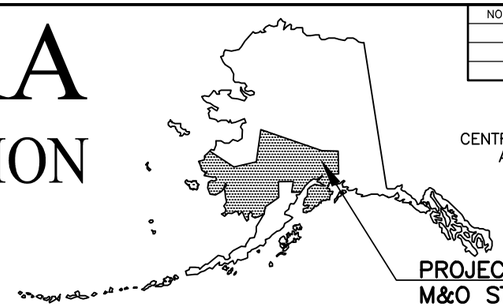
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PRKPAV2017	2017	AC1	AC5

CDS ROUTE	170000	MILEPOINT	54.52 TO 63.48
LATITUDE	62.076806	LONGITUDE	−150.020098
CDS ROUTE	170000	MILEPOINT	47.54 TO 63.48
LATITUDE	62.020642	LONGITUDE	−150.089389
CDS ROUTE	170000	MILEPOINT	63.03 TO 63.32
LATITUDE	62.130514	LONGITUDE	−150.038917

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



CENTRAL REGION
ALASKA

PROJECT LOCATION
M&O STATION: WILLOW
M&O STATION: WILLOW
M&O STATION: WILLOW

PROPOSED HIGHWAY PROJECT

PARKS HWY: MP 83-99 REHABILITATION, PEDESTRIAN, AND PASSING LANE IMPROVEMENTS CONTRACT NO. PRKPAV2017

GRADING, DRAINAGE, PAVING, SIGNING, STRIPING, AND ILLUMINATION

CONTRACT CONSISTS OF THE FOLLOWING PROJECTS:

PARKS HWY: MP 90-99 REHABILITATION
PROJECT NO. 0A41032/Z561770000

HSIP: PARKS HWY: SYSTEMIC PASSING LANES MP 83-99
PROJECT NO. 0A41037/CFHWY00127

PARKS HIGHWAY TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS
PROJECT NO. 0A4-1(030)/Z581170000

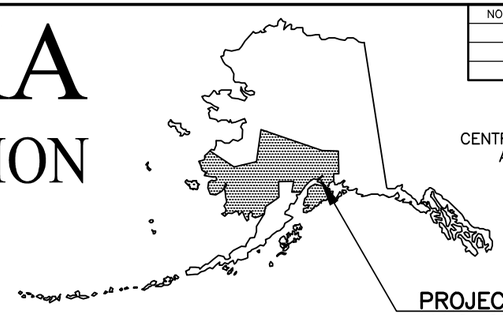
AUGUST 2017

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION		YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000		2017	A1	A5
CDS ROUTE	170000	MILEPOINT	63.03-63.32		
LATITUDE	62°07'49.85"N	LONGITUDE	150°02'20.10"W		

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

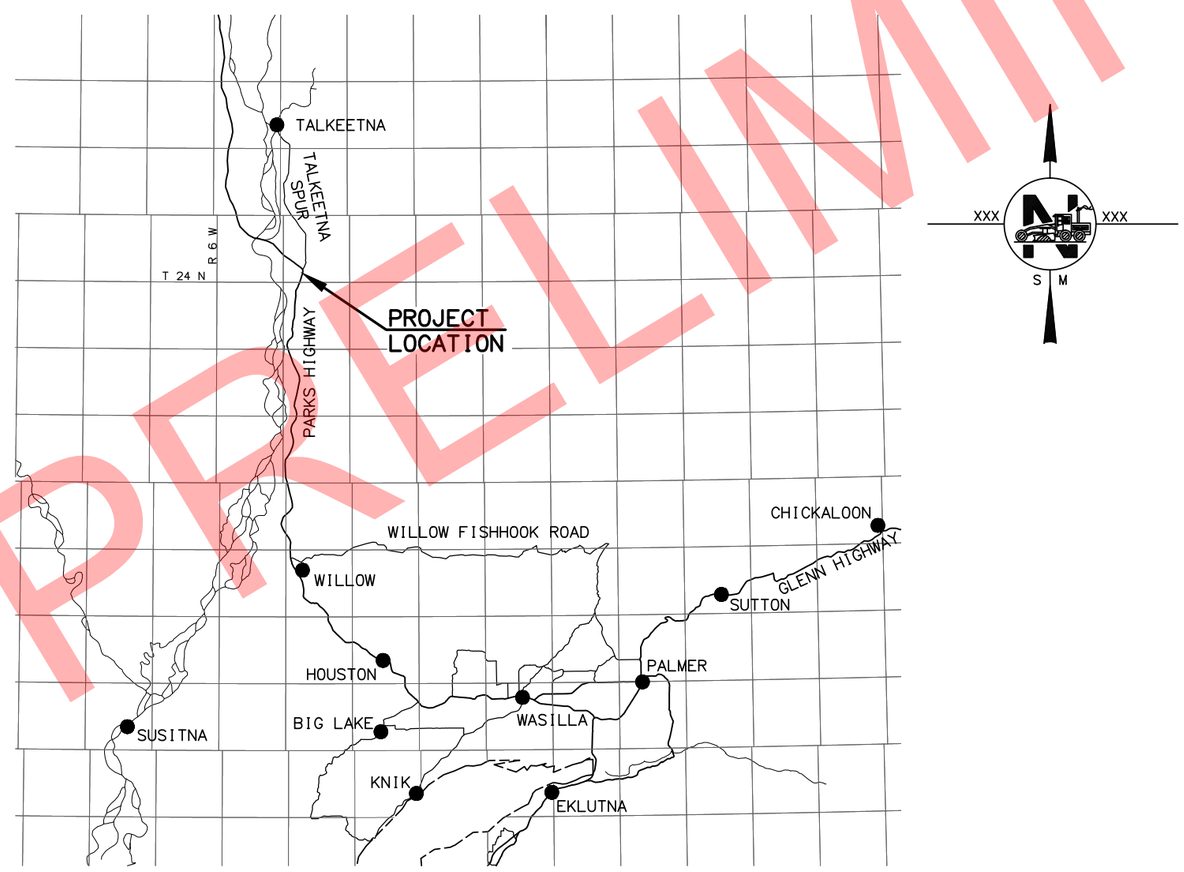


PROPOSED TRAIL PROJECT

PARKS HIGHWAY TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS PROJECT NO. 0A4-1(030)/Z581170000

GRADING, DRAINAGE, PAVING, ILLUMINATION, AND STRIPING

PROJECT SUMMARY		
ROADWAY	WIDTH	LENGTH
PARKS PATHWAY	10 FT	0.40 MILES



AUGUST 2017

PLANS DEVELOPED BY: CRW ENGINEERING GROUP, LLC
ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503
(907) 562-3252 #AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
4111 AVIATION AVENUE, ANCHORAGE, AK 99502
(907)269-0590

APPROVED:

REGIONAL PRECONSTRUCTION ENGINEER DATE

CONCUR:

DIRECTOR, DESIGN & CONSTRUCTION DATE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	A2	A5

GENERAL NOTES:

1. ALL CONSTRUCTION WILL BE CONTAINED WITHIN THE RIGHT-OF-WAY OR PROJECT CONSTRUCTION EASEMENTS.
2. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.
3. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW, OR ALTERNATE METHOD APPROVED BY THE ENGINEER.
4. MATCH EXISTING SUPERELEVATION AND TRANSITIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. PLACE 4" TOPSOIL AND SEED ANY AREAS WITHIN THE RIGHT-OF-WAY DISTURBED BY CONSTRUCTION, OR AS DIRECTED BY THE ENGINEER.
6. CLEARING LIMITS SHALL EXTEND:
   a. TO A POINT 10 FEET BEYOND THE SLOPE CATCH OR THE ROW WHICHEVER IS LESS.
   b. TO THE EASTERN ROW LINE WHEN THE PATHWAY IS ADJACENT TO THE ROW.
   c. AS NEEDED FOR CONSTRUCTION OF THE TEMPORARY DIVERSION.
   d. AS DIRECTED BY THE ENGINEER.
7. GRUBBING SHALL BE PERFORMED ON ALL EXISTING FORESLOPES AND UNDER EMBANKMENT BEFORE CONSTRUCTING WIDENED EMBANKMENT. GRUBBING BEYOND THE SLOPE CATCH SHALL NOT BE PERFORMED IN WETLAND AREAS. OTHERWISE GRUBBING LIMITS SHALL MATCH CLEARING LIMITS.

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

C-04.12, C-05.20,
D-01.02, D-04.21, D-06.10, D-20.03,
D-22.01
F-01.02
I-21.03
L-30.10
M-23.12, M-20.13
S-00.11, S-05.01, S-30.03, S-31.01
T-20.03, T-21.03, T-22.03

*IN THE EVENT OF CONFLICTS, REGIONAL DRAWINGS SUPERCEDE STANDARD DRAWINGS.

THE FOLLOWING REGIONAL DRAWINGS APPLY TO THIS PROJECT:

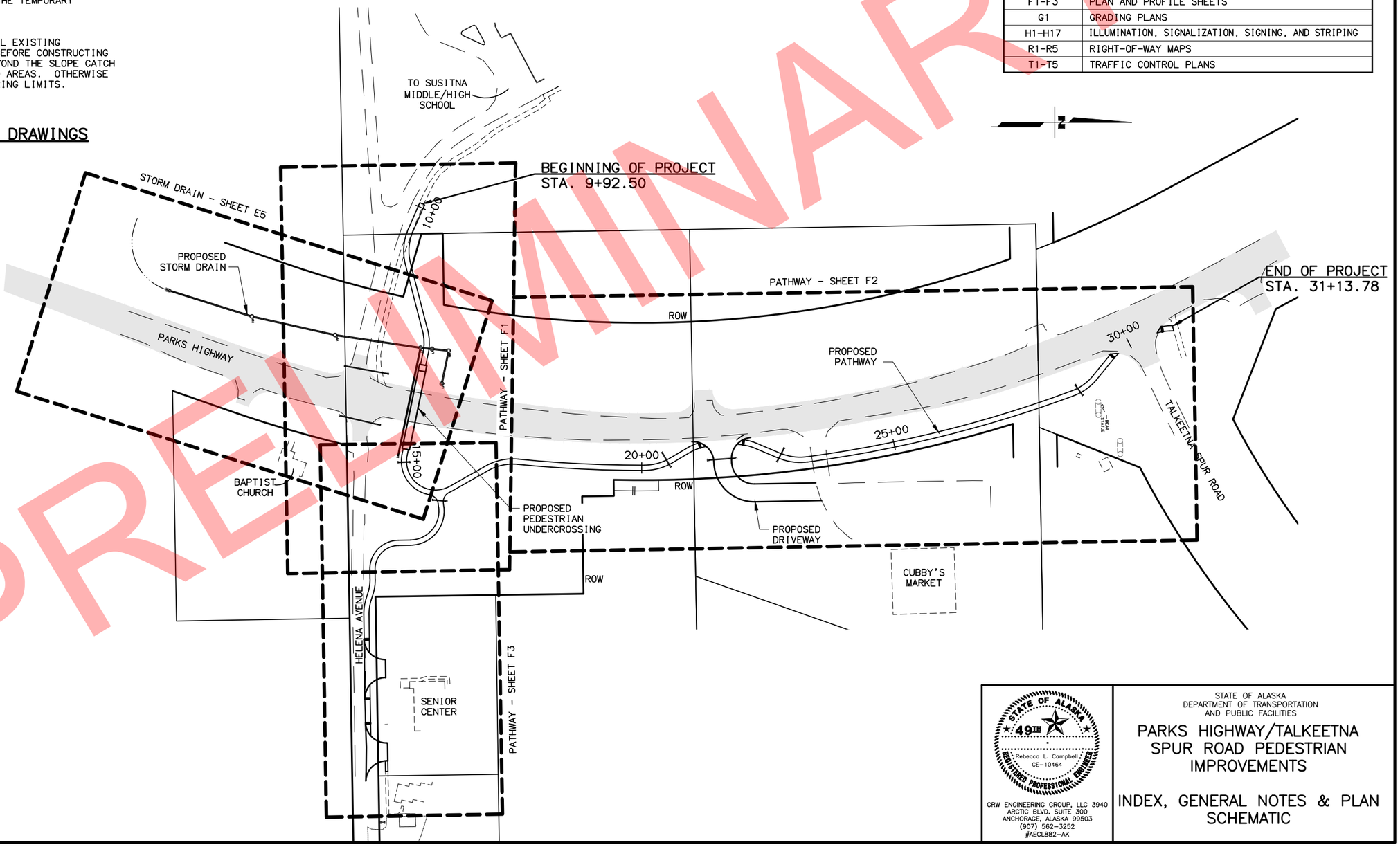
CR-T-01.01, CR-T-04.01, CR-T-25.10

SPECIFICATION:

CONSTRUCT THE IMPROVEMENTS COVERED BY THESE PLANS IN ACCORDANCE WITH THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2015 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS.

INDEX

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	GENERAL NOTES AND PLAN SCHEMATIC
A3	LEGEND AND ABBREVIATIONS
A4-A5	SURVEY CONTROL
B1	TYPICAL SECTIONS
C1	ESTIMATE OF QUANTITIES
D1-D3	SUMMARY TABLES
E1-E9	DETAIL SHEETS
F1-F3	PLAN AND PROFILE SHEETS
G1	GRADING PLANS
H1-H17	ILLUMINATION, SIGNALIZATION, SIGNING, AND STRIPING
R1-R5	RIGHT-OF-WAY MAPS
T1-T5	TRAFFIC CONTROL PLANS



STATE OF ALASKA
49TH
REGISTERED PROFESSIONAL ENGINEER
Rebecca L. Campbell
CE-10464

CRW ENGINEERING GROUP, LLC 3940
ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
(907) 562-3252
#AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

INDEX, GENERAL NOTES & PLAN SCHEMATIC

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	A3	A5

DRAFTED -- CHECKED -- DESIGNED -- LAYOUT DATE/TIME FILE

UTILITIES

	EXISTING	PROPOSED
PIPELINES:		
STORM DRAIN STRUCTURE AND PIPE NUMBERS, APPLICABLE IF SHOWN	S1-1, S1-2, P1-1, P1-2	
STORM DRAIN	SD	
MANHOLE STORM DRAIN	SD	SD
CURB INLET CATCH BASIN		
FIELD INLET CATCH BASIN	FI	FI
PIPE CULVERT w/ END SECTION		
CLEANOUT	CO	CO
SANITARY SEWER	SS	SS
MANHOLE SANITARY SEWER	SS	SS
SEPTIC VENTS	S	
WATER	W	W
FIRE HYDRANT		
WELL	W	
VALVE OR RISER		
NATURAL GAS	G	G
OIL OR GASOLINE PIPELINE	O	O
ELECTRIC (OVERHEAD)	OE	OE
ELECTRIC (DIRECT BURY)	UE	
ELECTRIC (OVERHEAD)	OE&OT	
UTILITY POLE		
UTILITY POLE WITH LUMINAIRE		
GUY POLE	GP	
GUY WIRE ANCHOR		
TRANSMISSION TOWER [WOOD]		
TRANSMISSION TOWER [STEEL]		
ELECTRICAL PEDESTAL	E	
ELECTRICAL TRANSFORMER	E	
ELECTRIC METER	E	
ELECTRICAL OUTLET	ET	
ELECTRIC MANHOLE	E	
TELEPHONE (OVERHEAD)	OT	
TELEPHONE (DIRECT BURY)	UT	
TELEPHONE (DIRECT BURY)	UT&TV	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	T	
FIBER OPTIC	FO	
FIBER OPTIC MANHOLE	FO	
CABLE TV (OVERHEAD)	OTV	
CABLE TV (DIRECT BURY)	UTV	
CABLE T.V. PEDESTAL	TV	
SATELLITE DISH		
U.G. DUCT (E, T, FO)		

UTILITIES

	EXISTING	PROPOSED
ELECTROLIER		
HIGHTOWER		
SIGNAL POLE WITH MAST		
PEDESTRIAN PUSH BUTTON		
RURAL BEACON		
SCHOOL ZONE BEACON		

RIGHT OF WAY

	EXISTING	PROPOSED
PRIMARY CENTERLINE MONUMENT		
SECONDARY CENTERLINE MONUMENT		
PROJECT RIGHT-OF-WAY LINES	ROW	
CONTROLLED ACCESS LINE	C/A	
TEMPORARY CONSTRUCTION EASEMENT/PERMIT		
PROJECT CENTERLINE	27+00	
RAILROAD CENTERLINE		

EXISTING TOPOGRAPHY

CONIFER TREE OR TREES	
DECIDUOUS TREE OR TREES	
SHRUB OR SHRUBS	
WETLANDS	
CREEK	
RIVER	
LAKE / POND	LAKE, POND

EXISTING/PROPOSED

DRAINAGE FLOW	
CONTOURS - MAJOR	515
CONTOURS - MINOR	

MISCELLANEOUS

	EXISTING	PROPOSED
BUILDING		
TANKS		
ABOVE GROUND		
UNDERGROUND	U	
PRIVATE SIGN		
POST/BOLLARDS		
MAILBOX	MB	MB
TRAFFIC SIGN		
TRAFFIC SIGN POST #		##
VENT		

ROADWAY

	EXISTING	PROPOSED
ROADWAY OBLITERATION		
LIMIT OF CUT SLOPE		
LIMIT OF FILL SLOPE		
EDGE OF PAVEMENT		
CONCRETE CURB		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
SIDEWALK		
CURB RAMPS		
PARALLEL CURB RAMP		
PERPENDICULAR CURB RAMP		
MID-BLOCK CURB RAMP		
UNIDIRECTIONAL CURB RAMP		
DETECTABLE WARNING TILES		
DRIVEWAY APPROACH		
GRAVEL EDGE		
PATH / TRAIL		
BRIDGE		
TUNNEL		
NOISE BARRIER	X X	X X
FENCE	X X	X X
RETAINING WALL		
HEAD & WINGWALLS		
GUARDRAIL		
END SECTION		
PARALLEL GUARDRAIL SECTION		
SPECIAL DITCH		
BOTTOM OF DITCH		
RIPRAP/DITCH LINING		
BOULDER OR BOULDERS		

ABBREVIATIONS:

AC = ASPHALT CONCRETE
A.D. = ALGEBRAIC DIFFERENCE
DOT&PF = ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
APX./APPROX = APPROXIMATE
BM = BENCH MARK
BOP = BOTTOM OF PIPE
CB = CATCH BASIN
CL = CENTERLINE
DIA = DIAMETER
DW = DETECTABLE WARNING
E = EAST
ELEC = ELECTRICAL
ELEV. = ELEVATION
EOG = EDGE OF GRAVEL
EOP = EDGE OF PAVEMENT
E.O.S. = END OF SHOULDER
ESMT = EASEMENT
FT = FEET
F&I = FURNISH & INSTALL
GB = GRADE BREAK
GS = GRAVITY SEWER
GV = GATE VALVE
HWY = HIGHWAY
INV = INVERT
LF = LINEAR FEET
LT = LEFT
MAX = MAXIMUM
MH = MANHOLE
MIN = MINIMUM
N = NORTH
N.T.S. = NOT TO SCALE
N/A = NOT APPLICABLE
OG = ORIGINAL GROUND (ELEV.)
PC = POINT OF CURVATURE
PCC = PORTLAND CEMENT CONCRETE
PI = POINT OF INTERSECTION
PL = PROPERTY LINE
PP = POWER POLE
PT = POINT OF TANGENCY
P.U.C. = PEDESTRIAN UNDERCROSSING
PVC = POINT OF VERTICAL CURVATURE
PVI = POINT OF VERTICAL INTERSECTION
PVT = POINT OF VERTICAL TANGENCY
R = RADIUS (LENGTH)
RP = RADIUS POINT
RT = RIGHT
ROW = RIGHT-OF-WAY
SD = STORM DRAIN
SF = SQUARE FEET
SHLDR = SHOULDER
STA. = STATION
T = TANGENT (LENGTH)
TBM = TEMPORARY BENCHMARK
TCP = TEMPORARY CONSTRUCTION PERMIT
TELE = TELEPHONE
TYP = TYPICAL
VC = VERTICAL CURVE
VPC = VERTICAL POINT OF CURVATURE
VPI = VERTICAL POINT OF INTERSECTION
VPT = VERTICAL POINT OF TANGENT
W = WEST
XING = CROSSING

STATE OF ALASKA 49TH
Rebecca L. Campbell
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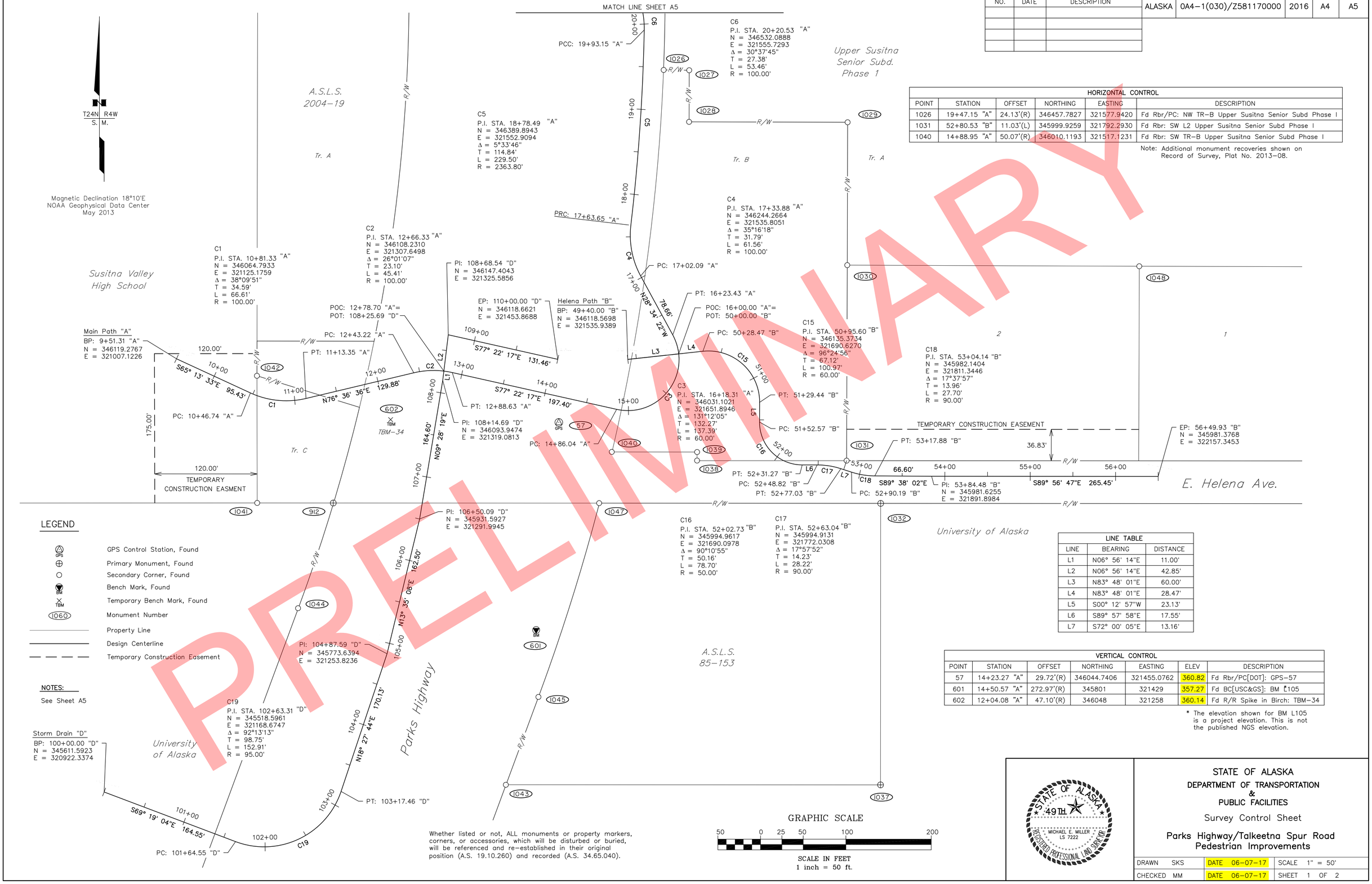
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

LEGEND & ABBREVIATIONS

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	0A4-1(030)/Z581170000	2016	A4	A5



HORIZONTAL CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
1026	19+47.15 "A"	24.13'(R)	346457.7827	321577.9420	Fd Rbr/PC: NW TR-B Upper Susitna Senior Subd Phase I
1031	52+80.53 "B"	11.03'(L)	345999.9259	321792.2930	Fd Rbr: SW L2 Upper Susitna Senior Subd Phase I
1040	14+88.95 "A"	50.07'(R)	346010.1193	321517.1231	Fd Rbr: SW TR-B Upper Susitna Senior Subd Phase I

Note: Additional monument recoveries shown on Record of Survey, Plat No. 2013-08.

LINE TABLE

LINE	BEARING	DISTANCE
L1	N06° 56' 14"E	11.00'
L2	N06° 56' 14"E	42.85'
L3	N83° 48' 01"E	60.00'
L4	N83° 48' 01"E	28.47'
L5	S00° 12' 57"W	23.13'
L6	S89° 57' 58"E	17.55'
L7	S72° 00' 05"E	13.16'

VERTICAL CONTROL

POINT	STATION	OFFSET	NORTHING	EASTING	ELEV	DESCRIPTION
57	14+23.27 "A"	29.72'(R)	346044.7406	321455.0762	360.82	Fd Rbr/PC[DOT]: GPS-57
601	14+50.57 "A"	272.97'(R)	345801	321429	357.27	Fd BC[USC&GS]: BM L105
602	12+04.08 "A"	47.10'(R)	346048	321258	360.14	Fd R/R Spike in Birch: TBM-34

* The elevation shown for BM L105 is a project elevation. This is not the published NGS elevation.

LEGEND

- GPS Control Station, Found
- Primary Monument, Found
- Secondary Corner, Found
- Bench Mark, Found
- Temporary Bench Mark, Found
- (1060) Monument Number
- Property Line
- Design Centerline
- Temporary Construction Easement

NOTES:

See Sheet A5

Storm Drain "D"
BP: 100+00.00 "D"
N = 345611.5923
E = 320922.3374

Whether listed or not, ALL monuments or property markers, corners, or accessories, which will be disturbed or buried, will be referenced and re-established in their original position (A.S. 19.10.260) and recorded (A.S. 34.65.040).

GRAPHIC SCALE

50 0 25 50 100 200

SCALE IN FEET
1 inch = 50 ft.

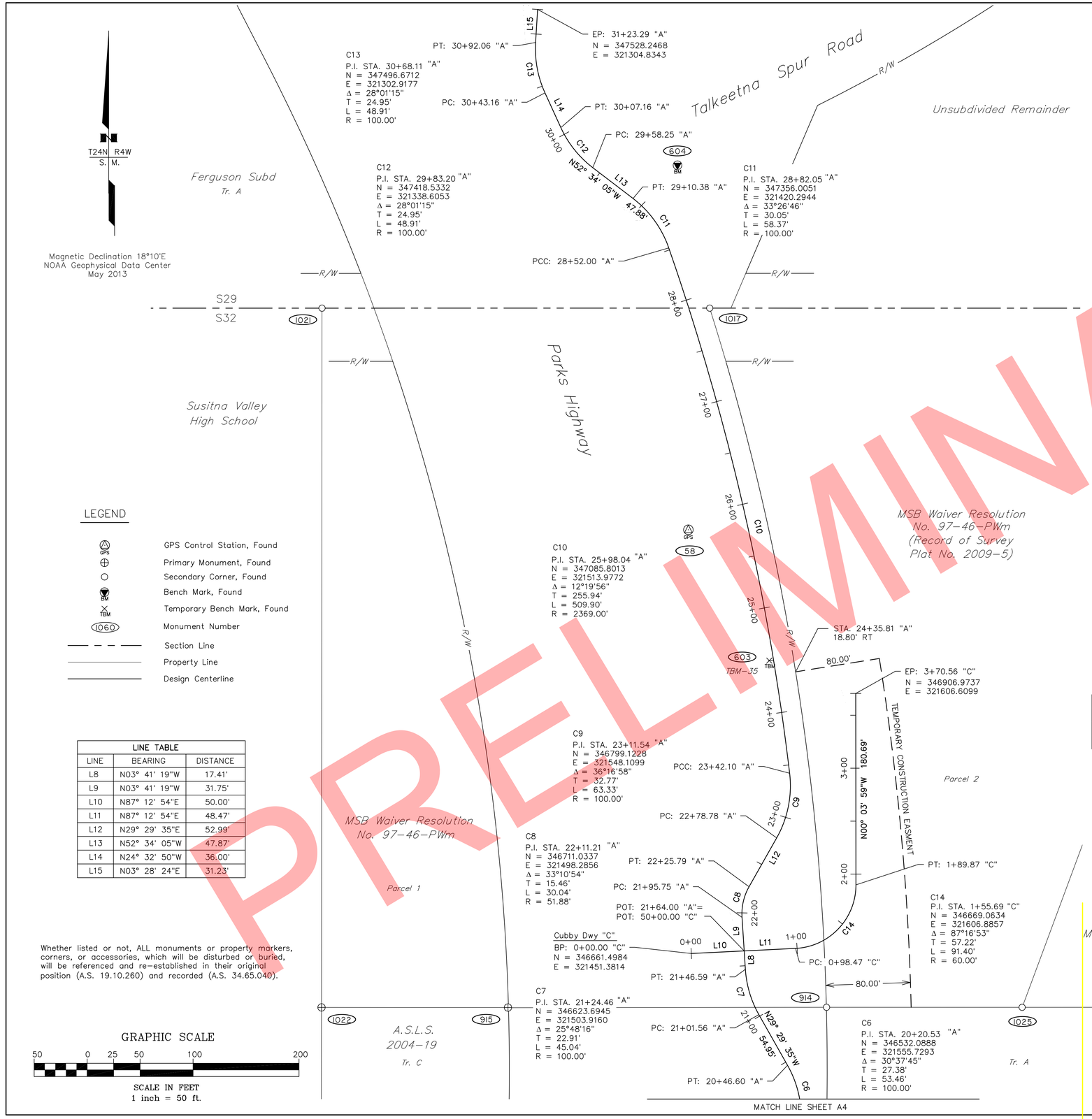
STATE OF ALASKA 49TH
MICHAEL E. MILLER LS 7222
RECORDED PROFESSIONAL LAND SURVEYOR

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

Survey Control Sheet

Parks Highway/Talkeetna Spur Road
Pedestrian Improvements

DRAWN SKS	DATE 06-07-17	SCALE 1" = 50'	
CHECKED MM	DATE 06-07-17	SHEET 1 OF 2	



LINE TABLE		
LINE	BEARING	DISTANCE
L8	N03° 41' 19"W	17.41'
L9	N03° 41' 19"W	31.75'
L10	N87° 12' 54"E	50.00'
L11	N87° 12' 54"E	48.47'
L12	N29° 29' 35"E	52.99'
L13	N52° 34' 05"W	47.87'
L14	N24° 32' 50"W	36.00'
L15	N03° 28' 24"E	31.23'

Whether listed or not, ALL monuments or property markers, corners, or accessories, which will be disturbed or buried, will be referenced and re-established in their original position (A.S. 19.10.260) and recorded (A.S. 34.65.040).

REVISIONS			STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
NO.	DATE	DESCRIPTION					
			ALASKA	0A4-1(030)/Z581170000	2016	A5	A5

HORIZONTAL CONTROL STATEMENT

Basis of Coordinates:
This project is located entirely within the Matanuska-Susitna Valley (SV-2) adjustment, a U.S. Survey Foot local surface grid coordinate system developed by the Alaska Department of Transportation & Public Facilities. The Basis of Coordinates is GPS Control Station 58, a brass disk having SV-2 coordinate values of 347,061.5287 N and 321,448.6352 E as taken from the Survey Control Sheet AKSAS Project No. 58298, Susitna Valley High School Zone. Bearings are grid bearings as determined by GPS observations recorded May 15, 2013 through May 19, 2013 using Topcon dual frequency GPS receivers.

The Basis of Bearings is a local plane bearing between GPS Control Station 58 and GPS Control Station 57. GPS Control Station 57 bears S 0°21'47" E a distance of 1016.81 U.S. Survey Feet from GPS Control Station 58. GPS Control Station 57 has SV-2 coordinates of 346,044.7406 N, and 321,455.0762 E.

Transformation Parameters:
The conversion from the local coordinate system to Alaska State Plane coordinate system, Zone 4, NAD83(1992): translate the local coordinates using +2,624,987.4040 feet North and +1,312,507.1407 feet East; then scale resulting coordinates using a scale factor of 0.9998907818.

The conversion from Alaska State Plane coordinate system, Zone 4, NAD1983(1992) to local surface grid coordinates; scale the State Plane coordinates using a scale factor of 1.0001092301; then translate the resulting coordinates using −2,624,987.4040 feet North and −1,312,507.1407 feet East.

VERTICAL CONTROL STATEMENT

Elevations shown are MSL NGVD1929 as shifted −5.42' from NAVD88.

A shift of −5.42' was applied to the original NAVD88 elevations for this survey in order to match the Parks Hwy MP 90-99 project that will be constructed simultaneously.

The original survey was NAVD88 orthometric heights expressed in U.S. Feet. The Basis of Elevations is GPS Control Station 57, having a value of 366.24 U.S. Feet (NAVD88) and a value of 360.82 U.S. Feet (NGVD1929). The NAVD88 orthometric height for this point is an OPUS derived elevation taken from the Survey Control Sheet AKSAS Project No. 58298, Susitna Valley High School Zone. The elevations for all other listed control points were determined by differential leveling from GPS Control Station 57.

A Topcon DL-502 digital level was used for differential leveling on this project. Levels were run from control points 57 and 58, through TBM-35, USC&GS BM L105, TBM-34 and BM 2001-12. The level loop closed within Third-order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

NOTES:

1. The information shown hereon is based on a field survey performed by McClintock Land Associates, Inc. from May 15, 2013 through August 23, 2013. Background information depicted is shown for orientation only and should not be used for any other purpose.

2. Primary horizontal control was established using Static GPS techniques with Topcon dual frequency receivers. Vectors were adjusted by a simultaneous least squares adjustment using Topcon Tools version 8.2. All recovered monuments were located using Static GPS techniques for positioning. This survey meets or exceeds 1:10,000 closure.

3. The road right-of-way and property lines are shown for background and orientation only, but no determination has been made to ensure the boundaries are depicted in the proper location. PLSS monuments shown are in their true location related to the project coordinate system. There was no attempt to rectify the background information such that monuments appear to fall in the proper relationship to section and subdivision of section lines.

4. All dimensions and coordinates shown are in U.S. Survey Feet unless otherwise noted.

5. Elevations shown on this Survey Control Sheet are NGVD1929 elevations. This survey was originally done holding NAVD88 elevations, as shown on Survey Control Diagram 2013-8, Talkeetna Recording District. A shift of −5.42' was applied in order to match other Parks Highway projects in this area.

HORIZONTAL CONTROL					
POINT	STATION	OFFSET	NORTHING	EASTING	DESCRIPTION
914	20+76.17 "A"	59.01'(R)	346610.7048	321579.0543	Fd Rbr/AC[8132-S]: NW TR-A Upper Susitna Senior Subd Phase I
1017	27+86.14 "A"	18.81'(R)	347270.7680	321468.7833	Fd Rbr: NW Parcel 2 MSB Waiver Res 97-46-PWm

Note: Additional monument recoveries shown on Record of Survey, Plat No. 2013-08.

VERTICAL CONTROL						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEV	DESCRIPTION
58	25+87.83 "A"	55.32'(L)	347061.5287	321448.6352	368.22	Fd Rbr/PC[DOT]: GPS-58
603	24+50.20 "A"	4.07'(L)	346938	321525	366.61	Fd R/R Spike in Birch: TBM-35
604	29+00.96 "A"	51.10'(R)	347406	321438	367.11	Fd AC[4469-S]: DOT BM 2001-12 *

* BM 2001-12 was set by Mullikin Surveys in 2001 as part of the Talkeetna Spur Pathway project; refer to Page 17, Field Book 2001.04.02. The elevation shown is a project elevation established this survey.

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

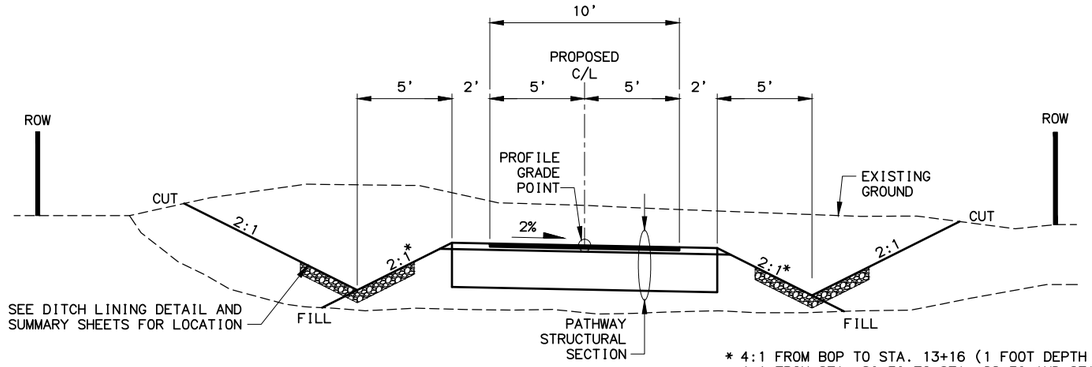
Survey Control Sheet

Parks Highway/Talkeetna Spur Road
Pedestrian Improvements

STATE OF ALASKA 49TH
MICHAEL E. MILLER
LS 7222
REGISTERED PROFESSIONAL LAND SURVEYOR

DRAWN SKS	DATE 06-07-17	SCALE 1" = 50'	
CHECKED MM	DATE 06-07-17	SHEET 2 OF 2	

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	B1	B1



PARKS PATHWAY

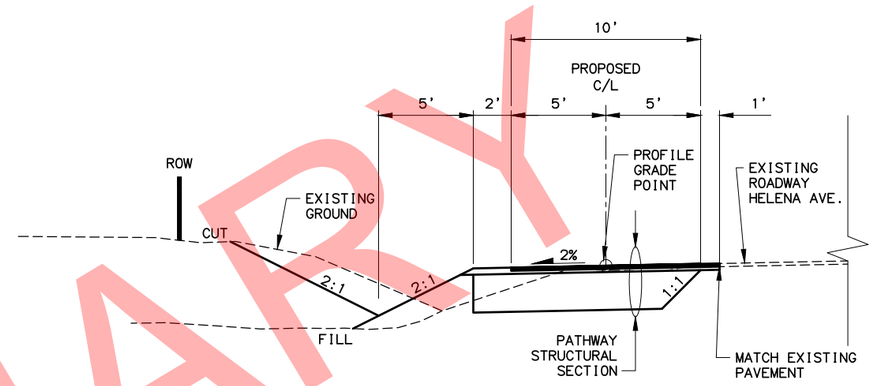
BOP TO STA. 13+20.84
STA. 14+84.84 TO EOP

HELENA PATHWAY

STA. 50+05 TO 53+87.23

* 4:1 FROM BOP TO STA. 13+16 (1 FOOT DEPTH DITCH)
4:1 FROM STA. 20+50 TO STA. 22+50 AND STA. 29+50 TO EOP

** SEE SHEET E1 FOR PARK PATHWAY SECTION FROM STA 13+20.84 TO STA 14+84.84

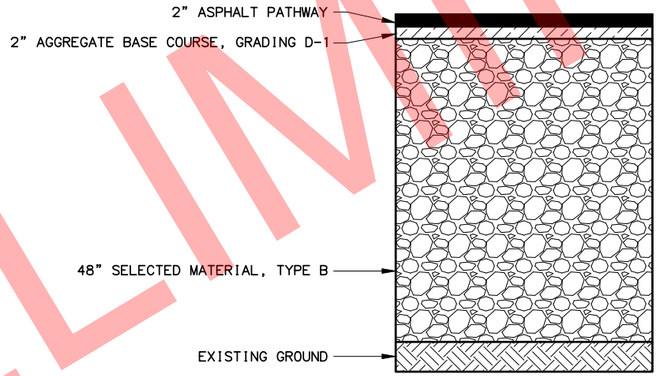


HELENA ATTACHED PATHWAY

STA. 54+59.07 TO 55+43.21

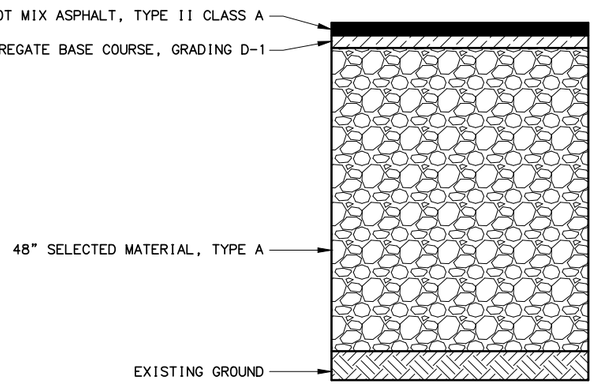
PATHWAY STRUCTURAL SECTION

PARKS PATHWAY STA. 10+50 TO STA. 18+25, STA 29+50 TO EOP AND HELENA PATHWAY STA.50+05 TO STA. 53+87.23; STA 54+59.07 TO 55+43.21



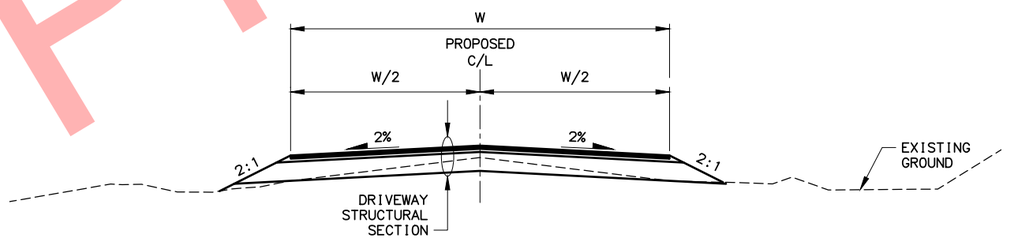
PATHWAY STRUCTURAL SECTION

PARKS PATHWAY BOP TO STA. 10+50 AND STA. 18+25 TO STA. 29+50



PAVED DRIVEWAY STRUCTURAL SECTION

* USE 2" ASPHALT PATHWAY FOR SENIOR CENTER DRIVEWAYS



PAVED DRIVEWAYS

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

TYPICAL SECTIONS

FILE [J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 B1-B2 TYPICALS.DWG] DATE/TIME [6/8/2017 11:41 AM] LAYOUT [B1] DESIGNED [RLC] CHECKED [SWB] DRAFTED [KB]

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	C1	C1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL
201(1A)	CLEARING	ACRE	3
201(2B)	GRUBBING	L.S.	ALL REQUIRED
202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	L.S.	ALL REQUIRED
202(2)	REMOVAL OF PAVEMENT	SQ. YD.	3,600
202(4)	REMOVAL OF CULVERT PIPE	LF	176
202(11)	MULTIPLE MAIL BOX INSTALLATION	EACH	3
203(3)	UNCLASSIFIED EXCAVATION	CU. YD.	23,638
203(6)	BORROW	TON	15,854
203(9)	OBLITERATION OF ROADWAY	SQ. YD.	500
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	1440
401(5)	HMA, TEMPORARY, TYPE II; CLASS B	TON	570
401(15)	ASPHALT MATERIAL PRICE ADJUSTMENT	C.S.	ALL REQUIRED
501(1)	CLASS A CONCRETE	L.S.	ALL REQUIRED
602(2A)	STRUCTURAL PLATE PIPE-ARCH 13'-10" SPAN, 12'-2" RISE, 10 GAGE	LF	164
603(17-18)	18 INCH PIPE	LF	164
603(17-24)	24 INCH PIPE	LF	819
603(20-18)	END SECTION FOR 18 INCH PIPE	EACH	12
603(20-24)	END SECTION FOR 24 INCH PIPE	EACH	2
604(1)	STORM SEWER MANHOLE	EACH	6
607(3)	CHAIN LINK FENCE	LF	70
608(7)	ASPHALT PATHWAY	TON	560
608(10)	DETECTABLE WARNING TILES	SQ. FT.	130
610(2)	DITCH LINING	TON	413
615(1)	STANDARD SIGN	SQ. FT.	60
615(2)	REMOVE AND RELOCATE EXISTING SIGN	EACH	1
615(4)	DELINEATOR, RIGID	EACH	4
615(6)	SALVAGE SIGN	EACH	1
616(3)	THAW WIRE INSTALLATION	LF	755
618(2A)	SEEDING, TYPE A	LB	150
618(3)	WATER FOR SEEDING	M. GAL	102
620(1)	TOPSOIL	SQ. YD.	11,000
639(6)	APPROACH	EACH	3
640(1)	MOBILIZATION AND DEMOBILIZATION	L.S.	ALL REQUIRED
640(4)	WORKER MEALS AND LODGING, OR PER DIEM	L.S.	ALL REQUIRED

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL
641(1)	EROSION, SEDIMENT, AND POLLUTION CONTROL ADMINISTRATION	L.S.	ALL REQUIRED
641(2)	TEMPORARY EROSION, SEDIMENT, AND POLLUTION CONTROL	C.S.	ALL REQUIRED
641(6)	WITHHOLDING	C.S.	ALL REQUIRED
641(7)	SWPPP MANAGER	L.S.	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	L.S.	ALL REQUIRED
642(3)	THREE PERSON SURVEY PARTY	HOUR	20
643(2)	TRAFFIC MAINTENANCE	L.S.	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	L.S.	ALL REQUIRED
643(15A)	FLAGGING	C.S.	ALL REQUIRED
643(23)	TRAFFIC PRICE ADJUSTMENT	C.S.	ALL REQUIRED
643(25)	TRAFFIC CONTROL	C.S.	ALL REQUIRED
644(1)	FIELD OFFICE	L.S.	ALL REQUIRED
644(2)	FIELD LABORATORY	L.S.	ALL REQUIRED
644(10)	ENGINEERING COMMUNICATIONS	C.S.	ALL REQUIRED
644(15)	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1
644(16)	STORAGE CONTAINER	EACH	1
645(1)	TRAINING PROGRAM, __ TRAINEES/APPRENTICES	L.H.	
646(1)	CPM SCHEDULING	L.S.	ALL REQUIRED
647(1)	WIDE PAD DOZER, 65 HP MINIMUM	C.S.	ALL REQUIRED
660(3)	HIGHWAY LIGHTING SYSTEM COMPLETE	L.S.	ALL REQUIRED
660(12)	UNDERPASS LIGHTING SYSTEM COMPLETE (PEDESTRIAN UNDERCROSSING)	L.S.	ALL REQUIRED
660(15)	SIGNAL AND LIGHTING SALVAGE	EACH	1
661(3)	LOAD CENTER, TYPE 2	EACH	2
670(10)	MMA PAVEMENT MARKINGS	L.S.	ALL REQUIRED
682(1)	VAC-TRUCK POTHOLE	C.S.	ALL REQUIRED

ESTIMATING FACTORS

ITEM NO.	ITEM	ESTIMATING FACTOR
203(6)	BORROW	144 LB./C.F.
301(1)	AGGREGATE BASE COURSE, GRADING D-1	144 LB./C.F.
608(7)	ASPHALT PATHWAY	151 LB./C.F.
610(2)	DITCH LINING	110 LB./C.F.
618(2A)	SEEDING, TYPE A	1.5 LB./1000 S.F.
618(3)	WATER FOR SEEDING	1 M. GAL./ 1000 S.F.

