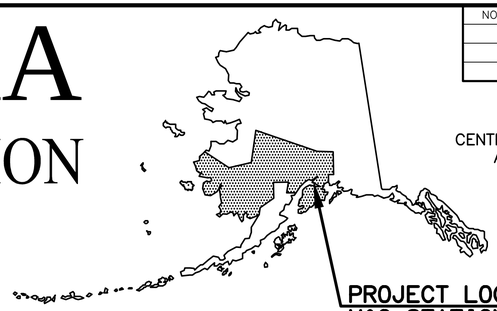
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000 0001(344)/Z581970000	2017	AC1	AC1

STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES



PROPOSED HIGHWAY PROJECT

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS PROJECT NO. 0001(344)/Z581970000

GRADING, DRAINAGE, PAVING, PATHWAYS, SIGNING, STRIPING, ILLUMINATION & SIGNALIZATION

PROJECT SUMMARY AND DESIGNATION				
ROADWAY SECTION	WIDTH	LENGTH	A.A.D.T. 2014	DESIGN SPEED
OLD SEWARD HIGHWAY @ 34TH AVENUE	165 FT	610 FT	8,836	40 MPH
36TH AVENUE @ LATOUCHE STREET	82 FT	75 FT	13,081	40 MPH
INGRA STREET @ 4TH TO 3RD	441 FT	493 FT	2,367	40 MPH
3RD AVENUE @ F STREET	147 FT	152 FT	5,178	35 MPH
7TH AVENUE @ D STREET	151 FT	153 FT	4,275	30 MPH
7TH AVENUE @ H STREET	173 FT	148 FT	4,275	30 MPH
8TH AVENUE @ D STREET	156 FT	162 FT	1,207	30 MPH
8TH AVENUE @ E STREET	152 FT	175 FT	2,973	35 MPH
8TH AVENUE @ G STREET	156 FT	163 FT	1,207	30 MPH
8TH AVENUE @ H STREET	145 FT	138 FT	1,207	30 MPH
8TH AVENUE @ K STREET	144 FT	157 FT	1,247	30 MPH

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION PROJECT NO. 0001(299)/Z566440000

SIGNALIZATION & SIGNING

PROJECT SUMMARY AND DESIGNATION				
ROADWAY SECTION	WIDTH	LENGTH	A.A.D.T. 2013	DESIGN SPEED
LAKE OTIS PARKWAY	109 FT	126 FT	22,040	50 MPH
68TH AVENUE	60 FT	147 FT	4,280	40 MPH

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000 0001(344)/Z581970000	2017	CC1	CC1

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	0001(344)/ Z581970000 QUANTITY	0001(299)/ Z566440000 QUANTITY	TOTAL QUANTITY
202(2)	REMOVAL OF PAVEMENT	SY	14,934	19	14,953
202(3)	REMOVAL OF SIDEWALK	SY	2,285	51	2,336
202(4)	REMOVAL OF CULVERT PIPE	LF	1,031	–	1,031
202(6)	REMOVAL OF MANHOLE	EA	8	–	8
202(8)	REMOVAL OF INLET	EA	27	–	27
202(9)	REMOVAL OF CURB AND GUTTER	LF	4,593	80	4,673
202(10A)	REMOVE AND REINSTALL COLLECTION BOX	EA	1	–	1
202(13)	REMOVAL OF FENCE	LF	70	–	70
203(6A)	BORROW, TYPE A	TON	1,338	–	1,338
301(1)	AGGREGATE BASE COURSE, GRADING D–1	TON	1,800	4	1,804
401(1A)	HMA, TYPE II; CLASS A	TON	3,100	3	3,103
401(4)	ASPHALT BINDER, GRADE PG 52–28	TON	165	0.2	165.2
401(8A)	HMA PRICE ADJUSTMENT, TYPE II; CLASS A	CS	ALL REQUIRED	–	ALL REQUIRED
401(15)	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQUIRED	–	ALL REQUIRED
603(21–12)	12 INCH CORRUGATED POLYETHYLENE PIPE	LF	1,212	–	1,212
603(21–18)	18 INCH CORRUGATED POLYETHYLENE PIPE	LF	353	–	353
604(1A)	STORM DRAIN MANHOLE, TYPE I	EA	10	–	10
604(1B)	STORM DRAIN MANHOLE, TYPE II	EA	11	–	11
604(3)	RECONSTRUCT EXISTING MANHOLE	EA	3	–	3
604(4)	ADJUST EXISTING MANHOLE	EA	10	–	10
604(5)	INLET, TYPE MOA PRECAST CATCH BASIN	EA	36	–	36
604(13F)	ADJUST TELEPHONE MANHOLE FRAME AND LID	EA	1	–	1
607(3)	CHAIN LINK FENCE	LF	61	–	61
608(1a)	CONCRETE SIDEWALK, 4 INCHES THICK	SY	4,219	51	4,270
608(1b)	CONCRETE SIDEWALK, 6 INCHES THICK	SY	437	–	437
608(6)	CURB RAMP	EA	76	2	78
608(13C)	CONCRETE (SLABS), TYPE III, 6 INCHES THICK, COLORED	SY	169	–	169
609(2)	CURB AND GUTTER, TYPE I	LF	5,309	80	5,389
609(8)	STEEL FACED CURB	LF	1,385	–	1,385
615(1)	STANDARD SIGN	SF	565	50	615
615(4)	DELINEATOR, RIGID	EA	8	–	8
615(5)	DELINEATOR, FLEXIBLE	EA	3	–	3
618(4)	SEEDING	SY	589	–	589
620(1)	TOPSOIL	SY	589	–	589
627(10)	ADJUSTMENT OF VALVE BOX	EA	17	–	17
640(1)	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	0001(344)/ Z581970000 QUANTITY	0001(299)/ Z566440000 QUANTITY	TOTAL QUANTITY
641(2)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(6)	WITHHOLDING	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(7)	SWPPP MANAGER	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(6)	REPLACE EXISTING WITH PRIMARY MONUMENT	EA	10	–	10
642(7)	REPLACE EXISTING WITH SECONDARY MONUMENT	EA	3	–	3
642(10)	MONUMENT CASE	EA	13	–	13
643(2)	TRAFFIC MAINTENANCE	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(15A)	FLAGGING	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(23)	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(25)	TRAFFIC CONTROL	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
644(1)	FIELD OFFICE	LS	–	ALL REQUIRED	ALL REQUIRED
644(10)	ENGINEERING COMMUNICATIONS	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
646(1)	CPM SCHEDULING	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
660(7A)	TEMPORARY SIGNAL SYSTEM COMPLETE (36TH AVENUE AND LATOUCHE STREET)	CS	ALL REQUIRED	–	ALL REQUIRED
660(13)	RELOCATE ELECTROLIER	EA	2	–	2
660(17A)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (LAKE OTIS PARKWAY AND 68TH AVENUE)	LS	–	ALL REQUIRED	ALL REQUIRED
660(17B)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (36TH AVENUE AND LATOUCHE STREET)	LS	ALL REQUIRED	–	ALL REQUIRED
660(17C)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (INGRA STREET AND 4TH AVENUE)	LS	ALL REQUIRED	–	ALL REQUIRED
660(17D)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (INGRA STREET AND 3RD AVENUE)	LS	ALL REQUIRED	–	ALL REQUIRED
660(18)	ADJUST JUNCTION BOX	EA	9	–	9
660(19A)	JUNCTION BOX, TYPE II	EA	1	–	1
660(20A)	SIGNAL SYSTEM TIMING AND ADJUSTMENTS (LAKE OTIS PARKWAY AND 68TH AVENUE)	CS	–	ALL REQUIRED	ALL REQUIRED
670(10D)	MMA PAVEMENT MARKINGS, LONGITUDINAL INLAID	LF	4,893	–	4,893
670(10E)	MMA PAVEMENT MARKINGS, SYMBOLS AND ARROW(S) INLAID	EA	12	–	12
670(10F)	MMA PAVEMENT MARKINGS, TRANSVERSE AND GORE INLAID	LF	5,654	–	5,654
682(1)	VAC–TRUCK POTHOLE	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

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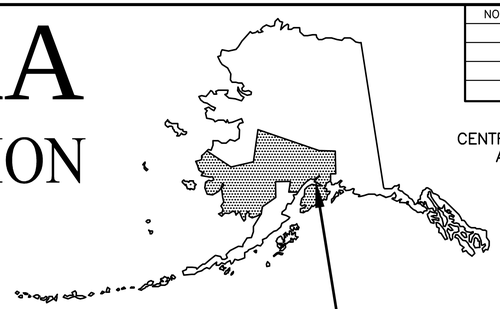
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A1	A4
			PLAN SET TOTAL	91



CDS ROUTE:	MILEPOINT:	LATITUDE:	LONGITUDE:
OLD SEWARD HWY-ROUTE: 133200	MILEPOINT: 7.855	61.189515°	-149.868208°
36TH AVENUE-ROUTE: 134770	MILEPOINT: 1.820	61.188175°	-149.858870°
INGRA STREET-ROUTE: 134150	MILEPOINT: 1.162 TO 1.230	61.219050°	-149.866944°
3RD AVENUE-ROUTE: 134410	MILEPOINT: 1.950, 2.220	61.219539°	-149.897587°
7TH AVENUE-ROUTE: 134536S1	MILEPOINT: 0.340, 0.610, 0.750	61.215603°	-149.893492°
8TH AVENUE-ROUTE: 134538S1	MILEPOINT: 0.270, 0.350, 0.410, 0.540, 0.610, 0.750	61.214616°	-149.894514°

PROPOSED HIGHWAY PROJECT

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

PROJECT NO. 0001(344)/Z581970000

GRADING, DRAINAGE, PAVING, PATHWAYS, SIGNING, STRIPING, ILLUMINATION & SIGNALIZATION

PROJECT SUMMARY AND DESIGNATION				
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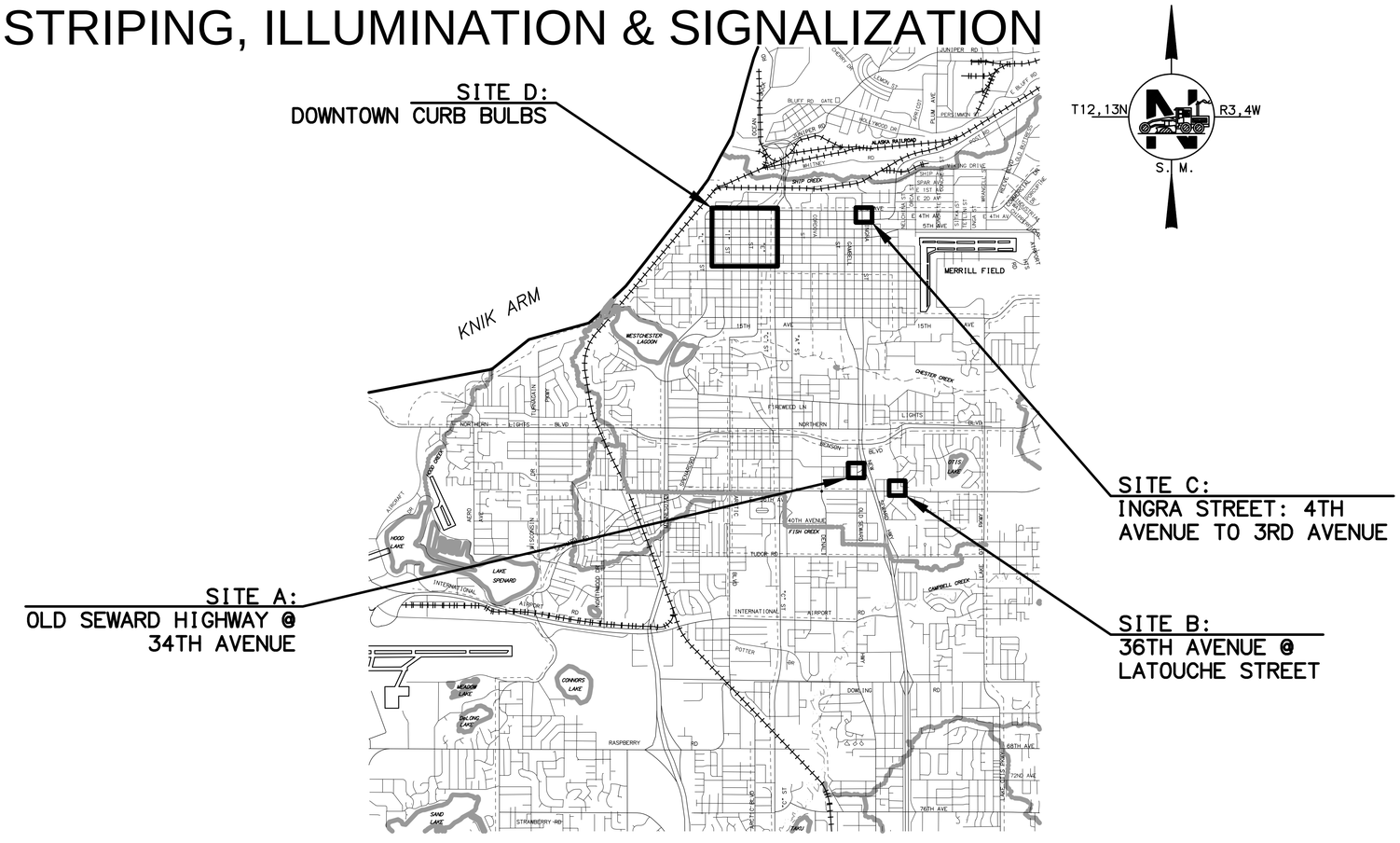

PLANS DEVELOPED BY: DOWL

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

APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER DATE

CONCUR:

REGIONAL CONSTRUCTION ENGINEER DATE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A2	A4

ALIGNMENT DESIGNATIONS

SITE	STREET NAME	ABBREVIATION
A	OLD SEWARD HIGHWAY	"OSH"
B	36TH AVENUE	"36A"
C	INGRA STREET	"IS"
C	3RD AVENUE (INGRA)	"3A"
D	3RD AVENUE (DOWNTOWN)	"TA"
D	7TH AVENUE	"SA"
D	8TH AVENUE	"EA"

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE ROW. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE ROW, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.

2. THE ROW LINES SHOWN WERE DRAWN ON THE PLANS USING INFORMATION FROM DOT&PF, PLATTED SUBDIVISIONS, AND SURVEYED MONUMENTS ON THE GROUND. THE ROW LINES WERE INSERTED USING A COMMON COORDINATE SYSTEM.

3. SAWCUT ALL JOINTS AND WHERE NEW ASPHALT WILL TIE INTO EXISTING ASPHALT. CONSTRUCT JOINTS AS LONGITUDINAL JOINTS. SAWCUTS ARE SUBSIDIARY TO 408 ITEMS.

4. PLACE TOPSOIL AND SEED IN ALL AREAS WITHIN THE ROW DISTURBED BY CONSTRUCTION, AND AS DIRECTED BY THE ENGINEER.

5. THE DESIGN SURVEY, WHICH ESTABLISHED ORIGINAL GROUND AND EXISTING IMPROVEMENTS, WAS PERFORMED PRIOR TO 2013. FIELD CONDITIONS MAY HAVE CHANGED THAT ARE NOT REPRESENTED IN THIS PLAN SET.

6. LOCATION OF ALL UTILITIES ARE APPROXIMATE. CONTRACTOR SHALL OBTAIN ALL UTILITY FIELD LOCATES AND VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD.

7. CONSTRUCT CURB RAMPS TO AVOID IMPACTING SIGNAL POLE FOUNDATIONS. DO NOT COVER SIGNAL POLE FOUNDATION BOLTS AND BASE PLATES WITH TOPSOIL OR OTHER MATERIALS.

8. ADJUST ALL PAVEMENT PENETRATIONS TO FINAL GRADE PRIOR TO TOP LIFT OF PAVING.

   IF ANY PAVEMENT PENETRATION REQUIRES GRADE ADJUSTMENT AFTER FINAL LIFT PAVING, AS DETERMINED BY THE ENGINEER, SAW CUT A NEAT LINE ALONG THE PAVEMENT TO BE REMOVED. (USE AN INFRARED HEATER TO HEAT THE EXISTING PAVEMENT. EQUIPMENT AND MAXIMUM TEMPERATURE SHALL BE APPROVED BY THE ENGINEER.) REPLACE THE REMOVED ASPHALT WITH NEW HOT MIX ASPHALT AND THOROUGHLY COMPACT. SEAL JOINTS AT LEAST 12 INCHES LONG USING ASPHALT SYSTEMS GSB-88 OR APPROVED EQUAL, WHILE THE HOT MIX ASPHALT IS CLEAN, FREE OF MOISTURE AND PRIOR TO STRIPING.

   NO PAYMENT WILL BE MADE FOR ADDITIONAL WORK CAUSED BY FAILURE TO ADJUST PAVEMENT PENETRATIONS TO FINAL GRADE.

9. ON STANDARD DRAWING C-03.10, REPLACE THE SAFETY FENCE AND TYPE II BARRICADE OR TUBULAR MARKINGS SHOWN IN THE TYPICAL SECTION WITH ADA COMPLIANT BARRICADES.

10. GROUND RODS FOR CHAIN LINK FENCE SHALL BE 5/8".

11. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICE FOR LOCATE AND OVERHEAD INSPECTION WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.

12. POSITIVE ALIGNMENT OFFSET VALUES ARE TO THE RIGHT OF THE REFERENCED ALIGNMENT. NEGATIVE ALIGNMENT OFFSET VALUES ARE TO THE LEFT OF THE REFERENCED ALIGNMENT.

13. WHEN TYING INTO A SIDEWALK WHERE THE EXISTING CROSS SLOPE IS GREATER THAN 2%, TIE THE NEW SIDEWALK IN AT THE EXISTING CROSS SLOPE AND WARP THE NEW SIDEWALK SUCH THAT THE NEW CROSS SLOPE IS LESS THAN 2% WITHIN A DISTANCE EQUAL TO THE EXISTING SIDEWALK WIDTH.

INDEX

THE FOLLOWING REGIONAL DRAWINGS APPLY TO THIS PROJECT:

CR-T-01.02, CR-T-04.02

IN THE EVENT OF A CONFLICT, REGIONAL DRAWINGS SUPERSEDE STANDARD DRAWINGS.

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

C-03.10*, C-04.12
D-04.21, D-20.03, D-22.01, D-23.01, D-24.00, D-35.00, D-36.00
F-01.02
I-21.10, I-22.10
L-23.01, L-24.00, L-25.00, L-26.00, L-30.10
S-00.11*, S-05.01, S-22.00, S-23.00, S-30.03, S-31.01
T-05.10, T-20.03, T-21.03, T-22.03, T-23.00, T-52.20, T-54.00, T-55.00, T-56.00

* AS MODIFIED HEREIN.

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 AS OF THE ADVERTISEMENT DATE OF THIS PROJECT.

DOWL
4041 B STREET
ANCHORAGE, AK 99503
(907) 562-2000
AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INDEX AND GENERAL NOTES

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A3	A4

ABBREVIATIONS

@	AT	EXP	EXPOSED, EXPANSION	PP	POWER POLE
&	AND	EXST, EX	EXISTING	PRV	PRESSURE REDUCING VALVE
AB	ANCHOR BOLT, AGGREGATE BASE	EVC	END VERTICAL CURVE	PSF	POUNDS PER SQUARE FOOT
AC	ASPHALT CONCRETE	FDN	FOUNDATION	PSI	POUNDS PER SQUARE INCH
ACI	AMERICAN CONCRETE INSTITUTE	FG	FINISH GRADE	PSIG	POUNDS PER SQUARE INCH GAUGE
ADH AB	ADHESIVE ANCHOR BOLT	FH	FIRE HYDRANT	PT	POINT OF TANGENCY
AL	ALUMINUM	FI	FIELD INLET	PVC	POLYVINYL CHLORIDE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	FIG	FIGURE	PVI	POINT OF VERTICAL INTERSECTION
APPROX	APPROXIMATE	FL	FLOW LINE (ELEV)	PVMT	PAVEMENT
APPD	APPROVED	FLG	FLANGE	R, RAD	RADIUS
AVAP	AS VERTICAL AS POSSIBLE	FNSH	FINISH	RD	ROAD
AWG	AMERICAN WIRE GAUGE	FT	FOOT OR FEET	REF	REFER OR REFERENCE
B FACING	BEGIN STEEL FACED CURB	FTG	FOOTING	REINF	REINFORCED, REINFORCING
BFV	BUTTERFLY VALVE	G	GAS	REQD	REQUIRED
BM	BENCH MARK	GA	GAGE	RMC	RIGID METAL CONDUIT
BOP	BOTTOM OF PIPE	GALV	GALVANIZED	ROW	RIGHT-OF-WAY
BOT	BOTTOM	GB	GRADE BREAK	RT	RIGHT
BRG	BEARING	GPM	GALLONS PER MINUTE	S	SOUTH, SLOPE
BVC	BEGIN VERTICAL CURVE	GSP	GALVANIZED STEEL PIPE	SCH	SCHEDULE
CC	CURB CUT	GV	GATE VALVE	SD	STORM DRAIN
C&G	CURB AND GUTTER	HORIZ	HORIZONTAL	SHLD	SHOULDER
CB	CATCH BASIN	ID	INSIDE DIAMETER	SHT	SHEET
CBMH	CATCH BASIN MANHOLE	IF	INSIDE FACE	SPECS	SPECIFICATIONS
CI	CAST IRON	INV	INVERT	SQ	SQUARE
CJ	CONSTRUCTION JOINT	JB, J-BOX	JUNCTION BOX	SS	SANITARY SEWER
CL	CENTER LINE	JT	JOINT	SST	STAINLESS STEEL
CMP	CORRUGATED METAL PIPE	LB	POUNDS	ST	STREET, STEEL PIPE
CONC	CONCRETE	LB/CU FT	POUNDS PER CUBIC FOOT	STA	STATION
CONN	CONNECTION	LF	LINEAR FEET	STD	STANDARD
CONT	CONTINUOUS, CONTINUATION	LT	LEFT	STL	STEEL
CORP	CORPORATION	MASS	MUNICIPALITY OF ANCHORAGE STANDARD SPECIFICATIONS	SWLK	SIDEWALK
COR	CENTER OF RAMP	MAX	MAXIMUM	SYMM	SYMMETRICAL
COW	CENTER OF WALK	ME	MATCH EXISTING	T	TANGENT, THERMOSTAT
CPEP	CORRUGATED POLYETHYLENE PIPE	MEP	MATCH EXISTING PAVEMENT	T&S	TOPSOIL & SEED
CSP	CORRUGATED STEEL PIPE	MFR	MANUFACTURER	TBC	TOP BACK OF CURB
CTRD	CENTERED	MH	MANHOLE	TBW	TOP BACK OF WALL
CTR	CENTER	MIN	MINIMUM	TCE	TEMPORARY CONSTRUCTION EASEMENT
CU	COPPER	MISC	MISCELLANEOUS	TEL	TELEPHONE
CY	CUBIC YARD	MJ	MECHANICAL JOINT	TEMP	TEMPORARY
DET	DETAIL	MOA	MUNICIPALITY OF ANCHORAGE	TOC	TOP OF CURB
DI	DROP INLET, DUCTILE IRON	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	TW	TOP OF WALL
DIA	DIAMETER	N	NORTH, NORTHING	TYP	TYPICAL
DIP	DUCTILE IRON PIPE	NC, NIC	NOT IN CONTRACT	UBC	UNIFORM BUILDING CODE
DOT&PF	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES	NO	NUMBER, NUMBERING	UG	UNDERGROUND
		NTS	NOT TO SCALE	UNK	UNKOWN
DWG	DRAWING	OC	ON CENTER	VB	VALVE BOX
E	EAST, EASTING	OCEW	ON CENTER EACH WAY	VC	VERTICAL CURVE
EA	EACH	OD	OUTSIDE DIAMETER	VERT, VT	VERTICAL
ECS	EDGE OF CONCRETE SIDEWALK	OGS	OIL AND GRIT SEPARATOR	VPI	VERTICAL POINT OF INTERSECTION
EF	EACH FACE	OH	OVERHEAD	W	WEST, WATER, WATER LINE
E FACING	END STEEL FACED CURB	OPNG	OPENING	W/	WITH
ELEV, EV	ELEVATION	PC, POC	POINT OF CURVATURE	WSP	WELDED STEEL PIPE
ENGR	ENGINEER	PCC	PORTLAND CEMENT CONCRETE	WT	WATER TABLE, WEIGHT
EP	EDGE OF PAVEMENT	PI	POINT OF INTERSECTION	WWF	WELDED WIRE, FABRIC
EW	EACH WAY	PL	PLACE, PLATE, PROPERTY LINE		

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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4041 B STREET
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(907) 562-2000
AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

ABBREVIATIONS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A4	A4

UTILITIES

	EXISTING	PROPOSED
PIPELINES:		
STORM DRAIN STRUCTURE AND PIPE NUMBERS, APPLICABLE IF SHOWN		S1-1, P1-1
STORM DRAIN	SD	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		
WATER	W	W
FIRE HYDRANT		
WELL	W	
VALVE OR RISER		
NATURAL GAS	G	G
NATURAL GAS VALVE OR RISER	G	
OIL OR GASOLINE PIPELINE	O	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)		RMC

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		"XX"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	515.0
CONTOURS - MINOR	515.5

MISCELLANEOUS

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

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	X	X
RETAINING WALL		
HEAD & WINGWALLS		
GUARDRAIL		
END SECTION		
PARALLEL GUARDRAIL SECTION		
SPECIAL DITCH		

ROADWAY - CONTINUED

	EXISTING	PROPOSED
BOTTOM OF DITCH		
RIPRAP		
BOULDER OR BOULDERS		
PARKING METER		
FLARED CONCRETE CURB CUT		

SUPPLEMENTAL

CROWN OF ROAD	CR
GRADE BREAK	GB
CURVE NUMBER	C#
GRADING POINT	XX1234
SIGNAL POLE	P#
PIPE NUMBER	P#-#
STRUCTURE NUMBER	S#-#
GUIDE MARKER	

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

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

LEGEND SHEET

DATE/TIME 12/23/2016 10:41 AM | LAYOUT A4 | DESIGNED AKM | CHECKED CRW | DRAFTED AKM
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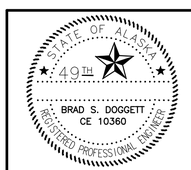
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C1	C2

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	SITE A	SITE B	SITE C	SITE D	TOTAL QUANTITY
			OLD SEWARD HIGHWAY & 34TH AVENUE	36TH AVENUE & LATOUCH STREET	INGRA STREET: 4TH AVENUE TO 3RD AVENUE	DOWNTOWN CURB BULBS	
202(2)	REMOVAL OF PAVEMENT	SY	1,681	39	3,173	10,041	14,934
202(3)	REMOVAL OF SIDEWALK	SY	37	40	113	2,095	2,285
202(4)	REMOVAL OF CULVERT PIPE	LF	–	–	100	930	1,031
202(6)	REMOVAL OF MANHOLE	EA	–	–	2	6	8
202(8)	REMOVAL OF INLET	EA	–	–	4	23	27
202(9)	REMOVAL OF CURB AND GUTTER	LF	169	54	1,216	3,154	4,593
202(10A)	REMOVE AND REINSTALL COLLECTION BOX	EA	–	–	–	1	1
202(13)	REMOVAL OF FENCE	LF	–	–	70	–	70
203(6A)	BORROW, TYPE A	TON	312	–	1,026	–	1,338
301(1)	AGGREGATE BASE COURSE, GRADING D–1	TON	360	6	465	969	1,800
401(1A)	HMA, TYPE II; CLASS A	TON	382	10	683	2,025	3,100
401(4)	ASPHALT BINDER, GRADE PG 52–28	TON	20	1	36	108	165
401(8A)	HMA PRICE ADJUSTMENT, TYPE II; CLASS A	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
401(15)	ASPHALT MATERIAL PRICE ADJUSTMENT	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
603(21–12)	12 INCH CORRUGATED POLYETHYLENE PIPE	LF	–	–	108	1,104	1,212
603(21–18)	18 INCH CORRUGATED POLYETHYLENE PIPE	LF	–	–	–	353	353
604(1A)	STORM DRAIN MANHOLE, TYPE I	EA	–	–	2	8	10
604(1B)	STORM DRAIN MANHOLE, TYPE II	EA	–	–	1	10	11
604(3)	RECONSTRUCT EXISTING MANHOLE	EA	–	–	2	1	3
604(4)	ADJUST EXISTING MANHOLE	EA	1	–	2	7	10
604(5)	INLET, TYPE MOA PRECAST CATCH BASIN	EA	–	–	4	32	36
604(13F)	ADJUST TELEPHONE MANHOLE FRAME AND LID	EA	–	–	–	1	1
607(3)	CHAIN LINK FENCE	LF	–	–	61	–	61
608(1a)	CONCRETE SIDEWALK, 4 INCHES THICK	SY	101	36	465	3,617	4,219
608(1b)	CONCRETE SIDEWALK, 6 INCHES THICK	SY	–	–	77	360	437
608(6)	CURB RAMP	EA	6	1	11	58	76
608(13C)	CONCRETE (SLABS), TYPE III, 6 INCHES THICK, COLORED	SY	143	–	26	–	169
609(2)	CURB AND GUTTER, TYPE 1	LF	537	54	1,244	3,474	5,309
609(8)	STEEL FACED CURB	LF	–	–	24	1,361	1,385
615(1)	STANDARD SIGN	SF	105	29	168	263	565
615(4)	DELINEATOR, RIGID	EA	8	–	–	–	8
615(5)	DELINEATOR, FLEXIBLE	EA	–	–	3	–	3
618(4)	SEEDING	SY	38	19	506	26	589



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STATE OF ALASKA
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AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

ESTIMATE OF QUANTITIES

FILE | P:\PROJECTS\D61519\D61519–HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14–CT–DT–C–D SHT–61519.DWG | DATE/TIME | 12/23/2016 10:41 AM | LAYOUT | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C2	C2

ESTIMATE OF QUANTITIES

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	SITE A OLD SEWARD HIGHWAY & 34TH AVENUE	SITE B 36TH AVENUE & LATOUCH STREET	SITE C INGRA STREET: 4TH AVENUE TO 3RD AVENUE	SITE D DOWNTOWN CURB BULBS	TOTAL QUANTITY
620(1)	TOPSOIL	SY	38	19	506	26	589
627(10)	ADJUSTMENT OF VALVE BOX	EA	1	–	4	12	17
640(1)	MOBILIZATION AND DEMOBILIZATION	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(2)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(6)	WITHHOLDING	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
641(7)	SWPPP MANAGER	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
642(6)	REPLACE EXISTING WITH PRIMARY MONUMENT	EA	–	–	2	8	10
642(7)	REPLACE EXISTING WITH SECONDARY MONUMENT	EA	–	–	1	2	3
642(10)	MONUMENT CASE	EA	–	–	3	10	13
643(2)	TRAFFIC MAINTENANCE	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(15A)	FLAGGING	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(23)	TRAFFIC PRICE ADJUSTMENT	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
643(25)	TRAFFIC CONTROL	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
644(10)	ENGINEERING COMMUNICATIONS	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
646(1)	CPM SCHEDULING	LS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
660(7A)	TEMPORARY SIGNAL SYSTEM COMPLETE (36TH AVENUE AND LATOUCHE STREET)	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED
660(13)	RELOCATE ELECTROLIER	EA	2	–	–	–	2
660(17B)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (36TH AVENUE AND LATOUCHE STREET)	LS	–	ALL REQUIRED	–	–	ALL REQUIRED
660(17C)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (INGRA STREET AND 4TH AVENUE)	LS	–	–	ALL REQUIRED	–	ALL REQUIRED
660(17D)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (INGRA STREET AND 3RD AVENUE)	LS	–	–	ALL REQUIRED	–	ALL REQUIRED
660(18)	ADJUST JUNCTION BOX	EA	1	–	–	8	9
660(19A)	JUNCTION BOX, TYPE II	EA	–	–	–	1	1
670(10D)	MMA PAVEMENT MARKINGS, LONGITUDINAL INLAID	LF	1,347	–	958	2,588	4,893
670(10E)	MMA PAVEMENT MARKINGS, SYMBOLS AND ARROW(S) INLAID	EA	4	–	4	4	12
670(10F)	MMA PAVEMENT MARKINGS, TRANSVERSE AND GORE INLAID	LF	873	–	1,512	3,269	5,654
682(1)	VAC–TRUCK POTHOLE	CS	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED	ALL REQUIRED

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
203(6A)	BORROW, TYPE A	144 LB/CF
301(1)	AGGREGATE BASE COURSE, GRADING D-1	144 LB/CF
401(1A)	HMA, TYPE II; CLASS A	151 LB/CF
401(4)	ASPHALT BINDER, GRADE PG 52-28	5.3% OF 401(1A)

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STATE OF ALASKA
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HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

ESTIMATE OF QUANTITIES

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D1	D4

202(2) REMOVAL OF PAVEMENT

SHEET	FROM STATION	TO STATION	OFFSET	AREA (SY)	REMARKS
A:F1	"OSH" 3+70.08	"OSH" 6+46.51	RT/LT	1681	
B:F1	"36A" 4+50.54	"36A" 4+88.41	LT	39	
C:F1	"IS" 3+54.72	"IS" 5+50.00	RT/LT	1347	
C:F2	"IS" 5+50.00	"IS" 7+10.00	RT/LT	732	
C:F3	"IS" 7+10.00	"IS" 8+24.51	RT/LT	1094	
D:F1	"TA" 15+84.15	"TA" 18+04.98	RT/LT	1250	
D:F3	"SA" 52+72.85	"SA" 54+67.08	RT/LT	1375	
D:F5	"SA" 39+95.32	"SA" 41+68.78	RT/LT	1236	
D:F7	"EA" 84+38.85	"EA" 86+03.55	RT/LT	1347	
D:F9	"EA" 80+56.39	"EA" 82+37.97	RT/LT	1306	
D:F11	"EA" 73+51.39	"EA" 75+03.64	RT/LT	1028	
D:F13	"EA" 69+96.52	"EA" 71+62.14	RT/LT	1191	
D:F15	"EA" 62+72.94	"EA" 64+45.94	RT/LT	1307	
			TOTAL (SY)	14,934	

202(3) REMOVAL OF SIDEWALK

SHEET	NW QUADRANT AREA (SY)	NE QUADRANT AREA (SY)	SW QUADRANT AREA (SY)	SE QUADRANT AREA (SY)	QUANTITY (SY)	REMARKS
A:F1	24	–	10	3	37	
B:F1	–	40	–	–	40	
C:F1	–	–	3	34	37	
C:F2	10	–	–	–	10	
C:F3	–	–	66	–	66	
D:F1	116	83	53	72	324	
D:F3	67	110	57	54	288	
D:F5	59	–	57	55	171	
D:F7	75	117	82	23	297	
D:F9	89	37	59	51	236	
D:F11	104	–	64	61	229	
D:F13	58	119	68	48	293	
D:F15	68	69	62	58	257	
				TOTAL (SY)	2,285	

202(4) REMOVAL OF CULVERT PIPE

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
C:F1	"IS" 3+93.15	25.25 LT	"IS" 4+07.67	5.72 RT	34	
C:F1	"IS" 3+89.89	25.11 RT	"IS" 4+07.67	5.72 RT	26	
C:F3	"IS" 7+74.62	22.21 RT	"IS" 8+10.70	5.16 RT	40	
D:F1	"TA" 16+88.73	22.40 RT	"TA" 17+21.27	2.23 RT	38	
D:F1	"TA" 17+48.95	22.46 RT	"TA" 17+21.27	2.23 RT	34	
D:F3	"SA" 53+25.65	22.28 LT	"SA" 53+67.35	7.73 RT	51	
D:F3	"SA" 53+82.34	32.94 LT	"SA" 53+67.35	7.73 RT	43	
D:F5	"SA" 40+66.86	31.59 LT	"SA" 40+97.61	5.36 RT	48	
D:F5	"SA" 41+24.24	22.69 RT	"SA" 40+97.61	5.36 RT	32	
D:F7	"EA" 84+89.69	22.59 RT	"EA" 85+26.81	5.09 RT	41	
D:F7	"EA" 85+50.38	20.40 LT	"EA" 85+26.87	5.09 RT	35	
D:F7	"EA" 85+43.32	30.69 RT	"EA" 85+26.87	5.09 RT	30	
D:F7	"EA" 85+56.17	26.23 LT	"EA" 85+50.38	20.40 LT	8	
D:F9	"EA" 81+38.13	35.39 RT	"EA" 81+54.61	8.16 RT	32	
D:F9	"EA" 81+93.01	20.37 LT	"EA" 81+54.61	8.16 RT	48	
D:F9	"EA" 81+83.05	36.76 RT	"EA" 81+54.61	8.16 RT	40	
D:F11	"EA" 74+18.62	39.23 RT	"EA" 74+44.39	8.24 RT	40	
D:F11	"EA" 74+63.22	39.20 RT	"EA" 74+44.39	8.24 RT	36	
D:F11	"EA" 74+18.39	36.5 LT	"EA" 74+44.39	8.24 RT	52	
D:F13	"EA" 70+58.00	31.58 RT	"EA" 70+86.24	8.44 RT	37	
D:F13	"EA" 70+40.45	20.35 LT	"EA" 70+86.24	8.44 RT	54	
D:F13	"EA" 71+13.91	20.36 LT	"EA" 70+86.24	8.44 RT	40	
D:F13	"EA" 71+03.19	31.62 RT	"EA" 70+86.24	8.44 RT	29	
D:F15	"EA" 63+28.82	22.68 RT	"EA" 63+68.28	3.95 RT	44	
D:F15	"EA" 63+82.68	32.01 RT	"EA" 63+68.28	3.95 RT	32	
D:F15	"EA" 63+82.70	32.01 LT	"EA" 63+68.28	3.95 RT	39	
D:F15	"EA" 63+27.53	20.20 LT	"EA" 63+68.28	3.95 RT	47	
				TOTAL (LF)	1,031	

202(6) REMOVAL OF MANHOLE

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
C:F1	"IS" 4+07.67	5.72 RT	1	REPLACE EXISTING
C:F4	"IS" 7+80.84	20.89 LT	1	REPLACE EXISTING
D:F1	"TA" 17+21.27	2.23 RT	1	REPLACE EXISTING
D:F3	"SA" 53+67.35	7.73 RT	1	REPLACE EXISTING
D:F7	"EA" 85+26.87	5.09 RT	1	REPLACE EXISTING
D:F9	"EA" 81+54.61	8.15 RT	1	REPLACE EXISTING
D:F11	"EA" 74+44.39	8.24 RT	1	REPLACE EXISTING
D:F13	"EA" 70+86.24	8.44 RT	1	REPLACE EXISTING
		TOTAL (EA)	8	

202(8) REMOVAL OF INLET

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
C:F1	"IS" 3+94.16	24.41 LT	1	
C:F1	"IS" 3+90.50	24.43 RT	1	
C:F3	"IS" 7+80.64	20.89 LT	1	REPLACE WITH TYPE I
C:F3	"IS" 7+74.62	22.21 RT	1	
D:F1	"TA" 16+88.73	22.40 RT	1	
D:F1	"TA" 17+48.95	22.46 RT	1	
D:F3	"SA" 53+25.65	22.28 LT	1	
D:F3	"SA" 53+82.34	32.94 LT	1	
D:F5	"SA" 41+24.24	22.69 RT	1	
D:F5	"SA" 40+66.86	31.59 LT	1	
D:F7	"EA" 85+43.32	30.69 RT	1	
D:F7	"EA" 85+50.38	20.40 LT	1	
D:F7	"EA" 84+89.69	22.59 RT	1	
D:F9	"EA" 81+38.13	35.39 RT	1	
D:F9	"EA" 81+83.05	36.76 RT	1	
D:F9	"EA" 81+93.01	20.37 LT	1	
D:F11	"EA" 74+18.62	39.23 RT	1	
D:F11	"EA" 74+18.39	36.50 LT	1	
D:F11	"EA" 74+63.22	39.20 RT	1	
D:F13	"EA" 70+58.00	31.58 RT	1	
D:F13	"EA" 71+03.19	31.62 RT	1	
D:F13	"EA" 70+40.45	20.35 LT	1	
D:F13	"EA" 71+13.91	20.36 LT	1	
D:F15	"EA" 63+28.82	22.68 RT	1	
D:F15	"EA" 63+82.68	32.01 RT	1	
D:F15	"EA" 63+27.53	20.20 LT	1	
D:F15	"EA" 63+82.70	32.01 LT	1	
		TOTAL (EA)	27	

202(9) REMOVAL OF CURB AND GUTTER

SHEET	FROM STATION	TO STATION	OFFSET	LENGTH (LF)	REMARKS
A:F1	"OSH" 4+44.46	"OSH" 5+88.23	RT/LT	169	
B:F1	"36A" 4+50.54	"36A" 4+84.95	LT	54	
C:F1–C:F3	"IS" 3+75.60	"IS" 4+37.98	RT/LT	1216	
D:F1	"TA" 15+84.12	"TA" 17+90.70	RT/LT	418	
D:F3	"SA" 52+72.85	"SA" 54+67.08	RT/LT	439	
D:F5	"SA" 39+95.29	"SA" 41+57.48	RT/LT	313	
D:F7	"EA" 84+38.85	"EA" 85+95.56	RT/LT	484	
D:F9	"EA" 80+56.39	"EA" 82+35.42	RT/LT	415	
D:F11	"EA" 73+51.39	"EA" 75+03.64	RT/LT	305	
D:F13	"EA" 70+06.04	"EA" 71+50.11	RT/LT	360	
D:F15	"EA" 62+87.12	"EA" 64+32.00	RT/LT	420	
			TOTAL (LF)	4,593	

202(10A) REMOVE AND REINSTALL COLLECTION BOX

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
D:F11	"EA" 73+95.22	24.10 RT	1	
		TOTAL (EA)	1	

202(13) REMOVAL OF FENCE

SHEET	FROM STATION	TO STATION	OFFSET	LENGTH (LF)	REMARKS
C:F1	"IS" 3+90.28	"IS" 4+28.43	RT	70	
			TOTAL (LF)	70	

604(13F) ADJUST TELEPHONE MANHOLE FRAME AND LID

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
D:F1	"TA" 17+06.47	3.97 RT	1	
		TOTAL (EA)	1	

607(3) CHAIN LINK FENCE

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
C:F1	"IS" 3+90.28	31.50 RT	"IS" 4+28.43	78.82 RT	61	
				TOTAL (LF)	61	

FENCE NOTES:

1. CONTRACTOR TO MATCH EXISTING FENCE TYPE (CHAIN LINK WITH BARBED WIRE).

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

SUMMARY SHEET

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D2	D4

608(1a) CONCRETE SIDEWALK, 4 INCHES THICK

SHEET	NW QUADRANT AREA (SY)	NE QUADRANT AREA (SY)	SW QUADRANT AREA (SY)	SE QUADRANT AREA (SY)	QUANTITY (SY)	REMARKS
A:F1	21	–	47	33	101	
B:F1	36	–	–	–	36	
C:F1	48	48	44	38	178	
C:F2	55	82	0	0	137	
C:F3	–	–	98	52	150	
D:F1	147	139	80	108	474	
D:F3	133	141	113	108	495	
D:F5	74	–	135	109	318	
D:F7	138	139	120	129	526	
D:F9	116	127	121	116	480	
D:F11	171	–	122	113	406	
D:F13	112	125	110	97	444	
D:F15	126	127	96	125	474	
				TOTAL (SY)	4,219	

608(1b) CONCRETE SIDEWALK, 6 INCHES THICK

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	AREA (SY)	REMARKS
C:F2	"IS 5+77.64	14.00 LT	"IS" 6+11.53	14.00 LT	19	DRIVE CURB CUT
C:F2	"IS" 6+24.47	14.00 LT	"IS" 6+51.59	14.00 LT	15	ALLEY CURB CUT
C:F3	"3A" 18+96.83	24.57 LT	"3A" 18+49.55	27.23 LT	26	SOUTH DRIVE CURB CUT
C:F3	"IS" 7+97.57	3.46 LT	"IS" 17+22.54	11.45 LT	17	MEDIAN CROSSING
D:F1	"TA" 16+10.18	14.28 LT	"TA" 16+61.68	14.15 LT	97	
D:F3	"SA" 54+08.93	15.00 LT	"SA" 54+42.98	14.92 LT	56	
D:F7	"EA" 85+35.17	42.54 LT	"EA" 85+36.25	76.15 LT	67	
D:F7	"EA" 85+06.25	44.12 RT	"EA" 85+06.34	77.12 RT	53	
D:F9	"EA" 80+80.37	12.98 LT	"EA" 81+19.23	12.87 LT	56	
D:F15	"EA" 63+45.61	44.17 RT	"EA" 63+45.62	65.78 RT	31	
				TOTAL (SY)	437	

NOTE:

1. CONSTRUCT THE MEDIAN CROSSING WITH COLORED CONCRETE AS NOTED ON SHEET A:F1.

608(6) CURB RAMP

SHEET	STATION	OFFSET	QUANTITY (EA)	TYPE	REMARKS
A:F1	"OSH" 5+53.09	44.83 LT	1	PARALLEL	
A:F1	"OSH" 4+88.94	23.28 RT	1	PERPENDICULAR	
A:F1	"OSH" 4+88.31	39.88 LT	1	PERPENDICULAR	
A:F1	"OSH" 5+04.41	52.96 LT	1	PERPENDICULAR	
A:F1	"OSH" 4+88.29	1.02 LT	1	PERPENDICULAR	SEE NOTE 1
A:F1	"OSH" 4+88.28	9.02 LT	1	PERPENDICULAR	SEE NOTE 1
B:F1	"36A" 4+75.83	45.20 LT	1	PARALLEL	
C:F1	"IS" 4+97.04	13.25 RT	1	PERPENDICULAR	
C:F1	"IS" 4+82.04	31.08 LT	1	PARALLEL	
C:F1	"IS" 4+97.43	13.90 LT	1	PARALLEL	
C:F1	"IS" 4+18.52	41.72 RT	1	PERPENDICULAR	
C:F1	"IS" 4+21.09	15.68 LT	1	PARALLEL	
C:F1	"IS" 4+37.56	31.95 LT	1	PARALLEL	
C:F3	"IS" 7+72.67	38.87 LT	1	PARALLEL	
C:F4	"IS" 8+02.59	2.22 LT	1	PERPENDICULAR	
C:F4	"IS" 7+98.34	15.75 LT	1	PERPENDICULAR	
C:F4	"IS" 8+03.04	13.25 RT	1	PERPENDICULAR	
C:F4	"IS" 8+11.26	22.49 RT	1	PERPENDICULAR	
D:F1	"TA" 17+47.33	15.53 LT	1	PERPENDICULAR	
D:F1	"TA" 16+84.92	16.07 LT	1	PERPENDICULAR	
D:F1	"TA" 17+44.72	15.09 RT	1	PERPENDICULAR	
D:F1	"TA" 17+28.79	28.31 RT	1	PERPENDICULAR	
D:F1	"TA" 16+98.70	29.79 RT	1	PERPENDICULAR	
D:F1	"TA" 16+84.92	15.13 RT	1	PERPENDICULAR	
D:F3	"SA" 53+76.91	30.15 LT	1	PERPENDICULAR	
D:F3	"SA" 53+90.25	17.07 LT	1	PERPENDICULAR	
D:F3	"SA" 53+30.45	16.95 LT	1	PERPENDICULAR	
D:F3	"SA" 53+43.47	30.05 LT	1	PERPENDICULAR	
D:F3	"SA" 53+90.24	16.07 RT	1	PERPENDICULAR	
D:F3	"SA" 53+76.30	30.61 RT	1	PERPENDICULAR	
D:F3	"SA" 53+44.10	30.98 RT	1	PERPENDICULAR	
D:F3	"SA" 53+29.13	16.76 RT	1	PERPENDICULAR	
D:F5	"SA" 40+57.01	15.20 LT	1	PARALLEL	
D:F5	"SA" 40+74.12	32.39 LT	1	PARALLEL	
D:F5	"SA" 41+20.36	16.44 RT	1	PERPENDICULAR	
D:F5	"SA" 41+06.44	29.97 RT	1	PERPENDICULAR	
D:F5	"SA" 40+72.61	30.27 RT	1	PERPENDICULAR	
D:F5	"SA" 40+59.35	17.02 RT	1	PERPENDICULAR	
D:F7	"EA" 85+37.09	28.94 LT	1	PERPENDICULAR	

608(6) CURB RAMP

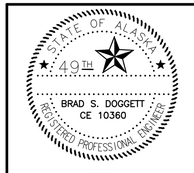
SHEET	STATION	OFFSET	QUANTITY (EA)	TYPE	REMARKS
D:F7	"EA" 85+50.04	15.47 LT	1	PERPENDICULAR	
D:F7	"EA" 84+87.87	13.73 LT	1	PERPENDICULAR	
D:F7	"EA" 85+03.99	28.17 LT	1	PERPENDICULAR	
D:F7	"EA" 85+53.15	17.04 RT	1	PERPENDICULAR	
D:F7	"EA" 85+37.75	30.67 RT	1	PERPENDICULAR	
D:F7	"EA" 85+04.11	31.66 RT	1	PERPENDICULAR	6' WIDE
D:F7	"EA" 84+88.25	17.25 RT	1	PERPENDICULAR	
D:F9	"EA" 81+74.79	27.38 LT	1	PERPENDICULAR	
D:F9	"EA" 81+89.13	14.01 LT	1	PERPENDICULAR	
D:F9	"EA" 81+28.40	12.27 LT	1	PERPENDICULAR	
D:F9	"EA" 81+45.71	27.21 LT	1	PERPENDICULAR	
D:F9	"EA" 81+92.01	17.34 RT	1	PERPENDICULAR	
D:F9	"EA" 81+76.43	32.91 RT	1	PERPENDICULAR	
D:F9	"EA" 81+45.92	30.43 RT	1	PERPENDICULAR	
D:F9	"EA" 81+31.39	17.00 RT	1	PERPENDICULAR	
D:F11	"EA" 74+08.55	14.87 LT	1	PERPENDICULAR	
D:F11	"EA" 74+23.50	29.76 LT	1	PERPENDICULAR	
D:F11	"EA" 74+70.33	15.83 RT	1	PERPENDICULAR	
D:F11	"EA" 74+54.91	33.15 RT	1	PERPENDICULAR	
D:F11	"EA" 74+26.55	30.86 RT	1	PERPENDICULAR	
D:F11	"EA" 74+11.91	16.35 RT	1	PERPENDICULAR	
D:F13	"EA" 70+97.42	29.07 LT	1	PERPENDICULAR	
D:F13	"EA" 71+11.62	14.84 LT	1	PERPENDICULAR	
D:F13	"EA" 70+50.26	14.27 LT	1	PERPENDICULAR	
D:F13	"EA" 70+64.07	28.21 LT	1	PERPENDICULAR	
D:F13	"EA" 71+13.07	17.98 RT	1	PERPENDICULAR	
D:F13	"EA" 70+96.67	33.39 RT	1	PERPENDICULAR	
D:F13	"EA" 70+64.18	33.20 RT	1	PERPENDICULAR	
D:F13	"EA" 70+49.84	18.49 RT	1	PERPENDICULAR	
D:F15	"EA" 63+75.64	30.25 LT	1	PERPENDICULAR	
D:F15	"EA" 63+90.70	14.19 LT	1	PERPENDICULAR	
D:F15	"EA" 63+28.61	14.07 LT	1	PERPENDICULAR	
D:F15	"EA" 63+44.25	30.41 LT	1	PERPENDICULAR	
D:F15	"EA" 63+92.31	17.78 RT	1	PERPENDICULAR	
D:F15	"EA" 63+75.78	34.31 RT	1	PERPENDICULAR	
D:F15	"EA" 63+44.51	34.57 RT	1	PERPENDICULAR	
D:F15	"EA" 63+27.73	17.82 RT	1	PERPENDICULAR	
		TOTAL (EA)	76		

608(13C) CONCRETE (SLABS), TYPE III, 6 INCHES THICK, COLORED

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	AREA (SY)	REMARKS
A:F1	"OSH" 3+87.53	5.39 LT	"OSH" 4+80.78	5.98 LT	65	
A:F1	"OSH" 4+85.78	6.01 LT	"OSH" 4+98.28	6.09 LT	14	
A:F1	"OSH" 5+61.29	4.13 LT	"OSH" 6+23.42	1.62 RT	64	
C:F3	"3A" 18+15.14	9.48 LT	"3A" 17+23.43	12.73 LT	26	
				TOTAL (SY)	169	

609(2) CURB AND GUTTER, TYPE 1

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
A:F1	"OSH" 4+65.54	36.17 LT	"OSH" 5+10.94	66.70 LT	60	
A:F1	"OSH" 5+47.82	64.87 LT	"OSH" 5+95.07	25.39 LT	72	
A:F1	"OSH" 3+83.78	5.37 LT	"OSH" 4+84.53	5.83 LT	210	
A:F1	"OSH" 5+59.06	6.52 LT	"OSH" 6+26.63	0.93 LT	145	
A:F1	"OSH" 4+44.46	23.56 RT	"OSH" 5+01.52	25.11 RT	50	
B:F1	"36A" 4+50.54	37.01 LT	"36A" 4+84.95	68.82 LT	54	
C:F1	"IS" 3+75.60	23.86 RT	"IS" 4+36.25	84.71 RT	96	
C:F1	"IS" 3+59.23	22.59 LT	"IS" 4+37.98	44.05 LT	84	
C:F1	"IS" 4+81.79	28.52 RT	"IS" 5+50.00	13.25 RT	79	
C:F1	"IS" 4+81.82	44.42 LT	"IS" 5+50.00	13.25 LT	91	
C:F2	"IS" 5+50.00	13.25 RT	"IS" 7+05.24	30.71 RT	165	
C:F2	"IS" 5+50.00	13.25 LT	"IS" 7+10.00	13.25 LT	159	
C:F3	"IS" 7+10.00	13.25 LT	"IS" 7+96.19	196.27 LT	232	
C:F3	"IS" 7+36.88	39.75 RT	"IS" 8+11.25	37.37 RT	121	
C:F3	"3A" 18+15.14	8.73 LT	"3A" 17+21.73	10.91 LT	217	
D:F1	"TA" 15+84.58	21.60 LT	"TA" 16+95.49	82.07 LT	176	
D:F1	"TA" 16+45.91	21.88 RT	"TA" 3+20.75	14.19 LT	72	
D:F1	"TA" 17+24.62	44.39 RT	"TA" 17+90.24	21.84 RT	85	
D:F1	"TA" 17+34.99	74.70 LT	"TA" 17+90.09	21.85 LT	112	
D:F3	"SA" 52+72.85	21.64 LT	"SA" 53+38.14	79.15 LT	129	
D:F3	"SA" 53+81.79	77.81 LT	"SA" 54+66.74	21.65 LT	147	
D:F3	"SA" 52+80.68	21.80 RT	"SA" 53+38.23	67.15 RT	103	
D:F3	"SA" 53+81.81	72.02 RT	"SA" 54+28.16	21.72 RT	110	
D:F5	"SA" 39+95.62	21.75 RT	"SA" 40+67.76	70.62 RT	127	
D:F5	"SA" 40+14.09	21.68 LT	"SA" 40+67.65	77.99 LT	117	
D:F5	"SA" 41+11.30	70.42 RT	"SA" 41+57.20	21.78 RT	101	
D:F7	"EA" 84+39.04	21.91 RT	"EA" 84+98.94	103.23 RT	146	
D:F7	"EA" 84+49.38	19.94 LT	"EA" 84+98.93	86.35 LT	122	
D:F7	"EA" 85+42.43	93.58 LT	"EA" 85+95.35	19.69 LT	133	
D:F7	"EA" 85+42.58	84.18 RT	"EA" 85+92.66	21.76 RT	117	
D:F9	"EA" 80+56.26	19.60 LT	"EA" 81+38.85	69.14 LT	141	
D:F9	"EA" 81+03.87	21.93 RT	"EA" 81+38.86	83.71 RT	105	
D:F9	"EA" 81+82.46	65.60 LT	"EA" 82+35.02	19.74 LT	108	
D:F9	"EA" 81+82.30	82.84 RT	"EA" 82+27.61	21.90 RT	111	
D:F11	"EA" 73+51.50	19.58 LT	"EA" 74+10.46	68.78 LT	122	
D:F11	"EA" 73+61.79	21.85 RT	"EA" 74+19.20	99.18 RT	121	
D:F11	"EA" 74+62.40	76.16 RT	"EA" 75+03.46	21.87 RT	104	
D:F13	"EA" 70+11.03	19.67 LT	"EA" 70+58.65	66.22 LT	101	
D:F13	"EA" 71+02.19	66.90 LT	"EA" 71+49.74	19.61 LT	102	
D:F13	"EA" 69+96.52	21.96 RT	"EA" 70+58.69	61.11 RT	106	
D:F13	"EA" 71+02.39	71.34 RT	"EA" 71+47.48	22.44 RT	99	
D:F15	"EA" 62+87.33	19.64 LT	"EA" 63+38.34	70.30 LT	108	
D:F15	"EA" 63+81.92	70.28 LT	"EA" 64+31.75	19.70 LT	107	
D:F15	"EA" 62+87.26	21.83 RT	"EA" 63.38.50	89.51 RT	123	
D:F15	"EA" 63+60.32	94.16 RT	"EA" 64+31.79	21.83 RT	119	
				TOTAL (LF)	5,309	



DOWL
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

SUMMARY SHEET

DATE/TIME | 12/23/2016 10:41 AM | LAYOUT | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-C-D SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D3	D4

609(8)	STEEL FACED CURB			
SHEET	BEGIN STATION	OFFSET	LENGTH (LF)	REMARKS
C:F1	"IS" 3+88.64	23.75 LT	24	
D:F1	"TA" 15+84.58	21.60 LT	22	
D:F1	"TA" 16+45.91	21.88 RT	25	
D:F1	"TA" 16+95.49	82.07 LT	20	
D:F1	"TA" 17+29.09	57.00 LT	19	
D:F1	"TA" 17+65.01	13.54 LT	27	
D:F1	"TA" 17+66.74	13.96 RT	25	
D:F3	"SA" 52+83.55	21.61 LT	25	
D:F3	"SA" 52+88.39	21.83 RT	26	
D:F3	"SA" 53+38.14	79.15 LT	27	
D:F3	"SA" 53+38.23	67.15 RT	23	
D:F3	"SA" 53+73.88	54.13 LT	25	
D:F3	"SA" 53+73.96	48.53 RT	25	
D:F3	"SA" 54+02.90	13.23 RT	27	
D:F3	"SA" 54+44.10	14.17 LT	24	
D:F5	"SA" 39+95.62	21.75 RT	21	
D:F5	"SA" 40+14.09	21.68 LT	23	
D:F5	"SA" 40+67.65	77.99 LT	26	
D:F5	"SA" 40+67.76	70.62 RT	22	
D:F5	"SA" 41+03.24	50.18 RT	22	
D:F5	"SA" 41+33.35	13.62 RT	26	
D:F7	"EA" 84+39.07	21.90 RT	21	
D:F7	"EA" 84+49.43	19.92 LT	25	
D:F7	"EA" 84+98.91	78.64 LT	26	
D:F7	"EA" 84+98.95	103.20 RT	26	
D:F7	"EA" 85+34.46	73.69 LT	22	
D:F7	"EA" 85+34.54	60.28 RT	26	
D:F7	"EA" 85+72.98	15.21 RT	21	
D:F7	"EA" 85+73.21	12.29 LT	24	
D:F9	"EA" 80+56.44	19.54 LT	23	
D:F9	"EA" 81+04.27	20.43 RT	18	
D:F9	"EA" 81+38.89	61.25 LT	25	
D:F9	"EA" 81+38.89	76.01 RT	25	
D:F9	"EA" 81+74.03	40.86 LT	27	
D:F9	"EA" 81+74.25	58.71 RT	26	
D:F9	"EA" 82+10.84	15.17 RT	18	
D:F9	"EA" 82+12.71	12.33 LT	24	
D:F11	"EA" 73+51.50	19.58 LT	25	
D:F11	"EA" 73+61.79	21.85 RT	20	
D:F11	"EA" 74+19.15	68.95 LT	21	
D:F11	"EA" 74+19.19	70.22 RT	26	
D:F11	"EA" 74+54.77	45.18 RT	25	
D:F11	"EA" 74+80.81	14.29 RT	24	
D:F13	"EA" 70+06.08	21.92 RT	19	
D:F13	"EA" 70+11.03	19.67 LT	23	
D:F13	"EA" 70+58.65	66.22 LT	22	
D:F13	"EA" 70+58.69	61.11 RT	22	
D:F13	"EA" 70+94.23	47.07 LT	22	
D:F13	"EA" 70+94.36	51.20 RT	22	
D:F13	"EA" 71+29.63	11.60 LT	22	
D:F13	"EA" 71+31.21	15.91 RT	18	
D:F15	"EA" 62+87.26	21.83 RT	19	
D:F15	"EA" 62+87.33	19.64 LT	26	
D:F15	"EA" 63+38.34	70.30 LT	26	
D:F15	"EA" 63+38.50	89.51 RT	25	
D:F15	"EA" 63+73.79	45.84 LT	26	
D:F15	"EA" 63+73.87	62.20 RT	26	
D:F15	"EA" 64+07.36	11.62 LT	26	
D:F15	"EA" 64+14.08	15.89 RT	19	
		TOTAL (LF)	1,385	

NOTES:
1. SOME SIGNS WERE NOT LOCATED BY FIELD SURVEY. LOCATION GIVEN IS APPROXIMATE.

SUBSIDIARY TO 615(1)	SALVAGE SIGN			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
A:H1	"OSH" 5+03.59	58.33 LT	3	
A:H1	"OSH" 5+71.58	24.30 LT	3	
A:H1	"OSH" 4+94.18	26.42 RT	3	
B:H1	"36A" 4+69.43	51.56 LT	4	
C:H4	"IS" 6+40	25.00 RT	1	SEE NOTE 1
C:H5	"IS" 7+08	25.00 RT	1	SEE NOTE 1
C:H5	"IS" 7+23	25.00 RT	1	SEE NOTE 1
C:H5	"IS" 7+07.62	15.77 LT	1	
C:H5	"IS" 7+84.74	26.15 RT	1	
C:H5	"IS" 8+04.50	3.97 LT	1	
D:H1	"TA" 16+93.10	32.90 LT	3	
D:H1	"TA" 16+91.80	50.91 LT	1	
D:H1	"TA" 16+72.73	22.75 RT	1	
D:H1	"TA" 17+90.08	23.34 LT	1	
D:H1	"TA" 17+30.89	31.80 RT	3	
D:H1	"TA" 17+78.49	24.01 RT	1	
D:H2	"SA" 53+36.39	29.98 LT	2	
D:H2	"SA" 53+36.48	55.64 LT	1	
D:H2	"SA" 53+92.53	23.33 LT	5	
D:H2	"SA" 54+45.12	23.19 LT	1	
D:H2	"SA" 52+91.38	24.13 RT	1	
D:H2	"SA" 53+27.24	23.27 RT	3	
D:H2	"SA" 53+83.98	48.09 RT	1	
D:H2	"SA" 53+82.77	31.01 RT	3	
D:H3	"SA" 40+38.59	23.50 LT	2	
D:H3	"SA" 40+65.91	46.29 LT	2	
D:H3	"SA" 40+65.64	56.08 LT	1	
D:H3	"SA" 40+65.69	74.58 LT	1	
D:H3	"SA" 40+35.84	23.84 RT	3	
D:H3	"SA" 40+60.80	23.85 RT	2	
D:H3	"SA" 41+13.33	58.92 RT	1	
D:H3	"SA" 41+13.29	34.36 RT	2	
D:H3	"SA" 41+28.82	23.61 RT	1	
D:H3	"SA" 41+39.59	23.84 RT	1	
D:H4	"EA" 84+97.45	30.23 LT	2	
D:H4	"EA" 84+96.79	46.07 LT	1	
D:H4	"EA" 85+44.21	82.55 LT	1	
D:H4	"EA" 85+56.50	21.92 LT	4	
D:H4	"EA" 85+72.24	22.99 LT	1	
D:H4	"EA" 84+57.42	23.45 RT	1	
D:H4	"EA" 84+87.12	23.40 RT	4	
D:H4	"EA" 84+97.86	101.41 RT	1	
D:H4	"EA" 85+44.40	61.53 RT	2	
D:H4	"EA" 85+44.19	34.15 RT	2	
D:H4	"EA" 85+68.52	23.28 RT	1	
D:H5	"EA" 80+61.95	21.51 LT	1	
D:H5	"EA" 81+95.83	22.35 LT	4	
D:H5	"EA" 81+07.32	23.49 RT	1	
D:H5	"EA" 81+27.73	24.59 RT	4	
D:H5	"EA" 81+37.20	75.94 RT	1	
D:H5	"EA" 81+84.37	39.86 RT	1	
D:H5	"EA" 82+21.23	23.85 RT	1	
D:H6	"EA" 73+72.83	21.73 LT	1	
D:H6	"EA" 74+17.04	47.27 LT	1	
D:H6	"EA" 73+62.81	24.27 RT	5	
D:H6	"EA" 74+08.62	23.78 RT	3	
D:H6	"EA" 74+17.74	68.14 RT	1	
D:H7	"EA" 70+11.08	21.79 LT	1	
D:H7	"EA" 70+56.67	30.07 LT	2	
D:H7	"EA" 70+56.99	47.20 LT	1	
D:H7	"EA" 71+17.18	21.44 LT	1	
D:H7	"EA" 71+29.65	22.06 LT	2	

SUBSIDIARY TO 615(1)	SALVAGE SIGN			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
D:H7	"EA" 71+46.88	20.24 LT	1	
D:H7	"EA" 71+28.82	23.87 RT	1	
D:H7	"EA" 70+47.90	23.60 RT	2	
D:H7	"EA" 71+94.26	53.24 RT	1	
D:H7	"EA" 71+04.14	31.26 RT	2	
D:H9	"EA" 63+10.84	21.72 LT	1	
D:H8	"EA" 63+36.54	34.87 LT	2	
D:H8	"EA" 63+36.54	48.86 LT	1	
D:H8	"EA" 63+83.78	69.69 LT	1	
D:H8	"EA" 63+90.80	22.07 LT	4	
D:H8	"EA" 64+11.93	21.39 LT	1	
D:H8	"EA" 63+03.39	23.86 RT	1	
D:H8	"EA" 63+30.16	24.15 RT	2	
D:H8	"EA" 63+31.29	31.93 RT	1	
D:H8	"EA" 63+88.33	56.52 RT	1	
D:H8	"EA" 63+83.68	30.05 RT	2	
D:H8	"EA" 64+07.17	23.43 RT	1	
		TOTAL (EA)	138	

615(4)	DELINEATOR, RIGID			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
A:H1	"OSH" 5+73.06	39.02 RT	1	
A:H1	"OSH" 5+80.54	56.66 RT	1	
A:H1	"OSH" 5+98.08	74.33 RT	1	
A:H1	"OSH" 6+20.15	85.86 RT	1	
A:H1	"OSH" 6+44.68	90.18 RT	1	
A:H1	"OSH" 6+69.36	86.88 RT	1	
A:H1	"OSH" 6+95.10	78.56 RT	1	
A:H1	"OSH" 7+26.24	68.44 RT	1	
		TOTAL (EA)	8	

615(5)	DELINEATOR, FLEXIBLE			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
C:H7	"IS" 8+02.92	20.03 LT	1	
C:H7	"IS" 8+09.76	3.02 LT	1	
C:H7	"3A" 18+14.64	9.98 LT	1	
		TOTAL (EA)	3	

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

SUMMARY SHEET

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D4	D4

627(10)	ADJUSTMENT OF VALVE BOX		
SHEET	**STATION**	**OFFSET**	**QUANTITY (EA)**
A:F1	"OSH" 5+39.85	38.00 LT	1
C:F1	"IS" 4+71.88	64.85 RT	1
C:F1	"IS" 4+74.41	44.51 RT	1
C:F2	"IS" 6+44.99	10.89 LT	1
C:F3	"IS" 7+99+98	2.00 LT	1
D:F1	"TA" 16+85.37	10.47 RT	1
D:F1	"TA" 16+99.80	7.87 RT	1
D:F1	"FS" 3+27.12	20.23 LT	1
D:F1	"FS" 3+89.66	22.51 LT	1
D:F3	"SA" 53+43.88	35.33 LT	1
D:F3	"SA" 53+46.59	5.97 LT	1
D:F3	"SA" 53+46.38	0.65 RT	1
D:F5	"SA" 40+52.86	7.84 LT	1
D:F5	"SA" 40+74.16	3.11 RT	1
D:F7	"DS" 3+26.06	16.49 LT	1
D:F7	"DS" 4+40.87	15.02 LT	1
D:F9	"ES" 3+22.17	14.89 LT	1
		TABLE (EA)	17

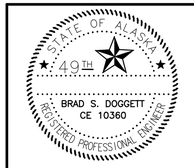
642(10)	MONUMENT CASE			
SHEET	**STATION**	**OFFSET**	**QUANTITY (EA)**	**REMARKS**
C:F1	"IS" 4+05.99	30.07 RT	1	851 – PROPERTY CORNER
C:F1	"IS" 4+59.91	0.00 RT/LT	1	701 – PRIMARY CENTERLINE MONUMENT
C:F3	"IS" 8+19.97	0.00 RT/LT	1	702 – PRIMARY CENTERLINE MONUMENT
D:F1	"TA" 17+15.38	0.00 RT/LT	1	706 – PRIMARY CENTERLINE MONUMENT
D:F3	"SA" 53+60.29	0.00 RT/LT	1	839 – PRIMARY CENTERLINE MONUMENT
D:F5	"SA" 40+89.49	0.00 RT/LT	1	711 – PRIMARY CENTERLINE MONUMENT
D:F7	"EA" 85+20.79	0.00 RT/LT	1	801 – PRIMARY CENTERLINE MONUMENT
D:F7	"EA" 85+50.73	29.93 LT	1	753 – PROPERTY CORNER
D:F9	"EA" 81+30.60	30.07 RT	1	756 – PROPERTY CORNER
D:F9	"EA" 81+60.41	0.00 RT/LT	1	755 – PRIMARY CENTERLINE MONUMENT
D:F11	"EA" 74+40.45	0.00 RT/LT	1	836 – PRIMARY CENTERLINE MONUMENT
D:F13	"EA" 70+80.40	0.00 RT/LT	1	712 – PRIMARY CENTERLINE MONUMENT
D:F15	"EA" 63+60.19	0.00 RT/LT	1	807 – PRIMARY CENTERLINE MONUMENT
		TOTAL (EA)	13	

642(6)	REPLACE EXISTING WITH PRIMARY MONUMENT			
SHEET	**STATION**	**OFFSET**	**QUANTITY (EA)**	**REMARKS**
C:F1	"IS" 4+59.91	0.00 RT/LT	1	701 – PRIMARY CENTERLINE MONUMENT
C:F3	"IS" 8+19.97	0.00 RT/LT	1	702 – PRIMARY CENTERLINE MONUMENT
D:F1	"TA" 17+15.38	0.00 RT/LT	1	706 – PRIMARY CENTERLINE MONUMENT
D:F3	"SA" 53+60.29	0.00 RT/LT	1	839 – PRIMARY CENTERLINE MONUMENT
D:F5	"SA" 40+89.49	0.00 RT/LT	1	711 – PRIMARY CENTERLINE MONUMENT
D:F7	"EA" 85+20.79	0.00 RT/LT	1	801 – PRIMARY CENTERLINE MONUMENT
D:F9	"EA" 81+60.41	0.00 RT/LT	1	755 – PRIMARY CENTERLINE MONUMENT
D:F11	"EA" 74+40.45	0.00 RT/LT	1	836 – PRIMARY CENTERLINE MONUMENT
D:F13	"EA" 70+80.40	0.00 RT/LT	1	712 – PRIMARY CENTERLINE MONUMENT
D:F15	"EA" 63+60.19	0.00 RT/LT	1	807 – PRIMARY CENTERLINE MONUMENT
		TOTAL (EA)	10	

660(13)	RELOCATE ELECTROLIER					
	FROM		**TO**			
SHEET	**STATION**	**OFFSET**	**STATION**	**OFFSET**	**QUANTITY (EA)**	**REMARKS**
A:F1	"OSH" 5+92.56	27.00 RT	"OSH" 5+92.73	36.06 RT	1	
A:F1	"OSH" 5+54.45	57.71 LT	"OSH" 5+57.39	57.70 LT	1	
				TOTAL (EA)	2	

642(7)	REPLACE EXISTING WITH SECONDARY MONUMENT			
SHEET	**STATION**	**OFFSET**	**QUANTITY (EA)**	**REMARKS**
C:F1	"IS" 4+05.99	30.07 RT	1	851 – PROPERTY CORNER
D:F7	"EA" 85+50.73	29.93 LT	1	753 – PROPERTY CORNER
D:F9	"EA" 81+30.60	30.07 RT	1	756 – PROPERTY CORNER
		TOTAL (EA)	3	

660(18)	ADJUST JUNCTION BOX			
SHEET	**STATION**	**OFFSET**	**QUANTITY (EA)**	**REMARKS**
A:F1	"OSH" 4+97.95	32.25 RT	1	
D:53	"SA" 53+16.93	25.67 LT	1	
D:F3	"SA" 54+03.56	29.05 LT	1	
D:F5	"SA" 40+64.37	33.84 LT	1	
D:F5	"SA" 40+63.64	38.41 RT	1	
D:F5	"SA" 41+15.47	36.64 RT	1	
D:F13	"EA" 70+54.45	37.50 LT	1	
D:F13	"EA" 70+54.74	35.65 RT	1	
D:F13	"EA" 71+08.46	36.67 RT	1	
		TOTAL (EA)	9	



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SUMMARY SHEET

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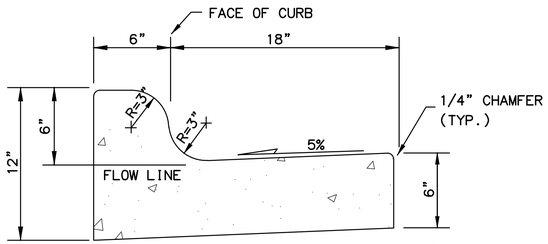

MOUNTABLE CURB & GUTTER (1)

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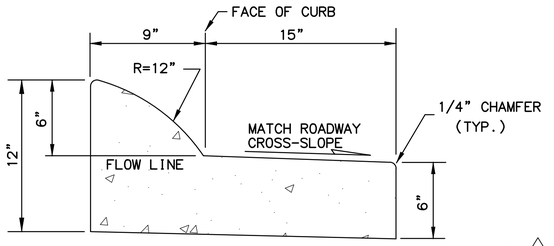

EXPRESSWAY CURB & GUTTER (MEDIAN) (3)

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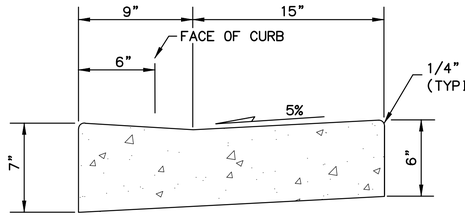

CURB RAMP CURB & GUTTER

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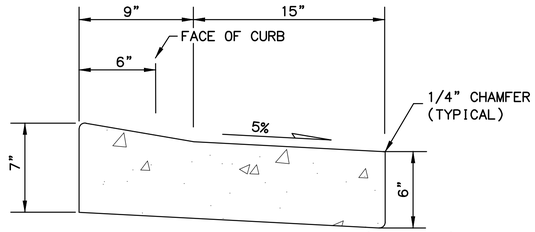

CURB RAMP CURB & GUTTER (SPILL)

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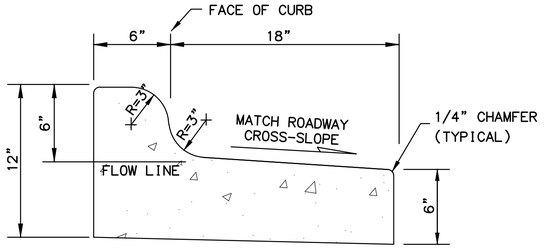
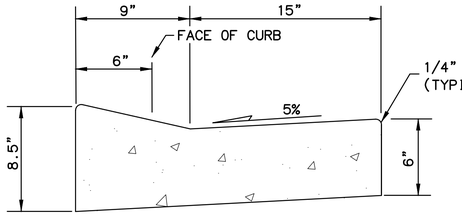


MOUNTABLE CURB & GUTTER (2)

(SPILL)

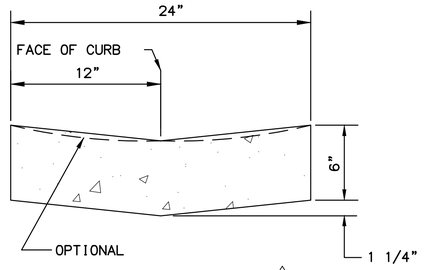
N.T.S.



DEPRESSED CURB & GUTTER (4)

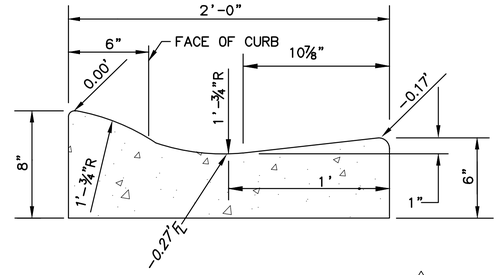
(CURB CUT)

N.T.S.



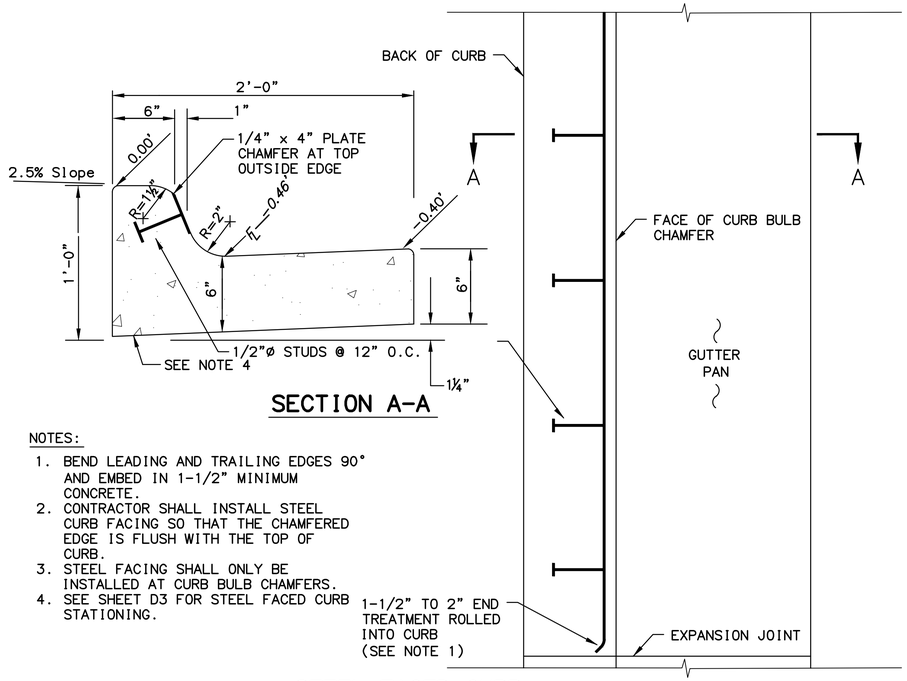
VALLEY GUTTER (5)

N.T.S.



ROLLED CURB & GUTTER (6)

N.T.S.



SECTION A-A

NOTES:

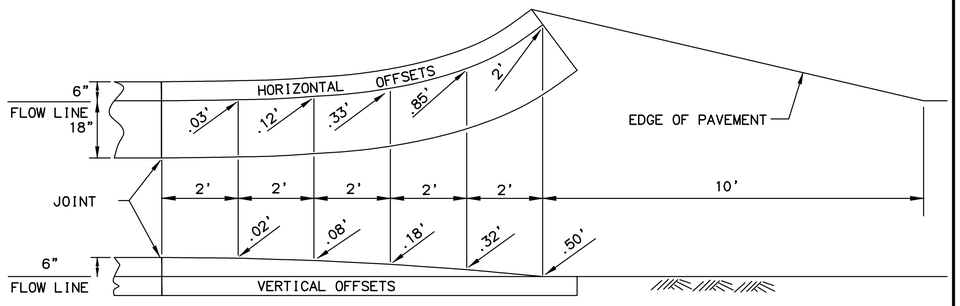
1. BEND LEADING AND TRAILING EDGES 90° AND EMBED IN 1-1/2" MINIMUM CONCRETE.
2. CONTRACTOR SHALL INSTALL STEEL CURB FACING SO THAT THE CHAMFERED EDGE IS FLUSH WITH THE TOP OF CURB.
3. STEEL FACING SHALL ONLY BE INSTALLED AT CURB BULB CHAMFERS.
4. SEE SHEET D3 FOR STEEL FACED CURB STATIONING.

STEEL FACED CURB

N.T.S.

NOTE:

1. USE A 5 FOOT TRANSITION LENGTH BETWEEN DIFFERENT CURB TYPES, UNLESS NOTED OTHERWISE.



CURB AND GUTTER

TERMINATION TRANSITIONS

STATE OF ALASKA
49TH
BRAD S. DOGGETT
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

CURB AND GUTTER DETAILS

DATE/TIME | 12/23/2016 10:41 AM | LAYOUT | E1 | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-E SHT-61519.DWG

NO.	DATE	REVISION

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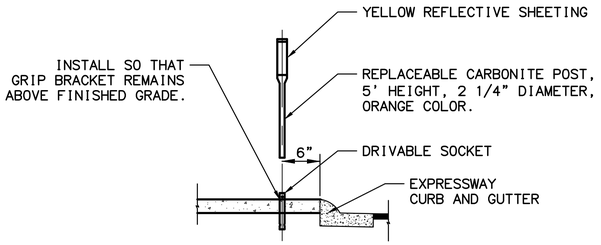
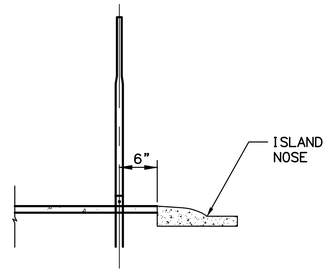
ALASKA	0001(344)/Z581970000	2017	E2	E7



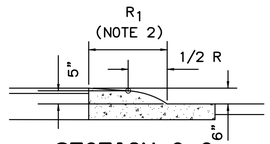
SECTION A-A
N.T.S.



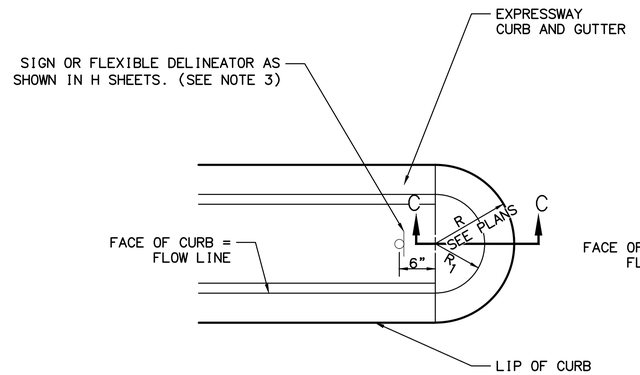
SECTION B-B
N.T.S.

MEDIAN NOSE DETAILS NOTES:

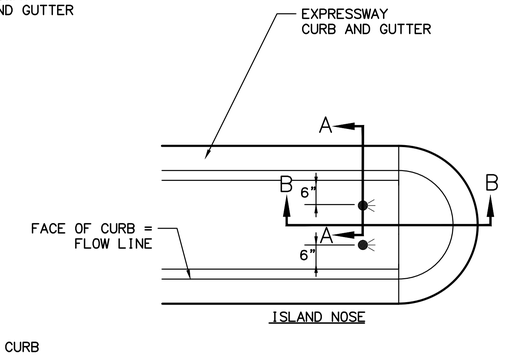
1. ISLAND NOSE SHALL BE PAINTED WITH YELLOW REFLECTORIZED PAINT. SHAPING AND PAINTING WILL BE SUBSIDIARY TO THE 609(2) CURB AND GUTTER, TYPE I PAY ITEM.
2. THE RADIUS DIMENSIONS PROVIDED IN THE PLANS ARE MEASURED TO TOP BACK OF CURB. CONTRACTOR WILL NEED TO CALCULATE THE VALUE OF "R" FROM RADIUS DIMENSION AND CURB GEOMETRY.
3. INSTALL FLEXIBLE DELINEATORS WHERE SHOWN IN THE 615(5) DELINEATOR SUMMARY TABLE ON SHEET D3. STATIONS AND OFFSETS PROVIDED ARE APPROXIMATE.



SECTION C-C
N.T.S.

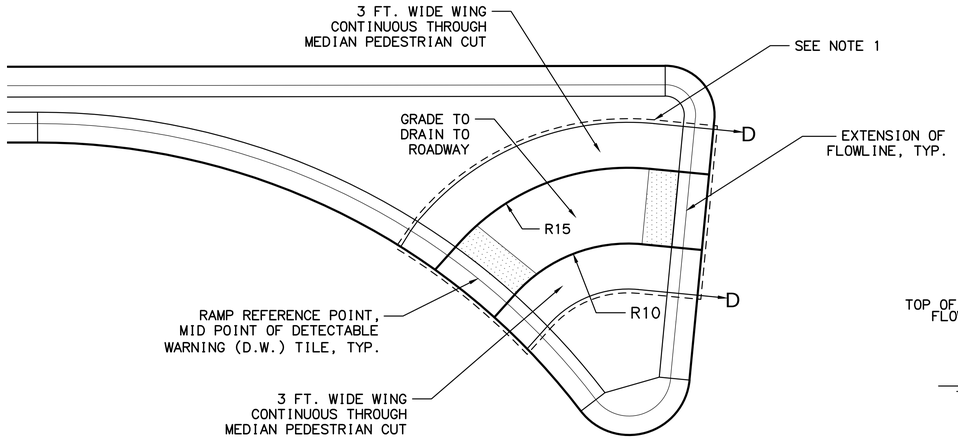


SIGN / DELINEATOR DETAIL
N.T.S.

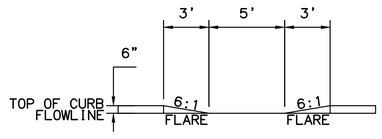


FLEXIBLE DELINEATOR DETAIL
N.T.S.

MEDIAN NOSE AND FLEXIBLE DELINEATOR DETAIL



SPECIAL CURB RAMP: INGRA AND 3RD MEDIAN ON SHEET C:F4
N.T.S.



SECTION D-D
N.T.S.

