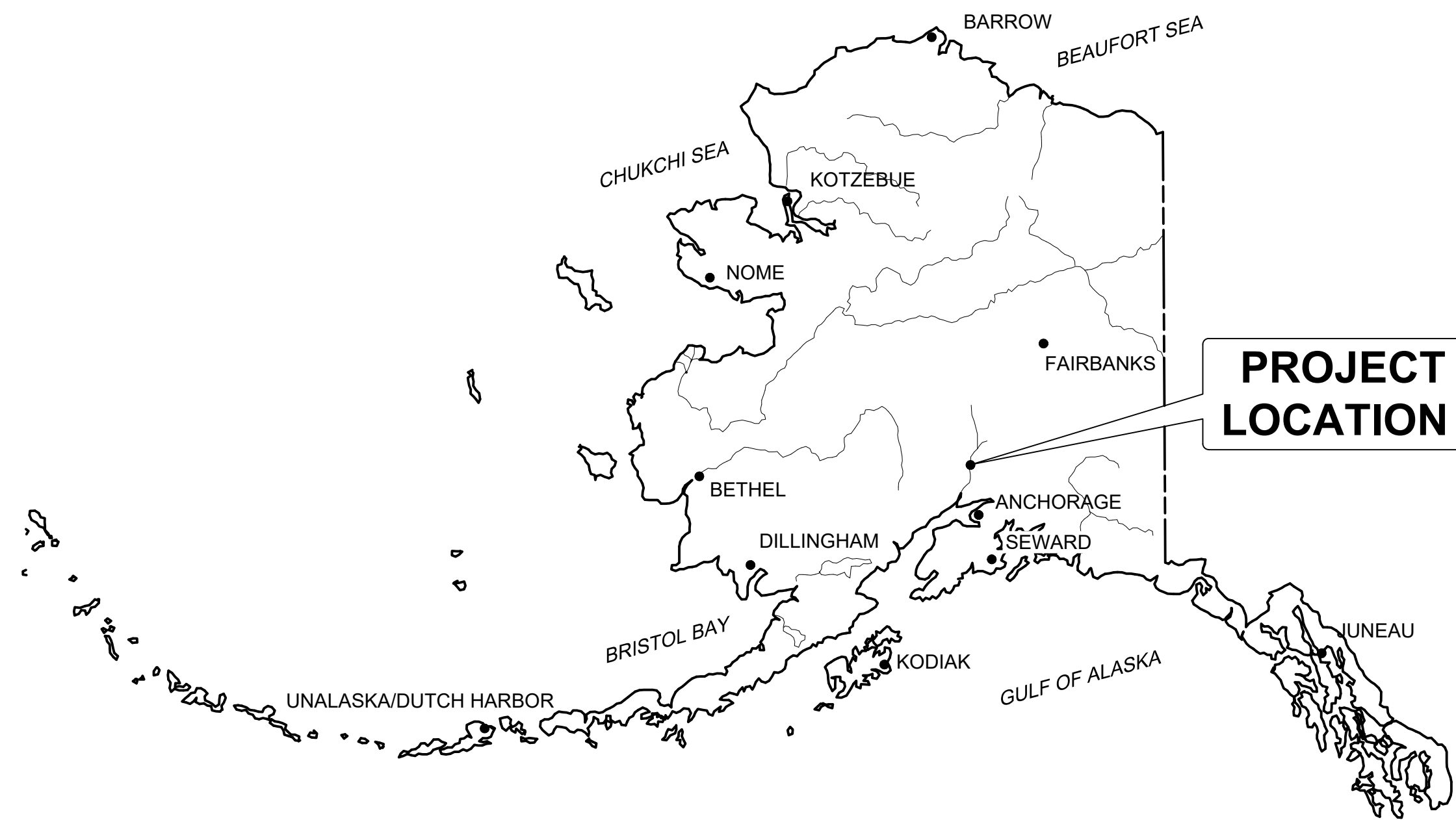


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

WILLOW, ALASKA
JUNE 2026



STATE OF ALASKA



VICINITY MAP

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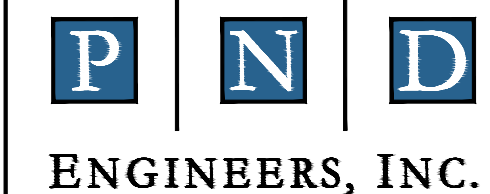
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE SHEET & DRAWING INDEX

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO:	01	OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029			

GENERAL NOTES

OWNER: ALASKA DEPARTMENT OF FISH & GAME

GENERAL

SEE PROJECT SPECIFICATIONS, REPORTS, AND PERMITS FOR ADDITIONAL REQUIREMENTS AND INFORMATION.

- INCIDENTAL PROPERTY DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ITS PRECONSTRUCTION CONDITION OR BETTER AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERING TO ALL APPLICABLE LOCAL, STATE AND FEDERAL CODES, PERMITS AND SAFETY REQUIREMENTS.
- THE LOCATIONS OF EXISTING FEATURES AND UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES NOT SHOWN IN THESE DRAWINGS MAY BE PRESENT. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD AS NECESSARY, PRIOR TO BEGINNING WORK. THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL UTILITIES ENCOUNTERED IN THE FIELD SHALL BE RECORDED ON THE CONTRACTOR'S RECORD DRAWINGS. CONTACT LOCAL UTILITY COMPANIES PRIOR TO ANY/ALL EXCAVATIONS.
- GRADING AND FINAL ALIGNMENT OF UTILITIES AND PIPING ARE SUBJECT TO MINOR REVISIONS BY THE ENGINEER TO FIT SITE CONDITIONS, AT NO ADDITIONAL COST.
- PROVIDE TEMPORARY AND PERMANENT STABILIZATION FOR DISTURBED AND EXPOSED SOILS DURING CONSTRUCTION IN COMPLIANCE WITH ADEC CONSTRUCTION GENERAL PERMIT AND SWPPP REQUIREMENTS.

SURVEY INFORMATION

THE BASIS FOR COORDINATES ARE NAD83 (2011), ALASKA STATE PLANE ZONE 4 IN US SURVEY FEET. VERTICAL DATUM IS NAVD88, GEOID 12B. EXISTING MONUMENTATION, CONTROL POINTS, AND ADDITIONAL INFORMATION IS SHOWN ON THE EXISTING CONDITIONS & SURVEY CONTROL SHEET. CONTRACTOR SHALL PROVIDE QUALIFIED SURVEYORS TO ESTABLISH AND MAINTAIN ADDITIONAL CONTROL AS REQUIRED.

APPLICABLE CODES AND STANDARDS

THE FOLLOWING SPECIFICATIONS, STANDARDS AND CODES ARE APPLICABLE:

- ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES, STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 2020 EDITION.
- AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS, CURRENT EDITION
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), "STEEL CONSTRUCTION MANUAL, CURRENT EDITION"
- AMERICAN CONCRETE INSTITUTE (ACI), BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - ACI 301-11
- AISC CODE OF STANDARD PRACTICE.
- AWS D1.1 STRUCTURAL WELDING CODE-STEEL, 2010 EDITION
- ALUMINUM DESIGN MANUAL (ADM), 2020
- UNITED STATES ACCESS BOARD, ACCESSIBLE BOATING FACILITIES, 2003
- CA DEPARTMENT OF PARKS AND RECREATION - LAYOUT AND DESIGN GUIDELINES FOR BOAT LAUNCHING FACILITIES.
- OREGON STATE MARINE BOARD - DESIGN GUIDELINES FOR RECREATIONAL BOATING FACILITIES, 3RD EDITION.

DESIGN VEHICLE

TURNING MOVEMENTS: AASHTO DESIGN VEHICLE: P/B - CAR AND BOAT TRAILER. (19 FT TRUCK WITH 23 FT TRAILER. 42 FT TOTAL LENGTH, 8 FT WIDTH.)

BOAT LAUNCH AND DOCK DESIGN PARAMETERS:

OWNER	ALASKA DEPARTMENT OF FISH & GAME
DESIGN LIFE	20 YEARS
GENERAL	FLOATING DOCK IS DESIGNED FOR SEASONAL (SUMMER) USE AND SHALL BE REMOVED FROM SERVICE PRIOR TO FREEZE UP.
DESIGN VESSEL	22-FT OVERALL LENGTH, 8.5-FT BEAM WIDTH, 1-FT OPERATING DRAFT, 6,000LB OPERATING WEIGHT
WIND LOAD	EXTREME: 117 MILE PER HOUR 3 SECOND GUST ADJUSTED TO 30-SECOND DURATION WITH VESSEL SHAPE FACTORS. ONE DESIGN VESSEL MOORED BETWEEN ADJACENT PILES.
DEAD LOAD	ALL
LIVE LOAD	FLOATS: 50 POUNDS PER SQUARE FOOT UNIFORM LOAD LAUNCH RAMP: AASHTO HS-20 AND 966 LOADER W/ FULL BUCKET
FREEBOARD	10 INCHES UNDER DEAD LOAD ONLY.
IMPACT	DESIGN VESSEL AT VELOCITY OF 3.0 FEET/SECOND, VESSEL IMPACT ANGLE OF 30°.
ICE IMPACT	64 POUNDS PER SQUARE INCH FOR A DEPTH OF 3 FEET ABOVE MUDLINE.
FROST JACKING	25 POUNDS PER SQUARE INCH FOR A DEPTH OF 3 FEET BELOW MUDLINE.
WATER LEVELS	DESIGN HIGH WATER = 155' DESIGN LOW WATER = 150'

LEGEND

EXISTING	PROPOSED		EXISTING	PROPOSED	
		PROPERTY BOUNDARY			ELECTRICAL JUNCTION BOX
		RIPRAP			ELECTRICAL METER
		WOOD FLOATS			ELECTRICAL PEDESTAL
		CONCRETE PAVERS/PLANKS			ELECTRICAL TRANSFORMER
		BREAKLINE			ELECTRICAL PANEL
		TREELINE / CLEARING AND GRUBBING			ELECTRIC RV PEDESTAL
		CONTOUR (MAJOR)			POWER POLE
		CONTOUR (MINOR)			BOLLARD
		CULVERT			FLAG POLE
		CUT LIMITS			LIGHT POLE
		FILL LIMITS			SANITARY SEWER/SEPTIC VENT
		ABANDONED WATER LINE			SINGLE POST SIGN
		WATER LINE			DOUBLE POST SIGN
		ABANDONED SEWER LINE			TELEPHONE PEDESTAL
		SEWER LINE			WATER VALVE
		OVERHEAD ELECTRIC LINE			WATER WELL
		UNDERGROUND ELECTRIC LINE			GUY ANCHOR
		UNDERGROUND COMM LINE			SANITARY SEWER MAN HOLE
		CHAINLINK FENCE			FUEL TANK
		ROOTWAD			GATE
		CONCRETE			
		GRAVEL			
		LEACH FIELD			
		LANDSCAPED AREAS			
		DITCH			
		SWALE			

ABBREVIATIONS

AAC	ALASKA ADMINISTRATIVE CODE	ELB	ELBOW	NTS	NOT TO SCALE	STD	STANDARD
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY TRANSPORTATION OFFICIALS	ELEV	ELEVATION	OC	ON CENTER	STL	STEEL
AC	ASPHALT CONCRETE	EOP	END OF PROJECT	OD	OUTSIDE DIAMETER	SQ	SQUARE
ACB	ARTICULATING CONCRETE BLOCKS	FF	FINISHED FLOOR	OHW	ORDINARY HIGH WATER	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
ADA	AMERICANS WITH DISABILITIES ACT	FT	FEET	OPUS	ONLINE USER POSITIONING SERVICE	OSHA	OCCUPATIONAL SAFETY AND HEALTH
ADEC	ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION	GAL	GALLON	PI	POINT OF INTERSECTION	PC	POINT OF CURVATURE
AK	ALASKA	GALV	GALVANIZED	PL	PLATE	PT	POINT OF TANGENCY
APPROX	APPROXIMATE	GI	GALVANIZED IRON	PSI	POUNDS PER SQUARE INCH	PVC	POLYVINYL CHLORIDE
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	GNSS	GLOBAL NAVIGATION SATELLITE SYSTEM	PT	POINT OF INTERSECTION	PVI	POINT OF VERTICAL INTERSECTION
AVAP	AS VERTICAL AS POSSIBLE	GPM	GALLONS PER MINUTE	R	RADIUS	REQ'D	REQUIRED
BOP	BEGINNING OF PROJECT	HDPE	HIGH DENSITY POLYETHYLENE	ROW	RIGHT OF WAY	RT	RIGHT
CIP	CAST-IN-PLACE	H, HORIZ	HORIZONTAL	RTK	REAL TIME KINEMATIC	SCH	SCHEDULE
CLR	CLEAR, CLEARANCE	HS	HIGH STRENGTH	SDR	STANDARD DIMENSION RATIO	SF	SQUARE FOOT
CMP	CORRUGATED METAL PIPE	I.D.	INSIDE DIAMETER	SHLD	SHOULDER	ST	STAND PIPE
CSP	CORRUGATED STEEL PIPE	INV	INVERT	STA	STATION		
CO	CLEANOUT	IN	INCHES				
CW	CONTINUOUS WELD	L	LENGTH				
DIA	DIAMETER	LF	LINEAR FOOT				
DIP	DUCTILE IRON PIPE	LT	LEFT				
E	EASTING	MAX	MAXIMUM				
EA	EACH	MH	MANHOLE				
		MIN	MINIMUM				
		N	NORTHING				
		NGS	NATIONAL GEODETIC SURVEY				
		NO.	NUMBER				



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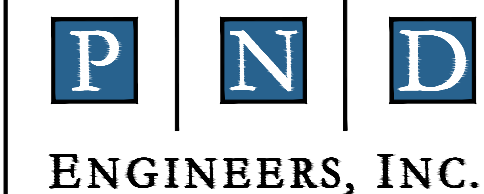


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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

GENERAL NOTES, ABBREVIATIONS, & LEGEND

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO:	02 OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029		

SURVEY CONTROL

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
201	2891063.714	1623383.501	157.44	SRBR SET 5/8 PND CONTROL
202	2890714.628	1622970.140	157.29	SRBR SET 5/8 PND CONTROL
* 203	2895082.121	1628177.171	190.40	FRBR 5/8" PC TS PH-49

* NOT SHOWN HEREON

RECOVERED MONUMENTATION

POINT #	NORTHING	EASTING	DESCRIPTION
* 701	2891555.15	1628436.30	FDR [FBC DRIVE ROD, AKDOTBM T104 RESET 2002]
* 702	2895286.63	1628079.60	FBC [3.5' USGS, U 104 1965]
703	2891397.31	1624330.18	FRBR [5/8" REBAR, NO CAP]
704	2890073.45	1624336.67	FBC [2.5' GLO, NE 1/4 S13]
705	2891398.62	1623720.82	FAC [2" L14/15 , LS10406 2021]

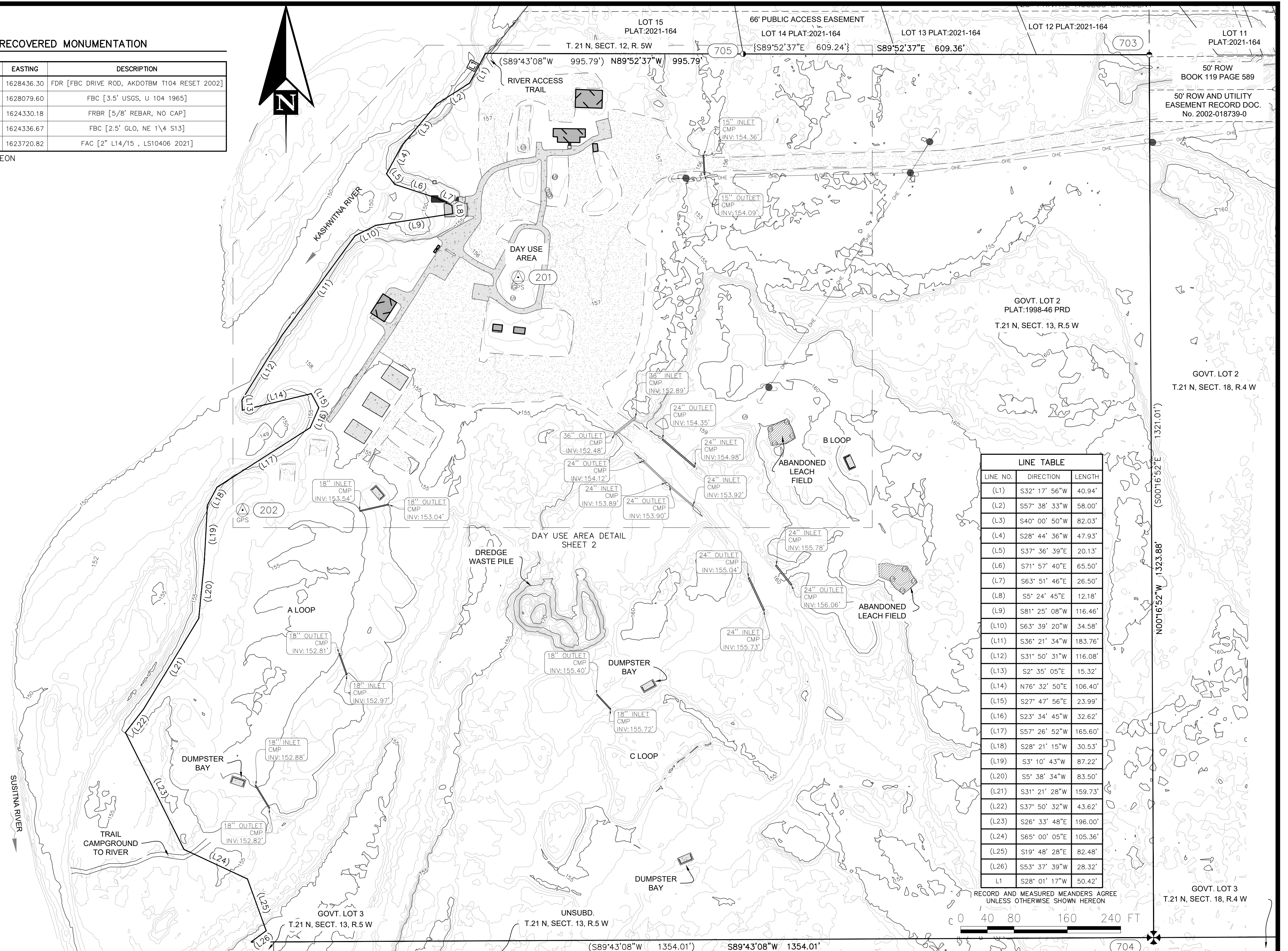
* NOT SHOWN HEREON

LEGEND

	PRIMARY GPS CONTROL		EXISTING CONTOUR & ELEVATION
	BLM/GLO MONUMENT FOUND		BUILDING LINE
	ALUMINUM CAP FOUND		GRAVEL SHOULDER
	5/8" REBAR OR PLASTIC CAP FOUND		CONCRETE EDGE
	POWER POLE		EASEMENT
	GUY ANCHOR		RECORD STATUS
	GUY POLE		MEASURED PROPERTY STATUS
	SANITARY SEWER CLEAN OUT		OVERHEAD ELECTRIC
	GRAVEL		CONCRETE RETAINING WALL
	CONCRETE/SIDEWALK		CULVERT
	PAVERS/BRICK		BUILDING
	WOOD DECKING		LEACH FIELD
	RECORD DATA PLAT: 1998-46		
	RECORD DATA PLAT: 2021-164		

NOTES

- BASIS OF COORDINATES FOR THIS SURVEY ARE NAD 83(2011), ALASKA STATE PLANE ZONE 4 IN U.S. SURVEY FEET, DERIVED FROM GNSS STATIC OBSERVATION, PROCESSED UTILIZING NATIONAL GEODETIC SURVEY'S (NGS) ONLINE USER POSITIONING SERVICE (OPUS) TO DETERMINE THE FOLLOWING COORDINATES FOR POINT NUMBER 201:
N=2891063.714,
E=1623383.501
- THE VERTICAL CONTROL FOR THIS SURVEY IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), DERIVED FROM GNSS STATIC OBSERVATION, PROCESSED UTILIZING NATIONAL GEODETIC SURVEY'S (NGS) ONLINE USER POSITIONING SERVICE (OPUS) TO DETERMINE THE FOLLOWING ELEVATION FOR POINT NUMBER 201:
ELEV: 157.437' US. FEET.
- PROPERTY FOR GOVT. LOT 2, SUSITNA LANDING FACILITIES, PLAT 1998-46 WAS TRANSFERRED TO NAD 83, ALASKA STATE PLANE ZONE 4 BY PLACING AT NE 1/4 CORNER SECTION 13 AND SECTION 18, POINT 704; AND ROTATED TO THE N 1/4 CORNER, POINT 703. RECORD BEARING A DISTANCE ARE SHOWN UNLESS OTHERWISE NOTED.
- THE FIELD SURVEY WAS PERFORMED MAY 07-08, 2025, BY PND ENGINEERS.
- ALL DIMENSIONS AND COORDINATES ARE IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED.
- THIS SURVEY WAS COMPLETED USING GNSS SURVEY TECHNIQUES. REAL TIME KINEMATIC (RTK) OBSERVATIONS WERE STORED USING TRIMBLE R12i, GNSS RECEIVERS.
- AERIAL IMAGERY AND TOPOGRAPHIC DATA WERE COLLECTED USING A DJI MATRICE 300 QUADCOPTER UAV EQUIPPED WITH A GREENVALLEY LIAIR V70 LIDAR SENSOR.
- NO UTILITY LOCATES WERE PERFORMED THIS SURVEY.
- CONTOURS ARE IN FEET, WITH ONE FOOT INTERVALS.
- NO TITLE SEARCH WAS PREPARED FOR THIS SURVEY. EASEMENTS AND ENCUMBRANCES MAY EXIST THAT ARE NOT SHOWN HEREON.



LINE TABLE

LINE NO.	DIRECTION	LENGTH
(L1)	S32° 17' 56"W	40.94'
(L2)	S57° 38' 33"W	58.00'
(L3)	S40° 00' 50"W	82.03'
(L4)	S28° 44' 36"W	47.93'
(L5)	S37° 36' 39"E	20.13'
(L6)	S71° 57' 40"E	65.50'
(L7)	S63° 51' 46"E	26.50'
(L8)	S5° 24' 45"E	12.18'
(L9)	S81° 25' 08"W	116.46'
(L10)	S63° 39' 20"W	34.58'
(L11)	S36° 21' 34"W	183.76'
(L12)	S31° 50' 31"W	116.08'
(L13)	S2° 35' 05"E	15.32'
(L14)	N76° 32' 50"E	106.40'
(L15)	S27° 47' 56"E	23.99'
(L16)	S23° 34' 45"W	32.62'
(L17)	S57° 26' 52"W	165.60'
(L18)	S28° 21' 15"W	30.53'
(L19)	S3° 10' 43"W	87.22'
(L20)	S5° 38' 34"W	83.50'
(L21)	S31° 21' 28"W	159.73'
(L22)	S37° 50' 32"W	43.62'
(L23)	S26° 33' 48"E	196.00'
(L24)	S65° 00' 05"E	105.36'
(L25)	S19° 48' 28"E	82.48'
(L26)	S53° 37' 39"W	28.32'
L1	S28° 01' 17"W	50.42'

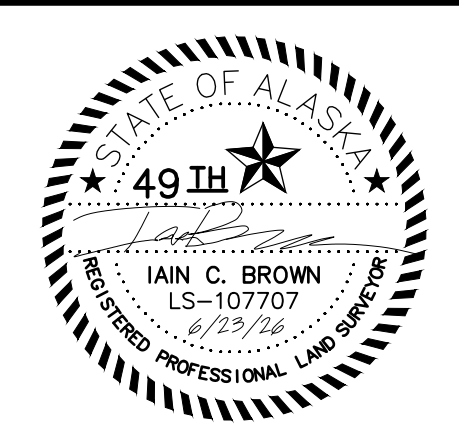
RECORD AND MEASURED MEANDERS AGREE UNLESS OTHERWISE SHOWN HEREON



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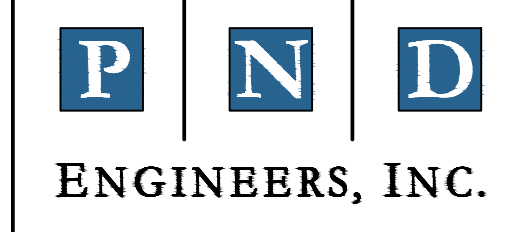
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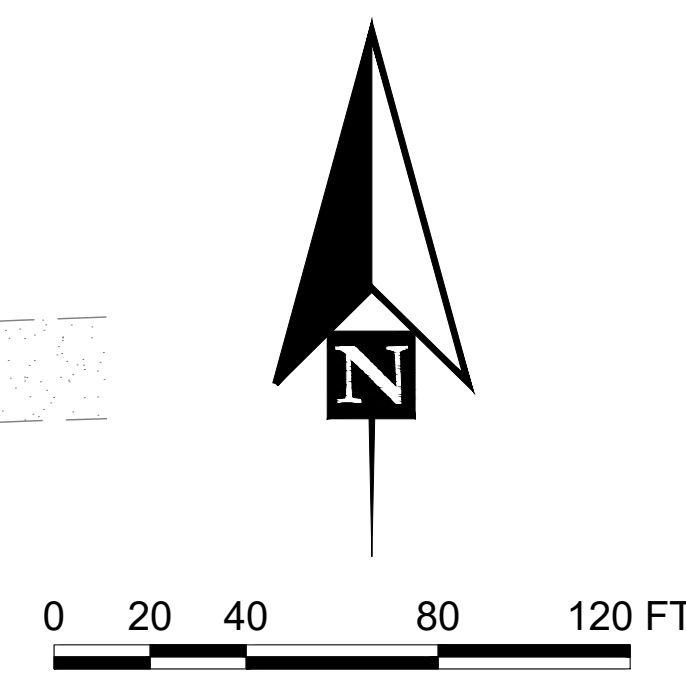
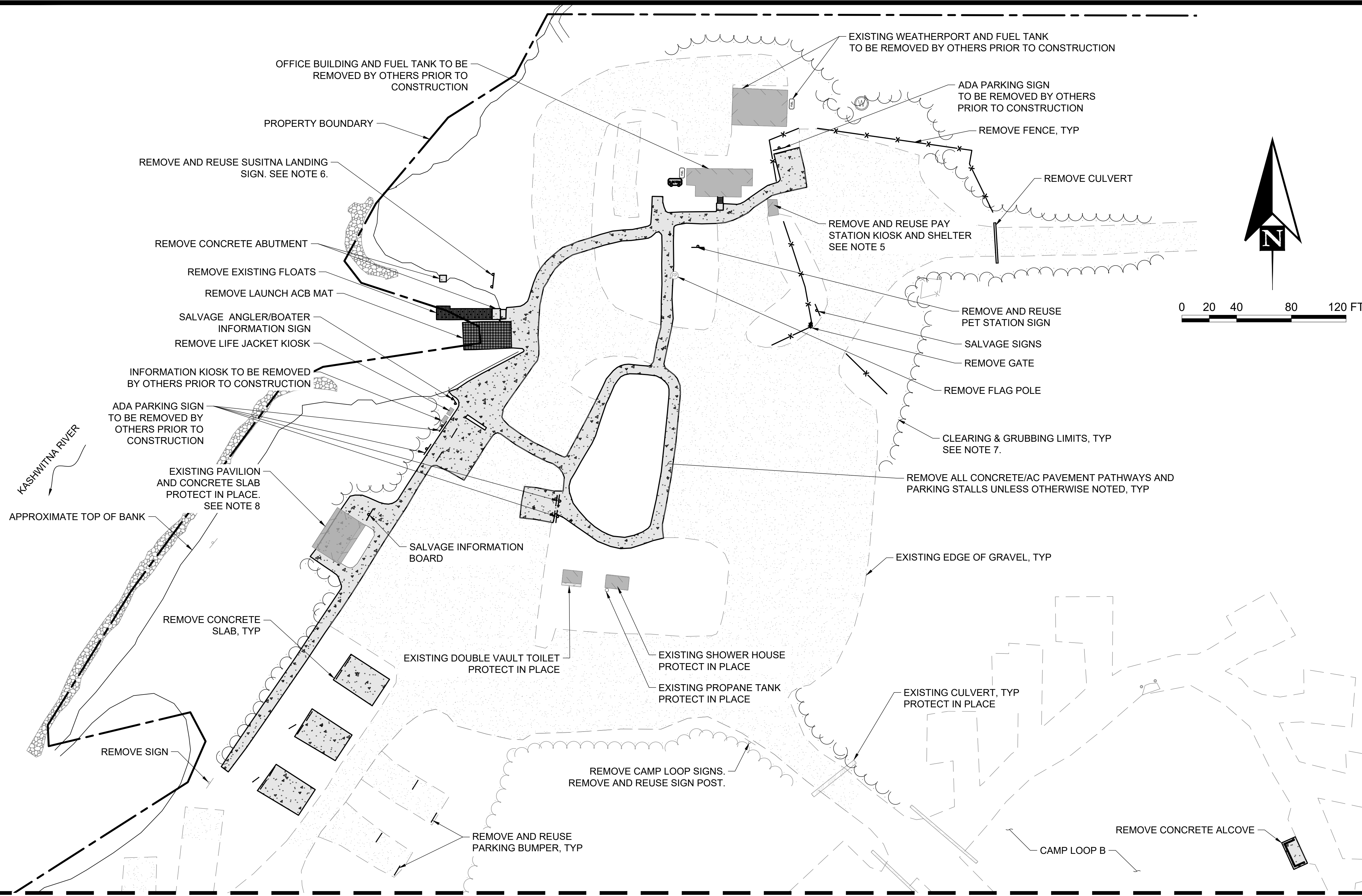
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION
TITLE: SURVEY CONTROL & EXISTING CONDITIONS

SCALE:	1"=80'	FIELD BOOK:	2025-2	SHEET NO:	03 OF 63
DESIGNED BY:	ZS	DATE:	6/23/26		
CHECKED BY:	IB	PROJECT NO:	251029		

6/2/26 - OROHLER - 1/2025/251029 Susitna Landing Boat Launch & Facility Renovation (G. Drawings/Civil/04-05 - Demolition Plan.dwg)



MATCH LINE - SEE SHEET 05

DEMOLITION SCHEDULE			
DESCRIPTION	QUANTITY	UNIT	REMOVE & REUSE
202.0001.0000 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS			
FENCE	450	LF	NO
GATE	1	EA	NO
ELECTRIC HOOKUPS	9	EA	NO
LAUNCH FLOATS	40.5	LF	NO
LAUNCH ACB MAT	700	SF	NO
MANHOLE COVER & FRAME	1	EA	NO
BOLLARD	2	EA	NO
FLAG POLE	1	EA	NO
HOLDING TANK, LINE, & ALARM	1	EA	NO
SEWER CLEANOUT	1	EA	NO
PAY STATION KIOSK & SHELTER	1	EA	YES
ELECTRIC PANEL	1	EA	NO
PARKING BUMPER	17	EA	YES
LEACH FIELD	2	EA	NO
CONCRETE ALCOVE	5	EA	NO
202.0003.0000 - REMOVAL OF SIDEWALK			
	1941	SY	NO
202.0004.0000 - REMOVAL OF CULVERT PIPE			
	30	LF	NO
615.0002.0000 - REMOVE AND RELOCATE SIGN			
SIGNS	8	EA	YES
615.0006.0000 - SALVAGE SIGN			
SIGNS	4	EA	NO

*SCHEDULE INCLUDES ITEMS SHOWN ON SHEETS 04, 05, 06, AND 07.
**SEE SHEET 33 FOR SIGN SCHEDULE.

