

State of Alaska

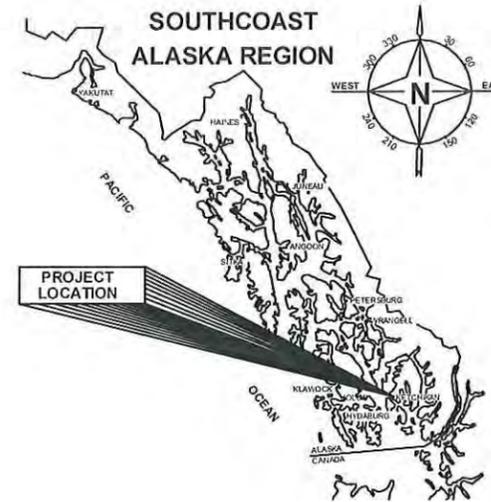
Department of Transportation
and Public Facilities

Southcoast Region

KETCHIKAN, ALASKA NORTH TONGASS HIGHWAY

ILLUMINATION UPGRADE (HSIP)
PROJECT NO. 0920028/Z684130000

As Advertised:
May 25, 2016



Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

DESIGN DESIGNATION

V = 45 MPH
A.D.T. 2012 = 4,380
A.D.T. 2016 (CONSTRUCTION YEAR) = 4,460
A.D.T. 2036 (DESIGN YEAR) = 4,930
D.H.V. (10.7%) 2036 = 530
TRUCKS % = 13.1

PROJECT SUMMARY

CDS ROUTE NO = 291500
CDS MILEPOINT = 5.095 TO 9.971
LENGTH OF PROJECT = 4.9 MILES

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

C-03.10 D-04.21 D-06.10 D-09.00
D-01.02 I-20.15
L-03.10 L-26.00

ASBUILT

UTILITY CONTACTS

KETCHIKAN PUBLIC UTILITIES ELECTRICAL DEPARTMENT	JEFF HARRISON	(907) 228-5442
KETCHIKAN PUBLIC UTILITIES TELECOMMUNICATIONS DIVISION	RAUL MOJE	(907) 228-5483
GCI COMMUNICATIONS	BUZZ HASSON	(907) 220-7111

USE THESE PLANS IN CONJUNCTION WITH STATE OF ALASKA STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2015 EDITION, AND THE PROJECT SPECIAL PROVISIONS.

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LEGEND
A3-A6	SURVEY CONTROL
A7	PROJECT ALIGNMENT & SHEET LAYOUT
B1-B2	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D8	SUMMARY TABLES
H1-H13	ILLUMINATION PLANS
J1-J5	LIGHT POLE AND J-BOX DETAILS
J6	DRILLED SHAFT FOUNDATION FOR LIGHTING
P1-P14	EROSION & SEDIMENT CONTROL PLAN
T1-T2	CONSTRUCTION TRAFFIC CONTROL PLAN

Contractor: Swanson General Construction

Project Engineer: Mandi Pelham

Start Date: August 31, 2017

End Date: November 30, 2017

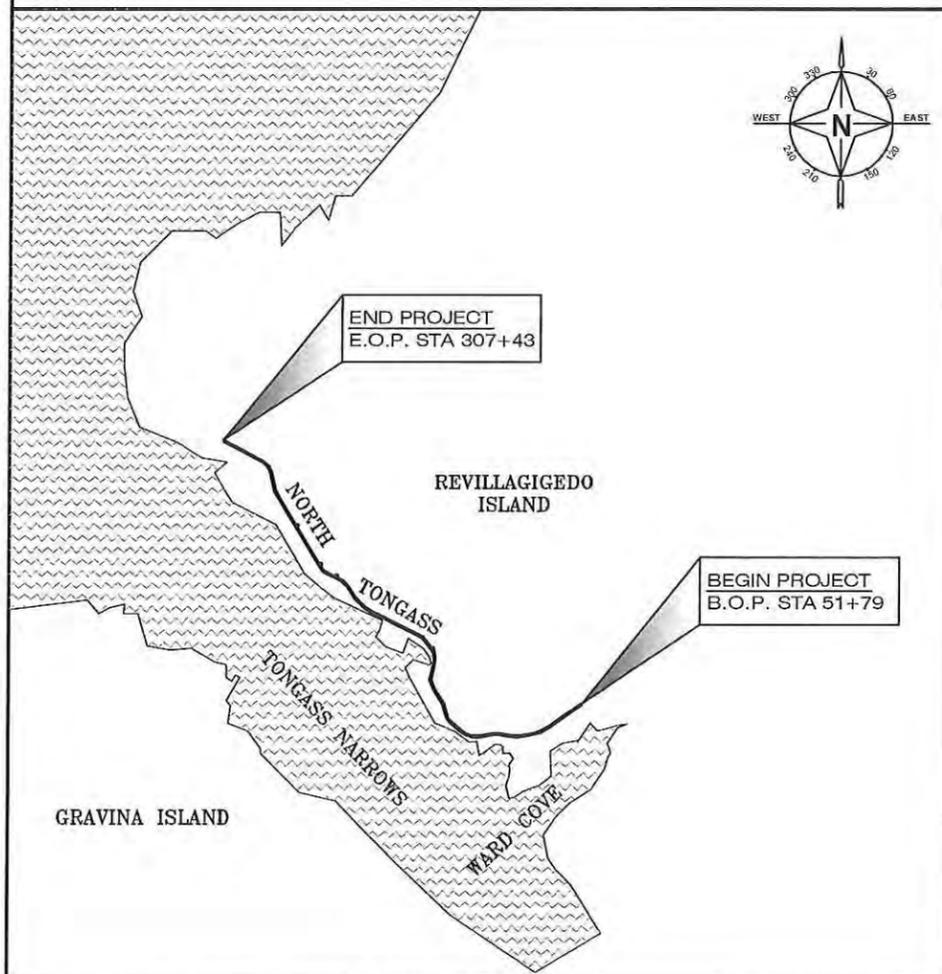
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES



APPROVED: *[Signature]* 5-24-16
REGIONAL PRE-CONSTRUCTION ENGINEER DATE
L. PAT CARROLL, P.E.

APPROVED: *[Signature]* 5-24-16
DIRECTOR, SOUTHCOAST REGION DATE
MICHAEL J. COFFEY



VICINITY MAP

N.T.S.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0920028/Z684130000	2016	A1	53

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	RECOVERED	SET
BLM MONUMENT		
GLO MONUMENT		
USC&GS MONUMENT		
PRIMARY MONUMENT		
CENTERLINE MONUMENT IN CASING		
PRIMARY R.O.W. MONUMENT		
BEARING OBJECT		
MISCELLANEOUS MONUMENT		
LINE OF SIGHT MONUMENT		
CONCRETE R.O.W. MONUMENT		
BENCHMARK		
REBAR AND CAP		
REBAR		
IRON PIPE		
PK NAIL		
SPIKE		
HUB AND TACK		
CONSTRUCTION CENTERLINE		
MICELLANEOUS CENTERLINE		
STATION EQUATION	$\frac{L}{100} = \frac{L^2}{2R}$	$\frac{L}{100} = \frac{L^2}{2R}$
PROJECT RIGHT-OF-WAY LINE		
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE		
EXISTING EASEMENT LINE		
PROPOSED EASEMENT LINE		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE		
MEANDER LINE		

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)		
FUEL LINE		
GAS LINE		
WATER LINE		
METER, VALVE, FIRE HYDRANT		
EXISTING STORM DRAIN (FLOW DIRECTION →)		
PROPOSED STORM DRAIN		
FIBER OPTIC LINE		
DIRECT BURIAL TELEPHONE CABLE		
DIRECT BURIAL ELECTRIC CABLE		
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT		
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE		
SANITARY SEWER CLEAN OUT		
RIPRAP		
SPECIAL DITCH CENTERLINE		

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Project Eng. Mandi Pelham
Date: 3/1/18

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE		
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX		
RAILROAD TRACKS		
RAILROAD DEVICES		
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS		
POST OR BOLLARD		
WELL OR MONITORING WELL		
SEPTIC PIPE		
FUEL TANK FILL PIPE/VENT		
SATELLITE DISH		
TEST HOLE		
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		

- H = HOUSE
- G = GARAGE
- M = MERCHANT/STORE
- B = BARN
- S = SHED
- P = PRIVY
- SS = SERVICE STATION
- W = WAREHOUSE

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		
JUNCTION BOX, TYPE II		
JUNCTION BOX, TYPE III		
SIGNAL FACE, VEHICULAR		
SIGNAL FACE, BACKPLATE		
SIGNAL FACE, LEFT TURN, BACKPLATE		
SIGNAL FACE, PEDESTRIAN		
LOOP DETECTOR		
VIDEO DETECTOR		
RADAR DETECTOR		
OPTICOM DETECTOR		
PEDESTRIAN PUSH BUTTON		
SIGNAL POST W/O MAST ARM		
SIGNAL POLE W/MAST ARM		
SIGNAL CONTROLLER		
LOAD CENTER		
LUMINAIRE		
RIGID METAL CONDUIT		
CONDUIT(EITHER HDPE OR RMC)		

ABBREVIATIONS

- LFMC LIQUIDTIGHT FLEXIBLE METAL CONDUIT
- RMC RIGID METAL CONDUIT
- HDPE HIGH DENSITY POLYETHYLENE

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

LEGEND

Wednesday, March 23, 2016 11:20:05 AM			TAB: A2			
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	0920028/Z684130000	2016	A2	53

CONTROL STATEMENT

All units for this survey are expressed in U.S. Survey Feet. The horizontal coordinate system and vertical datum for this survey were developed by the Southeast Region of the State of Alaska Department of Transportation & Public Facilities, with the conversion parameters stated below. Static networked GNSS techniques were used to observe recovered control points. Minimally constrained and partially constrained least squares adjustments were performed to verify record positions. All monuments shown hereon were physically recovered and verified by Stantec, Inc.

HORIZONTAL CONTROL

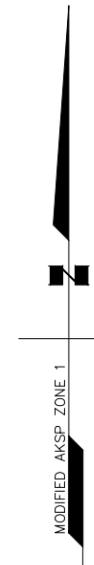
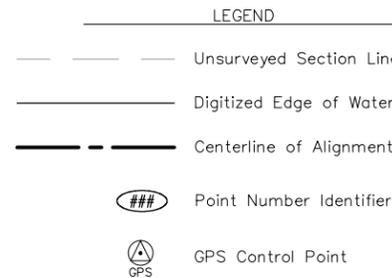
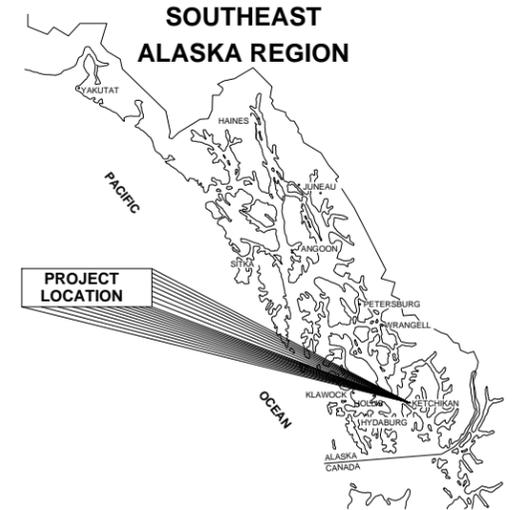
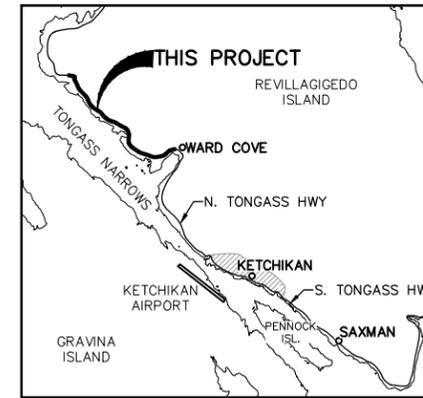
THESE COORDINATES ARE NOT TRUE STATE PLANE BUT RATHER A LOCAL SYSTEM NEAR STATE PLANE VALUES.

TRANSFORMATION PARAMETERS RELATING THE LOCAL GROUND BASED COORDINATE SYSTEM TO NAD83(92) ALASKA STATE PLANE ZONE 1 US FEET

GRID SCALE FACTOR : 0.99990085
 ROTATION TO GRID NORTH : 1°35'14"
 LOCAL NORTHING: 1,316,047.0920'
 LOCAL EASTING: 3,079,528.5740'
 AKSPC GRID NORTHING: 1,315,746.0455'
 AKSPC GRID EASTING: 3,079,408.2788'

VERTICAL CONTROL

THE BASIS OF VERTICAL CONTROL IS A BRASS CAP MONUMENT FOUND IN THE NE BRIDGE ABUTMENT OF WHIPPLE CREEK BRIDGE. THE ACCEPTED ELEVATION OF THIS POINT IS 135.79' ABOVE MLLW.



PROJECT NOTES

- The information shown hereon is based on a field survey performed by Stantec Consulting Inc. on April 21-25, 2015.
- This is not a boundary survey. Property information shown hereon is for general reference only. This drawing was prepared without the benefit of a title commitment and may not show easements and other encumbrances.
- All dimensions, coordinates, and elevations shown are in U.S. Survey Feet unless otherwise noted.
- Horizontal control points shown on this sheet were surveyed using networked static GPS techniques. GPS measurements were performed using Trimble R7, R6-3 and R8-2 GNSS receivers and processed using Trimble Business Center v3.30 office software. Differential leveling was not performed. Horizontal and vertical positions of existing control points in the project coordinate system were verified prior to performing topographic and planimetric data collection using Real Time Kinematic (RTK) survey methods. Multiple 3-dimensional checks against verified control were performed throughout RTK collection period.
- The alignment shown hereon is a project alignment only. It does not necessarily bear any relation to the road centerline or right-of-way.
- All elevations must be field verified before use.
- Whether listed or not, all monuments or property markers, corners, or accessories, which will be disturbed or buried, shall be referenced and re-established in their original position (A.S. 19.10.260) and recorded (A.S. 34.65.040).

Surveyor's Certificate

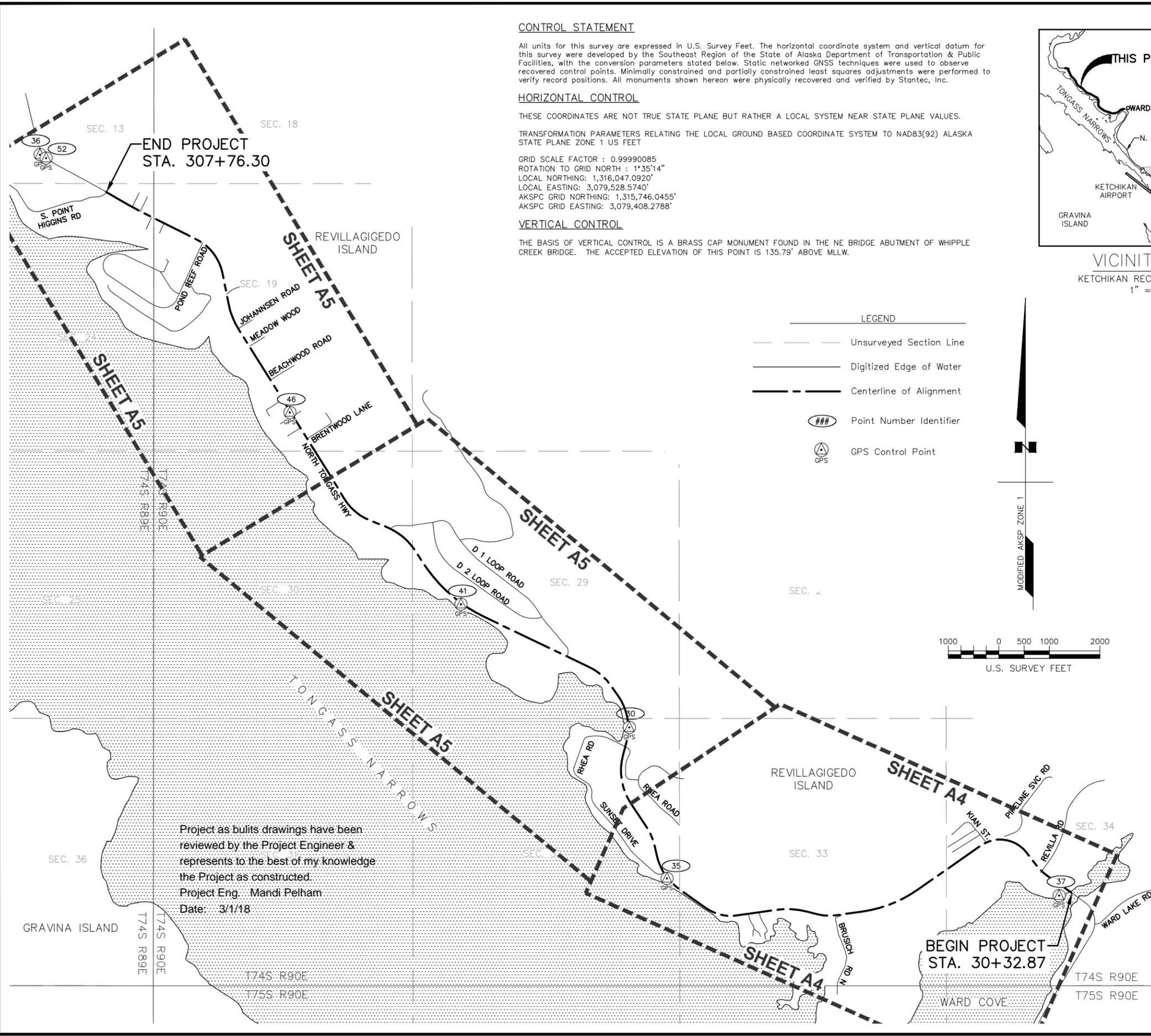
I hereby certify that I am properly Registered and Licensed to practice Land Surveying in the State of Alaska, and that this drawing represents a survey made by me or under my direct supervision, and that the monuments shown hereon actually exist as described, and that all dimensions and other details are correct to the extent shown hereon.

Jeremy A. Hurst (Signature)
 Jeremy A. Hurst LS-11796
 3/23/2016
 Date

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. HURST		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION												
		KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)												
		SURVEY CONTROL												
DESIGNED BY: E. GLAVES		Wednesday, March 23, 2016 3:52:22 PM												
DRAWN BY: E. GLAVES		TAB: A3												
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NO.	DATE	DESCRIPTION												
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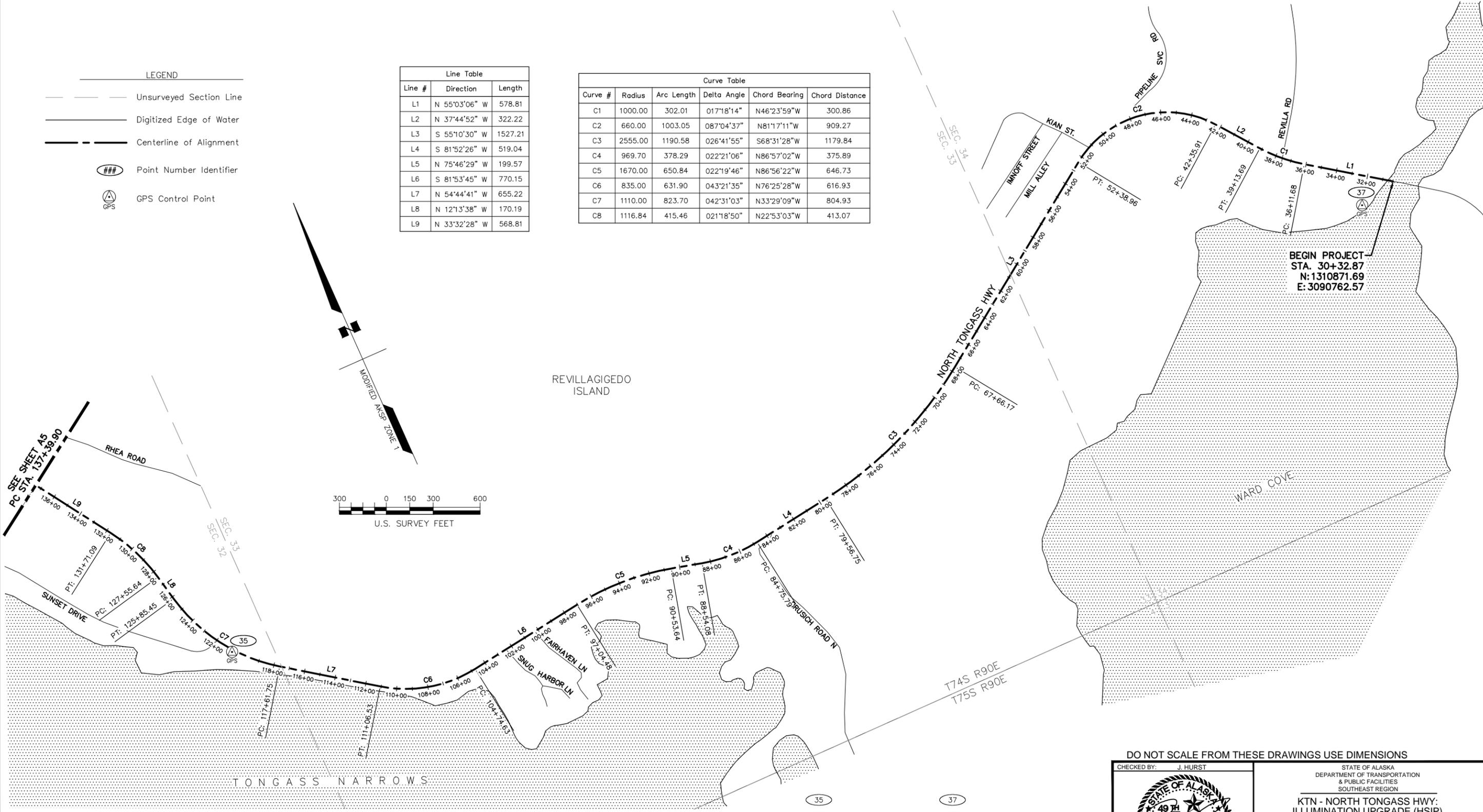
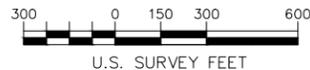
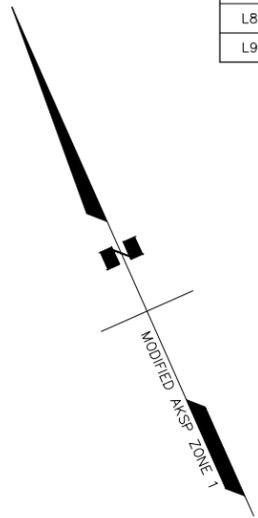
Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

LEGEND

- Unsurveyed Section Line
- Digitized Edge of Water
- Centerline of Alignment
- Point Number Identifier
- GPS Control Point

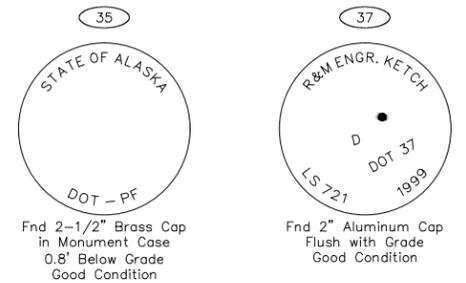
Line #	Direction	Length
L1	N 55°03'06" W	578.81
L2	N 37°44'52" W	322.22
L3	S 55°10'30" W	1527.21
L4	S 81°52'26" W	519.04
L5	N 75°46'29" W	199.57
L6	S 81°53'45" W	770.15
L7	N 54°44'41" W	655.22
L8	N 12°13'38" W	170.19
L9	N 33°32'28" W	568.81

Curve #	Radius	Arc Length	Delta Angle	Chord Bearing	Chord Distance
C1	1000.00	302.01	017°18'14"	N46°23'59"W	300.86
C2	660.00	1003.05	087°04'37"	N81°17'11"W	909.27
C3	2555.00	1190.58	026°41'55"	S68°31'28"W	1179.84
C4	969.70	378.29	022°21'06"	N86°57'02"W	375.89
C5	1670.00	650.84	022°19'46"	N86°56'22"W	646.73
C6	835.00	631.90	043°21'35"	N76°25'28"W	616.93
C7	1110.00	823.70	042°31'03"	N33°29'09"W	804.93
C8	1116.84	415.46	021°18'50"	N22°53'03"W	413.07



Recovered Control Points						
Point #	Northing	Easting	Elevation	Station	Offset	Description
35	1311152.5340	3082755.7560	35.54	120+79.41	14.55 Lt.	Fnd BC/Box[DOT]: Control Point
37	1310812.8260	3090519.3510	30.47	31+98.51	187.58 Lt.	Fnd AC[LS721]: DOT Control Point 36

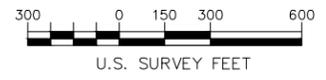
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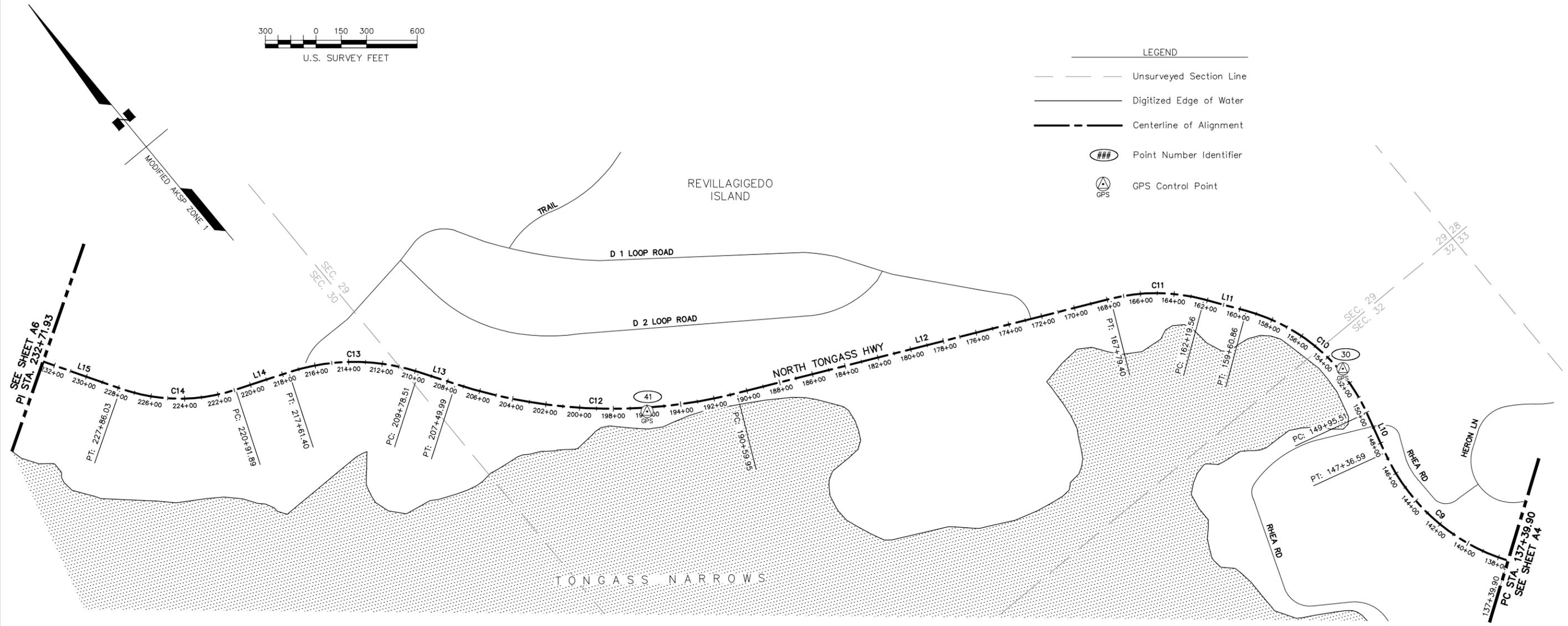
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: J. HURST	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)			
DESIGNED BY: E. GLAVES	SURVEY CONTROL			
DRAWN BY: E. GLAVES				
Wednesday, March 23, 2016 3:53:27 PM				
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REVISIONS	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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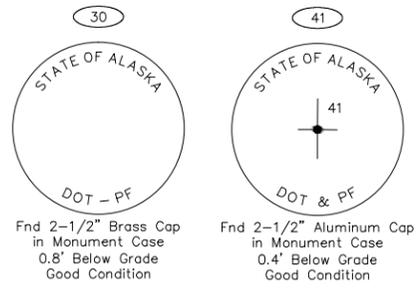


- LEGEND
- Unsurveyed Section Line
 - Digitized Edge of Water
 - Centerline of Alignment
 - ### Point Number Identifier
 - GPS GPS Control Point



Line Table		
Line #	Direction	Length
L10	N 14°59'49" E	258.92
L11	N 35°19'39" W	258.70
L12	N 64°30'44" W	2280.55
L13	N 32°26'55" W	228.53
L14	N 68°28'39" W	330.50
L15	N 31°08'01" W	485.90

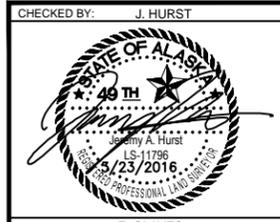
Curve Table					
Curve #	Radius	Arc Length	Delta Angle	Chord Bearing	Chord Distance
C9	1176.53	996.69	048°32'16"	N09°16'19"W	967.15
C10	1099.08	965.35	050°19'28"	N10°09'55"W	934.62
C11	1099.08	559.84	029°11'05"	N49°55'11"W	553.80
C12	3020.00	1690.04	032°03'49"	N48°28'49"W	1668.07
C13	1245.00	782.88	036°01'44"	N50°27'47"W	770.05
C14	1065.00	694.14	037°20'38"	N49°48'20"W	681.92



Recovered Control Points						
Point #	Northing	Easting	Elevation	Station	Offset	Description
30	1314132.5900	3082010.2280	33.53	152+90.49	19.73 Rt.	Fnd BC/Box[DOT]: Control Point
41	1316566.3970	3078677.4320	43.33	196+01.37	23.09 Lt.	Fnd AC[DOT]: Control Point 41

Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

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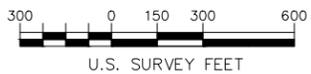
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION
 KTN - NORTH TONGASS HWY:
 ILLUMINATION UPGRADE (HSIP)

SURVEY CONTROL

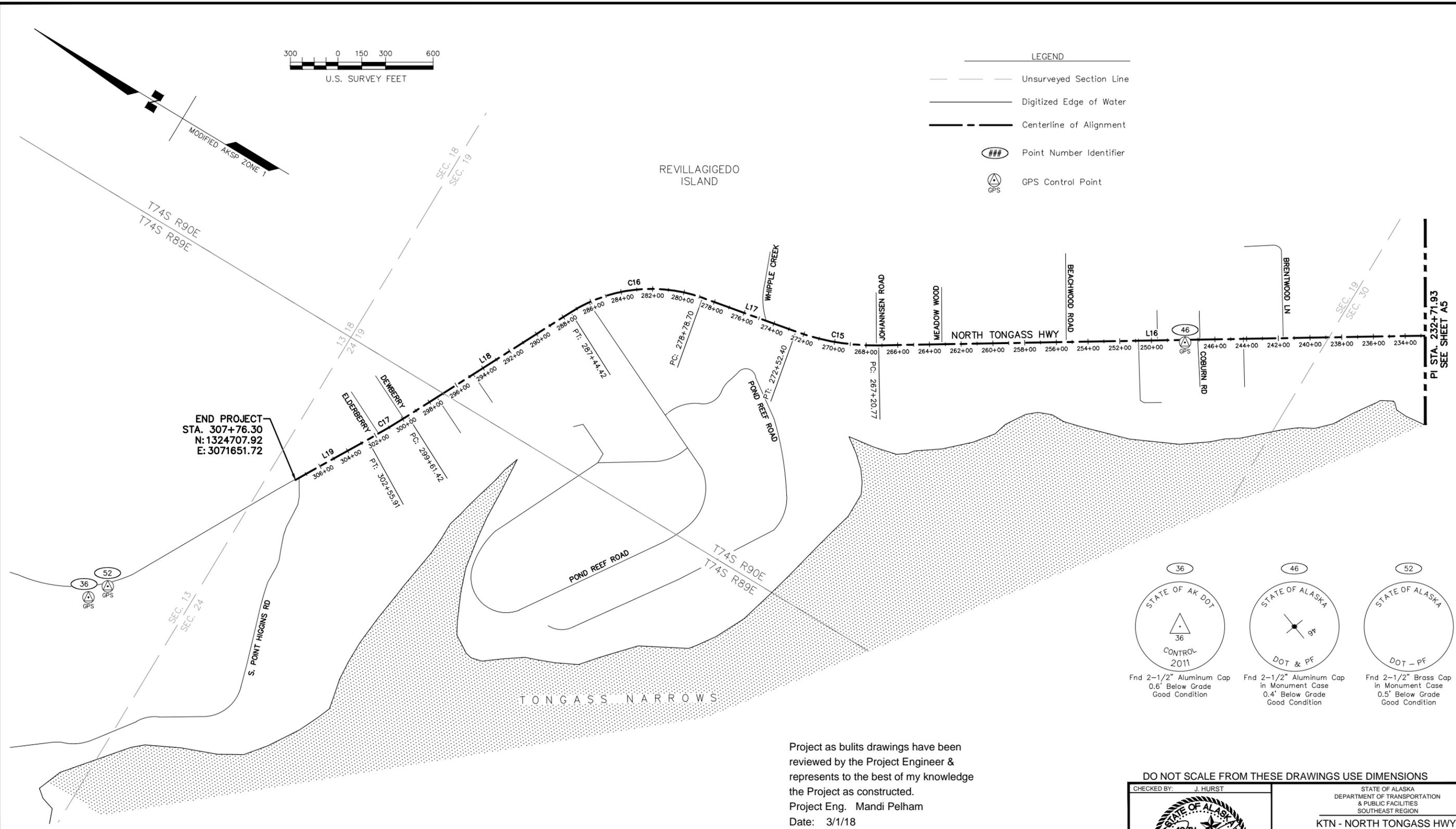
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 DRAWN BY: E. GLAVES
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REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
			0920028/Z684130000	2016	A5	53

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- LEGEND
- Unserved Section Line
 - Digitized Edge of Water
 - Centerline of Alignment
 - ### Point Number Identifier
 - GPS GPS Control Point



END PROJECT
 STA. 307+76.30
 N: 1324707.92
 E: 3071651.72

PI STA. 232+71.93
 SEE SHEET A5

36

Fnd 2-1/2" Aluminum Cap
0.6' Below Grade
Good Condition

46

Fnd 2-1/2" Aluminum Cap
in Monument Case
0.4' Below Grade
Good Condition

52

Fnd 2-1/2" Brass Cap
in Monument Case
0.5' Below Grade
Good Condition

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 Project Eng. Mandi Pelham
 Date: 3/1/18

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Line Table		
Line #	Direction	Length
L16	N 32°08'01" W	3448.83
L17	N 11°16'14" W	626.30
L18	N 63°29'00" W	1217.00
L19	N 60°06'32" W	520.39

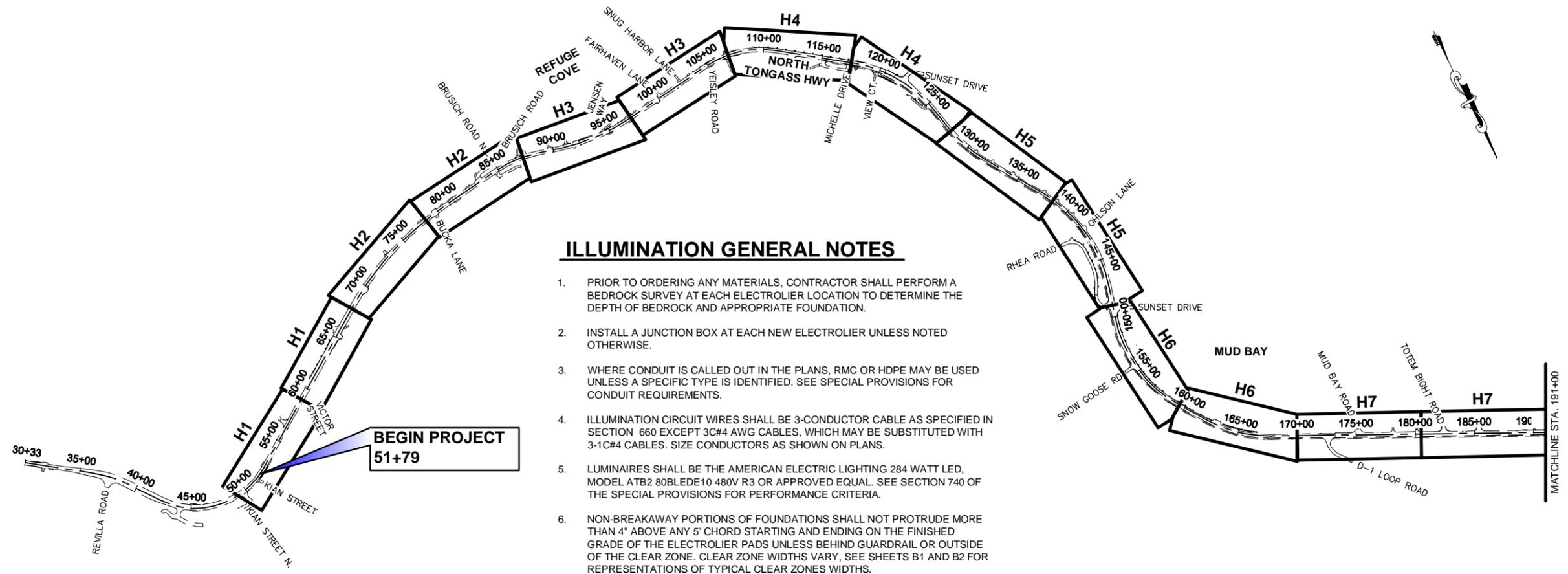
Curve Table					
Curve #	Radius	Arc Length	Delta Angle	Chord Bearing	Chord Distance
C15	1460.00	531.63	020°51'47"	N21°42'07"W	528.70
C16	950.00	865.72	052°12'46"	N37°22'37"W	836.08
C17	5000.00	294.49	003°22'28"	N61°47'46"W	294.44

Recovered Control Points						
Point #	Northing	Easting	Elevation	Station	Offset	Description
36	1325443.4310	3070344.3460	268.34			Fnd AC[DOT]: Control Point 36
46	1320352.0040	3075290.5740	103.45	247+89.19	16.09 Lt.	Fnd AC[DOT]: Control Point 46
52	1325374.7260	3070466.5420	258.53			Fnd BC/Box[DOT]: Control Point

CHECKED BY: J. HURST 	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)																	
<h2>SURVEY CONTROL</h2>																		
DESIGNED BY: E. GLAVES DRAWN BY: E. GLAVES Wednesday, March 23, 2016 4:08:16 PM TAB: A6																		
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REVISIONS																		
NO.	DATE	DESCRIPTION																
PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS															
0920028/Z684130000	2016	A6	53															

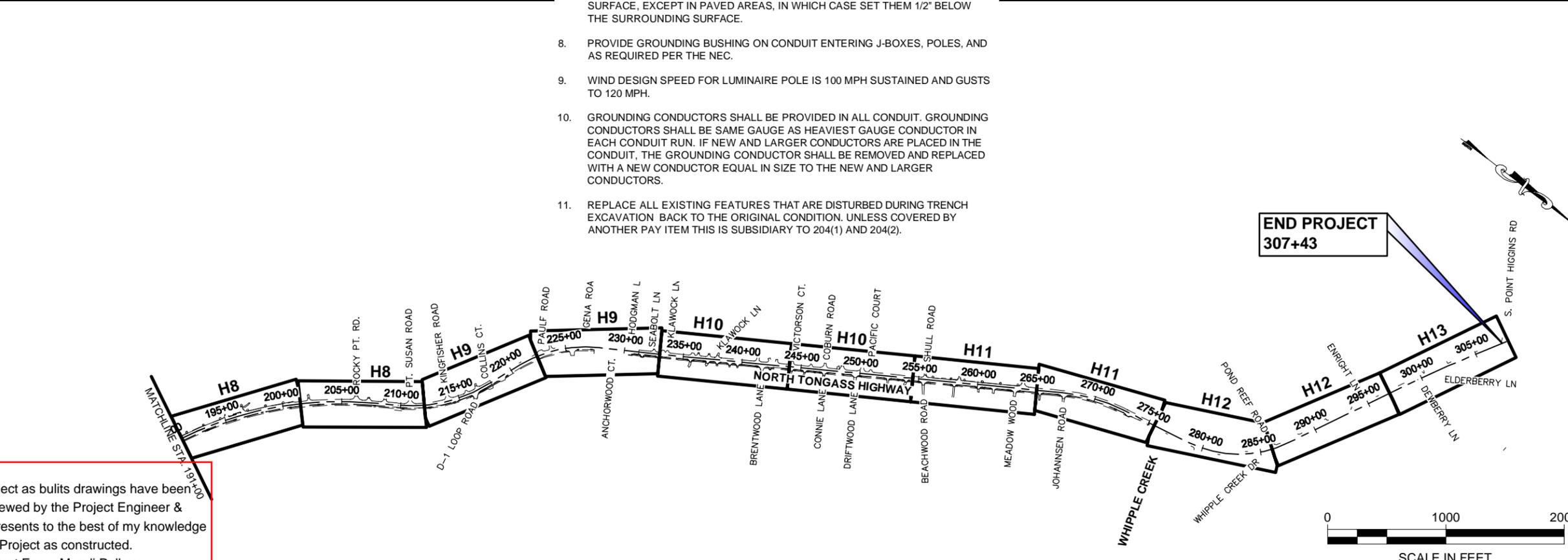
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No.	DATE	DESCRIPTION

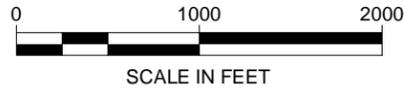


ILLUMINATION GENERAL NOTES

1. PRIOR TO ORDERING ANY MATERIALS, CONTRACTOR SHALL PERFORM A BEDROCK SURVEY AT EACH ELECTROLIER LOCATION TO DETERMINE THE DEPTH OF BEDROCK AND APPROPRIATE FOUNDATION.
2. INSTALL A JUNCTION BOX AT EACH NEW ELECTROLIER UNLESS NOTED OTHERWISE.
3. WHERE CONDUIT IS CALLED OUT IN THE PLANS, RMC OR HDPE MAY BE USED UNLESS A SPECIFIC TYPE IS IDENTIFIED. SEE SPECIAL PROVISIONS FOR CONDUIT REQUIREMENTS.
4. ILLUMINATION CIRCUIT WIRES SHALL BE 3-CONDUCTOR CABLE AS SPECIFIED IN SECTION 660 EXCEPT 3C#4 AWG CABLES, WHICH MAY BE SUBSTITUTED WITH 3-1C#4 CABLES. SIZE CONDUCTORS AS SHOWN ON PLANS.
5. LUMINAIRES SHALL BE THE AMERICAN ELECTRIC LIGHTING 284 WATT LED, MODEL ATB2 80BLEDE10 480V R3 OR APPROVED EQUAL. SEE SECTION 740 OF THE SPECIAL PROVISIONS FOR PERFORMANCE CRITERIA.
6. NON-BREAKAWAY PORTIONS OF FOUNDATIONS SHALL NOT PROTRUDE MORE THAN 4" ABOVE ANY 5' CHORD STARTING AND ENDING ON THE FINISHED GRADE OF THE ELECTROLIER PADS UNLESS BEHIND GUARDRAIL OR OUTSIDE OF THE CLEAR ZONE. CLEAR ZONE WIDTHS VARY, SEE SHEETS B1 AND B2 FOR REPRESENTATIONS OF TYPICAL CLEAR ZONES WIDTHS.
7. SET THE TOPS OF JUNCTION BOXES FLUSH WITH FINISHED SURROUNDING SURFACE, EXCEPT IN PAVED AREAS, IN WHICH CASE SET THEM 1/2" BELOW THE SURROUNDING SURFACE.
8. PROVIDE GROUNDING BUSHING ON CONDUIT ENTERING J-BOXES, POLES, AND AS REQUIRED PER THE NEC.
9. WIND DESIGN SPEED FOR LUMINAIRE POLE IS 100 MPH SUSTAINED AND GUSTS TO 120 MPH.
10. GROUNDING CONDUCTORS SHALL BE PROVIDED IN ALL CONDUIT. GROUNDING CONDUCTORS SHALL BE SAME GAUGE AS HEAVIEST GAUGE CONDUCTOR IN EACH CONDUIT RUN. IF NEW AND LARGER CONDUCTORS ARE PLACED IN THE CONDUIT, THE GROUNDING CONDUCTOR SHALL BE REMOVED AND REPLACED WITH A NEW CONDUCTOR EQUAL IN SIZE TO THE NEW AND LARGER CONDUCTORS.
11. REPLACE ALL EXISTING FEATURES THAT ARE DISTURBED DURING TRENCH EXCAVATION BACK TO THE ORIGINAL CONDITION. UNLESS COVERED BY ANOTHER PAY ITEM THIS IS SUBSIDIARY TO 204(1) AND 204(2).

