#### **ADDENDUM NO. 4**

#### TO THE BID DOCUMENTS

#### Ohlson Ln. & W. Bunnell Ave Roadway & Water Improvements

#### **CITY OF HOMER, ALASKA**

7144411441111		110101122, 2020	<del></del>
Bid Submittal Date:		April 1, 2025	
Previous Ad	ldenda Issued:	3	
Issued By:	Leon Galbrai City Enginee City of Home	r	
Nation to Di	44		

#### **Notice to Bidders:**

Addendum Issue Date:

Bidders must **acknowledge receipt of this addendum** by including the Addenda Acknowledgement Form with the bid.

March 21 2025

Bidders are required to acknowledge each addenda separately on the Addenda Acknowledgement Form. Any bids received without acknowledgment of addenda may be rejected prior to evaluation.

The Bid Documents for the above project are amended as follows (all other terms and conditions remain unchanged):

The attached plan set contains REVISION #1 on all sheets dated 03/21/25 and should replace the previously issued complete plan set drawings.

Changes to the design include shifting the location of SSMH#5 and changes the storm drain pipe diameter to 24". Clouded changes are on sheets:

C1.3

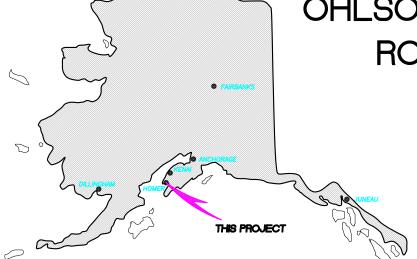
C5.2

C5.3

# CITY OF HOMER

OHLSON LANE AND WEST BUNNELL AVENUE ROADWAY AND WATER IMPROVEMENTS

**DRAWING** 



LOCATION MAP

VICINITY MAP



## **DRAWING INDEX**

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### LEGEND

EXISTING (E)	PROPOSED (P)	
	<del></del>	ROAD CENTERLINE
		ROW CENTERLINE
100	<del></del> 100	CONTOUR LINES
		CUT/FILL DAYLIGHT
		EDGE OF ASPHALT PAVEMENT
		EDGE OF GRAVEL
		PAVED DRIVEWAY
		EDGE OF R.O.W.
		PROPERTY LINE
		EASEMENT
UGT		UTILITY - COMMUNICATION
OHP		UTILITY - ELECTRIC - OVERHEAD
——— GAS ———		UTILITY - GAS
W	—— w ——	UTILITY - WATER MAIN LINE
	vv	UTILITY - WATER SERVICE LINE
—— ss ——		UTILITY - SANITARY SEWER MAIN
— ss —— ss ——		UTILITY - SANITARY SEWER SERVICE
———— SD ———	—— SD ——	UTILITY - STORM DRAIN
		COMMUNICATION PEDESTAL
W		MANHOLE - WATER
S		MANHOLE - SANITARY SEWER
D	0	MANHOLE - STORM SEWER
₩V	⋈ <sup>w∨</sup>	WATER VALVE
<b></b>		FENCE
		CULVERT
<b>+</b>		TEST HOLE LOCATION
4	4	SIGN
<b></b> →		DRAINAGE FLOW LINE







2022037 DRAWN BY:

CHECKED BY: DATE: 02/06/25

SHEET: **C1.1** 1 of 31

#### **GENERAL NOTES**

- 1. THE PURPOSE OF THIS PROJECT IS TO IMPROVE OHLSON LANE AND WEST BUNNELL AVENUE IN HOMER, ALASKA. THE PROJECT EXTENDS FROM THE INTERSECTION OF OHLSON LANE AND THE STERLING HIGHWAY TO THE INTERSECTION OF OHLSON LANE AND WEST BUNNELL AVENUE, CONTINUING TO AND TERMINATING AT THE INTERSECTION OF WEST BUNNELL AVE AND MAIN STREET. THE FULL EXTENTS ARE INDICATED IN THESE DRAWINGS. THE SCOPE OF THIS PROJECT INCLUDES, BUT IS NOT LIMITED TO:
- 1.1. DEMOLISHING EXISTING PAVEMENT AND EXCAVATING AND REPLACING ROAD EMBANKMENT MATERIAL
- 1.2. REGRADING AND RESURFACING OHLSON LANE AND WEST BUNNELL AVENUE AS INDICATED ON THE PLANS
- 1.3. ADDING PARALLEL PARKING, ASPHALT SIDEWALKS, AND PEDESTRIAN CROSSINGS
- 1.4. DRAINAGE IMPROVEMENTS, INCLUDING NEW CURBS & GUTTERS AND A STORM DRAIN SYSTEM
- 1.5. WATER MAIN AND SERVICE LINE REPLACEMENT

THE FULL PROJECT SCOPE IS PROVIDED IN THE PROJECT MANUAL.

- 2. THESE DRAWINGS ARE BASED ON THE TOPOGRAPHIC SURVEY CONDUCTED BY ABILITY SURVEYS IN JULY OF 2022, SEE THE SURVEY CONTROL SHEET FOR SPECIFICS.
- 3. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE. THE ACTUAL NUMBER, LOCATIONS, AND DEPTHS ARE UNKNOWN. BURIED UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING, LOCATING, AND WORKING AROUND ALL UTILITIES WITHIN THE PROJECT LIMITS AT NO ADDITIONAL COST TO THE OWNER. FOR ADDITIONAL REQUIREMENTS, SEE THE PROJECT MANUAL, SECTION 105 EXISTING UTILITIES IN CONSTRUCTION ZONE. ALWAYS CALL FOR LOCATES PRIOR TO EXCAVATION AT THE ALASKA DIGLINE, 1-800-478-3121, OR ONLINE AT 811AK.COM.
- 4. THE FOLLOWING ALASKA STATUTES APPLY TO WORK NEAR OVERHEAD ELECTRICAL LINES:
  - AS 18.60.670 (1) PLACEMENT OF ANY TYPE OF TOOL, EQUIPMENT, MACHINERY, OR MATERIAL THAT IS CAPABLE OF LATERAL VERTICAL, OR SWINGING MOTION WITHIN 10' OF ENERGIZED LINES IS NOT ALLOWED.
  - AS 18.60.670 (2) MINIMUM 10' CLEARANCE FROM BUILDINGS, APPARATUS, MACHINERY, MATERIALS, ETC.
  - AS 18.60.680 ANY WORK WITHIN MINIMUM DISTANCE STATED ABOVE SHALL REQUIRE CONTACT WITH HEA TO INSTALL TEMPORARY MECHANICAL BARRIERS, TEMPORARY DE-ENERGIZATION AND GROUNDING, OR TEMPORARY RAISING OF CONDUCTORS.
- 5. ALL CONTRACT DOCUMENTS ARE CONTAINED WITHIN THE PROJECT MANUAL. THE PROJECT MANUAL INCLUDES THE 2011 EDITION OF THE CITY OF HOMER STANDARD CONSTRUCTION SPECIFICATIONS (HSCS) AND THE MODIFICATIONS AND ADDITIONS TO THE CITY OF HOMER STANDARD CONSTRUCTION SPECIFICATIONS (MODIFICATIONS), AND THESE DRAWINGS, ENTITLED OHLSON LANE AND WEST BUNNELL AVENUE ROADWAY AND WATER IMPROVEMENTS. IF NOT DETAILED IN THESE DRAWINGS, ALL APPLICABLE CONSTRUCTION SHALL BE BUILT IN ACCORDANCE WITH THE PROJECT MANUAL. THESE DRAWINGS AND THE MODIFICATIONS TAKE PRECEDENCE OVER THE HSCS.
- 6. THE CONTRACTOR IS REQUIRED TO FIND ALL PROPERTY PINS AND MONUMENTS WITHIN THE PROJECT AREA AND PROTECT OR REPLACE THEM AFTER CONSTRUCTION IS COMPLETE.
- 7. THE CONTRACTOR IS REQUIRED TO SEED ALL AREAS DISTURBED BY CONSTRUCTION PER THE SPECIFICATIONS.
- 8. THE CONTRACTOR SHALL ADHERE TO LOCAL REQUIREMENTS FOR NOISE, HOURS OF OPERATION, AND DUST CONTROL.
- 9. CONTOURS AND CONTOUR LABELS SHOWN ON THE PLANS ARE FOR INFORMATIONAL PURPOSES AND SHOULD ONLY BE USED AS A REPRESENTATION OF EXISTING GRADES. SURVEYED ELEVATIONS ARE SHOWN WITH SPOT ELEVATION LABELS.
- 10. ALL WATER LINE MATERIALS AND APPURTENANCES SHALL BE NSF-61 APPROVED.
- 11. ALL WATER SYSTEM MATERIALS SHALL BE LEAD-FREE AS REQUIRED BY THE ALASKA ADMINISTRATIVE CODE 18 AAC 80.500.
- 12. ALL WATER LINE MATERIALS AND APPURTENANCES SHALL BE COMPLIANT WITH THE AMERICAN IRON AND STEEL (AIS) PROVISION PER THE PROJECT GENERAL PROVISIONS.
- 13. ALL WATER MAINS SHALL KEEP A MINIMUM OF TEN FEET (10') OF SEPARATION FROM SEWER LINES OR MANHOLES. SEPARATION IS MEASURED FROM THE OUTER EDGE OF PIPE OR MANHOLE. WATER AND SEWER MAINS SHALL BE CONSTRUCTED IN SEPARATE TRENCHES. AT LOCATIONS WHERE THE NEW WATER LINE MUST CROSS AN EXISTING SEWER, THE CONTRACTOR SHALL INSTALL JOINTS NO NEARER THAN NINE FEET (9') FROM THE OUTER EDGE OF THE EXISTING SEWER PIPE AND PROVIDE AT LEAST 18 INCHES (18") OF VERTICAL SEPARATION BETWEEN THE OUTER EDGES OF THE CROSSING PIPES. PORTIONS OF THE WATER MAIN WITHIN 10 FEET (10') OF THE EXISTING SEWER MAIN AT CROSSINGS MUST BE ENCASED IN A CARRIER PIPE OF SIMILAR STRENGTH OR STRONGER WITH SIMILAR RATINGS AS THE ACTUAL PIPE.
- 14. THE CONTRACTOR SHALL PERFORM A HYDROSTATIC PRESSURE TEST ON THE NEW WATER MAIN UNDER THE OBSERVATION OF THE ENGINEER. THE CONTRACTOR SHALL CLEAN AND FLUSH ALL WATER MAIN PIPES PRIOR TO PRESSURE TESTING. THE CONTRACTOR SHALL PERFORM ALL FLUSHING, TESTING, AND DISINFECTION ACCORDING TO HSCS SECTION 602.4, AND THE MODIFICATIONS TO SECTION 602.4 PROVIDED IN THE PROJECT MANUAL
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDIING BACTERIOLOGICAL TESTING OF THE NEW WATER MAINS. SAMPLES SHALL BE TAKEN BY THE CONTRACTOR, UNDER THE OBSERVATION OF THE ENGINEER, IN ACCORDANCE WITH ADEC AND AWWA C651. FOR THIS PROJECT, THREE SAMPLE SETS OF TWO (2) SAMPLES MINIMUM PER SET SHALL BE COLLECTED. ONE (1) SET SHALL BE COLLECTED AT A POINT TO BE DETERMINED ALONG THE 1200 FEET OF WATER MAIN, ONE (1) SET AT THE TEE TO THE JENNY WAY WATER MAIN BRANCH, AND ONE SET AT END OF THE NEW LINE AT THE TIE-IN TO THE MAIN STREET WATER MAIN. ALL SAMPLES SHALL BE DELIVERED BY THE CONTRACTOR TO AN ADEC-APPROVED TESTING LAB TO TEST FOR THE PRESENCE OF COLIFORM BACTERIA. IF NONE OF THESE SAMPLES SHOWS THE PRESENCE OF COLIFORM, THE WATER MAIN CAN BE PLACED INTO SERVICE.
- 16. THE CONTRACTOR SHALL NOTIFY THE CITY OF HOMER PUBLIC WORKS DEPARTMENT AND THE ENGINEER 48 HOURS PRIOR TO FLUSHING, PRESSURE TESTING, OR DISINFECTING WATER MAINS; OR CONNECTING A NEW WATER MAIN TO AN EXISTING WATER MAIN. THE CONTRACTOR SHALL NOTIFY AFFECTED CITY OF HOMER RESIDENTS IN WRITING A MINIMUM OF 48 HOURS PRIOR TO SHUTTING DOWN THE WATER SUPPLY FOR EACH WATER MAIN CONNECTION.
- 17. THE CONTRACTOR SHALL DISCHARGE WATER FROM ANY DEWATERING, PUMPING, OR GROUND WATER MANAGEMENT INTO A VEGETATED AREA APPROVED BY THE CITY OF HOMER AFTER TREATMENT IN CONTRACTOR-FURNISHED SETTLING PONDS TO REMOVE SEDIMENT. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM THE ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION PRIOR TO STARTING ANY DEWATERING ACTIVITIES. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING ANY DEWATERING ACTIVITIES.
- 18. ANY TEMPORARY WATER DISTRIBUTION SYSTEM INSTALLED BY THE CONTRACTOR MUST BE PRE-APPROVED BY THE ADEC DRINKING WATER PROGRAM. THIS PERMIT IS THE CONTRACTOR'S RESPONSIBILITY.
- 19. ALL WATER MAIN CONNECTIONS SHALL BE RESTRAINED. MECHANICAL RESTRAINTS SHALL BE USED AT ALL BENDS, TEES, WYES, AND VALVES (MEGALUG SERIES 1100). DUCTILE IRON PIPE-TO-PIPE CONNECTIONS SHALL BE MADE USING PUSH-ON JOINT RESTRAINTS (FIELD LOK 350 GASKETS).
- 20. WORKING AROUND EXISTING WATER, SEWER, AND STORM LINES IS INCLUDED UNDER THE "EXISTING UTILITIES IN CONSTRUCTION ZONE" BID ITEMS. VEHICLE ACCESS TO PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.





TRUCTURAL/CIVIL
15 BIDARKA ST
1NAI, AK 99611
1L. (907) 283 - 3583
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ANE AND W. BUNNELL AVENUE
HOMER, ALASKA

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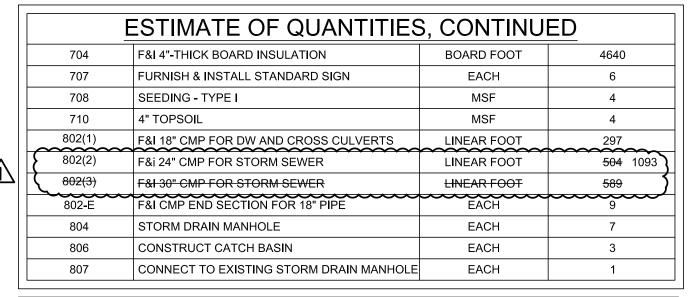
PROJECT NO.
2022037
DRAWN BY:

CHECKED BY:

DATE: 02/06/25
SCALES: NOTED
HORIZ. NOTED
VERT. NOTED

SHEET: **C1.2** 

	ESTIMATE OF QUAN	NIIIES	
ITEM#	PAY ITEM DESCRIPTION	PAY UNIT	QUANTITY
101	MOBILIZATION & DEMOBILIZATION	LUMP SUM	ALL REQUIRED
102	CONSTRUCTION SURVEYING	LUMP SUM	ALL REQUIRED
103	TRAFFIC MAINTENANCE	LUMP SUM	ALL REQUIRED
104(1)	TEMPORARY EROSION CONTROL PLAN (SWPPP)	LUMP SUM	ALL REQUIRED
105	EXISTING UTILITIES IN CONSTRUCTION ZONE	LUMP SUM	ALL REQUIRED
202	CLEARING AND GRUBBING	LUMP SUM	ALL REQUIRED
203(1)	REMOVAL OF CURB & GUTTER	LINEAR FOOT	1025
203(2)	REMOVAL OF EXISTING CULVERTS	LINEAR FOOT	335
203(3)	REMOVAL OF STORM DRAIN MANHOLES	EACH	1
203(4)	REMOVAL OF CATCH BASINS	EACH	2
203(5)	ABANDON PIPE IN PLACE - 8" CIP WATER MAIN	LINEAR FOOT	1245
203(6)	REMOVAL OF FIRE HYDRANT AND LEG	EACH	1
204(1)	USABLE EXCAVATION	CUBIC YARD	1440
204(2)	UNUSABLE EXCAVATION	CUBIC YARD	6150
204(3)	DITCH LINEAR GRADING	LINEAR FOOT	650
205(1)	TYPE II CLASSIFIED BACKFILL	TON	8940
205(2)	TYPE III CLASSIFIED BACKFILL	TON	1940
206	2" LEVELING COURSE - D1	TON	1050
208	COMPACTION CONTROL BY CONTRACTOR	LUMP SUM	ALL REQUIRED
209(1)	RECONSTRUCT PUBLIC APPROACH	EACH	1
209(2)	RECONSTRUCT DRIVEWAY APPROACH	EACH	11
211	CLASS C PIPE BEDDING	TON	1450
219	REMOVE EXISTING PAVEMENT	SQUARE YARD	2900
302(1)	CURB AND GUTTER, TYPE 1	LINEAR FOOT	1080
302(2)	CURB AND GUTTER, TYPE 2	LINEAR FOOT	1000
304	INSTALL CURB RAMP	EACH	3
401	2" ASPHALT PAVEMENT (TYPE II)	TON	690
402	PAINTED TRAFFIC MARKINGS	LUMP SUM	ALL REQUIRED
512	ADJUST MANHOLE TO FINISHED GRADE	EACH	4
602(1)	F&I 10" HDPE SDR11 WATER CONDUIT	LINEAR FOOT	1140
602(2)	F&I 8" DIP CL52 WATER CONDUIT	LINEAR FOOT	60
602(3)	F&I 14" HDPE SDR11 WATER CONDUIT SLEEVE	LINEAR FOOT	20
602(4)	F&I 16" HDPE SDR11 WATER CONDUIT SLEEVE	LINEAR FOOT	20
602(5)	F&I 1" TYPE K COPPER SERVICE LINE	LINEAR FOOT	270
603(1)	F&I 10" GATE VALVE AND VALVE BOX	EACH	2
603(2)	F&I 8" GATE VALVE AND VALVE BOX	EACH	4
603(3)	REPLACE/INSTALL VALVE BOX FOR SERVICES	EACH	9
604	F&I FIRE HYDRANT AND HYDRANT LEG	EACH	1
606	WATER SERVICE DISCONNECT/RECONNECT	EACH	9
607	ADJUST VALVE BOX TO FINISHED GRADE	EACH	1
702(N)	FURNISH & INSTALL NON-WOVEN GEOTEXTILE	SQUARE YARD	4750
703	F&I GEOGRID BASE REINFORCEMENT	SQUARE YARD	4750