SPECIAL CURB RAMP NOTE:

1. FLARES, CONCRETE, AND DETECTIBLE WARNING TILES WITHIN DASHED LINE ARE TO BE PAID FOR UNDER TWO CURB RAMPS.

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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

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CURB NOSE AND FLEXIBLE DELINEATOR DETAILS

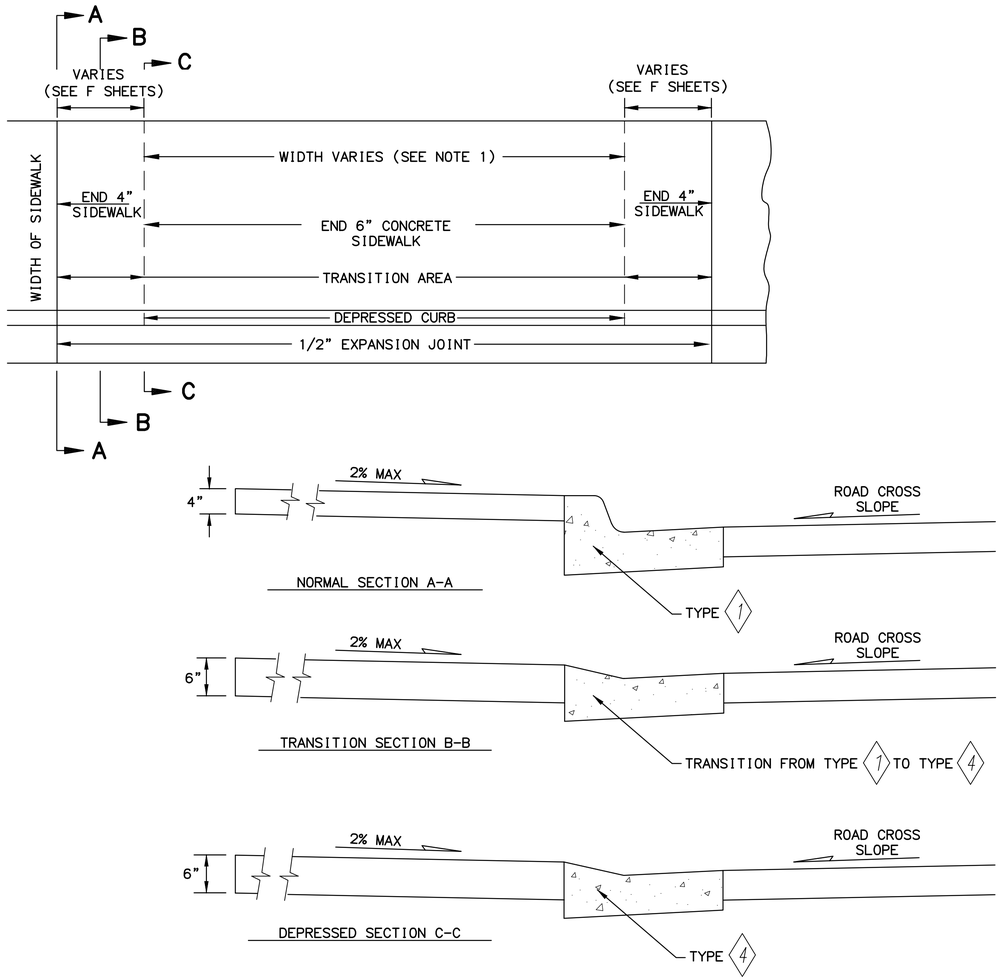
DATE/TIME | 12/23/2016 10:41 AM | LAYOUT | E2 | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-E SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	E3	E7

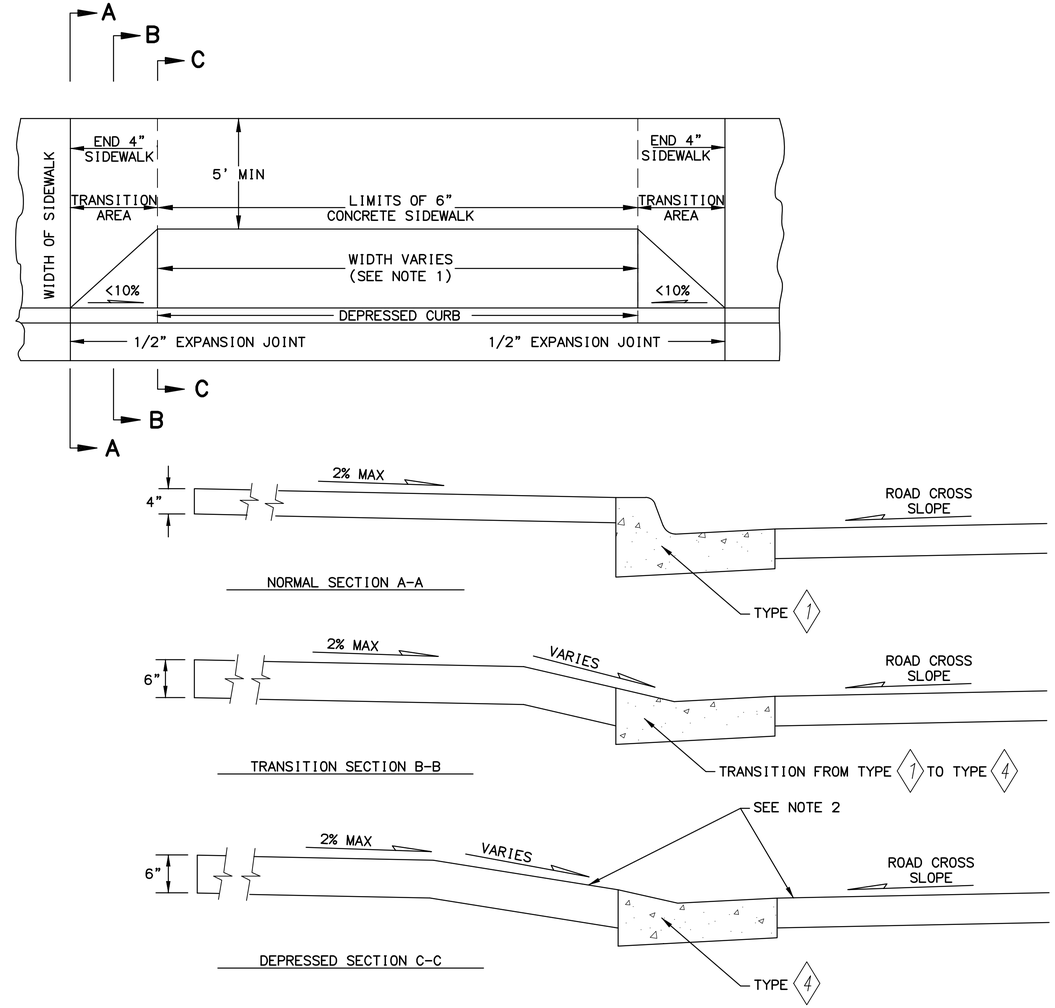
NOTES:

1. DRIVEWAY ENTRANCES SHALL BE CONSTRUCTED AT THE WIDTHS SHOWN IN THE PLANS AND THE DRIVEWAY CURB CUT TABLE BELOW.
2. MAXIMUM ALGEBRAIC DIFFERENCE BETWEEN RAMP AND ROADWAY CROSS SLOPE SHALL BE 8%.



DRIVEWAY CURB CUT DETAIL "A"

N.T.S



DRIVEWAY CURB CUT DETAIL "B"

N.T.S

DRIVEWAY CURB CUT

SHEET	BEGIN STATION	OFFSET	END STATION	OFFSET	DETAIL TYPE	WIDTH
C:F2	"IS" 5+77.64	14.00 LT	"IS" 6+11.53	14.00 LT	A	19.4'
C:F2	"IS" 6+24.47	14.00 LT	"IS" 6+51.59	14.00 LT	A	14.6'
C:F3	"3A" 18+96.83	24.57 LT	"3A" 18+49.55	27.23 LT	B	32.5'
D:F1	"TA" 16+10.18	14.28 LT	"TA" 16+61.68	14.15 LT	A	37.3'
D:F3	"SA" 54+13.93	14.24 LT	"SA" 54+42.98	14.92 LT	B	24.0'
D:F7	"EA" 85+35.17	42.54 LT	"EA" 85+36.25	76.15 LT	B	20.0'
D:F7	"EA" 85+06.25	44.12 RT	"EA" 85+06.34	77.12 RT	A	21.6'
D:F9	"EA" 80+80.37	12.98 LT	"EA" 81+19.23	12.87 LT	B	32.4'
D:F15	"EA" 63+45.61	44.17 RT	"EA" 63+45.62	65.78 RT	A	8.7'

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CURB CUT DETAILS

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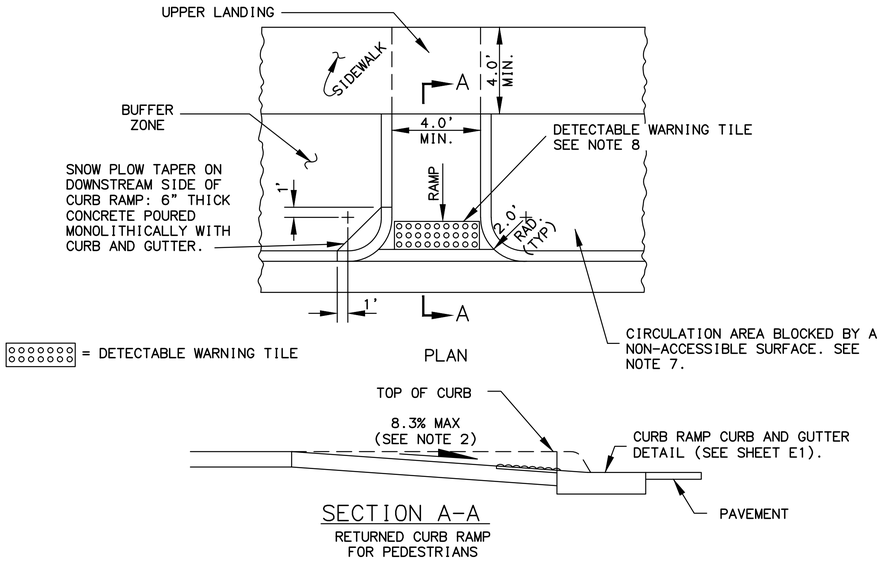


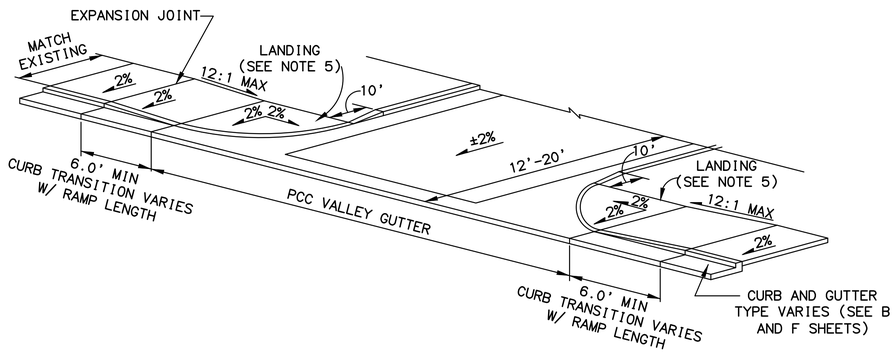
SECTION A-A
RETURNED CURB RAMP FOR PEDESTRIANS

RETURNED CURB RAMP FOR PEDESTRIANS

N.T.S.

NOTES:

1. USE THE TYPE OF CURB AND GUTTER SHOWN ON THE PLANS.
2. RAMP SLOPES MAY BE A MAXIMUM 8.3%. RAMP LENGTHS SHOULD BE INCREASED TO KEEP GRADES UNDER THE 8.3% MAXIMUM, BUT ARE NOT REQUIRED TO EXCEED 15.0 FEET. THE RESULTING RAMP GRADE AT A 15.0 FOOT RAMP LENGTH IS ACCEPTABLE EVEN IF IT EXCEEDS 8.3%.
3. CONSTRUCT FLARE SLOPES AT 8.3% (MEASURED PARALLEL TO THE CURB LINE) OR FLATTER, SIDEWALK CROSS SLOPES AT 1.5% NOMINAL (1.0% MIN. AND 2.0% MAX). CONSTRUCT GRADE BREAKS PERPENDICULAR TO RAMP RUNS.
4. PROVIDE A COARSE BROOMED FINISH ON RAMP RUNS PERPENDICULAR TO THE RAMP SLOPE.
5. SIZE LANDING TO MEET ADA REQUIREMENTS.
6. MAXIMUM CROSS SLOPES ON UPPER LANDINGS, MEASURED IN ANY DIRECTION, IS 2.0%. MAXIMUM CROSS SLOPE ON RAMPS IS 2.0% MEASURED PERPENDICULAR TO THE RAMP RUN.
7. WHEN APPROVED BY THE ENGINEER, CURB RETURNS MAY BE REPLACED WITH FLARES AT LOCATIONS WHERE ACCESS TO THE SIDE OF A RAMP RUN IS FREE OF POLES, UTILITY BOXES, OTHER OBSTRUCTIONS, OR NON-ACCESSIBLE SURFACES SUCH AS A DIRT PLANTER STRIPS. SEE STANDARD DRAWING I-22.10 FOR FLARE DETAILS.
8. INSTALL 24" DETECTABLE WARNING TILES MEETING SECTION 705.1 OF THE 2006 ADA STANDARDS FOR TRANSPORTATION FACILITIES FOR THE FULL WIDTH OF THE RAMP. ALIGN TRUNCATED DOME PATTERN IN THE PREDOMINANT DIRECTION OF WHEELCHAIR TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.



DRIVEWAY CURB RETURN WITH ATTACHED SIDEWALK

N.T.S.

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

DOWL
4041 B STREET
ANCHORAGE, ALASKA 99503
(907) 562-2000
AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

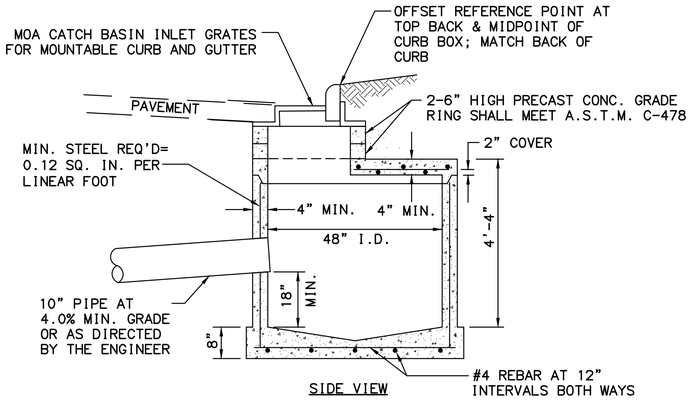
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

CURB & GUTTER, SIDEWALK, AND CURB RAMP DETAILS

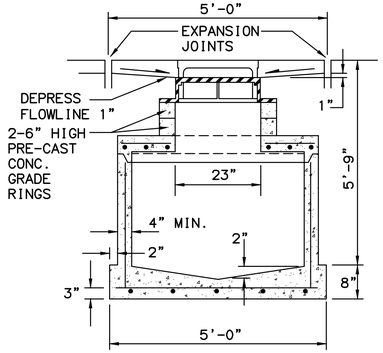
DATE/TIME 12/23/2016 10:41 AM | LAYOUT E4 | DESIGNED AKM | CHECKED BSD | DRAFTED CJS
FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-E SHT-61519.DWG | DATE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	E5	E7



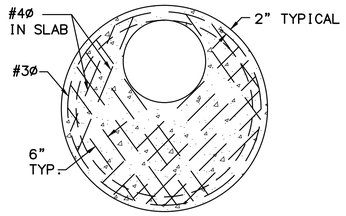
SIDE VIEW



FRONT VIEW

NOTES:

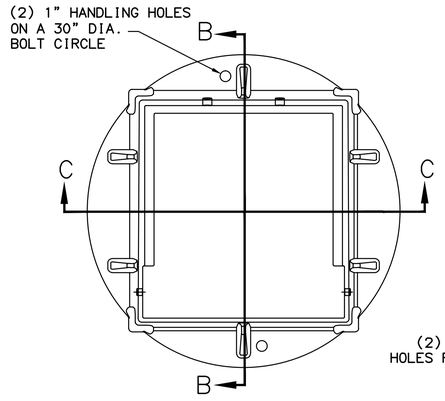
1. COMPRESSIVE STRENGTH OF CONCRETE SHALL BE MINIMUM 4000 P.S.I., EXCEPT BASE SLAB WHICH MAY BE 3000 P.S.I. CONNECT BASE & BARREL WITH CONTINUOUS STEEL.
2. SEE ASTM C-478 FOR DESIGN REQUIREMENTS AND MINIMUM REINFORCING STEEL REQUIRED.
3. AT CATCH BASIN, DELETE CONCRETE GUTTER PAN, PAVE TO FACE OF CATCH BASIN INLET.



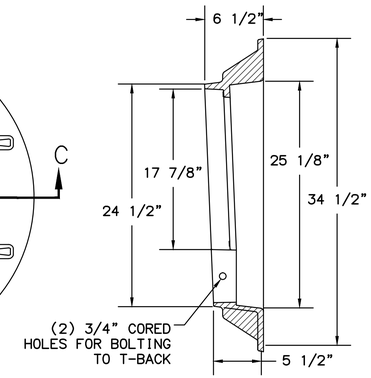
REDUCING SLAB

MOA PRECAST CATCH BASIN INLET

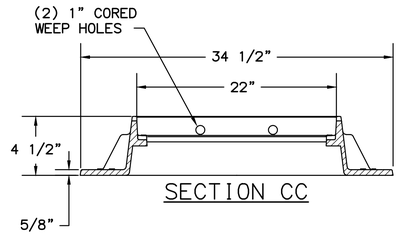
N.T.S.



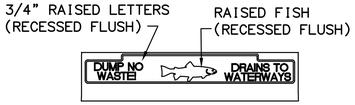
CURB INLET FRAME



SECTION BB



SECTION CC



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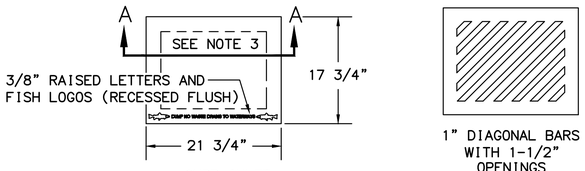
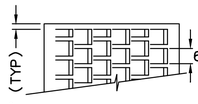
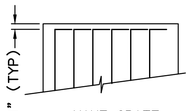


CURB INLET GRATE

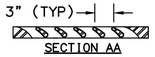
1" DIAGONAL BARS WITH 1-1/2" OPENINGS
DIAGONAL GRATE



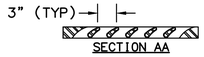
OFFSET VANE GRATE



VANE GRATE



SECTION AA



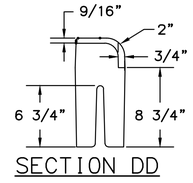
SECTION AA

NOTES:

1. MINIMUM CASTING WEIGHT SHALL BE 400 LBS. FOR CURB INLET FRAME, HOOD & GRATE.
2. CURB INLET HOOD & GRATE SHALL CONFORM TO ASTM A536.
3. GRATE SHALL BE AS SHOWN ON THE DRAWINGS OR SPECIFIED BY THE ENGINEER.

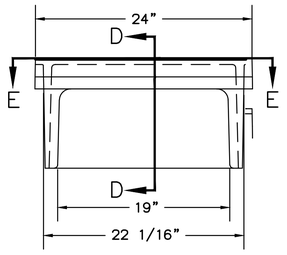
CATCH BASIN INLET GRATES

N.T.S.



SECTION DD

CURB INLET HOOD

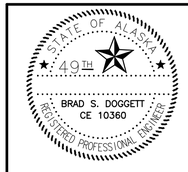


NOTES:

1. MINIMUM CASTING WEIGHT SHALL BE 400 LBS. FOR CURB INLET FRAME, HOOD & GRATE.
2. CURB INLET HOOD & GRATE SHALL CONFORM TO ASTM A536.
3. GRATE SHALL BE AS SHOWN ON THE DRAWINGS OR SPECIFIED BY THE ENGINEER.

CATCH BASIN INLET FRAME AND HOOD

N.T.S.



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

STORM DRAIN DETAILS

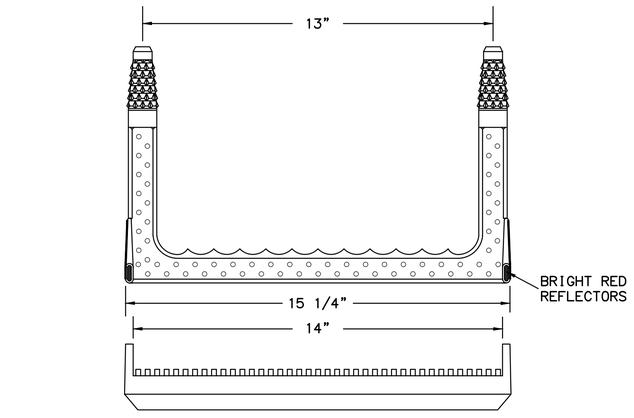
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-E SHT-61519.DWG | DATE/TIME | 12/23/2016 10:41 AM | LAYOUT | E5 | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

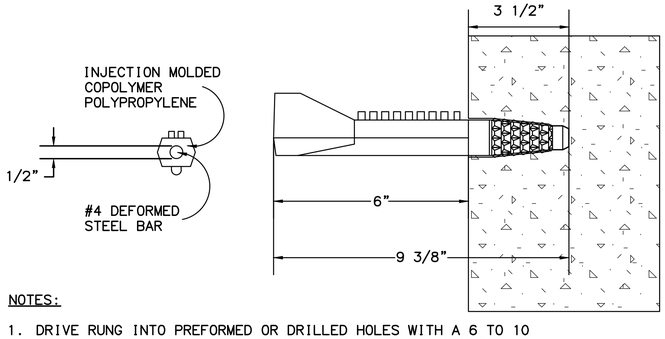
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	E6	E7

NOTES:

1. MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. C-478.
2. EXTEND PIPE 2" INTO MANHOLE. SEAL PIPE PENETRATIONS WITH NON-SHRINKABLE GROUT MIXED WITH POTABLE WATER I.A.W. MANUFACTURERS RECOMMENDATIONS.
3. BLOCKOUTS SHALL BE FORMED.
4. PLACE RUNGS 12" ON-CENTER ON UNOBSTRUCTED SIDE OF MANHOLE 18" MAX. FROM BOTTOM OF MANHOLE & 6" MAX. FROM TOP OF CONE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, BOTTOM RUNG TO BE PLACED 6" OVER SMALLEST PIPE. SEE COPOLYMER POLYPROPYLENE MANHOLE STEP DETAIL.
5. MANHOLE SHALL HAVE MINIMUM OF ONE 6" GRADE RING.
6. BACKFILL AROUND MANHOLE WITH A MINIMUM OF 3' BORROW, TYPE A. BACKFILL SHALL BE INCIDENTAL TO COST OF MANHOLE INSTALLATION.
7. CATCH BASIN LEADS SHALL ENTER THE MANHOLE AT LEAST ONE PRIMARY LEAD DIAMETER ABOVE THE TOP OF THE PRIMARY LEAD UNLESS MINIMUM PIPE SLOPES CANNOT BE ACHIEVED.
8. STEEL REQ'D FOR BARREL SHALL CONFORM TO A.S.T.M. C-478. EMBED STEEL IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
9. "RAM-NEK" OR EQUAL AND PRIME BARREL JOINTS. HEAT "RAM-NEK" AND SEAL SURFACES BEFORE FINAL ASSEMBLY.
10. PRIMARY LEADS NOT TO EXCEED 24" CPEP OR HDPEP WITH INCLUDED ANGLE BETWEEN LEADS GREATER THAN OR EQUAL TO 135°, OR PRIMARY LEADS NOT TO EXCEED 18" CPEP OR HDPEP WITH INCLUDED ANGLE LESS THAN 135°.
11. A TYPE I MANHOLE SHALL NOT BE USED WHEN BOTH CATCH BASIN AND ACCESS FUNCTIONS ARE REQUIRED.
12. STATION AND OFFSET IS TO THE CENTER OF STRUCTURE.



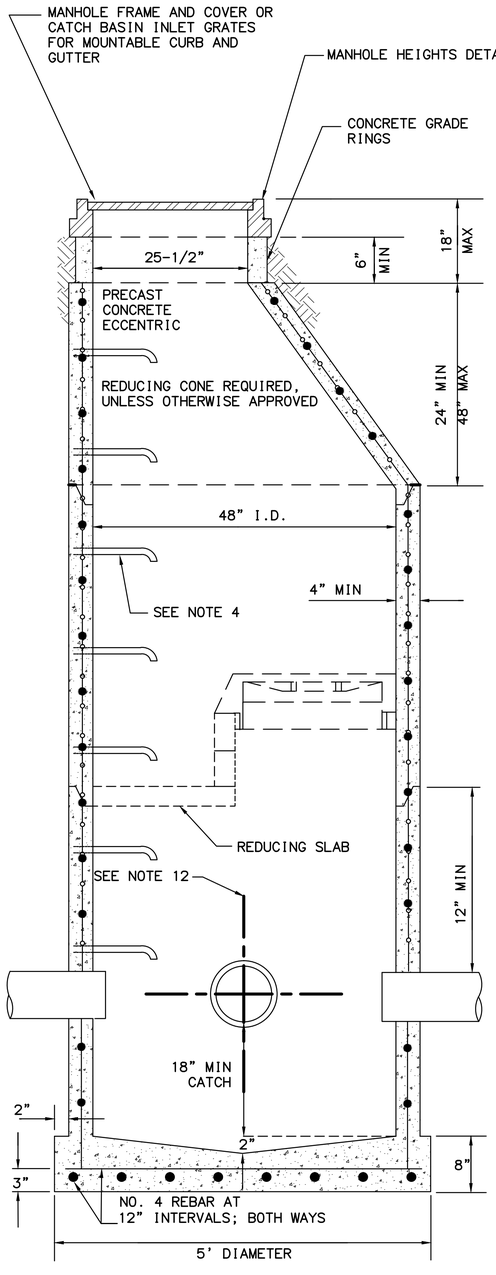


NOTES:

1. DRIVE RUNG INTO PREFORMED OR DRILLED HOLES WITH A 6 TO 10 LB. SLEDGE HAMMER, AFTER CONCRETE IS CURED TO 3000 PSI MIN.
2. THE INSTALLED STEP SHALL RESIST A PULLOUT FORCE OF 1500 LBS.

COPOLYMER POLYPROPLYENE MANHOLE STEP

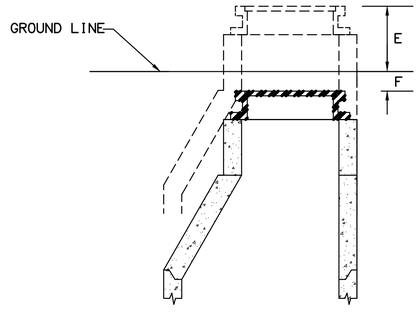
N.T.S.



STORM DRAIN TYPE I MANHOLE

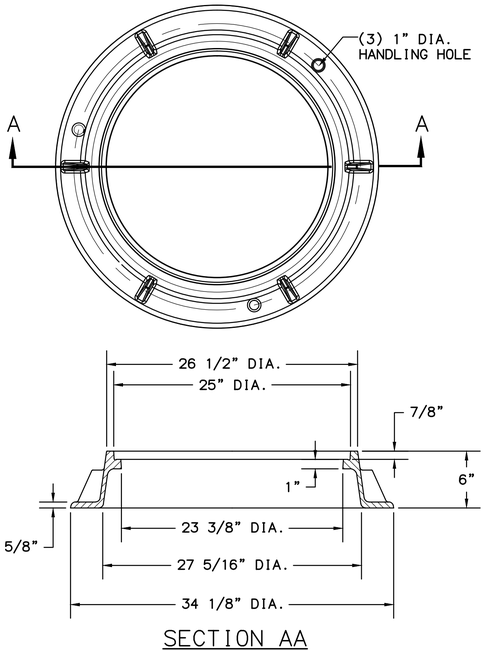
N.T.S.

LOCATION	E	F
BACKYARDS, GRAVEL STREETS, AND ALLEY AREAS WHERE TRAVELED.		6" TO 12"
UNDEVELOPED AND SWAMPY AREAS	24" MIN	
HIGHWAY ROW'S OUTSIDE TRAFFIC AREAS	6"	
PAVED STREETS (FEATHER PAVEMENT AT EDGE TO SMOOTH TRANSITION)		1/2"±1/4"



MANHOLE HEIGHTS

N.T.S.



SECTION AA

MANHOLE FRAME

N.T.S.

STATE OF ALASKA
49TH
BRAD S. DOGGETT
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4041 B STREET
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AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

STORM DRAIN DETAILS

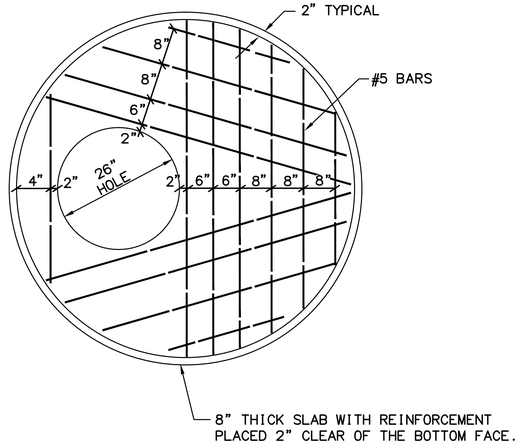
DATE/TIME | 12/23/2016 10:41 AM | LAYOUT | E6 | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-E SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	E7	E7

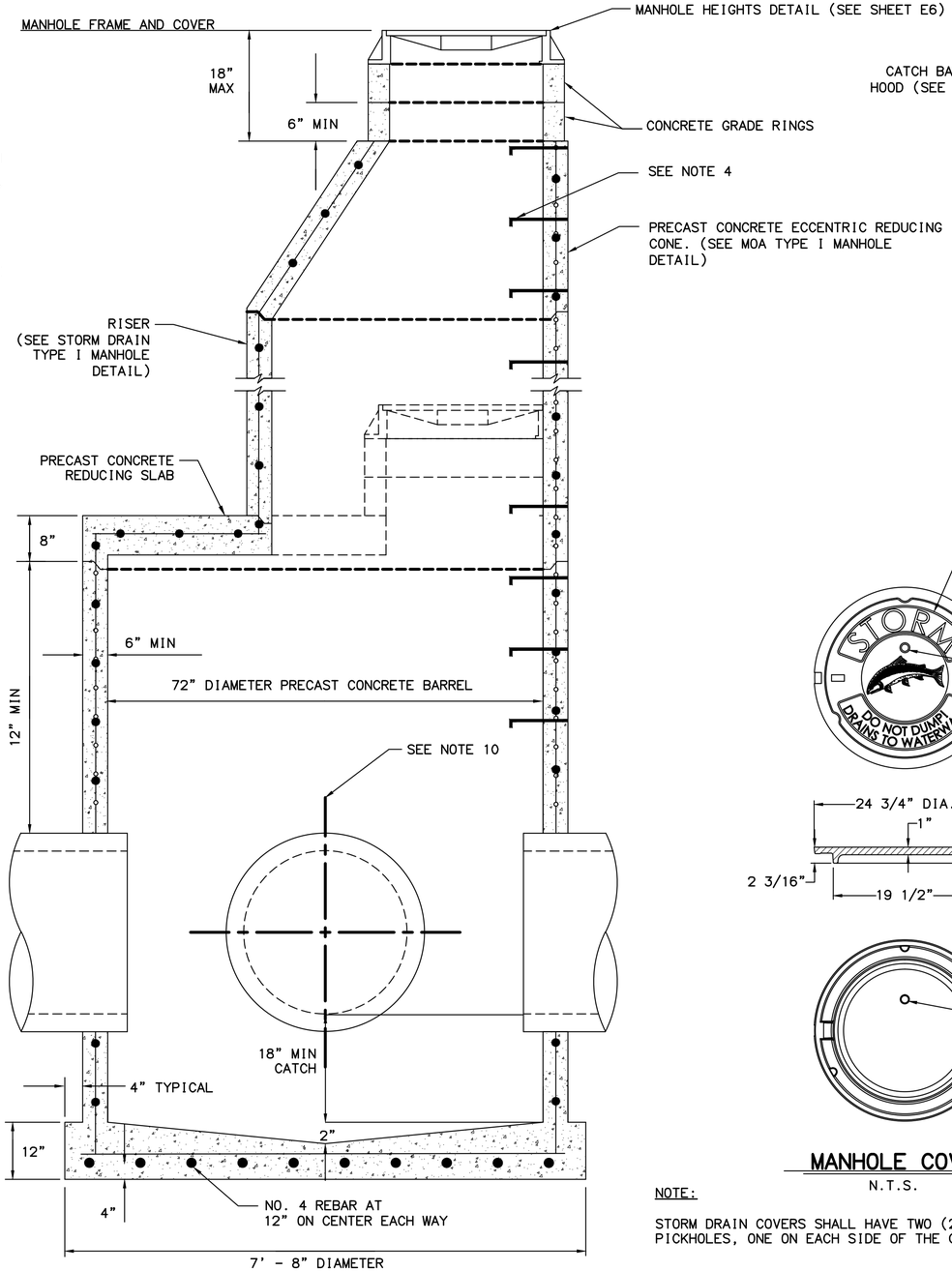
NOTES:

1. MANHOLE SECTIONS SHALL CONFORM TO A.S.T.M. C-478.
2. EXTEND PIPE 2" INTO MANHOLE. SEAL PIPE PENETRATIONS WITH NON-SHRINKABLE GROUT MIXED WITH POTABLE WATER I.A.W. MANUFACTURERS RECOMMENDATIONS.
3. BLOCKOUTS SHALL BE FORMED.
4. PLACE RUNGS 12" ON-CENTER ON UNOBSTRUCTED SIDE OF MANHOLE 18" MAX. FROM BOTTOM OF MANHOLE & 6" MAX. FROM TOP OF CONE. IF UNOBSTRUCTED SIDE NOT AVAILABLE, BOTTOM RUNG TO BE PLACED 6" OVER SMALLEST PIPE. SEE COPOLYMER POLYPROPYLENE MANHOLE STEP DETAIL. (FOR FLAT DUAL ENTRY LIDS, THE MAXIMUM DISTANCE TO THE FIRST LADDER RUNG IS 34".)
5. MANHOLE SHALL HAVE MINIMUM OF ONE 6" GRADE RING.
6. BACKFILL AROUND MANHOLE WITH A MINIMUM OF 3' BORROW, TYPE A. BACKFILL SHALL BE INCIDENTAL TO COST OF MANHOLE INSTALLATION.
7. STEEL REQ'D FOR BARREL SHALL CONFORM TO A.S.T.M. C-478. EMBED STEEL IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
8. "RAM-NEK" OR EQUAL AND PRIME BARREL JOINTS. HEAT "RAM-NEK" AND SEAL SURFACES BEFORE FINAL ASSEMBLY.
9. PRIMARY LEADS NOT TO EXCEED TWO 36" CPEP OR HDPEP WITH INCLUDED ANGLE BETWEEN LEADS GREATER THAN OR EQUAL TO 135°.
10. STATION AND OFFSET IS TO THE CENTER OF STRUCTURE. (FOR DUAL ENTRY SEE DETAIL FOR REFERENCE POINT)



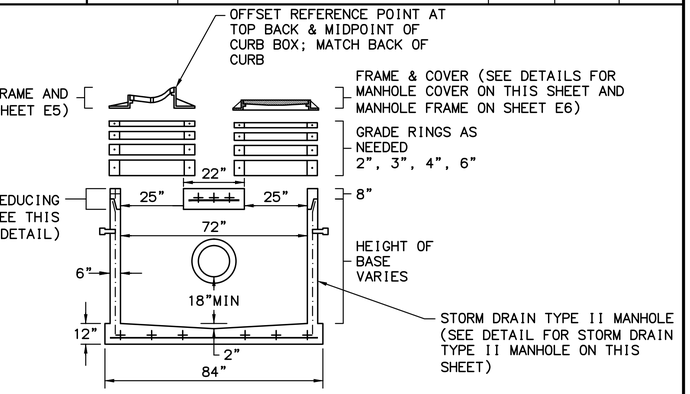
PRECAST CONCRETE REDUCING SLAB (72" TO 26")

N.T.S.



STORM DRAIN TYPE II MANHOLE

N.T.S.

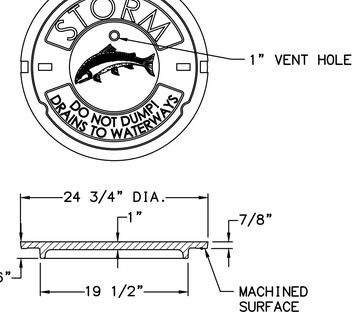


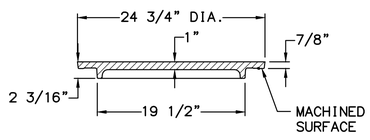
NOTE:

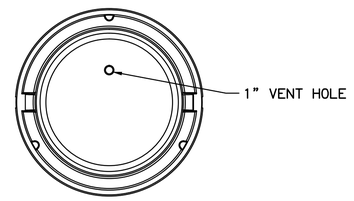
SEE STORM DRAIN TYPE II MANHOLE NOTES

TYPE II CATCH BASIN MANHOLE - DUAL ENTRY

N.T.S.





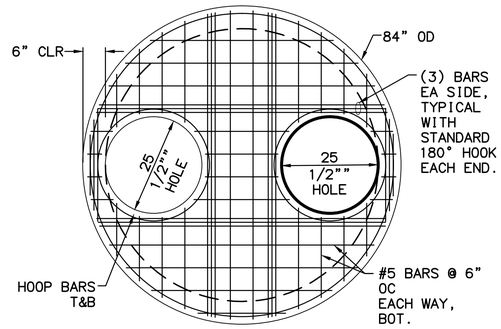


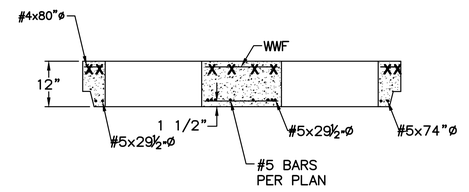
MANHOLE COVER

N.T.S.

NOTE:

STORM DRAIN COVERS SHALL HAVE TWO (2) CLOSED PICKHOLES, ONE ON EACH SIDE OF THE COVER.





TWO HOLE REDUCING SLAB

N.T.S.

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

DOWL
4041 B STREET
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

STORM DRAIN DETAILS

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-E SHT-61519.DWG | DATE/TIME | 12/23/2016 10:42 AM | LAYOUT | E7 | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H1	H9

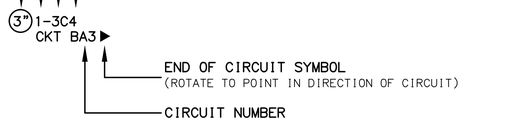
SYMBOL LEGEND

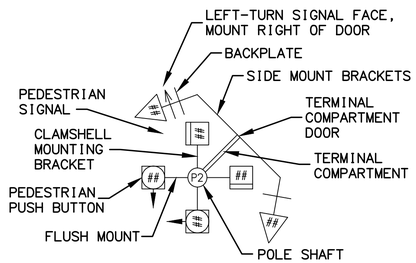
EXISTING	PROPOSED	
		LOAD CENTER
		TRAFFIC CONTROLLER
		BEACON CONTROLLER
##	##	TYPE 1A JUNCTION BOX
##	##	TYPE II JUNCTION BOX
##	##	TYPE III JUNCTION BOX
##	##	TYPE IV JUNCTION BOX
##	##	ELECTROLIER
HT#	HT#	HIGHTOWER
##	##	SIGNAL POLE WITH MASTARM
		PEDESTRIAN PUSH BUTTON
		PEDESTRIAN SIGNAL
		VEHICULAR SIGNAL
		VEHICULAR SIGNAL LEFT
		VEHICULAR SIGNAL RIGHT
A	A	OPTICAL DETECTOR
GPS	GPS	GPS DETECTOR
CAM	CAM	CAMARA DETECTOR
RAD	RAD	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
4"W GUIDE SKIP	4" WHITE BIKE LANE GUIDE SKIP LANE CONTINUATION OR TURN SKIP 2' STRIPES AND 6' 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
RCP	RED CURB PAINT





POLE SHAFT LEGEND

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

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

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. SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER, IN ACCORDANCE WITH SECTION 201, UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.
10. FOR ALL FINAL PAVEMENT MARKINGS USE METHYLMETHACRYLATE MATERIALS. LONGITUDINAL MARKINGS SHALL BE INLAID AT 250 MILS, TRANSVERSE AND SYMBOL MARKINGS TO BE INLAID AT 250 MILS, GORE STRIPES SHALL BE SURFACE APPLIED AT 60 MILS.
11. DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
12. 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.
13. 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.

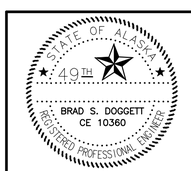
NOTES:

FOUNDATIONS NOTES:

1. STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE, EXCEPT ON LOOPS WHICH ARE TO THE CENTER OF THE TRAILING EDGE OF THE LOOP (EDGE NEAREST INTERSECTION).
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 AND TRAFFIC CONTROLLER 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.

SIGNAL SYSTEM NOTES:

1. FURNISH THE SIGNAL AND LUMINAIRE MASTARM LENGTHS AND DIMENSIONS SPECIFIED ON THE POLE ELEVATIONS.
2. INSTALL DEVICES SUCH THAT THE DIMENSIONS SHOWN TO THE BOTTOM OF THE DEVICES ON THE POLE ELEVATIONS ARE MINIMUMS. VERTICAL DIMENSIONS TO SIGNAL HEADS ARE TO BOTTOM OF THE BACK PLATE.
3. INSTALL MAST ARMS PERPENDICULAR TO THE ROADWAY CENTERLINE. ACCEPTABLE VARIANCE IS +/- 1-DEGREE.
4. SALVAGE SIGNAL POLE ASSEMBLIES, SIGNS, SIGNAL FACES, AND LUMINARIES AND DELIVER TO MAINTENANCE AND OPERATIONS WITHIN 48-HOURS OF DECOMMISSIONING. COMPONENTS DAMAGED WHILE IN THE CONTRACTORS CUSTODY MUST BE REPLACED AT THE CONTRACTORS EXPENSE. REMOVE AND DISPOSE OF FOUNDATIONS.
5. SALVAGE EXISTING CONTROLLER CABINET AFTER NEW CONTROLLER CABINET IS IN SERVICE AND DELIVER TO MAINTENANCE AND OPERATIONS WITHIN 48-HOURS OF DECOMMISSIONING.
6. VEHICLE SIGNALS AND PEDESTRIAN SIGNALS SHALL BE LED MODULES.
7. REMOVE ABANDONED OR UNUSED TRAFFIC JUNCTION BOXES UNLESS OTHERWISE NOTED.
8. NEW SIGNAL HEADS THAT ARE MOUNTED BUT NOT IN OPERATION SHALL BE COVERED WITH A COMMERCIALLY AVAILABLE SIGNAL-SHIRT. EACH SIGNAL SHIRT SHALL FEATURE ELASTICIZED OPENINGS THAT FIT OVER THE VISORS AND AT LEAST TWO STRAPS TO SECURE IT TO THE SIGNAL. PROVIDE SHIRTS WITH A LEGEND THAT READS "OUT OF SERVICE" AND A CENTER SECTION THAT ALLOWS AN OPERATOR TO SEE THE INDICATIONS DURING SYSTEM TESTS.
9. SIGNAL HEADS ARE TO BE LOCATED PER FIGURE 4D-100, TYPICAL SIGNAL HEAD LOCATIONS, PER THE ALASKA TRAFFIC MANUAL. ACCEPTABLE VARIANCE IS +/- 1-FOOT.
10. AIM SIGNALS PER TABLE 660-2, THROUGH-SIGNAL AIMING POINT, OF THE SPECIAL PROVISIONS. SIGNALS SHALL ALSO BE AIMED SO AS NOT TO BE VISIBLE FROM SIDE STREET TRAFFIC. ACCEPTABLE VARIANCE IS +/- 5 DEGREES.
11. EXISTING CIRCUITS LISTED ON THE LOAD CENTER SUMMARY AND PLAN SHEETS WERE OBTAINED FROM AS-BUILT INFORMATION AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO WORK INVOLVING THOSE CIRCUITS.
12. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICE(S), FOR OVERHEAD INSPECTION AND LOCATE WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.



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STATE OF ALASKA
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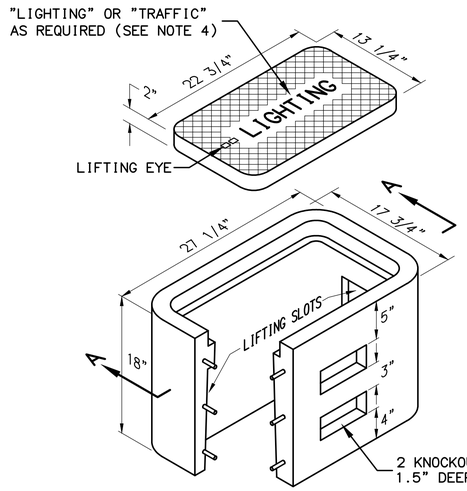
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

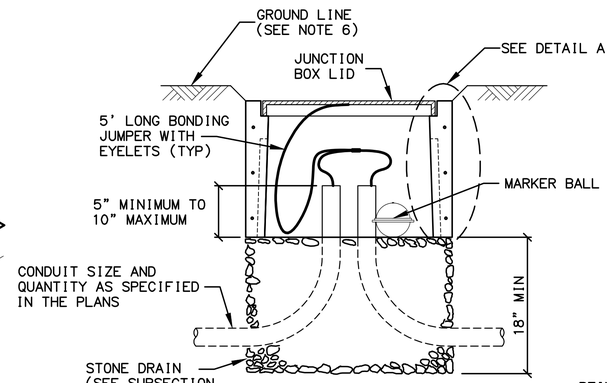
TRAFFIC LEGEND AND NOTES

FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\STANDARD DRAWINGS\01.DWG
DATE/TIME 12/23/2016 10:42 AM | LAYOUT H1 | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H2	H9





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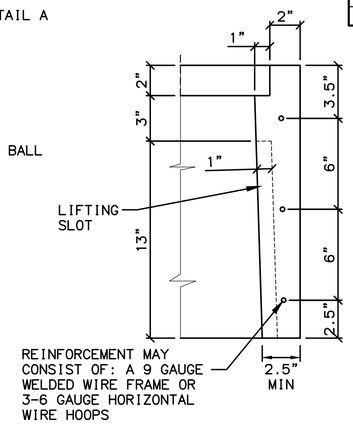
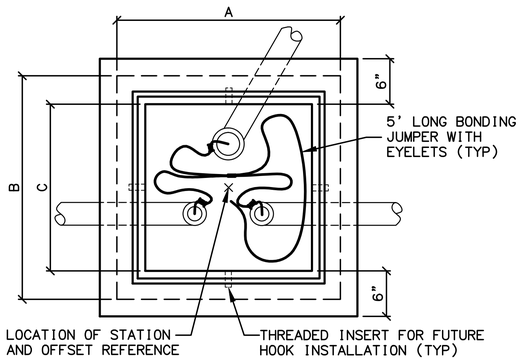
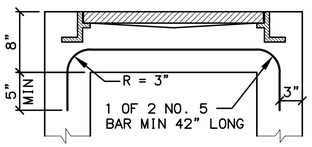


DETAIL A

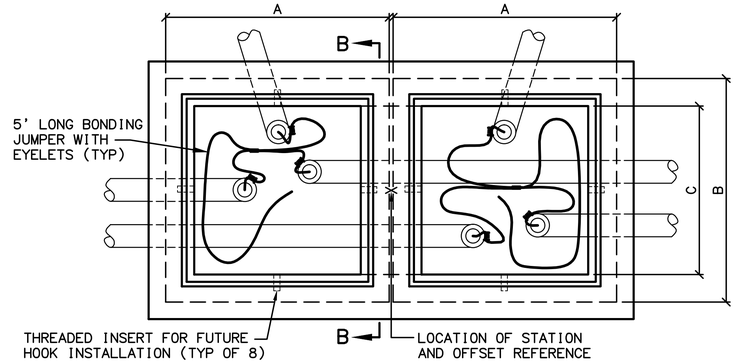
TYPE IA JUNCTION BOX



PLAN



SECTION B-B



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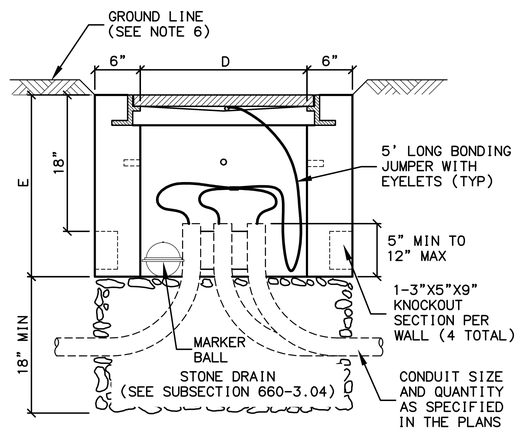
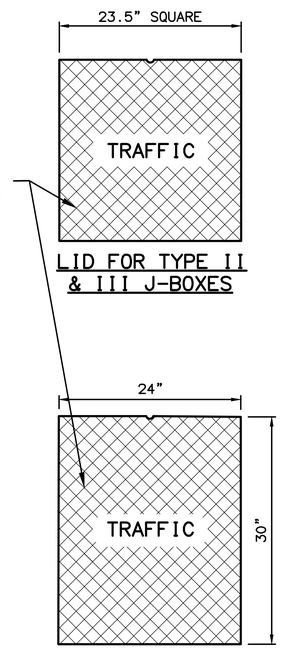
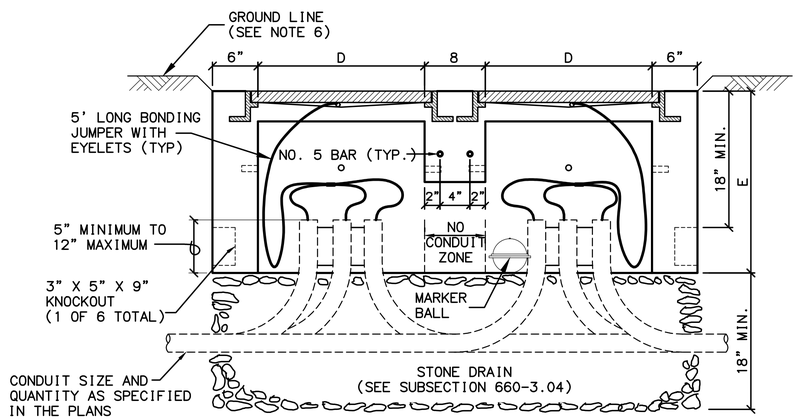


TYPE II JUNCTION BOX
ELEVATION





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. 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
6. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660-3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH BRASS OR STAINLESS STEEL HARDWARE.
7. 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.
8. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
9. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
10. 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.
11. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF POROUS BACKFILL MATERIAL CONFORMING TO SUBSECTION 703-2.10.

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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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

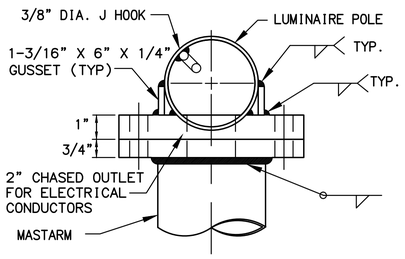
JUNCTION BOX DETAILS

DATE/TIME 12/23/2016 10:42 AM | LAYOUT H2 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

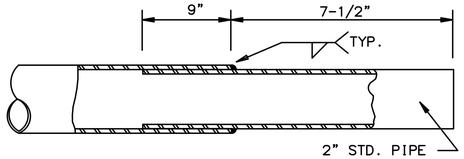
FILE P:\PROJECTS\061519\061519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\STANDARD DRAWINGS\08.DWG

NO.	DATE	REVISION

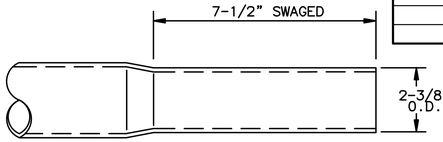
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H3	H9



TOP VIEW

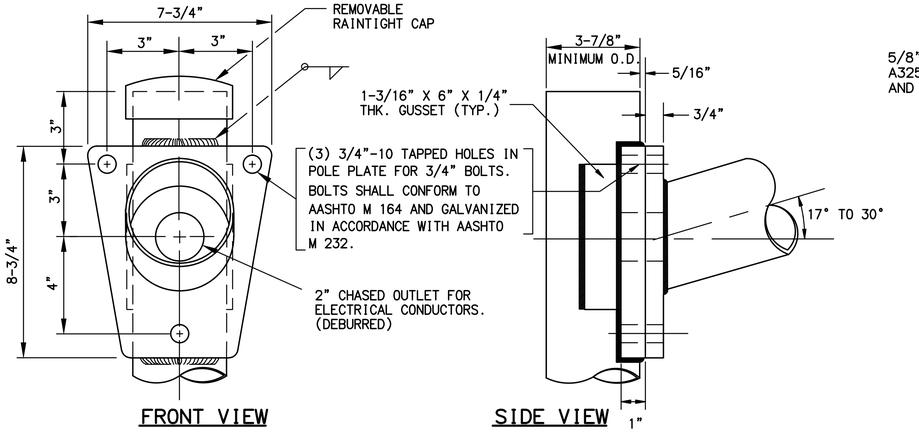


TENON



OPTIONAL SWAGED TENON

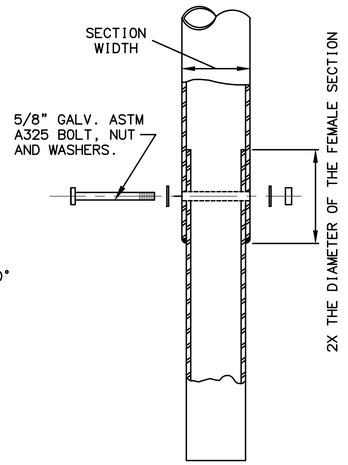
END OF MASTARM DETAIL



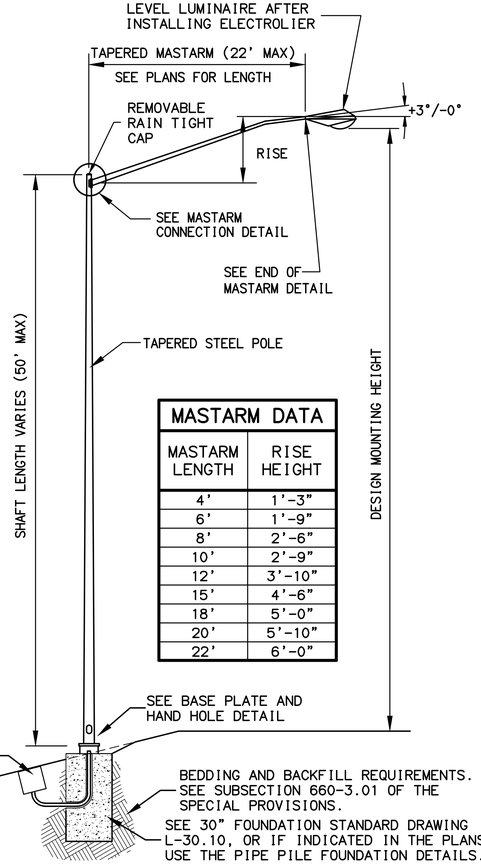
FRONT VIEW

SIDE VIEW

MASTARM CONNECTION DETAIL



POLE CONNECTION DETAIL

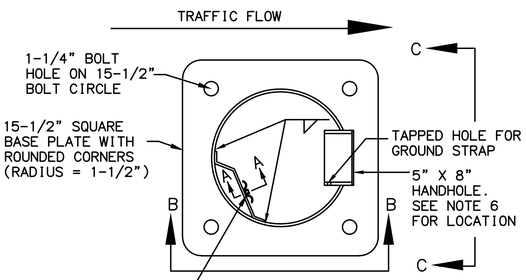


MASTARM DATA	
MASTARM LENGTH	RISE HEIGHT
4'	1'-3"
6'	1'-9"
8'	2'-6"
10'	2'-9"
12'	3'-10"
15'	4'-6"
18'	5'-0"
20'	5'-10"
22'	6'-0"

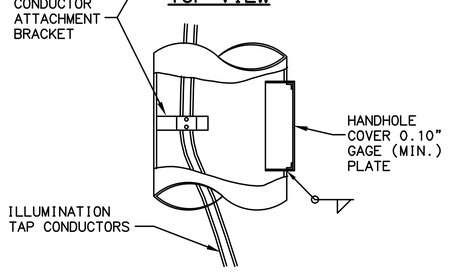
ELECTROLIER ELEVATION

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°40'0" 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.

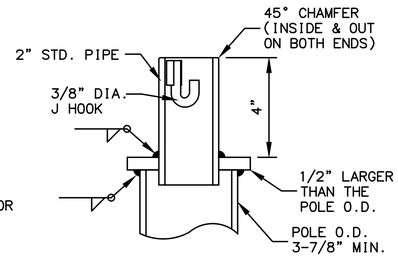


TOP VIEW



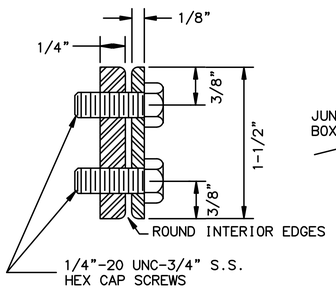
SIDE VIEW

BASE PLATE AND HAND HOLE DETAIL

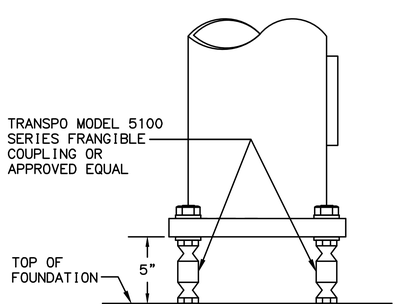


OFFSET LIGHTING STANDARD POLE TOP DETAIL

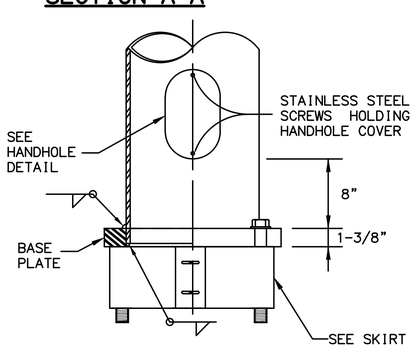
(CUTAWAY FOR CLARITY)



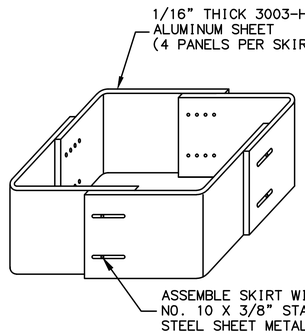
SECTION A-A



VIEW B-B



VIEW C-C



SKIRT DETAIL

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

LIGHTING STANDARD

DATE/TIME 12/23/2016 10:43 AM | LAYOUT H3 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\STANDARD DRAWINGS\16.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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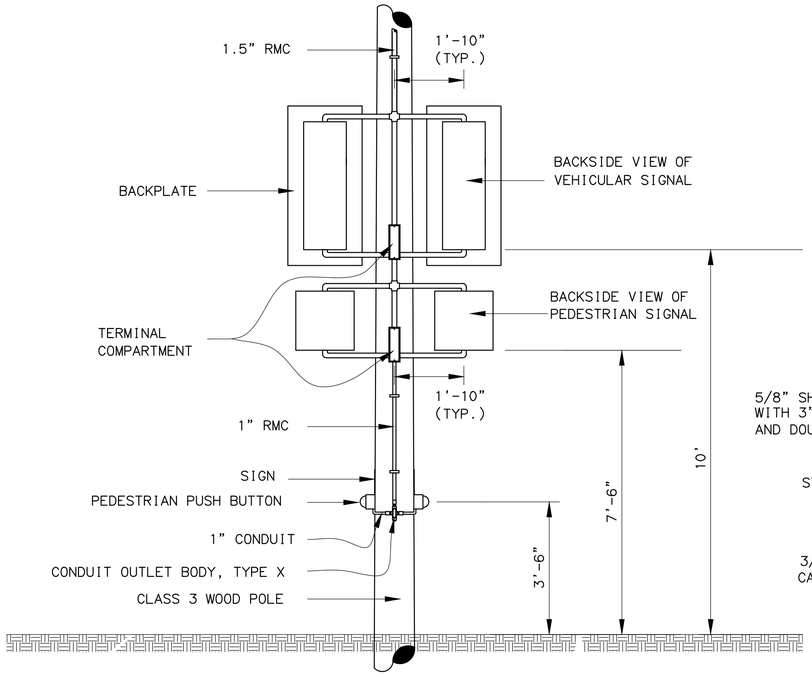
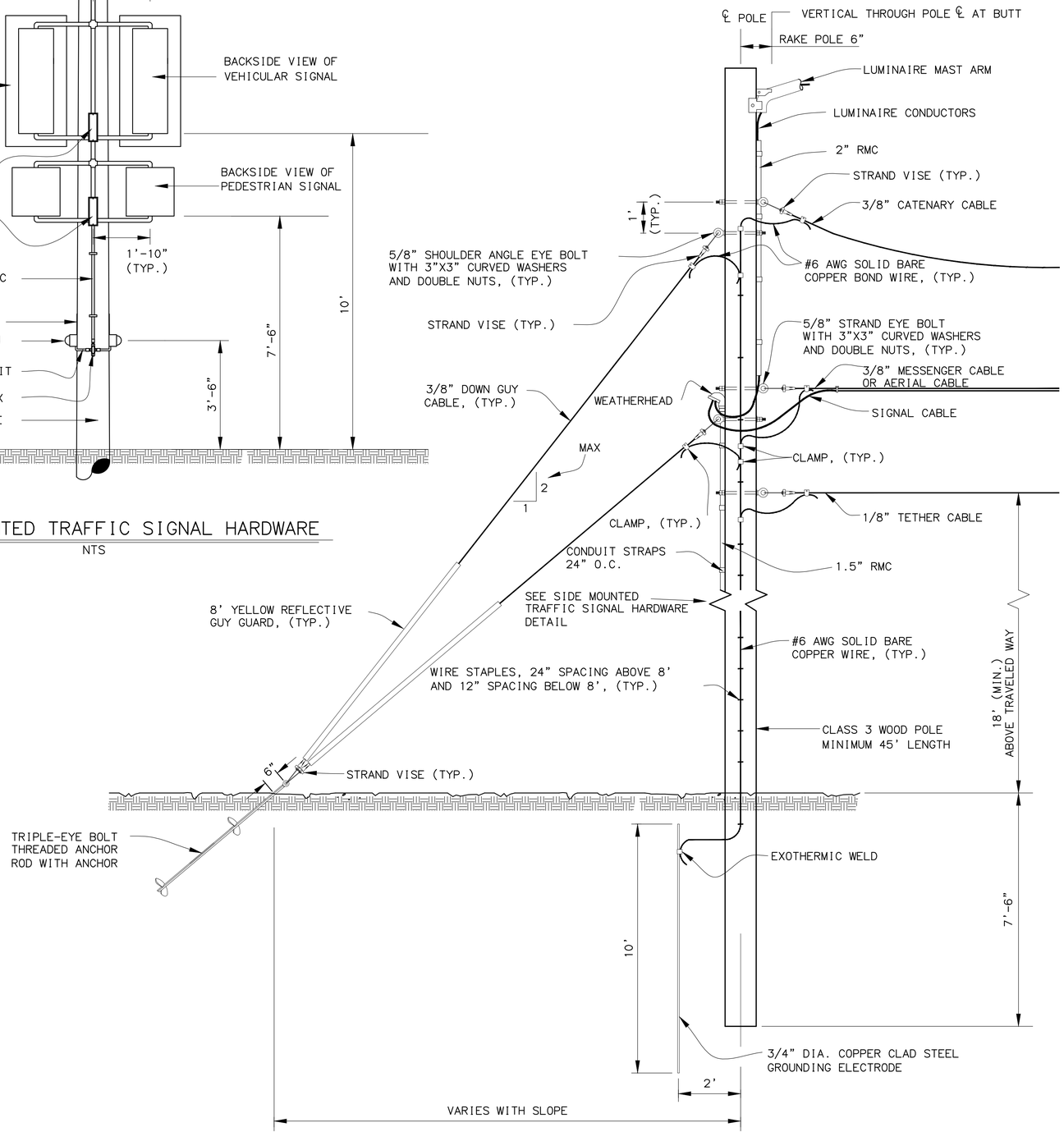


SIDE MOUNTED TRAFFIC SIGNAL HARDWARE

NTS

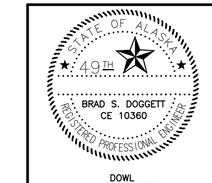


WOOD TRAFFIC POLE DETAIL

NTS
(SINGLE SPAN ATTACHMENT SHOWN)

GENERAL NOTES:

1. USE SIGNAL FRAMES WITH TERMINAL COMPARTMENTS TO INSTALL THE VEHICULAR AND PEDESTRIAN SIGNAL HEADS ON THE SIDES OF THE WOOD POLES.
2. SECURELY ATTACH THE TERMINAL COMPARTMENTS TO THE WOOD POLES AT THE LOCATIONS SHOWN ON THE SIGNAL HARDWARE DETAIL SHEET IN PLANS.
3. THE VERTICAL CLEARANCES SHOWN ARE FROM THE WALKING SURFACE FOR THE PEDESTRIAN GEAR AND THE TRAVELED WAY FOR THE VEHICULAR SIGNALS.
4. TERMINATE POLES WITH NO LUMINAIRE A MINIMUM OF 2 FEET ABOVE THE CATENARY CABLE CONNECTION.
5. SEE SIGNAL HARDWARE DETAIL SHEET IN PLANS FOR ADDITIONAL TRAFFIC SIGNAL HARDWARE DETAILS.
6. ALL 3/8 INCH SPAN AND GUY CABLE SHALL BE HEAVY DUTY (HD) STEEL WITH MINIMUM 9,700 LB BREAKING STRENGTH. ALL OTHER CABLES SHALL ALSO BE HD RATED.
7. GUY ANCHOR SHALL BE INSTALLED PER MANUFACTURER RECOMMENDATIONS. SOIL CLASSIFICATION SHALL BE USED TO DETERMINE ANCHOR SIZE, FOLLOW MANUFACTURE GUIDELINES AND CONFIRM SOIL CLASSIFICATION WITH ENGINEER PRIOR TO ANCHOR SELECTION.



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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

TEMPORARY WOOD POLE SIGNAL DETAILS

DATE/TIME 12/23/2016 10:43 AM | LAYOUT H4 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA
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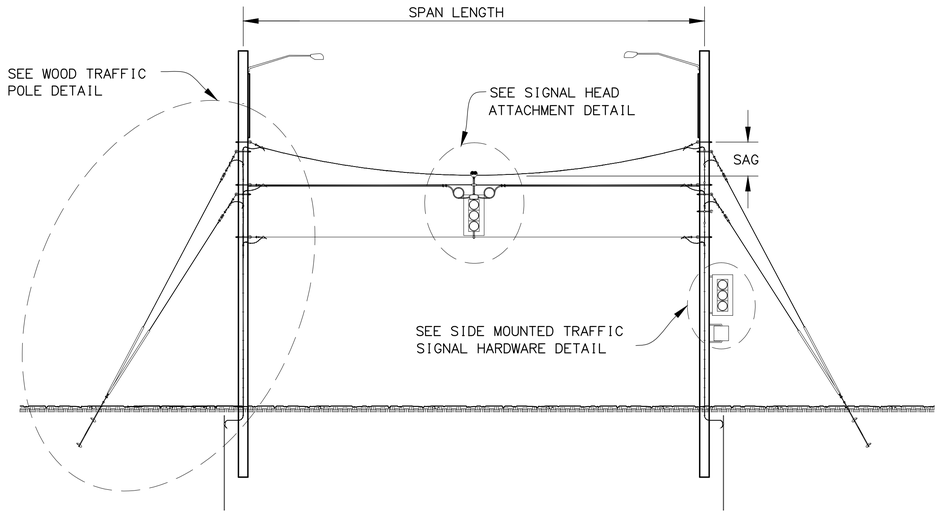
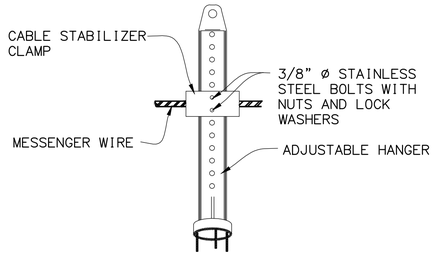
NO.	DATE	REVISION

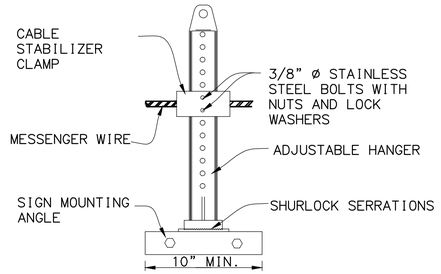
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H5	H9



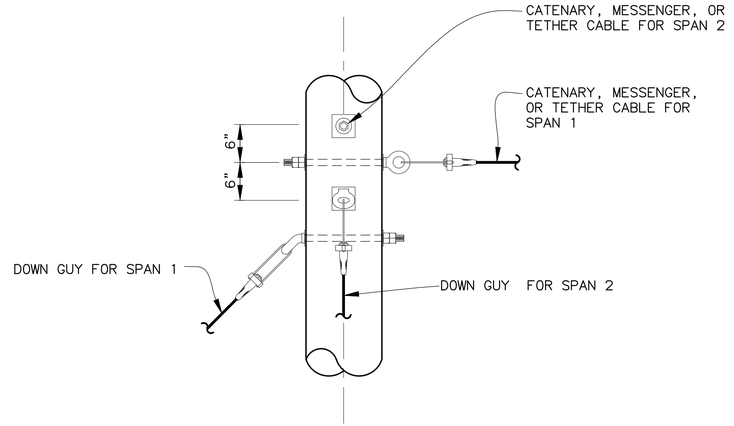
SPAN ELEVATION
NTS



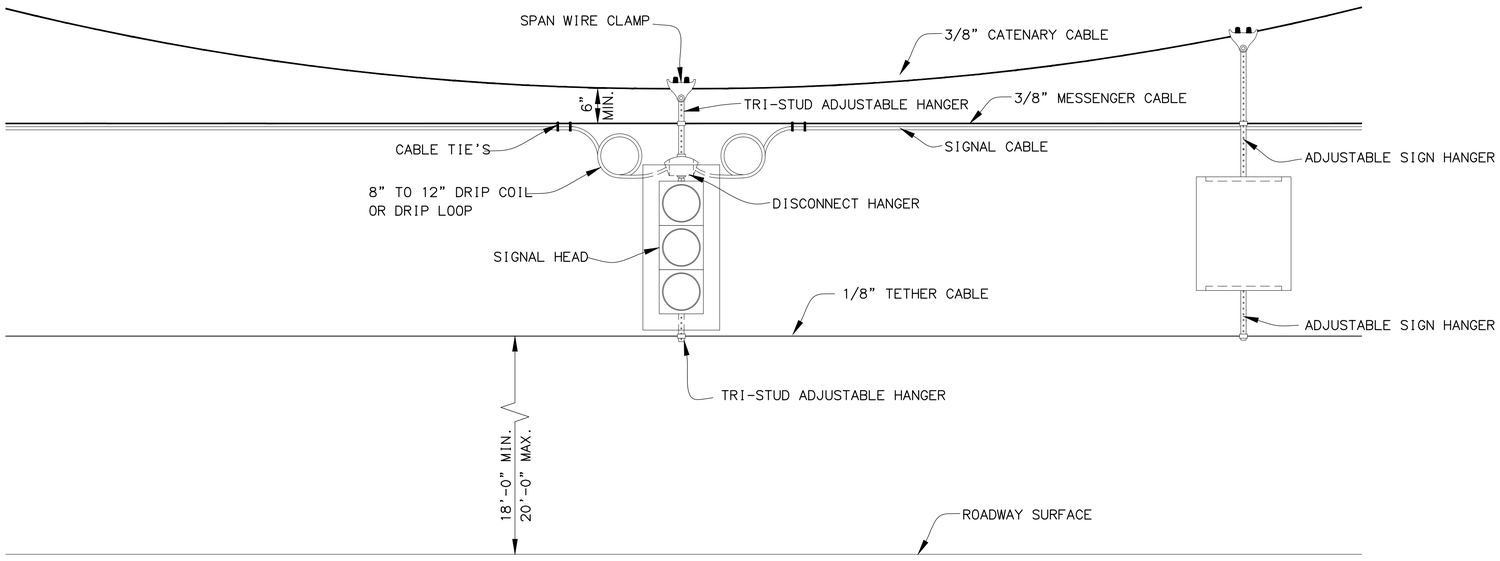
TRI-STUD ADJUSTABLE HANGER
NTS



ADJUSTABLE HANGER FOR SIGN MOUNTING
NTS



MULTIPLE SPAN ATTACHMENT DETAIL
NTC



SIGNAL HEAD AND SIGN ATTACHMENT DETAIL
NTS

GENERAL NOTES:

1. ATTACH ADJUSTABLE HANGERS TO THE MESSENGER AND TETHER CABLES WITH CABLE STABILIZER CLAMPS.
2. ATTACH SIGNAL CABLES TO MESSENGER CABLE EVERY 1' USING 3M HEAVY DUTY BLACK CABLE TIES OR APPROVED EQUAL. CABLE TIES SHALL BE WEATHER RESISTANT BLACK NYLON GREATER THAN 0.065" THICK, HAVE A TENSILE STRENGTH GREATER THAN 110LBS, AND HAVE A TEMPERATURE RANGE BETTER THAN -35°F TO 180°F. USE TWO TIES BEFORE/AFTER DRIP LOOPS. CABLE TIES SHALL BE ATTACHED "SNUG TIGHT", DO NOT OVER TIGHTEN.
3. INSTALL SIGNS SO THAT THE BOTTOM EDGES ARE AT APPROXIMATELY THE SAME ELEVATION.
4. SAG=4% TO 5% OF SPAN LENGTH.

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

TEMPORARY TRAFFIC SIGNAL SPAN WIRE DETAILS

DATE/TIME 12/23/2016 10:43 AM | LAYOUT H5 | DESIGNED AOA | CHECKED AOA | AP/SRT | DRAFTED AOA
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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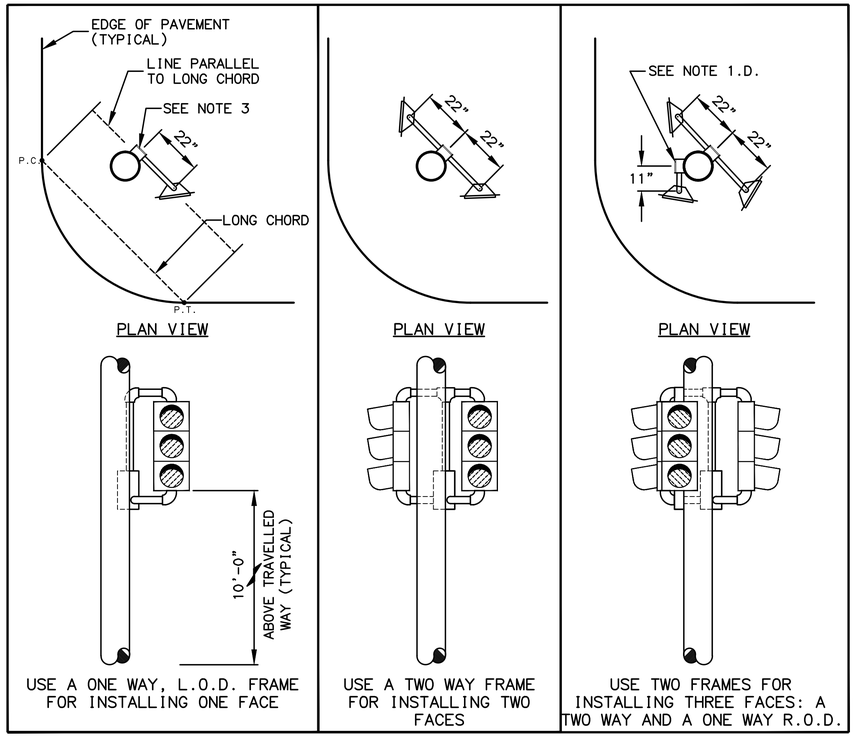
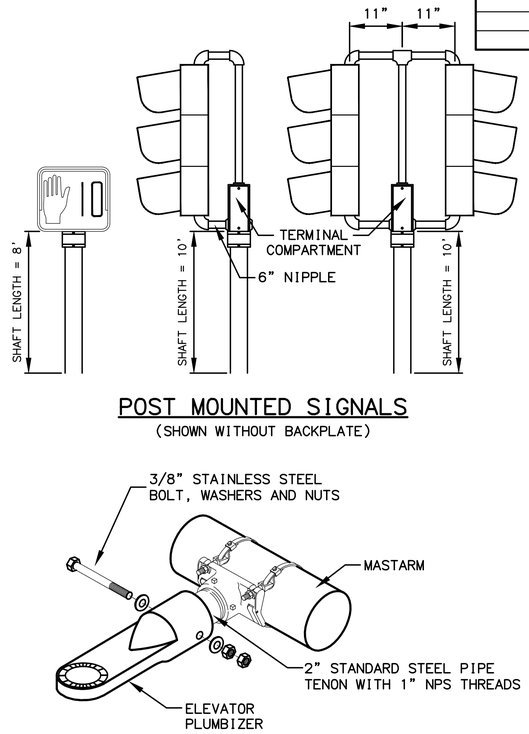


SIDE MOUNTED SIGNAL FRAMES WITH VEHICULAR SIGNALS

(SHOWN WITHOUT BACKPLATES)



POST MOUNTED SIGNALS

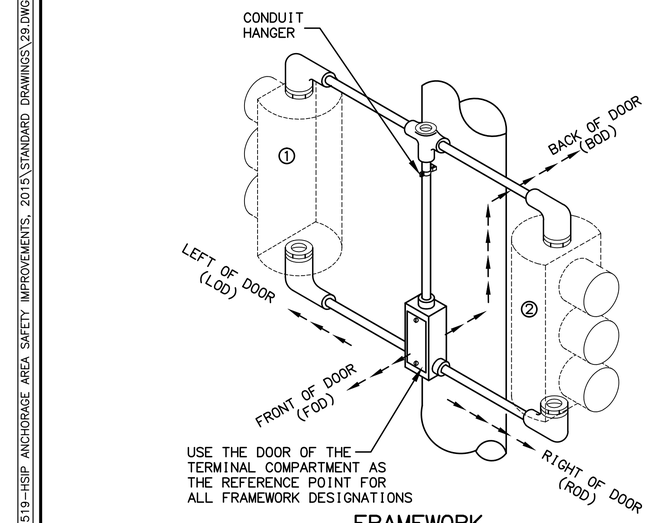
(SHOWN WITHOUT BACKPLATE)

ELEVATOR PLUMBIZER

(SEE NOTE 1.A.)

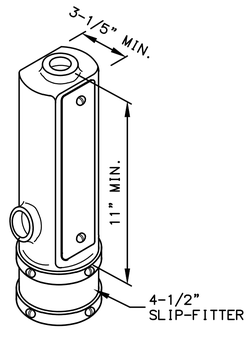
NOTES:

1. INSTALL THE SIGNAL FACES SHOWN IN THE PLANS AS DETAILED ON THIS SHEET AND PER ALASKA TRAFFIC MANUAL.
   A. USE ELEVATOR PLUMBIZERS TO INSTALL FACES ON MASTARMS AND WHENEVER TWO INCH PIPE TENONS ARE SPECIFIED. INSTALL THE PLUMBIZER BETWEEN THE RED AND YELLOW SIGNAL INDICATIONS FOR A THREE SECTION HEAD AND BETWEEN THE TWO YELLOW SIGNAL INDICATIONS FOR A FOUR SECTION HEAD. USE STAINLESS STEEL BAND MOUNT HARDWARE, AB-3007-L AS MANUFACTURED BY PELCO PRODUCTS, INC., OR APPROVED EQUAL TO INSTALL PLUMBIZER TO MASTARMS. PELCO MOUNT SHALL HAVE STAINLESS STEEL OPTION.
   B. USE SLIP FITTERS TO INSTALL PEDESTRIAN SIGNALS ON THE TOP OF POSTS.
   C. USE SIGNAL FRAMES TO INSTALL SIGNAL FACES ON THE SIDES OF POLES AND ON THE TOPS OF POSTS.
   D. USE A SECOND SIGNAL FRAME TO INSTALL THE THIRD FACE WHEN THREE SIDE MOUNTED SIGNAL FACES ARE SHOWN.
   E. USE CLAMSHELL BRACKETS TO INSTALL ALL PEDESTRIAN SIGNALS, EXCEPT THOSE THAT ARE POST TOP MOUNTED.
2. FURNISH ALL SIGNAL FRAMES WITH TERMINAL COMPARTMENTS.
3. INSTALL ONE TERMINAL COMPARTMENT ON THE SIDE OF THE POLE OPPOSITE THE MIDPOINT OF THE RADIUS RETURN. POSITION THE TERMINAL COMPARTMENT AT THE LOCATION WHERE A LINE PARALLEL TO THE LONG CHORD (P.C. TO P.T.) OF THE RADIUS RETURN IS TANGENT TO THE POLE.
4. INSTALL PEDESTRIAN INDICATION TO FACE THE CENTER OF THE FAR SIDE CROSSWALK. ACCEPTABLE VARIANCE IS +/- 1 DEGREE.
5. FIELD DRILL THE HOLES NEEDED FOR ATTACHING ALL SIGNAL HARDWARE. USE HOLE SAWS WHEN DRILL BITS ARE NOT AVAILABLE. TREAT THE BARE STEEL SURFACES IN ACCORDANCE WITH SECTION 660-3.01.8, REPAIRING DAMAGED FINISHES, OF THE STANDARD SPECIFICATIONS.
6. PROVIDE SOLID BACKPLATES SIZED FOR THE NUMBER OF SIGNAL SECTIONS AND MOUNTING TYPE, SO THAT NO LIGHT IS VISIBLE BETWEEN THE BACKPLATE AND THE SIGNAL FACE. FURNISH BACKPLATES FOR DOGHOUSE STYLE SIGNALS THAT FEATURE NOTCHED UPPER CORNERS.
7. ATTACH ALL BACK PLATES USING PLATED STEEL RIVETS WITH LARGE FLANGE BUTTON HEADS. INSTALL 0.187" DIAMETER BY 0.575" LONG RIVETS THAT PROVIDE AT LEAST 530 LBS. AND 670 LBS. SHEAR AND TENSILE STRENGTHS, RESPECTIVELY. BORE OUT THE MOUNTING HOLES IN THE BACK PLATES AND SIGNAL HEADS TO THE DIAMETER RECOMMENDED BY THE RIVET MANUFACTURER.
8. BEFORE INSTALLING THE MACHINE SCREWS THAT SECURE THE VISORS, COAT THE THREADS WITH AN ANTI-SEIZING COMPOUND.



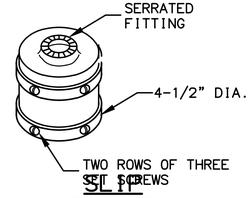
FRAMEWORK DESCRIPTION

HEAD NO. ① OFFSET L.O.D.
HEAD NO. ② OFFSET R.O.D.



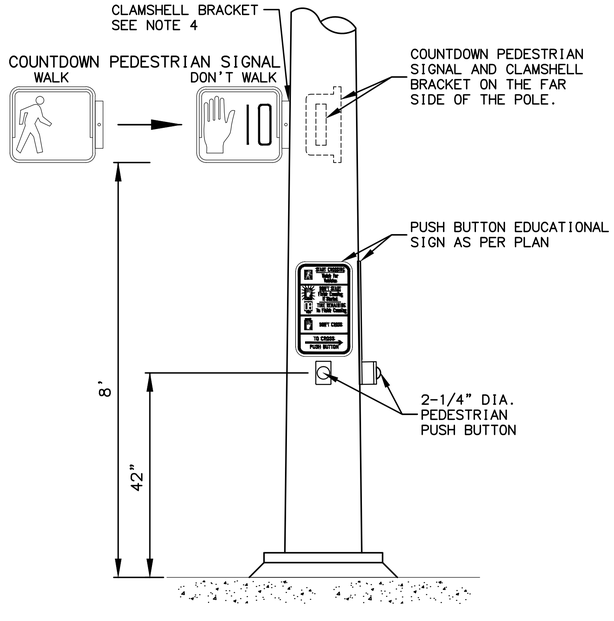
TERMINAL COMPARTMENT WITH SLIP FITTER

(SEE NOTES 1.C. AND 2)

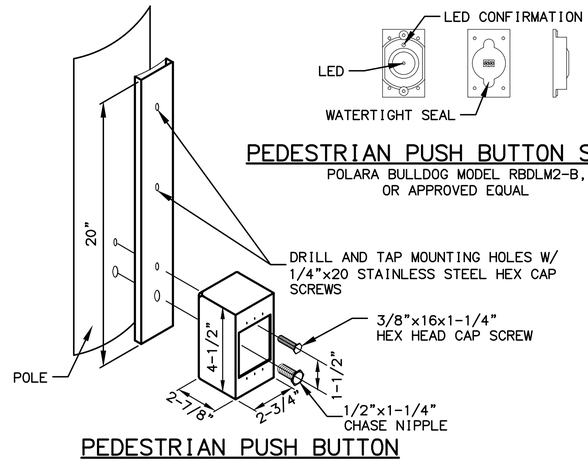


SLIP FITTER

(SEE NOTE 1.B.)