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

ESTIMATE OF QUANTITIES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	D1	D3

201(1A)

CLEARING

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	AREA	REMARKS
E5	101+50.00	LT/RT	108+15.00	LT/RT	0.4	CLEAR & GRUB 20' WIDE FOR STORM DRAIN CONSTRUCTION
F1/F2	9+92.00	LT/RT	29+74.00	LT/RT	1.8	PATHWAY
F3	50+30.00	LT/RT	23+87.00	LT/RT	0.4	HELENA PATHWAY
				SUB TOTAL:	2.7	
				ROUNDED TOTAL:	3	

202(1)

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

SHEET	STATION	OFFSET (FT)	DESCRIPTION
F1	11+59.98	51.04' RT	MSB OWNED PEDESTRIAN GATE
F1	14+90.00	66.5' RT	MAILBOX
F1	14+95.00	65.9' RT	MAILBOX
F3	50+80.00	35.3' LT	ELECTRICAL OUTLET
F3	51+28.00	10.0' LT	ELECTRICAL OUTLET
F3	51+47.00	9.1' LT	ELECTRICAL OUTLET

202(2)

REMOVAL OF PAVEMENT

SHEET	STATION TO STATION		AREA (S.Y.)	REMARKS
E5	106+94.00	107+19.00	111	STORM DRAIN/SCHOOL DRIVEWAY
F1	11+08.00	13+62.00	217	EXISTING PEDESTRIAN PATH
F1/H7	14+68.00	14+70.00	184	HELENA AVE CONDUIT INSTALL
F1/F2	19+01.00	20+25.00	279	DRIVEWAY
F2	22+81.00	24+08.00	464	DRIVEWAY
J1			2311	TEMPORARY BYPASS
		SUBTOTAL:	3567	
		TOTAL ROUNDED:	3600	

202(4)

REMOVAL OF CULVERT PIPE

SHEET	STATION TO STATION		OFFSET	LENGTH (L.F.)	REMARKS
F1	15+21.91	15+37.74	83' RT	44	
F2	21+31.00	22+02.00	22' RT	60	
F2	23+06.00	23+92.00	33' LT	72	
			TOTAL:	176	

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SUMMARY TABLES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	D2	D3

202(11)

MULTIPLE MAILBOX INSTALLATION

SHEET	STATION	OFFSET (FT)	NO. OF MAILBOXES	REMARKS
F1	14+10.63	69.8' RT	3	REQUIRED FOR TRAFFIC DIVERSION
F1	15+12.64	70.9' RT	3	REQUIRED FOR TRAFFIC DIVERSION
F1	15+14.62	72.1' RT	3	REQUIRED FOR TRAFFIC DIVERSION
	TOTAL:	3		

203(9)

OBLITERATION OF ROADWAY

SHEET	STATION TO STATION	OFFSET	AREA (S.Y.)	REMARKS
F1	11+10 TO 13+55	RT	217	SCHOOL PATHWAY
F2	19+00 to 20+10	CL	279	UNNAMED DRIVEWAY
		SUB TOTAL:	496	
		TOTAL ROUNDED:	500	

607(3)

CHAIN LINK FENCE

SHEET	FROM		TO		HEIGHT (FT)	LENGTH (L.F.)	REMARKS
	STATION	OFFSET	STATION	OFFSET			
F1	13+17.27	14.6' RT	13+24.34	7.5' RT	8	10	
F1	13+24.34	7.5' RT	13+24.34	7.5' LT	8	15	
F1	13+24.34	7.5' LT	13+17.27	14.6' LT	8	10	
F1	14+68.39	14.6' RT	14+61.32	7.5' RT	8	10	
F1	14+61.32	7.5' RT	14+61.32	7.5' LT	8	15	
F1	14+61.32	7.5' LT	14+68.39	14.6' LT	8	10	
					TOTAL:	70	

608(10)

DETECTABLE WARNING TILES

SHEET	STATION	LENGTH (FT)	AREA (S.F.)	REMARKS
F2	21+24.26	10	18	PARKS PATHWAY ALIGNMENT
F2	22+05.03	10	18	PARKS PATHWAY ALIGNMENT
F2	29+65.45	10	18	PARKS PATHWAY ALIGNMENT
F2	30+81.15	10	18	PARKS PATHWAY ALIGNMENT
F3	53+66.83	10	18	HELENA PATH ALIGNMENT
F3	54+77.60	10	18	HELENA PATH ALIGNMENT
F3	55+26.94	10	18	HELENA PATH ALIGNMENT
		SUB TOTAL:	126	
		ROUNDED TOTAL:	130	

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SUMMARY TABLE

FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 D1-D3 SUMMARY TABLES.DWG | DATE/TIME 6/9/2017 11:38 AM | LAYOUT D2 | DESIGNED RLC | CHECKED SMB | DRAFTED KB

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	D3	D3

610(2)

DITCH LINING

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	VOLUME (CF)	REMARKS
E5	103+14.06	CL	103+24.06	CL	10	69	OUTFALL PROTECTION
F1	10+90.00	LT	12+25.00	LT	135	932	
F1	10+90.00	RT	12+50.00	RT	160	1104	
F1	15+70.00	LT	17+70.00	LT	200	1380	
F1	15+70.00	RT	18+52.40	RT	282	1949	
F3	50+12.00	LT	51+45.00	LT	133	918	
F3	50+12.00	RT	51+74.00	RT	162	1118	
					SUBTOTAL:	7469	
					ROUNDED TOTAL:	7500	

615(2)

REMOVE AND RELOCATE EXISTING SIGN

EXISTING		PROPOSED		LEGEND	REMARKS
STATION	OFFSET	STATION	OFFSET		
11+53	RT	11+60	RT	SU VALLEY SCHOOL SIGN	PRIVATE ILLUMINATED SIGN. ROTATE SIGN TO FACE EAST.
TOTAL:	1				

615(4)

DELINEATOR, RIGID

STATION	OFFSET	REMARKS
15+25.00	8.0' RT	
15+40.00	8.0' RT	
15+55.00	8.0' RT	
15+70.00	8.0' RT	
TOTAL:	4	

615(6)

SALVAGE SIGN

SHEET	STATION	OFFSET (FT)	DESCRIPTION
F1	13+58.20	61.4' RT	PEDESTRIAN STOP SIGN/BICYCLE (SYMBOL)
TOTAL:	1		

639(6)

APPROACH

SHEET	STATION	OFFSET	TYPE	WIDTH (FEET)	REMARKS
F2/G1	21+57	CL	ASPHALT	34	CUBBY'S MARKET DRIVEWAY
F3/E6	54+22	CL	ASPHALT	34	SENIOR CENTER DRIVEWAY
F3/E6	55+78	CL	ASPHALT	34	SENIOR CENTER DRIVEWAY
		TOTAL:	3		

660(15)

SIGNAL AND LIGHTING SALVAGE

EXISTING		REMARKS
STATION	OFFSET	
10+99.55	3.78' RT	SALVAGE MSB OWNED LIGHT POLE
13+51.00	172.0' RT	SALVAGE LIGHT POLE
14+43.55	65.6' RT	SALVAGE LIGHT POLE
14+57.66	138.9' RT	SALVAGE LOAD CENTER
14+57.66	140.9' RT	SALVAGE FLASHER UNIT
11+08.77	625.0' RT	SIGN BEACON
21+02.86	75.5' LT	SIGN BEACON

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PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

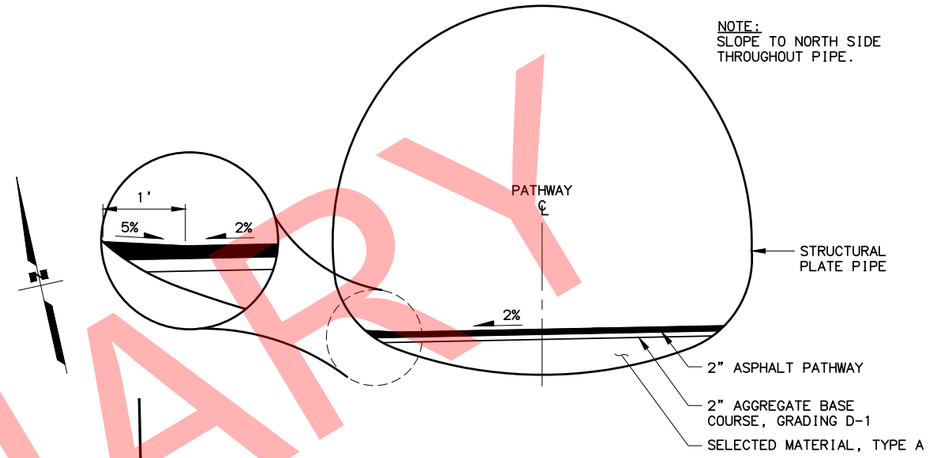
SUMMARY TABLE

NO.	DATE	REVISION

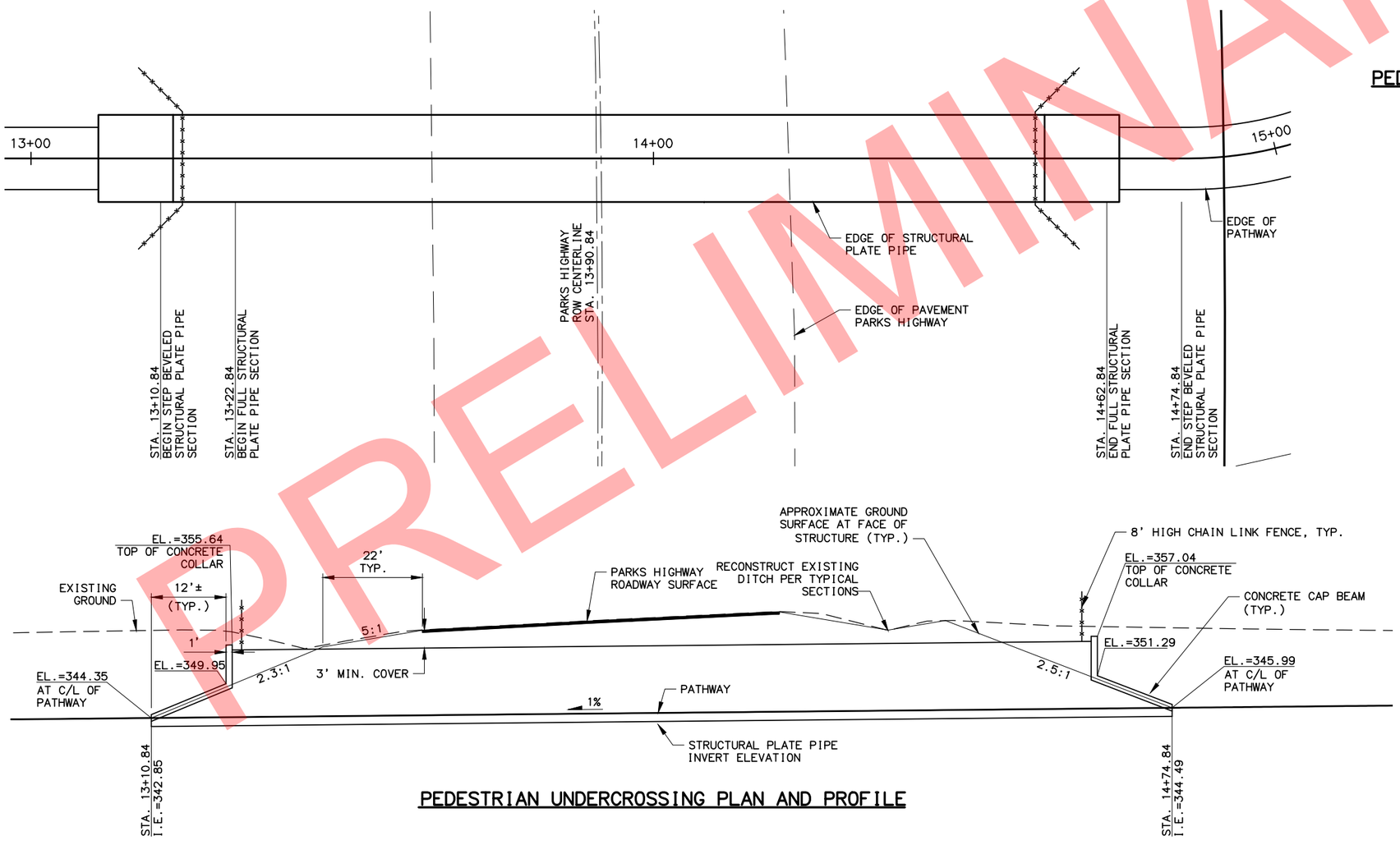
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E1	E9

NOTES:

1. STRUCTURE PLATE PIPE STEEL THICKNESS SHALL BE 0.138 INCHES (10 GAGE).
2. STRUCTURAL PLATE PIPE BOLTS SHALL BE INSTALLED WITH NUTS ON THE EXTERIOR OF THE STRUCTURE.
3. FIELD MADE BOLT HOLES SHALL BE REAMED OR DRILLED.
4. CONSTRUCTION EQUIPMENT SHALL NOT BE ALLOWED TO DRIVE ACROSS THE PIPE UNTIL A MINIMUM OF 24 INCHES OF COMPACTED BACKFILL COVER IS IN PLACE. NO TRAFFIC WILL BE ALLOWED WITHOUT THE 24 INCHES OF COVER ABOVE THE PIPE.
5. BACKFILL MATERIAL SHALL BE SELECTED MATERIAL, TYPE B. PIPE BEDDING SHALL BE SELECTED MATERIAL, TYPE A. MATERIAL GREATER THAN 3 INCHES SHALL NOT BE ALLOWED AGAINST THE PIPE.
6. CONCRETE SHALL BE CLASS 'A'. REINFORCED STEEL SHALL BE A.S.T.M. A615 GRADE 60.
7. FOR FENCE CONSTRUCTION, PROVIDE A CLEAR SPAN OVER THE STRUCTURAL STEEL PIPE. MAINTAIN A 2' MINIMUM CLEARANCE BETWEEN BOTTOM OF FENCE POSTS AND TOP OF STRUCTURAL PLATE PIPE.



PEDESTRIAN UNDERCROSSING CROSS-SLOPE DETAIL



PEDESTRIAN UNDERCROSSING PLAN AND PROFILE

STATE OF ALASKA
49TH
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PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

PEDESTRIAN UNDERCROSSING DETAILS

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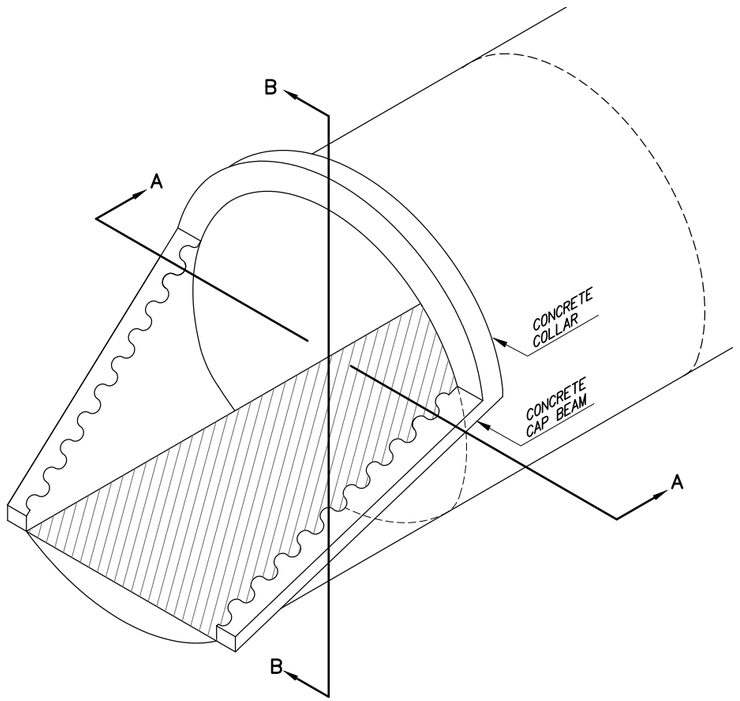
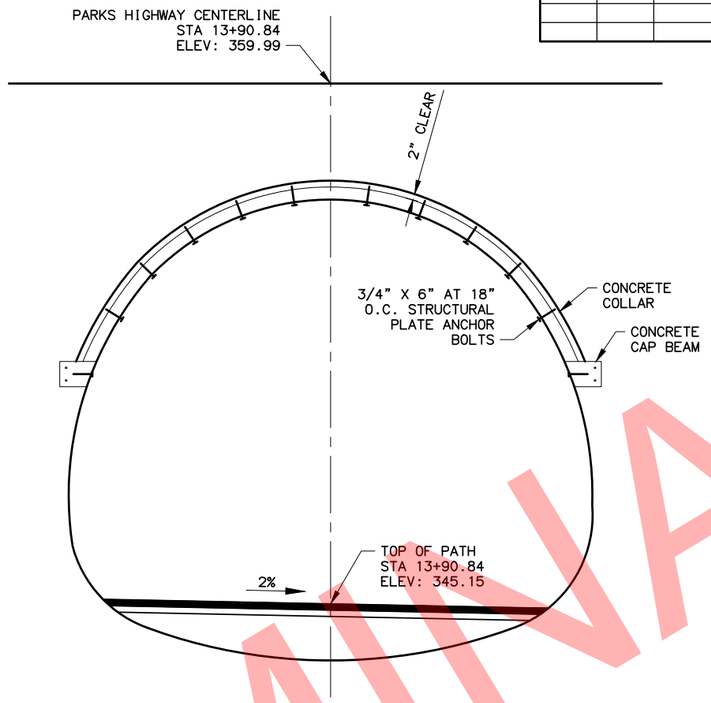
DATE/TIME 6/8/2017 11:45 AM
LAYOUT E1
DESIGNED SMB
CHECKED BCM
DRAFTED SMB

NO.	DATE	REVISION

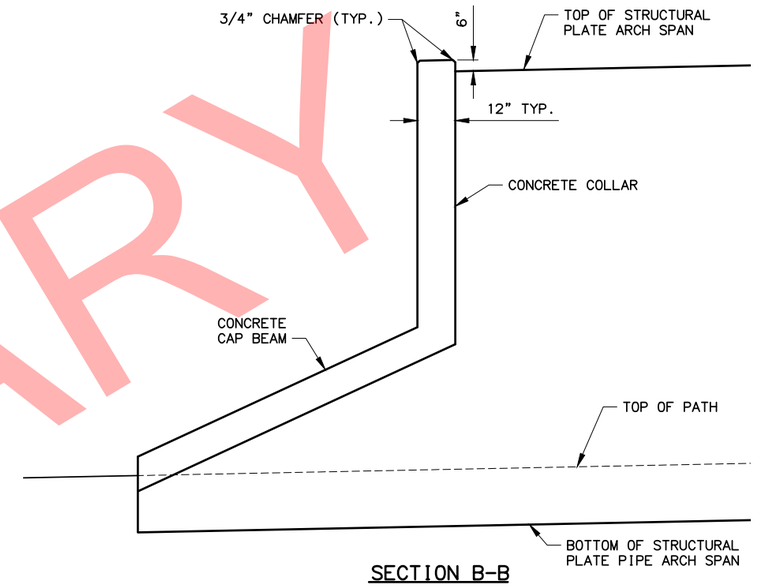
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E2	E9



ISOMETRIC VIEW



SECTION A-A



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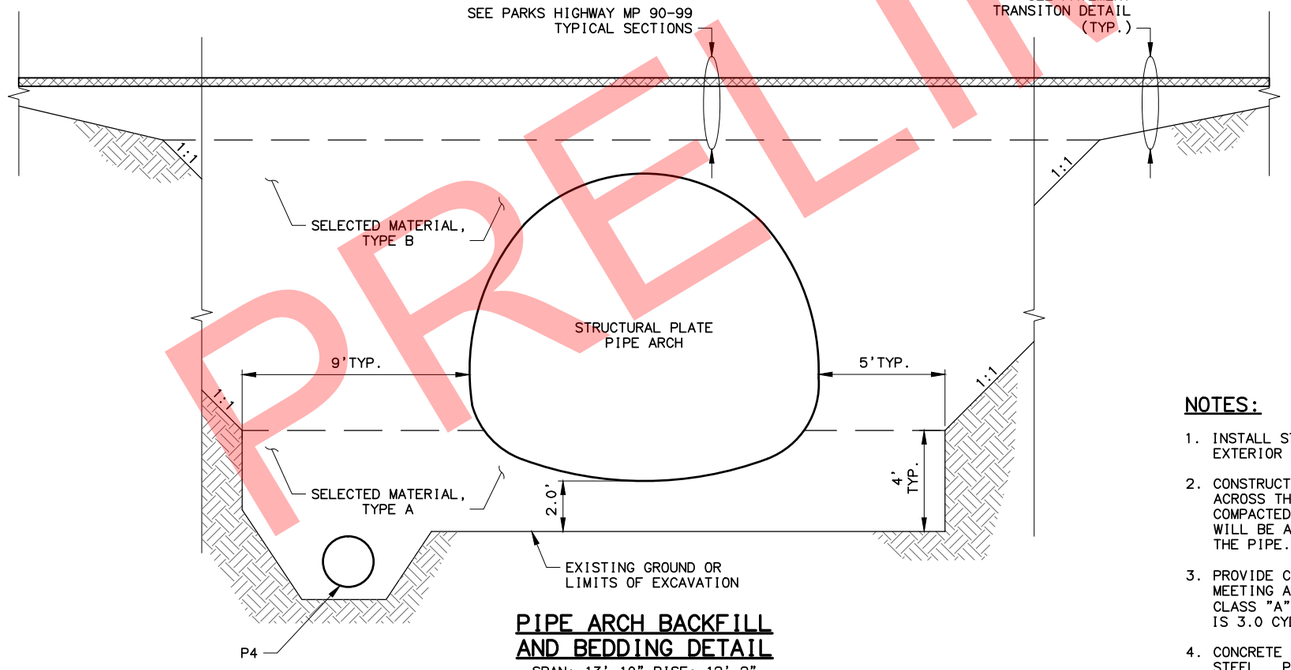
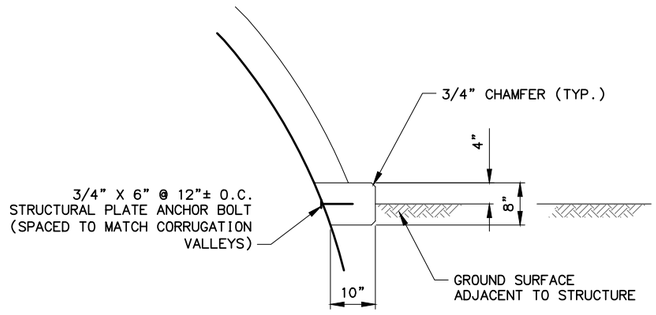


PIPE ARCH BACKFILL AND BEDDING DETAIL

SPAN: 13'-10" RISE: 12'-2"



CONCRETE CAP BEAM DETAIL

NOTES:

1. INSTALL STRUCTURAL PLATE BOLTS WITH NUTS ON THE EXTERIOR OF THE STRUCTURE.
2. CONSTRUCTION EQUIPMENT SHALL NOT BE ALLOWED TO DRIVE ACROSS THE PIPE UNTIL A MINIMUM OF 24 INCHES OF COMPACTED BACKFILL COVER IS IN PLACE. NO TRAFFIC WILL BE ALLOWED WITHOUT THE 24 INCHES OF COVER ABOVE THE PIPE.
3. PROVIDE CLASS "A" CONCRETE AND REINFORCING STEEL MEETING A.S.T.M. A615 GRADE 60. TOTAL QUANTITY OF CLASS "A" CONCRETE FOR CONCRETE CAP BEAMS AND COLLARS IS 3.0 CYD.
4. CONCRETE CAP BEAM AND COLLAR SHALL BE REINFORCED WITH STEEL. PROVIDE SHOP DRAWINGS FOR CAP BEAM AND COLLAR AS WELL AS STRUCTURAL PLATE PIPE ARCH DESIGN STAMPED BY PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ALASKA TO THE ENGINEER FOR REVIEW AND APPROVAL.

STATE OF ALASKA 49TH
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

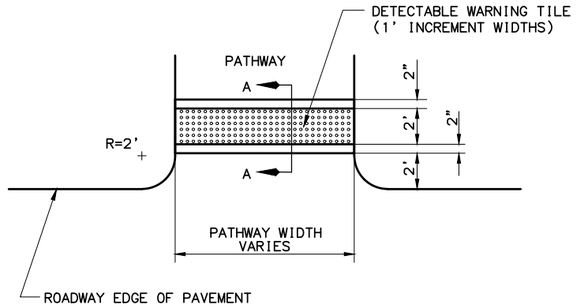
PEDESTRIAN UNDERCROSSING DETAILS

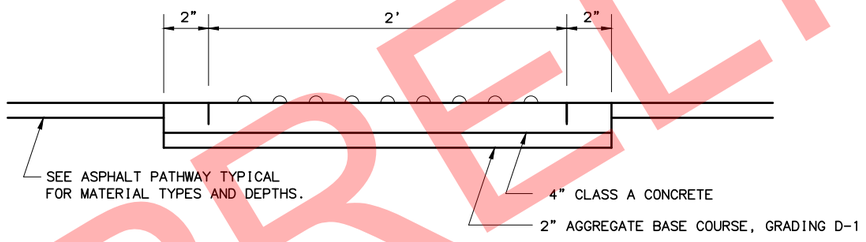
FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E2 PED DET.DWG
DATE/TIME 6/8/2017 11:46 AM
LAYOUT E2
DESIGNED SMB
CHECKED BCM
DRAFTED SMB

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	E3	E9

DETECTABLE WARNING NOTES:

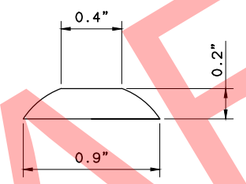
1. DETECTABLE WARNINGS SHALL BE 24 INCHES IN THE DIRECTION OF TRAVEL AND EXTEND THE FULL WIDTH OF THE PATHWAY.
2. TRUNCATED DOMES SHALL HAVE A DIAMETER OF 0.9 INCH AT THE BOTTOM, A DIAMETER OF 0.4 INCH AT THE TOP, A HEIGHT OF 0.2 INCH AND A CENTER-TO-CENTER SPACING OF 2.35 INCHES MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.
3. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.



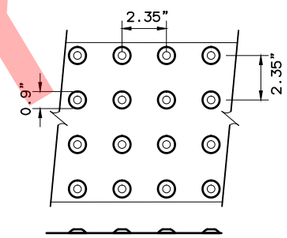


SECTION A-A

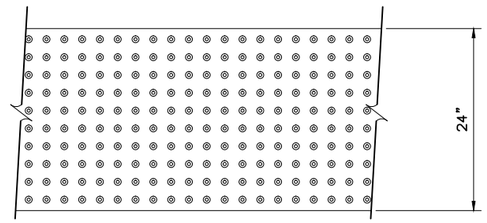
ASPHALT PATHWAY DETECTABLE WARNING DETAIL



DOME SECTION



DOME PLAN



PLAN VIEW OF DETECTABLE WARNING SURFACE

DETECTABLE WARNING SURFACE DETAILS

STATE OF ALASKA 49TH
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STATE OF ALASKA
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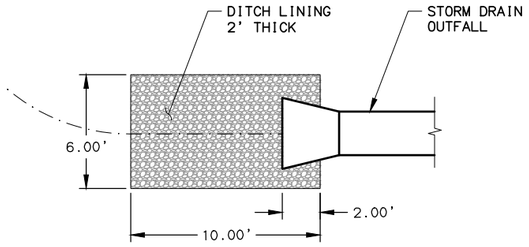
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

DETECTABLE WARNING DETAILS

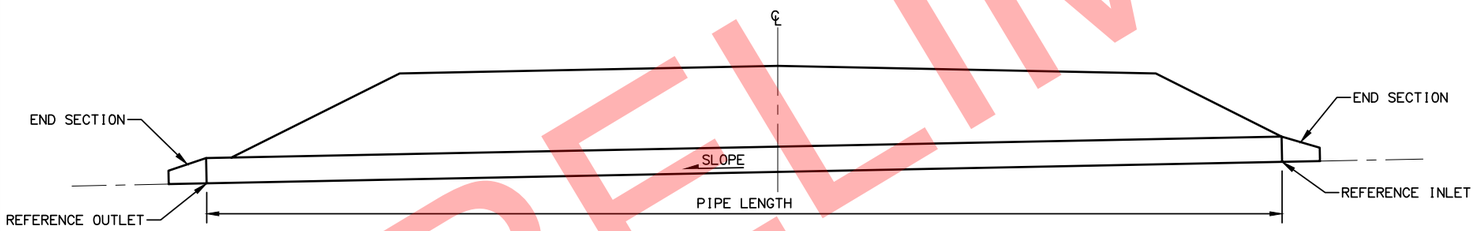
FILE: D:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E3 DETECTABLE WARNING DETAILS.DWG | DATE/TIME: 6/8/2017 11:47 AM | LAYOUT: E3 | DESIGNED: SMB | CHECKED: BCM | DRAFTED: SMB

NO.	DATE	REVISION

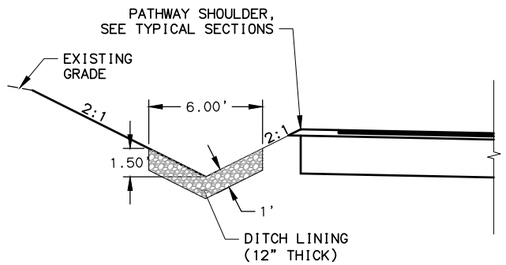
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E4	E9



OUTFALL PROTECTION DETAIL



CULVERT INSTALLATION



DITCH LINING DETAIL

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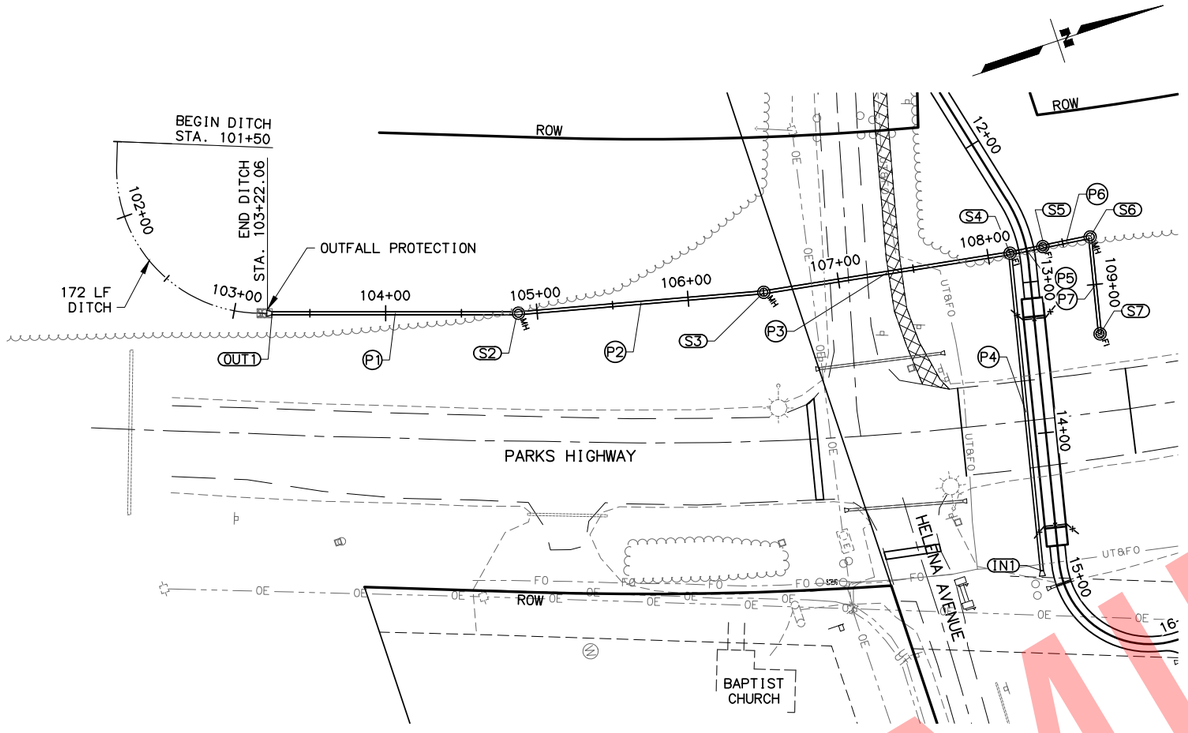
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

STORM DRAIN DETAILS

FILE | J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E4 STORM DRAIN DETAILS.DWG | DATE/TIME | 6/8/2017 11:47 AM | LAYOUT | E4 | DESIGNED | SMB | CHECKED | BCM | DRAFTED | SMB

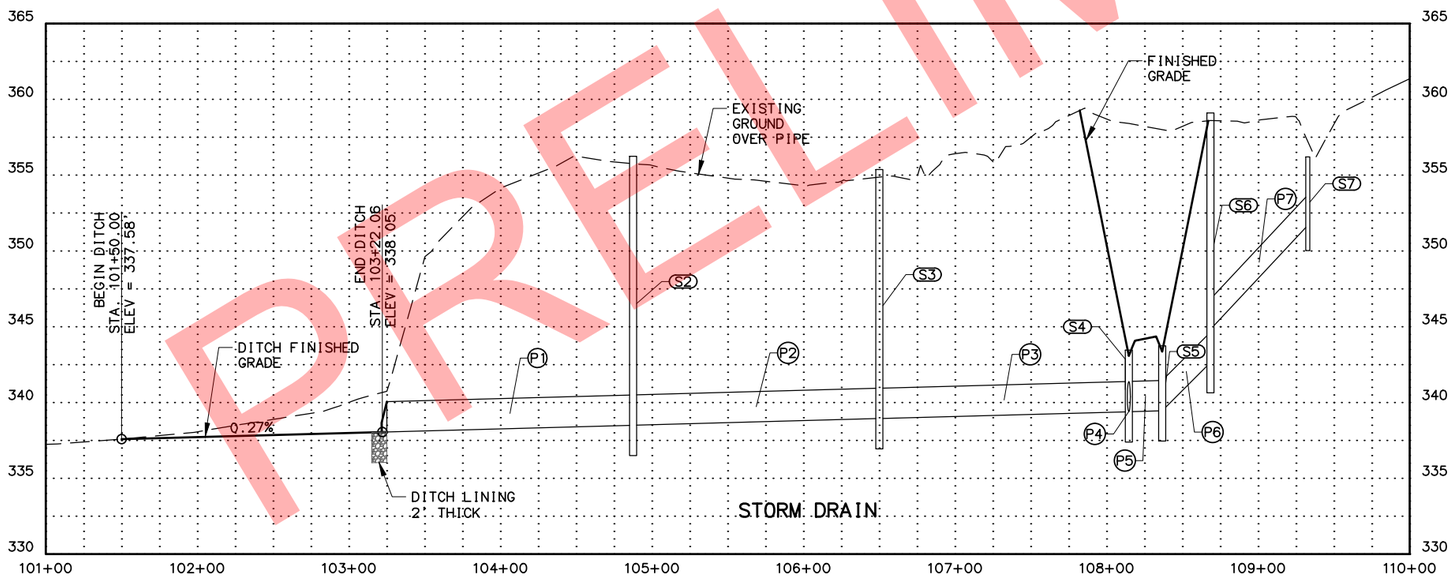


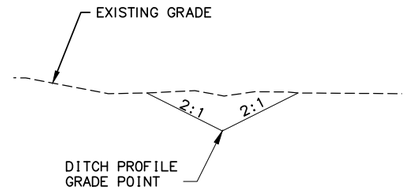
STORM DRAIN STRUCTURE SUMMARY

STRUCTURE	TYPE OF STRUCTURE	TYPE OF CASTING	STATION	OFFSET TO STRUCTURE CL	TOP OF CASTING ELEVATION
IN1	INLET		14+89.61	12.01' RT	–
OUT1	OUTFALL		103+25.09	0.00'	–
S2	SDMH, TYPE I	M.H.	104+87.59	0.00'	356.24
S3	SDMH, TYPE I	M.H.	106+50.09	0.00'	355.37
S4	SDMH, TYPE I	F.I.	108+14.69	0.00'	343.45
S5	SDMH, TYPE I	F.I.	108+36.69	0.00'	343.74
S6	SDMH, TYPE I	M.H.	108+68.54	0.00'	359.10
S7	SDMH, TYPE I	F.I.	109+32.78	0.00'	356.20

STORM DRAIN PIPE SUMMARY

PIPE	SIZE (IN.)	TYPE	LENGTH	END SECTIONS	FROM	TO	BEGIN ELEVATION	END ELEVATION	SLOPE
P1	24	CSP	162.50	1	S2	OUT1	338.50	338.06	0.27%
P2	24	CSP	162.50		S3	S2	338.94	338.50	0.27%
P3	24	CSP	164.60		S4	S3	339.39	338.94	0.27%
P4	24	CSP	210.57	1	IN1	S4	344.11	339.39	2.24%
P5	24	CSP	22.00		S5	S4	339.45	339.39	0.30%
P6	24	CSP	32.01		S6	S5	342.64	339.45	10.00%
P7	24	CSP	64.61		S7	S6	351.68	344.82	10.68%





DITCH DETAIL

NOTES:

1. ELEVATIONS LISTED IN PIPE SUMMARY TABLE ARE AT THE INSIDE WALL OF STRUCTURE.
2. ALL MANHOLES AND INLETS WILL HAVE AN 18" MINIMUM SUMP DEPTH.
3. THE FOLLOWING ACRONYMS ARE USED ON THE STRUCTURE SUMMARY TABLE:
   F.I. = FIELD INLET (STD. DRAWING D22.01)
   M.H. = MANHOLE
4. SEE F SHEETS FOR CULVERT SUMMARY TABLES.
5. DITCH GRADING SHALL BE PAID FOR UNDER UNCLASSIFIED EXCAVATION BID ITEM.