SIGN SCHEDULE						
STATUS	STATION / SIDE	SIGN	LEGEND	SIGN AREA / POST SIZE	NOTES	
EXISTING	0+53.3' / LEFT	-	-	2 1/2" SQUARE X 12 GA.	KEEP POST POSITION	
EXISTING	-	1	STOP	30X30	STOP ON OHLSON	
EXISTING	-	2	STREET	30X8	"OHLSON LN"	
NEW	-	3	STREET	30X8	"STERLING HWY"	
NEW	1+50' / RIGHT	-	-	2 1/2" SQUARE X 12 GA.	-	
NEW	-	1	LIMIT	30X24	"SPEED LIMIT 25"	
EXISTING	6+88.5' / RIGHT	-	-	2 1/2" SQUARE X 12 GA.	REPOSITION POST	
EXISTING	-	1	BEND	30X30	BEND ARROW	
EXISTING	-	2	LIMIT	12X12	"20 MPH"	
NEW	8+75' / LEFT	-	-	2 1/2" SQUARE X 12 GA.	-	
NEW	-	1	LIMIT	30X24	"SPEED LIMIT 25"	
EXISTING	7+44' / RIGHT	-	-	2 1/2" SQUARE X 12 GA.	REPOSITION POST	
EXISTING	-	1	STOP	30X30	STOP ON JENNY WY	
EXISTING	-	2	STREET	30X8	"JENNY WY"	
NEW	-	3	STREET	30X8	"OHLSON LN"	
EXISTING	10+03' / LEFT	-	-	2 1/2" SQUARE X 12 GA.	REPOSITION POST	
EXISTING	-	1	YIELD	24" SIDES	"YIELD"	
EXISTING	21+41.5' / LEFT	-	-	2 1/2" SQUARE X 12 GA.	KEEP POST POSITION	
EXISTING	-	1	BEND	30X30	BEND ARROW	
EXISTING	-	2	LIMIT	12X12	"20 MPH"	
EXISTING	24+20.0' / RIGHT	-	-	2 1/2" SQUARE X 12 GA.	REPOSITION POST	
EXISTING		1	STOP	30X30	STOP ON MAIN	
EXISTING	-	2	ALL WAY	12X4	"ALL WAY"	
EXISTING	-	3	STREET	30X8	"MAIN ST"	
EXISTING	-	4	STREET	30X8	"BUNNELL AVE"	

#### SIGN SCHEDULE NOTES:

- 1. FOR SIGN PLACEMENT SEE PLAN AND PROFILE SHEETS AND DETAILS ON SHEET C8.4.
- 2. ALL "STOP" SIGNS ARE EXISTING AND ARE TO BE REUSED AS DIRECTED.
- 3. NEW "SPEED LIMIT" SIGN: R2-1 (24"X30"). SEE ALASKA SIGN DESIGN SPECIFICATIONS, 2015 (ADOT).
- 4. NEW "STREET" SIGN: D3-100 (8"-HIGH). SEE ALASKA SIGN DESIGN SPECIFCATIONS, 2015 (ADOT).





N/L REMS

STRUCTURAL/CIVIL
155 BIDARKA ST
KENAI, AK 99611
TEL. (907) 283 - 3583
LICENSE NO. ARCOLZIO



CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVENUE
HOMER, ALASKA
QUANTITIES AND SCHEDULES

PROJECT NO.
2022037
DRAWN BY:

DRAWN BY:
GTP
CHECKED BY:

DATE: 02/06/25
SCALES: NOTED
HORIZ. NOTED
VERT. NOTED

VERT. NOTED
SHEET: C1.3

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# **TYPICAL ABBREVIATIONS**

ASS'Y	ASSEMBLY	F&I	FURNISH AND INSTALL	PT	POINT
APPROX	APPROXIMATE	FT	FOOT, FEET	PVI	POINT OF VERTICAL INTERSECTION
AVG	AVERAGE	G	GAS	PVMT	PAVEMENT
BLDG	BUILDING	GD	GROUND	R	RADIUS, RECORD
BGS	BELOW GROUND SURFACE	GR	GRADE	RD	ROAD
BOP	BOTTOM OF PIPE	HDPE	HIGH DENSITY POLYETHYLENE	REQ'D	REQUIRED
BVCE	BEGIN VERTICAL CURVE ELEVATION	HORIZ	HORIZONTAL	ROW	RIGHT OF WAY
BVCS	BEGIN VERTICAL CURVE STATION	HYD	HYDRANT	RP	RADIUS POINT
C.O.	CLEANOUT	INT	INTERSECTION	RT	RIGHT
CIP	CAST IRON PIPE	INV	INVERT	S	SOUTH, SLOPE
CL	CENTER LINE, CLASS	L	LENGTH	SEC	SECTION
CMP	CORRUGATED METAL PIPE	LF	LINEAR FEET OR LINEAL FEET	SCH	SCHEDULE
CNTR	CENTER	LVC	LENGTH OF VERTICAL CURVE	SD	STORM DRAIN
CONC	CONCRETE	MAX	MAXIMUM	SDMH	STORM DRAIN MANHOLE
CONST	CONSTRUCT	MB	MAIL BOX	SHLD	SHOULDER
COR	CORNER	ME	MATCH EXISTING	SS	SANITARY SEWER/SEWER SERVICE
CP	CONTROL POINT	MH	MANHOLE	SSLS	SANITARY SEWER LIFT STATION
DET	DETAIL	MFR	MANUFACTURER	SSMH	SANITARY SEWER MANHOLE
DIA	DIAMETER	MIN	MINIMUM	STA	STATION
DIP	DUCTILE IRON PIPE	MKR	MARKER POST	S/W	SIDEWALK
DW	DRIVEWAY	MON	MONUMENT	SW	SWALE
DWG	DRAWING	N	NORTH	SHT	SHEET
E	EAST, ELECTRIC LINE	NFS	NON FROST SUSCEPTIBLE	TBC	TOP BACK OF CURB
EA	EACH	NTS	NOT TO SCALE	TBM	TEMPORARY BENCHMARK
EL, ELEV	ELEVATION	OC	ON CENTER	TC	TOP OF CONCRETE
EG	EXISTING GRADE/GROUND	OFF	OFFSET	TP	TEST PIT
EOP	END OF PROJECT	OHC	OVERHEAD COMMUNICATION	TYP	TYPICAL
EP	EDGE OF PAVEMENT	OHE	OVERHEAD ELECTRIC	UG	UNDERGROUND
ESMT	EASEMENT	PC	POINT OF CURVATURE	UGC	UNDERGROUND COMMUNICATION
EVCE	END VERTICAL CURVE ELEVATION	P.C.	PROPERTY CORNER	UGE	UNDERGROUND ELECTRIC
EVCS	END VERTICAL CURVE STATION	PED	PEDESTAL	VB	VALVE BOX
EX	EXISTING	PI	POINT OF INTERSECTION	W	WATER, WEST
F	FOUND	PL	PROPERTY LINE	WS	WATER SERVICE
EC	EINIGH CDADE	DD	DOMED DOLE		

STORM SEWER MANHOLE SCHEDULE						
STATION	OFFSET	TYPE				
2+75.0	20.0 RT	NEW				
5+75.0	20.0 RT	NEW				
6+90.0	12.0 RT	NEW				
7+78.0	12.0 RT	NEW				
9+27.4	12.0 RT	NEW				
22+38.6	20.0 RT	DEMO				
22+44.4	17.0 RT	NEW				
24+25.0	5.4 RT	NEW				
24+51.6	5.6 RT	EXISTING*				

<sup>\*</sup> END OF NEW STORM SEWER

CULVERT SCHEDULE							
CULVERT TYPE	STATION	SIDE	REMOVE EXISTING CULVERT (LF)	INSTALL NEW CULVERT (LF)	NEW CULVERT MATERIAL	NEW CULVERT DIAMETER (IN)	
DRIVEWAY	2+89	RIGHT	40	NONE			
DRIVEWAY	4+92	LEFT	60	40	CMP	18	
DRIVEWAY	6+57	RIGHT	20	NONE			
DRIVEWAY	6+86	LEFT	50	40	CMP	18	
CROSS	7+07		41	NONE			
CROSS	7+78		NONE	28	CMP	18	
DRIVEWAY	8+05	LEFT	50	40	CMP	18	
CROSS	9+23		NONE	46	CMP	18	
CROSS	22+00		74	75	CMP	18	
CROSS	22+52		NONE	28	CMP	18	

POWER POLE

PI PL PP

**EVCS** 

ΕX

FG

FINISH GRADE

APPROACH SCHEDULE							
APPROACH TYPE	STATION START	ALIGNMENT SIDE	EXISTING WIDTH (FT)	NEW WIDTH (FT)			
DRIVEWAY	2+89	RIGHT	50	30			
DRIVEWAY	4+92	LEFT	55	30			
DRIVEWAY	6+86	LEFT	50	30			
PUBLIC - JENNY WAY	7+23	RIGHT	SEE PLAN	SEE PLAN			
DRIVEWAY	8+05	LEFT	55	30			
DRIVEWAY	8+18	RIGHT	70	30			
DRIVEWAY*	8+56	RIGHT	42	24			
DRIVEWAY*	9+14	RIGHT	48	24			
DRIVEWAY	9+81	RIGHT	48	24			
DRIVEWAY	21+58	LEFT	23	24			
DRIVEWAY	22+27	LEFT	34	30			
DRIVEWAY	22+85	RIGHT	35	24			

<sup>\*</sup> PART OF SAME LOOP DRIVEWAY



DATE	03/21/25		
REVISION	REVISION #1		
NO.	<b>€</b>		



CITY OF HOMER

OHLSON LANE AND W. BUNNELL AVENUE
HOMER, ALASKA
QUANTITIES AND SCHEDULES

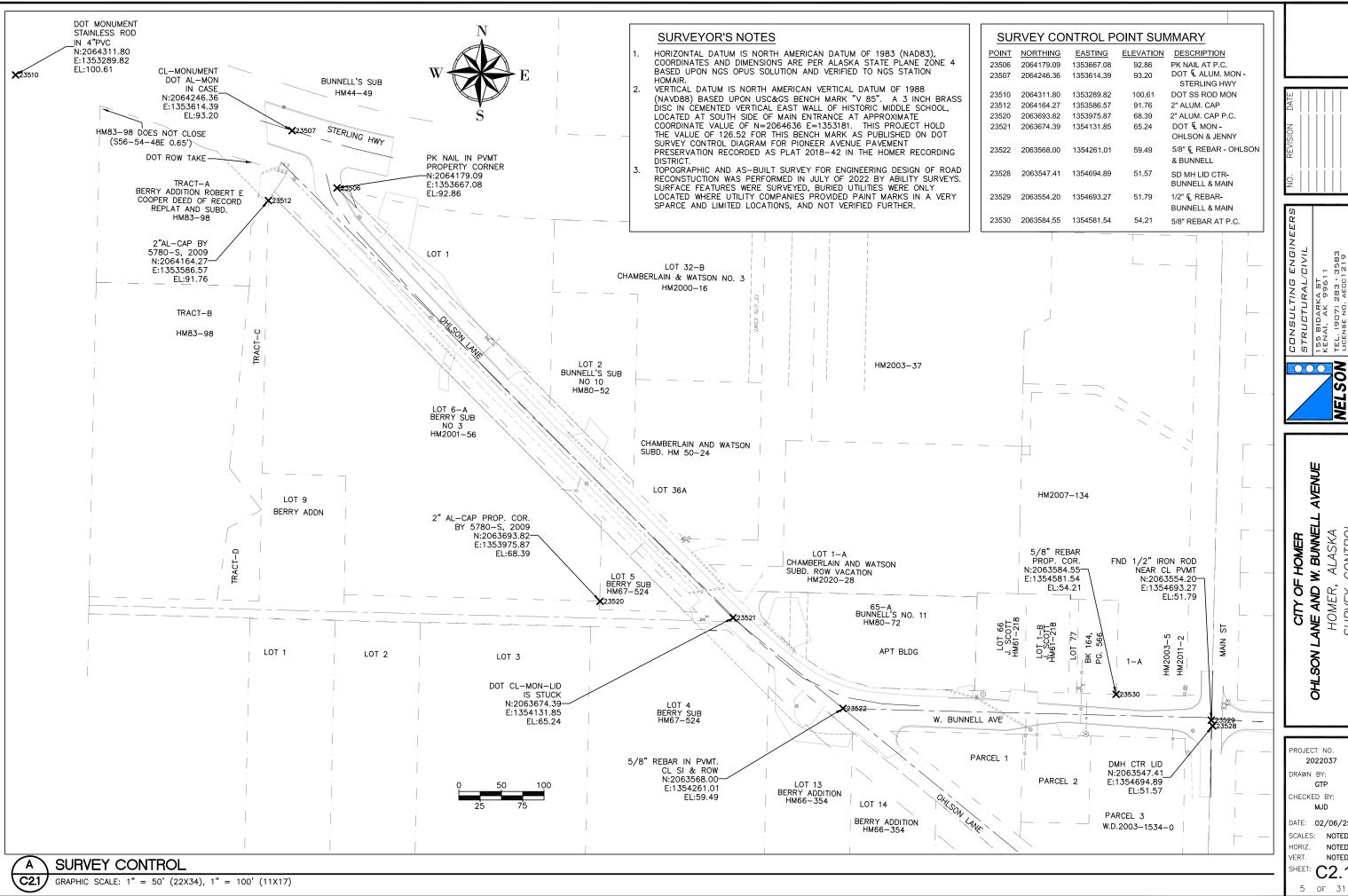
PROJECT NO. 2022037 DRAWN BY:

CHECKED BY:

DATE: 02/06/25 SCALES: NOTED NOTED

HORIZ. VERT. NOTED

SHEET: C1.4 4 of 31



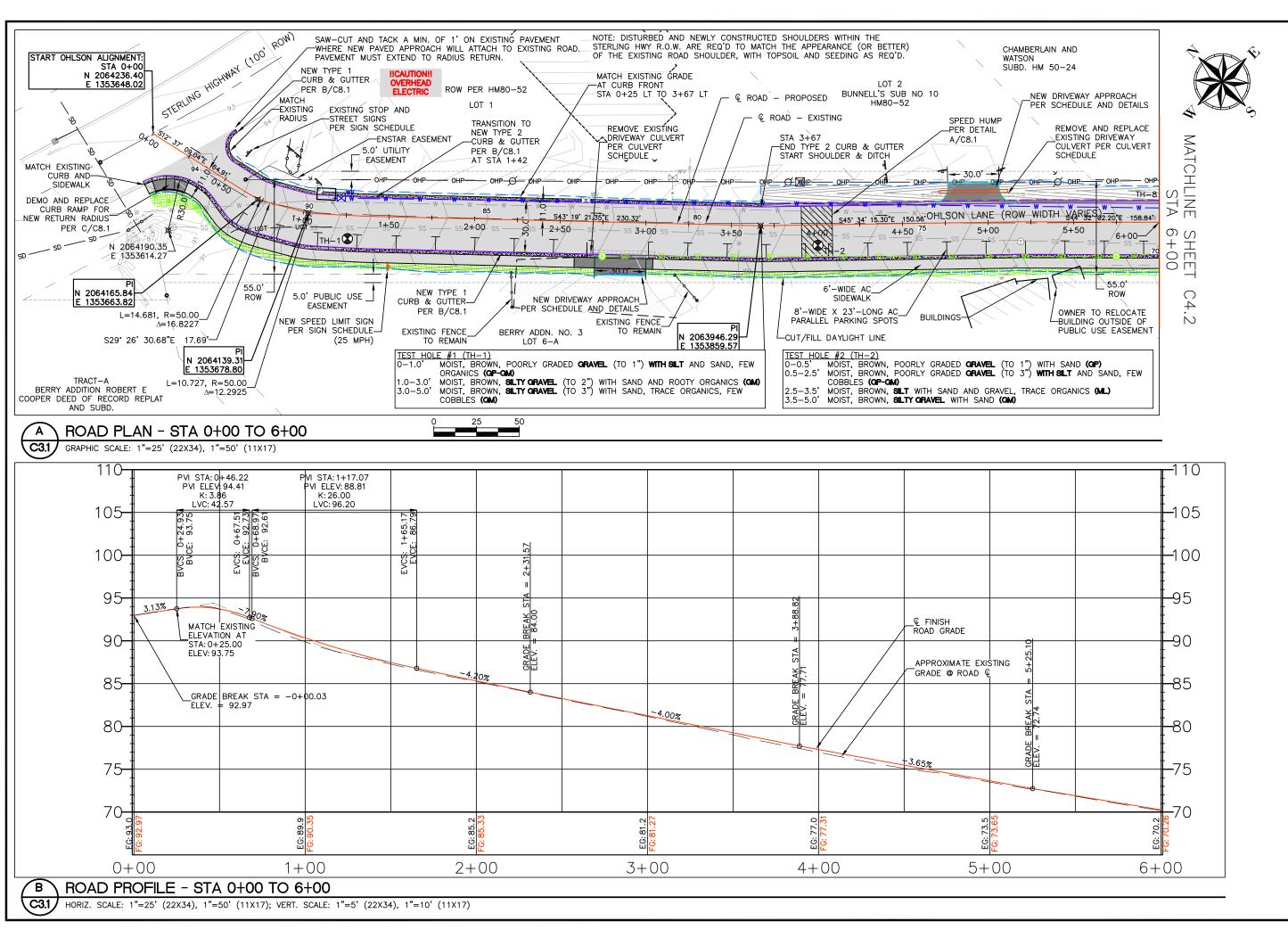
OF HOMER
ND W. BUNNEL
ER, ALASKA
EY CONTROL ANE AND W. E HOMER, AL SURVEY CO

2022037

DRAWN BY: CHECKED BY

DATE: 02/06/25 NOTED

NOTED NOTED





NELSON

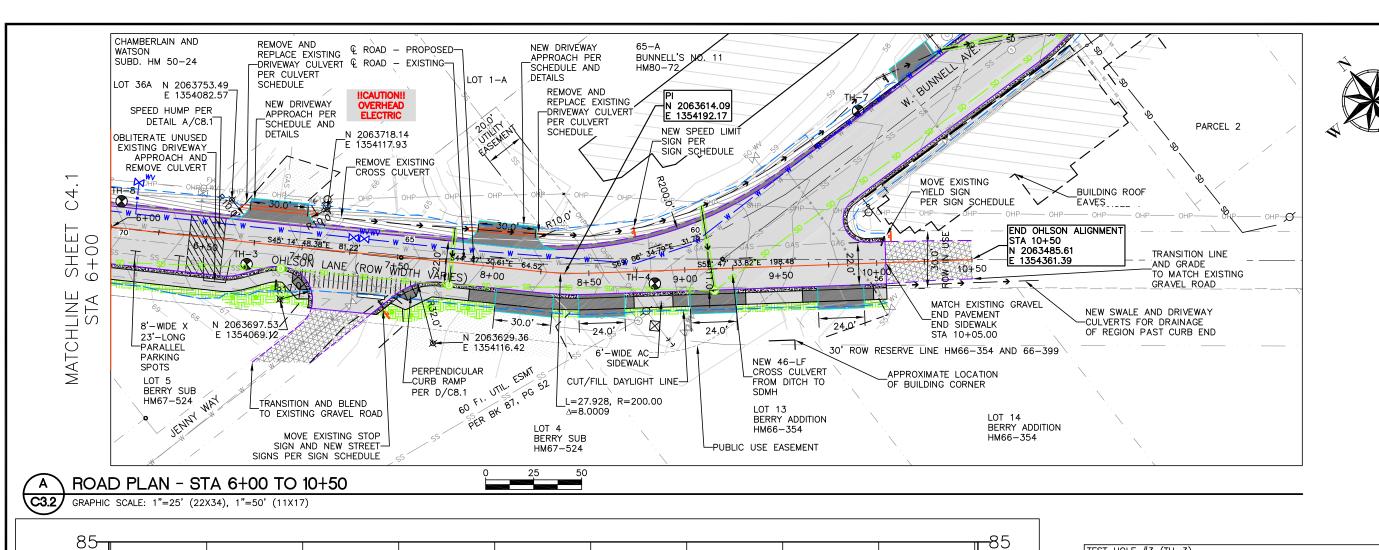
**AVENUE** ANE AND W. BUNNELL AVE HOMER, ALASKA D PLAN AND PROFILE OF HOMER CES

PROJECT NO 2022037 DRAWN BY CHECKED BY

DATE: 02/06/25 SCALES:

HORIZ. NOTED VERT. NOTED

SHEET: C3.1 6 OF 31



PVI STA: 9+44.53 VI ELEV: 59.01

LVC: 18.04

VCS: 9+35.51

BVCE: 59.33

CS: 9+53.55

EVCE: 58.56

-3.50%

9 + 00

TEST HOLE #3 (TH-3) 0-2.0' MÖIST, BROWN, POORLY GRADED CRAVEL (TO 1.5") WITH SILT AND SAND (GP-GM) MOIST, BROWN SILT WITH SAND AND GRAVEL, TRACE ORGANICS (ML) MOIST, BROWN, SILTY GRAVEL WITH SAND, FEW FIBROUS ORGANICS (CM)

-80

<del>-</del>65

-60

MATCH EXISTING STA = 10+05 ELEV. = 56.00

10+00

-5.00%

TEST HOLE #4 (TH-4)
0-0.5' MOIST, BROWN, POORLY GRADED GRAVEL (TO 1") WITH SILT AND SAND (GP-GM) MOIST, BROWN SILTY GRAVEL (TO 3") WITH SAND (GM) BROWN, GRAVELLY SILT WITH SAND, TRACE FIBROUS ORGANICS (ML)

5.0-6.0' MOIST, GRAY, SILTY CLAY WITH SAND AND GRAVEL (CL-ML)

3.0-6.0' MOIST, BROWN **SILT** WITH SAND AND GRAVEL **(ML)** 

TEST HOLE #7 (TH-7) 0-2.0' MÖIST, BROWN, SILTY GRAVEL WITH SAND, TRACE ORGANICS (GM) MOIST, BROWN SILT WITH SAND (ML) MOIST, BROWN, SILTY GRAVEL WITH SAND, FEW COBBLES 12"-THICK CONCRETE FOOTING ENCOUNTERED ON NORTH WALL OF HOLE BETWEEN 2.0' AND 3.0'

TEST HOLE #8 (TH-8)
0-1.5' MOIST, BROWN, SILTY GRAVEL (TO 2") WITH SAND (CM)
1.5-2.5' MOIST, BROWN SILT WITH SAND (ML) COBBLES (GC) LARGE ORGANIC DEBRIS ENCOUNTERED AT 4.5'-POSSIBLE BURY PIT

ROAD PROFILE - STA 6+00 TO 10+50 C3.2

© FINISH

ROAD GRADE

APPROXIMATE EXISTING

<del>-3.00%</del>

EG: 63.7

00 + 8

GRADE @ ROAD Q

80

70

65

60

55

50

6 + 00

HORIZ. SCALE: 1"=25' (22X34), 1"=50' (11X17); VERT. SCALE: 1"=5' (22X34), 1"=10' (11X17)

EG: 66.8

7+00

CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVE
HOMER, ALASKA
ROAD PLAN AND PROFILE PROJECT NO. 2022037 DRAWN BY GTP

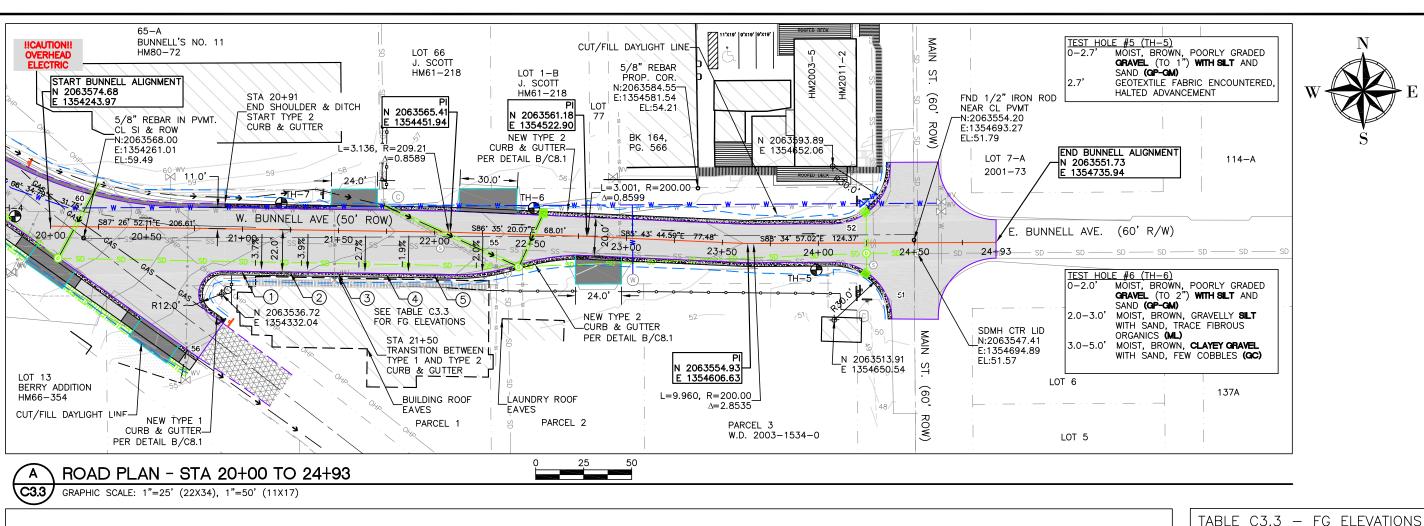
NELSON

AVENUE

CHECKED BY MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED SHEET: C3.2

7 of 31



80

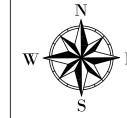
65

GRADE BREAK STA = 20+00.00

¢ FINISH

ROAD GRADE

ELEV. = 60.09







NELSON

AVENUE OF HOMER ND W. BUNNELL, ER, ALASKA AN AND PROFIL OHLSON LANE AND W. B HOMER, AL ROAD PLAN AND

21+25 22' RT 56.18' 21+50 22' RT 55.78 21+75 22' RT 55.58 22+00 22' RT 55.34' NOTE: MATCH FG ELEVATIONS PER TABLE AT RIGHT SIDE EDGE OF PAVEMENT FROM END OF OHLSON & BUNNELL INTERSECTION AT STATION 20+91 TO STATION 22+10. ROAD CROSS SLOPE

22' RT

OFFSET FG ELEVATION

56.70'

KEYNOTE STATION

21+00

1

2

3

4

(5)

-80

<del>-</del>70

-60

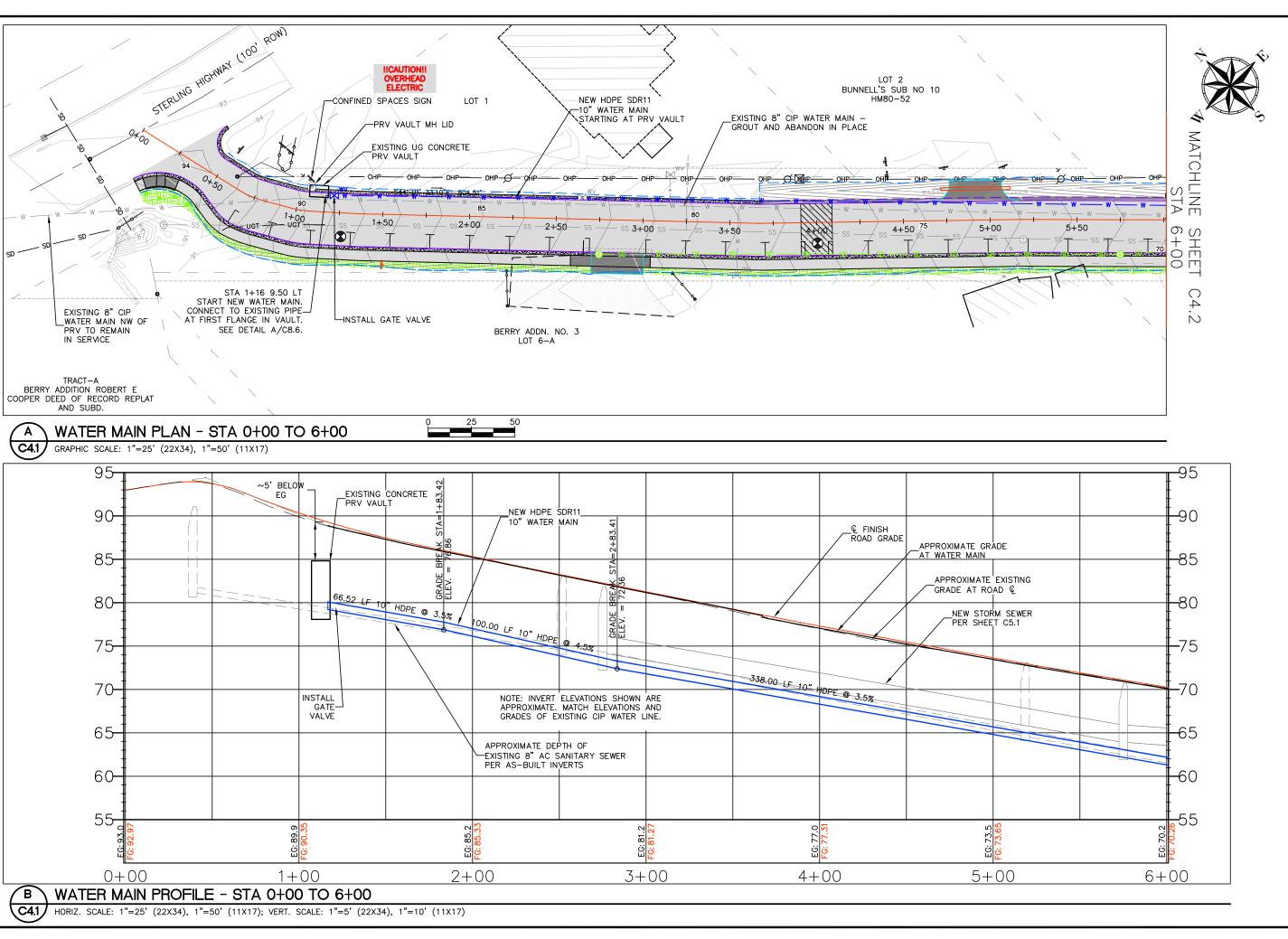
CH WILL VARY. SEE TYPICAL SECTION A/C7.3 AND INTERSECTION GRADING PLAN A/C6.1.

> 2022037 GTP MJD DATE: 02/06/25 SCALES: NOTED

-1.00% PROJECT NO. -50 EG: 53.9 DRAWN BY: CHECKED BY: 22+00 23 + 0024+00 25 + 0020 + 0021 + 00HORIZ. NOTED VERT. NOTED ROAD PROFILE - STA 20+00 TO 24+93 SHEET: C3.3 C3.3 HORIZ. SCALE: 1"=25' (22X34), 1"=50' (11X17); VERT. SCALE: 1"=5' (22X34), 1"=10' (11X17) 8 OF 31

APPROXIMATE EXISTING

GRADE @ ROAD Q





ENGINI CIVIL

NEL SON ENGINEERING

**AVENUE** PROFILE CITY OF HOMER

OHLSON LANE AND W. BUNNELL A'
HOMER, ALASKA
WATER MAIN PLAN & PROF

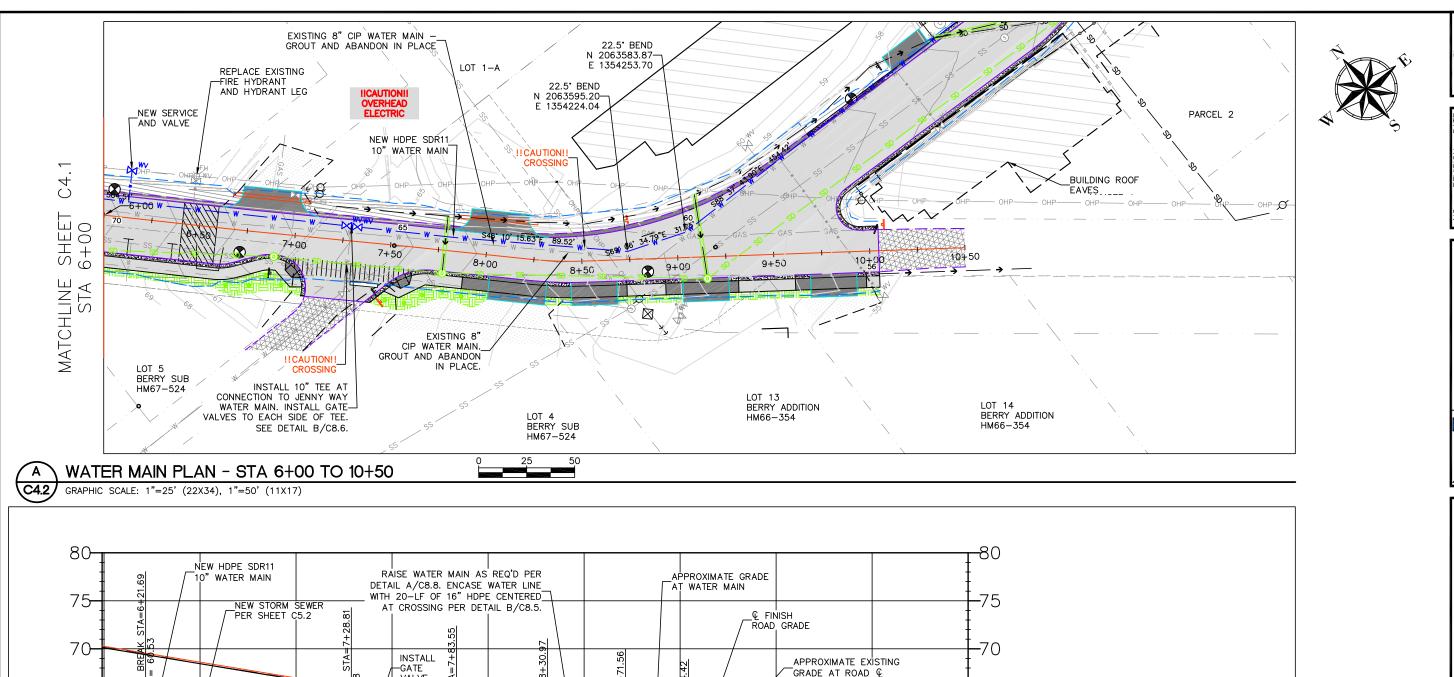
> PROJECT NO. 2022037

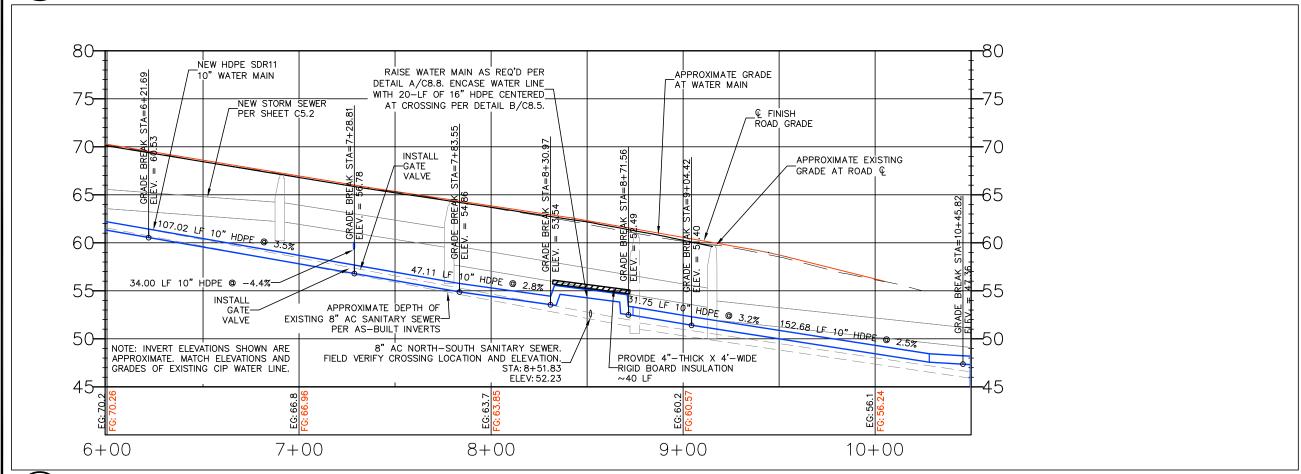
DRAWN BY GTP CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED

VERT. NOTED SHEET: C4.1

9 OF 31





WATER MAIN PROFILE - STA 6+00 TO 10+50 C4.2

HORIZ. SCALE: 1"=25' (22X34), 1"=50' (11X17); VERT. SCALE: 1"=5' (22X34), 1"=10' (11X17)





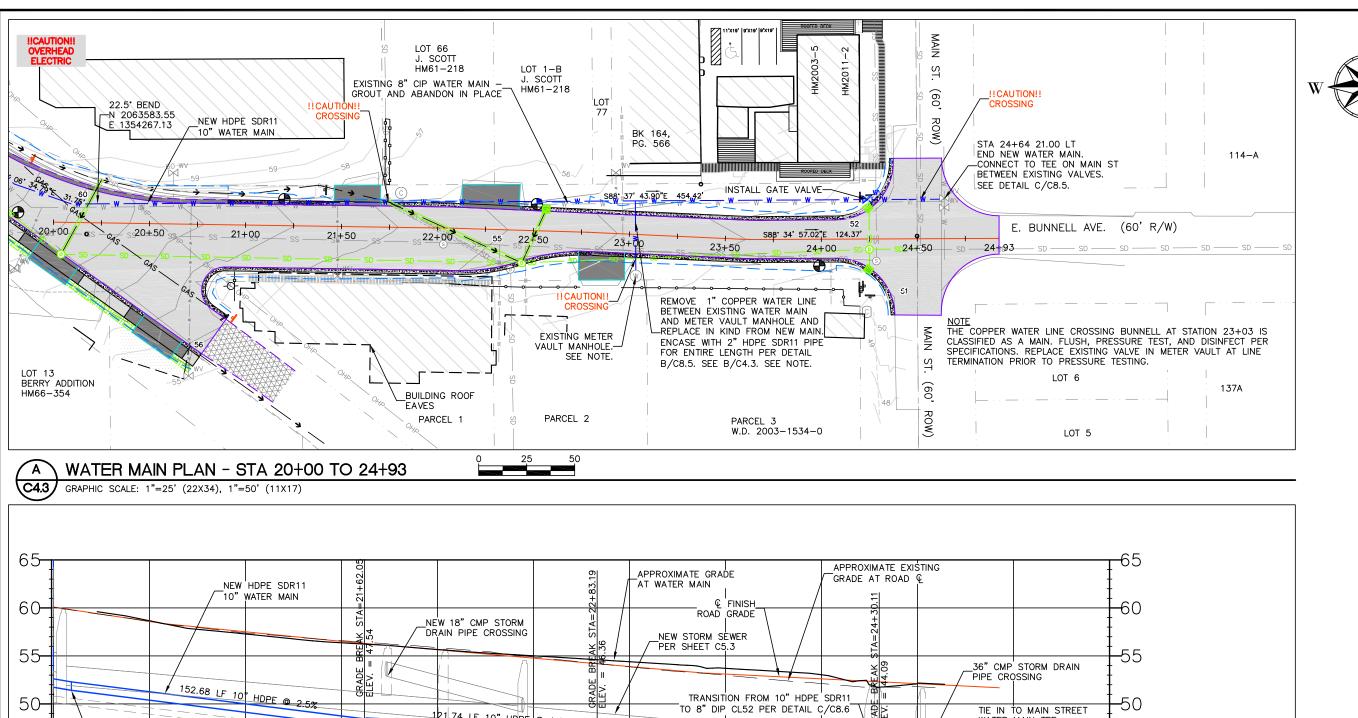
AVENUE

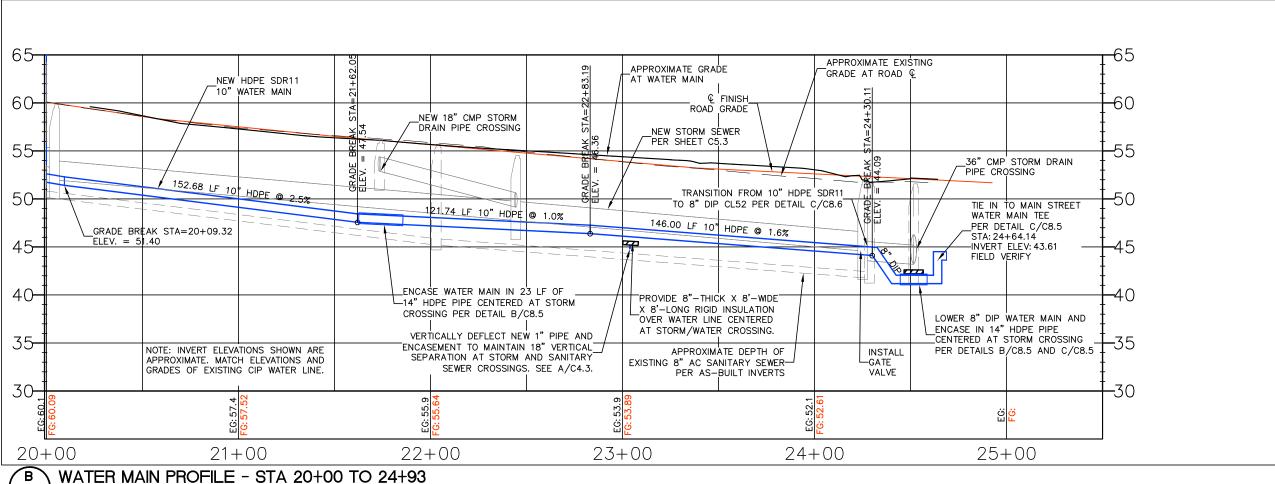
CITY OF HOMER
OHLSON LANE AND W. BUNNELL A'
HOMER, ALASKA
WATER MAIN PLAN AND PRO

PROJECT NO. 2022037 DRAWN BY: GTP CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C4.2** 10 of 31





2022037 DRAWN BY GTP CHECKED BY: MJD DATE: 02/06/25

PROJECT NO.

NELSON

AVENUE

CITY OF HOMER

ANE AND W. BUNNELL A

HOMER, ALASKA

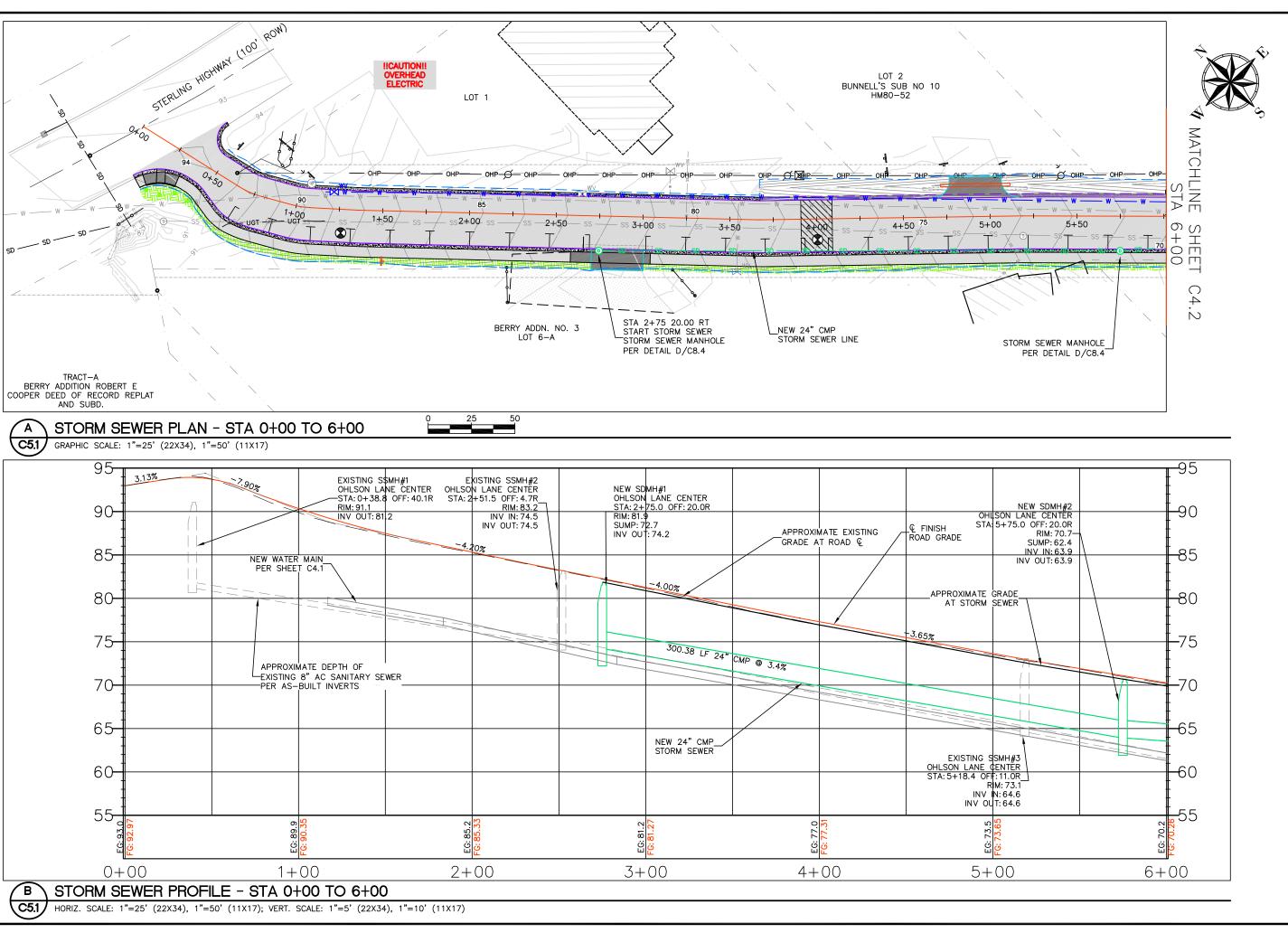
MAIN PLAN AND PRC

SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C4.3** 11 OF 31

HORIZ. SCALE: 1"=25' (22X34), 1"=50' (11X17); VERT. SCALE: 1"=5' (22X34), 1"=10' (11X17)

C4.3







ENGINE CIVIL

NEL SON ENGINEERING

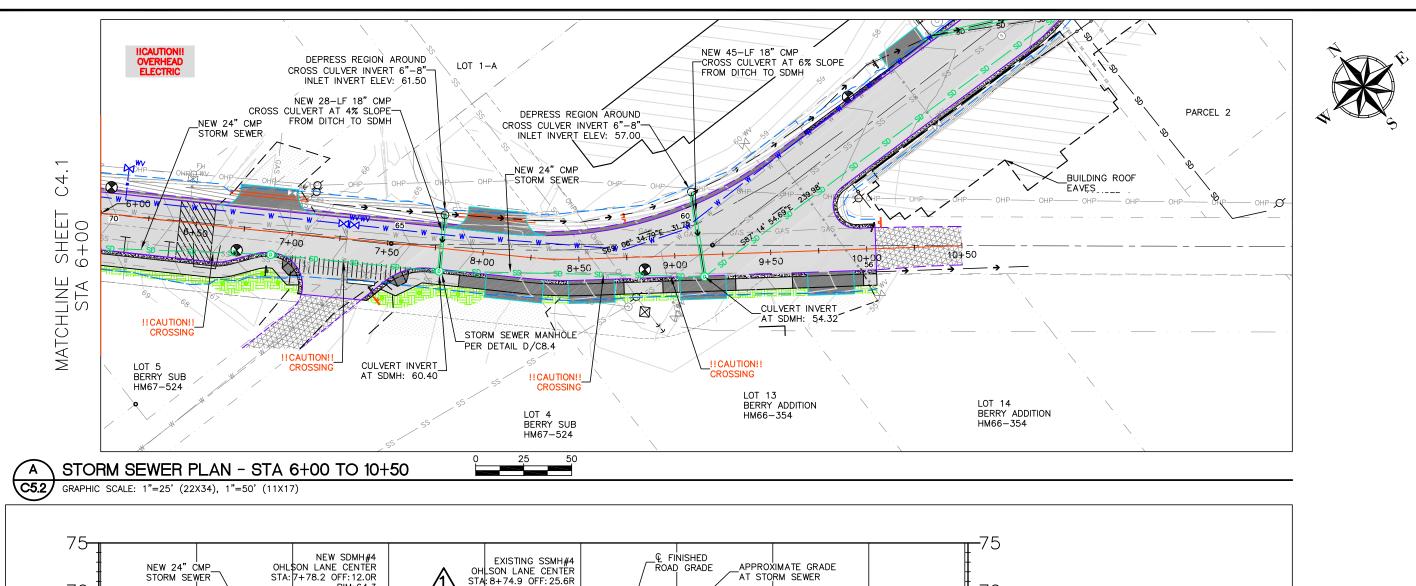
CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVENUE
HOMER, ALASKA
STORM SEWER PLAN & PROFILE

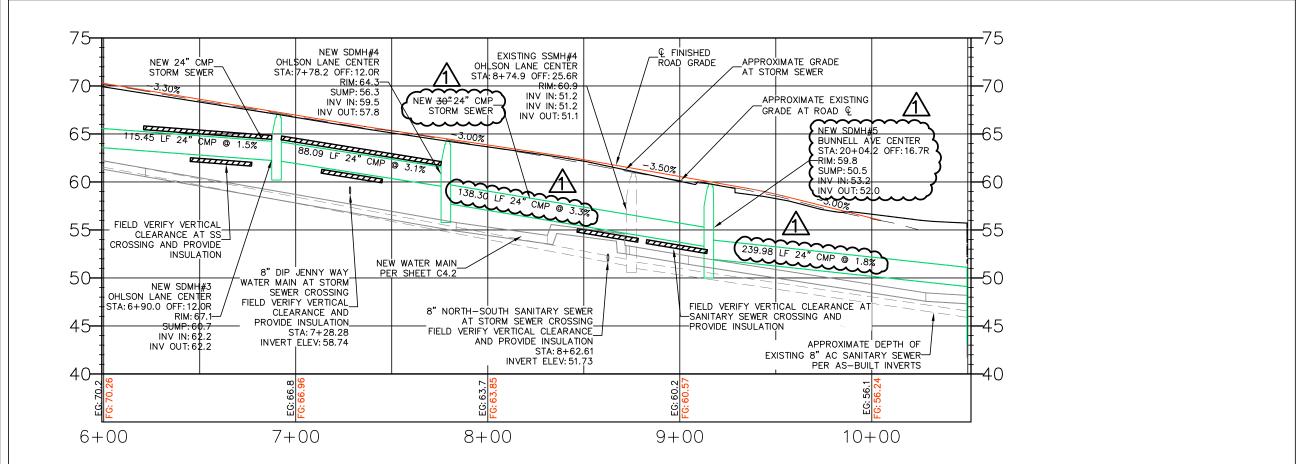
PROJECT NO. 2022037 DRAWN BY: GTP

CHECKED BY: MJD DATE: 02/06/25 SCALES:

NOTED HORIZ. NOTED VERT. NOTED

SHEET: C5.1 12 OF 31





STORM SEWER PROFILE - STA 6+00 TO 10+50 C5.2

HORIZ. SCALE: 1"=25' (22X34), 1"=50' (11X17); VERT. SCALE: 1"=5' (22X34), 1"=10' (11X17)

