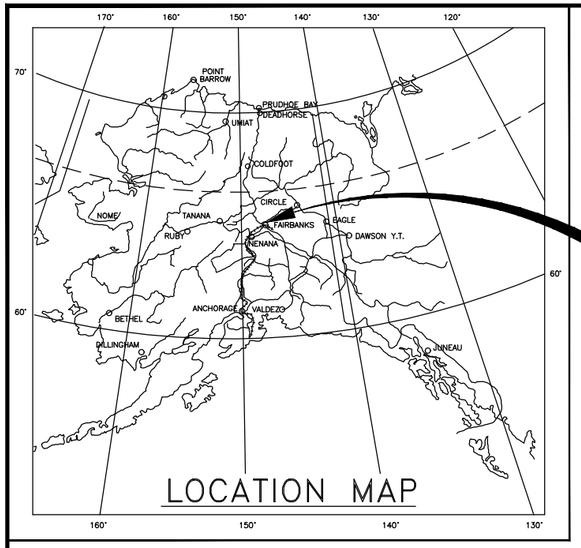
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	N/A	2020		206



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

3RD STREET WIDENING

0670001/Z625410000

GRADING, DRAINAGE, PAVING, ILLUMINATION & SIGNALIZATION

3RD STREET INTERCONNECT

PENDING/NFHWY00334

SIGNALIZATION

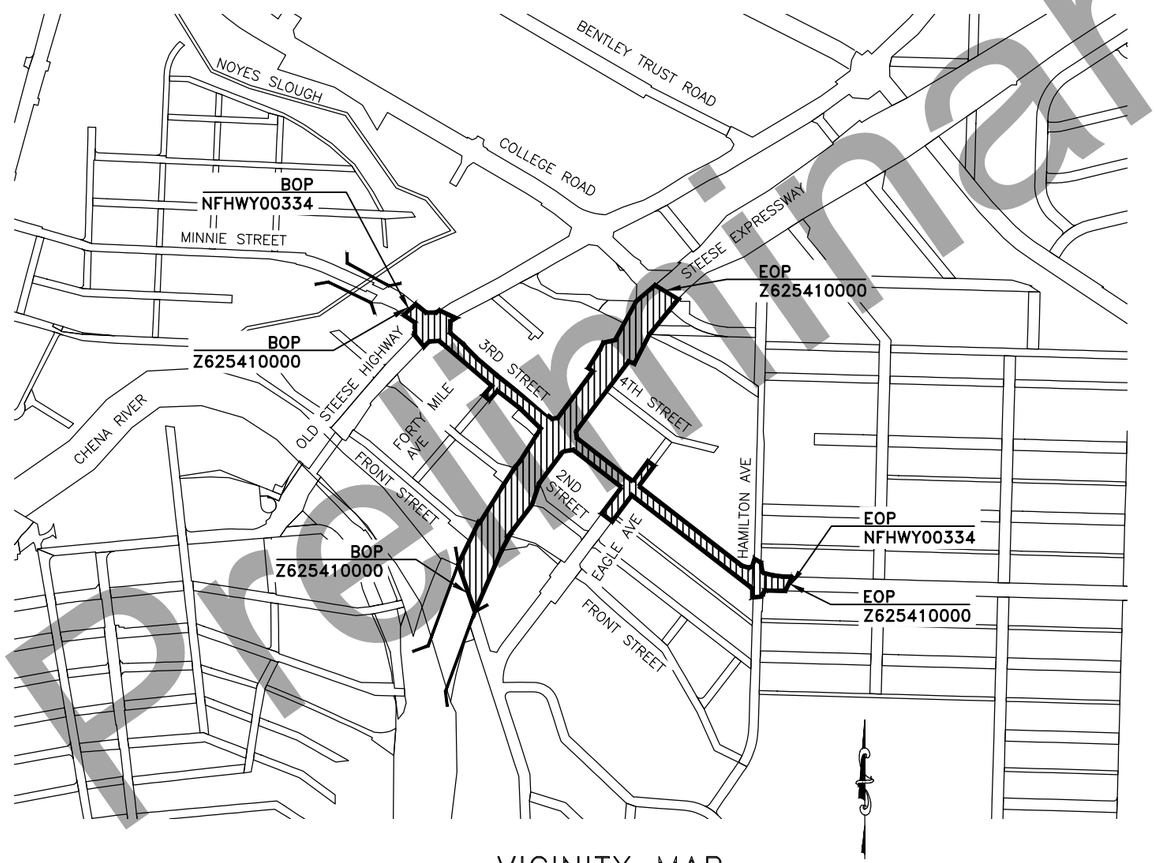
Preliminary Plans

INDEX OF SHEETS
3RD STREET WIDENING

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2–A3	LEGEND/ABBREVIATIONS & GENERAL NOTES
A4–A8	SURVEY CONTROL
B1–B3	TYPICAL SECTIONS
C1–C2	ESTIMATE OF QUANTITIES
D1–D3	SUMMARY TABLES
E1–E6	MISCELLANEOUS DETAILS
F1–F15	PLAN & PROFILE
G1–G14	GRADING PLANS
H1–H17	SIGNING/STRIPING
H18–H34	TRAFFIC SIGNAL PLANS
H100–H116	ILLUMINATION
L1–L2	LANDSCAPING
Q100–Q102	EROSION SEDIMENT CONTROL PLANS
T100–T103	CONSTRUCTION PHASING PLANS/TRAFFIC CONTROL PLANS
U1–11	STORM DRAIN
U101–109	WATER AND SEWER
U201–U212	ELECTRIC UTILITIES/VAULT DETAILS
U301–U315	COMMUNICATION & CABLE UTILITIES/VAULT DETAILS
U400–U412	SECONDARY UTILITIES
U413–U423	SERVICE ENTRANCE DETAILS

INDEX OF SHEETS
3RD STREET INTERCONNECT

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LEGEND AND ABBREVIATIONS
A3	SHEET LAYOUT
C1	ESTIMATE OF QUANTITIES & GENERAL NOTES
H1–H2	INTERCONNECT TRENCH DETAILS
H3–H4	FIBER OPTIC VAULT AND MANHOLE DETAILS
H5	MISCELLANEOUS DETAILS
H6	SPLICE AND WIRING DIAGRAMS
H7	CONTROLLER CABINET LAYOUT
H8	PAN, TILT, ZOOM CAMERA DETAILS
H9	VAULT GRADING DETAILS
H10–H18	INTERCONNECT PLANS



VICINITY MAP

PRELIMINARY PS&E
SEPTEMBER, 2018

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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	A1	182

CDS ROUTE:	150040	MILEPOINT:	0	TO	0.254
CDS ROUTE:	152000	MILEPOINT:	0.654	TO	1.033

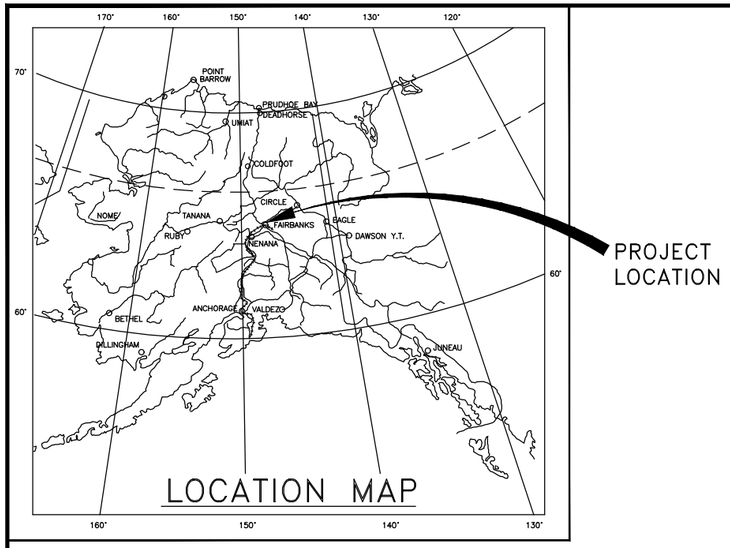
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

3RD STREET WIDENING

0670001/Z625410000

GRADING, DRAINAGE, PAVING, ILLUMINATION & SIGNALIZATION



LOCATION MAP

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2–A3	LEGEND/ABBREVIATIONS & GENERAL NOTES
A4–A8	SURVEY CONTROL
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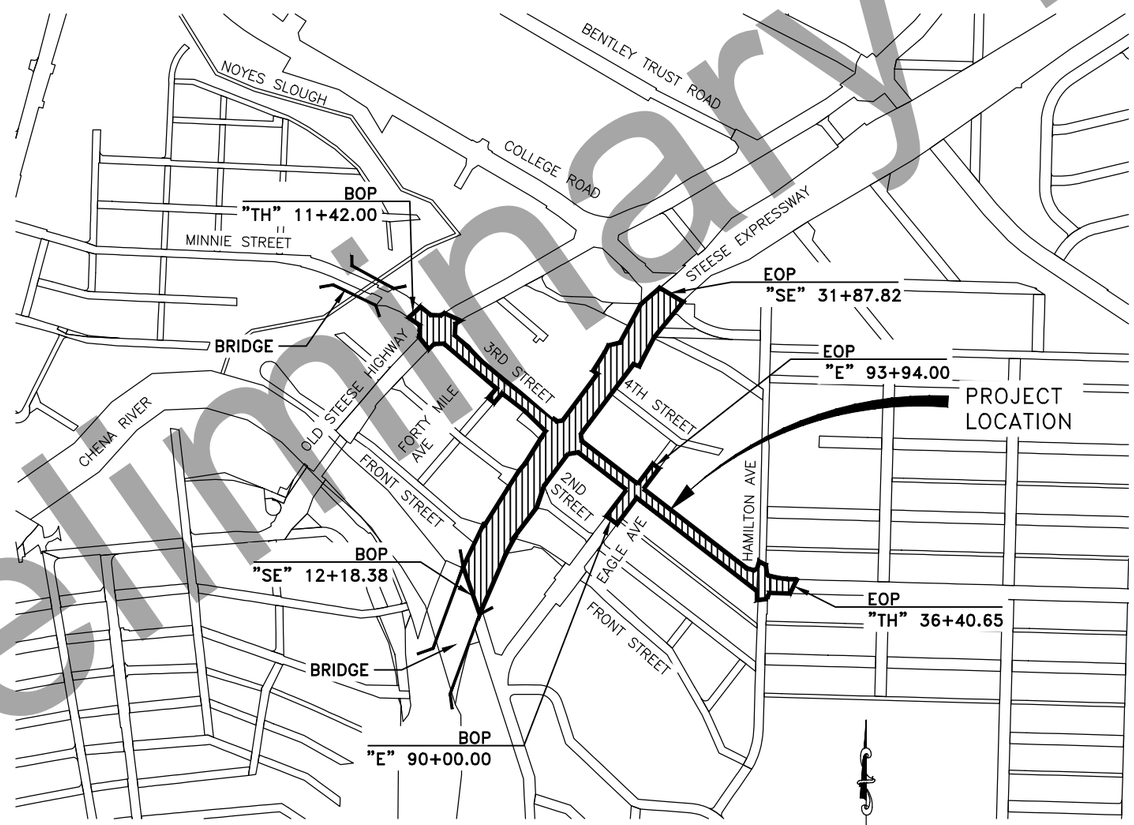
U301–U315	COMMUNICATION & CABLE UTILITIES/VAULT DETAILS
U400–U412	SECONDARY UTILITIES
U413–U423	SERVICE ENTRANCE DETAILS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
F–01.03, G–00.04, G–05.00S, G–09.04S, G–10.10, G–11.00, G–14.00, G–20.11, G–31.01, I–20.20, I–21.10, I–22.10, L–03.10, L–23.01, L–25.00, L–30.10, S–00.11, S–01.01, S–05.01, S–20.10, S–31.01, S–32.00, T–20.03, T–21.03, T–22.03, T–23.00, T–30.11, T–31.00, T–34.01, T–52.20, T–54.00, T–55.00, T–56.00



VICINITY MAP

DESIGN DESIGNATIONS

DESIGNATIONS	3RD STREET	STEESE EXPWY
ADT (2015)	13,302	27,576
ADT (2030)	13,367	30,864
ADT (2040)	13,950	33,989
DHV (%)	10.60%	10.60%
PERCENT TRUCKS (T)	3%	7%
DIRECTIONAL SPLIT (D)	45/55	45/55
DESIGN SPEED (V)	30 MPH	50 MPH
DESIGN ESAL'S (2040)	1,620,200	5,911,547

PROJECT SUMMARY

	3RD STREET	STEESE EXPWY
WIDTH OF PAVEMENT	95.5 FT	102.5 FT
LENGTH OF GRADING	2,488 FT	1,982 FT
LENGTH OF PAVING	2,488 FT	1,982 FT
LENGTH OF PROJECT	2,488 FT	1,982 FT

RUSSELL JOHNSON, P.E., DOT&PF PROJECT MANAGER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED BY:

_____ DATE _____

Sarah E. Schacher, P.E.
Preconstruction Engineer, Northern Region

ACCEPTED FOR CONSTRUCTION:

_____ DATE _____

Ryan F. Anderson, P.E.
Regional Director, Northern Region

PRELIMINARY PS&E
SEPTEMBER, 2018

Preliminary Plans

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	A2	8

	RECOVERED	SET
BLM MONUMENT		
GLO MONUMENT		
USC&GS MONUMENT		
PRIMARY MONUMENT		
CENTERLINE MONUMENT IN CASING		
PRIMARY R.O.W. MONUMENT		
BEARING OBJECT		
MISCELLANEOUS MONUMENT		
LINE OF SIGHT MONUMENT		
CONCRETE R.O.W. MONUMENT		
BENCHMARK		BM
REBAR AND CAP		
REBAR		
IRON PIPE		
PK NAIL		
SPIKE		
HUB AND TACK		
CONSTRUCTION CENTERLINE	5+00	
MISCELLANEOUS CENTERLINE	10+00	
STATION EQUATION	"L"48+97.23 POT BK= "O"48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE	R/W	
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE	C/A	
EXISTING EASEMENT LINE		
PROPOSED EASEMENT LINE		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE	T. 2 N. / T. 1 N. / T. 1 E. / T. 2 E.	
MEANDER LINE	M1 M2 M3	

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)	SS	SS
FUEL LINE	O	O
GAS LINE	G	G
WATER LINE	W	W
METER, VALVE, FIRE HYDRANT	W	W
EXISTING STORM DRAIN (FLOW DIRECTION →)	SD	
PROPOSED STORM DRAIN	S-10, S-11, P-11, SD, P-10, MH	
FIBER OPTIC LINE		
DIRECT BURIAL TELEPHONE CABLE	UGT	T
DIRECT BURIAL ELECTRIC CABLE	E	E
ELECTRIC LINE (OVERHEAD)		
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
TELEPHONE DUCT	T	T
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE	MH	MH
SANITARY SEWER CLEAN OUT		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE	X X X X	X X X X
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX	MB	MB
RAILROAD TRACKS		
RAILROAD DEVICES	CROSS-BUCK, FLASHING LIGHT, CANTILEVER, SWITCH	
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS	H	H = HOUSE G = GARAGE M = MERCHANT/STORE B = BARN S = SHED P = PRIVY SS= SERVICE STATION W = WAREHOUSE
POST OR BOLLARD		
WELL OR MONITORING WELL	W	
SEPTIC PIPE	S	
FUEL TANK FILL PIPE/VENT	P	
SATELLITE DISH	SAT. DISH	
TEST HOLE	TH	
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		
VEHICLE PLUG-IN		
DELINEATOR/GUIDE MARKER		

	EXISTING	PROPOSED
JUNCTION BOX, TYPE IA		5
JUNCTION BOX, TYPE II		6
JUNCTION BOX, TYPE III		3
JUNCTION BOX, ABOVE GRADE		7
SIGNAL FACE, VEHICULAR	42	42
SIGNAL FACE, BACKPLATE	42	42
SIGNAL FACE, LEFT TURN, BACKPLATE	43	43
SIGNAL FACE, PEDESTRIAN	44	44
LOOP DETECTOR	33	73
VIDEO DETECTOR	2	2
RADAR DETECTOR	4	4A
OPTICOM DETECTOR	1	1
PEDESTRIAN PUSH BUTTON	1	1
SIGNAL POST W/O MAST ARM		1
SIGNAL POLE W/MAST ARM	1	1
INTERCONNECT VAULT	I/C	I/C
INTERCONNECT MANHOLE	C	C
TRAFFIC CONTROLLER		M
PAN, TILT, ZOOM CAMERA		
SIGNAL CONTROLLER		
LOAD CENTER		
LUMINAIRE		2
RIGID METAL CONDUIT		
OVERHEAD COMMUNICATION	OHC	
OVERHEAD ELECTRIC	OHE	
OVERHEAD ELECTRIC/ COMMUNICATION	OHE/C	
OVERHEAD ELECTRIC/ TELEPHONE/COMMUNICATION	OHE/T/C	
UNDERGROUND ELECTRIC	UGE	
UNDERGROUND TELEPHONE	UGT	

LEGEND

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	A3	8

ABBREVIATIONS

ABC – AGGREGATE BASE COURSE
AASHTO – AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
AC – ACRES
ACP – ASPHALT CONCRETE PAVEMENT
ACS – ALASKA COMMUNICATIONS SYSTEMS
ADA – AMERICANS WITH DISABILITIES ACT
ADT – ANNUAL AVERAGE DAILY TRAFFIC
AP – ANGLE POINT
ATB – ASPHALT TREATED BASE
AVAP – AS VERTICAL AS POSSIBLE
BLDG – BUILDING
BMP – BEST MANAGEMENT PRACTICES
BOP – BEGINNING OF PROJECT
BSWK – BACK OF SIDEWALK
CABC – CRUSHED ASPHALT BASE COURSE
CB – CATCH BASIN
CDS – CONTRACT DELIVERY SERVICE
CL – CENTER LINE
CMP – CORRUGATED METAL PIPE
CMU – CONCRETE MASONRY UNIT
CO – CLEANOUT
COF – CITY OF FAIRBANKS
CONC – CONCRETE
CONT – CONTINUOUS
CPLG – COUPLING
CPP – CORRUGATED POLYETHYLENE PIPE
CR – CURB RAMP
CTC – CENTER TO CENTER
CTE – CONNECT TO EXISTING
CU – COPPER
DEMO – DEMOLITION
DHV – DESIGN HOURLY VOLUME
DIA – DIAMETER
DIP – DUCTILE IRON PIPE
DOT&PF – DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES
DSC – DESCRIPTION
DTL – DETAIL
DWY – DRIVEWAY
EA – EACH
ED – EDGE DRIVEWAY
EG – EXISTING GROUND
EL – ELEVATION
EOP – END OF PROJECT
EP – EDGE PAVEMENT
ESAL – EQUIVALENT SINGLE AXLE LOAD
EXPWY – EXPRESSWAY
FG – FINISHED GROUND
FH – FIRE HYDRANT
FL – FLOW LINE
GB – GRADE BREAK
GCI – GENERAL COMMUNICATIONS INC.
GP – GRADE POINT
GVEA – GOLDEN VALLEY ELECTRIC ASSOCIATION
HDPE – HIGH DENSITY POLYETHELENE
HMA – HOT MIX ASPHALT
HP – HIGH POINT
IE – INVERT ELEVATION
INV – INVERT
L – LENGTH
LC – LOAD CENTER
LED – LIGHT EMITTING DIODE
LF – LINEAR FEET
LMA – LUMINAIRE MAST ARM
LP – LOW POINT
LT – LEFT
MH – MANHOLE
MIL – MILLIMETERS
MIN – MINIMUM
MJ – MECHANICAL JOINT
MTAC – MATANUSKA TELEPHONE ASSOCIATION COMPANY
MTE – MATCH TO EXISTING
NFS – NON–FROST SUSCEPTIBLE
NTS – NOT–TO–SCALE
OFF – OFFSET
PC – POINT OF CURVATURE
PCC – POINT OF COMPOUND CURVATURE
PGP – PROFILE GRADE POINT
PI – POINT–OF–INTERSECTION
PIB – POINT–OF–INTERSECTION, BUFFER
POC – POINT–ON–CURVE
PRC – POINT–OF–REVERSE CURVE
PT – POINT–OF–TANGENCY
R – RADIUS
RMC – RIGID METAL CONDUIT
ROW – RIGHT–OF–WAY
RP – RADIUS POINT
RPM – REINFORCED PLASTIC MORTAR
RT – RIGHT
RW – RETAINING WALL
SMA – SIGNAL MAST ARM
SS – SANITARY SEWER SERVICE
SSMH – SANITARY SEWER MANHOLE
SHLDR – SHOULDER
SPRK – SPRINKLER
ST – STREET
STA – STATION
SW – SIDEWALK
SWPPP – STORM WATER POLLUTION PREVENTION PLAN
SY – SQUARE YARD
TA – TOP OF ASPHALT
TBC – TOP BACK OF CURB
TC – TOP OF CONCRETE
TCE – TEMPORARY CONSTRUCTION EASEMENT
TCP – TEMPORARY CONSTRUCTION PERMIT
TCP – TRAFFIC CONTROL PLAN
TYP – TYPICAL
U – UTILIDOR
VPI – VERTICAL POINT OF INTERSECTION
W/ – WITH
WS – WATER SERVICE
WWM – WELDED WIRE MESH

GENERAL NOTES

1. THE 2017 EDITION OF THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES (DOT&PF) STANDARD SPECIFICATIONS ARE MADE PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.

2. GRADES, ALIGNMENTS, APPROACH LOCATIONS, LENGTHS AND LOCATIONS OF STORM DRAINS AND UTILITIES AND INSULATION SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL DISTANCES SHOWN IN THE PLANS ARE HORIZONTAL MEASUREMENTS.

3. CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS OUTSIDE OF THE PROJECT LIMITS TO BETTER OR EQUAL–TO–EXISTING CONDITION AT THEIR EXPENSE, UNLESS OTHERWISE AGREED TO WITH DOT&PF.

4. WITHIN THE PROJECT LIMITS PROTECT ALL EXISTING FEATURES DESIGNATED TO REMAIN FROM DAMAGE, UNLESS OTHERWISE NOTED. ANY REPAIRS WILL BE AT THE CONTRACTOR'S EXPENSE.

5. UNLESS OTHERWISE NOTED ON PLANS, PRESERVE AND PROTECT ALL FEATURES ON PRIVATE PROPERTY. WHERE FEATURES CANNOT BE PROTECTED, REMOVE AND REPLACE ITEMS. CONTRACTOR TO RETURN ALL PRIVATE PROPERTY TO MATCH CONDITION PRIOR TO CONSTRUCTION. PAYMENT IS SUBSIDIARY TO PAY ITEMS RELATED TO THE WORK BEING PERFORMED.

6. CLEARING LIMITS SHALL EXTEND A MAXIMUM OF 10 FT BEYOND SLOPE LIMITS (UNLESS NOTED OTHERWISE) AND SHALL NOT EXCEED THE ROW, TCE, OR TCP.

7. ALL LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO HAUL, PLACE, STOCKPILE, AND DOUBLE HANDLE MATERIALS IS SUBSIDIARY TO 203 SERIES PAY ITEMS.

8. ALL REQUIRED EXCAVATIONS ARE SUBSIDIARY TO RESPECTIVE PAY ITEMS.

9. UTILITIES (OVERHEAD AND BURIED), TO THE EXTENT THEY ARE KNOWN, ARE SHOWN ON THE PLANS. BEFORE CONDUCTING ANY GROUND–DISTURBING ACTIVITIES THE CONTRACTOR SHALL VERIFY UTILITY LOCATIONS BY CONTACTING THE DIGLINE AT 1–800–478–3121 OR THE UTILITY COMPANY. UTILITY COMPANIES WITHIN THE PROJECT LIMITS ARE LISTED IN SECTION 651 OF THE SPECIAL PROVISIONS.

10. THE PROJECT LIMITS ARE DEFINED AS FOLLOWS:

    A. TO SAWCUT OR MTE LINES ON STREETS, SIDEWALKS, AND PATHS;

    B. TO THE TCP OR TCE BEYOND THE R/W LINE;

    C. WHERE ALL WORK IS WITHIN THE R/W LINE AND THERE IS NO TCE, TO 10 FEET BEYOND THE BACK OF SIDEWALK OR PATH;

    D. TO THE LIMITS OF STAGING AREAS.

Preliminary Plans

ABBREVIATIONS AND GENERAL NOTES

STATE OF AK 49 PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374–0275
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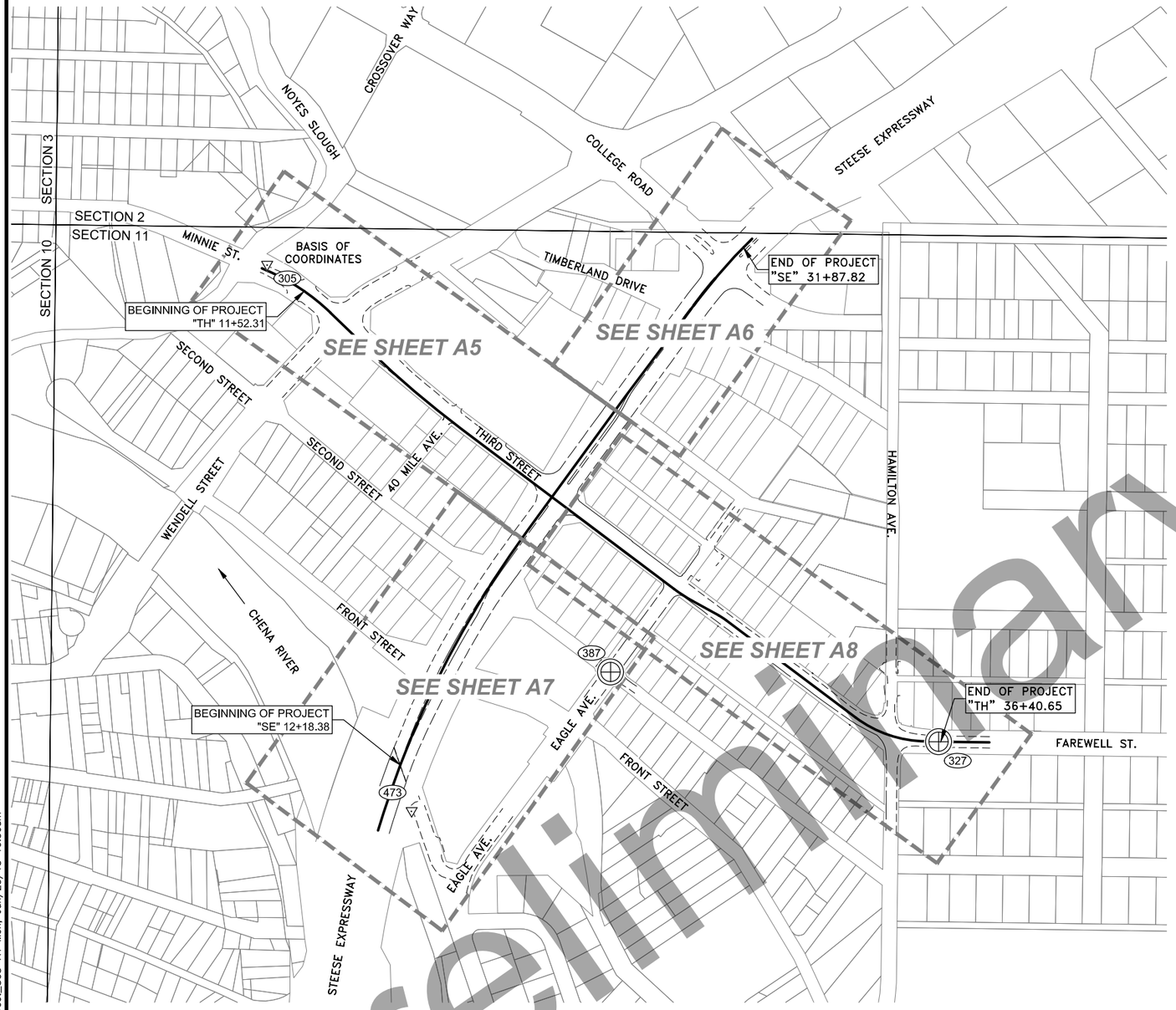
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	A4	8



HORIZONTAL CONTROL STATEMENT

COORDINATE SYSTEM

THIS PROJECT IS LOCATED ENTIRELY WITHIN THE FAIRBANKS LOW DISTORTION PROJECTION (LDP), A LOW DISTORTION PROJECTION CREATED BY THE ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES.

PROJECTION PARAMETERS

PROJECTION NAME: FAIRBANKS LDP
LINEAR UNIT: U.S. SURVEY FOOT
DATUM: NAD83 (2011)
PROJECTION: LAMBERT CONFORMAL CONIC (SINGLE PARALLEL)
STANDARD PARALLEL AND GRID ORIGIN: 64°51'00.0"N
CENTRAL MERIDIAN (GRID ORIGIN): 146°56'00.0"W
FALSE NORTHING: 200,000.0 SFT
FALSE EASTING: 800,000.0 SFT
STANDARD PARALLEL SCALE: 1.00003 (EXACT)

BASIS OF COORDINATES

THE BASIS OF COORDINATES IS POINT 305 HELD AT DOT PROVIDED LOCAL COORDINATES: N=200262.028', E=679655.748'

BASIS OF BEARINGS

PROJECT BEARINGS ARE FAIRBANKS LDP GRID BEARINGS.

VERTICAL CONTROL STATEMENT

THE BASIS OF VERTICAL CONTROL IS NAVD88, HOLDING THE ORTHOMETRIC HEIGHT OF STATION "P 5 RESET 1959" (PID:TT2861) FIXED AT 446.65 FEET, AS SHOWN ON THE NGS DATASHEET. PER THE EXISTING PROJECT DATUM.

3RD STREET - ALIGNMENT TABLE

GEOMETRY POINT	STATION	NORTHING	EASTING
BA	10+00.00	200252.08	679639.28
PC	10+19.07	200244.54	679656.79
RP		199632.92	679393.21
PT	12+59.90	200111.73	679856.12
PC	14+35.90	199989.40	679982.66
RP		202170.682	682091.49
PT	18+09.59	199746.84	680266.62
PI	20+12.24	199624.96	680428.51
PI	23+17.53	199441.38	680672.44
PC	26+52.97	199239.67	680940.46
RP		199639.18	681241.12
PT	27+22.51	199201.85	680998.75
PC	28+15.85	199156.60	681080.39
RP		198981.67	680983.44
PT	28+43.52	199141.56	681103.59
PC	33+56.15	198833.61	681513.42
RP		199133.63	681738.86
PT	35+93.04	198758.38	681733.91
EA	37+94.101	198755.732	681934.95

SURVEY NOTES

1. ALL DIMENSIONS AND COORDINATES SHOWN ARE GROUND IN U.S. SURVEY FEET. ALL DISTANCES SHOWN ARE GROUND DISTANCES.
2. THE FIELD SURVEY WAS CONDUCTED BY LOUNSBURY AND ASSOCIATES, INC. DURING NOVEMBER, 2016.
3. PROJECT HORIZONTAL CONTROL WAS SURVEYED USING NETWORKED STATIC GPS AND CONVENTIONAL SURVEY TECHNIQUES. GPS MEASUREMENTS WERE PERFORMED USING TOPCON GR-5 RECEIVERS AND PROCESSED USING TOPCON MAGNET VER. 4.10 SOFTWARE. THE MINIMUM CLOSURE OF ALL TRAVERSES MEETS OR EXCEEDS 1:10,000.
4. THE PURPOSE OF THIS SURVEY IS TO PROVIDE A DESIGN SURVEY AND A RECORD OF SURVEY (ROS) CONTROL DRAWING FOR DESIGN AND CONSTRUCTION IN SUPPORT OF ROAD IMPROVEMENTS AND ROW MAPPING ON THIRD STREET BETWEEN OLD STEESE HIGHWAY AND HAMILTON AVENUE.
5. VERIFY HORIZONTAL AND VERTICAL CONTROL PRIOR TO USE. ON MULTI YEAR PROJECTS, VERIFY ALL CONTROL ON A SEASONAL BASIS.
6. BACKGROUND INFORMATION IS FOR ORIENTATION PURPOSES ONLY. PARCEL LINEWORK SHOWN HEREON IS DERIVED FROM THE FAIRBANKS NORTH STORE BOROUGH'S GIS DATABASE AND DOES NOT REFLECT SURVEYED BOUNDARIES.
7. EASEMENT LINEWORK SHOWN HEREON IS SHOWN FOR ORIENTATION PURPOSES ONLY AND HAS BEEN REFERENCED TO THE GIS PARCEL LINEWORK MENTIONED ABOVE. THIS LINEWORK IS PER THE RECORDED SUBDIVISION PLATS ONLY AND DOES NOT INCLUDE ALL EASEMENTS AND OTHER ENCUMBRANCES AFFECTING THE PROPERTIES.
8. THIS PORTION OF HIGHWAY IS SHOWN ON U.S.G.S. TOPOGRAPHIC MAP FAIRBANKS D-2 SE.
9. THE RECOVERED MONUMENT TABLE REFERS TO THE POSITION OF PHYSICAL EVIDENCE RECOVERED.
10. THIS SURVEY DOES NOT CONSTITUTE A SUBDIVISION AS DEFINED BY ALASKA STATUTE 40.15.900(5)(A).
11. THE ALIGNMENT GEOMETRY AND STATIONING SHOWN HEREON WERE PROVIDED BY DOT&PF. THEY ARE RELATED TO THE PROJECT DESIGN AND THEY DO NOT BEAR ANY RELATION TO THE RIGHT-OF-WAY CENTERLINE.

T1S R1W
SECTION 11
F.M.

STEESE EXPRESSWAY - ALIGNMENT TABLE

GEOMETRY POINT	STATION	NORTHING	EASTING
BA	10+00.00	198477.43	680005.67
PC	10+60.57	198535.15	680024.04
RP		197666.10	682754.59
PT	12+17.94	198683.72	680075.86
PC	12+17.94	198683.72	680075.86
RP		197563.44	683024.81
PT	20+61.07	199422.77	680476.43
PI	25+82.40	199843.92	680783.70
PC	29+15.79	200110.75	680983.58
RP		198981.60	682531.47
EA	32+26.10	200345.57	681185.92

PRIMARY CONTROL POINTS (NAD83(2011)(EPOCH:2010.0000))

POINT NO.	NORTHING (FBX LDP)	EASTING (FBX LDP)	LATITUDE	LONGITUDE	NORTHING (SPZ3)	EASTING (SPZ3)
305	200262.03	679655.75	64°50'55.3450"N	147°42'23.4074"W	3968251.90	1374851.43
327	198757.68	681774.98	64°50'40.7928"N	147°41'33.9809"W	3966716.49	1376948.09
387	198977.60	680739.60	64°50'42.8345"N	147°41'57.9810"W	3966951.67	1375916.23
473	198537.29	680111.43	64°50'38.4266"N	147°42'12.3838"W	3966520.71	1375281.61

SHEET A4 LEGEND

- CENTERLINE MONUMENT IN CASE
- MAGNAIL
- ### POINT NUMBER IDENTIFIER
- SECTION LINE
- PARCEL LINE
- EDGE OF ASPHALT

I HEREBY CERTIFY THAT I AM PROPERLY REGISTERED AND LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF ALASKA, AND THAT THIS PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT THE MONUMENTS SHOWN HEREON ACTUALLY EXIST AS DESCRIBED, AND THAT ALL DIMENSIONS AND OTHER DETAILS ARE CORRECT TO THE EXTENT SHOWN HEREON.

JACOB M. GERONDALE LS. 11758

GRAPHIC SCALE (FEET)
200 0 100 200 400 800
1"= 200 FT.

STATE OF ALASKA 49TH JACOB M. GERONDALE PRELIMINARY PS&E PROFESSIONAL LAND SURVEYOR

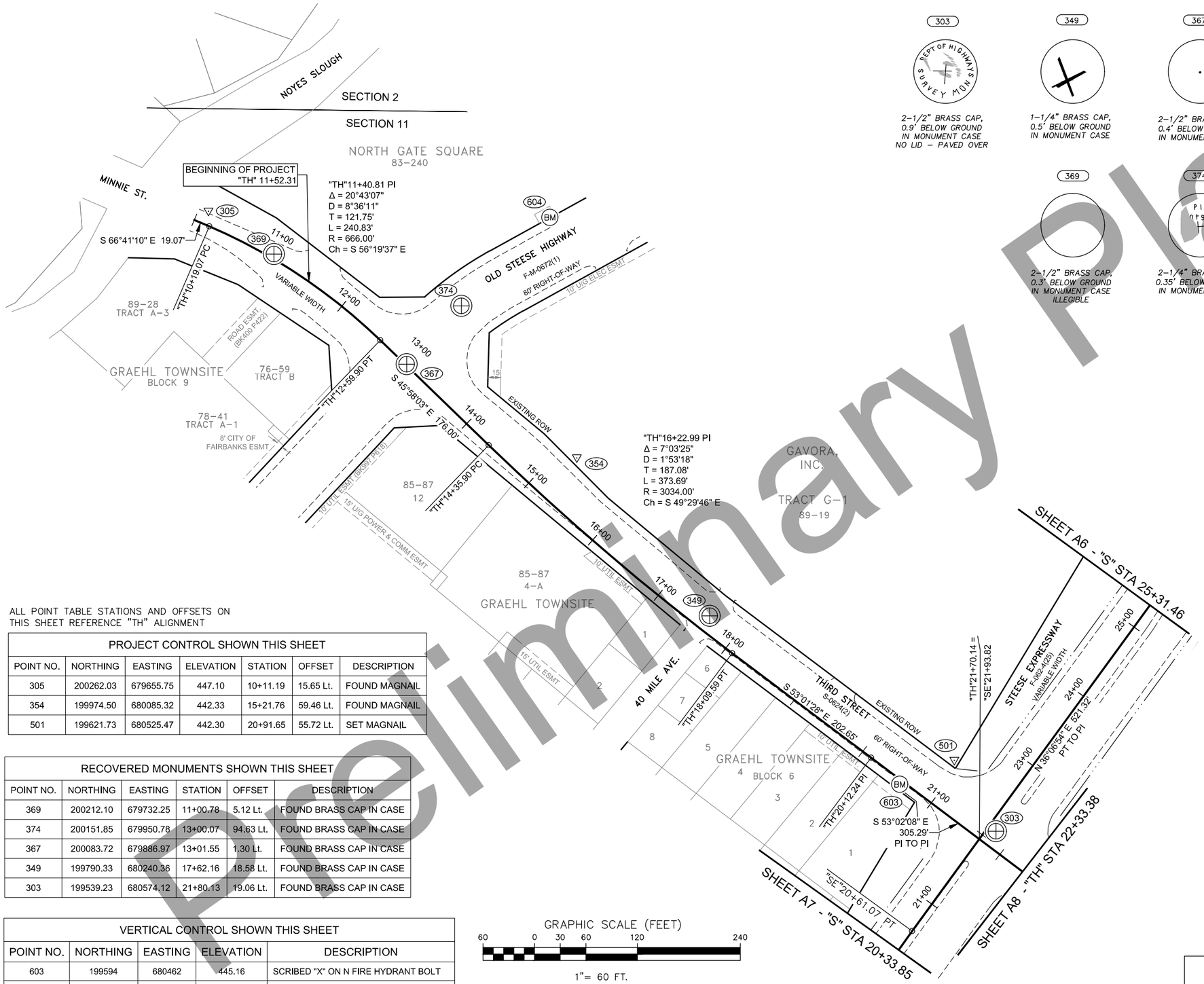
SURVEY CONTROL SHEET

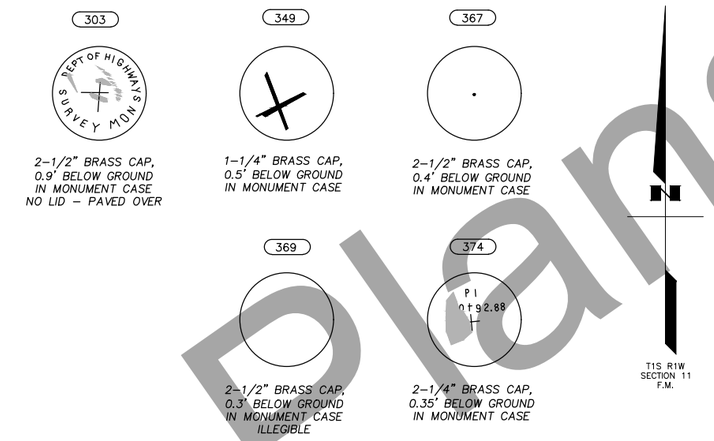
Preliminary Plans

PREPARED BY: LOUNSBURY & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: AECC391, 5300 A STREET, ANCHORAGE, AK 99518 (907) 272-5451
E:\Survey\2015\15-041C Third Street\DWG\Third_Street_SCS-A4 Mon, Jun/25/18 10:30am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	A5	8





SHEET A5 LEGEND

- CENTERLINE MONUMENT IN CASE
- BM TEMPORARY BENCHMARK
- MAGNAIL
- ### POINT NUMBER IDENTIFIER
- SECTION LINE
- PARCEL LINE
- EDGE OF ASPHALT
- ROW LINE
- EASEMENT LINE PER PLAT
- CONTROLLED ACCESS LINE

ALL POINT TABLE STATIONS AND OFFSETS ON THIS SHEET REFERENCE "TH" ALIGNMENT

PROJECT CONTROL SHOWN THIS SHEET

POINT NO.	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
305	200262.03	679655.75	447.10	10+11.19	15.65 Lt.	FOUND MAGNAIL
354	199974.50	680085.32	442.33	15+21.76	59.46 Lt.	FOUND MAGNAIL
501	199621.73	680525.47	442.30	20+91.65	55.72 Lt.	SET MAGNAIL

RECOVERED MONUMENTS SHOWN THIS SHEET

POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
369	200212.10	679732.25	11+00.78	5.12 Lt.	FOUND BRASS CAP IN CASE
374	200151.85	679950.78	13+00.07	94.63 Lt.	FOUND BRASS CAP IN CASE
367	200083.72	679886.97	13+01.55	1.30 Lt.	FOUND BRASS CAP IN CASE
349	199790.33	680240.36	17+62.16	18.58 Lt.	FOUND BRASS CAP IN CASE
303	199539.23	680574.12	21+80.13	19.06 Lt.	FOUND BRASS CAP IN CASE

VERTICAL CONTROL SHOWN THIS SHEET

POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
603	199594	680462	445.16	SCRIBED "X" ON N FIRE HYDRANT BOLT
604	200255	680054	443.17	SCRIBED "X" ON NW FIRE HYDRANT BOLT

GRAPHIC SCALE (FEET)

60 0 30 60 120 240

1"= 60 FT.

SURVEY CONTROL SHEET

STATE OF ALASKA 49TH
PRELIMINARY
PS&E
PROFESSIONAL LAND SURVEYOR

Preliminary Plans

PREPARED BY: LOUNSBURY & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: AECC391, 5300 A STREET, ANCHORAGE, AK 99518 (907) 272-5451
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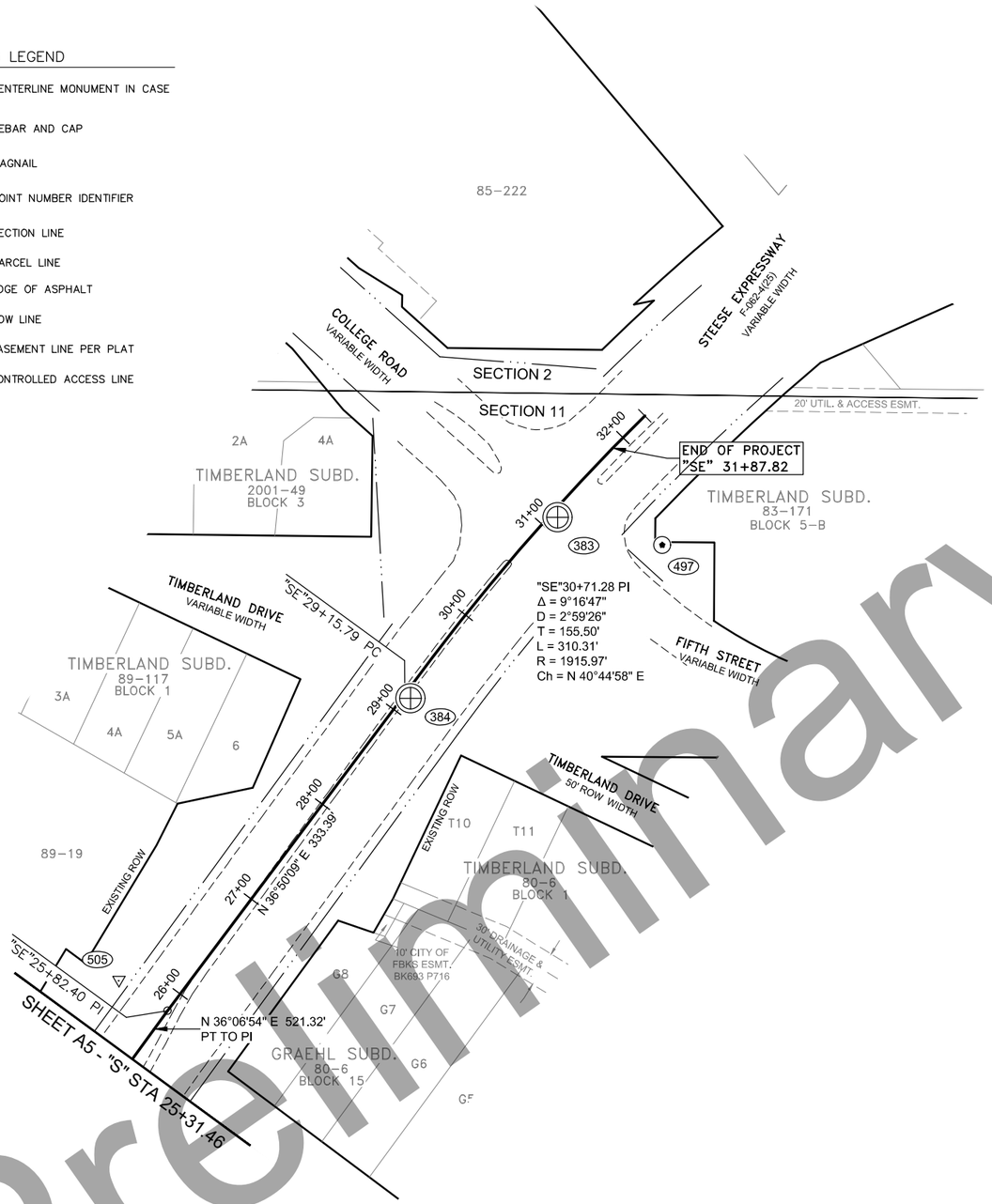
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	A6	8

SHEET A6 LEGEND

- CENTERLINE MONUMENT IN CASE
- REBAR AND CAP
- MAGNAIL
- ### POINT NUMBER IDENTIFIER
- SECTION LINE
- PARCEL LINE
- EDGE OF ASPHALT
- ROW LINE
- EASEMENT LINE PER PLAT
- CONTROLLED ACCESS LINE

T1S R1W
SECTION 11
F.M.



RECOVERED MONUMENTS SHOWN THIS SHEET					
POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
384	200107.28	680988.52	29+15.90	6.03 Rt.	FOUND BRASS CAP IN CASE
383	200259.95	681112.34	31+13.17	5.97 Rt.	FOUND BRASS CAP IN CASE
497	200236.61	681200.58	31+56.87	86.67 Rt.	FOUND REBAR / PLASTIC CAP

PROJECT CONTROL SHOWN THIS SHEET						
POINT NO.	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
505	199869.14	680742.51	443.84	25+78.50	48.15 Lt.	SET MAGNAIL

383

2-1/2" BRASS CAP,
0.7' DOWN
IN MONUMENT CASE

384

2-1/2" BRASS CAP,
0.3' BELOW GROUND
IN MONUMENT CASE

497

1-1/4" YELLOW PLASTIC CAP,
0.2' BELOW GROUND

GRAPHIC SCALE (FEET)

60 0 30 60 120 240

1"= 60 FT.

SURVEY CONTROL SHEET

STATE OF ALASKA
49TH
PRELIMINARY
PS&E
date
PROFESSIONAL LAND SURVEYOR

Preliminary Plans

PREPARED BY: LOUNSBURY & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: AECC391, 5300 A STREET, ANCHORAGE, AK 99518 (907) 272-5451
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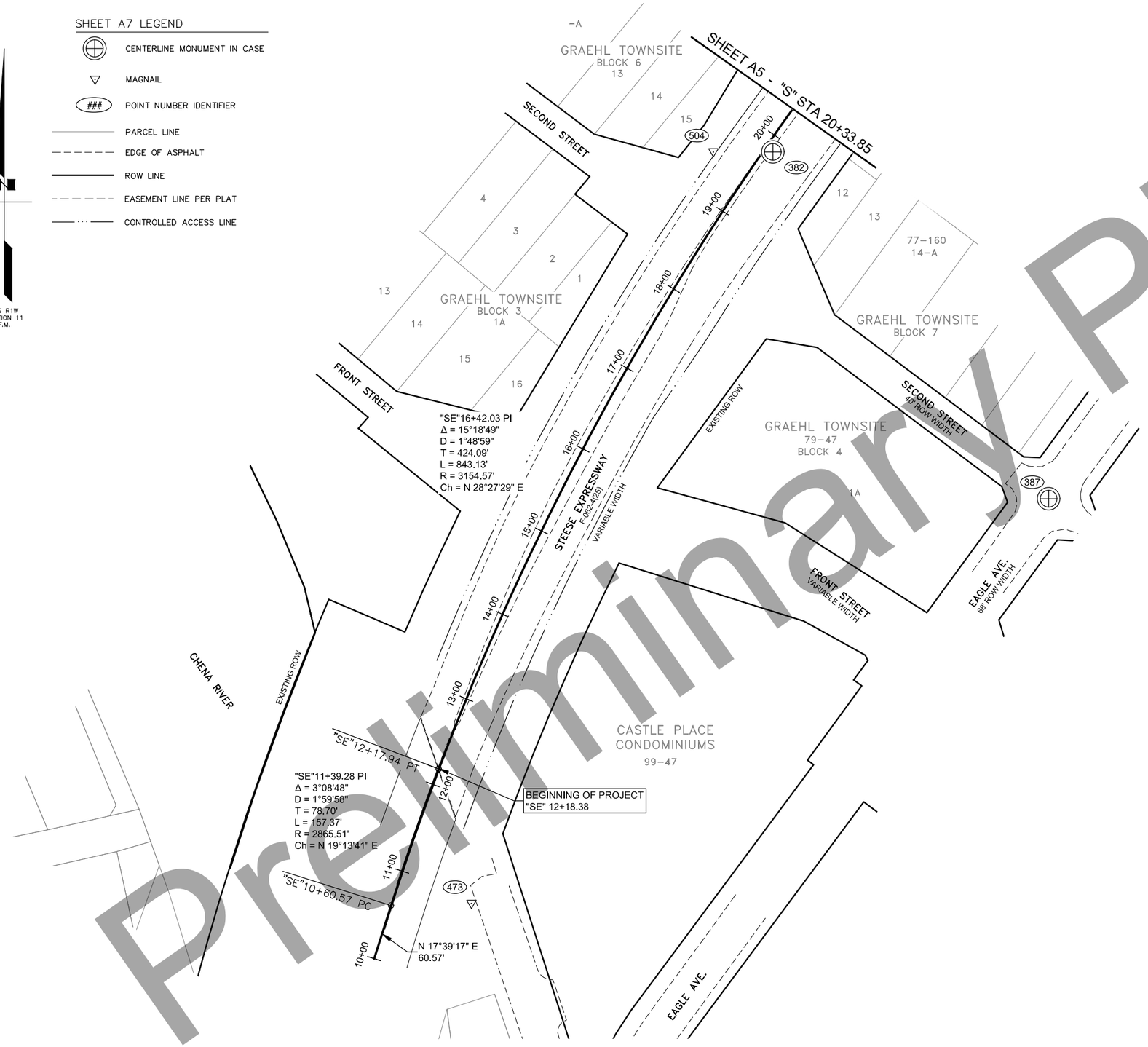
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	A7	8

SHEET A7 LEGEND

- CENTERLINE MONUMENT IN CASE
- MAGNAIL
- ### POINT NUMBER IDENTIFIER
- PARCEL LINE
- EDGE OF ASPHALT
- ROW LINE
- EASEMENT LINE PER PLAT
- CONTROLLED ACCESS LINE

T1S R1W
SECTION 11
F.M.



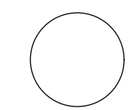
PROJECT CONTROL SHOWN THIS SHEET						
POINT NO.	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
473	198537.29	680111.43	442.64	10+89.96	82.48 Rt.	FOUND MAGNAIL
504	199354.46	680374.71	446.58	19+47.49	43.99 Lt.	SET MAGNAIL

RECOVERED MONUMENTS SHOWN THIS SHEET					
POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
382	199354.72	680439.50	19+84.09	9.33 Rt.	FOUND BRASS CAP IN CASE
387	198977.60	680739.60	26+50.07	330.18 Rt.	FOUND BRASS CAP IN CASE

382

2-1/2" BRASS CAP,
0.4' BELOW GROUND
IN MONUMENT CASE

387



3" BRASS CAP,
0.5' BELOW GROUND
IN MONUMENT CASE
ILLEGIBLE CAP TIED CENTER

GRAPHIC SCALE (FEET)

60 0 30 60 120 240

1"= 60 FT.

Preliminary Plans

SURVEY CONTROL SHEET

STATE OF ALASKA
49TH
PRELIMINARY
PS&E
PROFESSIONAL LAND SURVEYOR

PREPARED BY: LOUNSBURY & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: AECC391, 5300 A STREET, ANCHORAGE, AK 99518 (907) 272-5451
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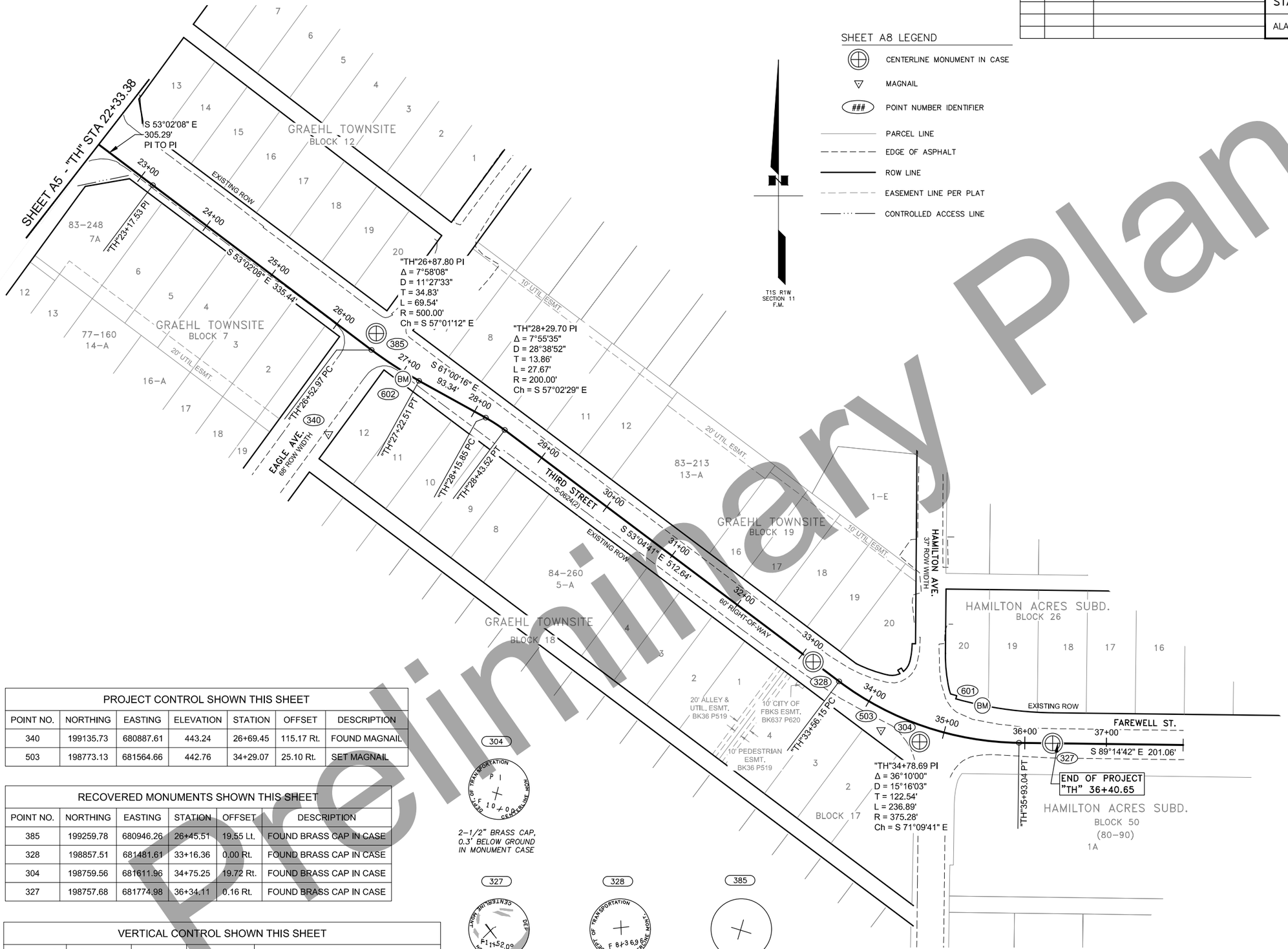
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	A8	8



SHEET A8 LEGEND

- CENTERLINE MONUMENT IN CASE
- MAGNAIL
- ### POINT NUMBER IDENTIFIER
- PARCEL LINE
- EDGE OF ASPHALT
- ROW LINE
- EASEMENT LINE PER PLAT
- CONTROLLED ACCESS LINE

PROJECT CONTROL SHOWN THIS SHEET						
POINT NO.	NORTHING	EASTING	ELEVATION	STATION	OFFSET	DESCRIPTION
340	199135.73	680887.61	443.24	26+69.45	115.17 Rt.	FOUND MAGNAIL
503	198773.13	681564.66	442.76	34+29.07	25.10 Rt.	SET MAGNAIL

RECOVERED MONUMENTS SHOWN THIS SHEET					
POINT NO.	NORTHING	EASTING	STATION	OFFSET	DESCRIPTION
385	199259.78	680946.26	26+45.51	19.55 Lt.	FOUND BRASS CAP IN CASE
328	198857.51	681481.61	33+16.36	0.00 Rt.	FOUND BRASS CAP IN CASE
304	198759.56	681611.96	34+75.25	19.72 Rt.	FOUND BRASS CAP IN CASE
327	198757.68	681774.98	36+34.11	0.16 Rt.	FOUND BRASS CAP IN CASE

VERTICAL CONTROL SHOWN THIS SHEET				
POINT NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
601	198804	681689	444.65	SCRIBED "X" ON S FIRE HYDRANT BOLT
602	199204	680979	445.47	SCRIBED "X" ON WNW FIRE HYDRANT BOLT

304

2-1/2" BRASS CAP,
0.3' BELOW GROUND
IN MONUMENT CASE

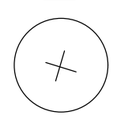
327

2-1/2" BRASS CAP,
0.1' BELOW GROUND
IN MONUMENT CASE
NO LID

328

2-1/2" BRASS CAP,
0.3' BELOW GROUND
IN MONUMENT CASE

385



3" BRASS CAP,
0.8' BELOW GROUND
IN MONUMENT CASE
TOP OF CASE
0.5' BELOW ASPHALT

SURVEY CONTROL SHEET

STATE OF ALASKA
49TH
PRELIMINARY
PS&E
PROFESSIONAL LAND SURVEYOR

Preliminary Plans

PREPARED BY: LOUNSBURY & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: AECC391, 5300 A STREET, ANCHORAGE, AK 99518 (907) 272-5451
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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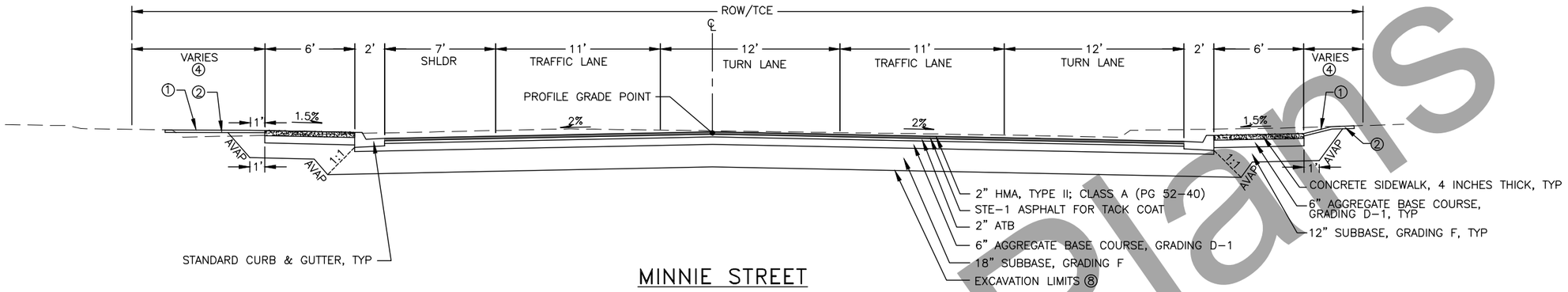
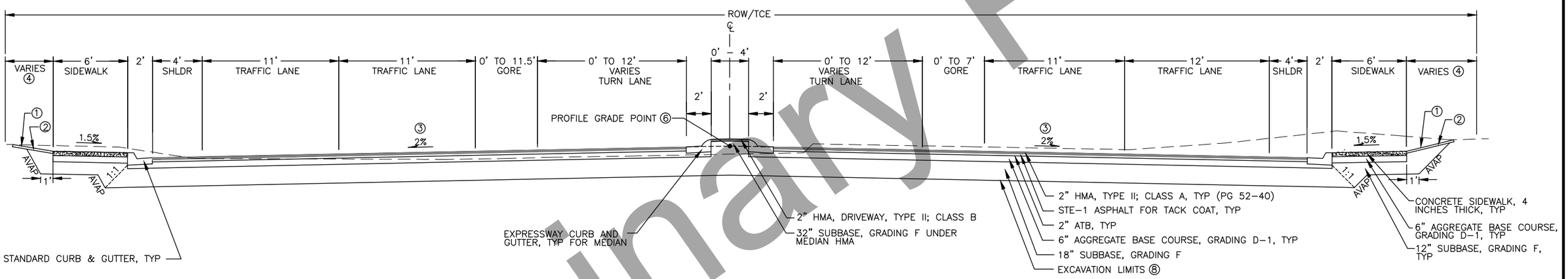


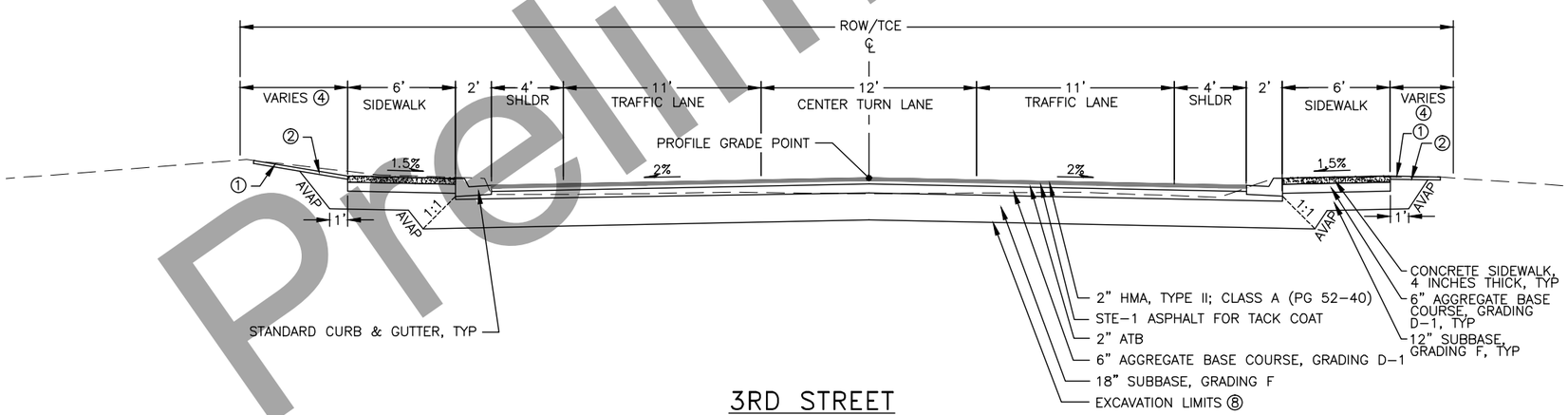
MINNIE STREET

STA "TH" 11+52.31 TO STA "TH" 13+00



3RD STREET

STA "TH" 13+00 TO STA "TH" 21+33
STA "TH" 22+25 TO STA "TH" 25+00



3RD STREET

STA "TH" 28+50 TO STA "TH" 36+40.65

NOTES:

① SLOPE VARIES, 4:1 (H:V) MAX. SLOPE SHALL BE AS FLAT AS POSSIBLE AND MATCH TO EXISTING WITHIN THE ROW/TCE. SLOPES 12:1 OR FLATTER CAN MATCH EXISTING AS SOON AS FEASIBLE.

② SEE SHEET E2 FOR TRANSITION MATERIAL AT BACK OF SIDEWALK.

③ SEE GRADING PLANS FOR VARIANCE IN LANE GRADES AT INTERSECTIONS.

④ SEE RIGHT-OF-WAY MAP AND TEMPORARY CONSTRUCTION EASEMENT PARCEL PLATS FOR LOCATIONS WHERE WIDTHS VARY.

5. PRESERVE AND PROTECT EXISTING SURFACING AND FEATURES ALONG THE BACK OF NEW SIDEWALK BEYOND THE SLOPE LIMITS.

⑥ ROADWAY CROWN FOLLOWS THE ALIGNMENT UNLESS NOTED OTHERWISE ON THE GRADING PLANS. SEE G-SHEETS AND E6 FOR MEDIAN DETAILS WHERE CROWN SHIFTS FROM ALIGNMENT.

7. DRIVEWAYS ARE LOCATED ON BOTH SIDES OF 3RD STREET. SEE DRIVEWAY SUMMARY TABLE ON SHEET D3 FOR NEW DRIVEWAY LOCATION AND CONSTRUCTION INFORMATION.

⑧ SILT AND ORGANIC MATERIAL MAY BE PRESENT WITHIN PROJECT LIMITS. SUBEXCAVATE SILT AND ORGANIC MATERIAL PER DETAIL ON E6. SUBEXCAVATION AND BACKFILL ARE PAID UNDER PAY ITEMS 203(3) AND 304(1).

9. SEE SHEET B3 FOR TYPICAL SECTION BETWEEN "TH" 21+33 TO 22+25.

10. THE EXISTING ASPHALT THICKNESS ON 3RD STREET VARIES BETWEEN 2-3 INCHES.

TYPICAL SECTIONS

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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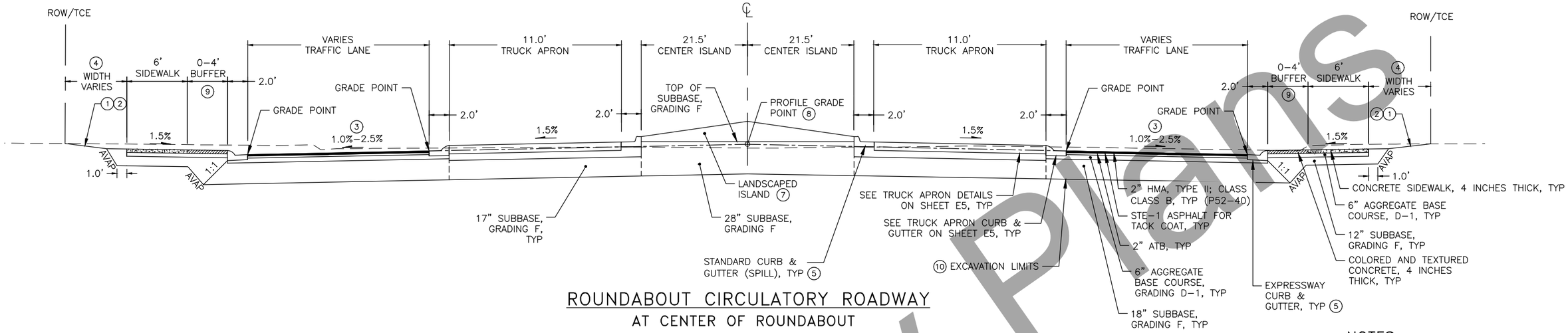
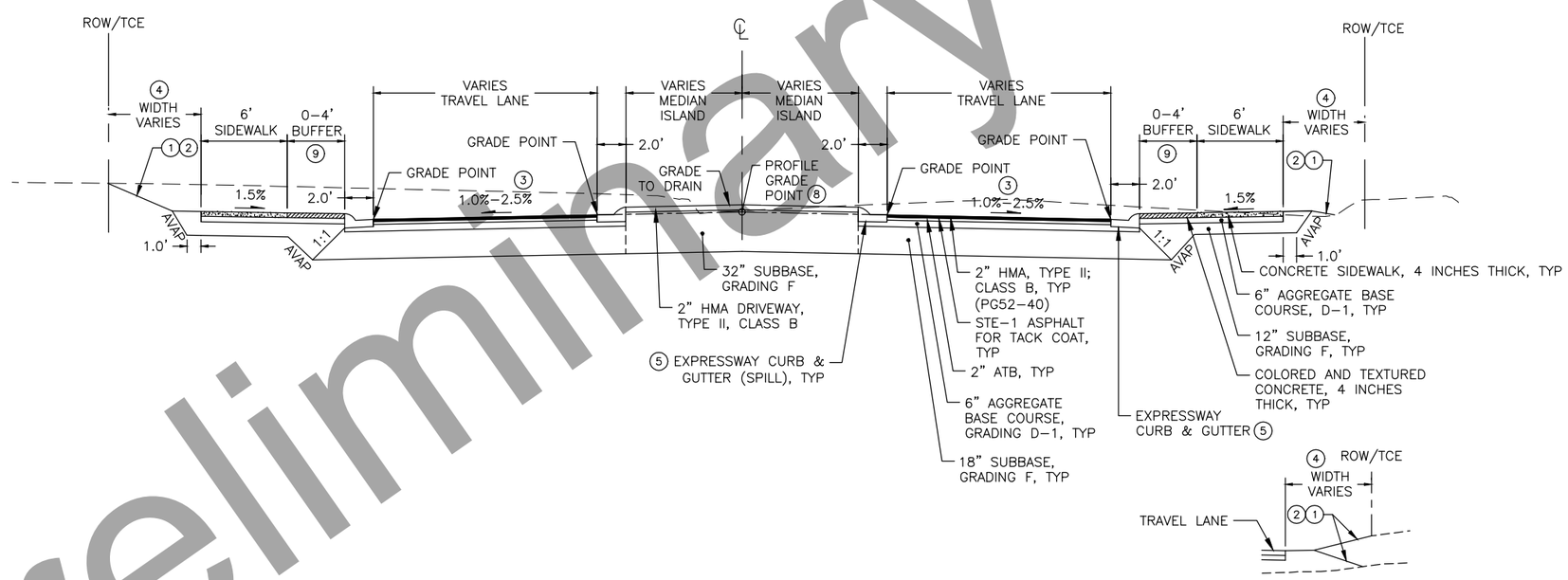
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	B2	3



ROUNDABOUT CIRCULATORY ROADWAY
AT CENTER OF ROUNDABOUT



APPROACH TYPICAL SECTION

"TH" STA 25+00 TO 25+92
"TH" STA 27+05 TO 28+50
"E" STA 90+20 TO 91+41
"E" STA 92+57 TO 93+69.22

SPECIAL END CONDITION
"E" STA 92+85.00 TO 93+69.22

NOTES

1. SLOPE VARIES. 4:1 (H:V) MAX.
2. SEE SHEET E2 FOR TRANSITION MATERIAL AT BACK OF SIDEWALK.
3. SEE GRADING PLANS FOR VARIANCE IN LANE GRADES.
4. SEE RIGHT–OF–WAY MAP AND TEMPORARY CONSTRUCTION EASEMENT PARCEL PLATS FOR LOCATIONS WHERE WIDTHS VARY.
5. SEE SHEET E1 OR DOT&PF STANDARD DRAWING 1.20.20 FOR CURB & GUTTER DETAILS OF SPECIFIED TYPE.
6. PRESERVE AND PROTECT EXISTING SURFACING AND FEATURES ALONG THE BACK OF NEW SIDEWALK THAT ARE BEYOND THE SLOPE LIMITS.
7. SEE L–SHEETS FOR ROUNDABOUT CENTER ISLAND LANDSCAPING PLAN.
8. ROADWAY CROWN FOLLOWS THE ALIGNMENT UNLESS OTHERWISE NOTED ON THE GRADING PLANS. SEE G–SHEETS AND SHEET E6 FOR MEDIAN DETAILS WHERE CROWN SHIFTS FROM ALIGNMENT.
9. BUFFER VARIES. SEE SHEET G5 FOR GRADING DETAILS.
10. SILT AND ORGANIC MATERIAL MAY BE PRESENT WITHIN PROJECT LIMITS. SUBEXCAVATE SILT AND ORGANIC MATERIAL PER DETAIL ON SHEET E6. SUBEXCAVATION IS PAID UNDER ITEM 203(4).
11. DRIVEWAYS ARE LOCATED ON BOTH SIDES OF 3RD STREET. SEE DRIVEWAY SUMMARY TABLE ON SHEET D3 FOR NEW DRIVEWAY LOCATIONS AND CONSTRUCTION INFORMATION.

TYPICAL SECTIONS

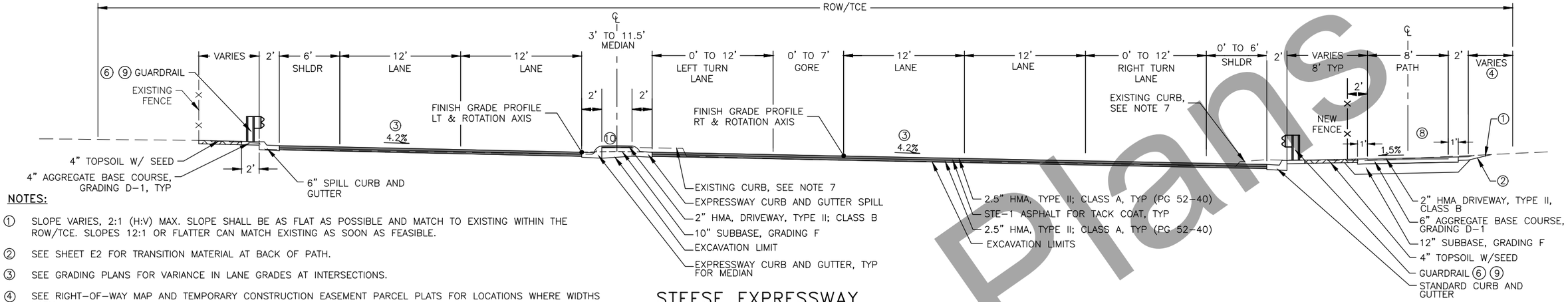
STATE OF ALASKA 49TH PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 – 3rd Street Widening Design\Final Design_CD\62541_B-B2 Fri, Aug/31/18 03:51pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	B3	3



STEESE EXPRESSWAY

STA BOP TO STA "SE" 21+20

NOTES:

① SLOPE VARIES, 2:1 (H:V) MAX. SLOPE SHALL BE AS FLAT AS POSSIBLE AND MATCH TO EXISTING WITHIN THE ROW/TCE. SLOPES 12:1 OR FLATTER CAN MATCH EXISTING AS SOON AS FEASIBLE.

② SEE SHEET E2 FOR TRANSITION MATERIAL AT BACK OF PATH.

③ SEE GRADING PLANS FOR VARIANCE IN LANE GRADES AT INTERSECTIONS.

④ SEE RIGHT-OF-WAY MAP AND TEMPORARY CONSTRUCTION EASEMENT PARCEL PLATS FOR LOCATIONS WHERE WIDTHS VARY.

5. PRESERVE AND PROTECT EXISTING SURFACING AND FEATURES ALONG THE BACK OF PATH BEYOND THE SLOPE LIMITS.

⑥ BEGIN AND END GUARDRAIL LOCATIONS VARY, SEE F-SHEETS FOR LIMITS. INSTALL SO FACE OF GUARDRAIL IS FLUSH WITH FACE OF CURB. WHERE GUARDRAIL IS PRESENT, REDUCE STANDARD CURB HEIGHT TO 4 INCHES. TRANSITION OVER 10 FT.

⑦ WHERE NEW HMA EXTENDS INTO EXISTING CURBING OR UNPAVED SHOULDERS, CONSTRUCT THE TYPICAL SECTION SHOWN. BOTTOM OF EXCAVATION LIMITS SHALL EXTEND FROM THE EXISTING CURB TO 2 FEET BEYOND THE BACK OF NEW CURB. SEE NOTE 8 ON SHEET B1 REGARDING SUBEXCAVATION.

⑧ PATH LOCATION FOLLOWS TYPICAL SECTION EXCEPT FROM STA "P" 300+00 TO STA "P" 306+68, WHERE IT FOLLOWS THE P-ALIGNMENT. UNIFORMLY TRANSITION PATH CROSS SLOPE FROM 1.5% RIGHT TO 1.5% LEFT BETWEEN STA "P" 305+00 AND STA "P" 306+00. SEE PATH TYPICAL, SHEET E3.

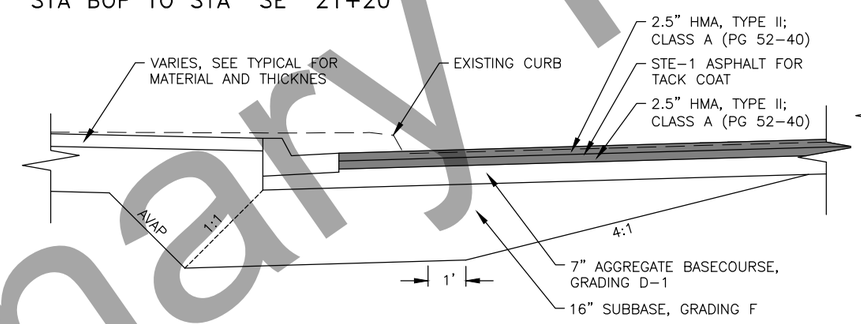
⑨ FOR PARALLEL GUARDRAIL TERMINALS, CONSTRUCT THE GUARDRAIL TERMINAL WIDENING IN ACCORDANCE WITH THE "STANDARD DETAIL" ON STANDARD DRAWING 6-20.11. THE END OFFSET (X) SHALL BE 2 FEET.

⑩ GRADE MEDIAN TO DRAIN. SEE DETAILS ON E3.

⑪ TRANSITION OFFSET TO 5' BETWEEN STA "SE" 27+75 AND "SE" 28+30. MAINTAIN 5' OFFSET TO END OF PATH AT STA "SE" 30+32. USE 1.5:1 FILL SLOPE FROM STA "SE" 28+30 TO STA "SE" 29+50.

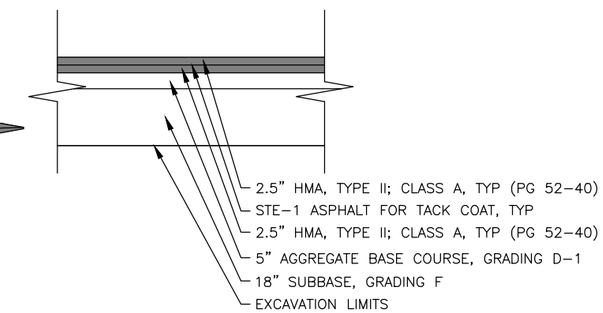
12. THE INTERSECTION OF 3RD STREET AND STEESE EXPRESSWAY IN GENERAL FOLLOWS THE EXCAVATION OF 3RD STREET AND THE HMA OF THE STEESE EXPRESSWAY, WITH DETAILS AS NOTED.

13. EXISTING STEESE EXPRESSWAY TYPICAL SECTION IS 2" HMA, 6" AGGREGATE BASE COURSE, OVER SELECTED MATERIAL.



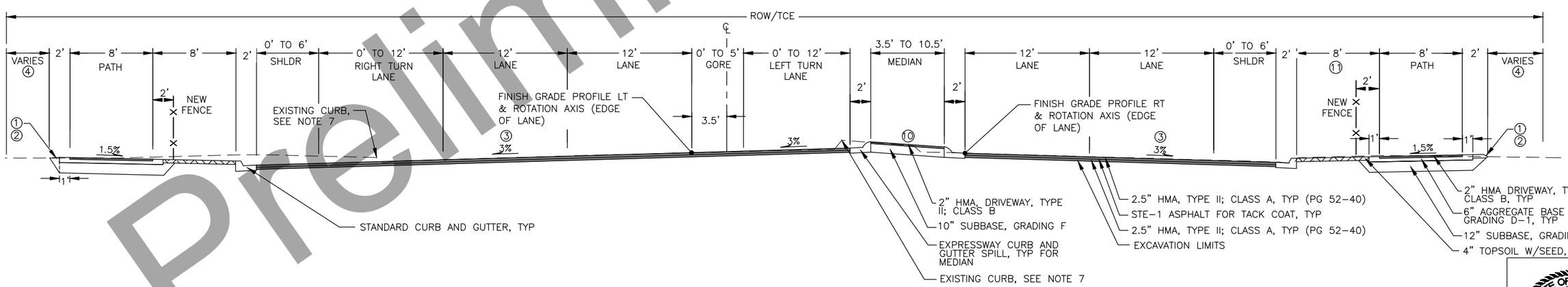
STEESE EXPRESSWAY EXCAVATION

NTS



STEESE EXPRESSWAY

STA "SE" 21+20 TO STA "SE" 22+80
(SEE NOTE 12)



STEESE EXPRESSWAY

STA "SE" 22+80 TO STA 30+79

TYPICAL SECTIONS

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	C1	2

ESTIMATE OF QUANTITIES

ITEM NO.	SSHC 2017 ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
201.0009.0000	201(3B)	CLEARING AND GRUBBING	LUMP SUM	ALL REQUIRED
202.0001.0000	202(1)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	ALL REQUIRED
202.0013.0000	202(125)	REMOVAL OF STRUCTURES AND OBSTRUCTIONS BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
203.0003.0000	203(3)	UNCLASSIFIED EXCAVATION	CUBIC YARD	24,500
301.0001.00D1	301(1)	AGGREGATE BASE COURSE, GRADING D-1	TON	9,500
304.2000.000F	304(1)	SUBBASE, GRADING F	TON	35,700
306.0001.0000	306(1)	ATB	TON	2,100
306.0002.5240	306(102)	ASPHALT BINDER, GRADE PG 52-40	TON	126
401.0001.002A	401(1A)	HMA, TYPE II; CLASS A	TON	7,400
401.0004.5240	401(4)	ASPHALT BINDER, GRADE PG 52-40	TON	498
401.0008.002A	401(8A)	HMA PRICE ADJUSTMENT, TYPE II; CLASS A	CONTINGENT SUM	ALL REQUIRED
401.0009.0000	401(9)	LONGITUDINAL JOINT DENSITY PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
401.0010.0001	401(10)	PAVEMENT SMOOTHNESS PRICE ADJUSTMENT, METHOD 1	CONTINGENT SUM	ALL REQUIRED
401.0012.002B	401(12)	HMA, DRIVEWAY, TYPE II; CLASS A	TON	910
401.0015.0000	401(15)	ASPHALT MATERIAL PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
402.0001.STE1	402(1)	STE-1 ASPHALT FOR TACK COAT	TON	16
501.2015.0000	501(124)	TRUCK APRON CONCRETE	CUBIC YARD	62
550.0003.0000	550(3)	CLASS B CONCRETE	CUBIC YARD	23
603.0021.0012	603(21-12)	12 INCH CORRUGATED POLYETHYLENE PIPE	LINEAR FOOT	1,947
603.0021.0018	603(21-18)	18 INCH CORRUGATED POLYETHYLENE PIPE	LINEAR FOOT	1,490
604.0001.0000	604(1)	STORM SEWER MANHOLE	EACH	10
604.0002.0000	604(2)	SANITARY SEWER MANHOLE	EACH	5
604.0003.0000	604(3)	RECONSTRUCT EXISTING MANHOLE	EACH	6
604.0004.0000	604(4)	ADJUST EXISTING MANHOLE	EACH	8
604.0005.000A	604(5)	INLET, TYPE A	EACH	42
606.0001.0000	606(1)	W-BEAM GUARDRAIL	LINEAR FOOT	510
606.0002.0000	606(2)	THRIE BEAM GUARDRAIL	LINEAR FOOT	60
606.0013.0000	606(13)	PARALLEL GUARDRAIL TERMINAL	EACH	1
606.2007.0000	606(108)	CRASH CUSHION	EACH	1
607.0003.0000	607(3)	CHAIN LINK FENCE	LINEAR FOOT	2,450
608.0001.0004	608(1A)	CONCRETE SIDEWALK, 4 INCHES THICK	SQUARE YARD	4,050
608.0006.0000	608(6)	CURB RAMP	EACH	46
608.2013.0005	NONE	CONCRETE SLABS, COLORED & PATTERN IMPRINTED, 4 INCHES THICK	SQUARE YARD	240
609.0002.0001	609(2)	CURB AND GUTTER, TYPE I	LINEAR FOOT	15,000
615.0001.0000	615(1)	STANDARD SIGN	SQUARE FOOT	459
615.0002.0000	615(2)	REMOVE AND RELOCATE EXISTING SIGN	EACH	15
615.0006.0000	615(6)	SALVAGE SIGN	EACH	15
618.0002.0000	618(2)	SEEDING	POUND	75
618.0003.0000	618(3)	WATER FOR SEEDING	M GAL.	38
620.0001.0000	620(1)	TOPSOIL	SQUARE YARD	4,200
621.2010.0000	621(103)	ROUNDABOUT CENTER ISLAND LANDSCAPING	LUMP SUM	ALL REQUIRED
626.0001.0008	626(1-8)	SANITARY SEWER CONDUIT, 8 INCH	LINEAR FOOT	1,001
626.0002.0000	626(2)	SEWER SERVICE CONNECTION	EACH	1
626.2003.0000	626(101)	SEWER FLUSHWELL	EACH	1
627.0001.0006	627(1-6)	6 INCH DUCTILE IRON WATER CONDUIT, CLASS 350	LINEAR FOOT	245
627.0001.0008	627(1-8)	8 INCH DUCTILE IRON WATER CONDUIT, CLASS 350	LINEAR FOOT	1,545
627.0001.0010	627(1-10)	10 INCH DUCTILE IRON WATER CONDUIT, CLASS 350	LINEAR FOOT	145
627.0003.0000	627(3)	INSTALL VALVE BOX	EACH	16
627.0005.0000	627(5)	FIRE HYDRANT INSTALLATION	EACH	5
627.0008.0000	627(8)	WATER SERVICE CONNECTION	EACH	9
627.0009.0006	627(9-6)	INSTALL 6 INCH GATE VALVE	EACH	7
627.0009.0008	627(9-8)	INSTALL 8 INCH GATE VALVE	EACH	8
627.0009.0010	627(9-10)	INSTALL 10 INCH GATE VALVE	EACH	1
627.0010.0000	627(10)	ADJUSTMENT OF VALVE BOX	EACH	2
627.2004.0000	627(104)	SPRINKLER SERVICE RECONNECTION	EACH	4
630.2000.0000	630(103)	GEOTEXTILE, SEPARATION BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
639.0001.0000	639(102)	DRIVEWAY	EACH	17
640.0001.0000	640(1)	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQUIRED

ESTIMATE OF QUANTITIES

ITEM NO.	SSHC 2017 ITEM NO.	ITEM DESCRIPTION	PAY UNIT	TOTAL QUANTITY
641.0001.0000	641(1)	EROSION, SEDIMENT AND POLLUTION CONTROL ADMINISTRATION	LUMP SUM	ALL REQUIRED
641.0003.0000	641(3)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL	LUMP SUM	ALL REQUIRED
641.0004.0000	641(4)	TEMPORARY EROSION, SEDIMENT AND POLLUTION CONTROL ADDITIVES	CONTINGENT SUM	ALL REQUIRED
641.0006.0000	641(6)	WITHHOLDING	CONTINGENT SUM	ALL REQUIRED
641.0007.0000	641(7)	SWPPP MANAGER	LUMP SUM	ALL REQUIRED
642.0001.0000	642(1)	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
642.0003.0000	642(3)	THREE PERSON SURVEY PARTY	HOUR	80
642.0004.0000	642(4)	SET PRIMARY MONUMENT	EACH	12
643.0002.0000	643(2)	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
643.0023.0000	643(23)	TRAFFIC PRICE ADJUSTMENT	CONTINGENT SUM	ALL REQUIRED
643.0025.0000	643(25)	TRAFFIC CONTROL	CONTINGENT SUM	ALL REQUIRED
643.2005.0000	643(117)	PUBLIC INFORMATION	LUMP SUM	ALL REQUIRED
644.0001.0000	644(1)	FIELD OFFICE	LUMP SUM	ALL REQUIRED
644.0006.0000	644(6)	VEHICLES	LUMP SUM	ALL REQUIRED
644.0015.0000	644(15)	NUCLEAR TESTING EQUIPMENT STORAGE SHED	EACH	1
645.0001.0000	645(1)	TRAINING PROGRAM, 2 TRAINEE/APPRENTICE	LABOR HOUR	1,000
646.0001.0000	646(1)	CPM SCHEDULING	LUMP SUM	ALL REQUIRED
660.0001.0000	660(1)-1A	TRAFFIC SIGNAL SYSTEM COMPLETE - OLD STEESE HIGHWAY	LUMP SUM	ALL REQUIRED
660.0001.0000	660(1)-2A	TRAFFIC SIGNAL SYSTEM COMPLETE - STEESE EXPRESSWAY	LUMP SUM	ALL REQUIRED
660.0001.0000	660(1)-3A	TRAFFIC SIGNAL SYSTEM COMPLETE - HAMILTON AVENUE	LUMP SUM	ALL REQUIRED
660.0003.0000	660(3)-A	HIGHWAY LIGHTING SYSTEM COMPLETE - DOT&PF	LUMP SUM	ALL REQUIRED
660.0003.0001	660(3)-B	HIGHWAY LIGHTING SYSTEM COMPLETE - COF	LUMP SUM	ALL REQUIRED
660.2004.0000	660(138)	ADJUST TRAFFIC BOX	EACH	3
660.2018.0000	660(144)	TRAFFIC SIGNAL SYSTEM BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
661.0002.0000	661(2)	LOAD CENTER, TYPE 1A	EACH	3
661.0006.0000	661(6)	TRANSFORMER, 10 KVA	EACH	1
661.2002.0000	661(103)	REMOVE EXISTING LOAD CENTER	EACH	4
662.2006.0000	662(114)-A	UTILITY RELOCATION, GVEA PRIMARY	LUMP SUM	ALL REQUIRED
662.2006.0000	662(114)-B	UTILITY RELOCATION, GVEA SECONDARY	LUMP SUM	ALL REQUIRED
662.2006.0000	662(114)-C	UTILITY RELOCATION, GCI PRIMARY	LUMP SUM	ALL REQUIRED
662.2006.0000	662(114)-D	UTILITY RELOCATION, GCI SECONDARY	LUMP SUM	ALL REQUIRED
662.2006.0000	662(114)-E	UTILITY RELOCATION, ACS PRIMARY	LUMP SUM	ALL REQUIRED
662.2006.0000	662(114)-F	UTILITY RELOCATION, ACS SECONDARY	LUMP SUM	ALL REQUIRED
662.2006.0000	662(114)-G	UTILITY RELOCATION, ALASCONNECT	LUMP SUM	ALL REQUIRED
662.2007.0000	662(115)	ELECTRICAL/TELECOMMUNICATIONS VAULT, DUCTBANK AND CONDUIT SYSTEM	LUMP SUM	ALL REQUIRED
670.2002.0000	670(108)	MMA PAVEMENT MARKINGS INLAID	LUMP SUM	ALL REQUIRED
670.2014.0000	670(118)	MMA PAVEMENT MARKINGS INLAID BY DIRECTIVE	CONTINGENT SUM	ALL REQUIRED
802.2000.0000	802(102)-A	CONTAMINATED SOIL REMOVAL AND DISPOSAL, SOLVENTS	CONTINGENT SUM	ALL REQUIRED
802.2000.0000	802(102)-B	CONTAMINATED SOIL REMOVAL AND DISPOSAL, PETROLEUM	CONTINGENT SUM	ALL REQUIRED
802.2001.0000	802(111)-A	LABORATORY TESTING, SOLVENTS	EACH	5
802.2001.0000	802(111)-B	LABORATORY TESTING, PETROLEUM	EACH	5
802.2001.0000	802(111)-C	LABORATORY TESTING, PAH AND METALS	EACH	2
802.2002.0000	802(112)	MEDIA SPECIALIST	LUMP SUM	ALL REQUIRED

Preliminary Plans

ESTIMATE OF QUANTITIES
1 OF 2

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	C2	2

TABLE OF ESTIMATING FACTORS

ITEM NO.	ITEM DESCRIPTION	ESTIMATING FACTOR
301(1)	AGGREGATE BASE COURSE, GRADING D-1	2 TON/CY
304(1)	SUBBASE, GRADING F	2 TON/CY
306(1)	ATB	113 LB/SY/IN
306(102)	ASPHALT BINDER, GRADE PG 52-40	6% OF 306(1) QUANTITY
401(1)	HMA, TYPE II; CLASS B	113 LB/SY/IN
401(4)	ASPHALT BINDER, GRADE PG 52-40	6% OF 401(1) QUANTITY
401(12)	HMA, DRIVEWAY, TYPE II; CLASS B	113 LB/SY/IN
402(1)	STE-1 ASPHALT FOR TACK COAT	0.1 GAL/SY
618(2)	SEEDING	2 LB/MSF
618(3)	WATER FOR SEEDING	1 GAL/SF

ESTIMATED LUMP SUM QUANTITIES

ITEM NO.	ITEM DESCRIPTION	TOTAL QUANTITY
201(3B)	CLEARING AND GRUBBING	1.8 ACRES
621(103)	ROUNDABOUT CENTER ISLAND LANDSCAPING	
	PRICKLY ROSE	126 EACH
	ROUND RIVER ROCK	23 CY
	MSE WALL (WALL FACE)	125 SF
644(6)	VEHICLES	3 EACH
670(108)	MMA PAVEMENT MARKINGS INLAID	
	LONGITUDINAL STRIPES	20,734 LF
	TRANSVERSE MARKINGS AND WORDS/SYMBOLS	7,811 SF

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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ESTIMATE OF QUANTITIES
2 OF 2

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	D1	3

501(124)	TRUCK APRON CONCRETE					
SHEET	FROM STATION	OFFSET (FT)	TO STATION	OFFSET	VOLUME (CY)	REMARKS
F5	'TH' STA 26+14	LT/RT	'TH' STA 26+83	LT/RT	62	ROUNDABOUT TRUCK APRON
				TOTAL:	62	

550(3)	CLASS B CONCRETE					
SHEET	FROM STATION	OFFSET (FT)	TO STATION	OFFSET	VOLUME (CY)	REMARKS
F1	'TH' STA 12+19	22 LT	'TH' STA 12+64	75 LT	7	CURB RETAINING WALL
F3	'TH' STA 22+72	49 LT	'TH' STA 23+83	49 LT	10	SIDEWALK
F7	'TH' STA 33+51	30 LT	'TH' STA 34+25	62 LT	6	SIDEWALK
				TOTAL:	23	

606(1)	W-BEAM GUARDRAIL					
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F9	'SE' STA 12+03	RT	'SE' STA 14+70	RT	267	
F9-F10	'SE' STA 12+93	LT	'SE' STA 15+27	LT	234	
				TOTAL:	501	
				ROUNDED TOTAL:	510	

606(2)	THRIE BEAM GUARDRAIL					
SHEET	FROM STATION	OFFSET (FT)	TO STATION	OFFSET (FT)	LENGTH (LF)	REMARKS
F9	'SE' STA 11+73	RT	'SE' STA 12+03	RT	30	
F9	'SE' STA 12+63	LT	'SE' STA 12+93	LT	30	
				TOTAL:	60	

606(13)	PARALLEL GUARDRAIL TERMINAL			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F10	'SE' STA 15+26	LT	1	
		TOTAL:	1	

606(108)	CRASH CUSHION			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F9	'SE' STA 12+59	CL	1	
		TOTAL:	1	

607(3)	CHAIN LINK FENCE					
SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F9-F11	'SE' STA 11+65	45' RT	'SE' STA 21+04	67' RT	942	
F11-F13	'SE' STA 22+80	60' RT	'SE' STA 30+32	30' RT	748	
F11-F13	'SE' STA 22+83	47' LT	'SE' STA 30+23	45' LT	743	
				TOTAL:	2,433	
				ROUNDED TOTAL:	2,450	

608(1A)	CONCRETE SIDEWALK, 4 INCHES THICK						
SHEET	SEGMENT REFERENCE NUMBER	FROM STATION	OFFSET (FT)	TO STATION	OFFSET	AREA (SY)	REMARKS
F2	1	'TH' STA 11+50	40 RT	'TH' STA 12+71	96 RT	99	
F2	2	'TH' STA 11+66	29 LT	'TH' STA 12+72	91 LT	99	
F2-F4	3	'TH' STA 13+41	114 LT	'TH' STA 21+27	89 LT	634	
F2-F3	4	'TH' STA 13+35	102 RT	'TH' STA 17+43	85 RT	317	
F3-F4	5	'TH' STA 17+76	86 RT	'TH' STA 21+36	95 RT	344	
F4	6A	'TH' STA 22+23	87 LT	'TH' STA 24+00	40 LT	234	
F5	6B	'TH' STA 24+00	46 LT	'TH' STA 26+21	90 LT	189	
F8	6C	'E' STA 92+92	28 LT	'E' STA 93+59	25 LT	48	
F4	7A	'TH' STA 22+32	89 RT	'TH' STA 24+00	36 RT	149	
F5	7B	'TH' STA 24+00	42 RT	'TH' STA 26+14	93 RT	188	
F8	7C	'E' STA 90+20	30 LT	'E' STA 91+10	32 LT	71	
F5	8A	'TH' STA 26+76	73 RT	'TH' STA 29+00	29 RT	174	
F6-F7	8B	'TH' STA 29+00	23 RT	'TH' STA 34+94	102 RT	435	
F8	8C	'E' STA 90+20	30 RT	'E' STA 91+28	33 RT	89	
F5	9A	'TH' STA 26+87	82 LT	'TH' STA 29+00	29 LT	183	
F6-F7	9B	'TH' STA 29+00	23 LT	'TH' STA 34+30	76 LT	369	
F7	10	'TH' STA 34+67	81 LT	'TH' STA 36+01	30 LT	102	
F7	11	'TH' STA 35+20	70 RT	'TH' STA 35+96	27 RT	76	
F13	12	'TH' STA 30+32	54 RT	'TH' STA 30+83	125 RT	150	
F13	13	'TH' STA 31+31	77 RT	'TH' STA 31+55	52 RT	33	
F13	14	'TH' STA 31+44	97 LT	'TH' STA 31+75	46 LT	63	
					TOTAL:	4,046	
					ROUNDED TOTAL:	4,050	

Preliminary Plans

SUMMARY TABLES

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	D2	3

608(6) CURB RAMP

SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F2	'TH' STA 11+62	34 RT	1	UNIDIRECTIONAL
F2	'TH' STA 11+77	24 LT	1	UNIDIRECTIONAL
F2	'TH' STA 12+49	40 RT	1	PARALLEL
F2	'TH' STA 12+62	52 RT	1	PARALLEL
F2	'TH' STA 12+46	28 LT	1	PARALLEL
F2	'TH' STA 12+63	46 LT	1	PARALLEL
F2	'TH' STA 13+41	57 RT	1	PARALLEL
F2	'TH' STA 13+55	43 RT	1	PARALLEL
F3	'TH' STA 17+33	56 RT	1	PARALLEL
F2	'TH' STA 13+43	62 LT	1	PARALLEL
F2	'TH' STA 13+57	47 LT	1	PARALLEL
F4	'TH' STA 21+07	47 LT	1	PARALLEL
F4	'TH' STA 21+24	66 LT	1	PERPENDICULAR
F3	'TH' STA 17+86	59 RT	1	PARALLEL
F4	'TH' STA 21+11	54 RT	1	PERPENDICULAR
F4	'TH' STA 21+27	69 RT	1	PERPENDICULAR
F4	'TH' STA 22+37	67 RT	1	PERPENDICULAR
F4	'TH' STA 22+53	49 RT	1	PARALLEL
F4	'TH' STA 22+25	66 LT	1	PERPENDICULAR
F4	'TH' STA 22+48	43 LT	1	PERPENDICULAR
F5	'TH' STA 25+69	26 RT	1	TYPE A
F5	'TH' STA 25+68	13 RT	1	TYPE B
F5	'TH' STA 25+68	13 LT	1	TYPE B
F5	'TH' STA 25+68	29 LT	1	TYPE A
F5	'TH' STA 26+26	82 RT	1	TYPE A
F5	'TH' STA 26+32	77 LT	1	TYPE A
F5	'TH' STA 26+40	83 RT	1	TYPE B
F5	'TH' STA 26+45	78 LT	1	TYPE B
F5	'TH' STA 26+51	83 RT	1	TYPE B
F5	'TH' STA 26+56	78 LT	1	TYPE B
F5	'TH' STA 26+62	83 RT	1	TYPE A
F5	'TH' STA 26+73	76 LT	1	TYPE C
F5	'TH' STA 27+28	9 RT	1	TYPE B
F5	'TH' STA 27+27	22 RT	1	TYPE A
F5	'TH' STA 27+27	20 LT	1	TYPE A
F5	'TH' STA 27+28	7 LT	1	TYPE B
F7	'TH' STA 34+47	23 RT	1	PARALLEL
F7	'TH' STA 34+73	36 RT	1	PARALLEL
F7	'TH' STA 34+27	47 LT	1	PERPENDICULAR
F7	'TH' STA 35+29	34 RT	1	PARALLEL
F7	'TH' STA 34+91	42 LT	1	PARALLEL
F7	'TH' STA 35+26	21 LT	1	PARALLEL
F8	'E' STA 26+36	156 LT	1	TYPE D
F13	'SE' STA 30+73	68 RT	1	PERPENDICULAR
F13	'SE' STA 31+43	58 RT	1	PERPENDICULAR
F13	'SE' STA 31+55	61 LT	1	PERPENDICULAR
		TOTAL:	46	

608(101) COLORED TEXTURED CONCRETE, 4 INCHES THICK

SHEET	FROM STATION	TO STATION	OFFSET	AREA (SY)	REMARKS
F5	'TH' STA 25+23	'TH' STA 25+57	LT	13	
F5	'TH' STA 25+24	'TH' STA 25+58	RT	12	
F5	'TH' STA 25+78	'TH' STA 26+23	LT	27	
F5	'TH' STA 25+80	'TH' STA 26+23	RT	27	
F5	'TH' STA 26+83	'TH' STA 27+17	LT	24	
F5	'TH' STA 26+70	'TH' STA 27+17	RT	23	
F5	'TH' STA 27+38	'TH' STA 28+32	LT	40	
F5	'TH' STA 27+38	'TH' STA 28+31	RT	40	
F8	'E' STA 90+86	'E' STA 91+09	LT	7	
F8	'E' STA 90+62	'E' STA 91+08	RT	18	
			TOTAL:	240	

609(2) CURB AND GUTTER, TYPE I

SHEET	FROM STATION	OFFSET	TO STATION	OFFSET	LENGTH (LF)	REMARKS
F2	'TH' STA 11+48	40' RT	'TH' STA 12+73	96' RT	166	
F2	'TH' STA 11+64	29' LT	'TH' STA 12+74	90' LT	163	
F2–F3	'TH' STA 13+33	102' RT	'TH' STA 17+45	85' RT	488	
F2–F3	'TH' STA 13+61	2' RT	'TH' STA 17+33	8' LT	754	MEDIAN PERIMETER
F2–F4	'TH' STA 13+39	115' LT	'TH' STA 21+29	89' LT	876	
F3–F4	'TH' STA 17+74	86' RT	'TH' STA 21+38	95' RT	417	
F3–F4	'TH' STA 17+93	14 RT	'TH' STA 21+00	8 LT	625	MEDIAN PERIMETER
F4	'TH' STA 22+21	87' LT	'TH' STA 24+00	38' LT	211	
F4	'TH' STA 22+30	89' RT	'TH' STA 24+00	34' RT	200	
F4	'TH' STA 22+58	14' RT	'TH' STA 24+00	16' RT	287	MEDIAN PERIMETER
F5	'TH' STA 24+00	40 LT	'TH' STA 26+11	44 LT	215	
F5	'TH' STA 24+00	35' RT	'TH' STA 26+03	41' RT	207	
F5	'TH' STA 24+00	13' RT	'TH' STA 25+90	CL	408	MEDIAN PERIMETER
F5	'TH' STA 26+81	56 LT	'TH' STA 29+00	23 LT	234	
F5	'TH' STA 26+80	49' RT	'TH' STA 29+00	23' RT	228	
F5	'TH' STA 27+07	CL	'TH' STA 28+01	CL	210	MEDIAN PERIMETER
F5	'TH' STA 26+13	CL	'TH' STA 26+83	CL	220	TRUCK APRON PERIMETER
F5	'TH' STA 26+26	CL	'TH' STA 26+70	CL	138	CENTER ISLAND PERIMETER
F6–F7	'TH' STA 29+00	21' LT	'TH' STA 34+30	82' LT	570	
F6–F7	'TH' STA 29+00	21' RT	'TH' STA 34+91	82' RT	635	
F7	'TH' STA 34+64	80' LT	'TH' STA 36+49	18' LT	206	
F7	'TH' STA 35+19	74' RT	'TH' STA 36+33	18' RT	157	
F8	'E' STA 90+20	22 LT	'E' STA 91+62	42 LT	147	
F8	'E' STA 90+20	22' RT	'E' STA 91+53	37' RT	138	
F8	'E' STA 92+40	CL	'E' STA 91+40	CL	118	MEDIAN PERIMETER
F8	'E' STA 92+47	39 LT	'E' STA 93+67	50 LT	148	
F8	'E' STA 92+58	29' RT	'E' STA 92+84	21' RT	27	
F8	'E' STA 92+59	CL	'E' STA 93+11	CL	120	MEDIAN PERIMETER
F9–F11	'SE' STA 11+76	35' RT	'SE' STA 21+04	59' RT	916	
F9–F11	'SE' STA 12+61	36' LT	'SE' STA 20+98	36' LT	847	
F9–F11	'SE' STA 12+95	1' RT	'SE' STA 21+21	CL	1,660	MEDIAN PERIMETER
F11–F13	'SE' STA 22+80	53' RT	'SE' STA 30+84	116' RT	847	
F11–F13	'SE' STA 22+83	40' LT	'SE' STA 30+23	36' LT	742	
F11–F13	'SE' STA 22+68	17' RT	'SE' STA 30+59	17' RT	1,592	MEDIAN PERIMETER
				TOTAL:	14,917	
				ROUNDED TOTAL:	15,000	

618(2) SEEDING

SHEET	FROM STATION	TO STATION	OFFSET	QUANTITY (LB)	REMARKS
F3	'TH' STA 15+00	'TH' STA 20+00	RT	0.7	
F4	'TH' STA 20+00	'TH' STA 24+00	RT	1.5	
F5	'TH' STA 24+00	'TH' STA 24+93	LT/RT	1.0	
F5	'TH' STA 26+94	'TH' STA 28+30	LT/RT	1.9	
F5	'TH' STA 28+89	'TH' STA 29+00	LT/RT	0.0	
F6	'TH' STA 29+00	'TH' STA 33+20	LT/RT	1.5	
F7	'TH' STA 33+20	'TH' STA 36+41	LT/RT	4.9	
F8	'E' STA 90+20	'E' STA 90+51	LT/RT	0.1	
F8	'E' STA 90+20	'E' STA 90+30	LT/RT	0.0	
F9	'SE' STA 10+00	'SE' STA 15+00	LT/RT	12.0	
F10	'SE' STA 15+00	'SE' STA 20+00	LT/RT	16.9	
F11	'SE' STA 20+00	'SE' STA 23+80	LT/RT	8.0	
F12	'SE' STA 23+80	'SE' STA 29+00	LT/RT	20.3	
F13	'SE' STA 29+00	'SE' STA 32+26	LT/RT	6.1	
			TOTAL:	74.9	
			ROUNDED TOTAL:	75	

SUMMARY TABLES

STATE OF AK 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	D3	3

620(1)	TOPSOIL				
SHEET	FROM STATION	TO STATION	OFFSET	AREA (SY)	REMARKS
F3	'TH' STA 15+00	'TH' STA 20+00	RT	38	
F4	'TH' STA 20+00	'TH' STA 24+00	RT	84	
F5	'TH' STA 24+00	'TH' STA 24+93	LT/RT	56	
F5	'TH' STA 26+94	'TH' STA 28+30	LT/RT	106	
F5	'TH' STA 28+89	'TH' STA 29+00	LT/RT	2	
F6	'TH' STA 29+00	'TH' STA 33+20	LT/RT	83	
F7	'TH' STA 33+20	'TH' STA 36+41	RT	273	
F8	'E' STA 90+20	'E' STA 90+51	LT/RT	7	
F8	'E' STA 90+20	'E' STA 90+30	LT/RT	1	
F9	'SE' STA 10+00	'SE' STA 15+00	LT/RT	665	
F10	'SE' STA 15+00	'SE' STA 20+00	LT/RT	939	
F11	'SE' STA 20+00	'SE' STA 23+80	LT/RT	441	
F12	'SE' STA 23+80	'SE' STA 29+00	LT/RT	1,127	
F13	'SE' STA 29+00	'SE' STA 32+26	LT/RT	340	
			TOTAL:	4,161	
			ROUNDED TOTAL:	4,200	

639(102)	DRIVEWAY								
SHEET	STATION	OFFSET	TYPE			RADIUS (LF)	WIDTH (LF)*	LENGTH (LF)*	REMARKS
			PUBLIC (EA)	RES. (EA)	COMM. (EA)				
F2	'TH' STA 14+58	40' LT			1	CURB CUT	42	28	HMA
F3	'TH' STA 17+63	40' LT			1	CURB CUT	42	19	HMA
F3	'TH' STA 19+38	40' LT			1	CURB CUT	42	19	HMA
F3	TH' STA 20+38	46' RT			1	CURB CUT	36	19	HMA
F4	'TH' STA 23+24	36' RT			1	CURB CUT	37	32	HMA
F4	'TH' STA 23+78	36' RT			1	CURB CUT	42	19	HMA
F5	TH' STA 28+18	28' LT			1	CURB CUT	36	8	AGGREGATE BASE COURSE, GRADING D-1
F5	'TH' STA 28+57	26' LT			1	CURB CUT	36	8	HMA
F6	'TH' STA 29+00	23' RT			1	CURB CUT	30	14	AGGREGATE BASE COURSE, GRADING D-1
F6	TH' STA 29+58	23' LT			1	CURB CUT	36	8	AGGREGATE BASE COURSE, GRADING D-1
F6	'TH' STA 30+05	23' LT			1	CURB CUT	42	19	HMA
F6	'TH' STA 30+38	23' RT			1	CURB CUT	28	14	AGGREGATE BASE COURSE, GRADING D-1
F6	'TH' STA 30+93	23' RT			1	CURB CUT	27	15	AGGREGATE BASE COURSE, GRADING D-1
F6	'TH' STA 31+04	23' LT			1	CURB CUT	42	19	HMA
F6	'TH' STA 31+91	23' RT			1	CURB CUT	36	14	AGGREGATE BASE COURSE, GRADING D-1
F6	'TH' STA 31+92	23' LT			1	CURB CUT	36	19	HMA
F6	'TH' STA 32+62	23' LT			1	CURB CUT	36	19	HMA
F7	'TH' STA 33+38	23' RT			1	CURB CUT	29	14	AGGREGATE BASE COURSE, GRADING D-1
F8	'E' STA 90+46	26' RT			1	CURB CUT	20	4	HMA
F8	'E' STA 90+69	26' LT			1	CURB CUT	24	6	AGGREGATE BASE COURSE, GRADING D-1
		TOTAL:			20				*SEE DETAIL, SHEET E3

660(138)	ADJUST TRAFFIC BOX			
SHEET	STATION	OFFSET	QUANTITY (EA)	REMARKS
F13	'SE' STA 30+46	54 RT	1	TRAFFIC SIGNAL TYPE 2 JUNCTION BOX
F13	'SE' STA 31+52	54 RT	1	
F13	'SE' STA 31+67	58 LT	1	
		TOTAL:	3	

Preliminary Plans

SUMMARY TABLES

STATE OF AK 49 PRELIM PS&E PROFESSIONAL ENGINEER

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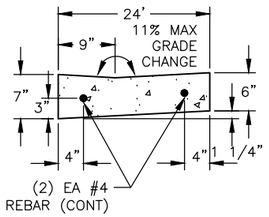
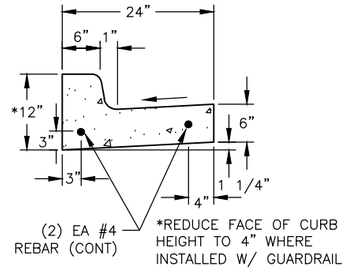
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	E1	6



CURB RAMP CURB AND GUTTER
NTS



STANDARD CURB AND GUTTER
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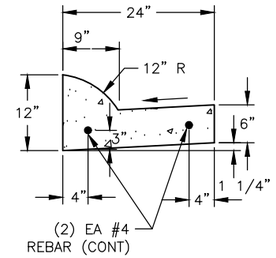

EXPRESSWAY CURB AND GUTTER
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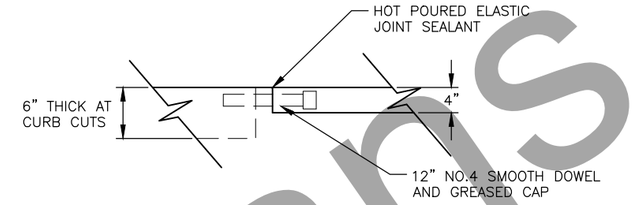
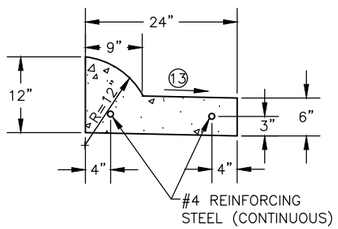


DOWEL DETAIL
NTS



EXPRESSWAY CURB & GUTTER SPILL
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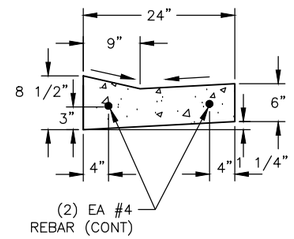

DEPRESSED CURB AND GUTTER
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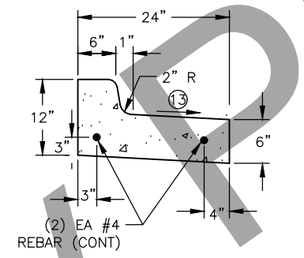
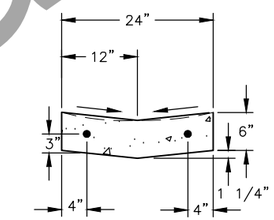
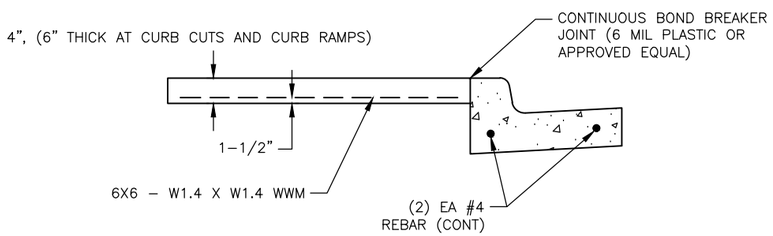


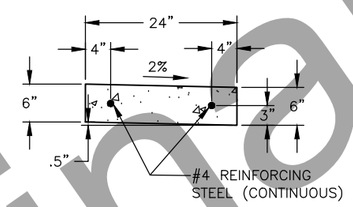
6" SPILL CURB AND GUTTER
NTS



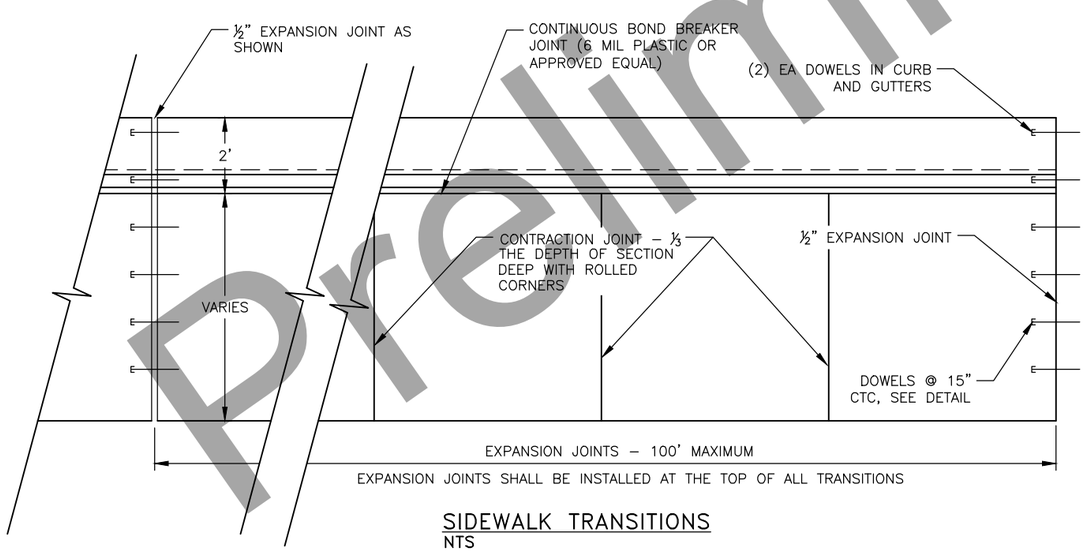
VALLEY GUTTER
NTS



STANDARD SIDEWALK, CURB & GUTTER
NTS



ADA CURB & GUTTER SPILL
NTS



SIDEWALK TRANSITIONS
NTS

NOTES:

1. CURB CUT AND CURB RAMP SECTIONS SHALL BE 6" THICK TO INCLUDE TRANSITIONS.
2. INSTALL CONTINUOUS FULL DEPTH ⅛" CONSTRUCTION JOINT AT ALL LOCATIONS WHERE SIDEWALK AND CURB (ANY TYPE) MEET.
3. PROTECT CONCRETE DURING CURE.
4. SEAL ALL EXPANSION JOINTS WITH HOT POURED ELASTIC TYPE JOINT SEAL, CONFORMING TO AASHTO DESIGNATION M173–60.
5. FOR SIDEWALKS LARGER OR DIFFERENTLY CONFIGURED THAN SHOWN, PLACE EXPANSION AND CONTRACTION JOINTS AS ENGINEER DIRECTS.
6. INSTALL ½" CONSTRUCTION JOINT MATERIAL BETWEEN NEW CONCRETE AND ADJACENT BUILDINGS, POLES AND HYDRANTS.
7. WWM STEEL REINFORCEMENT FOR PEDESTRIAN RAMPS AND CURB CUTS SHALL BE 6"X6"–W2.9 X W2.9 WWM. FOR NORMAL SIDEWALK REINFORCEMENT SHALL BE 6"X6"–W1.4 X W1.4 ALL STEEL SHALL BE SET ON SPACERS TO POSITION STEEL 1–½" UP FROM BOTTOM OF SIDEWALK.
8. EXPANSION AND CONTRACTION JOINTS IN THE SIDEWALK SHALL LINE UP WITH EXPANSION AND CONTRACTION JOINTS IN THE CURB.
9. FOR SIDEWALK REINFORCEMENT, POSITION STEEL 1–½" UP FROM BOTTOM OF SIDEWALK.
10. CONCRETE SHALL RECEIVE A MEDIUM BROOMED FINISH RUNNING PERPENDICULAR TO THE CURB ON STRAIGHT RUNS, RAMP RUNS, AND UPPER LANDINGS AND PARALLEL TO THE DIRECTION OF TRAVEL ON LOWER LANDINGS.
11. SAWCUT ALL MATCH LINES WHERE NEW CONSTRUCTION OF PAVEMENT, SIDEWALK OR CURBING ABUTS EXISTING. SAWCUTS SUBSIDIARY TO 202(1).
12. CONTROL POINT FOR ALL CURB AND GUTTER SHALL BE THE LIP OF THE GUTTER.

13. GUTTER PAN CROSS SLOPE TO MATCH ROAD CROSS SLOPE.

MISCELLANEOUS DETAILS

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	E2	6

3RD ST BACK OF SIDEWALK MATERIAL

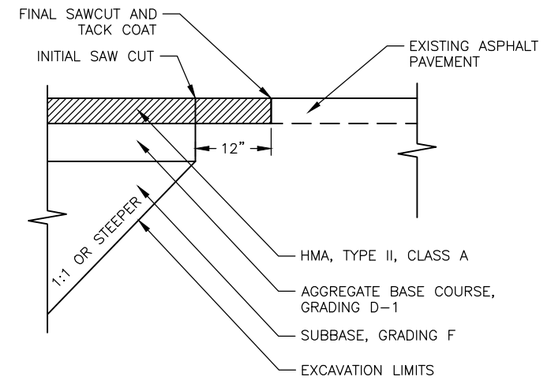
STATION LEFT				STATION RIGHT			
BEGIN STA	END STA	AREA SY	MATERIAL	BEGIN STA	END STA	AREA SY	MATERIAL
"TS" 11+64	"TS" 12+66	99	HMA	"TS" 11+50	"TS" 12+65	88	HMA
"TS" 13+45	"TS" 14+37	101	HMA	"TS" 13+41	"TS" 13+83	97	HMA
"TS" 14+38	"TS" 14+81	112	HMA, CC	"TS" 13+83	"TS" 17+37	202	BASE COURSE
"TS" 14+81	"TS" 17+42	119	HMA	"TS" 17+82	"TS" 17+88	4	BASE COURSE
"TS" 17+42	"TS" 17+84	76	HMA, CC	"TS" 17+93	"TS" 19+38	50	BASE COURSE
"TS" 17+84	"TS" 19+17	51	HMA	"TS" 19+38	"TS" 21+20	112	GRASS
"TS" 19+17	"TS" 19+59	76	HMA, CC	"TS" 22+94	"TS" 22+98	4	Concrete
"TS" 19+59	"TS" 20+98	51	HMA	"TS" 22+94	"TS" 23+06	5	HMA
"TS" 23+83	"TS" 24+00	11	GRASS	"TS" 23+06	"TS" 23+96	236	HMA, CC
"TS" 24+00	"TS" 24+93	56	GRASS	"TS" 24+00	"TS" 25+40	24	BASE COURSE
"TS" 24+93	"TS" 25+99	107	BASE COURSE	"TS" 25+40	"TS" 25+90	19	HMA
"TS" 26+94	"TS" 28+30	106	GRASS	"TS" 26+90	"TS" 29+00	41	BASE COURSE
"TS" 28+30	"TS" 28+89	12	HMA	"TS" 28+80	"TS" 29+16	492	BASE COURSE, CC
"TS" 28+89	"TS" 29+00	2	GRASS	"TS" 29+16	"TS" 29+55	2	GRASS
"TS" 29+00	"TS" 29+70	5	GRASS	"TS" 29+60	"TS" 30+25	9	GRASS
"TS" 29+84	"TS" 30+26	77	HMA, CC	"TS" 30+24	"TS" 30+52	35	BASE COURSE, CC
"TS" 30+26	"TS" 30+84	16	GRASS	"TS" 30+51	"TS" 30+81	16	GRASS
"TS" 30+83	"TS" 31+25	76	HMA, CC	"TS" 30+79	"TS" 31+06	36	BASE COURSE, CC
"TS" 31+24	"TS" 31+75	19	GRASS	"TS" 31+05	"TS" 31+74	30	GRASS
"TS" 31+74	"TS" 32+10	64	HMA, CC	"TS" 31+73	"TS" 32+09	47	BASE COURSE, CC
"TS" 32+44	"TS" 32+80	64	HMA, CC	"TS" 32+09	"TS" 33+23	8	BASE COURSE
"TS" 33+51	"TS" 34+26	163	HMA	"TS" 33+23	"TS" 33+53	37	BASE COURSE, CC
"TS" 34+74	"TS" 36+01	103	GRASS	"TS" 34+14	"TS" 34+80	63	HMA
"TS" 35+35	"TS" 36+49	77	GRASS	"TS" 35+30	"TS" 35+96	55	GRASS
				"TS" 35+57	"TS" 36+33	40	GRASS

EAGLE ST BACK OF SIDEWALK MATERIAL

STATION LEFT				STATION RIGHT			
BEGIN STA	END STA	AREA SY	MATERIAL	BEGIN STA	END STA	AREA SY	MATERIAL
"E" 90+20	"E" 90+51	8	GRASS	"E" 90+20	"E" 90+30	1	GRASS
"E" 90+87	"E" 91+55	28	HMA	"E" 90+61	"E" 91+45	20	BASE COURSE
"E" 92+55	"E" 93+64	26	HMA	"E" 92+68	"E" 93+69	20	HMA

STEESE EXPWY BACK OF SIDEWALK MATERIAL

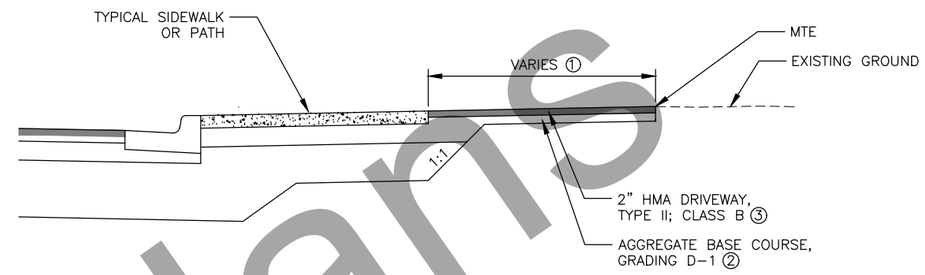
STATION LEFT				STATION RIGHT			
BEGIN STA	END STA	AREA SY	MATERIAL	BEGIN STA	END STA	AREA SY	MATERIAL
"SE" 12+63	"SE" 20+99	626	GRASS	"SE" 10+67	"SE" 21+48	580	GRASS
"SE" 22+44	"SE" 30+19	179	GRASS	"SE" 12+60	"SE" 21+04	667	GRASS
"SE" 22+83	"SE" 30+23	44	GRASS	"SE" 22+41	"SE" 27+31	333	HMA
				"SE" 22+80	"SE" 30+32	583	GRASS
				"SE" 30+32	"SE" 30+66	230	GRASS



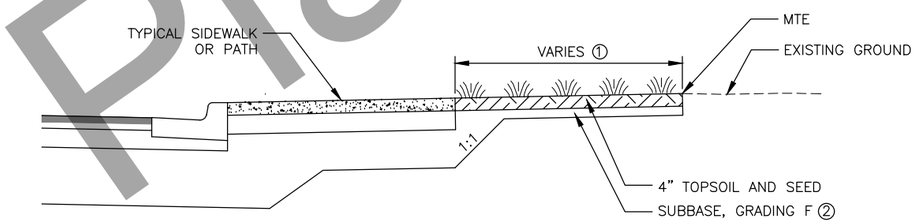
NOTE:

SEE TYPICAL SECTION FOR MATERIAL DEPTHS

ASPHALT SAWCUT AND PATCH
NTS



ASPHALT AT BACK OF SIDEWALK
NTS



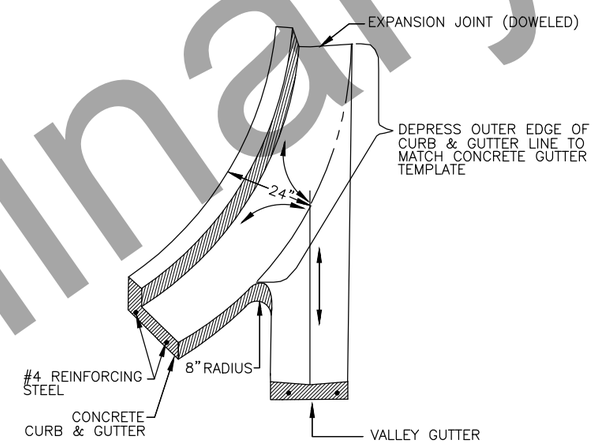
GRASS AT BACK OF SIDEWALK
NTS

NOTES:

① SLOPE AND WIDTHS VARY. SEE TABLE, THIS SHEET, FOR MATERIAL TYPE AND AREA (SY).

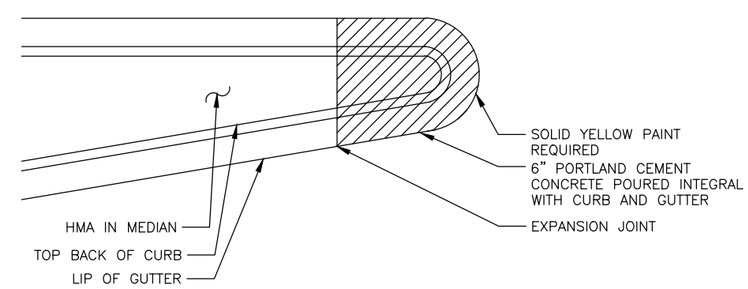
② PLACE AS REQUIRED TO BRING TO GRADE AND COMPACT.

③ IN LOCATIONS THAT SPECIFY BASE COURSE, ELIMINATE HMA AND BRING TO GRADE WITH AGGREGATE BASE COURSE, GRADING D-1.

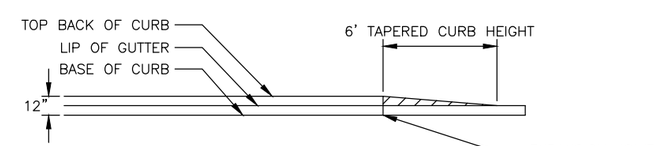


1. VALLEY GUTTER TO BE PAID UNDER ITEM 609(2).

CURB & GUTTER TO VALLEY GUTTER DETAIL
NTS



PLAN



ELEVATION

TAPERED CURB NOSE DETAIL
NTS

MISCELLANEOUS DETAILS

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

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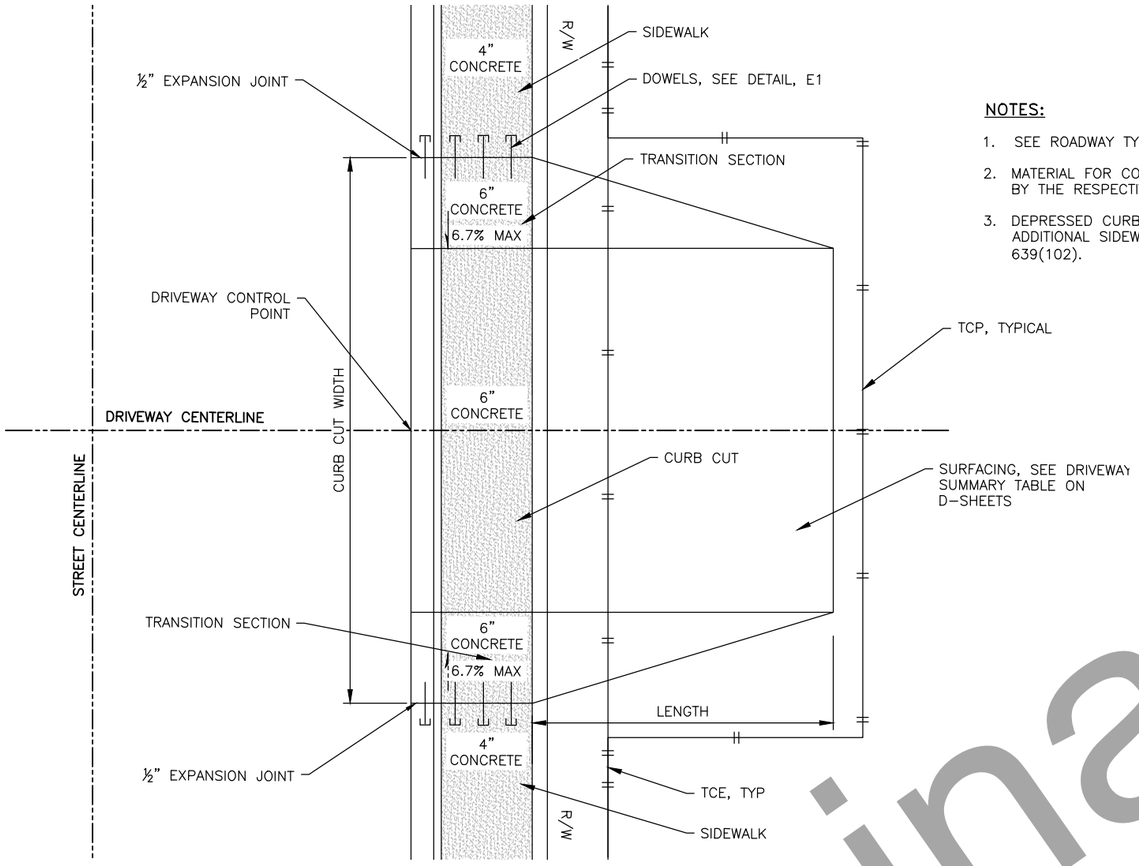
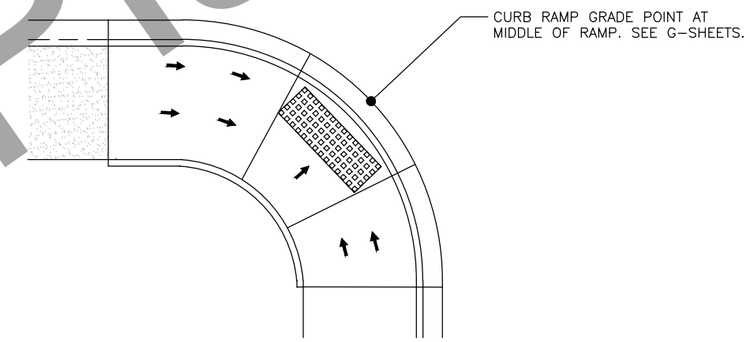


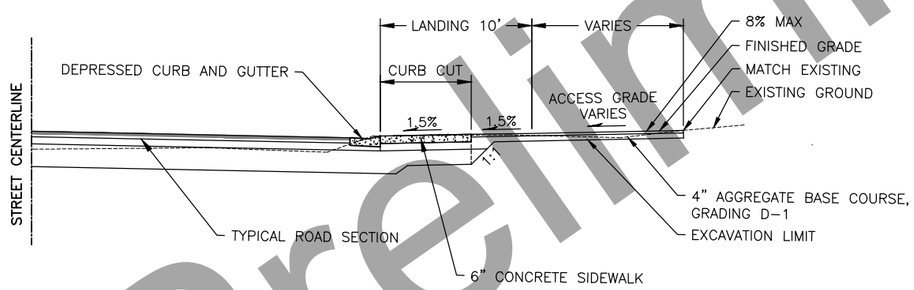
DRIVEWAY DETAIL
NTS

NOTES:

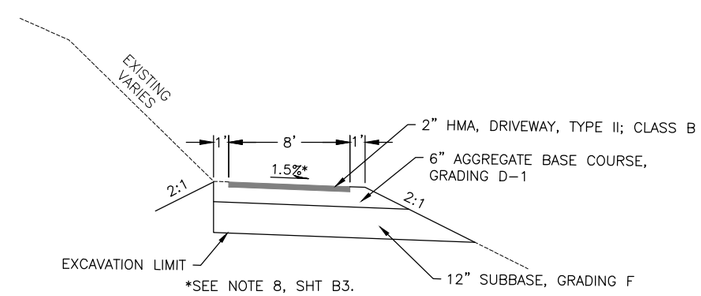
1. SEE ROADWAY TYPICAL SECTION FOR CURB TYPE.
2. MATERIAL FOR CONSTRUCTION OF DRIVEWAYS IS PAID BY THE RESPECTIVE PAY ITEM, EXCEPT AS NOTED.
3. DEPRESSED CURB, ADDITIONAL EXCAVATION, AND ADDITIONAL SIDEWALK THICKNESS ARE SUBSIDIARY TO 639(102).



CURB RAMP LOCATION
NTS



DRIVEWAY SECTION
NTS



PATH SECTION
STA "P" 300+00 TO STA "P" 306+68

MISCELLANEOUS DETAILS

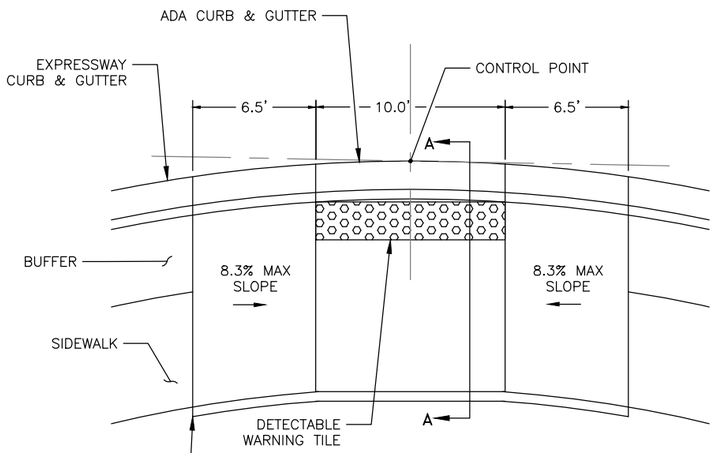
STATE OF ALASKA
49
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

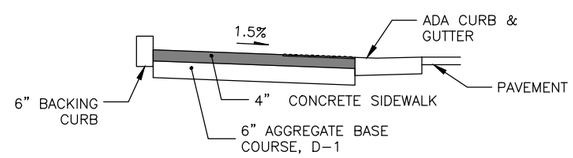
PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
C:\Temp\AcadTemp\AcPublish_20016\62541_E-E3 Fri, Sep/07/18 03:54pm

NO.	DATE	REVISION

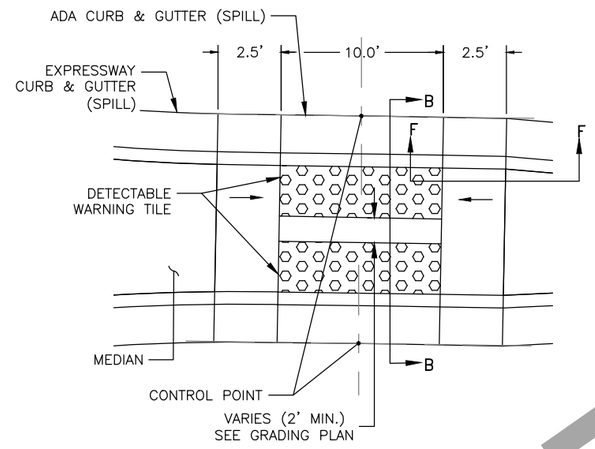
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	E4	6



TYPE A RAMP DETAIL
NTS



SECTION A-A
NTS



TYPE B RAMP DETAIL
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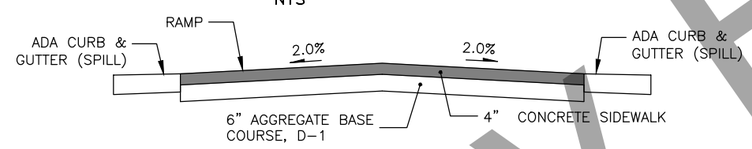
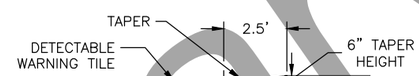
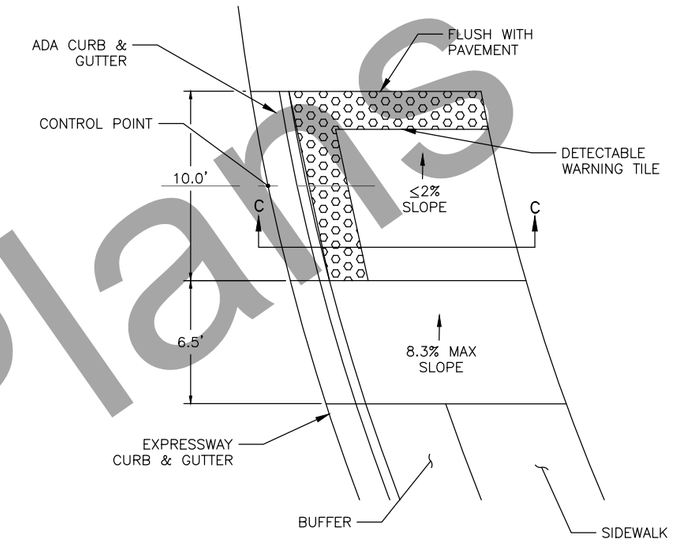


SECTION B-B
NTS



SECTION F-F
NTS



TYPE C RAMP DETAIL
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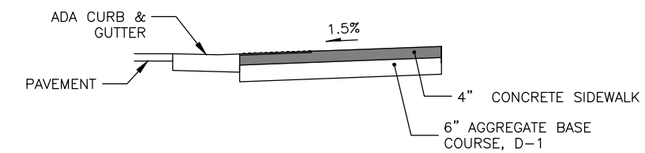
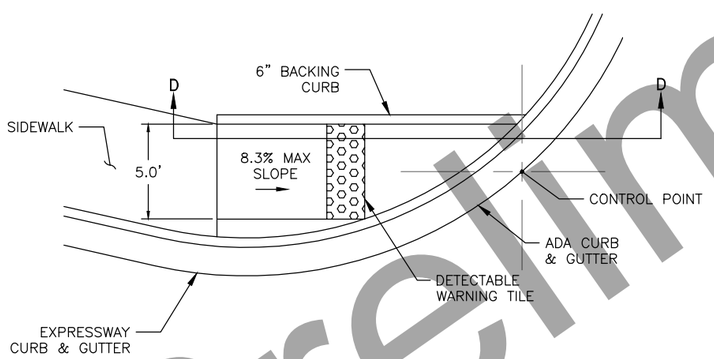


SECTION C-C
NTS



TYPE D RAMP DETAIL
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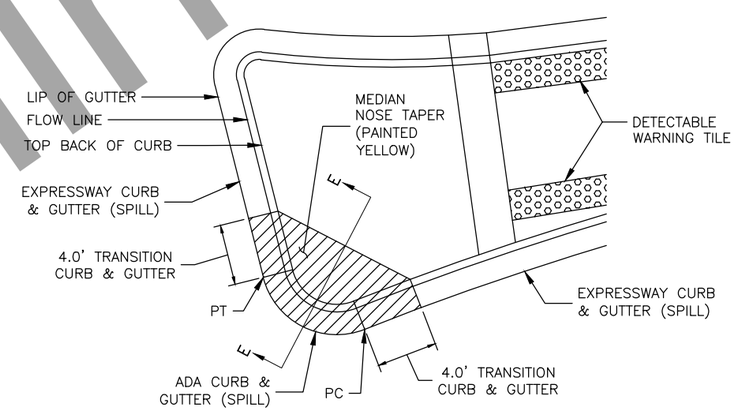
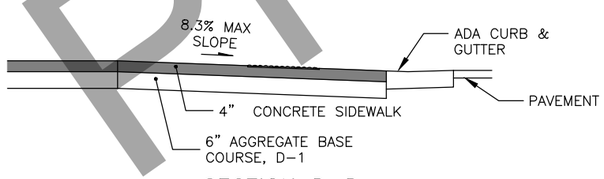
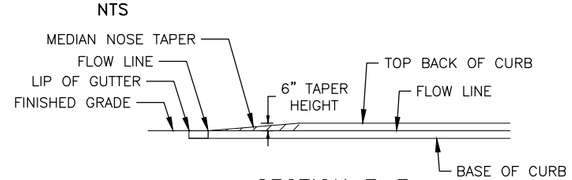


ROUNDABOUT MEDIAN NOSE TAPER DETAIL
NTS



SECTION D-D
NTS



SECTION E-E
NTS

NOTES:

1. CONTROL POINTS ARE TO CENTER OF RAMP. SEE SHEETS G5 & G6 FOR STAKING POINTS TO CENTER OF RAMP LOCATIONS.
2. REFER TO ADOT&PF STANDARD DRAWINGS I-21.10 & I-22.10 FOR CONSTRUCTION & DESIGN NOTES RELATED TO RAMP CONSTRUCTION

ROUNDABOUT DETAILS

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_E-E4 ROUNDABOUT DETAILS Fri, Aug/31/18 03:53pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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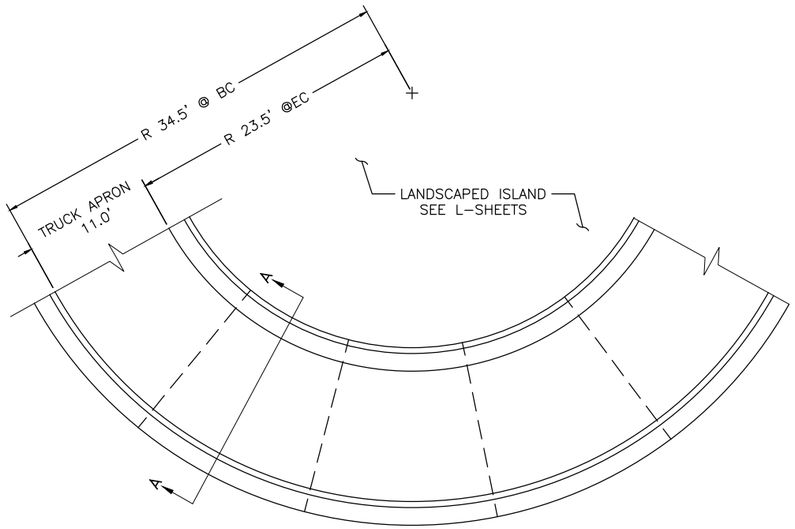
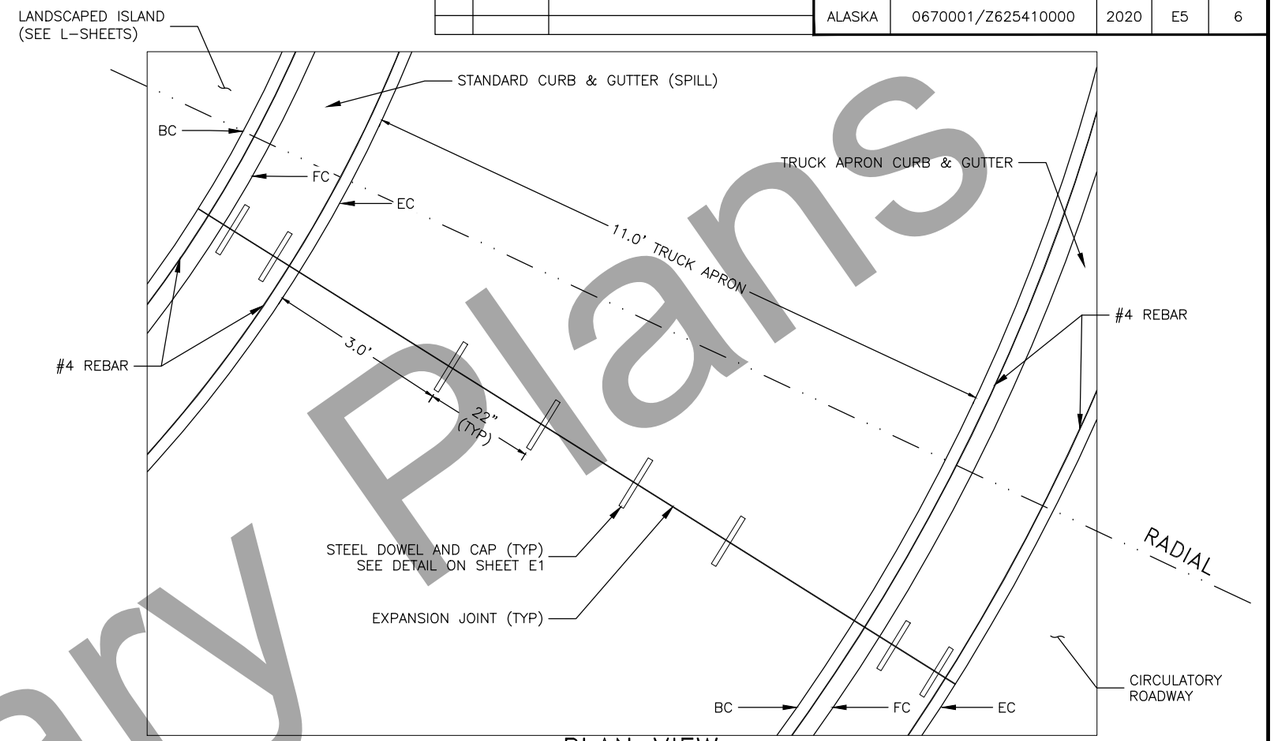
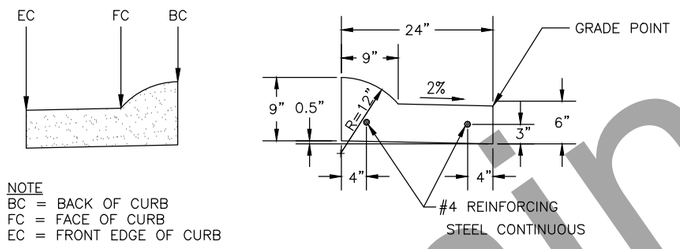


TRUCK APRON DETAIL
NTS

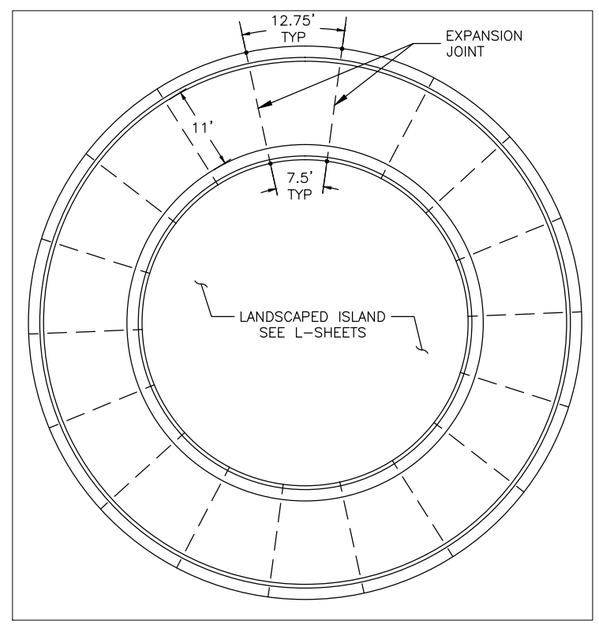


PLAN VIEW
NTS

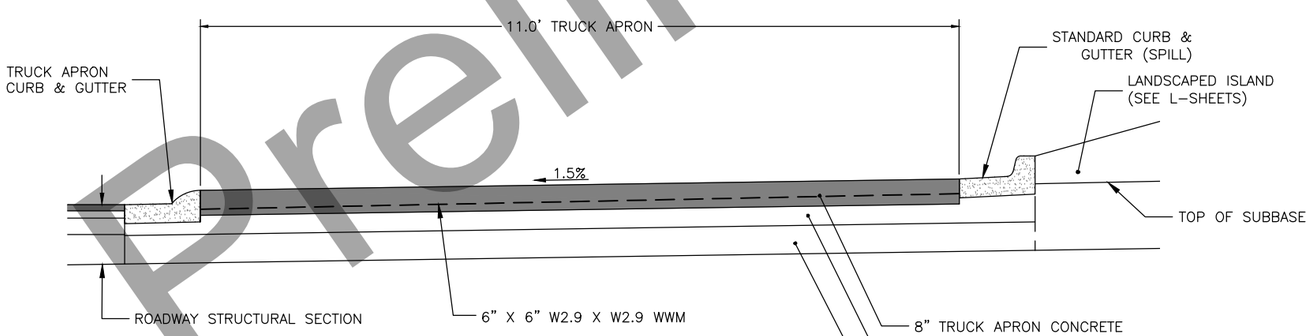


NOTE
BC = BACK OF CURB
FC = FACE OF CURB
EC = FRONT EDGE OF CURB

TRUCK APRON CURB & GUTTER DETAIL
NTS



TRUCK APRON JOINTING
NTS



SECTION A-A
NTS

TRUCK APRON DETAILS

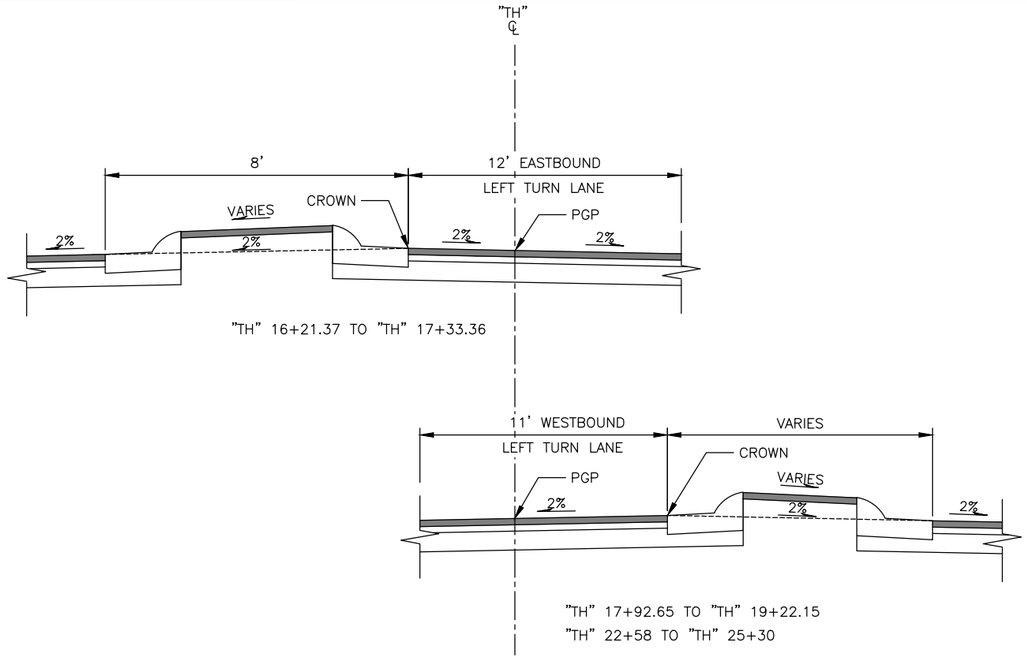
STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

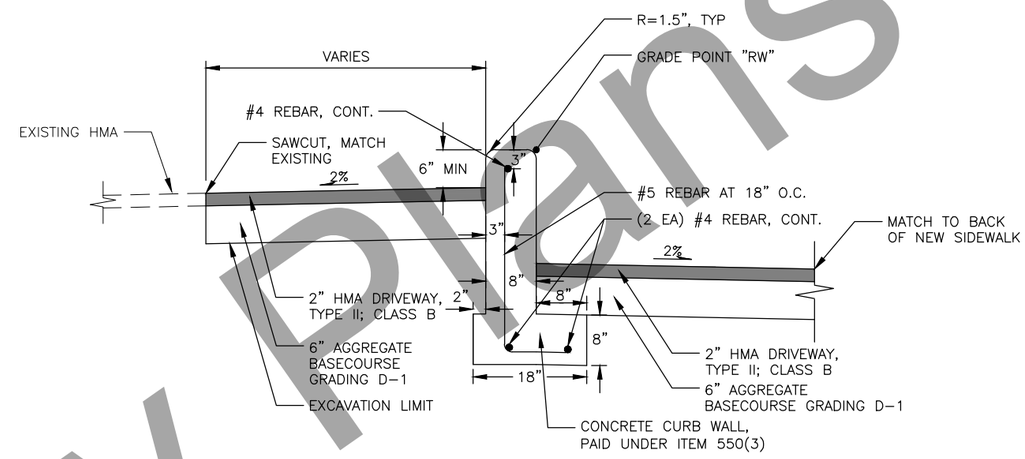
PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_E-E5 TRUCK APRON DETAILS Fri, Aug/31/18 03:53pm

NO.	DATE	REVISION

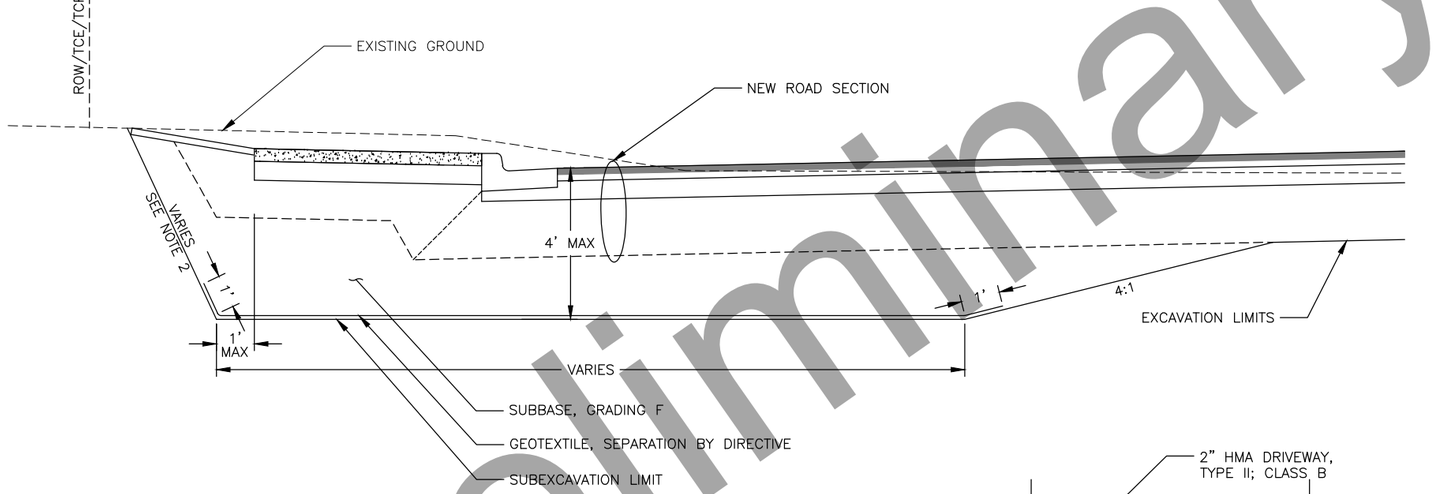
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	E6	6



3RD STREET CROWN SHIFTS
NTS



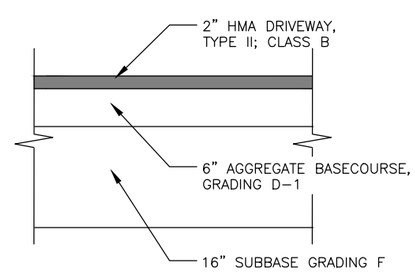
OLD STEESE HIGHWAY CURB WALL DETAIL
NTS



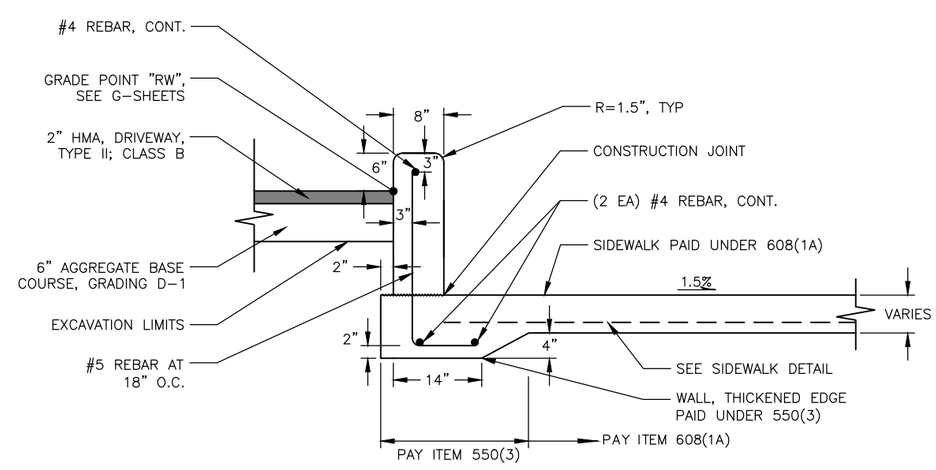
NOTES:

1. CONTRACTOR SHALL RECEIVE ENGINEER APPROVAL OF SUBEXCAVATION LIMITS TO CONFIRM REMOVAL OF SILTS AND/OR ORGANICS AND PAY LIMITS PRIOR TO BACKFILLING.
2. SUBEXCAVATION SLOPES SHALL BE 4:1 ON ROADWAY SIDE. IN LOCATIONS WHERE SUBEXCAVATION LIMITS EXTEND BEYOND THE BACK OF CURB SUBEXCAVATION SLOPE SHALL DAYLIGHT WITH THE PROJECT ROW.
3. PLACE GEOTEXTILE FABRIC OVER BOTTOM OF SUBEXCAVATED AREAS IN WHICH SILT AND ORGANIC MATERIAL EXTEND BELOW THE BOTTOM OF EXCAVATION.