SHEET NO.	TOTAL SHEETS
E5	E9
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION
0A4-1(030)/
Z581170000

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

STATE OF ALASKA
49TH
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS
HIGHWAY/TALKEETNA
SPUR ROAD

STORM DRAIN PLAN AND
PROFILE

FILE | J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E5 STORM PP.DWG | DATE/TIME | 6/8/2017 11:50 AM | LAYOUT | E5 | DESIGNED | RLC | CHECKED | SMB | DRAFTED | KB

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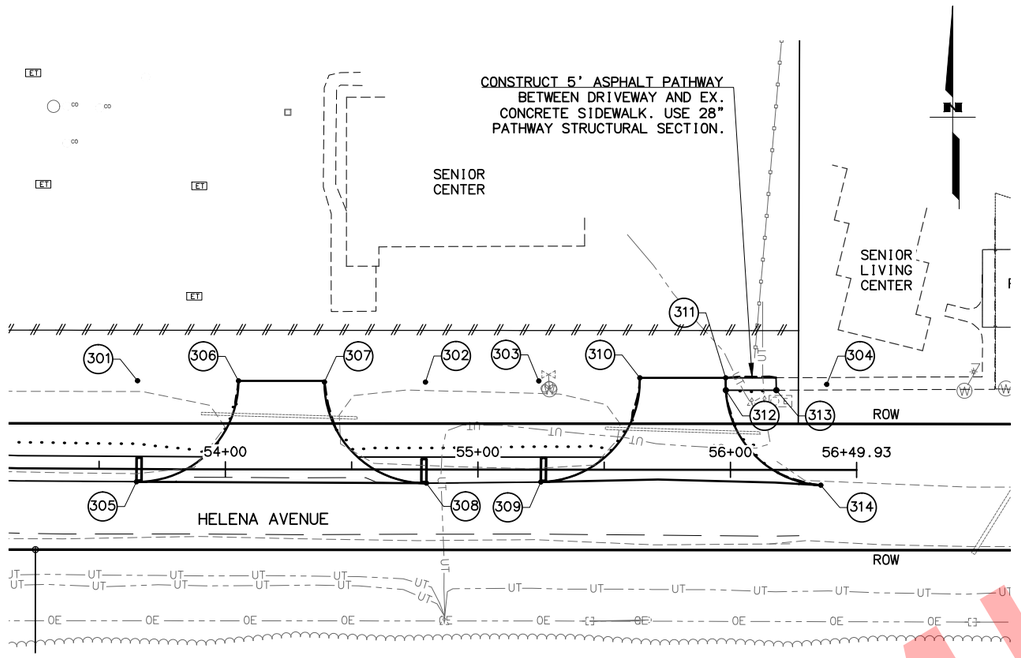
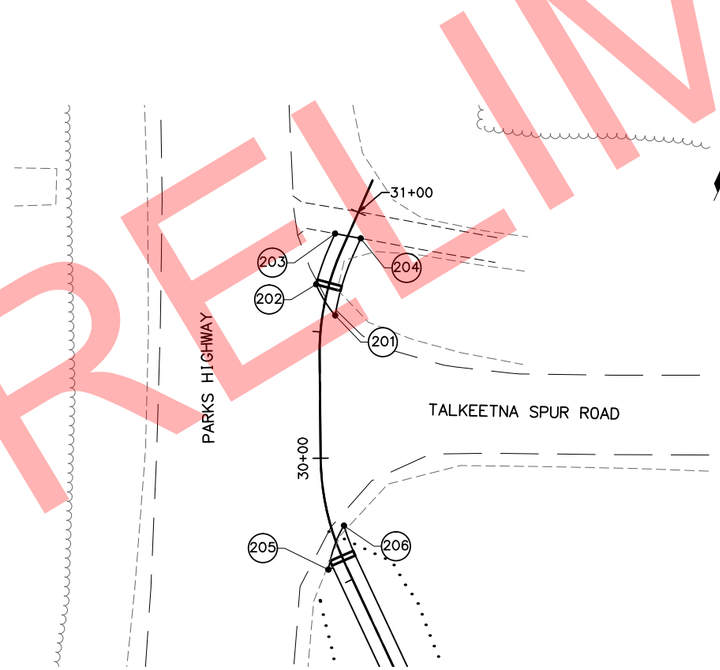
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E6	E9



SENIOR CENTER DRIVEWAYS

POINT TABLE				
POINT	STATION	OFFSET	ELEVATION	REMARKS
301	53+64.96	34.92' LT		RADIUS POINT, R=40.0'
302	54+79.15	34.59' LT		RADIUS POINT, R=40.0'
303	55+24.03	35.10' LT		RADIUS POINT, R=40.0'
304	56+38.03	33.86' LT		RADIUS POINT, R=40.0'
305	53+64.83	5.08' RT	357.53	MATCH EXISTING
306	54+05.15	35.04' LT	358.67	MATCH EXISTING
307	54+39.15	34.58' LT	358.96	MATCH EXISTING
308	54+79.57	5.40' RT	357.83	MATCH EXISTING
309	55+24.91	4.89' RT	357.92	MATCH EXISTING
310	55+64.03	36.38' LT	359.10	MATCH EXISTING
311	55+98.03	36.41' LT	359.43	MATCH EXISTING
312	55+98.10	31.50' LT	359.30	BEGIN 5' ASPHALT PATHWAY
313	56+18.08	31.52' LT	359.88	END 5' ASPHALT PATHWAY
314	56+35.74	6.07' RT	358.15	MATCH EXISTING



TALKEETNA SPUR ROAD INTERSECTION

POINT TABLE				
POINT	STATION	OFFSET	ELEVATION	REMARKS
201	30+57.38	5.00' RT	371.19	Null Structure
202	30+67.81	5.00' LT	371.30	Null Structure
203	30+88.53	5.00' LT	371.24	Null Structure
204	30+90.93	5.00' RT	371.18	Null Structure
205	29+57.48	7.00' LT	370.02	MATCH EXISTING
206	29+71.45	5.00' RT	370.46	MATCH EXISTING

STATE OF ALASKA 49TH
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STATE OF ALASKA
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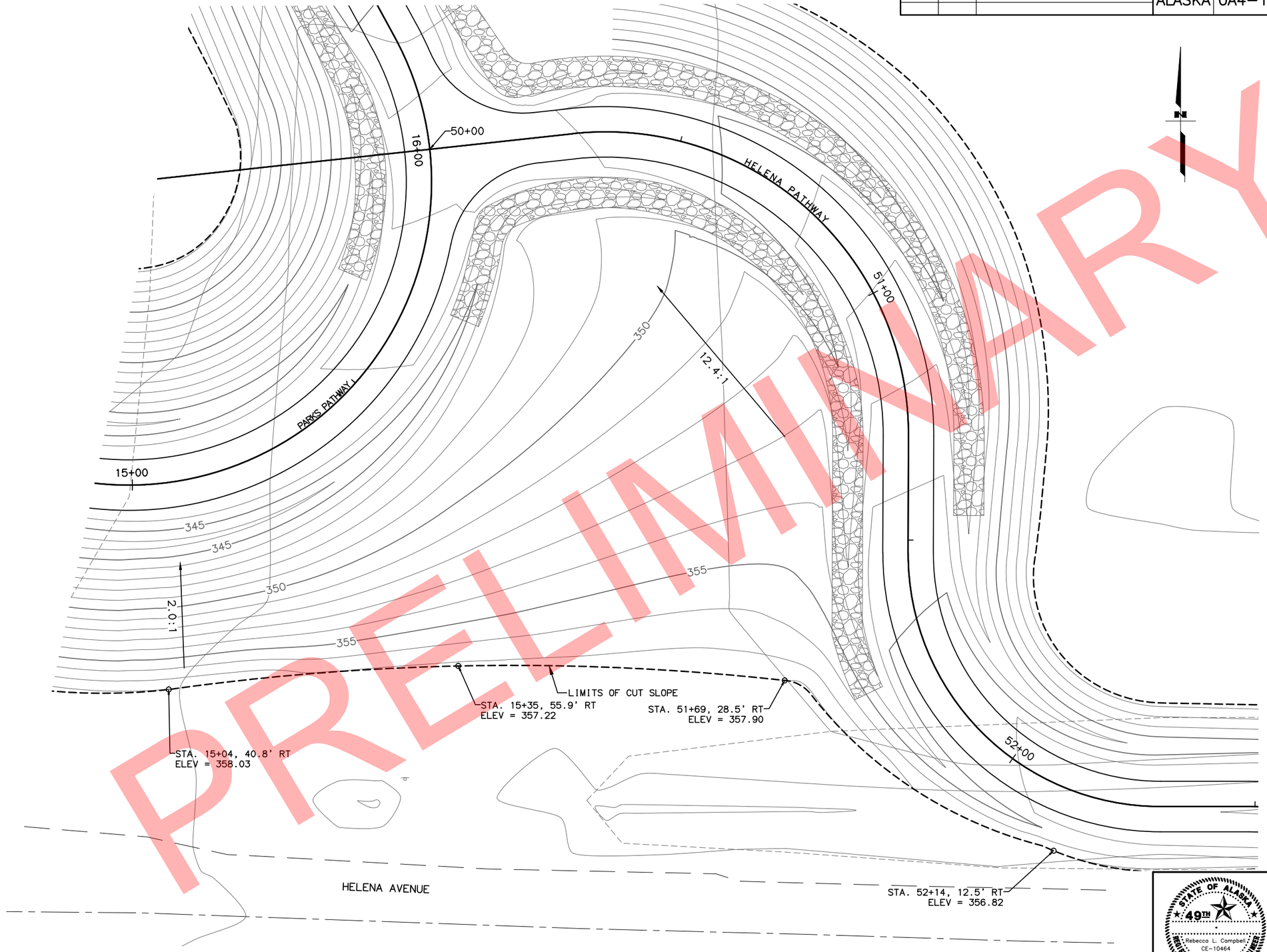
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

DRIVEWAY & PUBLIC APPROCH

ETG | DRAFTED | BCM | CHECKED | SMB | DESIGNED | E6 | LAYOUT | 6/8/2017 11:53 AM | DATE/TIME
FILE J:\JOBS\DATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E6 SENIOR CENTER DETAIL.DWG | DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E7	E9



NOTE:
UNLESS OTHERWISE NOTED: ALL STATION AND OFFSETS SHOWN ON THIS SHEET ARE MEASURED FROM "PARKS PATHWAY" ALIGNMENT.

STATE OF ALASKA 49TH
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

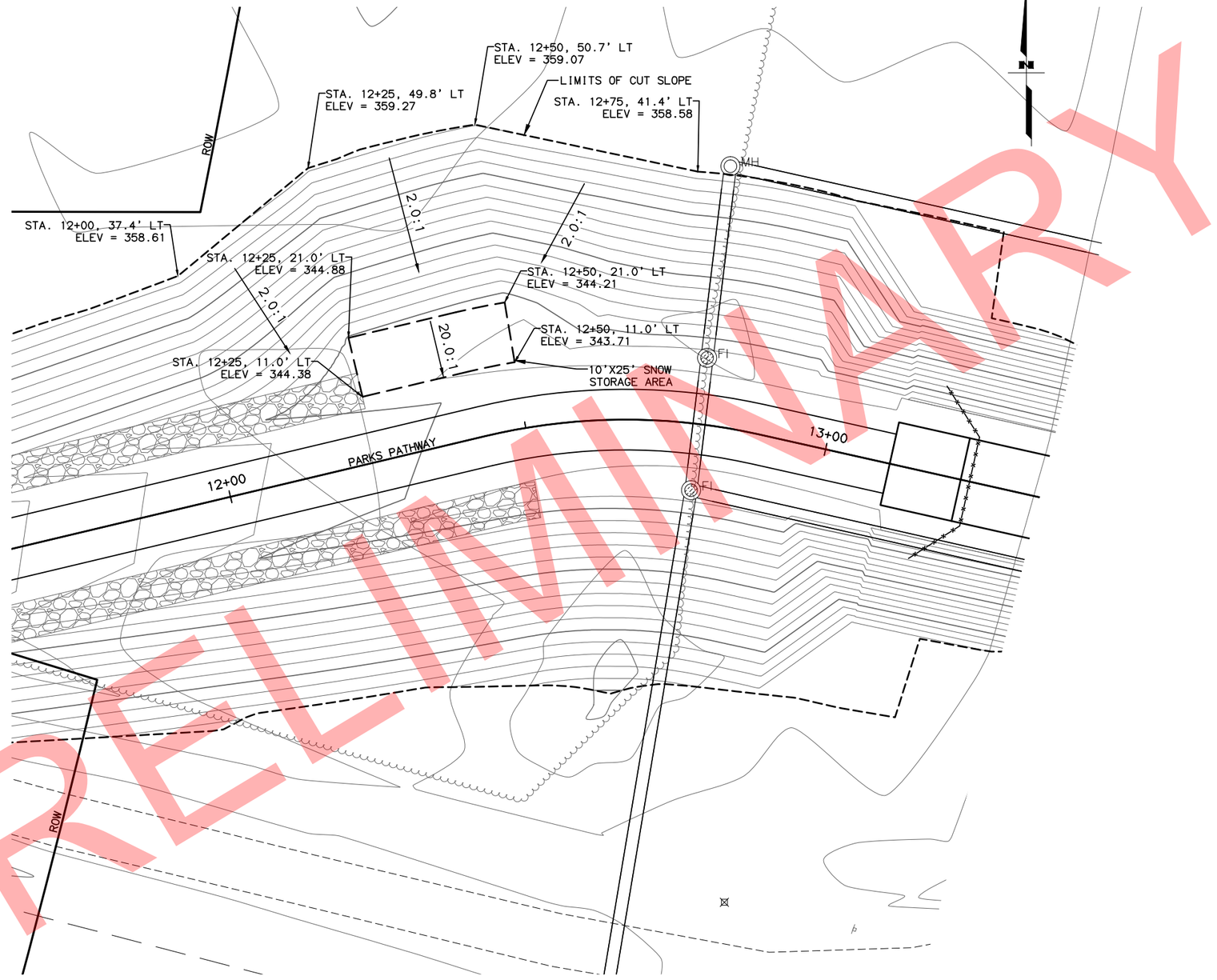
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

PATHWAY INTERSECTION SLOPE TRANSITION DETAIL

FILE: D:\JOBDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E7-E8 MAIN & HELENA PATH SLOPE TRANS DETAIL.DWG
DATE/TIME 6/8/2017 11:57 AM | LAYOUT E7 | DESIGNED SMB | CHECKED BCM | DRAFTED ETG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E8	E9



NOTE:
ALL STATION AND OFFSETS SHOWN ON THIS SHEET
ARE MEASURED FROM "PARKS PATHWAY" ALIGNMENT.

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STATE OF ALASKA
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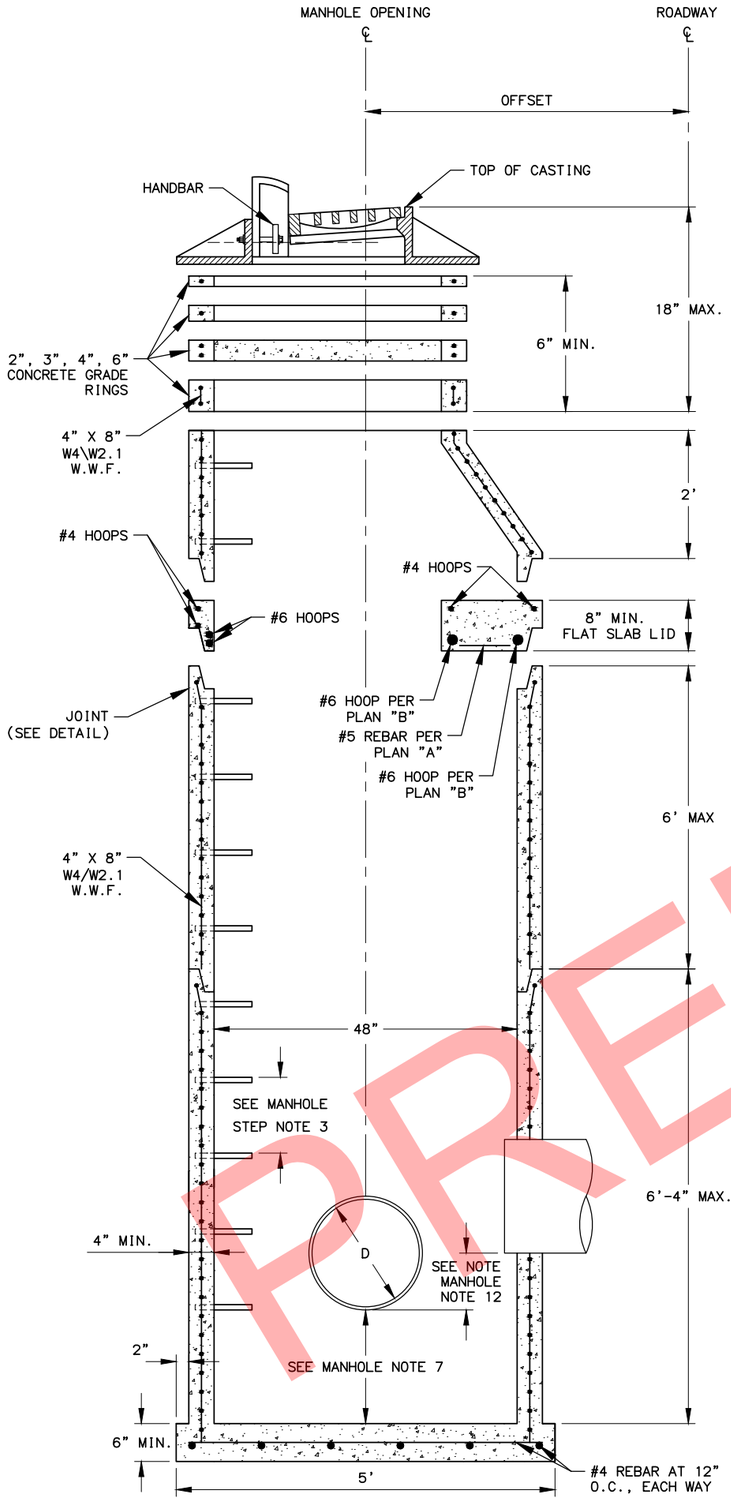
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SNOW STORAGE AREA

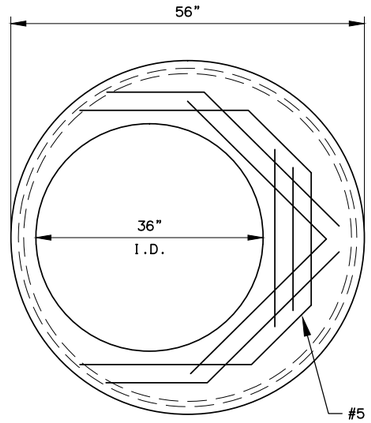
FILE | D:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E7-E8 MAIN & HELENA PATH-SLOPE-TRANS-DETAILS.DWG | DATE/TIME | 6/8/2017 11:57 AM | LAYOUT | E8 | DESIGNED | SMB | CHECKED | BCM | DRAFTED | ETG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	E9	E9

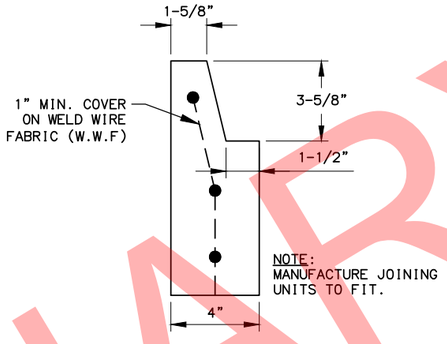


STORM DRAIN MANHOLE, TYPE 1



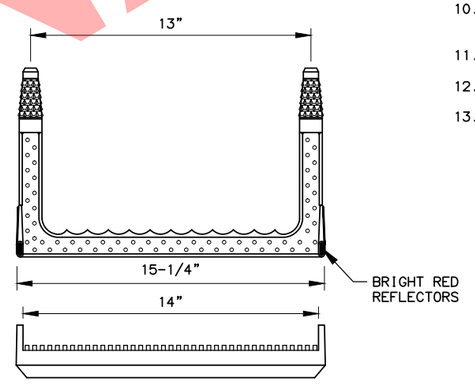
FLAT SLAB LID PLAN "A"

#5 REBAR BOTTOM REINFORCEMENT



JOINT DETAIL

(NOMINAL DIMENSIONS)



MANHOLE STEP

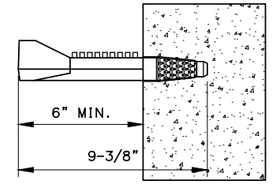
SEE CROSS SECTION AT LEFT FOR LOCATIONS OF THE #4 HOOPS.

FLAT SLAB LID PLAN "B"

#6 REBAR HOOPS ABOVE #5 REBAR AND WITHIN 3" OF BASE

MANHOLE NOTES:

1. THESE DRAWINGS ARE FOR PRECAST REINFORCED CONCRETE FOR HIGHWAY USE.
2. MAXIMUM KNOCKOUT SIZE FOR PIPES IS 32". MINIMUM DISTANCE BETWEEN KNOCKOUTS IS 4".
3. USE CONCRETE WITH A MINIMUM 4000 PSI 28 DAY COMPRESSIVE STRENGTH AND 6% ± 1.5% AIR ENTRAINMENT. MAXIMUM WATER/CEMENT RATIO IS 0.45.
4. MINIMUM STEEL REQUIRED FOR BARREL AS PER AASHTO M199 SHALL BE EMBEDDED IN BASE SO THAT THE FIRST BARREL SECTION IS CONNECTED TO THE BASE BY CONTINUOUS STEEL.
5. MINIMUM COVER ON REINFORCING STEEL IS 1".
6. FORM ALL BLOCKOUTS.
7. ALL STORM DRAIN MANHOLES AND INLETS SHALL HAVE 18" MINIMUM SUMPS. MANHOLES WITH PETROLEUM SEPARATORS SHALL HAVE 24" MINIMUM SUMPS.
8. A FLAT LID WITH A SMALLER OPENING MAY ALSO BE USED IF CALLED FOR. THIS REQUIRES ADDITIONAL #5 REBAR REINFORCEMENT AT THE SAME SPACING AS SHOWN IN PLAN "A". ALSO, ADJUST HOOP DIAMETERS AROUND THE OPENING TO PROVIDE THE SAME COVER.
9. MANHOLES PLACED ALONG CURB LINE SHALL HAVE STEPS ALIGNED UNDER THE CURB INLET.
10. PLACE MANHOLE BASE ON 6" MIN. COMPACTED AGGREGATE BASE COURSE.
11. EXTEND PIPE A MINIMUM OF 2" INTO MANHOLE.
12. MINIMUM DROP BETWEEN PIPES IS 1.5".
13. PIPE LENGTH, INVERT, AND SLOPE ARE MEASURED FROM CENTER OF MANHOLE.



MANHOLE STEP NOTES:

1. MANHOLE STEPS SHALL BE INJECTION MOLDED POLYPROPYLENE COVERED GRADE 60 STEEL TIGHTLY IMBEDDED AT LEAST 3" INTO CONCRETE.
2. THE INSTALLED STEPS SHALL RESIST A PULLOUT FORCE OF 1500 LB.
3. STEPS SHALL BE PLACED 12" O.C. ON AN UNOBSTRUCTED SIDE OF THE STRUCTURE, 24" MAX. FROM TOP OF CASTING AND 18" FROM MANHOLE BASE.

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PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

STORM DRAIN MANHOLE TYPE 1 DETAIL

CMK | DRAFTED | BCM | CHECKED | RLC | DESIGNED | E9 | LAYOUT | 6/8/2017 11:58 AM | DATE/TIME

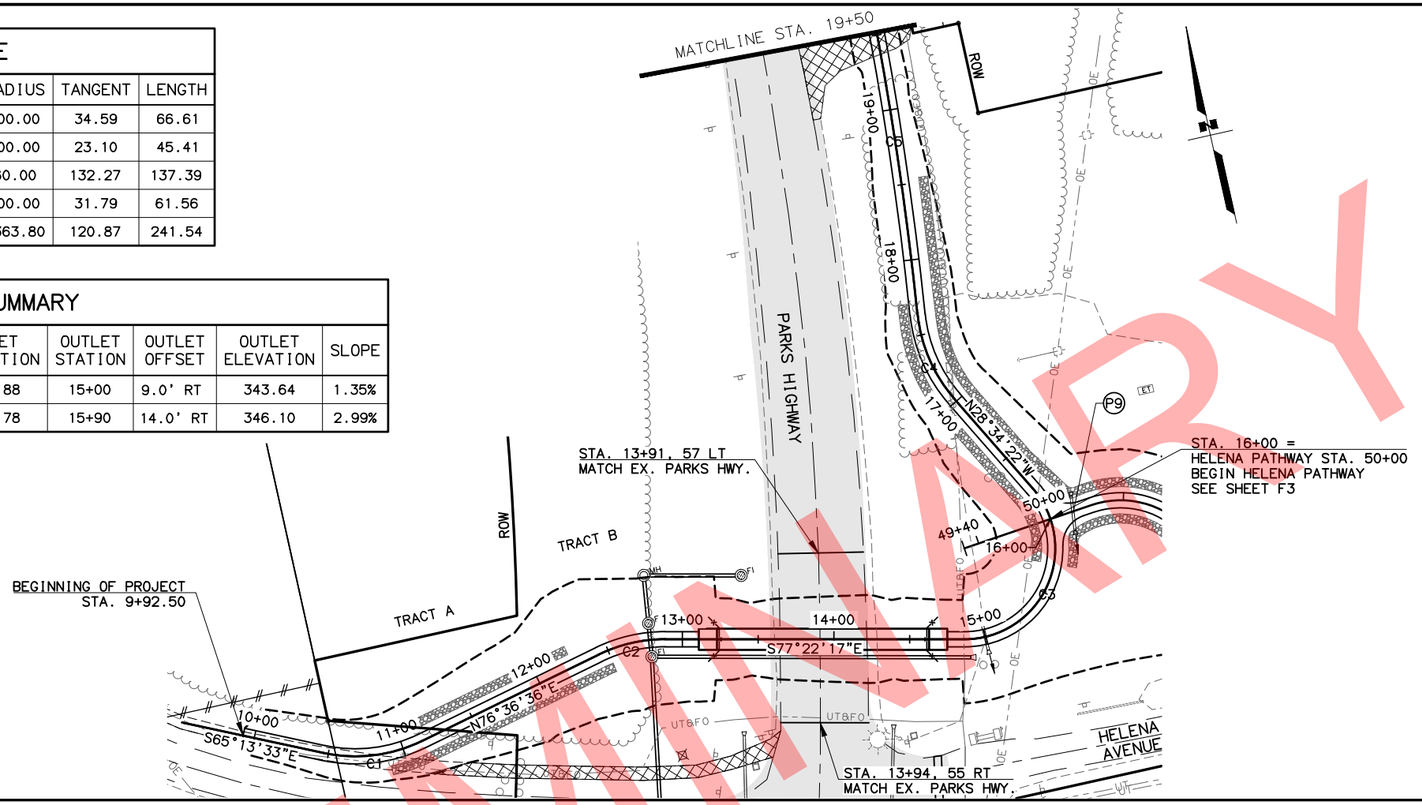
FILE I:\JOBS\DATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 E9 STORM DRAIN MH TYPE 1 DETAILS.DWG

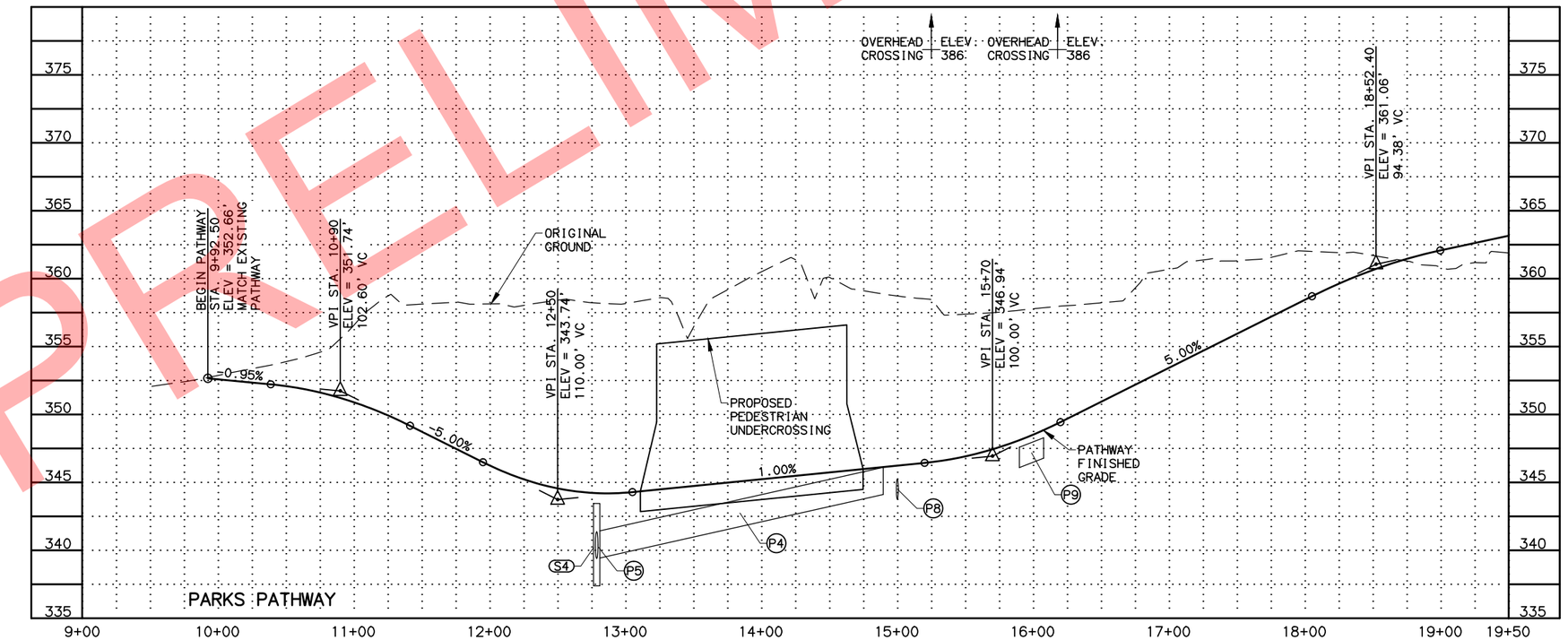
HORIZONTAL CURVE TABLE

CURVE #	PI	NORTHING	EASTING	DELTA	RADIUS	TANGENT	LENGTH
C1	10+80.04	346064.7933	321125.1759	038°09'51"	100.00	34.59	66.61
C2	12+65.93	346108.2310	321307.6498	026°01'07"	100.00	23.10	45.41
C3	15+54.73	346031.1021	321651.8946	131°12'05"	60.00	132.27	137.39
C4	17+32.87	346244.2664	321535.8051	035°16'18"	100.00	31.79	61.56
C5	18+84.42	346395.8888	321553.6135	005°51'17"	2363.80	120.87	241.54

CULVERT PIPE SUMMARY

PIPE	SIZE (IN.)	LENGTH	END SECTIONS	INLET STATION	INLET OFFSET	INLET ELEVATION	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	SLOPE
P8	18	18.00	2	15+00	9.0' LT	343.88	15+00	9.0' RT	343.64	1.35%
P9	18	23.00	2	16+08	18.4' RT	346.78	15+90	14.0' RT	346.10	2.99%





PRELIMINARY

SHEET NO.	TOTAL SHEETS
F1	F3
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0A4-1(030)/
Z581170000

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

STATE OF ALASKA 49TH
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STATE OF ALASKA
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PARKS
HIGHWAY/TALKEETNA
SPUR ROAD

PLAN & PROFILE

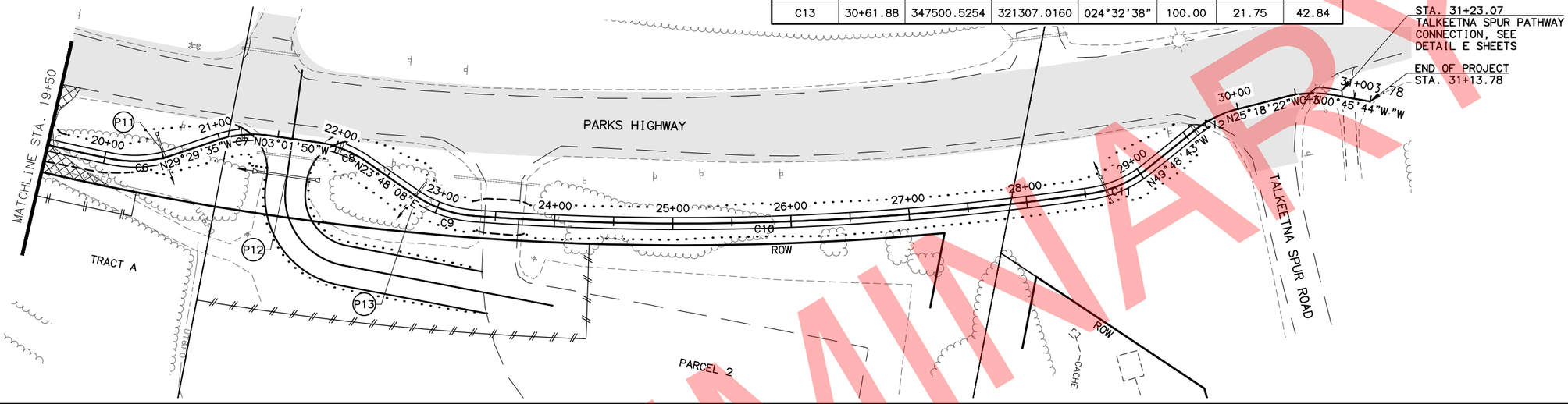
FILE [J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 F1 F2 PLAN AND PROFILE.DWG | DATE/TIME 6/8/2017 12:01 PM | LAYOUT F1 | DESIGNED RLC | CHECKED SMB | DRAFTED KB

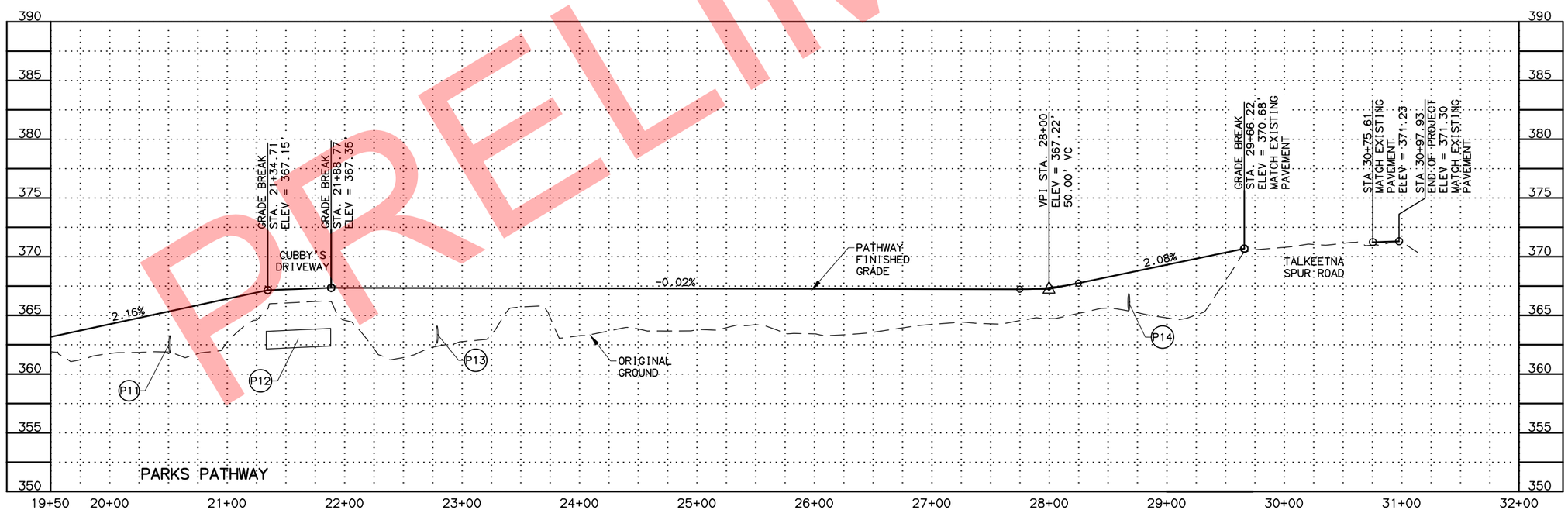
CULVERT PIPE SUMMARY

PIPE	SIZE (IN.)	LENGTH	END SECTIONS	INLET STATION	INLET OFFSET	INLET ELEVATION	OUTLET STATION	OUTLET OFFSET	OUTLET ELEVATION	SLOPE
P11	18	28.00	2	20+50	19.6' LT	361.90	20+52	8.4' RT	361.73	0.61%
P12	18	50.00	2	21+88	31.5' RT	362.39	21+34	31.2' RT	362.14	0.50%
P13	18	25.00	2	22+80	14.8' LT	362.69	22+78	10.1' RT	362.56	0.50%
P14	18	20.00	2	28+69	9.3' RT	365.65	28+66	10.5' LT	365.07	2.87%

HORIZONTAL CURVE TABLE

CURVE #	PI	NORTHING	EASTING	DELTA	RADIUS	TANGENT	LENGTH
C6	20+31.66	346543.8573	321555.7939	030°20'14"	100.00	27.11	52.95
C7	21+19.48	346621.2094	321512.0425	026°27'45"	100.00	23.51	46.19
C8	22+05.47	346707.9378	321507.4509	026°49'58"	100.00	23.85	46.83
C9	23+04.78	346799.7943	321547.9689	030°28'30"	100.00	27.24	53.19
C10	25+92.73	347087.4873	321514.3117	012°38'31"	2369.00	262.42	522.70
C11	28+80.69	347360.8594	321418.5003	030°29'50"	100.00	27.26	53.23
C12	29+78.76	347424.7774	321342.8318	024°30'21"	100.00	21.72	42.77
C13	30+61.88	347500.5254	321307.0160	024°32'38"	100.00	21.75	42.84





SHEET NO.	TOTAL SHEETS
F2	F3
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0A4-1(030)/ Z581170000

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER Rebecca L. Campbell CE-10464

CRW ENGINEERING GROUP, LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

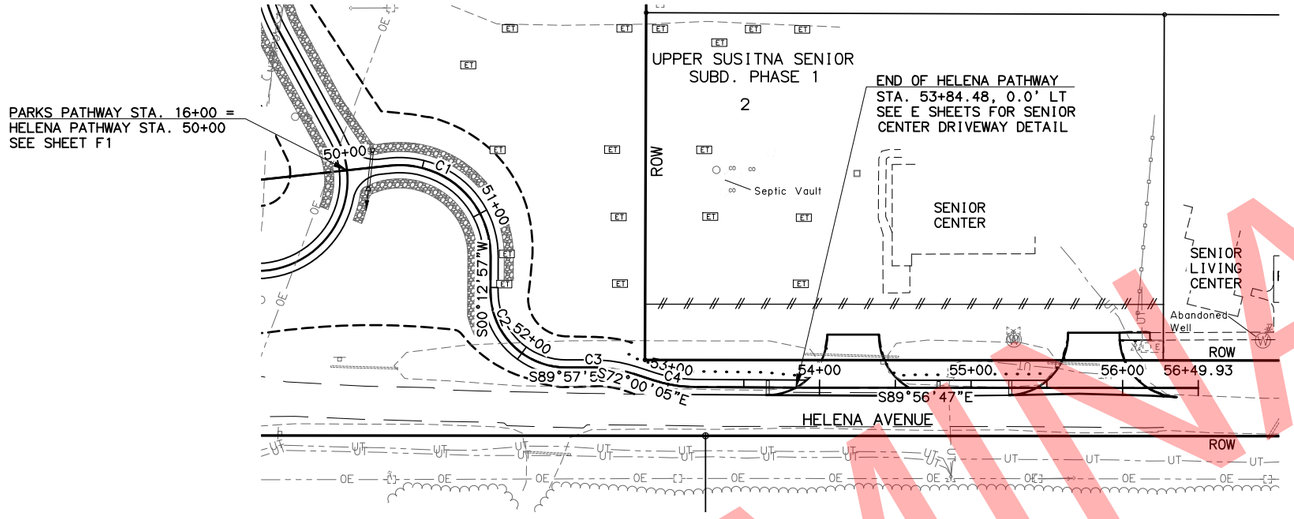
PARKS HIGHWAY/TALKEETNA SPUR ROAD

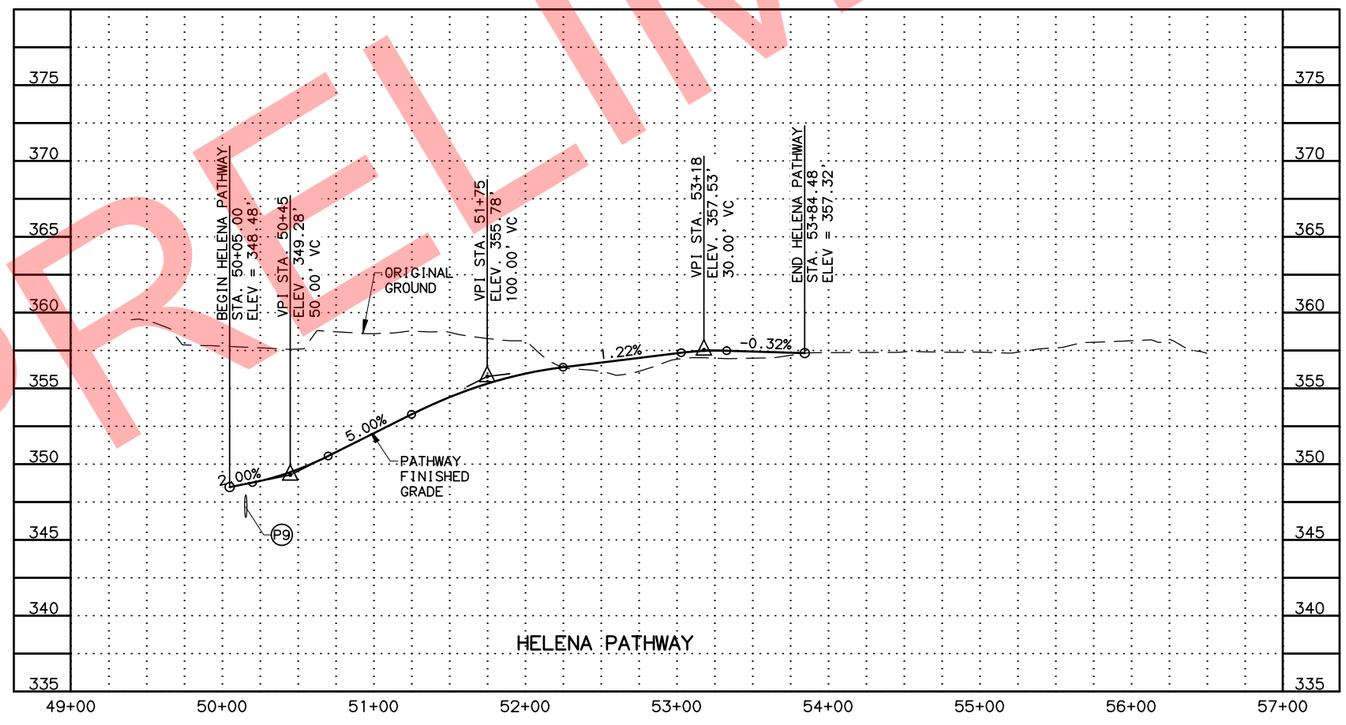
PLAN & PROFILE

FILE: J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 F1 F2 PLAN AND PROFILE.DWG | DATE/TIME: 6/8/2017 12:01 PM | LAYOUT: F2 | DESIGNED: RLC | CHECKED: SMB | DRAFTED: KB