NELSON ENGINFFRING

AVENUE

CITY OF HOMER

OHLSON LANE AND W. BUNNELL A

HOMER, ALASKA

TOTAL SEWER PLAN AND PR

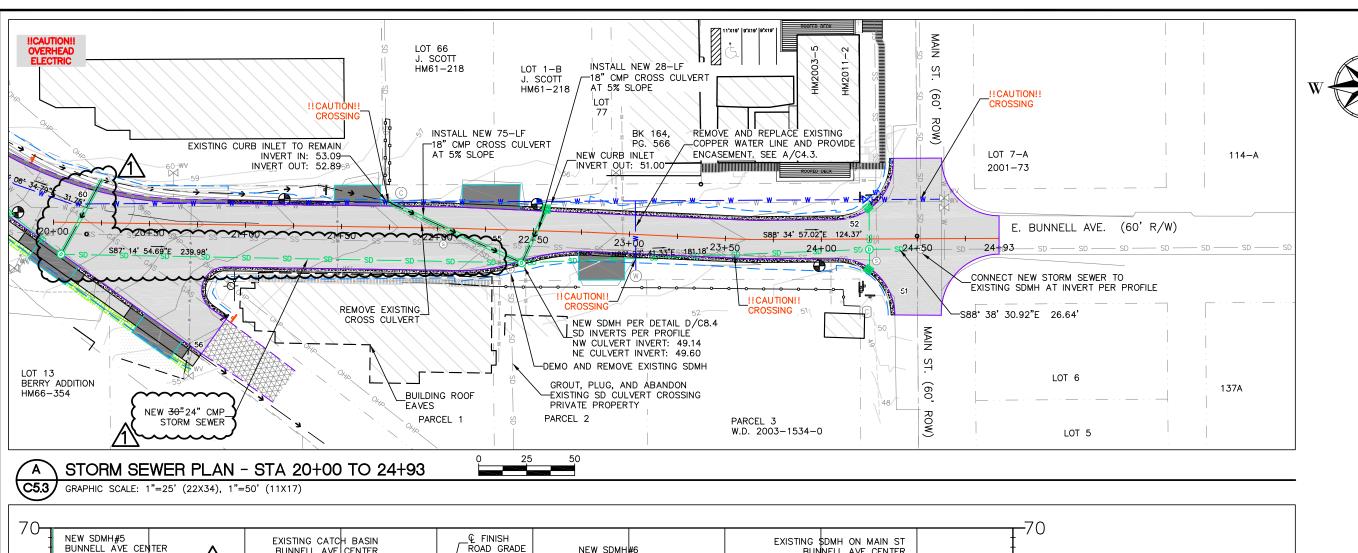
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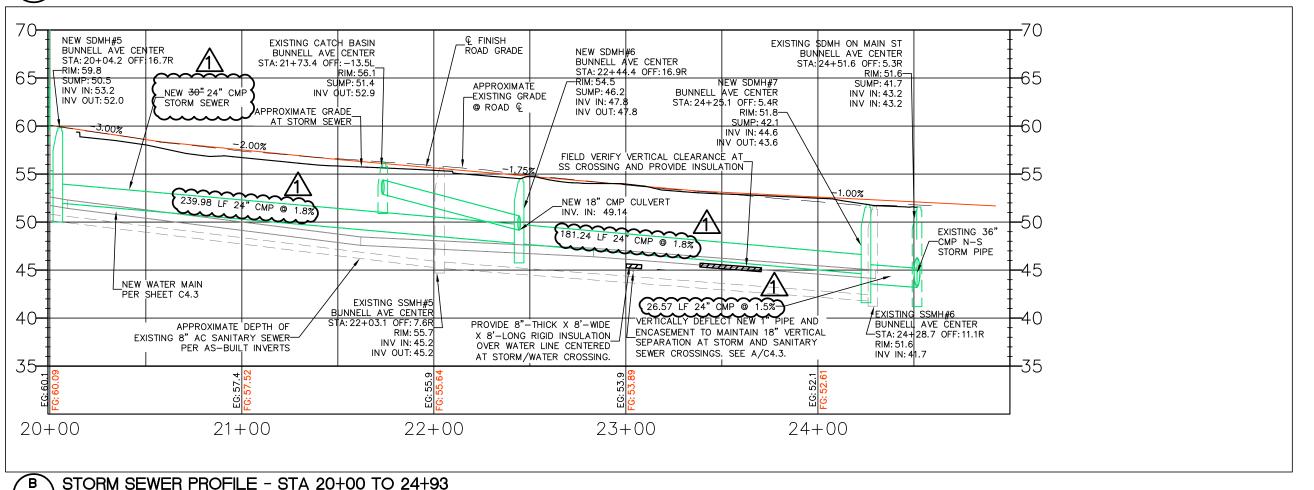
GTP CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C5.2** 

13 OF 31





CTP
CHECKED BY:
MJD

DATE: 02/06/25
SCALES: NOTED
HORIZ. NOTED
VERT. NOTED
SHEET: C5.3

14 OF 31

PROJECT NO.

**2022037**DRAWN BY:

HORIZ. SCALE: 1"=25' (22X34), 1"=50' (11X17); VERT. SCALE: 1"=5' (22X34), 1"=10' (11X17)

C5.3

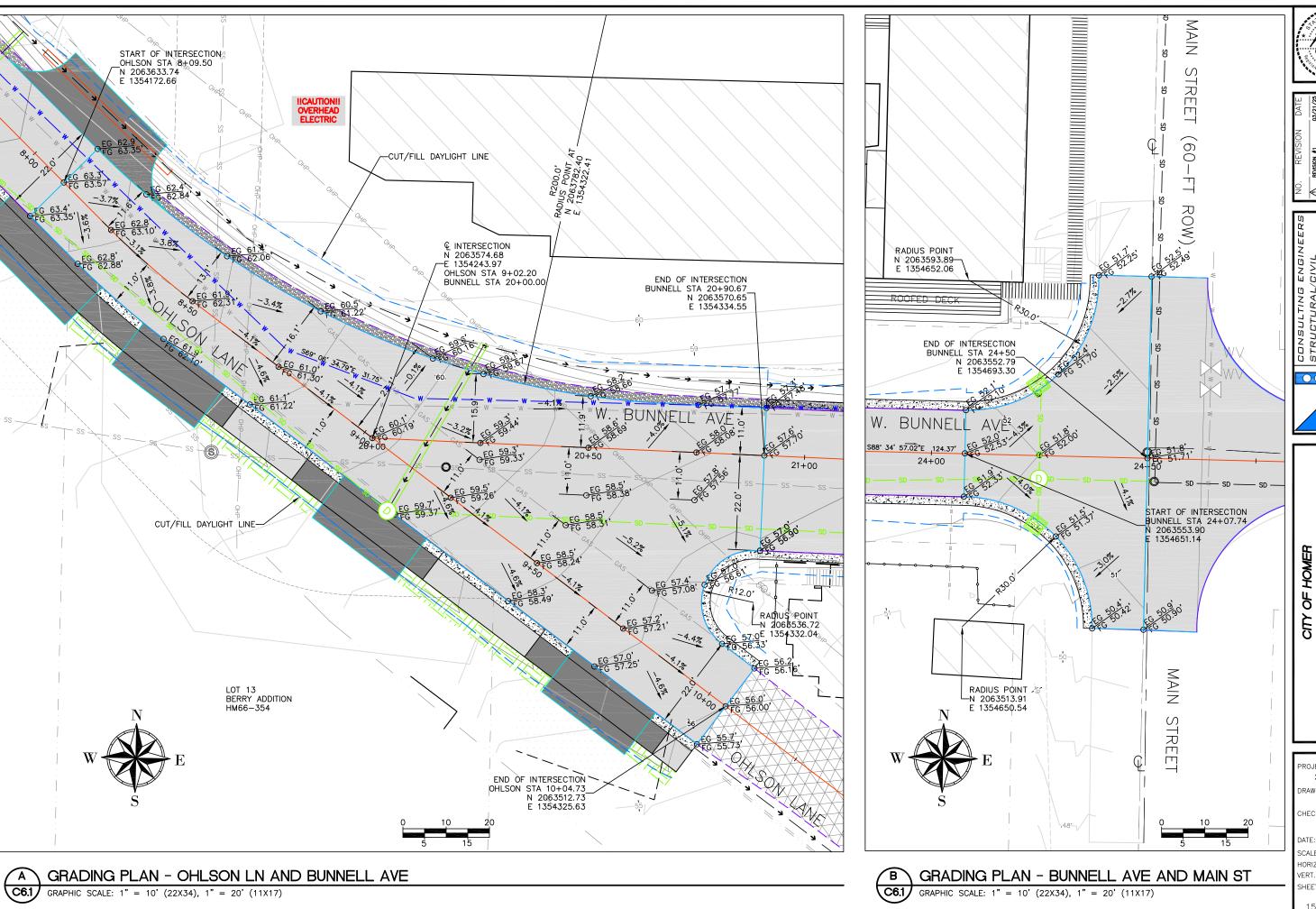
NO. REVISION DATE

CONSULTING ENGINEER
STRUCTURAL/CIVIL
155 BIDARKA ST
KENAI, AK 99611
TEL. (907) 283 - 3583
LICENSE NO. AEGGINS

NEL SON

CITY OF HOMER

N LANE AND W. BUNNELL AVENUE
HOMER, ALASKA
M SFWFR PLAN AND PROFILE





NELSON ENGINEERING

ROAD INTERSECTIONS AVENUE

OHLSON LANE AND W. BUNNELL HOMER, ALASKA RADING PLAN — ROAD INTER

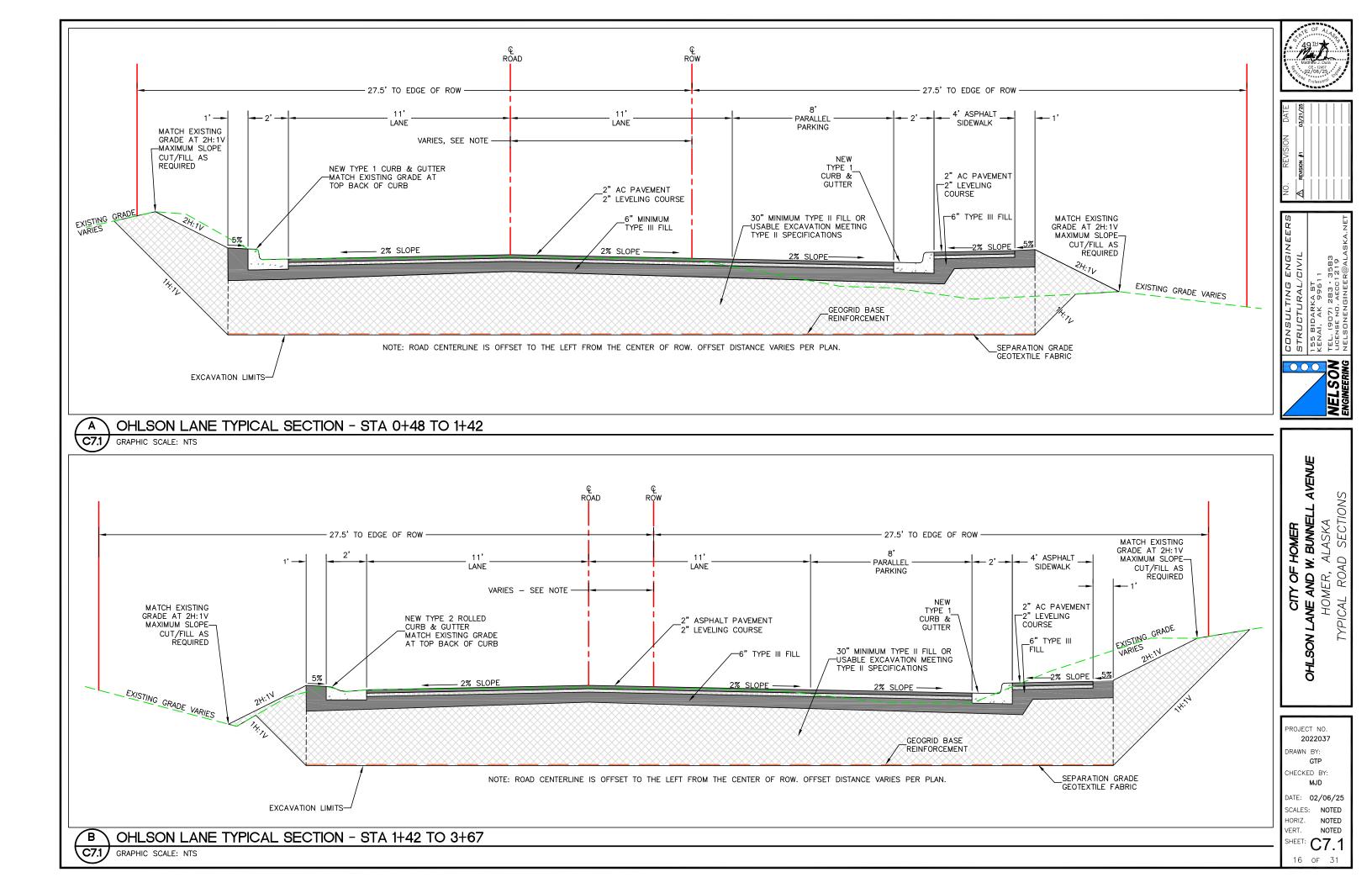
PROJECT NO. 2022037 DRAWN BY:

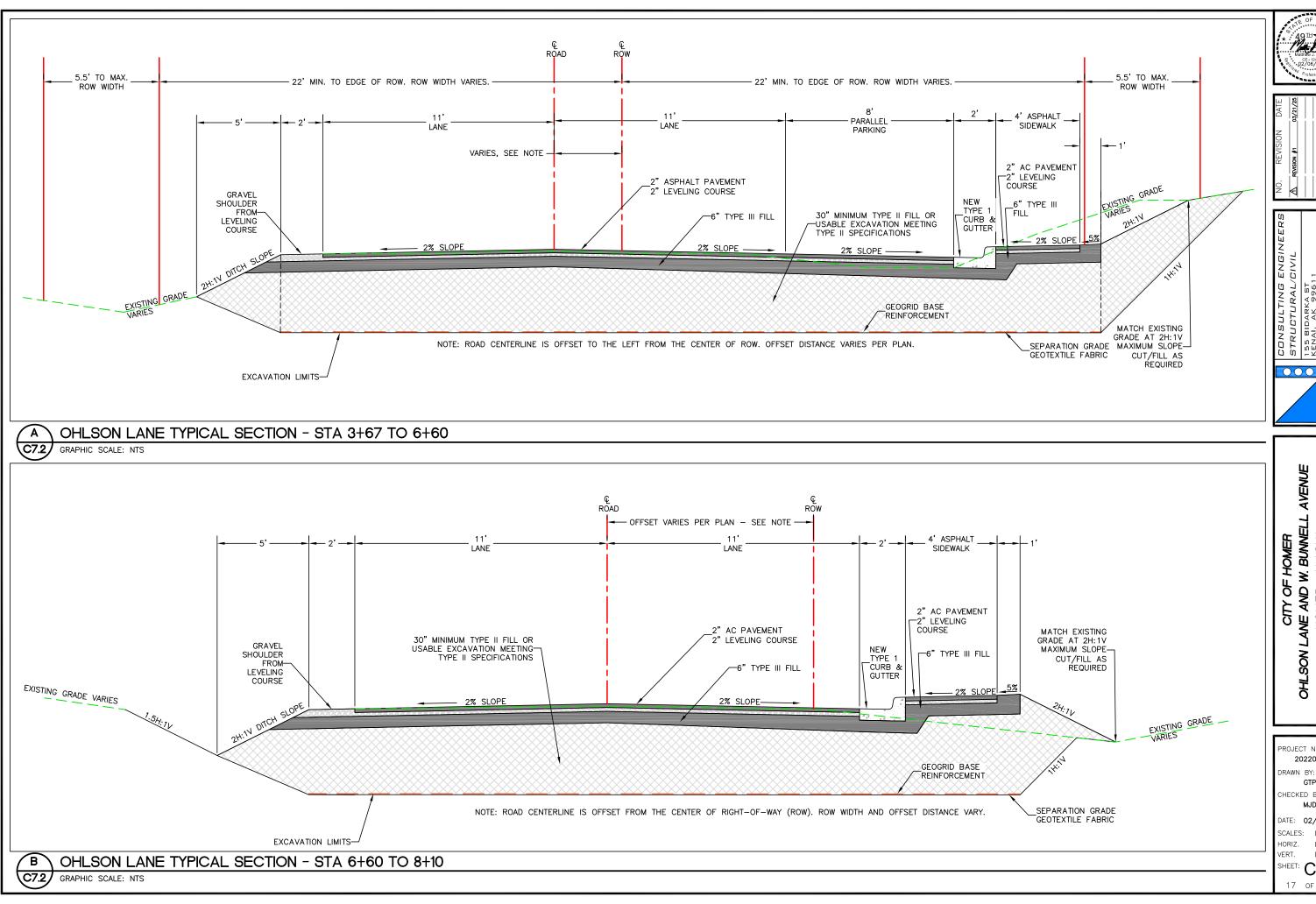
GRADING

CHECKED BY:

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: C6.1 15 of 31







NEL SON ENGINEERING

AVENUE

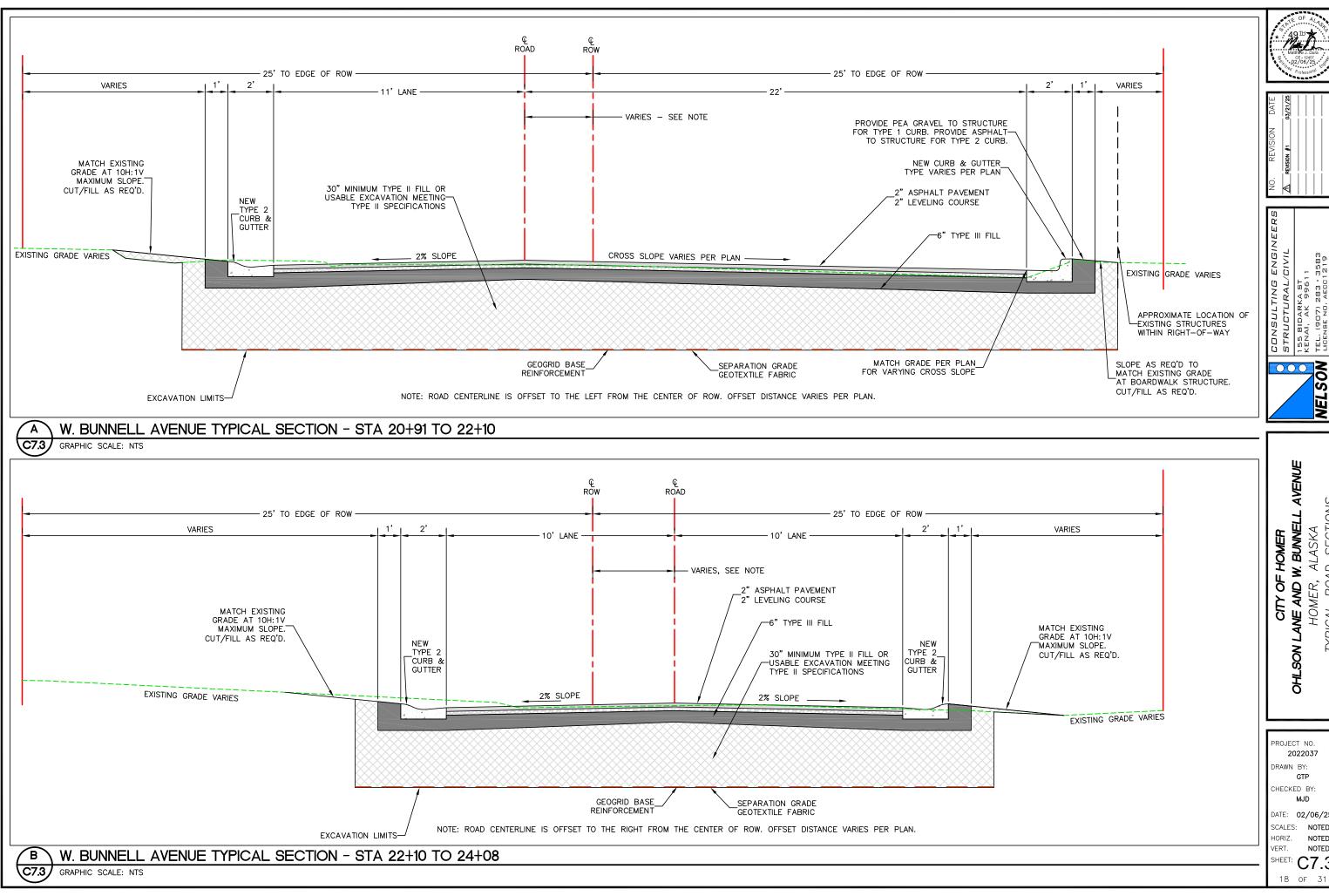
CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVE
HOMER, ALASKA
TYPICAL ROAD SECTIONS