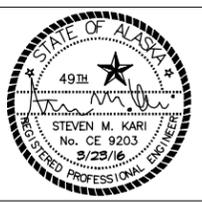


Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18



DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI



DESIGNED BY:

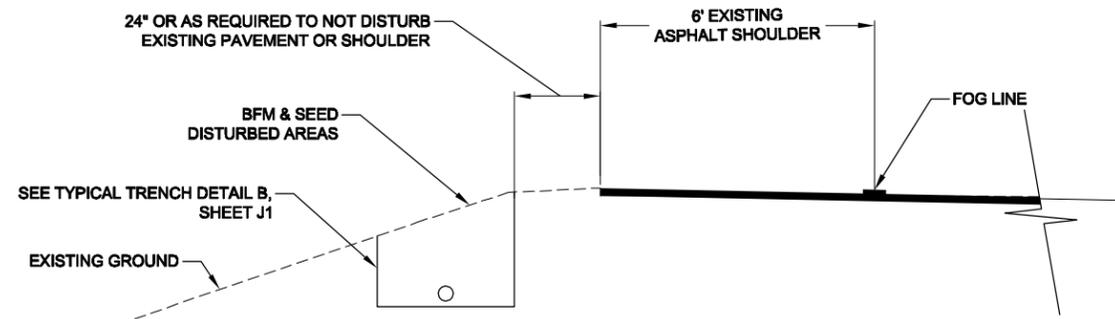
DRAWN BY:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

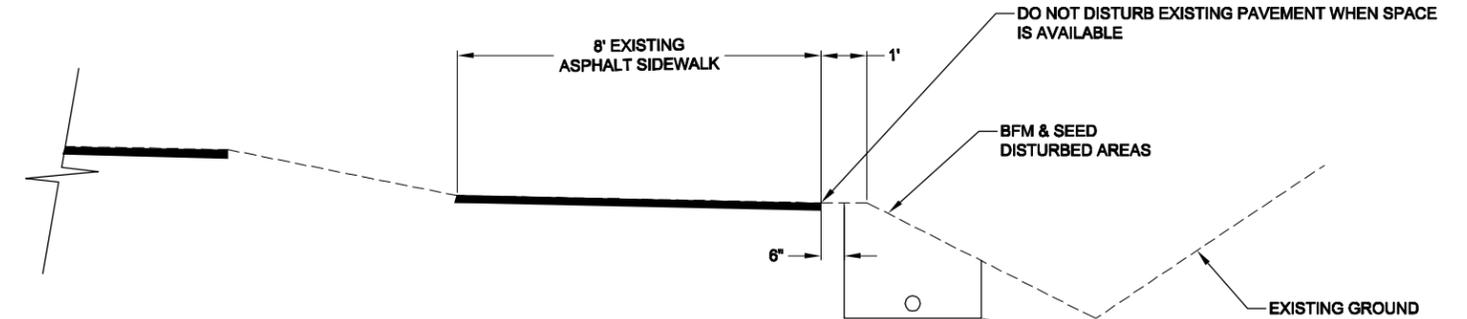
PROJECT ALIGNMENT & SHEET LAYOUT

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
A7	53



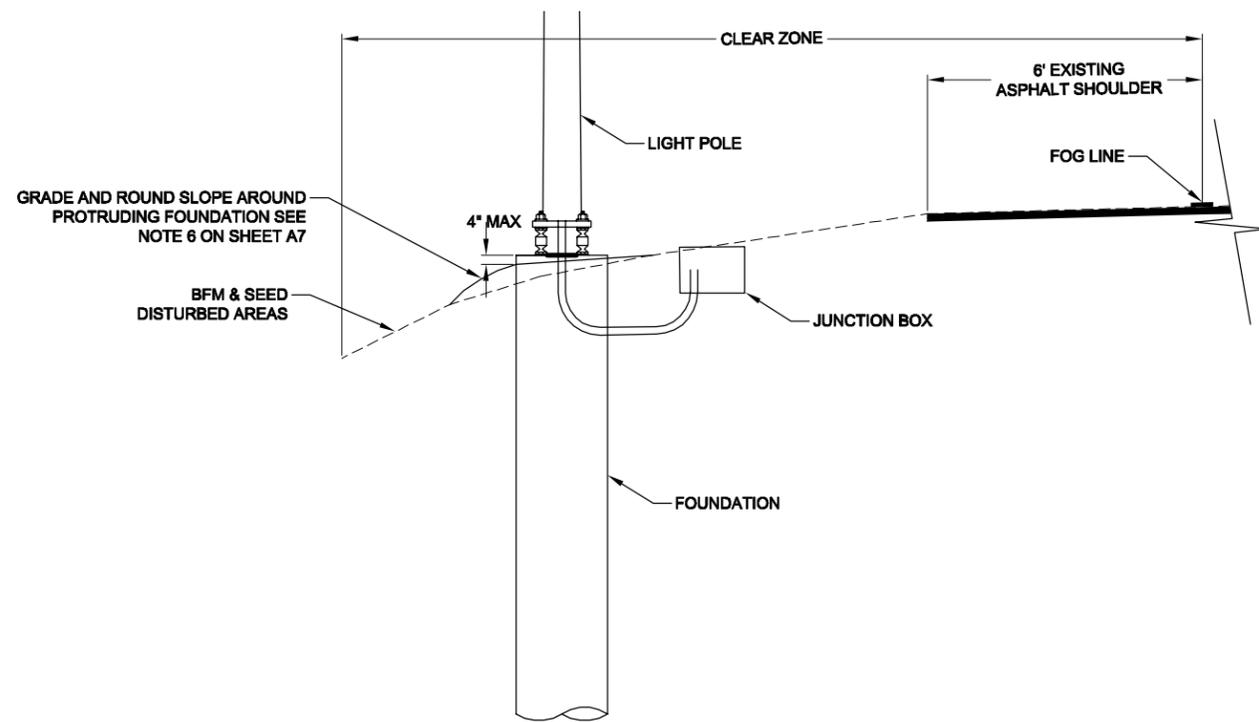
TRENCH LOCATION TYPICAL - BOTH SIDES

NO SCALE
 STA. 51+84 TO STA 117+78
 STA. 120+08 TO STA.128+78
 STA. 171+99 TO STA.188+59
 STA. 271+93 TO STA. 274+34
 STA. 276+74 TO STA. 281+47
 STA. 283+73 TO STA. 307+43



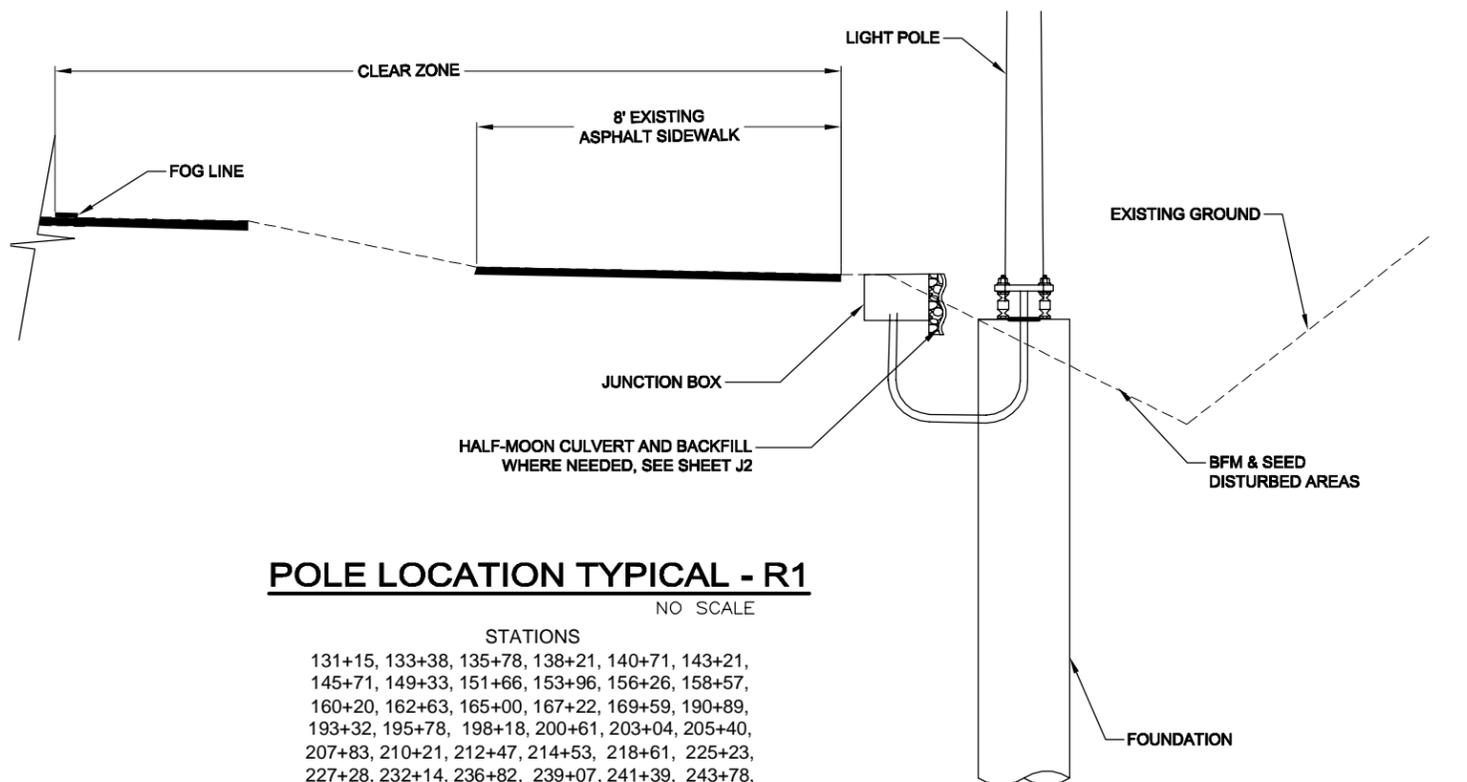
TRENCH LOCATION TYPICAL - R1

NO SCALE
 STA. 131+15 TO STA. 169+59
 STA. 190+89 TO STA. 218+61
 STA. 225+23 TO STA. 271+93



POLE LOCATION TYPICAL - BOTH SIDES

NO SCALE
 STATIONS
 56+24, 58+64, 61+04, 63+38, 65+81, 68+25,
 70+73, 73+06, 77+85, 80+30, 82+75, 85+23,
 87+62, 90+04, 94+83, 97+24, 99+44,
 101+84,104+24, 106+35, 107+97, 110+54,
 113+03, 115+48, 117+78, 120+08, 123+94,
 126+30, 128+78, 171+99, 174+39, 176+79,
 179+19, 181+59, 183+99, 186+39, 188+59,
 279+13, 281+47, 283+73, 286+31, 288+76,
 291+03, 293+47, 295+96, 298+15, 300+35,
 302+74, 305+14, 307+43



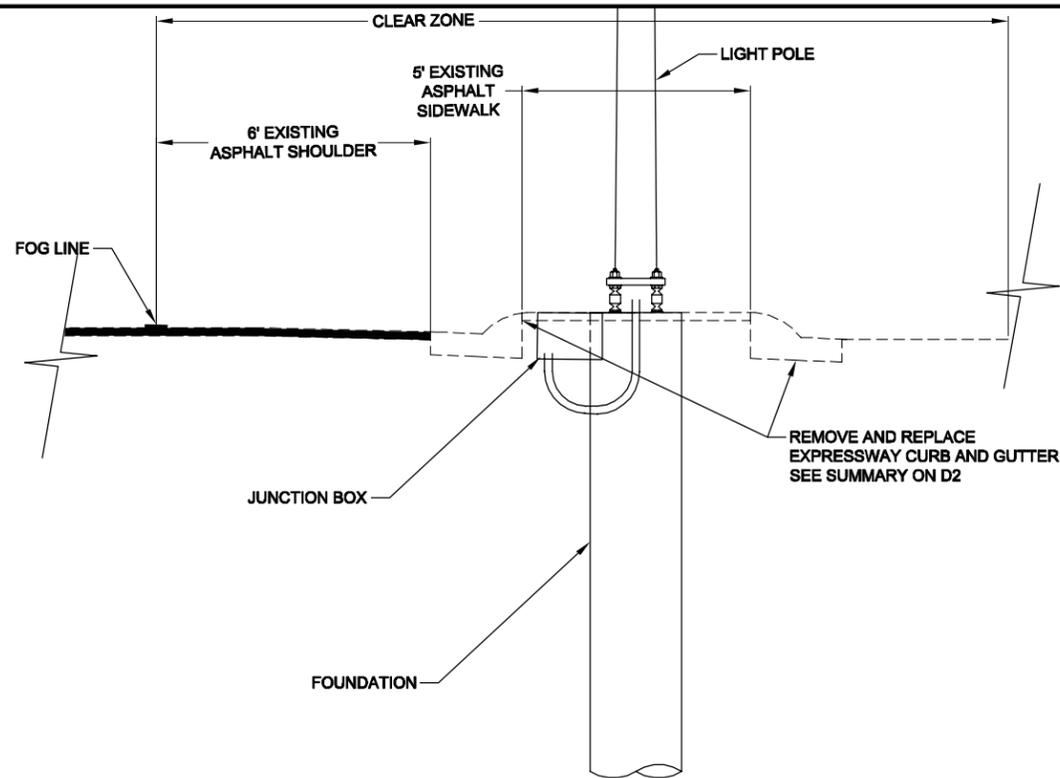
POLE LOCATION TYPICAL - R1

NO SCALE
 STATIONS
 131+15, 133+38, 135+78, 138+21, 140+71, 143+21,
 145+71, 149+33, 151+66, 153+96, 156+26, 158+57,
 160+20, 162+63, 165+00, 167+22, 169+59, 190+89,
 193+32, 195+78, 198+18, 200+61, 203+04, 205+40,
 207+83, 210+21, 212+47, 214+53, 218+61, 225+23,
 227+28, 232+14, 236+82, 239+07, 241+39, 243+78,
 246+18, 250+88, 255+76, 258+16, 260+50, 262+61,
 265+01, 267+01, 269+47, 271+93

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

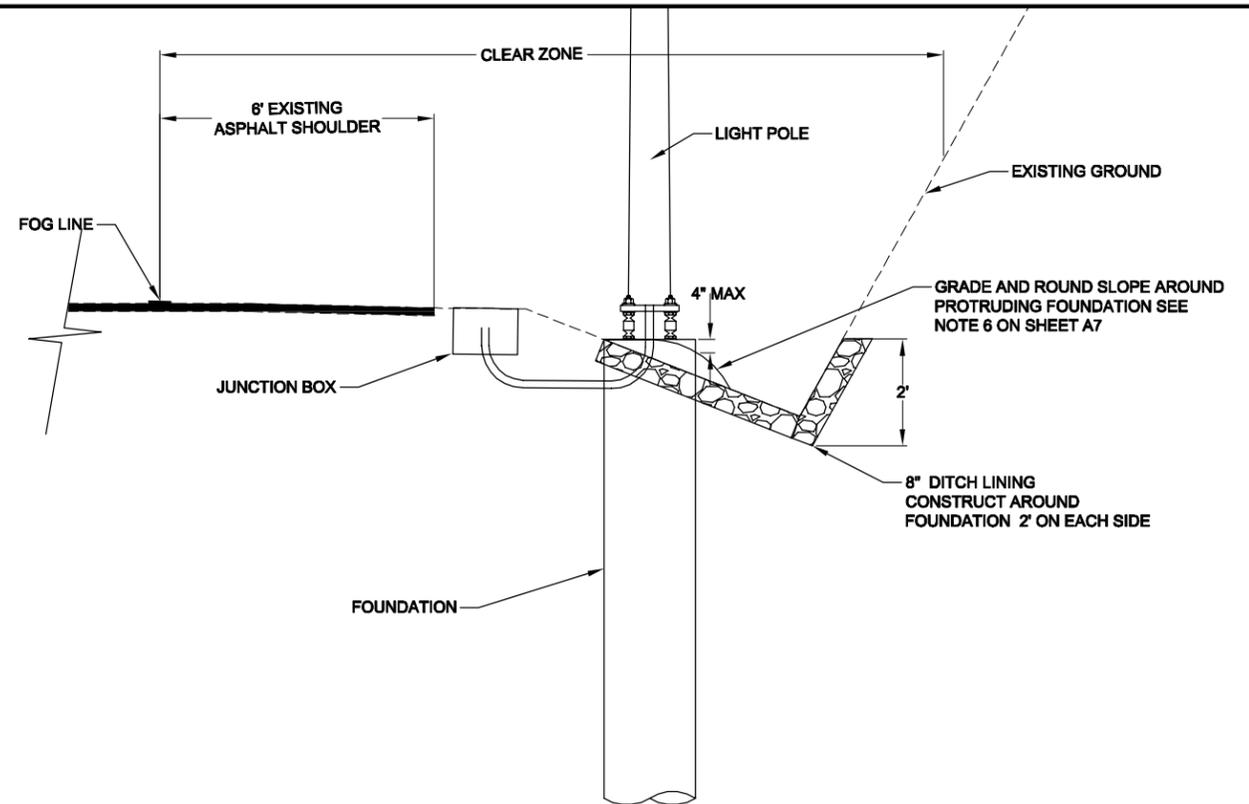
CHECKED BY: S. KARI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)												
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO		TYPICAL SECTIONS												
Wednesday, March 23, 2016 11:22:00 AM TAB: B1														
<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS			NO.	DATE	DESCRIPTION				PROJECT DESIGNATION 0920028/Z684130000	YEAR 2016	SHEET NO. B1	TOTAL SHEETS 53
REVISIONS														
NO.	DATE	DESCRIPTION												



ISLAND POLE LOCATION TYPICAL

NO SCALE

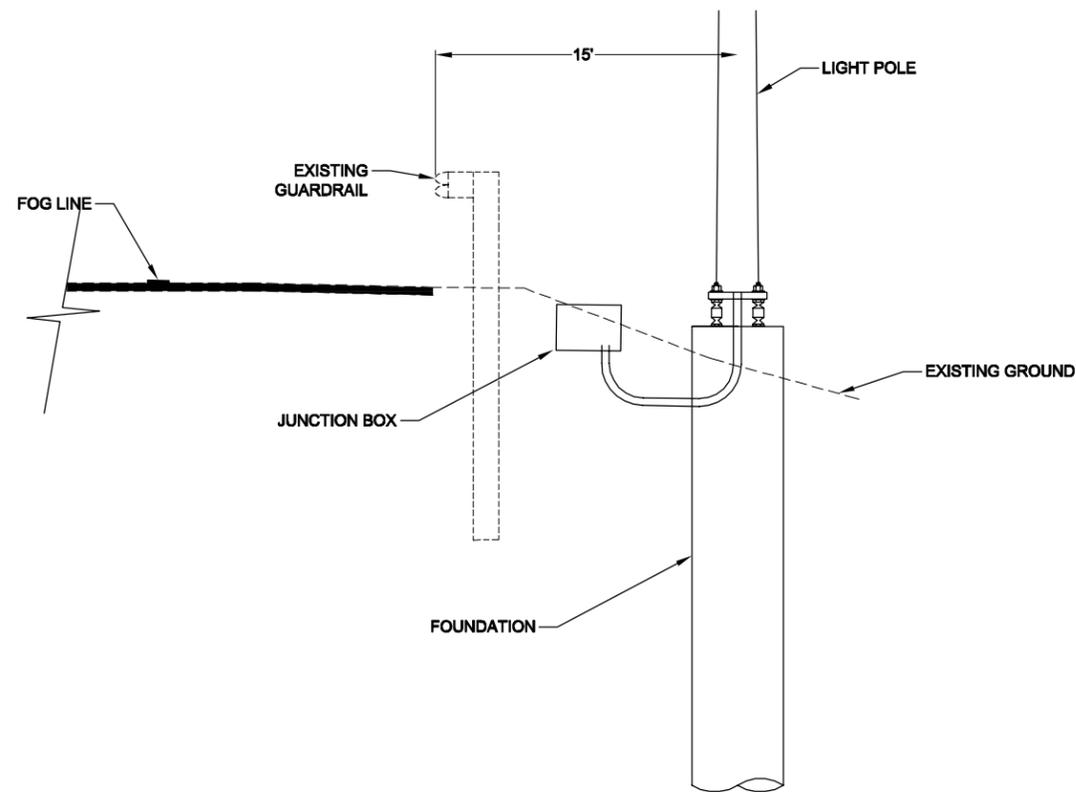
STATIONS
51+84 & 229+74



IN-DITCH POLE LOCATION TYPICAL

NO SCALE

STATIONS
53+84, 75+37, 92+41, 234+54, 248+58, 253+29



BEHIND GUARDRAIL POLE LOCATION TYPICAL

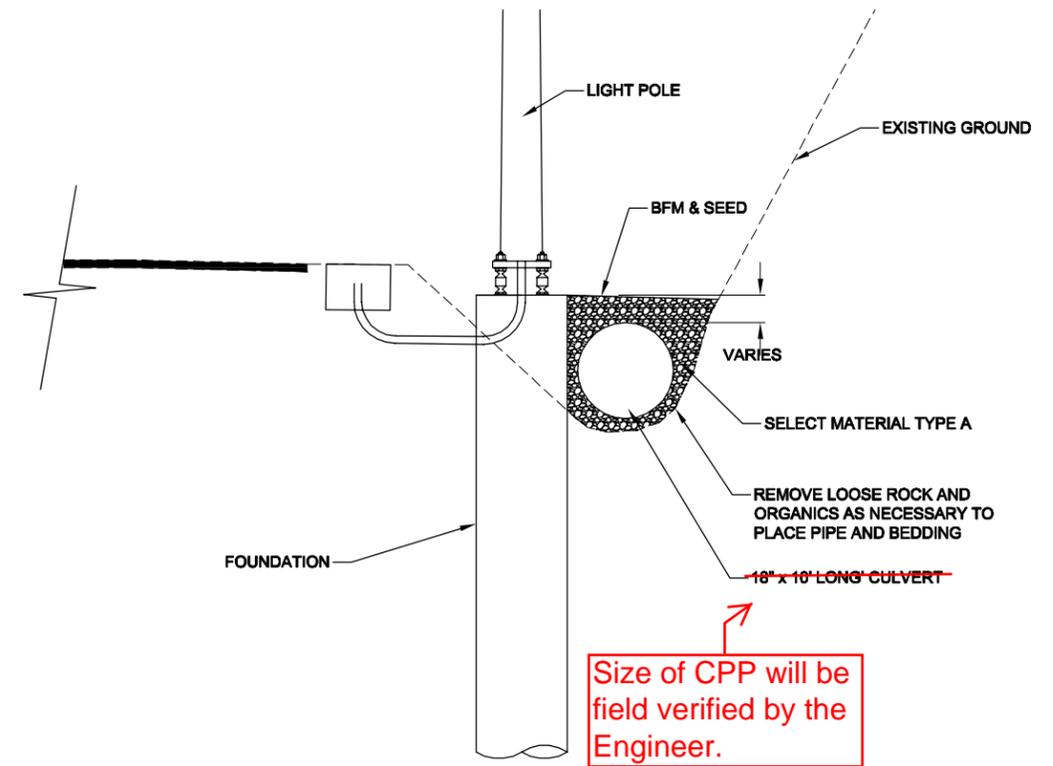
NO SCALE

STATIONS
274+34 & 276+74

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)			
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO		TYPICAL SECTIONS			
Wednesday, March 23, 2016 11:22:05 AM TAB: B2					
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 0920028/Z684130000	YEAR 2016	SHEET NO. B2	TOTAL SHEETS 53



△ IN-DITCH POLE LOCATION TYPICAL
NO SCALE

STATIONS
85+23, 92+41, 234+54

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)												
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO		TYPICAL SECTIONS												
Wednesday, November 02, 2016 3:20:02 PM TAB: B2														
<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>11/02/16</td> <td>EDIT IN-DITCH POLE LOCATION TYPICAL</td> </tr> </tbody> </table>		REVISIONS			NO.	DATE	DESCRIPTION	1	11/02/16	EDIT IN-DITCH POLE LOCATION TYPICAL	PROJECT DESIGNATION 0920028/Z684130000	YEAR 2016	SHEET NO. B2	TOTAL SHEETS 53
REVISIONS														
NO.	DATE	DESCRIPTION												
1	11/02/16	EDIT IN-DITCH POLE LOCATION TYPICAL												

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
201(7)	INVASIVE PLANT SPECIES CONTROL, REMOVAL AND DISPOSAL	SQAURE YARD	299.55
202(2)	REMOVAL OF PAVEMENT	SQUARE YARD	1268.9
202(3)	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	194
204(1)	STRUCTURE EXCAVATION	CUBIC YARD	3244.9
204(2)	STRUCTURE EXCAVATION IN ROCK	CUBIC YARD	752.97
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	2310.1
306(1)	ATB	TON	36.33
401(1B)	HMA, TYPE II, CLASS B	TON	78.31
608(2)	ASPHALT SIDEWALK	TON	10.74
609(2)	CURB AND GUTTER, TYPE 1	LINEAR FOOT	194
610(2)	DITCH LINING	TON	11
618(2)	SEEDING	POUND	66
619(3)	BONDED FIBER MATRIX (BFM)	POUND	4,291
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D
640(4)	WORKER MEALS AND LODGING, OR PER DIEM	LUMP SUM	ALL REQ'D
641(1)	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQ'D
641(3)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	LUMP SUM	ALL REQ'D
641(5)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL BY DIRECTIVE	CONTINGENT SUM	ALL REQ'D
641(6)	WITHHOLDING	CONTINGENT SUM	ALL REQ'D
641(7)	SWPPP MANAGER	LUMP SUM	ALL REQ'D
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D
642(3)	THREE PERSON SURVEY PARTY	HOURL	18
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQ'D
643(3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQ'D
643(15)	FLAGGING	CONTINGENT SUM	ALL REQ'D
643(23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQ'D
643(25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQ'D
660(13A)	SALVAGE EXISTING ELECTROLIER	EACH	103
660(14)	ELECTROLIER	EACH	97
660(15)	JUNCTION BOX, TYPE 1A	EACH	115

ESTIMATE OF QUANTITIES			
ITEM NO.	ITEM	UNIT	QUANTITY
660(16A)	CONDUIT, 2 INCH	LINEAR FOOT	24184.8
660(16B)	CONDUIT, 3 INCH	LINEAR FOOT	109.4
660(17)	CONDUCTOR, 3C #6 AWG	LINEAR FOOT	25071
660(18)	REPLACE LUMINAIRE	EACH	8
660(19)	DAVIT POLE ELECTROLIER	EACH	8
660(100)	CASING, FURNISHED	LINEAR FOOT	1460.75
660(101)	CASING, INSTALLED	EACH	105
660(102)	DRILLED ROCK SOCKET, EQUIPMENT	LUMP SUM	ALL REQ'D
660(103)	DRILLED ROCK SOCKET, INSTALLED	EACH	82
661(4)	LOAD CENTER, TYPE 3	EACH	10
665(1)	BEDROCK SURVEY	EACH	105

LIGHTING SUMMARY	
ITEM DESCRIPTION	EACH
ELECTROLIER, POLES	105
MAST ARM, 12-FOOT	33
MAST ARM, 16-FOOT	12
MAST ARM, 22-FOOT	52
MAST ARM, 20.5-FOOT (DAVIT)	8
POLE SHAFT, 14-FOOT (DAVIT)	8
POLE SHAFT, 36-FOOT	48
POLE SHAFT, 37-FOOT	32
POLE SHAFT, 38-FOOT	17
DRILLED SHAFT FOUNDATIONS	105
DRILLED SHAFT CASINGS	105
DRILLED SHAFT ROCK SOCKETS	82
REPLACEMENT LUMINAIRES	8

ITEMS ADDED BY CHANGE ORDER			
ITEM NO	ITEM	UNIT	QUANTITY
683(3)	DRILLING SUPPORT	LUMP SUM	ALL REQ'D
660(19)	DAVIT POLE ELECTROLIER	EACH	8
683(2)	BEDROCK SURVEY EQUITABLE ADJUSTMENT	LUMP SUM	ALL REQ'D
603(21)	CORRUGATED POLYETHYLENE PIPE	LINEAR FOOT	40
660(16D)	CONCRETE ENCASED HDPE CONDUIT	LINEAR FOOT	64.44
660(16e)	CONCRETE ENCASED RMC	LINEAR FOOT	115.14
401(2)	ASPHALT SHOULDERS	TON	110
660(7)	CONDUCTOR	LUMP SUM	ALL REQ'D
661(7)	P77 LOAD CENTER METTER, P77 LUMINAIRE 7 L85 L93 LIGHT SHEILDS	LUMP SUM	ALL REQ'D
201(1A)	CONTAMINATED SOIL REMOVAL, DISPOSAL	LUMP SUM	ALL REQ'D
660(101A)	EXTRA CASING LENGTH EQUITABLE ADJUSTMENT	LUMP SUM	ALL REQ'D

TABLE OF ESTIMATING FACTORS			
ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR	
203(6)	BORROW	1.96	TONS/CY
301(1)	AGGREGATE BASE COURSE, GRADING D-1	1.96	TONS/CY
306(1)	ATB	2.04	TONS/CY
401(1B)	HMA, TYPE II, CLASS B	2.04	TONS/CY
608(2)	ASPHALT SIDEWALK	2.04	TONS/CY
610(2)	DITCH LINING	1.48	TONS/CY

Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER
DRAWN BY: M. HIDALGO

Wednesday, January 04, 2017 9:52:13 AM
T.A.S.: C1

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY;
ILLUMINATION UPGRADE (HSIP)

ESTIMATE OF QUANTITIES

REVISIONS			REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION				
△	01/04/17	REVISED ITEM #660(14) ADDED ITEM #660(19)	△	6/24/16	ADDED ITEM #660(13A)	0920028/Z684130000	2016	C1	53
			△	11/7/16	EDIT LIGHTING SUMMARY				

P:\TH - U\204700428\DWGS\CS\SHETS\00428 C1.DWG

204(1) STRUCTURE EXCAVATION - CUBIC YARD

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
51+84	RT	117+78	RT	1099	
131+15	RT	169+59	RT	641	
171+99	LT	188+59	LT	277	
190+89	RT	216+92	RT	434	
225+23	RT	271+93	RT	779	
271+93	RT	281+47	RT	159	
283+73	LT	307+43	LT	395	
TOTAL				3,784	

204(2) STRUCTURE EXCAVATION IN ROCK - CUBIC YARD

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
73+06	RT	87+62	RT	243	
106+55	RT	110+54	RT	67	
120+08	LT	128+78	LT	145	
131+15	RT	146+00	RT	248	
158+57	RT	165+00	RT	108	
174+39	LT	188+59	LT	237	
190+89	RT	207+83	RT	283	
225+23	RT	236+82	RT	194	
TOTAL				1,525	

*204(2) ALL LOCATIONS ARE ESTIMATIONS FOR A BASIS OF BID BASED ON PAST REFERENCE DATA AND FIELD OBSERVATIONS. NO GEOTECHNICAL EXPLORATION WAS PERFORMED FOR THIS PROJECT.

202(9) REMOVAL OF CURB AND GUTTER - LINEAR FOOT

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
51+60	21 RT	52+18	21 RT	116	ASPHALT ISLAND
229+56	36 RT	229+95	36 RT	78	ASPHALT ISLAND
TOTAL				194	

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Project Eng. Mandi Pelham
Date: 3/1/18

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

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
51+84	21 RT	53+44	21 RT	2	PARKING LOT CROSSING BASE COURSE
51+84	RT	117+78	RT	158	ROADWAY SHOULDER
65+04	28 RT	65+40	28 RT	1	SIDE STREET CROSSING BASE COURSE
69+44	28 RT	70+04	28 RT	1	SIDE STREET CROSSING BASE COURSE
78+46	28 RT	78+75	28 RT	1	SIDE STREET CROSSING BASE COURSE
80+58	28 RT	80+98	28 RT	1	SIDE STREET CROSSING BASE COURSE
83+95	28 RT	84+21	28 RT	1	SIDE STREET CROSSING BASE COURSE
84+67	28 RT	84+92	28 RT	1	SIDE STREET CROSSING BASE COURSE
86+14	28 RT	86+41	28 RT	1	SIDE STREET CROSSING BASE COURSE
91+82	28 RT	91+94	28 RT	1	SIDE STREET CROSSING BASE COURSE
95+17	28 RT	95+34	28 RT	1	SIDE STREET CROSSING BASE COURSE
97+05	28 RT	97+23	28 RT	1	SIDE STREET CROSSING BASE COURSE
99+83	28 RT	99+91	28 RT	1	SIDE STREET CROSSING BASE COURSE
105+30	28 RT	105+91	28 RT	1	SIDE STREET CROSSING BASE COURSE
106+69	28 RT	106+94	28 RT	1	SIDE STREET CROSSING BASE COURSE
114+95	28 RT	115+37	28 RT	1	SIDE STREET CROSSING BASE COURSE
115+85	28 RT	115+99	28 RT	1	SIDE STREET CROSSING BASE COURSE
116+37	28 RT	116+51	28 RT	1	SIDE STREET CROSSING BASE COURSE
117+27	28 RT	117+43	28 RT	1	SIDE STREET CROSSING BASE COURSE
117+82	28 RT	118+11	28 RT	1	SIDE STREET CROSSING BASE COURSE
120+08	RT/LT	126+78	RT/LT	17	ROADWAY SHOULDER
121+98	36 LT	122+86	36 LT	2	SIDE STREET CROSSING BASE COURSE
131+15	RT	169+59	RT	93	ROADWAY SHOULDER
148+74	50 RT	149+14	50 RT	1	SIDE STREET CROSSING BASE COURSE
154+26	34 RT	154+62	34 RT	1	SIDE STREET CROSSING BASE COURSE
157+20	34 RT	157+57	34 RT	1	SIDE STREET CROSSING BASE COURSE
171+99	LT	188+59	LT	40	ROADWAY SHOULDER
174+97	24 LT	175+41	24 LT	1	SIDE STREET CROSSING BASE COURSE
180+09	24 LT	180+25	24 LT	1	SIDE STREET CROSSING BASE COURSE
182+14	24 LT	182+72	24 LT	1	SIDE STREET CROSSING BASE COURSE
185+25	24 LT	185+75	24 LT	1	SIDE STREET CROSSING BASE COURSE
186+80	24 LT	187+14	24 LT	1	SIDE STREET CROSSING BASE COURSE
190+89	RT	216+92	RT	63	ROADWAY SHOULDER
225+23	RT	271+93	RT	112	ROADWAY SHOULDER
225+30	36 RT	225+77	36 RT	1	SIDE STREET CROSSING BASE COURSE
229+02	36 RT	231+02	36 RT	3	PARKING LOT CROSSING BASE COURSE
232+96	36 RT	233+11	36 RT	1	SIDE STREET CROSSING BASE COURSE
235+54	36 RT	235+75	36 RT	1	SIDE STREET CROSSING BASE COURSE
237+82	36 RT	238+00	36 RT	1	SIDE STREET CROSSING BASE COURSE
238+90	36 RT	239+10	36 RT	1	SIDE STREET CROSSING BASE COURSE
239+54	36 RT	239+71	36 RT	1	SIDE STREET CROSSING BASE COURSE
241+58	40 RT	241+88	40 RT	1	SIDE STREET CROSSING BASE COURSE
242+30	36 RT	242+49	36 RT	1	SIDE STREET CROSSING BASE COURSE
244+15	36 RT	244+30	36 RT	1	SIDE STREET CROSSING BASE COURSE
245+25	36 RT	245+42	36 RT	1	SIDE STREET CROSSING BASE COURSE
246+88	36 RT	247+11	36 RT	1	SIDE STREET CROSSING BASE COURSE
249+50	36 RT	249+77	36 RT	1	SIDE STREET CROSSING BASE COURSE
252+27	36 RT	252+50	36 RT	1	SIDE STREET CROSSING BASE COURSE
253+85	36 RT	254+02	36 RT	1	SIDE STREET CROSSING BASE COURSE
255+27	36 RT	255+56	36 RT	1	SIDE STREET CROSSING BASE COURSE
256+74	36 RT	256+93	36 RT	1	SIDE STREET CROSSING BASE COURSE
257+96	36 RT	258+16	36 RT	1	SIDE STREET CROSSING BASE COURSE
260+00	36 RT	260+17	36 RT	1	SIDE STREET CROSSING BASE COURSE
261+39	36 RT	261+58	36 RT	1	SIDE STREET CROSSING BASE COURSE
263+07	36 RT	263+32	36 RT	1	SIDE STREET CROSSING BASE COURSE
263+68	36 RT	263+81	36 RT	1	SIDE STREET CROSSING BASE COURSE
265+22	36 RT	265+40	36 RT	1	SIDE STREET CROSSING BASE COURSE
267+22	36 RT	267+47	36 RT	1	SIDE STREET CROSSING BASE COURSE
271+93	RT	281+47	RT	23	ROADWAY SHOULDER
283+73	LT	307+43	LT	57	ROADWAY SHOULDER
285+95	45 LT	286+22	45 LT	1	SIDE STREET CROSSING BASE COURSE
288+32	34 LT	288+91	34 LT	1	SIDE STREET CROSSING BASE COURSE
291+07	34 LT	291+29	34 LT	1	SIDE STREET CROSSING BASE COURSE
293+54	24 LT	293+73	24 LT	1	SIDE STREET CROSSING BASE COURSE
294+47	28 LT	295+63	28 LT	2	SIDE STREET CROSSING BASE COURSE

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

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
297+53	28 LT	297+72	28 LT	1	SIDE STREET CROSSING BASE COURSE
300+02	28 LT	300+24	28 LT	1	SIDE STREET CROSSING BASE COURSE
306+03	28 LT	306+33	28 LT	1	SIDE STREET CROSSING BASE COURSE
TOTAL				628	

608(2) ASPHALT SIDEWALK - TON

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
51+60	21 RT	52+18	21 RT	3.6	ISLAND MEDIAN
229+56	36 RT	229+95	36 RT	2.4	ISLAND MEDIAN
TOTAL				6.0	

609(2) CURB AND GUTTER, TYPE 1 - LINEAR FOOT

BEGIN		END		QUANTITY	REMARKS
STATION	OFFSET	STATION	OFFSET		
51+60	21 RT	52+18	21 RT	116	EXPRESSWAY CURB AND GUTTER
229+56	36 RT	229+95	36 RT	78	EXPRESSWAY CURB AND GUTTER
TOTAL				194	

610(2) DITCH LINING - TON

BEGIN	END	QUANTITY	REMARKS
53+80	53+88 RT	1.8	
75+33	75+41 RT	1.8	
92+37	92+45 RT	1.8	
234+50	234+58 RT	1.8	
248+54	248+62 RT	1.8	
253+25	253+33 RT	1.8	
ROUNDED	TOTAL	11	

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI 	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO	SUMMARY TABLES
Wednesday, March 23, 2016 5:27:48 PM TAB: D2	PROJECT DESIGNATION: 0920028/Z684130000 YEAR: 2016 SHEET NO.: D2 TOTAL SHEETS: 53

LIGHT POLE SUMMARY					
POLE #	STATION	OFFSET	MAST ARM	SHAFT	COMMENTS
1	51+84	22	12'	36'	
2	53+84	21'	12'	36'	
3	56+24	21'	12'	36'	
4	58+64	22	12'	36'	
5	61+04	25'	12'	37'	
6	63+38	26.4'	12'	37'	
7	65+81	28	12'	38'	
8	68+25	25	12'	38'	
9	70+73	25	12'	38'	
10	73+06	24	12'	38'	
11	75+37	21	12'	37'	
12	77+85	22	12'	37'	
13	80+30	22	12'	36'	
14	82+75	22	12'	36'	
15	85+23	22	16'	38'	
16	87+62	22	12'	37'	
17	90+04	22	12'	36'	
18	92+42	22	12'	36'	
19	94+73	22'	12'	37'	
20	97+31	24	12'	36'	
21	99+44	22	12'	37'	
22	101+84	22	12'	37'	
23	104+34	27	16'	38'	
24	106+35	22	12'	36'	
25	107+97	30	16'	38'	
26	110+54	30	16'	38'	
27	113+03	27	16'	38'	
28	115+58	34	22'	36'	
29	117+68	36	22'	36'	
30	120+08	-29	16'	36'	
32	123+94	-29	16'	36'	
33	126+30	-29	16'	36'	
34	128+78	-28	16'	36'	
35	131+15	33'	22'	38'	
36	133+38	35	22'	38'	
37	135+78	35	22'	37'	
38	138+21	37	22'	37'	
39	140+71	37	22'	37'	
40	143+21	38	22'	37'	
41	145+72	41	22'	37'	
44	151+65	41	22'	38'	
45	153+96	40	22'	37'	
46	156+26	36	22'	37'	
47	158+57	34	22'	37'	
48	160+20	35	22'	37'	
49	162+63	35	22'	37'	
50	165+00	34	22'	37'	
51	167+22	34	22'	37'	
52	169+59	35	22'	36'	
53	171+99	-22	20.5'	14'	DAVIT POLE
55	174+39	-23	20.5'	14'	DAVIT POLE
56	176+79	-23	20.5'	14'	DAVIT POLE
57	179+19	-23	20.5'	14'	DAVIT POLE