SUBEXCAVATION LIMITS
NTS



HELMBRECHT PARKING LOT SECTION
NTS



NOTE:

1, WHERE REQUIRED, SAWCUT HMA PER DTL, SHT E2.

SIDEWALK/RETAINING WALL
NTS

MISCELLANEOUS DETAILS

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
C:\Civil 3D Projects\2016\24\50091-01\Civil\62541_E-E6 Mon, Sep/10/18 11:07am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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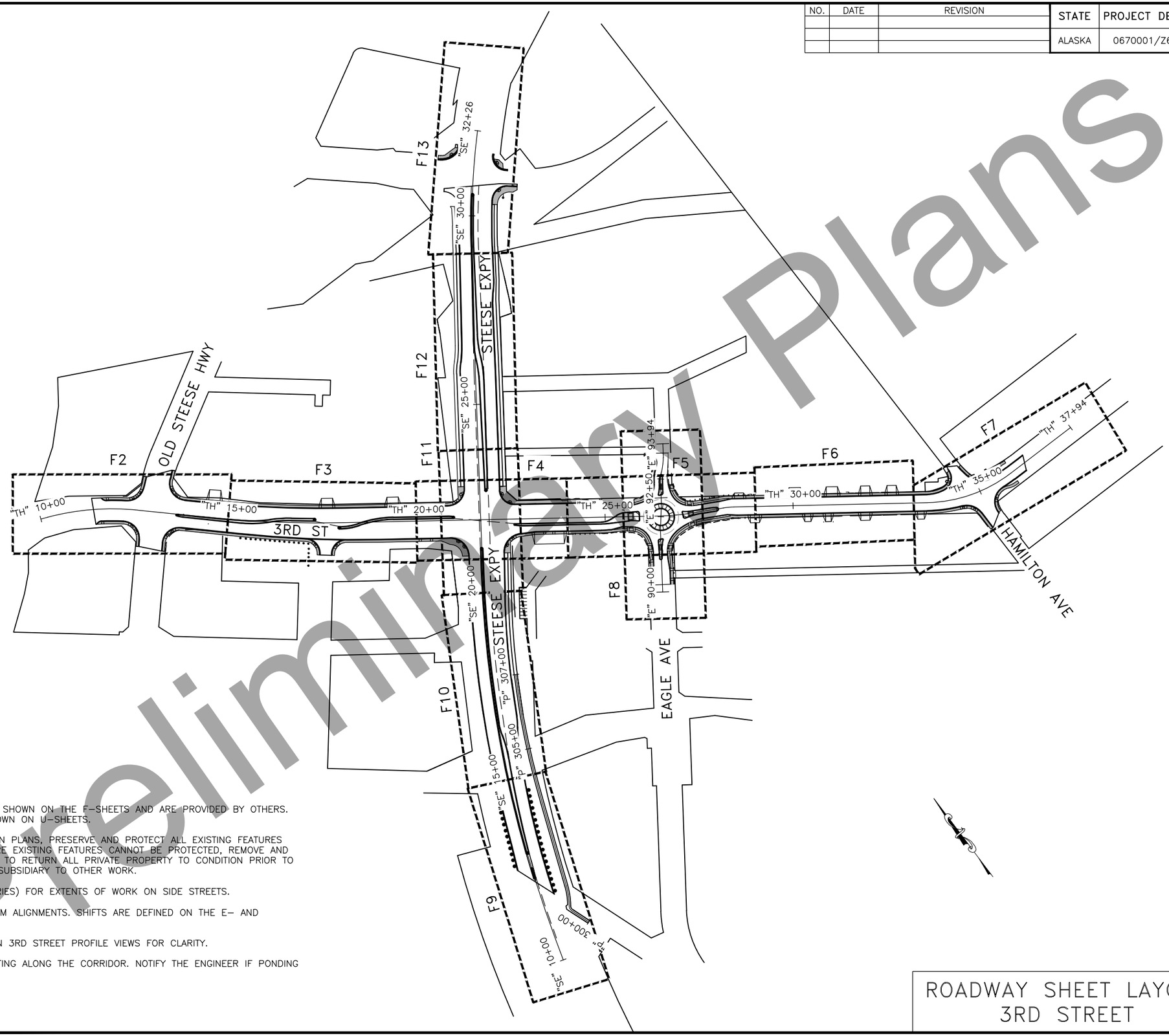

Preliminary Plans

ROADWAY NOTES:

1. ONLY EXISTING UTILITIES ARE SHOWN ON THE F-SHEETS AND ARE PROVIDED BY OTHERS. PROPOSED UTILITIES ARE SHOWN ON U-SHEETS.
2. UNLESS OTHERWISE NOTED ON PLANS, PRESERVE AND PROTECT ALL EXISTING FEATURES ON PRIVATE PROPERTY. WHERE EXISTING FEATURES CANNOT BE PROTECTED, REMOVE AND REPLACE ITEMS. CONTRACTOR TO RETURN ALL PRIVATE PROPERTY TO CONDITION PRIOR TO CONSTRUCTION. PAYMENT IS SUBSIDIARY TO OTHER WORK.
3. SEE GRADING SHEETS (G SERIES) FOR EXTENTS OF WORK ON SIDE STREETS.
4. ROADWAY CROWN VARIES FROM ALIGNMENTS. SHIFTS ARE DEFINED ON THE E- AND G-SHEETS.
5. CROWN PROFILE IS SHOWN IN 3RD STREET PROFILE VIEWS FOR CLARITY.
6. MINOR FILL CONDITIONS EXISTING ALONG THE CORRIDOR. NOTIFY THE ENGINEER IF PONDING WILL OCCUR.

ROADWAY SHEET LAYOUT
3RD STREET

STATE OF ALASKA
49
PRELIM PS&E
PROFESSIONAL ENGINEER

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C:\Temp\AcadTemp\AcPublish_20016\62541_F_PP-3rd Layout Fri, Sep/07/18 04:51pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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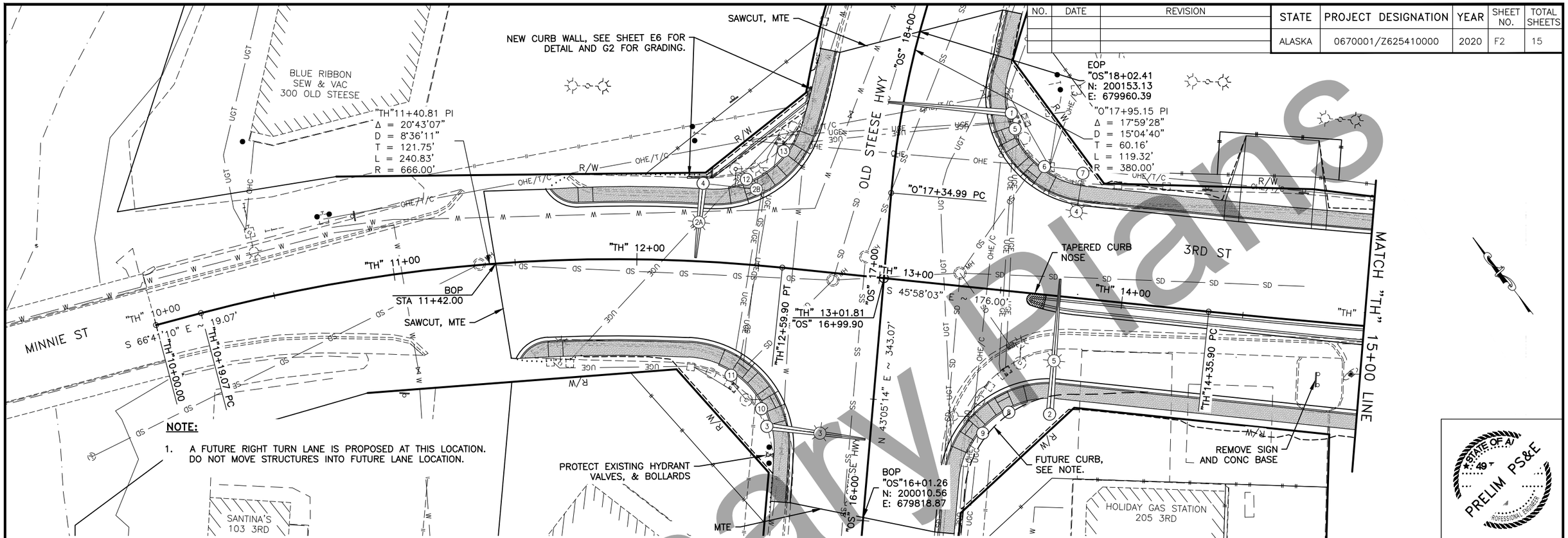

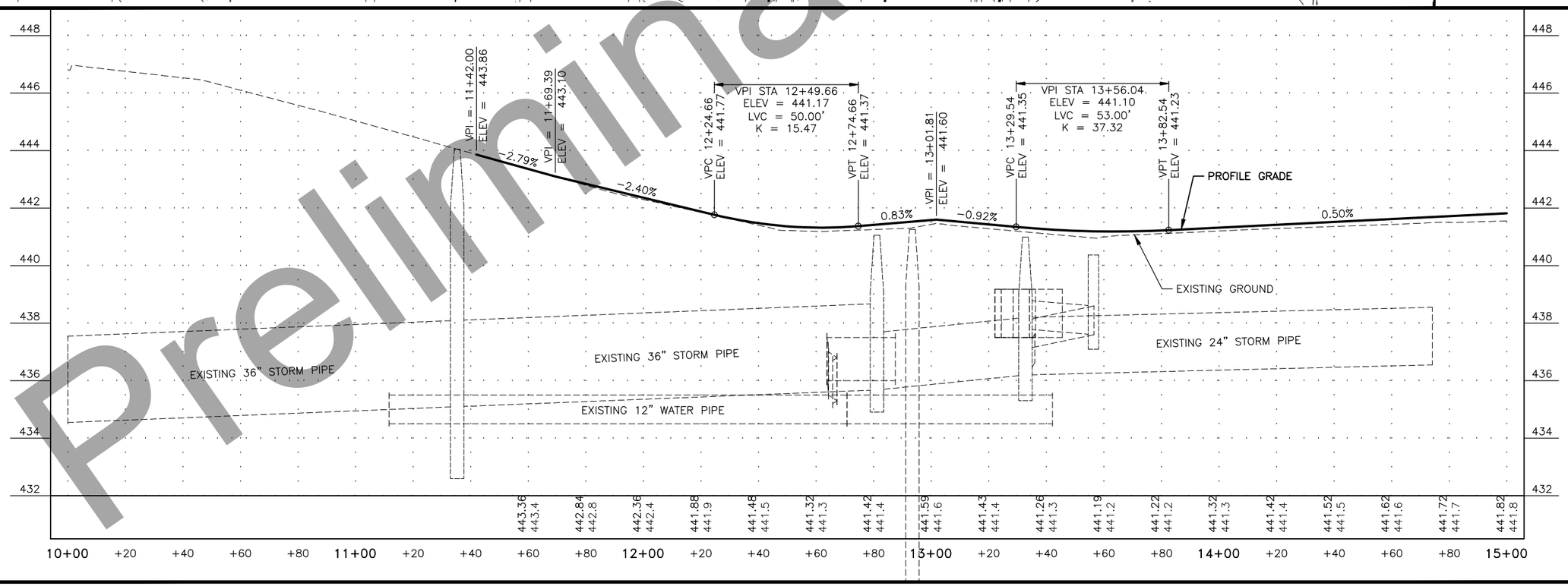

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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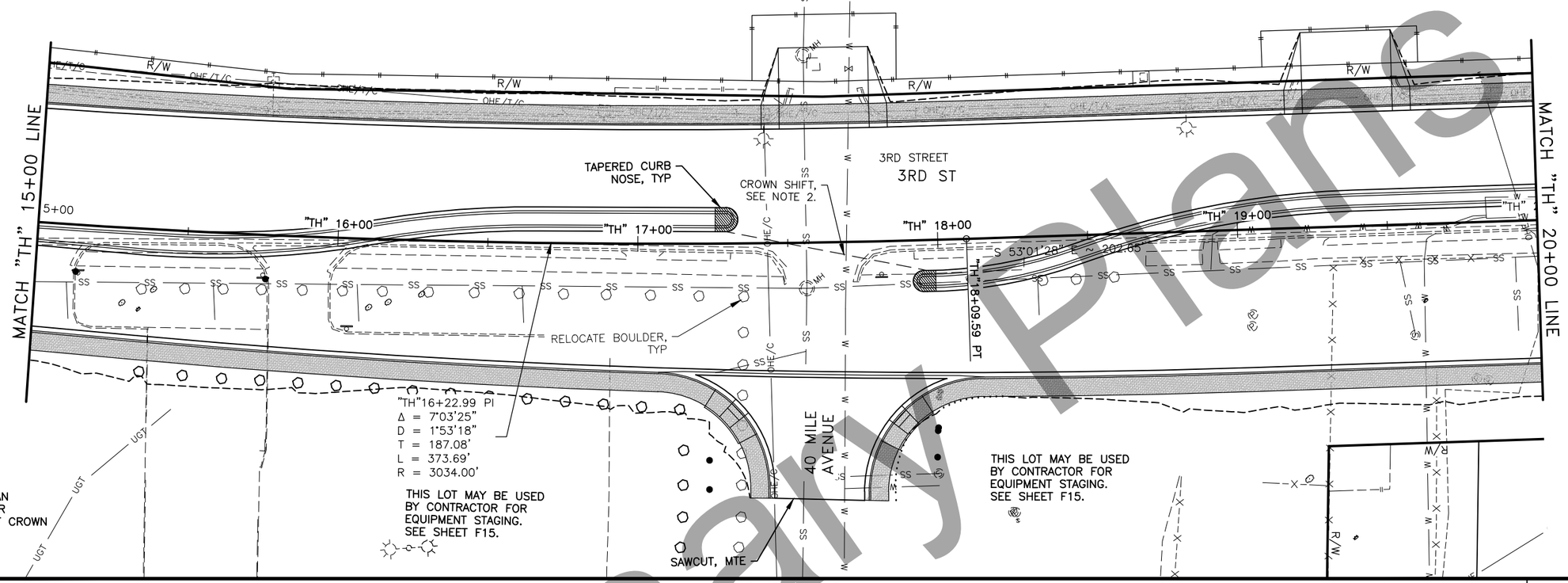
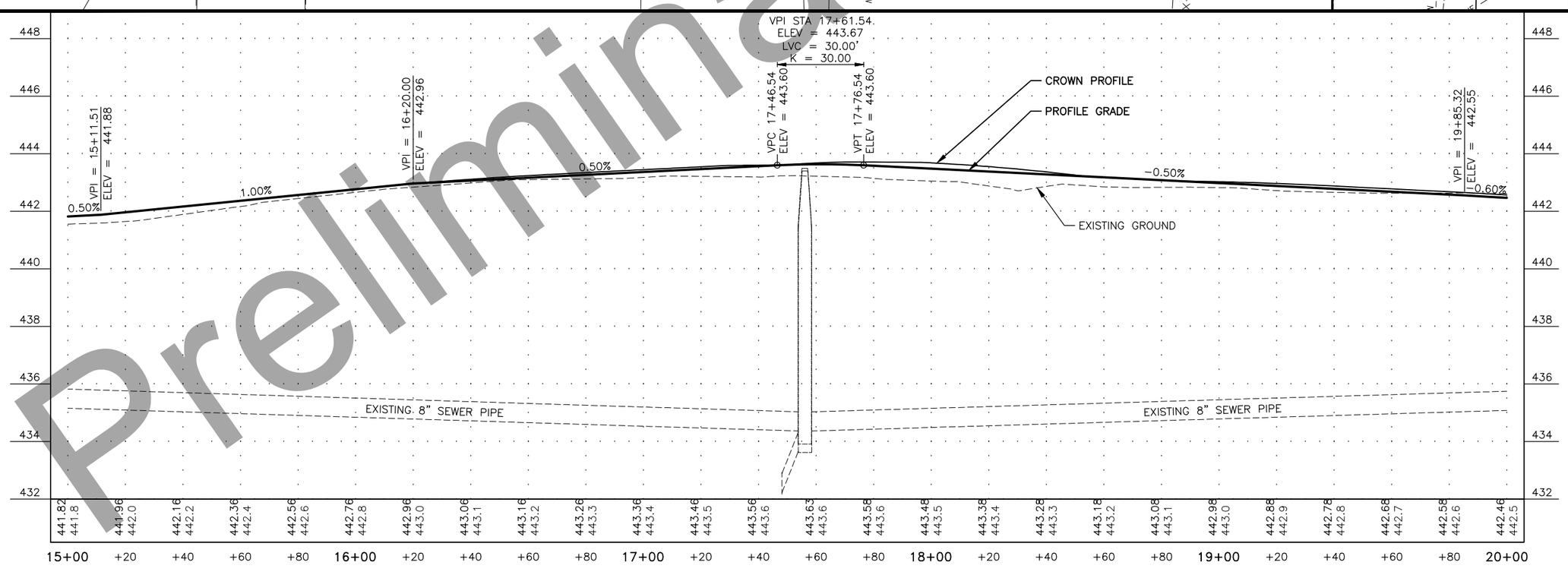


NOTES:

1. RELOCATE BOULDERS TO LOCATION DETERMINED BY ADOT&PF.
2. SEE SHEET E6 FOR MEDIAN DETAIL AND SHEET G3 FOR GRADING AND EXTENTS OF CROWN SHIFT.

STATE OF ALASKA 49 PROFESSIONAL ENGINEER PRELIM PS&E



Preliminary Plans

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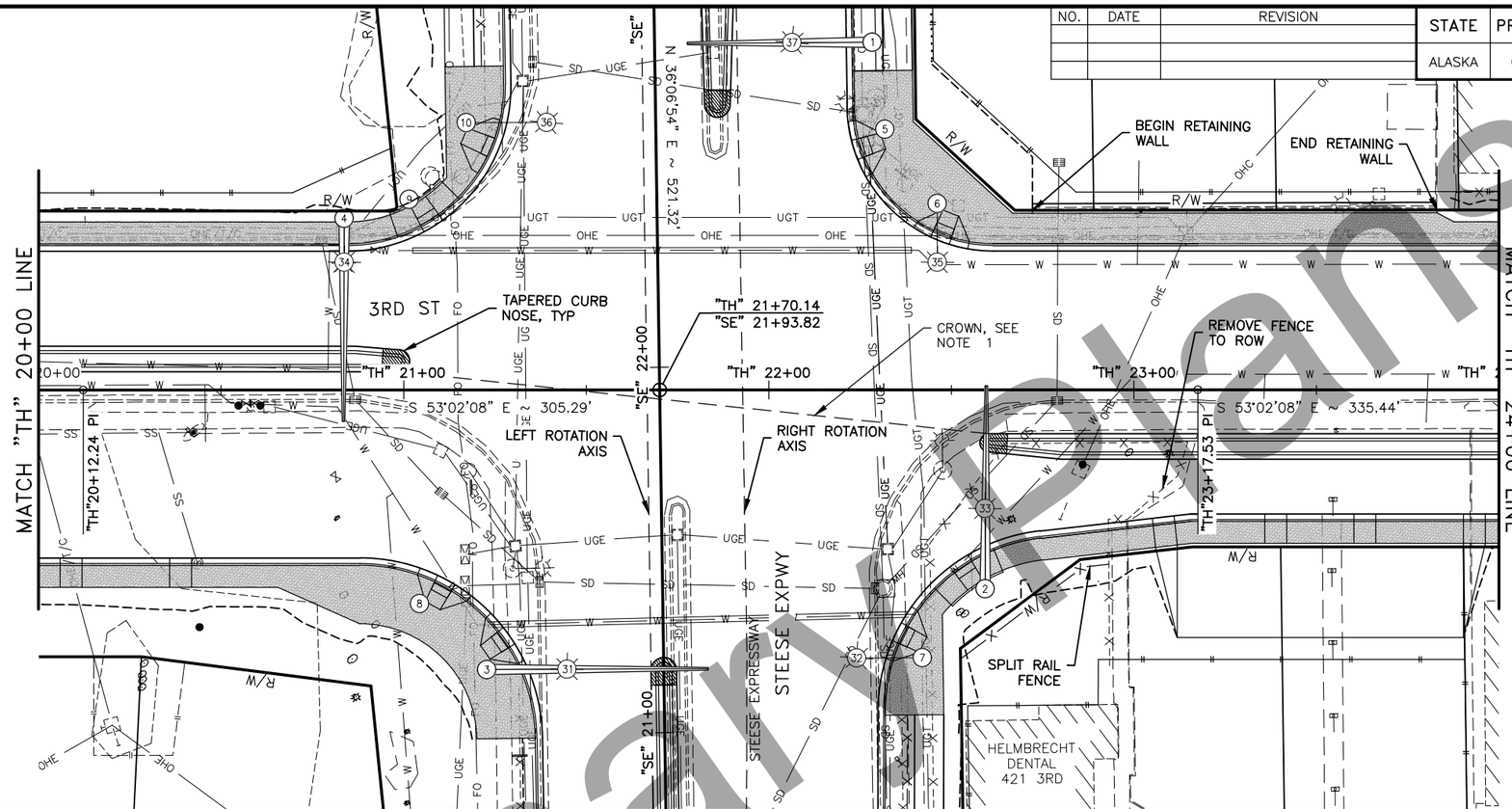
NO.	DATE	REVISION

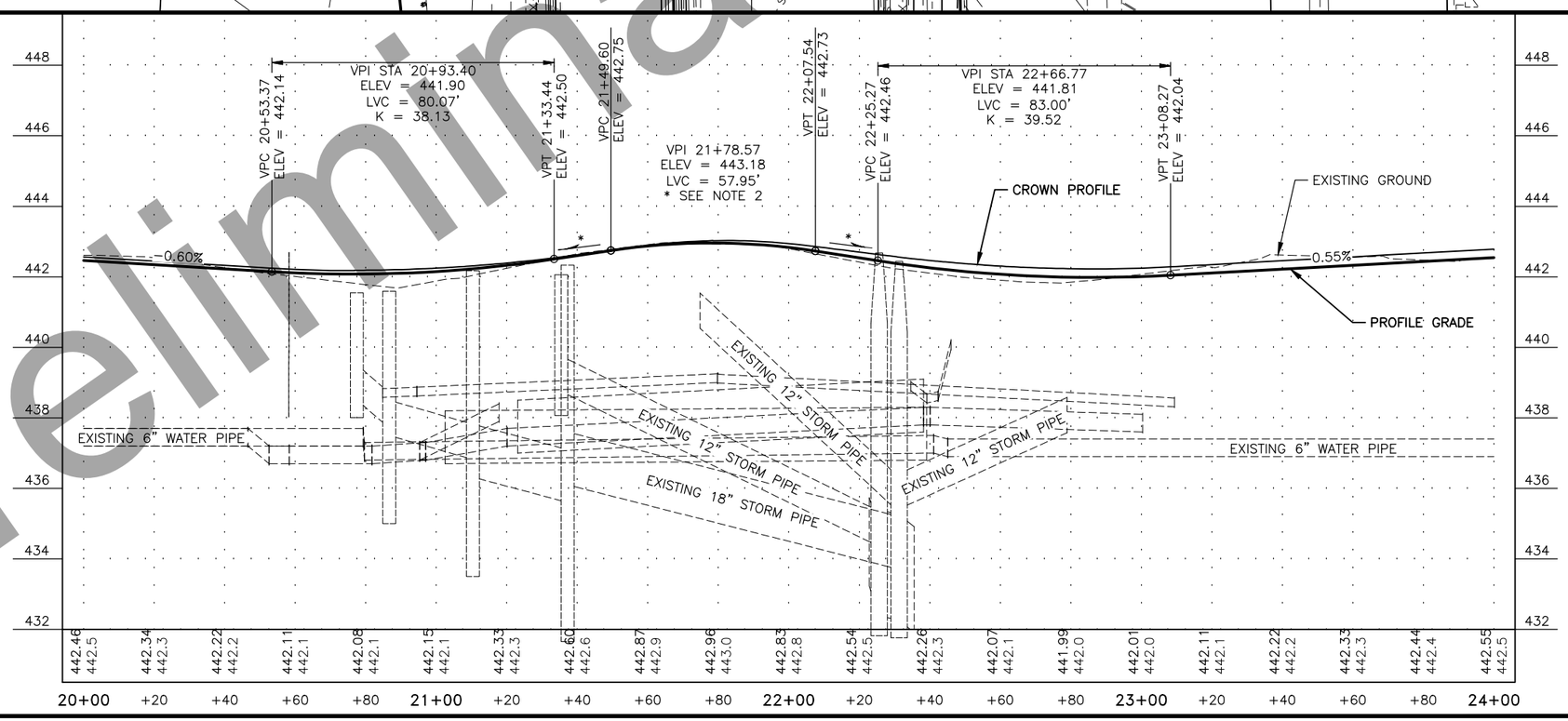
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F4	15



NOTES:

1. SEE SHEET E6 FOR MEDIAN DETAIL AND SHEET G4 FOR GRADING AND EXTENTS OF CROWN SHIFT.
2. SEE SHEETS G4 AND G10 FOR INTERSECTION GRADING.

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER



Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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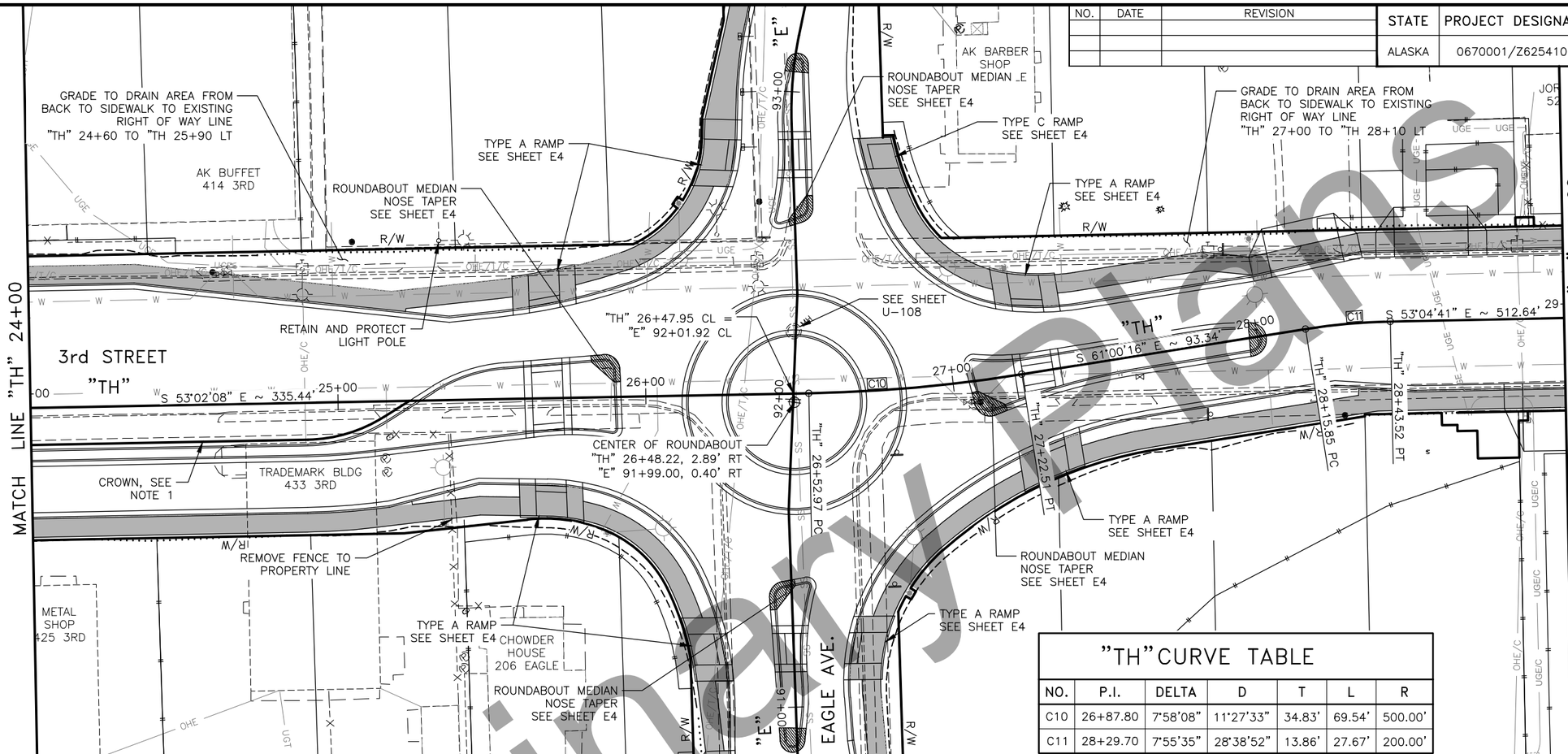
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F5	15

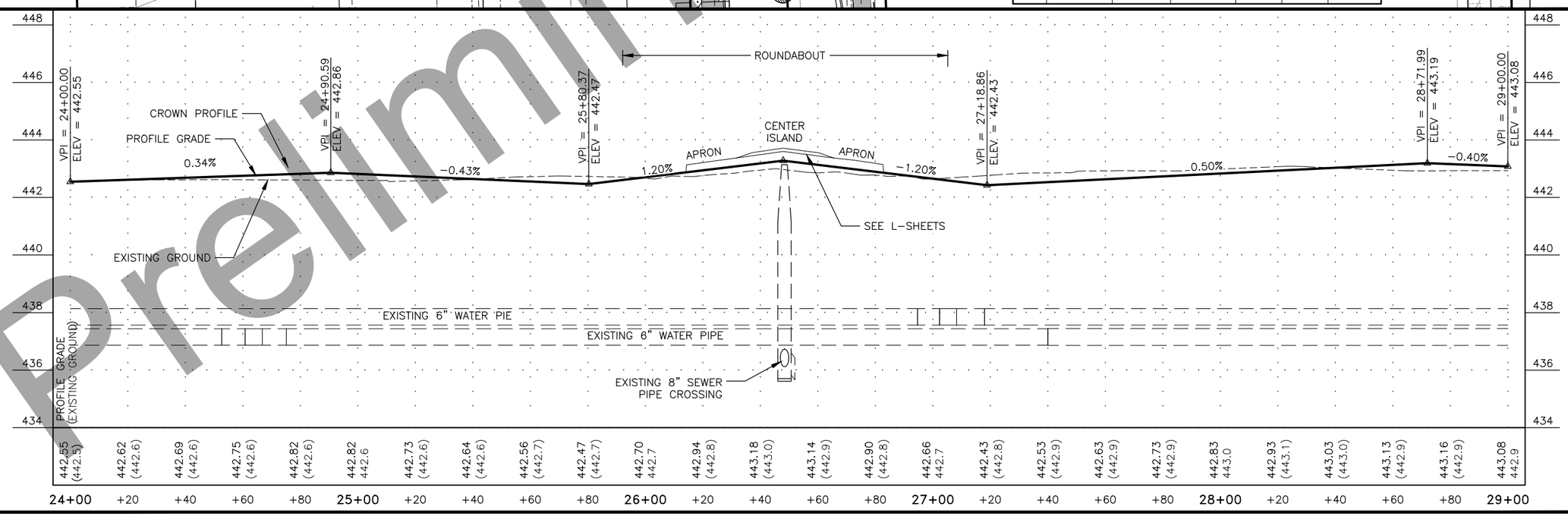


NOTES:

1. SEE SHEET E6 FOR MEDIAN DETAIL AND SHEET G6 FOR GRADING AND EXTENTS OF CROWN SHIFT.

"TH" CURVE TABLE

NO.	P.I.	DELTA	D	T	L	R
C10	26+87.80	7°58'08"	11°27'33"	34.83'	69.54'	500.00'
C11	28+29.70	7°55'35"	28°38'52"	13.86'	27.67'	200.00'



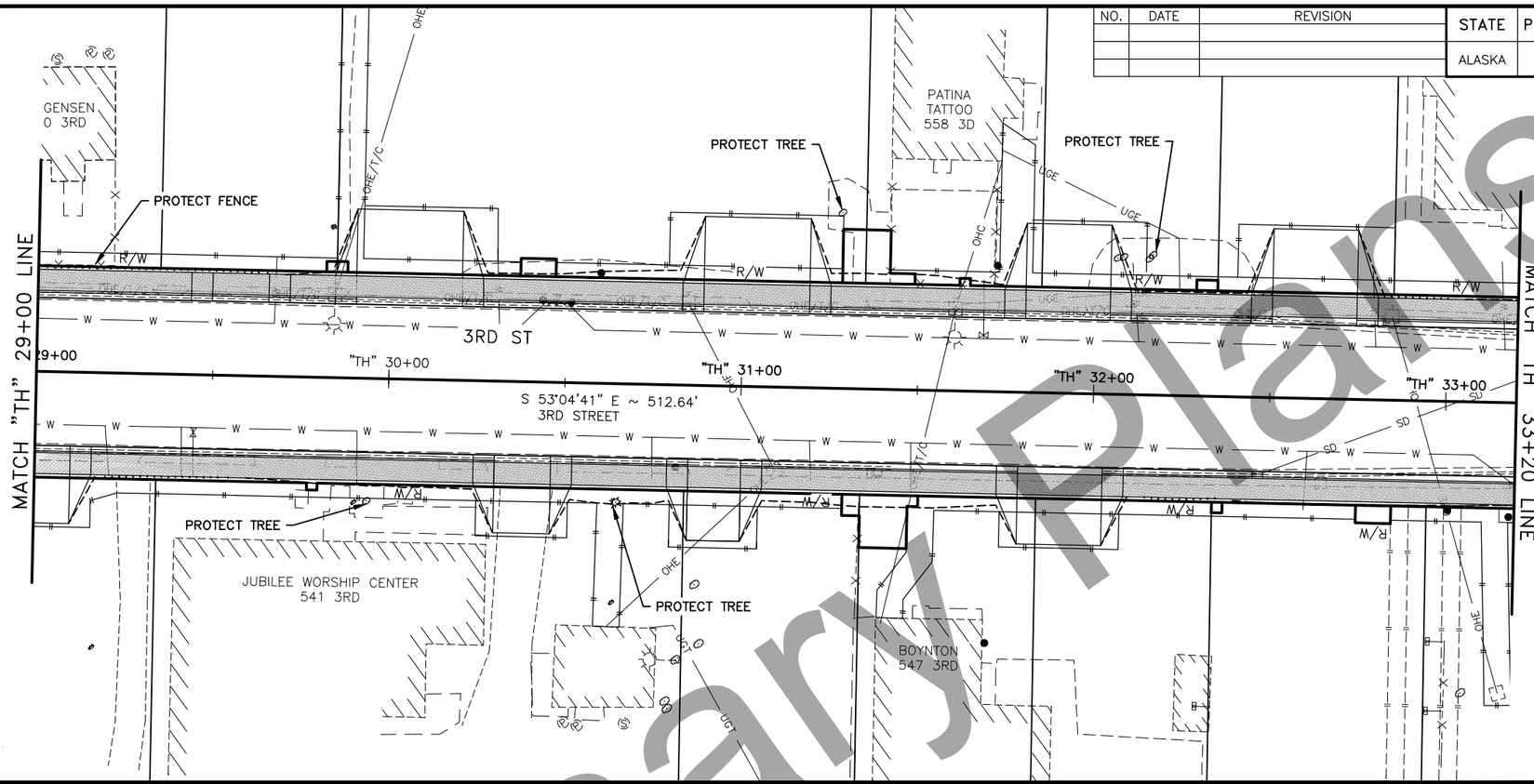
Preliminary Plans

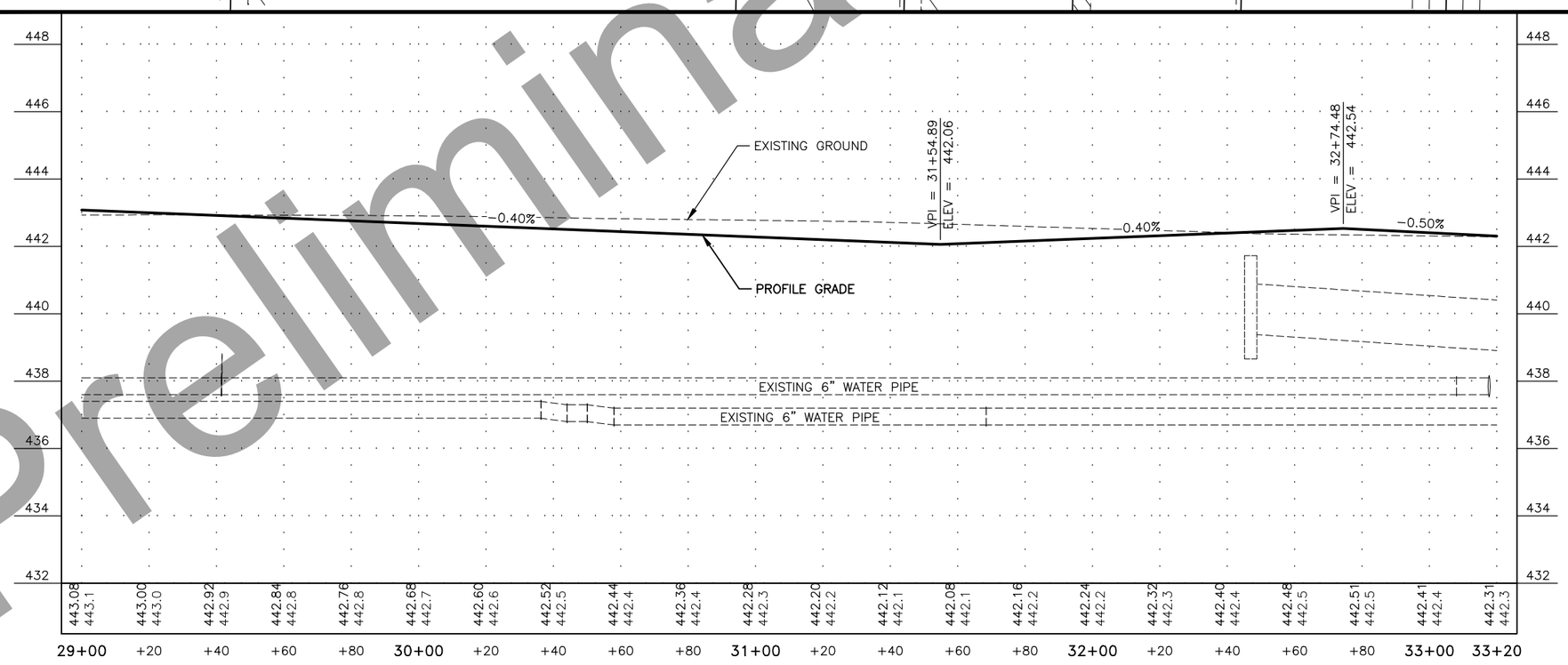
STATE OF ALASKA 49TH PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_F-F5 Fri, Aug/31/18 03:55pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F6	15





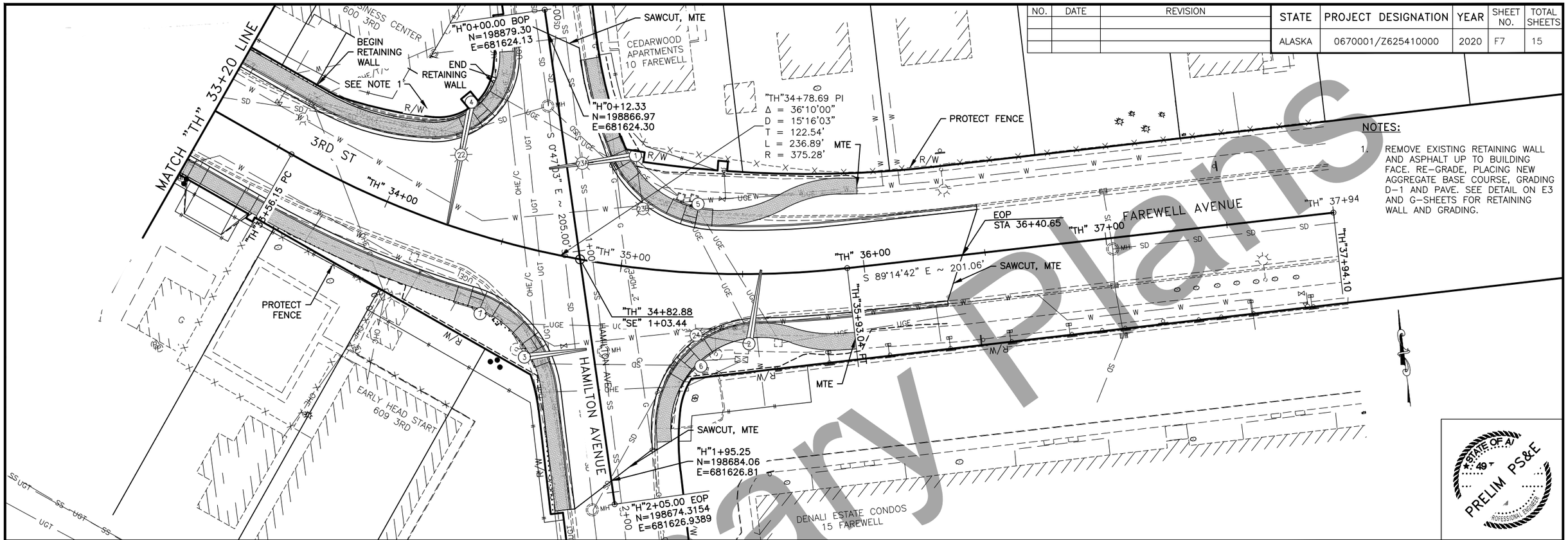
STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
C:\Temp\AcadTemp\AcPublish_20016\62541_F_PP-3rd St 29+00.00-33+20.00 Fri, Sep/07/18 04:52pm

NO.	DATE	REVISION

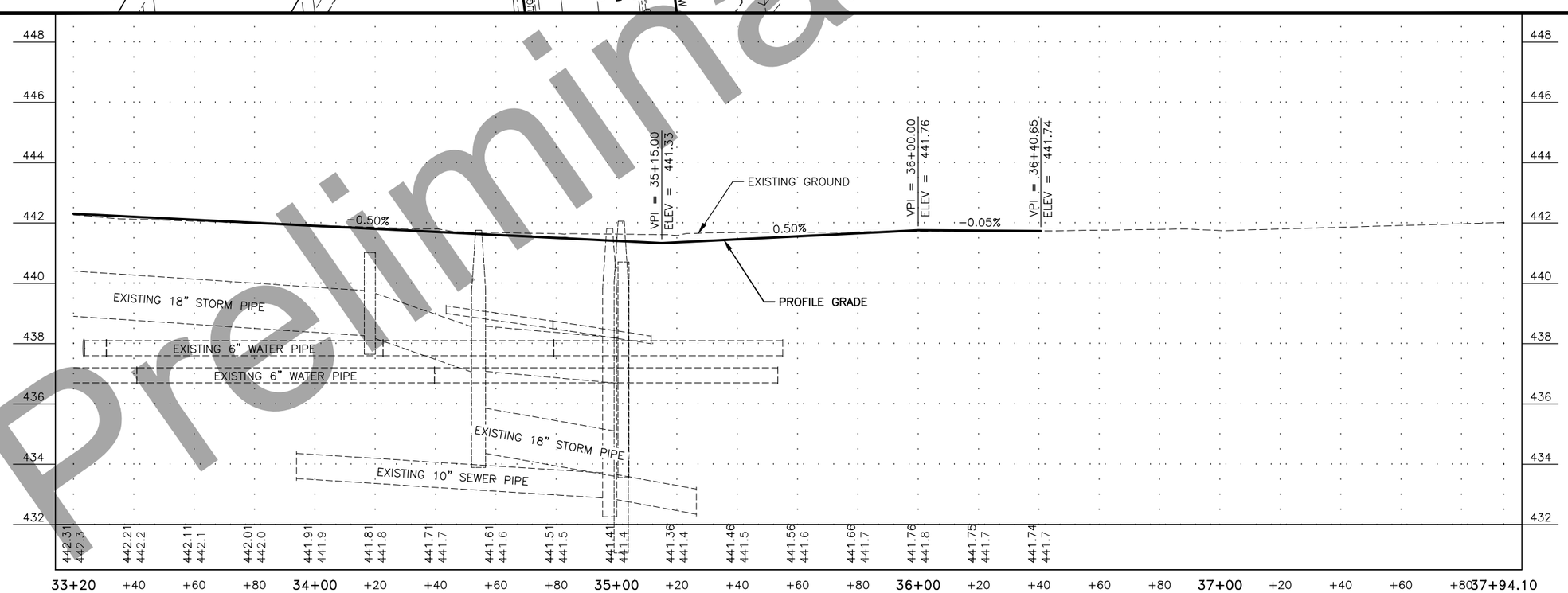
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F7	15



NOTES:

1. REMOVE EXISTING RETAINING WALL AND ASPHALT UP TO BUILDING FACE. RE-GRADE, PLACING NEW AGGREGATE BASE COURSE, GRADING D-1 AND PAVE. SEE DETAIL ON E3 AND G-SHEETS FOR RETAINING WALL AND GRADING.

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER



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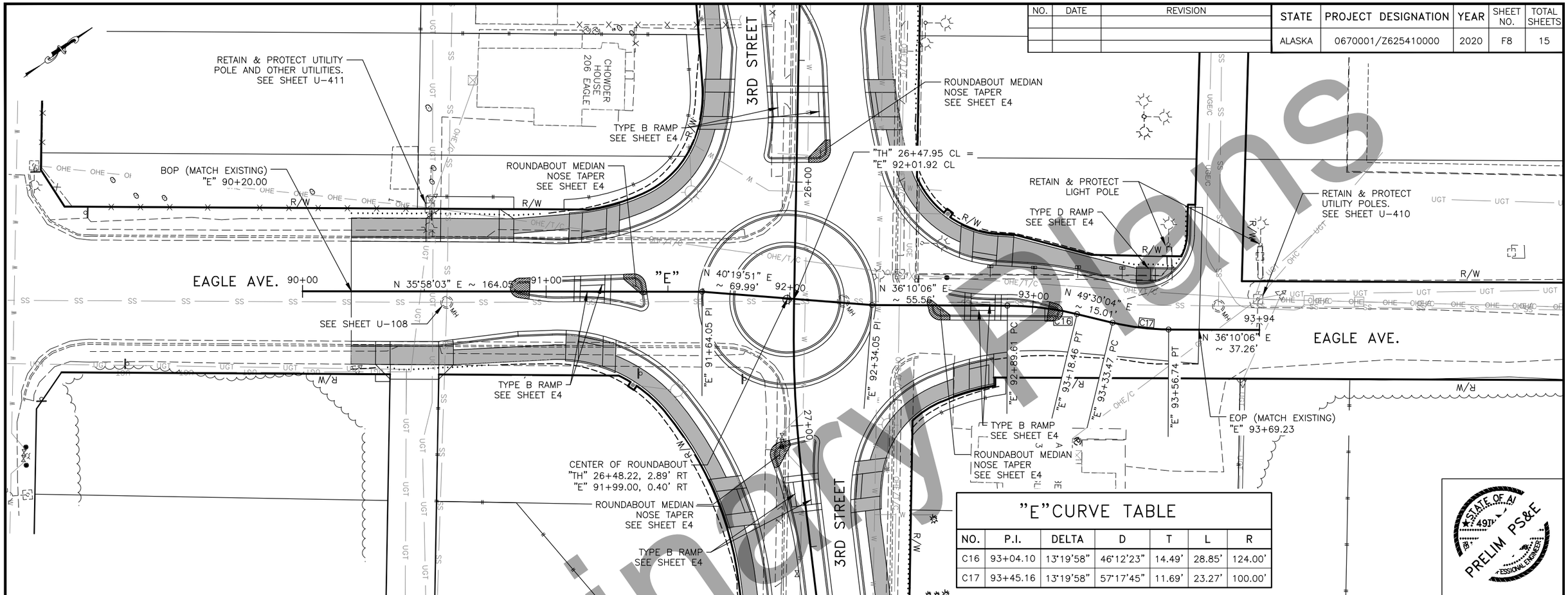
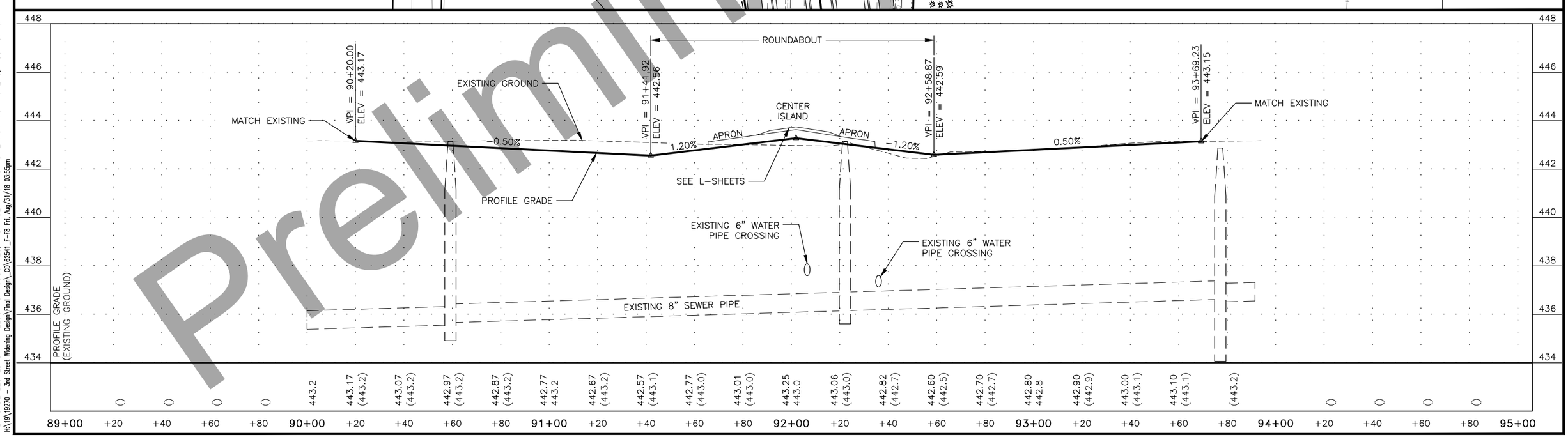
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F8	15



"E" CURVE TABLE

NO.	P.I.	DELTA	D	T	L	R
C16	93+04.10	13°19'58"	46°12'23"	14.49'	28.85'	124.00'
C17	93+45.16	13°19'58"	57°17'45"	11.69'	23.27'	100.00'



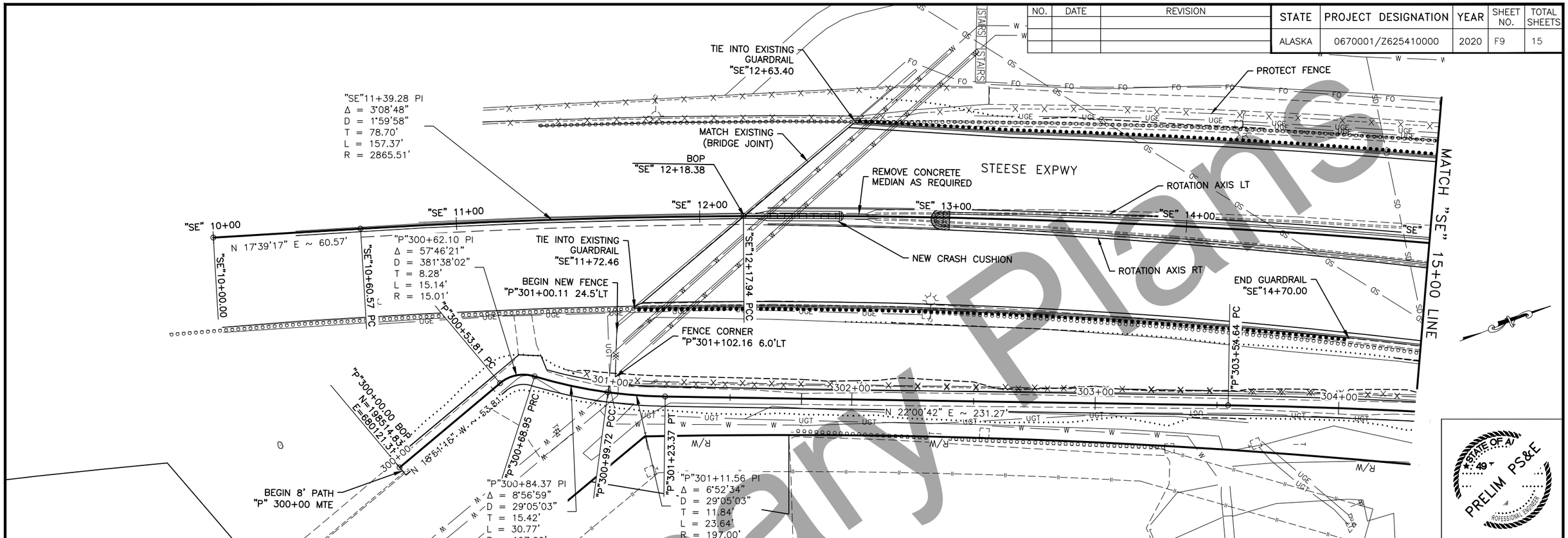
STATE OF ALASKA 49TH PRELIM PS&E PROFESSIONAL ENGINEER

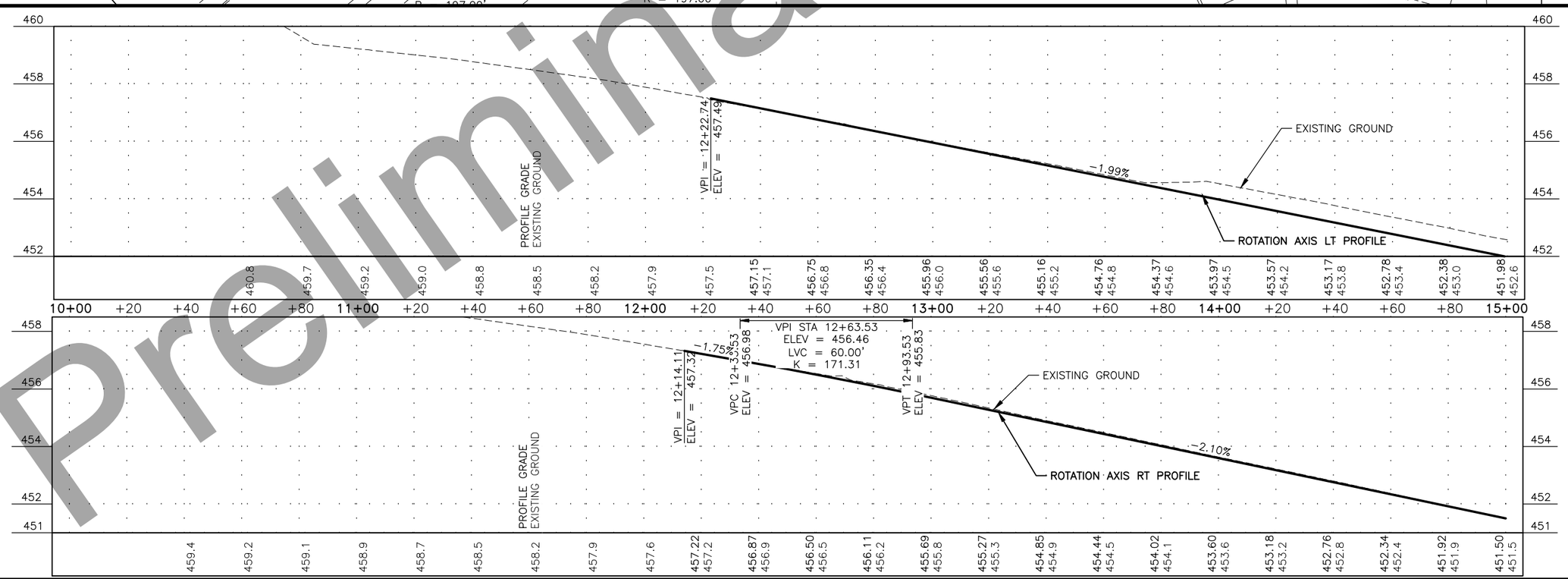
Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_F-F8 Fri, Aug/31/18 03:55pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F9	15





Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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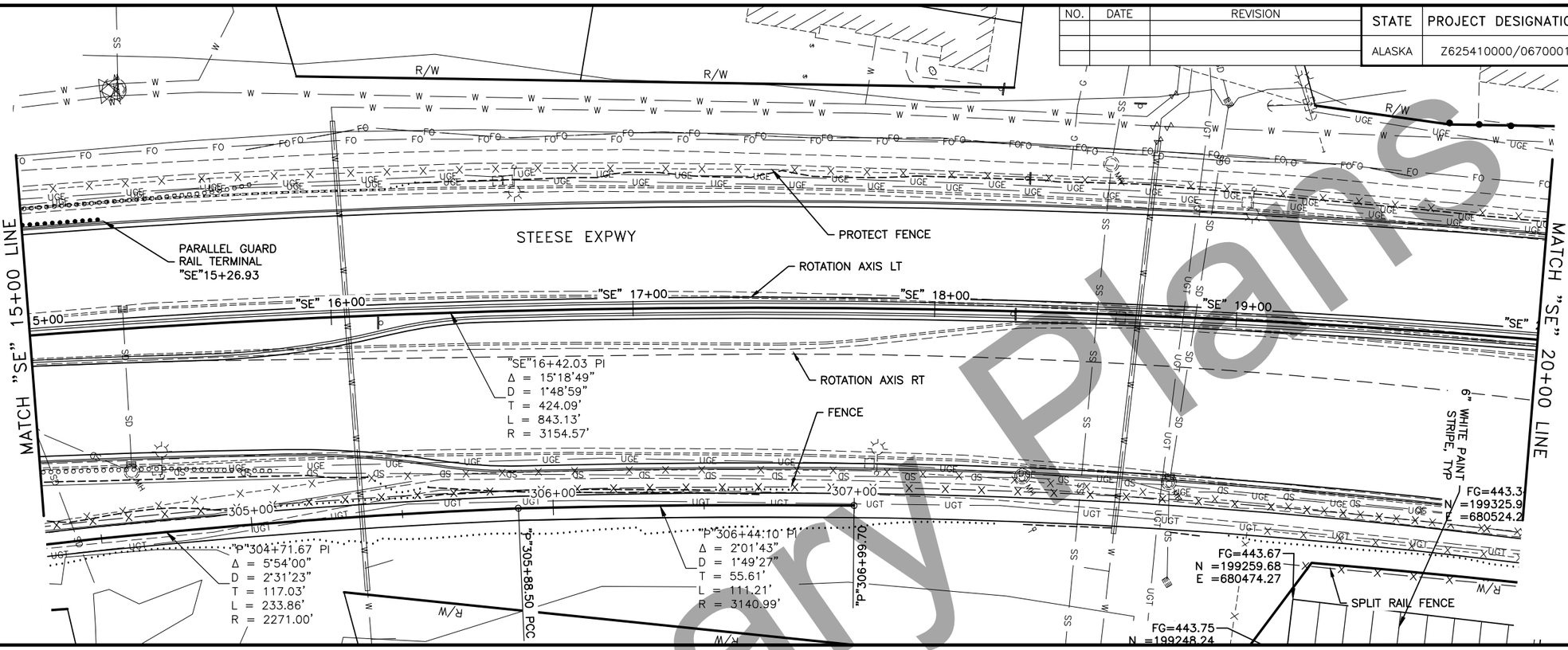

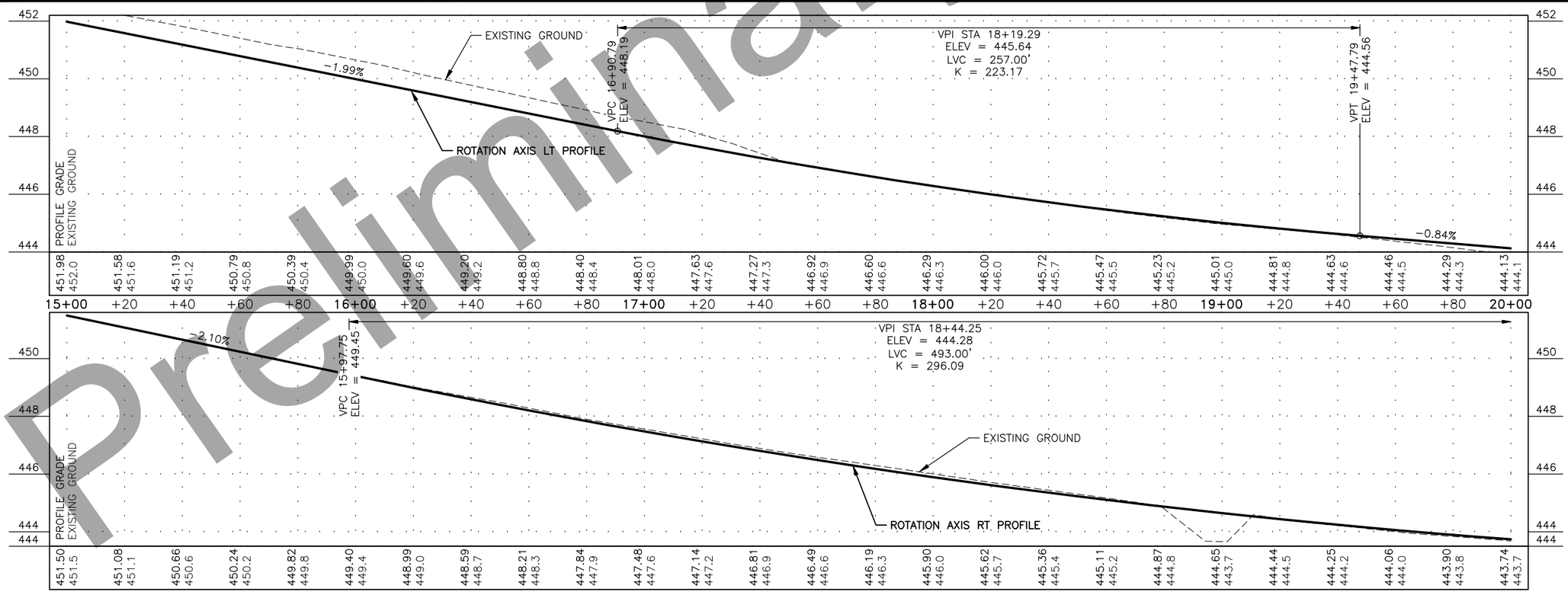

STATE OF ALASKA
49
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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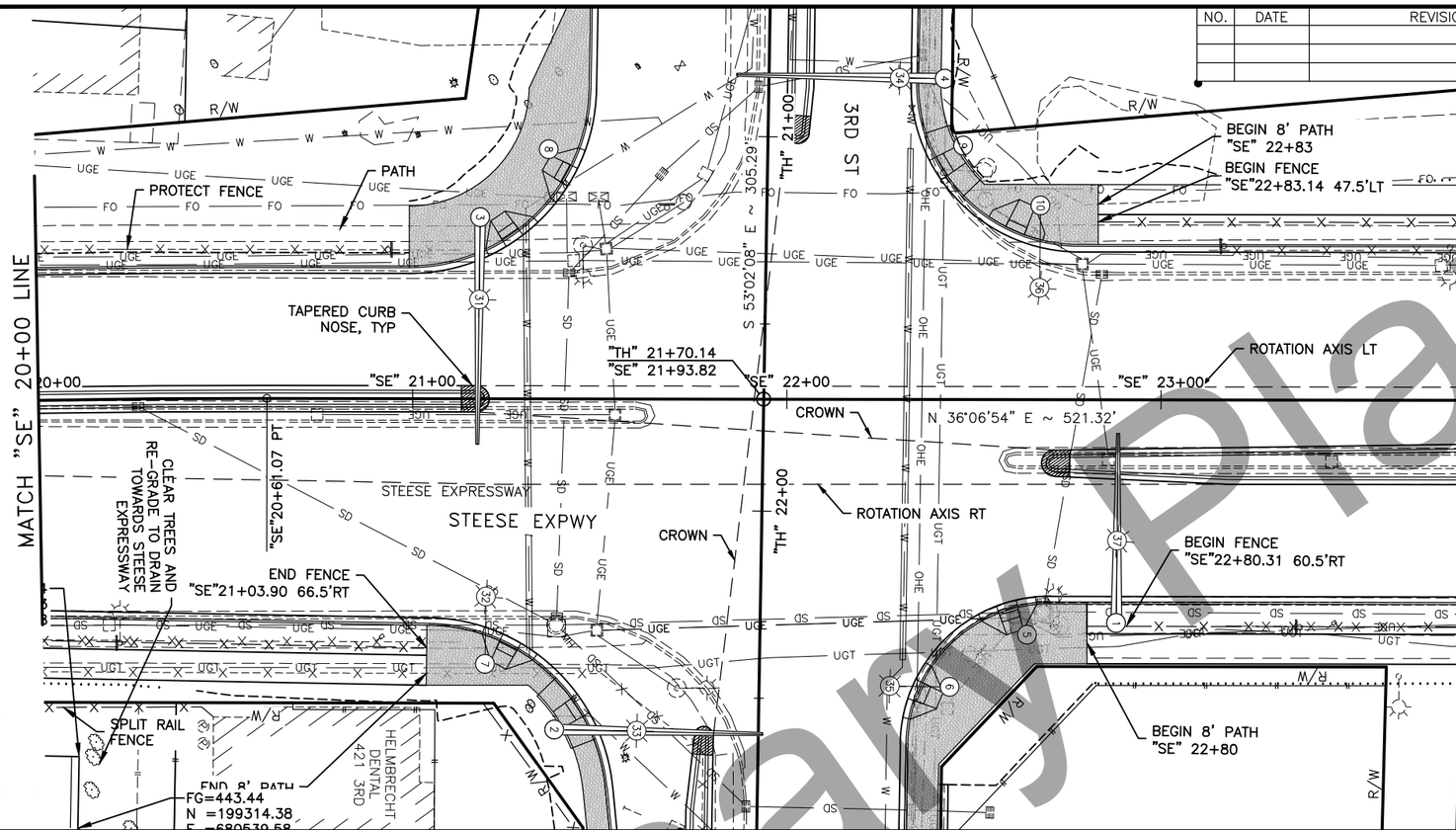
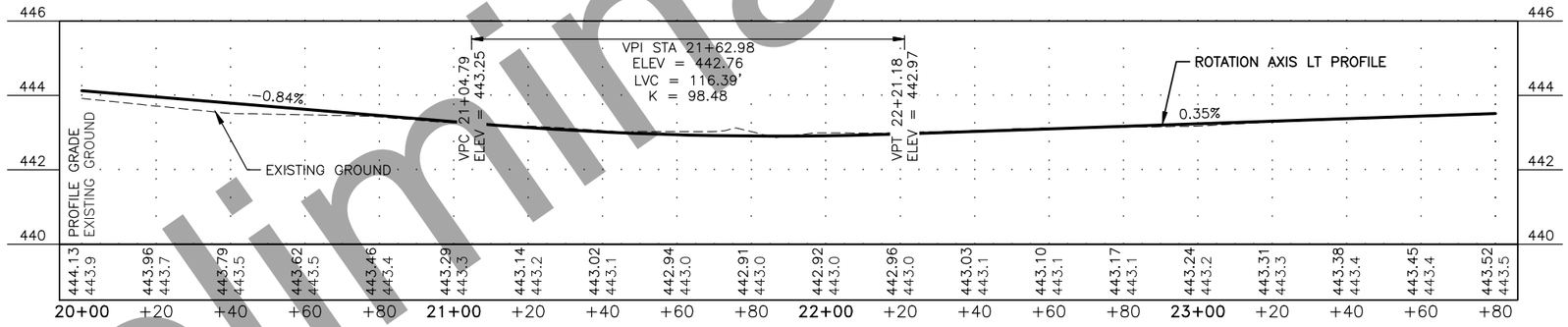
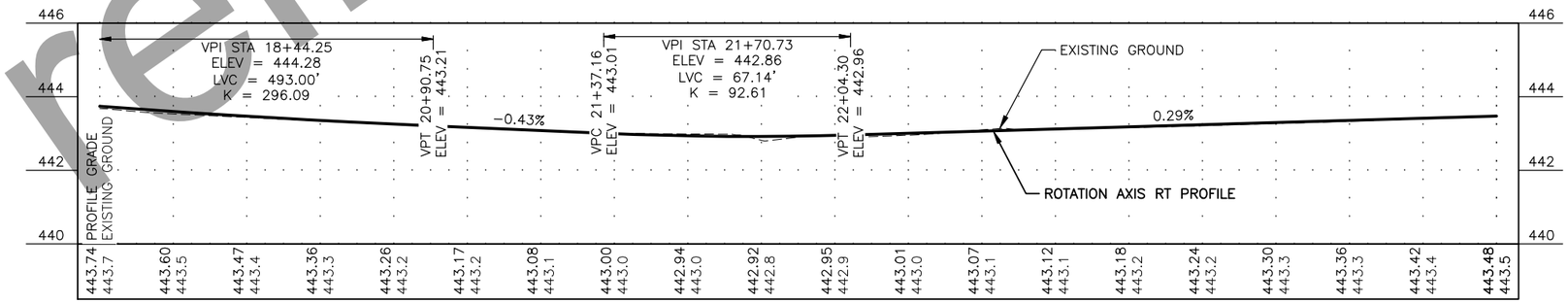
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F11	15







STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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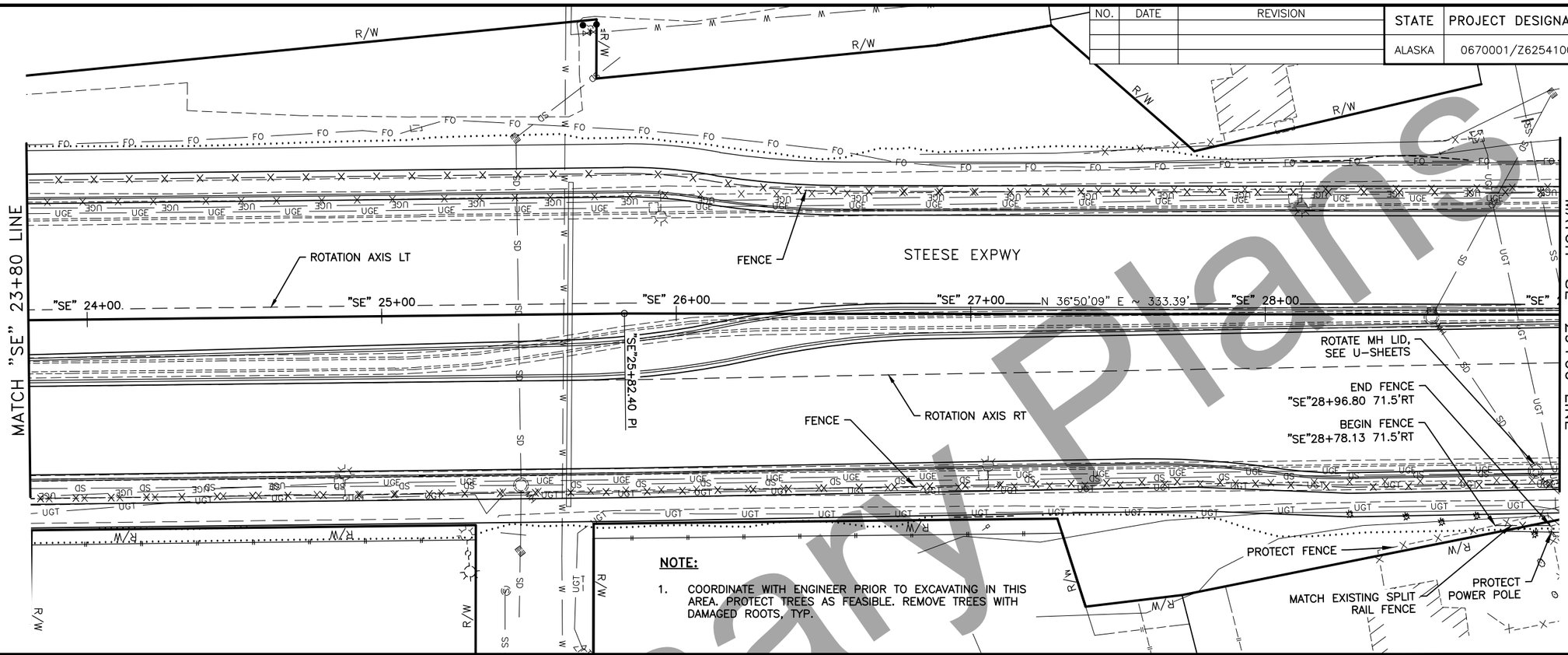
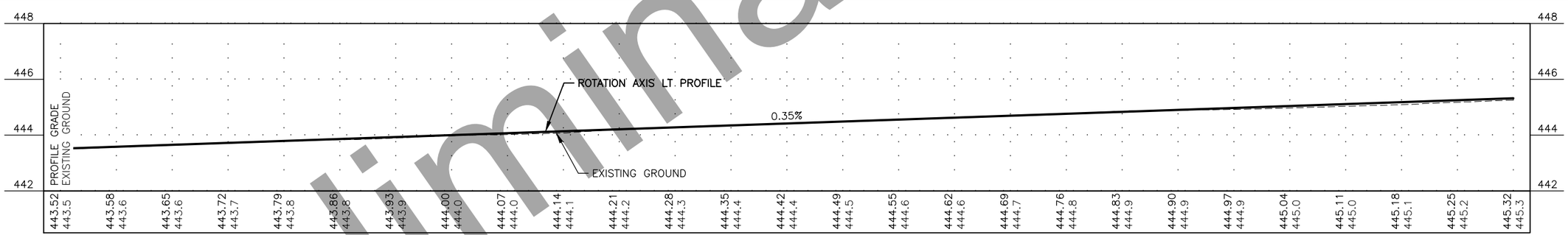
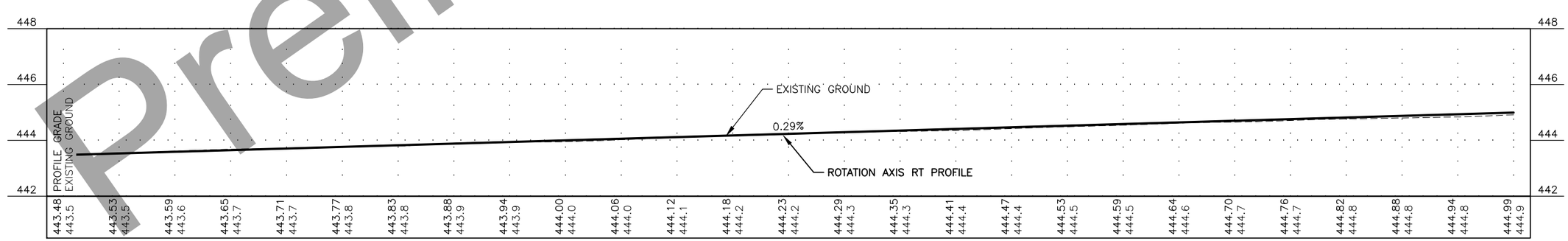


NOTE:

1. COORDINATE WITH ENGINEER PRIOR TO EXCAVATING IN THIS AREA. PROTECT TREES AS FEASIBLE. REMOVE TREES WITH DAMAGED ROOTS, TYP.

STATE OF ALASKA 49 PROFESSIONAL ENGINEER PRELIM PS&E





Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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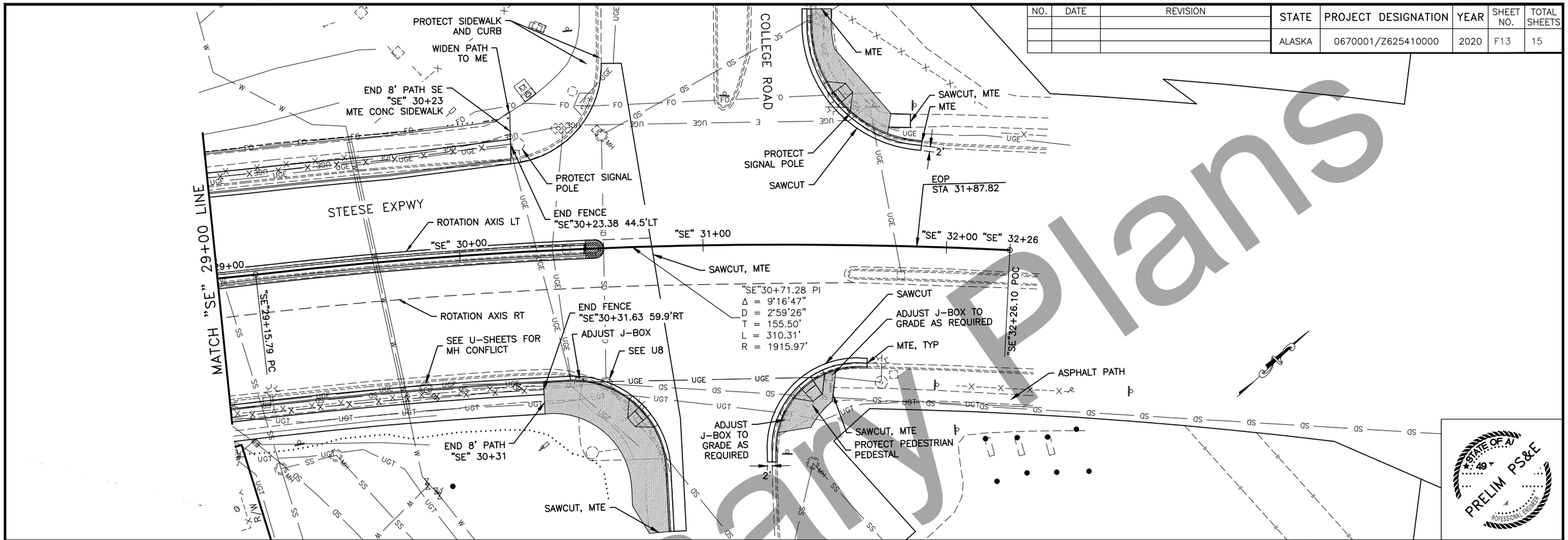
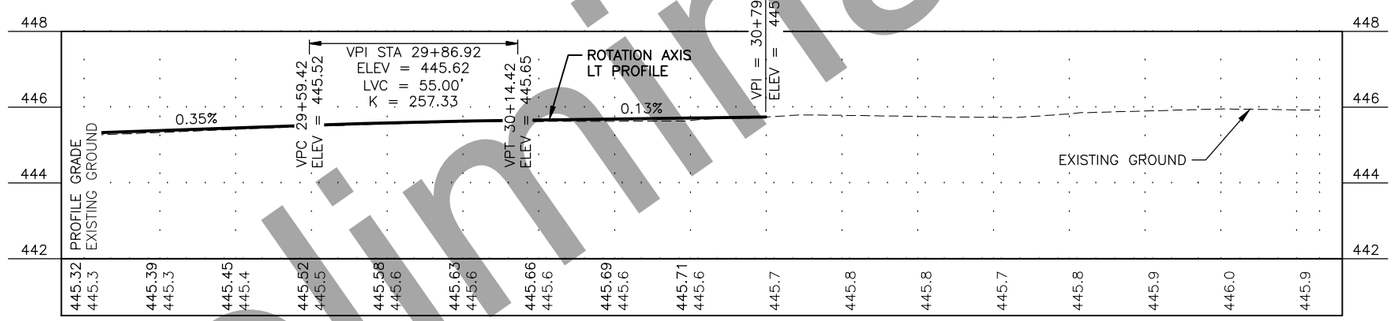
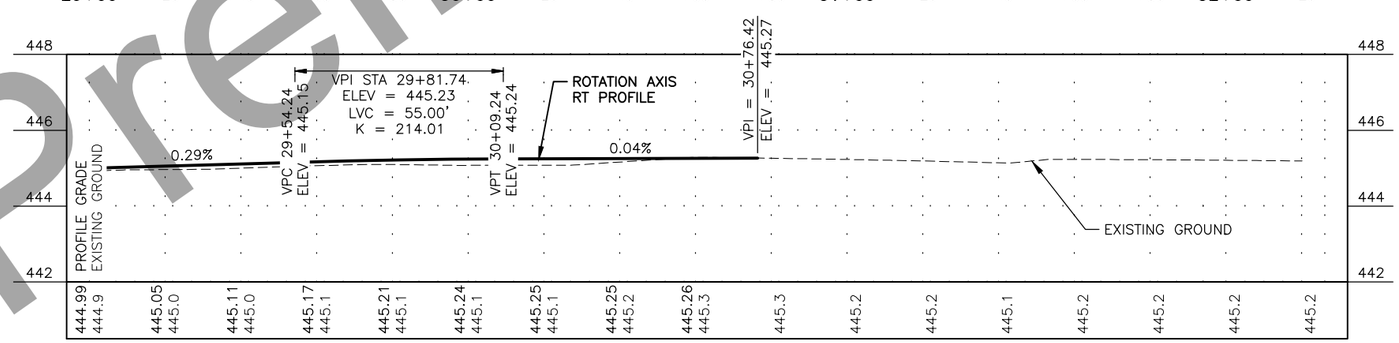
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F13	15







Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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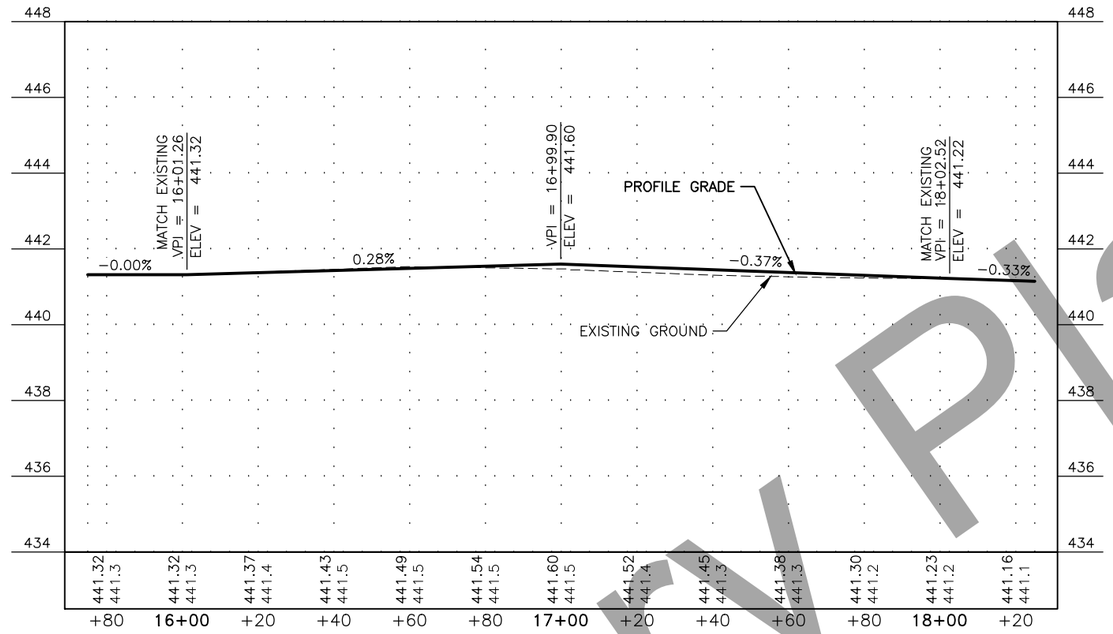
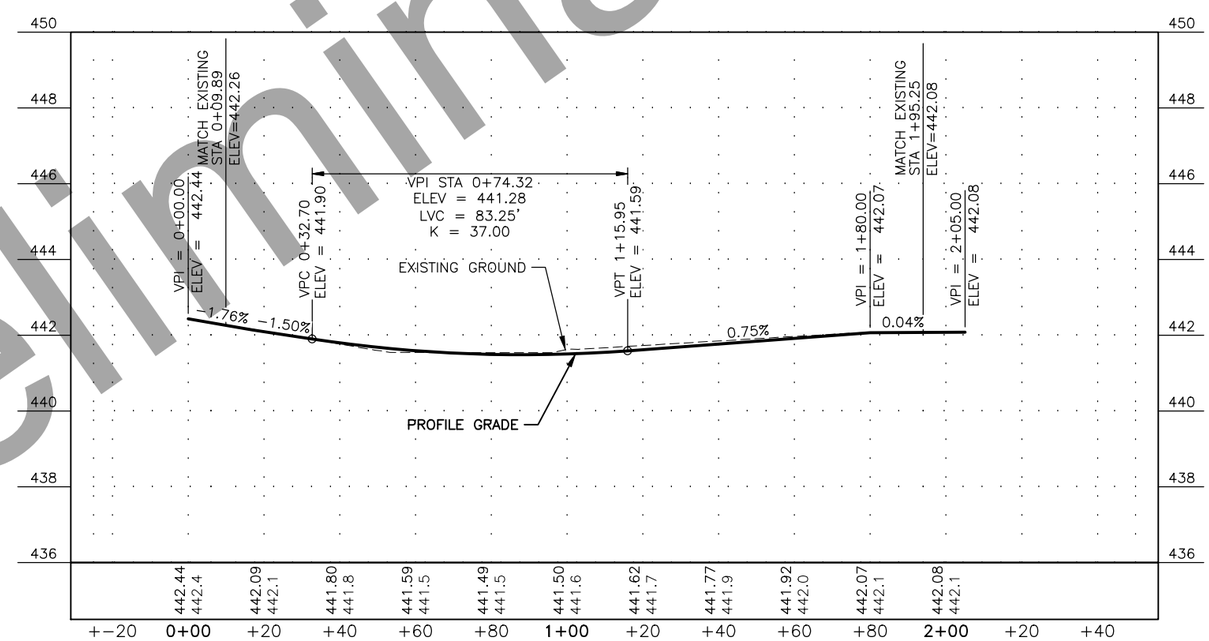


OLD STEESE HIGHWAY



HAMILTON AVENUE

STATE OF ALASKA
49
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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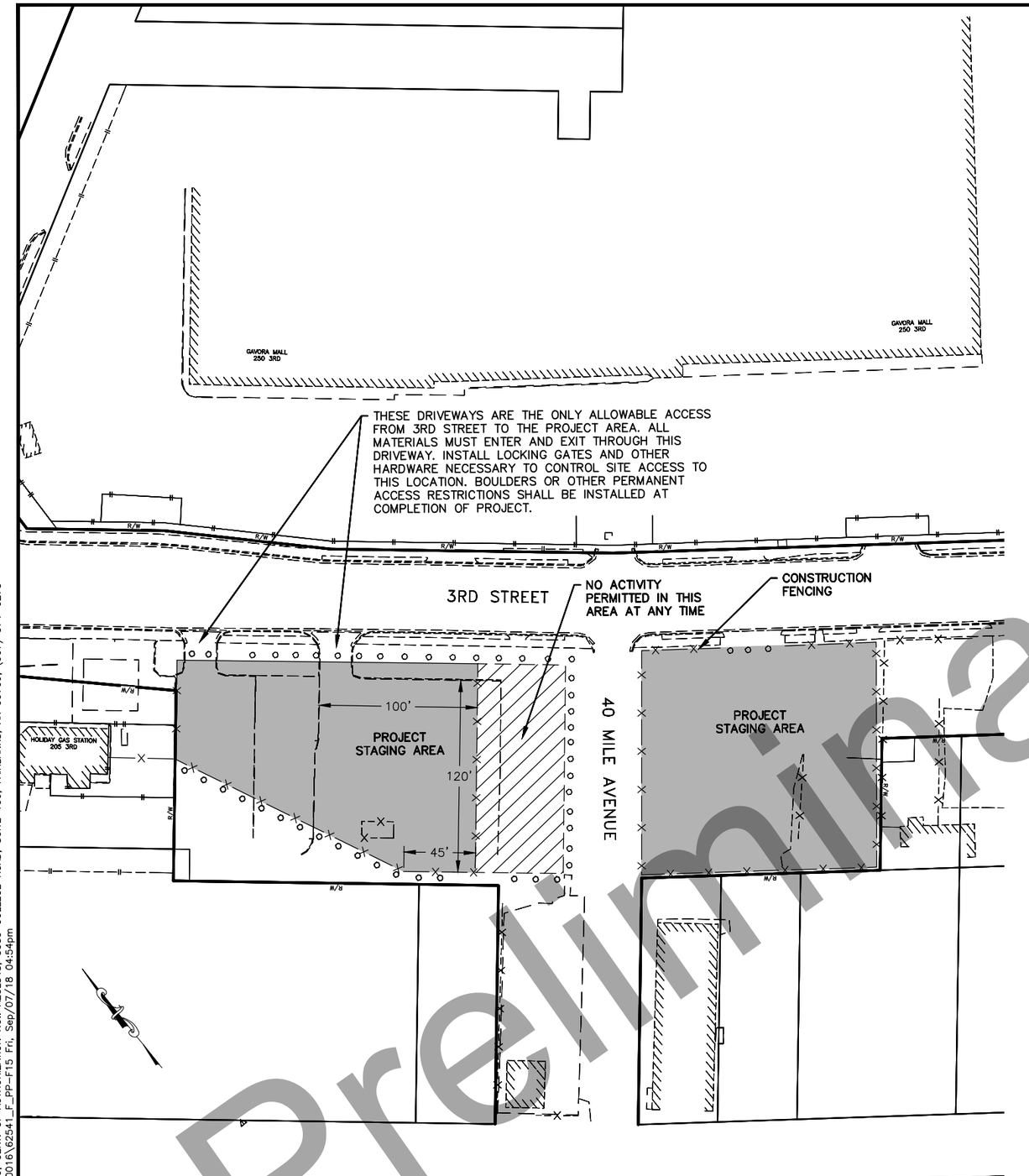
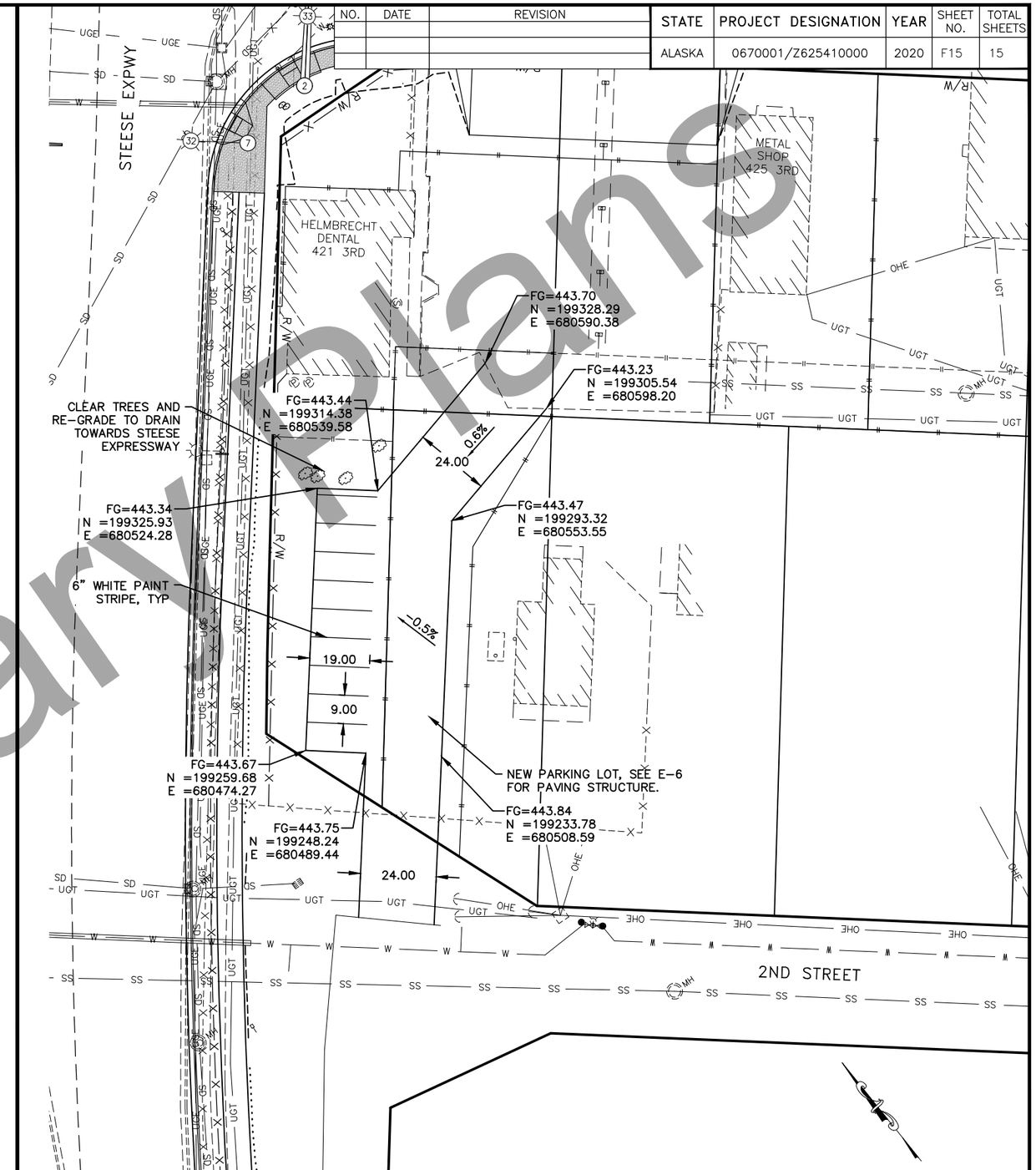
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	F15	15



PROJECT STAGING AREA



HELMBRECHT DENTAL PARKING LAYOUT

ROADWAY SHEET LAYOUT
3RD STREET

STATE OF AK 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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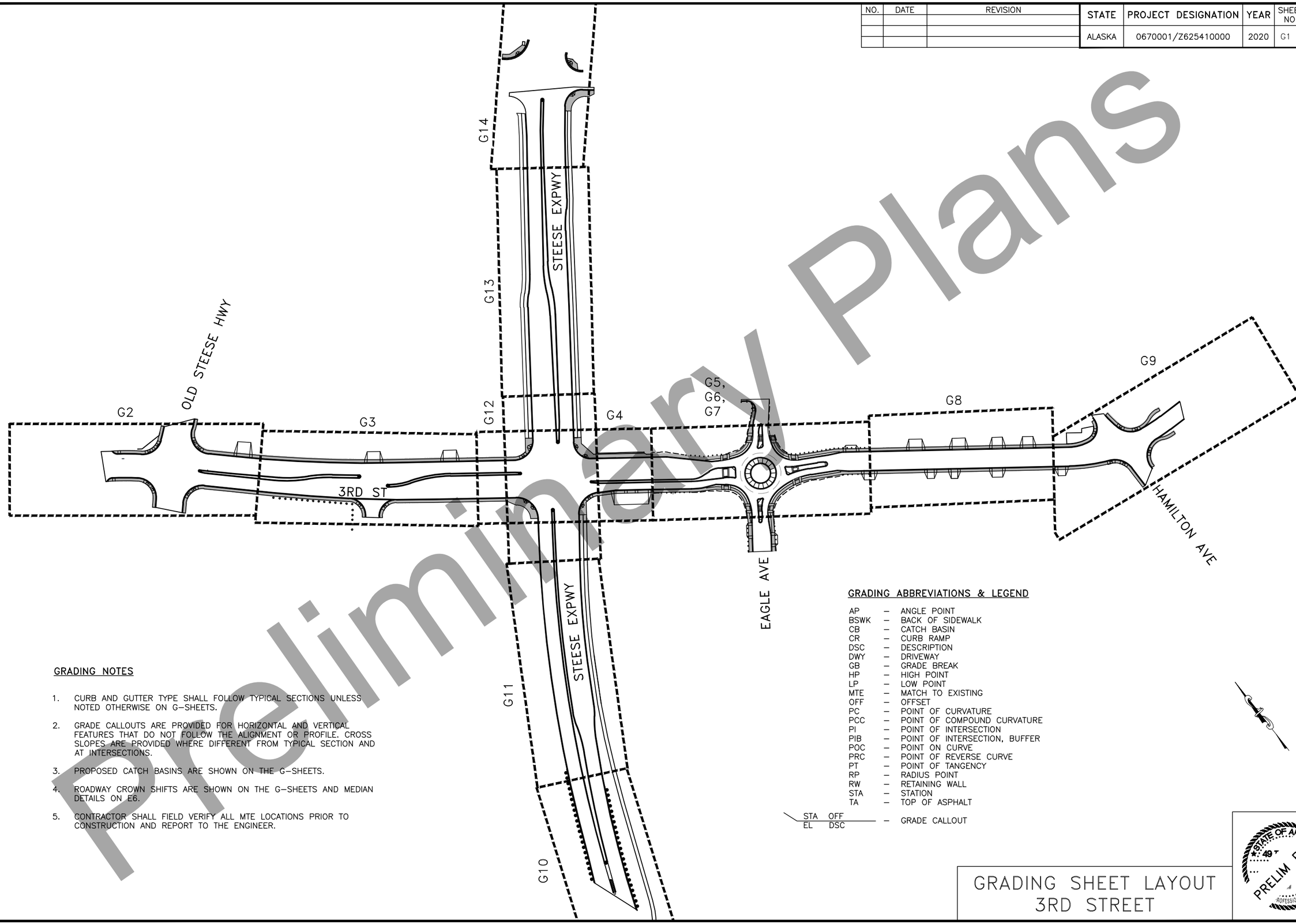
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G1	14



Preliminary Plans

GRADING NOTES

1. CURB AND GUTTER TYPE SHALL FOLLOW TYPICAL SECTIONS UNLESS NOTED OTHERWISE ON G–SHEETS.
2. GRADE CALLOUTS ARE PROVIDED FOR HORIZONTAL AND VERTICAL FEATURES THAT DO NOT FOLLOW THE ALIGNMENT OR PROFILE. CROSS SLOPES ARE PROVIDED WHERE DIFFERENT FROM TYPICAL SECTION AND AT INTERSECTIONS.
3. PROPOSED CATCH BASINS ARE SHOWN ON THE G–SHEETS.
4. ROADWAY CROWN SHIFTS ARE SHOWN ON THE G–SHEETS AND MEDIAN DETAILS ON E6.
5. CONTRACTOR SHALL FIELD VERIFY ALL MTE LOCATIONS PRIOR TO CONSTRUCTION AND REPORT TO THE ENGINEER.

GRADING ABBREVIATIONS & LEGEND

AP	–	ANGLE POINT
BSWK	–	BACK OF SIDEWALK
CB	–	CATCH BASIN
CR	–	CURB RAMP
DSC	–	DESCRIPTION
DWY	–	DRIVEWAY
GB	–	GRADE BREAK
HP	–	HIGH POINT
LP	–	LOW POINT
MTE	–	MATCH TO EXISTING
OFF	–	OFFSET
PC	–	POINT OF CURVATURE
PCC	–	POINT OF COMPOUND CURVATURE
PI	–	POINT OF INTERSECTION
PIB	–	POINT OF INTERSECTION, BUFFER
POC	–	POINT ON CURVE
PRC	–	POINT OF REVERSE CURVE
PT	–	POINT OF TANGENCY
RP	–	RADIUS POINT
RW	–	RETAINING WALL
STA	–	STATION
TA	–	TOP OF ASPHALT

STA OFF
EL DSC – GRADE CALLOUT

GRADING SHEET LAYOUT
3RD STREET

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374–0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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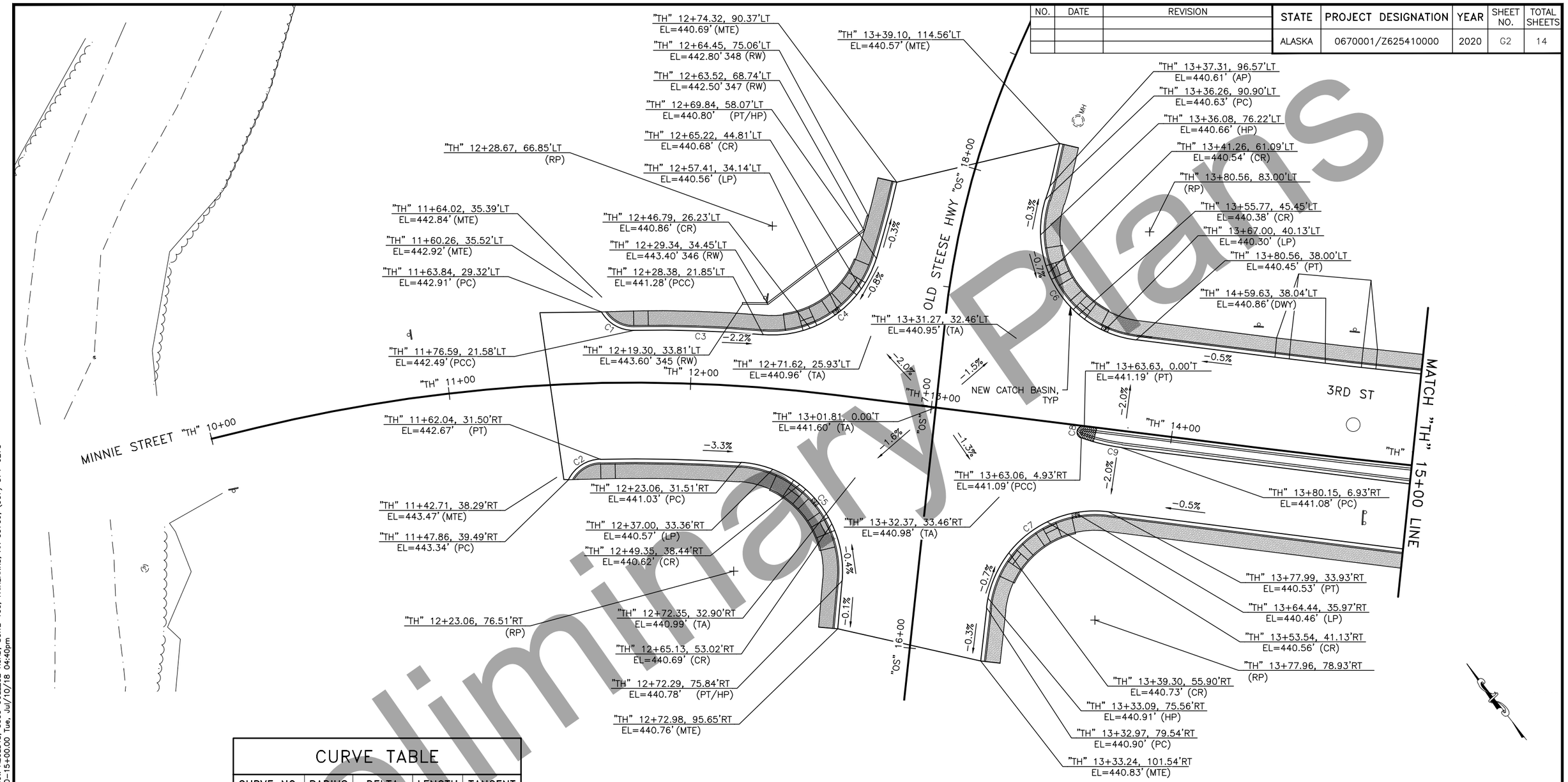

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C1	15.00'	61°28'33"	16.09	8.92
C2	15.00'	62°47'27"	16.44	9.15
C3	525.00'	5°50'15"	53.49	26.77
C4	45.00'	77°29'44"	60.86	36.11
C5	45.00'	91°10'45"	71.61	45.94
C6	45.00'	100°06'18"	78.62	53.73
C7	45.00'	90°48'48"	71.32	45.64
C8	2.50'	166°41'49"	7.27	21.44
C9	74.50'	13°15'39"	17.24	8.66

GRADING PLANS
10+00 – 15+00

STATE OF ALASKA
49
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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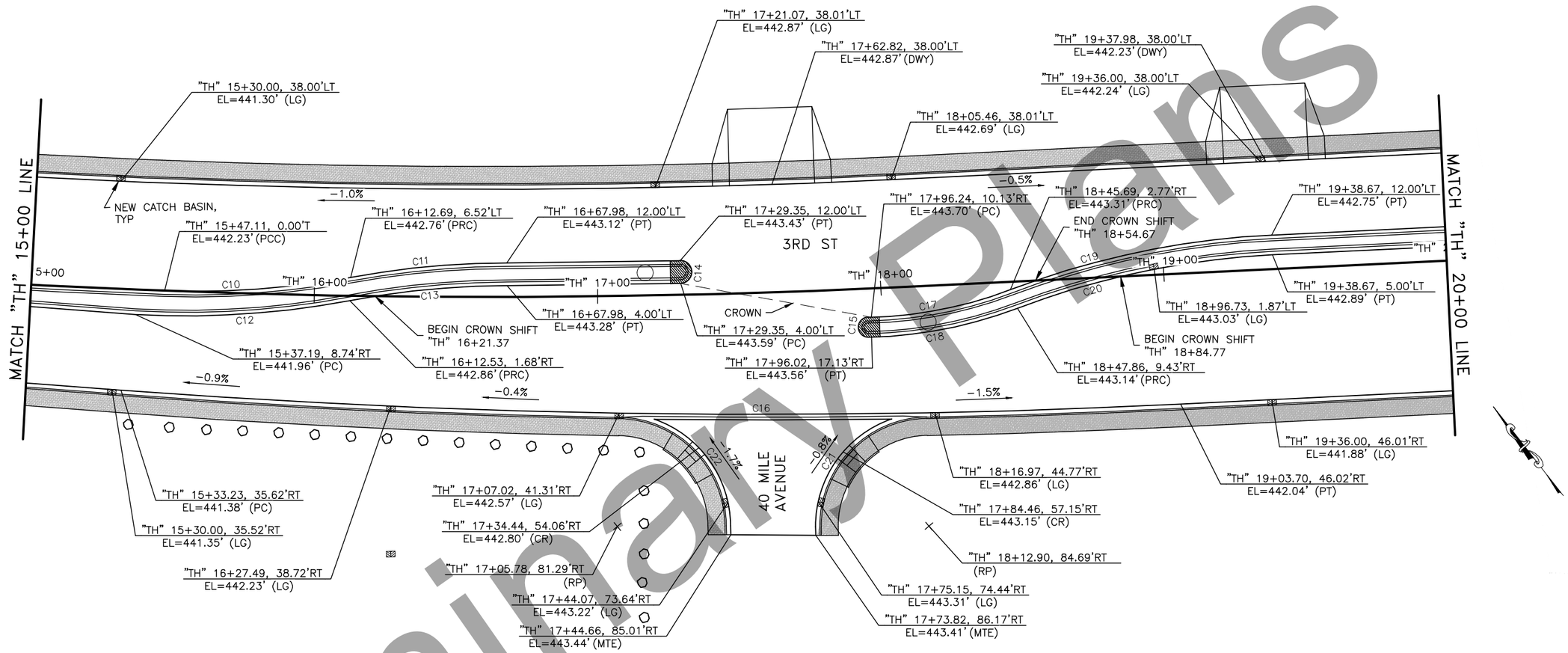

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C10	300.00'	12°35'59"	65.97	33.12
C11	308.00'	10°19'02"	55.46	27.81
C12	308.00'	14°08'11"	75.99	38.19
C13	300.00'	10°39'22"	55.79	27.98
C14	4.00'	180°00'00"	12.57	INFINITY
C15	3.50'	180°00'00"	11.00	INFINITY
C16	3016.00'	2°03'45"	108.57	54.29
C17	150.00'	19°38'33"	51.42	25.97
C18	157.00'	19°38'33"	53.82	27.18
C19	300.00'	18°03'17"	94.53	47.66
C20	293.00'	18°03'17"	92.33	46.55
C21	40.00'	71°07'50"	49.66	28.60
C22	40.00'	70°39'08"	49.32	28.35

GRADING PLANS
15+00 – 20+00

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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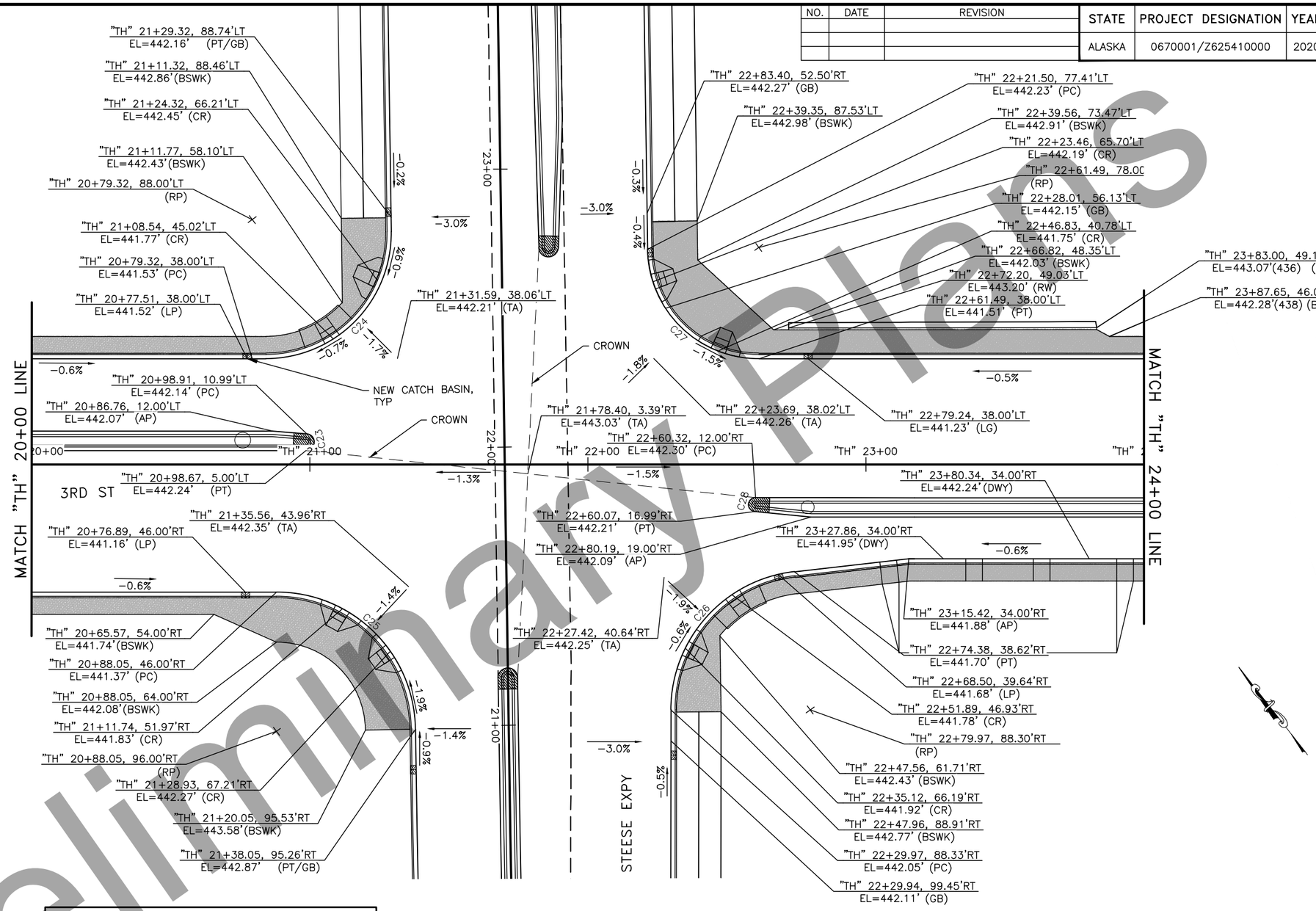

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C23	3.00'	175°15'03"	9.18	72.34
C24	45.00'	90°50'58"	71.35	45.67
C25	50.00'	89°09'02"	77.80	49.26
C26	50.00'	83°27'30"	72.83	44.59
C27	40.00'	89°09'02"	62.24	39.41
C28	2.50'	174°17'22"	7.60	50.12

GRADING PLANS
20+00 – 24+00

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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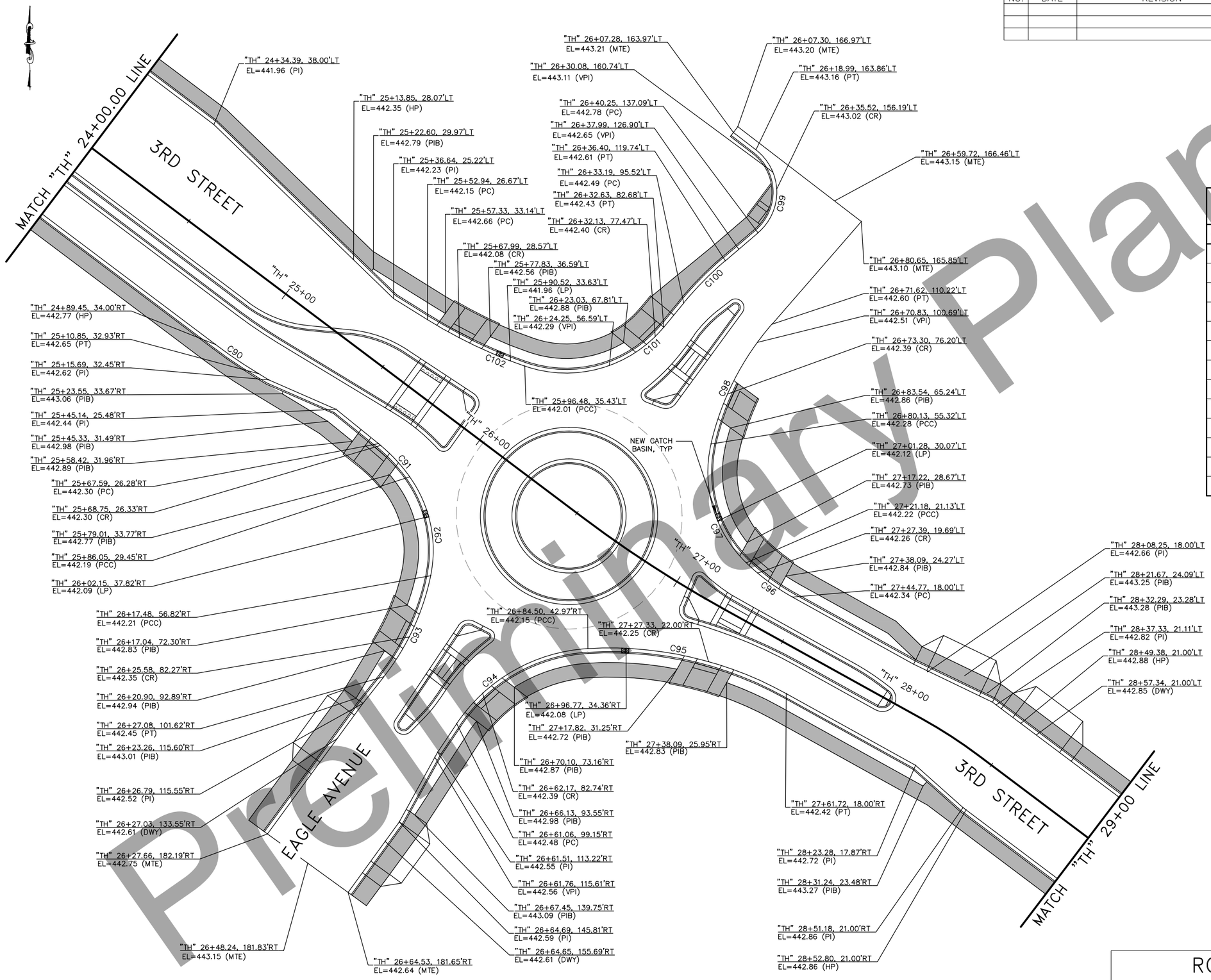
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G5	14



CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C90	215.00'	5°42'38"	21.43	10.72
C91	70.00'	15°22'24"	18.78	9.45
C92	52.00'	47°15'23"	42.89	22.75
C93	100.00'	26°29'20"	46.23	23.54
C94	70.00'	52°46'18"	64.47	34.73
C95	150.00'	32°25'59"	84.91	43.63
C96	90.00'	15°09'15"	23.80	11.97
C97	52.00'	58°45'42"	53.33	29.28
C98	114.00'	28°06'19"	55.92	28.53
C99	22.00'	101°59'12"	39.16	27.16
C100	140.00'	10°00'43"	24.46	12.26
C101	52.00'	69°47'10"	63.34	36.27
C102	202.00'	12°37'17"	44.50	22.34

Preliminary Plans

ROUNDABOUT GRADING PLAN (1 OF 3)

STATE OF OREGON
PRELIM PS&E
PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
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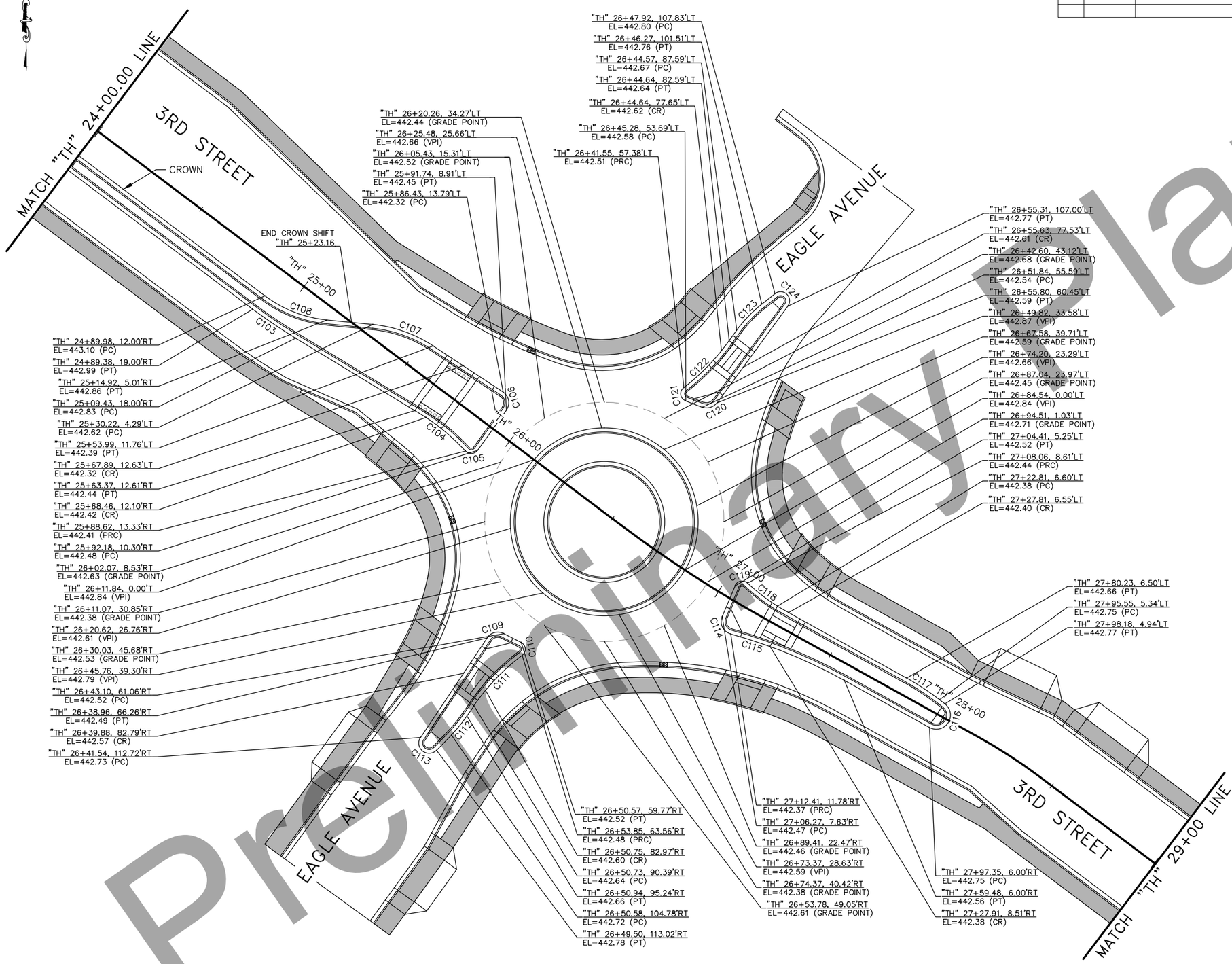
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G6	14



LEGEND:

GRADE LINE (10' OFFSET FROM TRUCK APRON LIP OF GUTTER)

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C103	201.50'	5°42'38"	20.08	10.05
C104	79.78'	18°13'14"	25.37	12.79
C105	3.00'	102°02'49"	5.34	3.71
C106	5.00'	92°14'58"	8.05	5.20
C107	52.00'	27°43'44"	25.17	12.83
C108	48.00'	31°18'17"	26.23	13.45
C109	5.00'	83°21'10"	7.27	4.45
C110	3.00'	115°54'05"	6.07	4.79
C111	84.50'	18°33'35"	27.37	13.81
C112	51.50'	10°37'55"	9.56	4.79
C113	4.00'	169°22'05"	11.82	42.99
C114	5.00'	97°26'58"	8.50	5.70
C115	200.00'	13°40'56"	47.76	23.99
C116	5.50'	171°19'26"	16.45	72.50
C117	101.50'	8°40'34"	15.37	7.70
C118	78.96'	10°39'07"	14.68	7.36
C119	3.00'	110°14'01"	5.77	4.30
C120	5.00'	74°40'24"	6.52	3.81
C121	3.00'	121°43'06"	6.37	5.38
C122	84.88'	17°12'32"	25.50	12.84
C123	52.00'	15°29'36"	14.06	7.07
C124	3.50'	164°30'24"	10.05	25.73

Preliminary Plans

ROUNDABOUT GRADING PLAN (2 OF 3)

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

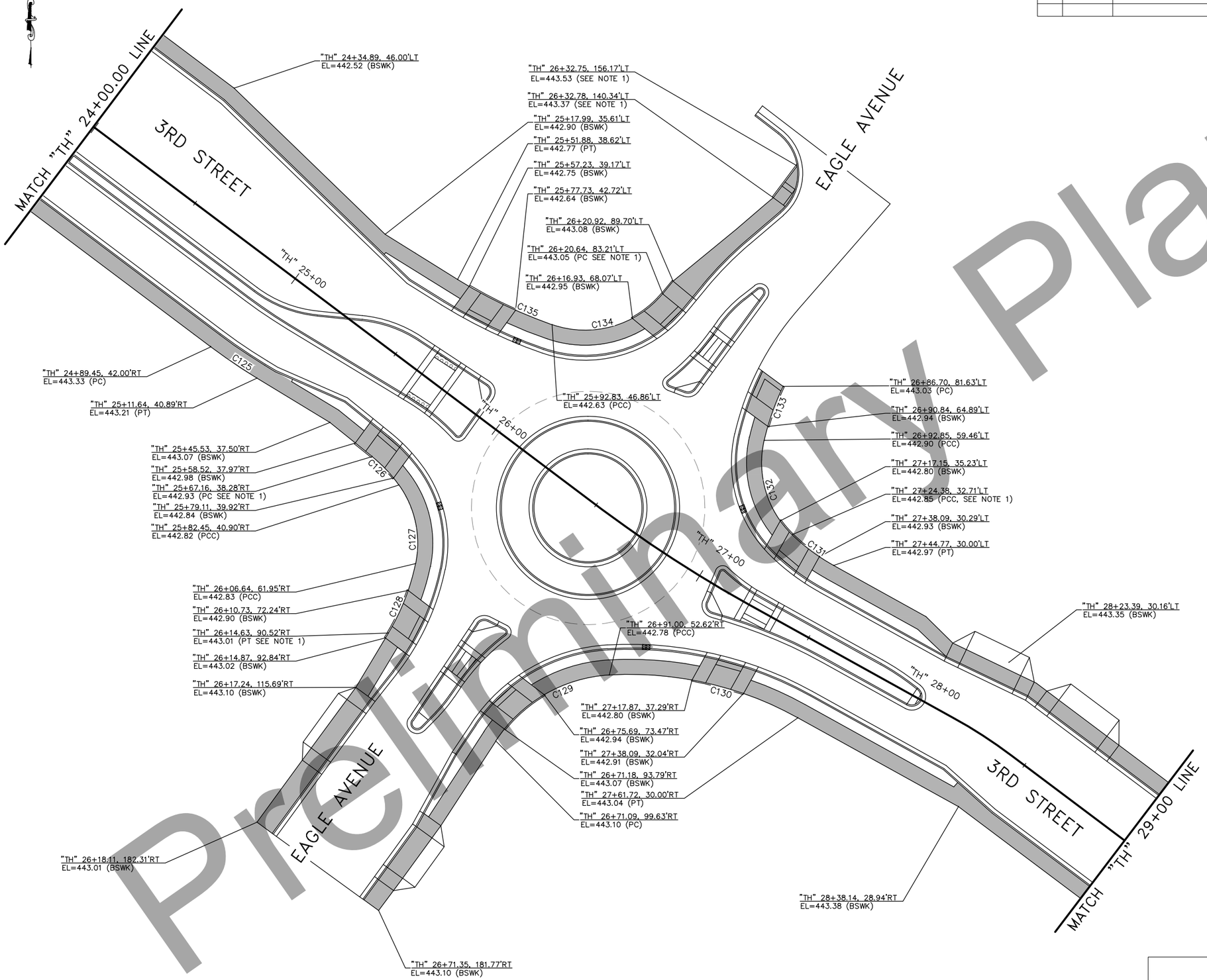
PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 – 3rd Street Widening Design\Final Design_CD\62541_G-G6 Fri, Aug/31/18 03:56pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G7	14

NOTES:

1. ELEVATIONS ARE TO TOP FACE OF BACKING CURB. REFER TO RAMP DETAILS ON SHEET E4 FOR GRADING WITHIN RAMP AREA.



CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C125	223.00'	5°42'38"	22.23	11.12
C126	52.65'	16°56'49"	15.57	7.84
C127	40.00'	47°15'23"	32.99	17.50
C128	88.00'	19°24'13"	29.80	15.05
C129	58.00'	53°35'29"	54.25	29.29
C130	138.00'	32°25'59"	78.12	40.14
C131	78.00'	15°09'15"	20.63	10.38
C132	40.00'	58°45'42"	41.02	22.52
C133	102.00'	12°49'31"	22.83	11.46
C134	40.00'	69°47'10"	48.72	27.90
C135	190.00'	12°37'17"	41.85	21.01

Preliminary Plans

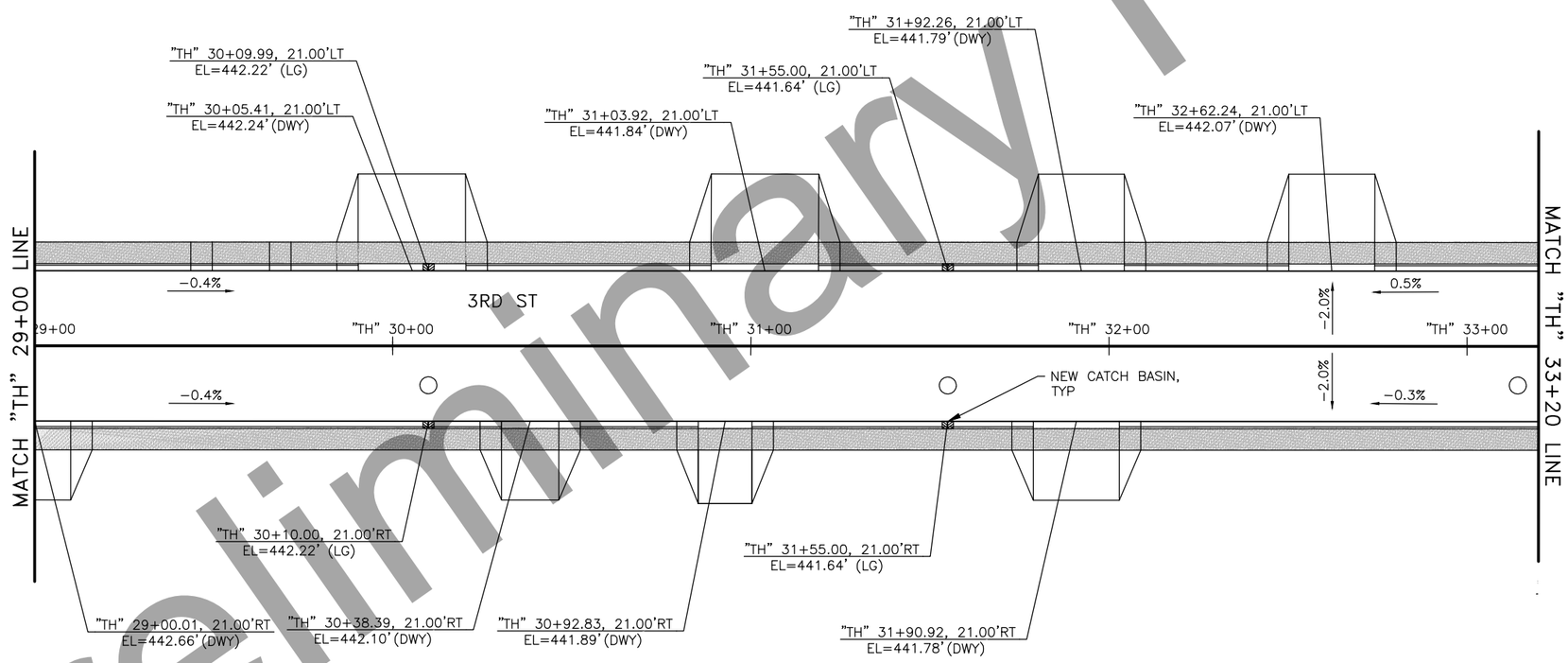
ROUNDABOUT GRADING PLAN (3 OF 3)

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 – 3rd Street Widening Design\Final Design_CD\62541_G-G7 Fri, Aug/31/18 03:56pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G8	14



GRADING PLANS
29+00 – 33+20

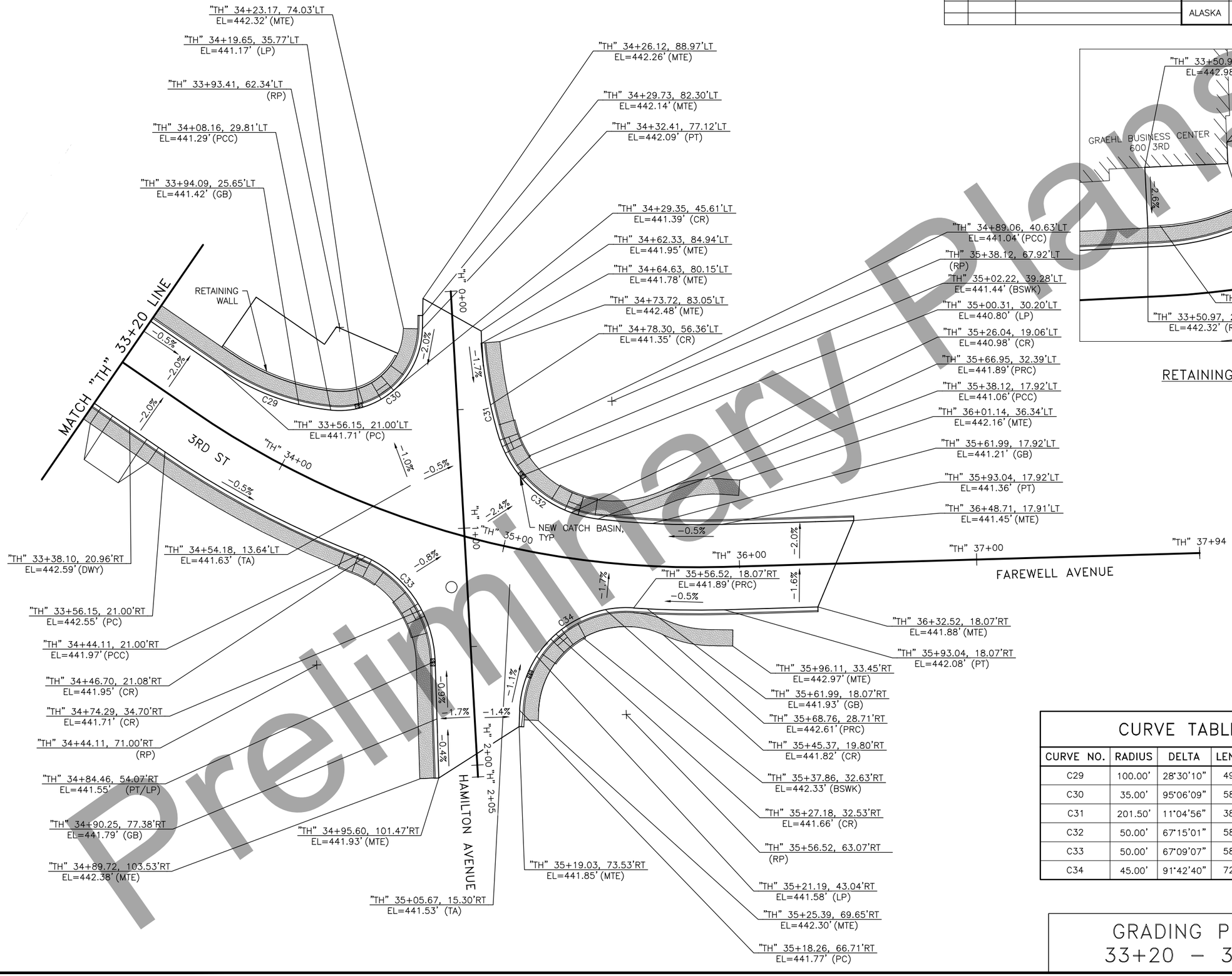
STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

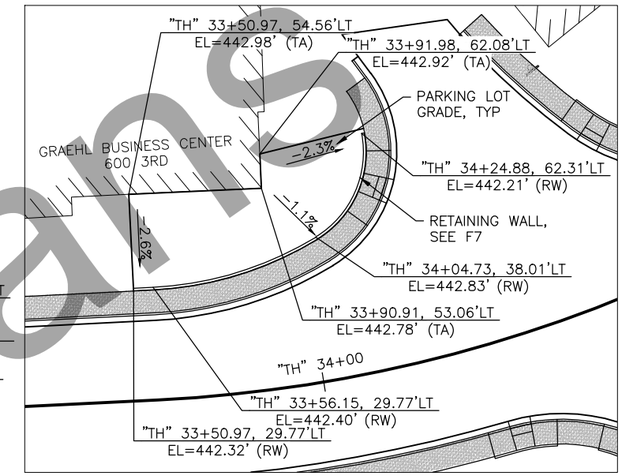
Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
C:\Temp\AcadTemp\AcPublish_3064\62541_G-3rd St29+00.00-33+20.00 Tue, Sep/11/18 11:06am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G9	14





RETAINING WALL GRADING

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C29	100.00'	28°30'10"	49.75	25.40
C30	35.00'	95°06'09"	58.09	38.26
C31	201.50'	11°04'56"	38.97	19.55
C32	50.00'	67°15'01"	58.69	33.25
C33	50.00'	67°09'07"	58.60	33.19
C34	45.00'	91°42'40"	72.03	46.36

GRADING PLANS
33+20 – 37+94

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

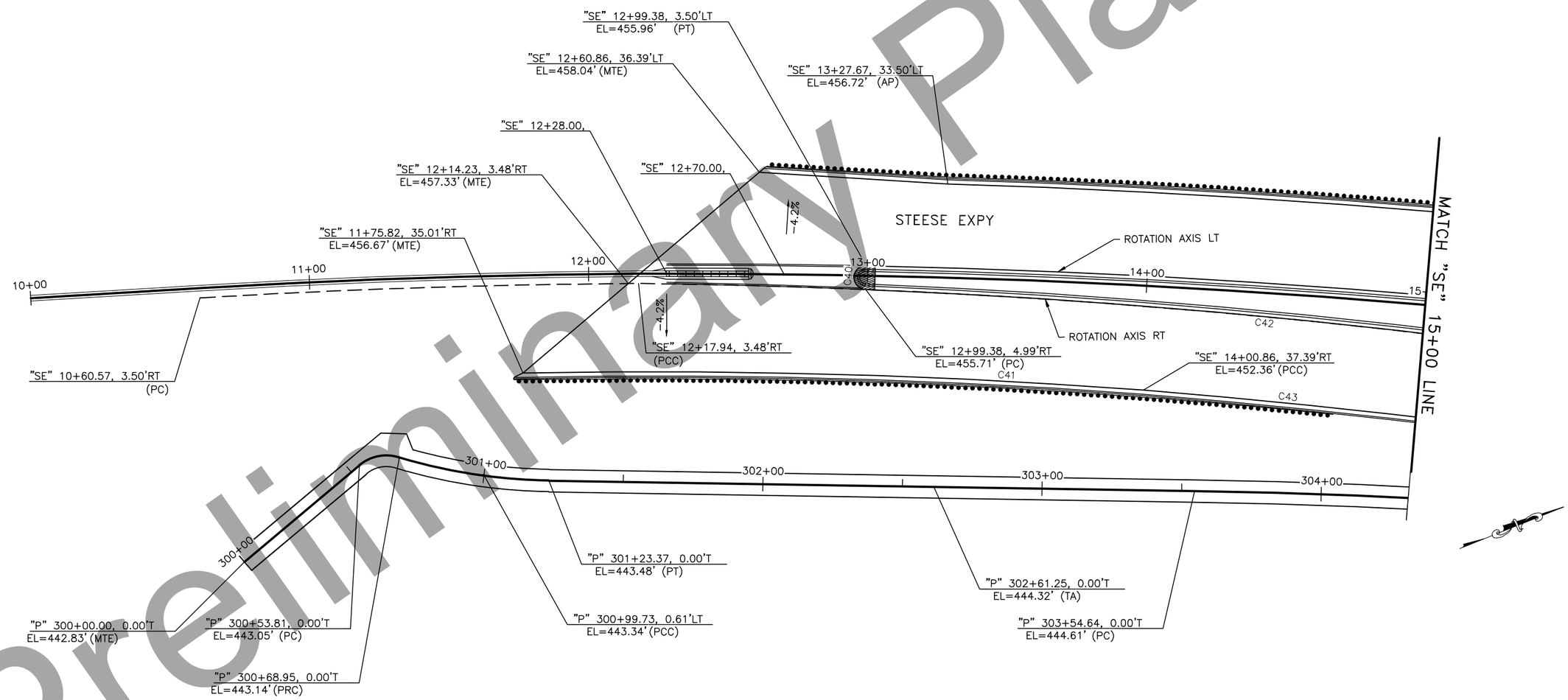
PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
C:\Civil 3D Projects\2016\24\50091-01\Civil\62541_G-3rd St33+20.00-37+94.10 Tue, Sep/11/18 11:12am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G10	14

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C40	4.25'	180°00'00"	13.34	INFINITY
C41	2343.24'	5°26'32"	222.57	111.37
C42	2683.28'	5°25'56"	254.41	127.30
C43	2653.28'	3°52'41"	179.59	89.83



GRADING PLANS
10+00 – 15+00

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G11	14

CURVE TABLE

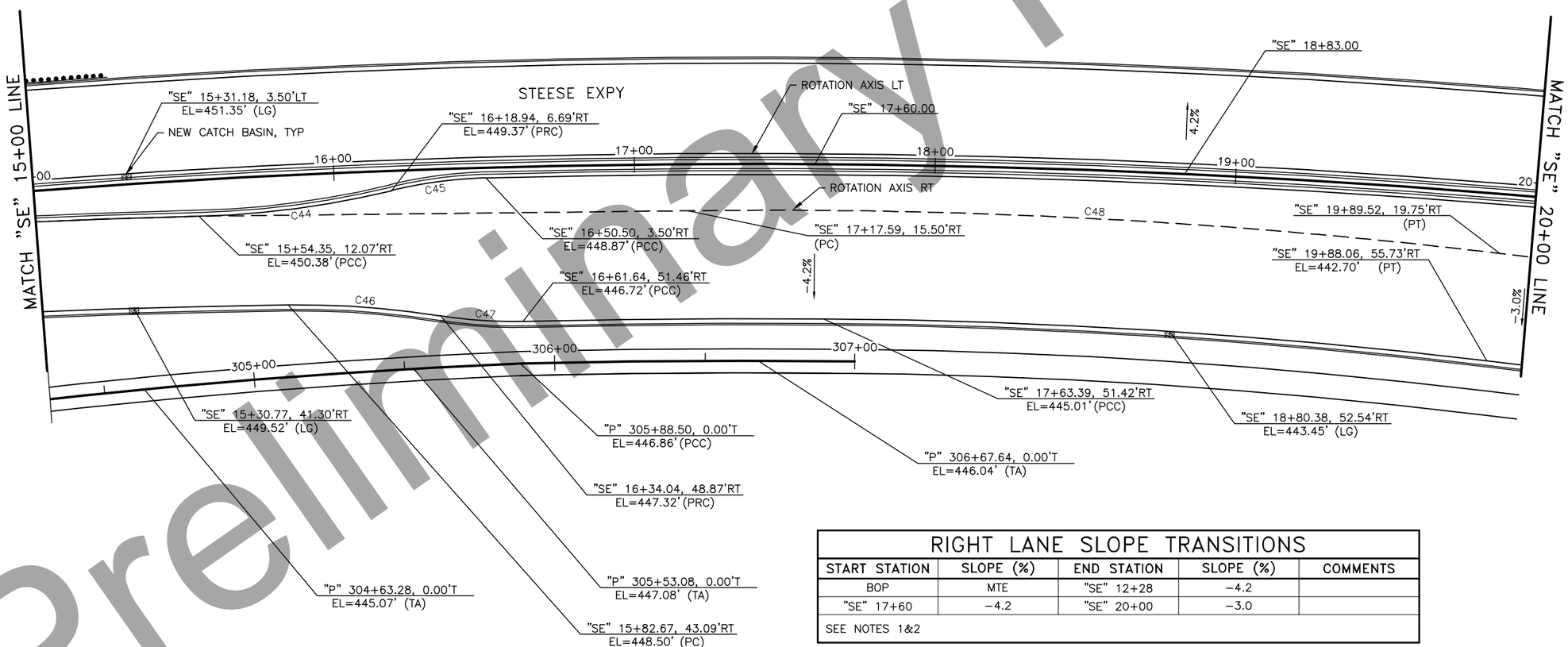
CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C44	300.00'	12°21'58"	64.75	32.50
C45	150.00'	12°07'08"	31.73	15.92
C46	300.00'	9°44'35"	51.02	25.57
C47	150.00'	10°26'04"	27.32	13.70
C48	2031.29'	7°37'53"	270.56	135.48

NOTES:

1. SEE TYPICAL SECTIONS AND INTERSECTION GRADING FOR SLOPES IN ALL OTHER LOCATIONS.
2. SLOPE TRANSITIONS SHALL BE UNIFORM ACROSS THE STATIONS SPECIFIED.

LEFT LANE SLOPE TRANSITIONS

START STATION	SLOPE (%)	END STATION	SLOPE (%)	COMMENTS
BOP	MTE	"SE" 12+70	4.2	
"SE" 18+83	4.2	"SE" 20+99	−1.4	
SEE NOTES 1&2				



RIGHT LANE SLOPE TRANSITIONS

START STATION	SLOPE (%)	END STATION	SLOPE (%)	COMMENTS
BOP	MTE	"SE" 12+28	−4.2	
"SE" 17+60	−4.2	"SE" 20+00	−3.0	
SEE NOTES 1&2				

GRADING PLANS
15+00 – 20+00

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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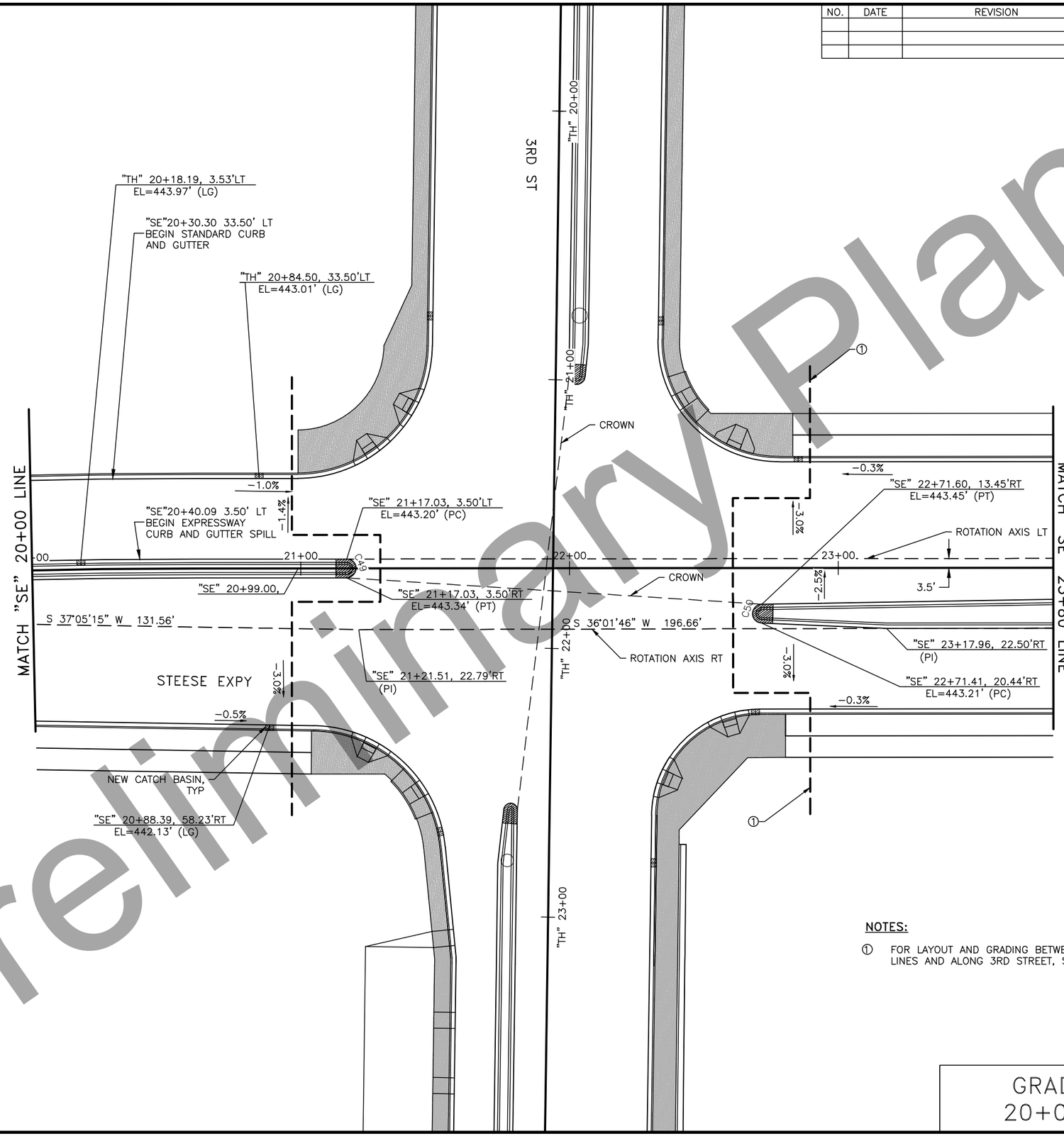
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G12	14



CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C49	3.50'	180°00'00"	11.00	INFINITY
C50	3.50'	175°08'59"	10.70	82.64

NOTES:

① FOR LAYOUT AND GRADING BETWEEN DASHED LINES AND ALONG 3RD STREET, SEE SHEET G4.

GRADING PLANS
20+00 – 23+80

STATE OF ALASKA
49
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

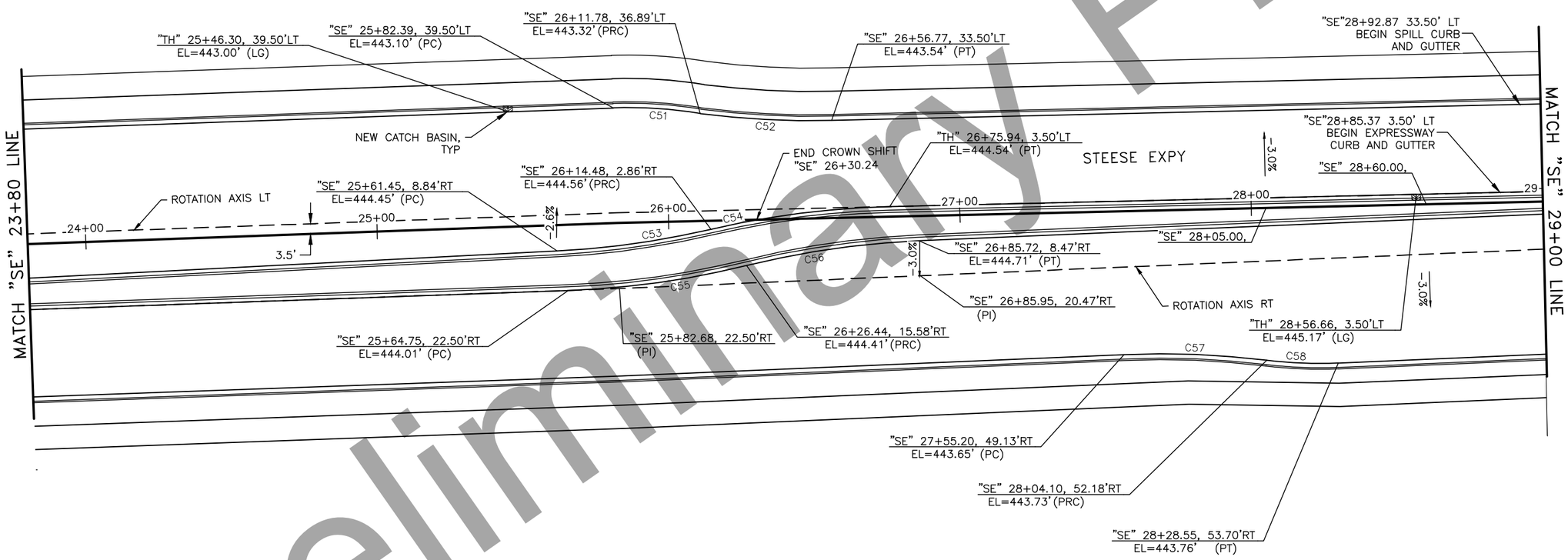
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G13	14

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C51	150.00'	11°26'22"	29.95	15.02
C52	300.00'	8°37'31"	45.16	22.62
C53	300.00'	10°11'24"	53.35	26.75
C54	300.00'	11°49'17"	61.90	31.06
C55	300.00'	11°49'40"	61.93	31.08
C56	300.00'	11°25'17"	59.80	30.00
C57	300.00'	9°22'05"	49.05	24.58
C58	150.00'	9°22'06"	24.53	12.29

LEFT LANE SLOPE TRANSITIONS

START STATION	SLOPE (%)	END STATION	SLOPE (%)	COMMENTS
"SE" 28+05	−3.0	"SE" 30+06	3.0	
"SE" 30+20	3.0	EOP	–	SEE SHEET G12 FOR INTERSECTION GRADING PLAN
SEE NOTES 1&2				



NOTES:

1. SEE TYPICAL SECTIONS AND INTERSECTION GRADING FOR SLOPES IN ALL OTHER LOCATIONS.
2. SLOPE TRANSITIONS SHALL BE UNIFORM ACROSS THE STATIONS SPECIFIED.