PROJECT NO. 2022037

GTP CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C7.2** 17 OF 31





AVENUE CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVE
HOMER, ALASKA
TYPICAL ROAD SECTIONS

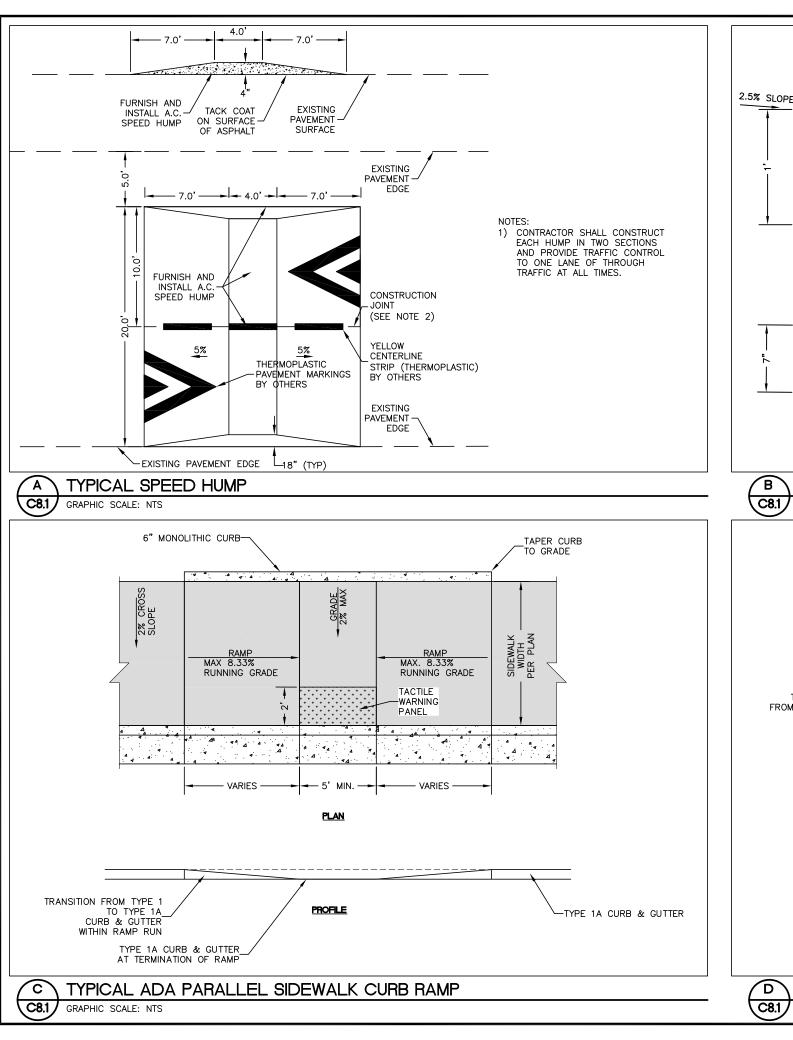
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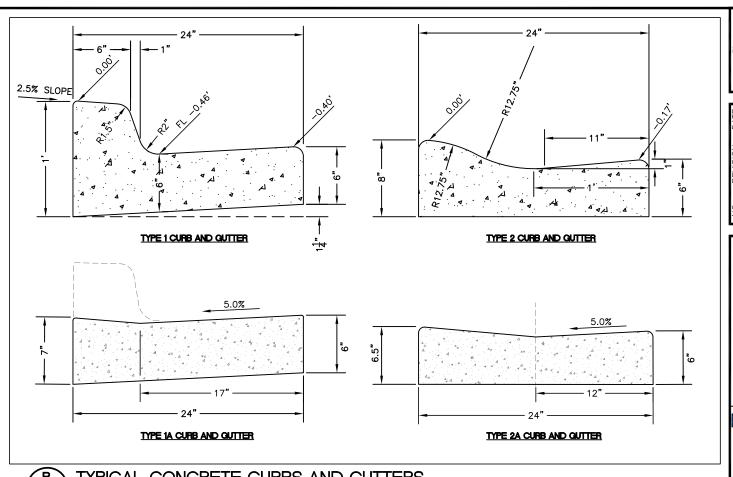
GTP CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED

NOTED

SHEET: **C7.3** 





TYPICAL CONCRETE CURBS AND GUTTERS

TYPE 2A CURB & GUTTER\_ AT TERMINATION OF RAMP TRANSITION FROM TYPE 2 TO TYPE 2A - 4' MIN. CURB AND GUTTER AT FLARES TRANSITION BETWEEN FROM TYPE 1 TO TYPE 2 CURB AND GUTTER PER PLAN TACTILE WARNING-LANDING OR PANEL SIDEWALK BYPASS <u>PLAN</u> TACTILE WARNING-5.0% MIN. PANEL 8.33% MAX. STREET LANDING OR — RAMP LENGTH PER PLAN – SIDEWALK BYPASS CURB & GUTTER SECTION A-A'

TYPICAL ADA PERPENDICULAR SIDEWALK CURB RAMP

GRAPHIC SCALE: NTS

GRAPHIC SCALE: NTS



NELSON

CITY OF HOMER

V LANE AND W. BUNNELL /
HOMER, ALASKA
TYPICAL DETAILS

PROJECT NO. 2022037

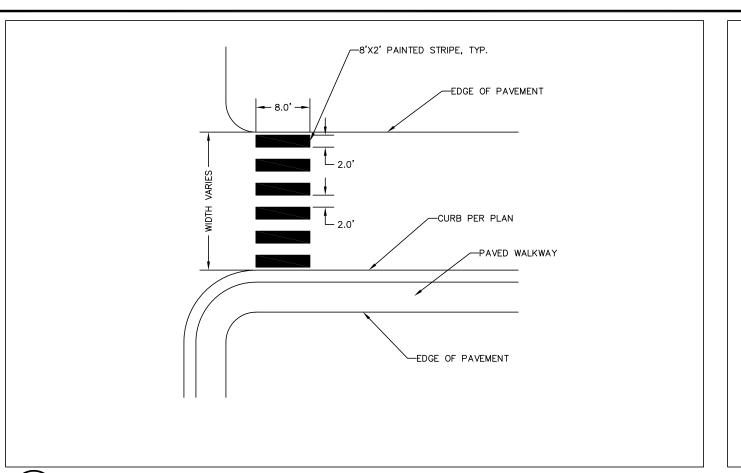
OHLSON

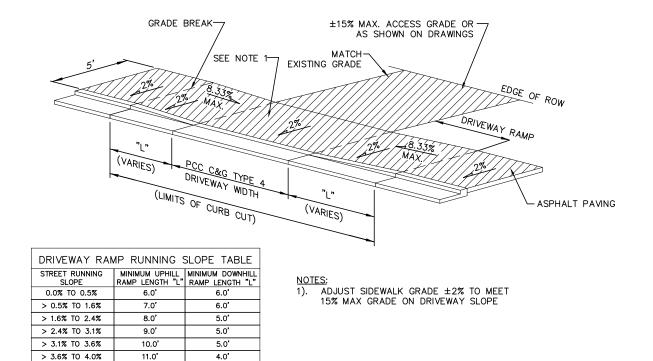
DRAWN BY: GTP CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED

VERT. NOTED 19 of 31

SHEET: C8.1





CITY OF HOMER

\*\*LANE AND W. BUNNELL /

HOMER, ALASKA

TYPICAL DETAILS

OHLSON

PROJECT NO.

DRAWN BY:

2022037

GTP CHECKED BY:

TYPICAL CROSSWALK MARKINGS

C8.2 GRAPHIC SCALE: NTS TYPICAL DRIVEWAY APPROACH WITH CURB CUT

4.0' 4.0'

4.0'

4.0'

GRAPHIC SCALE: NTS

> 4.0% TO 4.4%

> 4.4% TO 4.7%

> 4.7% TO 5.0%

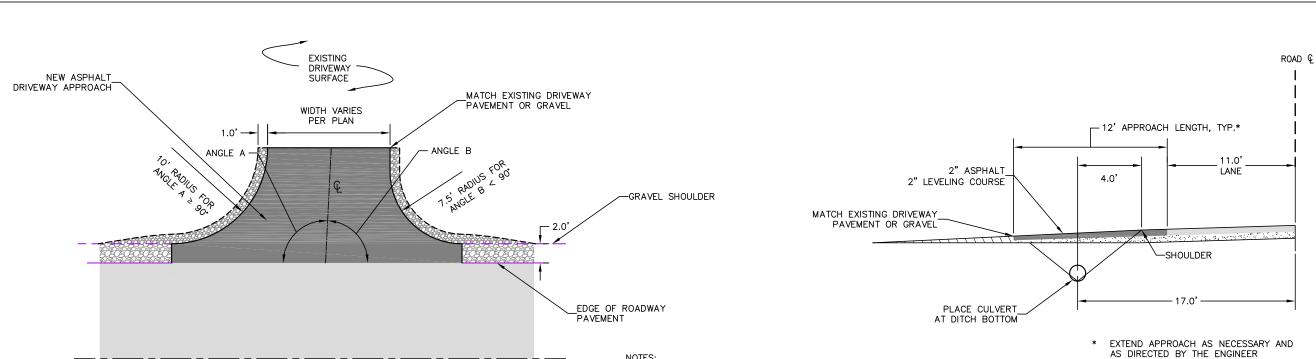
> 5.0%

12.0'

13.0

14.0'

15.0'



PROFILE

- SAWCUT AND REMOVE ANY EXISTING DRIVEWAY PAVEMENT FROM ROADWAY
- EP TO THE NEW APPROACH LENGTH.

  2. EXCAVATE AND REMOVE EXISTING CULVERTS PER THE CULVERT SCHEDULE.

  3. RESHAPE DRIVEWAY EMBANKMENT TO MATCH NEW GEOMETRY AND REMOVE MATERIAL AS NEEDED.
  - PLACE NEW DRIVEWAY CULVERT PER DRAWINGS AND CULVERT SCHEDULE.
  - REGRADE, PAVE, AND BLEND TO MATCH APPROACH TO EXISTING DRIVEWAY

C8.2

TYPICAL DRIVEWAY APPROACH WITH CURB RETURN

ROAD Q

<u>PLAN</u>

GRAPHIC SCALE: NTS

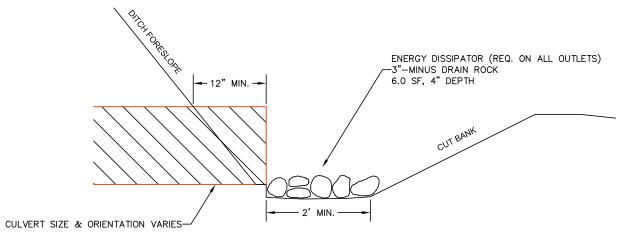
MJD DATE: 02/06/25

SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C8.2** 20 of 31

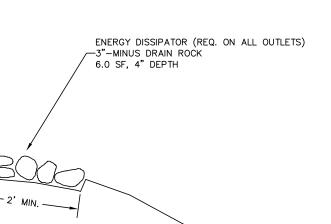
#### **PLAN VIEW**

#### **CUT SECTION PROFILE VIEW**

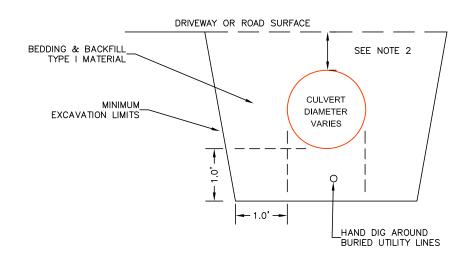


CULVERT SIZE & ORIENTATION VARIES-

#### FILL SECTION PROFILE VIEW



#### **CROSS SECTION VIEW**



#### **CULVERT NOTES**

- 1. CULVERT STATIONING IS APPROXIMATE. VERIFY ALL CSP INSTALLATION LOCATIONS WITH THE ENGINEER BEFORE INSTALLATION.
- 2. MINIMUM DRIVEWAY COVER REQUIREMENTS: 15" DIA 9", 18" DIA 9", 24" DIA
- -12", 33" DIA 18". MINIMUM CROSS CULVERT COVER REQUIREMENT: 18". INSTALL CULVERTS IN BOTTOM OF DITCH LINE & DEPRESS AS NECESSARY TO ENSURE MINIMUM COVER REQUIREMENT. EXCAVATE "BELL HOLE", PLACE ENERGY DISSIPATER (IF REQUIRED), AND REMOVE ANY DEBRIS AT CULVERT INLETS AND OUTLETS FOR BOTH NEW AND EXISTING CULVERTS. THIS WORK IS INCIDENTAL TO CULVERT PAY ITEMS.
- DO NOT PERCH CULVERT ENDS.

- 12" MIN.

- INSTALL CARSONITE MARKER POSTS ON OR NEAR ALL CROSS CULVERTS AND PUBLIC APPROACH CULVERTS. MARKERS ARE NOT REQUIRED FOR RESIDENTIAL
- CULVERTS.

  6. BEDDING AND BACKFILL MATERIAL SUBSIDIARY TO RESPECTIVE CULVERT PAY ITEM.



AVENUE CITY OF HOMER
OHLSON LANE AND W. BUNNELL A
HOMER, ALASKA
TYPICAL DETAILS

PROJECT NO. 2022037

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DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: C8.3 21 OF 31

**CULVERT INSTALLATION DETAILS** 

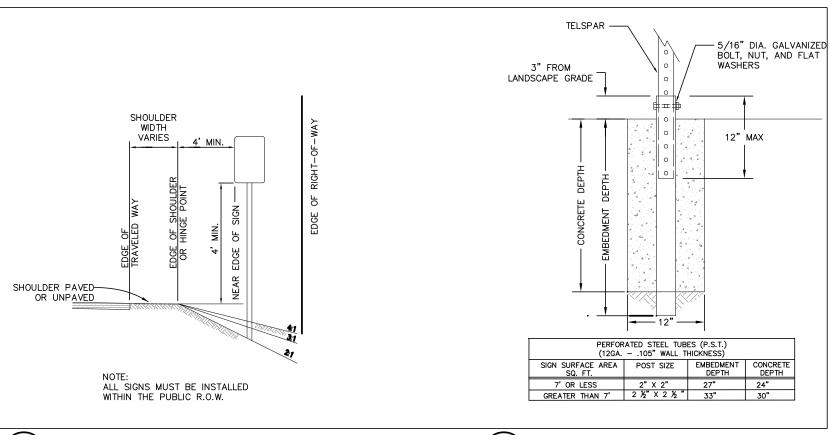
CULVERT SIZE & ORIENTATION VARIES-

"BELL HOLE" EXCAVATION AROUND ENDS, 3" BELOW INVERT

ENERGY DISSIPATOR (REQ. ON ALL OUTLETS)

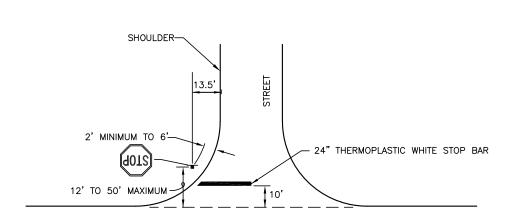
3"-MINUS DRAIN ROCK-6.0 SF, 4" DEPTH

GRAPHIC SCALE: NTS



TYPICAL SIGN LOCATION GRAPHIC SCALE: NTS

TYPICAL SIGN LOCATION GRAPHIC SCALE: NTS



NOTES:

1. LOCATE STOP SIGNS SO THEY ARE: A. VISIBLE TO APPROACHING TRAFFIC B. AS NEAR TO THE STOP BAR AS PRACTICABLE.

STOP BAR / STOP SIGN INSTALLATION

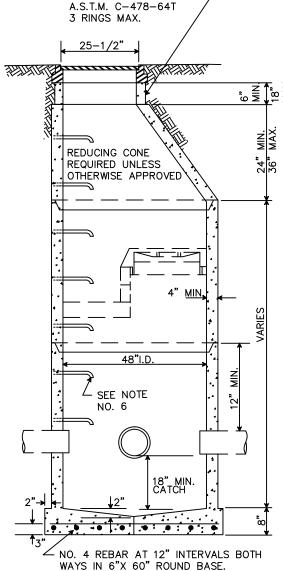
GRAPHIC SCALE: NTS

C8.4

#### TYPICAL STORM DRAIN MANHOLE (TYPE I)

NOTES:

- 1. REFER TO A.S.T.M. DESIGNATION C-470-69 FOR DESIGN RE-QUIREMENTS.
- SEE MANHOLE FRAME & COVER DETAIL
- MIN. STEEL REQ'D FOR BARREL AS PER A.S.T.M. C-478-69 SHALL BE IMBEDDED IN BASE SO THAT FIRST BARREL SECTION IS CONNECTED WITH BASE.
- 4. PRIMARY LEADS NOT TO EXCEED 30" CMP, PCMP, CPEP OR 27" RCP WITH INCLUDED ANGLE BETWEEN LEADS NO LESS THAN 135° OR PRIMARY LEAD NOT TO EXCEED 24" CMP, PCMP, CPEP OR 21" RCP WITH INCLUDED ANGLE LESS THAN135°.
- 5. BLOCKOUTS TO BE FORMED.
- 6. RUNGS TO BE PLACED 12" ON CENTER ON UNOBSTRUCTED SIDE OF MANHOLE 18" MAX. FROM BOTTOM OF MANHOLE & 6" MAX. FROM TOP OF CONE. IF UNOB-STRUCTED SIDE NOT AVAILABLE, BOTTOM RUNG TO BE PLACED 6" OVER SMALLEST PIPE. SEE RUNG (MANHOLE STEP) DETAIL