LIGHT POLE SUMMARY					
POLE #	STATION	OFFSET	MAST ARM	SHAFT	COMMENTS
58	181+59	-23	20.5'	14'	DAVIT POLE
59	183+99	-22	20.5'	14'	DAVIT POLE
60	186+40	-22'	20.5'	14'	DAVIT POLE
61	188+58	-22	20.5'	14'	DAVIT POLE
62	190+89	36	22'	37'	
63	193+32	34'	22'	37'	
64	195+75	33.5	22'	36'	
65	198+18	35	22'	36'	
66	200+61	40	22'	36'	
67	203+04	34	22'	36'	
68	205+40	34'	22'	36'	
69	207+83	34'	22'	36'	
70	210+21	35'	22'	36'	
71	212+47	34'	22'	36'	
72	214+53	34'	22'	37'	
74	218+61	35	22'	36'	
78	225+13	34.5	22'	36'	
79	227+28	36	22'	36'	
80	229+74	34'	22'	36'	
81	232+14	34	22'	36'	
82	234+54	33	22'	36'	
83	236+82	34	22'	36'	
84	239+10	35	22'	36'	
85	241+39	35	22'	36'	
86	243+78	33	22'	36'	
87	246+18	33	22'	36'	
88	248+58	33	22'	36'	
89	250+88	34	22'	36'	
90	253+29	34.5	22'	36'	
91	255+74	34.5	22'	37'	
92	258+26	35'	22'	36'	
93	260+50	34	22'	36'	
94	262+61	33	22'	36'	
95	265+01	34	22'	37'	
96	267+01	37	12'	36'	
97	269+47	33	22'	36'	
98	271+93	34	22'	36'	
99	274+24	24	12	37'	
100	276+74	24	12'	38'	
101	279+13	22'	12'	38'	
102	281+47	20'	12'	38'	
103	283+96	-28	16'	38'	
104	286+50	-37'	22'	38'	
105	288+96	-34	16'	38'	
106	291+53	-27	16'	37'	
107	293+84	-30	12'	37'	
108	296+12	-21	12'	36'	
109	298+15	-32	12'	36'	
110	300+35	-33	22'	37'	
111	302+79	-25.5	12'	37'	
112	305+13	-20.5	12'	37'	
113	307+00	-22.5	12'	37'	

REMOVE/SALVAGE EXISTING ELECTROLIER		
POINT #	STATION	OFFSET
601	52+35	-33
602	53+97	-27
603	55+49	-22
604	57+37	-21
605	59+27	-20
606	61+21	-38
607	63+14	-37
608	64+90	-32
609	66+70	-30
610	68+11	-31
611	69+62	-28
612	71+71	-40
613	73+53	-27
614	75+11	-26
615	76+70	-31
616	78+31	-31
617	78+33	43
618	79+82	-32
619	80+82	65
620	81+56	-38
621	83+46	-37
622	85+02	-36
623	86+52	-49
624	88+14	-34
625	89+76	-39
626	91+50	-44
627	93+58	-38
628	95+40	-35
629	96+93	-35
630	98+69	-32
631	100+34	-31
632	101+25	-30
633	102+38	-30
634	103+43	-29
635	105+06	-26
636	106+52	-45
637	107+94	-36
638	130+34	-42
639	132+04	-48
640	133+58	-45
641	135+01	-41
642	136+61	-37
643	138+06	-36
644	139+74	-62
645	141+25	-103

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

REMOVE/SALVAGE EXISTING ELECTROLIER		
POINT #	STATION	OFFSET
646	142+90	-105
647	147+29	-70
648	152+92	142
649	154+17	127
650	155+92	111
651	157+77	59
652	158+72	-34
653	160+22	-39
654	161+74	-40
655	163+39	-37
656	164+81	-34
657	166+59	-38
658	167+90	-34
659	169+51	-34
660	171+27	-34
661	205+95	-49
662	207+58	-49
663	209+19	-52
664	210+90	-46
665	212+66	-46
666	214+27	-40
667	216+04	-39
668	217+64	-37
669	219+25	-46
670	225+56	-50
671	226+77	-31
672	229+04	-29
673	230+55	-33
674	232+28	-36
675	233+76	-35
676	235+55	-34
677	237+28	-35
678	238+89	-34
679	240+66	-35
680	242+13	-36
681	243+89	-33
682	245+46	-35
683	247+18	-35
684	249+43	-37
685	251+08	-35
686	253+26	-34
687	255+33	-35
688	256+84	-35
689	259+07	-35
690	261+14	-34

REMOVE/SALVAGE EXISTING ELECTROLIER		
POINT #	STATION	OFFSET
691	263+62	-34
692	265+25	-35
693	266+93	-36
694	268+41	-46
695	269+94	-73
696	271+58	-46
697	273+08	-38
698	276+27	-48
699	278+07	-41
700	286+41	-47
701	288+88	60
702	291+98	57
703	295+04	50
704	296+47	49
705	298+43	49
706	302+14	70
707	304+14	66
708	307+25	67

REPLACEMENT LUMINAIRE SUMMARY		
POLE #	STATION	OFFSET
31	121+66	-41
42	148+46	-28
43	149+44	32
54	173+30	30
73	216+92	19
75	220+98	-25
76	222+40	-24
77	224+04	-24

7-Nov-16
TAB: D3

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION
1	6/24/16	ADDED TABLE
2	11/7/16	REVISED LP SUMMARIES

PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

LIGHT POLE SUMMARY TABLE

PROJECT DESIGNATION
0920028/Z68413000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
D3	53

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

JUNCTION BOX SUMMARY			
POINT	STATION	OFFSET	HALF-MOON CULVERT INSTALLATION
301	51+87	21	NO
302	53+87	22	YES
303	56+27	22	YES
304	58+67	24	YES
305	61+07	41	NO
306	63+43	49	YES
307	65+84	27	NO
308	68+28	25	YES
309	70+76	38	YES
310	73+09	36	NO
311	75+40	22	NO
312	77+88	22	NO
313	80+33	36	NO
314	82+78	22	NO
315	85+26	22	YES
316	87+65	22	YES
317	90+07	22	YES
318	92+45	22	YES
319	94+86	30	NO
320	97+27	30	NO
321	99+47	30	NO
322	101+87	30	NO
323	104+27	30	YES
324	106+38	23	YES
325	108+00	31	NO
326	110+57	30	NO
327	113+06	34	NO
328	115+51	34	NO
329	117+81	34	NO
330	120+05	-36	NO
332	123+91	-30	NO
333	126+27	-29	NO
334	128+75	-28	NO
335	131+18	33	NO
336	133+41	35	NO
337	135+81	35	NO
338	138+25	36	NO
339	140+74	35	NO
340	143+24	38	NO

JUNCTION BOX SUMMARY			
POINT	STATION	OFFSET	HALF-MOON CULVERT INSTALLATION
341	145+75	41	NO
344	151+68	41	NO
345	153+99	40	NO
346	156+29	36	NO
347	158+60	34	NO
348	160+23	35	NO
349	162+66	35	NO
350	165+03	34	NO
351	167+24	34	NO
352	169+62	35	NO
353	171+96	-21	NO
355	174+36	-22	NO
356	176+76	-23	NO
357	179+16	-22	NO
358	181+56	-22	NO
359	183+96	-22	NO
360	186+35	-22	NO
361	188+55	-22	NO
362	190+92	36	NO
363	193+32	33	YES
364	195+79	37	YES
365	198+21	36	YES
366	200+64	40	YES
367	203+07	42	YES
368	205+43	40	YES
369	207+86	35	YES
370	210+24	35	YES
371	212+51	36	YES
372	214+56	40	YES
374	218+64	36	NO
378	225+20	36	NO
379	227+31	36	NO
380	229+77	34	NO
381	232+17	40	NO
382	234+57	33	NO
383	236+85	40	YES
384	239+10	35	NO
385	241+42	35	YES
386	243+81	33	YES

JUNCTION BOX SUMMARY			
POINT	STATION	OFFSET	HALF-MOON CULVERT INSTALLATION
387	246+21	33	NO
388	248+61	33	YES
389	250+91	40	YES
390	253+32	35	YES
391	255+79	35	YES
392	258+19	35	NO
393	260+53	40	YES
394	262+64	33	YES
395	265+06	40	YES
396	267+04	40	YES
397	269+50	33	YES
398	271+96	35	YES
399	274+37	32	NO
400	276+77	32	NO
401	279+16	29	NO
402	281+50	25	NO
403	283+70	-35	NO
404	286+28	-39	NO
405	288+73	-34	NO
406	291+00	-28	NO
407	293+44	-31	NO
408	295+93	-31	NO
409	298+12	-28	NO
410	300+32	-33	NO
411	302+70	-24	NO
412	305+10	-27	YES
413	307+40	-29	YES
444	148+46	50	NO
446	267+64	40	YES
454	173+30	-23	NO

PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

**JUNCTION BOX
SUMMARY TABLE**

PROJECT DESIGNATION

0920028/Z684130000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
D4	53

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

SUMMARY OF NEW LOAD CENTER NO. 3				
Load center type: 3				
Location Data:				
Load center:	Station: 121+38 Offset: 58' LT			
Power source:	Pole # 3330-C5-2			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting, Luminaires 30-34	1.5	20	2
*A2	Spare		20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Space			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	1.8	3.8	
	Demand Load Panel A (@ 125%)	2.3	4.7	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

SUMMARY OF NEW LOAD CENTER NO. 4				
Load center type: 3				
Location Data:				
Load center:	Station: 148+71 Offset: 60' RT			
Power source:	Pole # 3440-A4-7			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting South, Luminaires 35-42	2.3	20	2
*A2	Lighting North, Luminaires 43-52	2.9	20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Space			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	5.5	11.5	
	Demand Load Panel A (@ 125%)	6.9	14.3	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

SUMMARY OF NEW LOAD CENTER NO. 5				
Load center type: 3				
Location Data:				
Load center:	Station: 179+14 Offset: 49' LT			
Power source:	Pole # 3340-D4-3			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting South, Luminaires 53-57	1.5	20	2
*A2	Lighting North, Luminaires 58-61	1.2	20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Space			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	3	6.3	
	Demand Load Panel A (@ 125%)	3.8	7.8	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION			
		KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)			
DESIGNED BY: N. STALLER		LOAD CENTER SUMMARY			
DRAWN BY: M. HIDALGO					
Wednesday, March 23, 2016 3:42:00 PM					
TAB: D6					
REVISIONS		PROJECT DESIGNATION		YEAR	SHEET NO.
NO.	DATE	DESCRIPTION		2016	D6
		0920028/Z684130000			53
				TOTAL SHEETS	

SUMMARY OF NEW LOAD CENTER NO. 6				
Load center type: 3				
Location Data:				
Load center:	Station: 203+28 Offset: 54' RT			
Power source:	Pole # 3430-B4-3			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting South, Luminaires 62-67	1.7	20	2
*A2	Lighting North, Luminaires 68-74	2.0	20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Spare			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	4.0	8.3	
	Demand Load Panel A (@125%)	5.0	10.4	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

SUMMARY OF NEW LOAD CENTER NO. 7				
Load center type: 3				
Location Data:				
Load center:	Station: 221+15 Offset: 43' LT			
Power source:	Pole # 3430-C4-7			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting, Luminaires 75-77	0.9	20	2
*A2	Spare		20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Spare			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	1.2	2.5	
	Demand Load Panel A (@125%)	1.5	3.1	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

SUMMARY OF NEW LOAD CENTER NO. 8				
Load center type: 3				
Location Data:				
Load center:	Station: 236+66 Offset: 45' RT			
Power source:	Pole # 3540-A4-2			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting South, Luminaires 78-83	1.7	20	2
*A2	Lighting North, Luminaires 84-93	2.9	20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Spare			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	4.9	10.2	
	Demand Load Panel A (@125%)	6.1	12.8	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)		
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO		LOAD CENTER SUMMARY		
Wednesday, March 23, 2016 3:42:05 PM TAB: D7				
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION	YEAR	SHEET NO.
		0920028/Z684130000	2016	D7
				TOTAL SHEETS
				53

SUMMARY OF NEW LOAD CENTER NO. 9				
Load center type: 3				
Location Data:				
Load center:	Station: 267+68 Offset: 49' RT			
Power source:	Pole # 3540-D4-13			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting South, Luminaires 94-96	0.9	20	2
*A2	Lighting North, Luminaires 97-102	1.7	20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Space			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	2.9	6.0	
	Demand Load Panel A (@ 125%)	3.6	7.6	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

SUMMARY OF NEW LOAD CENTER NO. 10				
Load center type: 3				
Location Data:				
Load center:	Station: 298+46 Offset: 34' LT			
Power source:	Pole # 3530-B4-3			
Photoelectric control:	Yes			
Service voltage:	480/240-volt, 1 phase, 3 wire			
Interrupting Capacity of Circuit Breakers - Series Rated	10,000 AIC			
Provide meter socket?	Yes 100A			
Main Breaker A:	480 volts, 2 pole, 100 amperes		Serving: Panel A	
Contactor 1:	600 volt, 8 pole, 30 amperes			
Load Panel A Summary				
Bus rating: 100A, 480/240-volt, 1-phase, 3-wire				
Circuit Number	Description	KVA Load	Breaker	
			Amps	Poles
*A1	Lighting South, Luminaires 103-109	2.0	20	2
*A2	Lighting North, Luminaires 110-113	1.2	20	2
*A3	Spare		20	2
A4	Spare		20	2
A5	Space			2
A6	Photoelectric control	0.1	15	1
A7	Heater	0.2	15	1
A8	Spare		20	1
	Connected Load Panel A	3.5	7.3	
	Demand Load Panel A (@ 125%)	4.4	9.1	

Panel Notes:

- * Circuit routed through contactor
- 1. See DOT standard drawing L-26.00 for typical load center construction and installation.
- 2. Provide contactor with 240-volt coil and hand-off-auto switch located on load center dead-front.
- 3. Provide photoelectric control mounted on 24" minimum length of rigid steel conduit extending approximately 12" above top of load center. Orient north (preferable) or east.
- 4. Provide label on load center dead-front "Available fault current = 1839 amps, calculated on 27 October 2015"
- 5. Calculated fault current is based on a 15kVA utility transformer with 1.7% impedance. Field verify actual conditions and notify engineer if different.

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Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI  DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO Wednesday, March 23, 2016 3:42:10 PM TAB: D8	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP) <h2 style="margin: 0;">LOAD CENTER SUMMARY</h2>																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> <th>PROJECT DESIGNATION</th> <th>YEAR</th> <th>SHEET NO.</th> <th>TOTAL SHEETS</th> </tr> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td>0920028/Z684130000</td> <td>2016</td> <td>D8</td> <td>53</td> </tr> </tbody> </table>	REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS	NO.	DATE	DESCRIPTION								0920028/Z684130000	2016	D8	53	
REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS																
NO.	DATE	DESCRIPTION																				
			0920028/Z684130000	2016	D8	53																

LEGEND:

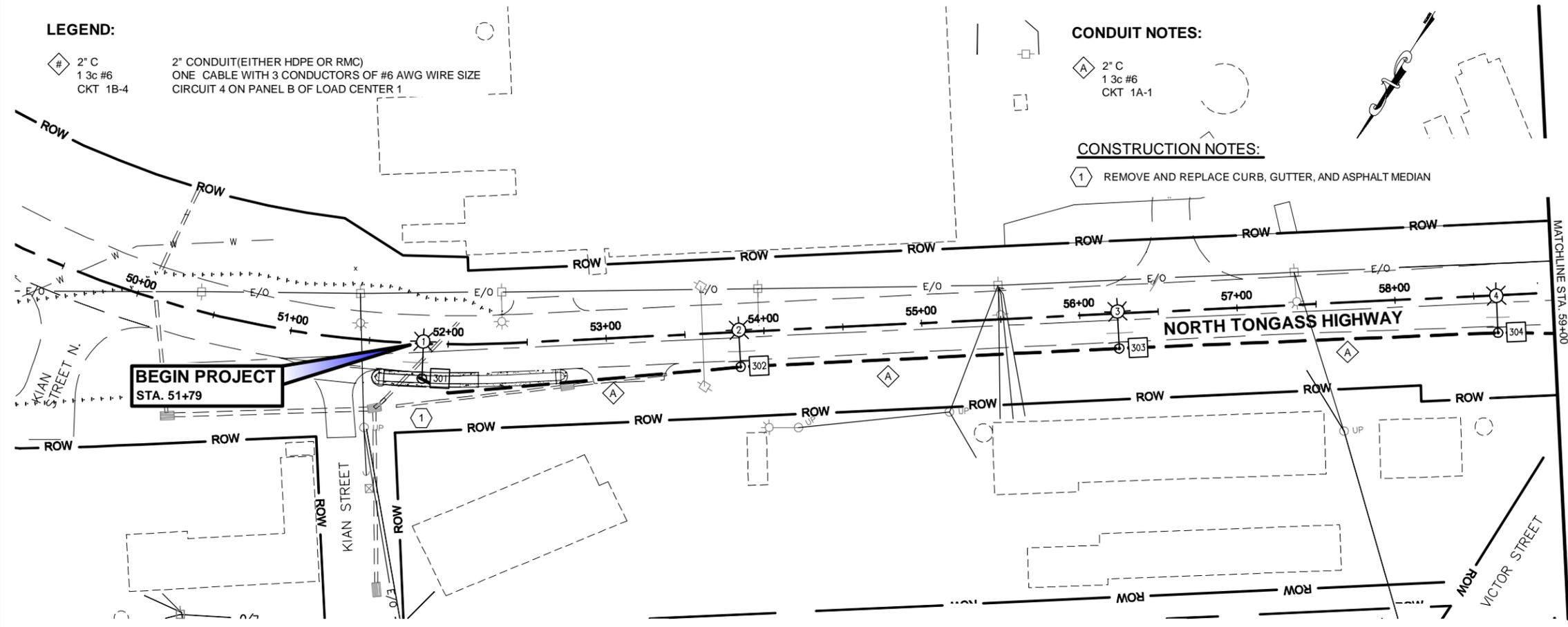
2" C 2" CONDUIT(EITHER HDPE OR RMC)
 1 3c #6 ONE CABLE WITH 3 CONDUCTORS OF #6 AWG WIRE SIZE
 CKT 1B-4 CIRCUIT 4 ON PANEL B OF LOAD CENTER 1

CONDUIT NOTES:

A 2" C
 1 3c #6
 CKT 1A-1

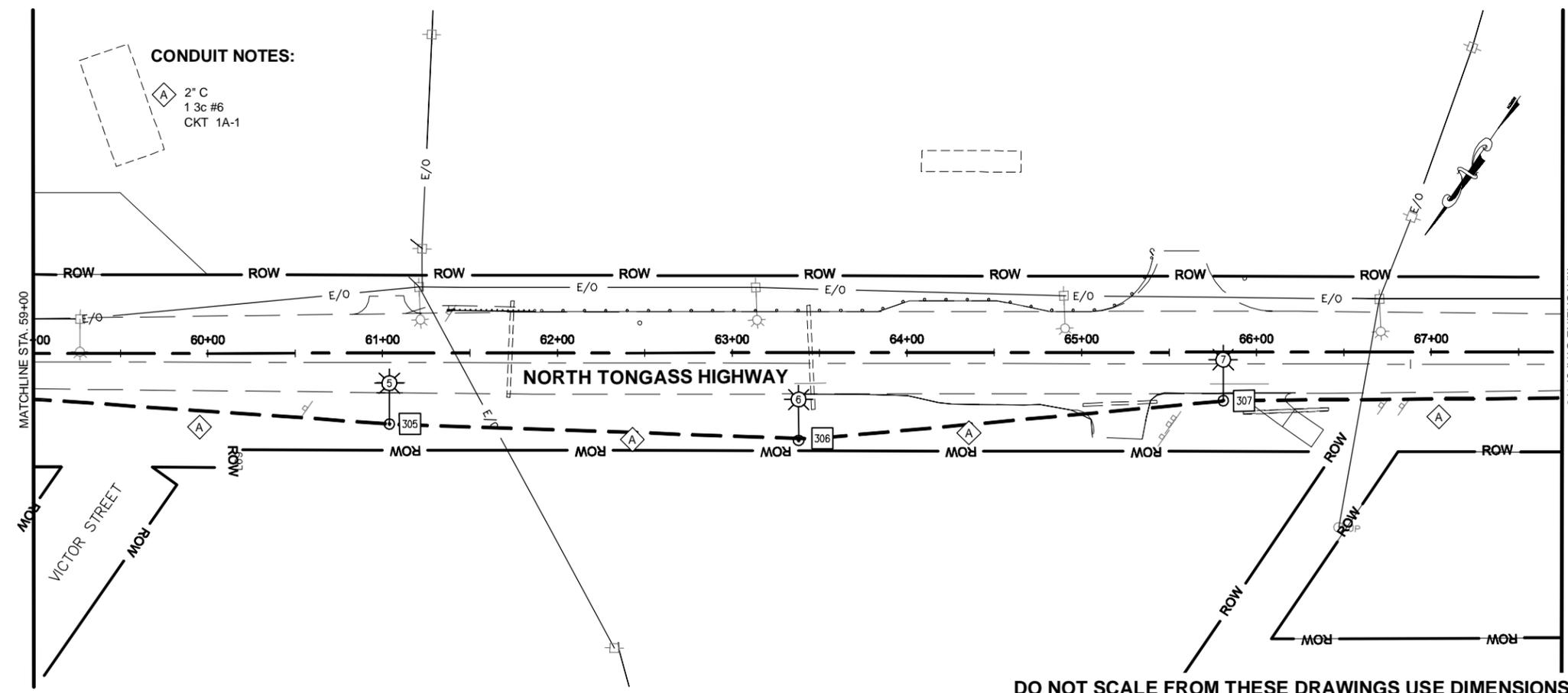
CONSTRUCTION NOTES:

1 REMOVE AND REPLACE CURB, GUTTER, AND ASPHALT MEDIAN



CONDUIT NOTES:

A 2" C
 1 3c #6
 CKT 1A-1



Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

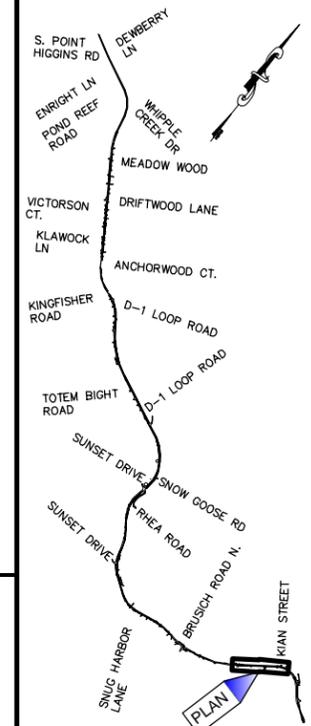
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TAB: H1

ADDENDUM NUMBER

ATTACHMENT NUMBER

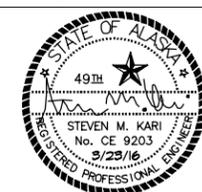
RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

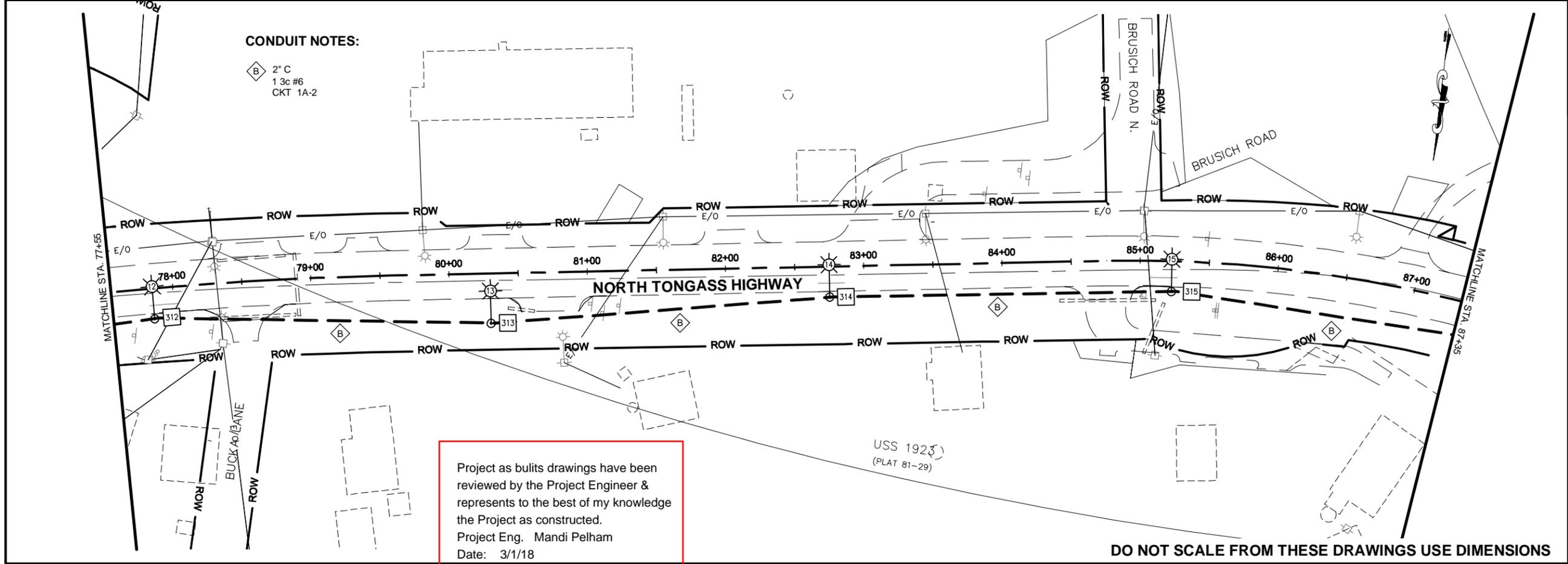
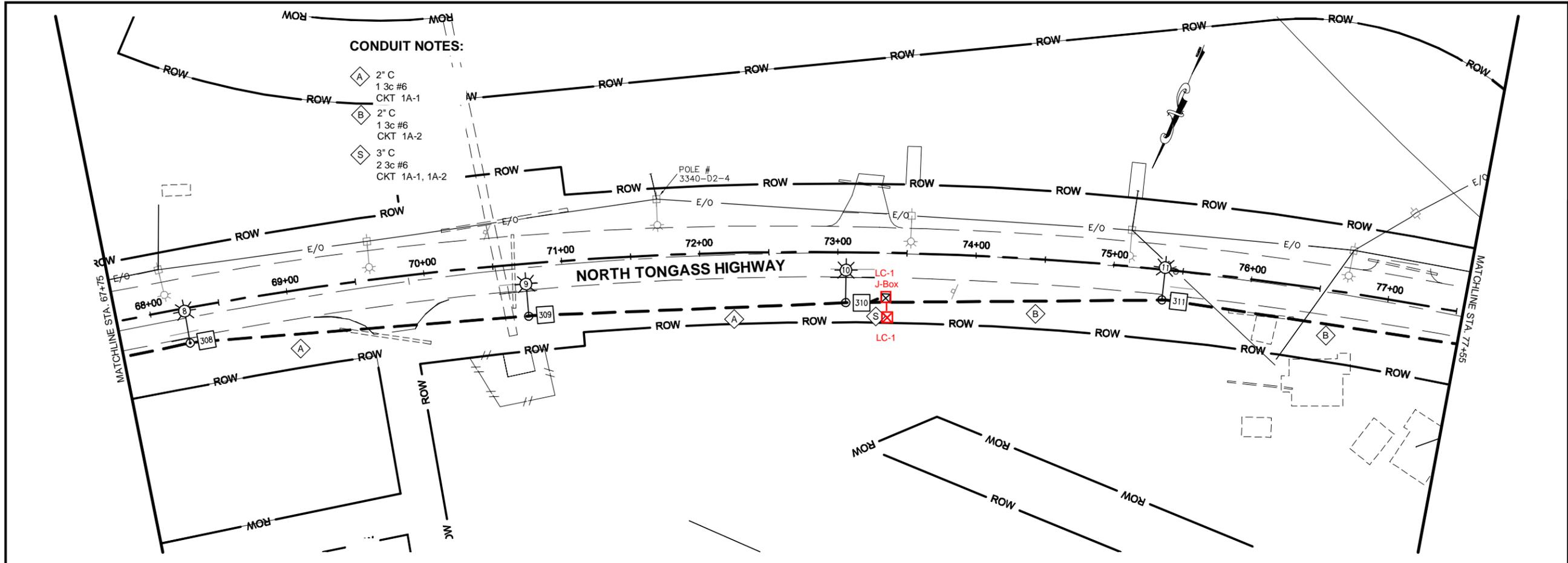
**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z68413000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
H1	53



23-Mar-16
TAB: H2

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, T. GALAMBUSH

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

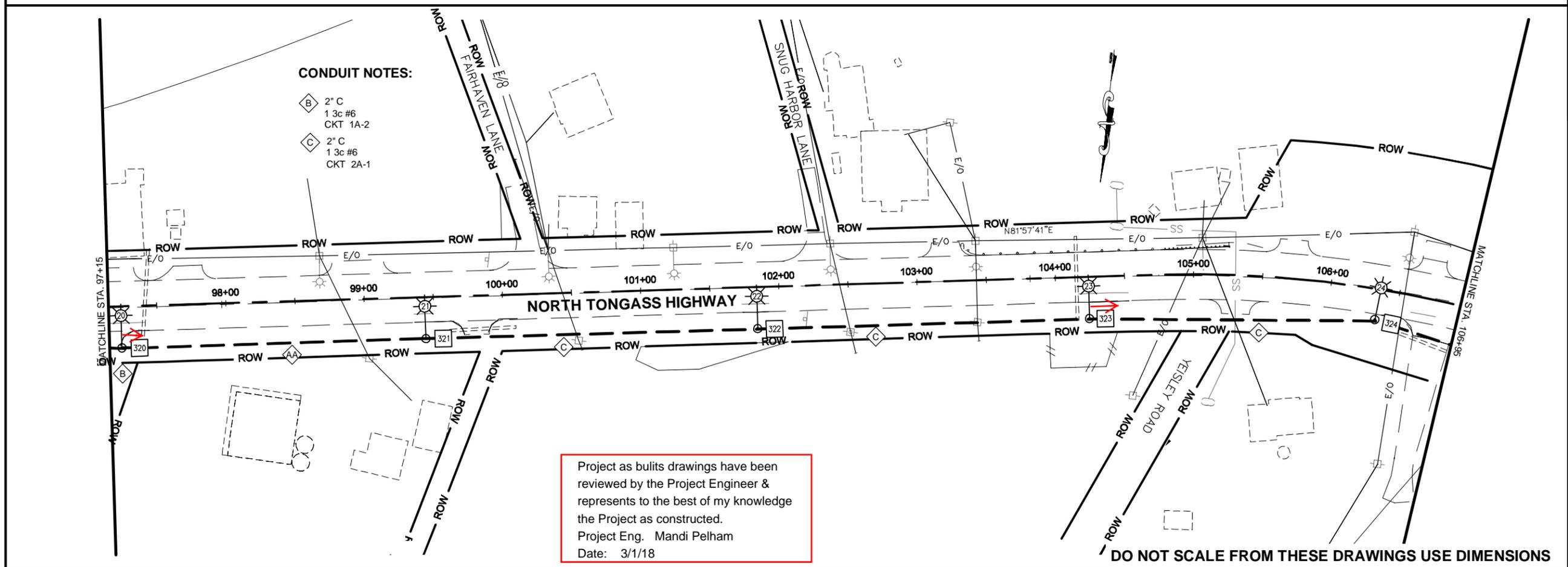
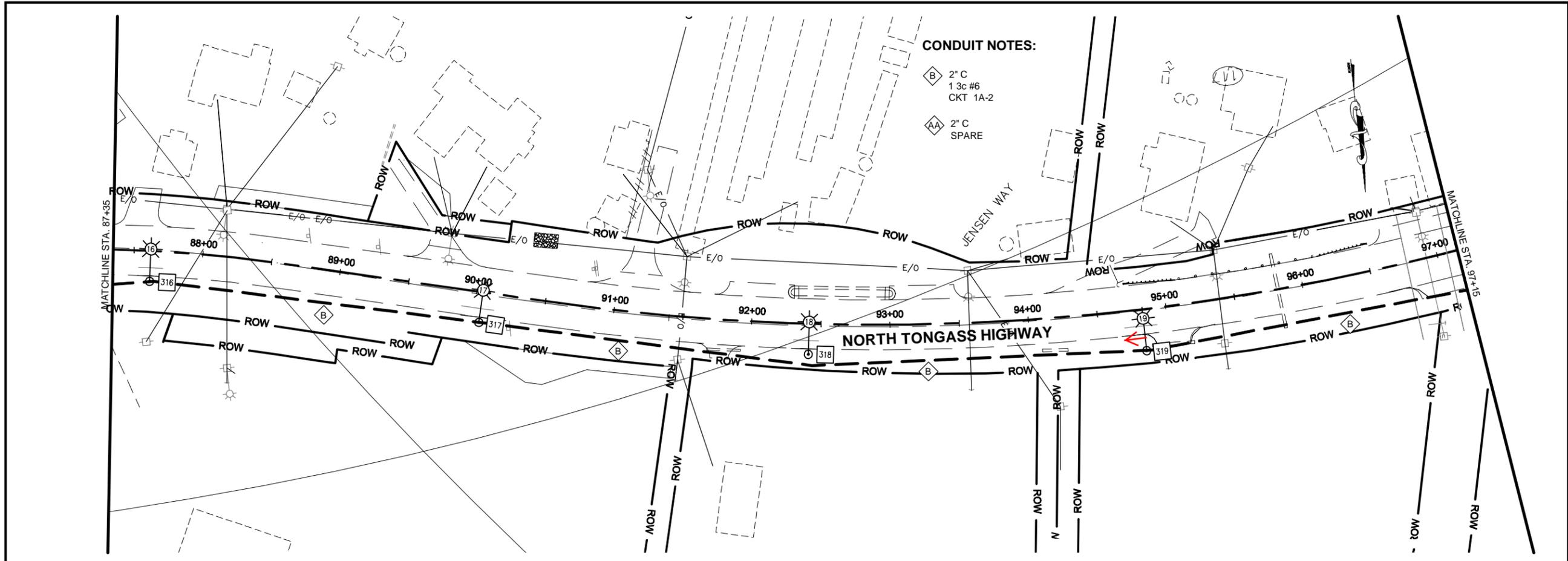
ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z68413000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
H2	53

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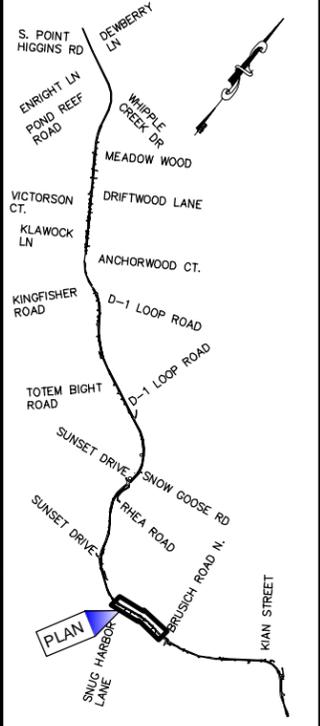


Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

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23-Mar-16
TAB: H3

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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DESIGNED BY: N. STALLER, T. GALAMBUSH
 DRAWN BY: M. HIDALGO

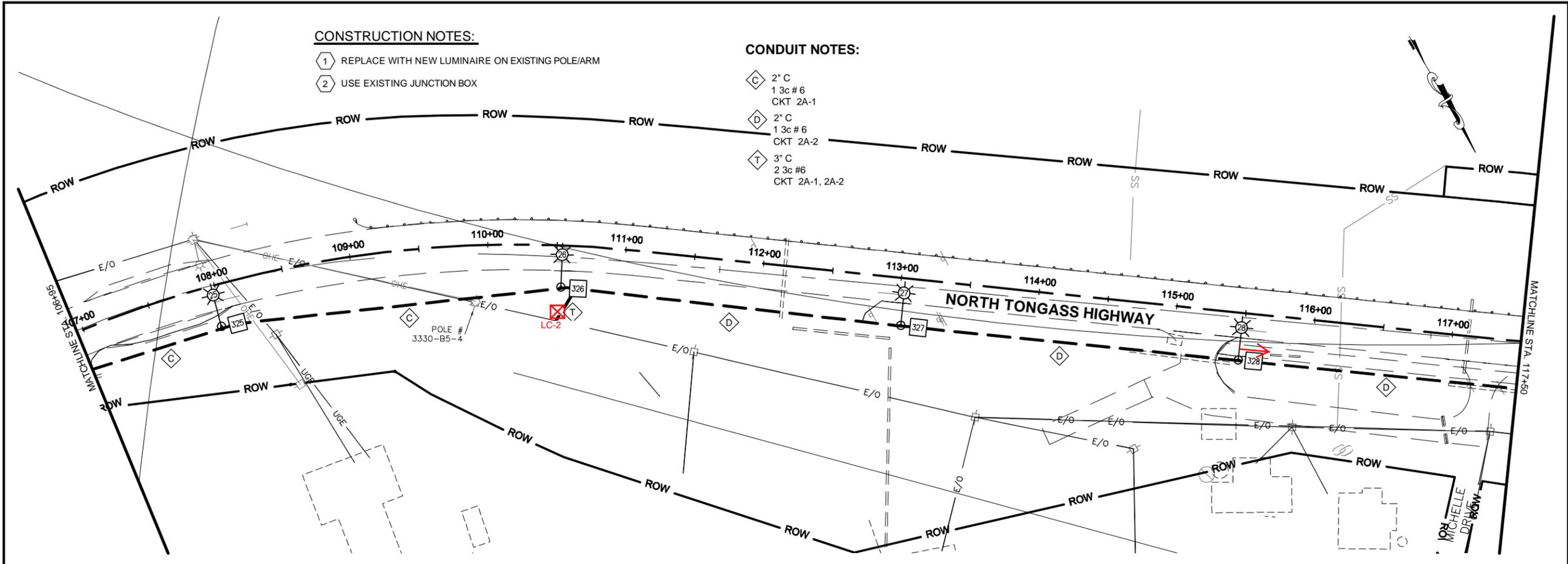
STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
 ILLUMINATION UPGRADE (HSIP)

ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H3	53

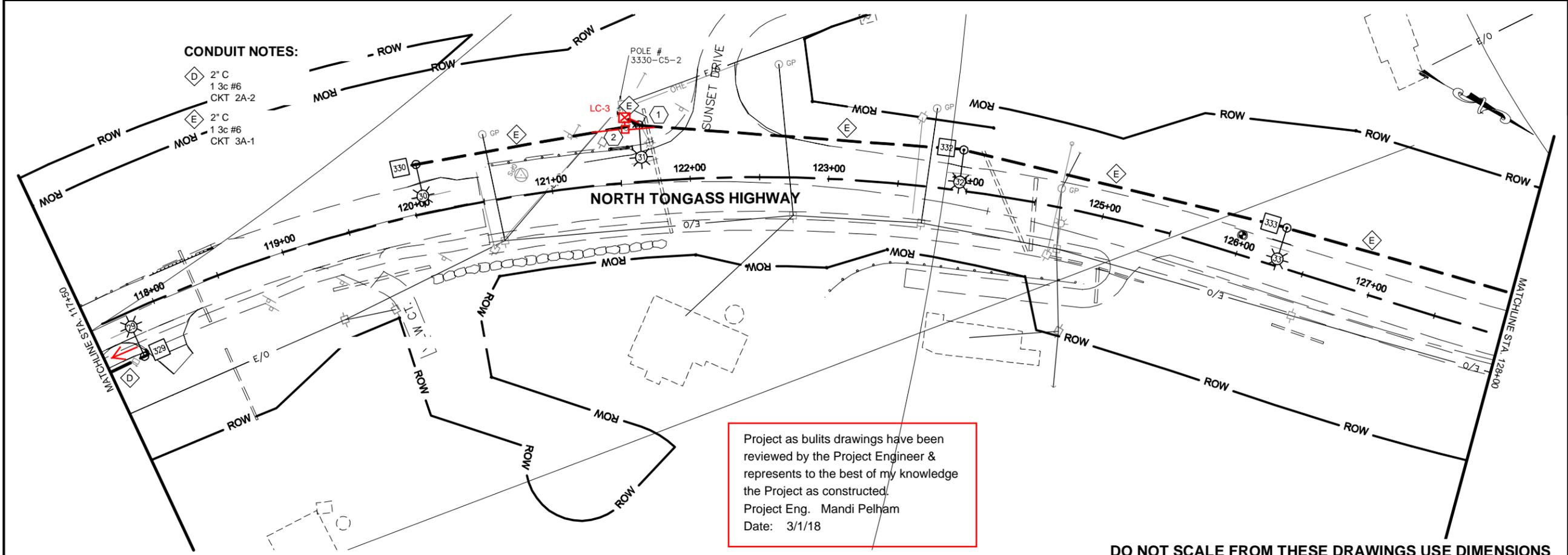


CONSTRUCTION NOTES:

- 1 REPLACE WITH NEW LUMINAIRE ON EXISTING POLE/ARM
- 2 USE EXISTING JUNCTION BOX

CONDUIT NOTES:

- C 2" C
1 3c # 6
CKT 2A-1
- D 2" C
1 3c # 6
CKT 2A-2
- T 3" C
2 3c #6
CKT 2A-1, 2A-2



CONDUIT NOTES:

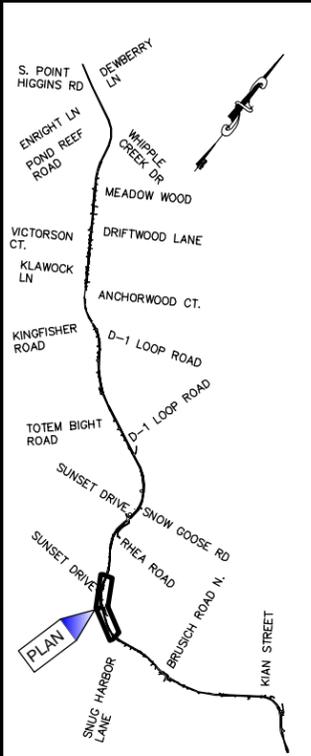
- D 2" C
1 3c #6
CKT 2A-2
- E 2" C
1 3c #6
CKT 3A-1