RIGHT LANE SLOPE TRANSITIONS

START STATION	SLOPE (%)	END STATION	SLOPE (%)	COMMENTS
"SE" 28+60	−3.0	"SE" 29+90	−4.2	
"SE" 30+19	−4.2	EOP	–	SEE SHEET G12 FOR INTERSECTION GRADING PLAN
SEE NOTES 1&2				

GRADING PLANS
23+80 – 29+00

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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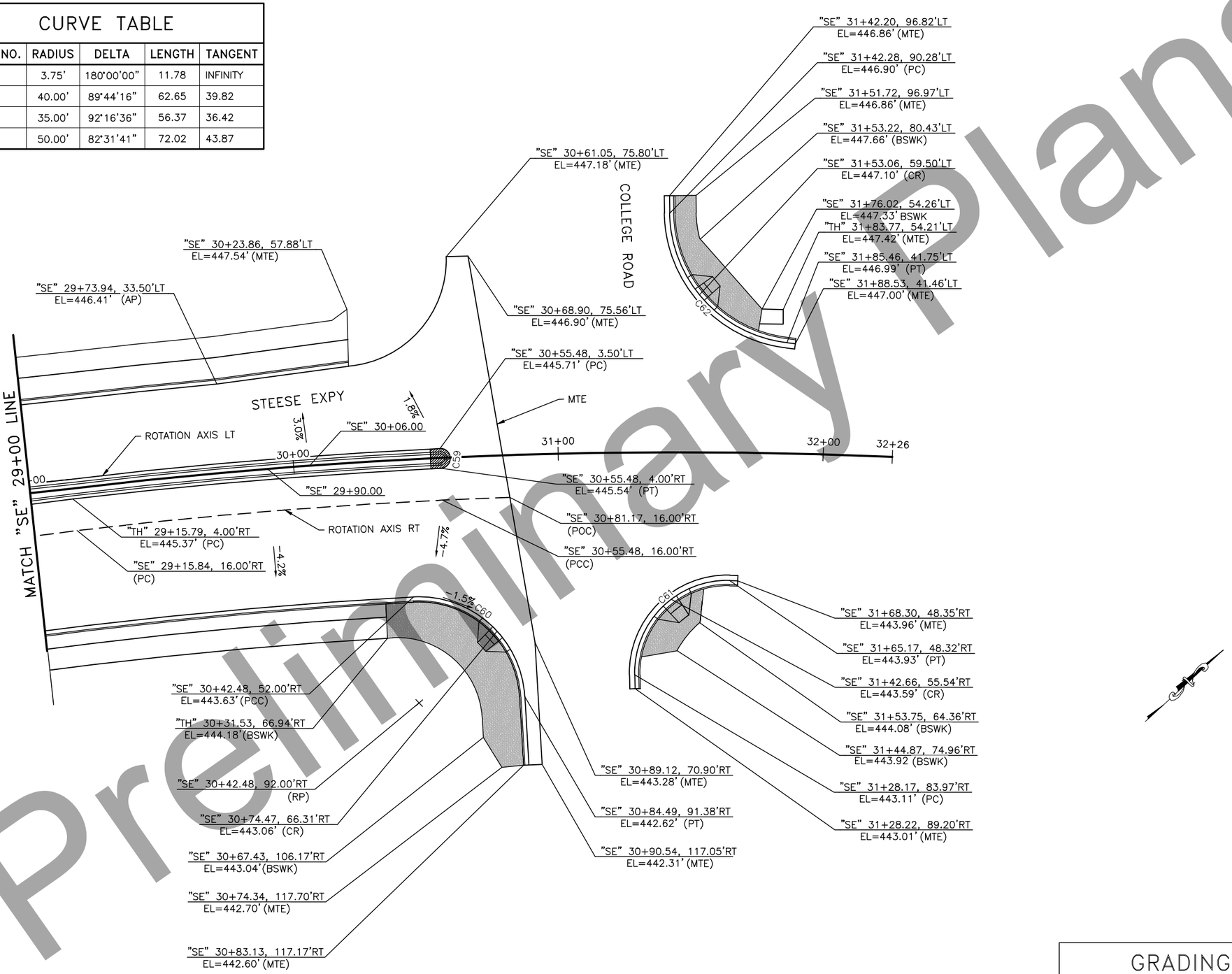
C:\Temp\AcadTemp\AcPublish_1632\62541_G-Steese 23+80.00-29+00.00 Tue, Jul/10/18 04:41pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	G14	14

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT
C59	3.75'	180°00'00"	11.78	INFINITY
C60	40.00'	89°44'16"	62.65	39.82
C61	35.00'	92°16'36"	56.37	36.42
C62	50.00'	82°31'41"	72.02	43.87



Preliminary Plans

GRADING PLANS
29+00 – 32+26

STATE OF AK
49
PRELIM PS&E
PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H1	34

LEGEND

SEE SHEET A2 FOR LEGEND.

TRAFFIC MARKING NOTES

1. ALL PROPOSED PAVEMENT MARKINGS SHALL BE INLAID METHYL METHACRYLATE (MMA.)
2. BEGIN PAVEMENT MARKINGS BY INSTALLING THE INTERSECTION CROSSWALKS FIRST. LAYOUT THE CROSSWALKS IN ACCORDANCE WITH STD. DWG. T-23.00. FOR SKEWED INTERSECTIONS AND WHERE CURB RAMPS ARE LOCATED IN NON-STANDARD LOCATIONS, CENTER THE CROSSWALK ON THE CURB RAMP.
3. IF NEW AND EXISTING LONGITUDINAL PAVEMENT MARKINGS ARE NOT ALIGNED AT THE MATCH LINE, TRANSITION BETWEEN THE TWO USING A 100:1 TAPER.
4. REMOVE ALL EXISTING PAVEMENT MARKINGS NOT COINCIDING WITH THE NEW INLAID MARKINGS. THIS WORK IS SUBSIDIARY TO 670 PAY ITEMS.
5. DIMENSIONS REFER TO THE CENTER OF STRIPE, STRIPE GROUP, EDGE OF PAVEMENT OR LIP OF GUTTER WHEN PRESENT.
6. TWO-WAY LEFT TURN LANE TO BE STRIPED IN ACCORDANCE WITH ALASKA DOT&PF STANDARD DRAWING T-21.03.
7. INSTALL THE "APPROACH TO OBSTRUCTIONS" MARKINGS IN ACCORDANCE WITH STANDARD DRAWING T-20.03 OR AS SHOWN ON THESE PLANS.
8. INSTALL TURN ARROWS WHERE SHOWN ACCORDING TO STD. DWG. T-21.03 AND 22.03. DO NOT INSTALL "ONLY" MARKINGS UNLESS SHOWN ON THE STRIPING PLAN.
9. PAINT THE TOP AND FACE OF ALL RAMPED MEDIAN NOSES AND THE CURB AND GUTTER ISLAND NOSES WITH 20 MILS OF SURFACE APPLIED YELLOW METHYL METHACRYLATE MARKINGS. THIS WORK IS SUBSIDIARY TO 670 PAY ITEMS.
10. STRIPING CONFIGURATIONS IN THIS PLAN SET ARE APPROXIMATE. THE CONTRACTOR SHALL PERFORM PRELIMINARY SPOTTING (RABBIT TRACKING) OF STRIPING AT LEAST 48 HOURS PRIOR TO MILLING AND APPLICATION OF MARKINGS. THE ENGINEER WILL THEN APPROVE THE LAYOUT OR MAKE MODIFICATIONS AS REQUIRED.

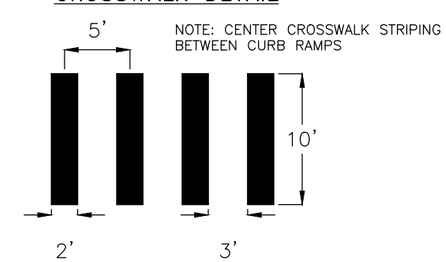
INDEX OF SHEETS

SHEET NO.	DESCRIPTION
H1	TRAFFIC LEGEND & NOTES
H2-H12	SIGNING & STRIPING
H13-H17	SIGN SUMMARIES & DETAILS
H18-H21	OLD STEESE HIGHWAY SIGNAL PLAN
H22-H25	STEESE EXPRESSWAY SIGNAL PLAN
H26-H29	HAMILTON AVENUE SIGNAL PLAN
H30-H34	SIGNAL DETAILS
H100 - H114	ILLUMINATION PLANS & DETAILS
H115 - H116	LOAD CENTER DETAILS

TRAFFIC MARKINGS SUMMARY

TYPE	DESCRIPTION	QUANTITY	REMARKS
LONGITUDINAL STRIPING (4" EQUIVALENT)	4"W	6,209 LF	
	4"WS	803 LF	DOES NOT INCLUDE SKIPS
	4"WD-1	326 LF	DOES NOT INCLUDE SKIPS
	4"Y	1,298 LF	
	4"YS	206 LF	DOES NOT INCLUDE SKIPS
	4"DY	1,592 LF	TWO 4" STRIPES
	8"W	9,708 LF	
	8"WD-1	171 LF	DOES NOT INCLUDE SKIPS
	8"WD-2	189 LF	DOES NOT INCLUDE SKIPS
	18"WD	207 LF	DOES NOT INCLUDE SKIPS
TOTAL LONGITUDINAL STRIPING (4" EQUIVALENT)		20,709 LF	
TRANSVERSE STRIPING & SYMBOLS	24"W	5,498 SF	INCLUDES CROSSWALKS AND STOP BARS
	WHITE CHEVRONS	914 SF	
	YELLOW DIAGONALS	86 SF	
	TURN ARROW SYMBOLS	780 SF	
	ONLY SYMBOLS	84 SF	
	TAPERED CURB NOSES	757 SF	
TOTAL TRANSVERSE STRIPING & SYMBOLS		8119 SF	

CROSSWALK DETAIL



TRAFFIC LEGEND AND NOTES

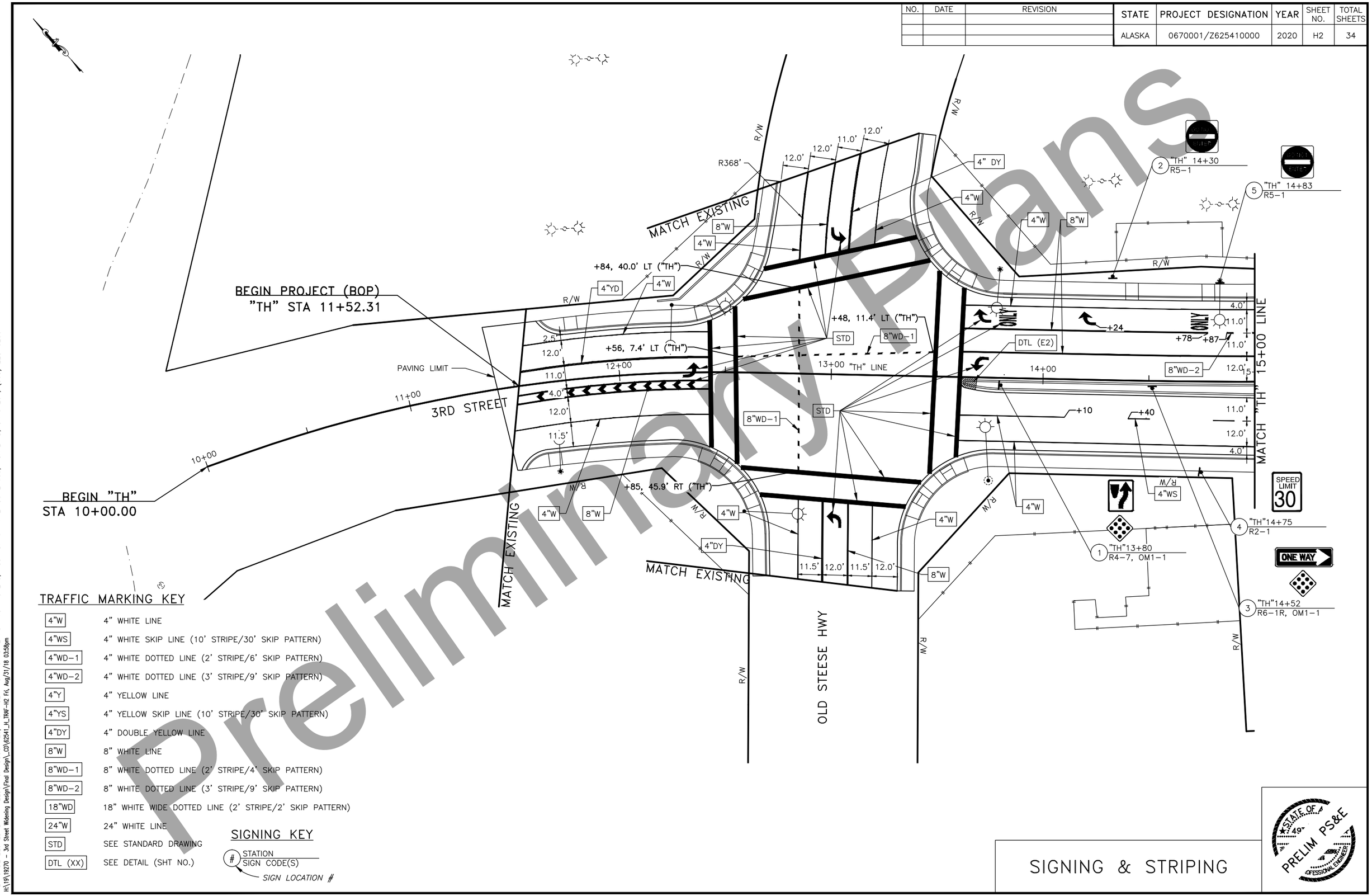
STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H1 Fri, Aug/31/18 03:58pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H2	34



TRAFFIC MARKING KEY

4"W	4" WHITE LINE
4"WS	4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN)
4"WD-1	4" WHITE DOTTED LINE (2' STRIPE/6' SKIP PATTERN)
4"WD-2	4" WHITE DOTTED LINE (3' STRIPE/9' SKIP PATTERN)
4"Y	4" YELLOW LINE
4"YS	4" YELLOW SKIP LINE (10' STRIPE/30' SKIP PATTERN)
4"DY	4" DOUBLE YELLOW LINE
8"W	8" WHITE LINE
8"WD-1	8" WHITE DOTTED LINE (2' STRIPE/4' SKIP PATTERN)
8"WD-2	8" WHITE DOTTED LINE (3' STRIPE/9' SKIP PATTERN)
18"WD	18" WHITE WIDE DOTTED LINE (2' STRIPE/2' SKIP PATTERN)
24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION / SIGN CODE(S)

SIGN LOCATION #

SIGNING & STRIPING

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
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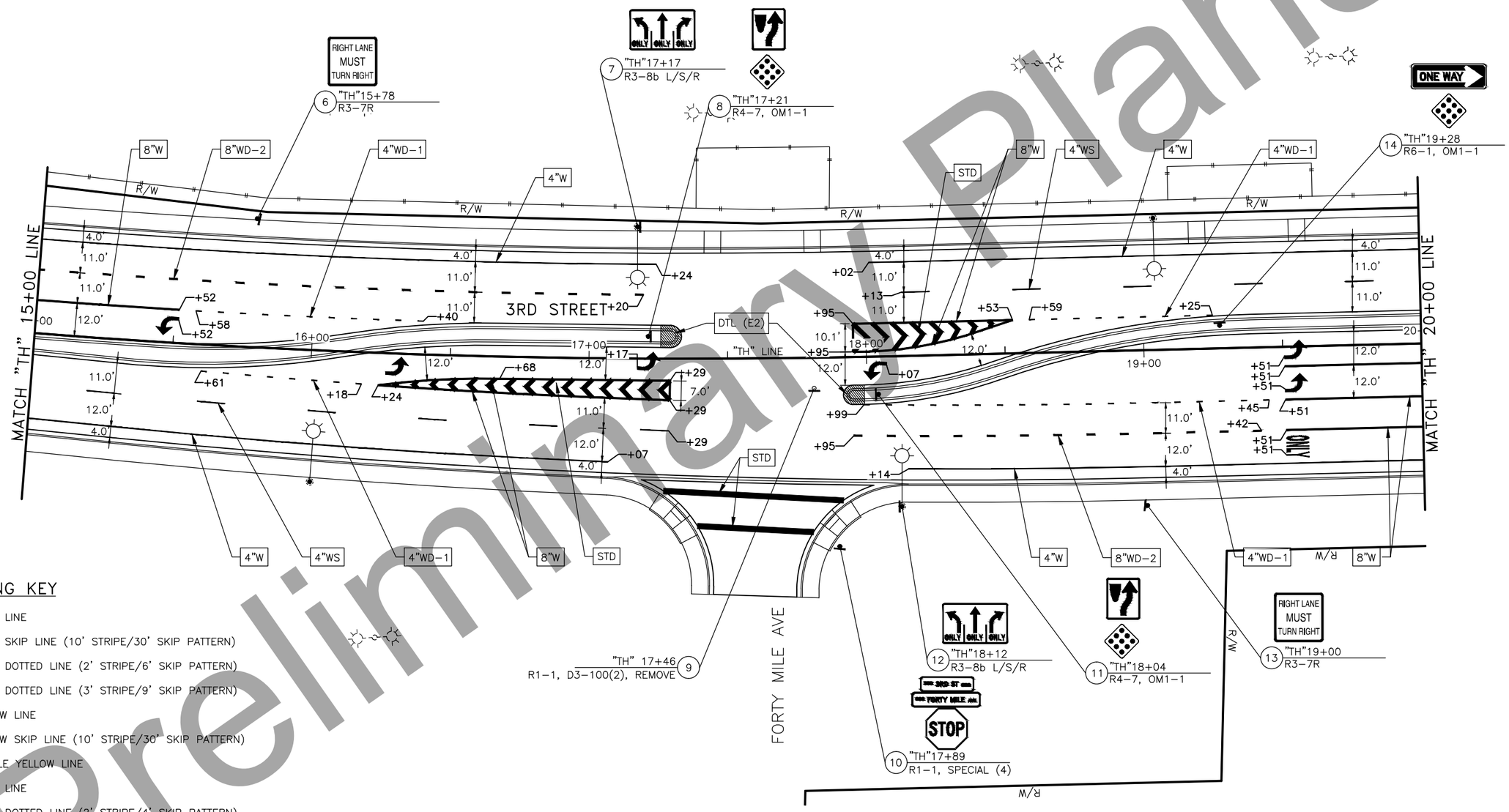
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H3	34



TRAFFIC MARKING KEY

4"W	4" WHITE LINE
4"WS	4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN)
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24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION / SIGN CODE(S)

SIGN LOCATION #

SIGNING & STRIPING

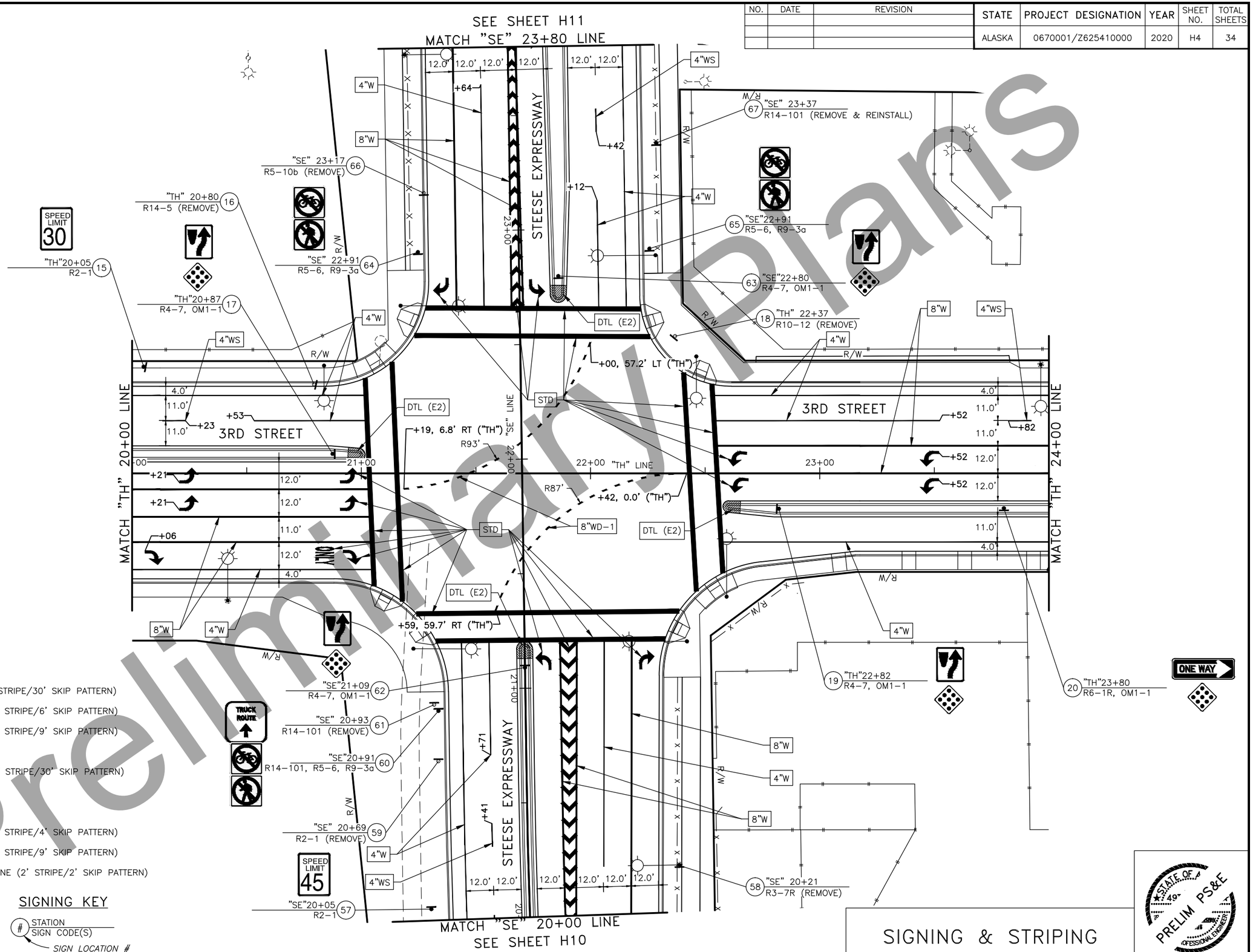
STATE OF ALASKA 49th PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_JL_TRAF-H3 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H4	34



TRAFFIC MARKING KEY

4"W	4" WHITE LINE
4"WS	4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN)
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24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION / SIGN CODE(S)

SIGN LOCATION #

SIGNING & STRIPING

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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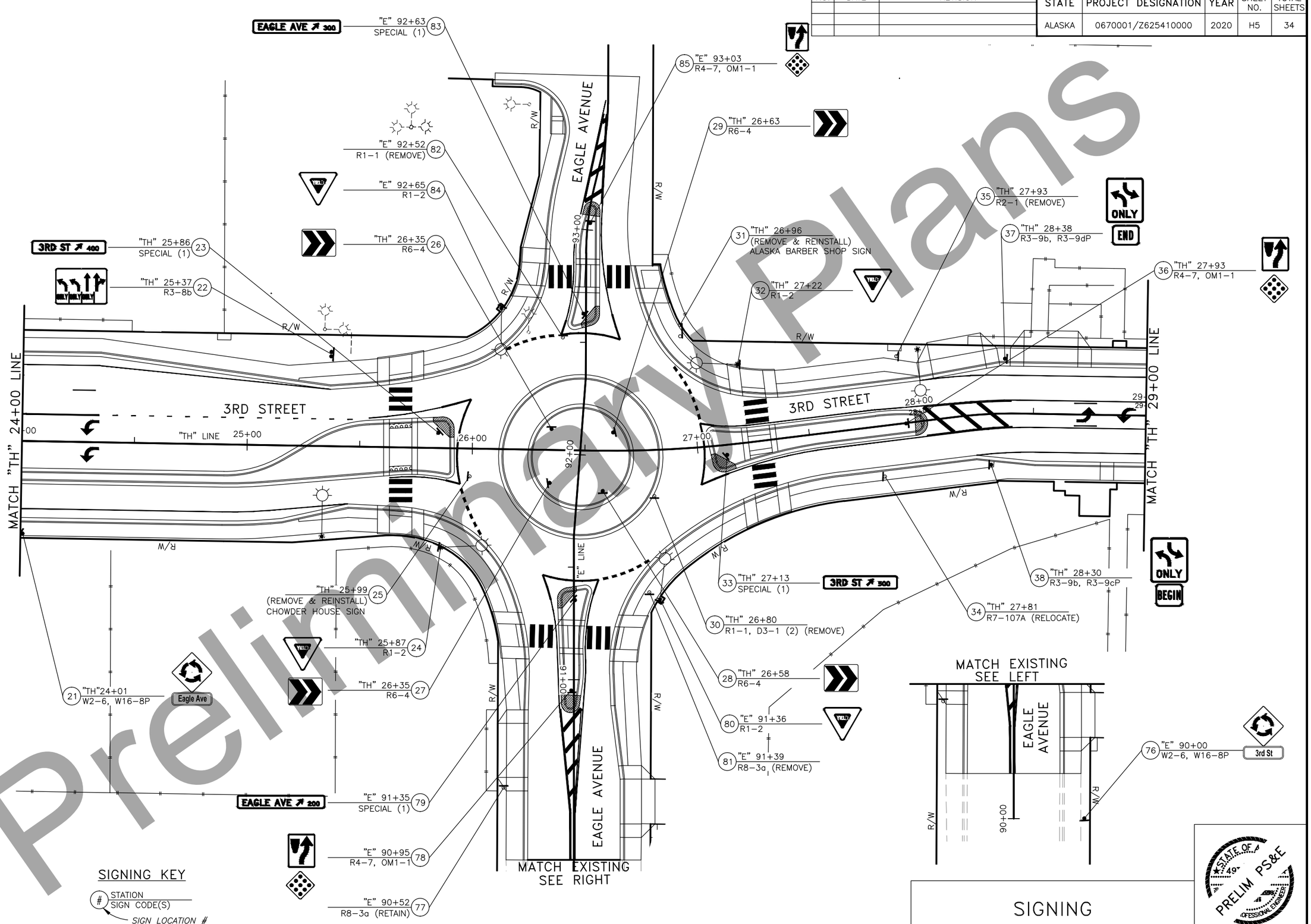
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H4 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H5	34



Preliminary Plans

SIGNING

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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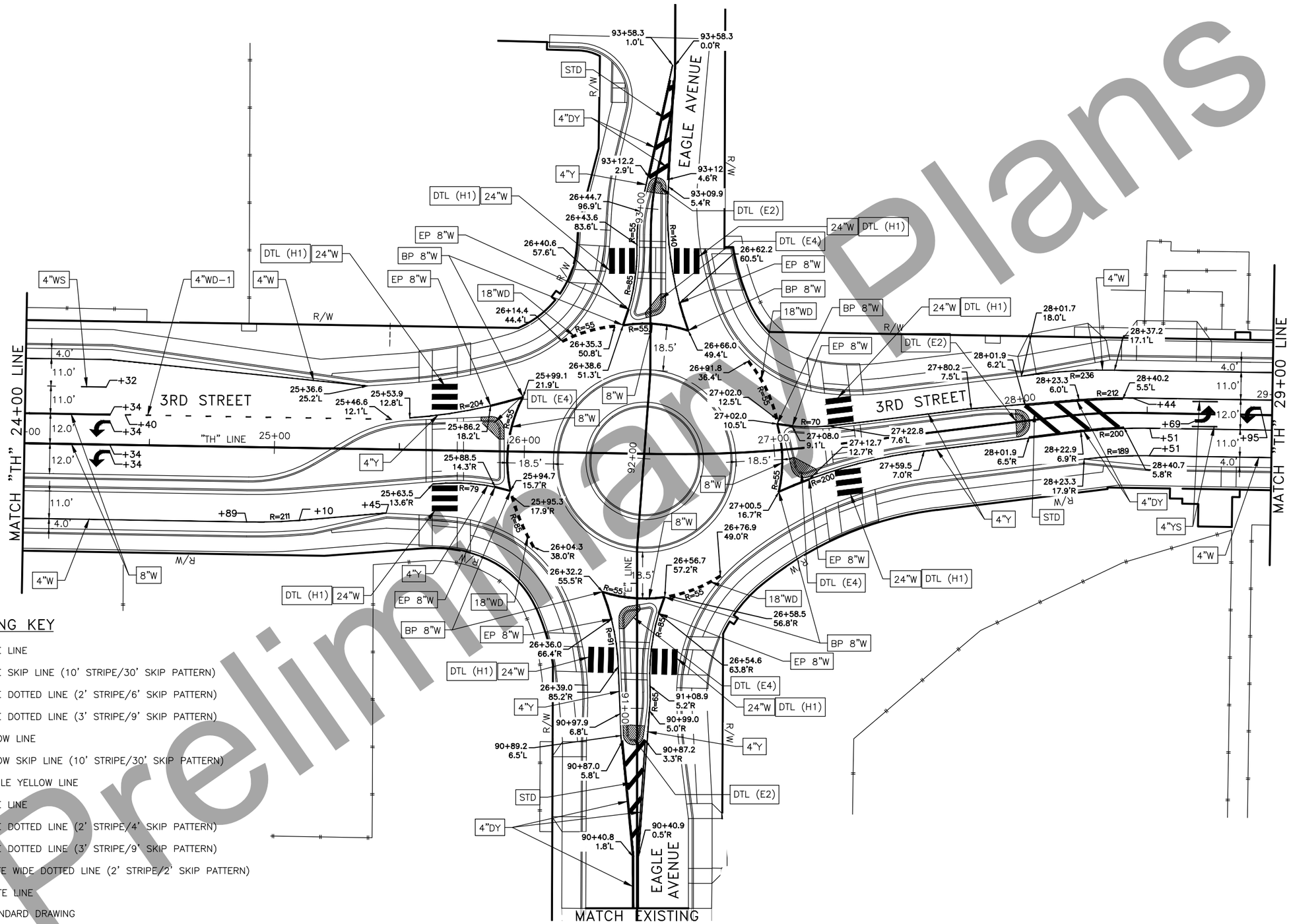
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H6	34



TRAFFIC MARKING KEY

4"W	4" WHITE LINE
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8"W	8" WHITE LINE
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24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)
BP	BEGIN POINT (THIS SHEET ONLY)
EP	END POINT (THIS SHEET ONLY)

Preliminary Plans

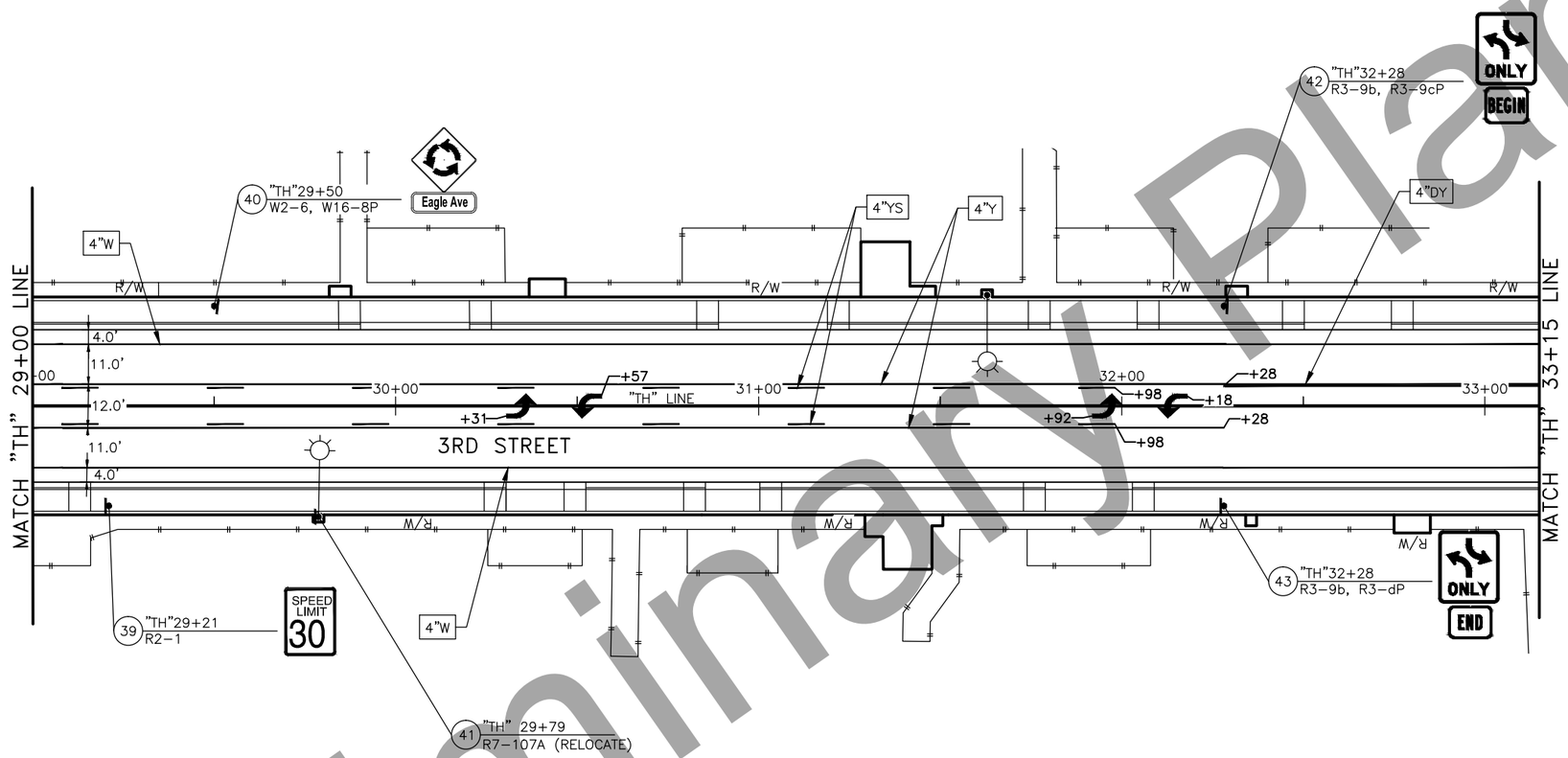
STRIPING

STATE OF ALASKA 49th PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H6 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H7	34



TRAFFIC MARKING KEY

4"W	4" WHITE LINE
4"WS	4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN)
4"WD-1	4" WHITE DOTTED LINE (2' STRIPE/6' SKIP PATTERN)
4"WD-2	4" WHITE DOTTED LINE (3' STRIPE/9' SKIP PATTERN)
4"Y	4" YELLOW LINE
4"YS	4" YELLOW SKIP LINE (10' STRIPE/30' SKIP PATTERN)
4"DY	4" DOUBLE YELLOW LINE
8"W	8" WHITE LINE
8"WD-1	8" WHITE DOTTED LINE (2' STRIPE/4' SKIP PATTERN)
8"WD-2	8" WHITE DOTTED LINE (3' STRIPE/9' SKIP PATTERN)
18"WD	18" WHITE WIDE DOTTED LINE (2' STRIPE/2' SKIP PATTERN)
24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION
SIGN CODE(S)
SIGN LOCATION #

SIGNING & STRIPING

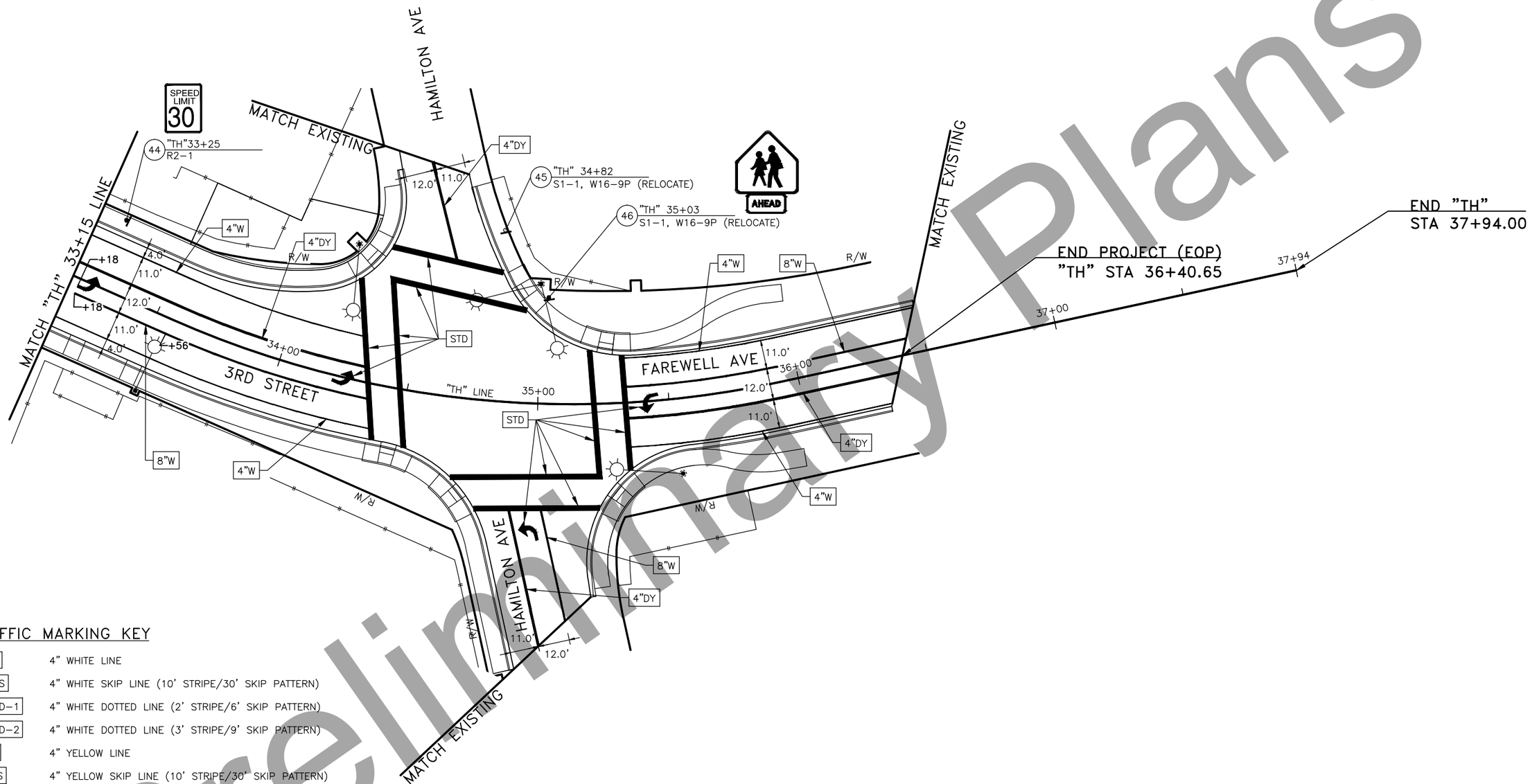
STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_C0\62541_H_TRAF-H7 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H8	34



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8"WD-1	8" WHITE DOTTED LINE (2' STRIPE/4' SKIP PATTERN)
8"WD-2	8" WHITE DOTTED LINE (3' STRIPE/9' SKIP PATTERN)
18"WD	18" WHITE WIDE DOTTED LINE (2' STRIPE/2' SKIP PATTERN)
24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION
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SIGN LOCATION #

SIGNING & STRIPING

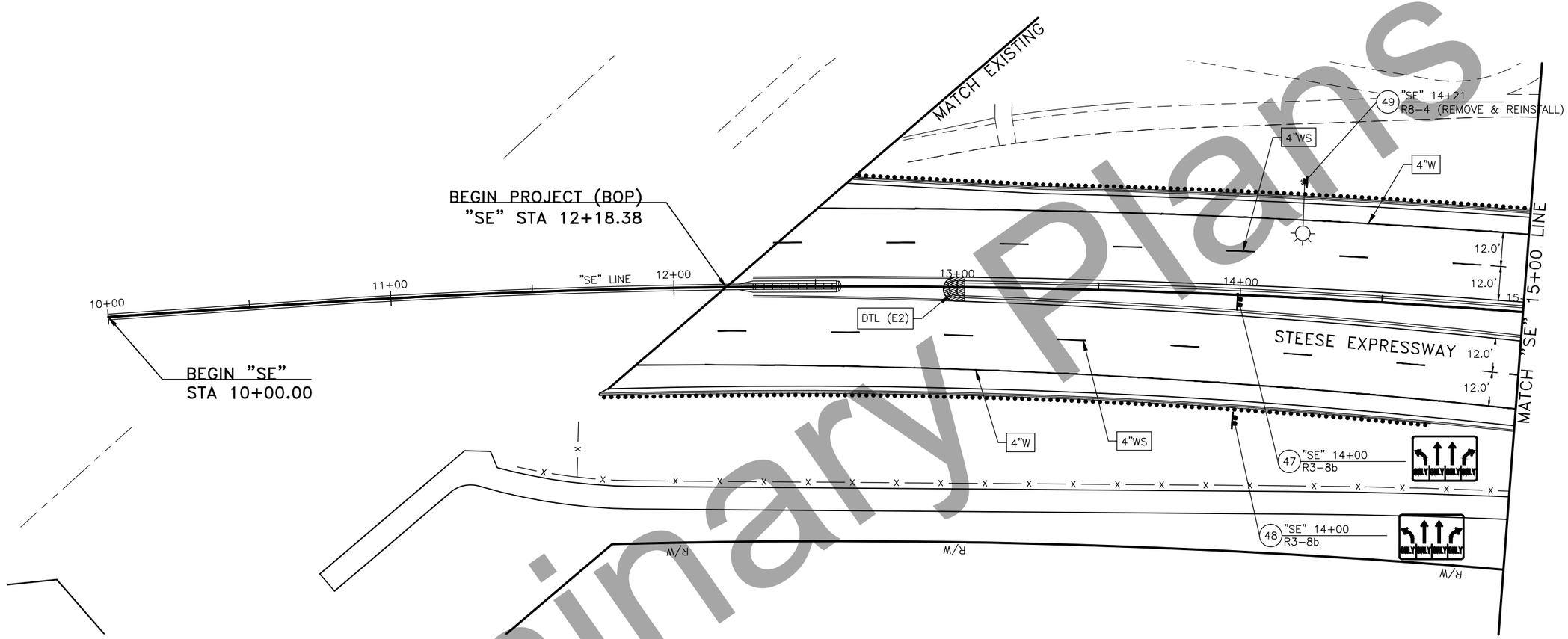
STATE OF ALASKA 49th PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H8 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H9	34



TRAFFIC MARKING KEY

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4"WS	4" WHITE SKIP LINE (10' STRIPE/30' SKIP PATTERN)
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18"WD	18" WHITE WIDE DOTTED LINE (2' STRIPE/2' SKIP PATTERN)
24"W	24" WHITE LINE
STD	SEE STANDARD DRAWING
DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION
SIGN CODE(S)
SIGN LOCATION #

SIGNING & STRIPING

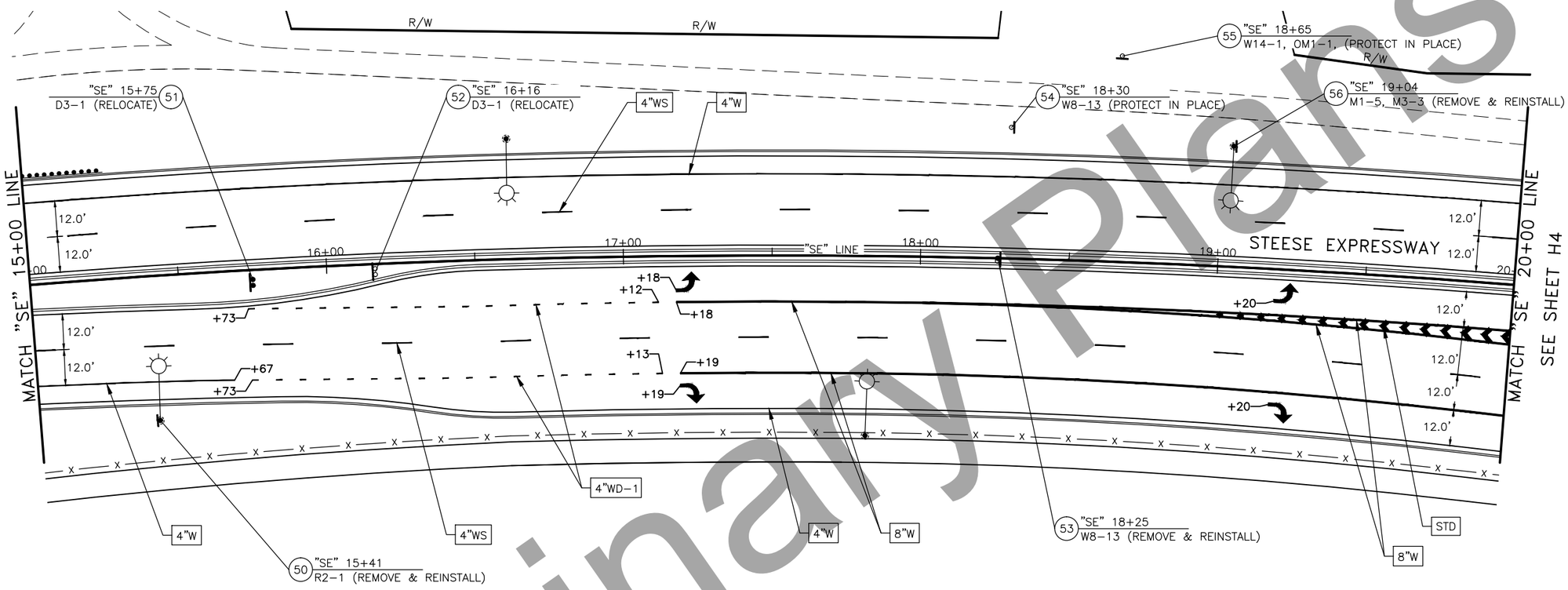
STATE OF ALASKA 49th PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H9 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H10	34



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18"WD	18" WHITE WIDE DOTTED LINE (2' STRIPE/2' SKIP PATTERN)
24"W	24" WHITE LINE
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SIGNING KEY

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SIGNING & STRIPING

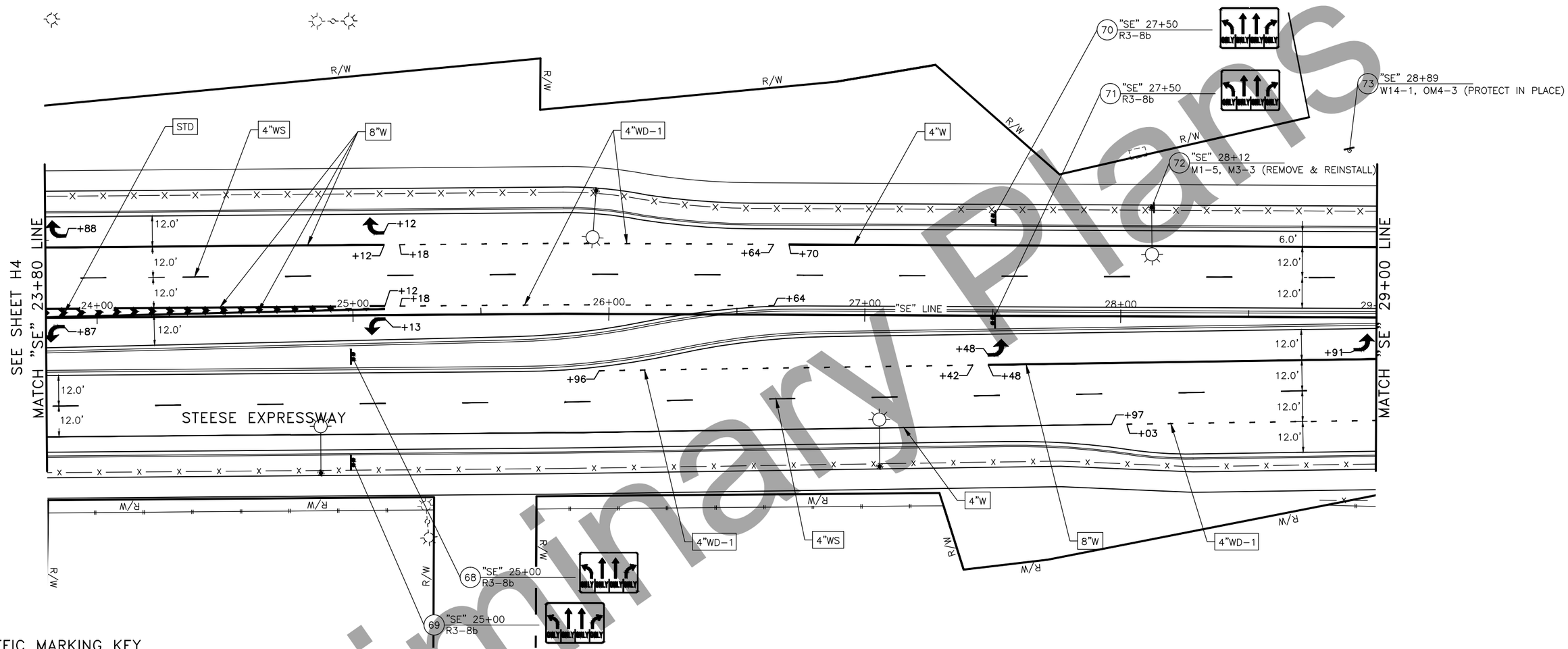
STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H10 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H11	34



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24"W	24" WHITE LINE
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DTL (XX)	SEE DETAIL (SHT NO.)

SIGNING KEY

(#) STATION / SIGN CODE(S)

SIGN LOCATION #

SIGNING & STRIPING

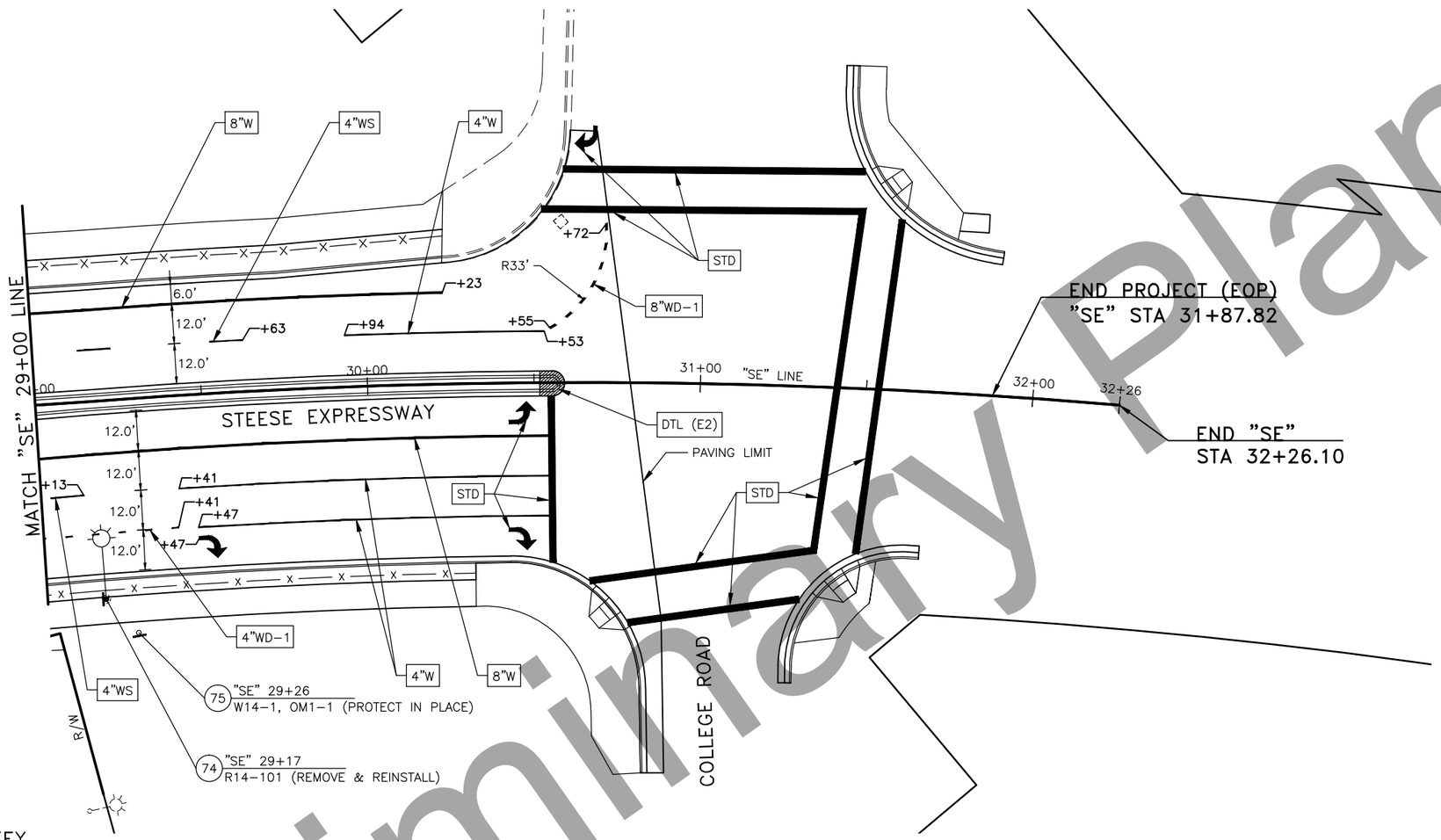
STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H11 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H12	34



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STD	SEE STANDARD DRAWING
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SIGNING & STRIPING

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_TRAF-H12 Fri, Aug/31/18 03:59pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H13	34

SIGNING SUMMARY

LOC. NO	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND	SIZE H (INCHES)	SIZE X (INCHES)	SIZE V (INCHES)	BRACING/ FRAMING BRACED	BRACING/ FRAMING FRAMED	AREA (SQ.FT.)	MTG. HGT. (FT.)	DIR.	POST TYPE	POST SIZE (INCHES)	POST NO.	REMARKS
1	"TH" 13+80		3.5	R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		NW	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
2	"TH" 14+30	50.6		R5-1	DO NOT ENTER	30	X	30	X		6.3		SW	PST	2.5	1	
3	"TH" 14+52		3.5	R6-1R	ONE WAY	36	X	12	X		3.0		NE	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18	X		2.3						
4	"TH" 14+75		42.8	R2-1	SPEED LIMIT (30)	30	X	36	X		7.5		NW	PST	2.5	1	
5	"TH" 14+83	47.5		R5-1	DO NOT ENTER	30	X	30	X		6.3		SW				INSTALL ON NEW LIGHT POLE
6	"TH" 15+78	46.4		R3-7R	RIGHT LANE TURN RIGHT	36	X	36	X		9.0		SE	PST	2.5	1	
7	"TH" 17+17	47.5		R3-8b	LANE CONTROL (L/S/R)	48	X	30	X		10.0		SE				INSTALL ON NEW LIGHT POLE
8	"TH" 17+21	8.0		R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		SE	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
10	"TH" 17+89		68.1	SPECIAL	200 Forty Mile Ave	45	X	8	X		2.5		SW	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15 AND INSTALLATION DETAILS ON SHEET H17
				SPECIAL	Forty Mile Ave 200	45	X	8	X		2.5						
				SPECIAL	300 3rd St 200	34	X	8	X		1.9						
				SPECIAL	200 3rd St 300	34	X	8	X		1.9						
				R1-1	STOP	30	X	30	X		6.3						
11	"TH" 18+04		13.9	R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		NW	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
12	"TH" 18+12		54.2	R3-8b	LANE CONTROL (L/S/R)	48	X	30	X		10.0		NW				INSTALL ON NEW LIGHT POLE
13	"TH" 19+00		56.0	R3-7R	RIGHT LANE TURN RIGHT	30	X	30	X		6.3		NW	PST	2.5	1	
14	"TH" 19+28		4.0	R6-1	ONE WAY	36	X	12	X		3.0		NE	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
15	"TH" 20+05	46.5		R2-1	SPEED LIMIT (30)	30	X	36	X		7.5		SE	PST	2.5	1	
17	"TH" 20+87	0.3		R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		SE	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
19	"TH" 22+82		15.5	R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		NW	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
20	"TH" 23+80		15.2	R6-1R	ONE WAY	36	X	12	X		3.0		SW	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
21	"TH" 24+01		41.1	W2-6	ROUNDABOUT (SYM)	30	X	30	X		6.3		NW	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15
				W16-8P	Eagle Ave	28	X	8	X		1.6						
22	"TH" 25+37	40.9		R3-8B	LANE CONTROL (L/L/S/SR)	64	X	30		X	13.3		SE	PST	2.5	2	
23	"TH" 25+86	7.8		SPECIAL	3rd St ↗ 400	46	X	12	X		3.8		E	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15
24	"TH" 25+87		44.0	R1-2	YIELD	36	X	36	X		9.0		NW				INSTALL ON NEW LIGHT POLE
25	"TH" 25+99		12.4		CHOWDER HOUSE (BUSINESS SIGN)												REMOVE & REINSTALL *
26	"TH" 26+35	9.3		R6-4	CHEVRON (SYM)	30	X	24	X		5.0		NW	PST	2.5	1	
27	"TH" 26+35		14.6	R6-4	CHEVRON (SYM)	30	X	24	X		5.0		NE	PST	2.5	1	
28	"TH" 26+58		17.9	R6-4	CHEVRON (SYM)	30	X	24	X		5.0		SW	PST	2.5	1	
29	"TH" 26+63	8.1		R6-4	CHEVRON (SYM)	30	X	24	X		5.0		SE	PST	2.5	1	
31	"TH" 26+96	54.8			ALASKA BARBER SHOP (BUSINESS SIGN)												REMOVE & REINSTALL *
32	"TH" 27+22	35.0		R1-2	YIELD	36	X	36	X		9.0		SE				INSTALL ON NEW LIGHT POLE
33	"TH" 27+13		4.5	SPECIAL	3rd St ↗ 500	46	X	12	X		3.8		W	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15

* COORDINATE WITH PROPERTY OWNER FOR NEW SIGN LOCATION

SIGNING SUMMARY

LOC. NO	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND	SIZE H (INCHES)	SIZE X (INCHES)	SIZE V (INCHES)	BRACING/ FRAMING BRACED	BRACING/ FRAMING FRAMED	AREA (SQ.FT.)	MTG. HGT. (FT.)	DIR.	POST TYPE	POST SIZE (INCHES)	POST NO.	REMARKS
34	"TH" 27+81		22.5	R7-107A	BUS STOP												RELOCATE ONTO NEW LIGHT POLE; SEE SIGN 41
36	"TH" 27+93	CL		R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		SE	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
37	"TH" 28+38	24.4		R3-9B	CENTER LANE	24	X	36			6.0		SE	PST	2.5	1	
				R3-9dP	END	30	X	12	X		2.5						
38	"TH" 28+30		22.5	R3-9B	CENTER LANE	24	X	36			6.0		NW	PST	2.5	1	
				R3-9cP	BEGIN	30	X	12	X		2.5						
39	"TH" 29+21		27.5	R2-1	SPEED LIMIT (30)	30	X	36	X		7.5		NW	PST	2.5	1	
40	"TH" 29+50	27.5		W2-6	ROUNDABOUT (SYM)	30	X	30	X		6.3		S	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15
				W16-8P	Eagle Ave	28	X	8	X		1.6						
41	"TH" 29+79		30.5	R7-107a	BUS STOP								NW				RELOCATE ONTO NEW LIGHT POLE; SEE SIGN 34
42	"TH" 32+28	27.5		R3-9b	CENTER LANE	24	X	36			6.0		SE	PST	2.5	1	
				R3-9cP	BEGIN	30	X	12	X		2.5						
43	"TH" 32+28		27.5	R3-9b	CENTER LANE	24	X	36			6.0		NW	PST	2.5	1	
				R3-9dP	END	30	X	12	X		2.5						
44	"TH" 33+25	27.5		R2-1	SPEED LIMIT (30)	30	X	36	X		7.5		SE	PST	2.5	1	
45	"TH" 34+82	65.3		S1-1	SCHOOL												RELOCATE; SEE SIGN 46
				W16-9P	AHEAD												
46	"TH" 35+03	40.6		S1-1	SCHOOL CROSSING (SYM)								S	PST	2.5	1	RELOCATE; SEE SIGN 45
				W16-9P	AHEAD												
47	"SE" 14+00		2.5	R3-8b	LANE CONTROL (R/S/S/L)	64	X	30		X	13.3		SW	TS	3.0	2	SEE NOTE 22
48	"SE" 14+00		44.4	R3-8b	LANE CONTROL (R/S/S/L)	64	X	30		X	13.3		SW	PST	2.5	2	
49	"SE" 14+21	41.0		R8-4	EMERGENCY PARKING								NE				REMOVE & REINSTALL ON NEW LIGHT POLE
50	"SE" 15+41		48.7	R2-1	SPEED LIMIT (45)								SW				REMOVE & REINSTALL ON NEW LIGHT POLE
51	"SE" 15+75		4.2	D3-1	← 3rd St →								SW	TS	3.0	2	RELOCATE; SEE SIGN 52; SEE NOTE 22
52	"SE" 16+16		2.6	D3-1	← 3rd St →												RELOCATE; SEE SIGN 51
53	"SE" 18+25	0.0		W8-13	BRIDGE MAY BE ICY								NE	PST	2.5	1	REMOVE & REINSTALL
54	"SE" 18+30	44.1		W8-13	BRIDGE MAY BE ICY												PROTECT IN PLACE
55	"SE" 18+65	69.3		W14-1	END												PROTECT IN PLACE
				OM1-1	REFLECTOR												
56	"SE" 19+04	40.5		M1-5	ALASKA ROUTE								NE				REMOVE & REINSTALL ON NEW LIGHT POLE
				M3-3	SOUTH												
57	"SE" 20+05	42.9		R2-1	SPEED LIMIT (45)	30	X	36	X		7.5		NE	PST	2.5	1	
60	"SE" 20+91	38.0		R14-101	TRUCK ROUTE	30	X	42	X		8.8		NE	PST	2.5	1	
				R5-6	NO BIKES (SYM)	30	X	30	X		6.3						
				R9-3a	NO PEDESTRIANS (SYM)	30	X	30	X		6.3						
62	"SE" 21+09	0.0		R4-7	KEEP RIGHT	24	X	30			5.0		NE	PST	2.5	1	
				OM1-1	REFLECTOR	18	X	18			2.3						

POST TYPE LEGEND:

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

SIGN SUMMARY

STATE OF ALASKA 49th PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\625410_H_SIGN SUMMARY-H13 Fri, Aug/31/18 04:06pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H14	34

SIGNING SUMMARY

LOC. NO	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND	SIZE H (INCHES)	SIZE X (INCHES)	SIZE V (INCHES)	BRACING/ FRAMING BRACED	BRACING/ FRAMING FRAMED	AREA (SQ.FT.)	MTG. HGT. (FT.)	DIR.	POST TYPE	POST SIZE (INCHES)	POST NO.	REMARKS
63	"SE" 22+80		17.1	R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		SW	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
64	"SE" 22+91	44.0		R5-6	NO BIKES (SYM)	30	X	30	X		6.3		SW	TS	3.0	2	
				R9-3a	NO PEDESTRIANS (SYM)	30	X	30	X		6.3						
65	"SE" 22+91		57.0	R5-6	NO BIKES (SYM)	30	X	30	X		6.3		SW	TS	3.0	2	
				R9-3a	NO PEDESTRIANS (SYM)	30	X	30	X		6.3						
67	"SE" 23+37		60.7	R14-101	TRUCK ROUTE								SW	PST	2.5	1	REMOVE & REINSTALL
68	"SE" 25+00		6.2	R3-8b	LANE CONTROL (R/S/S/L)	64	X	30		X	13.3		SW	TS	3.0	2	SEE NOTE 22
69	"SE" 25+00		57.5	R3-8b	LANE CONTROL (R/S/S/L)	64	X	30		X	13.3		SW	TS	3.0	2	SEE NOTE 22
70	"SE" 27+50	38.1		R3-8b	LANE CONTROL (R/S/S/L)	64	X	30		X	13.3		NE	TS	3.0	2	SEE NOTE 22
71	"SE" 27+50	1.9		R3-8b	LANE CONTROL (R/S/S/L)	64	X	30		X	13.3		NE	TS	3.0	2	SEE NOTE 22
72	"SE" 28+12	42.5		M1-5	ALASKA ROUTE								NE				REMOVE & REINSTALL ON NEW LIGHT POLE
				M3-3	SOUTH												
73	"SE" 28+89	65.1		W14-1	DEAD END												PROTECT IN PLACE
				OM4-3	REFLECTOR												
74	"SE" 29+17		59.5	R14-101	TRUCK ROUTE								SW				REMOVE & REINSTALL ON NEW LIGHT POLE
75	"SE" 29+26		70.4	W14-1	DEAD END												PROTECT IN PLACE
				OM1-1	REFLECTOR												
76	"E" 90+00		31.3	W2-6	ROUNDABOUT	30	X	30	X		6.3		SW	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15
				W16-8P	3rd St	20	X	8			1.1						
77	"E" 90+52	31.2		R8-3a	NO PARKING												PROTECT IN PLACE
78	"E" 90+95	1.2		R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		SW	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
79	"E" 91+35		0.5	SPECIAL	Eagle Ave ↗ 200	58	X	12		X	4.8		N	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15
80	"E" 91+36		38.3	R1-2	YIELD	36	X	36	X		9.0		SW				INSTALL ON NEW LIGHT POLE
83	"E" 92+63	1.1		SPECIAL	Eagle Ave ↗ 300	58	X	12		X	4.8		S	PST	2.5	1	SEE SIGN DETAILS ON SHEET H15
84	"E" 92+65	37.5		R1-2	YIELD	36	X	36	X		9.0		NE				INSTALL ON NEW LIGHT POLE
85	"E" 93+03		1.0	R4-7	KEEP RIGHT (SYM)	24	X	30			5.0		NE	PST	2.5	1	
				OM1-1	REFLECTOR (SYM)	18	X	18			2.3						
								TOTAL SIGN AREA =			458.4	SF					

SIGN SALVAGE SUMMARY

LOC. NO	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND
9	"TH" 17+46		11.0	R1-1	STOP
				D3-100	FORTY MILE AVE
				D3-100	3RD ST
16	"TH" 20+80	38.8		R14-5	TRUCKS PROHIBITED
18	"TH" 22+37	59.9		R10-12	LEFT TURN YIELD
30	"TH" 26+80		20.5	R1-1	STOP
				D3-100	3RD STREET
				D3-100	EAGLE AVE
35	"TH" 27+93	29.9		R2-1	SPEED LIMIT (30)
58	"SE" 20+21		65.2	R3-7R	RIGHT LANE TURN RIGHT
59	"SE" 20+69	38.3		R2-1	SPEED LIMIT
61	"SE" 20+93	39.8		R14-101	TRUCK ROUTE

SIGN SALVAGE SUMMARY

LOC. NO	STATION	LOCATION LT.	LOCATION RT.	ASDS CODE	LEGEND
66	"SE" 23+17	41.1		R5-10b	PEDS BIKES PROHIBITED
81	"E" 91+39		33.6	R8-3a	NO PARKING
82	"E" 92+52	10.2		R1-1	STOP

SIGNING NOTES:

1. REMOVE AND SALVAGE ALL EXISTING SIGNS AND SIGN FOUNDATIONS WITHIN THE PROJECT LIMITS, EXCEPT THOSE DESIGNATED FOR REINSTALLATION, OR OTHERWISE NOTED. DELIVER ALL SALVAGED SIGNS TO DOT&PF MAINTENANCE YARD LOCATED AT 2301 PEGER RD, FAIRBANKS, AK 99709.
2. OFFSET DISTANCES ARE FROM DESIGN CENTERLINE TO CENTER OF POST OR POLE, EXCEPT FOR TWO POST SIGNS, WHERE DISTANCES ARE FROM DESIGN CENTERLINE TO CENTER OF SIGN STRUCTURE.
3. MOUNT SIGNS PER STANDARD DRAWING S-05.01. SIGNS THAT PROJECT OVER OR WITHIN 2 FEET OF THE SIDEWALK SHALL BE MOUNTED TO A HEIGHT OF 8 FEET TO BOTTOM OF SIGN.
4. DETERMINE POST LENGTHS IN THE FIELD. DO NOT EXTEND POSTS ABOVE TOP OF SIGN.
5. INSTALL PST SIGN POSTS WITH SLEEVE TYPE CONCRETE FOUNDATION PER STANDARD DRAWING S-30.04. ATTACH THE SIGN POST TO THE SLEEVE USING GALVANIZED 3/8" BOLT, NUT, SPLIT LOCK WASHER AND TWO FLAT WASHERS.
6. INSTALL "TUBE POST BRACING" AS SHOWN ON STANDARD DRAWING S-01.01 ON ALL SIGNS MOUNTED ON A SINGLE PST POST AND HAVING A HORIZONTAL DIMENSION OF 30 INCHES OR GREATER, EXCEPT D3-100 SERIES SIGNS. INSTALL GALVANIZED SPLIT LOCK WASHERS ON ALL 3/8" BOLTS. STAINLESS STEEL FASTENER HARDWARE MAY BE USED INSTEAD OF GALVANIZED. 1/4" X 1-1/2" ALUMINUM ALLOY 6061-T6 BAR MAY ALSO BE USED TO FABRICATE SIGN BRACES.
7. INSTALL 48" DIAMOND WARNING SIGNS ON A SINGLE POST WITH A BRACE HAVING EFFECTIVE BRACE LENGTH OF 54" OR WITH THREE WIND FRAMING MEMBERS AS SHOWN ON STANDARD DRAWING S-00.11. THIS MODIFIES STANDARD DRAWING S-01.01.
8. ATTACH ALL SIGNS TO THEIR SUPPORTS WITH 3/8" BOLTS, EXCEPT ATTACH UNFRAMED SIGNS TO PST POSTS WITH ALUMINUM DRIVE RIVETS. WIND WASHERS ARE NOT REQUIRED WITH DRIVE RIVETS. INCLUDE SPLIT LOCK WASHERS WHEN BOLTS ARE USED.
9. ALL FASTENER HARDWARE SHALL MEET THE REQUIREMENTS OF THE "FASTENER SPECIFICATION TABLE" ON SHEET H16.
10. SIGNS INSTALLED ON LIGHT POLES MAY REQUIRE TEMPORARY INSTALLATION ON 2-1/2" PST POST UNTIL LIGHT POLES ARE IN PLACE. THIS WORK IS SUBSIDIARY TO PAY ITEM 615(1).
11. SEE SIGNAL SIGN SCHEDULES ON SHEETS H20, H24, AND H28 FOR LOCATION AND DETAILS OF MAST ARM MOUNTED SIGNS.
12. STOP (R1-1) AND YIELD (R1-2) SIGN LOCATIONS, ESPECIALLY THOSE AT LARGE RADIUS INTERSECTIONS, MAY NEED ADJUSTMENT IN THE FIELD. THE ENGINEER WILL APPROVE FINAL LOCATIONS.
13. INSTALL SPECIAL STREET NAME SIGNS ABOVE THEIR RESPECTIVE STOP SIGNS. WHEN TWO SPECIAL STREET NAME SIGNS ARE TO BE LOCATED ON THE SAME POST, INSTALL THE CROSS-STREET PANEL IN THE LOWER POSITION.
14. SPECIAL STREET NAME SIGNS REQUIRE TWO SEPARATE SINGLE SIDED PANELS. END-BRACE PANELS PER SMALL STREET SIGN NAME SIGN BRACING DETAILS ON SHEET H17.
15. MAINTAIN EXISTING SIGNS UNTIL NEW SIGNS ARE INSTALLED. DO NOT LEAVE DUPLICATE OR CONFLICTING SIGNING UP AT ANY TIME.
16. ALL SIGNS NOTED FOR REMOVAL AND REINSTALLATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE IF THEY ARE DAMAGED DURING THE RELOCATION EFFORT.
17. USE SERIES C LETTERS FOR SPECIAL STREET NAME SIGNS UNLESS OTHERWISE NOTED. USE 4.5" FOR DIMENSION "E" FOR 12" SPECIAL STREET NAME SIGNS. THE LETTERING INDICATING THE TYPE OF STREET (SUCH AS St, Ave, OR Rd) SHALL BE UPPER CASE AND LOWER CASE. THIS MODIFIES THE ASDS.
18. USE A 3" HORIZONTAL SPACING BETWEEN WORDS, BETWEEN CARDINAL DIRECTIONS AND WORDS, AND BETWEEN WORDS AND NUMBERS ON SPECIAL STREET NAME SIGNS UNLESS OTHERWISE NOTED.
19. LOCATE AND PROTECT ALL NEW AND EXISTING UNDERGROUND UTILITIES PRIOR TO INSTALLING SIGN POSTS. NOT ALL UTILITIES MAY BE SHOWN ON THE PLANS.
20. CLEARING MAY BE REQUIRED TO ENSURE ADEQUATE VISIBILITY OF SIGNS. THIS WORK IS SUBSIDIARY TO PAY ITEM 615(1).
21. INSTALL WEATHER TIGHT CAPS ON ALL TS POSTS.
22. INSTALL FRANGIBLE COUPLING SYSTEMS IN ACCORDANCE WITH STANDARD DRAWING S-31.01.
23. HINGED JOINTS WITH FRANGIBLE FUSE PLATE ARE REQUIRED ON ALL MULTIPLE POST SIGNS WITH FRANGIBLE COUPLING SYSTEMS. THE HINGE LOCATION ON ALL POSTS SHALL BE THE SAME DISTANCE BELOW THE SIGNS, INSTEAD OF THE 6 INCH MINIMUM SHOW ON STANDARD DRAWING S-31.01. SEE MANUFACTURER'S SPECIFICATION FOR HINGE LOCATION BELOW SIGN.
24. RELOCATION OF EXISTING SIGNS ONTO NEW POSTS SHALL BE SUBSIDIARY TO PAY ITEM 615(1) STANDARD SIGN.

POST TYPE LEGEND:

PST = PERFORATED STEEL TUBE
TS = TUBE STEEL (SQUARE STRUCTURAL STEEL TUBING)
W_X_ = WIDE FLANGE

SIGN SUMMARY

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

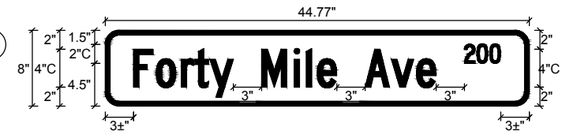
PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_SIGN SUMMARY-H14 Fri, Aug/31/18 04:07pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H15	34

(X) = SIGN LOCATION NUMBER

(10)



BORDER
R=1.5"
TH=0.5"

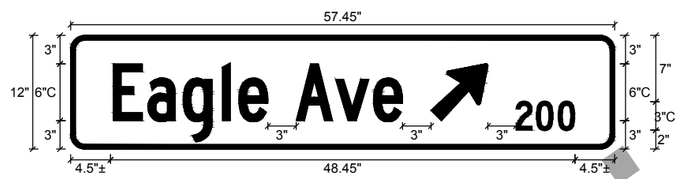
COLORS:
BACKGROUND: GREEN
LEGEND: WHITE

(10)

BORDER
R=1.5"
TH=0.5"

COLORS:
BACKGROUND: GREEN
LEGEND: WHITE

(79)



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LEGEND: WHITE

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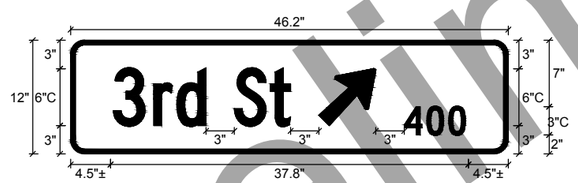

BORDER
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TH=0.5"

COLORS:
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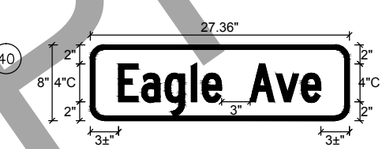
LEGEND: WHITE

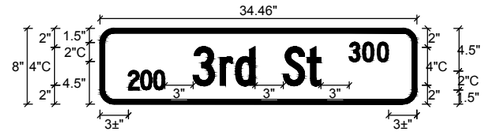
(21) (40)



BORDER
R=1.5"
TH=0.5"

COLORS:
BACKGROUND: YELLOW
LEGEND: BLACK

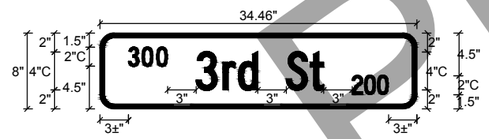
(10)



BORDER
R=1.5"
TH=0.5"

COLORS:
BACKGROUND: GREEN
LEGEND: WHITE

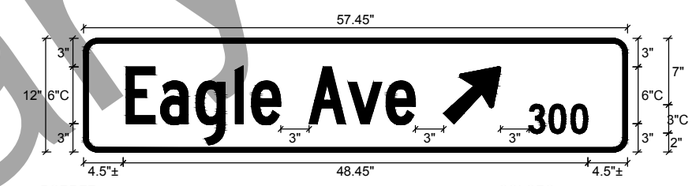
(10)



BORDER
R=1.5"
TH=0.5"

COLORS:
BACKGROUND: GREEN
LEGEND: WHITE

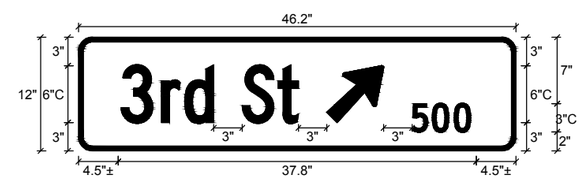
(83)



BORDER
R=1.5"
TH=0.5"

COLORS:
BACKGROUND: GREEN
LEGEND: WHITE

(33)



BORDER
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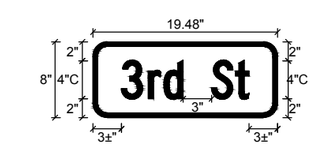
TH=0.5"

COLORS:
BACKGROUND: GREEN
LEGEND: WHITE

(76)



BORDER
R=1.5"
TH=0.5"

COLORS:
BACKGROUND: YELLOW
LEGEND: BLACK

SIGN DETAILS

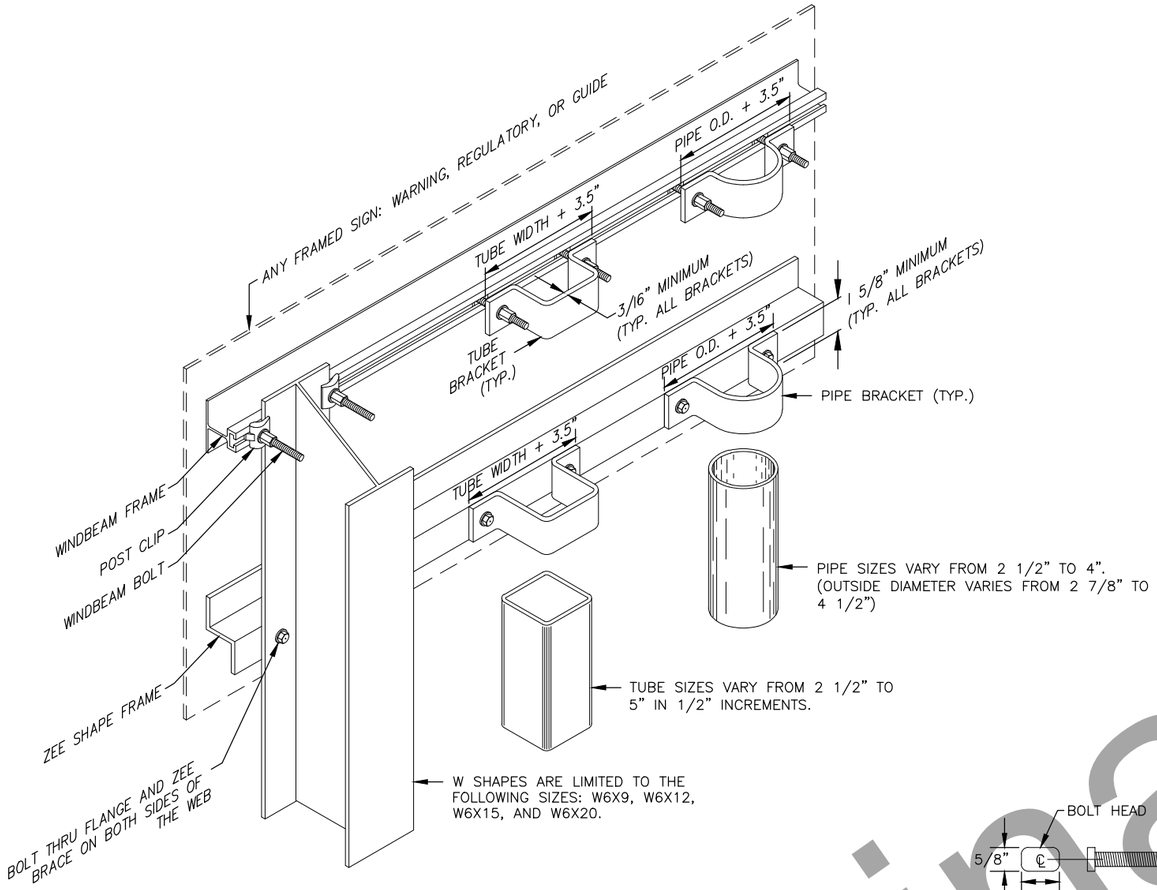
STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

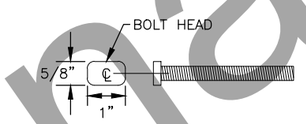
PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_SIGN SUMMARY-H15 Fri, Aug/31/18 04:08pm

NO.	DATE	REVISION

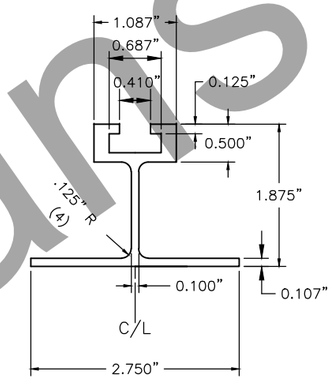
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H16	34



FRAMED SIGN ATTACHMENT BRACKETS
NTS



3/8" WINDBEAM BOLT
NTS



EXTRUDED ALUMINUM WINDBEAM
NTS

NOTES:

1. ALUMINUM ALLOY 6061–T6 SHALL BE USED FOR EXTRUDED WINDBEAM AND RIVETS.
2. ATTACH SIGNS TO WINDBEAM WITH 3/6" RIVETS AT 4" STAGGERED SPACING.

NOTES:

1. 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 OR A BRACKET WITH SQUARE CORNERS ON TUBES.
2. THE TUBE BRACKETS USED ON EVEN INCH SIZE TUBES MAY ALSO BE USED ON TUBES 1/2" SMALLER IN SIZE.
3. THE BRACKET DETAILS SHOWN INDICATE GENERAL DESIGNS ONLY. DESIGNS MAY VARY BY MANUFACTURER.
4. ALUMINUM ALLOY 6061–T6 SHALL BE USED FOR ZEE SHAPE FRAMING AND RIVETS.

FASTENER SPECIFICATION TABLE

FASTENERS	STEEL	STAINLESS STEEL
BOLTS	ASTM A 307	ASTM F 593
NUTS	ASTM A 563	ASTM F 594
WASHERS	ASTM F 844	ASTM A 480

THESE SPECIFICATIONS APPLY TO ALL SIGN FASTENER HARDWARE ON THE PROJECT.

Preliminary Plans

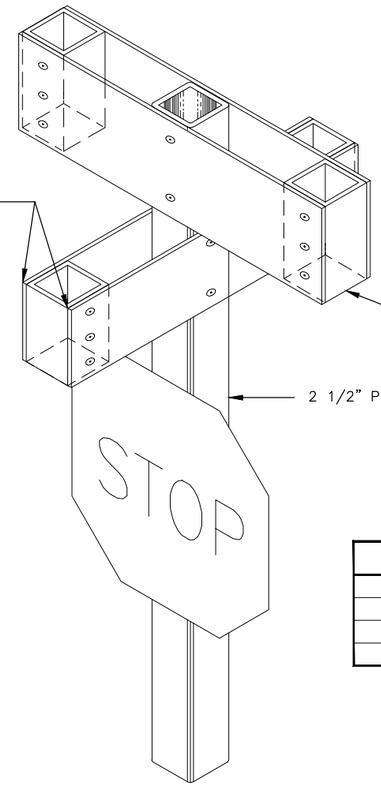
SIGN ATTACHMENT DETAILS

STATE OF ALASKA 49th PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 – 3rd Street Widening Design\Final Design_CD\62541_H_SIGN SUMMARY-H16 Fri, Aug/31/18 04:09pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H17	34

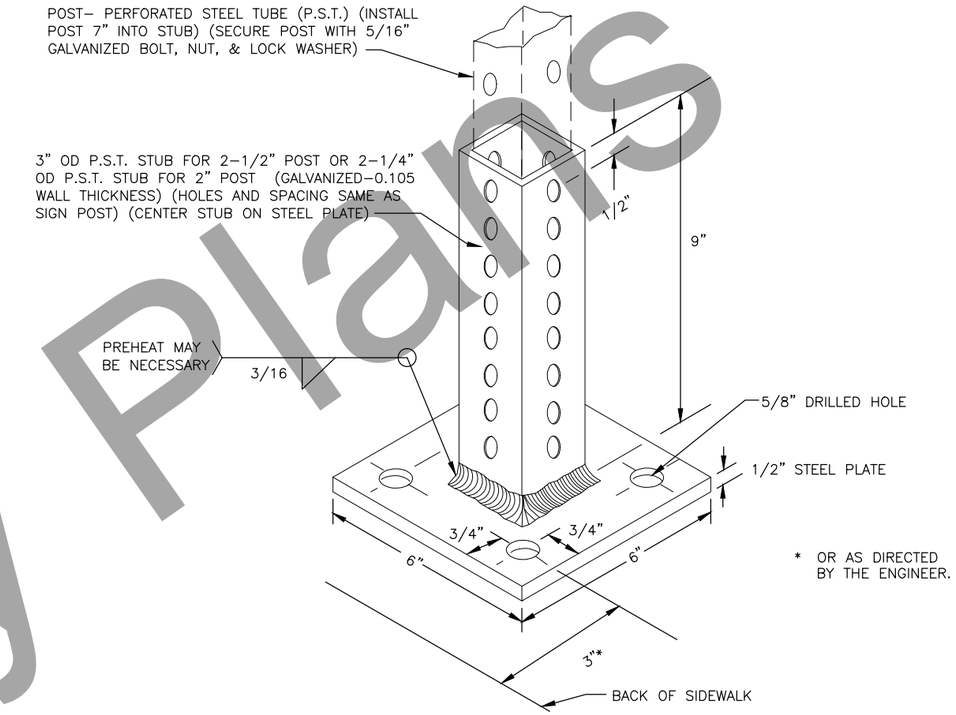


STREET NAME SIGN
NTS

STREET NAME SIGN NOTE:

VERTICALLY SEPARATE MULTIPLE SIGNS MOUNTED ON THE SAME POST BY 2 1/2 INCHES.

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



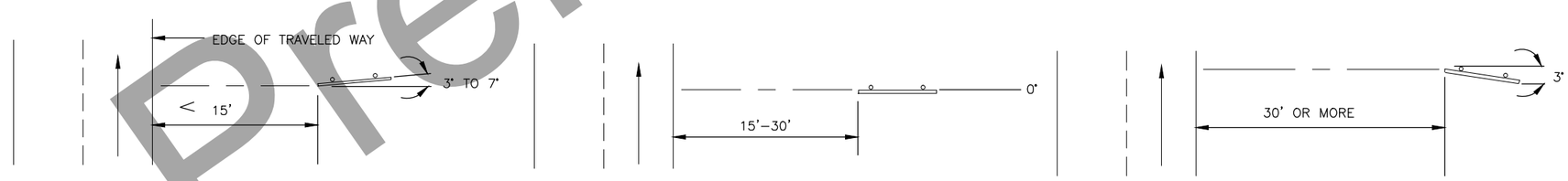
* OR AS DIRECTED BY THE ENGINEER.

SIDEWALK MOUNTING STUB FOR SIGN POSTS
NTS

INSTALLATION NOTES

1. DRILL FOUR (4) 1/2" HOLES IN SIDEWALK OR CONCRETE USING PLATE AS TEMPLATE. (DEPTH AS REQUIRED).
2. INSTALL STUB AND PLATE WITH FOUR (4) HILTI EXPANSION ANCHORS CAT. NO. HDI 3/8" OR APPROVED EQUAL. USE FOUR (4) 3/8" GALVANIZED BOLTS AND FLAT WASHERS.
3. DO NOT SHIM BASE, PLUMB STUB BY HEATING AT PLATE.
4. PAINT STUB AND BASE WITH ZINC RICH PAINT PRIOR TO INSTALLATION.
5. INSTALL STUBS FOR NO PARKING SIGNS AT 45° FACING TRAFFIC.

SIGN INSTALLATION ANGLES
NTS



SIGN INSTALLATION DETAILS

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

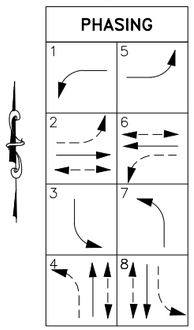
Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_SIGN SUMMARY-H17 Fri, Aug/31/18 04:09pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H18	34

PHASE SEQUENCE

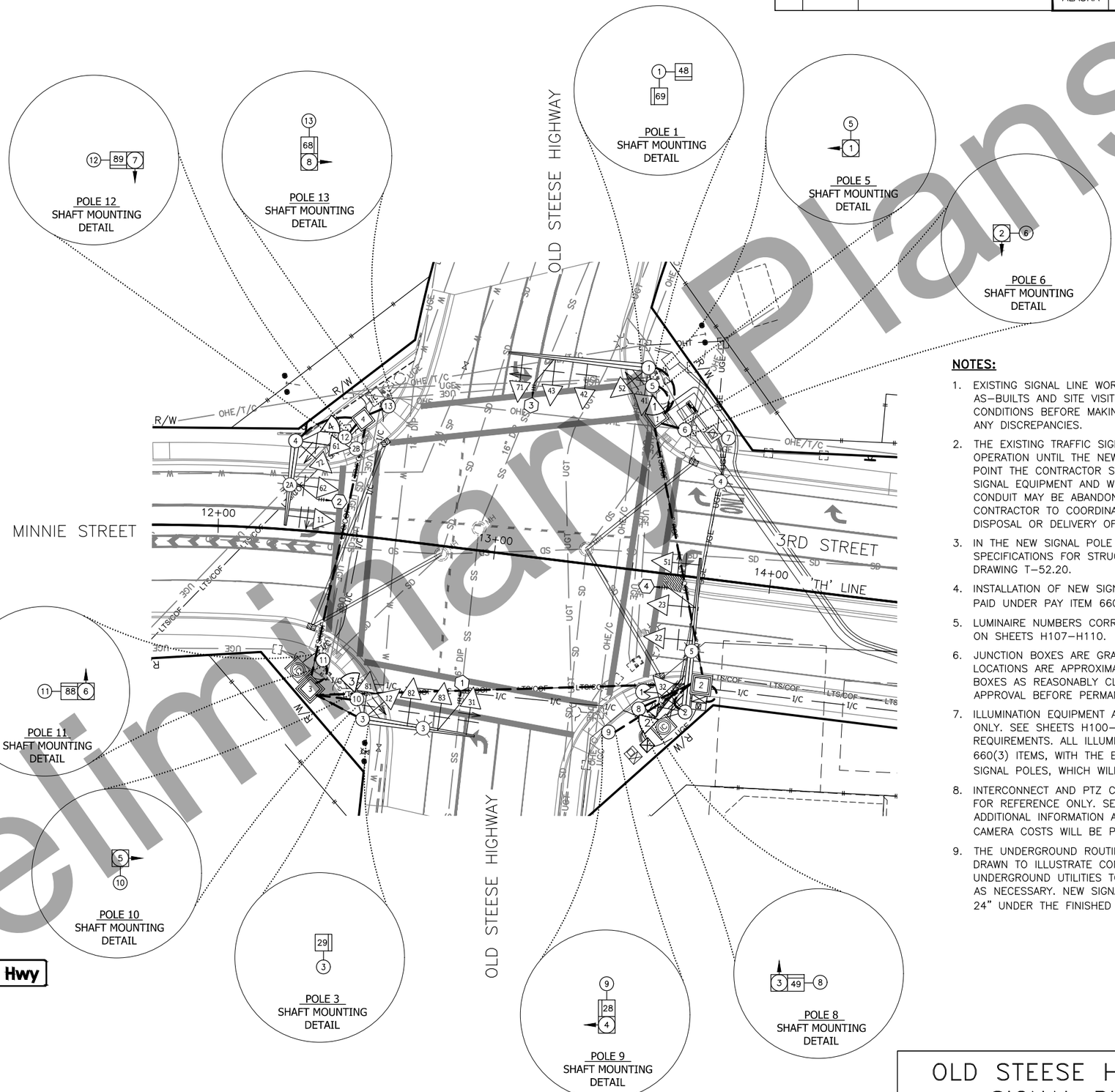


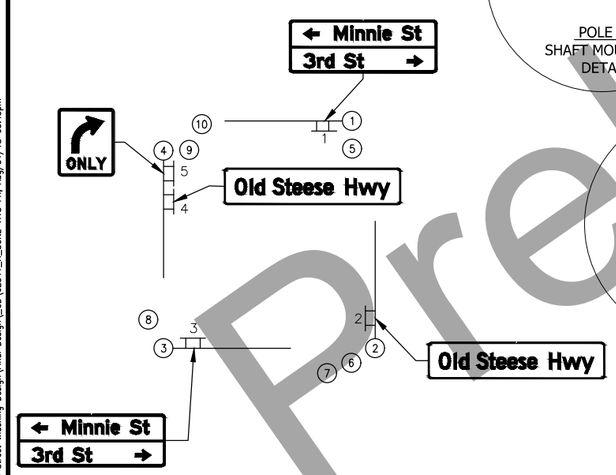
PED MOVEMENT

VEH. MOVEMENT

LEFT TURN MOVEMENT (PROTECTED)

LEFT TURN MOVEMENT (PERMISSIVE)





SIGN PLACEMENT

NOTES:

1. EXISTING SIGNAL LINE WORK IS FROM A COMBINATION OF SURVEY, AS–BUILTS AND SITE VISITS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE MAKING MODIFICATIONS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. THE EXISTING TRAFFIC SIGNAL SHALL BE PROTECTED AND REMAIN IN OPERATION UNTIL THE NEW TRAFFIC SIGNAL IS OPERATIONAL, AT WHICH POINT THE CONTRACTOR SHALL REMOVE AND SALVAGE ALL EXISTING SIGNAL EQUIPMENT AND WIRING. EXISTING SIGNAL POLE FOUNDATIONS AND CONDUIT MAY BE ABANDONED–IN–PLACE PER THE SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH DOT&PF MAINTENANCE FOREMAN FOR DISPOSAL OR DELIVERY OF SALVAGED SIGNAL EQUIPMENT.
3. IN THE NEW SIGNAL POLE LOCATIONS, STABILIZE AND COMPACT SOILS PER SPECIFICATIONS FOR STRUCTURAL FILL AS DESCRIBED IN STANDARD DRAWING T–52.20.
4. INSTALLATION OF NEW SIGNS ON TRAFFIC SIGNAL STRUCTURES WILL BE PAID UNDER PAY ITEM 660(1)–1A.
5. LUMINAIRE NUMBERS CORRESPOND WITH ELECTROLIER NUMBERS SHOWN ON SHEETS H107–H110.
6. JUNCTION BOXES ARE GRAPHICAL AND ARE NOT TO SCALE. JUNCTION BOX LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL LOCATE JUNCTION BOXES AS REASONABLY CLOSE AS POSSIBLE AND OBTAIN ENGINEER APPROVAL BEFORE PERMANENTLY PLACING.
7. ILLUMINATION EQUIPMENT AND CONDUIT DEPICTED IS FOR REFERENCE ONLY. SEE SHEETS H100–H116 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL ILLUMINATION EQUIPMENT WILL BE PAID UNDER 660(3) ITEMS, WITH THE EXCEPTION OF LUMINAIRE ARMS MOUNTED TO SIGNAL POLES, WHICH WILL BE PAID UNDER 660(1)–1A.
8. INTERCONNECT AND PTZ CAMERA EQUIPMENT AND CONDUIT DEPICTED IS FOR REFERENCE ONLY. SEE 3RD ST INTERCONNECT PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL INTERCONNECT AND PTZ CAMERA COSTS WILL BE PAID UNDER 660(1)–1B.
9. THE UNDERGROUND ROUTING OF SIGNAL CONDUIT IS SCHEMATICALLY DRAWN TO ILLUSTRATE CONNECTIONS. COORDINATE WITH OTHER UNDERGROUND UTILITIES TO ROUTE SIGNAL CONDUIT TO AVOID CONFLICTS AS NECESSARY. NEW SIGNAL CONDUIT SHALL BE BURIED A MINIMUM OF 24" UNDER THE FINISHED SURFACE.

OLD STEESE HIGHWAY SIGNAL PLAN

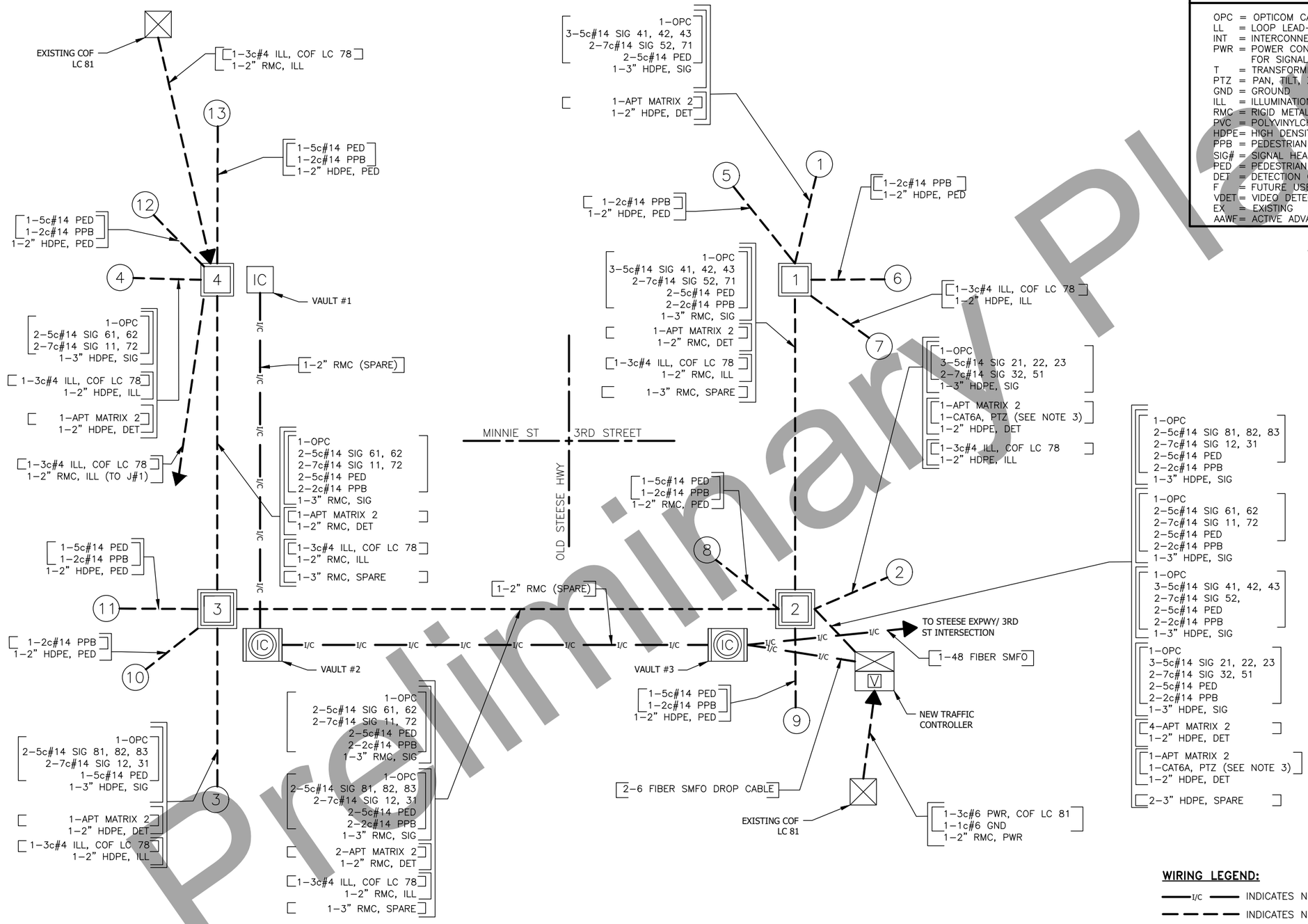
STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228–5230
H:\19\19270 – 3rd Street Widening Design\Final Design_CD\62541_H_SGNL–H18 Fri, Aug/31/18 03:45pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H19	34



WIRING DIAGRAM CODING LEGEND

OPC = OPTICOM CABLE
LL = LOOP LEAD-IN
INT = INTERCONNECT CABLE
PWR = POWER CONDUCTORS FOR SIGNAL CONTROLLER
T = TRANSFORMER
PTZ = PAN, TILT, ZOOM CAMERA
GND = GROUND
ILL = ILLUMINATION
RMC = RIGID METAL CONDUIT
PVC = POLYVINYLCHLORIDE CONDUIT
HDPE = HIGH DENSITY POLYETHALENE
PPB = PEDESTRIAN PUSH-BUTTON
SIG# = SIGNAL HEAD NUMBER
PED = PEDESTRIAN SIGNAL
DET = DETECTION CONDUIT
F = FUTURE USE
VDET = VIDEO DETECTION
EX = EXISTING
AAWF = ACTIVE ADVANCED WARNING FLASHER

5c#14 TRAFFIC SIGNALS
7c#14 PROTECTED-PERMITTED SIGNALS
5c#14 PEDESTRIAN SIGNALS
2c#14 PEDESTRIAN PUSH-BUTTON
3pr#18, 6pr#18, 9pr#18, 15pr#18 } LOOP LEAD-IN CABLE & VDET
3c#6 SIGNAL POWER
1c#8 BARE COPPER GROUND
18pr#19 PE-39 INTERCONNECT CABLE
1c#6 BARE COPPER GROUND
APT MATRIX 2 RDET HOME RUN CABLE
CAT-6A PTZ DATA
SMFO SINGLE MODE FIBER OPTIC
3c#4 COF ILLUMINATION
3c#6 DOT&PF ILLUMINATION

NOTES:

1. INSTALL 1-1c#8 BARE COPPER GROUND CONDUCTOR IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.
2. ILLUMINATION WIRING AND EQUIPMENT SHOWN FOR REFERENCE ONLY. SEE SHEETS H107-H116 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL ILLUMINATION WIRING AND EQUIPMENT WILL BE PAID UNDER 660(3) ITEMS. CONDUIT CONTAINING BOTH SIGNAL AND ILLUMINATION WIRING WILL BE PAID UNDER ITEM 660(1)-1A
3. INTERCONNECT VAULTS, CONDUIT, FIBER AND PTZ CAMERA WIRING SHOWN FOR REFERENCE ONLY. SEE 3RD ST INTERCONNECT PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL INTERCONNECT AND PTZ CAMERA COSTS WILL BE PAID UNDER 660(1)-1B.

WIRING LEGEND:

I/C — INDICATES NEW INTERCONNECT CONDUIT RUN
- - - - INDICATES NEW SIGNAL/ILLUMINATION CONDUIT RUN(S)

OLD STEESE HIGHWAY WIRING DIAGRAM

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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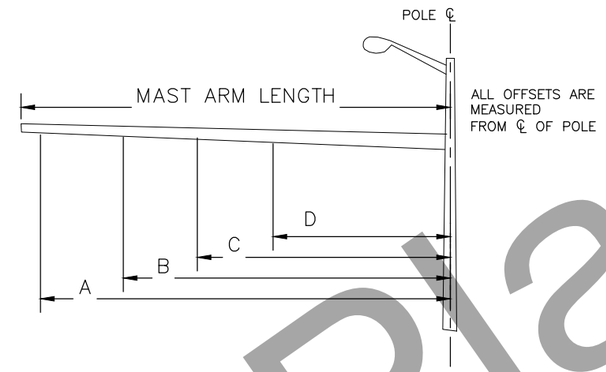
ALASKA	0670001/Z625410000	2020	H20	34

POLE–POST DESIGN LOADING SCHEDULE

POLE NO.	CORNER	ILLUMINATION # ARM L. (FT.)	MAST ARM L (FT.)		A	B	C	D	REMARKS
1	NE	SEE NOTE 1	50'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 179° TO "TH" CL
				LOC. OFFSET	45.5	33.8	22.0	16.5	
				LxW OR S.F.	14.1	11.5	11.5	17.5	
2	SE		55'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 269° TO "TH" CL
				LOC. OFFSET	53.2	37.7	25.7	20.1	
				LxW OR S.F.	14.1	11.5	11.5	10.9	
3	SW		40'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 2° TO "TH" CL
				LOC. OFFSET	37.7	26.7	15.7	11.2	
				LxW OR S.F.	14.1	11.5	11.5	17.5	
4	NW		30'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGN	SIGN	SIGNAL ARM @ 90° TO "TH" CL
				LOC. OFFSET	27.1	15.6	10.0	4.1	
				LxW OR S.F.	14.1	11.5	10.9	7.5	

POLE–POST DESIGN LOADING SCHEDULE NOTES:

1. SEE SHEET H101 FOR LUMINAIRE TYPE, ARM LENGTHS, MOUNTING HEIGHTS, AND MOUNTING ANGLES.



SIGNAL HEAD SCHEDULE

POLE/POST NO.	FACE NO.	INDICATIONS 12" BALL R	12" BALL Y	12" BALL G	12" ARROW R	12" ARROW Y	12" ARROW FYA	12" ARROW G	MOUNTING MAST ARM LOC. OFFSET	MAST ARM ELEV. PLUMB	SIDE MTNG. TYPE	REMARKS
1	41	X	X	X							D	INSTALL ON SIGNAL POLE 90° TO SMA
	52				L	L	L	L			D	INSTALL ON SIGNAL POLE 45° TO SMA
	42	X	X	X					22.0	X		
	43	X	X	X					33.8	X		
	71				L	L	L	L	45.5	X		
2	21	X	X	X							D	INSTALL ON SIGNAL POLE 80° TO SMA
	32				L	L	L	L			D	INSTALL ON SIGNAL POLE 45° TO SMA
	22	X	X	X					25.7	X		
	23	X	X	X					37.7	X		
	51				L	L	L	L	53.2	X		
3	81	X	X	X							D	INSTALL ON SIGNAL POLE 90° TO SMA
	12				L	L	L	L			D	INSTALL ON SIGNAL POLE 50° TO SMA
	82	X	X	X					15.7	X		
	83	X	X	X					26.7	X		
	31				L	L	L	L	37.7	X		
4	61	X	X	X							D	INSTALL ON SIGNAL POLE 90° TO SMA
	72				L	L	L	L			D	INSTALL ON SIGNAL POLE 55° TO SMA
	62	X	X	X					13.6	X		
	11				L	L	L	L	27.1	X		

SIGNAL HEAD SCHEDULE NOTES:

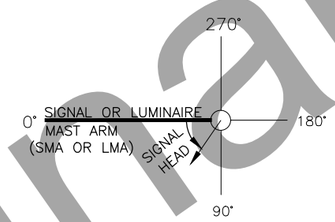
1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ℄ OF SIGNAL POLE.
2. FYA = FLASHING YELLOW ARROW.
3. ALL SIGNAL HEADS INSTALLED PERPENDICULAR TO SIGNAL MAST ARM UNLESS OTHERWISE NOTED.

SIGNAL SIGN SCHEDULE

SIGN NO.	LOCATION POLE NO.	LOCATION OFFSET	ASDS CODE	LEGEND	SIZE HxV (INCHES)	AREA (SQ FT)	BRACING/FRAMING BRACED	BRACING/FRAMING FRAMED	REMARKS
1	1	16.5	D3–102	3RD ST./MINNIE ST	84x30	17.5		X	
2	2	29.2	D3–1	OLD STEESE HWY	87x18	10.9		X	
3	3	11.2	D3–102	3RD ST./MINNIE ST	84x30	17.5		X	
4	4	6.6	D3–1	OLD STEESE HWY	87x18	10.9		X	
5	4	0.6	R3–5R	RIGHT ONLY	30X36	7.5		X	

SIGNAL SIGN SCHEDULE NOTES:

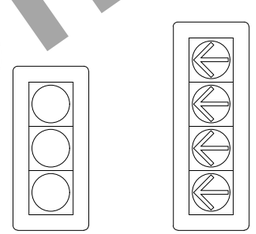
1. LOCATION OFFSETS ARE FROM CENTER OF SIGN TO ℄ OF SIGNAL POLE.



POLE–MOUNTED SIGNAL HEAD ORIENTATION

PED SIGNAL HEAD SCHEDULE

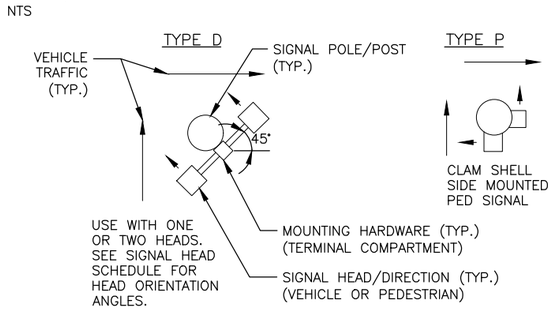
POLE/POST NO.	FACE NO.	MOUNTING TYPE	REMARKS
1	69	P	
1	48	P	
3	29	P	
8	49	P	
9	28	P	
11	88	P	
12	89	P	
13	68	P	



SIGNAL HEAD CONFIGURATIONS
(AREAS ARE FOR WIND LOAD CALCULATIONS)

POLE/POST SIGNAL HEAD SIDE MOUNTING TYPES

NTS



OLD STEESE HIGHWAY
SCHEDULES (1 OF 2)

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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ALASKA	0670001/Z625410000	2020	H21	34

BASE & JUNCTION BOX SCHEDULE

LOCATION		DESCRIPTION			BASE TYPE					JUNCTION BOX TYPE				REMARKS
STATION	OFFSET	POLE NO.	JUNCTION BOX NO.	CONTROLLER	CIDH	P	A	B	CSLPF	IA	II	III	IV	
"TH" 13+46.9	72.8' LT	1			X									INSTALL NEW SIGNAL POLE
"TH" 13+75.4	48.7' RT	2			X									INSTALL NEW SIGNAL POLE
"TH" 12+60.3	65.5' RT	3			X									INSTALL NEW SIGNAL POLE
"TH" 12+25.6	32.0' LT	4			X									INSTALL NEW SIGNAL POLE
"TH" 13+49.1	66.5' LT	5						X						INSTALL NEW PUSH BUTTON POST. SEE NOTE 1.
"TH" 13+62.7	52.3' LT	6						X						INSTALL NEW PUSH BUTTON POST. SEE NOTE 1.
SEE SHT H101	SEE SHT H101	7							X					INSTALL NEW LUMINAIRE POLE. SEE SHEET H101.
"TH" 13+58.5	49.5' RT	8					X							INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 13+48.8	59.2' RT	9					X							INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 12+57.1	58.5' RT	10						X						INSTALL NEW PUSH BUTTON POST. SEE NOTE 1.
"TH" 12+42.3	45.9' RT	11					X							INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 12+42.4	34.9' LT	12					X							INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 12+55.9	47.6' LT	13					X							INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 13+52.0	55.8' LT		1								X			SEE NOTE 6 ON SHEET H18.
"TH" 13+79.8	40.5' RT		2									X		SEE NOTE 6 ON SHEET H18.
"TH" 12+38.3	56.6' RT		3									X		SEE NOTE 6 ON SHEET H18.
"TH" 12+47.9	41.9' LT		4								X			SEE NOTE 6 ON SHEET H18.
"TH" 13+79.8	43.3' RT			X										SEE NOTE 2

BASE & JUNCTION BOX NOTES:

1. USE ALTERNATE "PELCO" POST BASE, SEE SHEET 31.
2. CONTROLLER STATION/OFFSET LOCATION IS THE CENTER OF THE SIGNAL CONTROLLER CABINET. SEE SHEET H33 FOR ILLUSTRATION OF LOCATION.

P = PRECAST BASE (FOUNDATION)
A = TYPE "A" SIGNAL BASE POST FOUNDATION. SEE STD. DWG, T-31.00
B = TYPE "B" PUSH BUTTON BASE POST FOUNDATION. SEE STD. DWG, T-31.00
CIDH = CAST IN DRILLED HOLE
CSLPF = CONCRETE STREET LIGHT POLE FOUNDATION. SEE STD. DWG, L-30.10

PEDESTRIAN DETECTION SCHEDULE

POLE	PUSH BUTTON	PHASE	REMARKS
5	1	6	SEE NOTE 1
6	2	4	SEE NOTE 2
8	3	4	SEE NOTE 1
9	4	2	SEE NOTE 1
10	5	2	SEE NOTE 1
11	6	8	SEE NOTE 2
12	7	8	SEE NOTE 1
13	8	6	SEE NOTE 2

PEDESTRIAN DETECTION NOTES:

1. INSTALL AN R10-3eL SIGN ABOVE PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS.
2. INSTALL AN R10-3eR SIGN ABOVE PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS.

OPTICOM DETECTOR SCHEDULE

LOCATION	DET. NO.	PHASE CALL	FACING DIR.	PREEMPTOR PRIORITY	REMARKS
ON TOP OF SIGNAL HEAD 83	1	3, 8	NORTH		
ON TOP OF SIGNAL HEAD 62	2	1, 6	EAST		
ON TOP OF SIGNAL HEAD 43	3	4, 7	SOUTH		
ON TOP OF SIGNAL HEAD 23	4	2, 5	WEST		

OPTICOM DETECTOR NUMBER

RADAR DETECTION SCHEDULE

DET. NO.	PHASE CALL	TYPE	FACING DIR.	POLE NO.	LOCATION	RADAR TYPE
1	1&6	STOP BAR	SOUTH	1	SIGNAL SHAFT	SMARTSENSOR MATRIX
2	4&7	STOP BAR	WEST	2	SIGNAL SHAFT	SMARTSENSOR MATRIX
3	2&5	STOP BAR	NORTH	3	SIGNAL SHAFT	SMARTSENSOR MATRIX
4	3&8	STOP BAR	EAST	4	SIGNAL SHAFT	SMARTSENSOR MATRIX

RADAR DETECTOR NUMBER

FLASH PROGRAM COLOR

PHASE	1	2	3	4	5	6	7	8
COLOR	R	R	R	R	R	R	R	R

Preliminary Plans

OLD STEESE HIGHWAY
SCHEDULES (2 OF 2)

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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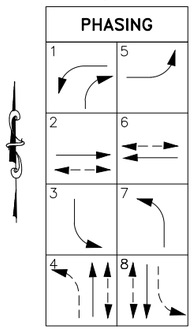
ALASKA	0670001/Z625410000	2020	H22	34

PHASE SEQUENCE

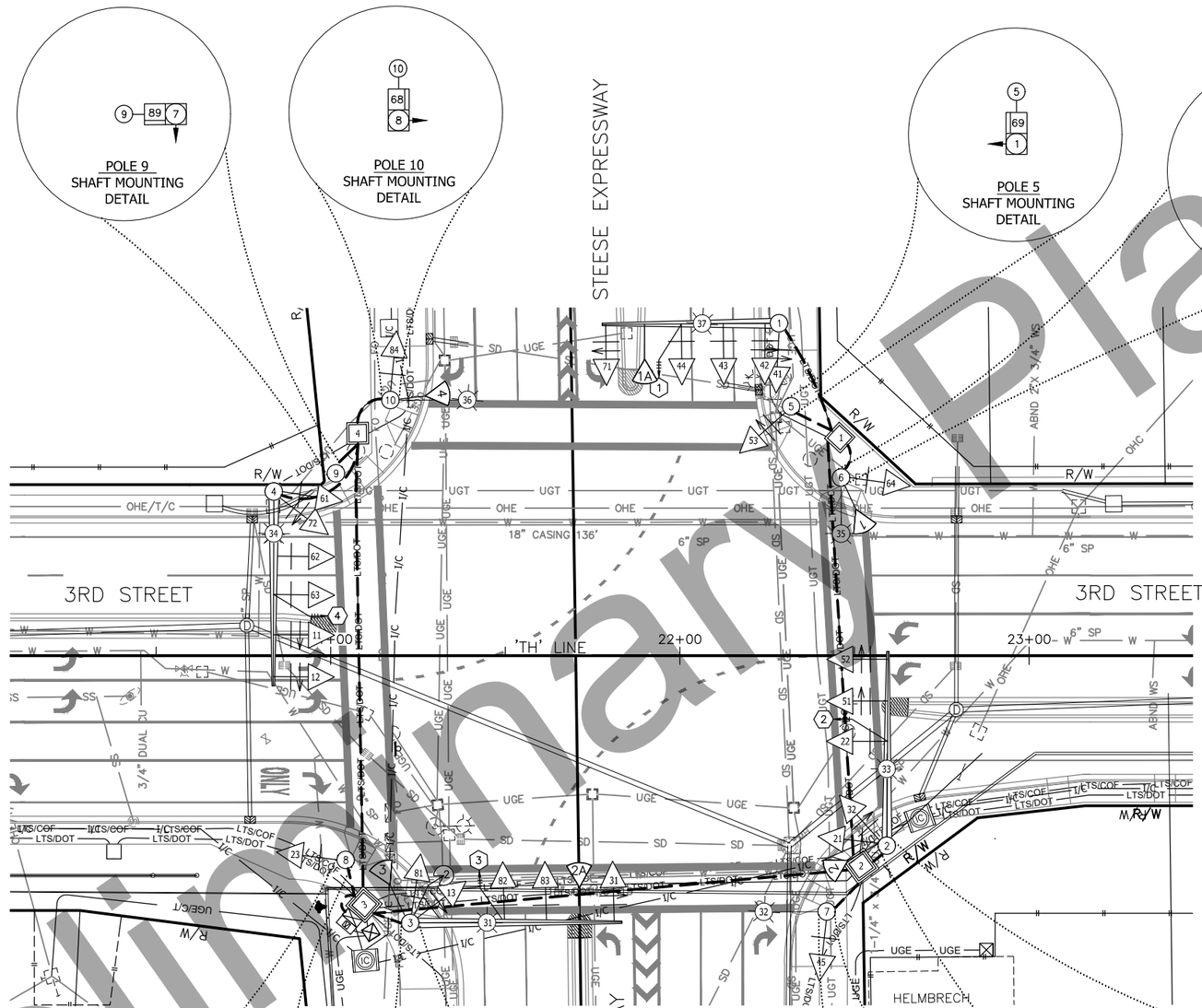


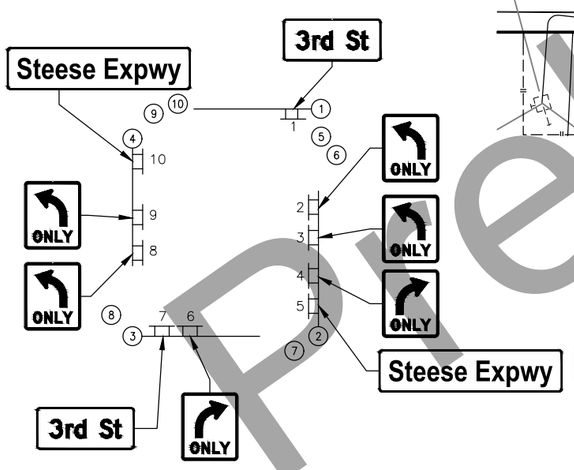
PED MOVEMENT

VEH. MOVEMENT

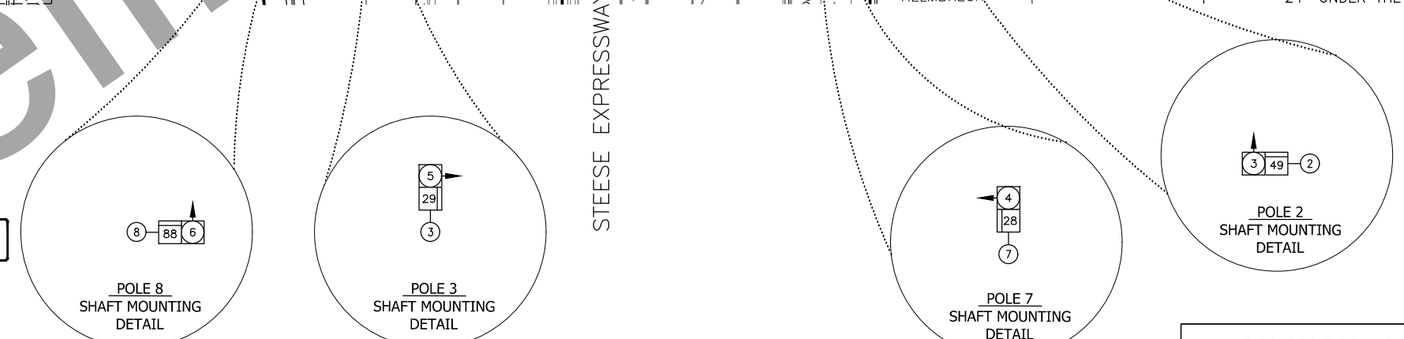
LEFT TURN MOVEMENT (PROTECTED)

LEFT TURN MOVEMENT (PERMISSIVE)





SIGN PLACEMENT



NOTES:

1. EXISTING SIGNAL LINE WORK IS FROM A COMBINATION OF SURVEY, AS-BUILTS AND SITE VISITS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE MAKING MODIFICATIONS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. THE EXISTING TRAFFIC SIGNAL SHALL BE PROTECTED AND REMAIN IN OPERATION UNTIL THE NEW TRAFFIC SIGNAL IS OPERATIONAL, AT WHICH POINT THE CONTRACTOR SHALL REMOVE AND SALVAGE ALL EXISTING SIGNAL EQUIPMENT AND WIRING. EXISTING SIGNAL POLE FOUNDATIONS AND CONDUIT MAY BE ABANDONED-IN-PLACE PER THE SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH DOT&PF MAINTENANCE FOREMAN FOR DISPOSAL OR DELIVERY OF SALVAGED SIGNAL EQUIPMENT.
3. IN THE NEW SIGNAL POLE LOCATIONS, STABILIZE AND COMPACT SOILS PER SPECIFICATIONS FOR STRUCTURAL FILL AS DESCRIBED IN STANDARD DRAWING T-52.20.
4. INSTALLATION OF NEW SIGNS ON TRAFFIC SIGNAL STRUCTURES WILL BE PAID UNDER PAY ITEM 660(1)-2A.
5. LUMINAIRE NUMBERS CORRESPOND WITH ELECTROLIER NUMBERS SHOWN ON SHEETS H107-H110.
6. JUNCTION BOXES ARE GRAPHICAL AND ARE NOT TO SCALE. JUNCTION BOX LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL LOCATE JUNCTION BOXES AS REASONABLY CLOSE AS POSSIBLE AND OBTAIN ENGINEER APPROVAL BEFORE PERMANENTLY PLACING.
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STEESE EXPRESSWAY SIGNAL PLAN

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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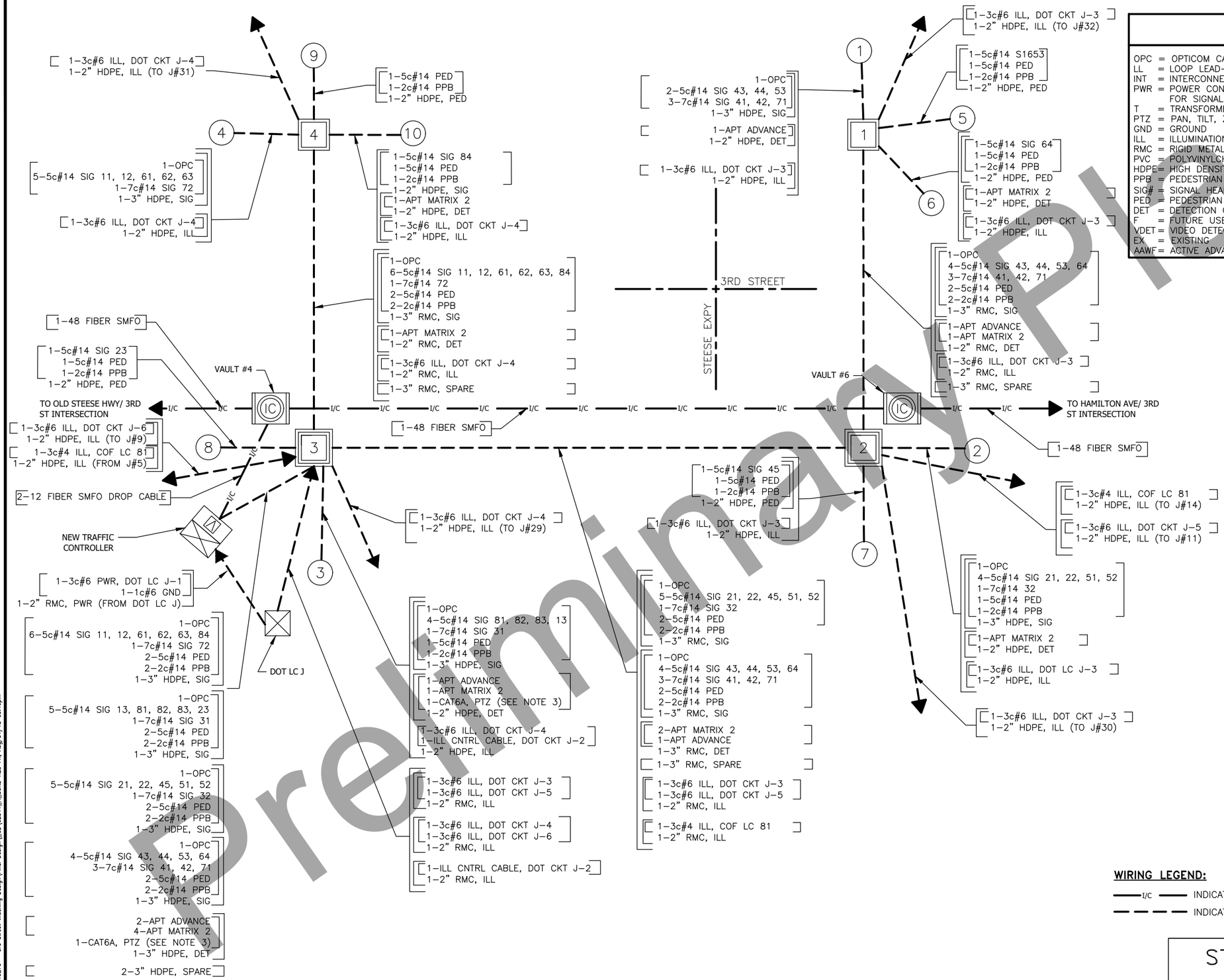
ALASKA	0670001/Z625410000	2020	H23	34



WIRING DIAGRAM CODING LEGEND

OPC	= OPTICOM CABLE	5c#14	TRAFFIC SIGNALS
LL	= LOOP LEAD-IN	7c#14	PROTECTED-PERMITTED SIGNALS
INT	= INTERCONNECT CABLE	5c#14	PEDESTRIAN SIGNALS
PWR	= POWER CONDUCTORS FOR SIGNAL CONTROLLER	2c#14	PEDESTRIAN PUSH-BUTTON
T	= TRANSFORMER	3pr#18	LOOP LEAD-IN CABLE & VDET
PTZ	= PAN, TILT, ZOOM CAMERA	6pr#18	LOOP LEAD-IN CABLE & VDET
GND	= GROUND	9pr#18	LOOP LEAD-IN CABLE & VDET
ILL	= ILLUMINATION	15pr#18	LOOP LEAD-IN CABLE & VDET
RMC	= RIGID METAL CONDUIT	3c#6	SIGNAL POWER
PVC	= POLYVINYLCHLORIDE CONDUIT	1c#8	BARE COPPER GROUND
HDPE	= HIGH DENSITY POLYETHALENE	18pr#19	PE-39 INTERCONNECT CABLE
PPB	= PEDESTRIAN PUSH-BUTTON	1c#6	BARE COPPER GROUND
SIG#	= SIGNAL HEAD NUMBER	APT MATRIX 2	RDET HOME RUN CABLE
PED	= PEDESTRIAN SIGNAL	CAT-6A	PTZ DATA
DET	= DETECTION CONDUIT	SMFO	SINGLE MODE FIBER OPTIC
F	= FUTURE USE	APT ADVANCE	ADVANCED RDET HOME RUN CABLE
VDET	= VIDEO DETECTION	3c#4	COF ILLUMINATION
EX	= EXISTING	3c#6	DOT&PF ILLUMINATION
AAWF	= ACTIVE ADVANCED WARNING FLASHER		

NOTES:

1. INSTALL 1-1c#8 BARE COPPER GROUND CONDUCTOR IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.
2. ILLUMINATION WIRING AND EQUIPMENT SHOWN FOR REFERENCE ONLY. SEE SHEETS H107-H116 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL ILLUMINATION WIRING AND EQUIPMENT WILL BE PAID UNDER 660(3) ITEMS. CONDUIT CONTAINING BOTH SIGNAL AND ILLUMINATION WIRING WILL BE PAID UNDER ITEM 660(1)-2A
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WIRING LEGEND:

I/C — INDICATES NEW INTERCONNECT CONDUIT RUN

- - - - INDICATES NEW SIGNAL/ILLUMINATION CONDUIT RUN(S)

STEESE EXPRESSWAY WIRING DIAGRAM

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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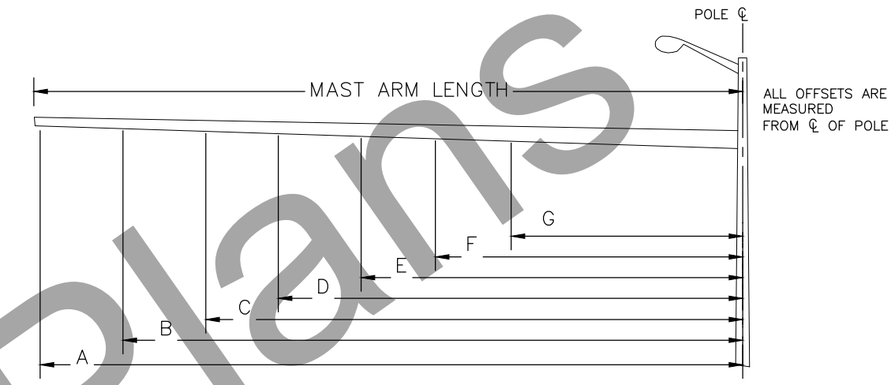
ALASKA	0670001/Z625410000	2020	H24	34

POLE–POST DESIGN LOADING SCHEDULE

POLE NO.	CORNER	ILLUMINATION # ARM L. (FT.)	MAST ARM L (FT.)		A	B	C	D	E	F	G	REMARKS
1	NE	SEE NOTE 1	50'	SIG. OR SIGN	SIGNAL	RADAR	SIGNAL	SIGNAL	SIGN	SIGNAL		SIGNAL ARM @ 180° TO "TH" CL
				LOC. OFFSET	49.6	38.5	28.0	16.0	12.2	4.0		
				LxW OR S.F.	14.1	1.0	11.5	11.5	5.3	14.1		
2	SE		55'	SIG. OR SIGN	SIGNAL	SIGN	SIGNAL	SIGN	SIGNAL	SIGN	SIGN	SIGNAL ARM @ 270° TO "TH" CL
				LOC. OFFSET	53.5	50.2	41.5	38.2	30.0	26.8	21.2	
				LxW OR S.F.	11.5	7.5	11.5	7.5	11.5	7.5	9.9	
3	SW		60'	SIG. OR SIGN	SIGNAL	RADAR	SIGNAL	SIGNAL	SIGN	SIGN		SIGNAL ARM @ 0° TO "TH" CL
				LOC. OFFSET	58.4	48.7	39.0	27.0	23.7	19.8		
				LxW OR S.F.	11.5	1.0	11.5	11.5	7.5	5.3		
4	NW		55'	SIG. OR SIGN	SIGNAL	SIGN	SIGNAL	SIGN	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 90° TO "TH" CL
				LOC. OFFSET	53.0	49.7	41.0	37.7	29.5	18.5	13.1	
				LxW OR S.F.	14.1	7.5	7.5	7.5	11.5	11.5	9.9	

POLE–POST DESIGN LOADING SCHEDULE NOTES:

1. SEE SHEET H101 FOR LUMINAIRE TYPE, ARM LENGTHS, MOUNTING HEIGHTS, AND MOUNTING ANGLES.



SIGNAL SIGN SCHEDULE

SIGN NO.	LOCATION		ASDS CODE	LEGEND	SIZE HxV (INCHES)	AREA (SQ FT)	BRACING/FRAMING		REMARKS
	POLE NO.	OFFSET					BRACED	FRAMED	
1	1	12.2	D3–1	3RD ST.	42x18	5.3		X	
2	2	50.2	R3–5L	LEFT ONLY	30x36	7.5		X	
3	2	38.2	R3–5L	LEFT ONLY	30x36	7.5		X	
4	2	26.8	R3–5R	RIGHT ONLY	30x36	7.5		X	
5	2	21.2	D3–1	STEESE EXPWY	79.5x18	9.9		X	
6	3	23.7	R3–5R	RIGHT ONLY	30x36	7.5		X	
7	3	19.8	D3–1	3RD ST.	42x18	5.3		X	
8	4	49.7	R3–5L	LEFT ONLY	30x36	7.5		X	
9	4	37.7	R3–5L	LEFT ONLY	30x36	7.5		X	
10	4	13.1	D3–1	STEESE EXPWY	79.5x18	9.9		X	

SIGNAL SIGN SCHEDULE NOTES:

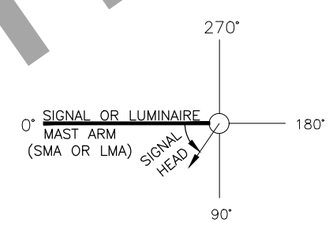
1. LOCATION OFFSETS ARE FROM CENTER OF SIGN TO ℄ OF SIGNAL POLE.

SIGNAL HEAD SCHEDULE

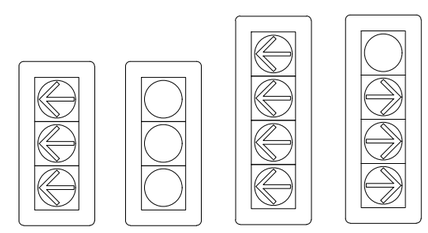
POLE/POST NO.	FACE NO.	INDICATIONS							MOUNTING			TOP OF POST	REMARKS
		12" BALL			12" ARROW				MAST ARM		SIDE MTNG. TYPE		
		R	Y	G	R	Y	FYA	G	LOC. OFFSET	ELEV. PLUMB			
1	41	X				R	R	R			D		INSTALL ON SIGNAL POLE 85° TO SMA
	42	X				R	R	R	4.0				
	43	X	X	X					16.0	X			
	44	X	X	X					28.0	X			
	71				L	L	L	L	49.6	X			
2	21	X	X	X							D		INSTALL ON SIGNAL POLE 85° TO SMA
	32				L	L	L	L			D		INSTALL ON SIGNAL POLE 40° TO SMA
	22	X	X	X					30.0	X			
	51				L	L		L	41.5	X			
	52				L	L		L	53.5	X			
3	81	X	X	X							D		INSTALL ON SIGNAL POLE 80° TO SMA
	13				L	L		L			D		INSTALL ON SIGNAL POLE 35° TO SMA
	82	X	X	X					27.0	X			
	83	X	X	X					39.0	X			
	31				L	L	L	L	58.4	X			
4	61	X	X	X							D		INSTALL ON SIGNAL POLE 80° TO SMA
	72				L	L	L	L			D		INSTALL ON SIGNAL POLE 55° TO SMA
	62	X	X	X					18.5	X			
	63	X	X	X					29.5	X			
	11				L	L		L	41.0	X			
	12				L	L		L	53.0	X			
5	53				L	L		L			D		INSTALL ON SIGNAL POLE 135° TO 'TH' CL
6	64	X	X	X							D		INSTALL ON LUMINAIRE POLE 80° TO LMA
7	45	X	X	X							D		INSTALL ON LUMINAIRE POLE 85° TO LMA
8	23	X	X	X								X	INSTALL ON SIGNAL POST 185° TO 'TH' CL
10	84	X	X	X							D		INSTALL ON LUMINAIRE POLE 85° TO LMA

SIGNAL HEAD SCHEDULE NOTES:

1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ℄ OF SIGNAL POLE.
2. FYA = FLASHING YELLOW ARROW.
3. ALL SIGNAL HEADS INSTALLED PERPENDICULAR TO SIGNAL MAST ARM UNLESS OTHERWISE NOTED.



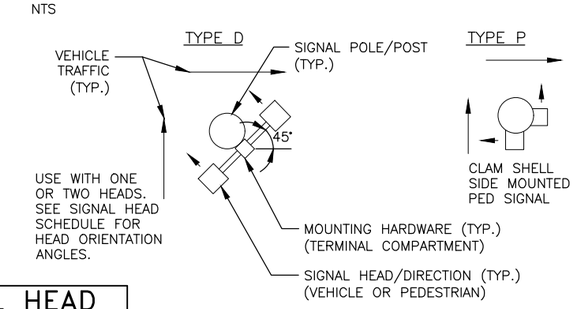
POLE–MOUNTED SIGNAL HEAD ORIENTATION



SIGNAL HEAD CONFIGURATIONS
(AREAS ARE FOR WIND LOAD CALCULATIONS)

POLE/POST SIGNAL HEAD SIDE MOUNTING TYPES

NTS



PED SIGNAL HEAD SCHEDULE

POLE/POST NO.	FACE NO.	MOUNTING TYPE	REMARKS
2	49	P	
3	29	P	
5	68	P	
6	48	P	
7	28	P	
8	89	P	
9	88	P	
10	69	P	

STEESE EXPRESSWAY
SCHEDULES (1 OF 2)

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
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STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H25	34

BASE & JUNCTION BOX SCHEDULE

LOCATION		DESCRIPTION			BASE TYPE				JUNCTION BOX TYPE				REMARKS
STATION	OFFSET	POLE NO.	JUNCTION BOX NO.	CONTROLLER	CIDH	P	A	CSLPF	IA	II	III	IV	
"TH" 22+28.4	95.1' LT	1			X								INSTALL NEW SIGNAL POLE
"TH" 22+59.3	54.5' RT	2			X								INSTALL NEW SIGNAL POLE
"TH" 21+22.8	76.5' RT	3			X								INSTALL NEW SIGNAL POLE
"TH" 20+83.7	47.0' LT	4			X								INSTALL NEW SIGNAL POLE
"TH" 22+31.9	71.3' LT	5					X						INSTALL NEW SIGNAL POST. SEE NOTE 1.
SEE SHT H101	SEE SHT H101	6						X					INSTALL NEW LUMINAIRE POLE. SEE SHEET H101.
SEE SHT H101	SEE SHT H101	7						X					INSTALL NEW LUMINAIRE POLE. SEE SHEET H101.
"TH" 21+04.3	58.5' RT	8					X						INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 21+01.5	52.2' LT	9					X						INSTALL NEW SIGNAL POST. SEE NOTE 1.
SEE SHT H101	SEE SHT H101	10						X					INSTALL NEW LUMINAIRE POLE. SEE SHEET H101.
"TH" 22+45.8	62.4' LT		1								X		SEE NOTE 6 ON SHEET H22.
"TH" 22+51.9	60.2' RT		2								X		SEE NOTE 6 ON SHEET H22.
"TH" 21+08.0	73.0' RT		3							X			SEE NOTE 6 ON SHEET H22.
"TH" 21+07.7	63.7' LT		4							X			SEE NOTE 6 ON SHEET H22.
"TH" 21+06.2	75.1' RT			X									SEE NOTE 2

BASE & JUNCTION BOX NOTES:

1. USE ALTERNATE "PELCO" POST BASE, SEE SHEET 31.
2. CONTROLLER STATION/OFFSET LOCATION IS THE CENTER OF THE SIGNAL CONTROLLER CABINET. SEE SHEET H33 FOR ILLUSTRATION OF LOCATION.

P = PRECAST BASE (FOUNDATION)
A = TYPE "A" SIGNAL BASE POST FOUNDATION.
SEE STD. DWG, T-31.00
CIDH = CAST IN DRILLED HOLE
CSLPF = CONCRETE STREET LIGHT POLE FOUNDATION.
SEE STD. DWG, L-30.10

PEDESTRIAN DETECTION SCHEDULE

POLE	PUSH BUTTON	PHASE	REMARKS
2	3	4	SEE NOTE 1
3	5	2	SEE NOTE 1
5	1	6	SEE NOTE 1
6	2	4	SEE NOTE 2
7	4	2	SEE NOTE 2
8	6	8	SEE NOTE 2
9	7	8	SEE NOTE 1
10	8	6	SEE NOTE 2

PEDESTRIAN DETECTION NOTES:

1. INSTALL AN R10-3eL SIGN ABOVE PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS.
2. INSTALL AN R10-3eR SIGN ABOVE PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS.

OPTICOM DETECTOR SCHEDULE

LOCATION	DET. NO.	PHASE CALL	FACING DIR.	PREEMPTOR PRIORITY	REMARKS
ON TOP OF SIGNAL HEAD 44	1	4, 7	SOUTH		
ON TOP OF SIGNAL HEAD 22	2	2, 5	WEST		
ON TOP OF SIGNAL HEAD 82	3	3, 8	NORTH		
ON TOP OF SIGNAL HEAD 63	4	1, 6	EAST		

OPTICOM DETECTOR NUMBER

RADAR DETECTION SCHEDULE

DET. NO.	PHASE CALL	TYPE	FACING DIR.	POLE NO.	LOCATION	LOC. OFFSET	RADAR TYPE
1	1&6	STOP BAR	SOUTH	6	SIGNAL SHAFT		SMARTSENSOR MATRIX
2	4&7	STOP BAR	WEST	2	SIGNAL SHAFT		SMARTSENSOR MATRIX
3	2&5	STOP BAR	NORTH	3	SIGNAL SHAFT		SMARTSENSOR MATRIX
4	3&8	STOP BAR	EAST	10	SIGNAL SHAFT		SMARTSENSOR MATRIX
1A	4	ADVANCE	SOUTH	1	SIGNAL MAST ARM	38.5	SMARTSENSOR ADVANCE
2A	8	ADVANCE	NORTH	3	SIGNAL MAST ARM	48.7	SMARTSENSOR ADVANCE

RADAR DETECTION NUMBER

FLASH PROGRAM COLOR

PHASE	1	2	3	4	5	6	7	8
COLOR	R	R	R	R	R	R	R	R

STEESE EXPRESSWAY
SCHEDULES (2 OF 2)

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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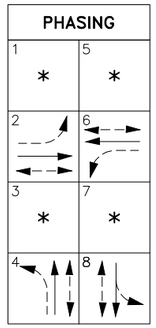
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H26	34

PHASE SEQUENCE



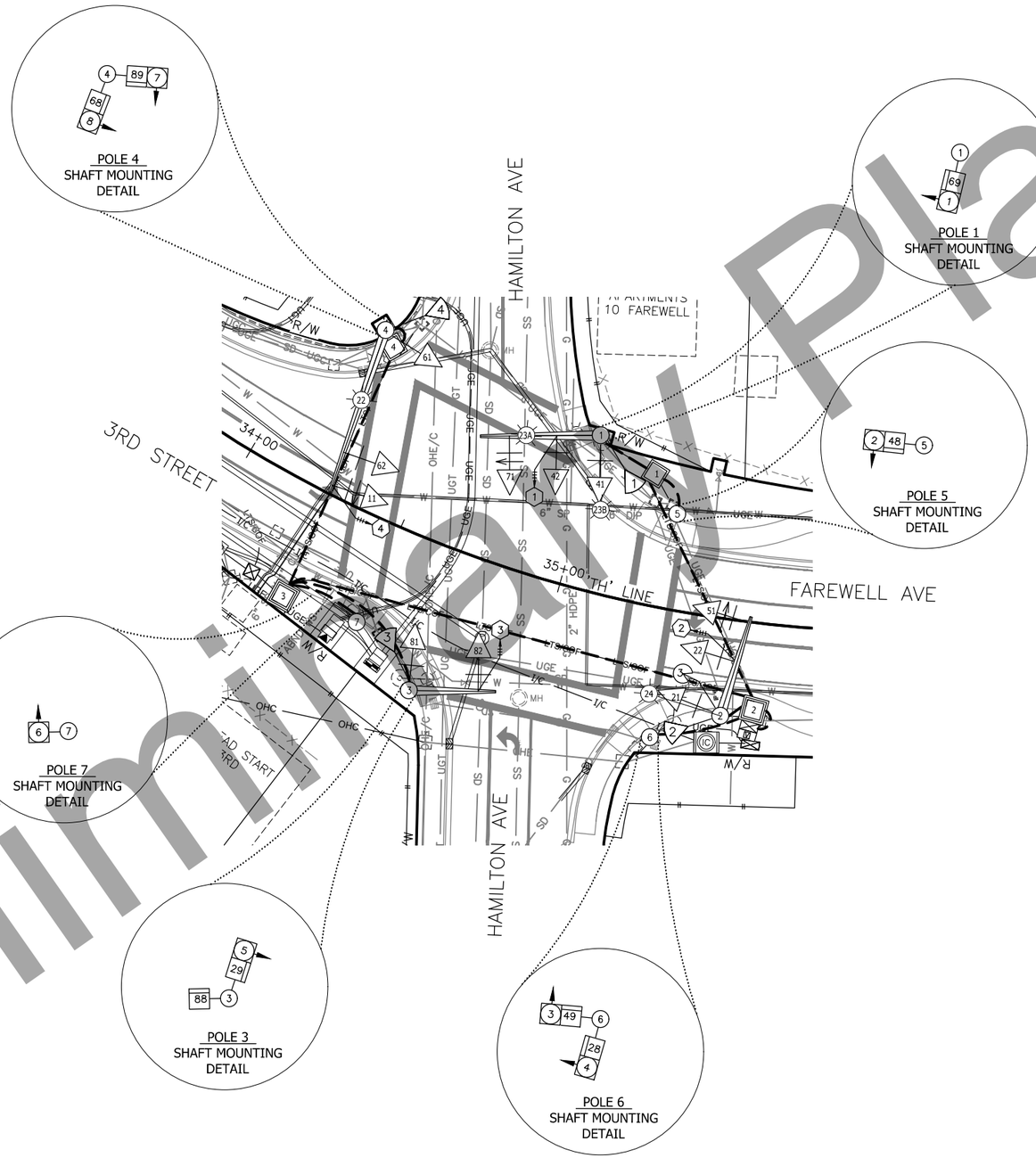
PED MOVEMENT

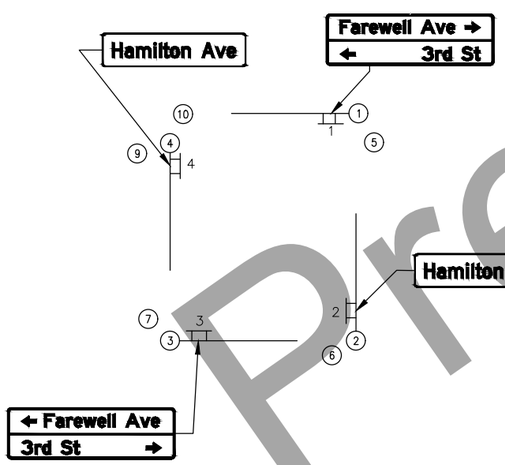
VEH. MOVEMENT

LEFT TURN MOVEMENT (PROTECTED)

LEFT TURN MOVEMENT (PERMISSIVE)

* FUTURE PHASE





SIGN PLACEMENT

NOTES:

1. EXISTING SIGNAL LINE WORK IS FROM A COMBINATION OF SURVEY, AS-BUILTS AND SITE VISITS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS BEFORE MAKING MODIFICATIONS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES.
2. PRIOR TO INSTALLATION OF NEW SIGNAL POLES AND EQUIPMENT, CONTRACTOR TO REMOVE AND SALVAGE ALL EXISTING SIGNAL EQUIPMENT, CONDUIT AND WIRING AND CONVERT THE INTERSECTION TO TEMPORARY ALL-WAY STOP CONTROL PER THE TRAFFIC CONTROL PLANS. ALL EXISTING SIGNAL POLE FOUNDATIONS SHALL BE REMOVED IN THEIR ENTIRETY ACCORDING TO A METHOD APPROVED BY THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR TO COORDINATE WITH DOT&PF MAINTENANCE FOREMAN FOR DISPOSAL OR DELIVERY OF SALVAGED SIGNAL EQUIPMENT.
3. IN THE NEW SIGNAL POLE LOCATIONS, STABILIZE AND COMPACT SOILS PER SPECIFICATIONS FOR STRUCTURAL FILL AS DESCRIBED IN STANDARD DRAWING T-52.20.
4. INSTALLATION OF NEW SIGNS ON TRAFFIC SIGNAL STRUCTURES WILL BE PAID UNDER PAY ITEM 660(1)-3A.
5. LUMINAIRE NUMBERS CORRESPOND WITH ELECTROLIER NUMBERS SHOWN ON SHEETS H107-H110.
6. JUNCTION BOXES ARE GRAPHICAL AND ARE NOT TO SCALE. JUNCTION BOX LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL LOCATE JUNCTION BOXES AS REASONABLY CLOSE AS POSSIBLE AND OBTAIN ENGINEER APPROVAL BEFORE PERMANENTLY PLACING.
7. ILLUMINATION EQUIPMENT AND CONDUIT DEPICTED IS FOR REFERENCE ONLY. SEE SHEETS H100-H116 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL ILLUMINATION EQUIPMENT WILL BE PAID UNDER 660(3) ITEMS, WITH THE EXCEPTION OF LUMINAIRE ARMS MOUNTED TO SIGNAL POLES, WHICH WILL BE PAID UNDER 660(1)-3A.
8. INTERCONNECT AND PTZ CAMERA EQUIPMENT AND CONDUIT DEPICTED IS FOR REFERENCE ONLY. SEE 3RD ST INTERCONNECT PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL INTERCONNECT AND PTZ CAMERA COSTS WILL BE PAID UNDER 660(1)-3B.
9. THE UNDERGROUND ROUTING OF SIGNAL CONDUIT IS SCHEMATICALLY DRAWN TO ILLUSTRATE CONNECTIONS. COORDINATE WITH OTHER UNDERGROUND UTILITIES TO ROUTE SIGNAL CONDUIT TO AVOID CONFLICTS AS NECESSARY. NEW SIGNAL CONDUIT SHALL BE BURIED A MINIMUM OF 24" UNDER THE FINISHED SURFACE.

HAMILTON AVENUE SIGNAL PLAN

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
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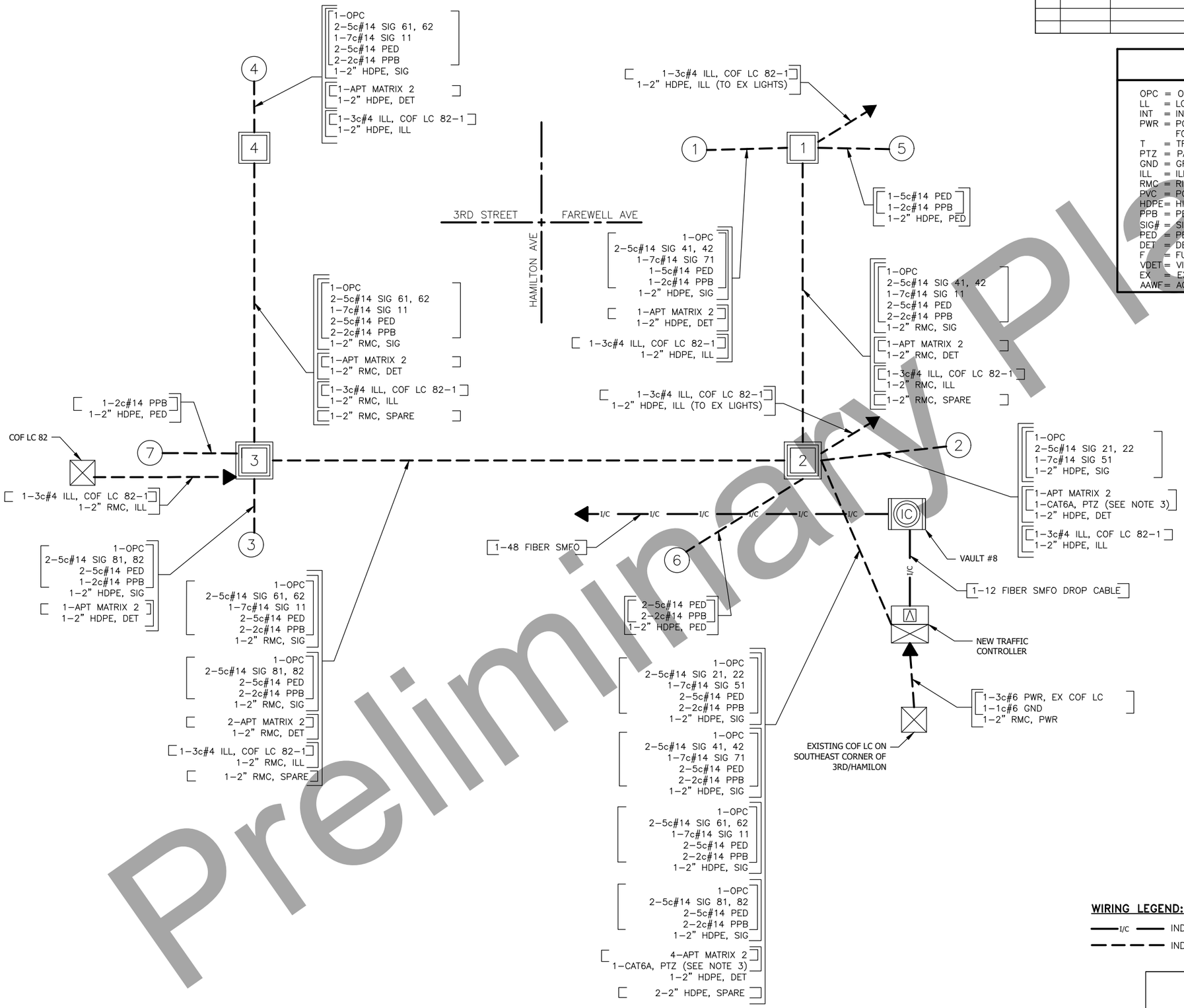
ALASKA	0670001/Z625410000	2020	H27	34



WIRING DIAGRAM CODING LEGEND

OPC = OPTICOM CABLE		5c#14	TRAFFIC SIGNALS
LL = LOOP LEAD-IN		7c#14	PROTECTED-PERMITTED SIGNALS
INT = INTERCONNECT CABLE		5c#14	PEDESTRIAN SIGNALS
PWR = POWER CONDUCTORS FOR SIGNAL CONTROLLER		2c#14	PEDESTRIAN PUSH-BUTTON
T = TRANSFORMER		3pr#18	LOOP LEAD-IN CABLE & VDET
PTZ = PAN, TILT, ZOOM CAMERA		6pr#18	LOOP LEAD-IN CABLE & VDET
GND = GROUND		9pr#18	LOOP LEAD-IN CABLE & VDET
ILL = ILLUMINATION		15pr#18	LOOP LEAD-IN CABLE & VDET
RMC = RIGID METAL CONDUIT		3c#6	SIGNAL POWER
PVC = POLYVINYLCHLORIDE CONDUIT		1c#8	BARE COPPER GROUND
HDPE= HIGH DENSITY POLYETHALENE		18pr#19	PE-39 INTERCONNECT CABLE
PPB = PEDESTRIAN PUSH-BUTTON		1c#6	BARE COPPER GROUND
SIG# = SIGNAL HEAD NUMBER		APT MATRIX 2	RDET HOME RUN CABLE
PED = PEDESTRIAN SIGNAL		CAT-6A	PTZ DATA
DET = DETECTION CONDUIT		SMFO	SINGLE MODE FIBER OPTIC
F = FUTURE USE		3c#4	COF ILLUMINATION
VDET= VIDEO DETECTION		3c#6	DOT&PF ILLUMINATION
EX = EXISTING			
AAWF= ACTIVE ADVANCED WARNING FLASHER			

NOTES:

1. INSTALL 1-1c#8 BARE COPPER GROUND CONDUCTOR IN ALL CONDUITS UNLESS ANOTHER GROUND CONDUCTOR IS SPECIFIED.
2. ILLUMINATION WIRING AND EQUIPMENT SHOWN FOR REFERENCE ONLY. SEE SHEETS H107-H116 FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL ILLUMINATION WIRING AND EQUIPMENT WILL BE PAID UNDER 660(3) ITEMS. CONDUIT CONTAINING BOTH SIGNAL AND ILLUMINATION WIRING WILL BE PAID UNDER ITEM 660(1)-3A
3. INTERCONNECT VAULTS, CONDUIT, FIBER AND PTZ CAMERA WIRING SHOWN FOR REFERENCE ONLY. SEE 3RD ST INTERCONNECT PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. ALL INTERCONNECT AND PTZ CAMERA COSTS WILL BE PAID UNDER 660(1)-3B.
4. SIGNAL HEADS 11, 51 & 71 TO BE WIRED WITH 7c#14 PROTECTED-PERMITTED CABLE, BUT SHALL BE PROGRAMMED TO OPERATE AS PERMITTED-ONLY PER THE PHASING DIAGRAM ON SHEET H26.

