CREST STREET RECONSTRUCTION

VOLUME II of II

Contract No. BE21-219

File No. 2099

CITY AND BOROUGH OF JUNEAU

ALASKA'S CAPITAL CITY

ENGINEERING DEPARTMENT

CREST STREET RECONSTRUCTION

CBJ CONTRACT No. BE21-219

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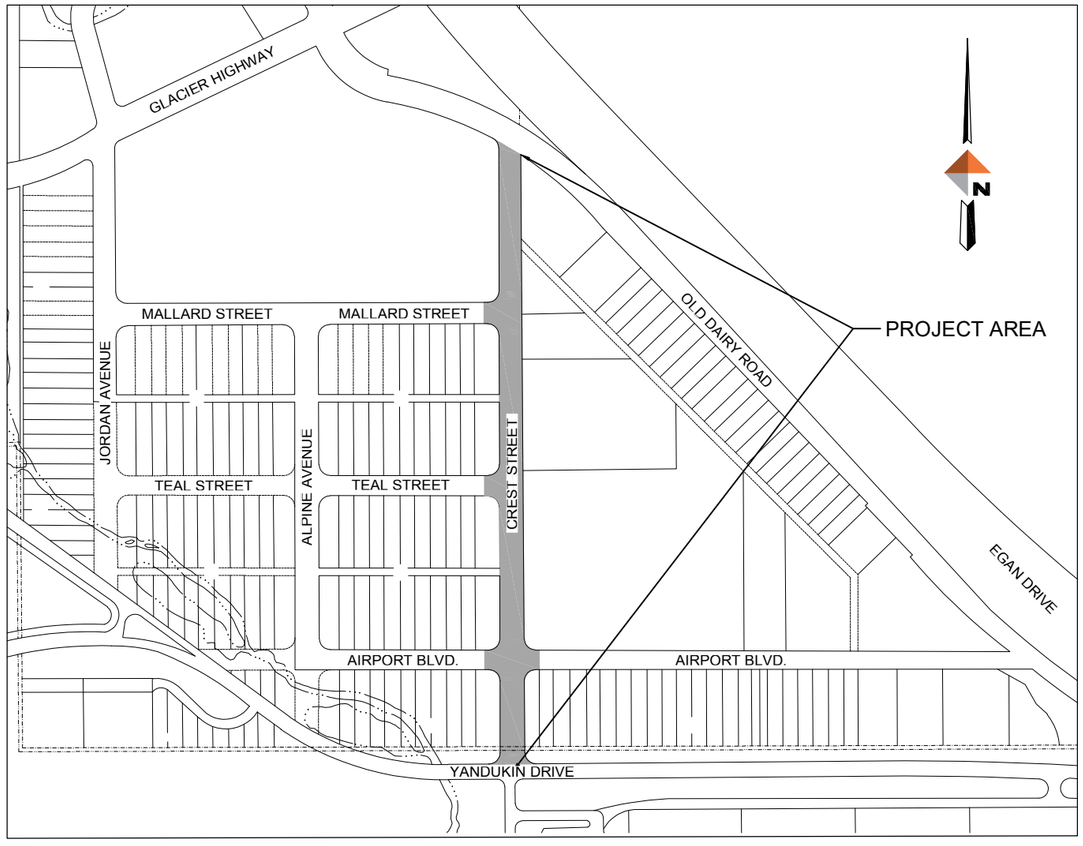

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PREPARED FOR:

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

STATE OF ALASKA
49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

PROJECT	71095.01
DATE	4/20/2021

SHEET
G-001

LEGEND

DESCRIPTION	EXISTING	REMOVE	PROPOSED
ADA TILE & RAMP			
AREA DRAIN			
BIOSWALE			
UTILITIES	OE E C T		E
CAP			E
CATCH BASIN			CB-X
CONTROL POINT			
CURB & GUTTER			
EXCAVATION LIMITS			
DEPRESSED CURB AND GUTTER			
DITCH CENTER LINE			
EDGE OF ASPHALT			
FENCE	X		
FILL LIMITS			
FIRE HYDRANT			
GURADRAIL			
HEADWALL			
HOUSE NO	3000		
LUMINAIRE			
PROJECT CONTROL LINE			
PROPERTY LINE			
SANITARY SEWER CLEANOUT			
SANITARY SEWER GRAVITY PIPE	S	S	S SS-X
SANITARY SEWER MANHOLE			MH-X
SAWCUT			
SIGN			
STORM DRAIN PIPE	SD	SD	SD SD-X
TREE			
TRENCH DRAIN			TD-X
WATER LINE PIPE	W	W	W
WATER VALVE BOX			

ABBREVIATIONS

AC	ASPHALT CONCRETE
ADA	AMERICAN DISABILITIES ACT
BOP	BEGINNING OF PROJECT
BTRM	BOTTOM OF RAMP
CB	CATCH BASIN
CBJ	CITY AND BOROUGH OF JUNEAU
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED POLYETHYLENE PIPE
CONC	CONCRETE
CTE	CONNECT TO EXISTING
DI	DUCTILE IRON
DIA	DIAMETER
EL	ELEVATION
EOP	END OF PROJECT
EP	EDGE OF PAVEMENT
FL	FLOW LINE
FG	FINISHED GRADE
FM	FORCE MAIN
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
INV	INVERT
IP	IRON PIPE
LT	LEFT
MH	MANHOLE
MN	MAGNETIC NAIL
MTE	MATCH TO EXISTING
NO	NUMBER
NTS	NOT TO SCALE
PC	POINT OF CURVATURE
PT	POINT OF TANGENT
POC	POINT ON CURVE
PVC	POLYVINYL CHLORIDE
ROW	RIGHT-OF-WAY
RT	RIGHT
SD	STORM DRAIN
SHLD	SHOULDER
SS	SANITARY SEWER
STA	STATION
STD	STANDARD
TBC	TOP BACK OF CURB
TBVG	TOP BACK OF VALLEY GUTTER
TP	TOP OF PAVEMENT
TRMP	TOP OF RAMP
TYP	TYPICAL

GENERAL NOTES

1. BEGIN SUBCUT AT 24 INCHES FROM PAVEMENT SAWCUT LINE AT STREET CONNECTIONS, UNLESS OTHERWISE SHOWN ON THE DRAWINGS, OR DIRECTED BY THE ENGINEER. REMOVE AND REPLACE BASE COURSE WITH 6 INCHES OF 2" MINUS SHOT ROCK W/BASE COURSE TO 12 INCHES FROM PAVEMENT SAWCUT LINE. SAWCUT AS NECESSARY ALONG ALL STREET AND DRIVEWAY APPROACHES TO PROVIDE A NEAT MATCH LINE.
2. CONTRACTOR SHALL ENSURE UNINTERUPTED GARBAGE PICKUP AND DAILY MAIL SERVICE TO ALL RESIDENCES IMPACTED BY THIS PROJECT.
3. THE 4TH EDITION OF THE CBJ STANDARD DETAILS, DATED AUGUST 14 2011 AND STANDARD SPECS DATED 2003 AND ALL ERRATA, ARE MADE PART OF THIS CONTRACT, WITH CURRENT REVISIONS AS APPLICABLE.
4. ALL EXISTING STORM DRAIN PIPES (6 INCH DIAMETER AND LARGER), AND APPURTENANCES (TO BE ABANDONED) THAT ARE WITHIN THE STREET LIMITS, SHALL BE REMOVED AND DISPOSED OF, UNLESS OTHERWISE NOTED.
5. EXISTING PIPE LOCATIONS ARE DERIVED FROM CBJ AS-BUILTS OR FIELD LOCATED. ACTUAL LOCATIONS MAY VARY FROM THOSE SHOWN. DEPTH OF THE EXISTING PIPES SHOWN ON THE PROFILES ARE ASSUMED. CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF EACH EXISTING SERVICE PIPE PRIOR TO INSTALLING MAIN LINE TEES AND WYES FOR THE STORM AND SANITARY SEWER. DIAL BEFORE YOU DIG 586-1333.
6. THE GRADING AND ALIGNMENT ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
7. LOCATION OF CULVERTS AND CULVERT LENGTHS ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER.
8. THE CONTRACTOR SHALL NOTIFY CBJ WATER UTILITIES, LONI VANKIRK AT 723-4975 OF ANY WATER MAIN INTERRUPTION.
9. A MINIMUM CLEARANCE OF 18-INCHES SHALL BE OBTAINED BETWEEN WATER AND SEWER PIPES. IN SOME LOCATIONS STORM SEWER CULVERTS WILL REQUIRE THAT THE WATER LINES BE INSTALLED WITH MORE THAN 60-INCHES OF COVER.
10. PROPERTY LINE LOCATIONS USED IN THESE PLANS ARE DERIVED FROM RECORD PLATS AND DO NOT REPRESENT A BOUNDARY SURVEY. EXISTING RECORD PLATS DO NOT CLOSE WITH EACH OTHER IN SOME CASES. THE PROPERTY LINES SHOWN ON THESE PLANS ARE A BEST FIT APPROXIMATION OF CLOSURE.
11. ALL ITEMS DESIGNATED TO BE REMOVED SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE, EXCEPT AS NOTED IN THE CONTRACT DOCUMENTS.
12. CONTRACTOR SHALL REFERENCE ALL EXISTING PROPERTY CORNER MONUMENTS (I.E. REBARS, CONCRETE NAILS, BRASS CAP MONUMENT AND ETC.) PRIOR TO CONSTRUCTION, REMONUMENT AFTER SURFACING IS REPLACED, AND SUBMIT A RECORD OF MONUMENT TO THE ENGINEER. ALL WORK SHALL BE DONE BY, OR UNDER THE DIRECTION OF, AN ALASKA REGISTERED LAND SURVEYOR.
13. ALL ASPHALT AND CHIP SEAL PAVEMENT TO BE REMOVED AND DISPOSED OF SHALL BE DELIVERED TO A STOCKPILE AREA AT THE LEMON CREEK CITY PIT TO BE DESIGNATED BY THE ENGINEER. CONTACT THE ENGINEER FOR THE EXACT LOCATION OF THE STOCKPILE.
14. AEL&P, ACS, AND GCI MAY CONDUCT WORK WITHIN THE PROJECT LIMITS TO RELOCATE UTILITIES AND UPGRADE THEIR RESPECTIVE SYSTEMS. THE CONTRACTOR SHALL COORDINATE ITS ACTIVITIES WITH EACH UTILITY COMPANY AND PROVIDE ACCESS AS NECESSARY FOR UTILITY COMPANIES TO CONDUCT THEIR WORK.
15. THE CONTRACTOR SHALL RESTRICT ITS COMPACTION AND OTHER VIBRATION INDUCING OPERATIONS AS NECESSARY TO ENSURE NO DAMAGE OCCURS TO ADJACENT BUILDINGS OR STRUCTURES. REFER TO SECTION 01530, ARTICLE 1.7 FOR FURTHER REQUIREMENTS.
16. THE PLAN SHEETS DO NOT SHOW ALL OF THE TREES AND OTHER VEGETATION THAT WILL BE ENCOUNTERED DURING CONSTRUCTION ACTIVITIES. NO TREES OR OTHER VEGETATION ARE TO BE REMOVED OR DAMAGED, UNLESS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER.
17. THE CONTRACTOR SHALL NOT STORE MATERIALS OR EQUIPMENT, OR OPERATE EQUIPMENT WITH ITS TRACKS OR WHEELS PLACED ON PRIVATE PROPERTY, WITHOUT WRITTEN APPROVAL OF THE PROPERTY OWNER.
18. THE CONTRACTOR SHALL NOTIFY EACH RESIDENT OF EACH DRIVEWAY CLOSURE THE DAY PRECEDING THE DAY THE DRIVEWAY IS TO BE CLOSED TO VEHICULAR ACCESS. THE RESIDENT SHALL BE INFORMED OF THE PERIOD OF TIME THE CLOSURE WILL BE IN EFFECT. NO DRIVEWAY CLOSURES WILL BE PERMITTED UNTIL THIS REQUIREMENT HAS BEEN MET TO THE SATISFACTION OF THE ENGINEER.
19. "JUMPING JACK" OR SIMILAR TYPE COMPACTORS SHALL BE USED TO THOROUGHLY COMPACT ALL LAYERS OF MATERIAL AROUND WATER VALVE BOXES, CATCH BASINS, MANHOLES AND OTHER STRUCTURES.
20. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ENGINEER APPROVED EROSION CONTROL DEVICES DURING CONSTRUCTION PER SECTION 01570.

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th — Tobias A. Lockhart No. CE12602 — REGISTERED PROFESSIONAL ENGINEER

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CITY AND BOROUGH OF JUNEAU — ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

LEGEND, ABBREVIATIONS, AND GENERAL NOTES

PROJECT	71095.01
DATE	4/20/2021
SHEET	G-002

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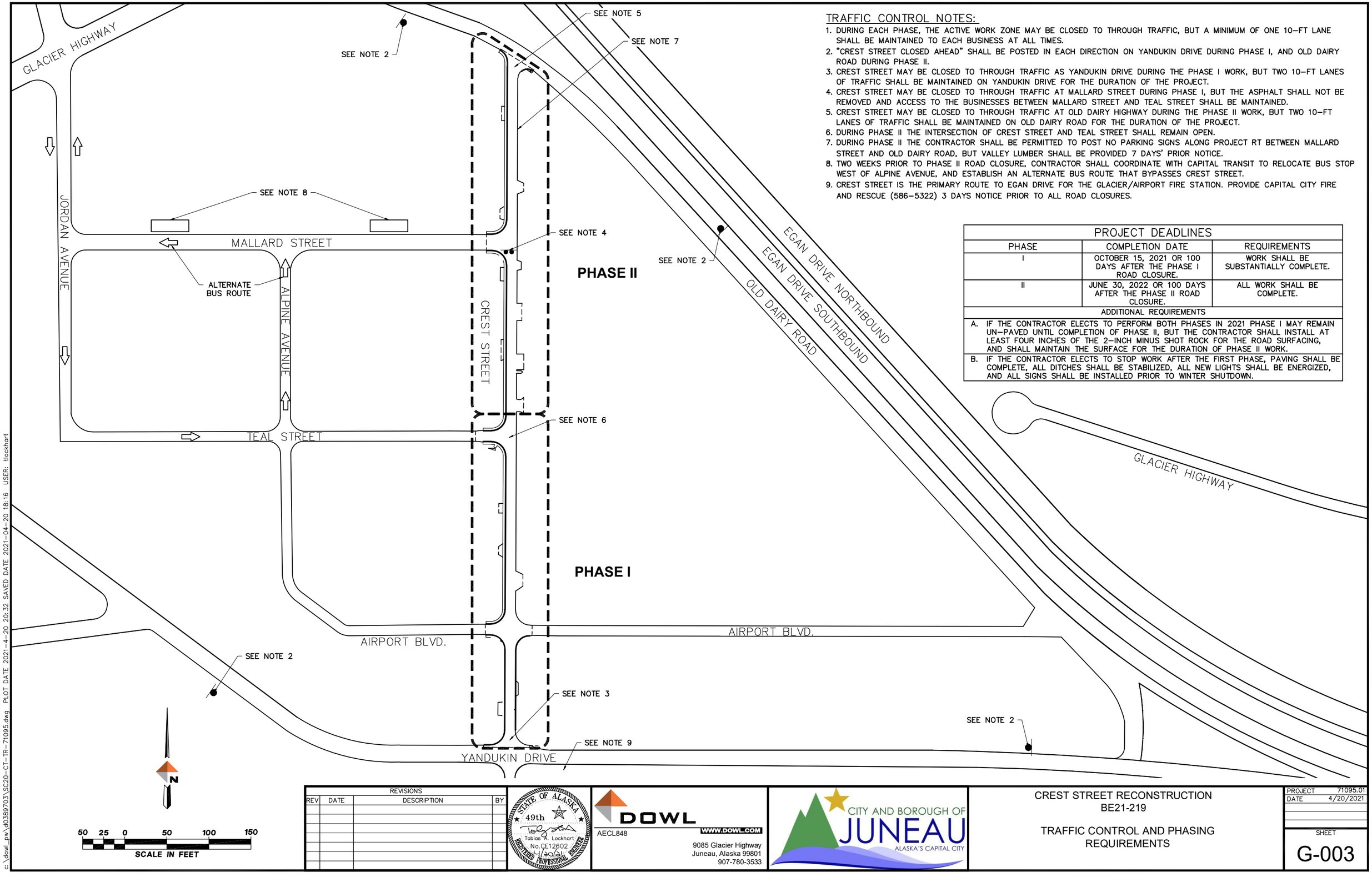

TRAFFIC CONTROL NOTES:

1. DURING EACH PHASE, THE ACTIVE WORK ZONE MAY BE CLOSED TO THROUGH TRAFFIC, BUT A MINIMUM OF ONE 10-FT LANE SHALL BE MAINTAINED TO EACH BUSINESS AT ALL TIMES.
2. "CREST STREET CLOSED AHEAD" SHALL BE POSTED IN EACH DIRECTION ON YANDUKIN DRIVE DURING PHASE I, AND OLD DAIRY ROAD DURING PHASE II.
3. CREST STREET MAY BE CLOSED TO THROUGH TRAFFIC AS YANDUKIN DRIVE DURING THE PHASE I WORK, BUT TWO 10-FT LANES OF TRAFFIC SHALL BE MAINTAINED ON YANDUKIN DRIVE FOR THE DURATION OF THE PROJECT.
4. CREST STREET MAY BE CLOSED TO THROUGH TRAFFIC AT MALLARD STREET DURING PHASE I, BUT THE ASPHALT SHALL NOT BE REMOVED AND ACCESS TO THE BUSINESSES BETWEEN MALLARD STREET AND TEAL STREET SHALL BE MAINTAINED.
5. CREST STREET MAY BE CLOSED TO THROUGH TRAFFIC AT OLD DAIRY HIGHWAY DURING THE PHASE II WORK, BUT TWO 10-FT LANES OF TRAFFIC SHALL BE MAINTAINED ON OLD DAIRY ROAD FOR THE DURATION OF THE PROJECT.
6. DURING PHASE II THE INTERSECTION OF CREST STREET AND TEAL STREET SHALL REMAIN OPEN.
7. DURING PHASE II THE CONTRACTOR SHALL BE PERMITTED TO POST NO PARKING SIGNS ALONG PROJECT RT BETWEEN MALLARD STREET AND OLD DAIRY ROAD, BUT VALLEY LUMBER SHALL BE PROVIDED 7 DAYS' PRIOR NOTICE.
8. TWO WEEKS PRIOR TO PHASE II ROAD CLOSURE, CONTRACTOR SHALL COORDINATE WITH CAPITAL TRANSIT TO RELOCATE BUS STOP WEST OF ALPINE AVENUE, AND ESTABLISH AN ALTERNATE BUS ROUTE THAT BYPASSES CREST STREET.
9. CREST STREET IS THE PRIMARY ROUTE TO EGAN DRIVE FOR THE GLACIER/AIRPORT FIRE STATION. PROVIDE CAPITAL CITY FIRE AND RESCUE (586-5322) 3 DAYS NOTICE PRIOR TO ALL ROAD CLOSURES.

PROJECT DEADLINES		
PHASE	COMPLETION DATE	REQUIREMENTS
I	OCTOBER 15, 2021 OR 100 DAYS AFTER THE PHASE I ROAD CLOSURE.	WORK SHALL BE SUBSTANTIALLY COMPLETE.
II	JUNE 30, 2022 OR 100 DAYS AFTER THE PHASE II ROAD CLOSURE.	ALL WORK SHALL BE COMPLETE.
ADDITIONAL REQUIREMENTS		
A. IF THE CONTRACTOR ELECTS TO PERFORM BOTH PHASES IN 2021 PHASE I MAY REMAIN UN-PAVED UNTIL COMPLETION OF PHASE II, BUT THE CONTRACTOR SHALL INSTALL AT LEAST FOUR INCHES OF THE 2-INCH MINUS SHOT ROCK FOR THE ROAD SURFACING, AND SHALL MAINTAIN THE SURFACE FOR THE DURATION OF PHASE II WORK.		
B. IF THE CONTRACTOR ELECTS TO STOP WORK AFTER THE FIRST PHASE, PAVING SHALL BE COMPLETE, ALL DITCHES SHALL BE STABILIZED, ALL NEW LIGHTS SHALL BE ENERGIZED, AND ALL SIGNS SHALL BE INSTALLED PRIOR TO WINTER SHUTDOWN.		

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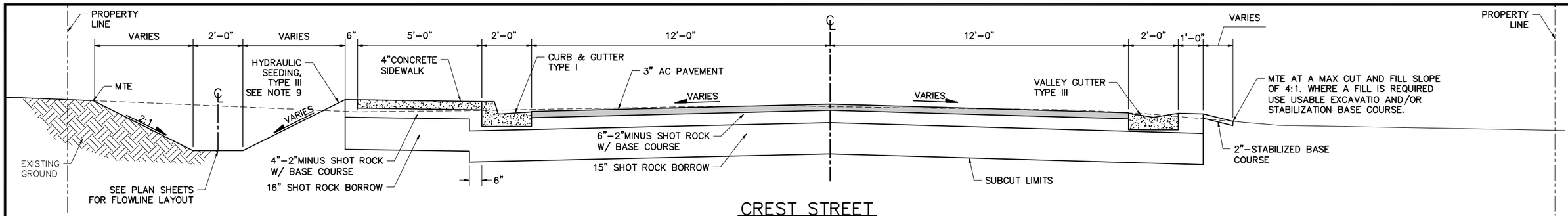
CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

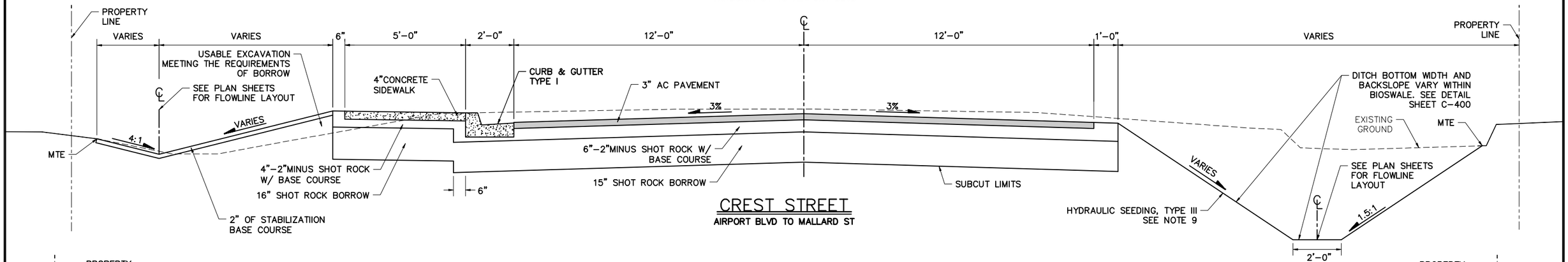
CREST STREET RECONSTRUCTION
BE21-219

TRAFFIC CONTROL AND PHASING REQUIREMENTS

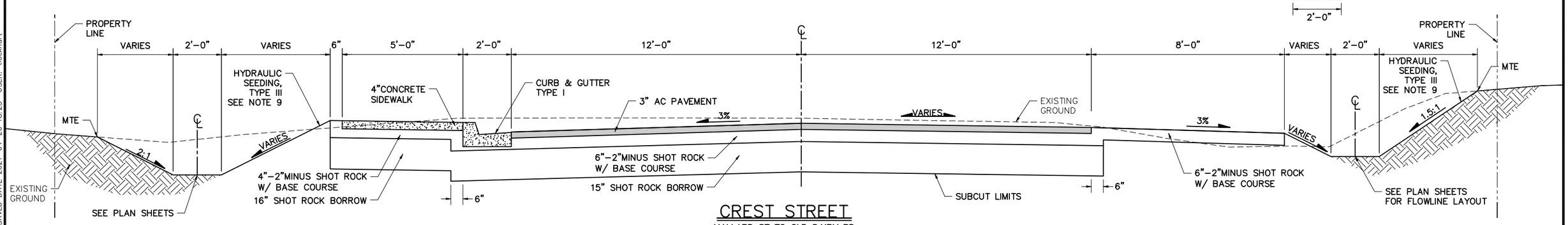
PROJECT 71095.01
DATE 4/20/2021
SHEET
G-003



CREST STREET
YANDUKIN ST TO AIRPORT BLVD



CREST STREET
AIRPORT BLVD TO MALLARD ST



CREST STREET
MALLARD ST TO OLD DAIRY RD

NOTES FOR TYPICAL SECTIONS

1. IF ORGANIC OR OTHER UNSUITABLE MATERIALS ARE FOUND AT OR NEAR THE PLANNED SUBCUT LEVEL, ADDITIONAL EXCAVATION MAY BE REQUIRED AS DIRECTED BY THE ENGINEER. USABLE MATERIAL FROM EXCAVATION SHALL BE USED TO BACKFILL THE ADDITIONAL AREAS OF EXCAVATION, WHICH MAY VARY FROM 6" IN DEPTH TO A DEPTH OF UP TO 5'-0" BELOW FINISH GRADE. BACKFILLING WITH USABLE MATERIAL FROM EXCAVATION WILL BE CONSIDERED INCIDENTAL TO EXCAVATION.
2. SANITARY SEWER AND WATER SERVICES ARE NOT SHOWN ON THE TYPICAL SECTION. SEE PLAN SHEETS FOR LOCATIONS.
3. SEE HORIZONTAL AND VERTICAL CONTROL, CURB AND GUTTER LAYOUT AND GRADE DRAWINGS FOR GRADING DETAILS.
4. DEPTH AND HORIZONTAL LOCATION OF EXISTING UNDERGROUND ELECTRICAL, WATER, AND SANITARY SEWER VARIES. SEE PLAN SHEETS FOR APPROXIMATE LOCATIONS.
5. TOP OF ASPHALT CONCRETE PAVEMENT SHALL BE ¼ INCH ABOVE THE LIP OF CONCRETE GUTTER. TOP OF PAVEMENT GRADES AND SLOPES GIVEN ON THE PLANS REFLECT THE ACTUAL FINISH PAVEMENT SURFACE.
6. THE 2-INCH MINUS SHOT ROCK W/BASE COURSE COURSE LAYER WITHIN THE ROADWAY SHALL BE 4" TO 5" OF 2-INCH MINUS SHOT ROCK WITH 1" TO 2" TOP LAYER OF BASE COURSE, GRADING D-1 FOR A TOTAL THICKNESS OF 6". THE 2-INCH MINUS SHOT ROCK SHALL BE COMPACTED WITH VIBRATORY EQUIPMENT PRIOR TO PLACING THE BASE COURSE GRADING D-1.
7. THE SIDEWALK BASE COURSE LAYER SHALL BE 3" OF 2-INCH MINUS SHOTROCK WITH 1" OF BASE COURSE, GRADING D-1. ALTERNATIVELY, 4" OF BASE COURSE, GRADING D-1 MAY ALSO BE USED UNDER THE SIDEWALK.
8. DRIVEWAYS DISTURBED DURING CONSTRUCTION SHALL BE RECONSTRUCTED TO EQUAL OR BETTER CONDITION WITH SUBGRADE REPLACED IN LAYERS TO MATCH THOSE REMOVED EXCEPT:
   A. PAVED DRIVEWAYS SHALL BE SUBCUT TO 8-1/2 INCHES BELOW FINISH GRADE AND REPLACED WITH 6" OF 2-INCH MINUS WITH BASE COURSE, AND 2-1/2" OF A.C. PAVEMENT.
   B. ALL WORK REQUIRED TO RECONSTRUCT GRAVEL DRIVEWAYS BEYOND THE BACK OF EXISTING CURB WILL BE CONSIDERED INCIDENTAL TO OTHER WORK AND NO ADDITIONAL PAYMENT WILL BE MADE.
   C. ORGANICS, ROOTS, WOOD OR OTHER DELETERIOUS MATERIALS ENCOUNTERED IN THE DRIVEWAYS DURING EXCAVATION OPERATIONS SHALL NOT BE REPLACED, BUT SHALL BE DISPOSED OF AT AN APPROVED DISPOSAL SITE. BACKFILL VOIDS BELOW THE REQUIRED SUBBASE LAYERS WITH USABLE MATERIAL FROM EXCAVATION.
9. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES NOT RESURFACED WITH ASPHALT PAVEMENT, CONCRETE OR BASECOURSE SHALL BE GRADED TO A UNIFORM, WELL DRAINED APPEARANCE AND STABILIZED WITH HYDRAULIC SEEDING, AS DIRECTED BY THE ENGINEER.