PEDESTRIAN HARDWARE



PEDESTRIAN PUSH BUTTON SWITCH

POLARA BULLDOG MODEL RBDLM2-B, OR APPROVED EQUAL

PEDESTRIAN PUSH BUTTON HOUSING

(STYLE A)

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DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

SIGNAL HARDWARE DETAILS

DATE/TIME 12/23/2016 10:43 AM | LAYOUT H6 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA
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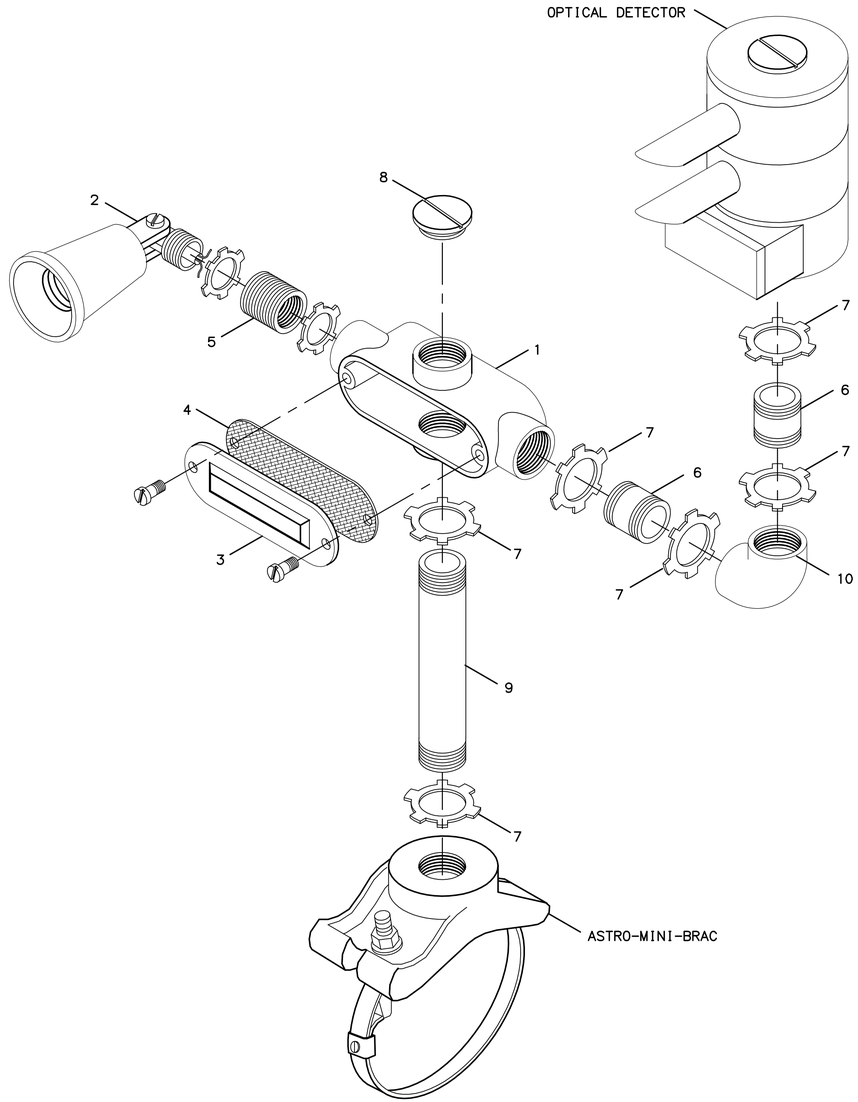
NO.	DATE	REVISION
1	10/25/2016	ENGINEER'S EDITS, PART NO. 6.

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H7	H9



PARTS LIST FOR EACH GTT OPTICOM DETECTOR INSTALLED

GTT OPTICOM MODEL 575 CONFIRMATION LIGHT KIT
CONFIGURE AS SHOWN FROM PARTS BELOW

PART NO.	PART TYPE	LIGHT KIT QUANTITY
1	"X" CONDUIT BODY	1
2	PAR 38 LAMP HOLDER	2
3	CONDUIT COVER	1
4	COVER GASKET	1
5	REDUCING BUSHING	2
6	3/4"X2" GALVANIZED NIPPLE	ADD 2 TO KIT
7	3/4" LOCKNUT	6
8	3/4" HOLE PLUG	2
9	3/4" X 6" NIPPLE	ADD 1 TO KIT
10	3/4" X 90° ELBOW	ADD 1 TO KIT

NOTES:

1. SEE THE SIGNAL PLANS FOR THE SIGNAL POLE MAST ARMS SCHEDULED FOR EVP INSTALLATION.
2. FOR EACH EVP INSTALLATION, FURNISH:
   A. A GTT MODEL 711, 721, 722 OPTICOM DETECTOR AS CALLED FOR IN PLANS.
   B. AN ASTRO-MINI-BRAC, MODEL AB-0155-L, AS MANUFACTURED BY PELCO PRODUCTS OR AN APPROVED EQUAL.
   C. A GTT MODEL 575 CONFIRMATION LIGHT KIT WITH THE ADDITIONAL PARTS SHOWN IN THE PARTS LIST, OR STEEL PARTS, WITH A HOT DIP GALVANIZED FINISH, AS SHOWN IN THE PARTS LIST.
   D. WITH EACH OPTICOM DETECTOR INSTALLED, FURNISH A PAR38 20 WATT LED FLOOD LAMP RATED FOR 120 VOLT OPERATION, 1250 INITIAL LUMENS, AND A 25000 HOUR LAMP LIFE.
3. MOUNT EVP DETECTORS TO HAVE DIRECT, UNOBSTRUCTED LINE-OF-SIGHT OF APPROACHING VEHICLES. DRILL A 1 INCH HOLE IN THE TOP DEAD CENTER OF THE MAST ARM AT THE LOCATION PRE-APPROVED BY THE ENGINEER. ASSEMBLE AND TIGHTEN THE PARTS AND LOCKNUTS AS SHOWN ON THIS SHEET.
4. BEFORE ATTACHING THE MODEL 138 DETECTOR CABLE TO THE OPTICOM DETECTOR, STRIP THE INSULATION FROM THE THREE INSULATED CONDUCTORS AT THE CONTROLLER CABINET AND ATTACH ALL FOUR CONDUCTORS TO GROUND.
5. PREEMPTION EMITTERS SHALL BE ASSIGNED ID NUMBERS BY JURISDICTION AS SHOWN IN VEHICLE EMITTER TABLE.

VEHICLE EMITTER TABLE

CLASS	VEHICLE I.D. NO.	JURISDICTION	VEHICLE TYPE
0	NOT USED	MUNICIPALITY OF ANCHORAGE	FIRE & EMS
1	NOT USED	MUNICIPALITY OF ANCHORAGE	OTHER
2	NOT USED	FAIRBANKS	FIRE & EMS
3	NOT USED	FAIRBANKS	OTHER
4	1-30	MATANUSKA/SUSITNA	FIRE & EMS
5	NOT USED	MATANUSKA/SUSITNA	OTHER
6	NOT USED	KENAI PENINSULA	FIRE & EMS
7	NOT USED	KENAI PENINSULA	OTHER
8	NOT USED	ELMENDORF/FT. RICHARDSON	FIRE & EMS
9	NOT USED	ELMENDORF/FT. RICHARDSON	OTHER

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

EVP INSTALLATION DETAILS

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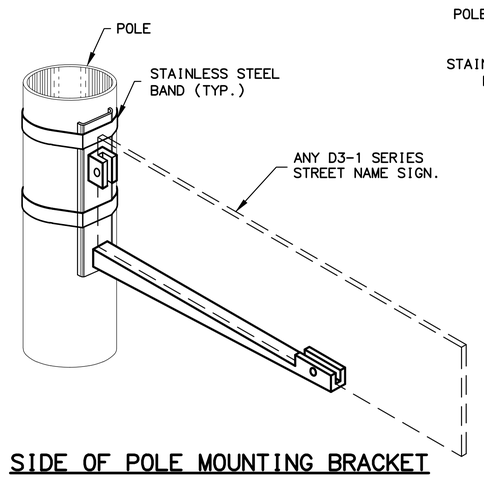
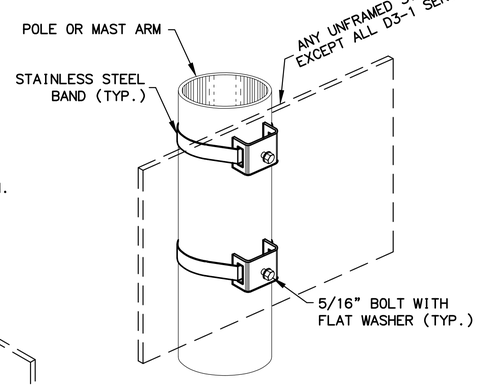
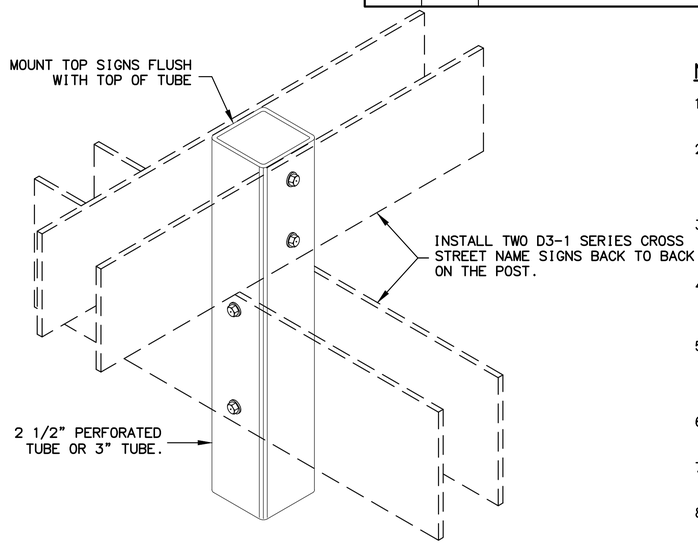
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H8	H9



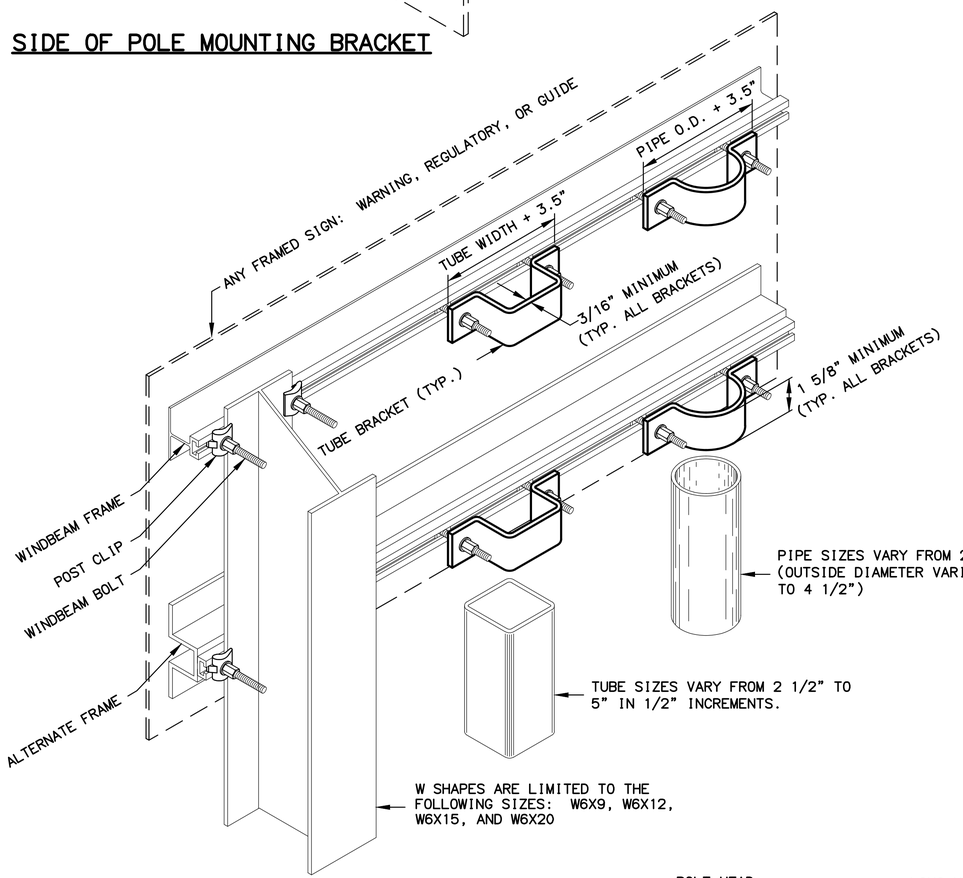
SIDE OF POLE MOUNTING BRACKET



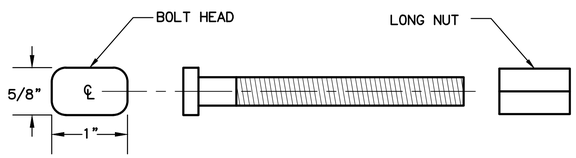
SADDLE BRACKETS



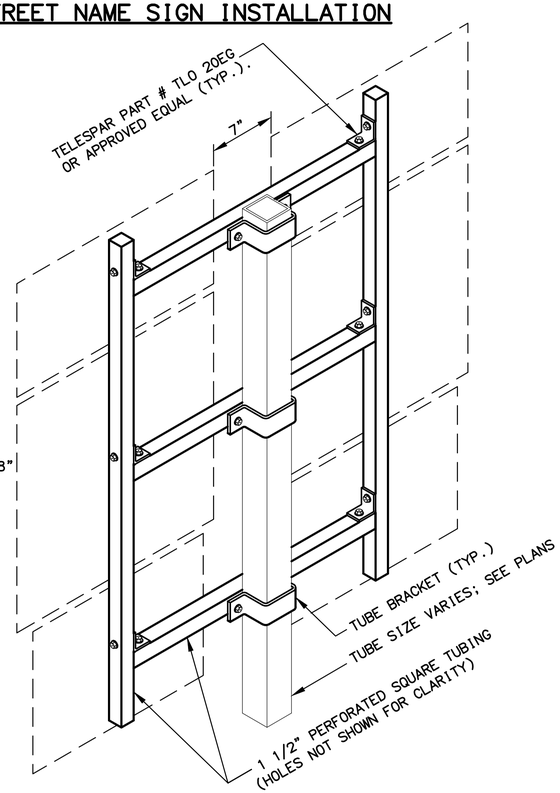
STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS



3/8" WINDBEAM BOLT AND LONG NUT



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 IN TWO LOCATIONS, NEAR TOP AND NEAR BOTTOM OF MATING SURFACE. 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			

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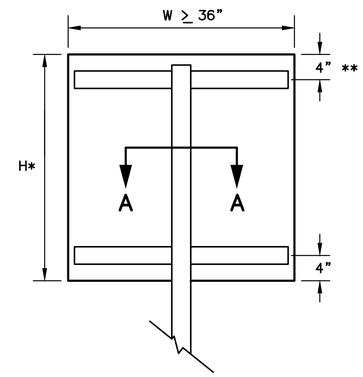
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

SIGN ATTACHMENT DETAILS

FILE [P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\STANDARD DRAWINGS\33.DWG] DATE/TIME [12/23/2016 10:44 AM] LAYOUT [H8] DESIGNED [AOA] CHECKED [AP/SRT] DRAFTED [AOA]

NO.	DATE	REVISION

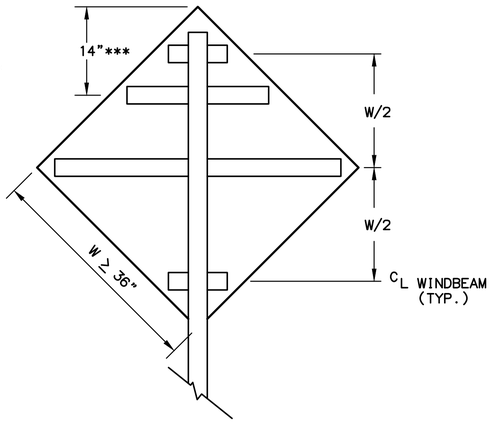
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	H9	H9



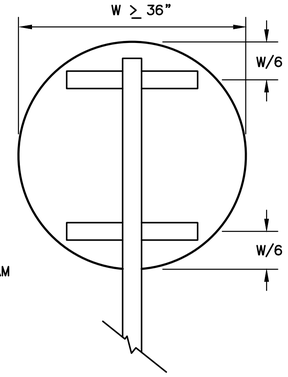
RECTANGLES AND TRAPEZOIDS

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

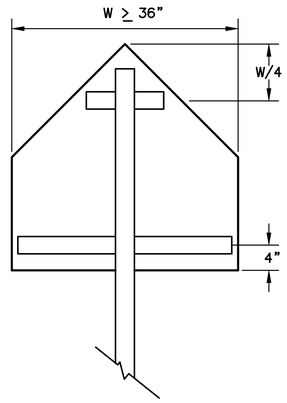
** FOR S5-1 SIGNS MOUNTED ON FLASHING BEACON POSTS, USE A 10" OFFSET. OTHERWISE, USE 4".

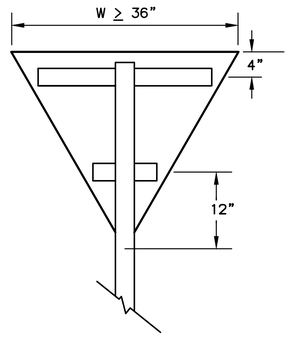


*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.



ROUNDS AND OCTAGONS



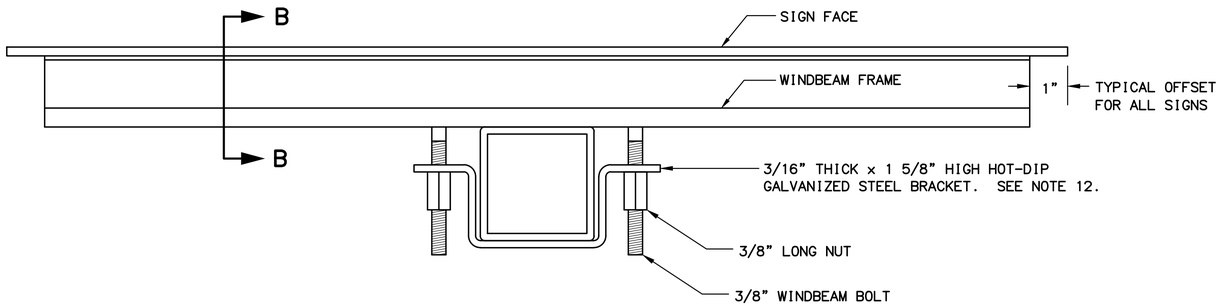


NOTES:

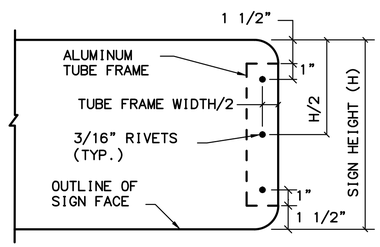
1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
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 BOLTS WITH 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.
13. USE ONE 2.5" P.T. FOR ALL STOP SIGNS WITHIN THE MOA, AND ALL POSTS WITH A SINGLE SIGN PANEL THAT ARE 30" WIDE OR LESS. ALL OTHER STOP SIGN POSTS OUTSIDE THE MOA SHALL BE ON A 3" TUBE.

WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

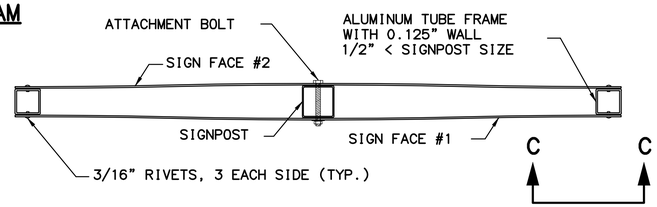
ELEVATION VIEW



SECTION A - A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

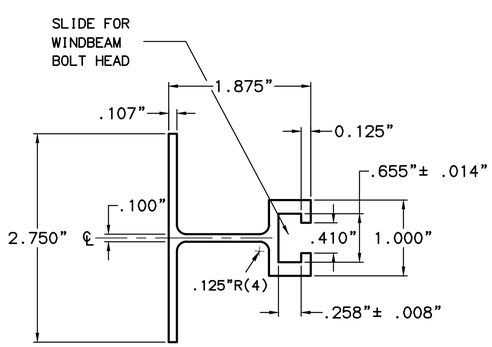


VIEW C - C

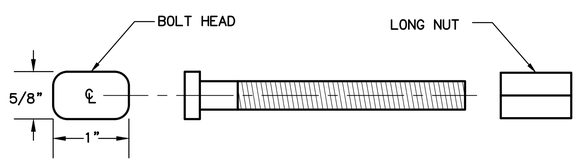


D3-1 STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B - B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

THIS SHEET SUPERSEDES ONLY:
THE LIGHT SIGN FRAMING DETAILS AND SIGN POST SPACING NOTE 2.B. ON STD. DWG. S-00.11, AND ENTIRELY REPLACES STD. DWG. S-01.00

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

LIGHT SIGN FRAMING AND ATTACHMENT DETAILS

STATE OF ALASKA 49TH BRAD S. DOGGETT CE 10360 REGISTERED PROFESSIONAL ENGINEER

DOWL
4041 B STREET
ANCHORAGE, ALASKA 99503
(907) 562-2000
AECL848

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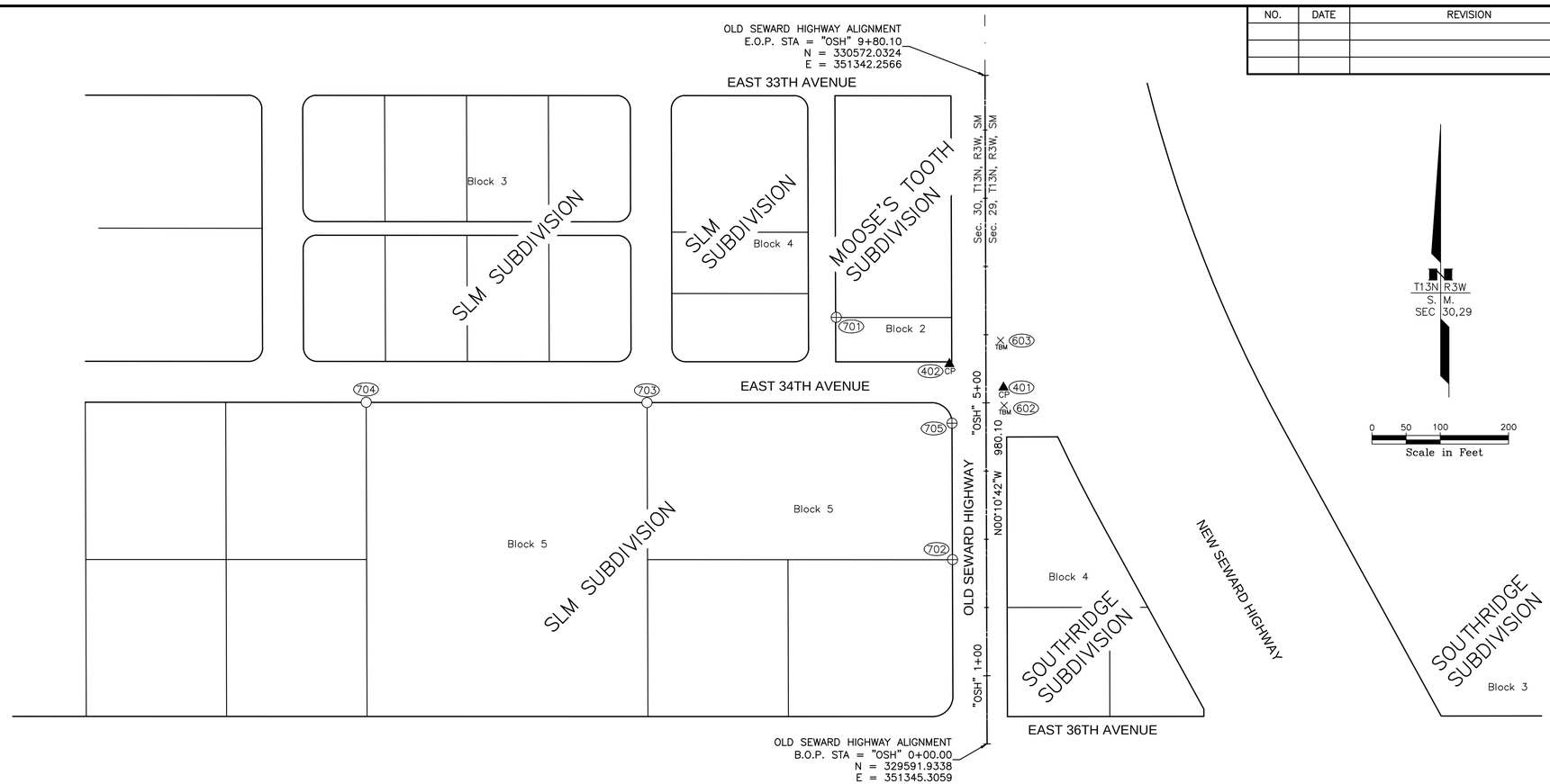
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A:A1	A:A1



LEGEND

- Property Miscellaneous Corner
- Primary Property Monument
- CP — Control Point
- TBM — Temporary Bench Mark
- (1) — Survey Point Number
- Right-Of-Way Property Line
- Interior Property Line
- Section Line
- 1+00 2+00 — Project Alignment & Stationing

NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the 2014 HSIP Anchorage Area Safety Improvements.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted forward and reverse angles collected by total station as well as static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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. 34.65.0440).

HORIZONTAL CONTROL STATEMENT

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears N 01°43'26.4"E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N usf, +1312517.4904 E usf, and scale using 0.9998910192.

VERTICAL CONTROL STATEMENT

Elevations are based on the Municipality of Anchorage (MOA) Vertical Control Network. The datum is Mean Sea Level (MSL) GAAB 1972 Adjust and the unit of measure is U.S. Survey Feet.

The basis of elevations is MOA Bench Mark "TNH 10", a brass cap set vertical in the east wall of the ACS Building approx 460 feet west of the intersection of Telephone Ave and Old Seward Highway, having a value of 118.04 feet above Mean Sea Level.

A Leica DNA10 digital level was used for all leveling on this project. The elevations were computed in Leica Digilev software using a length weighted adjustment. All of the level loops closed within Third-Order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

All elevations on control points and benchmarks need to be field verified before they are used.

HORIZONTAL AND VERTICAL CONTROL

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
401	"OSH" 5+22.80	25.53 RT	61° 11' 22.14127" N	149° 52' 04.83211" W	330114.8128	351369.2092	139.50	110.91	Set Rbr: CP
402	"OSH" 5+57.49	53.53 LT	61° 11' 22.48196" N	149° 52' 06.44573" W	330149.2524	351290.0449	138.86	110.28	Set Rbr: CP

RECOVERED MONUMENTS

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
702	"OSH" 2+70.36	49.81 LT	61° 11' 19.65469" N	149° 52' 06.36342" W	329862.1401	351294.6573	Fd Almon[5202-S]: ROW/SE Cor L5A Blk 5 SLM Subd
705	"OSH" 4+70.41	50.00 LT	61° 11' 21.62455" N	149° 52' 06.37183" W	330062.1865	351293.8426	Fd Almon[5202-S]: ROW/PC NE Cor L5A Blk 5 SLM Subd
703	"OSH" 5+01.98	496.82 LT	61° 11' 21.93050" N	149° 52' 15.48810" W	330092.3665	350846.9286	Fd Rbr: ROW/NW Cor L5A Blk 5 SLM Subd
704	"OSH" 5+03.64	908.44 LT	61° 11' 21.94211" N	149° 52' 23.88574" W	330092.7400	350435.2999	Fd AC: ROW/NW Cor L3B Blk 5 SLM Subd
701	"OSH" 6+25.99	219.16 LT	61° 11' 23.15466" N	149° 52' 09.82647" W	330217.2347	351124.1960	Fd Almon[5202-S]: ROW/SW Cor L1 Mooses Tooth Subd

VERTICAL CONTROL

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING		
602	"OSH" 4+96.18	26.43 RT	61° 11' 21.88" N	149° 52' 04.81" W	330088	351370	110.97	Set X in Bolt: Chiseled X in top of North LP base bolt/SE cor of 34th & Old Seward Hwy
603	"OSH" 5+91.56	21.50 RT	61° 11' 22.82" N	149° 52' 04.92" W	330184	351365	110.57	Set X in Bolt: Chiseled X in top of North LP base bolt/SE cor in 34th & Old Seward Hwy

STATE OF ALASKA
49TH
"A. WILLIAM STOLL"
LS 12041
REGISTERED PROFESSIONAL LAND SURVEYOR

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

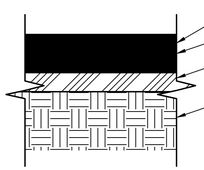
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

OLD SEWARD HWY & 34TH AVE SURVEY CONTROL

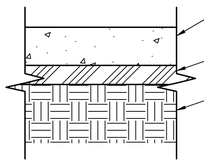
FILE [P:\PROJECTS\D61519\D61519.02-34TH & OLD SEWARD\CAD\SURVEY\SCS\MC14-CS-VC_HSIP2014 34TH-OSH_SCS.DWG | DATE/TIME 12/23/2016 10:45 AM | LAYOUT A:A1 | DESIGNED | CHECKED AWS | DRAFTED DOWL

NO.	DATE	REVISION

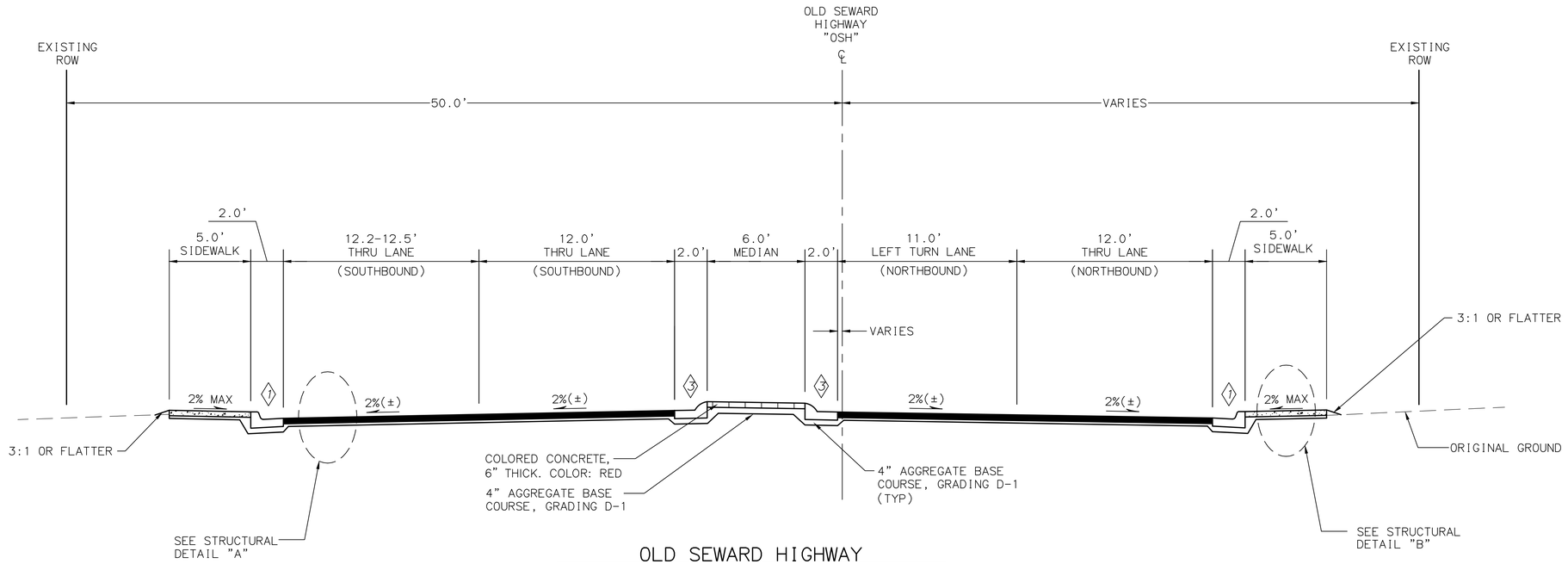
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A:B1	A:B1



ROADWAY STRUCTURAL DETAIL "A"

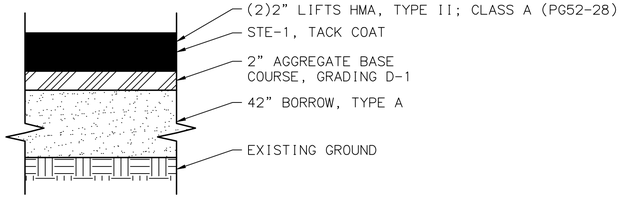


SIDEWALK STRUCTURAL DETAIL "B"

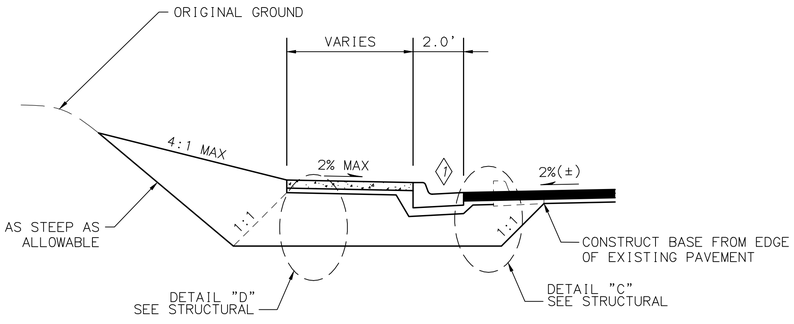


OLD SEWARD HIGHWAY

STA "OSH" 3+87.55 TO STA "OSH" 4+80.79

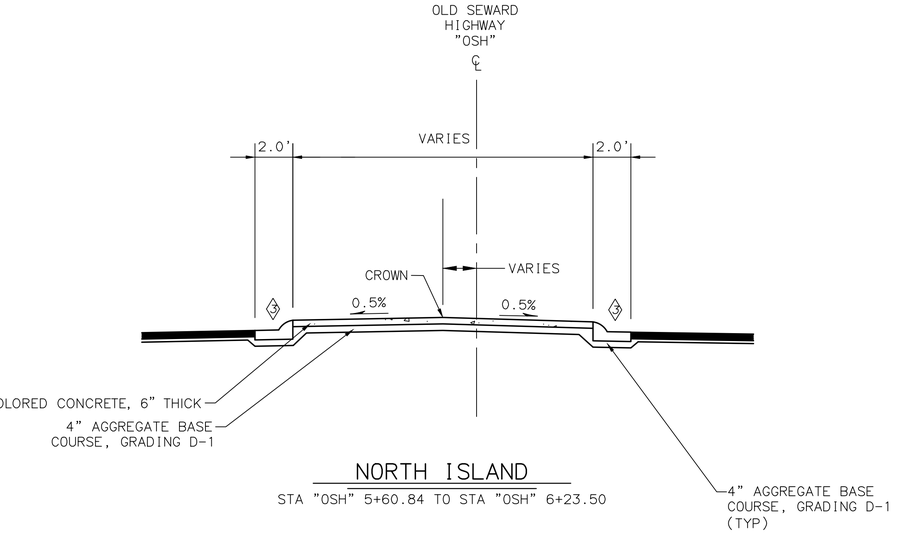


NEW ROADWAY STRUCTURAL DETAIL "C"



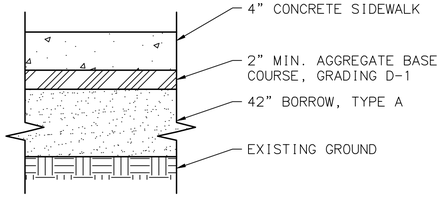
OLD SEWARD HIGHWAY WIDENING

STA "OSH" 5+47.82 TO STA "OSH" 5+95.07

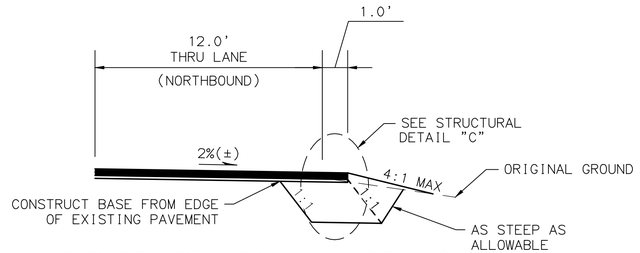


NORTH ISLAND

STA "OSH" 5+60.84 TO STA "OSH" 6+23.50



NEW ROADWAY WITH SIDEWALK STRUCTURAL DETAIL "D"



OLD SEWARD HIGHWAY WIDENING

STA "OSH" 5+76.96 TO STA "OSH" 6+33.31

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

OLD SEWARD HWY & E. 34TH AVE TYPICAL SECTIONS

DATE/TIME 12/23/2016 10:45 AM | LAYOUT A:B1 | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

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DATE/TIME 12/23/2016 10:50 AM | LAYOUT A:F1 | DESIGNED AKM | CHECKED CRW | DRAFTED AKM
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GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW101	FL	"OSH" 4+65.54	−36.17	110.54	±ME
SW102	FL	"OSH" 4+72.06	−36.26	110.45	PC
SW103	SWLK	"OSH" 4+65.54	−41.58	111.02	PC, ±ME
SW104	SWLK	"OSH" 4+78.00	−42.56	110.90	–
SW105	SWLK	"OSH" 4+80.53	−48.83	110.83	PC
SW106	FL	"OSH" 4+88.31	−39.88	110.21	COR
SW107	FL	"OSH" 5+04.41	−52.96	109.90	COR
SW108	SWLK	"OSH" 4+97.25	−62.41	110.41	PC
SW109	FL	"OSH" 5+10.94	−66.70	109.68	PC, ±ME
SW110	EOP	"OSH" 5+13.79	−76.75	109.53	±ME
SW111	FL	"OSH" 3+87.51	−9.14	111.52	PT
SW112	FL	"OSH" 4+80.76	−9.73	111.17	PC
SW113	EOP	"OSH" 4+93.25	−11.06	111.01	PC
SW114	EOP/CROWN	"OSH" 4+98.28	−6.09	111.11	–
SW115	EOP	"OSH" 4+93.31	−1.06	111.02	PT
SW116	FL	"OSH" 4+80.81	−2.23	111.15	PT

GRADING COORDINATES

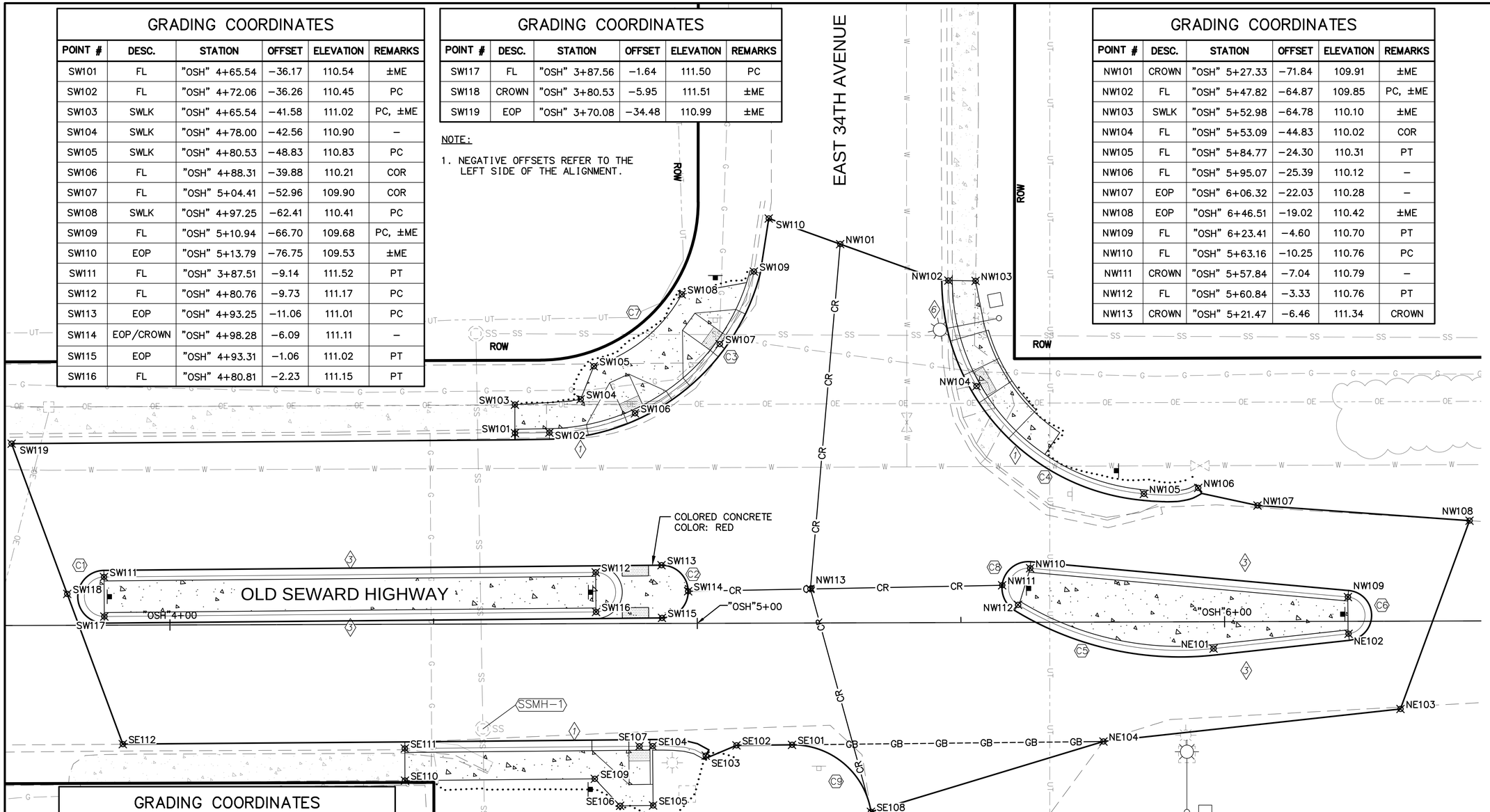
POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW117	FL	"OSH" 3+87.56	−1.64	111.50	PC
SW118	CROWN	"OSH" 3+80.53	−5.95	111.51	±ME
SW119	EOP	"OSH" 3+70.08	−34.48	110.99	±ME

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW101	CROWN	"OSH" 5+27.33	−71.84	109.91	±ME
NW102	FL	"OSH" 5+47.82	−64.87	109.85	PC, ±ME
NW103	SWLK	"OSH" 5+52.98	−64.78	110.10	±ME
NW104	FL	"OSH" 5+53.09	−44.83	110.02	COR
NW105	FL	"OSH" 5+84.77	−24.30	110.31	PT
NW106	FL	"OSH" 5+95.07	−25.39	110.12	–
NW107	EOP	"OSH" 6+06.32	−22.03	110.28	–
NW108	EOP	"OSH" 6+46.51	−19.02	110.42	±ME
NW109	FL	"OSH" 6+23.41	−4.60	110.70	PT
NW110	FL	"OSH" 5+63.16	−10.25	110.76	PC
NW111	CROWN	"OSH" 5+57.84	−7.04	110.79	–
NW112	FL	"OSH" 5+60.84	−3.33	110.76	PT
NW113	CROWN	"OSH" 5+21.47	−6.46	111.34	CROWN



GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE101	EOP	"OSH" 5+17.90	+23.10	110.78	PT, ±ME
SE102	EOP	"OSH" 5+07.36	+23.17	110.65	–
SE103	FL	"OSH" 5+01.52	+25.11	110.57	PC
SE104	FL	"OSH" 4+91.45	+23.26	110.64	PT
SE105	SWLK	"OSH" 4+91.52	+34.51	111.10	–
SE106	SWLK	"OSH" 4+85.26	+34.55	111.10	–
SE107	FL	"OSH" 4+88.94	+23.28	110.65	COR
SE108	EOP	"OSH" 5+32.82	+35.85	110.89	PC, ±ME
SE109	SWLK	"OSH" 4+80.47	+29.43	111.22	–
SE110	SWLK	"OSH" 4+44.47	+29.65	111.36	±ME
SE111	FL	"OSH" 4+44.46	+23.56	110.92	±ME
SE112	EOP	"OSH" 3+90.98	+22.57	110.83	±ME

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"OSH" 3+87.53	-5.39'	3'	TBC
C2	"OSH" 4+93.28	-6.06'	5'	EOP
C3	"OSH" 4+71.52	-77.01	40'	TBC
C4	"OSH" 5+88.57	-64.87'	40'	TBC
C5	"OSH" 5+91.68	-53.33	58'	TBC
C6	"OSH" 6+33.15	-1.43'	3'	TBC
C7	"OSH" 4+71.97	-76.46'	28.9'	SWLK
C8	"OSH" 5+62.81	-6.52	3'	TBC
C9	"OSH" 5+17.99	30.10	15'	EOP

GRADING COORDINATES

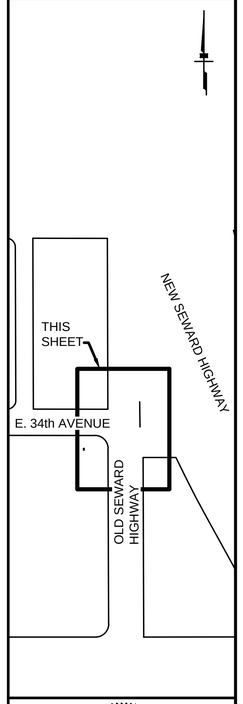
POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE101	FL	"OSH" 5+97.89	+5.09	110.72	PT
NE102	FL	"OSH" 6+23.50	+2.36	110.69	PC
NE103	EOP	"OSH" 6+33.31	+16.65	110.32	±ME
NE104	EOP	"OSH" 5+76.96	+22.65	110.35	±ME

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
SSMH-1	SSMH	"OSH"4+59.29	+19.90'	110.92'	MANHOLE			ADJUST EXISTING

SHEET NO.	TOTAL SHEETS
A: F1	A:F1
STATE	YEAR
ALASKA	2017
PROJECT DESIGNATION	
0001(344)/ Z581970000	

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



STATE OF ALASKA
49TH
BRAD S. DOGGETT
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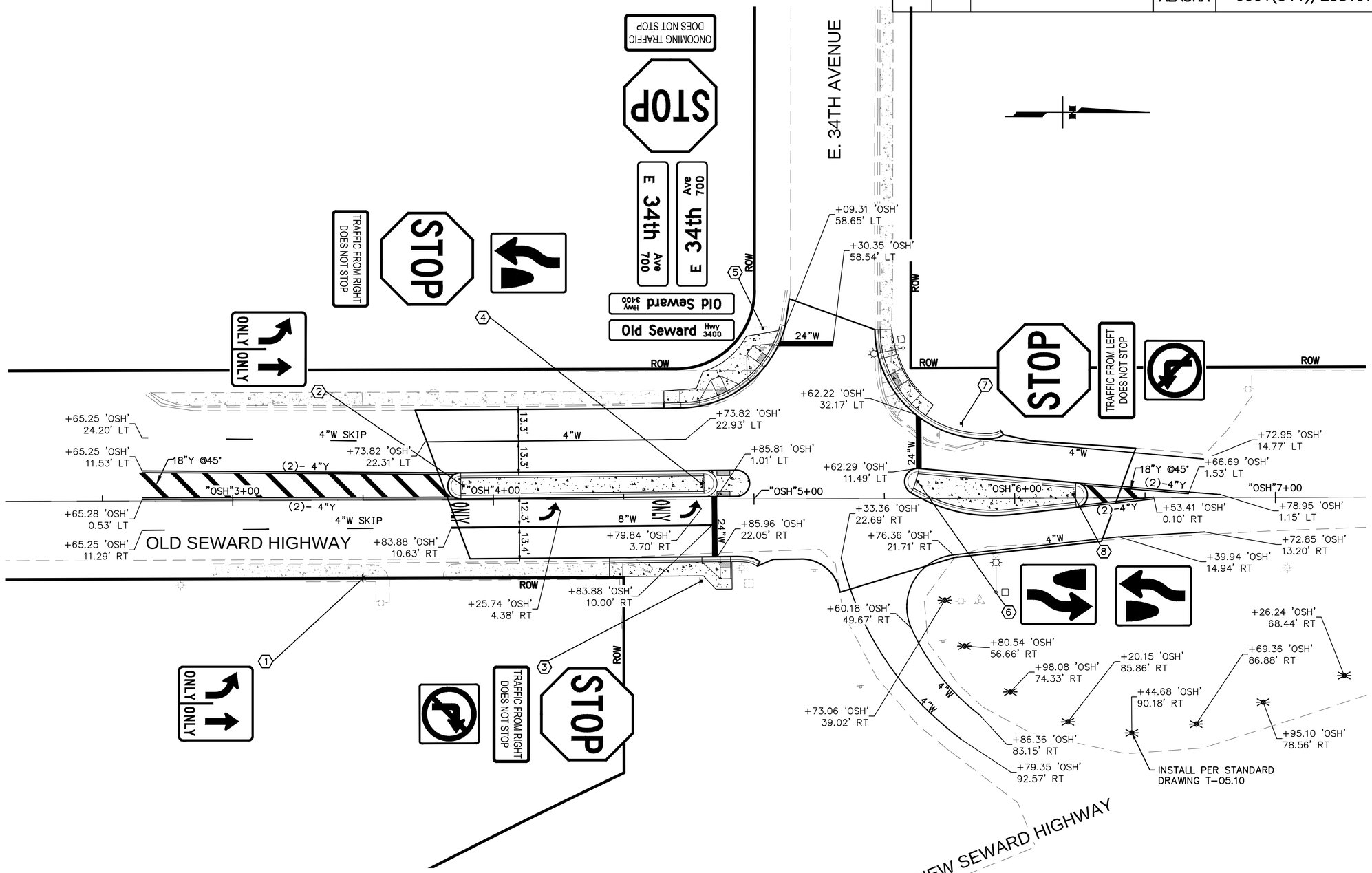
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

OLD SEWARD HWY & E. 34TH AVE GRADING PLAN

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A:H1	A:H3



NOTES:

1. EXISTING MERGE LEFT SIGNAGE AND STRIPING ALONG OLD SEWARD HIGHWAY FROM 36TH AVE TO PAVEMENT CUT TO BE REMOVED BY CONTRACTOR.

2. RELOCATE LIGHT POLES PER SPECIFICATIONS. NEW LIGHT POLE LOCATIONS ARE AS FOLLOWS:

   "OSH" 5+57.39 57.70' LT
   "OSH" 5+92.73 36.06' RT

STATE OF ALASKA
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STATE OF ALASKA
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AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

OLD SEWARD HIGHWAY & E. 34TH AVE SIGNING & STRIPING PLAN

DATE/TIME | 12/23/2016 10:56 AM | LAYOUT | A:H1 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A:H2	A:H3

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED YES	FRAMED NO	REMARKS
A:H1	1	"OSH" 3+50.06	29.82'	RT	R3-108B		30	30	6.25	S	-		X	MOUNT ON EXISTING LIGHT POLE
A:H1	2	"OSH" 3+88.53	5.40'	LT	R3-108B		30	30	6.25	S	1-2.5" X 2.5" PT		X	
A:H1	3	"OSH" 4+79.61	31.43'	RT	R1-1		36	36	9.00	S	1-2.5" X 2.5" PT	X		POST HEIGHT TO BOTTOM OF TOP SIGN IS 8'.
					W4-4AP		36	18	4.50	S		X		
					R3-1		24	24	4.0	S			X	
A:H1	4	"OSH" 4+79.78	5.97'	LT	R1-1		36	36	9.00	S	1-3.0" T	X		
					W4-4AP		36	18	4.50	S		X		
					R4-7		24	30	5.0	N			X	
A:H1	5	"OSH" 5+03.62	65.55'	LT	D3-101		48	8	5.33	E/W	1-3.0" T	X		2 SIGNS BACK TO BACK; POST HEIGHT TO BOTTOM OF TOP SIGN IS 9'
					D3-101		42	12	7.0	N/S		X		2 SIGNS BACK TO BACK
					R1-1		36	36	9.00	W		X		
					W4-4BP		36	18	4.50	W		X		
A:H1	6	"OSH" 5+62.81	6.52'	LT	R4-7		24	30	5.0	S	1-2.5" X 2.5" PT		X	

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

OLD SEWARD HWY & E. 34TH AVE SIGN SUMMARY TABLE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	A:H3	A:H3

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (FT2)	SIGN FACES	POSTS	THICKNESS (in)		REMARKS
							WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
A:H1	7	"OSH" 5+79.57	28.72'	LT	R1-1		36	36	9.00	N	1-3.0" T	X		POST HEIGHT TO BOTTOM OF TOP SIGN IS 8'.
					W4-4AP		36	18	4.50	N		X		
					R3-2		30	30	6.25	N			X	
A:H1	8	"OSH" 6+22.40	1.36'	LT	R4-7		24	30	5.0	N	1-2.5" X 2.5" PT		X	

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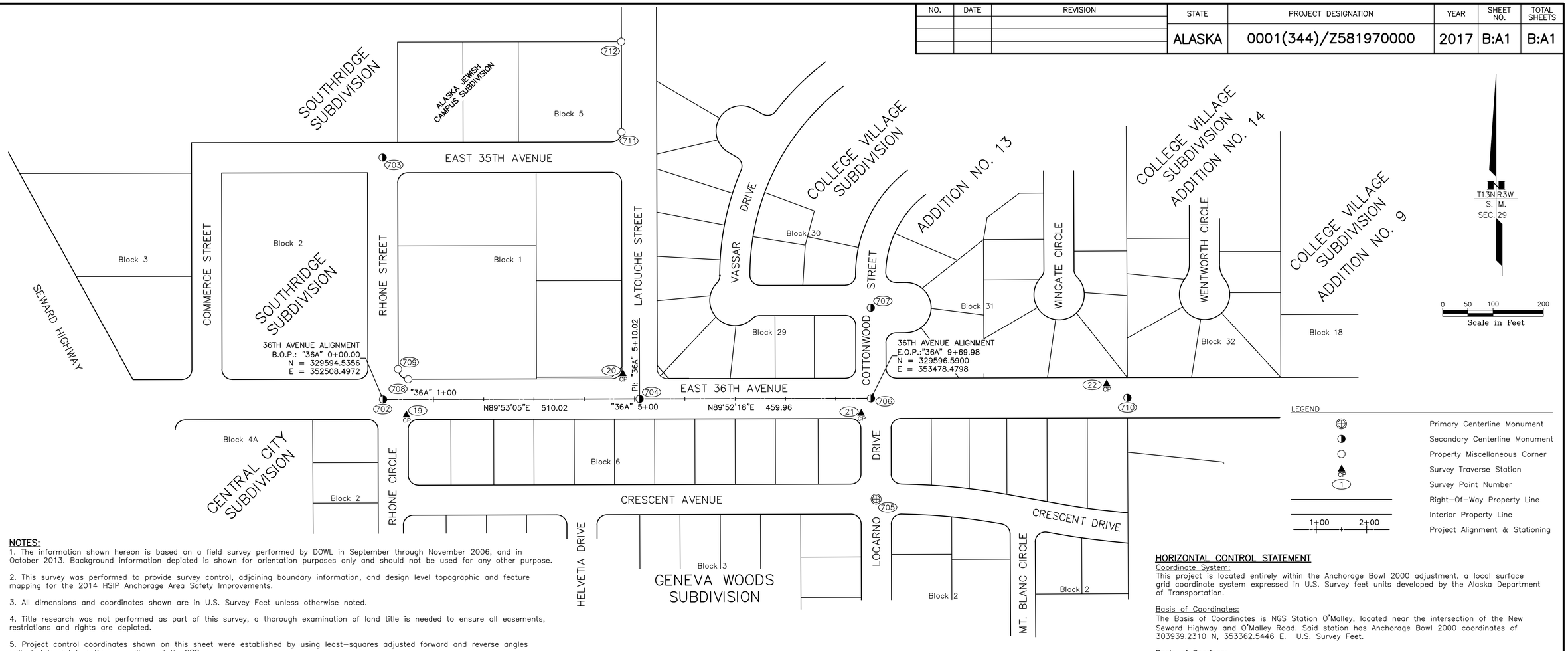
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

OLD SEWARD HWY & E. 34TH AVE SIGN SUMMARY TABLE

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 10:56 AM | LAYOUT | A:H3 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	B:A1	B:A1



LEGEND

- Primary Centerline Monument
- Secondary Centerline Monument
- Property Miscellaneous Corner
- CP Survey Traverse Station
- 1 Survey Point Number
- Right-Of-Way Property Line
- Interior Property Line
- 1+00 2+00 Project Alignment & Stationing

NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the 2014 HSIP Anchorage Area Safety Improvements.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted forward and reverse angles collected by total station as well as static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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. 34.65.0440).

HORIZONTAL AND VERTICAL CONTROL

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
19	"36A" 0+46.04	30.75 RT	61° 11' 16.69210" N	149° 51' 40.67279" W	329563.8813	352554.5961	140.66	111.52	Fd BC/Conc[6714-S]: CP HSIP-19
20	"36A" 4+76.65	49.80 LT	61° 11' 17.48473" N	149° 51' 31.88792" W	329645.2972	352985.0492	142.15	112.83	Fd BC/Conc[6714-S]: CP HSIP-20
21	"36A" 9+50.30	29.30 RT	61° 11' 16.70603" N	149° 51' 22.22555" W	329567.2493	353458.8609	154.03	124.70	Fd BC/Conc[6714-S]: CP HSIP-21
22	N/A	N/A	61° 11' 17.26724" N	149° 51' 12.26801" W	329625.3258	353946.8432	156.04	126.68	Fd BC/Conc[6714-S]: CP HSIP-22

RECOVERED MONUMENTS

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
702	"36A" 0+00	0.00	61° 11' 16.99492" N	149° 51' 41.61188" W	329594.5356	352508.4972	Fd Rbr: SI E 36th & Rhone
703	"36A" 0+00.09	480.22 LT	61° 11' 21.72368" N	149° 51' 41.60892" W	330074.7593	352507.6257	Fd Rbr: SI E 35th & Rhone
709	"36A" 0+29.97	59.95 LT	61° 11' 17.58519" N	149° 51' 41.00035" W	329654.5436	352538.3472	Fd BC/Conc[6714-S]: ROW/PC SW Cor L5B Blk 1 Southridge Subd
708	"36A" 0+50.00	39.92 LT	61° 11' 17.38792" N	149° 51' 40.59172" W	329634.5528	352558.4199	Fd BP/Conc[6714-S]: ROW/PC SW Cor L5B Blk 1 Southridge Subd
711	"36A" 4+74.95	530.17 LT	61° 11' 22.21488" N	149° 51' 31.92130" W	330125.6578	352982.3762	Fd IronPipe: ROW/PC SE Cor L2 Blk 5 Southridge Subd Addition 1
712	"36A" 4+74.96	709.92 LT	61° 11' 23.98491" N	149° 51' 31.92047" W	330305.4113	352982.0289	Fd IronPipe: ROW/PC NE Cor L2 Blk 5 Southridge Subd Addition 1
704	"36A" 5+10.02	0.00	61° 11' 16.99427" N	149° 51' 31.20735" W	329595.5608	353018.5177	Fd Rbr: SI E 36th & LaTouche
707	"36A" 9+69.95	180.11 LT	61° 11' 18.76806" N	149° 51' 21.82476" W	329776.6988	353478.0465	Fd Rbr: SI Cottonwood & unknown cir
706	"36A" 9+69.98	0.00	61° 11' 16.99452" N	149° 51' 21.82401" W	329596.5900	353478.4798	Fd AC: SI E 36th & Cottonwood
705	N/A	N/A	61° 11' 15.02383" N	149° 51' 21.62347" W	329396.4802	353488.7504	Fd AM/Box[LS7338]: SI Crescent & Locarno
710	N/A	N/A	61° 11' 16.99504" N	149° 51' 11.42449" W	329597.7758	353988.2540	Fd Rbr: E 36th

HORIZONTAL CONTROL STATEMENT

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears N 01°43'26.4"E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N usf, +1312517.4904 E usf, and scale using 0.9998910192.

VERTICAL CONTROL STATEMENT

Elevations are based on the Municipality of Anchorage (MOA) Vertical Control Network. The datum is Mean Sea Level (MSL) GAAB 1972 Adjust and the unit of measure is U.S. Survey Feet.

The basis of elevations is MOA Bench Mark "GAAB-70", a brass cap set vertically in a pillar, located approximately 245 feet northwest of the intersection of E. 36th Ave. and LaTouche St. on the North side of the Anchorage Medical & Dental Center, having a value of 113.77 feet above Mean Sea Level.

A Leica DNA10 digital level was used for all leveling on this project. The elevations were computed in Leica Digilev software using a length weighted adjustment. All of the level loops closed within Third-Order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

All elevations on control points and benchmarks need to be field verified before they are used.

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AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

E. 36TH AVE & LATOUCHE ST SURVEY CONTROL

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DESIGNED	AKM
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DRAFTED	AKM

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GRADING COORDINATES

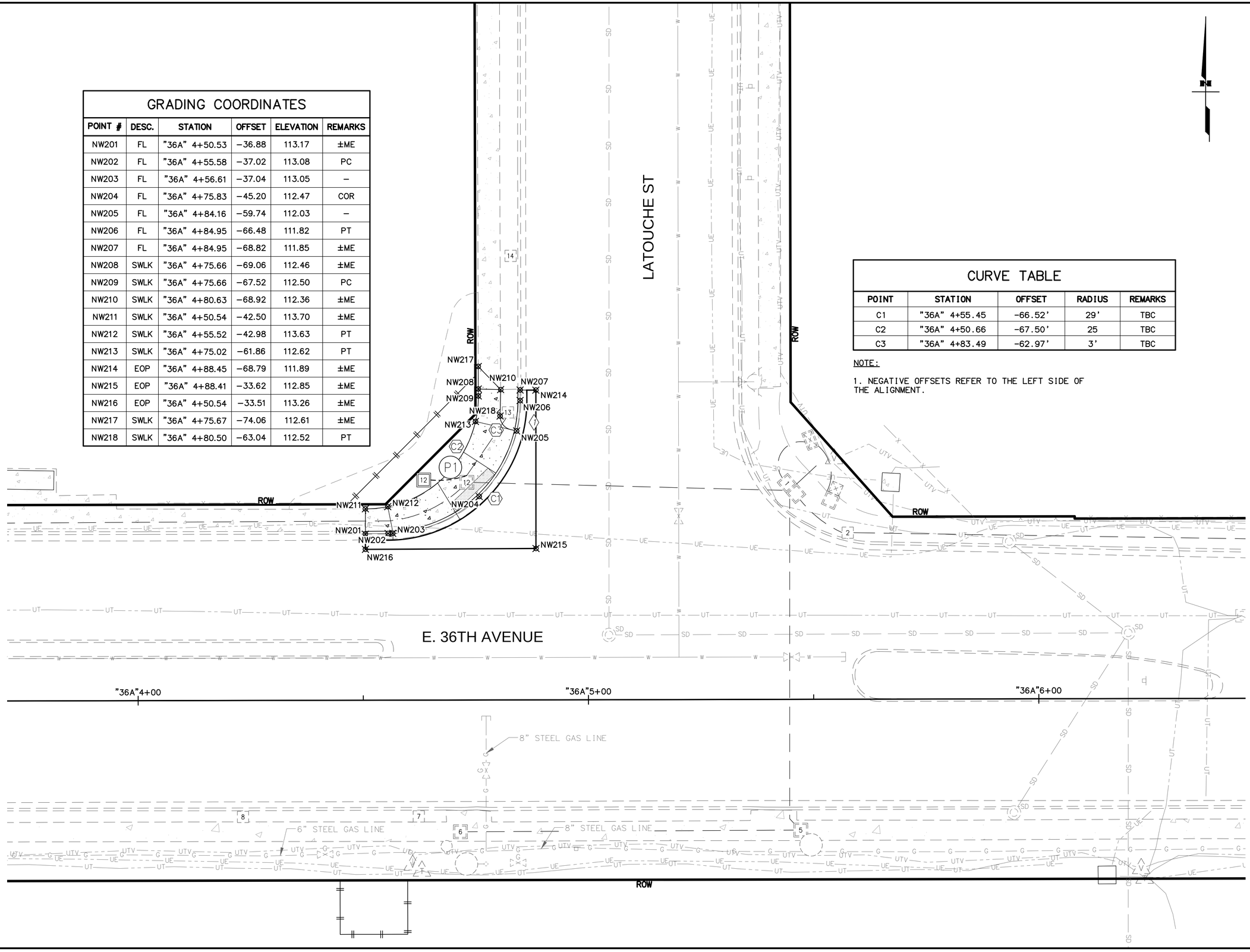
POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW201	FL	"36A" 4+50.53	-36.88	113.17	±ME
NW202	FL	"36A" 4+55.58	-37.02	113.08	PC
NW203	FL	"36A" 4+56.61	-37.04	113.05	–
NW204	FL	"36A" 4+75.83	-45.20	112.47	COR
NW205	FL	"36A" 4+84.16	-59.74	112.03	–
NW206	FL	"36A" 4+84.95	-66.48	111.82	PT
NW207	FL	"36A" 4+84.95	-68.82	111.85	±ME
NW208	SWLK	"36A" 4+75.66	-69.06	112.46	±ME
NW209	SWLK	"36A" 4+75.66	-67.52	112.50	PC
NW210	SWLK	"36A" 4+80.63	-68.92	112.36	±ME
NW211	SWLK	"36A" 4+50.54	-42.50	113.70	±ME
NW212	SWLK	"36A" 4+55.52	-42.98	113.63	PT
NW213	SWLK	"36A" 4+75.02	-61.86	112.62	PT
NW214	EOP	"36A" 4+88.45	-68.79	111.89	±ME
NW215	EOP	"36A" 4+88.41	-33.62	112.85	±ME
NW216	EOP	"36A" 4+50.54	-33.51	113.26	±ME
NW217	SWLK	"36A" 4+75.67	-74.06	112.61	±ME
NW218	SWLK	"36A" 4+80.50	-63.04	112.52	PT

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"36A" 4+55.45	-66.52'	29'	TBC
C2	"36A" 4+50.66	-67.50'	25	TBC
C3	"36A" 4+83.49	-62.97'	3'	TBC

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.



SHEET NO.	TOTAL SHEETS
B: F1	B:F1
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

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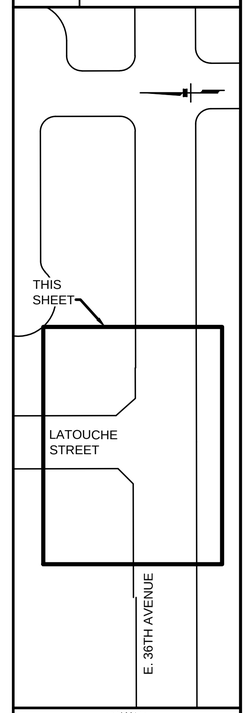

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AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

E. 36TH AVE & LATOUCHE ST GRADING PLAN

NO.	DATE	REVISION

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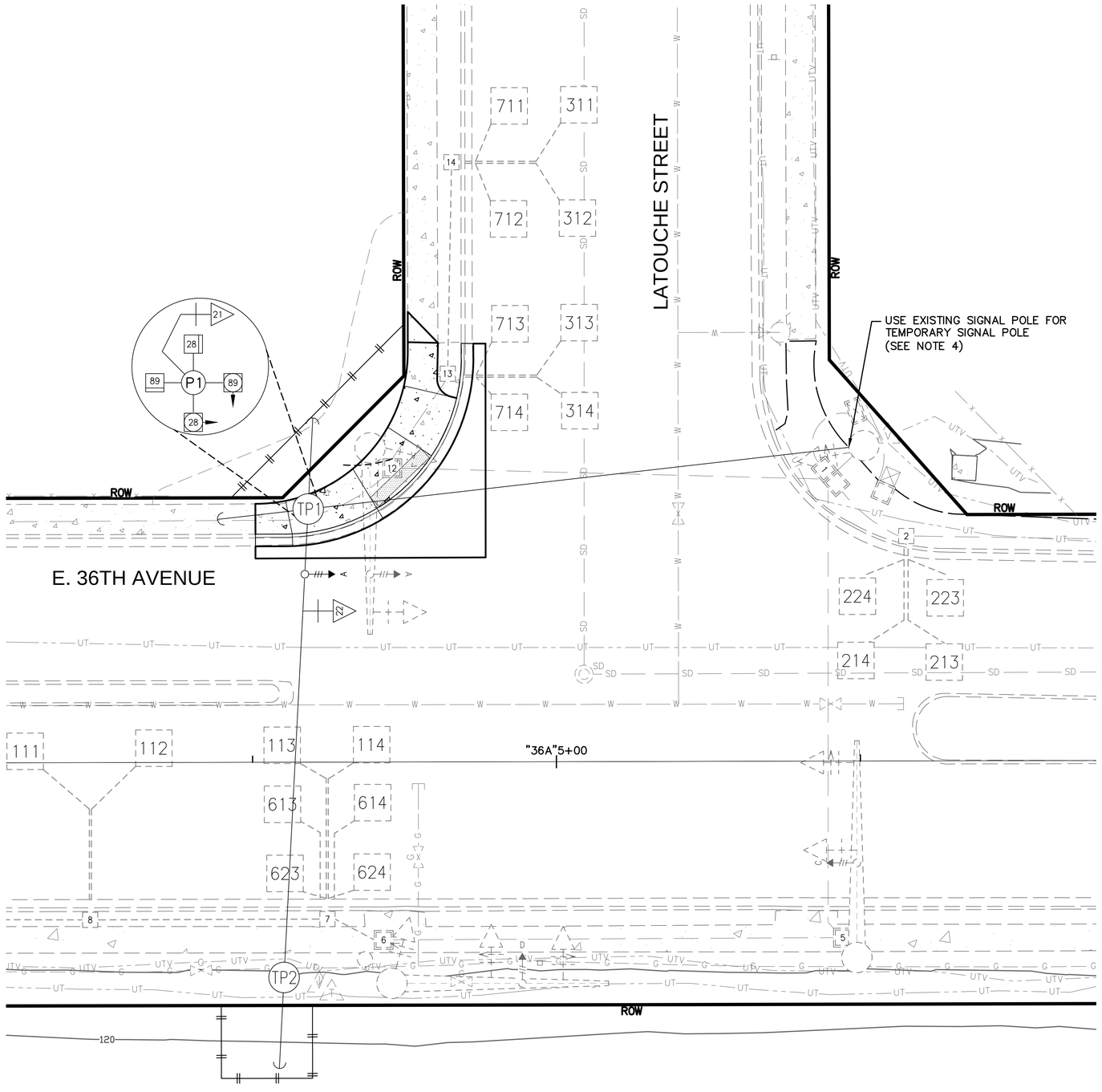
ALASKA	0001(344)/Z581970000	2017	B:H1	B:H4

OPTICOM DETECTOR NOTES:

1. AIM OPTICOM DETECTOR EYE TOWARDS THE CENTER OF THE VEHICLE APPROACH.
2. OPTICOM DETECTORS SHALL BE MOUNTED ON THE MAST ARM AND HAVE DIRECT, UNOBSTRUCTED LINE-OF-SIGHT TO APPROACH VEHICLES.



TEMPORARY SIGNAL NOTES

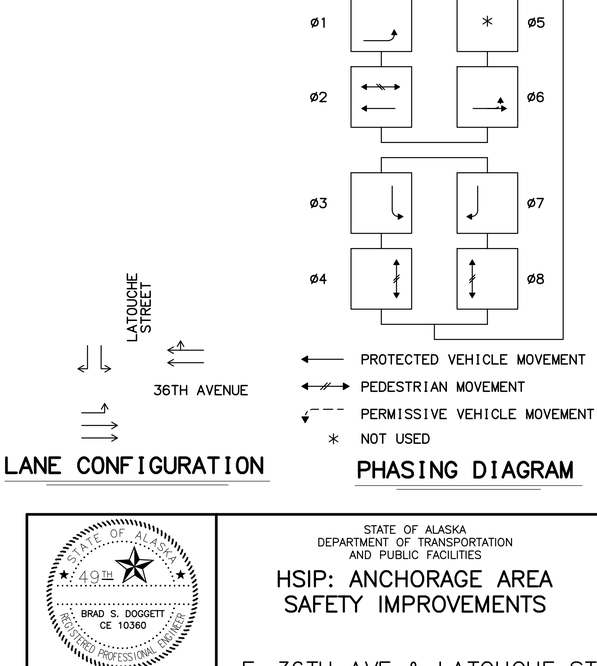
1. SIGNALS AND SIGNS IN TEMPORARY SIGNAL SYSTEM SHALL MATCH EXISTING CONFIGURATION.
2. AIM OPTICOM DETECTOR EYE TOWARDS THE CENTER OF THE VEHICLE APPROACH.
3. OPTICOM DETECTORS SHALL BE MOUNTED ON THE MAST ARM AND HAVE DIRECT, UNOBSTRUCTED LINE-OF-SIGHT TO APPROACH VEHICLES.
4. CONTRACTOR TO USE EXISTING SIGNAL POLE FOR TEMPORARY SIGNAL SYSTEM POLE. CONTRACTOR WILL NEED TO SCHEDULE WITH MOA SIGNAL ELECTRONICS FOR THE TEMPORARY DEACTIVATION OF THE SIGNAL EQUIPMENT LOCATED ON THE POLE. PULL SIGNAL AND LIGHTING CABLES OUT OF POLE, BACK TO THE ADJACENT TYPE 3 J-BOX NUMBER 1. REMOVE EXISTING GROUT FROM POLE'S SLIP BASE PLATE. RAISE POLE AND REMOVE THE KEEPER PLATE AND WASHERS FROM BETWEEN THE SLIP BASE AND THE POLE BASE PLATE. REINSTALL POLE (INCLUDING LIGHTING FIXTURE) ON SLIP BASE PLATE. RE-TERMINATE SIGNAL AND LIGHTING CABLES FOR REACTIVATION. PROVIDE TEMPORARY MATERIAL TO SEAL OFF GAP BETWEEN TOP OF THE CONCRETE FOUNDATION AND BOTTOM OF THE SLIP BASE PLATE.

   WHEN TEMPORARY SIGNAL SYSTEM IS BEING REMOVED. CONTRACTOR WILL NEED TO SCHEDULE WITH MOA SIGNAL ELECTRONICS FOR THE TEMPORARY DEACTIVATION OF THE SIGNAL EQUIPMENT LOCATED ON THE POLE. PULL SIGNAL AND LIGHTING CABLES OUT OF POLE, BACK TO ADJACENT TYPE 3 J-BOX NUMBER 1. RAISE POLE AND RE-INSTALL THE KEEPER PLATE AND WASHERS THAT WERE REMOVED FROM BETWEEN THE SLIP BASE AND THE POLE BASE PLATE. REINSTALL POLE (INCLUDING LIGHTING FIXTURE) ON SLIP BASE PLATE. RE-TERMINATE SIGNAL AND LIGHTING CABLES FOR REACTIVATION. CONTRACTOR SHALL GROUT GAP BETWEEN TOP OF THE CONCRETE FOUNDATION AND BOTTOM OF THE SLIP BASE PLATE. TIGHTEN BASE BOLTS TO 150 FT. LBS. SEE NOTE 5 FOR GROUTING REQUIREMENTS.
5. GROUT SHALL CONFORM TO THE FOLLOWING:

   THE CONTRACTOR SHALL USE A PREMIXED GROUT HAVING A MINIMUM TWENTY-EIGHT (28) DAY COMPRESSIVE STRENGTH OF FOUR THOUSAND POUNDS PER SQUARE INCH (4000 PSI). PROPRIETARY GROUT MIXTURES SHALL BE UTILIZED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.

   CONCRETE AREAS TO BE IN CONTACT WITH THE GROUT SHALL BE CLEANED OF ALL LOOSE AND FOREIGN MATTER THAT WOULD IN ANY WAY PREVENT BOND BETWEEN THE MORTAR AND THE CONCRETE SURFACES.

   CONTRACTOR SHALL NOT GROUT UNLESS AMBIENT TEMPERATURE WILL REMAIN A MINIMUM TEMPERATURE OF FORTY-FIVE DEGREES FAHRENHEIT (45 F) FOR THREE DAYS AFTER GROUTING. ALL IMPROPERLY CURED OR OTHERWISE DEFECTIVE GROUT SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE. NO LOAD SHALL BE PLACED ON THE GROUT UNTIL IT HAS SET FOR AT LEAST NINETY-SIX (96) HOURS.



LANE CONFIGURATION

PHASING DIAGRAM

STATE OF ALASKA
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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

E. 36TH AVE & LATOUCHE ST TEMPORARY SIGNAL PLAN

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DATE/TIME 12/23/2016 1:21 PM LAYOUT B:H1 DESIGNED AOA CHECKED AP/SRT DRAFTED AOA

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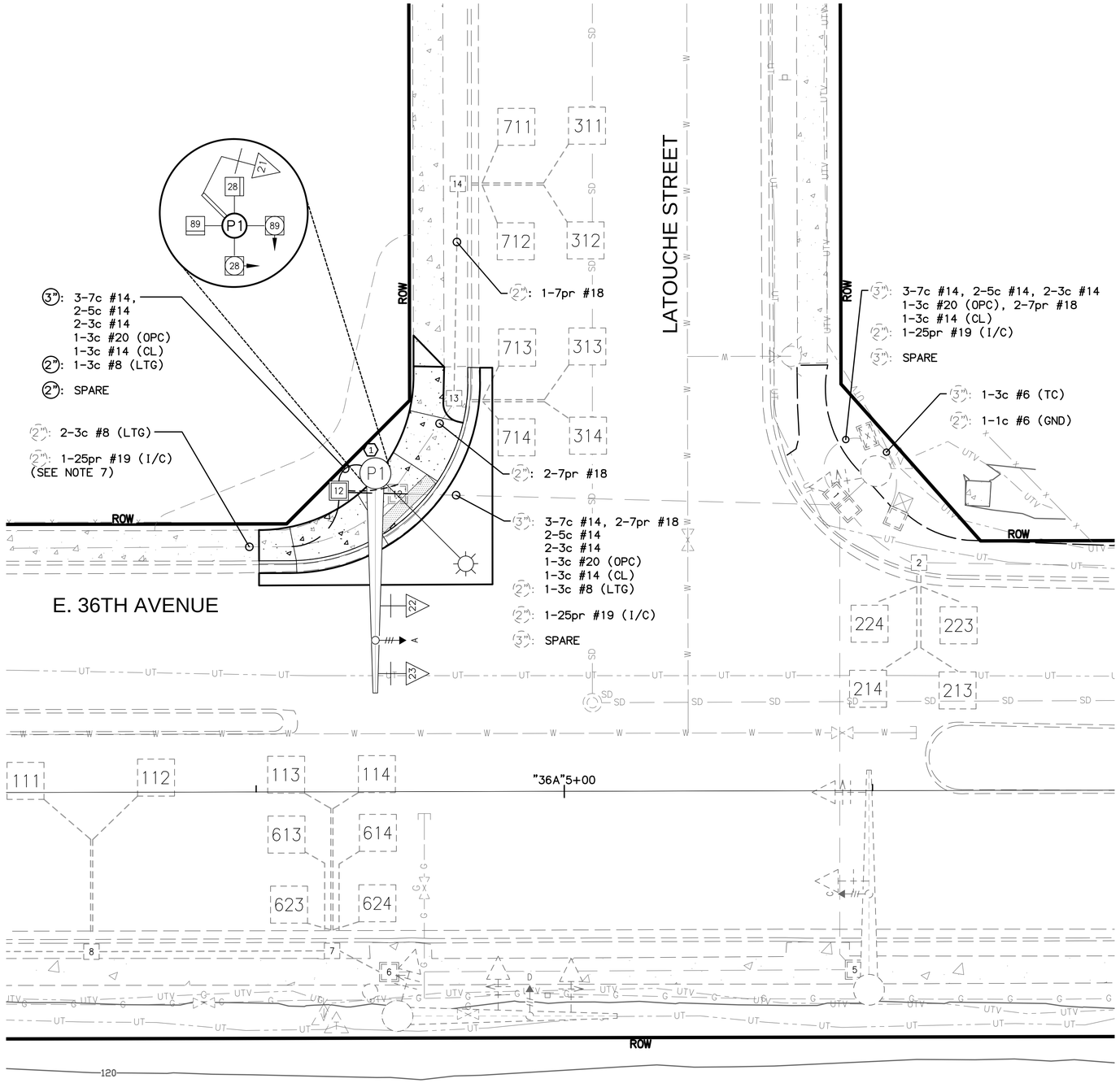
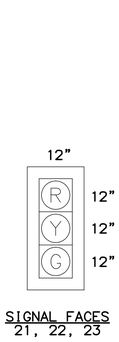


NOTES

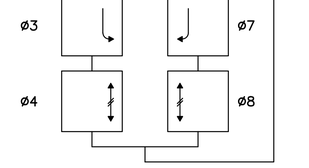
1. EXISTING SIGNAL INFORMATION WAS OBTAINED FROM AS-BUILTS. CONTRACTOR SHALL VERIFY CONDITIONS PRIOR TO BEGINNING WORK.
2. REMOVE EXISTING TRAFFIC CABLES BACK TO THE TRAFFIC CONTROLLER CABINET FROM EXISTING POLE 1. SALVAGE SIGNAL POLE AND ALL HARDWARE. DELIVER SIGNAL POLE TO MOA TRAFFIC SIGNAL POLE YARD AT 3RD AVE. & ORCA ST. AND ALL HARDWARE TO MOA SIGNAL ELECTRONICS AT 5923 ROWAN ST. IN ANCHORAGE. REMOVE AND DISPOSE OF OLD FOUNDATIONS. REMOVE ABANDONED CONDUIT BETWEEN OLD POLE 1 AND EXISTING J-BOX 12.
3. INSTALL NEW SIGNAL POLE 1 WITH A NEW FOUNDATION AS SHOWN IN THE FOUNDATION SCHEDULE. RE-WORK PATHWAY OR SIDEWALK INTO AND FLUSH AROUND POLE FOUNDATIONS.
4. RUN NEW CABLES FROM TRAFFIC CONTROLLER TO NEW EQUIPMENT USING EXISTING CONDUIT. REPLACE EXISTING J-BOX 12 AS SHOWN ON PLANS.
5. INSTALL NEW SIGNAL EQUIPMENT AND SIGNAGE AS SHOWN AND RETURN SIGNAL TO FULL OPERATION.
6. ALL WORK SHOWN ON THIS SHEET IS TO BE PAID UNDER 660(17A). ALL INCIDENTAL ITEMS, INCLUDING BUT NOT LIMITED TO: ASPHALT, CEMENT, CURB, ASPHALT PATHWAY, SAWCUTTING, TOPSOIL, SEEDING, STRIPING, OR OTHER ITEMS NOT COVERED BY A SEPARATE PAY ITEM ARE SUBSIDIARY TO THE 660(17A) WORK.
7. REPLACE LIGHTING CABLE WEST OF J-BOX 12 TO THE NEXT ELECTROLIER TO THE WEST AND SPLICE TO THE FUSED SPLICE DISCONNECT. INSTALL NEW INTERCONNECT CABLE BETWEEN CONTROLLER CABINET AND EXISTING TYPE II JUNCTION BOX ON THE NORTHWEST QUADRANT OF 36TH AVENUE AND RHONE CIRCLE.
8. REPLACE PEDESTRIAN CROSSING MARKINGS IN SAWCUT AREA.