NOTES:

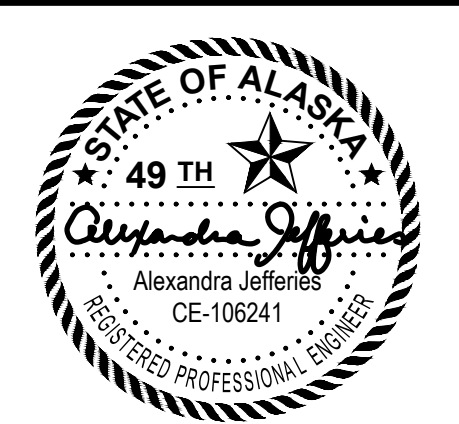
1. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING ARTICULATING CONCRETE BLOCK LAUNCH, CIP CONCRETE, MISCELLANEOUS CONCRETE DEBRIS, TIMBER FLOAT UNITS, AC PAVEMENT, EXCAVATION SPOILS AND ALL OTHER MATERIAL ASSOCIATED WITH THE DEMOLITION AND INSTALLATION OF THE NEW BOAT LAUNCH AND FLOATS WITHIN THE AREA OF DISTURBANCE.
2. ITEMS DESIGNATED "REMOVE" SHALL BE DEMOLISHED AND DISPOSAL WORK SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND STANDARDS. ALL PROJECT SPECIFIC PERMITS SHALL BE FOLLOWED.
3. ITEMS DESIGNATED "REMOVE AND REUSE" ARE TO BE REMOVED AND STORED IN A MANNER TO PREVENT DAMAGE DURING CONSTRUCTION.
4. ITEMS DESIGNATED "SALVAGE" SHALL BE TRANSFERRED TO THE OWNER OR STORED AT AN OWNER DESIGNATED LOCATION ON SITE.
5. PAY KIOSK AND SHELTER SHALL BE REMOVED AND REUSED. PROTECT FROM DAMAGE. EXISTING CONCRETE SLAB SHALL BE REMOVED.
6. SIGN POSTS SHALL BE CUT AT GRADE AND THE FOUNDATION REMOVED UNLESS OTHERWISE INDICATED.
7. LIMIT CLEARING AND GRUBBING TO THE EXTENT NECESSARY TO COMPLETE CONSTRUCTION.
8. SAW CUT EXISTING ASPHALT PAD AROUND OUTER EXTENTS OF EXISTING PAVILION ROOF DRIP LINE. CONCRETE PAD WITHIN THE PAVILION TO REMAIN.
9. SEE SHEETS 6 & 7 FOR UTILITY DEMOLITION.



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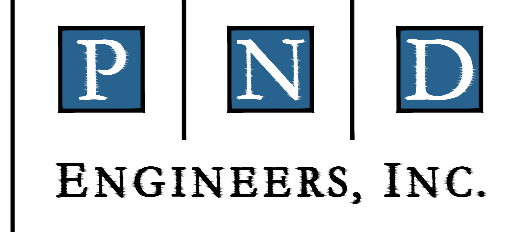
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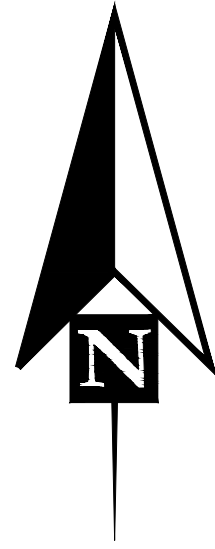
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

PROJECT TITLE: **DEMOLITION PLAN**

DESIGNED BY: OTR DATE: 6/26/26
CHECKED BY: AWJ PROJECT NO: 251029

SHEET NO: **04** OF 63

MATCH LINE - SEE SHEET 04



0 20 40 80 120 FT

REMOVE CONCRETE ALCOVE

CAMP LOOP B

CAMP LOOP A

REMOVE CONCRETE ALCOVE

CAMP LOOP C

REMOVE CONCRETE ALCOVE

POTENTIAL VEGETATIVE MAT COLLECTION LOCATIONS

TRAIL TO SUSITNA RIVER

NOTE:

1. SIGNS WITHIN CAMP LOOPS A, B, AND C SHALL BE PROTECTED IN PLACE.

6/2/26 - CROHLER - I:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\04-05 - Demolition Plan.dwg



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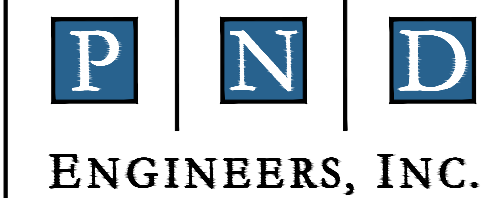
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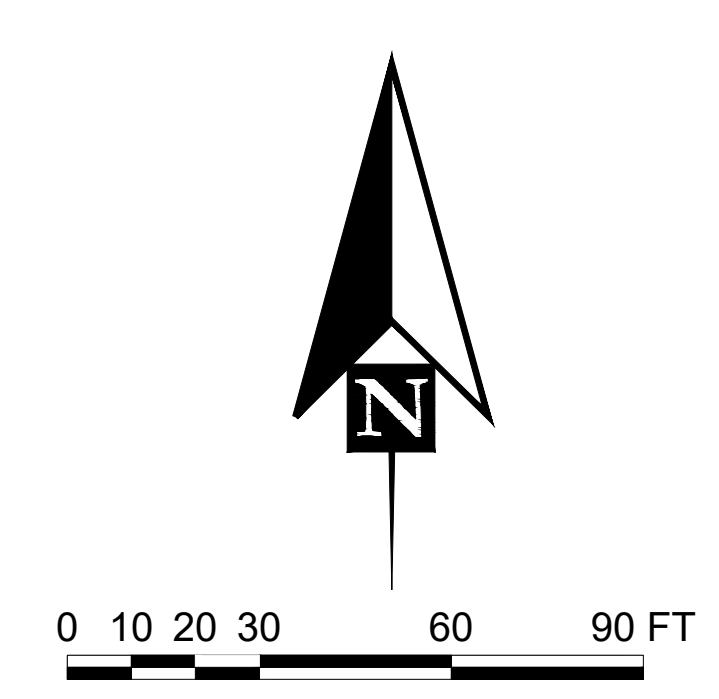
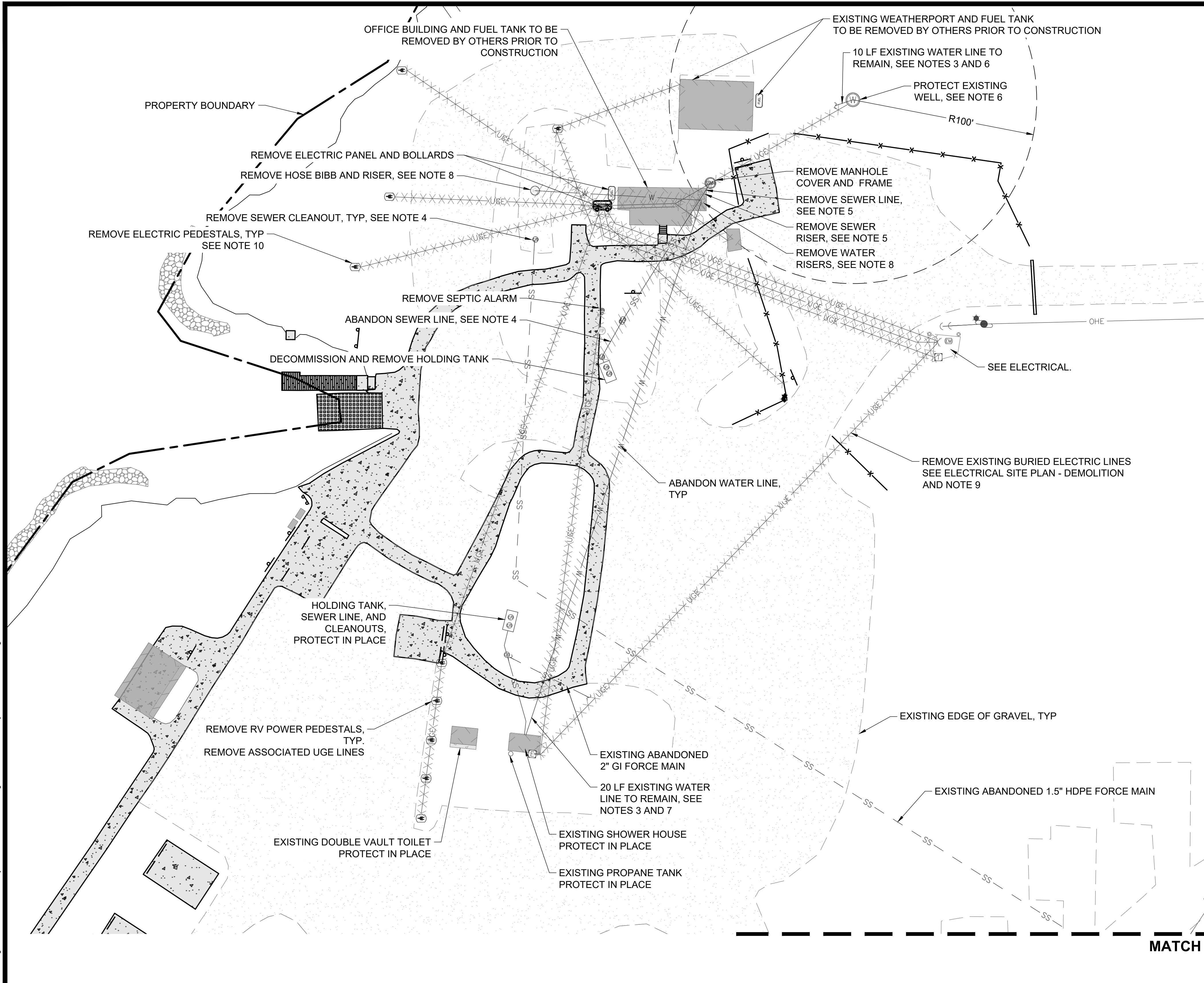


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

DEMOLITION PLAN

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 05 OF 63
CHECKED BY:	AWJ	PROJECT NO.:	251029	

6/2/26 - CROHLER - 1\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\06-07 - Utility Demolition Plan.dwg

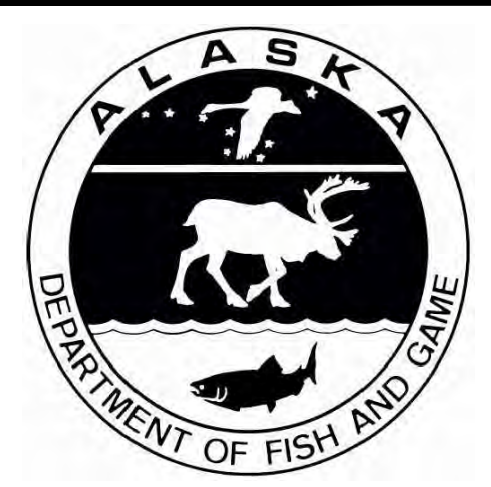


LEGEND:

XXXXXXXXXX REMOVE UTILITY

/////// ABANDON UTILITY

- NOTES:**
1. ITEMS DESIGNATED "REMOVE" SHALL BE DEMOLISHED AND DISPOSAL WORK SHALL BE DONE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND STANDARDS. ALL PROJECT SPECIFIC PERMITS SHALL BE FOLLOWED.
 2. ITEMS DESIGNATED "ABANDON" SHALL BE ABANDONED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL CODES AND STANDARDS.
 3. LOCATIONS OF EXISTING AND ABANDONED UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. CONTRACTOR MUST VERIFY THE LOCATION OF THE EXISTING WATER LINE TO THE WELL AND SHOWERHOUSE.
 4. ALL ABANDONED SEWER PIPE, RISERS, AND CLEANOUT ENDS MUST BE PLUGGED WITH WATERTIGHT CAP OR END PLUG. PIPE 4" AND LARGER MUST BE FILLED WITH SAND SLURRY PRIOR TO BEING PERMANENTLY SEALED.
 5. ALL EXISTING SEWER PIPE, RISERS, CLEANOUTS, AND OTHER RELATED COMPONENTS MUST BE REMOVED AND DISPOSED OF WITHIN 100' OF THE WELL.
 6. AT A MINIMUM, 10 LF OF WATER LINE CONNECTED TO THE ARTESIAN WELL MUST REMAIN. EXCAVATION REQUIRED TO LOCATE WATER LINE MUST NOT DISTURB CEMENTED AND / OR BENTONITE SEAL AROUND WELL CASING, CLEANLY CUT, CAP, AND PROTECT WATER LINE CONNECTED TO WELL.
 7. AT A MINIMUM, 20 LF OF WATER LINE CONNECTED TO THE SHOWERHOUSE MUST REMAIN. CLEANLY CUT, CAP, AND PROTECT WATER LINE CONNECTED TO SHOWERHOUSE.
 8. REMOVE AND DISPOSE OF EXISTING OFFICE BUILDING WATER RISERS TO 2' BELOW FINISHED GRADE. CUT AND PLUG PIPE WITH WATERTIGHT CAP.
 9. UNDERGROUND ELECTRIC LINES SHALL BE REMOVED WHEN ENCOUNTERED DURING EXCAVATION OR TRENCHING. UNDISTURBED ELECTRIC LINES TO BE ABANDONED.
 10. ELECTRIC PEDASTALS AND ASSOCIATED ELECTRIC LINES SHALL BE REMOVED TO A MINIMUM ONE FOOT BELOW GROUND.



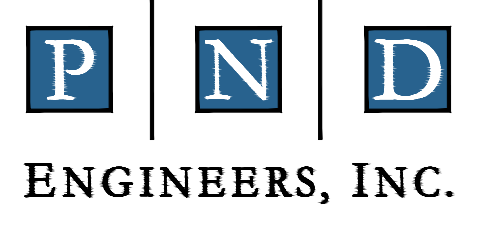
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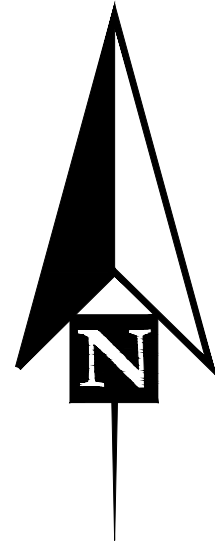
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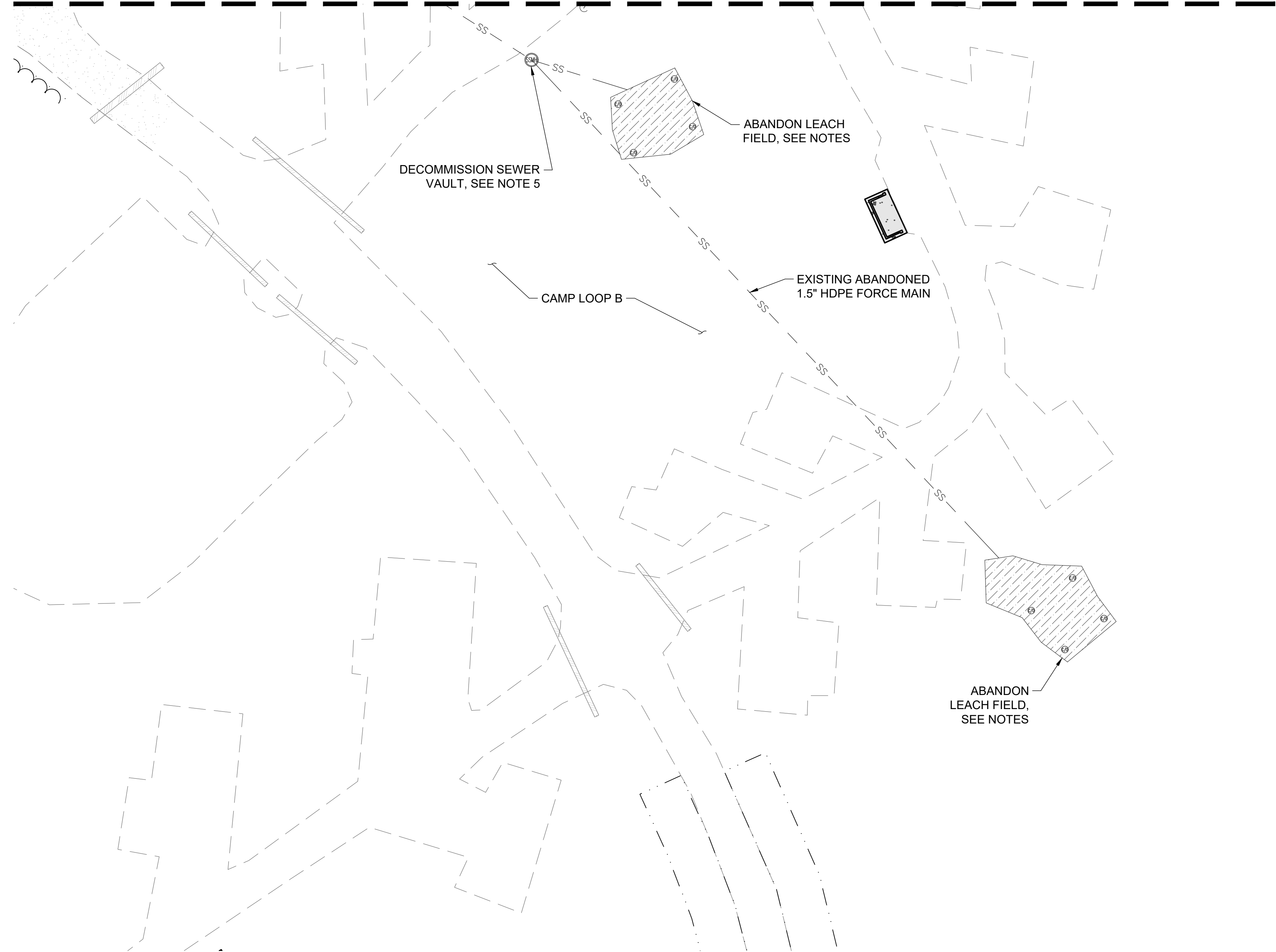


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
UTILITY DEMOLITION PLAN	
DESIGNED BY: OTR	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 06 OF 63	



0 10 20 30 60 90 FT

MATCH LINE - SEE SHEET 06



NOTES:

1. LOCATIONS OF EXISTING AND ABANDONED UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE.
2. ALL ABANDONED SEWER PIPE, RISERS, AND CLEANOUT ENDS MUST BE PLUGGED WITH WATERTIGHT CAP OR END PLUG. PIPE 4" AND LARGER MUST BE FILLED WITH SAND SLURRY PRIOR TO BEING PERMANENTLY SEALED.
3. LEACH FIELD ABANDONMENT TO BE PERFORMED IN COMPLIANCE WITH FEDERAL, STATE, AND LOCAL CODES AND STANDARD.
4. LEACH FIELD CLEANOUTS SHALL BE CUT OFF AND CAPPED 6" BELOW GRADE.
5. REMOVE AND DISPOSE OF VALVES, PIPE, AND VAULT. PLUG ENDS WITH WATERTIGHT CAP OR END PLUG. BACKFILL EXCAVATION WITH COMPACTED SELECTED MATERIAL, TYPE A TO EXISTING GROUND. PROVIDE 4" OF TOPSOIL AND SEED DISTURBED AREA.

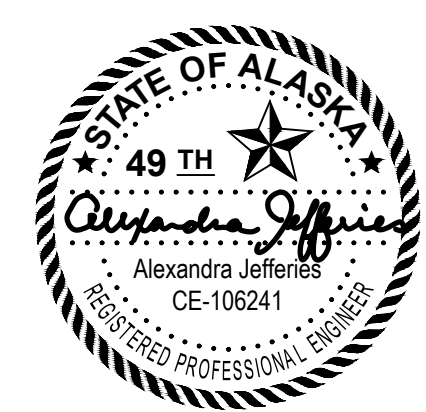
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6/26/2026

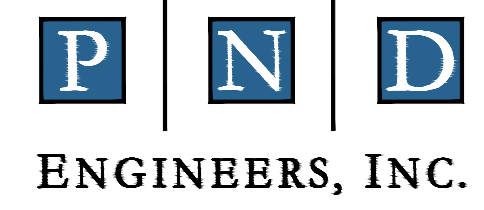
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
UTILITY DEMOLITION PLAN	
DESIGNED BY: OTR	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 07 OF 63	

BOAT LAUNCH PLAN - SHEET 18

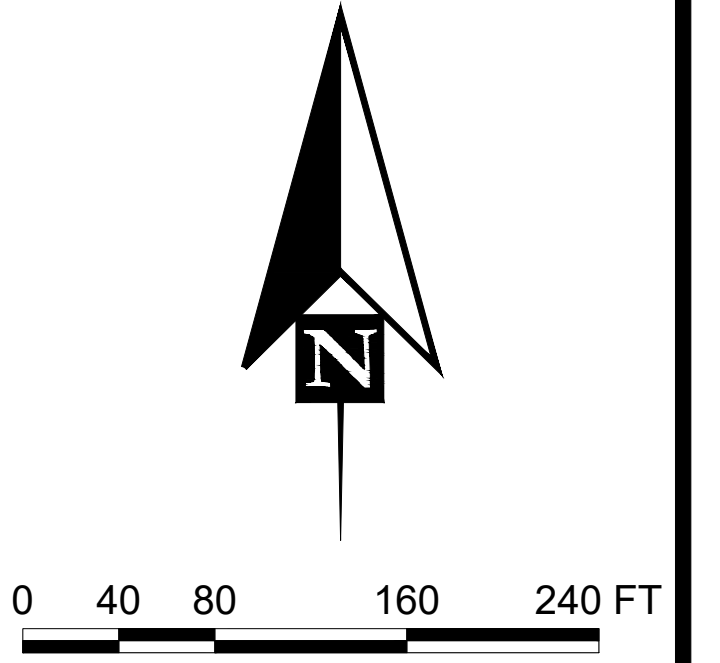
SITE PLAN - SHEET 09

SITE PLAN - SHEET 10

WATER PLAN &
PROFILE - SHEET 40

SEWER PLAN &
PROFILE - SHEET 42

CAMPGROUND SITE PLAN - SHEET 38



5/21/26 - JKINNEY - 11/2025/05/1029 Susitna Landing Boat Launch & Facility Renovation\G_Drawings\Civil\08 - Project Overview Plan.dwg



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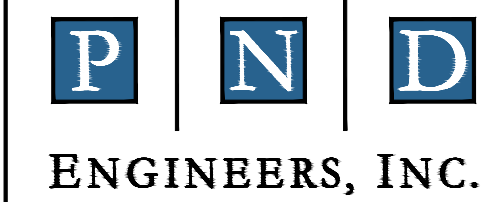
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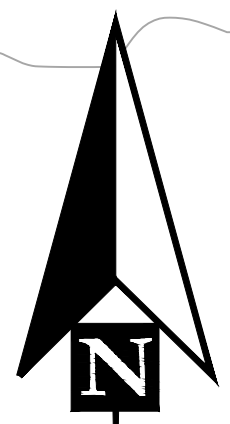
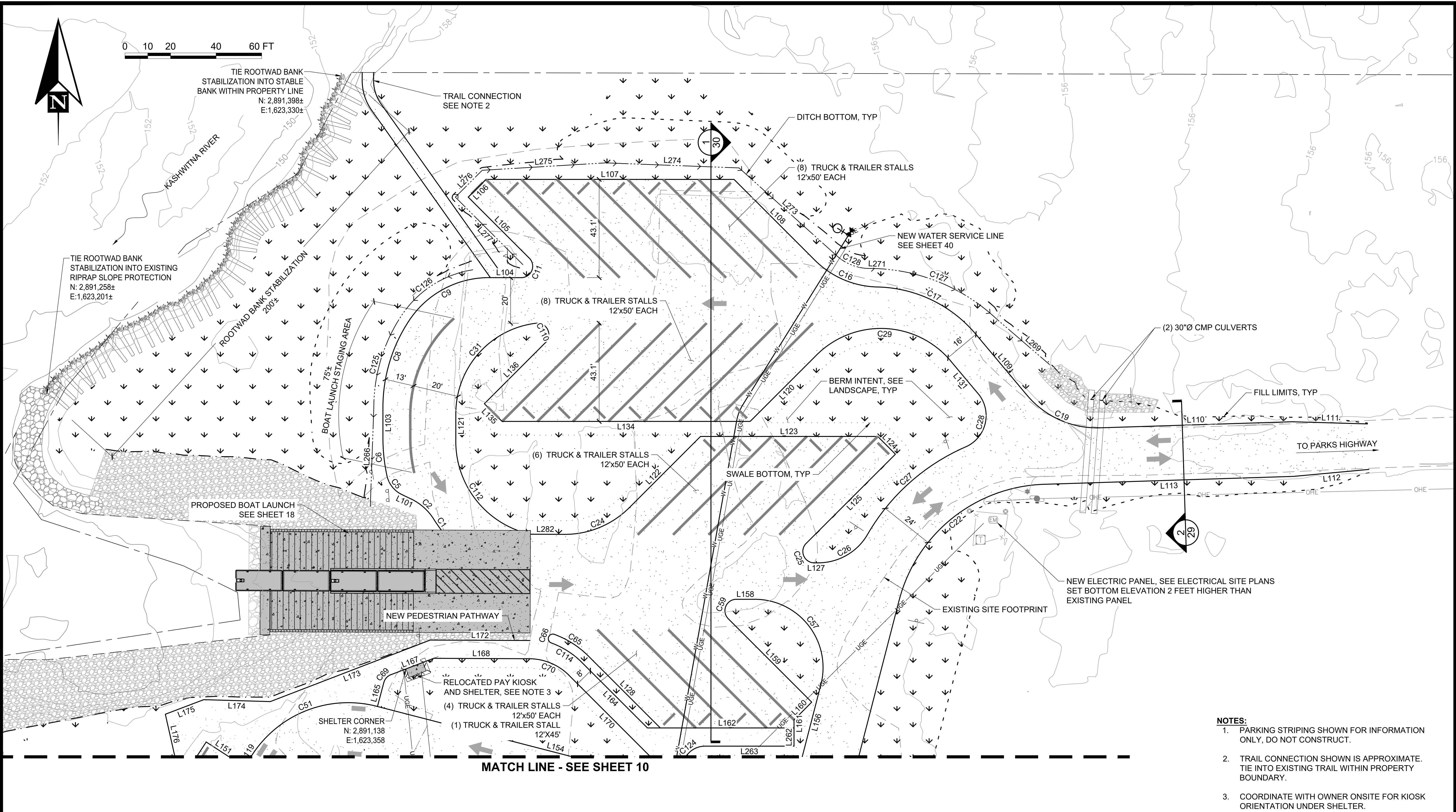


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

PROJECT OVERVIEW PLAN

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 08 OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029	

6/11/26 - OROHLER - J:\2025\251029_Susitna Landing Boat Launch & Facility Renovation\G_Drawings\Civil\09-12 - Site Plan.dwg



TIE ROOTWAD BANK STABILIZATION INTO STABLE BANK WITHIN PROPERTY LINE
N: 2,891,398±
E: 1,623,330±

TIE ROOTWAD BANK STABILIZATION INTO EXISTING RIPRAP SLOPE PROTECTION
N: 2,891,258±
E: 1,623,201±

TRAIL CONNECTION
SEE NOTE 2

DITCH BOTTOM, TYP

(8) TRUCK & TRAILER STALLS
12'x50' EACH

NEW WATER SERVICE LINE
SEE SHEET 40

(8) TRUCK & TRAILER STALLS
12'x50' EACH

BERM INTENT, SEE
LANDSCAPE, TYP

(2) 30"Ø CMP CULVERTS

FILL LIMITS, TYP

TO PARKS HIGHWAY

PROPOSED BOAT LAUNCH
SEE SHEET 18

SWALE BOTTOM, TYP

(6) TRUCK & TRAILER STALLS
12'x50' EACH

NEW ELECTRIC PANEL, SEE ELECTRICAL SITE PLANS
SET BOTTOM ELEVATION 2 FEET HIGHER THAN
EXISTING PANEL

EXISTING SITE FOOTPRINT

NEW PEDESTRIAN PATHWAY

RELOCATED PAY KIOSK
AND SHELTER, SEE NOTE 3

(4) TRUCK & TRAILER STALLS
12'x50' EACH

(1) TRUCK & TRAILER STALL
12'x45'

SHELTER CORNER
N: 2,891,138
E: 1,623,358

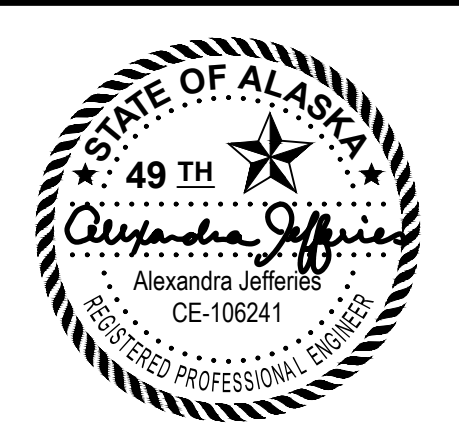
MATCH LINE - SEE SHEET 10

- NOTES:**
1. PARKING STRIPING SHOWN FOR INFORMATION ONLY, DO NOT CONSTRUCT.
 2. TRAIL CONNECTION SHOWN IS APPROXIMATE. TIE INTO EXISTING TRAIL WITHIN PROPERTY BOUNDARY.
 3. COORDINATE WITH OWNER ONSITE FOR KIOSK ORIENTATION UNDER SHELTER.