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

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23-Mar-16
TAB: H4

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH

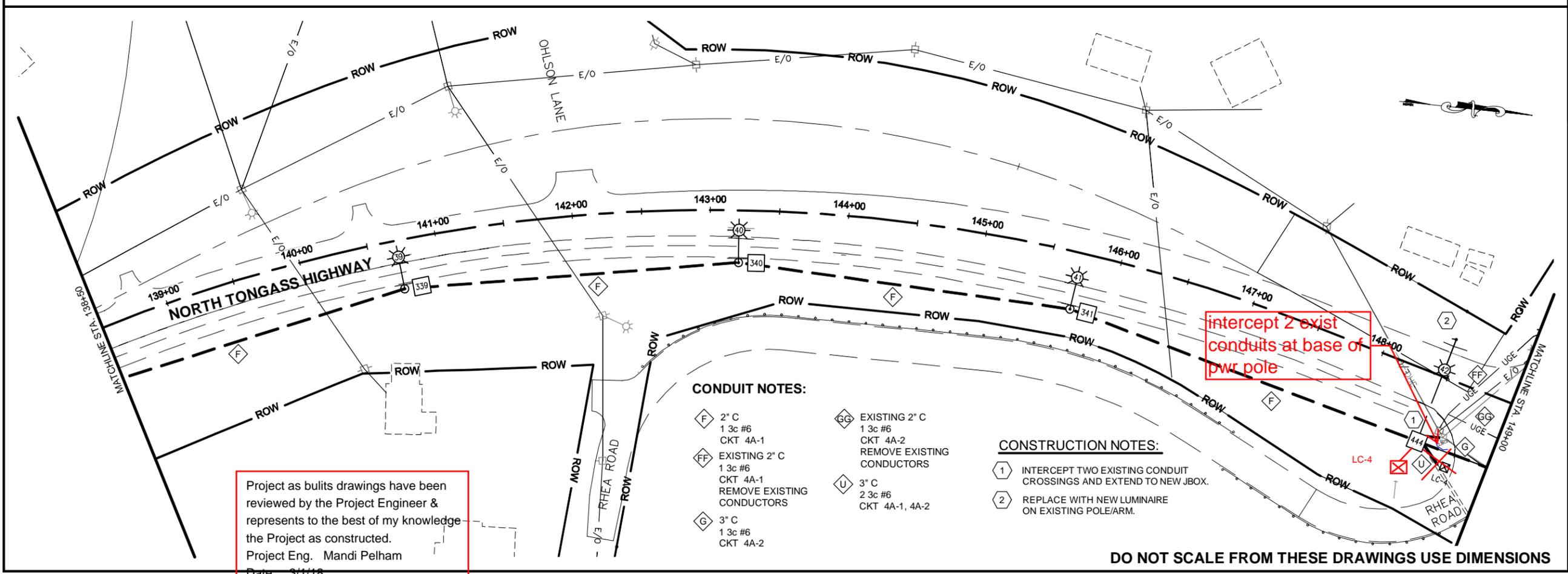
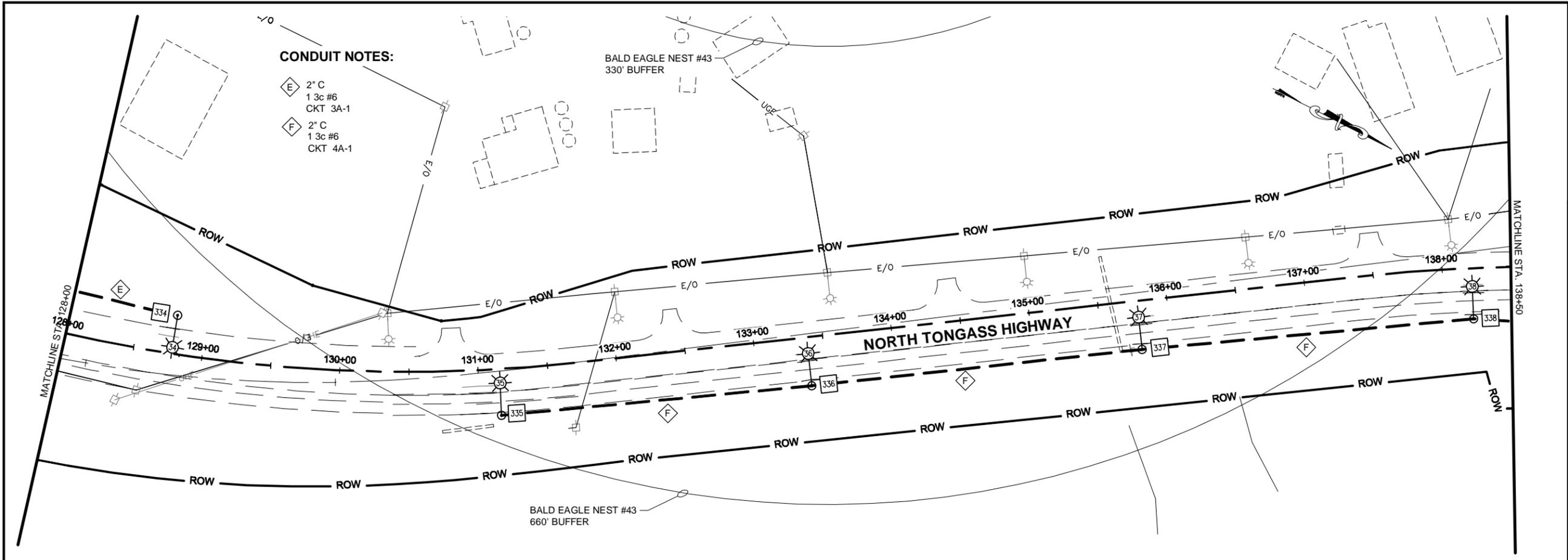
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ILLUMINATION PLANS

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H4	53

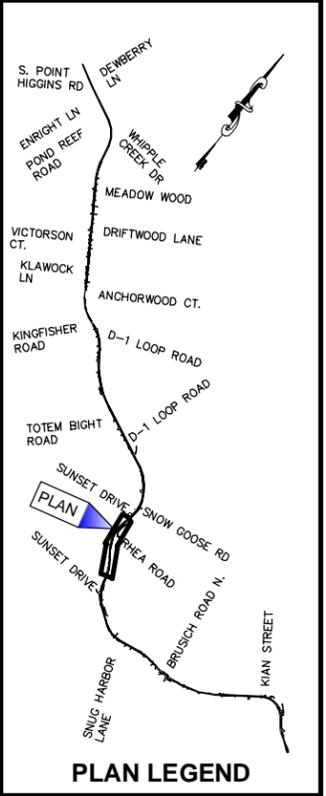


Project as bulit drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/16

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

23-Mar-16
TAB: H5

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, T. GALAMBUSH
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

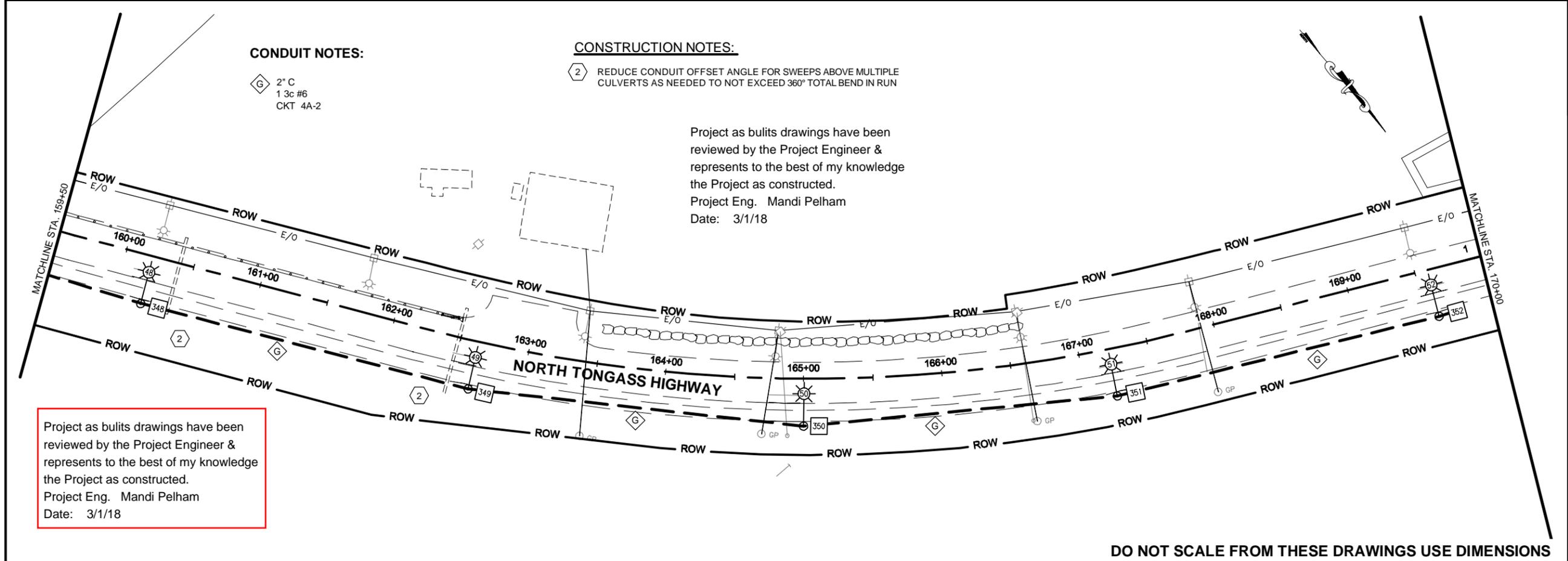
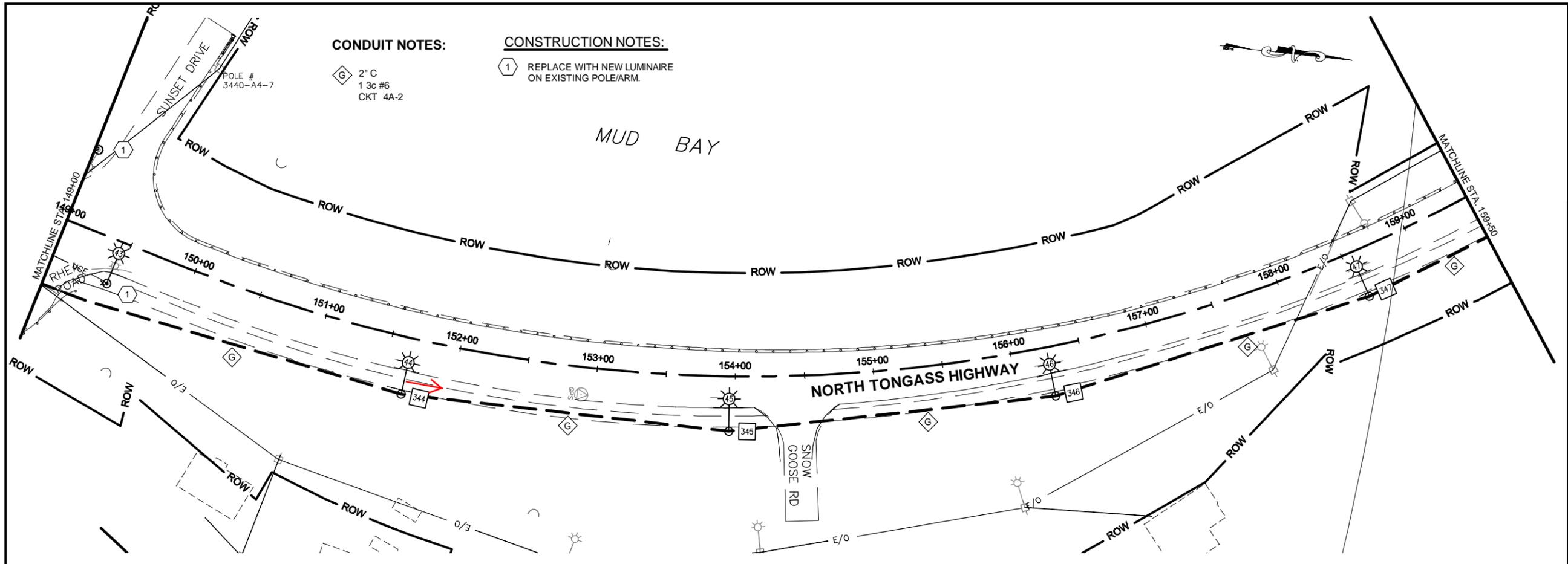
KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H5	53

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CONDUIT NOTES:
 G 2" C
 1 3/4" #6
 CKT 4A-2

CONSTRUCTION NOTES:
 1 REPLACE WITH NEW LUMINAIRE ON EXISTING POLE/ARM.

CONDUIT NOTES:
 G 2" C
 1 3/4" #6
 CKT 4A-2

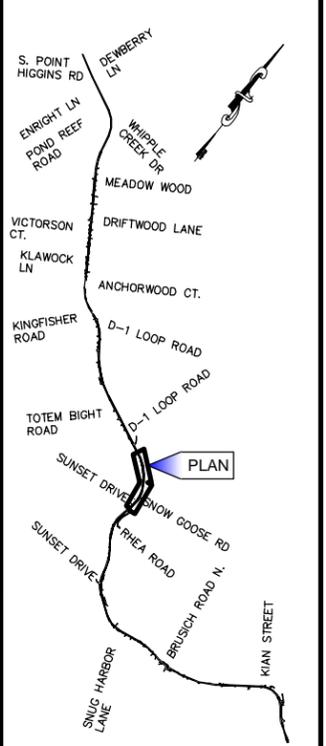
CONSTRUCTION NOTES:
 2 REDUCE CONDUIT OFFSET ANGLE FOR SWEEPS ABOVE MULTIPLE CULVERTS AS NEEDED TO NOT EXCEED 360° TOTAL BEND IN RUN

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

23-Mar-16
TAB: H6

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, T. GALAMBUSH
 DRAWN BY: M. HIDALGO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION

KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)

ILLUMINATION PLANS

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H6	53

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

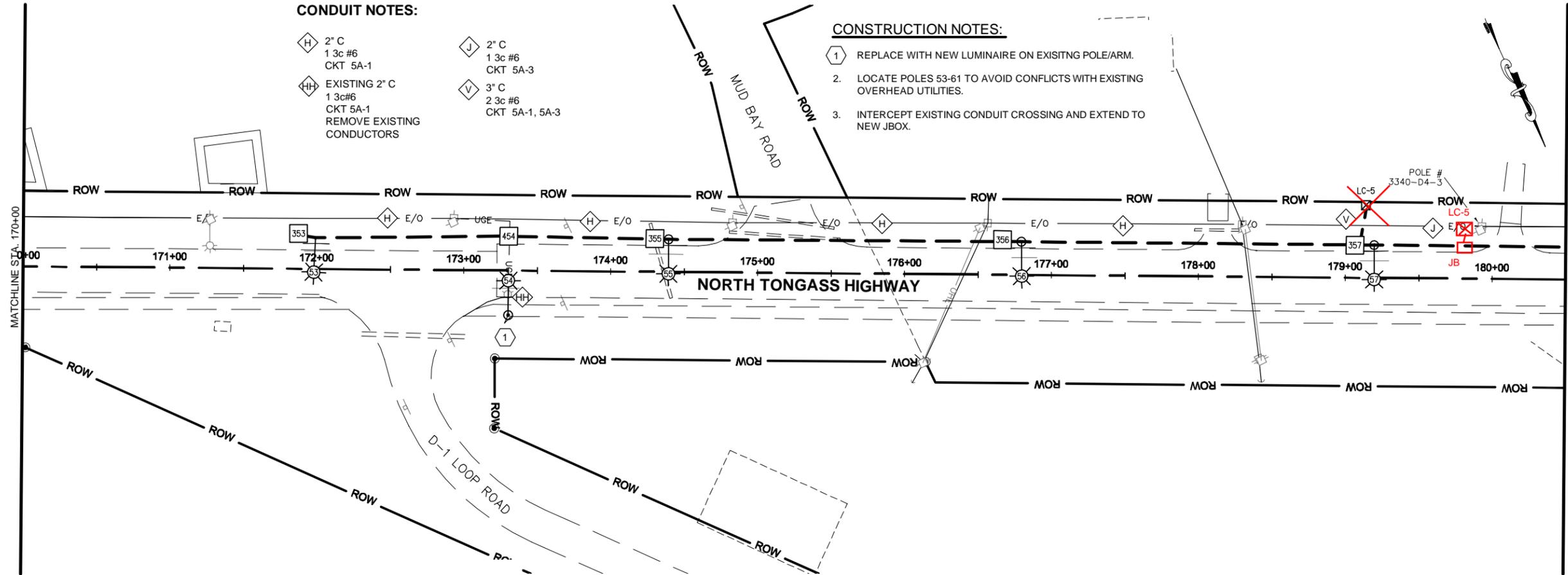
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CONDUIT NOTES:

- ◇ H 2" C
1 3c #6
CKT 5A-1
- ◇ HH EXISTING 2" C
1 3c #6
CKT 5A-1
REMOVE EXISTING
CONDUCTORS
- ◇ J 2" C
1 3c #6
CKT 5A-3
- ◇ V 3" C
2 3c #6
CKT 5A-1, 5A-3

CONSTRUCTION NOTES:

1. REPLACE WITH NEW LUMINAIRE ON EXISTING POLE/ARM.
2. LOCATE POLES 53-61 TO AVOID CONFLICTS WITH EXISTING OVERHEAD UTILITIES.
3. INTERCEPT EXISTING CONDUIT CROSSING AND EXTEND TO NEW JBOX.

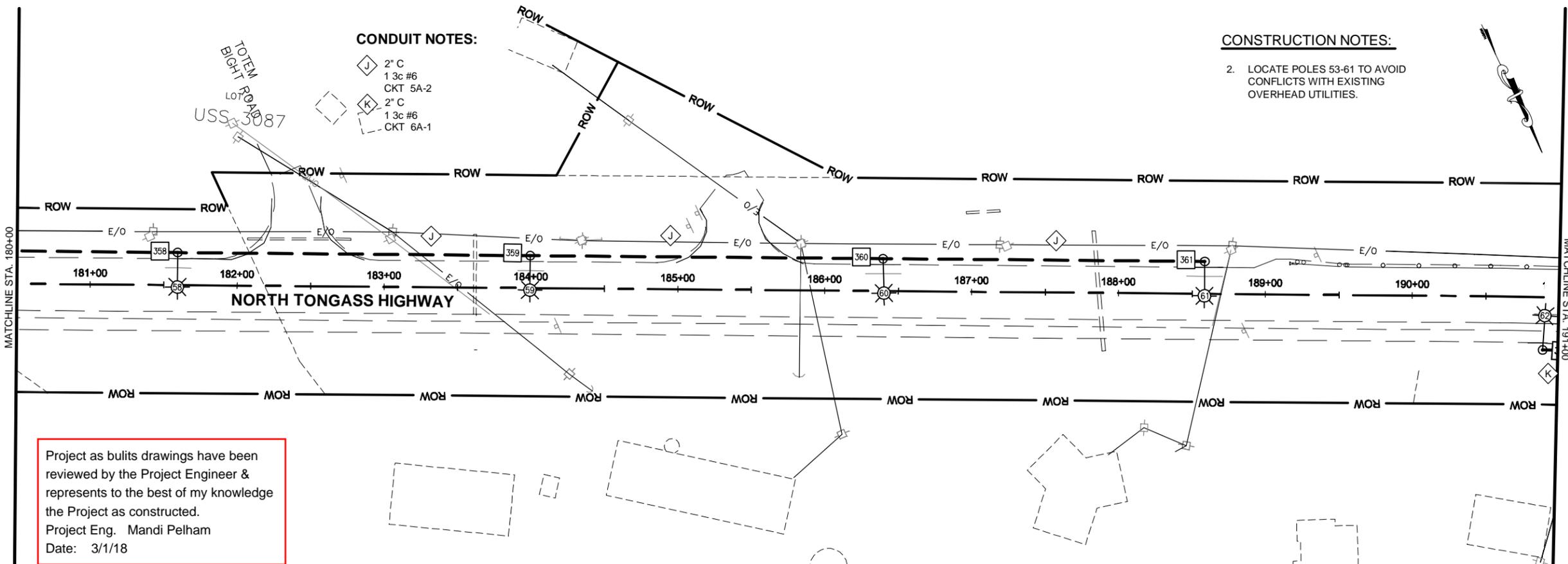


CONDUIT NOTES:

- ◇ J 2" C
1 3c #6
CKT 5A-2
- ◇ K 2" C
1 3c #6
CKT 6A-1

CONSTRUCTION NOTES:

2. LOCATE POLES 53-61 TO AVOID CONFLICTS WITH EXISTING OVERHEAD UTILITIES.



Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

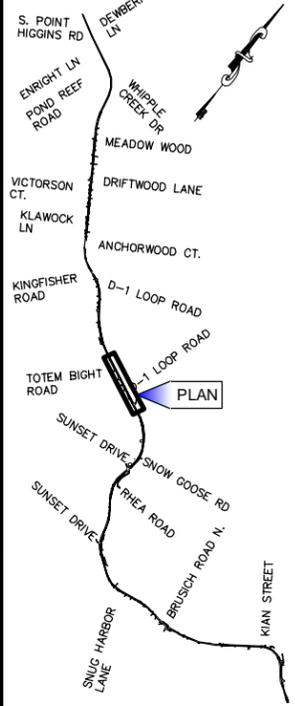
23-Mar-16
TAB: H7

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

**ILLUMINATION
PLANS**

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H7	53

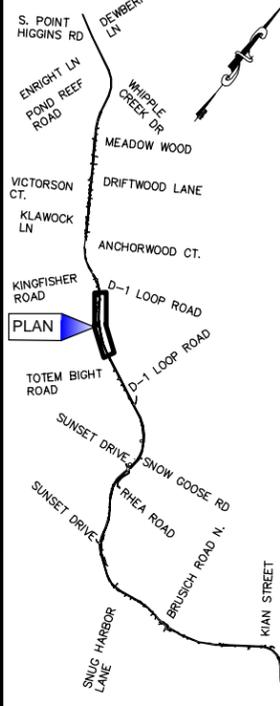
23-Mar-16
TAB: H8

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

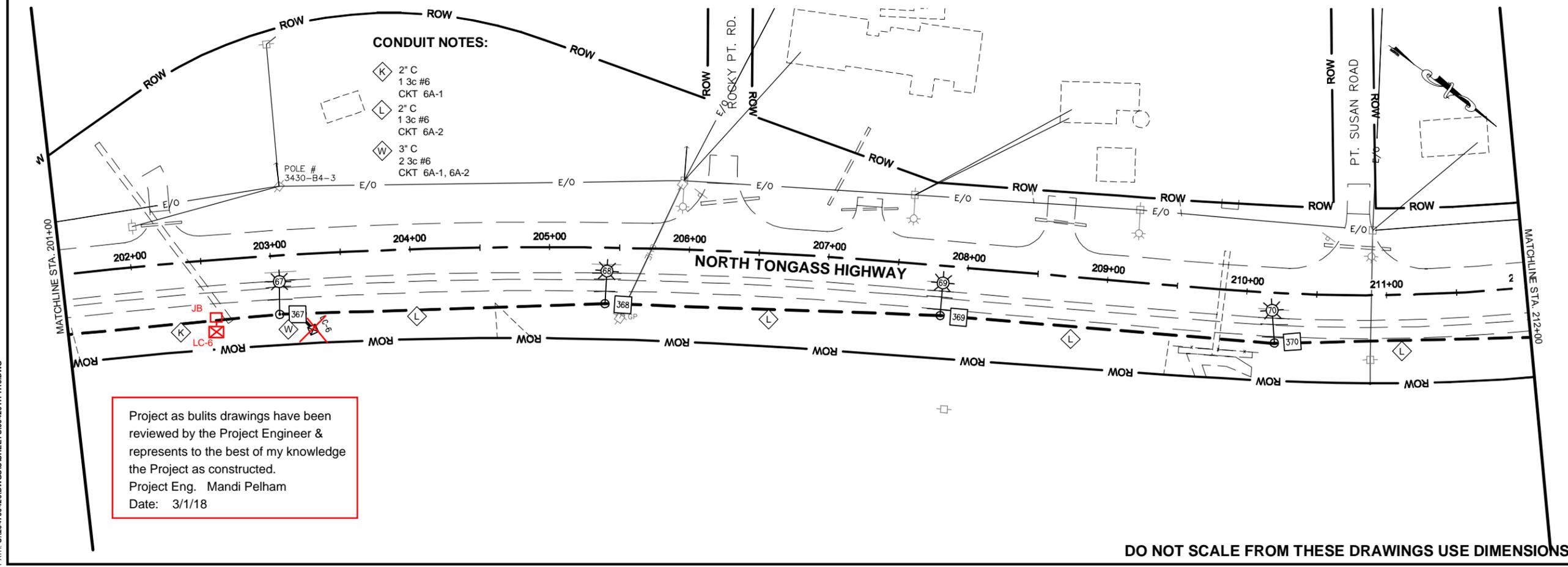
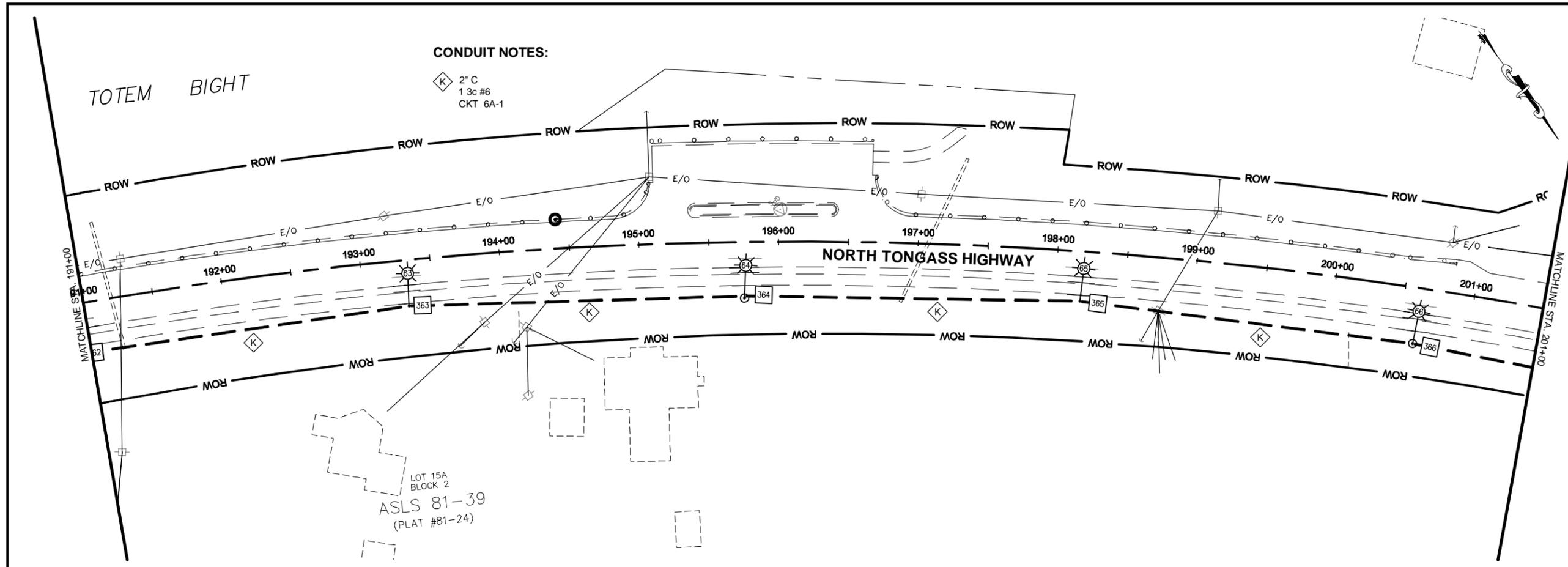
**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016

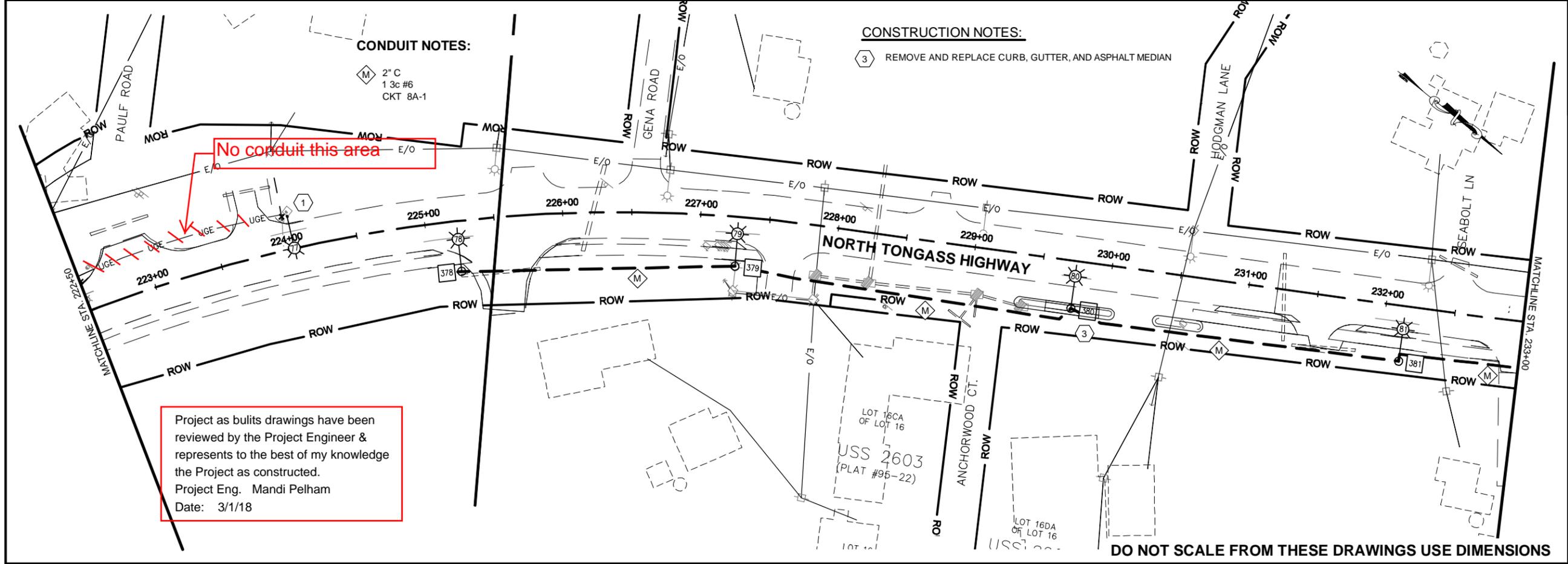
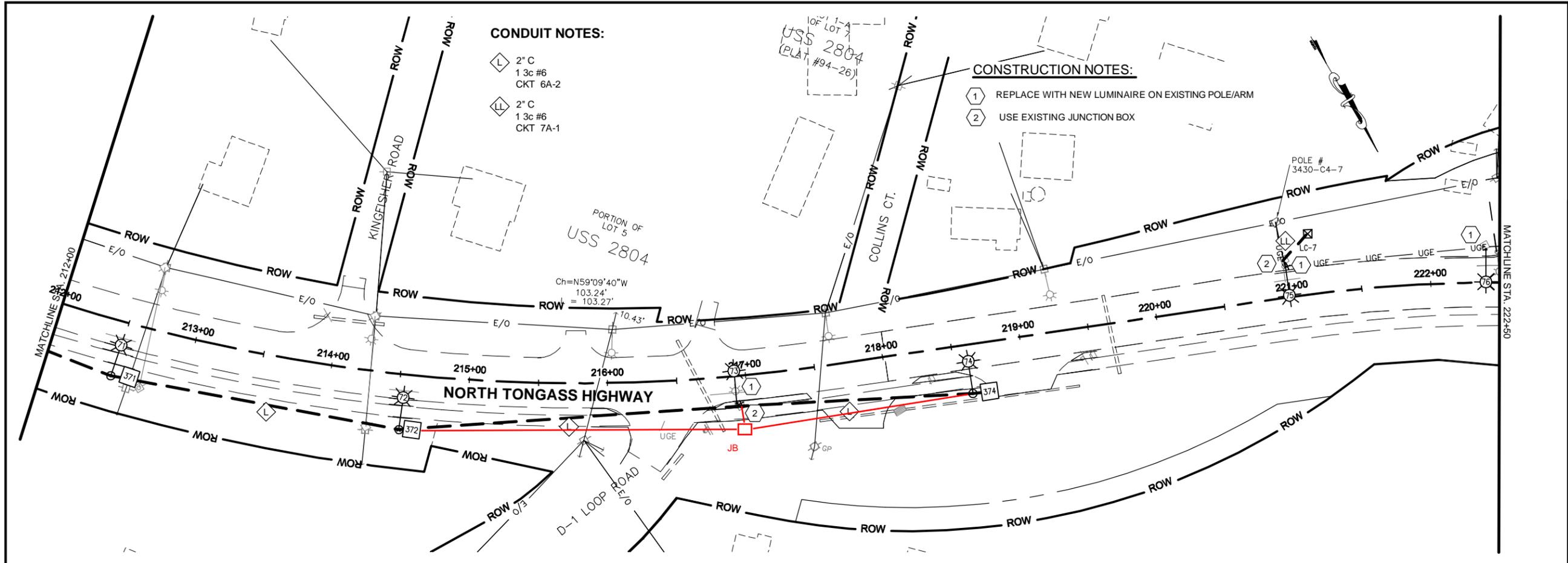
SHEET NUMBER	TOTAL SHEETS
H8	53



Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

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PATH: U:\2017\0426\DWG\CS\CSHEET\9\00426 H1-H13.DWG



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 Project Eng. Mandi Pelham
 Date: 3/1/18

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23-Mar-16
 TAB: H9

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, T. GALAMBUSH
 DRAWN BY: M. HIDALGO

STATE OF ALASKA
 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION

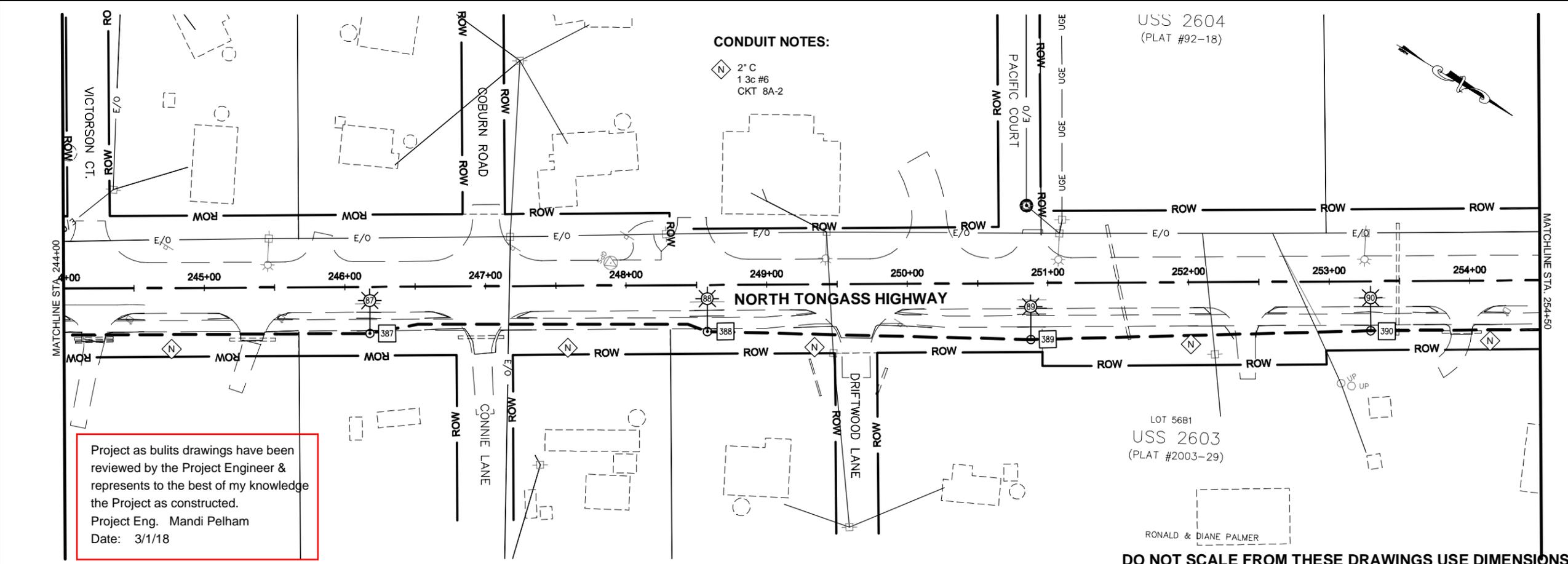
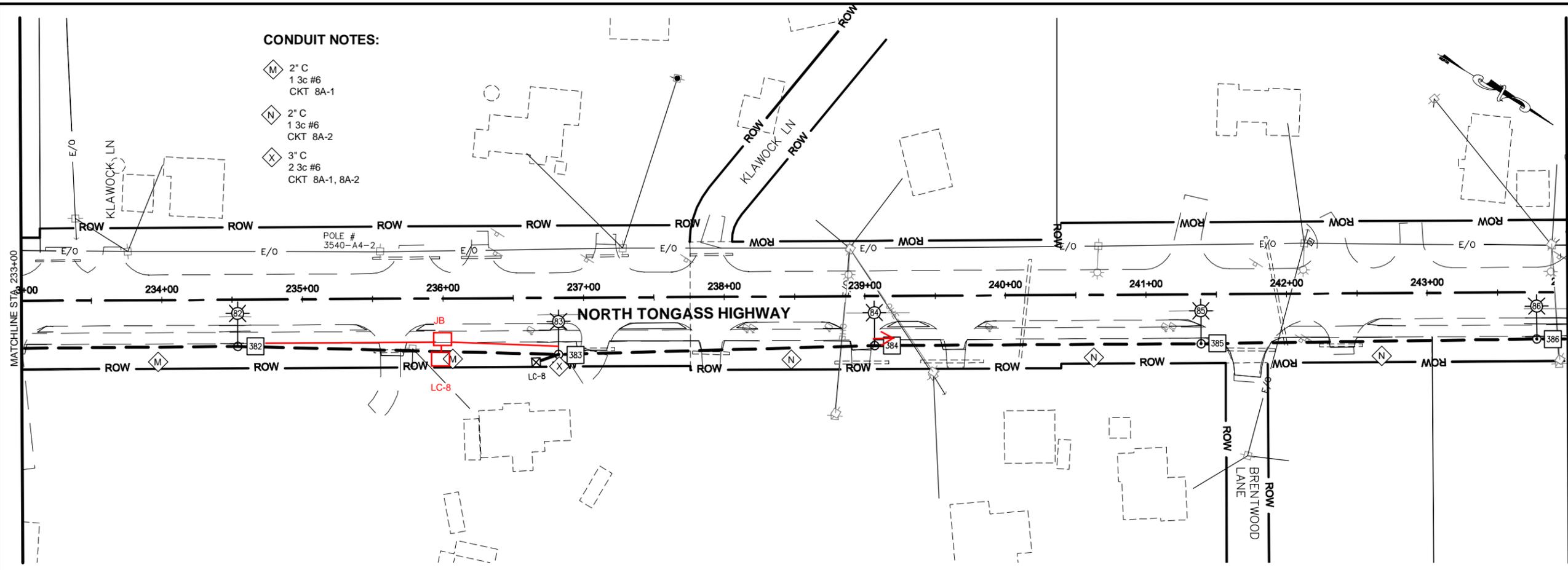
KTN - NORTH TONGASS HWY:
 ILLUMINATION UPGRADE (HSIP)

ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016

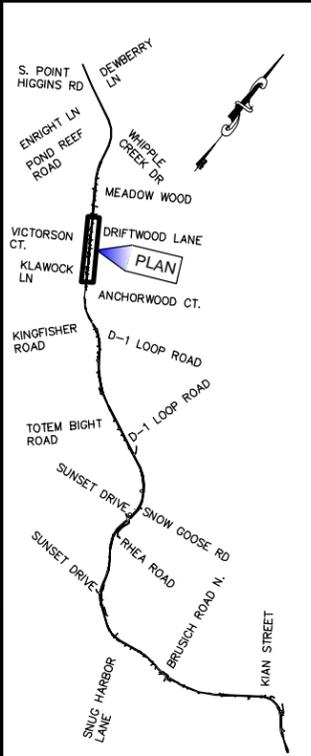
SHEET NUMBER	TOTAL SHEETS
H9	53



Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

23-Mar-16
TAB: H10

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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 DRAWN BY: M. HIDALGO

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 DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
 SOUTHEAST REGION