WIRING LEGEND:

I/C INDICATES NEW INTERCONNECT CONDUIT RUN

INDICATES NEW SIGNAL/ILLUMINATION CONDUIT RUN(S)

HAMILTON AVENUE WIRING DIAGRAM

STATE OF OREGON PRELIM PS&E PROFESSIONAL ENGINEER

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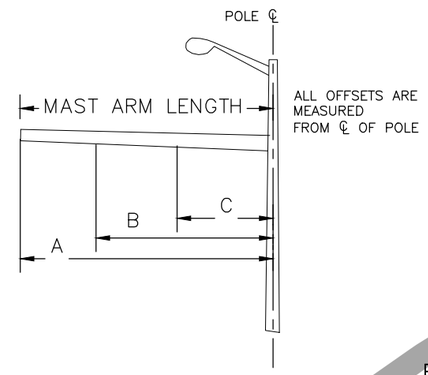
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H28	34

POLE–POST DESIGN LOADING SCHEDULE

POLE NO.	CORNER	ILLUMINATION # ARM L. (FT.)	SIGNAL ARM L (FT.)		A	B	C	REMARKS
1	NE	SEE NOTE 1	35'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 164° TO "TH" CL
				LOC. OFFSET	27.1	13.0	6.9	
				LxW OR S.F.	14.1	11.5	20.4	
2	SE		30'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 280° TO "TH" CL
				LOC. OFFSET	28.9	16.6	11.3	
				LxW OR S.F.	14.1	11.5	9.6	
3	SW		25'	SIG. OR SIGN	SIGNAL	SIGN		SIGNAL ARM @ 340° TO "TH" CL
				LOC. OFFSET	20.5	14.4		
				LxW OR S.F.	11.5	20.4		
4	NW		50'	SIG. OR SIGN	SIGNAL	SIGNAL	SIGN	SIGNAL ARM @ 81° TO "TH" CL
				LOC. OFFSET	48.5	38.3	33.0	
				LxW OR S.F.	14.1	11.5	9.6	

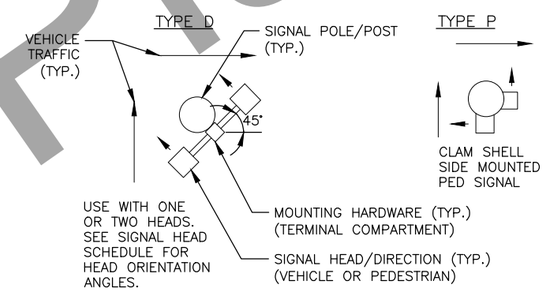
POLE–POST DESIGN LOADING SCHEDULE NOTES:

1. SEE SHEET H101 FOR LUMINAIRE TYPE, ARM LENGTHS, MOUNTING HEIGHTS, AND MOUNTING ANGLES.



POLE/POST SIGNAL HEAD SIDE MOUNTING TYPES

NTS

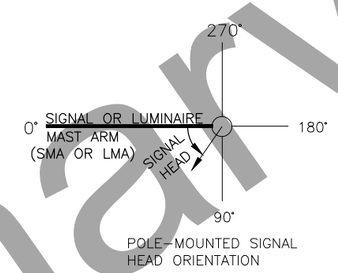


SIGNAL HEAD SCHEDULE

POLE/POST NO.	FACE NO.	INDICATIONS: 12" BALL R	12" BALL Y	12" BALL G	12" ARROW R	12" ARROW Y	12" ARROW FYA	12" ARROW G	MOUNTING: MAST ARM LOC. OFFSET	MAST ARM ELEV. PLUMB	SIDE MTNG. TYPE	TOP OF POST	REMARKS
1	41	X	X	X							D		INSTALL ON SIGNAL POLE 90° TO SMA
	42	X	X	X					13.0	X			
	71				X	X	X	X	27.1	X			
2	21	X	X	X							D		INSTALL ON SIGNAL POLE 85° TO SMA
	22	X	X	X					16.6	X			
	51				X	X	X	X	28.9	X			
3	81	X	X	X							D		INSTALL ON SIGNAL POLE 85° TO SMA
	82	X	X	X					20.5	X			
4	61	X	X	X							D		INSTALL ON SIGNAL POLE 75° TO SMA
	62	X	X	X					38.3	X			
	11				X	X	X	X	48.5	X			

SIGNAL HEAD SCHEDULE NOTES:

1. LOCATION OFFSETS ARE FROM CENTER OF SIGNAL HEAD TO ℄ OF SIGNAL POLE.
2. FYA = FLASHING YELLOW ARROW.
3. ALL SIGNAL HEADS INSTALLED PERPENDICULAR TO SIGNAL MAST ARM UNLESS OTHERWISE NOTED.



POLE–MOUNTED SIGNAL HEAD ORIENTATION

SIGNAL SIGN SCHEDULE

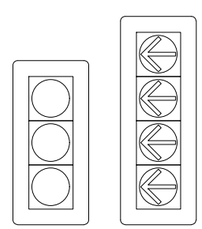
SIGN NO.	LOCATION: POLE NO.	LOCATION: OFFSET	ASDS CODE	LEGEND	SIZE HxV (INCHES)	AREA (SQ FT)	BRACING/FRAMING: BRACED	BRACING/FRAMING: FRAMED	REMARKS
1	1	6.9	D3–102	FAREWELL AVE/THIRD ST	98x30	20.4		X	
2	2	11.3	D3–1	HAMILTON AVE	77x18	9.6		X	
3	3	14.4	D3–102	FAREWELL AVE/THIRD ST	98x30	20.4		X	
4	4	33.0	D3–1	HAMILTON AVE	77x18	9.6		X	

SIGNAL SIGN SCHEDULE NOTES:

1. LOCATION OFFSETS ARE FROM CENTER OF SIGN TO ℄ OF SIGNAL POLE.

PED SIGNAL HEAD SCHEDULE

POLE/POST NO.	FACE NO.	MOUNTING TYPE	REMARKS
1	69	P	
3	29	P	
3	88	P	
4	89	P	
4	68	P	
5	48	P	
6	49	P	
6	28	P	



SIGNAL HEAD CONFIGURATIONS

(AREAS ARE FOR WIND LOAD CALCULATIONS)

HAMILTON AVENUE
SCHEDULES (1 OF 2)

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
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ALASKA	0670001/Z625410000	2020	H29	34

BASE & JUNCTION BOX SCHEDULE

LOCATION		DESCRIPTION			BASE TYPE				JUNCTION BOX TYPE				REMARKS
STATION	OFFSET	POLE NO.	JUNCTION BOX NO.	CONTROLLER	CIDH	P	A	B	IA	II	III	IV	
"TH" 34+99.7	45.6' LT	1			X								INSTALL NEW SIGNAL POLE
"TH" 35+52.5	28.6' RT	2			X								INSTALL NEW SIGNAL POLE
"TH" 34+69.2	43.9' RT	3			X								INSTALL NEW SIGNAL POLE
"TH" 34+18.5	50.7' LT	4			X								INSTALL NEW SIGNAL POLE
"TH" 35+30.2	28.3' LT	5					X						INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 35+34.5	38.2' RT	6					X						INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 34+49.2	30.9' RT	7						X					INSTALL NEW SIGNAL POST. SEE NOTE 1.
"TH" 35+20.5	38.6' LT		1								X		SEE NOTE 6 ON SHEET H26.
"TH" 35+61.1	28.0' RT		2								X		SEE NOTE 6 ON SHEET H26.
"TH" 34+28.1	33.3' RT		3							X			SEE NOTE 6 ON SHEET H26.
"TH" 34+23.4	47.3' LT		4							X			SEE NOTE 6 ON SHEET H26.
"TH" 35+60.7	30.7' RT			X									SEE NOTE 2

BASE & JUNCTION BOX NOTES:

1. USE ALTERNATE "PELCO" POST BASE, SEE SHEET 31.
2. CONTROLLER STATION/OFFSET LOCATION IS THE CENTER OF THE SIGNAL CONTROLLER CABINET. SEE SHEET H33 FOR ILLUSTRATION OF LOCATION.

P = PRECAST BASE (FOUNDATION)
A = TYPE "A" SIGNAL BASE POST FOUNDATION. SEE STD. DWG, T-31.00
B = TYPE "B" PUSH BUTTON BASE POST FOUNDATION. SEE STD. DWG, T-31.00
CIDH = CAST IN DRILLED HOLE

PEDESTRIAN DETECTION SCHEDULE

POLE	PUSH BUTTON	PHASE	REMARKS
1	1	6	SEE NOTE 1
3	5	2	SEE NOTE 1
4	7	8	SEE NOTE 1
4	8	6	SEE NOTE 2
5	2	4	SEE NOTE 2
6	3	4	SEE NOTE 1
6	4	2	SEE NOTE 1
7	6	8	SEE NOTE 1

PEDESTRIAN DETECTION NOTES:

1. INSTALL AN R10-3eL SIGN ABOVE PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS.
2. INSTALL AN R10-3eR SIGN ABOVE PEDESTRIAN PUSH BUTTON. SIGN SHALL NOT BE MEASURED FOR PAYMENT AND IS SUBSIDIARY TO TRAFFIC SIGNAL PAY ITEMS.

OPTICOM DETECTOR SCHEDULE

LOCATION	DET. NO.	PHASE CALL	FACING DIR.	PREEMPTOR PRIORITY	REMARKS
ON TOP OF SIGNAL HEAD 42	1	4	SOUTH		
ON TOP OF SIGNAL HEAD 22	2	2	WEST		
ON TOP OF SIGNAL HEAD 82	3	8	NORTH		
ON TOP OF SIGNAL HEAD 63	4	6	EAST		

OPTICOM DETECTOR NUMBER

RADAR DETECTION SCHEDULE

DET. NO.	PHASE CALL	TYPE	FACING DIR.	POLE NO.	LOCATION	RADAR TYPE
1	6	STOP BAR	EAST	1	SIGNAL SHAFT	SMARTSENSOR MATRIX
2	4	STOP BAR	SOUTH	2	SIGNAL SHAFT	SMARTSENSOR MATRIX
3	2	STOP BAR	WEST	3	SIGNAL SHAFT	SMARTSENSOR MATRIX
4	8	STOP BAR	NORTH	4	SIGNAL SHAFT	SMARTSENSOR MATRIX

RADAR DETECTION NUMBER

FLASH PROGRAM COLOR

PHASE	1	2	3	4	5	6	7	8
COLOR	R	R	R	R	R	R	R	R

Preliminary Plans

HAMILTON AVENUE
SCHEDULES (2 OF 2)

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

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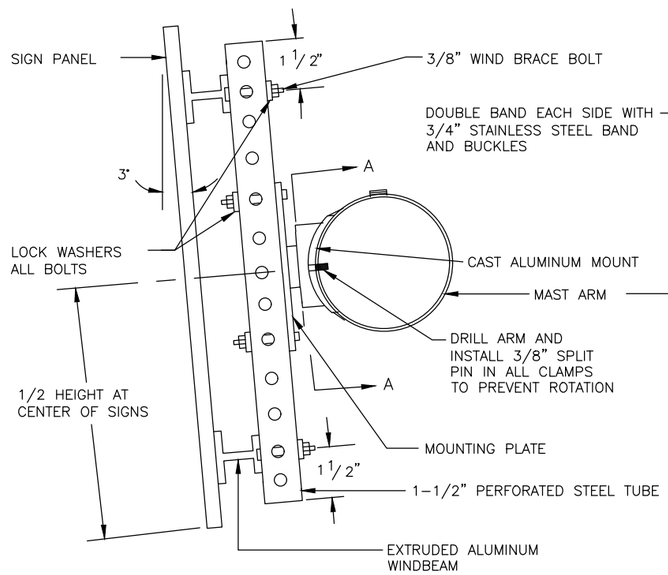
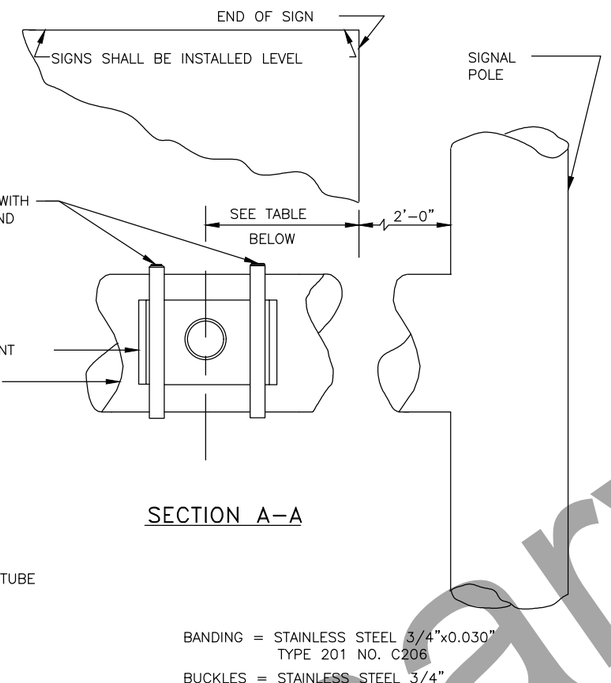
SIGNAL MAST ARM MOUNTED SIGNS (NOT FOR "R" SERIES SIGNS)

NTS





SECTION A–A

BANDING = STAINLESS STEEL 3/4"x0.030" TYPE 201 NO. C206

BUCKLES = STAINLESS STEEL 3/4" TYPE 201 NO. C256

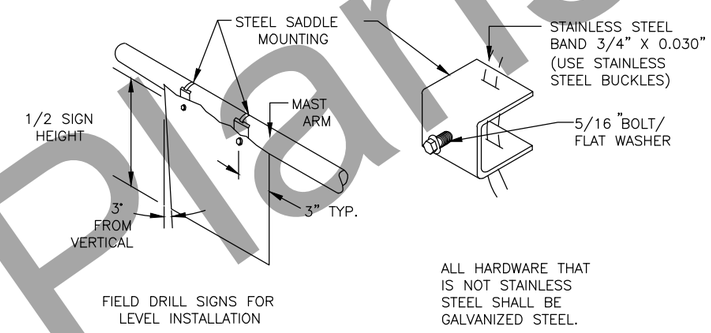
ALUMINUM MOUNT (SIGNAL) = 1-1/2"NPT NO. D040

PIN = NO. D042

SIGN WIDTH(W)	NO. OF CLAMPS	CLAMP SPACING		
		OVERHANG	BETWEEN CLAMPS	OVERHANG
0–12 1/2'	2	0.2W	1 SPACE AT 0.6W	0.2W
13' TO 21'	3	0.15W	2 SPACES AT 0.35W	0.15W

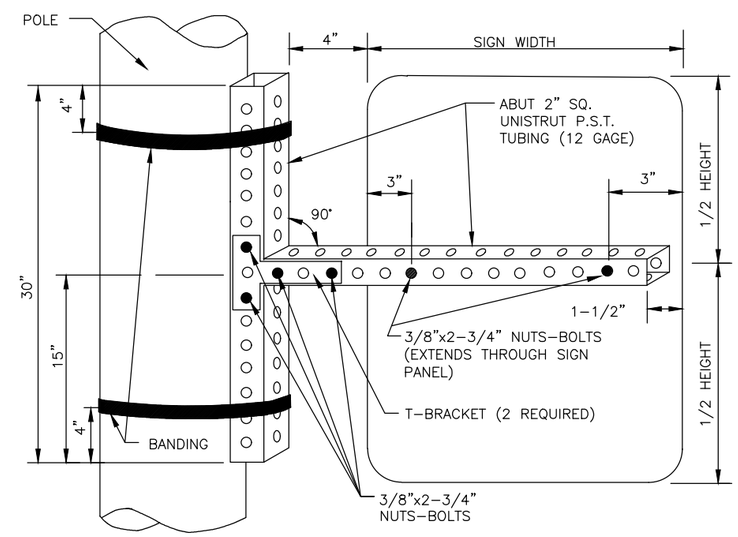
MAST ARM MOUNTING FOR "R" SERIES SIGNS

NTS

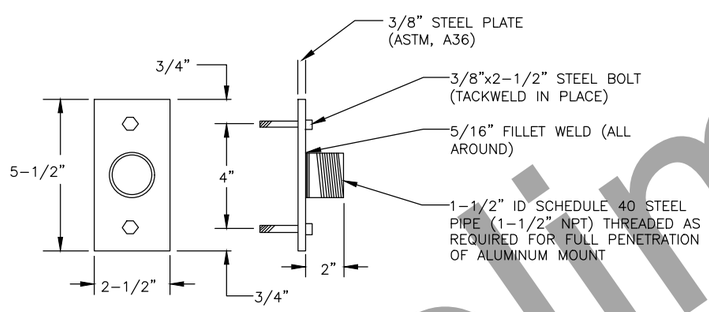


POLE /POST SIDE MOUNTED SIGN BRACKET

NTS



ALL NUTS SHALL BE INSTALLED WITH LOCK WASHERS
BANDING = STAINLESS STEEL 3/4"x0.030" (DOUBLE BANDING REQUIRED)
BUCKLES = STAINLESS STEEL 3/4"



MOUNTING PLATE DETAIL

NTS

1. CAST ALUMINUM MOUNTS AND BANDING MATERIALS SHALL BE "BAND-IT" OR APPROVED EQUAL.
2. MOUNTING PLATE SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
3. ALL WELDING SHALL MEET AMERICAN WELDING SOCIETY SPECS.
4. BOLTS, NUTS AND WASHERS SHALL MEET THE REQUIREMENTS OF STANDARD DRAWING S-20.10

Preliminary Plans

SIGNAL MOUNTED SIGN DETAILS

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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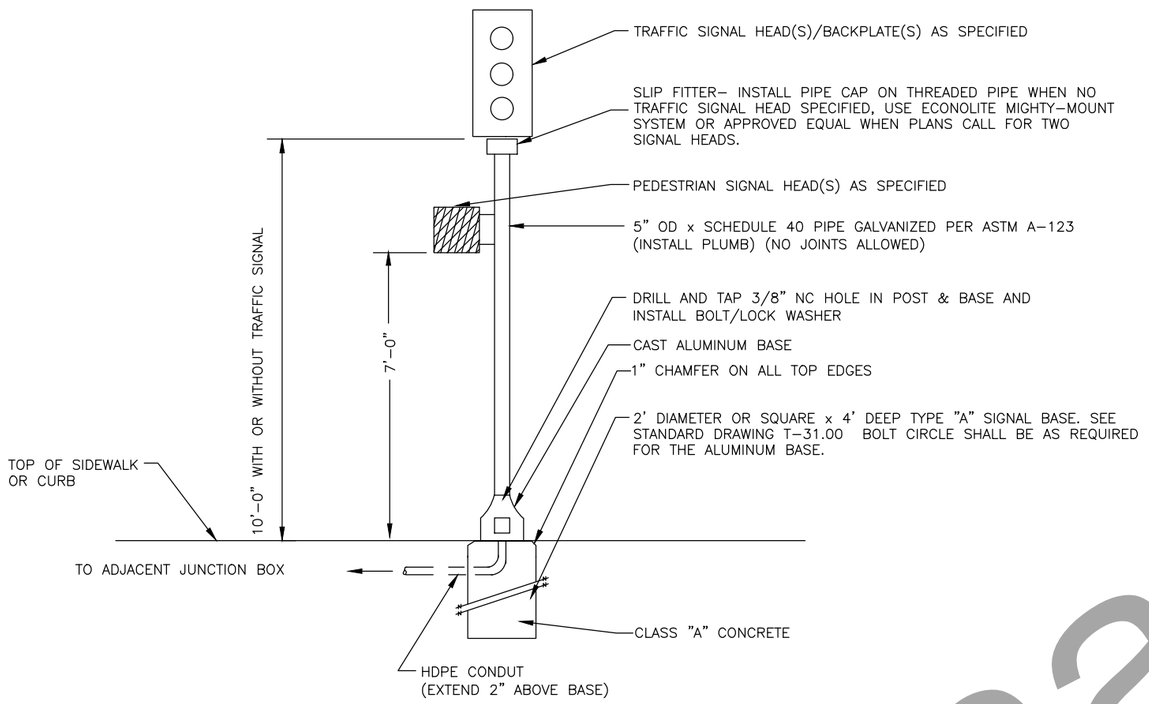
SIGNAL POST DETAIL

NTS

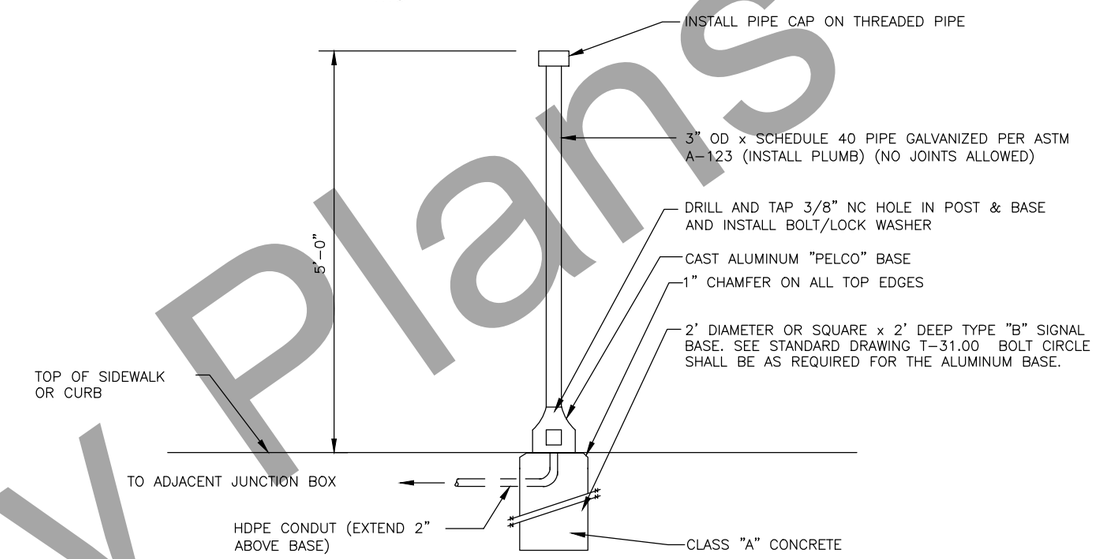


MATERIAL LIST *
1 TWO FOOT DIAMETER OR SQUARE x 4' BASE & 4 ANCHOR BOLTS, AND ONE CONDUIT
1– POST TOP SLIP FITTER. (SEE STANDARD DRAWING T–30.11)
1– POST & BREAKAWAY CAST ALUMINUM "PELCO" BASE;

MATERIAL LISTED ARE FOR ONE INSTALLATION AND DOES NOT INCLUDE SIGNAL HEADS, PEDESTRIAN HEADS OR PUSH BUTTONS

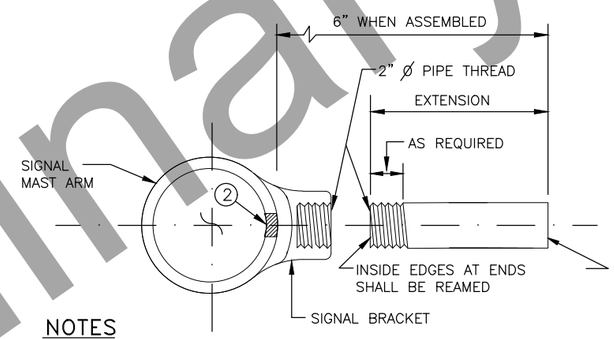
PUSH BUTTON POST DETAIL

NTS



MATERIAL LIST *
1– 1'–6" DIAMETER OR SQUARE x 2' BASE & 4 ANCHOR BOLTS, AND ONE CONDUIT
1– POST TOP SLIP FITTER. (SEE STANDARD DRAWING T–30.11)
1– POST & BREAKAWAY CAST ALUMINUM "PELCO" BASE;

MATERIAL LISTED ARE FOR ONE INSTALLATION AND DOES NOT INCLUDE SIGNAL HEADS, PEDESTRIAN HEADS OR PUSH BUTTONS

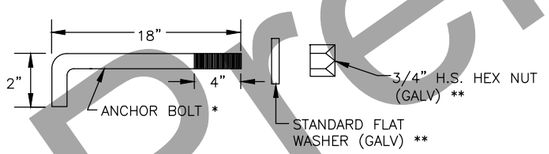


NOTES

1. THESE DETAILS MODIFY STANDARD DRAWING T–30.11.
2. FIELD DRILL WIRING ACCESS HOLE AS REQUIRED. REAM INSIDE & OUTSIDE AND PAINT WITH SPELTER REPAIR MATERIAL.
3. ONE 2" GALVANIZED SCHEDULE 40 RIGID METAL CONDUIT EXTENSION SHALL BE FURNISHED WITH EACH SIGNAL BRACKET.
4. SIGNAL BRACKETS SHALL BE ASTRO–BRAC AB–3008AK OR APPROVED EQUAL AND SHALL BE INSTALLED AS RECOMMENDED BY THE MANUFACTURER. THE ACTUAL LOCATION OF BRACKETS ON EACH ARM SHALL BE DETERMINED BY THE ENGINEER AFTER THE POLES AND ARMS HAVE BEEN INSTALLED.

ANCHOR BOLTS

NTS



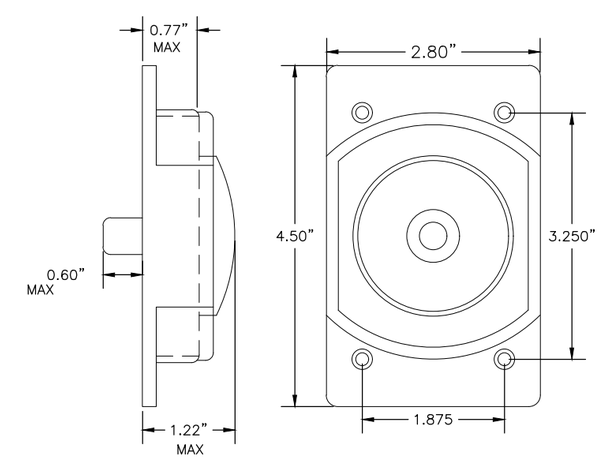
* MEETS ASTM A–572 GALVANIZED PER ASTM A–153

** MEETS ASTM A–325 GALVANIZED

PLUMBIZER SIGNAL MOUNTING DETAIL

NTS

(REQUIRED FOR ALL NEW OR RELOCATED PLUMBIZER [MAST ARM] MOUNTED SIGNALS)



PEDESTRIAN PUSH BUTTON DETAIL

NTS

SIGNAL POST, PEDESTRIAN PUSH BUTTON & SIGNAL MOUNTING DETAIL

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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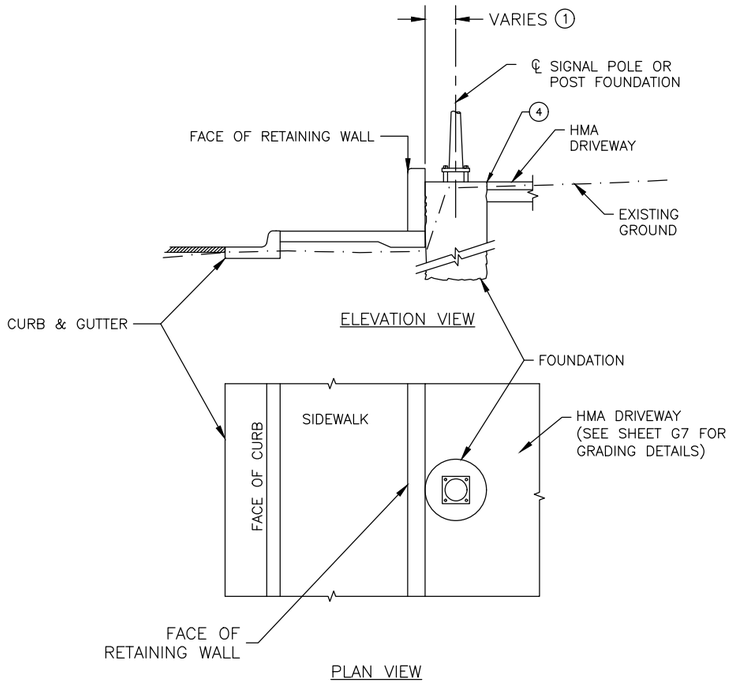
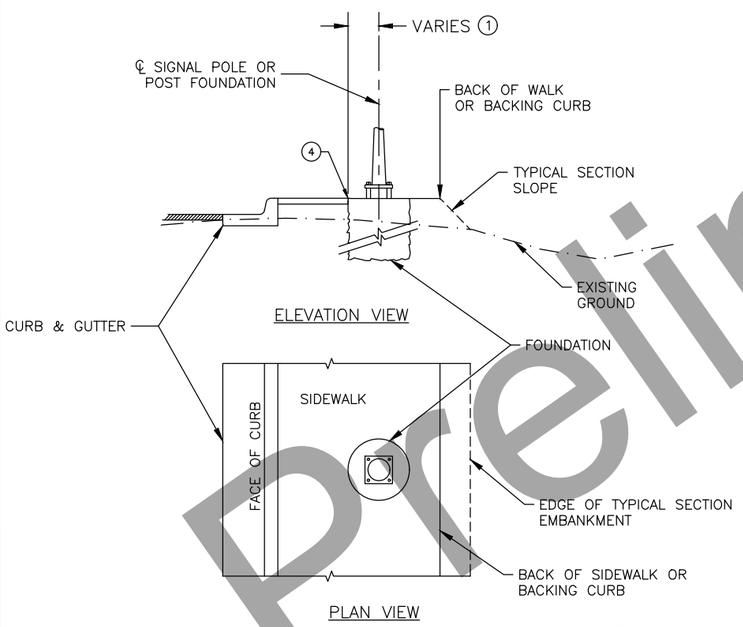
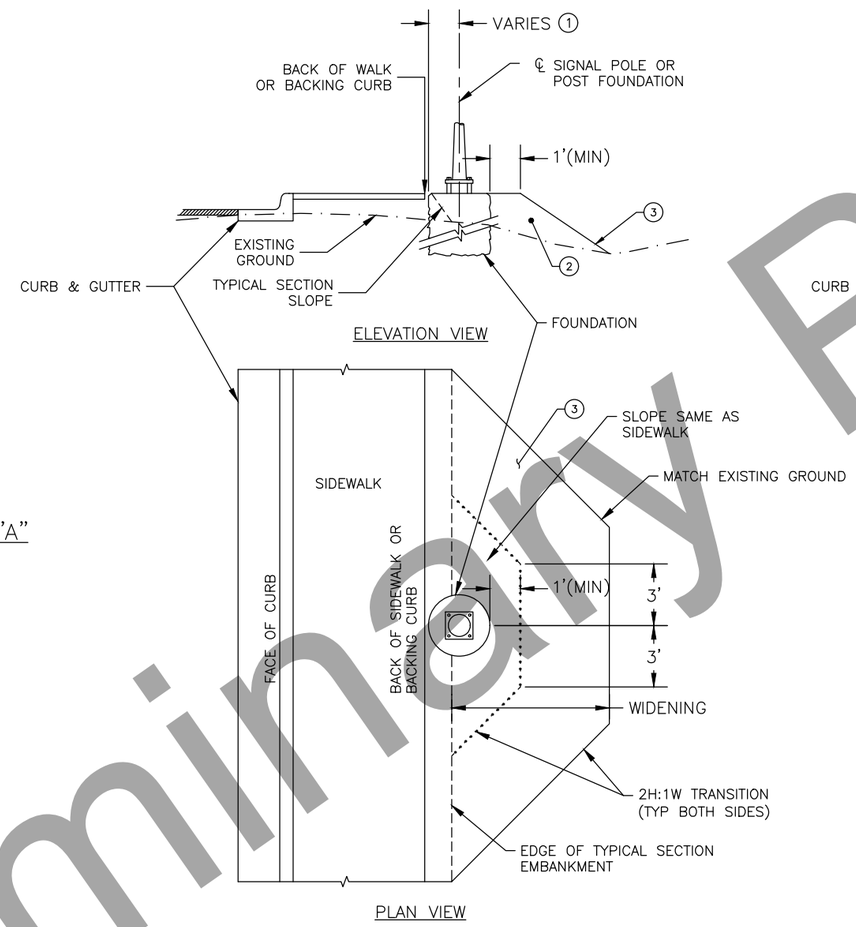


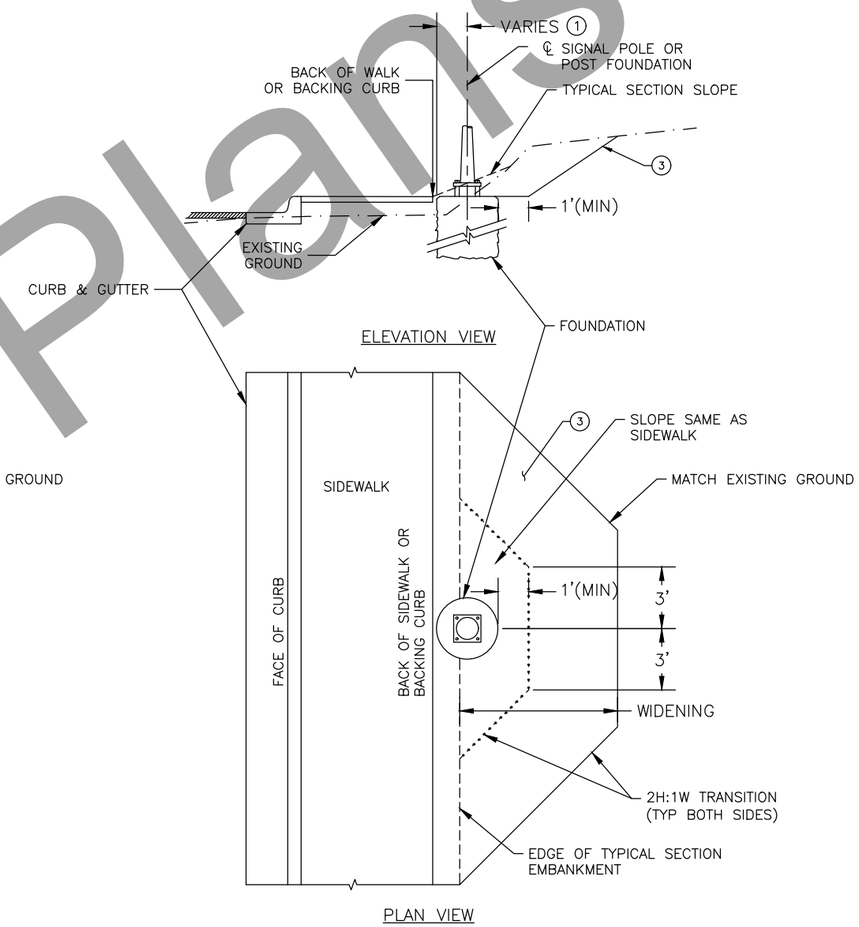
SIGNAL POLE/POST BEHIND RETAINING WALL DETAIL: "A"
NTS
(USE WHEN POLE AND FOUNDATION ARE LOCATED BEHIND RETAINING WALL)



SIGNAL POLE/POST IN SIDEWALK DETAIL: "B"
NTS
(USE WHEN POLE AND FOUNDATION ARE LOCATED FULLY OR PARTIALLY WITHIN SIDEWALK)



SIGNAL POLE/POST WIDENING (FILL CONDITION) DETAIL: "C"
NTS
(USE WHEN POLE AND FOUNDATION ARE LOCATED BEHIND SIDEWALK OR BACKING CURB)



SIGNAL POLE/POST WIDENING (CUT CONDITION) DETAIL: "D"
NTS
(USE WHEN POLE AND FOUNDATION ARE LOCATED BEHIND SIDEWALK OR BACKING CURB)

SPECIFIC SHEET NOTES

1. SEE STANDARD DRAWINGS T-52.20 FOR SIGNAL POLE FOUNDATION DETAILS AND T-31.00 FOR SIGNAL POST FOUNDATION DETAILS.
2. BACKFILL AND COMPACT ACCORDING TO SECTION 205 AND SUBSECTIONS 203-3.04 AND 660-3.01 OF THE SPECIFICATIONS. ALL BACKFILL, COMPACTION AND GRADING SHOWN SHALL NOT BE MEASURED FOR PAYMENT, BUT BE CONSIDERED INCIDENTAL TO THE 660(1) PAY ITEMS.
3. GRADE SLOPE TO TYPICAL SECTION OR EXISTING GROUND MATCH POINT AT NO STEEPER THAN 4H:1V.
4. TOP OF POLE FOUNDATION TO BE INSTALLED INTEGRAL WITH FINISHED ASPHALT OR CONCRETE SURFACE TO PROVIDE A SMOOTH FINISHED SURFACE.

SIGNAL POLE PLACEMENT DETAILS

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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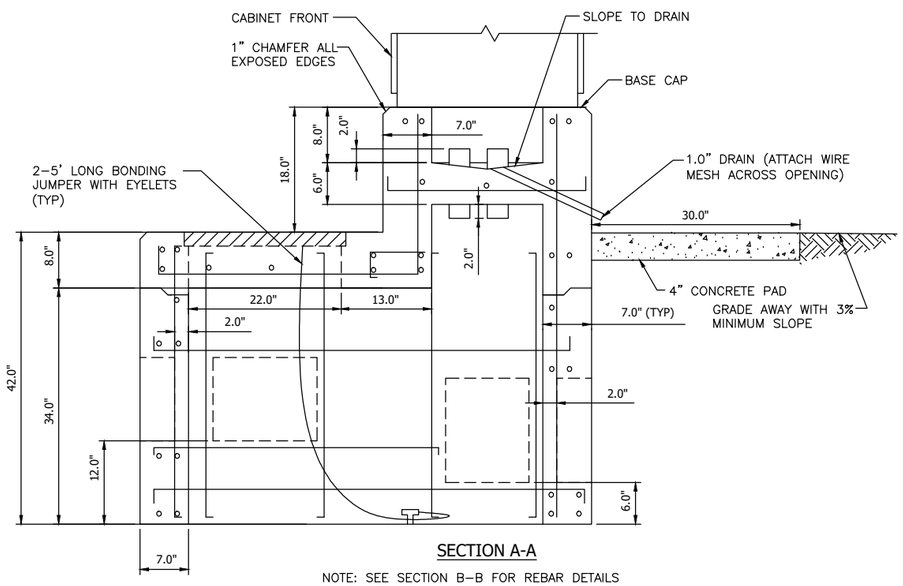
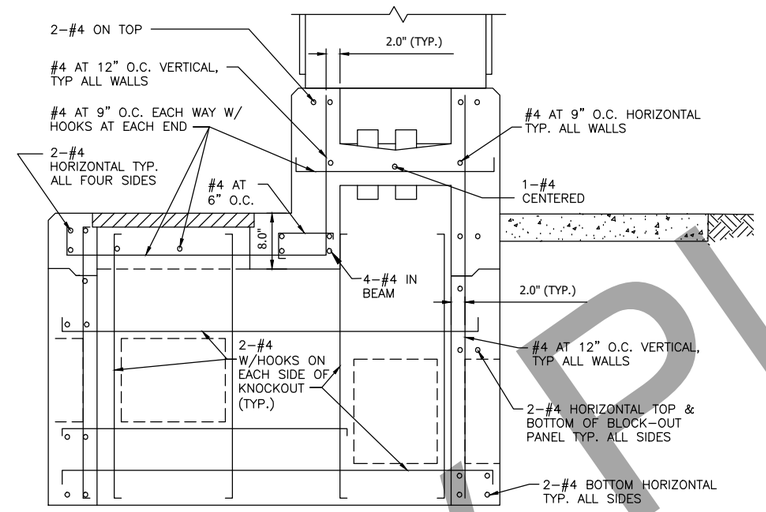


SECTION A-A

NOTE: SEE SECTION B–B FOR REBAR DETAILS

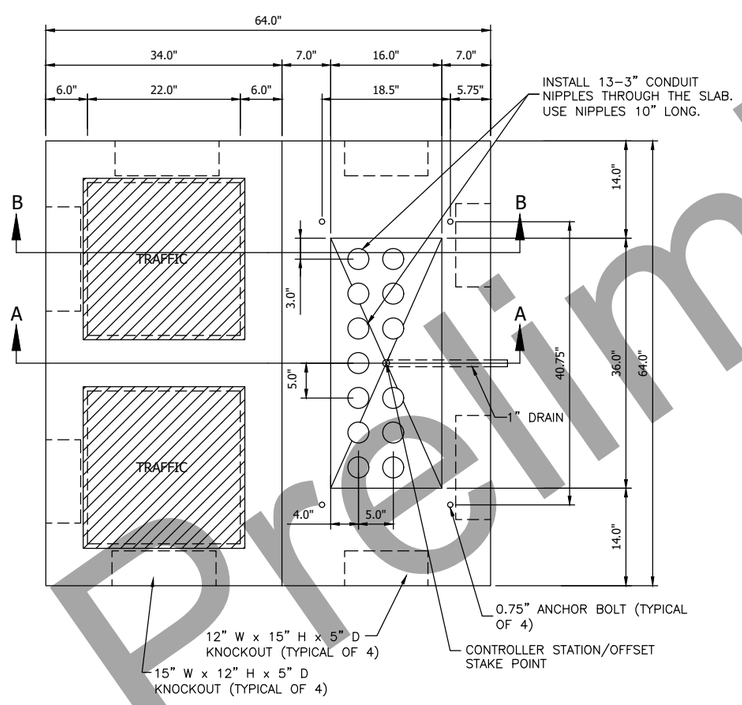


SECTION B-B

NOTE: SEE SECTION A–A FOR DIMENSIONAL DETAILS

NOTES:

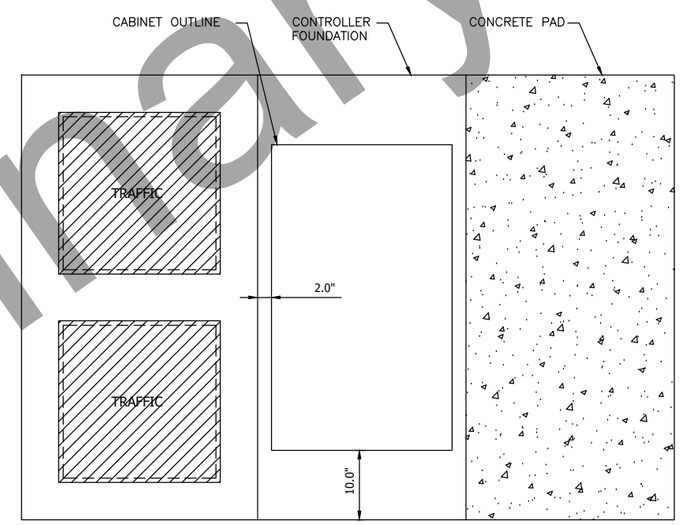
1. ANCHOR BOLTS SHALL NOT PROTRUDE MORE THAN 1.5" ABOVE THE TOP OF THE FOUNDATION. ANCHOR BOLT DIMENSIONS SHALL BE AS SPECIFIED BY THE CABINET MANUFACTURER.
2. SEAL UNUSED CONDUIT STUBS WITH WATERTIGHT CAPS. SEAL STUBS CARRYING CONDUCTORS WITH WATERTIGHT SEALING BUSHINGS DESIGNED TO SEAL AROUND CONDUCTORS 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.



SIZE 6 OR 7 CONTROLLER CABINET FOUNDATION

NTS

NOTE: BOLT SPACING DIMENSIONS SHOWN FOR TS2 CONTROLLER CABINETS.



PLAN VIEW

Preliminary Plans

SIGNAL CABINET FOUNDATION DETAILS

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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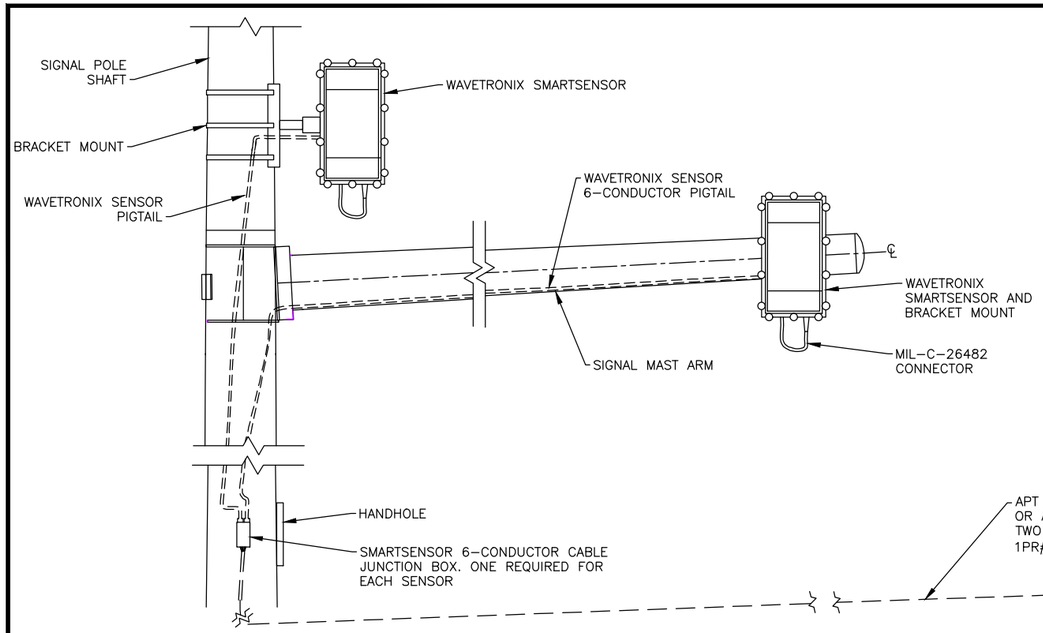
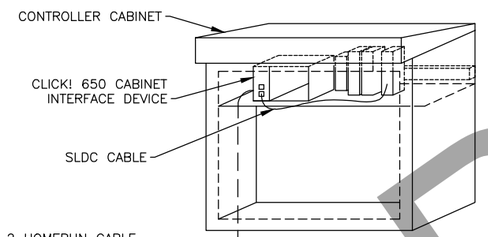




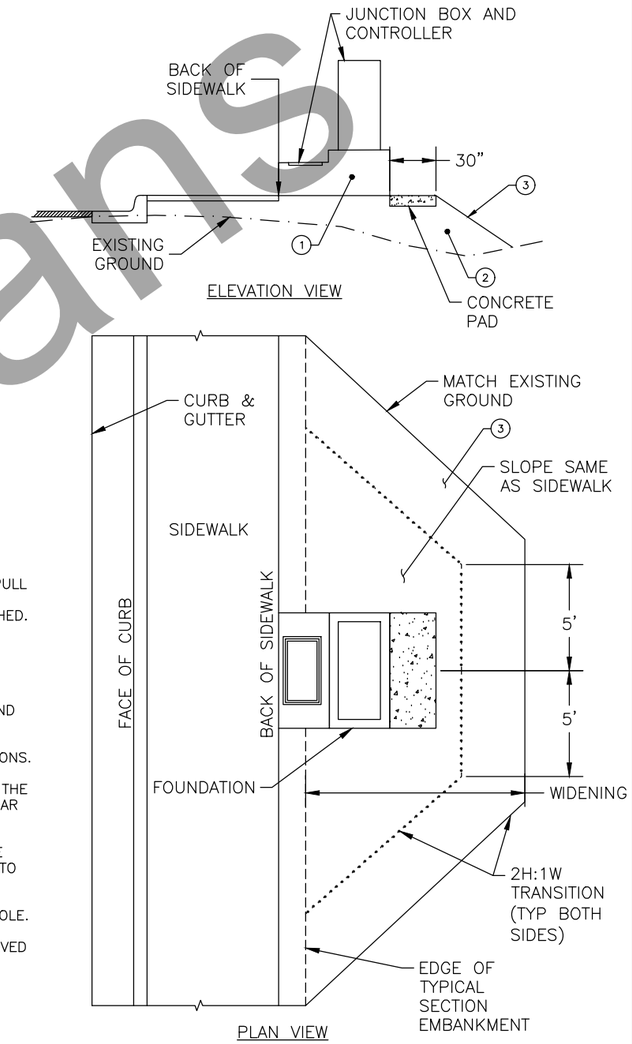
APT MATRIX 2 HOMERUN CABLE OR APPROVED EQUAL. CABLE IS A TWO ELEMENT COMPOSITE CABLE, 1PR#20 AND 2#22 TRIADS.

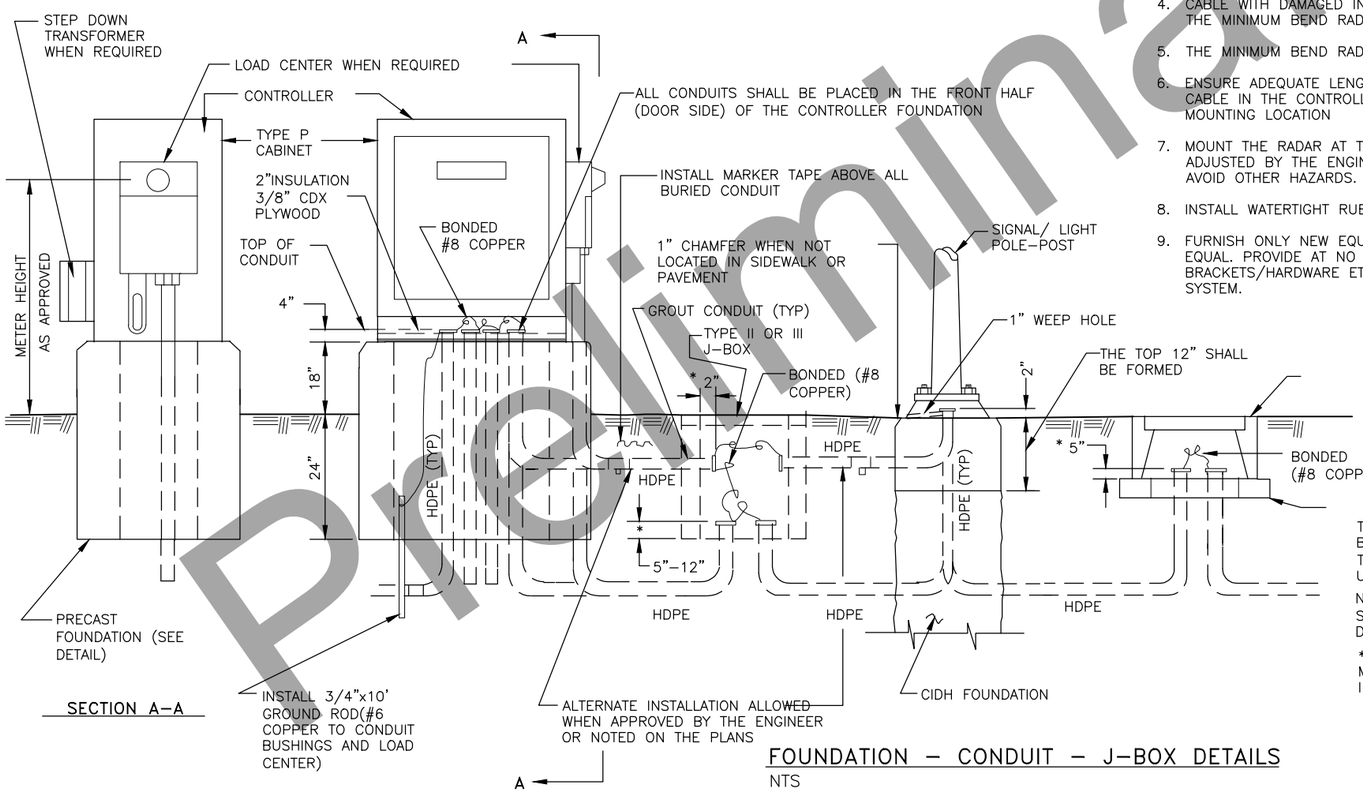
RADAR DETECTION DETAIL

NTS

RADAR DETECTION 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.
4. CABLE WITH DAMAGED INSULATION, OR THAT HAS BEEN CRIMPED OR BENT BEYOND THE MINIMUM BEND RADIUS MUST BE REPLACED AT CONTRACTORS EXPENSE.
5. THE MINIMUM BEND RADIUS SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
6. ENSURE ADEQUATE LENGTH OF EACH CABLE TO ALLOW WORK ON THE ENDS OF THE CABLE IN THE CONTROLLER CABINET, AT THE POLE MOUNT ENCLOSURE AND RADAR MOUNTING LOCATION
7. MOUNT THE RADAR AT THE LOCATION STATED IN THE PLANS. PLACEMENT MAY BE ADJUSTED BY THE ENGINEER TO ALLOW FOR BETTER AIMING OF THE RADAR OR TO AVOID OTHER HAZARDS.
8. INSTALL WATERTIGHT RUBBER GROMMETS WHERE CABLE PASSES THROUGH THE POLE.
9. FURNISH ONLY NEW EQUIPMENT OF THE BRAND AND TYPE LISTED OR ITS APPROVED EQUAL. PROVIDE AT NO ADDITIONAL COST ALL NECESSARY DEVICES, WIRES, BRACKETS/HARDWARE ETC. TO PROVIDE A FULLY FUNCTIONING RADAR DETECTION SYSTEM.





THE TOP OF SIGNAL FOUNDATIONS SHALL BE THE SAME ELEVATION AS THE TOP OF THE ADJACENT NEW SIDEWALK (RAMP) UNLESS NOTED OR DETAILED OTHERWISE.

NOTE: ALL GROUTED FOUNDATIONS (BASES) SHALL HAVE 1" DRAIN (WEEP) HOLES. DEPRESS JUNCTION BOXES PER 660-2.06

*EXISTING CONDUITS MAY HAVE TO BE MODIFIED WHEN ADJUSTING EXISTING OR INSTALLING NEW J-BOXES

FOUNDATION - CONDUIT - J-BOX DETAILS

NTS

NOTES

1. SEE SHEET H33 FOR SIGNAL CABINET FOUNDATION DETAILS.
2. BACKFILL AND COMPACT ACCORDING TO SECTION 205 AND SUBSECTIONS 203-3.04 AND 660-3.01 OF THE SPECIFICATIONS. ALL BACKFILL, COMPACTION AND GRADING SHOWN SHALL NOT BE MEASURED FOR PAYMENT, BUT BE CONSIDERED INCIDENTAL TO THE 660(1) PAY ITEMS.
3. GRADE SLOPE TO TYPICAL SECTION OR EXISTING GROUND MATCH POINT AT NO STEEPER THAN 4H:1V.

GRADING DETAILS FOR SIGNAL CONTROLLER CABINET FOUNDATIONS

NTS

RADAR DETECTION & SIGNAL CABINET DETAILS

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: KITTELSON & ASSOCIATES, INC. CERT. OF AUTHORIZATION NO.: 137243, 851 SW 6TH AVE. SUITE 600, PORTLAND, OR 97204, (503) 228-5230
H:\19\19270 - 3rd Street Widening Design\Final Design_CD\62541_H_SIGNL-H34 Fri, Aug/31/18 03:49pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	H100	17

ELECTRICAL ANNOTATION LEGEND

(#) SHEET SPECIFIC NOTE KEY – INDICATES SPECIFIC NOTES APPLICABLE ON EACH SHEET

LUMINAIRE SCHEDULE

TYPE	LUMENS	CCT (K)	FIXTURE DESCRIPTION	MOUNTING	MANUFACTURER	MODEL NUMBER	LOAD (W)	NOTES
LED	24,000 LM	4000	TYPE–2 'EXTRA–LARGE' ROADWAY LED LUMINAIRE WITH SLIM PROFILE, LIGHT WEIGHT BULK MOLDING COMPOUND HOUSING PAINTED GRAY, CREE WAVEMAX TECHNOLOGY, AND A 7–PIN PHOTOCONTROL RECEPTACLE.	POLE MOUNTED	CREE	RSWX–HT–2ME–24L–40K7–480/MVOLT–GY–N (1)	202	LUMINAIRE BASIS OF DESIGN
LED	22,127 LM	4000	TYPE–3 ROADWAY LED LUMINAIRE WITH SLIM PROFILE, RUGGED DIE–CAST ALUMINUM HOUSING PAINTED GRAY, A BUILT–IN WILDLIFE SHIELD, AND A 7–PIN PHOTOCONTROL RECEPTACLE.	POLE MOUNTED	AMERICAN ELECTRIC	ATB2–80BLEDE70–480/MVOLT–R3–P7 (1)	180	ALTERNATIVE LUMINAIRE OPTION

IES RP–8–14 – ROADWAY LIGHTING CLASSIFICATIONS

CONTINUOUS LIGHTING – LUMINANCE METHOD

CLASSIFICATION	POPULATION LEVEL	AVG (CD/M2)	MAX/MIN	AVG/MIN	LV RATIO
MAJOR	MEDIUM	>=0.9	<=5	<=3	<=0.3

CONTINUOUS LIGHTING ON 'MAJOR' ROADS

- THIRD STREET – FROM OLD STEESE HIGHWAY TO HAMILTON AVENUE
- STEESE EXPRESSWAY – FROM COLLEGE ROAD TO CHENA RIVER BRIDGE

INTERSECTIONS – ILLUMINANCE METHOD

CLASSIFICATION	POPULATION LEVEL	AVG (FC)	AVG/MIN
MAJOR/MAJOR	MEDIUM	>=2.6	<=3
MAJOR/COLLECTOR	MEDIUM	>=2.2	<=3

APPLICABLE MAJOR/MAJOR INTERSECTIONS WITH 3RD STREET

- OLD STEESE HIGHWAY
- STEESE EXPRESSWAY

APPLICABLE MAJOR/COLLECTOR INTERSECTIONS WITH 3RD STREET

- EAGLE AVENUE
- HAMILTON AVENUE

GENERAL NOTES

1. IF AN ALTERNATIVE LUMINAIRE TO THOSE LISTED IN THE LUMINAIRE SCHEDULE IS CHOSEN:

   –PERFORM AND SUBMIT LIGHTING CALCULATIONS TO THE ELECTRICAL DOR FOR REVIEW & ACCEPTANCE (BEFORE PROVIDING LUMINAIRES), SHOWING THAT ALL TARGET VALUES LISTED IN THE 'IES RP–8–14 – ROADWAY LIGHTING CLASSIFICATIONS' TABLES ARE SATISFIED.

   –ALL LUMINAIRES MUST BE OF THE LED TYPE, MADE BY THE SAME MANUFACTURER, AND MUST SATISFY ALL REQUIREMENTS LISTED IN SPECIAL PROVISIONS SECTION 740–2.18.

SPECIFIC NOTES

(1) PROVIDE LUMINAIRES WITH VOLTAGE DRIVERS AS INDICATED IN THE ELECTROLIER TABLE ON SHEET H101. CONFIRM FINAL PART NUMBER FOR BOTH 240V AND 480V LUMINAIRES WITH MANUFACTURER BEFORE ORDERING LUMINAIRES.

660(3)–A – HIGHWAY LIGHTING SYSTEM COMPLETE, DOT & PF (LUMP SUM)

DESCRIPTION	QUANTITY
DOT RACEWAY SYSTEM	
HDPE CONDUIT – 2"	3,520–FT
RMC CONDUIT – 2"	2,050–FT
#6 AWG XHHW	19,400–FT
GENERAL	
ELECTROLIER WITH FOUNDATION	31
TYPE 1A JUNCTION BOX	33
LED LUMINAIRE	35
GE LIGHTING CONTROL SYSTEM	
GE LUMINAIRE NODES	35
GE GATEWAY	1
GE CELLULAR MODEM	1
DEMOLITION	
DEMOLISH ELECTROLIER AND FOUNDATION	13
DEMOLISH LIGHTING BRANCH CIRCUIT	3,100–FT

660(3)–B – HIGHWAY LIGHTING SYSTEM COMPLETE, COF (LUMP SUM)

DESCRIPTION	QUANTITY
COF RACEWAY SYSTEM	
HDPE CONDUIT – 2"	1,570–FT
RMC CONDUIT – 2"	2,270–FT
#4 AWG XHHW	12,670–FT
GENERAL	
RECONNECT EXISTING COF LIGHTING CIRCUIT CONDUCTORS	5
ELECTROLIER WITH FOUNDATION	2
TYPE 1A JUNCTION BOX	3
LED LUMINAIRE	10
DEMOLITION	
DEMOLISH UTILITY POLE MOUNT LUMINAIRE	11
DEMOLISH LIGHTING BRANCH CIRCUIT	3,400–FT

661 – ELECTRICAL LOAD CENTERS

DESCRIPTION	QUANTITY
661(2) – LOAD CENTER, TYPE 1A	3
661(6) – TRANSFORMER, 10 kVA	1
661(103) – REMOVE EXISTING LOAD CENTER	4

ELECTRICAL NOTES

1. COORDINATE WITH THE ELECTROLIER TABLE SHOWN ON SHEETS H101 FOR ELECTROLIER INFORMATION.
2. NEW COF AND DOT LIGHTING CIRCUITS SHALL BE LOCATED 24" MINIMUM UNDERGROUND.
3. ALL EXISTING UNDERGROUND UTILITIES SHALL BE FIELD LOCATED BEFORE ANY CONDUIT TRENCHING OR FOUNDATION WORK BEGINS. SEE 'U' SHEETS FOR ALL MODIFICATIONS TO UTILITY LINES AND FOR LOCATIONS OF POWER DROPS FOR LIGHTING EQUIPMENT.
4. THE UNDERGROUND ROUTING SHOWN FOR COF AND DOT LIGHTING CIRCUITS IS SCHEMATICALLY DRAWN FOR CONCEPTUAL AND MATERIAL TAKE–OFF PURPOSES ONLY. COORDINATE WITH ALL 'NEW' AND 'EXISTING–TO–REMAIN' BURIED UTILITIES AND ROUTE THE LIGHTING CIRCUITS AS NECESSARY TO AVOID CONFLICTS. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONCEPT MODIFICATIONS TO THE LIGHTING CIRCUIT ROUTING.
5. SEPARATE CONDUIT SHALL BE PROVIDED FOR DOT AND COF LIGHTING SYSTEM CIRCUITS. AT INTERSECTIONS, MULTIPLE DOT LIGHTING CIRCUITS MAY BE ROUTED WITHIN A SINGLE DOT CONDUIT, GIVEN ALL NEC REQUIREMENTS FOR DOING SO ARE SATISFIED.
6. LIGHTING CIRCUIT CONDUIT SHALL BE 2":
   –RMC FOR ALL SWEEPS.
   –RMC BETWEEN JUNCTION BOX AND ADJACENT ELECTROLIER.
   –RMC BETWEEN LOAD CENTER AND FIRST JUNCTION BOX.
   –FROM JUNCTION BOX SWEEP TO NEXT JUNCTION BOX SWEEP:
   –RMC UNDER ROADWAYS
   –HDPE UNDER SIDEWALKS/OPEN AREAS.
   NOTE, ALL CONNECTORS AND COUPLINGS BETWEEN RMC AND HDPE CONDUIT SHALL BE LISTED AND RATED FOR SUCH USE.
7. FUSIBLE DISCONNECTS SHALL BE LOCATED IN THE ELECTROLIER HANDHOLE AND BE RATED AT 10 AMPS AND 600 VOLTS.
8. –ALL DOT LIGHTING CIRCUITS SHALL BE (3) #6 AWG XHHW COPPER.
   –ALL COF LIGHTING CIRCUITS SHALL BE (3) #4 AWG XHHW COPPER.
9. REFER TO TRAFFIC SIGNAL H–SHEETS FOR FURTHER INFORMATION AND REQUIREMENTS OF BOTH THE EXISTING AND NEW TRAFFIC SIGNAL SYSTEMS BEFORE BEGINNING ANY WORK AT THE SIGNALIZED INTERSECTIONS.
10. THE INSTALLATION OF ALL ELECTROLIER TYPE 1A JUNCTION BOXES SHALL SATISFY THE REQUIREMENTS OF THE DOT STANDARD DRAWING L–23.01 AND DETAILS ON SHEET H113.
11. THE INSTALLATION OF ALL ELECTROLIERS SHALL SATISFY THE REQUIREMENTS OF THE DOT STANDARD DRAWING L–03.10 AND DETAILS ON SHEETS H111–H113.
12. THE INSTALLATION OF ALL ELECTROLIER FOUNDATIONS SHALL SATISFY THE REQUIREMENTS OF THE DOT STANDARD DRAWING L–30.10 AND DETAILS ON SHEETS H111–H113.
13. THE INSTALLATION OF ALL DOT ELECTROLIER TYPE 1A LOAD CENTERS SHALL SATISFY THE REQUIREMENTS OF THE DOT STANDARD DRAWING L–25.00 AND DETAILS ON SHEETS H115.
14. THE INSTALLATION OF ALL COF ELECTROLIER LOAD CENTERS SHALL SATISFY THE REQUIREMENTS OF DETAILS THE DOT STANDARD DRAWING L–25.00 AND ALL MODIFICATIONS ON SHEETS H116.
15. ALL ELECTROLIER JUNCTION BOXES SHALL BE TYPE 1A.
16. TRAFFIC SIGNAL CONTROLLER BRANCH CIRCUITS ARE SUBSIDIARY TO PAY ITEM 661(2). FOR EACH 60A TRAFFIC SIGNAL CONTROLLER BRANCH CIRCUIT, PROVIDE (3)#4 AWG, #10 GND, 1" C.
17. TRAFFIC SIGNAL POLES, LUMINAIRE MAST–ARMS ON SIGNAL POLES, AND TYPE 2 OR TYPE 3 TRAFFIC SIGNAL JUNCTION BOXES ARE NOT INCLUDED UNDER 660(3). SEE ELECTROLIER SCHEDULE ON SHEET H101 FOR APPLICABLE SIGNAL POLES.
18. PROVIDE GE LIGHTGRID NODES (ELWN–5–A–5–U–G–5–B) FOR ALL DOT LUMINAIRES. CONFIRM FINAL PART NUMBER WITH MANUFACTURER. INSTALL PER MANUFACTURERS INSTRUCTIONS. SEE SPECIFIC NOTE 8 ON SHEET H108 FOR FURTHER INFORMATION REGARDING REQUIRED GE LIGHTGRID CONTROL EQUIPMENT.
19. PROVIDE PHOTOCONTROL RECEPTACLE SHORTING CAPS FOR ALL COF LUMINAIRES.

Preliminary Plans

GENERAL LIGHTING NOTES
1 OF 1

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452–1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H101	17

ELECTROLIER SUMMARY TABLE

NO.	SHEET NO.	POLE STATION	POLE OFFSET	DRIVER VOLTAGE	CIRCUIT	MAST-ARM LENGTH	LUMINAIRE HEIGHT	SIGNAL POLE	LUMINAIRE CONFIGURATION	WIDENING DETAIL 1	LED LUMINAIRE	ELECTROLIER AND FOUNDATION	NOTES	
1	H108	"TH" 11+66.98	42.47 RT	240V	COF LC 78	15'-4"	30'-0"		SINGLE	A	1	1		
2	H108	--	--	240V	COF LC 78	16'-4" / 22'-4"	30'-0"	•	DOUBLE @ 90°	--	2	--		
3	H108	--	--	240V	COF LC 78	22'-4"	30'-0"	•	SINGLE	--	1	--		2
4	H108	--	--	240V	COF LC 78	22'-4"	30'-0"	•	SINGLE	--	1	--		
5	H108	"TH" 13+66.36	50.10 LT	240V	COF LC 78	15'-4"	30'-0"		SINGLE	--	1	1		
6	H108	"TH" 14+83.30	47.48 LT	480V	DOT LC J-6	15'-4"	40'-0"		SINGLE	A	1	1		
7	H108	"TH" 15+28.65	47.38 RT	480V	DOT LC J-6	15'-4"	40'-0"		SINGLE	A	1	1		
8	H108	"TH" 17+17.23	47.50 LT	480V	DOT LC J-6	15'-4"	40'-0"		SINGLE	A	1	1		
9	H108	"TH" 18+11.55	54.22 RT	480V	DOT LC J-6	15'-4"	40'-0"		SINGLE	A	1	1		
10	H108	"TH" 19+04.43	47.48 LT	480V	DOT LC J-6	15'-4"	40'-0"		SINGLE	A	1	1		
11	H109	"TH" 20+41.75	55.50 RT	480V	DOT LC J-6	15'-4"	40'-0"		SINGLE	A	1	1		
12	H109	"TH" 20+83.77	46.00 LT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	A	1	1		
13	H109	"TH" 25+33.88	40.18 RT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	A	1	1		
14	H109	"TH" 25+86.69	44.03 RT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	A	1	1		
15	H109	"TH" 26+11.90	62.49 LT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	*A	1	1		
16	H109	"TH" 26+80.82	66.38 RT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	*A	1	1		
17	H109	"TH" 27+12.93	39.06 LT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	A	1	1		
18	H109	"TH" 28+02.24	31.87 LT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	A	1	1		
19	H109	"TH" 29+78.78	30.50 RT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	*A	1	1		
20	H109	"TH" 31+62.92	30.50 LT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	*A	1	1		
21	H109	"TH" 33+54.38	30.50 RT	480V	DOT LC J-5	15'-4"	40'-0"		SINGLE	*A	1	1		
22	H109	--	--	240V	COF LC 82	22'-4"	30'-0"	•	SINGLE	--	1	--		
23	H109	--	--	240V	COF LC 82	22'-4" / 22'-4"	30'-0"	•	DOUBLE @ 90°	--	2	--		2
24	H110	--	--	240V	COF LC 82	22'-4"	30'-0"	•	SINGLE	--	1	--	ROTATE LUMINAIRE ARM 90° FROM SIGNAL ARM	
25	H110	"SE" 14+20.63	44.36 LT	480V	DOT LC J-4	15'-4"	40'-0"		SINGLE	D	1	1		
26	H110	"SE" 15+40.84	49.55 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	D	1	1		
27	H110	"SE" 16+61.70	42.92 LT	480V	DOT LC J-4	15'-4"	40'-0"		SINGLE	*B	1	1		
28	H108	"SE" 17+81.82	62.98 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	*B	1	1		
29	H108	"SE" 19+03.55	42.61 LT	480V	DOT LC J-4	15'-4"	40'-0"		SINGLE	*B	1	1		
30	H108	"SE" 20+21.07	67.21 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	*B	1	1		
31	H108	--	--	480V	DOT LC J-4	22'-4"	40'-0"	•	SINGLE	--	1	--		2
32	H108	"SE" 21+19.44	70.84 RT	480V	DOT LC J-3	22'-4"	40'-0"		SINGLE	--	1	1	PED BUTTON MOUNTED ON LUMINAIRE POLE	
33	H108	--	--	480V	DOT LC J-3	22'-4"	40'-0"	•	SINGLE	--	1	--		
34	H108	--	--	480V	DOT LC J-4	12'-4"	40'-0"	•	SINGLE	--	1	--		2
35	H108	"SE" 22+43.38	86.20 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	--	1	1	PED BUTTON MOUNTED ON LUMINAIRE POLE	
36	H108	"SE" 22+67.74	51.86 LT	480V	DOT LC J-4	22'-4"	40'-0"		SINGLE	--	1	1	PED BUTTON MOUNTED ON LUMINAIRE POLE	
37	H108	--	--	480V	DOT LC J-3	22'-4"	40'-0"	•	SINGLE	--	1	--		2
38	H108	"SE" 23+77.21	49.00 LT	480V	DOT LC J-4	15'-4"	40'-0"		SINGLE	*B	1	1		
39	H108	"SE" 24+87.01	62.00 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	*B	1	1		
40	H110	"SE" 25+94.83	48.62 LT	480V	DOT LC J-4	15'-4"	40'-0"		SINGLE	*B	1	1		
41	H110	"SE" 27+06.11	59.59 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	*B	1	1		
42	H110	"SE" 28+11.89	42.99 LT	480V	DOT LC J-4	15'-4"	40'-0"		SINGLE	*B	1	1		
43	H110	"SE" 29+16.82	60.78 RT	480V	DOT LC J-3	15'-4"	40'-0"		SINGLE	*B	1	1		
										TOTALS	45	33		

SPECIFIC NOTES

1. SEE SHEETS H112 & H113 FOR HIGHWAY LIGHTING ELECTROLIER WIDENING DETAILS. COORDINATE WITH ENGINEER IF AN ALTERNATE WIDENING DETAIL OR MODIFICATION TO THE WIDENING DETAILS IS REQUIRED PER INFIELD CONDITIONS. SEE TRAFFIC SIGNAL SHEETS FOR SIGNAL POLE, FOUNDATION, AND JUNCTION BOX INSTALLATION DETAILS.

2. SEE SHEETS H18-H29 FOR FURTHER INFORMATION REGARDING SIGNAL POLE STATIONING. ALL LUMINAIRE BRANCH CIRCUITS AT INTERSECTIONS ROUTE THROUGH THE SIGNAL JUNCTION BOXES. COORDINATE WITH TRAFFIC SIGNAL CONTRACTOR TO INSTALL REQUIRED NUMBER OF CONDUITS IN SIGNAL POLE FOUNDATION AT THE TIME OF FOUNDATION INSTALLATION.

Preliminary Plans

SUMMARY TABLES
1 OF 2

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: DESIGN ALASKA, INC. AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H102	17

TYPE 1A JUNCTION BOX SUMMARY TABLE

JUNCTION BOX NO.	SHEET NO.	STATION	OFFSET	ASSOCIATED LIGHTING SYSTEM	ASSOCIATED ELECTROLIER NUMBER	TYPE 1A JUNCTION BOX	NOTES
1	H108	"TH" 11+71.12	42.47 RT	COF	1	1	
2	H108	"TH" 14+87.44	47.48 RT	DOT	6	1	
3	H108	"TH" 15+24.51	47.38 RT	DOT	7	1	
4	H108	"TH" 17+07.20	51.46 RT	DOT	--	1	
5	H108	"TH" 17+12.17	52.16 RT	COF	--	1	
6	H108	"TH" 17+13.09	47.50 LT	DOT	8	1	
7	H108	"TH" 18+07.55	55.64 RT	DOT	9	1	
8	H108	"TH" 19+03.10	47.48 LT	DOT	10	1	
9	H108	"TH" 20+37.61	55.50 RT	DOT	11	1	
10	H109	"TH" 20+79.63	46.00 LT	DOT	12	1	
11	H109	"TH" 23+58.36	39.53 RT	DOT	--	1	
12	H109	"TH" 25+38.01	39.65 RT	DOT	13	1	
13	H109	"TH" 25+90.09	46.36 RT	DOT	14	1	
14	H109	"TH" 25+94.24	49.15 RT	COF	--	1	
15	H109	"TH" 26+11.90	59.24 LT	DOT	15	1	
16	H109	"TH" 26+80.82	63.13 RT	DOT	16	1	
17	H109	"TH" 27+19.32	33.55 RT	DOT	--	1	
18	H109	"TH" 27+17.23	37.22 LT	DOT	17	1	
19	H109	"TH" 27+94.23	27.00 RT	DOT	--	1	
20	H109	"TH" 27+98.00	32.10 LT	DOT	18	1	
21	H109	"TH" 29+78.78	27.25 RT	DOT	19	1	
22	H109	"TH" 31+58.82	26.59 RT	DOT	--	1	
23	H109	"TH" 31+62.92	27.25 LT	DOT	20	1	
24	H109	"TH" 33+54.38	27.25 RT	DOT	21	1	
25	H110	"SE" 14+20.63	44.36 LT	DOT	25	1	
26	H110	"SE" 15+40.84	46.55 RT	DOT	26	1	
27	H110	"SE" 16+61.70	36.24 LT	DOT	27	1	
28	H110	"SE" 17+81.82	54.16 RT	DOT	28	1	
29	H110	"SE" 19+03.55	36.24 LT	DOT	29	1	
30	H110	"SE" 20+21.07	59.60 RT	DOT	30	1	
31	H108	"SE" 23+77.21	42.24 LT	DOT	38	1	
32	H108	"SE" 24+87.01	55.23 RT	DOT	39	1	
33	H110	"SE" 25+94.83	41.85 LT	DOT	40	1	
34	H110	"SE" 27+06.11	52.81 RT	DOT	41	1	
35	H110	"SE" 28+11.89	36.24 LT	DOT	42	1	
36	H110	"SE" 29+16.82	54.68 RT	DOT	43	1	
					TOTALS	36	

GENERAL NOTES

1. SEE WIDENING DETAILS ON SHEETS H112 & H113 FOR INSTALLATION LOCATION OF JUNCTION BOX IN RELATION TO THE ADJACENT ELECTROLIER.

Preliminary Plans

SUMMARY TABLES
2 OF 2

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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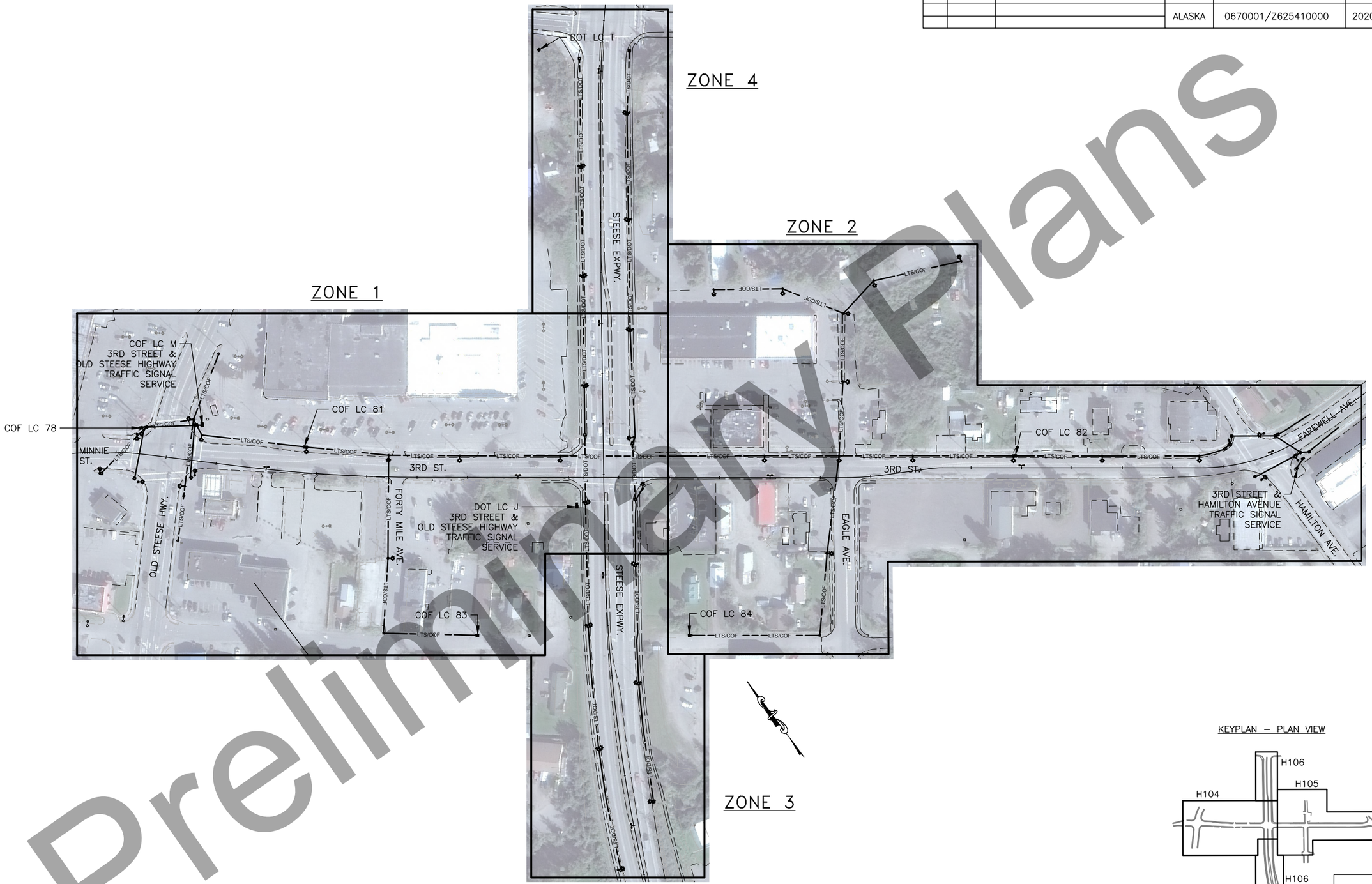
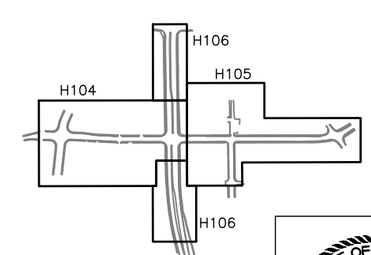
			ALASKA	0670001/Z625410000	2020	H103	17



EXISTING LIGHTING SYSTEM – OVERALL

[NO SCALE]

KEYPLAN – PLAN VIEW



LIGHTING DEMOLITION
1 OF 4

PRELIM PS&E

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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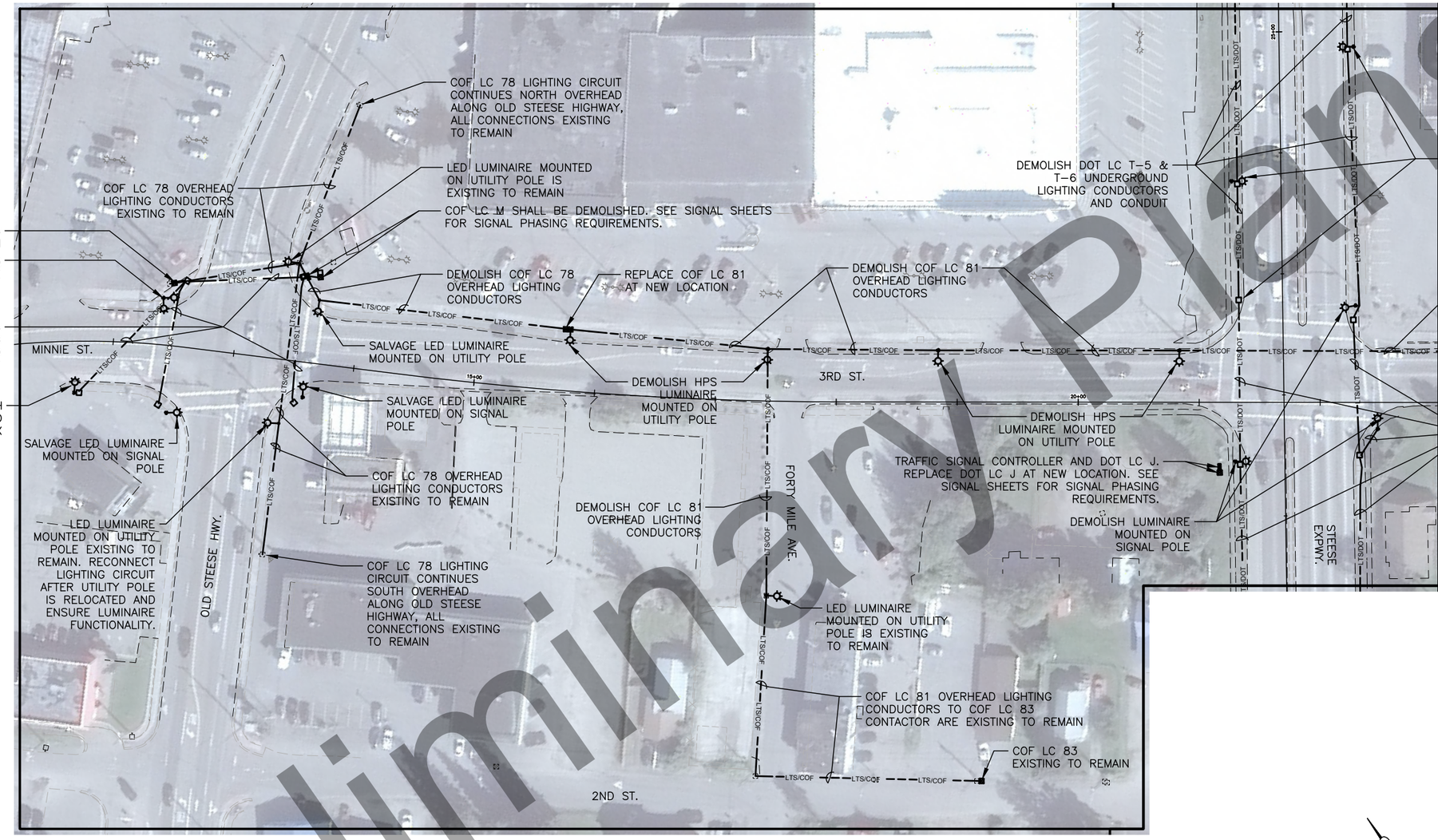
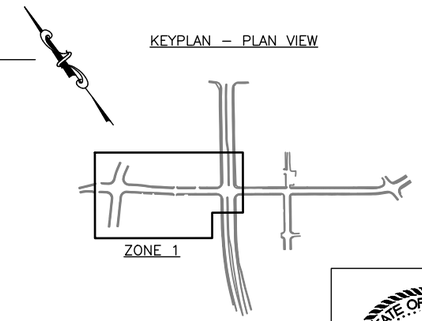
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H104	17



LIGHTING DEMOLITION – ZONE 1

[1" = 50']

KEYPLAN – PLAN VIEW



SPECIFIC NOTES

1 EXISTING SIGNALS WILL BE LEFT IN PLACE UNTIL NEW SIGNALS ARE INSTALLED AND ACTIVE. TO AVOID RE-TRENCHING OR CAUSING ADDITIONAL LANE CLOSURES, REMOVE CONDUCTORS BUT ABANDON UNDERGROUND CONDUIT IN PLACE AT SIGNALIZED INTERSECTIONS.

LIGHTING DEMOLITION
2 OF 4

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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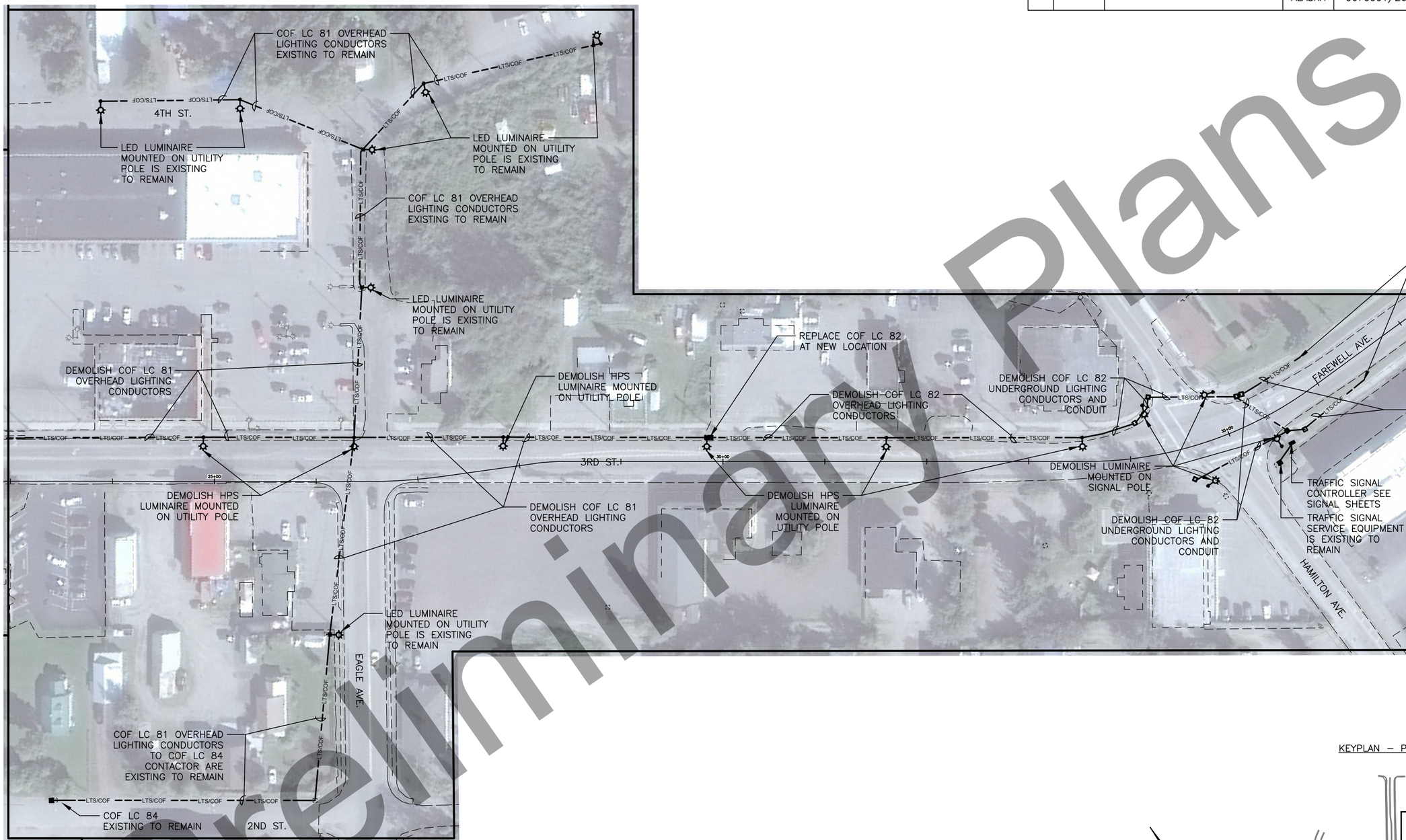
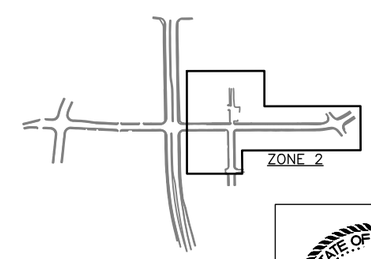
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H105	17



LIGHTING DEMOLITION – ZONE 2

[1" = 50']

KEYPLAN – PLAN VIEW



LIGHTING DEMOLITION
3 OF 4

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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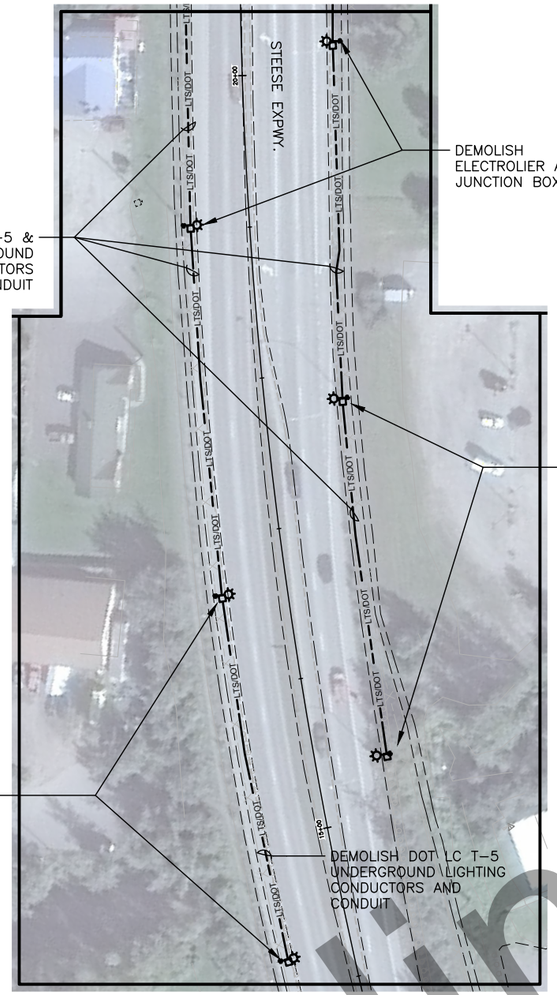
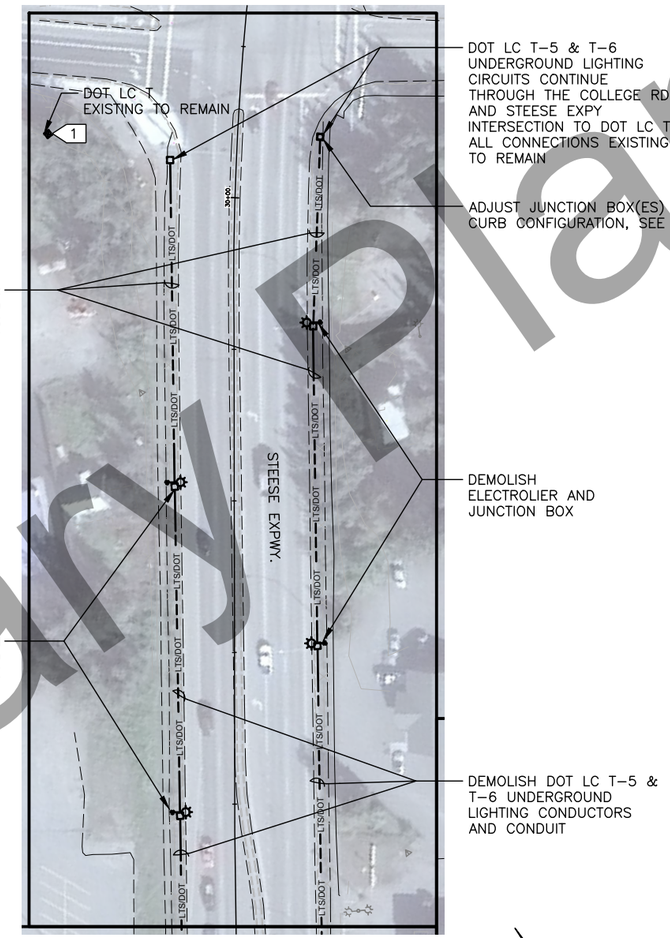
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H106	17



LIGHTING DEMOLITION – ZONE 3

[1" = 50']



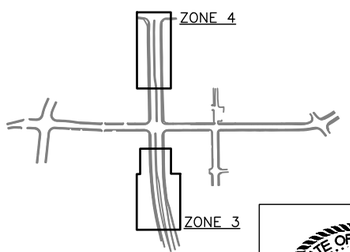
LIGHTING DEMOLITION – ZONE 4

[1" = 50']

SPECIFIC NOTES

1. SEE SHEET H115 FOR FURTHER INFORMATION REGARDING THE EXISTING DOT LOAD CENTER 'T'.

KEYPLAN – PLAN VIEW



LIGHTING DEMOLITION
4 OF 4

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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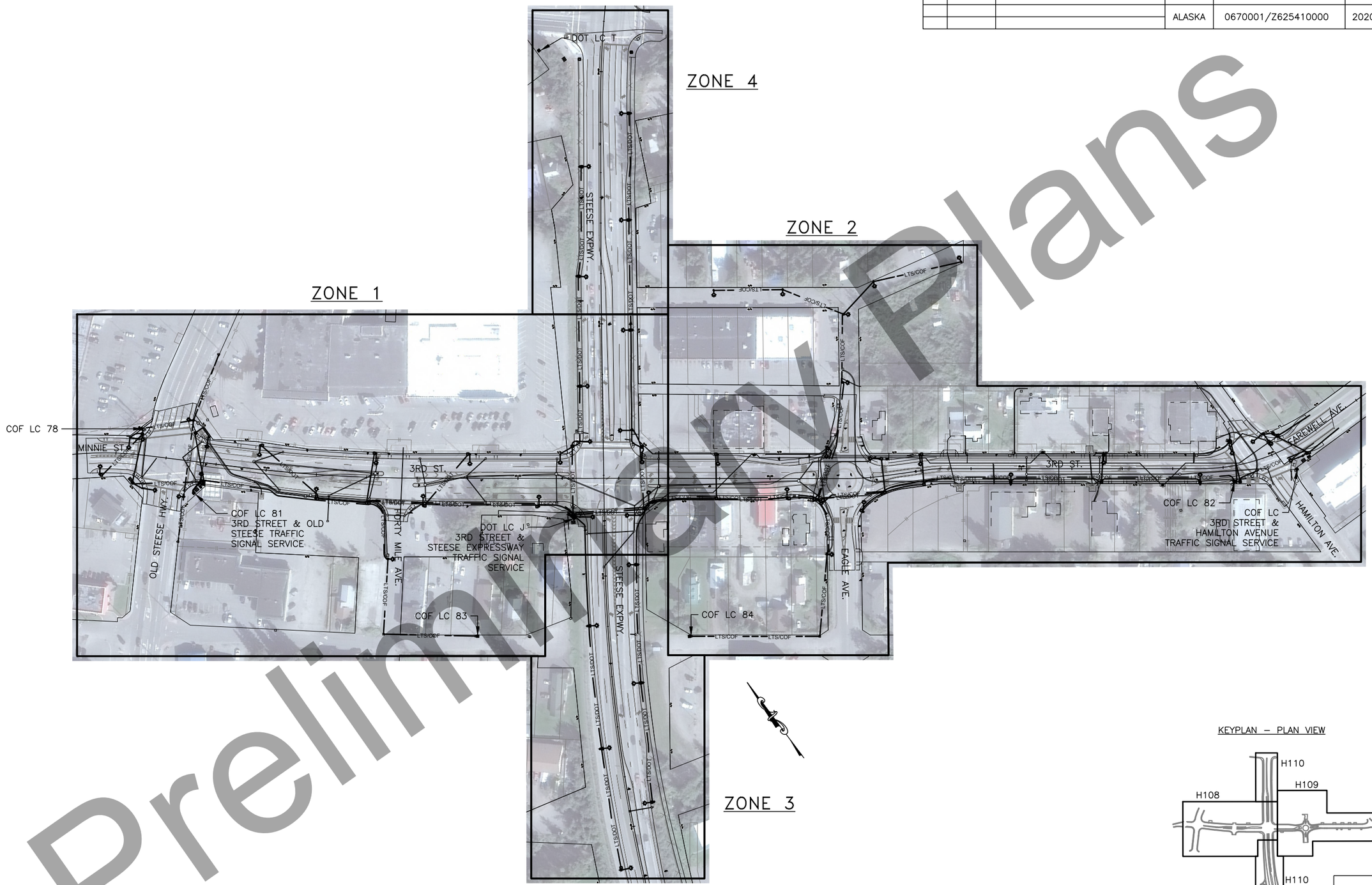
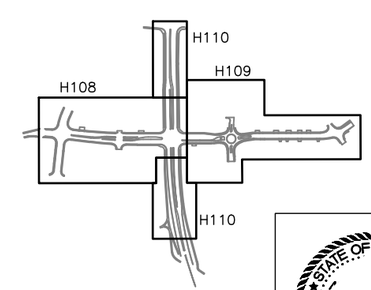
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H107	17



KEYPLAN – PLAN VIEW



RENOVATED LIGHTING SYSTEM – OVERALL

[NO SCALE]

LIGHTING RENOVATION
1 OF 4

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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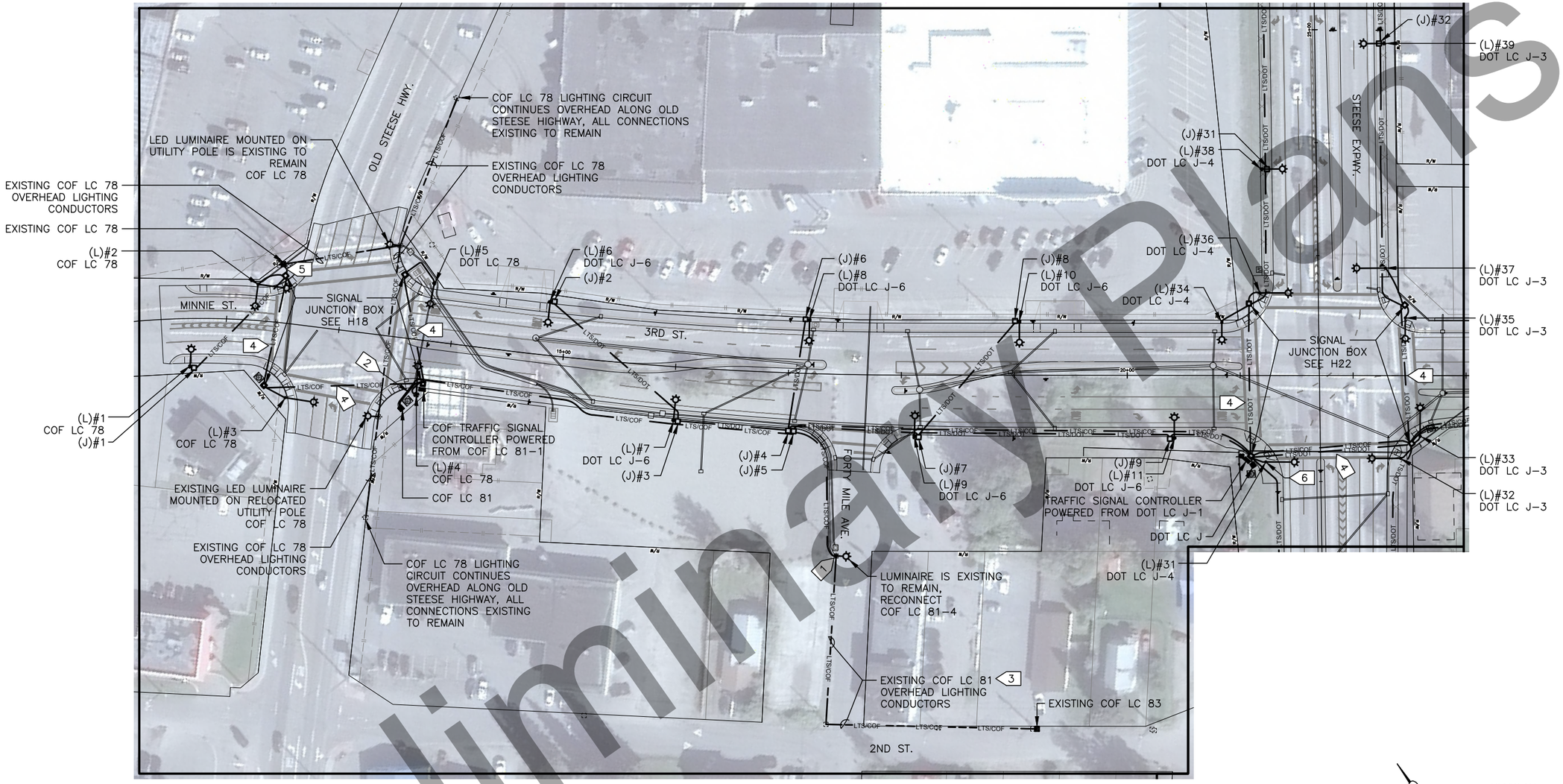
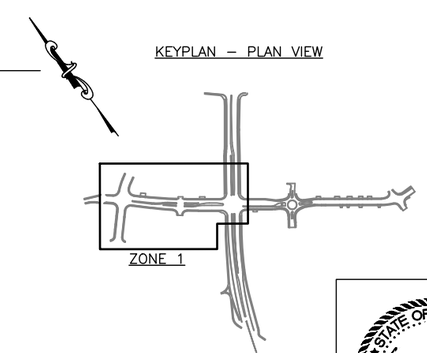
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H108	17



LIGHTING RENOVATION – ZONE 1

[1" = 50']



SPECIFIC NOTES

1. PROVIDE UTILITY POLE RISER TO TRANSITION COF LC 81 CONDUCTORS FROM UNDERGROUND TO OVERHEAD. CONNECT NEW CONDUCTORS TO EXISTING OVERHEAD CONDUCTORS.
2. CONNECT COF LC 78 LIGHTING CIRCUIT CONDUCTORS TO COF LC 81 CONTROL CONTACTOR, SEE H116 FOR FURTHER INFORMATION.
3. ENSURE COF LC 81-4 OVERHEAD LIGHTING CONDUCTORS ARE CONNECTED TO COF LC 83 CONTROL CONTACTOR, PROVIDE ADDITIONAL CONNECTIONS AS NECESSARY.
4. ROUTE UNDERGROUND LIGHTING RACEWAY SYSTEM(S) AT INTERSECTION ADJACENT TO SIGNAL RACEWAY SYSTEM(S) IN SAME TRENCH. PROVIDE SEPARATE CONDUIT BUT UTILIZE SIGNAL JUNCTION BOXES. SEE WIRING DIAGRAMS ON SHEETS H19 & H23.
5. COF LC 78 LIGHTING CIRCUIT FEEDS UNDERGROUND INTO SIGNAL JUNCTION BOX TO POWER LUMINAIRES MOUNTED ON SIGNAL POLES.
6. PROVIDE GE LIGHTGRID GATEWAY (ELWG-H-C-XX-G-C-B) W/ STEP DOWN TRANSFORMER AND WIRELESS CELLULAR MODEM (ELWM-O-C). CONFIRM FINAL PART NUMBERS WITH MANUFACTURER. FIELD DRILL HOLE IN SIGNAL POLE AND PROVIDE WATER-TIGHT, RIGID COMPRESSION CONNECTOR. MOUNT GE EQUIPMENT TO SIGNAL POLE AT 35' ABOVE GRADE, PROVIDE ALL BRACKETS AND INSTALL PER MANUFACTURERS INSTRUCTIONS. ENSURE GE EQUIPMENT DOES NOT INTERFERE WITH TRAFFIC SIGNAL EQUIPMENT. POWER GE EQUIPMENT FROM DOT LC J, SEE H115.

LIGHTING RENOVATION
2 OF 4

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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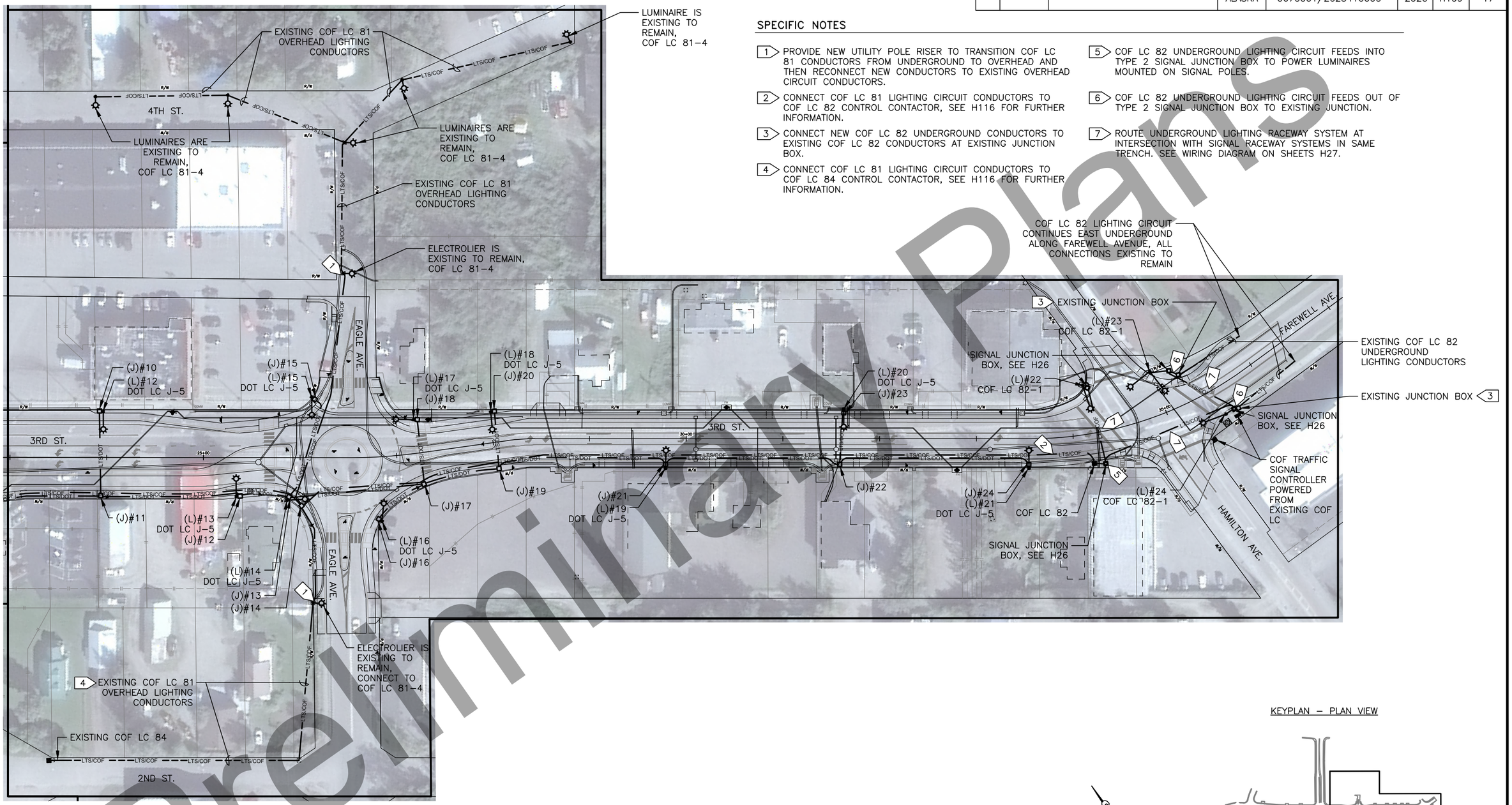
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H109	17

SPECIFIC NOTES

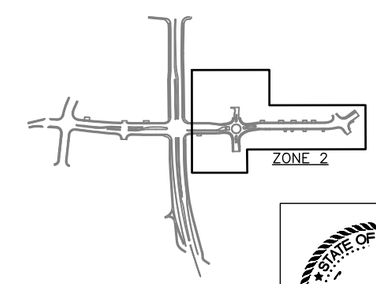
1. PROVIDE NEW UTILITY POLE RISER TO TRANSITION COF LC 81 CONDUCTORS FROM UNDERGROUND TO OVERHEAD AND THEN RECONNECT NEW CONDUCTORS TO EXISTING OVERHEAD CIRCUIT CONDUCTORS.
2. CONNECT COF LC 81 LIGHTING CIRCUIT CONDUCTORS TO COF LC 82 CONTROL CONTACTOR, SEE H116 FOR FURTHER INFORMATION.
3. CONNECT NEW COF LC 82 UNDERGROUND CONDUCTORS TO EXISTING COF LC 82 CONDUCTORS AT EXISTING JUNCTION BOX.
4. CONNECT COF LC 81 LIGHTING CIRCUIT CONDUCTORS TO COF LC 84 CONTROL CONTACTOR, SEE H116 FOR FURTHER INFORMATION.
5. COF LC 82 UNDERGROUND LIGHTING CIRCUIT FEEDS INTO TYPE 2 SIGNAL JUNCTION BOX TO POWER LUMINAIRES MOUNTED ON SIGNAL POLES.
6. COF LC 82 UNDERGROUND LIGHTING CIRCUIT FEEDS OUT OF TYPE 2 SIGNAL JUNCTION BOX TO EXISTING JUNCTION.
7. ROUTE UNDERGROUND LIGHTING RACEWAY SYSTEM AT INTERSECTION WITH SIGNAL RACEWAY SYSTEMS IN SAME TRENCH. SEE WIRING DIAGRAM ON SHEETS H27.



LIGHTING RENOVATION – ZONE 2

[1" = 50']

KEYPLAN – PLAN VIEW



LIGHTING RENOVATION
3 OF 4

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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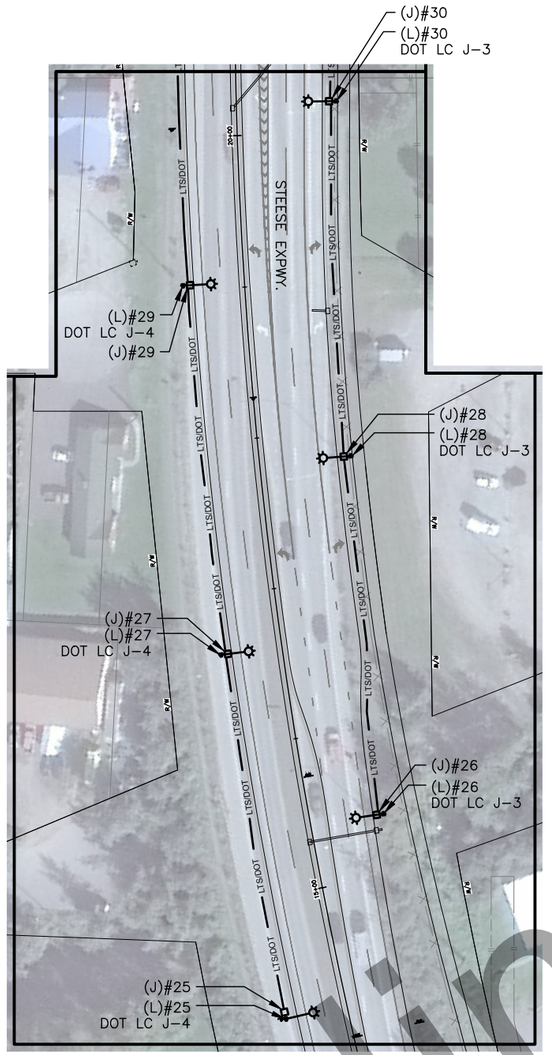
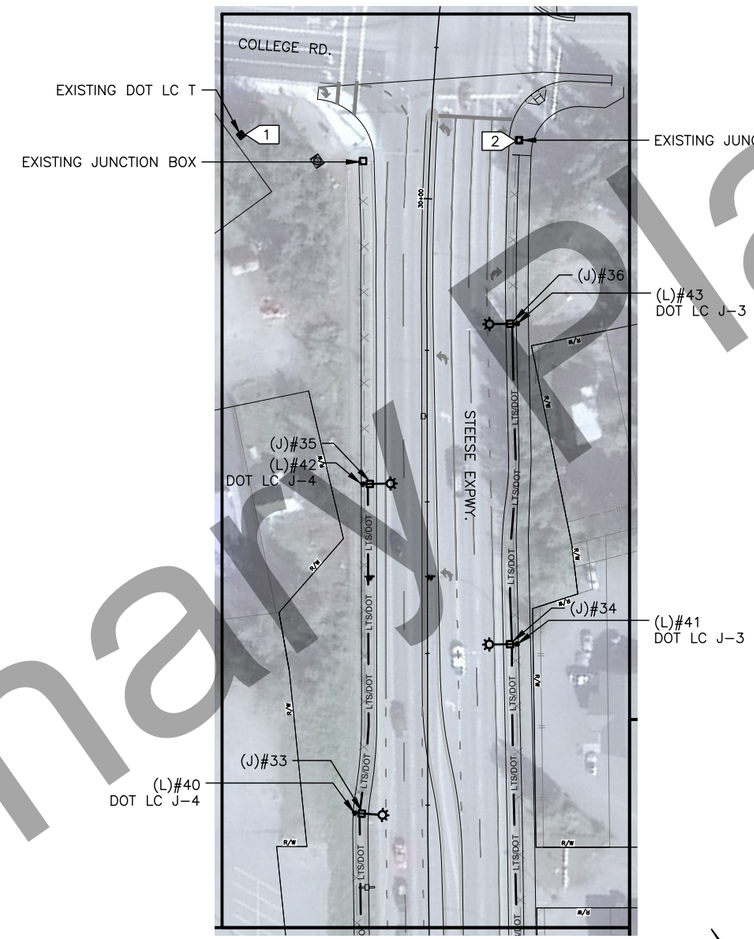
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H110	17



LIGHTING RENOVATION – ZONE 3

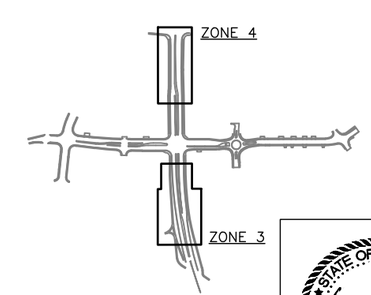
[1" = 50']



LIGHTING RENOVATION – ZONE 4

[1" = 50']

KEYPLAN – PLAN VIEW



SPECIFIC NOTES

1. SEE SHEET H115 FOR FURTHER INFORMATION REGARDING THE EXISTING DOT LOAD CENTER 'T'.
2. ADJUST JUNCTION BOX(ES) AS NECESSARY TO MATCH NEW CURB CONFIGURATION. CONTACT ENGINEER IF ASSOCIATED SIGNALS WILL BE IMPACTED DUE TO RELOCATION OF JUNCTION BOX. FINAL JUNCTION BOX INSTALLATION SHALL MATCH EXISTING INSTALLATION BUT ALIGNED WITH NEW CURB.

LIGHTING RENOVATION
4 OF 4

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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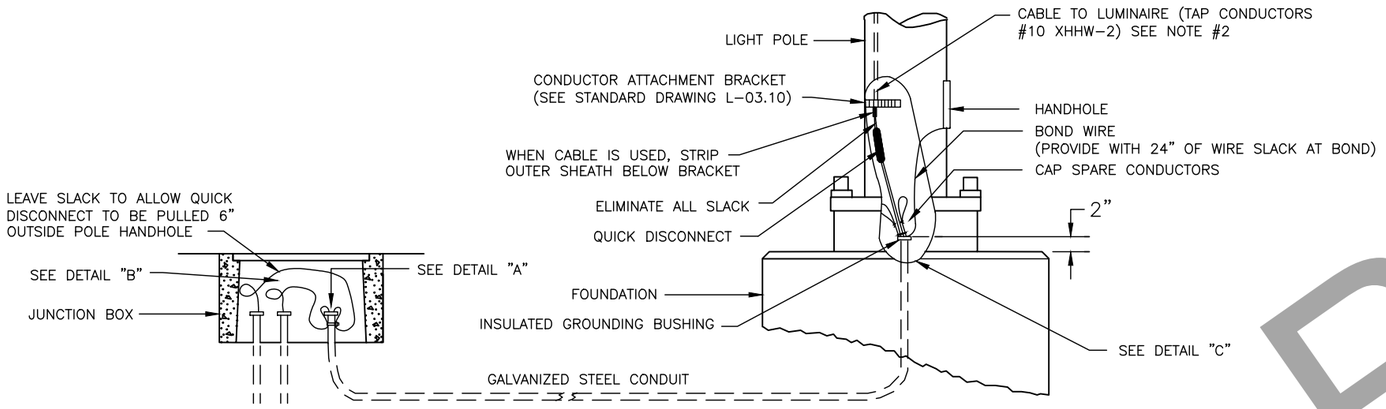
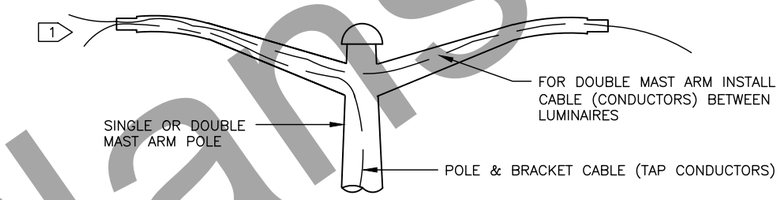
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H111	17

LIGHTING SYSTEM POLE AND JUNCTION BOX WIRING DETAILS

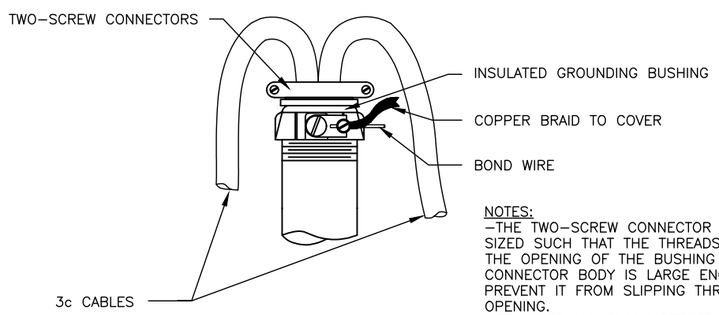


LIGHT STANDARD MAST ARM WIRING DETAIL



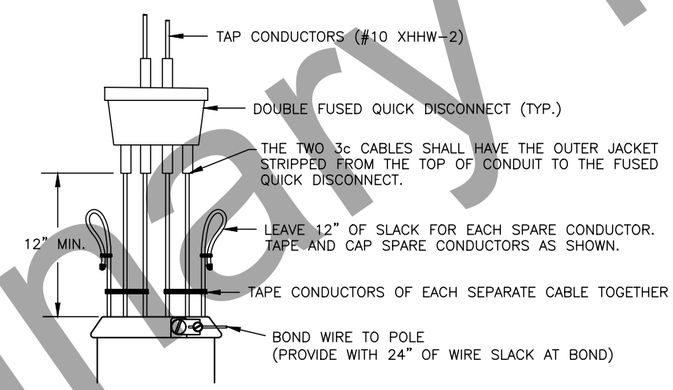
SPECIFIC NOTES

1. INSTALL 2"x1" REDUCING WASHER AND 1" CONNECTOR TO SECURE CONDUCTORS AT THE END OF THE MAST ARM



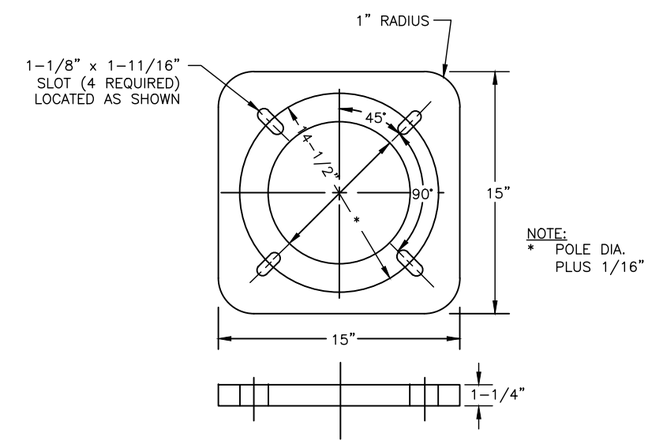
NOTES:
-THE TWO-SCREW CONNECTOR SHALL BE SIZED SUCH THAT THE THREADS FIT INSIDE THE OPENING OF THE BUSHING AND THE CONNECTOR BODY IS LARGE ENOUGH TO PREVENT IT FROM SLIPPING THROUGH THE OPENING.
-ELIMINATE ALL SLACK BETWEEN TWO-SCREW CONNECTOR AND CONDUCTOR ATTACHMENT BRACKET IN LIGHT POLE

DETAIL A

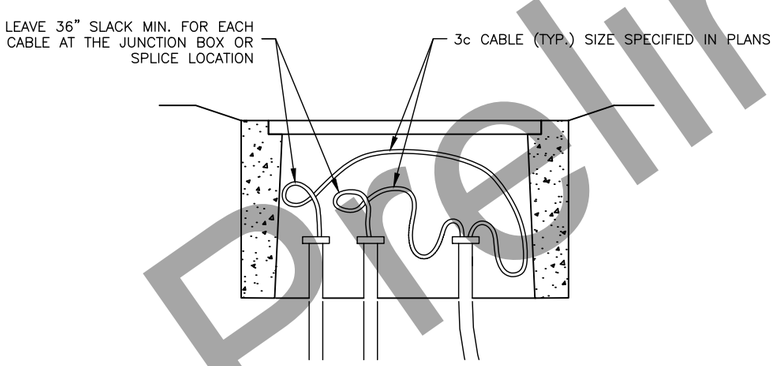


DETAIL C

LIGHT POLE BASE FLANGE DETAIL



NOTE:
* POLE DIA. PLUS 1/16"



DETAIL B

GENERAL NOTES

1. LABEL ALL CABLES AND CONDUCTORS IN POLE BASE AND JUNCION BOX.
2. LEAVE ENOUGH SLACK ABOVE THE CONDUCTOR ATTACHMENT BRACKET TO ALLOW THE QUICK DISCONNECT TO BE PULLED 6" OUTSIDE OF HANDHOLE.
3. NOT ALL GROUNDING CONDUCTORS, AS REQUIRED BY SECTION 660-3.06, ARE SHOWN IN THESE DETAILS.

Preliminary Plans

ELECTROLIER DETAILS
1 OF 3

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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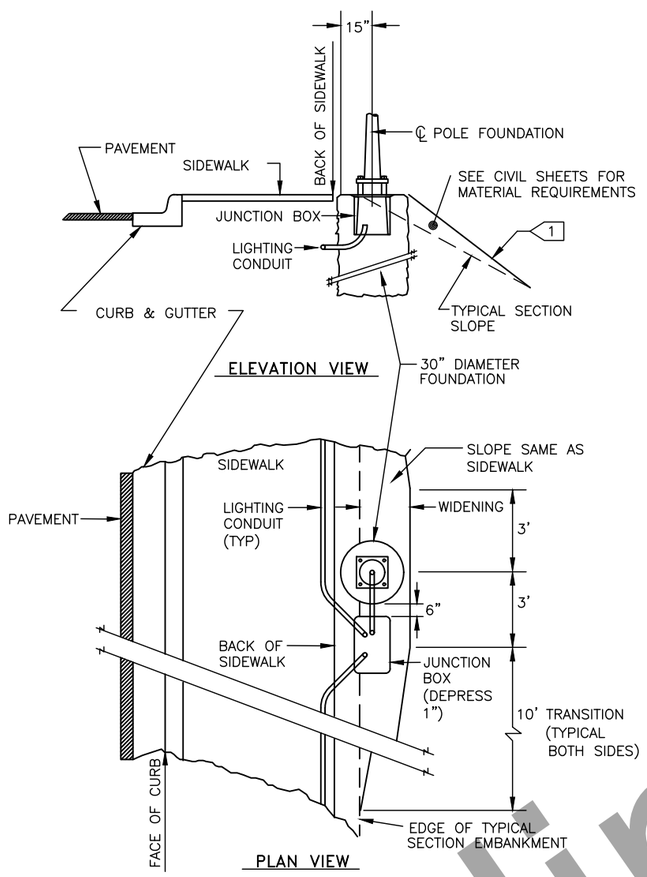
			ALASKA	0670001/Z625410000	2020	H112	17

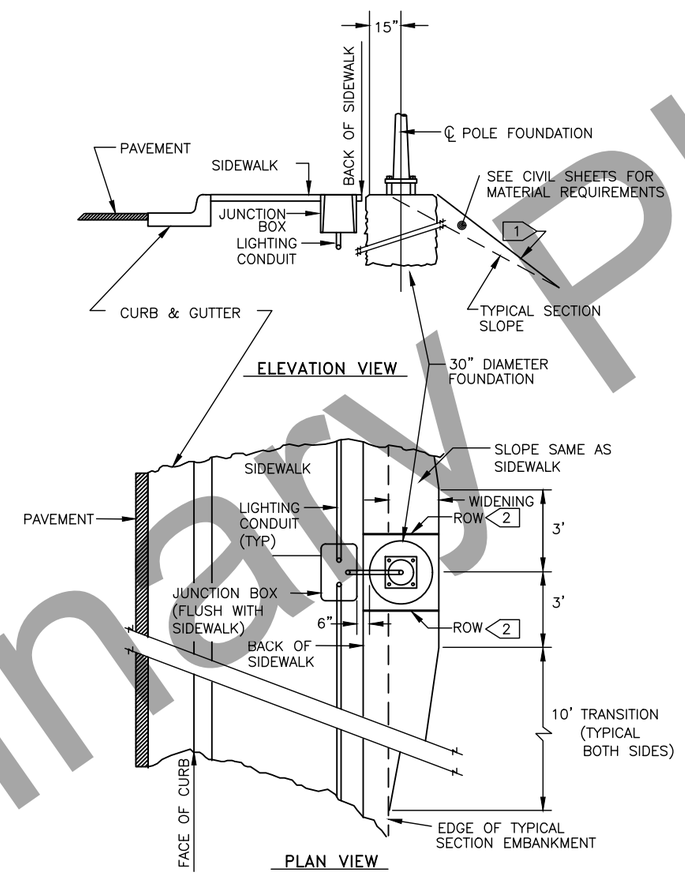
LIGHT POLE WIDENING DETAIL; "A"

(USE WHEN POLE IS LOCATED BACK OF SIDEWALK)



MODIFIED LIGHT POLE WIDENING DETAIL; "*A"

(USE WHEN POLE IS LOCATED BACK OF SIDEWALK & ROW RESTRICTIONS EXIST)



SPECIFIC SHEET NOTES

1. GRADE SLOPE FROM BACK OF FOUNDATION TO TYPICAL SECTION SLOPE CATCH POINT OR DITCH LINE EXCEPT THAT THE SLOPE SHALL BE NO STEEPER THAN 1-1/2:1.
2. VERIFY ACTUAL IN-FIELD RIGHT OF WAY BOUNDARIES BEFORE BEGINNING WORK.

Preliminary Plans

ELECTROLIER DETAILS
2 OF 3

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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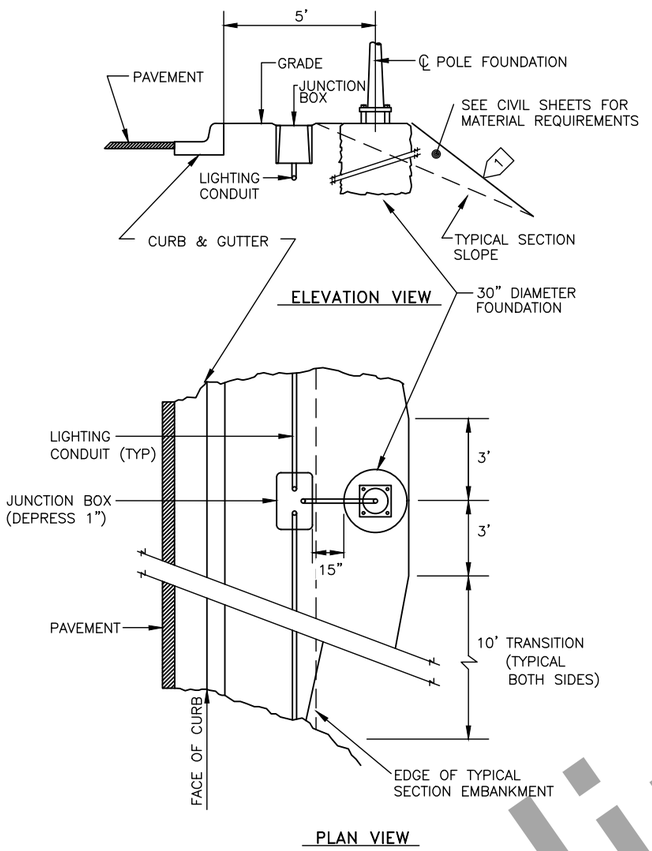
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H113	17

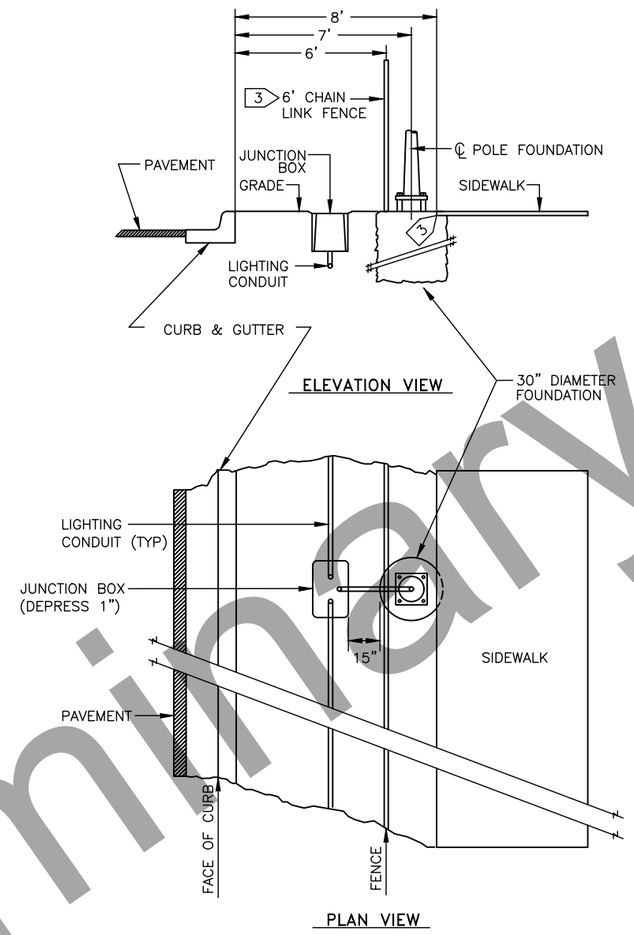
LIGHT POLE WIDENING DETAIL "B"

(USE WHEN POLE IS LOCATED BACK OF CURB)



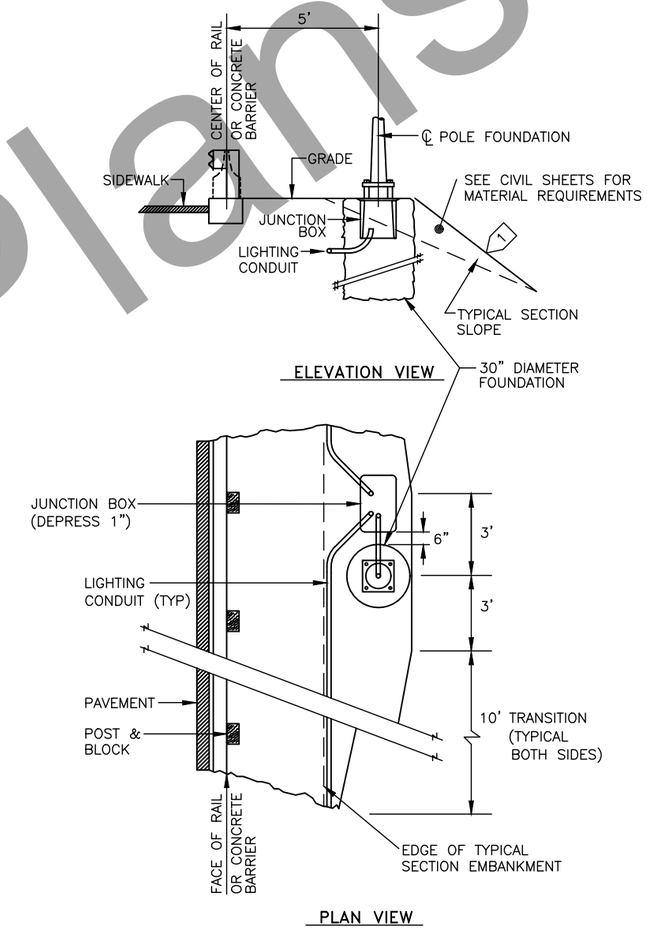
MODIFIED LIGHT POLE WIDENING DETAIL "*B"

(USE WHEN POLE IS LOCATED BACK OF CURB AND BEHIND FENCE)



LIGHT POLE WIDENING DETAIL "D"

(USE WHEN POLE IS LOCATED BACK OF GUARDRAIL OR CONCRETE BARRIER)



SPECIFIC SHEET NOTES

1. WARP SLOPE TO TOP CIRCUMFERENCE OF POLE FOUNDATION
2. GRADE SLOPE FROM BACK OF FOUNDATION TO TYPICAL SECTION SLOPE CATCH POINT OR DITCH LINE EXCEPT THAT THE SLOPE SHALL BE NO STEEPER THAN 1–1/2:1
3. COORDINATE LOCATION OF ELECTROLIER FOUNDATION WITH FENCE INSTALLER TO AVOID INSTALLING FENCE POST AT ELECTROLIER FOUNDATION LOCATION.
4. PROVIDE 2" MINIMUM NOTCH IN FOUNDATION. COORDINATE WITH SIDEWALK INSTALLER BEFORE INSTALLING FOUNDATIONS. TOP OF ELECTROLIER FOUNDATION TO BE FLUSH WITH TOP OF SIDEWALK.

Preliminary Plans

ELECTROLIER DETAILS
3 OF 3

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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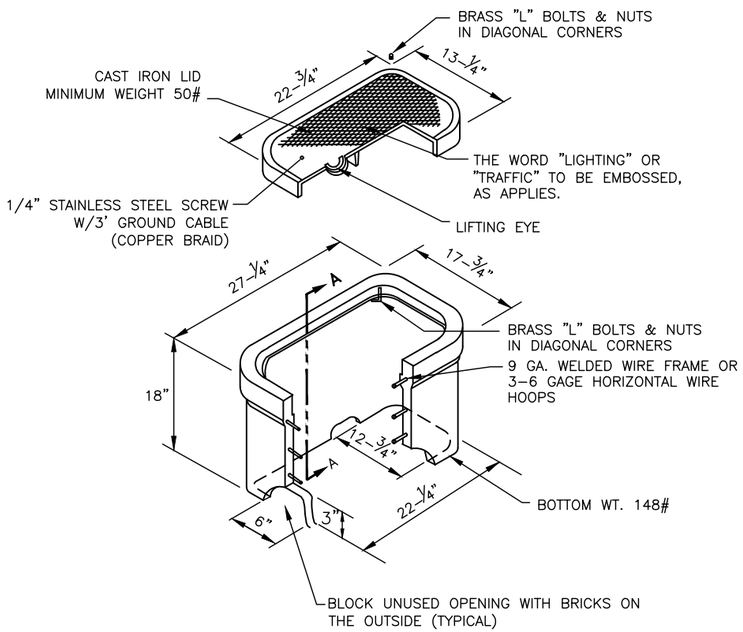
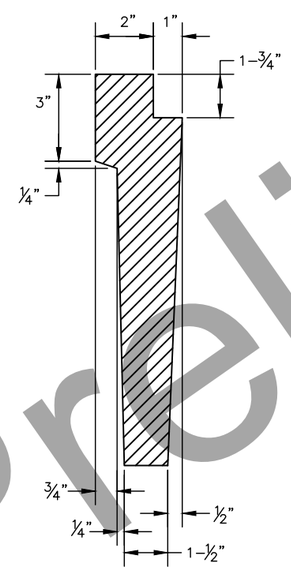
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H114	17

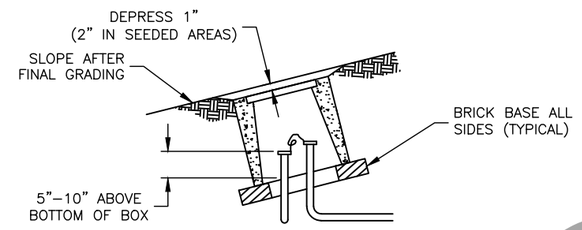
TYPE IA JUNCTION BOX DETAIL



SECTION A–A

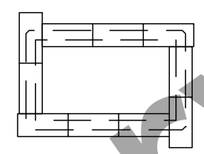


TYPE IA JUNCTION BOX INSTALLATION ON SLOPE



TYPE IA JUNCTION BOX

BRICK BASE – TYPE IA JUNCTION BOX



Preliminary Plans

JUNCTION BOX DETAILS
1 OF 1

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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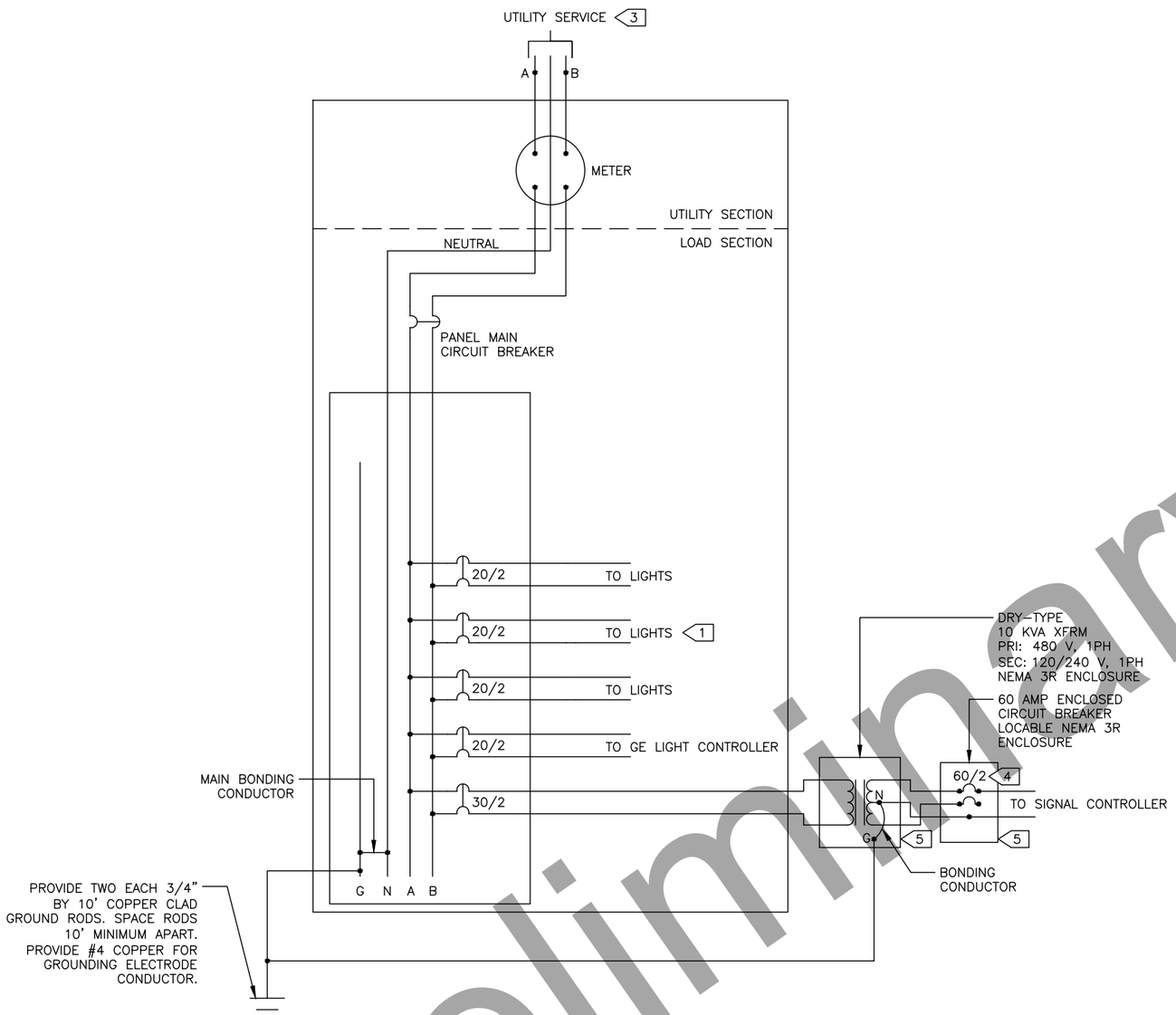
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H115	17

NEW DOT LOAD CENTER J WIRING DIAGRAM

THIS DETAIL REVISES REQUIREMENTS OF DOT STANDARD DRAWING L–25.00



SUMMARY OF EXISTING NEW LOAD CENTERS AND CIRCUITS

NEW DOT LOAD CENTER J			
LOCATION:	THIRD STREET & STEESE EXPRESSWAY INTERSECTION		
STATION & OFFSET:	"SE" 21+00.96 (54.51 LT)		
VOLTAGE RATING:	120/240 V, SINGLE PHASE		
MAIN CIRCUIT BREAKER RATING:	200 A		
LOAD CENTER TYPE:	TYPE 1A		
CIRCUIT NUMBER	BRANCH CIRCUIT BREAKER RATING	CONTACTOR RATING	CIRCUIT PURPOSE
J–1	30 AMP, 480V	––	THIRD/STEESE EXPY SIGNAL
J–2	20 AMP, 480V	––	GE LIGHTING CONTROLS
J–3	20 AMP, 480V	––	STEESE LIGHTING – EAST
J–4	20 AMP, 480V	––	STEESE LIGHTING – WEST
J–5	20 AMP, 480V	––	THIRD LIGHTING – EAST
J–6	20 AMP, 480V	––	THIRD LIGHTING – WEST

SUMMARY OF EXISTING DOT LOAD CENTER AND CIRCUITS

2

EXISTING DOT LOAD CENTER T			
LOCATION:	COLLEGE ROAD & STEESE EXPRESSWAY INTERSECTION		
STATION & OFFSET:	EXISTING TO REMAIN		
VOLTAGE RATING:	480/240 V, SINGLE PHASE		
MAIN CIRCUIT BREAKER RATING:	200 A		
LOAD CENTER TYPE:	TYPE 1A		
CIRCUIT NUMBER	BRANCH CIRCUIT BREAKER RATING	CONTACTOR RATING	CIRCUIT PURPOSE
(E) T–1	30 AMP, 480V	––	COLLEGE/OLD STEESE SIGNAL
(E) T–2	15 AMP, 240V	––	CONTROL
(E) T–3	30 AMP, 240V	––	SPARE
(E) T–4	30 AMP, 480V	30 AMP	LIGHTS COLLEGE C–1
T–5	30 AMP, 480V	30 AMP	LIGHTS WEST STEESE
T–6	30 AMP, 480V	30 AMP	LIGHTS EAST STEESE
NOTES: (E) = EXISTING CIRCUIT TO REMAIN			

SPECIFIC NOTES

1. REFER TO LOAD CENTER SUMMARY FOR ACTUAL QUANTITY OF CIRCUITS, CIRCUIT NUMBERS, NAMING, AND OTHER INFORMATION FOR EACH CIRCUIT (TYPICAL).
2. EXISTING DOT LOAD CENTER T GENERAL INFORMATION AND CIRCUIT INFORMATION WAS TAKEN FROM AS–BUILTS. FIELD VERIFY LOAD CENTER CHARACTERISTICS AND STEESE HIGHWAY LIGHTING CIRCUITS BEFORE BEGINNING WORK. ONLY MODIFY STEESE HIGHWAY LIGHTING CIRCUITS, ALL OTHER CIRCUITS ARE EXISTING TO REMAIN.
3. SEE U400'S SHEETS FOR FURTHER INFORMATION REGARDING UTILITY SERVICE DROP LOCATIONS.
4. ONLY UTILIZE ONE POLE OF THE CIRCUIT BREAKER FOR 120 VOLTS TO SIGNAL CONTROLLER.
5. MOUNT DRY–TYPE TRANSFORMER AND ENCLOSED CIRCUIT BREAKER TO SIDE OF TYPE–1A LOAD CENTER J ENCLOSURE. PROVIDE ADDITIONAL STRUT RACKING AS REQUIRED.

GENERAL NOTES

1. REFER TO DOT STANDARD DRAWING L–25.00 FOR WIRE SIZES, GENERAL NOTES, ENCLOSURE DETAILS, AND ELEVATION DETAILS.

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452–1241
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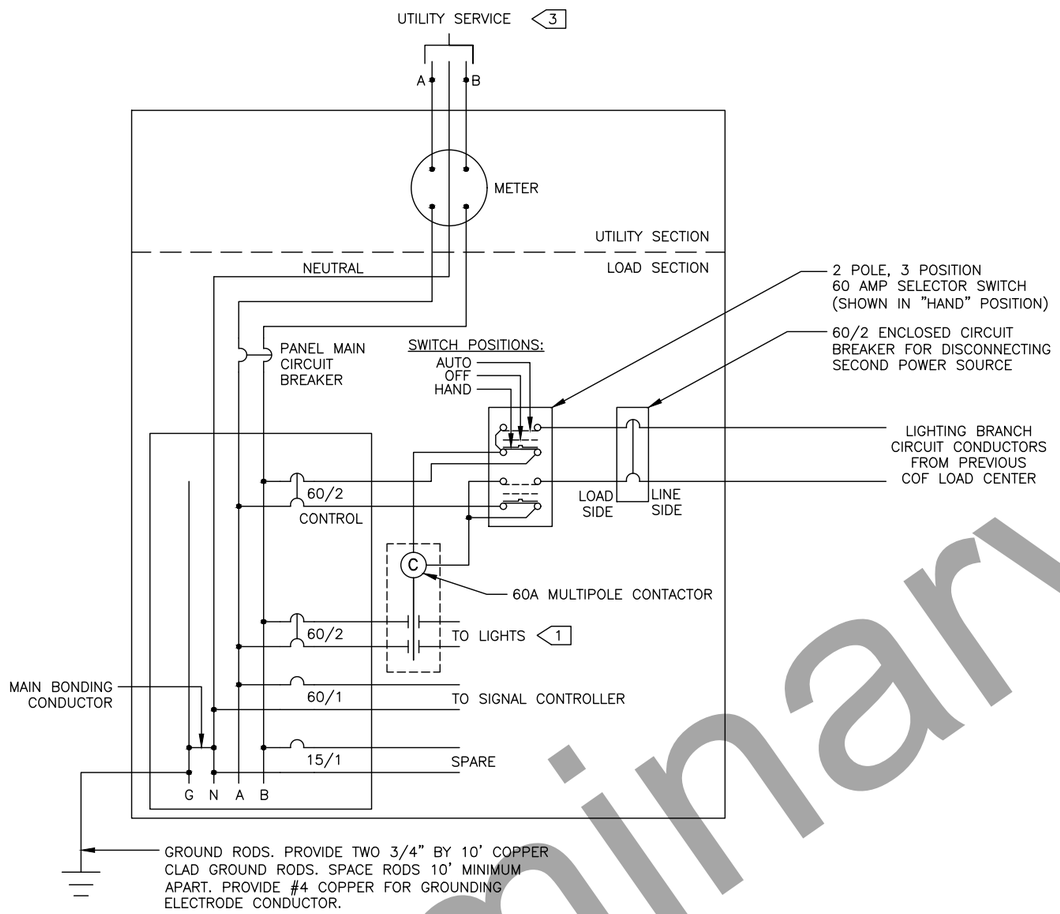
LOAD CENTER DETAILS
1 OF 2

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	H116	17

NEW (RELOCATED) COF LOAD CENTER 81 & 82 WIRING DIAGRAM

THIS DETAIL REVISES REQUIREMENTS OF DOT STANDARD DRAWING L-25.00

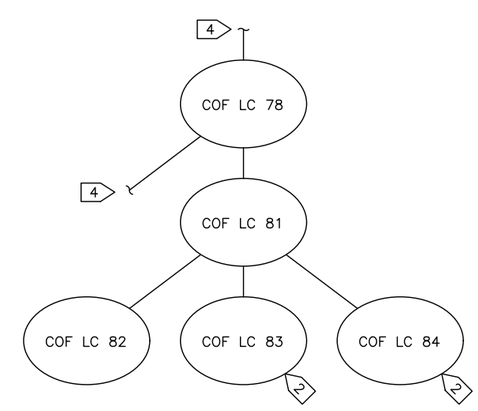


SUMMARY OF NEW COF LOAD CENTERS AND CIRCUITS

NEW (& RELOCATED) COF LOAD CENTER 81			
LOCATION:	THIRD STREET & OLD STEESE HIGHWAY INTERSECTION		
STATION & OFFSET:	"TH" 13+63.62 (63.44' RT)		
VOLTAGE RATING:	120/240 V, SINGLE PHASE		
MAIN CIRCUIT BREAKER RATING:	200 A		
LOAD CENTER TYPE:	TYPE 1A		
CONTROLLED FROM:	COF LC: 78		
CONTROLS:	COF LC: 82, 83, 84		
CIRCUIT NUMBER	BRANCH CIRCUIT BREAKER RATING	CONTACTOR RATING	CIRCUIT PURPOSE
81-1	60 AMP, 120V	--	THIRD/OLD STEESE SIGNALS
81-2	15 AMP, 120V	--	SPARE
81-3	15 AMP, 240V	--	CONTACTOR CONTROL
81-4	60 AMP, 240V	60 AMP	LTS, COF LC 82-84
NOTES: -PROVIDE ADDITIONAL 60/2 ENCLOSED CIRCUIT BREAKER WITHIN LOAD CENTER			

NEW (& RELOCATED) COF LOAD CENTER 82			
LOCATION:	THIRD STREET & HAMILTON INTERSECTION		
STATION & OFFSET:	"TH" 34+21.45 (30.90 RT)		
VOLTAGE RATING:	120/240 V, SINGLE PHASE		
MAIN CIRCUIT BREAKER RATING:	100 A		
LOAD CENTER TYPE:	TYPE 1A		
CONTROLLED FROM:	COF LC 81		
CONTROLS:	--		
CIRCUIT NUMBER	BRANCH CIRCUIT BREAKER RATING	CONTACTOR RATING	CIRCUIT PURPOSE
82-1	60 AMP, 240V	60 AMP	FAREWELL STREET LTS
82-2	15 AMP, 240V	--	CONTACTOR CONTROL
82-3	15 AMP, 120V	--	SPARE
NOTES: -PROVIDE ADDITIONAL 60/2 ENCLOSED CIRCUIT BREAKER WITHIN LOAD CENTER			

COF LOAD CENTER CONTROL FLOW CHART



SPECIFIC NOTES

1. PROVIDE CIRCUITS AS INDICATED IN THE LOAD CENTER SUMMARY (TYPICAL). LOAD CENTER SUMMARIES INCLUDE CIRCUIT NUMBERS, NAMING, RATING, AND OTHER INFORMATION.
2. COF LC 83 & 84 ARE EXISTING TO REMAIN. RECONNECT COF LC 81 LIGHTING BRANCH CIRCUIT TO COF LC 83 & 84 TO MAINTAIN AUTOMATIC CONTROL.
3. SEE 'U' SHEETS FOR FURTHER INFORMATION REGARDING UTILITY SERVICE DROP LOCATIONS.
4. CITY OF FAIRBANKS LIGHTING LOAD CENTER CONTROL SYSTEM EXTENDS TO OTHER LOAD CENTERS LOCATED OUTSIDE OF THE PROJECT AREA. CONNECTIONS ARE EXISTING TO REMAIN.

GENERAL NOTES

1. REFER TO DOT STANDARD DRAWING L-25.00 FOR WIRE SIZES, GENERAL NOTES, ENCLOSURE DETAILS, AND ELEVATION DETAILS.
2. CIRCUITS FOR THE TRAFFIC SIGNAL CONTROLLER SHALL BE UNSWITCHED AND BY-PASS CONTACTOR CONTROL.
3. PROVIDE NEC COMPLIANT PLAQUE IN COF LOAD CENTERS INDICATING TWO POWER SOURCES AVAILABLE. PROVIDE ADDITIONAL LABEL FOR EACH POWER SOURCE DISCONNECT.
4. PROVIDE ADDITIONAL CONDUIT IN FOUNDATION FOR LIGHTING CIRCUIT CONDUCTORS FROM PREVIOUS LOAD CENTER

LOAD CENTER DETAILS
2 OF 2

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC. AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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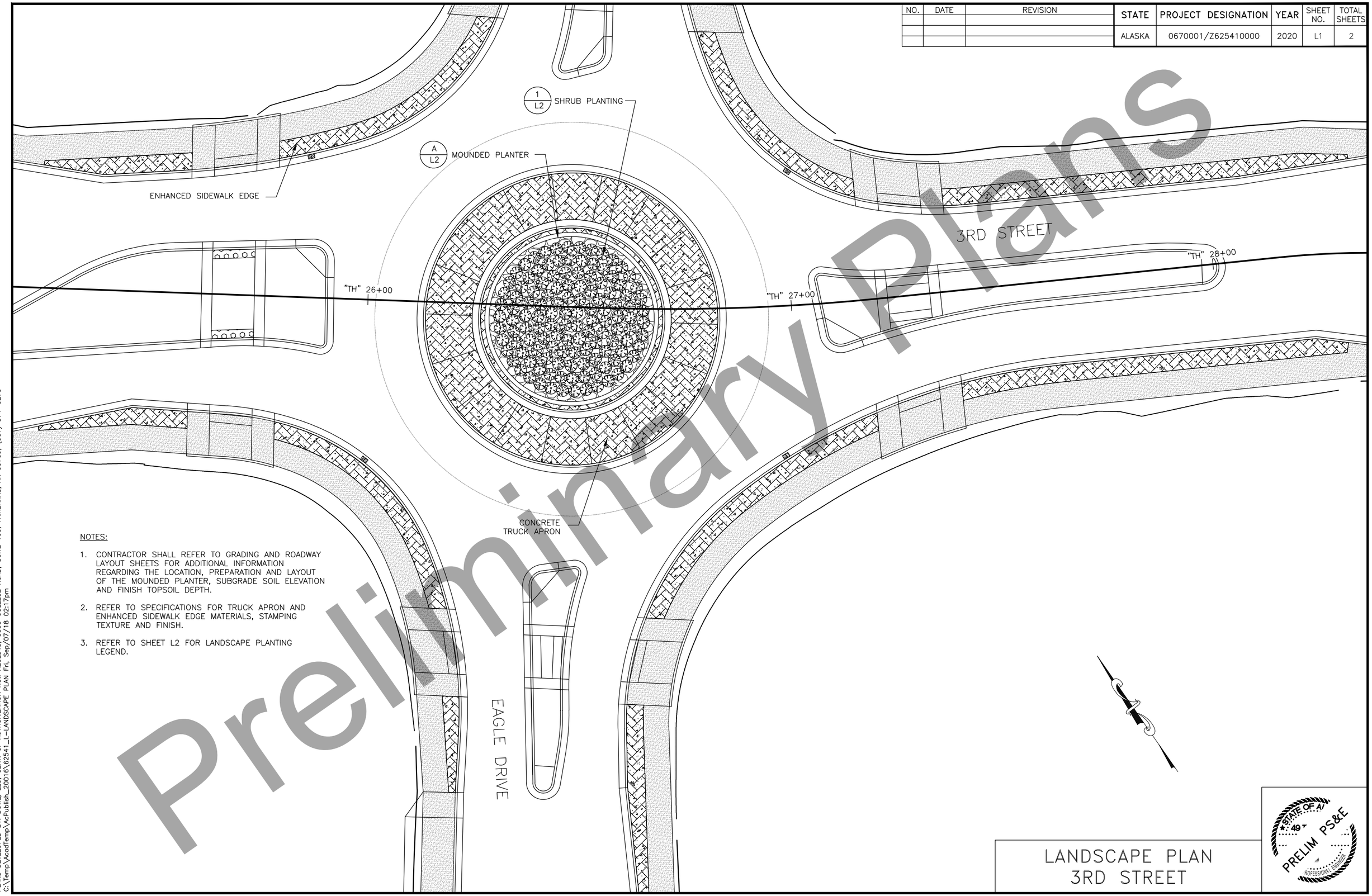
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	L1	2



NOTES:

1. CONTRACTOR SHALL REFER TO GRADING AND ROADWAY LAYOUT SHEETS FOR ADDITIONAL INFORMATION REGARDING THE LOCATION, PREPARATION AND LAYOUT OF THE MOUNDED PLANTER, SUBGRADE SOIL ELEVATION AND FINISH TOPSOIL DEPTH.
2. REFER TO SPECIFICATIONS FOR TRUCK APRON AND ENHANCED SIDEWALK EDGE MATERIALS, STAMPING TEXTURE AND FINISH.
3. REFER TO SHEET L2 FOR LANDSCAPE PLANTING LEGEND.

