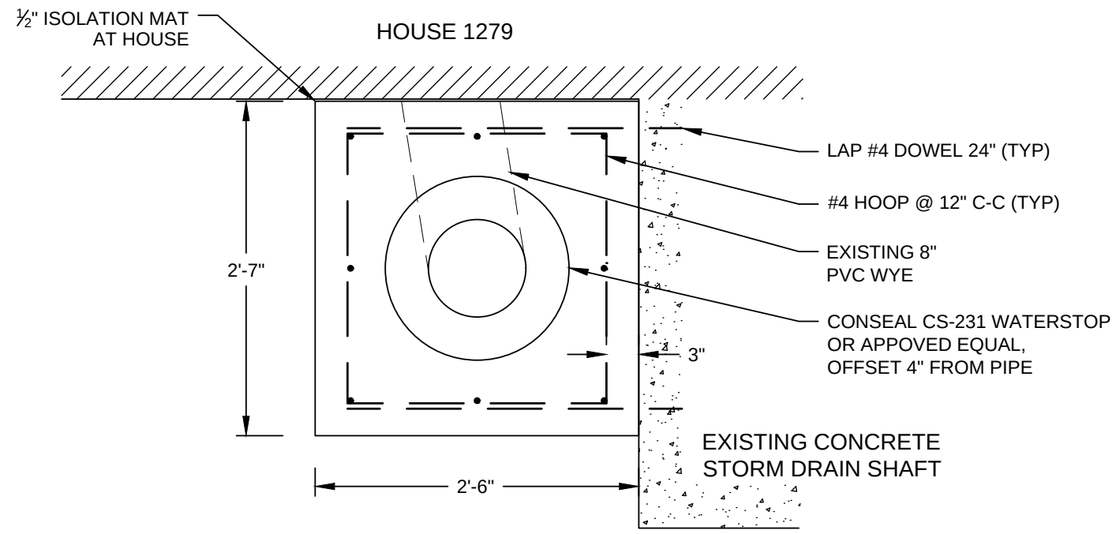

TOP

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

Implemented due to cracked/leaking condition of existing exposed Wye near project CTE point

CHECKED BY:	T. GRIER
DESIGNED BY:	R. REDICK
DRAWN BY:	R. REDICK

STATE OF ALASKA
Ryan D. Redick
No. CE 12799
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

1279 SEWER ENCASEMENT

TAB: 1279 Monday, November 06, 2017 10:10:03 AM RYAN REDICK

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
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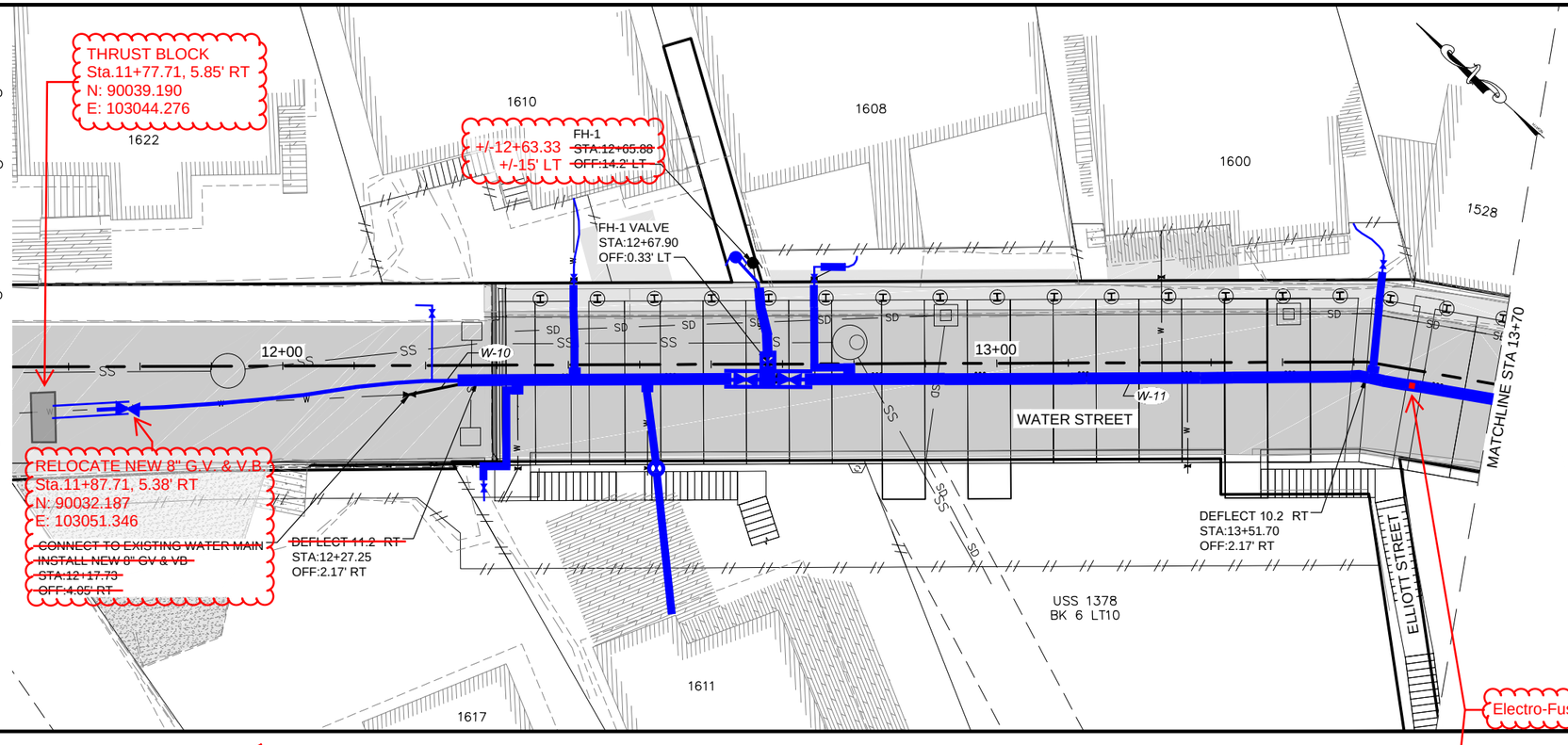
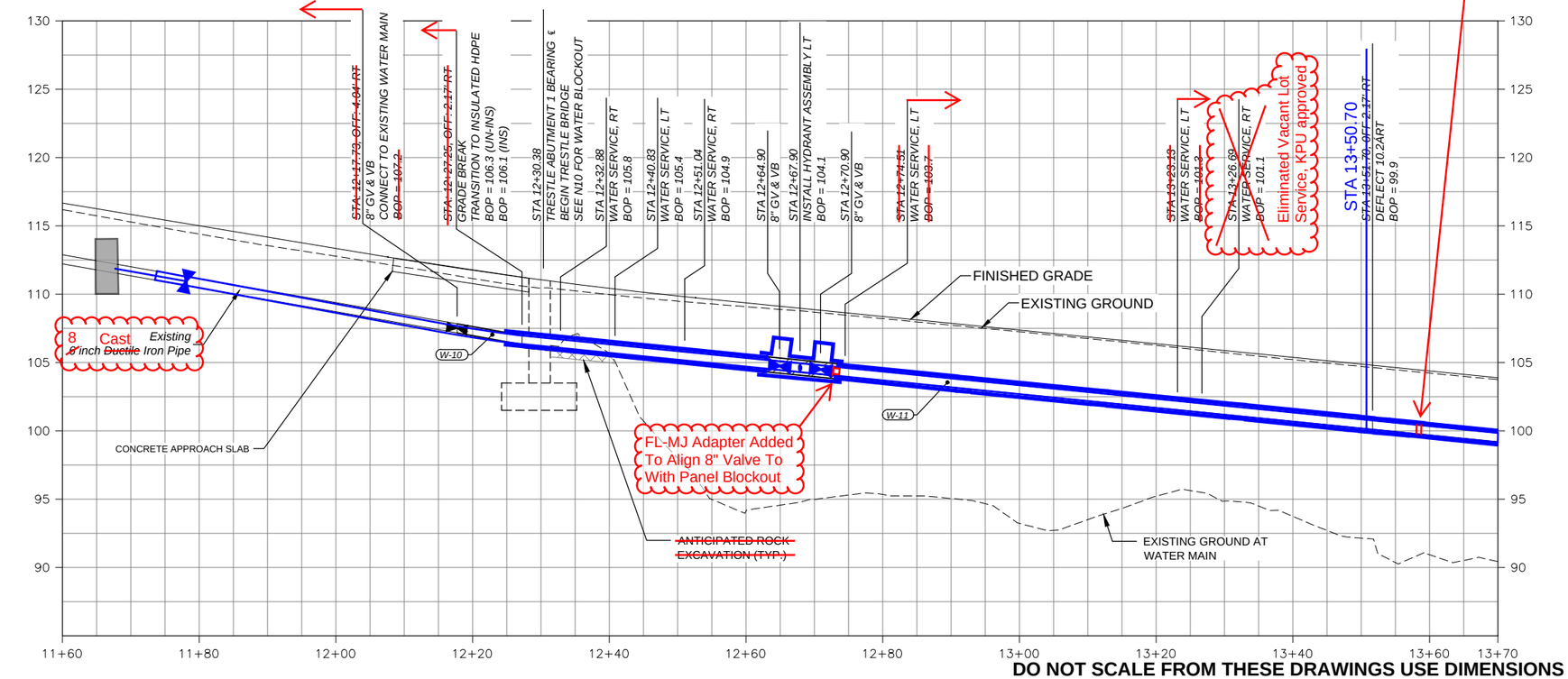
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET WADUCT\CIVIL\CONSTRUCTION ASSISTANCE\ACAD\1744.01_WATER STREET VIADUCT - 1279 SEWER\1279 SEWER.DWG