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th — Tobias A. Lockhart No. CE12602 — REGISTERED PROFESSIONAL ENGINEER

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CREST STREET RECONSTRUCTION
BE21-219

TYPICAL SECTIONS

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-100

CATCH BASIN FRAME AND GRATE SUMMARY

CATCH BASIN NO.	EAST JORDAN IRON WORKS, OLYMPIC FOUNDRY CO., CBJ STANDARD No., OR APPROVED EQUAL
CB-1	7701 T2 HOOD W/T100 M1 GRATE
CB-2	EJ 3721Z / 3700M GRATE
CB-3	EJ 3721Z / 3700M GRATE
CB-4	EJ 3700 Z / 3705 COVER
CB-5	EJ 3700 Z / 3705 COVER
CB-6	EJ 3721Z / 3700M GRATE
CB-7	OF SM18DI
CB-8	7701 T2 HOOD W/T100 M1 GRATE
CB-9	7701 T2 HOOD W/T100 M2 GRATE
CB-10	EJ 3721Z / 3700M GRATE
CB-11	EJ 3721Z / 3700M GRATE
CB-12	EJ 3721Z / 3700M GRATE
CB-13	7701 T2 HOOD W/T100 M1 GRATE
CB-14	EJ 3721Z / 3700M GRATE
CB-15	EJ 3721Z / 3700M GRATE
CB-16	7701 T2 HOOD W/T100 M2 GRATE
CB-17	EJ 3721Z / 3700M GRATE
CB-18	7701 T2 HOOD W/T100 M1 GRATE
CB-19	EJ 3721Z / 3700M GRATE
CB-20	7701 T2 HOOD W/T100 M2 GRATE
CB-21	EJ 3721Z / 3700M GRATE
CB-22	7701 T2 HOOD W/T100 M1 GRATE
CB-23	7701 T2 HOOD W/T100 M1 GRATE
CB-24	7701 T2 HOOD W/T100 M1 GRATE
CB-25	EJ 3721Z / 3700M GRATE
CB-26	EJ 3721Z / 3700M GRATE
CB-27	7701 T2 HOOD W/T100 M1 GRATE
CB-28	EJ 3721Z / 3700M GRATE
CB-29	EJ 3721Z / 3700M GRATE
CB-30	OF SM18DI
CB-31	EXISTING TO REMAIN
CB-32	EJ 3700 Z / 3705 COVER
CB-33	7701 T2 HOOD W/T100 M2 GRATE
TD-1	ACO KLASSIKDRAIN – K200 "678Q DUCTILE IRON LONGITUDINAL GRATE"
TD-2	ACO KLASSIKDRAIN – K200 "678Q DUCTILE IRON LONGITUDINAL GRATE"

CATCH BASIN TOP SLAB OPENINGS SHALL BE DIMENSIONED TO FIT THE FRAME DIMENSIONS. ALL COVERS SHALL BE HEAVY DUTY CONSTRUCTION AND BICYCLE SAFE. ALL FRAMES AND GRATES SHALL BE DUCTILE IRON.

ALL FINISHED GRADES (FG) PROVIDED ARE TO THE FLOWLINE OF FRAME AT THE LONGITUDINAL CENTER OF THE FRAME AFTER APPLICATION OF THE LOCALIZED DEPRESSION. FOR TYPE I CURB AND GUTTER THE FG WILL BE 0.56' BELOW THE TBC AND 0.14' BELOW THE LG. FOR TYPE III VALLEY GUTTER, THE FG WILL BE 0.17' BELOW BOTH THE TBVG AND LG.

STD 309 FOR TYPE I CURB AND GUTTER SHALL BE MODIFIED AS FOLLOWS: THE LOCALIZED DEPRESSION AT THE CATCH BASIN SHALL BE ¾", WITH 36" TRANSITIONS TO EACH SIDE OF THE FRAME, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. FOR TYPE III VALLEY GUTTER THE LOCALIZED DEPRESSION SHALL BE 1", WITH 36" TRANSITIONS TO EACH SIDE OF THE FRAME (NOTE: FOR THE OF SM 18DI FRAME, THIS WILL RESULT IN A UNIFORM FLOW LINE GRADIENT AT 2" BELOW TBVG GRADES PROVIDED, WITH 36" LONG TAPERS ALONG THE EDGES OF THE GUTTER PAN TO MATCH THE FRAME). IN BOTH CASES THE ROADWAY CROSS-SLOPE SHALL BE MAINTAINED AND THE EDGE OF ASPHALT SHALL NOT DIP ACROSS THE FRAME AND TRANSITIONS.

UTILITY FRAME AND COVER SUMMARY

STATION	OFFSET	UTILITY	SIZE	EXISTING CONFIGURATION	EXISTING ELEVATION	FINISH ELEVATION	REMARKS
11+10.8	11.6' RT	ELECTRICAL	4'X4'	SOLID CONCRETE TOP	28.57	28.03	AEL&P TO REPLACE VAULT ROOF. AND FURNISH 2-FT DIAMETER FRAME AND "ELECTRIC" COVER. COORDINATE WORK AS REQUIRED.
13+17.6	4.2' RT	TELEPHONE	4'X9'	6"FRAME, 2"INFA-RISER, 8"CONC RISER, 13" CONC RISER, 9" FLAT TOP	27.18	27.10	ADJUST EXISTING OR OWNER-SUPPLIED FRAME AND COVER TO GRADE.
15+35.0	4.5' RT	TELEPHONE	4'X8'	6"FRAME, 3"INFA-RISER, 10"CONC RISER, 8" FLAT TOP	27.39	27.20	ADJUST EXISTING OR OWNER-SUPPLIED FRAME AND COVER TO GRADE.
19+84.3	3.0' RT	TELEPHONE	4'X8'	6"FRAME, 2"INFA-RISER, 8"FLAT TOP	28.17	28.12	ADJUST EXISTING OR OWNER-SUPPLIED FRAME AND COVER TO GRADE.

WATER SERVICE SUMMARY

PROPERTY NUMBER	LOCATION	SIZE/TYPE	COMMENTS
8550	14+02.91, 24.20' RT	6" HDPE	CTE
1850	17+32.99, 42.01' LT	6" HDPE	CTE
8620	17+94.85, 32.59' LT	6" HDPE	CTE
USS 1195	18+32.58, 25.32' RT	6" HDPE	CAP AT PROPERTY LINE
1880	19+17.82, 26.89' LT	6" HDPE	CTE
1900	19+59.50, 27.06' RT	6" HDPE	CTE
8252	21+47.81, 26.56' RT	6" HDPE	CTE
8717	21+70.41, 30.67' LT	6" HDPE	CTE
8745	22+37.49, 41.06' LT	8" HDPE	SEE DETAIL, SHEET C-402

INSTALL NEW WATER SERVICE, CURB STOP, AND CURB BOX PER CBJ STANDARD DETAIL 406A. STATION AND OFFSET ARE GIVEN TO THE CENTER OF THE VALVE BOX.

SEWER SERVICE SUMMARY

HOUSE NUMBER	LOCATION	COMMENTS
8850	16+69.67, 28.97' RT	CTE
1850	16+64.83, 29.88' LT	CTE
USS 1195	17+92.70, 28.83' RT	CAP FOR FUTURE CONNECTION
8525	24+27.23, 28.81' RT	CTE

NOTES:

1.) STATION AND OFFSET ARE GIVEN TO THE CENTER OF THE NEW CLEANOUT COVER.

2.) INSTALL NEW 6" PVC SEWER SERVICE WITH CLEANOUT PER CBJ STANDARD DETAIL 213 AND CONNECT TO EXISTING SEWER SERVICE AT PROPERTY LINE.

SEEDING, HYDRAULIC METHOD, TYPE III

START STATION	END STATION	AREA (SY)	REMARKS
10+33.2, 56.9' LT	10+96.5, 19.5' LT	108.5	
11+28.4, 19.5' LT	12+80.4, 39.4' LT	132.7	
13+22.1, 95.5' RT	13+88.4, 23.7' RT	225.3	BIOSWALE, SEE NOTE 1
14+45.7, 23.0' RT	18+10.1, 19.3' RT	694.8	BIOSWALE, SEE NOTE 1
18+55.5, 19.3' RT	19+01.2, 19.3' RT	90.0	
19+63.2, 19.0' RT	20+27.5, 24.8' RT	93.6	
20+82.6, 19.1' RT	21+50.7, 18.5' RT	103.2	
21+80.4, 18.3' RT	23+35.5, 23.5' RT	138.0	
22+46.7, 61.0' LT	22+74.3, 19.5' LT	10.2	
23+07.4, 21.4' LT	25+10.1, 19.5' LT	132.0	
23+67.9, 23.6' RT	26+25.5, 22.0' RT	147.8	
25+43.9, 19.5' LT	26+72.3, 33.5' LT	84.6	

1) HYDRAULIC SEEDING WITH THE BIOSWALE WILL ALSO CONTAIN BIOTIC SOIL AND EROSION CONTROL MEDIA PER DETAIL 1 ON C-400.

STABILIZATION BASE COURSE

START STATION	END STATION	AREA (SY)
13+20.45, 57.97' LT	14+72.78, 19.50' LT	121.89
15+04.12, 19+50' LT	15+77.61, 19.50' LT	44.02
16+00.19, 19+50' LT	17+36.70, 32.90' LT	69.83
17+40.01, 40.97' LT	17+40.67, 67.00' LT	4.21
17+79.59, 67.00' LT	17+83.04, 33.68' LT	10.55
17+86.30, 29.00' LT	19+42.19, 19.50' LT	87.17
19+89.68, 19.50' LT	21+29.16, 19.50' LT	92.40
21+61.16, 19.50' LT	21+80.33, 32.36' LT	10.57
21+89.71, 31.25' LT	21+94.66, 61.00' LT	2.71

REVISIONS

REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

DOWL
AECL848
WWW.DOWL.COM
9085 Glacier Highway
Juneau, Alaska 99801
907-780-3533

CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

SUMMARY TABLES

PROJECT 71095.01
DATE 4/20/2021

SHEET
C-101

NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO THE CENTER OF STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. CONNECT TO EXISTING 12" DI AND INSTALL TWO 18-LB ANODES PER SHEET C-401.
4. CTE 8"PVC SEWER AT ~STA 11+86 WITH A BELL AND SPIGOT JOINT. ARC SS-1 AS REQUIRED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
5. SUPPORT EXISTING LIGHT POLE AT STA 10+60.3, 28.0' LT OR REMOVE AND REPLACE AS REQUIRED TO INSTALL CB-2.
6. CONTRACTOR TO PROVIDE BOTH A 45-DEGREE AND 22.5-DEGREE 16"HDPE BEND AT STA 10+50 RT, AND UTILIZE THE FITTING THAT BEST FITS THE PROPOSED ALIGNMENT OF THE 16" MAIN.
7. FILL THE EXISTING DITCH LINE WITH USABLE EXCAVATION IN 2-FT LIFTS AND GRADE TO DRAIN. STABILIZE THE FINISH SURFACE WITH 2-INCHES OF TOPSOIL AND SEEDING.

CB-1 STA "C" 10+60.7, 12.7' LT	
TYPE IV	
FG	EL=27.97
INV SD-2	EL=23.14

CB-2 STA "C" 10+67.1, 24.99' LT	
TYPE II W/ AREA DRAIN AND OIL/WATER SEPARATOR PER CBJ STD 305	
FG	EL=26.75
INV SD-1	EL=21.05
INV SD-2	EL=23.00
INV SD-3	EL=21.10

PIPE SUMMARY - STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-1	36"	19.97	CPP	0.001
SD-2	12"	9.66	CPP	0.010
SD-3	36"	102.24	CPP	0.001
SD-4	12"	4.59	CPP	0.012
SD-5	36"	78.73	CPP	0.001
SS-1	8"	110.65	PVC	0.006

CB-3 STA "C" 11+75.0, 25.1' LT	
TYPE III W/ AREA DRAIN	
FG	EL=25.78
INV SD-4	EL=22.91

CB-4 STA "C" 11+75, 16.56' LT	
TYPE II	
FG	EL=28.21
INV SD-3	EL=21.25
INV SD-4	EL=22.81
INV SD-5	EL=21.30

REGRADE EXISTING DITCH
STA: 10+56.00 100.44' LT
FL EL 20.68

REGRADE EXISTING DITCH
STA: 10+55.33 73.27' LT
FL EL 20.79

SD-1 OUTFALL
STA: 10+57.52 45.86' LT
INV EL 21.00

TOP OF FILL
STA: 10+62.03 36.17' LT
FL EL 27.17

TOP OF FILL
STA: 10+71.59 47.18' LT
FL EL 28.44

CL DITCH
STA: 10+69.59 24.62' LT
FL EL 26.86

1720
JMA BUILDING LLC

CL DITCH
STA: 11+77.50 25.11' LT
FL EL 25.95

CL DITCH
STA: 11+72.50 25.20' LT
FL EL 25.95

EDGE FILL

CL DITCH
STA: 10+90.44 21.56' LT
FL EL 27.82

CL DITCH
STA: 11+28.64 21.21' LT
FL EL 28.22

CL DITCH
STA: 10+96.45 20.68' LT
FL EL 28.44

CL DITCH
STA: 11+34.58 22.33' LT
FL EL 27.63

TOE OF FILL
SEE NOTE 7

TOP OF FILL
STA: 10+48.99 31.91' LT
FL EL 27.11

YANDUKIN DRIVE

SAWCUT/MTE

MATCHLINE STA "C" 12+00

SD-1
36"CPP

SD-2
12"CPP

SD-3
36"CPP

SD-4
12"CPP

SD-5
36"CPP

CB-1
CB-2
CB-3
CB-4

30"X40" CMP

SEE NOTE 5

BP: 10+00.00

10+00

INSTALL BEND
STA: 10+50.56, 7.50' RT
SEE NOTE 6

11+00

8" PVC

SEE NOTE 4

8"PVC
SS-1

CREST STREET

7.5' TYP

16" HDPE

SEE NOTE 3

16" BV
STA: 10+54.42
7.50' RT

ELECTRICAL VAULT
SEE SHEET C-101

12" DI

24" CMP

8575
GREGORY WILLIAM WILCOX

10 5 0 10 20 30
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA
49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

DOWL
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9085 Glacier Highway
Juneau, Alaska 99801
907-780-3533

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
YANDUKIN DR TO STA "C" 12+00

PROJECT 71095.01
DATE 4/20/2021

SHEET
C-201

C:\dowl_pw\d0389703\SC20-CT-RD-71095.dwg PLOT DATE 2021-4-20 23:45 SAVED DATE 2021-04-20 23:41 USER: tlockhart

NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO THE CENTER OF STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. CTE 12"DI AND INSTALL TWO 18-LB ANODES PER SHEET C-401.
4. CTE 8"DI AND INSTALL ONE 18-LB ANODE PER SHEET C-401.
5. REPLACE FRAME AND COVER TO GRADE.
6. CTE 8"PVC WITH A BELL AND SPIGOT JOINT OR AN LSS-1 NON-SHEAR COUPLING.
7. SEE SHEET C-403 FOR SANITARY SEWER SWITCH OVER REQUIREMENTS.

CB-8 STA "C" 12+87.5, 40.1' LT	
TYPE III	
FG	EL=26.07
INV SD-9	EL=23.35

CB-5 STA "C" 12+58.9, 28.25' LT	
TYPE II	
FG	EL=26.83
INV SD-5	EL=21.42
INV SD-6	EL=21.47

MH-1 STA "C" 12+99.7, 6.80' LT	
TYPE II	
FG	EL=27.06
INV SS-1	EL=20.50
INV SS-2	EL=19.78
INV SS-3	EL=19.93
INV SS-4	EL=19.77

CB-6 STA "C" 12+74.5, 38.7' RT	
TYPE IV	
FG	EL=26.00
INV SD-7	EL=22.03
INV SD-8	EL=21.88
INV EXIST 24" CMP (E)	EL=21.93
INV 6"PVC (S)	EL=23.43

CB-7 STA "C" 12+79.8, 25.9' RT	
TYPE III	
FG	EL=26.69
INV SD-7	EL=22.17

PIPE SUMMARY – STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-5	36"	78.73	CPP	0.001
SD-6	36"	89.10	CPP	0.001
SD-7	12"	11.04	CPP	0.010
SD-8	24"	44.91	CPP	0.001
SD-9	12"	24.58	CPP	0.005
SD-10	24"	10.32	CPP	0.004
SD-11	12"	34.26	CPP	0.006
SD-12	12"	46.64	CPP	0.005
SS-1	8"	110.65	PVC	0.006
SS-2	21"	50.05	PVC Pipe	0.001
SS-3	8"	44.62	PVC	0.004
SS-4	21"	448.62	PVC Pipe	0.001

CB-9 STA "C" 13+13.8, 44.3' LT	
TYPE III	
FG	EL=26.00
INV SD-9	EL=23.22
INV SD-11	EL=23.17

CB-10 STA "C" 13+44.7, 24.2' LT	
TYPE III W/ AREA DRAIN	
FG	EL=25.95
INV SD-11	EL=22.96
INV SD-12	EL=22.91

CB-11 STA "C" 13+93.3, 25.9' LT	
TYPE III W/ AREA DRAIN	
FG	EL=25.71
INV SD-12	EL=22.67
INV SD-15	EL=22.62
INV EXIST 4" PVC (W)	EL=23.55

1720 JMA BUILDING LLC

8600 VMS LIMITED PARTNERSHIP

8575 GREGORY WILLIAM WILCOX

8550 NC MACHINERY

AIRPORT BLVD

CREST STREET

MATCHLINE STA "C" 12+00

MATCHLINE STA "C" 14+00

FIRE HYDRANT STA: 12+78.58 44.00' LT

CL DITCH STA: 12+77.47 38.27' LT FL EL 26.59

CL DITCH STA: 12+53.95 23.35' LT FL EL 26.33

SEE NOTE 4

SAWCUT/MTE

SEE NOTE 6

10"x10"x8" TEE

SEE NOTE 7

INSTALL 16"X16"X16" TEE STA: 12+85.16 7.50' RT

7.5' TYP

16" BV

16" BV

12" GV

INSTALL 12"X12"x10" TEE STA: 12+91.96 7.50' RT

16"X12" REDUCER

TELEPHONE VAULT SEE NOTE 5

6"PVC INV EL=22.05

SEE NOTE 3

SAWCUT/MTE

CTE W/LSS-1 NON-SHEAR COUPLING

SD-8 STA: 13+20.92 44.17' RT INV EL 21.83

CL SWALE STA: 13+22.61 59.04' LT FL EL 26.18

CL SWALE STA: 13+22.45 52.93' LT FL EL 26.16

CL SWALE STA: 13+42.19 24.45' LT FL EL 25.97

CL SWALE STA: 13+47.19 24.03' LT FL EL 25.97

CL SWALE STA: 13+95.81 25.75' LT FL EL 25.75

REMOVE/DISPOSE OF EXISTING AREA DRAIN AND CTE 4"PVC

CL SWALE STA: 13+90.81 25.79' LT FL EL 25.75

CL BIOSWALE STA: 13+46.37 23.63' RT FL EL 21.55

SD-13 AND SD-14 HEADWALL STA: 13+88.39 23.70' RT INV EL 21.67

CL BIOSWALE STA: 13+39.90 24.75' RT FL EL 21.51

SD-6 HEADWALL W/TRASHRACK STA: 13+34.65 24.21' RT INV EL = 21.60

SD-10 HEADWALL STA: 13+34.40 26.82' RT INV EL 21.70

SD-10 HEADWALL STA: 13+27.08 34.10' RT INV EL 21.73

BEGIN 6-FT BIOSWALE STA: 13+23.47 51.74' RT FL ELEV 21.83

BEGIN 2-FT WIDE BIOSWALE TRANSITION TO 6-FT WIDE BIOSWALE STA: 13+22.58 67.08' RT FL ELEV 23.12

BEGIN DITCH STA: 13+22.07 95.54' RT FL ELEV 25.48

CB-5 CB-6 CB-7 CB-8 CB-9 CB-10 CB-11

SD-5 36"CPP SD-6 36"CPP SD-7 12"CPP SD-8 24"CPP SD-9 12"CPP SD-10 24"CPP SD-11 12"CPP SD-12 12"CPP

SS-1 8"PVC SS-2 21"PVC Pipe SS-3 8"PVC SS-4 21"PVC Pipe

24"X36"CMP 24"CMP 18" AC 12" DI 10" DI 8" DI 8" PVC 16" HDPE 12" HDPE 10" HDPE 10" GV 21"PVC Pipe

SCALE IN FEET: 10 5 0 10 20 30

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

DOWL AECL848 WWW.DOWL.COM 9085 Glacier Highway Juneau, Alaska 99801 907-780-3533

CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
STA "C" 12+00 TO STA "C" 14+00

PROJECT 71095.01
DATE 4/20/2021

SHEET C-202

C:\dowl_pw\d03897033\SC20-CT-RD-71095.dwg PLOT DATE 2021-4-20 23:43 SAVED DATE 2021-04-20 23:41 USER: tlockhart

NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO THE CENTER OF STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. REPLACE FRAME AND COVER TO FG. SEE SHEET C-101.
4. INSTALL 6"GV AND CTE WITH ALL FITTINGS AS REQUIRED.
5. TRIM 6"PVC FLUSH WITH BACKSLOPE OF BIOSWALE.

CB-12 STA "C" 14+51.0, 25.8' LT	
TYPE IV W/ AREA DRAIN	
FG	EL=25.42
INV SD-15	EL=22.30
INV SD-16	EL=22.25
INV EXIST 4"PVC(N)	EL=23.97
INV EXIST 4"PVC(SW)	EL=23.40

CB-13 STA "C" 14+51.0, 12.7' LT	
TYPE IV	
FG	EL=26.39
INV SD-16	EL=22.18
INV SD-17	EL=22.13

CB-14 STA "C" 15+50.0, 24.9' LT	
TYPE III W/ AREA DRAIN	
FG	EL=25.70
INV SD-19	EL=23.00
INV SD-18	EL=22.95

CB-15 STA "C" 16+09.0, 24.9' LT	
TYPE III W/ AREA DRAIN	
FG	EL=26.05
INV SD-19	EL=23.29

PIPE SUMMARY – STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-13	24"	57.30	CPP	0.003
SD-14	24"	57.30	CPP	0.003
SD-15	12"	55.70	CPP	0.006
SD-16	12"	11.09	CPP	0.005
SD-17	18"	31.58	CPP	0.005
SD-18	12"	44.03	CPP	0.015
SD-19	12"	56.98	CPP	0.005
SS-4	21"	448.62	PVC Pipe	0.001

8600
VMS LIMITED PARTNERSHIP

1850
SHAWN J OBRIEN

8550
NC MACHINERY

MATCHLINE STA "C" 14+00

MATCHLINE STA "C" 16+50

CREST STREET

CL DITCH STA: 14+53.50 25.84' LT FL EL 25.49
CL DITCH STA: 14+48.50 25.64' LT FL EL 25.48
CL DITCH STA: 14+66.46 22.52' LT FL EL 26.33
CL DITCH STA: 15+04.47 20.96' LT FL EL 26.91
CL DITCH STA: 15+10.46 22.26' LT FL EL 26.61
CL DITCH STA: 15+47.50 24.36' LT FL EL 25.87
CL DITCH STA: 15+52.50 24.44' LT FL EL 25.87
CL DITCH STA: 15+71.62 24.33' LT FL EL 26.40
CL DITCH STA: 15+77.62 22.29' LT FL EL 27.15
CL DITCH STA: 16+00.19 20.92' LT FL EL 27.19
CL DITCH STA: 16+06.48 24.44' LT FL EL 26.17
CL DITCH STA: 16+11.48 24.51' LT FL EL 26.17
CL DITCH STA: 16+49.21 21.03' LT FL EL 26.87

REMOVE/DISPOSE OF EXISTING AREA DRAIN AND CTE 4"PVC INLETS
REMOVE/DISPOSE OF EXISTING AREA DRAIN
REMOVE/DISPOSE OF EXISTING AREA DRAIN

12"CPP SD-15 CB-12
4"PVC
SD-16 12"CPP
CB-13
24"X36" CMP
CB-14
SD-19 12"CPP
CB-15
24"X36" CMP
21"PVC Pipe SS-4
SD-18 12"CPP
18" CMP
SD-17 18"CPP
12" HDPE
6" HDPE
8" HDPE
10" DI
24"CPP SD-13
24"CPP SD-14

15+00
16+00
7.5' TYP
TELEPHONE VAULT SEE NOTE 3

SD-17 STA: 14+51.00 19.94' RT INV EL 21.97
SD-18 STA: 15+50.00 20.13' RT INV EL 22.27
SEE NOTE 4
CL BIOSWALE STA: 14+51.00 22.94' RT FL EL 21.87
SD-13 AND SD-14 HEADWALL STA: 14+45.69 23.01' RT INV EL 21.85
SEE NOTE 5
CL BIOSWALE STA: 15+50.00 23.13' RT FL EL 22.17
SEE NOTE 4
6"PVC

N

10 5 0 10 20 30
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

DOWL
AECL848
WWW.DOWL.COM
9085 Glacier Highway
Juneau, Alaska 99801
907-780-3533

CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
STA "C" 14+00 TO STA "C" 16+50

PROJECT 71095.01
DATE 4/20/2021

SHEET
C-203

NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO CENTER OF THE STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. CTE 8"DI WITH A 10"X8" HDPE REDUCER AND 8"MJ ADAPTER AND INSTALL ONE 18-LB ANODE PER SHEET C-401.
4. INSTALL 6"PVC SEWER SERVICE W/CLEANOUT AND CTE WITH ALL NON-SHEAR FITTINGS AS REQUIRED.
5. INSTALL 6"GV AND CTE W/ALL FITTINGS AS REQUIRED.
6. INSTALL 6"PVC SEWER SERVICE W/CLEANOUT TO PROPERTY LINE AT 2% MIN GRADE AND CAP FOR FUTURE CONNECTION.
7. INSTALL 6"GV TO PROPERTY LINE AND CAP FOR FUTURE CONNECTION.
8. LONG RADIUS SWEEPS TO BE APPROXIMATELY 8-FT LONG WITH A 12-FT MIN. RADIUS OR APPROVED EQUAL. SEE SANITARY SEWER SWITCH OVER REQUIREMENTS, SHEET C-403.

PIPE SUMMARY – STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-20	18"	44.60	CPP	0.005
SD-21	12"	13.49	CPP	0.010
SD-22	18"	46.06	CPP	0.017
SD-23	18"	39.55	CPP	0.003
SD-24	24"	33.24	CPP	0.002
SD-25	12"	11.48	CPP	0.002
SD-26	18"	45.14	CPP	0.009
SD-27	24"	114.87	CPP	0.002
SS-4	21"	448.62	PVC Pipe	0.001
SS-5	21"	52.78	PVC Pipe	0.001

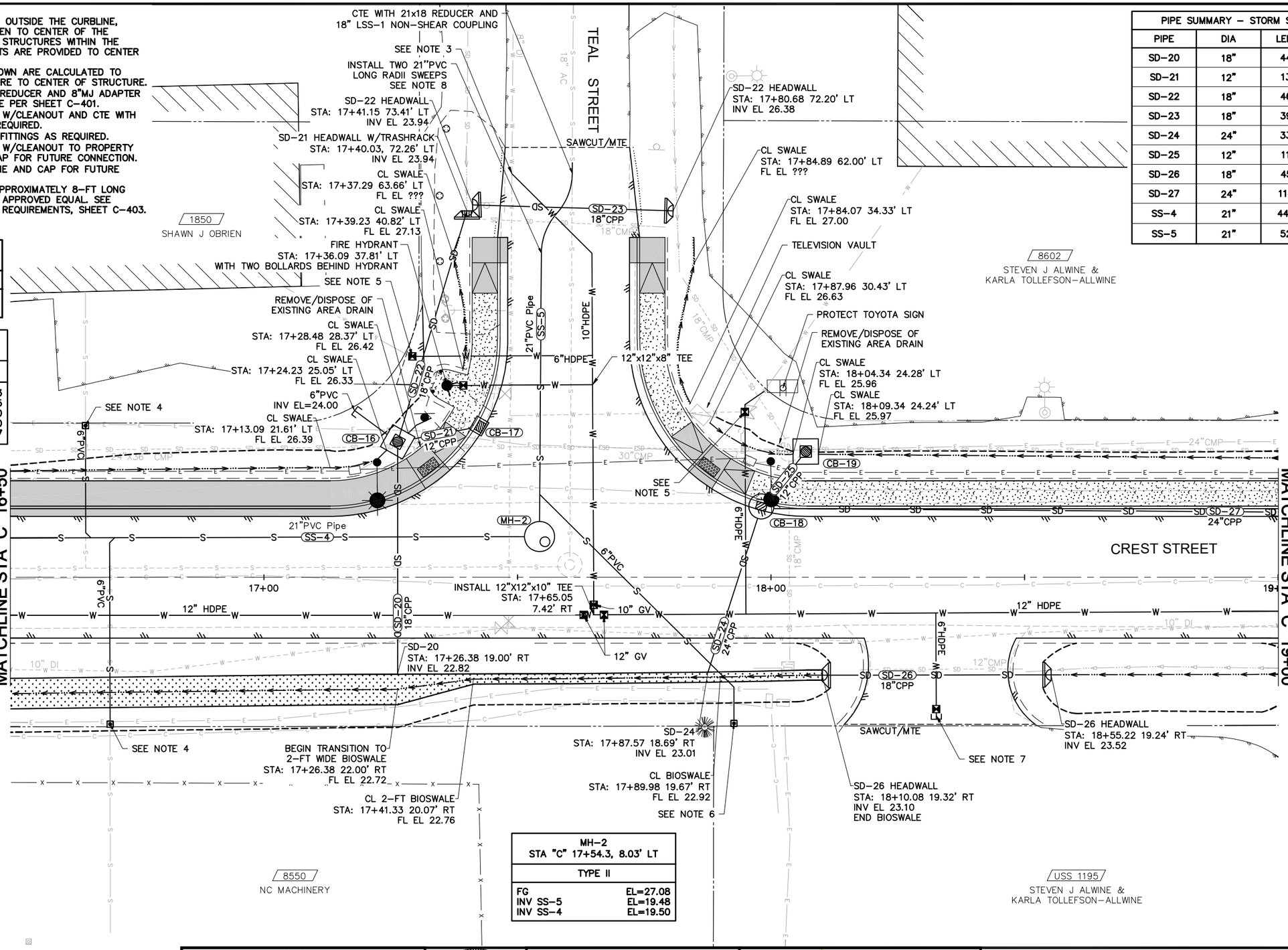
CB-17 STA "C" 17+42.5, 29.8' LT	
TYPE III	
FG	EL=26.51
INV SD-21	EL=23.33

CB-16 STA "C" 17+26.4, 26.70' LT	
TYPE I W/ AREA DRAIN	
FG	EL=26.33
INV SD-20	EL=23.05
INV SD-21	EL=23.50
INV SD-22	EL=23.10
INV 6"PVC (SW)	EL=24.27

CB-19 STA "C" 18+06.8, 24.8' LT	
TYPE III W/ AREA DRAIN	
FG	EL=25.82
INV SD-25	EL=23.16

CB-18 STA "C" 17+98.1, 13.88' LT	
TYPE I	
FG	EL=26.46
INV SD-24	EL=23.08
INV SD-25	EL=23.13
INV SD-27	EL=23.13

MH-2 STA "C" 17+54.3, 8.03' LT	
TYPE II	
FG	EL=27.08
INV SS-5	EL=19.48
INV SS-4	EL=19.50



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SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

DOWL AECL848 WWW.DOWL.COM
9085 Glacier Highway
Juneau, Alaska 99801
907-780-3533

CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
STA "C" 16+50 TO STA "C" 19+00

PROJECT 71095.01
DATE 4/20/2021
SHEET C-204

C:\dowl_pw\d0389703\SC20-CT-RD-71095.dwg PLOT DATE 2021-4-20 23:52 SAVED DATE 2021-04-20 23:51 USER: tlockhart

NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO THE CENTER OF STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. REPLACE FRAME AND COVER TO GRADE. SEE SHEET C-101.
4. INSTALL 6"GV AND CTE W/ALL FITTINGS AS REQUIRED.
5. INSTALL WATER MAIN RT OF CABLE VAULT AT 19+85 AS REQUIRED AND ADJUST ALIGNMENT AS REQUIRED FOR MALLARD STREET VALVE CLUSTER.
6. VALVE FOR NUGGET MALL FIRE SERVICE IS WITHIN THE DMV EXPRESS BUILDING. SEE SHEET C-402.