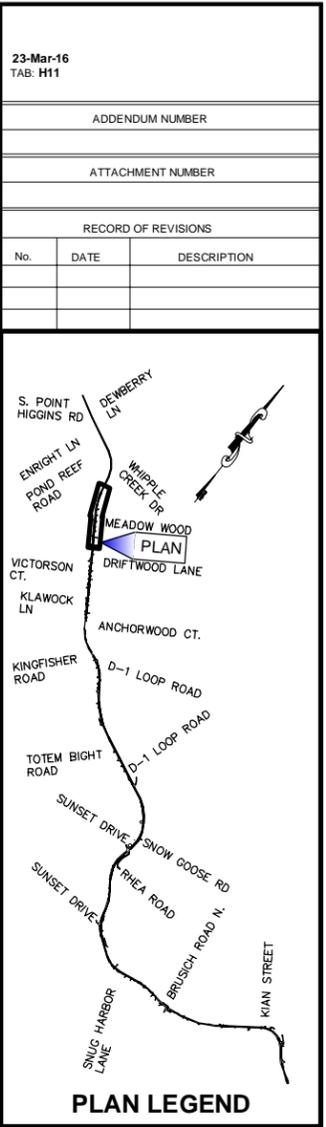
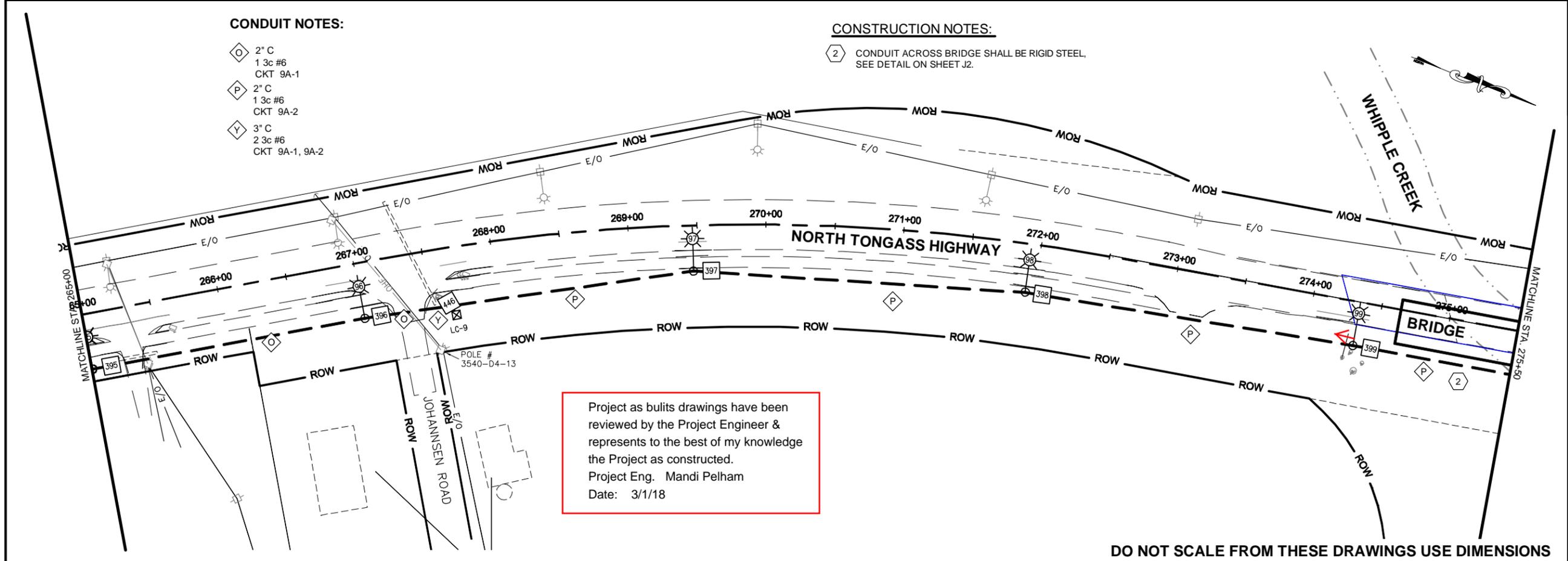
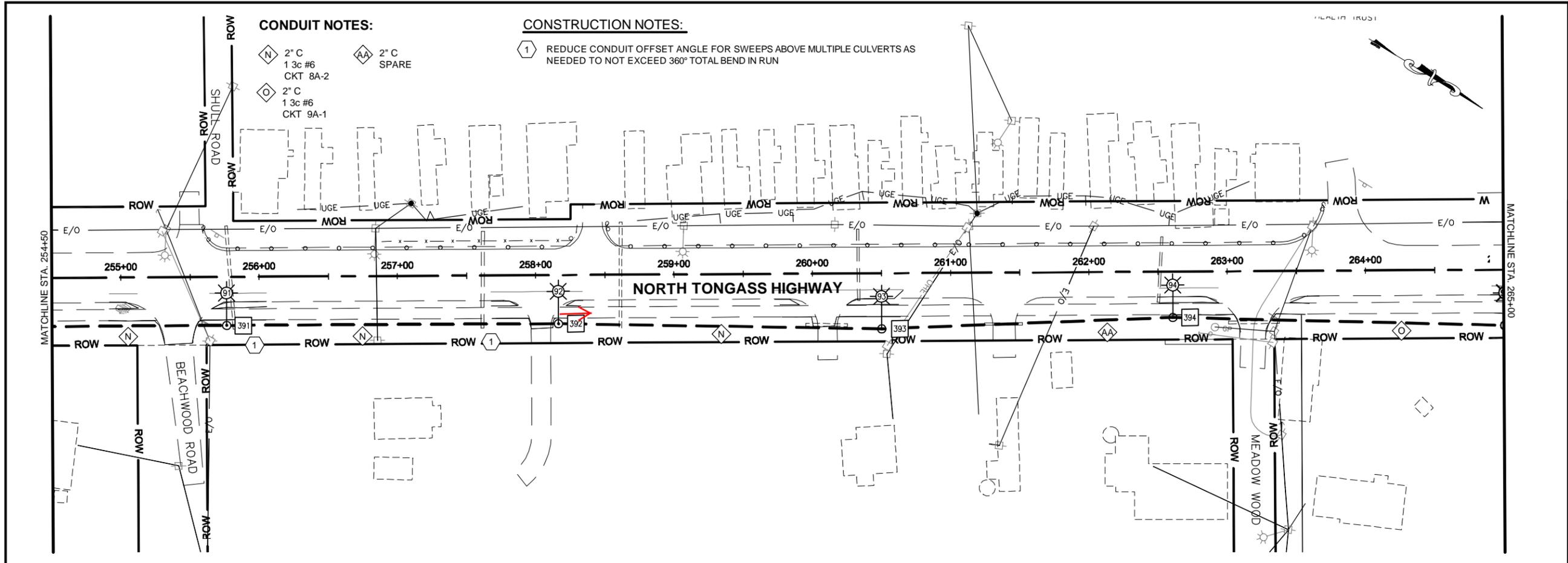
**KTN - NORTH TONGASS HWY:
 ILLUMINATION UPGRADE (HSIP)**

ILLUMINATION PLANS

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H10	53

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**KTN - NORTH TONGASS HWY:
 ILLUMINATION UPGRADE (HSIP)**

ILLUMINATION PLANS

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H11	53

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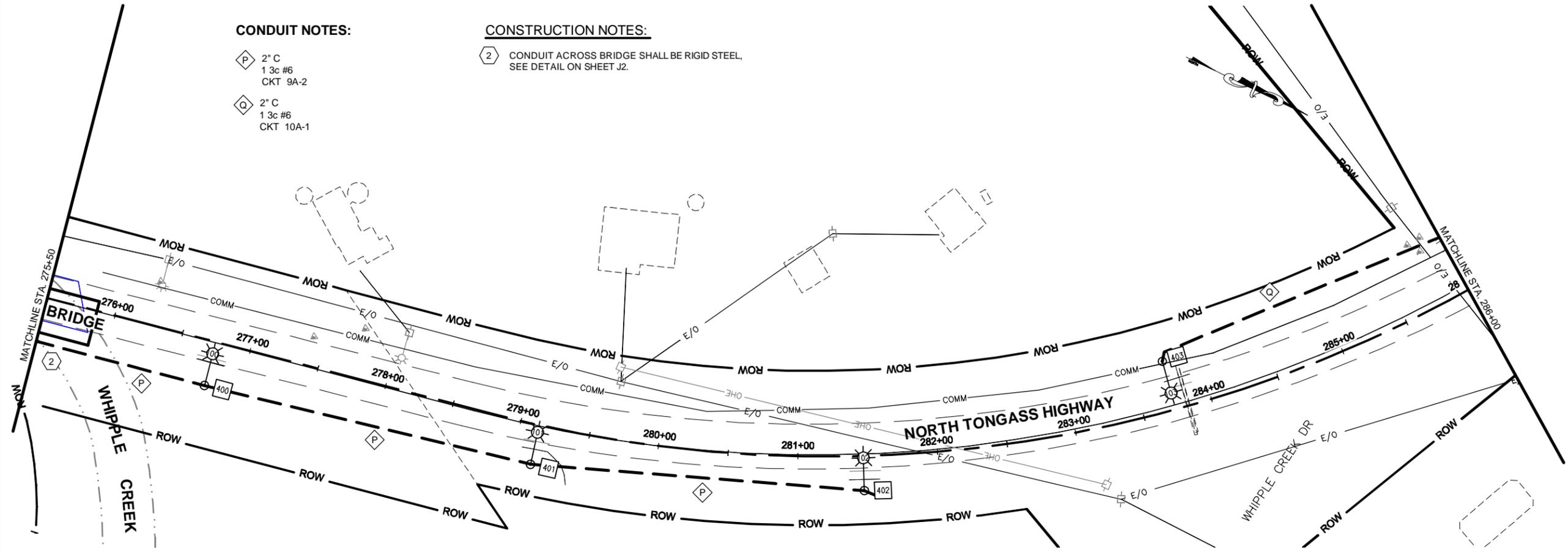
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CONDUIT NOTES:

- ◊ 2" C
1 3c #6
CKT 9A-2
- ◊ 2" C
1 3c #6
CKT 10A-1

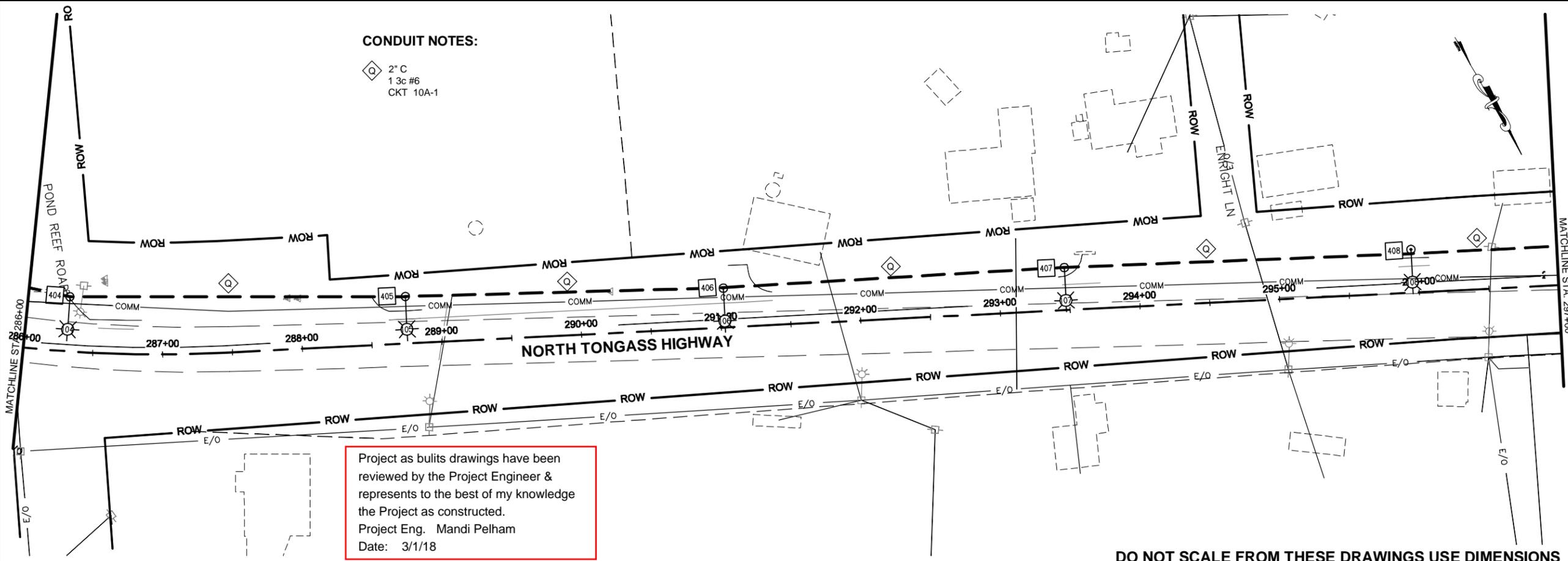
CONSTRUCTION NOTES:

- ② CONDUIT ACROSS BRIDGE SHALL BE RIGID STEEL,
SEE DETAIL ON SHEET J2.



CONDUIT NOTES:

- ◊ 2" C
1 3c #6
CKT 10A-1

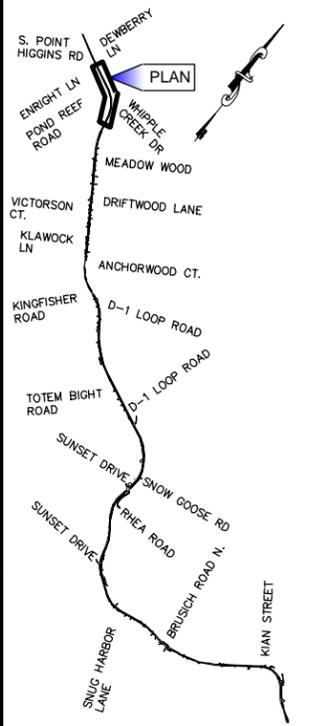


Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

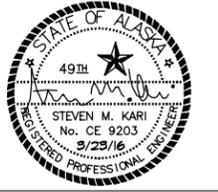
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

23-Mar-16
TAB: H12

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



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DRAWN BY: M. HIDALGO

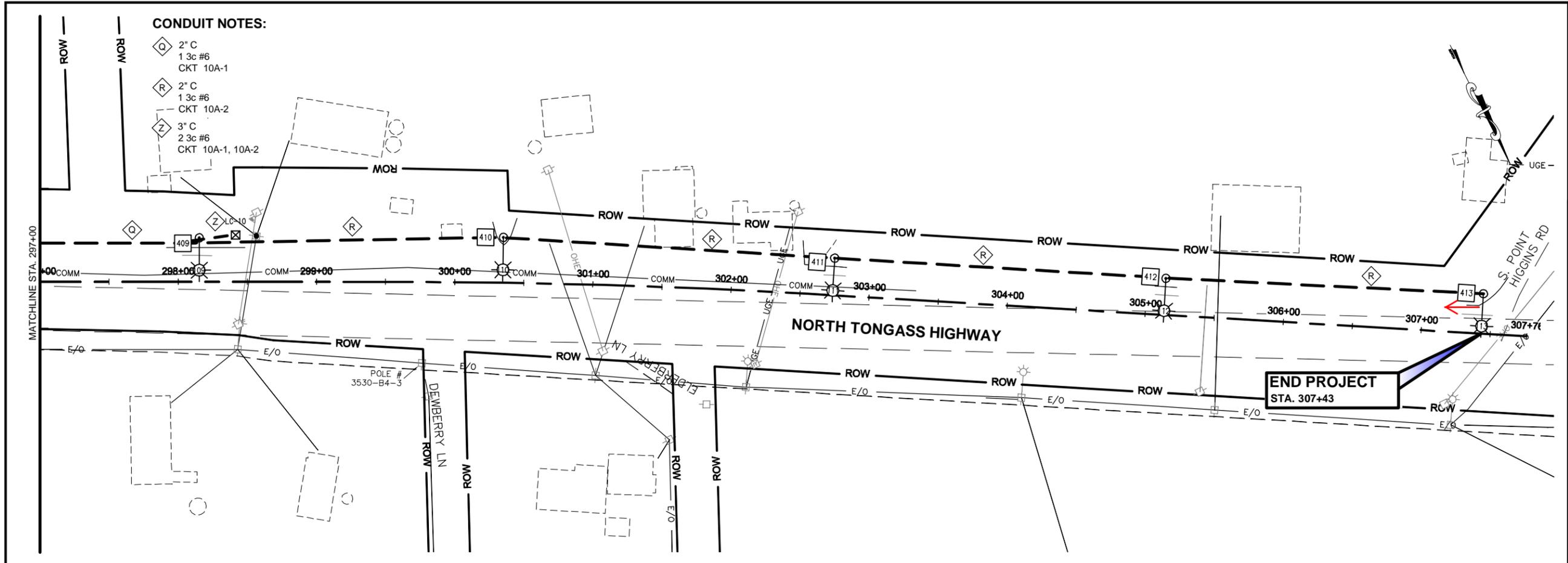
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ILLUMINATION PLANS

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H12	53

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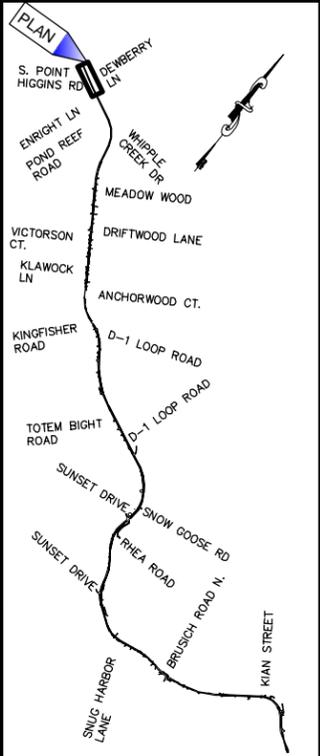


CONDUIT NOTES:

- Q 2" C
1 3c #6
CKT 10A-1
- R 2" C
1 3c #6
CKT 10A-2
- Z 3" C
2 3c #6
CKT 10A-1, 10A-2

23-Mar-16
TAB: H13

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER, T. GALAMBUSH

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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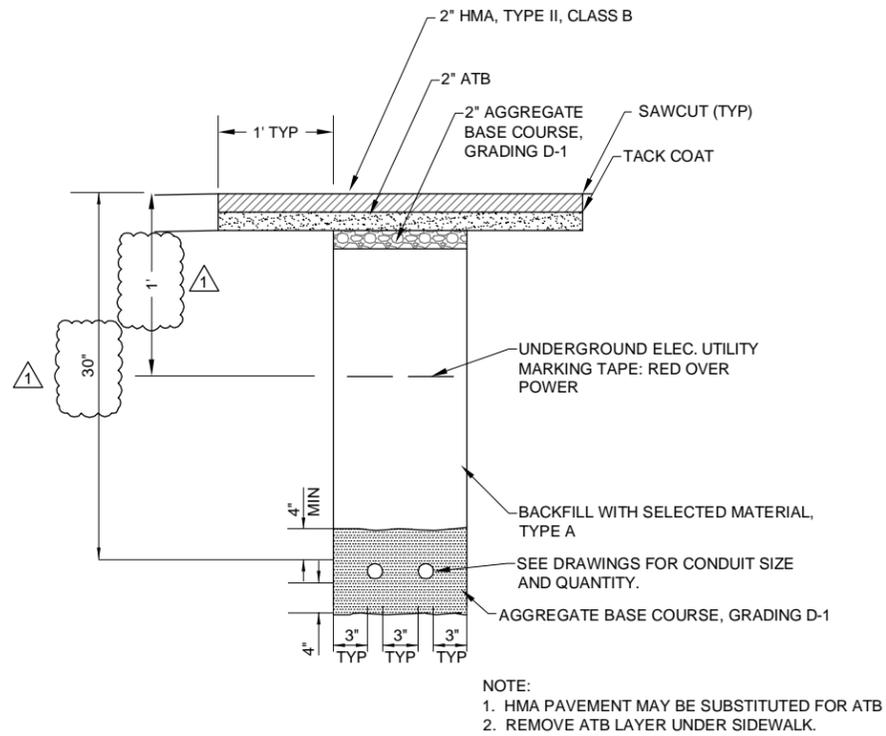
KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

ILLUMINATION PLANS

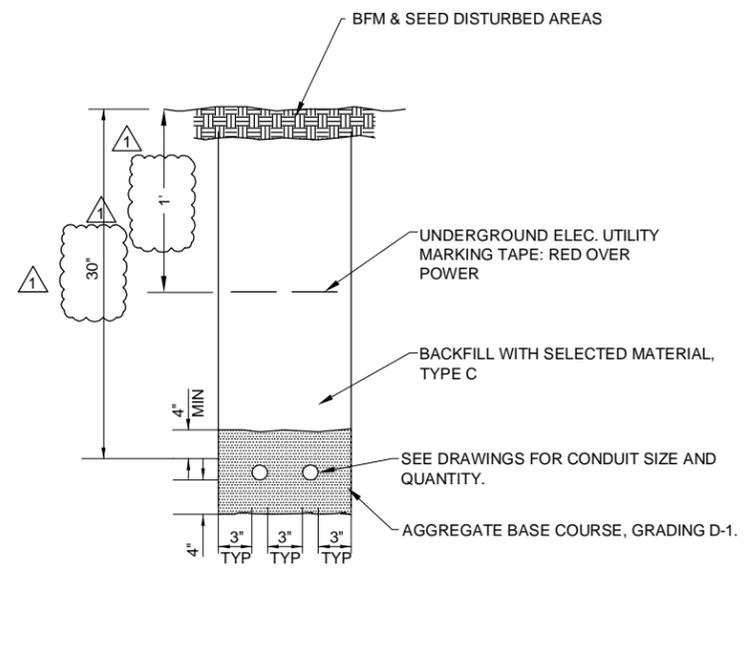
PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
H13	53

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

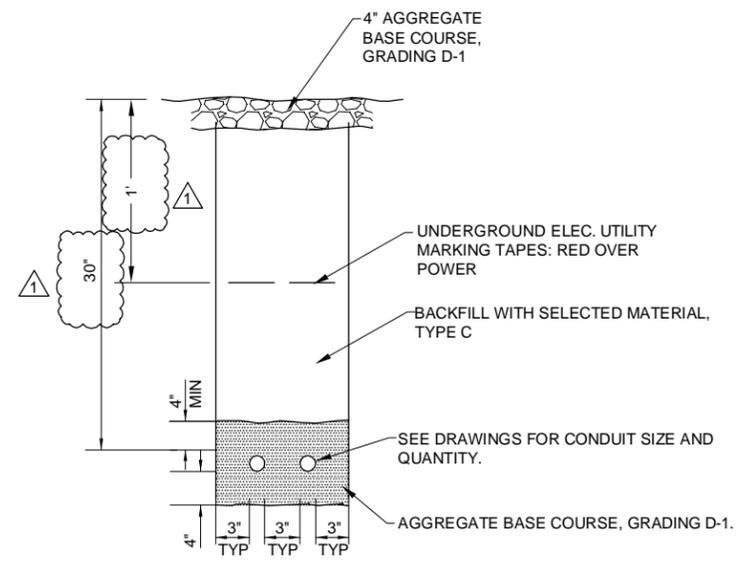
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



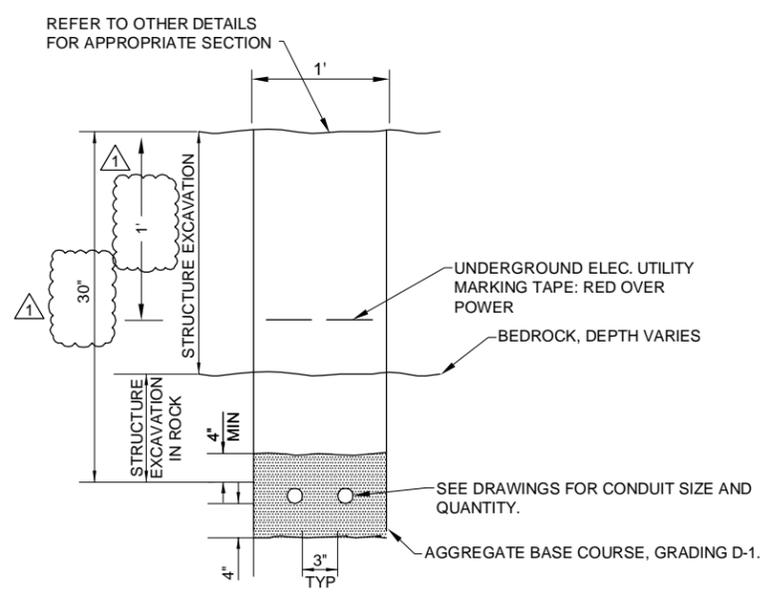
A TRENCH DETAIL - PAVED AREAS
J1 NO SCALE



B TRENCH DETAIL - NON-PAVED AREAS
J1 NO SCALE



C TRENCH DETAIL - GRAVEL SHOULDER
J1 NO SCALE



D TRENCH DETAIL - BEDROCK
J1 (AS NECESSARY) NO SCALE

NOTE:
1. HMA PAVEMENT MAY BE SUBSTITUTED FOR ATB
2. REMOVE ATB LAYER UNDER SIDEWALK.

- NOTES:
1. COMPACTION IN TRENCHES SHALL BE 95% UNDER PAVEMENT.
 2. TRENCHES SHALL NOT BE LEFT OPEN OVERNIGHT.

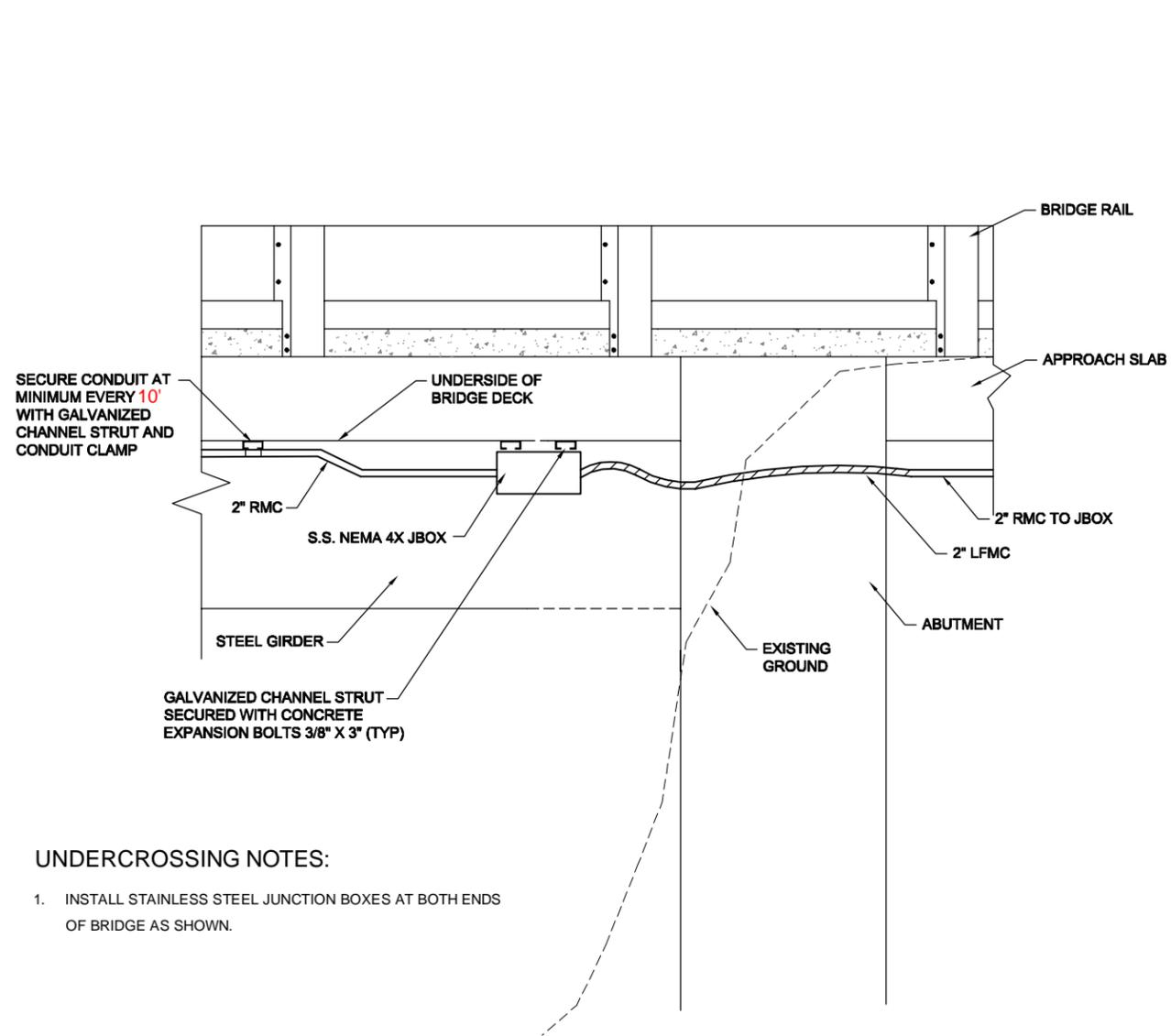
Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

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DESIGNED BY: N. STALLER					
DRAWN BY: M. HIDALGO					
<p>THURSDAY, SEPTEMBER 22, 2016 11:42:39 AM TAB: J1</p>					
REVISIONS		PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION			
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TRENCH DETAILS

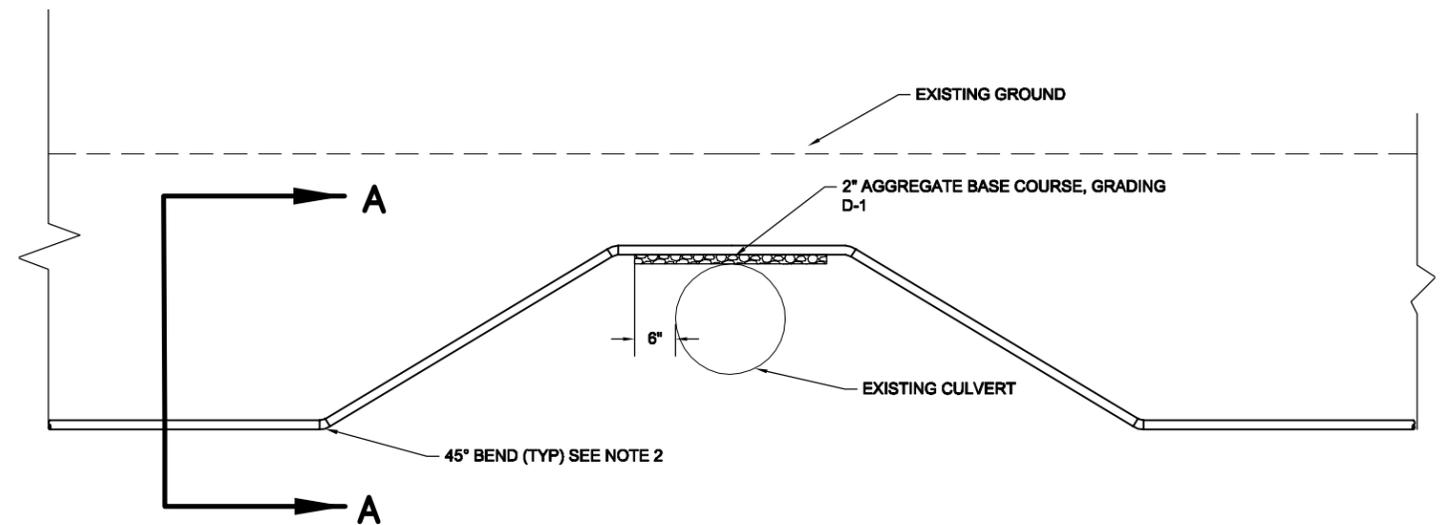
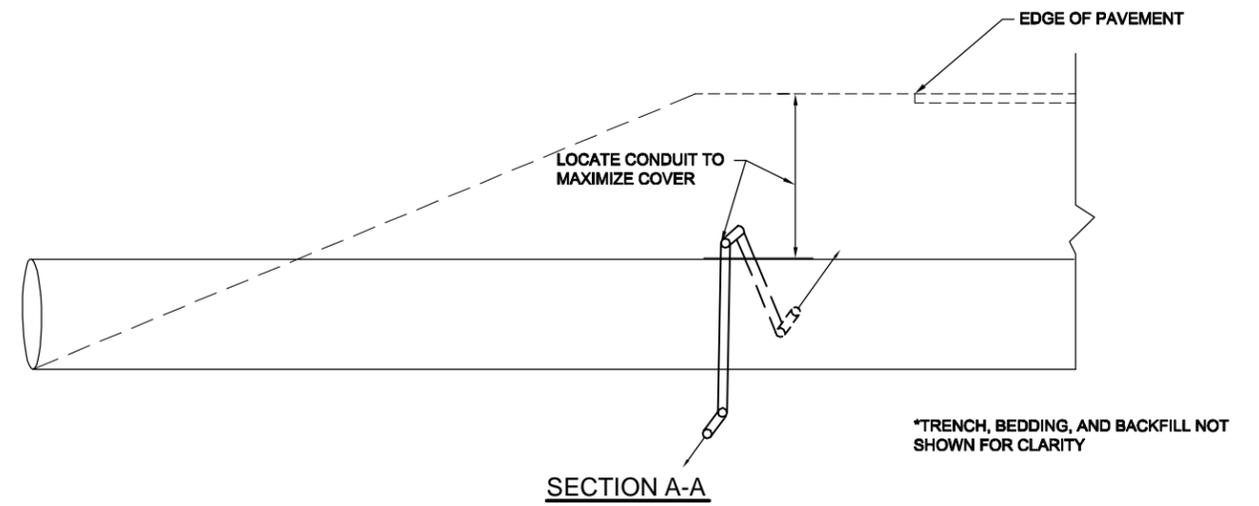
PATH: U:\2017\04\26\DWGS\C\SHSHEETS\0426-J1-J2.DWG



UNDERCROSSING NOTES:

1. INSTALL STAINLESS STEEL JUNCTION BOXES AT BOTH ENDS OF BRIDGE AS SHOWN.

CONDUIT UNDERCROSSING WHIPPLE CREEK BRIDGE
NO SCALE

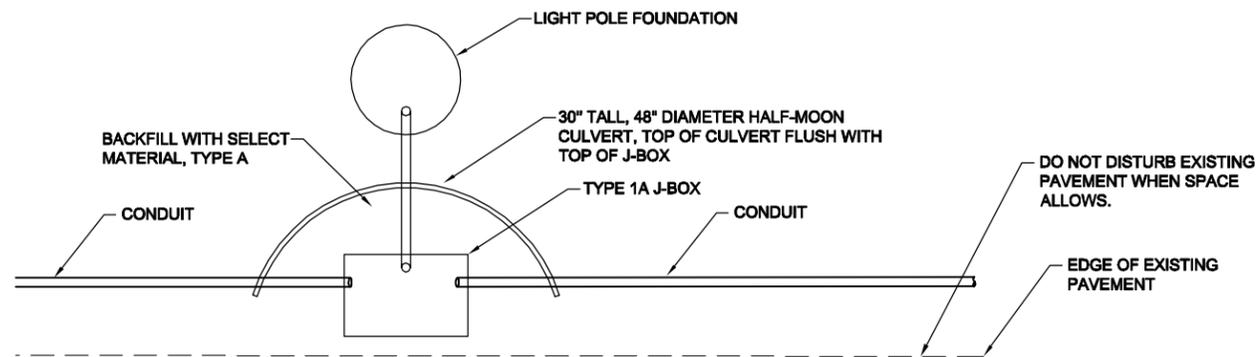


CONDUIT OVER CULVERT INSTALLATION DETAIL
NO SCALE

CONDUIT OVER CULVERT NOTES:

1. CONSTRUCT PER TYPICAL TRENCH DETAILS EXCEPT AS MODIFIED IN THIS DETAIL.
2. WHERE MULTIPLE CULVERT CROSSING OCCUR BETWEEN JUNCTION BOXES, VARY BENDS TO NOT EXCEED 360° IN RUN.

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18



J-BOX/CONDUIT INSTALLATION DETAIL
NO SCALE

J-BOX INSTALLATION NOTES:

1. INSTALL HALF-MOON CULVERT WHERE JUNCTION BOX MUST BE LOCATED ON SLOPE.

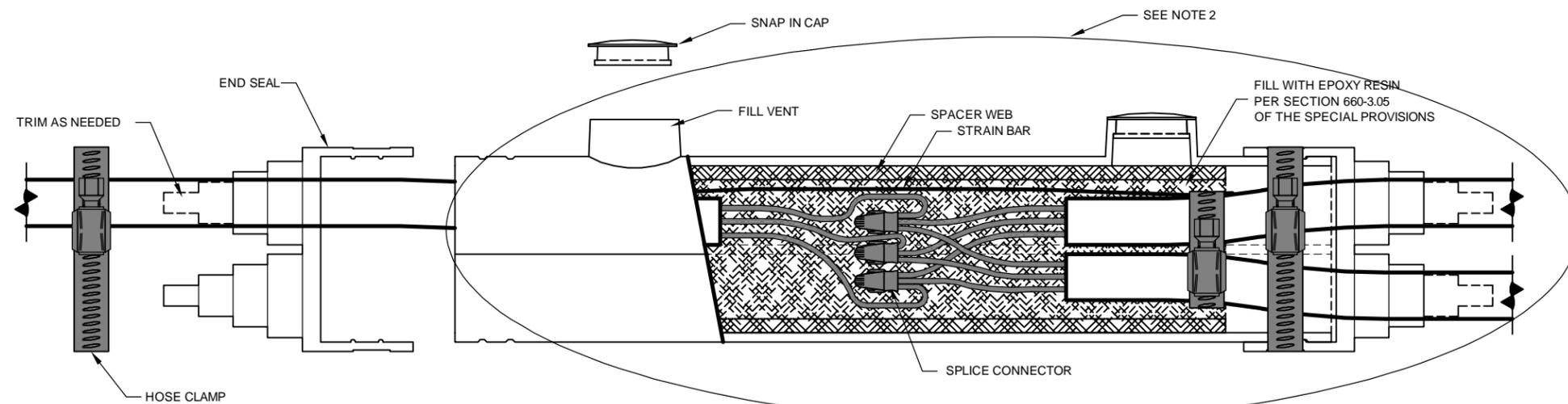
DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)			
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO		CONDUIT DETAILS			
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REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 0920028/Z684130000	YEAR 2016	SHEET NO. J2	TOTAL SHEETS 53

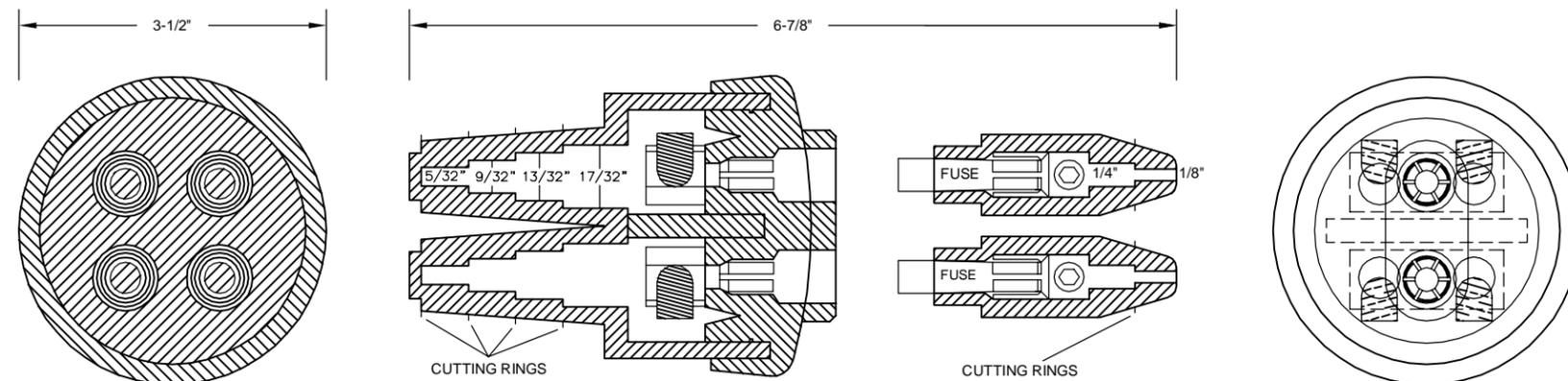
NOTES:

POWER CABLE SPLICE

1. SECURE CABLE/CONNECTOR BUNDLE WITH HOSE CLAMPS AS SHOWN.
2. ALL SPLICES MUST BE APPROVED BY THE ENGINEER



POWER CABLE SPLICE

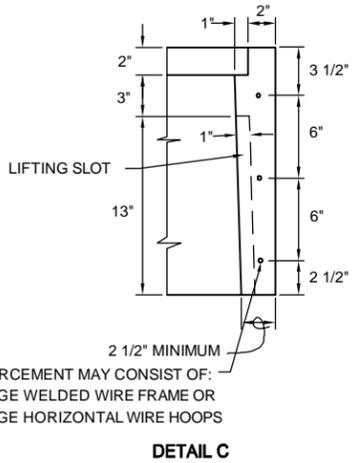
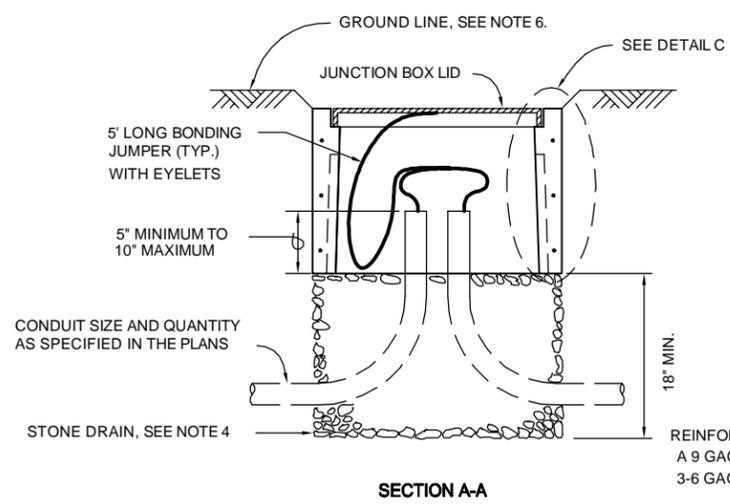
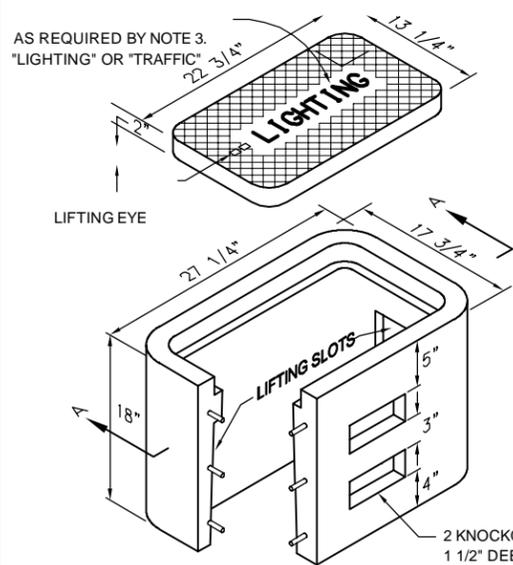


DOUBLE FUSED CONNECTOR

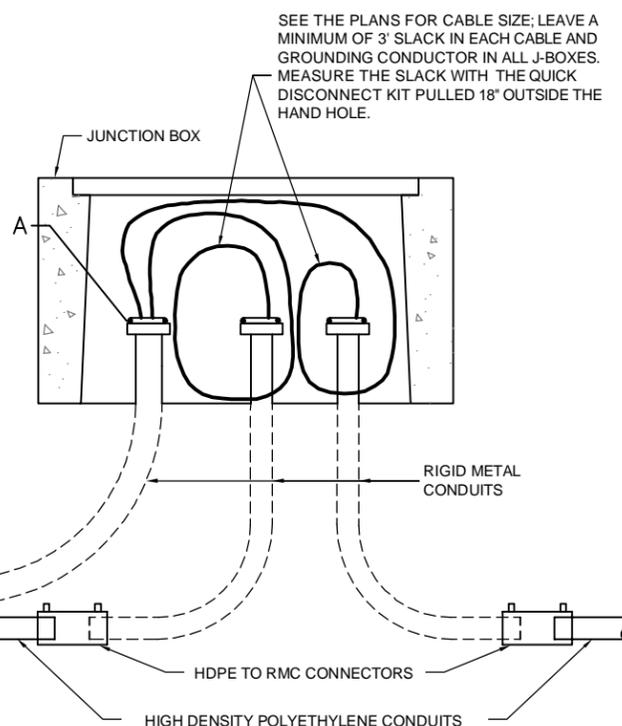
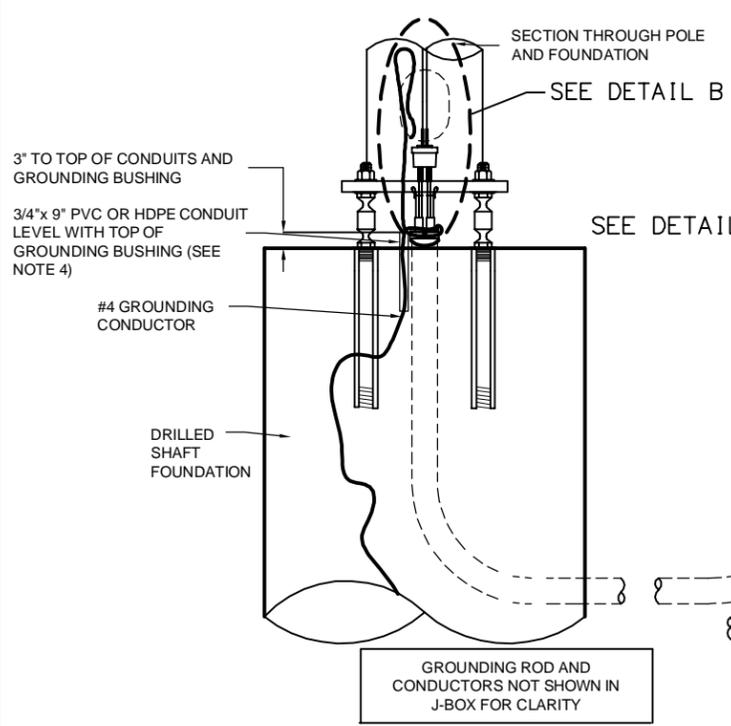
Project as built drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