WATER CONSTRUCTION NOTES:

1. CITY OF KETCHIKAN, KETCHIKAN FIRE DEPARTMENT, AND EXISTING CUSTOMERS SHALL BE NOTIFIED SEVENTY-TWO (72) HOURS IN ADVANCE OF WATER SERVICE INTERRUPTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY WATER SERVICE TO EXISTING CUSTOMERS IF THE OUTAGE EXCEEDS 6-HOURS OR IF DEEMED NECESSARY BY THE ENGINEER. THE CONTRACTOR SHALL HAVE A TEMPORARY WATER SERVICE PLAN REVIEWED AND APPROVED BY ADEC.
2. WATER MAIN STATIONING REFERENCES WATER STREET STATIONING.
3. REPLACE ALL WATER SERVICES TO THE EDGE OF RIGHT-OF-WAY OR TO RESIDENCE AS SHOWN.
4. REPLACE ALL WATER SERVICE VALVE BOXES.
5. EXISTING WATER MAIN AND APPURTENANCES TO BE REMOVED AND DISPOSED OF BY CONTRACTOR. SEE DEMOLITION SHEETS A3 AND A4.
6. EXISTING WATER & SEWER MAINS NOT SHOWN IN PLAN VIEW FOR CLARITY.
7. EXISTING UTILITY LOCATIONS TO BE VERIFIED BY CONTRACTOR PRIOR TO COMMENCING WORK.
8. BURIED WATER MAINS SHALL HAVE 4' MINIMUM COVER. WHERE MINIMUM COVER IS NOT POSSIBLE, INSTALL PRE-INSULATED PIPE.
9. TRACE WIRE SHALL BE INSTALLED 12" ABOVE BURIED WATER MAINS. USE 8 GAGE WIRE ABOVE MAINS.
10. ALL NEW WATER MAINS SHALL BE FUSED-JOINT HIGH DENSITY POLYETHYLENE (HDPE) SDR 11 PIPE.
11. NO PIPE LENGTH LESS THAN EIGHT (8') FEET SHALL BE INCORPORATED IN THE WATER SYSTEM EXCEPT FOR THOSE NECESSARY FOR FIRE HYDRANTS OR VALVE LOCATIONS UNLESS RESTRAINED.
12. THRUST RESTRAINT SHALL BE PROVIDED BY USE OF FIELD-LOK GASKETS (OR EQUAL) OR MEG-A-LUG FITTINGS (OR EQUAL) ON ALL MECHANICAL JOINTS.
13. WATER SERVICES SHALL BE 2" COPPER, TYPE K, UNLESS OTHERWISE NOTED ON PLANS.
14. THE CONTRACTOR SHALL OPEN BORE FLUSH THE NEWLY INSTALLED WATER MAIN PRIOR TO INSTALLATION OF WATER SERVICES. PROVIDE A MINIMUM OF 48 HOURS ADVANCE NOTICE.
15. ALL WATER MAIN AND SERVICE TRENCHES AND BEDDING SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY.
16. PIPE DEFLECTION MAY BE ACCOMPLISHED BY FUSED INSTALLATION OF PRE-FORMED ELBOWS.

As-Built Drawing markups most clear when viewed in color (all W sheets).





Actual Installed Location (appx.)

-w- As Designed

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

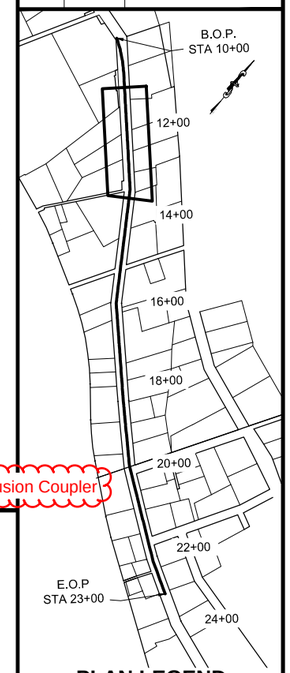
PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-WATER.DWG
NICOLE KNOX
TAB: W18 10/11/2015 4:56 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A. KNOX CE-11896 10/11/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