PIPE SUMMARY – STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-27	24"	114.87	CPP	0.002
SD-28	12"	61.73	CPP	0.009
SD-29	24"	81.45	CPP	0.002
SD-30	24"	172.73	CPP	0.001
SD-31	12"	57.84	CPP	0.004

CB-20
STA "C" 19+15.0, 12.75' LT
TYPE I
FG EL=27.32
INV SD-27 EL=23.36
INV SD-29 EL=23.41

CB-21
STA "C" 19+98.6, 24.78' LT
TYPE I W/ AREA DRAIN
FG EL=26.98
INV SD-29 EL=23.57
INV SD-30 EL=23.61
INV EXIST 12" CMP (W) EL=23.89

8717
KARLA AND STEVE ALLWINE

8602
STEVEN J ALWINE & KARLA TOLLEFSON–ALLWINE

SEE NOTE 6

CL SWALE
STA: 19+37.41 21.29' LT
FL EL 27.67

CL SWALE
STA: 19+31.21 22.20' LT
FL EL 27.37

CL SWALE
STA: 19+96.09 25.08' LT
FL EL 27.00

CL SWALE
STA: 19+89.68 22.02' LT
FL EL 27.73

CL SWALE
STA: 20+01.09 25.18' LT
FL EL 27.00

CL SWALE
STA: 21+23.16 21.71' LT
FL EL 28.48

SAWCUT/MTE

24"CMP

24"CPP SD-30

12"CMP

CB-21

SD-29 24"CPP

CB-20

MATCHLINE STA "C" 19+00

MATCHLINE STA "C" 21+50

19+00

20+00

21+00

12"x12"x8" TEE

12" HDPE

TELEPHONE VAULT
SEE NOTE 3

SEE NOTE 5

10" DI

6"HDPE

SD-28 12"CPP

SAWCUT/MTE

SEE NOTE 4

PROTECT BUILDERS PLAZA SIGN

PROTECT TIMBER RETAINING WALL

SD-31 HEADWALL
STA: 20+26.30 18.90' RT
INV EL 24.77

SD-31 12"CPP

SAWCUT/MTE

SD-31 HEADWALL
STA: 20+84.14 18.99' RT
INV EL 25.00

SD-32 HEADWALL
STA: 21+47.60 19.09' RT
INV EL 25.25

SEE NOTE 4

FIRE HYDRANT
STA: 19+13.04 25.12' RT

SD-28 HEADWALL
STA: 19+01.78 19.14' RT
INV EL 23.95

SD-28 HEADWALL
STA: 19+63.51 18.79' RT
INV EL 24.52

USS 1195
STEVEN J ALWINE & KARLA TOLLEFSON–ALLWINE

1880
BUILDERS PLAZA TWO CONDOMINIUM ASSOC.

1900
LONNIE AND BEVERLY ANDERSON LIVING TRUST

8525
HOLDINGS LLC

N

10 5 0 10 20 30
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

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9085 Glacier Highway
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907-780-3533

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
STA "C" 19+00 TO STA "C" 21+50

PROJECT 71095.01
DATE 4/20/2021

SHEET
C-205

C:\dowl_pw\d0389703\SC20-CT-RD-71095.dwg PLOT DATE 2021-4-20 23:43 SAVED DATE 2021-04-20 23:41 USER: tlockhart

NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO THE CENTER OF STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. CTE 8"DI AND INSTALL ONE 18-LB ANODE PER SHEET C-401.
4. INSTALL 6"GV AND CTE WITH ALL FITTINGS AS REQUIRED.
5. FIELD VERIFY INVERT OF VALLY LUMBER SEWER SERVICE PRIOR TO INSTALLING WYE.

CB-23 STA "C" 22+01.4, 55.0' LT	
TYPE III	
FG	EL=27.63
INV SD-33	EL=24.55
INV SD-35	EL=24.66

CB-24 STA "C" 22+39.9, 57.6' LT	
TYPE III	
FG	EL=27.76
INV SD-35	EL=24.86
INV EXIST 18" CMP	EL=24.89

CB-25 STA "C" 22+68.6, 23.69' LT	
TYPE I W/ AREA DRAIN	
FG	EL=28.17
INV SD-34	EL=23.98
INV SD-36	EL=24.03

CB-26 STA "C" 24+25.0, 24.1' LT	
TYPE IV W/ AREA DRAIN	
FG	EL=27.39
INV SD-36	EL=24.34
INV SD-38	EL=24.39

PIPE SUMMARY – STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-32	12"	34.98	CPP	0.004
SD-33	12"	36.35	CPP	0.009
SD-34	24"	90.86	CPP	0.001
SD-35	12"	36.09	CPP	0.005
SD-36	18"	153.35	CPP	0.002
SD-37	8"	32.35	HP PVC	0.005
SD-38	18"	48.70	CPP	0.003

CB-22 STA "C" 21+74.8, 26.04' LT	
TYPE I W/ AREA DRAIN	
FG	EL=28.16
INV SD-30	EL=23.80
INV SD-33	EL=24.20
INV SD-34	EL=23.85

MH-3 STA "C" 22+19.4, 3.7' LT	
EXISTING TYPE I*	
FG	EL=28.88
INV EXIST 8"PVC	EL=22.09
INV EXIST 4"PVC**	EL=23.13
*TO REMAIN. INSTALL NEW FRAME AND GRATE. POWERWASH INTERIOR. WATERPROOF EXTERIOR.	
**RELOCATE EXISTING SERVICE AS SHOWN AND GROUT EXISTING 4" MH PENETRATION.	

MALLARD STREET
CREST STREET
MATCHLINE STA "C" 21+50
MATCHLINE STA "C" 24+25
FIRE HYDRANT STA: 21+81.82 28.00' LT INSTALL FOUR BOLLARDS
CAP WATER LINE AT PROPERTY LINE
SEE NOTE 3
SEE NOTE 4
SEE NOTE 5
CL SWALE 21+72.33 25.37' LT FL EL 28.21
CL SWALE 21+62.13 21.30' LT FL EL 28.78
8717 KARLA AND STEVE ALLWINE
PROPANE TANKS
CL DITCH STA: 22+46.66 46.98' LT FL EL 28.48
TYPE I MH W/CHECK VALVE SEE DETAIL, SHEET C-402
CTE WITH ALL FITTINGS REQUIRED
TELEPHONE VAULT
CL DITCH STA: 22+66.15 23.39' LT FL EL 28.16
CL DITCH STA: 22+71.16 22.39' LT FL EL 28.23
8745 NUGGET MALL
NUGGET MALL LLC
CL DITCH STA: 23+12.22 21.80' LT FL EL 28.58
CL DITCH STA: 24+22.50 24.08' LT FL EL 27.41
SAWCUT/MTE
10"x10"x8" TEE
8" HDPE
8"GV
10" HDPE
6" HDPE
12" HDPE
10" GV 22+00
12" GV
MH-3
4"PVC
23+00
24+00
INSTALL 12"X12"x10" TEE STA: 22+03.48 2.01' RT
REMOVE EXISTING CATCH BASIN AND CUT THE EXISTING 8"CPP TO MATCH THE BACKSLOPE OF THE NEW DITCH.
SD-32 HEADWALL STA: 21+82.70 18.78' RT INV EL 25.39
CL DITCH STA: 21+84.26 18.83' RT FL EL 25.43
CL DITCH STA: 22+39.98 16.64' RT FL EL 26.77
CL DITCH STA: 22+82.74 16.04' RT FL EL 27.09
CL DITCH STA: 22+91.35 23.31' RT FL EL 27.13
SD-37 HEADWALL STA: 23+35.53 23.35' RT INV EL 27.33
SD-37 HEADWALL STA: 23+67.88 23.39' RT INV EL 27.48
8" HP PVC
8525 HOLDINGS LLC
8525 HOLDINGS LLC
8525 HOLDINGS LLC
SD-30 24"CPP
SD-32 12"CPP
SD-33 12"CPP
SD-34 24"CPP
SD-35 12"CPP
SD-36 18"CPP
SD-37
CB-22
CB-23
CB-24
CB-25
CB-26
24"CMP
18"CMP
8"DI
10"DI
8"PVC

SCALE IN FEET: 10 5 0 10 20 30

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No.CE12602 REGISTERED PROFESSIONAL ENGINEER

DOWL AECL848 WWW.DOWL.COM 9085 Glacier Highway Juneau, Alaska 99801 907-780-3533

CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
STA "C" 21+50 TO STA "C" 24+25

PROJECT 71095.01
DATE 4/20/2021
SHEET C-206

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NOTES:
1. FOR STORM DRAIN STRUCTURES OUTSIDE THE CURBLINE, STATION AND OFFSETS ARE GIVEN TO CENTER OF THE STRUCTURE. FOR STORM DRAIN STRUCTURES WITHIN THE CURBLINE, STATION AND OFFSETS ARE PROVIDED TO CENTER OF GRATE.
2. PIPE LENGTHS AND SLOPES SHOWN ARE CALCULATED TO ENDS OF PIPE. PAY LENGTHS ARE TO CENTER OF STRUCTURE.
3. CTE 10"GV AT OLD DAIRY ROAD AND INSTALL TWO 18-LB ANODES ON THE 20"DI MAIN PER SHEET C-401.

CB-29 STA "C" 25+73.5, 23.8' LT	
TYPE III W/ AREA DRAIN	
FG	EL=27.35
INV SD-39	EL=24.93
INV SD-40	EL=24.93
INV EXIST 12"CPP (N)	EL=24.98

CB-32 STA "C" 26+39.3, 26.6' LT	
EXISTING TYPE I*	
FG EXIST	EL=27.75
FG	EL=27.75
INV SD-41	EL=25.19
INV EXIST 12"CPP (N)	EL=25.20
INV EXIST 12"CPP (S)	EL=25.18
INV EXIST 12"CPP (E)**	EL=25.15
*TO REMAIN. INSTALL NEW FRAME AND COVER.	
**REMOVE EXISTING 12"CPP, RECONSTRUCT INLET FOR SD-41.	

PIPE SUMMARY – STORM SEWER AND SANITARY SEWER				
PIPE	DIA	LENGTH	TYPE	SLOPE
SD-38	18"	48.70	CPP	0.003
SD-39	18"	96.57	CPP	0.003
SD-40	12"	55.21	CPP	0.004
SD-41	12"	44.56	CPP	0.002
SD-42	12"	7.70	CPP	0.003

CB-27 STA "C" 24+75.0, 12.8' LT	
TYPE IV	
FG	EL=28.30
INV SD-38	EL=24.55
INV SD-39	EL=24.59

8745
NUGGET MALL LLC

6"PVC INV=24.77
CL DITCH STA: 24+27.50 24.05' LT FL EL 27.41
CL DITCH STA: 24+74.98 23.04' LT FL EL 27.65
CL DITCH STA: 25+04.13 22.25' LT FL EL 28.04
CL DITCH STA: 25+49.79 22.86' LT FL EL 28.08
CL DITCH STA: 25+70.96 23.81' LT FL EL 27.43
CL DITCH STA: 25+75.99 23.82' LT FL EL 27.43
CL DITCH STA: 26+30.82 26.22' LT FL EL 27.71
SAWCUT/MTE
TD-2 STA: 24+78.00 14.00' LT
TD-1 STA: 24+72.00 14.00' LT
CB-26
CB-27
CB-29
CB-32
CB-33
SD-38 18"CPP
SD-39 18"CPP
18"CMP
12"CPP
SD-40
SD-41
SD-42
CREST STREET
MATCHLINE STA "C" 24+25
25+00
26+00
12" HDPE
10" DI
20" DI
INSTALL 45° BEND STA: 26+17.53 2.00' RT
EP: 26+81.00
26+81
OLD DAIRY ROAD
CB-28
CB-30
CB-31
SEE NOTE 3
CONNECT TO EXISTING SEWER SERVICE
CL DITCH STA: 24+49.95 22.25' RT FL EL 27.84
CL DITCH STA: 25+36.22 23.18' RT FL EL 27.46
CL DITCH STA: 25+41.22 23.18' RT FL EL 27.48
CL DITCH STA: 25+67.99 22.91' RT FL EL 27.86
CL DITCH STA: 25+77.79 16.78' RT FL EL 28.10
CL DITCH STA: 25+95.80 16.60' RT FL EL 28.58
CL DITCH STA: 26+10.96 16.09' RT FL EL 29.18
CL DITCH STA: 26+22.10 18.75' RT FL EL 29.77

CB-28 STA "C" 25+38.7, 23.2' RT	
TYPE IV	
FG	EL=27.45
INV SD-40	EL=25.15
INV EXIST 12" CPP (E)	EL=25.20

8525
HOLDINGS LLC

CB-31 STA "C" 26+25.6, 32.4' RT	
EXISTING TYPE I*	
FG	EL=29.65
INV SD-42	EL=25.34
INV EXIST 12"CPP (E)	EL=25.37
INV EXIST 12"CPP (W)**	EL=25.34
INV EXIST 12"CPP (N)***	EL=25.42
*TO REMAIN	
**REMOVE EXISTING 12"CPP, RECONSTRUCT FOR SD-42.	
***REMOVE EXISTING 12"CPP, PLUG OUTLET.	

CB-33 STA "C" 26+72.0, 21.7' LT	
EXISTING TYPE IV*	
FG	EL=30.78
INV EXIST 12"CPP (S)	EL=25.50
INV EXIST 12"CPP (W)	EL=25.39
*TO REMAIN. INSTALL NEW FRAME AND GRATE.	

CB-30 STA "C" 26+29.4, 22.6' RT	
TYPE IV	
FG	EL=30.40
INV SD-41	EL=25.29
INV SD-42	EL=25.31

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SCALE IN FEET

REVISIONS			
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STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

DOWL
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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PLAN - CREST STREET
STA "C" 24+25 TO OLD DAIRY RD

PROJECT	71095.01
DATE	4/20/2021
SHEET	C-207

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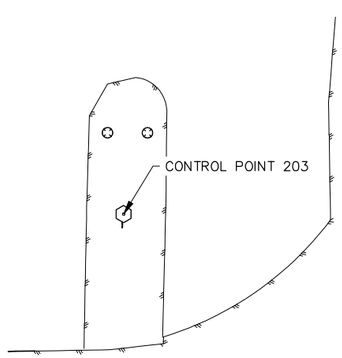
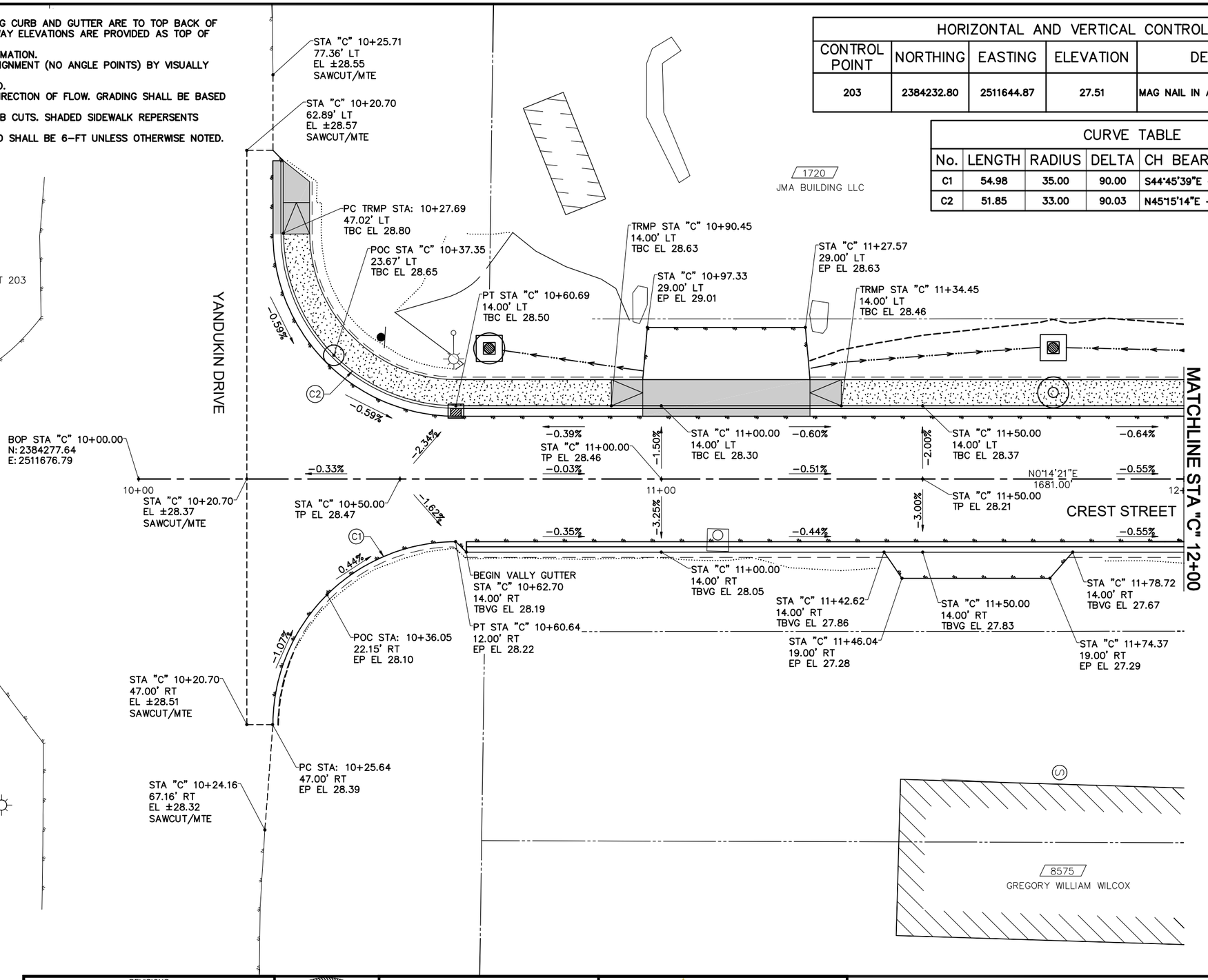
GRADING NOTES

1. STATIONS, OFFSETS, ELEVATIONS AND CURVE INFORMATION ALONG CURB AND GUTTER ARE TO TOP BACK OF CURB (TBC), AND TOP BACK OF VALLEY GUTTER (TBVG). ROADWAY ELEVATIONS ARE PROVIDED AS TOP OF PAVEMENT (TP).
2. SEE TYPICAL SECTIONS AND DETAILS FOR OTHER GRADING INFORMATION.
3. ESTABLISH VERTICAL CURVES AS NECESSARY FOR A SMOOTH ALIGNMENT (NO ANGLE POINTS) BY VISUALLY ADJUSTING TOP OF CURB THROUGH VERTICAL CONTROL POINTS.
4. SIDEWALK CROSS-SLOPES TO BE 1.5% UNLESS OTHERWISE NOTED.
5. SLOPE ARROWS ARE ONLY INTENDED TO DEPICT THE GENERAL DIRECTION OF FLOW. GRADING SHALL BE BASED ON THE LAYOUT ELEVATIONS PROVIDED.
6. SHADED CURB AND GUTTER REPRESENTS FULLY DEPRESSED CURB CUTS. SHADED SIDEWALK REPERSENTS 6-INCH CONCRETE THICKNESS.
7. ALL CURB TRANSITIONS FROM FULL HEIGHT TO FULLY DEPRESSED SHALL BE 6-FT UNLESS OTHERWISE NOTED.

HORIZONTAL AND VERTICAL CONTROL				
CONTROL POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
203	2384232.80	2511644.87	27.51	MAG NAIL IN ASPHALT HYDRANT PAD

CURVE TABLE				
No.	LENGTH	RADIUS	DELTA	CH BEARING & DISTANCE
C1	54.98	35.00	90.00	S44°45'39"E – 54.98
C2	51.85	33.00	90.03	N45°15'14"E – 51.85





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10 5 0 10 20 30
SCALE IN FEET

REVISIONS			
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STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

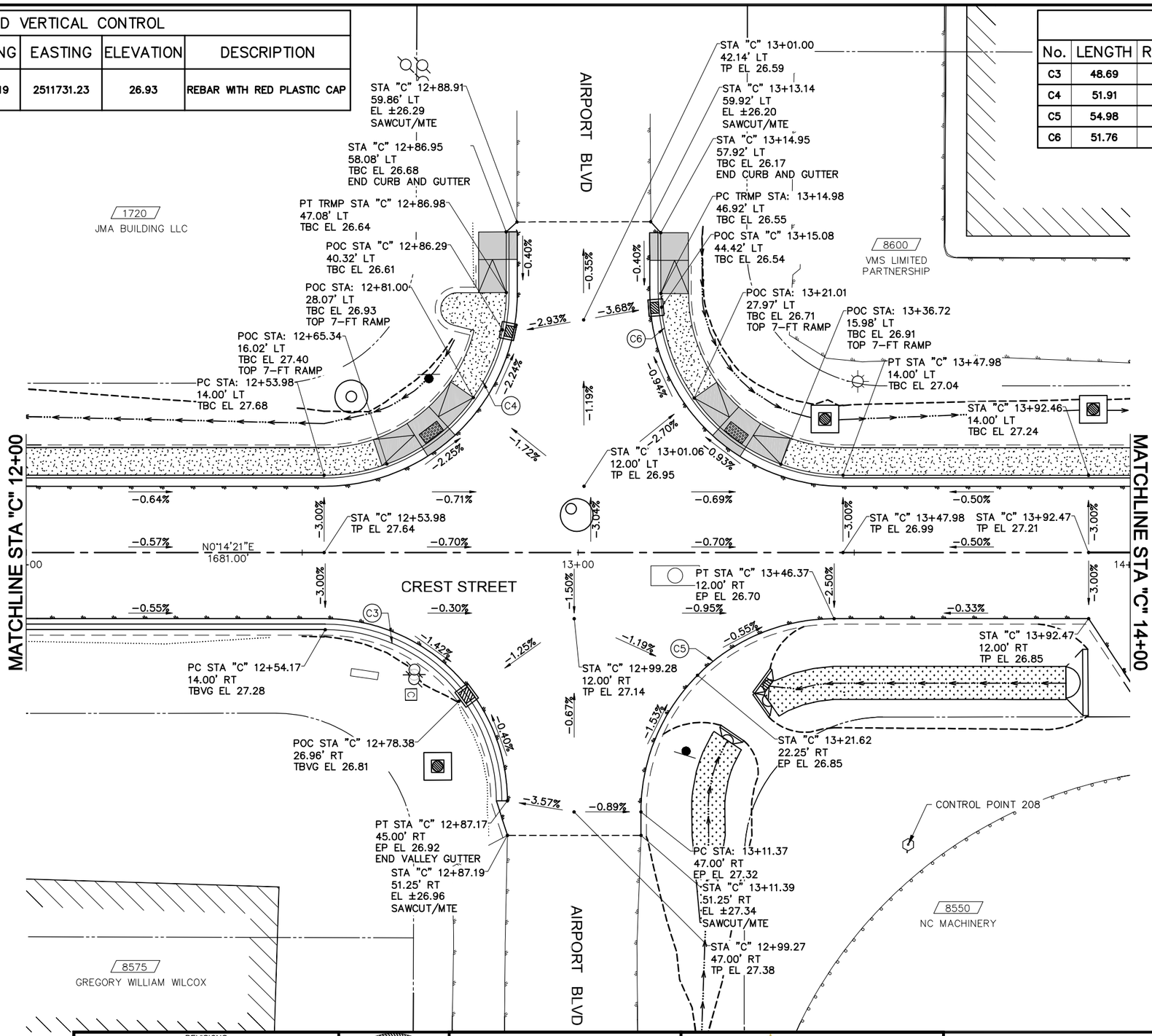
HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
YANDUKIN DR TO STA "C" 12+00

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-301

HORIZONTAL AND VERTICAL CONTROL						
CONTROL POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
208	13+59.77	52.94' RT	2384637.19	2511731.23	26.93	REBAR WITH RED PLASTIC CAP

CURVE TABLE				
No.	LENGTH	RADIUS	DELTA	CH BEARING & DISTANCE
C3	48.69	31.00	90.00	S45°14'21"W – 48.69
C4	51.91	33.00	90.13	N44°49'41"W – 51.91
C5	54.98	35.00	90.00	S44°45'39"E – 54.98
C6	51.76	33.00	89.87	N45°10'19"E – 51.76



10 5 0 10 20 30
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STATE OF ALASKA 49th
Tobias A. Lockhart
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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219
HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
STA "C" 12+00 TO STA "C" 14+00

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-302

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8600
VMS LIMITED
PARTNERSHIP

1850
SHAWN J OBRIEN

STA "C" 14+78.91
29.00' LT
EL ±27.07
SAWCUT/MTE

STA "C" 14+97.70
29.00' LT
EL ±27.17
SAWCUT/MTE

TRMP STA "C" 14+66.46
14.00' LT
TBC EL 27.00

TRMP STA "C" 15+10.46
14.00' LT
TBC EL 27.22

STA "C" 15+77.62
29.01' LT
EL ±26.94
SAWCUT/MTE

STA "C" 16+00.18
29.00' LT
EL ±27.19
SAWCUT/MTE

SAWCUT/MTE

SAWCUT/MTE

MATCHLINE STA "C" 14+00

MATCHLINE STA "C" 16+50

STA "C" 14+51.00
14.00' LT
TBC EL 26.92

TRMP STA "C" 15+71.62
14.00' LT
TBC EL 27.53

CREST STREET

STA "C" 16+12.50
14.00' LT
TBC EL 27.73

-3.00%

0.55%

N0°14'21"E
1681.00'

-0.50%

-0.50%

00

15+00

16+00

-3.00%

STA "C" 14+51.00
TP EL 26.89

STA "C" 16+12.50
TP EL 27.69

-3.00%

STA "C" 14+39.94
12.03' RT
EP EL 26.61

STA "C" 14+51.00
12.00' RT
EP EL 26.53

STA "C" 16+12.50
12.00' RT
EP EL 27.33

SAWCUT/MTE

STA "C" 14+03.68
29.00' RT
EL ±26.98
SAWCUT/MTE

STA "C" 14+31.74
29.00' RT
EL ±26.97
SAWCUT/MTE

8550
NC MACHINERY

N

10 5 0 10 20 30
SCALE IN FEET

REVISIONS

REV	DATE	DESCRIPTION	BY

STATE OF ALASKA
49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

DOWL
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9085 Glacier Highway
Juneau, Alaska 99801
907-780-3533