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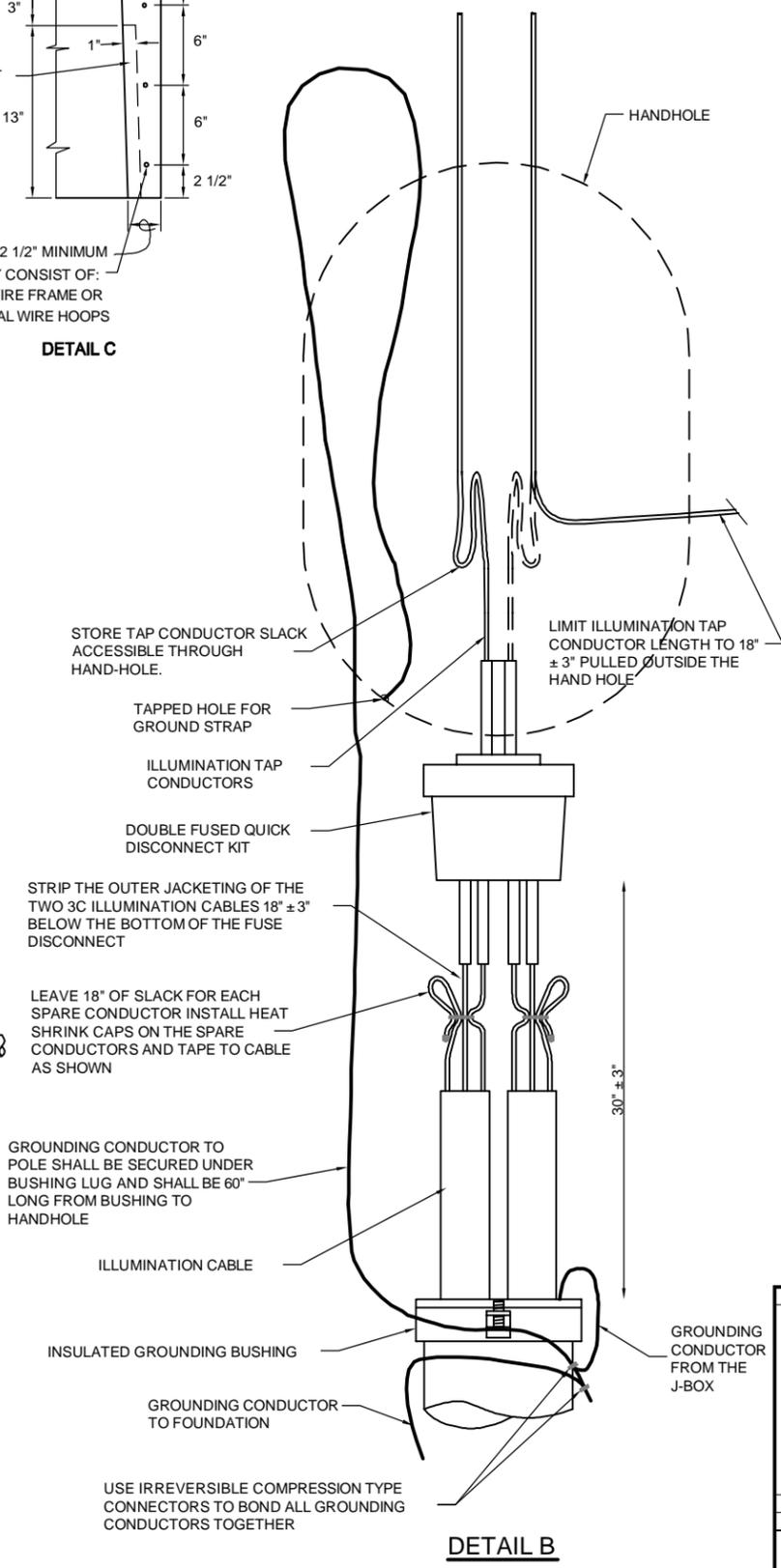
CHECKED BY: S. KARI 		STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE (HSIP)			
DESIGNED BY: N. STALLER DRAWN BY: M. HIDALGO		DETAILS			
Wednesday, March 23, 2016 11:28:35 AM TAB: J3					
REVISIONS NO. DATE DESCRIPTION		PROJECT DESIGNATION 0920028/Z684130000	YEAR 2016	SHEET NO. J3	TOTAL SHEETS 53



TYPE IA JUNCTION BOX

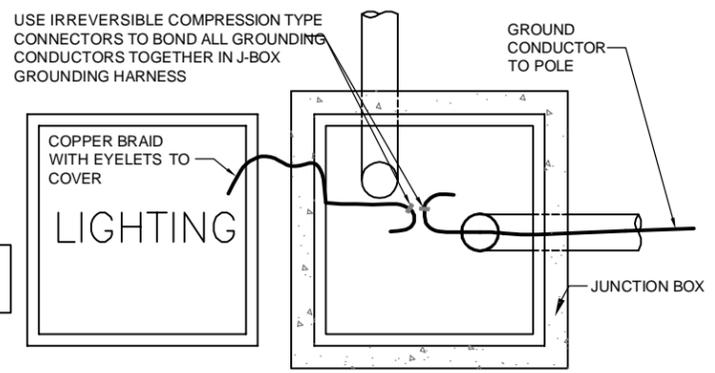


LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS



DETAIL A

DETAIL B



GROUNDING CONDUCTOR BONDING CONNECTIONS

NOTES:

1. AVOID INSTALLING TYPE IA JUNCTION BOXES IN DRIVEWAYS OR IN LOCATIONS SUBJECT TO USE BY HEAVY TRUCKS. INSTALL JUNCTION BOXES ONLY AT THE LATERAL LOCATIONS ALLOWED IN SUBSECTION 660-3.04.
2. CONSTRUCT JUNCTION BOXES ACCORDING TO SECTION 501 USING CLASS A CONCRETE. REINFORCE TYPE IA JUNCTION BOXES AS SHOWN OR CONSTRUCT THEM WITH SYNTHETIC STRUCTURAL FIBER-REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER.
3. FOR JUNCTION BOXES THAT CONTAIN ILLUMINATION CONDUCTORS EXCLUSIVELY, FURNISH LIDS WITH THE WORD LIGHTING INSCRIBED INTO THEM. FOR OTHER JUNCTION BOXES, FURNISH LIDS WITH THE WORD TRAFFIC INSCRIBED INTO THEM.
4. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF COARSE AGGREGATE FOR PORTLAND CEMENT CONCRETE CONFORMING TO SUBSECTION 703-2.02.
5. SET THE TOPS OF JUNCTION BOXES THE FOLLOWING DIMENSIONS BELOW THE FINISHED SURROUNDING SURFACE: 1" IN PAVED MEDIANS AND ADJACENT TO PEDESTRIAN FACILITIES, 1/4" IN PEDESTRIAN FACILITIES, AND 2" IN ALL OTHER AREAS.
6. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660-3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH BRASS HARDWARE.
7. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
8. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
9. APPLICATION FOR SLIP BASE IS THE SAME EXCEPT FOR BONDING. SEE SUBSECTION 660-3.06 FOR BONDING.
10. LABEL ALL CABLES AND CONDUCTORS IN POLE BASE AND J-BOX. SEE SUBSECTION 660-3.05.
11. MAKE ALL GROUNDING AND BONDING WIRE #8 AWG, EXCEPT IN THOSE CONDUITS THAT CONTAIN CIRCUIT CONDUCTORS LARGER THAN #8 AWG. IN THIS CASE USE WIRE EQUAL IN SIZE TO THE LARGEST CONDUCTOR. THE GROUNDING CONDUCTOR TO THE FOUNDATION SHALL BE #4 AWG.
12. USE LISTED IRREVERSIBLE COMPRESSION TYPE CONNECTORS SIZED FOR EACH APPLICATION AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.
13. PROTECT GROUND WIRE WITH 3/4 INCH PVC OR HDPE CONDUIT TO 6 INCHES BELOW TOP OF FOUNDATION FILLED WITH DUCT SEAL.
14. ALL SPLICES ARE TO BE APPROVED BY THE ENGINEER.

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18

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DESIGNED BY: N. STALLER
DRAWN BY: M. HIDALGO

STATE OF ALASKA
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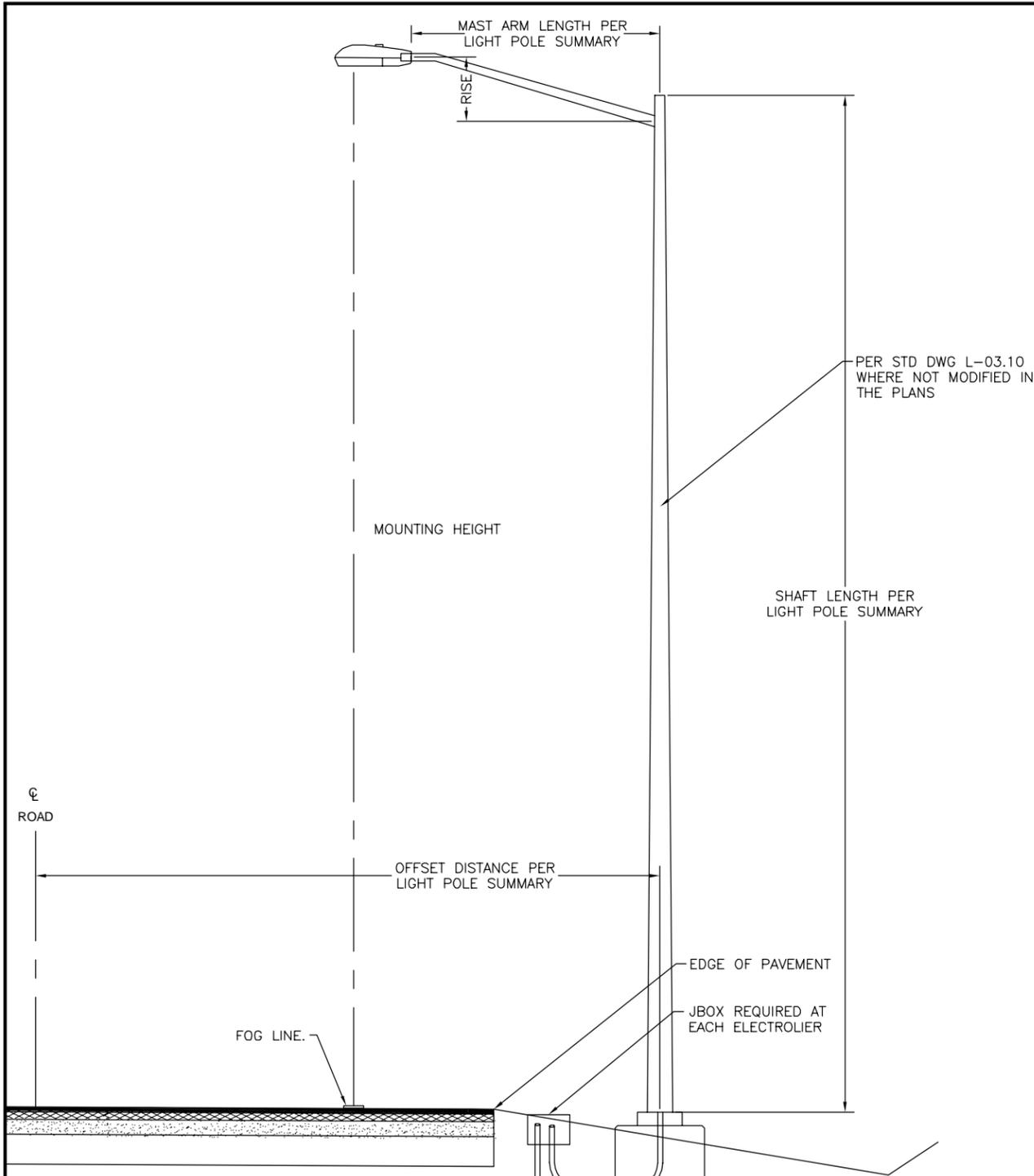
KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

JUNCTION BOX DETAILS

Wednesday, March 23, 2016 11:28:50 AM
TAB: J4

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NO.	DATE	DESCRIPTION				
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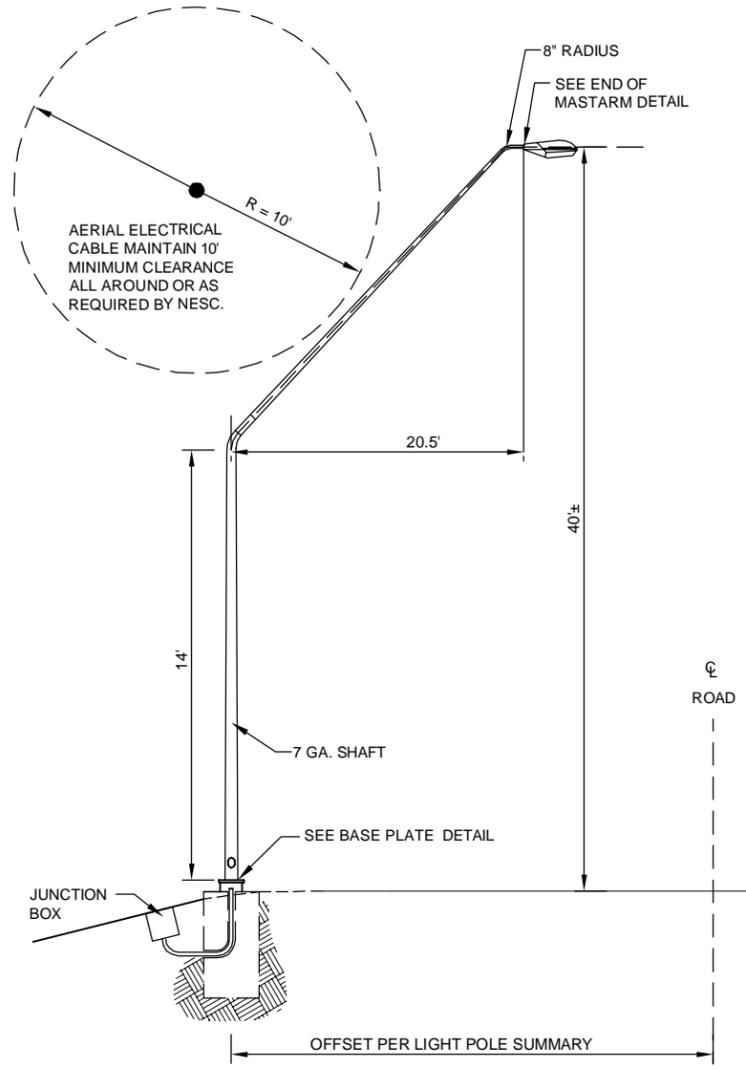
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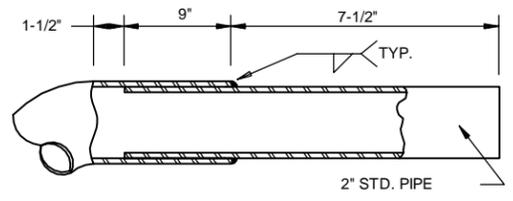
Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

LIGHT POLE/ELECTROLIER MOUNTING DETAIL
NO SCALE

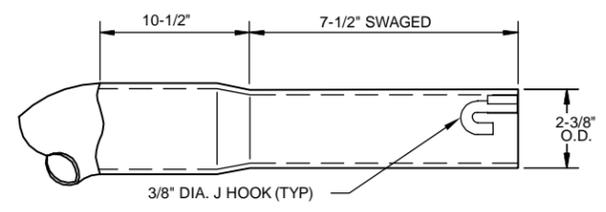
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 Date: 3/1/18



DAVIT ELECTROLIER ELEVATION
NO SCALE



TENON

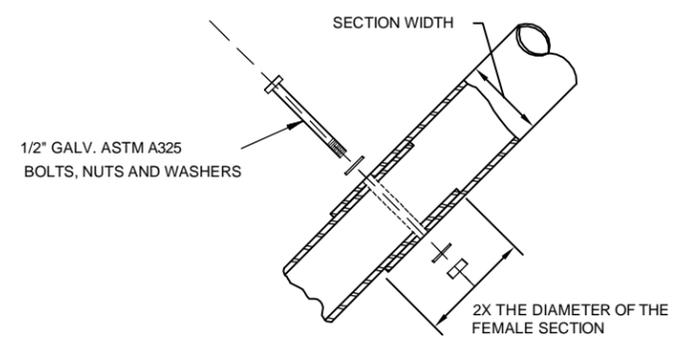


OPTIONAL SWAGED TENON

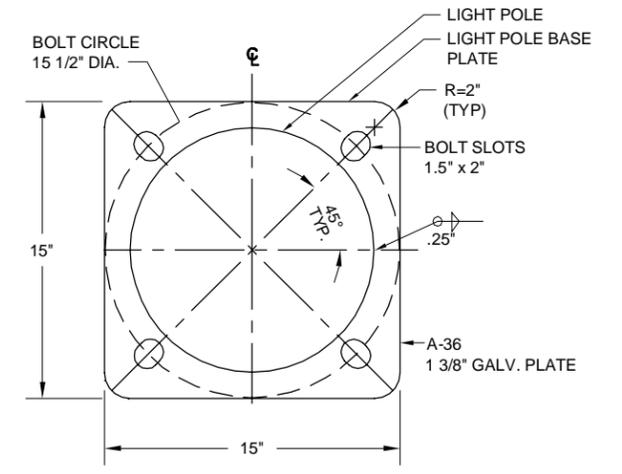
END OF MASTARM DETAIL
NO SCALE

NOTES:

1. MOUNTING HEIGHT FOR ALL NEW ELECTROLIERS SHALL BE 40 FEET.
2. CONSTRUCT ELECTROLIERS PER STANDARD DRAWING L-03.10 EXCEPT WHERE MODIFIED.
3. APPLY AN ANTI-SEIZING COMPOUND TO ALL THREADED SURFACES, INCLUDING THOSE IN THE ANCHOR PLATE AND ON THE COUPLINGS.



SLIP CONNECTION DETAIL
NO SCALE



LIGHT POLE BASE DETAIL
NO SCALE
DETAIL MODIFIES STANDARD DRAWING L-03.10 WITH BOLT SLOTS

DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER
 DRAWN BY: M. HIDALGO

STATE OF ALASKA
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**KTN - NORTH TONGASS HWY:
 ILLUMINATION UPGRADE (HSIP)**

**LIGHT POLE
 DETAILS**

Monday, November 07, 2016 4:01:08 PM
 TAB: J5

REVISIONS			PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION				
1	11/7/16	ADDED DAVIT ELECTROLIER DETAILS	0920028/Z684130000	2016	J5	53

GENERAL NOTES

FRANGIBLE COUPLING DATA

Use frangible Coupling Breakaway System, meeting NCHRP 350 test level 3 criteria, designed for impacts from any direction and having no specific torque requirements. Install components of the Frangible Coupling System in accordance with the manufacturer's written instructions.

Use this drawing when frangible couplings have the following properties:

Ultimate Shear Capacity = $V_u = 5.5$ kips
 Ultimate Tensile Capacity = $T_u = 49.8$ kips

Foundation Design based on 120% of coupling ultimate capacities.

MATERIALS

CONCRETE.....Class "DS" $f'_c = 3,000$ psi.

PIPE CASING.....API 5L X52, $F_y = 52,000$ psi or ASTM A709, GR 50, $F_y = 50,000$ psi.

POLE DATA

Pole Height = 50' maximum
 Mast Arm Length = 22' maximum
 Luminaire = 50 lbs. maximum
 Luminaire Projected Area = 2 square feet maximum
 Pole, Arm and Luminaire Dead load ≤ 950 lbs.

SOILS

Peat and other organic soil layers encountered above rock may be replaced with structural fill or controlled low-strength material.

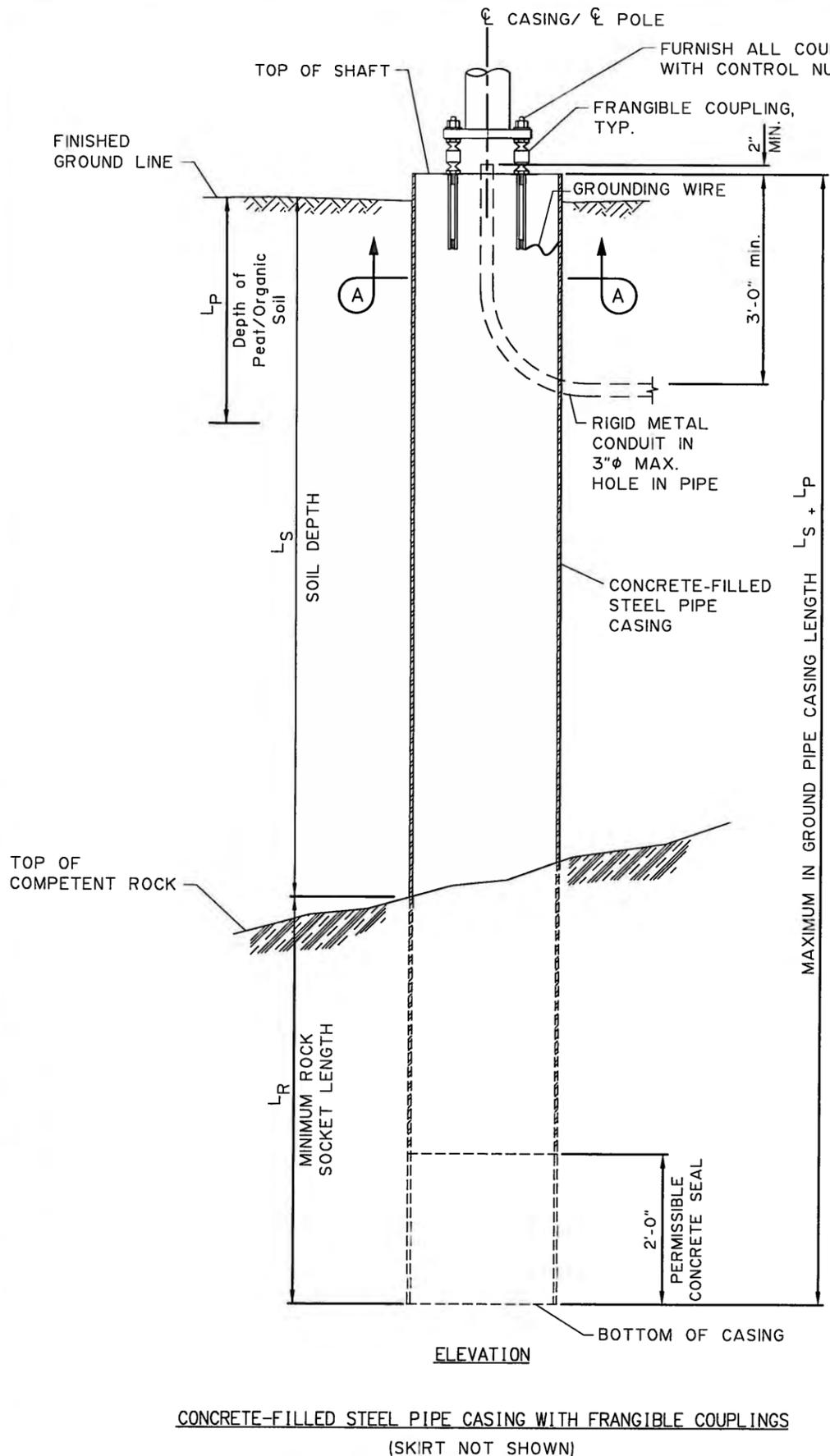
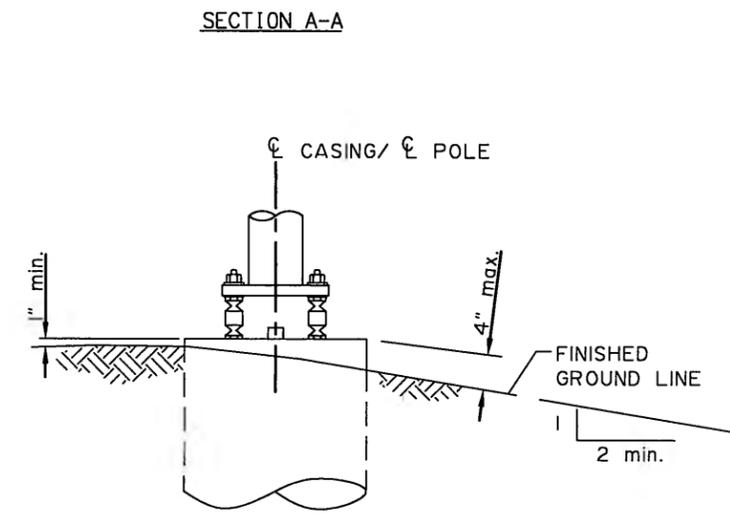
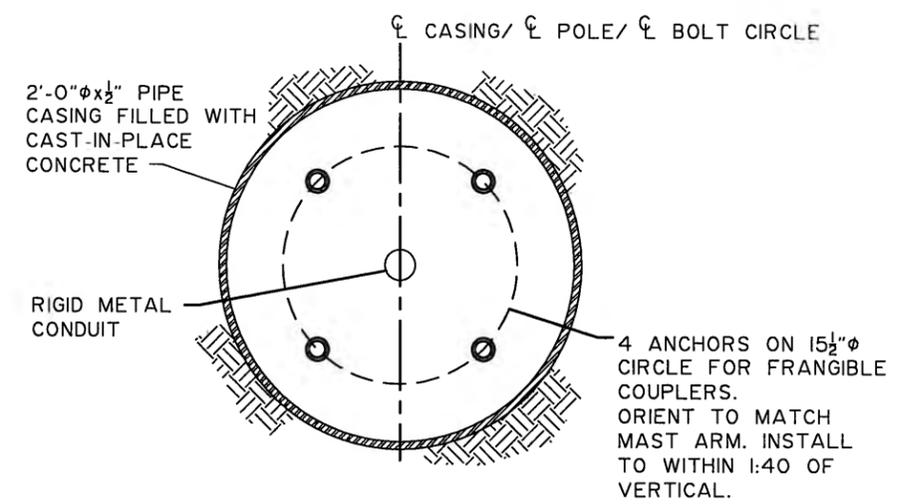
Predrilling required.

Grout annular space between casing and soil with DS grout if not in direct contact.

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
 Project Eng. Mandi Pelham
 Date: 3/1/18

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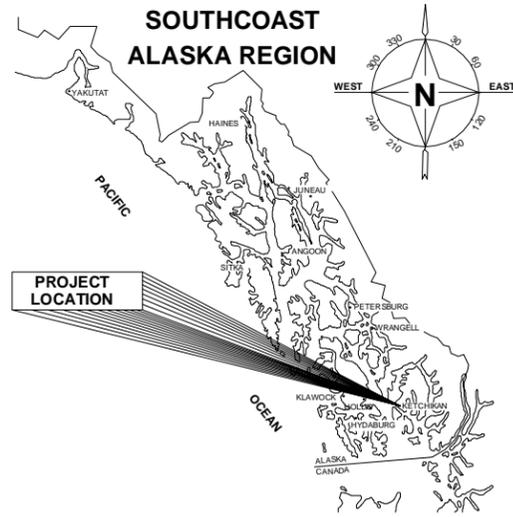
CHECKED BY: Mary McRae  DESIGNED BY: Elmer Marx DRAWN BY: Sam Solie	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES SOUTHEAST REGION KTN - NORTH TONGASS HWY: ILLUMINATION UPGRADE						
DRILLED SHAFT FOUNDATION FOR LIGHTING STANDARD							
Thursday, February 18, 2016 11:25:19 AM TAB: J6							
REVISIONS <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	NO.	DATE	DESCRIPTION				PROJECT DESIGNATION: 0920028/Z684130000 YEAR: 2016 SHEET NO.: J6 TOTAL SHEETS: 53
NO.	DATE	DESCRIPTION					



DRILLED SHAFT DATA TABLE		
DEPTH OF SOIL ABOVE COMPETENT ROCK L_s (FT)	DEPTH OF PEAT/ORGANIC SOIL L_p (FT)	MINIMUM ROCK SOCKET LENGTH L_r (FT)
0 to 12	0 to 12	5
12 to 18	0 to 1	2
	1 to 18	5
Greater than 18	0 to 1	0 *
	Greater than 1	Not Applicable

* Shaft length need not exceed 18 feet if bedrock is not encountered and peat/organic layer is less than 1 foot.

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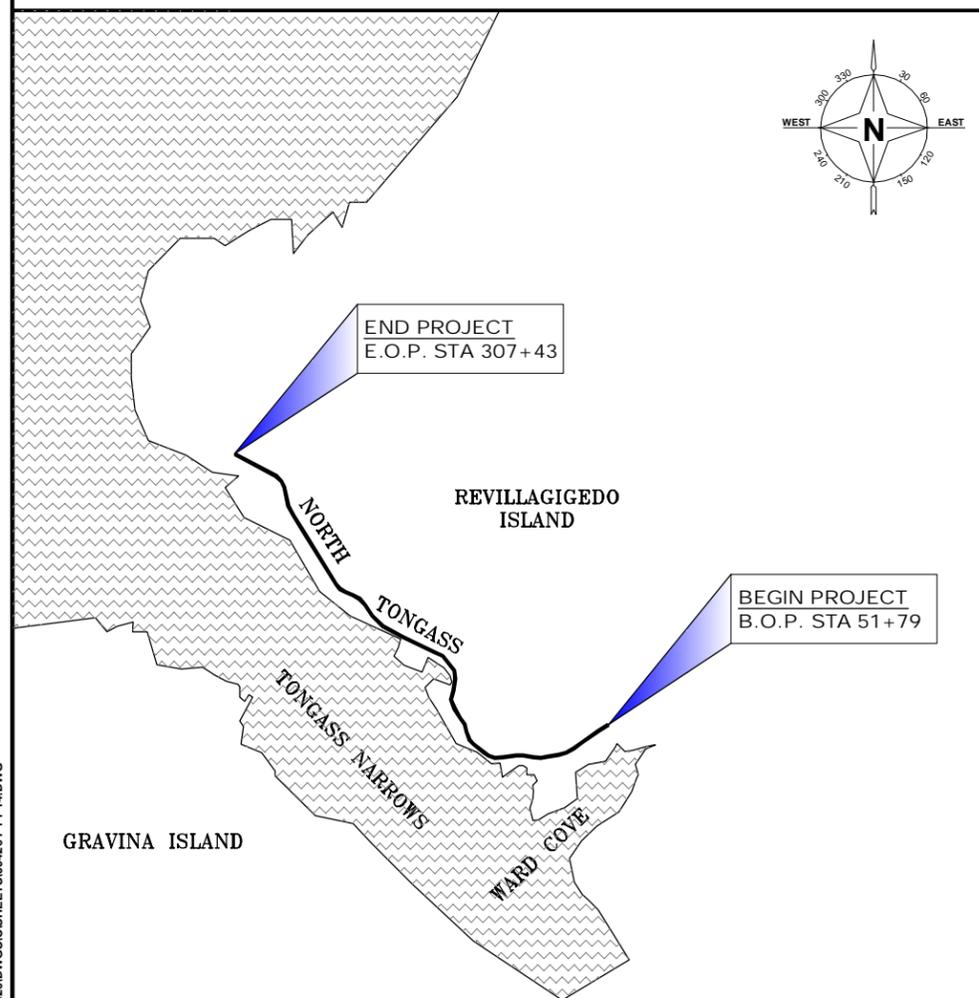
ESCP LEGEND

- RIGHT OF WAY
- SEDIMENT CONTROL
- FLOW DIRECTION
- INLET/OUTLET PROTECTION
- CULVERT
- GROUND DISTURBANCE
- EDGE OF WATER BODY
- INVASIVE SPECIES

GENERAL ESCP NOTES:

1. THE CONTRACTOR SHALL DEVELOP A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR THIS PROJECT. THE PLAN SHALL COMPLY WITH THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) REQUIREMENTS FOR STORM WATER DISCHARGE FROM CONSTRUCTION SITES. SEE SECTION 641 OF THE SPECIAL PROVISIONS, THE ALASKA SWPPP GUIDE (AS CURRENTLY AMENDED), AND ALL CONDITIONS OF PERMIT APPROVALS. WORK SHOWN HERE IS MINIMUM REQUIRED.
2. THE CONTRACTOR SHALL INSTALL SEDIMENT CONTROL DEVICES BEFORE ERODIBLE SOILS ARE EXPOSED AND MAY HAVE TO REMOVE AND REINSTALL CONTROLS DAILY TO ALLOW CONSTRUCTION ACTIVITIES TO PROCEED. ALL DEVICES SHALL BE MAINTAINED ON A DAILY BASIS, INCLUDING BUT NOT LIMITED TO, REMOVAL AND DISPOSAL OF ACCUMULATED SOILS, CLEANING DEVICES, AND REPAIR OF DAMAGED DEVICES OR REPLACEMENT WITH NEW.
3. PROVIDE TEMPORARY SEDIMENT CONTROL AS SHOWN ON PLANS AND AS NECESSARY TO PREVENT MIGRATION OF SEDIMENT USING SILT FENCE OR FIBER ROLLS.
4. THE CONTRACTOR SHALL PROVIDE INLET PROTECTION ON ALL CULVERTS WITHIN 25 FEET OF DISTURBED GROUND. INLET PROTECTION SHALL BE SEQUENCED TO PROTECT EXISTING INLETS AS PROJECT PHASING OCCURS.
5. THE CONTRACTOR SHALL USE WATER OR NON-TOXIC DUST PALLIATIVES TO CONTROL DUST.
6. THE CONTRACTOR SHALL MAINTAIN DEVICES AND CORRECT ANY PROBLEMS OCCURING DUE TO INADEQUATE PROTECTION MEASURES. INSPECT AND REPAIR DEVICES AFTER EACH RAINFALL. REMOVE AND DISPOSE OF SEDIMENT CONTROL DEVICES AFTER STABILIZATION OF SLOPES.
7. IF INSPECTION REVEALS EROSION CONTROL MEASURES ARE INSUFFICIENT, THE CONTRACTOR SHALL IMMEDIATELY IMPLEMENT CORRECTIVE ACTION. THIS MAY INCLUDE: CHANGING CONSTRUCTION METHODS, INSTALLING ADDITIONAL EROSION CONTROL BMPs, PHASING WORK, AND OTHER CORRECTIVE MEASURES.
8. THE CONTRACTOR SHALL MINIMIZE THE AREA AND TIME PERIOD ERODIBLE SOILS ARE EXPOSED TO STORM WATER. DISTURBED AREAS SHALL BE STABILIZED AS SOON AS PRACTICABLE AFTER DISTURBANCE AND IN ACCORDANCE WITH ALASKA CONSTRUCTION GENERAL PERMIT (ACGP) REQUIREMENTS.
9. STABILIZE DISTURBED GROUND AS SOON AS POSSIBLE. UNSTABILIZED SURFACES MUST BE TEMPORARILY STABILIZED WITH BONDED FIBER MATRIX, SEEDING, ROLLED EROSION CONTROL PRODUCT (RECP), OR OTHER EFFECTIVE MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING EROSION AND SEDIMENT CONTROL UNTIL PROJECT WORK AREAS ARE PAVED AND SEEDED AREAS HAVE ACHIEVED 70% VEGETATIVE COVER.
10. MATERIAL TRACKED BY CONSTRUCTION EQUIPMENT MUST BE SWEEPED BACK INTO THE PROJECT AREA OR PICKED UP BY A VACUUM TRUCK. A CONSTRUCTION EXIT SHALL BE INSTALLED IF SWEEPING MEASURES ARE INADEQUATE TO CONTROL TRACK-OUT.

Project as bulits drawings have been reviewed by the Project Engineer & represents to the best of my knowledge the Project as constructed.
Project Eng. Mandi Pelham
Date: 3/1/18



VICINITY MAP
N.T.S.

1-Apr-16
TAB: P1

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

ESCP

PROJECT DESIGNATION

0920028/Z684130000

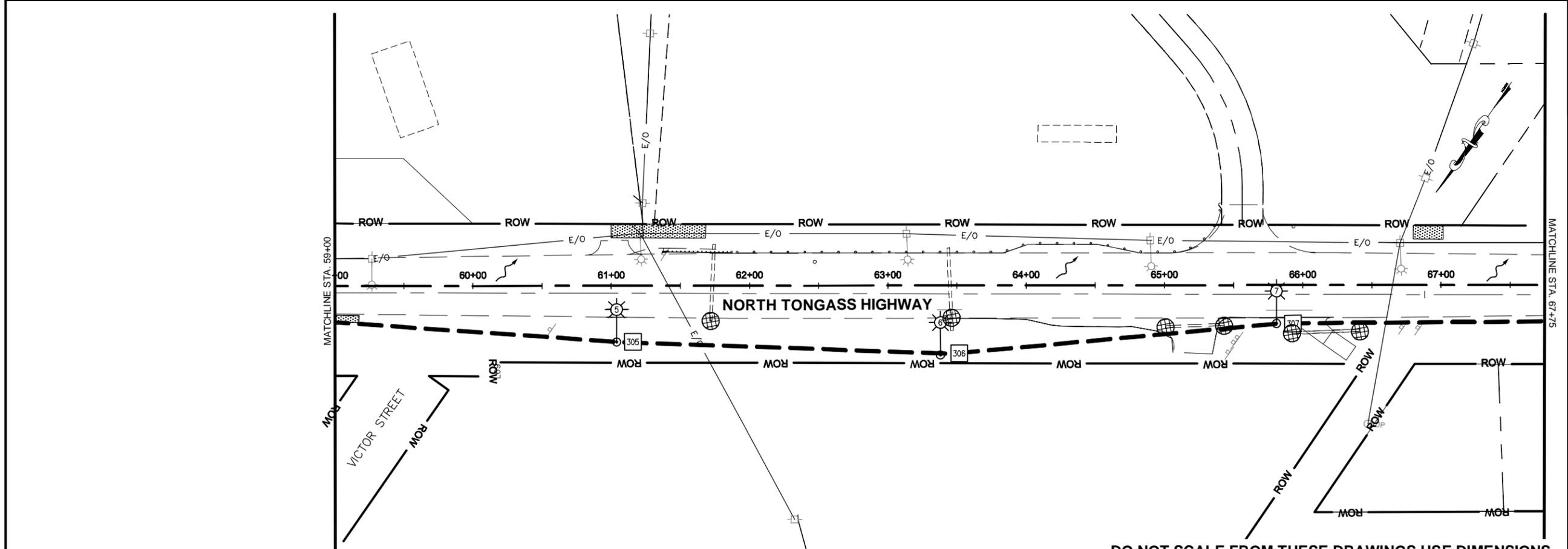
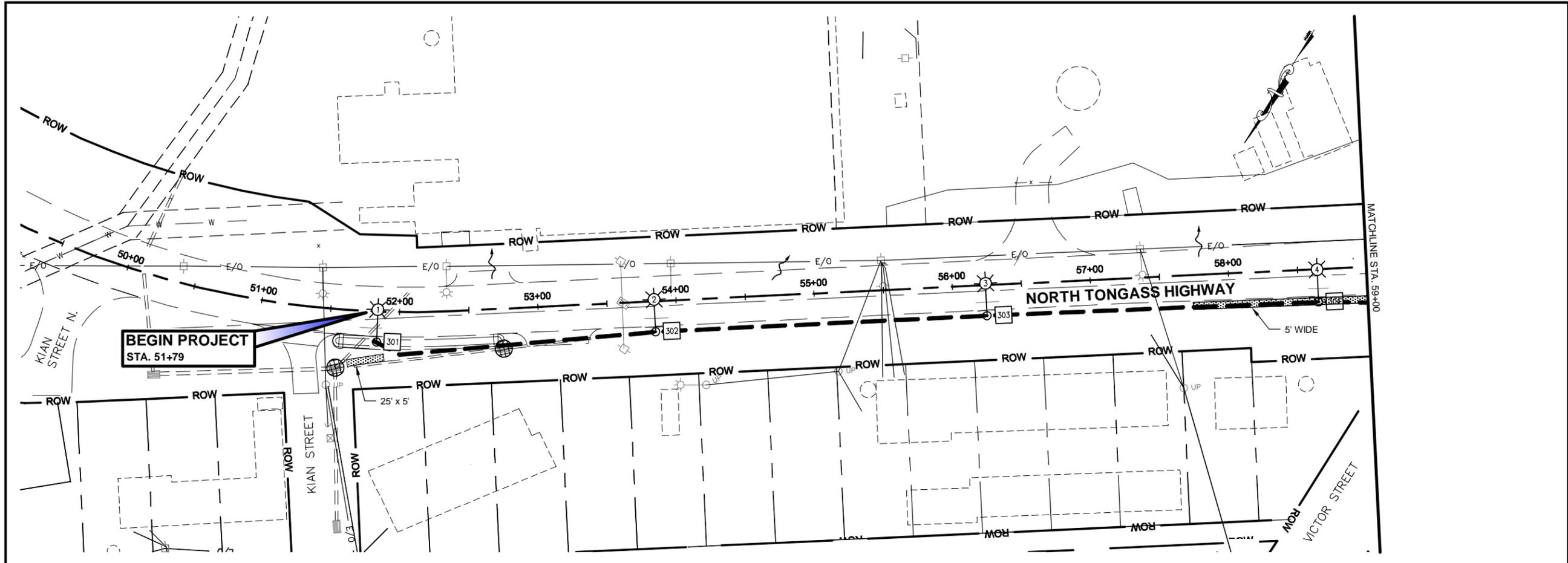
STATE YEAR