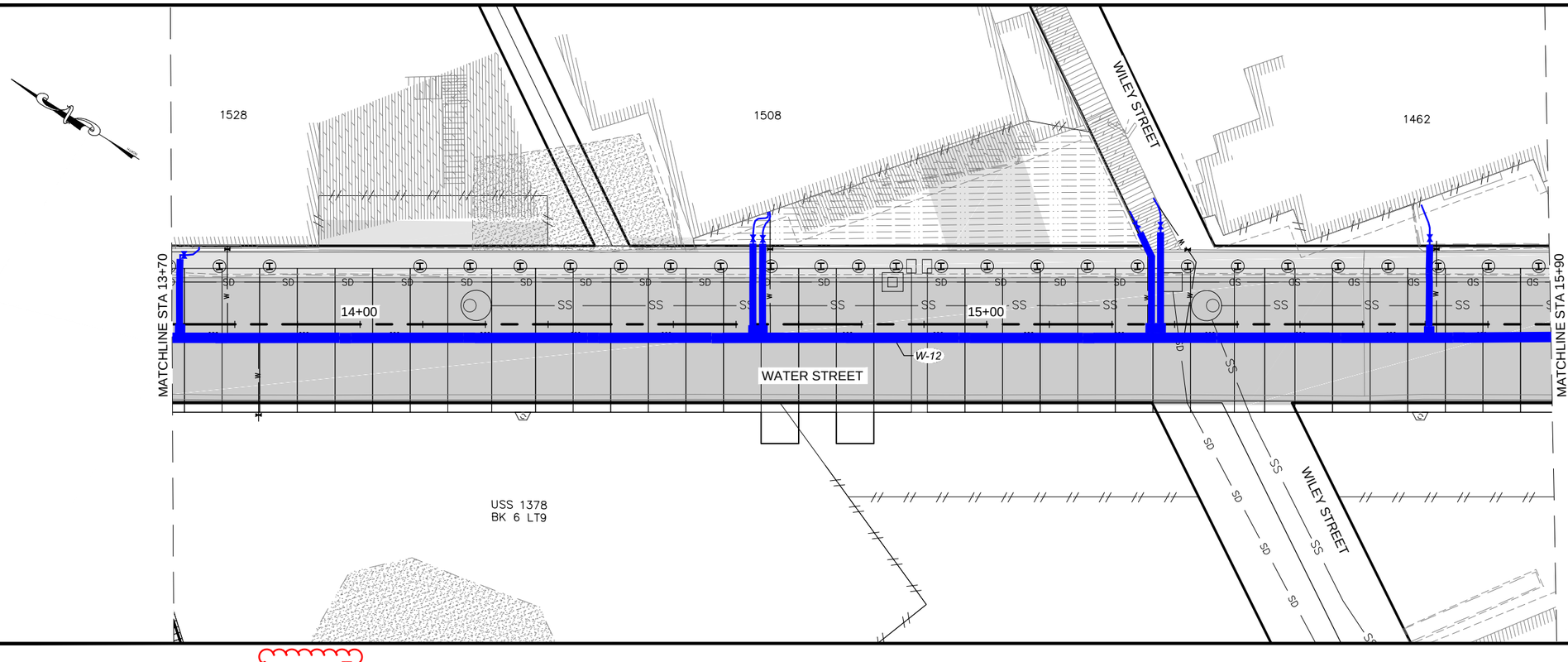
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHCOAST REGION

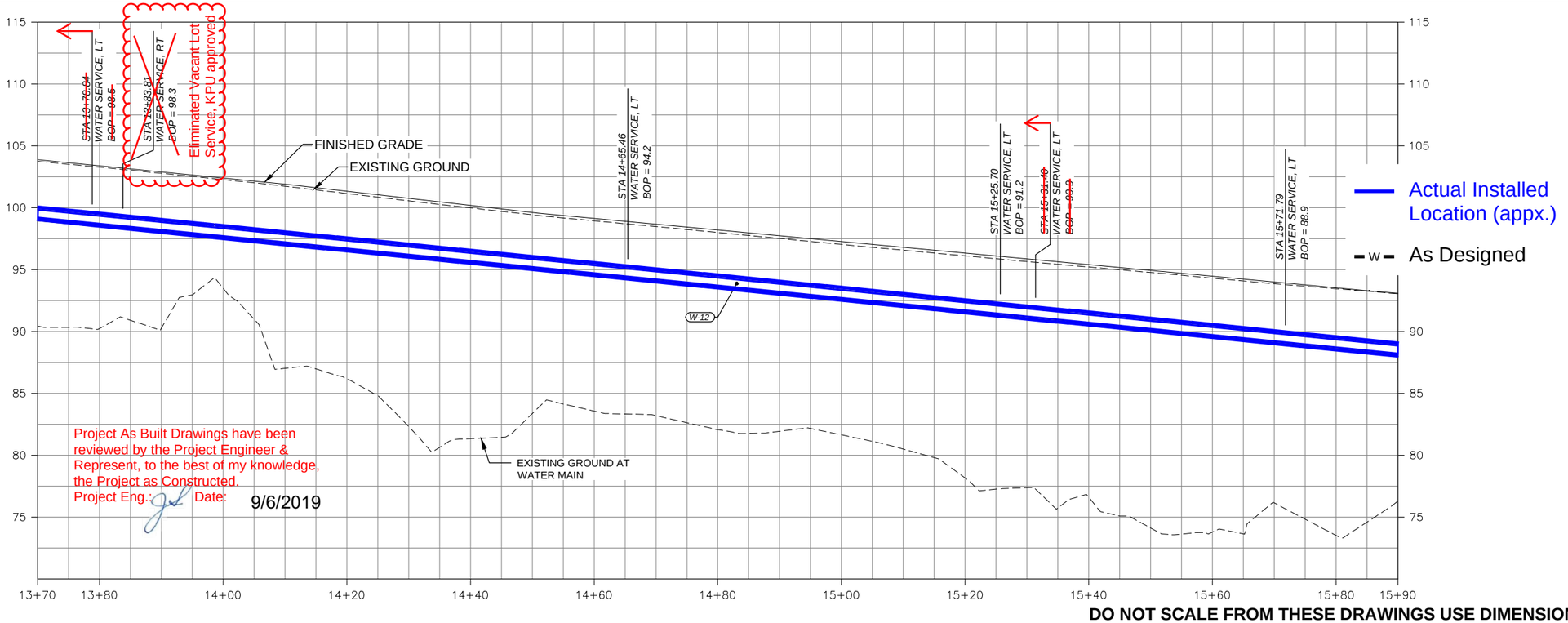
KTN - WATER STREET REHABILITATION/REPLACEMENT OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

WATER P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W18	W22





DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

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NICOLE KNOX

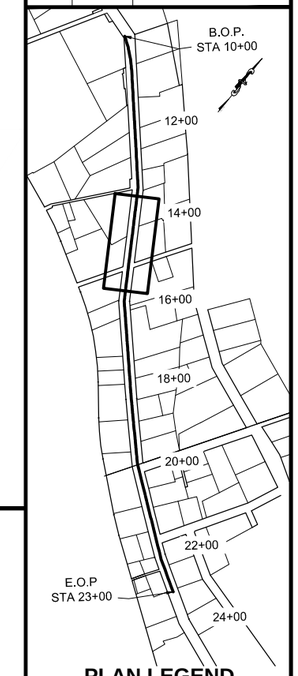
TAB: W19 10/11/2015 4:56 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

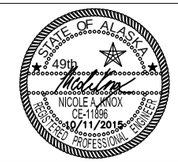
RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER



DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

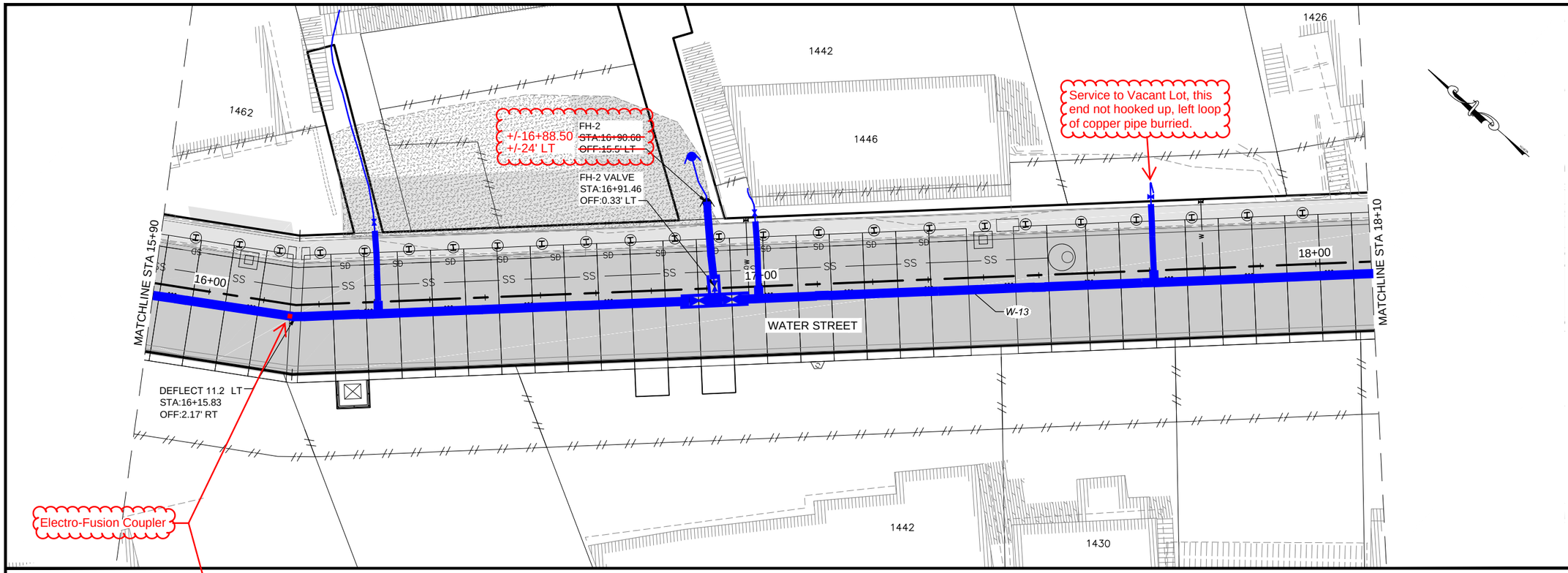
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

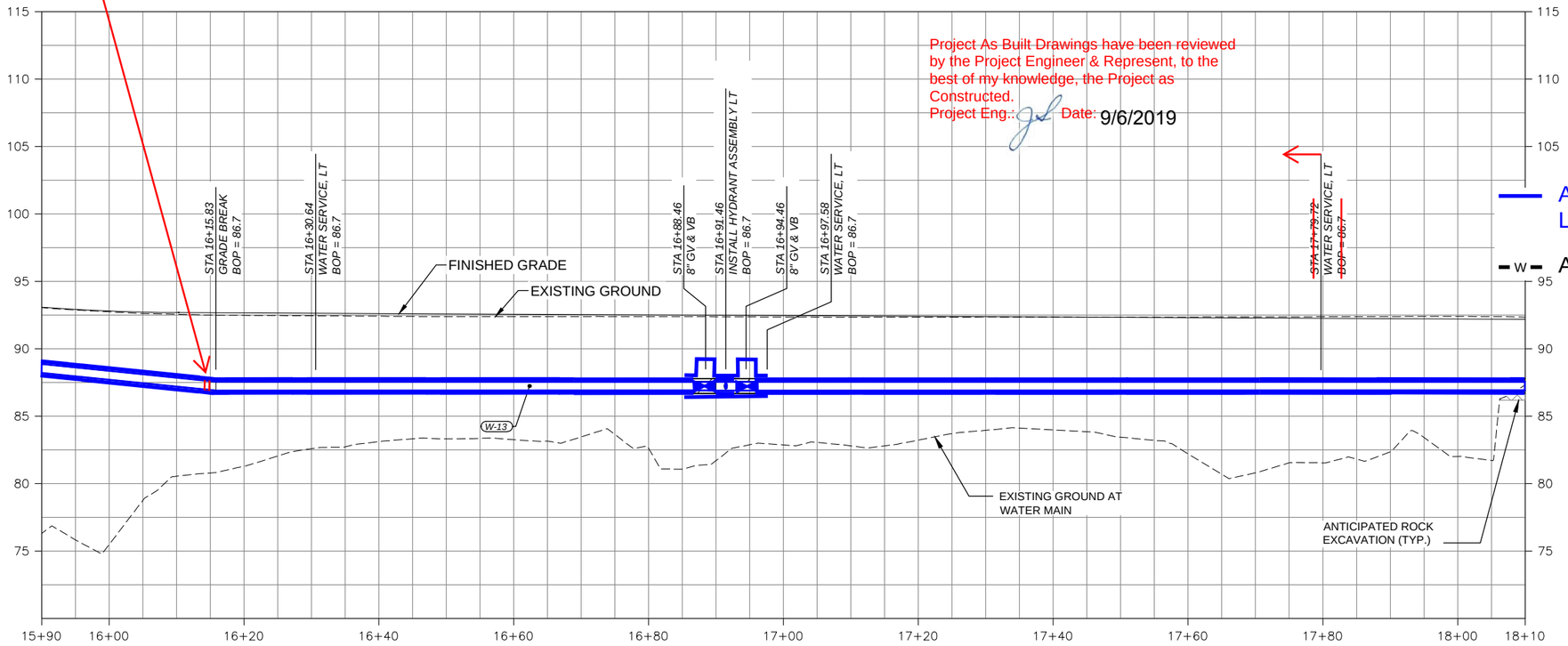
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

WATER P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W19	W22





Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-WATER.DWG

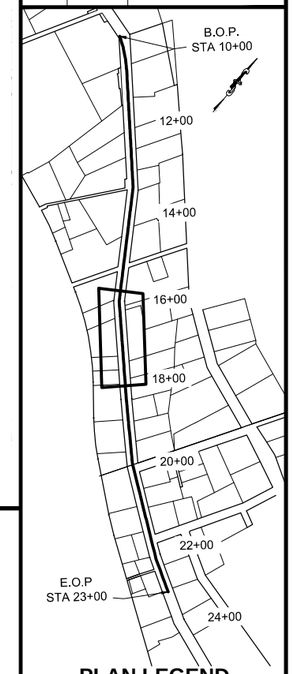
NICOLE KNOX
TAB: W20 10/11/2015 4:56 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA 49th NICOLE A KNOX CE-11696 10/11/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