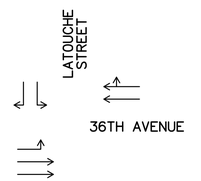
SIGNAL FACES
21, 22, 23

SIGNAL FACES
28, 89

SIGNAL HEAD CONFIGURATIONS



PHASING DIAGRAM



LANE CONFIGURATION

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

E. 36TH AVE & LATOUCHE ST SIGNAL SYSTEMS PLAN

FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME 12/23/2016 11:07 AM | LAYOUT B:H2 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

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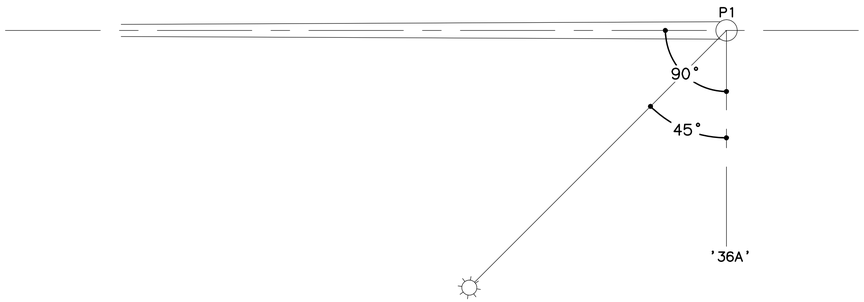
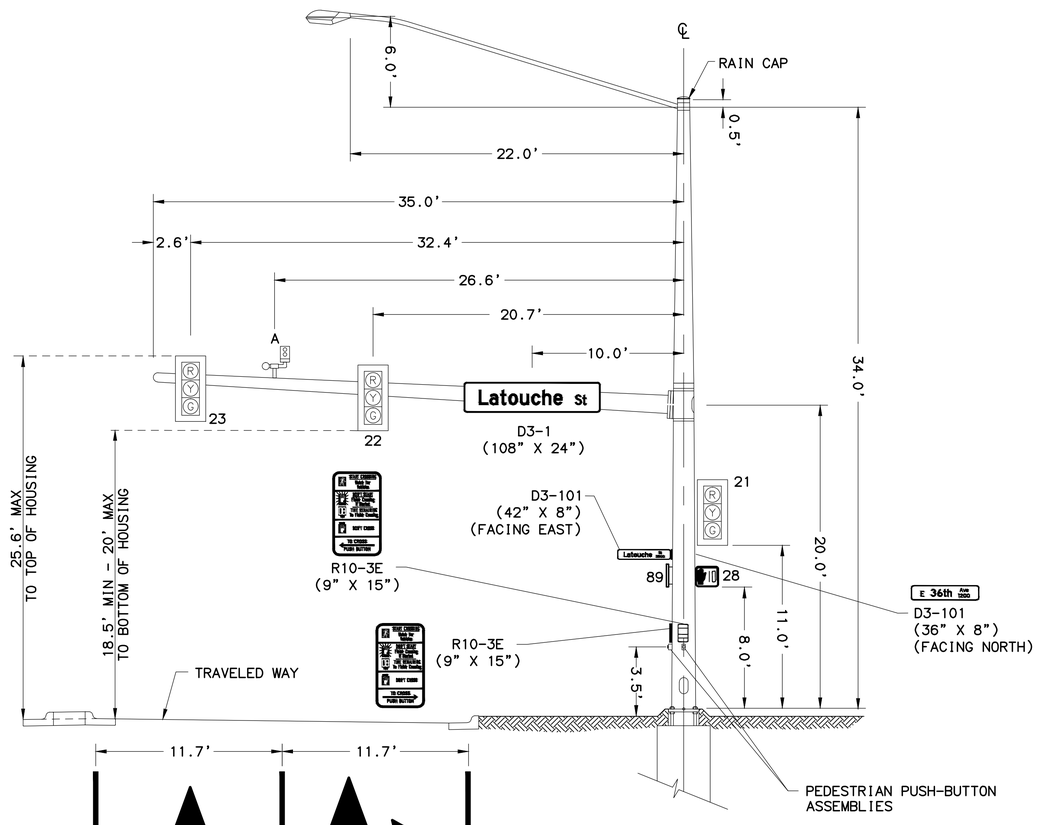
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	B:H3	B:H4



SIGNAL POLE No. 1 RADIAL INDEX



PROPOSED TRAFFIC SIGNAL POLE NO. 1

LOOKING WEST

OPTICOM DETECTOR SCHEDULE				
LOCATION	DETECTOR ID	PHASE CALL	FACING DIRECTION	REMARKS
SIGNAL POLE 1 MASTARM	A	2	EAST	INSTALL DETECTOR MODEL 721

J-BOX SCHEDULE			
DESC	STATION ALIGNMENT	OFFSET	REMARKS
12	"36A" 4+63.52	48.87' LT	NEW

J-BOX SALVAGE SCHEDULE		
J-BOX	STATION ALIGNMENT	OFFSET
12	"36A" 4+73.08	48.31' LT

FOUNDATION SCHEDULE			
DESC	STATION ALIGNMENT	OFFSET	REMARKS
P1	"36A" 4+69.43	51.68' LT	EXISTING/TO BE REPLACED WITH 42" DIAMETER, 10' DEEP CIDH

POLE SALVAGE SCHEDULE		
POLE	STATION ALIGNMENT	OFFSET
1	"36A" 4+69.43	51.68' LT

LUMINAIRE SCHEDULE	
MANUFACTURER	GE OR APPROVED EQUAL
MODEL	M-400 CUTOFF OR APPROVED EQUAL
WATTAGE	400
LIGHT SOURCE	HIGH PRESSURE SODIUM
VOLTAGE	240
INITIAL LUMENS	38,416
BALLAST TYPE	MAG-REG
PE CONTROL	NONE
LENS TYPE	FLAT GLASS
COLOR TEMPERATURE	2100
COLOR RENDITION INDEX	22
DISTRIBUTION TYPE	M-C-2
UL LISTED	YES

INTERSECTION ILLUMINATION PERFORMANCE CRITERIA	
PEDESTRIAN ACTIVITY	MEDIUM
INTERSECTION FUNCTIONAL CLASSIFICATION	MAJOR/MAJOR
MINIMUM ILLUMINANCE	2.6 fc
MAXIMUM UNIFORMITY (AVG/MIN)	3.0:1
DESIGN ILLUMINANCE	2.6 fc
DESIGN UNIFORMITY (AVG/MIN)	2.9:1

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

E. 36TH AVE & LATOUCHE ST POLE ELEVATIONS

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	B:H4	B:H4

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN)		AREA (FT2)	SIGN FACES	POSTS	THICKNESS (in)		REMARKS
							WIDTH	HEIGHT			NO., SIZE, & TYPE	YES	NO	
BH3	1	"36A" 4+69.43	51.68'	LT	D3-101	Latouche St 3500	42	8	4.67	E/W	SIGNAL POLE NO. 1	X		2 SIGNS BACK TO BACK
					D3-101	E 36th Ave 1200	36	8	4.00	N/S			X	2 SIGNS BACK TO BACK
					D3-1	Latouche St	108	24	18.00	E		X		
					R10-3E		9	15	0.94	E			X	
					R10-3E		9	15	0.94	S			X	

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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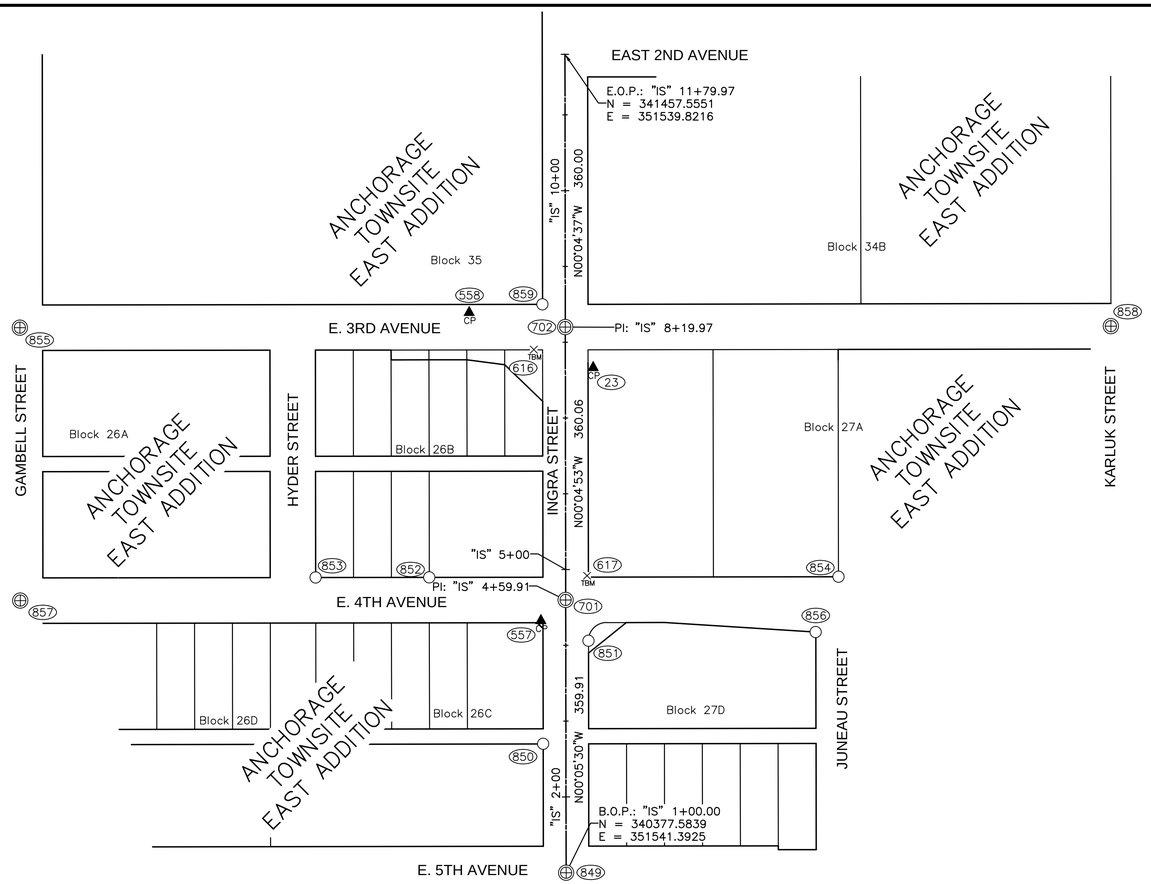
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

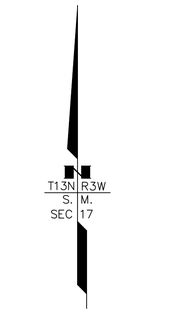
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

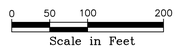
E. 36TH AVE & LATOUCHE ST SIGN SUMMARY TABLE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:A1	C:A1







LEGEND

- Property Miscellaneous Corner
- Primary Centerline Monument
- CP — Control Point
- TBM — Temporary Bench Mark
- 1 — Survey Point Number
- Right-of-Way Property Line
- Interior Property Line
- 1+00 2+00 — Project Alignment & Stationing

NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the 2014 HSIP Anchorage Area Safety Improvements.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted forward and reverse angles collected by total station as well as static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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. 34.65.0440).

HORIZONTAL CONTROL STATEMENT

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears N 01°43'26.4"E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N usf, +1312517.4904 E usf, and scale using 0.9998910192.

VERTICAL CONTROL STATEMENT

Elevations are based on the Municipality of Anchorage (MOA) Vertical Control Network. The datum is Mean Sea Level (MSL) GAAB 1972 Adjust and the unit of measure is U.S. Survey Feet.

The basis of elevations is MOA Bench Mark "CB-4C", a brass cap located in the southeast quadrant of the intersection of 12th Avenue and L Street, having a value of 90.88 feet above Mean Sea Level.

A Leica DNA10 digital level was used for all leveling on this project. The elevations were computed in Leica Digilev software using a length weighted adjustment. All of the level loops closed within Third-Order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

All elevations on control points and benchmarks need to be field verified before they are used.

HORIZONTAL AND VERTICAL CONTROL

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
557	"IS" 4+32.80	32.85 LT	61° 13' 06.47200" N	149° 52' 01.56103" W	340710.3354	351508.0102	145.24	116.58	Fd BC[LS6912]: TS SW1
23	"IS" 7+66.66	36.56 RT	61° 13' 09.75909" N	149° 52' 00.13958" W	341044.2949	351576.9405	136.70	108.04	Fd AC[6714-S]: HSIP-23
558	"IS" 8+39.47	127.02 LT	61° 13' 10.47715" N	149° 52' 03.47893" W	341116.8846	351413.2636	140.59	111.94	Fd YPC[AKDOT]: CP

RECOVERED MONUMENTS

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
849	"IS" 1+00.00	0.00	61° 13' 03.19475" N	149° 52' 00.89320" W	340377.5839	351541.3925	Fd AM/Bx: SI 5th Ave/Ingra St
850	"IS" 2+70.06	30.00 LT	61° 13' 04.86941" N	149° 52' 01.50421" W	340547.5914	351511.1239	Fd Rbr: ROW/NE Cor L7B Blk 26C Anchorage Townsite East Addition Subd
851	"IS" 4+05.99	30.07 RT	61° 13' 06.20773" N	149° 52' 00.27653" W	340683.6260	351570.9691	Fd Rbr/YPC: ROW/PC NW Cor L1A Blk 27D Anchorage Townsite East Addition Subd
856	"IS" 4+16.96	329.94 RT	61° 13' 06.31436" N	149° 51' 54.15302" W	340695.0694	351870.8270	Fd Rbr/YPC[LS7625]: ROW/NE Cor L1A Blk 27D Anchorage Townsite East Addition Subd
701	"IS" 4+59.91	0.00	61° 13' 06.73875" N	149° 52' 00.88999" W	340737.4917	351540.8172	Fd AM/Bx[LS5122]: SI 4th Ave/Ingra St
857	"IS" 4+60.00	719.83 LT	61° 13' 06.74379" N	149° 52' 15.58879" W	340736.5609	350820.9912	Fd Copperweld/Bx: SI 4th Ave/Gambell St
853	"IS" 4+89.92	329.89 LT	61° 13' 07.03625" N	149° 52' 07.62592" W	340767.0373	351210.8867	Fd AC[LS7625]: ROW/SW Cor L7 Blk 26B Anchorage Townsite East Addition Subd
852	"IS" 4+89.95	179.94 LT	61° 13' 07.03564" N	149° 52' 04.56407" W	340767.2775	351360.8304	Fd Rbr/YPC: ROW/SW Cor L10A Blk 26B Anchorage Townsite East Addition Subd
854	"IS" 4+90.01	360.14 RT	61° 13' 07.03295" N	149° 51' 53.53563" W	340768.1084	351900.9106	Fd Rbr/YPC[LS6091]: ROW/SE Cor L3 Blk 27A Anchorage Townsite East Addition Subd
702	"IS" 8+19.97	0.00	61° 13' 10.28428" N	149° 52' 00.88548" W	341097.5554	351540.3051	Fd AM/Bx[LS5122]: SI 3rd Ave/Ingra St
858	"IS" 8+20.13	720.15 RT	61° 13' 10.28072" N	149° 51' 46.17966" W	341098.6832	352260.4517	Fd AC/Bx[6054-S]: SI 3rd Ave/Karluk St
855	"IS" 8+20.14	719.81 LT	61° 13' 10.29060" N	149° 52' 15.58444" W	341096.7542	350820.4933	Fd AC/Bx[8504-S]: SI 3rd Ave/Gambell St
859	"IS" 8+49.96	30.12 LT	61° 13' 10.57977" N	149° 52' 01.50015" W	341127.5026	351510.1434	Fd AC[LS7835]: ROW/SE Cor Blk 35 Anchorage Townsite East Addition Subd

VERTICAL CONTROL

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING		
617	"IS" 4+91.84	28.23 RT	61° 13' 07.05" N	149° 52' 00.31" W	340769	351569	116.19	Set X on Bolt: Scribed X on NE bolt of light pole base/NE cor of Ingra St/4th Ave
616	"IS" 7+90.33	41.60 LT	61° 13' 09.99" N	149° 52' 01.74" W	341068	351499	109.07	Set X on Bolt: Scribed X on NE bolt of light polt base/SW cor of Ingra St/3rd Ave

STATE OF ALASKA · 49TH · "A. WILLIAM STOLL" · LS 12041 · REGISTERED PROFESSIONAL LAND SURVEYOR

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST FROM E. 3RD TO E. 4TH AVE

SURVEY CONTROL

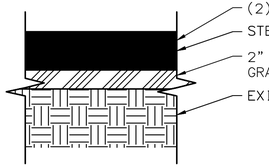
FILE P:\PROJECTS\D61519\D61519.03-INGRA STREET FROM 3RD TO 4TH\CAD\SURVEY\SCS\MC14-CS-VC_HSIP2014 INGRA_SCS.DWG | DATE/TIME 12/23/2016 11:07 AM | LAYOUT C:A1 | DESIGNED | CHECKED AWS | DRAFTED | DOWL

NO.	DATE	REVISION

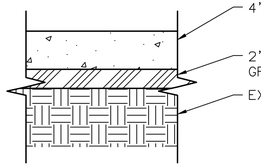
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:B1	C:B2

GENERAL NOTES:

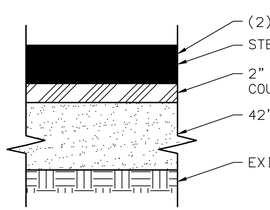
1. FOR CURB AND GUTTER DETAIL SEE SHEET E1.



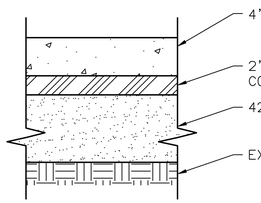
ROADWAY STRUCTURAL DETAIL "A"



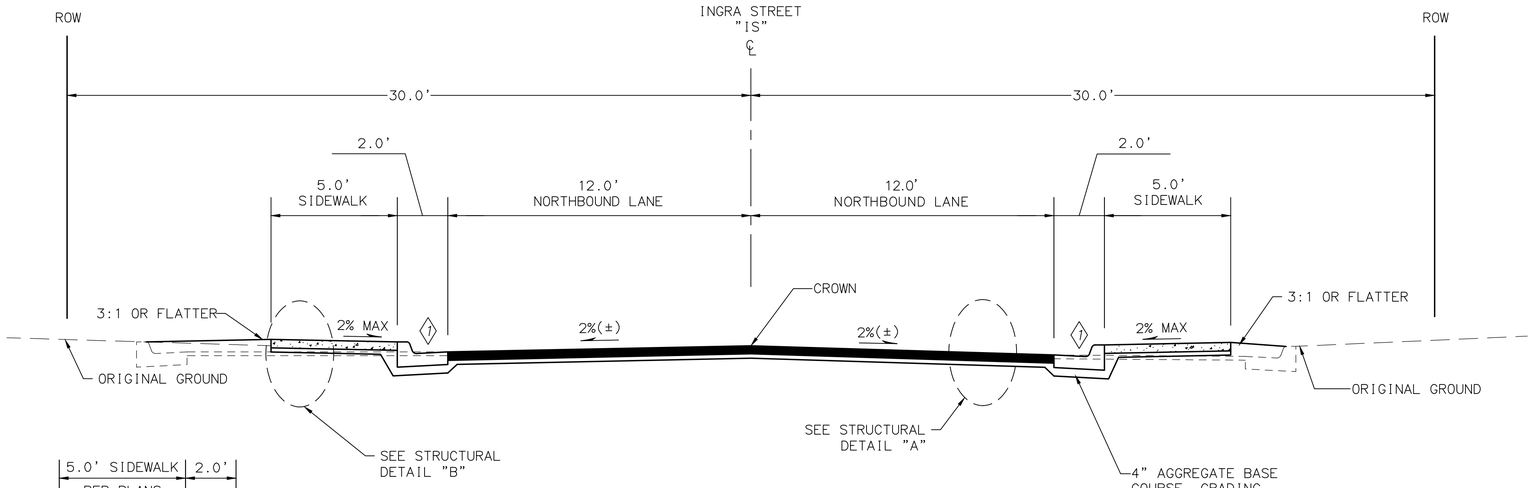
SIDEWALK STRUCTURAL DETAIL "B"



NEW ROADWAY STRUCTURAL DETAIL "C"

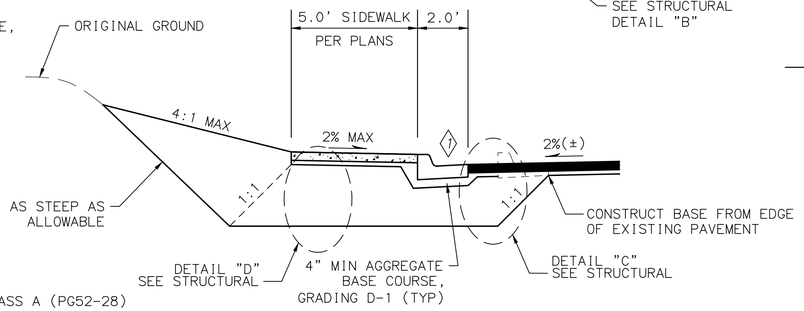


NEW ROADWAY WITH SIDEWALK STRUCTURAL DETAIL "D"



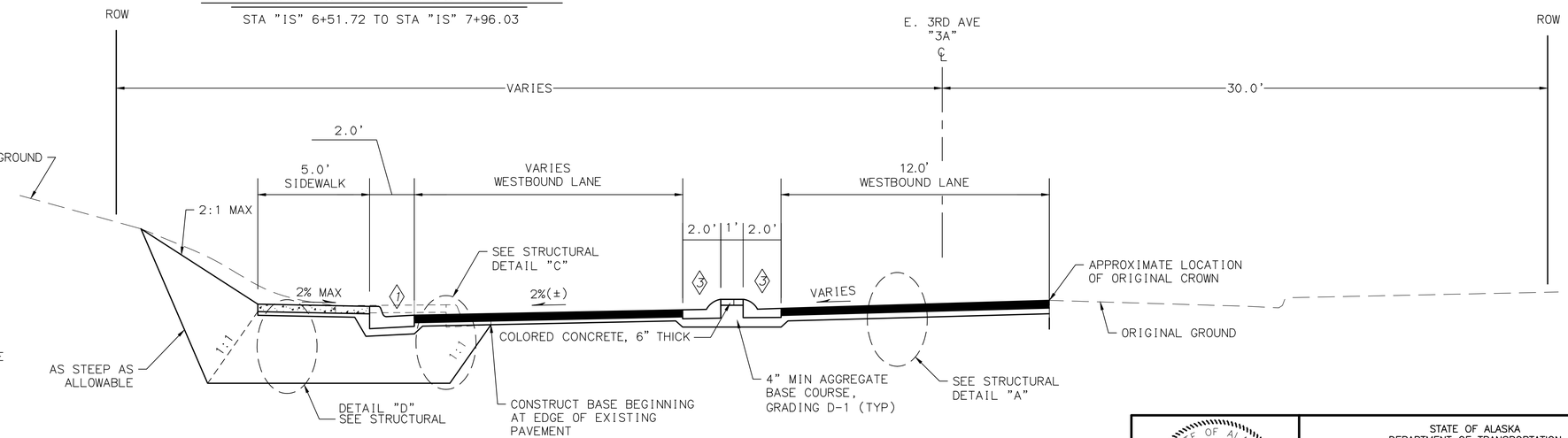
INGRA STREET

STA "IS" 5+01.16 TO STA "IS" 7+16.79



INGRA STREET WIDENING

STA "IS" 6+51.72 TO STA "IS" 7+96.03



E. 3RD AVENUE

STA "3A" 17+65.14 TO STA "3A" 18+15.14

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST FROM E. 3RD TO E. 4TH AVE TYPICAL SECTIONS

STATE OF ALASKA 49TH BRAD S. DOGGETT CE 10360 REGISTERED PROFESSIONAL ENGINEER

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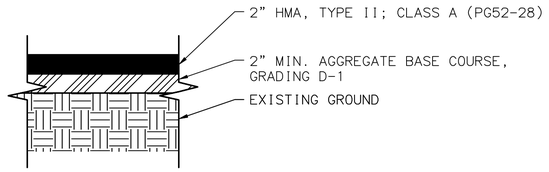
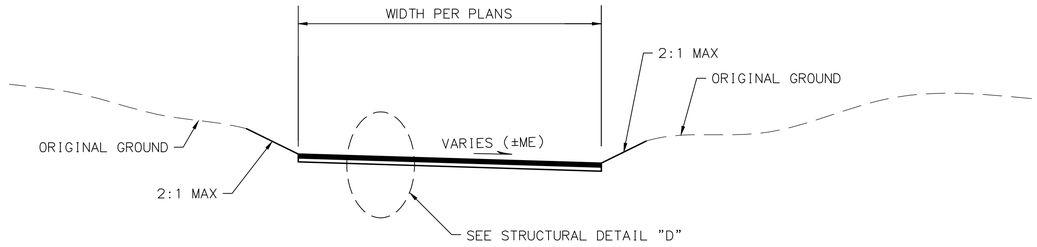
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C: B2	C: B2



PRIVATE DRIVEWAY
STRUCTURAL DETAIL "D"



PRIVATE DRIVEWAY

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

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST FROM E. 3RD TO E. 4TH AVE DRIVEWAY TYPICAL SECTIONS

DATE/TIME | 12/23/2016 11:08 AM | LAYOUT | C.B2 | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

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GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW301	FL	"IS" 4+81.82	−44.42	116.16	±ME
NW302	SWLK	"IS" 4+87.57	−44.43	116.74	±ME
NW303	SWLK	"IS" 4+87.59	−33.97	116.14	PT
NW304	FL	"IS" 4+81.84	−34.42	116.01	PT
NW305	FL	"IS" 4+82.04	−31.08	115.96	COR
NW306	FL	"IS" 4+85.41	−22.36	115.81	–
NW307	FL	"IS" 4+89.09	−18.24	115.72	GB
NW308	FL	"IS" 4+97.43	−13.90	115.57	COR
NW309	SWLK	"IS" 5+02.59	−19.00	115.71	PC
NW310	SWLK	"IS" 5+07.58	−19.00	115.98	–
NW311	FL	"IS" 5+07.58	−13.25	115.40	–
NW312	FL	"IS" 5+02.59	−13.25	115.48	PC, GB

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW313	EOP	"IS" 4+80.56	−44.42	116.23	±ME
NW314	CROWN	"IS" 4+60.99	+0.01	116.22	PROFILE GB
NW315	CROWN	"IS" 4+80.56	0.00	115.75	PROFILE GB
NW316	CROWN	"IS" 5+01.16	0.00	115.45	BVC
NW317	CROWN	"IS" 5+49.88	+0.01	114.34	PVI − K = 29
NW318	CROWN	"IS" 4+60.92	−50.42	116.51	±ME
NW319	FL	"IS" 5+01.16	−13.30	115.50	BVC
NW320	FL	"IS" 5+49.88	−13.25	114.37	PVI

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE301	SWLK	"IS" 5+07.23	+19.00	115.82	–
NE302	FL	"IS" 5+05.05	+13.25	115.20	–
NE303	FL	"IS" 4+97.04	+13.25	115.28	COR
NE304	SWLK	"IS" 5+01.22	+25.51	115.93	–
NE305	SWLK	"IS" 4+93.93	+25.50	115.96	–
NE306	FL	"IS" 4+92.54	+13.25	115.31	PC
NE307	FL	"IS" 4+88.82	+13.92	115.34	–
NE308	FL	"IS" 4+84.34	+17.05	115.35	GB
NE309	FL	"IS" 4+81.79	+23.98	115.34	PT
NE310	FL	"IS" 4+81.79	+28.52	115.32	±ME
NE311	EOP	"IS" 4+80.48	+69.14	114.96	±ME
NE312	CROWN	"IS" 4+61.29	+76.10	115.12	±ME
NE313	FL	"IS" 5+01.16	+13.25	115.24	BVC
NE314	FL	"IS" 5+49.88	+13.25	114.17	PVI

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"IS" 3+75.50	+84.61'	60'	TBC
C2	"IS" 4+17.22	-36.06'	20'	TBC
C3	"IS" 5+02.59	-34.00'	20'	TBC
C4	"IS" 4+92.54	+24.00'	10'	TBC

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW301	FL	"IS" 3+75.67	−23.77	115.77	±ME
SW302	FL	"IS" 3+88.64	−23.75	115.48	B FACING
SW303	SWLK	"IS" 3+89.58	−29.50	116.05	–
SW304	SWLK	"IS" 4+10.18	−22.60	116.15	PC
SW305	FL	"IS" 4+10.61	−16.40	115.61	PC, E FACING
SW306	FL	"IS" 4+21.09	−15.68	115.69	COR
SW307	FL	"IS" 4+29.69	−19.48	115.75	GB
SW308	FL	"IS" 4+33.63	−23.36	115.82	PC
SW309	FL	"IS" 4+37.56	−31.95	115.95	COR
SW310	FL	"IS" 4+37.98	−43.04	116.09	PT
SW311	EOP	"IS" 4+39.20	−57.05	116.33	±ME
SW312	EOP	"IS" 3+59.23	−22.59	115.92	±ME
SW313	SWLK	"IS" 3+75.68	−29.52	116.24	±ME
SW314	FL	"IS" 4+37.97	−36.03	116.00	PC
SW315	SWLK	"IS" 4+32.23	−43.05	116.61	–
SW316	CROWN	"IS" 3+67.42	+0.04	115.76	±ME
SW317	CROWN	"IS" 4+17.22	0.00	116.10	PROFILE GB
SW318	CROWN	"IS" 4+38.71	+0.01	116.07	PROFILE GB

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE301	FL	"IS" 4+36.25	+84.71	114.66	±ME
SE302	FL	"IS" 4+18.52	+41.72	114.98	COR
SE303	SWLK	"IS" 4+19.84	+52.08	115.51	–
SE304	SWLK	"IS" 4+12.98	+52.08	115.60	–
SE305	SWLK	"IS" 4+07.81	+46.93	115.60	–
SE306	SWLK	"IS" 4+08.13	+33.37	115.07	–
SE307	FL	"IS" 3+75.60	+23.86	115.30	±ME
SE308	FL	"IS" 3+94.36	+26.86	115.17	PT
SE309	FL	"IS" 4+11.28	+35.52	115.05	PT
SE310	FL	"IS" 4+24.70	+48.98	115.24	PT
SE311	FL	"IS" 4+33.30	+65.93	114.79	PT
SE312	FL	"IS" 4+29.64	+57.07	114.85	PT

MATCHLINE STA "IS" 5+50

INGRA STREET

EAST 4TH AVENUE

ROW

8" STEEL GAS LINE

4" STEEL GAS LINE

SHEET NO.	TOTAL SHEETS
C: F1	C:F4
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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

3RD AVENUE

INGRA STREET

4TH AVENUE

THIS SHEET

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
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AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST & E. 4TH AVE
GRADING PLAN

STRUCTURE SUMMARY

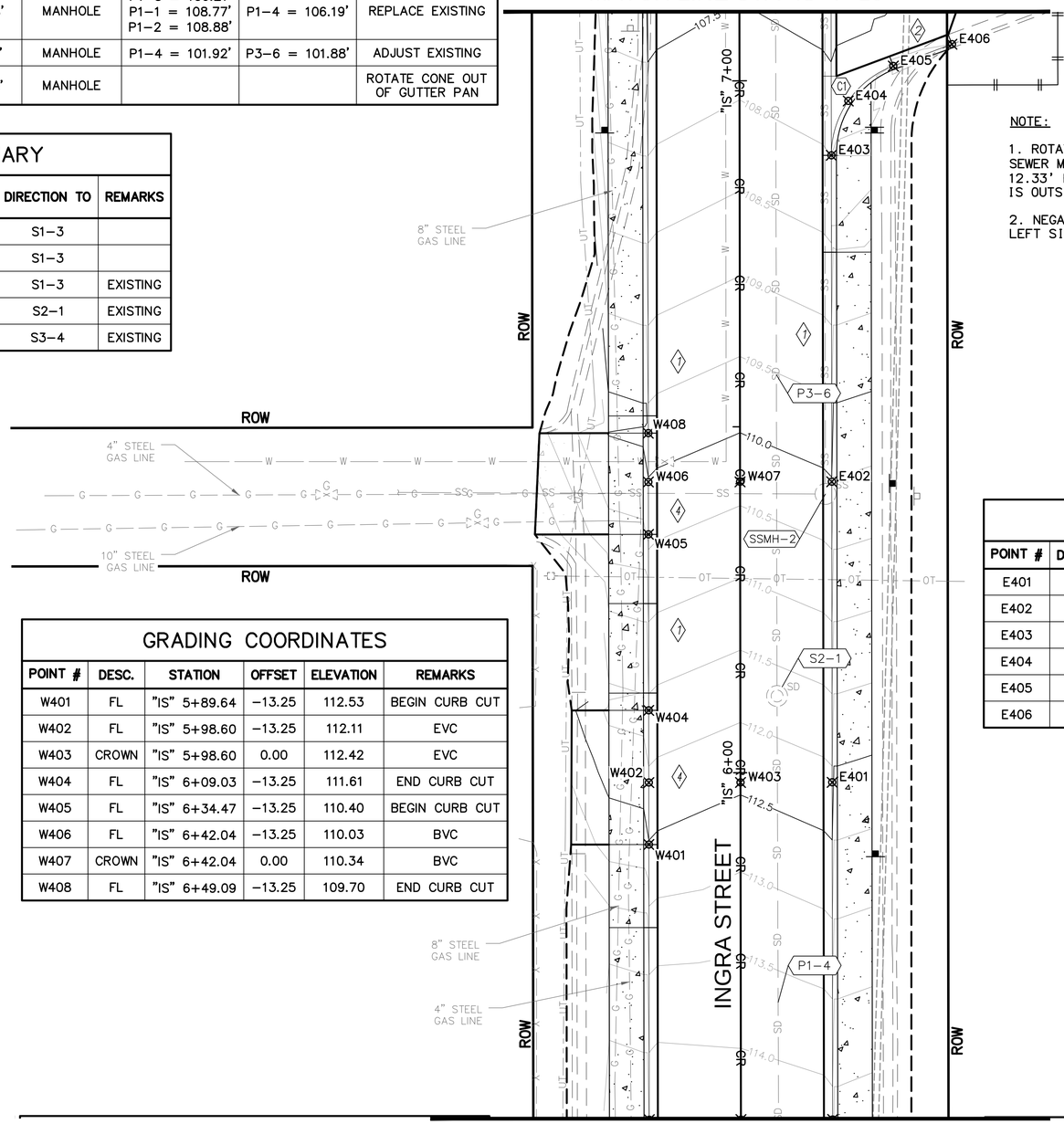
STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S1–1	MOA CB	"IS"3+86.06	+25.55'	115.68'	CURB INLET		P1–1 = 109.94'	–
S1–2	MOA CB	"IS"3+86.87	–24.51'	116.02'	CURB INLET		P1–2 = 110.35'	–
S1–3	TYPE II	"IS"4+07.67	+5.72'	115.88'	MANHOLE	P1–3 = 106.21' P1–1 = 108.77' P1–2 = 108.88'	P1–4 = 106.19'	REPLACE EXISTING
S2–1	SDMH	"IS"6+11.08	+5.44'	111.71'	MANHOLE	P1–4 = 101.92'	P3–6 = 101.88'	ADJUST EXISTING
SSMH–2	SSMH	"IS"6+40.26	+12.33'	110.16'	MANHOLE			ROTATE CONE OUT OF GUTTER PAN

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P1–1	12"	CPEP	30	4.0%	S1–1	S1–3	
P1–2	12"	CPEP	37	4.0%	S1–2	S1–3	
P1–3	24"	CMP				S1–3	EXISTING
P1–4	24"	CMP			S1–3	S2–1	EXISTING
P3–6	24"	CMP	159	1.0%	S2–1	S3–4	EXISTING

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	7+47.03	+27.00	13.75	FL



NOTE:

1. ROTATE REDUCTION SLAB OF SANITARY SEWER MANHOLE LOCATED AT "IS"6+40.26 12.33' RT SO THAT MANHOLE LID FRAME IS OUTSIDE OF GUTTER PAN.

2. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
W401	FL	"IS" 5+89.64	–13.25	112.53	BEGIN CURB CUT
W402	FL	"IS" 5+98.60	–13.25	112.11	EVC
W403	CROWN	"IS" 5+98.60	0.00	112.42	EVC
W404	FL	"IS" 6+09.03	–13.25	111.61	END CURB CUT
W405	FL	"IS" 6+34.47	–13.25	110.40	BEGIN CURB CUT
W406	FL	"IS" 6+42.04	–13.25	110.03	BVC
W407	CROWN	"IS" 6+42.04	0.00	110.34	BVC
W408	FL	"IS" 6+49.09	–13.25	109.70	END CURB CUT

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
E401	FL	"IS" 5+98.60	+13.25	112.11	EVC
E402	FL	"IS" 6+42.04	+13.25	110.03	BVC
E403	FL	"IS" 6+89.21	+13.25	108.00	PC
E404	FL	"IS" 6+97.07	+15.72	107.85	FL
E405	FL	"IS" 7+02.11	+22.23	108.08	PT
E406	FL	"IS" 7+05.24	+30.71	108.00	±ME

SHEET NO.	TOTAL SHEETS
C: F2	C:F4
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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STATE OF ALASKA
49TH
BRAD S. DOGGETT
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DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST FROM E. 3RD TO E. 4TH AVE GRADING PLAN

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LAYOUT | C:F2
DESIGNED | AKM
CHECKED | CRW
DRAFTED | AKM

DATE/TIME	DESIGNED	DRAFTED	CHECKED
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LAYOUT
C:F3

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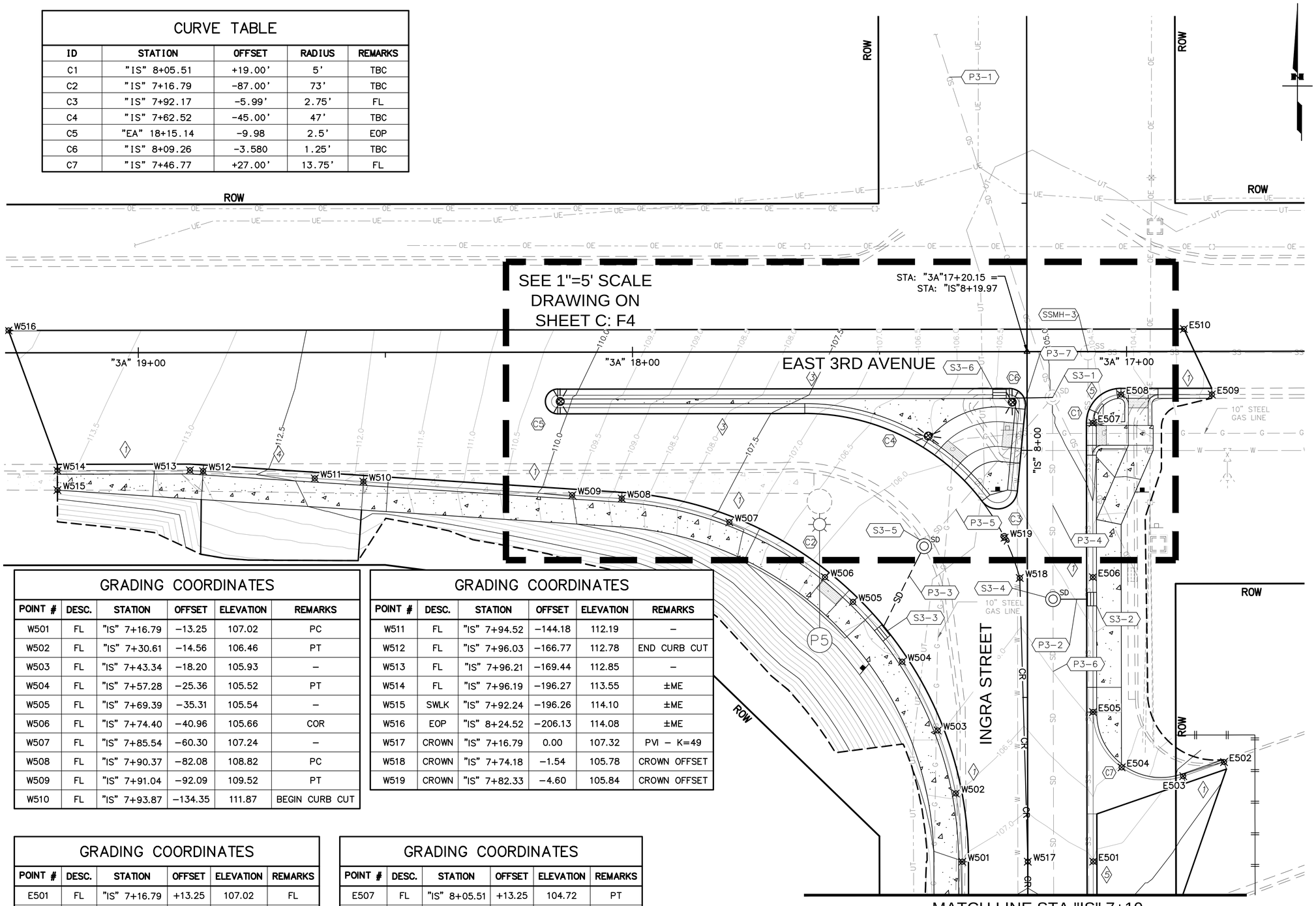
CURVE TABLE

ID	STATION	OFFSET	RADIUS	REMARKS
C1	"IS" 8+05.51	+19.00'	5'	TBC
C2	"IS" 7+16.79	-87.00'	73'	TBC
C3	"IS" 7+92.17	-5.99'	2.75'	FL
C4	"IS" 7+62.52	-45.00'	47'	TBC
C5	"EA" 18+15.14	-9.98	2.5'	EOP
C6	"IS" 8+09.26	-3.580	1.25'	TBC
C7	"IS" 7+46.77	+27.00'	13.75'	FL



GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
W501	FL	"IS" 7+16.79	-13.25	107.02	PC
W502	FL	"IS" 7+30.61	-14.56	106.46	PT
W503	FL	"IS" 7+43.34	-18.20	105.93	–
W504	FL	"IS" 7+57.28	-25.36	105.52	PT
W505	FL	"IS" 7+69.39	-35.31	105.54	–
W506	FL	"IS" 7+74.40	-40.96	105.66	COR
W507	FL	"IS" 7+85.54	-60.30	107.24	–
W508	FL	"IS" 7+90.37	-82.08	108.82	PC
W509	FL	"IS" 7+91.04	-92.09	109.52	PT
W510	FL	"IS" 7+93.87	-134.35	111.87	BEGIN CURB CUT

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
W511	FL	"IS" 7+94.52	-144.18	112.19	–
W512	FL	"IS" 7+96.03	-166.77	112.78	END CURB CUT
W513	FL	"IS" 7+96.21	-169.44	112.85	–
W514	FL	"IS" 7+96.19	-196.27	113.55	±ME
W515	SWLK	"IS" 7+92.24	-196.26	114.10	±ME
W516	EOP	"IS" 8+24.52	-206.13	114.08	±ME
W517	CROWN	"IS" 7+16.79	0.00	107.32	PVI – K=49
W518	CROWN	"IS" 7+74.18	-1.54	105.78	CROWN OFFSET
W519	CROWN	"IS" 7+82.33	-4.60	105.84	CROWN OFFSET

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
E501	FL	"IS" 7+16.79	+13.25	107.02	FL
E502	FL	"IS" 7+36.88	+39.75	107.39	±ME
E503	FL	"IS" 7+34.03	+31.48	107.11	PT, ±ME
E504	FL	"IS" 7+35.84	+19.02	106.52	FL
E505	FL	"IS" 7+47.03	+13.25	105.93	PT
E506	FL	"IS" 7+74.30	+13.25	105.27	FL

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
E507	FL	"IS" 8+05.51	+13.25	104.72	PT
E508	FL	"IS" 8+11.26	+19.00	104.13	PC
E509	FL	"IS" 8+11.25	+37.37	102.83	±ME
E510	EOP	"IS" 8+24.51	+31.76	103.38	±ME

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

SHEET NO.	TOTAL SHEETS
C: F3	C:F4
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/ Z581970000

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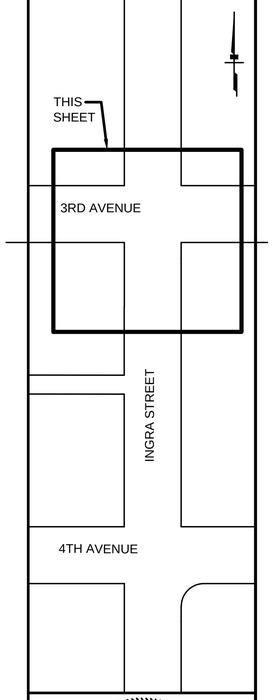

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST & E. 3RD AVE GRADING PLAN

DATE/TIME	FILE
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STRUCTURE SUMMARY

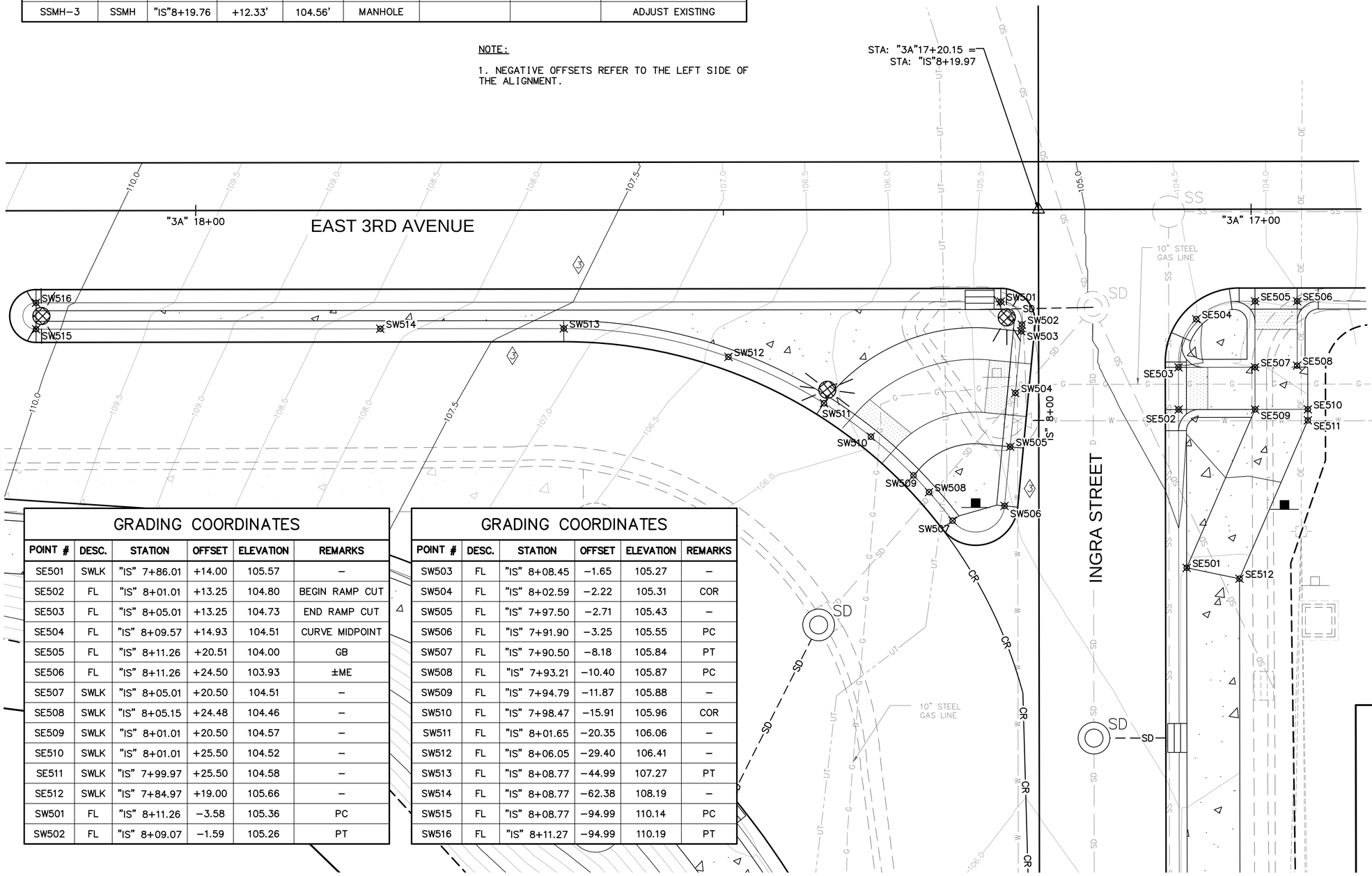
STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S3-1	TYPE II	"IS"8+10.70	+5.16'	104.99'	MANHOLE	P3-5 = 99.77' P3-4 = 99.83' P3-7 = 99.99'	P3-1 = 99.27'	RECONSTRUCT EXISTING
S3-2	MOA CB	"IS"7+69.89	+14.00'	105.86'	CURB INLET		P3-2 = 100.20'	–
S3-3	MOA CB	"IS"7+62.50	-30.09'	105.97'	CURB INLET		P3-3 = 99.95'	–
S3-4	TYPE I	"IS"7+69.89	+5.19'	105.65'	MANHOLE	P3-6 = 100.27' P3-2 = 100.17'	P3-4 = 100.23'	–
S3-5	TYPE I	"IS"7+80.64	-20.89'	105.76'	MANHOLE	P3-3 = 99.94'	P3-5 = 99.88'	REPLACE EXISTING
S3-6	MOA CB	"IS"8+10.51	-5.58'	105.45'	CURB INLET		P3-7 = 100.46'	–
SSMH-3	SSMH	"IS"8+19.76	+12.33'	104.56'	MANHOLE			ADJUST EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P3-1	24"	CMP			S3-1		EXISTING
P3-2	12"	CPEP	9	0.3%	S3-2	S3-4	
P3-3	12"	CPEP	21	0.1%	S3-3	S3-5	
P3-4	24"	CMP	41	1.0%	S3-4	S3-1	EXISTING
P3-5	18"	CPEP	40	0.3%	S3-5	S3-1	EXISTING
P3-6	24"	CMP	159	1.0%	S2-1	S3-4	EXISTING
P3-7	12"	CPEP	11	4.4%	S3-6	S3-1	

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.



GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE501	SWLK	"IS" 7+86.01	+14.00	105.57	–
SE502	FL	"IS" 8+01.01	+13.25	104.80	BEGIN RAMP CUT
SE503	FL	"IS" 8+05.01	+13.25	104.73	END RAMP CUT
SE504	FL	"IS" 8+09.57	+14.93	104.51	CURVE MIDPOINT
SE505	FL	"IS" 8+11.26	+20.51	104.00	GB
SE506	FL	"IS" 8+11.26	+24.50	103.93	±ME
SE507	SWLK	"IS" 8+05.01	+20.50	104.51	–
SE508	SWLK	"IS" 8+05.15	+24.48	104.46	–
SE509	SWLK	"IS" 8+01.01	+20.50	104.57	–
SE510	SWLK	"IS" 8+01.01	+25.50	104.52	–
SE511	SWLK	"IS" 7+99.97	+25.50	104.58	–
SE512	SWLK	"IS" 7+84.97	+19.00	105.66	–
SW501	FL	"IS" 8+11.26	-3.58	105.36	PC
SW502	FL	"IS" 8+09.07	-1.59	105.26	PT

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW503	FL	"IS" 8+08.45	-1.65	105.27	–
SW504	FL	"IS" 8+02.59	-2.22	105.31	COR
SW505	FL	"IS" 7+97.50	-2.71	105.43	–
SW506	FL	"IS" 7+91.90	-3.25	105.55	PC
SW507	FL	"IS" 7+90.50	-8.18	105.84	PT
SW508	FL	"IS" 7+93.21	-10.40	105.87	PC
SW509	FL	"IS" 7+94.79	-11.87	105.88	–
SW510	FL	"IS" 7+98.47	-15.91	105.96	COR
SW511	FL	"IS" 8+01.65	-20.35	106.06	–
SW512	FL	"IS" 8+06.05	-29.40	106.41	–
SW513	FL	"IS" 8+08.77	-44.99	107.27	PT
SW514	FL	"IS" 8+08.77	-62.38	108.19	–
SW515	FL	"IS" 8+08.77	-94.99	110.14	PC
SW516	FL	"IS" 8+11.27	-94.99	110.19	PT

SHEET NO.	TOTAL SHEETS
C:F4	C:F4
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

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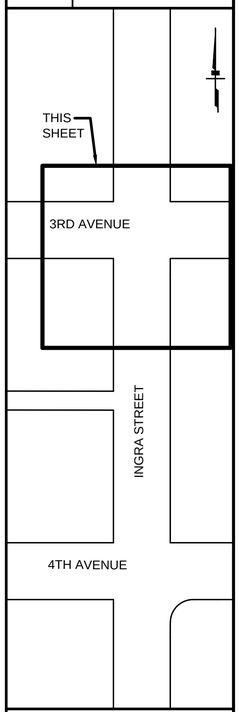

STATE OF ALASKA
49TH
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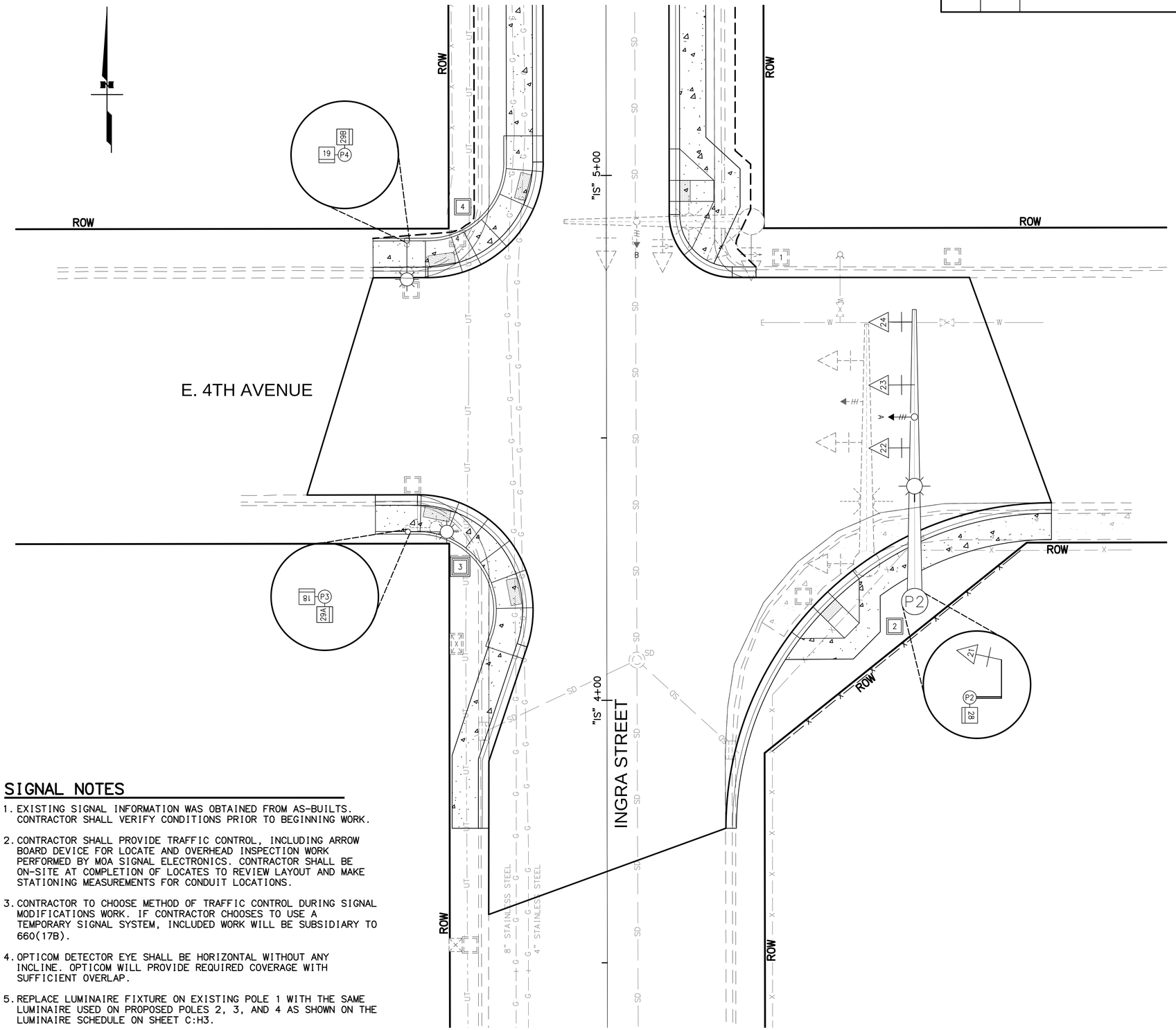
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

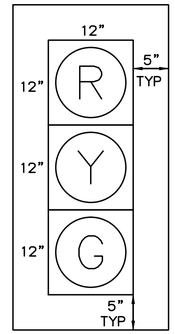
HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

INGRA ST & E. 3RD AVE
GRADING PLAN

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H1	C:H10





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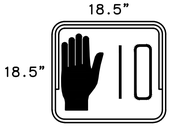

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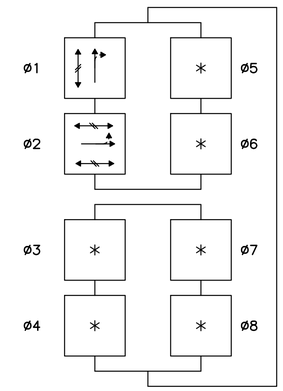
18, 19, 28,
29A, 29B

SIGNAL DISPLAYS



PROTECTED VEHICLE MOVEMENT
PEDESTRIAN MOVEMENT
PERMISSIVE VEHICLE MOVEMENT
* NOT USED

PHASING DIAGRAM

SIGNAL NOTES

1. EXISTING SIGNAL INFORMATION WAS OBTAINED FROM AS-BUILTS. CONTRACTOR SHALL VERIFY CONDITIONS PRIOR TO BEGINNING WORK.
2. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICE FOR LOCATE AND OVERHEAD INSPECTION WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.
3. CONTRACTOR TO CHOOSE METHOD OF TRAFFIC CONTROL DURING SIGNAL MODIFICATIONS WORK. IF CONTRACTOR CHOOSES TO USE A TEMPORARY SIGNAL SYSTEM, INCLUDED WORK WILL BE SUBSIDIARY TO 660(17B).
4. OPTICOM DETECTOR EYE SHALL BE HORIZONTAL WITHOUT ANY INCLINE. OPTICOM WILL PROVIDE REQUIRED COVERAGE WITH SUFFICIENT OVERLAP.
5. REPLACE LUMINAIRE FIXTURE ON EXISTING POLE 1 WITH THE SAME LUMINAIRE USED ON PROPOSED POLES 2, 3, AND 4 AS SHOWN ON THE LUMINAIRE SCHEDULE ON SHEET C:H3.

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STATE OF ALASKA
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AND PUBLIC FACILITIES

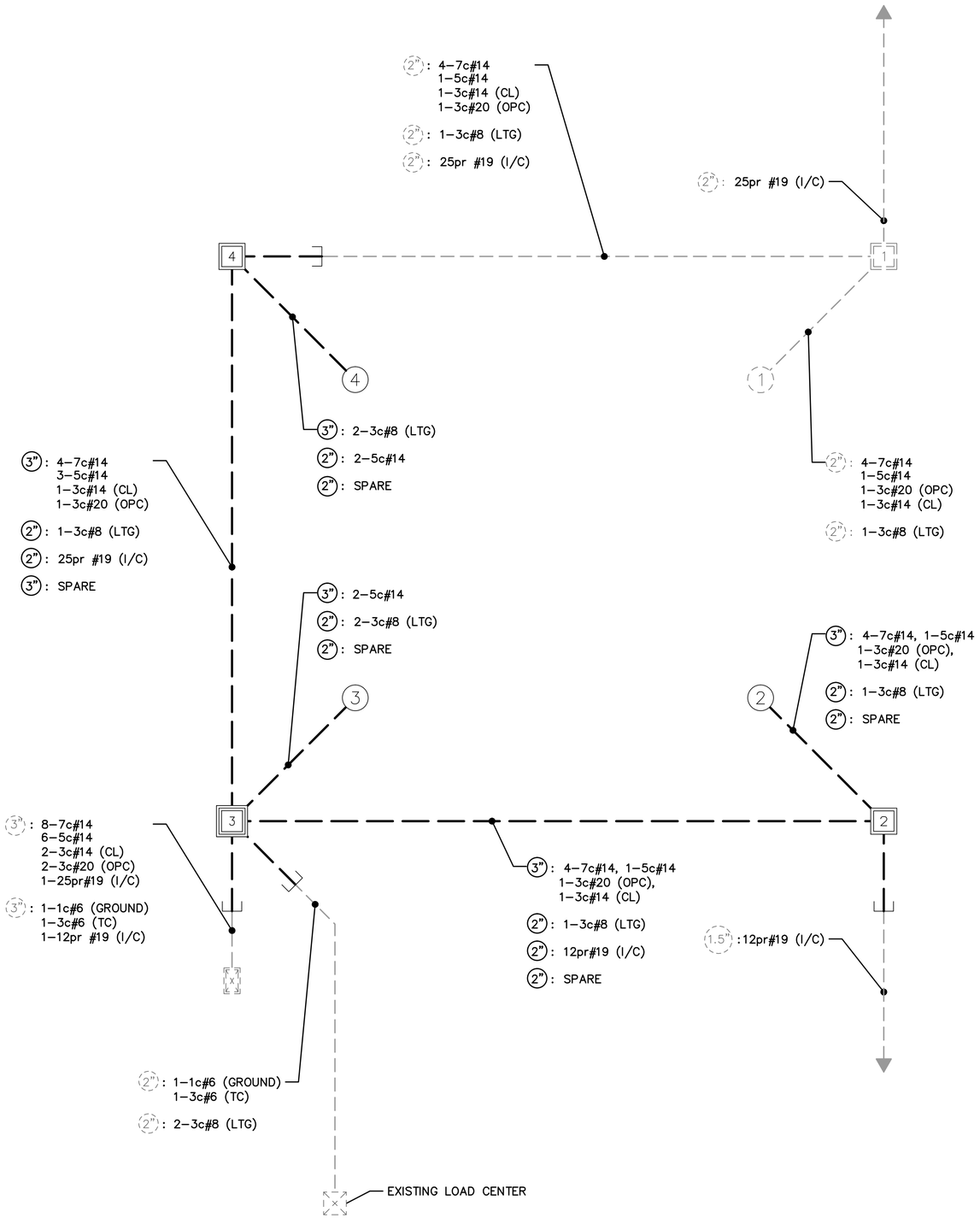
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST & E. 4TH AVE SIGNAL SYSTEM PLAN

FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME 12/23/2016 11:19 AM | LAYOUT C:H1 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H2	C:H10



WIRING NOTES

1. NEW 12pr#19 INTERCONNECT CABLE SHALL BE INSTALLED BETWEEN INGRA STREET & 4TH AVENUE CONTROLLER CABINET AND INGRA STREET & 5TH AVENUE INTERCONNECT CABINET ADJACENT TO CONTROLLER CABINET.

2. NEW 25PR#19 INTERCONNECT CABLE SHALL BE INSTALLED BETWEEN INGRA STREET & 4TH AVENUE CONTROLLER CABINET AND TYPE 3 SPLICE JUNCTION BOX LOCATED ON THE SOUTHEAST QUADRANT OF INGRA STREET & 3RD AVENUE.

FOUNDATION SCHEDULE

DESC	STATION ALIGNMENT	OFFSET	REMARKS
P2	"IS" 4+18.71	58.63' RT	42" DIAMETER, 12' DEEP CIDH
P3	"IS" 4+32.17	37.88' LT	42" DIAMETER, 10' DEEP CIDH
P4	"IS" 4+87.66	37.97' LT	42" DIAMETER, 10' DEEP CIDH

POLE SALVAGE SCHEDULE

POLE	STATION ALIGNMENT	OFFSET
2	"IS" 4+25.96	49.49' RT

J-BOX SCHEDULE

DESC	STATION ALIGNMENT	OFFSET	REMARKS
2	"IS" 4+14.00	54.83' RT	TYPE II
3	"IS" 4+25.50	27.91' LT	TYPE III
4	"IS" 4+94.00	27.32' LT	TYPE II

J-BOX SALVAGE SCHEDULE

J-BOX	STATION ALIGNMENT	OFFSET
2	"IS" 4+19.75	37.43' RT
3	"IS" 4+25.50	27.91' LT
4	"IS" 4+88.04	28.34' LT

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

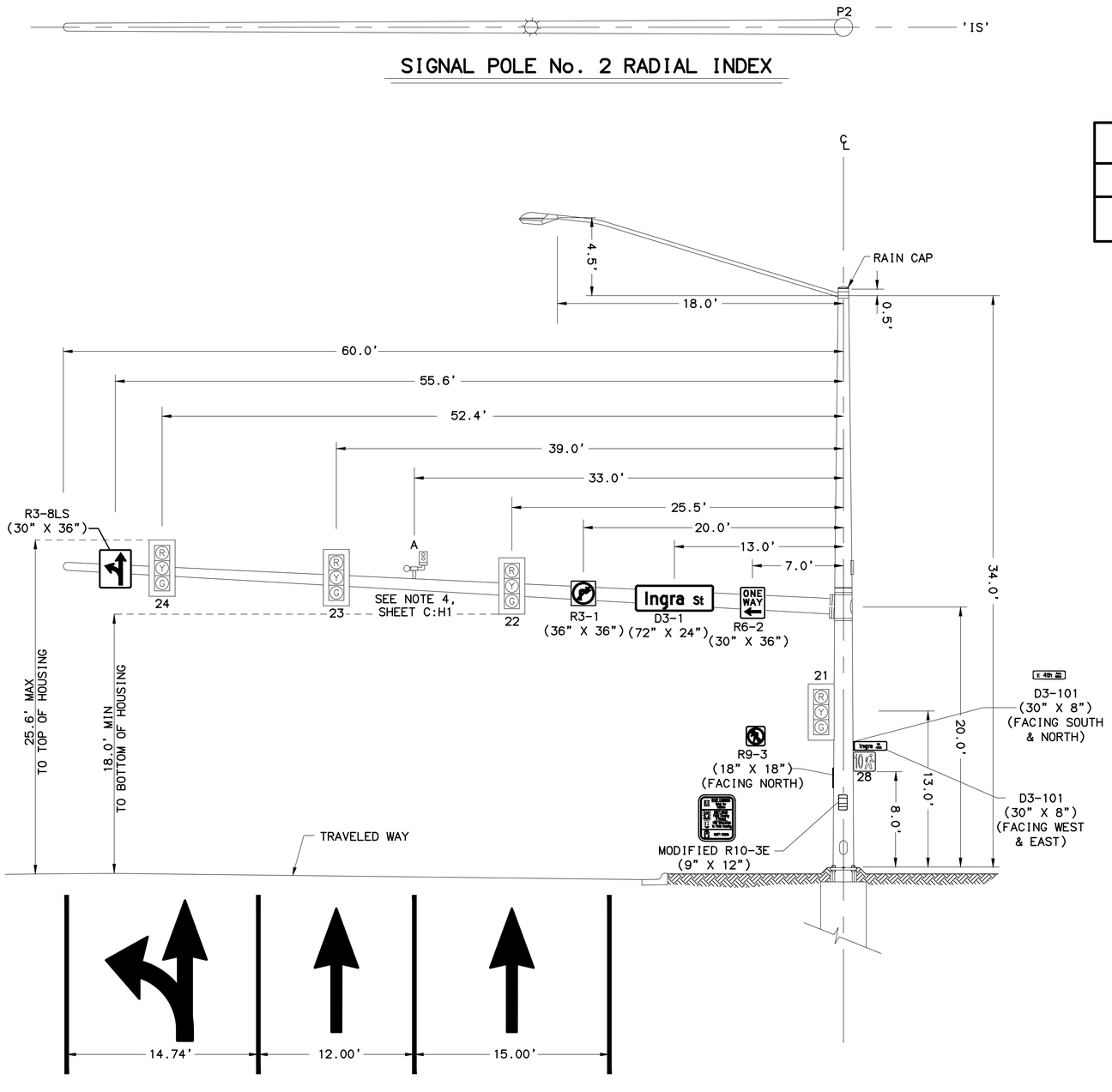
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST & E. 4TH AVE WIRING DIAGRAM

FILE P:\PROJECTS\D61519\D61519–HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14–CT–SL–H SHT–61519.DWG | DATE/TIME 12/23/2016 11:19 AM | LAYOUT C:H2 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H3	C:H10



OPTICOM DETECTOR SCHEDULE

LOCATION	DETECTOR ID	PHASE CALL	FACING DIRECTION	REMARKS
SIGNAL POLE 2 MASTARM	A	8	WEST	INSTALL DETECTOR MODEL 721

LUMINAIRE SCHEDULE

MANUFACTURER	GE OR APPROVED EQUAL
MODEL	M-250A2 POWR/DOOR OR APPROVED EQUAL
WATTAGE	250
LIGHT SOURCE	HIGH PRESSURE SODIUM
VOLTAGE	240
INITIAL LUMENS	21,403
BALLAST TYPE	MAG-REG
PE CONTROL	NONE
LENS TYPE	FLAT GLASS
COLOR TEMPERATURE	2100
COLOR RENDITION INDEX	22
DISTRIBUTION TYPE	M-C-3
UL LISTED	YES

INTERSECTION ILLUMINATION PERFORMANCE CRITERIA

PEDESTRIAN ACTIVITY	MEDIUM
INTERSECTION FUNCTIONAL CLASSIFICATION	MAJOR/MAJOR
MINIMUM ILLUMINANCE	2.6 fc
MAXIMUM UNIFORMITY (AVG/MIN)	3.0:1
DESIGN ILLUMINANCE	3.1 fc
DESIGN UNIFORMITY (AVG/MIN)	2.0:1

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

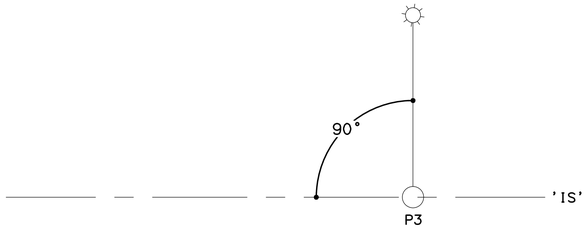
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST & E. 4TH AVE POLE ELEVATIONS

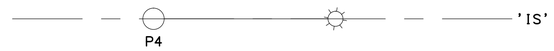
DATE/TIME 12/23/2016 11:19 AM | LAYOUT C:H3 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA
FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

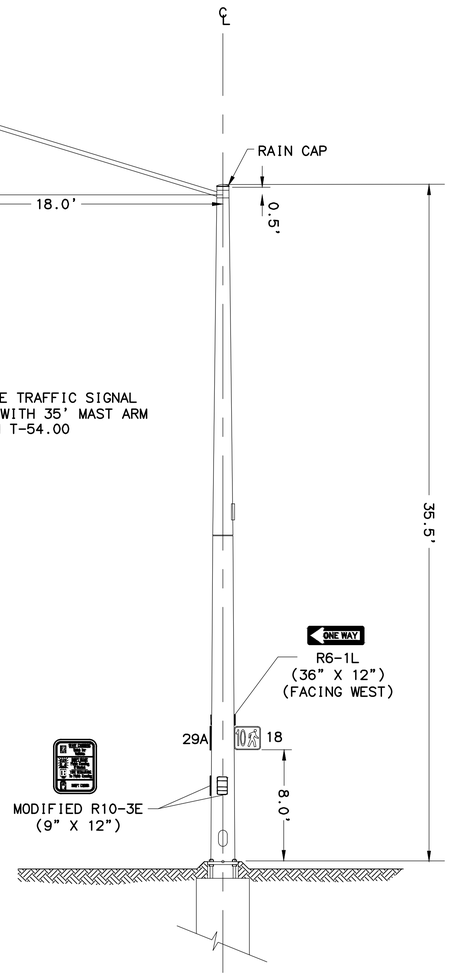
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H4	C:H10



SIGNAL POLE No. 3 RADIAL INDEX



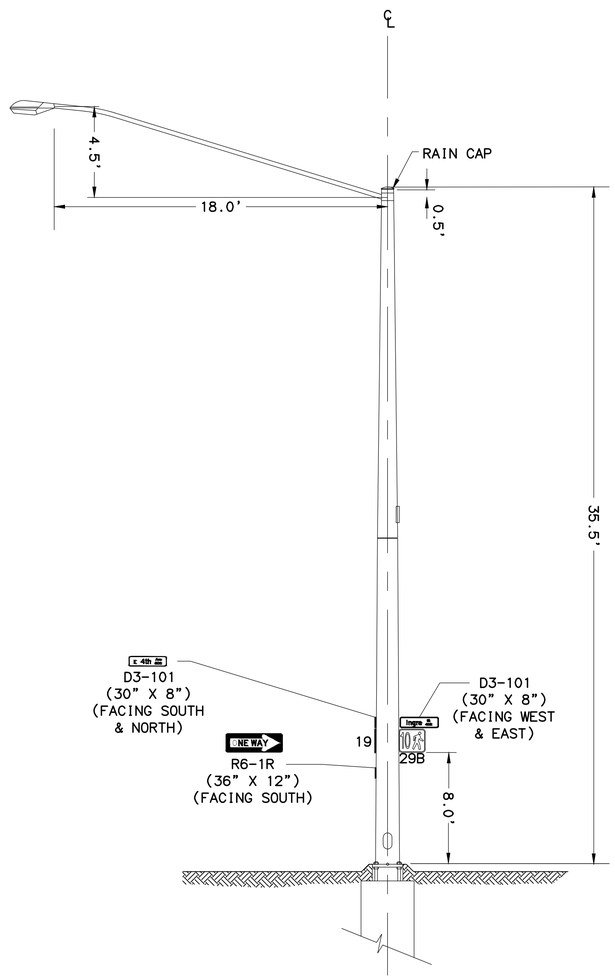
SIGNAL POLE No. 4 RADIAL INDEX



NOTES:
1. POLE 3 & 4 ARE TRAFFIC SIGNAL POLES COMPLYING WITH 35' MAST ARM POLE DESIGN FROM T-54.00

SIGNAL POLE No. 3

LOOKING SOUTH



SIGNAL POLE No. 4

LOOKING WEST

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STATE OF ALASKA
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AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

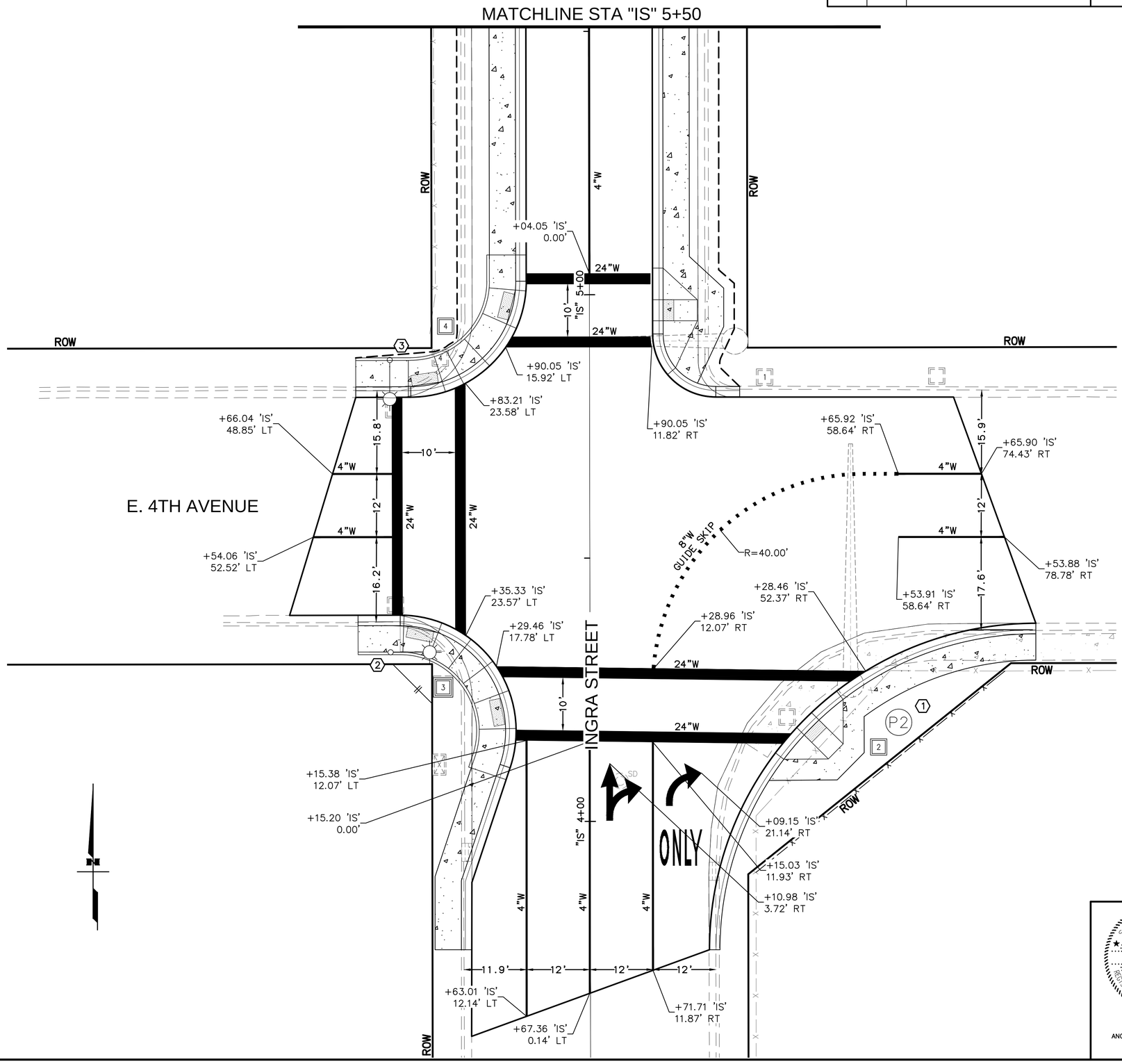
INGRA ST & E. 4TH AVE POLE ELEVATIONS

DATE/TIME 12/23/2016 11:19 AM | LAYOUT C:H4 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H5	C:H10



STATE OF ALASKA
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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST & E. 4TH AVE SIGNING, STRIPING & ILLUM. PLAN

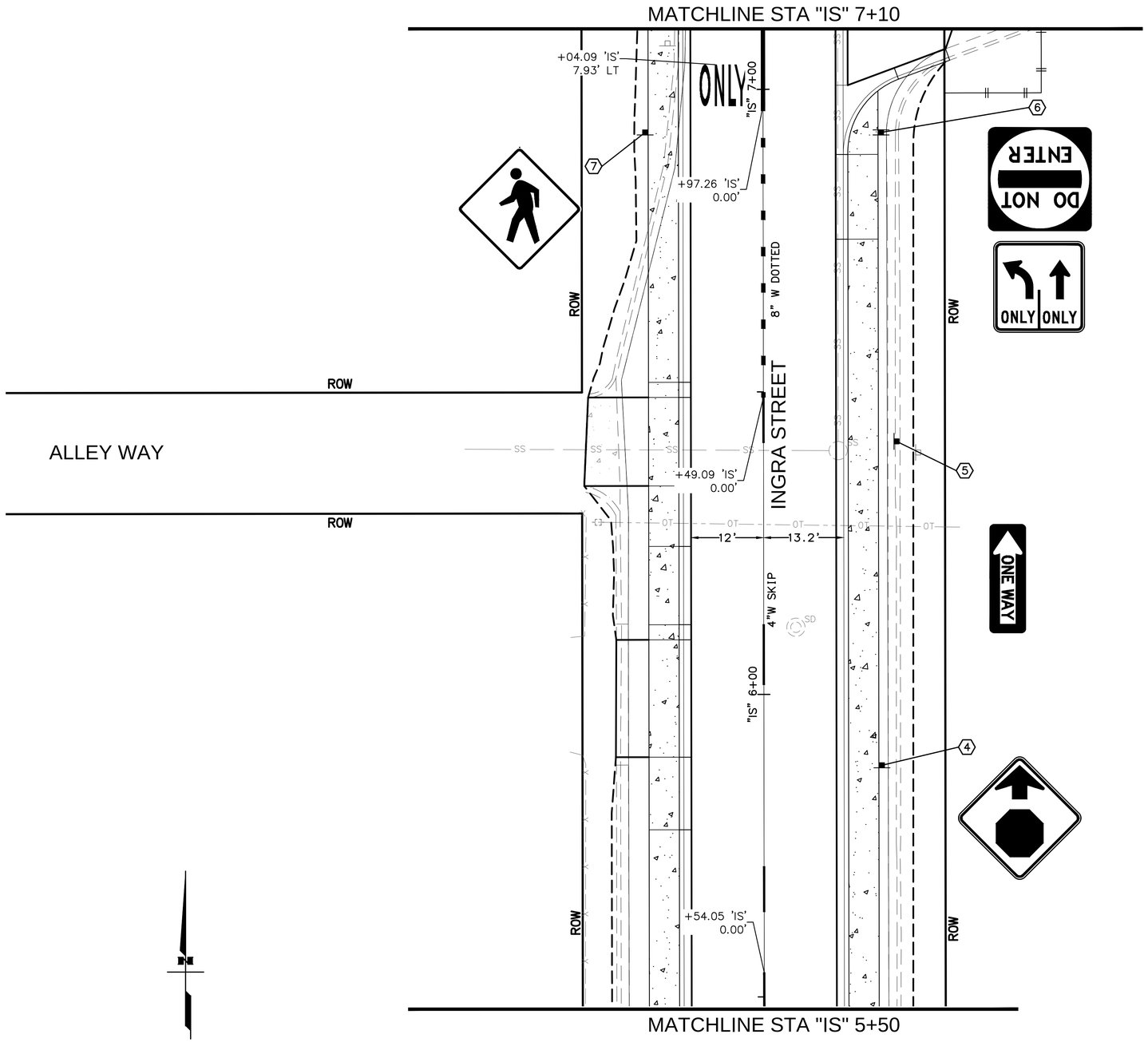
DATE/TIME | 12/23/2016 11:19 AM | LAYOUT | C:H5 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

FILE | P:\PROJECTS\061519\061519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H6	C:H10

MATCHLINE STA "IS" 7+10



MATCHLINE STA "IS" 5+50

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

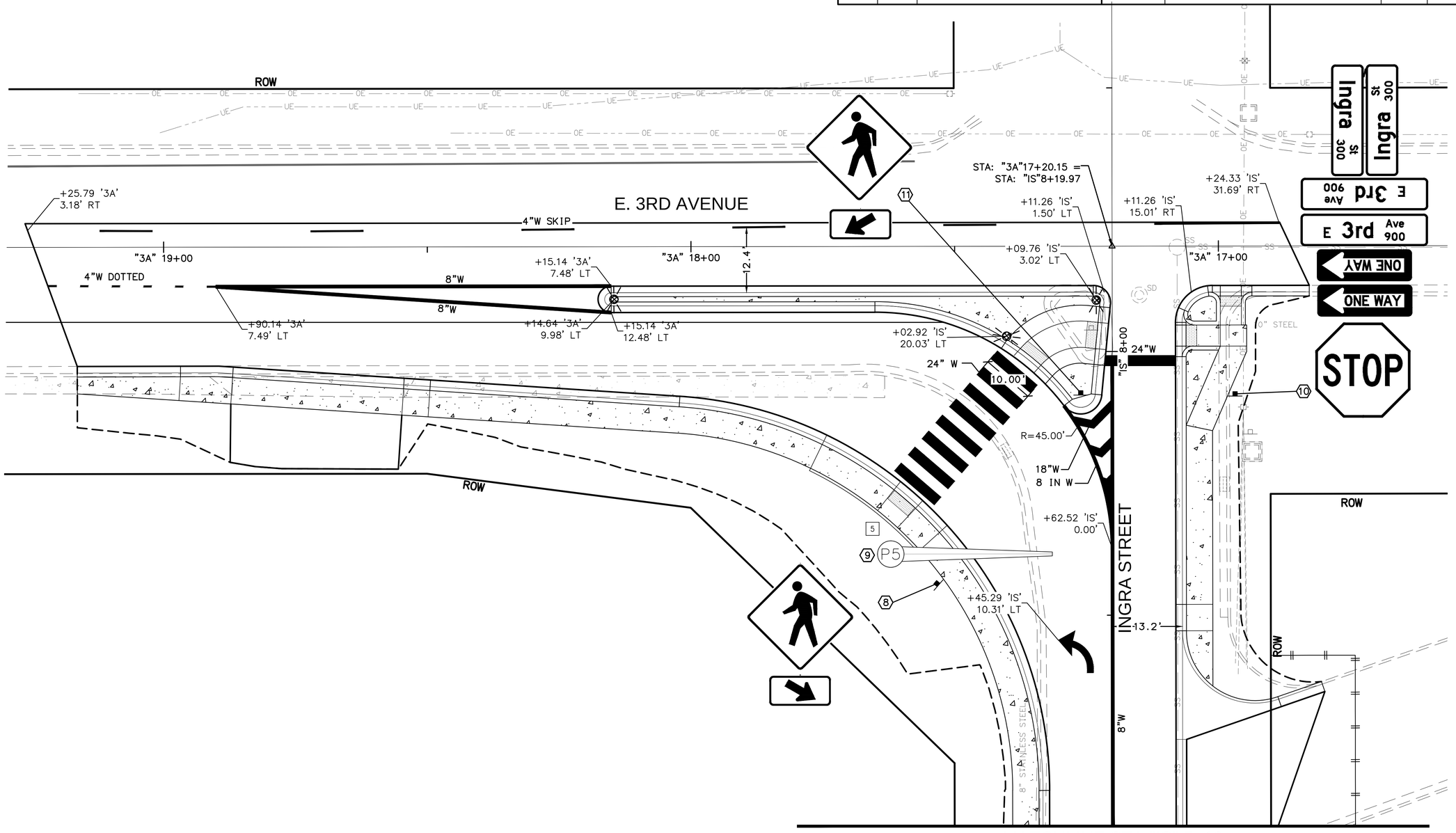
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA FROM E. 3RD TO E. 4TH AVE SIGNING, STRIPING & ILLUM. PLAN

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 11:19 AM | LAYOUT | C:H6 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H7	C:H10



MATCHLINE STA "IS" 7+10

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

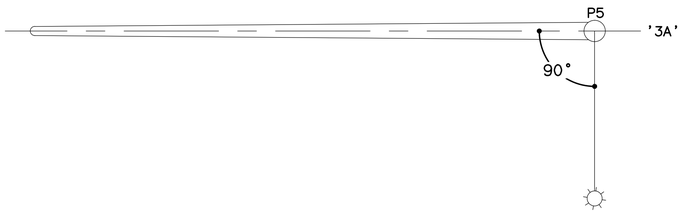
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA & E. 3RD AVE SIGNING, STRIPING & ILLUM. PLAN

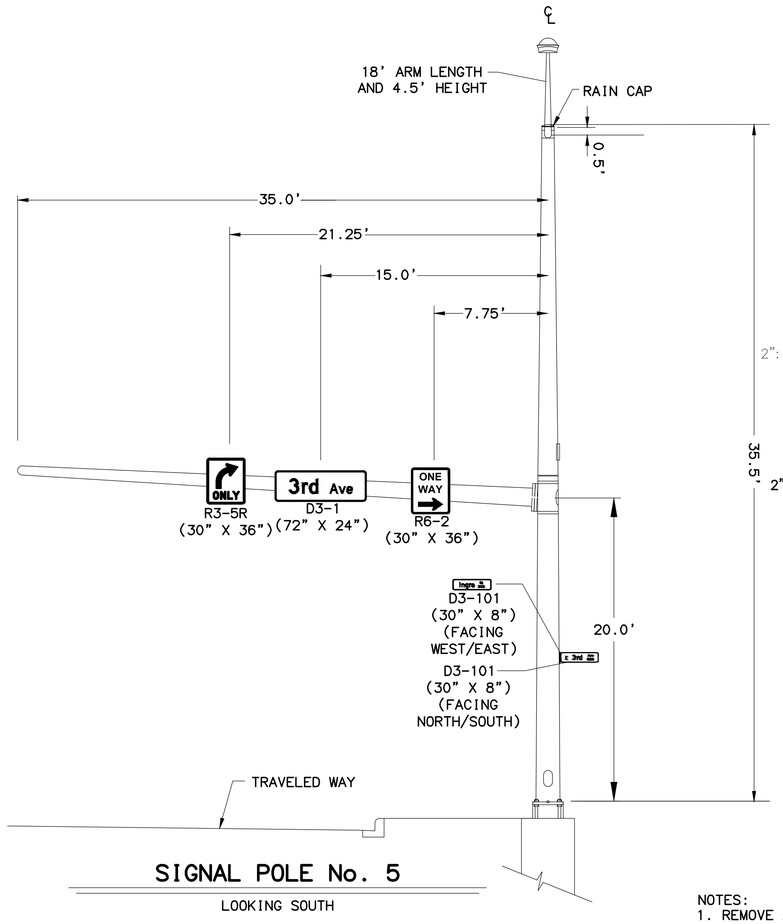
FILE [P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME 12/23/2016 11:19 AM | LAYOUT C:H7 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H8	C:H10

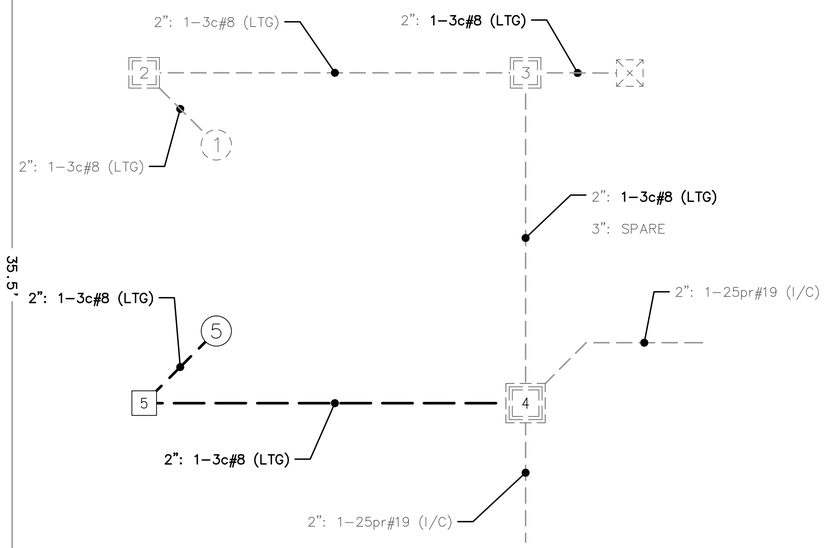


SIGNAL POLE No. 5 RADIAL INDEX



SIGNAL POLE No. 5

LOOKING SOUTH



NOTES:
1. REMOVE ABANDONED SOUTH LEG CONDUIT ROAD CROSSING.