ALASKA 2016

SHEET NUMBER TOTAL SHEETS

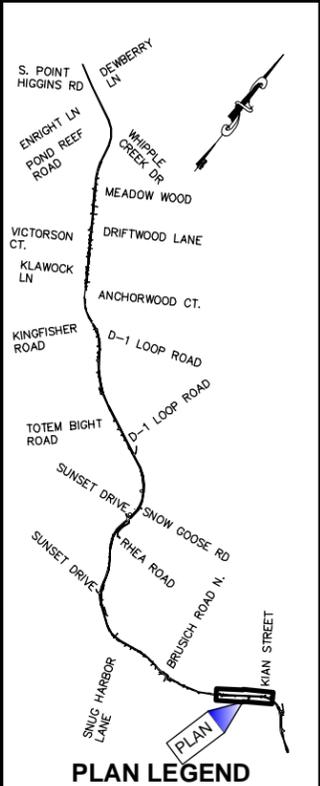
P1 53

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1-Apr-16
TAB: P2

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

ESCP

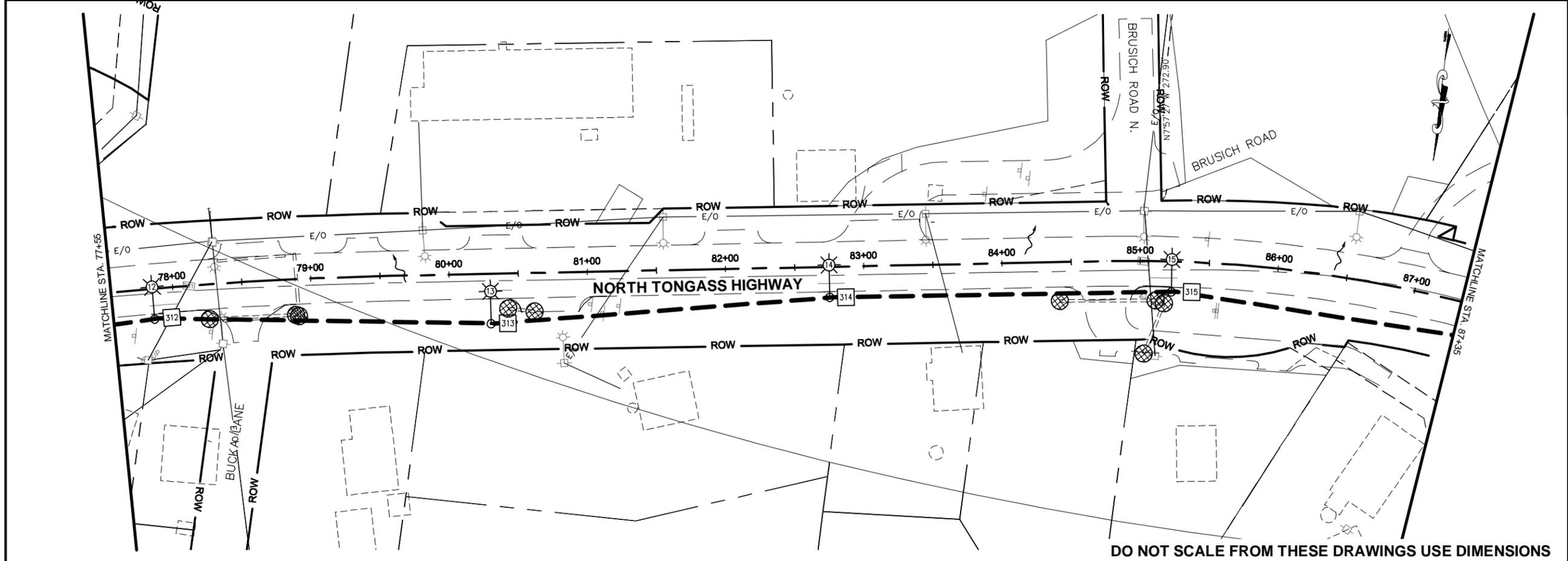
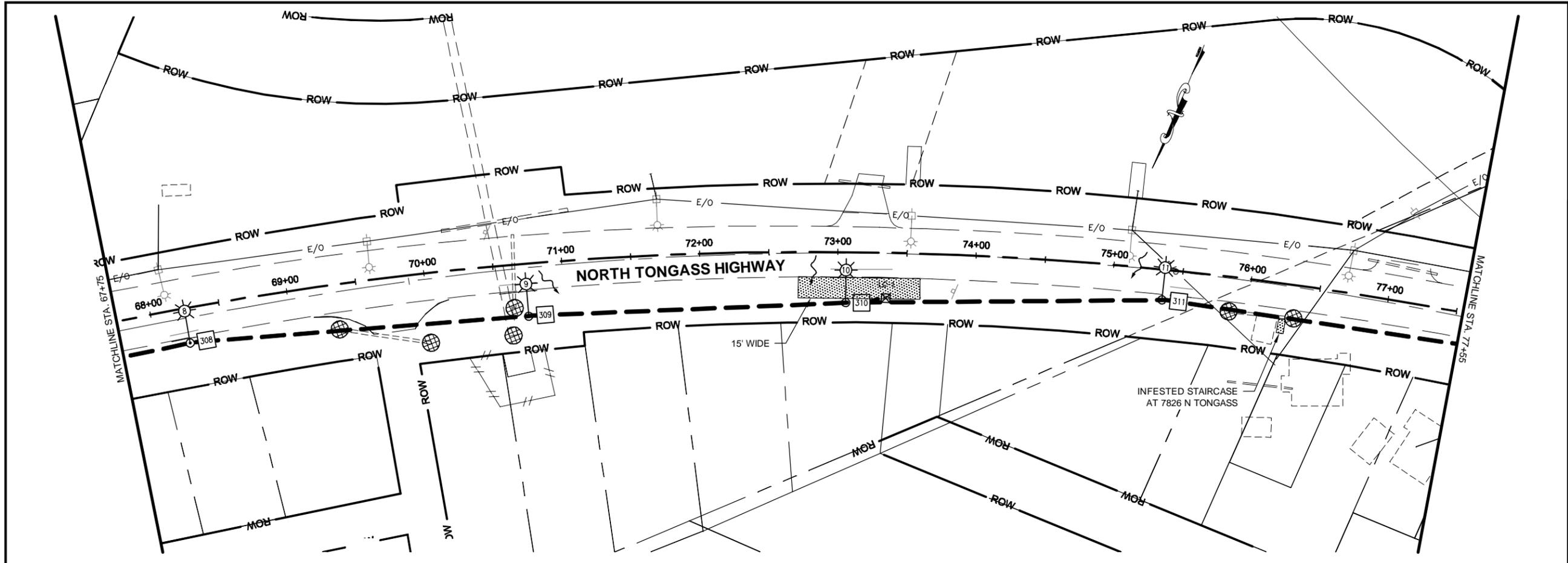
PROJECT DESIGNATION

0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P2	53

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1-Apr-16
TAB: P3

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ESCP

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
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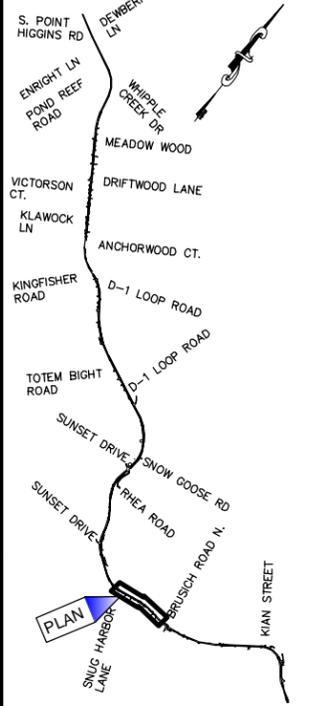
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ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

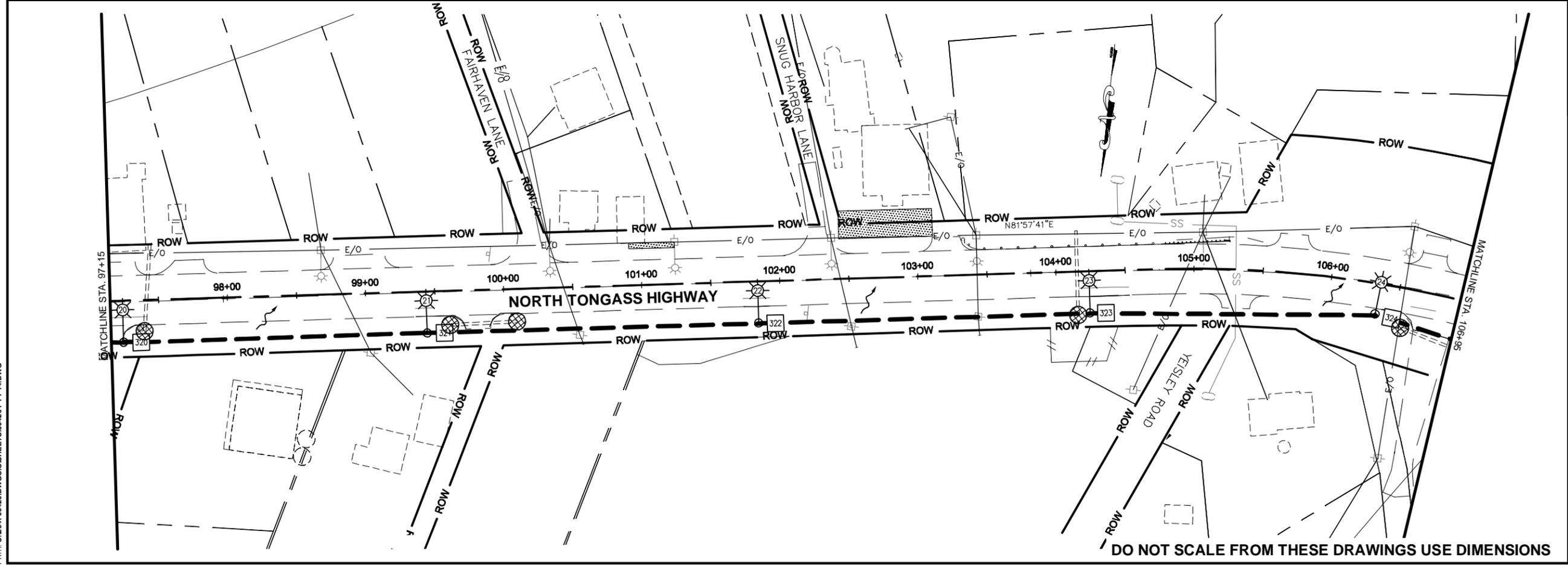
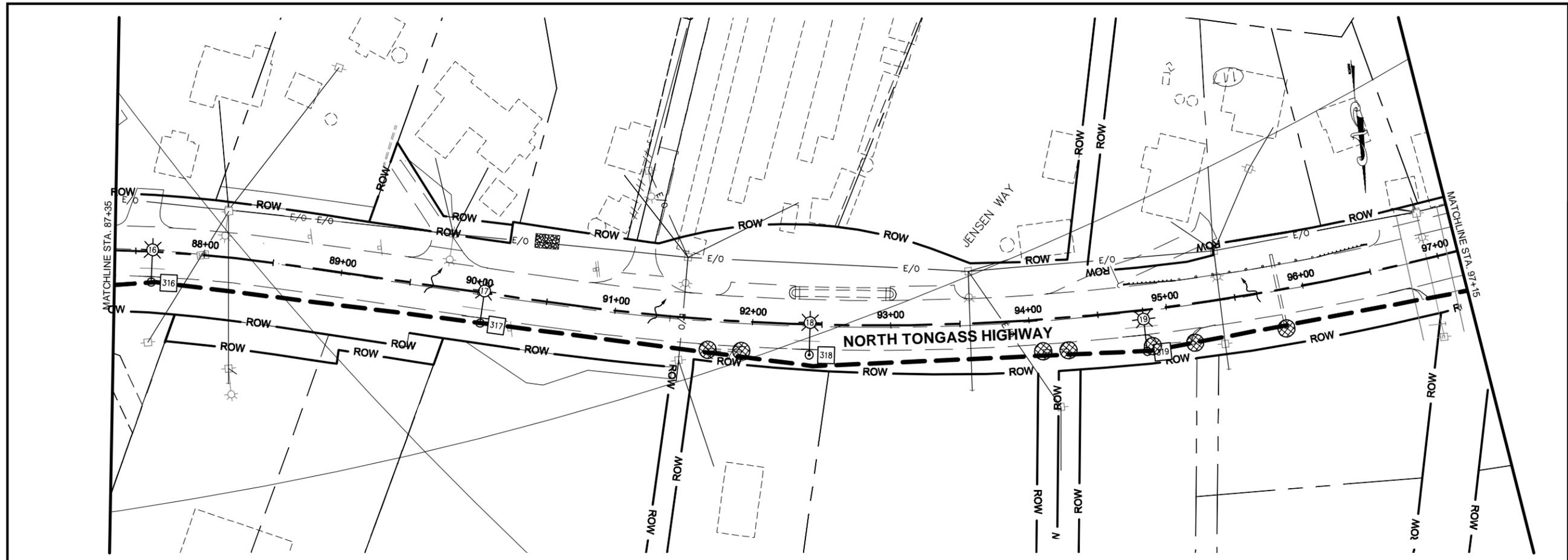
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PROJECT DESIGNATION

0920028/Z684130000

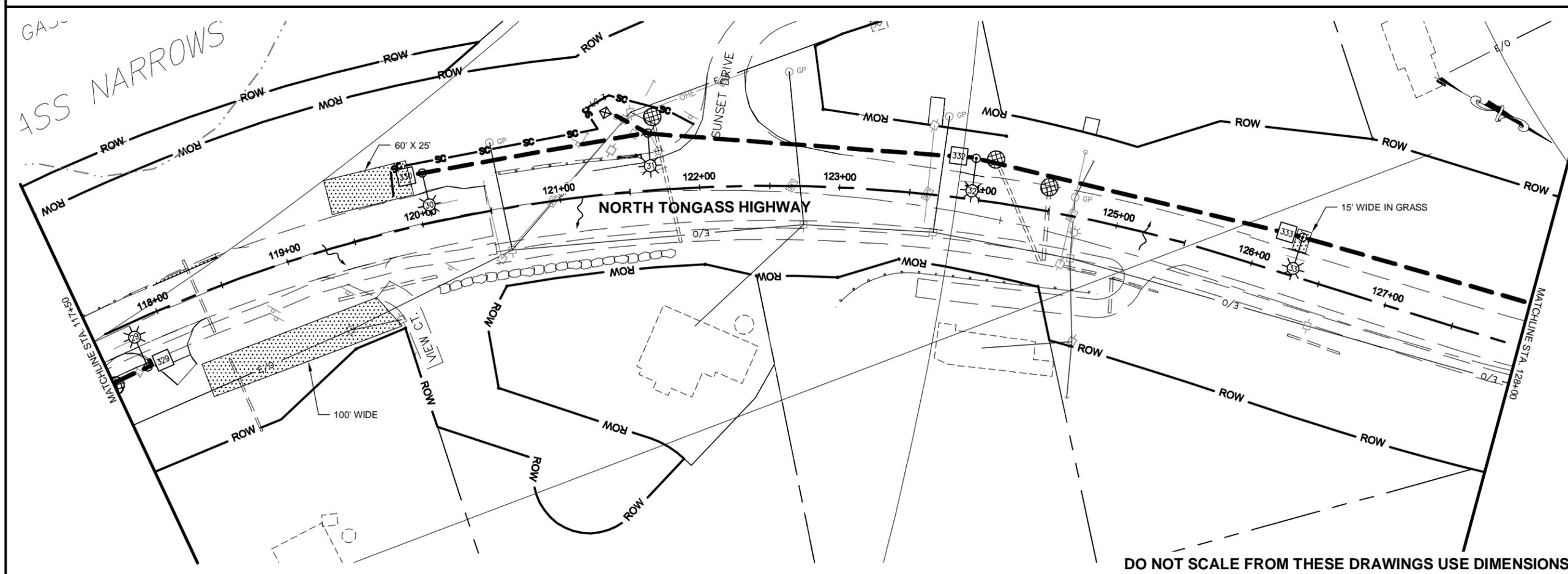
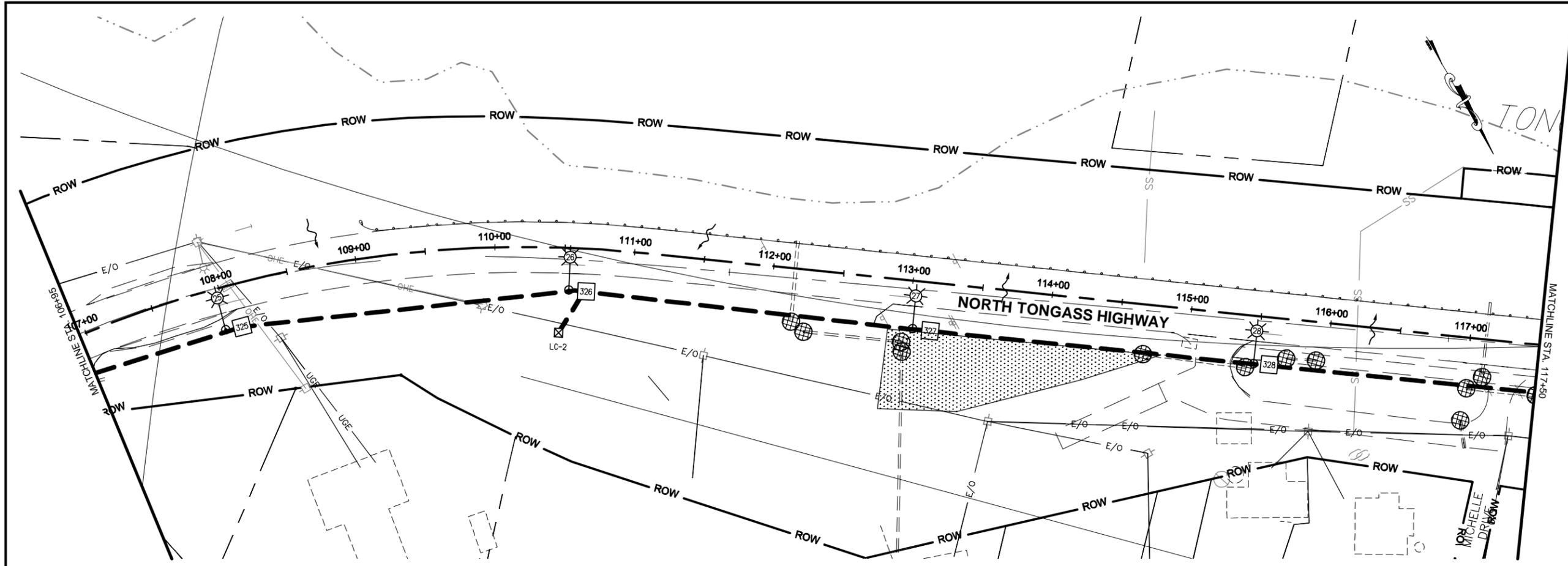
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ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
P4	53



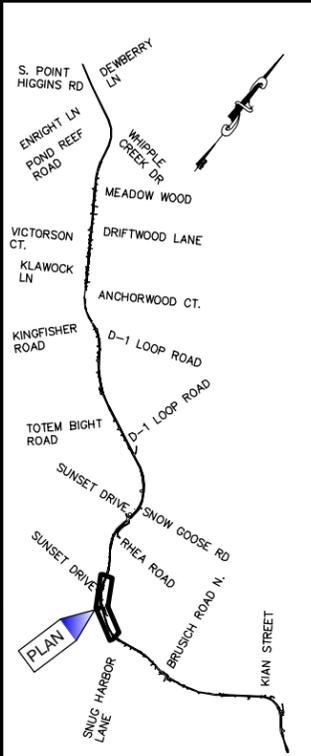
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1-Apr-16
TAB: P5

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

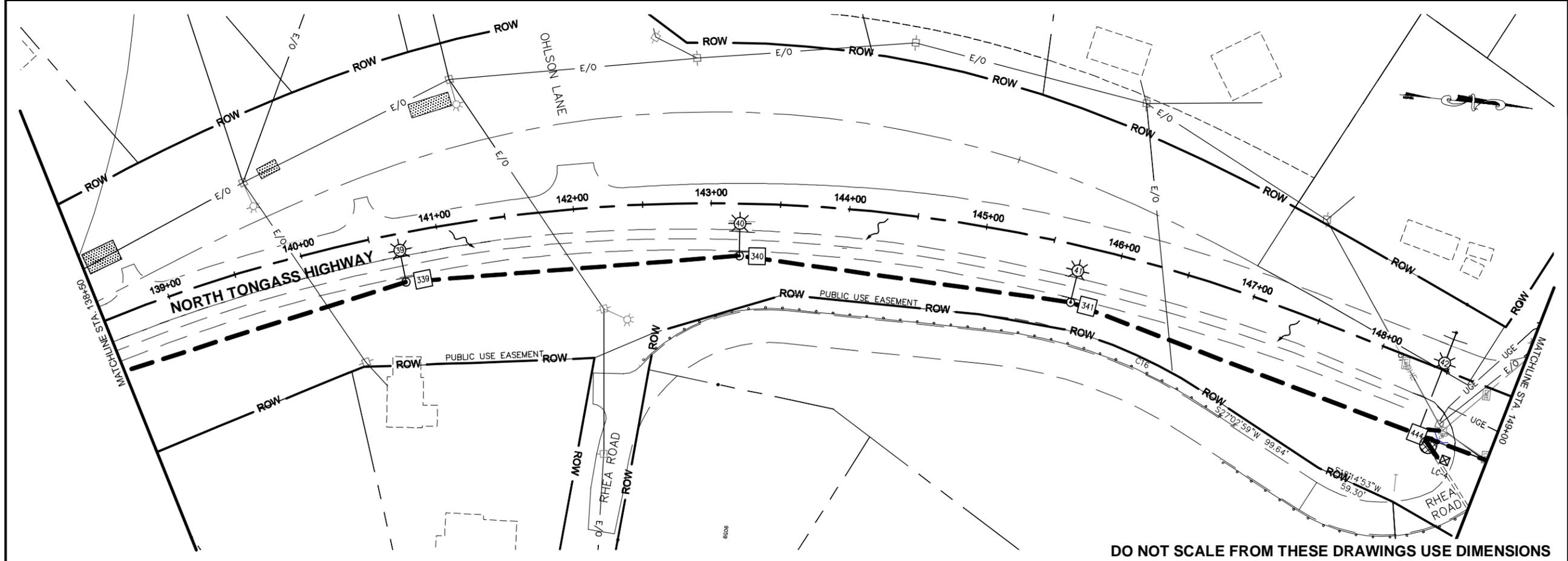
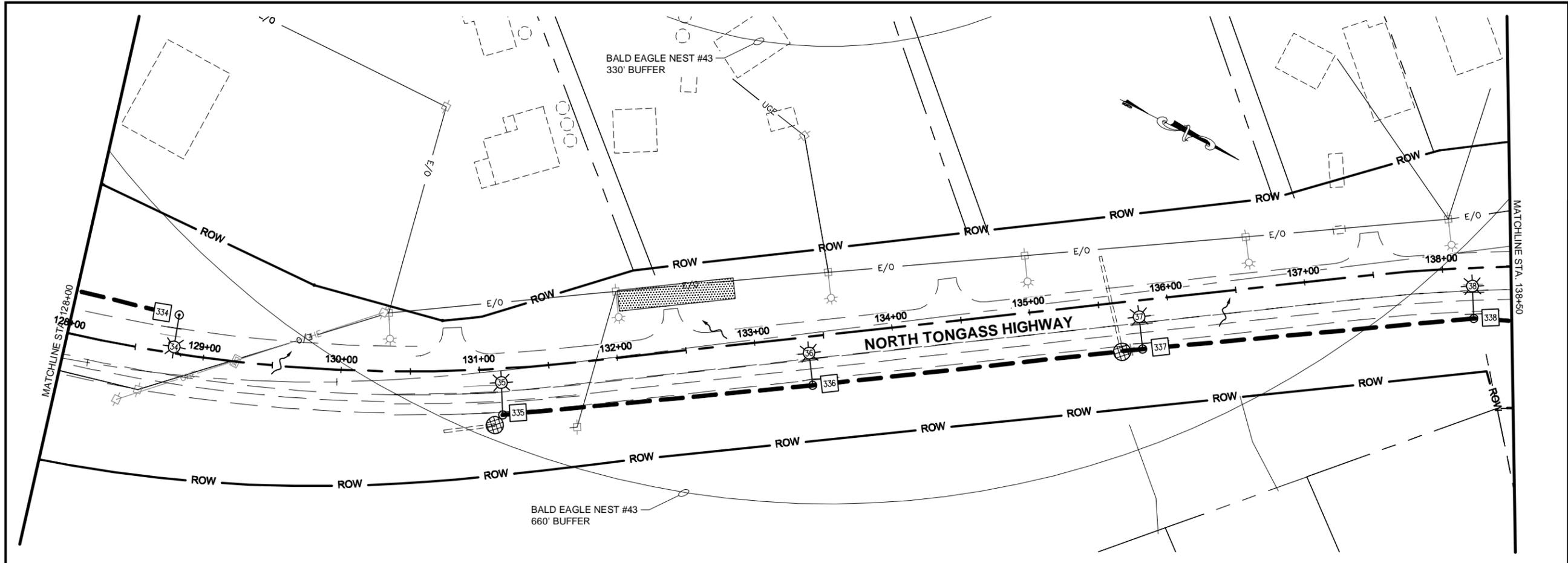
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PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P5	53

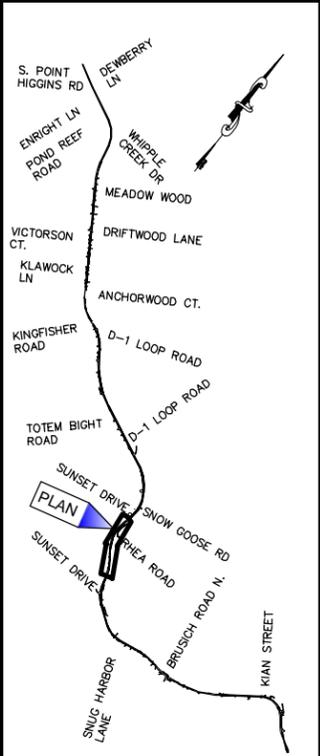
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1-Apr-16
TAB: P6

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER
DRAWN BY: M. HIDALGO

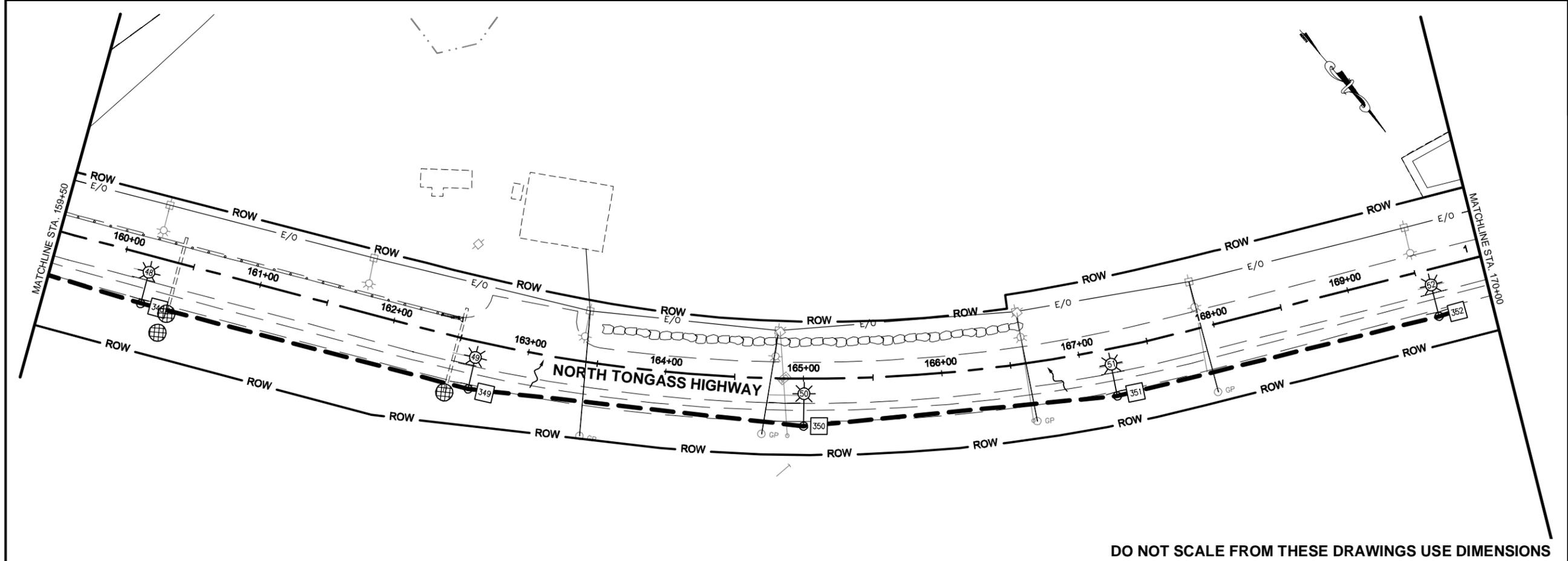
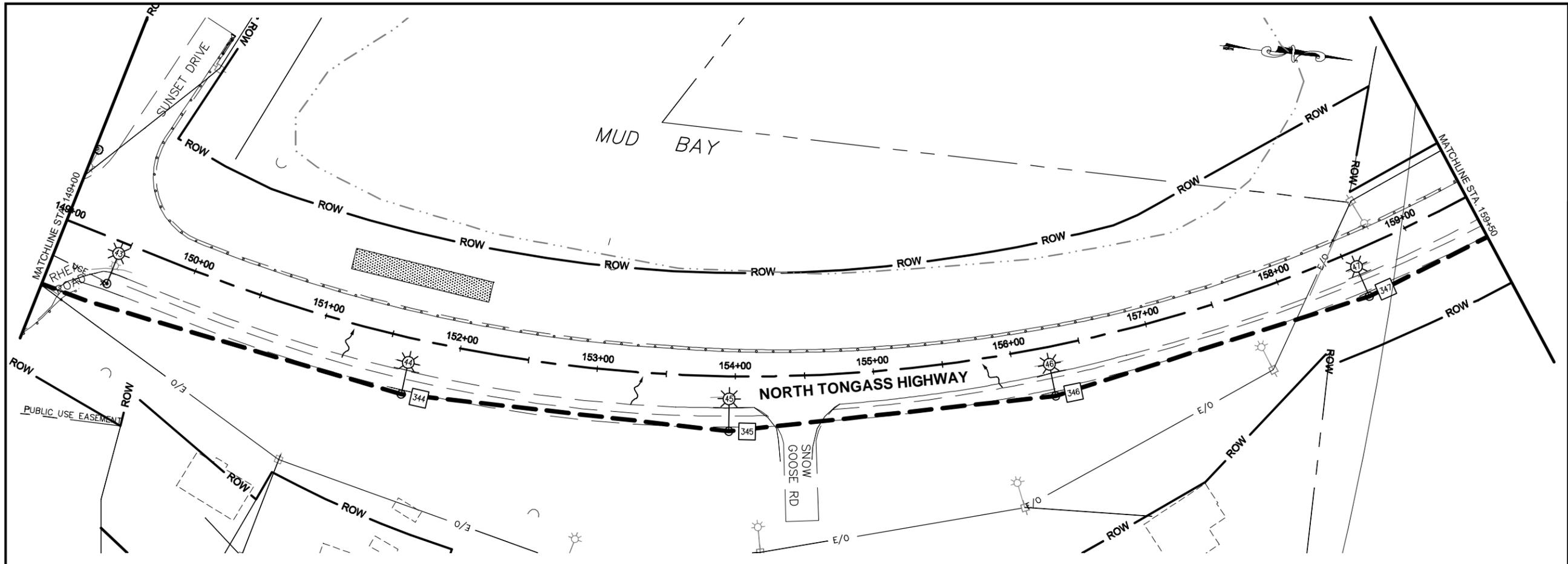
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ESCP
PROJECT DESIGNATION
0920028/Z684130000

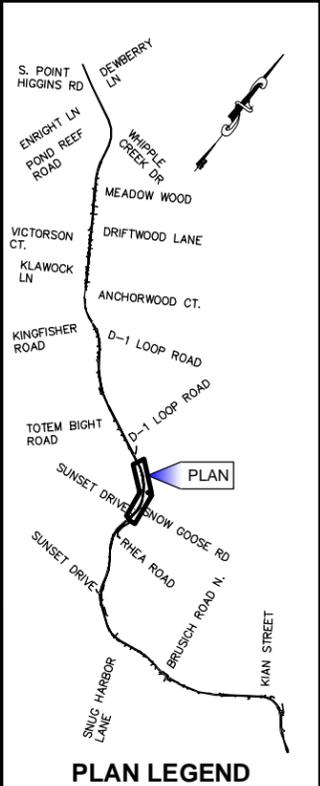
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ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P6	53

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1-Apr-16
TAB: P7

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

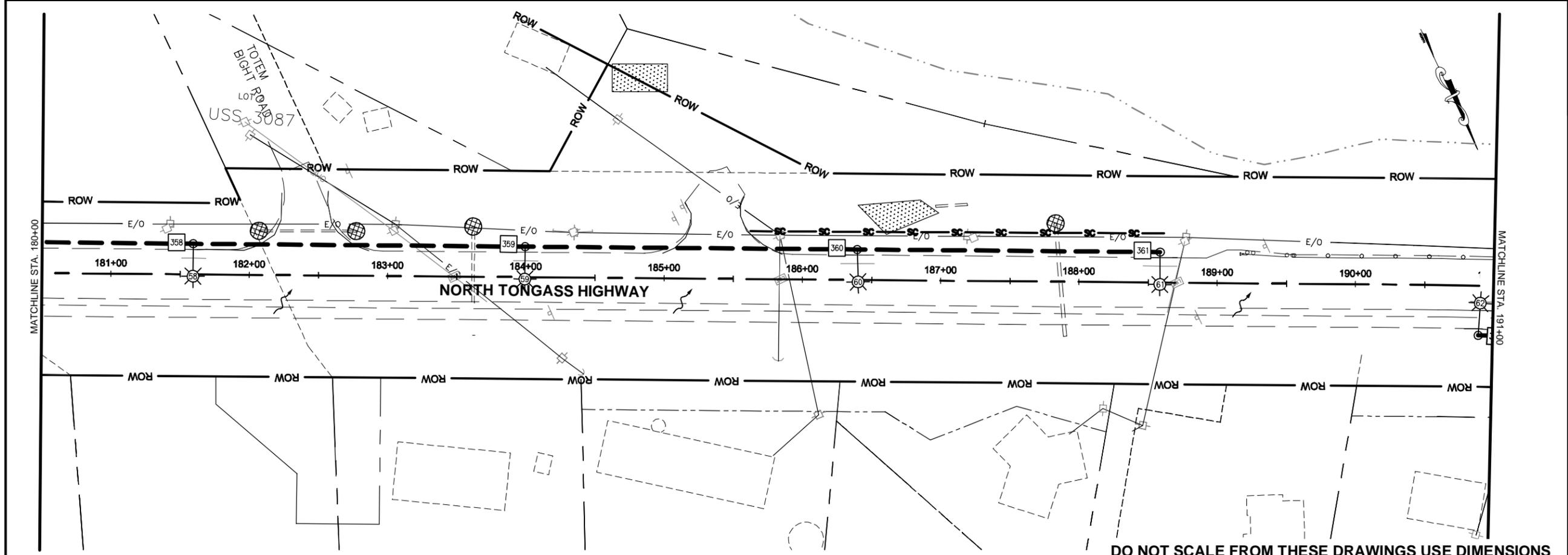
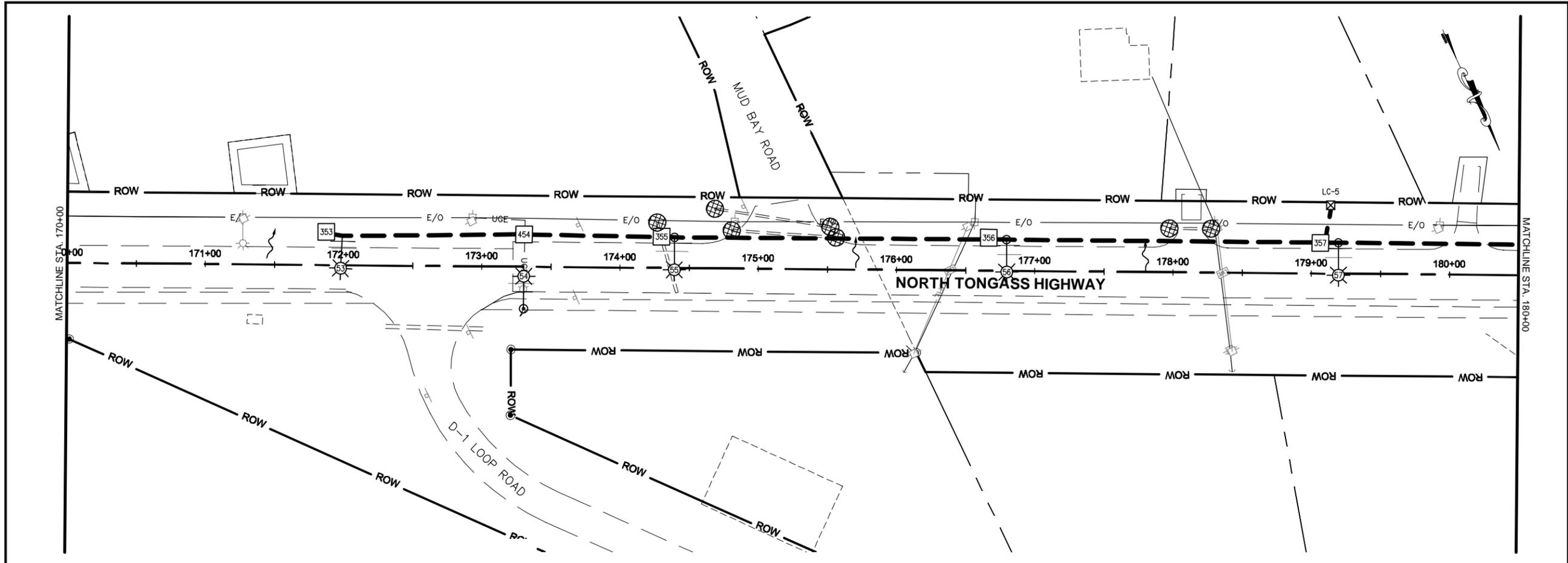
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PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P7	53

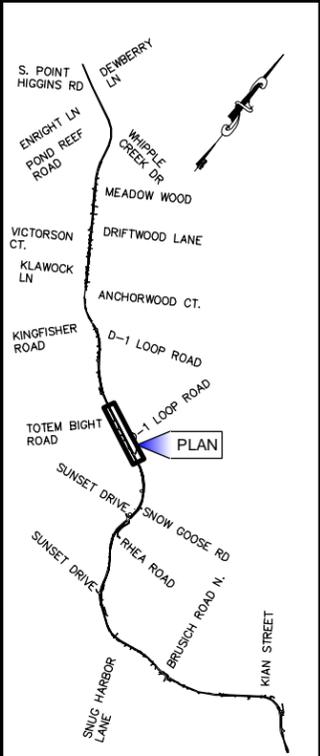
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1-Apr-16
TAB: P8

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

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DESIGNED BY: N. STALLER, M. SPICER
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ESCP

PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P8	53

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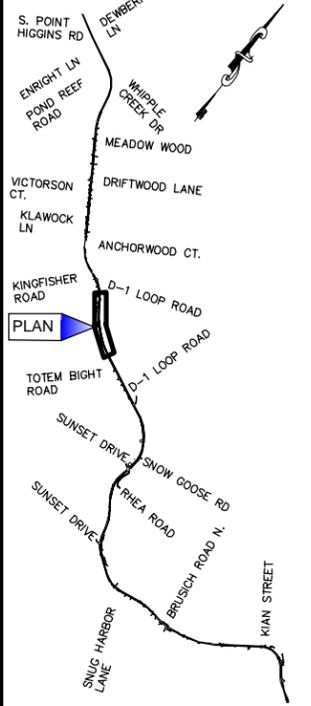
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TAB: P9

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

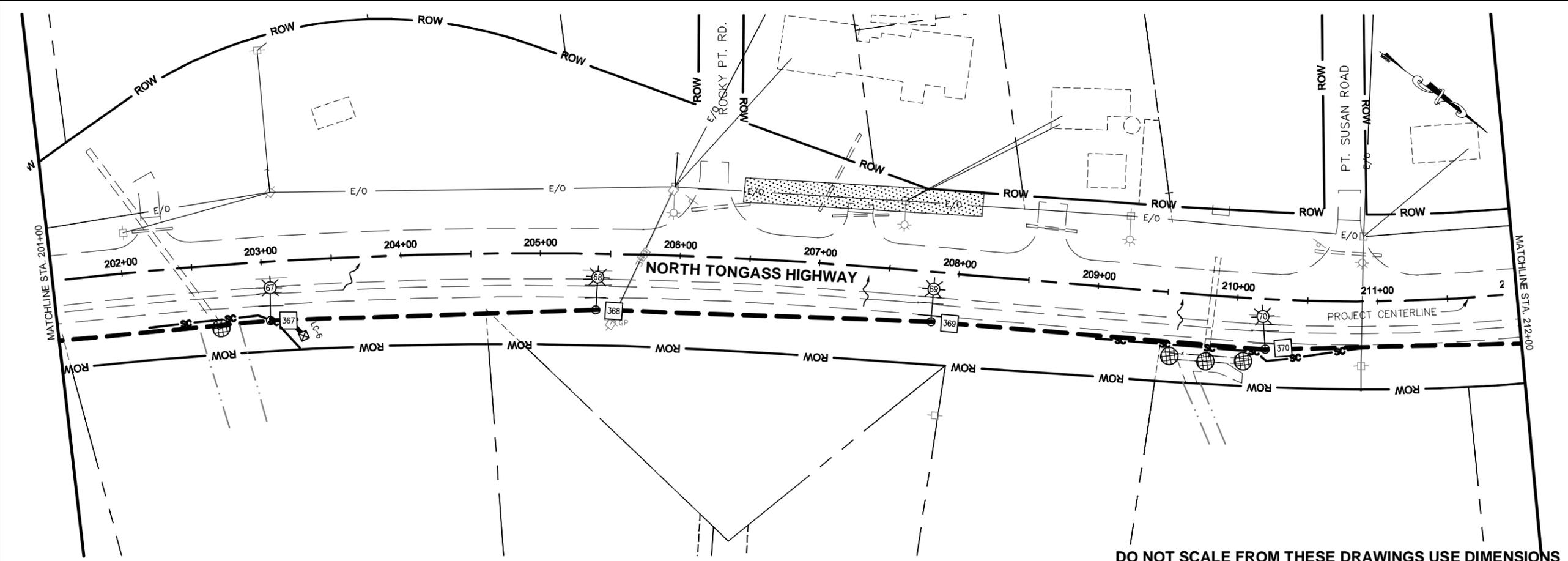
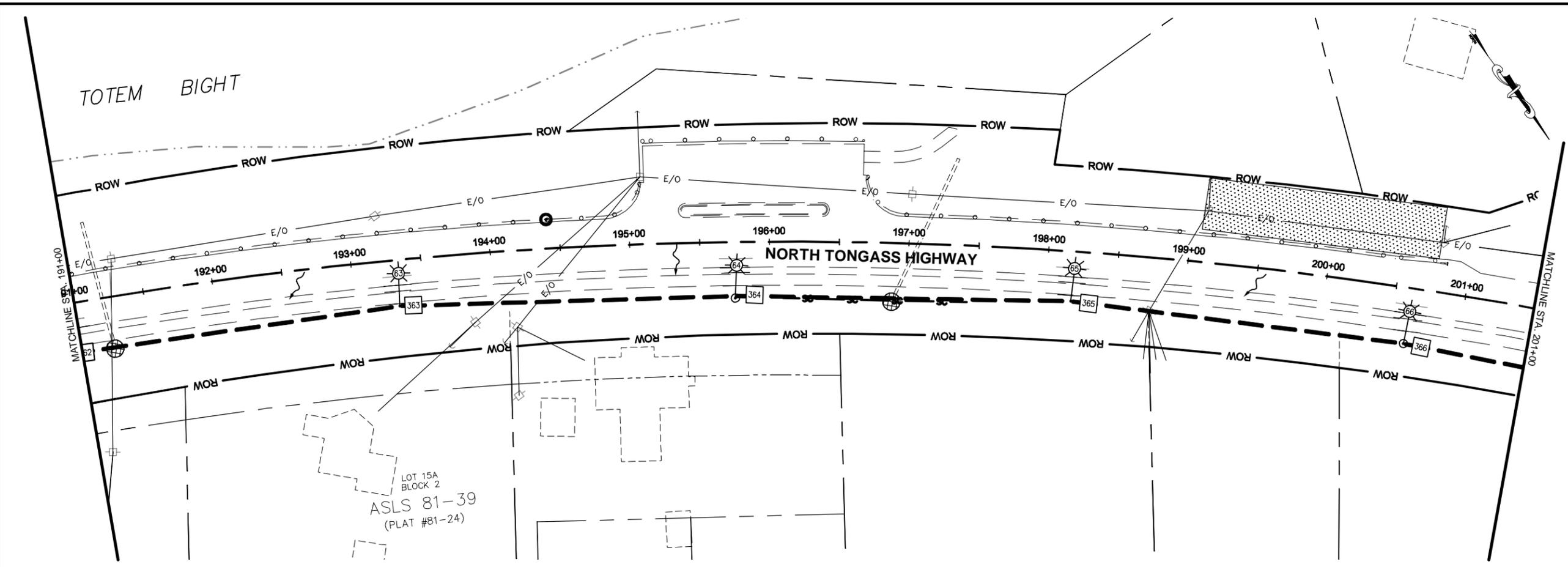
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PROJECT DESIGNATION