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

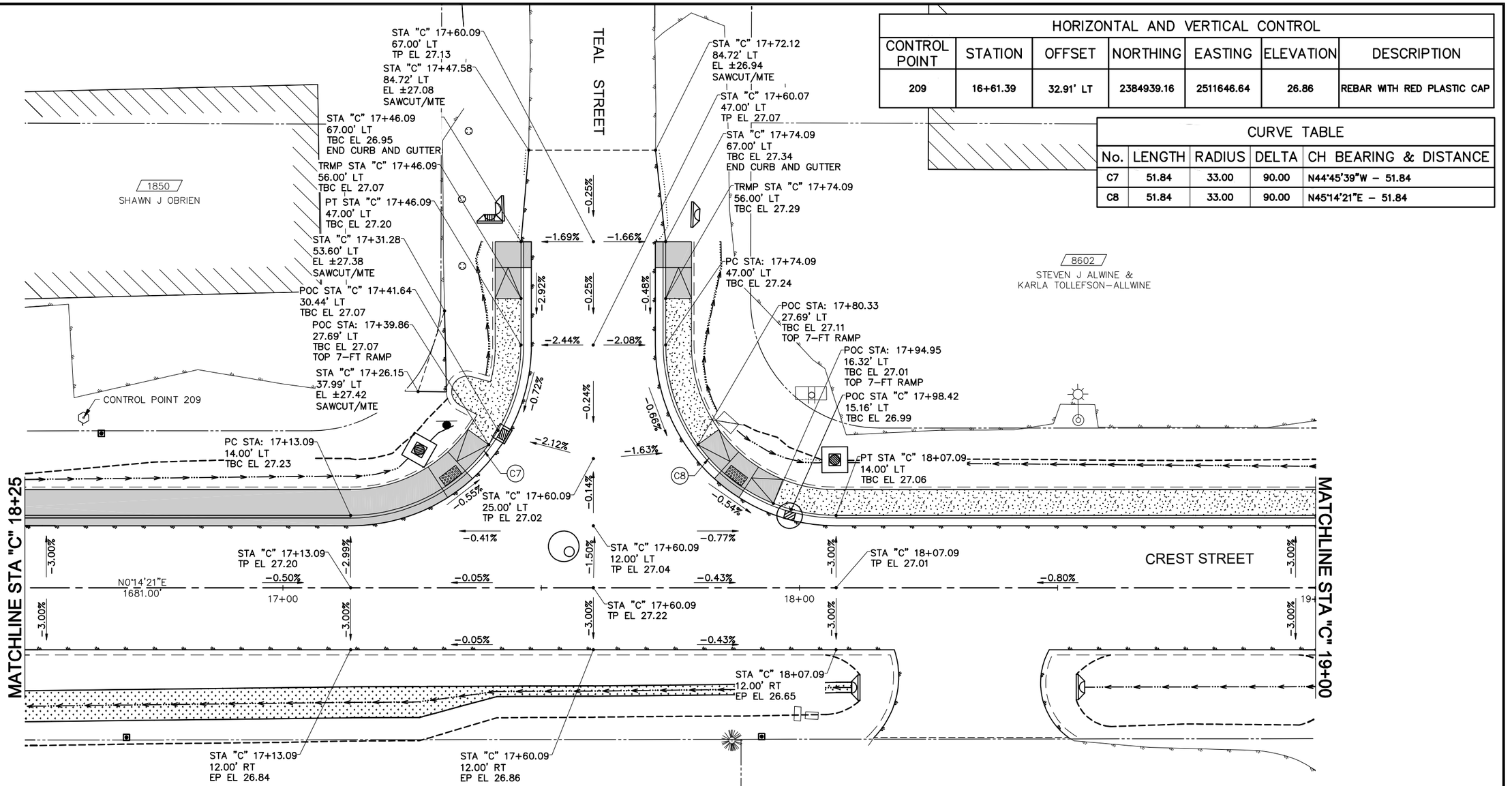
CREST STREET RECONSTRUCTION
BE21-219
HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
STA "C" 14+00 TO STA "C" 16+50

PROJECT 71095.01
DATE 4/20/2021
SHEET
C-303

C:\dowl_pw\d03897033\SC20-CT-GR-71095.dwg PLOT DATE 2021-4-20 20:34 SAVED DATE 2021-04-20 19:07 USER: tlockhart

HORIZONTAL AND VERTICAL CONTROL						
CONTROL POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
209	16+61.39	32.91' LT	2384939.16	2511646.64	26.86	REBAR WITH RED PLASTIC CAP

CURVE TABLE				
No.	LENGTH	RADIUS	DELTA	CH BEARING & DISTANCE
C7	51.84	33.00	90.00	N44°45'39"W – 51.84
C8	51.84	33.00	90.00	N45°14'21"E – 51.84



N

10 5 0 10 20 30

SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA
49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

DOWL
AECL848
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9085 Glacier Highway
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907-780-3533

CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
STA "C" 16+50 TO STA "C" 19+00

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-304

HORIZONTAL AND VERTICAL CONTROL						
CONTROL POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
201	19+06.18	31.81' RT	2385183.68	2511712.38	27.79	REBAR WITH RED PLASTIC CAP

8717
KARLA AND
STEVE ALLWINE

8602
STEVEN J ALWINE &
KARLA TOLLEFSON–
ALLWINE

STA "C" 19+37.51
29.00' LT
EL ±???
SAWCUT/MTE

STA "C" 19+87.93
29.00' LT
EL ±???
SAWCUT/MTE

SAWCUT/MTE

STA "C" 21+29.16
27.67' LT
EP EL 28.54

STA "C" 19+00.00
14.00' LT
TBC EL 27.79

TRMP STA "C" 19+93.93
14.00' LT
TBC EL 28.30

TRMP STA "C" 21+23.31
14.29' LT
TBC EL 28.95

MATCHLINE STA "C" 19+00

MATCHLINE STA "C" 21+50

-0.54%

TRMP STA "C" 19+36.42
14.00' LT
TBC EL 27.99

-0.54%

STA "C" 19+98.60
TP EL 28.29

-3.00%

STA "C" 19+98.60
14.00' LT
TBC EL 28.33

-0.50%

-0.50%

STA "C" 21+05.02
TP EL 28.82

-3.00%

STA "C" 21+05.02
14.00' LT
TBC EL 28.86

STA "C" 19+00.00
TP EL 27.76

N0°14'21"E
1681.00'

00

STA "C" 19+00.00
12.00' RT
EP EL 27.40

20+00

-3.00%

STA "C" 19+98.60
12.00' RT
EP EL 27.93

21+00

-3.00%

STA "C" 21+05.02
12.00' RT
EP EL 28.46

-0.54%

-0.49%

SAWCUT/MTE

SAWCUT/MTE

STA "C" 19+18.49
29.00' RT
EL ±27.76
SAWCUT/MTE

STA "C" 19+55.64
29.00' RT
EL ±28.40
SAWCUT/MTE

STA "C" 20+35.07
24.00' RT
EL ±29.10
SAWCUT/MTE

STA "C" 20+76.21
24.00' RT
EL ±28.63
SAWCUT/MTE

CONTROL POINT 201

USS 1195
STEVEN J
ALWINE &
KARLA
TOLLEFSON–
ALLWINE

1880
BUILDERS PLAZA TWO
CONDOMINIUM ASSOC.

1900
LONNIE AND BEVERLY ANDERSON
LIVING TRUST

8525
HOLDINGS LLC

N

10 5 0 10 20 30
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA
49th
Tobias A. Lockhart
No. CE12602
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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
STA "C" 19+00 TO STA "C" 21+50

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-305

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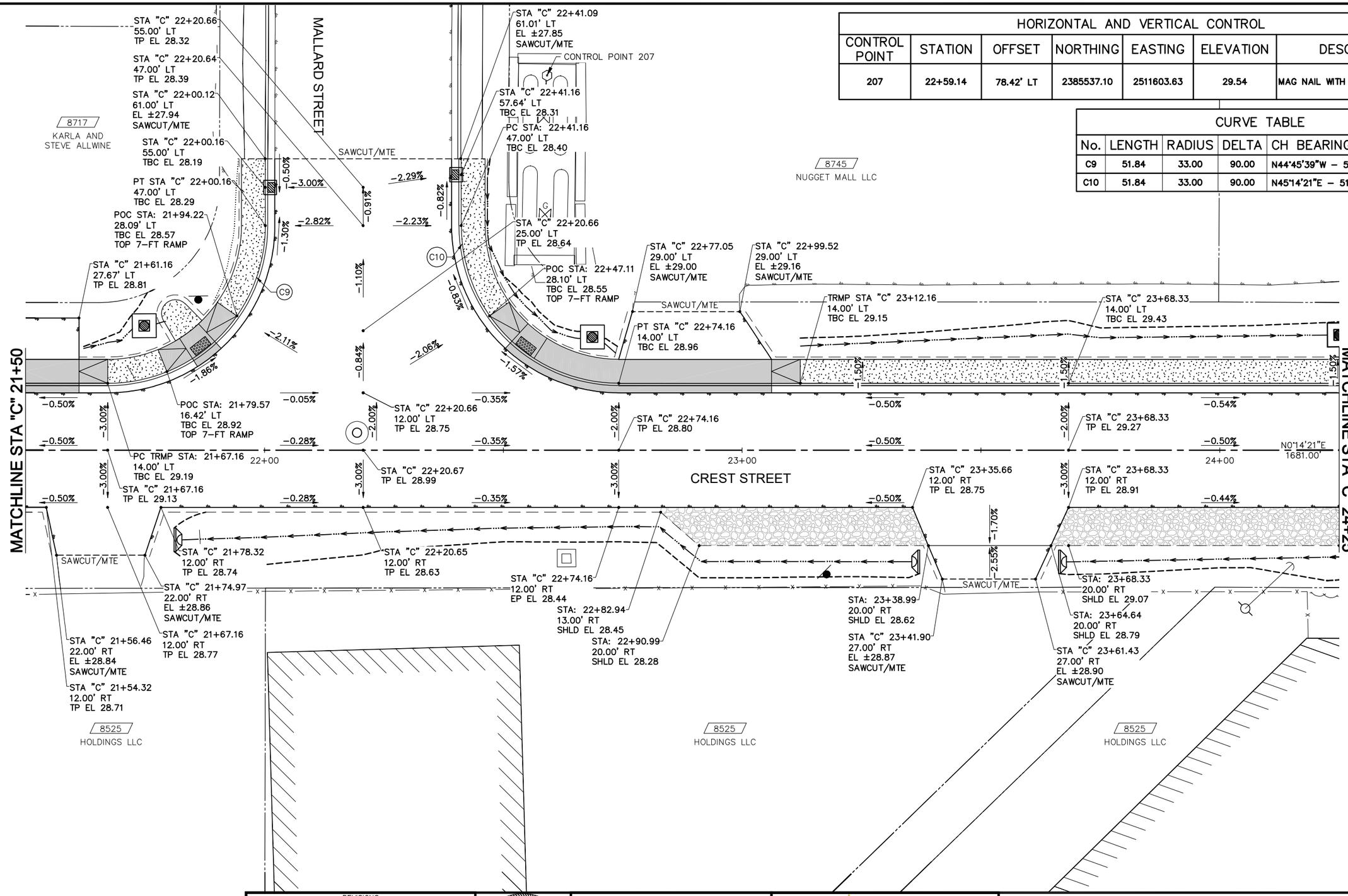
HORIZONTAL AND VERTICAL CONTROL						
CONTROL POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
207	22+59.14	78.42' LT	2385537.10	2511603.63	29.54	MAG NAIL WITH PLASTIC WASHER

CURVE TABLE				
No.	LENGTH	RADIUS	DELTA	CH BEARING & DISTANCE
C9	51.84	33.00	90.00	N44°45'39"W – 51.84
C10	51.84	33.00	90.00	N45°14'21"E – 51.84



SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219
HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
STA "C" 21+50 TO STA "C" 24+25

PROJECT 71095.01
DATE 4/20/2021

SHEET
C-306

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CURVE TABLE				
No.	LENGTH	RADIUS	DELTA	CH BEARING & DISTANCE
C11	31.96	30.00	61.03	N30°16'39"W – 31.96
C12	50.57	23.00	125.98	S63°13'41"W – 50.57

8745
NUGGET MALL LLC

MATCHLINE STA "C" 24+25

STA "C" 25+10.11
26.00' LT
EP EL 28.76

TRMP STA "C" 25+04.11
14.00' LT
TBC EL 28.97

SAWCUT/MTE

STA "C" 25+43.94
26.00' LT
EP EL 28.72

STA "C" 25+77.66
14.00' LT
TBC EL 29.55

STA "C" 26+10.95
14.00' LT
TBC EL 30.05

POC STA: 26+68.87
20.57' LT
TBC EL 31.23
TOP 7-FT RAMP

POC STA: 26+52.59
14.10' LT
TBC EL 30.87
TOP 7-FT RAMP

PC STA: 26+50.13
14.00' LT
TBC EL 30.18

PT STA "C" 26+76.38
29.47' LT
TBC EL 31.35

STA "C" 26+80.53
28.95' LT
EL ±31.26
SAWCUT/MTE

C11

−1.50% −1.50% −1.50% −1.50%

−0.56% −0.48% −1.31% −1.48% −1.93% −2.06%

STA "C" 24+75.00
14.00' LT
TBC EL 28.83

STA "C" 24+75.00
TP EL 28.74

TRMP STA "C" 25+50.00
14.00' LT
TBC EL 29.19

STA "C" 25+50.00
TP EL 29.15

STA "C" 25+77.66
TP EL 29.51

STA "C" 26+10.95
TP EL 29.95

EOP STA "C" 26+81.00
N: 2385958.62
E: 2511683.81

−2.50% −3.00% −3.00% −2.50% −3.17%

−0.50% −0.54% −1.31% −1.33% −2.11%

25+00 26+00 26+81

CREST STREET

STA "C" 24+75.00
12.00' RT
EP EL 28.44

STA "C" 25+50.00
12.00' RT
EP EL 28.85

STA "C" 25+77.66
12.00' RT
EP EL 29.51

−2.50% 0.00% −2.50%

−0.44% −0.55% −2.40% −2.22%

C12

−1.33%

−3.00% −1.00% −1.00% −3.00%

STA: 24+25.00
20.00' RT
SHLD EL 28.42

STA: 24+50.00
20.00' RT
SHLD EL 28.47

STA: 24+75.00
20.00' RT
SHLD EL 28.36

STA: 25+25.00
20.00' RT
SHLD EL 28.47

STA: 25+50.00
20.00' RT
SHLD EL 28.61

STA: 25+67.66
20.00' RT
SHLD EL 28.80

STA: 25+77.66
13.00' RT
SHLD EL 29.12

PC STA: 26+10.95
12.00' RT
EP EL 30.25

−1.66%

SAWCUT/MTE

OLD DAIRY ROAD

POC STA "C" 26+26.53
20.91' RT
TBC EL 30.94
BEGIN CURB

PT STA "C" 26+29.57
48.51' RT
EP EL 30.97

STA "C" 26+30.80
50.31' RT
EL ±31.12
SAWCUT/MTE

8525
HOLDINGS LLC

N

10 5 0 10 20 30
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA
49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

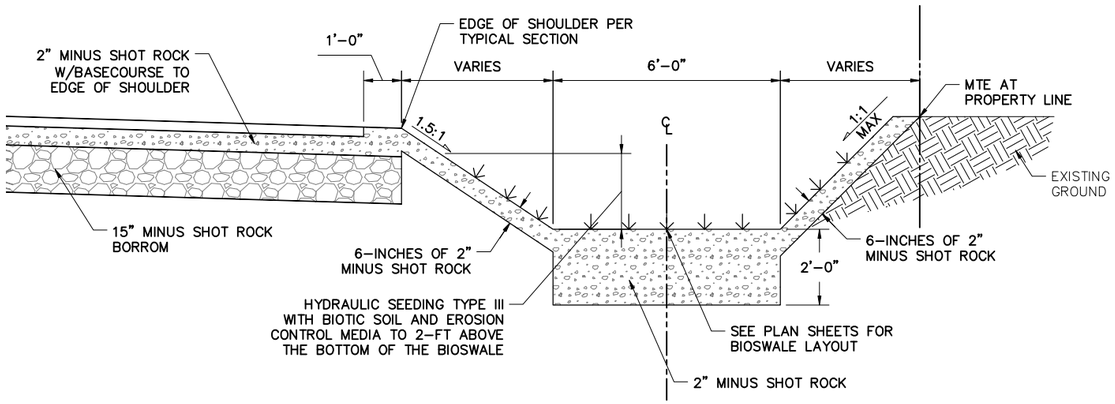
CREST STREET RECONSTRUCTION
BE21-219
HORIZONTAL AND VERTICAL CONTROL
CURB AND GUTTER LAYOUT AND GRADES
STA "C" 24+25 TO OLD DAIRY RD

PROJECT 71095.01
DATE 4/20/2021
SHEET
C-307

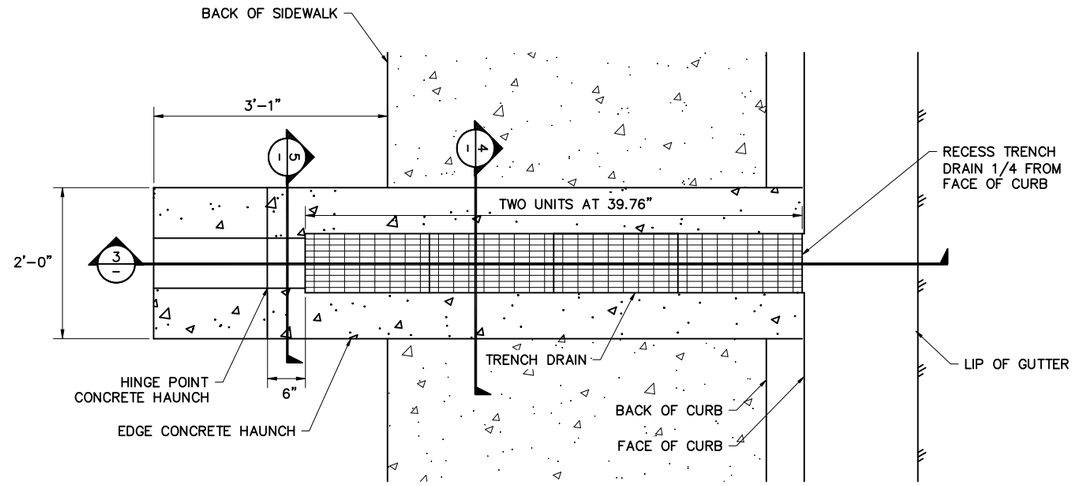
C:\dowl_pw\d03897033\SC20-CT-GR-71095.dwg PLOT DATE 2021-4-20 20:34 SAVED DATE 2021-04-20 19:07 USER: tlockhart

2202.5 BIOSWALE ESTIMATE OF QUANTITIES

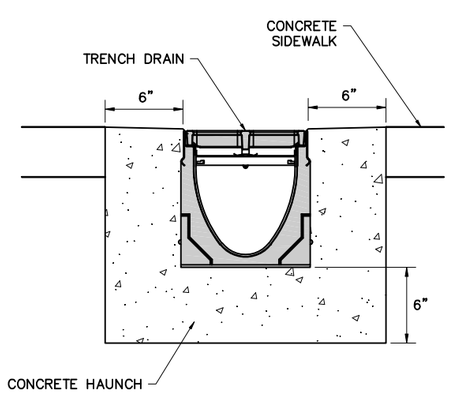
EXCAVATION	2-INCH MINUS	SPECIAL SEEDING
990 CUBIC YARDS	240 CUBIC YARDS	525 SQUARE YARDS

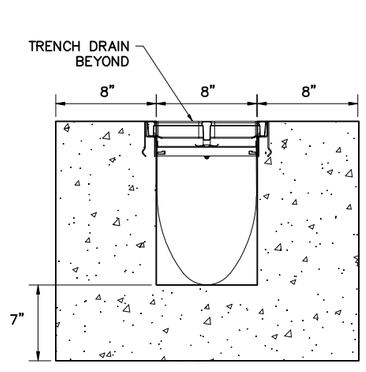


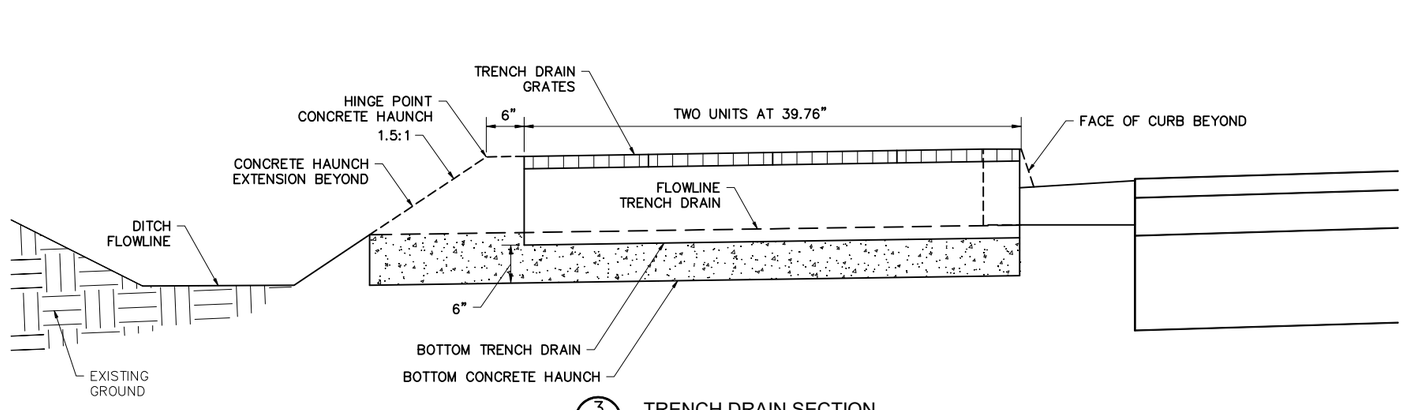
1 / C-203 BIOSWALE SECTION
NTS



2 / C-207 TRENCH DRAIN PLAN
NTS







3 / - TRENCH DRAIN SECTION
NTS

4 / - TRENCH DRAIN SECTION
NTS

5 / - CONCRETE HAUNCH EXTENSION SECTION
NTS

REVISIONS

REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

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9085 Glacier Highway
Juneau, Alaska 99801
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CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

DRAINAGE DETAILS

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-400

CORROSION PROTECTION SPECIFICATIONS AND NOTES:

ANODES

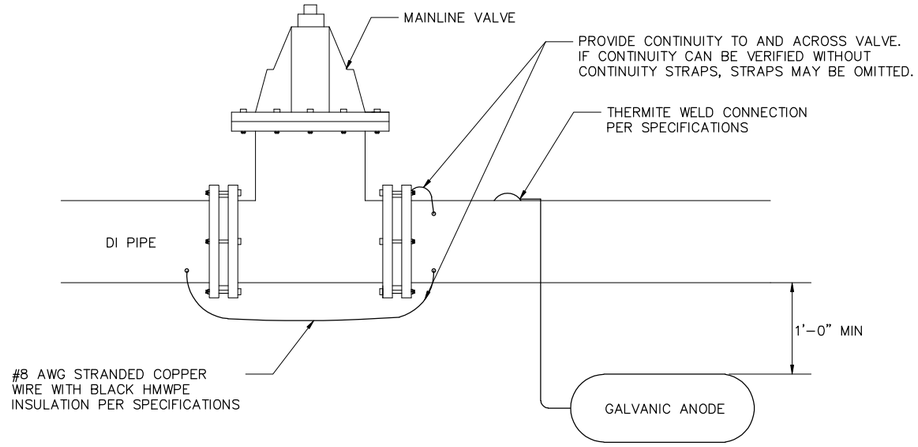
1. ANODES SHALL BE 18–LBS BARE WEIGHT ZINC WITH PREPACKAGED ANODE BACKFILL.
2. ACCEPTABLE ANODE MODELS ARE:
   a. MODEL NO. ZUR–18 FROM FARWEST INDUSTRIES
   b. MODEL S18 FROM MESA PRODUCTS
   c. APPROVED EQUAL
3. INSTALL TYPE, SIZE, AND NUMBER OF ANODES SPECIFIED.
4. INSTALL 2 ANODES TO ALL CONNECTIONS TO EXISTING C.I. OR D.I. PIPE 12–INCH DIAMETER AND LARGER.
5. CONDUCTOR WIRE SHALL BE A MINIMUM OF 10–FEET IN LENGTH, SIZE #8 OR LARGER, AND INSULATED WITH HIGH MOLECULAR WEIGHT POLYETHYLENE (HMWPE).
6. PREPACKAGED ANODE SHALL BE SATURATED WITH WATER PRIOR TO BACKFILL.
7. ANODES SHALL BE PLACED IN NATIVE EARTH BACKFILL. DO NOT PLACE IN PIPE BEDDING MATERIAL.

THERMITE (EXOTERMIC) WELDING

1. THERMITE WELD MATERIALS SHALL BE DESIGNED FOR CONNECTION OF COPPER TO DUCTILE IRON AND CAST IRON SURFACES AND SHALL BE INSTALLED PER MANUFACTURERS INSTRUCTIONS.
2. ACCEPTABLE MANUFACTURES OF THERMITE WELD PRODUCTS ARE:
   a. CADWELD BY ERICO PRODUCTS INC.
   b. THERMOWELD BY CONTINENTAL INDUSTRIES INC.
   c. APPROVED EQUAL
3. A 2–INCH SQUARE AREA IN THE PIPE SURFACE SHALL BE GROUND CLEAN PER MANUFACTURERS RECOMMENDATIONS PRIOR TO THERMITE WELDING.
4. WIRE ENDS SHALL HAVE PROPER ADAPTER SLEEVES TO ENSURE PROPER BOND. #8 AWG SHALL HAVE ADAPTER SLEEVES SPECIFIED BY THERMITE WELD MANUFACTURER. FIELD INSTALLED SLEEVES SHALL HAVE WIRE CONDUCTOR EXTEND ¼–INCH BEYOND ENDS OF SLEEVE.
5. WIRE CONNECTION SHALL BE TESTED FOR INTEGRITY PRIOR TO COATING.
6. CONTINUITY STRAPS SHALL BE #2 AWG COPPER STRANDED WIRE WITH THW INSULATION AND SHALL BE ATTACHED TO THE PIPE BY THERMITE WELDING AND COATED AND SEALED AS DESCRIBED BELOW.

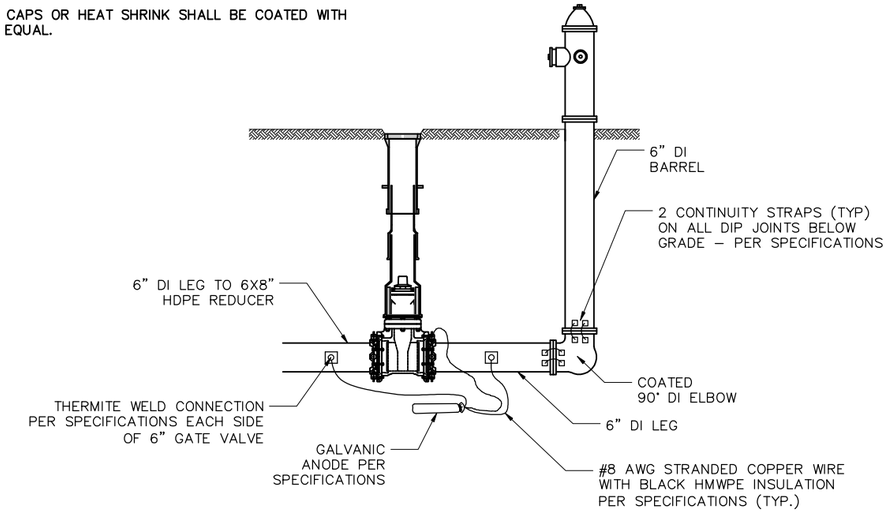
COATING AND SEALING

1. ALL THERMITE WELDS SHALL BE PROTECTED AND SEALED BY:
   a. PREFABRICATED THERMITE WELD CAPS, SIZED ACCORDING TO WIRE SIZE, MINIMUM DIMENSIONS OF 4–INCH BY 4–INCH FILLED WITH ELASTOMERIC MASTIC COATING OR,
   b. HEAT SHRINK SLEEVE PIPE ENCASEMENT AFTER COATING THERMITE WELD WITH ELASTOMERIC MASTIC COATING – HEAT SHRINK SLEEVE SHALL BE CANUSA AQUA SEAL OR APPROVED EQUAL.
2. ALL PIPE SURFACE COATING DAMAGED BEYOND THE WELD CAPS OR HEAT SHRINK SHALL BE COATED WITH PROTAL 7125 FROM DENSO NORTH AMERICA OR APPROVED EQUAL.