6" HIGH PRECAST CONC. -RINGS REQ'D SHALL MEET





ENGIN



AVENUE CITY OF HOMER

\*\*LANE AND W. BUNNELL \*\*

HOMER, ALASKA

TYPICAL DETAILS

PROJECT NO. 2022037

OHLSON

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DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED

MJD

VERT. NOTED SHEET: **C8.4** 

22 OF 31

GRAPHIC SCALE: NTS

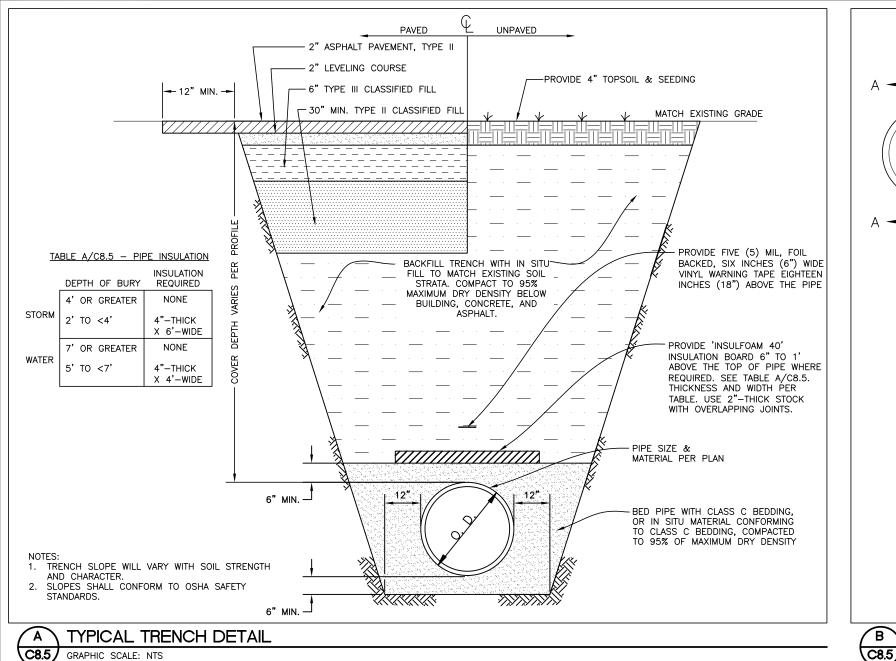
CURB BOX ADJUSTABLE 4" TO 9" 21-1/2

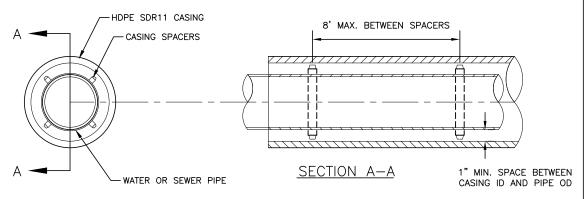
24" CURB INLET FRAME, GRATE AND

**CURB BOX** ILLUSTRATING NEENAH R-3065 WITH TYPE DR REVERSIBLE GRATE. FOR OPPOSITE HAND

FLIP GRATE TOP TO BOTTOM.

C8.4



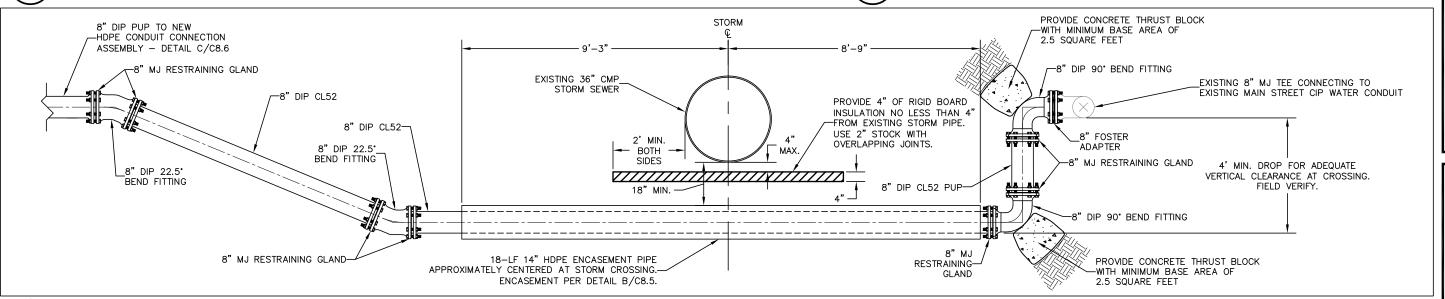


#### NOTES:

- 1. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING ELEVATIONS ON WATER AND SEWER MAINS PRIOR TO INSTALLING PIPE ENCASEMENT. IF ELEVATIONS DIFFER FROM PLANS, CONTRACTOR SHALL CONTACT THE ENGINEER FOR DIRECTION IN INSTALLING THE PIPE. CONTRACTOR MUST INSTALL ENCASEMENT PIPE TO ENSURE WATER AND SEWER MAIN REQUIRED SEPARATION DISTANCES ARE MET.
- 2. CASING PIPE BE SHALL HDPE SDR11 PIPE, MIN. STRENGTH.
- 3. INSTALL CASING SPACERS A MAXIMUM OF ONE FOOT (1') FROM EACH SIDE OF EACH PIPE JOINT. CASING SPACERS SHALL BE CASCADE WATERWORKS MFG. STAINLESS STEEL WITH POLYETHYLENE RUNNERS OR APPROVED EQUAL.
- 4. ENDS OF CASING PIPE SHALL BE SEALED WITH SYNTHETIC RUBBER SEAL WITH STAINLESS STEEL BANDS. CASING END SEALS SHALL BE CASCADE WATERWORKS MFG. MODEL CCES END SEALS OR APPROVED EQUAL. CASING SHALL BE WATER TIGHT.
- 5. CARRIER PIPE CONSTRUCTED OF DUCTILE IRON PIPE SHALL HAVE FIELD LOK® GASKETS OR APPROVED EQUAL INSTALLED ENTIRE LENGTH OF CASING PIPE AND AT A MINIMUM SHALL EXTEND ONE FULL PIPE LENGTH BEYOND END OF CASING.
- 6. FILL CARRIER PIPE WITH WATER PRIOR TO FILLING ANNULAR SPACE WITH CDF GROUT.
- 7. GROUT ANNULAR SPACE WITH CONTROLLED DENSITY FILL (CDF) 50-150 PSI 28 DAY
- 8. VOIDS CREATED BY CASING INSTALLATION ON OUTSIDE OF CASING SHALL BE PRESSURE

GRAPHIC SCALE: NTS

TYPICAL PIPE ENCASEMENT GRAPHIC SCALE: NTS



BUNNELL STORM DRAIN CROSSING AND CONNECTION TO EXISTING WATER MAIN

C8.5 GRAPHIC SCALE: NTS

'OF HOMER ND W. BUNNEL! ER, ALASKA ANE AND W. E HOMER, AL 

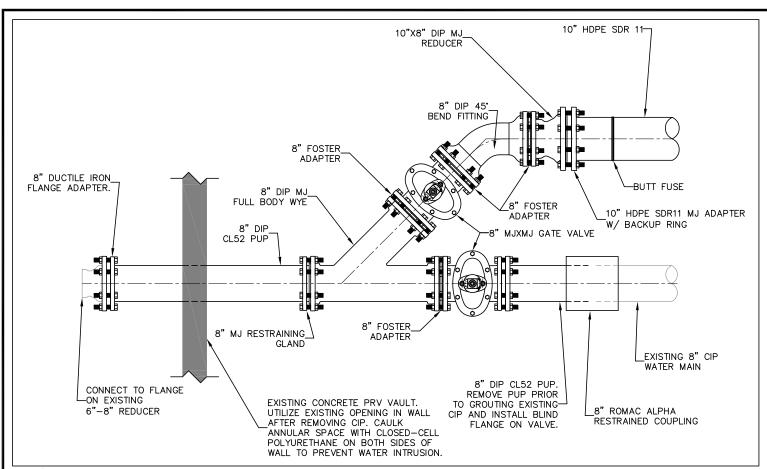
PROJECT NO. 2022037 DRAWN BY:

CHECKED BY MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

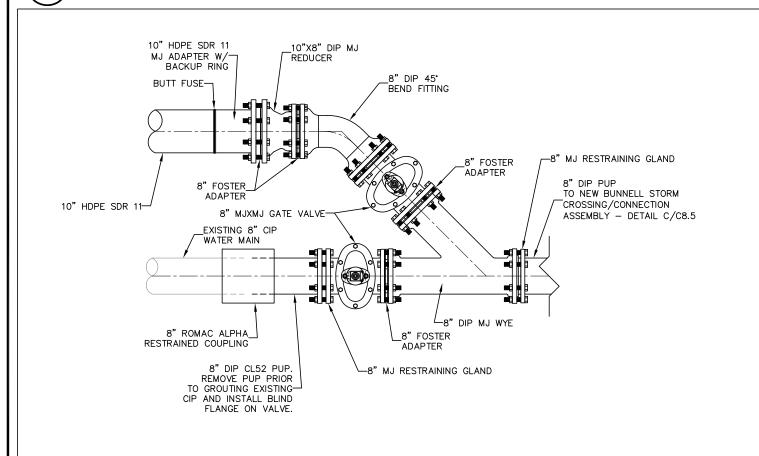
SHEET: **C8.5** 

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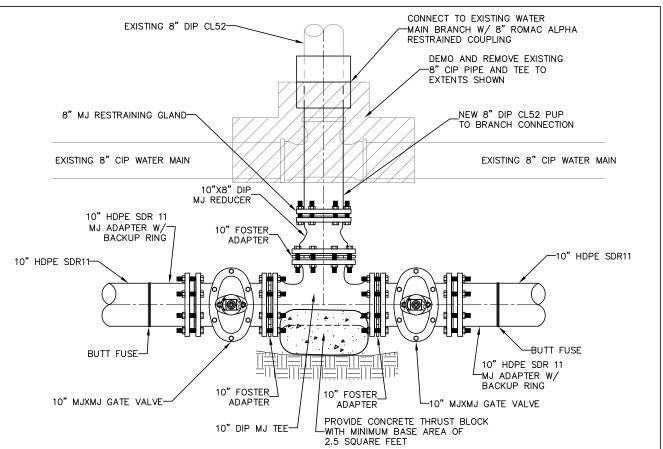
#### WATER MAIN CONNECTION AT PRV

C8.6 GRAPHIC SCALE: NTS



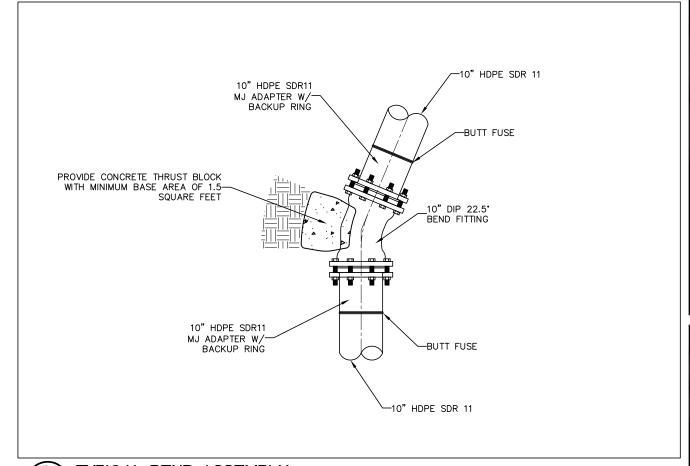
BUNNELL HDPE WATER MAIN CONNECTION C8.6

GRAPHIC SCALE: NTS



WATER MAIN CONNECTION AT JENNY WAY

C8.6 GRAPHIC SCALE: NTS



TYPICAL BEND ASSEMBLY C8.6

GRAPHIC SCALE: NTS



NELSON FNGINEEDING

AVENUE CITY OF HOMER

ANE AND W. BUNNELL A
HOMER, ALASKA
TYPICAL DETAILS

PROJECT NO. 2022037 DRAWN BY: GTP

CHECKED BY:

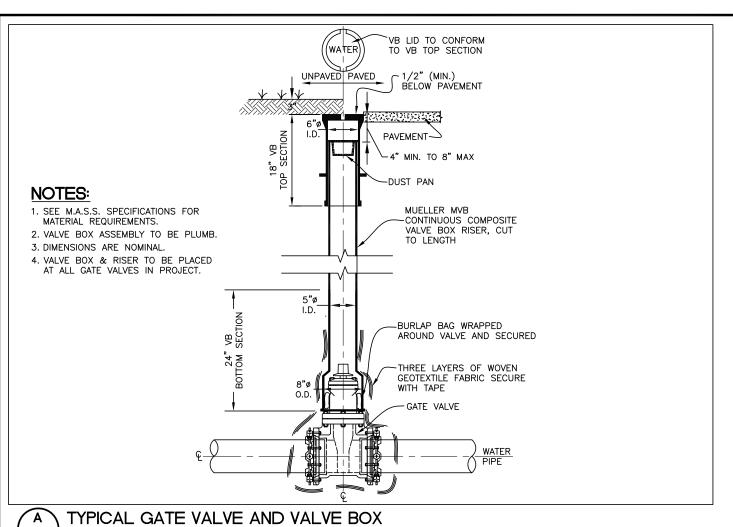
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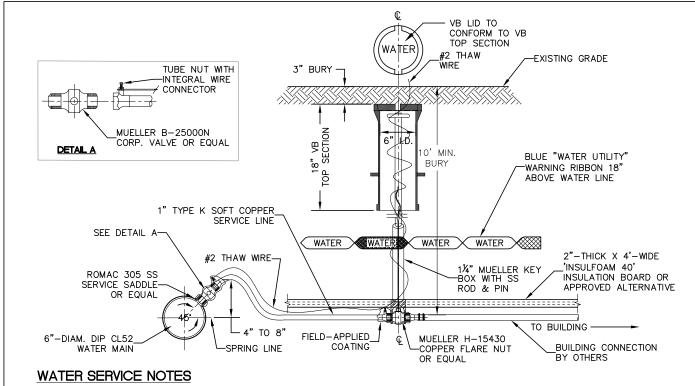
DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT.

MJD

NOTED SHEET: **C8.6** 

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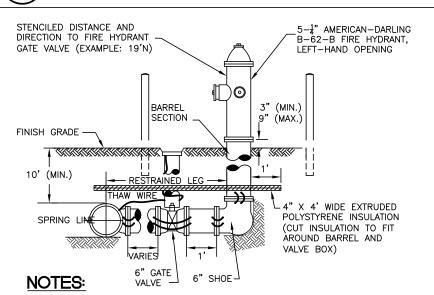


- 1. STAINLESS STEEL (SS) WRAP-AROUND SERVICE SADDLE TO BE USED ON ALL TAPS.
- 2. THAW WIRE IS TO BE #2 GAUGE HMWPE INSULATED COPPER WIRE THAT IS LAID PARALLEL TO THE SERVICE LINE WITHOUT CONTACTING THE SERVICE LINE.
- 3. VALVE BOX ASSEMBLY IS TO BE PLUMB.

# C8.7

#### TYPICAL 1" WATER SERVICE CONNECTION

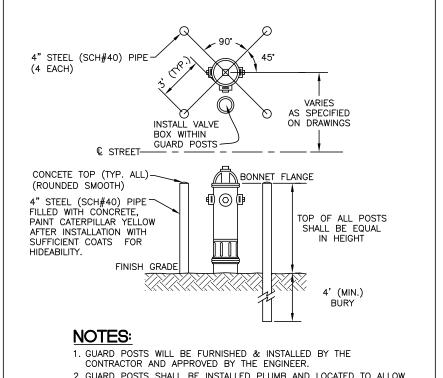
GRAPHIC SCALE: NTS



- 1. HYDRANT BARREL SHALL BE INSTALLED PLUMB AND THE LEG SHALL BE LEVEL. 2. HYDRANT GATE VALVE BOX TO BE INSTALLED ACCORDING TO DETAIL FOR TYPICAL
- 3. ALL PIPE AND FITTINGS FROM THE MAIN TO THE HYDRANT SHOE SHALL BE RESTRAINED BY USE OF MEGALUG® AND/OR FIELD LOK® GASKETS OR EQUAL.
- 4. ALL BACKFILL MATERIAL AROUND HYDRANT BARREL SHALL BE NFS. 5. THAW WIRE SHALL BE #2 COPPER WITH TYPE THW INSULATION. THAW WIRE SHALL BE BOLTED OR CAD WELDED TO THE TEE AT THE MAIN. EXTEND THAW WIRE TO TO SURFACE BETWEEN VB TOP SECTION AND RISER PIPE, FOLD AND STORE UNDER
- 6. ALL HYDRANTS SHALL BE LEFT-HAND OPENING (COUNTER-CLOCKWISE)



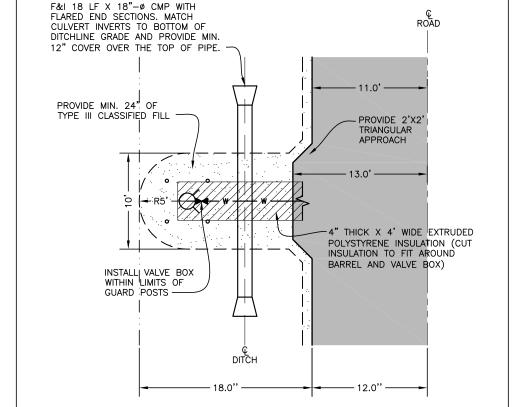
VB LID. CONTINUITY STRAPS ARE REQUIRED ON 6" DIP.