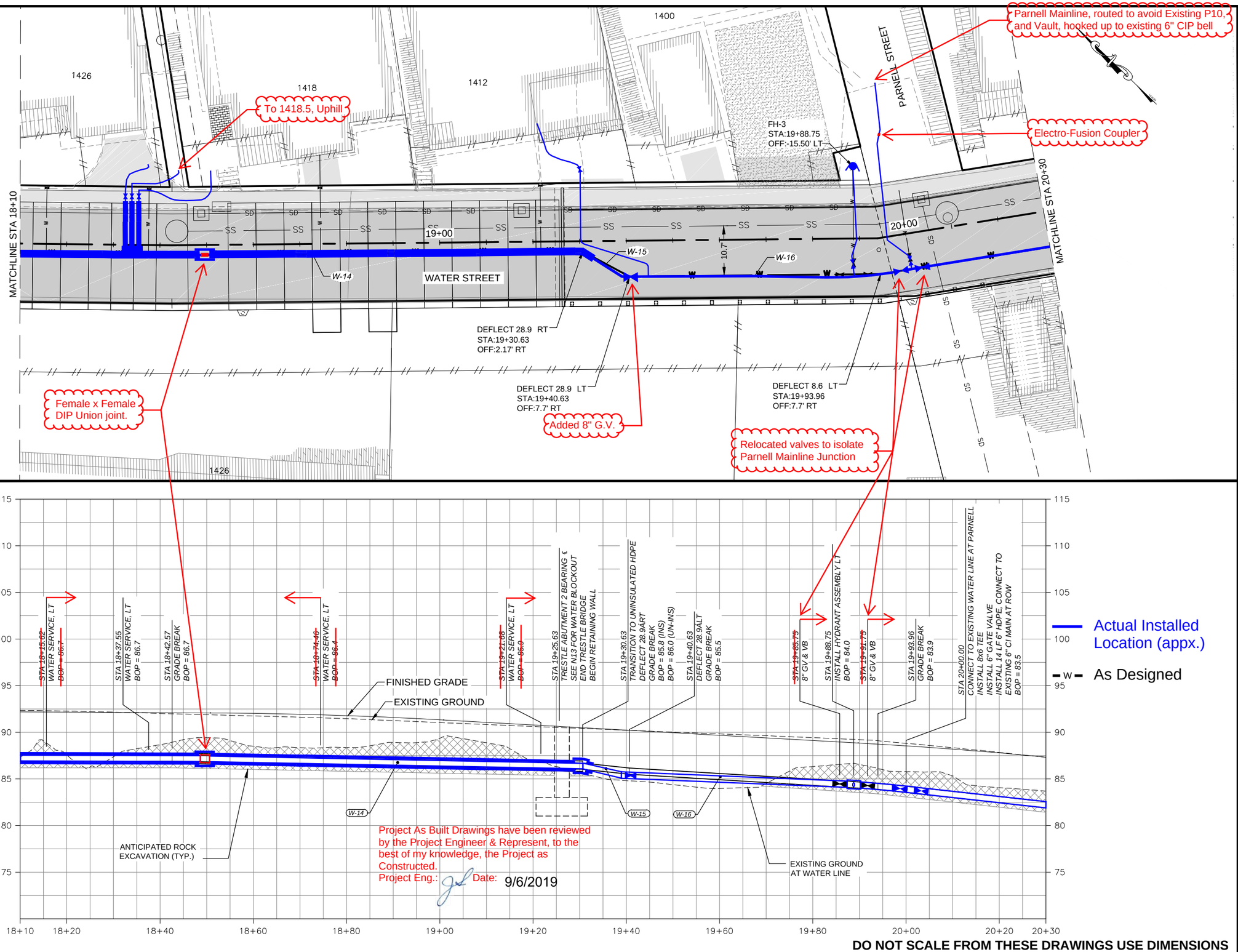
KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

WATER P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015

SHEET NUMBER	TOTAL SHEETS
W20	W22



Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\1744-W SHEETS-WATER.DWG

NICOLE KNOX

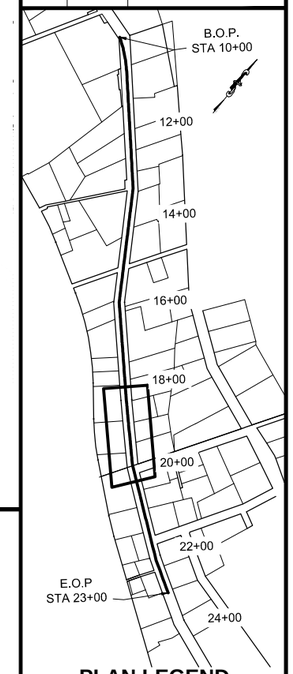
TAB: W21 10/11/2015 4:56 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set



PLAN LEGEND

CHECKED BY: D. PORTER

STATE OF ALASKA
49th
NICOLE A. KNOX
CE-11996
10/11/2015
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

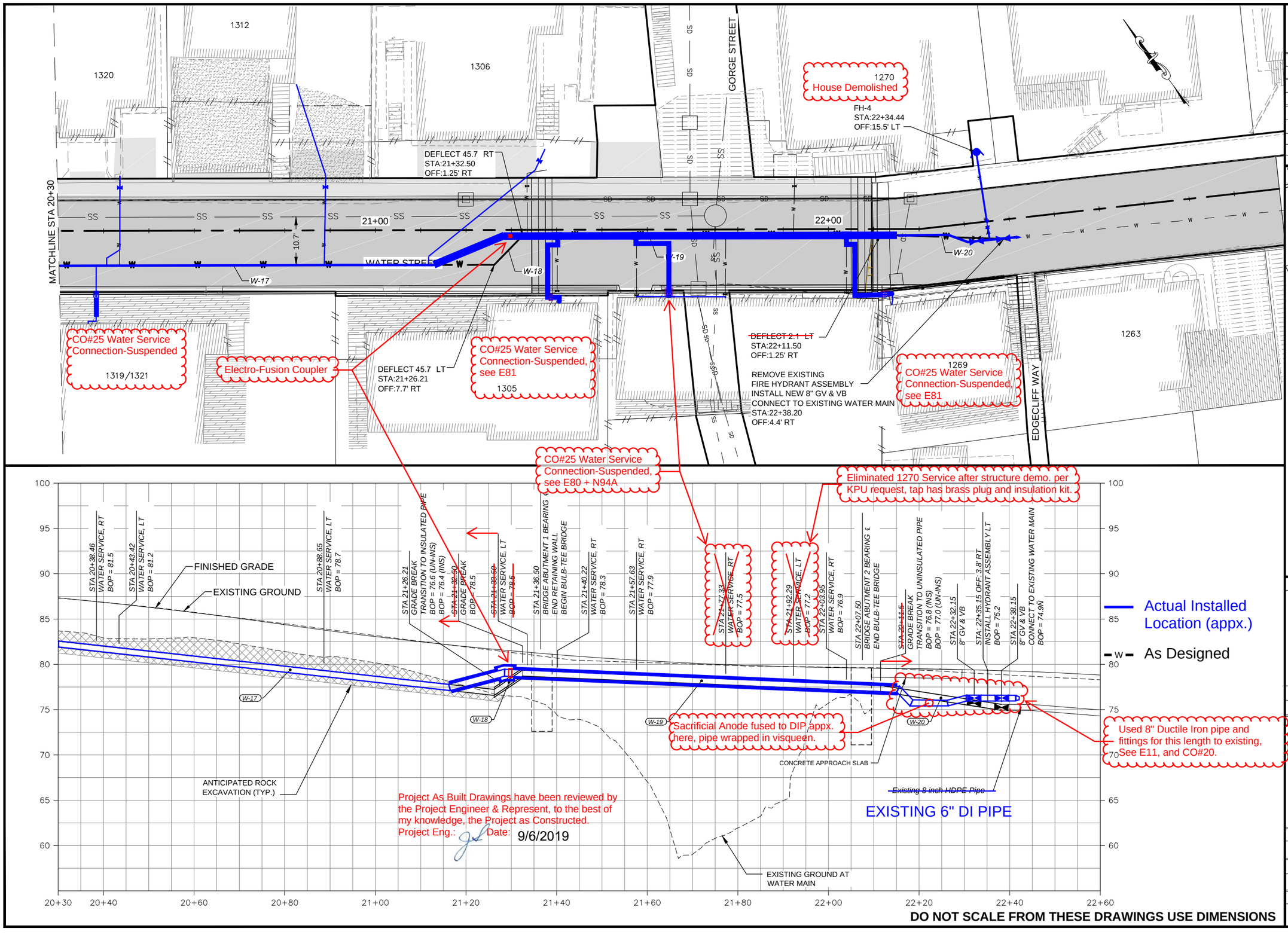
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