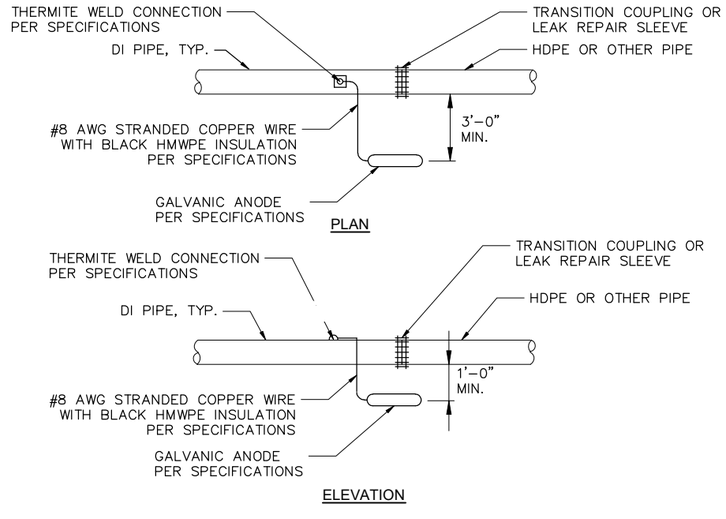
GALVANIC ANODE INSTALLATION AT MAINLINE WATER VALVES

NTS



GALVANIC ANODE INSTALLATION AT HYDRANT ASSEMBLIES W/ HDPE

NTS



GALVANIC ANODE INSTALLATION FOR EXISTING METALLIC PIPE CONNECTIONS OR LEAK REPAIR LOCATIONS DETAIL

NTS

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

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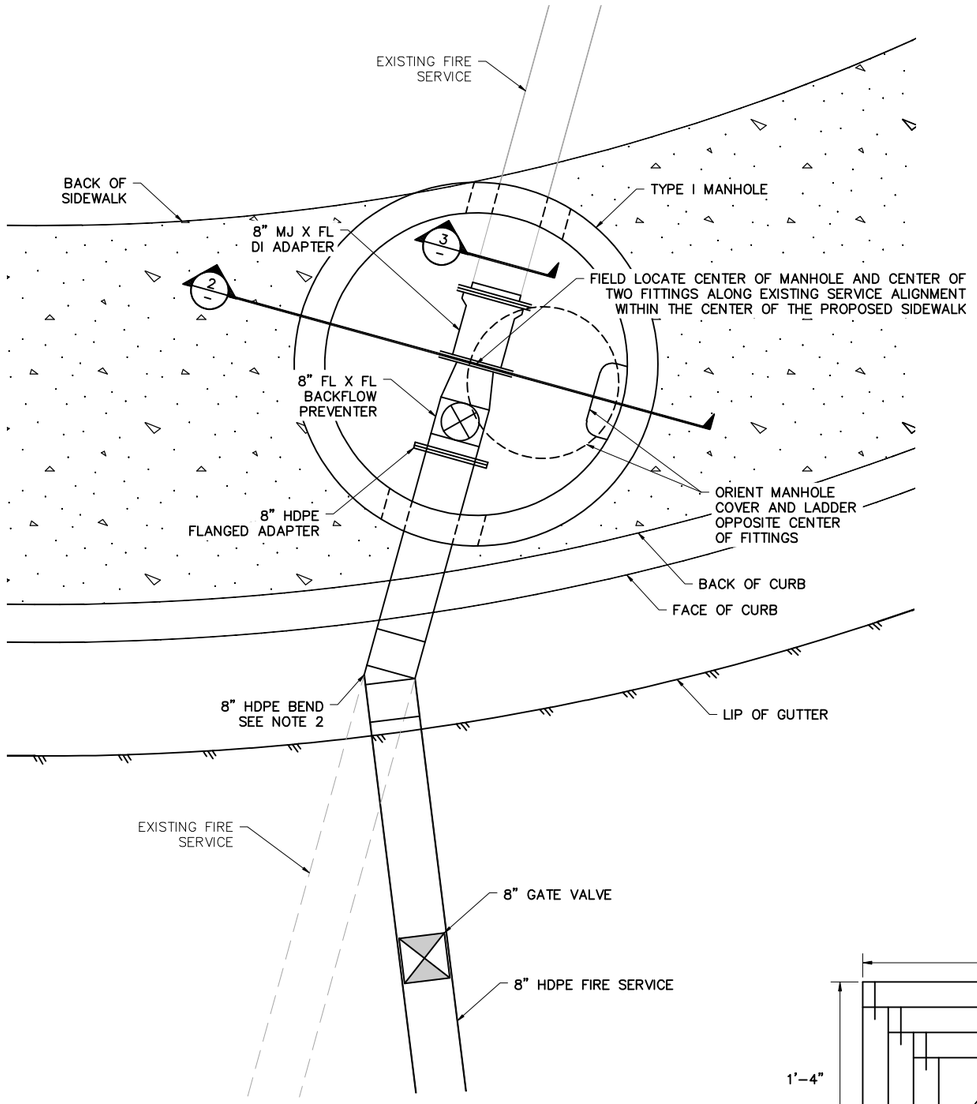
CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

CORROSION PROTECTION DETAILS

PROJECT	71095.01
DATE	4/20/2021

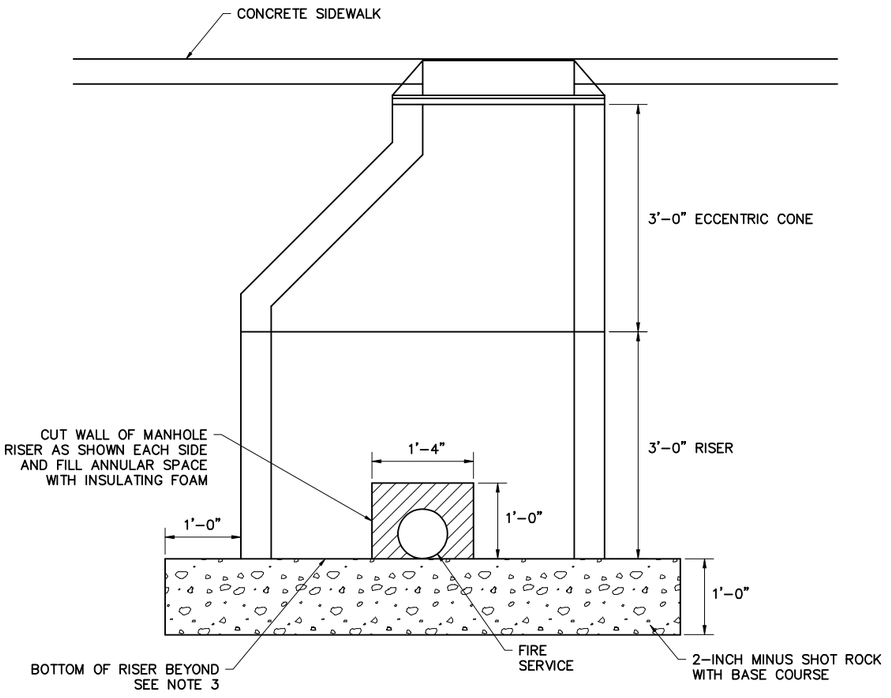
SHEET
C-401



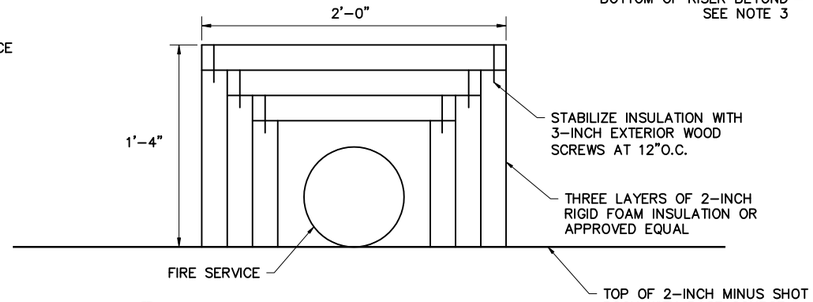
1 C-206 MANHOLE PLAN
NTS

NOTES:

1. THE EXISTING NUGGET MALL FIRE SERVICE IS FED FROM BOTH THE CORNER OF MALLARD / CREST AND JORDAN / OLD DAIRY ROAD. THE VALVE AT MALLARD / CREST IS INSIDE THE DMV EXPRESS BUILDING, AND THE VALVE AT JORDAN / OLD DAIRY IS ON THE ALASKA PACIFIC BANK PROPERTY. BEFORE CONNECTING TO THE EXISTING SERVICE LINE, COORDINATE VALVE OPERATION WITH BOTH THE PRIVATE PROPERTY OWNERS AND LONI VANKIRK (723-4975) OF THE WATER DEPARTMENT.
2. THE ALIGNMENT OF THE EXISTING FIRE SERVICE IS UNCERTAIN. FIELD VERIFY LOCATION AND ALIGNMENT PRIOR TO INSTALLING MAINLINE TEE AND INSTALL BEND(S) AS REQUIRED OUTSIDE THE MANHOLE TO ELIMINATE THE NEED FOR ADDITIONAL FITTINGS WITHIN THE MANHOLE.
3. THE FIRE SERVICE MANHOLE SHALL BE BOTTOMLESS AND THE 3-FT RISER SHALL BE SET ON A 2-INCH MINUS SHOT ROCK PAD AS SHOWN.



2 MANHOLE SECTION
NTS



3 FIRE SERVICE INSULATION SECTION
NTS

NOTE: INSULATION NOT SHOWN IN PLAN VIEW FOR CLARITY

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER 4/20/21

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CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

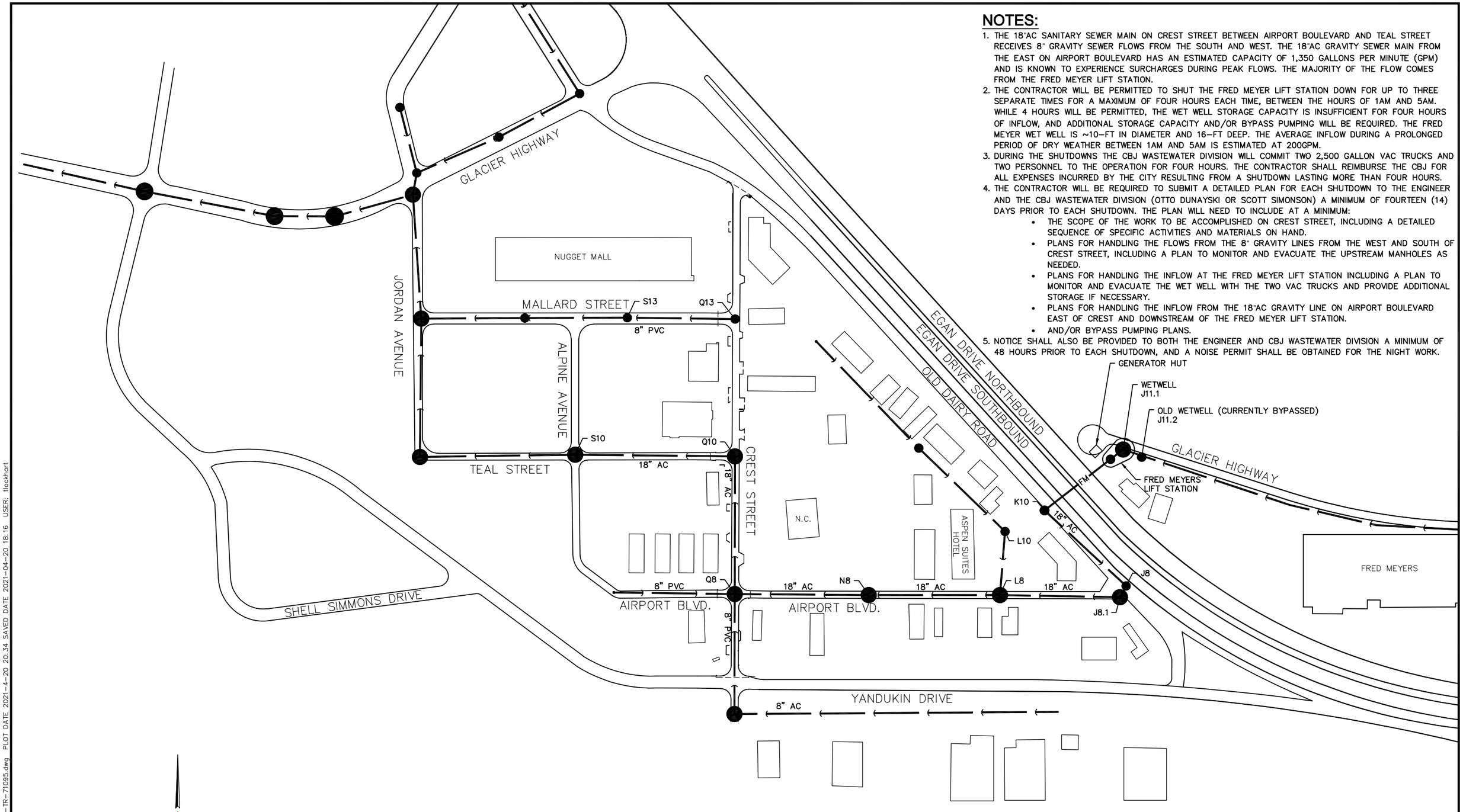
NUGGET MALL FIRE SERVICE MANHOLE

PROJECT 71095.01
DATE 4/20/2021

SHEET
C-402

NOTES:

1. THE 18"AC SANITARY SEWER MAIN ON CREST STREET BETWEEN AIRPORT BOULEVARD AND TEAL STREET RECEIVES 8" GRAVITY SEWER FLOWS FROM THE SOUTH AND WEST. THE 18"AC GRAVITY SEWER MAIN FROM THE EAST ON AIRPORT BOULEVARD HAS AN ESTIMATED CAPACITY OF 1,350 GALLONS PER MINUTE (GPM) AND IS KNOWN TO EXPERIENCE SURCHARGES DURING PEAK FLOWS. THE MAJORITY OF THE FLOW COMES FROM THE FRED MEYER LIFT STATION.
2. THE CONTRACTOR WILL BE PERMITTED TO SHUT THE FRED MEYER LIFT STATION DOWN FOR UP TO THREE SEPARATE TIMES FOR A MAXIMUM OF FOUR HOURS EACH TIME, BETWEEN THE HOURS OF 1AM AND 5AM. WHILE 4 HOURS WILL BE PERMITTED, THE WET WELL STORAGE CAPACITY IS INSUFFICIENT FOR FOUR HOURS OF INFLOW, AND ADDITIONAL STORAGE CAPACITY AND/OR BYPASS PUMPING WILL BE REQUIRED. THE FRED MEYER WET WELL IS ~10-FT IN DIAMETER AND 16-FT DEEP. THE AVERAGE INFLOW DURING A PROLONGED PERIOD OF DRY WEATHER BETWEEN 1AM AND 5AM IS ESTIMATED AT 200GPM.
3. DURING THE SHUTDOWNS THE CBJ WASTEWATER DIVISION WILL COMMIT TWO 2,500 GALLON VAC TRUCKS AND TWO PERSONNEL TO THE OPERATION FOR FOUR HOURS. THE CONTRACTOR SHALL REIMBURSE THE CBJ FOR ALL EXPENSES INCURRED BY THE CITY RESULTING FROM A SHUTDOWN LASTING MORE THAN FOUR HOURS.
4. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED PLAN FOR EACH SHUTDOWN TO THE ENGINEER AND THE CBJ WASTEWATER DIVISION (OTTO DUNAYSKI OR SCOTT SIMONSON) A MINIMUM OF FOURTEEN (14) DAYS PRIOR TO EACH SHUTDOWN. THE PLAN WILL NEED TO INCLUDE AT A MINIMUM:
    - THE SCOPE OF THE WORK TO BE ACCOMPLISHED ON CREST STREET, INCLUDING A DETAILED SEQUENCE OF SPECIFIC ACTIVITIES AND MATERIALS ON HAND.
    - PLANS FOR HANDLING THE FLOWS FROM THE 8" GRAVITY LINES FROM THE WEST AND SOUTH OF CREST STREET, INCLUDING A PLAN TO MONITOR AND EVACUATE THE UPSTREAM MANHOLES AS NEEDED.
    - PLANS FOR HANDLING THE INFLOW AT THE FRED MEYER LIFT STATION INCLUDING A PLAN TO MONITOR AND EVACUATE THE WET WELL WITH THE TWO VAC TRUCKS AND PROVIDE ADDITIONAL STORAGE IF NECESSARY.
    - PLANS FOR HANDLING THE INFLOW FROM THE 18"AC GRAVITY LINE ON AIRPORT BOULEVARD EAST OF CREST AND DOWNSTREAM OF THE FRED MEYER LIFT STATION.
    - AND/OR BYPASS PUMPING PLANS.
5. NOTICE SHALL ALSO BE PROVIDED TO BOTH THE ENGINEER AND CBJ WASTEWATER DIVISION A MINIMUM OF 48 HOURS PRIOR TO EACH SHUTDOWN, AND A NOISE PERMIT SHALL BE OBTAINED FOR THE NIGHT WORK.



N

75 0 75 150 300

SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

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Juneau, Alaska 99801
907-780-3533

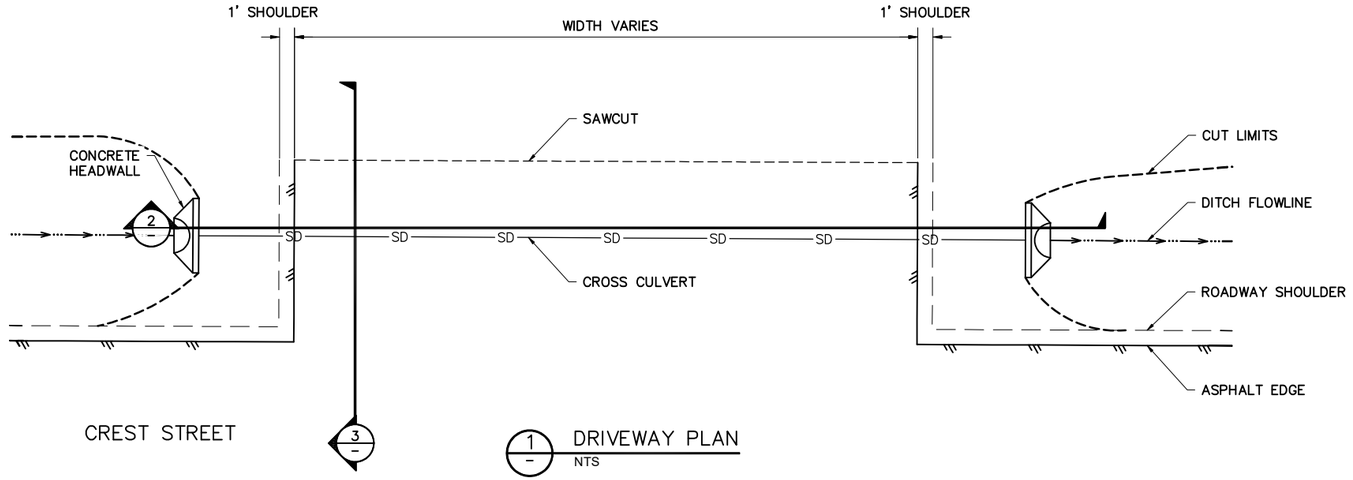
CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

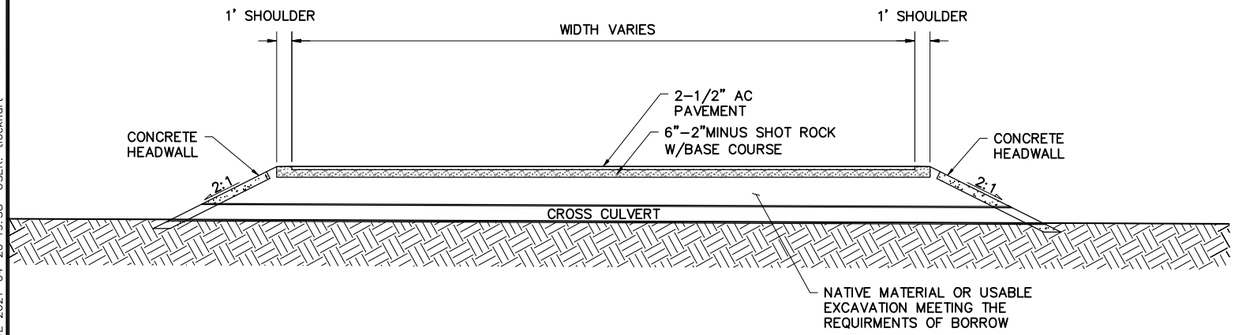
SANITARY SEWER SWITCH OVER REQUIREMENTS

PROJECT	71095.01
DATE	4/20/2021
SHEET	C-403

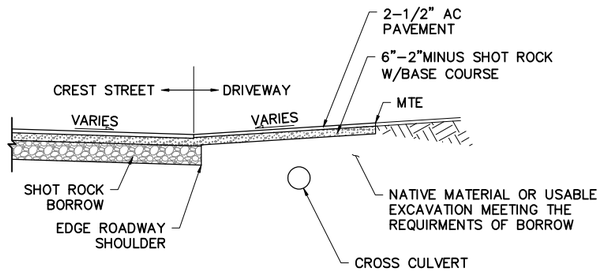
c:\dowl_pw\d0389703\SC20-CT-TR-71095.dwg PLOT DATE 2021-4-20 20:34 SAVED DATE 2021-04-20 18:16 USER: tlockhart



1 DRIVEWAY PLAN
NTS



2 DRIVEWAY SECTION
NTS



3 DRIVEWAY SECTION
NTS

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

DRIVEWAY DETAILS

PROJECT	71095.01
DATE	4/20/2021

SHEET
C-404

NOTES:
1. PAINTED TRAFFIC MARKINGS CENTERLINE, CROSSWALKS, AND CURBS SHALL BE ALKYD OIL BASED.
2. LOCATION OF PAINTED TRAFFIC MARKINGS AND SIGN POSTS SHOWN ARE APPROXIMATE AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. REMOVE AND DISPOSE OF ALL EXISTING SIGNS.
4. SIGNS SHALL BE MOUNTED ON NEW POSTS IN ACCORDANCE WITH STD 127A WITH ALL HARDWARE AS REQUIRED.

SIGN ASSEMBLY TABLE

POST/ LUMINAIRE NO.	MUTCD DESIGNATION	DIMENSIONS LxH (in)	FACING	COMMENTS
1	D3-1	36x8	N/S	INSTALL NEW SIGNS (2) ON NEW POST
	D3-1	24x8	E/W	INSTALL NEW SIGNS (2) ON NEW POST
	R1-1	30x30	N	INSTALL NEW SIGN ON NEW POST
2	D3-1	24x8	E/W	INSTALL NEW SIGNS (2) ON NEW POST
	D3-1	36x8	N/S	INSTALL NEW SIGNS (2) ON NEW POST
	R1-1	30x30	W	INSTALL NEW SIGN ON NEW POST
3	D3-1	24x8	E/W	INSTALL NEW SIGNS (2) ON NEW POST
	D3-1	36x8	N/S	INSTALL NEW SIGNS (2) ON NEW POST
	R1-1	30x30	E	INSTALL NEW SIGN ON NEW POST
4	R2-1	24x30	S	INSTALL NEW SIGN ON NEW POST
5	R2-1	24x30	N	INSTALL NEW SIGN ON NEW POST

STA "C" 10+46.37, 27.13' LT (1)
STA "C" 12+72.95, 31.50' LT (2)
STA "C" 13+19.54, 35.98' RT (3)
STA "C" 14+76.03, 28.69' RT (4)
STA "C" 15+42.83, 21.00' LT (5)
(6)

YANDUKIN DR
CREST ST
STOP
AIRPORT BLVD

YANDUKIN DRIVE
CREST STREET
AIRPORT BLVD

2' WIDE WHITE (TYP.)
10'

BEGIN DOUBLE 4" SOLID YELLOW
STA "C" 10+45.53 0.00' LT

END DOUBLE 4" SOLID YELLOW
STA "C" 12+62.17 0.00' T

BEGIN DOUBLE 4" SOLID YELLOW
STA "C" 13+36.22 0.50' LT

BEGIN 4" SOLID WHITE
STA "C" 13+46.37 11.00' RT

END 4" SOLID WHITE
STA "C" 13+92.47 11.00' RT

BEGIN 4" SOLID WHITE
STA "C" 14+39.97 11.00' RT

SPEED LIMIT 20

10+00 11+00 12+00 13+00 14+00 15+00

MATCHLINE STA "C" 15+50

20 10 0 20 40 60
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

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ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

SIGNING AND STRIPING
YANDUKIN DR TO STA "C" 15+50

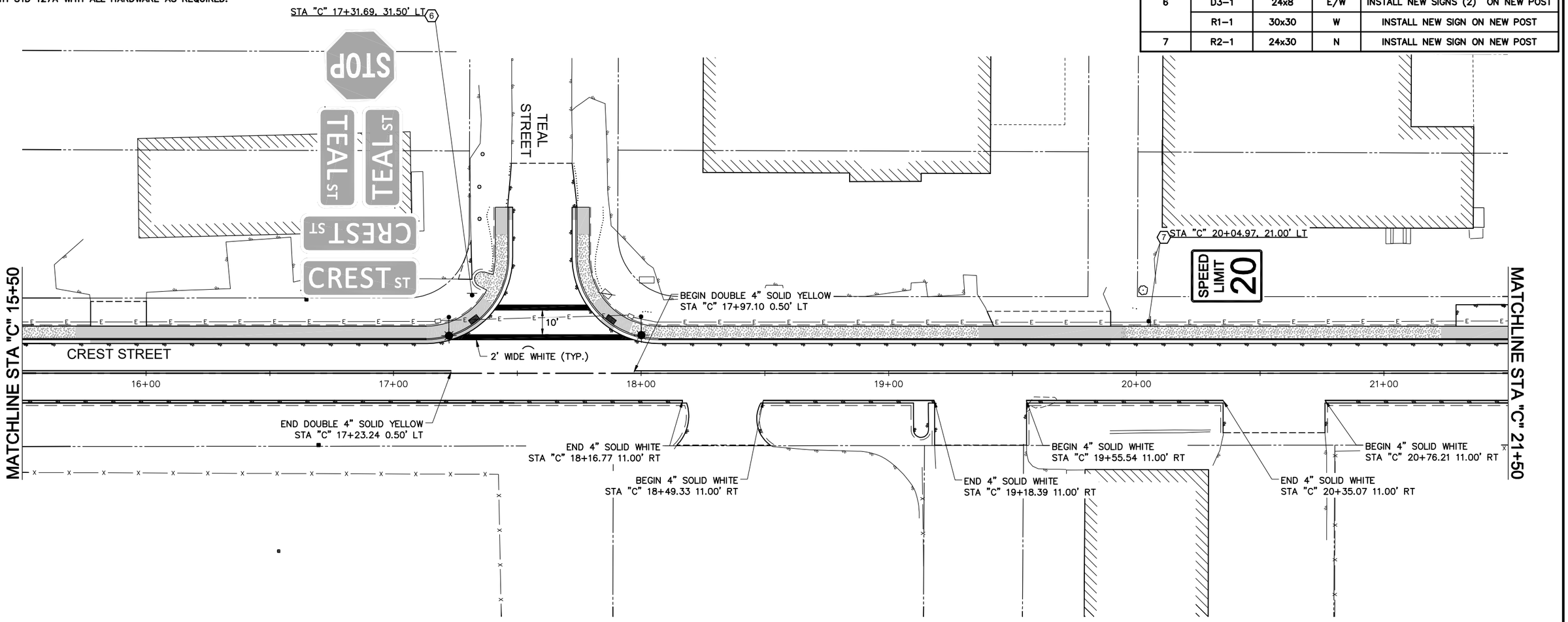
PROJECT 71095.01
DATE 4/20/2021
SHEET
C-501

c:\dowl_pw\d0389703\SC20-CT-SG-71095.dwg PLOT DATE 2021-4-20 20:35 SAVED DATE 2021-04-19 17:49 USER: tlockhart

NOTES:
1. PAINTED TRAFFIC MARKINGS CENTERLINE, CROSSWALKS, AND CURBS SHALL BE ALKYD OIL BASED.
2. LOCATION OF PAINTED TRAFFIC MARKINGS AND SIGN POSTS SHOWN ARE APPROXIMATE AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. REMOVE AND DISPOSE OF ALL EXISTING SIGNS.
4. SIGNS SHALL BE MOUNTED ON NEW POSTS IN ACCORDANCE WITH STD 127A WITH ALL HARDWARE AS REQUIRED.