FOUNDATION SCHEDULE

DESC	STATION ALIGNMENT	OFFSET	REMARKS
P5	"IS" 7+61.64	42.05'LT	42" DIAMETER, 10' DEEP CIDH

POLE SALVAGE SCHEDULE

POLE	STATION ALIGNMENT	OFFSET
P5	"IS" 7+89.73	42.04'LT

J-BOX SCHEDULE

DESC	STATION ALIGNMENT	OFFSET	REMARKS
5	"3A" 17+65.64	53.54' LT	TYPE IA

LUMINAIRE SCHEDULE

MANUFACTURER	GE OR APPROVED EQUAL
MODEL	M-250A2 POWR/DOOR OR APPROVED EQUAL
WATTAGE	250
LIGHT SOURCE	HIGH PRESSURE SODIUM
VOLTAGE	240
INITIAL LUMENS	21,403
BALLAST TYPE	MAG-REG
PE CONTROL	NONE
LENS TYPE	FLAT GLASS
COLOR TEMPERATURE	2100
COLOR RENDITION INDEX	22
DISTRIBUTION TYPE	M-C-3
UL LISTED	YES

INTERSECTION ILLUMINATION PERFORMANCE CRITERIA

PEDESTRIAN ACTIVITY	MEDIUM
INTERSECTION FUNCTIONAL CLASSIFICATION	MAJOR/MAJOR
MINIMUM ILLUMINANCE	2.6 fc
MAXIMUM UNIFORMITY (AVG/MIN)	3.0:1
DESIGN ILLUMINANCE	6.2 fc
DESIGN UNIFORMITY (AVG/MIN)	4.4:1

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

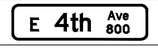
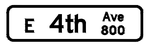
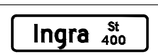
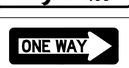
INGRA ST & E. 3RD AVE POLE ELEVATIONS

DATE/TIME | 12/23/2016 11:19 AM | LAYOUT | C:H8 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H9	C:H10

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED YES	FRAMED NO	REMARKS
C:H3	1	"IS" 4+18.71	58.63'	RT	R3-8LS		30	36	7.50	W	SIGNAL POLE NO. 2	X		
					R3-1		36	36	9.00	W			X	
					D3-1		72	24	12.00	W		X		
					R6-2		30	36	7.50	W		X		
					R9-3		18	18	4.50	N			X	
					D3-101		30	8	3.33	E/W			X	2 SIGNS BACK TO BACK
					D3-101		30	8	3.33	N/S			X	2 SIGNS BACK TO BACK
					MODIFIED R10-3E		9	12	0.75	W			X	
C:H4	2	"IS" 4+32.17	37.88'	LT	R6-1L		36	12	3.00	W	SIGNAL POLE NO. 3	X		
					MODIFIED R10-3E		9	12	0.75	N			X	
					MODIFIED R10-3E		9	12	0.75	E			X	
C:H4	3	"IS" 4+87.66	37.97'	LT	D3-101		30	8	3.33	N/S	SIGNAL POLE NO. 4		X	2 SIGNS BACK TO BACK
					D3-101		30	8	3.33	E/W			X	2 SIGNS BACK TO BACK
					R6-1R		36	12	3.00	S		X		
C:H6	4	"IS" 5+88.29	19.50'	RT	W3-1		30	30	6.25	S	1-2.5" X 2.5" PT		X	
C:H6	5	"IS" 6+41.79	22.00'	RT	R6-1L		36	12	3.00	W	1-3.0" T	X		

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STATE OF ALASKA
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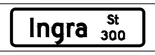
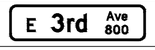
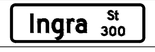
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST AT E. 3RD TO E. 4TH AVE SIGN SUMMARY

DATE/TIME 12/23/2016 11:19 AM | LAYOUT C:H9 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA
FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	C:H10	C:H10

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	FRAMED YES	FRAMED NO	REMARKS
C:H6	6	"IS" 6+92.85	19.50'	RT	R3-108B		30	30	6.25	S	1-2.5" X 2.5" PT		X	
					R5-1		30	30	6.25	N			X	
C:H6	7	"IS" 6+92.91	19.50'	LT	W11-2		30	30	6.25	S	1-2.5" X 2.5" PT		X	
C:H7	8	"IS" 7+56.04	33.32'	LT	W11-2		30	30	6.25	S	1-2.5" X 2.5" PT		X	
					W16-7PR		24	12	2.00	S			X	
C:H8	9	"IS" 7+61.64	42.05'	LT	R3-5R		30	3.0	7.5	N	SIGNAL POLE NO. 5		X	
					D3-1		72	24	12.0	N		X		
					R6-2		30	36	7.5	N			X	
					D3-101		42	12	7.00	E/W		X		2 SIGNS BACK TO BACK
					D3-101		24	8	2.67	N/S			X	2 SIGNS BACK TO BACK
C:H7	10	"IS" 7+91.95	23.27'	RT	D3-101		42	12	7.00	E/W	1-2.5" X 2.5" PT	X		2 SIGNS BACK TO BACK
					D3-101		24	8	2.67	N/S			X	2 SIGNS BACK TO BACK
					R6-1R		36	12	3.00	N		X		SIGN BACK TO BACK WITH R6-1L
					R6-1L		36	12	3.00	S		X		SIGN BACK TO BACK WITH R6-1R
					R1-1		36	36	9.00	S		X		
C:H7	11	"IS" 7+94.17	5.99'	LT	W11-2		30	30	6.25	S	1-2.5" X 2.5" PT		X	
					W16-7PL		24	12	2.00	S			X	

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

INGRA ST AT E. 3RD TO E. 4TH AVE SIGN SUMMARY

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A1	D:A7

NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the 2014 HSIP Anchorage Area Safety Improvements.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted forward and reverse angles collected by total station as well as static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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. 34.65.0440).

HORIZONTAL CONTROL STATEMENT

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears
N 01°43'26.4"E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N usf, +1312517.4904 E usf, and scale using 0.9998910192.

VERTICAL CONTROL STATEMENT

Elevations are based on the Municipality of Anchorage (MOA) Vertical Control Network. The datum is Mean Sea Level (MSL) GAAB 1972 Adjust and the unit of measure is U.S. Survey Feet.

The basis of elevations is MOA Bench Mark "CB-4C", a brass cap located in the southeast quadrant of the intersection of 12th Avenue and L Street, having a value of 90.88 feet above Mean Sea Level.

A Leica DNA10 digital level was used for all leveling on this project. The elevations were computed in Leica Digilev software using a length weighted adjustment. All of the level loops closed within Third-Order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

All elevations on control points and benchmarks need to be field verified before they are used.

HORIZONTAL AND VERTICAL CONTROL – 3RD AVENUE ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
25	"TA" 2+52.58	29.45 LT	61° 13' 10.61232" N	149° 54' 06.33226" W	341120.0004	345397.1045	120.59	92.45	Fd BC[6714-S]: HSIP-25
24	"TA" 13+50.50	22.67 LT	61° 13' 10.53934" N	149° 53' 43.91447" W	341114.2907	346494.9166	125.28	97.09	Fd BC[6714-S]: HSIP-24
40	"TA" 16+95.31	27.11 RT	61° 13' 10.05216" N	149° 53' 36.87292" W	341065.3717	346839.8222	–	94.22	Fd AC[6714-S]: HSIP-40
704	"TA" 17+34.32	390.12 LT	61° 13' 14.16119" N	149° 53' 36.09592" W	341482.7234	346877.1915	–	67.11	Fd AC[DOWL]: IMF-16
702	N/A	N/A	61° 13' 10.27953" N	149° 54' 11.61298" W	341085.8179	345138.5572	–	95.63	Fd AC[6714-S]: IMF-10
705	N/A	N/A	61° 13' 14.02315" N	149° 53' 28.42270" W	341469.3234	347252.9607	–	69.39	Fd AC[6714-S]: IMF-17

RECOVERED MONUMENTS – 3RD AVENUE ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
848	"TA" 0+00.00	0.00	61° 13' 10.33229" N	149° 54' 11.49253" W	341091.1853	345144.4478	Fd Rbr/YPC[LS8535]: ROW/SSE Cor L10A Blk 12 L Street Slide Replat Subd
703	"TA" 2+75.11	0.00	61° 13' 10.32140" N	149° 54' 05.87458" W	341090.4897	345419.5614	Fd AC: SI 3rd Ave/K St
806	"TA" 2+75.11	360.22 RT	61° 13' 06.77431" N	149° 54' 05.87901" W	340730.2678	345419.8867	Fd BC/Bx[609-S]: SI 4th Ave/K St
701	"TA" 6+05.24	29.99 RT	61° 13' 10.02411" N	149° 53' 59.13370" W	341060.8005	345749.7098	Fd Rbr: ROW/NE Cor Lot 1A Blk 30 Anchorage Townsite Subd
805	"TA" 9+95.27	0.00	61° 13' 10.31698" N	149° 53' 51.16865" W	341091.1470	346139.7140	Fd AC: SI 3rd Ave/H St
802	"TA" 13+55.28	0.00	61° 13' 10.31613" N	149° 53' 43.81704" W	341091.6309	346499.7238	Fd Copperweld/Bx: SI 3rd Ave/G St
706	"TA" 17+15.38	0.00	61° 13' 10.31927" N	149° 53' 36.46358" W	341092.5305	346859.8232	Fd AC: SI 3rd Ave/F St
803	"TA" 20+74.78	0.00	61° 13' 10.32775" N	149° 53' 29.12438" W	341093.9835	347219.2238	Fd Copperweld: SI 3rd Ave/E St

VERTICAL CONTROL – 3RD AVENUE ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING		
602	"TA" 2+44.94	33.55 RT	61° 13' 09.99" N	149° 54' 06.49" W	341057	345389	95.40	Set X on Wall: TBM 2482-68B/Yellow X on NE cor of concrete retaining wall/SW cor K st./3rd
603	"TA" 16+94.80	40.50 RT	61° 13' 09.92" N	149° 53' 36.88" W	341052	346839	95.58	Set X on Screw: TBM 2482-68A/Yellow X on top of NE light pole base screw/SW cor F st./3rd

STATE OF ALASKA
49TH
A. WILLIAM STOLL
LS 12041
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AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN
W. 3RD AVENUE
SURVEY CONTROL

DOWL | DRAFTED | AWS | CHECKED | DESIGNED | D:A1 | LAYOUT | DATE/TIME | 12/23/2016 11:19 AM

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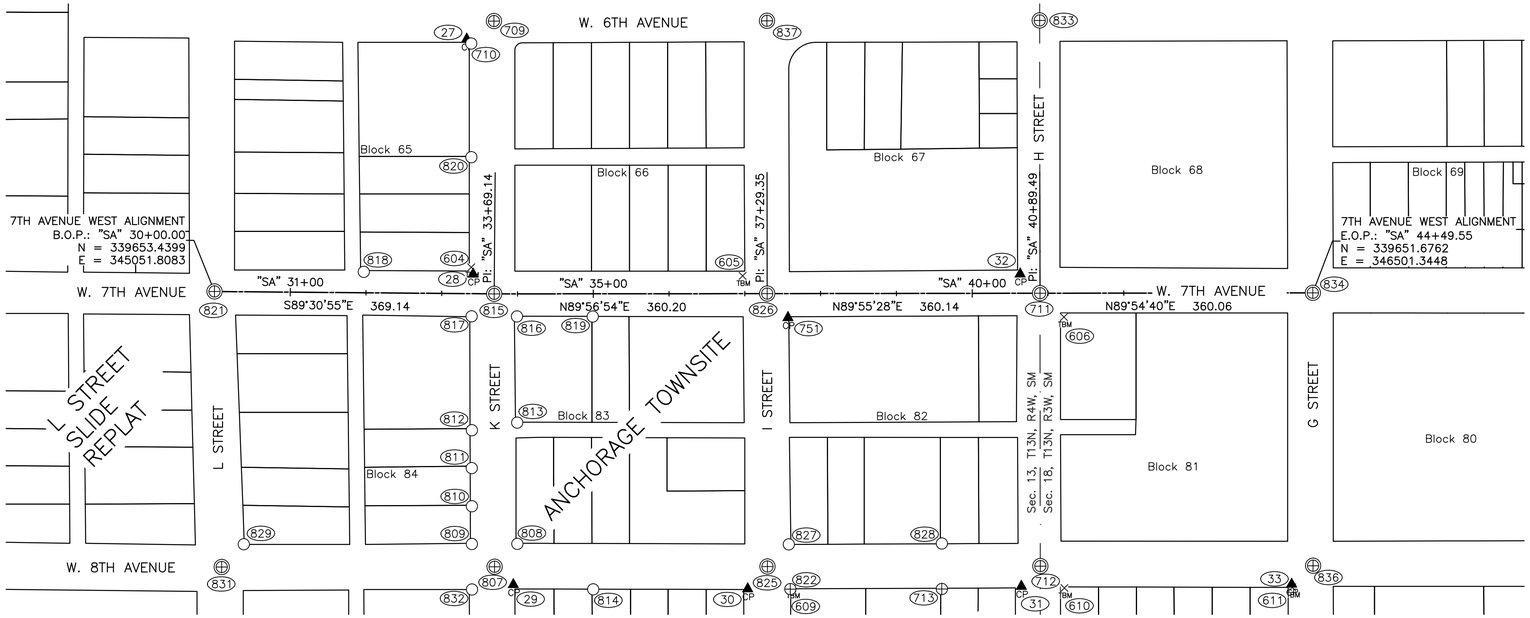
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A2	D:A7



SEE MONUMENT TABLES ON SHEET D:A3

HORIZONTAL CONTROL STATEMENT

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

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Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N usf, +1312517.4904 E usf, and scale using 0.9998910192.

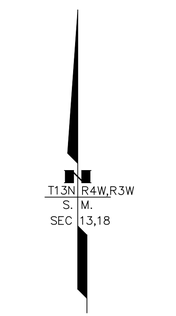
VERTICAL CONTROL STATEMENT

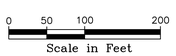
Elevations are based on the Municipality of Anchorage (MOA) Vertical Control Network. The datum is Mean Sea Level (MSL) GAAB 1972 Adjust and the unit of measure is U.S. Survey Feet.

The basis of elevations is MOA Bench Mark "CB-4C", a brass cap located in the southeast quadrant of the intersection of 12th Avenue and L Street, having a value of 90.88 feet above Mean Sea Level.

A Leica DNA10 digital level was used for all leveling on this project. The elevations were computed in Leica Digilev software using a length weighted adjustment. All of the level loops closed within Third-Order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

All elevations on control points and benchmarks need to be field verified before they are used.





LEGEND

- Property Primary Monument
- Property Miscellaneous Corner
- Primary Centerline Monument
- CP — Control Point
- TBM — Temporary Bench Mark
- (1) — Survey Point Number
- Protracted Section Line
- Property Line
- 1+00 2+00 — Project Alignment & Stationing

NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the 2014 HSIP Anchorage Area Safety Improvements.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted forward and reverse angles collected by total station as well as static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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. 34.65.0440).

STATE OF ALASKA 49TH
A. WILLIAM STOLL LS 12041
REGISTERED PROFESSIONAL LAND SURVEYOR

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AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN
W. 7TH AVENUE – WEST
SURVEY CONTROL

FILE P:\PROJECTS\D61519\D61519.05-DOWNTOWN CURB BULBS\CAD\SURVEY\SCS\MC14-CS-VC-HSIP2014 DOWNTOWN_SCS.DWG | DATE/TIME 12/23/2016 11:19 AM | LAYOUT D:A2 | DESIGNED | CHECKED AWS | DRAFTED DOWL

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A3	D:A7

HORIZONTAL AND VERTICAL CONTROL – 7TH AVENUE WEST ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
27	"SA" 33+29.97	336.03 LT	61° 12' 59.45261" N	149° 54' 06.62217" W	339986.6627	345384.6093	125.38	97.30	Fd BC[6714-S]: HSIP-27
28	"SA" 33+41.08	26.03 LT	61° 12' 56.39911" N	149° 54' 06.45842" W	339676.5795	345393.0948	124.63	96.56	Fd BC[6714-S]: HSIP-28
29	"SA" 33+93.93	383.48 RT	61° 12' 52.36380" N	149° 54' 05.38944" W	339266.8559	345446.0669	123.82	95.71	Fd BC[6714-S]: HSIP-29
30	"SA" 37+03.26	389.34 RT	61° 12' 52.30427" N	149° 53' 59.07379" W	339261.2800	345755.4035	126.47	98.32	Fd BC[6714-S]: HSIP-30
751	"SA" 37+56.73	31.50 RT	61° 12' 55.82765" N	149° 53' 57.97708" W	339619.1769	345808.5675	-	98.51	Fd BC[6714-S]: CP
32	"SA" 40+63.20	25.66 LT	61° 12' 56.38982" N	149° 53' 51.71923" W	339676.7425	346114.9652	126.77	98.60	Fd BC[6714-S]: HSIP-32
31	"SA" 40+64.31	386.51 RT	61° 12' 52.33125" N	149° 53' 51.69875" W	339264.5794	346116.6133	126.37	98.19	Fd BC[6714-S]: HSIP-31
33	"SA" 44+20.89	384.30 RT	61° 12' 52.35277" N	149° 53' 44.41655" W	339267.3291	346473.2771	127.96	99.76	Fd BC[6714-S]: HSIP-33

RECOVERED MONUMENTS – 7TH AVENUE WEST ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
821	"SA" 30+00.00	0.00	61° 12' 56.17626" N	149° 54' 13.42752" W	339653.4399	345051.8083	Fd AM/Bx: SI 7th Ave/L St
831	"SA" 30+12.56	363.48 RT	61° 12' 52.59602" N	149° 54' 13.24477" W	339289.8655	345061.2943	Fd AM/Bx[LS6091]: SI 8th Ave/L St
829	"SA" 30+41.47	333.27 RT	61° 12' 52.89069" N	149° 54' 12.64841" W	339319.8329	345090.4586	Fd IP/BC[MOA]: ROW/SW Cor L7A Blk 84 L Street Slide Replat Subd
818	"SA" 31+96.71	27.57 LT	61° 12' 56.42842" N	149° 54' 09.40559" W	339679.3400	345248.7491	Fd Rbr: ROW/SW Cor L6A Blk 65 L Street Slide Replat Subd
710	"SA" 33+35.93	329.98 LT	61° 12' 59.39251" N	149° 54' 06.50163" W	339980.5686	345390.5217	Fd Rbr: ROW/NE Cor L1C Blk 65 L Street Slide Replat Subd
820	"SA" 33+37.44	180.05 LT	61° 12' 57.91609" N	149° 54' 06.50134" W	339830.6315	345390.7612	Fd Rbr: ROW/SE Cor L1C Blk 65 L Street Slide Replat Subd
817	"SA" 33+39.51	29.85 RT	61° 12' 55.84913" N	149° 54' 06.50180" W	339620.7238	345391.0541	Fd IP: ROW/NE Cor L1B Blk 84 L Street Slide Replat Subd
812	"SA" 33+41.13	180.20 RT	61° 12' 54.36852" N	149° 54' 06.49933" W	339470.3613	345391.4009	Fd Rbr: ROW/SE Cor L1B Blk 84 L Street Slide Replat Subd
811	"SA" 33+41.40	230.29 RT	61° 12' 53.87529" N	149° 54' 06.50401" W	339420.2714	345391.2470	Fd Rbr: ROW/SE Cor L4A Blk 84 L Street Slide Replat Subd
810	"SA" 33+41.95	280.53 RT	61° 12' 53.38052" N	149° 54' 06.50288" W	339370.0254	345391.3778	Fd Rbr: ROW/SE Cor L5A Blk 84 L Street Slide Replat Subd
809	"SA" 33+42.46	330.40 RT	61° 12' 52.88944" N	149° 54' 06.50275" W	339320.1545	345391.4591	Fd Rbr: ROW/SE Cor L6A Blk 84 L Street Slide Replat Subd
832	"SA" 33+43.07	390.46 RT	61° 12' 52.29805" N	149° 54' 06.50247" W	339260.0965	345391.5628	Fd Rbr: ROW/NE Cor L1 Blk 96 L Street Slide Replat Subd
709	"SA" 33+65.66	360.02 LT	61° 12' 59.68531" N	149° 54' 05.88865" W	340010.3483	345420.4978	Fd BC[MOA]: SI 6th Ave/K St
815	"SA" 33+69.14	0.00	61° 12' 56.14009" N	149° 54' 05.89070" W	339650.3170	345420.9391	Fd AC/Bx: SI 7th Ave/K St
807	"SA" 33+69.36	360.09 RT	61° 12' 52.59427" N	149° 54' 05.89071" W	339290.2234	345421.4802	Fd AC/Bx: SI 8th Ave/K St
816	"SA" 33+99.16	29.94 RT	61° 12' 55.84506" N	149° 54' 05.27820" W	339620.4001	345450.9820	Fd IronRod: ROW/NW Cor L5A Blk 83 Anchorage Townsite Subd
813	"SA" 33+99.30	170.07 RT	61° 12' 54.46525" N	149° 54' 05.27703" W	339480.2748	345451.2507	Fd Rbr: ROW/SW Cor L5A Blk 83 Anchorage Townsite Subd
808	"SA" 33+99.34	330.01 RT	61° 12' 52.89028" N	149° 54' 05.27827" W	339320.3305	345451.4312	Fd Rbr: ROW/SW Cor L7 Blk 83 Anchorage Townsite Subd
819	"SA" 34+99.15	30.06 RT	61° 12' 55.84331" N	149° 54' 03.23662" W	339620.3735	345550.9719	Fd Rbr: ROW/NW Cor L4 Blk 83 Anchorage Townsite Subd
814	"SA" 34+99.45	390.10 RT	61° 12' 52.29803" N	149° 54' 03.23498" W	339260.3358	345551.5977	Fd Rbr: ROW/NW Cor L4 Blk 97 Anchorage Townsite Subd
826	"SA" 37+29.35	0.00	61° 12' 56.13790" N	149° 53' 58.53609" W	339650.6423	345781.1409	Fd Rbr/Bx: SI 7th Ave/I St
825	"SA" 37+29.36	360.11 RT	61° 12' 52.59194" N	149° 53' 58.53746" W	339290.5350	345781.6268	Fd AC/Bx: SI 8th Ave/I St
837	"SA" 37+29.51	360.05 LT	61° 12' 59.68332" N	149° 53' 58.53109" W	340010.6947	345780.8328	Fd Copperweld/Bx: SI 6th Ave/I St
827	"SA" 37+57.48	330.97 RT	61° 12' 52.87877" N	149° 53' 57.96307" W	339319.7072	345809.7146	Fd IP: ROW/SW Cor L7 Blk 82 Anchorage Townsite Subd
822	"SA" 37+59.33	390.05 RT	61° 12' 52.29701" N	149° 53' 57.92560" W	339260.6290	345811.6405	Fd AM/Conc[S10351]: ROW/NW Cor L5A Blk 98 Anchorage Townsite Subd
713	"SA" 39+59.40	390.15 RT	61° 12' 52.29564" N	149° 53' 53.84079" W	339260.7997	346011.7063	Fd Pipe Mon[DOWL]: ROW/NE Cor L2 Blk 98 Anchorage Townsite Subd
828	"SA" 39+59.41	330.14 RT	61° 12' 52.88653" N	149° 53' 53.84023" W	339320.8073	346011.6404	Fd AC: ROW/SE Cor L9A Blk 82 Anchorage Townsite Subd
712	"SA" 40+89.43	360.14 RT	61° 12' 52.59085" N	149° 53' 51.18577" W	339290.9827	346141.6967	Fd AC[MOA]: SI 8th Ave/H St
711	"SA" 40+89.49	0.00	61° 12' 56.13709" N	149° 53' 51.18269" W	339651.1180	346141.2833	Fd AC[MOA]: SI 7th Ave/H St
833	"SA" 40+89.60	359.99 LT	61° 12' 59.68188" N	149° 53' 51.18030" W	340011.1066	346140.8360	Fd AC/Bx[LS6091]: SI 6th Ave/H St
836	"SA" 44+49.39	360.23 RT	61° 12' 52.58983" N	149° 53' 43.83460" W	339291.4492	346501.7414	Fd AC/Bx[7338-S]: SI 8th Ave/G St
834	"SA" 44+49.55	0.00	61° 12' 56.13697" N	149° 53' 43.83094" W	339651.6762	346501.3448	Fd AM/Bx[LS7338]: SI 7th Ave/G St

VERTICAL CONTROL – 7TH AVENUE WEST ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING		
604	"SA" 33+38.62	34.77 LT	61° 12' 56.49" N	149° 54' 06.51" W	339685	345391	99.75	Set X on Bolt: TBM 2482-69A/Marked X on N bolt of FH/NW cor K St & 7th Ave
605	"SA" 36+97.00	23.47 LT	61° 12' 56.37" N	149° 53' 59.20" W	339674	345749	98.86	Set X on Bolt: TBM 2482-70B/Marked X on SE bolt of metal light pole/NW cor I St & 7th Ave
609	"SA" 37+62.04	388.78 RT	61° 12' 52.31" N	149° 53' 57.87" W	339262	345814	98.89	Set X on Bolt: TBM 2482-71A/Marked X on SE Bolt of metal light pole/SE cor I St & 8th Ave
610	"SA" 41+21.13	389.00 RT	61° 12' 52.32" N	149° 53' 50.54" W	339262	346174	99.14	Set X on Bolt: TBM 2482-71B/Marked X on N bolt of metal light pole/SE cor H St & 8th Ave
606	"SA" 41+21.14	31.43 RT	61° 12' 55.83" N	149° 53' 50.54" W	339620	346173	99.24	Set X on Bolt: TBM 2482-69B/Marked X on NW bolt of Signal Pole base/SE cor H St & 7th Ave
611	"SA" 44+21.93	388.68 RT	61° 12' 52.31" N	149° 53' 44.40" W	339263	346474	100.74	Set X in Bolt: TBM 2482-67/NE bolt of metal overhead sign pole base/SW cor G St & 8th Ave

STATE OF ALASKA
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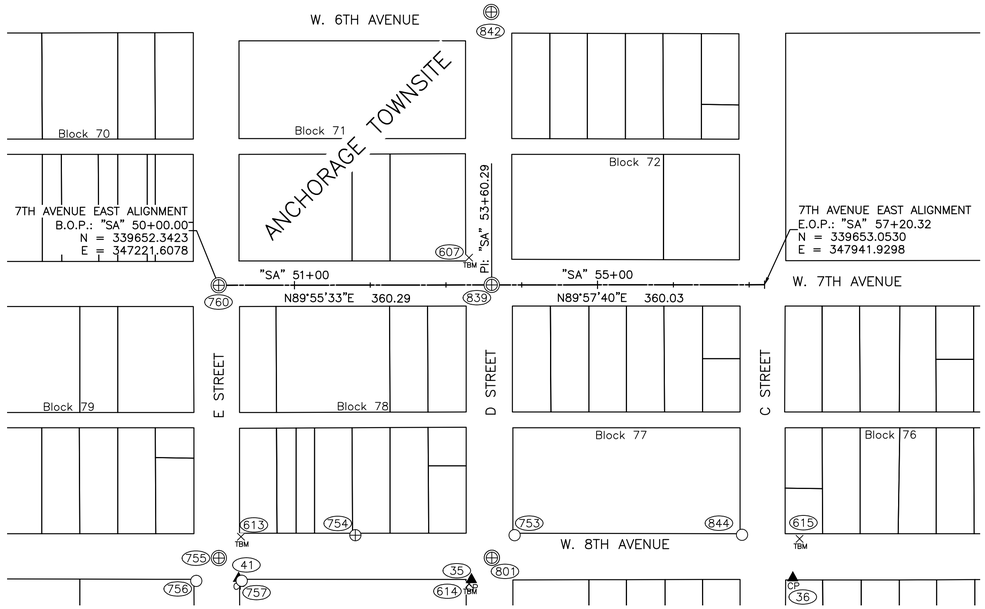
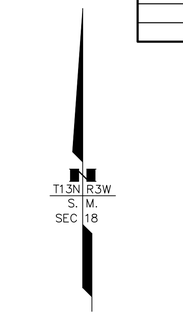
DOWNTOWN
W. 7TH AVENUE – WEST
SURVEY CONTROL

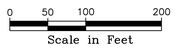
FILE P:\PROJECTS\D61519\D61519.05-DOWNTOWN CURB BULBS\CAD\SURVEY\SCS\MC14-CS-VC-HSIP2014 DOWNTOWN_SCS.DWG | DATE/TIME 12/23/2016 11:19 AM | LAYOUT D:A3 | DESIGNED | CHECKED | AWS | DRAFTED | DOWL

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A4	D:A7







LEGEND

- Property Miscellaneous Corner
- Primary Centerline Monument
- CP — Control Point
- TBM — Temporary Bench Mark
- (1) — Survey Point Number
- Property Line
- 1+00 2+00 — Project Alignment & Stationing

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NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the 2014 HSIP Anchorage Area Safety Improvements.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted forward and reverse angles collected by total station as well as static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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. 34.65.0440).

HORIZONTAL AND VERTICAL CONTROL – 7TH AVENUE EAST ALIGNMENT

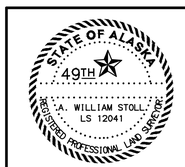
POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
41	"SA" 50+25.57	386.58 RT	61° 12' 52.32527" N	149° 53' 28.60535" W	339265.7980	347247.6815	-	100.76	Set BC[6714-S]: HSIP-41
35	"SA" 53+32.86	388.66 RT	61° 12' 52.30357" N	149° 53' 22.33137" W	339264.1090	347554.9716	129.78	101.42	Fd BC[6714-S]: HSIP-35
36	N/A	N/A	61° 12' 52.31967" N	149° 53' 13.67031" W	339266.4693	347979.1697	132.20	103.78	Fd BC[6714-S]: HSIP-36

VERTICAL CONTROL – 7TH AVENUE EAST ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING		
613	"SA" 50+28.92	331.83 RT	61° 12' 52.86" N	149° 53' 28.54" W	339321	347251	102.48	Set X on Bolt: TBM 2482-72A/Marked X on SW bolt of metal overhead sign pole/NE cor E St & 8th Ave
614	"SA" 53+29.93	394.68 RT	61° 12' 52.24" N	149° 53' 22.39" W	339258	347552	101.94	Set X on Bolt: TBM 2482-72B/Marked X on NE bolt of FH/SW cor D St & 8th Ave
607	"SA" 53+30.43	36.03 LT	61° 12' 56.49" N	149° 53' 22.38" W	339689	347552	105.83	Set X on Bolt: TBM 2482-73A/Marked X on NW bolt of FH/NW cor D St & 7th Ave
615	N/A	N/A	61° 12' 52.82" N	149° 53' 13.48" W	339318	347988	104.10	Set X on Bolt: TBM 2482-73B/Marked X on NW bolt of Metal Light Pole/NE cor C St & 8th Ave

RECOVERED MONUMENTS – 7TH AVENUE EAST ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
760	"SA" 50+00.00	0.00	61° 12' 56.13197" N	149° 53' 29.12459" W	339652.3423	347221.6078	Fd PC/Rbr/Bx[LS6091]: SI 7th Ave/E St
757	"SA" 50+29.85	390.05 RT	61° 12' 52.29107" N	149° 53' 28.51813" W	339262.3318	347251.9588	Fd Rbr: ROW/NW Cor L1A Blk 102 Anchorage Townsite Subd
754	"SA" 51+79.83	330.11 RT	61° 12' 52.88073" N	149° 53' 25.45532" W	339322.4649	347401.8688	Fd AM[6714-S]: ROW/SW Cor L12A Blk 78 Anchorage Townsite Subd
801	"SA" 53+60.01	360.16 RT	61° 12' 52.58418" N	149° 53' 21.77689" W	339292.6520	347582.0807	Fd AC: SI 8th Ave/D St
842	"SA" 53+60.08	360.02 LT	61° 12' 59.67575" N	149° 53' 21.76962" W	340012.8311	347581.2183	Fd BC/Bx[S8922]: SI 6th Ave/D St
839	"SA" 53+60.29	0.00	61° 12' 56.13061" N	149° 53' 21.76823" W	339652.8078	347581.8953	Fd AC/Bx: SI 7th Ave/D St
753	"SA" 53+90.16	330.21 RT	61° 12' 52.87874" N	149° 53' 21.16507" W	339322.6170	347611.9957	Fd AC/Conc[3252-S]: ROW/SW Cor L7A Blk 77 Anchorage Townsite Subd
844	"SA" 56+90.38	329.98 RT	61° 12' 52.87798" N	149° 53' 15.03541" W	339323.0523	347912.2123	Fd AC/Rbr[3262-S]: ROW/SE Cor L7A Blk 77 Anchorage Townsite Subd
755	N/A	N/A	61° 12' 52.58683" N	149° 53' 29.13494" W	339292.3179	347221.6990	Fd AM/Bx[6504]: SI 8th Ave/D St
756	N/A	N/A	61° 12' 52.29087" N	149° 53' 29.74375" W	339262.2120	347191.9308	Fd AC/Conc[4094-S]: ROW/NE Cor L1A Blk 101 Anchorage Townsite Subd



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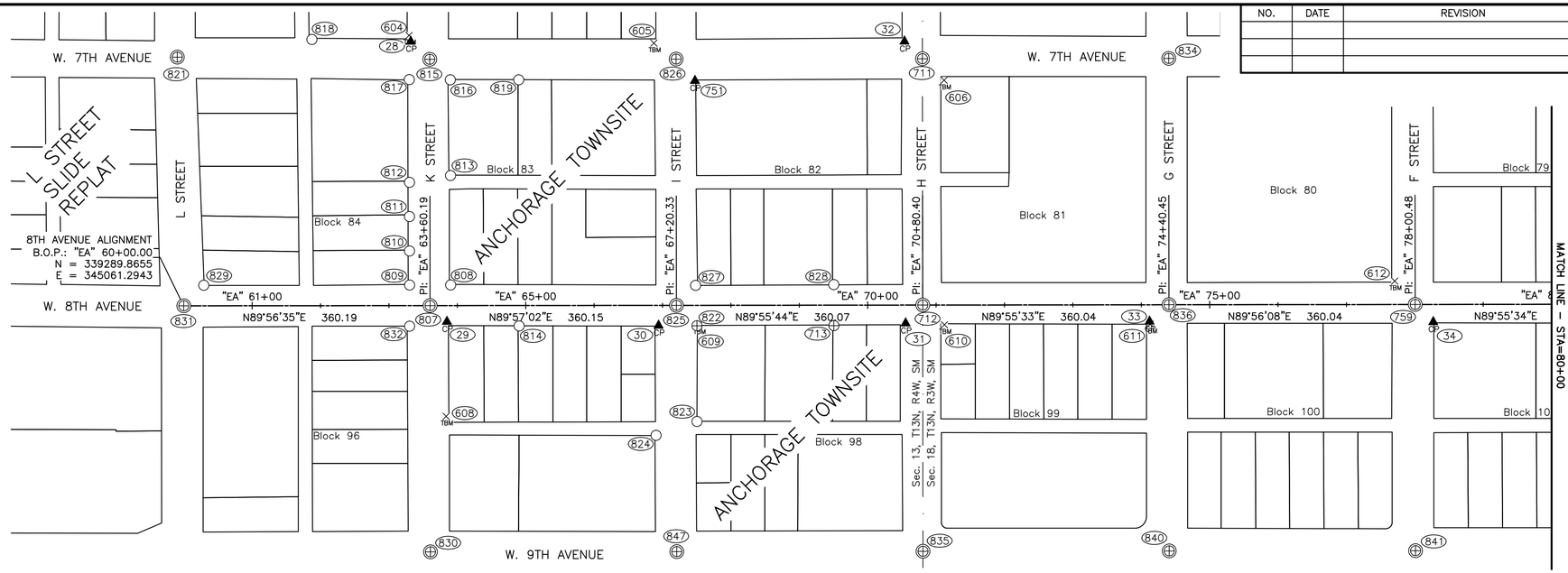
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

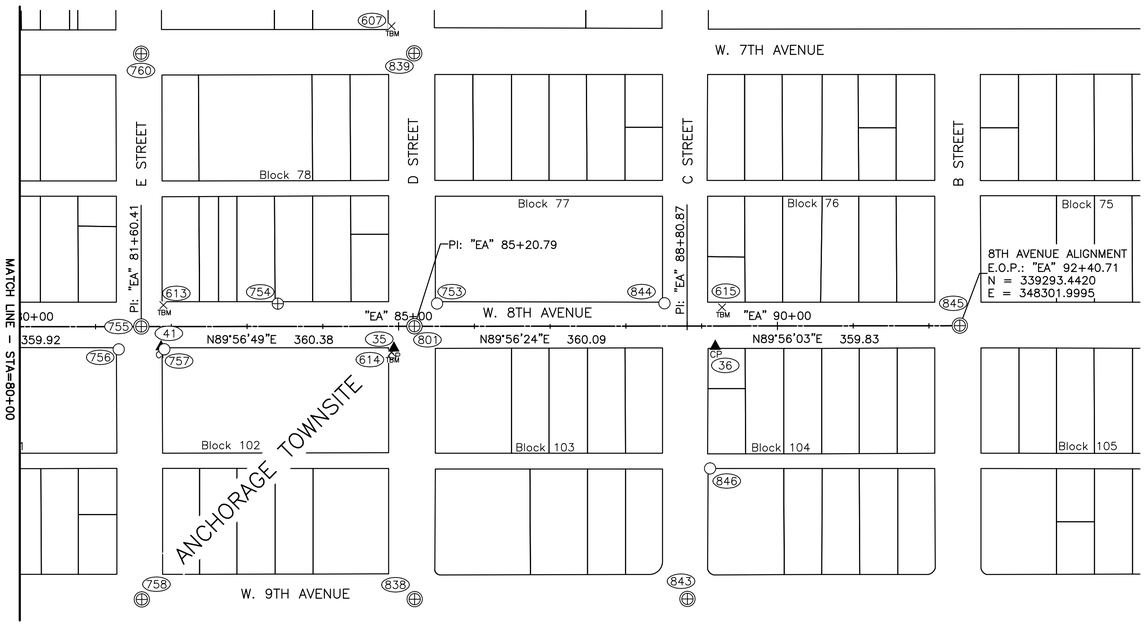
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

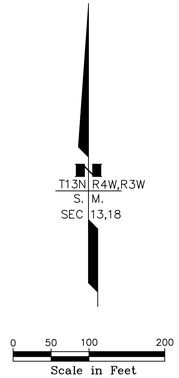
DOWNTOWN
W. 7TH AVENUE – EAST
SURVEY CONTROL

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A5	D:A7







LEGEND

- Property Primary Monument
- Property Miscellaneous Corner
- Primary Centerline Monument
- Control Point (CP)
- Temporary Bench Mark (TBM)
- Survey Point Number (1)
- Protracted Section Line
- Property Line
- 1+00 2+00 Project Alignment & Stationing

NOTES:

1. The information shown hereon is based on a field survey performed by DOWL in September through November 2006, and in October 2013. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

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HORIZONTAL CONTROL STATEMENT

Coordinate System:
This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in U.S. Survey feet units developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E. U.S. Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears N 01°43'26.4"E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E. U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N usf, +1312517.4904 E usf, and scale using 0.9998910192.

VERTICAL CONTROL STATEMENT

Elevations are based on the Municipality of Anchorage (MOA) Vertical Control Network. The datum is Mean Sea Level (MSL) GAAB 1972 Adjust and the unit of measure is U.S. Survey Feet.

The basis of elevations is MOA Bench Mark "CB–4C", a brass cap located in the southeast quadrant of the intersection of 12th Avenue and L Street, having a value of 90.88 feet above Mean Sea Level.

A Leica DNA10 digital level was used for all leveling on this project. The elevations were computed in Leica Digilev software using a length weighted adjustment. All of the level loops closed within Third–Order tolerances per Federal Geodetic Control Committee Standards and Specifications for Geodetic Control Networks.

All elevations on control points and benchmarks need to be field verified before they are used.

SEE MONUMENT TABLES ON SHEET D:A6 & D:A7

STATE OF ALASKA
49TH
A. WILLIAM STOLL
LS 12041
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN
W. 8TH AVENUE
SURVEY CONTROL

FILE P:\PROJECTS\D61519\D61519.05–DOWNTOWN CURB BULBS\CAD\SURVEY\SCS\MC14–CS–VC–HSIP2014 DOWNTOWN_SCS.DWG | DATE/TIME 12/23/2016 11:19 AM | LAYOUT D:A5 | DESIGNED | CHECKED AWS | DRAFTED DOWL

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A6	D:A7

HORIZONTAL AND VERTICAL CONTROL – 8TH AVENUE ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELLIPSOID HEIGHT	ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING			
28	"EA" 63+32.18	386.38 LT	61° 12' 56.39911" N	149° 54' 06.45842" W	339676.5795	345393.0948	124.63	96.56	Fd BC[6714-S]: HSIP-28
29	"EA" 63+84.75	23.39 RT	61° 12' 52.36380" N	149° 54' 05.38944" W	339266.8559	345446.0669	123.82	95.71	Fd BC[6714-S]: HSIP-29
30	"EA" 66+94.08	29.23 RT	61° 12' 52.30427" N	149° 53' 59.07379" W	339261.2800	345755.4035	126.47	98.32	Fd BC[6714-S]: HSIP-30
751	"EA" 67+47.68	328.61 LT	61° 12' 55.82765" N	149° 53' 57.97708" W	339619.1769	345808.5675	-	98.51	Fd BC[6714-S]: CP
32	"EA" 70+54.15	385.79 LT	61° 12' 56.38982" N	149° 53' 51.71923" W	339676.7425	346114.9652	126.77	98.60	Fd BC[6714-S]: HSIP-32
31	"EA" 70+55.29	26.37 RT	61° 12' 52.33125" N	149° 53' 51.69875" W	339264.5794	346116.6133	126.37	98.19	Fd BC[6714-S]: HSIP-31
33	"EA" 74+11.95	24.08 RT	61° 12' 52.35277" N	149° 53' 44.41655" W	339267.3291	346473.2771	127.96	99.76	Fd BC[6714-S]: HSIP-33
34	"EA" 78+26.71	25.41 RT	61° 12' 52.33780" N	149° 53' 35.94836" W	339266.4777	346888.0337	127.89	99.62	Fd BC[6714-S]: HSIP-36
41	"EA" 81+86.36	26.54 RT	61° 12' 52.32527" N	149° 53' 28.60535" W	339265.7980	347247.6815	-	100.76	Set BC[6714-S]: HSIP-41
35	"EA" 84+93.65	28.52 RT	61° 12' 52.30357" N	149° 53' 22.33137" W	339264.1090	347554.9716	129.78	101.42	Fd BC[6714-S]: HSIP-35
36	"EA" 89+17.85	26.60 RT	61° 12' 52.31967" N	149° 53' 13.67031" W	339266.4693	347979.1697	132.20	103.78	Fd BC[6714-S]: HSIP-36

VERTICAL CONTROL – 8TH AVENUE ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		ELEVATION	DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING		
604	"EA" 63+29.81	395.16 LT	61° 12' 56.49" N	149° 54' 06.51" W	339685	345391	99.75	Set X on Bolt: TBM 2482-69A/Marked X on N bolt of FH/NW cor K St & 7th Ave
608	"EA" 63+83.55	161.90 RT	61° 12' 51.00" N	149° 54' 05.42" W	339128	345445	100.20	Set X on Bolt: TBM 2482-70A/Marked X on top of N FH Bolt near alley/E side of K St between 8th & 9th Ave
605	"EA" 66+87.81	383.58 LT	61° 12' 56.37" N	149° 53' 59.20" W	339674	345749	98.86	Set X on Bolt: TBM 2482-70B/Marked X on SE bolt of metal light pole/NW cor I St & 7th Ave
609	"EA" 67+53.02	28.67 RT	61° 12' 52.31" N	149° 53' 57.87" W	339262	345814	98.89	Set X on Bolt: TBM 2482-71A/Marked X on SE Bolt of metal light pole/SE cor I St & 8th Ave
606	"EA" 71+12.11	328.72 LT	61° 12' 55.83" N	149° 53' 50.54" W	339620	346173	99.24	Set X on Bolt: TBM 2482-69B/Marked X on NW bolt of Signal Pole base/SE cor H St & 7th Ave
610	"EA" 71+12.19	28.85 RT	61° 12' 52.31" N	149° 53' 50.54" W	339262	346174	99.14	Set X on Bolt: TBM 2482-71B/Marked X on N bolt of metal light pole/SE cor H St & 8th Ave
611	"EA" 74+13.00	28.46 RT	61° 12' 52.31" N	149° 53' 44.40" W	339263	346474	100.74	Set X in Bolt: TBM 2482-67/NE bolt of metal overhead sign pole base/SW cor G St & 8th Ave
612	"EA" 77+70.60	34.24 LT	61° 12' 52.93" N	149° 53' 37.09" W	339326	346832	100.79	Set Chiseled X: TBM 2482-54/Concrete building foundation SE corner of Dena'ina Center/NW cor F St & 8th Ave
613	"EA" 81+89.69	28.21 LT	61° 12' 52.86" N	149° 53' 28.54" W	339321	347251	102.48	Set X on Bolt: TBM 2482-72A/Marked X on SW bolt of metal overhead sign pole/NE cor E St & 8th Ave
614	"EA" 84+90.72	34.53 RT	61° 12' 52.24" N	149° 53' 22.39" W	339258	347552	101.94	Set X on Bolt: TBM 2482-72B/Marked X on NE bolt of FH/SW cor D St & 8th Ave
607	"EA" 84+91.06	396.17 LT	61° 12' 56.49" N	149° 53' 22.38" W	339689	347552	105.83	Set X on Bolt: TBM 2482-73A/Marked X on NW bolt of FH/NW cor D St & 7th Ave
615	"EA" 89+26.90	24.66 LT	61° 12' 52.82" N	149° 53' 13.48" W	339318	347988	104.10	Set X on Bolt: TBM 2482-73B/Marked X on NW bolt of Metal Light Pole/NE cor C St & 8th Ave

STATE OF ALASKA
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STATE OF ALASKA
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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN
W. 8TH AVENUE

SURVEY CONTROL

FILE [P:\PROJECTS\D61519\D61519.05-DOWNTOWN CURB BULBS\CAD\SURVEY\SCS\WC14-CS-VC-HSIP2014 DOWNTOWN_SCS.DWG] DATE/TIME [12/23/2016 11:19 AM] LAYOUT [D_A6] DESIGNED [] CHECKED [AWS] DRAFTED [DOWL]

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:A7	D:A7

RECOVERED MONUMENTS – 8TH AVENUE ALIGNMENT

POINT	STATION	OFFSET	NAD83(92) GEODETIC COORDINATES		LOCAL COORDINATES		DESCRIPTION
			LATITUDE	LONGITUDE	NORTHING	EASTING	
831	"EA" 60+00.00	0.00	61° 12' 52.59602" N	149° 54' 13.24477" W	339289.8655	345061.2943	Fd AM/Bx[LS6091]: SI 8th Ave/L St
829	"EA" 60+29.19	29.94 LT	61° 12' 52.89069" N	149° 54' 12.64841" W	339319.8329	345090.4586	Fd IP/BC[MOA]: ROW/SW Cor L7A Blk 84 L Street Slide Replat Subd
818	"EA" 61+87.84	389.29 LT	61° 12' 56.42842" N	149° 54' 09.40559" W	339679.3400	345248.7491	Fd Rbr: ROW/SW Cor L6A Blk 65 L Street Slide Replat Subd
811	"EA" 63+30.08	130.08 LT	61° 12' 53.87529" N	149° 54' 06.50401" W	339420.2714	345391.2470	Fd Rbr: ROW/SE Cor L4A Blk 84 L Street Slide Replat Subd
817	"EA" 63+30.09	330.53 LT	61° 12' 55.84913" N	149° 54' 06.50180" W	339620.7238	345391.0541	Fd IP: ROW/NE Cor L1B Blk 84 L Street Slide Replat Subd
810	"EA" 63+30.16	79.83 LT	61° 12' 53.38052" N	149° 54' 06.50288" W	339370.0254	345391.3778	Fd Rbr: ROW/SE Cor L5A Blk 84 L Street Slide Replat Subd
809	"EA" 63+30.19	29.96 LT	61° 12' 52.88944" N	149° 54' 06.50275" W	339320.1545	345391.4591	Fd Rbr: ROW/SE Cor L6A Blk 84 L Street Slide Replat Subd
832	"EA" 63+30.24	30.10 RT	61° 12' 52.29805" N	149° 54' 06.50247" W	339260.0965	345391.5628	Fd Rbr: ROW/NE Cor L1 Blk 96 L Street Slide Replat Subd
812	"EA" 63+30.29	180.17 LT	61° 12' 54.36852" N	149° 54' 06.49933" W	339470.3613	345391.4009	Fd Rbr: ROW/SE Cor L1B Blk 84 L Street Slide Replat Subd
815	"EA" 63+60.00	360.09 LT	61° 12' 56.14009" N	149° 54' 05.89070" W	339650.3170	345420.9391	Fd AC/Bx: SI 7th Ave/K St
807	"EA" 63+60.19	0.00	61° 12' 52.59427" N	149° 54' 05.89071" W	339290.2234	345421.4802	Fd AC/Bx: SI 8th Ave/K St
830	"EA" 63+60.42	360.14 RT	61° 12' 49.04804" N	149° 54' 05.89069" W	338930.0892	345422.0230	Fd AC/Bx[LS6091]: SI 8th Ave/I St
816	"EA" 63+89.97	330.15 LT	61° 12' 55.84506" N	149° 54' 05.27820" W	339620.4001	345450.9820	Fd IronRod: ROW/NW Cor L5A Blk 83 Anchorage Townsite Subd
813	"EA" 63+90.12	190.03 LT	61° 12' 54.46525" N	149° 54' 05.27703" W	339480.2748	345451.2507	Fd Rbr: ROW/SW Cor L5A Blk 83 Anchorage Townsite Subd
808	"EA" 63+90.16	30.08 LT	61° 12' 52.89028" N	149° 54' 05.27827" W	339320.3305	345451.4312	Fd Rbr: ROW/SW Cor L7 Blk 83 Anchorage Townsite Subd
819	"EA" 64+89.96	330.04 LT	61° 12' 55.84331" N	149° 54' 03.23662" W	339620.3735	345550.9719	Fd Rbr: ROW/NW Cor L4 Blk 83 Anchorage Townsite Subd
814	"EA" 64+90.28	30.00 RT	61° 12' 52.29803" N	149° 54' 03.23498" W	339260.3358	345551.5977	Fd Rbr: ROW/NW Cor L4 Blk 97 Anchorage Townsite Subd
824	"EA" 66+90.37	190.08 RT	61° 12' 50.72039" N	149° 53' 59.15176" W	339100.4251	345751.8311	Fd Rbr/YPC[LS7338]: ROW/NE Cor L9A Blk 97 Anchorage Townsite Subd
826	"EA" 67+20.16	360.11 LT	61° 12' 56.13790" N	149° 53' 58.53609" W	339650.6423	345781.1409	Fd Rbr/Bx: SI 7th Ave/I St
825	"EA" 67+20.33	0.00	61° 12' 52.59194" N	149° 53' 58.53746" W	339290.5350	345781.6268	Fd AC/Bx: SI 8th Ave/I St
847	"EA" 67+20.33	360.13 RT	61° 12' 49.04575" N	149° 53' 58.53993" W	338930.4041	345782.0591	Fd AC/Bx[LS6091]: SI 9th Ave/I St
827	"EA" 67+48.46	29.14 LT	61° 12' 52.87877" N	149° 53' 57.96307" W	339319.7072	345809.7146	Fd IP: ROW/SW Cor L7 Blk 82 Anchorage Townsite Subd
823	"EA" 67+50.19	169.91 RT	61° 12' 50.91879" N	149° 53' 57.92889" W	339120.6649	345811.6949	Fd Rbr/OPC[S10351]: ROW/SW Cor L5A Blk 98 Anchorage Townsite Subd
822	"EA" 67+50.31	29.94 RT	61° 12' 52.29701" N	149° 53' 57.92560" W	339260.6290	345811.6405	Fd AM/Conc[S10351]: ROW/NW Cor L5A Blk 98 Anchorage Townsite Subd
713	"EA" 69+50.38	30.02 RT	61° 12' 52.29564" N	149° 53' 53.84079" W	339260.7997	346011.7063	Fd Pipe Mon[DOWL]: ROW/NE Cor L2 Blk 98 Anchorage Townsite Subd
828	"EA" 69+50.38	29.99 LT	61° 12' 52.88653" N	149° 53' 53.84023" W	339320.8073	346011.6404	Fd AC: ROW/SE Cor L9A Blk 82 Anchorage Townsite Subd
835	"EA" 70+80.38	360.09 RT	61° 12' 49.04508" N	149° 53' 51.18871" W	338930.8949	346142.1170	Fd IR/Bx: SI 9th Ave/H St
712	"EA" 70+80.40	0.00	61° 12' 52.59085" N	149° 53' 51.18577" W	339290.9827	346141.6967	Fd AC[MOA]: SI 8th Ave/H St
711	"EA" 70+80.46	360.14 LT	61° 12' 56.13709" N	149° 53' 51.18269" W	339651.1180	346141.2833	Fd AC[MOA]: SI 7th Ave/H St
840	"EA" 74+40.40	360.15 RT	61° 12' 49.04347" N	149° 53' 43.83777" W	338931.3013	346502.1618	Fd AC/Bx[LS6091]: SI 9th Ave/G St
836	"EA" 74+40.45	0.00	61° 12' 52.58983" N	149° 53' 43.83460" W	339291.4492	346501.7414	Fd AC/Bx[7338-S]: SI 8th Ave/G St
834	"EA" 74+40.46	360.23 LT	61° 12' 56.13697" N	149° 53' 43.83094" W	339651.6762	346501.3448	Fd AM/Bx[LS7338]: SI 7th Ave/G St
759	"EA" 78+00.48	0.00	61° 12' 52.58809" N	149° 53' 36.48359" W	339291.8533	346861.7781	Fd AM/Bx[7338-S]: SI 8th Ave/F St
841	"EA" 78+00.48	360.11 RT	61° 12' 49.04213" N	149° 53' 36.48731" W	338931.7460	346862.1827	Fd AC/Bx[LS6091]: SI 9th Ave/F St
756	"EA" 81+30.60	30.07 R	61° 12' 52.29087" N	149° 53' 29.74375" W	339262.2120	347191.9308	Fd AC/Conc[4094-S]: ROW/NE Cor L1A Blk 101 Anchorage Townsite Subd
755	"EA" 81+60.41	0.00	61° 12' 52.58683" N	149° 53' 29.13494" W	339292.3179	347221.6990	Fd AM/Bx[6504]: SI 8th Ave/D St
760	"EA" 81+60.65	360.02 LT	61° 12' 56.13197" N	149° 53' 29.12459" W	339652.3423	347221.6078	Fd PC/Rbr/Bx[LS6091]: SI 7th Ave/E St
758	"EA" 81+60.72	360.16 RT	61° 12' 49.04039" N	149° 53' 29.13395" W	338932.1619	347222.3454	Fd Copperweld/Bx: SI 9th Ave/E St
757	"EA" 81+90.64	30.01 RT	61° 12' 52.29107" N	149° 53' 28.51813" W	339262.3318	347251.9588	Fd Rbr: ROW/NW Cor L1A Blk 102 Anchorage Townsite Subd
754	"EA" 83+40.60	29.98 LT	61° 12' 52.88073" N	149° 53' 25.45532" W	339322.4649	347401.8688	Fd AM[6714-S]: ROW/SW Cor L12A Blk 78 Anchorage Townsite Subd
801	"EA" 85+20.79	0.00	61° 12' 52.58418" N	149° 53' 21.77689" W	339292.6520	347582.0807	Fd AC: SI 8th Ave/D St
838	"EA" 85+20.79	360.18 RT	61° 12' 49.03750" N	149° 53' 21.78232" W	338932.4715	347582.4242	Fd AC/Bx[LS6091]: SI 9th Ave/D St
839	"EA" 85+20.98	360.16 LT	61° 12' 56.13061" N	149° 53' 21.76823" W	339652.8078	347581.8953	Fd AC/Bx: SI 7th Ave/D St
753	"EA" 85+50.73	29.93 LT	61° 12' 52.87874" N	149° 53' 21.16507" W	339322.6170	347611.9957	Fd AC/Conc[3252-S]: ROW/SW Cor L7A Blk 77 Anchorage Townsite Subd
844	"EA" 88+50.95	30.06 LT	61° 12' 52.87798" N	149° 53' 15.03541" W	339323.0523	347912.2123	Fd AC/Rbr[3262-S]: ROW/SE Cor L7A Blk 77 Anchorage Townsite Subd
843	"EA" 88+80.79	360.09 RT	61° 12' 49.03609" N	149° 53' 14.43155" W	338932.9431	347942.4605	Fd AC/Bx[LS6091]: SI 9th Ave/C St
846	"EA" 89+10.71	187.99 RT	61° 12' 50.73053" N	149° 53' 13.81786" W	339105.0728	347972.2215	Fd Rbr/YPC[LS3143]: ROW/NW Cor L7A Blk 104 Anchorage Townsite Subd
845	"EA" 92+40.71	0.00	61° 12' 52.57974" N	149° 53' 07.07803" W	339293.4420	348301.9995	Fd AC/Bx: SI 8th Ave/B St
821	N/A	N/A	61° 12' 56.17626" N	149° 54' 13.42752" W	339653.4399	345051.8083	Fd AM/Bx: SI 7th Ave/L St

STATE OF ALASKA
49TH
A. WILLIAM STOLL
LS 12041
REGISTERED PROFESSIONAL LAND SURVEYOR

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN
W. 8TH AVENUE

SURVEY CONTROL

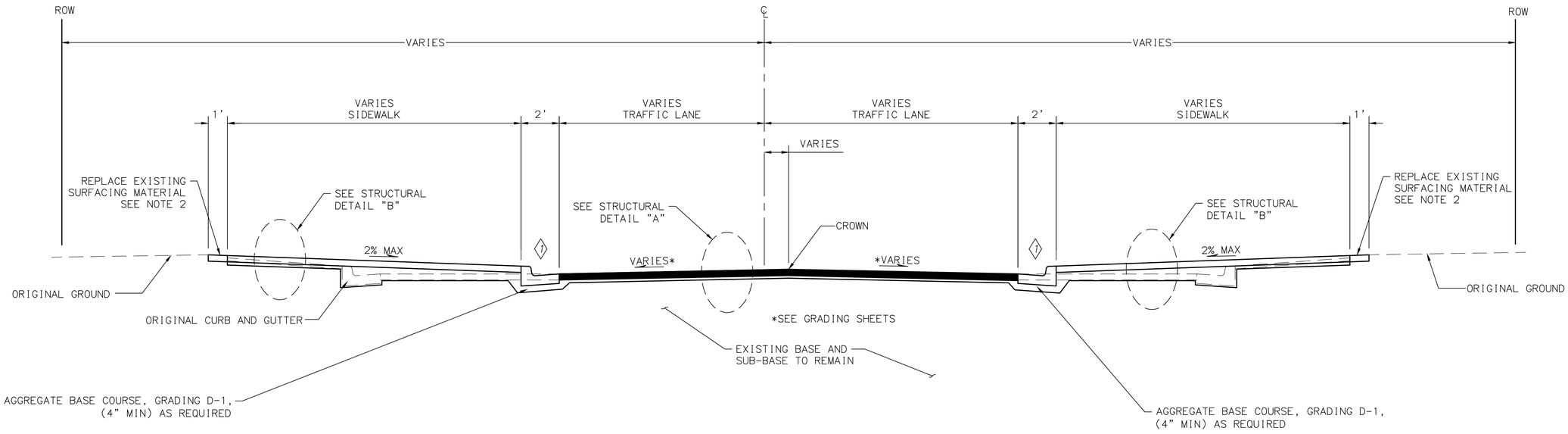
FILE | P:\PROJECTS\D61519\D61519.05-DOWNTOWN CURB BULBS\CAD\SURVEY\SCS\MC14-CS-VC-HSIP2014 DOWNTOWN_SCS.DWG | DATE/TIME | 12/23/2016 11:19 AM | LAYOUT | D:A7 | DESIGNED | CHECKED | AWS | DRAFTED | DOWL

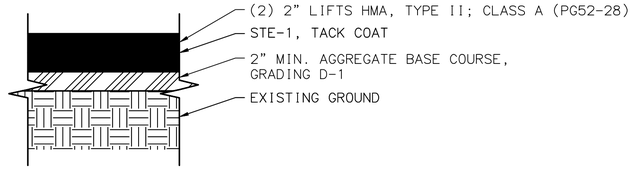
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D: B1	D: B1

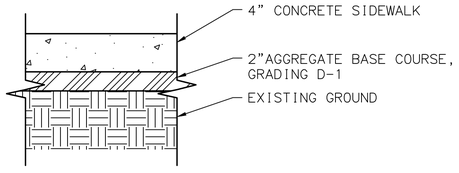
GENERAL NOTES:

1. FOR CURB AND GUTTER DETAIL SEE SHEET E1.
2. REPLACE EXISTING SURFACING MATERIAL SHALL BE SUBSIDIARY TO ITEM 608(1a), CONCRETE SIDEWALK, 4 INCHES THICK.





ROADWAY STRUCTURAL DETAIL "A"



SIDEWALK STRUCTURAL DETAIL "B"

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN CURB BULBS TYPICAL SECTIONS

FILE [P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-DT-B SHT-61519.DWG | DATE/TIME 12/23/2016 11:20 AM | LAYOUT D:B1 | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

FILE [P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-GR-F-SHT-61519.DWG | DATE/TIME 12/23/2016 11:25 AM | LAYOUT D:F1 | DESIGNED AKM | CHECKED CRW | DRAFTED AKM

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW601	FL	"TA" 15+84.58	−21.60	94.60	±ME, B FACING
NW602	SWLK	"TA" 15+84.85	−29.93	95.24	±ME
NW603	FL	"TA" 16+04.48	−13.54	94.45	E FACING
NW604	SWLK	"TA" 16+17.47	−30.00	94.84	GB ±ME
NW605	FL	"TA" 16+17.43	−13.51	94.36	BEGIN CURB CUT
NW606	SWLK	"TA" 16+54.72	−30.00	94.29	GB, ±ME
NW607	FL	"TA" 16+54.68	−13.42	94.10	END CURB CUT
NW608	FL	"TA" 16+72.11	−13.38	93.98	PC
NW609	FL	"TA" 16+84.92	−16.07	93.88	COR, BC
NW610	SWLK	"TA" 16+83.63	−30.00	94.52	–
NW611	SWLK	"TA" 16+87.55	−30.50	94.00	–
NW612	FL	"TA" 16+96.51	−25.93	93.22	PVI
NW613	FL	"TA" 17+01.50	−42.11	91.25	PT, EVC
NW614	SWLK	"TA" 16+87.51	−42.11	91.95	GB
NW615	FL	"TA" 17+01.50	−53.06	89.71	–
NW616	FL	"TA" 17+01.51	−64.00	88.11	B FACING

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW617	SWLK	"TA" 16+87.46	−63.93	88.76	GB
NW618	FL	"TA" 16+95.49	−82.07	85.44	±ME, E FACING
NW619	FL	"TA" 16+87.53	−81.86	85.59	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE601	CROWN	"TA" 17+16.68	−78.52	86.60	±ME
NE602	FL	"TA" 17+34.99	−74.70	86.51	±ME, B FACING
NE603	SWLK	"TA" 17+43.36	−74.45	87.31	±ME
NE604	FL	"TA" 17+29.09	−57.00	89.20	E FACING
NE605	FL	"TA" 17+29.09	−53.04	89.76	–
NE606	CROWN	"TA" 17+16.54	−53.06	90.23	EVC
NE607	FL	"TA" 17+29.07	−42.36	91.26	PT, EVC
NE608	SWLK	"TA" 17+43.39	−35.23	93.12	PC, R=4.30'
NE609	SWLK	"TA" 17+46.86	−30.56	94.21	PT, R=4.30'
NE610	FL	"TA" 17+33.85	−26.42	93.07	PVI
NE611	CROWN	"TA" 17+16.06	−27.07	93.05	PVI, K=4.11
NE612	FL	"TA" 17+45.38	−16.38	93.59	HIGH POINT
NE613	FL	"TA" 17+47.33	−15.53	93.58	COR, BVC
NE614	FL	"TA" 17+57.82	−13.56	93.47	PC
NE615	FL	"TA" 17+65.01	−13.54	93.40	B FACING
NE616	SWLK	"TA" 17+90.10	−30.43	93.75	±ME
NE617	FL	"TA" 17+90.09	−21.85	93.15	±ME, E FACING
NE618	EOP	"TA" 18+04.98	−20.38	93.14	±ME
NE619	SWLK	"TA" 17+43.38	−42.37	91.90	PC, R=4.30'

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW601	CROWN	"TA" 17+14.79	+43.00	94.71	±ME
SW602	FL	"TA" 17+01.13	+39.75	94.43	±ME
SW603	FL	"TA" 16+98.74	+29.96	94.27	PC
SW604	FL	"TA" 16+98.70	+29.79	94.26	COR
SW605	CROWN	"TA" 17+15.38	0.00	94.24	BVC
SW606	FL	"TA" 16+84.92	+15.13	94.16	COR
SW607	FL	"TA" 16+78.59	+14.14	94.20	PT
SW608	FL	"TA" 16+69.23	+14.13	94.25	B FACING
SW609	SWLK	"TA" 16+85.34	+29.69	94.81	–
SW610	FL	"TA" 16+45.91	+21.88	94.38	±ME, E FACING
SW611	SWLK	"TA" 16+46.14	+29.96	94.96	±ME
SW612	EOP	"TA" 15+99.04	+20.39	94.84	±ME
SW613	CROWN	"TA" 15+91.94	+0.96	95.15	±ME
SW614	SWLK	"TA" 16+85.33	+39.92	94.96	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE601	CROWN	"TA" 17+97.53	+1.05	93.77	±ME
SE602	FL	"TA" 17+90.24	+21.84	93.46	±ME, B FACING
SE603	SWLK	"TA" 17+89.95	+29.23	94.21	±ME
SE604	FL	"TA" 17+66.74	+13.96	93.63	E FACING
SE605	FL	"TA" 17+52.56	+13.93	93.76	PC
SE606	FL	"TA" 17+44.72	+15.09	93.87	COR
SE607	SWLK	"TA" 17+44.41	+29.09	94.49	±ME
SE608	FL	"TA" 17+28.79	+28.31	94.17	COR
SE609	FL	"TA" 17+26.14	+36.19	94.29	PC
SE610	SWLK	"TA" 17+44.37	+44.79	95.28	±ME
SE611	FL	"TA" 17+24.62	+44.39	94.40	±ME
SE612	EOP	"TA" 17+23.19	+45.42	94.48	±ME

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

F STREET

W 3RD AVENUE

CONCRETE PLANTERS

ROW

"TA" 16+00

"TA" 17+00

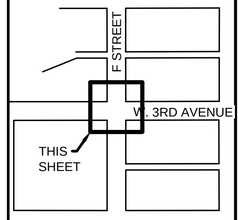
"TA" 18+00

SHEET NO.	TOTAL SHEETS
D: F1	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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



STATE OF ALASKA
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BRAD S. DOGGETT
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REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

W. 3RD AVE & F ST
GRADING PLAN

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D :F2	D:F16

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"TA" 16+78.58	+34.89'	20'	TBC
C2	"TA" 16+72.75	-42.12'	28'	TBC
C3	"TA" 17+57.82	-42.31'	28'	TBC
C4	"TA" 17+52.51	+40.69'	26'	TBC

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S1-1	MOA CB	"TA"16+93.65	+21.78'	94.60'	CURB INLET		P1-1 = 89.35'	-
S1-2	MOA CB	"TA"17+54.91	+14.69'	94.22'	CURB INLET		P1-2 = 88.97'	-
S1-3	TYPE I	"TA"17+21.27	+2.23'	94.20'	MANHOLE	P1-1 = 89.01' P1-2 = 88.61' P1-5 = 86.49'	P1-3 = 86.85'	REPLACE EXISTING
S1-4	TYPE I	"TA"17+22.05	-19.51'	93.53'	MANHOLE	P1-3 = 86.55'	P1-4 = 85.66'	ADJUST EXISTING
SSMH-4	SSMH	"TA"17+30.29	-16.12'	93.65'	MANHOLE			ADJUST EXISTING
SSMH-5	SSMH	"TA"17+29.63	-76.48'	86.54'	MANHOLE			ADJUST EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P1-1	12"	CPEP	34	1.0%	S1-1	S1-3	
P1-2	12"	CPEP	36	1.0%	S1-2	S1-3	
P1-3	12"	CPEP	22	1.4%	S1-3	S1-4	EXISTING
P1-4	12"	CPEP			S1-4		EXISTING
P1-5	10"	CPEP				S1-3	EXISTING

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

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

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 3RD AVE & F ST GRADING PLAN

DATE/TIME 12/23/2016 11:25 AM | LAYOUT D:F2 | DESIGNED AKM | CHECKED CRW | DRAFTED AKM
FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-GR-F-SHT-61519.DWG

SHEET NO.	TOTAL SHEETS
D: F3	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

NO.	REVISION
DATE	

NO.	REVISION
DATE	

NO.	REVISION
DATE	

THIS SHEET

W. 7TH AVENUE

W. 8TH AVENUE

D STREET

STATE OF ALASKA
49TH
BRAD S. DOGGETT
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

W. 7TH AVE & D ST
GRADING PLAN

W. 7TH AVENUE

D STREET

"SA" 53+00

"SA" 54+00

WARNING: SHALLOW TRAFFIC SYSTEM CONDUIT

WARNING: SHALLOW TRAFFIC SYSTEM CONDUIT

ROW

CR

SD

SS

OE

W

NW714 NW715 NW712 NW713 NW711 NW710 NW709 NW707 NW708 NW702 NW701 NW703 NW706 NW704 NW705

NE701 NE702 NE704 NE703 NE705 NE706 NE707 NE708 NE712 NE714 NE716 NE717 NE709 NE710 NE711 NE713 NE715 NE718 NE719

SW715 SW711 SW710 SW709 SW713 SW712 SW714 SW716 SW708 SW707 SW706 SW705 SW704 SW703 SW702 SW701

SE704 SE705 SE702 SE701 SE706 SE703 SE708 SE707 SE709 SE710 SE712 SE711 SE713

NW716

SSMH-6

S3-1 S3-2 S3-3 S3-4 S3-5 S3-6 S3-7 S3-8

P3-1 P3-2 P3-3 P3-4 P3-5 P3-6 P3-7 P3-8 P3-9

C1 C2 C3 C4 C5 C6 C7

FILE: P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-GR-F-SHT-61519.DWG

DATE/TIME 12/23/2016 11:26 AM | LAYOUT D:F3 | DESIGNED AKM | CHECKED CRW | DRAFTED AKM

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW701	FL	"SA" 52+72.85	−21.63	102.23	±ME
NW702	SWLK	"SA" 52+72.86	−27.77	102.64	±ME
NW703	FL	"SA" 52+83.55	−21.61	101.93	B FACING
NW704	FL	"SA" 53+07.12	−13.89	102.09	E FACING
NW705	FL	"SA" 53+17.79	−13.94	102.15	PC
NW706	FL	"SA" 53+30.45	−16.95	101.93	COR
NW707	FL	"SA" 53+43.47	−30.05	101.84	COR
NW708	SWLK	"SA" 53+25.03	−27.63	102.62	PC
NW709	SWLK	"SA" 53+32.05	−34.60	102.49	PT
NW710	FL	"SA" 53+46.39	−42.65	101.91	PT
NW711	FL	"SA" 53+46.41	−54.23	101.98	B FACING
NW712	SWLK	"SA" 53+32.21	−79.08	102.66	±ME
NW713	FL	"SA" 53+38.14	−79.15	102.12	±ME, E FACING
NW714	EOP	"SA" 53+39.40	−92.82	102.15	±ME
NW715	CROWN	"SA" 53+60.18	−85.27	102.59	±ME
NW716	CROWN	"SA" 53+60.29	−0.37	102.47	PT

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW702	FL	"SA" 53+38.23	+67.15	102.06	±ME, B FACING
SW703	SWLK	"SA" 53+31.99	+66.97	102.67	±ME
SW704	FL	"SA" 53+46.43	+46.65	102.26	E FACING
SW705	FL	"SA" 53+46.43	+42.35	102.23	PC
SW706	FL	"SA" 53+44.10	+30.98	102.17	COR
SW707	SWLK	"SA" 53+31.99	+30.91	102.75	PC
SW708	SWLK	"SA" 53+29.24	+28.16	102.76	PT
SW709	FL	"SA" 53+29.13	+16.76	102.22	COR
SW710	FL	"SA" 53+17.53	+13.56	102.25	PT
SW711	FL	"SA" 53+12.70	+13.59	102.28	B FACING
SW712	FL	"SA" 52+88.39	+21.82	102.10	E FACING
SW713	FL	"SA" 52+80.68	+21.80	102.09	±ME
SW714	SWLK	"SA" 52+80.68	+28.05	102.83	±ME
SW715	CROWN	"SA" 52+76.74	0.00	102.43	±ME
SW716	FL	"SA" 52+86.92	+28.07	102.10	E FACING

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE701	FL	"SA" 53+81.79	−77.81	102.22	±ME, B FACING
NE702	SWLK	"SA" 53+92.39	−77.91	102.98	±ME
NE703	SWLK	"SA" 53+92.47	−72.05	102.99	–
NE704	SWLK	"SA" 53+89.96	−72.09	102.88	–
NE705	FL	"SA" 53+73.88	−54.13	102.08	E FACING
NE706	FL	"SA" 53+73.87	−43.04	102.02	PC
NE707	FL	"SA" 53+76.91	−30.15	101.94	COR
NE708	FL	"SA" 53+90.00	−29.82	102.62	–
NE709	FL	"SA" 53+90.25	−17.07	101.99	COR
NE710	FL	"SA" 54+02.55	−14.27	102.14	PT
NE711	FL	"SA" 54+13.93	−14.24	102.26	BEGIN CURB CUT
NE712	SWLK	"SA" 54+13.97	−29.86	102.88	±ME, GB
NE713	FL	"SA" 54+37.98	−14.18	102.53	END CURB CUT
NE714	SWLK	"SA" 54+37.86	−29.88	103.15	±ME, GB
NE715	FL	"SA" 54+44.10	−14.17	102.59	B FACING
NE716	SWLK	"SA" 54+66.53	−29.84	101.40	PT, ±ME
NE717	FL	"SA" 54+66.74	−21.65	102.86	±ME, E FACING
NE718	CROWN	"SA" 54+57.70	−0.32	103.24	±ME
NE719	CROWN	"SA" 54+02.82	−0.52	102.64	PROFILE GB

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE701	EOP	"SA" 54+48.02	+20.42	102.75	±ME
SE702	FL	"SA" 54+28.16	+21.72	102.51	PT, ±ME, B FACING
SE703	SWLK	"SA" 54+28.17	+28.02	103.13	±ME
SE704	FL	"SA" 54+02.90	+13.23	102.36	PC, E FACING
SE705	FL	"SA" 53+90.24	+16.07	102.28	COR
SE706	SWLK	"SA" 53+90.94	+28.04	102.90	PC
SE707	SWLK	"SA" 53+87.94	+31.04	102.87	PT
SE708	FL	"SA" 53+76.30	+30.60	102.29	COR
SE709	FL	"SA" 53+73.95	+42.00	102.36	PC
SE710	FL	"SA" 53+73.96	+48.53	102.32	B FACING
SE711	FL	"SA" 53+81.81	+72.02	102.17	±ME, E FACING
SE712	SWLK	"SA" 53+87.96	+71.94	102.69	±ME
SE713	EOP	"SA" 53+80.52	+82.40	102.17	±ME

CURVE TABLE

ID	STATION	OFFSET	RADIUS	REMARKS
C1	"SA" 53+17.68	+42.31'	28'	TBC
C2	"SA" 53+17.64	−42.69'	28'	TBC
C3	"SA" 54+02.62	−43.02'	28'	TBC
C4	"SA" 54+02.70	+41.98'	28'	TBC
C5	"SA" 53+90.94	+31.04	3'	SWLK
C6	"SA" 53+29.24	+30.91'	2.75'	SWLK
C7	"SA" 53+25.05	−34.63'	7'	SWLK

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S3−1	MOA CB	"SA"53+37.64	+22.67'	102.60'	CURB INLET		P3−1 = 97.80'	–
S3−2	MOA CB	"SA"52+86.93	+22.57'	102.59'	CURB INLET		P3−2 = 97.04'	–
S3−3	MOA CB	"SA"52+82.10	−22.37'	102.44'	CURB INLET		P3−3 = 96.89'	–
S3−4	MOA CB	"SA"53+37.42	−22.87'	102.28'	CURB INLET		P3−4 = 96.73'	–
S3−5	MOA CB	"SA"53+83.01	−23.03'	102.39'	CURB INLET		P3−5 = 96.84'	–
S3−6	MOA CB	"SA"53+82.92	+22.16'	102.73'	CURB INLET		P3−6 = 97.18'	–
S3−7	TYPE I	"SA"52+86.93	+7.71'	102.33'	MANHOLE	P3−3 = 96.59' P3−2 = 96.89'	P3−7 = 96.53'	–
S3−8	TYPE II	"SA"53+67.35	+7.73'	102.41'	MANHOLE	P3−1 = 97.47' P3−4 = 96.30' P3−5 = 96.49' P3−6 = 96.97' P3−7 = 95.73' P3−8 = 93.46'	P3−9 = 93.40'	REPLACE EXISTING
SSMH−6	SSMH	"SA"54+11.01	+13.62'	102.49'	MANHOLE			ADJUST EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P3−1	12"	CPEP	34	1.0%	S3−1	S3−8	
P3−2	12"	CPEP	15	1.0%	S3−2	S3−7	
P3−3	12"	CPEP	31	1.0%	S3−3	S3−7	
P3−4	12"	CPEP	43	1.0%	S3−4	S3−8	
P3−5	12"	CPEP	35	1.0%	S3−5	S3−8	
P3−6	12"	CPEP	22	1.0%	S3−6	S3−8	
P3−7	18"	CPEP	81	1.0%	S3−7	S3−8	
P3−8	20"	CMP				S3−8	EXISTING
P3−9	20"	CMP			S3−8		EXISTING

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 7TH AVE & D ST GRADING PLAN

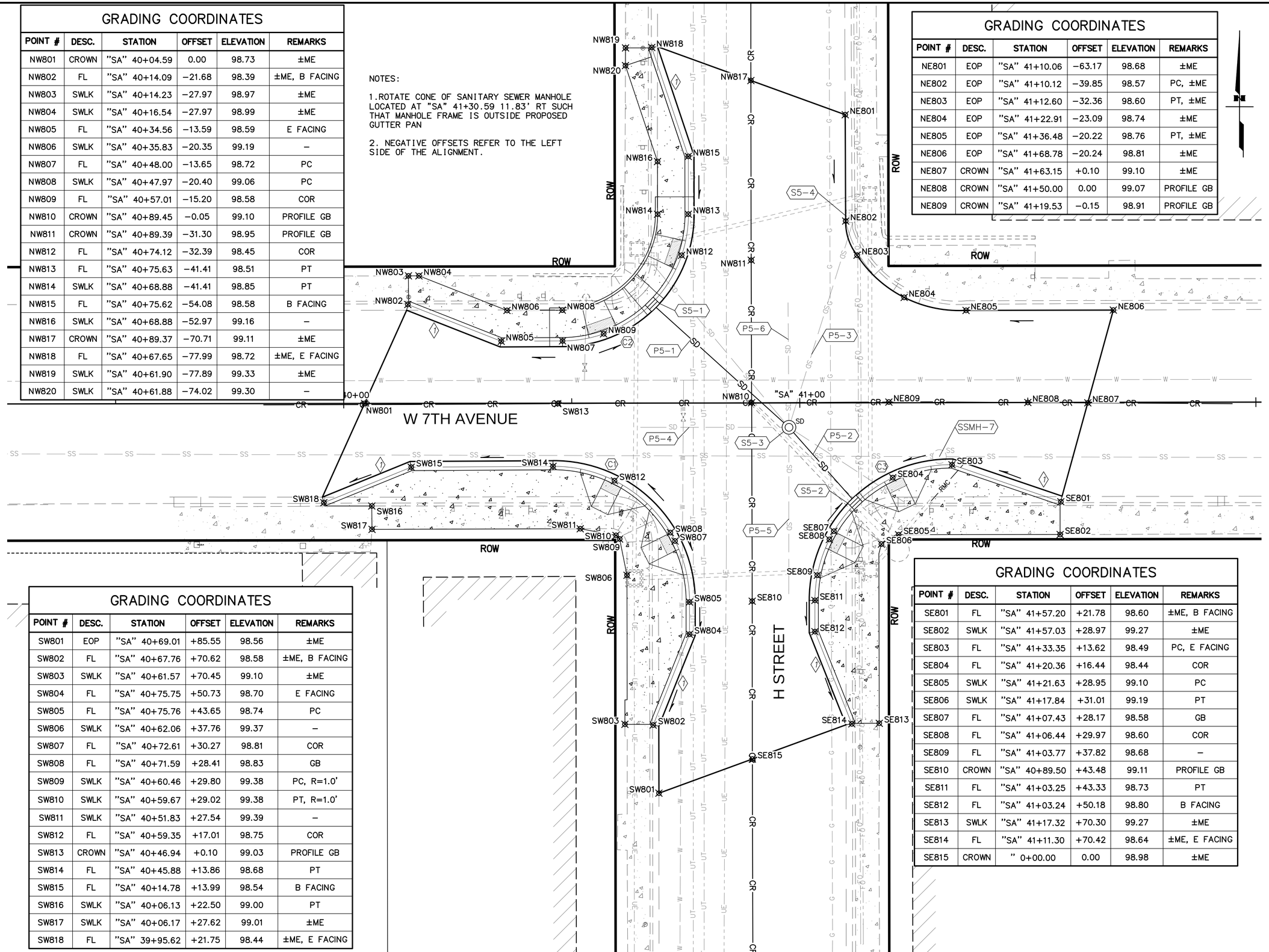
GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW801	CROWN	"SA" 40+04.59	0.00	98.73	±ME
NW802	FL	"SA" 40+14.09	−21.68	98.39	±ME, B FACING
NW803	SWLK	"SA" 40+14.23	−27.97	98.97	±ME
NW804	SWLK	"SA" 40+16.54	−27.97	98.99	±ME
NW805	FL	"SA" 40+34.56	−13.59	98.59	E FACING
NW806	SWLK	"SA" 40+35.83	−20.35	99.19	–
NW807	FL	"SA" 40+48.00	−13.65	98.72	PC
NW808	SWLK	"SA" 40+47.97	−20.40	99.06	PC
NW809	FL	"SA" 40+57.01	−15.20	98.58	COR
NW810	CROWN	"SA" 40+89.45	−0.05	99.10	PROFILE GB
NW811	CROWN	"SA" 40+89.39	−31.30	98.95	PROFILE GB
NW812	FL	"SA" 40+74.12	−32.39	98.45	COR
NW813	FL	"SA" 40+75.63	−41.41	98.51	PT
NW814	SWLK	"SA" 40+68.88	−41.41	98.85	PT
NW815	FL	"SA" 40+75.62	−54.08	98.58	B FACING
NW816	SWLK	"SA" 40+68.88	−52.97	99.16	–
NW817	CROWN	"SA" 40+89.37	−70.71	99.11	±ME
NW818	FL	"SA" 40+67.65	−77.99	98.72	±ME, E FACING
NW819	SWLK	"SA" 40+61.90	−77.89	99.33	±ME
NW820	SWLK	"SA" 40+61.88	−74.02	99.30	–

NOTES:

1. ROTATE CONE OF SANITARY SEWER MANHOLE LOCATED AT "SA" 41+30.59 11.83' RT SUCH THAT MANHOLE FRAME IS OUTSIDE PROPOSED GUTTER PAN

2. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.



GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE801	EOP	"SA" 41+10.06	−63.17	98.68	±ME
NE802	EOP	"SA" 41+10.12	−39.85	98.57	PC, ±ME
NE803	EOP	"SA" 41+12.60	−32.36	98.60	PT, ±ME
NE804	EOP	"SA" 41+22.91	−23.09	98.74	±ME
NE805	EOP	"SA" 41+36.48	−20.22	98.76	PT, ±ME
NE806	EOP	"SA" 41+68.78	−20.24	98.81	±ME
NE807	CROWN	"SA" 41+63.15	+0.10	99.10	±ME
NE808	CROWN	"SA" 41+50.00	0.00	99.07	PROFILE GB
NE809	CROWN	"SA" 41+19.53	−0.15	98.91	PROFILE GB

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW801	EOP	"SA" 40+69.01	+85.55	98.56	±ME
SW802	FL	"SA" 40+67.76	+70.62	98.58	±ME, B FACING
SW803	SWLK	"SA" 40+61.57	+70.45	99.10	±ME
SW804	FL	"SA" 40+75.75	+50.73	98.70	E FACING
SW805	FL	"SA" 40+75.76	+43.65	98.74	PC
SW806	SWLK	"SA" 40+62.06	+37.76	99.37	–
SW807	FL	"SA" 40+72.61	+30.27	98.81	COR
SW808	FL	"SA" 40+71.59	+28.41	98.83	GB
SW809	SWLK	"SA" 40+60.46	+29.80	99.38	PC, R=1.0'
SW810	SWLK	"SA" 40+59.67	+29.02	99.38	PT, R=1.0'
SW811	SWLK	"SA" 40+51.83	+27.54	99.39	–
SW812	FL	"SA" 40+59.35	+17.01	98.75	COR
SW813	CROWN	"SA" 40+46.94	+0.10	99.03	PROFILE GB
SW814	FL	"SA" 40+45.88	+13.86	98.68	PT
SW815	FL	"SA" 40+14.78	+13.99	98.54	B FACING
SW816	SWLK	"SA" 40+06.13	+22.50	99.00	PT
SW817	SWLK	"SA" 40+06.17	+27.62	99.01	±ME
SW818	FL	"SA" 39+95.62	+21.75	98.44	±ME, E FACING

GRADING COORDINATES

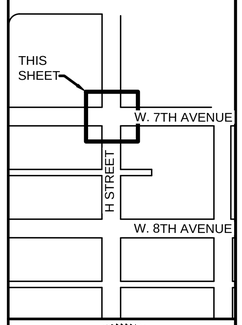
POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE801	FL	"SA" 41+57.20	+21.78	98.60	±ME, B FACING
SE802	SWLK	"SA" 41+57.03	+28.97	99.27	±ME
SE803	FL	"SA" 41+33.35	+13.62	98.49	PC, E FACING
SE804	FL	"SA" 41+20.36	+16.44	98.44	COR
SE805	SWLK	"SA" 41+21.63	+28.95	99.10	PC
SE806	SWLK	"SA" 41+17.84	+31.01	99.19	PT
SE807	FL	"SA" 41+07.43	+28.17	98.58	GB
SE808	FL	"SA" 41+06.44	+29.97	98.60	COR
SE809	FL	"SA" 41+03.77	+37.82	98.68	–
SE810	CROWN	"SA" 40+89.50	+43.48	99.11	PROFILE GB
SE811	FL	"SA" 41+03.25	+43.33	98.73	PT
SE812	FL	"SA" 41+03.24	+50.18	98.80	B FACING
SE813	SWLK	"SA" 41+17.32	+70.30	99.27	±ME
SE814	FL	"SA" 41+11.30	+70.42	98.64	±ME, E FACING
SE815	CROWN	" 0+00.00	0.00	98.98	±ME

SHEET NO.	TOTAL SHEETS
D: F5	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

W. 7TH AVE & H ST
GRADING PLAN

FILE [P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-GR-F-SHT-61519.DWG] | DATE/TIME [12/23/2016 11:26 AM] | LAYOUT [D:F5] | DESIGNED [AKM] | CHECKED [CRW] | DRAFTED [AKM]

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D :F6	D:F16

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"SA" 40+46.01	+43.61'	29'	TBC
C2	"SA" 40+47.88	-41.40'	27'	TBC
C3	"SA" 41+33.00	+43.37'	29'	TBC

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S5-1	MOA CB	"SA"40+67.01	-22.35'	98.74'	CURB INLET		P5-1 = 93.19'	-
S5-2	MOA CB	"SA"41+12.79	+22.58'	98.89'	CURB INLET		P5-2 = 93.37'	-
S5-3	TYPE II	"SA"40+97.61	+5.36'	98.92'	MANHOLE	P5-1 = 92.78' P5-2 = 93.14' P5-3 = 92.48' P5-4 = 90.16' P5-5 = 88.90'	P5-6 = 90.04'	REPLACE EXISTING
S5-4	MOA CB	"SA"41+12.10	-40.90'		CURB INLET		P5-3 = 95.79'	EXISTING
SSMH-7	SSMH	"SA"41+30.59	+11.83'		MANHOLE			ADJUST EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P5-1	12"	CPEP	42	1.0%	S5-1	S5-3	
P5-2	12"	CPEP	23	1.0%	S5-2	S5-3	
P5-3	12"	CPEP	49	6.8%	S5-4	S5-3	EXISTING
P5-4	10"	CPEP				S5-3	EXISTING
P5-5	18"	CPEP				S5-3	EXISTING
P5-6	15"	CPEP			S5-3		EXISTING

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

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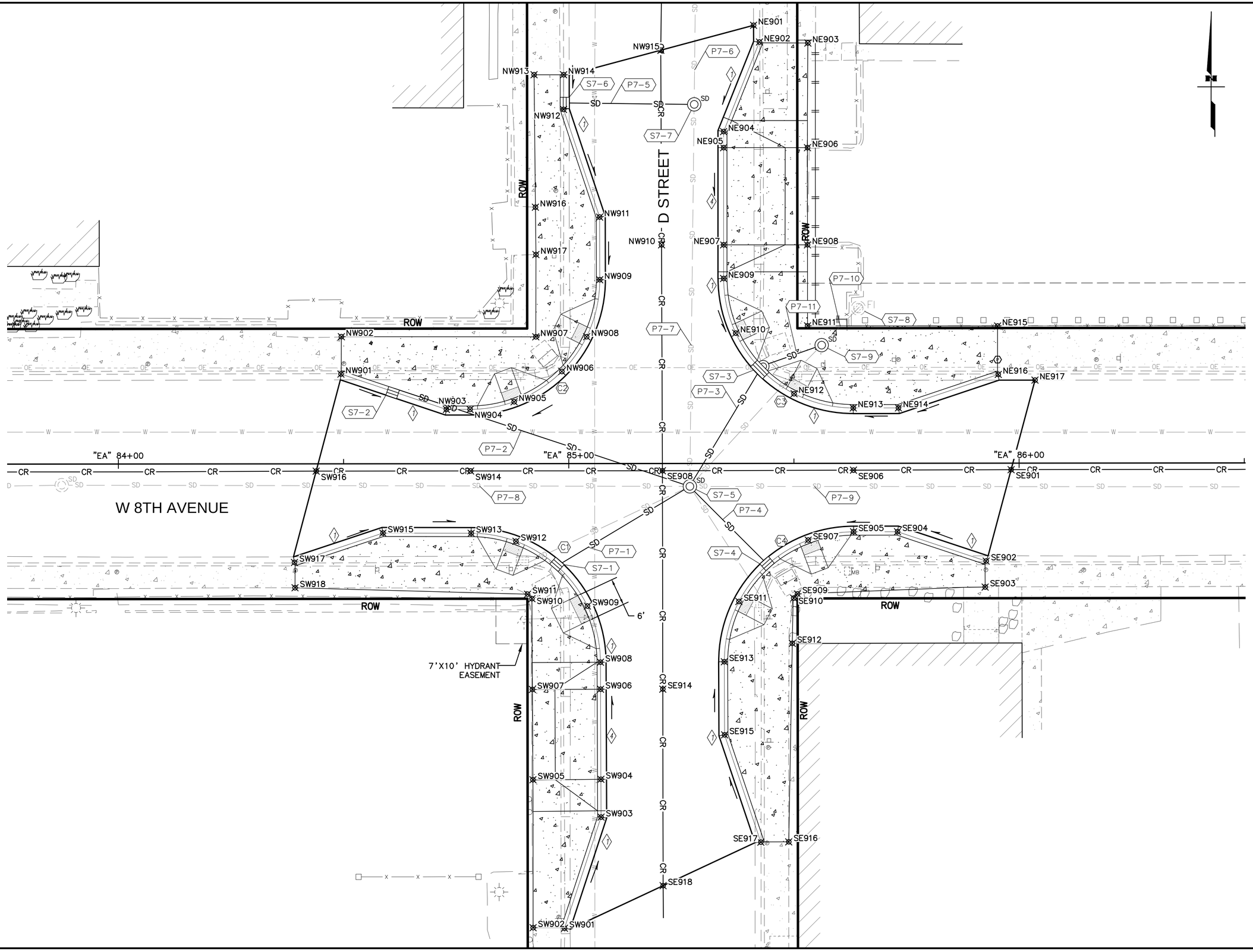
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 7TH AVE & H ST GRADING PLAN

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-GR-F-SHT-61519.DWG | DATE/TIME | 12/23/2016 11:26 AM | LAYOUT | D :F6 | DESIGNED | AKM | CHECKED | CRW | DRAFTED | AKM



SHEET NO.	TOTAL SHEETS
D: F7	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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

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

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

W. 8TH AVE & D ST
GRADING PLAN

FILE	DATE/TIME	LAYOUT	DESIGNED	CHECKED	DRAFTED
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:F8	D:F16

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW901	FL	"EA" 84+49.43	−19.92	101.40	±ME, B FACING
NW902	SWLK	"EA" 84+49.53	−28.22	101.96	±ME
NW903	FL	"EA" 84+72.83	−12.06	101.37	E FACING
NW904	FL	"EA" 84+78.10	−12.05	101.38	PC
NW905	FL	"EA" 84+87.87	−13.73	101.41	COR
NW906	FL	"EA" 84+98.48	−20.45	101.45	GB
NW907	SWLK	"EA" 84+92.71	−28.16	102.05	±ME
NW908	FL	"EA" 85+03.99	−28.17	101.48	COR
NW909	FL	"EA" 85+06.92	−40.82	101.52	PT
NW910	CROWN	"EA" 85+20.65	−48.55	101.85	PROFILE GB
NW911	FL	"EA" 85+06.91	−54.73	101.56	B FACING
NW912	FL	"EA" 84+98.91	−78.64	101.63	E FACING
NW913	SWLK	"EA" 84+92.37	−86.36	102.27	±ME
NW914	FL	"EA" 84+98.93	−86.35	101.65	±ME
NW915	CROWN	"EA" 85+20.53	−91.78	102.10	±ME
NW916	SWLK	"EA" 84+92.65	−56.94	102.13	±ME
NW917	SWLK	"EA" 84+92.75	−46.43	102.10	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE901	EOP	"EA" 85+41.13	−97.29	101.75	±ME
NE902	FL	"EA" 85+42.43	−93.58	101.71	±ME, B FACING
NE903	SWLK	"EA" 85+53.19	−93.34	102.49	±ME
NE904	FL	"EA" 85+34.46	−73.69	101.59	E FACING
NE905	FL	"EA" 85+34.45	−70.12	101.57	BEGIN CURB CUT
NE906	SWLK	"EA" 85+53.08	−70.10	102.36	±ME
NE907	FL	"EA" 85+34.43	−48.54	101.47	END CURB CUT
NE908	SWLK	"EA" 85+53.06	−48.53	102.20	±ME
NE909	FL	"EA" 85+34.42	−41.07	101.44	PC
NE910	FL	"EA" 85+37.09	−28.93	101.38	COR
NE911	SWLK	"EA" 85+53.05	−30.53	101.98	–
NE912	FL	"EA" 85+50.04	−15.47	101.40	COR
NE913	FL	"EA" 85+63.18	−12.29	101.49	PT
NE914	FL	"EA" 85+73.21	−12.29	101.55	B FACING
NE915	SWLK	"EA" 85+95.25	−30.45	102.37	±ME
NE916	FL	"EA" 85+95.39	−19.70	101.76	±ME, E FACING
NE917	EOP	"EA" 86+03.55	−18.43	101.80	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW901	FL	"EA" 84+98.95	+103.20	101.44	±ME, B FACING
SW902	SWLK	"EA" 84+91.98	+103.07	102.13	±ME
SW903	FL	"EA" 85+07.10	+78.52	101.31	E FACING
SW904	FL	"EA" 85+07.07	+70.12	101.27	BEGIN CURB CUT
SW905	SWLK	"EA" 84+91.97	+70.20	101.92	±ME
SW906	FL	"EA" 85+07.01	+50.12	101.17	END CURB CUT
SW907	SWLK	"EA" 84+91.88	+50.16	101.93	±ME
SW908	FL	"EA" 85+07.00	+44.12	101.14	PC
SW909	FL	"EA" 85+04.11	+31.66	101.07	COR
SW910	SWLK	"EA" 84+91.79	+30.00	101.65	PC R=1'
SW911	SWLK	"EA" 84+90.82	+29.00	101.64	PT R=1'
SW912	FL	"EA" 84+88.25	+17.25	101.08	COR
SW913	FL	"EA" 84+78.32	+15.45	101.15	PT
SW914	CROWN	"EA" 84+78.20	+1.62	101.53	PROFILE GB
SW915	FL	"EA" 84+58.71	+15.41	101.28	B FACING
SW916	CROWN	"EA" 84+43.91	+1.63	101.90	±ME
SW917	FL	"EA" 84+39.07	+21.90	101.52	±ME, E FACING
SW918	SWLK	"EA" 84+39.19	+27.53	101.98	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE901	CROWN	"EA" 85+98.22	+1.46	102.15	±ME
SE902	FL	"EA" 85+92.66	+21.76	101.71	±ME, B FACING
SE903	SWLK	"EA" 85+92.43	+27.52	102.27	±ME
SE904	FL	"EA" 85+72.98	+15.21	101.43	E FACING
SE905	FL	"EA" 85+63.23	+15.21	101.31	PC
SE906	CROWN	"EA" 85+63.22	+1.53	101.61	PROFILE GB
SE907	FL	"EA" 85+53.15	+17.04	101.16	COR
SE908	CROWN	"EA" 85+20.79	+1.61	101.74	PROFILE GB
SE909	SWLK	"EA" 85+50.75	+29.00	101.68	PC R=1'
SE910	SWLK	"EA" 85+49.91	+29.94	101.63	PT R=1'
SE911	FL	"EA" 85+37.75	+30.67	101.08	COR
SE912	SWLK	"EA" 85+49.60	+39.98	101.74	±ME
SE913	FL	"EA" 85+34.49	+44.04	101.15	PT
SE914	CROWN	"EA" 85+20.82	+50.11	101.36	PROFILE GB
SE915	FL	"EA" 85+34.54	+60.28	101.23	B FACING
SE916	SWLK	"EA" 85+48.76	+84.06	101.86	±ME
SE917	FL	"EA" 85+42.56	+84.12	101.36	±ME, E FACING
SE918	CROWN	"EA" 85+20.85	+93.76	101.81	±ME

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"EA" 84+78.25	+44.20'	28'	TBC
C2	"EA" 84+78.17	−40.80'	28'	TBC
C3	"EA" 85+63.17	−41.04'	28'	TBC
C4	"EA" 85+63.24	+43.96'	28'	TBC

STRUCTURE SUMMARY

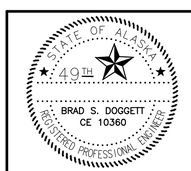
STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S7−1	MOA CB	"EA"84+96.68	+23.13'	101.51'	CURB INLET		P7−1 = 96.20'	–
S7−2	MOA CB	"EA"84+61.23	−16.75'	101.83'	CURB INLET		P7−2 = 96.48'	–
S7−3	TYPE II CBMH	"EA"85+42.98	−21.64'	101.84'	CURB INLET MANHOLE	P7−11 = 96.28'	P7−3 = 96.23'	–
S7−4	MOA CB	"EA"85+44.68	+23.00'	101.52'	CURB INLET		P7−4 = 96.16'	–
S7−5	TYPE II	"EA"85+26.87	+5.09'	101.63'	MANHOLE	P7−9 = 92.63' P7−1 = 95.85' P7−2 = 95.79' P7−3 = 95.92' P7−4 = 95.91' P7−7 = 91.85'	P7−8 = 91.74'	REPLACE EXISTING
S7−6	MOA CB	"EA"84+98.17	−80.10'	102.13'	CURB INLET		P7−5 = 96.81'	–
S7−7	TYPE I	"EA"85+27.93	−79.73'	101.85'	MANHOLE	P7−5 = 96.51' P7−6 = 92.32'	P7−7 = 92.30'	–
S7−8	FIELD INLET	"EA"85+64.33	−34.45'		FIELD INLET		P7−10 = 98.87'	EXISTING
S7−9	TYPE I	"EA"85+56.17	−26.23'	101.96'	MANHOLE	P7−10 = 98.18'	P7−11 = 96.42'	–

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P7−1	12"	CPEP	36	1.0%	S7−1	S7−5	
P7−2	12"	CPEP	70	1.0%	S7−2	S7−5	
P7−3	12"	CPEP	32	1.0%	S7−3	S7−5	
P7−4	12"	CPEP	26	1.0%	S7−4	S7−5	
P7−5	12"	CPEP	30	1.0%	S7−6	S7−7	
P7−6	24"	CPEP				S7−7	EXISTING
P7−7	24"	CPEP	85	0.5%	S7−7	S7−5	EXISTING
P7−8	24"	CMP			S7−5		EXISTING
P7−9	24"	CMP				S7−5	EXISTING
P7−10	12"	CPEP	12	6.0%	S7−8	S7−9	EXISTING
P7−11	12"	CPEP	14	1.0%	S7−9	S7−3	

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & D ST GRADING PLAN

DATE/TIME 12/23/2016 11:26 AM | LAYOUT D:F8 | DESIGNED AKM | CHECKED CRW | DRAFTED AKM
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NOTE:

CONTRACTOR TO WORK AROUND ML&P MANHOLE. MANHOLE WILL NOT BE ADJUSTED.

W 8TH AVENUE

"EA" 81+00

"EA" 82+00

E STREET

ROW

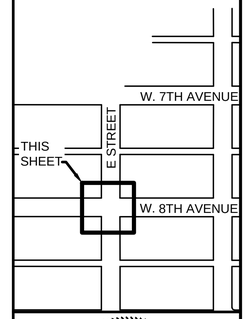
SEE NOTE

SHEET NO.	TOTAL SHEETS
D: F9	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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



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

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & E ST
GRADING PLAN

FILE	DATE/TIME	LAYOUT	DESIGNED	CHECKED	DRAFTED
P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-GR-F-SHT-61519.DWG	12/23/2016 11:26 AM	D:F9	AKM	AKM	CRW	AKM

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:F10	D:F16

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW1001	FL	"EA" 80+56.44	−19.54	100.36	PT, ±ME, B FACING
NW1002	SWLK	"EA" 80+56.46	−27.59	100.98	±ME
NW1003	FL	"EA" 80+78.15	−12.24	100.48	E FACING
NW1004	SWLK	"EA" 80+83.66	−27.70	101.09	DRIVEWAY ±ME
NW1005	FL	"EA" 80+83.61	−12.22	100.51	BEGIN CURB CUT
NW1006	FL	"EA" 81+15.98	−12.13	100.67	END CURB CUT
NW1007	SWLK	"EA" 81+16.02	−27.84	101.19	DRIVEWAY ±ME
NW1008	FL	"EA" 81+25.68	−12.10	100.71	PC
NW1009	SWLK	"EA" 81+32.56	−27.90	101.42	–
NW1010	FL	"EA" 81+28.40	−12.27	100.73	COR
NW1011	CROWN	"EA" 81+60.34	−26.52	101.35	PROFILE GB
NW1012	FL	"EA" 81+45.71	−27.21	100.86	COR
NW1013	FL	"EA" 81+46.49	−32.70	100.89	PT
NW1014	FL	"EA" 81+46.53	−37.79	100.91	B FACING
NW1015	FL	"EA" 81+38.89	−61.25	100.96	E FACING
NW1016	SWLK	"EA" 81+32.76	−69.17	101.64	±ME
NW1017	FL	"EA" 81+38.85	−69.14	100.97	±ME
NW1018	CROWN	"EA" 81+60.40	−71.62	101.51	±ME
NW1019	EOP	"EA" 81+40.12	−77.08	101.04	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW1001	CROWN	"EA" 81+60.42	+90.78	101.28	±ME
SW1002	EOP	"EA" 81+40.13	+98.17	100.83	±ME
SW1003	FL	"EA" 81+38.86	+83.71	100.72	±ME
SW1004	SWLK	"EA" 81+31.04	+83.70	101.33	±ME
SW1005	FL	"EA" 81+38.89	+76.01	100.54	B FACING
SW1006	FL	"EA" 81+46.73	+52.50	100.79	E FACING
SW1007	FL	"EA" 81+46.73	+36.15	100.85	PC
SW1008	SWLK	"EA" 81+45.92	+30.43	100.82	COR
SW1010	SWLK	"EA" 81+31.10	+39.79	101.41	±ME
SW1011	SWLK	"EA" 81+30.77	+35.05	101.38	±ME
SW1012	SWLK	"EA" 81+30.79	+33.84	101.38	PC, R=4.00'
SW1013	SWLK	"EA" 81+26.79	+30.02	101.36	PT, R=4.00'
SW1014	CROWN	"EA" 81+60.29	+1.45	101.10	PROFILE GB
SW1015	FL	"EA" 81+31.62	+16.18	100.72	COR
SW1016	FL	"EA" 81+26.00	+15.40	100.69	PC
SW1017	FL	"EA" 81+20.28	+15.39	100.67	B FACING
SW1018	SWLK	"EA" 81+14.63	+29.96	101.33	±ME
SW1019	EOP	"EA" 81+04.27	+20.43	100.65	±ME/E FACING
SW1020	SWLK	"EA" 81+04.17	+29.94	101.33	±ME
SW1021	EOP	"EA" 80+67.53	+20.61	100.44	±ME
SW1022	CROWN	"EA" 80+62.07	+1.56	100.86	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE1001	FL	"EA" 81+82.46	−65.60	101.04	±ME, B FACING
NE1002	SWLK	"EA" 81+88.59	−65.36	101.64	–
NE1003	FL	"EA" 81+74.03	−40.86	101.21	E FACING
NE1004	FL	"EA" 81+73.98	−33.24	101.12	PC
NE1005	FL	"EA" 81+74.79	−27.38	101.05	COR
NE1006	SWLK	"EA" 81+88.86	−28.20	101.62	PC, R=1.60'
NE1007	SWLK	"EA" 81+92.01	−28.25	101.66	PT, R=1.60'
NE1008	FL	"EA" 81+88.89	−13.19	100.98	COR
NE1009	FL	"EA" 81+94.70	−12.35	101.02	PT
NE1010	FL	"EA" 82+12.71	−12.33	101.12	E FACING
NE1011	SWLK	"EA" 82+34.78	−27.90	101.66	±ME
NE1012	FL	"EA" 82+35.02	−19.74	101.02	±ME/B FACING
NE1013	EOP	"EA" 82+37.97	−18.43	101.08	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE1001	CROWN	"EA" 82+32.64	+1.45	101.53	±ME
SE1002	FL	"EA" 82+27.52	+21.86	100.99	±ME/B FACING
SE1003	SWLK	"EA" 82+27.54	+27.77	101.52	±ME
SE1004	SWLK	"EA" 82+16.89	+27.31	101.51	±ME
SE1005	FL	"EA" 82+10.84	+15.17	100.93	E FACING
SE1006	SWLK	"EA" 81+98.36	+27.45	101.37	PC, R=1.00'
SE1007	FL	"EA" 82+03.02	+15.16	100.86	PC
SE1008	FL	"EA" 81+92.01	+17.34	100.75	COR
SE1009	SWLK	"EA" 81+93.83	+29.25	101.35	–
SE1010	SWLK	"EA" 81+88.73	+29.52	101.28	MID, R=1.00'
SE1011	FL	"EA" 81+76.43	+32.91	100.71	COR
SE1012	FL	"EA" 81+74.24	+43.92	100.78	PT
SE1013	SWLK	"EA" 81+88.42	+43.91	101.41	GB
SE1014	FL	"EA" 81+74.25	+58.71	100.68	B FACING
SE1015	SWLK	"EA" 81+88.42	+76.67	101.16	GB
SE1016	FL	"EA" 81+82.30	+82.84	100.59	±ME/E FACING
SE1017	FL	"EA" 81+88.42	+82.60	101.17	PT
SE1018	SWLK	"EA" 82+21.11	+27.80	101.54	±ME
SE1019	CROWN	"EA" 82+03.02	+1.45	101.30	PROFILE GB
SW1009	CROWN	"EA" 81+60.33	+36.14	101.16	PROFILE GB

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"EA" 81+25.98	+36.15'	20'	TBC
C2	"EA" 81+25.74	−32.85'	20'	TBC
C3	"EA" 81+94.73	−33.10'	20'	TBC
C4	"EA" 82+02.99	+43.91'	28'	TBC

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S9−1	TYPE II	"EA"81+54.61	+8.15'	101.02'	MANHOLE	P9−1 = 95.79' P9−8 = 95.57' P9−9 = 95.90' P9−10 = 91.20' P9−12 = 94.15' P9−13 = 92.37'	P9−11 = 90.84'	REPLACE EXISTING
S9−2	MOA CB	"EA"81+80.53	−19.02'	101.42'	CURB INLET		P9−1 = 96.17'	–
S9−3	MOA CB	"EA"81+38.08	−62.89'	101.45'	CURB INLET		P9−2 = 96.20'	–
S9−4	TYPE I	"EA"81+54.96	−61.37'	101.35'	MANHOLE	P9−2 = 96.03' P9−3 = 95.98' P9−14 = 92.64'	P9−13 = 92.63'	–
S9−5	MOA CB	"EA"81+81.01	−59.01'	101.49'	CURB INLET		P9−3 = 96.24'	–
S9−6	MOA CB	"EA"82+29.00	−18.53'	101.48'	CURB INLET		P9−4 = 96.23'	–
S9−7	MOA CB	"EA"82+20.99	+20.05'	101.47'	CURB INLET		P9−5 = 96.22'	–
S9−8	MOA CB	"EA"81+38.13	+77.45'	101.20'	CURB INLET		P9−7 = 96.43'	–
S9−9	MOA CB	"EA"81+81.03	+76.67'	101.05'	CURB INLET		P9−6 = 96.39'	–
S9−10	TYPE I	"EA"81+63.55	+76.99'	101.14'	MANHOLE	P9−6 = 96.30' P9−7 = 96.30'	P9−9 = 96.25'	–
S9−11	TYPE I	"EA"82+23.66	+7.13'	101.32'	MANHOLE	P9−4 = 95.97' P9−5 = 96.09' P9−15 = 91.21'	P9−10 = 91.21'	–
S9−12	MOA CB	"EA"81+83.20	+24.10'	101.15'	CURB INLET		P9−8 = 95.90'	–

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P9−1	12"	CPEP	38	1.0%	S9−2	S9−1	
P9−2	12"	CPEP	17	1.0%	S9−3	S9−4	
P9−3	12"	CPEP	27	1.0%	S9−5	S9−4	
P9−4	12"	CPEP	27	1.0%	S9−6	S9−11	
P9−5	12"	CPEP	14	1.0%	S9−7	S9−11	
P9−6	12"	CPEP	18	0.5%	S9−9	S9−10	
P9−7	12"	CPEP	26	0.5%	S9−8	S9−10	
P9−8	12"	CPEP	33	1.0%	S9−12	S9−1	
P9−9	18"	CPEP	70	0.5%	S9−10	S9−1	
P9−10	24"	CPEP	70	0.0%	S9−11	S9−1	EXISTING
P9−11	24"	CPEP				S9−1	EXISTING
P9−12	12"	CPEP	35	0.5%		S9−1	EXISTING
P9−13	18"	CPEP			S9−4	S9−1	EXISTING
P9−14	18"	CPEP	105	0.5%		S9−4	EXISTING
P9−15	24"	CPEP			S9−11		EXISTING

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

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

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & E ST GRADING PLAN

DATE/TIME | 12/23/2016 11:26 AM | LAYOUT | D:F10 | DESIGNED | AKM | CHECKED | CRW | DRAFTED | AKM
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-GR-F-SHT-61519.DWG

DATE/TIME | 12/23/2016 11:27 AM | LAYOUT | D:F11 | DESIGNED | AKM | CHECKED | CRW | DRAFTED | AKM
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-GT-GR-F-SHT-61519.DWG

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW1101	FL	"EA" 73+51.50	−19.58	99.20	±ME, B FACING
NW1102	SWLK	"EA" 73+51.55	−30.00	100.01	±ME
NW1103	FL	"EA" 73+74.88	−11.81	99.34	E FACING
NW1104	FL	"EA" 73+95.87	−11.84	99.22	PC
NW1105	FL	"EA" 74+08.66	−14.64	99.14	COR
NW1106	SWLK	"EA" 74+10.45	−30.00	99.69	±ME
NW1107	FL	"EA" 74+23.73	−29.65	99.13	COR
NW1108	FL	"EA" 74+26.58	−42.45	99.05	PT
NW1109	FL	"EA" 74+26.62	−50.05	99.10	E FACING
NW1110	SWLK	"EA" 74+10.46	−68.78	99.78	±ME
NW1111	FL	"EA" 74+19.15	−68.95	99.09	±ME, B FACING

NOTE:

1. CONTRACTOR TO WORK AROUND ML&P MANHOLE DURING CONSTRUCTION. ML&P WILL ADJUST MANHOLE TO FINISH GRADE AFTER PAVING.

2. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE1101	EOP	"EA" 74+40.27	−61.98	98.83	±ME
NE1102	EOP	"EA" 74+51.81	−57.78	98.60	±ME
NE1103	EOP	"EA" 74+51.72	−35.64	98.61	±ME
NE1104	EOP	"EA" 74+51.88	−27.71	98.58	±ME
NE1105	EOP	"EA" 74+69.10	−12.33	98.71	±ME
NE1106	EOP	"EA" 74+91.68	−12.25	98.77	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW1101	EOP	"EA" 74+20.46	+87.06	99.25	±ME
SW1102	CROWN	"EA" 74+40.90	+81.59	99.82	±ME
SW1103	FL	"EA" 74+19.20	+77.93	99.18	±ME
SW1104	SWLK	"EA" 74+13.54	+77.93	99.71	±ME
SW1105	SWLK	"EA" 74+13.56	+71.68	99.75	–
SW1106	FL	"EA" 74+19.19	+70.22	99.18	B FACING
SW1107	FL	"EA" 74+27.25	+46.43	99.31	E FACING
SW1108	SWLK	"EA" 74+13.64	+46.26	100.01	–
SW1109	SWLK	"EA" 74+13.66	+38.61	100.04	–
SW1110	FL	"EA" 74+27.31	+36.51	99.36	PC
SW1111	FL	"EA" 74+26.55	+30.86	99.40	COR
SW1112	SWLK	"EA" 74+13.69	+28.09	100.09	–
SW1113	FL	"EA" 74+21.26	+21.76	99.45	GB
SW1114	CROWN	"EA" 74+40.44	+1.40	99.05	–
SW1115	FL	"EA" 74+11.91	+16.35	99.41	COR
SW1116	FL	"EA" 74+06.53	+15.65	99.38	PT
SW1117	CROWN	"EA" 74+06.50	+1.90	99.61	PROFILE GB
SW1118	FL	"EA" 73+80.24	+15.68	99.28	B FACING
SW1119	SWLK	"EA" 73+80.38	+28.07	99.95	–
SW1120	SWLK	"EA" 73+61.90	+28.06	99.68	±ME
SW1121	FL	"EA" 73+61.79	+21.85	99.20	±ME, E FACING
SW1122	CROWN	"EA" 73+56.72	+2.04	99.60	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE1101	CROWN	"EA" 74+96.38	+0.67	99.12	±ME
SE1102	FL	"EA" 75+03.46	+21.87	99.63	±ME, B FACING
SE1103	SWLK	"EA" 75+03.36	+28.02	100.29	±ME
SE1104	FL	"EA" 74+80.81	+14.29	99.49	E FACING
SE1105	FL	"EA" 74+75.60	+14.28	99.46	PT
SE1106	FL	"EA" 74+70.10	+15.01	99.43	COR
SE1107	SWLK	"EA" 74+70.36	+27.98	99.97	–
SE1108	CROWN	"EA" 74+41.09	+31.16	99.52	PROFILE GB
SE1109	FL	"EA" 74+54.91	+33.14	99.28	COR
SE1110	FL	"EA" 74+54.82	+34.93	99.27	PC
SE1111	FL	"EA" 74+54.77	+45.18	99.21	B FACING
SE1112	SWLK	"EA" 74+70.27	+61.61	99.76	–
SE1113	CROWN	"EA" 74+40.90	+68.76	99.81	PROFILE GB
SE1114	FL	"EA" 74+62.39	+68.42	99.22	E FACING
SE1115	SWLK	"EA" 74+70.25	+76.17	100.01	±ME
SE1116	FL	"EA" 74+62.40	+76.16	99.30	±ME

SHEET NO.	TOTAL SHEETS
D:F11	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION
0001(344)/
Z581970000

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

THIS SHEET

W. 7TH AVENUE
G STREET
W. 8TH AVENUE

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

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

W. 8TH AVE & G ST
GRADING PLAN

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:F12	D:F16

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"EA" 74+06.56	+36.40'	20'	TBC
C2	"EA" 73+95.83	-42.59'	30'	TBC
C3	"EA" 74+75.57	+35.03'	20'	TBC

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S11-1	MOA CB	"EA"74+18.44	+71.68'	99.67'	CURB INLET		P11-1 = 94.10'	-
S11-2	MOA CB	"EA"74+60.94	+61.60'	99.62'	CURB INLET		P11-2 = 94.10'	-
S11-3	TYPE I	"EA"74+43.15	+70.70'	99.75'	MANHOLE	P11-1 = 93.85' P11-2 = 93.90'	P11-3 = 93.80'	-
S11-4	TYPE II	"EA"74+44.39	+8.24'	99.17'	MANHOLE	P11-3 = 91.10' P11-4 = 88.11' P11-5 = 93.68'	P11-6 = 87.94'	REPLACE EXISTING
S11-5	MOA CB	"EA"74+53.84	-35.04'		CURB INLET		P11-5 = 94.75'	EXISTING
SSMH-8	SSMH	"EA"74+55.99	+15.20'		MANHOLE			ADJUST EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P11-1	12"	CPEP	25	1.0%	S11-1	S11-3	
P11-2	12"	CPEP	20	1.0%	S11-2	S11-3	
P11-3	18"	CPEP	63	4.3%	S11-3	S11-4	
P11-4	24"	CMP				S11-4	EXISTING
P11-5	12"	CPEP	45	2.4%	S11-5	S11-4	EXISTING
P11-6	30"	CMP			S11-4	S13-5	EXISTING

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & G ST GRADING PLAN

DATE/TIME | 12/23/2016 11:27 AM | LAYOUT | D:F12 | DESIGNED | AKM | CHECKED | CRW | DRAFTED | AKM
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DATE/TIME	DESIGNED	DRAFTED	CHECKED
12/23/2016 11:27 AM	AKM	CRW	AKM

LAYOUT
D:F13

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GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW1201	FL	"EA" 70+11.03	−19.67	98.31	±ME, B FACING
NW1202	SWLK	"EA" 70+11.20	−27.81	99.01	±ME
NW1203	FL	"EA" 70+32.00	−11.52	98.18	E FACING
NW1204	SWLK	"EA" 70+32.34	−27.54	98.92	GB
NW1205	FL	"EA" 70+37.94	−11.51	98.15	PC
NW1206	SWLK	"EA" 70+38.13	−27.47	98.88	GB
NW1207	FL	"EA" 70+50.26	−14.27	98.08	COR
NW1208	SWLK	"EA" 70+52.04	−27.29	98.66	–
NW1209	CROWN	"EA" 70+80.38	−20.57	98.80	PROFILE GB
NW1210	SWLK	"EA" 70+52.04	−31.56	98.71	–
NW1211	SWLK	"EA" 70+53.09	−33.82	98.75	–
NW1212	FL	"EA" 70+64.07	−28.21	98.12	COR
NW1213	FL	"EA" 70+66.71	−40.23	98.24	PT
NW1214	SWLK	"EA" 70+53.03	−45.77	98.91	GB
NW1215	FL	"EA" 70+66.72	−45.97	98.21	B FACING

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW1216	SWLK	"EA" 70+52.94	−66.09	98.67	±ME
NW1217	FL	"EA" 70+58.65	−66.22	98.07	±ME, E FACING

NOTE:

1. CONTRACTOR TO WORK AROUND ML&P MANHOLE. MANHOLE WILL NOT BE ADJUSTED.
2. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE1201	EOP	"EA" 71+00.83	−81.28	98.05	±ME
NE1202	CROWN	"EA" 70+80.49	−73.88	98.43	±ME
NE1203	FL	"EA" 71+02.19	−66.90	98.03	±ME, B FACING
NE1204	SWLK	"EA" 71+09.29	−66.95	98.68	±ME
NE1205	FL	"EA" 70+94.23	−47.07	98.15	PT, E FACING
NE1206	FL	"EA" 70+94.22	−40.39	98.19	PC
NE1207	FL	"EA" 70+96.67	−28.74	98.16	COR
NE1208	SWLK	"EA" 71+09.70	−28.91	98.83	±ME
NE1209	FL	"EA" 71+11.28	−14.09	98.19	COR
NE1210	FL	"EA" 71+22.93	−11.60	98.25	PT
NE1211	FL	"EA" 71+29.63	−11.60	98.28	B FACING
NE1212	SWLK	"EA" 71+49.53	−28.75	99.11	±ME
NE1213	FL	"EA" 71+49.74	−19.61	98.39	±ME, E FACING
NE1214	EOP	"EA" 71+62.14	−18.41	98.50	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW1201	EOP	"EA" 70+59.91	+86.52	98.10	±ME
SW1202	FL	"EA" 70+58.69	+61.11	97.94	±ME, B FACING
SW1203	SWLK	"EA" 70+50.66	+60.82	98.69	±ME
SW1204	FL	"EA" 70+66.66	+41.25	97.80	E FACING
SW1205	FL	"EA" 70+64.41	+33.10	97.74	COR
SW1206	CROWN	"EA" 70+80.33	+1.44	98.76	PT
SW1207	CROWN	"EA" 70+57.90	+1.29	98.31	PROFILE GB
SW1208	FL	"EA" 70+49.84	+18.49	97.79	COR
SW1209	SWLK	"EA" 70+50.68	+29.93	98.32	–
SW1210	FL	"EA" 70+38.15	+15.99	97.94	PT
SW1211	SWLK	"EA" 70+25.92	+29.93	98.76	±ME
SW1212	FL	"EA" 70+23.98	+15.97	98.11	B FACING
SW1213	SWLK	"EA" 70+19.92	+29.93	98.83	±ME
SW1214	FL	"EA" 70+06.08	+21.92	98.33	±ME, E FACING
SW1215	SWLK	"EA" 70+09.09	+29.94	98.92	±ME
SW1216	FL	"EA" 70+02.94	+21.92	98.34	±ME
SW1217	SWLK	"EA" 70+02.94	+29.94	99.00	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW1218	EOP	"EA" 69+96.52	+20.61	98.43	±ME
SW1219	CROWN	"EA" 70+03.69	+0.92	98.80	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE1201	CROWN	"EA" 71+55.11	+0.89	98.76	±ME
SE1202	FL	"EA" 71+47.48	+22.44	98.21	±ME, B FACING
SE1203	SWLK	"EA" 71+47.34	+28.26	98.85	±ME
SE1204	FL	"EA" 71+31.21	+15.91	98.07	E FACING
SE1205	FL	"EA" 71+23.16	+15.90	98.01	PC
SE1206	FL	"EA" 71+12.98	+17.74	97.92	COR
SE1207	CROWN	"EA" 71+03.16	+1.27	98.50	PROFILE GB
SE1208	SWLK	"EA" 71+17.20	+28.25	98.54	–
SE1209	SWLK	"EA" 71+15.10	+29.04	98.52	–
SE1210	SWLK	"EA" 71+11.16	+29.04	98.47	–
SE1211	SWLK	"EA" 71+08.16	+32.04	98.46	–
SE1212	CROWN	"EA" 70+80.40	+24.98	98.20	PROFILE GB
SE1213	FL	"EA" 70+96.67	+33.39	97.87	COR
SE1214	FL	"EA" 70+94.36	+51.20	97.98	B FACING
SE1215	FL	"EA" 71+02.39	+71.34	98.10	±ME, E FACING
SE1216	SWLK	"EA" 71+08.13	+71.23	98.70	±ME
SE1217	CROWN	"EA" 70+80.58	+79.00	98.50	±ME

W 8TH AVENUE

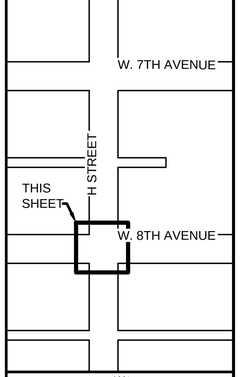
H STREET

SHEET NO.	TOTAL SHEETS
D:F13	D:F16
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(344)/
Z581970000

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



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA
SAFETY IMPROVEMENTS

W. 8TH AVE & H ST
GRADING PLAN

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:F14	D:F16

CURVE TABLE

POINT	STATION	OFFSET	RADIUS	REMARKS
C1	"EA" 70+38.13	+44.74'	28'	TBC
C2	"EA" 70+37.96	-40.26'	28'	TBC
C3	"EA" 71+22.97	-40.35'	28'	TBC
C4	"EA" 71+23.12	+44.65'	28'	TBC
C5	"EA" 71+11.16	+32.04	3'	SWLK

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S13-1	MOA CB	"EA"70+57.93	+24.94'	98.17'	CURB INLET		P13-1 = 93.92'	-
S13-2	MOA CB	"EA"70+57.86	-20.58'	98.52'	CURB INLET		P13-2 = 94.27'	-
S13-3	MOA CB	"EA"71+03.17	-20.55'	98.63'	CURB INLET		P13-3 = 94.38'	-
S13-4	MOA CB	"EA"71+02.65	+25.54'	98.32'	CURB INLET		P13-4 = 94.07'	-
S13-5	TYPE II	"EA"70+86.24	+8.44'	98.50'	MANHOLE	P13-1 = 91.29' P13-2 = 91.29' P13-3 = 91.29' P13-4 = 91.29' P11-6 = 87.79' P13-5 = 87.42'	P13-6 = 87.23'	REPLACE EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P11-6	30"	CMP			S11-4	S13-5	EXISTING
P13-1	12"	CPEP	33	8.0%	S13-1	S13-5	
P13-2	12"	CPEP	41	7.3%	S13-2	S13-5	
P13-3	12"	CPEP	34	9.2%	S13-3	S13-5	
P13-4	12"	CPEP	24	11.7%	S13-4	S13-5	
P13-5	18"	CPEP				S13-5	EXISTING
P13-6	30"	CMP			S13-5		EXISTING

NOTE:

1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & H ST GRADING PLAN

DATE/TIME | 12/23/2016 11:27 AM | LAYOUT | D:F14 | DESIGNED | AKM | CHECKED | CRW | DRAFTED | AKM
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SHEET NO.	TOTAL SHEETS
D:F15	D:F16

STATE	YEAR
ALASKA	2017

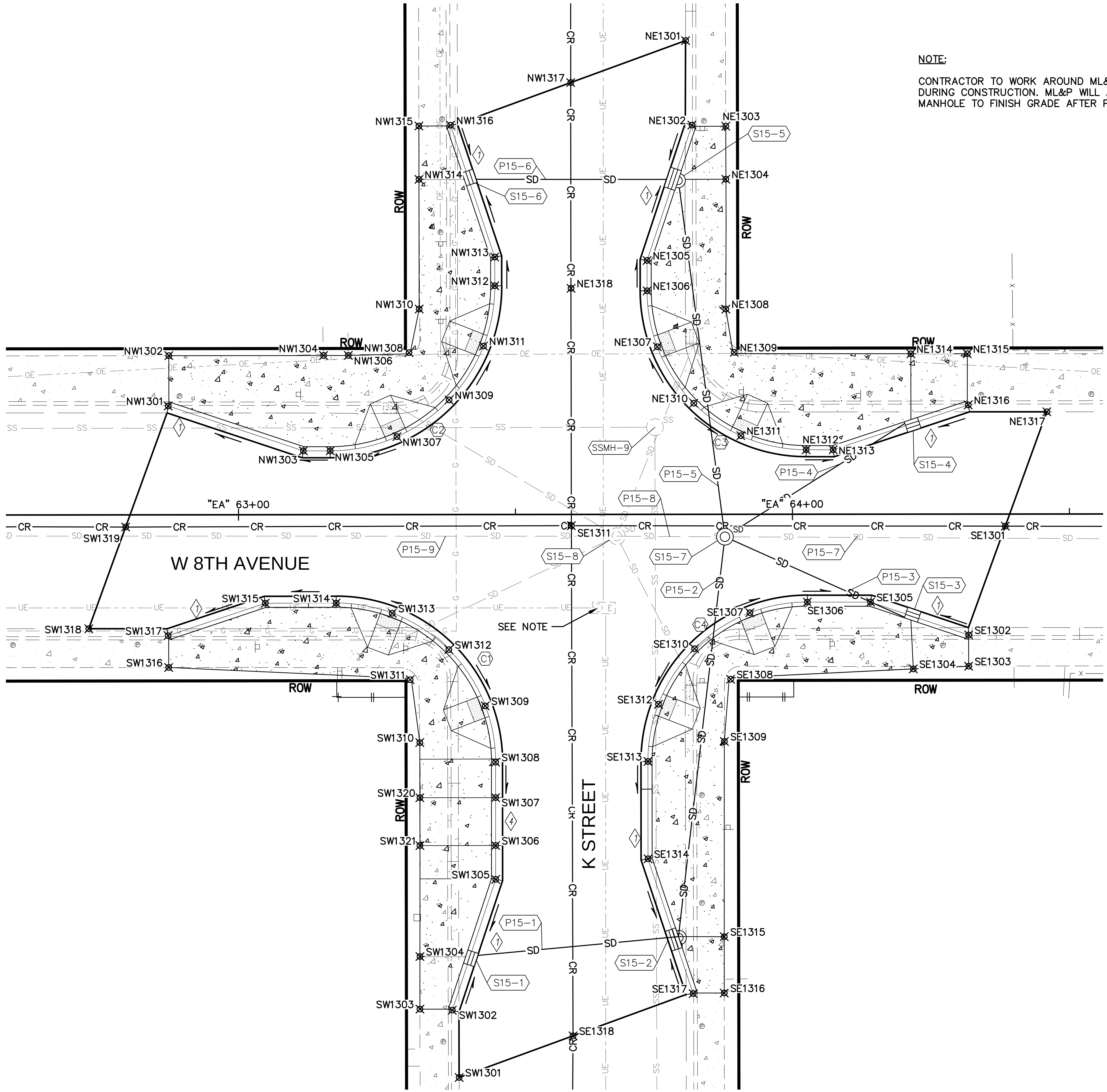
PROJECT DESIGNATION

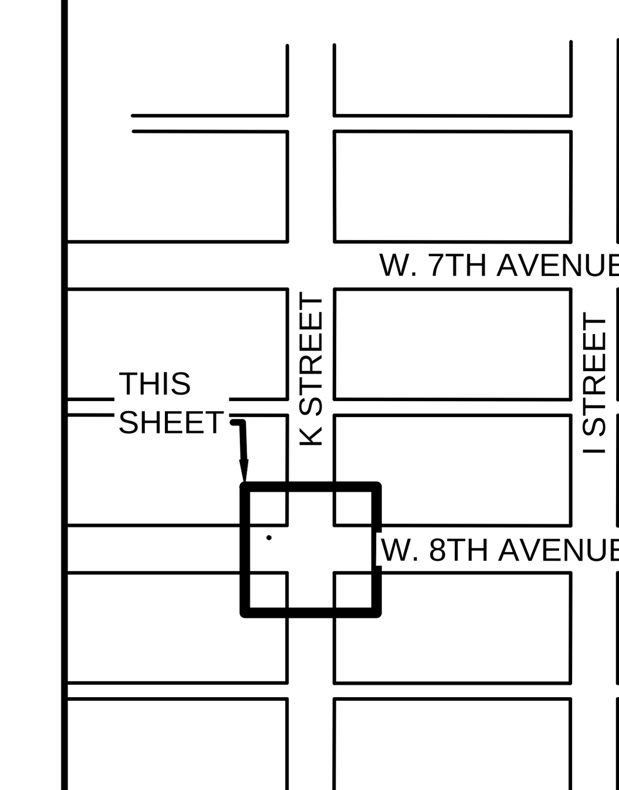
0001(344)/
Z581970000

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

NOTE:

CONTRACTOR TO WORK AROUND ML&P MANHOLE DURING CONSTRUCTION. ML&P WILL ADJUST MANHOLE TO FINISH GRADE AFTER PAVING.





STATE OF ALASKA
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BRAD S. DOGGETT
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & K ST
GRADING PLAN

FILE	P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-GR-F-SHT-61519.DWG
DATE/TIME	12/23/2016 11:27 AM
LAYOUT	D:F15
DESIGNED	AKM
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:F16	D:F16

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NW1301	FL	"EA" 62+87.33	−19.64	95.39	±ME, B FACING
NW1302	SWLK	"EA" 62+87.45	−28.73	96.05	±ME
NW1303	FL	"EA" 63+11.71	−11.52	95.57	E FACING
NW1304	SWLK	"EA" 63+15.39	−28.73	96.18	±ME
NW1305	FL	"EA" 63+16.56	−11.52	95.60	PC
NW1306	SWLK	"EA" 63+19.84	−28.73	96.18	±ME
NW1307	FL	"EA" 63+28.61	−14.07	95.68	COR
NW1308	SWLK	"EA" 63+30.81	−29.23	96.34	MIDPOINT, R=1.0'
NW1309	FL	"EA" 63+38.03	−20.68	95.77	GB
NW1310	SWLK	"EA" 63+32.65	−37.11	96.31	–
NW1311	FL	"EA" 63+44.25	−30.41	95.72	COR
NW1312	FL	"EA" 63+46.30	−41.29	95.68	PT
NW1313	FL	"EA" 63+46.30	−46.48	95.66	B FACING
NW1314	SWLK	"EA" 63+32.64	−60.52	96.23	–
NW1315	SWLK	"EA" 63+32.64	−70.15	96.27	±ME
NW1316	FL	"EA" 63+38.34	−70.30	95.67	±ME, E FACING
NW1317	CROWN	"EA" 63+60.05	−77.97	96.17	±ME

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
NE1301	EOP	"EA" 63+80.77	−85.54	95.79	±ME
NE1302	FL	"EA" 63+81.92	−70.28	95.69	±ME, B FACING
NE1303	SWLK	"EA" 63+88.02	−70.07	96.42	±ME
NE1304	SWLK	"EA" 63+88.02	−60.49	96.27	–
NE1305	FL	"EA" 63+73.79	−45.84	95.75	E FACING
NE1306	FL	"EA" 63+73.80	−40.36	95.79	PC
NE1307	FL	"EA" 63+75.64	−30.25	95.87	COR
NE1308	SWLK	"EA" 63+88.01	−37.04	96.52	–
NE1309	SWLK	"EA" 63+89.52	−29.24	96.60	MIDPOINT, R=1.0'
NE1310	FL	"EA" 63+82.21	−20.06	95.95	GB
NE1311	FL	"EA" 63+90.70	−14.19	95.90	COR
NE1312	FL	"EA" 64+02.49	−11.63	95.83	PT
NE1313	FL	"EA" 64+07.36	−11.62	95.81	B FACING
NE1314	SWLK	"EA" 64+21.41	−28.94	96.42	–
NE1315	SWLK	"EA" 64+31.60	−28.94	96.60	±ME
NE1316	FL	"EA" 64+31.75	−19.70	95.92	±ME, E FACING
NE1317	EOP	"EA" 64+45.94	−18.46	96.08	±ME
NE1318	CROWN	"EA" 63+60.07	−40.82	96.18	PROFILE GB

CURVE TABLE

ID	STATION	OFFSET	RADIUS	REMARKS
C1	"EA" 63+17.61	+44.73'	28'	TBC
C2	"EA" 63+16.55	−41.27'	29'	TBC
C3	"EA" 64+02.55	−40.38'	28'	TBC
C4	"EA" 64+02.62	+44.62'	28'	TBC

STRUCTURE SUMMARY

STRUCTURE ID	TYPE	STATION	STRUCTURE OFFSET	CASTING ELEVATION	CASTING TYPE	PIPES IN	PIPES OUT	REMARKS
S15−1	MOA CB	"EA"63+40.94	+79.82'	96.10'	CURB INLET		P15−1 = 91.60'	–
S15−2	TYPE II CBMH	"EA"63+79.35	+76.26'	96.13'	CURB INLET MANHOLE	P15−1 = 91.21'	P15−2 = 90.91'	–
S15−3	MOA CB	"EA"64+21.37	+19.13'	96.29'	CURB INLET		P15−3 = 91.20'	–
S15−4	MOA CB	"EA"64+21.40	−17.06'	96.23'	CURB INLET		P15−4 = 90.73'	–
S15−5	TYPE II CBMH	"EA"63+79.45	−60.47'	96.14'	CURB INLET MANHOLE	P15−6 = 90.22'	P15−5 = 90.17'	–
S15−6	MOA CB	"EA"63+40.82	−60.52'	96.11'	CURB INLET		P15−6 = 90.61'	–
S15−7	TYPE II	"EA"63+87.80	+4.07'	96.28'	MANHOLE	P15−2 = 90.18' P15−3 = 90.83' P15−4 = 90.33' P15−5 = 89.52' P15−7 = 85.29'	P15−8 = 85.27'	–
S15−8	TYPE II	"EA"63+68.28	+3.95'	96.26'	MANHOLE	P15−8 = 85.22'	P15−9 = 85.07'	RECONSTRUCT EXISTING
SSMH−9	SSMH	"EA"63+75.18	−15.72'	96.07'	MANHOLE			ADJUST EXISTING

STORM DRAIN PIPE SUMMARY

PIPE ID	SIZE (IN)	TYPE	LENGTH (FT)	GRADE (%)	DIRECTION FROM	DIRECTION TO	REMARKS
P15−1	12"	CPEP	39	1.0%	S15−1	S15−2	
P15−2	18"	CPEP	73	1.0%	S15−2	S15−7	
P15−3	12"	CPEP	37	1.0%	S15−3	S15−7	
P15−4	12"	CPEP	40	1.0%	S15−4	S15−7	
P15−5	18"	CPEP	66	1.0%	S15−5	S15−7	
P15−6	12"	CPEP	39	1.0%	S15−6	S15−5	
P15−7	36"	CMP				S15−7	EXISTING
P15−8	36"	CMP	20	0.3%	S15−7	S15−8	EXISTING
P15−9	36"	CMP			S15−8		EXISTING

NOTE:

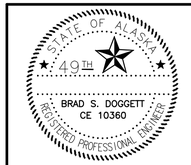
1. NEGATIVE OFFSETS REFER TO THE LEFT SIDE OF THE ALIGNMENT.

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SW1301	EOP	"EA" 63+39.73	+101.66	95.80	±ME
SW1302	FL	"EA" 63+38.50	+89.51	95.70	±ME, B FACING
SW1303	SWLK	"EA" 63+32.66	+89.31	96.29	±ME
SW1304	SWLK	"EA" 63+32.67	+79.81	96.22	–
SW1305	FL	"EA" 63+46.37	+65.90	95.68	E FACING
SW1306	FL	"EA" 63+46.36	+59.78	95.72	BEGIN CURB CUT
SW1307	FL	"EA" 63+46.36	+51.13	95.77	END CURB CUT
SW1308	FL	"EA" 63+46.36	+44.73	95.81	PC
SW1309	FL	"EA" 63+44.51	+34.57	95.87	COR
SW1310	SWLK	"EA" 63+32.68	+41.17	96.54	–
SW1311	SWLK	"EA" 63+30.95	+29.82	96.60	MIDPOINT, R=1.0'
SW1312	FL	"EA" 63+37.94	+24.40	95.94	GB
SW1313	FL	"EA" 63+27.73	+17.82	95.80	COR
SW1314	FL	"EA" 63+17.61	+15.98	95.68	PT
SW1315	FL	"EA" 63+04.81	+15.98	95.53	B FACING
SW1316	SWLK	"EA" 62+87.36	+27.57	95.95	±ME
SW1317	FL	"EA" 62+87.26	+21.83	95.32	±ME, E FACING
SW1318	EOP	"EA" 62+72.94	+20.56	95.32	±ME
SW1319	CROWN	"EA" 62+79.62	+2.20	95.82	±ME
SW1320	SWLK	"EA" 63+32.69	+51.13	96.15	±ME, GB
SW1321	SWLK	"EA" 63+32.69	+59.78	96.17	±ME, GB

GRADING COORDINATES

POINT #	DESC.	STATION	OFFSET	ELEVATION	REMARKS
SE1301	CROWN	"EA" 64+38.42	+2.19	96.42	±ME
SE1302	FL	"EA" 64+31.79	+21.83	95.92	±ME, B FACING
SE1303	SWLK	"EA" 64+31.80	+27.47	96.62	±ME
SE1304	SWLK	"EA" 64+21.79	+27.95	96.42	–
SE1305	FL	"EA" 64+14.08	+15.89	95.83	E FACING
SE1306	FL	"EA" 64+02.68	+15.87	95.89	PC
SE1307	FL	"EA" 63+92.31	+17.78	95.95	COR
SE1308	SWLK	"EA" 63+88.81	+29.79	96.58	MIDPOINT, R=1.0'
SE1309	SWLK	"EA" 63+87.67	+41.02	96.50	–
SE1310	FL	"EA" 63+82.31	+24.27	96.02	GB
SE1311	CROWN	"EA" 63+60.09	+2.04	96.27	PT
SE1312	FL	"EA" 63+75.78	+34.31	95.93	COR
SE1313	FL	"EA" 63+73.87	+44.63	95.86	PT
SE1314	FL	"EA" 63+73.87	+62.20	95.73	B FACING
SE1315	SWLK	"EA" 63+87.62	+76.27	96.25	–
SE1316	SWLK	"EA" 63+87.61	+86.45	96.36	±ME
SE1317	FL	"EA" 63+81.99	+86.54	95.75	±ME, E FACING
SE1318	CROWN	"EA" 63+60.32	+94.16	96.25	±ME



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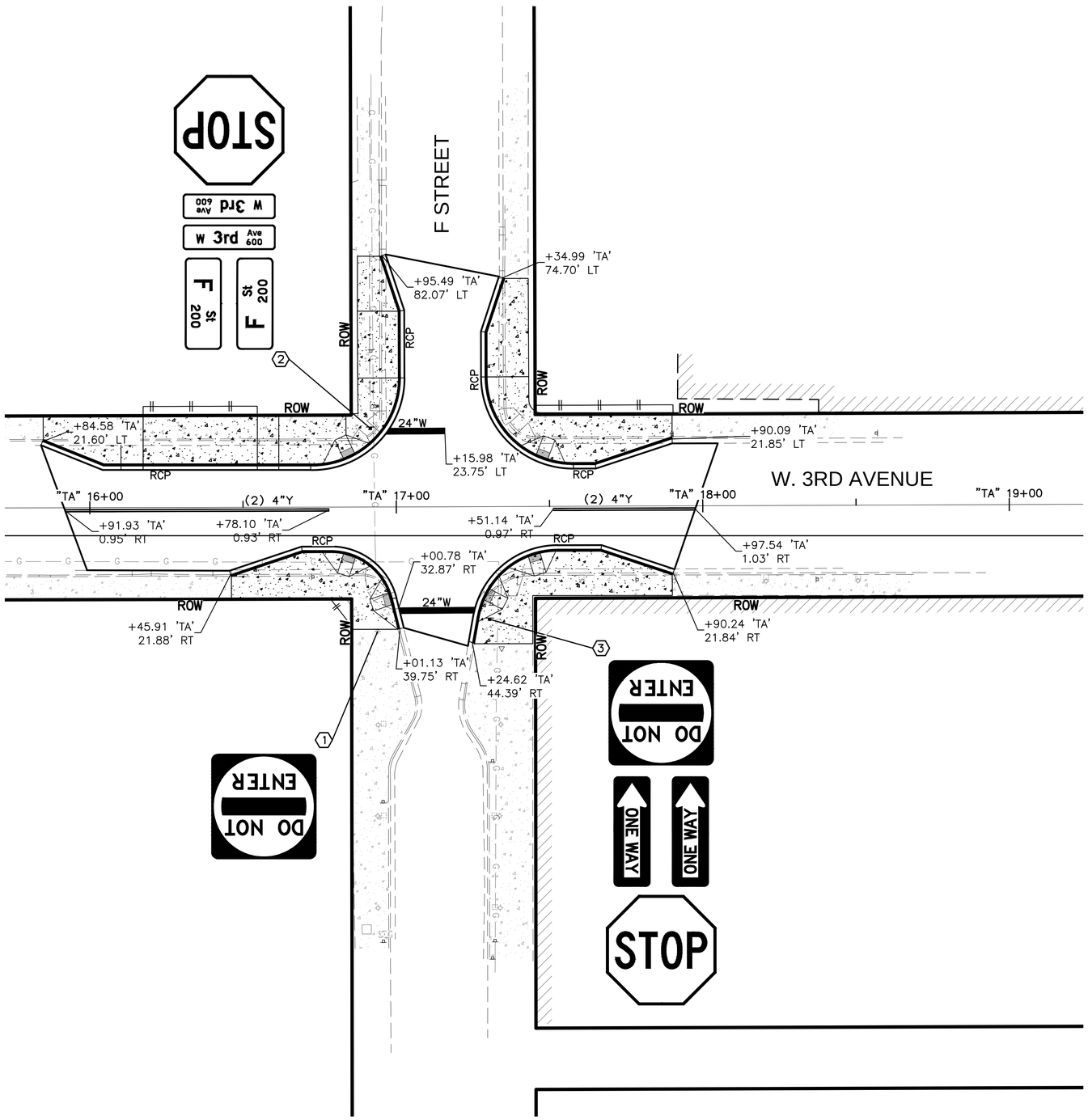
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & K ST GRADING PLAN

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H1	D:H12



STATE OF ALASKA
49TH
BRAD S. DOGGETT
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

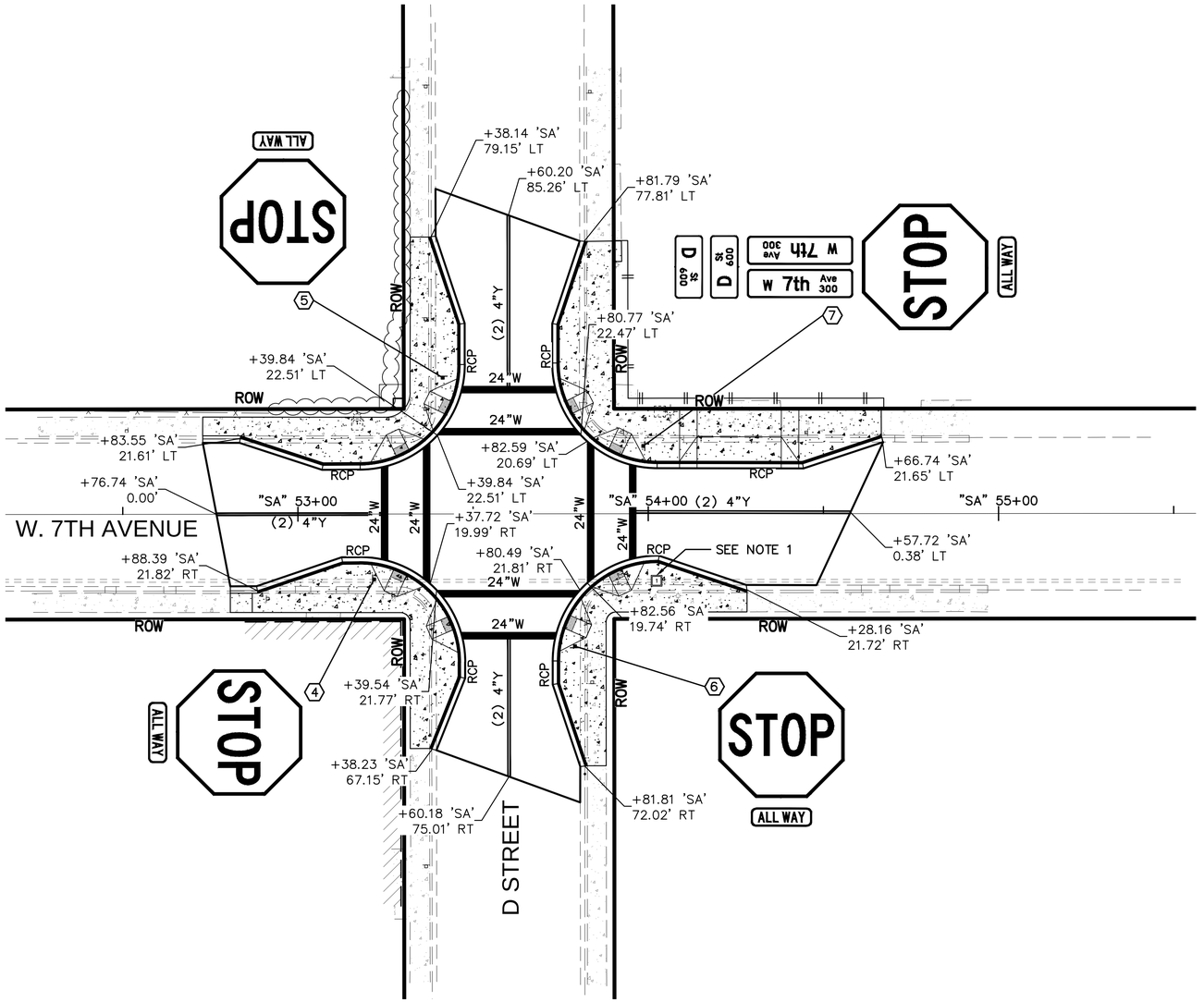
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 3RD AVE & F ST SIGNING & STRIPING PLAN

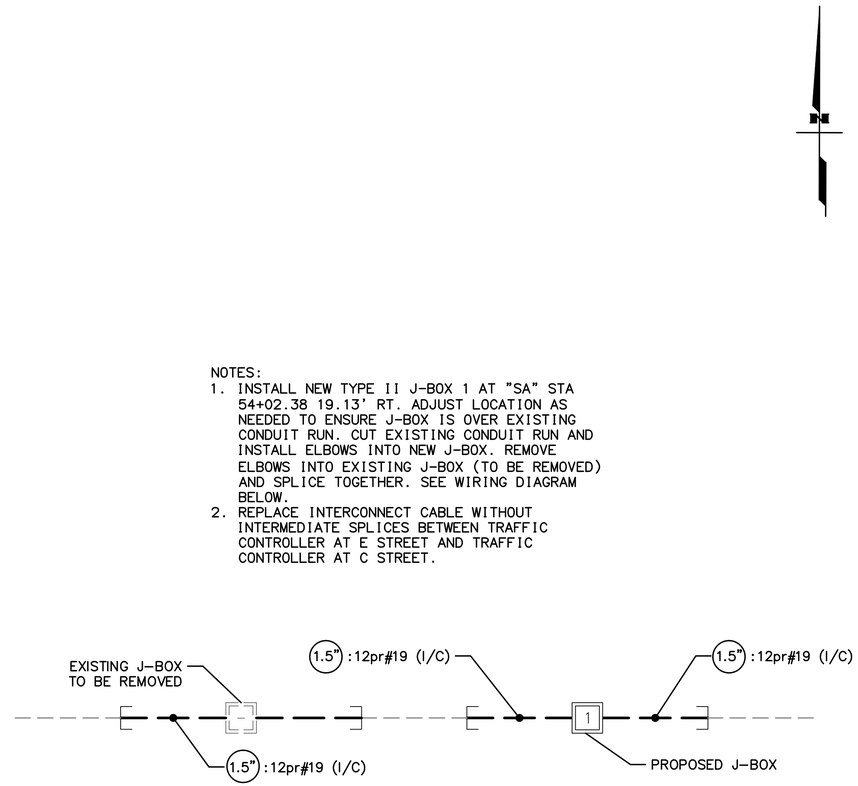
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 11:32 AM | LAYOUT | D:H1 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H2	D:H12



NOTES:
1. INSTALL NEW TYPE II J-BOX 1 AT "SA" STA 54+02.38 19.13' RT. ADJUST LOCATION AS NEEDED TO ENSURE J-BOX IS OVER EXISTING CONDUIT RUN. CUT EXISTING CONDUIT RUN AND INSTALL ELBOWS INTO NEW J-BOX. REMOVE ELBOWS INTO EXISTING J-BOX (TO BE REMOVED) AND SPLICE TOGETHER. SEE WIRING DIAGRAM BELOW.
2. REPLACE INTERCONNECT CABLE WITHOUT INTERMEDIATE SPLICES BETWEEN TRAFFIC CONTROLLER AT E STREET AND TRAFFIC CONTROLLER AT C STREET.



WIRING DIAGRAM

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 7TH AVE & D ST SIGNING & STRIPING PLAN

STATE OF ALASKA
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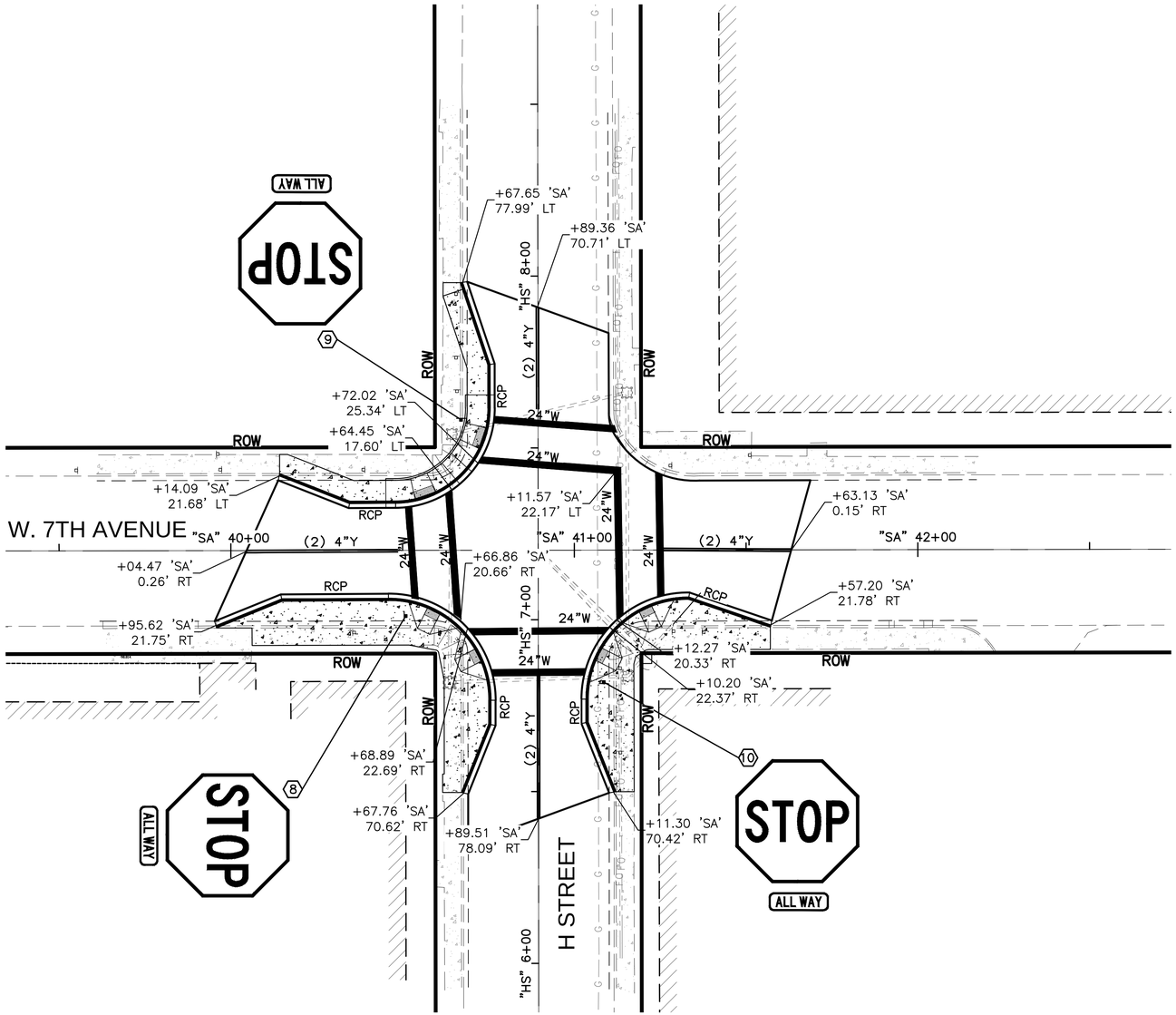
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D:H2 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H3	D:H12



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 7TH AVE & H ST SIGNING & STRIPING PLAN

STATE OF ALASKA 49TH
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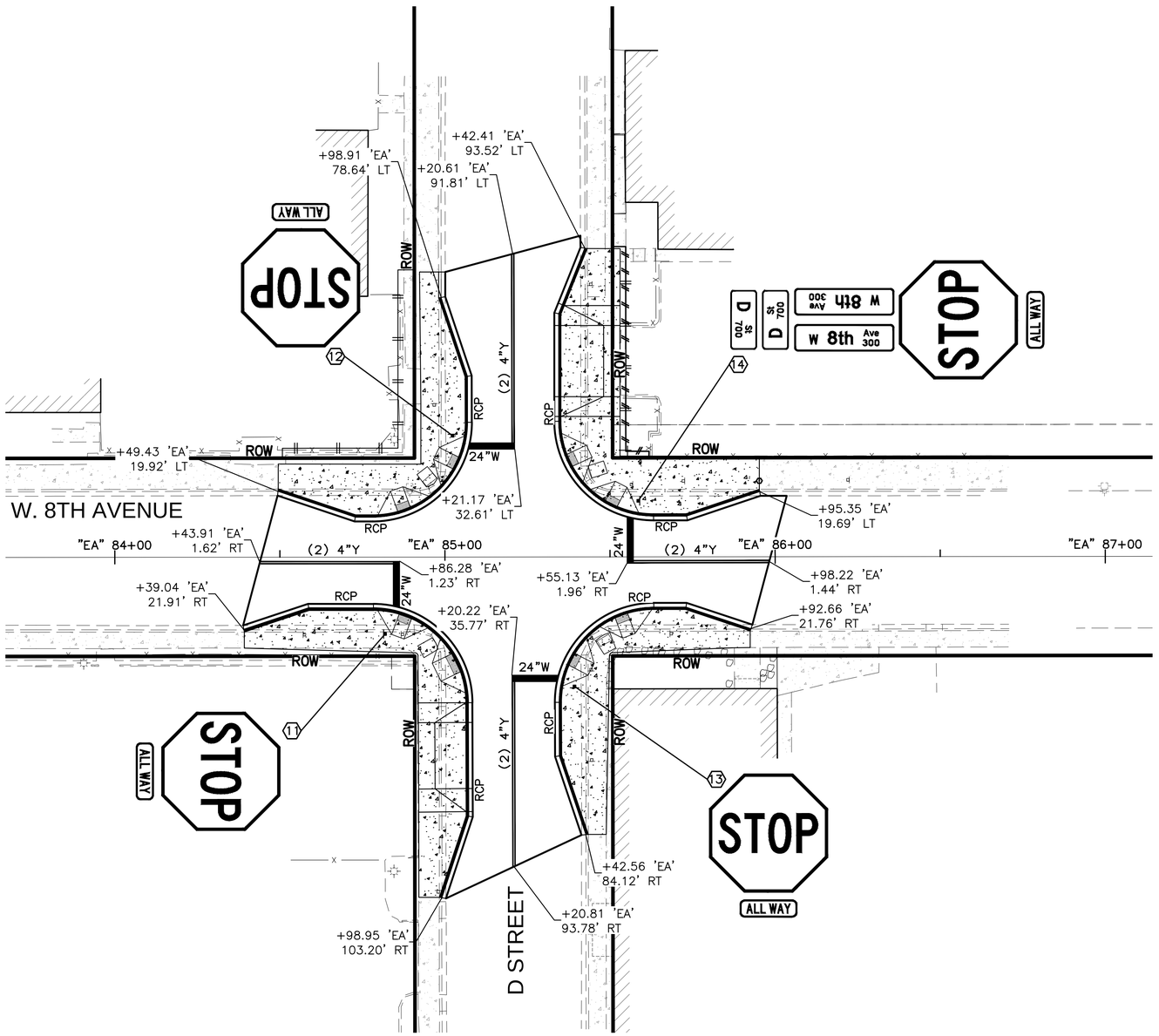
FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS_ 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D-H3 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H4	D:H12



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

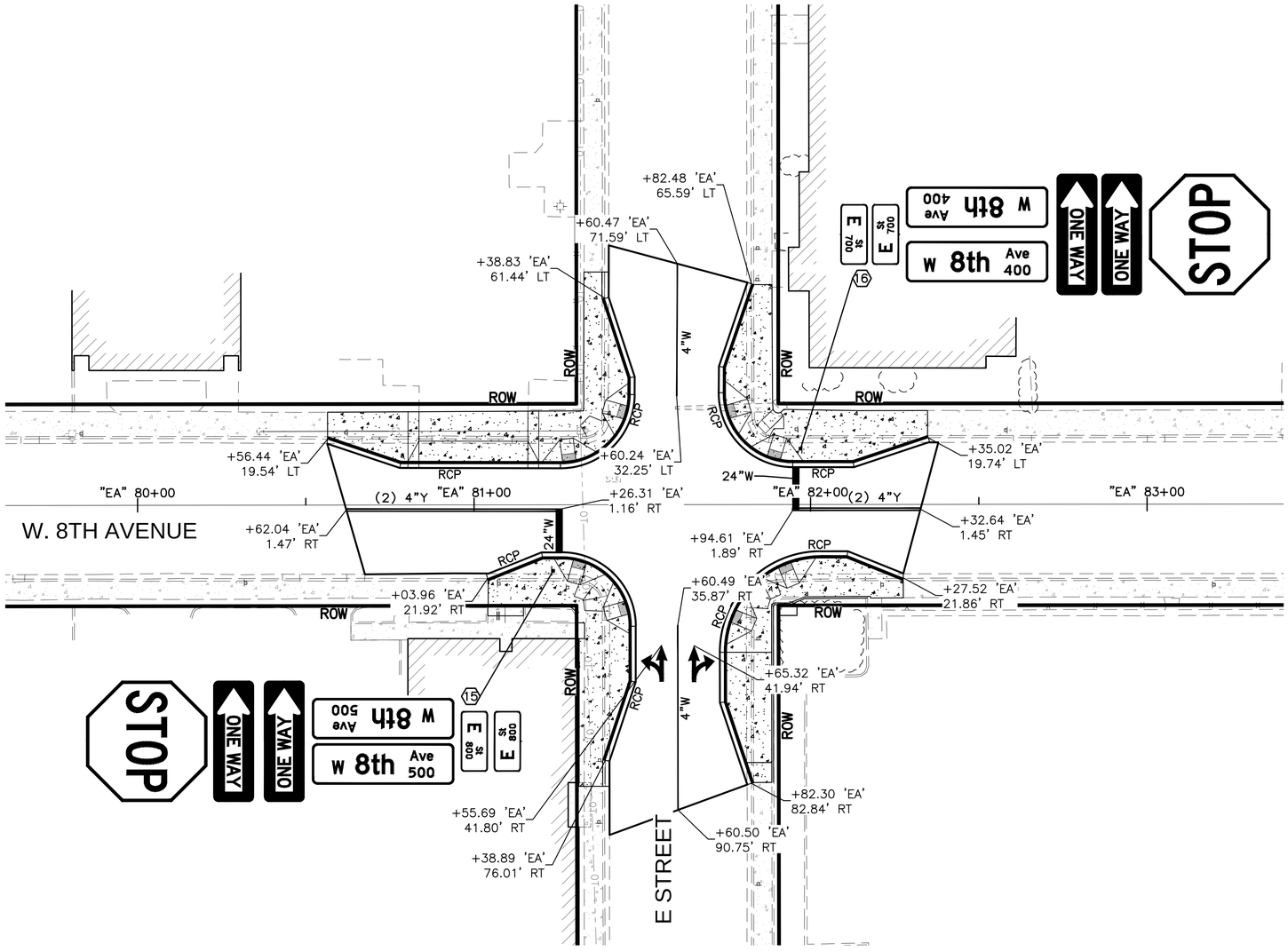
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & D ST SIGNING AND STRIPING PLAN

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG
DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D:H4 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H5	D:H12



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

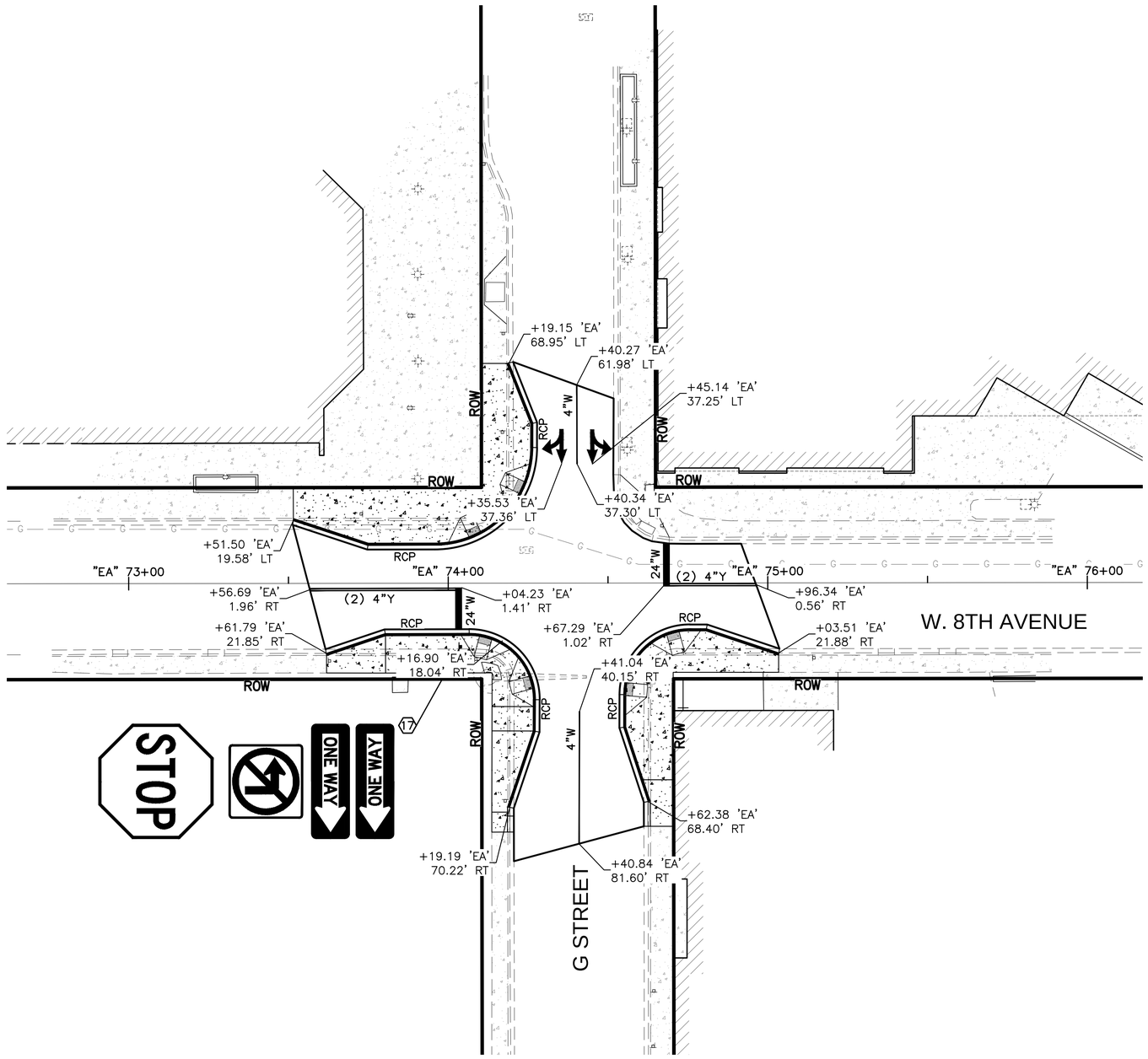
W. 8TH AVE & E ST SIGNING AND STRIPING PLAN

DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D:H5 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H6	D:H12



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & G ST SIGNING AND STRIPING PLAN

STATE OF ALASKA
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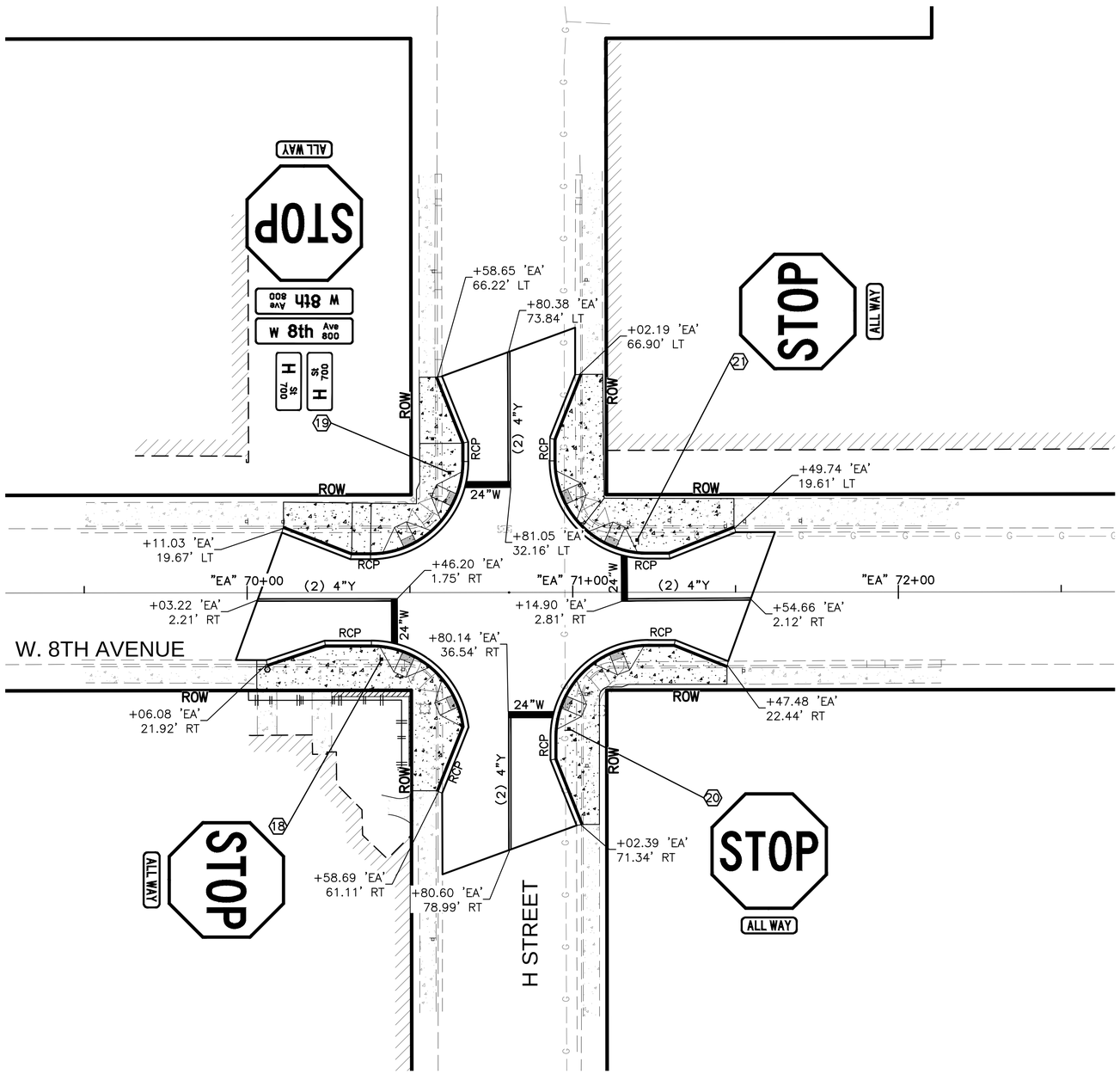
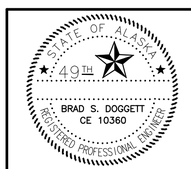
DATE/TIME 12/23/2016 11:33 AM | LAYOUT D:H6 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA

FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H7	D:H12





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STATE OF ALASKA
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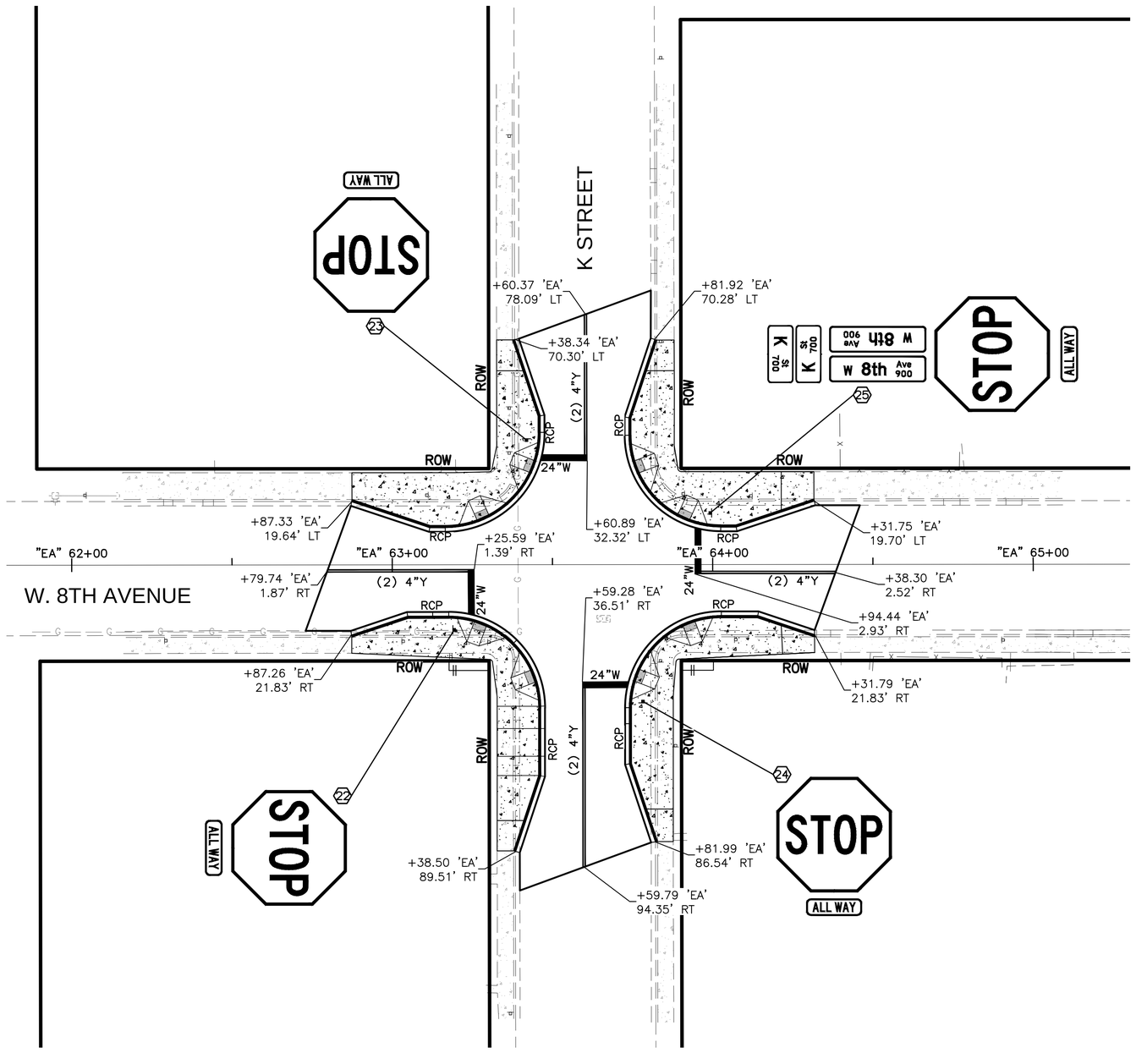
HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & H ST SIGNING AND STRIPING PLAN