WATER P&P

PROJECT DESIGNATION
BR-000S(735)

STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W21	W22



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NICOLE KNOX

TAB: W22 10/11/2015 4:57 PM

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
AB		As-Built Set

CHECKED BY: D. PORTER

STATE OF ALASKA 49th Mission NICOLE A. KNOX CE-11996 10/11/2015 REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: N. KNOX

DRAWN BY: B. MAXWELL

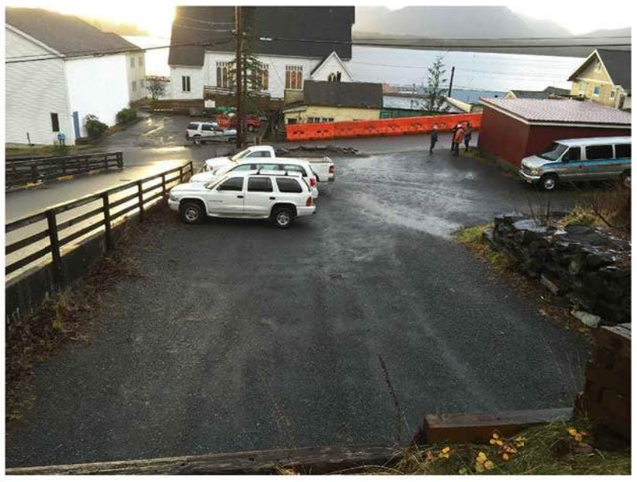
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN - WATER STREET
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

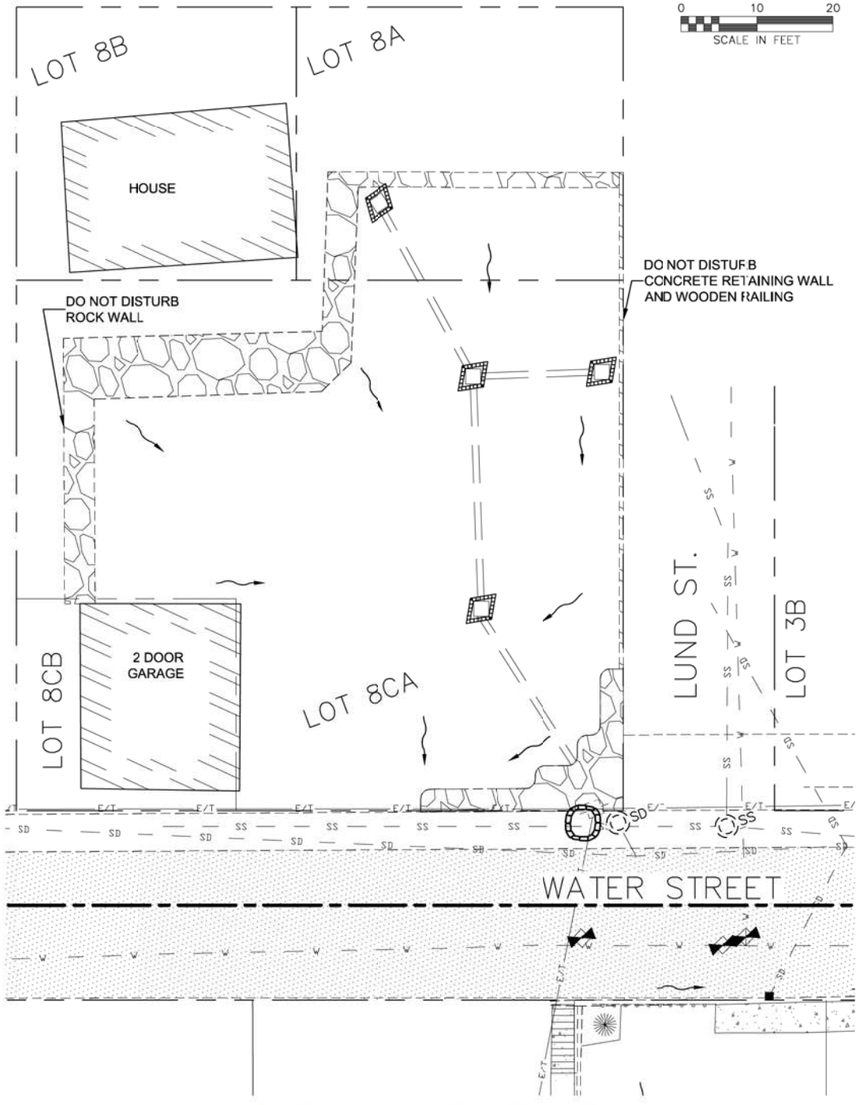
WATER P&P

PROJECT DESIGNATION	
BR-000S(735)	
STATE	YEAR
ALASKA	2015
SHEET NUMBER	TOTAL SHEETS
W22	W22

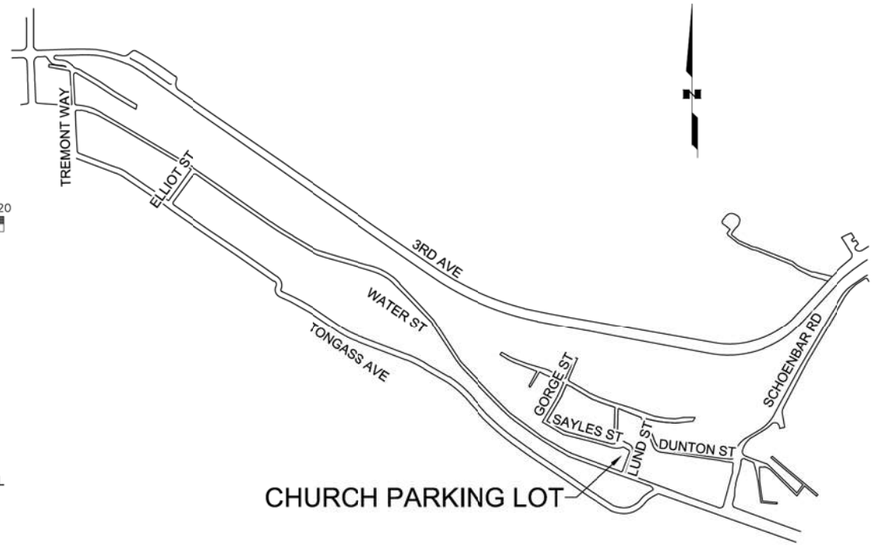
EXISTING PARKING LOT - LOOKING NW



EXISTING PARKING LOT - LOOKING SW



CHURCH PARKING LOT EXISTING CONDITIONS & ESCP



VICINITY MAP

LEGEND	
SYMBOL	DESCRIPTION
	SEDIMENT BARRIER
	INLET PROTECTION
	FLOW ARROW

NOTES:

1) SEE ESCP DETAIL SHEETS FOR BEST MANAGEMENT PLAN (BMP) DETAILS.