SIGN ASSEMBLY TABLE

POST/ LUMINAIRE NO.	MUTCD DESIGNATION	DIMENSIONS LxH (in)	FACING	COMMENTS
6	D3-1	24x8	N/S	INSTALL NEW SIGNS (2) ON NEW POST
	D3-1	24x8	E/W	INSTALL NEW SIGNS (2) ON NEW POST
	R1-1	30x30	W	INSTALL NEW SIGN ON NEW POST
7	R2-1	24x30	N	INSTALL NEW SIGN ON NEW POST



N

20 10 0 20 40 60
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
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ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

SIGNING AND STRIPING
STA "C"15+50 TO STA "C" 21+50

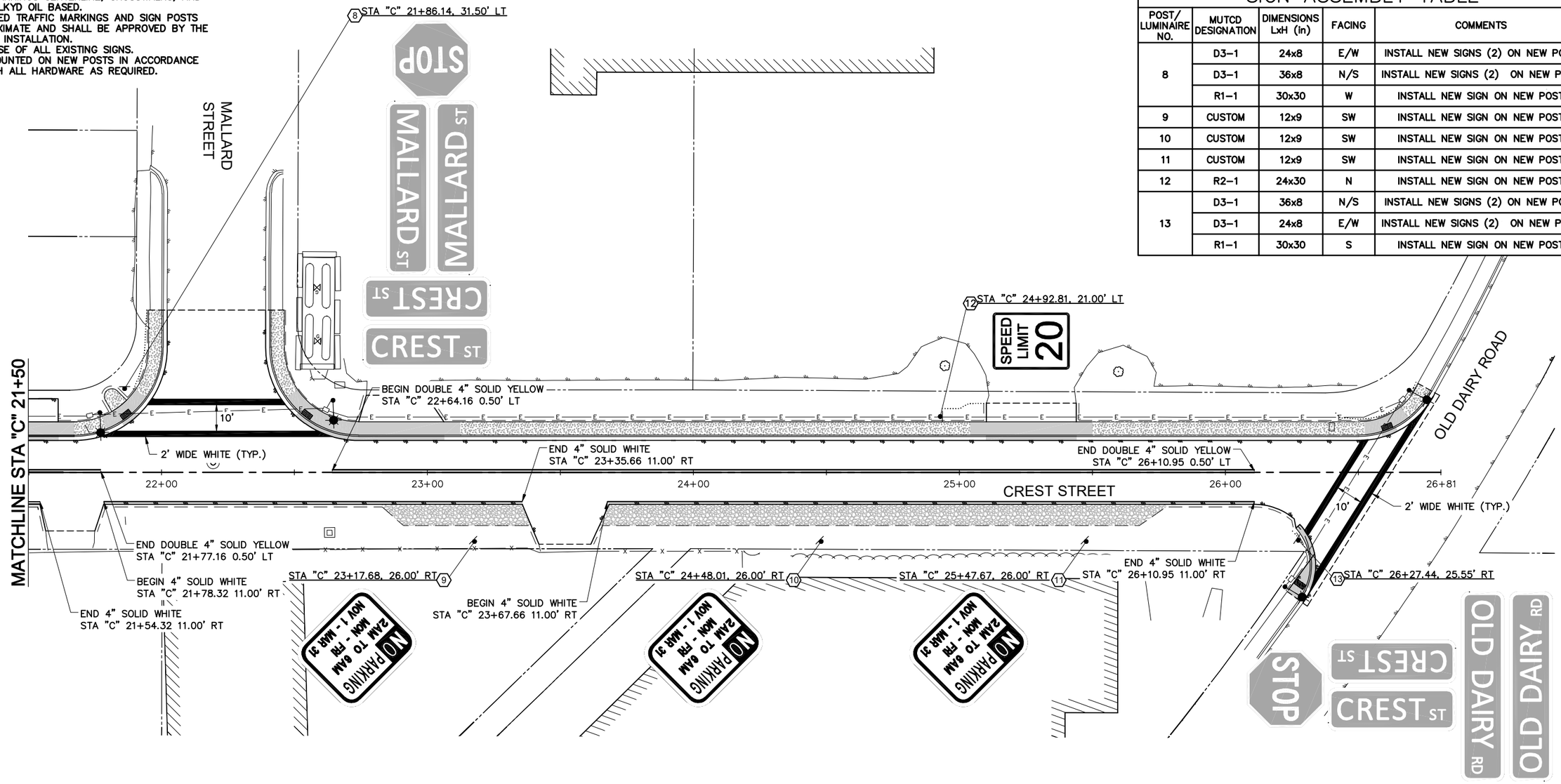
PROJECT 71095.01
DATE 4/20/2021
SHEET
C-502

c:\dowl_pw\d0389703\SC20-CT-SG-71095.dwg PLOT DATE 2021-4-20 20:35 SAVED DATE 2021-04-19 17:49 USER: tlockhart

NOTES:
1. PAINTED TRAFFIC MARKINGS CENTERLINE, CROSSWALKS, AND CURBS SHALL BE ALKYD OIL BASED.
2. LOCATION OF PAINTED TRAFFIC MARKINGS AND SIGN POSTS SHOWN ARE APPROXIMATE AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
3. REMOVE AND DISPOSE OF ALL EXISTING SIGNS.
4. SIGNS SHALL BE MOUNTED ON NEW POSTS IN ACCORDANCE WITH STD 127A WITH ALL HARDWARE AS REQUIRED.

SIGN ASSEMBLY TABLE

POST/ LUMINAIRE NO.	MUTCD DESIGNATION	DIMENSIONS LxH (in)	FACING	COMMENTS
8	D3-1	24x8	E/W	INSTALL NEW SIGNS (2) ON NEW POST
	D3-1	36x8	N/S	INSTALL NEW SIGNS (2) ON NEW POST
	R1-1	30x30	W	INSTALL NEW SIGN ON NEW POST
9	CUSTOM	12x9	SW	INSTALL NEW SIGN ON NEW POST
10	CUSTOM	12x9	SW	INSTALL NEW SIGN ON NEW POST
11	CUSTOM	12x9	SW	INSTALL NEW SIGN ON NEW POST
12	R2-1	24x30	N	INSTALL NEW SIGN ON NEW POST
13	D3-1	36x8	N/S	INSTALL NEW SIGNS (2) ON NEW POST
	D3-1	24x8	E/W	INSTALL NEW SIGNS (2) ON NEW POST
	R1-1	30x30	S	INSTALL NEW SIGN ON NEW POST



N

20 10 0 20 40 60
SCALE IN FEET

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
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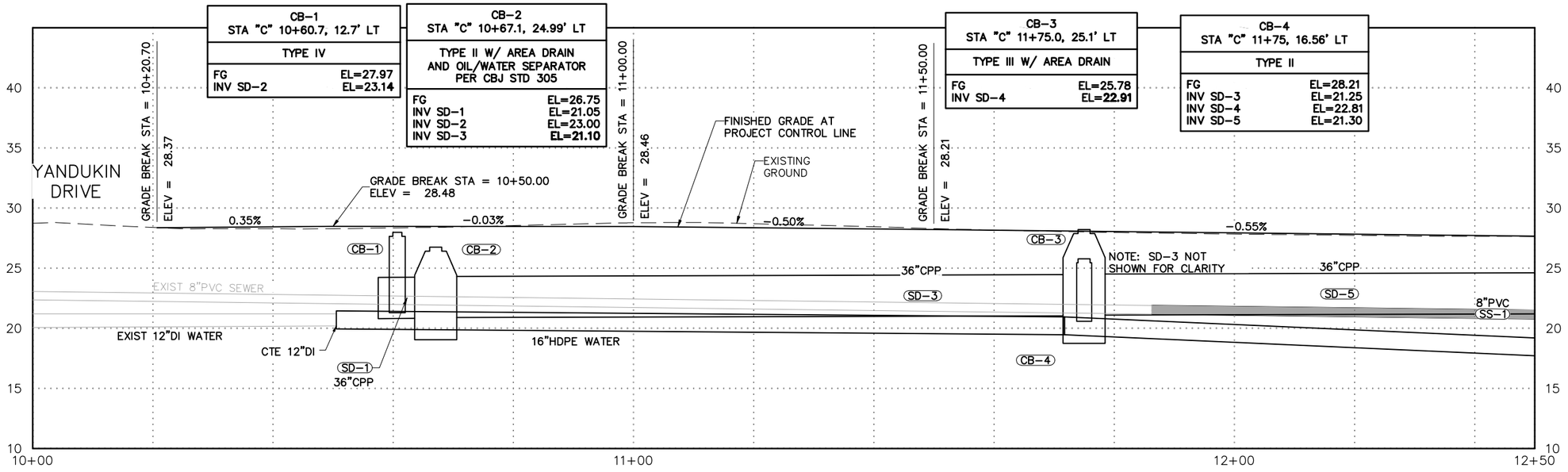
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

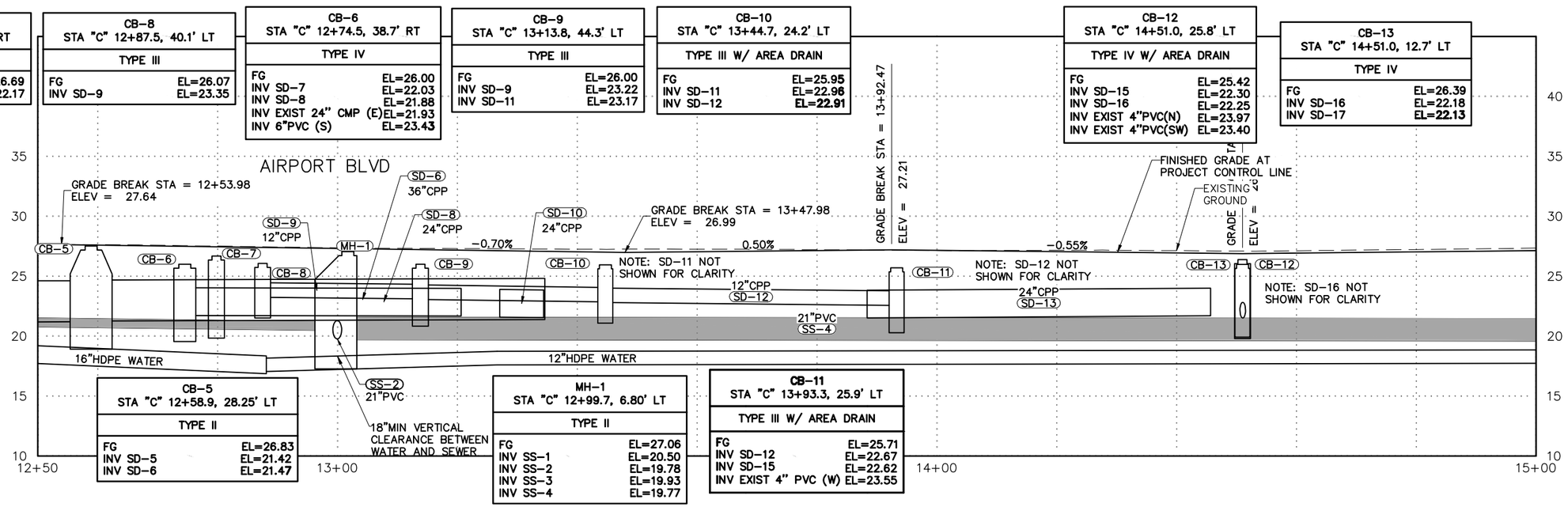
SIGNING AND STRIPING
STA "C" 21+50 TO OLD DAIRY ROAD

PROJECT 71095.01
DATE 4/20/2021
SHEET
C-503

c:\dowl_pw\d0389703\SC20-CT-SG-71095.dwg PLOT DATE 2021-4-20 20:35 SAVED DATE 2021-04-19 17:49 USER: tlockhart



STA "C" 10+00 TO STA "C" 12+50



STA "C" 12+50 TO STA "C" 15+00

NOTES:
1. SERVICES NOT SHOWN.
2. LONGITUDINAL RUN OF UTILITIES NOT SHOWN FOR CLARITY.
3. HEADWALLS NOT SHOWN.
4. EXISTING WATER MAIN AND EXISTING SEWER MAIN NOT SHOWN FOR CLARITY.
5. ALL NEW SANITARY SEWER IS SHADED.

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No.CE12602 REGISTERED PROFESSIONAL ENGINEER

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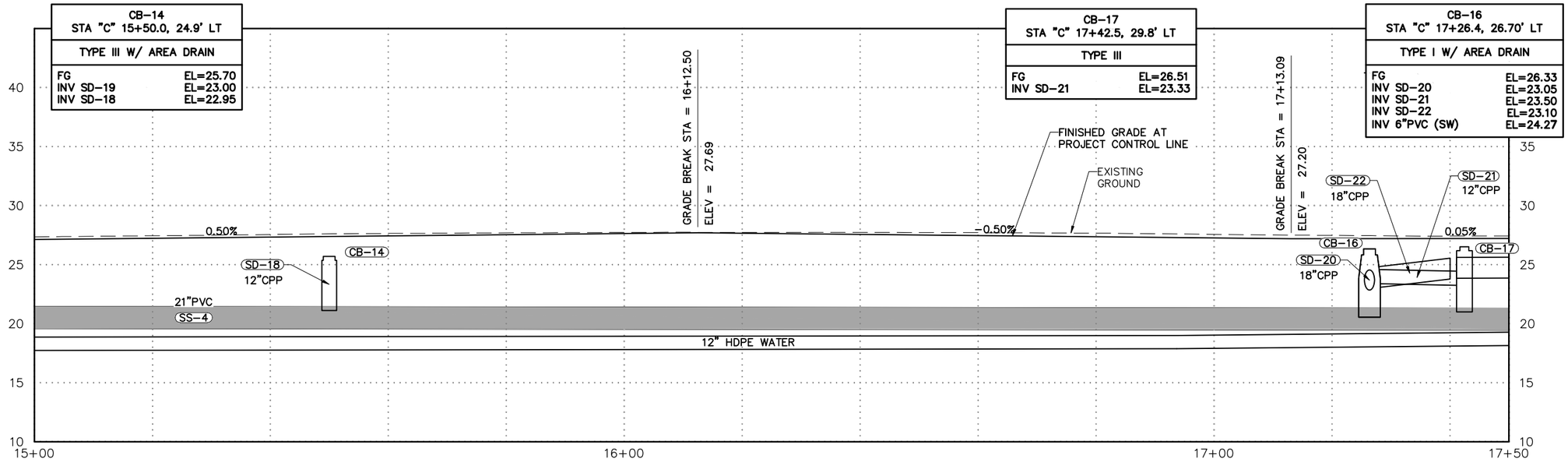
CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

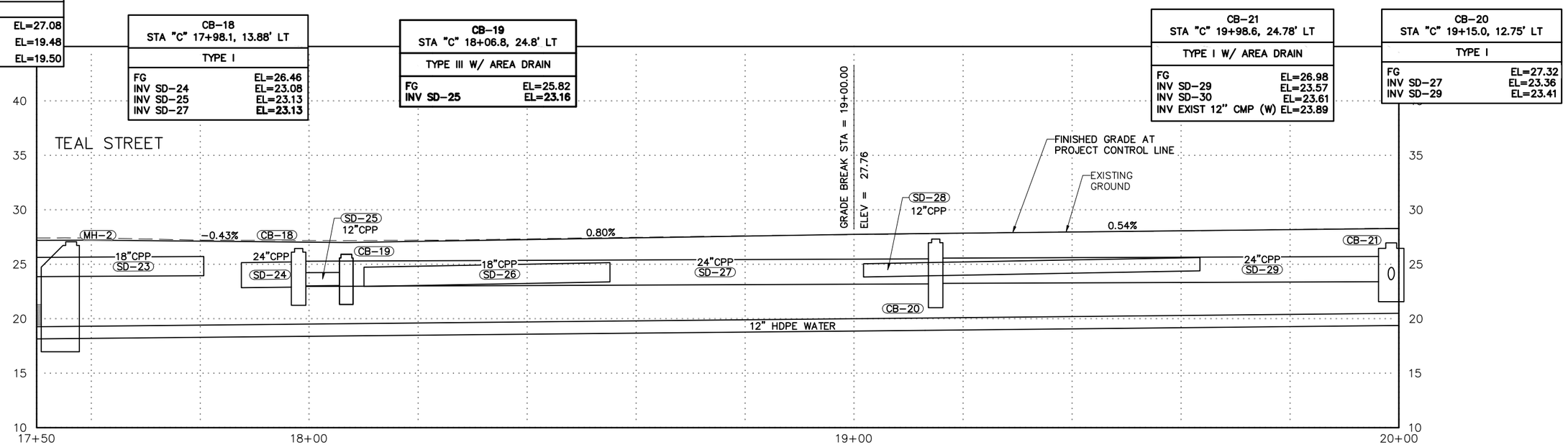
CREST STREET RECONSTRUCTION
BE21-219

PROFILE - CREST STREET
STA "C" 10+00 TO STA "C" 15+00

PROJECT	71095.01
DATE	4/21/2021
SHEET	C-601



STA "C" 15+00 TO STA "C" 17+50



STA "C" 17+50 TO STA "C" 20+00

NOTES:
1. SERVICES NOT SHOWN.
2. LONGITUDINAL RUN OF UTILITIES NOT SHOWN FOR CLARITY.
3. HEADWALLS NOT SHOWN.
4. EXISTING WATER MAIN AND EXISTING SEWER MAIN NOT SHOWN FOR CLARITY.
5. ALL NEW SANITARY SEWER IS SHADED.

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER
4/20/21

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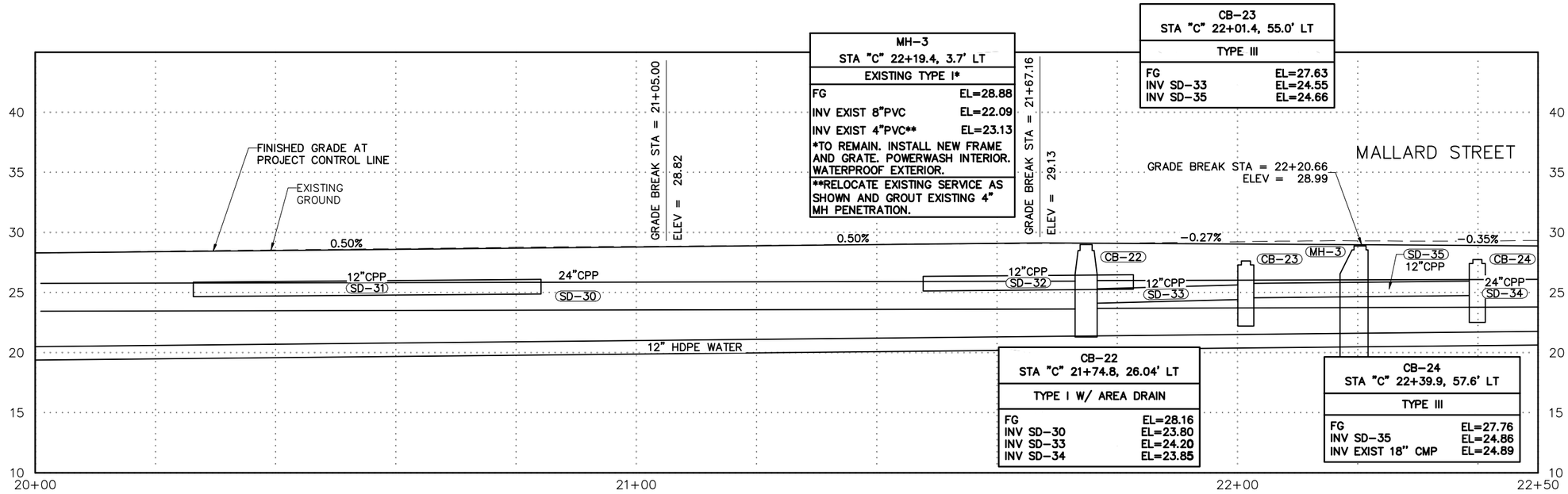
CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

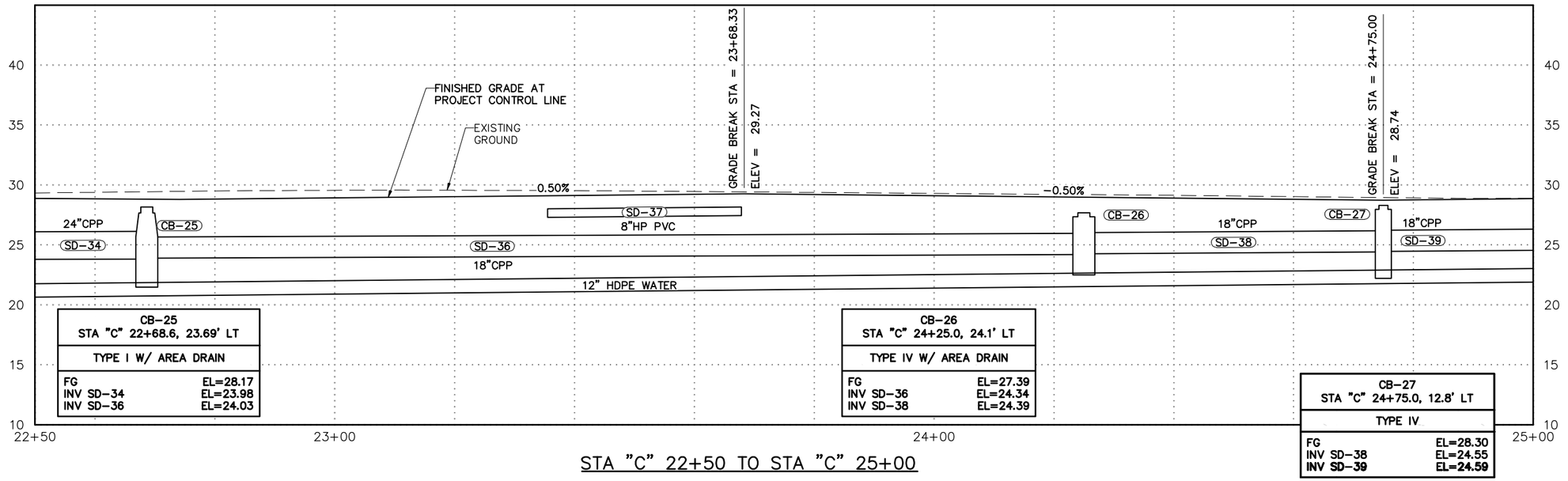
CREST STREET RECONSTRUCTION
BE21-219

PROFILE - CREST STREET
STA "C" 15+00 TO STA "C" 20+00

PROJECT	71095.01
DATE	4/21/2021
SHEET	C-602



STA "C" 20+00 TO STA "C" 22+50



STA "C" 22+50 TO STA "C" 25+00

NOTES:
1. SERVICES NOT SHOWN.
2. LONGITUDINAL RUN OF UTILITIES NOT SHOWN FOR CLARITY.
3. HEADWALLS NOT SHOWN.
4. THE EXISTING WATER MAIN IS NOT SHOWN.

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th
Tobias A. Lockhart
No. CE12602
REGISTERED PROFESSIONAL ENGINEER
4/20/21

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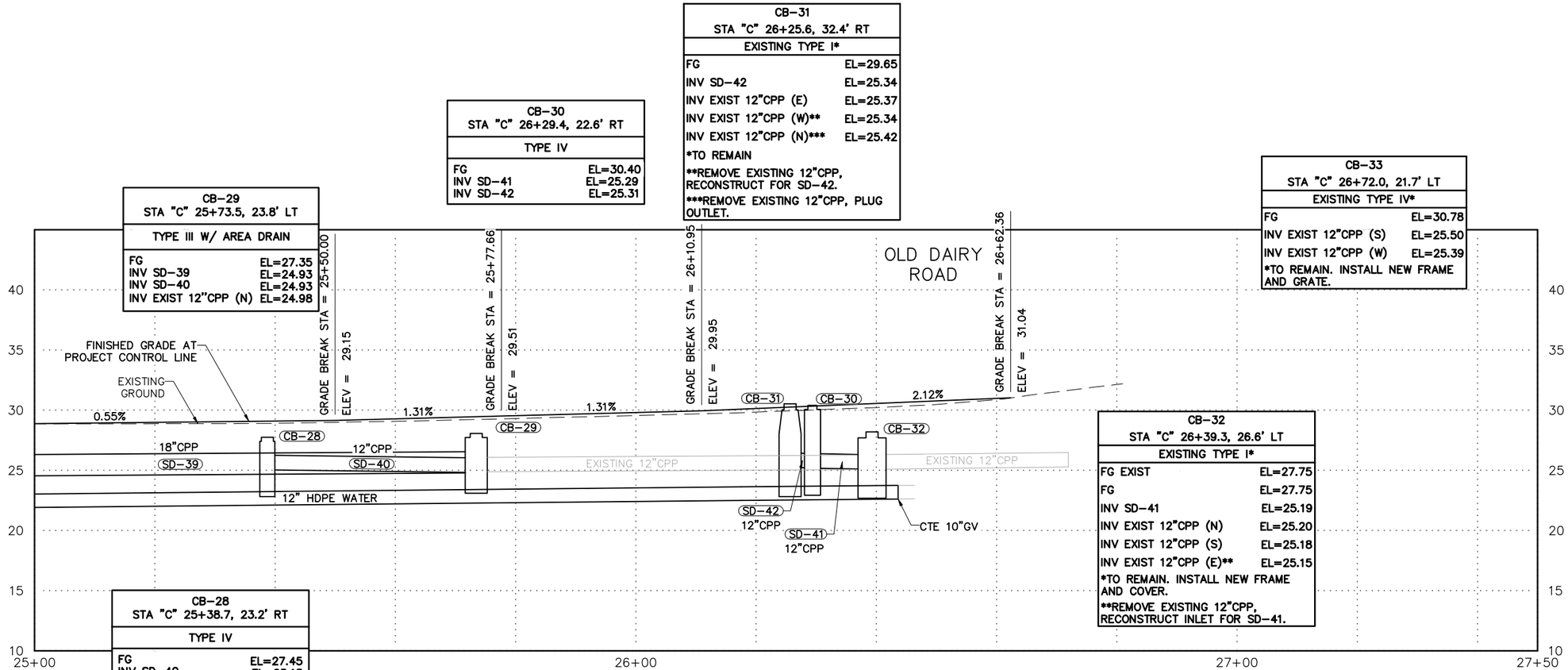
CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PROFILE - CREST STREET
STA "C" 20+00 TO STA "C" 25+00

PROJECT	71095.01
DATE	4/21/2021

SHEET
C-603



STA "C" 25+00 TO STA "C" 27+50

NOTES:
1. SERVICES NOT SHOWN.
2. LONGITUDINAL RUN OF UTILITIES NOT SHOWN FOR CLARITY.
3. HEADWALLS NOT SHOWN.
4. EXCEPT AT THE POINT OF CONNECTION, THE EXISTING WATER MAIN IS NOT SHOWN.

REVISIONS			
REV	DATE	DESCRIPTION	BY

STATE OF ALASKA 49th Tobias A. Lockhart No. CE12602 REGISTERED PROFESSIONAL ENGINEER

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CITY AND BOROUGH OF JUNEAU ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

PROFILE - CREST STREET
STA "C" 25+00 TO STA "C" 27+50

PROJECT	71095.01
DATE	4/21/2021

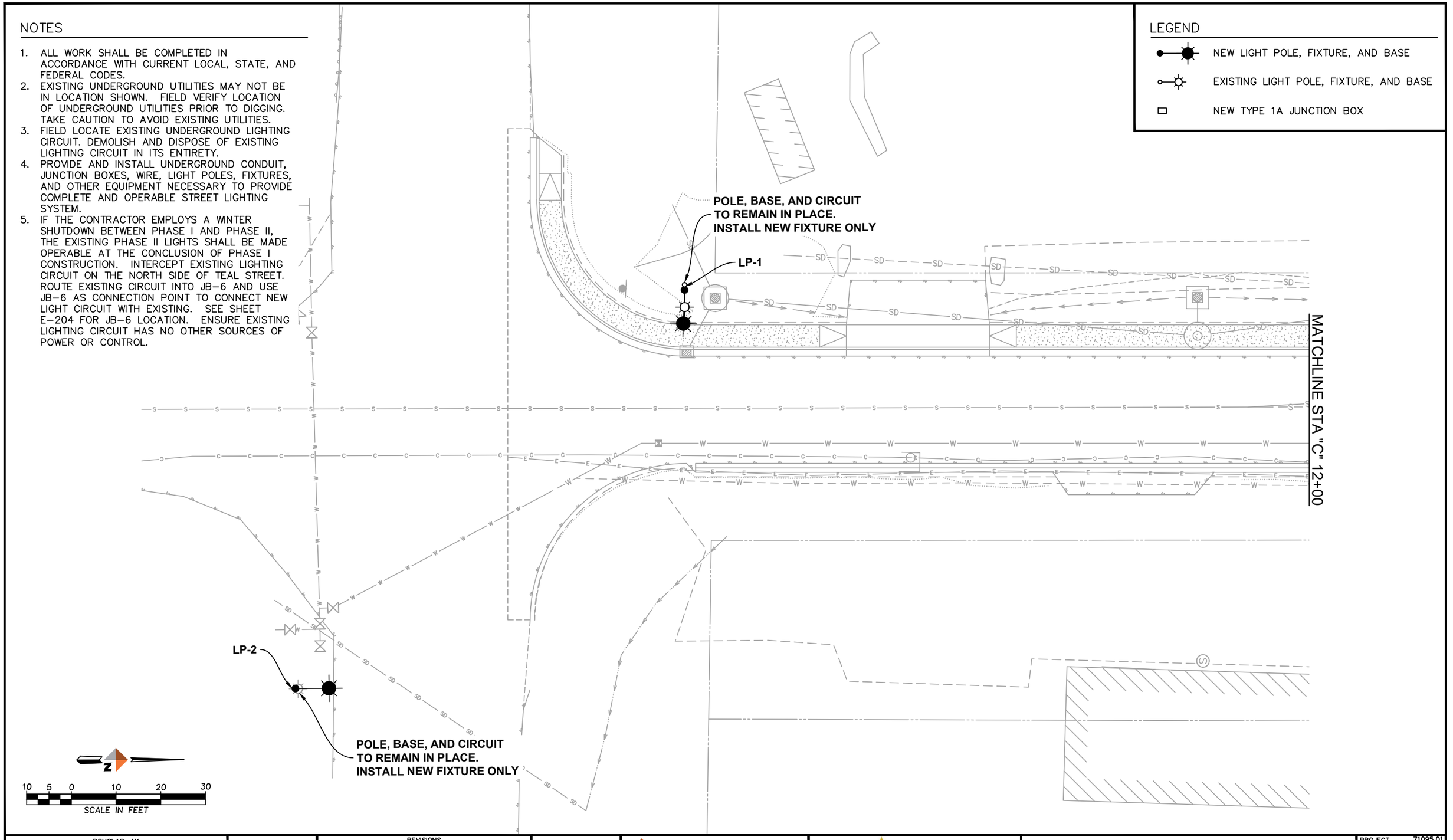
SHEET
C-604

NOTES

1. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH CURRENT LOCAL, STATE, AND FEDERAL CODES.
2. EXISTING UNDERGROUND UTILITIES MAY NOT BE IN LOCATION SHOWN. FIELD VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. TAKE CAUTION TO AVOID EXISTING UTILITIES.
3. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH AND DISPOSE OF EXISTING LIGHTING CIRCUIT IN ITS ENTIRETY.
4. PROVIDE AND INSTALL UNDERGROUND CONDUIT, JUNCTION BOXES, WIRE, LIGHT POLES, FIXTURES, AND OTHER EQUIPMENT NECESSARY TO PROVIDE COMPLETE AND OPERABLE STREET LIGHTING SYSTEM.
5. IF THE CONTRACTOR EMPLOYS A WINTER SHUTDOWN BETWEEN PHASE I AND PHASE II, THE EXISTING PHASE II LIGHTS SHALL BE MADE OPERABLE AT THE CONCLUSION OF PHASE I CONSTRUCTION. INTERCEPT EXISTING LIGHTING CIRCUIT ON THE NORTH SIDE OF TEAL STREET. ROUTE EXISTING CIRCUIT INTO JB–6 AND USE JB–6 AS CONNECTION POINT TO CONNECT NEW LIGHT CIRCUIT WITH EXISTING. SEE SHEET E–204 FOR JB–6 LOCATION. ENSURE EXISTING LIGHTING CIRCUIT HAS NO OTHER SOURCES OF POWER OR CONTROL.