DATE/TIME 12/23/2016 11:33 AM | LAYOUT D:H7 | DESIGNED AOA | CHECKED AP/SRT | DRAFTED AOA
FILE P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H8	D:H12



STATE OF ALASKA
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AND PUBLIC FACILITIES

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

W. 8TH AVE & K ST SIGNING AND STRIPING PLAN

DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D:H8 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	THICKNESS (in) FRAMED YES	THICKNESS (in) FRAMED NO	REMARKS
D:H1	1	"TA" 16+93.81	40.61'	RT.	R5-1	DO NOT ENTER	30	30	6.25	N	N/A		X	MOUNT ON EXISTING LIGHT POLE
D:H1	2	"TA" 16+91.59	25.68'	LT.	D3-101	F St 200	30	12	5.0	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 3rd Ave 600	30	8	3.33	N/S			X	2 SIGNS BACK TO BACK
					R1-1	STOP	30	30	6.25	N		X		
D:H1	3	"TA" 17+30.27	36.76'	RT.	R5-1	DO NOT ENTER	30	30	6.25	N	1-3.0" T		X	
					R6-1R	ONE WAY	36	12	3.0	E		X		BACK TO BACK WITH R6-1L
					R6-1L	ONE WAY	36	12	3.0	W		X		BACK TO BACK WITH R6-1R
					R1-1	STOP	30	30	6.25	S		X		
D:H2	4	"SA" 53+21.71	18.65'	RT	R1-1	STOP	30	30	6.25	W	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	W			X	
D:H2	5	"SA" 53+41.35	38.92'	LT	R1-1	STOP	30	30	6.25	N	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	N			X	
D:H2	6	"SA" 53+79.07	37.81'	RT.	R1-1	STOP	30	30	6.25	S	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	S			X	
D:H2	7	"SA" 53+98.59	19.36'	LT.	D3-101	D St 600	18	8	2.00	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 7th Ave 300	30	8	3.33	N/S			X	2 SIGNS BACK TO BACK
					R1-1	STOP	30	30	6.25	E		X		
					R1-3P	ALL WAY	18	6	0.75	E			X	
D:H3	8	"SA" 40+50.88	19.08'	RT.	R1-1	STOP	30	30	6.25	W	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	W			X	

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H9	D:H12

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

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN CURB BULBS SIGN SUMMARY

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D:H9 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	THICKNESS (in) FRAMED YES	THICKNESS (in) FRAMED NO	REMARKS
D:H3	9	"SA" 40+67.09	38.00'	LT.	R1-1	STOP	30	30	6.25	N	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	N			X	
D:H3	10	"SA" 41+08.50	38.39'	RT.	R1-1	STOP	30	30	6.25	S	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	S			X	
D:H4	11	"EA" 84+81.83	23.28'	RT.	R1-1	STOP	30	30	6.25	W	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	W			X	
D:H4	12	"EA" 85+02.33	36.77'	LT.	R1-1	STOP	30	30	6.25	N	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	N			X	
D:H4	13	"EA" 85+39.20	39.22'	RT.	R1-1	STOP	30	30	6.25	S	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	S			X	
D:H4	14	"EA" 85+58.56	17.00'	LT.	D3-101	D St 700	18	8	2.0	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 8th Ave 300	30	8	3.33	N/S			X	2 SIGNS BACK TO BACK
					R1-1	STOP	30	30	6.25	E		X		
					R1-3P	ALL WAY	18	6	0.75	E			X	
D:H5	15	"EA" 81+23.46	19.65'	RT.	D3-101	E St 800	18	8	2.0	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 8th Ave 500	42	12	7.0	N/S		X		2 SIGNS BACK TO BACK
					R6-1R	ONE WAY	36	12	3.0	E		X		BACK TO BACK WITH R6-1R
					R6-1L	ONE WAY	36	12	3.0	W		X		BACK TO BACK WITH R6-1R
					R1-1	STOP	36	36	9.00	W		X		

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H10	D:H12

STATE OF ALASKA
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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN CURB BULBS SIGN SUMMARY

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG
DATE/TIME | 12/23/2016 11:33 AM
LAYOUT | D:H10
DESIGNED | AOA
CHECKED | AP/SRT
DRAFTED | AOA

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	THICKNESS (in) FRAMED YES	THICKNESS (in) FRAMED NO	REMARKS
D:H5	16	"EA" 81+97.04	16.60'	LT.	D3-101	E St 700	18	8	2.0	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 8th Ave 400	42	12	7.0	N/S		X		2 SIGNS BACK TO BACK
					R6-1L	ONE WAY	36	12	3.0	W		X		BACK TO BACK WITH R6-1R
					R6-1R	ONE WAY	36	12	3.0	E		X		BACK TO BACK WITH R6-1L
					R1-1	STOP	36	36	9.00	E		X		
D:H6	17	"EA" 74+03.77	19.90'	RT	R6-1L	ONE WAY	36	12	3.0	E	1-3.0" T	X		
					R6-1R	ONE WAY	36	12	3.0	W		X		
					R3-1		30	30	6.25	E			X	
					R1-1	STOP	36	36	9.00	W		X		
D:H7	18	"EA" 70+41.25	20.44'	RT.	R1-1	STOP	30	30	6.25	W	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	W			X	
D:H7	19	"EA" 70+62.22	36.77'	LT.	D3-101	H St 700	18	8	2.0	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 8th Ave 800	30	8	3.33	N/S			X	2 SIGNS BACK TO BACK
					R1-1	STOP	30	30	6.25	N		X		
					R1-3P	ALL WAY	18	6	0.75	N			X	
D:H7	20	"EA" 70+98.78	41.90'	RT.	R1-1	STOP	30	30	6.25	S	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	S			X	
D:H7	21	"EA" 71+19.82	16.06'	LT.	R1-1	STOP	30	30	6.25	E	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	E			X	

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H11	D:H12

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HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN CURB BULBS SIGN SUMMARY

FILE | P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG | DATE/TIME | 12/23/2016 11:33 AM | LAYOUT | D:H11 | DESIGNED | AOA | CHECKED | AP/SRT | DRAFTED | AOA

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	THICKNESS (in) FRAMED YES	THICKNESS (in) FRAMED NO	REMARKS
D:H8	22	"EA" 63+19.32	20.29'	RT.	R1-1	STOP	30	30	6.25	W	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	W			X	
D:H8	23	"EA" 63+41.94	38.87'	LT.	R1-1	STOP	30	30	6.25	N	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	N			X	
D:H8	24	"EA" 63+78.20	42.73'	RT.	R1-1	STOP	30	30	6.25	S	1-2.5" X 2.5" PT	X		
					R1-3P	ALL WAY	18	6	0.75	S			X	
D:H8	25	"EA" 63+99.25	16.10'	LT.	D3-101	K St 700	18	8	2.0	E/W	1-3.0" T		X	2 SIGNS BACK TO BACK
					D3-101	W 8th Ave 900	30	8	3.33	N/S			X	2 SIGNS BACK TO BACK
					R1-1	STOP	30	30	6.25	E		X		
					R1-3P	ALL WAY	18	6	0.75	E			X	

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(344)/Z581970000	2017	D:H12	D:H12

DRAFTED AOA | CHECKED AP/SRT | DESIGNED AOA | LAYOUT D:H12 | DATE/TIME 12/23/2016 11:33 AM | DWG FILE [P:\PROJECTS\D61519\D61519-HSIP ANCHORAGE AREA SAFETY IMPROVEMENTS, 2015\SA14-CT-SL-H SHT-61519.DWG

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

DOWL
4041 B STREET
ANCHORAGE, ALASKA 99503
(907) 562-2000
AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: ANCHORAGE AREA SAFETY IMPROVEMENTS

DOWNTOWN CURB BULBS SIGN SUMMARY

DATE/TIME	12/23/2016 1:00 PM
LAYOUT	A1
DESIGNED	MLG
CHECKED	BMM
DRAFTED	CJS

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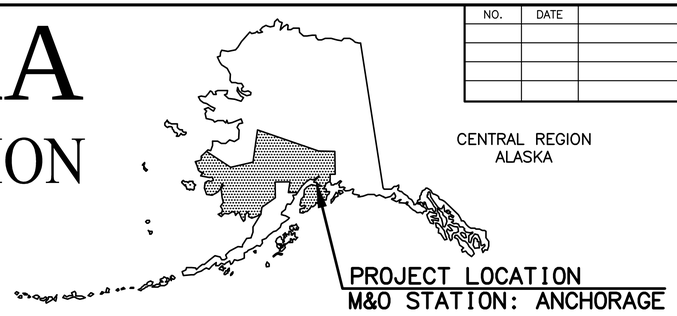
STATE OF ALASKA

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	A1	A4
			PLAN SET TOTAL	29

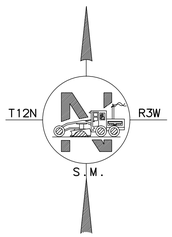
CDS ROUTE: 134140	MILEPOINT:3.309 TO 3.498
CDS ROUTE: 133732	MILEPOINT:0.909 TO 1.909
LATITUDE:61.159187	LONGITUDE:-149.834214

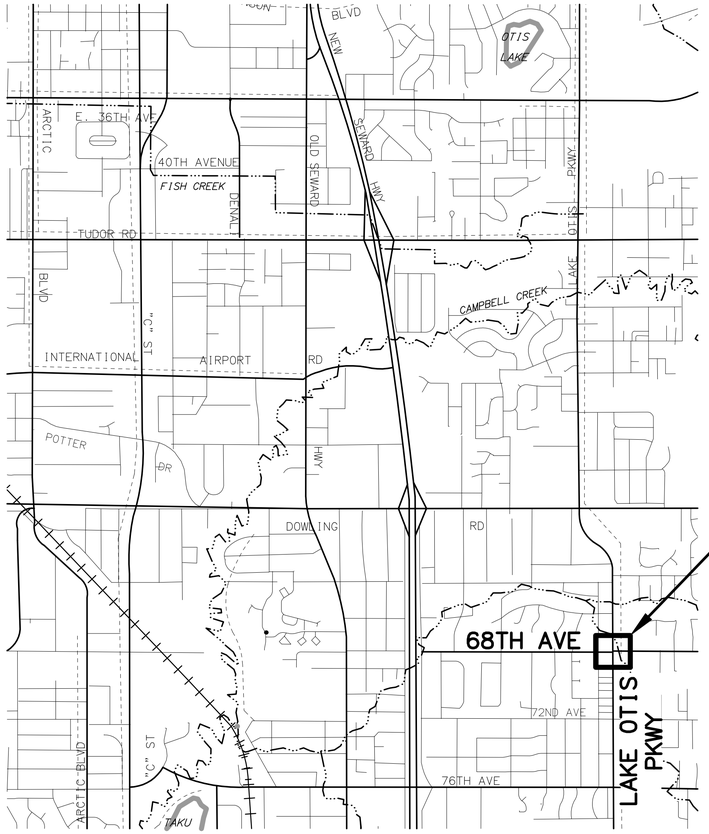


PROPOSED HIGHWAY PROJECT

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION
PROJECT NO: 0001299/Z566440000

SIGNALIZATION AND SIGNING





PROJECT SUMMARY AND DESIGNATION

ROADWAY SECTION	WIDTH	LENGTH	A.A.D.T. 2013	DESIGN SPEED
LAKE OTIS PARKWAY	109 FT	126 FT	22,040	50 MPH
68TH AVENUE	60 FT	147 FT	4,280	40 MPH

PLANS DEVELOPED BY: DOWL

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

APPROVED:

REGIONAL PRE-CONSTRUCTION ENGINEER DATE

CONCUR:

REGIONAL CONSTRUCTION ENGINEER DATE

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	A2	A4

ABBREVIATIONS:

AL	ARC LENGTH
CL	CENTER LINE
COMM	COMMUNICATIONS
DIA	DIAMETER
DOT&PF	STATE OF ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
DWG	DRAWING
EA	EACH
EP	EDGE OF PAVEMENT
EVP	EMERGENCY VEHICLE PREEMPTION
FC	FOOTCANDLE
FDN	FOUNDATION
FG	FINISH GRADE
FL	FLOW LINE (ELEV)
GTT	GLOBAL TRAFFIC TECHNOLOGIES
ID	INSIDE DIAMETER
IN	INCH
JB	JUNCTION BOX
LT	LEFT
MAX	MAXIMUM
ME	MATCH EXISTING
MIN	MINIMUM
MOA	MUNICIPALITY OF ANCHORAGE
OD	OUTSIDE DIAMETER
OE	OVERHEAD ELECTRIC
R	RADIUS
ROW	RIGHT-OF-WAY
RT	RIGHT
SQ	SQUARE
STA	STATION
TBC	TOP BACK OF CURB
TYP	TYPICAL
UNC	UNIFIED NATIONAL COARSE (THREAD TYPE)

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE RIGHT-OF-WAY AND TEMPORARY CONSTRUCTION EASEMENT. NO EXCESS MATERIAL SHALL BE DISPOSED OF WITHIN THE RIGHT-OF-WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR DIRECTED BY THE ENGINEER.

2. THE ROW LINES SHOWN WERE DRAWN ON THE PLANS USING INFORMATION FROM DOT&PF, PLATTED SUBDIVISIONS, AND SURVEYED MONUMENTS ON THE GROUND. THE ROW LINES WERE INSERTED USING A COMMON COORDINATE SYSTEM.

3. ALL PAVEMENT CUTS SHALL BE MADE WITH A SAW OR ALTERNATE METHOD APPROVED BY THE ENGINEER.

4. PLACE SOD ON ALL AREAS WITHIN THE RIGHT-OF-WAY DISTURBED BY CONSTRUCTION, AND AS DIRECTED BY THE ENGINEER.

5. SOME OF THE EXISTING INFORMATION SHOWN IN THE PLANS IS DERIVED FROM THE 2014-2015 MOA RESURFACING PROJECT PLANS, AND HAVE BEEN PARTIALLY FIELD VERIFIED. FIELD CONDITIONS MAY NOT BE ACCURATELY REPRESENTED AND/OR MAY HAVE CHANGED. ADJUST INSTALLATIONS AS DIRECTED BY THE ENGINEER.

6. CONSTRUCT CURB RAMPS TO AVOID IMPACTING SIGNAL POLE FOUNDATIONS. DO NOT COVER SIGNAL POLE FOUNDATION BOLTS AND BASE PLATES.

7. ON STANDARD DRAWING C-03.10, REPLACE THE SAFETY FENCE AND TYPE II BARRICADE OR TUBULAR MARKINGS SHOWN IN THE TYPICAL SECTION WITH ADA COMPLIANT BARRICADES.

INDEX

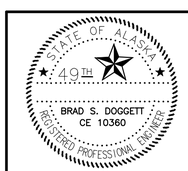
THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:

C-03.10*, C-04.12,
I-20.20, I-21.10*,
S-00.11*, S-05.01,
S-23.00, S-30.03, S-31.01,
T-21.03, T-52.20, T-56.00

* AS MODIFIED HEREIN.

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 AS OF THE ADVERTISEMENT DATE OF THIS PROJECT.



DOWL
4041 B STREET
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

INDEX AND GENERAL NOTES

DATE/TIME | 12/23/2016 1:00 PM | LAYOUT | | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS |

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	A3	A4

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		
WATER	W	W
FIRE HYDRANT		
WELL	W	
VALVE OR RISER		
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
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	2072+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/SINGLE		
TRAFFIC SIGN/DOUBLE		
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
FENCE	X	X
CONCRETE RETAINING WALL		
GABION RETAINING WALL		
HEAD & WINGWALLS		
GUARDRAIL		
END SECTION		
PARALLEL GUARDRAIL SECTION		

ROADWAY

	EXISTING	PROPOSED
SIGNAL POLE	P#	
DRAINAGE ARROW		
PEDESTRIAN RAILING		
SPECIAL DITCH		
BOTTOM OF DITCH		
RIPRAP		
BOULDER OR BOULDERS		
CROWN OF ROAD		CR

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

LEGEND

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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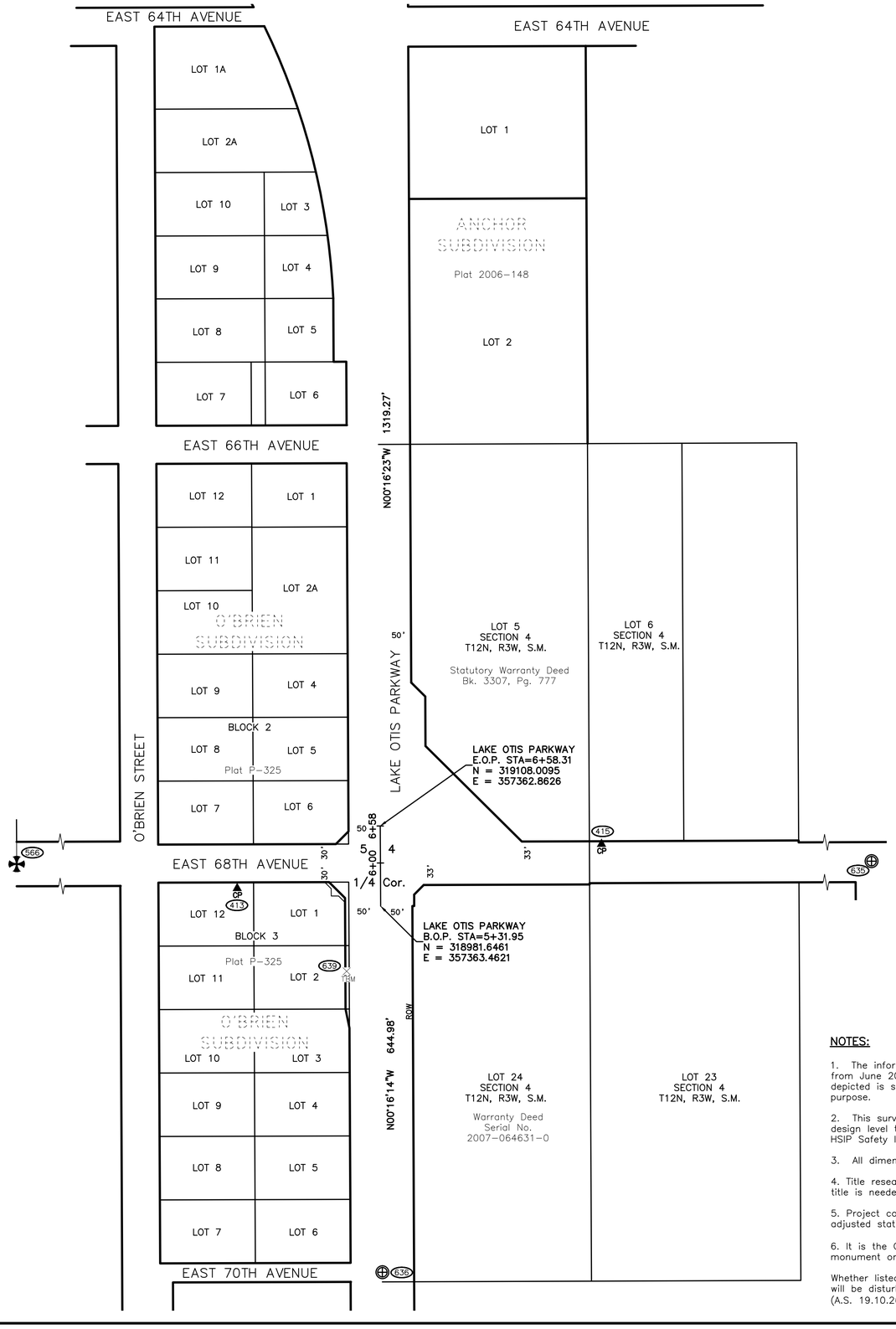
(907) 562-2000
AECL848

DATE/TIME 12/23/2016 1:00 PM | LAYOUT | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

FILE [Q:\22\61551-01\65CAD\CIVIL\SA14-CT-CV-A-SHT-61551-LOP&68.DWG]

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	A4	A4



HORIZONTAL CONTROL

POINT	STATION	OFFSET	LOCAL COORDINATES NORTHING	LOCAL COORDINATES EASTING	DESCRIPTION
636	N/A	N/A	318404.7290	357366.1873	Fd AC/Bx[6091]: 1/4C SI 70TH/LO
563	N/A	N/A	317955.8616	357406.5853	Set Rbr/PC: LOP-5 N OF 72TH/LO
413	5+61.21	225.86 LT	319009.8440	357137.4620	Set Magnail[DOWL]:
635	5+99.12	824.32 RT	319052.7121	358187.4548	Fd AC/Bx: SI 64TH/LO
566	6+04.71	2638.62 LT	319041.8316	354724.5332	Fd Rbr: C 1/4 S5 *T12N R3W
415	6+28.05	348.59 RT	319079.4138	357711.5924	Set Magnail[DOWL]:

VERTICAL CONTROL

POINT	STATION	OFFSET	LOCAL COORDINATES NORTHING	LOCAL COORDINATES EASTING	ELEVATION	DESCRIPTION
639	N/A	N/A	318879	357310	149.87	TBM-639: NE. Bolt LP Chisled "X", Blue Paint

T12N R3W
S. M.
SEC. 4 & 5

0 50 100 200
Scale in Feet

LEGEND

- (xxx) Survey Point Number
- Primary Centerline Monument
- Primary Government Monument
- CP Survey Control Station
- TBM Temporary Bench Mark
- Right-of-Way Line
- Property Line
- Right-of-Way Centerline
- 1+00 + 2+00 Project Alignment

NOTES:

1. The information shown hereon is based on multiple field surveys performed by DOWL from June 2004 to November 2009, with field edit on July 2, 2015. Background information depicted is shown for orientation purposes only and should not be used for any other purpose.

2. This survey was performed to provide survey control, adjoining boundary information, and design level topographic and feature mapping for the Lake Otis Parkway and 68th Avenue HSIP Safety Improvement Projects.

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

4. Title research was not performed as part of this survey, a thorough examination of land title is needed to ensure all easements, restrictions and rights are depicted.

5. Project control coordinates shown on this sheet were established by using least-squares adjusted static GPS.

6. It is the Contractor's responsibility to work around all monuments without disturbing the monument or case.

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).

HORIZONTAL CONTROL STATEMENT

This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system expressed in US Survey feet units, developed by the Alaska Department of Transportation.

Basis of Coordinates:
The Basis of Coordinates is NGS Station O'Malley, located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303939.2310 N, 353362.5446 E., US Survey Feet.

Basis of Bearings:
The Basis of Bearings is a local plane bearing between NGS Station O'Malley and NGS Station Loop 2 USE RM 3 1964. NGS Station Loop 2 USE RM 3 1964 bears N 01°43'26.4"E a distance of 49488.4476 feet from NGS Station O'Malley. NGS Station Loop 2 USE RM 3 1964 has Anchorage Bowl 2000 coordinates of 353405.2778 N, 354851.3982 E., U.S. Survey Feet.

Translation Parameters:
To convert the local coordinates to NAD83 (92) State Plane coordinates expressed in U.S. Survey Feet, translate using +2296868.6878 N U.S Feet, +1312517.4904 E U.S Feet, and scale using 0.9998910192.

VERTICAL CONTROL STATEMENT

Vertical Datum is MOA GAAB 72 as determined by differential level loops performed by DOWL between the following benchmarks:

BM GAAB 22. A Brass Cap on the 0.4 feet south of northwest corner of a block building at 5406 Lake Otis Blvd. The elevation is 162.82 feet.

All elevations on control points and benchmarks need to be field verified before they are used.

STATE OF ALASKA 49TH
A. WILLIAM STOLL, LS 12041
REGISTERED PROFESSIONAL LAND SURVEYOR

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4041 B STREET
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AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

SURVEY CONTROL SHEET

DATE/TIME 12/23/2016 1:00 PM | LAYOUT | DESIGNED | CHECKED AWS | DRAFTED DOWL

FILE [Q:\22\61551-01\65CAD\SURVEY\SCS\SC14-CS-VC-LOP&68TH.DWG]

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	C1	C1

ESTIMATE OF QUANTITIES LOP68

ITEM NO.	ITEM DESCRIPTION	PAY UNIT	QUANTITY
202(2)	REMOVAL OF PAVEMENT	SQUARE YARD	19
202(3)	REMOVAL OF SIDEWALK	SQUARE YARD	51
202(9)	REMOVAL OF CURB AND GUTTER	LINEAR FOOT	80
301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	4
401(1A)	HMA, TYPE II; CLASS A	TON	3
401(4)	ASPHALT BINDER, GRADE PG 52-28	TON	0.2
608(1a)	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	51
608(6)	CURB RAMP	EACH	2
609(2)	CURB AND GUTTER, TYPE I	LINEAR FOOT	80
615(1)	STANDARD SIGN	SQUARE FOOT	50
640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED
641(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641(2)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	CONTINGENT SUM	ALL REQUIRED
641(6)	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
641(7)	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643(3)	PERMANENT CONSTRUCTION SIGNS	LUMP SUM	ALL REQUIRED
643(15A)	FLAGGING	CONTINGENT SUM	ALL REQUIRED
643(23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643(25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
644(1)	FIELD OFFICE	LUMP SUM	ALL REQUIRED
644(10)	ENGINEERING COMMUNICATIONS	CONTINGENT SUM	ALL REQUIRED
646(1)	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
660(17A)	TRAFFIC SIGNAL SYSTEM MODIFICATIONS (LAKE OTIS PARKWAY AND 68TH AVENUE)	LUMP SUM	ALL REQUIRED
660(20A)	SIGNAL SYSTEM TIMING AND ADJUSTMENTS (LAKE OTIS PARKWAY AND 68TH AVENUE)	CONTINGENT SUM	ALL REQUIRED
682(1)	VAC-TRUCK POTHOLE	CONTINGENT SUM	ALL REQUIRED

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
301(1)	AGGREGATE BASE COURSE, GRADING D-1	144 LB/CF
401(1A)	HMA, TYPE II; CLASS A	151 LB/CF
401(4)	ASPHALT BINDER, GRADE PG 52-28	5.3% OF 401(1A)

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

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

ESTIMATE OF QUANTITIES

DATE/TIME | 12/23/2016 1:01 PM | LAYOUT | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

FILE | Q:\22\61551-01\65CAD\CIVIL\SA14-CT-DT-C-D SHT-61551-LOP&68.DWG

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	D1	D1

202(2)	REMOVAL OF PAVEMENT				
SHEET	**FROM STATION**	**TO STATION**	**OFFSET**	**AREA (SY)**	**REMARKS**
F1	5+44.87	5+72.11	LT	9	
F1	6+28.70	6+58.05	RT	10	
			TOTAL	19	

202(3)	REMOVAL OF SIDEWALK				
SHEET	**FROM STATION**	**TO STATION**	**OFFSET**	**AREA (SY)**	**REMARKS**
F1	5+44.88	5+72.11	LT	21	
F1	6+28.70	6+58.05	RT	30	
			TOTAL	51	

202(9)	REMOVAL OF CURB AND GUTTER				
SHEET	**FROM STATION**	**TO STATION**	**OFFSET**	**LENGTH (LF)**	**REMARKS**
F1	5+44.88	5+72.11	LT	35	
F1	6+28.70	6+58.05	RT	45	
			TOTAL	80	

608(1a)	CONCRETE SIDEWALK, 4 INCHES THICK				
SHEET	**FROM STATION**	**TO STATION**	**OFFSET**	**AREA (SY)**	**REMARKS**
F1	5+44.88	5+72.11	LT	21	
F1	6+28.70	6+58.05	RT	30	
			TOTAL	51	

608(6)	CURB RAMP			
SHEET	**STATION**	**OFFSET**	**QUANTITY (EA)**	**REMARKS**
F1	5+64.10	55.73' LT	1	PARALLEL
F1	6+36.47	39.09' RT	1	PARALLEL
		TOTAL	2	

609(2)	CURB AND GUTTER, TYPE I				
SHEET	**FROM STATION**	**TO STATION**	**OFFSET**	**LENGTH (LF)**	**REMARKS**
F1	5+44.88	5+72.11	LT	35	
F1	6+28.70	6+58.05	RT	45	
			TOTAL	80	

SUBSIDIARY TO 615(1)	SALVAGE SIGN			
SHEET	**STATION**	**OFFSET**	**QUANTITY**	**REMARKS**
H12	5+52.39	59.2 LT	4	POLE 4
H12	6+50.49	43.9 RT	4	POLE 2

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

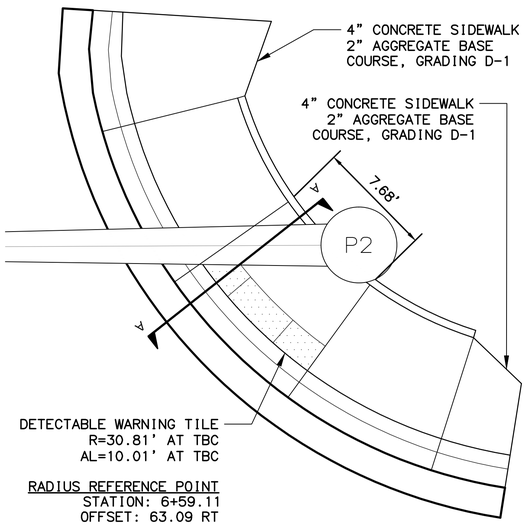
SUMMARY SHEET

DATE/TIME 12/23/2016 1:01 PM | LAYOUT | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

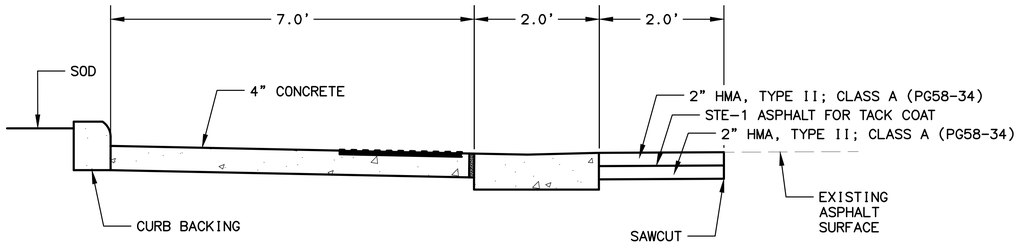
FILE Q:\22\61551-01\65CAD\CIVIL\SA14-CT-DT-C-D SHT-61551-LOP&68.DWG

NO.	DATE	REVISION

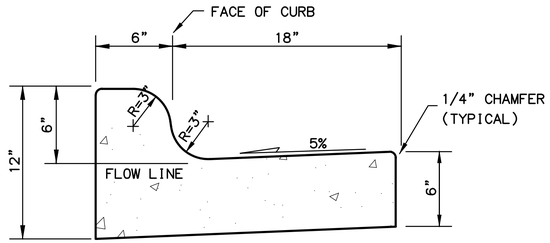
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	E1	E1



NE QUADRANT ADA RAMP RECONSTRUCTION



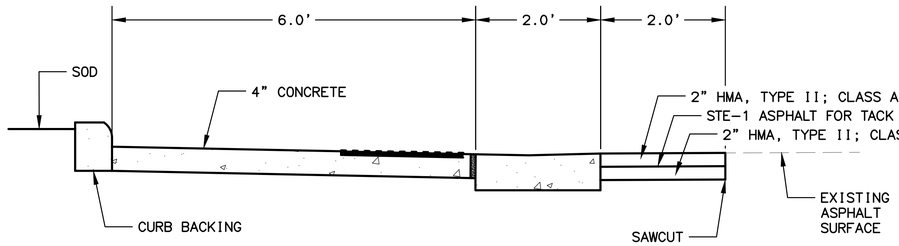
SECTION A-A



NOTES:

1. MOUNTABLE CURBS SHALL BE USED OUTSIDE OF CURB RAMPS.

MOUNTABLE CURB & GUTTER



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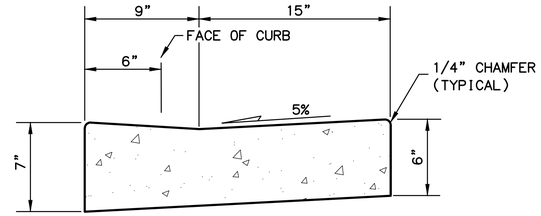
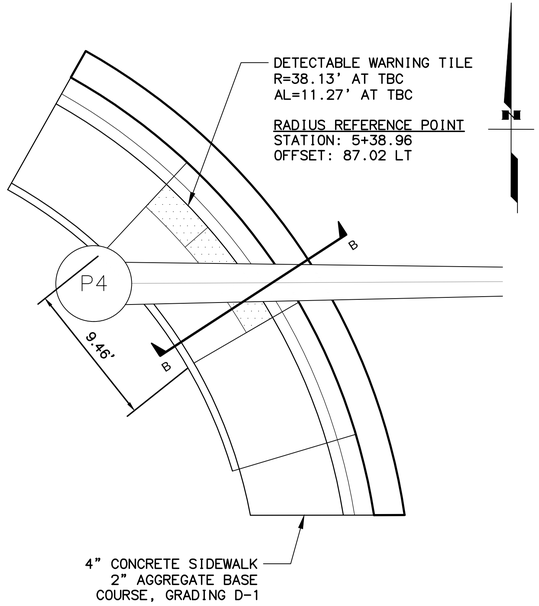


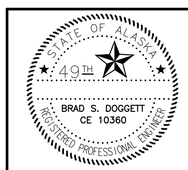
CURB RAMP CURB & GUTTER



SW QUADRANT ADA RAMP RECONSTRUCTION

CURB RAMP NOTES:

1. CONSTRUCT CURB RAMP, BACKING CURB, LANDING, AND CURB RAMP CURB & GUTTER PER STANDARD DETAIL I-21.10 USING THE DIMENSIONS SHOWN HEREON AND THE REFERENCE POINT SHOWN ON SHEET F1.



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

CURB RAMP DETAILS

DATE/TIME | 12/23/2016 1:01 PM | LAYOUT | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

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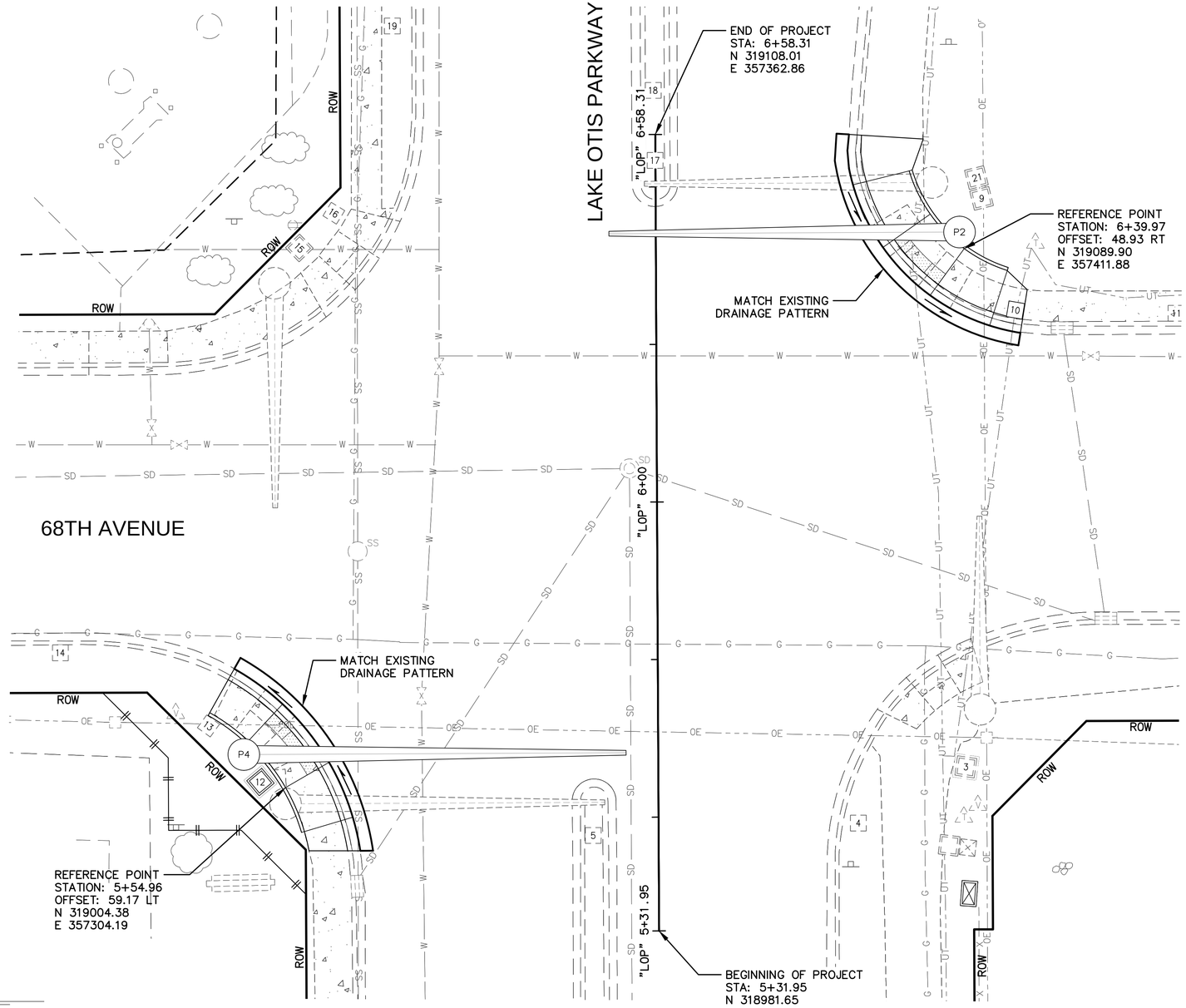

NOTES:

1. FINISHED GROUND ELEVATIONS WILL MATCH EXISTING GROUND ELEVATIONS.

SHEET NO.	TOTAL SHEETS
F1	F1
STATE	YEAR
ALASKA	2017

PROJECT DESIGNATION

0001(299)/
Z566440000

NO.	REVISION
DATE	
NO.	REVISION
DATE	
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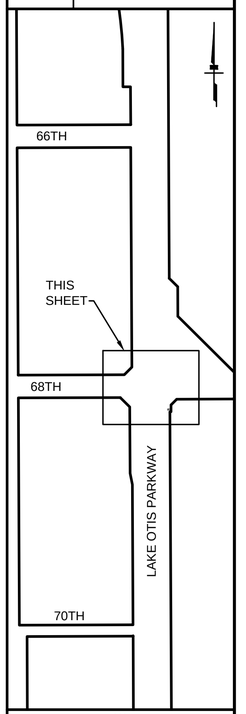

STATE OF ALASKA
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY
AT 68TH AVE
CHANNELIZATION

PLAN

DATE/TIME 12/23/2016 1:02 PM | LAYOUT | DESIGNED AKM | CHECKED CRW | DRAFTED AKM

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12/23/2016 1:03 PM	AKM	BSD	CJS

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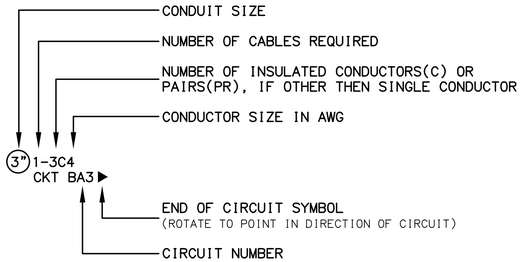
NO.	DATE	REVISION

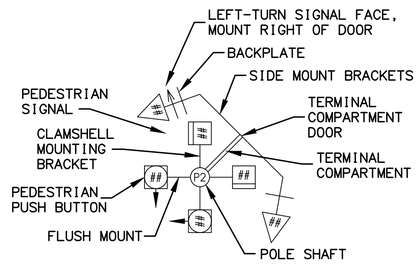
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H1	H21

SYMBOL LEGEND

EXISTING / PROPOSED

- LOAD CENTER
- TRAFFIC CONTROLLER
- TYPE 1A JUNCTION BOX
- TYPE II JUNCTION BOX
- TYPE III JUNCTION BOX
- ELECTROLIER
- SIGNAL POLE WITH MASTARM
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN SIGNAL
- VEHICULAR SIGNAL
- VEHICULAR SIGNAL LEFT
- VEHICULAR SIGNAL RIGHT
- OPTICAL DETECTOR
- PTZ CAMERA
- LOOP DETECTOR
- LOOP DETECTOR CONDUIT
- SIGNAL CONDUIT
- LIGHTING CONDUIT
- SIGNAL & LIGHTING CONDUIT
- CONDUIT SIZE IN INCHES
- INTERCONNECT
- SIGN POST & NUMBER
- PRIVATE SIGN





POLE SHAFT LEGEND

ABBREVIATIONS

℄ - CENTERLINE
SIG - SERVICE TO CONTROLLER
INTX - INTERSECTION
INTX L - INTERSECTION LIGHTING
LTG - LIGHTING
FC - FOOTCANDLE
EVP - EMERGENCY VEHICLE PREEMPTION
GTT - GLOBAL TRAFFIC TECHNOLOGIES
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. SELECTIVE AND HAND CLEARING SHALL BE PERFORMED AT THE DISCRETION OF THE ENGINEER, IN ACCORDANCE WITH SECTION 201, UPSTREAM OF ALL SIGN INSTALLATION LOCATIONS TO ACHIEVE MINIMUM SIGN VISIBILITY REQUIREMENTS. IF NOT INCLUDED AS A SEPARATE ITEM, THIS WORK SHALL BE SUBSIDIARY TO THE SIGN INSTALLATION ITEMS AND WORK.
10. FOR ALL FINAL PAVEMENT MARKINGS USE SURFACE APPLIED PAINT MATERIALS.
11. DIMENSIONS REFER TO THE CENTER OF STRIPE AND THE EDGE OF PAVEMENT OR FACE OF CURB WHEN PRESENT.
12. 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.
13. 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.
14. ALL SIGNS SHALL BE MANUFACTURED WITH TYPE IX RETRO-FLECTIVE SHEETING. TYPE IV SIGN SHEETING IS UNACCEPTABLE ON MOA ROADWAYS.

NOTES:

FOUNDATIONS NOTES:

1. STATION & C.L. REFERENCE ARE TO THE CENTER OF THE STRUCTURE, EXCEPT ON LOOPS WHICH ARE TO THE CENTER OF THE TRAILING EDGE OF THE LOOP (EDGE NEAREST INTERSECTION).
2. JUNCTION BOX LOCATIONS APPROXIMATE. LOCATE J-BOXES SO THAT THEY ARE LOCATED OUT OF THE PATHWAY, SIDEWALK, CURB RAMPS, DRIVEWAYS AND DRAINAGE COLLECTION AREAS.
3. INSTALL LOAD CENTER AND TRAFFIC CONTROLLER FOUNDATIONS WITHIN 1-DEGREE OF PLUMB.
4. INSTALL ANCHOR BOLTS IN CAST FOUNDATIONS TO BE WITHIN 1:40 OF PLUMB.
5. SOD ANY DISTURBED AREAS.

SIGNAL SYSTEM NOTES:

1. FURNISH THE SIGNAL AND LUMINAIRE MASTARM LENGTHS AND DIMENSIONS SPECIFIED ON THE POLE ELEVATIONS.
2. INSTALL DEVICES SUCH THAT THE DIMENSIONS SHOWN TO THE BOTTOM OF THE DEVICES ON THE POLE ELEVATIONS ARE MINIMUMS. VERTICAL DIMENSIONS TO SIGNAL HEADS ARE TO BOTTOM OF THE BACK PLATE.
3. INSTALL MAST ARMS PERPENDICULAR TO THE ROADWAY CENTERLINE. ACCEPTABLE VARIANCE IS +/- 1-DEGREE.
4. SALVAGE SIGNAL POLE ASSEMBLIES, SIGNS, SIGNAL FACES, AND LUMINARIES AND DELIVER TO MAINTENANCE AND OPERATIONS WITHIN 48-HOURS OF DECOMMISSIONING. COMPONENTS DAMAGED WHILE IN THE CONTRACTORS CUSTODY MUST BE REPLACED AT THE CONTRACTORS EXPENSE. REMOVE AND DISPOSE OF FOUNDATIONS.
5. SALVAGE EXISTING CONTROLLER CABINET AFTER NEW CONTROLLER CABINET IS IN SERVICE AND DELIVER TO MAINTENANCE AND OPERATIONS WITHIN 48-HOURS OF DECOMMISSIONING.
6. VEHICLE SIGNALS AND PEDESTRIAN SIGNALS SHALL BE LED MODULES.
7. REMOVE ABANDONED OR UNUSED TRAFFIC JUNCTION BOXES UNLESS OTHERWISE NOTED.
8. NEW SIGNAL HEADS THAT ARE MOUNTED BUT NOT IN OPERATION SHALL BE COVERED WITH A COMMERCIALLY AVAILABLE SIGNAL-SHIRT. EACH SIGNAL SHIRT SHALL FEATURE ELASTICIZED OPENINGS THAT FIT OVER THE VISORS AND AT LEAST TWO STRAPS TO SECURE IT TO THE SIGNAL. PROVIDE SHIRTS WITH A LEGEND THAT READS "OUT OF SERVICE" AND A CENTER SECTION THAT ALLOWS AN OPERATOR TO SEE THE INDICATIONS DURING SYSTEM TESTS.
9. SIGNAL HEADS ARE TO BE LOCATED PER FIGURE 4D-100, TYPICAL SIGNAL HEAD LOCATIONS, PER THE ALASKA TRAFFIC MANUAL. ACCEPTABLE VARIANCE IS +/- 1-FOOT.
10. AIM SIGNALS PER TABLE 660-2, THROUGH-SIGNAL AIMING POINT, OF THE SPECIAL PROVISIONS. SIGNALS SHALL ALSO BE AIMED SO AS NOT TO BE VISIBLE FROM SIDE STREET TRAFFIC. ACCEPTABLE VARIANCE IS +/- 5 DEGREES.
11. EXISTING CIRCUITS LISTED ON THE LOAD CENTER SUMMARY AND PLAN SHEETS WERE OBTAINED FROM AS-BUILT INFORMATION AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO WORK INVOLVING THOSE CIRCUITS.
12. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL, INCLUDING ARROW BOARD DEVICE(S) FOR OVERHEAD INSPECTION AND LOCATE WORK PERFORMED BY MOA SIGNAL ELECTRONICS. CONTRACTOR SHALL BE ON-SITE AT COMPLETION OF LOCATES TO REVIEW LAYOUT AND MAKE STATIONING MEASUREMENTS FOR CONDUIT LOCATIONS.

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

STATE OF ALASKA · 49TH · BRAD S. DOGGETT CE 10360 · REGISTERED PROFESSIONAL ENGINEER

DOWL
4041 B STREET
ANCHORAGE, ALASKA 99503
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AECL848

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

TRAFFIC LEGEND AND NOTES

NO.	DATE	REVISION

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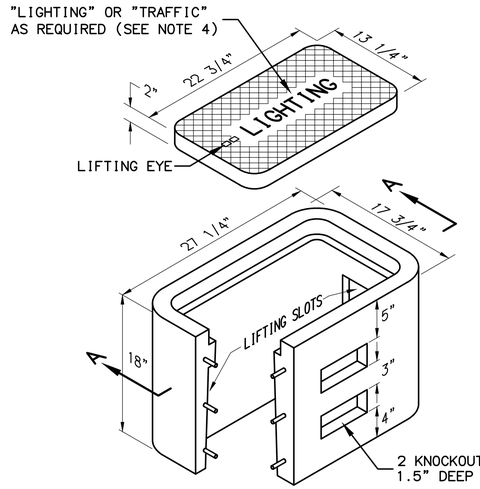
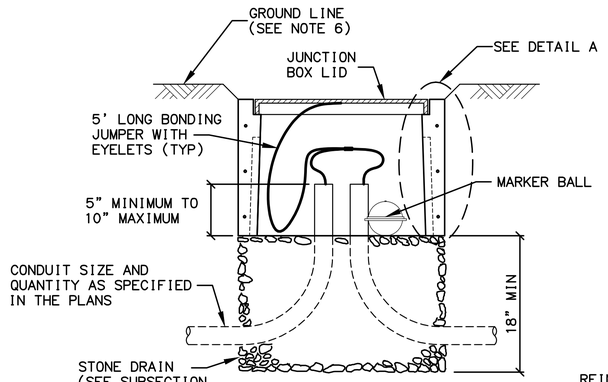
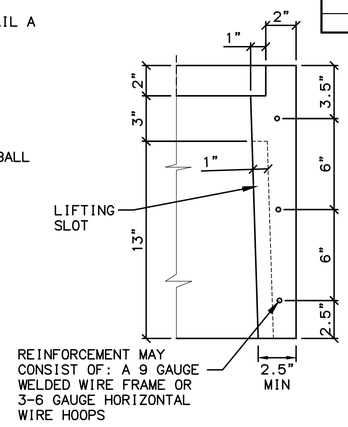
ALASKA	0001(299)/Z566440000	2017	H2	H21





SECTION A-A

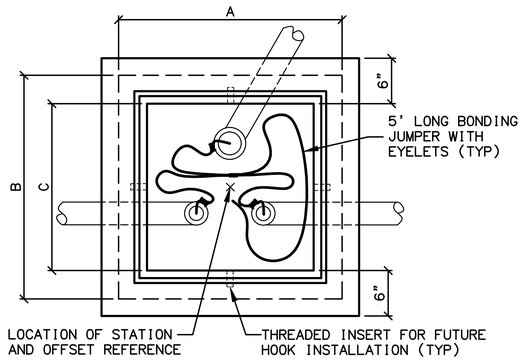


DETAIL A

TYPE IA JUNCTION BOX

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. 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
6. BOND JUNCTION BOX LIDS TO THE SYSTEM OF EQUIPMENT GROUNDING CONDUCTORS ACCORDING TO SUBSECTION 660-3.06. ATTACH BONDING JUMPERS TO THE JUNCTION BOX LIDS WITH BRASS OR STAINLESS STEEL HARDWARE.
7. 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.
8. INSTALL A 1/2" THICK PREFORMED BITUMINOUS JOINT MATERIAL AROUND JUNCTION BOXES INSTALLED IN PORTLAND CEMENT CONCRETE WALKWAYS.
9. INSTALL AN ELECTRONIC MARKER BALL IN ALL JUNCTION BOXES PER SUBSECTION 660-3.04.
10. 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.
11. UNDER JUNCTION BOXES, INSTALL STONE DRAINS THAT CONSIST OF POROUS BACKFILL MATERIAL CONFORMING TO SUBSECTION 703-2.10.



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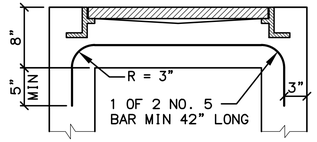

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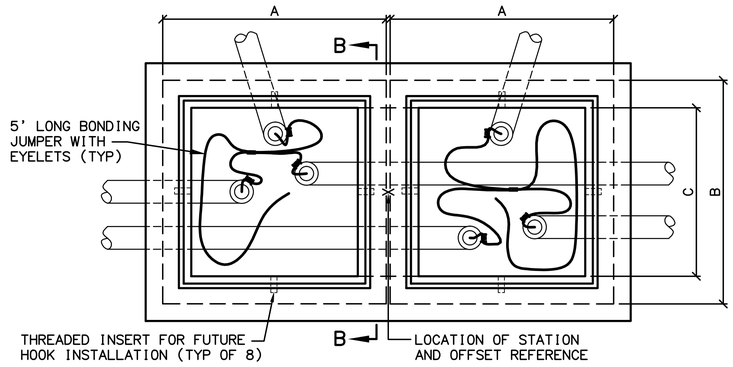

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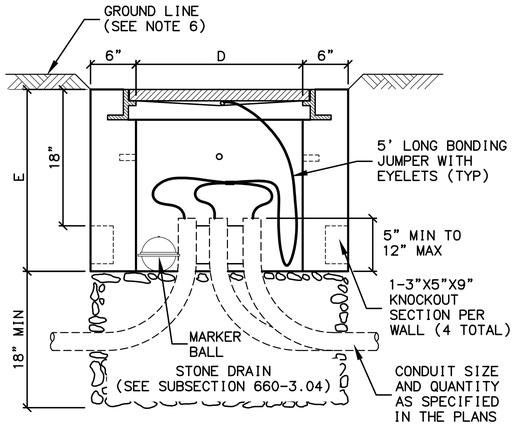
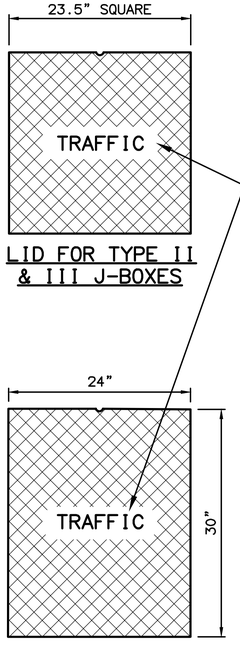
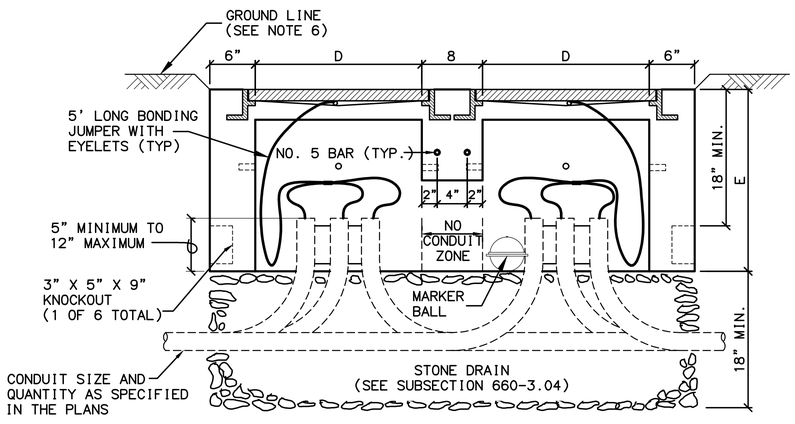


TYPE II JUNCTION BOX
ELEVATION



LID FOR TYPE II & III J-BOXES

LID FOR TYPE IV J-BOXES



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

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"

J-BOX DIMENSIONS

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JUNCTION BOX DETAILS

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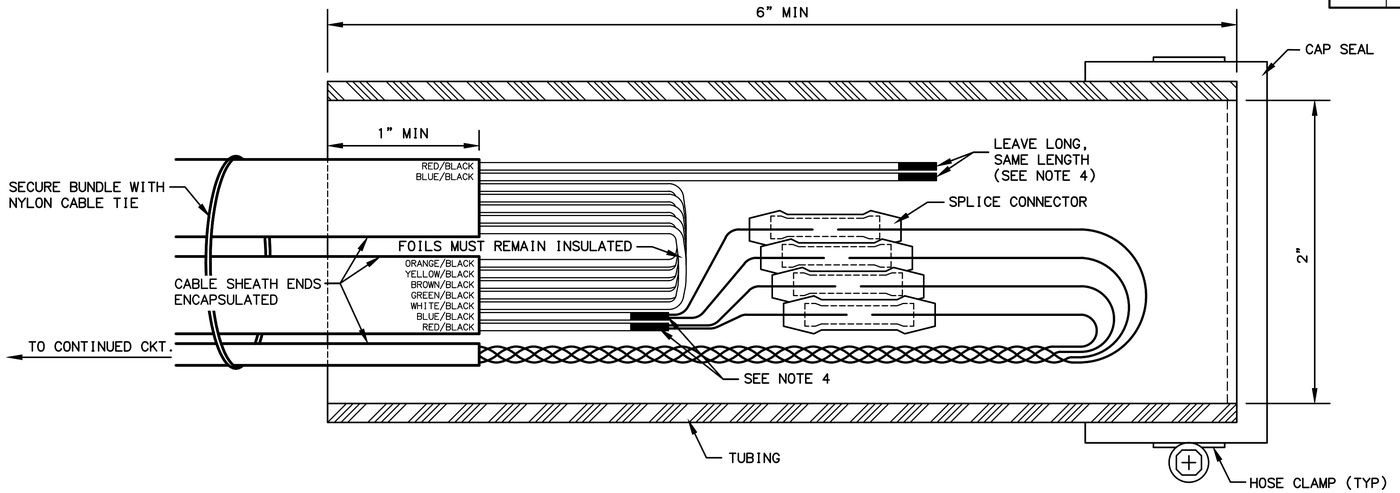
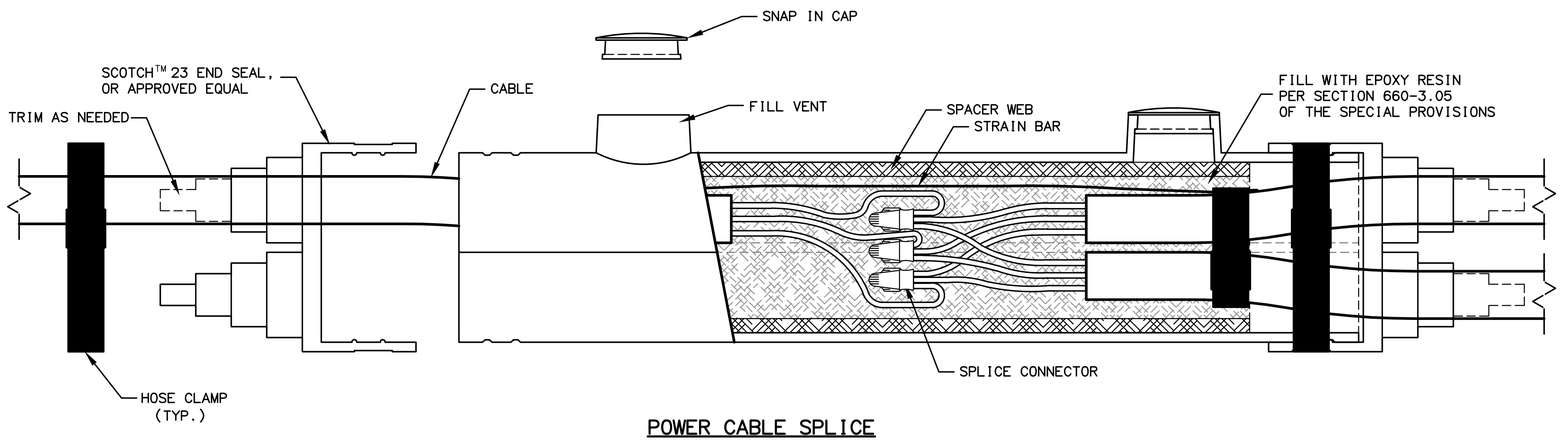
NO.	DATE	REVISION

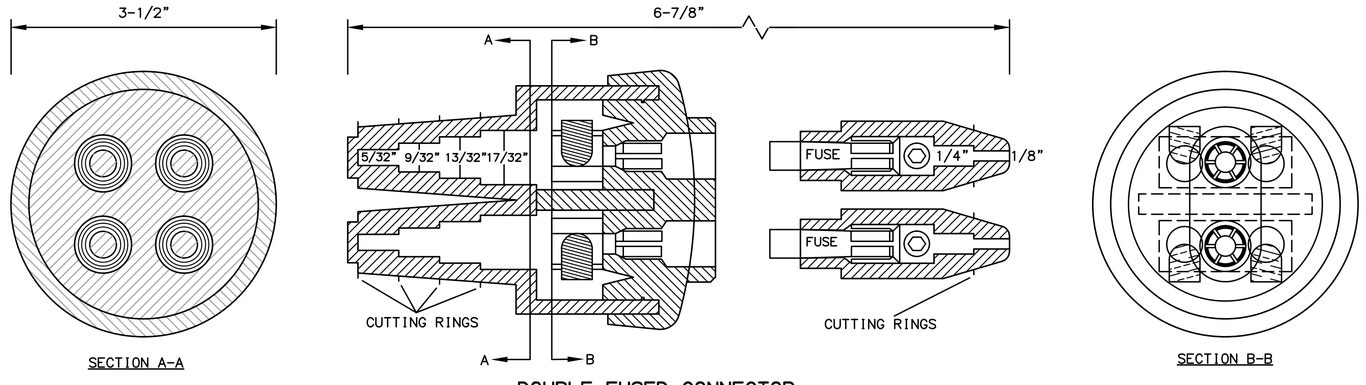
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H3	H21



LOOP LEAD-IN SPLICE



POWER CABLE SPLICE



DOUBLE FUSED CONNECTOR

NOTES:

LOOP LEAD-IN SPLICE

1. FABRICATE LOOP LEAD-IN SPLICE IN THE FIELD AS SHOWN.
2. CAP SEAL ONE END AND COMPLETELY FILL OPEN END WITH RE-ENTERABLE ENCAPSULATION COMPOUND TO EDGE OF TUBING.
3. LEAVE A MINIMUM OF 1/2" CLEARANCE BETWEEN THE ENCLOSURE AND THE SPLICE AT BOTH ENDS OF THE TUBING.
4. EXPOSE FOIL AND DRAIN WIRES, SEAL WITH HEAT SHRINK TUBING (TYP).
5. INSTALL SPLICE CONNECTORS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.

POWER CABLE SPLICE

6. SECURE CABLE/CONNECTOR BUNDLE WITH HOSE CLAMPS AS SHOWN.

MATERIAL PROPERTIES

LOOP LEAD-IN SPLICE	
TUBING	PER SECTION 660-3.05
CAP SEAL	FERNCO QWIK CAP #QC-102, OR APPROVED EQUAL
HOSE CLAMP	STAINLESS STEEL
SPLICE CONNECTOR	ML56-16, OR APPROVED EQUAL
COMPOUND	RE-ENTERABLE ENCAPSULATION

POWER CABLE SPLICE	
SPLICE KIT	3M MODEL 78R, OR APPROVED EQUAL
SPLICE CONNECTOR	SCOTCHLOCK G, R, OR Y SPRING CONNECTOR, OR APPROVED EQUAL
HOSE CLAMP	(4)- STAINLESS STEEL
EPOXY RESIN	PER SECTION 660-3.05

DOUBLE FUSED CONNECTOR	
DOUBLE FUSED CONNECTOR	SEC-1791-DF-1, OR APPROVED EQUAL
FUSES	(2) - COMPATIBLE 10-AMP

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SPLICE DETAILS

DESIGNED AKM | DRAFTED CJS | CHECKED BSD | LAYOUT | DATE/TIME 12/23/2016 1:03 PM

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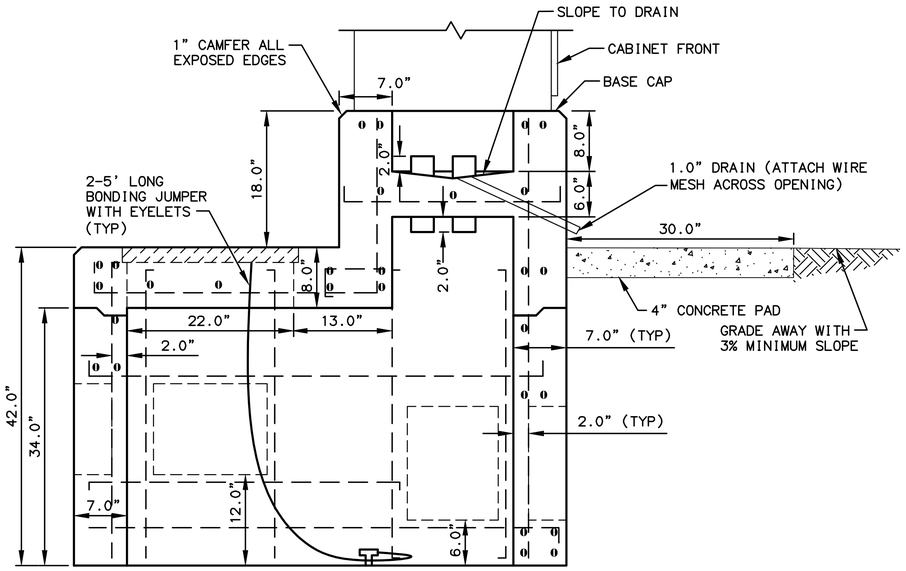
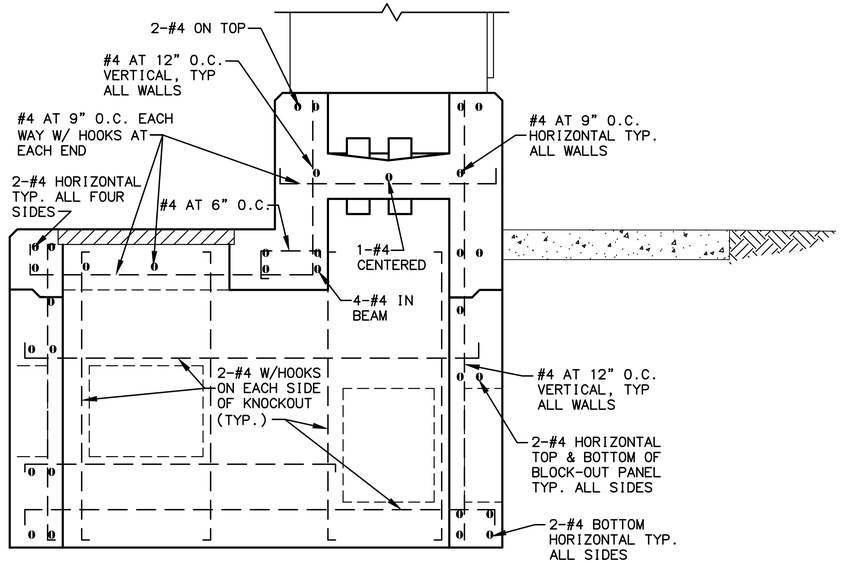


SECTION A-A

NOTE: SEE SECTION B-B FOR REBAR DETAILS



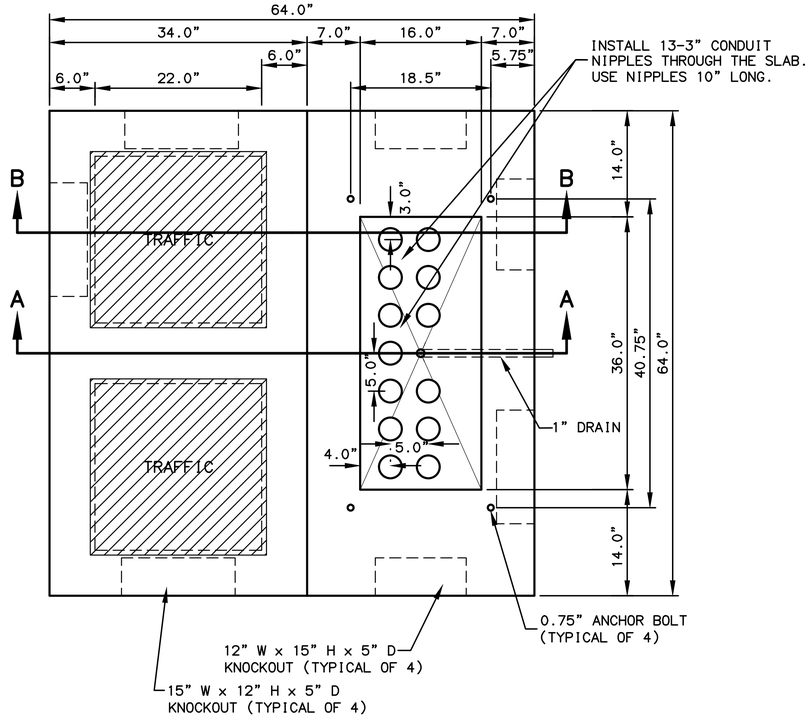
SECTION B-B

NOTE: SEE SECTION A-A FOR DIMENSIONAL DETAILS

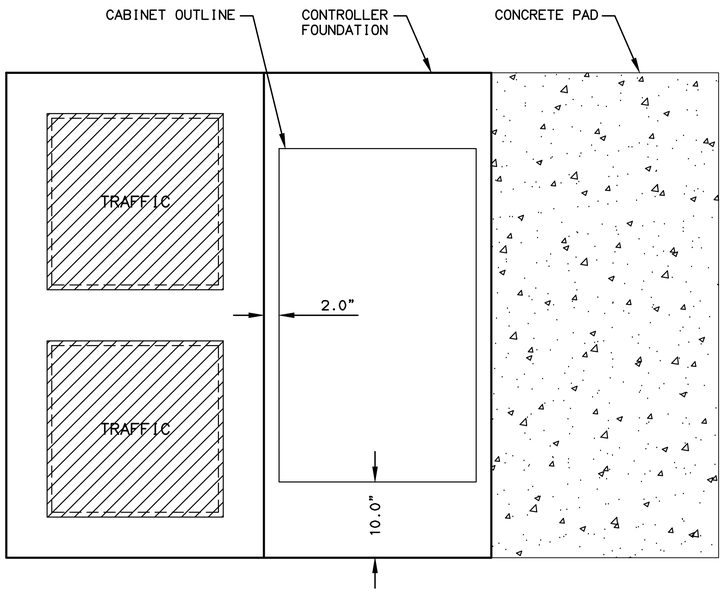
NOTES:

1. ANCHOR BOLTS SHALL NOT PROTRUDE MORE THAN 1.5" ABOVE THE TOP OF THE FOUNDATION. ANCHOR BOLT DIMENSIONS SHALL BE AS SPECIFIED BY THE CABINET MANUFACTURER.
2. SEAL UNUSED CONDUIT STUBS WITH WATERTIGHT CAPS. SEAL STUBS CARRYING CONDUCTORS WITH WATERTIGHT SEALING BUSHINGS DESIGNED TO SEAL AROUND CONDUCTORS AND AGAINST THE CONDUIT WALLS.
3. ROUTE THE FIVE FOOT COPPER GROUNDING JUMPER THROUGH THE 2" PIPE NIPPLE AND ATTACH IT TO THE GROUNDING BUSHING ON THE FEEDER CONDUIT.
4. STOP HORIZONTAL & VERTICAL STEEL AT THE BLOCK-OUT PANELS & THE JOINT USING 90 DEGREE HOOKS. USE 2 EXTRA #4 HORIZONTAL & VERTICAL BARS. ALL SIDES AS SHOWN.
5. INSTALL TRAFFIC CONTROLLER WITHIN 1-DEGREE OF PLUMB.

MATERIAL PROPERTIES		
CONCRETE	CLASS A	F'c = 4000 psi
REINFORCING STEEL	AASHTO M31 GRADE 60	Fy = 60 ksi
CONDUIT	RMC	
BONDING JUMPERS	3M-25T BBE6 OR EQUAL	



SIZE 6 OR 7 CONTROLLER CABINET FOUNDATION



PLAN VIEW

STATE OF ALASKA
49TH
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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ANCHORAGE, ALASKA 99503
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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

TS2 CONTROLLER CABINET FOUNDATION DETAILS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H5	H21

LIGHT
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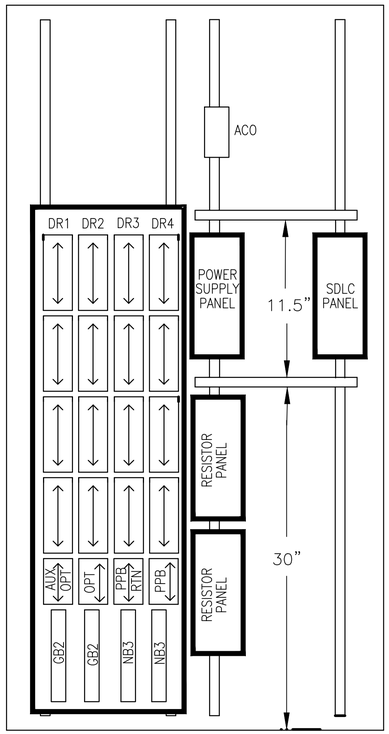
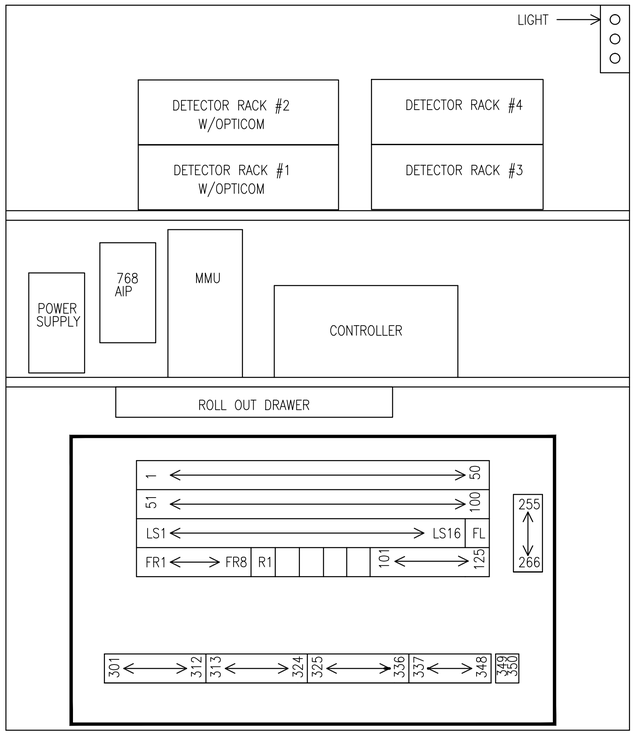
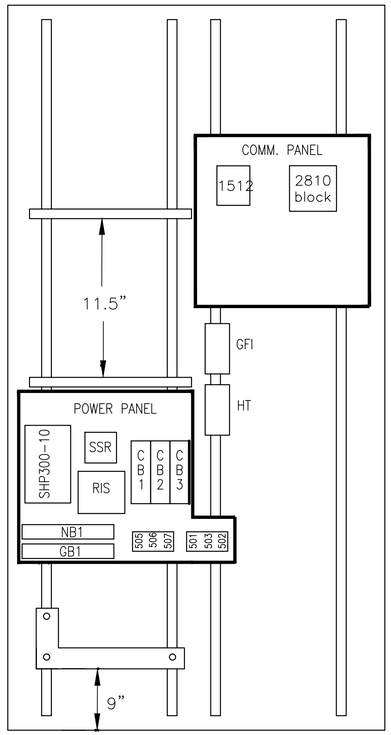
THERM FAN

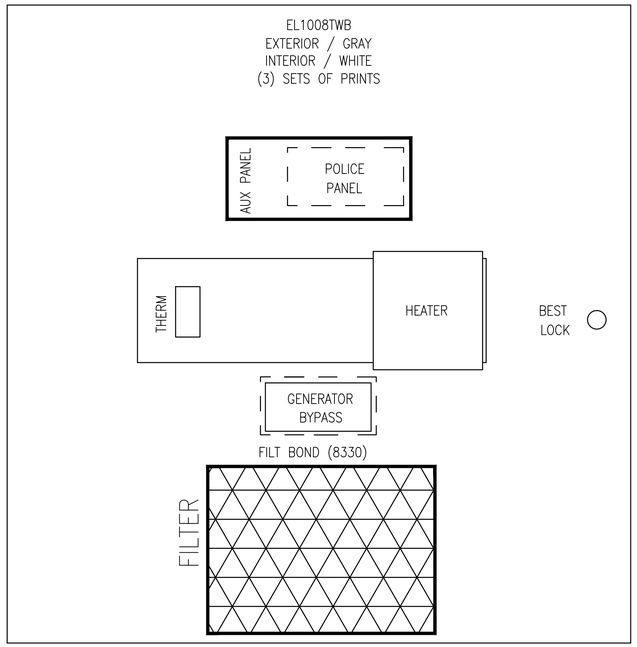
MOA TS2-1
CONTROLLER CABINET
WITH GENERATOR BYPASS
LAYOUT







EL1008TWB
EXTERIOR / GRAY
INTERIOR / WHITE
(3) SETS OF PRINTS



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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

TS2-CONTROLLER ASSEMBLY LAYOUT WITH BYPASS

DATE/TIME 12/23/2016 1:04 PM | LAYOUT | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H6	H21

DATE/TIME	LAYOUT	DESIGNED	CHECKED	BSD	DRAFTED
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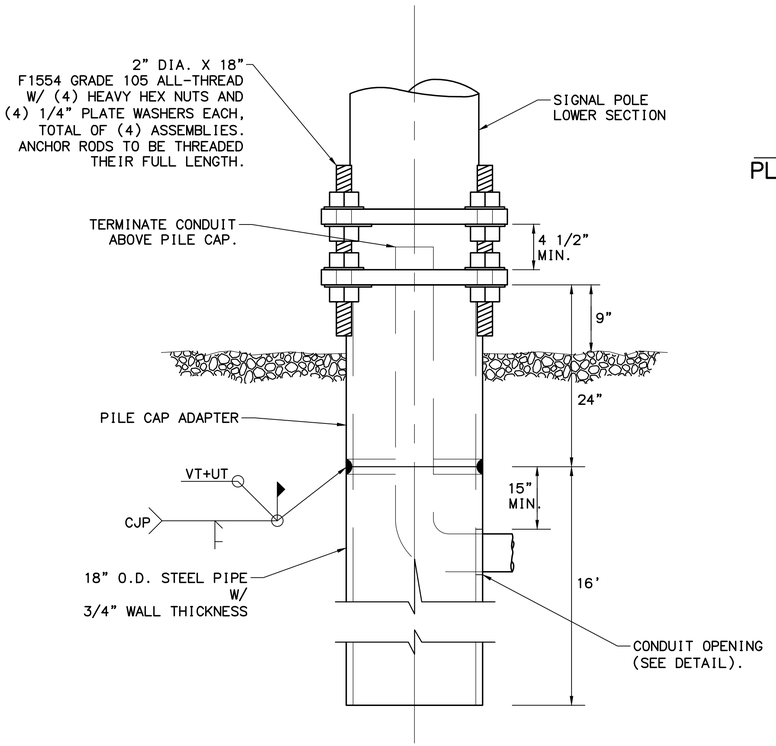
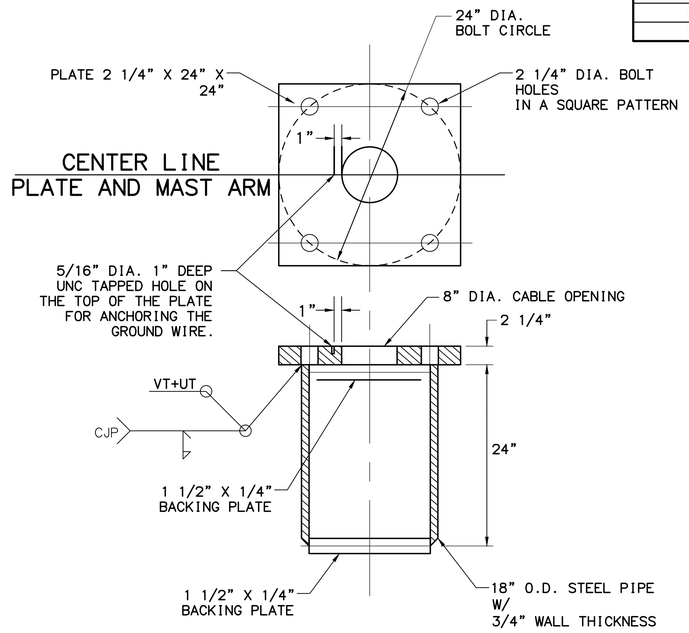


FOUNDATION DETAIL

N.T.S.

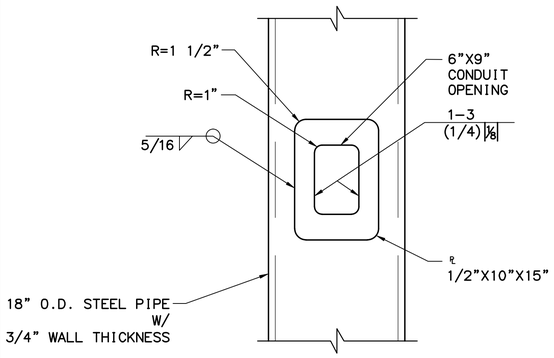
NOTE: SEE STANDARD DRAWING T-56.00 FOR SIGNAL POLE ORIENTATION AND BASE PLATE DETAILS



PILE CAP ADAPTER DETAIL

N.T.S.

NOTE: TACK WELD BACKING PLATE TO PIPE PILE SECTION



CONDUIT OPENING DETAIL

N.T.S.

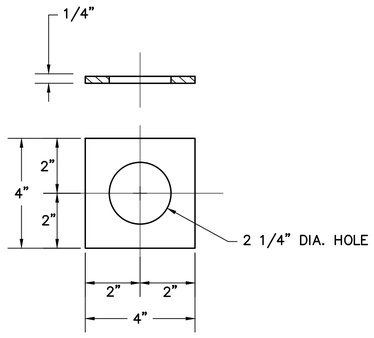


PLATE WASHER DETAIL

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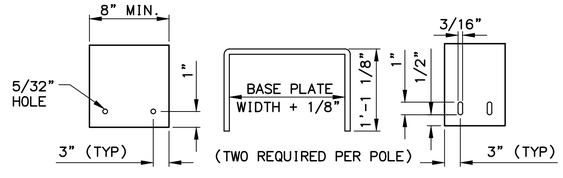
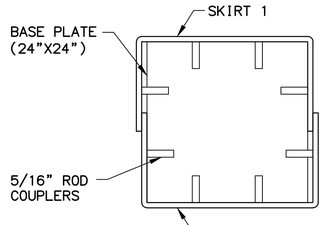


PILE FOUNDATION SKIRT DETAIL

N.T.S.



TOP VIEW

DESIGN NOTES

DESIGN: 2009 STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS.

DESIGN LOADS: 6,500 LBS SHEAR, 175 KIP-FT MOMENT AND 6,500 LBS AXIAL.

CONSTRUCTION STANDARD: THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES 2015 STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND THE PROJECT SPECIAL PROVISIONS AS OF THE ADVERTISEMENT DATE OF THIS PROJECT.

NOTES

1. DRIVE ALL PILES OPEN ENDED WITH FLUSH MOUNTED, HARDENED DRIVING SHOES. COMPLETE PILE DRIVING WORK IN ACCORDANCE WITH SECTIONS 505, 660 AND 715 OF THE STANDARD SPECIFICATIONS. INSTALLED PILE TO BE WITHIN 1/4" PER FOOT OF PLUMB. PILES OUT OF PLUMB MUST BE REMOVED AND REINSTALLED. CUT THE TOP OF THE PILE TO ACHIEVE PROPER ELEVATION. THE RESULTING BUTT JOINT ALIGNMENT SHALL MEET THE REQUIREMENTS OF AWS D1.1.
2. PILE MANUFACTURER TO PROVIDE THE REQUIRED PILE CAP ADAPTER. HOT DIP GALVANIZE THE ADAPTER TO WITHIN 3 INCHES OF THE TOE. DELIVER THE ADAPTER WITH ALL FASTENERS AND HARDWARE.
3. MACHINE OR PLASMA CUT ANY PENETRATION IN THE ADAPTER OR PILE. OXY-FUEL CUTTING IS PROHIBITED.
4. ALL WELDS TO BE SIZED BY THE MANUFACTURER. BOTH SHOP AND FIELD CJP WELDS TO BE 100% VISUALLY (VT) AND ULTRASONICALLY (UT) TESTED. SUBMIT WRITTEN RECORDS OF TESTS TO THE PROJECT ENGINEER.
5. MANUFACTURE THE ADAPTER TOP PLATE AND COMPONENTS FROM STEEL MEETING THE REQUIREMENTS OF ASTM A6. THE PERMISSIBLE BOW AND SWEEP OF THE ADAPTER TOP PLATE IS LIMITED TO 1/32". PLATE SHALL BE FLATTENED IN THE SHOP PRIOR TO FIT-UP AND WELDING IN THE SHOP. PRIOR TO HOT DIP GALVANIZING, BURRS AND IMPERFECTIONS SHALL BE REMOVED BY MILLING FOR ANY SURFACE NOT MEETING THIS SPECIFICATION. THE FLATNESS TOLERANCE LISTED HEREIN FOR THE ADAPTER TOP PLATE APPLIES TO THE FINAL FABRICATED PILE CAP ADAPTER. A MACHINING ALLOWANCE OF 1/4" HAS BEEN INCORPORATED INTO THE PILE CAP ADAPTER TOP PLATE FOR THE PURPOSE OF MEETING THIS REQUIREMENT.
6. HOT DIP GALVANIZE THE PILE TO WITHIN 3 INCHES OF THE TOP OF THE PILE PER AASHTO M111.
7. CONNECT THE GROUND WIRE TO THE PILE CAP ADAPTER TOP PLATE USING A BOLTED COMPRESSION FITTING WHICH IN TURN IS BOLTED TO THE TAPPED HOLE SHOWN ON THE DETAIL. GROUND WIRE SHALL BE BARE SOLID, STRANDED OR BRAIDED COPPER.
8. INSTALL THE PILE CAP ADAPTER TO WITHIN 0.1 DEGREES OF PLUMB.
9. PROVIDE ANCHOR ROD MATERIAL MEETING THE REQUIREMENTS SHOWN ON THE DETAIL AND AS LISTED IN THE MATERIAL PROPERTIES TABLE. THE ANCHOR RODS ARE SUBJECT TO CHARPY V-NOTCH IMPACT TESTING. THE CONTRACTOR SHALL SUBMIT MILL CERTIFICATIONS FOR ANCHOR RODS, NUTS AND WASHERS. ANCHOR RODS ARE TO BE GALVANIZED THEIR FULL LENGTH. PROVIDE PERMANENT MANUFACTURER'S IDENTIFICATION AND PERMANENT GRADE SPECIFICATION ON EACH OF THE ANCHOR ROD BY MEANS OF A STEEL DIE STAMP. ANCHOR RODS TO BE SNUG-TIGHT TO THE POLE BASE PLATE AND PILE CAP ADAPTER TOP PLATE.
10. AFTER THE FIELD WELDING, ELECTRICAL CONDUIT, AND ELECTRICAL CONDUCTOR WORK IS COMPLETE, BACKFILL AND COMPACT SOIL AROUND THE INSTALLED PILE IN ACCORDANCE WITH SECTION 205, SUBSECTIONS 203-3.04, 660-3.01 AND 660-3.02 OF THE SPECIFICATIONS. USE SELECT TYPE A MATERIAL ONLY AS BACKFILL.
11. INSTALL A 10 GAUGE SHEET STEEL SKIRT AROUND THE SIGNAL POLE BASE AND PILE CAP FASTENED WITH STAINLESS SHEET METAL SCREWS. SIZE SKIRT TO COVER GAP BETWEEN SIGNAL POLE BASE PLATE AND PILE CAP WITH APPROXIMATELY 1" OVERLAP ON EACH PLATE. CONTRACTOR SHALL DRILL HOLES FOR MOUNTING 5/16" STAINLESS STEEL BOLTS WITH 5/16" ROD COUPLERS. TWO ROD COUPLERS SHALL BE INSTALLED DIRECTLY ON TOP OF THE PILING PLATE. TWO ROD COUPLERS SHALL BE INSTALLED DIRECTLY BELOW POLE PLATE AND PERPENDICULAR TO THE FIRST SET OF ROD COUPLERS.