LANDSCAPE PLAN
3RD STREET

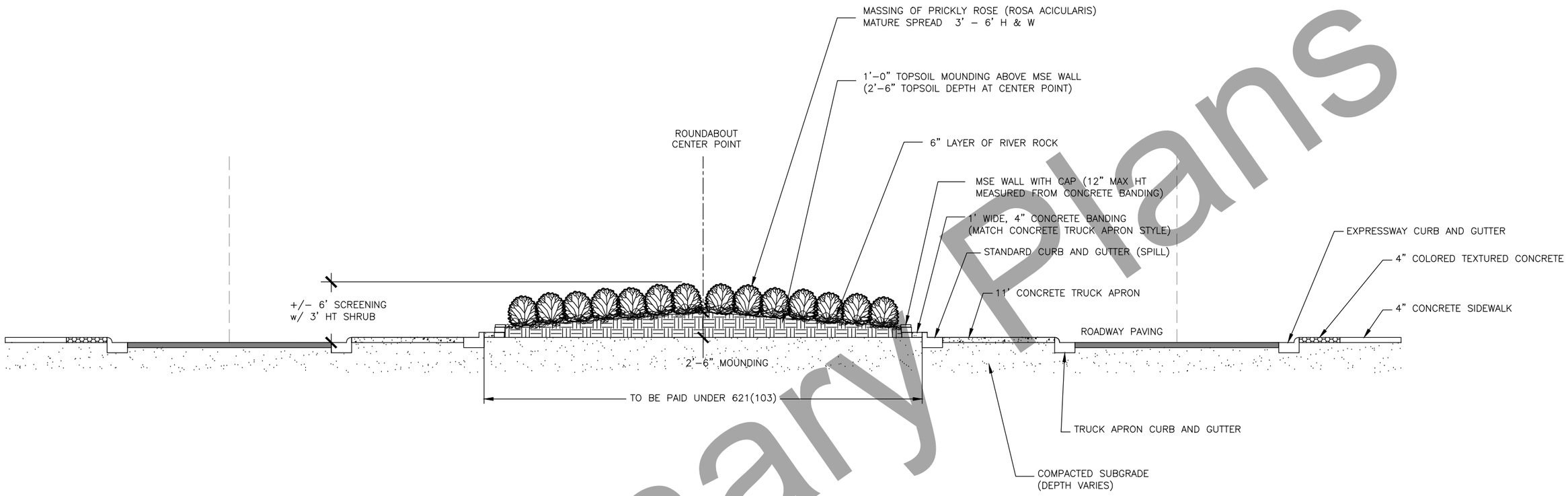
STATE OF AK 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
C:\Temp\AcadTemp\AcPublish_20016\62541_L-LANDSCAPE PLAN Fri, Sep/07/18 02:17pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	L2	2



(A) SECTION: ROUNDABOUT MOUNDED PLANTER
SCALE: 1" = 5'–0"

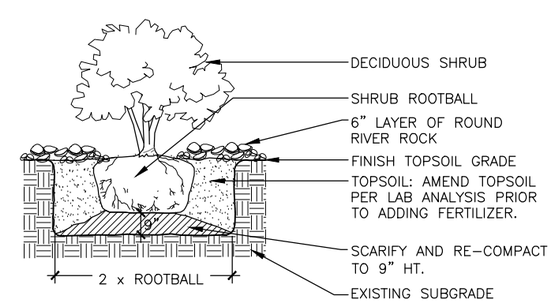
PLANTING SCHEDULE

QTY	SYMBOL	LABEL	SCIENTIFIC NAME	COMMON NAME	SIZE	SPACING	NOTES
SHRUBS: DECIDUOUS							
126		RC	ROSA ACICULARIS	PRICKLY ROSE	18" HT.	3'–0" O.C.	PLANT IN CONCENTRIC RINGS

LANDSCAPE MATERIALS SCHEDULE

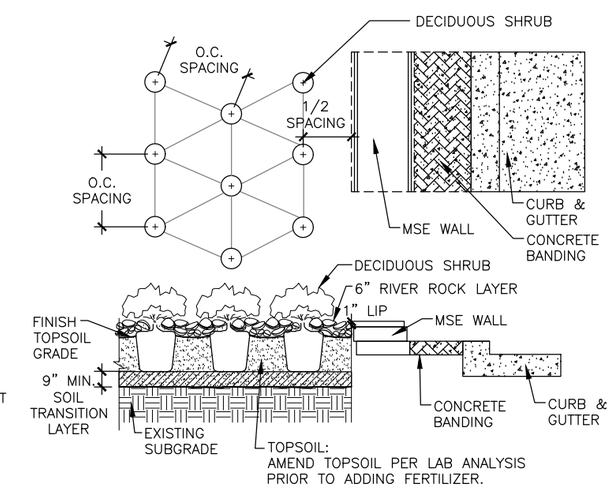
QTY	SYMBOL	ITEM	SIZE	NOTES
1,195 SF 22.5 CY		ROUND RIVER ROCK	6" LAYER OF 3"–6"DIAMETER	OBTAIN FROM A LOCAL SUPPLIER. INSTALL UNDER PRICKLY ROSE AS GROUNDCOVER.

REFER TO THE PROJECT SPECIFICATIONS FOR ADDITIONAL PLANTING AND TOPSOIL INFORMATION.



REMOVE CONTAINER FROM PLANT AND SCORE ROOTBALLS TO LOOSEN ANY ROOT BOUND MATERIAL PRIOR TO INSTALLATION.

(1) SHRUB PLANTING
N.T.S.



ALL PLANTS SHALL BE INSTALLED IN AN EQUAL TRIANGULAR SPACING. PLANT IN CONCENTRIC RINGS WITHIN MOUNDED LANDSCAPE ISLAND.

LOCATE PLANT ONE HALF OF SPECIFIED SPACING DISTANCE FROM MSE WALL, UNLESS OTHERWISE NOTED.

(2) SHRUB SPACING
N.T.S.

LANDSCAPE DETAILS
3RD STREET

STATE OF ALASKA 49 PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DOWL, LLC, CERT. OF AUTHORIZATION NO.: AECL848, 3535 COLLEGE ROAD, SUITE 100, FAIRBANKS, AK 99709, (907) 374-0275
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NO.	DATE	REVISION

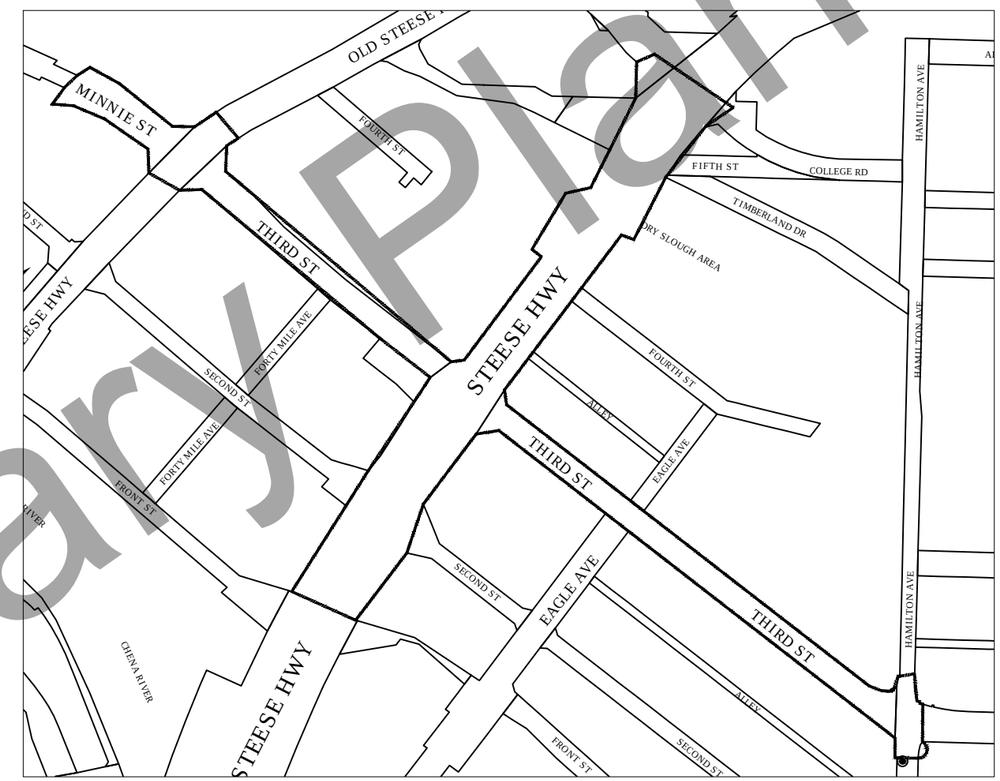
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001 / Z625410000	2020	Q100	3

SITE INFORMATION

1. SITE FUNCTION: ROAD
2. MEAN ANNUAL PRECIPITATION: 10.83 INCHES (SOURCE: https://www.usclimatedata.com/climate/fairbanks/alaska/united-states/usak0083)
3. 2-YEAR, 24-HOUR RAINFALL EVENT: 1.09 INCHES, STATION: FAIRBANKS F.O. SITE ID: 10-0215 (SOURCE: https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_ak.html)
4. STAGING AND STOCKPILE AREAS: CONTRACTOR MUST SEEK LOCATIONS FOR STOCKPILING MATERIAL AND STAGING AND STORAGE OF EQUIPMENT. STAGING AREAS MUST COMPLY WITH CGP, SWPPP, SECTION 641 SPECIFICATIONS, AND ALL PERMITS.
5. PROJECT AREAS ARE LISTED BELOW, MATERIAL SITES NOT INCLUDED:
   - PROJECT AREA: 10.6 ACRES
   - DISTURBED AREA: 10.6 ACRES
   - PRE-CONSTRUCTION PERCENT IMPERVIOUS AREA: 88
   - POST CONSTRUCTION PERCENT IMPERVIOUS AREA: 92
   - PRE-CONSTRUCTION RUNOFF COEFFICIENT: 0.81
   - POST CONSTRUCTION RUNOFF COEFFICIENT: 0.84
6. LANDSCAPE TOPOGRAPHY: VERY FLAT, URBAN WITH COMMERCIAL AND RESIDENTIAL DEVELOPMENT IN PROJECT CORRIDOR.
7. DRAINAGE PATTERNS: SURFACE DRAINAGE VIA PIPED STORM DRAIN SYSTEM FLOWS TO CHENA RIVER, DRY SLOUGH, AND NOYES SLOUGH.
8. APPROXIMATE GROWING SEASON: MAY 3 THROUGH OCTOBER 3
9. EXISTING VEGETATION: PROJECT AREA IS RESIDENTIAL AND COMMERCIAL LANDSCAPED GRASS, SCRUBS, AND TREES.
10. HISTORIC SITE CONTAMINATION: CONTAMINATED SITES HAVE BEEN IDENTIFIED WITHIN THE PROJECT LIMITS.
    - HAZARD ID: 23,796, FILE ID: 102.26.003 (CLEAN-UP COMPLETE, INSTITUTIONAL CONTROLS)
    - HAZARD ID: 24,224, FILE ID: 102.26.020 (CLEAN-UP COMPLETE, INSTITUTIONAL CONTROLS)
    - HAZARD ID: 26,826, FILE ID: 102.38.198 (ACTIVE)
    - HAZARD ID: 25,767, FILE ID: 102.38.166 (ACTIVE)
    - HAZARD ID: 727, FILE ID: 102.23.015 (ACTIVE)
    - HAZARD ID: 4,131, FILE ID: 102.38.132 (ACTIVE)
    - HAZARD ID: 26,359, FILE ID: 102.38.186 (ACTIVE)
    - HAZARD ID: 24,310, FILE ID: 102.26.046 (ACTIVE)
    - HAZARD ID: 26,359, FILE ID: 102.38.186 (INFORMATIONAL)

ENVIRONMENTAL INFORMATION

1. RECEIVING WATERS: CHENA RIVER, DRY SLOUGH, AND NOYES SLOUGH
2. IMPAIRED WATER BODIES: CHENA RIVER AND NOYES SLOUGH
3. TOTAL MAXIMUM DAILY LOAD (TDML):
   - CHENA RIVER: NONE
   - NOYES SLOUGH: DEBRIS HAS BEEN ESTABLISHED AS ZERO AND PETROLEUM PRODUCTS PROHIBIT VISIBLE SHEEN ON THE SURFACE OF THE WATER
4. STORM SEWER / DRAINAGE SYSTEMS: FAIRBANKS MS4 DRAIN TO OUTFALLS AT CHENA RIVER, NOYES SLOUGH, AND DRY SLOUGH.
5. THREATENED AND ENDANGERED SPECIES: NONE
6. HISTORICAL & CULTURAL RESOURCE PRESENCE: NONE
7. FISH & WILDLIFE HABITAT PRESENCE: THERE WILL BE NO VEGETATIVE CLEARING ALLOWED FROM MAY 1 – JULY 15 FOR THE USFWS BIRD NESTING WINDOW.
8. EXISTING PUBLIC WATER SYSTEM (PWS) DRINKING WATER PROTECTION AREAS:
   - PWSID: AK2310730
   - WATER SYSTEM NAME: GOLDEN HEART UTILITIES
   - PSW CONTACT INFORMATION:
     NAME: BERNIE STACK
     PHONE: (907)455-0117
     EMAIL: BERNIE@AKWATER.COM
     ADDRESS: P.O. BOX 80370 FAIRBANKS, AK 99708



PROJECT LIMITS
SEE SHEET Q101 FOR ADDITIONAL CATCH BASIN INLET PROTECTION

Preliminary Plans

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CE 9878
REGISTERED PROFESSIONAL ENGINEER

EROSION & SEDIMENT CONTROL 1 OF 3

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd street widening\civil3d drawing files\13-production\Erosion & Sediment Control Detail-Q100 ESCP 1 OF 3 Tue, Jul/03/18 09:18am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	Q101	3

NOTES

1. THIS PROJECT WILL RESULT IN GROUND DISTURBANCE OF GREATER THEN 1 ACRE, AND WILL REQUIRE A STORM WATER POLLUTION PREVENT PLAN (SWPPP). A NOTICE OF INTENT TO DISCHARGE (NOI) TO APPLY FOR COVERAGE UNDER THE ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM (APDES) CONSTRUCTION GENERAL PERMIT (CGP) WILL BE REQUIRED.

2. THIS EROSION & SEDIMENT CONTROL PLAN (ESCP) IS GENERAL IN NATURE AND IS PROVIDED AS GUIDANCE TO THE CONTRACTOR FOR DEVELOPMENT OF THE:
   - SWPPP;
   - HAZARDOUS MATERIAL CONTROL PLAN (HMCP); AND
   - SPILL PREVENTION, CONTROL AND COUNTERMEASURES (SPCC) PLAN.

   SUBMIT COPIES OF THE HMCP AND THE SPCC PLAN TO THE ENGINEER PER SPECIAL PROVISIONS SECTION 641. THE ENGINEER MAY REQUIRE REVISIONS PRIOR TO APPROVAL.

3. A QUALITY ASSURANCE PROJECT PLAN (QAPP) WILL BE REQUIRED DUE TO SEVERAL LOCATIONS WITHIN THE PROJECT LIMITS WITH KNOWN TCE AND/OR BTEX CONTAMINATION IN SOIL AND/OR GROUNDWATER. DEVELOP THE QAPP PER SPECIAL PROVISIONS SECTION 802. ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC) NON-OBJECTION OF QAPP IS REQUIRED BEFORE CONSTRUCTION.

4. SHEET Q102 CONTAINS A PLAN VIEW OF 3RD ST. AND ITS EXISTING STORM DRAIN SYSTEM, INCLUDING ALL KNOWN STORM DRAIN INLETS, MANHOLES, AND PIPED SECTIONS. THE CONTRACTOR SHALL SELECT AND APPLY APPROPRIATE CONTROLS TO PREVENT SEDIMENT AND OTHER POLLUTANTS FROM ENTERING THE PIPED STORM DRAIN SYSTEM AND DISCHARGING TO THE CHENA RIVER, NOYES SLOUGH, OR DRY SLOUGH.

5. DEWATERING OF GROUNDWATER AND STORM WATER THAT ACCUMULATES IN AN EXCAVATION AREA WITHIN 1500 FT OF A "DEC-IDENTIFIED CONTAMINATED SITE REQUIRES AN EXCAVATION DEWATERING PERMIT FROM DEC. AN EXCAVATION DEWATERING PERMIT FROM DEC IS REQUIRED FOR THIS PROJECT.

6. AT A MINIMUM, INLET PROTECTION (I.E. FILTER BAGS PLACED UNDER THE INLET GRATE) SHALL BE PROVIDED AT ALL INLETS WITHIN AND IMMEDIATELY ADJACENT TO THE PROJECT LIMITS.

7. INLET PROTECTION INCLUDES ANY AND ALL BMPS TO PREVENT POLLUTION FROM ENTERING INLETS. CONTRACTOR TO ENSURE BMPS ARE IN GOOD WORKING CONDITION, AND ARE MAINTAINED PER ADEC CGP AND MANUFACTURER'S REQUIREMENTS. SPECIFIC BMPS AND LOCATIONS SHALL BE SELECTED BY THE CONTRACTOR.

8. THE CHENA RIVER IS LISTED AS A SECTION 303(D) IMPAIRED WATER BODY. THE POLLUTANT OF CONCERN IS SEDIMENT FROM URBAN RUNOFF, BUT A TOTAL MAXIMUM DAILY LOAD (TMDL) HAS NOT YET BEEN ESTABLISHED BY THE STATE. THE STATE OF ALASKA RESERVES THE RIGHT TO ENFORCE ANY POLLUTANT CONTROL BASED ON THE DEVELOPMENT OF A TMDL FOR THE CHENA RIVER DURING THE TIME OF CONSTRUCTION.

9. STREET SURFACES ADJACENT TO THE WORK AREA SHALL BE SWEPT DAILY TO COLLECT ANY SEDIMENT OR OTHER CONSTRUCTION DEBRIS TRACKED OFFSITE.

10. THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASHOUT AREA ONSITE, AS NECESSARY, TO CONTAIN THE WASHOUT WATER AND RESIDUALS DURING CONCRETE WORK.

11. HAVE A SPILL KIT AVAILABLE AT EACH WORK AREA WHEN HEAVY EQUIPMENT IS BEING UTILIZED.

12. PROVIDE CONSTRUCTION FENCING OR CONES AROUND WORK AREAS TO LIMIT POTENTIAL FOR VEHICLES TO DRIVE THROUGH AND TRACK SEDIMENT ONTO THE STREET SURFACE. CONTRACTOR TO ENSURE THAT SILT-LADEN RUNOFF WILL NOT REACH THE CHENA RIVER, DRY SLOUGH, OR NOYES SLOUGH.

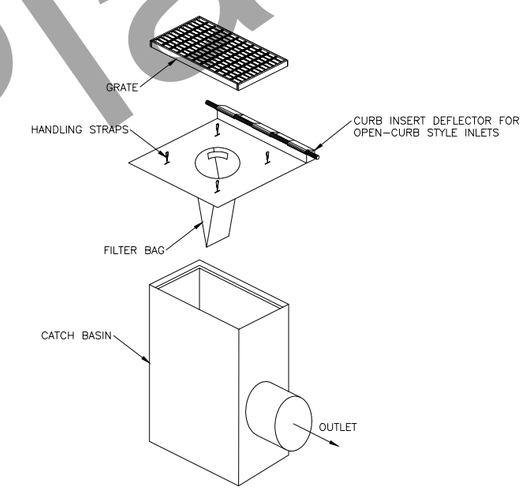
13. IF VEGETATIVE CLEARING IS REQUIRED, CONTRACTOR TO ACT IN ACCORDANCE WITH THE U.S. FISH AND WILDLIFE SERVICE (USFWS) RECOMMENDATION TO AVOID VEGETATIVE CLEARING (BIRD NESTING WINDOW) FROM MAY 1 THROUGH JULY 15 FOR INTERIOR ALASKA.

14. SURFACE RUNOFF DIRECTIONS SHOWN REPRESENT GRADE OF 3RD ST. CENTERLINE PROFILE. ROADWAY MAINTAINS 2% CROWN AT CENTERLINE FROM BEGINNING TO END OF PROJECT, DIRECTING SURFACE RUNOFF TO CURB AND GUTTER AT SIDES OF THE ROAD.

15. ANY STORM WATER COLLECTED IN THE STORM DRAIN SYSTEM OF 3RD ST., OR NEAR 3RD ST., WILL DISCHARGE TO THE FOLLOWING CHENA RIVER OUTFALLS:
   - STEESE EXPRESSWAY AND FRONT STREET
   - OLD STEESE HIGHWAY AND FRONT STREET
   - A STREET AND B STREET

14. ANY STORM WATER COLLECTED IN THE STORM DRAIN SYSTEM OF 3RD ST., OR NEAR 3RD ST., WILL DISCHARGE TO THE FOLLOWING NOYES SLOUGH OUTFALL:
   - MINNIE STREET BRIDGE

15. ANY STORM WATER COLLECTED IN THE STORM DRAIN SYSTEM OF 3RD ST., OR NEAR 3RD ST., WILL DISCHARGE TO THE FOLLOWING DRY SLOUGH OUTFALL:
   - HAMILTON AVENUE AND FRONT STREET



CATCH BASIN INLET PROTECTION
NOT TO SCALE

Preliminary Plans

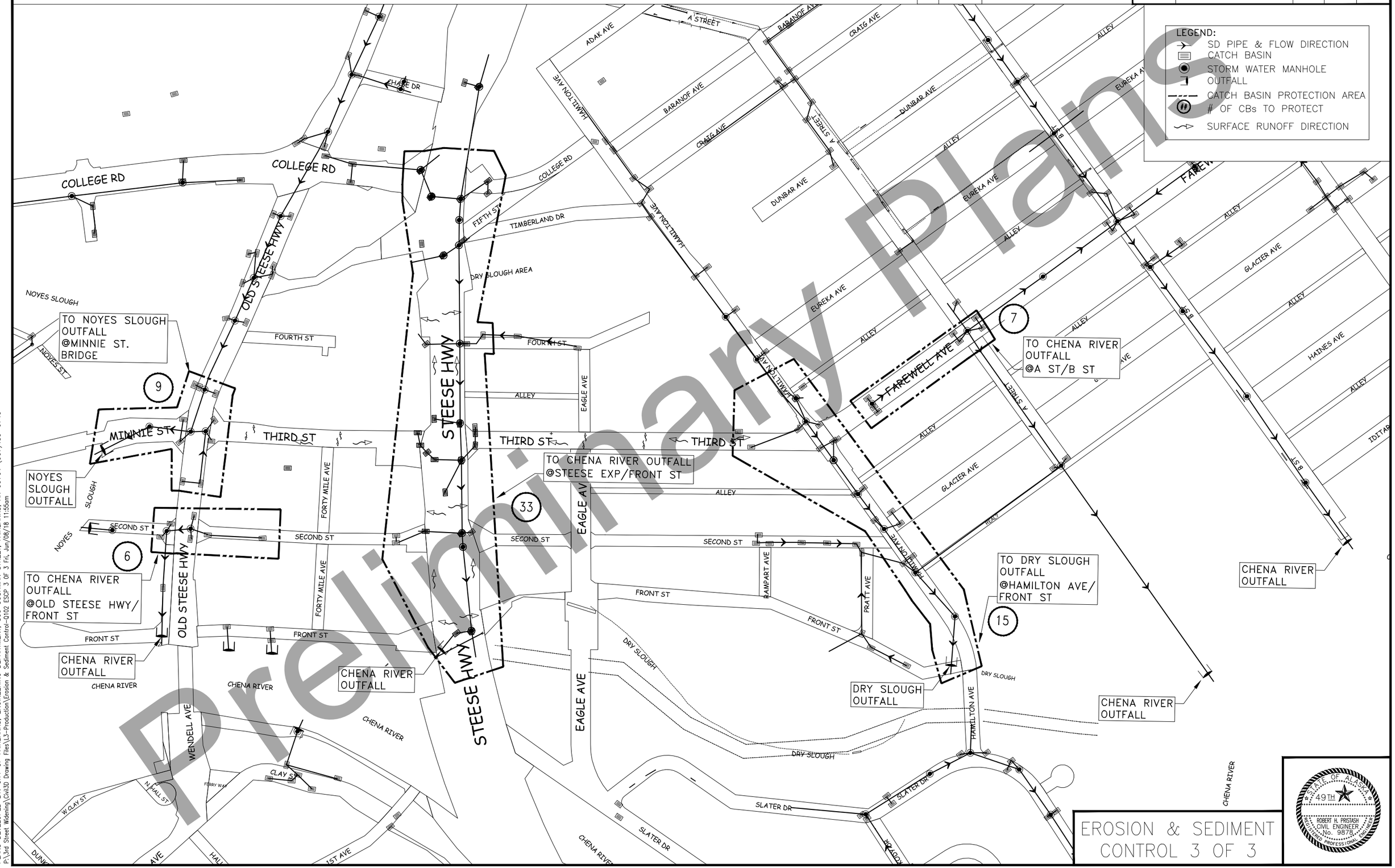
EROSION & SEDIMENT CONTROL 2 OF 3

STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Erosion & Sediment Control Detail-Q101 ESCP 2 OF 3 Fri, Jun/08/18 11:51am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	Q102	3



Preliminary Plans

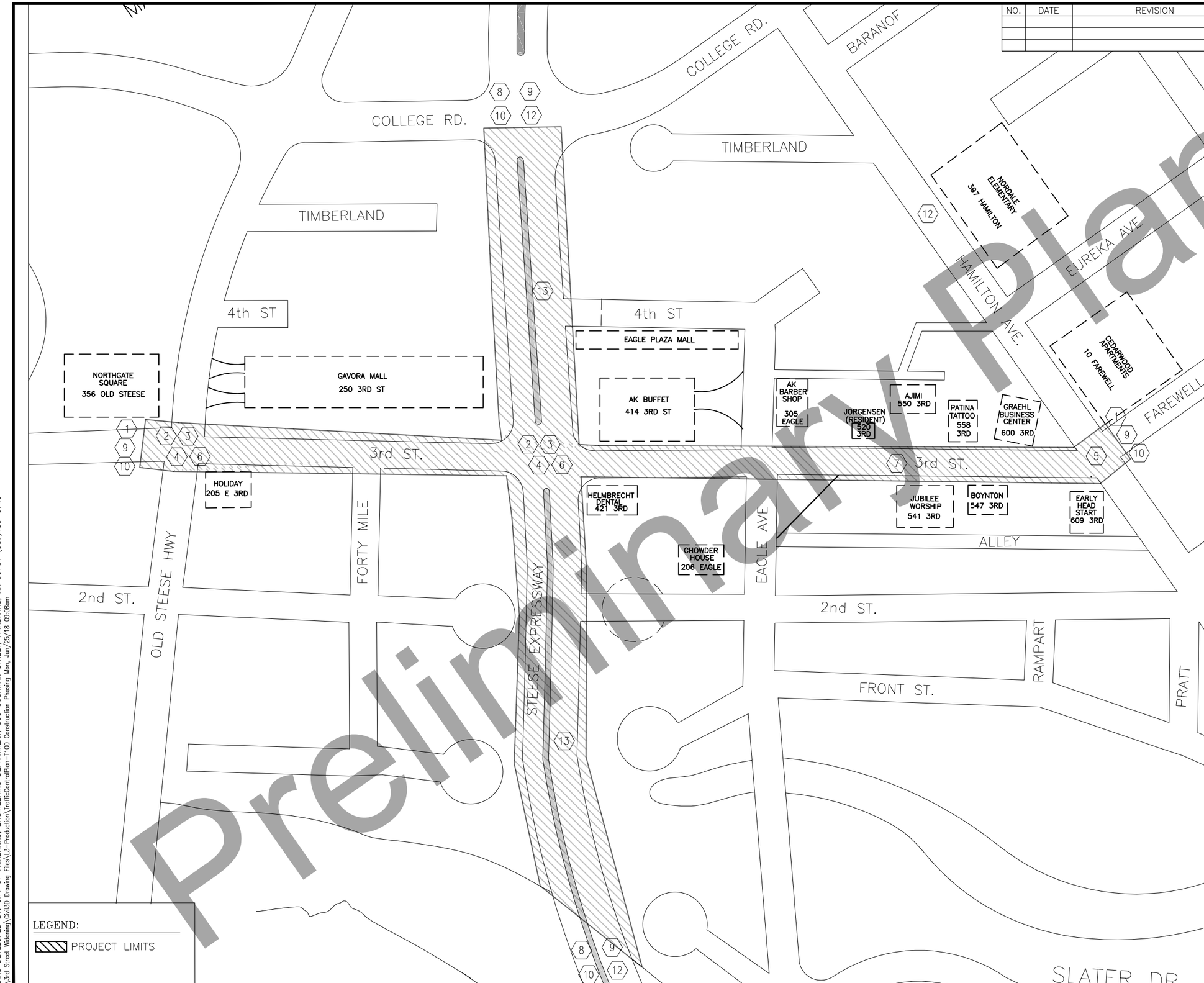
EROSION & SEDIMENT CONTROL 3 OF 3

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Erosion & Sediment Control-Q102 ESCP 3 OF 3 Fri, Jun/08/18 11:55am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	T100	4



CONSTRUCTION PHASING NOTES

1. 3RD STREET WILL BE CLOSED FROM OLD STEESE TO STEESE EXPRESSWAY AND FROM STEESE EXPRESSWAY TO EAGLE.
2. THE STEESE EXPRESSWAY AND OLD STEESE HIGHWAY INTERSECTIONS ARE TO REMAIN OPEN AND OPERATIONAL DURING BUSINESS HOURS (5:00 AM – 9:00 PM) FOR NORTH / SOUTH MOVEMENT.
3. NEW SIGNALS SHALL BE INSTALLED AND FULLY OPERATIONAL BEFORE THE OLD SIGNALS ARE REMOVED FOR OLD STEESE AND STEESE EXPRESSWAY.
4. STAGED CONSTRUCTION INTERSECTION IMPROVEMENTS SHALL BE DONE DURING NON–BUSINESS HOURS (9:00 PM – 5:00 AM).
5. THE HAMILTON AVENUE/3RD STREET INTERSECTION WILL REMAIN OPEN TO THRU TRAFFIC FOR THE DURATION OF THE PROJECT. THE HAMILTON AVENUE/3RD STREET INTERSECTION CAN BE STOP CONTROLLED.
6. THE STEESE EXPRESSWAY AND OLD STEESE HIGHWAY INTERSECTIONS SIGNALS SHALL NOT ALLOW TURNING MOVEMENTS ONTO 3RD ST.
7. 3RD STREET MUST MAINTAIN A ONE WAY LANE BETWEEN EAGLE AVENUE AND HAMILTON AVENUE FOR BUSINESS AND RESIDENCE ACCESS.
8. ROAD RESURFACING OF THE STEESE EXPRESSWAY SHALL BE DONE DURING NIGHT TIME DURING THE HOURS OF 9:00 PM – 5 AM.
9. NIGHT TIME ILLUMINATION WILL NOT BE REQUIRED FROM MAY 15 THROUGH AUGUST 15.
10. 3RD STREET WIDENING PROJECT WILL BE CONSTRUCTED IN ONE YEAR.
11. CONSTRUCTION OF 3RD STREET BETWEEN THE STEESE EXPRESSWAY AND HAMILTON SHALL NOT BE WORKED ON DURING SCHOOL MONTHS. SEE FNSB SCHOOL DISTRICT SCHEDULE FOR SUMMER CLOSURE.
12. THE NORTHBOUND 2 LANES OF TRAFFIC MAY BE CLOSED FOR RESURFACING OF STEESE EXPRESSWAY. 2 LANE TWO WAY TRAFFIC WILL BE PLACED ON SOUTHBOUND LANES WITH A MINIMUM OF 12' TRAVELED WAY. WHEN CONSTRUCTION COMPLETE ON THE NORTHBOUND LANES, TRAFFIC CAN BE ROUTED THROUGH THE NORTHBOUND LANE FOR SOUTHBOUND CONSTRUCTION.
13. ONE LANE CLOSURE ON STEESE EXPRESSWAY DURING DAY, WEEKENDS ONLY, FOR CURB MACHINE

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CE 9878
REGISTERED PROFESSIONAL ENGINEER

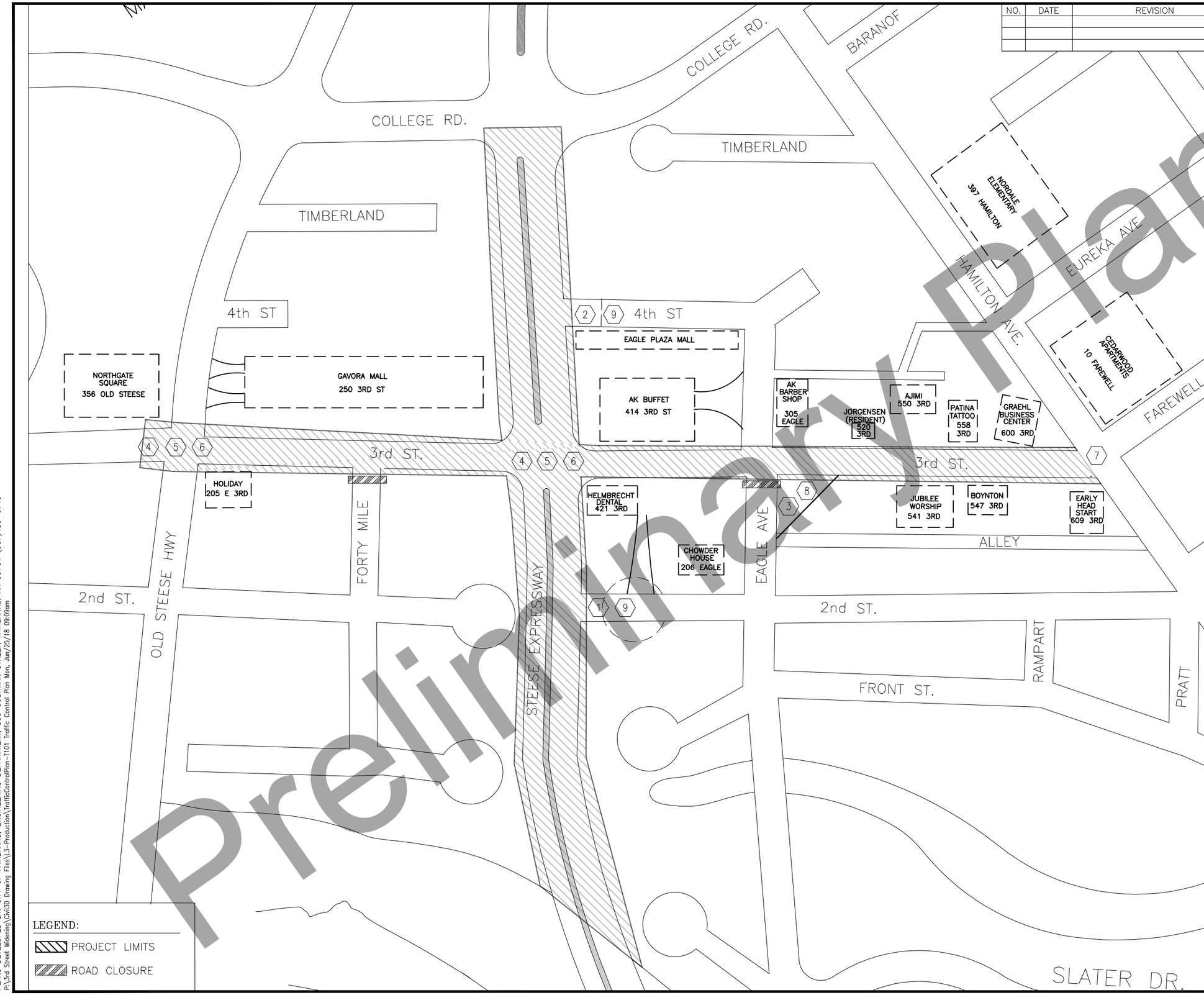
CONSTRUCTION PHASING 1 OF 1

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459–6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\TrafficControlPlan-T100 Construction Phasing Mon, Jun/25/18 09:08am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	T101	4



TRAFFIC CONTROL NOTES

1. CONTRACTOR TO PROVIDE "RIGHT IN AND RIGHT OUT ONLY" ACCESS ROUTE FROM 2ND STREET TO THE STEESE EXPRESSWAY. CLEAR/GRUB ROUTE AND REMOVE FENCE TO PROVIDE ACCESS FOR DURATION OF PROJECT. FENCE TO BE REPLACED AT END OF PROJECT. EXISTING BIKE PATH TO REMAIN AND BIKE PATH STOP SIGNS SHALL BE PROVIDED.

2. CONTRACTOR TO PROVIDE "RIGHT IN AND RIGHT OUT ONLY" ACCESS ROUTE FROM 4TH STREET TO THE STEESE EXPRESSWAY. CLEAR/GRUB ROUTE AND REMOVE FENCE TO PROVIDE ACCESS. EXISTING BIKE PATH TO REMAIN AND BIKE PATH STOP SIGNS SHALL BE PROVIDED. REMOVE EXISTING SIGNS AND 2 JERSEY BARRIERS FOR DURATION OF PROJECT AND REPLACE AT END OF PROJECT. REMOVE FRAME OF STORM DRAIN MANHOLE AND PROVIDE TEMPORARY STEEL PLATE OVER STORM DRAIN MANHOLE. REMOVE PARKING LOT LIGHT POLE FOR DURATION OF PROJECT AND REPLACE AT END OF PROJECT.

3. TEMPORARY CONSTRUCTION EASEMENT FOR BUSINESS ACCESS ON 3RD STREET TO BE STAKED BY SURVEYOR.

4. THE STEESE EXPRESSWAY AND OLD STEESE HIGHWAY INTERSECTIONS ARE TO REMAIN OPEN AND OPERATIONAL DURING BUSINESS HOURS (5:00 AM – 9:00 PM) WITH LIMITED TURNING MOVEMENTS. CONTRACTOR MAY REDUCE BOTH INTERSECTIONS FROM 4 LANE TRAFFIC TO 2 LANE TRAFFIC FROM 9:00 P.M. TO 5:00 A.M.

5. NEW SIGNALS SHALL BE INSTALLED AND FULLY OPERATIONAL BEFORE THE OLD SIGNALS ARE REMOVED.

6. STAGED CONSTRUCTION INTERSECTION IMPROVEMENTS SHALL BE DONE DURING NON–BUSINESS HOURS (9:00 PM – 5:00 AM). CONTRACTOR MAY REDUCE BOTH INTERSECTIONS TO SINGLE LANE TRAFFIC WITH FLAGGERS DURING NON–BUSINESS HOURS.

7. THE HAMILTON AVENUE/3RD STREET INTERSECTION WILL BE CLOSED TO THRU TRAFFIC DURING CONSTRUCTION OF THE INTERSECTION. CONTRACTOR MAY ROUTE TRAFFIC THROUGH GLACIER AVENUE AND "A" STREET. AFTER CONSTRUCTION OF THE INTERSECTION, THE HAMILTON AVENUE/3RD STREET INTERSECTION WILL BE STOP CONTROLLED. TRAFFIC MAY BE ROUTED THROUGH HAMILTON AVENUE.

8. JUBILEE CHURCH EASEMENT FOR ACCESS.

9. STEESE EXPRESSWAY ACCESS CONTROL BREAKS.

STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

TRAFFIC CONTROL PLAN 1 OF 3

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459–6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\TrafficControlPlan-T101 Traffic Control Plan Mon, Jun/25/18 09:09am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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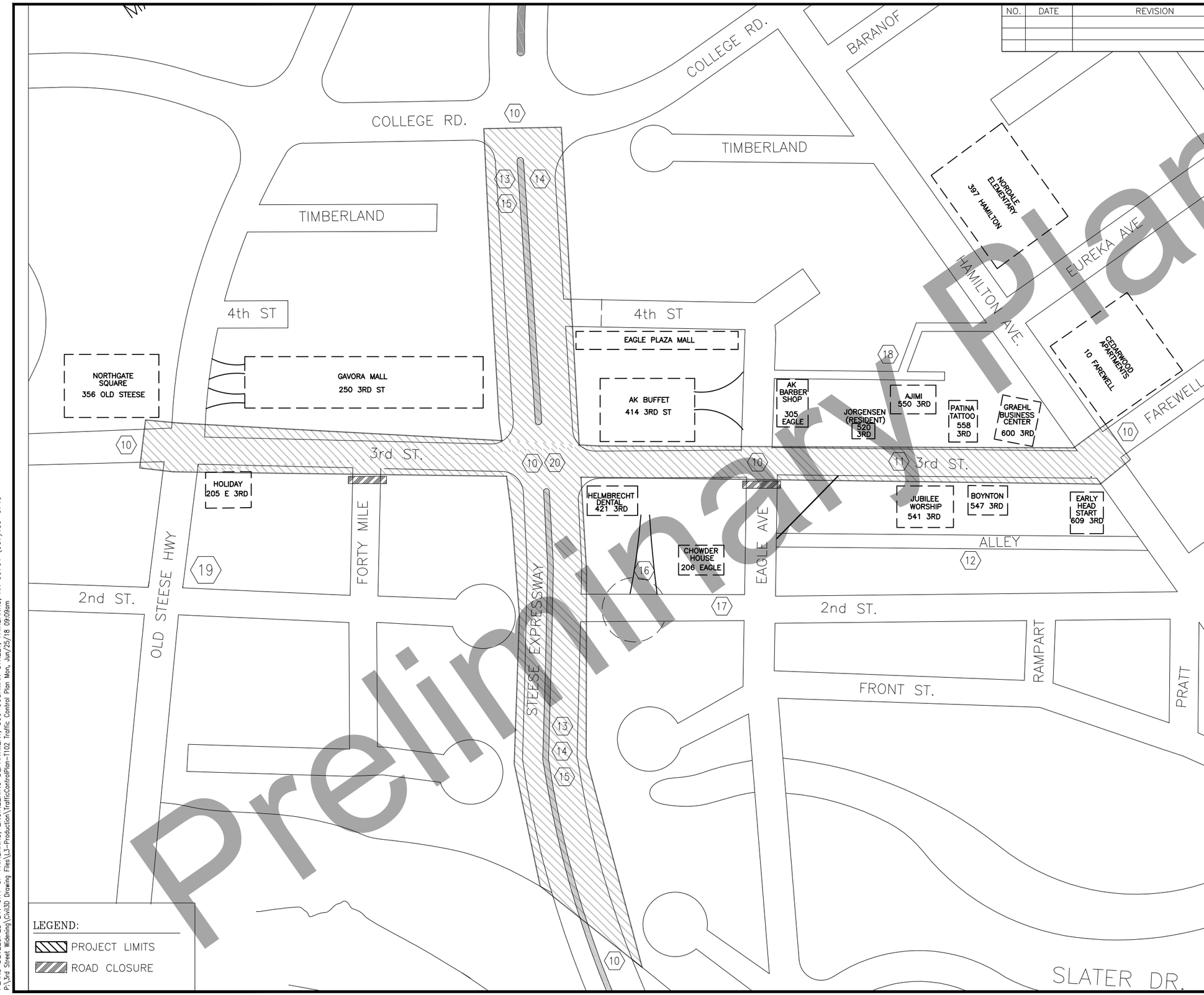


TRAFFIC CONTROL NOTES

10. ADA COMPLIANT PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL INTERSECTIONS AND STREETS WITHIN PROJECT LIMITS. PEDESTRIANS CANNOT CROSS AT NEW STEESE AND 3RD STREET. PEDESTRIAN FLAGGER SHALL BE PROVIDED FOR PUBLIC ACCESS THROUGHOUT PROJECT LIMITS.

11. 3RD STREET MUST MAINTAIN A ONE WAY LANE BETWEEN EAGLE AVENUE AND HAMILTON AVENUE FOR BUSINESS AND RESIDENCE ACCESS.

12. CONTRACTOR MUST MAINTAIN ACCESS ON 20' ALLEY, SOUTH OF 3RD STREET BETWEEN EAGLE & HAMILTON AVENUE FOR 2-WAY TRAFFIC. CLEAR/GRUB ALLEY AND IMPROVE ROAD STRUCTURE AS REQUIRED. PAY SUBSIDIARY TO PAY ITEM 643(2) TRAFFIC MAINTENANCE.

13. ROAD RESURFACING OF THE STEESE EXPRESSWAY SHALL BE DONE AT NIGHT TIME DURING THE HOURS OF 9:00 PM – 5 AM.

14. 2 LANES OF TWO WAY TRAFFIC WITH A MINIMUM OF 12' TRAVELED WAY MUST BE MAINTAINED ON THE 4 LANE STEESE EXPRESSWAY FROM 5:00 AM TO 9:00 PM.

15. THE NORTHBOUND 2 LANES OF TRAFFIC MAY BE CLOSED FOR RESURFACING OF STEESE EXPRESSWAY. 2 LANE TWO WAY TRAFFIC WILL BE PLACED ON SOUTHBOUND LANES WITH A MINIMUM OF 12' TRAVELED WAY. WHEN CONSTRUCTION COMPLETE ON THE NORTHBOUND LANES, TRAFFIC CAN BE ROUTED THROUGH THE NORTHBOUND LANE FOR SOUTHBOUND CONSTRUCTION.

16. HELMBRECHT DENTAL SHALL HAVE ACCESS VIA 2ND STREET. TEMPORARY CONSTRUCTION PERMIT IS REQUIRED.

17. MACS TRANSIT BROWN BUS LINE ROUTES THROUGH PROJECT LIMITS. PROPOSED REROUTE THRU 2ND STREET TO FAREWELL AVENUE.

18. BUSINESS ACCESS ONLY WITH A 45-FT CLEAR WIDTH FOR 2 LANE TWO WAY TRAFFIC AND PEDESTRIANS / BICYCLES. EASEMENT IS REQUIRED.

19. THE NEIGHBORHOOD AND BUSINESSES ON THE SOUTH SIDE OF 3RD STREET BETWEEN THE OLD STEESE HIGHWAY AND STEESE EXPRESSWAY SHALL HAVE ACCESS FROM 2ND STREET.

20. PEDESTRIAN AND BICYCLIST ACCESS SHALL REMAIN OPEN TO NORTH AND SOUTH TRAFFIC AT THE STEESE EXPRESSWAY INTERSECTION. PEDESTRIANS WILL NOT CROSS EAST AND WEST AT THE STEESE EXPRESSWAY INTERSECTION BUT WILL USE THE COLLEGE ROAD INTERSECTION TO CROSS.

STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

TRAFFIC CONTROL PLAN 2 OF 3

Preliminary Plans

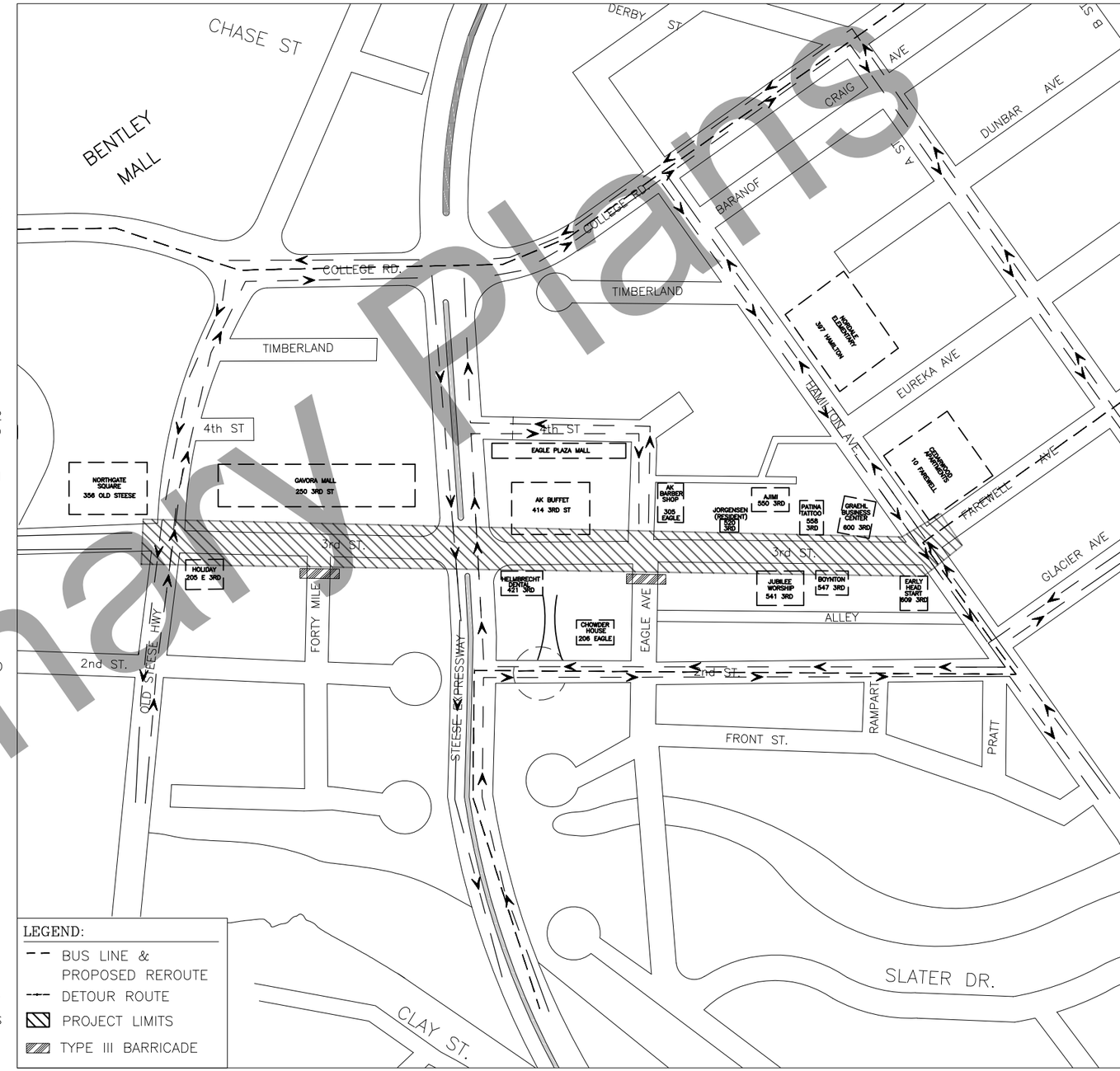
PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\TrafficControlPlan-T102 Traffic Control Plan Mon, Jun/25/18 09:09am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001 / Z625410000	2020	T103	4

TRAFFIC CONTROL GENERAL NOTES

1. THESE TRAFFIC CONTROL PLANS (TCPs) ARE GENERAL IN NATURE. CONTRACTOR TO PROVIDE DETAILED TRAFFIC CONTROL PLANS TO ENGINEER FOR APPROVAL 7 DAYS PRIOR TO CONSTRUCTION. NO WORK SHALL BEGIN WITHOUT AN APPROVED TCP.
2. REFER TO THE ADOT&PF ALASKA TRAFFIC MANUAL (2016) FOR TRAFFIC CONTROL PLAN SPECIFICATIONS.
3. IMPLEMENT ONLY ONE TRAFFIC CONTROL SETUP AT A TIME AND RESTORE FULL FUNCTION AS SOON AS PRACTICABLE.
4. ALL SIGNS AND BARRICADES SHALL MEET REQUIREMENTS OF THE CURRENT ALASKA TRAFFIC MANUAL (ATM) AND ALASKA SIGN DESIGN SPECIFICATION (ASDS). THE FINAL JUDGMENT IN THE SELECTION, NUMBER AND APPLICATION OF THE TRAFFIC CONTROL DEVICES AND LOCATION OF ALL TRAFFIC CONTROL MEASURES WILL REST WITH THE ENGINEER.
5. MACS TRANSIT BUS BROWN LINE ROUTES THROUGH PROJECT LIMITS. BUS ARRIVE AND DEPART SCHEDULE: MON THROUGH FRI 7:00 AM – 9:10 PM; SAT 9:15 AM – 6:40 PM.
6. TEMPORARY PEDESTRIAN PATHWAYS SHALL BE PROVIDED TO ALL BUS STOPS AND OTHER AREAS AND SHALL BE A MINIMUM OF 5 FEET WIDE, EXPECT AS DIRECTED. PATHS SHALL BE CONSTRUCTED, REMOVED, AND RECONSTRUCTED AS REQUIRED AND SHALL BE TOPPED WITH A MINIMUM OF 2.5" RECYCLED ASPHALT COMPACTED TO 94%. ALL PATHS SHALL BE SEPARATED FROM THE WORK BY A FENCE.
7. EXISTING SIGNS WHICH CONFLICT WITH CONSTRUCTION SIGNING SHALL BE COVERED DURING PROJECT. COORDINATE REMOVAL WITH CITY OF FAIRBANKS PUBLIC WORKS DEPARTMENT.
8. CONSTRUCTION SIGNING SPECIFIED MAY BE ALTERED BY THE ENGINEER TO MEET CHANGING CONDITIONS AND TO PROTECT THE TRAVELING PUBLIC.
9. BUSINESSES WITHIN THE PROJECT LIMITS MAY HAVE DELIVERIES AND GARBAGE PICK–UP DURING NON–BUSINESS HOURS. CONTRACTOR SHALL CONTACT ALL BUSINESSES IN THE PROJECT AND COORDINATE WITH THEM TO ENSURE ACCESS.
10. ALL BARRICADES SHALL HAVE 1 OPERABLE FLASHING LIGHT FOR EACH 10 FEET OF BARRICADE, WITH A MINIMUM OF 2 LIGHTS PER TYPE III BARRICADE EXCEPT IN A TAPER WHERE ONLY THE FIRST TWO LIGHTS SHALL FLASH (TYPE A) AND THE REMAINDER SHALL BE STEADY BURN (TYPE C).
11. PARKING LOTS AND DRIVEWAYS ADJACENT TO AN EXCAVATION SHALL BE RAMPED TO PROVIDE ACCESS. DELINEATE WITH CONES.
12. WHEN STREETS ARE RESTRICTED TO ONE LANE, THE MINIMUM CLEAR WIDTH SHALL BE 12' UNLESS OTHERWISE SPECIFIED ON AN APPROVED TRAFFIC CONTROL PLAN (TCP) OR AS DIRECTED BY THE ENGINEER.
13. ACCESS SHALL BE MAINTAINED FOR THE PASSAGE OF EMERGENCY VEHICLES THROUGH THE PROJECT.
14. ACCESS SHALL BE PROVIDED TO COMMERCIAL PROPERTIES DURING THEIR BUSINESS HOURS AND TO RESIDENTIAL PROPERTIES CONTINUOUSLY. CLOSURES SHALL NOT OCCUR WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. COORDINATE CLOSURE PLANS WITH THE AFFECTED BUSINESS OWNERS AND PROPERTY OWNERS. NOTIFY OWNERS A MINIMUM OF 48 HOURS PRIOR TO IMPLEMENTATION OF AN APPROVED CLOSURE.
15. CLOSURES CAN ONLY OCCUR WITH AN ACCEPTABLE DETOUR APPROVED BY THE ENGINEER, OTHERWISE CONTRACTOR TO UTILIZE HALF WIDTH CONSTRUCTION.
16. ALTERNATE ACCESS MAY ALSO BE USED AS PART OF AN APPROVED TRAFFIC CONTROL PLAN. ALTERNATE ACCESS ROUTES SHALL BE CLEARLY SIGNED.
17. TYPE "A" FLASHING WARNING LIGHTS SHALL BE USED TO MARK THE TYPE III BARRICADES, ROAD CLOSURES, AND ADVANCE DETOUR SIGNING AT NIGHT.
18. SIX (6) MESSAGE BOARDS WILL BE SUBSIDIARY TO PAY ITEM 643(2) – TRAFFIC MAINTENANCE.
19. CONTRACTOR SHALL INTEGRATE THE TRAFFIC CONTROL WITH OTHER CONSTRUCTION IN THE AREA.
20. CONTRACTOR SHALL PROVIDE AFFECTED RESIDENTS NOTICE OF CONSTRUCTION A MAXIMUM OF 3 WEEKS AND A MINIMUM OF 1 WEEK PRIOR TO CONSTRUCTION. NOTICE TO INCLUDE NEWSPAPER ADVERTISEMENT AND FLYERS TO RESIDENTS AND BUSINESS OWNERS.
21. USE EXPRESSWAY/FREEWAY DIMENSIONS SPECIFIED IN THE AKDOT'S ALASKA SIGN DESIGN SPECIFICATIONS MANUAL FOR ANY SIGNS PLACED ON THE STEESE HIGHWAY. USED LISTED CONVENTIONAL DIMENSIONS FOR SIGNS ON ALL OTHER ROADS. REFERENCE AKDOT&PF WEBSITE: http://www.dot.state.ak.us/stwddes/dcstraffic/asdsmsg.shtml
22. INSTALL PEDESTRIAN FENCING AROUND ALL OPEN EXCAVATIONS AT NIGHT.
23. THE CONTRACTOR CAN OPEN A SEGMENT TO TRAFFIC AT ANY LEVEL IN THE EXCAVATION OR BACKFILL WITH AN APPROVED TCP.
24. ALL SPECIAL CONSTRUCTION SIGNS SHALL BE FABRICATED OF MATERIALS CONFORMING TO SECTION 615 OF THE SPECIFICATIONS AND SHALL HAVE A BLACK LEGEND ON ORANGE BACKGROUND.
25. CONTRACTOR SHALL PROVIDE PERSONNEL TO STOP PEDESTRIANS FROM ENTERING WORK ZONE AND KEEP THEM ON THE DESIGNATED PEDESTRIAN PATH.
26. ONE LANE, TWO–WAY TRAFFIC REQUIRES ONE FLAGGER AT EACH END OF THE TRAFFIC CONTROL ZONE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
27. TEMPORARY STRIPING SHALL BE EITHER TEMPORARY RAISED PAVEMENT MARKERS OR PREFORMED PAVEMENT MARKING TAPE.
28. THERE WILL BE NO VEGETATIVE CLEARING ALLOWED FROM MAY 1 – JULY 15 FOR THE USFWS BIRD NESTING WINDOW.



DETOURS

TRAFFIC CONTROL PLAN 3 OF 3

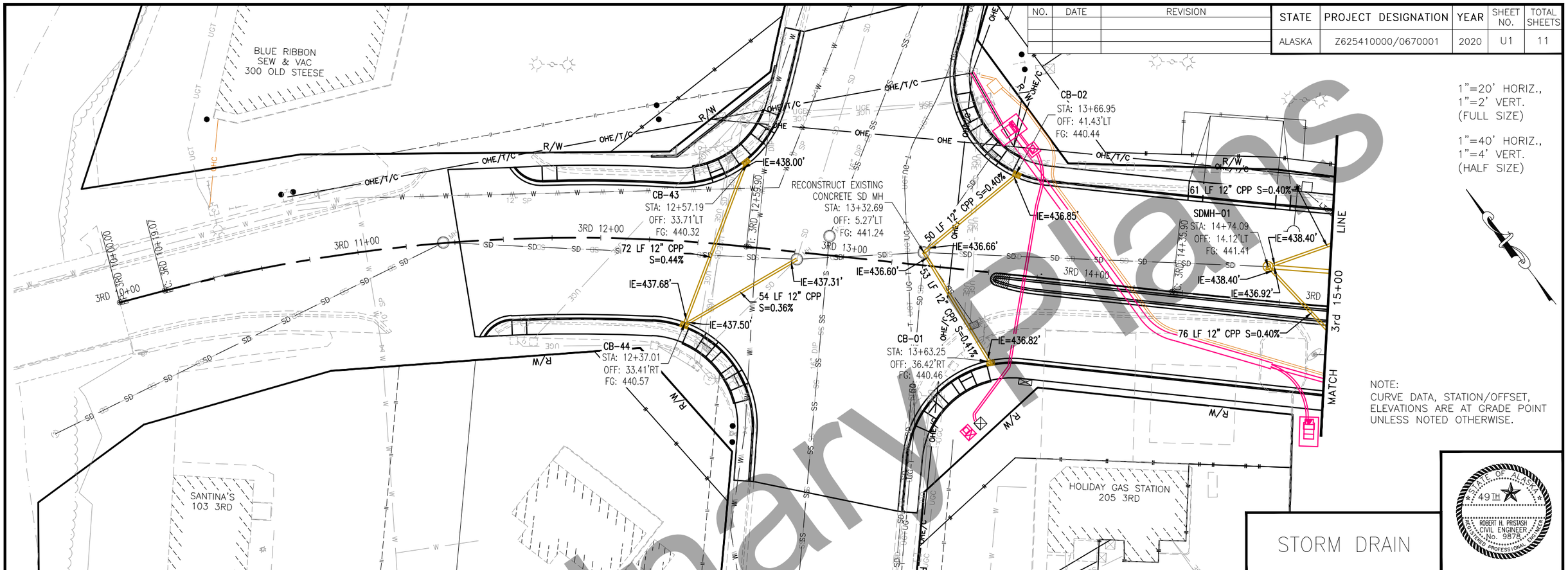
STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459–6740
P:\3rd street widening\civil3d drawing files\3-production\TrafficControlPlan-T103 Traffic Control Plan Tue, Jul/03/18 09:21am

NO.	DATE	REVISION

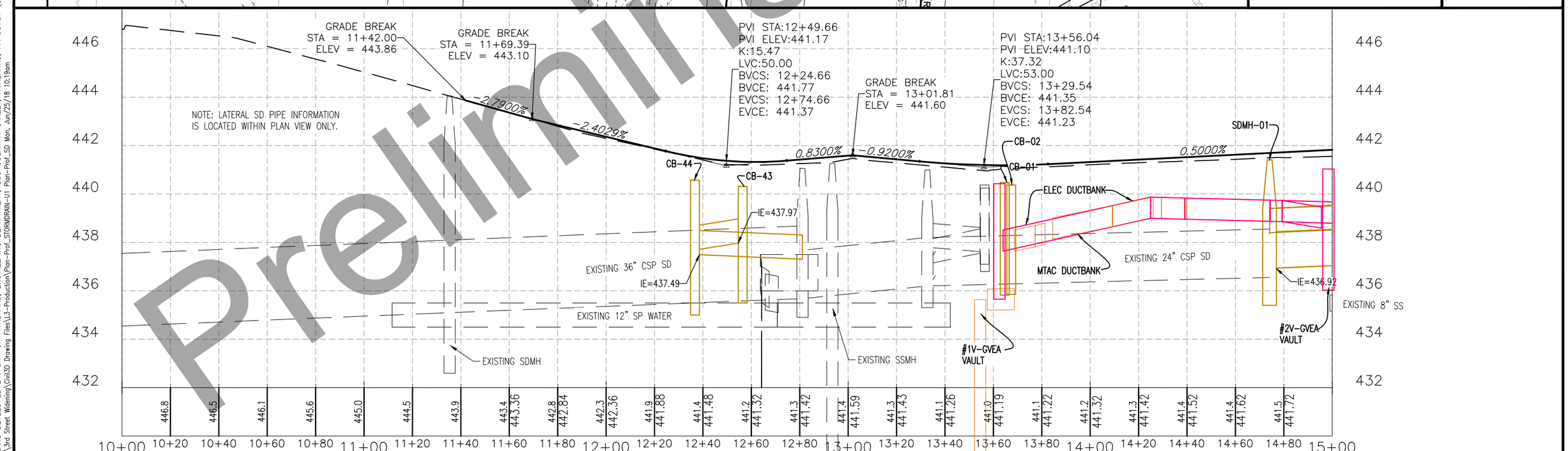
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U1	11



NOTE:
CURVE DATA, STATION/OFFSET, ELEVATIONS ARE AT GRADE POINT UNLESS NOTED OTHERWISE.

STORM DRAIN

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_STORMDRAIN-U1 Plan-Prof_SD Mon, Jun/25/18 10:19am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U2	11

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(FULL SIZE)

1"=40' HORIZ.,
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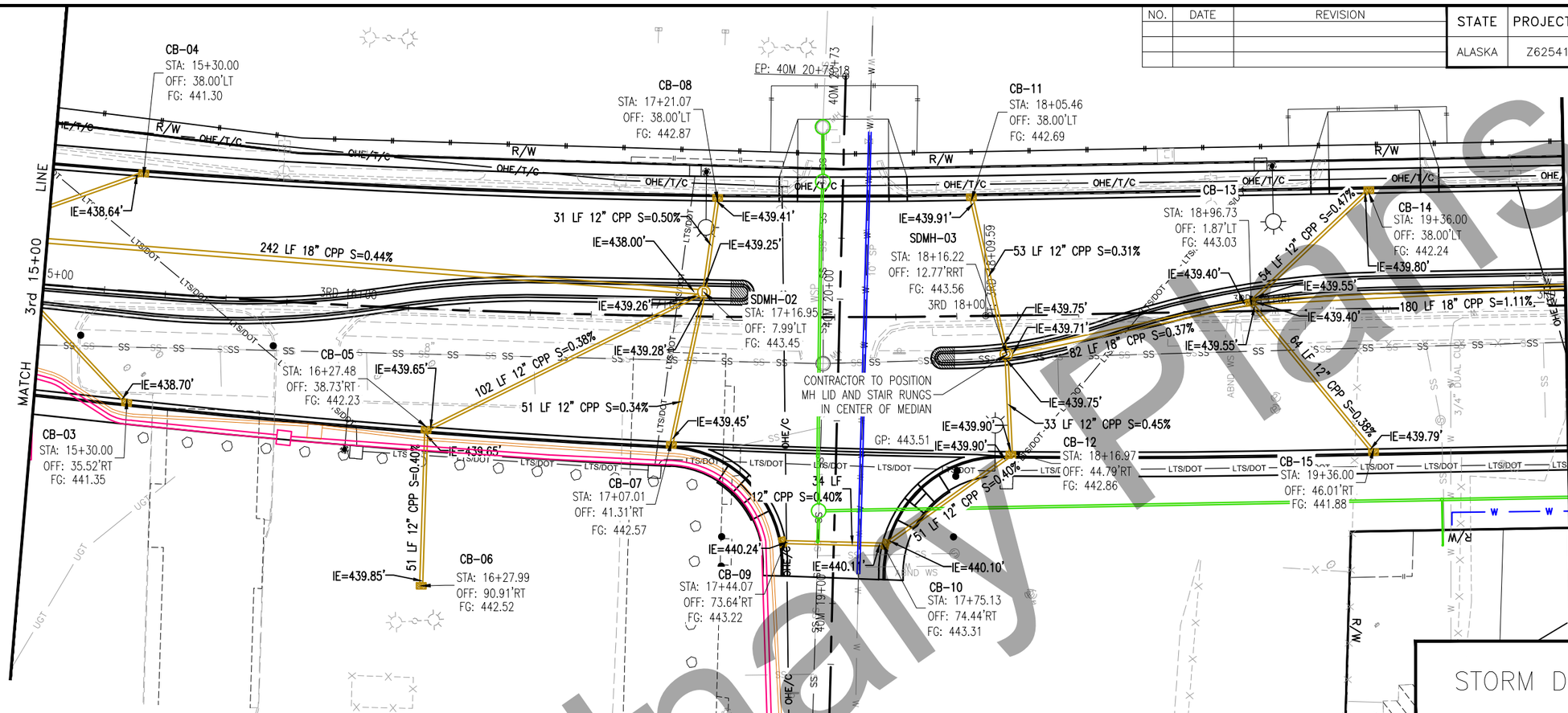
(HALF SIZE)



NOTE:
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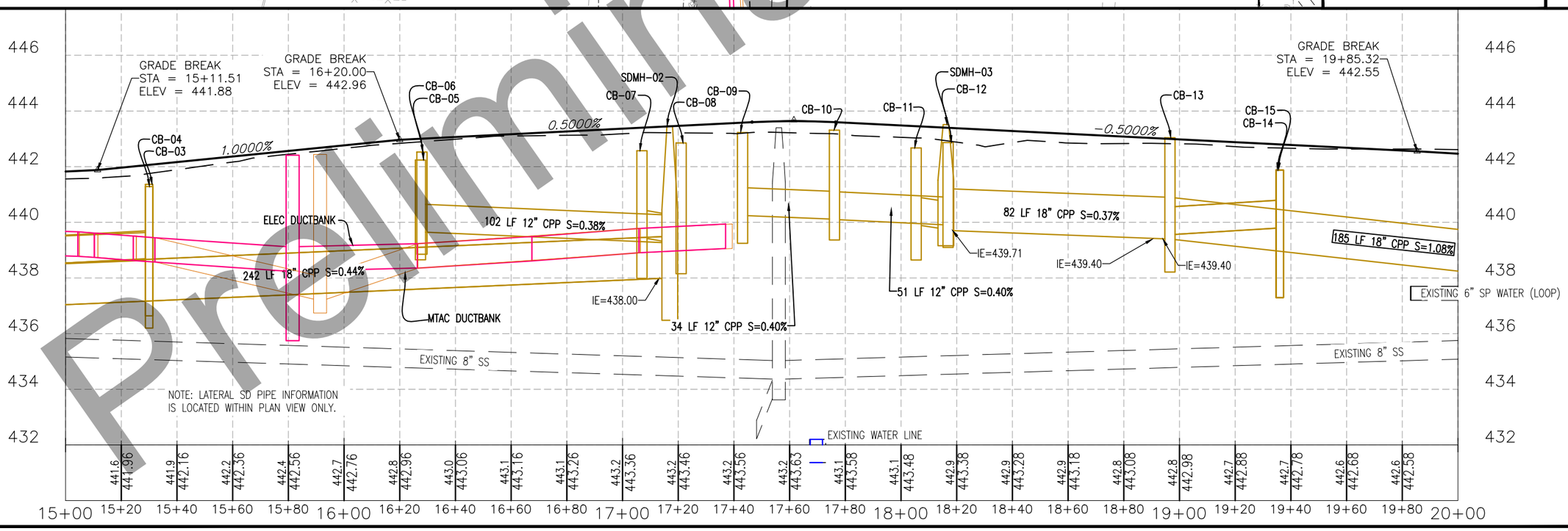
STORM DRAIN

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

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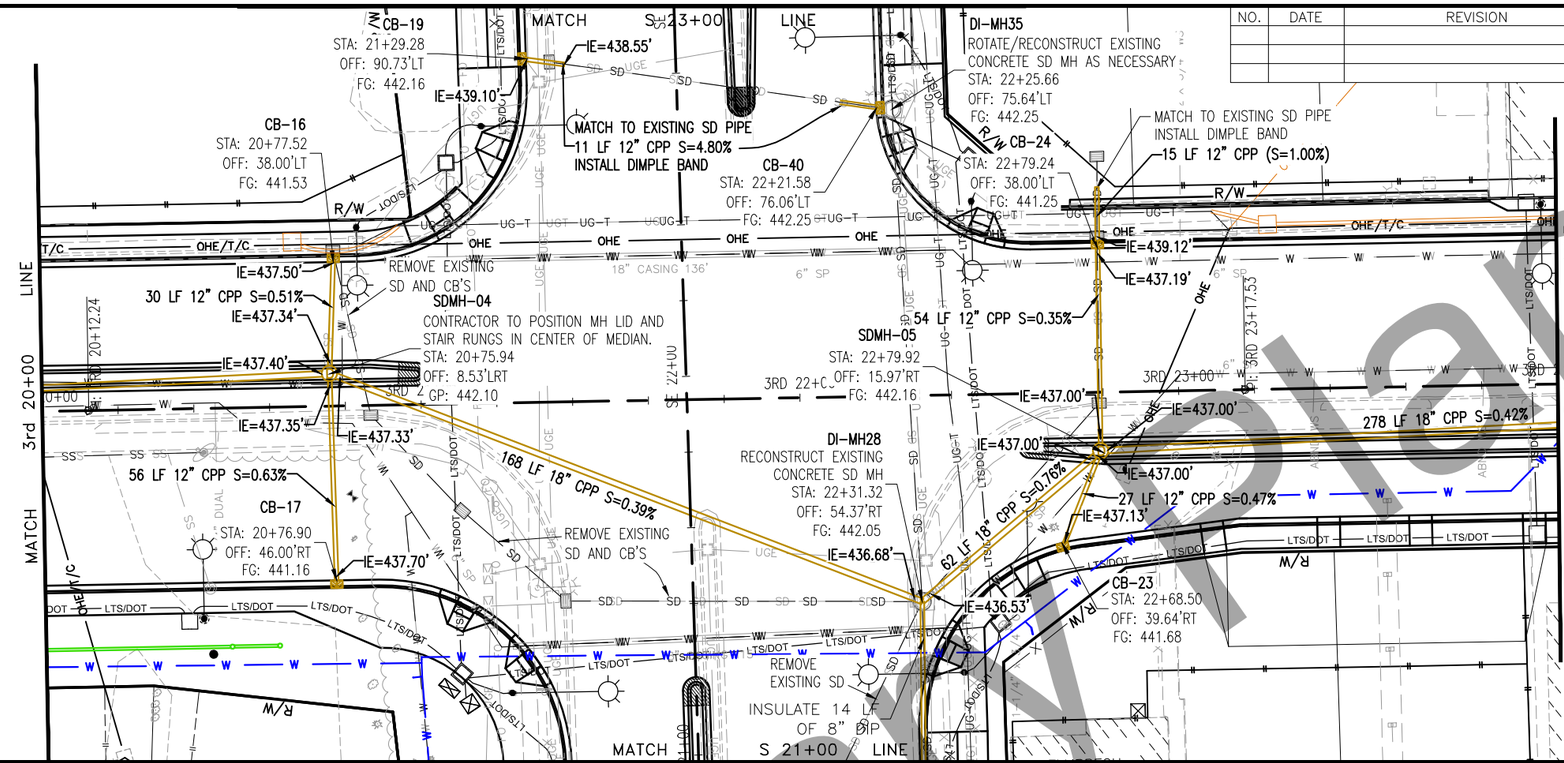
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U3	11



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(FULL SIZE)

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(HALF SIZE)

NOTE:
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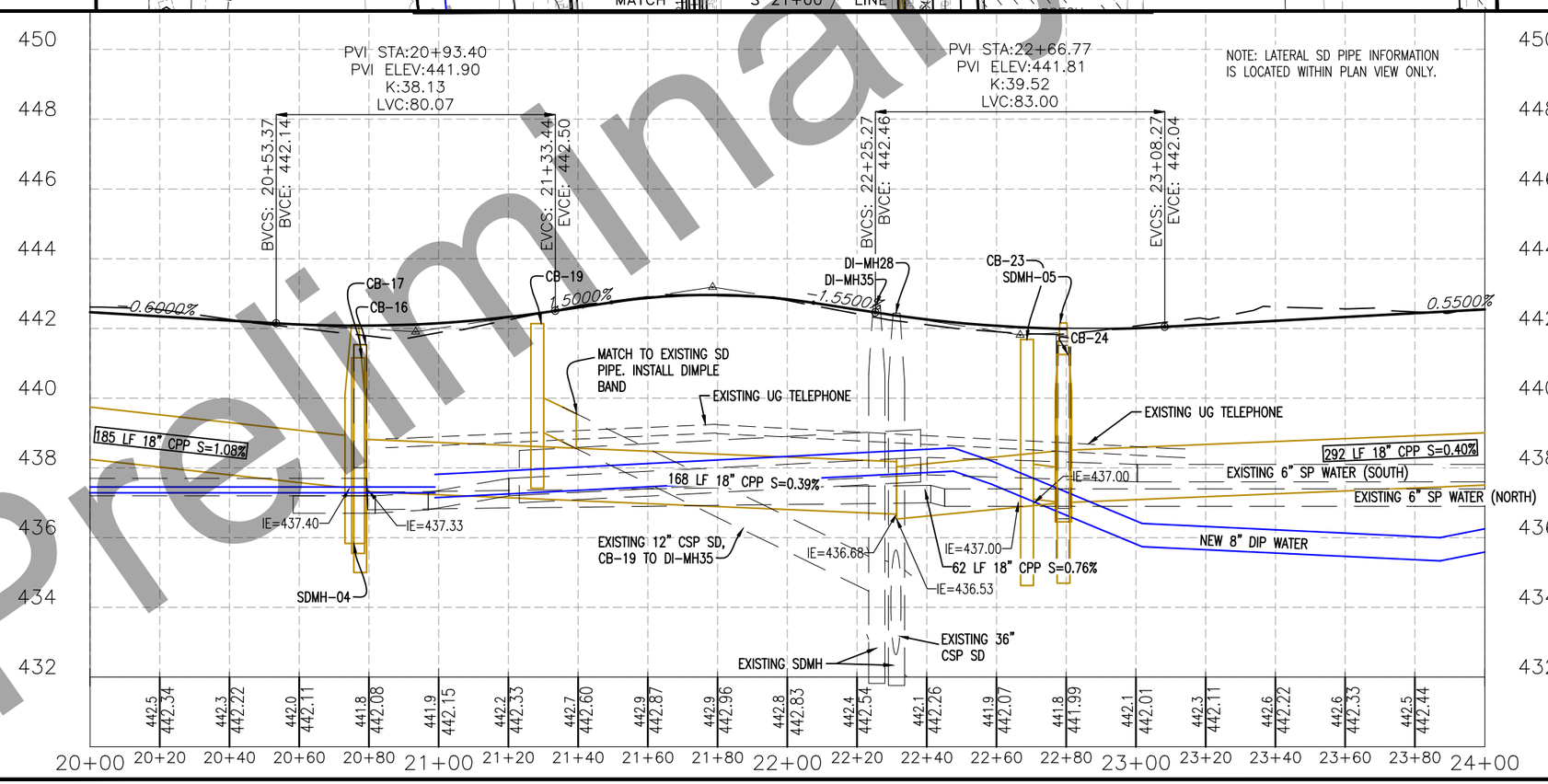
STORM DRAIN

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U4	11

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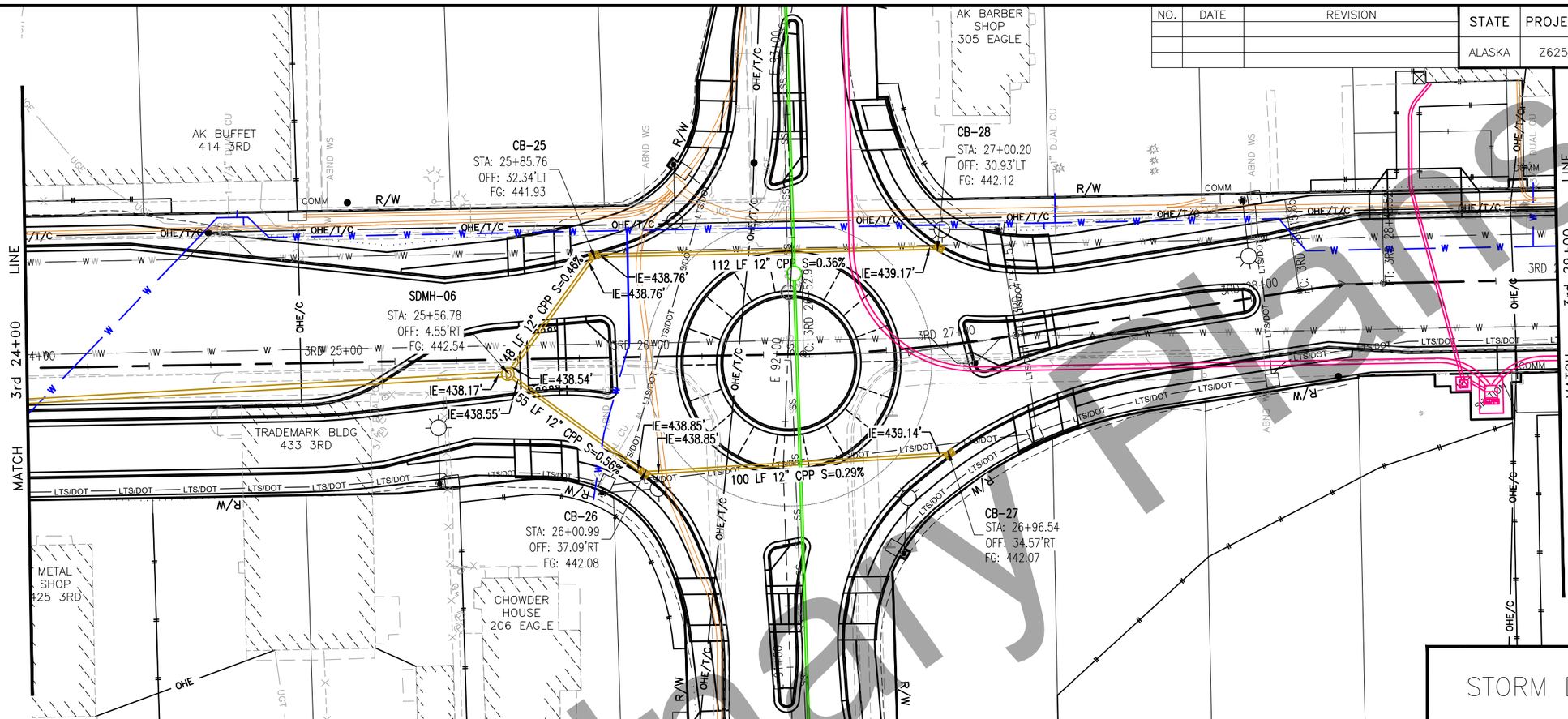

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STORM DRAIN

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
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No. 9878
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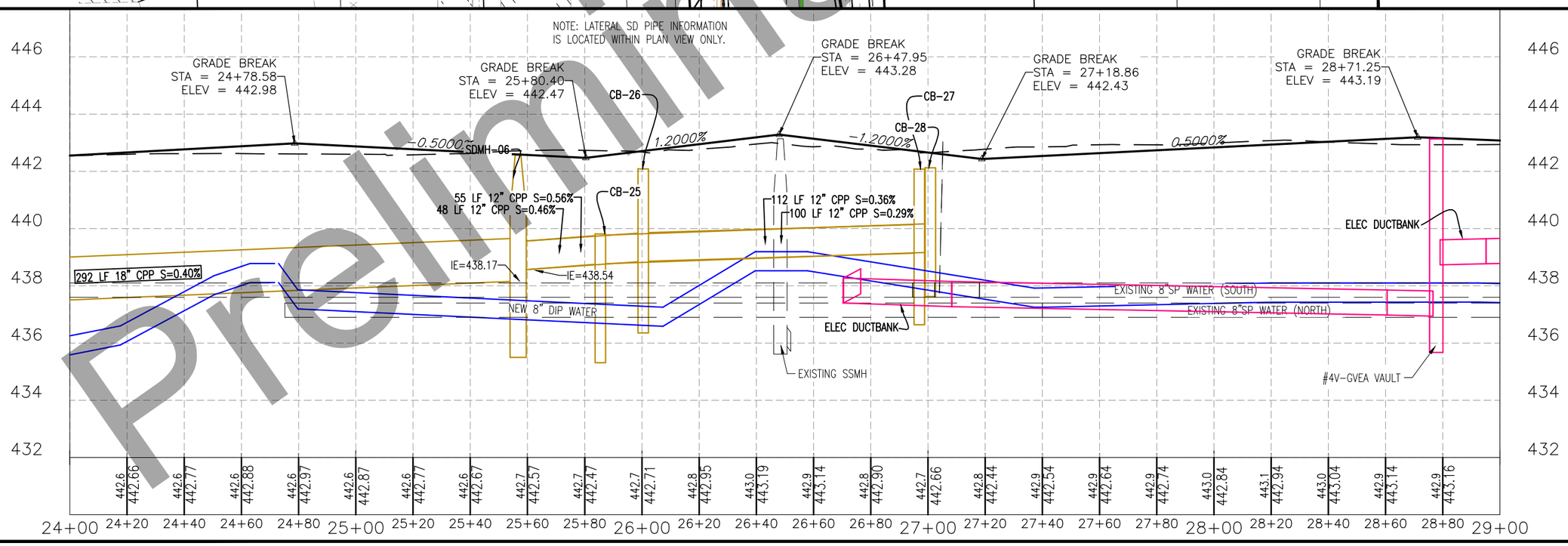

Preliminary Plans

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U5	11

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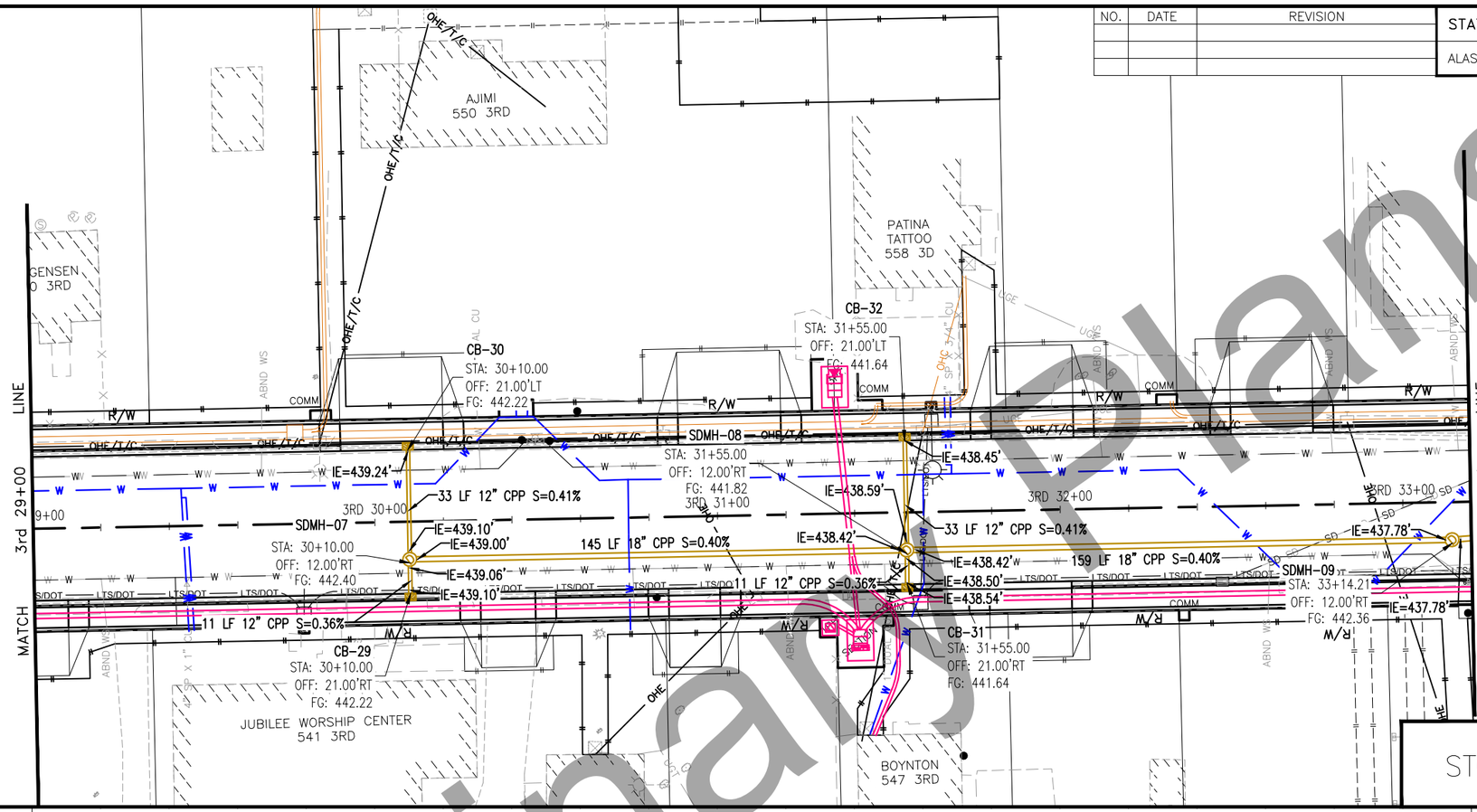

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STORM DRAIN

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
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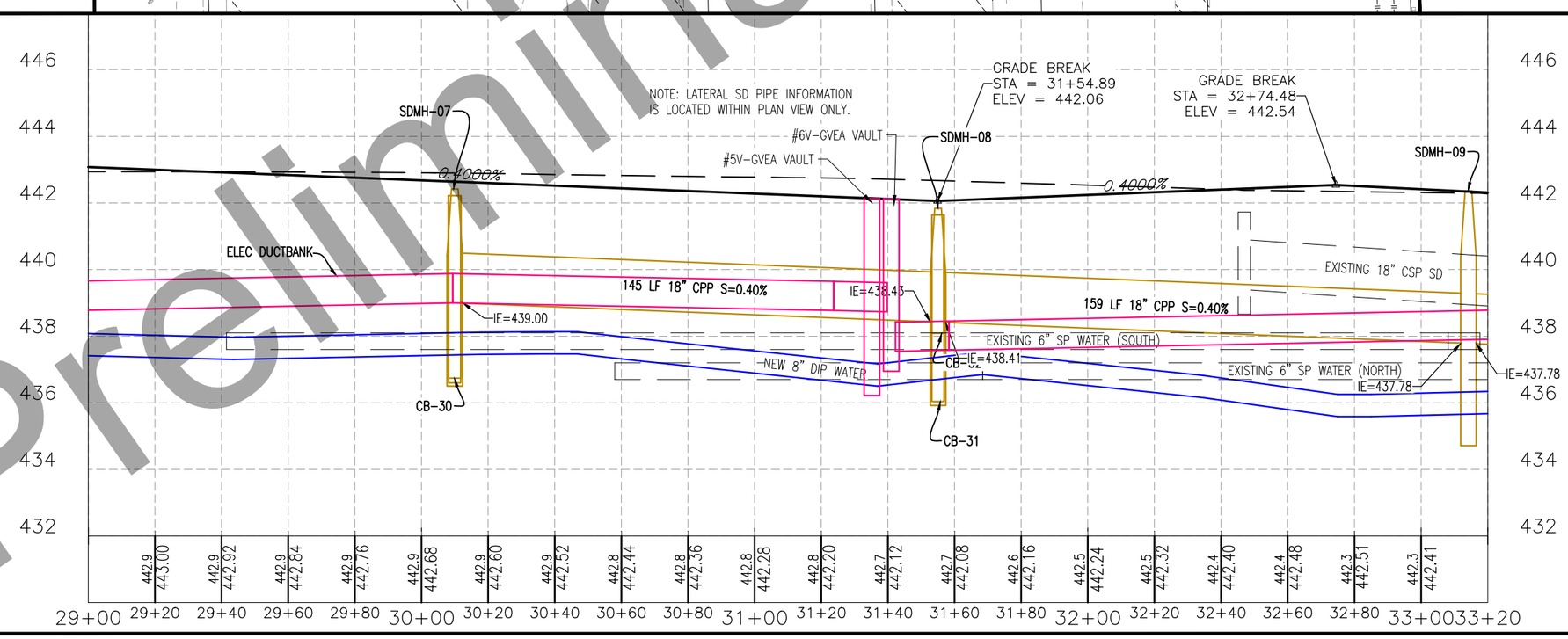

Preliminary Plans

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U6	11

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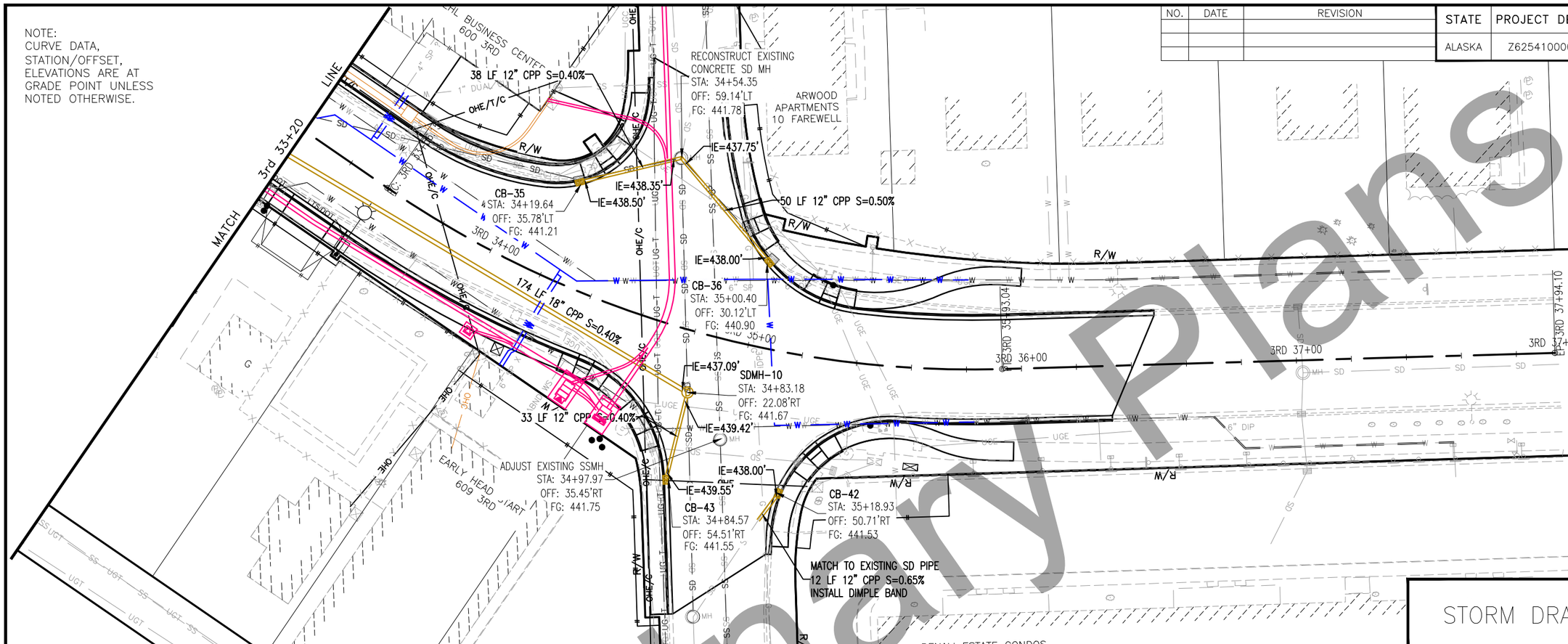
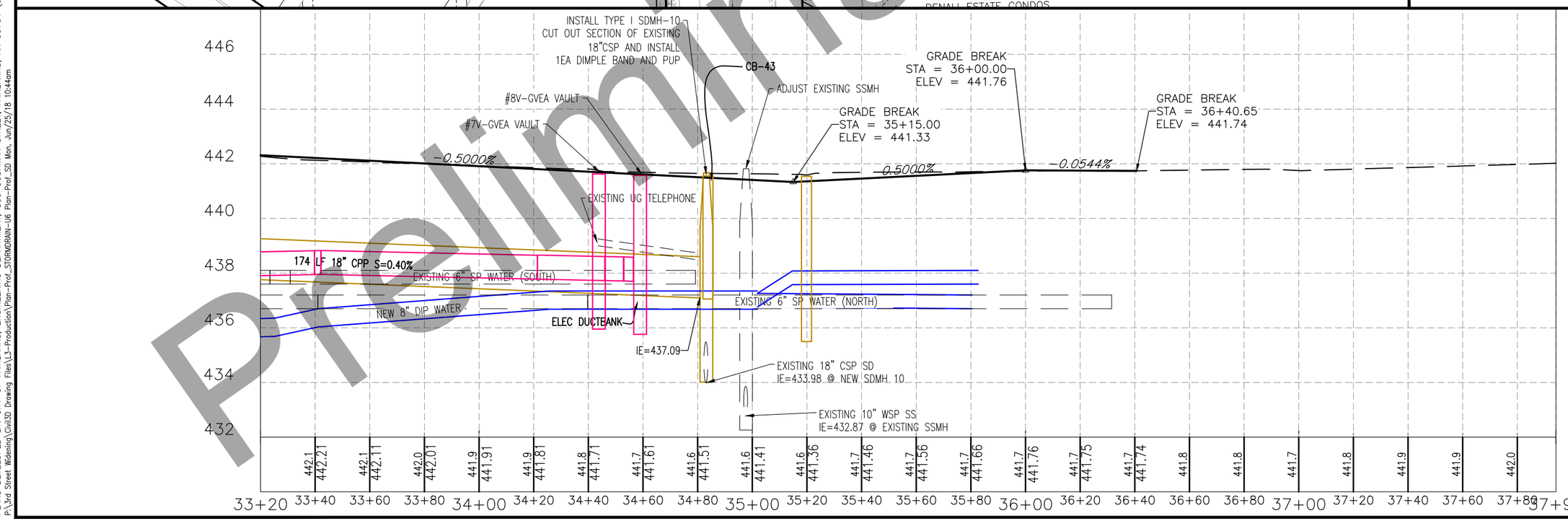


STORM DRAIN



STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
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Preliminary Plans

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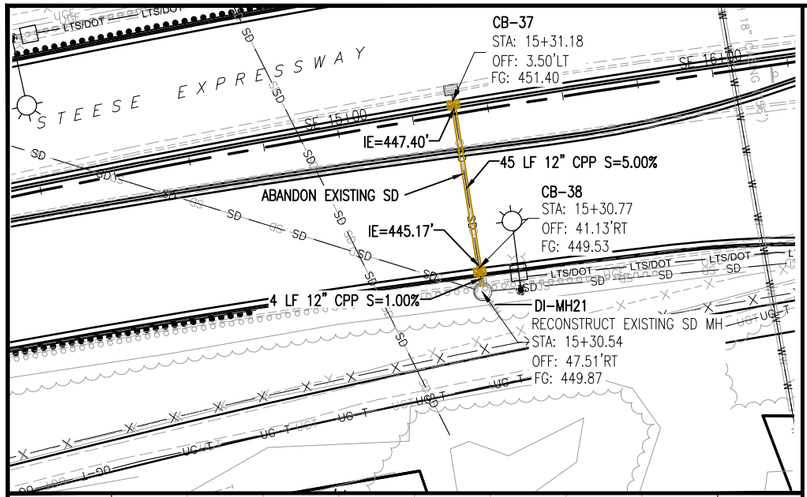
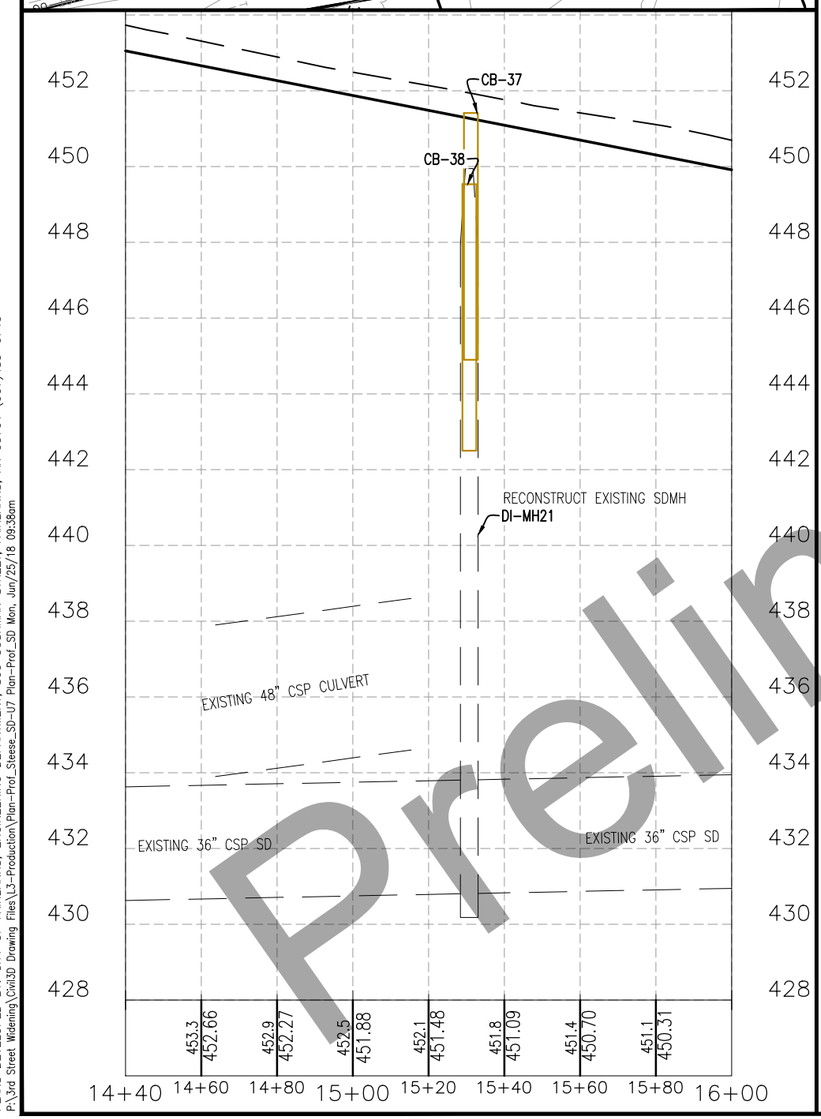
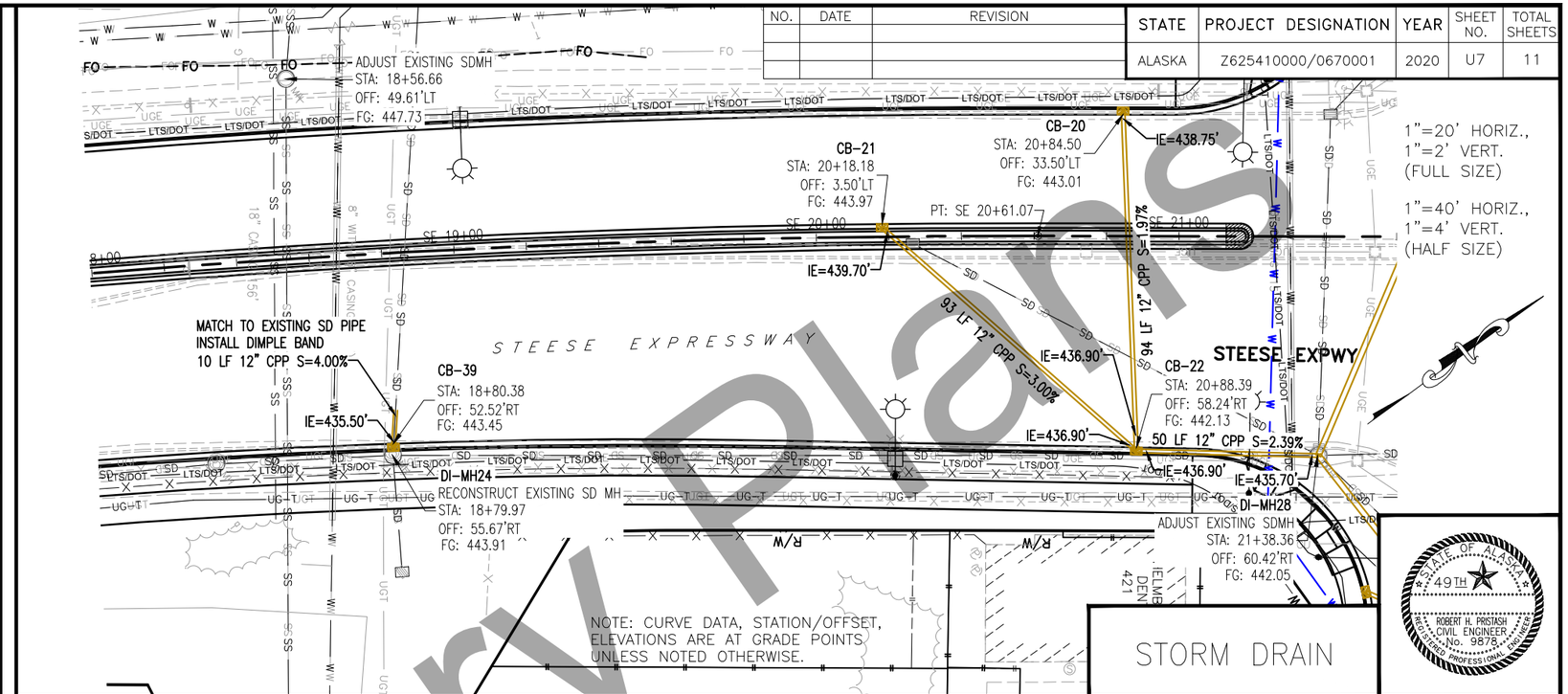
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U7	11



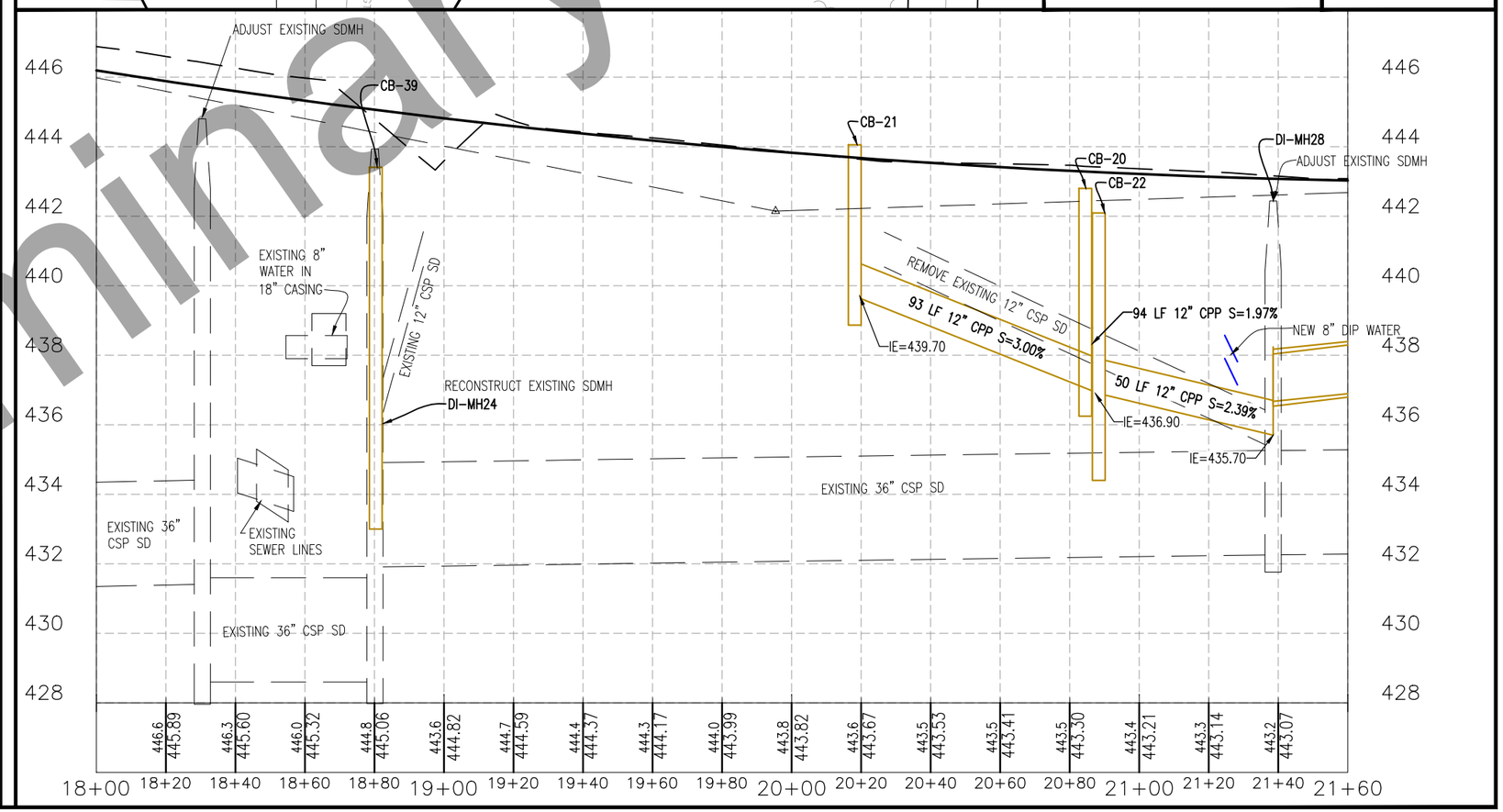




NOTE: CURVE DATA, STATION/OFFSET, ELEVATIONS ARE AT GRADE POINTS UNLESS NOTED OTHERWISE.

STORM DRAIN

STATE OF ALASKA 49TH
R. ROBERT H. PROTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_Steese_SD-U7 Plan-Prof_SD Mon, Jun/25/18 09:38am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U8	11

1"=20' HORIZ.,
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)

ADJUST EXISTING SDMH
STA: 25+46.32
OFF: 60.02'LT
FG: 443.37

MATCH TO EXISTING SD PIPE
INSTALL DIMPLE BAND
5 LF 12" CPP S=4.37%

IE=439.00'

CB-18
STA: 25+46.31
OFF: 39.50'LT
FG: 443.00

IE=439.00'

MATCH TO EXISTING SD PIPE
INSTALL DIMPLE BAND
5 LF 12" CPP S=4.04%

PI: SE 25+82.40

STEESE EXPWY

CB-41
STA: 28+56.66
OFF: 3.50'LT
FG: 445.17

2 LF 12" CPP S=8.14%

IE=440.50'

DI-MH41
RECONSTRUCT EXISTING SDMH
STA: 28+56.41
OFF: 0.90'RT
FG: 445.72

STEESE EXPRESSWAY

MH40
ADJUST EXISTING SDMH
STA: 28+91.91
OFF: 53.66'RT
FG: 443.77

MH44
ADJUST EXISTING SDMH
STA: 29+81.89
OFF: 54.15'RT
FG: 444.20

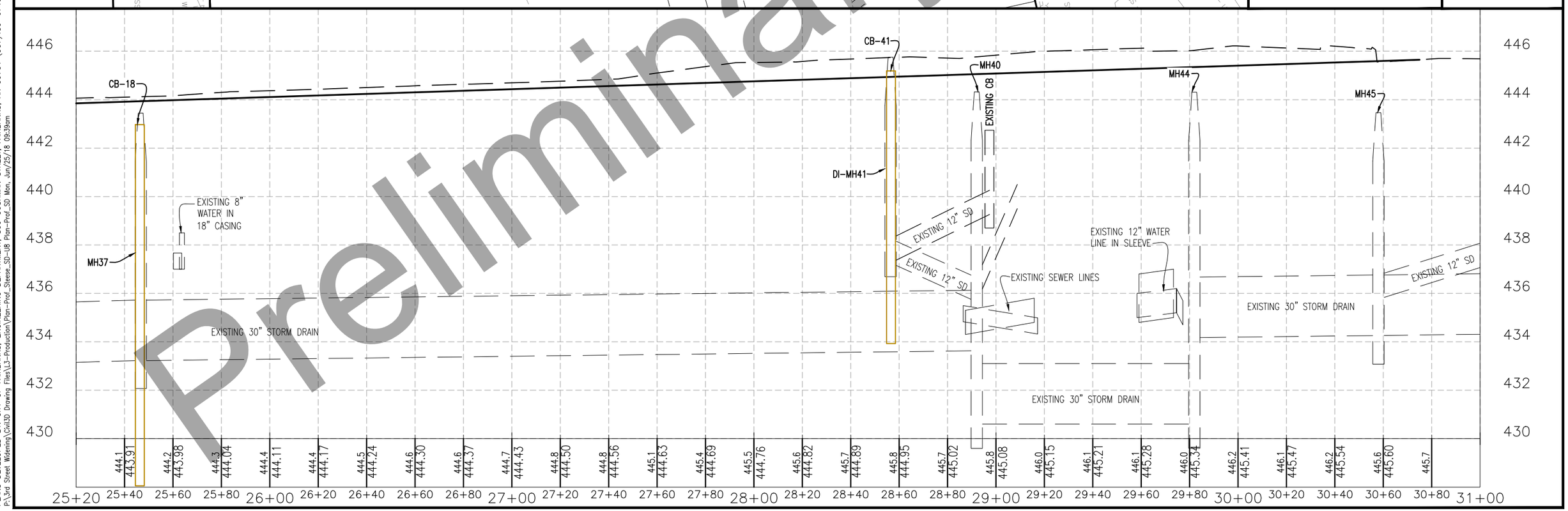
MH45
ADJUST EXISTING SDMH
STA: 30+57.92
OFF: 55.57'RT
FG: 443.37

ADJUST EXISTING SDMH
STA: 25+46.67
OFF: 58.09'RT
FG: 443.54

NOTE: CURVE DATA, STATION/OFFSET, ELEVATIONS ARE AT GRADE POINTS UNLESS NOTED OTHERWISE.

STORM DRAIN

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_Steese_SD-U8 Plan-Prof_SD Mon, Jun/25/18 09:39am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U9	11

STORM DRAIN NOTES

1. GRADES, ALIGNMENTS, APPROACH LOCATIONS, LENGTHS AND LOCATIONS OF STORMDRAINS AND UTILITIES AND INSULATION SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL DISTANCES SHOWN IN THE PLANS ARE HORIZONTAL MEASUREMENTS.
2. SAWCUT ALL MATCH LINES WHERE NEW CONSTRUCTION OF PAVEMENT, SIDEWALK OR CURBING ABUTS EXISTING. SAWCUTS SUBSIDIARY TO RESPECTIVE 603 PAY ITEMS.
3. SALVAGE STORM DRAIN CASTINGS AND DELIVER TO THE CITY OF FAIRBANKS PUBLIC WORKS YARD AT 2121 PEGER ROAD. PAY SUBSIDIARY TO RESPECTIVE 603 PAY ITEMS.
4. STRUCTURAL EXCAVATION, PIPE BEDDING, AND BACKFILL ARE SUBSIDIARY TO THE ITEMS INSTALLED.
5. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN STAGING AREA.
6. GET ENGINEER'S APPROVAL PRIOR TO ANY WORK OUTSIDE OF THE DESIGNATED PROJECT LIMITS, EASEMENT, OR RIGHT OF WAY.
7. PRESERVE / PROTECT OR REPLACE EXISTING LANDSCAPING, STRUCTURES OR OTHER APPURTENANCES TO ORIGINAL / EXISTING CONDITIONS. PAYMENT IS SUBSIDIARY TO PAY ITEM 202(1).
8. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION. PAYMENT SUBSIDIARY TO RESPECTIVE 603 PAY ITEMS.
9. VERIFY LOCATION AND ELEVATION OF NEARBY UNDERGROUND WATER, SEWER, STORM DRAIN, GAS OR CABLES (BOTH MAINS AND SERVICES), AND REPORT TO ENGINEER BEFORE STARTING WORK THAT WILL CROSS THESE UTILITIES. PAYMENT SUBSIDIARY TO RESPECTIVE 603 PAY ITEMS.
10. WORK IS REQUIRED UNDER EXISTING OVERHEAD CABLES. PROTECT EQUIPMENT AND PERSONNEL AS REQUIRED SUBSIDIARY TO THOSE WORK ITEMS.
11. VERIFY ELEVATION OF STORM DRAIN CONNECTION POINTS AND REPORT THESE SURVEY ELEVATIONS TO THE ENGINEER SO CHANGES CAN BE MADE IN THE GRADES AS REQUIRED TO MATCH EXISTING IMPROVEMENTS. PAYMENT SUBSIDIARY TO PAY ITEM 642(1).
12. ALL ACCESS FRAMES & COVERS / LIDS IN ASPHALT SHALL BE INSTALLED TO GRADE BEFORE ASPHALT IS INSTALLED. NO CUTTING OUT ASPHALT SHALL BE ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
13. FIELD STAKE ALL STORM DRAIN LOCATIONS FOR APPROVAL BY ENGINEER PRIOR TO INSTALLATION.
14. INSTALL END SECTIONS ON ALL STORM DRAIN OUTLETS/INLETS.
15. CLEAN AFTER CONSTRUCTION ALL NEW AND REMAINING EXISTING STORM DRAIN SYSTEM DOWNSTREAM OF NEW STORM DRAIN, PAYMENT SUBSIDIARY TO PAY ITEM 641(3).
16. EXISTING TELECOMMUNICATION CABLES SHOWN ON THE PLAN SHEETS MAY INCLUDE ACS, GCI, OR MTAC.

STORM DRAIN NOTES (CONT.)

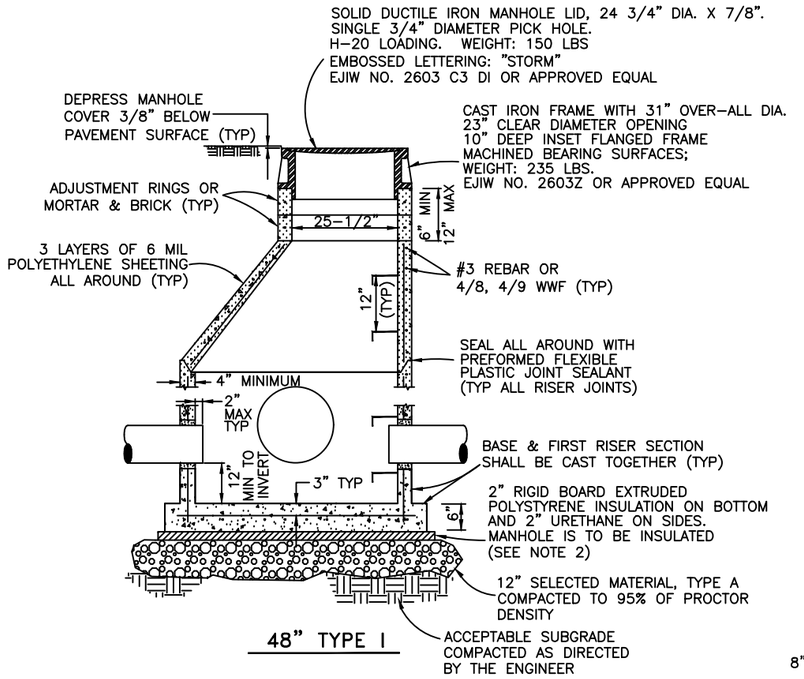
17. ABANDON EXISTING STORM DRAIN PIPE IN PLACE EXCEPT WHERE CONFLICTS ARISE AS A RESULT OF NEW CONSTRUCTION. WHERE CONFLICTS EXIST, REMOVE EXISTING STORM DRAIN PIPE, PLUG ALL OPEN ENDS OF ABANDONED PIPE NOT REMOVED WITH 12 INCHES OF SPRAYED URETHANE FOAM OR 4 INCHES OF CONCRETE. PAYMENT SUBSIDIARY TO PAY ITEM 202(1).
18. INSTALL STORM DRAIN PIPE BEDDING PER PIPE BEDDING DETAIL.
19. PAYMENT FOR ALL SHORING, BRACING, TRENCH BOXES, ETC. TO PROTECT BUILDINGS, TRAFFIC, AND PERSONS SHALL BE SUBSIDIARY TO THE STRUCTURE BEING INSTALLED.
20. PROTECT OR REMOVE AND REPLACE IN SAME LOCATION OR TO THE SIDE OF THE ROADWAY, EXISTING MARKER POSTS FOR GAS, BURIED CABLE, WATER, SEWER, OR STORM DRAIN, SUBSIDIARY TO OTHER ITEMS OF WORK. PAYMENT SUBSIDIARY TO RESPECTIVE 603 PAY ITEMS.
21. FINAL ADJUSTMENT OF MANHOLE FRAMES AND COVERS, AND INLETS TO FINISH GRADE WITHIN PROJECT LIMITS IS SUBSIDIARY TO RESPECTIVE 603 PAY ITEMS.
22. THE NATURAL GROUND WATER TABLE VARIES SEASONALLY WITH HIGHER STAGE LEVELS OF THE CHENA AND/OR TANANA RIVERS. APPLY WATERPROOF PROTECTIVE COATING WHERE INDICATED BY THE ENGINEER. PAY IS SUBSIDIARY TO RESPECTIVE PAY ITEM.

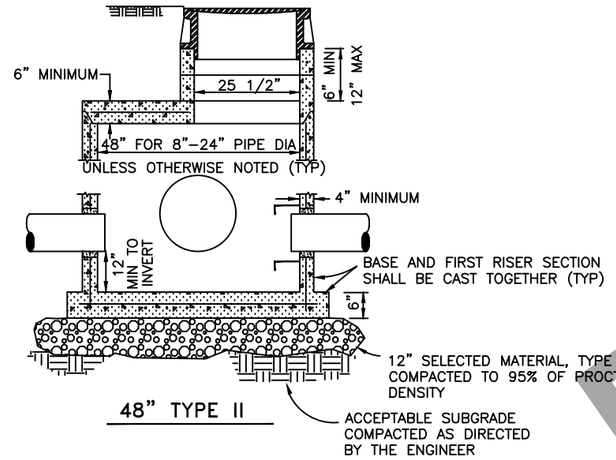
Preliminary Plans

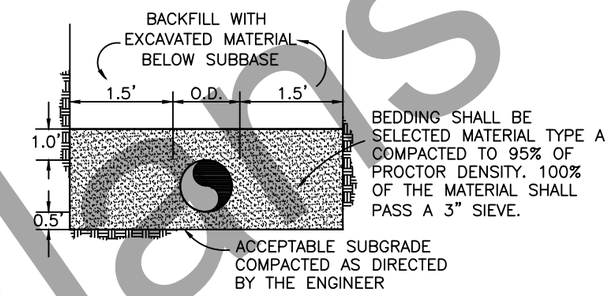
STORM DRAIN NOTES

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Notes-Summary_STORMDRAIN-U9 NOTES-SUMMARY Mon, Jun/25/18 09:44am

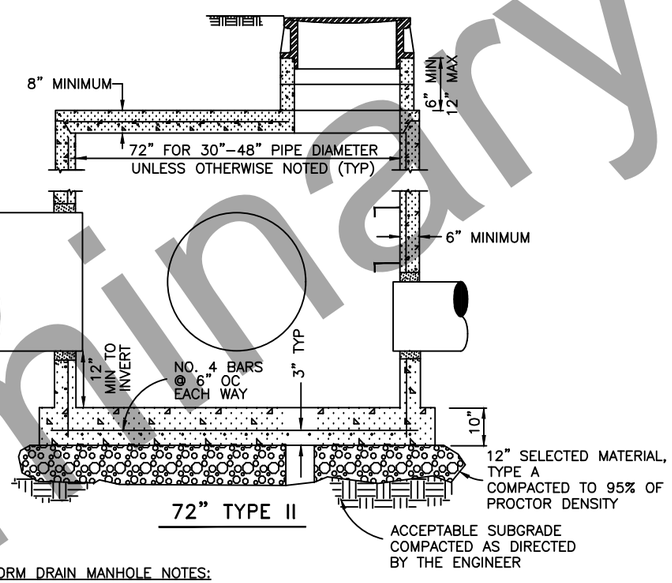


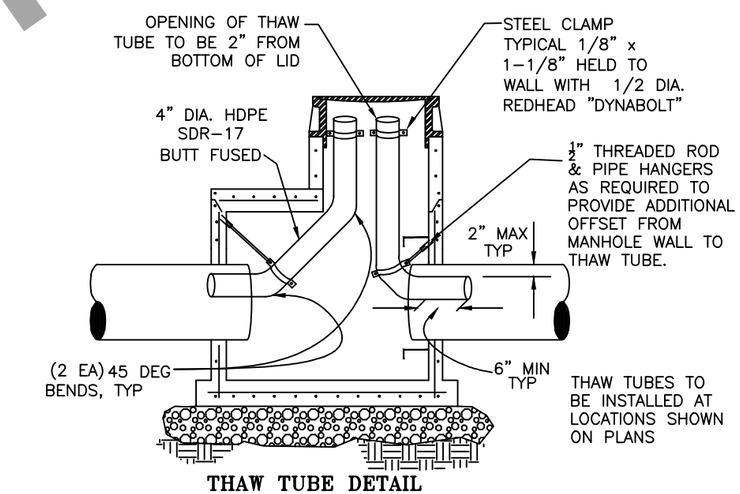




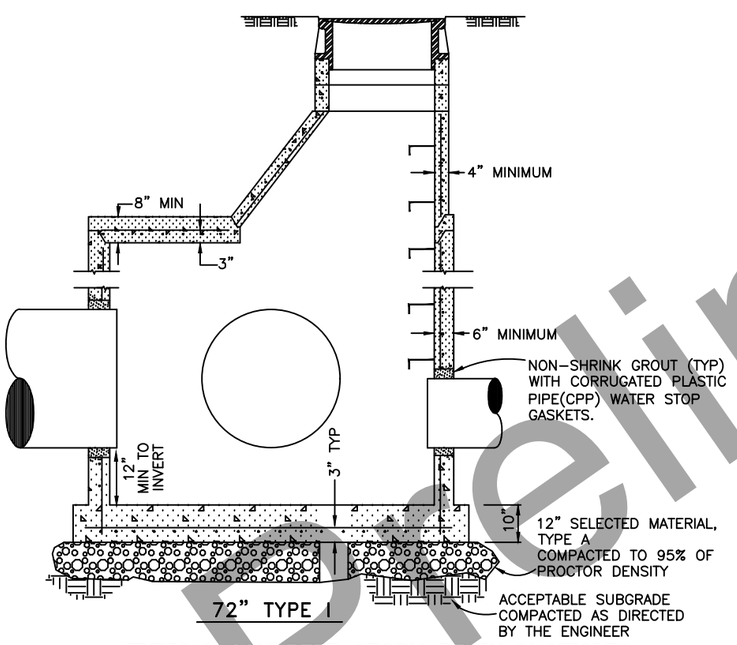
PIPE BEDDING DETAIL

NOT TO SCALE





THAW TUBE DETAIL



(A) TYPICAL CONCRETE STORM DRAIN MANHOLES

NOT TO SCALE

STORM DRAIN MANHOLE NOTES:

1. OPENINGS IN MANHOLE TO RECEIVE PIPE SHALL BE 1" TO 2" LARGER THEN THE OD AND PIPE. LARGER OPENINGS SHALL BE FILLED AS DIRECTED BY THE ENGINEER. INSIDE GROUT SURFACE SHALL BE SMOOTH. PROVIDE CPP WATER STOP GASKETS.
2. TYPICALLY, STORM DRAIN MANHOLES DO NOT REQUIRE INSULATION. HOWEVER, SPECIAL CASES REQUIRE INSULATION OF ALL OUTSIDE SURFACES. SEE PLANS.
3. SEAL RISER JOINTS WITH FLEXIBLE PLASTIC JOINT SEALERS.
4. MANHOLE STEPS SHALL BE APPROVED GALVANIZED STEEL OR PLASTIC AND MEET CURRENT OSHA STANDARDS.
5. ALL GROUT SHALL BE NON-SHRINK. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
6. REINFORCEMENT IN BASE, RISER, CONE, FLAT LID, AND ADJUSTING RINGS SHALL COMPLY WITH AASHTO SPECIFICATION M199/ASTM478.

MANHOLE REINFORCEMENT SCHEDULE			
SECTION	MANHOLE SIZE		(SHALL COMPLY WITH AASHTO M 199 /ASTM 478) *CIRCUMFERENTIAL REINFORCING ALL AREAS ARE MINIMUM CROSS-SECTIONAL AREA OF REINFORCEMENT PER FOOT OF SECTION.
	48"	72"	
FLAT BASE	0.39 SQ IN/FT EACH WAY	0.39 SQ IN/FT EACH WAY	
RISER SECTION*	0.12 SQ IN/FT	0.18 SQ IN/FT	
CONE SECTION*	0.12 SQ IN/FT	0.18 SQ IN/FT	
FLAT LID**	0.12 SQ IN/FT EACH WAY	0.12 SQ IN/FT EACH WAY	
ADJUSTING RING	0.024 SQ IN	0.024 SQ IN	

**OPENINGS IN FLAT LIDS SHALL BE ADDITIONALLY REINFORCED WITH A MINIMUM OF THE EQUIVALENT OF 0.2 SQ IN OF STEEL AT 90°.

STATE OF ALASKA 49TH ROBERT H. PRUTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER
5/23/18

Preliminary Plans

DATE		BY
3/13/17	WATER STOP GASKETS	RHP
2/3/10	NEW SD1	GSC,RHP
3/23/07		RHP

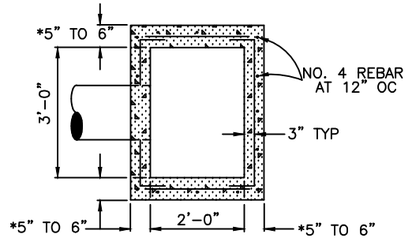
NOT TO SCALE

DESIGNED:
DRAWN: STAFF
CHECKED: RHP,GSC
DATE: 3/23/07

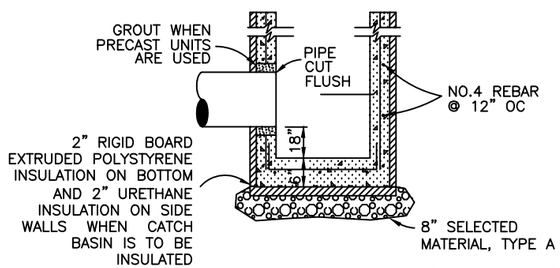
CITY OF FAIRBANKS, ALASKA
ENGINEERING DIVISION

STANDARD DETAILS
STORM DRAIN MANHOLES, THAW TUBES AND BEDDING

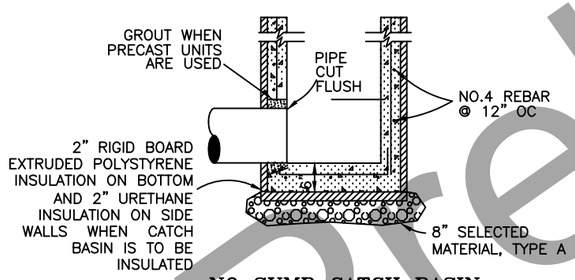
SD1



*DIMENSION WHEN PRECAST INLET BOX WITH CONTINUOUS WWF 6x6 4/4 REINFORCEMENT IS USED



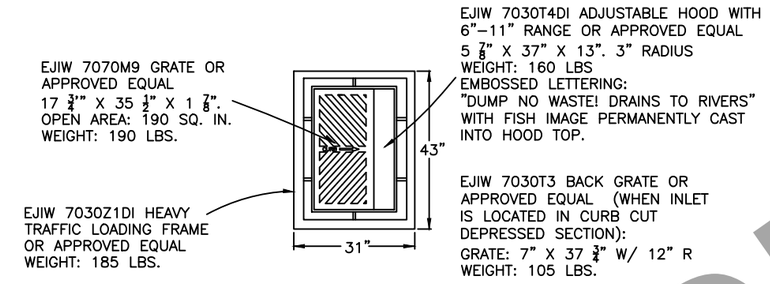
REINFORCED CATCH BASIN (STANDARD)



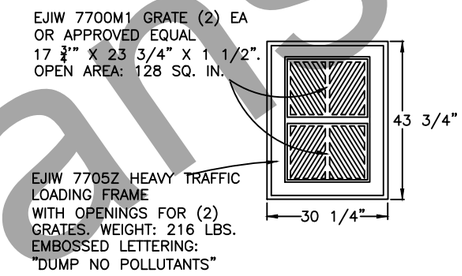
NO SUMP CATCH BASIN

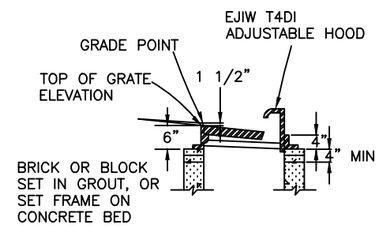
ALTERNATE USED WHERE INDICATED ON PLANS

TYPICAL CURB INLET

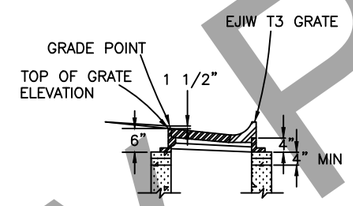


TYPICAL FIELD INLET

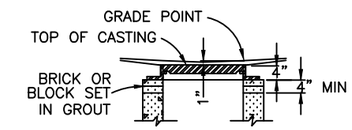




FRAME WITH ADJUSTABLE HOOD FOR INSTALLATION IN CURB FACE



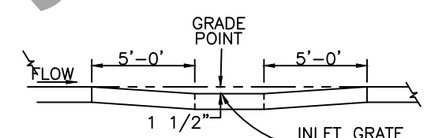
FRAME WITH BACK GRATE FOR INSTALLATION IN CURB CUT



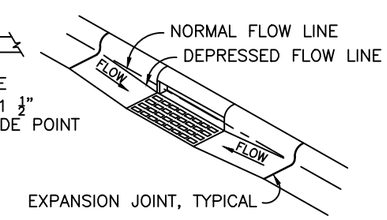
FRAME WITH DOUBLE OPENING

INLET BOX/CATCH BASIN DETAILS

NOT TO SCALE



ON GRADE



PLAIN ISOMETRIC

DEPRESSION IN FLOW LINE AT INLET

CATCH BASIN NOTES:

1. THE WORDS "INLET" AND "CATCH BASIN" SHALL BE INTERCHANGEABLE.
2. ALL GROUT SHALL BE NON–SHRINK. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
4. TYPICALLY, CATCH BASINS ARE NOT INSULATED. HOWEVER, SPECIAL CASES REQUIRE INSULATION OF ALL OUTSIDE SURFACES. SEE PLAN NOTE TO INSULATE CB.
5. GROUT THE INSIDE FACE OF ALL JOINTS SMOOTH.

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER

5/24/18

DATE	REVISION	BY
2/3/10	NEW SD2	GSC,RHP
3/23/07		RHP

NOT TO SCALE

DESIGNED:
DRAWN: STAFF
CHECKED: RHP,GSC
DATE: 3/23/07

CITY OF FAIRBANKS, ALASKA
ENGINEERING DIVISION

STANDARD DETAILS
STORM DRAIN CATCH BASIN

SD2

Preliminary Plans

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U101	9

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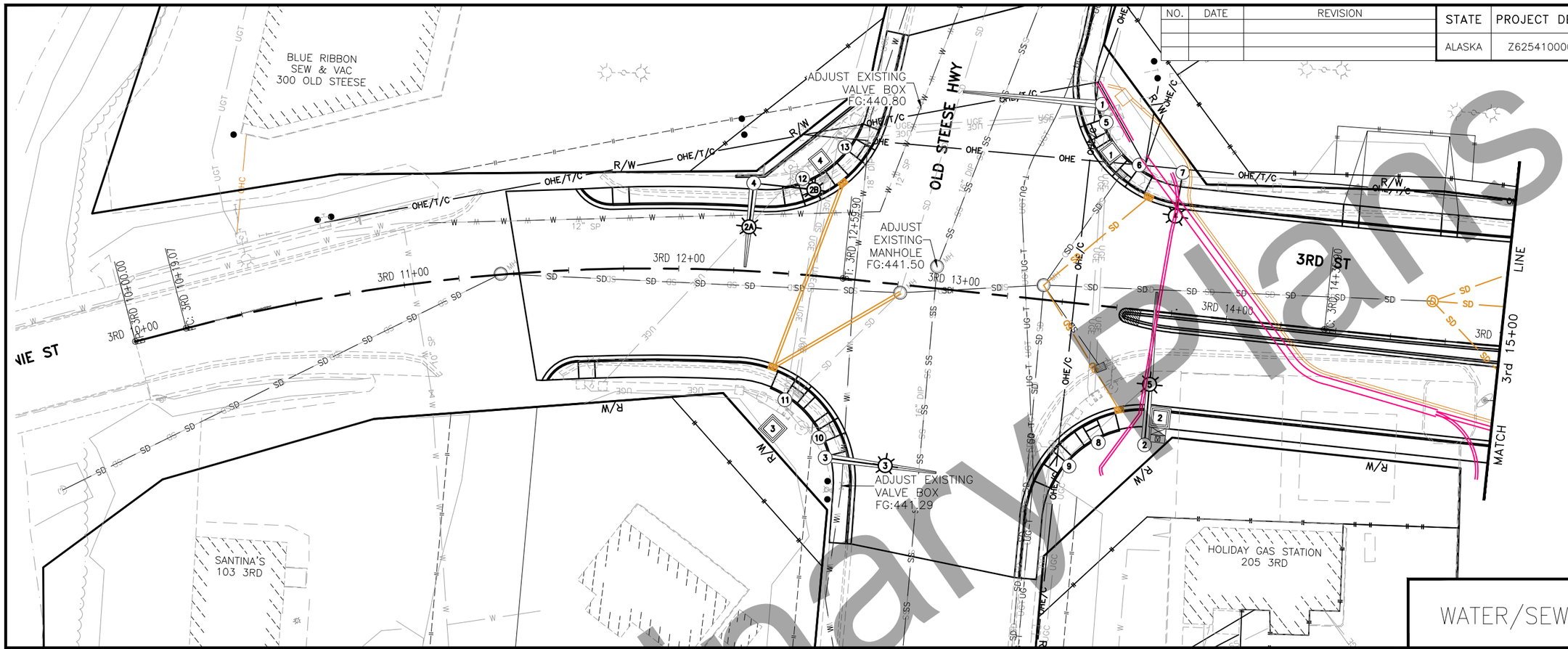
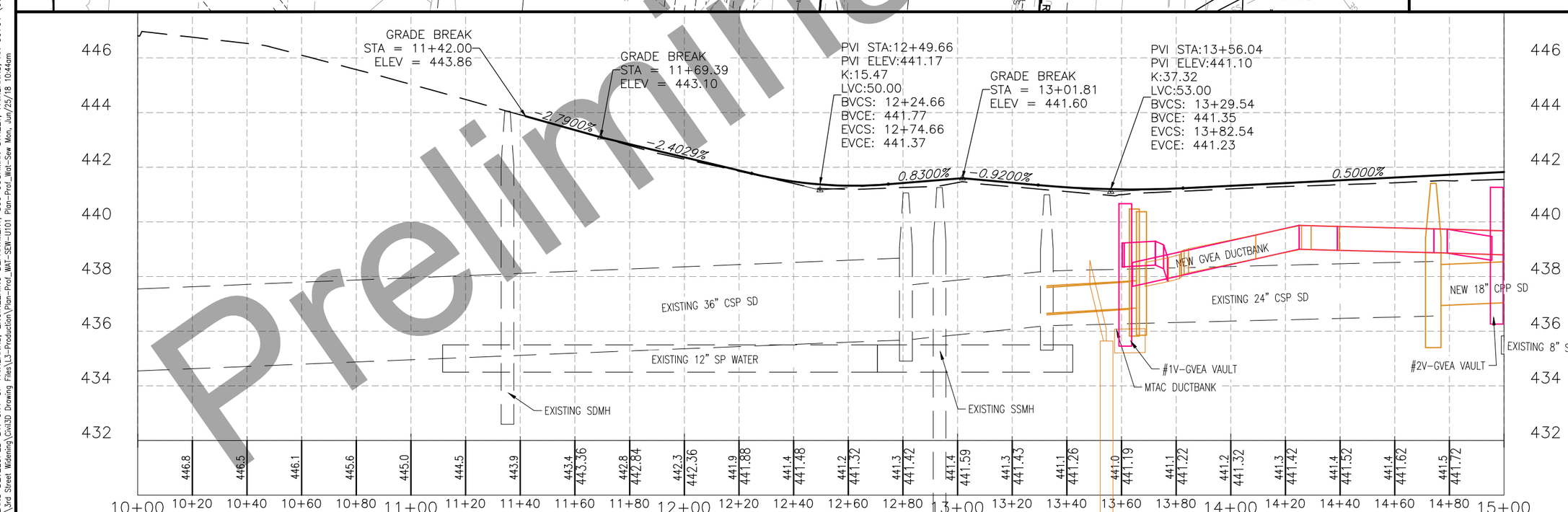
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)



WATER/SEWER

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_WAT-SEW-U101 Plan-Prof_Wat-Sew Mon, Jun/25/18 10:44am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U102	9

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(FULL SIZE)

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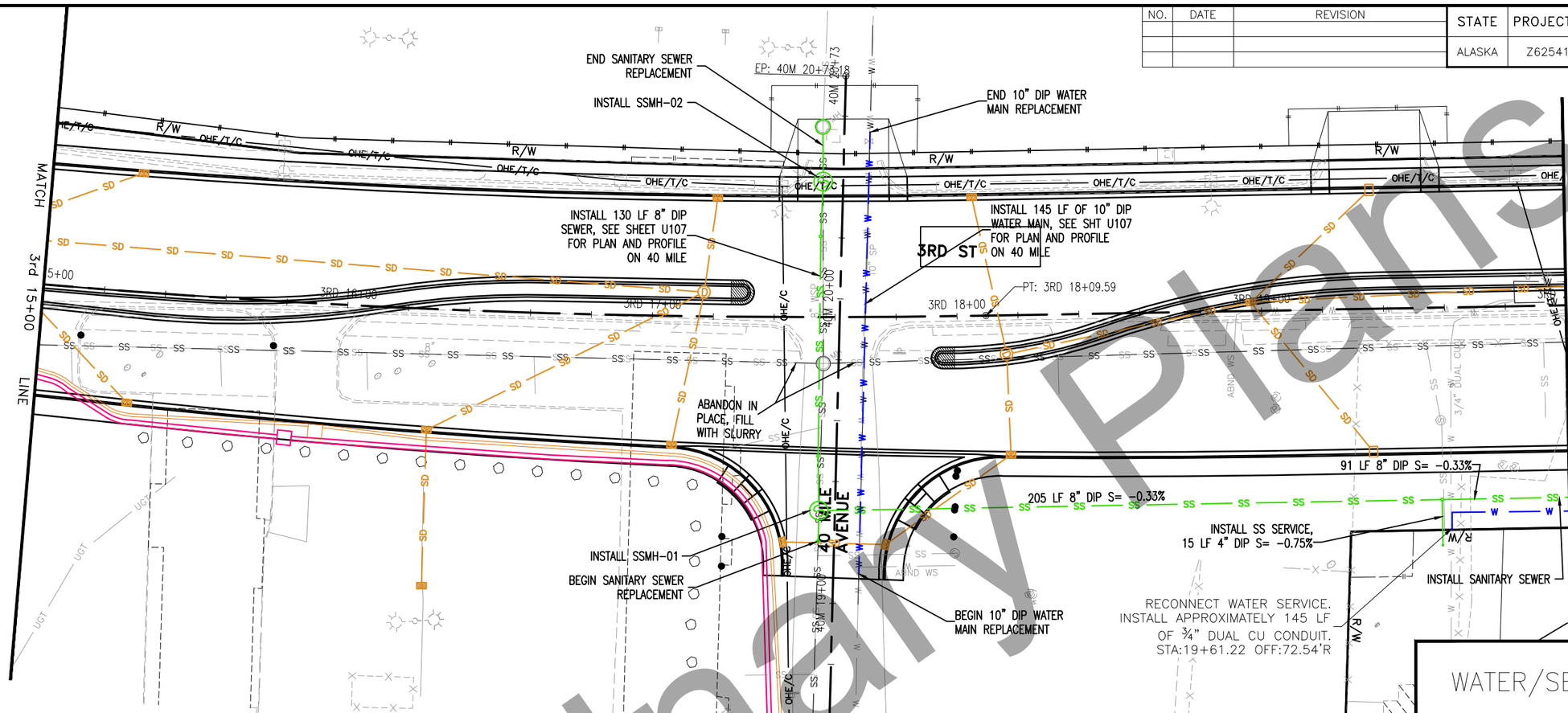
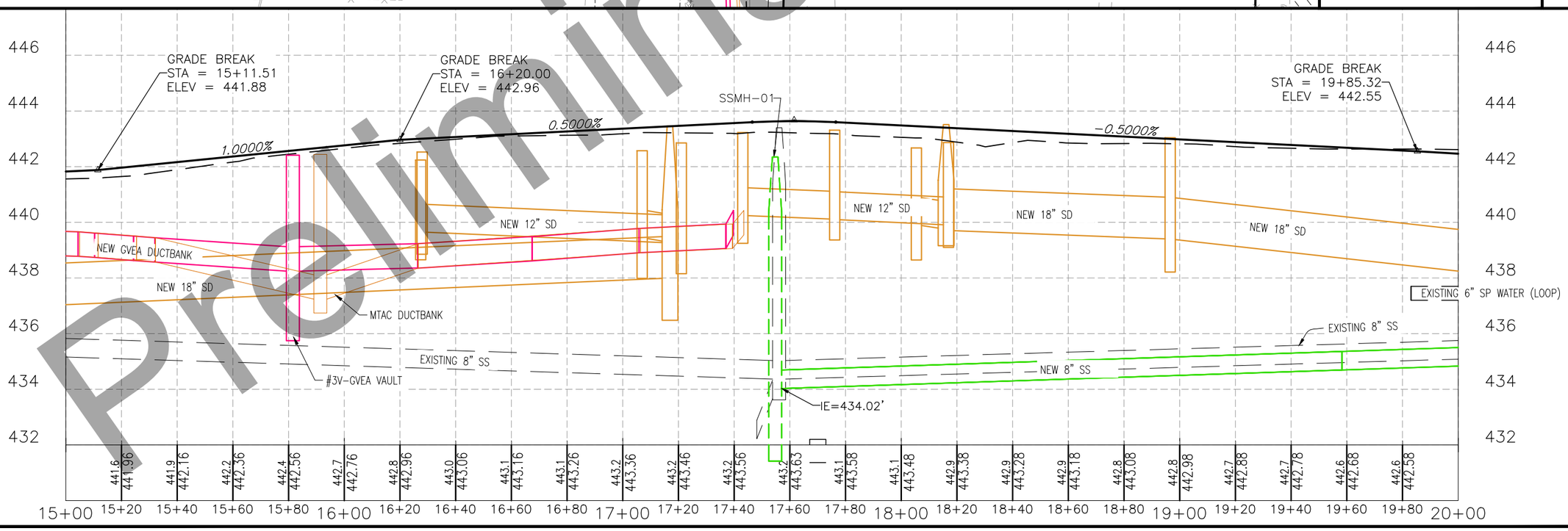
(HALF SIZE)



WATER/SEWER



Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U103	9

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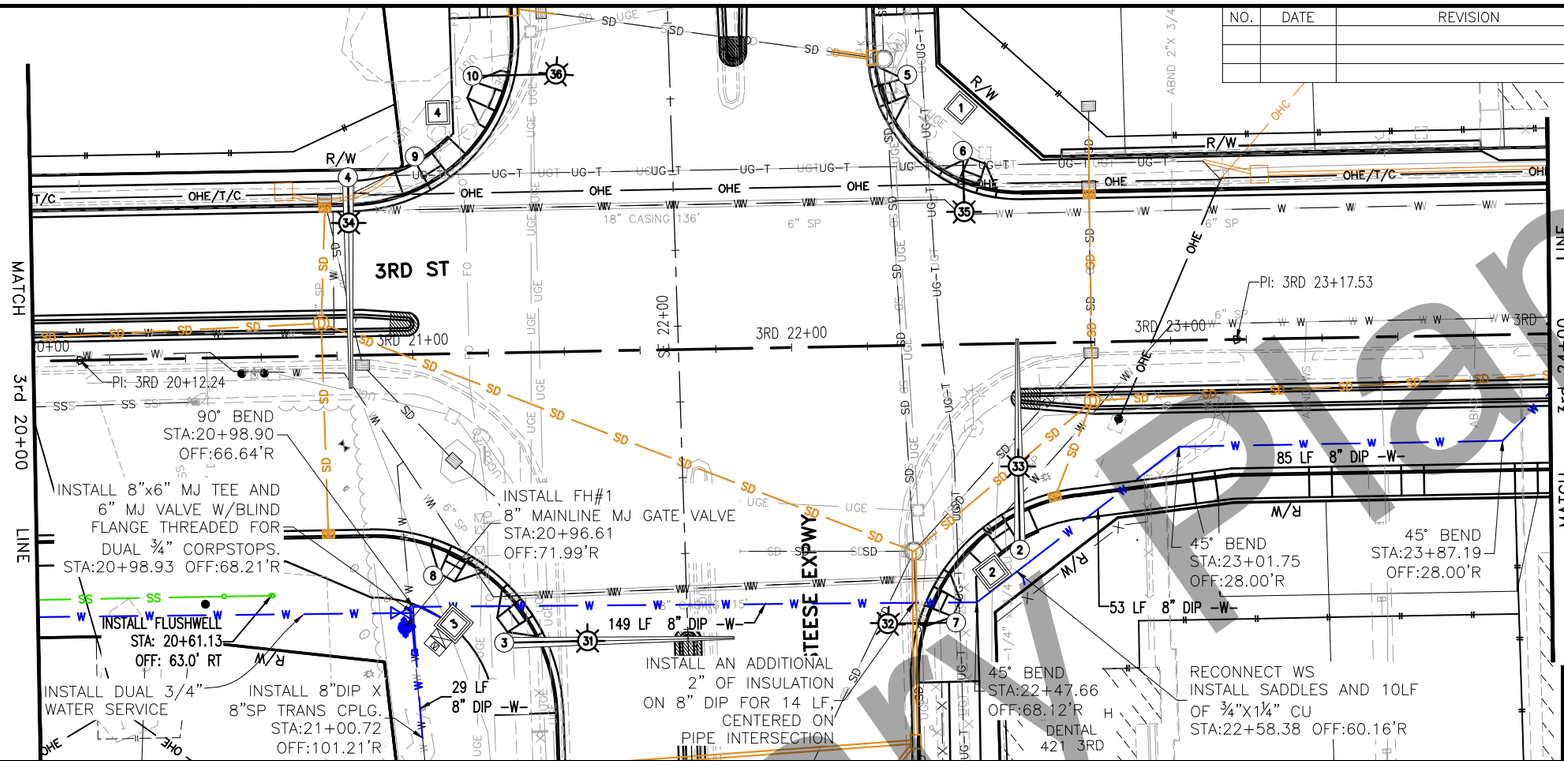
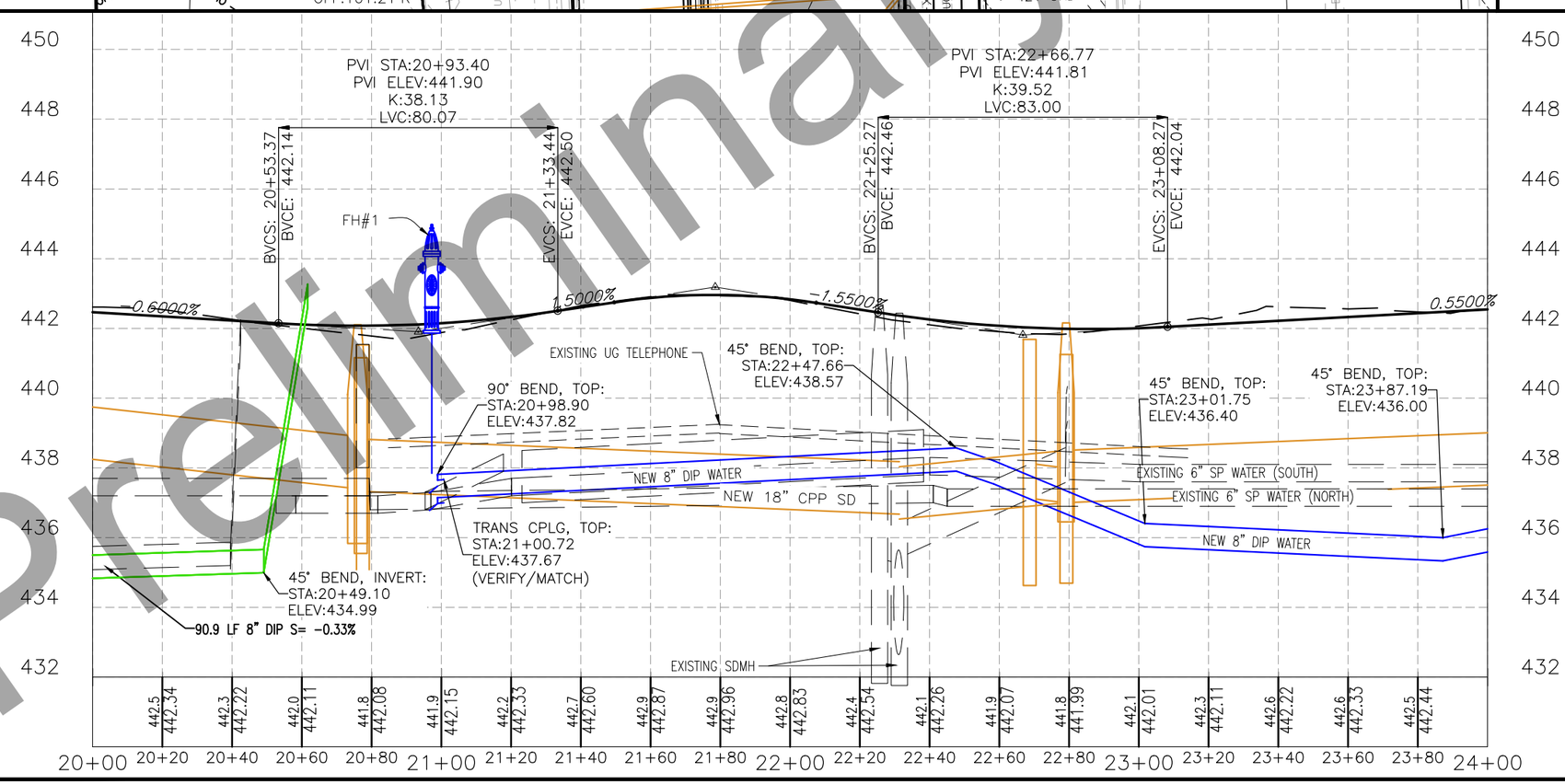


WATER/SEWER



Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U104	9

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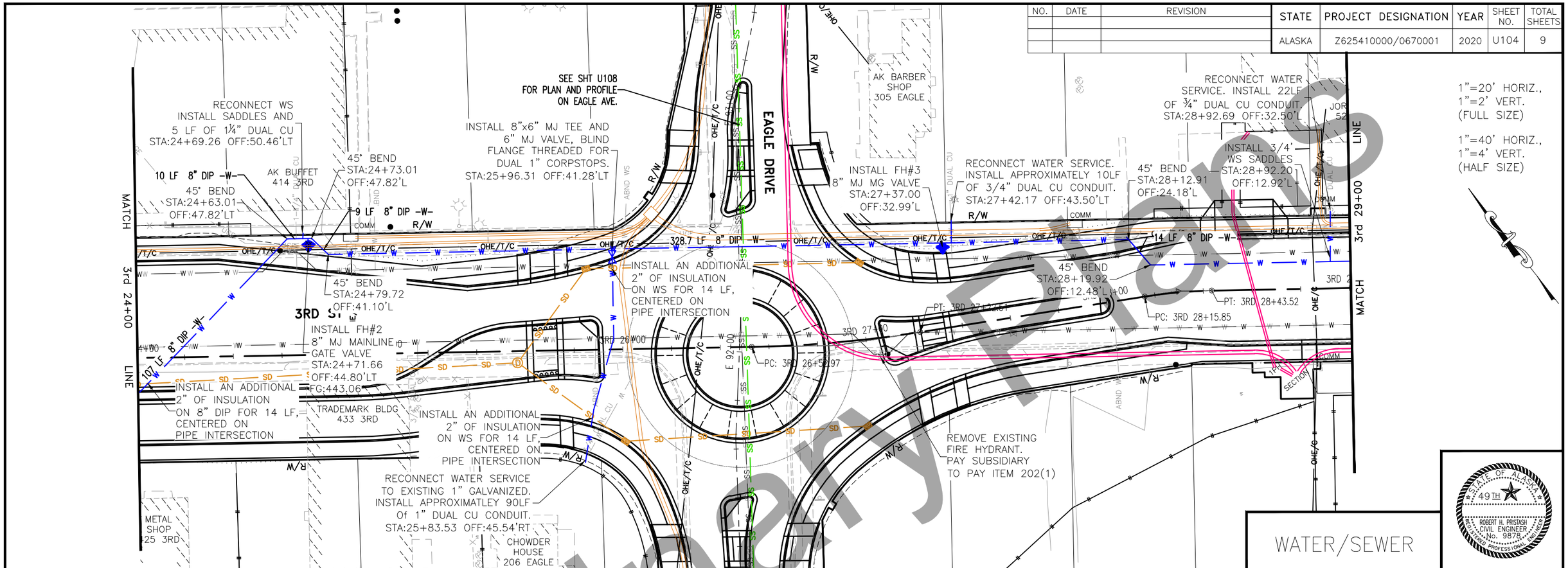
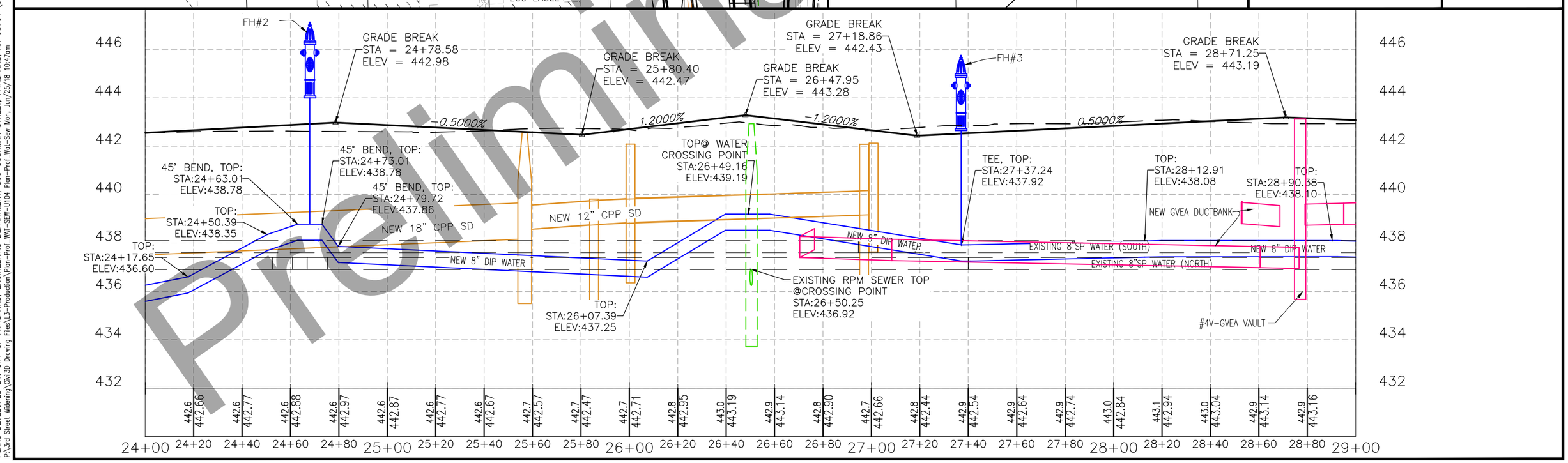
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)