LEGEND

- NEW LIGHT POLE, FIXTURE, AND BASE
- EXISTING LIGHT POLE, FIXTURE, AND BASE
- NEW TYPE 1A JUNCTION BOX



DOUGLAS, AK

RMC engineering
907–723–2996

STATE OF ALASKA 49TH
Vincent McElmurry
No.E 14454
PROFESSIONAL ENGINEER

REVISIONS

REV	DATE	DESCRIPTION	BY

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

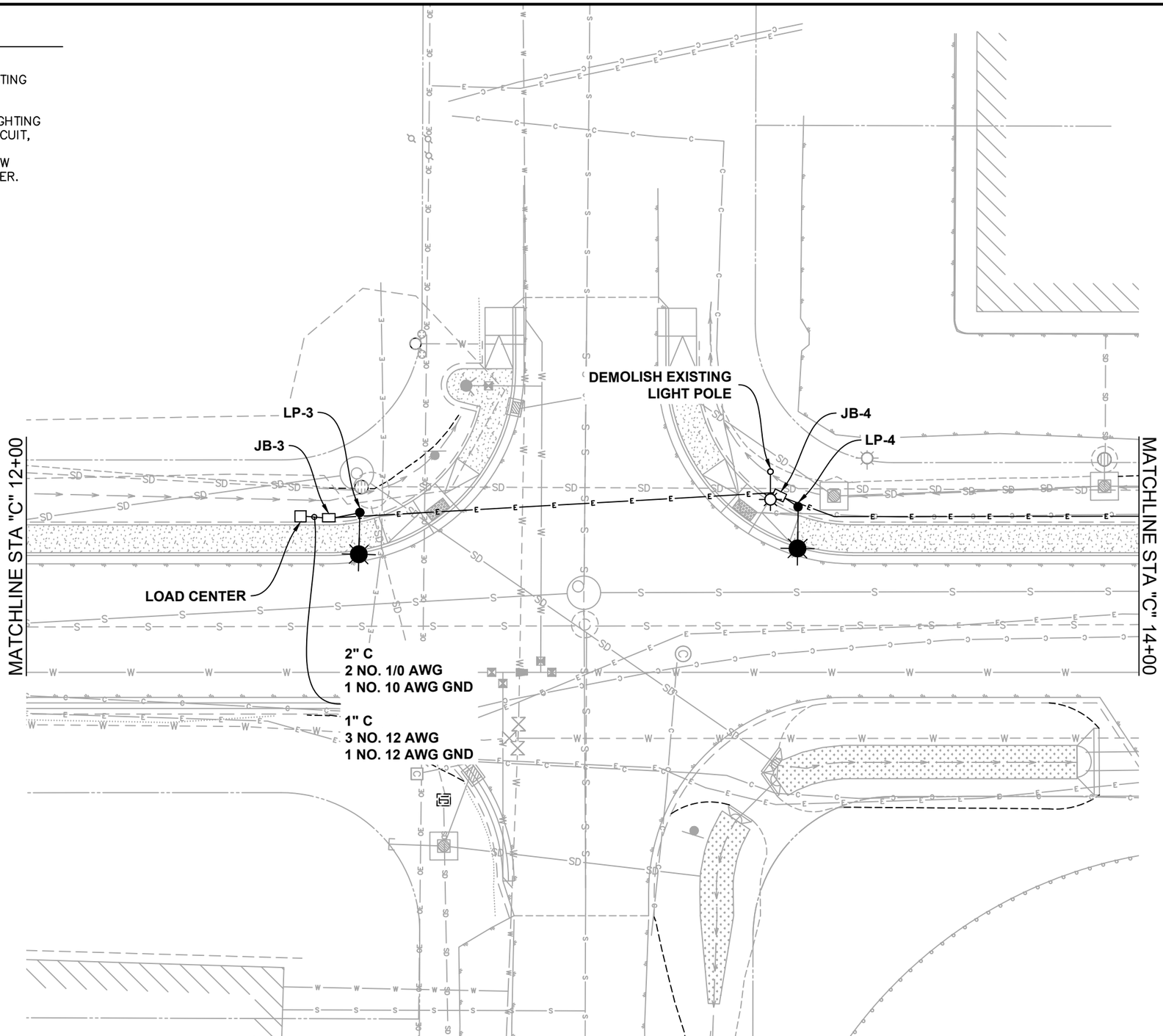
ELECTRICAL PLAN
YANDUKIN DR TO STA "C" 12+00

PROJECT 71095.01
DATE 4/20/2021

SHEET
E-201

NOTES

1. COORDINATE WITH AEL&P TO VERIFY EXISTING SERVICE CONNECTION FOR CREST STREET LIGHTING.
2. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH EXISTING LIGHTING CIRCUIT, POLES AND BASES.
3. COORDINATE WITH AEL&P TO PROVIDE NEW SERVICE CONNECTION TO THE LOAD CENTER.
4. PHOTOCELL TO BE LOCATED ON LP–3.



N

10 5 0 10 20 30

SCALE IN FEET

DOUGLAS, AK

RMC engineering

907–723–2996

STATE OF ALASKA — Vincent McElmurry — No. E 14454 — REGISTERED PROFESSIONAL ENGINEER

REVISIONS			
REV	DATE	DESCRIPTION	BY

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CITY AND BOROUGH OF JUNEAU — ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

ELECTRICAL PLAN
STA "C" 12+00 TO STA "C" 14+00

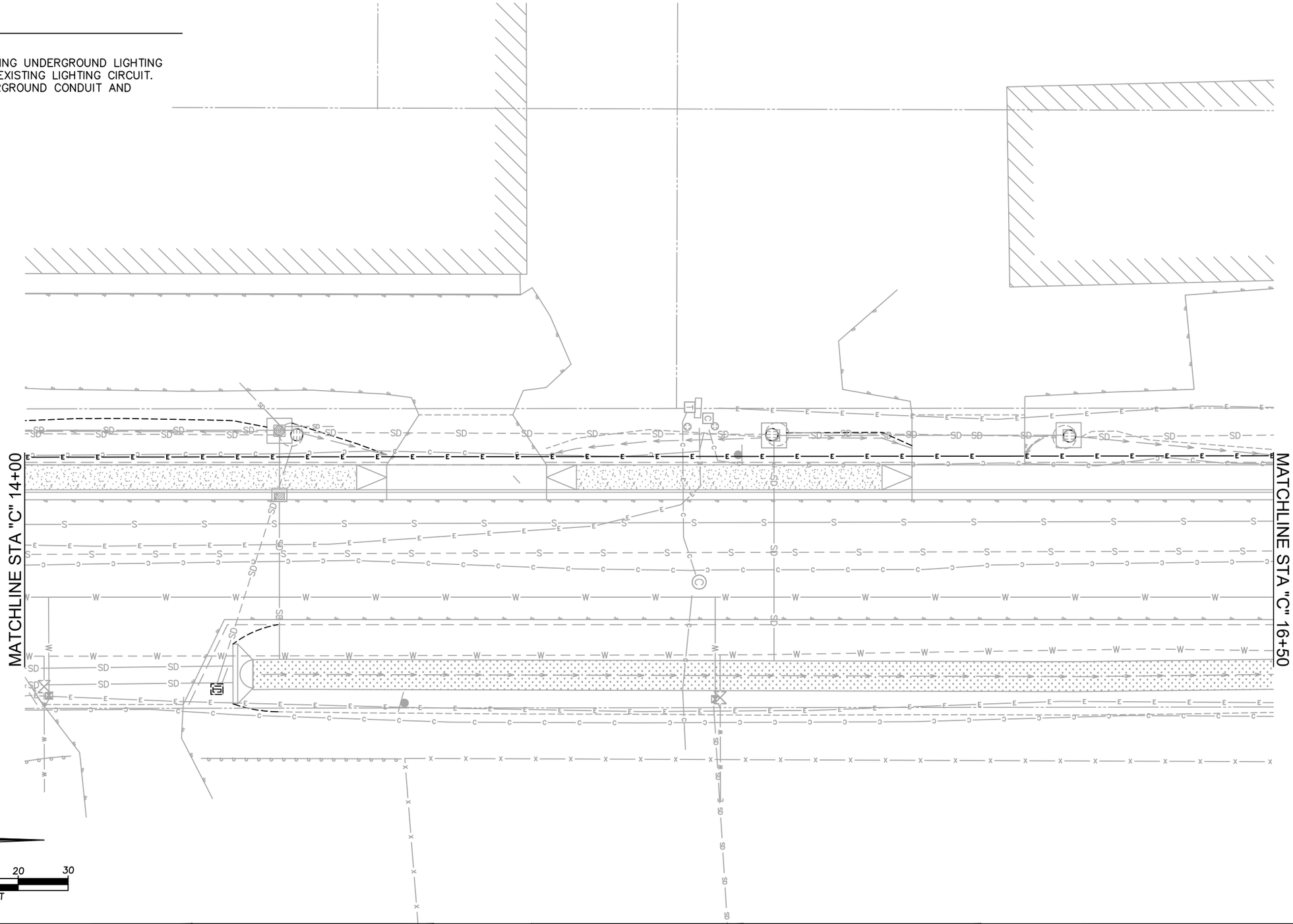
PROJECT	71095.01
DATE	4/20/2021

SHEET

E-202

NOTES

1. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH EXISTING LIGHTING CIRCUIT.
2. INSTALL NEW UNDERGROUND CONDUIT AND LIGHTING CIRCUIT.



10 5 0 10 20 30
SCALE IN FEET

DOUGLAS, AK

RMC engineering
907–723–2996

STATE OF ALASKA 49TH
Vincent McElmurry
No.E 14454
PROFESSIONAL ENGINEER

REVISIONS			
REV	DATE	DESCRIPTION	BY

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

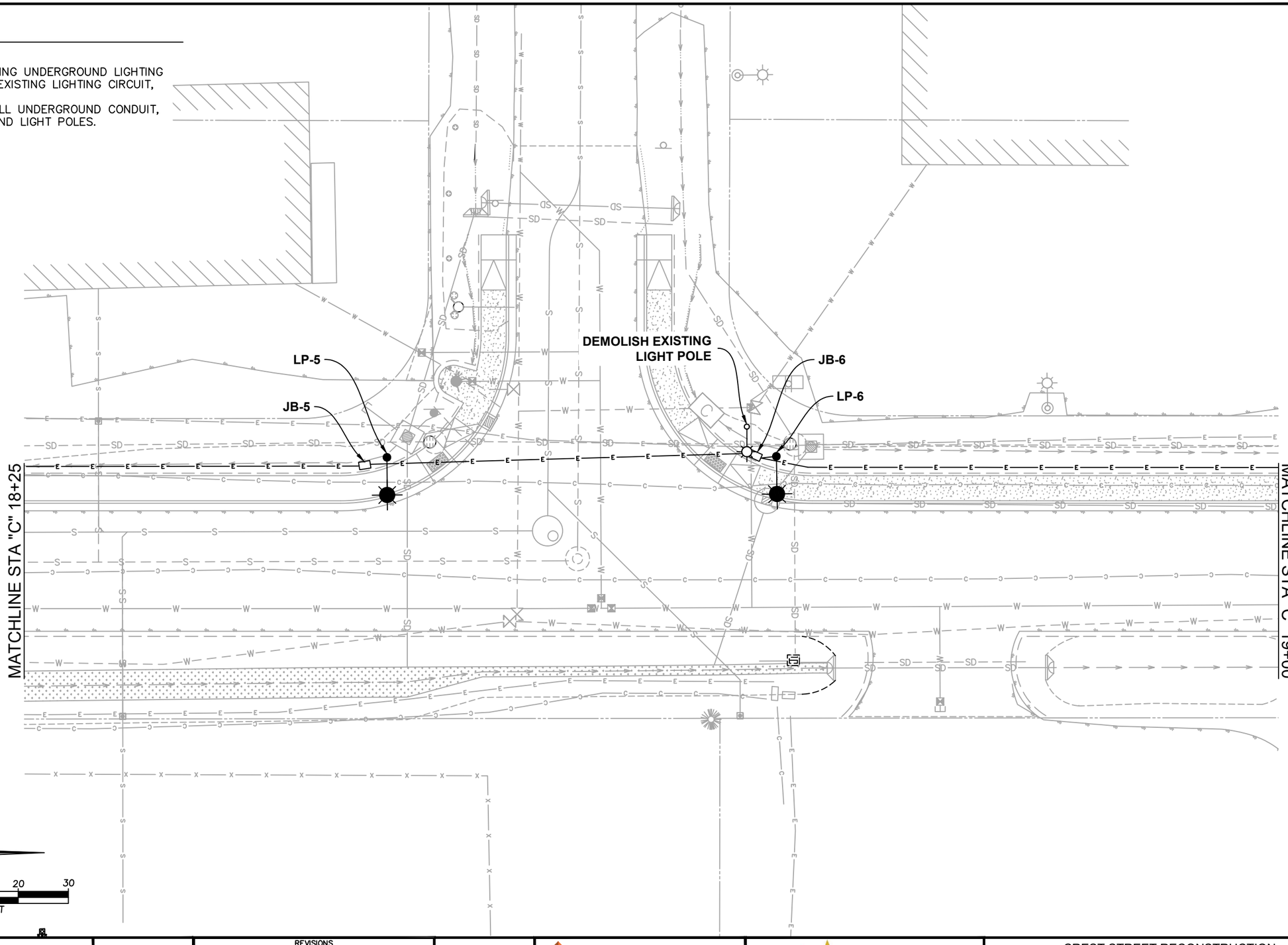
ELECTRICAL PLAN
STA "C" 14+00 TO STA "C" 16+50

PROJECT 71095.01
DATE 4/20/2021

SHEET
E-203

NOTES

1. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH EXISTING LIGHTING CIRCUIT, POLES AND BASES.
2. PROVIDE AND INSTALL UNDERGROUND CONDUIT, JUNCTION BOXES, AND LIGHT POLES.



10 5 0 10 20 30
SCALE IN FEET

DOUGLAS, AK
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907-723-2996

REVISIONS			
REV	DATE	DESCRIPTION	BY

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

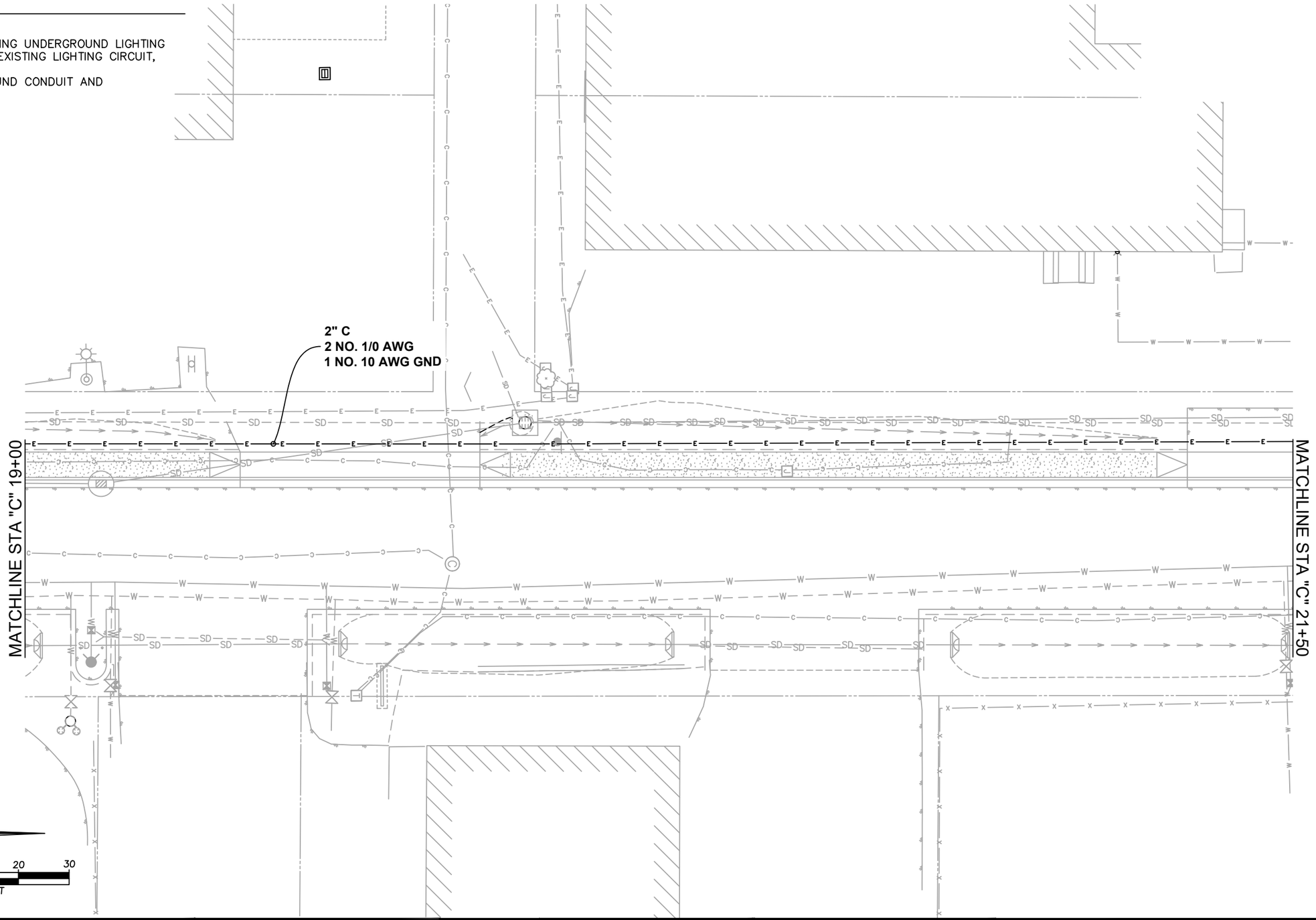
ELECTRICAL PLAN
STA "C" 16+50 TO STA "C" 19+00

PROJECT	71095.01
DATE	4/20/2021

SHEET
E-204

NOTES

1. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH EXISTING LIGHTING CIRCUIT, POLES AND BASES.
2. INSTALL UNDERGROUND CONDUIT AND CONDUCTORS.



10 5 0 10 20 30
SCALE IN FEET

DOUGLAS, AK

RMC engineering
907–723–2996

REVISIONS			
REV	DATE	DESCRIPTION	BY

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

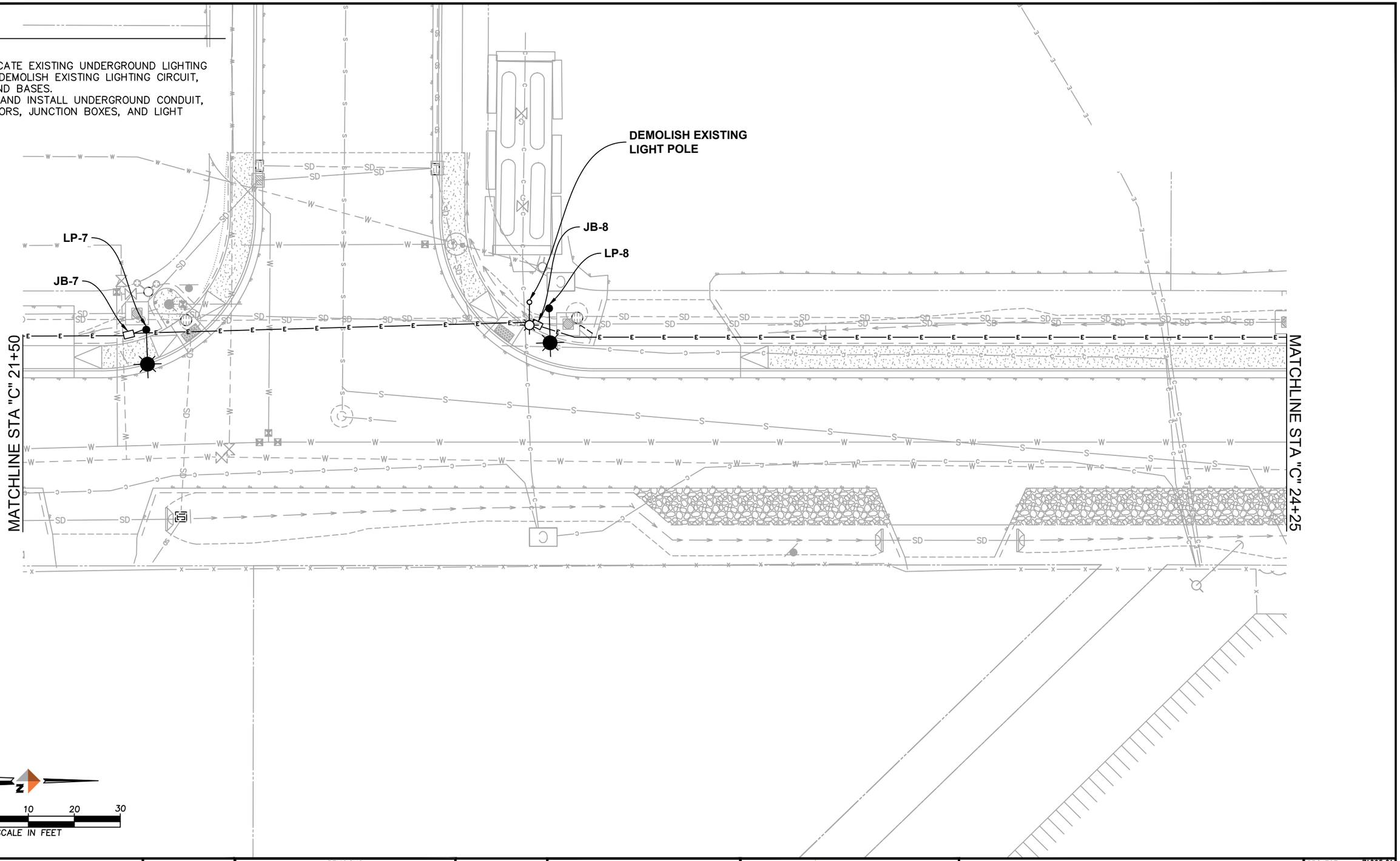
ELECTRICAL PLAN
STA "C" 19+00 TO STA "C" 21+50

PROJECT	71095.01
DATE	4/20/2021

SHEET
E-205

NOTES

1. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH EXISTING LIGHTING CIRCUIT, POLES AND BASES.
2. PROVIDE AND INSTALL UNDERGROUND CONDUIT, CONDUCTORS, JUNCTION BOXES, AND LIGHT POLES.



DOUGLAS, AK

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REVISIONS

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ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

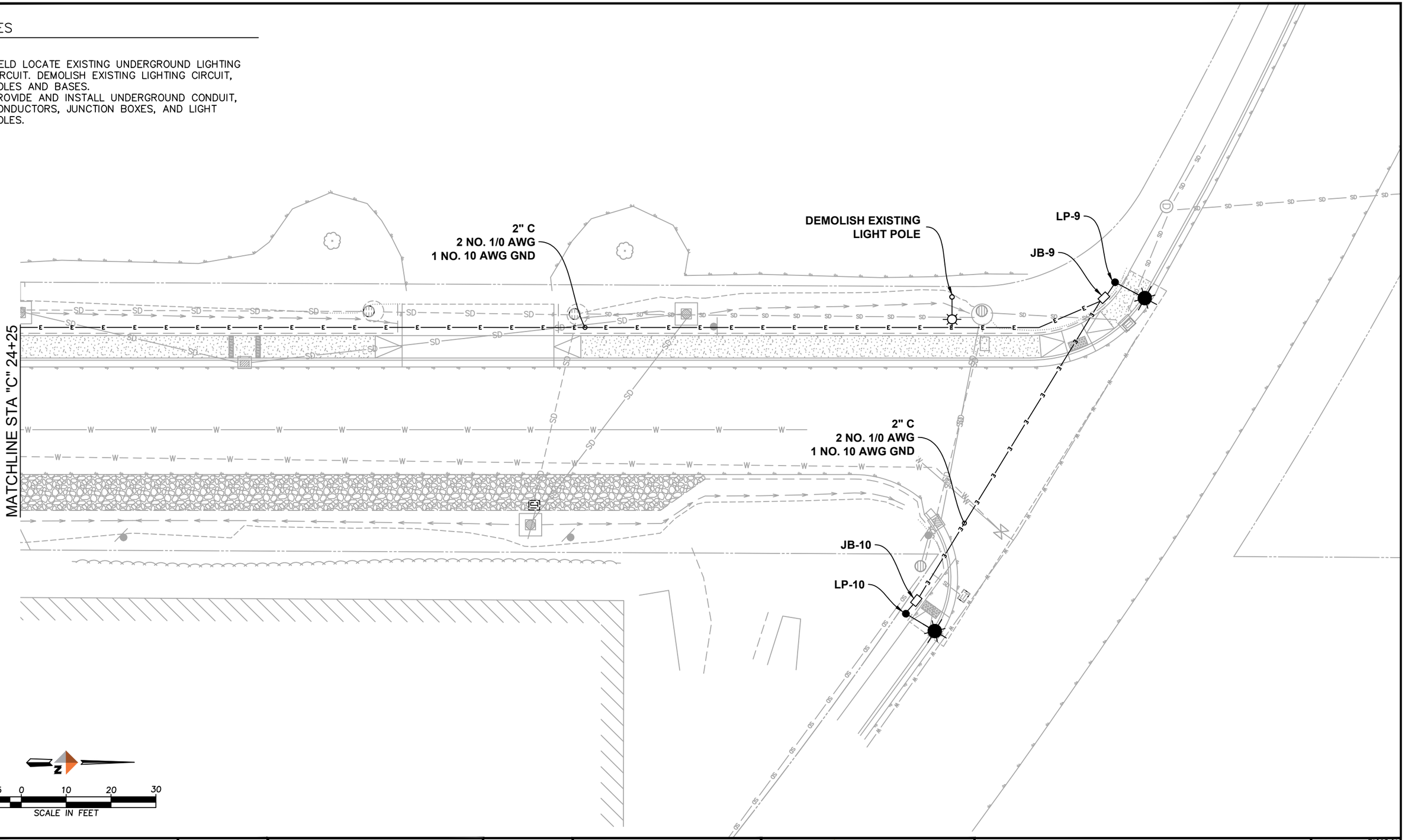
ELECTRICAL PLAN
STA "C" 21+50 TO STA "C" 24+25

PROJECT 71095.01
DATE 4/20/2021

SHEET
E-206

NOTES

1. FIELD LOCATE EXISTING UNDERGROUND LIGHTING CIRCUIT. DEMOLISH EXISTING LIGHTING CIRCUIT, POLES AND BASES.
2. PROVIDE AND INSTALL UNDERGROUND CONDUIT, CONDUCTORS, JUNCTION BOXES, AND LIGHT POLES.