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

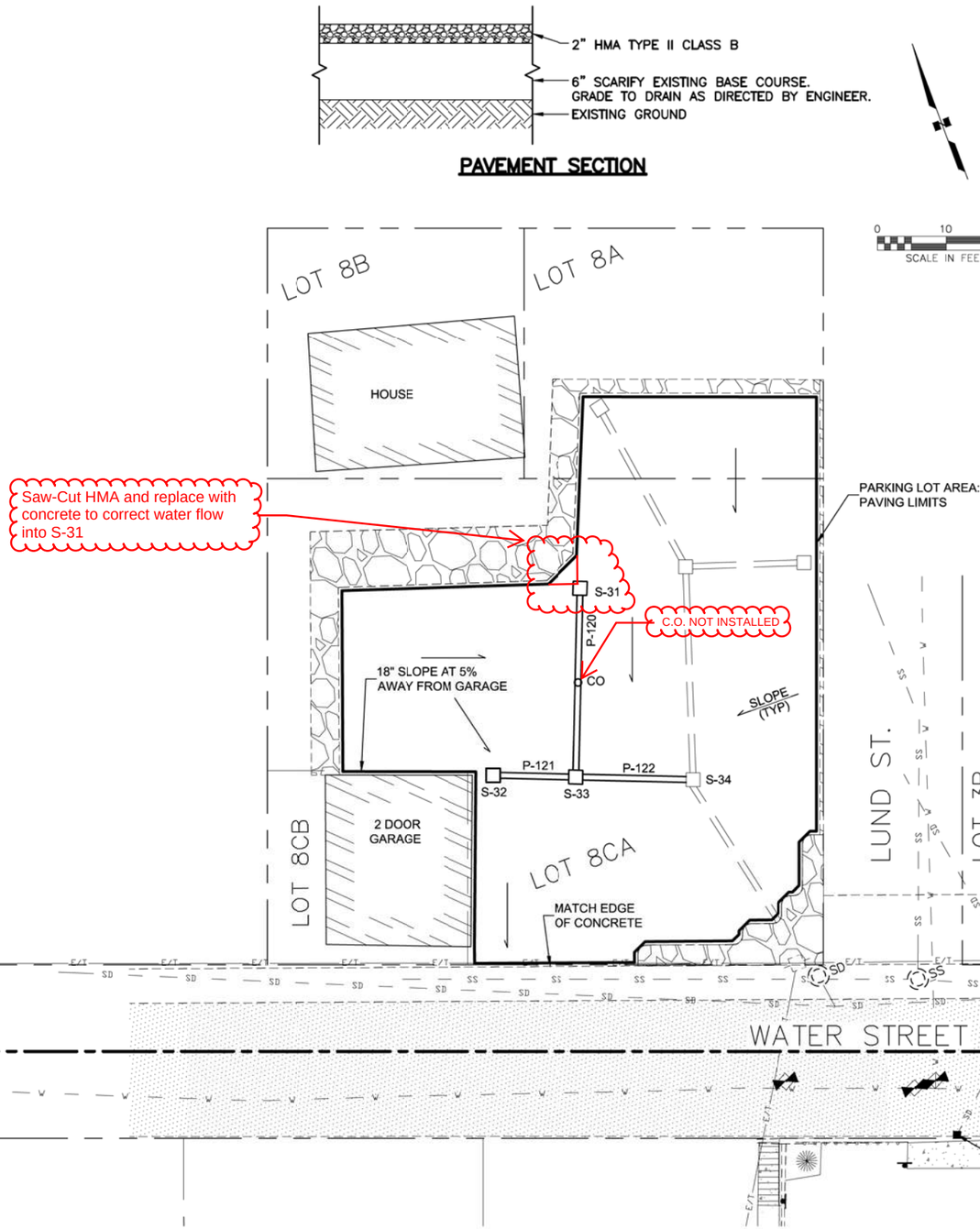
CHURCH PARKING LOT

TAB: Z01 Thursday, December 17, 2015 1:39:47 PM RYAN REDICK

REVISIONS NO.	DATE	DESCRIPTION
1 AB	12/14/15	Addendum #1 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**Z01**	Z03

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\CHURCH PARKING LOT\GRADING PLAN.DWG



CHURCH PARKING LOT GRADING, PAVING, & DRAINAGE IMPROVEMENTS

NOTES

1) CHURCH PARKING LOT IMPROVEMENTS ARE TO BE PAID AS LUMP SUM UNDER ITEM 678 (2).
2) NO SITE SPECIFIC FIELD GEOTECHNICAL INVESTIGATION WAS PERFORMED FOR THIS PROJECT. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ENGINEER IF PLANS DO NOT MATCH EXISTING SITE CONDITIONS.
3) LOCATIONS OF UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL OBTAIN UTILITY FIELD LOCATES PRIOR TO EXCAVATION OR GRADING ACTIVITIES, VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD AND SHALL RECORD SAME ON CONTRACTOR RECORD DRAWINGS.
4) ALL EXISTING SITE IMPROVEMENTS SHALL BE LEFT IN PLACE UNLESS NOTED OTHERWISE.
5) CONTRACTOR SHALL RESTORE PROPERTY DISTURBED BY CONTRACT ACTIVITY TO THE PRECONSTRUCTION CONDITION.
6) STORM WATER POLLUTION PREVENTION PLAN, SUBMITTAL AND ENFORCEMENT IS THE RESPONSIBILITY OF THE CONTRACTOR.
7) REMOVE ORGANICS PRIOR TO GRADING AND COMPACTING THE EXISTING BASE COURSE.
8) GRADE AND COMPACT THE EXISTING BASE COURSE TO DRAIN AND MATCH THE EXISTING RIM ELEVATION WITH 2" OF ASPHALT. REMOVAL AND DISPOSAL OF EXCESS MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR.