HORIZONTAL CURVE TABLE

CURVE #	PI	NORTHING	EASTING	DELTA	RADIUS	TANGENT	LENGTH
C1	50+78.96	346135.3734	321690.6270	096°24'56"	60.00	67.12	100.97
C2	51+91.92	345994.9617	321690.0978	090°10'55"	50.00	50.16	78.70
C3	52+62.92	345994.9131	321772.0308	017°57'52"	90.00	14.23	28.22
C4	53+04.03	345982.1404	321811.3446	017°37'57"	90.00	13.96	27.70





SHEET NO.	TOTAL SHEETS
F3	F3
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION
0A4-1(030)/
Z581170000

NO.	REVISION
DATE	
NO.	REVISION
DATE	
NO.	REVISION
DATE	

STATE OF ALASKA 49TH
Shane M. Blanchard
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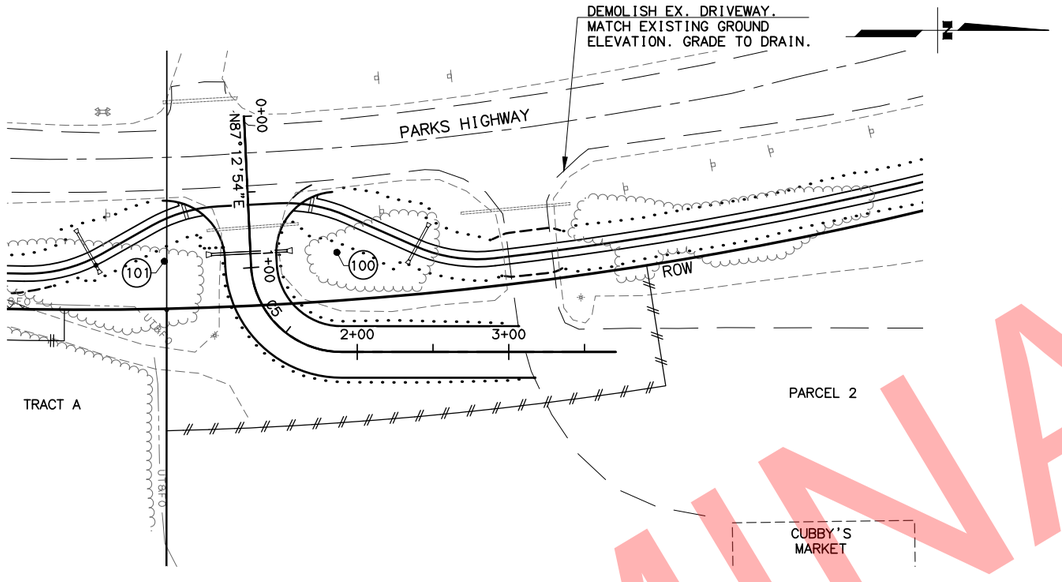
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

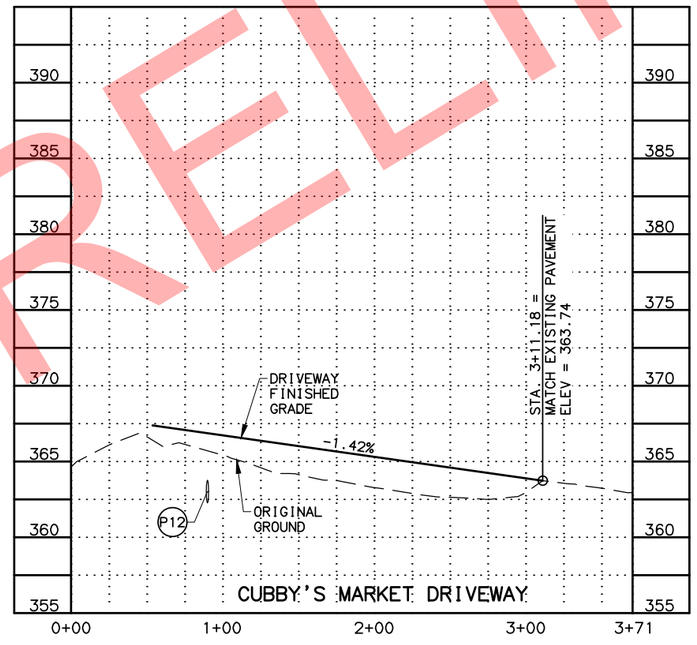
PARKS
HIGHWAY/TALKEETNA
SPUR ROAD

PLAN & PROFILE

FILE [J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 F3 G1 PLAN AND PROFILE.DWG | DATE/TIME 6/9/2017 12:46 PM | LAYOUT F3 | DESIGNED RLC | CHECKED SMB | DRAFTED KB



POINT TABLE			
POINT	STATION	OFFSET	REMARKS
100	0+92.58	57.00' LT	RADIUS POINT, R=40.0'
101	0+93.06	57.00' RT	RADIUS POINT, R=40.0'



HORIZONTAL CURVE TABLE							
CURVE #	PI	NORTHING	EASTING	DELTA	RADIUS	TANGENT	LENGTH
C5	1+44.17	346669.0634	321606.8857	087°16'53"	60.00	57.22	91.40

SHEET NO.	TOTAL SHEETS
G1	G1
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION
0A4-1(030)/
Z581170000

NO.	REVISION
DATE	
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DATE	
NO.	REVISION
DATE	

STATE OF ALASKA
49TH
Rebecca L. Campbell
CE-10464
REGISTERED PROFESSIONAL ENGINEER

CRW ENGINEERING GROUP, LLC 3940
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS
HIGHWAY/TALKEETNA
SPUR ROAD

COMMERCIAL DRIVEWAY
DETAILS

FILE: J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 F3 G1 PLAN AND PROFILE.DWG | DATE/TIME: 6/8/2017 12:05 PM | LAYOUT: G1 | DESIGNED: RLC | CHECKED: SMB | DRAFTED: KB

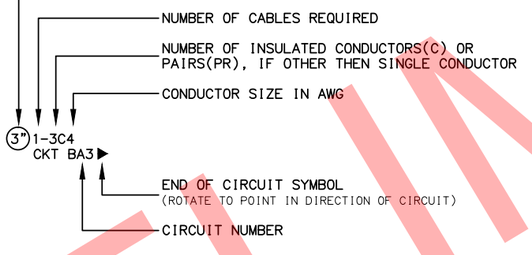
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	H1	H17

SYMBOL LEGEND

EXISTING	PROPOSED	
		LOAD CENTER
		TRAFFIC CONTROLLER
		BEACON CONTROLLER
##	##	TYPE 1A JUNCTION BOX
##	##	TYPE II JUNCTION BOX
##	##	TYPE III JUNCTION BOX
##	##	TYPE IV JUNCTION BOX
## — ##	## — ##	ELECTROLIER
HT#	HT#	HIGHTOWER
##	##	SIGNAL POLE WITH MASTARM
##	##	PEDESTRIAN PUSH BUTTON
##	##	PEDESTRIAN SIGNAL
##	##	VEHICULAR SIGNAL
##	##	VEHICULAR SIGNAL LEFT
##	##	VEHICULAR SIGNAL RIGHT
A	A	OPTICAL DETECTOR
GPS	GPS	GPS DETECTOR
CAM 1	CAM 1	CAMARA DETECTOR
RAD 1	RAD 1	RADAR DETECTOR
###	###	LOOP DETECTOR
		ANTENNA, YAGI OR OMNI
		MASTARM BEACON
		RURAL BEACON
		SCHOOL ZONE BEACON
		LOOP DETECTOR CONDUIT
		SIGNAL CONDUIT
		LIGHTING CONDUIT
		SIGNAL & LIGHTING CONDUIT
		CONDUIT BORING
2"	2"	CONDUIT SIZE IN INCHES
F/O #	F/O #	FIBER OPTIC VAULT
I/C	I/C	INTERCONNECT
	1	SIGN POST & NUMBER
		PRIVATE SIGN

PAVEMENT MARKING LEGEND

PROPOSED	
	PROJECT CENTERLINE
8"W	8" WHITE SOLID STRIPE
4"W	4" WHITE SOLID STRIPE
4"W SKIP	4" WHITE SKIP STRIPE 10' STRIPES AND 30' SPACES
8"W GUIDE SKIP	8" WHITE LANE GUIDE SKIP LANE CONTINUATION OR TURN SKIP 1' STRIPES AND 3' SPACES
8"Y	8" YELLOW SOLID STRIPE
4"Y	4" YELLOW SOLID STRIPE
4"Y SKIP	4" YELLOW SKIP STRIPE 10' STRIPES AND 30' SPACES
+20	STRIPING CHANGE STATION INTERVAL
24"W (TYP)	2' CROSSWALK OR STOPBAR
10'	LADDER CROSSWALK LAYOUT 2' WIDE RUNGS WITH 2' SPACES ALIGNED TO AVOID TIRE PATHS
12', (2)-4"Y 3" APART, VARIES, 18"Y @ 45°	TYPICAL PAINTED MEDIAN



CALL BEFORE YOU DIG!

CONTRACTOR SHALL CALL A MINIMUM OF 3 DAYS IN ADVANCE OF CONSTRUCTION

ALASKA DIGLINE....907-278-3121 OR 800-478-3121

CALL OR GO TO WWW.AKONECALL.COM/STATEWIDE.HTM FOR MEMBER LIST OF WHO WILL BE NOTIFIED

ABBREVIATIONS

℄ - CENTERLINE
SIG - SERVICE TO CONTROLLER
INTX - INTERSECTION
INTX L - INTERSECTION LIGHTING
LTG - LIGHTING
PRE 2 - PREEMPTION #
PRE CON 2 - PREEMPTION CONTROLLER #
LC - LOAD CENTER
TC - TRAFFIC CONTROLLER
P1 - TRAFFIC SIGNAL POLE #
PEC - PHOTOELECTRIC CELL
YAGI - DIRECTIONAL ANTENNA
OMNI - OMNI DIRECTIONAL ANTENNA
HEAD - VEHICULAR SIGNAL HEAD
PED B 28 - PEDESTRIAN PUSH BUTTON #
PEDI - PEDESTRIAN SIGNAL HEAD
RMC - RIGID METAL CONDUIT
PE - POLYETHYLENE CONDUIT
LFNC - LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
AWG - AMERICAN WIRE GAUGE
NB - NORTH BOUND
EB - EAST BOUND
SB - SOUTH BOUND
WB - WEST BOUND

SIGNING & STRIPING NOTES:

1. ALL STATION LOCATIONS FOR SIGN INSTALLATION ARE APPROXIMATE. INSTALL SIGNS AT LOCATIONS AS DIRECTED BY THE ENGINEER.
2. USE THE FOLLOWING DEFINITIONS TO DECIPHER THE ABBREVIATED SIGN POST TYPES IN THE SIGN SUMMARY SHEETS.
   A. PT MEANS A PERFORATED STEEL TUBE.
   B. T MEANS A SQUARE STEEL TUBE.
   C. P MEANS A ROUND STEEL PIPE.
   D. W MEANS A WIDE FLANGE BEAM.
   E. POPL MEANS A POLE PLATE INSTALLED PER ITS STANDARD DRAWING S-23
3. FABRICATE ALL SIGNS FROM 0.125" THICK ALUMINUM SHEETING, UNLESS STATED ELSEWHERE.
4. FOR SIGNS SUPPORTED BY MULTIPLE POSTS, FABRICATE THE POSTS WITH THEIR TOPS LEVEL WITH ONE ANOTHER.
5. FOR PERFORATED STEEL TUBE SIGNPOSTS, INSTALL THE CONCRETE FOUNDATION OPTION SHOWN ON STANDARD DRAWING S-30.03. TRIM EACH PT POST TO LIMIT THE LENGTH INSERTED INTO THE FOUNDATION TO 12 INCHES.
6. FABRICATE GUIDE SIGNS ACCORDING TO THE SHOP DRAWINGS INCLUDED IN THE APPENDICES OF PART 4, CONTRACT PROVISIONS AND SPECIAL PROVISIONS. TRIM THE CORNERS OF ALL SIGNS TO THE RADIUS SHOWN ON EACH SHOP DRAWING.
7. ERECT NEW SIGNS BEFORE REMOVAL OF EXISTING SIGNS WITH SIMILAR MESSAGE. NOTIFY THE ENGINEER A MINIMUM OF 14 DAYS PRIOR TO BEGINNING SIGN REMOVAL AND SALVAGE OR DISPOSAL ACTIVITIES.
8. FOR SIGNS SUPPORTED BY MULTIPLE TUBES OR PIPES, LOCATE THE OUTER POSTS ON MAXIMUM SIX FEET CENTERS. INSTALL ADJACENT WIDE FLANGE POSTS ON MINIMUM EIGHT FEET CENTERS.
9. FOR ALL FINAL PAVEMENT MARKINGS USE TRAFFIC PAINT 60 MILS, SURFACE APPLIED.
10. DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
11. IF THE NEW AND EXISTING PAVEMENT MARKINGS ARE NOT ALIGNED AT MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER ON THE NEW PAVEMENT.
12. WHERE NEW STRIPING IS TO EXTEND BEYOND PAVING LIMITS, REMOVE EXISTING STRIPING IN ACCORDANCE WITH SUBSECTION 670-3.04 TO THE EXTENT OF STRIPING LIMITS.
13. REPLACE RUMBLE STRIPS FOR RIGHT TURN LANE DAMAGED BY CONSTRUCTION.

NOTES:

FOUNDATIONS NOTES:

1. STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE.
2. JUNCTION BOX LOCATIONS APPROXIMATE. LOCATE J-BOXES SO THAT THEY ARE LOCATED OUT OF THE PATHWAY, SIDEWALK, CURB RAMPS, AND DRAINAGE COLLECTION AREAS.
3. INSTALL LOAD CENTER FOUNDATIONS WITHIN 1-DEGREE OF PLUMB.
4. INSTALL ANCHOR BOLTS IN CAST FOUNDATIONS TO BE WITHIN 1:40 OF PLUMB.
5. TOPSOIL AND SEED ANY DISTURBED AREAS.

STATE OF ALASKA
49TH
Rebecca L. Campbell
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SIGNING & STRIPING NOTES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H2	H17

MATCHLINE STA. 18+50

TRACT A

TRACT B

TRACT C

ROW

PARKS HIGHWAY

HELENA AVENUE

STA. 9+95 (1)

STA. 10+14 (2)

STA. 15+75 (3)

STA. 16+00 (4)

STA. 20+00 (5)

STA. 21+23 (6)

STA. 22+08 (7)

STA. 21+94 (8)

STA. 29+25 (9)

STA. 29+65 (10)

STA. 50+21 (11)

STA. 53+00 (12)

STA. 53+85 (13)

STA. 31+07 (11)

STA 11+60.00, 34.50' RT
REMOVE & RELOCATE
ILLUMINATED SCHOOL SIGN

STA. 21+63.84, 10.20' RT
BEGIN 2-4" Y STRIPE

STA. 23+49.46, 63.56' RT
END 2-4" Y STRIPE

EXISTING STRIPING
PARKS HWY.

PROVIDE 4"W SHOULDER STRIPE ON
HELENA AVE FROM PARKS HWY TO
STA. 55+24.91, 5.5' RT

PARCEL 2

TALKEETNA SPUR ROAD

BEAR STATUE

10'

4" Y

4" W

2-4" Y

24" W

PATHWAY
NO MOTOR VEHICLES

STOP

SU VALLEY JR./SR. HIGH SCHOOL

TALKEETNA SPUR RD

HELENA AVE

TALKEETNA 14 MILES

PARKS HIGHWAY

CRW ENGINEERING GROUP, LLC 3940
ARCTIC BLVD. SUITE 300
ANCHORAGE, ALASKA 99503
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SIGNING & STRIPING

DATE/TIME | 6/8/2017 12:09 PM | LAYOUT | H2 | DESIGNED | WMM | CHECKED | SMB | DRAFTED | TRK

FILE | J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 H2 SIGN & STRIPE.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H3	H17

SIGN SUMMARY

SHEET NO.	POST N.	STATION	OFFSET	TYPE	LEGEND	INCHES		SIGN FACES	POST SIZE & TYPE	FRAMED?		SALVAGE SIGN	REMARKS
						WIDTH	HEIGHT			YES	NO		
H2	1	9+95	10.0' RT	R3-5AP	PATHWAY	18	6	W	2" P.S.T.		X		BUILD AS ONE PANEL
				R3-5AP		18	6	E			X		
				R3-5A	NO MOTOR VEHICLES	18	24	W			X		MOUNT TWO SIGNS BACK TO BACK
				R3-5A		18	24	E			X		
H2	2	10+14	10.0' RT	W7-5		18	18	W	2" P.S.T.		X		
H2	3	15+75	10.0' LT	R3-5A	NO MOTOR VEHICLES	18	24	NE	2" P.S.T.		X		MOUNT TWO SIGNS BACK TO BACK
				R3-5A		18	24	SW			X		
H2	4	16+00	10.0' LT	SPECIAL	HELENA AVE / SU VALLEY JR./ SR. HIGH SCHOOL	24	18	N	4" X 4" WOOD POST		X		SEE SPECIAL SIGN DETAIL
				SPECIAL	SU VALLEY JR./ SR. HIGH SCHOOL / TALKEETNA SPUR RD	24	24	N			X		SEE SPECIAL SIGN DETAIL
				SPECIAL	TALKEETNA SPUR RD / HELENA AVE	26	18	S			X		SEE SPECIAL SIGN DETAIL
H2	5	20+00	10.0' LT	W7-5		18	18	N	2" P.S.T.		X		
H2	6	21+23	10.0' RT	R3-5AP	PATHWAY	18	6	N	2" P.S.T.		X		BUILD AS ONE PANEL
				R3-5A	NO MOTOR VEHICLES	18	24	N			X		

STATE OF ALASKA
49TH
Rebecca L. Campbell
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SIGN SUMMARY

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H4	H17

SIGN SUMMARY (CONTINUED)

SHEET NO.	POST N.	STATION	OFFSET	TYPE	LEGEND	INCHES		SIGN FACES	POST SIZE & TYPE	FRAMED?		SALVAGE SIGN	REMARKS
						WIDTH	HEIGHT			YES	NO		
H2	7	22+08	10.0' RT	R3-5AP	PATHWAY	18	6	S	2" P.S.T.		X		BUILD AS ONE PANEL
				R3-5A	NO MOTOR VEHICLES	18	24	S			X		
H2	8	21+94	18.5' RT	R1-1	STOP	30	30	E	2" P.S.T.		X		
H2	9	29+25	10.0' LT	SPECIAL	PARKS HIGHWAY XING	24	6	N	2" P.S.T.				SEE SPECIAL SIGN DETAIL
H2	10	29+65	10.0' RT	R3-5AP	PATHWAY	18	6	N	2" P.S.T.		X		BUILD AS ONE PANEL
				R3-5A	NO MOTOR VEHICLES	18	24	N			X		
H2	11	50+21	10.0' LT	R1-2	YIELD	24	24	E	2" P.S.T.		X		BUILD AS ONE PANEL
H2	12	53+00	10.0' LT	W7-5		18	18	E	2" P.S.T.		X		
H2	13	53+85	10.0' LT	R3-5AP	PATHWAY	18	6	E	2" P.S.T.		X		BUILD AS ONE PANEL
				R3-5A	NO MOTOR VEHICLES	18	24	E			X		
H2	14	31+07	6.24' RT	SPECIAL	TALKEETNA 14 MILES	24	12	S	2" P.S.T.		X		

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SIGN SUMMARY

TRK | DRAFTED | SMB | CHECKED | WMM | DESIGNED | H4 | LAYOUT | 6/8/2017 12:09 PM | DATE/TIME

FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 H1 AND H3-H4 SIGN SUMMARY.DWG

NO.	DATE	REVISION

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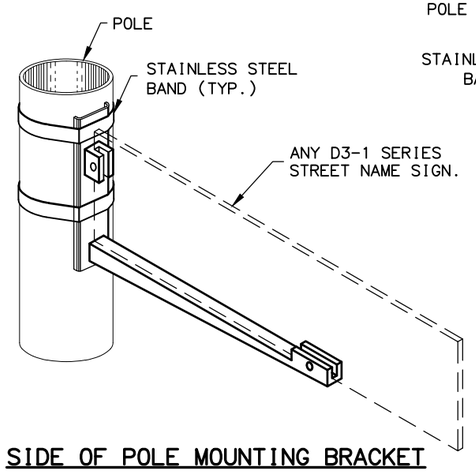
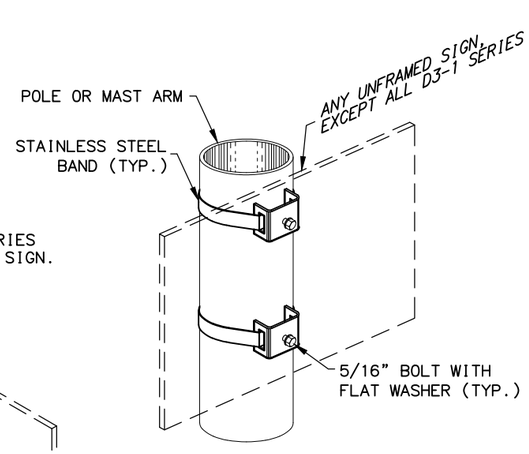
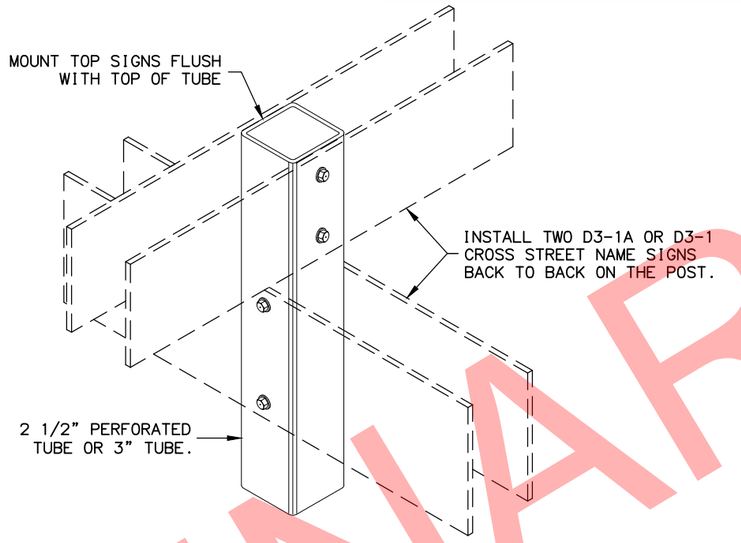
ALASKA	0A4-1(030)/Z581170000	2017	H5	H17



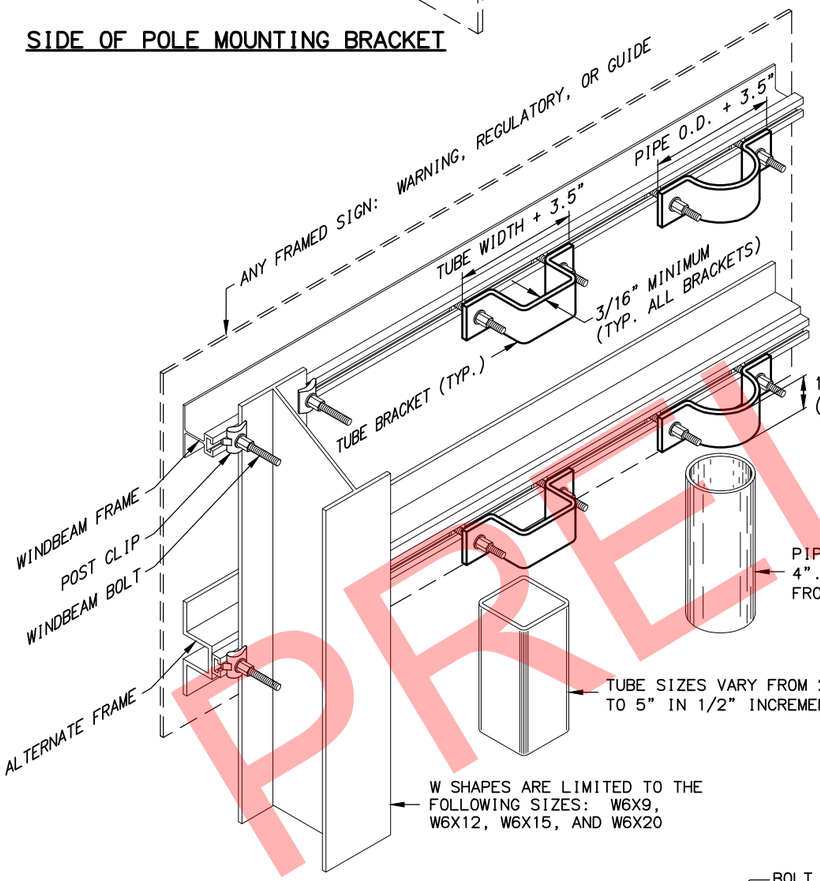
SIDE OF POLE MOUNTING BRACKET



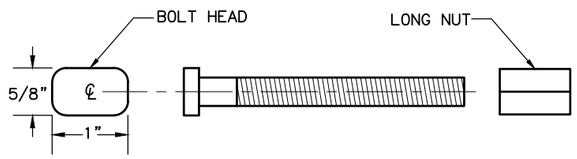
SADDLE BRACKETS

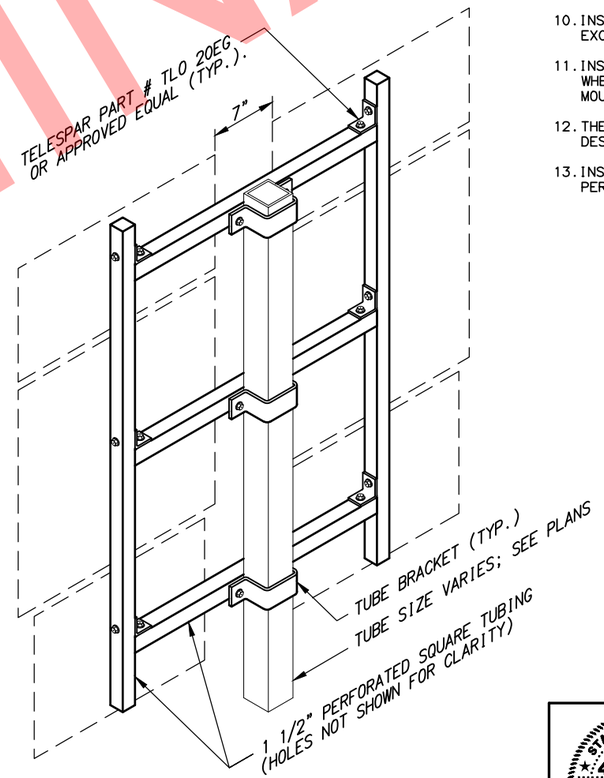


STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS





ROUTE MARKER TREE

NOTES:

1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE TUBES TO SUPPORT SIGNS MOUNTED ON ONE POST.
2. ATTACH SIGNS, FRAMED AND UNFRAMED TO THEIR SUPPORTS WITH ZINC PLATED 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PERFORATED TUBES WITH ACCESSORY DRIVE RIVETS AND TO SADDLES WITH 5/16" BOLTS.
3. BOLT UNFRAMED SIGNS DIRECTLY TO TUBES, AND ATTACH THEM TO POLES AND MAST ARMS WITH TWO SADDLES.
4. ATTACH BRACKETS TO POLES AND MAST ARMS WITH DOUBLE WRAPS OF 3/4" WIDE BY 0.020" THICK STAINLESS STEEL BANDING MATERIAL. TIGHTEN EACH BAND UNTIL IT STOPS MOVING THROUGH THE BUCKLE.
5. ATTACH FRAMED SIGNS TO POSTS WHEREVER THE FRAMES CROSS THE POSTS. AT EACH CROSSING, ATTACH THE SIGN USING TWO POST CLIPS ON W-SHAPE POSTS, A U-SHAPED BRACKET ON PIPES, AND A BRACKET WITH SQUARE CORNERS ON TUBES.
6. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
7. ONLY USE THE SPECIAL WINDBEAM BOLTS TO ATTACH SIGNS FRAMED WITH THE WINDBEAM FRAMING MATERIAL.
8. ATTACH FRAMED SIGNS TO POLES AND MAST ARMS USING POLE PLATES INSTALLED ACCORDING TO STANDARD DRAWING S-23.00
9. FOR ROUTE MARKER TREES, CUT PERFORATED TUBES TO ENSURE TIGHT FITTING JOINTS. ASSEMBLE THE PIECES WITH ACCESSORY ELL-SHAPED ANGLE BRACKETS.
10. INSTALL THE TOP EDGE OF SIGNS 1" ABOVE THE TOPS OF POSTS, EXCEPT FOR THE D3-1 STREET NAME SIGNS.
11. INSTALL THE TOP EDGE OF SIGNS 3" BELOW THE TOP OF POST, WHENEVER THEY ARE MOUNTED BELOW SIGNS SECURED BY POST TOP MOUNTING BRACKETS.
12. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
13. INSTALL WEATHER TIGHT CAPS ON ALL PIPE AND TUBE POSTS, EXCEPT PERFORATED TUBING.

FASTENER SPECIFICATION TABLE			
FASTENERS		STEEL	STAINLESS STEEL
BOLTS		ASTM A 307	ASTM F 593
NUTS	REGULAR	ASTM A 563	ASTM F 594
	LOCK		
WASHERS		ASTM A 36	ASTM A 480
POST CLIPS			

STATE OF ALASKA 49TH REGISTERED PROFESSIONAL ENGINEER Rebecca L. Campbell CE-10464
CRW ENGINEERING GROUP, LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

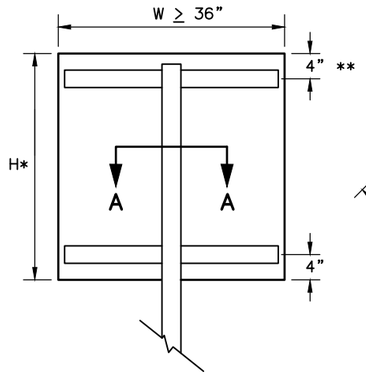
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SIGN ATTACHMENT DETAILS I

ETG | DRAFTED | RLC | CHECKED | RLC | DESIGNED | H5 | LAYOUT | 6/8/2017 12:10 PM | DATE/TIME
FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 H5-H6 SIGN ATTACHMENT DETAILS.DWG

NO.	DATE	REVISION

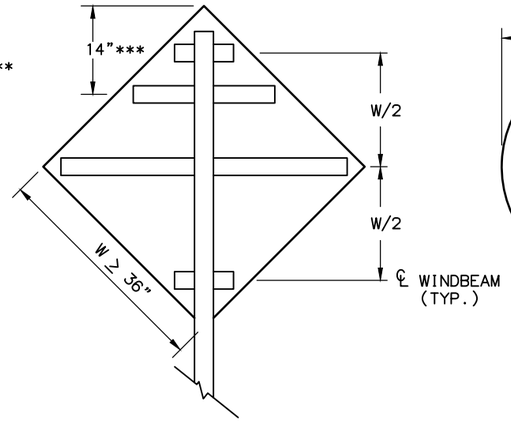
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H6	H17



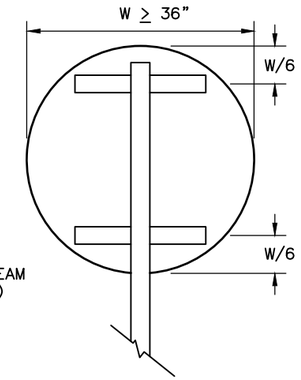
RECTANGLES AND TRAPEZOIDS

* WHEN H > 42 INCHES, INSTALL A 3RD WINDBEAM CENTERED ON THE SIGN.

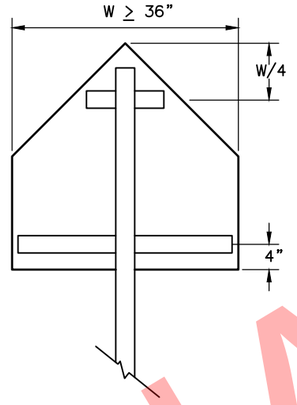
** FOR S5-1 SIGNS MOUNTED ON FLASHING BEACON POSTS, USE A 10" OFFSET. OTHERWISE, USE 4".

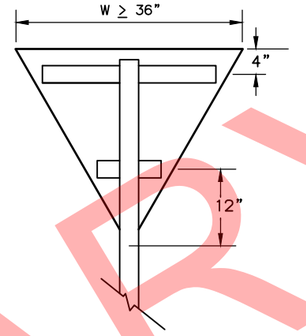


*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.



ROUNDS AND OCTAGONS



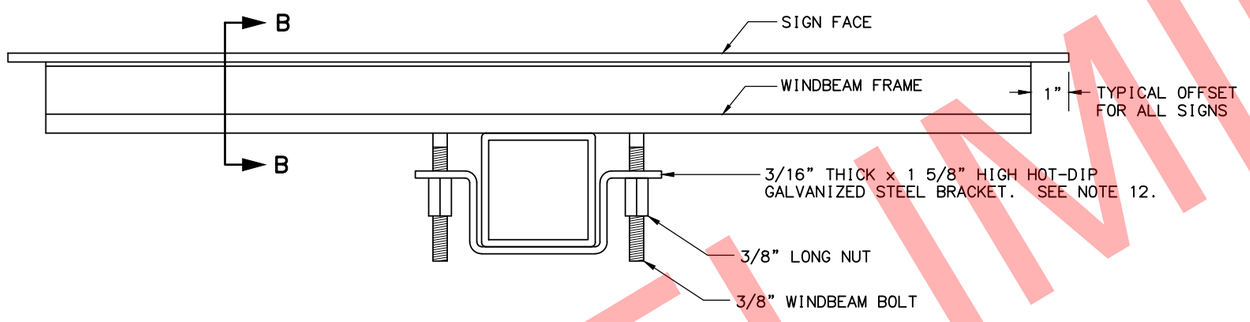


NOTES:

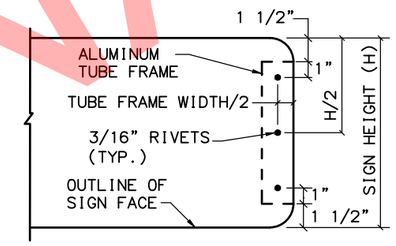
1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HEREON.
4. THIS DRAWING DEPICTS THE WINDBEAM FRAMING AND ATTACHMENT SYSTEM. ATTACH SIGNS FRAMED WITH ZEE SHAPED FRAMING ACCORDING TO REGIONAL DRAWING "SIGN ATTACHMENT DETAILS", USING "U" SHAPED BRACKETS AND TWO BOLTSWITH NUTS.
5. THE ENGINEER MAY APPROVE OTHER FRAMING MEMBERS. SUBMIT DOCUMENTS THAT DETAIL THE FRAME'S CROSS SECTION AND STRENGTH, AND METHOD OF ATTACHING THE FRAME TO A POST.
6. USE FRAMING MEMBERS MADE FROM ALUMINUM ALLOY 6061-T6.
7. EACH FRAMING MEMBER SHALL BE ONE CONTINUOUS PIECE.
8. ATTACH FRAMING MEMBERS TO THE SIGN PANELS WITH RIVETS OR AN ENGINEER APPROVED, DOUBLE SIDED, HIGH STRENGTH, ADHESIVE TAPE.
9. WITH THE ADHESIVE TAPE, INSTALL TWO RIVETS IN BOTH ENDS OF EACH FRAMING MEMBER, AND ATTACH THE FRAMING MEMBERS TO THE SIGN PANELS ACCORDING TO THE TAPE MANUFACTURER'S WRITTEN INSTRUCTIONS, INCLUDING:
   A. THE CLEANING AND HANDLING OF THE SIGN PANELS AND FRAMING MEMBERS.
   B. THE APPLICATION OF THE ADHESIVE TAPE.
10. WHEN RIVETS ARE USED TO ATTACH FRAMING MEMBERS, INSTALL 2 RIVETS IN EACH END AND THE BALANCE ON 8" MAXIMUM CENTERS.
11. USE 3/16" DIAMETER RIVETS CONFORMING TO ALUMINUM ALLOY 6061-T6 FOR COLD DRIVEN RIVETS, OR ALUMINUM ALLOY 6061-T43 FOR HOT DRIVEN RIVETS.
12. THE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.

WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

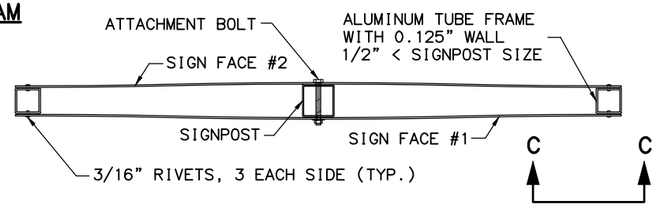
ELEVATION VIEW



SECTION A - A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

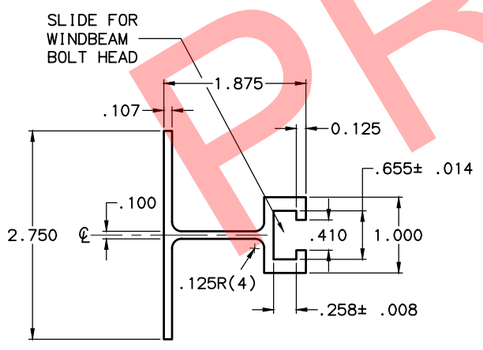


VIEW C - C

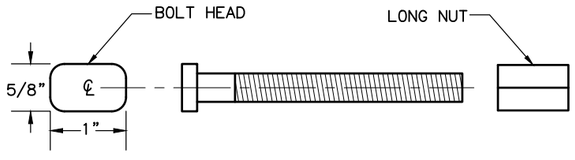


D3-1, D3-1A, D3-1D STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B - B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

CRW ENGINEERING GROUP, LLC 3940 ARCTIC BLVD. SUITE 300 ANCHORAGE, ALASKA 99503 (907) 562-3252 #AECL882-AK

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

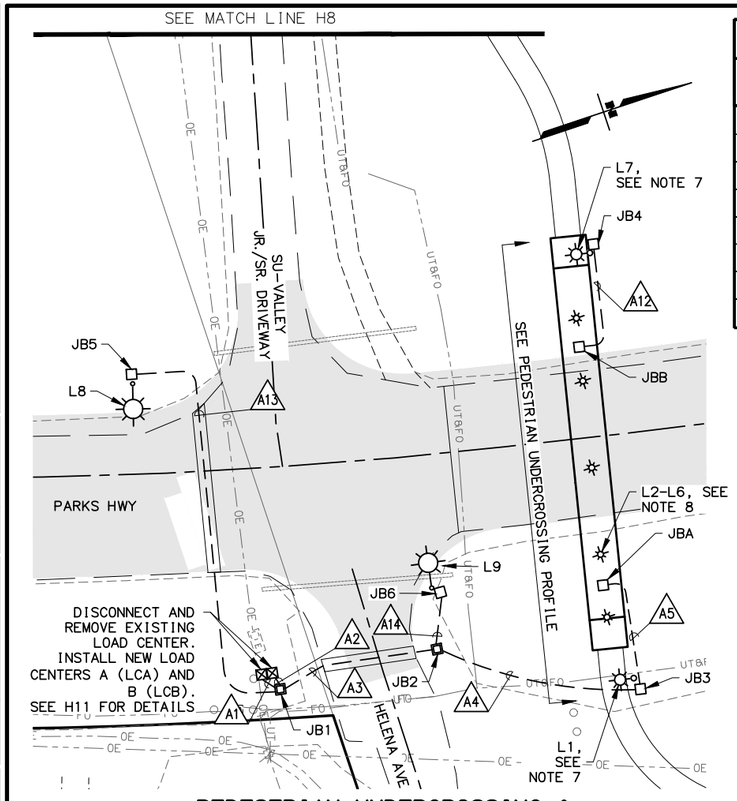
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

SIGN ATTACHMENT DETAILS II

TRK | DRAFTED | SMB | CHECKED | WMM | DESIGNED | H6 | LAYOUT | DATE/TIME 6/8/2017 12:10 PM | FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY FED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 H5-H6 SIGN ATTACHMENT DETAILS.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H7	H17



PEDESTRIAN UNDERCROSSING & INTERSECTION LIGHTING PLAN

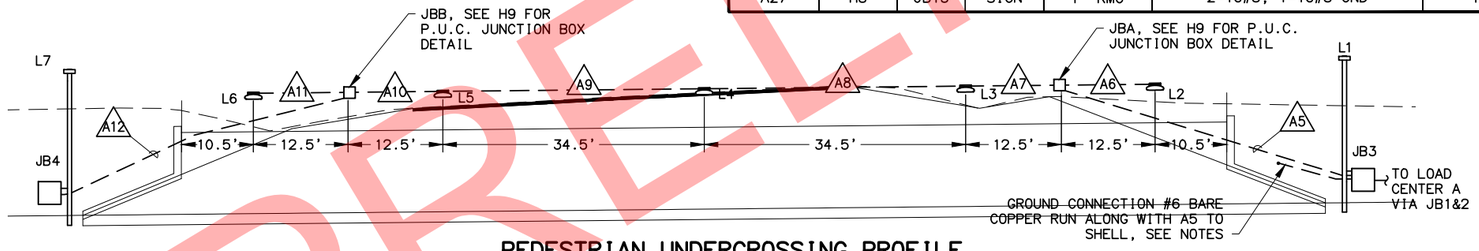
SCALE: 1"=30'

POWER & LIGHTING JUNCTION BOX SUMMARY

J-BOX NO	STATION	OFFSET	TYPE	COMMENTS
JB1	14+77.5	131.50 RT	2	
JB2	14+70.0	68.0 RT	2	
JB3	14+93.0	10.0 LT	1A	
JB4	13+15.0	10.0 LT	1A	
JB5	13+47.5	177.5 RT	1A	
JB6	14+45.5	64.5 RT	1A	
JB12	10+85.0	10.6LT	1A	
JB13	11+55.4	32.0 RT	1A	

POWER & LIGHTING CONDUIT SUMMARY

CONDUIT	SHEET #	FROM	TO	SIZE	CONTAINS	LENGTH (FT)
A1	H7	LCA	JB1	2" RMC	6-1c#10, 1C#8 GND	5
A2	H7	LCB	JB1	2" RMC	6-1c#10, 1-1c#8 GND	5
A3	H7	JB1	JB2	2" RMC	8-1c#10, 1-1c#8 GND	60
	H7	JB1	JB2	2" RMC	SPARE	60
A4	H7	JB2	JB3	2" RMC	6-1c#10, 1-1c#8 GND	80
A5	H7	JB3	JBA	1" RMC	6-1c#10, 1-1c#8 GND	50
A6	H7	JBA	L2	1" RMC	2-1c#10, 1-1c#8 GND	12
A7	H7	JBA	L3	1" RMC	6-1c#10, 1-1c#8 GND	12
A8	H7	L3	L4	1" RMC	6-1c#10, 1-1c#8 GND	34.5
A9	H7	L4	L5	1" RMC	6-1c#10, 1-1c#8 GND	34.5
A10	H7	L5	JBB	1" RMC	6-1c#10, 1-1c#8 GND	12
A11	H7	JBB	L6	1" RMC	2-1c#10, 1-1c#8 GND	12
A12	H7	JBB	JB4	1" RMC	2-1c#10, 1-1c#8 GND	40
A13	H7	JB1	JB5	1" RMC	2-1c#10, 1-1c#8 GND	135
	H7	JB1	JB5	1" RMC	SPARE	135
A14	H7	JB2	JB6	1" RMC	2-1c#10, 1-1c#8 GND	25
A24	H8	L4B1-2	JB12	1" RMC	2-1c#8, 1-1c#8 GND	150
A25	H8	JB12	L4B1-10	1" RMC	4-1c#8, 1-1c#8 GND	12
A26	H8	JB12	JB13	1" RMC	2-1c#8, 1-1c#8 GND	90
A27	H8	JB13	SIGN	1" RMC	2-1c#8, 1-1c#8 GND	12



PEDESTRIAN UNDERCROSSING PROFILE

DETAIL, NTS

ELECTROLIER SUMMARY

POLE NO	CIRCUIT NO	STATION	OFFSET	LIGHT DISTRIBUTION TYPE	LAMP WATTS	VOLTAGE	TYPE	MOUNTING HEIGHT (FT)	SHAFT LENGTH (FT)	MAST ARM LENGTH (FT)
L1	B2	14+87.5	8.00 LT	MEDIUM, CUTOFF, TYPE 2	70	240	LED	15.0	21.5*	N/A
L7	B2	13+18.0	8.00 LT	MEDIUM, CUTOFF, TYPE 2	70	240	LED	15.0	21.5*	N/A
L8	B6	13+51.5	177.5 RT	MEDIUM, CUTOFF, TYPE 3	400	240	HPS	39.8	34.0	20.0
L9	B6	14+43.5	67.5 RT	MEDIUM, CUTOFF, TYPE 3	400	240	HPS	39.8	34.0	20.0
L4B1-2	TEACHERS			EXISTING SHOWN FOR REFERENCE AND POWER TAP						
LAB4-10	CUSTODIAN	10+87.8	8.5 LT					30.0	26.0	N/A

NOTE: FOR P.U.C. FIXTURES L2 THROUGH L6, SEE NOTE 6 ON SHEET H7 AND LOAD CENTER SCHEDULE AND POWER ONE-LINE ON SHEET H11.

*LENGTH INCLUDES BURIED PORTION OF SHAFT

PEDESTRIAN UNDERCROSSING LIGHTING NOTES:

ITEM 660(12), PEDESTRIAN UNDERCROSSING LIGHTING SYSTEM COMPLETE, INCLUDES THE FOLLOWING WORK:

1. PEDESTRIAN UNDERCROSSING LIGHTING LEVELS AS LISTED IN IES RP-8-00 ARE 10.0 FC AVERAGE WITH A UNIFORMITY (AVE/MIN) OF 3.0:1 DURING DAYLIGHT HOURS AND 4.0 FC AVERAGE WITH A UNIFORMITY OF (AVE/MIN) 3.0:1 DURING THE NIGHTTIME HOURS. NOTE THAT ONLY 2 OF 5 FIXTURES OPERATE DURING THE NIGHTTIME HOURS.
2. CONDUITS TO THE JUNCTION BOXES TO BE SUPPORTED BY THE SHELL OF THE P.U.C. STRUCTURE AND ATTACHED WITH GALVANIZED CONDUIT CLAMPS ATTACHED TO THE STRUCTURE WITH EITHER POWER DRIVEN FASTENERS OR SELF TAPPING BOLTS. SPACING OF CLAMPS NOT TO EXCEED 5 FEET, AND WITHIN 1.5 FEET OF THE JUNCTION BOX.
3. CAP ALL UNUSED OPENINGS IN ELECTRICAL ITEMS WITH WATER PROOF PLUGS.
4. FIXTURES ARE TO BE INSTALLED CENTERED IN THE P.U.C. SO THAT THE 90° PLANE LIGHT DISTRIBUTION IS IN LINE WITH THE LONGITUDINAL DIMENSION OF THE P.U.C.
5. GROUNDING: ALL LIGHTING ENCLOSURES SHALL BE CONNECTED TO THE GROUND IN THE TYPE 1A JUNCTION BOX, WITH A CONTINUOUS CONDUCTOR INSTALLED IN THE CONDUIT. THE JUNCTION BOX GROUND CONDUCTOR SHALL BE A MINIMUM OF #6 AWG BARE COPPER CONNECTED TO THE SHELL OF THE P.U.C. INSTEAD OF A GROUND ROD. CONNECTION TO THE P.U.C. SHALL BE MADE USING A COMPRESSION FITTING BOLTED OR THERMITE WELDED. (CADWELD, THERMOWELD, OR EQUIVALENT). CONTINUOUS GROUND PATH TO THE SOURCE SHALL BE PROVIDED.
6. THE TYPE IA JUNCTION BOX FEEDING THE P.U.C. LIGHTING SHALL BE LOCATED LOWER THAN THE JUNCTION BOXES FEEDING THE LIGHT FIXTURES TO ALLOW CONDUITS TO DRAIN.
7. SEE PEDESTRIAN UNDERCROSSING FIXTURE & ENCLOSURE NOTES ON H9 FOR ADDITIONAL INFORMATION.
8. SEE P.U.C. LIGHT FIXTURE DETAIL ON H9 FOR ADDITIONAL INFORMATION.

ROADWAY LIGHTING NOTES:

ITEM 660(3), HIGHWAY LIGHTING SYSTEM COMPLETE, INCLUDES THE FOLLOWING WORK:

1. INSTALL ALL ELECTROLIERS ON NEW FOUNDATIONS WITH FRANGIBLE COUPLING BASES.
2. INSTALL THE NEW ROADWAY LIGHTING SYSTEM SHOWN IN THE PLANS. FURNISH ALL LUMINAIRES WITH THE FOLLOWING FEATURES:

   A. LIGHT DISTRIBUTION SYSTEM THAT MEETS OR EXCEEDS THE UNIFORMITY REQUIREMENTS LISTED IN THE LUMINAIRE PERFORMANCE CRITERIA,

   B. MAGNETIC REGULATOR BALLASTS RATED FOR THE VOLTAGE SHOWN IN THE ELECTROLIER SUMMARY, AND,

   C. HIGH PRESSURE SODIUM LAMPS WITH FLAT LENSES THAT FEATURE A RATED LIFE OF 40,000 HOURS AT 10 HOURS PER START.

ELECTRICAL LEGEND

- CONDUIT
- THAW WIRE
- ROADWAY ELECTROLIER
- PATHWAY ELECTROLIER
- P.U.C. LIGHT FIXTURE
- TYPE IA JUNCTION BOX
- TYPE II JUNCTION BOX
- LOAD CENTER
- THAW WIRE CONTROLLER
- NORMALLY OPEN CONTACT
- NORMALLY CLOSED CONTACT
- CONTACTOR
- CONDUIT CALL OUT

ABBREVIATIONS

AMP	AMPERE
AWG	AMERICAN WIRE GAGE
BCU	BARE COPPER
Cu	COPPER
HPS	HIGH PRESSURE SODIUM
HT	HEAT TAPE
KVA	KILO-VOLT-AMPERE
LC	LOAD CENTER
LFMC	LIQUID-TIGHT FLEXIBLE METALLIC
MEA	CONDUIT
NC	MATANUSKA ELECTRIC ASSOCIATION
NEC	NORMALLY CLOSED
NO	NATIONAL ELECTRICAL CODE
NTS	NORMALLY OPEN
PH	NOT TO SCALE
P.U.C.	PHASE
RMC	PEDESTRIAN UNDERCROSSING
VD	RIGID METAL CONDUIT
	VOLTAGE DROP

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

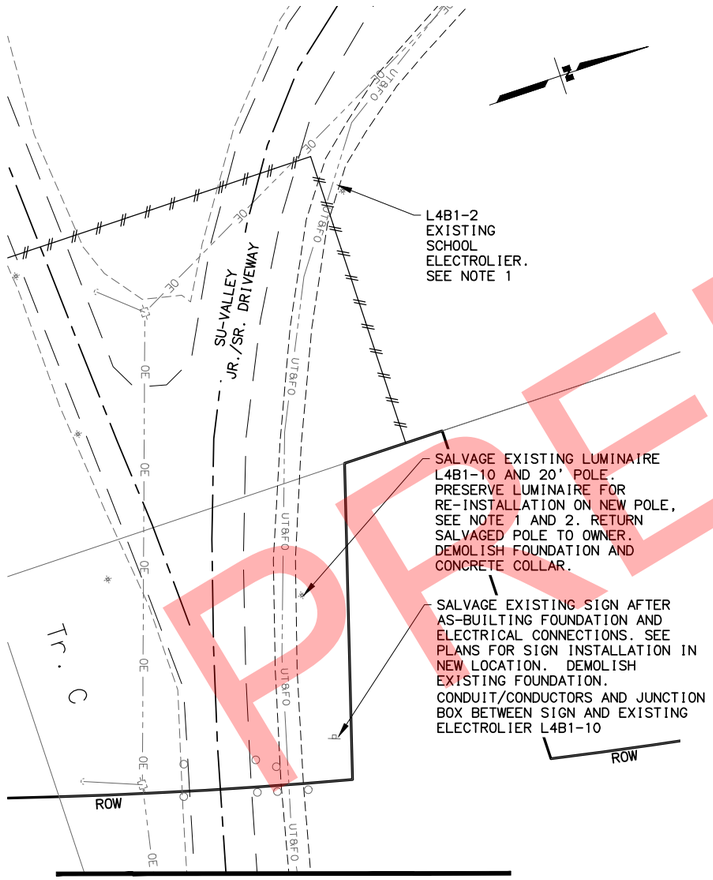
LIGHTING PLAN & PROFILE

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	H8	H17

SCHOOL LIGHTING NOTES:

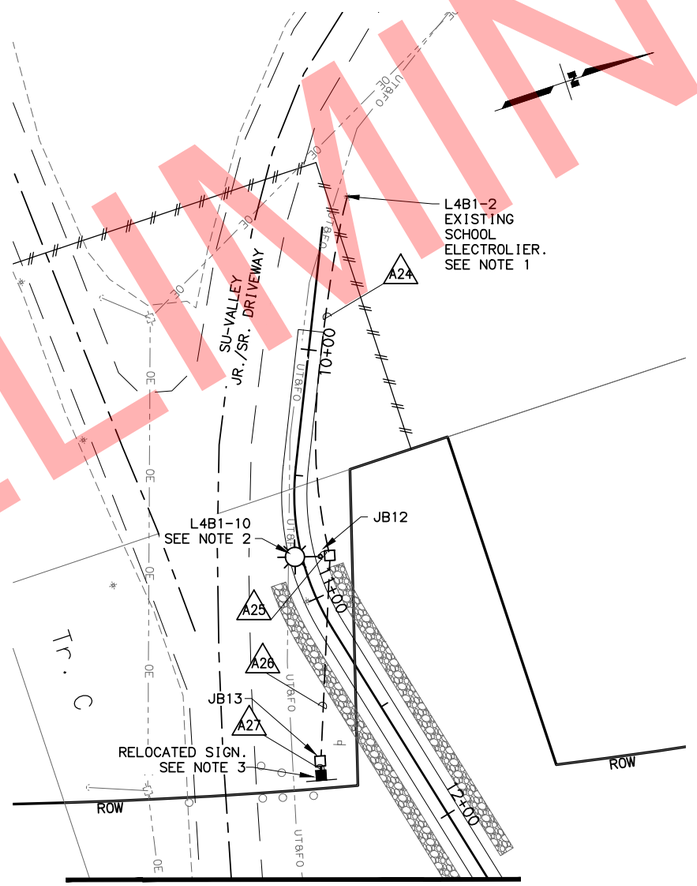
ITEM 660(3), HIGHWAY LIGHTING SYSTEM COMPLETE, INCLUDES THE FOLLOWING WORK:

1. EXISTING SCHOOL ELECTROLIER L4B1-2 WHICH IS TO REMAIN AS IS WILL BE THE LOCATION WHERE A NEW BRANCH CIRCUIT FEEDER WILL BE OBTAINED, SERVING THE RELOCATED LIGHTING AND SIGN. THERE ARE TWO CIRCUITS LOCATED AT THIS ELECTROLIER, EITHER WITHIN THE HANDHOLE OR AN ADJACENT JUNCTION BOX. THIS PROJECT REQUIRES THE CONTRACTOR TO EXTEND THE CIRCUIT NOT SERVING L4B1-2 TO THE DOWNSTREAM LIGHT AND SIGN. THESE CIRCUITS ARE LABELED BY ZONE: "TEACHERS" SERVES L4B1-2 AND IS TO BE PRESERVED AND NOT USED, "CUSTODIAN" WILL BE EXTENDED. THE EXISTING CONDUIT AND CONDUCTORS MAY BE RE USED WHERE THEY DO NOT INTERFERE WITH NEW TRAIL, SIDEWALK OR APPURTENANCES, HOWEVER, DIRECT BURIED SPLICES ARE NOT PERMITTED AND UNDERGROUND JUNCTION BOXES MUST BE USED.
2. PROVIDE NEW UNDERGROUND JUNCTION BOX AND FOUNDATION MATCHING THE EXISTING FOUNDATION THAT WAS DEMOLISHED (SEE DETAIL) AND NEW POLE WITH EXISTING SALVAGED FIXTURE. SERVE THE SIGN FROM THIS LOCATION
3. INSTALL SALVAGED SIGN ON NEW FOUNDATION AND SUPPORT POSTS MATCHING THE DEMOLISHED SUPPORTS. SERVE ON CIRCUIT ZONE "CUSTODIAN". SIGN ALIGNMENT TO THE ROAD WAY TO BE APPROVED BY ENGINEER PRIOR TO POURING FOUNDATION. ALIGNMENT SHALL BE AS CLOSE TO THE ORIGINAL AS PRACTICABLE.



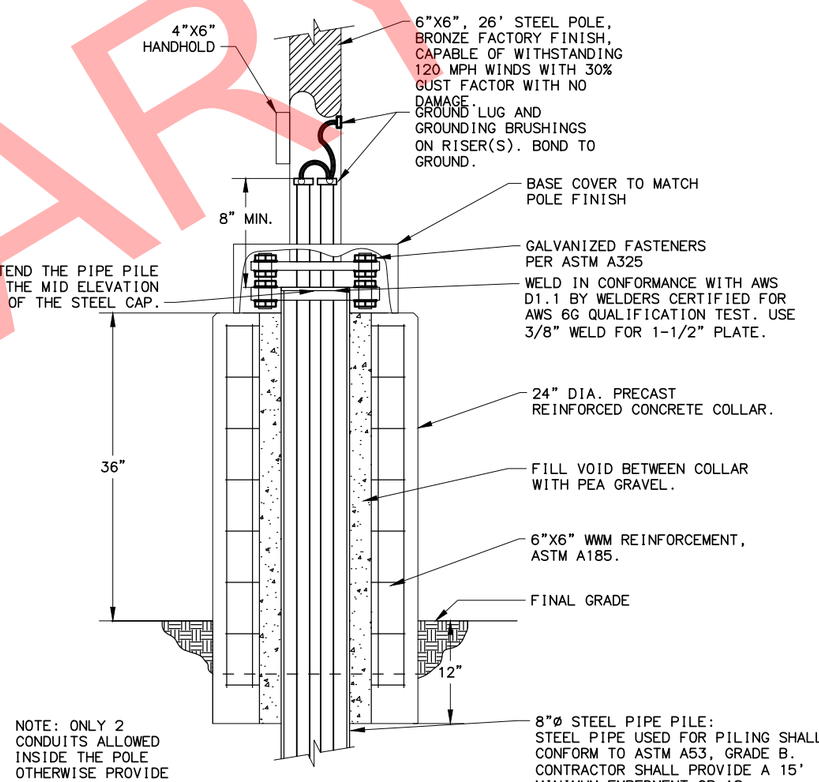
SCHOOL LIGHTING REPLACEMENT AND SIGN DEMOLITION PLAN

SCALE: 1"=30'



SCHOOL LIGHTING REPLACEMENT AND SIGN RELOCATION PLAN

SCALE: 1"=30'



L4B1-10 FOUNDATION ELEVATION

SCALE: NONE

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

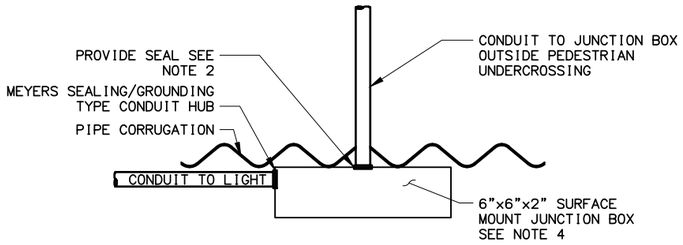
LIGHTING PLAN & PROFILE

FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\03 ELECTRICAL\30107.00 ELECTRICAL.DWG | DATE/TIME 6/8/2017 12:14 PM | LAYOUT H8 | DESIGNED WMM | CHECKED SMB | DRAFTED TRK

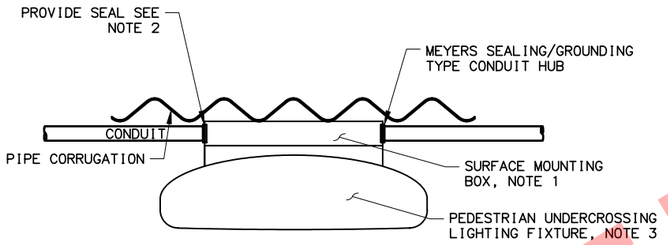
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	H9	H17

PEDESTRIAN UNDERCROSSING FIXTURE, JUNCTION BOX & ENCLOSURE NOTES:

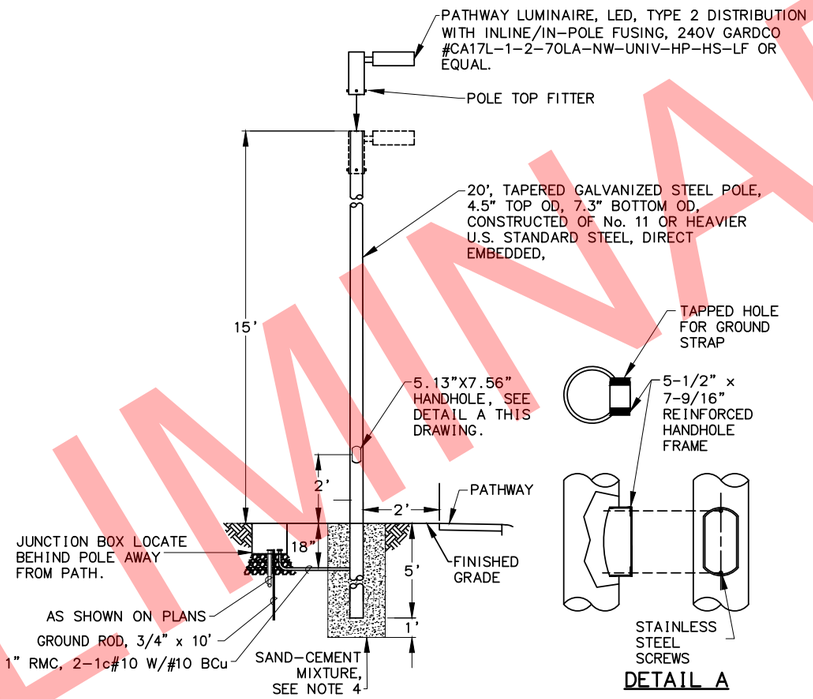
1. CREE EDGE LED SURFACE MOUNTING BOX OR APPROVED EQUAL TO BE ATTACHED TO THE P.U.C. EITHER BY CAPTIVE, OR SELF TAPPING, STAINLESS STEEL BOLTS, SO THAT THE ENCLOSURES CAN BE INSTALLED, AND REMOVED, FROM INSIDE THE P.U.C.
2. PROVIDE A WATER TIGHT FITTING WHERE THE CONDUCTORS ENTER THE ENCLOSURE. THE SEAL AROUND THE CONDUCTORS SHALL USE A RUBBER GROMMET COMPRESSED WITH AN EXTERNAL THREADED CAP.
3. P.U.C. LIGHT FIXTURE, BLACK, 40 LED, SHORT TYPE 5 OPTIC, 240V, DIRECT MOUNT, 525mA DRIVE CURRENT, 40K CCT. BetaLED EDGE #CAN-EDG-DM-40-E-UL-BK-525-40K WITH ADAPTOR PLATE KIT XA-CLSB16 OR EQUAL.
4. ATTACHED THE JUNCTION BOX TO THE P.U.C. EITHER BY CAPTIVE, OR SELF TAPPING, STAINLESS STEEL BOLTS SO THAT THE JUNCTION BOX CAN BE INSTALLED AND REMOVED FROM INSIDE.



P.U.C JUNCTION BOX DETAIL
90° PLANE, N.T.S



P.U.C LIGHT FIXTURE DETAIL
90° PLANE, N.T.S



DIRECT EMBEDDED PATHWAY LUMINAIRE DETAIL
DETAIL, N.T.S

LUMINAIRE PERFORMANCE CRITERIA ROADWAY PER ANSI / IES RP-8-00 (2005)	
LUMINAIRE TYPE	COBRA HEAD
LENS TYPE	FLAT
LIGHT DISTRIBUTION	MEDIUM, FULL CUTOFF, TYPE 3
LAMP WATTS	400 WATTS
LIGHT SOURCE	HIGH PRESSURE SODIUM
ARRANGEMENT	VARIES
NUMBER OF LANES	2
LANE WIDTH	12 FEET
ROADWAY WIDTH	VARIES
MEDIAN WIDTH	VARIES
MOUNTING HEIGHT	39.8 FEET
SPACING	VARIES
LUMINAIRE OVERHANG	0 FEET
ANALYSIS METHOD	ILLUMINANCE
ROAD CLASSIFICATION	MAJOR/LOCAL INTERSECTION
UNIFORMITY RATIO (AVG./MIN.)	3.0 : 1
AVERAGE INITIAL ILLUMINANCE	1.3 FOOT-CANDLES

LUMUNAIRE PERFORMANCE CRITERIA PEDESTRIAN UNDERCROSSING LIGHTS (PATHWAY)	
LUMINAIRE TYPE	TRAIL LIGHT
LENS TYPE	FLAT
LIGHT DISTRIBUTION	MEDIUM, FULL CUTOFF, TYPE 2
LAMP WATTS	70 WATTS
LIGHT SOURCE	LED
ARRANGEMENT	OUTSIDE OF EACH END OF P.U.C.
MOUNTING HEIGHT	15 FEET
SPACING	N/A
LUMINAIRE OVERHANG	N/A
INITIAL LUMENS	7240

LUMUNAIRE PERFORMANCE CRITERIA PEDESTRIAN UNDERCROSSING LIGHTS		
LUMINAIRE TYPE	40 LED	
OPTICS	SHORT TYPE 5	
ARRANGEMENT	1 ROW, CENTER OF P.U.C.	
P.U.C. HEIGHT	12'-2"	
P.U.C. WIDTH	13'-10"	
REFLECTANCE OF SURFACES	0.3	
MOUNTING HEIGHT	10 FEET	
SPACING	VARIES	
INITIAL LUMENS	5771	
LLF	0.87	
	DAY	NIGHT
UNIFORMITY (AVE/MIN)	1.8:1	2.1:1
AVE INITIAL ILLUMINANCE	11.2 fc	5.3 fc

DIRECT EMBEDDED PATHWAY LUMINAIRE NOTES:

FOUNDATION NOTES:

1. EXCAVATE A MINIMUM 3-FOOT RADIAL RING AROUND POLE LOCATION.
2. RADIUS OF EXCAVATION SHALL INCREASE TO A MINIMUM OF 5-FEET WHEN ANY OF THE FOLLOWING CONDITIONS ARE ENCOUNTERED:
   - PEAT;
   - IN SITU DENSITY IS LESS THAN MEDIUM DENSE, OR BLOW COUNT IS LESS THAN 20 BLOWS/FOOT;
   - GM, GC, SM AND SC SOILS WHERE MOISTURE IS REPORTED AS MOIST TO WET, OR WETTER; OR
   - SILTS AND CLAYS, REGARDLESS OF MOISTURE.
3. A BOTTOM OF HOLE INSPECTION SHALL BE PERFORMED BY THE PROJECT SOILS ENGINEER PRIOR TO BACKFILL OPERATIONS.
4. DESIGN SAND-CEMENT MIXTURE TO PRODUCE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 50 POUNDS PER SQUARE INCH IN 48 HOURS AND 100 POUNDS PER SQUARE INCH IN 7 DAYS WHEN COMPACTED TO 95% IN ACCORDANCE TO ASTM D558 AND WHEN CURED IN ACCORDANCE WITH ASTM D1632 AND TESTED IN ACCORDANCE WITH ASTM D1632, AND TESTED IN ACCORDANCE WITH ASTM D1633. MIX SHALL CONTAIN 2 SACKS OF CEMENT PER CUBIC YARD. COMPACT MIX WITH MOISTURE CONTENT BETWEEN 0% TO 2% ABOVE OPTIMUM.

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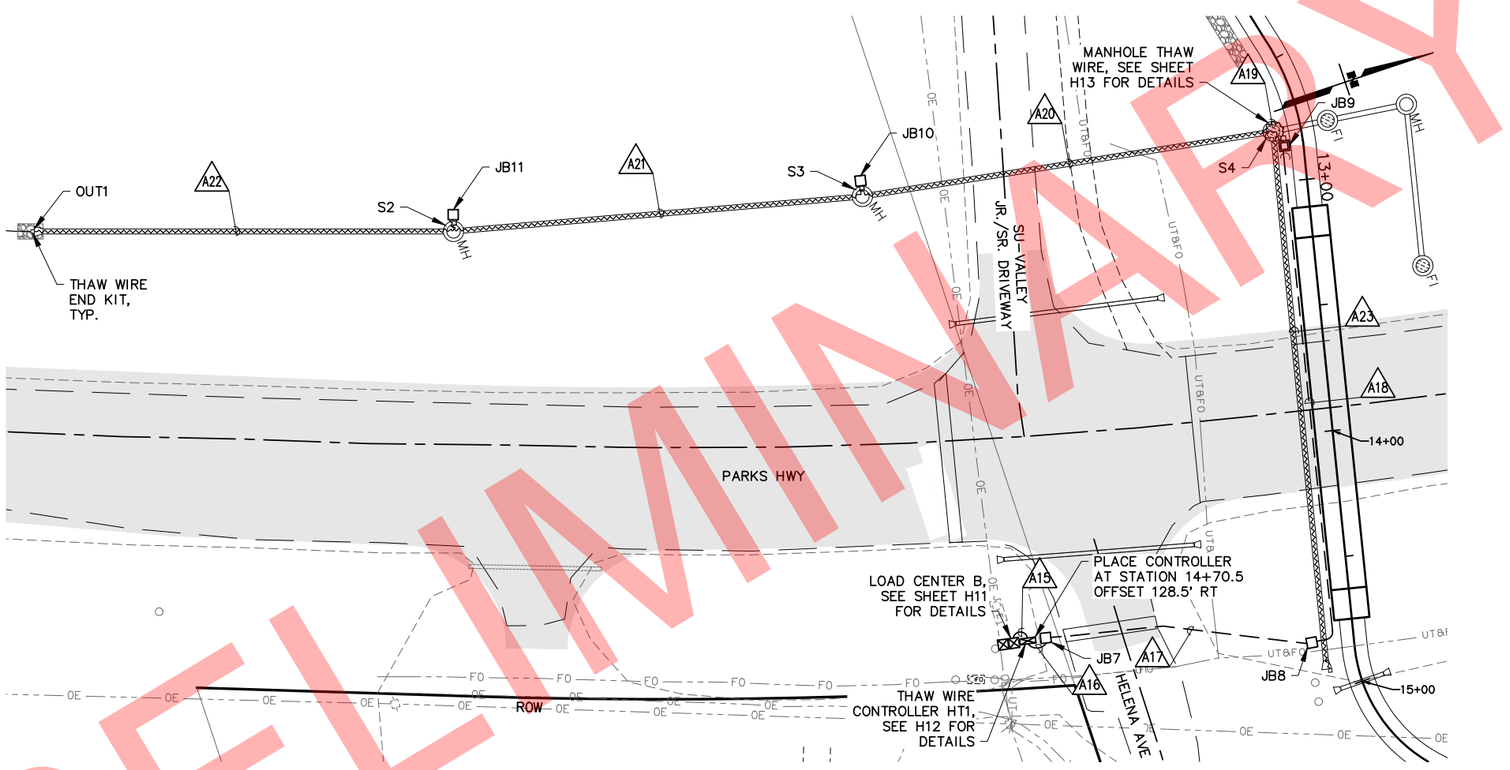
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

LIGHTING DETAILS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H10	H17



THAW WIRE PLAN
SCALE: 1"=30'

THAW WIRE JUNCTION BOX SUMMARY

J-BOX NO	STATION	OFFSET	TYPE	COMMENTS
JB7	14+65.5	128.5 RT	1A	
JB8	14+82.5	16.5 RT	1A	
JB9	12+86.0	7.5 RT	2	SPLICE KITS FOR THAW WIRE TO BE LOCATED IN THIS J-BOX
JB10	12+04.5	165.5 RT	1A	
JB11	11+30.5	309.5 RT	1A	

THAW WIRE CONDUIT SUMMARY

CONDUIT	SHEET #	FROM	TO	SIZE	CONTAINS	LENGTH (FT)
A15	H10	LCB	HT1	1" RMC	3-1c#6, 1-1c#6 GND	5
A16	H10	HT1	JB7	1-1/2" RMC	2-1c#6, 4-1c#8, 1-1c#6 GND	5
A17	H10	JB7	JB8	1-1/2" RMC	2-1c#6, 4-1c#8, 1-1c#6 GND	100
				1-1/2" RMC	SPARE	100
A18	H10	JB8	JB9	1-1/2" RMC	2-1c#6, 4-1c#8, 1-1c#6 GND	190
A19	H10	JB9	S4	1-1/2" RMC	THAW WIRE	30
A20	H10	JB9	JB10	1-1/2" RMC	THAW WIRE	175
A21	H10	JB10	JB11	1-1/2" RMC	THAW WIRE	175
A22	H10	JB11	OUT1	1-1/2" RMC	THAW WIRE	175
A23	H10	JB9	IN1	1-1/2" RMC	THAW WIRE	200

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PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

THAW WIRE PLAN

FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\03 ELECTRICAL\30107.00 ELECTRICAL.DWG
DATE/TIME 6/8/2017 12:14 PM
LAYOUT H10
DESIGNED WMM
CHECKED SMB
DRAFTED TRK

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	H11	H17

VOLTAGE DROP CALCULATION - LCA

1-PH, 2W CONFIGURATION, 1 COPPER CONDUCTOR PER PHASE IN RMC. TEMPERATURE RATING 75°C.

CKT #	SEGMENT SIZE (AWG)	SEGMENT LENGTH (FT)	VOLTAGE	POWER FACTOR	LOAD (KVA)	TOTAL (AMPS)	SEG. (%VD)
A-1	10	276	240	0.8	1.0	4.17	0.99%
A-3	10	352	240	0.8	0.8	3.33	1.01%
A-4	10	328	240	0.8	0.5	2.08	0.59%

VOLTAGE DROP CALCULATION - LCB

1-PH, 2W CONFIGURATION, 1 COPPER CONDUCTOR PER PHASE IN RMC. TEMPERATURE RATING 75°C.

CKT #	SEGMENT SIZE (AWG)	SEGMENT LENGTH (FT)	VOLTAGE	POWER FACTOR	LOAD (KVA)	TOTAL (AMPS)	SEG. (%VD)
B-3	6	5	240	0.8	8.0	33.33	0.06%
B-5 (L8)	10	140	240	0.8	0.4	1.67	0.20%
B-5 (L9)	10	90	240	0.8	0.4	1.67	0.13%

SUMMARY OF LOAD CENTER: A

LOAD CENTER TYPE: II (DUAL POST)

SERVING UTILITY: MATANUSKA ELECTRIC

SERVICE CONDUIT TYPE: 2" LIQUIDTIGHT FLEXIBLE METAL CONDUIT

LOCATION DATA

LOCATION DATA: PATHWAY, STA 14+71.0, 138.5' RT

POWER SOURCE: PATHWAY, STA 15+24.5, 156.5 RT

CONTROL: NEW PHOTOELECTRIC CONTROL ON CABINET

SERVICE VOLTAGE: 1 PHASE, 3 WIRE, 120/240V AC WITH GROUNDED NEUTRAL

PROVIDE METER SOCKET: YES

A.I.C. RATING: 10,000 AMPS

MAIN BREAKER: 240 VOLT, 2 POLE, 100 AMP

CONTACTOR: 600 V, 8 POLE, 30 AMP (EA)

LOAD SCHEDULE

CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
A-1	LUMINAIRES L3, L5	1.0	20	2
A-2	PHOTOELECTRIC CONTROL	0.1	15	2
A-3	LUMINAIRES L2, L4, L6**	0.8	20	2
A-4	LUMINAIRES L1, L7*	0.5	20	2
A-5	SPARE	0.0	20	2
A-6	SPARE	0.0	20	2

TOTAL KVA = 2.4

TOTAL AMPS = 10.0

* CIRCUIT THROUGH CONTACTOR (NO CONTACT)

** CIRCUIT THROUGH CONTACTOR (NC CONTACT)

SUMMARY OF LOAD CENTER: B

LOAD CENTER TYPE: II (DUAL POST)

SERVING UTILITY: MATANUSKA ELECTRIC

SERVICE CONDUIT TYPE: 2" LIQUIDTIGHT FLEXIBLE METAL CONDUIT

LOCATION DATA

LOCATION DATA: PATHWAY, STA 14+71.0, 135.0' RT

POWER SOURCE: PATHWAY, STA 15+24.5, 156.5 RT

CONTROL: NEW PHOTOELECTRIC CONTROL ON CABINET

SERVICE VOLTAGE: 1 PHASE, 3 WIRE, 120/240V AC WITH GROUNDED NEUTRAL

PROVIDE METER SOCKET: YES

A.I.C. RATING: 10,000 AMPS

MAIN BREAKER: 240 VOLT, 2 POLE, 100 AMP

CONTACTOR: 600 V, 8 POLE, 30 AMP (EA)

LOAD SCHEDULE

CIRCUIT NUMBER	DESCRIPTION	KVA LOAD	BREAKER	
			AMPS	POLES
B-1	LUMINAIRES L8, L9*	0.6	20	2
B-2	PHOTOELECTRIC CONTROL	0.1	15	2
B-3	HT1	8.0	60	2
B-4	SPARE	0.8	20	2
B-5	SPARE	0.6	20	2

TOTAL KVA = 10.1

TOTAL AMPS = 42.1

* CIRCUIT THROUGH CONTACTOR (NO CONTACT)

LOAD CENTER NOTES:

1. PLACARDS FOR LOAD CENTERS SHALL HAVE SUFFICIENT DURABILITY TO WITHSTAND THE ENVIRONMENT INVOLVED. CONTACT ENGINEER PRIOR TO ORDER OF PLACARD TO VERIFY MAXIMUM FAULT CURRENT.

SHORT CIRCUIT CALCULATION - LCA

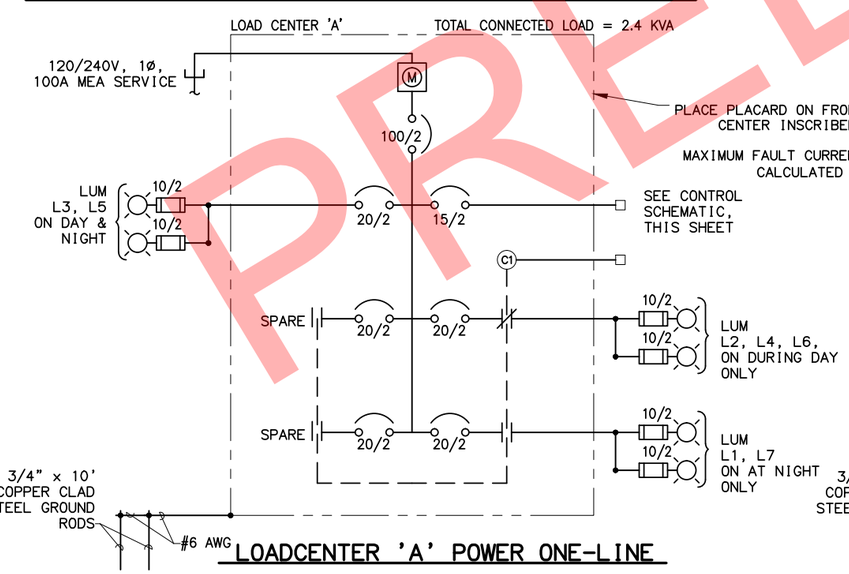
240V AC IN A 1-PH, 2W CONFIGURATION WITH A POWER-FACTOR OF 1.00, 1 COPPER WIRE PER PHASE IN A CONDUIT. TEMPERATURE RATING 75°C.

TRANSFORMER RATING	25KVA
VOLTAGE	240V
TRANSFORMER IMPEDANCE	1.60%
SHORT CIRCUIT CURRENT	6510A

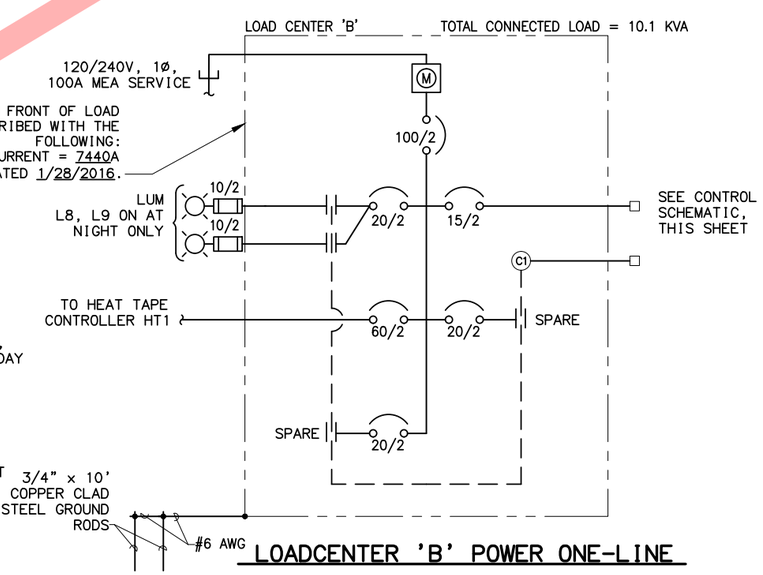
SHORT CIRCUIT CALCULATION - LCB

240V AC IN A 1-PH, 2W CONFIGURATION WITH A POWER-FACTOR OF 1.00, 1 COPPER WIRE PER PHASE IN A CONDUIT. TEMPERATURE RATING 75°C.