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RMC engineering
907-723-2996

STATE OF ALASKA — Vincent McElmurry — No. E 14454 — REGISTERED PROFESSIONAL ENGINEER

REVISIONS			
REV	DATE	DESCRIPTION	BY

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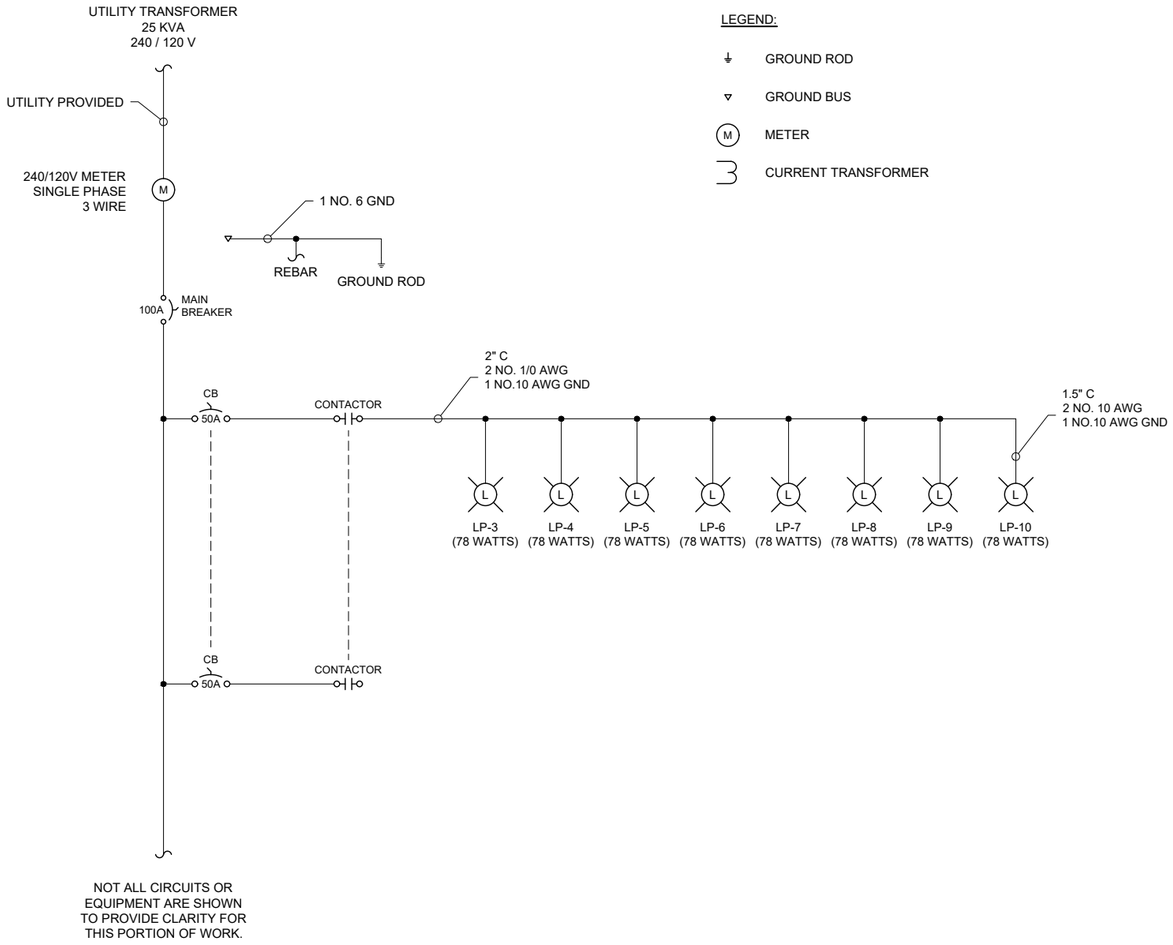
CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

ELECTRICAL PLAN
STA "C" 24+25 TO OLD DAIRY RD

PROJECT	71095.01
DATE	4/20/2021

SHEET
E-207



NOT ALL CIRCUITS OR EQUIPMENT ARE SHOWN TO PROVIDE CLARITY FOR THIS PORTION OF WORK.

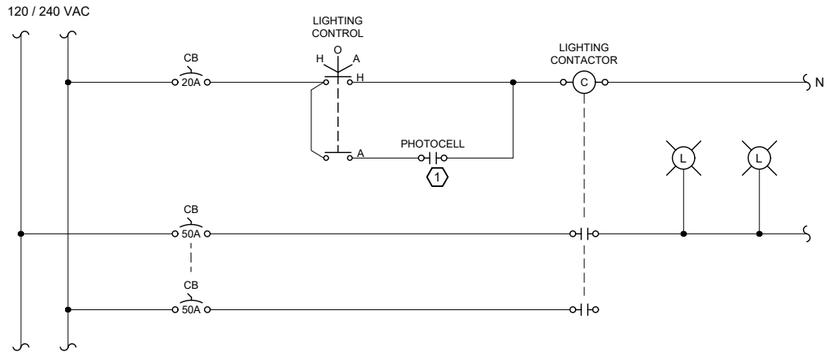
1 ONE LINE

LEGEND:

- GROUND ROD
- GROUND BUS
- (M) METER
- CURRENT TRANSFORMER

NOTES:

1. PHOTOCELL LOCATED ON LP-3.
2. LABEL ALL CIRCUIT BREAKERS WITH CIRCUIT NUMBERS AND FUNCTION.
3. LABEL ALL CIRCUIT CONDUCTORS WITH PRINTED HEAT SHRINK LABELS. LABELS SHALL LIST PANEL AND CIRCUIT NUMBER.
4. COORDINATE WITH AEL&P FOR NEW LOAD CENTER SERVICE.
5. USE NO. 10 AWG TAP CONDUCTORS TO CONNECT THE INDIVIDUAL LIGHT FIXTURES.
6. PROVIDE 2 POLE, 50 AMP, ELECTRICALLY HELD LIGHTING CONTACTOR.



2 LIGHTING CONTROLS

DOUGLAS, AK

RMC engineering

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STATE OF ALASKA — 49TH — Vincent McElmurry No.E 14454 — PROFESSIONAL ENGINEER

REVISIONS			
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CITY AND BOROUGH OF JUNEAU — ALASKA'S CAPITAL CITY

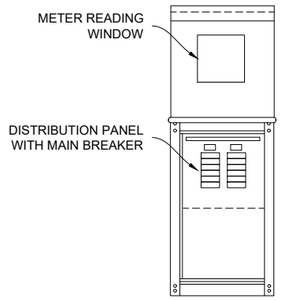
CREST STREET RECONSTRUCTION
BE21-219

ONE LINE
LIGHTING CONTROLS

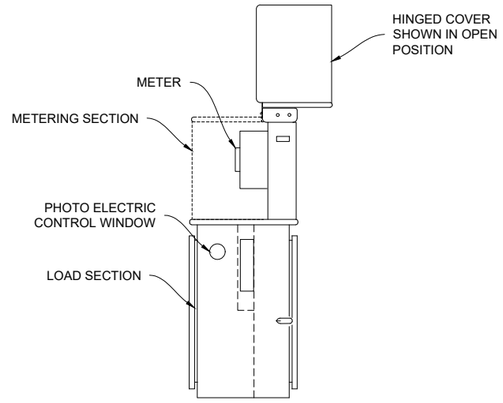
PROJECT	71095.01
DATE	03/19/2021

SHEET

E-208



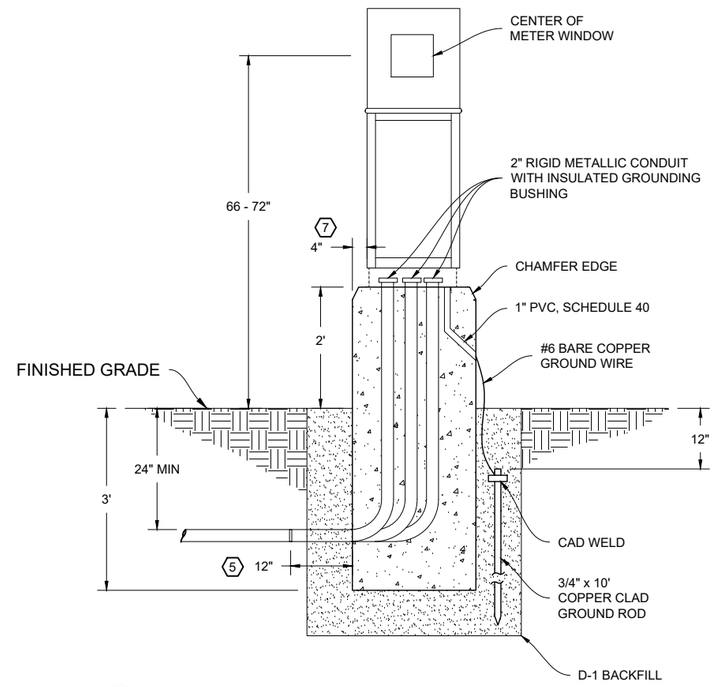
1 LOAD CENTER FRONT VIEW



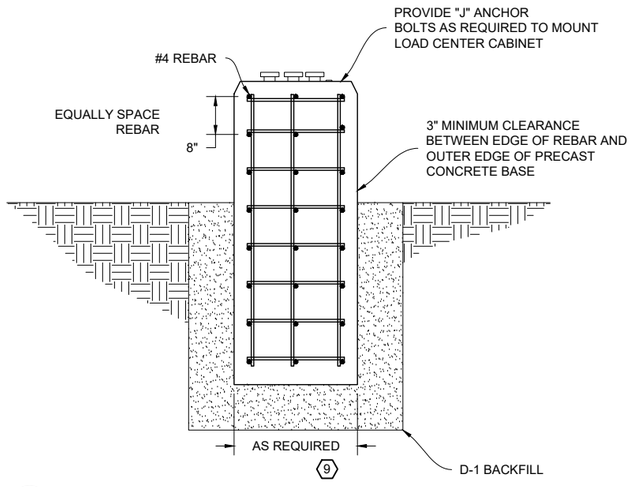
2 LOAD CENTER SIDE VIEW

NOTES

1. PROVIDE STAINLESS STEEL, UL LISTED LOAD CENTER. MILBANK OR APPROVED EQUAL.
   - 1.1. LOCKABLE.
   - 1.2. 22K SCCR.
   - 1.3. 120/240V 1PH 3W.
   - 1.4. 200AMP 5JAW RING TYPE SOCKET WITH TEST BYPASS.
   - 1.5. 40A, 2P ELECTRICALLY HELD LIGHTING CONTACTOR
   - 1.6. HOA SWITCH, MOUNTED INTERNALLY.
   - 1.7. 20 AMP GFI RECEPTACLE, MOUNTED INTERNALLY.
   - 1.8. 18 CIRCUIT PANELBOARD
     - 1.8.1. 100 AMP 2P MAIN BREAKER.
     - 1.8.1. 1 EA. 20A 1P CB RECEPTACLE.
     - 1.8.2. 2 EA. 20A 1P CB SPARE.
     - 1.8.3. 1 EA. 50A 2P CB STREET LIGHTS.
     - 1.8.4. 1 EA. 20A 1P CB HOA.
     - 1.8.5. 1 EA. 20A 2P CB SPARE.
2. GRADE AWAY FROM THE BASE WITH A MINIMUM SLOPE OF 3%. USE A PRE-MOLDED BITUMINOUS JOINT BETWEEN THE BASE AND CONCRETE SIDEWALK OR PAVING WHEN ADJACENT TO A SIDEWALK.
3. PROVIDE ANCHOR BOLTS FOR MOUNTING THE CABINET PER THE MANUFACTURER'S INSTRUCTIONS. ANCHOR HARDWARE SHALL BE GALVANIZED.
4. 12" MINIMUM GROUNDING ROD BURIAL DEPTH.
5. RIGID METALLIC CONDUIT SHALL EXTEND FROM CONCRETE FOOTING A MINIMUM OF 12" BEFORE TRANSITIONING TO NON-METALLIC CONDUIT.
6. SIZE PRECAST CONCRETE FOOTING TO PROVIDE A MINIMUM OF 4" OF CLEARANCE BETWEEN EDGE OF LOAD CENTER AND BASE.
7. LOCATE PHOTOCELL ON LP-3.



3 FRONT VIEW



4 PRECAST CONCRETE BASE

DOUGLAS, AK
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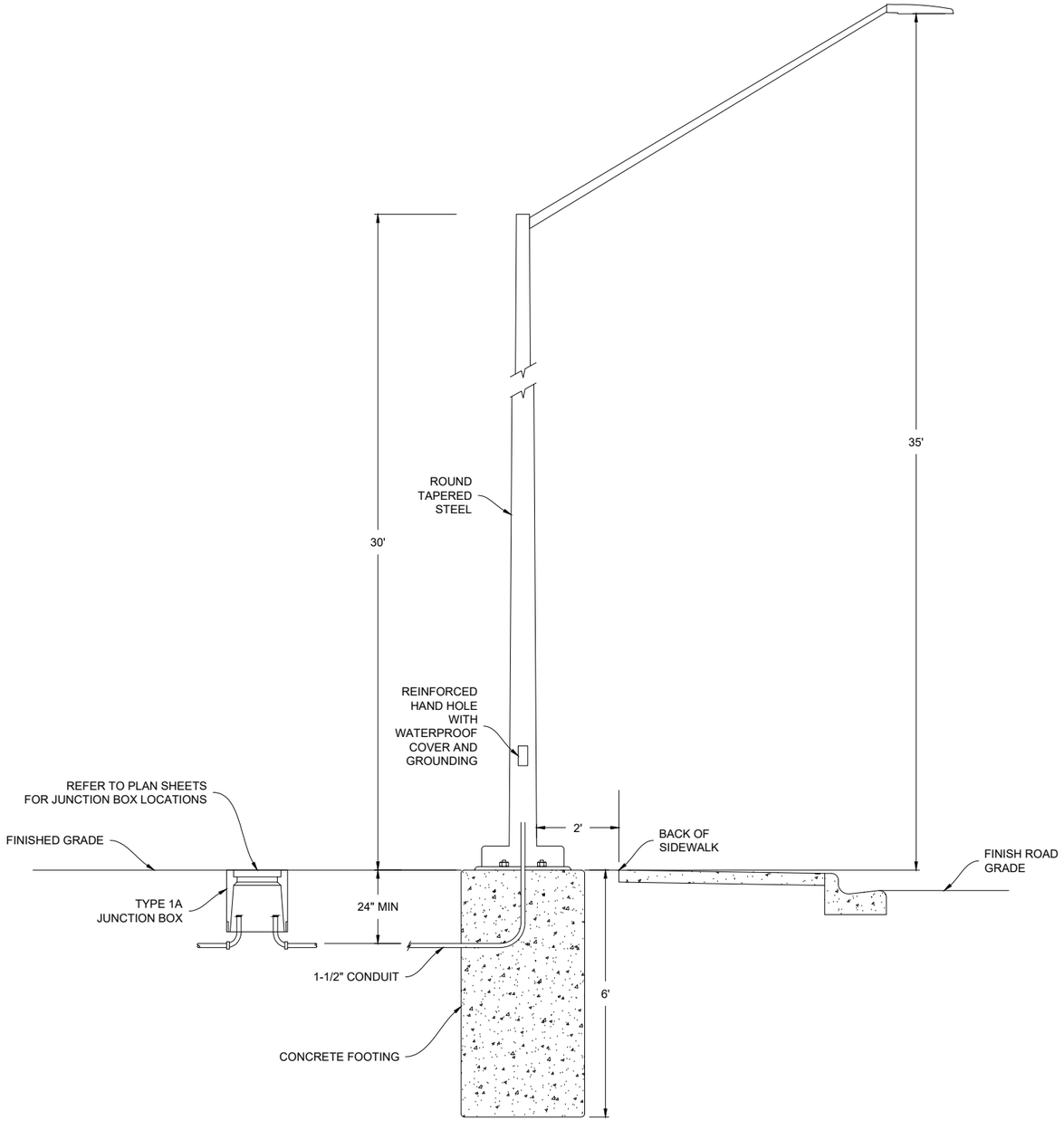
CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

LOAD CENTER

PROJECT	71095.01
DATE	03/19/2021

SHEET
E-209



1 LIGHT FIXTURE AND POLE DETAIL

LIGHT POLE

1. LIGHT POLES SHALL BE 30' ROUND TAPERED GALVANIZED STEEL, 10' MAST ARM 5' RISE. VALMONT OR APPROVED EQUAL.
2. DESIGN POLES TO WITHSTAND FORCES EQUIVALENT TO A 110 MPH ISOTACH WIND VELOCITY, WITH A 1.3 GUST FACTOR. AS DEFINED BY THE AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES AND TRAFFIC SIGNALS". 1994
3. INSTALL UNDERGROUND WIRING BETWEEN LIGHTS IN PVC CONDUIT. ABOVE GROUND CONDUITS SHALL BE GALVANIZED RIGID STEEL.
4. USE A TYPE 1A JUNCTION BOX AT EACH LIGHT POLE, SEE SITE PLAN FOR LOCATIONS.
5. WIRING BETWEEN JUNCTION BOXES SHALL BE CONTINUOUS AND FREE OF SPLICES.
6. PROVIDE DOUBLE FUSED CONNECTOR KITS WITH FUSES IN THE BASE OF EACH POLE.

LIGHT FIXTURE

1. BASIS OF DESIGN IS CREE RSW SERIES. PROVIDE CREE RSW SERIES, OR APPROVED EQUAL.
2. PROVIDE SHORTING CAPS FOR EACH FIXTURE.
3. CONTRACTOR SHALL COORDINATE WITH OWNER AND MANUFACTURER TO PROVIDE COMPLETE LIGHT FIXTURE PART NUMBER.

3.1. RSWM-A-HT-2ME-9L-40K7-UL-GY-_-_

3.1.1.	PRODUCT:	RSWM	CREE RSW SERIES
3.1.2.	VERSION:	A	
3.1.3.	MOUNTING:	HT	HORIZONTAL TENON
3.1.4.	OPTIC:	3ME	TYPE III MEDIUM
3.1.5.	LUMENS:	9L	
3.1.6.	CCT/CRI:	40K7	4000K, 70CRI
3.1.7.	VOLTAGE:	UL	UNIVERSAL 120-277V
3.1.8.	COLOR:	GY	GRAY
3.1.9.	UTILITY LABEL/RECEPTACLE	AS REQUIRED	
3.1.10.	OPTIONS	AS REQUIRED	

DOUGLAS, AK
RMC engineering
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STATE OF ALASKA 49TH
Vincent McElmurry No.E 14454 PROFESSIONAL ENGINEER

REVISIONS

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

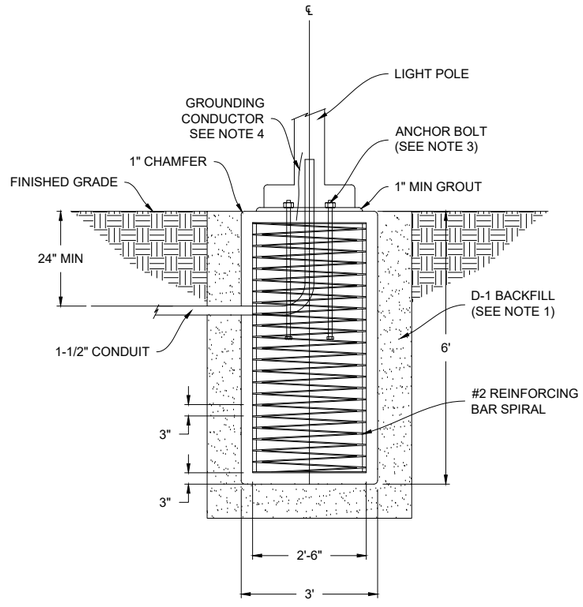
LIGHT POLE

PROJECT 71095.01
DATE 03/19/2021

SHEET
E-210

PRECAST CONCRETE FOOTING DETAIL:

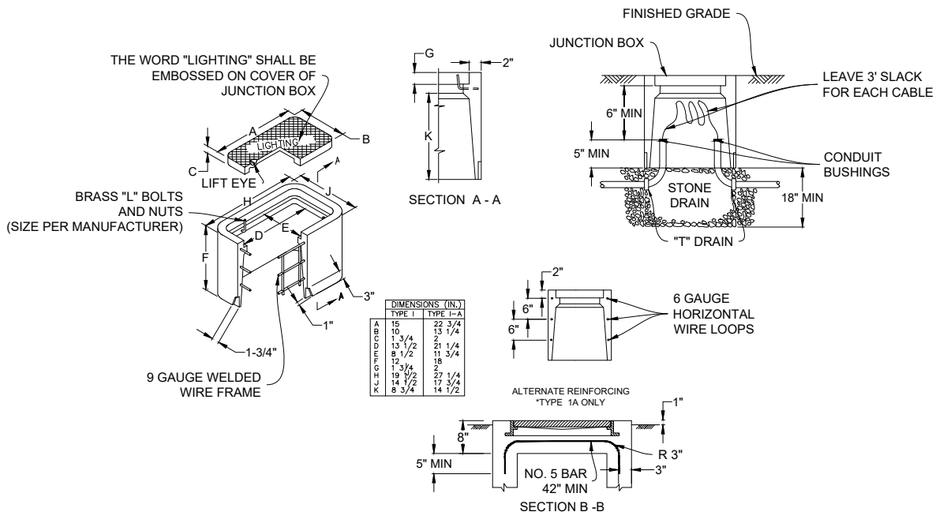
1. BACKFILL WITH D-1 AROUND FOOTING, 12 INCHES ALL SIDES. COMPACT TO 95%.
2. NO. 2 REBAR SPIRAL INSTALLATION. SPIRAL SHALL HAVE 30 INCH DIAMETER WITH 1 TURN EVERY 3 INCHES. MAINTAIN MINIMUM 3" COVER.
3. PROVIDE GALVANIZED ANCHOR BOLTS AND LEVELING NUTS AS RECOMMENDED BY POLE MANUFACTURER. SPACE ANCHOR BOLTS EVENLY WITHIN THE REBAR SPIRAL. EMBED BOLTS IN CONCRETE TO DEPTH AS RECOMMENDED BY POLE MANUFACTURER.
4. PROVIDE NO. 8 CU GROUNDING CONDUCTOR, BOND GROUNDING CONDUCTOR TO FOOTING REBAR, ANCHOR BOLTS, LIGHT POLE, AND EQUIPMENT GROUNDING CONDUCTOR.
5. CONCRETE SHALL BE PER CITY AND BOROUGH OF JUNEAU SPECS SECTION 03302.



1 PRECAST CONCRETE FOOTING DETIAL

CONCRETE JUNCTION BOX DETAIL:

1. EACH COVER FOR TYPE 1A JUNCTION BOXES SHALL BE CAST IRON.
2. JUNCTION BOXES LOCATED IN A SIDEWALK SHALL BE INSTALLED WITH A 1/2" PREFORMED BITUMINOUS JOINT MATERIAL AROUND ITS PERIMETER.
3. ALL CONDUITS SHALL BE BONDED TO FORM A CONTINUOUS ELECTRICAL SECURE SYSTEM WITH THE GROUND AT THE LOAD CENTER JUNCTION BOX.
4. ALL LIDS SHALL BE GROUNDED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION, STATE, AND LOCAL CODES.
5. ALL CONDUITS SHALL BE GROUTED IN KNOCKOUT SECTIONS IN ACCORDANCE WITH THE ALASKA SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.



DIMENSIONS (IN.)

	TYPE 1	TYPE 1-A
A	15	22 3/4
B	10	13 1/4
C	1 3/4	2
D	13 1/2	21 1/4
E	8 1/2	11 3/4
F	12	18
G	1 3/4	2
H	19 1/2	27 1/4
J	14 1/2	17 3/4
K	8 3/4	14 1/2

2 TYPE 1 & 1A JUNCTION BOX DETAIL

DOUGLAS, AK

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REVISIONS

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CITY AND BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

CREST STREET RECONSTRUCTION
BE21-219

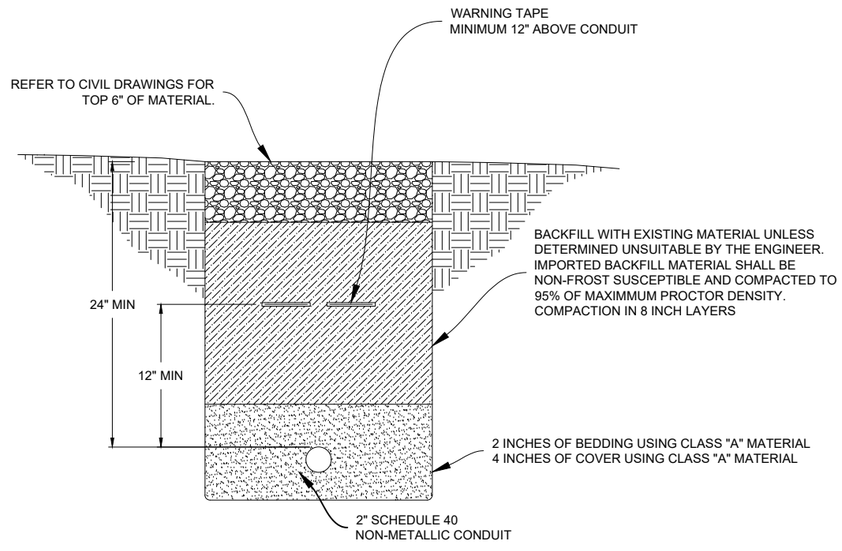
PRECAST FOOTING
JUNCTION BOX

PROJECT 71095.01
DATE 03/19/2021

SHEET
E-211

NOTES:

1. REFER TO CIVIL DRAWINGS FOR BACKFILL AND COMPACTION REQUIREMENTS WHEN UNDERGROUND RACEWAY IS IN ROADWAY.
2. TRENCH DEPTH SHALL BE PER THE TRENCH DETAIL DRAWING. MINIMUM CONDUIT BURIAL DEPTH SHALL BE 24 INCHES. THIS DEPTH MAY BE REDUCED IF CONCRETE ENCASEMENT OR OTHER SUPPLEMENTAL PROTECTION IS PROVIDED. THE BOTTOM OF THE TRENCH SHALL BE FREE OF ANY SHARP ROCKS OR MATERIAL THAT MAY CAUSE DAMAGE TO CABLES AND CONDUIT. AT NO POINT SHALL THE CABLES SUSPEND OVER A HOLE OR GAP IN THE TRENCH, SUCH VOIDS SHALL BE FILLED WITH APPROPRIATE MATERIAL.
3. ALL TRENCHING DEPTHS SPECIFIED ARE MINIMUM AS MEASURED FROM THE FINAL GRADE TO THE TOP SURFACE OF THE CONDUIT. THE TRENCH ROUTING MAY BE ALTERED FROM THE LOCATION SHOWN ON THE SITE PLAN TO MAINTAIN THE MINIMUM DEPTH, COORDINATE WITH THE OWNER TO DETERMINE THE FINAL LOCATION.
4. CARE SHALL BE EXERCISED TO MINIMIZE THE RISK OF WATER FLOW SINCE THIS MAY CAUSE TRENCH DAMAGE AND A REDUCTION IN TRENCH DEPTH. IF THIS OCCURS, THE TRENCH MUST BE CLEARED TO THE SPECIFIED DEPTH BEFORE INSTALLING THE CONDUIT AND CABLE.
5. CONSTRUCTION SHALL BE ARRANGED SO THAT TRENCHES MAY BE LEFT OPEN FOR THE SHORTEST PRACTICAL TIME TO AVOID CREATING A HAZARD TO THE PUBLIC AND TO MINIMIZE THE LIKELIHOOD OF COLLAPSE OF THE TRENCH DUE TO OTHER CONSTRUCTION ACTIVITY, RAIN, ACCUMULATION OF WATER IN THE TRENCH, ETC.
6. THE FIRST 6 INCHES OF TRENCH BACKFILL SHALL BE CLASS "A" MATERIAL. THIS BACKFILL LAYER MUST BE CAREFULLY COMPACTED SO THAT THE CABLE CONDUIT WILL NOT BE DAMAGED.
7. BACKFILLING MUST BE COMPLETED IN SUCH A MANNER THAT VOIDS WILL BE ELIMINATED.
8. PIECES OF SCRAP CABLE OR OTHER MATERIAL REMAINING AFTER INSTALLATION MUST NOT BE BURIED IN THE TRENCH AS A MEANS OF DISPOSAL.
9. BACKFILLED MATERIAL SHALL BE COMPACTED FOR ALL ROAD CROSSING.
10. ALL EXPOSED ENDS OF CONDUIT MUST BE PLUGGED DURING CONSTRUCTION TO PREVENT THE ENTRANCE OF FOREIGN MATTER AND MOISTURE INTO THE CONDUIT. BURRS OR SHARP PROJECTIONS WHICH MIGHT DAMAGE THE CABLE MUST BE REMOVED.
11. ENSURE THE MINIMUM BENDING RADIUS OF THE CABLE IS 12 TIMES THE OVERALL DIAMETER OF THE CABLE OR PER THE MANUFACTURER'S INSTRUCTIONS, WHICHEVER IS LARGER. THE BENDING RADIUS IS MEASURED TO THE SURFACE OF THE CABLE ON THE INSIDE OF THE BEND.
12. CABLES SHALL BE TAGGED AND IDENTIFIED AT ALL ACCESSIBLE LOCATIONS AS THE CABLES ARE LAID. THE IDENTIFICATION MUST BE OF A PERMANENT TYPE, SUCH AS THAT DONE ON PLASTIC OR CORROSION RESISTANT METAL TAGS. THE TAG MUST BE SECURELY ATTACHED TO THE CABLE. PAPER OR CLOTH TAGS ARE NOT ACCEPTABLE.
13. CONDUIT SHALL BE 2 INCH NON-METALLIC, SCHEDULE 40.



1 TRENCH DETAIL

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CITY AND BOROUGH OF JUNEAU
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CREST STREET RECONSTRUCTION
BE21-219

TRENCH DETIAL

PROJECT	71095.01
DATE	03/19/2021

SHEET
E-212