RFI-002

PIPE TABLE

PIPE NO.	TYPE & SIZE [IN]	LENGTH [FT]	INLET	OUTLET
P-120	CPPP 8"	32	S-31	S-32
P-121	CPPP 8"	12	S-32	S-33
P-122	CPPP 8"	17	S-33	S-34

STRUCTURES TABLE

STRUCTURE NO.	STRUCTURE TYPE	N	E	INVERTS	REMARKS
S-31	TYPE 20 CB	89181.82	104151.42	P-120 S	FIELD ADJUST LOCATION TO CATCH SEEP
S-32	TYPE 20 CB	89160.37	104130.12	P-121 E	
S-33	TYPE 20 CB	89155.96	104140.11	P-120 N P-122 E P-121 W	
S-34	TYPE 20 CB	89150.33	104157.08	P-121 W	EXISTING CATCH BASIN

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.
Project Eng.: Date: 9/6/2019

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: T. GRIER
DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

CHURCH PARKING LOT

TAB: Z02 Thursday, December 17, 2015 1:39:52 PM RYAN REDICK

REVISIONS NO.	DATE	DESCRIPTION
1 AB	12/14/15	Addendum #1 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	Z02	Z03

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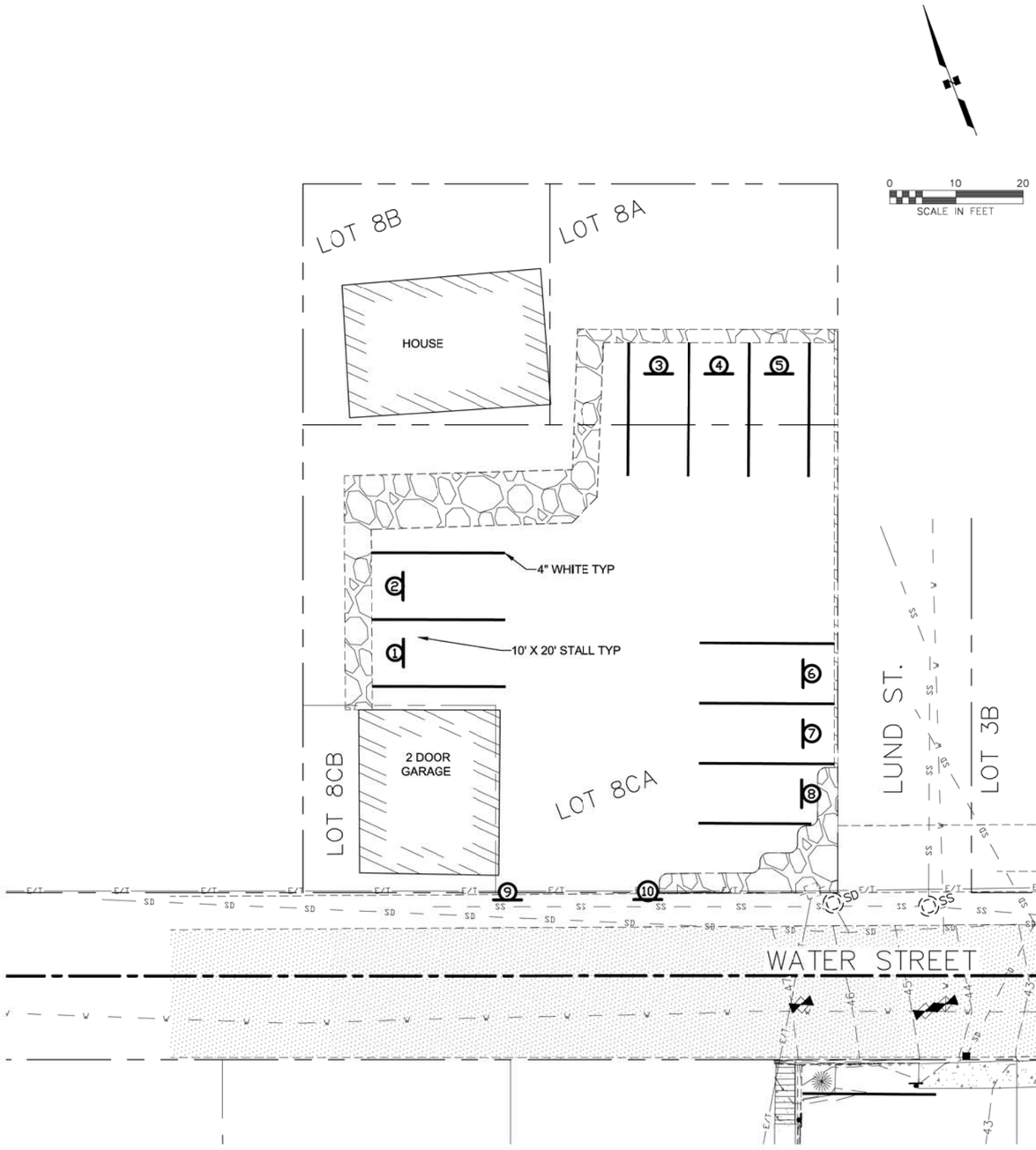

CHURCH PARKING LOT SIGNING & STRIPING

SIGN SUMMARY

SIGN NO.	CODE NO. ASDS	SIZE (INCHES)		AREA SQ. FT	SIGN FACES	POST TYPE	REMARKS
		W	H				
1	CUSTOM	12	18	1.50	E	2 ½" PST	SEE SIGN BELOW
2	CUSTOM	12	18	1.50	E	2 ½" PST	SEE SIGN BELOW
3	CUSTOM	12	18	1.50	S	2 ½" PST	SEE SIGN BELOW
4	CUSTOM	12	18	1.50	S	2 ½" PST	SEE SIGN BELOW
5	CUSTOM	12	18	1.50	S	2 ½" PST	SEE SIGN BELOW
6	CUSTOM	12	18	1.50	W	2 ½" PST	SEE SIGN BELOW
7	CUSTOM	12	18	1.50	W	2 ½" PST	SEE SIGN BELOW
8	CUSTOM	12	18	1.50	W	2 ½" PST	SEE SIGN BELOW
9	CUSTOM	18	24	3.00	S	2 ½" PST	SEE SIGN BELOW NO STALL NUMBER PLACARD
10	CUSTOM	18	24	3.00	S	2 ½" PST	SEE SIGN BELOW NO STALL NUMBER PLACARD

NOTES:

1) INSTALL SIGN POSTS PER STANDARD DRAWING S-30.03 CONCRETE FOUNDATION.
2) INSTALL 6" X 6" SIGNS WITH STALL NUMBERING UNDER PROPOSED 12" X 18" SIGNS.
3) SIGNS AND POSTS TO BE REMOVED AND DISPOSED UPON PROJECT COMPLETION.

Posts left at request of Church

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

Project As Built Drawings have been reviewed by the Project Engineer & Represent, to the best of my knowledge, the Project as Constructed.

Project Eng.: Date: 9/6/2019

CHECKED BY: T. GRIER

STATE OF ALASKA
49 TH
Ryan D. Redick
No. CE 12799
9/6/19
REGISTERED PROFESSIONAL ENGINEER

DESIGNED BY: R. REDICK
DRAWN BY: R. REDICK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHCOAST REGION

KTN -WATER STREET:
REHABILITATION/REPLACEMENT
OF OFF SYSTEM CITY BRIDGES
PROJECT # 69534

CHURCH PARKING LOT

TAB: Z03 Thursday, December 17, 2015 1:39:57 PM RYAN REDICK

REVISIONS NO.	DATE	DESCRIPTION
1 AB	12/14/15	Addendum #1 As-Built Set

PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
BR-000S(735)	2015	**Z03**	Z03

PATH: Z:\PROJECT\1744.00 DOT_SE WATER STREET VIADUCT\CIVIL\ACAD\CHURCH PARKING LOT\GRADING PLAN.DWG