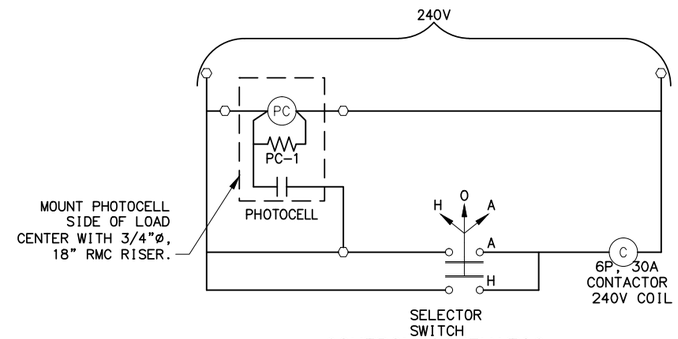
TRANSFORMER RATING	25KVA
VOLTAGE	240V
TRANSFORMER IMPEDANCE	1.60%
SHORT CIRCUIT CURRENT	6510A



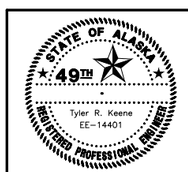
LOADCENTER 'A' POWER ONE-LINE



LOADCENTER 'B' POWER ONE-LINE



CONTROL SCHEMATIC



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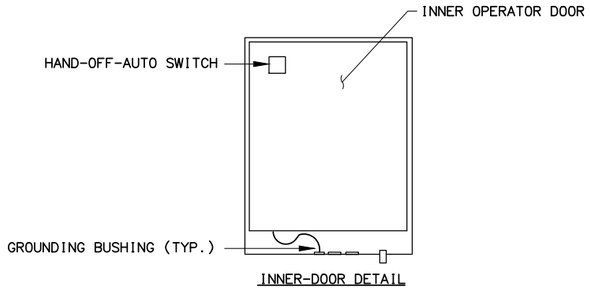
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

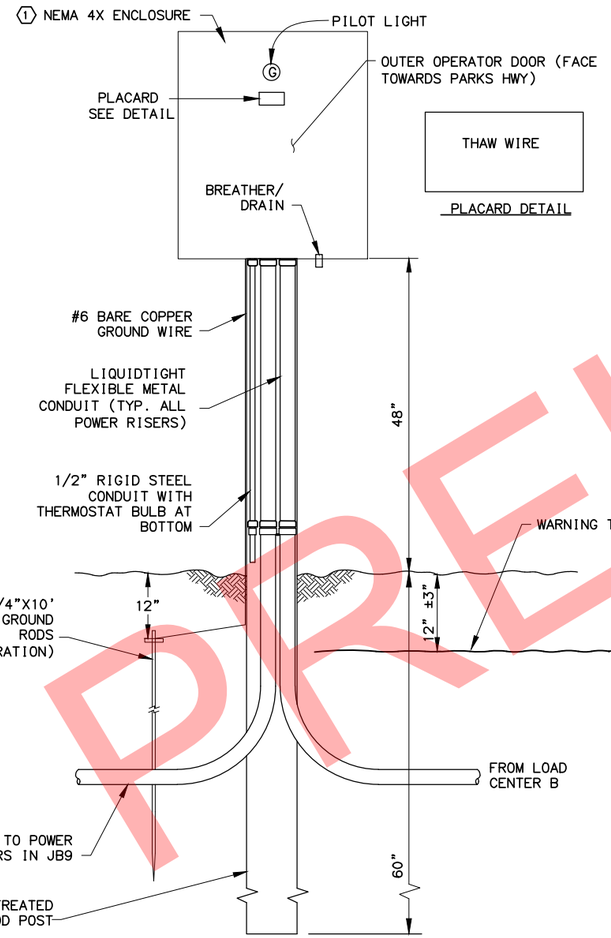
LOAD CENTER PANEL SCHEDULE & POWER ONE-LINE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H12	H17



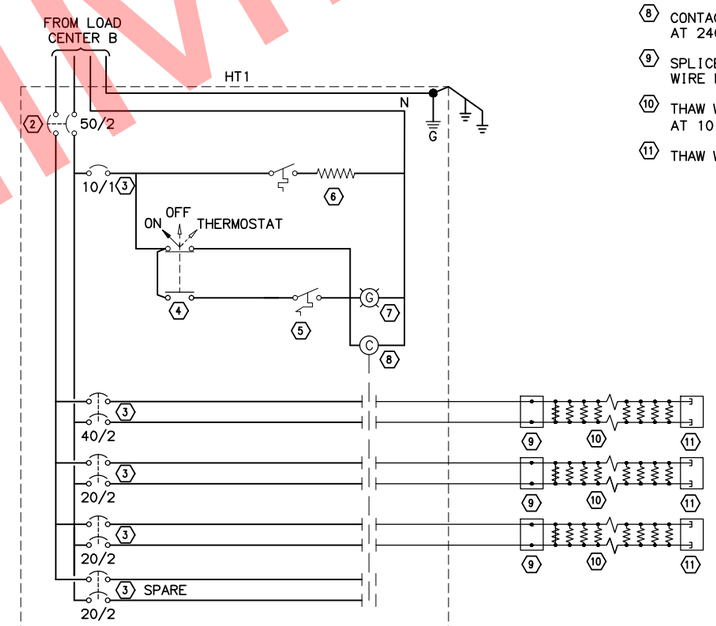
INNER-DOOR DETAIL



THAW WIRE

PLACARD DETAIL

THAW WIRE CONTROLLER ELEVATION
SCALE: N.T.S



THAW WIRE CONTROL SCHEMATIC
SCALE: N.T.S

THAW WIRE CONSTRUCTION NOTES:

1. PROVIDE A THAW WIRE CONTROLLER AT LOCATION INDICATED ON THE DRAWINGS. INSTALL THE ENCLOSURE WITH THE DOOR FACING THE ADJACENT PATHWAY.
2. ATTACH THE ENCLOSURE AND LIQUIDTIGHT FLEXIBLE METAL RISERS TO GALVANIZED STEEL UNISTRUT P1000 HS CHANNELS THAT ARE BOLTED TO THE WOOD POST. USE UNISTRUT: CHANNEL NUTS, BOLTS, WASHERS, AND CONDUIT CLAMPS TO COMPLETE THE ATTACHMENT.
3. SEE SITE PLAN FOR FEEDER FOR THAW WIRE CONTROLLER POWER SUPPLY.
4. PROVIDE SEAL-OFF FITTINGS IN THE SERVING JUNCTION BOX ON THE 1-1/2" CONDUITS THAT ENTER THE CULVERTS, DRAINS AND MANHOLES.
5. INSTALL CAUTION SIGNS AT LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

THAW WIRE CONTROLLER MATERIALS LIST

1. ENCLOSURE: STAINLESS STEEL NEMA 4X - MINIMUM SIZE: 30" WIDE BY 36" HIGH BY 8" DEEP. FURNISH WITH HINGED LOCKABLE OUTER DOOR AND INNER OPERATOR DOOR.
2. 50 AMPERE 2 POLE MAIN CIRCUIT BREAKER.
3. CONTROL BREAKER AND CLASS B GROUND FAULT CIRCUIT INTERRUPTERS FOR THAW WIRE CIRCUITS. BREAKER SIZES AS SHOWN.
4. SELECTOR SWITCH: SINGLE POLE - 3 POSITION WITH CONTACTS RATED 10 AMPS AT 120 VOLTS. LABEL THE SWITCH "HEAT TRACE CONTROL" AND THE SWITCH POSITIONS H = "ON", O = "OFF", A = "AUTO"
5. REMOTE BULB THERMOSTAT: OPEN ON RISE, SPST REMOTE BULB THERMOSTAT. WHITE RODGERS "1609-102" OR EQUAL.
6. ENCLOSURE HEATER: 800W THERMOSTATICALLY CONTROLLED 120V FAN-DRIVEN HEATER. HOFFMAN "D-AH8001B" OR EQUAL.
7. PILOT LIGHT: 120 VOLT LIGHT EMITTING DIODE LAMP WITH GREEN LENS, NEMA 4X RATED IN OUTER DOOR OF ENCLOSURE. LABEL "THAW WIRE ON". PROVIDE A SPARE LAMP.
8. CONTACTOR: PROVIDE (2) 30A, 6 POLE CONTACTORS WITH CONTACTS RATED 30 AMPS RESISTIVE AT 240 VOLTS AND A 120 VOLT CONTROL COIL.
9. SPLICE KIT: POWER TO THAW WIRE CABLE, LISTED FOR WET LOCATIONS. INSTALL PER THAW WIRE MANUFACTURERS RECOMMENDATIONS.
10. THAW WIRE CABLE: SELF-REGULATION TYPE LISTED FOR CLASS I, DIVISION 2 USE AND RATED AT 10 WATTS/FOOT AT 240 VOLTS. RAYCHEM LBTV2-CT OR EQUAL.
11. THAW WIRE END KIT PER MANUFACTURER.

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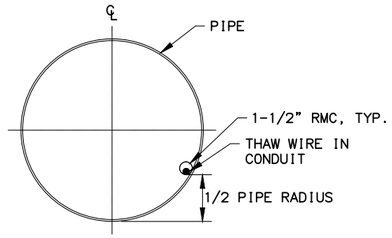
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

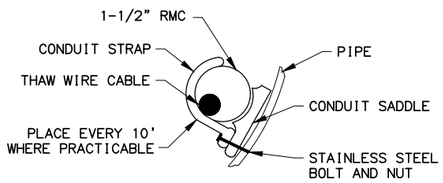
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

HEAT TAPE CONTROL DETAIL & SCHEMATIC

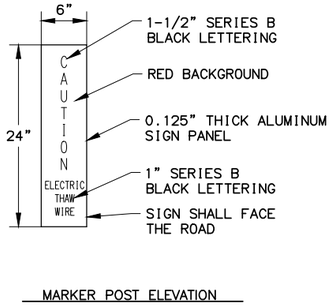
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	H13	H17



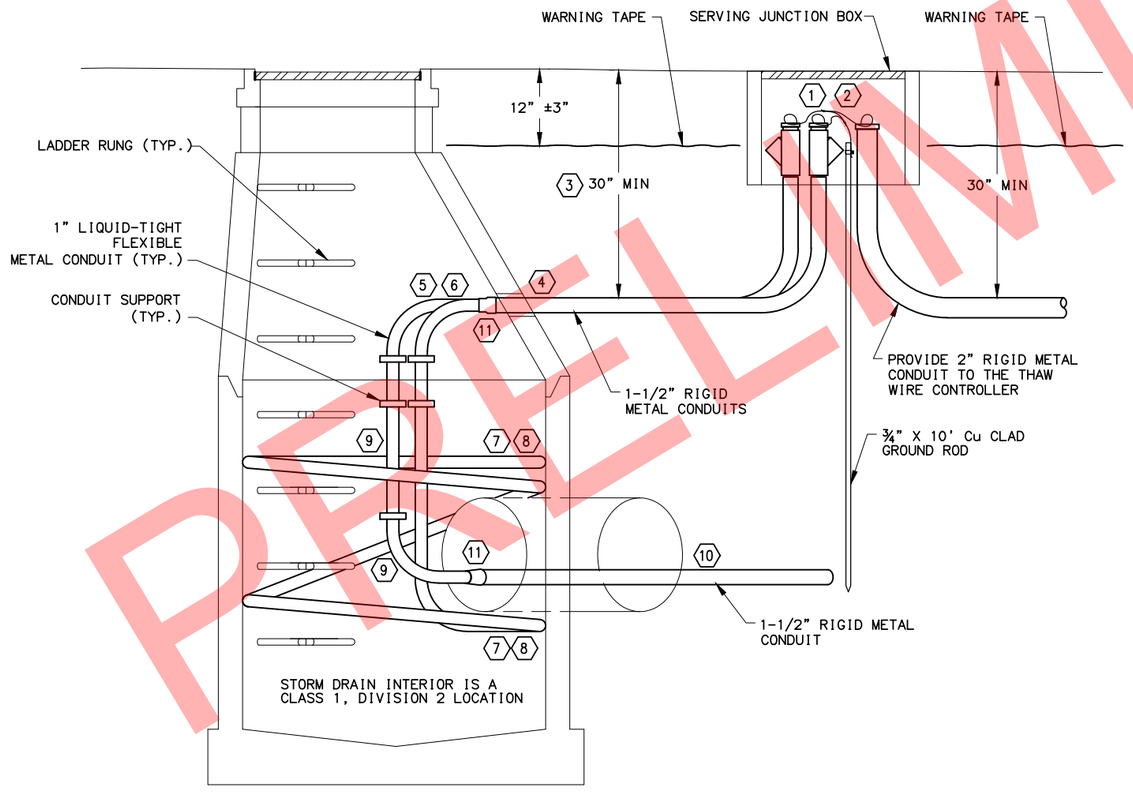
THAW WIRE MOUNTING DETAIL
SCALE: N.T.S



CONDUIT SADDLE STRAP
SCALE: N.T.S



CAUTION SIGN (12)
SCALE: N.T.S



MANHOLE THAW WIRE DETAIL
SCALE: N.T.S

MANHOLE THAW WIRE CONSTRUCTION NOTES

1. PROVIDE TYPE 1A JUNCTION BOXES WITH GROUND ROD, GROUNDING BUSHINGS, AND GROUNDING.
2. COMPLETE SPLICES BETWEEN HOT AND COLD LEADS IN THE JUNCTION BOX AND PROVIDE SEALING FITTINGS ON THE 1" RIGID STEEL CONDUITS.
3. INSTALL RIGID STEEL CONDUITS A MINIMUM OF 30 INCHES BELOW FINISHED GRADE.
4. CORE DRILL SEPARATE CONDUIT ACCESS HOLES FOR EACH CONDUIT THROUGH THE MANHOLE WALL AND GROUT AROUND THE INSTALLED CONDUIT.
5. PROVIDE 1" LIQUIDTIGHT FLEXIBLE METAL CONDUITS (LFMC) INSIDE THE MANHOLE AND 1-1/2" LFMC IN THE FIELD INLETS. PROVIDE LFMC FITTINGS ON BOTH ENDS OF ALL SEGMENTS OF LFMC.
6. PROVIDE THE LFMC WITH A STAINLESS STEEL GROUND STRAP BETWEEN THE SECTIONS OF RIGID STEEL CONDUIT.
7. PROVIDE THREE SPIRALS OF HEAT TRACE INSTALLED IN LFMC AROUND THE INSIDE CIRCUMFERENCE OF THE MANHOLE.
8. ATTACH LFMC TO MANHOLE WALL ON 2.5' CENTERS.
9. CROSS THE LFMC TO PROVIDE A CONTINUOUS HEATED PATH.
10. PROVIDE 1-1/2" RIGID STEEL CONDUIT IN THE STORM DRAIN PIPES, EXTENDING THEM TO THE LOCATIONS SHOWN IN THE DRAWINGS.
11. PROVIDE A 1-1/2" TO 1" REDUCING COUPLING FOR CONNECTION BETWEEN 1-1/2" RMC AND 1" LFMC IN THE MANHOLE.
12. CAUTION SIGNS SHALL BE PLACED NEXT TO INTAKES, OUTFALLS, STRUCTURES AND JUNCTION BOXES CONTAINING THAW WIRE.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

THAW WIRE DETAILS

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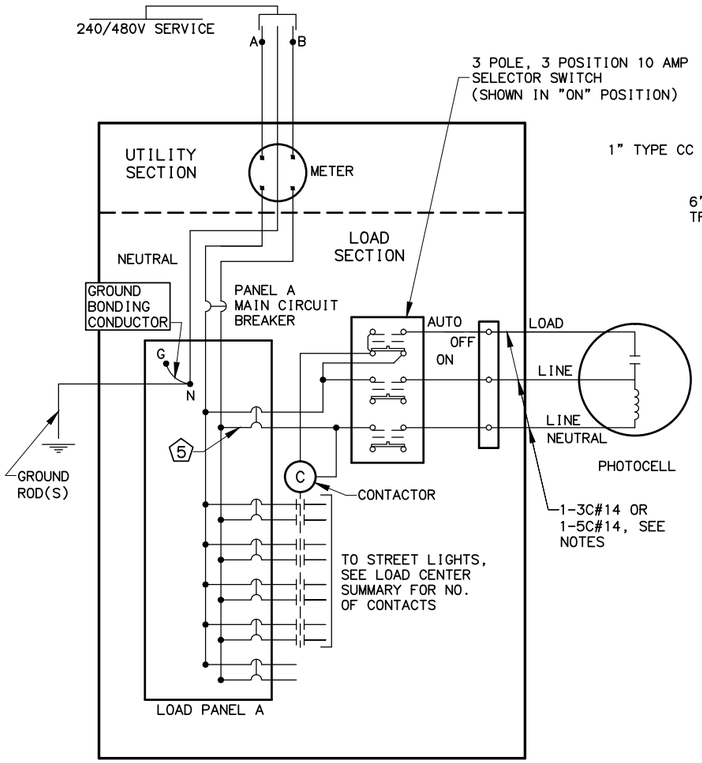
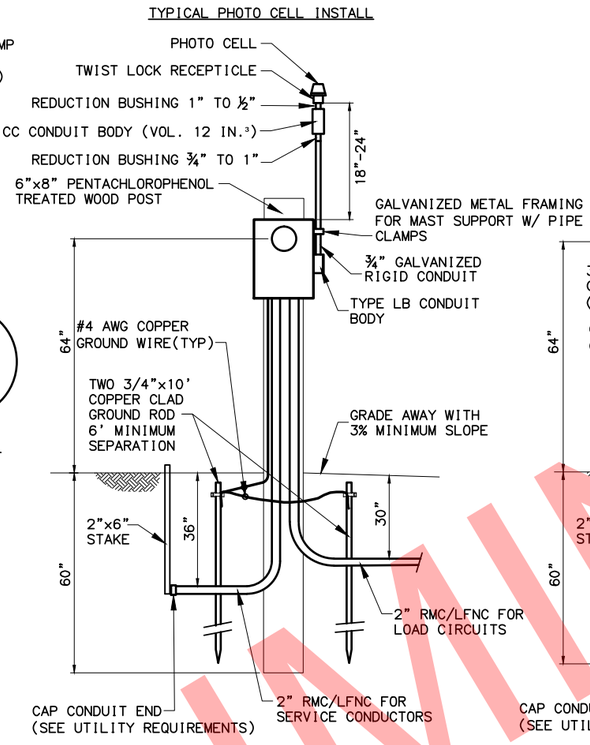
DATE/TIME 6/8/2017 12:14 PM
LAYOUT H13
DESIGNED WMM
CHECKED SMB
DRAFTED TRK

NO.	DATE	REVISION
	09/30/2013	CENTRAL REGION DETAIL - REPLACES STD. DWG. L-26.00

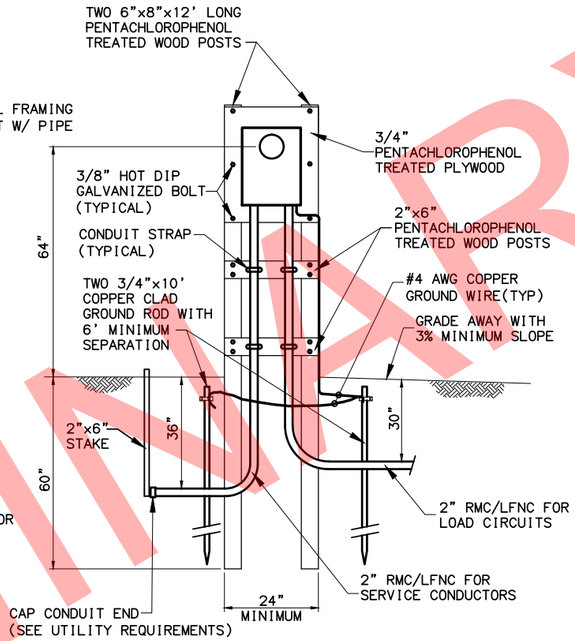
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H14	H17



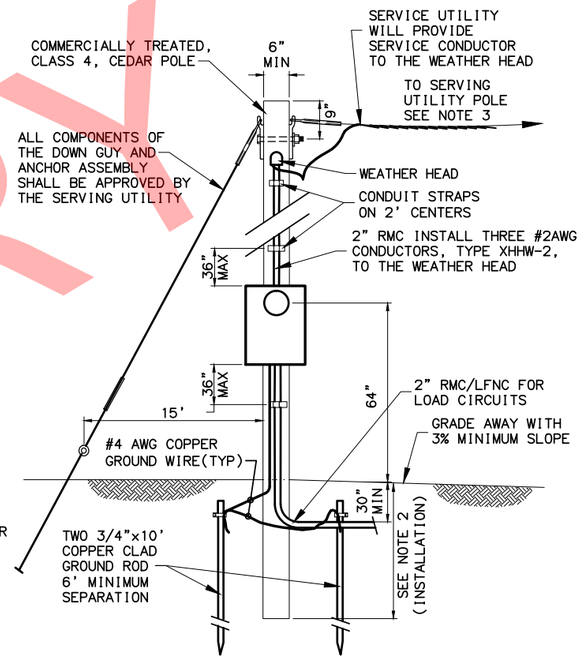
LOAD CENTER ONE LINE DIAGRAM
AND SELECTOR SWITCH WIRING



TYPE 2 LOAD CENTER
SINGLE POST – STANDARD



TYPE 2 LOAD CENTER
DUAL POST – ALTERNATE



TYPE 3 LOAD CENTER

WIRING NOTES:

1. FURNISH ALL EQUIPMENT NOTED IN THE LOAD CENTER SUMMARY, PLUS TWO 20-AMP 2-POLE SPARE CIRCUIT BREAKERS, AND SPACE FOR A MINIMUM OF TWO ADDITIONAL TWO-POLE CIRCUIT BREAKERS, IN EACH LOAD PANEL. SEE SUMMARIES FOR LOAD PANEL VOLTAGES, CURRENT RATINGS, SHORT CIRCUIT INTERRUPTING RATINGS, AND THE NAME OF THE SERVING UTILITY.
2. SIZE THE TYPE 2 AND 3 LOAD CENTER CABINETS TO HOLD THE EQUIPMENT SHOWN IN THE WIRING DIAGRAM AND DETAILED IN EACH LOAD CENTER SUMMARY, ALLOWING SPACE FOR WIRING PER THE NATIONAL ELECTRICAL CODE. INSTALLING A METER BASE AND MAIN BREAKER IN A SEPARATE ENCLOSURE IS ALLOWABLE. HOWEVER IN THIS CASE, FURNISH A BREAKER PANEL WITH A MAIN BREAKER.
3. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION. LABEL THE SELECTOR SWITCH "LIGHTING" AND ITS POSITIONS "ON-OFF-AUTO".
4. THE VOLTAGE FOR THE PHOTOELECTRIC CONTROL EQUIPMENT SHALL BE 240-VOLT, DERIVED FROM THE SERVICE VOLTAGE, OR FROM A CONTROL TRANSFORMER.
5. PROVIDE 1-POLE CIRCUIT BREAKER ON 240/480 VOLT LOAD CENTERS AND 2-POLE CIRCUIT BREAKER ON 120/240 VOLT LOAD CENTERS.
6. LABEL ALL CIRCUIT BREAKERS AS TO FUNCTION AND POSITION.
7. MOUNT PHOTOCELL RECEPTACLE TO ½" CONDUIT WITH SILICONE SEALANT. INSTALL A 3C#14 CABLE FROM THE LOAD CENTER TO THE TYPE CC CONDUIT BODY WHERE THE SPLICE TO THE PHOTOCELL RECEPTACLE CABLE SHALL BE MADE. IF PLANS CALL TO MOUNT PHOTOCELL AWAY FROM LOAD CENTER USE A 5C#14 CABLE FROM LOAD CENTER TO RECEPTACLE.
8. STORE A SCHEMATIC DIAGRAM, A CIRCUIT DIRECTORY, AND A MATERIALS LIST INCLUDING THE MANUFACTURERS' NAMES AND PART/CATALOG NUMBERS, ALL LAMINATED IN PLASTIC, IN A METAL POCKET ATTACHED TO THE INSIDE OF THE LOAD CENTER.
9. WHEN METAL HALIDE OR MERCURY VAPOR LAMPED FIXTURES ARE USED, PROVIDE A REMOTE BULB THERMOSTAT, SO THAT THE CONTACT CLOSES AND THE LIGHTS TURN ON WHEN THE TEMPERATURE DROPS TO 15°F. WIRE THERMOSTAT SO THAT ITS CONTACT IS PARALLEL THE CONTACT IN THE PHOTOELECTRIC CELL.

INSTALLATION NOTES:

1. INSTALL TYPE 3 LOAD CENTER POLES OF SUFFICIENT LENGTH TO PROVIDE THE FOLLOWING MINIMUM GROUND TO SERVICE CONDUCTOR CLEARANCE:

A. 18.5 FEET, IF THE SERVICE CONDUCTORS ARE LOCATED ABOVE ROADWAYS OR PARKING AREAS.

B. 26.5 FEET, IF THE SERVICE CONDUCTORS ARE LOCATED WITHIN 20 FEET OF A RAILROAD TRACK.

C. 18.5 FEET IN ALL OTHER CIRCUMSTANCES.

2. SET THE BUTT END OF TYPE 3 LOAD CENTER POLES TO THE FOLLOWING MINIMUM DEPTH:

A. 10 PERCENT OF ITS LENGTH PLUS 24 INCHES, OR 60 INCHES, WHICHEVER IS GREATER, IF IT IS INSTALLED IN EARTH OTHER THAN SOLID ROCK OR MUSKEG.

B. 10 PERCENT OF ITS LENGTH, OR 48 INCHES, WHICHEVER IS GREATER, IF IT IS INSTALLED IN SOLID ROCK.

C. CONSIDER MUSKEG TO BE AIR, AND SET THE BUTT ENDS TO THE DEPTH GIVEN IN A OR B, WHICHEVER APPLIES, IN THE UNDERLYING EARTH OR ROCK.

WHENEVER MORE THAN 24 INCHES OF EARTH OVERLAYS ROCK, OR THE DIAMETER OF THE DRILLED HOLE IN ROCK EXCEEDS TWICE THE DIAMETER OF THE POLE AT THE GROUND LINE, CONSIDER THE INSTALLATION AS EARTH.

3. ATTACH ALL CONDUITS TO THE POSTS AND POLES USING TWO HOLE RIGID METAL CONDUIT STRAPS LOCATED ON 24 INCHES MAXIMUM CENTERS.
4. ATTACH ALL GROUND CONDUCTORS TO THE POSTS AND POLES USING CABLE STAPLES LOCATED ON 12 INCH CENTERS. MAKE ALL GROUNDING CONDUCTORS CONTINUOUS. USE #4 AWG GROUND WIRE FOR 200 AMP SERVICE.

UTILITY REQUIREMENTS:

1. USE THE SINGLE-POST TYPE 2 "STANDARD" LOAD CENTER IN ALL LOCATIONS EXCEPT WHERE THE SERVING UTILITY REQUIRES THE TWO-POST TYPE 2 "ALTERNATIVE" LOAD CENTER. REFER TO THE LOAD CENTER SUMMARY FOR WHICH TO INSTALL.
2. THE LENGTH AND TYPE OF SERVICE ENTRANCE CONDUIT INSTALLED BY THE CONTRACTOR VARIES BY UTILITY. REGARDLESS OF ITS LENGTH, INSTALL A PULL ROPE IN THE SERVICE CONDUIT AND A CAP ON THE BURIED END: MARK THE BURIED END WITH A 2"x6" STAKE. SEE THE LOAD CENTER SUMMARIES FOR THE FOLLOWING INFORMATION.

A. STATION AND OFFSET OF THE LOAD CENTER AND POWER SOURCE.

B. WHERE THE CONTRACTOR TERMINATES THE SERVICE ENTRANCE CONDUIT.

C. THE TYPE OF SERVICE ENTRANCE CONDUIT (SUCH AS RIGID METAL CONDUIT OR LIQUID-TIGHT FLEXIBLE METAL CONDUIT).

D. THE MAXIMUM AND MINIMUM DISTANCES ALLOWED BETWEEN THE TYPE-3 LOAD CENTER POLE AND UTILITY POLE TO WHICH THE AERIAL DROP IS CONNECTED.

3. VERTICAL CLEARANCE FOR SERVICE-DROP CONDUCTORS IN ACCORDANCE WITH NEC 230.24(B).

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

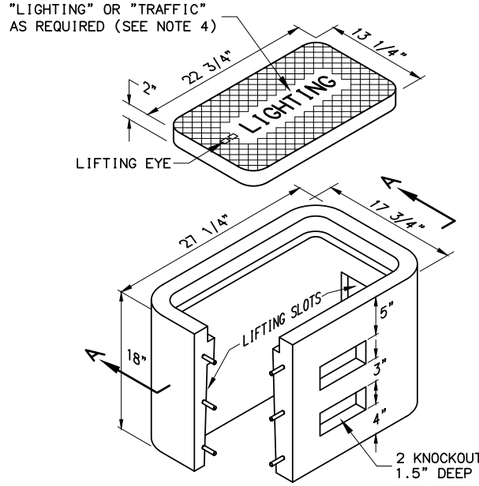
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

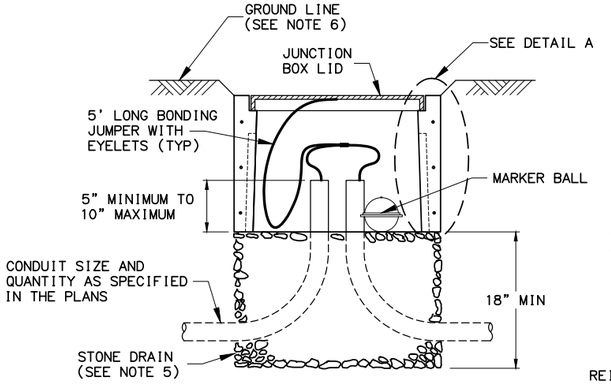
TYPE 2 AND 3 LOAD CENTER DETAILS

FILE J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\03 ELECTRICAL\30107.00 TYPE 2 AND 3 LOAD CENTER.DWG
DATE/TIME 6/8/2017 12:15 PM
LAYOUT H14
DESIGNED --
CHECKED --
DRAFTED --

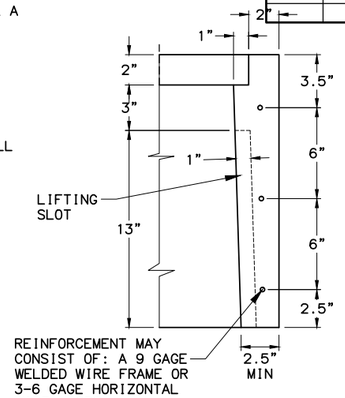
NO.	DATE	REVISION
	04/09/2014	CENTRAL REGION DETAIL - REPLACES STD. DWG. L-23.01, T-34.01

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H15	H17



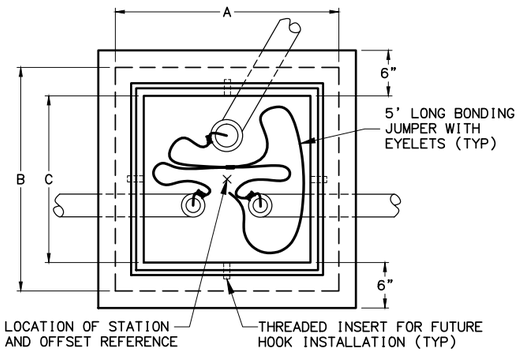


SECTION A-A

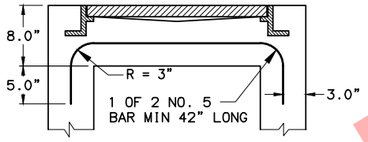


DETAIL A

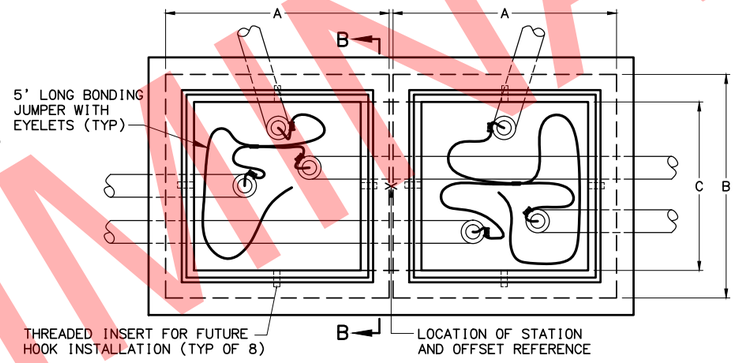
TYPE IA JUNCTION BOX



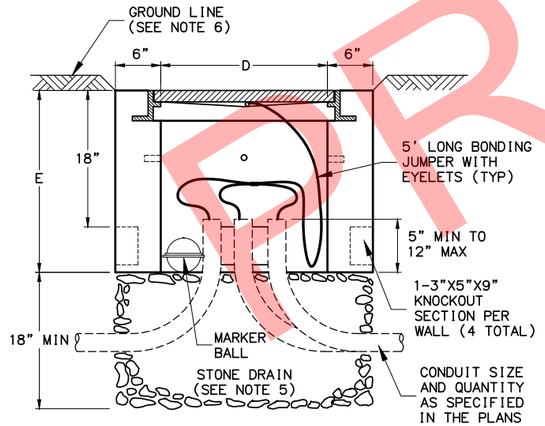
PLAN



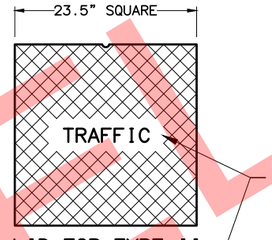
SECTION B-B



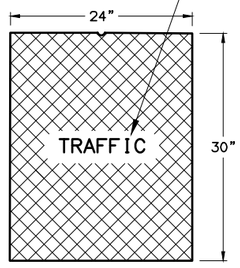
PLAN



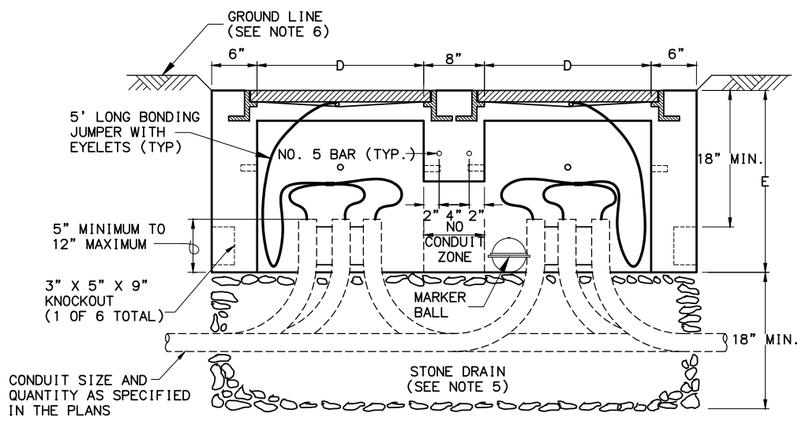
TYPE II JUNCTION BOX
ELEVATION



LID FOR TYPE II & III J-BOXES



LID FOR TYPE IV J-BOXES



TYPE III/IV JUNCTION BOX
ELEVATION (TYPE III LAYOUT DEPICTED)

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. FURNISH TYPE II, III AND IV JUNCTION BOXES WITH CAST IRON FRAMES AND LIDS THAT WEIGH A MINIMUM OF 210 POUNDS AND ARE RATED FOR HEAVY TRAFFIC LOADS IN COMPLIANCE WITH AASHTO M306. FURNISH TYPE IA JUNCTION BOXES WITH CAST IRON LIDS THAT WEIGH A MINIMUM OF 50 POUNDS.
3. CONSTRUCT JUNCTION BOXES ACCORDING TO SECTION 501 USING CLASS A CONCRETE. REINFORCE TYPE IA JUNCTION BOXES AS SHOWN. SYNTHETIC STRUCTURAL FIBER-REINFORCED CONCRETE THAT MEETS ASTM C 1116 AND CONTAINS FIBER IN PROPORTIONS AS RECOMMENDED BY THE FIBER MANUFACTURER MAY BE ADDED FOR STRENGTH.
4. 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.
5. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF POROUS BACKFILL MATERIAL CONFORMING TO SUBSECTION 703-2.10.
6. SET THE TOPS OF JUNCTION BOXES WITH THE FOLLOWING DIMENSIONS BELOW THE FINISHED SURROUNDING SURFACE:
   - 1" IN PAVED MEDIANS AND ADJACENT TO PEDESTRIAN FACILITIES
   - 1/4" IN PEDESTRIAN FACILITIES
   - 2" IN ALL OTHER AREAS
7. 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 OR STAINLESS STEEL HARDWARE.
8. INSTALL LOOP DETECTOR TAILS THROUGH ONE OF THE KNOCKOUTS OF TYPE 1A JUNCTION BOXES. AFTER SETTING THE BOXES TO GRADE, INSTALL GROUT IN THE GAPS THAT REMAIN IN THE KNOCKOUT.
9. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
10. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
11. PRIOR TO INSTALLATION MARK ALL JUNCTION BOX LOCATIONS WITH A WIRE STAFF VINYL FLAG. THE FLAG SHALL BE RED IN COLOR AND MINIMUM 4-INCHES TALL BY 5-INCHES WIDE. THE WIRE STAFF SHALL BE 21-INCHES IN LENGTH AND CONSTRUCTED OF MINIMUM 15.5 GAUGE STEEL.