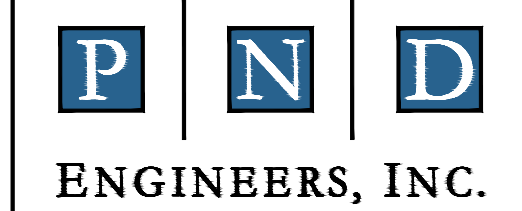


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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

SITE PLAN

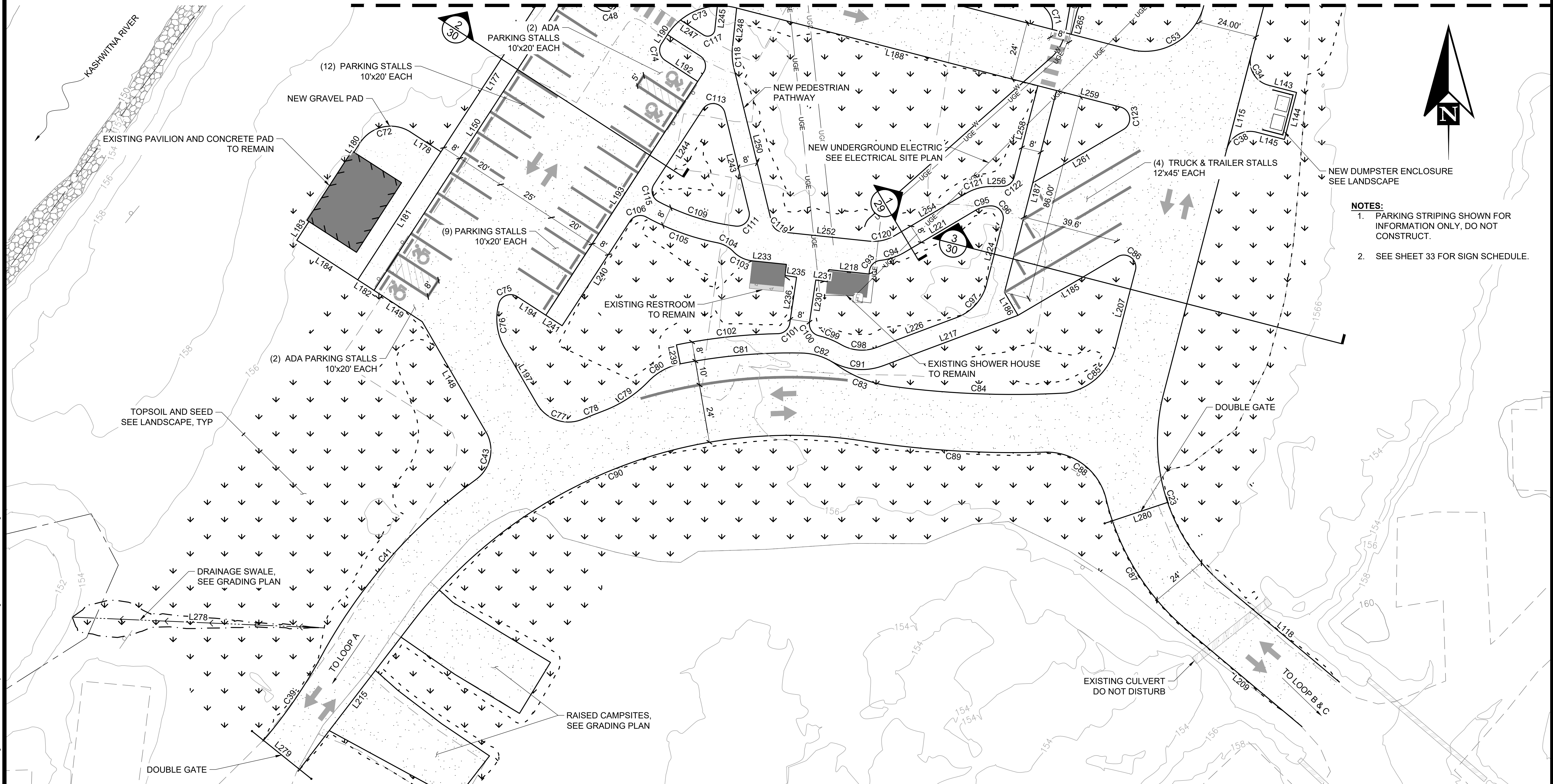
REV	DATE	DESCRIPTION

DATE: 6/26/2026

DESIGNED BY:	OTR	DATE:	6/26/26
CHECKED BY:	AWJ	PROJECT NO.:	251029

SHEET NO: **09** OF 63

MATCH LINE - SEE SHEET 09



- NOTES:**
1. PARKING STRIPING SHOWN FOR INFORMATION ONLY, DO NOT CONSTRUCT.
 2. SEE SHEET 33 FOR SIGN SCHEDULE.

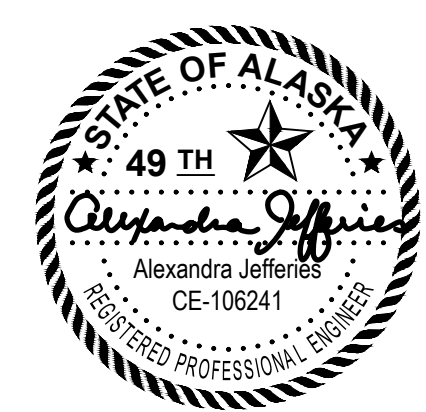
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REV	DATE	DESCRIPTION



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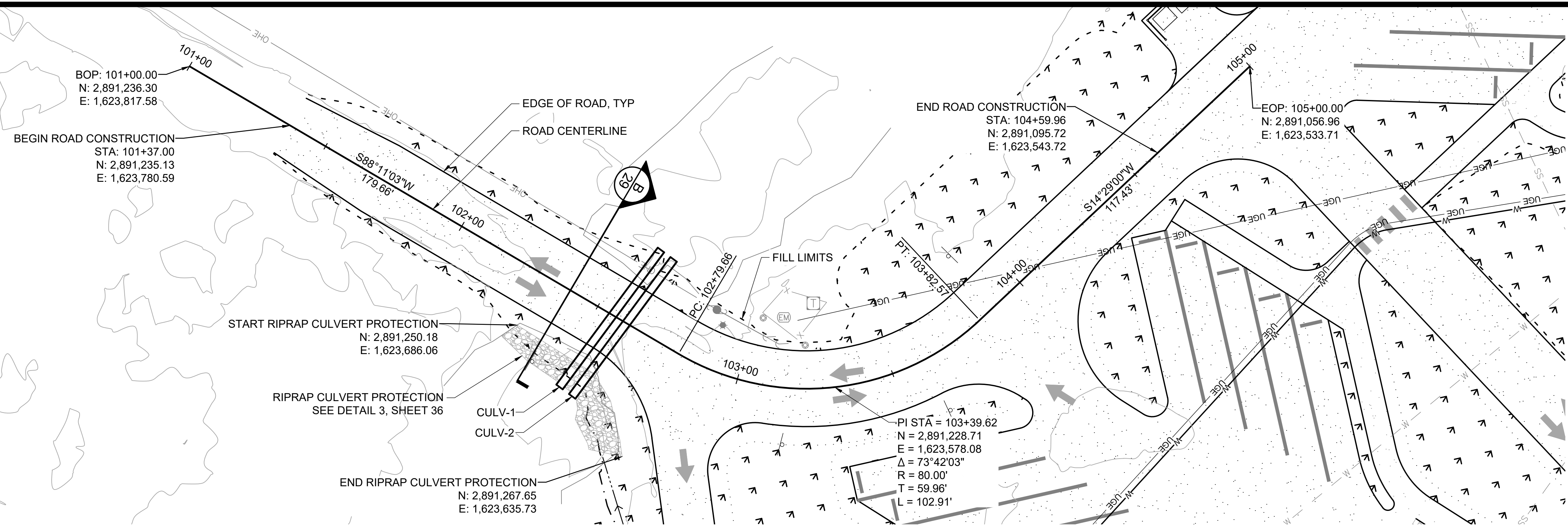
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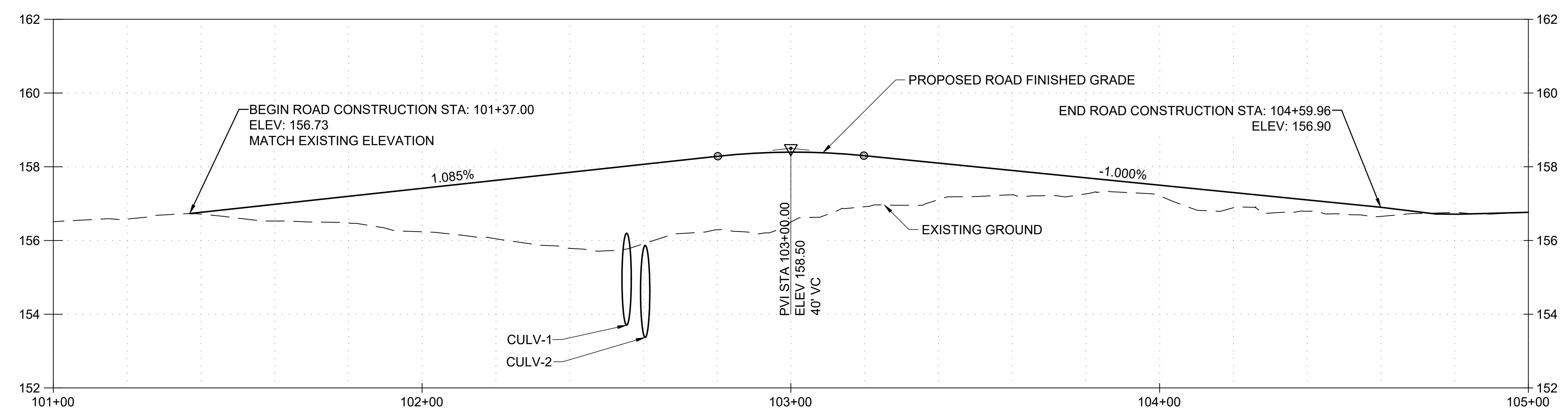
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **SITE PLAN**

DESIGNED BY: OTR	DATE: 6/26/26	SHEET NO: 10 OF 63
CHECKED BY: AWJ	PROJECT NO: 251029	



PLAN



PROFILE
1H:10V

CULVERT TABLE								
NAME	SIZE & TYPE	LENGTH	START STATION	START OFFSET	START INVERT ELEVATION	END STATION	END OFFSET	END INVERT ELEVATION
CULV-1	30"Ø CSP	54.00'	102+52.49	28.16' RT.	153.70'	102+58.18	25.54' LT.	153.70'
CULV-2	30"Ø CSP	54.00'	102+57.47	28.69' RT.	153.46'	102+63.16	25.01' LT.	153.29'

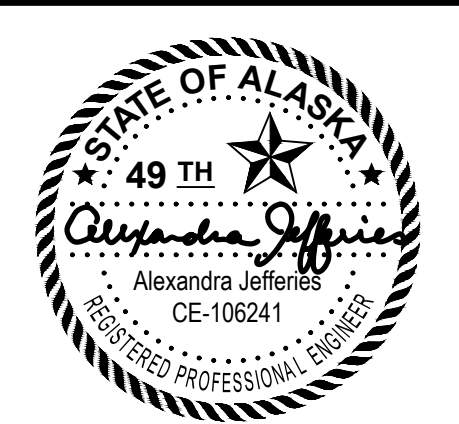
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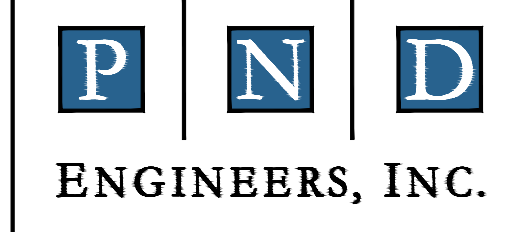
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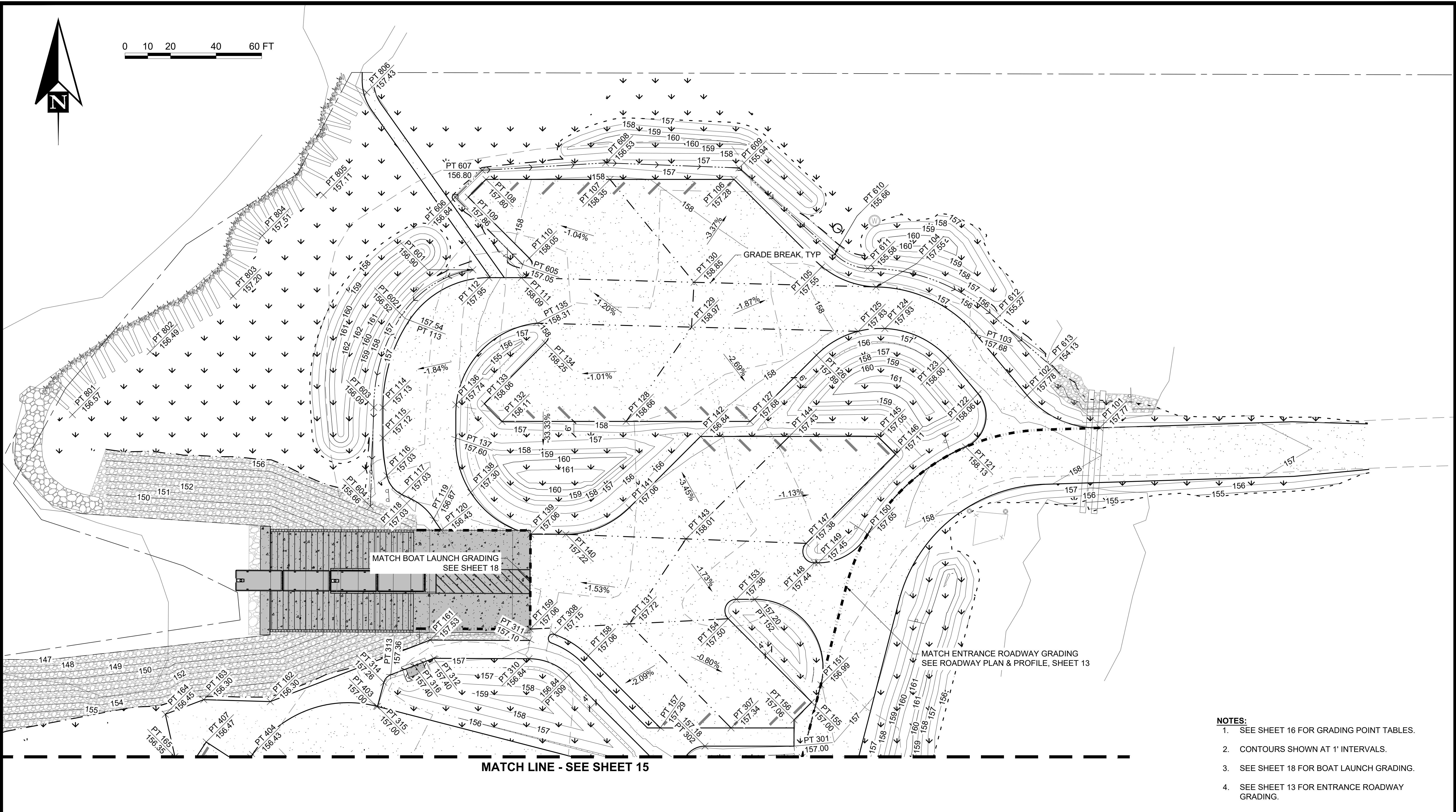
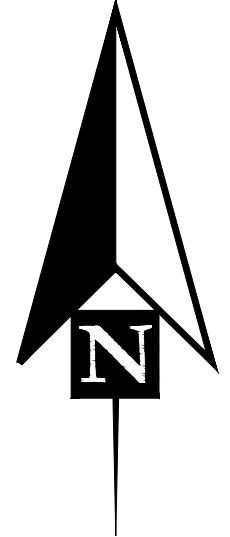
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **ROADWAY PLAN & PROFILE**

DESIGNED BY: OTR DATE: 6/26/26
CHECKED BY: AWJ PROJECT NO: 251029

SHEET NO: **13** OF 63

0 10 20 40 60 FT



- NOTES:**
1. SEE SHEET 16 FOR GRADING POINT TABLES.
 2. CONTOURS SHOWN AT 1' INTERVALS.
 3. SEE SHEET 18 FOR BOAT LAUNCH GRADING.
 4. SEE SHEET 13 FOR ENTRANCE ROADWAY GRADING.

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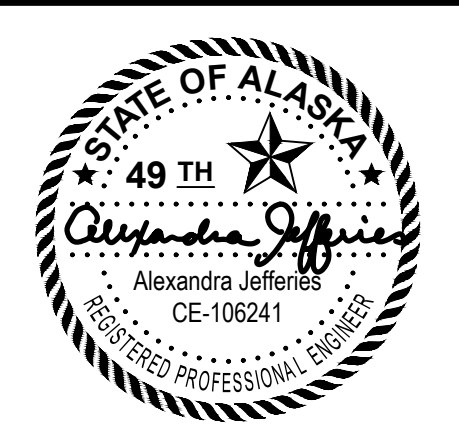
MATCH LINE - SEE SHEET 15



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6/26/2026

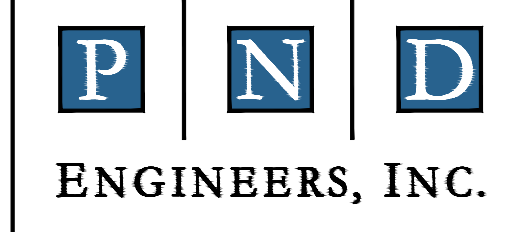
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REV	DATE	DESCRIPTION



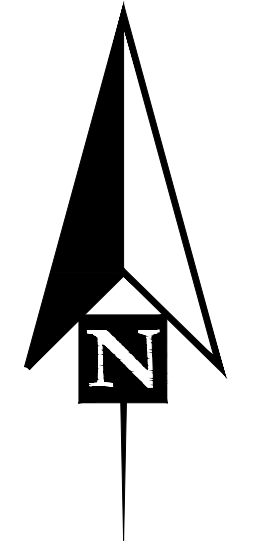
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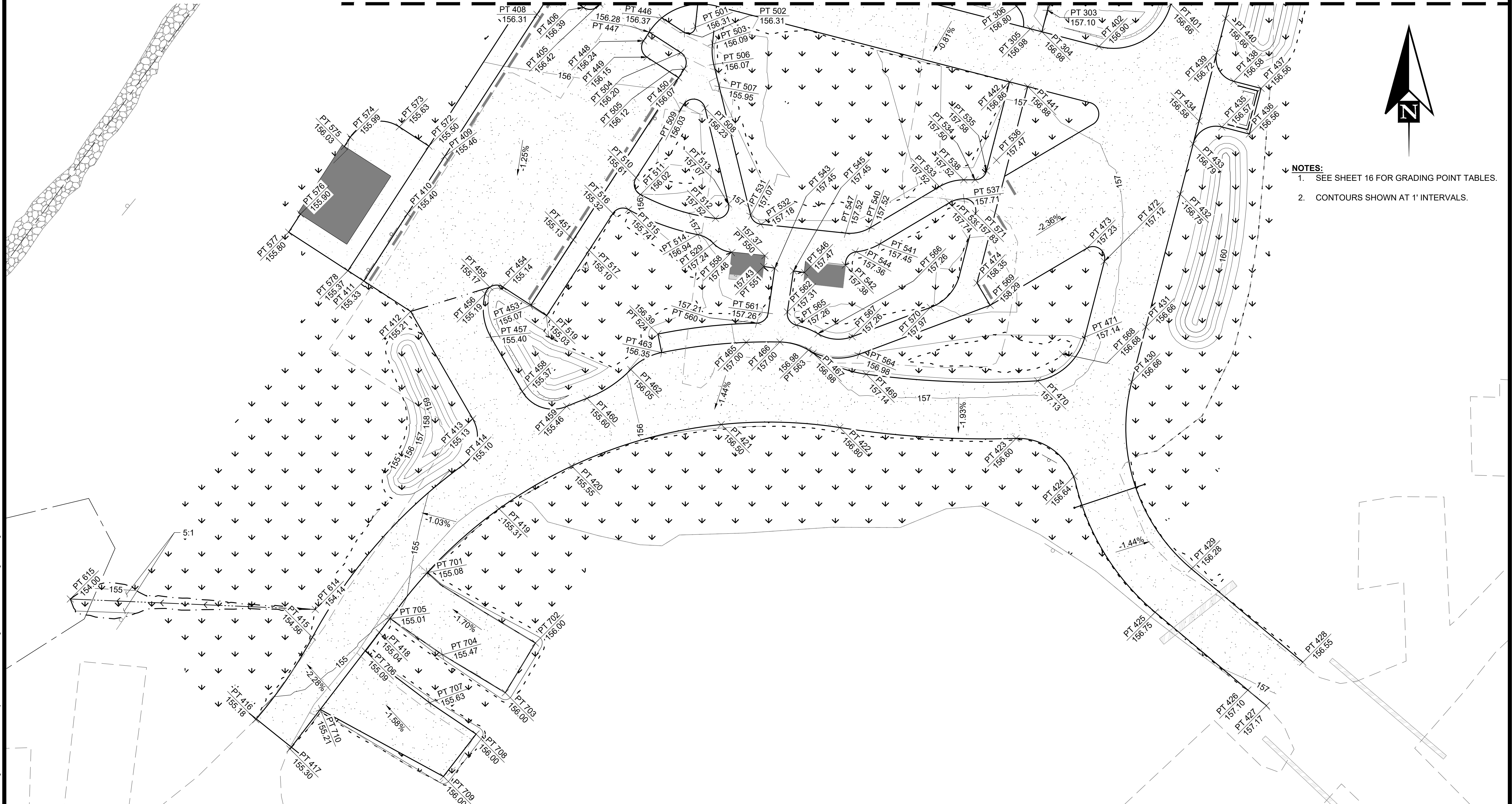


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: GRADING PLAN	
DESIGNED BY: OTR	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 14 OF 63	

MATCH LINE - SEE SHEET 14



- NOTES:
- SEE SHEET 16 FOR GRADING POINT TABLES.
 - CONTOURS SHOWN AT 1' INTERVALS.



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6/26/2026

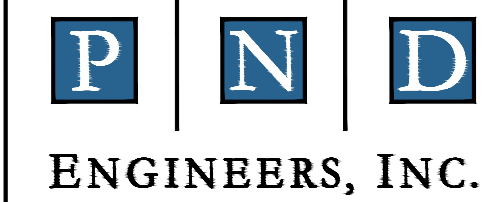
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

GRADING PLAN

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 15 OF 63
CHECKED BY:	AWJ	PROJECT NO.:	251029	

6/1/26 - OROHLER - I:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\14-17 - Grading Plan.dwg

POINT TABLE				
POINT NO	NORTHING	EASTING	ELEV.	DESCRIPTION
PT 514	2,891,000.99	1,623,331.46	156.94'	EDGE OF PATHWAY
PT 515	2,891,011.63	1,623,302.16	155.74'	EDGE OF PATHWAY
PT 516	2,891,009.97	1,623,295.56	155.32'	EDGE OF PATHWAY
PT 517	2,890,994.41	1,623,285.45	155.10'	EDGE OF PATHWAY
PT 519	2,890,966.74	1,623,267.48	155.03'	EDGE OF PATHWAY
PT 524	2,890,958.85	1,623,314.64	156.39'	EDGE OF PATHWAY
PT 529	2,890,997.34	1,623,338.11	157.24'	EDGE OF PATHWAY
PT 531	2,891,009.20	1,623,353.95	157.07'	EDGE OF PATHWAY
PT 532	2,891,005.42	1,623,358.28	157.18'	EDGE OF PATHWAY
PT 533	2,891,021.35	1,623,434.05	157.52'	EDGE OF PATHWAY
PT 534	2,891,024.26	1,623,449.14	157.50'	EDGE OF PATHWAY
PT 535	2,891,028.01	1,623,453.93	157.58'	EDGE OF PATHWAY
PT 536	2,891,032.50	1,623,458.19	157.47'	EDGE OF PATHWAY
PT 537	2,891,016.21	1,623,444.39	157.71'	EDGE OF PATHWAY
PT 538	2,891,024.21	1,623,444.32	157.52'	EDGE OF PATHWAY
PT 539	2,891,014.47	1,623,438.13	157.74'	EDGE OF PATHWAY
PT 540	2,891,003.93	1,623,404.65	157.52'	EDGE OF PATHWAY
PT 541	2,890,997.04	1,623,408.73	157.45'	EDGE OF PATHWAY
PT 542	2,890,988.09	1,623,394.08	157.38'	EDGE OF PATHWAY
PT 543	2,890,986.78	1,623,364.19	157.45'	EDGE OF PATHWAY
PT 544	2,890,993.69	1,623,398.65	157.36'	EDGE OF PATHWAY
PT 545	2,890,985.61	1,623,372.10	157.45'	EDGE OF PATHWAY
PT 546	2,890,984.91	1,623,376.80	157.47'	EDGE OF PATHWAY
PT 547	2,891,001.64	1,623,394.21	157.52'	EDGE OF PATHWAY
PT 550	2,890,992.08	1,623,359.99	157.37'	EDGE OF PATHWAY
PT 551	2,890,987.48	1,623,359.49	157.43'	EDGE OF PATHWAY
PT 558	2,890,993.53	1,623,345.90	157.48'	EDGE OF PATHWAY
PT 560	2,890,963.47	1,623,356.52	157.21'	EDGE OF PATHWAY
PT 561	2,890,967.73	1,623,361.36	157.26'	EDGE OF PATHWAY
PT 562	2,890,968.22	1,623,369.52	157.31'	EDGE OF PATHWAY
PT 563	2,890,952.06	1,623,378.46	156.98'	EDGE OF PATHWAY
PT 564	2,890,950.22	1,623,399.84	156.98'	EDGE OF PATHWAY
PT 565	2,890,962.62	1,623,373.33	157.26'	EDGE OF PATHWAY
PT 566	2,890,958.96	1,623,382.50	157.26'	EDGE OF PATHWAY
PT 567	2,890,957.71	1,623,397.04	157.26'	EDGE OF PATHWAY
PT 568	2,890,950.41	1,623,486.26	156.68'	EDGE OF PATHWAY
PT 569	2,890,971.04	1,623,455.52	158.29'	EDGE OF PATHWAY
PT 570	2,890,970.10	1,623,430.17	157.97'	EDGE OF PATHWAY
PT 571	2,891,009.96	1,623,449.27	157.83'	EDGE OF PATHWAY
PT 572	2,891,038.53	1,623,217.52	155.50'	EDGE OF PATHWAY

POINT TABLE				
POINT NO	NORTHING	EASTING	ELEV.	DESCRIPTION
PT 573	2,891,046.70	1,623,204.94	155.63'	EDGE OF PATHWAY
PT 574	2,891,042.29	1,623,184.19	155.99'	EDGE OF PATHWAY
PT 575	2,891,038.35	1,623,181.63	156.03'	EDGE OF PATHWAY
PT 576	2,891,009.73	1,623,163.05	155.90'	EDGE OF PATHWAY
PT 577	2,891,002.03	1,623,158.05	155.80'	EDGE OF PATHWAY
PT 578	2,890,985.69	1,623,183.21	155.37'	EDGE OF PATHWAY
PT 601	2,891,312.80	1,623,387.56	156.90'	DITCH BOTTOM
PT 602	2,891,292.91	1,623,356.40	156.52'	DITCH BOTTOM
PT 603	2,891,252.35	1,623,344.10	156.09'	DITCH BOTTOM
PT 604	2,891,208.94	1,623,342.56	155.66'	DITCH BOTTOM
PT 605	2,891,315.11	1,623,409.49	157.05'	DITCH BOTTOM
PT 606	2,891,344.70	1,623,379.90	156.84'	DITCH BOTTOM
PT 607	2,891,356.48	1,623,391.68	156.80'	DITCH BOTTOM
PT 608	2,891,359.75	1,623,445.85	156.53'	DITCH BOTTOM
PT 609	2,891,357.53	1,623,504.43	155.94'	DITCH BOTTOM
PT 610	2,891,319.77	1,623,546.44	155.66'	DITCH BOTTOM
PT 611	2,891,313.39	1,623,560.90	155.58'	DITCH BOTTOM
PT 612	2,891,291.26	1,623,617.42	155.27'	DITCH BOTTOM
PT 613	2,891,271.17	1,623,640.76	154.13'	DITCH BOTTOM
PT 614	2,890,842.05	1,623,169.36	154.14'	DITCH BOTTOM
PT 615	2,890,846.48	1,623,065.47	154.00'	DITCH BOTTOM
PT 701	2,890,857.67	1,623,216.83	155.08'	EDGE OF CAMPSITE
PT 702	2,890,827.83	1,623,262.68	156.00'	EDGE OF CAMPSITE
PT 703	2,890,806.75	1,623,249.91	156.00'	EDGE OF CAMPSITE
PT 704	2,890,822.87	1,623,223.25	155.47'	EDGE OF CAMPSITE
PT 705	2,890,838.22	1,623,201.05	155.01'	EDGE OF CAMPSITE
PT 706	2,890,824.45	1,623,190.54	155.09'	EDGE OF CAMPSITE
PT 707	2,890,802.52	1,623,217.76	155.63'	EDGE OF CAMPSITE
PT 708	2,890,789.20	1,623,237.53	156.00'	EDGE OF CAMPSITE
PT 709	2,890,771.23	1,623,223.68	156.00'	EDGE OF CAMPSITE
PT 710	2,890,799.65	1,623,171.44	155.21'	EDGE OF CAMPSITE
PT 801	2,891,249.16	1,623,211.78	156.57'	ROOTWAD
PT 802	2,891,276.89	1,623,245.90	156.49'	ROOTWAD
PT 803	2,891,301.16	1,623,282.35	157.20'	ROOTWAD
PT 804	2,891,327.77	1,623,295.16	157.51'	ROOTWAD
PT 805	2,891,345.60	1,623,321.96	157.11'	ROOTWAD
PT 806	2,891,390.71	1,623,340.93	157.43'	ROOTWAD