WATER/SEWER



STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U105	9

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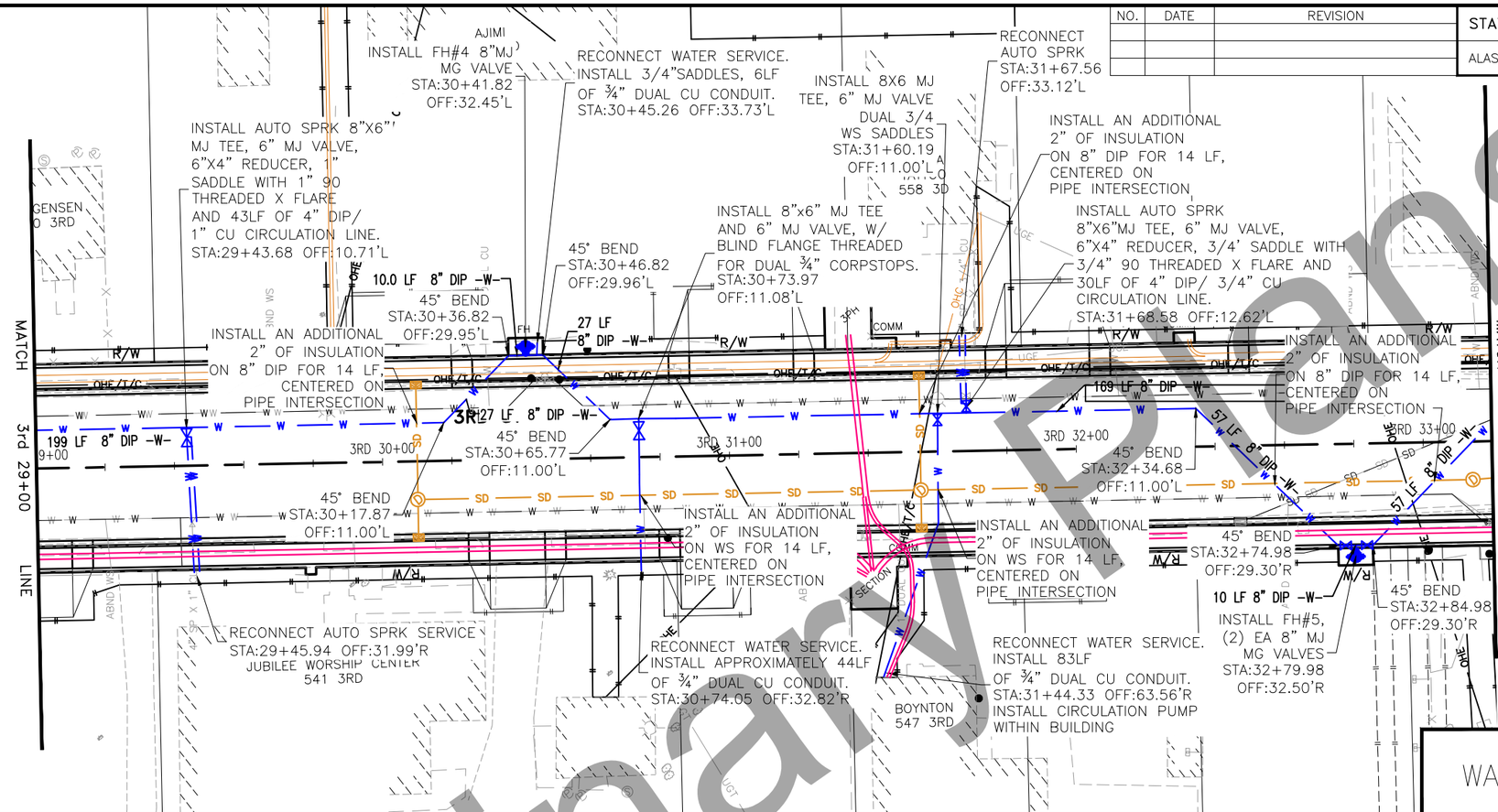
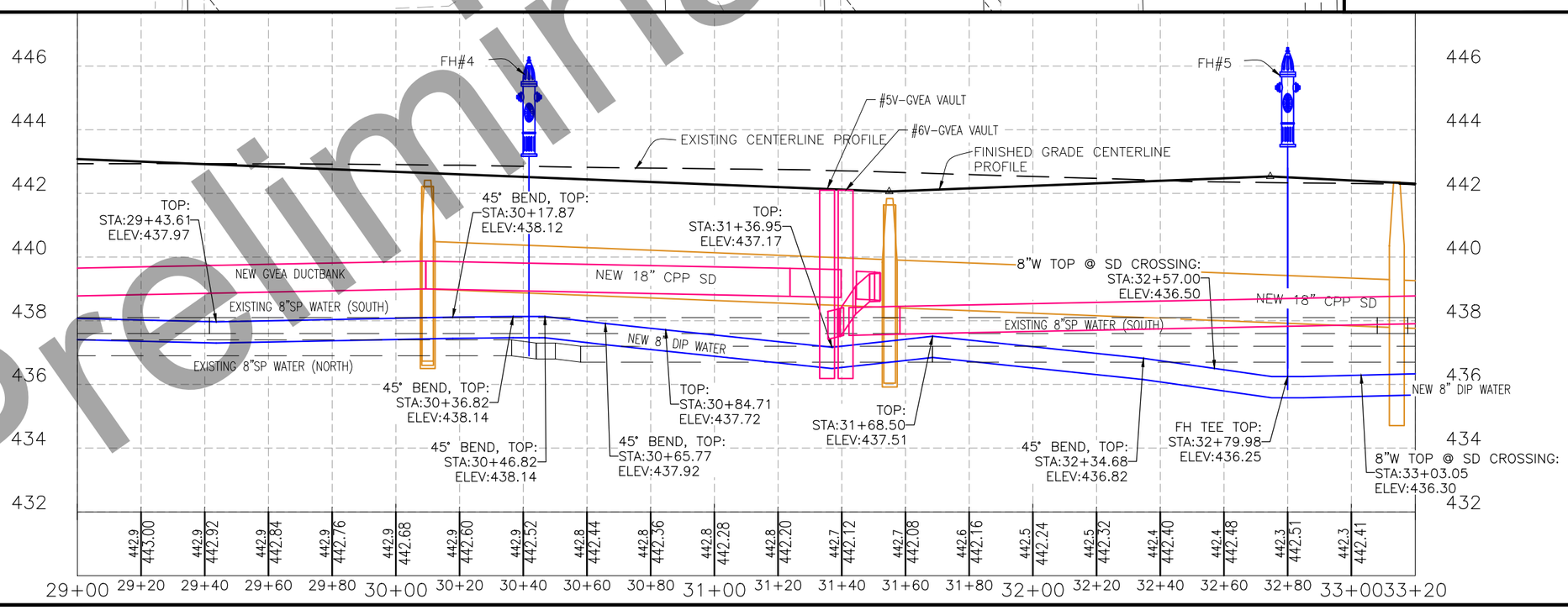
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)



WATER/SEWER



STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_WAT-SEW-U105 Plan-Prof_Wat-Sew Mon, Jun/25/18 10:47am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U106	9

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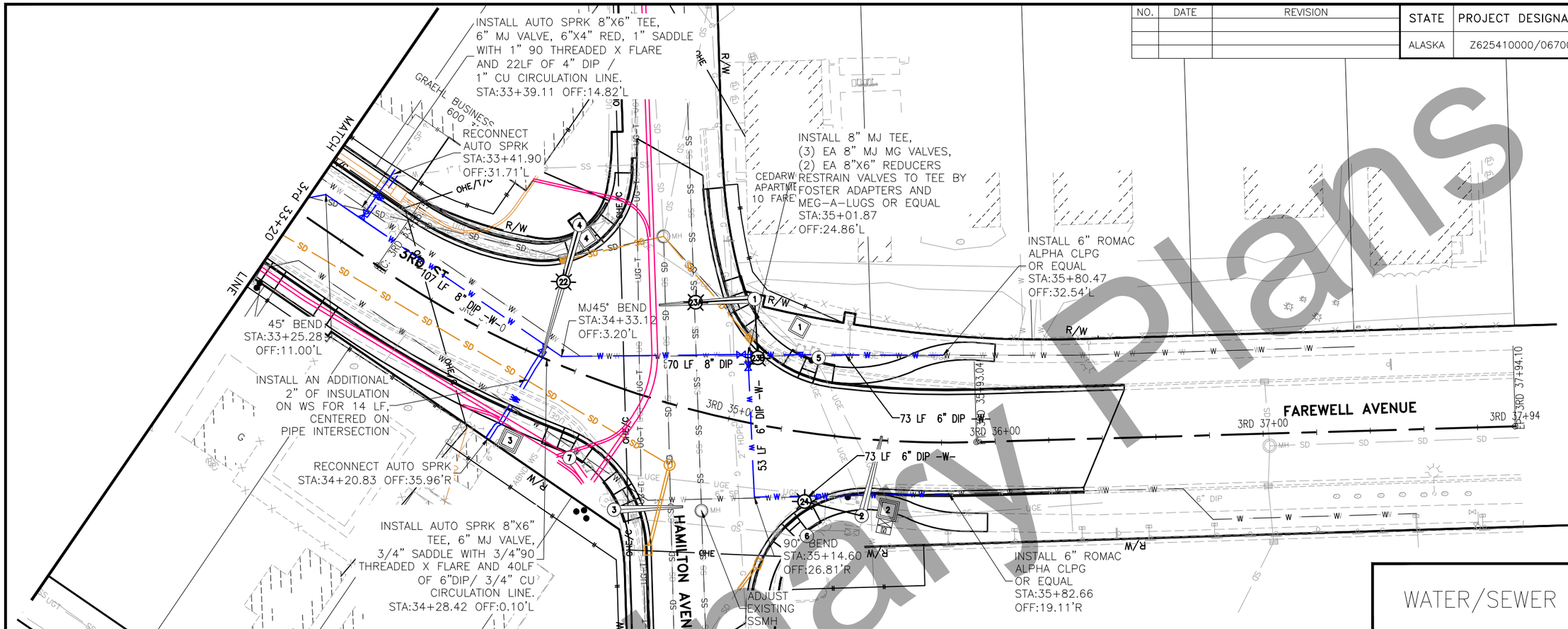
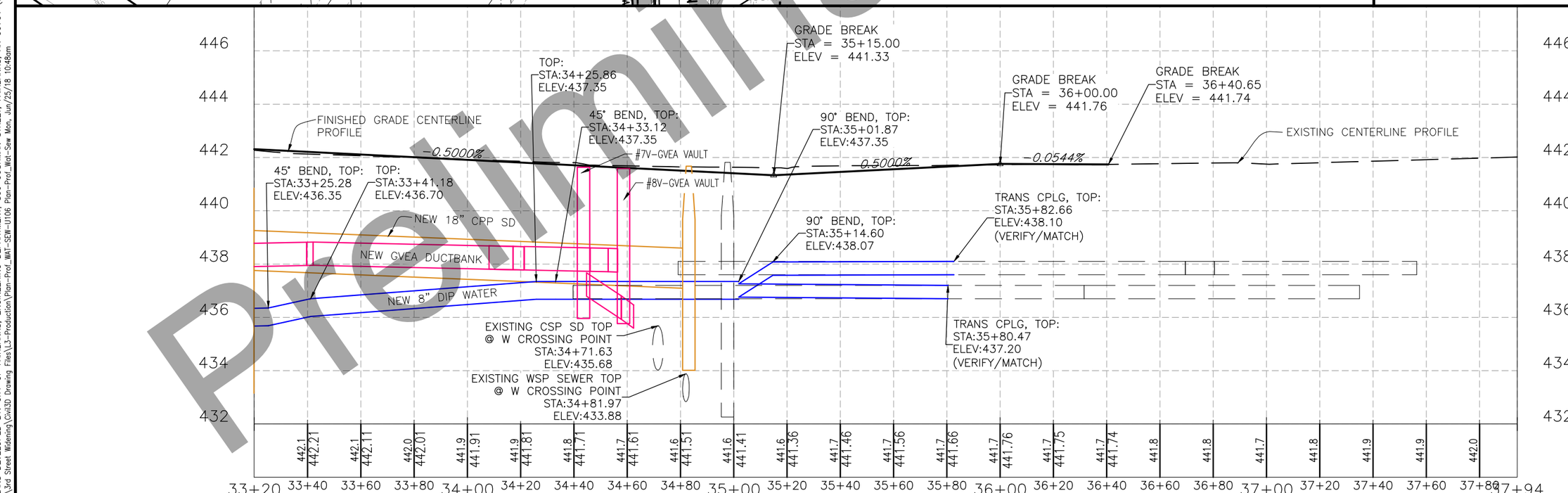
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)





WATER/SEWER

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_WAT-SEW-U106 Plan-Prof_Wat-Sew Mon, Jun/25/18 10:48am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U107	9

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(FULL SIZE)

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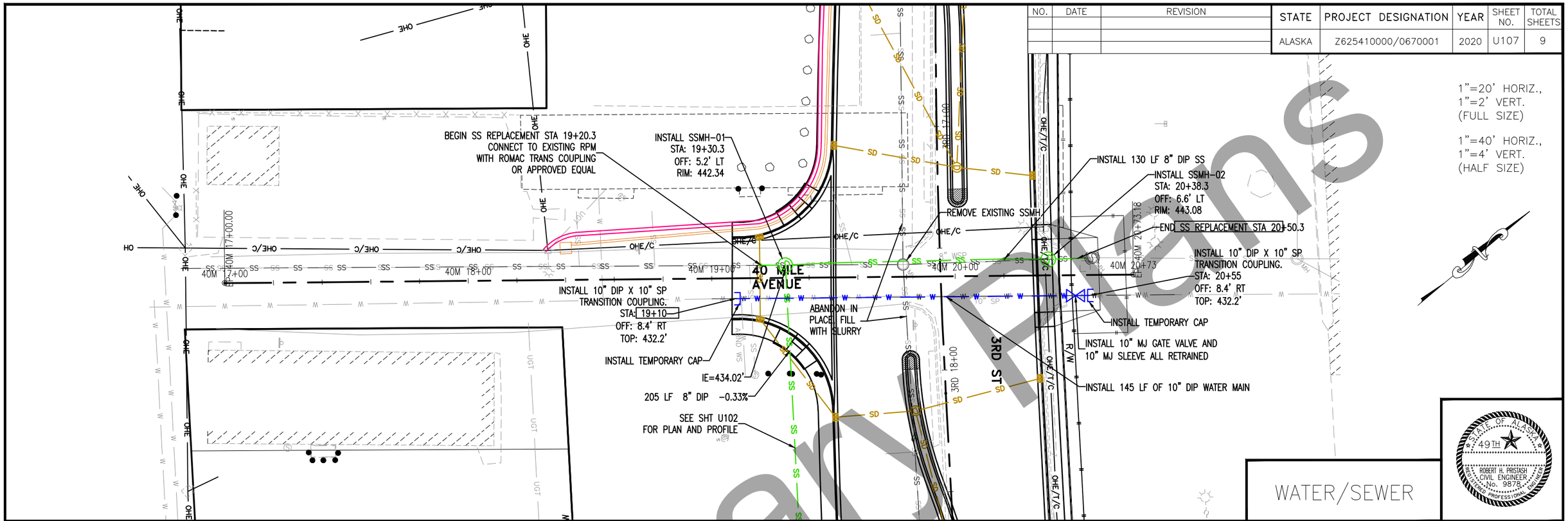
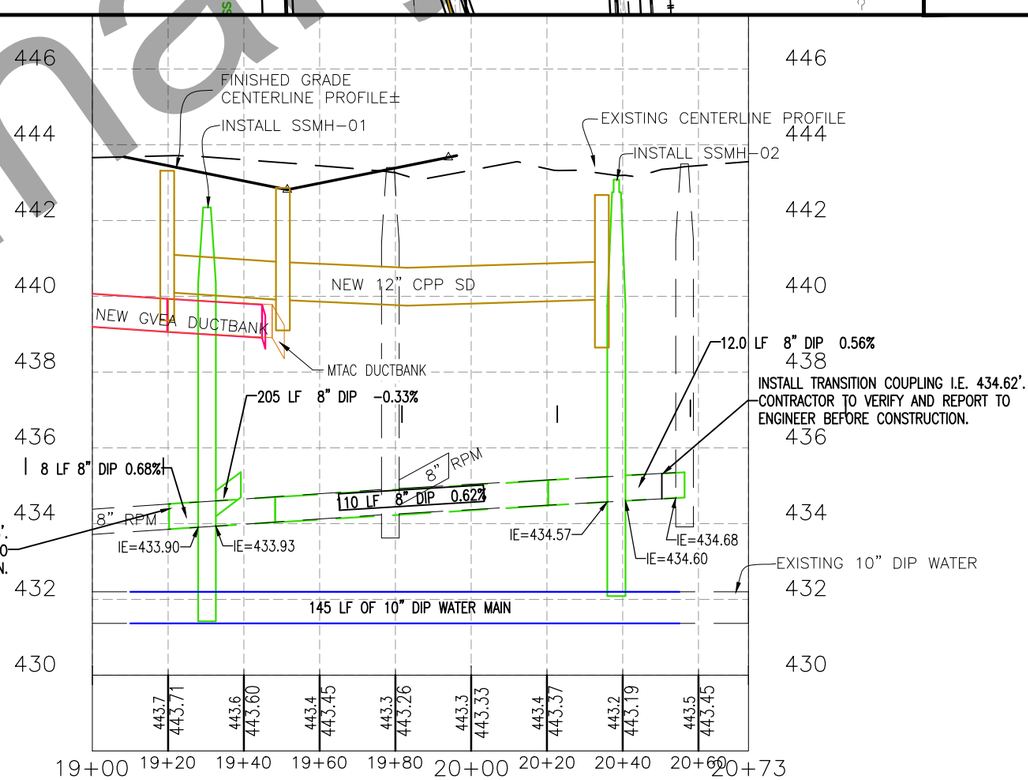
(HALF SIZE)



WATER/SEWER



STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_Eagle_WAT-SEW-U107 Plan-Prof_Wat-Sew-40MILE Mon, Jun/25/18 11:01am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U108	9

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(FULL SIZE)

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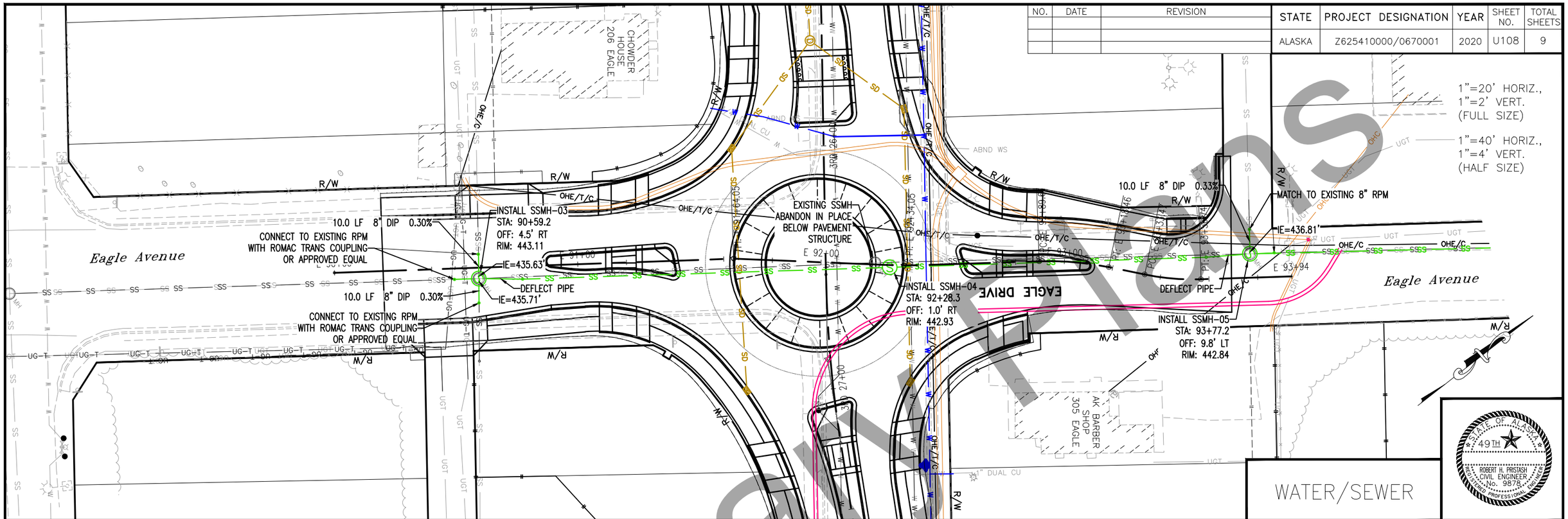
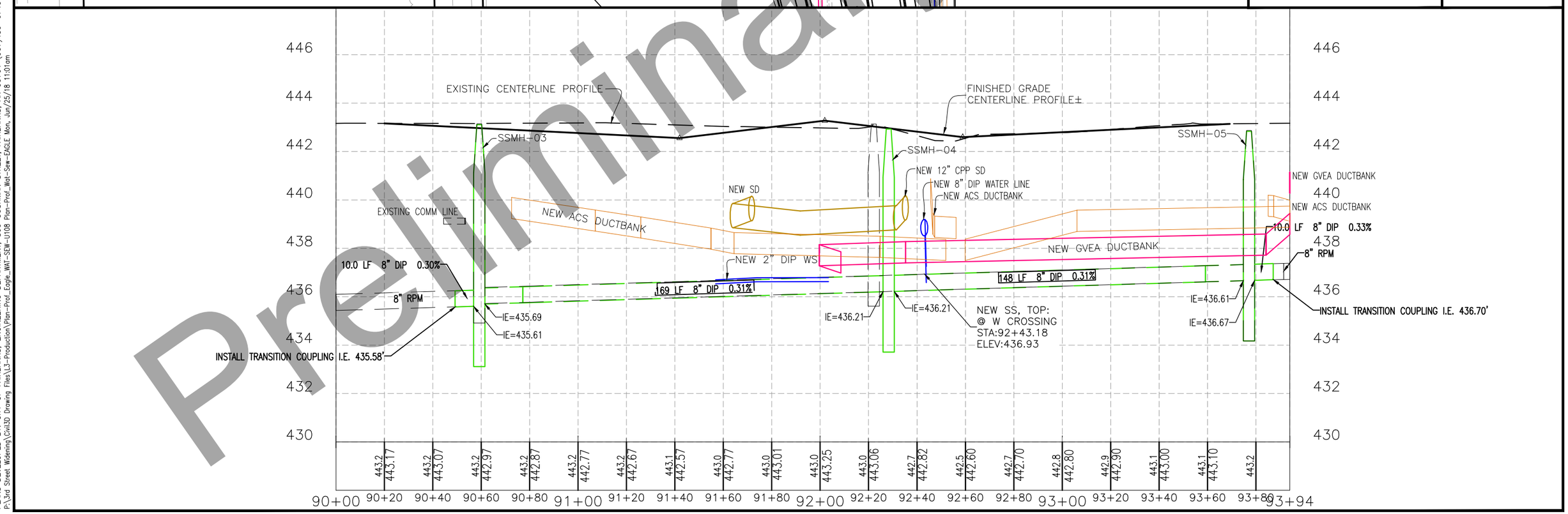
(HALF SIZE)





Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_Eagle_WAT-SEW-U108 Plan-Prof_Wat-Sew-EAGLE Mon, Jun/25/18 11:01am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U109	9

WATER / SEWER NOTES

1. GRADES, ALIGNMENTS, APPROACH LOCATIONS, LENGTHS AND LOCATIONS OF STORMDRAINS AND UTILITIES AND INSULATION SHOWN ON THESE PLANS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER. ALL DISTANCES SHOWN IN THE PLANS ARE HORIZONTAL MEASUREMENTS.
2. SAWCUT ALL MATCH LINES WHERE NEW CONSTRUCTION OF PAVEMENT, SIDEWALK OR CURBING ABUTS EXISTING. SAWCUTS SUBSIDIARY TO RESPECTIVE 626 AND 627 PAY ITEMS.
3. STRUCTURAL EXCAVATION, PIPE BEDDING, AND BACKFILL ARE SUBSIDIARY TO THE ITEMS INSTALLED.
4. CONTRACTOR IS RESPONSIBLE FOR PROVIDING THEIR OWN STAGING AREA.
5. GET ENGINEER'S APPROVAL PRIOR TO ANY WORK OUTSIDE OF THE DESIGNATED PROJECT LIMITS, EASEMENT, OR RIGHT OF WAY.
6. PRESERVE / PROTECT OR REPLACE EXISTING LANDSCAPING, STRUCTURES OR OTHER APPURTENANCES TO ORIGINAL / EXISTING CONDITIONS. PAYMENT IS SUBSIDIARY TO ITEM 202(1).
7. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION.
8. VERIFY LOCATION AND ELEVATION OF NEARBY UNDERGROUND WATER, SEWER, STORM DRAIN, GAS OR CABLES (BOTH MAINS AND SERVICES), AND REPORT TO ENGINEER BEFORE STARTING WORK THAT WILL CROSS THESE UTILITIES. WORK SUBSIDIARY TO RESPECTIVE 626 AND 627 PAY ITEMS.
9. WORK IS REQUIRED UNDER EXISTING OVERHEAD CABLES. PROTECT EQUIPMENT AND PERSONNEL AS REQUIRED SUBSIDIARY TO THOSE WORK ITEMS.
10. COMPLY WITH THE LATEST EDITION OF GOLDEN HEART UTILITIES (GHU) "STANDARDS OF CONSTRUCTION" AND "SERVICE LINE STANDARDS".
11. VERIFY ELEVATION OF WATER/ SEWER CONNECTION POINTS AND REPORT THESE SURVEY ELEVATIONS TO THE ENGINEER SO CHANGES CAN BE MADE IN THE GRADES AS REQUIRED TO MATCH EXISTING IMPROVEMENTS. PAYMENT SUBSIDIARY TO 642(1).
12. APPLY 2 INCHES OF ADDITIONAL INSULATION TO WATER MAIN OR WATER SERVICE FOR A DISTANCE OF 7 LF EACH SIDE OF ANY STORM DRAIN OR SANITARY SEWER CROSSING AS SHOWN ON PLANS OR DIRECTED BY ENGINEER IN THE FIELD. PAY SUBSIDIARY TO RESPECTIVE 627 PAY ITEMS.
13. APPLY 2 INCHES OF ADDITIONAL INSULATION TO WATER MAIN OR WATER SERVICE WHERE IT IS WITHIN 7 LF HORIZONTALLY OF STORM DRAIN OR SANITARY SEWER MAIN AS DIRECTED BY ENGINEER IN THE FIELD. PAY SUBSIDIARY TO RESPECTIVE 627 PAY ITEMS.
14. ALL ACCESS FRAMES & COVERS / LIDS IN ASPHALT SHALL BE INSTALLED TO GRADE BEFORE ASPHALT IS INSTALLED. NO CUTTING OUT ASPHALT SHALL BE ALLOWED WITHOUT APPROVAL OF THE ENGINEER.
15. FIELD STAKE ALL SANITARY SEWER AND WATER LOCATIONS FOR APPROVAL BY ENGINEER PRIOR TO INSTALLATION. WORK SUBSIDIARY TO RESPECTIVE 626 AND 627 PAY ITEMS.
16. LOCATE ALL WATER SERVICES USING CONTRACTOR PROVIDED MAGNETIC LOCATOR, OTHER DEVICE DESIGNED FOR WATER SERVICE LOCATES, OR ANY MEANS NECESSARY TO FIND THE SERVICES, PAYMENT SUBSIDIARY TO WATER OR SPRINKLER SERVICES.
17. EXPOSE SERVICE SADDLES ON THE EXISTING WATER AND SEWER MAINS AND VERIFY THEY ARE ACTIVE. REPORT TO ENGINEER BEFORE RECONNECTING NEW SEWER SERVICE. GHU WILL NOT LOCATE WATER OR SEWER SERVICES. ALL COSTS ASSOCIATED WITH FINDING WATER OR SEWER SERVICES WITHIN 10 FEET LEFT OR RIGHT HORIZONTALLY FROM THE LOCATION SHOWN ON THE PLANS OR STAKED BY THE ENGINEER ARE SUBSIDIARY TO WATER SERVICE CONNECTION OR SEWER SERVICE CONNECTION, RESPECTIVELY.
18. MAINTAIN EXISTING UTILITY CUSTOMER SERVICE EXCEPT MAXIMUM 4 HOUR OUTAGE FOR NEW MAIN OR SERVICE RECONNECTIONS. 48 HOUR ADVANCE PUBLIC NOTICE IS REQUIRED.

WATER / SEWER NOTES (CONT.)

19. EXISTING TELECOMMUNICATION CABLES SHOWN ON THE PLAN SHEETS MAY INCLUDE ACS, GCI, OR MTAC UTILITIES.
20. ABANDON EXISTING SANITARY SEWER AND WATER CONDUIT IN PLACE, EXCEPT WHERE CONFLICTS ARISE AS A RESULT OF NEW CONSTRUCTION. WHERE CONFLICTS EXIST, REMOVE EXISTING WATER OR SANITARY SEWER CONDUIT. PLUG ALL ENDS OF ABANDONED PIPE NOT REMOVED WITH 12 INCHES OF SPRAYED URETHANE FOAM OR 4 INCHES OF CONCRETE OR FILL WITH SLURRY AS SHOWN IN PLANS. PAYMENT IS SUBSIDIARY TO PAY ITEM 202(1).
21. RESTRAIN ALL MECHANICAL JOINT BENDS AND PUSH ON JOINTS FROM BENDS OR FITTINGS TO TRANSITION COUPLINGS OR WITHIN 45 FEET OF A BEND. RESTRAIN ALL PUSH ON JOINTS SHOWN TO BE DEFLECTED IN THE PLANS. RESTRAIN ALL VALVES OR REDUCERS WITH MEG-A-LUGS OR APPROVED EQUAL. USE MJ ADAPTERS INSTEAD OF SHORT RESTRAINED PUPS.
22. INSTALL ALL SERVICE VALVES AND SADDLES BEFORE MAINLINE TESTING.
23. INSTALL DUAL COPPER TUBING FOR ALL WATER SERVICE RECONNECTIONS WITH SIZE AS INDICATED ON PLANS AND PIPING LENGTH TO 4' BEYOND PROPERTY LINE. ADAPT TO EXISTING SIZE AS NEEDED.
24. INSTALL 6" DIP WITH 1" COPPER TUBING OR AS OTHERWISE NOTED ON PLANS FOR ALL NEW SPRINKLER LINE RECONNECTIONS AND PIPING LENGTH TO 4' BEYOND PROPERTY LINE. ADAPT TO EXISTING SIZE AS NEEDED.
25. INSTALL 4" PIPE SIZE OR AS OTHERWISE NOTED ON PLANS FOR ALL SEWER SERVICE RECONNECTIONS AND PIPING LENGTH TO 4' BEYOND PROPERTY LINE. ADAPT TO EXISTING SIZE AS NEEDED.
26. SEWER SERVICE RECONNECTIONS MAY REQUIRE GRADE CHANGES TO AVOID CONFLICT WITH WATER MAINS OR STORM DRAIN. PAYMENT FOR THIS WORK IS SUBSIDIARY TO SEWER SERVICE CONNECTIONS.
27. INSTALL ALL SEWER SERVICE SADDLES ON MAIN WITH RISER CAPPED BEFORE AIR TESTING. VIDEO INSPECT MAIN AFTER BACKFILLING A MINIMUM OF 3' ABOVE T.O.P.
28. SCHEDULE ALL UTILITY OUTAGES TO TAKE PLACE DURING NON BUSINESS HOURS. ALL COSTS TO PROVIDE AND INSTALL TEMPORARY MEASURES ON EXISTING UTILITIES ARE SUBSIDIARY TO THE UTILITY PAY ITEM. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES THAT RESULT FROM OUTAGES BEYOND THE PRESCRIBED PERIOD.
29. PAYMENT FOR ALL SHORING, BRACING, TRENCH BOXES, ETC. TO PROTECT BUILDINGS, TRAFFIC, AND PERSONS SHALL BE SUBSIDIARY TO THE STRUCTURE BEING INSTALLED.
30. SALVAGE SEWER MANHOLE & FLUSHWELL CASTINGS. COORDINATE PICK-UP BY GHU.
31. PROTECT OR REMOVE AND REPLACE IN SAME LOCATION OR TO THE SIDE OF THE ROADWAY, EXISTING MARKER POSTS FOR GAS, BURIED CABLE, WATER, SEWER, OR STORM DRAIN, SUBSIDIARY TO OTHER ITEMS OF WORK.
32. FINAL ADJUSTMENT OF MANHOLE FRAMES AND COVERS, VALVE BOXES AND FLUSHWELLS TO FINISH GRADE IS SUBSIDIARY TO RESPECTIVE PAY ITEMS 604, 626, AND 627.
33. THE NATURAL GROUND WATER TABLE VARIES SEASONALLY WITH HIGHER STAGE LEVELS OF THE CHENA AND/OR TANANA RIVERS. APPLY WATERPROOF PROTECTIVE COATING OVER SANITARY SEWER MANHOLES AND PIPING WHERE INDICATED BY ENGINEER. PAY IS SUBSIDIARY TO RESPECTIVE PAY ITEMS.
34. USE MECHANICAL JOINT ADAPTERS FOR ALL FITTING / VALVE ASSEMBLIES.
35. TEST FIRE SPRINKLER SERVICES TO 200 PSI.

ADDITIONAL 2" INSULATION LOCATIONS IN PLANS

Sheet No.	Station	Offset	Count (LF)
U103	'3RD' 22+31	68 RT	14.00
U104	'3RD' 24+05	11 RT	14.00
U104	'3RD' 25+87	28 RT	14.00
U104	'3RD' 25+96	33 LT	14.00
U105	'3RD' 30+10	11 LT	14.00
U105	'3RD' 30+74	11 RT	14.00
U105	'3RD' 31+55	11 LT	14.00
U105	'3RD' 31+60	11 RT	14.00
U105	'3RD' 32+57	11 RT	14.00
U105	'3RD' 33+03	11 RT	14.00
U106	'3RD' 34+25	11 RT	14.00
		Total	**154**

Preliminary Plans

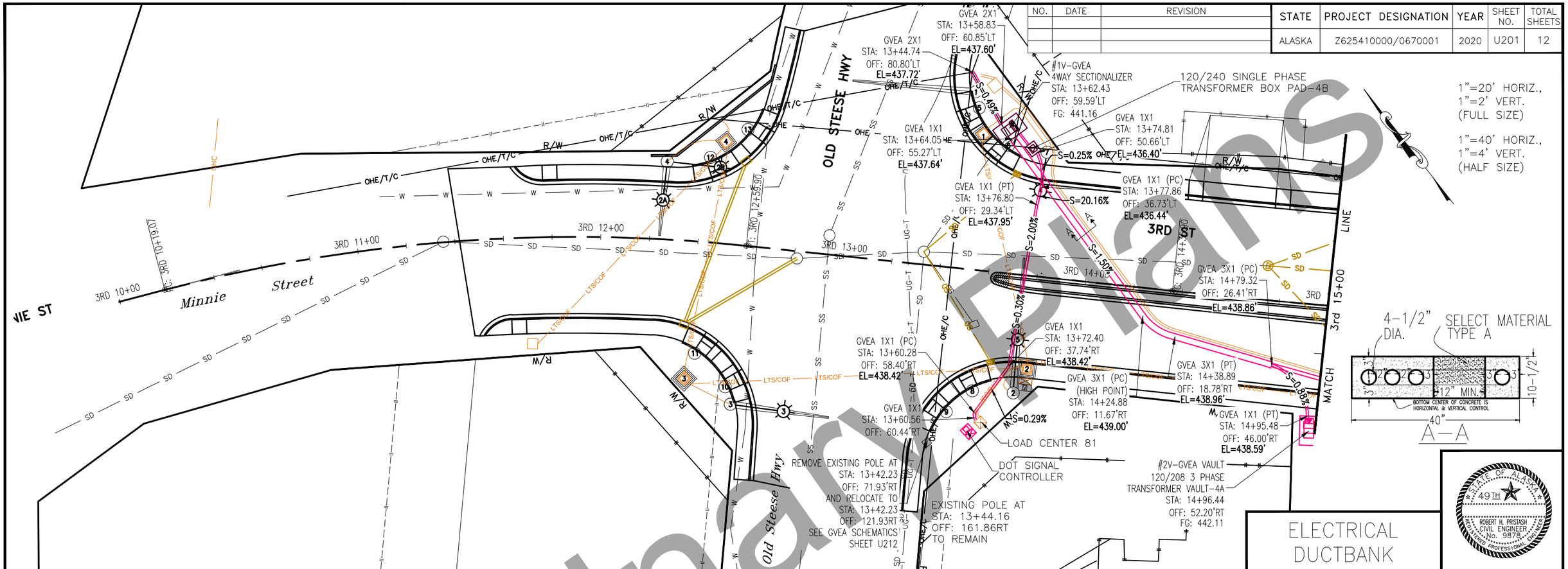
WATER/SEWER NOTES

STATE OF ALASKA 49TH ROBERT M. PRISSIGH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Notes-Summary_WAT-SEW-U109 NOTES_WAT-SEW Mon, Jun/25/18 11:06am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U201	12



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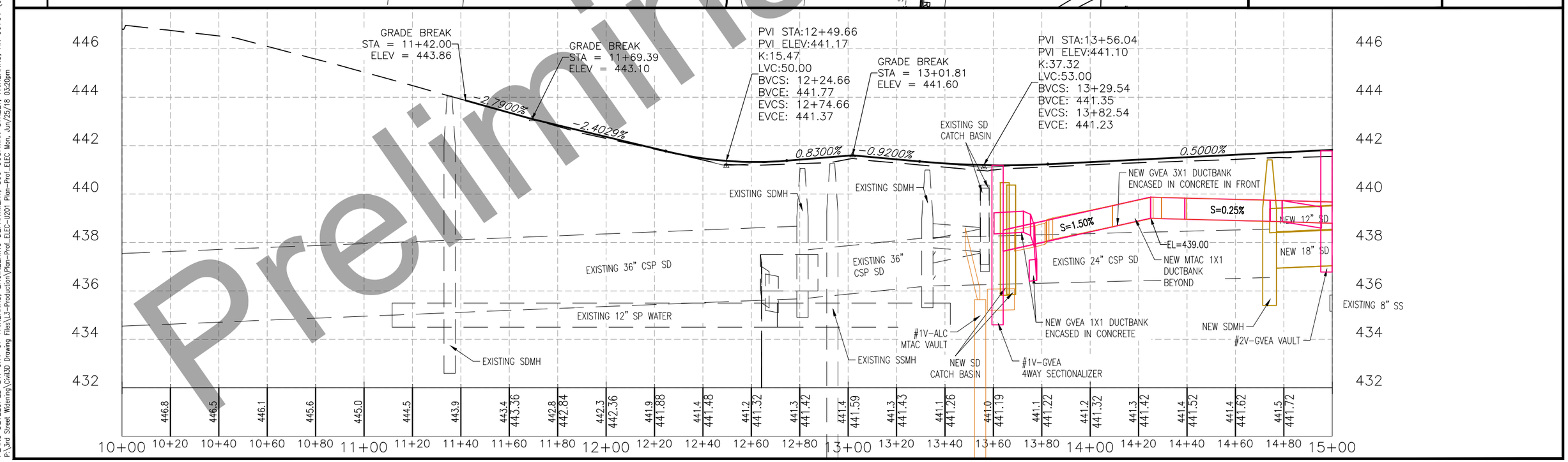

Preliminary Plans

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P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_ELEC-U201 Plan-Prof_ELEC Mon, Jun/25/18 03:20pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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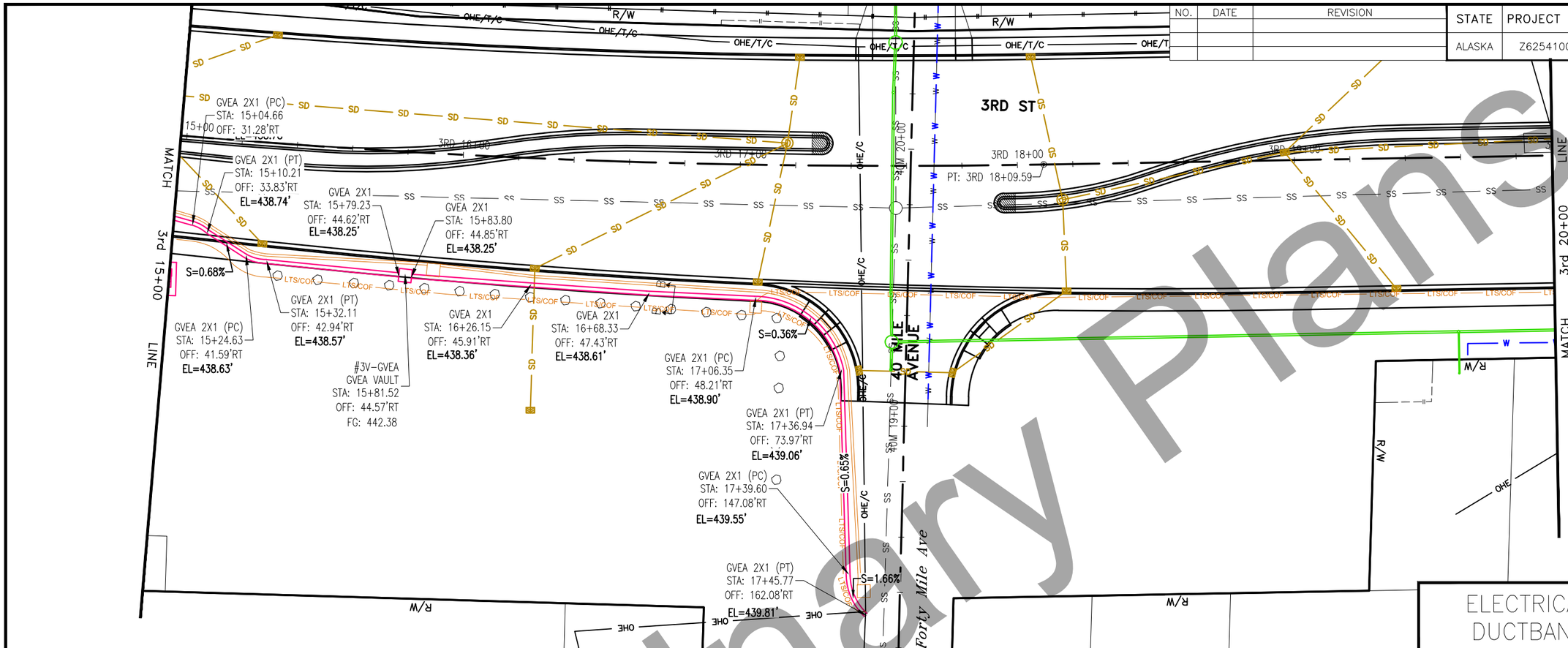

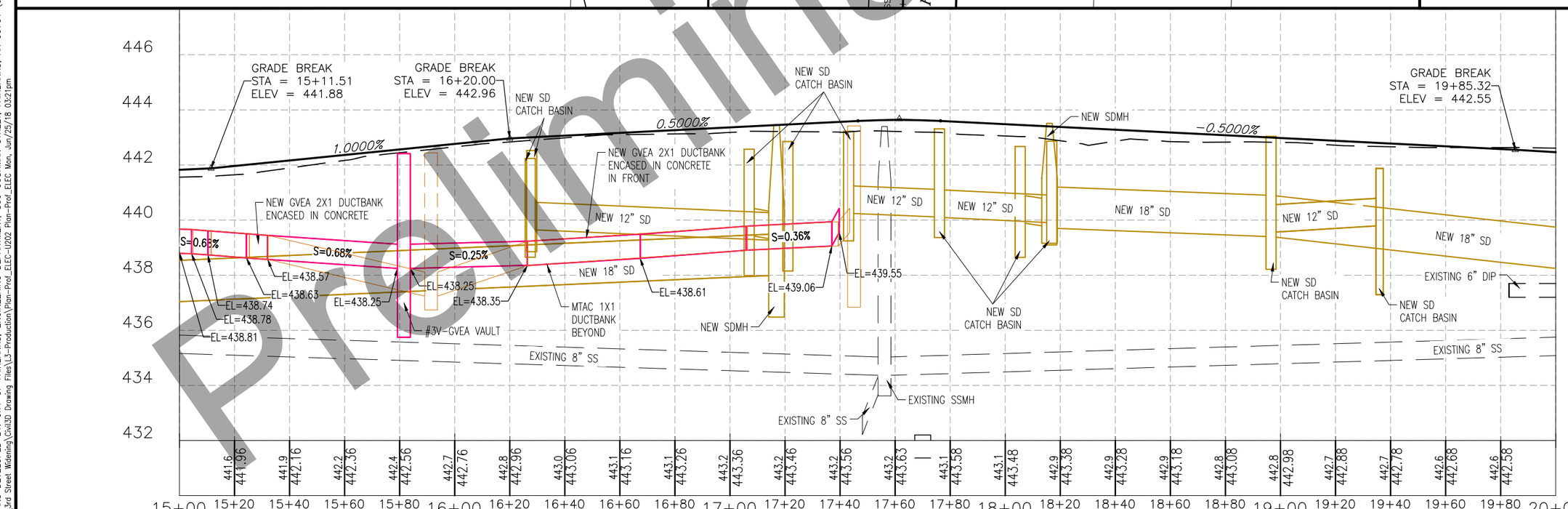

Preliminary Plans

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P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_ELEC-U202 Plan-Prof_ELEC Mon, Jun/25/18 03:21pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U203	12

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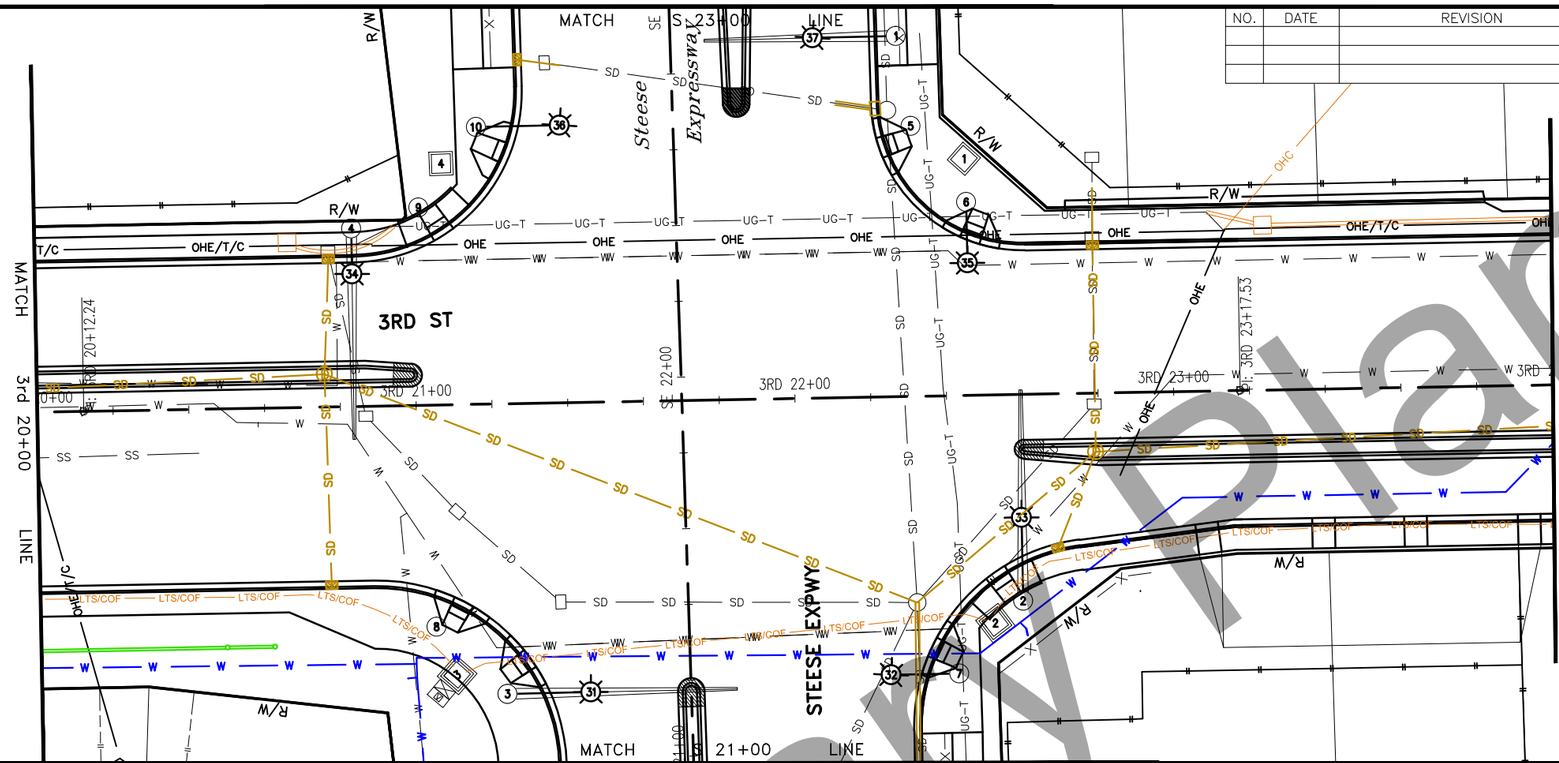
ON THIS SHEET

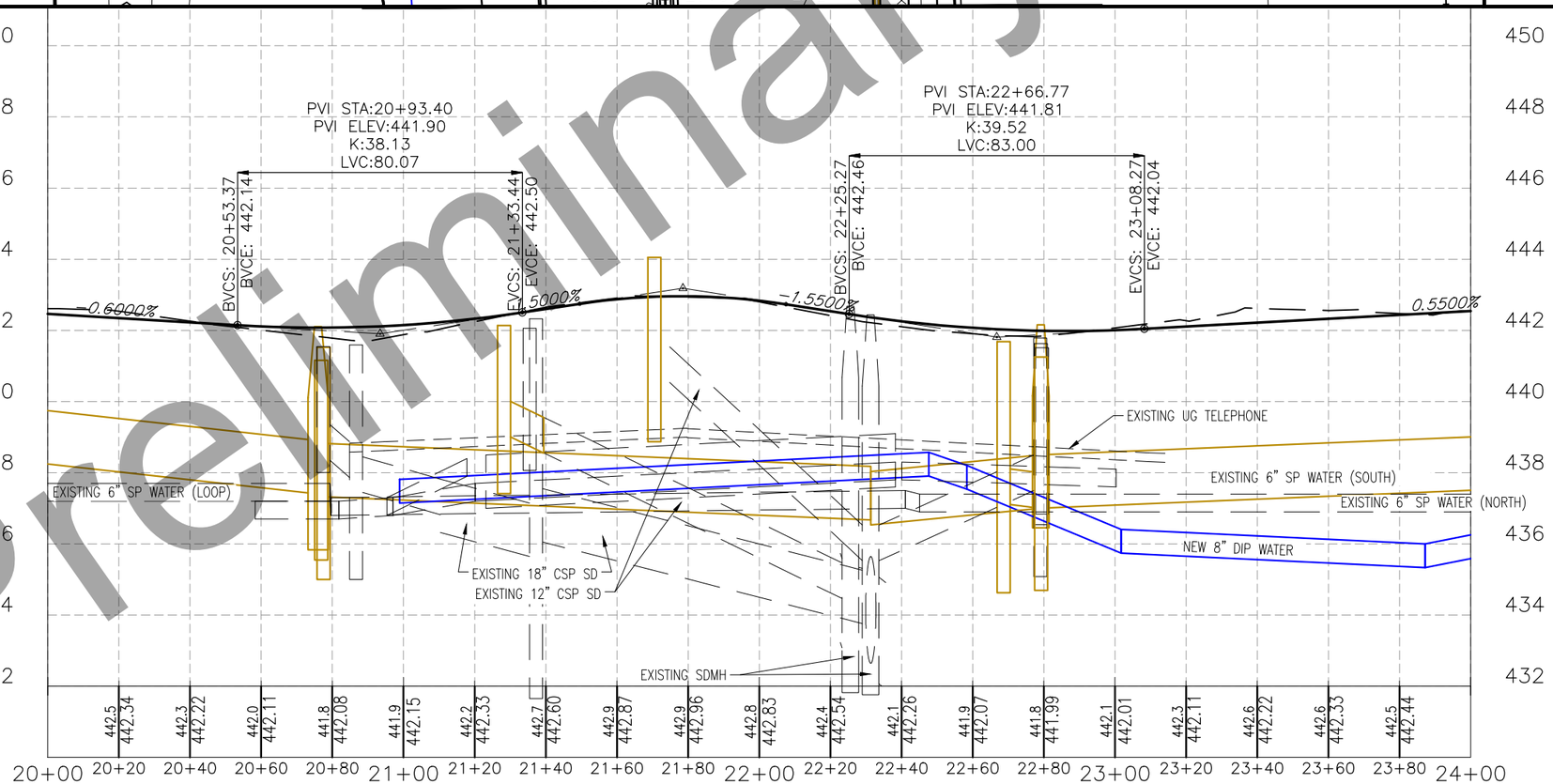


1"=20' HORIZ.,
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)

ELECTRICAL
DUCTBANK

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

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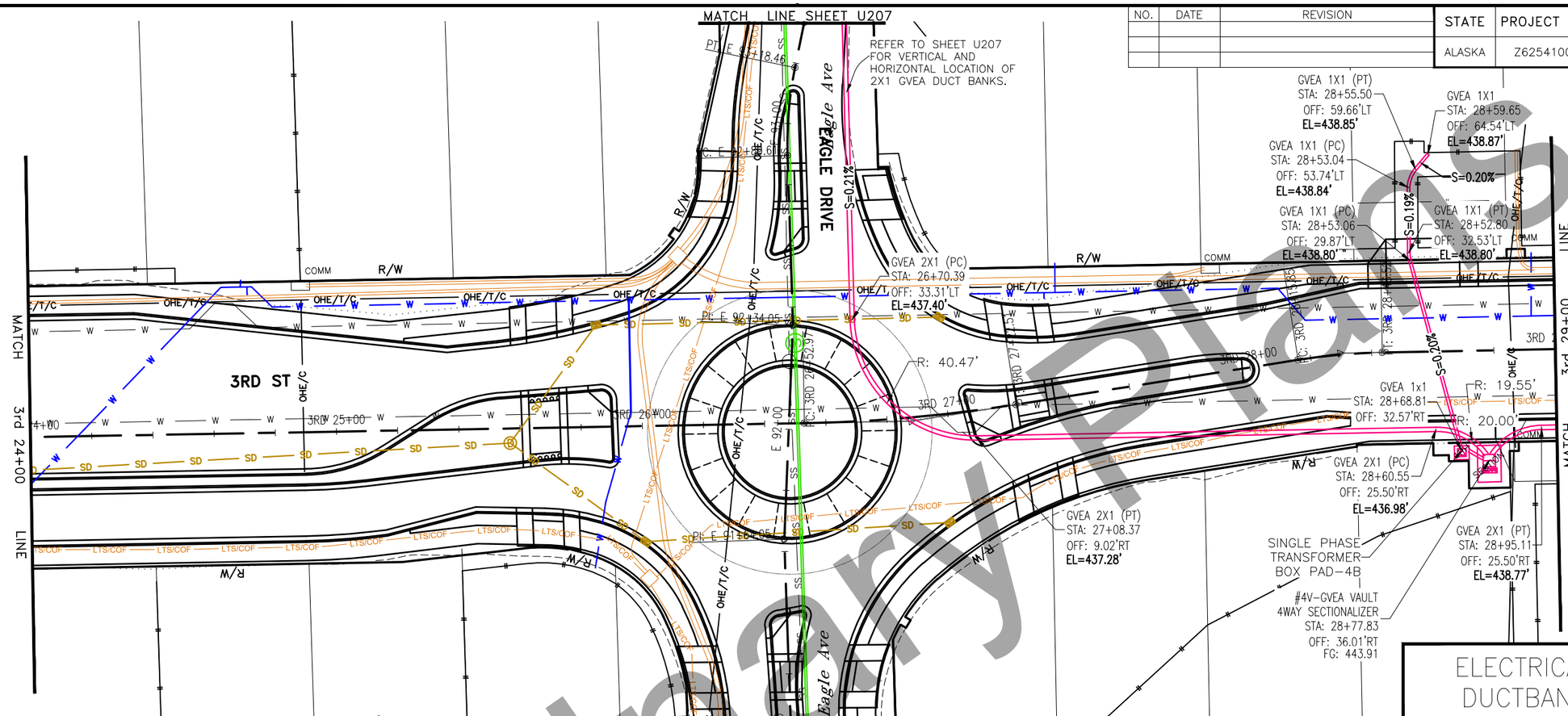
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_ELEC-U203 Plan-Prof_ELEC Mon, Jun/25/18 11:27am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U204	12

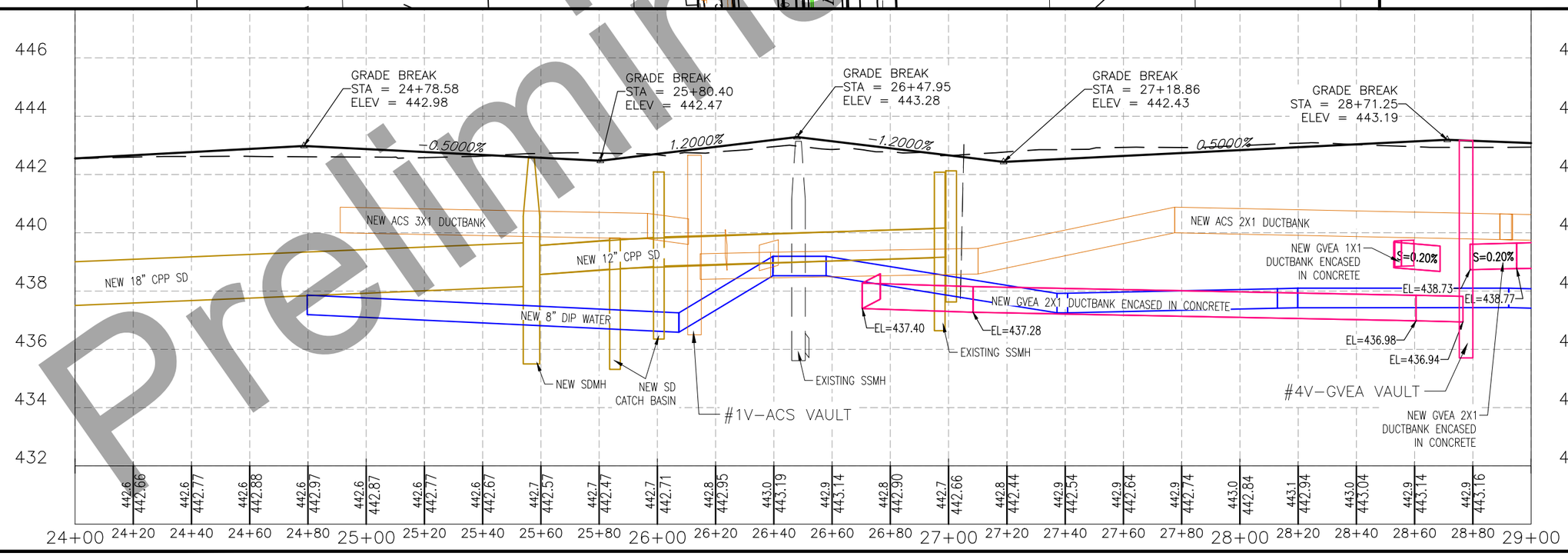


1"=20' HORIZ., 1"=2' VERT. (FULL SIZE)

1"=40' HORIZ., 1"=4' VERT. (HALF SIZE)

ELECTRICAL DUCTBANK

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER



NOTE: EXISTING WATER AND STORM DRAIN FEATURES ARE NOT SHOWN WITHIN PROFILE VIEW.

Preliminary Plans

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U205	12

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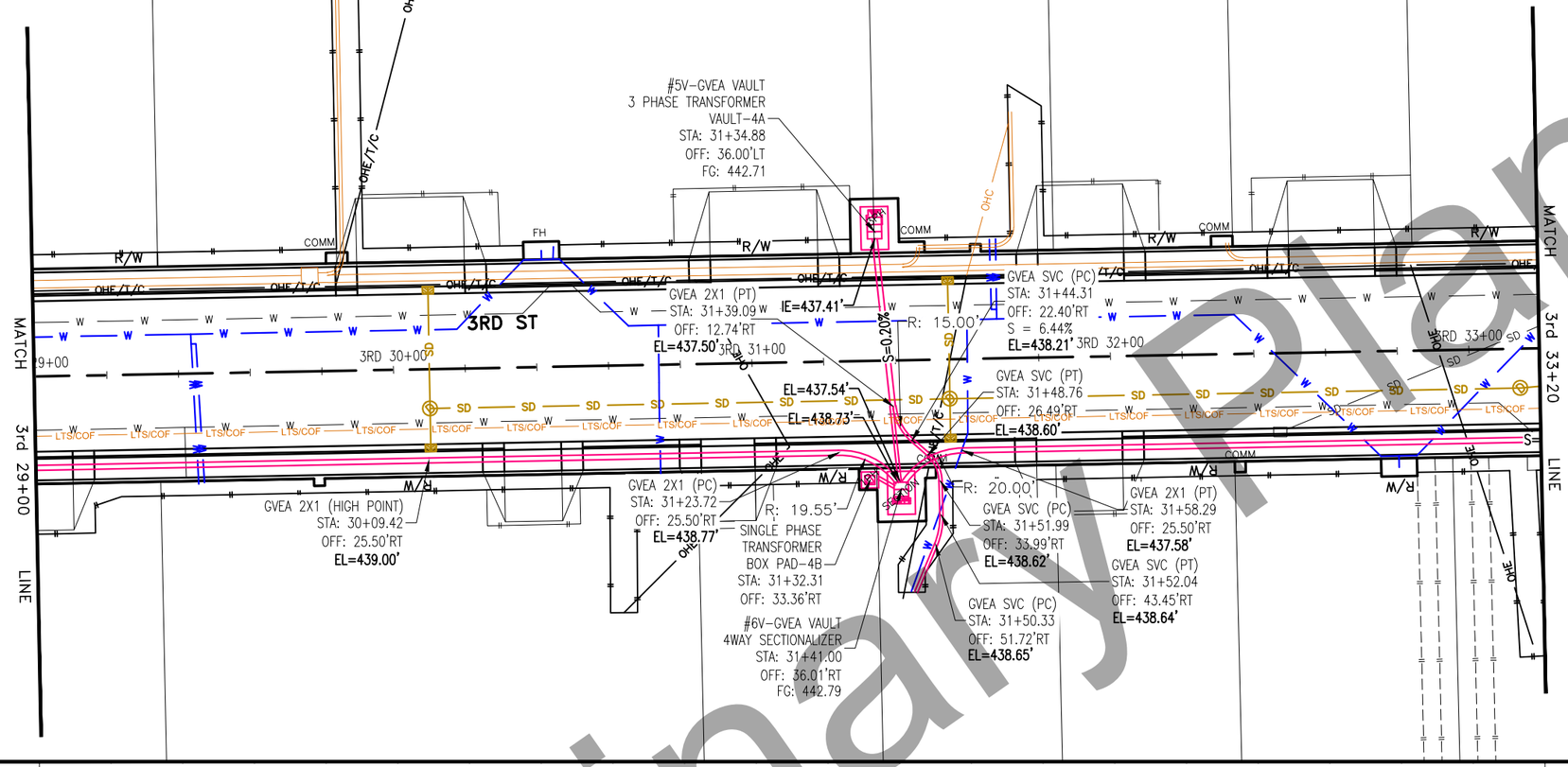

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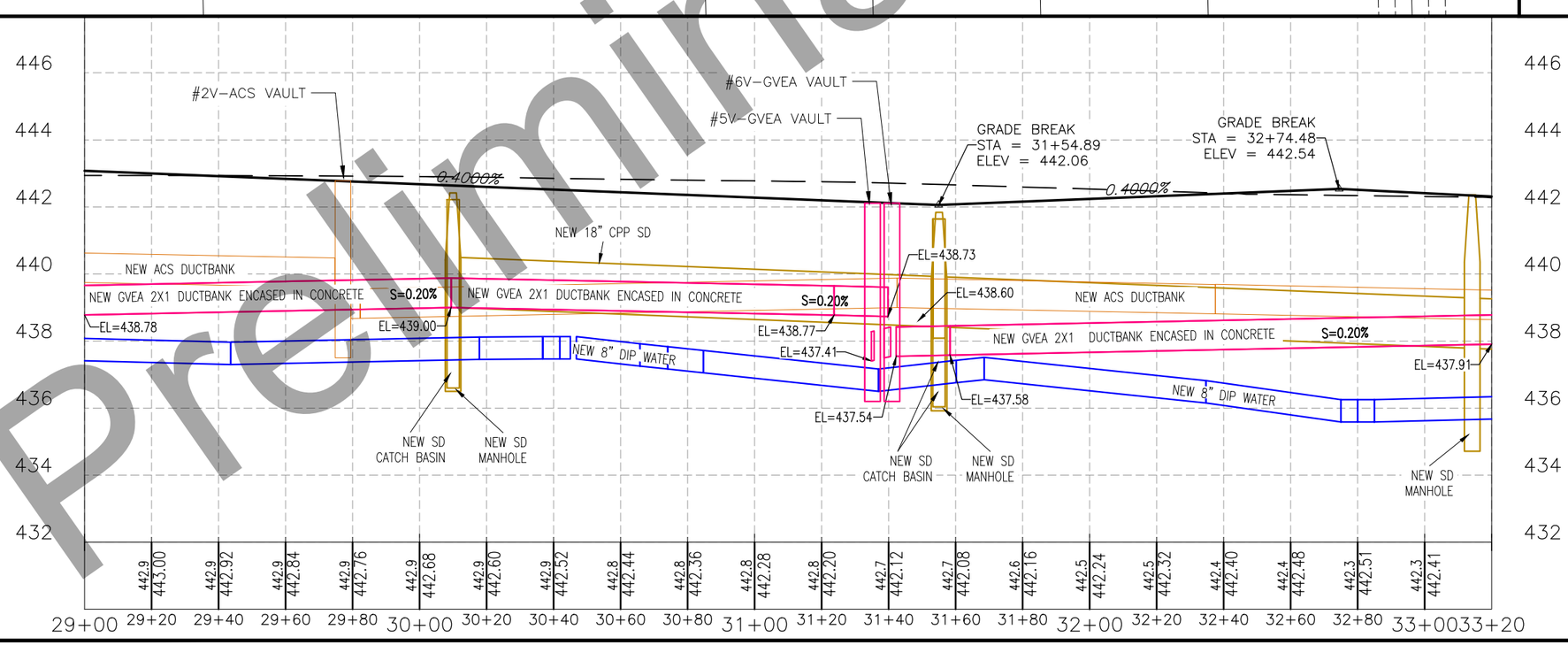

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STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
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Preliminary Plans

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P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_ELEC-U205 Plan-Prof_ELEC Mon, Jun/25/18 03:29pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U206	12

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(FULL SIZE)

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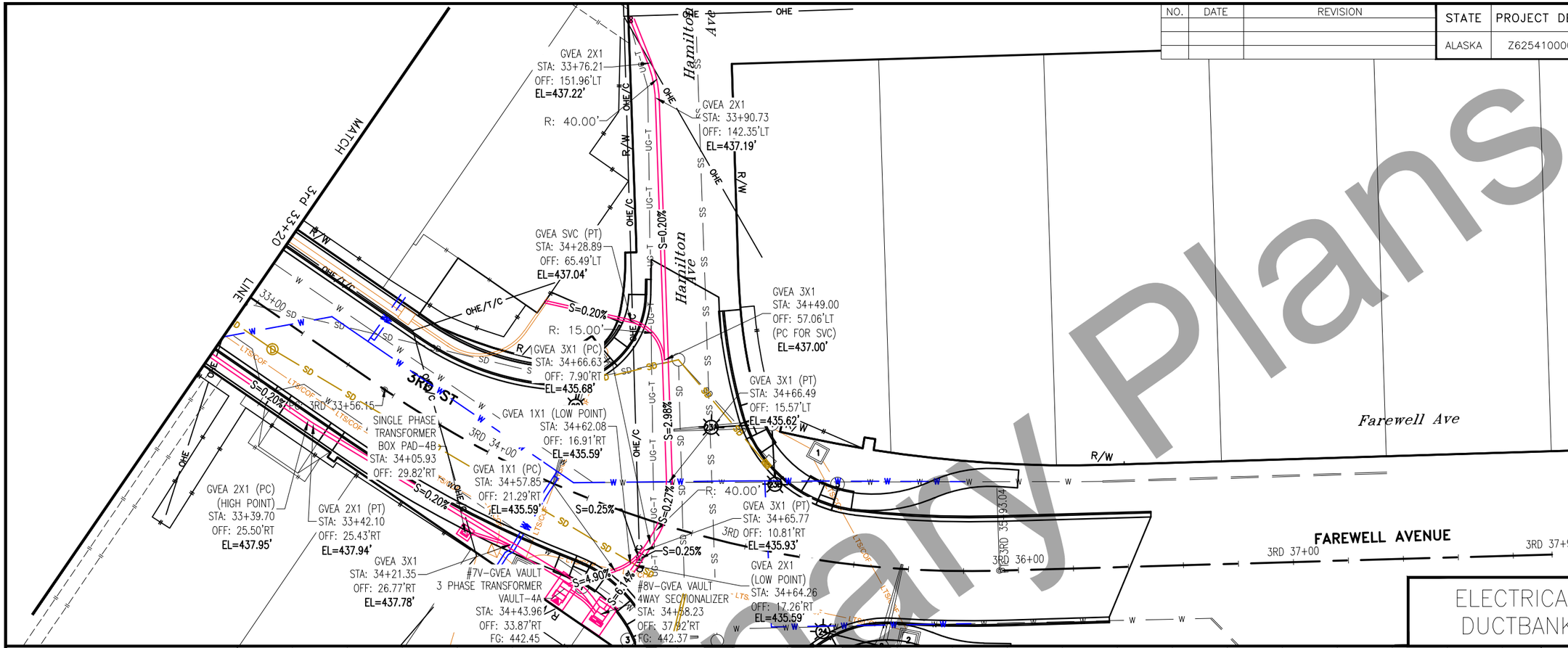
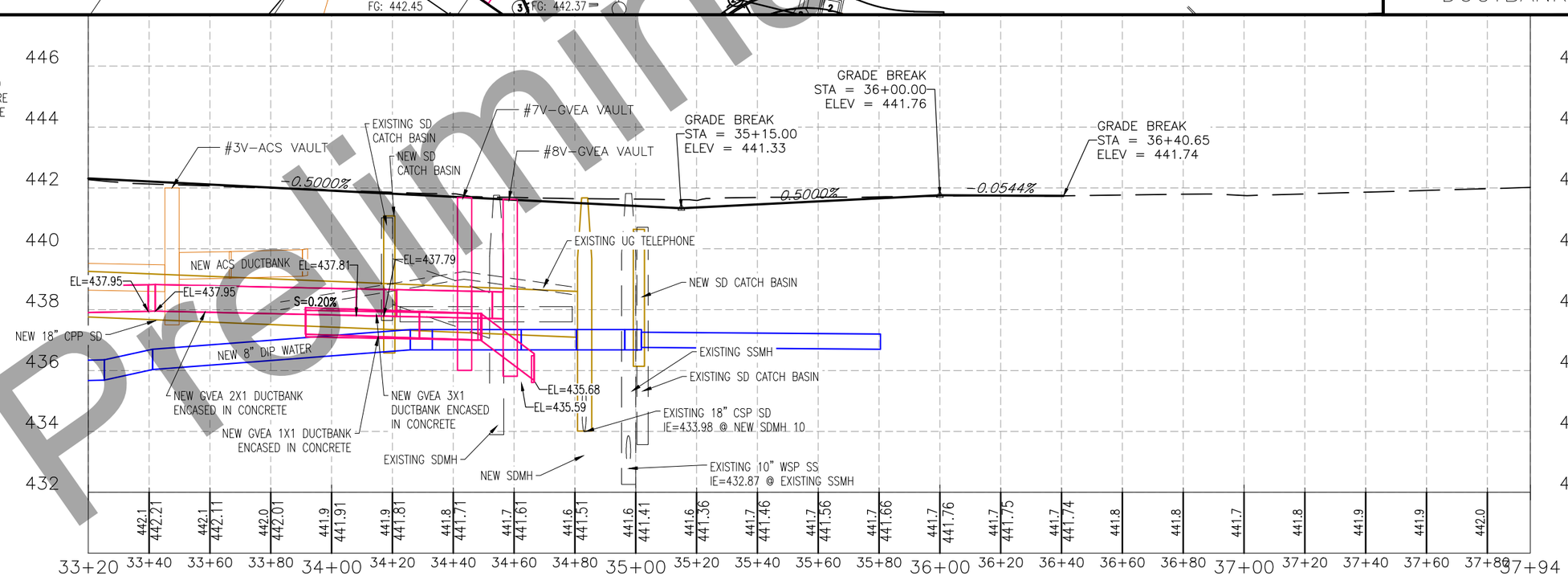
(HALF SIZE)



ELECTRICAL DUCTBANK

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

NOTE: EXISTING WATER AND STORM DRAIN FEATURES ARE NOT SHOWN WITHIN PROFILE VIEW.



Preliminary Plans

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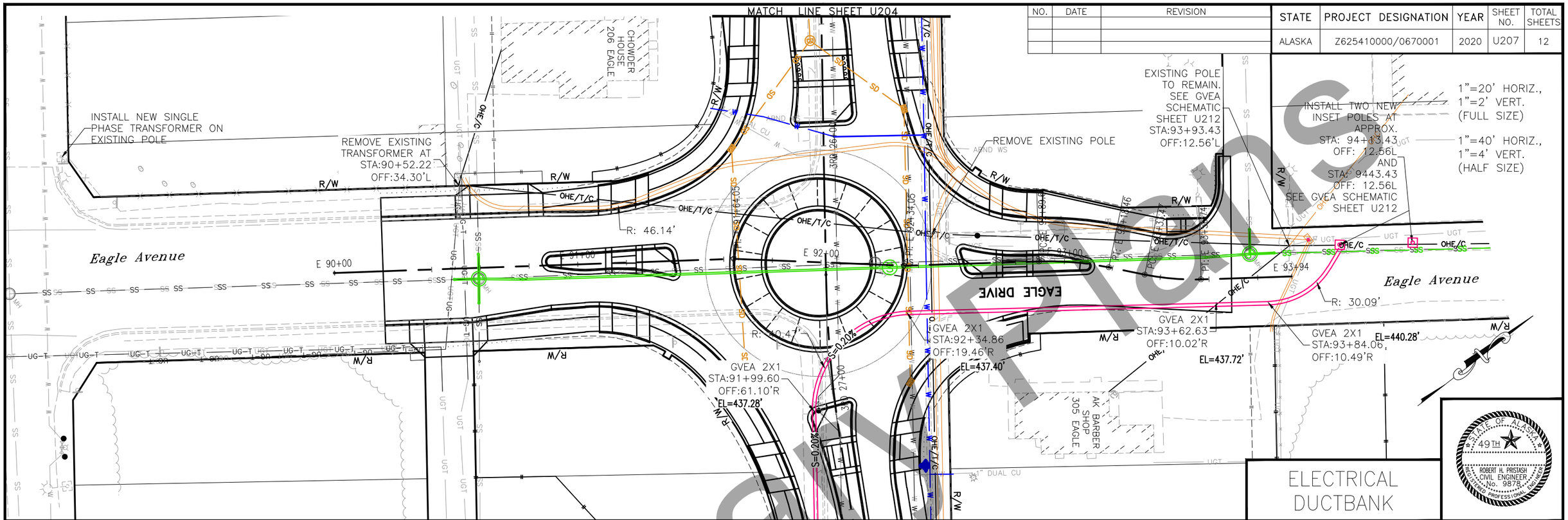
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_ELEC-U206 Plan-Prof_ELEC Mon, Jun/25/18 03:34pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U207	12



Preliminary Plans

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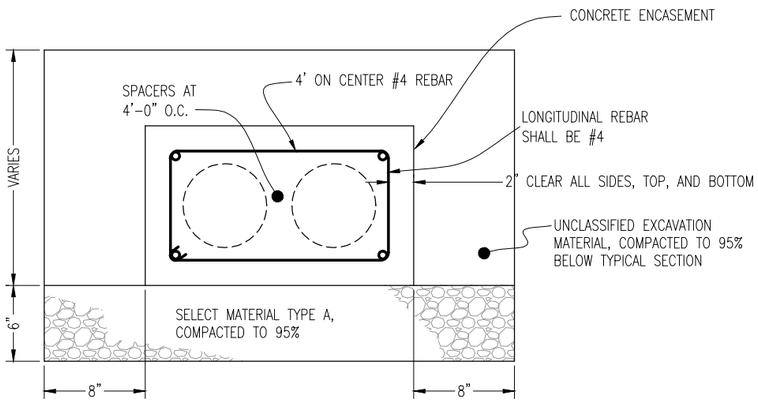
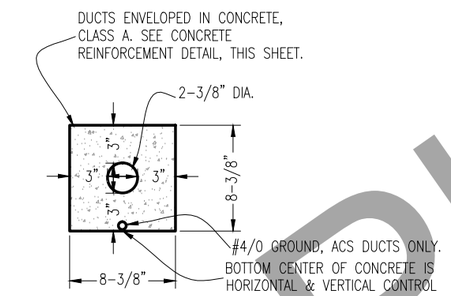
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_Eagle_ELEC-U207 Plan-Prof_ ELEC-Eagle Mon, Jun/25/18 04:05pm

NO.	DATE	REVISION

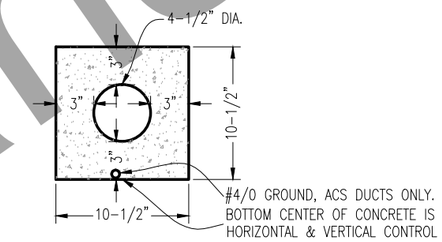
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U208	12



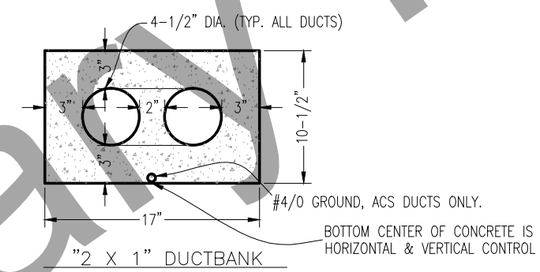
TYPICAL DUCTBANK SECTION



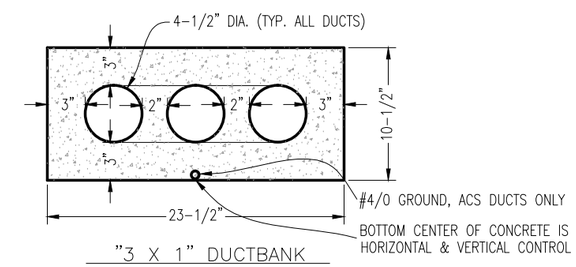
"1 X 1" DUCTBANK



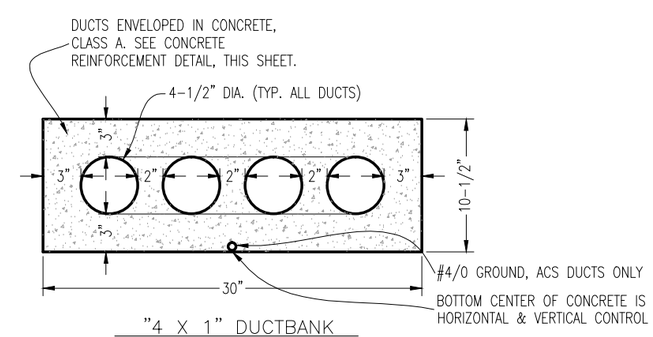
"1 X 1" DUCTBANK



"2 X 1" DUCTBANK

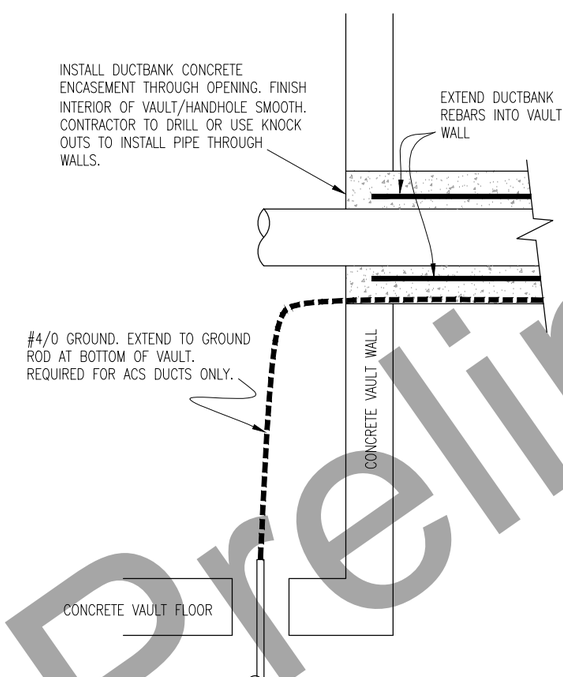


"3 X 1" DUCTBANK



"4 X 1" DUCTBANK

TYPICAL DUCTBANK CONFIGURATIONS



VAULT PENETRATION DETAIL

DUCTBANK TYPICAL SECTIONS,
POWER & COMM

STATE OF ALASKA
49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

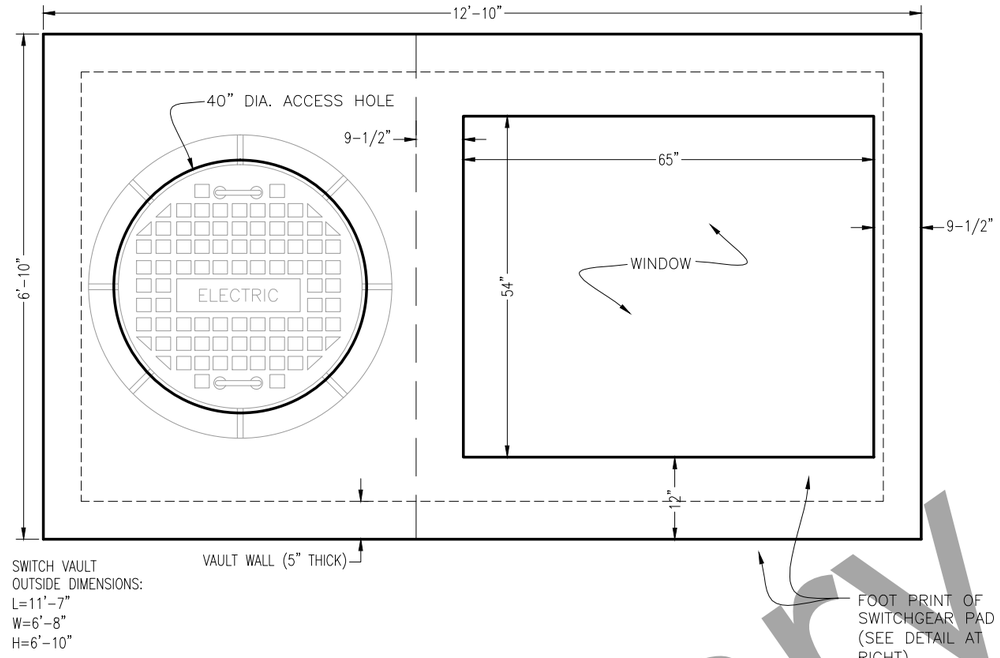
PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\DuctbankXSEC-COMM-U208 Ductbank Typical Sec Mon, Jun/25/18 11:45am

NO.	DATE	REVISION

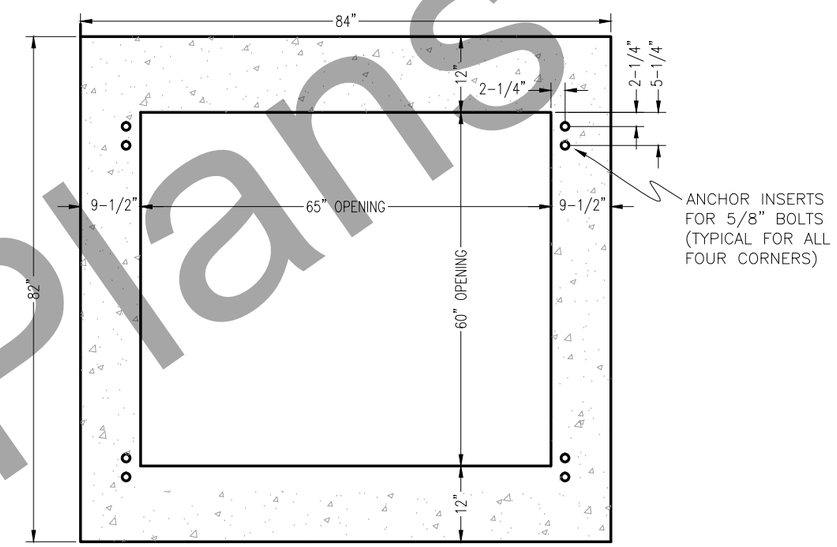
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U209	12

**USE MANHOLE FRAME AND COVER PER SHEET: 7.04

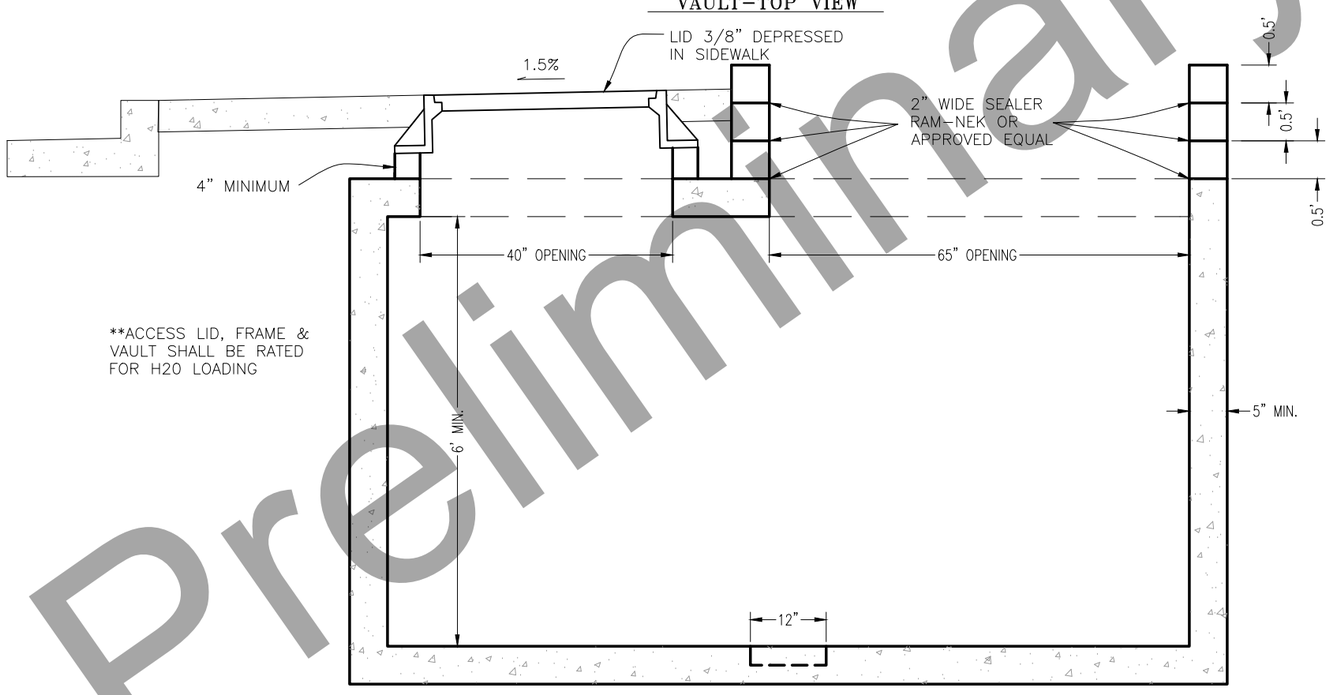
**DUCT TERMINATION LOCATION PER INDIVIDUAL VAULT SPECIFICATION

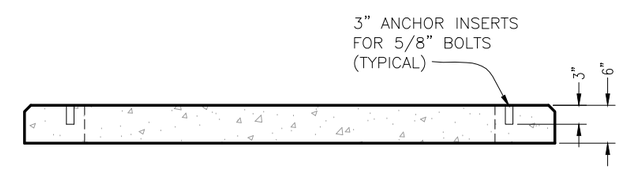


VAULT-TOP VIEW



SWITCHGEAR PAD-TOP VIEW





SWITCHGEAR PAD-SIDE VIEW

GVEA SWITCHGEAR VAULT DETAILS

GVEA SWITCH VAULT

STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

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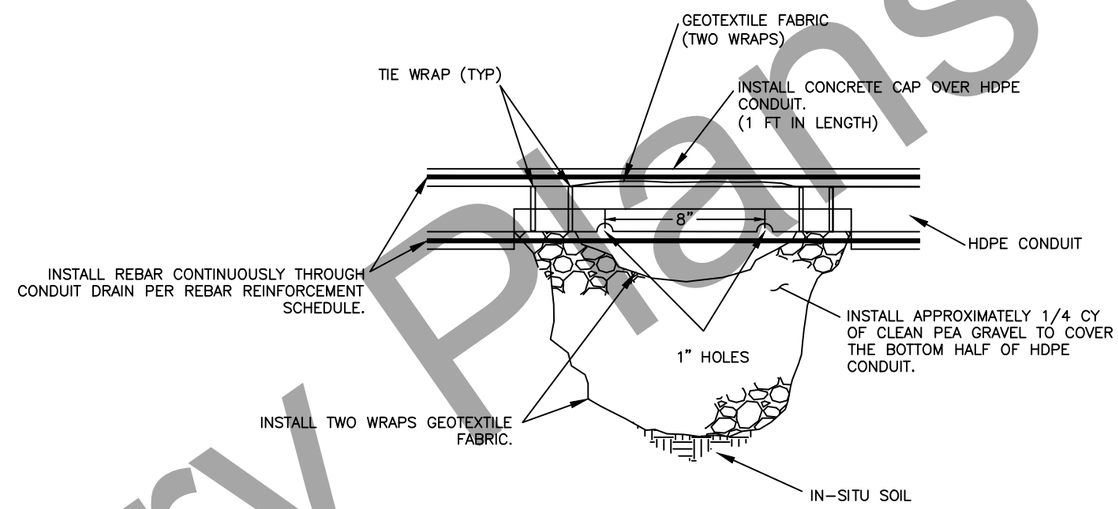
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\GVEA SwitchgearVault-U209 SWITCHGEAR VAULT Mon, Jun/25/18 11:49am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U210	12

UTILITY / GVEA NOTES

1. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION. PAYMENT SUBSIDIARY TO ASSOCIATED PAY ITEM 662.
2. VERIFY LOCATION AND ELEVATION OF NEARBY UNDERGROUND WATER, SEWER, STORM DRAIN OR CABLES (BOTH MAINS AND SERVICES), AND REPORT TO ENGINEER BEFORE STARTING WORK THAT WILL CROSS THESE UTILITIES. PAYMENT SUBSIDIARY TO ASSOCIATED PAY ITEM 662.
3. WORK IS REQUIRED UNDER EXISTING OVERHEAD CABLES. PROTECT EQUIPMENT AND PERSONNEL AS REQUIRED SUBSIDIARY TO ASSOCIATED PAY ITEM 662.
4. CONTRACTOR SHALL SCHEDULE ALL UTILITY OUTAGES TO TAKE PLACE DURING NON BUSINESS HOURS. ALL COSTS TO PROVIDE IT AND INSTALL TEMPORARY MEASURES ON EXISTING UTILITIES ARE SUBSIDIARY TO THE ASSOCIATED BID ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES THAT RESULT FROM OUTAGES BEYOND THE PRESCRIBED PERIOD.
5. MAINTAIN A MINIMUM OF 12" SEPARATION BETWEEN ELECTRIC POWER AND TELECOMMUNICATION CONDUITS.
6. INSTALL THREE-PHASE TRANSFORMER PAD & VAULT PER DETAILS OF MARCH 2013 OR CURRENT GVEA "ELECTRICAL SERVICE REQUIREMENTS FOR COMMERCIAL AND MULTI-RESIDENTIAL INSTALLATIONS" PAGES 34-36. CONSTRUCT CONCRETE COLLAR OF CLASS A CONCRETE AND MATCH BACK OF SIDEWALK GRADE.
7. INSTALL SINGLE-PHASE TRANSFORMER BOX PAD PER DETAILS OF SAME GVEA REQUIREMENTS, PAGE 32, WITH TOP OF BOX PAD 4" ABOVE BACK OF SIDEWALK GRADE.
8. INSTALL SECTIONALIZER AS THREE-PHASE TRANSFORMER PER DETAILS DESCRIBED ABOVE IN NOTE 6.
9. INSTALL RMC LONG RADIUS SWEEPS AT ALL LOCATIONS WHERE CONDUITS ARE EXPOSED ABOVE THE GROUND SURFACE. JOIN RMC WITH HDPE CONDUIT WITH APPROVED COUPLINGS.
10. SUPPORT EXISTING POWER POLES AS NECESSARY TO INSTALL DUCT BANK SYSTEM. DEFLECT DUCT BANK AROUND EXISTING POWER POLES AS REQUIRED. PAYMENT SUBSIDIARY TO DUCT BANK SYSTEM PAY ITEM 662(115).
11. SEE ALSO SUPPLEMENTAL DOCUMENTS: GVEA STAKING SHEETS.
12. DUCTBANKS SHOULD ENTER VAULTS OFFSET FROM THE CENTER AND DIRECTLY ACROSS ONE ANOTHER TO ALLOW FOR CONDUIT LOOP INSIDE VAULT. DUCTBANK SHOULD NOT ENTER VAULT AT THE CENTER.



CONDUIT DRAIN HOLES
NOT TO SCALE

Preliminary Plans

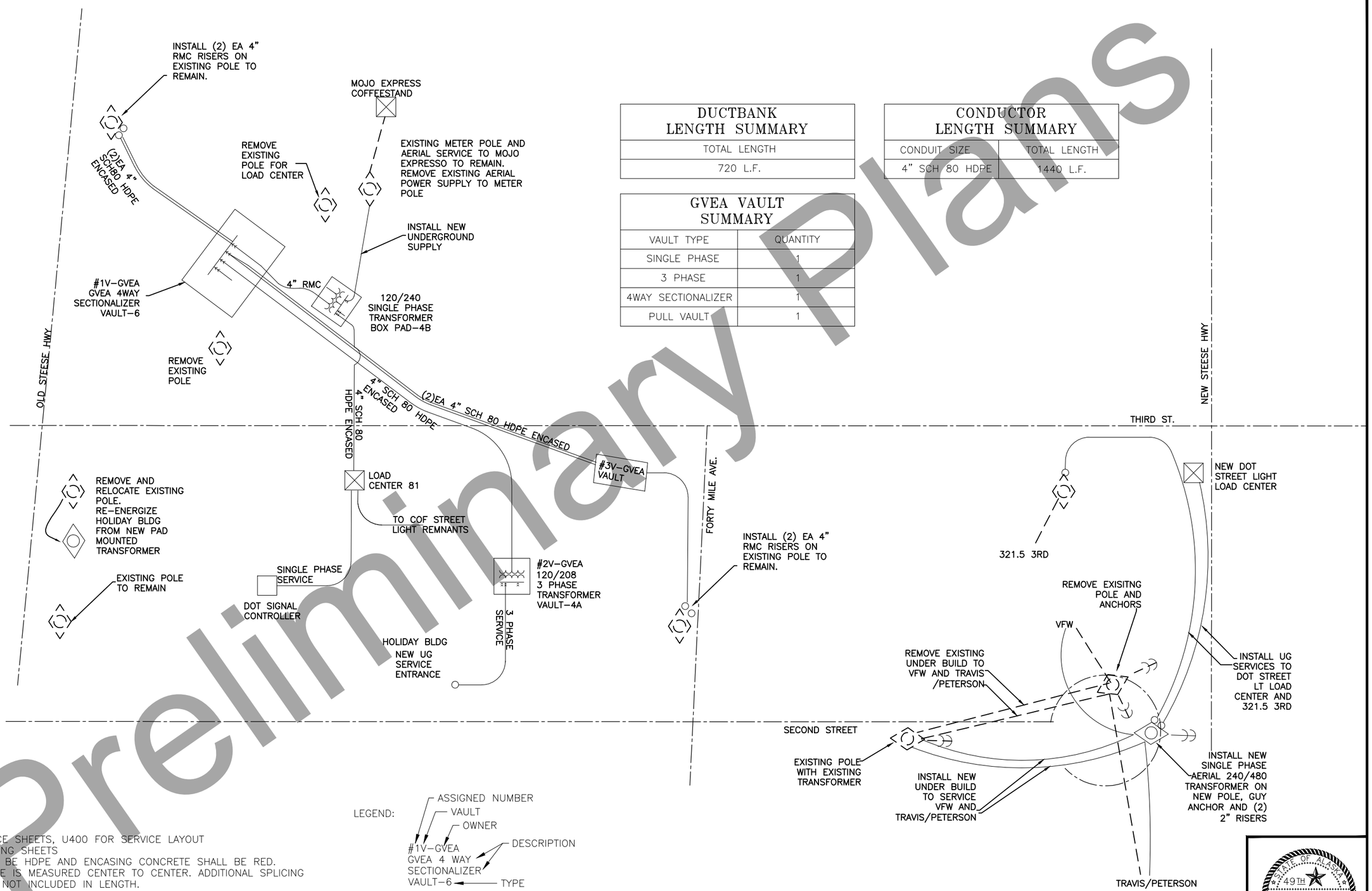
GVEA
NOTES/DETAILS

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Notes-Summary_GVEA-U210 NOTES_DETAILS_GVEA Mon, Jun/25/18 11:54am

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U211	12



DUCTBANK LENGTH SUMMARY
TOTAL LENGTH
720 L.F.

CONDUCTOR LENGTH SUMMARY	
CONDUIT SIZE	TOTAL LENGTH
4" SCH 80 HDPE	1440 L.F.

GVEA VAULT SUMMARY	
VAULT TYPE	QUANTITY
SINGLE PHASE	1
3 PHASE	1
4WAY SECTIONALIZER	1
PULL VAULT	1

NOTES:

1. SEE ELECTRICAL SERVICE SHEETS, U400 FOR SERVICE LAYOUT
2. REFERENCE GVEA STAKING SHEETS
3. ALL DUCTBANKS SHALL BE HDPE AND ENCASING CONCRETE SHALL BE RED.
4. LENGTH SUMMARY TABLE IS MEASURED CENTER TO CENTER. ADDITIONAL SPLICING AND SLACK LOOP ARE NOT INCLUDED IN LENGTH.

LEGEND:

#1V-GVEA
GVEA 4 WAY SECTIONALIZER
VAULT-6

ASSIGNED NUMBER
VAULT
OWNER
DESCRIPTION
TYPE

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

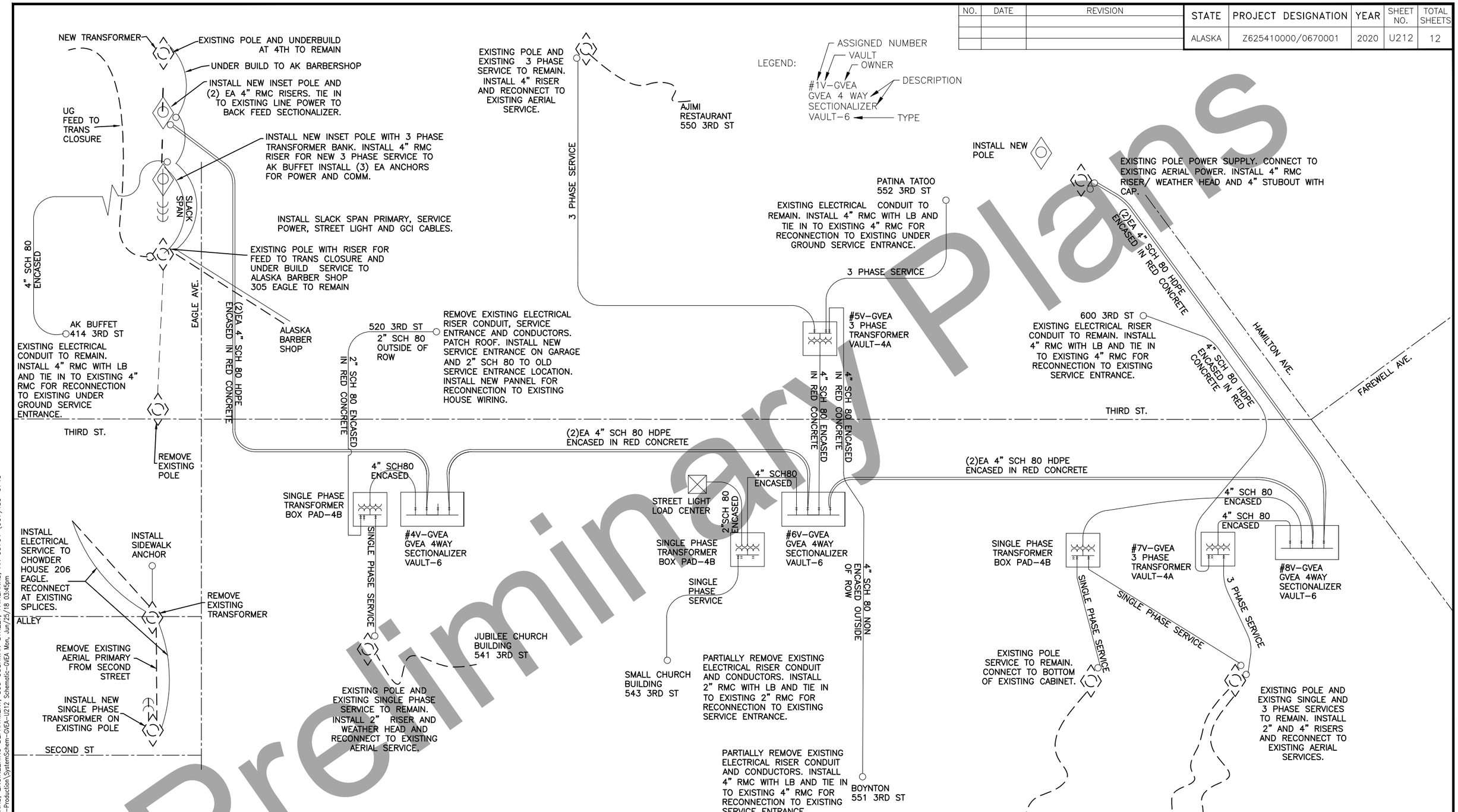
SYSTEM SCHEMATIC
GVEA 1 OF 2

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-GVEA-U211 Schematic-GVEA Mon, Jun/25/18 03:45pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U212	12



Preliminary Plans

DUCTBANK LENGTH SUMMARY
TOTAL LENGTH
1560 L.F.

CONDUCTOR LENGTH SUMMARY	
CONDUIT SIZE	TOTAL LENGTH
4" SCH 80 HDPE	2735 L.F.
2" SCH 80 HDPE	105 L.F.

SERVICE LINE CONDUCTOR SUMMARY	
SERVICE TYPE	QUANTITY
SINGLE PHASE	3
3 PHASE	3

GVEA VAULT SUMMARY	
VAULT TYPE	QUANTITY
SINGLE PHASE	2
3 PHASE	2
4WAY SECTIONALIZER	3

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
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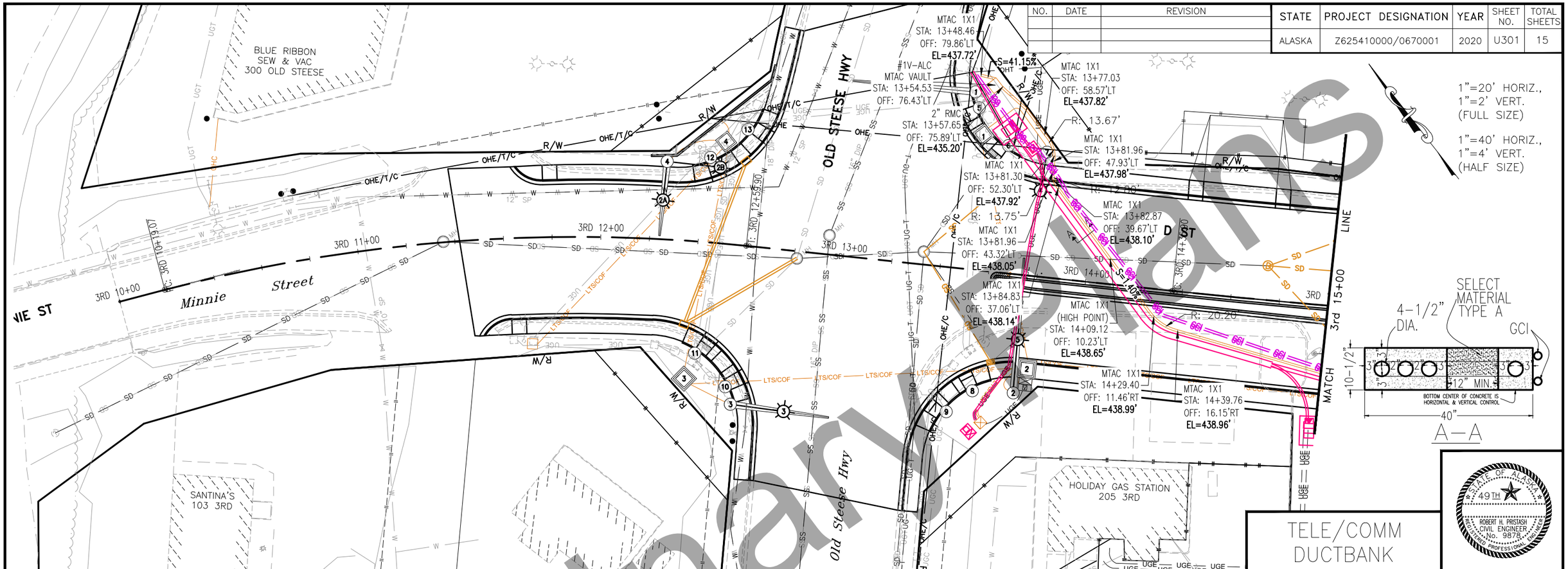
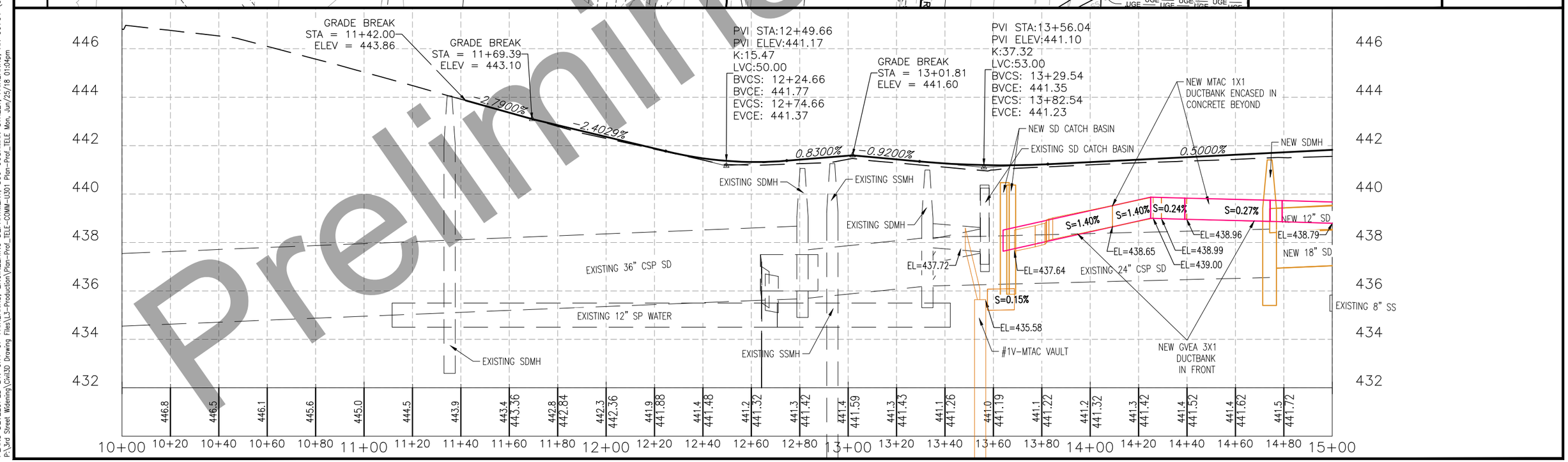
SYSTEM SCHEMATIC
GVEA 2 OF 2

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-GVEA-U212 Schematic-GVEA Mon, Jun/25/18 03:45pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U301	15



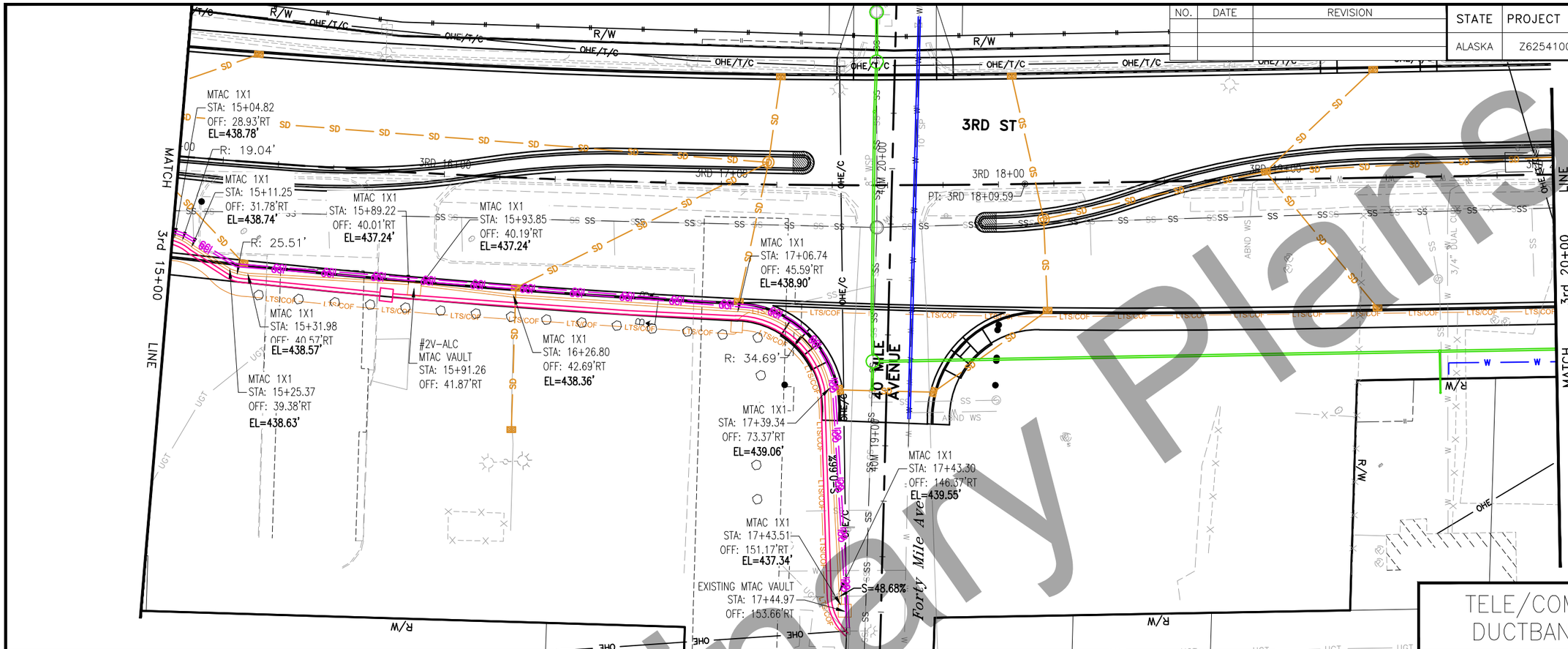


Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_TELE-COMM-U301 Plan-Prof_TELE Mon, Jun/25/18 01:04pm

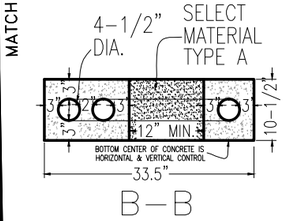
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U302	15



1"=20' HORIZ., 1"=2' VERT. (FULL SIZE)

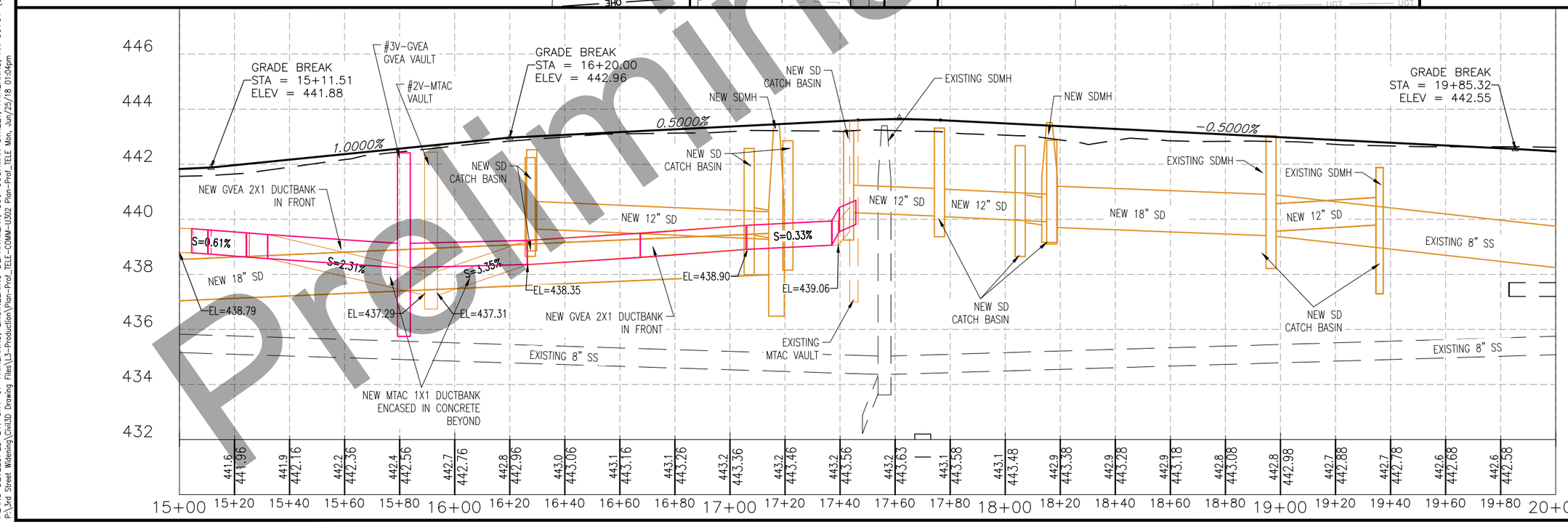
1"=40' HORIZ., 1"=4' VERT. (HALF SIZE)



B-B

TELE/COMM DUCTBANK

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

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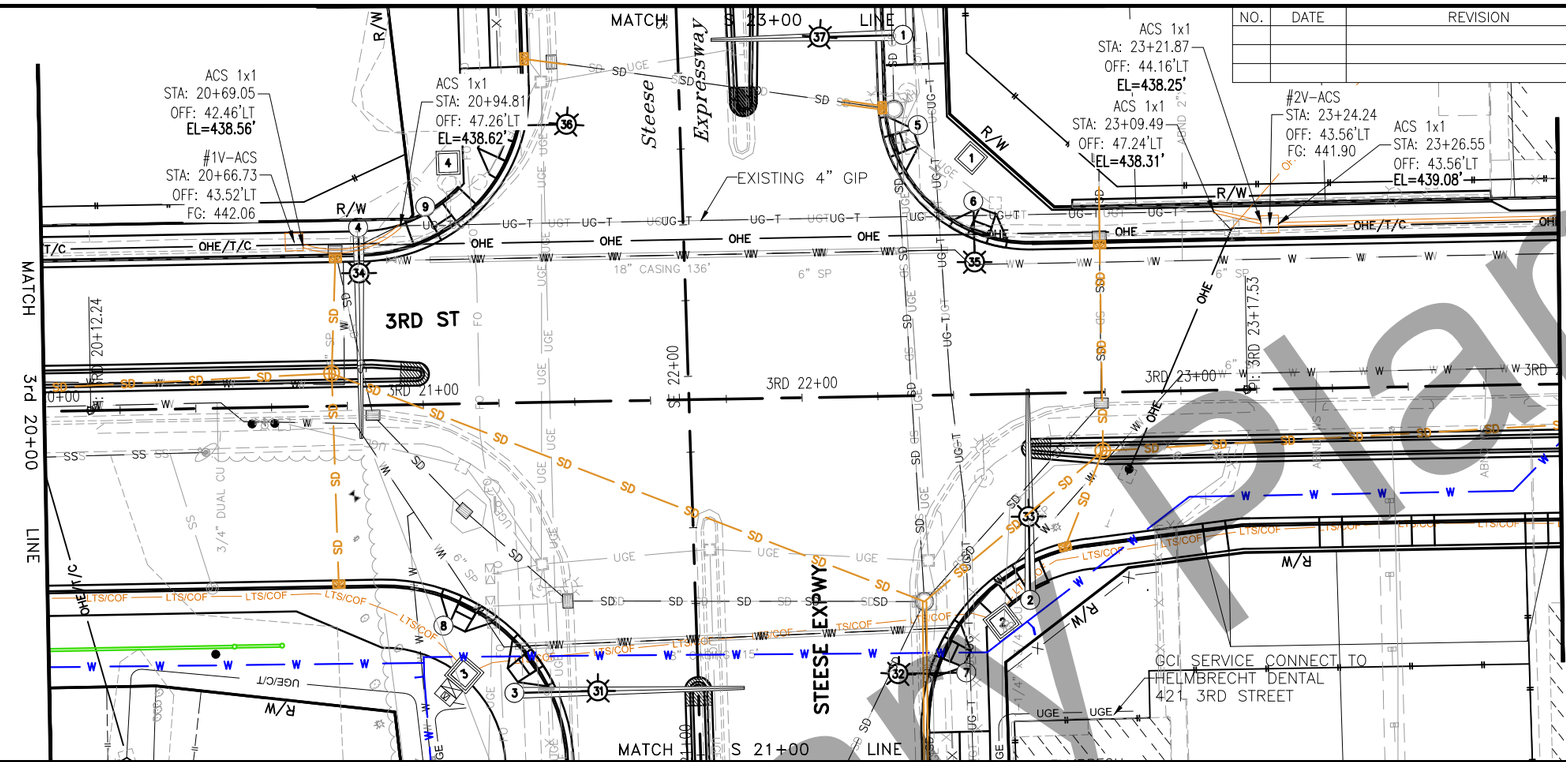
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_TELE-COMM-U302 Plan-Prof_TELE Mon, Jun/25/18 01:04pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U303	15

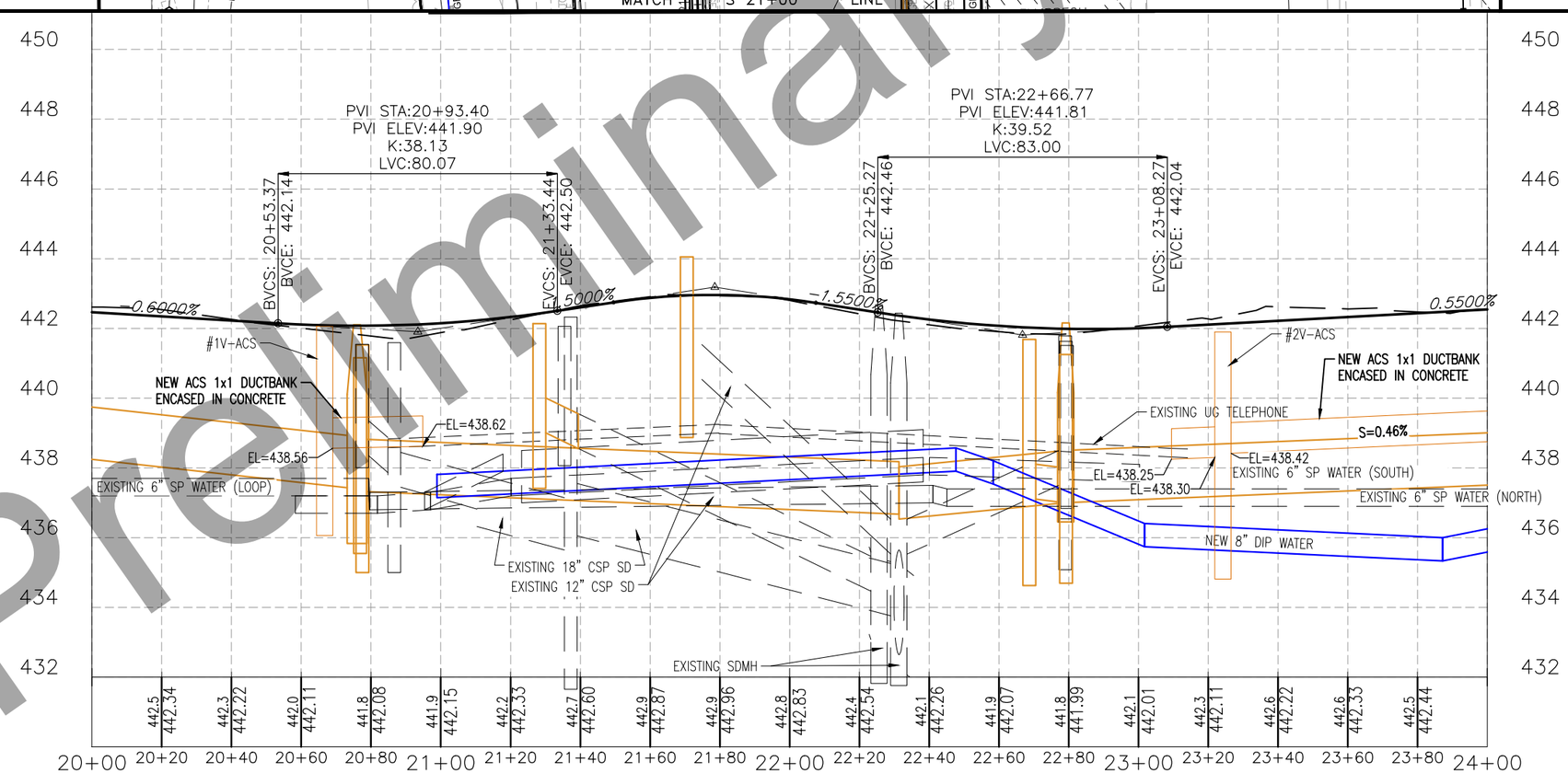


1"=20' HORIZ.,
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)

TELE/COMM
DUCTBANK

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER



Preliminary Plans

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P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_TELE-COMM-U303 Plan-Prof_TELE Mon, Jun/25/18 01:05pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U304	15

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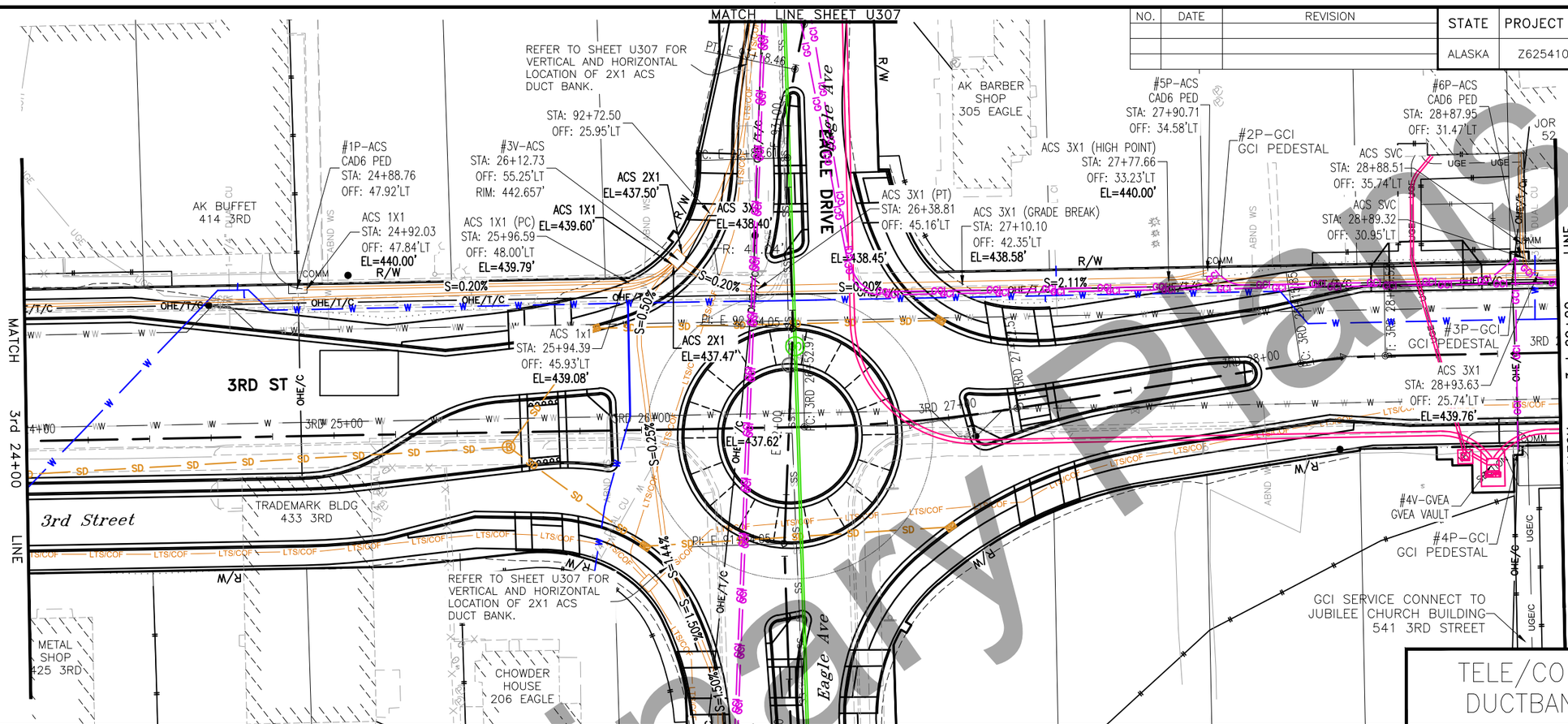
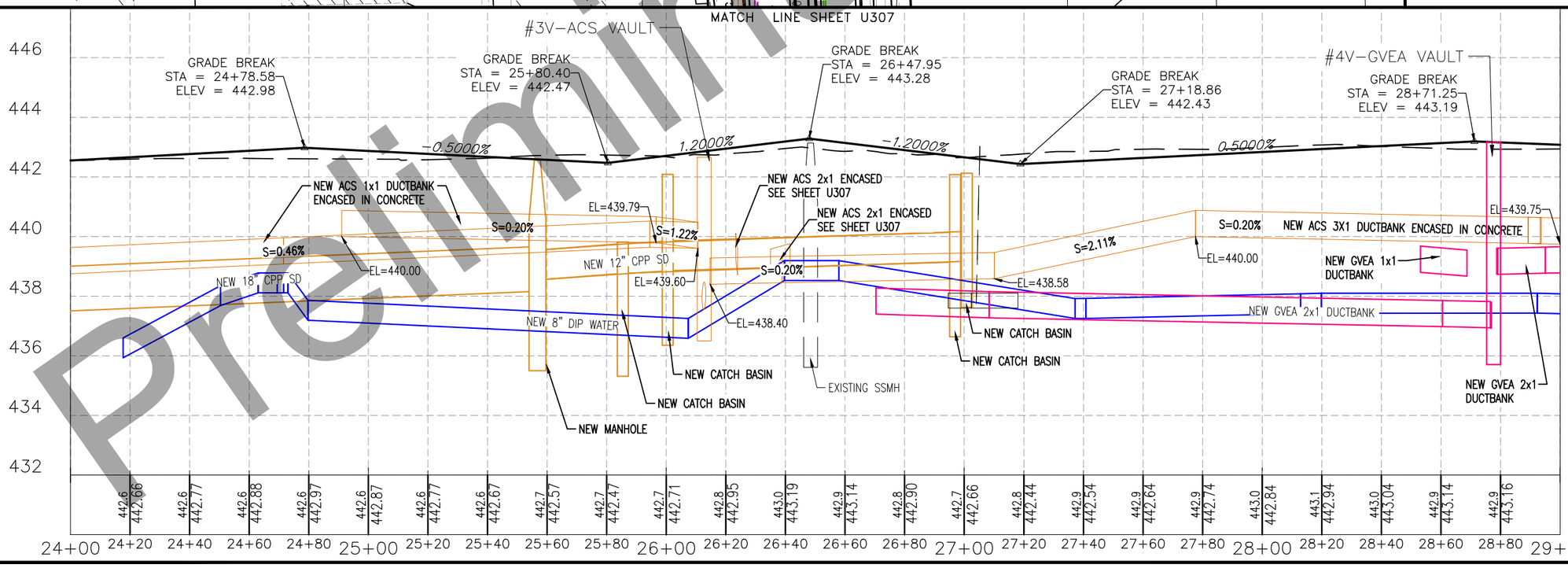
1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)





NOTE: EXISTING WATER AND STORM DRAIN FEATURES ARE NOT SHOWN WITHIN PROFILE VIEW.

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

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P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_TELE-COMM-U304 Plan-Prof_TELE Mon, Jun/25/18 01:05pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U305	15

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1"=2' VERT.
(FULL SIZE)

1"=40' HORIZ.,
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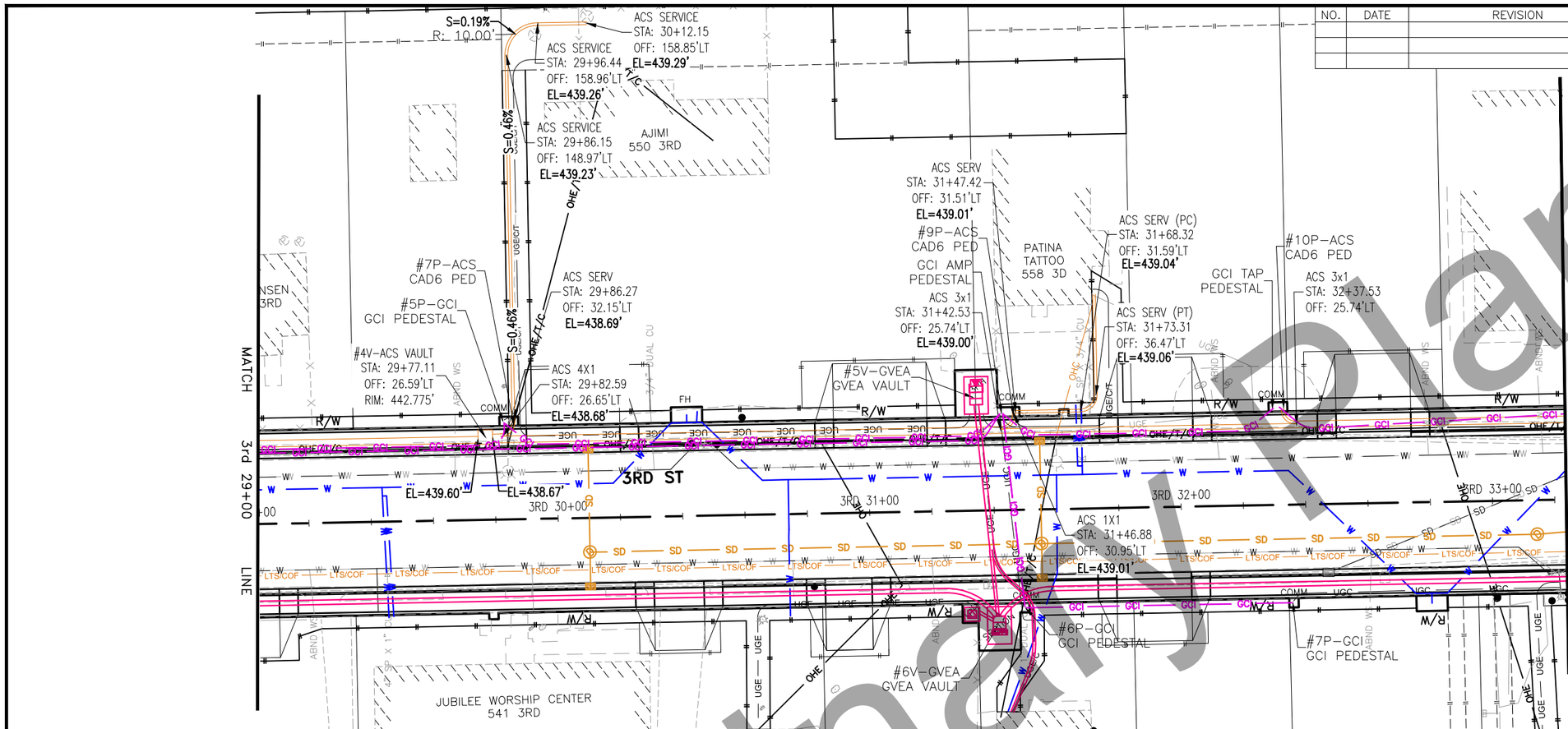
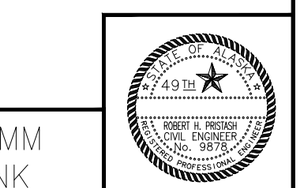
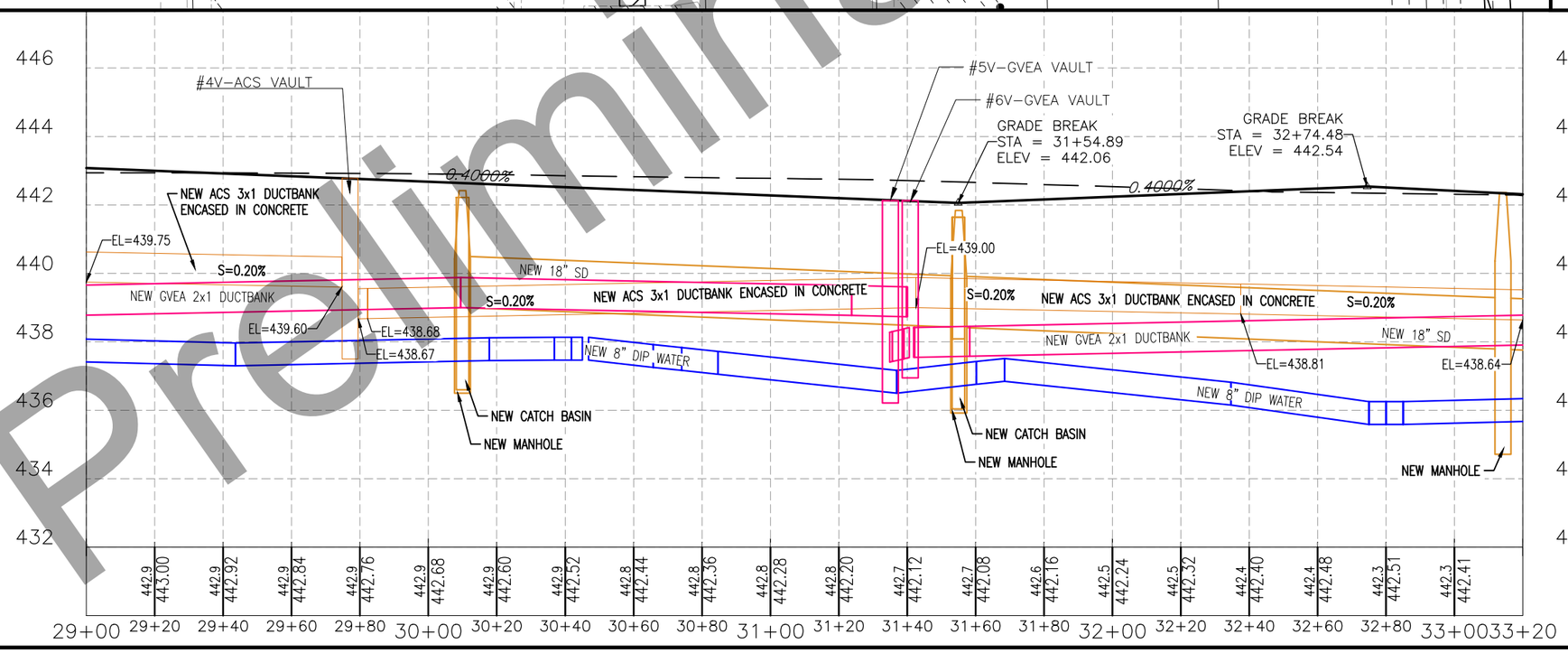
(HALF SIZE)



TELE/COMM
DUCTBANK





NOTE: EXISTING WATER AND STORM DRAIN FEATURES ARE NOT SHOWN WITHIN PROFILE VIEW.

Preliminary Plans

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P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_TELE-COMM-U305 Plan-Prof_TELE Mon, Jun/25/18 01:06pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U306	15

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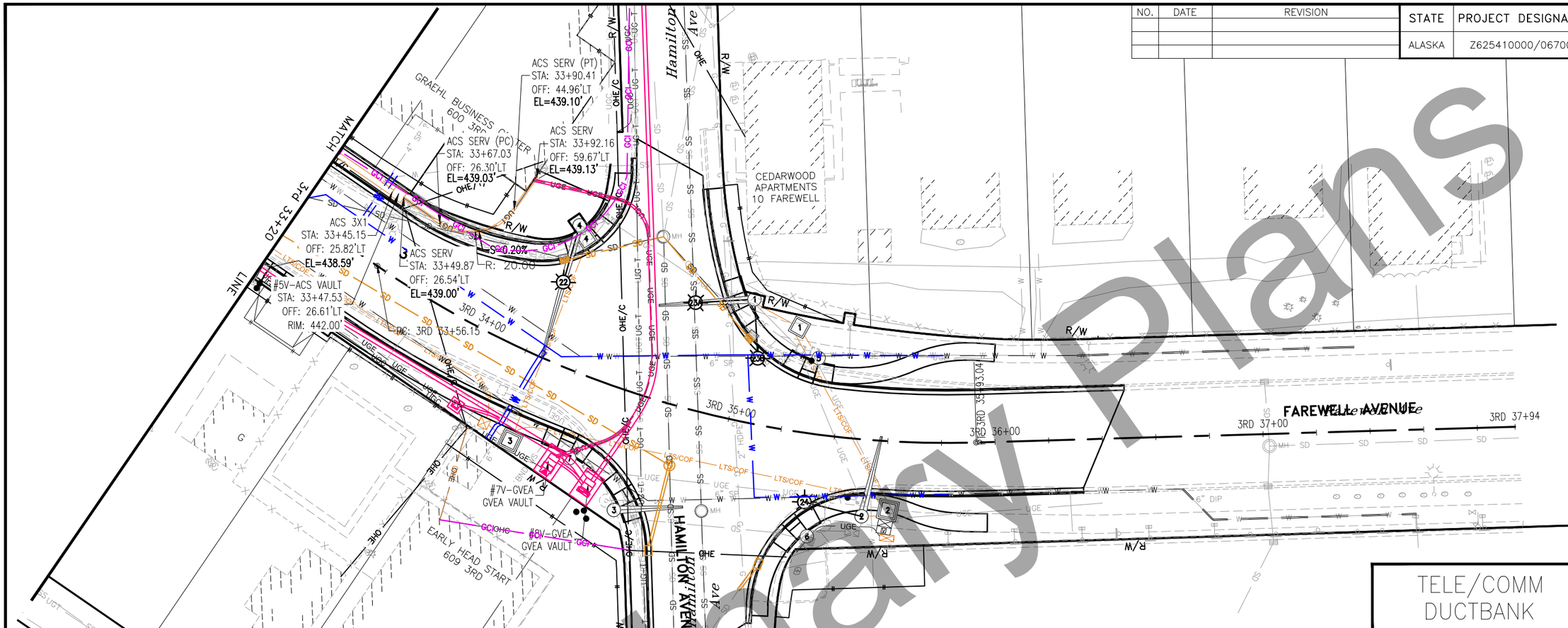
1"=2' VERT.
(FULL SIZE)

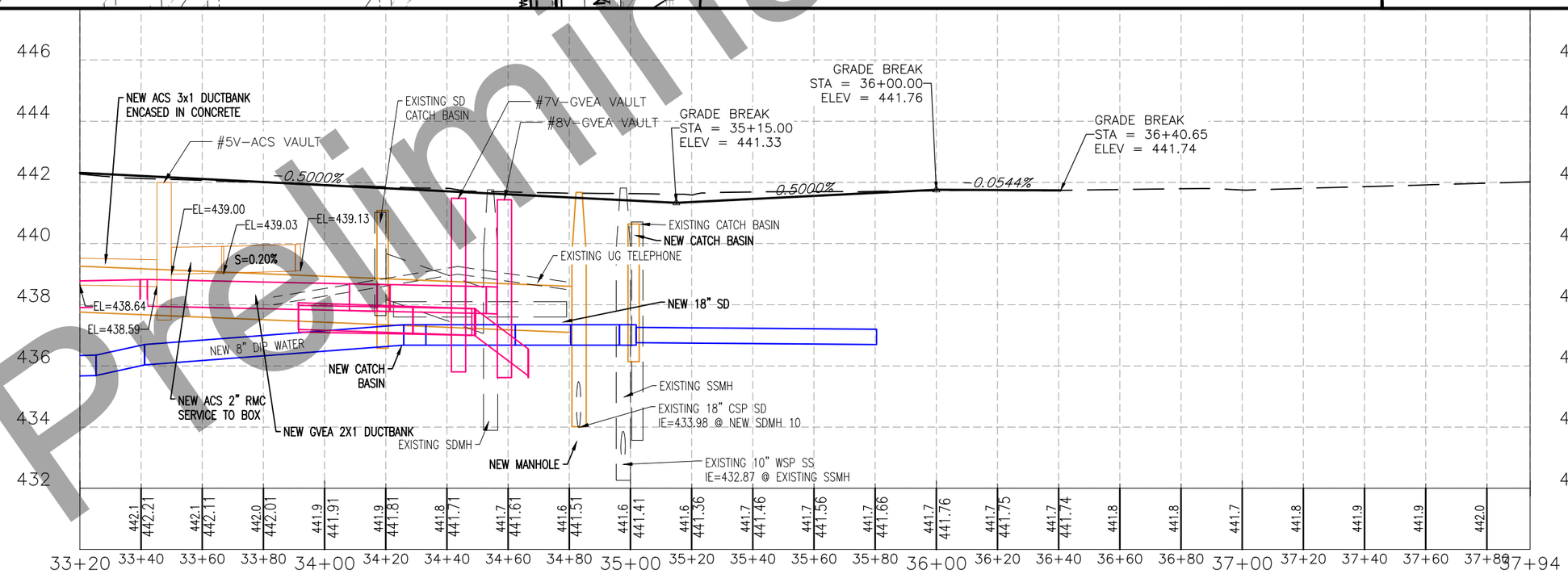
1"=40' HORIZ.,
1"=4' VERT.
(HALF SIZE)



TELE/COMM DUCTBANK

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

NOTE: EXISTING WATER AND STORM DRAIN FEATURES ARE NOT SHOWN WITHIN PROFILE VIEW.



Preliminary Plans

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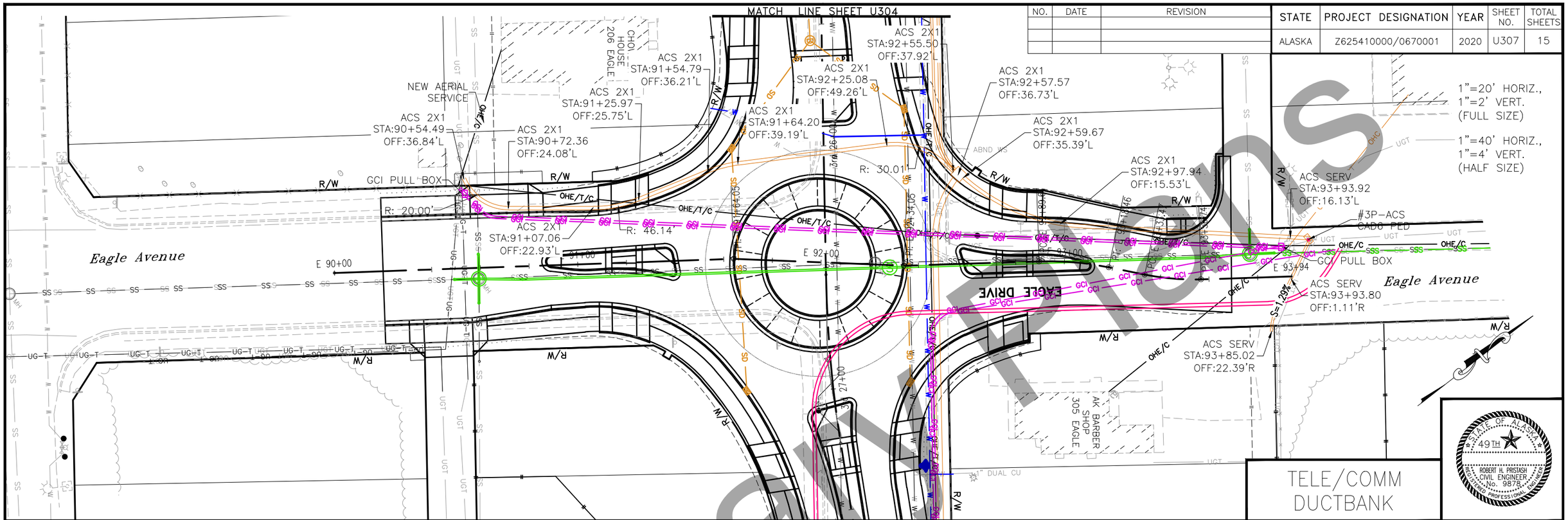
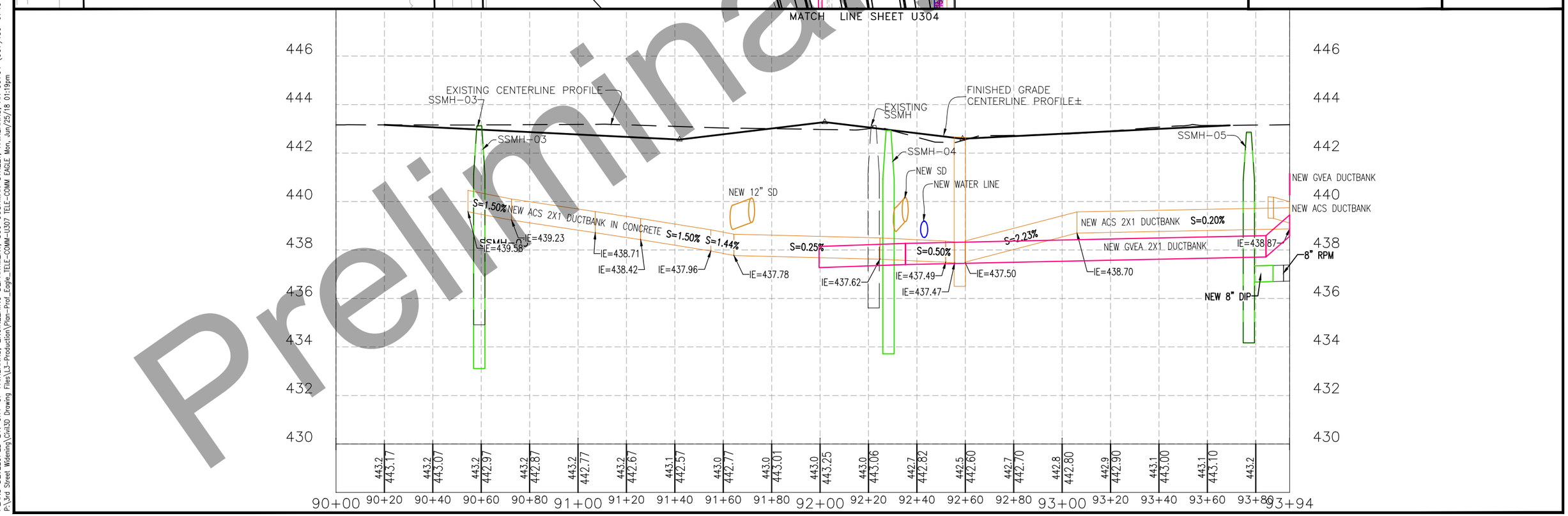
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_TELE-COMM-U306 Plan-Prof_TELE Mon, Jun/25/18 01:06pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U307	15



TELE/COMM DUCTBANK



Preliminary Plans

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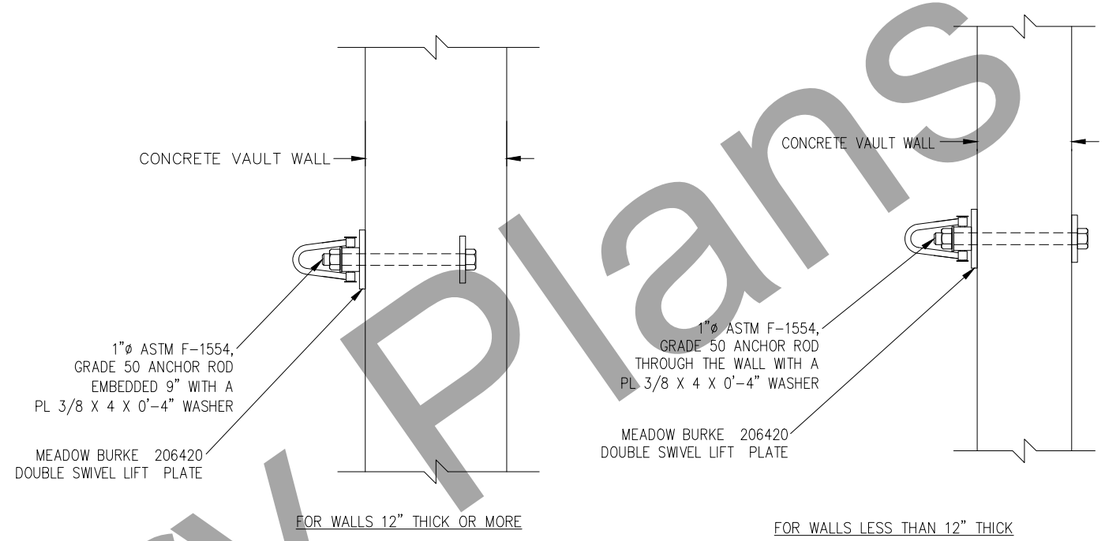
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Plan-Prof_Eagle_TELE-COMM-U307 TELE-COMM EAGLE Mon, Jun/25/18 01:19pm

NO.	DATE	REVISION

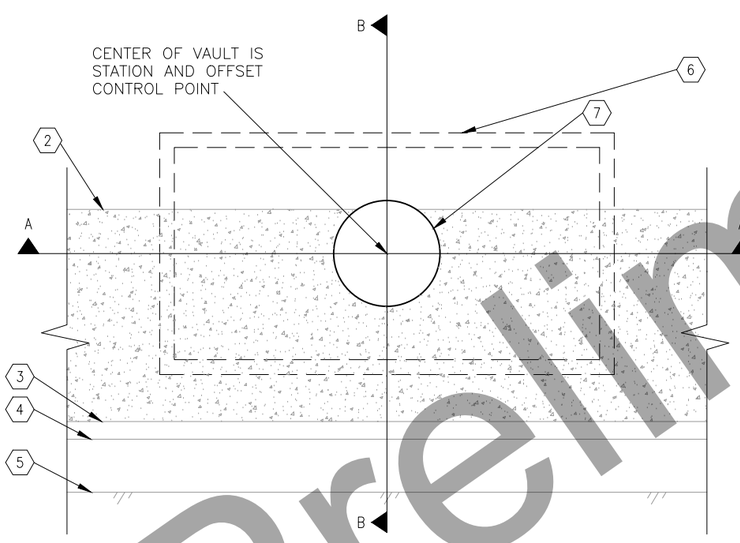
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U308	15

SHEET NOTES

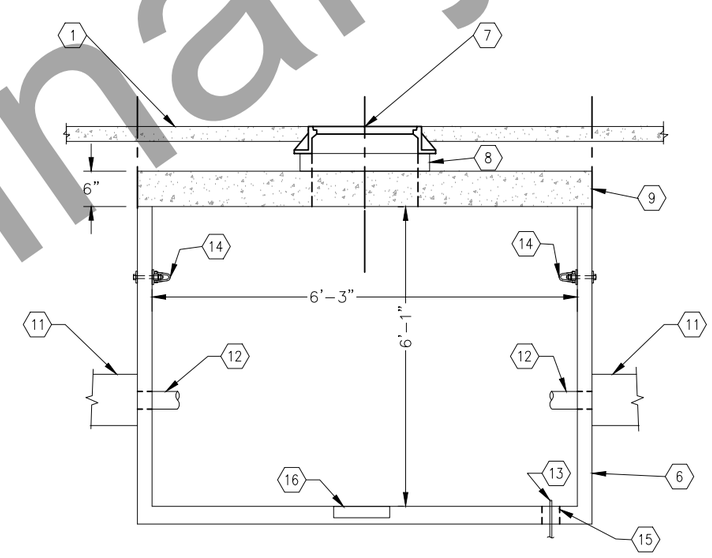
1. SIDEWALK
2. BACK OF SIDEWALK
3. TOP BACK OF CURB
4. FACE OF CURB/CURB FLOW LINE
5. LIP OF GUTTER/EDGE OF PAVEMENT
6. VAULT STRUCTURE (SEE DETAIL, SHEET U309)
7. MANHOLE COVER: ADJUST RIM ELEVATION USING GROUT AND ADJUSTING RINGS TO 3/8" BELOW FINISHED GRADE.
8. PRECAST CONCRETE GRADE RING: 4" MINIMUM
9. VAULT LID, H20 LOADING REQUIRED
10. GROUT TO MATCH SIDEWALK CROSS-SLOPE
11. DUCT BANK
12. CONDUITS
13. 3/4"x10' GROUND ROD
14. PULL EYE: LOCATION (OR ALTERNATE DESIGN) AS APPROVED. SEE DETAIL, THIS SHEET
15. 6"ø SLEEVE
16. 12" DIA. SUMP PAN WITH COVER PLACED DIRECTLY UNDER ACCESS OPENING
17. ALL INTERIOR METAL APPURTENANCES SHALL BE BONDED TO GROUND.