J-BOX DIMENSIONS

J-BOX TYPE	DIMENSIONS				
	A (MAX.)	B (MAX.)	C (MIN.)	D (MIN.)	E (MIN.)
II	29 1/2"	29 1/2"	22"	22"	24"
III	29 1/2"	29 1/2"	22"	22"	24"
IV	30"	36"	30"	24"	30"

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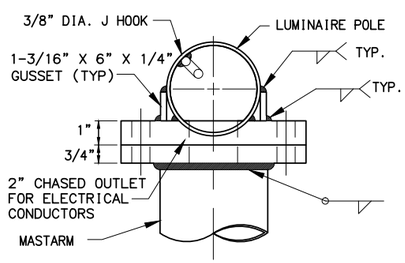
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

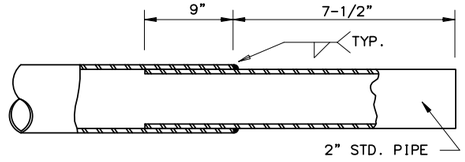
JUNCTION BOX DETAILS

NO.	DATE	REVISION
	07/12/2012	CENTRAL REGION DETAIL - REPLACES STD. DWG. L-03.10

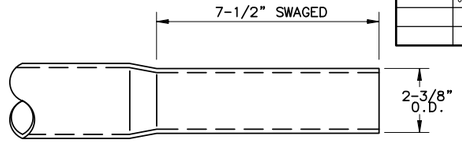
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H16	H17



TOP VIEW

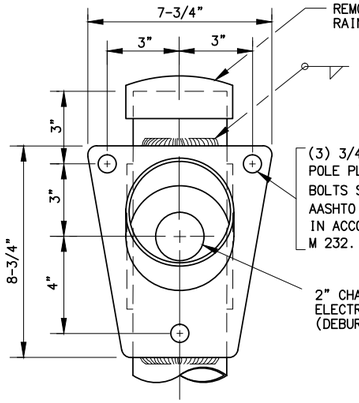


TENON

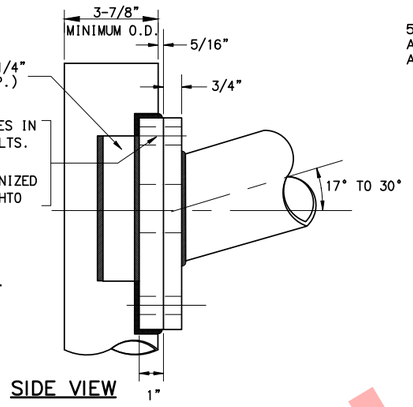


OPTIONAL SWAGED TENON

END OF MASTARM DETAIL

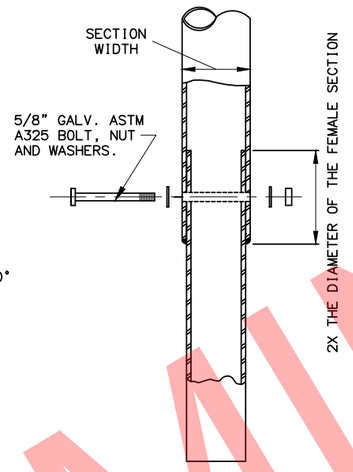


FRONT VIEW

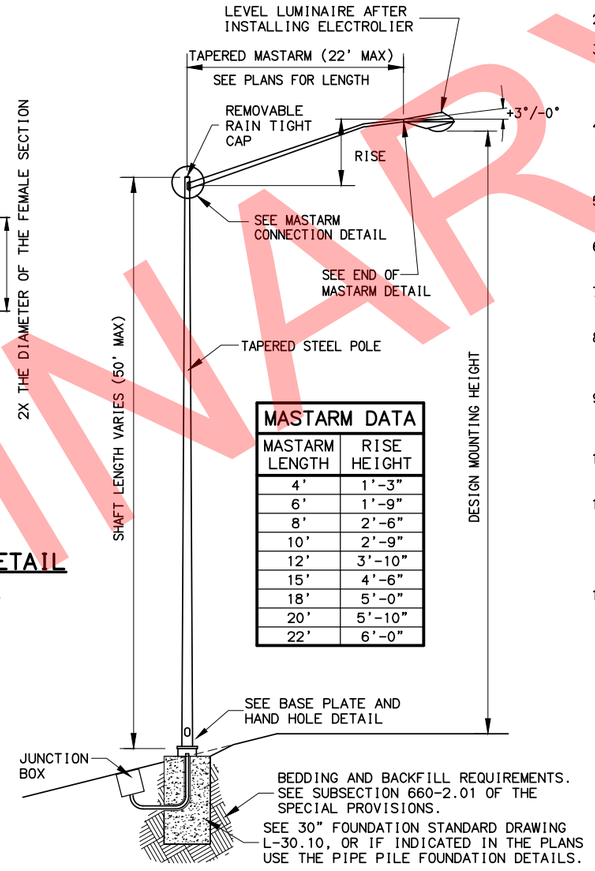


SIDE VIEW

MASTARM CONNECTION DETAIL



POLE CONNECTION DETAIL

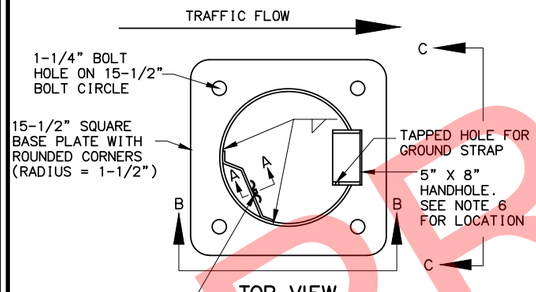


ELECTROLIER ELEVATION

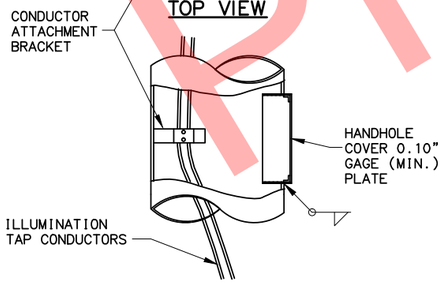
MASTARM DATA	
MASTARM LENGTH	RISE HEIGHT
4'	1'-3"
6'	1'-9"
8'	2'-6"
10'	2'-9"
12'	3'-10"
15'	4'-6"
18'	5'-0"
20'	5'-10"
22'	6'-0"

NOTES:

1. DESIGN AND FABRICATE ALL SHAFTS TO SUPPORT A MASTARM 22 FEET LONG WITH LUMINAIRE. ASSUME EACH LUMINAIRE WEIGHS 55 POUNDS AND HAS AN EFFECTIVE PROJECTED AREA OF 1.2 SQUARE FEET. WITH THIS DEAD LOAD, LIMIT THE ANGULAR ROTATION TO THE POLE TOP 1° 40" MAXIMUM.
2. WELD SIZE TO BE DETERMINED BY THE MANUFACTURER.
3. MOUNTING HEIGHT, IF SPECIFIED IN THE PLANS, REFERS TO THE HEIGHT OF LUMINAIRE ABOVE THE ROADWAY. ADJUST EACH POLE'S SHAFT LENGTH TO MAINTAIN THIS DIFFERENCE IN ELEVATION WHENEVER SLOPE AND/OR OFFSET VARIES.
4. MINIMUM OUTSIDE DIAMETER AT THE TOP OF POLE EQUALS 3-7/8". POLE DIAMETER SHALL TAPER UNIFORMLY FROM THE TOP OF THE POLE TO THE BASE PLATE, WITH A MAXIMUM TAPER RATE OF 0.14" PER FOOT.
5. APPLY AN ANTI-SEIZING COMPOUND TO ALL THREADED SURFACES, INCLUDING THOSE IN THE ANCHOR PLATE AND ON THE COUPLINGS.
6. MASTARM RISE MAY VARY ±0.5' FROM THE VALUES LISTED IN THE TABLE.
7. LOCATE THE HANDHOLD AT 90 DEGREES TO THE MASTARM ON THE SIDE OF POLE DOWNSTREAM FROM TRAFFIC FLOW.
8. FURNISH ALL POLES WITH A J-HOOK TO SUPPORT THE ILLUMINATION TAP CONDUCTORS. FURNISH ALL MASTARM POLES WITH A REMOVABLE RAIN TIGHT CAP.
9. MOUNT LIGHTING STANDARDS UPON TRANSPO MODEL NO. 5100 FRANGIBLE COUPLINGS AND TRANSPO TYPE B FEMALE ANCHORS, OR APPROVED EQUAL.
10. INSTALL ALL COMPONENTS OF THE BREAKAWAY SUPPORT SYSTEM IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
11. FABRICATE THE SKIRT FROM FOUR PIECES OF 1/16" THICK 3003 H-14 ALUMINUM SHEET. BEND EACH PLATE TO PROVIDE CORNERS WITH A 3/4" RADIUS. ASSEMBLE THE SKIRT WITH #10 X 3/8" SELF TAPPING STAINLESS SCREWS OR POP RIVETS. THE ASSEMBLED SKIRT MEASURES ABOUT 12-3/4" SQUARE.
12. A JUNCTION BOX IS REQUIRED AT EACH NEW ELECTROLIER. INSTALL THE JUNCTION BOX IMMEDIATELY BEHIND THE FOUNDATION APPROXIMATELY 7' FROM POLE UNLESS OTHERWISE SPECIFIED IN THE PLANS.

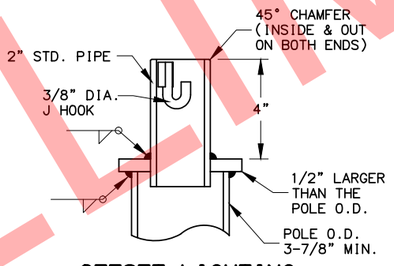


TOP VIEW



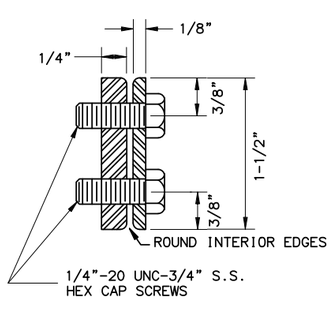
SIDE VIEW

BASE PLATE AND HAND HOLE DETAIL

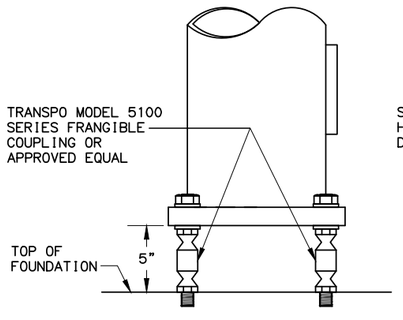


OFFSET LIGHTING STANDARD POLE TOP DETAIL

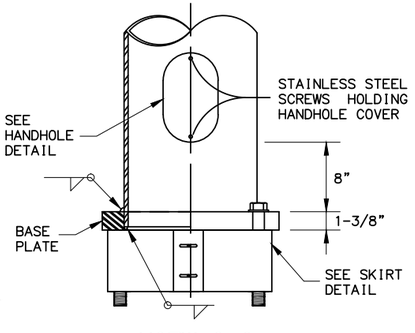
(CUTAWAY FOR CLARITY)



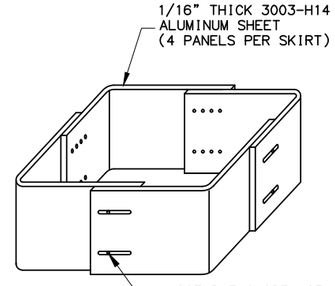
SECTION A-A



VIEW B-B



VIEW C-C



SKIRT DETAIL

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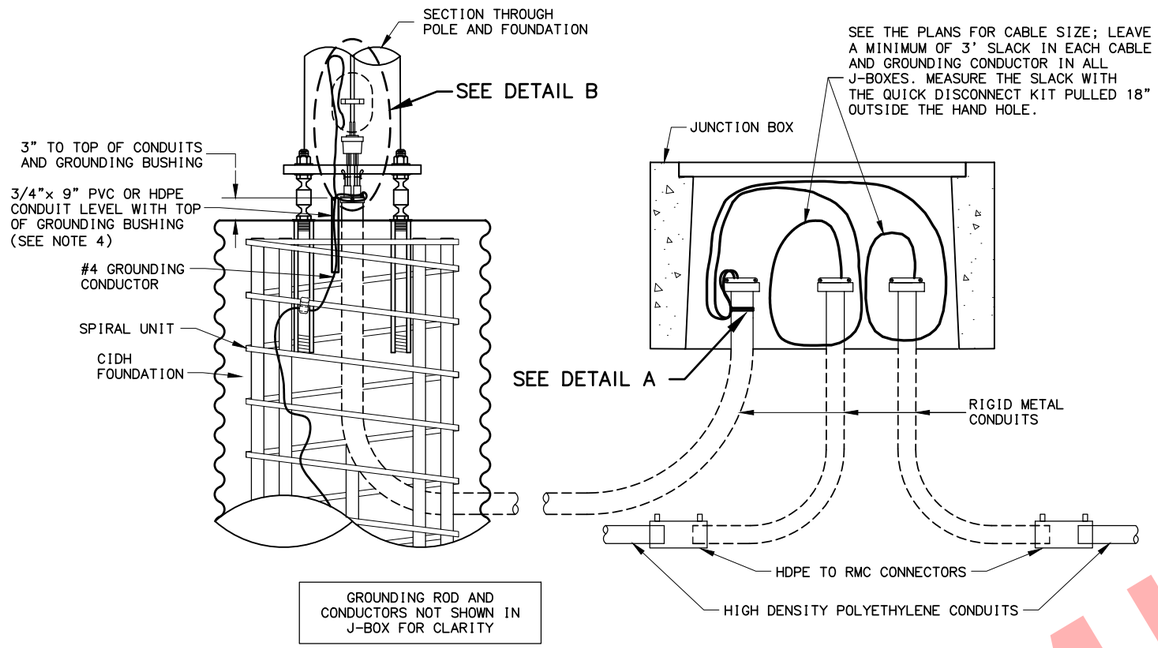
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

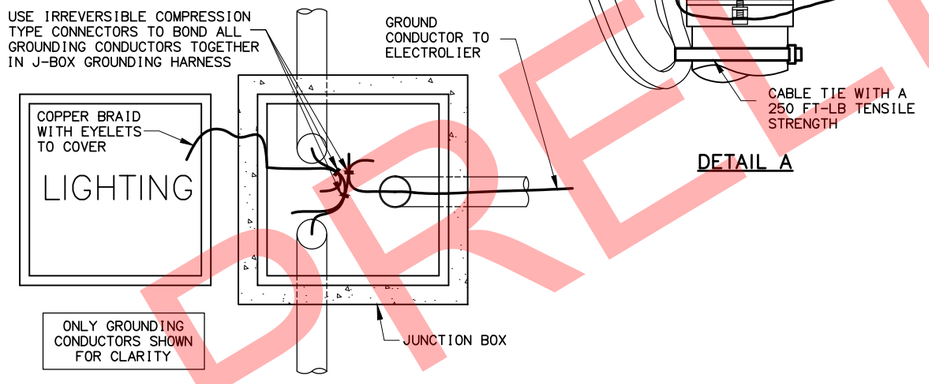
LIGHTING STANDARD

NO.	DATE	REVISION
	12/09/2013	CENTRAL REGION DETAIL

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	H17	H17

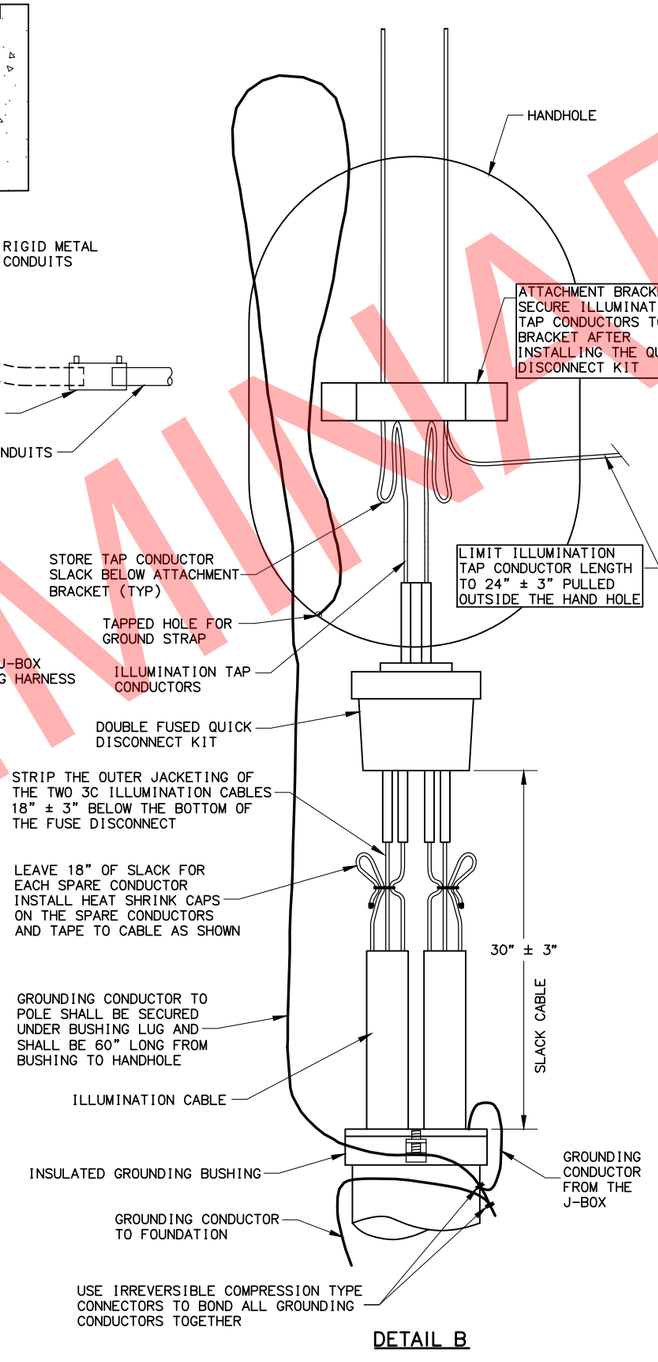


LIGHTING SYSTEM POLE AND J-BOX WIRING DETAILS



GROUNDING CONDUCTOR BONDING CONNECTIONS

DETAIL A



DETAIL B

NOTES:

1. APPLICATION FOR SLIP BASE IS THE SAME EXCEPT FOR BONDING. SEE SUBSECTION 660-3.06 FOR BONDING.
2. LABEL ALL CABLES AND CONDUCTORS IN POLE BASE AND J-BOX. SEE SUBSECTION 660-3.05.
3. 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.
4. USE LISTED IRREVERSIBLE COMPRESSION TYPE CONNECTORS SIZED FOR EACH APPLICATION AND INSTALLED PER MANUFACTURERS SPECIFICATIONS.
5. PROTECT GROUND WIRE WITH 3/4 INCH PVC OR HDPE CONDUIT TO 6 INCHES BELOW TOP OF FOUNDATION FILLED WITH SILICONE SEALANT.

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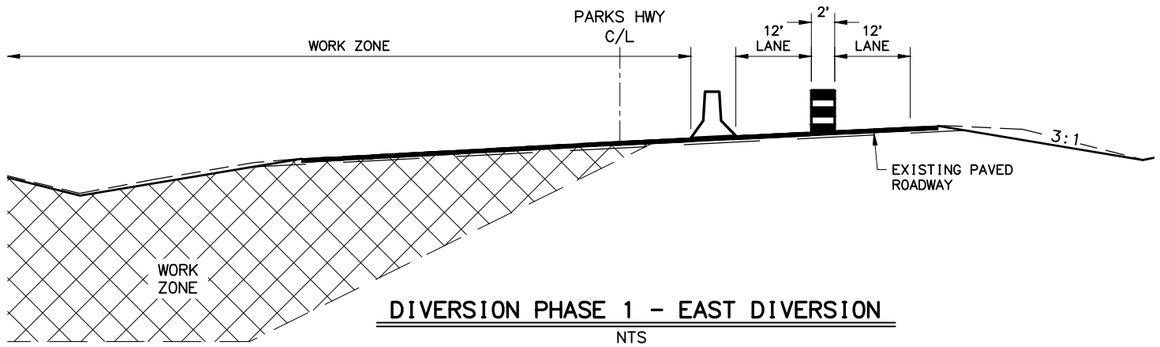
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

WIRING & GROUNDING CIDH FOUNDATION

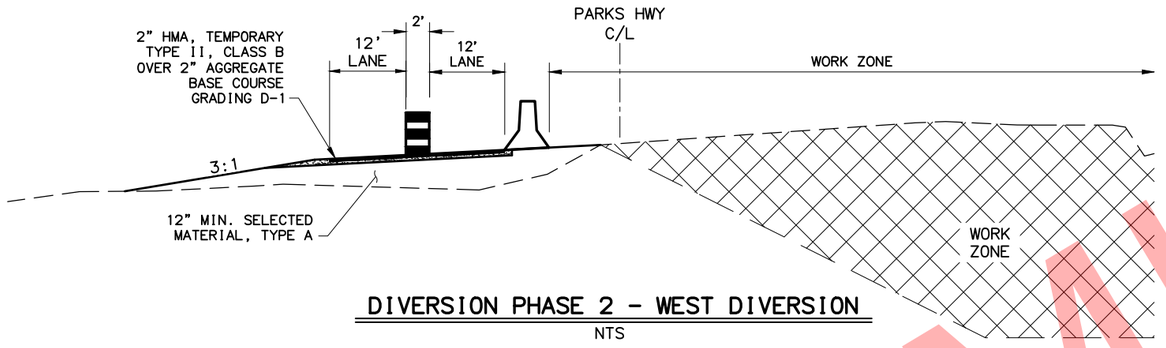
DRAFTED -- | CHECKED -- | DESIGNED -- | LAYOUT H17 | DATE/TIME 6/8/2017 12:16 PM | FILE I:\CROSSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\05 ELECTRICAL\30107.00 POLE WIRING & GROUNDING.DWG

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	T1	T5



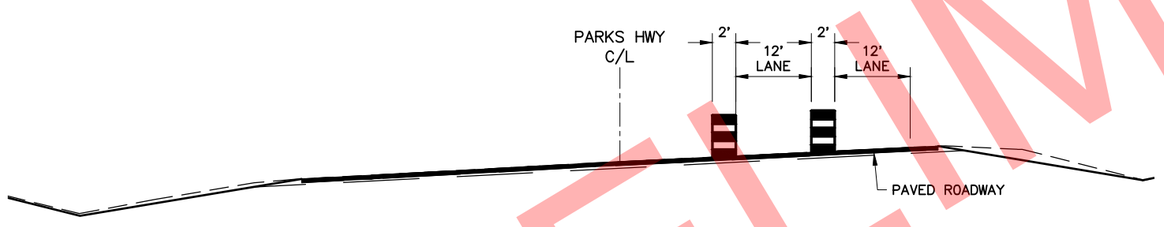
DIVERSION PHASE 1 - EAST DIVERSION

NTS



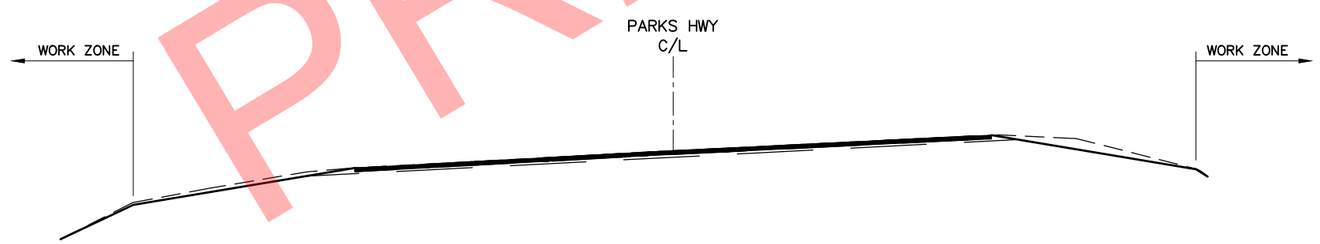
DIVERSION PHASE 2 - WEST DIVERSION

NTS



PHASE 3

NTS



PHASE 4 - VEHICLE TRAFFIC UNINTERRUPTED

NTS

TYPICAL CONSTRUCTION SEQUENCE:

PHASE I - EAST DIVERSION:
STEEL PIPE CONSTRUCTION

1. NARROW TRAFFIC TO TWO 12 FOOT LANES. PLACE TRAFFIC CONTROL DEVICES PER TYPICAL CONSTRUCTION SEQUENCE SIGNING AND IN ACCORDANCE WITH SHEET J4.
2. REMOVE EXISTING ASPHALT IN WORK ZONE, AND BEING CONSTRUCTION OF STRUCTURAL STEEL PLATE PIPE
3. BACKFILL OVER COMPLETED STRUCTURAL STEEL PLATE PIPE AND CONSTRUCT
4. PLACE 4" AGGREGATE BASE COURSE, GRADING D-1 TO SERVE AS A DRIVING SURFACE FOR PHASE II CONSTRUCTION.

PHASE II - WEST DIVERSION:
STEEL PIPE CONSTRUCTION

1. DIRECT TRAFFIC ONTO THE WEST DIVERSION. PLACE TRAFFIC CONTROL DEVICES PER TYPICAL CONSTRUCTION SEQUENCE SIGNING AND IN ACCORDANCE WITH SHEET J4.
2. REMOVE EXISTING ASPHALT IN WORK ZONE, AND COMPLETE CONSTRUCTION OF STRUCTURAL STEEL PLATE PIPE
3. BACKFILL OVER COMPLETED STRUCTURAL STEEL PLATE PIPE AND CONSTRUCT EMBANKMENT IN ACCORDANCE WITH THE PARKS HIGHWAY TYPICAL SECTION INCLUDING FIRST LIFT OF HMA ASPHALT, TYPE II, CLASS A .

PHASE III - FINAL PAVING:
PARKS HIGHWAY

1. RESTRICT TRAFFIC TO TWO LANES AND PLACE TRAFFIC CONTROL DEVICES.
2. CONSTRUCT HMA ASPHALT FROM CENTERLINE TO OUTSIDE EDGE OF SHOULDER.
3. SWITCH TRAFFIC TO OPPOSITE SIDE AND COMPLETE ASPHALT CONCRETE PAVEMENT.
4. LANE CLOSURES FOR SHORT TERM ONLY WILL BE ALLOWED AS NEEDED.
5. DEMOLISH DIVERSION CREATED FOR PHASE II. SELECT MATERIAL TYPE A IMPORTED FOR CONSTRUCTION OF THE DIVERSION SHALL BE EXCAVATED AND USED FOR CONSTRUCTION OF PATHWAY EMBANKMENT.

PHASE IV - PATHWAY CONSTRUCTION:

1. CONSTRUCT PATHWAY EMBANMENT. IMPORT SELECT MATERIAL TYPE A TO COMPLETE PAHTWAY EMBANKMENT.
2. CONSTRUCT DRIVEWAYS AND COMPLETE LIGHTING SYSTEM.
3. NO LANE CLOSURES WILL BE ALLOWED ON THE PARKS HIGHWAY AT THIS TIME.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

CONSTRUCTION SEQUENCE

RLC | DRAFTED | -- | CHECKED | RLC | DESIGNED | T1 | LAYOUT | 6/8/2017 12:17 PM | DATE/TIME | J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 T1-T5 TRAFFIC CONTROL.DWG | DWG | FILE

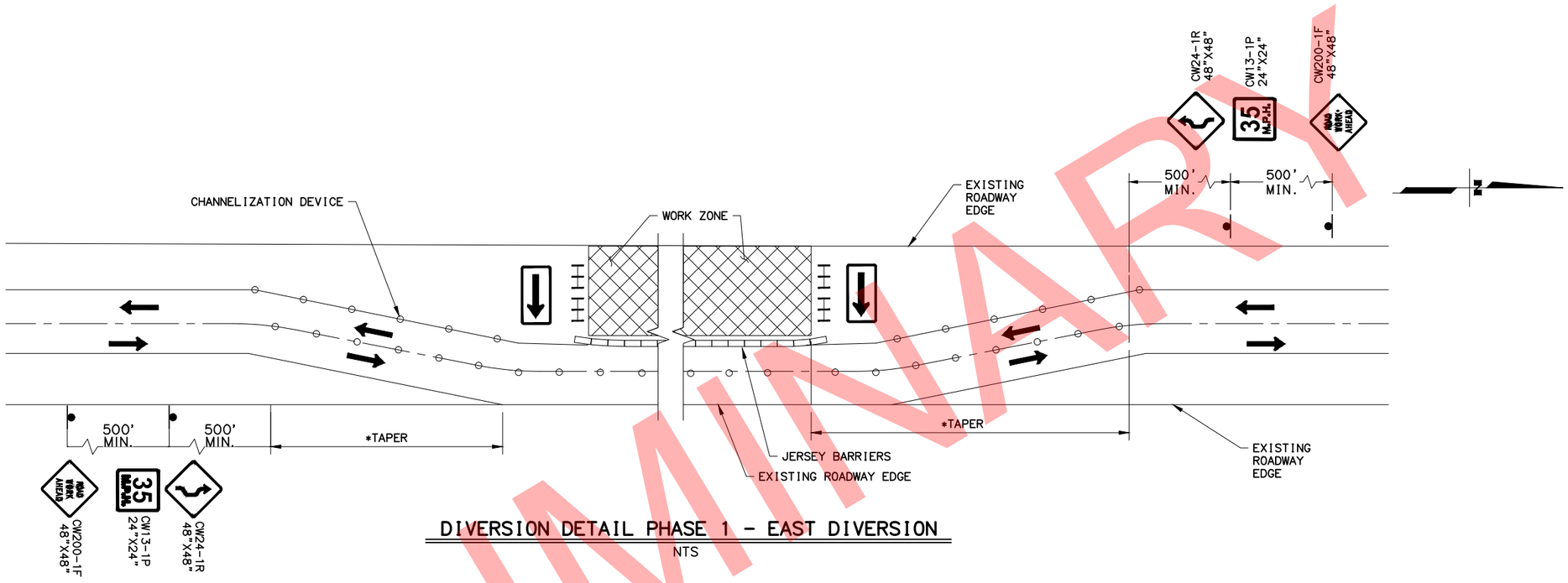
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	T2	T5

LEGEND:

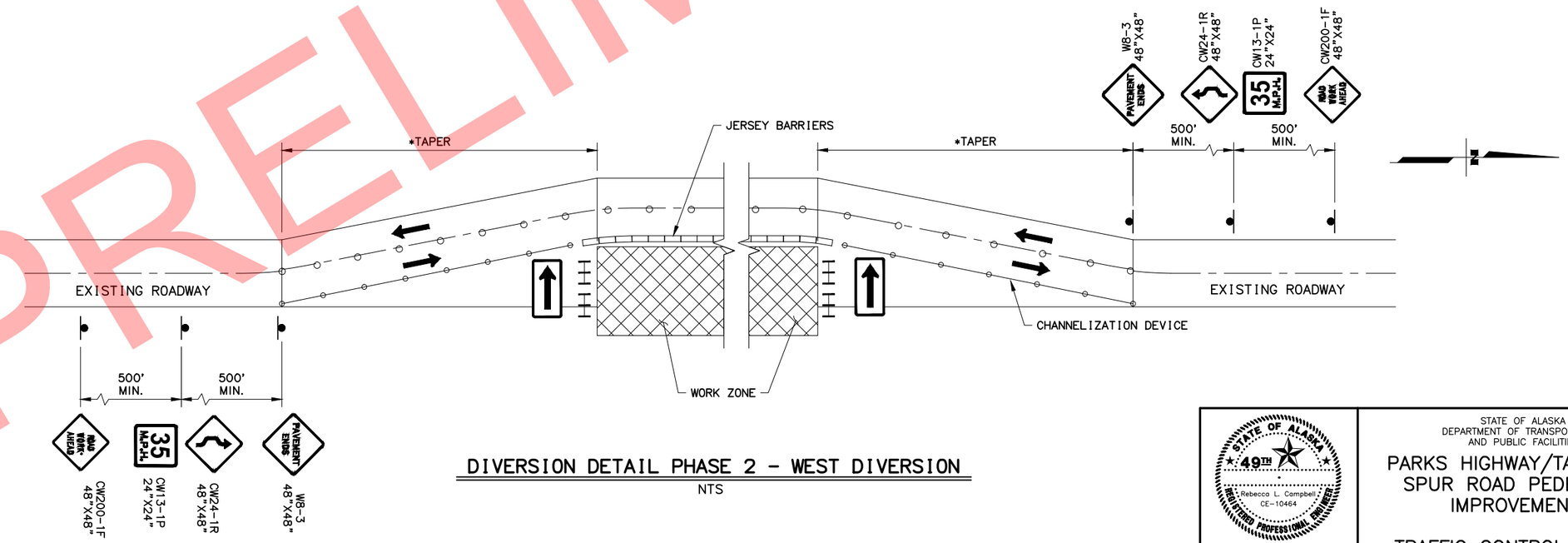
- ACTIVE WORK ZONES
- TYPE III BARRICADE
- TRAFFIC CHANNELIZATION DEVICE
- CONSTRUCTION SIGN
- JERSEY BARRIER

* TAPER LENGTHS SHALL BE DETERMINED BY USING PART 6 OF THE LATEST VERSION OF THE MUTCD.



DIVERSION DETAIL PHASE 1 - EAST DIVERSION

NTS



DIVERSION DETAIL PHASE 2 - WEST DIVERSION

NTS

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STATE OF ALASKA
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PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

TRAFFIC CONTROL DETAILS

NO.	DATE	REVISION

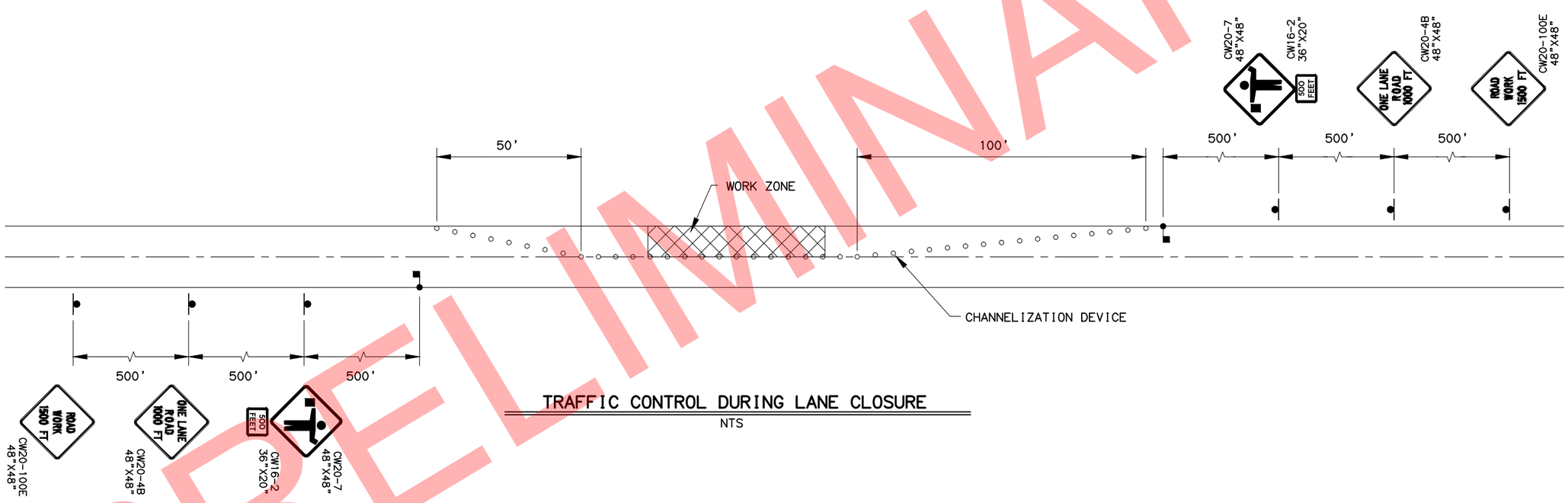
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	T3	T5

LEGEND:

- ACTIVE WORK ZONES
- TYPE III BARRICADE
- TRAFFIC CHANNELIZATION DEVICE
- CONSTRUCTION SIGN

TRAFFIC CONTROL PLAN NOTES:

1. A FULL CLOSURE WILL NOT BE ALLOWED ON THE PARKS HIGHWAY.
2. MAINTAIN ACCESS TO HELENA DRIVE AND SUSITNA VALLEY HIGH SCHOOL.
3. DIVERSION OF TRAFFIC ON PARKS HIGHWAY WILL NOT BE ALLOWED WHEN SCHOOL IS IN SESSION.
4. TAPER LENGTHEN "L" SHALL BE DETERMINED BY USING PART 6 OF THE LATEST VERSION OF THE MUTCD.
5. DIVERSION OF THE PARKS HIGHWAY SHALL NOT EXCEED 2 WEEKS (PHASE I & PHASE II). 35MPH SPEED LIMIT REDUCTION WILL ONLY BE ALLOWED IN PHASES I & II.
6. LANE CLOSURES SHALL BE SHORT TERM ONLY AND SHALL NOT EXCEED 8 HOURS IN LENGTH FOR EACH CLOSURE.



TRAFFIC CONTROL DURING LANE CLOSURE
NTS

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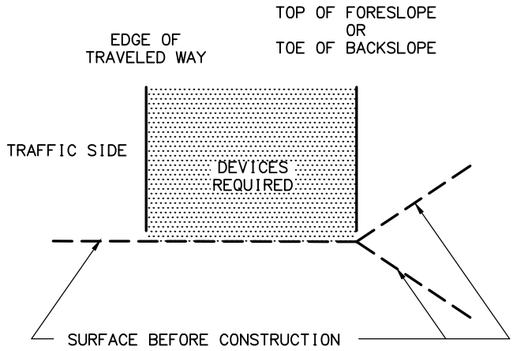
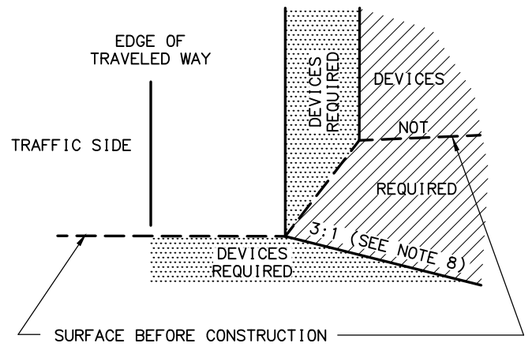
TRAFFIC CONTROL DETAILS

RLC | DRAFTED | -- | CHECKED | RLC | DESIGNED | T3 | LAYOUT | 6/8/2017 12:17 PM | DATE/TIME | J:\OBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 T1-T5 TRAFFIC CONTROL.DWG | FILE

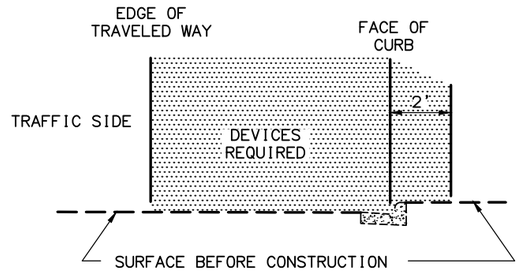
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0A4-1(030)/Z581170000	2017	T4	T5



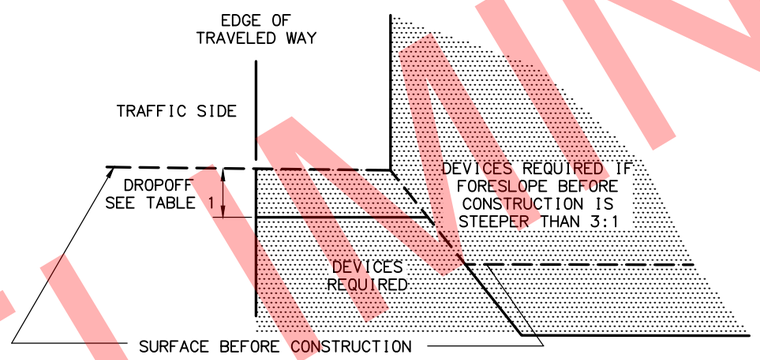
EMBANKMENT SECTION



BACKSLOPE SECTION



CURB AND GUTTER SECTION



FORESLOPE SECTION

LEGEND

- WORK AREA WHERE TRAFFIC CONTROL DEVICES ARE REQUIRED
- WORK AREA WHERE TRAFFIC CONTROL DEVICES ARE NOT REQUIRED
- SURFACE BEFORE CONSTRUCTION
- CONSTRUCTION AREA BOUNDARY

TABLE 1
TRAFFIC CONTROL DEVICES REQUIRED FOR VERTICAL DROPOFFS ≤ 4 FEET FROM TRAVELED WAY*

ROADWAY TYPE	DROPOFF ≤ 2"	2"< DROPOFF ≤ 12"	DROPOFF ≥ 12"
AVERAGE DAILY TRAFFIC > 4000 OR SPEED > 40 MPH	TAPER ASPHALT AT 1:1 OR ~45°	TYPE II BARRICADES OR DRUMS	TEMPORARY PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL
ALL OTHER ROADWAYS	NONE REQUIRED	TUBULAR CANDLES OR DELINEATORS	TYPE II BARRICADES OR DRUMS

*SPACE THE DEVICES IN ACCORDANCE WITH REQUIREMENTS FOR SPACING TYPE II BARRICADES AND DRUMS SET FORTH IN THE ALASKA TRAFFIC MANUAL.

NOTES:

1. TRAFFIC CONTROL DEVICES REQUIRED BY THE GUIDELINES ON THIS SHEET ARE INTENDED FOR CONDITIONS WHICH WILL BE IN PLACE LONGER THAN ONE CONTINUOUS WORK SHIFT. AN APPROVED TRAFFIC CONTROL PLAN IS REQUIRED PRIOR TO BEGINNING WORK.
2. THE GROUND CROSS SECTION AT A LOCATION BEFORE CONSTRUCTION DETERMINES WHETHER TRAFFIC CONTROL DEVICES ARE NEEDED AT THE SAME LOCATION DURING CONSTRUCTION.
3. GUARDRAIL EXISTING AT A LOCATION BEFORE CONSTRUCTION SHALL REMAIN IN PLACE DURING CONSTRUCTION OR APPROVED ALTERNATE DEVICES INSTALLED.
4. INSTALL TRAFFIC CONTROL DEVICES BETWEEN THE EDGE OF TRAVELED WAY AND THE WORK AREA ON ANY ROADWAY OPENED TO TRAFFIC WHEN REQUIRED BY THIS DRAWING.
5. EXISTING ROADWAY ALIGNMENTS INSTALL TRAFFIC CONTROL DEVICES WHEN WORK OCCURS IN THE DEVICES REQUIRED AREAS SHOWN ON THIS DRAWING.
6. DETOURS, TEMPORARY ROADWAYS, OR NEW ROADWAYS NOT YET COMPLETE:
   INSTALL TRAFFIC CONTROL DEVICES WHEN ANY OF THE FOLLOWING CONDITIONS EXIST:
   A. THE HORIZONTAL OR VERTICAL CURVATURE IS MORE SEVERE THAN BEFORE CONSTRUCTION BEGAN.
   B. THE ROADWAY OR SHOULDER WIDTH IS LESS THAN BEFORE CONSTRUCTION BEGAN.
   C. THE BACKSLOPE OR FORESLOPE IS STEEPER THAN BEFORE CONSTRUCTION BEGAN.
   D. THE HEIGHT OF THE FORESLOPE IS GREATER THAN BEFORE CONSTRUCTION BEGAN.
7. DROPOFFS:
   INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FORESLOPE SECTION DETAIL AND TABLE 1.
8. ON ANY NEWLY CONSTRUCTED SLOPE STEEPER THAN 4:1 TO 3:1 PROVIDE A TEN FOOT FLAT RECOVERY AREA AT THE TOE OF SLOPE OR INSTALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE FORESLOPE SECTION DETAIL.
9. TRAFFIC CONTROL DEVICE REQUIREMENTS:
   A. ON ROADWAYS WITH A SPEED LIMIT GREATER THAN 40 MILES PER HOUR OR AVERAGE DAILY TRAFFIC VOLUME GREATER THAN 4000 VEHICLES PER DAY INSTALL TEMPORARY PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL. ON MULTI-LANE ROADWAYS CLOSE THE LANE CLOSEST TO THE WORK AREA AND INSTALL DRUMS.

   TERMINATE RUNS OF TEMPORARY PORTABLE CONCRETE BARRIER USING ONE OF THE FOLLOWING THREE METHODS:
   I. TEMPORARY CRASH ATTENUATOR.
   II. RIGID TO SEMI-RIGID GUARDRAIL TRANSITION WITH SLOTTED RAIL TERMINAL OR OTHER APPROVED CRASHWORTHY END TREATMENT.
   III. FLARE THE ENDS OF THE TEMPORARY BARRIER AWAY FROM THE ROADWAY AT A RATE OF 15:1 ON A TRANSVERSE SLOPE OF 10:1 OR FLATTER TO THE OUTSIDE EDGE OF THE CLEAR ZONE AND INSTALL A SLOPING END TREATMENT, PER STANDARD DRAWING G-46.10.

   TERMINATE RUNS OF TEMPORARY GUARDRAIL USING EITHER OF THE FOLLOWING TWO METHODS:
   I. SLOTTED RAIL TERMINAL OR OTHER APPROVED CRASHWORTHY END TREATMENT.
   II. FLARE THE ENDS OF THE TEMPORARY GUARDRAIL AWAY FROM THE ROADWAY AT A RATE OF 15:1 ON A TRANSVERSE SLOPE OF 10:1 OR FLATTER TO THE OUTSIDE EDGE OF THE CLEAR ZONE.