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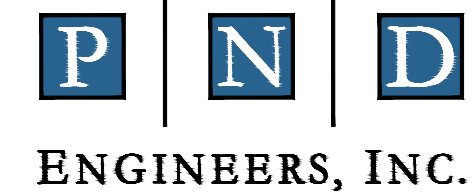
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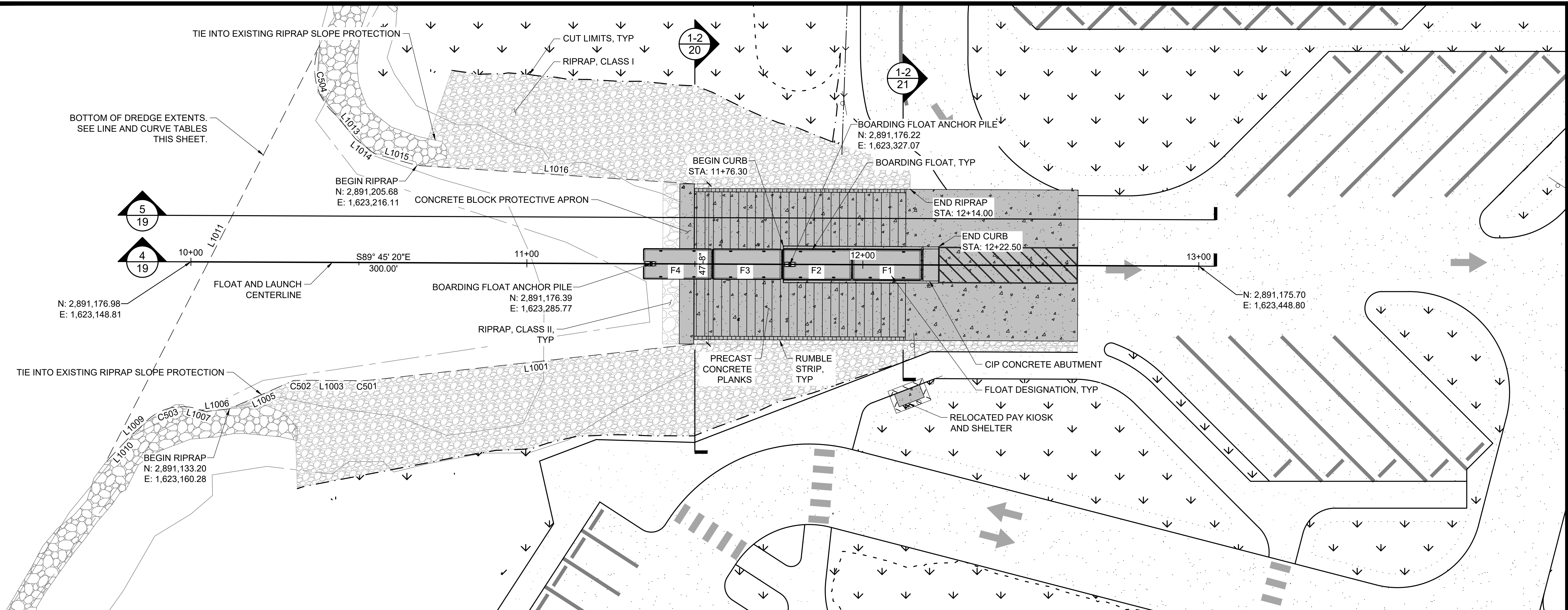
DATE: 6/26/2026

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PROJECT: SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: GRADING POINT TABLES	
DESIGNED BY: OTR	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 17 OF 63	

6/26 - CROHLER - 1\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\18-19 - Boat Launch P&P.dwg

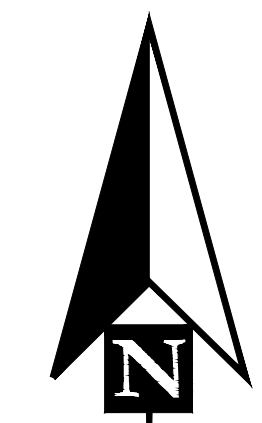


LINE TABLE

LINE	LENGTH	DIRECTION	START NORTHING	START EASTING	END NORTHING	END EASTING
L1001	95.42'	S83° 37' 27"W	2,891,152.51	1,623,298.70	2,891,141.9	1,623,203.87
L1003	14.59'	N89° 36' 59"W	2,891,141.60	1,623,197.98	2,891,141.7	1,623,183.39
L1005	20.91'	S66° 10' 49"W	2,891,141.65	1,623,179.41	2,891,133.2	1,623,160.28
L1006	7.03'	S83° 33' 53"W	2,891,133.20	1,623,160.28	2,891,132.4	1,623,153.30
L1007	3.55'	N73° 18' 27"W	2,891,132.41	1,623,153.30	2,891,133.4	1,623,149.91
L1009	3.94'	S48° 54' 05"W	2,891,128.28	1,623,134.38	2,891,125.7	1,623,131.41
L1010	11.65'	S43° 20' 58"W	2,891,125.69	1,623,131.41	2,891,117.2	1,623,123.41
L1011	139.66'	N27° 08' 55"E	2,891,117.22	1,623,123.41	2,891,241.5	1,623,187.14
L1013	8.90'	S39° 12' 51"E	2,891,220.44	1,623,192.22	2,891,213.5	1,623,197.85
L1014	7.03'	S51° 54' 14"E	2,891,213.54	1,623,197.85	2,891,209.2	1,623,203.38
L1015	13.20'	S74° 30' 40"E	2,891,209.21	1,623,203.38	2,891,205.7	1,623,216.11
L1016	82.98'	S86° 11' 29"E	2,891,205.68	1,623,216.11	2,891,200.2	1,623,298.90

CURVE TABLE

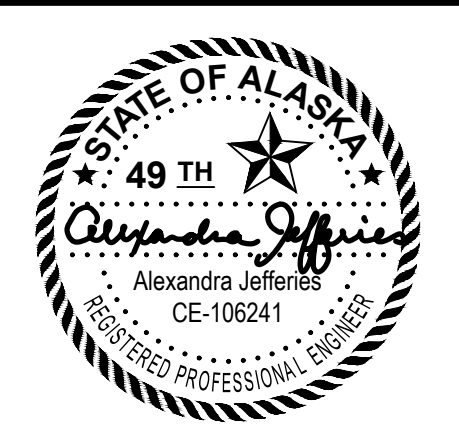
CURVE	RADIUS	DELTA	CHORD BEARING	CHORD LENGTH	LENGTH	TANGENT
C501	50.00'	6°45'34"	S87°00'14"W	5.90'	5.9'	2.95'
C502	100.00'	2°16'51"	S89°14'36"W	3.98'	4.0'	1.99'
C503	15.45'	63°54'38"	S71°39'17"W	16.36'	17.2'	9.64'
C504	17.89'	74°31'15"	S13°34'28"E	21.66'	23.3'	13.61'



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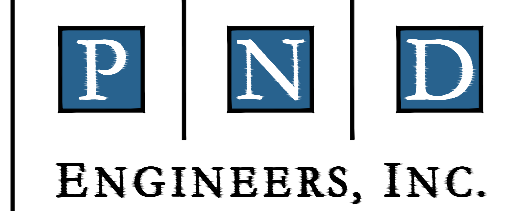
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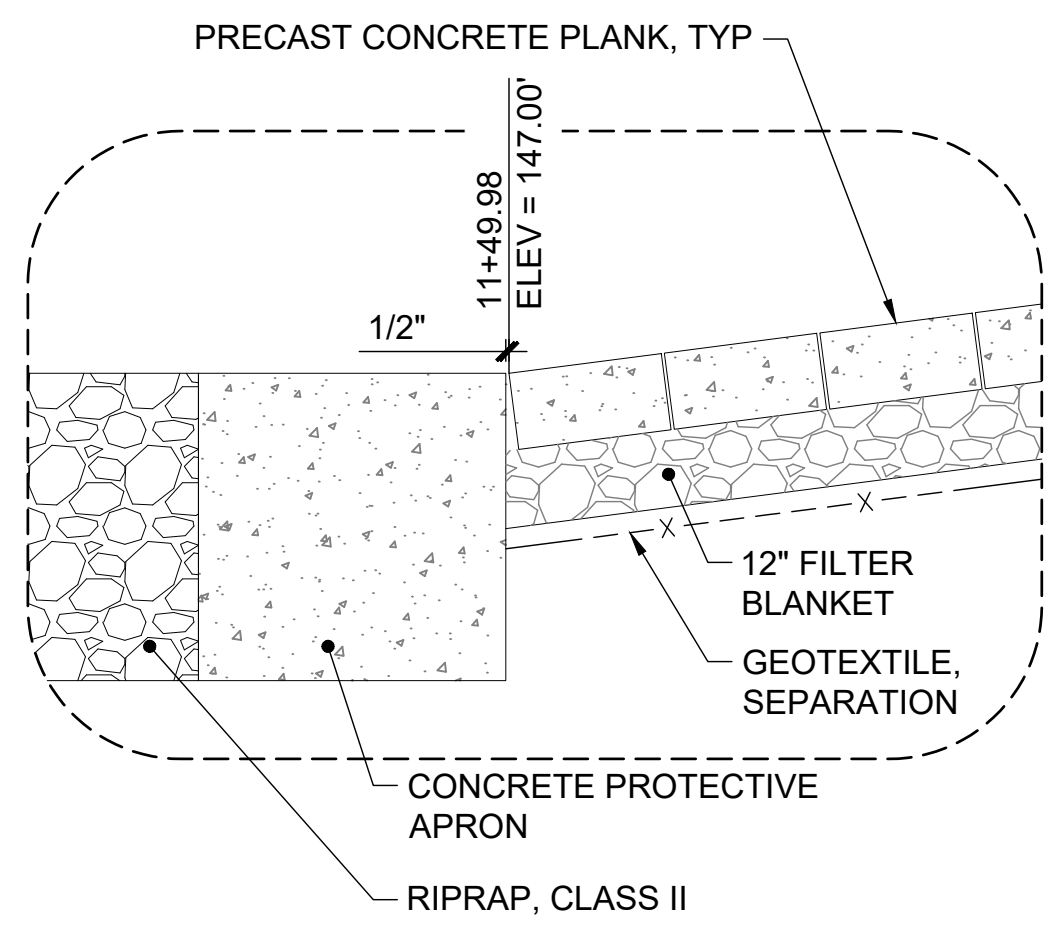


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

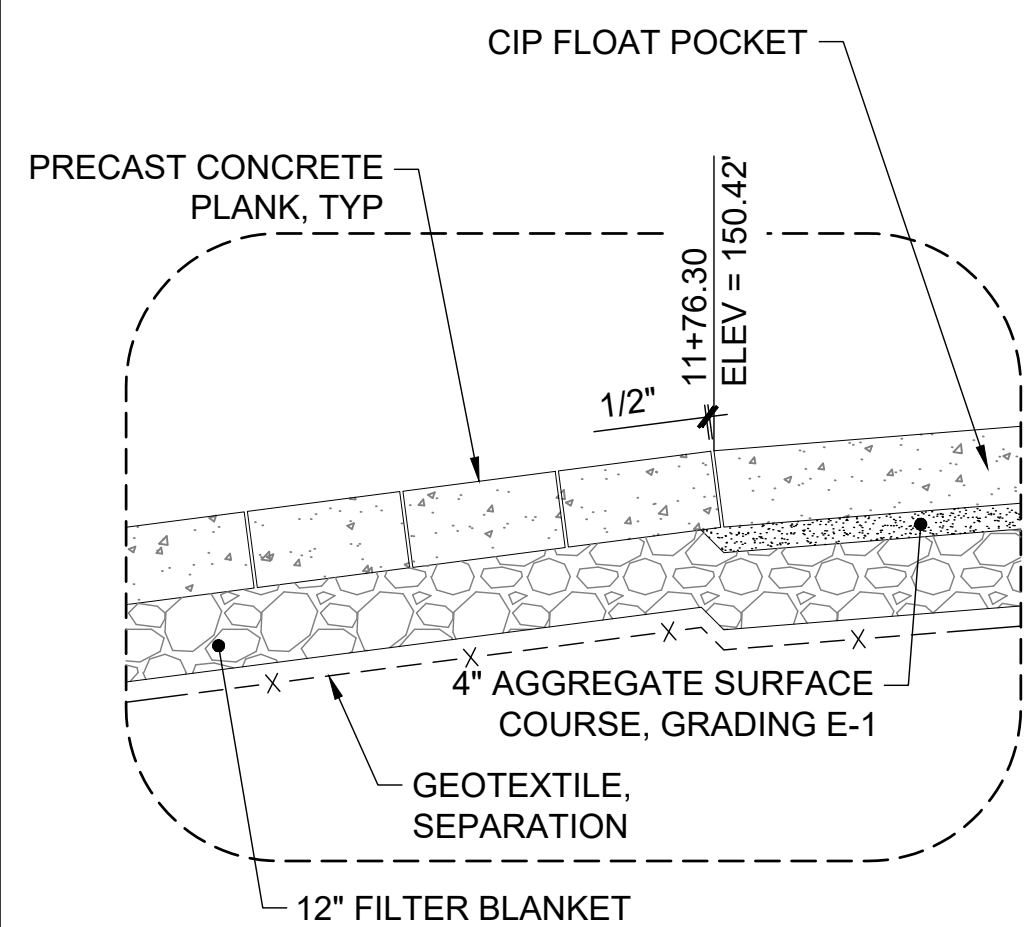
TITLE: **BOAT LAUNCH PLAN**

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 18 OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029	

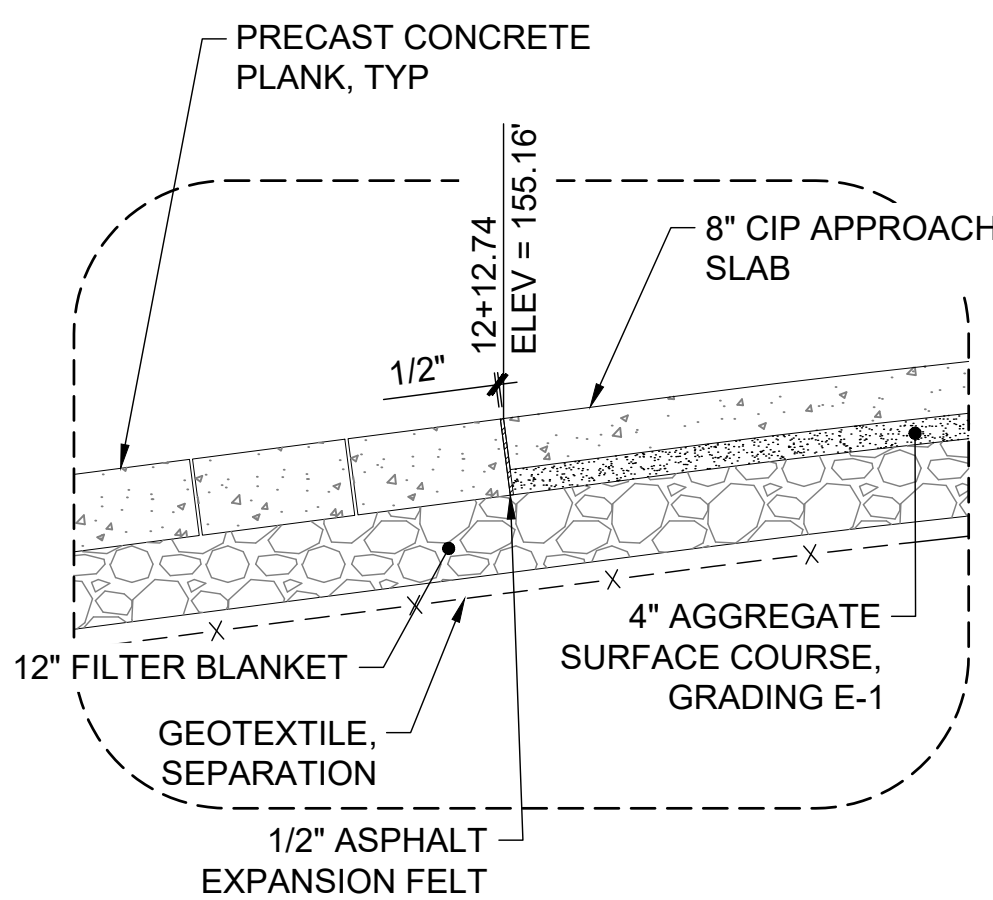
6/2/26 - OROHLER - 1/2025/251029 Susitna Landing Boat Launch & Facility Renovation (G. Drawings/Civil/18-19 - Boat Launch P&P.dwg)



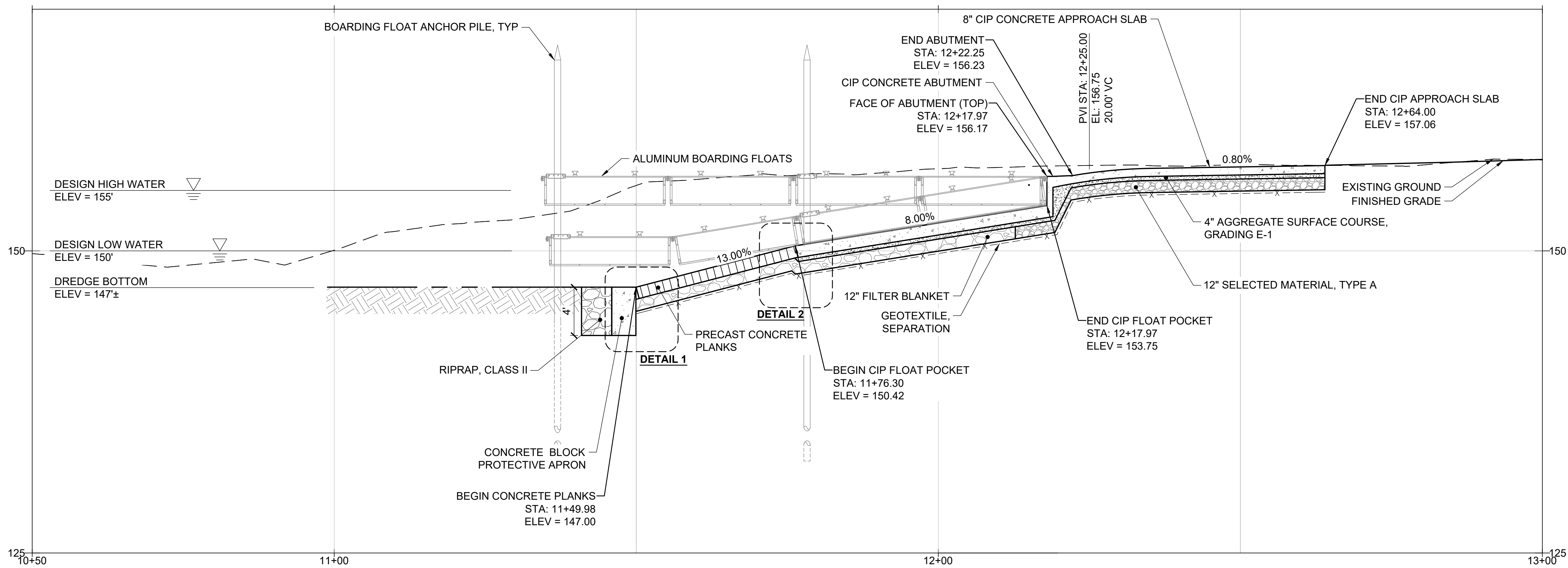
1
 19 NTS
DETAIL 1



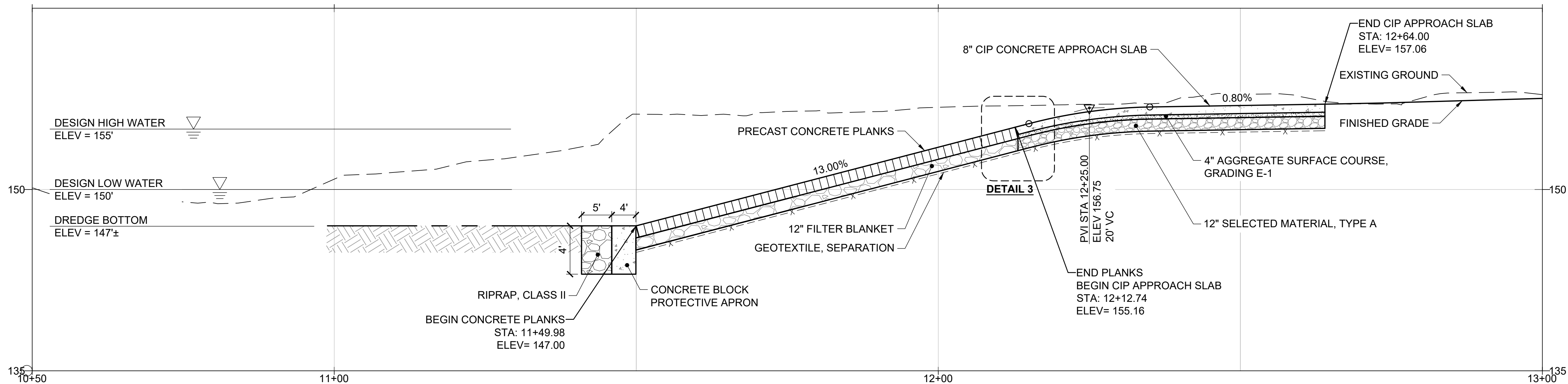
2
 19 NTS
DETAIL 2



3
 19 NTS
DETAIL 3



4
 19 1" = 10' H 1" = 5' V
BOAT LAUNCH PROFILE



5
 19 1" = 10' H 1" = 5' V
BOAT LAUNCH PROFILE

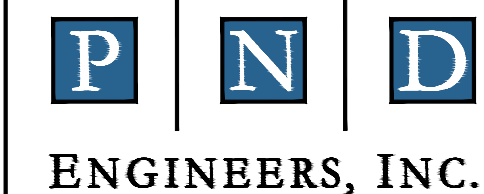


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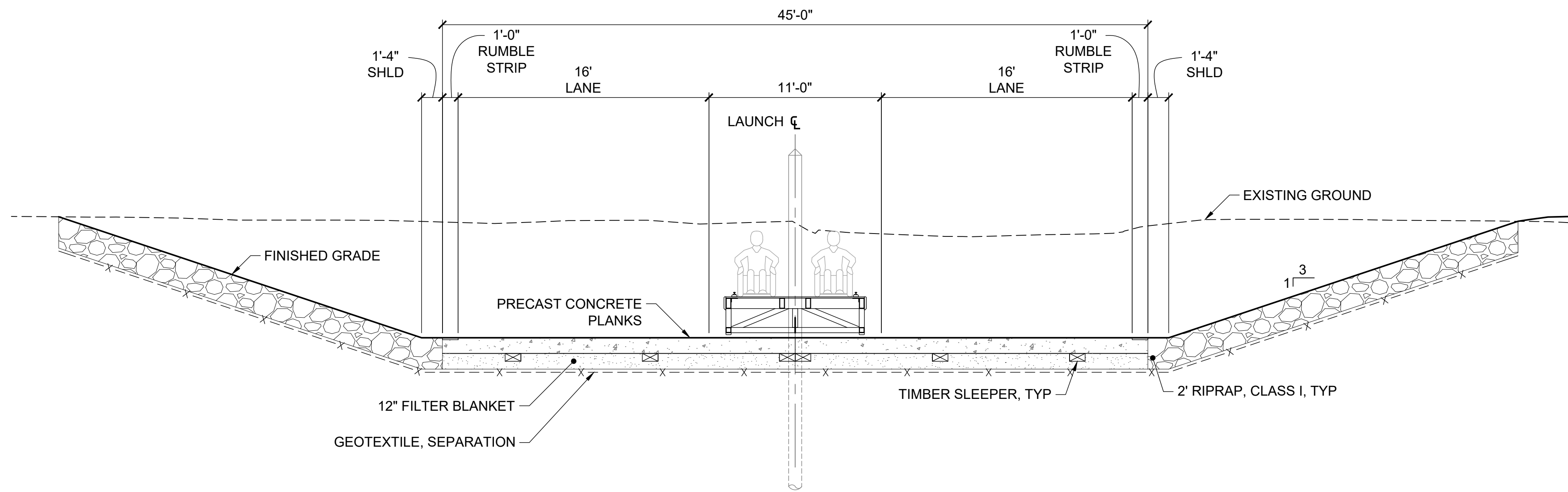


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

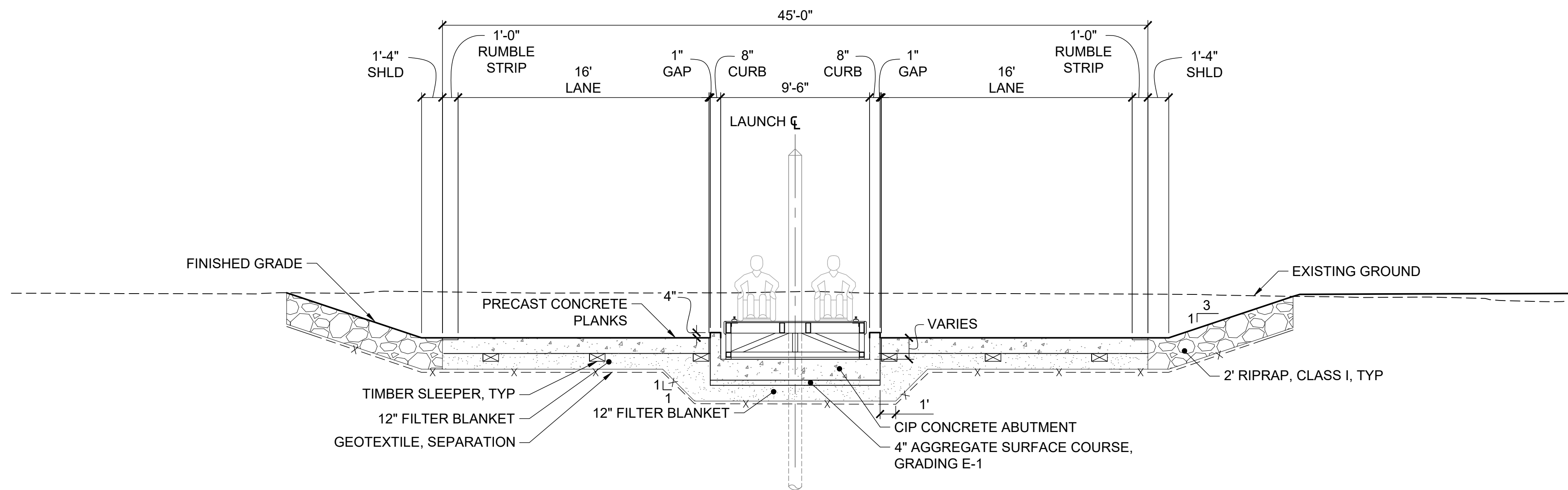
BOAT LAUNCH PROFILE

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 19 OF 63
CHECKED BY:	AWJ	PROJECT NO.:	251029	

6/2/26 - CROHLER - I:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\20-25 - Boat Ramp & Float Details.dwg



1
20 **BOAT LAUNCH SECTION**
STA 11+49.98 TO STA 11+76.30



2
20 **BOAT LAUNCH SECTION**
STA 11+76.30 TO STA 12+12.74



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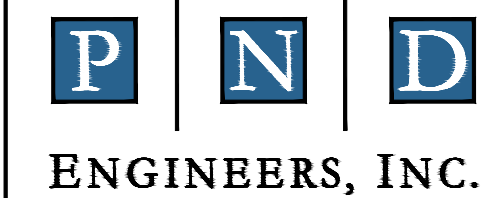
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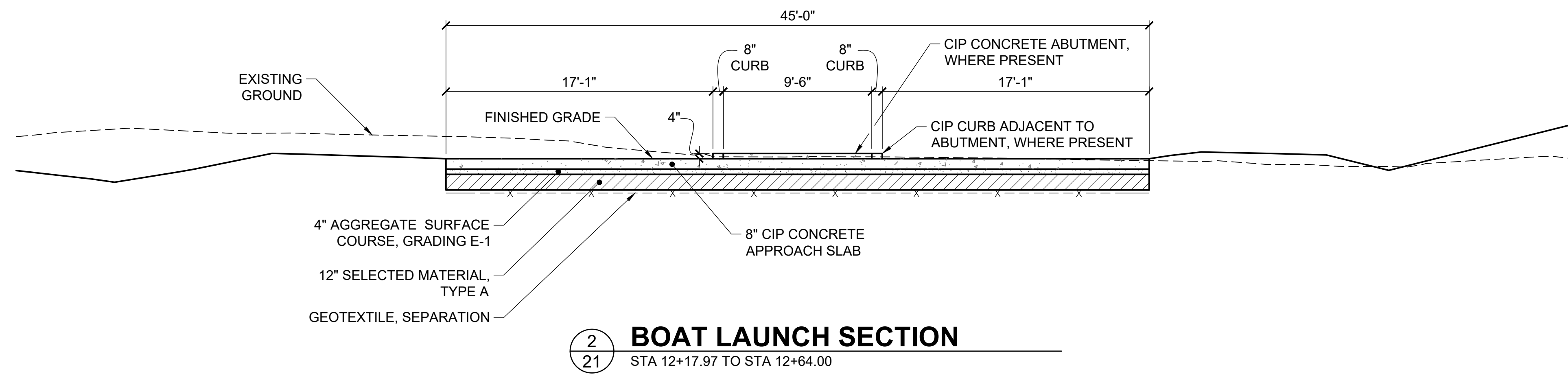
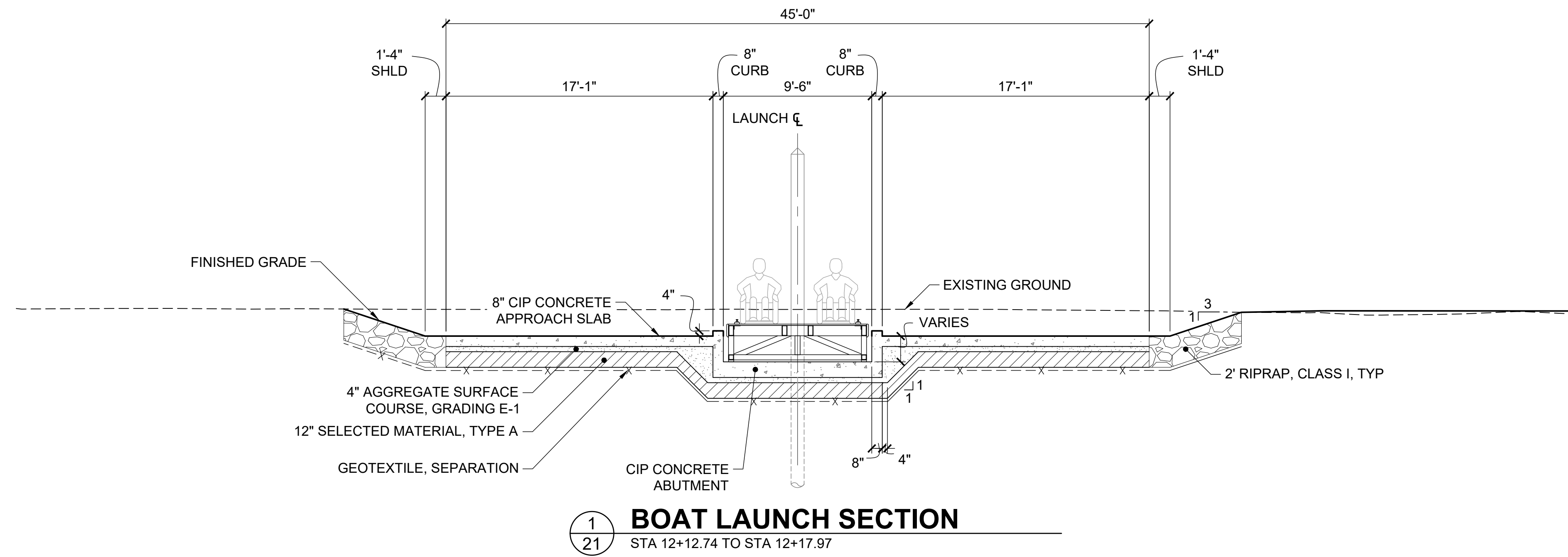