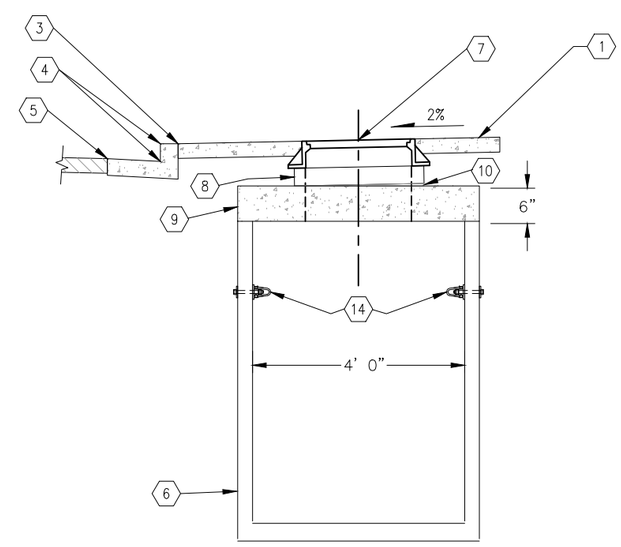
PULL EYE DETAIL



TYPICAL TOP VIEW



SECTION A-A



SECTION B-B

ACS OR MTAC (ALASCONNECT) VAULT

Preliminary Plans

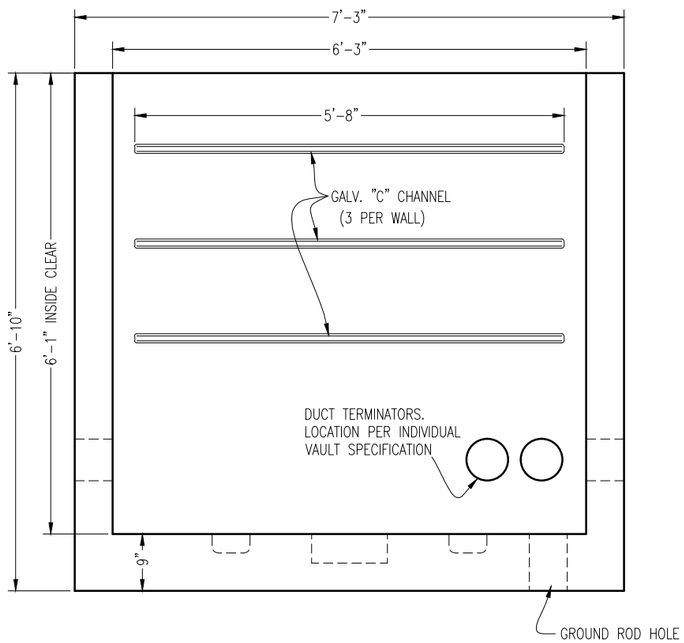
UTILITIES DUCTBANK & VAULT DETAILS-ACS / MTAC

STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

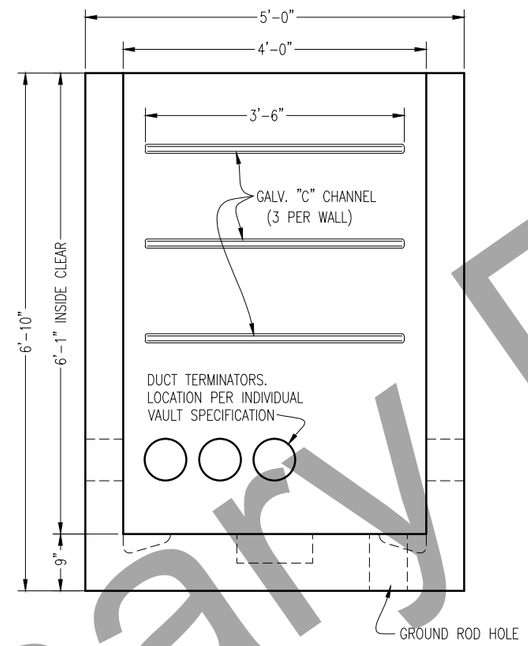
PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\VaultDetails-COMM-U308 VAULT DETAILS-COMM Mon, Jun/25/18 01:23pm

NO.	DATE	REVISION

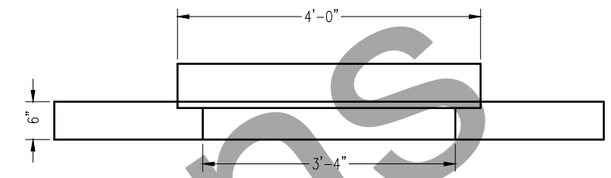
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U309	15



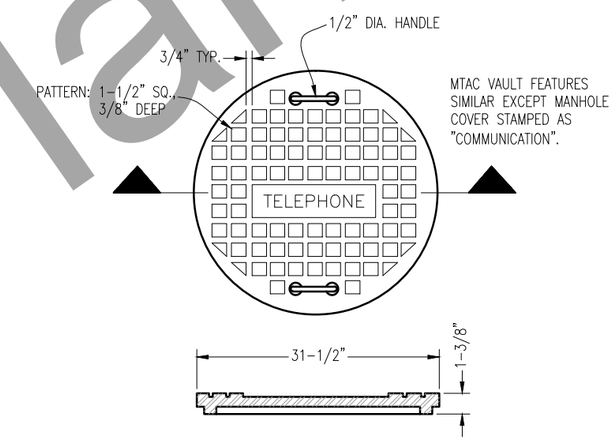
VAULT-SIDE VIEW WITHOUT LID



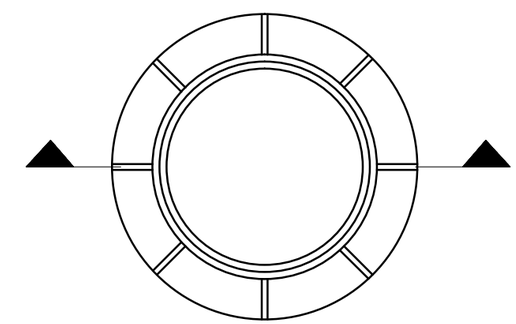
VAULT-SIDE VIEW WITHOUT LID

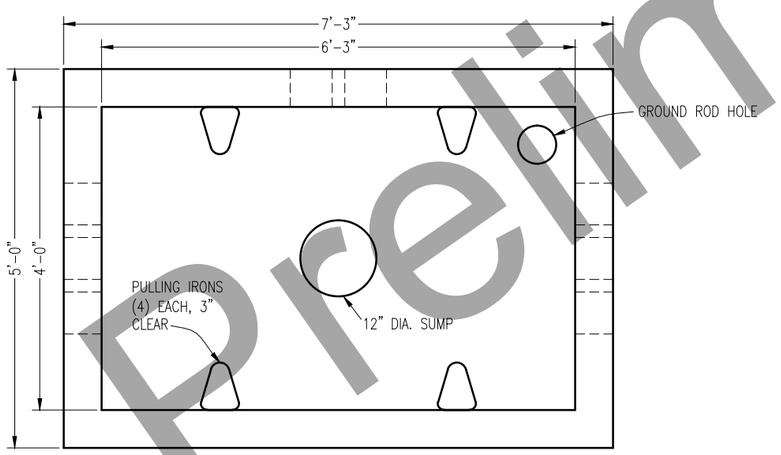


LID-SIDE VIEW

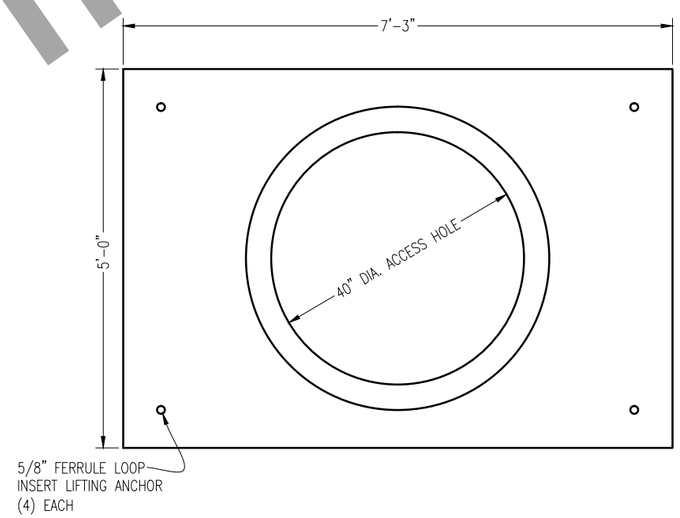


MANHOLE COVER

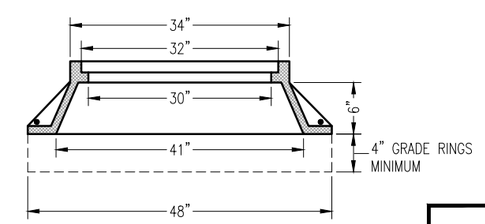




VAULT-TOP VIEW WITHOUT LID



LID-TOP VIEW



MANHOLE COVER FRAME

UTILITIES VAULT CONCRETE CASTING DETAILS-ACS / MTAC

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Vault_CastingDetails-COMM-U309 VAULT CONC. CASTING DETAIL-COMM Mon, Jun/25/18 01:25pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U310	15

UTILITY / TELECOMMUNICATION NOTES

1. NUMEROUS UNDERGROUND UTILITIES EXIST WITHIN THE PROJECT CORRIDOR. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND GET LOCATES PRIOR TO ANY EXCAVATION. PAYMENT SUBSIDIARY TO ASSOCIATED PAY ITEMS.

2. VERIFY LOCATION AND ELEVATION OF NEARBY UNDERGROUND WATER, SEWER, STORM DRAIN OR CABLES (BOTH MAINS AND SERVICES), AND REPORT TO ENGINEER BEFORE STARTING WORK THAT WILL CROSS THESE UTILITIES. PAYMENT SUBSIDIARY TO ASSOCIATED PAY ITEMS.

3. WORK IS REQUIRED UNDER EXISTING OVERHEAD CABLES. PROTECT EQUIPMENT AND PERSONNEL AS REQUIRED. PAYMENT SUBSIDIARY TO ASSOCIATED PAY ITEMS.

4. CONTRACTOR SHALL SCHEDULE ALL UTILITY OUTAGES TO TAKE PLACE DURING NON BUSINESS HOURS. ALL COSTS TO PROVIDE IT AND INSTALL TEMPORARY MEASURES ON EXISTING UTILITIES ARE SUBSIDIARY TO THE ASSOCIATED PAY ITEMS. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES THAT RESULT FROM OUTAGES BEYOND THE PRESCRIBED PERIOD.

5. MAINTAIN A MINIMUM OF 12" SEPARATION BETWEEN ELECTRIC POWER AND TELECOMMUNICATION CONDUITS.

6. INSTALL DIRECT BURY HDPE SERVICE CONDUITS A MINIMUM DEPTH OF 30".

7. INSTALL RMC LONG RADIUS SWEEPS AT ALL LOCATIONS WHERE CONDUITS ARE EXPOSED ABOVE THE GROUND SURFACE. JOIN RMC WITH HDPE CONDUIT WITH APPROVED COUPLINGS.

8. SEE ALSO SUPPLEMENTAL DOCUMENTS:
   MTAC RELOCATION PLANS
   ACS RELOCATION PLANS
   GCI RELOCATION PLANS

9. SUPPORT EXISTING POWER POLES AS NECESSARY TO INSTALL DUCT BANK SYSTEM. DEFLECT DUCT BANK AROUND EXISTING POWER POLES AS REQUIRED. PAYMENT SUBSIDIARY TO DUCT BANK SYSTEM PAY ITEM.

10. SWEEP DIRECT BURY CONDUIT INTO CENTER OF GCI PEDESTAL LOCATION AND LEAVE THE BUNDLE OF CONDUITS STANDING VERTICALLY WITH END CAPS FOR GCI TO CUT OFF WHEN INSTALLING THEIR PEDESTAL BASE.

11. DUCTBANKS SHOULD ENTER VAULTS OFFSET FROM THE CENTER AND DIRECTLY ACROSS ONE ANOTHER TO ALLOW FOR CONDUIT LOOP INSIDE VAULT. DUCTBANK SHOULD NOT ENTER VAULT AT THE CENTER.

Preliminary Plans

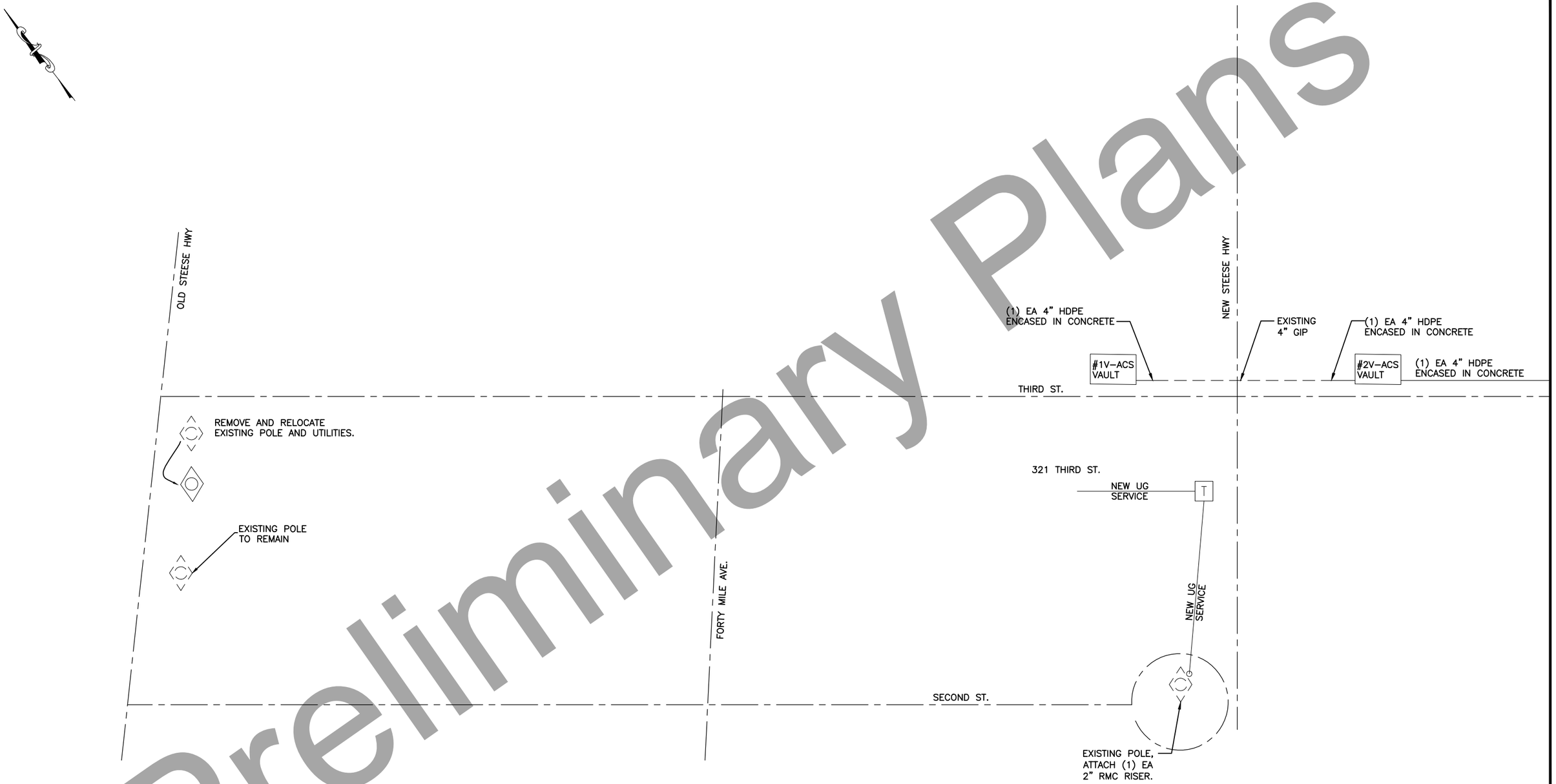
TELECOMMUNICATION NOTES

STATE OF ALASKA 49TH ROBERT H. PRISTASH CIVIL ENGINEER No. 9878 REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\Notes-Summary_ACS-GCI-U310 NOTES_TELE Mon, Jun/25/18 01:29pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U311	15



Preliminary Plans

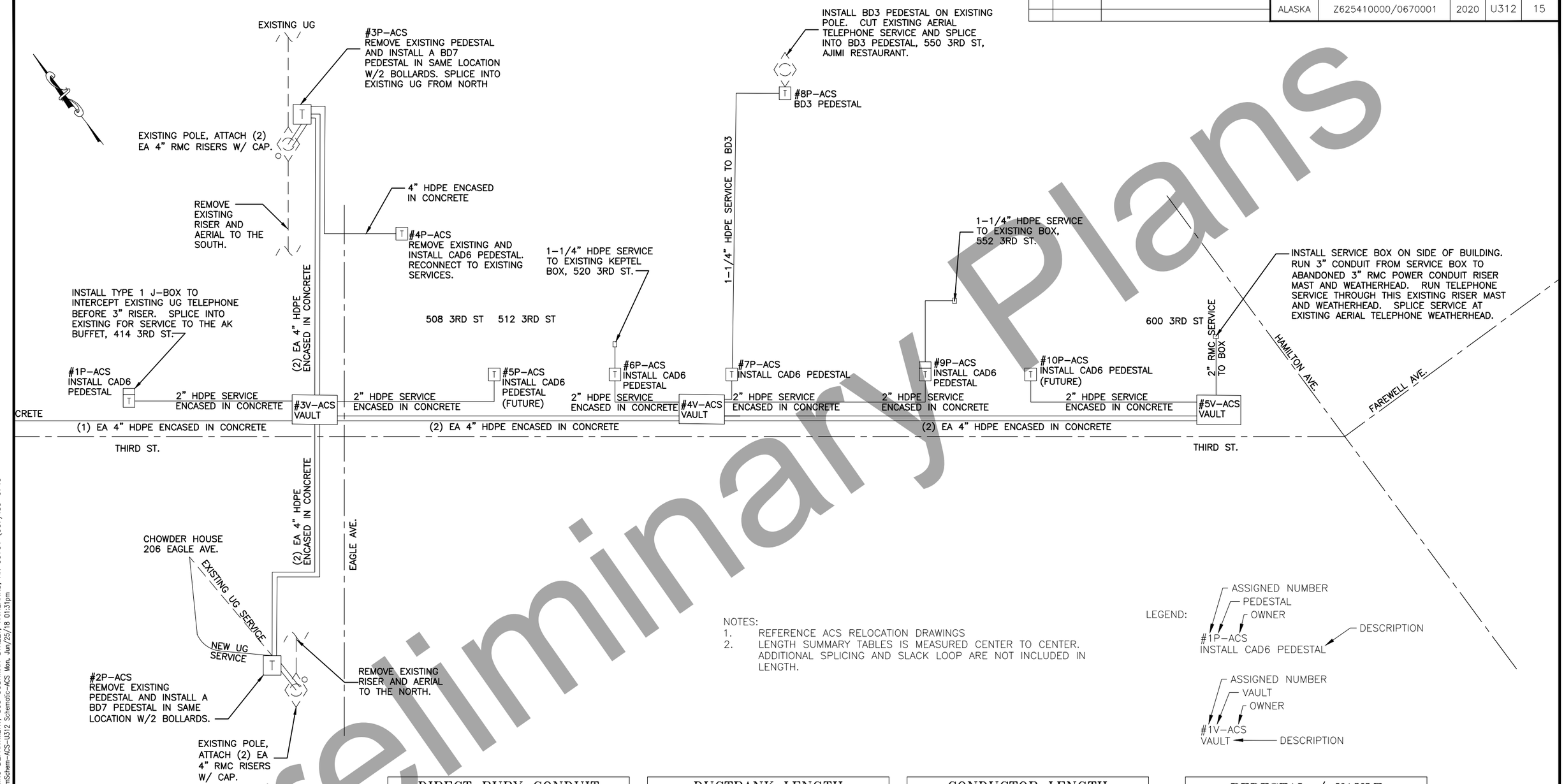
SYSTEM SCHEMATIC
ACS 1 OF 2

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-ACS-U311 Schematic-ACS Mon, Jun/25/18 04:09pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U312	15



NOTES:
1. REFERENCE ACS RELOCATION DRAWINGS
2. LENGTH SUMMARY TABLES IS MEASURED CENTER TO CENTER. ADDITIONAL SPLICING AND SLACK LOOP ARE NOT INCLUDED IN LENGTH.

LEGEND:

#1P–ACS (ASSIGNED NUMBER, PEDESTAL, OWNER)
INSTALL CAD6 PEDESTAL (DESCRIPTION)

#1V–ACS (ASSIGNED NUMBER, VAULT, OWNER)
VAULT (DESCRIPTION)

DIRECT BURY CONDUIT LENGTH SUMMARY

CONDUIT SIZE	TOTAL LENGTH
1.25"	250 LF

DUCTBANK LENGTH SUMMARY

TOTAL LENGTH
1630 LF

CONDUCTOR LENGTH SUMMARY

CONDUIT SIZE	TOTAL LENGTH
4"	2555 LF
2"	740 LF

PEDESTAL / VAULT SUMMARY

PEDESTAL TYPE	QUANTITY
BD3	1
BD7	2
CAD6	7
VAULT	5

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

SYSTEM SCHEMATIC
ACS 2 OF 2

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-ACS-U312 Schematic-ACS Mon, Jun/25/18 01:31pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U313	15

NOTES:
1. LENGTH SUMMARY TABLE IS MEASURED CENTER TO CENTER. LENGTHS IN SUMMARY TABLE DO NOT INCLUDE SERVICE LENGTHS SEE SHEETS U400 FOR SERVICE LENGTH SUMMARY. ADDITIONAL TAIL FOR SPLICING, RISER AND SLACK LOOP ARE NOT INCLUDED IN LENGTH. GROUND RISER PER GVEA SPECS.

2. GCI WILL PROVIDE .625 CIC, RG11, $1\frac{1}{4}$"HDPE FOR FIBER, R6 AERIAL, PEDESTALS AND PULL BOXES PICKED UP AT GCI WAREHOUSE. CONTRACTOR SHALL PROVIDE ALL LABOR TO INSTALL ALL MATERIAL PROVIDED, CABLES, HDPE, PEDESTALS AND PULL BOXES ALONG WITH AERIAL AND UNDERGROUND SERVICES.

3. GCI SHALL SPLICE ALL COAX AND FIBER. GCI SHALL PROVIDE AND PULL FIBER OPTIC IN CONTRACTOR INSTALLED HDPE.

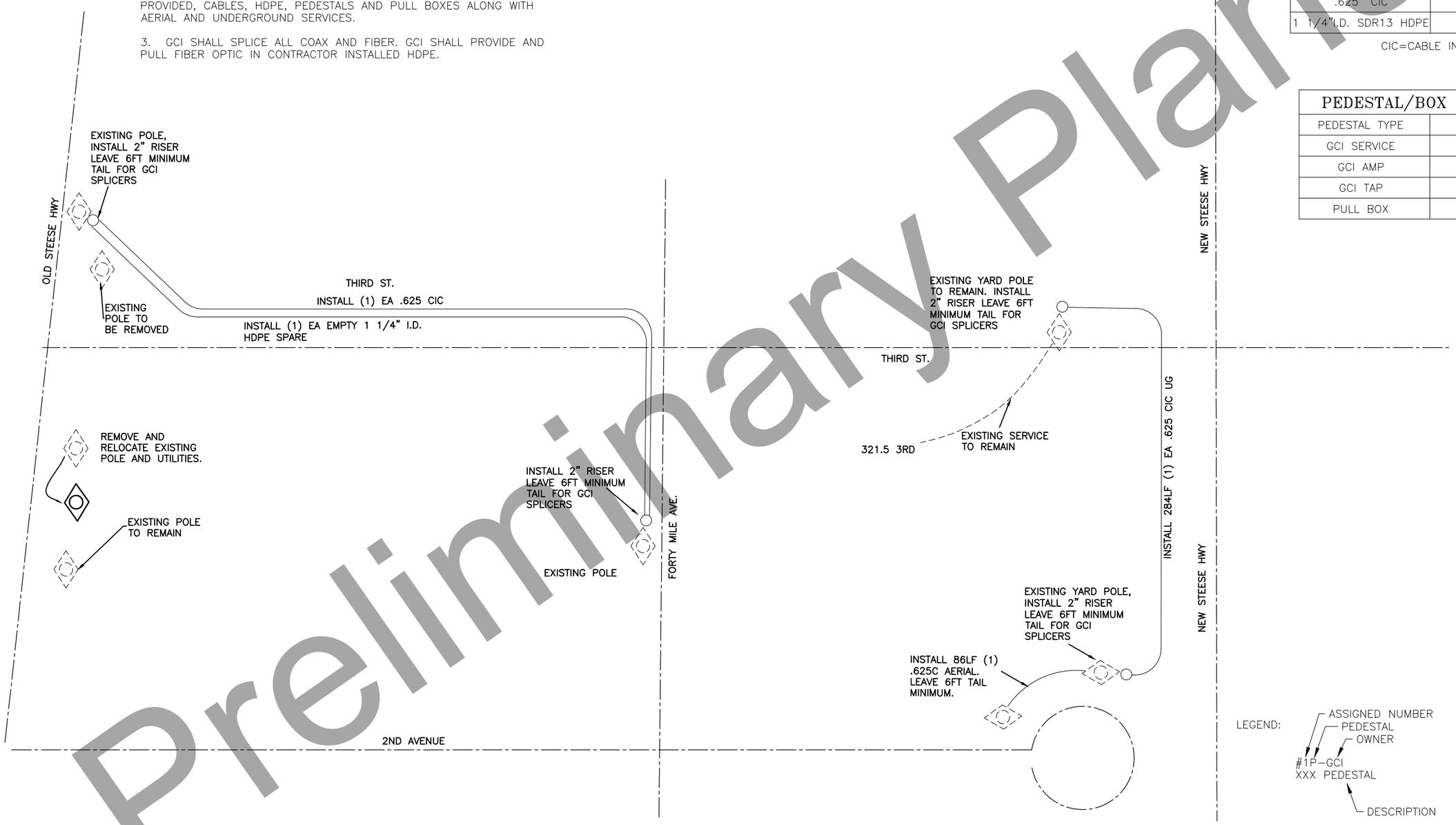
DIRECT BURY/HDPE CONDUIT LENGTH SUMMARY

CONDUIT/CABLE	TOTAL LENGTH
.625" CIC	2160 L.F.
1 1/4"I.D. SDR13 HDPE	1530 L.F.

CIC=CABLE IN CONDUIT.

PEDESTAL/BOX SUMMARY

PEDESTAL TYPE	QUANTITY
GCI SERVICE	7
GCI AMP	1
GCI TAP	1
PULL BOX	2



LEGEND:
ASSIGNED NUMBER
PEDESTAL
OWNER
#1P-GCI
XXX PEDESTAL
DESCRIPTION

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CE 9878
REGISTERED PROFESSIONAL ENGINEER

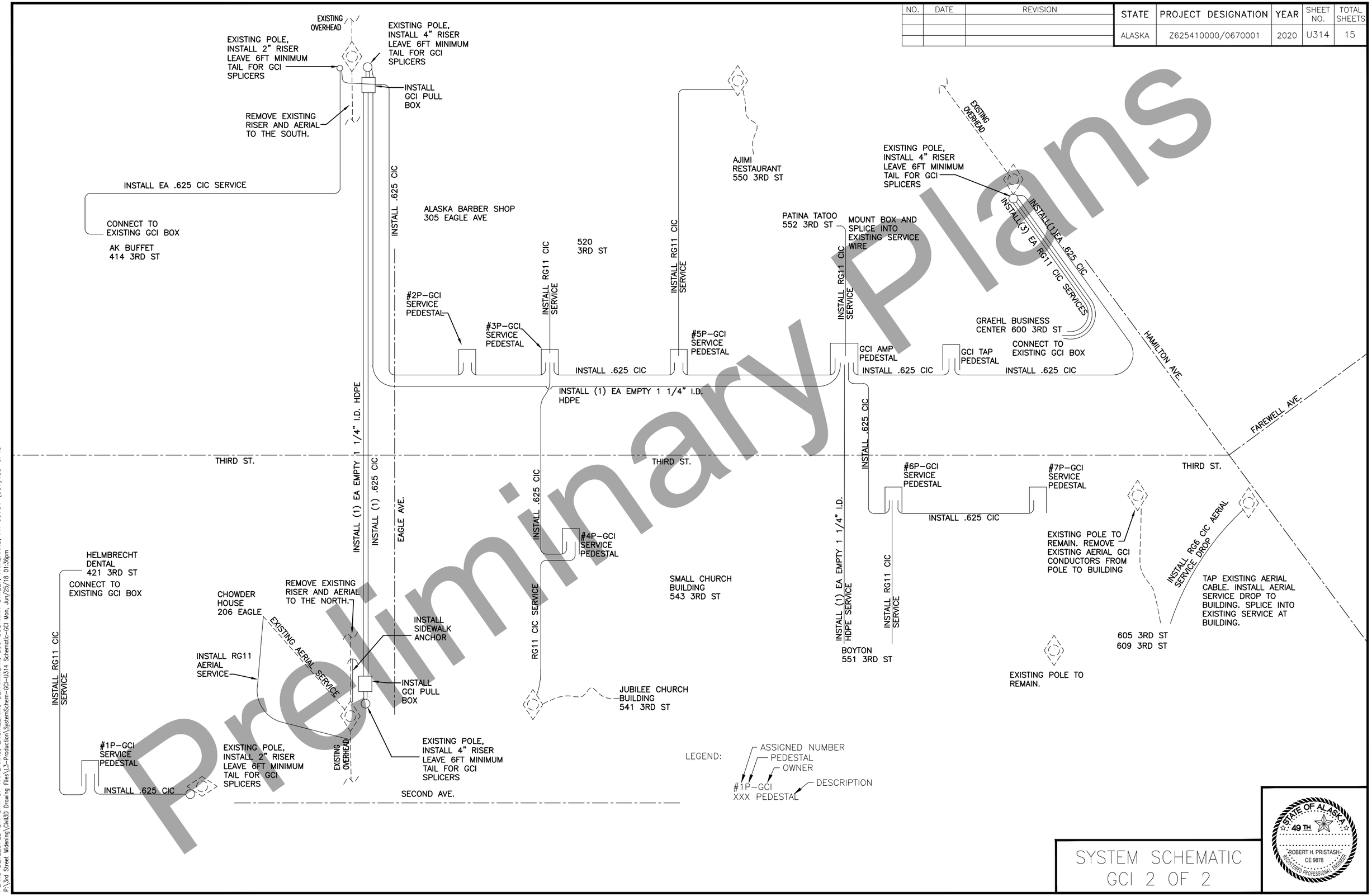
SYSTEM SCHEMATIC
GCI 1 OF 2

Preliminary Plans

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-GCI-U313 Schematic-GCI Mon, Jun/25/18 04:22pm

NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U314	15



Preliminary Plans

SYSTEM SCHEMATIC
GCI 2 OF 2

STATE OF ALASKA 49TH ROBERT H. PRISTASH CE 9878 REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-GCI-U314 Schematic-GCI Mon, Jun/25/18 01:36pm

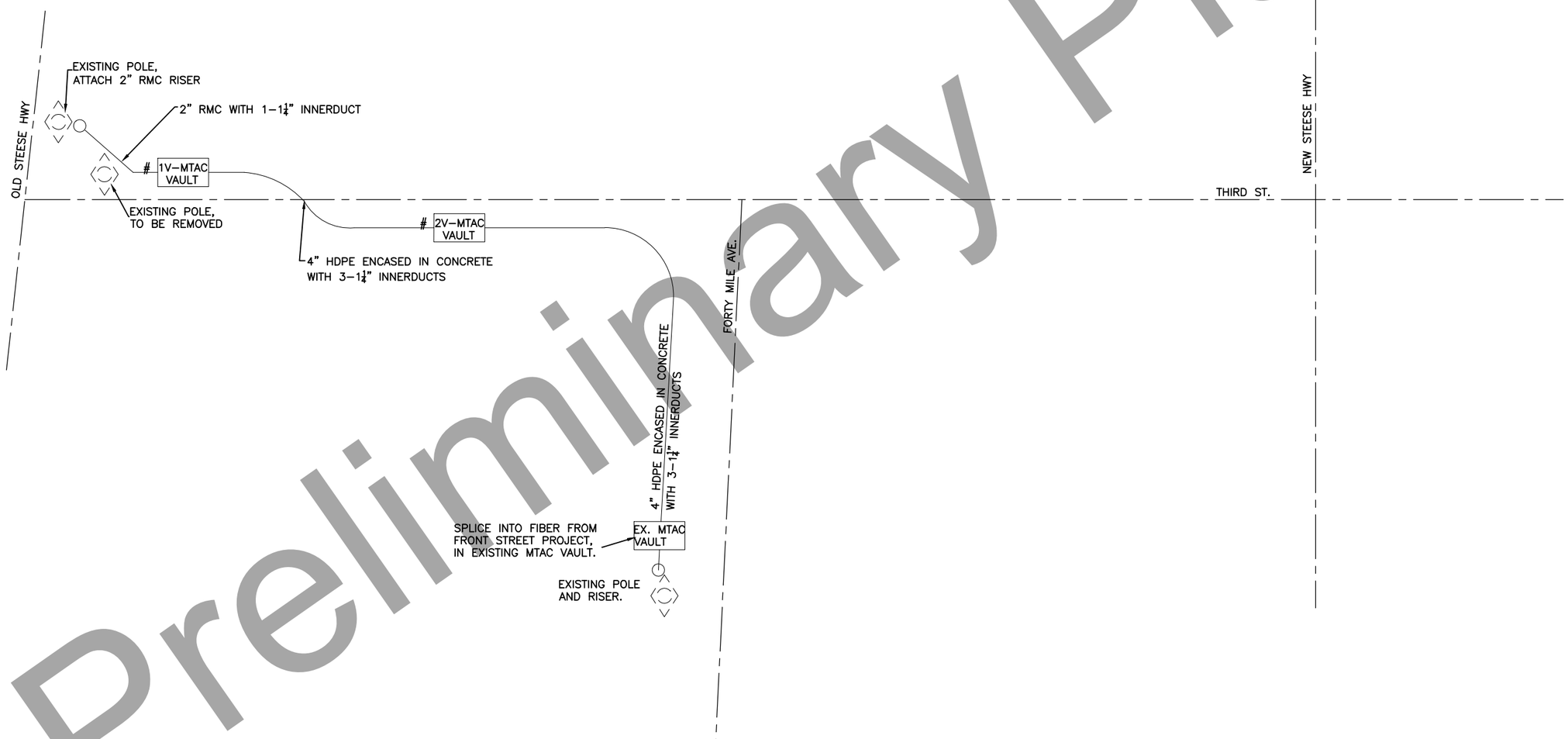
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	Z625410000/0670001	2020	U315	15

CONDUCTOR LENGTH SUMMARY	
CONDUIT SIZE	TOTAL LENGTH
4" HDPE	540 L.F.

DUCTBANK LENGTH SUMMARY
TOTAL LENGTH
540 L.F.

MTAC VAULT SUMMARY	
VAULT TYPE	QUANTITY
UTILITIES	2



NOTES:
1. CONDUIT LENGTH SUMMARY TABLE IS MEASURED CENTER TO CENTER. ADDITIONAL SPLICING AND SLACK LOOP ARE NOT INCLUDED IN LENGTH.

Preliminary Plans

SYSTEM SCHEMATIC
MTAC 1 OF 1

STATE OF ALASKA 49TH
ROBERT H. PRISTASH
CIVIL ENGINEER
No. 9878
REGISTERED PROFESSIONAL ENGINEER

PLANS DEVELOPED BY: CITY OF FAIRBANKS, ENGINEERING DEPARTMENT, 800 CUSHMAN STREET, FAIRBANKS, AK 99701 (907)459-6740
P:\3rd Street Widening\Civil3D Drawing Files\L3-Production\SystemSchem-AlasCON-U315 Schematic-MTAC Mon, Jun/25/18 01:40pm

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U400	24

ELECTRICAL ANNOTATION LEGEND

SHEET SPECIFIC NOTE KEY – INDICATES SPECIFIC NOTES APPLICABLE ON EACH SHEET

ITEMS TO BE DEMOLISHED

ELECTRICAL NOTES

1. PLAN SHEETS U401–U412 SHOW SECONDARY ELECTRICAL & TELECOMMUNICATIONS UTILITILES ONLY, INCLUDING GVEA, ACS, AND GCI.
2. SEE PRIMARY ELECTRICAL & TELECOMMUNICATION UTILITIES SHEETS U201–U314 FOR FURTHER INFORMATION REGARDING PRIMARY UTILITY MODIFICATION, EQUIPMENT RATINGS, LOCATIONS, AND CONFIGURATIONS.
3. ALL SECONDARY UTILITY INSTALLATIONS REQUIRING MODIFICATION TO THE SERVICE ENTRANCE SHALL BE COORDINATED WITH THE PROPERTY OWNER AND UTILITY BEFORE STARTING WORK. MODIFICATIONS TO THE SERVICE EQUIPMENT SHALL SATISFY ALL INSTALLATION REQUIREMENTS OF THE CORRESPONDING UTILITY.
5. SEE LIGHTING AND SIGNAL H–SHEETS FOR FURTHER INFORMATION & REQUIREMENTS REGARDING DEMOLITION OF TRAFFIC SIGNAL POWER SYSTEMS & LIGHTING SYSTEMS.
6. ALL EXISTING UNDERGROUND UTILITIES SHALL BE FIELD LOCATED BEFORE ANY CONDUIT TRENCHING OR OTHER EXCAVATION WORK BEGINS. ANY EXISITNG TO REMAIN UTILITIES DAMAGED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.
7. IN GENERAL, THE LOCATIONS OF SERVICE EQUIPMENT & ROUTING OF UTILITY CONDUCTORS/CABLES SHOWN IN THE PLAN DRAWINGS ARE SCHEMATIC. FIELD VERIFY EXACT FIELD CONDITIONS AND LOCATIONS OF EQUIPMENT BEFORE BEGINNING WORK. SEE SECONDARY UTILITY DETAIL SHEETS U413–U423 FOR FURTHER INFORMATION FOR SERVICE MODIFICATIONS.
8. FOR SECONDARY UTILITY CONDUIT SYSTEMS, PROVIDE:
   –RMC CONDUIT ABOVE GROUND STUB–UPS AND FOR SWEEPS
   –BELOW GRADE AND BETWEEN SWEEPS:
   –RMC CONDUIT BELOW ROADWAYS OR PARKING LOTS
   –HDPE UNDER SIDEWALKS OR OPEN AREAS
   CONDUIT SIZE INDICATED IN DETAIL SHEETS U413–U422. ALL COUPLINGS AND CONNECTORS BETWEEN RMC AND HDPE CONDUIT SHALL BE LISTED AND RATED FOR SUCH USE.
9. ALL CONDUCTORS SHALL BE COPPER, UON.
10. ALL GVEA (SECONDARY) SERVICE MODIFICATIONS SHALL BE PAID FOR UNDER 662(114)–B 'UTILITY RELOCATION, GVEA SECONDARY'.
11. ALL GCI (SECONDARY) SERVICE MODIFICATIONS SHALL BE PAID FOR UNDER 662(114)–D 'UTILITY RELOCATION, GCI SECONDARY'.
12. ALL ACS (SECONDARY) SERVICE MODIFICATIONS SHALL BE PAID FOR UNDER 662(114)–F 'UTILITY RELOCATION, ACS SECONDARY'.
13. SEE U200 & U300 SERIES SHEETS FOR LOCATIONS IN WHICH THE SECONDARY UTILITY SHALL BE ENCASED IN CONCRETE.
14. PROVIDE HANDHOLES FOR UNDERGROUND UTILITY SERVICE LATERALS AS REQUIRED PER NEC OR UTILITY STANDARDS.

2 662(114)–B UTILITY RELOCATION, GVEA SECONDARY (LUMP SUM)

DESCRIPTION	QUANTITY
HDPE CONDUIT	
1–1/4"	290–FT
1–1/2"	500–FT
2–0"	815–FT
2–1/2"	450–FT
3–0"	670–FT
RMC CONDUIT	
1–1/4"	50–FT
1–1/2"	100–FT
2–0"	265–FT
2–1/2"	50–FT
3–0"	95–FT
CONDUCTORS	
#2 AWG XHHW	1,240–FT
#1 AWG XHHW	1,800–FT
#3/0 AWG XHHW	1,780–FT
#4/0 AWG XHHW	3,285–FT
300 KCMIL XHHW	2,060–FT
500 KCMIL XHHW	1,700–FT
3c #4/0 OVERHEAD "ZUZARA" SERVICE CABLE	310–FT
GENERAL	
RECONNECT EXISTING SERVICE EQUIPMENT	5
RECONNECT EXISTING SERVICE FEEDERS	7
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	6
REPLACE EXISTING SERVICE EQUIPMENT	1
REPLACE AND RELOCATE SERVICE EQUIPMENT	1

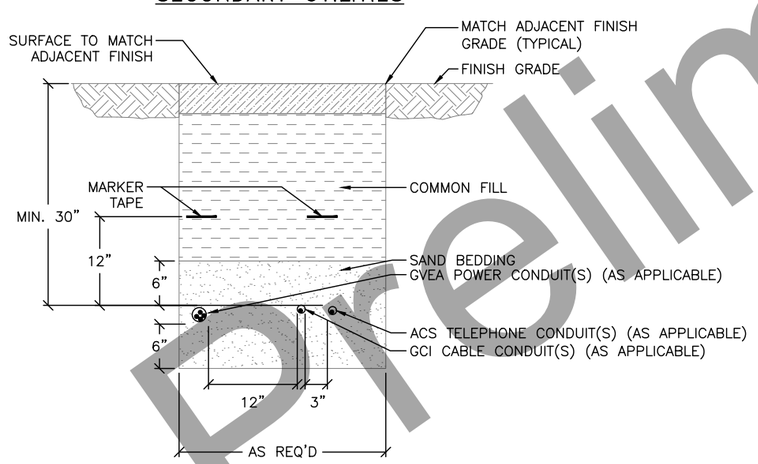
2 662(114)–D UTILITY RELOCATION, GCI SECONDARY (LUMP SUM)

DESCRIPTION	QUANTITY
RACEWAY	
HDPE CONDUIT – 1–1/4"	1,675–FT
HDPE CONDUIT – 2"	120–FT
RMC CONDUIT – 1–1/4"	140–FT
CABLES	
COAX CABLE	2,135–FT
FIBER OPTIC CABLE	105–FT
GENERAL	
RECONNECT EXISTING SERVICE CABLES	5
RECONNECT EXISTING SERVICE EQUIPMENT	7

2 662(114)–F UTILITY RELOCATION, ACS SECONDARY (LUMP SUM)

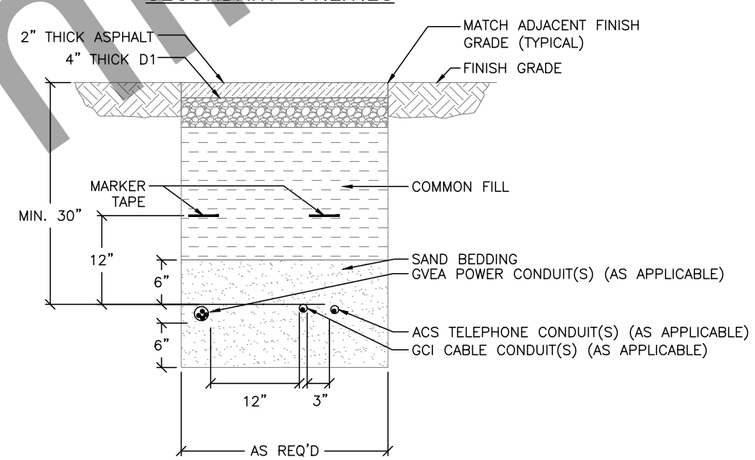
DESCRIPTION	QUANTITY
RACEWAY	
HDPE CONDUIT – 1–1/4"	635–FT
RMC CONDUIT – 1–1/4"	100–FT
CABLES	
OSP CABLE	735–FT
GENERAL	
RECONNECT EXISTING SERVICE CABLES	1
RECONNECT EXISTING SERVICE EQUIPMENT	2
REPLACE/RELOCATE SERVICE EQUIPMENT	1

TYPICAL ELECTRICAL TRENCH DETAIL 1 SECONDARY UTILITIES



NOTES:
- CONDUIT SIZE AND QUANTITY, AND NUMBER OF CONDUCTORS/CABLES INDICATED IN SERVICE DETAILS (TYPICAL).
- AS NECESSARY, BURY CONDUIT(S) DEEPER TO AVOID CONFLICTS WITH OTHER BURIED UTILITIES.
- SEPARATION DISTANCE BETWEEN UTILITIES MAY BE REDUCED IN LOCATIONS WITH LIMITED SPACE IF PRE–APPROVED BY THE ENGINEER.

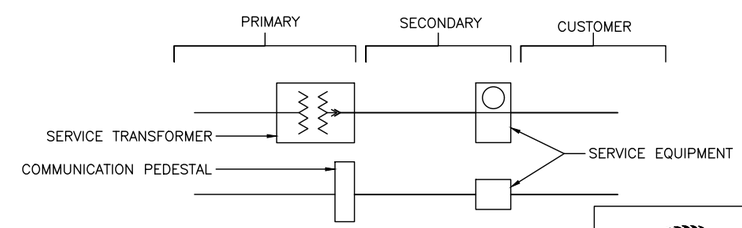
TYPICAL ELECTRICAL PAVEMENT TRENCH DETAIL 1 SECONDARY UTILITIES



NOTES:
- CONDUIT SIZE AND QUANTITY, AND NUMBER OF CONDUCTORS/CABLES INDICATED IN SERVICE DETAILS (TYPICAL).
- AS NECESSARY, BURY CONDUIT(S) DEEPER TO AVOID CONFLICTS WITH OTHER BURIED UTILITIES.
- SEPARATION DISTANCE BETWEEN UTILITIES MAY BE REDUCED IN LOCATIONS WITH LIMITED SPACE IF PRE–APPROVED BY THE ENGINEER.

SPECIFIC NOTES

1. MODIFY THE TRENCH ELEVATIONS, PROFILES, AND MATERIALS TO MATCH CIVIL REQUIREMENTS FOR ALL UTILITY CROSSINGS/ROUTING UNDER ROADWAYS AND/OR SIDEWALKS.
2. THE QUANTITIES LISTED DO NOT REFLECT ANY REQUIRED PRIMARY UTILITY WORK, THESE ARE QUANTITIES FOR THE UTILITY SECONDARY WORK ONLY. SEE DETAIL SHEETS U414–U423 FOR PAY ITEM QUANTITY SUBTOTALS AND BREAKDOWNS FOR EACH SERVICE. COORDINATE WITH EACH RESPECTIVE UTILITY AND PROVIDE ALL ADDITIONAL EQUIPMENT REQUIRED FOR THE SERVICE MODIFICATIONS.



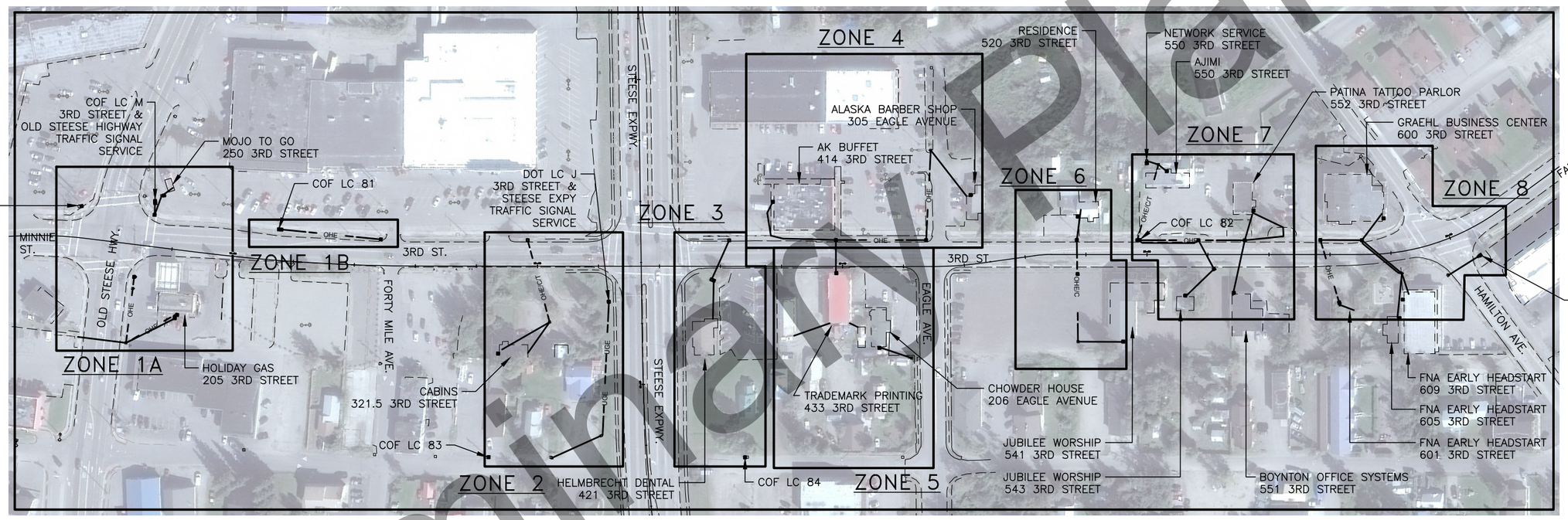
SECONDARY UTILITIES GENERAL NOTES 1 OF 1

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452–1241
C:\Design Alaska AutoCAD 2018\backup\AcPublish_8248\H_LTG&PWR–U400 Fri, Jul/06/18 09:34am

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U401	24



EXISTING SECONDARY UTILITIES – OVERALL

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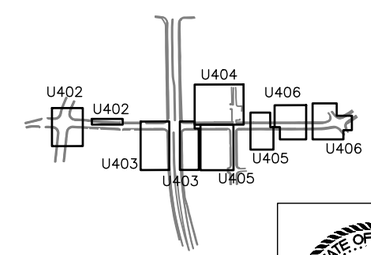
KEYPLAN – PLAN VIEW



SECONDARY UTILITIES
DEMOLITION 1 OF 6

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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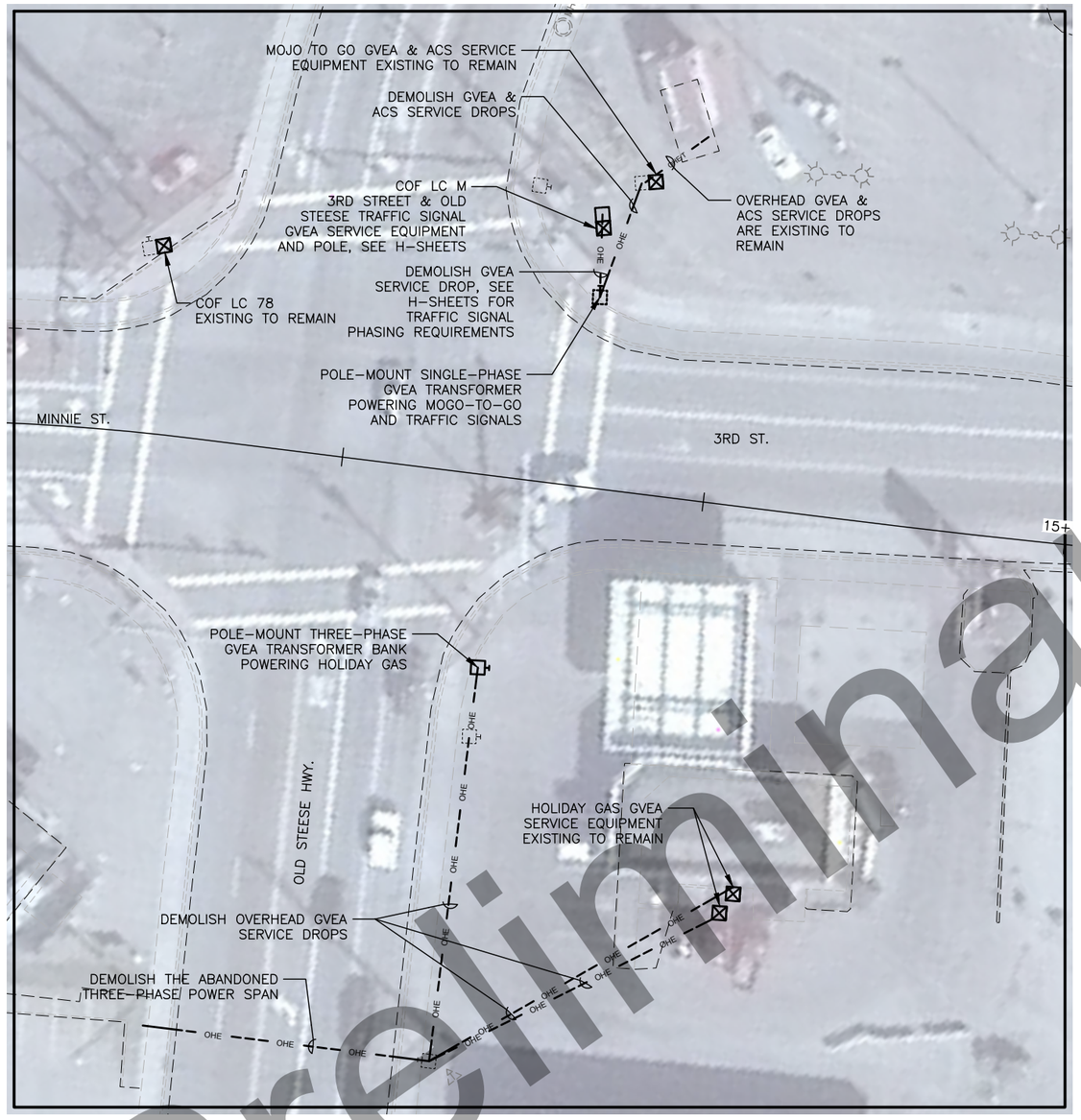

SECONDARY UTILITIES DEMOLITION – ZONE 1A

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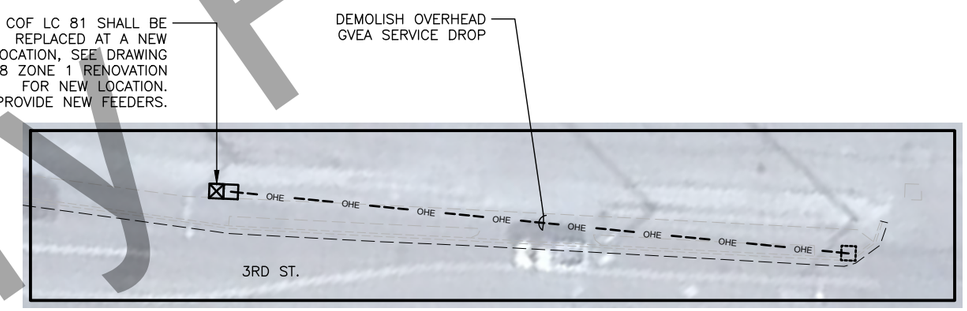

SECONDARY UTILITIES DEMOLITION – ZONE 1B

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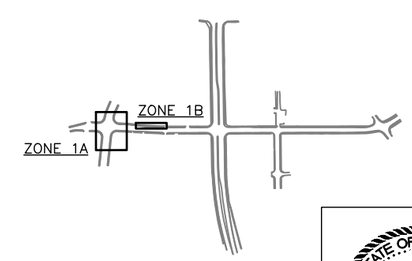

SECONDARY UTILITIES DEMOLITION 2 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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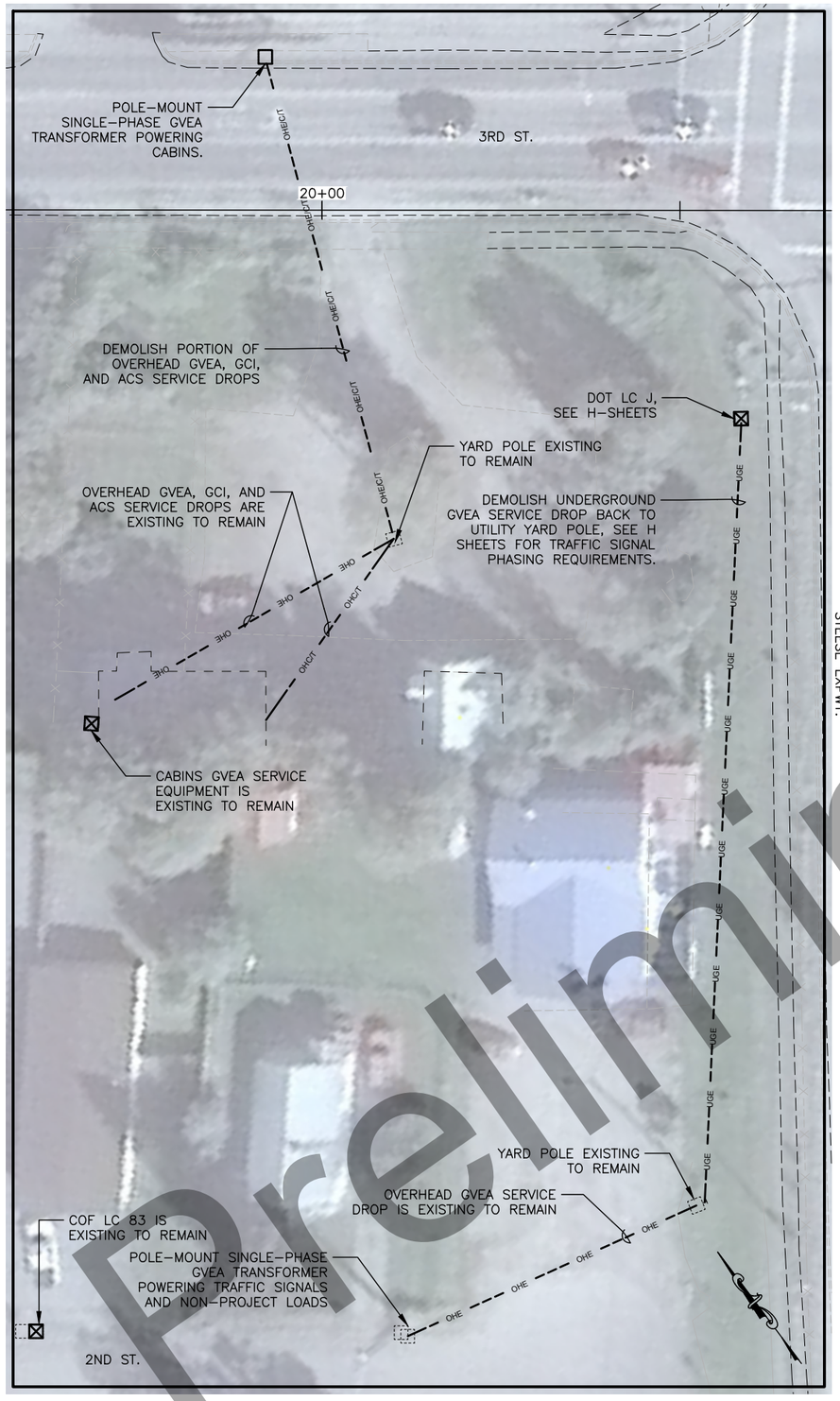

SECONDARY UTILITIES DEMOLITION – ZONE 2

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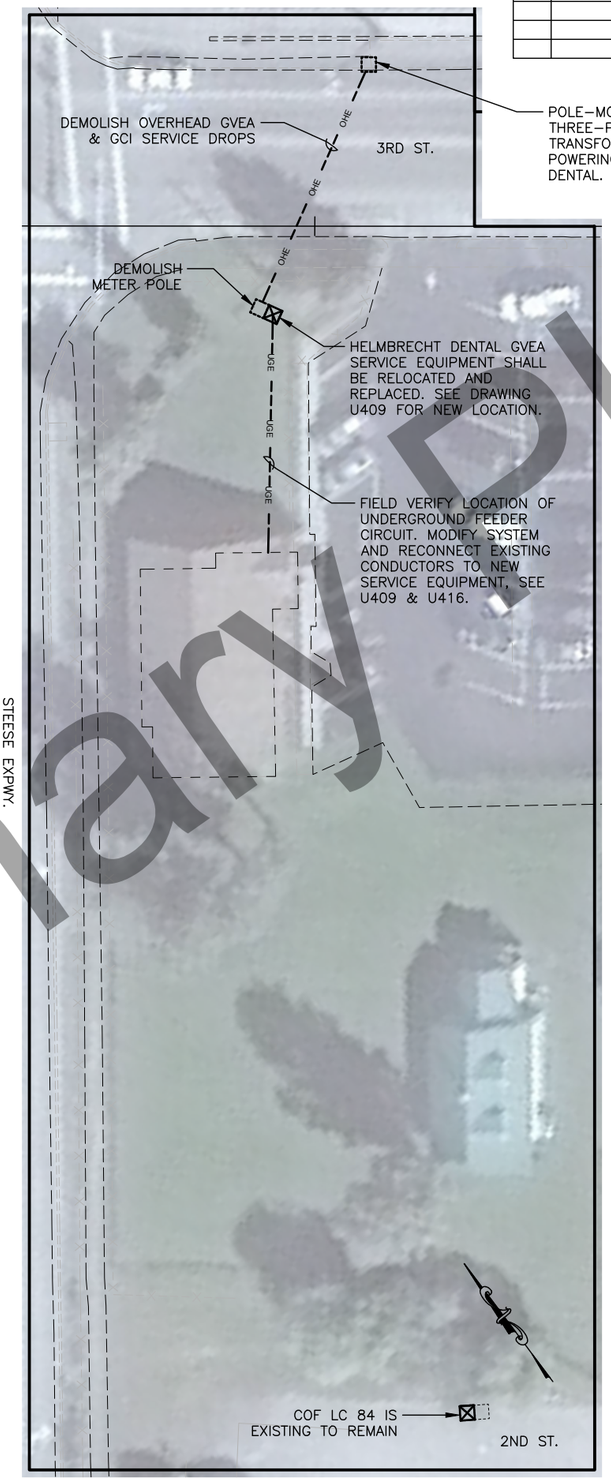

SECONDARY UTILITIES DEMOLITION – ZONE 3

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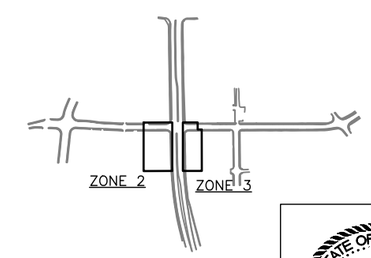

SECONDARY UTILITIES DEMOLITION 3 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U404	24

SECONDARY UTILITIES DEMOLITION – ZONE 4

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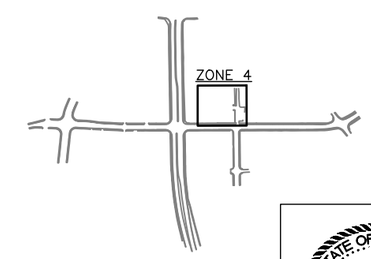

SECONDARY UTILITIES DEMOLITION 4 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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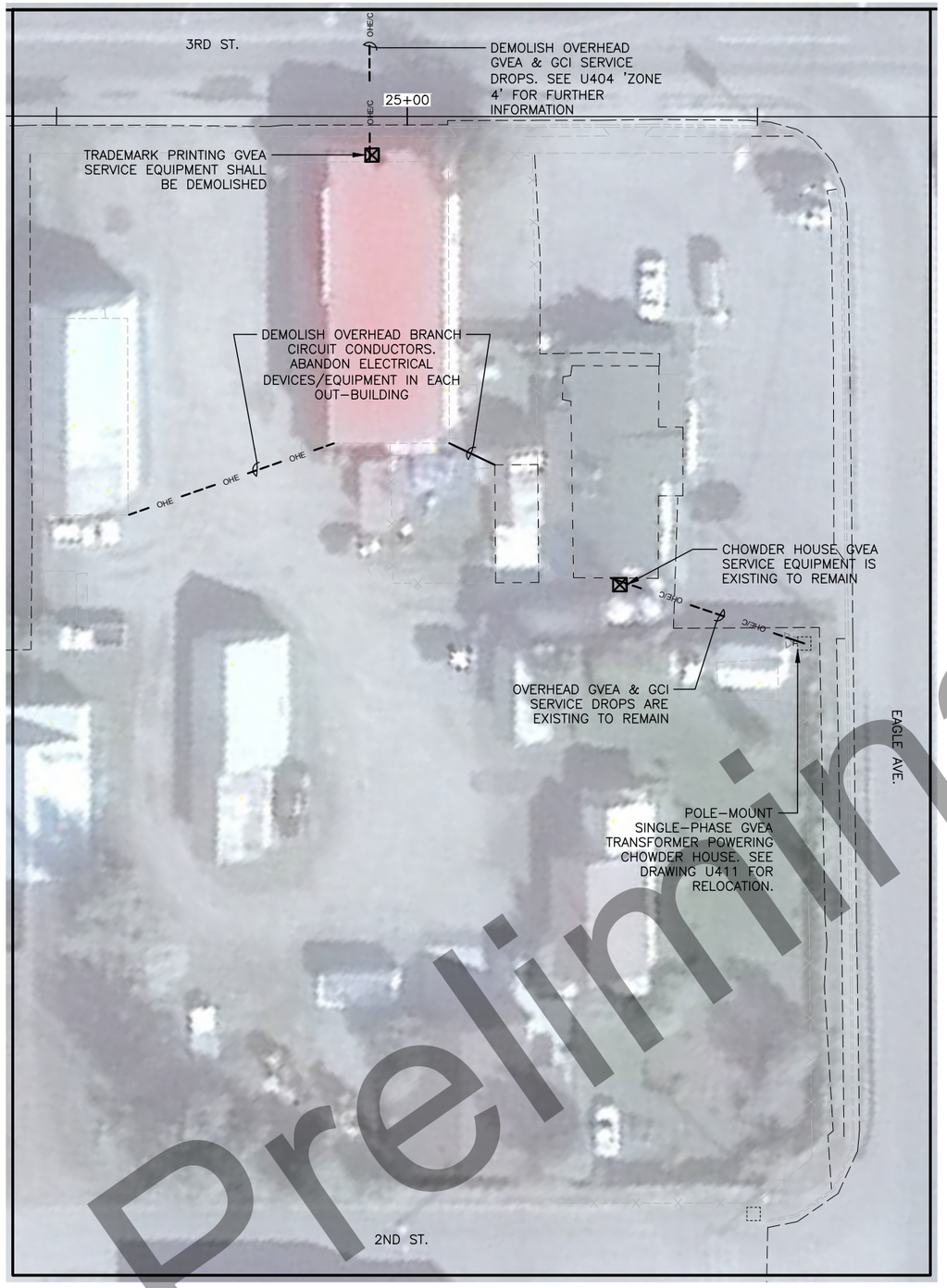

SECONDARY UTILITIES DEMOLITION – ZONE 5

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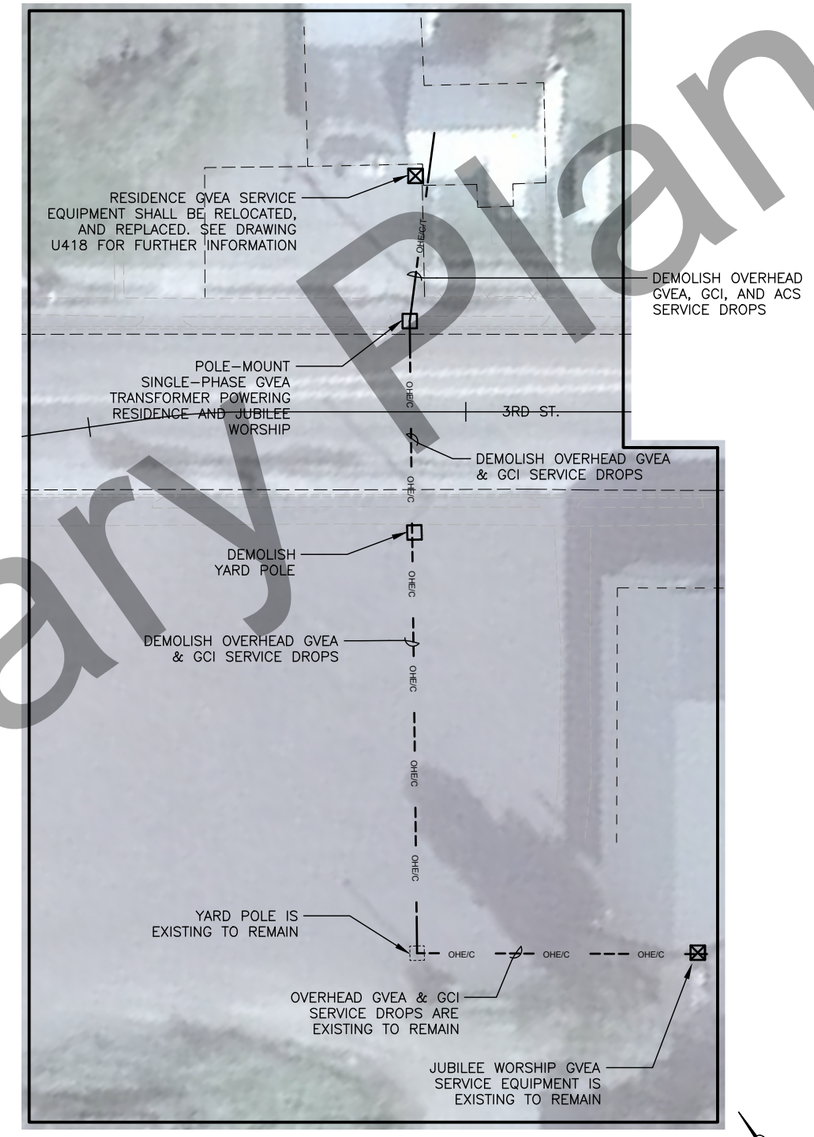

SECONDARY UTILITIES DEMOLITION – ZONE 6

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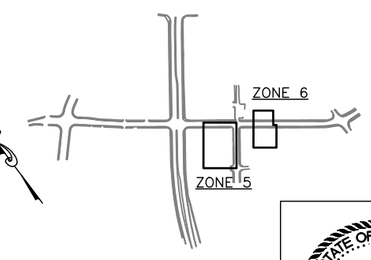

SECONDARY UTILITIES DEMOLITION 5 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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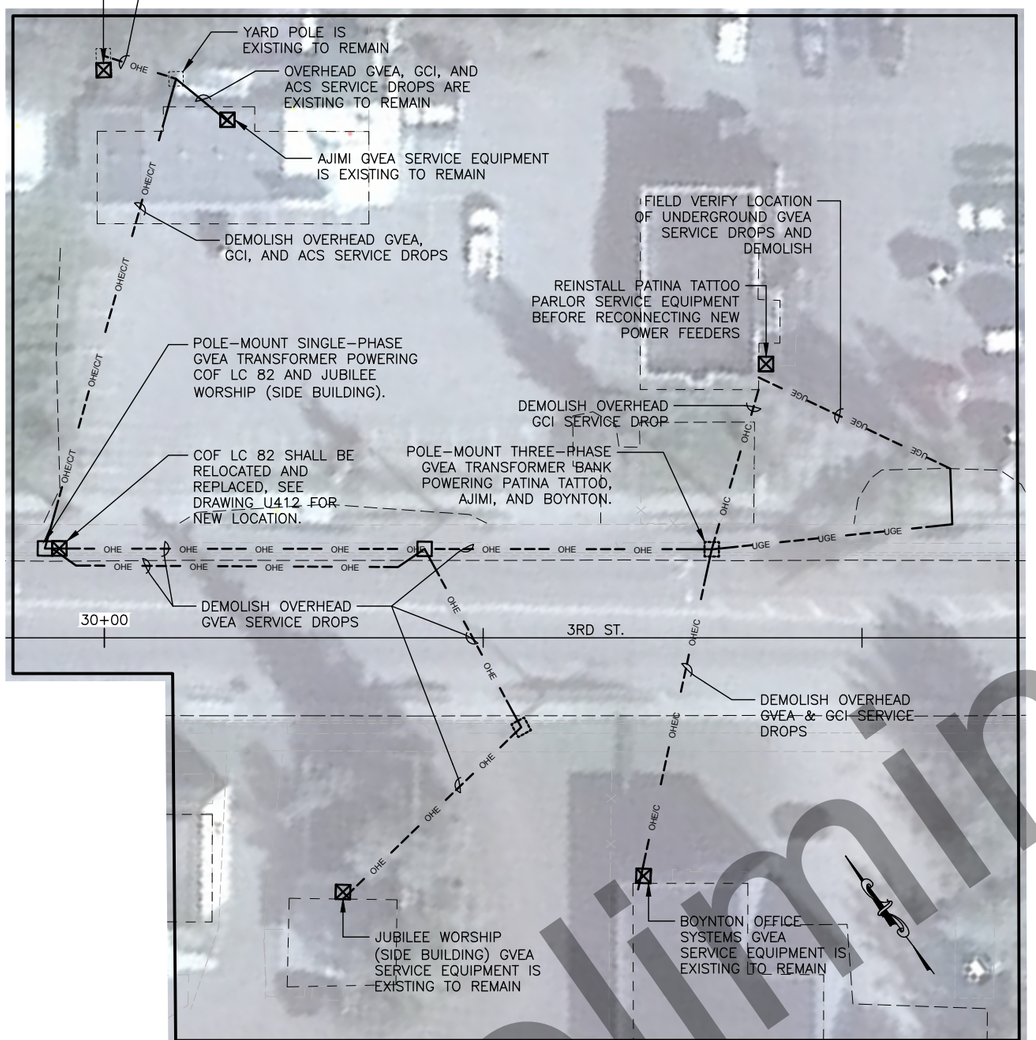

SECONDARY UTILITIES DEMOLITION – ZONE 7

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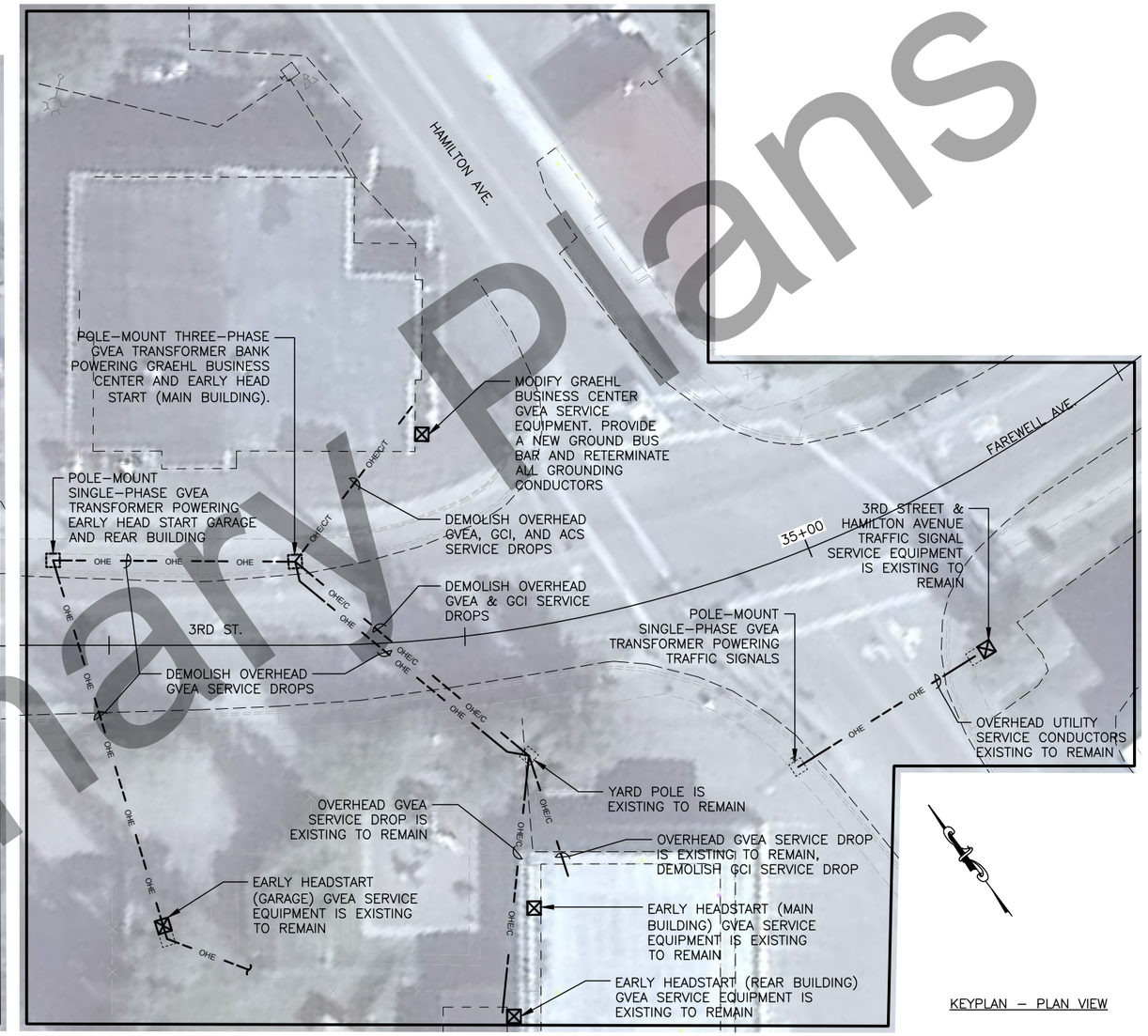

SECONDARY UTILITIES DEMOLITION – ZONE 8

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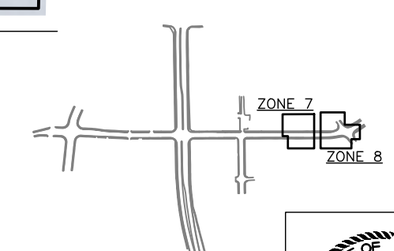

SECONDARY UTILITIES DEMOLITION 6 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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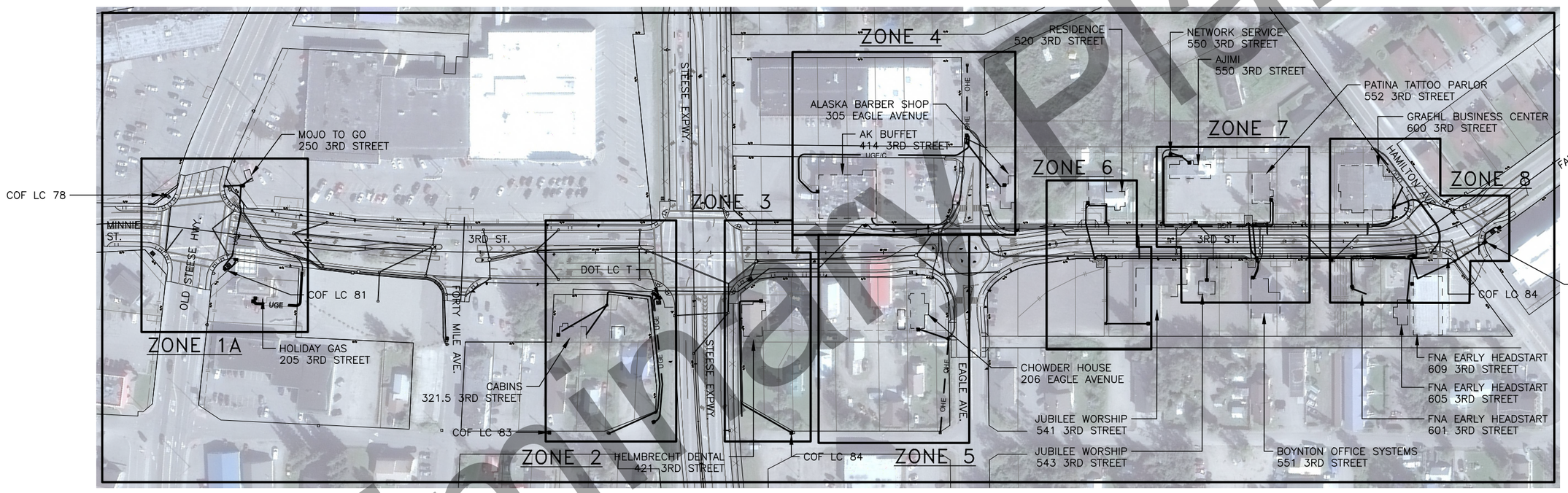
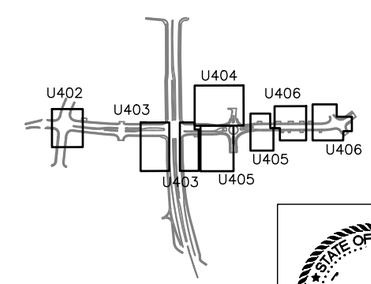


RENOVATED SECONDARY UTILITIES – OVERALL

[NO SCALE]

KEYPLAN – PLAN VIEW



SECONDARY UTILITIES
RENOVATION 1 OF 6

STATE OF ALASKA
PRELIM PS&E
PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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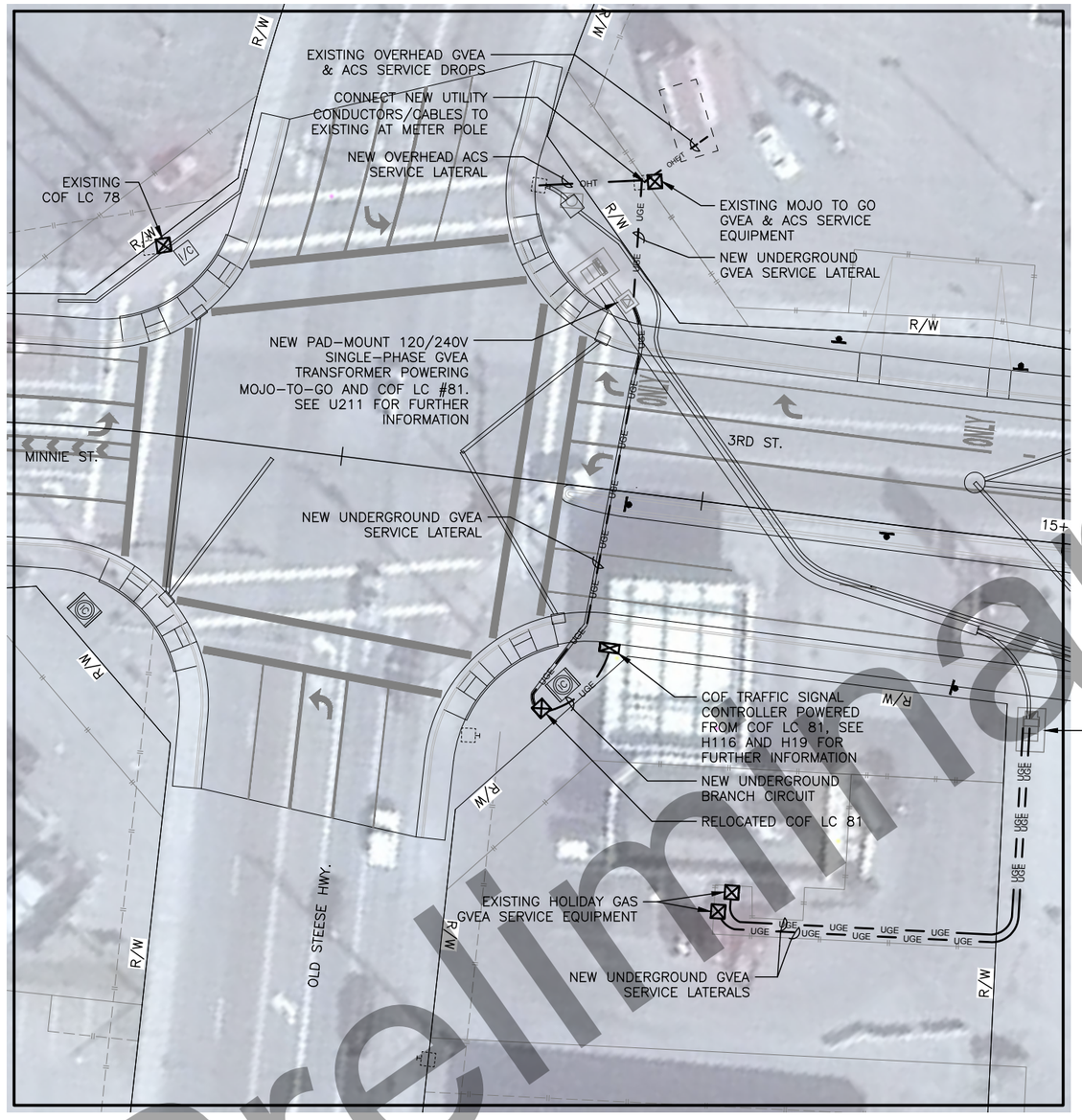
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U408	24



SECONDARY UTILITIES RENOVATION – ZONE 1

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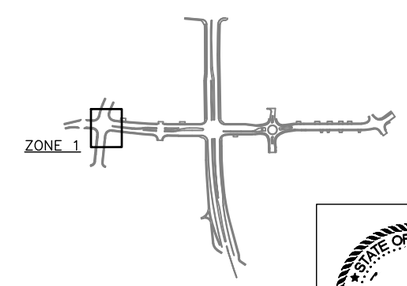

SECONDARY UTILITIES RENOVATION 2 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC. AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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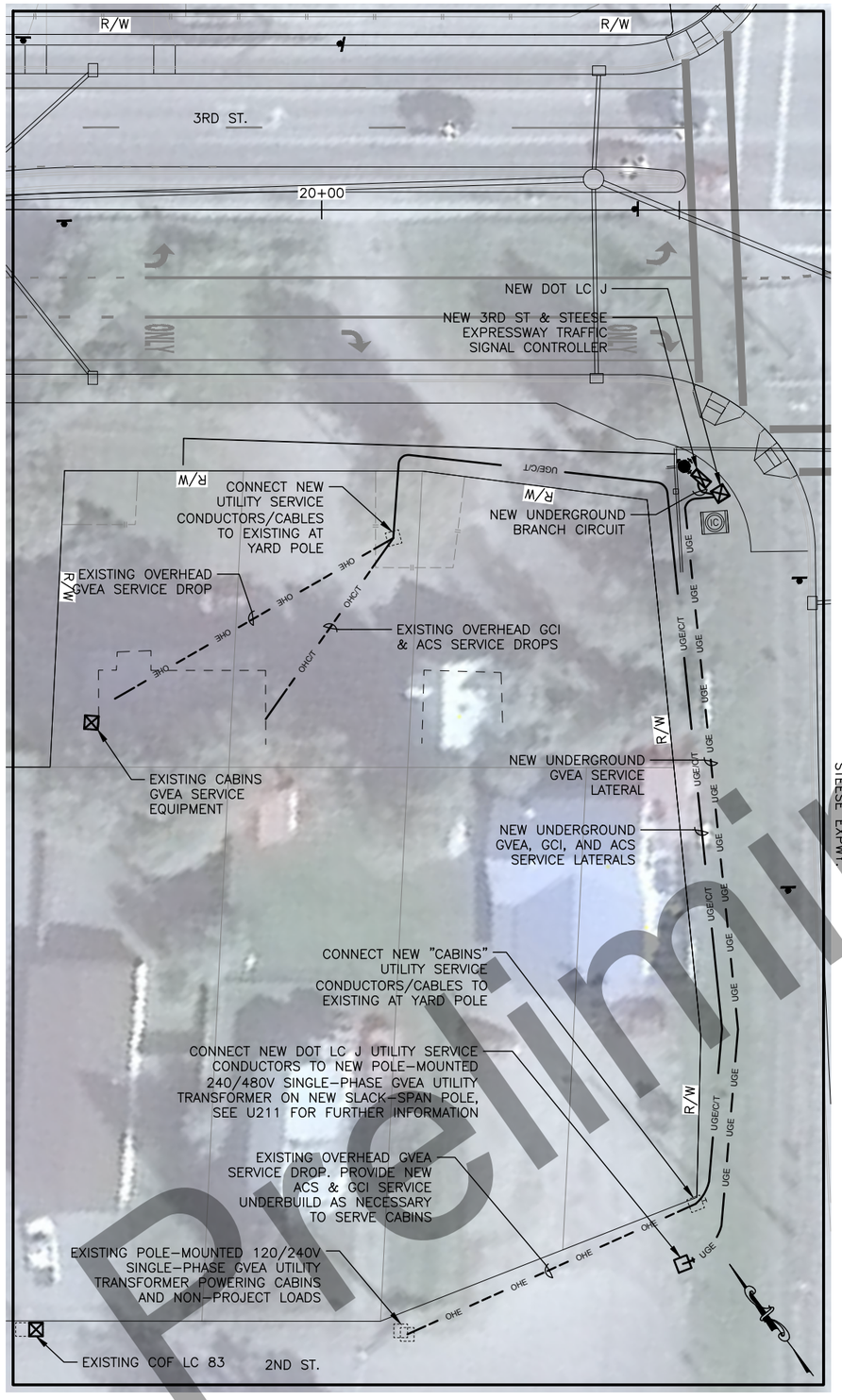

SECONDARY UTILITIES RENOVATION – ZONE 2

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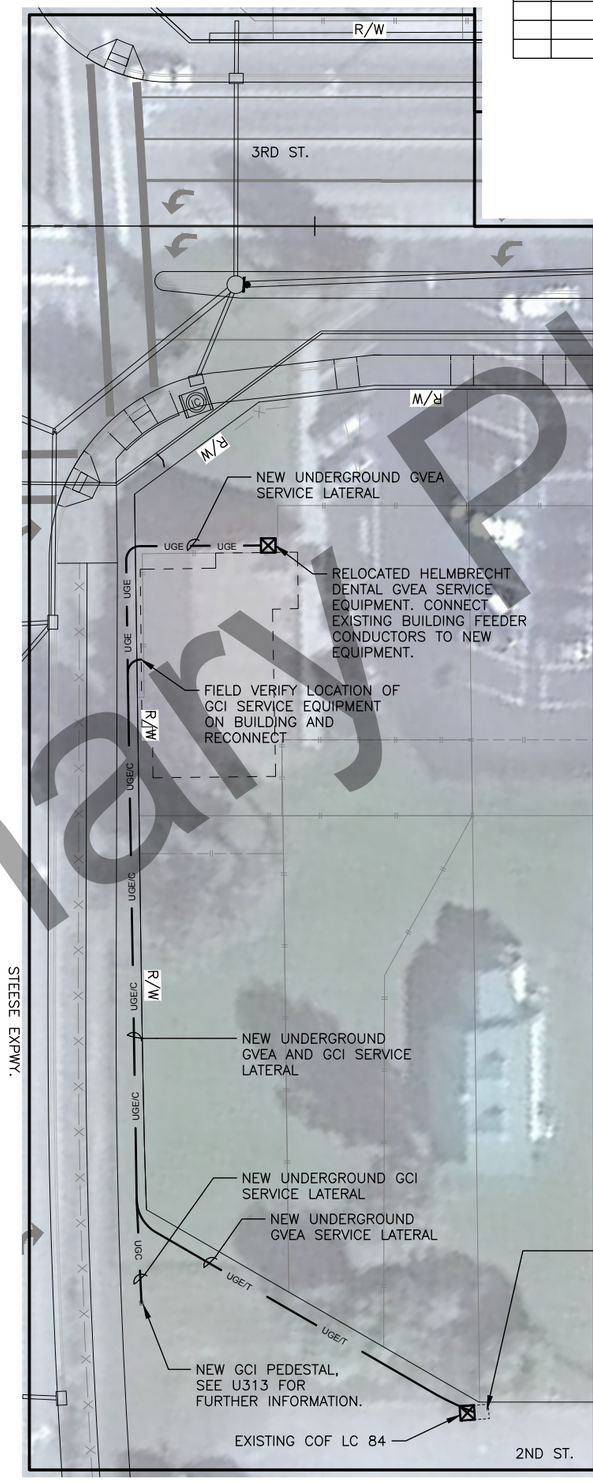

SECONDARY UTILITIES RENOVATION – ZONE 3

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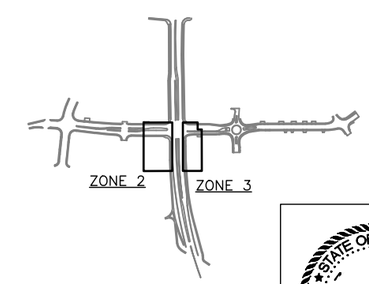
KEYPLAN – PLAN VIEW



SECONDARY UTILITIES RENOVATION 3 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC. AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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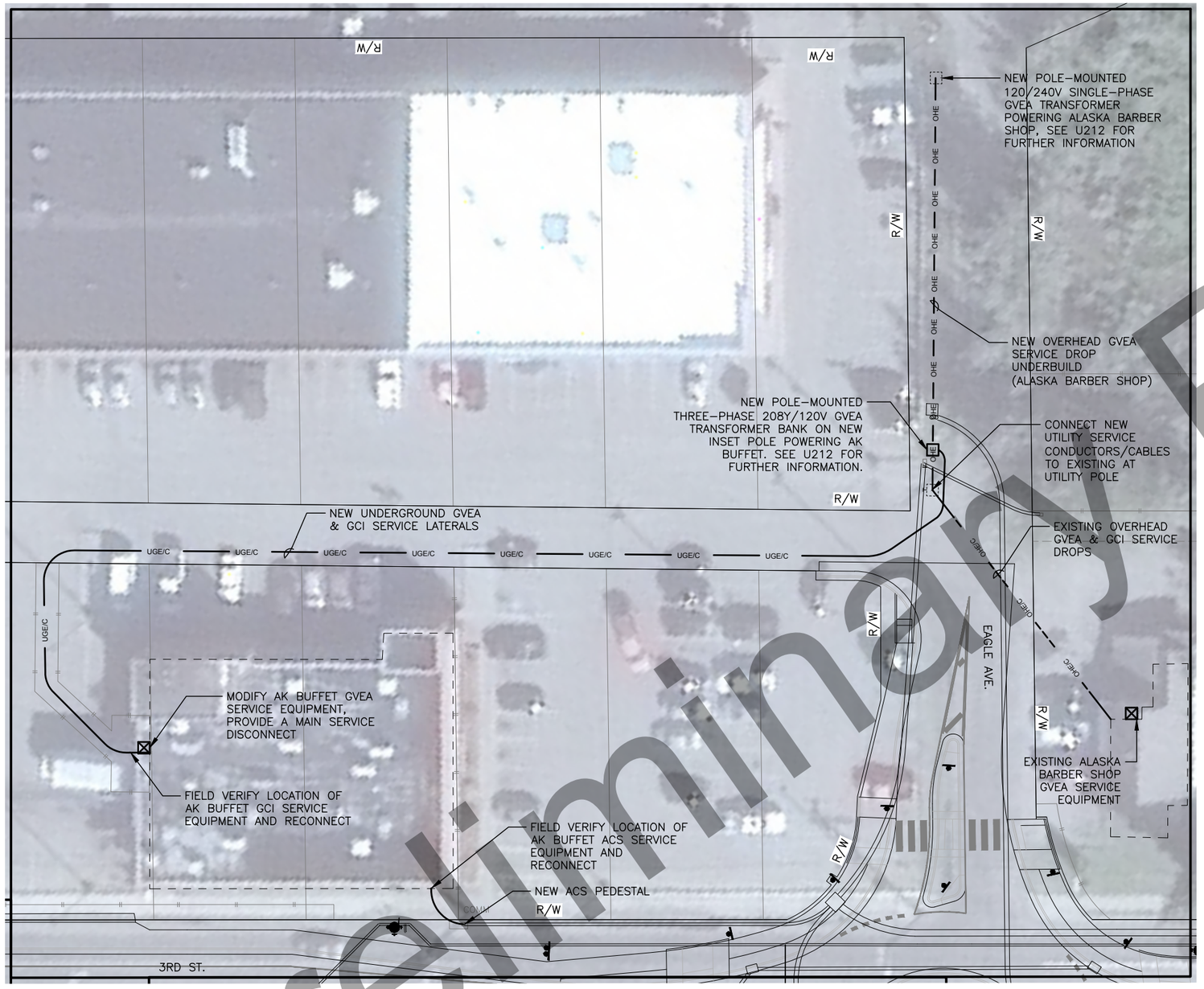

SECONDARY UTILITIES RENOVATION – ZONE 4

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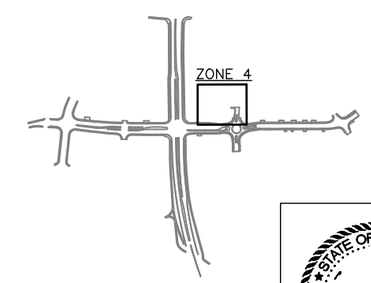
KEYPLAN – PLAN VIEW



SECONDARY UTILITIES RENOVATION 4 OF 6

STATE OF PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC. AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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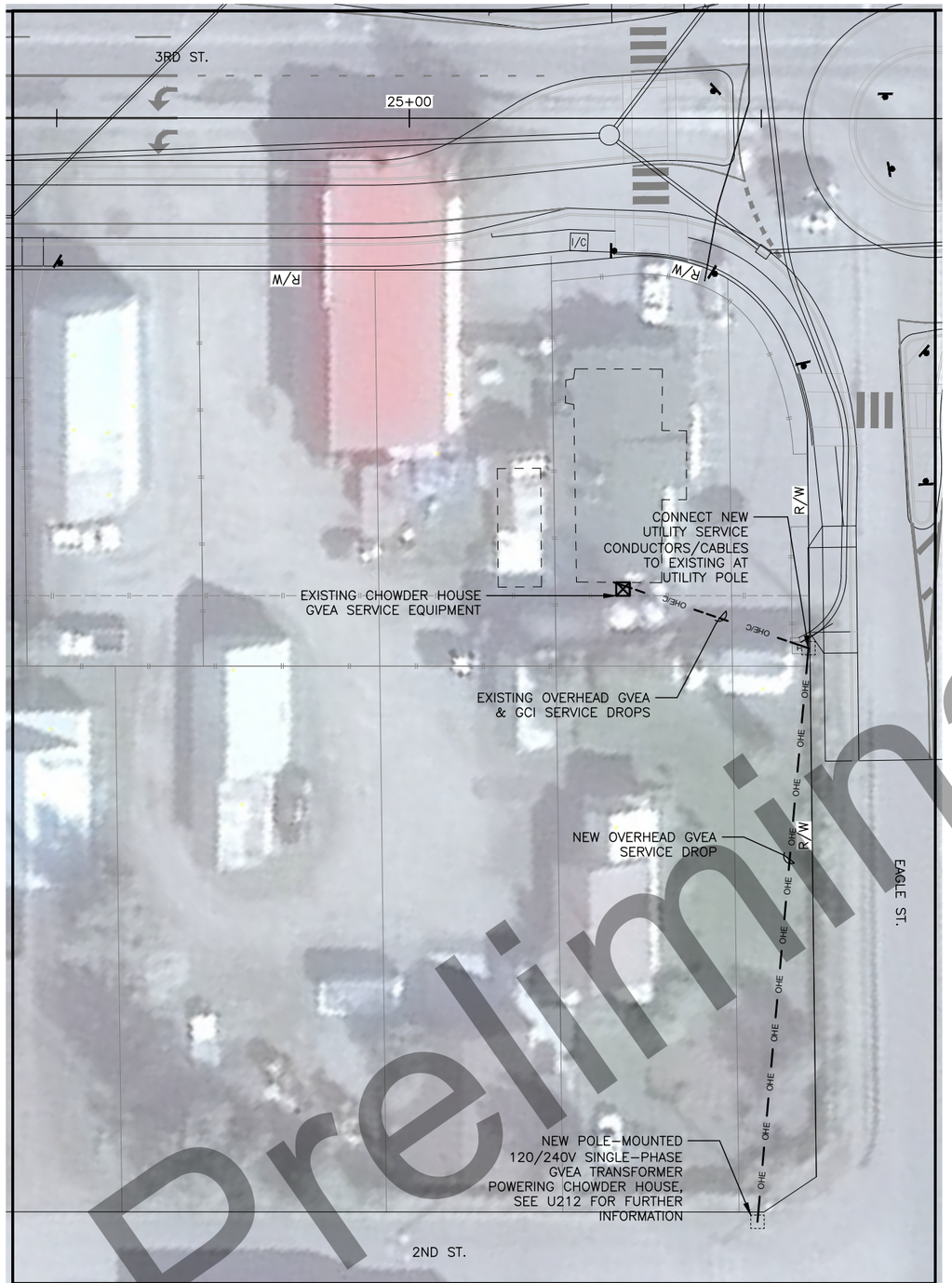

SECONDARY UTILITIES RENOVATION – ZONE 5

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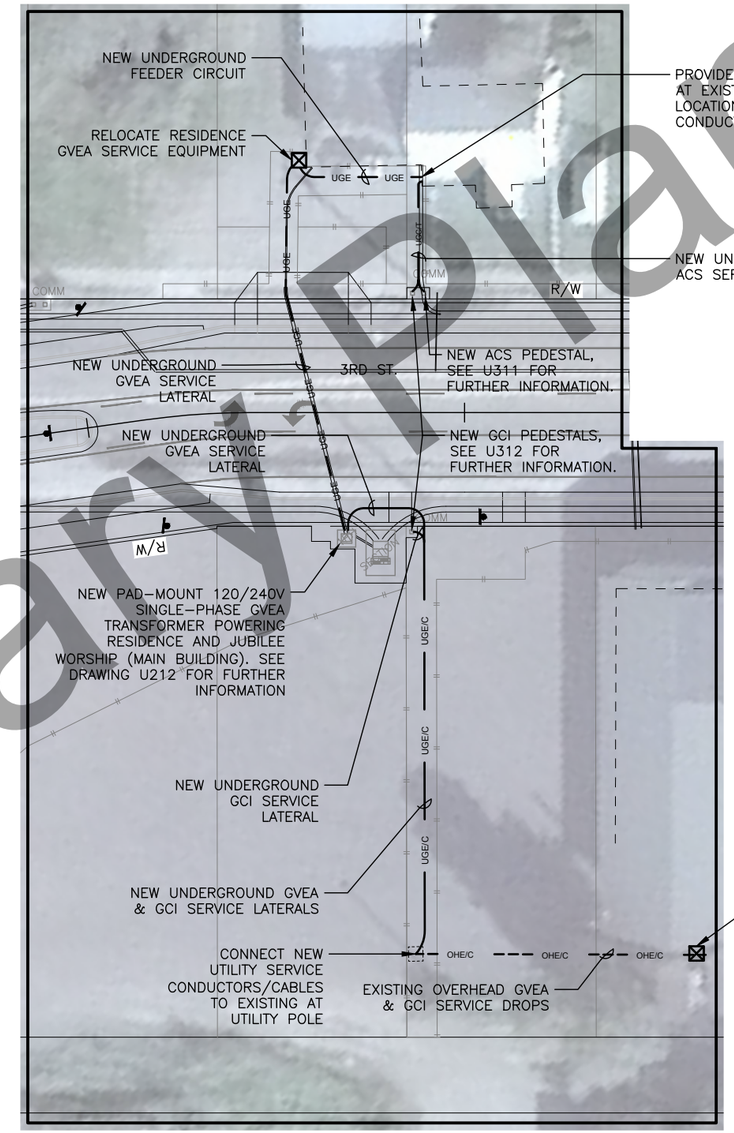

SECONDARY UTILITIES RENOVATION – ZONE 6

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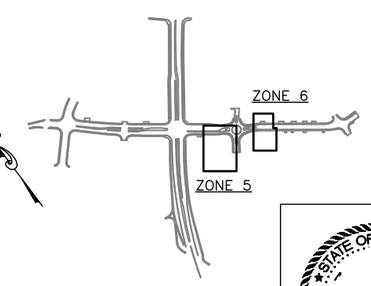
KEYPLAN – PLAN VIEW



SECONDARY UTILITIES RENOVATION 5 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
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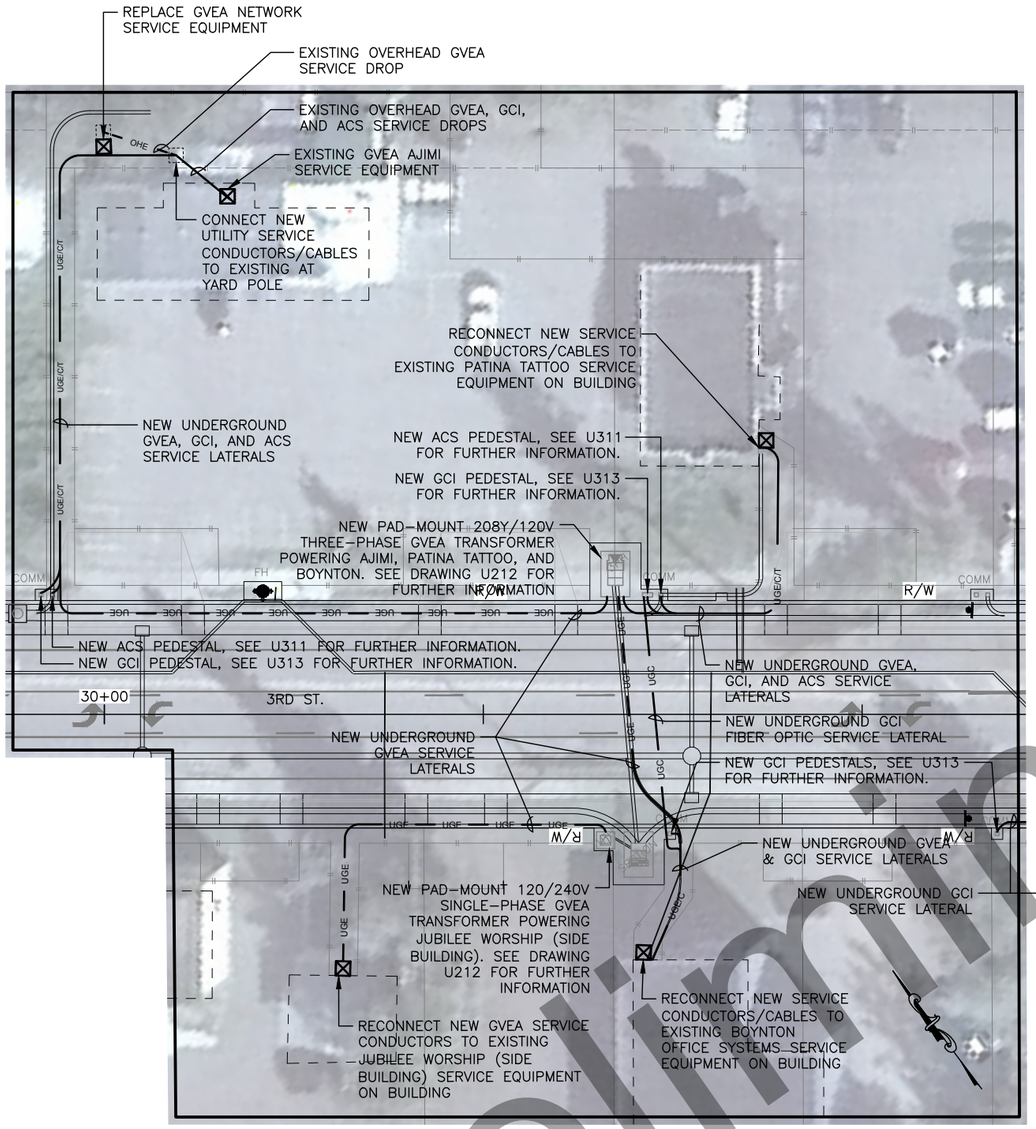

SECONDARY UTILITIES RENOVATION – ZONE 7

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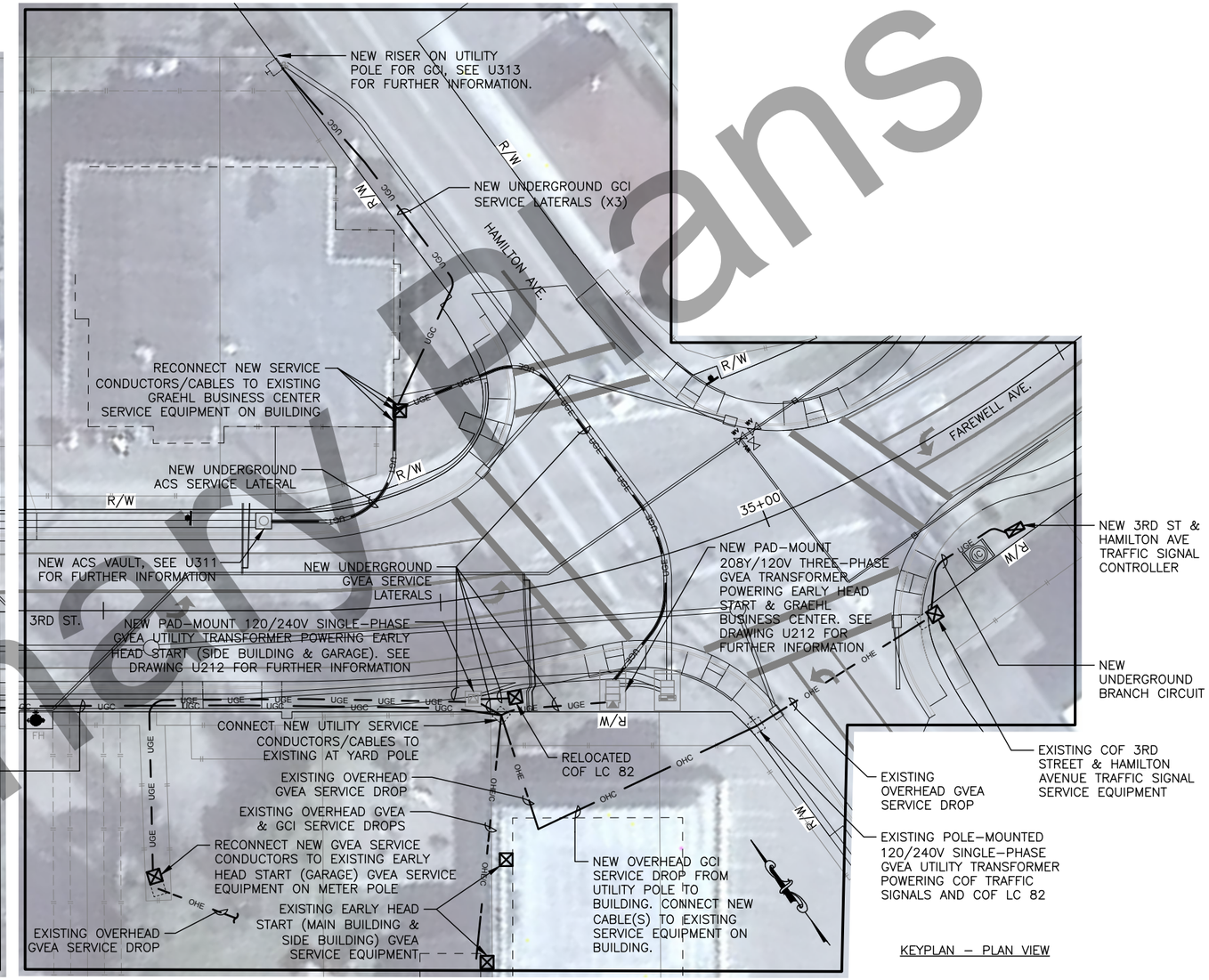

SECONDARY UTILITIES RENOVATION – ZONE 8

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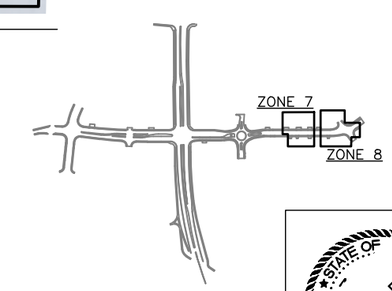
KEYPLAN – PLAN VIEW



SECONDARY UTILITIES RENOVATION 6 OF 6

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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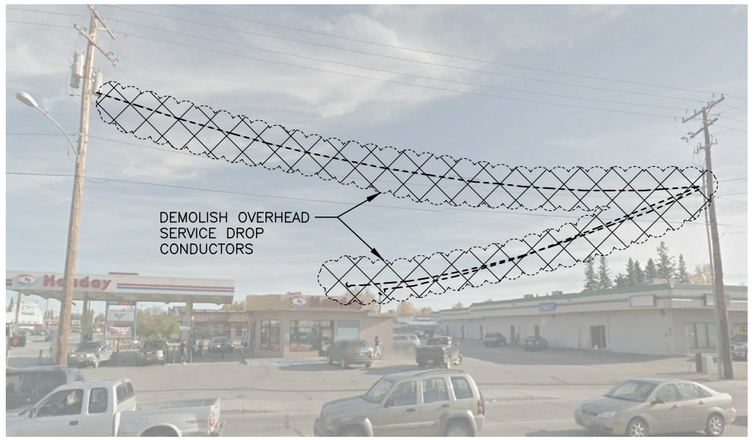
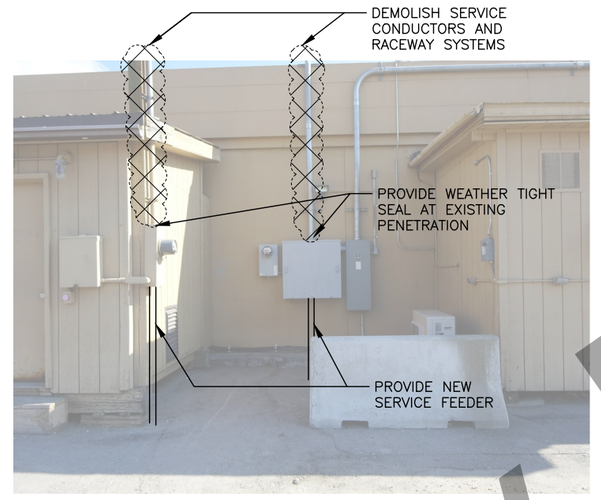
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U413	24

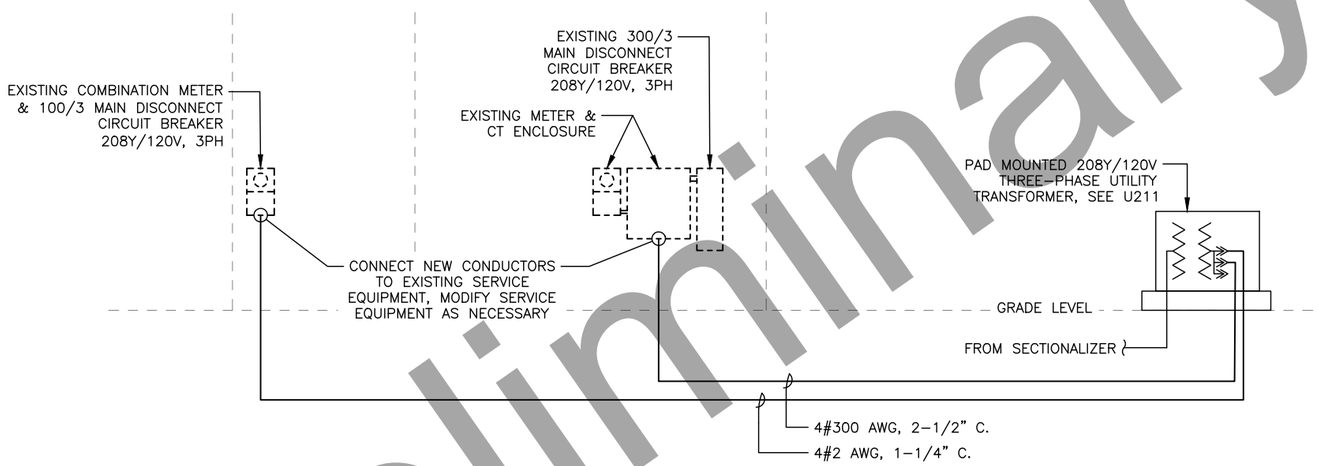
205 3RD STREET – HOLIDAY GAS





SECONDARY UTILITIES DEMOLITION

(NO SCALE)



UTILITIES MODIFICATIONS ONE-LINE DIAGRAM

(NOT TO SCALE)

HOLIDAY GAS SUMMARY

662(114)-B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 1-1/4"	160-FT
HDPE CONDUIT – 2-1/2"	150-FT
RMC CONDUIT – 1-1/4"	16-FT
RMC CONDUIT – 2-1/2"	15-FT
#2 AWG XHHW	700-FT
300 KCMIL XHHW	660-FT
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	2

SERVICE ENTRANCE DETAILS 1 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 801 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452-1241
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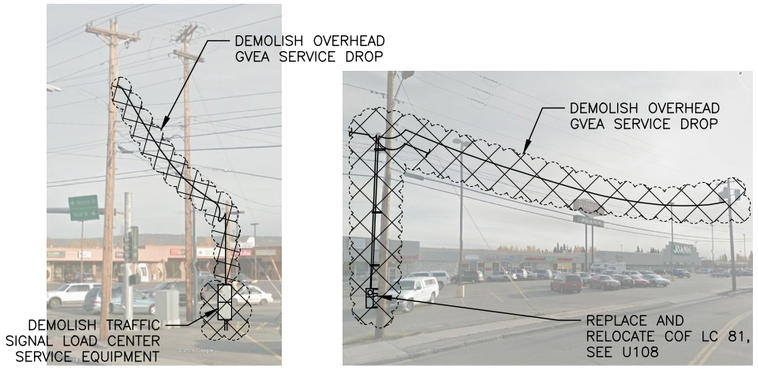
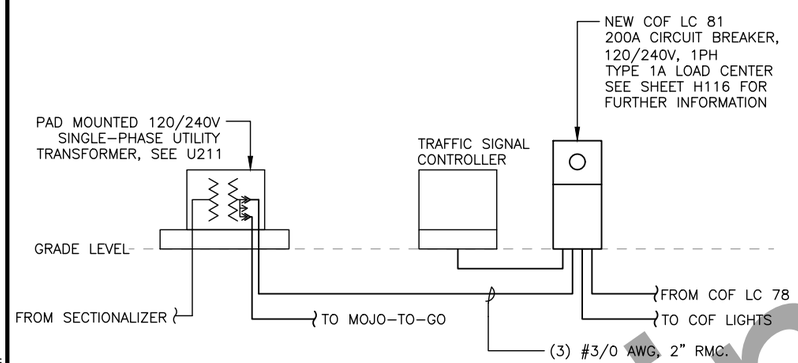
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U414	24

OLD STEESE & 3RD STREET INTERSECTION – TRAFFIC SIGNAL SERVICE & COF STREET LIGHT LOAD CENTER #81



SECONDARY UTILITIES DEMOLITION
(NO SCALE)

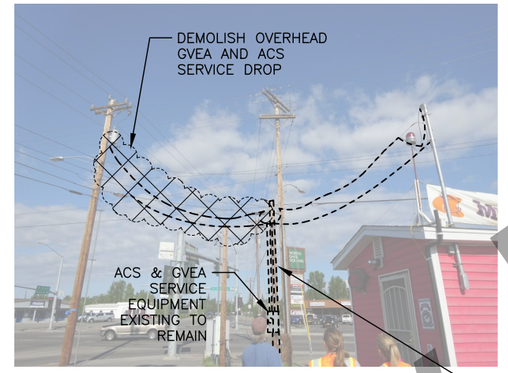


UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)

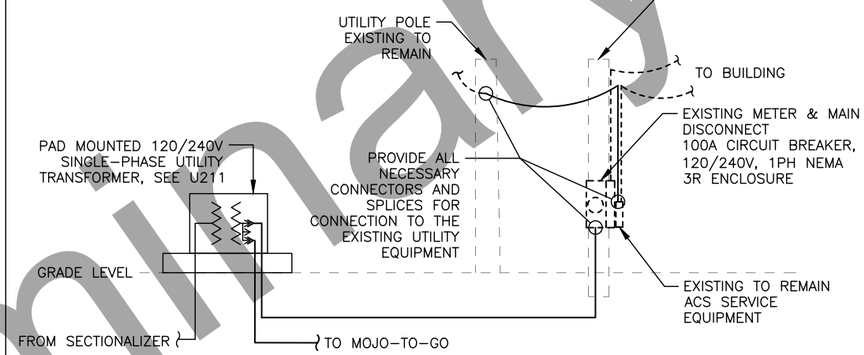
COF LC #81 SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
RMC CONDUIT – 2"	125–FT
#3/0 AWG XHHW	375–FT

NOTES:
–TYPE 1A LOAD CENTER, INCLUDING SERVICE FEEDER, IS PAID FOR UNDER 661(2), SEE H SHEETS.
–TRAFFIC SIGNAL CONTROLLER BRANCH CIRCUITS PAID FOR UNDER 661(2).
–LIGHTING BRANCH CIRCUITS PAID FOR UNDER 660(3).

250 3RD STREET – MOJO–TO–GO



SECONDARY UTILITIES DEMOLITION
(NO SCALE)



EXISTING UTILITIES ONE–LINE DIAGRAM
(NOT TO SCALE)

MOJO–TO–GO SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	20–FT
RMC CONDUIT – 2"	35–FT
#3/0 AWG XHHW	465–FT
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	20–FT
(ACS) OSP CABLE, 1–1/4" C.	20–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1

Preliminary Plans

SERVICE ENTRANCE DETAILS 2 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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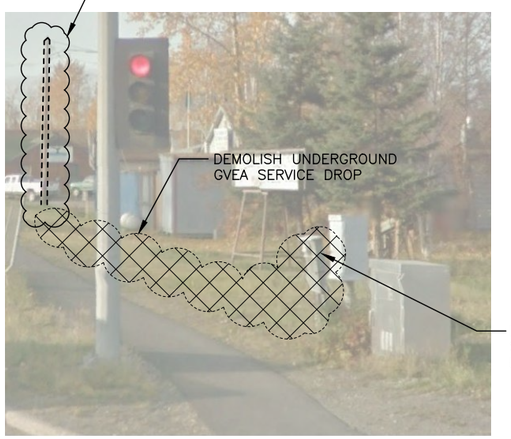
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	U415	24

DOT LOAD CENTER J
STEESE EXPRESSWAY & 3RD STREET INTERSECTION
TRAFFIC SIGNAL SERVICE

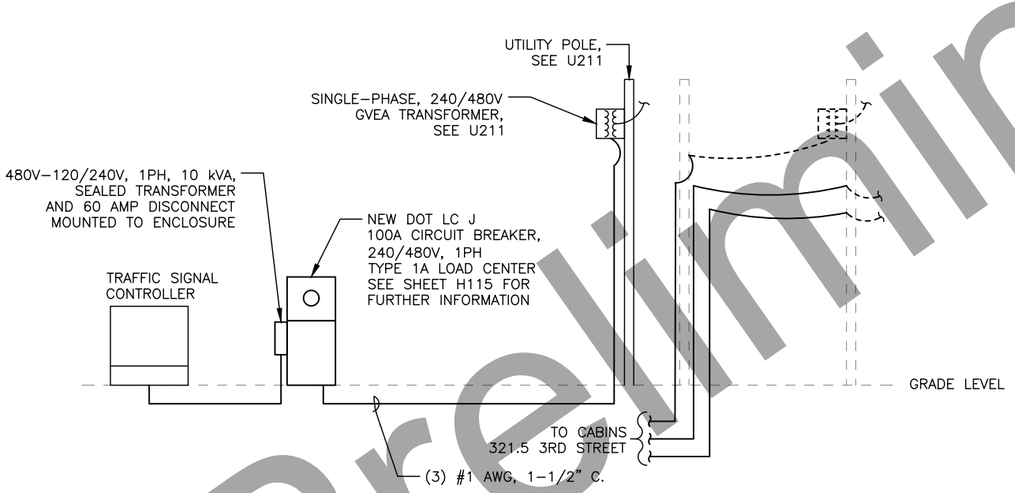


DOT LC J SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 1–1/2"	200–FT
RMC CONDUIT – 1–1/2"	35–FT
#1 AWG XHHW	705–FT

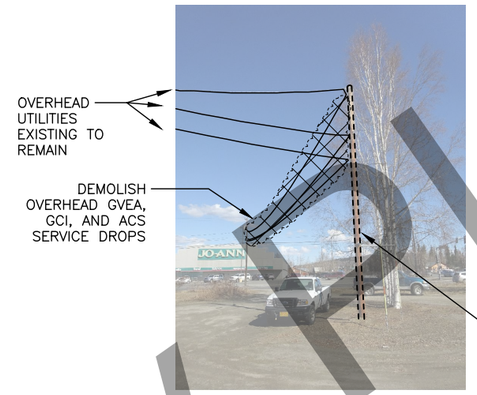
NOTES:
–TYPE 1A LOAD CENTER & ACCESSORIES PAID FOR UNDER 661(2), SEE H SHEETS.
–TRAFFIC SIGNAL CONTROLLER BRANCH CIRCUITS PAID FOR UNDER 661(2).
–THE ENTIRETY OF THE FEEDER RACEWAY SYSTEM FOR DOT LC J SHALL BE RMC.

SECONDARY UTILITIES DEMOLITION
(NO SCALE)



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)

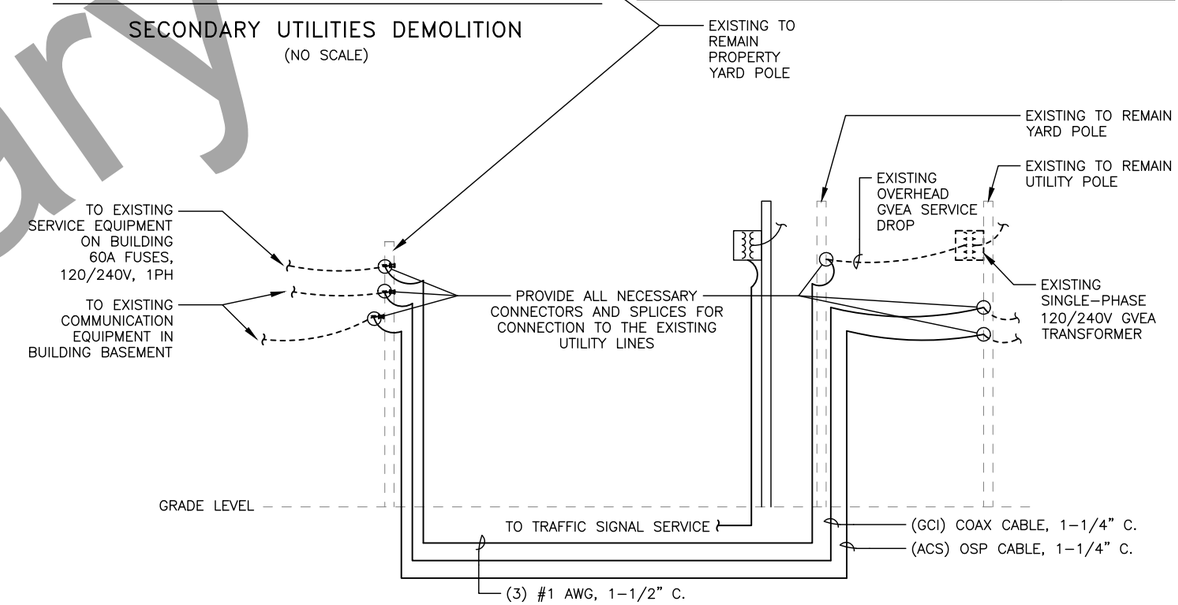
321.5 3RD STREET – CABINS



SECONDARY UTILITIES DEMOLITION
(NO SCALE)

321.5 3RD STREET SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 1–1/2"	300–FT
RMC CONDUIT – 1–1/2"	65–FT
#1 AWG XHHW	1,095–FT
RECONNECT EXISTING SERVICE FEEDERS	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	300–FT
RMC CONDUIT – 1–1/4"	65–FT
COAX CABLE	365–FT
RECONNECT EXISTING SERVICE CABLES	1
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	300–FT
RMC CONDUIT – 1–1/4"	65–FT
OSP CABLE	365–FT
RECONNECT EXISTING SERVICE CABLES	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)

SERVICE ENTRANCE DETAILS 3 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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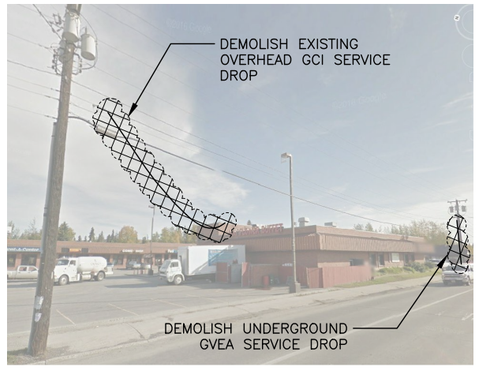
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	0670001/Z625410000	2020	U416	24

414 3RD STREET – AK BUFFET RESTAURANT

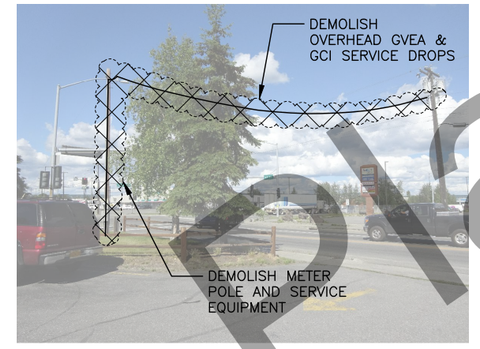


SECONDARY UTILITIES DEMOLITION
(NO SCALE)

AK BUFFET SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 3"	385–FT
RMC CONDUIT – 3"	40–FT
500 KCMIL XHHW	1,700–FT
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	385–FT
RMC CONDUIT – 1–1/4"	40–FT
COAX CABLE	425–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	20–FT
OSP CABLE	20–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1

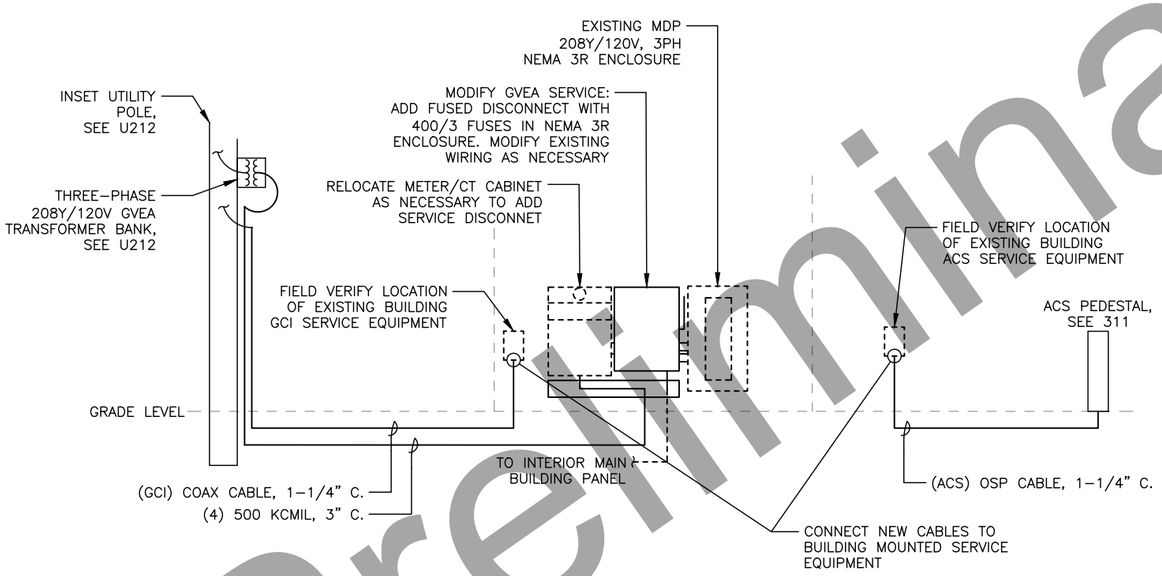
421 3RD STREET – HELMBRECHT DENTAL OFFICE



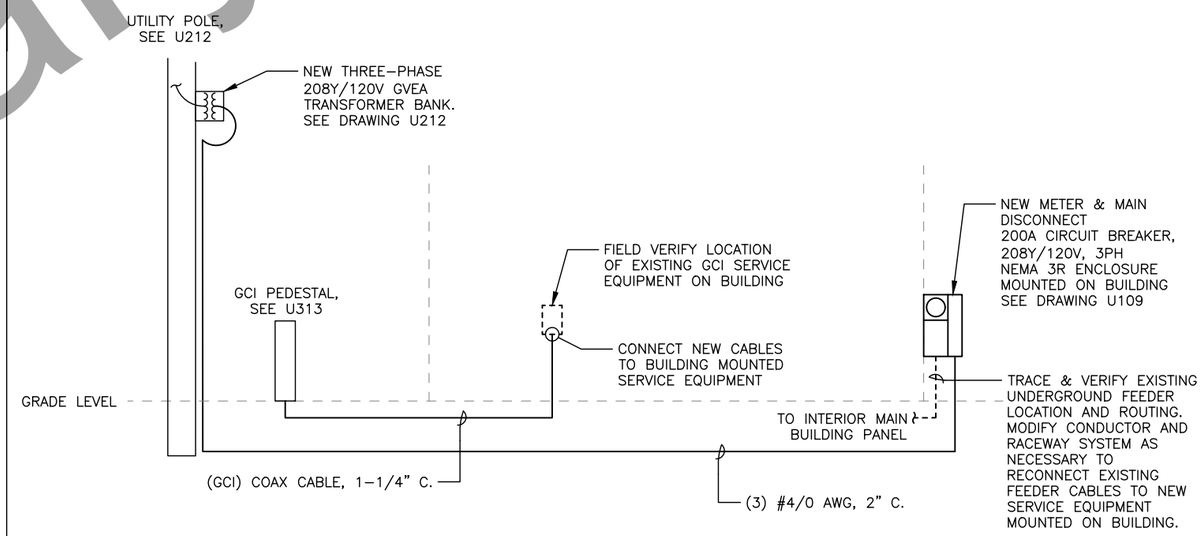
SECONDARY UTILITIES DEMOLITION
(NO SCALE)

HELMBRECHT DENTAL SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	315–FT
RMC CONDUIT – 2"	40–FT
#4/0 AWG XHHW	1,420–FT
REPLACE AND RELOCATE SERVICE EQUIPMENT	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	175–FT
COAX CABLE	175–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1
667(100) – ACS RELOCATION	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	20–FT
OSP CABLE	20–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)

Preliminary Plans

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

SERVICE ENTRANCE DETAILS 4 OF 11

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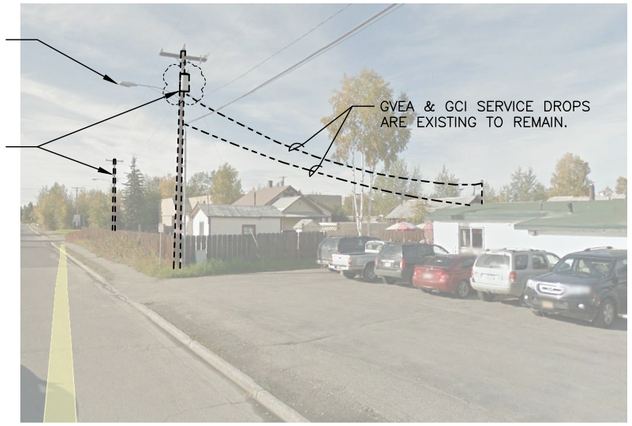
			ALASKA	0670001/Z625410000	2020	U417	24

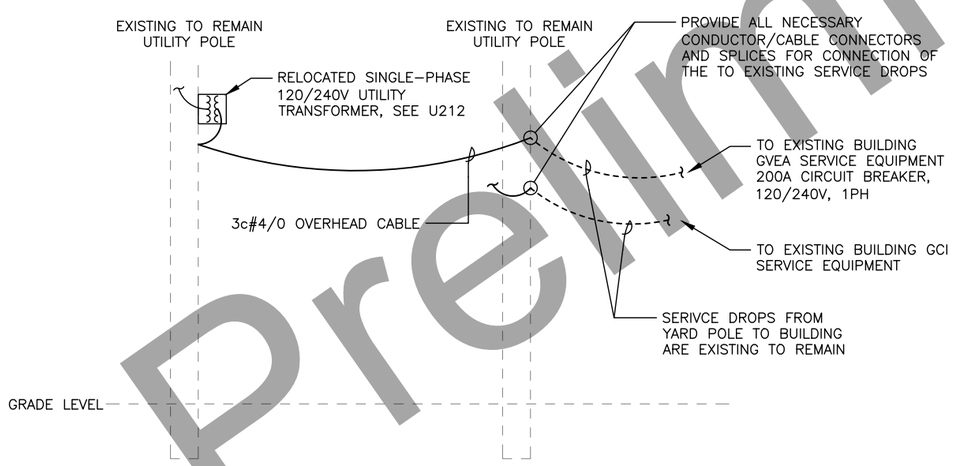
206 EAGLE AVENUE – CHOWDER HOUSE



SECONDARY UTILITIES DEMOLITION
(NO SCALE)

CHOWDER HOUSE SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
3c #4/0 OVERHEAD "ZUZARA" SERVICE CABLE	510–FT
RECONNECT EXISTING SERVICE FEEDERS	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
RECONNECT EXISTING SERVICE CABLES	1

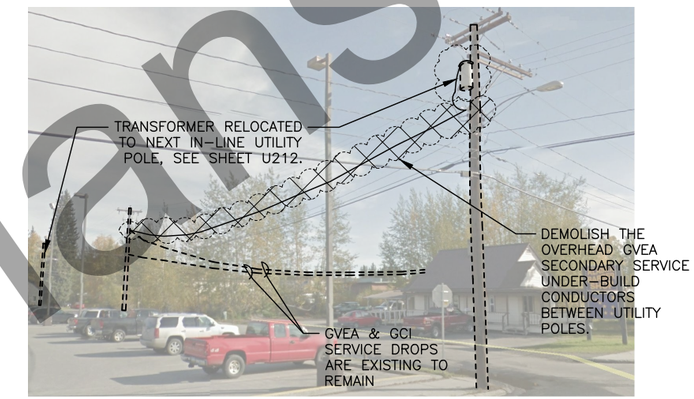


UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)

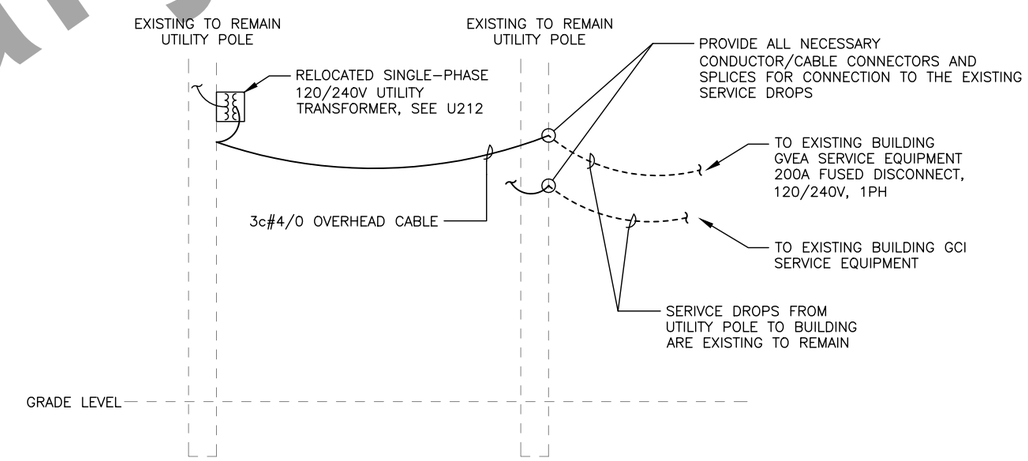
305 EAGLE AVENUE – ALASKA BARBER SHOP

ALASKA BARBER SHOP SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
3c #4/0 OVERHEAD "ZUZARA" SERVICE CABLE	420–FT
RECONNECT EXISTING SERVICE FEEDERS	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
RECONNECT EXISTING SERVICE CABLES	1



SECONDARY UTILITIES DEMOLITION
(NO SCALE)



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM
(NOT TO SCALE)

Preliminary Plans

SERVICE ENTRANCE DETAILS 5 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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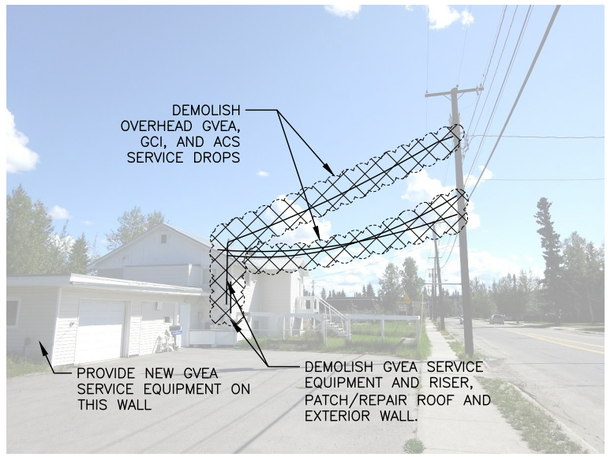
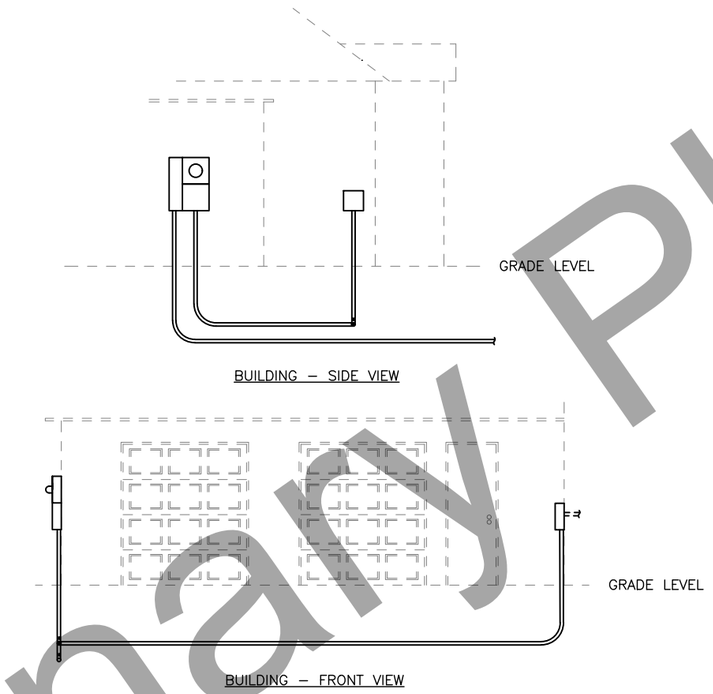
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U418	24

520 3RD STREET – RESIDENCE



SECONDARY UTILITIES DEMOLITION

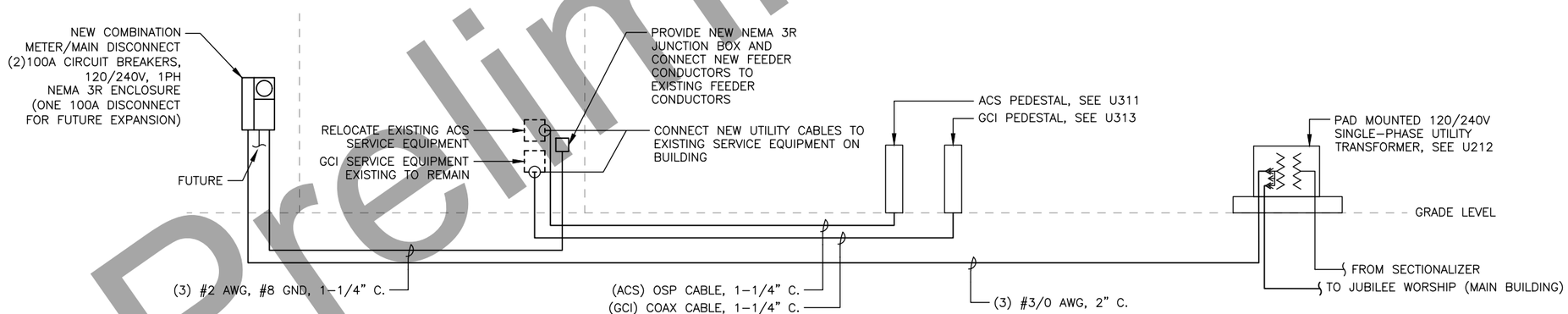
(NO SCALE)



GVEA SERVICE ENTRANCE RELOCATION – CONCEPT

(NO SCALE)

RESIDENCE SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	100–FT
RMC CONDUIT – 2"	10–FT
#3/0 AWG XHHW	330–FT
REPLACE AND RELOCATE SERVICE EQUIPMENT	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	30–FT
COAX CABLE	30–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	30–FT
OSP CABLE	30–FT
REPLACE/RELOCATE SERVICE EQUIPMENT	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

SERVICE ENTRANCE DETAILS 6 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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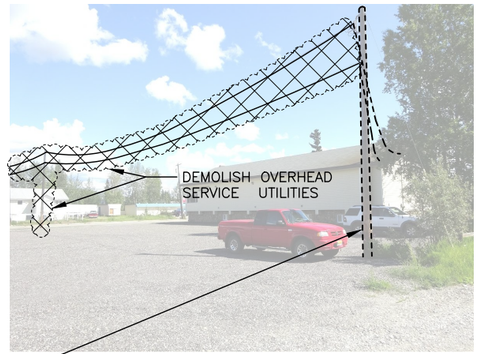
			ALASKA	0670001/Z625410000	2020	U419	24

541 3RD STREET – JUBILEE WORSHIP (MAIN BUILDING)

JUBILEE WORSHIP (MAIN BUILDING) SUMMARY

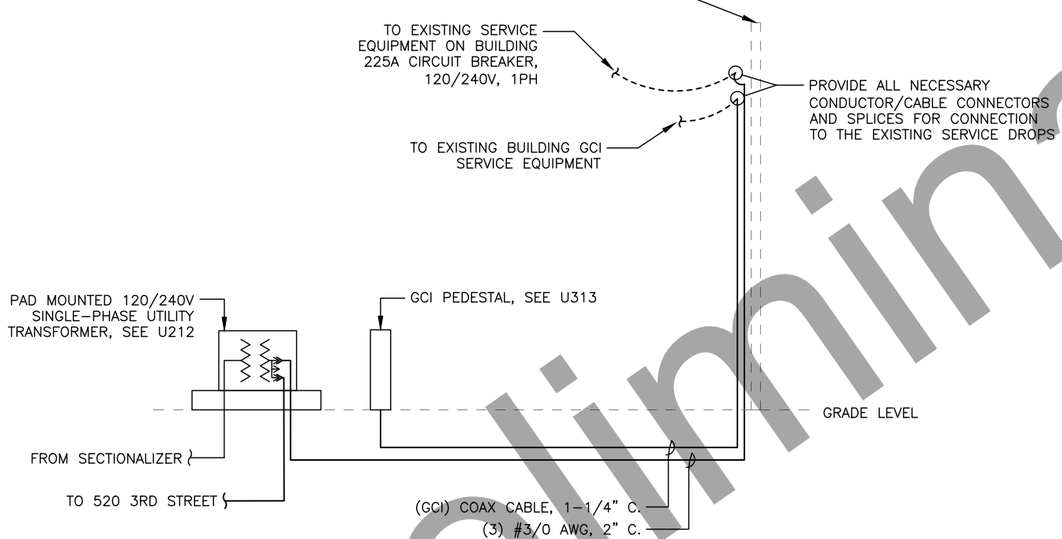
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	140–FT
RMC CONDUIT – 2"	35–FT
#4/0 AWG XHHW	525–FT
RECONNECT EXISTING SERVICE FEEDERS	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	115–FT
COAX CABLE	115–FT
RECONNECT EXISTING SERVICE CABLES	1



YARD POLE EXISTING TO REMAIN

SECONDARY UTILITIES DEMOLITION

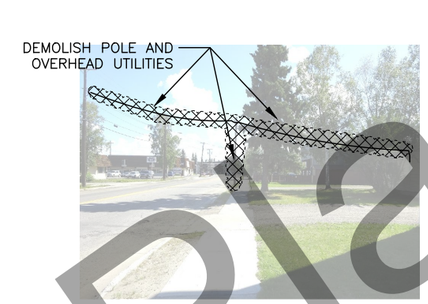
(NO SCALE)



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

543 3RD STREET – JUBILEE WORSHIP (SECONDARY BUILDING)

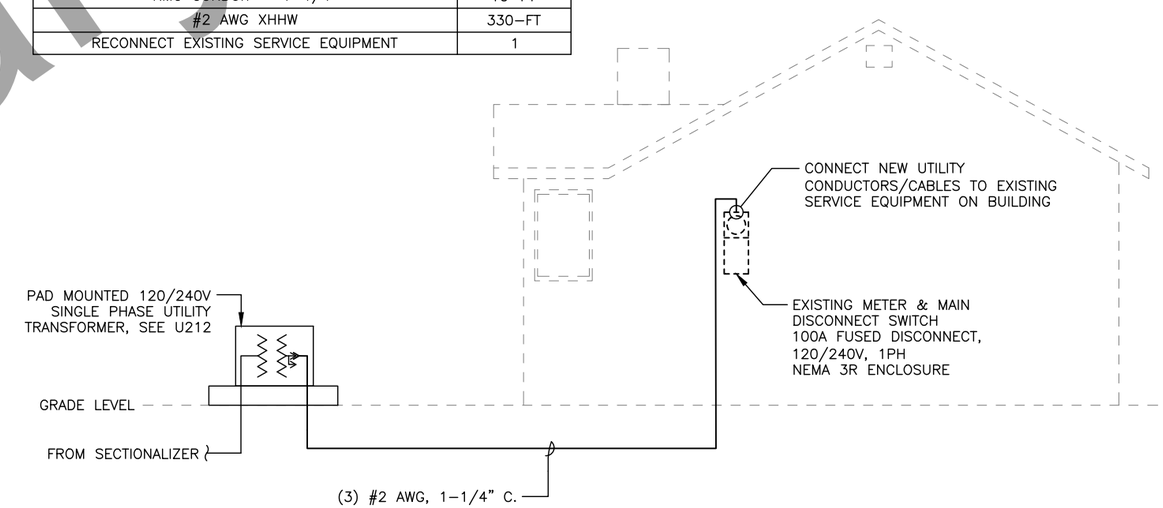


SECONDARY UTILITIES DEMOLITION

(NO SCALE)

JUBILEE WORSHIP (SIDE BUILDING) SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 1–1/4"	100–FT
RMC CONDUIT – 1–1/4"	10–FT
#2 AWG XHHW	330–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

SERVICE ENTRANCE DETAILS 7 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

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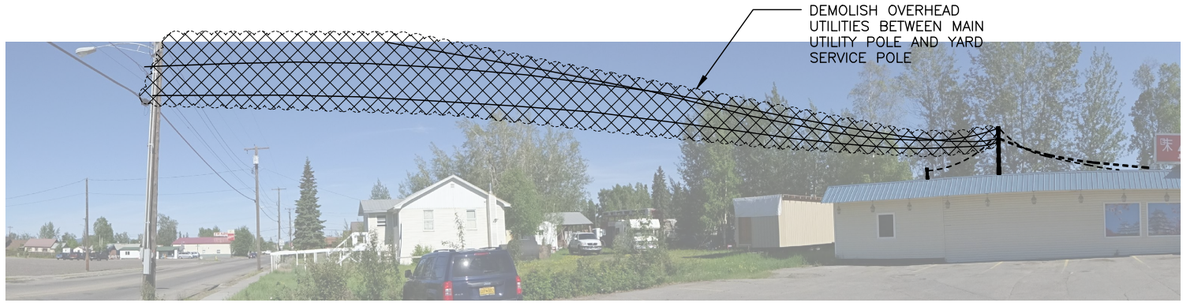
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U420	24

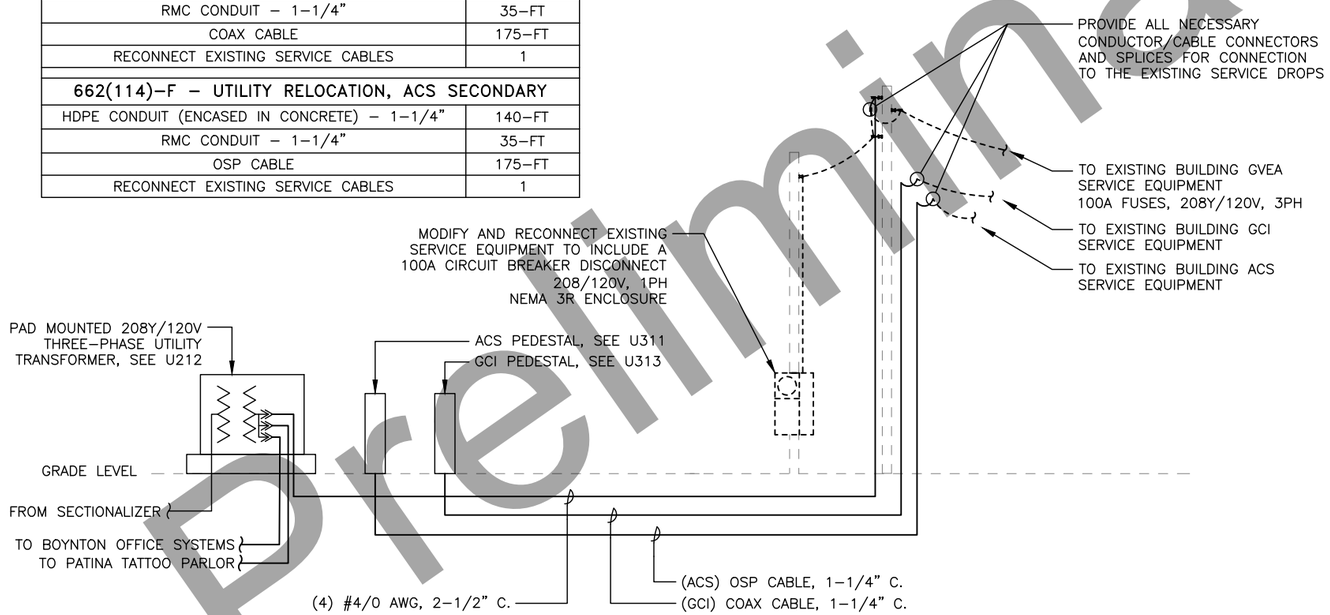
550 3RD STREET – AJIMI RESTAURANT



SECONDARY UTILITIES DEMOLITION

(NO SCALE)

AJIMI SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2–1/2"	300–FT
RMC CONDUIT – 2–1/2"	35–FT
#4/0 AWG XHHW	1,340–FT
RECONNECT EXISTING SERVICE FEEDERS	1
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	140–FT
RMC CONDUIT – 1–1/4"	35–FT
COAX CABLE	175–FT
RECONNECT EXISTING SERVICE CABLES	1
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	140–FT
RMC CONDUIT – 1–1/4"	35–FT
OSP CABLE	175–FT
RECONNECT EXISTING SERVICE CABLES	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

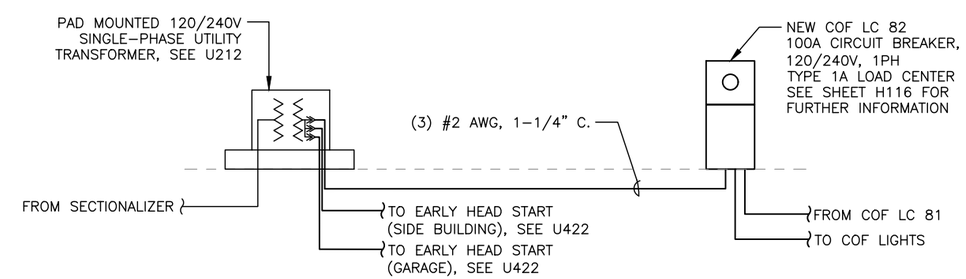
COF STREET LIGHT LOAD CENTER #82

SECONDARY UTILITIES DEMOLITION

(NO SCALE)

COF LC 82 SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 1–1/4"	12–FT
RMC CONDUIT – 1–1/4"	8–FT
#2 AWG XHHW	60–FT

NOTES:
–TYPE 1A LOAD CENTER PAID FOR UNDER 661(2), SEE H SHEETS.
–LIGHTING BRANCH CIRCUITS PAID FOR UNDER PAY ITEM 660(3).