0920028/Z684130000

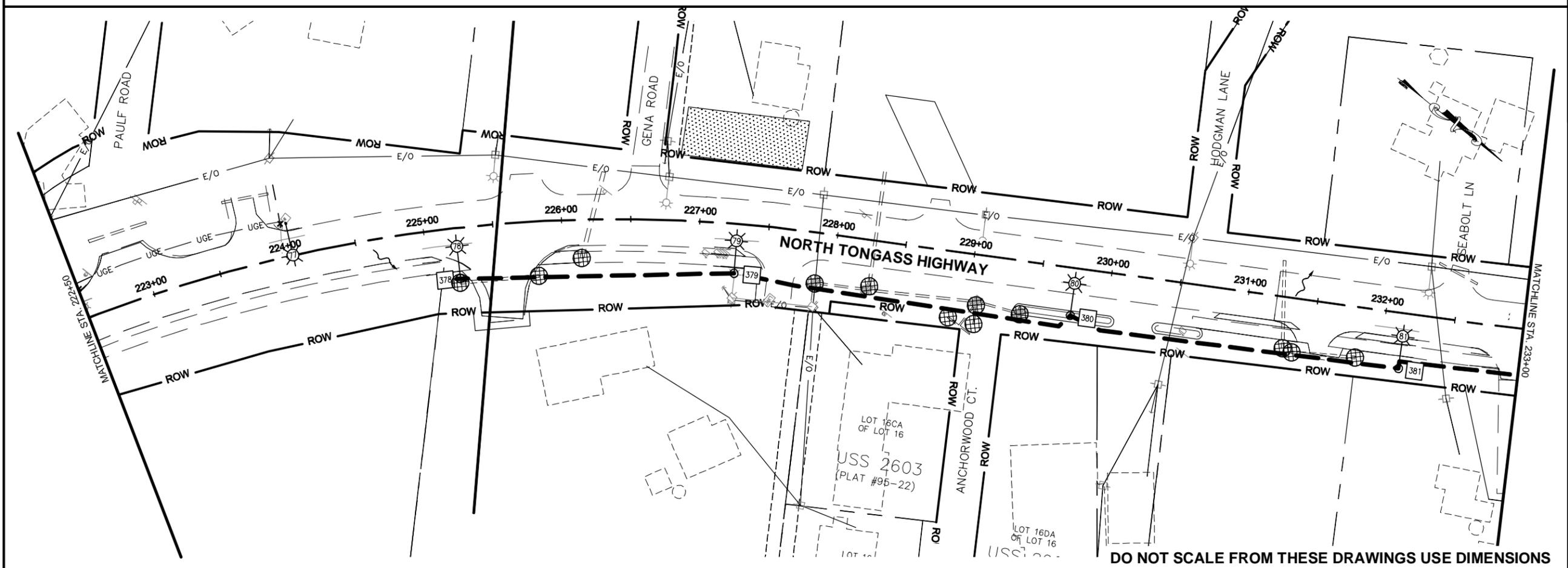
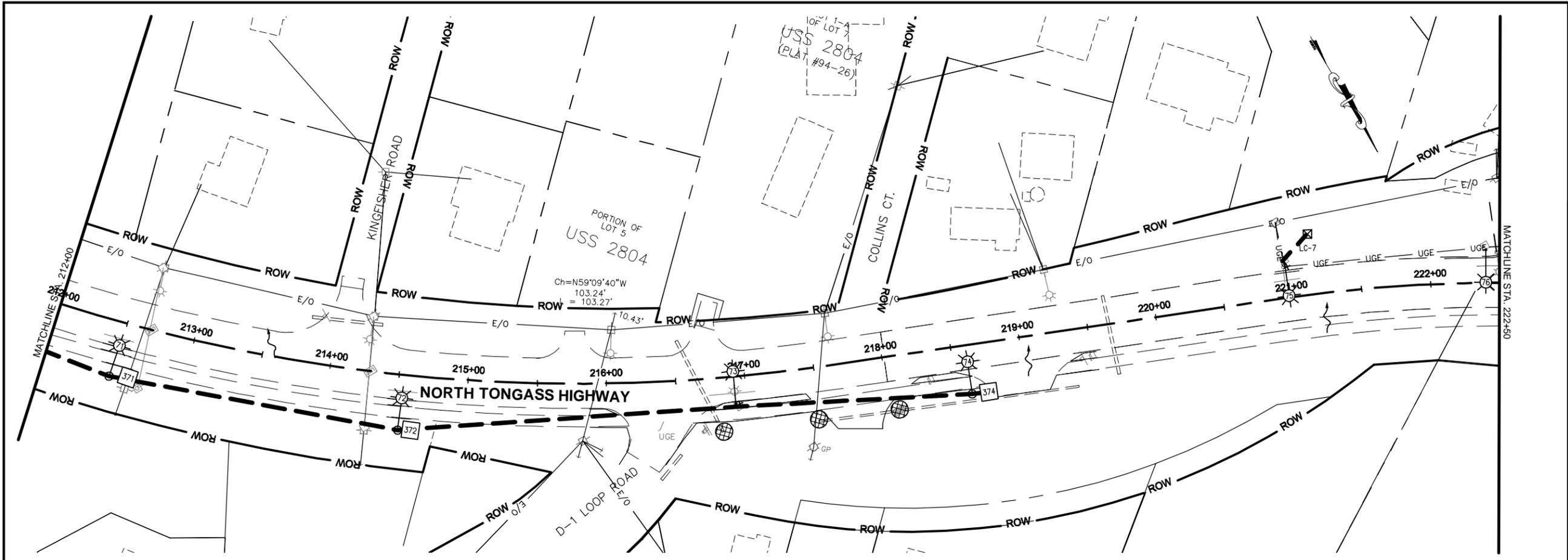
STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
P9	53



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1-Apr-16
TAB: P10

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ESCP

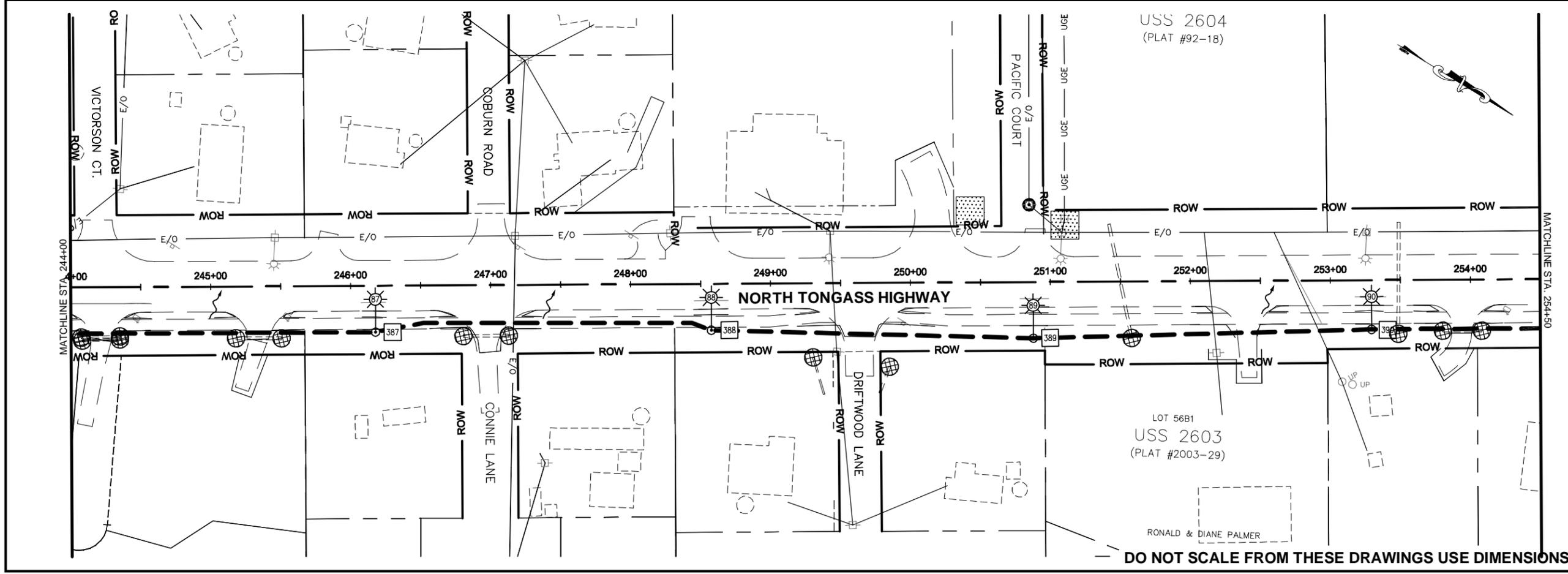
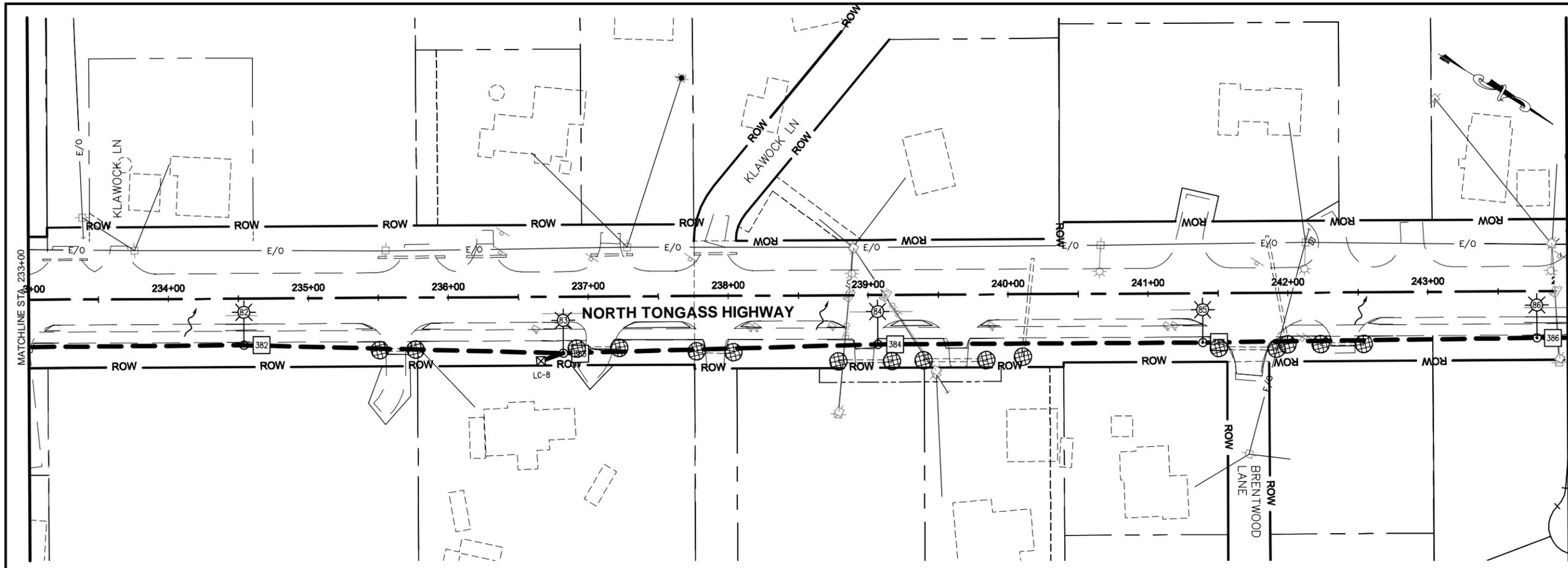
PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
P10	53

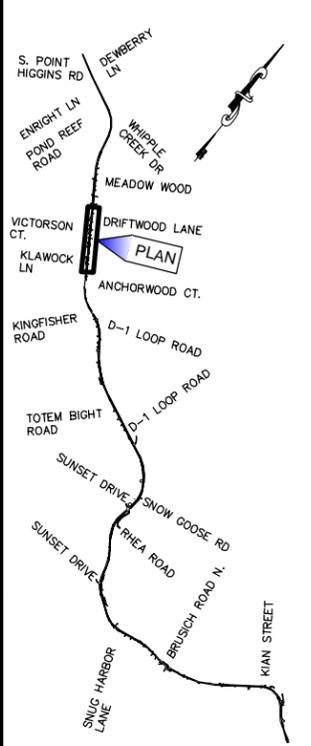
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1-Apr-16
TAB: P11

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

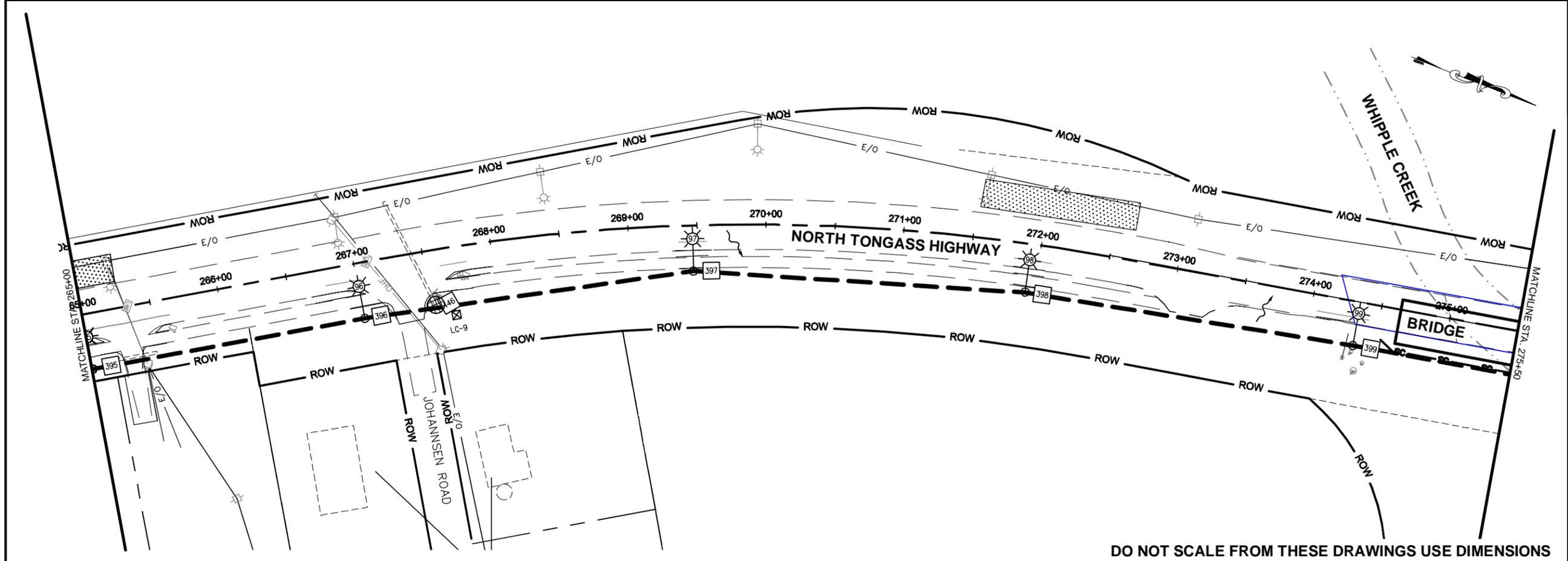
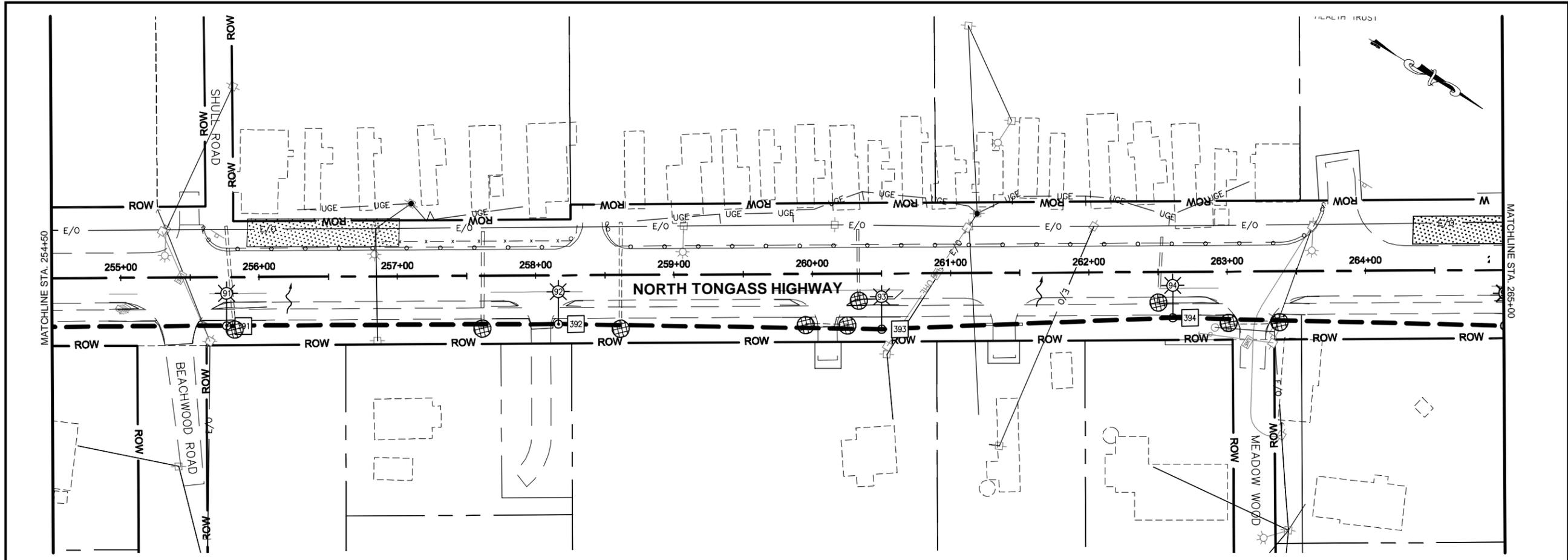
ESCP

PROJECT DESIGNATION

0920028/Z684130000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P11	53

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1-Apr-16
TAB: P12

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION

PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: L. GALBRAITH, T. GALAMBUSH

DRAWN BY: B. PADDOCK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

ESCP

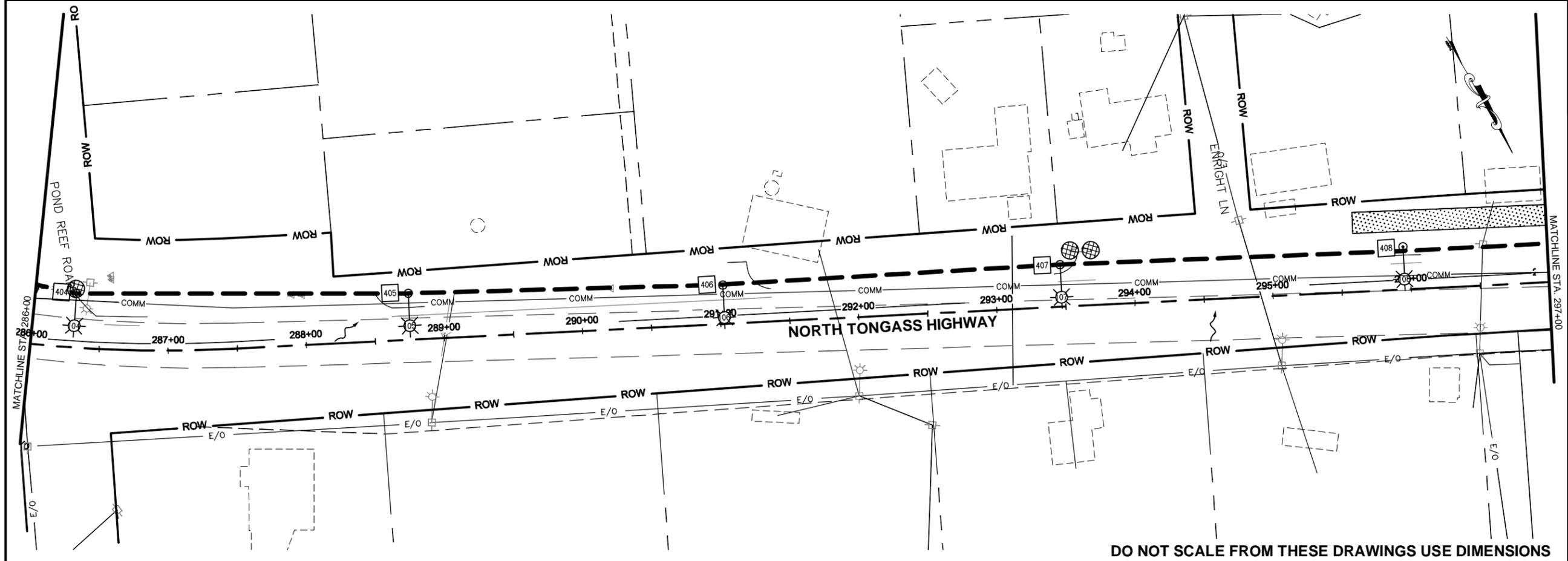
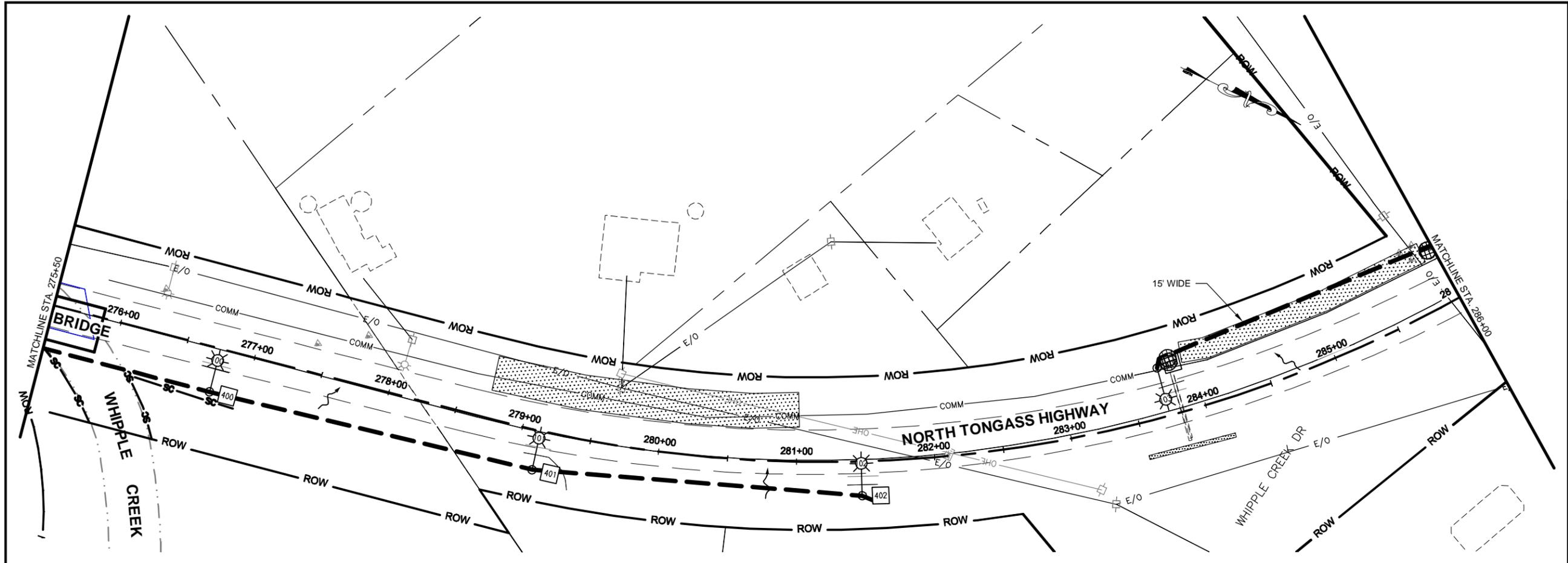
PROJECT DESIGNATION
0920028/Z684130000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
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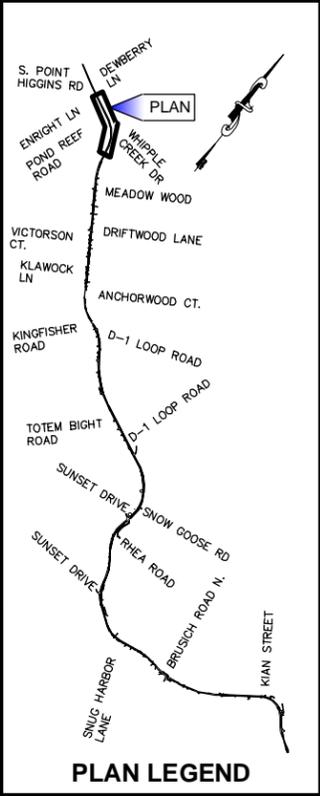
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1-Apr-16
TAB: P13

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION
KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

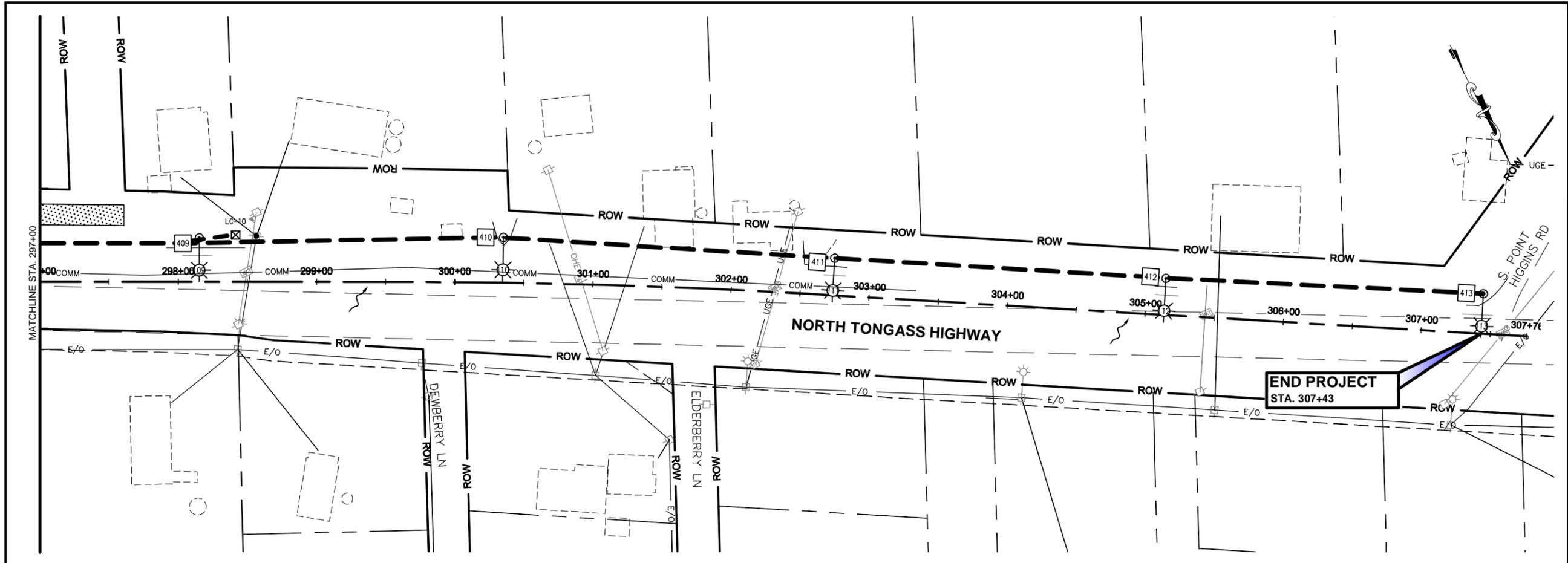
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PROJECT DESIGNATION
0920028/Z68413000

STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
P13	53

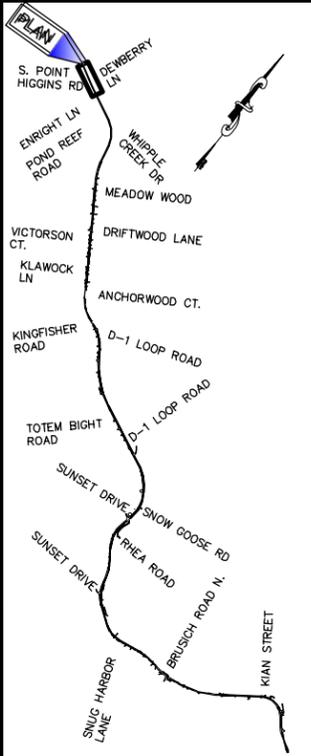
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DO NOT SCALE FROM THESE DRAWINGS USE DIMENSIONS



1-Apr-16
TAB: P14

ADDENDUM NUMBER		
ATTACHMENT NUMBER		
RECORD OF REVISIONS		
No.	DATE	DESCRIPTION



PLAN LEGEND

CHECKED BY: S. KARI

DESIGNED BY: N. STALLER, M. SPICER
DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

**KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)**

ESCP

PROJECT DESIGNATION	
0920028/Z684130000	
STATE	YEAR
ALASKA	2016
SHEET NUMBER	TOTAL SHEETS
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Traffic Control Notes:

1. A MINIMUM OF ONE LANE SHALL BE MAINTAINED AT ALL TIMES, THROUGH ALL WORK AREAS.
2. TWO LANES SHALL BE MAINTAINED AT ALL TIMES IN NON-WORK AREAS AND DURING NON-WORK HOURS.
3. TEMPORARY DRIVING LANES SHALL HAVE A MINIMUM WIDTH OF 10'-0".
4. THE LENGTH OF WORK AREA SHALL BE MINIMIZED TO AVOID EXCESSIVE TRAFFIC DELAYS AS DIRECTED BY THE ENGINEER. IN NO CASE WILL THE ENGINEER ALLOW A WORK AREA GREATER THAN ONE MILE.
5. MAX. CONE OR DRUM SPACING SHALL NOT EXCEED 45' ON TAPERS OR 90' ON TANGENTS.
6. WHEN WORKING ON TONGASS HIGHWAY SHOULDERS, THE CONTRACTOR SHALL CLOSE THE ADJACENT TRAVEL LANE.
7. IT IS THE INTENT OF THIS TRAFFIC CONTROL PLAN (TCP) TO ILLUSTRATE SOME, NOT ALL, OF THE TRAFFIC CONTROL SETUPS WHICH WILL BE REQUIRED ON THIS PROJECT. ALL TCP'S SHALL BE CREATED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL. TRAFFIC CONTROL SHALL CONFORM TO THE ALASKA TRAFFIC MANUAL AND THE MUTCD.
8. THE CONTRACTOR IS RESPONSIBLE FOR SNOW REMOVAL INSIDE THE ACTIVE WORK AREA. THIS INCLUDES REMOVING SNOWFALL AND SNOW PLOWED BY DOT&PF MAINTENANCE OF TONGASS HIGHWAY. THE ROADWAY MUST BE CLEARED UP TO THE FACE OF THE GUARDRAIL BEFORE ALLOWING TRAFFIC BACK ON THE ROAD. THE CONTRACTOR IS RESPONSIBLE FOR CLEARING SNOW FROM NEW WORK AREAS, INCLUDING SNOW BUILT-UP FROM DOT&PF MAINTENANCE OF TONGASS HIGHWAY.

Legend

- SIGN
- CONE
- DRUM
- CONCRETE BARRIER
- WATER FILLED BARRIER
- TYPE III BARRICADE
- FLAGGING STATION
- BLASTING CAP
- TEMPORARY SIGNAL
- HIGH LEVEL WARNING DEVICE

FORMULAS FOR L (TAPER LENGTH)
 40 MPH OR LESS $L = \frac{W \times S^2}{60}$
 45 MPH OR GREATER $L = W \times S$
 WHERE W = WIDTH OF OFFSET
 S = POSTED SPEED LIMIT

SPEED (MPH)	MIN MERGING TAPER LENGTH (L) IN FEET WIDTH OF OFFSET (W) IN FEET			MIN NUMBER OF DEVICES WIDTH OF OFFSET (W) IN FEET			MAX DEVICE SPACING IN FEET		BUFFER SPACE (FT)
	10'	11'	12'	10'	11'	12'	ALONG TAPER	ALONG TANGENT	
25 OR BELOW	105	115	125	6	6	6	25	50	155
30	150	165	180	6	7	7	30	60	200
35	205	225	245	7	8	8	35	70	250
40	270	295	320	8	9	9	40	80	305
45	450	495	540	11	12	13	45	90	360
50	500	550	600	11	12	13	45	90	425
55	550	605	660	11	12	13	45	90	495
60	600	660	720	11	12	13	45	90	570

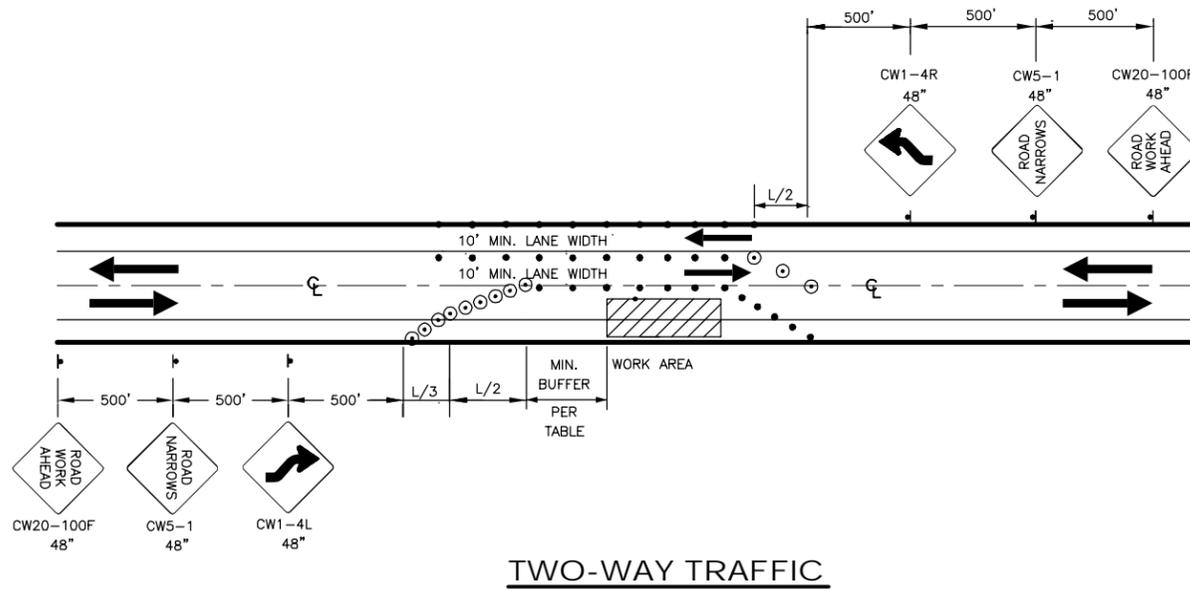
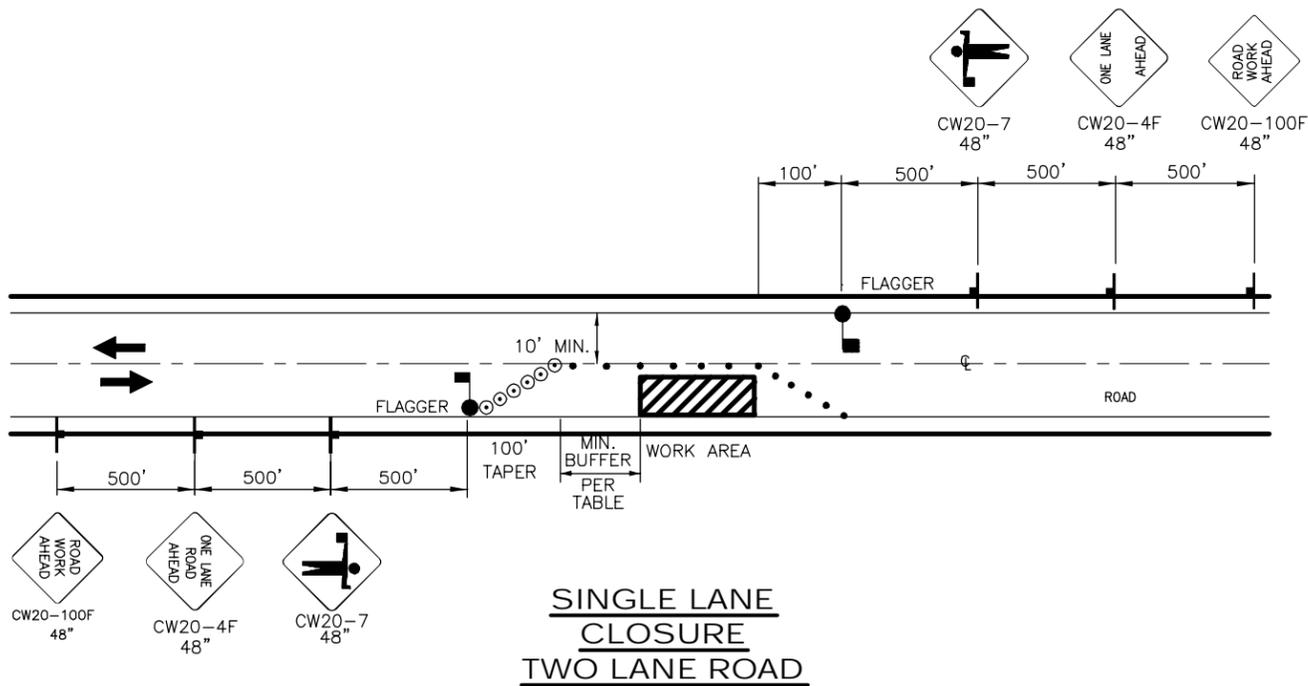
23-Mar-16
TAB: T01

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No. DATE DESCRIPTION



CHECKED BY: S. KARI



DESIGNED BY: N. STALLER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

TRAFFIC CONTROL PLAN

PROJECT DESIGNATION

0920028/Z684130000

STATE YEAR
ALASKA 2016

SHEET NUMBER TOTAL SHEETS

T1 53

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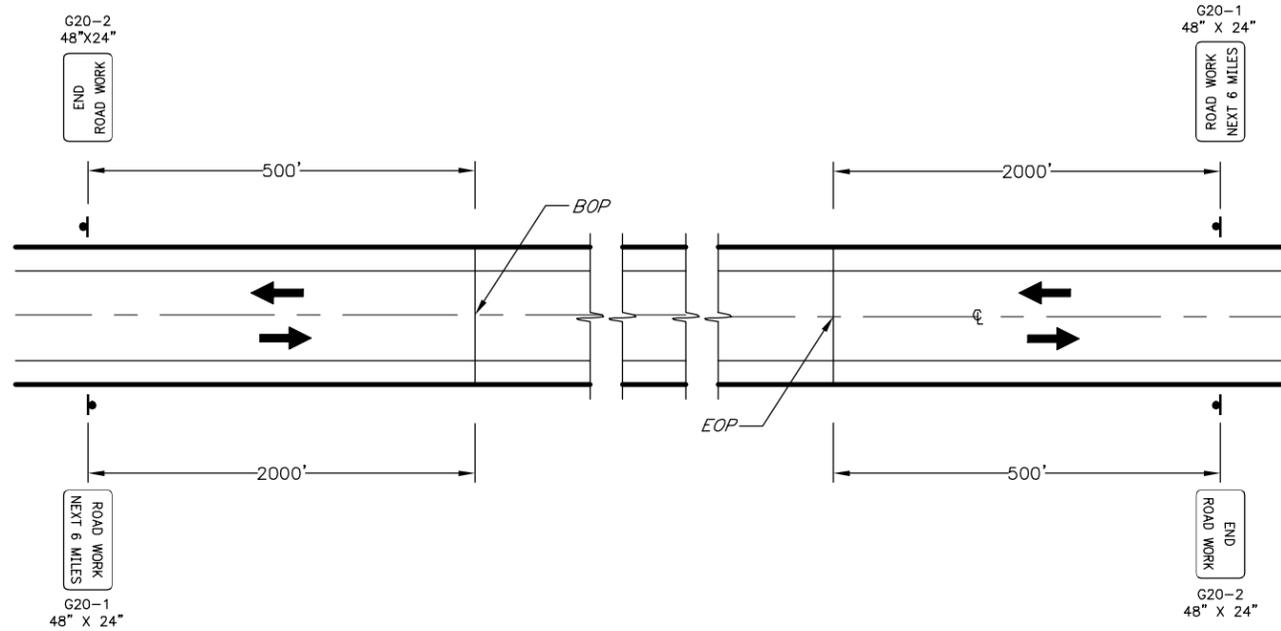
23-Mar-16
TAB: T2

ADDENDUM NUMBER

ATTACHMENT NUMBER

RECORD OF REVISIONS

No.	DATE	DESCRIPTION



PERMANENT CONSTRUCTION SIGNING

PLAN LEGEND

CHECKED BY: S. KARI



DESIGNED BY: N. STALLER

DRAWN BY: M. HIDALGO

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
& PUBLIC FACILITIES
SOUTHEAST REGION

KTN - NORTH TONGASS HWY:
ILLUMINATION UPGRADE (HSIP)

**TRAFFIC CONTROL
PLAN**

PROJECT DESIGNATION

0920028/Z684130000

STATE	YEAR
ALASKA	2016

SHEET NUMBER	TOTAL SHEETS
T2	53

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