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

BOAT LAUNCH TYPICAL SECTIONS

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 20 OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029	

6/2/26 - OROHLER - I:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\20-25 - Boat Ramp & Float Details.dwg



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6/26/2026

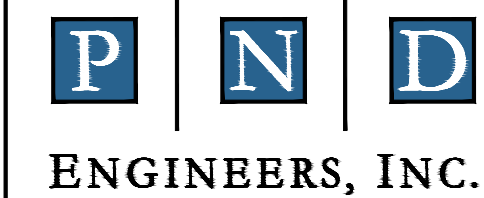
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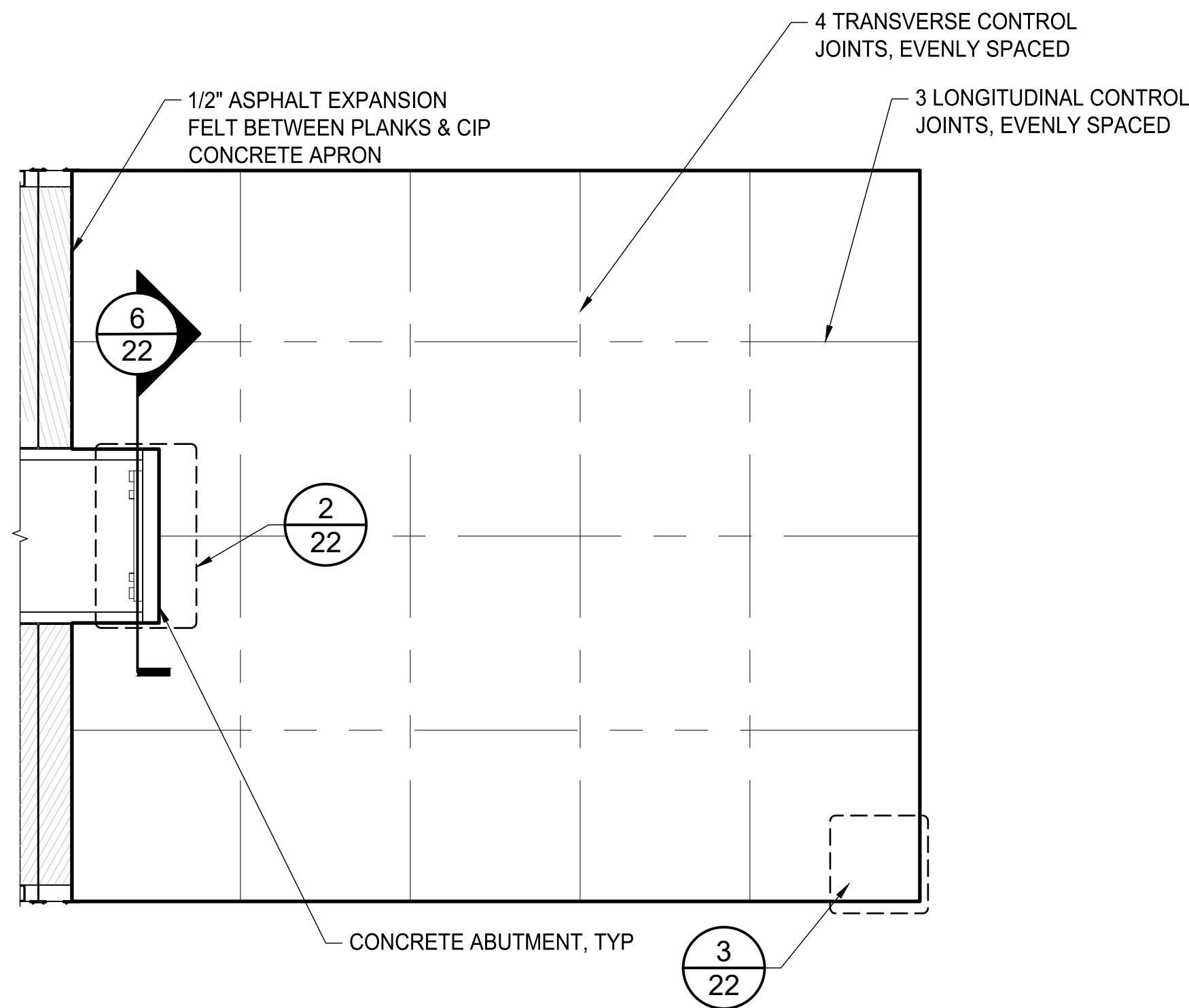


PROJECT: SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: BOAT LAUNCH TYPICAL SECTIONS

DESIGNED BY:	OTR	DATE:	6/26/26	21	OF 63
CHECKED BY:	AWJ	PROJECT NO.:	251029		

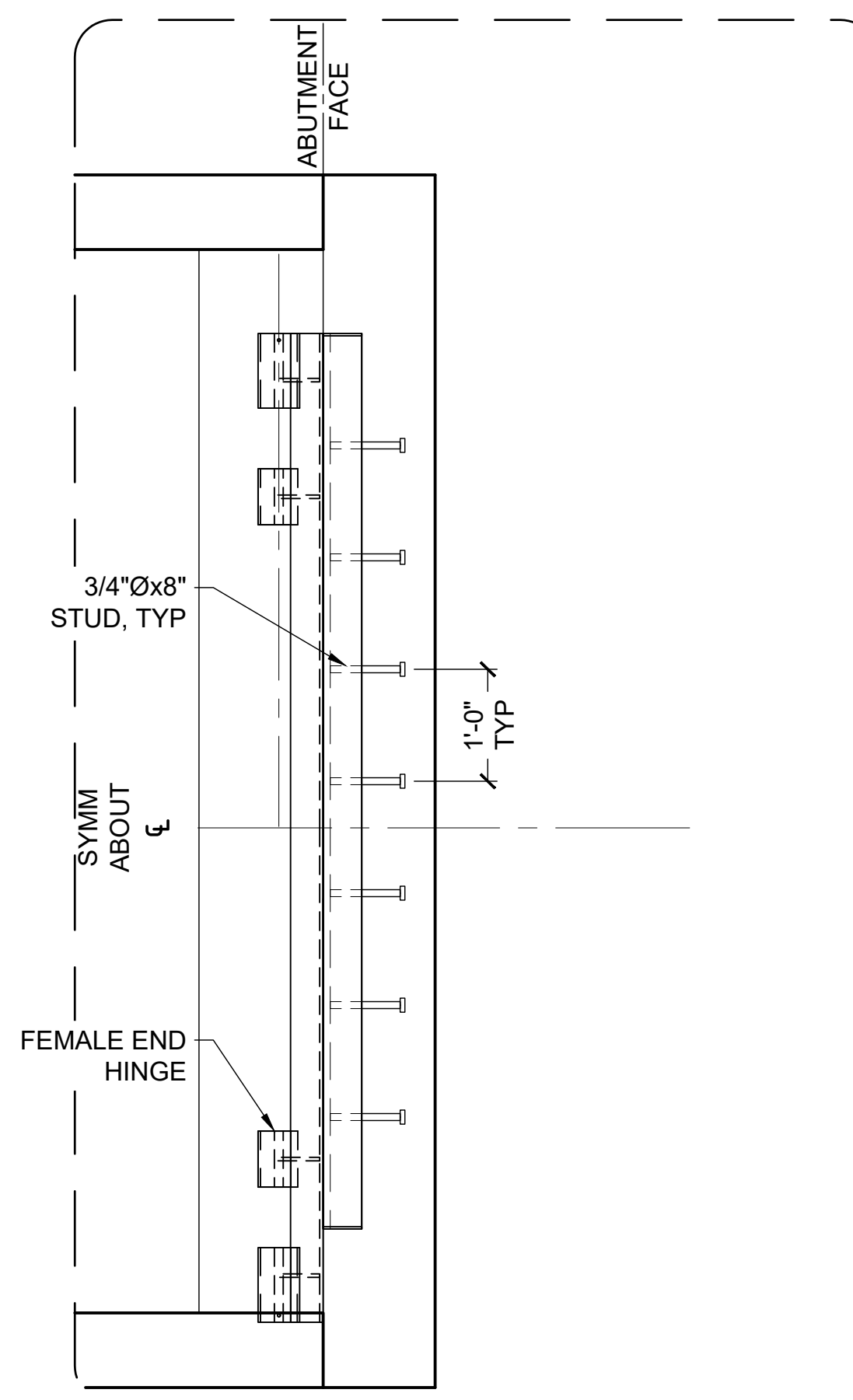
6/2/26 - CROHLER - 1\2025\25\029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\20-25 - Boat Ramp & Float Details.dwg



NOTES:

1. RIPRAP AND FLOATS NOT SHOWN FOR CLARITY.

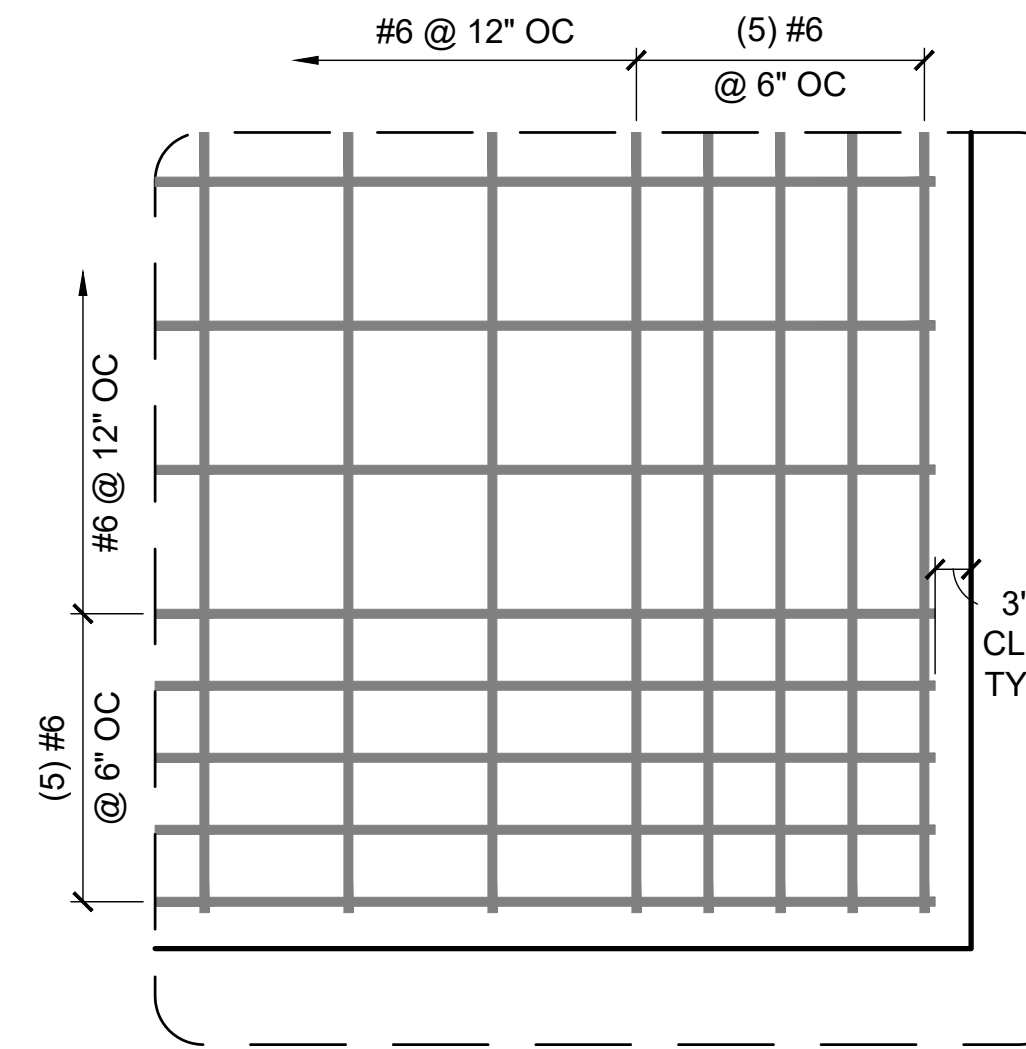
1
22 NTS **APPROACH & ABUTMENT PLAN**



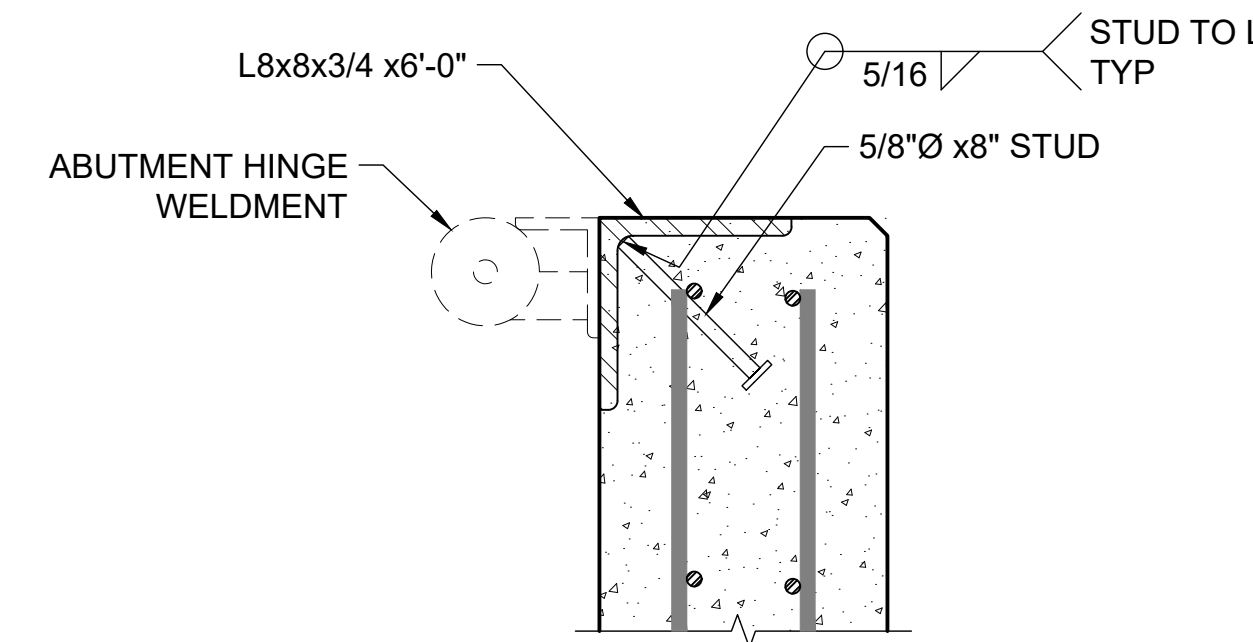
NOTES:

1. TYPICAL ABUTMENT REINFORCING NOT SHOWN FOR CLARITY.
2. ABUTMENT HINGE AND CONNECTING ANGLE SHALL BE STEEL. HINGE DETAILS SHALL MATCH THOSE SHOWN ON DETAIL C, SHEET 28.

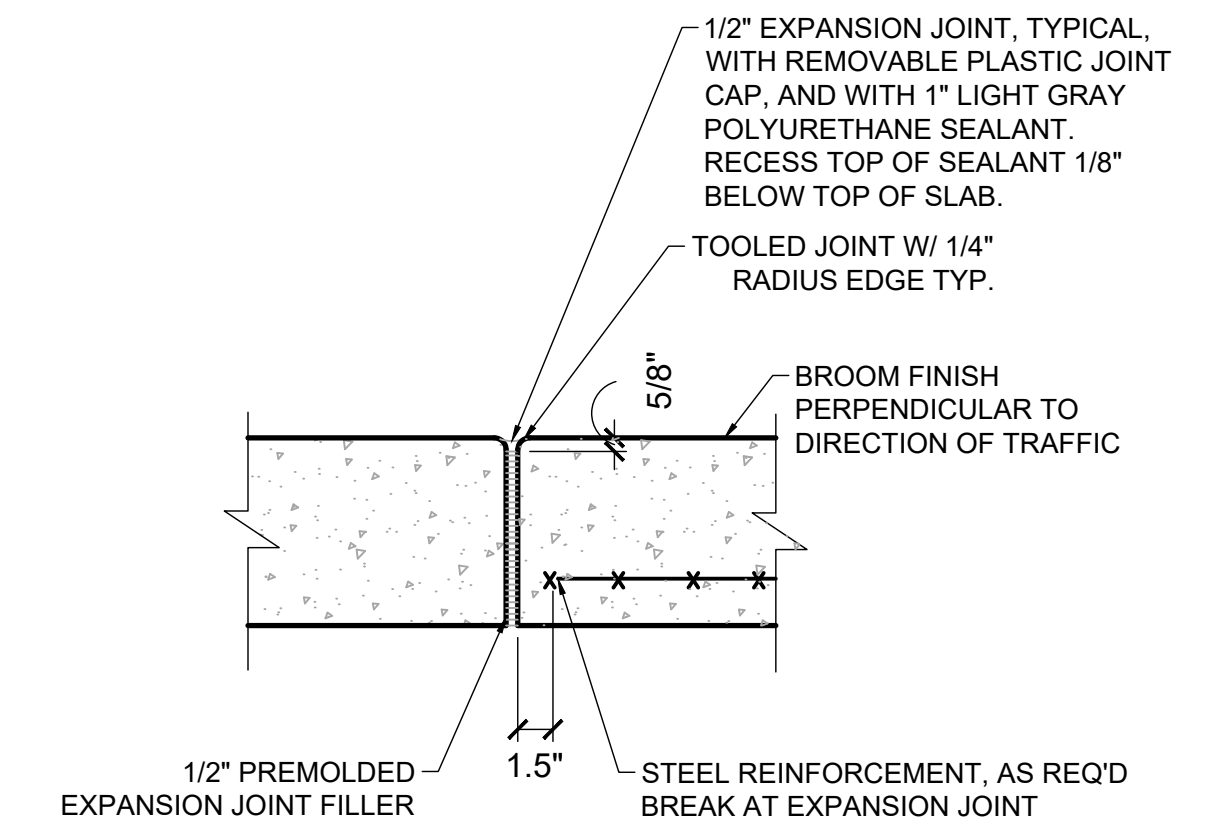
2
22 NTS **ABUTMENT HINGE PLAN DETAIL**



3
22 NTS **CORNER & EDGE REINFORCEMENT DETAIL**



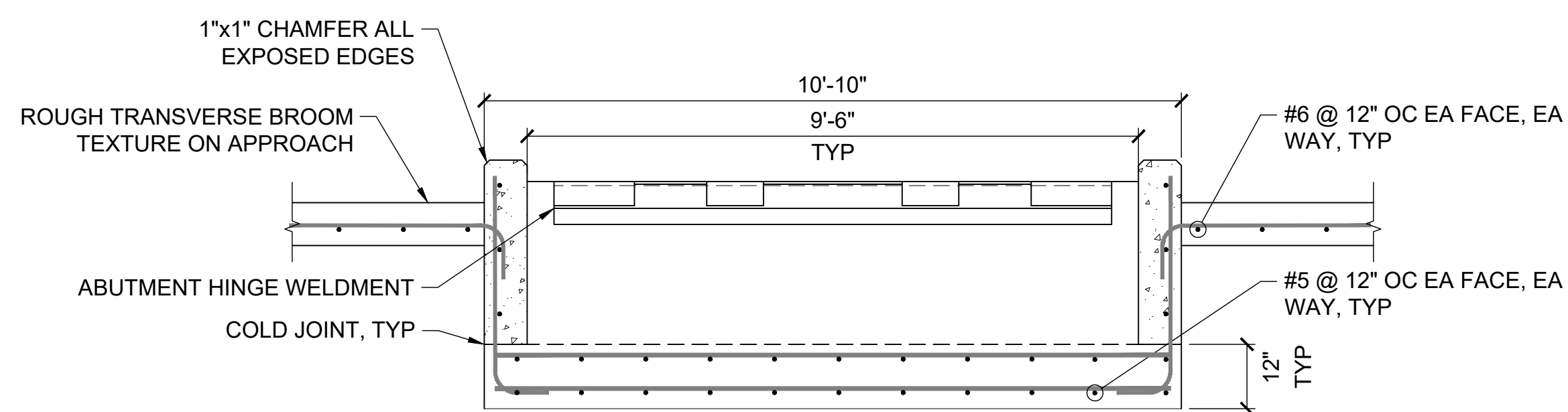
5
22 NTS **ABUTMENT HINGE DETAIL**



NOTES:

1. SPACING AT 20' O.C., BETWEEN CHANGE IN CONTROL JOINT GRIDS, AND AS SHOWN ON APPROACH AND ABUTMENT PLAN.
2. NEW SEALANT SHALL BE PROTECTED FROM VEHICLE AND PEDESTRIAN TRAFFIC UNTIL FULLY CURED PER SEALANT MANUFACTURERS RECOMMENDATIONS.

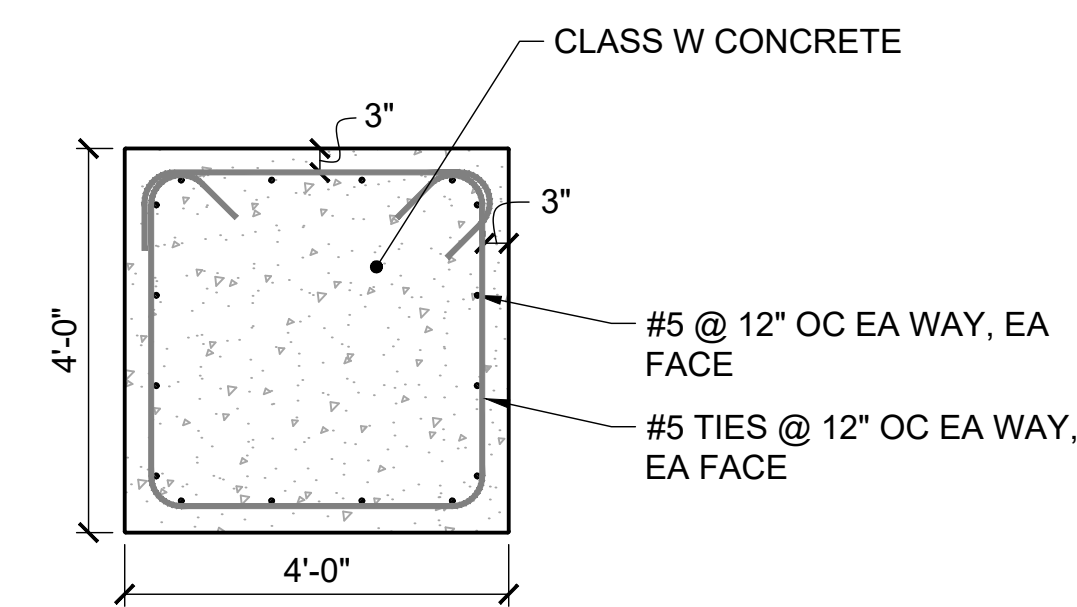
4
22 NTS **EXPANSION JOINT DETAIL**



NOTES:

1. BACKWALL REINF NOT SHOWN FOR CLARITY.
2. PROVIDE 2" COVER ALL VERT AND TOP FACES, 3" COVER BOTTOM, TYP.

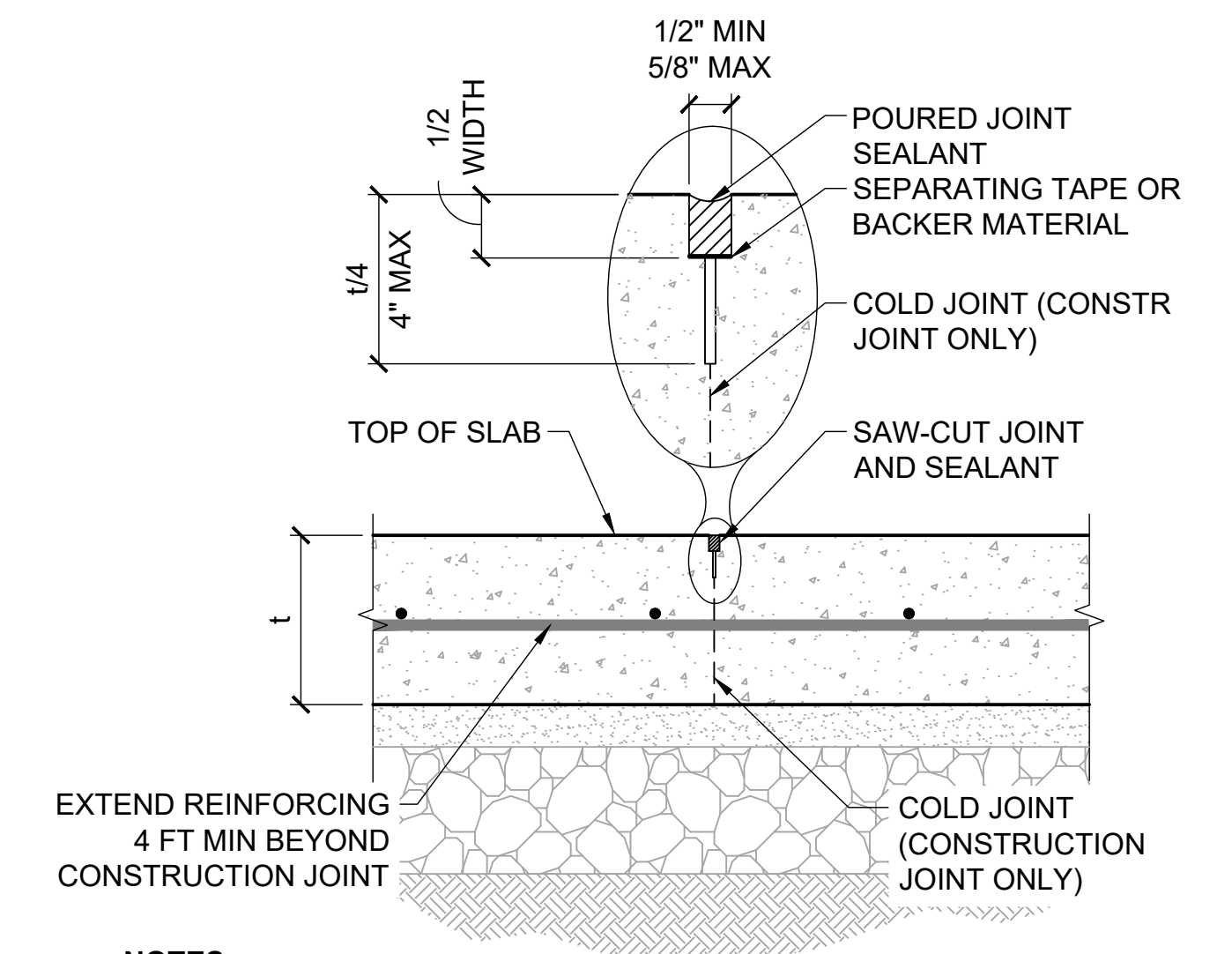
6
22 NTS **APPROACH & ABUTMENT SECTION**



NOTES:

1. MAY BE PRECAST OR CAST-IN-PLACE CONCRETE.

7
22 NTS **CONCRETE BLOCK PROTECTIVE APRON**



NOTES:

1. CONTROL JOINT SPACING= AS SHOWN
2. CONSTRUCTION JOINT SPACING = AS REQUIRED WITH ENGINEER APPROVAL.
3. PROVIDE CONTROL JOINTS AT ANY AND ALL REENTRANT CORNERS.