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

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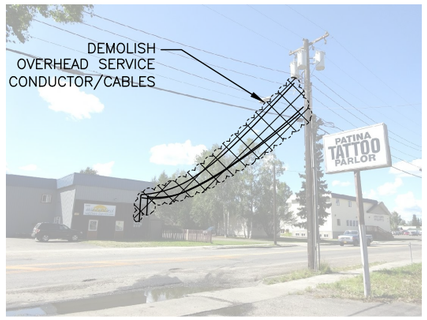
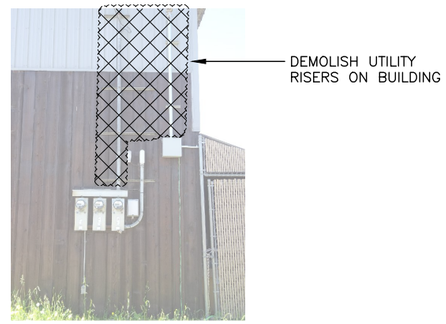
STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U421	24

551 3RD STREET – BOYNTON OFFICE SYSTEMS

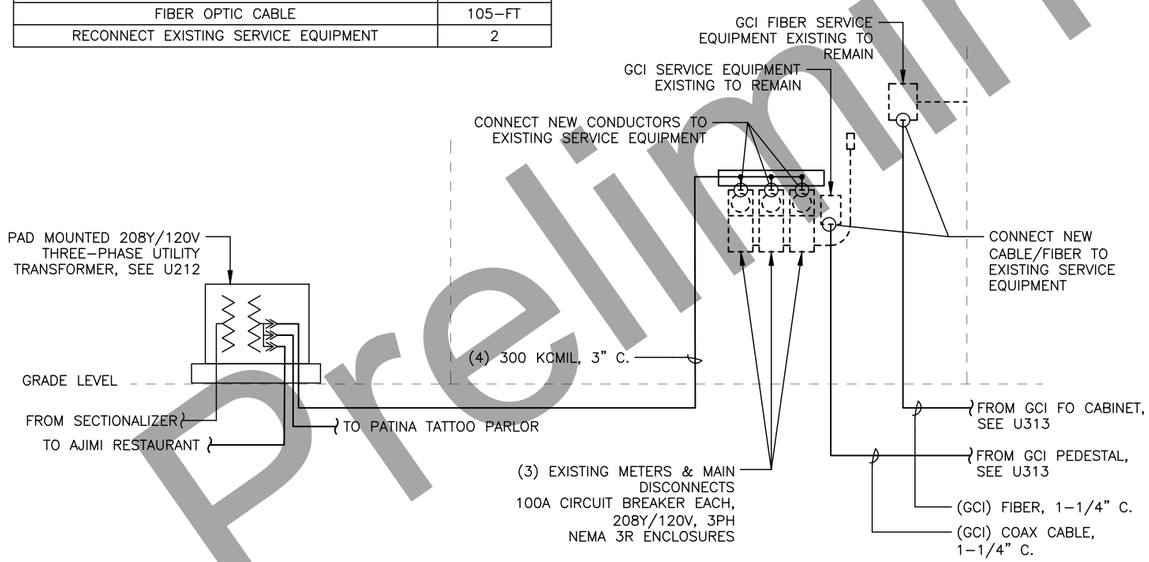




SECONDARY UTILITIES DEMOLITION

(NO SCALE)

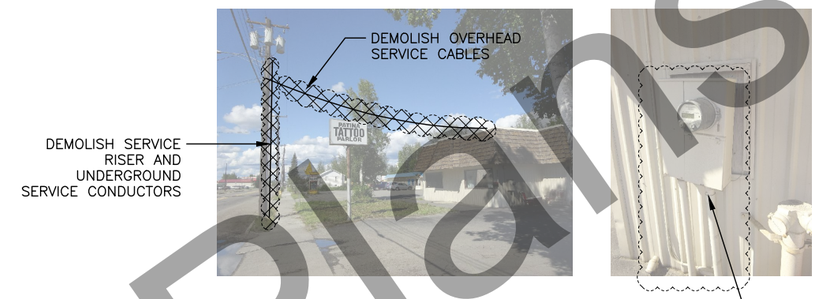
BOYNTON OFFICE SYSTEMS SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 3"	105–FT
RMC CONDUIT – 3"	10–FT
300 KCMIL XHHW	460–FT
RECONNECT EXISTING SERVICE EQUIPMENT	3
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	140–FT
COAX CABLE	35–FT
FIBER OPTIC CABLE	105–FT
RECONNECT EXISTING SERVICE EQUIPMENT	2



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

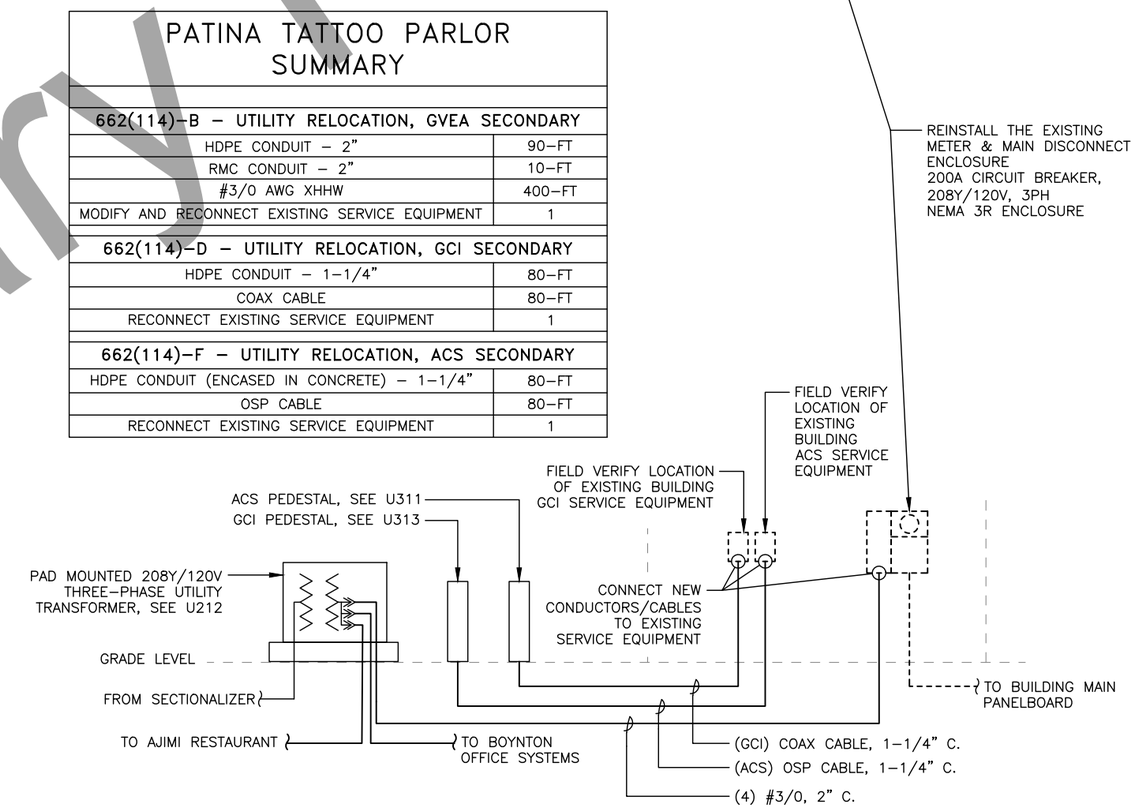
552 3RD STREET – PATINA TATTOO PARLOR



SECONDARY UTILITIES DEMOLITION

(NO SCALE)

PATINA TATTOO PARLOR SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	90–FT
RMC CONDUIT – 2"	10–FT
#3/0 AWG XHHW	400–FT
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	80–FT
COAX CABLE	80–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	80–FT
OSP CABLE	80–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

SERVICE ENTRANCE
DETAILS 9 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

PLANS DEVELOPED BY: DESIGN ALASKA, INC, AECC511, 601 COLLEGE ROAD, FAIRBANKS, AK 99701 (907)452–1241
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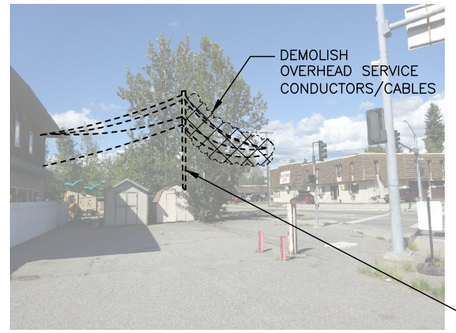
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U422	24

605 & 609 3RD STREET – EARLY HEAD START (MAIN BUILDING & REAR BUILDING)

EARLY HEAD START (MAIN & SIDE) SUMMARY

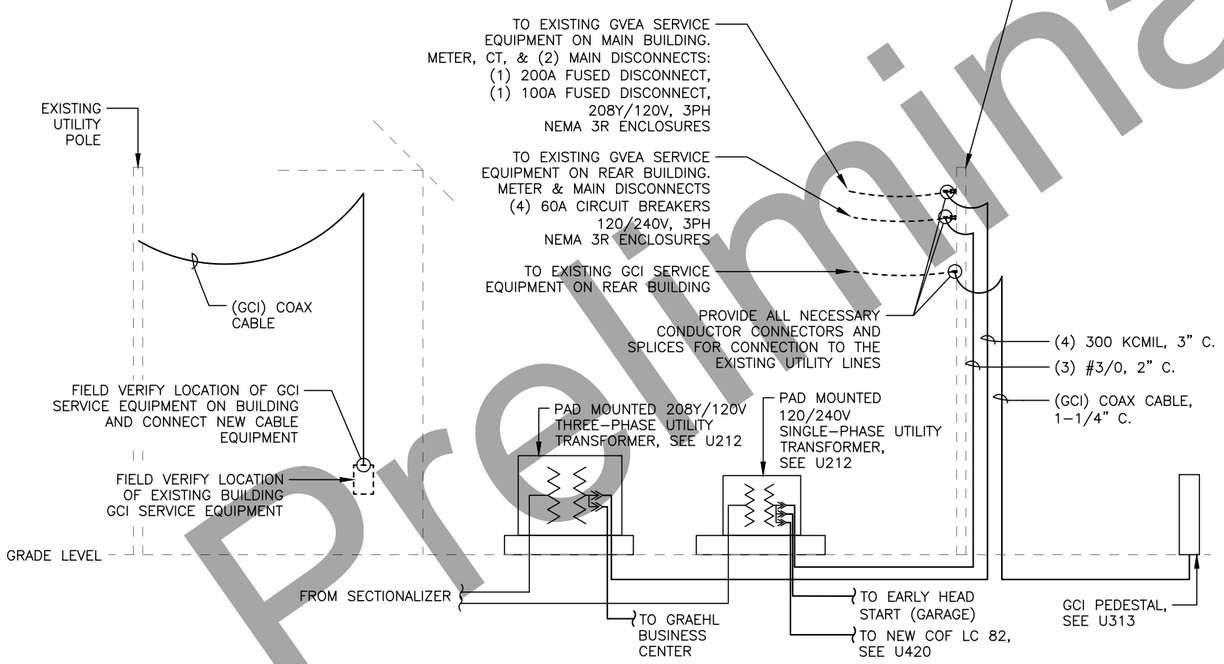
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	10–FT
HDPE CONDUIT – 3"	35–FT
RMC CONDUIT – 2"	35–FT
RMC CONDUIT – 3"	35–FT
#3/0 AWG XHHW	135–FT
300 KCMIL XHHW	280–FT
RECONNECT EXISTING SERVICE FEEDERS	2
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 1–1/4"	210–FT
COAX CABLE	275–FT
RECONNECT EXISTING SERVICE CABLES	2



YARD POLE EXISTING TO REMAIN

SECONDARY UTILITIES DEMOLITION

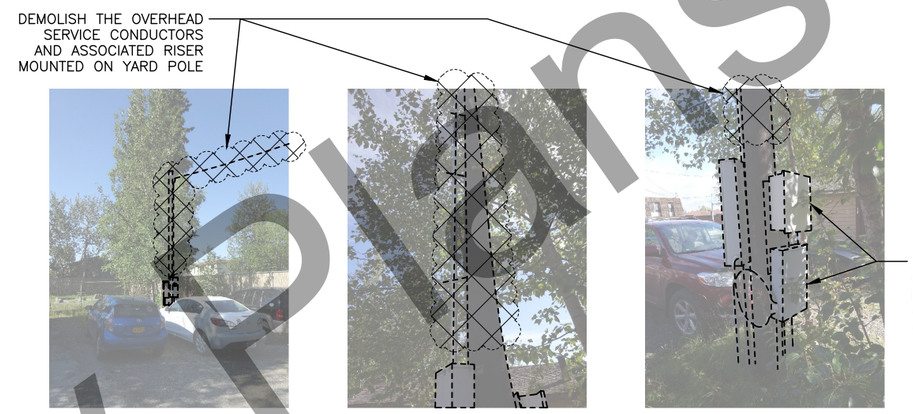
(NO SCALE)



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

601 3RD STREET – EARLY HEAD START (GARAGE BUILDING)

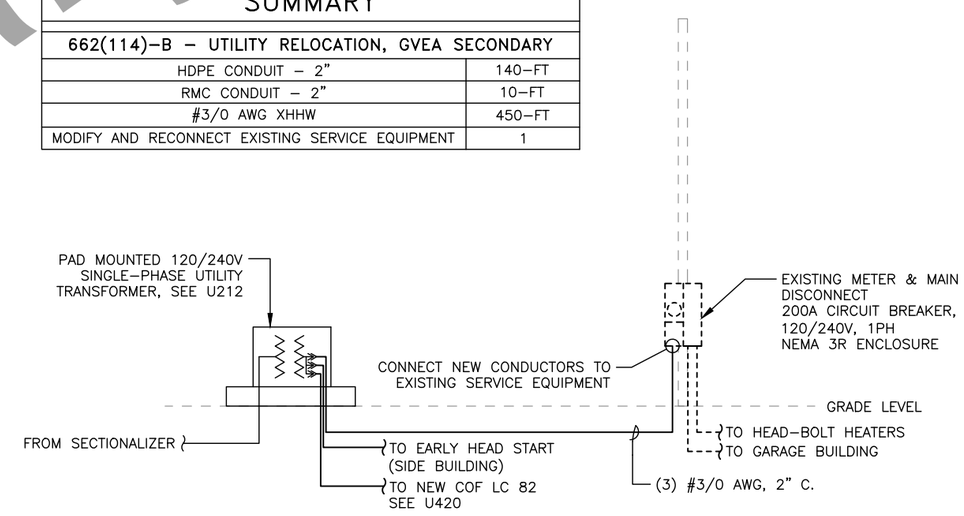


SECONDARY UTILITIES DEMOLITION

(NO SCALE)

EARLY HEAD START (GARAGE) SUMMARY

662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 2"	140–FT
RMC CONDUIT – 2"	10–FT
#3/0 AWG XHHW	450–FT
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

SERVICE ENTRANCE DETAILS 10 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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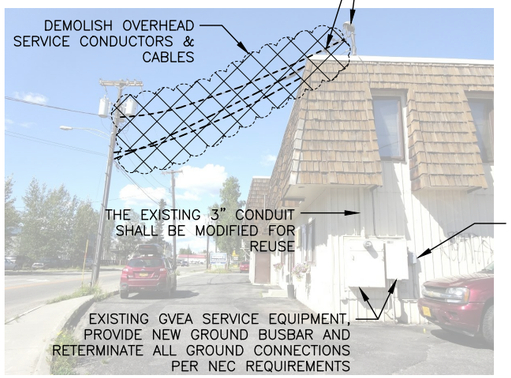
NO.	DATE	REVISION	STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
			ALASKA	0670001/Z625410000	2020	U423	24

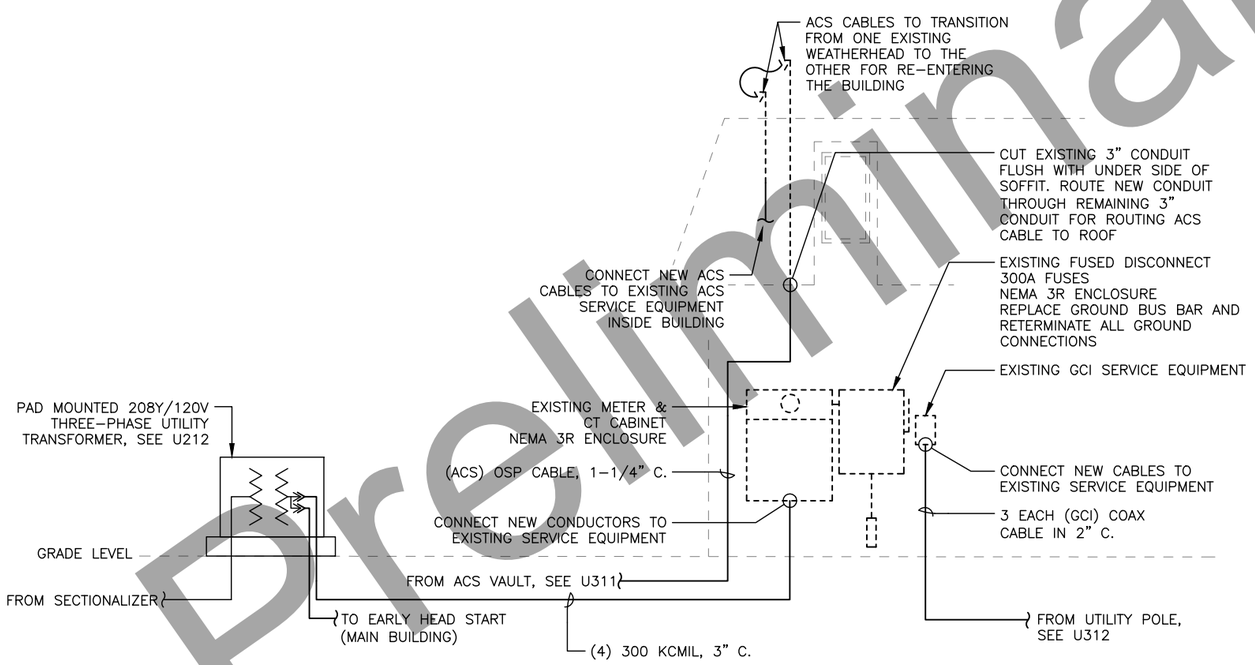
600 3RD STREET – GRAEHL BUSINESS CENTER



SECONDARY UTILITIES DEMOLITION

(NO SCALE)

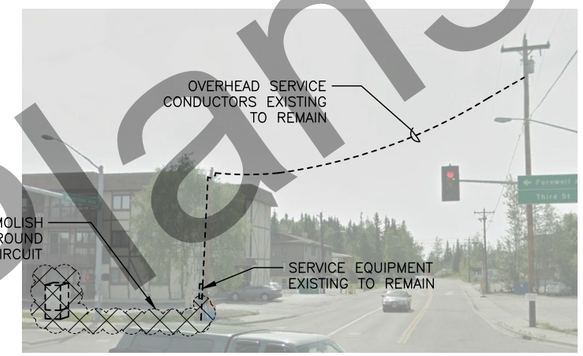
GRAEHL BUSINESS CENTER SUMMARY	
662(114)–B – UTILITY RELOCATION, GVEA SECONDARY	
HDPE CONDUIT – 3"	155–FT
RMC CONDUIT – 3"	10–FT
300 KCMIL XHHW	660–FT
MODIFY AND RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–D – UTILITY RELOCATION, GCI SECONDARY	
HDPE CONDUIT – 2"	120–FT
COAX CABLE	360–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1
662(114)–F – UTILITY RELOCATION, ACS SECONDARY	
HDPE CONDUIT (ENCASED IN CONCRETE) – 1–1/4"	65–FT
OSP CABLE	65–FT
RECONNECT EXISTING SERVICE EQUIPMENT	1



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

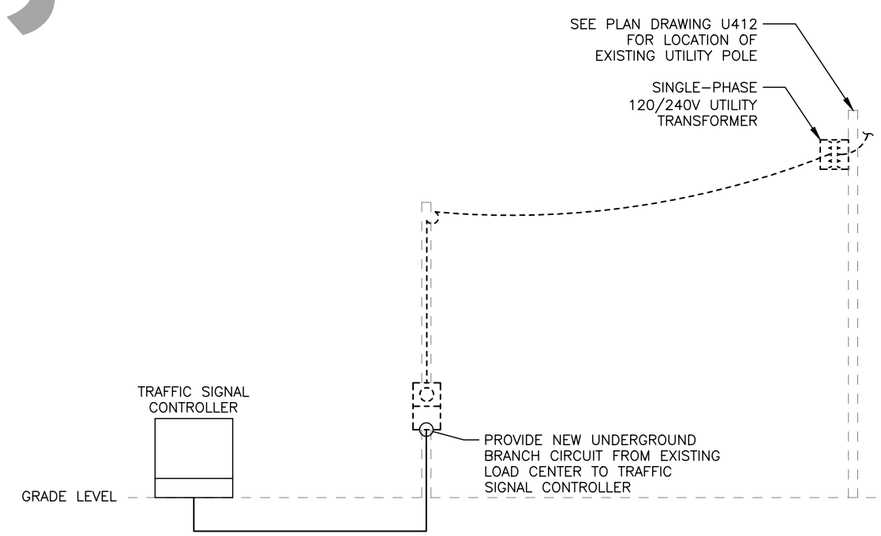
HAMILTON & 3RD STREET INTERSECTION – TRAFFIC SIGNAL SERVICE



SECONDARY UTILITIES DEMOLITION

(NO SCALE)

NOTE:
–TRAFFIC SIGNAL CONTROLLER BRANCH CIRCUIT PAID FOR UNDER 661(2).



UTILITIES MODIFICATIONS ONE–LINE DIAGRAM

(NOT TO SCALE)

SERVICE ENTRANCE DETAILS 11 OF 11

STATE OF ALASKA PRELIM PS&E PROFESSIONAL ENGINEER

Preliminary Plans

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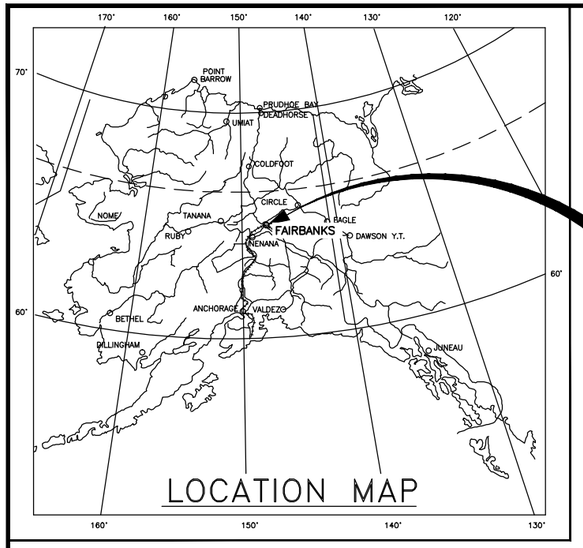
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	A1	23

CDS ROUTE:	150040	MILEPOINT:	0.00	TO	0.471
CDS ROUTE:	152000	MILEPOINT:	.862	TO	1.051



PROJECT LOCATION

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

PROPOSED HIGHWAY PROJECT

3RD STREET INTERCONNECT

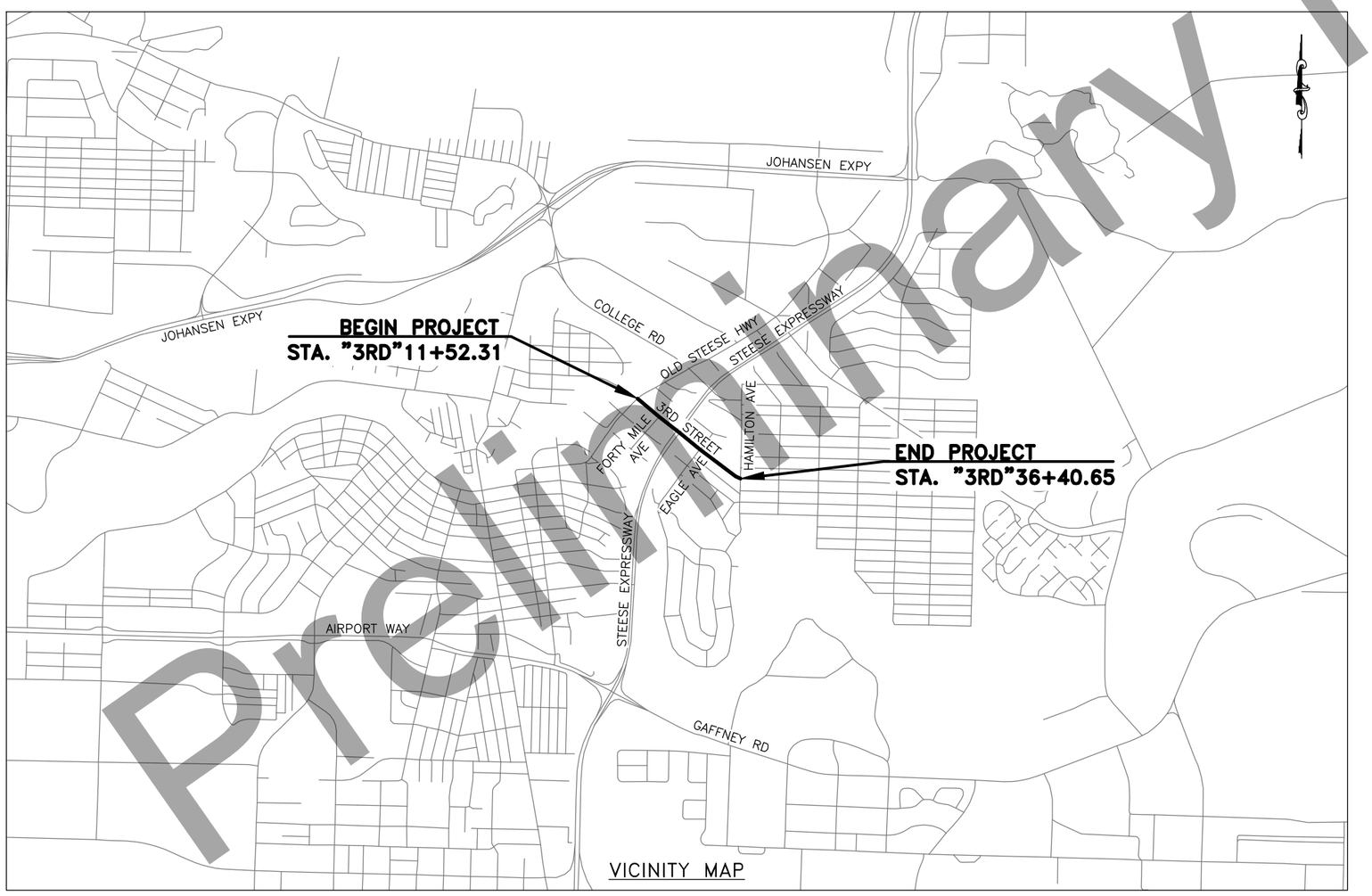
PENDING/NFHWY00334

SIGNALIZATION

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
A1	TITLE SHEET
A2	LEGEND AND ABBREVIATIONS
A3	SHEET LAYOUT
C1	ESTIMATE OF QUANTITIES & GENERAL NOTES
H1–H2	INTERCONNECT TRENCH DETAILS
H3–H4	FIBER OPTIC VAULT AND MANHOLE DETAILS
H5	MISCELLANEOUS DETAILS
H6	SPLICE AND WIRING DIAGRAMS
H7	CONTROLLER CABINET LAYOUT
H8	PAN, TILT, ZOOM CAMERA DETAILS
H9	VAULT GRADING DETAILS
H10–H18	INTERCONNECT PLANS

THE FOLLOWING STANDARD DRAWINGS APPLY TO THIS PROJECT:
C–4.12, I–20.20, I–21.10, I–22.10
T–20.03, T–21.03, T–22.03, T–23.00



DESIGN DESIGNATIONS

3RD STREET	
ADT (2015)	13,302
ADT (2030)	13,367
DHV	10.6%
PERCENT TRUCKS (T)	3%
DIRECTIONAL SPLIT (D)	45/55
DESIGN SPEED (V)	30 MPH
DESIGN ESALS (10 YEARS)	1,620,200
STEESE EXPRESSWAY	
ADT (2015)	27,586
ADT (2030)	30,864
DHV	10.6%
PERCENT TRUCKS (T)	7%
DIRECTIONAL SPLIT (D)	45/55
DESIGN SPEED (V)	50 MPH
DESIGN ESALS (10 YEARS)	5,911,547

PROJECT SUMMARY

LENGTH OF PROJECT	TOTAL	
FIBER INTERCONNECT LENGTH	LINEAR FEET	MILES
3RD STREET	2,522	0.48
STEESE EXPRESSWAY	935	0.18

Carl F. Heim, P.E., PROJECT MANAGER
Arthur J. Johnson, P.E., DESIGN ENGINEER

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION
&
PUBLIC FACILITIES

APPROVED BY:

_____ DATE _____

Sarah E. Schacher, P.E.
Preconstruction Engineer, Northern Region

ACCEPTED FOR CONSTRUCTION:

_____ DATE _____

Ryan F. Anderson, P.E.
Regional Director, Northern Region

Preliminary Plans

PLANS DEVELOPED BY: KINNEY ENGINEERING, LLC 3909 Arctic Blvd, Suite 400 Anchorage, Alaska 99503 (907) 346-2373 CERT. OF AUTH. NO. 1102
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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	A2	23

	RECOVERED	SET
BLM MONUMENT		
GLO MONUMENT		
USC&GS MONUMENT		
PRIMARY MONUMENT		
CENTERLINE MONUMENT IN CASING		
PRIMARY R.O.W. MONUMENT		
BEARING OBJECT		
MISCELLANEOUS MONUMENT		
LINE OF SIGHT MONUMENT		
CONCRETE R.O.W. MONUMENT		
BENCHMARK		BM
REBAR AND CAP		
REBAR		
IRON PIPE		
PK NAIL		
SPIKE		
HUB AND TACK		
CONSTRUCTION CENTERLINE	5+00	
MICELLANEOUS CENTERLINE	10+00	
STATION EQUATION	"L"48+97.23 POT BK= "O"48+97.23 PC AHD	
PROJECT RIGHT-OF-WAY LINE	R/W	
EXISTING RIGHT-OF-WAY LINE		
EXISTING PROPERTY LINE		
CONTROLLED ACCESS LINE	C/A	
EXISTING EASEMENT LINE		
PROPOSED EASEMENT LINE		
PROPOSED CUT SLOPE LIMIT		
PROPOSED FILL SLOPE LIMIT		
SECTION LINE		
1/4 SECTION LINE		
1/16 SECTION LINE		
TOWNSHIP & RANGE LINE	T. 2 N. / T. 1 N. / T. 1 E. / T. 2 E.	
MEANDER LINE	M1 M2 M3	

	EXISTING	PROPOSED
SANITARY SEWER (FLOW DIRECTION →)	SS	SS
FUEL LINE	O	O
GAS LINE	G	G
WATER LINE	W	W
METER, VALVE, FIRE HYDRANT	W	W
EXISTING STORM DRAIN (FLOW DIRECTION →)	SD	
PROPOSED STORM DRAIN	S-10, SD, P-10, S-11, MH, P-11	
FIBER OPTIC LINE	FO	FO
DIRECT BURIAL TELEPHONE CABLE	T	T
DIRECT BURIAL ELECTRIC CABLE	E	E
ELECTRIC LINE (OVERHEAD)		
CABLE TV LINE (UG)	UGC	UGC
ELECTRIC & CABLE LINE (OH)	OHE/C	OHE/C
ELECTRIC, CABLE & TELEPHONE LINE (OH)	OHE/T/C	OHE/T/C
ELECTRIC, CABLE & TELEPHONE LINE (UG)		UGE/T/C
ELECTRIC, CABLE, FIBER OPTIC & TELEPHONE LINE (UG)		UGE/T/C/FO
TELEPHONE, CABLE, & FIBER OPTIC LINE (UG)		UGT/C/FO
POWER POLE LINE		
JOINT USE POWER & TELEPHONE		
TELEPHONE POLE LINE		
POLE ANCHOR		
STUB POLE (POWER OR TELEPHONE)		
ELECTRIC DUCT	E	E
TELEPHONE DUCT	T	T
TELEPHONE PEDESTAL		
BURIED CABLE MARKER		
PIPELINE MARKER OR VALVE		
CATCH BASIN OR DROP INLET		
MANHOLE	MH	MH
SANITARY SEWER CLEAN OUT		

	EXISTING	PROPOSED
ROADWAY/PAVEMENT EDGE		
FENCE	X	X
CURB AND GUTTER		
DETECTABLE WARNINGS		
GUARDRAIL		
CULVERT PIPE		
SIGN		
MAILBOX	MB	MB
RAILROAD TRACKS		
RAILROAD DEVICES	CROSS-BUCK, FLASHING LIGHT, CANTILEVER, SWITCH	
TREE LINE		
WATER BOUNDARY		
ORDINARY HIGH WATER LINE		
FLOW CENTERLINE		
FLOW DIRECTION		
WETLANDS		
EXISTING BUILDINGS	H	H = HOUSE G = GARAGE M = MERCHANT/STORE B = BARN S = SHED P = PRIVY SS= SERVICE STATION W = WAREHOUSE
POST OR BOLLARD		
WELL OR MONITORING WELL	W, MW	
SEPTIC PIPE	S	
FUEL TANK FILL PIPE/VENT	F	
LUMINAIRE		
TRANSFORMER		
TEST HOLE	TH	
CONIFER TREE		
DECIDUOUS TREE		
GRAVE		
THERMOSIPHON		
PARKING METER		

	EXISTING	PROPOSED
LOAD CENTER		
TRAFFIC CONTROLLER		
TYPE 1A JUNCTION BOX	##	##
TYPE II JUNCTION BOX	##	##
TYPE III JUNCTION BOX	##	##
TYPE IV JUNCTION BOX	##	##
TYPE I INTERCONNECT VAULT	I/C	I/C
TYPE II INTERCONNECT VAULT	I/C	I/C
INTERCONNECT MANHOLE	IC	IC
ELECTROLIER		
SIGNAL POLE	P#	P#
SIGNAL POLE WITH MASTARM	P#	P#
COUNT STATION CONTROLLER		
LOOP DETECTOR	###	###
LOOP DETECTOR CONDUIT		
RIGID METAL CONDUIT		
INTERCONNECT CONDUIT	I/C	I/C
TRENCHING AND IMPROVEMENTS REMOVAL LIMITS		
PAN, TILT, ZOOM CAMERA	#	
BORED OR JACKED CASING		
RETAINING WALL		

EXISTING	
VEHICLE PLUG-IN	
DELINEATOR/GUIDE MARKER	
SATELLITE DISH	SAT. DISH

ABBREVIATIONS

A.R.R.C.	ALASKA RAILROAD CORPORATION
C	CONDUCTOR
CL	CONFIRMATION LIGHT
DOT&PF	DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
DRL	DETECTOR REFERENCE LINE
EX	EXISTING
EB	EAST BOUND
EVP	EMERGENCY VEHICLE PREEMPTION
FO	FIBER OPTIC
GVEA	GOLDEN VALLEY ELECTRIC ASSOCIATION
HDPE	HIGH DENSITY POLYETHYLENE
HEAD	VEHICULAR SIGNAL HEAD
HMA	HOT-MIX ASPHALT
I/C	INTERCONNECT
INTX	INTERSECTION
INTX LTG	SIGNALIZED INTERSECTION LIGHTING
LC	LOAD CENTER
LFNC	LIQUIDTIGHT FLEXIBLE NONMETALLIC CONDUIT
LTG	LIGHTING
MIN.	MINIMUM
NB	NORTH BOUND
NTS	NOT TO SCALE
OMNI	OMNI DIRECTIONAL ANTENNA
OPC	OPTICAL EMERGENCY VEHICLE PREEMPTION DETECTOR
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
P1	TRAFFIC SIGNAL POLE #
PE	POLYETHYLENE CONDUIT
PEC	PHOTOELECTRIC CELL
PEDI	PEDESTRIAN SIGNAL HEAD
PED B 28	PEDESTRIAN PUSH BUTTON #
PPB	PEDESTRIAN PUSH BUTTON
PRE 2	PREEMPTION #
PRE CON 2	PREEMPTION CONTROLLER #
RMC	RIGID METAL CONDUIT
R/W	RIGHT-OF-WAY
ROW	RIGHT-OF-WAY
SB	SOUTH BOUND
SIG	SERVICE TO CONTROLLER
SMFO	SINGLE MODE FIBER OPTIC
TC	TRAFFIC CONTROLLER
TYP.	TYPICAL
WB	WEST BOUND
WGU	WIRE GROUNDING UNIT
YAGI	DIRECTIONAL ANTENNA

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LEGEND AND ABBREVIATIONS

Preliminary Plans

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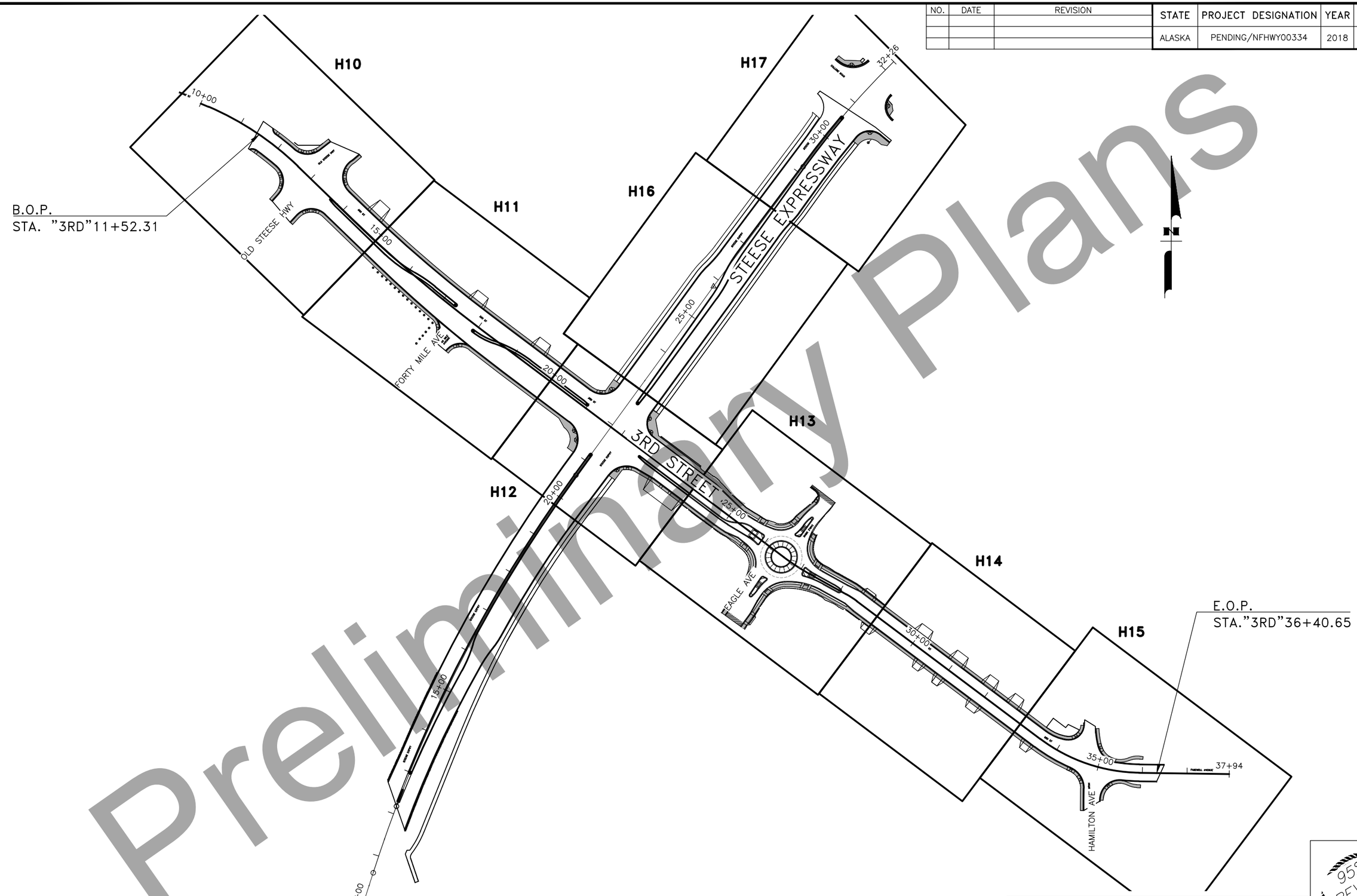
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	A3	23



SHEET LAYOUT

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Preliminary Plans

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	C1	23

ESTIMATE OF QUANTITIES

AASHTOWARE	ITEM NO.	ITEM	UNIT	TOTAL
	640(1)–B	MOBILIZATION AND DEMOBILIZATION	LUMP SUM	ALL REQ'D
	642(1)–B	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQ'D
	642(3)–B	THREE PERSON SURVEY PARTY	HOUR	40
	646(1)–B	CPM SCHEDULING	LUMP SUM	ALL REQ'D
	659(109)–B	FIBER OPTIC INTERCONNECT, NEW CONDUIT	LINEAR FOOT	3,457
	659(110)–B	FIBER OPTIC VAULT TYPE 1	EACH	3
	659(112)–B	FIBER OPTIC MANHOLE	EACH	6
	660(1)–1B	TRAFFIC SIGNAL SYSTEM COMPLETE 3RD/OLD STEESE HIGHWAY	LUMP SUM	ALL REQ'D
	660(1)–2B	TRAFFIC SIGNAL SYSTEM COMPLETE 3RD/STEESE EXPRESSWAY	LUMP SUM	ALL REQ'D
	660(1)–3B	TRAFFIC SIGNAL SYSTEM COMPLETE 3RD/HAMILTON AVENUE	LUMP SUM	ALL REQ'D

BASIS OF STATIONING NOTE:

1. USE 3RD STREET WIDENING PROJECT NO. 0670(001)/Z625410000 FOR THE BASIS OF STATIONING AND SURVEY CONTROL.

GENERAL NOTES:

1. EXISTING PLANIMETRIC, ROW, UTILITIES, AND PROPOSED IMPROVEMENTS LINEWORK ARE FROM 3RD STREET WIDENING, PROJECT NO. 0670(001)/Z625410000.
2. 3RD STREET WIDENING IMPROVEMENTS WILL INCLUDE TRAFFIC SIGNALIZATION, HIGHWAY LIGHTING, STORM DRAIN, UTILITY RELOCATIONS, SIDEWALK, CURB & GUTTER, GRADING AND PAVING.
3. CONTRACTOR SHALL COORDINATE INSTALLATION OF THE FIBER OPTIC INTERCONNECT SYSTEM WITH THE 3RD STREET WIDENING PROJECT. WHEN DIRECTED BY THE ENGINEER, ADJUST FIBER OPTIC INTERCONNECT CONDUIT AND VAULTS AS NECESSARY TO FACILITATE INSTALLATION. INSTALLATION OF THE FIBER OPTIC CONDUIT AND VAULTS SHALL BE COMPLETED BEFORE PLACING FINAL HMA LIFT.
4. UNLESS OTHERWISE NOTED IN THESE PLANS AND THE 3RD STREET WIDENING PROJECT, THE CONTRACTOR IS RESPONSIBLE FOR:
   A. PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. ALL ADJUSTMENTS, RELOCATIONS, REMOVALS, RECONSTRUCTIONS, AND SALVAGING OF CURB & GUTTER, PAVEMENT, SIDEWALK, STRUCTURES & OBSTRUCTIONS, MANHOLES, JUNCTION BOXES, STORM DRAIN INLETS, FENCING, GUARDRAIL, CURB RAMPS, SIGNS, VALVE BOXES, HYDRANTS, AND OTHER ROADWAY IMPROVEMENTS WILL BE MEASURED AND PAID FOR BY THE 3RD STREET WIDENING PROJECT UNDER THEIR RESPECTIVE BID ITEMS.
   B. LOCATING AND PROTECTING UTILITIES FROM DAMAGE. ALL UTILITIES WITHIN, UNDER, AND OVER THE PROJECT SHALL REMAIN IN PLACE AND IN SERVICE DURING CONSTRUCTION. BEFORE COMMENCING GROUND DISTURBING ACTIVITIES, CONTRACTOR SHALL CONTACT 811 ALASKA DIGLINE AT 1–800–478–3121. NOT ALL AREA UTILITIES ARE MEMBERS OF 811 ALASKA DIGLINE AND THE CONTRACTOR SHALL CONTACT INDIVIDUAL NON–MEMBER UTILITIES DIRECTLY, INCLUDING THE CITY OF FAIRBANKS, DOT&PF, AND GVEA. ANY UTILITY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.
5. RESTORE ALL DISTURBED AREAS DUE TO CONTRACTOR'S ACTIVITIES OUTSIDE THE CUT AND FILL SLOPE LIMITS IN ACCORDANCE WITH THE PLANS AND AS DIRECTED BY THE ENGINEER. SEED ALL DISTURBED AREAS.
6. NO WASTE MATERIAL, EXCESS MATERIAL, OR STOCKPILED AGGREGATE BASE OR SURFACE COURSE SHALL BE DISPOSED OF WITHIN THE RIGHT OF WAY, UNLESS SPECIFICALLY CALLED FOR IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
7. ALL CONSTRUCTION ACTIVITIES SHALL BE CONTAINED WITHIN THE RIGHT–OF–WAY (R/W).

Preliminary Plans

ESTIMATE OF QUANTITIES

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NO.	DATE	REVISION

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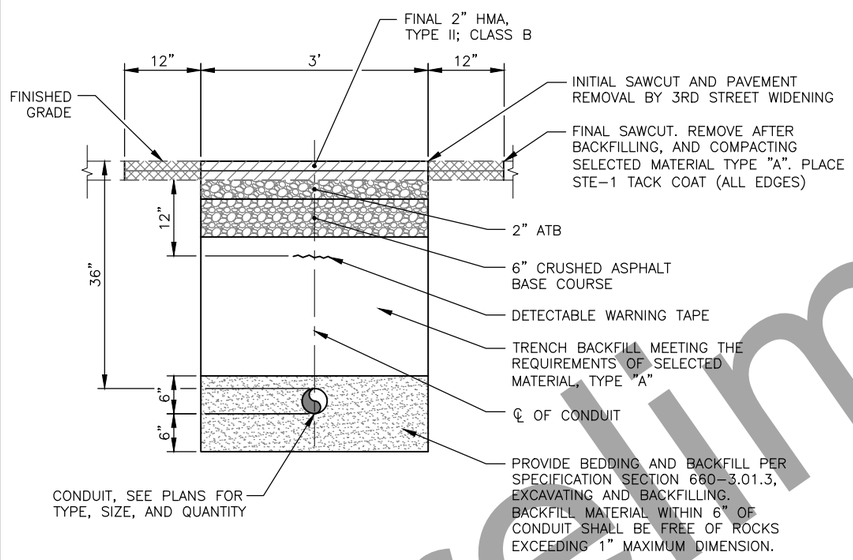
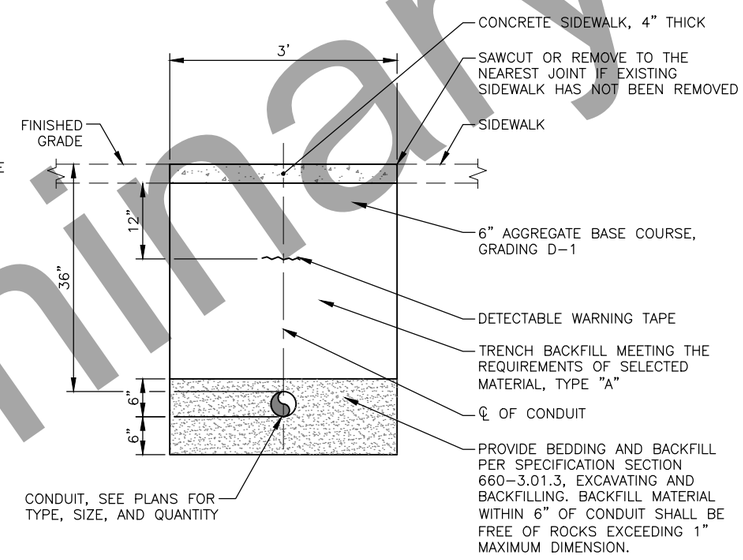
ALASKA	PENDING/NFHWY00334	2018	H1	23

NOTES:

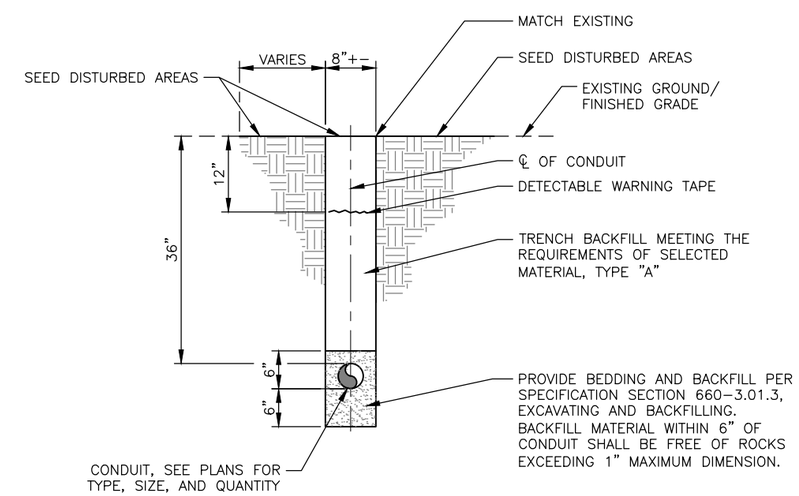
1. ALL ASPHALT PAVEMENT, CURB & GUTTER, OR CONCRETE SIDEWALK SHALL BE SAWCUT PRIOR TO REMOVAL. EXCEPTION: WHERE APPLICABLE, CONCRETE SIDEWALK MAY BE REMOVED TO THE NEAREST CONSTRUCTION JOINT.
2. ALL CONDUIT TRENCH AND EXCAVATION BENEATH ASPHALT PAVEMENT, SIDEWALK, AND CURB AND GUTTER SHALL BE COMPLETED BEFORE FINAL PAVING BY 3RD STREET WIDENING PROJECT.
3. SEE SPECIAL PROVISIONS SUBSECTION 643–3.08 FOR ADDITIONAL PAVING REQUIREMENTS.
4. REFER TO 3RD STREET WIDENING, PROJECT 0670(001)/Z625410000 FOR ADDITIONAL INFORMATION.
5. SEEDING PAID FOR UNDER 3RD STREET WIDENING PROJECT WHERE GROUND IS DISTURBED CONCURRENTLY.
6. USE CRUSHED ASPHALT BASE COURSE DEVELOPED BY THE 3RD STREET WIDENING PROJECT.



CONDUIT TRENCH AND EXCAVATION IN PAVING AREAS



CONDUIT TRENCH AND EXCAVATION IN SIDEWALK AREAS



CONDUIT TRENCH ADJACENT TO ROADWAYS

TRENCH DETAILS

Preliminary Plans

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INTERCONNECT TRENCH DETAILS

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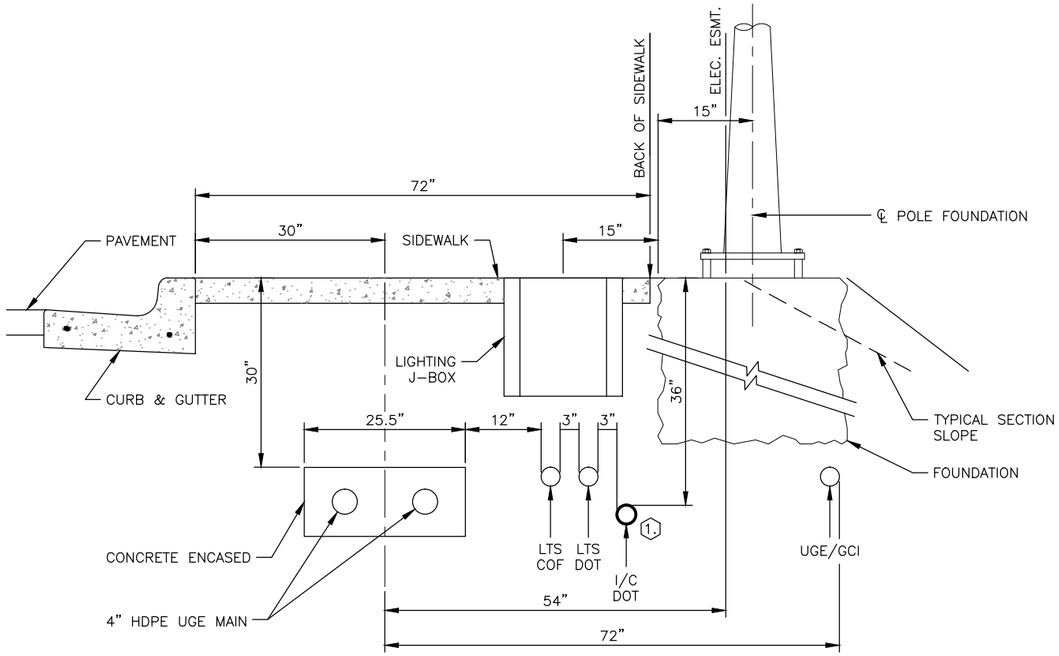
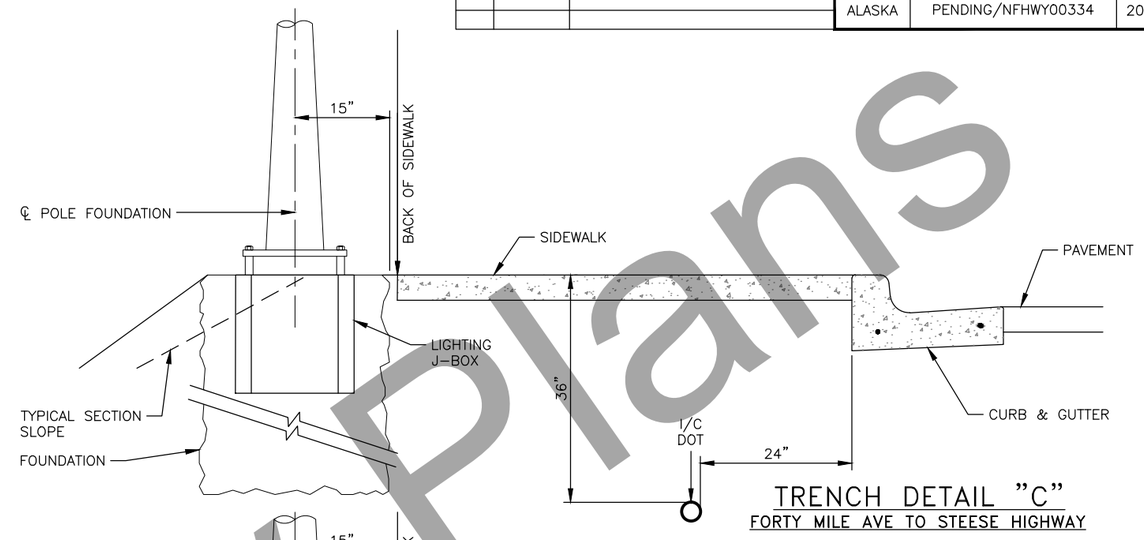
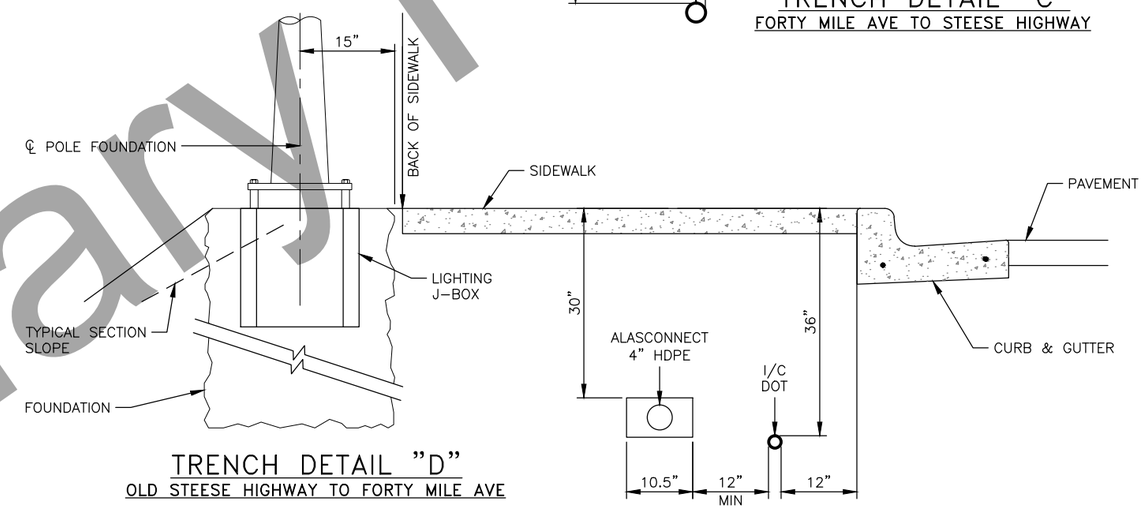


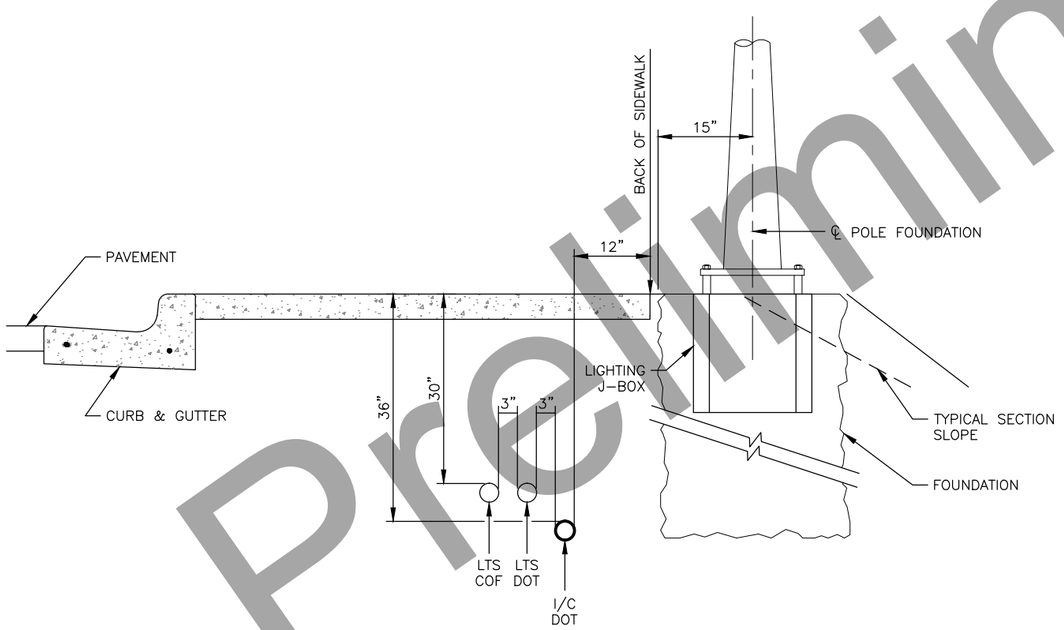
TRENCH DETAIL "A"
ROUNDABOUT TO UGE



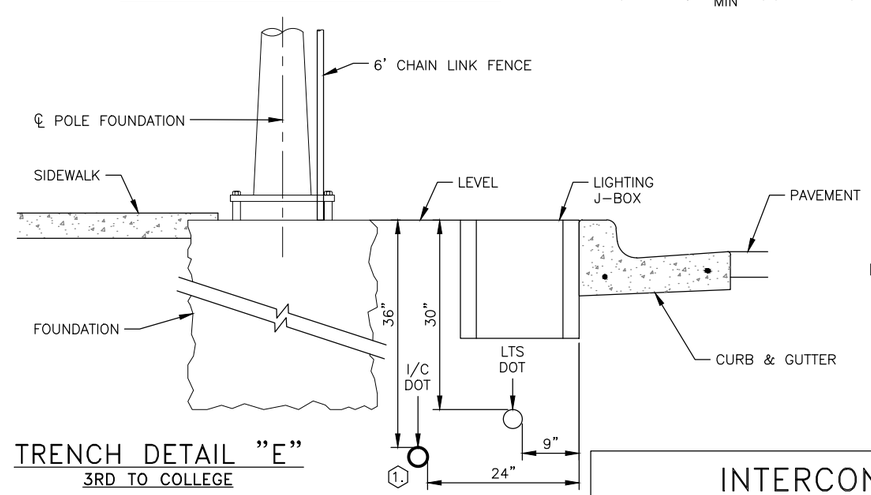
TRENCH DETAIL "C"
FORTY MILE AVE TO STEESE HIGHWAY



TRENCH DETAIL "D"
OLD STEESE HIGHWAY TO FORTY MILE AVE



TRENCH DETAIL "B"
STEESE EXPRESSWAY TO ROUNDABOUT



TRENCH DETAIL "E"
3RD TO COLLEGE

NOTES:

1. ADJUST OFFSET TO MAINTAIN 6" SEPARATION FROM EDGE OF CONDUIT TO EDGE OF LIGHT POLE FOUNDATION AT A RATE OF 1 INCH HORIZONTAL TO 1 FOOT OF LENGTH.

INTERCONNECT TRENCH DETAILS

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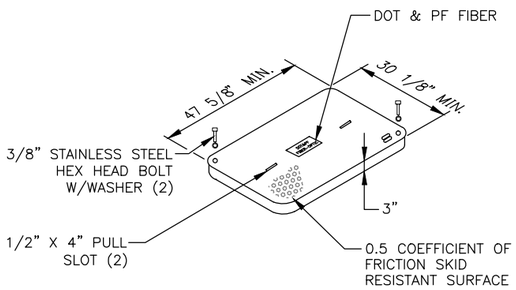
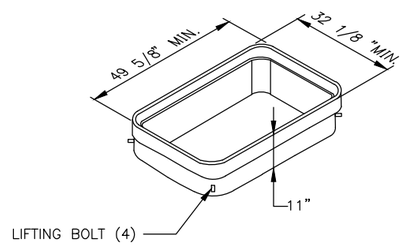


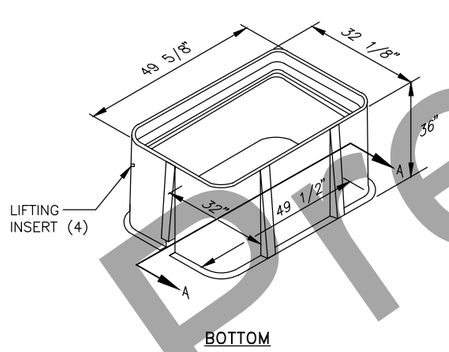
COVER

HUBBELL QUAZITE NO. PG3048HH00 OR APPROVED EQUIVALENT



TOP EXTENSION

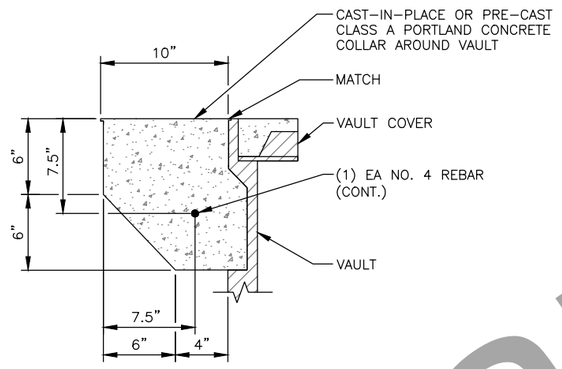
HUBBELL QUAZITE NO. PG3048EA11 OR APPROVED EQUIVALENT



BOTTOM

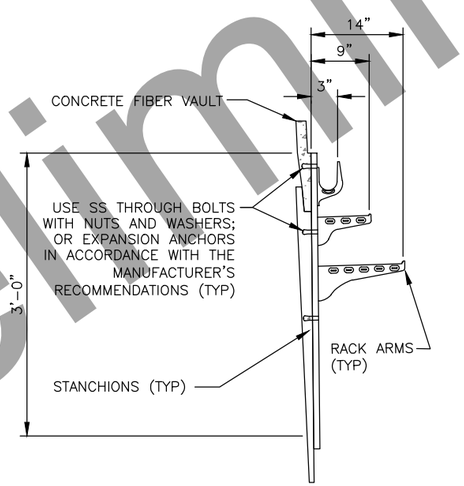
PG TYPE JUNCTION BOX

HUBBELL QUAZITE NO. PG3048BA36 OR APPROVED EQUIVALENT



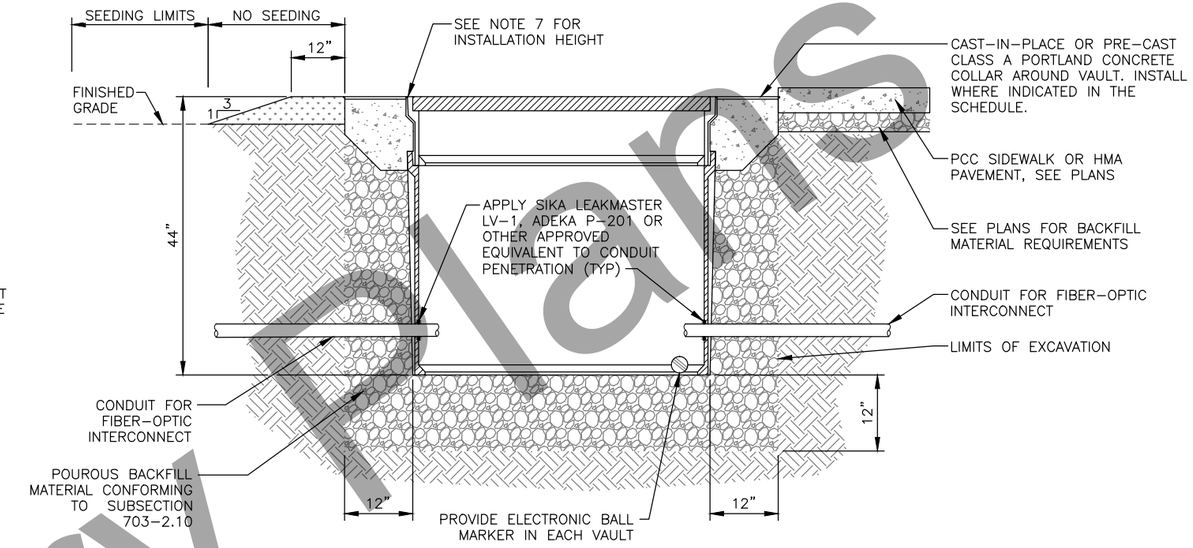
CONCRETE COLLAR DETAIL

NTS

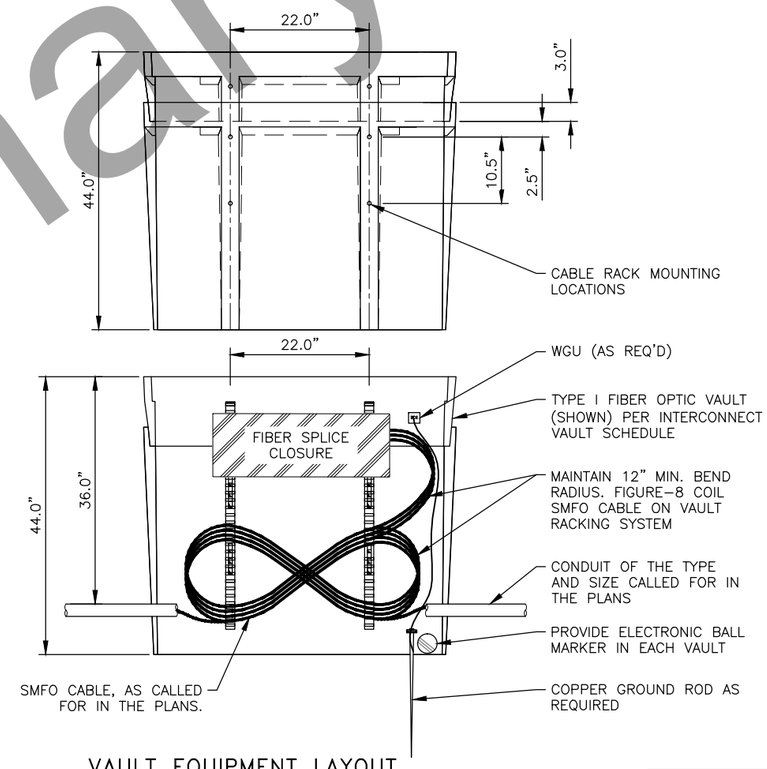


TYPICAL CABLE RACK

NTS



SECTION A-A



VAULT EQUIPMENT LAYOUT

NTS

NOTES:

1. FIBER-OPTIC VAULTS SHALL BE PRECAST, POLYMER CONCRETE, OPEN BOTTOM, W/FLARED BASE UNLESS OTHERWISE NOTED IN THE PLANS AND CONTRACT SPECIFICATIONS.
2. PROVIDE TYPE I FIBER-OPTIC VAULTS HAVING NOMINAL DIMENSIONS AS SHOWN.
3. THE DESIGN/TEST LOAD STRENGTH OF THE BOX SHALL BE MINIMUM OF 22,500/33,750 LBS.
4. THE STANDARD COVER (LID) SHALL HAVE NOMINAL DIMENSIONS OF 30 1/8 in. WIDE X 47 5/8 in. LONG X 3 in. DEEP.
5. THE DESIGN/TEST LOAD STRENGTH OF THE COVER SHALL BE A MINIMUM OF 22,500/33,750 LBS.
6. THE COVER SHALL BE CAPABLE OF BEING SECURED TO THE BOX WITH TWO BOLTS, AND EMBOSSED WITH: "DOT&PF FIBER".
7. U.O.N. FIBER-OPTIC VAULTS SHALL BE INSTALLED 0" TO 3/16" BELOW FINISHED GRADE WHEN INSTALLED IN/OR IMMEDIATELY ADJACENT TO SIDEWALK, PATHWAY, DRIVEWAY, ROADWAY, OR PARKING LOT. 4" TO 6" ABOVE FINISHED GRADE IN UNIMPROVED AREAS, AWAY FROM HARDSCAPED SURFACES, OR AS DIRECTED BY THE ENGINEER. DO NOT PLACE IN BOTTOM OF DRAINAGE COLLECTION AREAS.
8. FIBER-OPTIC VAULTS SHALL NOT INCLUDE ELECTRICAL CONDUIT OR CONDUCTORS.
9. COMPLY WITH SECTIONS 501, 503, 659, AND ANY SECTION OF THE SPECIFICATIONS CALLED OUT THERE-IN.

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FIBER OPTIC VAULT TYPE I DETAIL

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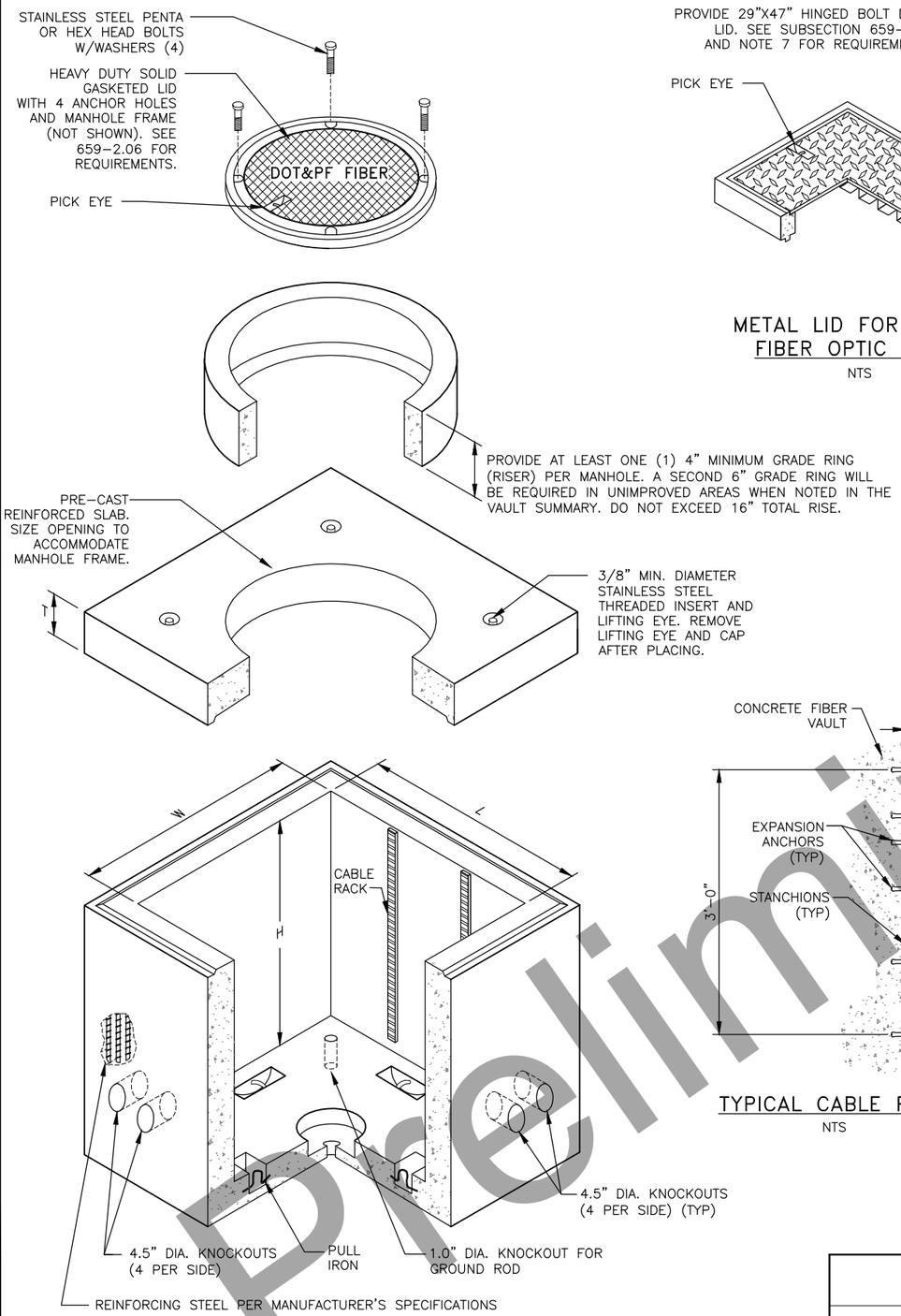
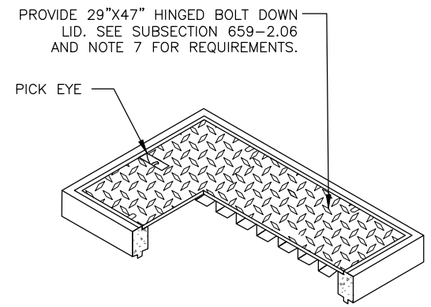


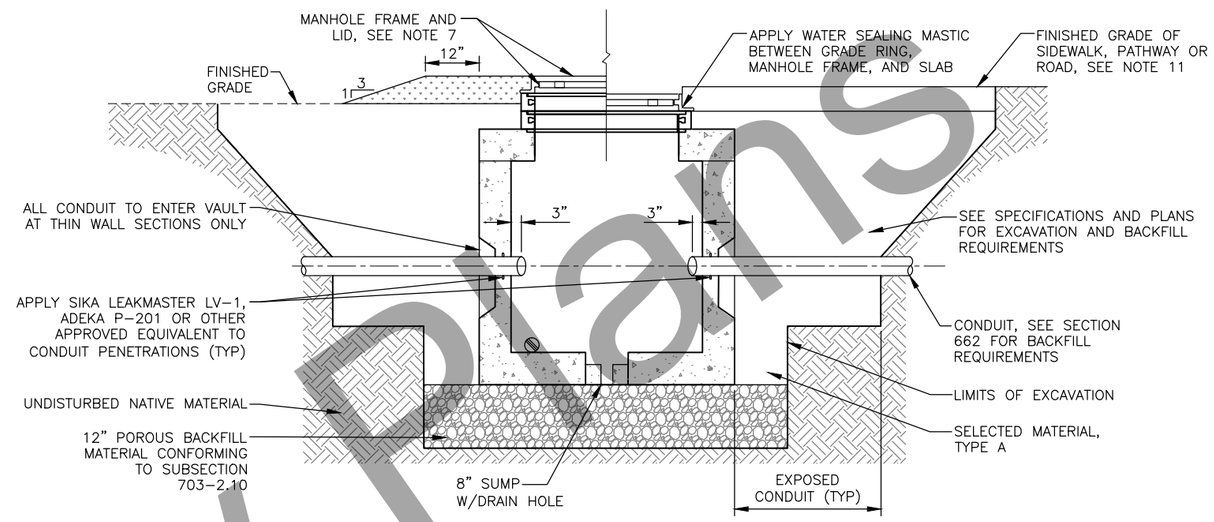
FIBER OPTIC MANHOLE WITH MANHOLE LID

NTS (TYPE II FIBER OPTIC VAULT SIMILAR)



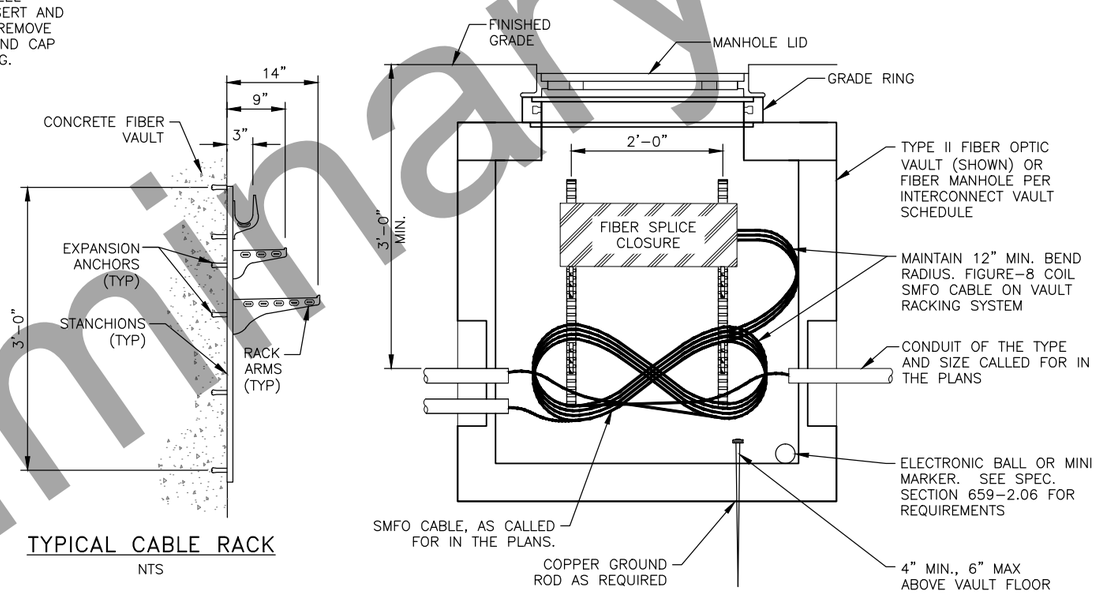
METAL LID FOR TYPE II FIBER OPTIC VAULT

NTS



CONDUIT PENETRATION DETAIL

NTS



TYPICAL CABLE RACK

NTS

VAULT EQUIPMENT LAYOUT

NTS

NOTES:

1. SUPPLY TYPE II FIBER OPTIC VAULTS WITH BOLT DOWN HINGED METAL LID. SUPPLY FIBER VAULTS, LIDS, AND COVERS RATED FOR AASHTO HS-20-44 LOADING.
2. SUPPLY ALL LIDS WITH WITH A HOLE OR SLOT FOR REMOVAL WITH A LEVER OR HOOK.
3. SUPPLY VAULTS AND MANHOLES WITH A PERMANENT INTERNAL LADDER. COMPLY WITH OSHA REQUIREMENTS.
4. PROVIDE FIBER VAULT AND MANHOLE LIDS MARKED, "DOT&PF FIBER".
5. PROVIDE FIBER MANHOLES AND VAULTS WITH A HEAVY-DUTY NON-METALLIC CABLE STORAGE RACK SYSTEM. PROVIDE RACK ARMS OR STANCHIONS CAPABLE OF SUPPORTING A MINIMUM OF 250 LBS. INCLUDE A MINIMUM OF 36 INCH RACK STANCHIONS AND 4 RACK ARMS.
6. ENTER CONDUITS INTO FIBER VAULT AT THINWALL SECTIONS ONLY. CORE DRILL IN THE THINWALL SECTION TO CONDUIT SIZE PLUS 1/4 INCH ALL AROUND. DO NOT "KNOCK OUT" THE THINWALL SECTION.
7. BOND AND GROUND ALL METALLIC COMPONENTS OF THE FIBER VAULT, INCLUDING RACK, FRAME AND LIDS PER STANDARD SPECIFICATION 660-3.06.
8. INSTALL CONDUIT PLUGS PER SECTIONS 660 AND 659.
9. EXTEND GROUND ROD A MINIMUM OF 4 INCHES AND A MAXIMUM OF 6 INCHES ABOVE BOTTOM OF FIBER VAULT.
10. USE A SPLIT BOLT CONNECTOR TO ATTACH GROUND WIRES TO GROUND ROD. ATTACH NOT MORE THAN TWO WIRES PER BOLT.
11. U.O.N. TOP OF FIBER OPTIC VAULT / MANHOLE LIDS SHALL BE INSTALLED 0"-3/16" BELOW FINISHED GRADE WHEN IN SIDEWALK OR PATHWAY; 3/8" BELOW FINISHED GRADE WHEN LOCATED IN PAVED PARKING LOT; AND U.O.N., 4"-8" ABOVE FINISHED GRADE IN UNIMPROVED AREAS, AWAY FROM HARDSCAPED SURFACES; OR AS DIRECTED BY THE ENGINEER. DO NOT PLACE IN BOTTOM OF DRAINAGE COLLECTION AREAS.

MANHOLE/VAULT DIMENSIONS

TYPE	"L" INCH	'W' INCH	"H" INCH	"T" INCH	LID
TYPE II FIBER OPTIC VAULT	30	48	48	6 MIN	HINGED METAL
MANHOLE	48	48	48	6 MIN	MANHOLE

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FIBER OPTIC VAULT TYPE II AND MANHOLE DETAIL

Preliminary Plans

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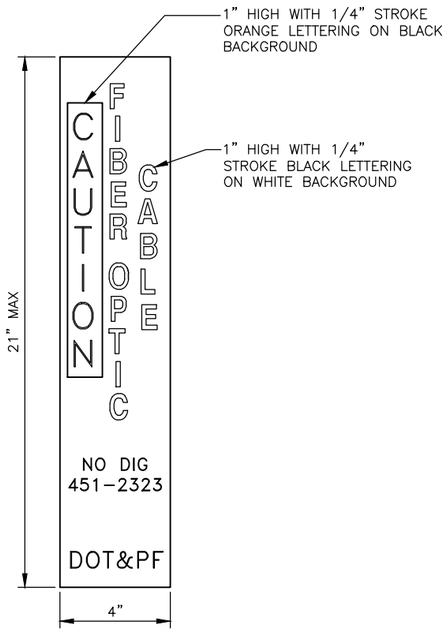
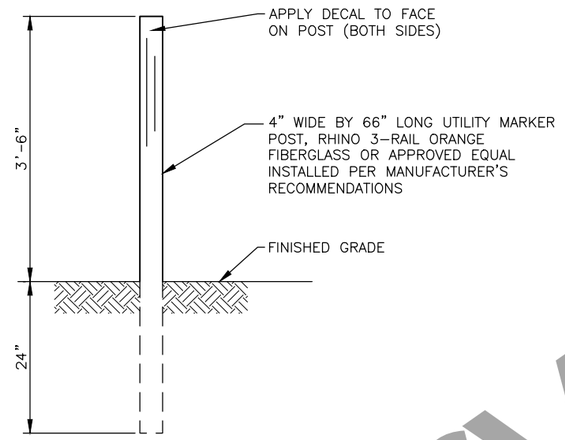


DECAL
NTS

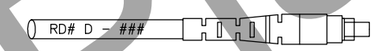


FIBER OPTIC MARKER ELEVATION
NTS

TX/RX TRANSMIT DIRECTION ABBREVIATION PER TRANSMIT DIRECTION TABLE
P LETTER P FOR PATCH CORD
FIBER POSITION NUMBER

LABEL BOTH ENDS OF THE PATCH PANEL CORD

LABELING FOR FIBER PATCH CORDS



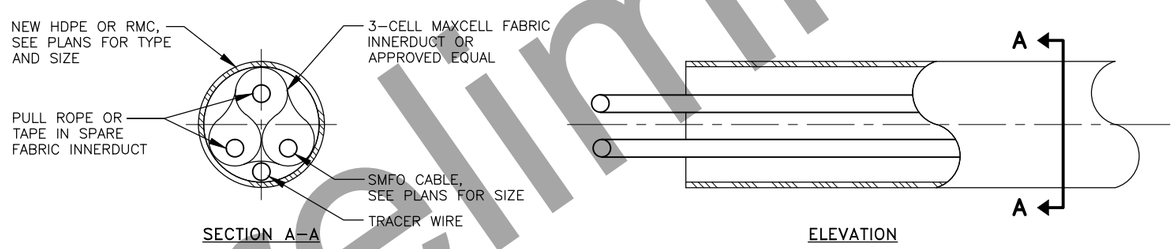
RD# ROADWAY THE CABLE IS ROUTED FROM THE PATCH PANEL
FLR = FARMERS LOOP RD TD = NORTH TANANA DR
AW = AIRPORT WAY BR = BALLAINE RD
3RD = 3RD STREET AD = ALUMNI DR
UA = UNIVERSITY AVE CR = COLLEGE RD

D DIRECTION THE CABLE IS ROUTED FROM THE PATCH PANEL
N = NORTH E = EAST
S = SOUTH W = WEST

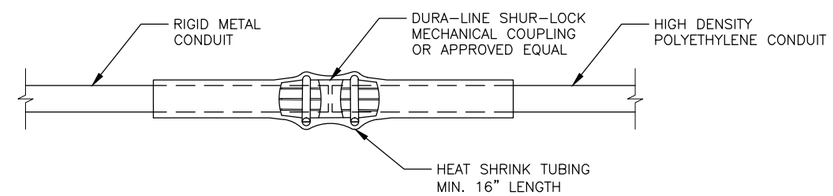
NUMBER OF OPTICAL FIBERS PER EIA 359-A-1

LABELING FOR MAINLINE FIBER CABLES

TRANSMIT DIRECTION	ABBREVIATION	
	TRANSMIT	RECEIVE
SOUTH TO NORTH	TX(a)	RX(a)
NORTH TO SOUTH	TX(b)	RX(b)
WEST TO EAST	TX(a)	RX(a)
EAST TO WEST	TX(b)	RX(b)



CONDUIT DETAIL
NTS



NOTE:

USE ELECTROFUSION COUPLINGS PER THE HDPE MANUFACTURER'S REQUIREMENTS, WHEN JOINING HDPE TO HDPE.

RMC TO HDPE CONDUIT CONNECTION DETAIL
NTS

MISCELLANEOUS DETAILS

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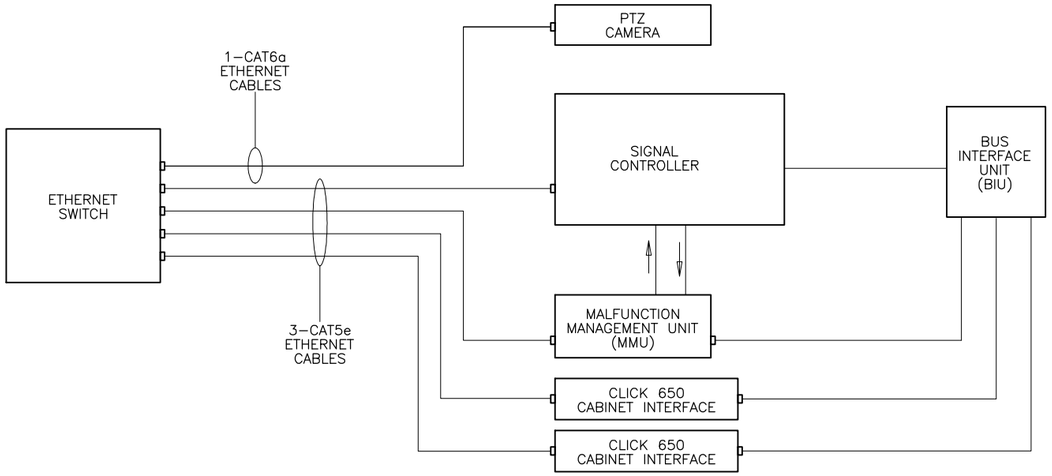
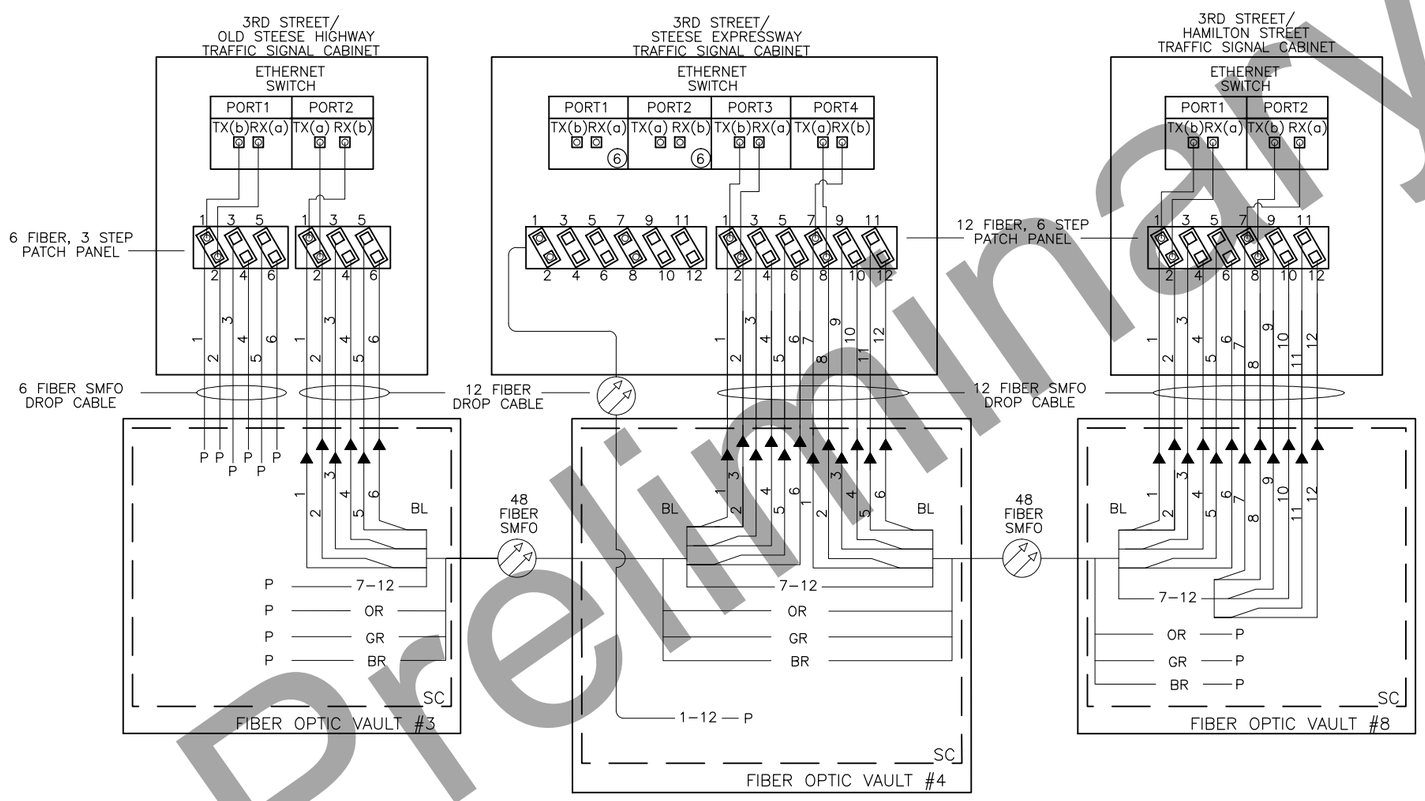


SWITCH COMMUNICATIONS WIRING DIAGRAM

NOTES:

1. REFER TO PLANS FOR CABLE ROUTING TO/FROM CABINETS.
2. ALL ETHERNET SWITCHES, ARE SINGLE MODE, OPERATING AT 1310 nm, UNLESS OTHERWISE SPECIFIED.
3. ETHERNET SWITCHES AND TERMINAL SERVERS SHALL INCLUDE POWER ADAPTERS CONVERTING 120 VAC TO APPROPRIATE OPERATING VOLTAGES.
4. ALL SPLICE TRAYS SHALL BE CONTAINED WITHIN ONE CLOSURE PER VAULT.
5. DROP CABLES SHALL BE PRECONNECTORIZED IN THE FACTORY. CONNECTORS INSTALLED IN THE FIELD WILL NOT BE ALLOWED.
6. PORT RESERVED FOR FUTURE INTERCONNECT.
7. COMMUNICATION COMPONENTS ARE SHOWN SCHEMATICALLY. VERIFY TX–RX FIBER PORTS PRIOR TO MAKING FINAL CONNECTIONS.
8. CONNECT ETHERNET SWITCH TO EACH PATCH PANEL WITH TWO SINGLE MODE FIBER PATCH CABLES. THE CABLES SHALL BE OF SUFFICIENT LENGTH TO ALLOW FOR MOVING OF THE ETHERNET SWITCH TO ANY SHELF LOCATION IN THE CABINET ONCE THE PATCH PANEL HAS BEEN INSTALLED. LABEL EACH PATCH CABLE ACCORDING TO THE TRANSMISSION DIRECTION TABLE.
9. PROVIDE THREE (EACH) ETHERNET CABLES OF SIX FOOT LENGTH FOR EACH CABINET RECEIVING AN ETHERNET SWITCH, TO BE CONNECTED TO CABINET COMPONENTS ACCORDING TO THE SWITCH COMMUNICATIONS WIRING DIAGRAM.
10. NO SPLICES ARE PERMITTED EXCEPT WHERE SPECIFICALLY INDICATED IN THE FIBER OPTIC SPLICE DIAGRAM. SPLICE CLOSURES MUST CONFORM TO SECTION 659–3.10 OF THE SPECIFICATIONS
11. MOUNT PATCH PANEL TO CABINET WALL AND IN A LOCATION AS TO NOT INTERFERE WITH OTHER EQUIPMENT AND SUCH THAT IT IS READILY ACCESSIBLE. PROVIDE SUFFICIENT SLACK CABLE IN CABINET TO ALLOW THE PATCH CABLE TO BE RELOCATED AT ANY LOCATION IN THE CABINET.



FIBER OPTIC SPLICE DIAGRAM

TRANSMIT DIRECTION	ABBREVIATION	
	TRANSMIT	RECEIVE
SOUTH TO NORTH	TX(a)	RX(a)
NORTH TO SOUTH	TX(b)	RX(b)
WEST TO EAST	TX(a)	RX(a)
EAST TO WEST	TX(b)	RX(b)

BUFFER COLOR CODING

FIBER / POSITION NO.	BASE COLOR	ABBREVIATION
1	BLUE	BL
2	ORANGE	OR
3	GREEN	GR
4	BROWN	BR
5	SLATE	SL
6	WHITE	WH
7	RED	RD
8	BLACK	BK
9	YELLOW	YL
10	VIOLET	VI
11	PINK	PK
12	AQUA	AQ

LEGEND

- ▲ FIBER SPLICE
- FIBER STRAND / BUFFER TUBE
- ○ LC CONNECTOR
- □ LC PORT
- JUMPER OR PATCH CHORD
- EXISTING FIBER STRAND / BUFFER TUBE
- EXISTING FIBER OPTIC CABLE
- FIBER OPTIC CABLE
- SC SPLICE CLOSURE
- SMFO SINGLE MODE FIBER OPTIC CABLE
- P PROTECT FIBER END

SPLICE AND WIRING DIAGRAMS

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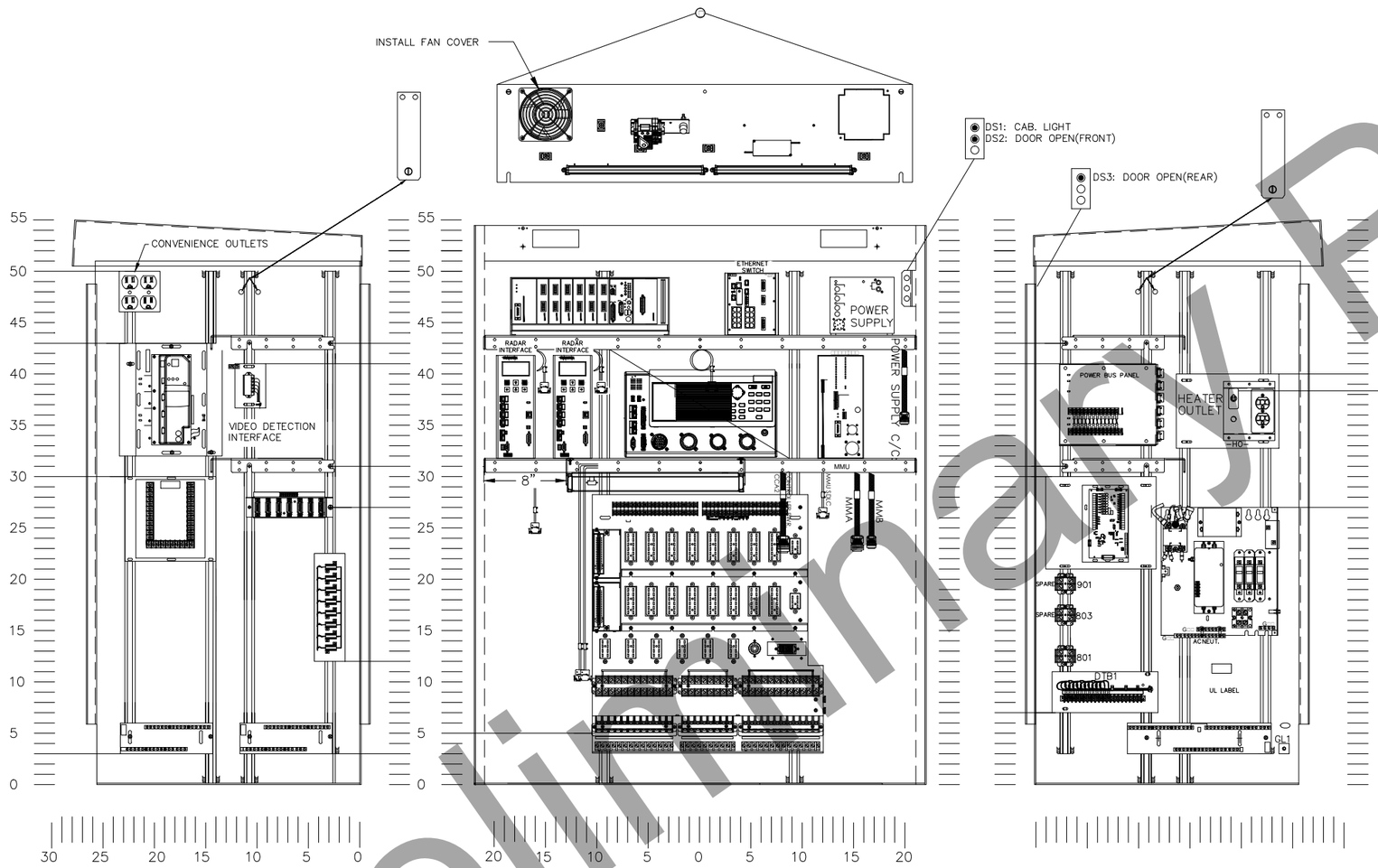

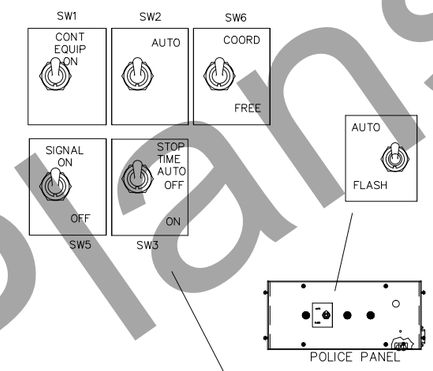

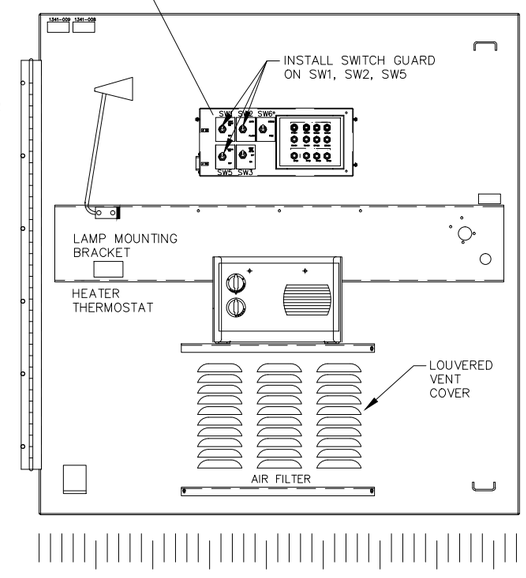

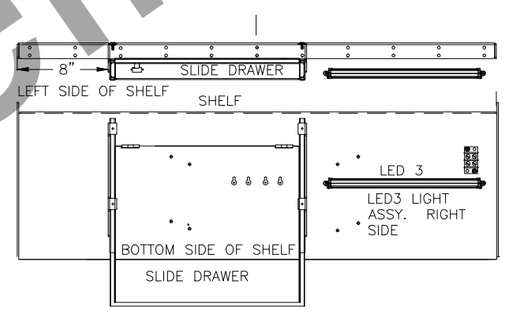

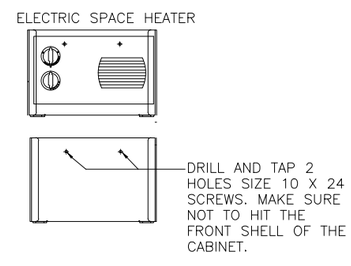

NOTES:

1. TYPICAL ECONOLITE CABINET LAYOUT. CABINET LAYOUT AND REQUIRED COMPONENTS VARY BY INTERSECTION.

CONTROLLER CABINET LAYOUT

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Preliminary Plans

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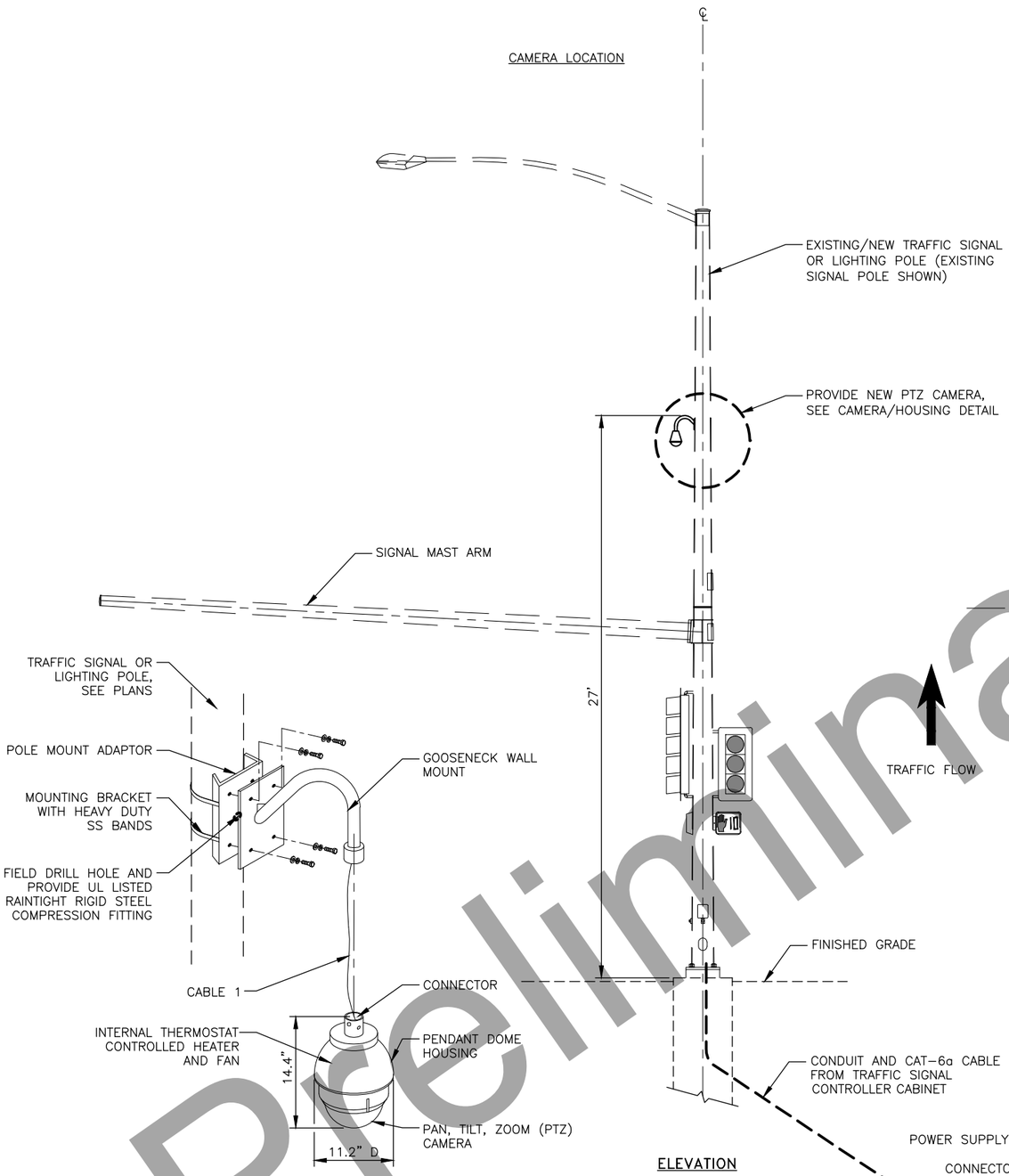
Z:\PROJECTS\00488_nr signal interconnect\1 3rd St\DWGS\C\Sheets\62451_H7_CNTR_LAYt detls-H7 Mon, Jul/16/18 04:08pm

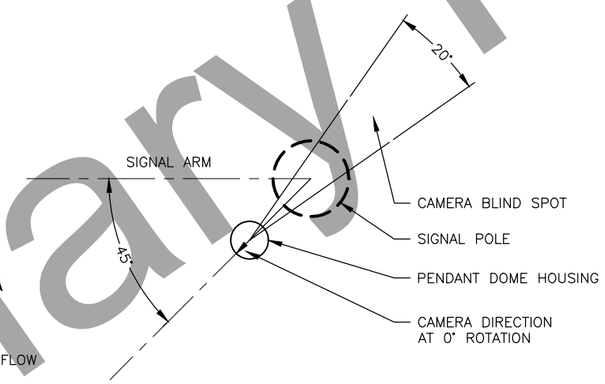
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H8	23



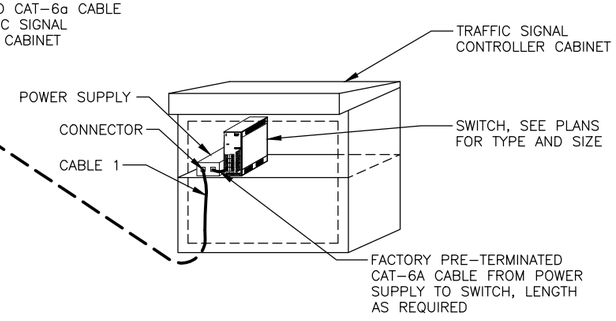
MATERIAL REQUIREMENTS

ALL ASSEMBLIES	
MOUNTING BRACKET	PELCO TRITON BRACKET OR APPROVED EQUAL
POLE MOUNT ADAPTOR	AXIS T91A57 OR APPROVED EQUAL
GOOSENECK WALL MOUNT	AXIS T91G61 OR APPROVED EQUAL
CABLE 1	CAT-6a, FOILED
POWER SUPPLY	AXIS T8134 60W OR APPROVED EQUAL
CONNECTOR	ENVIRONMENTALLY HARDENED RJ-45
STRAIN RELIEF	REMKE 2201-013 OR APPROVED EQUAL
CAMERA	
CAMERA	UNLESS OTHERWISE NOTED, PROVIDE AXIS Q6155-E OR APPROVED EQUAL
HOUSING	
PENDANT DOME HOUSING	OUTDOOR, INTEGRATED WITH CAMERA OR APPROVED EQUAL



NOTES:

1. PROTECT CABLE ENDS FROM MOISTURE AT ALL TIMES.
2. PROVIDE CABLE IN ACCORDANCE WITH SECTION 660 OF THE SPECIAL PROVISIONS AND ENSURE THAT THERE IS SUFFICIENT CABLE LENGTH TO REACH THE TOP OF THE CONTROLLER CABINET. CABLE IS TO BE PULLED WITHOUT CONNECTORS ATTACHED. WHEN CABLE HAS BEEN PULLED TO FINAL LOCATIONS INSTALL AND MAKE FINAL CONNECTIONS.
3. CABLE RUN 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 CABLE BEND RADIUS SHALL NOT EXCEED THE MANUFACTURER'S RECOMMENDATIONS.
6. MOUNT THE PENDENT DOME HOUSING AT A 45° ANGLE AT THE REQUIRED HEIGHT. ANGLE AND HEIGHT MAY BE ADJUSTED BY THE ENGINEER TO AVOID SEAM WELDS, SLIP JOINTS, AND MOUNTED POLE EQUIPMENT; AND TO IMPROVE CAMERA VIEWS.
7. ADJUST CAMERA INSIDE THE PENDENT DOME HOUSING AS SHOWN. ENSURE THAT THE CAMERA IS MOUNTED AT A 0° TILT ANGLE.
8. AT CABLE END CONNECTOR LOCATION PROVIDE A SECURE CONNECTION USING CONNECTOR PARTS SPECIFIED. AFTER CONNECTION IS MADE COVER SPLICE WITH WATER PROOF HEAT SHRINK TUBING. PROVIDE A STRAIN RELIEF CABLE AS NECESSARY.
9. CAT6a TOTAL CABLE LENGTH SHALL NOT EXCEED 325 FEET FROM SWITCH TO PTZ CAMERA.



PAN, TILT, ZOOM CAMERA DETAILS

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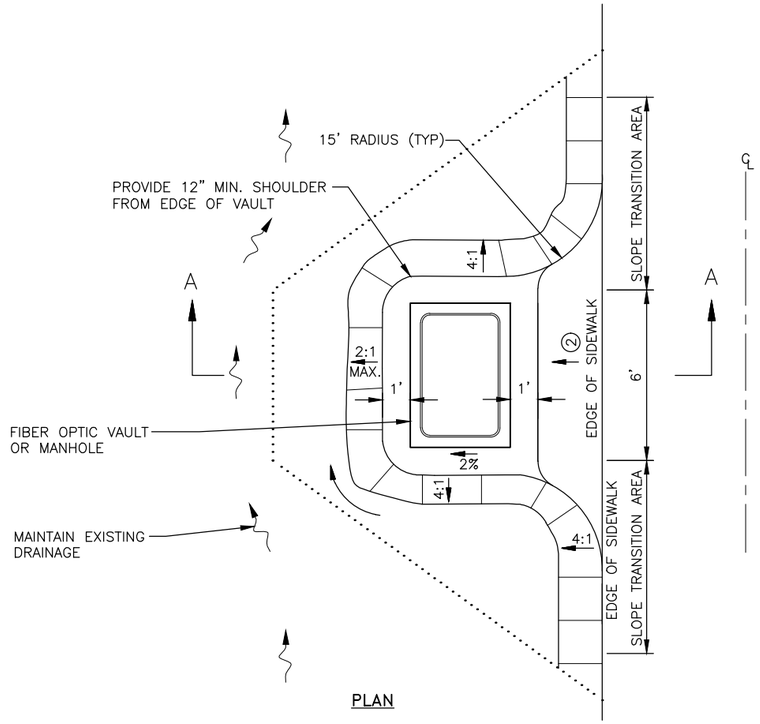
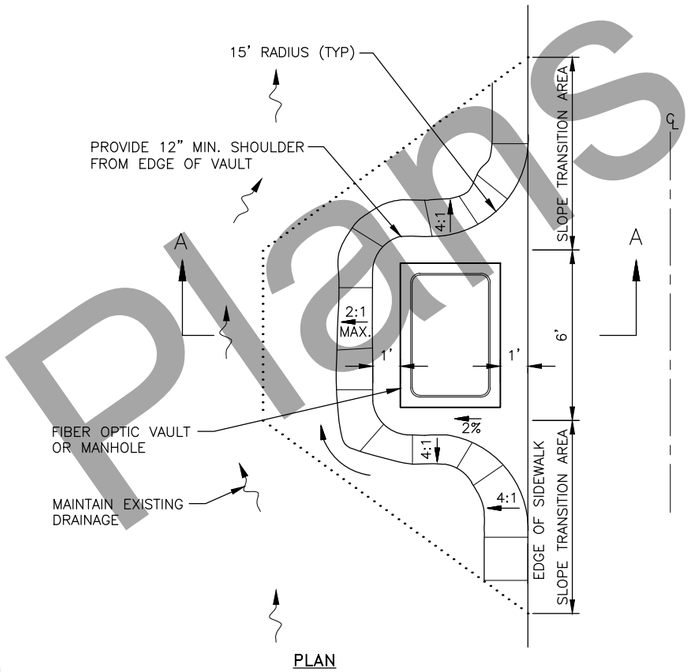
NO.	DATE	REVISION

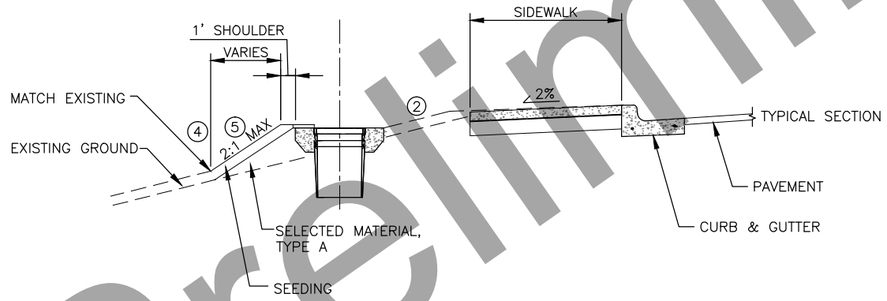
STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H9	23



VAULT GRADING SEPARATED FROM SIDEWALK

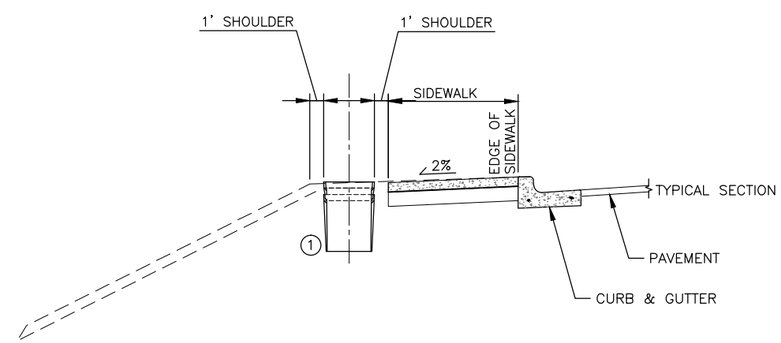


VAULT GRADING ADJACENT TO SIDEWALK



SECTION

VAULT GRADING SEPARATED FROM SIDEWALK



SECTION

VAULT GRADING ADJACENT TO SIDEWALK

NOTES:

1. WHEN VAULT IS LOCATED WITHIN OR ADJACENT TO A SIDEWALK DEPRESS VAULT 0"– 3/16" BELOW FINISH SIDEWALK GRADE.
2. SLOPE AS CALLED FOR IN 3RD STREET WIDENING PROJECT, 4:1 TYPICAL.
3. SEED DISTURBED AREAS AS DIRECTED BY THE ENGINEER.
4. STEEPEN SLOPES AS NECESSARY TO CONTAIN SLOPE LIMITS WITHIN THE ROW.

VAULT GRADING

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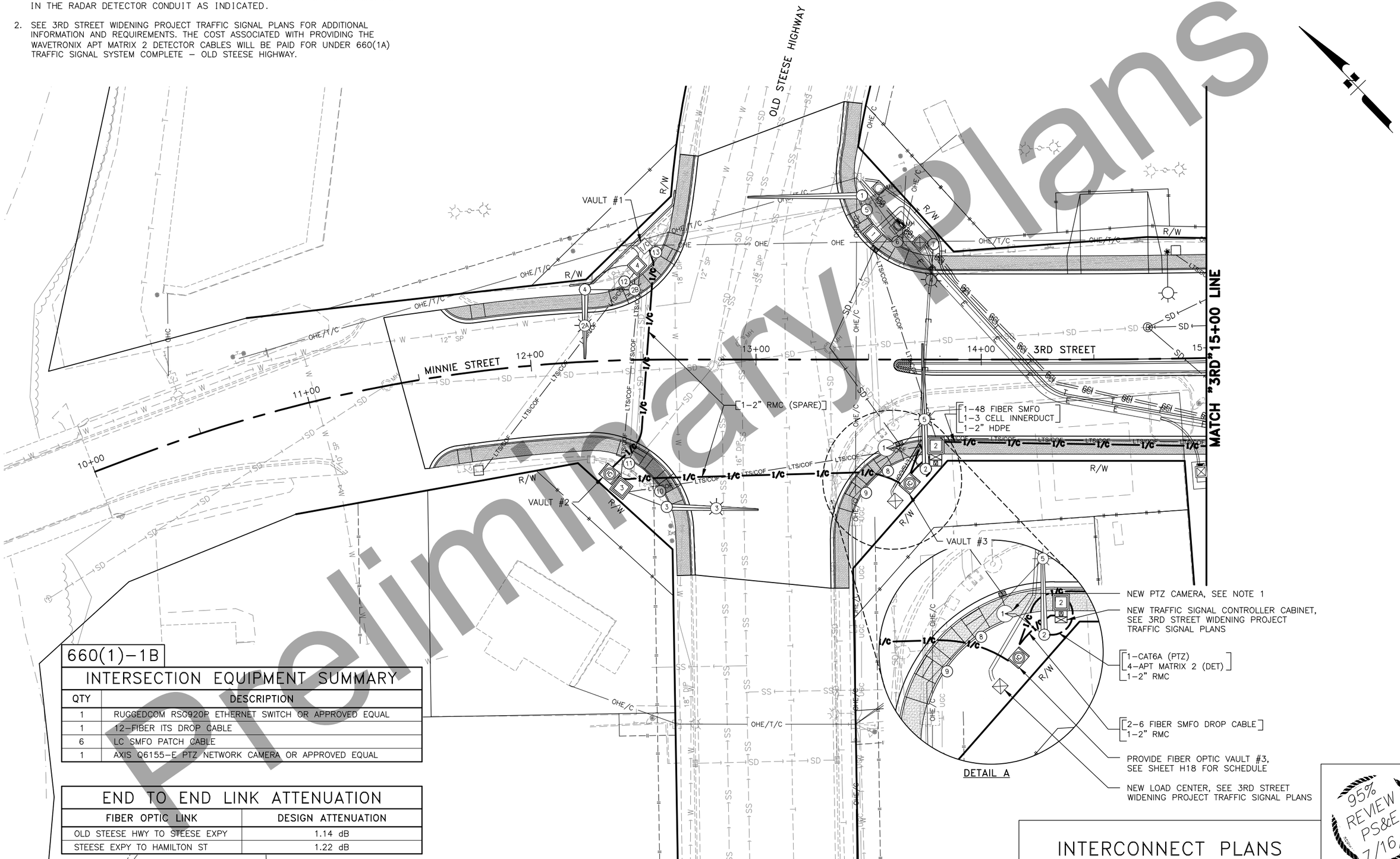
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H10	23

CONSTRUCTION NOTES:

1. AFTER NEW TRAFFIC SIGNAL POLES, CONTROLLER CABINET, JUNCTION BOXES, AND CONDUIT ARE INSTALLED, CONTRACTOR SHALL FURNISH AND INSTALL THE PTZ CAMERA AND CAT6A CABLE. ROUTE THE CAT6A CABLE AND DETECTOR CABLES IN THE RADAR DETECTOR CONDUIT AS INDICATED.
2. SEE 3RD STREET WIDENING PROJECT TRAFFIC SIGNAL PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE COST ASSOCIATED WITH PROVIDING THE WAVETRONIX APT MATRIX 2 DETECTOR CABLES WILL BE PAID FOR UNDER 660(1A) TRAFFIC SIGNAL SYSTEM COMPLETE – OLD STEESE HIGHWAY.



660(1)–1B

INTERSECTION EQUIPMENT SUMMARY

QTY	DESCRIPTION
1	RUGGEDCOM RSG920P ETHERNET SWITCH OR APPROVED EQUAL
1	12–FIBER ITS DROP CABLE
6	LC SMFO PATCH CABLE
1	AXIS Q6155–E PTZ NETWORK CAMERA OR APPROVED EQUAL

END TO END LINK ATTENUATION

FIBER OPTIC LINK	DESIGN ATTENUATION
OLD STEESE HWY TO STEESE EXPY	1.14 dB
STEESE EXPY TO HAMILTON ST	1.22 dB

INTERCONNECT PLANS

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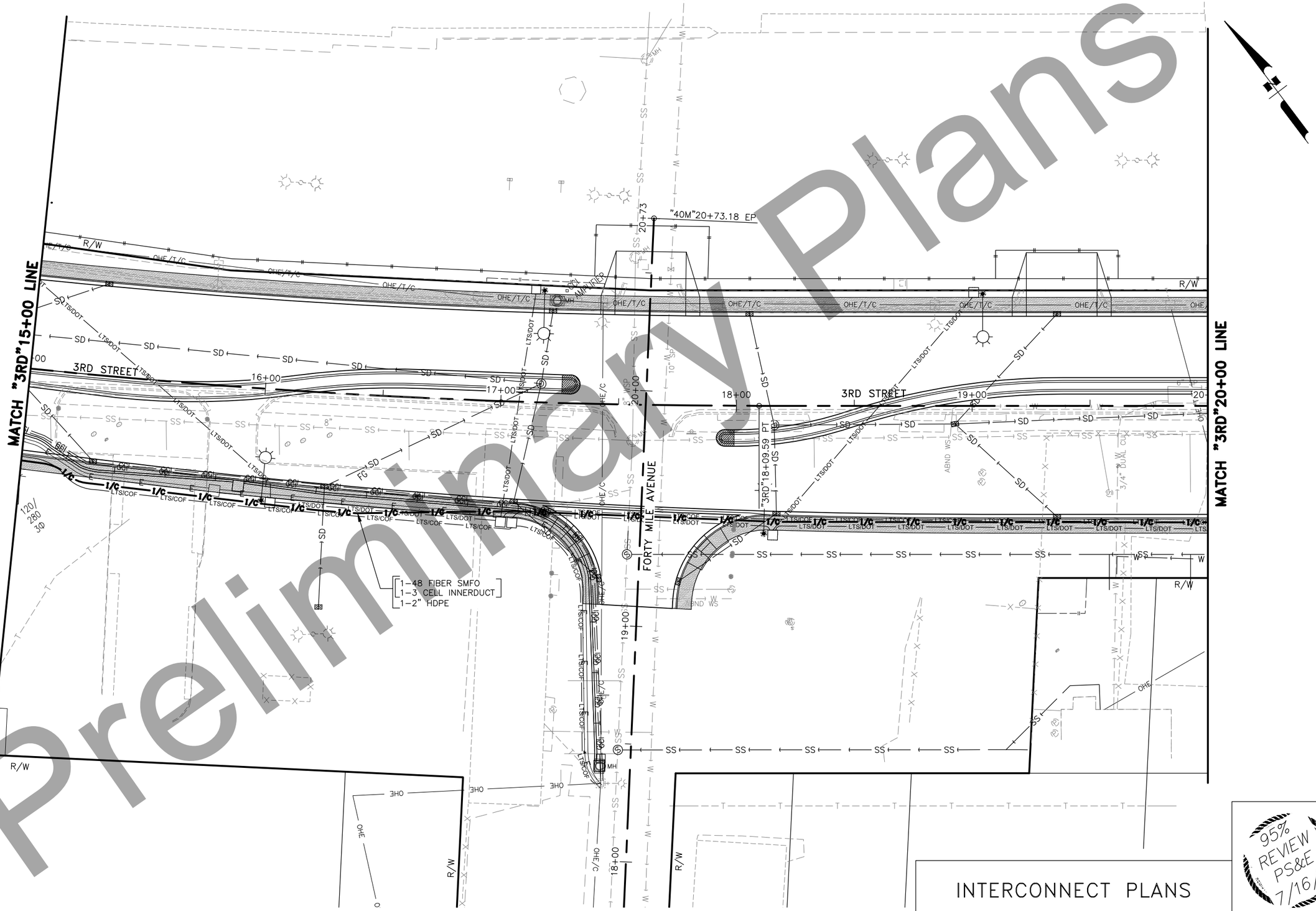
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H11	23



Preliminary Plans

INTERCONNECT PLANS

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NO.	DATE	REVISION

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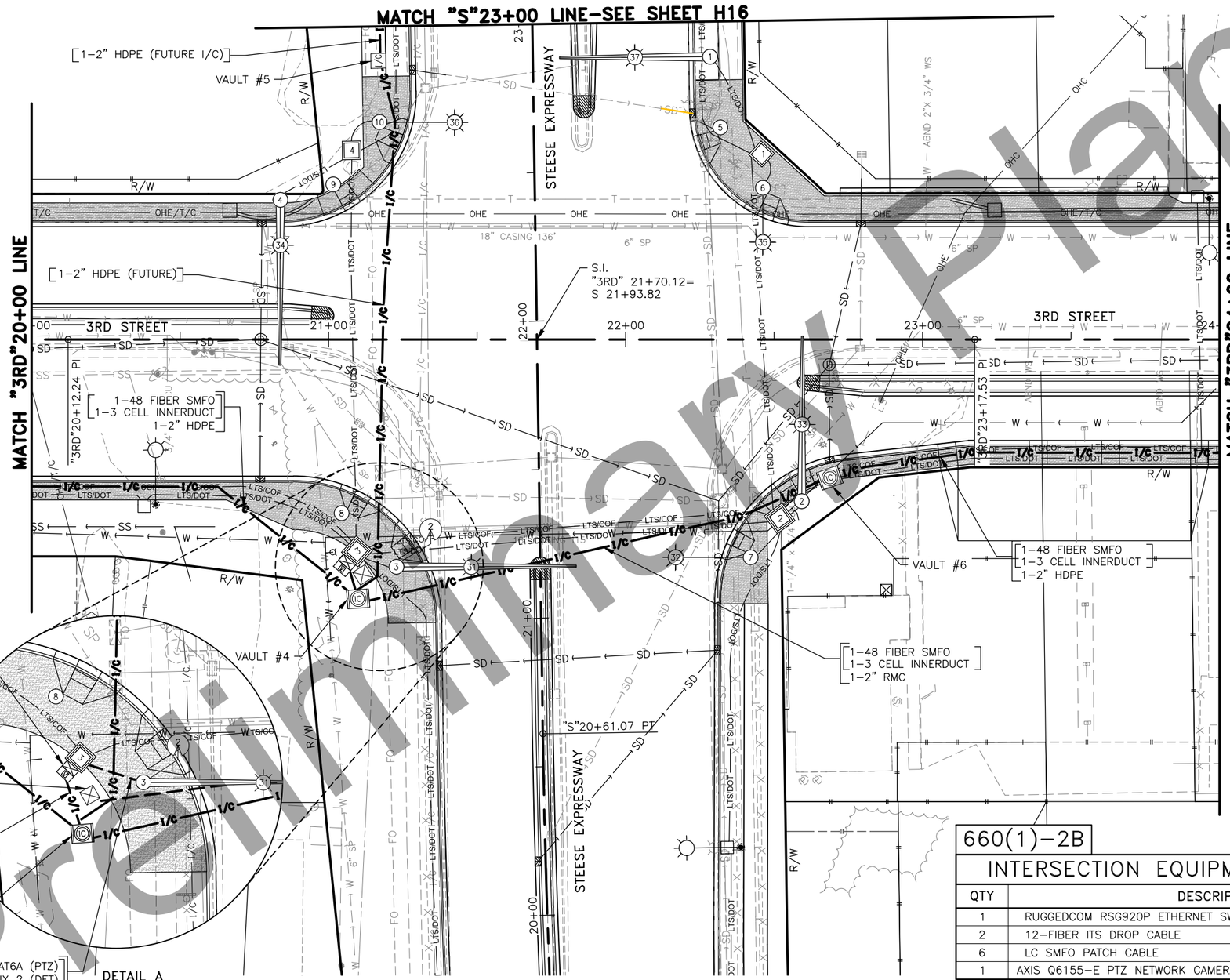

CONSTRUCTION NOTES:

1. AFTER NEW TRAFFIC SIGNAL POLES, CONTROLLER CABINET, JUNCTION BOXES, AND CONDUIT ARE INSTALLED, CONTRACTOR SHALL FURNISH AND INSTALL THE PTZ CAMERA AND CAT6A CABLE. ROUTE THE CAT6A CABLE AND DETECTOR CABLES IN THE RADAR DETECTOR CONDUIT AS INDICATED.
2. SEE 3RD STREET WIDENING PROJECT TRAFFIC SIGNAL PLANS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. THE COST ASSOCIATED WITH PROVIDING THE WAVETRONIX APT MATRIX 2 DETECTOR CABLES WILL BE PAID FOR UNDER 660(1B) TRAFFIC SIGNAL SYSTEM COMPLETE – STEESE EXPRESSWAY .

660(1)–2B

INTERSECTION EQUIPMENT SUMMARY

QTY	DESCRIPTION
1	RUGGEDCOM RSG920P ETHERNET SWITCH OR APPROVED EQUAL
2	12–FIBER ITS DROP CABLE
6	LC SMFO PATCH CABLE
1	AXIS Q6155–E PTZ NETWORK CAMERA OR APPROVED EQUAL

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INTERCONNECT PLANS

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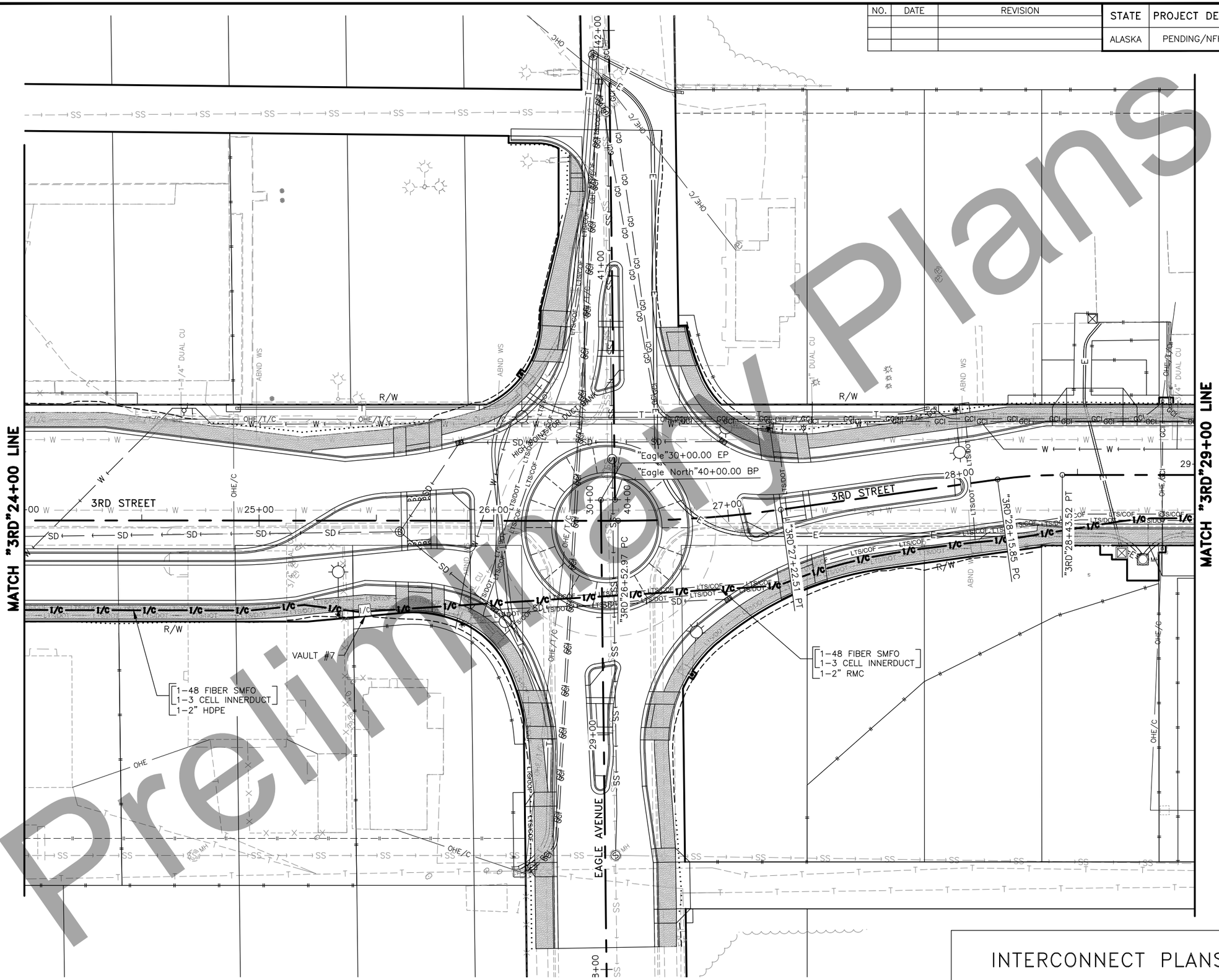
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H13	23



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INTERCONNECT PLANS

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NO.	DATE	REVISION

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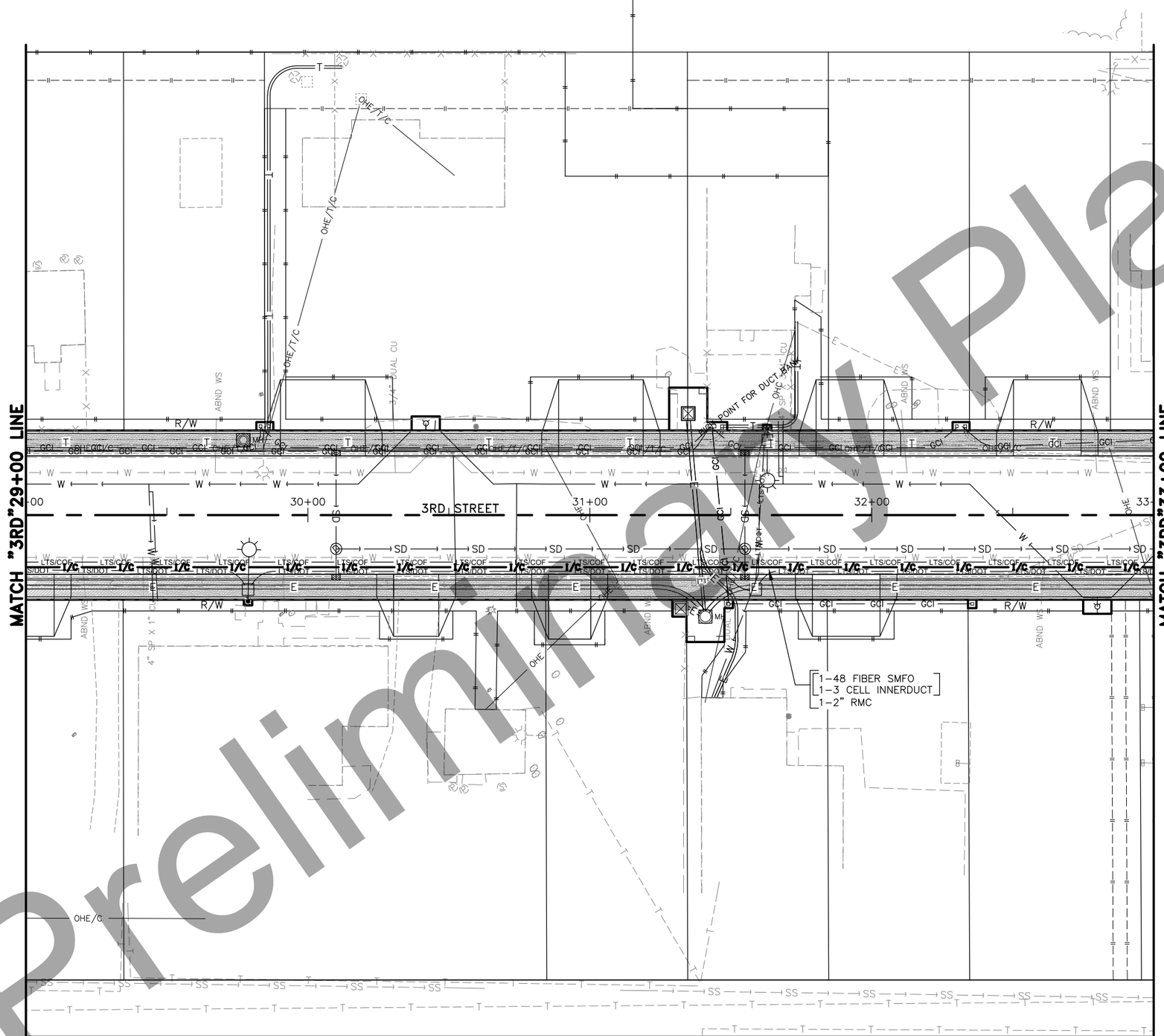
ALASKA	PENDING/NFHWY00334	2018	H14	23



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INTERCONNECT PLANS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H15	23

CONSTRUCTION NOTES:

1. AFTER NEW TRAFFIC SIGNAL POLES, CONTROLLER CABINET, JUNCTION BOXES, AND CONDUIT ARE INSTALLED, CONTRACTOR SHALL FURNISH AND INSTALL THE PTZ CAMERA AND CAT6A CABLE. ROUTE THE CAT6A CABLE AND DETECTOR CABLES IN THE RADAR DETECTOR CONDUIT AS INDICATED.
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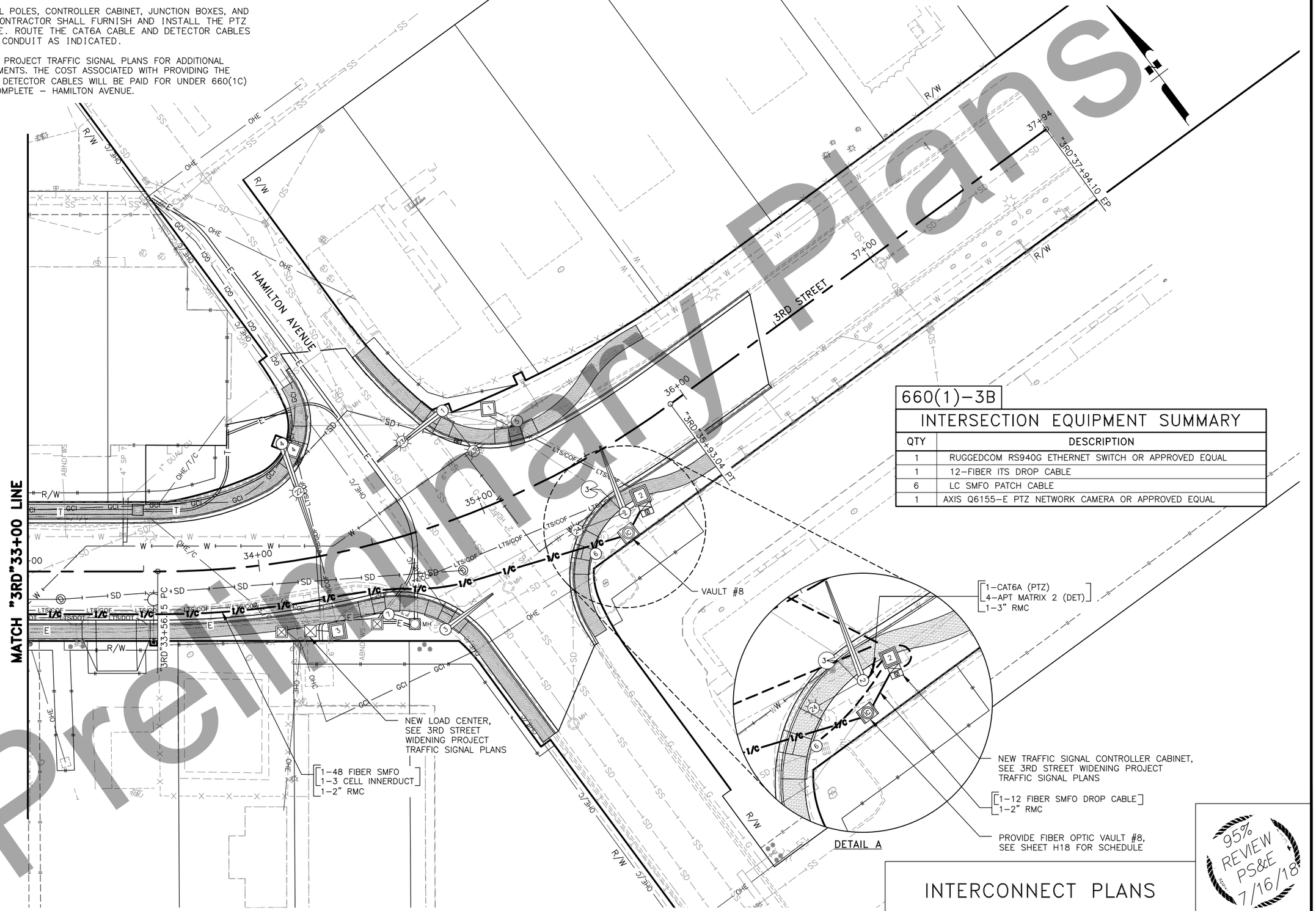

660(1)–3B

INTERSECTION EQUIPMENT SUMMARY

QTY	DESCRIPTION
1	RUGGEDCOM RS940G ETHERNET SWITCH OR APPROVED EQUAL
1	12–FIBER ITS DROP CABLE
6	LC SMFO PATCH CABLE
1	AXIS Q6155–E PTZ NETWORK CAMERA OR APPROVED EQUAL

INTERCONNECT PLANS

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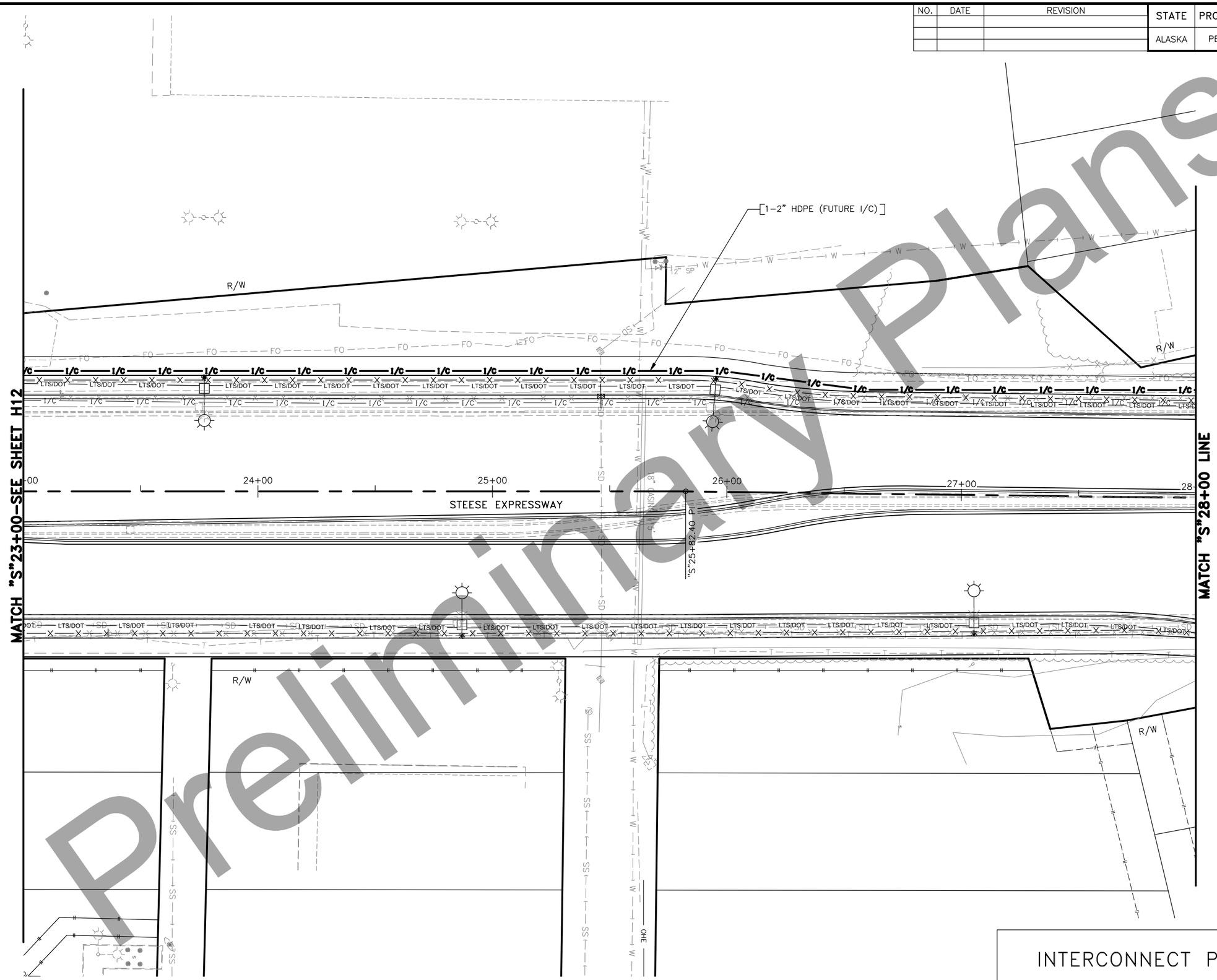
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H16	23



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INTERCONNECT PLANS

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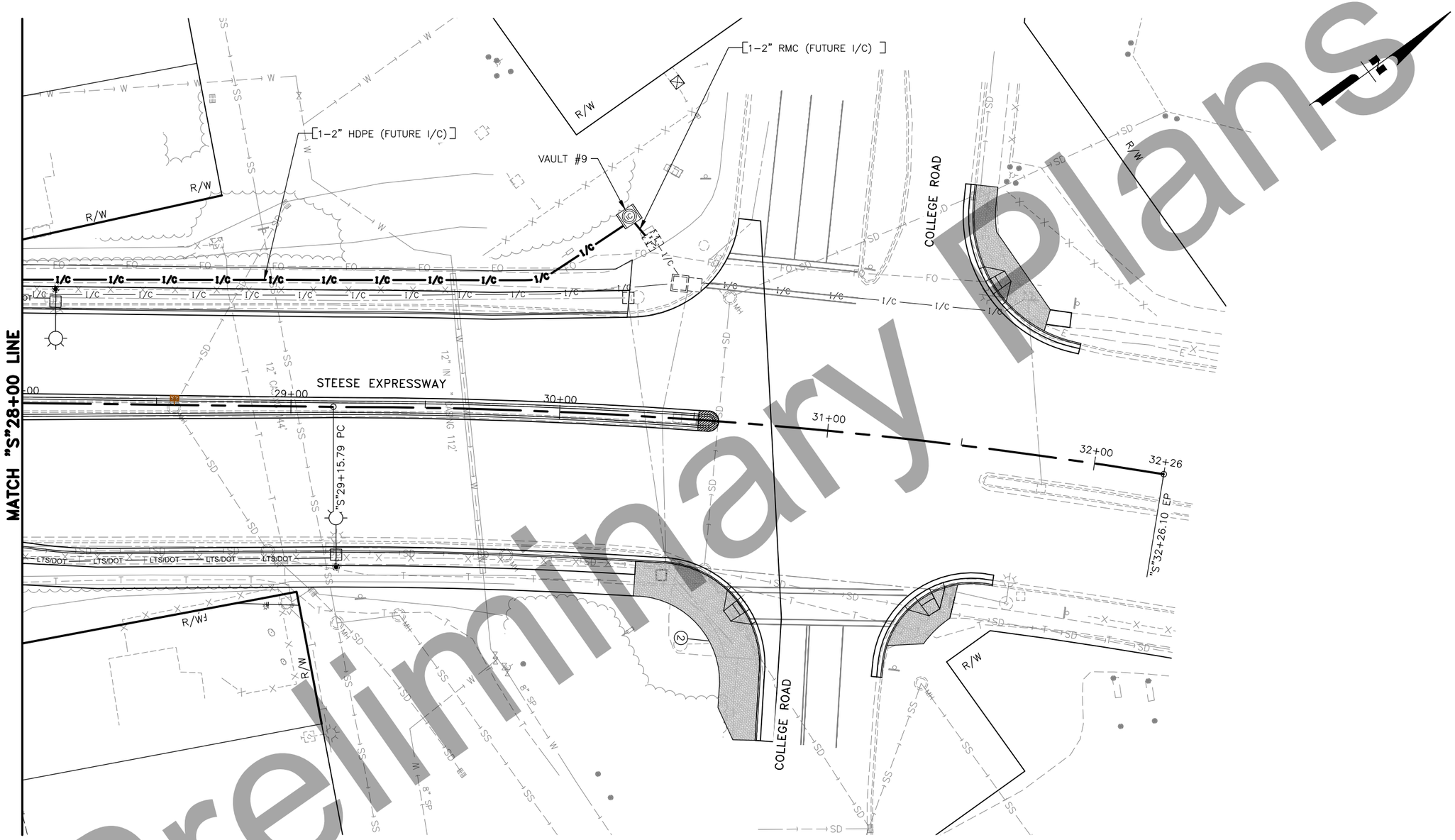
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H17	23



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INTERCONNECT PLANS

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NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	H18	23

VAULT SCHEDULE

I/C VAULT NO.	LOCATION			TYPE	REMARKS
	ALIGNMENT	STATION	OFFSET		
VAULT 1	"3RD"	12+51.5	49.8 LT	VAULT TYPE 1	
VAULT 2	"3RD"	12+32.9	50.3 RT	MANHOLE	
VAULT 3	"3RD"	13+66.1	57.1 RT	MANHOLE	
VAULT 4	"3RD"	21+09.9	87.3 RT	MANHOLE	
VAULT 5	"3RD"	21+17.4	93.8 LT	VAULT TYPE 1	
VAULT 6	"3RD"	22+66.7	51.4 RT	MANHOLE	
VAULT 7	"3RD"	25+45.2	51.4 RT	VAULT TYPE 1	
VAULT 8	"3RD"	35+49.7	37.1 RT	MANHOLE	
VAULT 9	"S"	30+21.9	73.9 LT	MANHOLE	

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INTERCONNECT VAULT SCHEDULE

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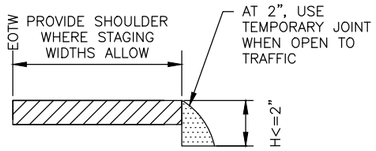
NO.	DATE	REVISION

STATE	PROJECT DESIGNATION	YEAR	SHEET NO.	TOTAL SHEETS
ALASKA	PENDING/NFHWY00334	2018	T1	23

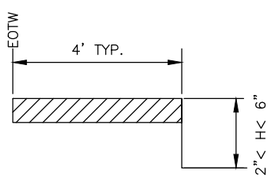
VERTICAL DROP-OFFS



CASE A

DROP-OFFS <2 INCHES
(PAVED SURFACES ONLY)

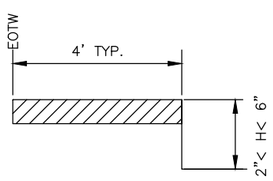
1. USE "UNEVEN LANES" (CW8-11) SIGNS FOR ALL DROP-OFFS IN BETWEEN TRAFFIC LANES.
2. LEAVE NO DROP-OFFS > 1.5" IN THE



CASE B

2"< DROP-OFFS < 6"
(ALL ROADWAY SURFACES)

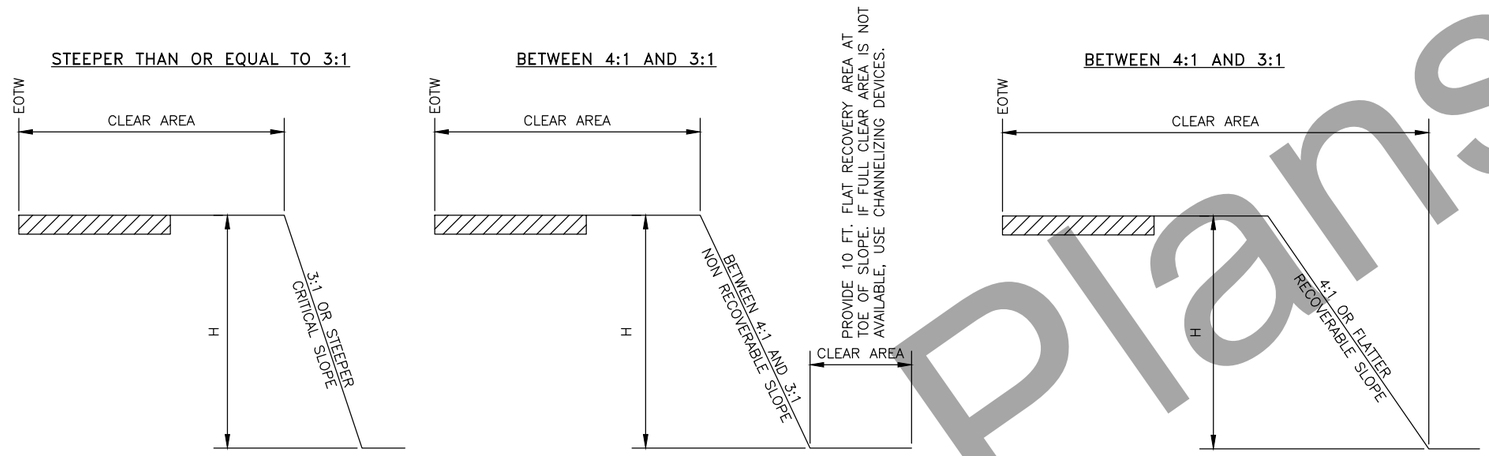
1. PLACE CONES OR CANDLES FOR DROP-OFFS > 4 FEET AND ≤ 30 FEET FROM THE EOTW.
2. USE DRUMS OR TYPE II BARRICADES FOR DROP-OFFS ≤ 4 FEET FROM THE EOTW.



CASE C

DROP-OFFS >6"
(ALL ROADWAY SURFACES AND ROADSIDE SLOPES)

1. PLACE DRUMS OR TYPE II BARRICADES FOR DROP-OFFS < 24" WITHIN THE CLEAR AREA.
2. PROVIDE PORTABLE CONCRETE BARRIER FOR DROP-OFFS >24" WITHIN 15 FEET OF THE EOTW. USE DRUMS OR TYPE II BARRICADES IF BEYOND 15 FEET.



FILL SLOPES

CLEAR AREA REQUIREMENTS

	LOW SPEED < = 35 MPH	INTERMEDIATE SPEED 40 MPH TO 45 MPH	HIGH SPEED > = 50 MPH
RURAL	15'	24'	30'
URBAN	10' DITCH SECTION, OR 2' BEHIND CURB	15' DITCH CONDITIONS, OR 2' BEHIND CURB	15' DITCH SECTIONS, OR 2' BEHIND CURB

CHANNELIZING DEVICE REQUIREMENTS FOR SLOPES 3:1 OR STEEPER WITHIN THE CLEAR AREA

	H <= 15'	H > 15'
< 2000 VPD LOW VOLUME	CANDLES OR CONES	TYPE II BARRICADES OR DRUMS
> 2000 VPD	TYPE II BARRICADE OR DRUMS	PORTABLE CONCRETE BARRIER OR TEMPORARY GUARDRAIL

TRAFFIC CONTROL NOTES:

1. USE THE EXISTING CROSS-SECTION (PRIOR TO CONSTRUCTION) AS A BASIS FOR DETERMINING WHEN CHANNELIZING DEVICES ARE NEEDED.
2. INSTALL CHANNELIZING DEVICES WHEN THE HORIZONTAL OR VERTICAL CURVATURE IS MADE MORE SEVERE.
3. INSTALL FLEXIBLE DELINEATORS WHEN ALL VEGETATION OVER 4 FEET HIGH IS CLEARED FROM FILL SLOPES THAT ARE 3:1 OR STEEPER IN THE CLEAR AREA.
4. USE PORTABLE CONCRETE BARRIER FOR WARRANTING CONDITIONS WHICH LAST LONGER THAN 3 DAYS. FOR CONDITIONS LASTING LESS THAN 3 DAYS, OTHER CHANNELIZING DEVICES MAY BE INSTALLED.
5. TERMINATE RUNS OF PORTABLE CONCRETE BARRIER USING THE FOLLOWING METHODS:

5.A. CONNECT TO A PORTABLE CRASH CUSHION, OR

5.B. PROVIDE A CONCRETE BARRIER WITH THRIE BEAM TRANSITION TO W-BEAM GUARDRAIL, TREATED WITH A PARALLEL GUARDRAIL TERMINAL, OR

5.C. FLARE THE ENDS OF THE PORTABLE CONCRETE BARRIER AWAY FROM THE ROADWAY AT A RATE OF 7:1 ON A COMPACTED SLOPE OF 6:1 OR FLATTER, OUTSIDE OF THE CLEAR AREA. INSTALL A SLOPING PORTABLE CONCRETE BARRIER END TREATMENT, OR

5.D. BURY IN THE BACKSLOPE.

6. TERMINATE THE RUNS OF TEMPORARY W-BEAM GUARDRAIL USING THE FOLLOWING METHODS.

6.A. PROVIDE A PARALLEL GUARDRAIL TERMINAL TO W-BEAM GUARDRAIL, OR

6.B. FLARE THE ENDS OF THE TEMPORARY GUARDRAIL AWAY FROM THE ROADWAY AT A RATE OF 6:1 ON A COMPACTED SLOPE OF 6:1 OR FLATTER OUTSIDE OF THE CLEAR AREA, TERMINATE WITH A STANDARD W-BEAM END SECTION, OR

6.C. BURY IN THE BACKSLOPE.

EQUIPMENT NOTES:

1. WHEN THERE IS ACTIVE, NON-MOBILE CONSTRUCTION EQUIPMENT WITHIN THE CLEAR AREA, DELINEATE THE ROADSIDE WITH TRAFFIC CONES.
2. SEPARATE PROCEDURES ARE REQUIRED FOR MOBILE WORK ZONE OPERATIONS AND SHORT DURATION WORK OF LESS THAN 12 HOURS.

WINTER SHUTDOWN NOTES:

1. WHEN REQUIRED, USE CHANNELIZING DEVICES WHICH CAN BE MAINTAINED OVER WINTER.
2. NO CHANNELIZING DEVICES ARE REQUIRED IF:

2.A. CONSTRUCTION SLOPES ARE RECOVERABLE, AND

2.B. SLOPES ARE SMOOTH AND COMPACTED, AND

2.C. REQUIRED CLEAR AREA IS PROVIDED

TRAFFIC CONTROL DETAILS

95% REVIEW PS&E 7/13/18

Preliminary Plans

PLANS DEVELOPED BY: KINNEY ENGINEERING, LLC 3909 Arctic Blvd. Suite 400 Anchorage, Alaska 99503 (907) 346-2373 CERT. OF AUTH. NO. 1152
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