MATERIAL PROPERTIES		
FASTENERS, WASHERS	AASHTO M270	GRADE 36
FASTENERS, NUTS	AASHTO M292	
ANCHOR ROD AND HARDWARE FINISH	AASHTO M232	
ANCHOR PLATE	AASHTO M270 F3	GRADE 50
PIPE PILE	API 5L	GRADE 52
PIPE PILE AND ADAPTER FINISH	AASHTO M111	
CONDUIT	SCH 40	RMC
GROUND WIRE		#4 AWG

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

TRAFFIC SIGNAL PILE FOUNDATION DETAILS

NO.	DATE	REVISION

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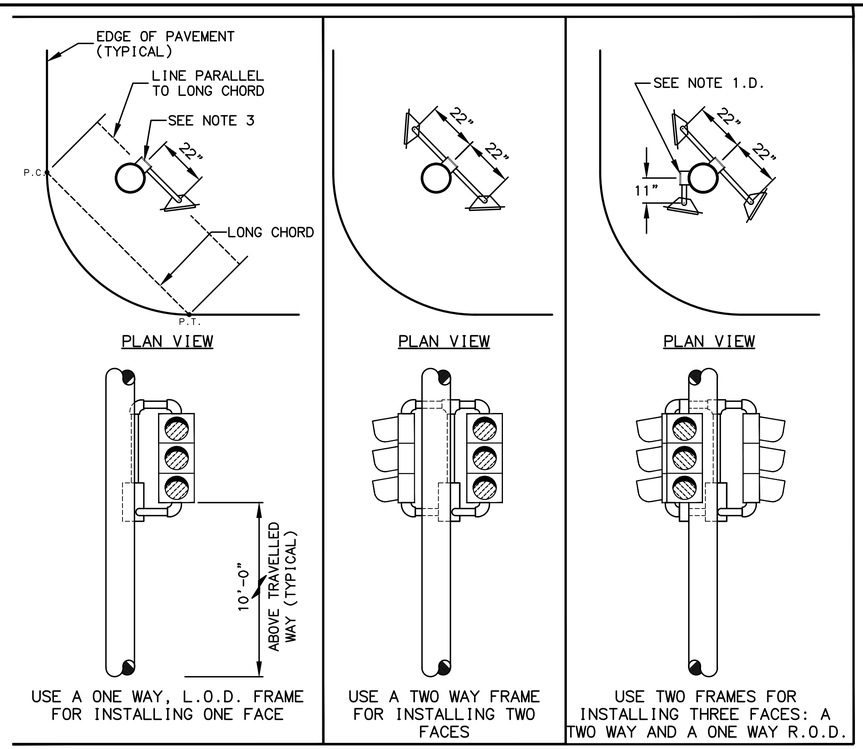
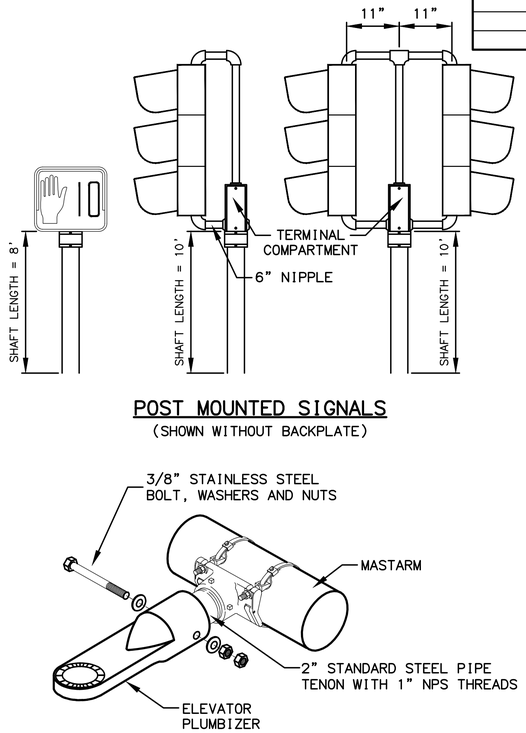
ALASKA	0001(299)/Z566440000	2017	H7	H21



SIDE MOUNTED SIGNAL FRAMES WITH VEHICULAR SIGNALS

(SHOWN WITHOUT BACKPLATES)



POST MOUNTED SIGNALS

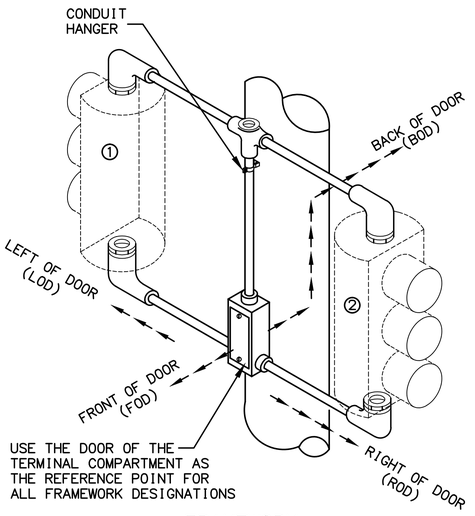
(SHOWN WITHOUT BACKPLATE)

ELEVATOR PLUMBIZER

(SEE NOTE 1.A.)

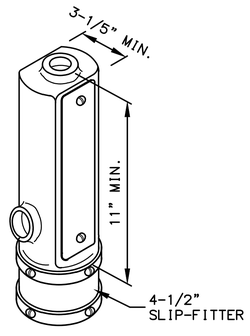
NOTES:

1. INSTALL THE SIGNAL FACES SHOWN IN THE PLANS AS DETAILED ON THIS SHEET AND PER ALASKA TRAFFIC MANUAL.
   A. USE ELEVATOR PLUMBIZERS TO INSTALL FACES ON MASTARMS AND WHENEVER TWO INCH PIPE TENONS ARE SPECIFIED. INSTALL THE PLUMBIZER BETWEEN THE RED AND YELLOW SIGNAL INDICATIONS FOR A THREE SECTION HEAD AND BETWEEN THE TWO YELLOW SIGNAL INDICATIONS FOR A FOUR SECTION HEAD. USE STAINLESS STEEL BAND MOUNT HARDWARE, AB-3007-L AS MANUFACTURED BY PELCO PRODUCTS, INC., OR APPROVED EQUAL TO INSTALL PLUMBIZER TO MASTARMS. PELCO MOUNT SHALL HAVE STAINLESS STEEL OPTION.
   B. USE SLIP FITTERS TO INSTALL PEDESTRIAN SIGNALS ON THE TOP OF POSTS.
   C. USE SIGNAL FRAMES TO INSTALL SIGNAL FACES ON THE SIDES OF POLES AND ON THE TOPS OF POSTS.
   D. USE A SECOND SIGNAL FRAME TO INSTALL THE THIRD FACE WHEN THREE SIDE MOUNTED SIGNAL FACES ARE SHOWN.
   E. USE CLAMSHELL BRACKETS TO INSTALL ALL PEDESTRIAN SIGNALS, EXCEPT THOSE THAT ARE POST TOP MOUNTED.
2. FURNISH ALL SIGNAL FRAMES WITH TERMINAL COMPARTMENTS.
3. INSTALL ONE TERMINAL COMPARTMENT ON THE SIDE OF THE POLE OPPOSITE THE MIDPOINT OF THE RADIUS RETURN. POSITION THE TERMINAL COMPARTMENT AT THE LOCATION WHERE A LINE PARALLEL TO THE LONG CHORD (P.C. TO P.T.) OF THE RADIUS RETURN IS TANGENT TO THE POLE.
4. INSTALL PEDESTRIAN INDICATION TO FACE THE CENTER OF THE FAR SIDE CROSSWALK. ACCEPTABLE VARIANCE IS +/- 1 DEGREE.
5. FIELD DRILL THE HOLES NEEDED FOR ATTACHING ALL SIGNAL HARDWARE. USE HOLE SAWS WHEN DRILL BITS ARE NOT AVAILABLE. TREAT THE BARE STEEL SURFACES IN ACCORDANCE WITH SECTION 660-3.01.8, REPAIRING DAMAGED FINISHES, OF THE STANDARD SPECIFICATIONS.
6. PROVIDE SOLID BACKPLATES SIZED FOR THE NUMBER OF SIGNAL SECTIONS AND MOUNTING TYPE, SO THAT NO LIGHT IS VISIBLE BETWEEN THE BACKPLATE AND THE SIGNAL FACE. FURNISH BACKPLATES FOR DOGHOUSE STYLE SIGNALS THAT FEATURE NOTCHED UPPER CORNERS.
7. ATTACH ALL BACK PLATES USING PLATED STEEL RIVETS WITH LARGE FLANGE BUTTON HEADS. INSTALL 0.187" DIAMETER BY 0.575" LONG RIVETS THAT PROVIDE AT LEAST 530 LBS. AND 670 LBS. SHEAR AND TENSILE STRENGTHS, RESPECTIVELY. BORE OUT THE MOUNTING HOLES IN THE BACK PLATES AND SIGNAL HEADS TO THE DIAMETER RECOMMENDED BY THE RIVET MANUFACTURER.
8. BEFORE INSTALLING THE MACHINE SCREWS THAT SECURE THE VISORS, COAT THE THREADS WITH AN ANTI-SEIZING COMPOUND.



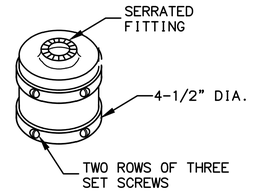
FRAMEWORK DESCRIPTION

HEAD NO. ① OFFSET L.O.D.
HEAD NO. ② OFFSET R.O.D.



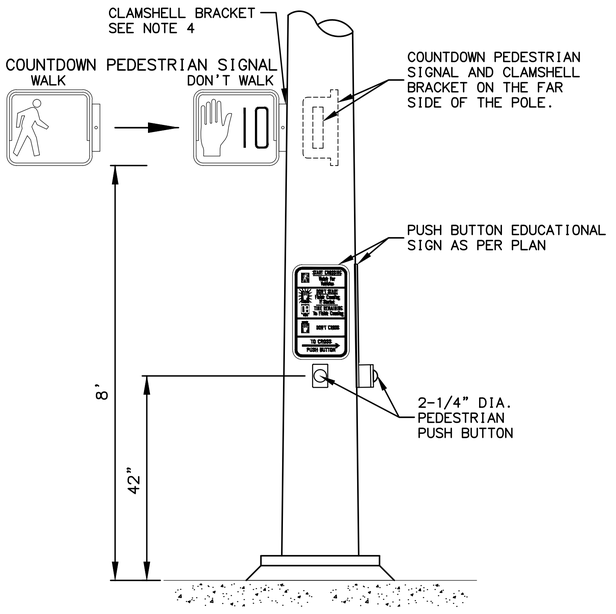
TERMINAL COMPARTMENT WITH SLIP FITTER

(SEE NOTES 1.C. AND 2)

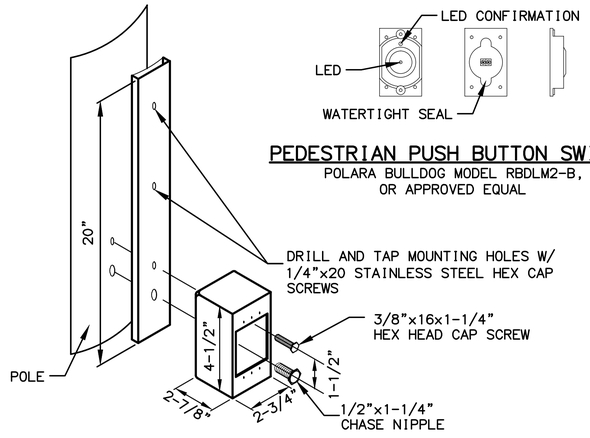


SLIP FITTER

(SEE NOTE 1.B.)



PEDESTRIAN HARDWARE



PEDESTRIAN PUSH BUTTON SWITCH

POLARA BULLDOG MODEL RBDLM2-B, OR APPROVED EQUAL

PEDESTRIAN PUSH BUTTON HOUSING

(STYLE A)

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

SIGNAL HARDWARE

DATE/TIME 12/23/2016 1:05 PM | LAYOUT | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

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NO.	DATE	REVISION

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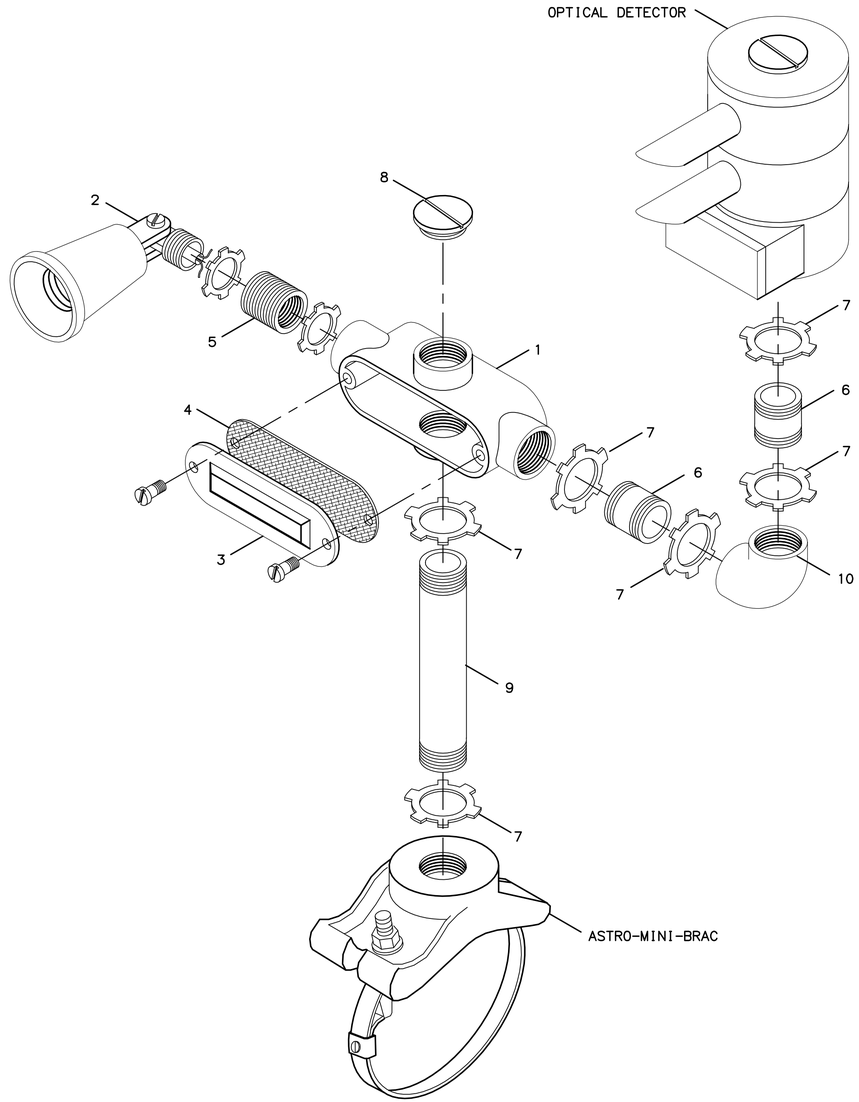

NOTES:

1. SEE THE SIGNAL PLANS FOR THE SIGNAL POLE MAST ARMS SCHEDULED FOR EVP INSTALLATION.
2. FOR EACH EVP INSTALLATION, FURNISH:
   A. A GTT MODEL 711, 721, 722 OPTICOM DETECTOR AS CALLED FOR IN PLANS.
   B. AN ASTRO-MINI-BRAC, MODEL AB-0155-L, AS MANUFACTURED BY PELCO PRODUCTS OR AN APPROVED EQUAL.
   C. A GTT MODEL 575 CONFIRMATION LIGHT KIT WITH THE ADDITIONAL PARTS SHOWN IN THE PARTS LIST, OR STEEL PARTS, WITH A HOT DIP GALVANIZED FINISH, AS SHOWN IN THE PARTS LIST.
   D. WITH EACH OPTICOM DETECTOR INSTALLED, FURNISH A PAR38 20 WATT LED FLOOD LAMP RATED FOR 120 VOLT OPERATION, 1250 INITIAL LUMENS, AND A 25000 HOUR LAMP LIFE.
3. MOUNT EVP DETECTORS TO HAVE DIRECT, UNOBSTRUCTED LINE-OF-SIGHT OF APPROACHING VEHICLES. DRILL A 1 INCH HOLE IN THE TOP DEAD CENTER OF THE MAST ARM AT THE LOCATION PRE-APPROVED BY THE ENGINEER. ASSEMBLE AND TIGHTEN THE PARTS AND LOCKNUTS AS SHOWN ON THIS SHEET.
4. BEFORE ATTACHING THE MODEL 138 DETECTOR CABLE TO THE OPTICOM DETECTOR, STRIP THE INSULATION FROM THE THREE INSULATED CONDUCTORS AT THE CONTROLLER CABINET AND ATTACH ALL FOUR CONDUCTORS TO GROUND.
5. PREEMPTION EMITTERS SHALL BE ASSIGNED ID NUMBERS BY JURISDICTION AS SHOWN IN VEHICLE EMITTER TABLE.

VEHICLE EMITTER TABLE

CLASS	VEHICLE I.D. NO.	JURISDICTION	VEHICLE TYPE
0	NOT USED	MUNICIPALITY OF ANCHORAGE	FIRE & EMS
1	NOT USED	MUNICIPALITY OF ANCHORAGE	OTHER
2	NOT USED	FAIRBANKS	FIRE & EMS
3	NOT USED	FAIRBANKS	OTHER
4	1-30	MATANUSKA/SUSITNA	FIRE & EMS
5	NOT USED	MATANUSKA/SUSITNA	OTHER
6	NOT USED	KENAI PENINSULA	FIRE & EMS
7	NOT USED	KENAI PENINSULA	OTHER
8	NOT USED	ELMENDORF/FT. RICHARDSON	FIRE & EMS
9	NOT USED	ELMENDORF/FT. RICHARDSON	OTHER

PARTS LIST FOR EACH GTT OPTICOM DETECTOR INSTALLED

GTT OPTICOM MODEL 575 CONFIRMATION LIGHT KIT
CONFIGURE AS SHOWN FROM PARTS BELOW

PART NO.	PART TYPE	LIGHT KIT QUANTITY
1	"X" CONDUIT BODY	1
2	PAR 38 LAMP HOLDER	2
3	CONDUIT COVER	1
4	COVER GASKET	1
5	REDUCING BUSHING	2
6	3/4"X2" GALVANIZED NIPPLE	ADD 2 TO KIT
7	3/4" LOCKNUT	6
8	3/4" HOLE PLUG	2
9	3/4" X 6" NIPPLE	ADD 1 TO KIT
10	3/4" X 90° ELBOW	ADD 1 TO KIT

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STATE OF ALASKA
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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

EVP INSTALLATION DETAILS

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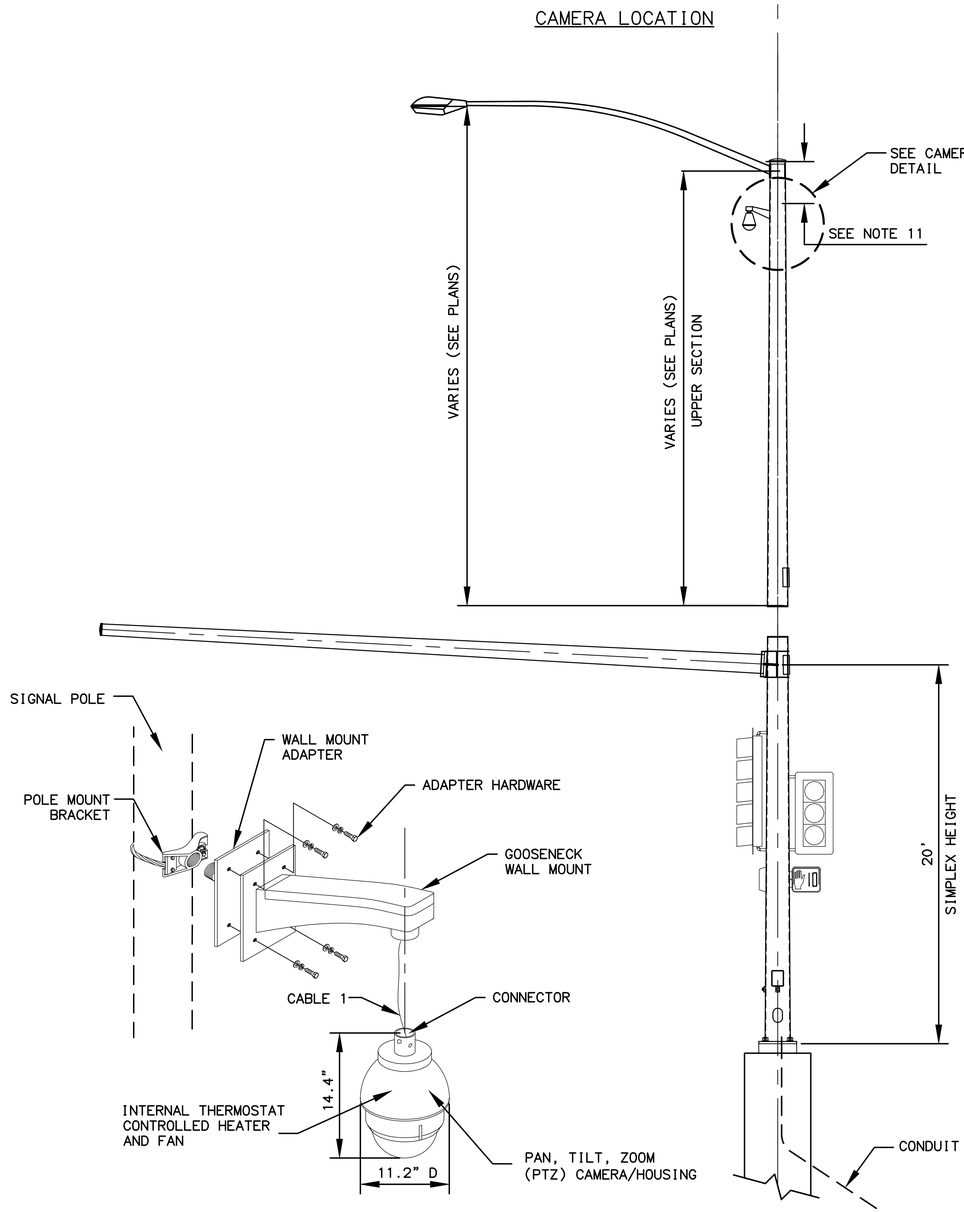


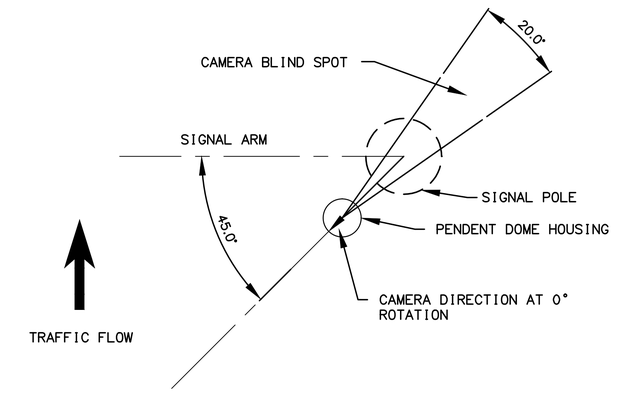
CAMERA/HOUSING DETAIL
NTS

SYSTEM LAYOUT
NTS

MATERIAL REQUIREMENTS	
ALL ASSEMBLIES	
POLE MOUNT BRACKET	ASTRO-BRAC AB-0160-45-SF-PNC
WALL MOUNT ADAPTOR	SUPPLIED BY MOA SIGNAL ELECTRONICS
ADAPTOR HARDWARE	SUPPLIED BY MOA SIGNAL ELECTRONICS
GOOSENECK WALL MOUNT	SONY UNI-WMB3
CABLE 1	CAT-5E, SHIELDED, DIRECT BURIAL
CABLE 2	3C14 (ACCORDING TO MANUFACTURER'S RECOMMENDATIONS)
CONNECTOR	ENVIRONMENTALLY HARDENED RJ-45
STRAIN RELIEF	REMKE 2201-013 OR APPROVED EQUAL
CAMERA/HOUSING	
CAMERA/HOUSING	SONY UNIONEP550C7

NOTES:

1. PROTECT CABLE ENDS FROM MOISTURE AT ALL TIMES.
2. PULL CABLE IN ACCORDANCE WITH SECTION 660 OF THE SPECIAL PROVISIONS. PULL CABLE SO THAT THERE IS SUFFICIENT LENGTH TO REACH THE TOP OF THE CONTROLLER CABINET. CABLES ARE TO BE PULLED WITHOUT CONNECTORS ATTACHED. WHEN CABLE HAS BEEN PULLED TO FINAL LOCATIONS, INSTALL AND MAKE FINAL CONNECTIONS.
3. CABLE RUNS ARE TO BE MADE CONTINUOUS WITHOUT SPLICES EXCEPT FOR IN LOCATION SHOWN IN SPICE DETAIL WITH SPECIFIED CONNECTOR.
4. CABLE WITH DAMAGED INSULATION, OR THAT HAS BEEN CRIMPED OR BENT BEYOND THE MINIMUM BEND RADIUS MUST BE REPLACED AT NO ADDITIONAL COST.
5. THE MIN BEND RADIUS SHALL NOT EXCEED THE MANUFACTURERS RECOMMENDATIONS.
6. ENSURE ADEQUATE LENGTH OF EACH CABLE TO ALLOW WORK ON THE ENDS OF THE CABLE IN THE CONTROLLER CABINET AND THE CAMERA MOUNTING LOCATION.
7. MOUNT THE PENDENT DOME HOUSING AT A 45° ANGLE AT THE REQUIRED HEIGHT. ANGLE AND HEIGHT MAY BE ADJUSTED BY THE ENGINEER TO AVOID WELDS, APPENDICES AND TO APPROVE SIGHT DISTANCE.
8. ADJUST CAMERA INSIDE THE PENDENT DOME HOUSING AS SHOWN. ENSURE THAT THE CAMERA IS MOUNTED AT A 0° TILT ANGLE.
9. INSTALL WATERTIGHT THREADED RIGID COMPRESSION CONNECTOR WHERE CABLE PASSES THROUGH THE POLE.
10. AT SPLICE LOCATION PROVIDE A SECURE CONNECTION USING CONNECTOR PARTS SPECIFIED. AFTER CONNECTION IS MADE, COVER SPLICE WITH HEAT SHRINK. PROVIDE A STRAIN RELIEF CABLE AS NECESSARY.
11. CAMERA/HOUSING MOUNTING HEIGHT TO BE DETERMINED IN THE FIELD BY THE ENGINEER AND MOA SIGNAL ELECTRONICS.



CAMERA/PENDENT DOME ORIENTATION
NTS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

PLAN, TILT, ZOOM, CAMERA MOUNTING DETAIL

STATE OF ALASKA 49TH BRAD S. DOGGETT CE 10360 REGISTERED PROFESSIONAL ENGINEER

DOWL
4041 B STREET
ANCHORAGE, ALASKA 99503
(907) 562-2000
AECL848

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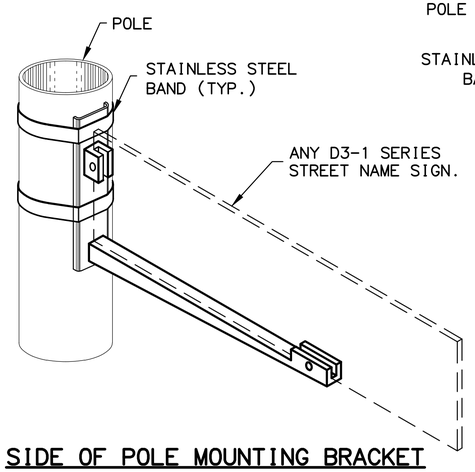
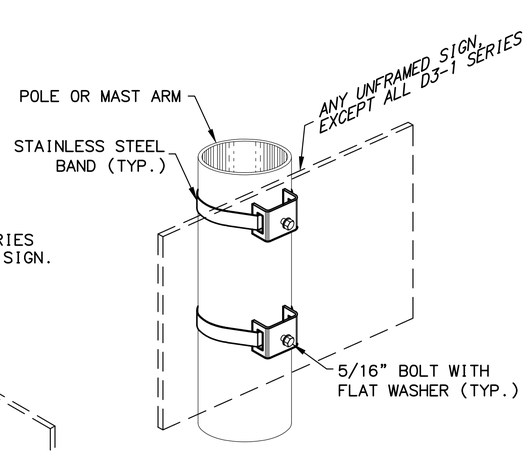
NO.	DATE	REVISION

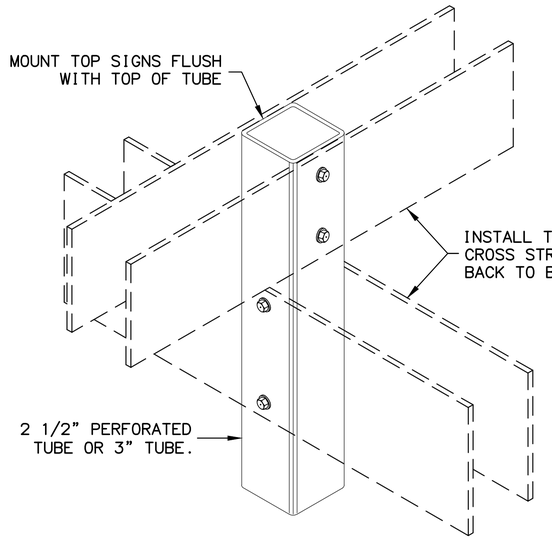
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H10	H21



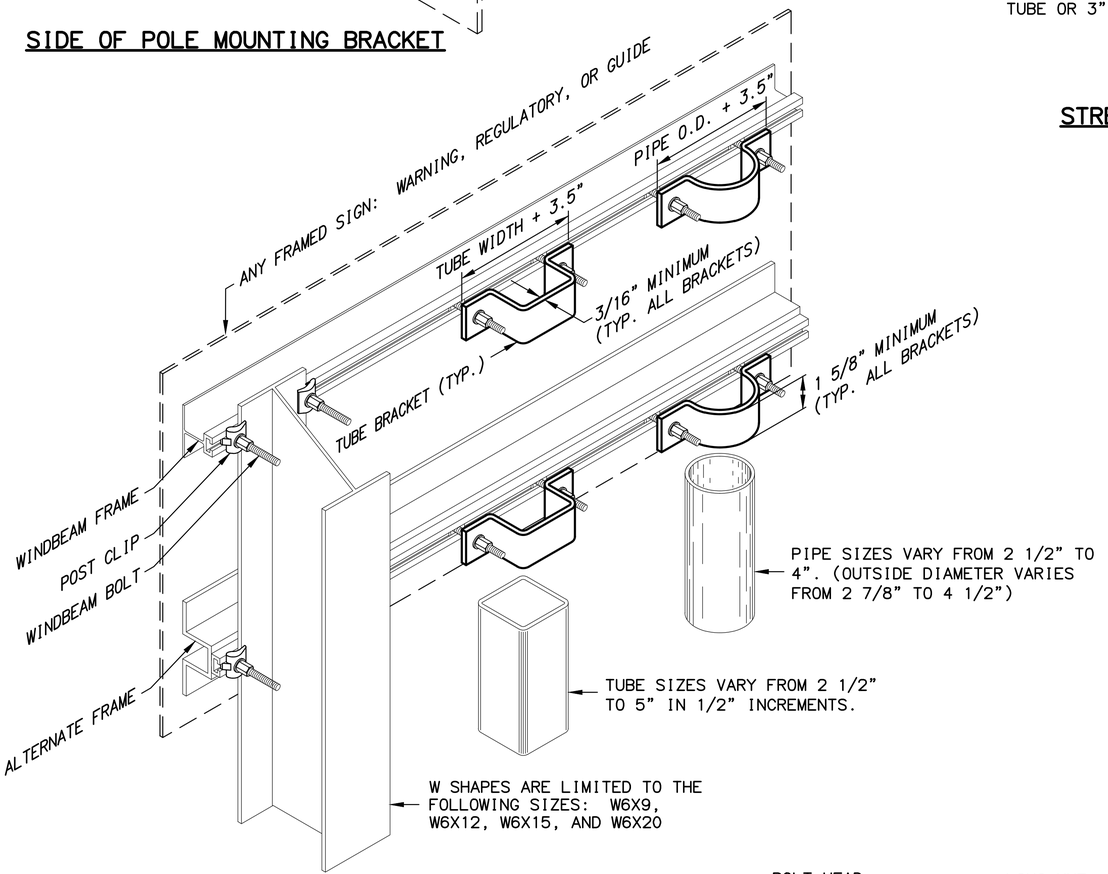
SIDE OF POLE MOUNTING BRACKET



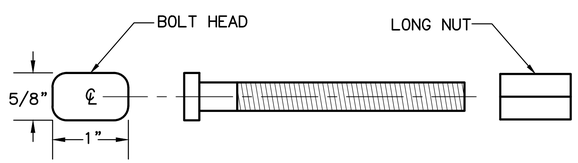
SADDLE BRACKETS



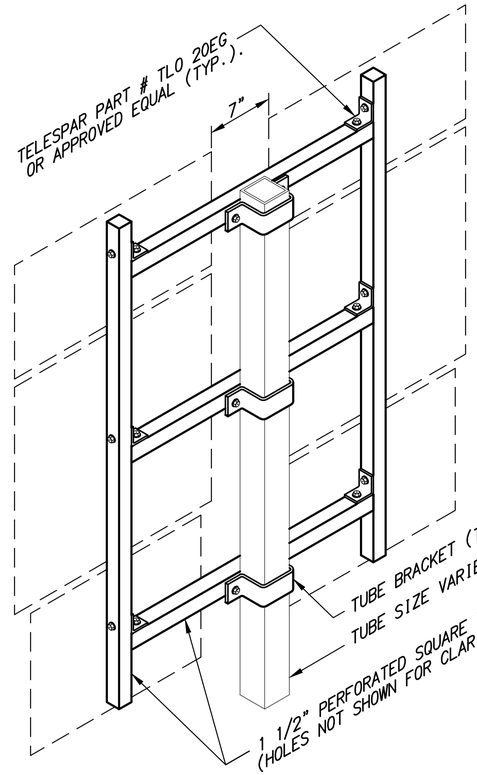
STREET NAME SIGN INSTALLATION



FRAMED SIGN ATTACHMENT BRACKETS



3/8" WINDBEAM BOLT AND LONG NUT



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 IN TWO LOCATIONS, NEAR TOP AND NEAR BOTTOM OF MATING SURFACE. 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
BRAD S. DOGGETT
CE 10360
REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

SIGN ATTACHMENT DETAIL

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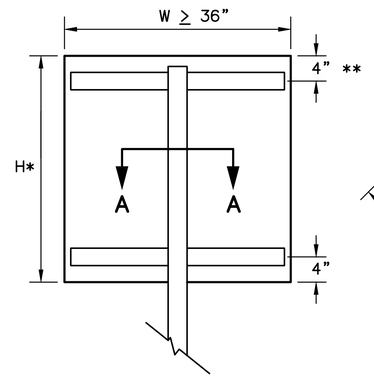
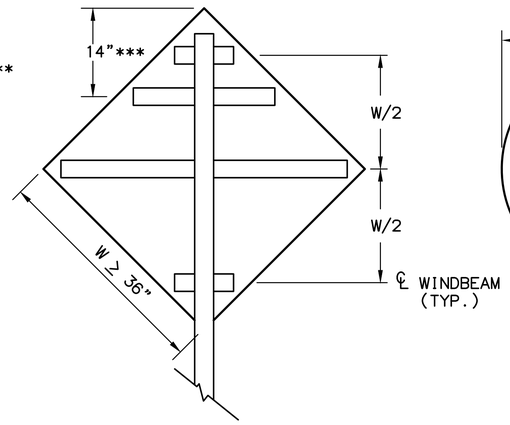
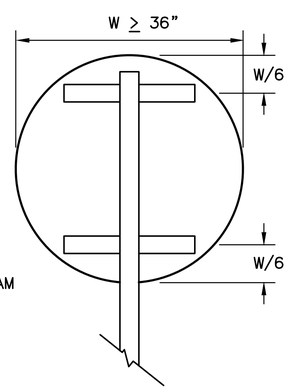
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H11	H21

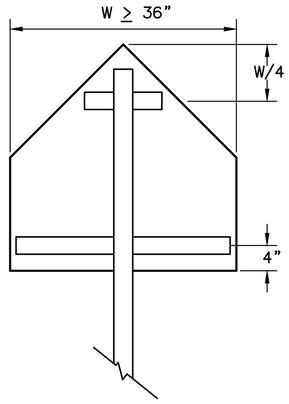


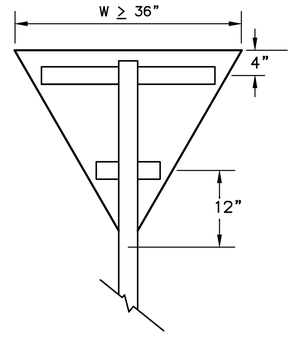
RECTANGLES AND TRAPEZOIDS





ROUNDS AND OCTAGONS





* 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".

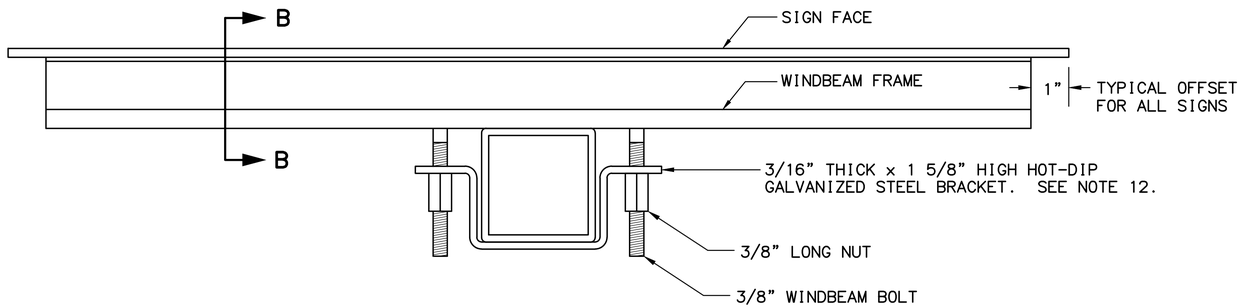
*** FOR WARNING SIGNS MOUNTED ON FLASHING BEACON POSTS, USE THE 14" OFFSET. OTHERWISE, USE W/2.

WINDBEAM LOCATIONS FOR EACH SIGN SHAPE

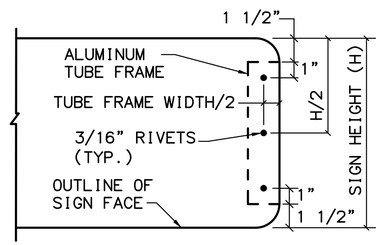
ELEVATION VIEW

NOTES:

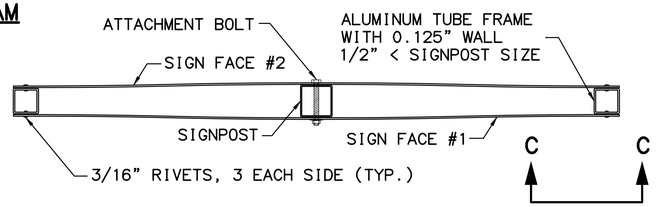
1. EXCEPT FOR POLES AND MAST ARMS, ONLY USE SQUARE STEEL TUBES TO SUPPORT SIGNS MOUNTED ON SINGLE POSTS.
2. INSTALL WINDBEAM OR ZEE SHAPED FRAMING MEMBERS ON DIAMOND SHAPED SIGNS 36 INCHES AND LONGER ON A SIDE AND ON OTHER SIGNS 36 INCHES WIDE AND WIDER.
3. IN HIGH WIND AREAS, THE PLANS MAY REQUIRE SIGNS SMALLER THAN THOSE LISTED IN NOTE 2 BE FRAMED AS SHOWN HERE IN.
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 BOLTS WITH 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.
13. USE ONE 2.5" P.T. FOR ALL STOP SIGNS WITHIN THE MOA, AND ALL POSTS WITH A SINGLE SIGN PANEL THAT ARE 30" WIDE OR LESS. ALL OTHER STOP SIGN POSTS OUTSIDE THE MOA SHALL BE ON A 3" TUBE.



SECTION A - A TYPICAL SIGN ATTACHMENT DETAILS AT EACH WINDBEAM

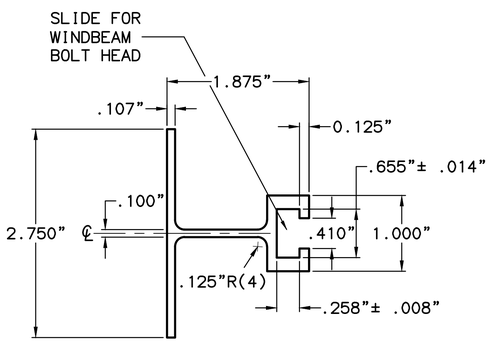


VIEW C - C

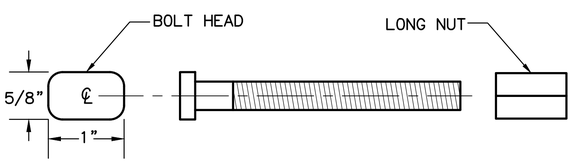


D3-1 STREET NAME SIGN FRAMING DETAIL

PLAN VIEW



SECTION B - B WINDBEAM CROSS SECTION



3/8" WINDBEAM BOLT AND LONG NUT

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

LIGHT SIGN FRAMING AND ATTACHMENT DETAILS

STATE OF ALASKA 49TH BRAD S. DOGGETT CE 10360 REGISTERED PROFESSIONAL ENGINEER

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ANCHORAGE, ALASKA 99503
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ILLUMINATION DESIGN	
FUNCTION CLASSIFICATION	MAJOR/COLLECTOR
PEDESTRIAN ACTIVITY	MEDIUM
DESIGN ILLUMINANCE (MIN)	2.2 FC
MAXIMUM UNIFORMITY (AVG/MIN)	3.0
ACTUAL ILLUMINANCE	2.4 FC
ACTUAL UNIFORMITY (AVG/MIN)	2.0
LIGHT LOSS FACTOR	0.85

LIGHTING CERTIFICATION STATEMENT:

BY SIGNING BELOW THE DESIGNER CERTIFIES THAT THE INTERSECTION LIGHTING DESIGN MEETS AASHTO AND IESNA CRITERIA FOR A MAJOR/COLLECTOR INTERSECTION WITH MEDIUM PEDESTRIAN ACTIVITY.

ALEX PROSAK, P.E.

NO.	DATE	REVISION

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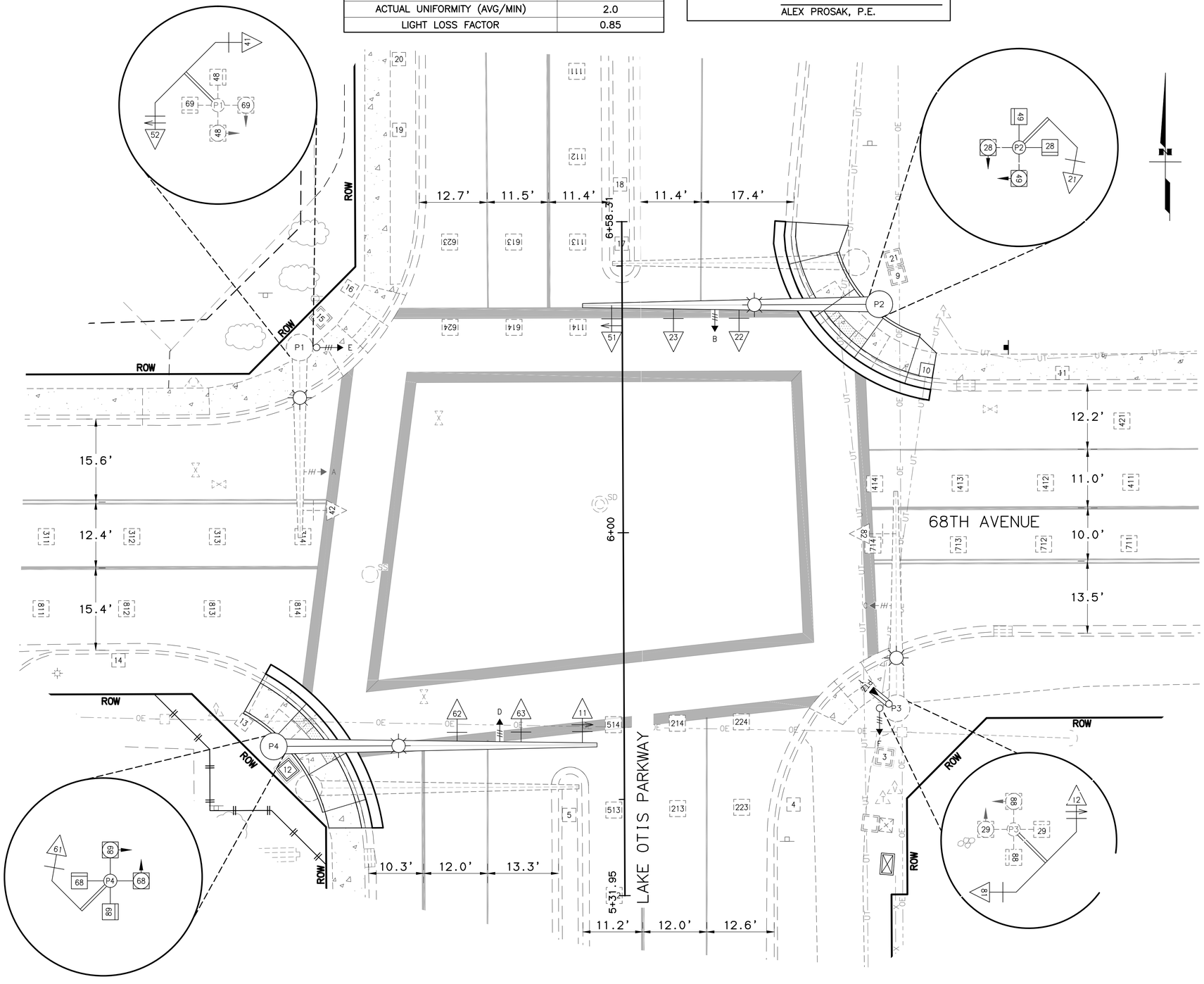
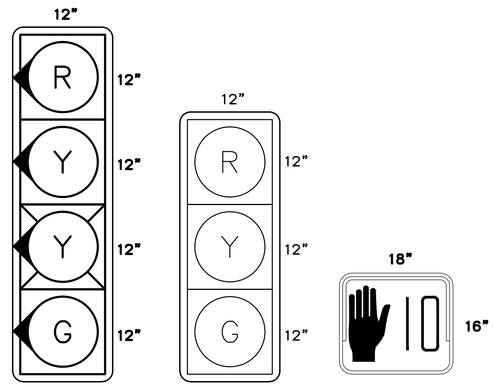
ALASKA	0001(299)/Z566440000	2017	H12	H21



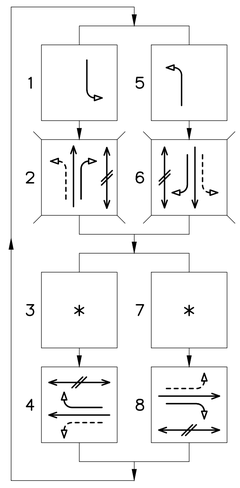


SIGNAL FACES
11, 12, 51, 52

SIGNAL FACES
21, 22, 23, 41, 42,
61, 62, 63, 81, 82

SIGNAL FACES
28, 29, 48, 49,
68, 69, 88, 89

SIGNAL HEAD CONFIGURATIONS



PHASING DIAGRAM

- PEDESTRIAN MOVEMENT
- PROTECTED VEHICLE MOVEMENT
- PROTECTED VEHICLE MOVEMENT
- PERMISSIVE VEHICLE MOVEMENT
- * NOT USED

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

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

SIGNAL SYSTEMS PLAN

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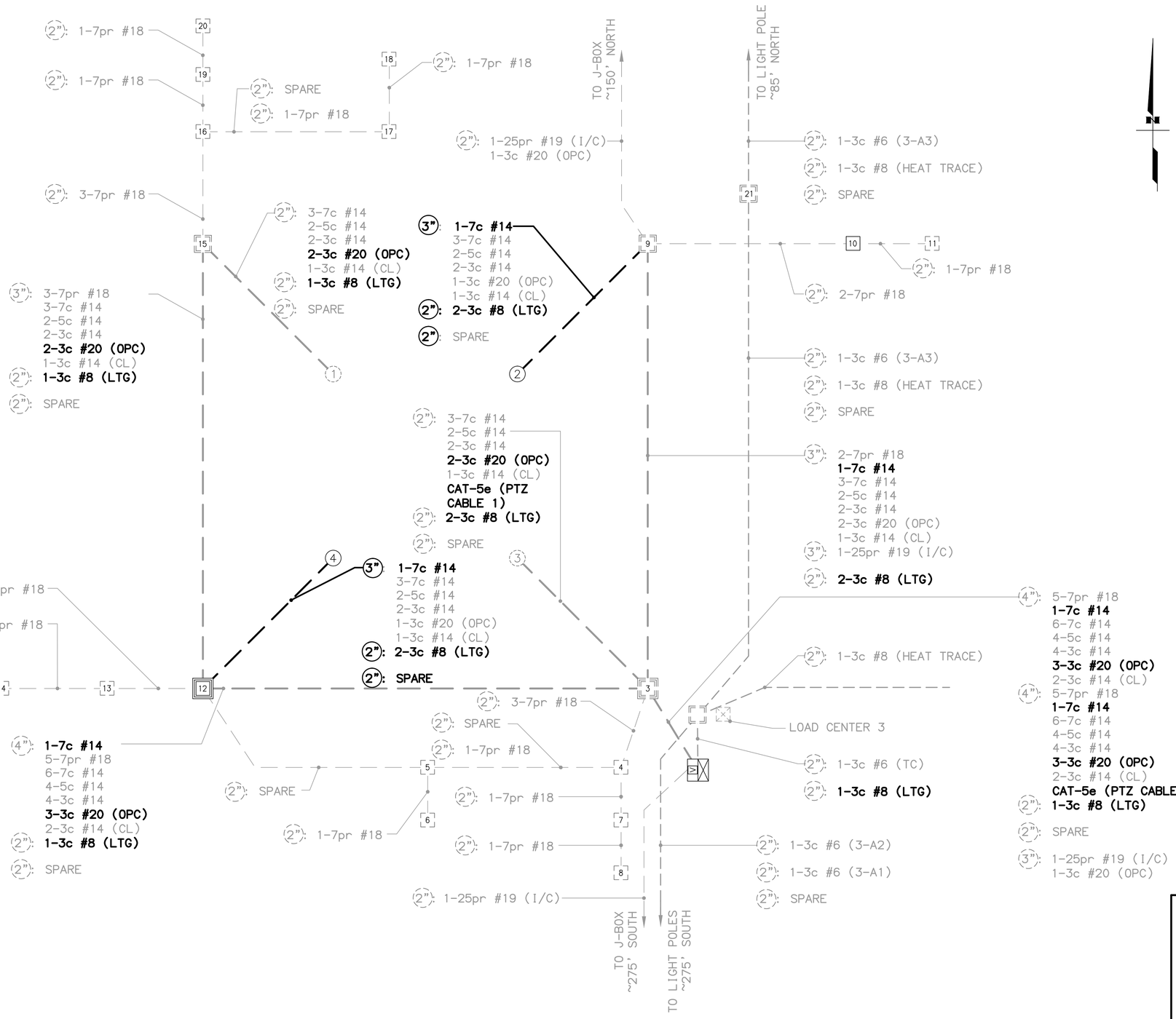
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H13	H21



NOTES:

1. CABLE SLACK FOR THIS PROJECT WAS ACCOUNTED FOR IN RECENT INTERSECTION REWIRING BY MOA PROJECT. CONTRACTOR TO VERIFY SUFFICIENT SLACK IN CABLES.
2. CONTRACTOR TO REUSE EXISTING SOUTHBOUND ADVANCE OPTICOM DETECTOR.
3. CONTRACTOR TO REMOVE/ABANDON OLD POLE 4 CONDUITS FROM J-BOX.
4. CONTRACTOR TO REMOVE/ABANDON OLD POLE 2 CONTUITS FROM J-BOX.
5. REMOVE EXISTING CONTROLLER FOUNDATION AND ADJACENT TYPE III J-BOX.
6. PROVIDE A NEW TS2 CONTROLLER CABINET ON A NEW TS2 CONTROLLER CABINET FOUNDATION.

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STATE OF ALASKA
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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

WIRING DIAGRAM

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H14	H21

FOUNDATION SCHEDULE

	STATION	OFFSET	REMARKS
P1	6+35.01	60.53' LT	EXISTING POLE
P2	6+42.61	48.22' RT	DRIVEN PILE FOUNDATION
P3	5+66.86	51.11' RT	EXISTING POLE
P4	5+60.24	65.75' LT	42"ø, 12' FOUNDATION DEPTH
LC "3"	5+44.93	49.05' RT	EXISTING
TC	5+37.64	49.23' RT	REPLACE EXISTING PER SHEET H4 DETAILS

J-BOX SCHEDULE

J-BOX	STATION	OFFSET	REMARKS
15	6+40.40	56.78' LT	EXISTING
9	6+44.85	52.47' RT	EXISTING
3	5+57.64	48.35' RT	EXISTING
12	5+55.40	64.00' LT	REPLACE WITH TYPE III
10	6+30.90	56.30' RT	REPLACE EXISTING

OPTICOM DETECTOR SCHEDULE

LOCATION	DETECTOR NO	PHASE CALL	FACING DIRECTION	DETECTOR MODEL NO
P1 MAST ARM	A	4	E	EXISTING
P2 MAST ARM	B	2,5	S	721
P3 MAST ARM	C	8	W	EXISTING
P4 MAST ARM	D	1,6	N	721
P1 SHAFT	E	4	E	721
P3 SHAFT	F	2,5	S	721

POLE SALVAGE SCHEDULE

POLE	STATION	OFFSET
2	6+50.49	43.88 RT
4	5+52.39	59.17 LT

LUMINAIRE SCHEDULE

MANUFACTURER	CREE OR APPOVED EQUAL
MODEL	LEDWAY OR APPROVED EQUAL
WATTAGE	270
LIGHT SOURCE	LED
VOLTAGE	240
INITIAL LUMENS	21,189
BALLAST TYPE	MULTI-LEVEL DRIVER
PE CONTROL	NONE
COLOR TEMPERATURE	4,000 K
IES DISTRIBUTION TYPE	M-C-3
UL LISTED	YES
IES FILE	STR-LWY-3M-___-12-E-UL-700-40K.IES OR APPROVED EQUAL

OPTICOM DETECTOR SCHEDULE

1. AIM OPTICOM DETECTOR EYE TOWARD THE CENTER OF THE VEHICLE APPROACH AT APPROXIMATELY 1500 FEET FROM THE INTERSECTION.
2. OPTICOM DETECTORS SHALL HAVE DIRECT UNOBSTRUCTED LINE-OF-SIGHT TO APPROACHING VEHICLES. ADJUST ANGLE AS NECESSARY.

NOTES:

1. UNLESS OTHERWISE NOTED, ALL STATION AND OFFSETS ARE TO CENTER OF STRUCTURE OR OBJECT.
2. CONTRACTOR TO RETURN REMOVED ILLUMINATION FIXTURES AND MAST ARMS TO MOA POLE YARD AT 245 ORCA STREET.

STATE OF ALASKA 49TH BRAD S. DOGGETT CE 10360 REGISTERED PROFESSIONAL ENGINEER

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

SIGNALIZATION STRUCTURE SCHEDULES

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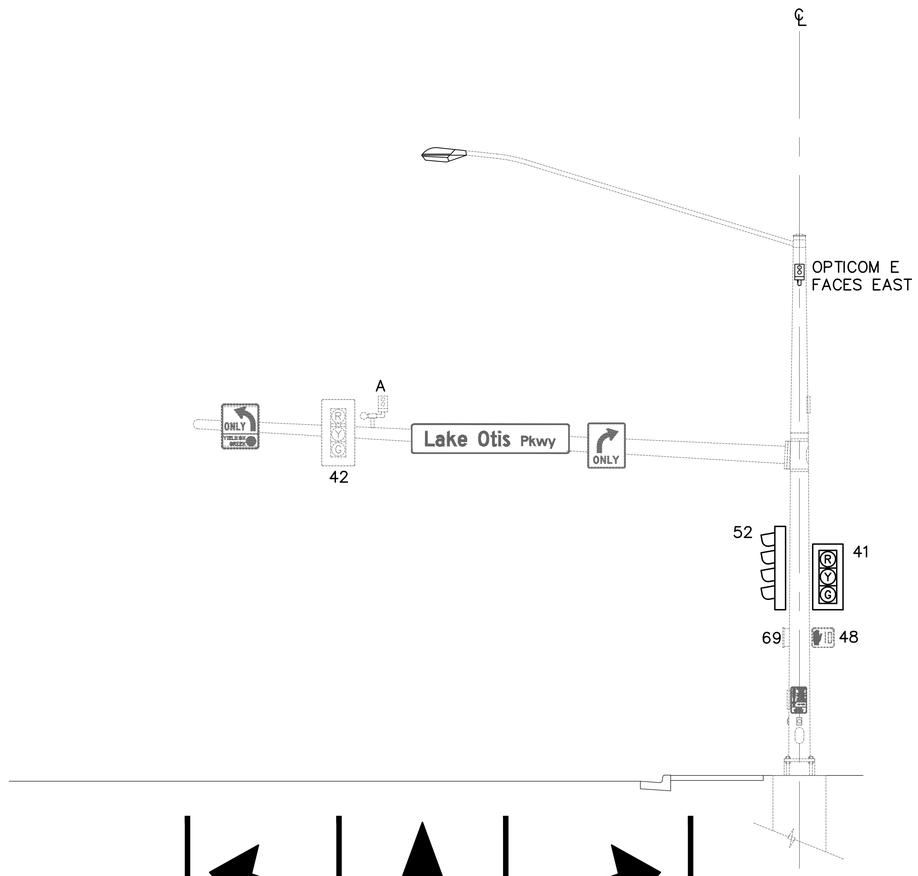
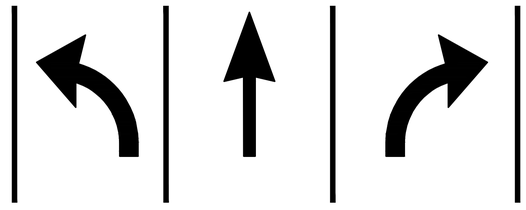
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H15	H21





EXISTING SIGNAL POLE NO. 1

LOOKING WEST

NOTES:

1. EXISTING POLE NO. 1 TO REMAIN.
2. REPLACE EXISTING LUMINAIRE. SEE LUMINAIRE SCHEDULE ON H14.
3. OPTICOM E TO BE INSTALLED ON POLE #1 FACING EAST.

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STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
AND PUBLIC FACILITIES

HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

POLE 1 DETAIL

DATE/TIME | 12/23/2016 1:07 PM | LAYOUT | | DESIGNED | AKM | CHECKED | BSD | DRAFTED | CJS

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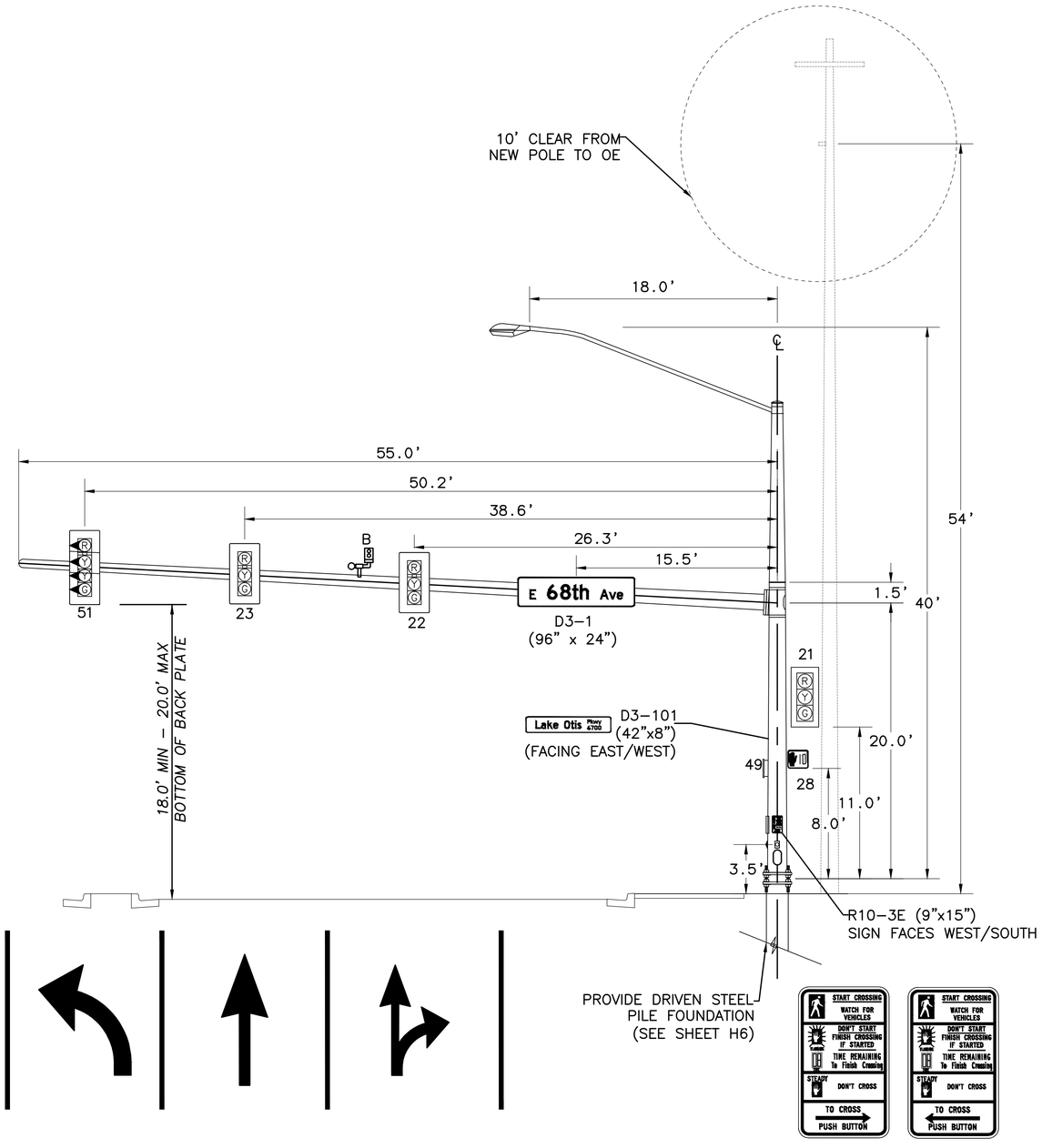
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H16	H21



SIGNAL POLE NO. 2

LOOKING NORTH

NOTES:

1. SEE LUMINAIRE SCHEDULE ON H14.
2. NEW SIGNALS, SIGNAL POLE, AND MAST ARM SHALL NOT VIOLATE 10' CLEARANCE FROM OVERHEAD POWER LINES.

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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

POLE 2 DETAIL

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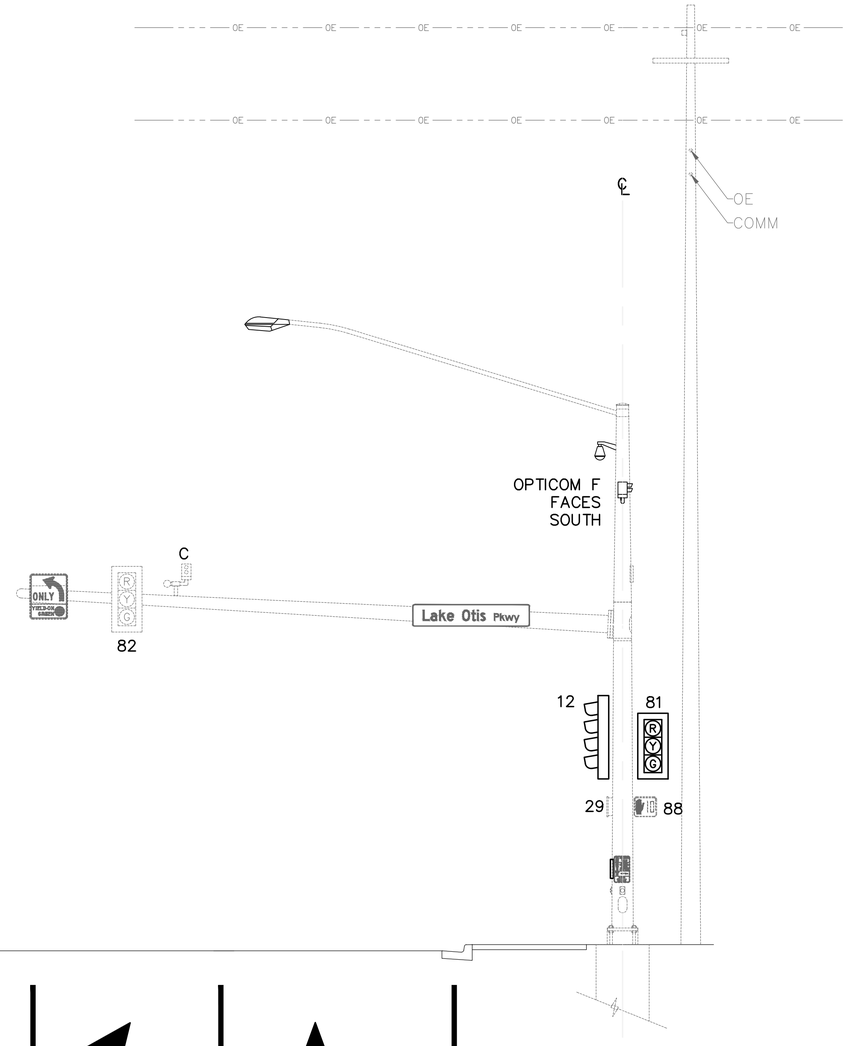
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H17	H21



EXISTING SIGNAL POLE NO. 3

LOOKING EAST

NOTES:

1. EXISTING POLE NO. 3 TO REMAIN.
2. REPLACE EXISTING LUMINAIRE. SEE LUMINAIRE SCHEDULE ON H14.
3. OPTICOM F TO BE INSTALLED ON WEST SIDE OF POLE #3 FACING SOUTH.

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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

POLE 3 DETAIL

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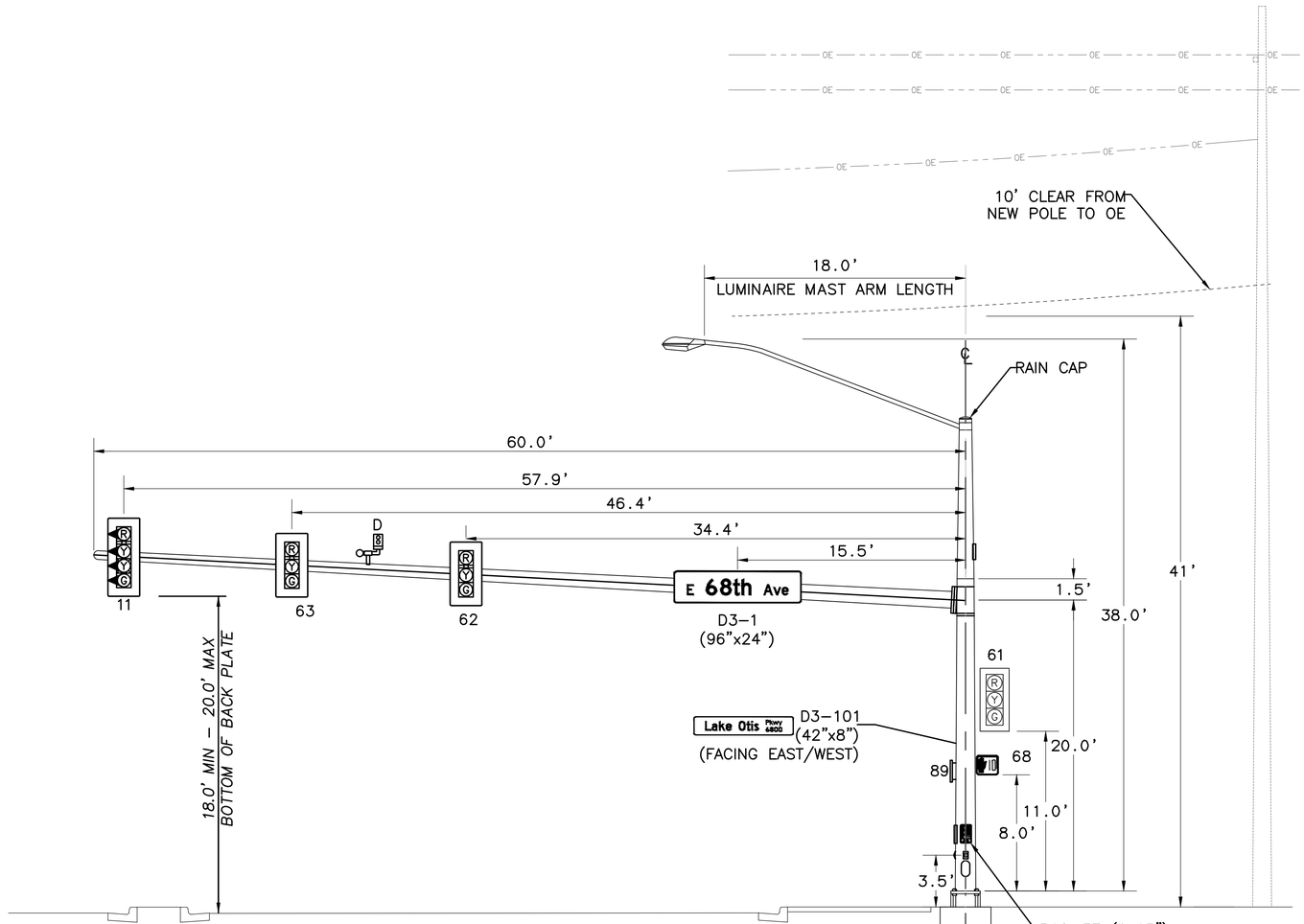
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H18	H21



NOTES:

1. SEE LUMINAIRE SCHEDULE ON H14.
2. NEW SIGNALS, SIGNAL POLE, AND MAST ARM SHALL NOT VIOLATE 10' CLEARANCE FROM OVERHEAD POWER LINES.
3. MAINTAIN USE OF SOUTHBOUND ADVANCE OPTICOM DETECTOR CIRCUIT.

SIGNAL POLE NO. 4

LOOKING SOUTH

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HSIP: LAKE OTIS PARKWAY AT 68TH AVE CHANNELIZATION

POLE 4 DETAIL

DATE/TIME 12/23/2016 1:07 PM | LAYOUT | DESIGNED AKM | CHECKED BSD | DRAFTED CJS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0001(299)/Z566440000	2017	H19	H21

CONTROLLER CABINET FEATURES

GENERAL OPTIONS	
TYPE	TS2-1
SIZE	NEMA SIZE 6
MATERIALS	0.125" NATURAL ALUMINUM
MODEL	WESTERN SYSTEMS NEMA TS2-1P
EXTENDER BASE	NONE
MOUNTING HARDWARE	INCLUDED
PAINT	YES - SEE SPECIAL PROVISIONS
SPECIAL OPTIONS	
LIFTING TABS	INCLUDED
COMPUTER SHELF	FULL WIDTH, 12"
AIR FILTER	FIBER MESH
MAIN DOOR LOCK	BEST
REAR DOOR	NONE
INCANDESCENT LAMP	100 WATT
MAIN PANEL	
MAIN PANEL POSITION	16-POSITION HORIZONTAL
RESISTOR LOCATION	LEFT SIDEWALL
FLASH TRANSFER RELAYS SOCKETS	8 INCLUDED
FLASHER SOCKETS	1 INCLUDED
R1 RELAY SOCKET	INCLUDED
POWER PANEL	
SURGE SUPPRESSION	SHP300-10
LINE FILTER (RADIO INTERFERENCE)	50A
CONTACTOR - SOLID STATE RELAY	NORMALLY OPEN, 50A
MAIN CIRCUIT BREAKER	40A
AUXILIARY CIRCUIT BREAKERS	20A
3 POSITION TERMINAL BLOCK FOR INCOMING POWER, #4-#8 U.S.G.	INCLUDED
16 POSITION NEUTRAL BUS BAR	INCLUDED
16 POSITION CHASSES GROUND BUS BAR	INCLUDED
POLICE PANEL	
POLICE PANEL	INCLUDED
POLICE PANEL SWITCHES	SIGNALS ON/OFF, AUTO/FLASH
POLICE PANEL PUSHBUTTON ALARM	NONE
POLICE DOOR LOCK	BEST
POLICE PANEL MANUAL CORD	NONE
AUXILIARY PANEL	
AUXILIARY PANEL SWITCHES	AUTO/FLASH, STOP TIME, CONTROLLER POWER, COORD/TOD/FREE, CABINET LIGHT, HEATER BYPASS
DETECTOR TEST SWITCHES	TACTILE PUSHBUTTON
FORCE OFF SWITCHES	TACTILE PUSHBUTTON
RACK DETECTION	
DETECTOR RACKS	PROVIDE FOUR (4) 16-CHANNEL DETECTOR RACKS. TWO OF THE RACKS SHALL BE CONFIGURED WITH 2 SLOTS EACH FOR OPTICOM.
DETECTOR RACK POWER SUPPLY	BIU FOR EACH RACK
EVP REQUIREMENTS	WIRE FOR GREEN SENSE MONITORING
ADDITIONAL OPTIONS	
MASTER CABINET	NO
WIRE CABINET FOR UPS	NO
RAILROAD PREEMPTION	INCLUDED
RAILROAD PREEMPTION/STAND ALONE PANEL	NO
RED JUMPERS FOR ALL UNUSED PAHSES	INCLUDED
LOAD RESISTORS	8 INCLUDED
HEATER RECEPTACLE (SINGLE)	INCLUDED - RIGHT SIDE OF CABINET
DUPLEX GFI OUTLET (NON-FILTERED)	INCLUDED - RIGHT SIDE OF CABINET
DUPLEX CONVENIENCE OUTLET - FILTERED	INCLUDED - LEFT SIDE OF CABINET
ADDITIONAL NEUTRAL BUS BARS (32 POSITIONS)	LEFT SIDE OF CABINET
ADDITIONAL CHASSIS GROUND BUS BAR (32 POSITIONS)	LEFT SIDE OF CABINET
STANDARD WIRING DIAGRAMS (33x22)	1 CABINET, 1 SIGNAL TECH, 1 TRAFFIC
ELECTRONIC WIRING DIAGRAM (AUTOCAD FORMAT)	PROVIDE ON COMPACT DISC
48-HOURS FACTORY BURN-IN	INCLUDED
CONTINUOUS WELD	INCLUDED
GTT OPTICOM 768 AUXILIARY INTERFACE PANEL	INCLUDED - WIRED INTO CABINET
GTT OPTICOM 757 HARNESS	INCLUDED - WIRED INTO CABINET
GENERATOR BYPASS COMPARTMENT - WITH HUBBELL HBL2615 FLANGED INLET RECEPTACLE, BACO HC52DQG CAM SWITCH, 3 POSITION TERM. BLOCK AND BEST DOOR LOCK	INCLUDED - MOUNT COMPARTMENT ON INSIDE OF CONTROLLER CABINET DOOR. MOUNT ACCESS DOOR FLUSH WITH CABINET DOOR. SEE SPECIAL PROVISIONS FOR OTHER REQUIREMENTS

CONTROLLER ASSEMBLY EQUIPMENT

SUPPLY ALL LABOR, EQUIPMENT AND MATERIALS TO PROVIDE A FULLY FUNCTIONING TRAFFIC SIGNAL CONTROLLER ASSEMBLY COMPLIANT WITH THE NEMA STANDARD PUBLICATION NO. TS2-2003 V02.06 AND SPECIAL "SPECIALS" PROVISIONS OF THIS CONTRACT INCLUDING BUT NOT LIMITED TO;

QTY	CONTROLLER/MMU EQUIPMENT
1	ECONOLITE COBALT OR APPROVED EQUAL CONTROLLER
1	CONTROLLER TELEMETRY MODULE TCM-FSK-9
1	CONTROLLER ETHERNET PORT
1	CONTROLLER DATA KEY
1	EDI MMU2-16LEIP OR APPROVED EQUAL
1	MMU2 CARD
	CABINET EQUIPMENT
16	PDC SSS-87-I/O LOAD SWITCHES
16	EDI ORACLE4E DETECTOR AMPLIFIERS
8	DETROL CONTROLS 295 FLASH TRANSFER RELAYS
2	EDI BIU700 TERMINAL AND FACILITIES BIUS
4	EDI BIU700 DETECTION BIU'S
1	EDI PS250 TS2 CABINET POWER SUPPLY
1	PDC SSF8 FLASHER
1	R1 RELAY
1	600/900/1500W SELECTABLE THERMOSTATICALLY CONTROLLED CABINET HEATER
1	RESEALABLE PRINT POUCH OF SUFFICIENT SIZE TO ACCOMMODATE CABINET PRINTS
1	COMPLETE SET OF MANUALS FOR CONTROLLER, MMU2 AND VEHICLE DETECTOR AMPLIFIERS

COMMUNICATION EQUIPMENT SCHEDULE

QTY	ETHERNET EQUIPMENT
1	ACTELIS ML688 WITH FOUR 10/100TX PORTS AND ONE OPTIONAL 1000BASE SFP PORT
1	AC POWER ADAPTER 506R00005
4	3 FOOT CAT6 PATCH CABLE
1	SFP OPTICS 100base FX SM 1310nm 15km LC MODULE 506R00032
1	CARRIER-CLASS ELEMENT MANAGEMENT SYSTEM
2	QUAD DSL CABLES 504R20110
1	WALL MOUNTING KIT 510R21080
	ON-STREET MASTER CONTROLLER
0	MASTER CONTROLLER, ECONOLITE ASC/2M-1000
0	56K INDUSTRIAL MODEM & PHONE DROP (INCLUDES TELCO ACTIVATION)
0	ECONOLITE GPS-100 GPS TIME REFERENCE OR APPROVED EQUAL
	UNINTERRUPTIBLE POWER SUPPLY
0	ECONOLITE CUSTOM CABINET FOR UPS, MOUNT TC CABINET
0	ECONOLITE DBL 2100 OR APPROVED EQUAL
0	ECONOLITE HOT SWAP BYPASS SWITCH OR APPROVED EQUAL
0	ECONOLITE FAIL-SAFE BYPASS SWITCH OR APPROVED EQUAL
	OTHER EQUIPMENT
0	ATSI PCMT-2600 MMU TESTER W/ MMU & CMU CABLES
0	FULLY FUNCTIONING TRAFFIC SIGNAL CONTROLLER, MASTER CONTROLLER AND CABINET
0	INDUCTIVE LOOP TEST KITS
0	LOOP FINDERS
0	BIU TESTERS
0	FRAME GRABBER
0	MULTI-SWITCH TESTER
0	BIU SLOT TESTER
0	CARD RACK SLOT TESTER
0	DETECTOR TESTER
0	MCCAIN CID II
0	RADIO SITE SURVEY LOCATIONS
0	INTX DIAGRAM LOCATIONS

EVP EQUIPMENT SCHEDULE

QTY	
0	GTT OPTICOM MODEL 711 DETECTOR
4	GTT OPTICOM MODEL 721 DETECTOR
0	GTT OPTICOM MODEL 722 DETECTOR
1	GTT OPTICOM MODEL 764 PHASE SELECTOR (PROVIDE WITH CONT. CAB.)
0	OPTICOM MODEL 792H EMITTERS W/792 SWITCH

VIDEO DETECTION EQUIPMENT SCHEDULE

QTY	
0	ECONOLITE AUTOSCOPE TERRA ACCESS POINT (TAP)
0	ECONOLITE AUTOSCOPE TERRA INTERFACE PANEL (TIP)
0	TAP STAND ALONE ENCLOSURE
0	ECONOLITE AUTOSCOPE ENCORE CAMERA

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CABINET EQUIPMENT

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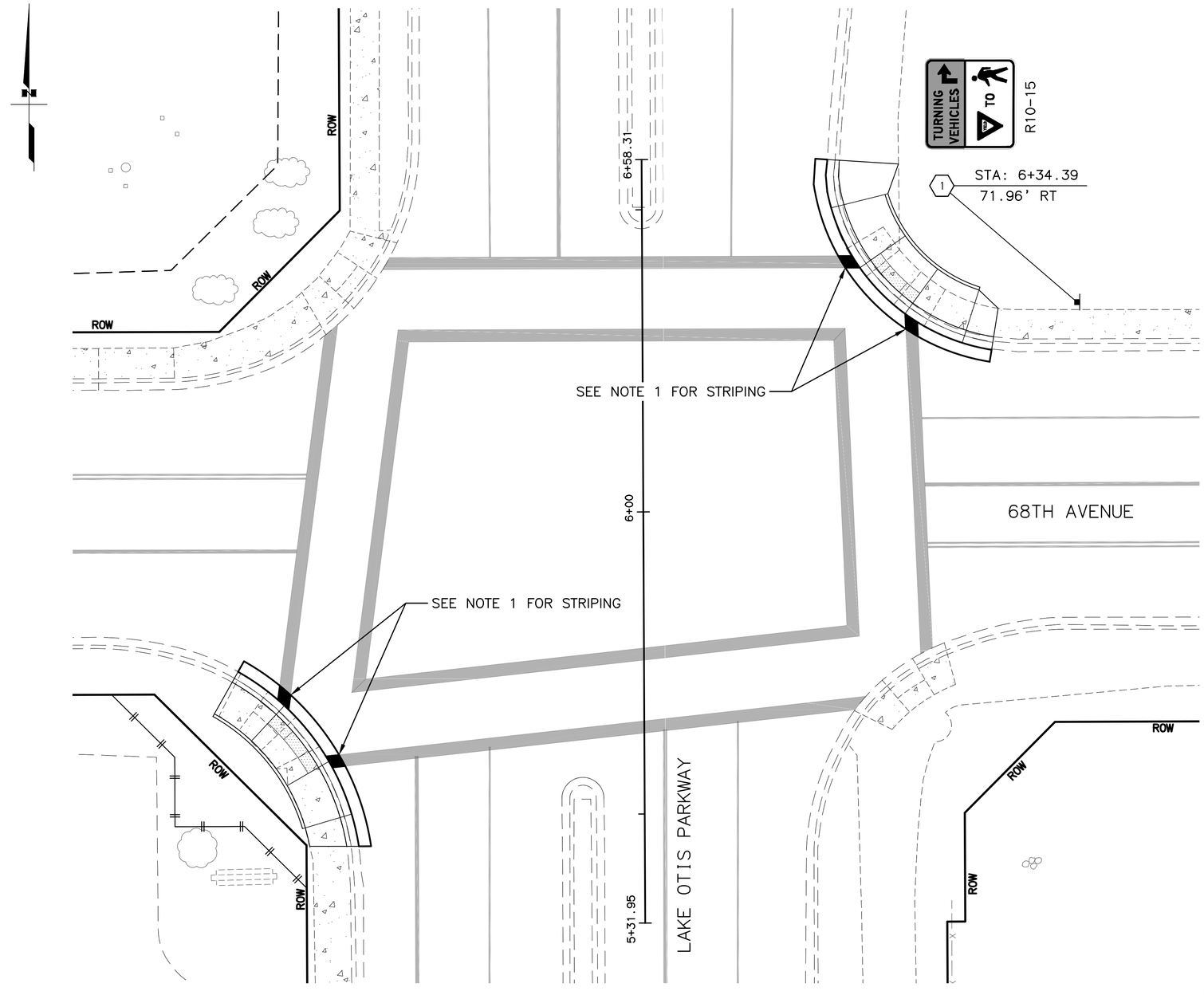
ALASKA	0001(299)/Z566440000	2017	H20	H21



NOTES:

1. REPLACE EXISTING 24" WHITE STRIPING WITH PAINT MARKINGS AS NECESSARY WITHIN ASPHALT DEMOLITION LIMITS. ACTUAL LOCATION IS BASED ON FIELD OBSERVATION.

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STRIPING PLAN

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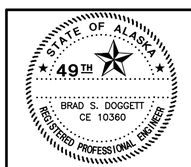
ALASKA	0001(299)/Z566440000	2017	H21	H21

SHEET	POST NO.	STATION	CL OFFSET	CL REF	TYPE	LEGEND	SIZE (IN) WIDTH	SIZE (IN) HEIGHT	AREA (FT2)	SIGN FACES	POSTS NO., SIZE, & TYPE	THICKNESS (in) FRAMED YES	THICKNESS (in) FRAMED NO	REMARKS
H20	1	6+34.39	71.96'	RT	R10-15		30	30	6.25	E	1-2.5" X 2.5" PT		X	
H16	2	6+42.61	48.22'	RT	D3-1		96	24	16	S	SIGNAL POLE NO. 2	X		
					D3-101		42	8	2.33	E/W		X		BLOCK NO. 6700
					R10-3E		9	15	.94	W			X	
					R10-3E		9	15	.94	S			X	
H18	3	5+60.24	65.75'	LT	D3-1		96	24	16	N	SIGNAL POLE NO. 4	X		
					D3-101		42	8	2.33	E/W		X		BLOCK NO. 6800
					R10-3E		9	15	.94	E			X	
					R10-3E		9	15	.94	N			X	



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SIGN SUMMARY TABLE

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