8
22 NTS **TYPICAL JOINT DETAIL**



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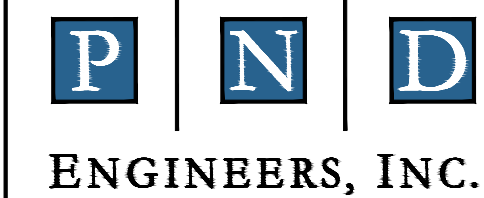
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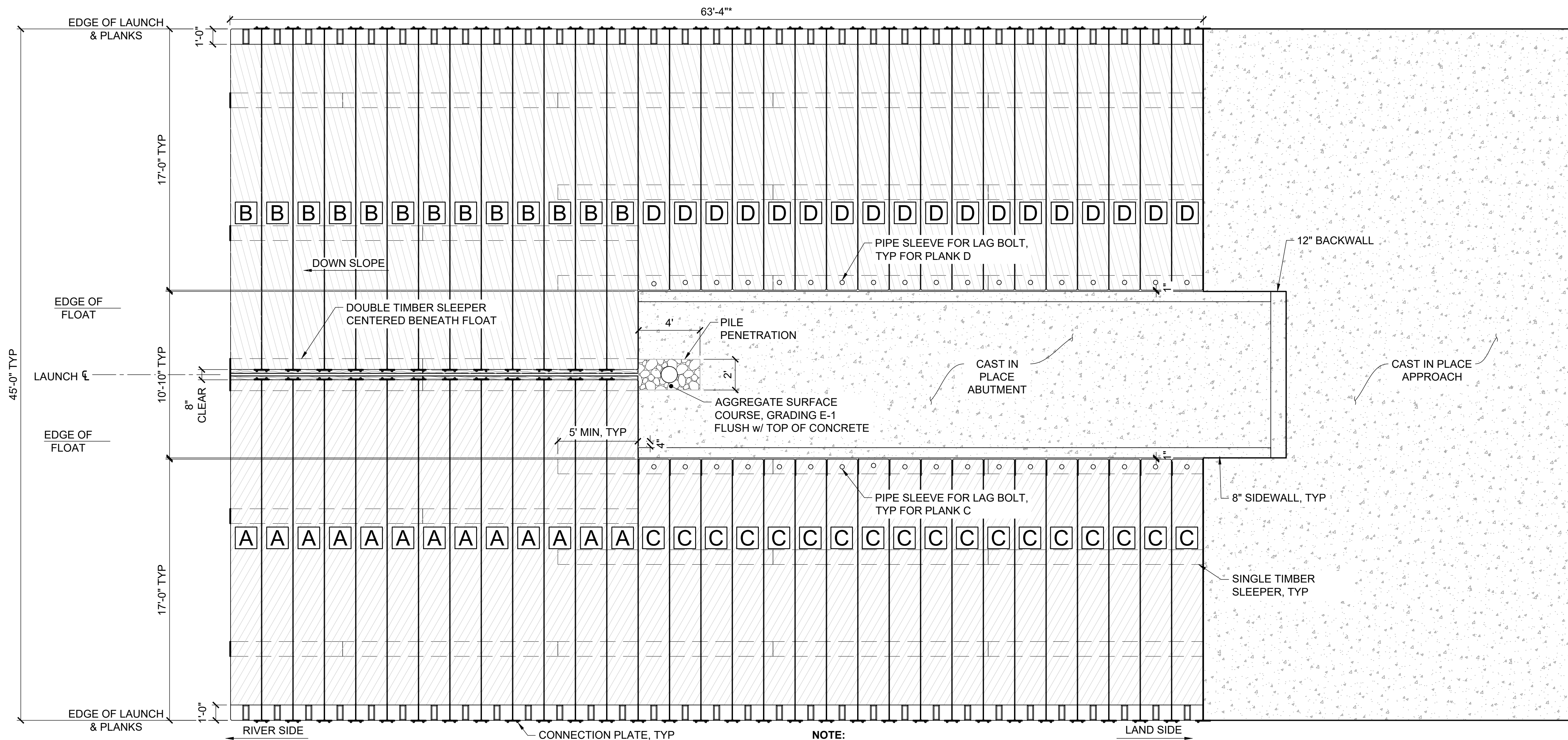


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

APPROACH AND ABUTMENT DETAILS

DESIGNED BY:	PK	DATE:	6/26/26	SHEET NO: 22 OF 63
CHECKED BY:	CC	PROJECT NO.:	251029	

6/2/26 - OROHLER - 1\2025\25\029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\20-25 - Boat Ramp & Float Details.dwg

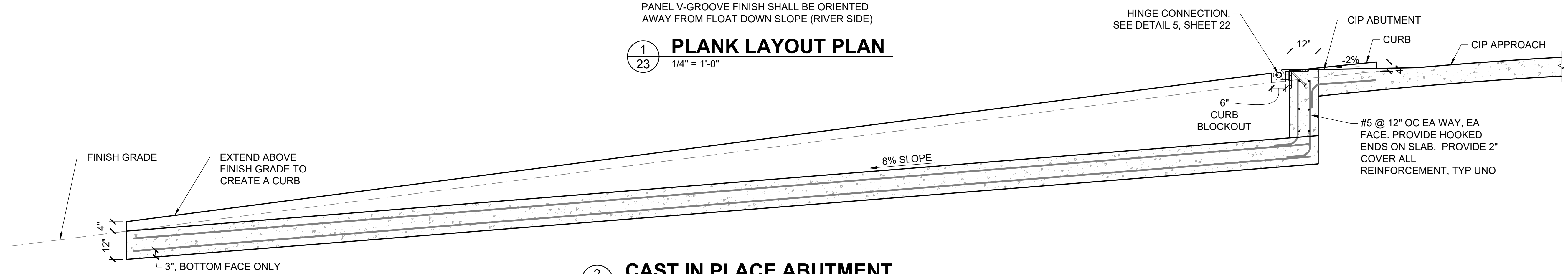


PLANK SCHEDULE	
PLANK DESIGNATION	PLANK QUANTITY
PLANK A	13
PLANK B	13
PLANK C	18
PLANK D	18

*MEASURED ALONG LAUNCH SLOPE

NOTE:
PANEL V-GROOVE FINISH SHALL BE ORIENTED AWAY FROM FLOAT DOWN SLOPE (RIVER SIDE)

1 PLANK LAYOUT PLAN
1/4" = 1'-0"



2 CAST IN PLACE ABUTMENT
1/2" = 1'-0"



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6/26/2026

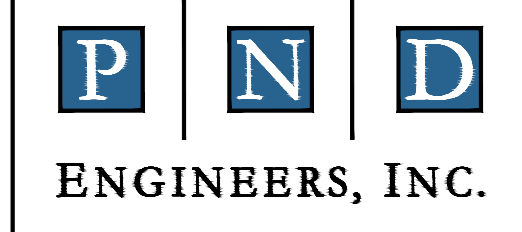
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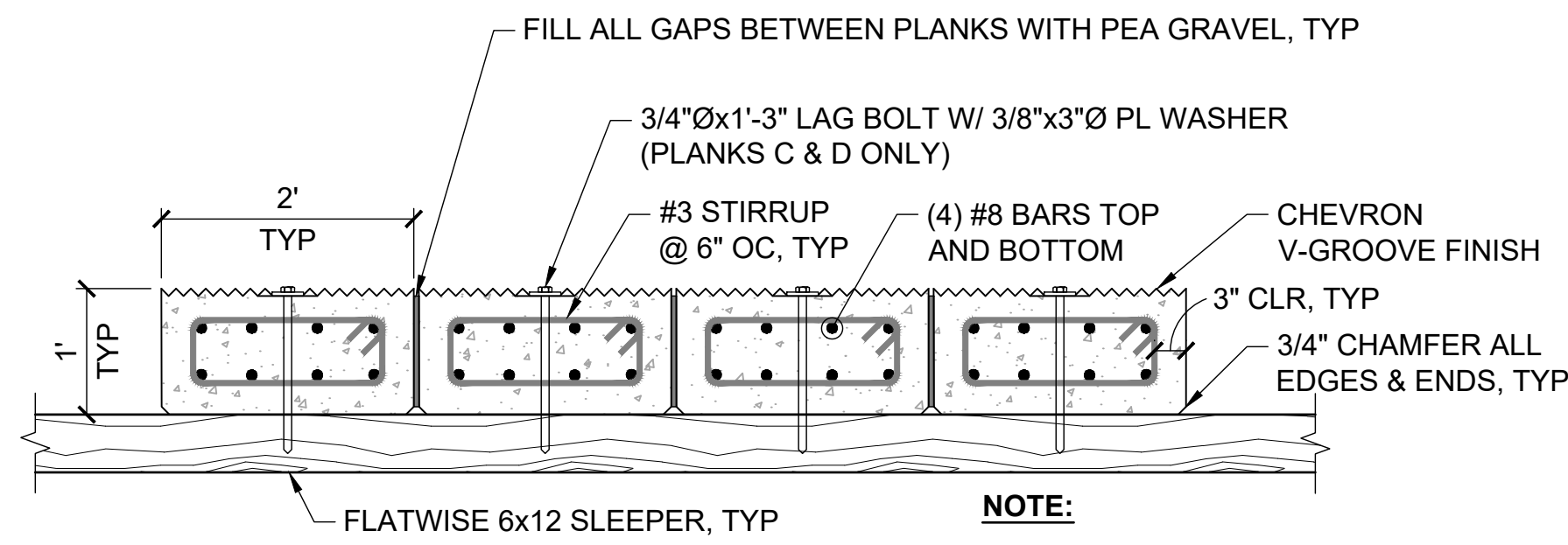
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **PLANK DETAILS**

DESIGNED BY:	PK	DATE:	6/26/26
CHECKED BY:	CC	PROJECT NO.:	251029

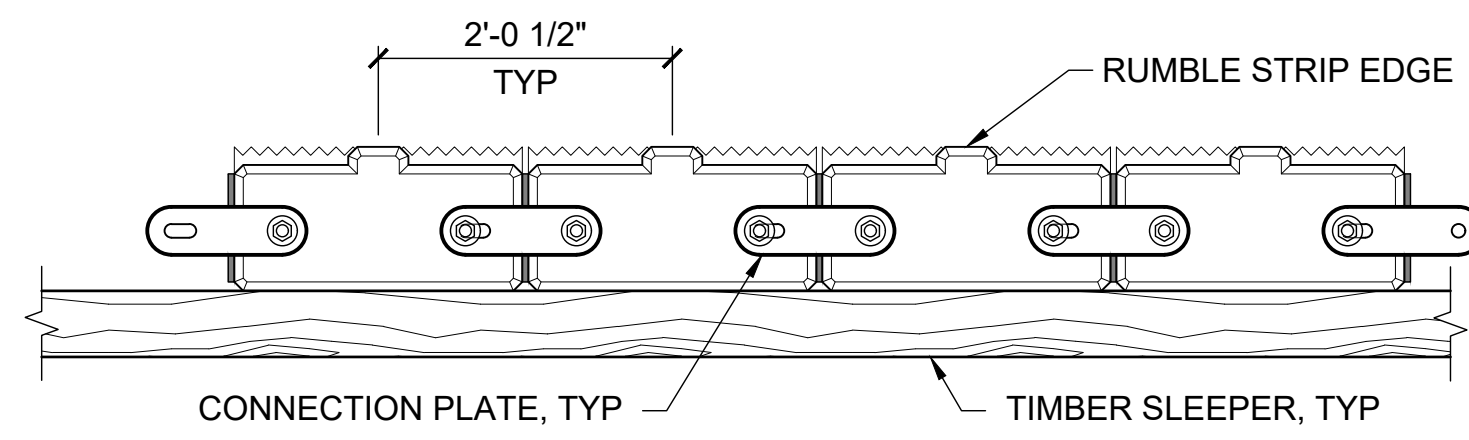
SHEET NO: **23** OF 63

6/2/26 - CROHLER - 1\2025\25\029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\20-25 - Boat Ramp & Float Details.dwg

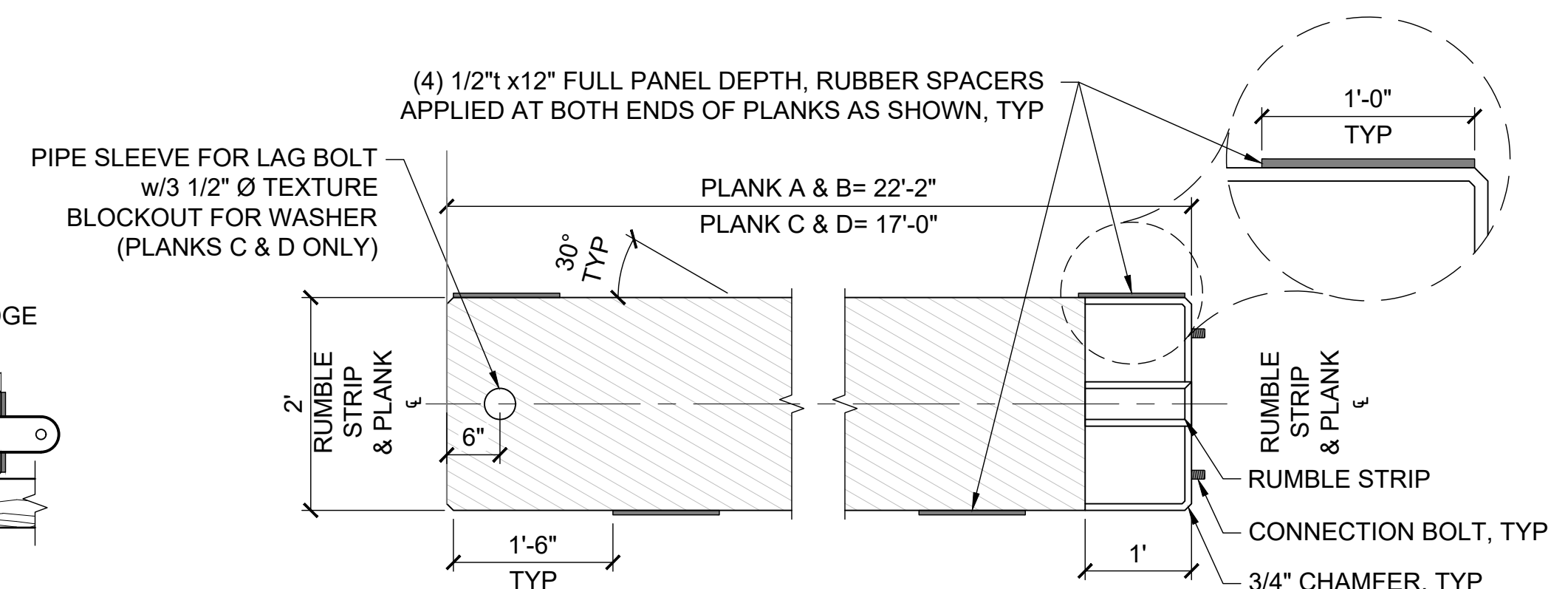


1
24 NTS **TYPICAL PLANK SECTION**

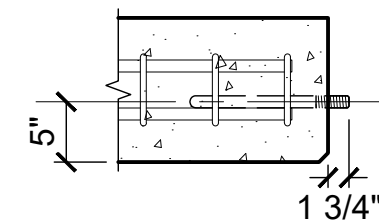
NOTE:
FILL ALL GAPS BETWEEN PLANKS WITH PEA GRAVEL, TYP
ALL REBAR SHALL BE GALVANIZED UNO



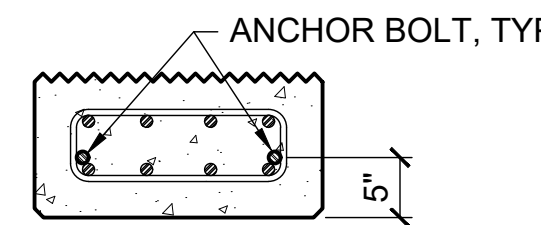
2
24 NTS **TYPICAL CONNECTION ELEVATION**



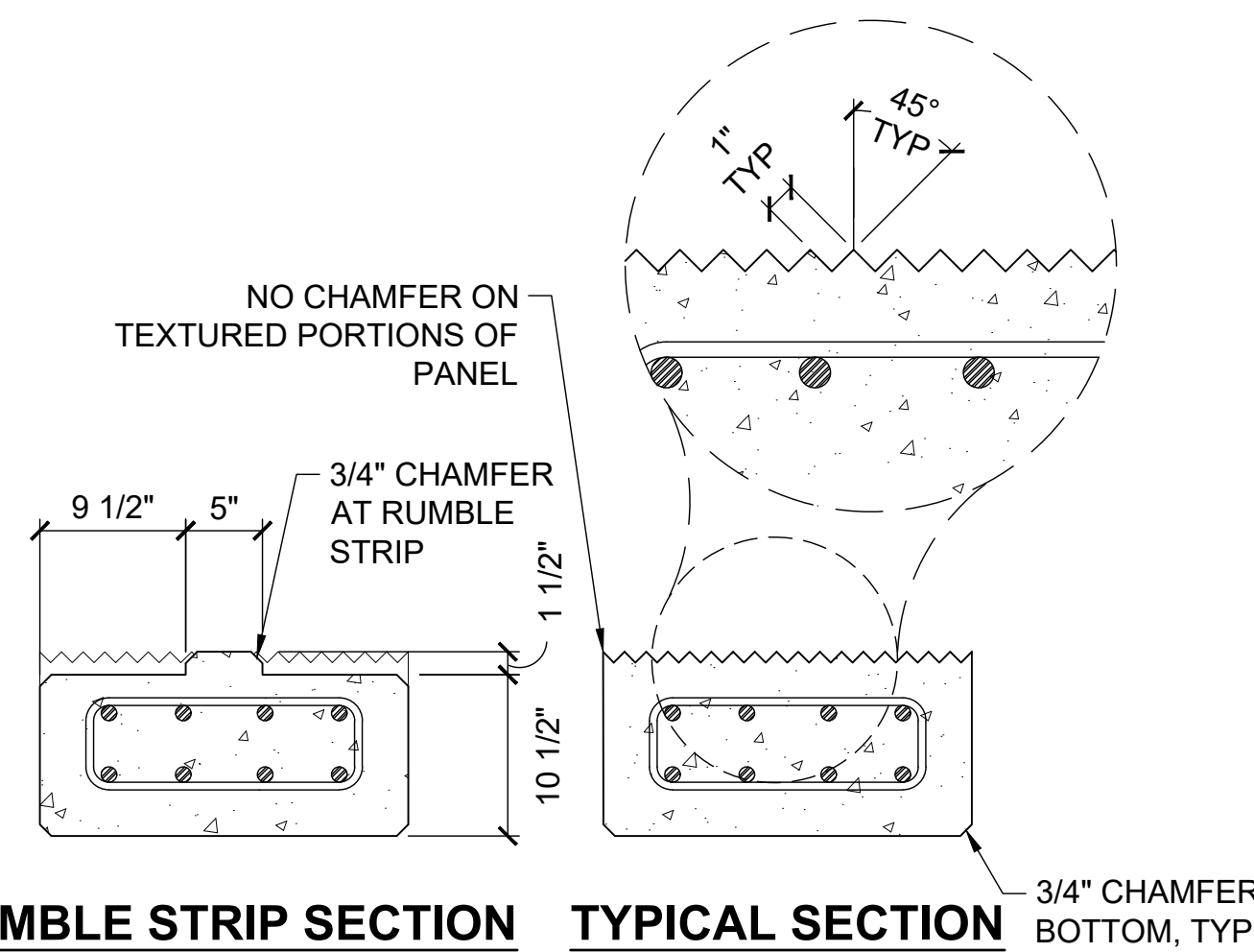
3
24 NTS **TYPICAL PLAN**
PLANK NOTE:
ORIENTATION OF PANEL FINISH CRITICAL,
SEE LAYOUT PLAN



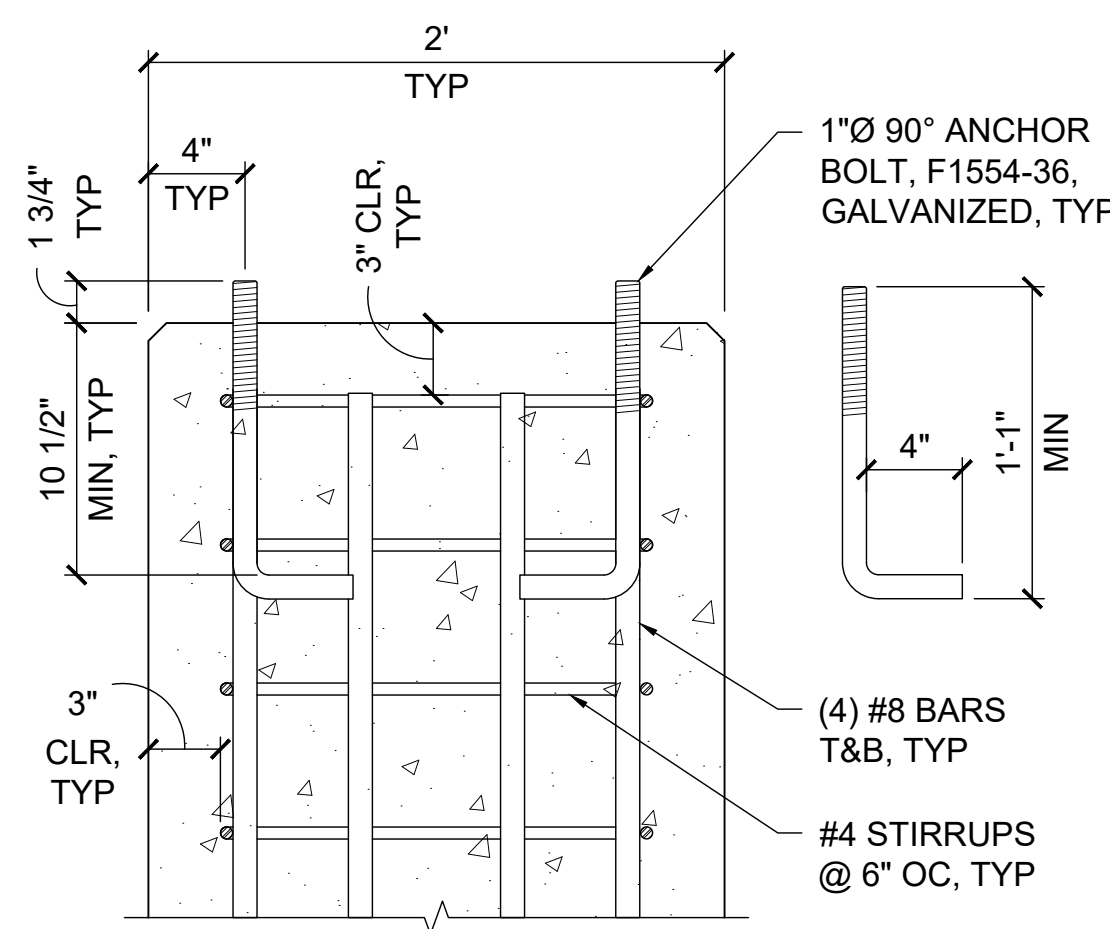
4
24 NTS **TYPICAL CONNECTION**



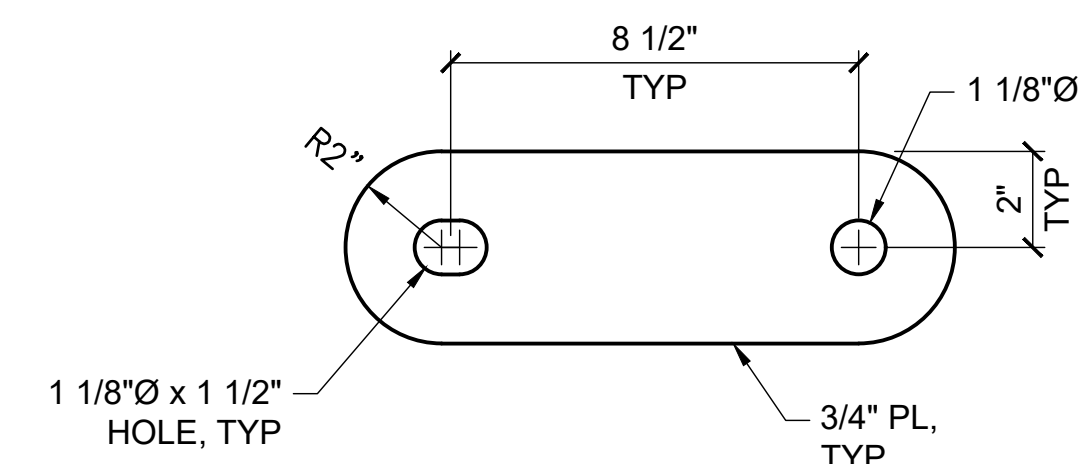
5
24 NTS **ANCHOR BOLT DETAIL**



6
24 NTS **PLANK SURFACE FINISH DETAIL**



7
24 NTS **CONNECTION SECTION**
PLANK NOTE:
DETAIL APPLICABLE TO BOTH ENDS OF PLANKS A & B.
DETAIL APPLICABLE TO ONLY THE EXTERIOR END OF
PLANKS C & D.



8
24 NTS **CONNECTION PLATE DETAIL**



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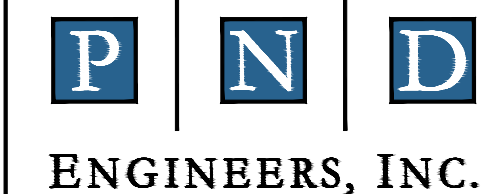
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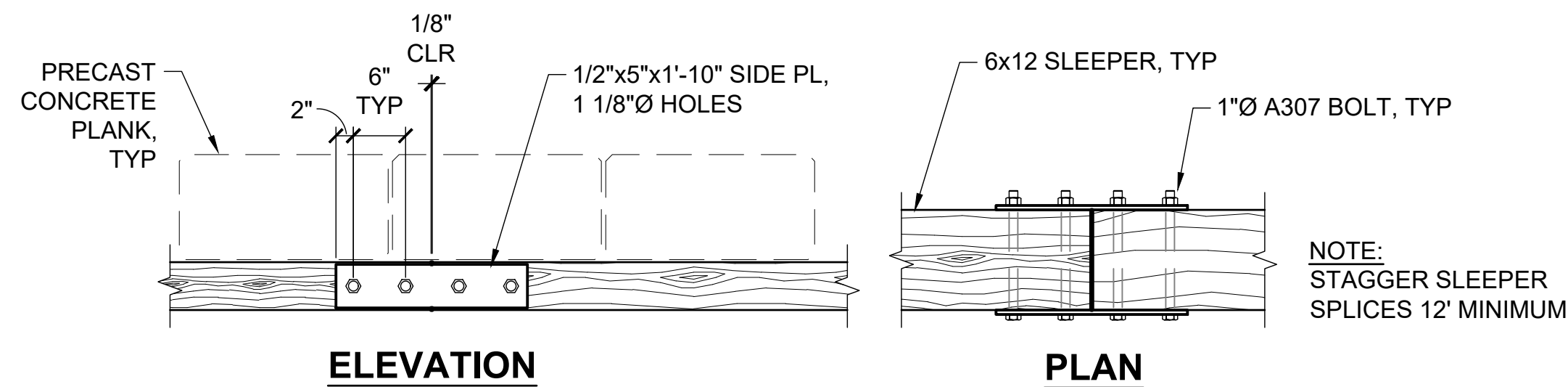


DATE: 6/26/2026

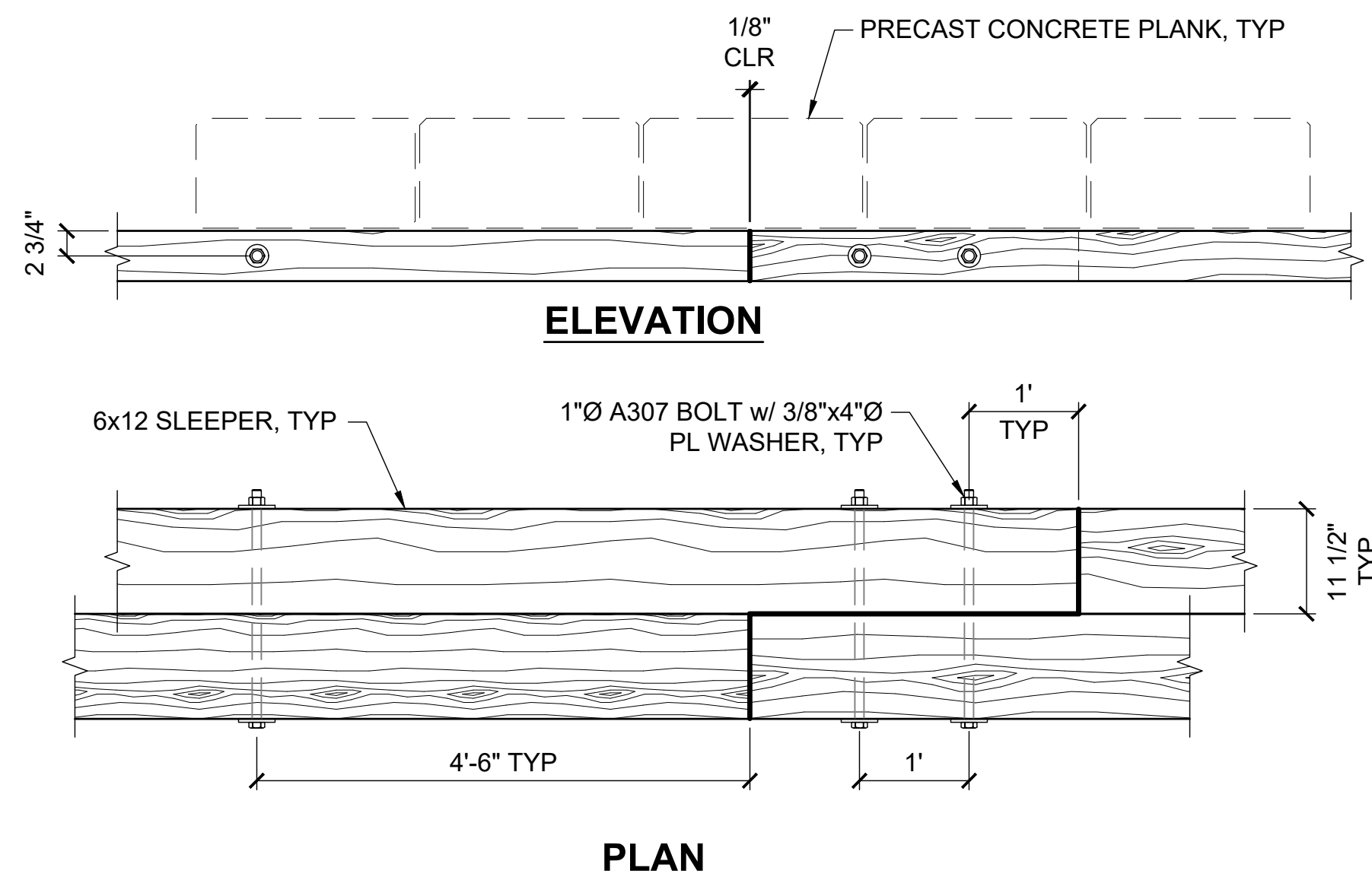
1506 West 36th Avenue
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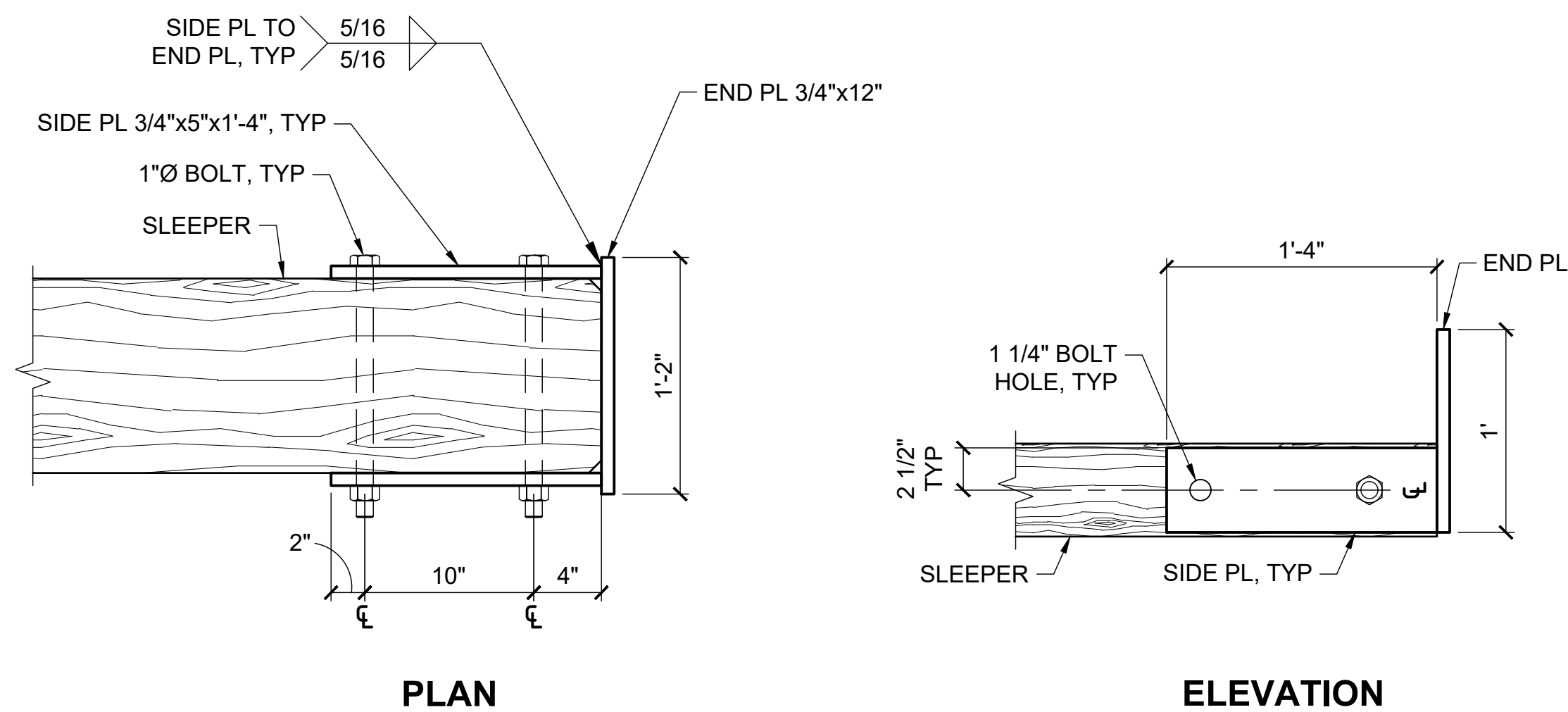
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: PLANK DETAILS	
DESIGNED BY: PK	DATE: 6/26/26
CHECKED BY: CC	PROJECT NO: 251029
SHEET NO: 24 OF 63	