2. GUARD POSTS SHALL BE INSTALLED PLUMB AND LOCATED TO ALLOW UNRESTRICTED ACCESS TO PUMPER AND HOSE CONNECTIONS.

### TYPICAL FIRE HYDRANT GUARD POSTS

GRAPHIC SCALE: NTS



TYPICAL FIRE HYDRANT DRIVEWAY GRAPHIC SCALE: NTS



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OF HOMER

ND W. BUNNEL

IER, ALASKA ANE AND W. E HOMER, AL TYPICAL DE 

PROJECT NO. 2022037 DRAWN BY

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GTP CHECKED BY MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: C8.7

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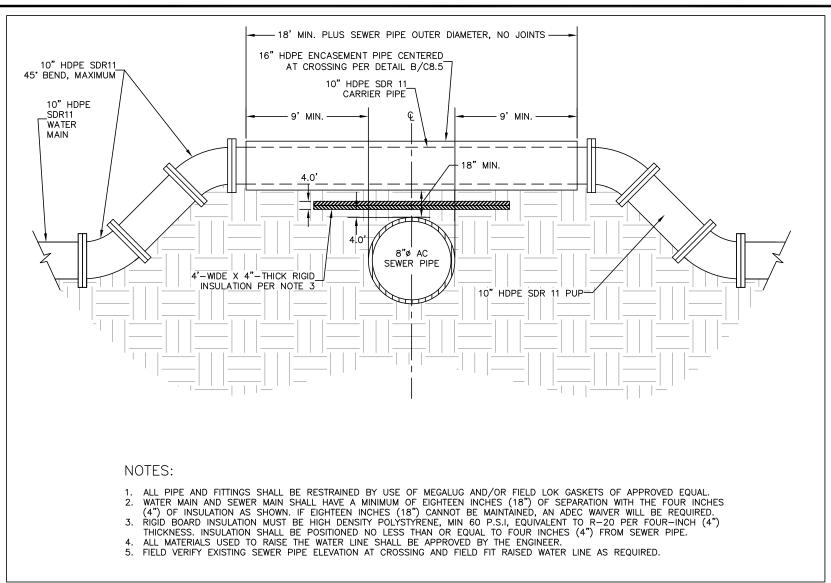
C8.7 GRAPHIC SCALE: NTS

C8.7

GRAPHIC SCALE: NTS

C8.7

C8.7





#### TYPICAL RAISED WATER MAIN AT SEWER CROSSING

C8.8

GRAPHIC SCALE: NTS





CONSULTING ENGINEERS
STRUCTURAL/CIVIL
155 BIDARKA ST
KENAI, AK 99611
TEL. (907) 283 - 3583
LIGENSE NO. AEGO1219



CITY OF HOMER

V LANE AND W. BUNNELL AVENUE

HOMER, ALASKA

TYPICAL DETAILS

OHLSON L

PROJECT NO.
2022037

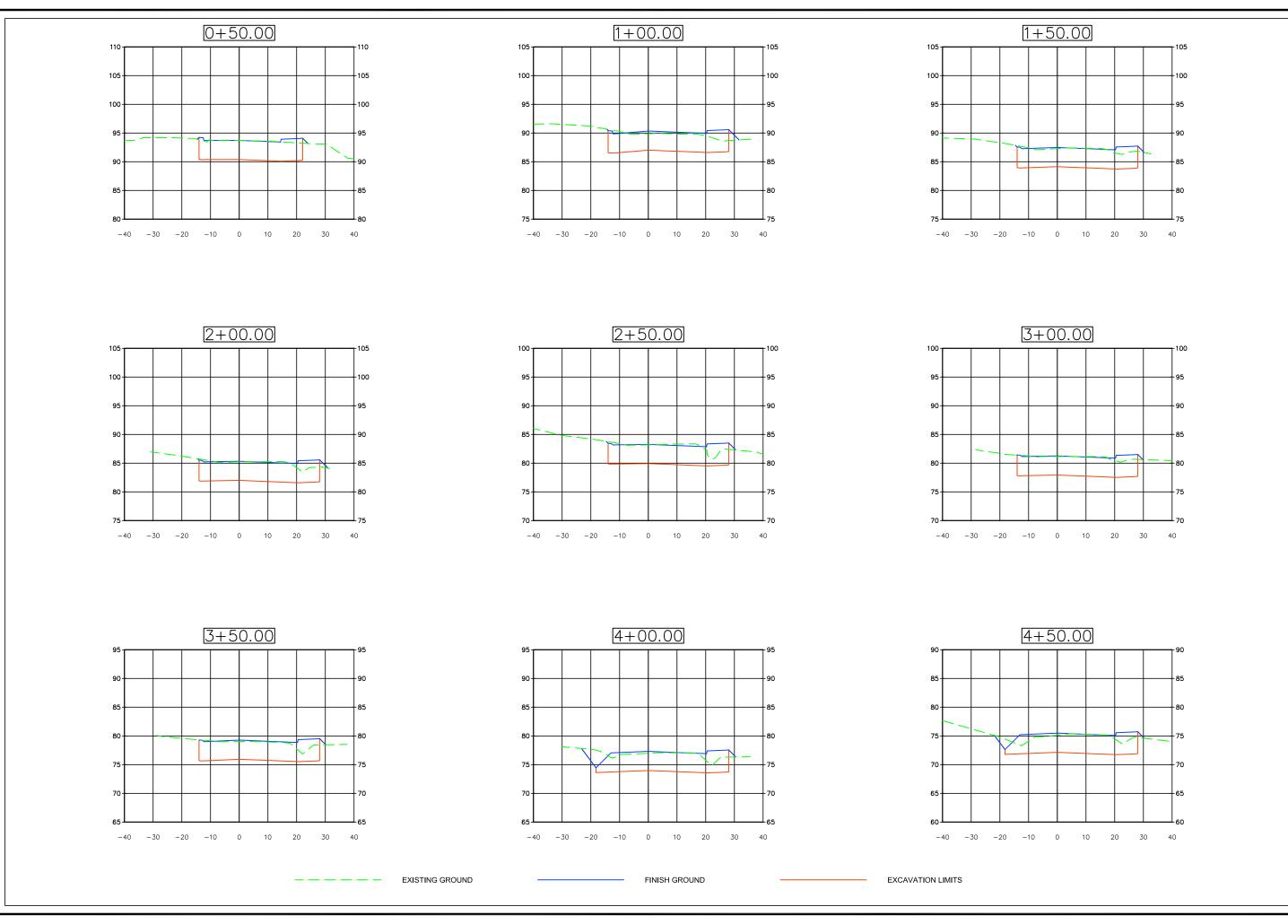
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SHEET: C8.8

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AVENUE CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVE
HOMER, ALASKA
ROAD CROSS SECTIONS

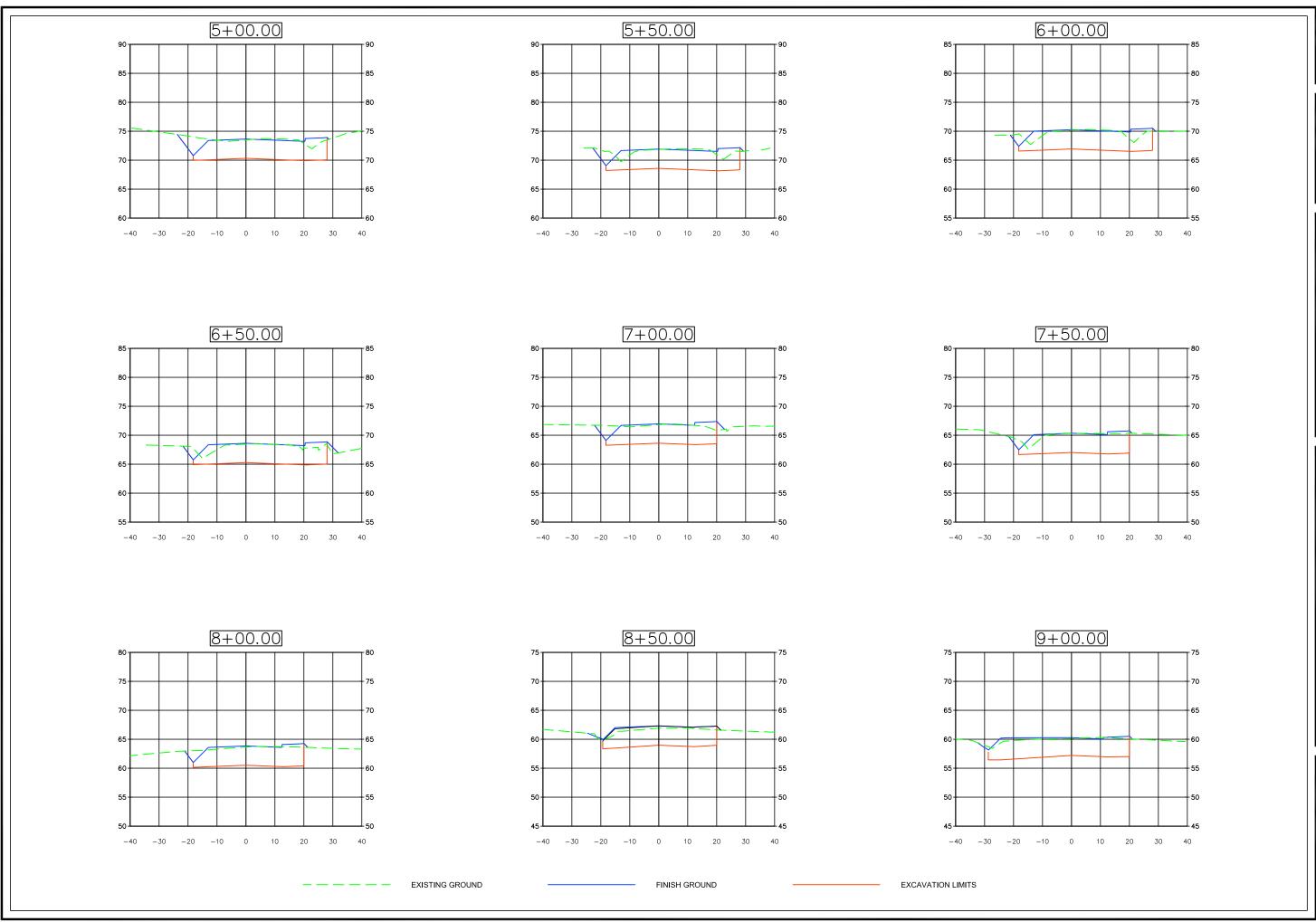
PROJECT NO. 2022037

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DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C9.1** 27 of 31







AVENUE CITY OF HOMER
OHLSON LANE AND W. BUNNELL AVI
HOMER, ALASKA
ROAD CROSS SECTIONS

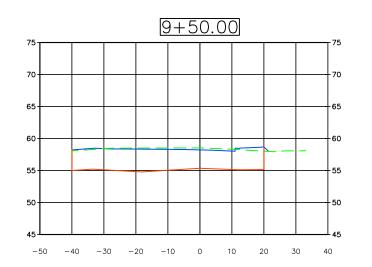
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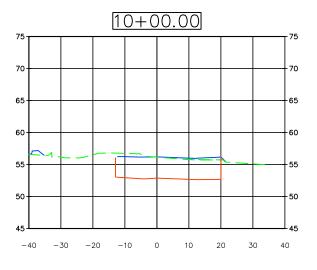
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DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: **C9.2** 28 of 31







CITY OF HOMER

OHLSON LANE AND W. BUNNELL AVENUE
HOMER, ALASKA
ROAD CROSS SECTIONS

PROJECT NO. 2022037

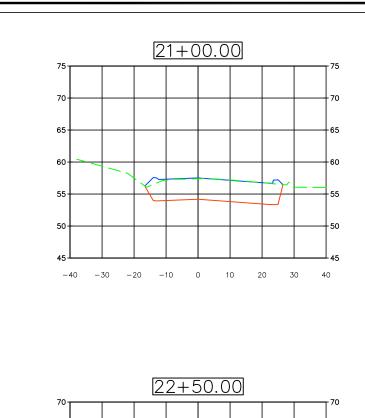
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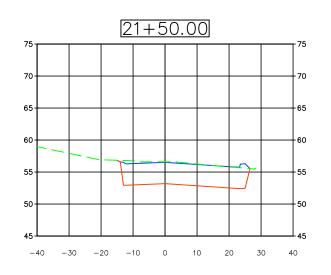
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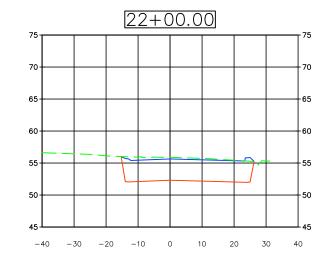
EXCAVATION LIMITS

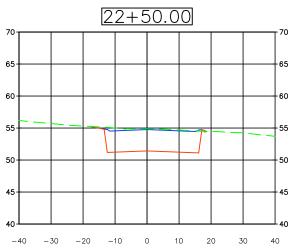
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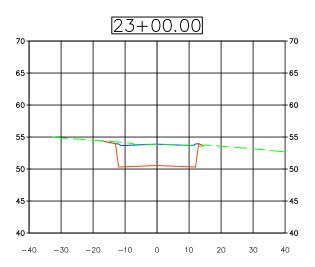
SHEET: **C9.3** 29 of 31

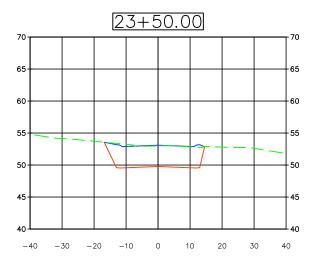


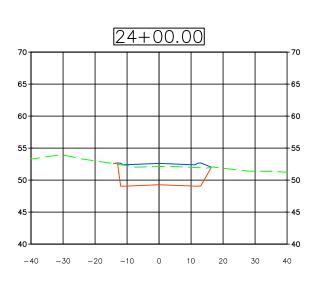












EXISTING GROUND FINISH GROUND

**EXCAVATION LIMITS** 

CITY OF HOMER

OHLSON LANE AND W. BUNNELL AVENUE
HOMER, ALASKA
ROAD CROSS SECTIONS

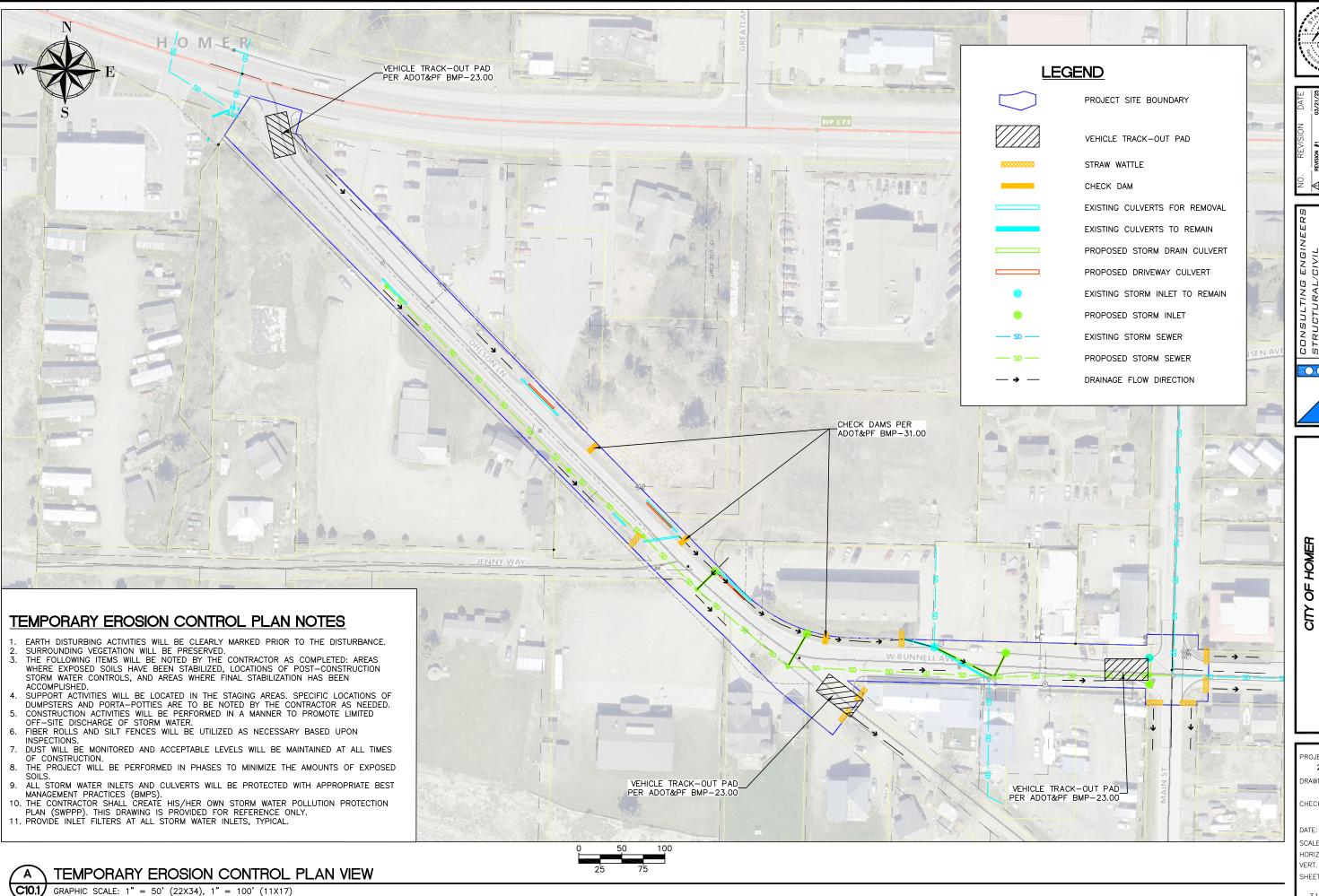
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DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED SHEET: **C9.4** 

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W. BUNNELL ALASKA CONTROL

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OHLSON LANE AND W. B HOMER, AL

ROJECT NO. 2022037

DRAWN BY:

CHECKED BY: MJD

DATE: 02/06/25 SCALES: NOTED HORIZ. NOTED VERT. NOTED

SHEET: C10.1 31 OF 31