   B. ON ALL OTHER ROADWAYS INSTALL TYPE II BARRICADES, DRUMS OR DELINEATORS WHEN DEVICES ARE REQUIRED. SPACE THE DEVICES IN ACCORDANCE WITH THE REQUIREMENTS FOR SPACING TYPE II BARRICADES AND DRUMS SET FORTH IN THE ALASKA TRAFFIC MANUAL.
10. DO NOT CONSTRUCT VERTICAL DROPOFFS GREATER THAN 1.5" WITHIN THE TRAFFIC LANE OR ACTIVE WHEEL TRACK. PROVIDE 2' OF SHY DISTANCE FROM EDGE OF ALL TRAFFIC CONTROL DEVICES TO THE EDGE OF THE TRAVELED WAY.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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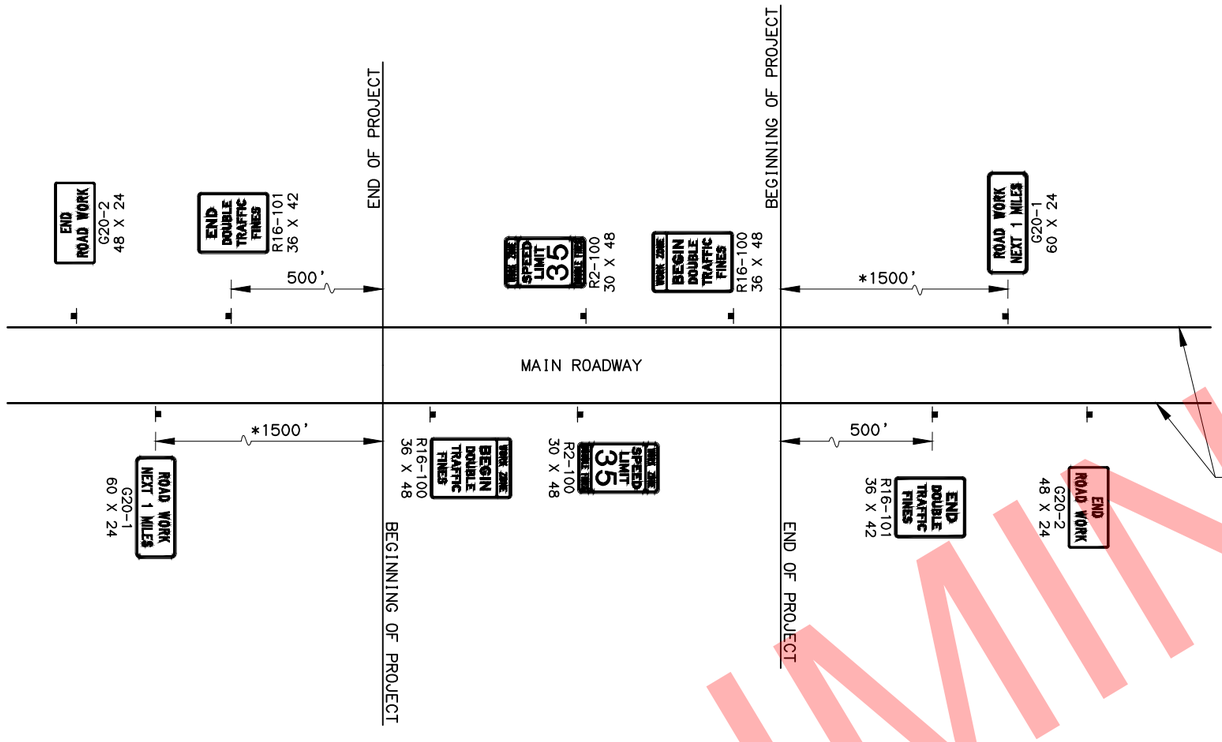
PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

TRAFFIC CONTROL DEVICES FOR ROADSIDES

FILE | J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 T1-T5 TRAFFIC CONTROL.DWG | DATE/TIME | 6/8/2017 12:17 PM | LAYOUT | T4 | DESIGNED | RLC | CHECKED | -- | DRAFTED | RLC

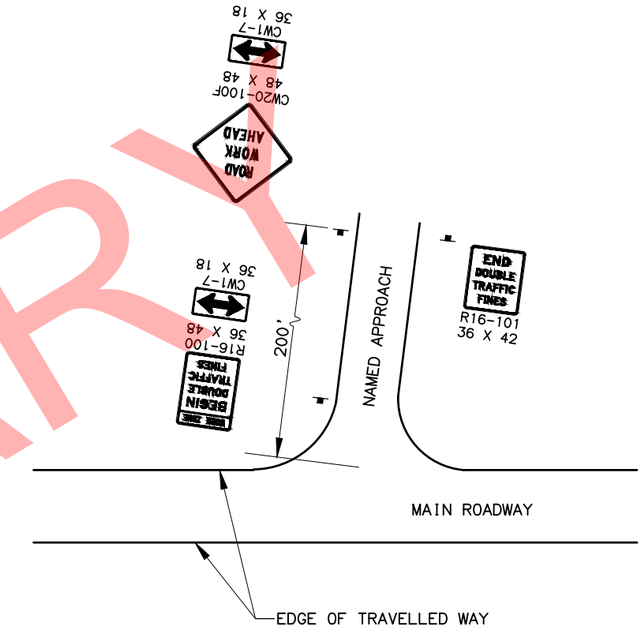
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0A4-1(030)/Z581170000	2017	T5	T5



PERMANENT CONSTRUCTION SIGNING

* LOCATION TO BE DETERMINED BY PROJECT ENGINEER.



PERMANENT CONSTRUCTION SIGNING

SIDE STREETS

NOTES:

1. SPEED LIMIT TO BE DETERMINED BY THE PROJECT ENGINEER.
2. SEE STANDARD DRAWING C-04.12 FOR SPACING OF DOUBLE FINE SIGNS AND SPEED LIMIT SIGNS.

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STATE OF ALASKA
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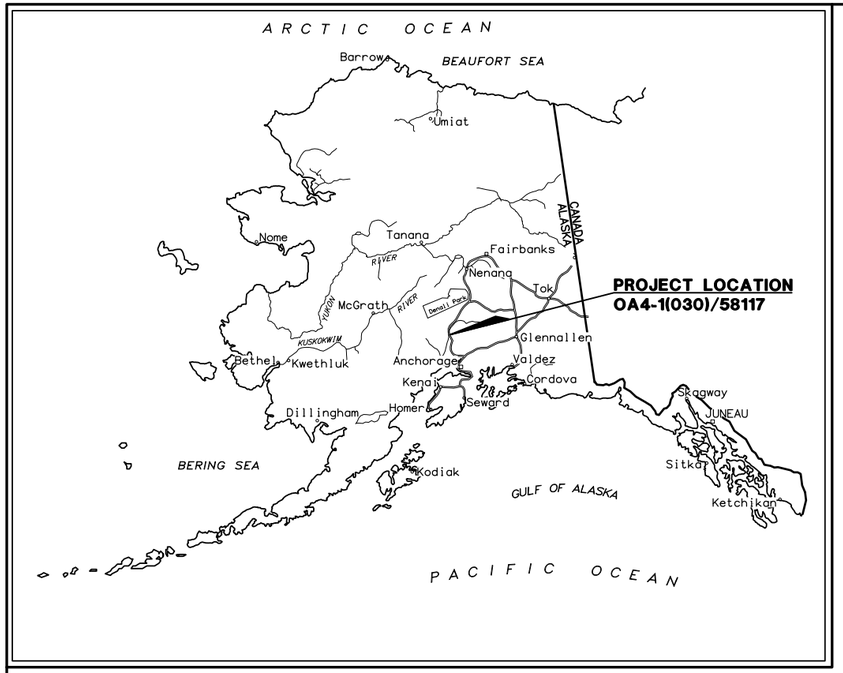
AND PUBLIC FACILITIES

PARKS HIGHWAY/TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS

PERMANENT CONSTRUCTION SIGN DETAIL

FILE | J:\JOBSDATA\30107.00 PARKS HIGHWAY PED IMPROVEMENTS\00 CADD\01 WORKING SET\01 CIVIL\30107 T1-T5 TRAFFIC CONTROL.DWG | DATE/TIME | 6/8/2017 12:17 PM | LAYOUT | T5 | DESIGNED | RLC | CHECKED | -- | DRAFTED | RLC

PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
0A4-1(030)	R1	R5

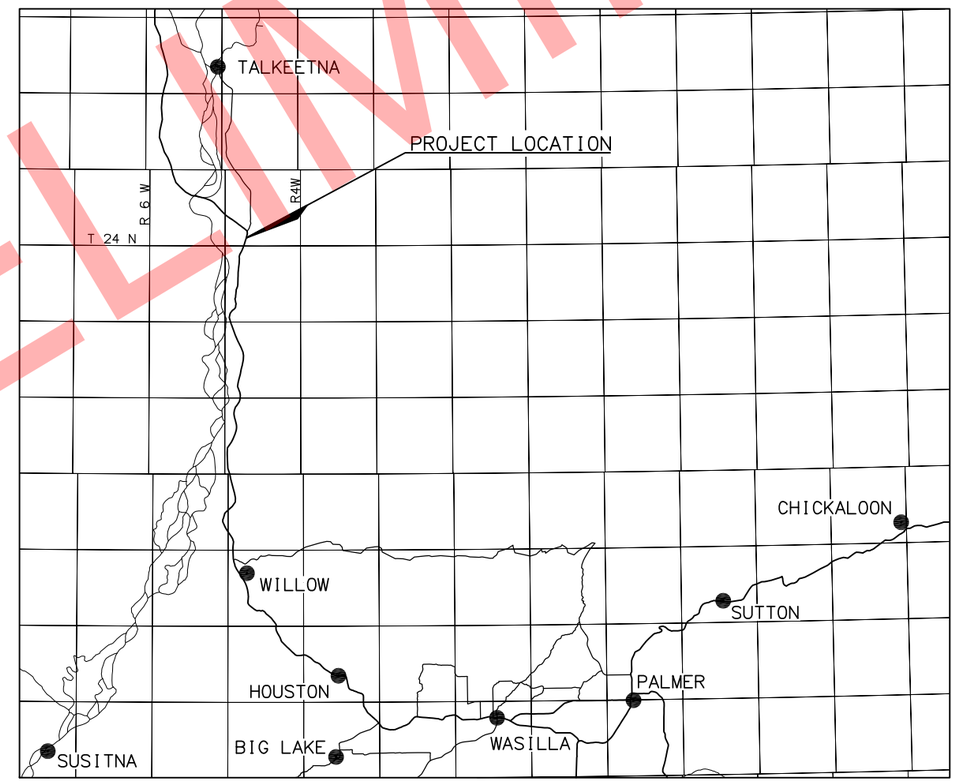


STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

RIGHT OF WAY MAP

ALASKA PROJECT

PARKS HIGHWAY \ TALKEETNA SPUR ROAD PEDESTRIAN IMPROVEMENTS
0A4-1(030)/58117



T24N R4W
S. M.

PRELIMINARY

PROJECT LENGTH 0.4 MI.

SCALE

0 6 12 24

Scale in Miles

DEPARTMENT LOCATIONS SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA AND THAT ALL RIGHT-OF-WAY CENTERLINE MONUMENT LOCATIONS HAVE BEEN ESTABLISHED AS INDICATED ON THE RIGHT-OF-WAY PLANS, ALL EXISTING FOUND SUBDIVISION MONUMENTS, PROPERTY CORNERS AND SECTION LINE MONUMENTATION AS INDICATED ON THE RIGHT-OF-WAY PLANS HAVE BEEN REFERENCED TO PROJECT SURVEY CONTROLS BY ME OR UNDER MY SUPERVISION.

DATE _____ REGISTRATION NUMBER _____

ROBERT M. KEINER

STATE OF ALASKA 49TH ROBERT M. KEINER NO. L.S.-11547 REGISTERED PROFESSIONAL LAND SURVEYOR

DEPARTMENT RIGHT-OF-WAY SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF ALASKA AND THAT THIS PLAT WAS MADE BY ME OR UNDER MY SUPERVISION. THIS PLAT WAS BASED UPON THE MONUMENTS RECOVERED DURING THE DEPARTMENT'S LOCATIONS SURVEY FOR THIS PROJECT.

DATE _____ REGISTRATION NUMBER _____

P. LOUISE HOOYER

STATE OF ALASKA 49TH P. LOUISE HOOYER NO. L.S.-6109 REGISTERED PROFESSIONAL LAND SURVEYOR

DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES

APPROVED_____, 20____
Date

_____
REGIONAL CHIEF R/W AGENT

THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS DEFINED BY A.S. 40.15.900(5).

WITHIN A PORTION OF SECTIONS 29 & 32, T24N, R4W, SEWARD MERIDIAN

RECORD OF SURVEY
TALKEETNA RECORDING DISTRICT

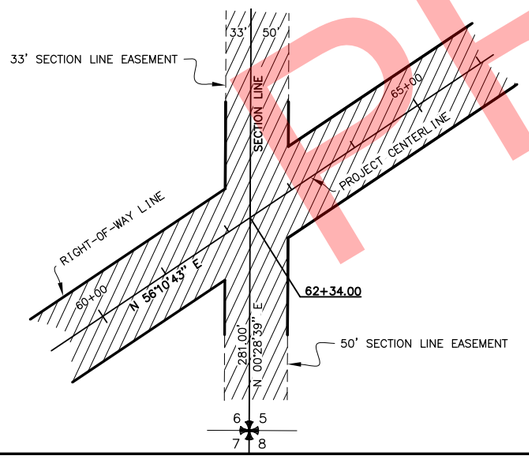
STATE BUSINESS-NO FEE

PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
0A4-1(030)	R2	R5

RIGHT OF WAY

	RECOVERED	SET THIS PROJECT
FED. GOV'T SECTION CORNER	SEC COR	
FED. GOV'T 1/4 SECTION CORNER	1/4 COR	
FED. GOV'T 1/16 SECTION CORNER	1/16 COR	
FED. GOV'T SURVEY MONUMENT		
GOV'T CONTROL STA.		
PRIMARY MONUMENT (BRASS/AL CAP)		
MISC. SECONDARY CORNER		
PRIMARY CENTERLINE MOMUMENT		
SECONDARY CENTERLINE MONUMENT		
CONTROL POINT	CP	
TOWNSHIP & RANGE LINE	T. 13 N. / T. 12 N.	R. 2 W. / R. 3 W.
INTERNATIONAL BOUNDARY LINE	ALASKA / CANADA	
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
CORPORATE or CITY LIMITS		
EXISTING RIGHT-OF-WAY		
RIGHT-OF-WAY OR EASEMENT REQUIRED		
STATION EQUATION	STA. 14+33.22 BK. = STA. 16+90.17 AHD.	
PROJECT CENTERLINE	27+00	
EXISTING CENTERLINE		
RAILROAD CENTERLINE		
PROJECT RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE	C/A	
TEMPORARY CONSTRUCTION PERMIT		
TEMPORARY CONSTRUCTION EASEMENT		
EXISTING RIGHT-OF-WAY EASEMENT		

SECTION LINE EASEMENT AND SECTION LINE-CENTERLINE INTERSECTION



RIGHT OF WAY

EXISTING UTILITY EASEMENT	
PROPOSED UTILITY EASEMENT	

UTILITIES

	EXISTING	PROPOSED
PIPELINES:		
STORM DRAIN	SD	
MANHOLE STORM DRAIN	SD	
CURB INLET CATCH BASIN		
FIELD INLET CATCH BASIN	FI	
PIPE CULVERT w/ END SECTION		
CLEANOUT	CO	
SANITARY SEWER	SS	
MANHOLE SANITARY SEWER	SS	
SEPTIC VENTS	S	
WATER	W	
FIRE HYDRANT		
WELL	W	
VALVE OR RISER		
WATER SERVICE CONNECT		
NATURAL GAS	G	
OIL OR GASOLINE PIPELINE	O	
ELECTRIC (OVERHEAD)	OE	
ELECTRIC (DIRECT BURY)	UE	
ELECTRIC (OVERHEAD)	OE&OT	
UTILITY POLE		
UTILITY POLE WITH LUMINAIRE		
GUY POLE	GP	
GUY WIRE ANCHOR		
TRANSMISSION TOWER [WOOD]		
TRANSMISSION TOWER [STEEL]		
ELECTRICAL PEDESTAL	E	
ELECTRICAL TRANSFORMER	E	
ELECTRIC METER		
ELECTRICAL OUTLET		
ELECTRIC MANHOLE	E	
TELEPHONE (OVERHEAD)	OT	
TELEPHONE (DIRECT BURY)	UT	
TELEPHONE (DIRECT BURY)	UT&TV	
TELEPHONE PEDESTAL	T	
TELEPHONE MANHOLE	T	
FIBER OPTIC	FO	
FIBER OPTIC MANHOLE	FO	
CABLE TV (OVERHEAD)	OTV	
CABLE TV (DIRECT BURY)	UTV	
CABLE T.V. PEDESTAL	V	
SATELLITE DISH		
U.G. DUCT (E, T, FO)		

UTILITIES

	EXISTING	PROPOSED
TYPE IA JUNCTION BOX		
TYPE II JUNCTION BOX		
TYPE III JUNCTION BOX		
TYPE IV JUNCTION BOX		
TRAFFIC CONTROLLER		
ELECTROLIER		
HIGHTOWER		
SIGNAL POLE WITH MAST		
PEDESTRIAN PUSH BUTTON		
RURAL BEACON		
SCHOOL ZONE BEACON		

EXISTING TOPOGRAPHY

CONIFER TREE OR TREES	
DECIDUOUS TREE OR TREES	
SHRUB OR SHRUBS	
WETLANDS	
CREEK	
RIVER	
LAKE / POND	LAKE / POND

EXISTING/PROPOSED

DRAINAGE FLOW	
CONTOURS - MAJOR	515
CONTOURS - MINOR	

MISCELLANEOUS

	EXISTING	PROPOSED
BUILDING		
FOUNDATION		
TANKS ABOVE GROUND		
TANKS UNDERGROUND	U	
PLANTER	P	
PRIVATE SIGN		
POST/BOLLARDS		
MAILBOX	MB	
TRAFFIC SIGN		
VENT		
GAS PUMP	GP	
LANDSCAPE LIGHT		

ROADWAY

	EXISTING	PROPOSED
ROADWAY OBLITERATION		
LIMIT OF CUT SLOPE		
LIMIT OF FILL SLOPE		
EDGE OF PAVEMENT		
CONCRETE CURB		
CONCRETE CURB & GUTTER		
CONCRETE CURB CUT		
SIDEWALK		
CURB RAMPS		
PARALLEL CURB RAMP		
PERPENDICULAR CURB RAMP		
MID-BLOCK CURB RAMP		
UNIDIRECTIONAL CURB RAMP		
DETECTABLE WARNING TILES		
DRIVEWAY APPROACH		
GRAVEL EDGE		
PATH / TRAIL		
BRIDGE		
TUNNEL		
NOISE BARRIER	X	X
FENCE		
STONE FENCE		
RETAINING WALL		
HEAD & WINGWALLS		
GUARDRAIL		
END SECTION		
PARALLEL GUARDRAIL SECTION		
SPECIAL DITCH		
BOTTOM OF DITCH		
RIPRAP		
BOULDER OR BOULDERS		

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

RIGHT OF WAY MAP
ALASKA PROJECT
0A4-1(030)
58117

PARKS HIGHWAY\TALKEETNA SPUR ROAD
PEDESTRIAN IMPROVEMENTS

DRAWN RVK	DATE AUG 2014	SCALE 1" = 1'
CHECKED	DATE	SHEET 2 OF 5

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PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
0A4-1(030)	R3	R5

T24N R4W S.M. SEC. 32

NW 1/4 NE 1/4 SEC 32

SUSITNA VALLEY HIGH SCHOOL

CN 1/16 COR

NE 1/16 COR

N 89°58'35" E 1322.57'

S 00°07'11" E 148.99'

S 00°06'33" W 511.23'

470.50'

N 00°02'25" E 659.91'

E 1/16 COR

N 89°53'27" W 136.71'

89.11'

S 72°58'27" E 125.26'

40.73'

STA. "PH" 1500+44.54
325.01' LT.

STA. "PH" 1500+90.97
333.91' LT.

"A" 10+00

MSB PLAT WAIVER 86-48-PWm
PLAT NO. 86-45W
PARCEL 3

TRACT C

100' ACCESS EASEMENT ADL 56194

A.S.L.S. 2004-19
PLAT NO. 2009-10

TRACT A

MSB PLAT WAIVER 97-46-PWm
BK 163 PG 809

PARCEL 1

STA. "PH" 1513+22.25
200.00' LT.

L=53.00'

L=130.04'
R=2091.83'

STA. "PH" 1499+08.07
200.00' LT.

L=116.41'
R=2091.83'

STA. "PH" 1500+35.62
200.00' LT.

L=79.01'

STA. "PH" 1501+22.18
200.00' LT.

PROJECT F-035-2(7) CENTERLINE
Δ = 47°30'09" LT
T = 1008.49'
L = 1900.10'
R = 2,291.8

STA. "PH" 1506+40.80
200.00' LT.

S 89°57'45" E 175.95'

L=473.36'
L=552.37'
R=2091.83'

L=621.99'
R=2091.83'

"A" 12+00

207.96'

260.66'

N 89°59'20" E

MATCH LINE SEE SHEET 4

TRACT B

R=2291.83' L=202.13'

"PH" 1500+00

"A" 14+00

PROJECT F-035-2(7) CENTERLINE

PARKS HIGHWAY

R=2291.83' L=667.60'

"PH" 1505+00

"PH" 1510+00

R=2291.83' L=672.26'

"A" 22+00

"A" 26+00

"A" 24+00

L=618.94'
R=2391.83'

"A" 105.07'

L=52.24'

103.45'

N 1/16 COR TO NE 1/16 COR

L=238.03'
R=2391.83'

STA. "PH" 1499+93.68
100.00' RT.

A.S.L.S. 85-153
PLAT NO 87-61RS

"A" 18+00

L=452.36'
R=2391.83'

"A" 20+00

L=152.98'
R=2391.83'

S89°46'08"E 30.59'

STA. "PH" 1504+30.07
133.55' RT.

60.56'

S00°13'52"W

STA. "PH" 1504+86.33
100.00' RT.

60' x 60' COMMON DRIVEWAY ESMT

STA. "PH" 1504+87.35
130.57' RT.

STA. "PH" 1506+32.91
100.00' RT.

STA. "PH" 1512+25.97
100.00' RT.

N 89°57'22" E 100.03'

N 89°57'22" E 100.16'

60'

N 89°57'34" W 1323.13'

HELENA AVE

"A" 16+00

"B" 50+00

N 00°02'38" E 10.00'

N 89°57'22" W 175.12'

330.00'

N 89°57'22" W 342.00'

592.61'

"B" 54+00

N 1/16 COR

2

TRACT B

50' MEA ELECTRIC ESMT ADL 21220

20' MTA TELECOMMUNICATIONS ESMT, BK 155 PG 296

S 89°48'48" E 185.93'

MSB PLAT WAIVER 97-46-PWm
BK 163 PG 809

PARCEL 2
RECORD OF SURVEY
PLAT NO. 2009-5

185.34'

539.85'

50' SECTION LINE EASEMENT

30' MEA ELECTRIC EASEMENT

10' SNOW STORAGE, DRAINAGE AND ROAD MAINTENANCE EASEMENT

UPPER SUSITNA SENIOR SUBD. PHASE 1

50'

229.15'
S 00°11'12" W

167.42'
S 00°11'12" W

STA. "PH" 1502+94.03
333.79' RT.

STA. "PH" 1504+40.03
319.05' RT.

STA. "PH" 1500+97.98
370.94' RT.

PLAT NO. 2003-13

TRACT A

N 89°48'48" W 582.71'

N 89°58'47" E 798.55'

20' MTA TELECOMMUNICATIONS ESMT BK 153 PG 501

50' MEA ELECTRIC ESMT ADL 21220

703.80'
N 20°20'30" E

613.21'

PARCEL 3

MSB PLAT WAIVER 86-48-PWm

PLAT NO. 86-45W
PARCEL 2

N 1/16 COR

0 25 50 100
Scale in Feet

ALIGNMENT DESIGNATIONS:
"PH" = PARKS HIGHWAY
"A" = MAIN PATHWAY
"B" = HELENA PATHWAY

PARCEL NO.	INTEREST ACQUIRED	OWNER	LARGER PARCEL	TAKE INCLUDING EXISTING EASEMENT	NET TAKE	REMAINDER	RECORDED DOCUMENT NUMBER
E-1	EASEMENT	MATANUSKA-SUSITNA BOROUGH	85522 S.F.	7737 S.F.	7737 S.F.	85522 S.F.	
2	FEE	UPPER SUSITNA SENIORS INC	97293 S.F.	97293 S.F.	97293 S.F.	0.00	

PARCEL INFORMATION

DATE	REVISIONS	BY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

RIGHT OF WAY MAP
ALASKA PROJECT
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58117

PARKS HIGHWAY\TALKEETNA SPUR ROAD
PEDESTRIAN IMPROVEMENTS

DRAWN	RVK	DATE	AUG 2014	SCALE	1:50
CHECKED		DATE		SHEET	3 OF 5

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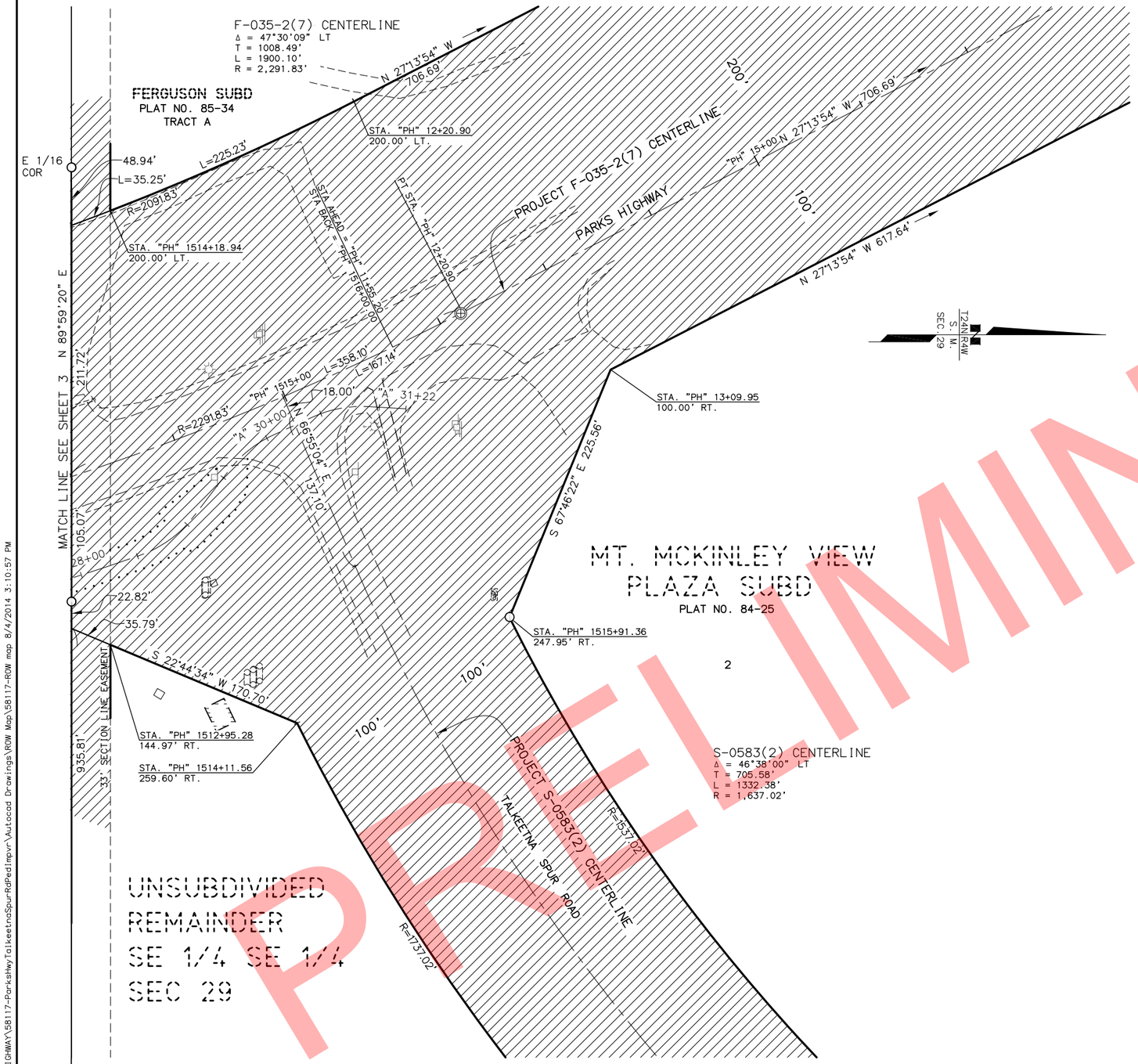
PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
0A4-1(030)	R4	R5



BASIS OF COORDINATES AND BEARINGS

COORDINATE SYSTEM:

THIS PROJECT IS LOCATED ENTIRELY WITHIN THE MATANUSKA-SUSITNA VALLEY (SV-2) ADJUSTMENT, A U.S. SURVEY FOOT LOCAL SURFACE GRID COORDINATE SYSTEM DEVELOPED BY THE ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES.

BASIS OF COORDINATES:

THE BASIS OF COORDINATES IS GPS CONTROL STATION 58, A BRASS DISK HAVING SV-2 COORDINATE VALUES OF 347,061.5287 N AND 321,448.6352 E AS TAKEN FROM THE SURVEY CONTROL SHEET AKSAS PROJECT NO. 58298, SUSITNA VALLEY HIGH SCHOOL ZONE.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS IS A LOCAL PLANE BEARING BETWEEN GPS CONTROL STATION 58 AND GPS CONTROL STATION 57.

GPS CONTROL STATION 57 BEARS S 0°21'47" E A DISTANCE OF 1016.81 U.S. SURVEY FEET FROM GPS CONTROL STATION 58. GPS CONTROL STATION 57 HAS SV-2 COORDINATES OF 346,044.7406 N, AND 321,455.0762 E.

TRANSLATION PARAMETERS:

TO CONVERT THE LOCAL COORDINATES TO NAD83(1992) STATE PLANE COORDINATES, TRANSLATE USING +2,624,987.4040 FEET NORTH AND +1,312,507.1407 FEET EAST THEN SCALE USING 0.9998907818.

TO CONVERT NAD83(1992) STATE PLANE COORDINATES TO LOCAL COORDINATES, SCALE USING 1.0001092301, THEN TRANSLATE USING -2,624,987.4040 FEET NORTH AND -1,312,507.1407 FEET EAST.

GENERAL NOTES

1. ALL DISTANCES SHOWN ARE GROUND DISTANCES IN U.S. SURVEY FEET.
2. THESE PLANS MAY BE USED FOR THE ESTABLISHMENT OF RIGHT OF WAY LIMITS ONLY. THESE DRAWINGS SHOULD NOT BE USED AS A BASIS FOR ESTABLISHING ADJOINING PROPERTY LINES AND CORNERS.
3. 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).
4. ALL DOCUMENTS AND PLATS REFERRED TO BY BOOK AND PAGE OR INSTRUMENT NUMBER CAN BE FOUND IN THE RECORDS OF THE TALKEETNA RECORDING DISTRICT.
5. THE PARKS HIGHWAY ALIGNMENT WAS COMPUTED FROM RECORD INFORMATION FROM PROJECT F-035-2(7) AND FOUND MONUMENTS. THE COMPUTED PC TO THE SOUTH WAS HELD FOR THE START OF STATIONING.
6. STATION AND OFFSETS SHOWN ARE TO COMPUTED POINTS.
7. FOR MORE INFORMATION AND RIGHT OF WAY NOTES, SEE RECORD OF SURVEY RIGHT OF WAY BASE MAP, PLAT 2014-7.

EXISTING RIGHT OF WAY - SOURCE DOCUMENTS

THE EXISTING PARKS HIGHWAY AND TALKEETNA SPUR ROAD RIGHT OF WAY CORRIDORS DEPICTED HEREIN WERE DETERMINED FROM THE FOLLOWING PLANS AND DOCUMENTS

SHEET	DOCUMENT
3	DOH ROW MAP F-035-2(7) WILLOW TO PETERSVILLE ROAD; PCL A-1795 ADL 17098 BK26 PG384; PLAT 2009-10; PLAT 2003-13; WR 97-46-PWm BK 163 PG 809; PLAT 87-61RS; ROS 2009-5; PLAT 86-45W; PLAT 85-4RS; ADL 56194; ADL 21220
4	DOH ROW MAP F-035-2(7) WILLOW TO PETERSVILLE ROAD; DOH ROW PLAT S-0583(2) JUNCTION FAP 35 NORTH TO TALKEETNA; PCL A-1796 WD BK 31 PG 221; WD BK 26 PG 340; PLAT 84-25; PLAT 85-34
	LEGEND: DOH = DEPARTMENT OF HIGHWAYS; PCL = PARCEL; WD = WARRANTY DEED; WR = WAIVER RESOLUTION; ADL = ALASKA DIVISION OF LANDS

DATE	REVISIONS	BY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

RIGHT OF WAY MAP
ALASKA PROJECT
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58117

PARKS HIGHWAY\TALKEETNA SPUR ROAD
PEDESTRIAN IMPROVEMENTS

DRAWN RVK	DATE AUG 2014	SCALE 1:50
CHECKED	DATE	SHEET 4 OF 5

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MONUMENT SUMMARY SHEET

ALL STATIONING SHOWN IN THESE TABLES REFER TO THE PARKS HIGHWAY ALIGNMENT.

PROJECT DESIGNATION	SHEET NO.	TOTAL SHEETS
0A4-1(030)	R5	R5

LOCATION	MONUMENT	NORTHING	EASTING	STATION	OFFSET
SHEET 3					
Parks Hwy ROW	Concrete ROW Mon	345827.0013	321149.5627	1497+65.60	200 LT
C4 TR-C ASLS 2004-19/ NE 1/16 S32 *T24N R4W SM	Rbr	345950.3674	321101.6847	1498+78.87	285.20 LT
C3 TR-C ASLS 2004-19	AM[2234-S]	345950.2788	321190.8217	1499+08.05	199.97 LT
C1 ASLS 85-153	Rbr	345950.1514	321502.3526	1499+93.77	100.12 RT
NW TR-C ASLS 2004-19	Rbr	346099.3585	321101.3732	1500+44.54	325.02 LT
SW TR-B Upper Susitna Senior Phase I	Rbr	346010.1193	321517.1231	1500+52.95	100.13 RT
C2 ASLS 85-153	AM[6267-S]	345949.8265	321832.2084	1500+63.61	420.71 RT
S TR-B Upper Susitna Senior Phase I	Rbr	346000.0300	321617.0762	1500+64.73	199.81 RT
S TR-B Upper Susitna Senior Phase I	Rbr	346010.0149	321617.1090	1500+73.70	197.65 RT
SE TR-B Upper Susitna Senior Phase I	Rbr	345999.9259	321792.2930	1500+98.03	370.98 RT
N 1/16 S32IS33 *T24N R4W SM	AM[2234-S]	345949.4343	322424.8167	1501+54.89	1001.25 RT
NW L2 Upper Susitna Senior Phase I	Rbr	346229.0489	321793.0498	1502+94.06	333.84 RT
N TR-B Upper Susitna Senior Phase I	Rbr/PC[2234-S]	346396.9449	321607.7223	1504+30.07	133.55 RT
NE TR-B Upper Susitna Senior Phase I	Rbr/PC[2234-S]	346396.4735	321793.4699	1504+40.06	318.97 RT
NW TR-B Upper Susitna Senior Phase I	Rbr/PC	346457.7827	321577.9420	1504+86.41	100.67 RT
N TR-B Upper Susitna Senior Phase I	Rbr/PC[2234-S]	346457.4472	321607.8764	1504+87.21	130.59 RT
SE Pcl 2 Waiver 97-46-PWm	Rbr/AC[10686-S]	346610.6694	321763.6968	1506+28.85	285.25 RT
NW TR-A Upper Susitna Senior Phase I	Rbr/AC[8132-S]	346610.7048	321579.0543	1506+32.93	100.66 RT
C2 TR-A ASLS 2004-19	AM[2234-S]	346610.4749	321278.3273	1506+40.80	199.97 LT
C1 TR-A ASLS 2004-19	AM[2234-S]	346610.5900	321102.3469	1506+46.85	375.87 LT
Point on ROW Line NW Pcl 2 Waiver 97-46-PWm	Rbr	347270.7680	321468.7833	1512+76.14	100.29 RT
NW Pcl 1 Waiver 97-46-PWm/ E 1/16 S29/S32 *T24N R4W SM	Rbr	347270.7580	321102.8123	1513+99.41	245.80 LT
CN 1/16 S32 *T24N R4W SM	Rbr	345949.8226	319779.0138		
SHEET 4					
S29IS28/S32IS33 *T24N R4W SM	AM[4575-S]	347270.7592	322427.1684	1510+76.94	1,026.88 RT
SE L2 Mt. McKinley View Plaza	Rbr/AC[4575-S]	347640.1875	321481.7568	1515+91.58	247.72 RT
Centerline Monument Parks Hwy	BC[DOH]	347598.9817	321225.8538	12+19.25	0
MONUMENTS NOT SHOWN					
C5 ASLS 85-153	Rbr	345723.0192	321431.1854	1497+65.63	100.21 RT
C3 ASLS 85-153	AM[6267-S]	345619.9505	321832.0335	1498+00.11	512.26 RT
SW L1 BD Montana Creek Add No. 1	Rbr	345990.4800	322466.3920	1501+87.93	1034.96 RT
NW L1 Upper Susitna Senior Phase I	Rbr/PC[2234-S]	346227.7470	322135.1924	1503+25.56	673.82 RT
NE L1 Upper Susitna Senior Phase I	Rbr/PC[2234-S]	346227.1158	322375.6478	1503+43.89	913.01 RT
NE L1 BD Montana Creek Add No. 1	Rbr	346580.2490	322796.3830	1505+94.54	1317.38 RT
NW L1 BD Montana Creek Add No. 1	Rbr	346581.0460	322466.8490	1505+96.92	987.86 RT
N-N 1/64 S32IS33 *T24N R4W SM	Rbr	346611.0973	322426.9449	1506+18.42	948.37 RT
NE TR-A Upper Susitna Senior Phase I	Rbr/PC[2234-S]	346610.9889	322376.9430	1506+19.00	898.38 RT
SE L2 BC Montana Creek Add No. 1	Rbr/PC[4575-LS]	346639.0780	323127.0770	1506+27.23	1648.93 RT
SE L1 BC Montana Creek Add No. 1	Rbr	346640.1070	322796.4400	1506+32.54	1318.40 RT
NW L1 BC Montana Creek Add No. 1	Rbr	347230.8390	322467.8160	1510+44.26	1058.25 RT
NE Pcl 2 Waiver 97-46-PWm	Rbr/AC[10686-S]	347270.6921	322008.3929	1511+48.33	619.45 RT

LOCATION	MONUMENT	NORTHING	EASTING	STATION	OFFSET
MONUMENTS NOT SHOWN					
SE L1 B2 Sunshine Townsite	Rbr/AC[4575-S]	348590.7660	322896.7040	13+36.54	1939.49 RT
SE L1 Mt. McKinley View Plaza	Rbr	348315.7858	322164.1154	14+27.26	1162.27 RT
SW L1 B2 Sunshine Townsite	Rbr/AC[4575-S]	348591.5140	322580.4700	14+81.91	1658.65 RT
SE Tr C Sunshine Townsite	Rbr/AC[4575-S]	348591.5950	322516.4980	15+11.25	1601.80 RT
S 1/16 S29|S28 *T24N R4W SM	AM[11550-S]	348591.7592	322433.8652	15+49.21	1528.41 RT
SW L1 Mt. McKinley View Plaza	Rbr	348276.5140	321779.4550	15+68.36	802.27 RT
1/4 S29/S32 *T24N R4W SM	BC[GLO]	347270.4154	319777.6225	15+89.80	1438.06 LT
NE L1 Mt. McKinley View Plaza	Rbr/AC	348590.5299	322280.1986	16+18.44	1391.21 RT
SE L1 B7 Sunshine City Unit No. 6	Rbr	348590.5720	322136.0360	16+84.44	1263.04 RT
SW L1 B7 Sunshine City Unit No. 6	Rbr	348591.2580	321955.8070	17+67.52	1103.10 RT
NW L1 Mt. McKinley View Plaza	Rbr	348591.0460	321777.1080	18+49.11	944.12 RT
MC S29/S32 *T24N R4W SM	BC[GLO]	347268.2710	319090.5901	19+02.27	2049.93 LT
Parks Hwy ROW	Concrete ROW Mon	348137.3076	320724.5021	19+27.32	199.45 LT
Centerline Monument Parks Hwy	BC[DOH]	348228.8124	320901.7231	19+27.59	0
Parks Hwy ROW	Concrete ROW Mon	340072.0831	319343.0144		
Parks Hwy ROW	Concrete ROW Mon	340176.5161	319061.5646		
1/4 S32IS33 *T24N R4W SM	IP	344627.4366	322422.1374		
Parks Hwy ROW	Rbr/AC[3796S]	344628.5072	321026.6682		
CE 1/16 S32 *T24N R4W SM	AM[3796S]	344628.5306	321101.3521		
C 1/4 S32 *T24N R4W SM	AM[3796S]	344629.1269	319780.7121		
1/4 S31IS32 *T24N R4W SM	BC[GLO]	344629.2449	317138.1173		
Parks Hwy ROW	IP	344629.2896	320707.0071		
C4 ASLS 85-153	Alum Pipe	345620.0653	321393.0387		
MC S29/S32 *T24N R4W SM	BC[GLO]	347264.9074	317632.6988		
S30IS29/S31IS32 *T24N R4W SM	BC[GLO]	347272.6321	317127.9738		
NW WCMC Tr C Ferguson	Rbr	348589.3074	319512.5061		
CS 1/16 S29 *T24N R4W SM	BC[613-S]	348589.5558	319774.4052		
NE Tr C Ferguson	Rbr	348590.1827	320325.0895		
NW L2 Mt. McKinley View Plaza	Rbr	348590.3690	320774.4613		
SE L1 B4 Sunshine City Unit No. 6	Rbr	348590.6300	321492.5610		
NW L4 B2 Sunshine City Unit No. 6	Rbr	348659.0820	320708.0540		
NE L4 B2 Sunshine City Unit No. 6	Rbr	348865.6710	321009.2500		
SW L4 B5 Sunshine City Unit No. 6	Rbr	349581.9770	322433.7970		
NW L4 B5 Sunshine City Unit No. 6	Rbr	349881.9980	322434.2720		
S20IS21/S29IS28 *T24N R4W SM	BC[GLO]	352550.9680	322432.3060		

DATE	REVISIONS	BY

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

RIGHT OF WAY MAP
ALASKA PROJECT
0A4-1(030)
58117

PARKS HIGHWAY\TALKEETNA SPUR ROAD
PEDESTRIAN IMPROVEMENTS

DRAWN	RVK	DATE	AUG 2014	SCALE	NO SCALE
CHECKED		DATE		SHEET	5 OF 5