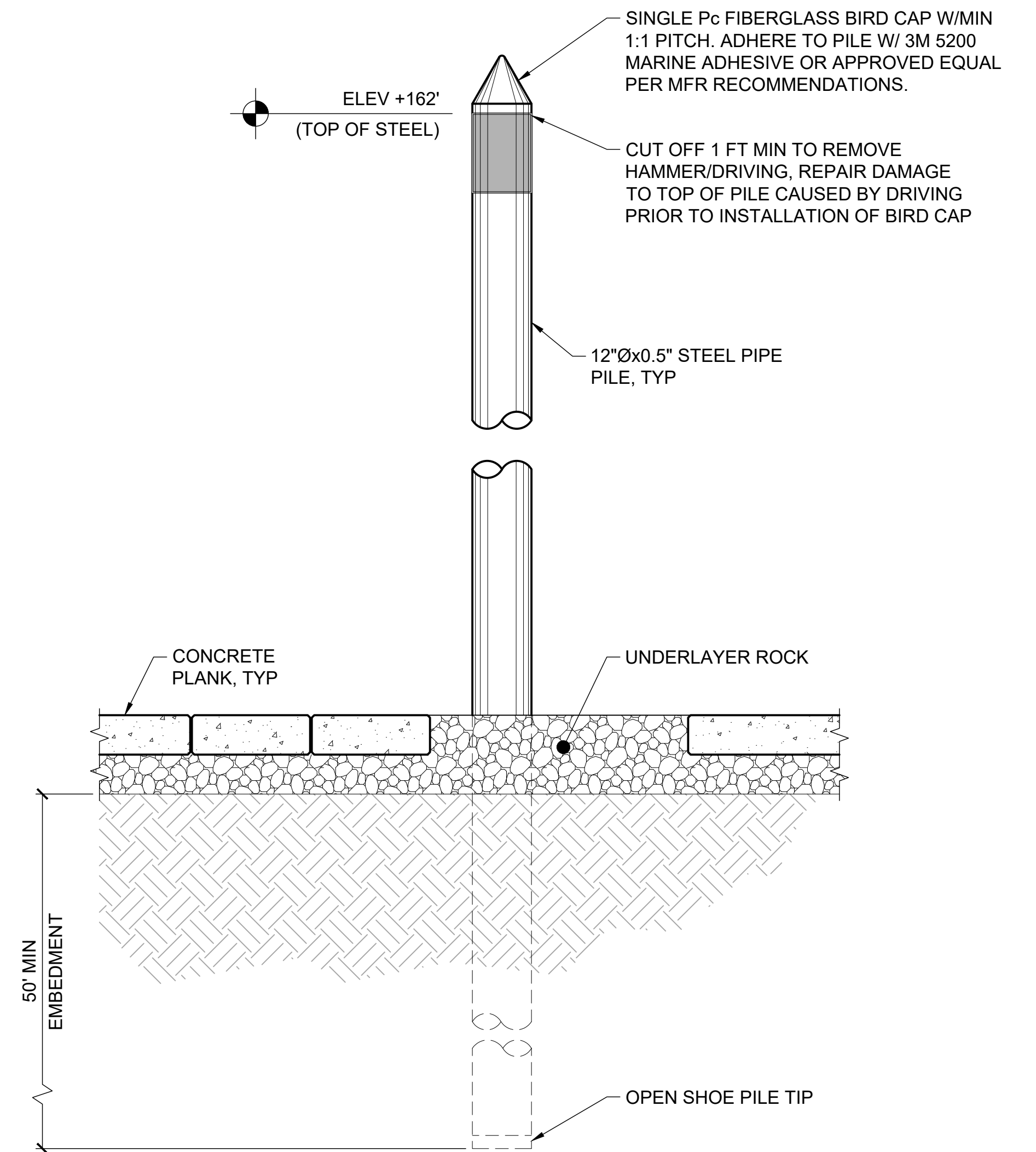
1
25
NTS
TIMBER SINGLE SLEEPER SPLICE DETAIL



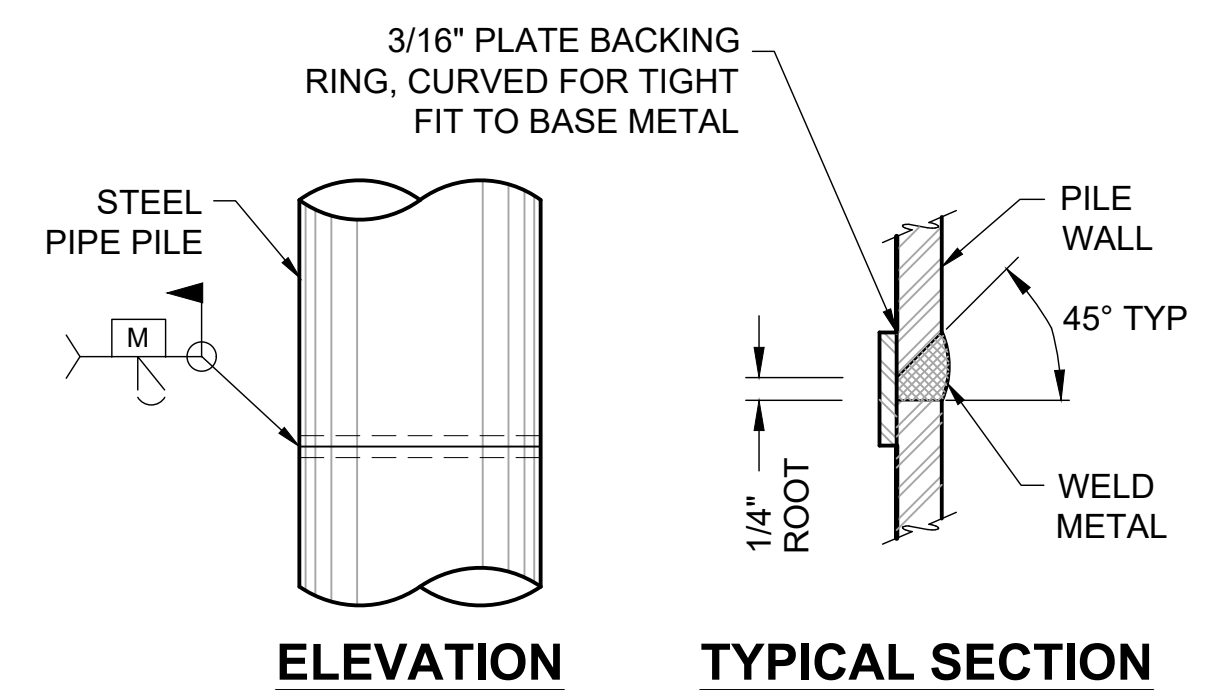
2
25
NTS
TIMBER DOUBLE SLEEPER SPLICE DETAIL



3
25
NTS
END TAB DETAIL



4
25
NTS
TYPICAL BOARDING FLOAT PILE



5
25
NTS
TYPICAL PILE SPLICE WELD

6/2/26 - CROHLER - 1/2025/251029 Susitna Landing Boat Launch & Facility Renovation/G. Drawings/Civil/20-25 - Boat Ramp & Float Details.dwg



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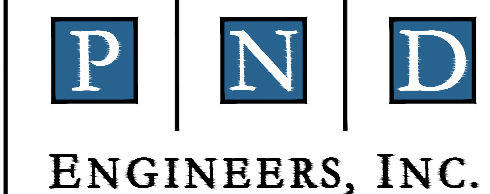
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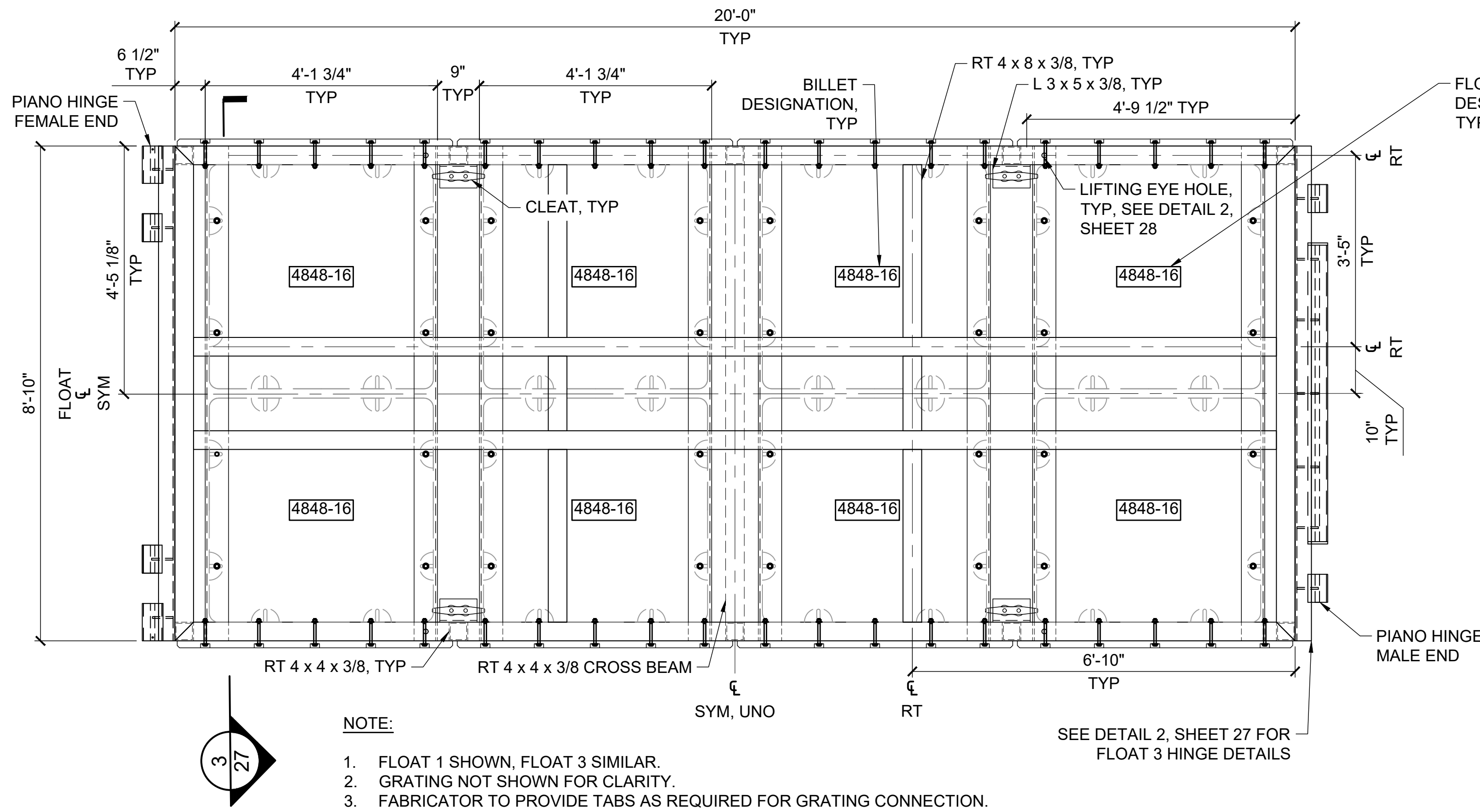


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

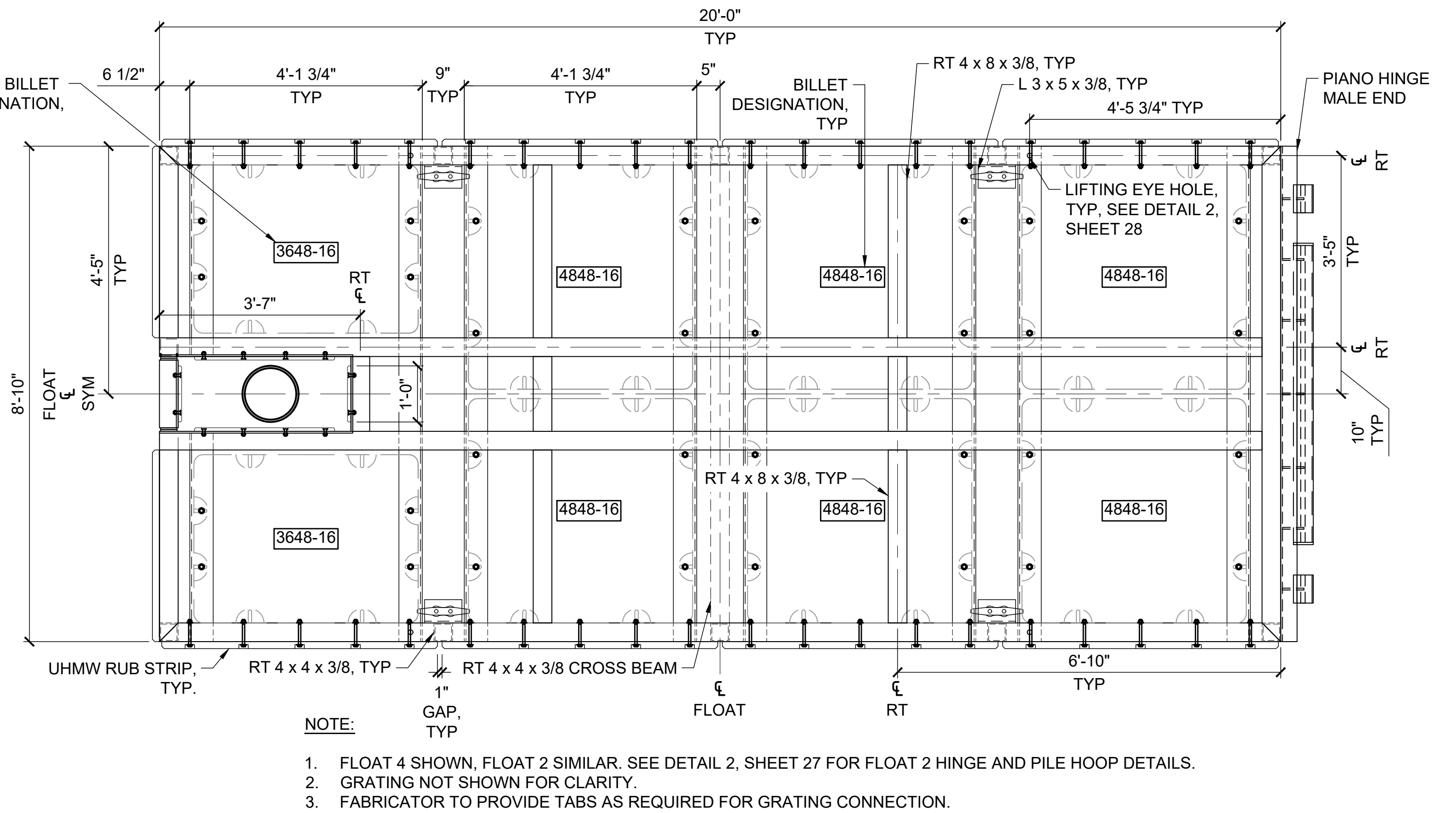
TITLE:
TIMBER SLEEPER & PILE DETAILS

DESIGNED BY:	PK	DATE:	6/26/26	SHEET NO:	25 OF 63
CHECKED BY:	CC	PROJECT NO:	251029		

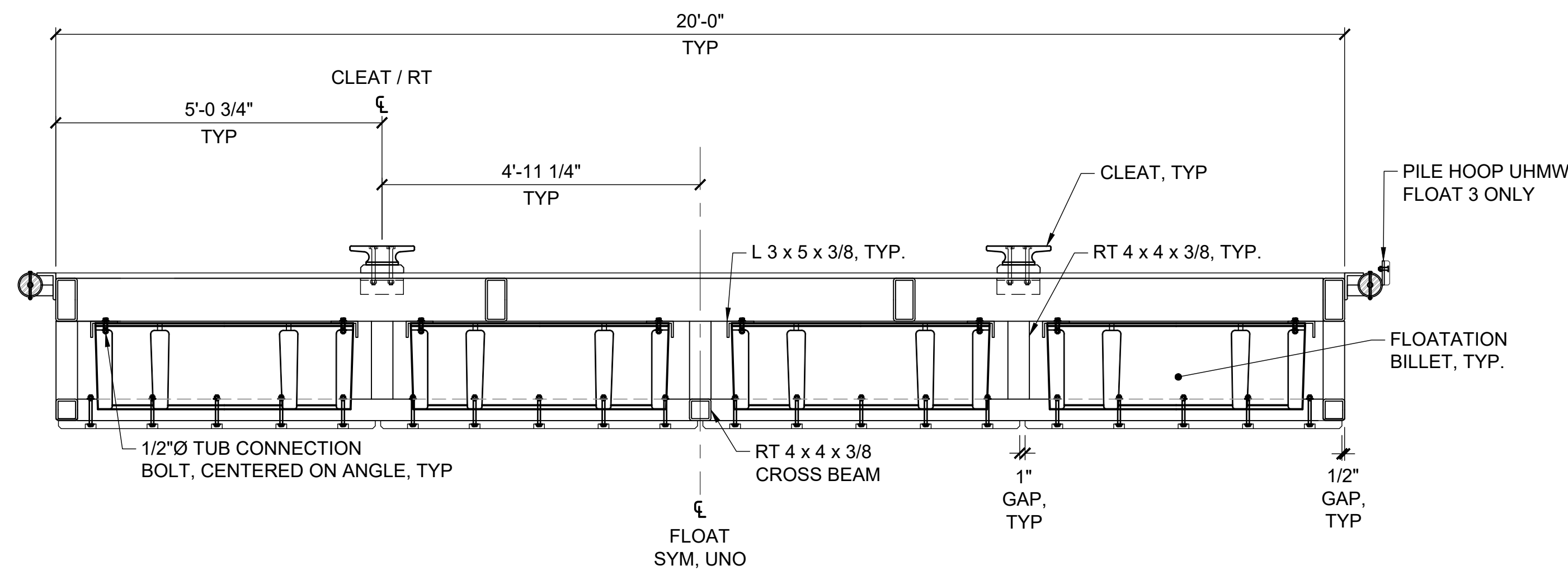
6/2/26 - B.AMISON - J:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\26-28 - Float Details.dwg



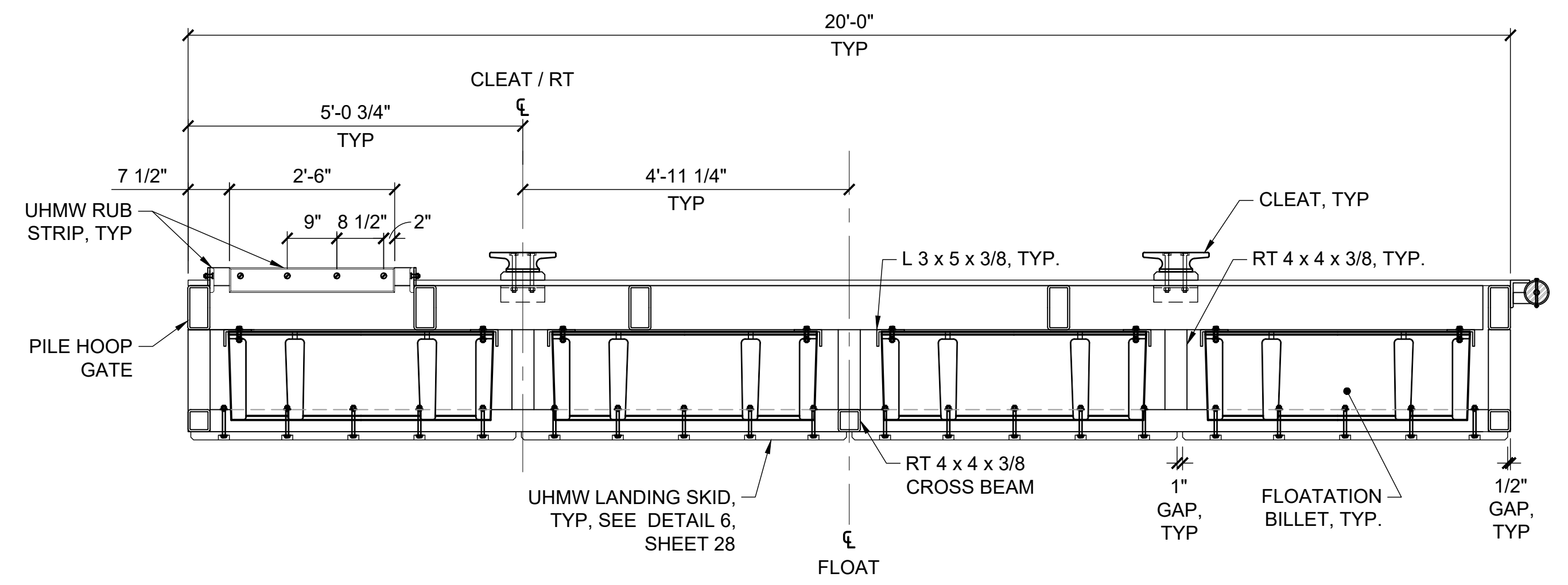
1
26 NTS **FLOAT 1/3 PLAN**



2
26 NTS **FLOAT 2/4 PLAN**



3
26 NTS **FLOAT 1/3 SECTION**



4
26 NTS **FLOAT 2/4 SECTION**

SHEET NOTES:

1. ALL JOINTS SHALL BE WELDED WITH 1/4" FILLET WELD OR EQUIVALENT BEVEL WELDS UNO.
2. APPROXIMATE WEIGHT OF ALL FLOATS = 3,000LB.
3. PROVIDE ELECTRIC ISOLATION BETWEEN ALL DISSIMILAR METALS.

NOTE:

1. FLOAT 4 SHOWN, FLOAT 2 SIMILAR.



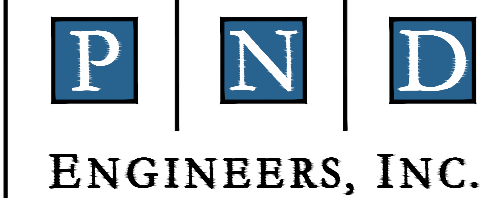
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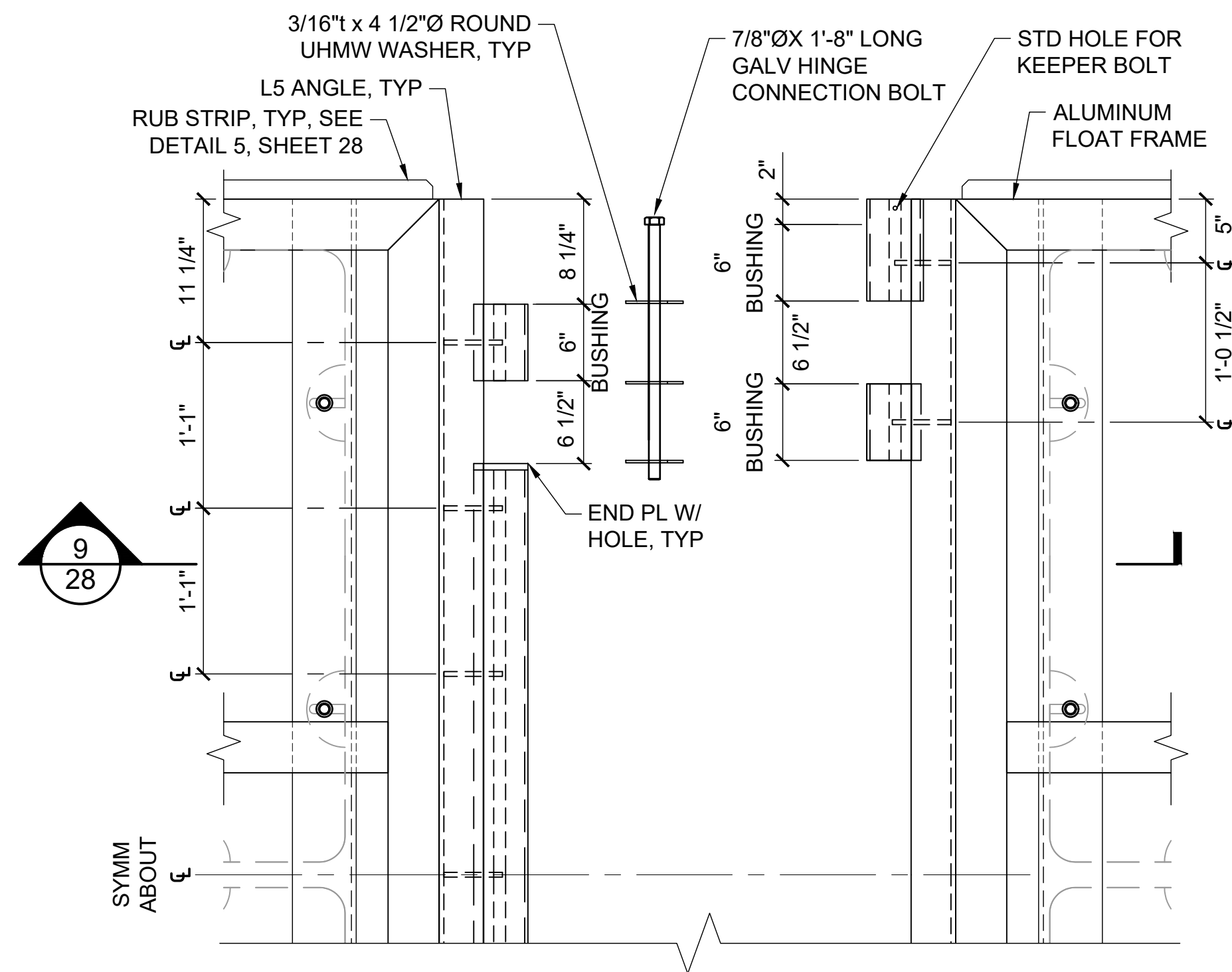


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

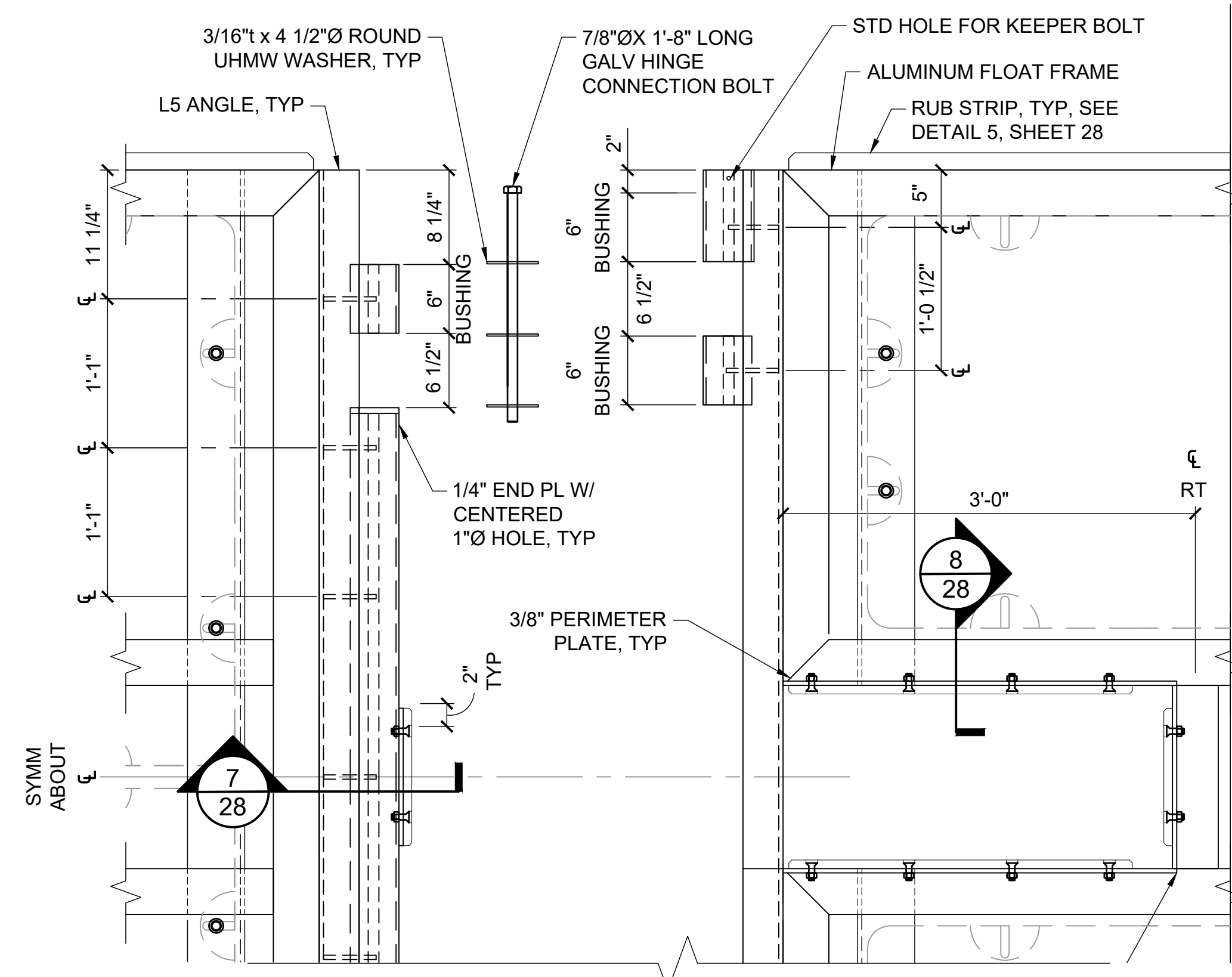
TITLE: **FLOAT PLANS**

DESIGNED BY: PK DATE: 6/26/26
CHECKED BY: CC PROJECT NO: 251029 **26** OF 63

6/2/26 - B.AMISON - J120251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\26-28 - Float Details.dwg



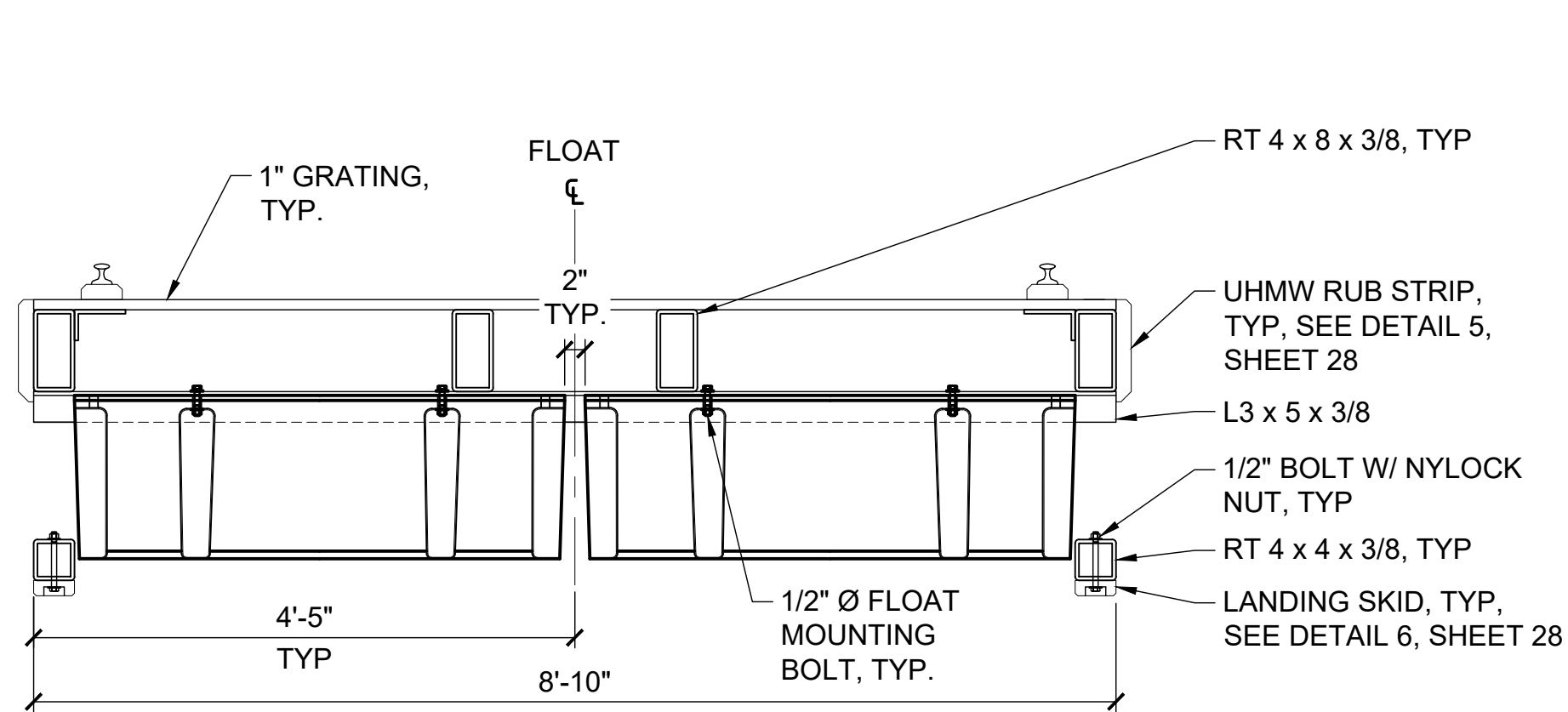
1 HINGE PLAN
27 NTS



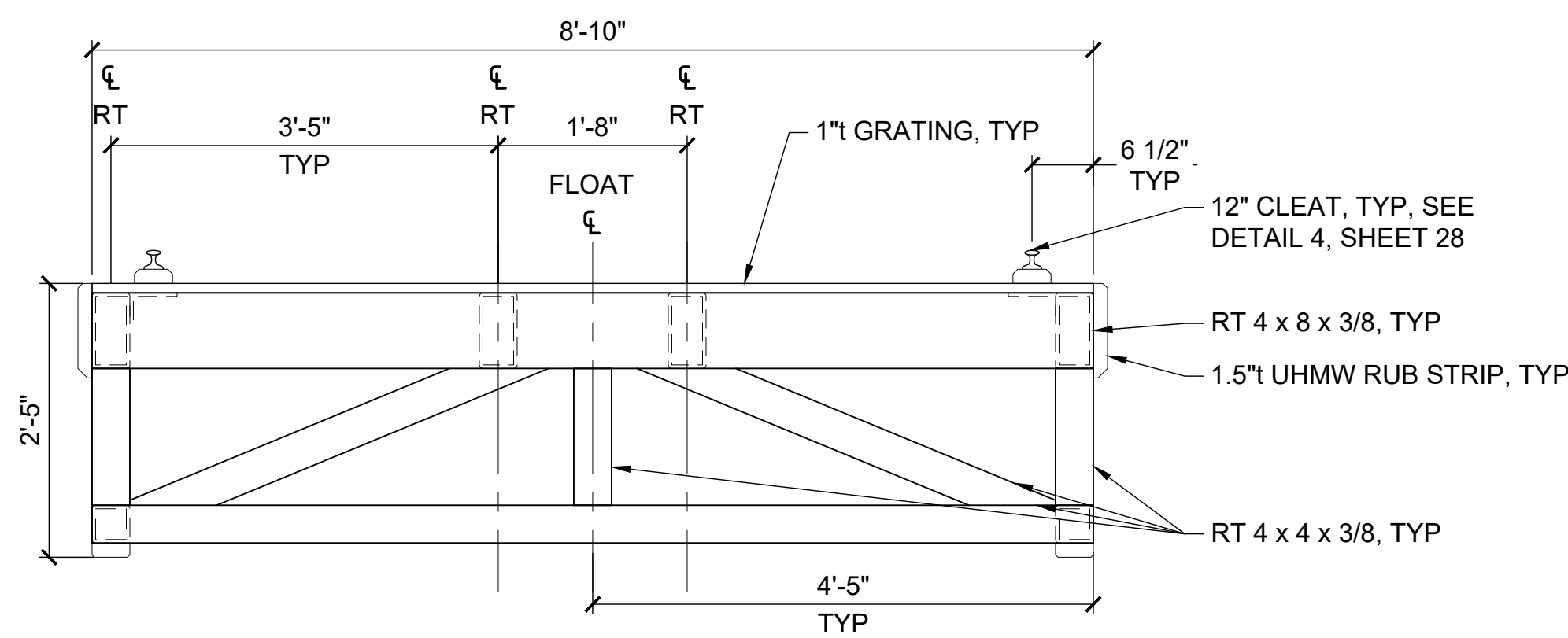
2 HINGE PLAN AT FLOAT 2
27 NTS

SHEET NOTES:

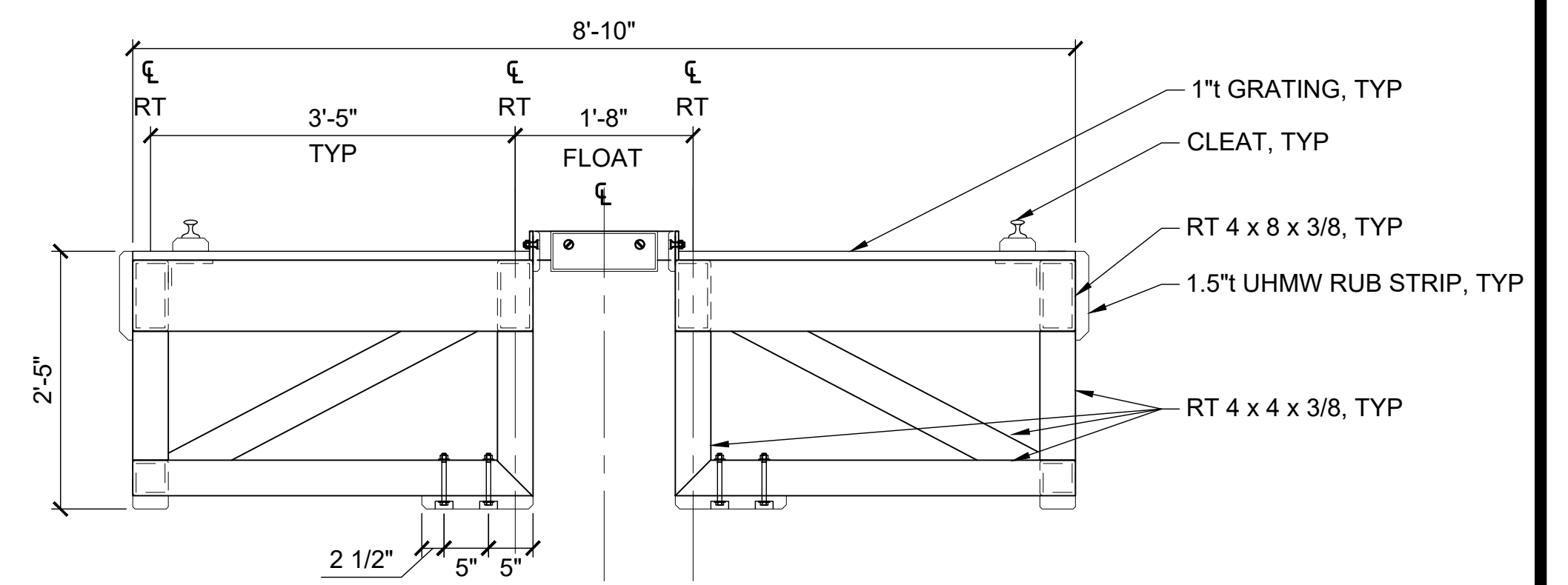
1. ALL JOINTS SHALL BE WELDED WITH 1/4" FILLET WELDS OR EQUIVALENT BEVEL WELDS UNO.
2. PROVIDE ELECTRIC ISOLATION BETWEEN ALL DISSIMILAR METALS.



3 FLOAT SECTION
27 NTS



4 TYPICAL FLOAT END ELEVATION
27 NTS



5 FLOAT END ELEVATION AT PILE HOOP
27 NTS



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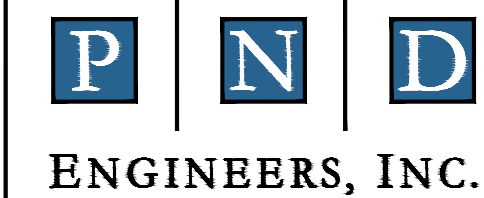
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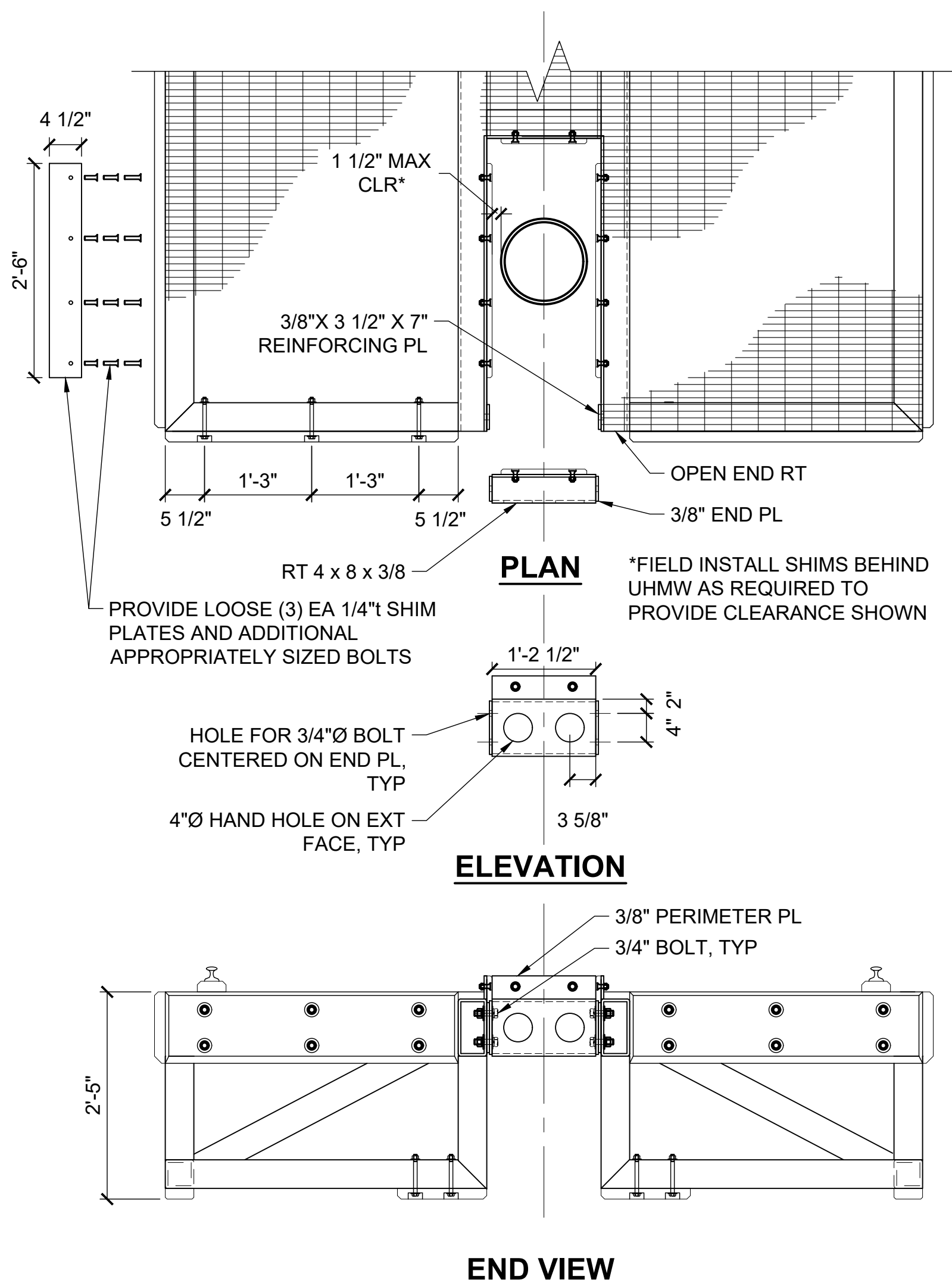


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

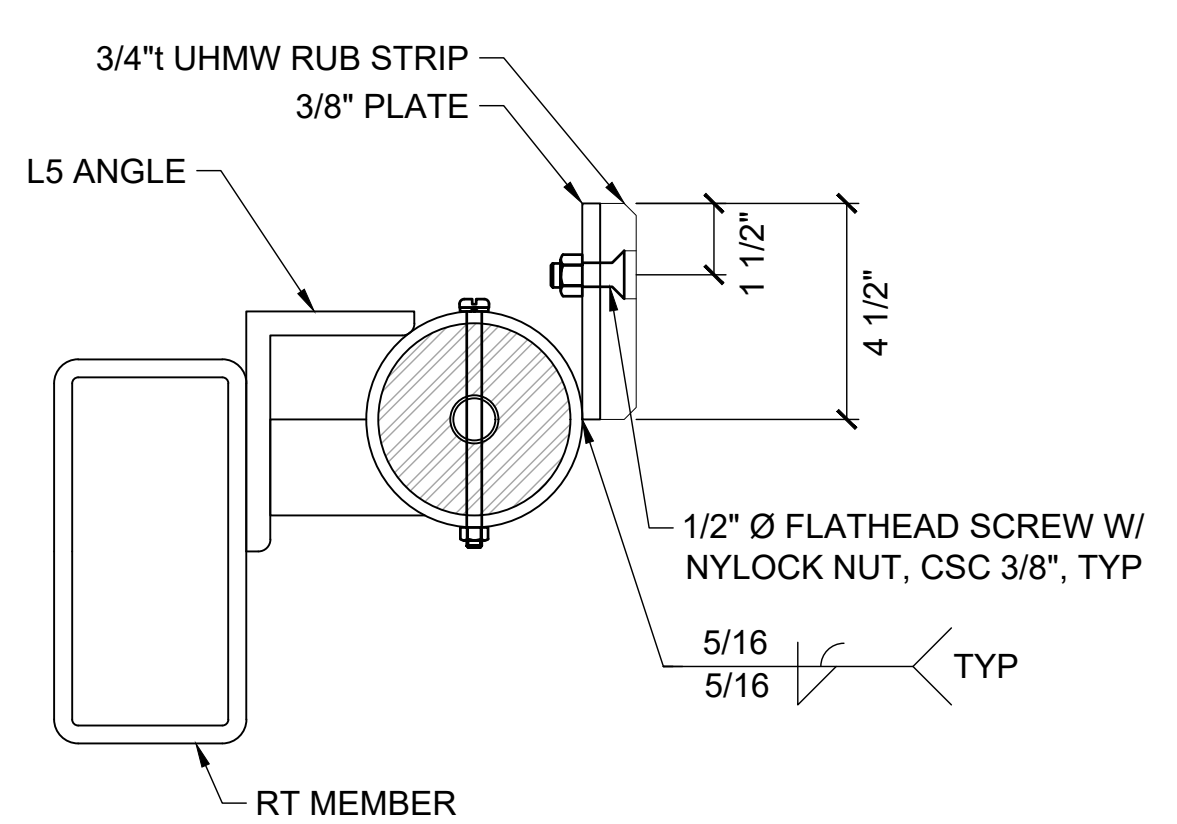
TITLE: **FLOAT DETAILS**

DESIGNED BY:	PK	DATE:	6/26/26	SHEET NO: 27 OF 63
CHECKED BY:	CC	PROJECT NO:	251029	

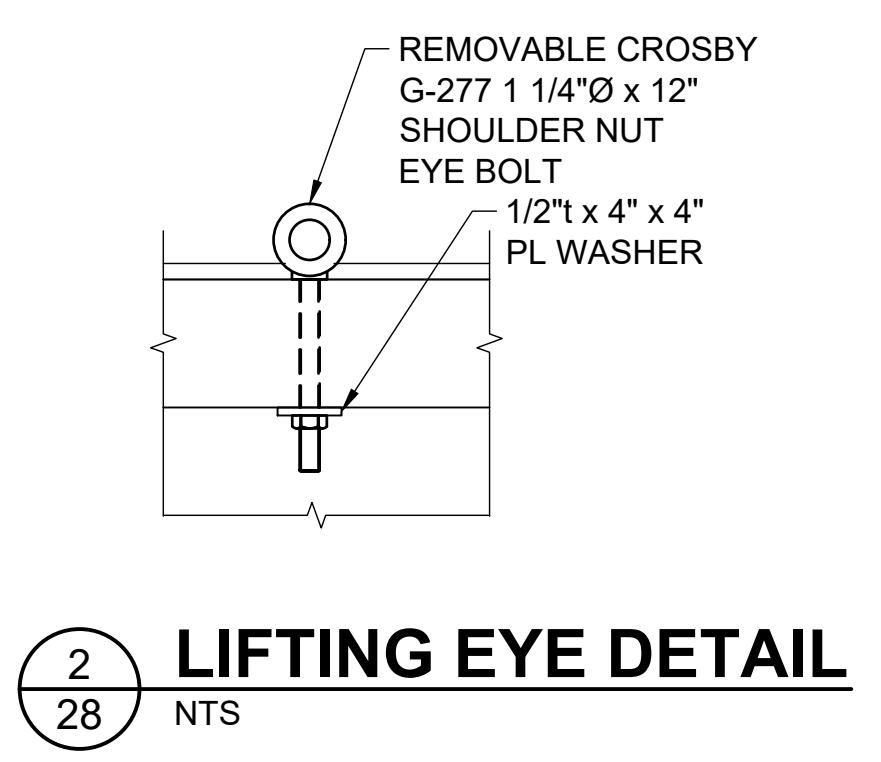
6/2/26 - B.AMISON - J120251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\26-28 - Float Details.dwg



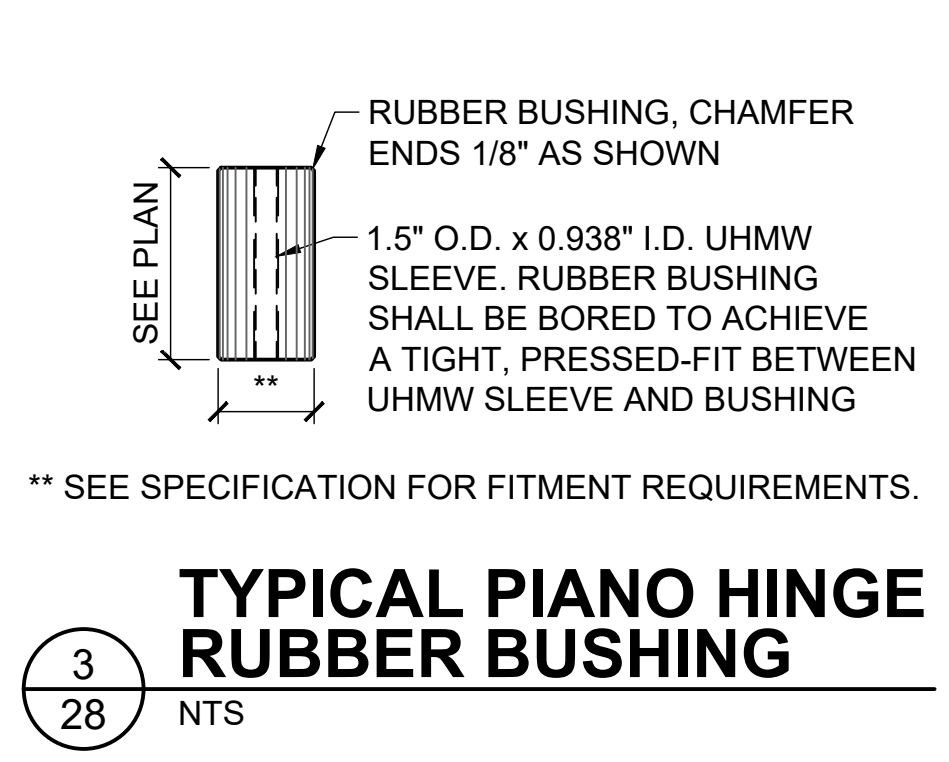
1 PILE HOOP GATE DETAIL
28 NTS



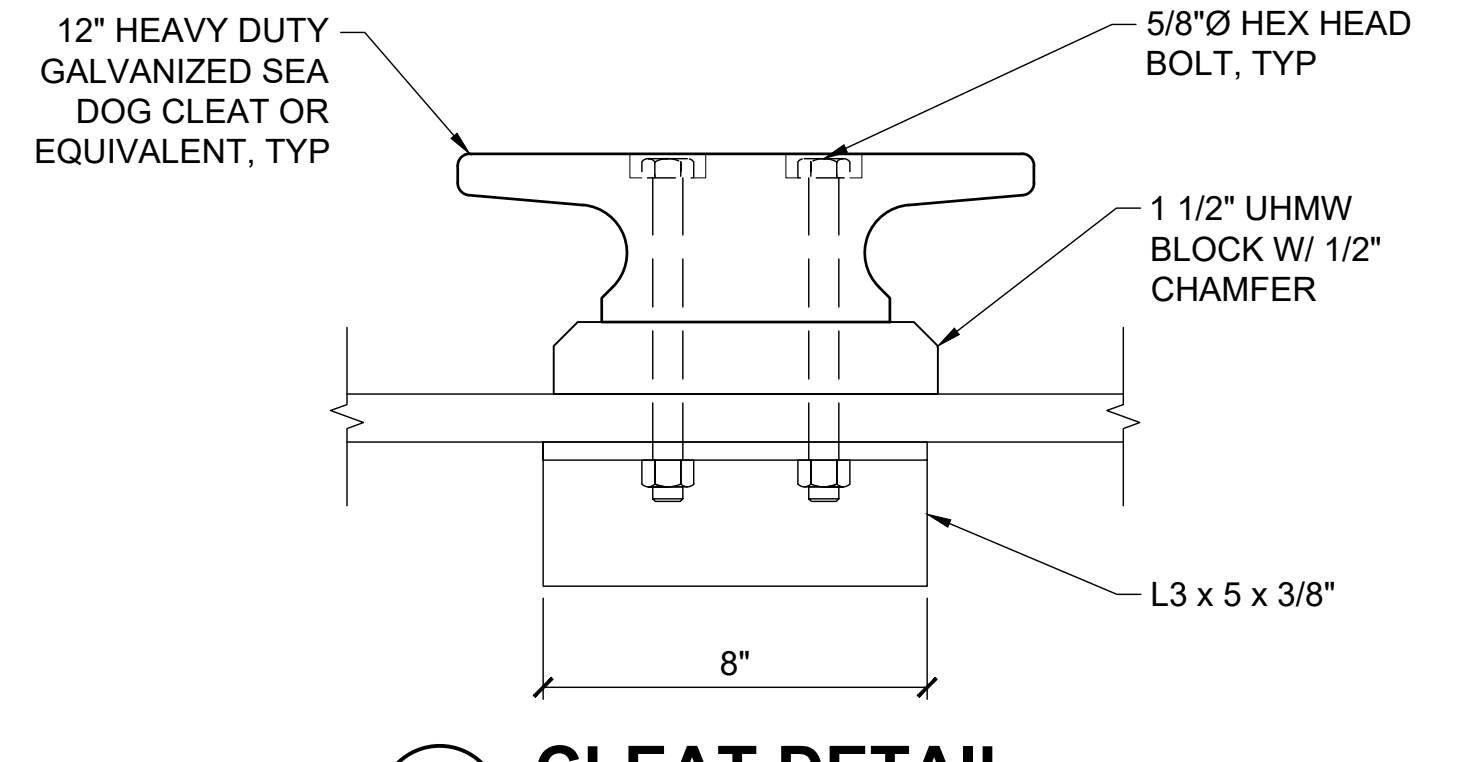
7 UHMW CONNECTION AT HINGE DETAIL
28 NTS



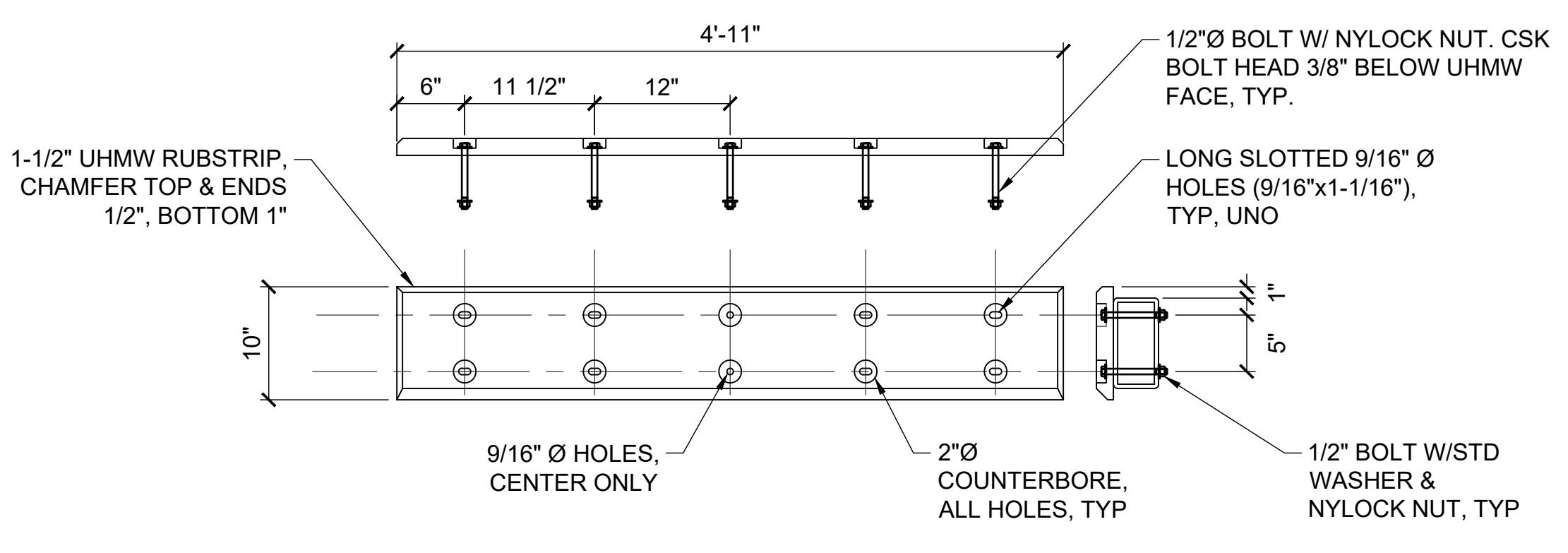
2 LIFTING EYE DETAIL
28 NTS



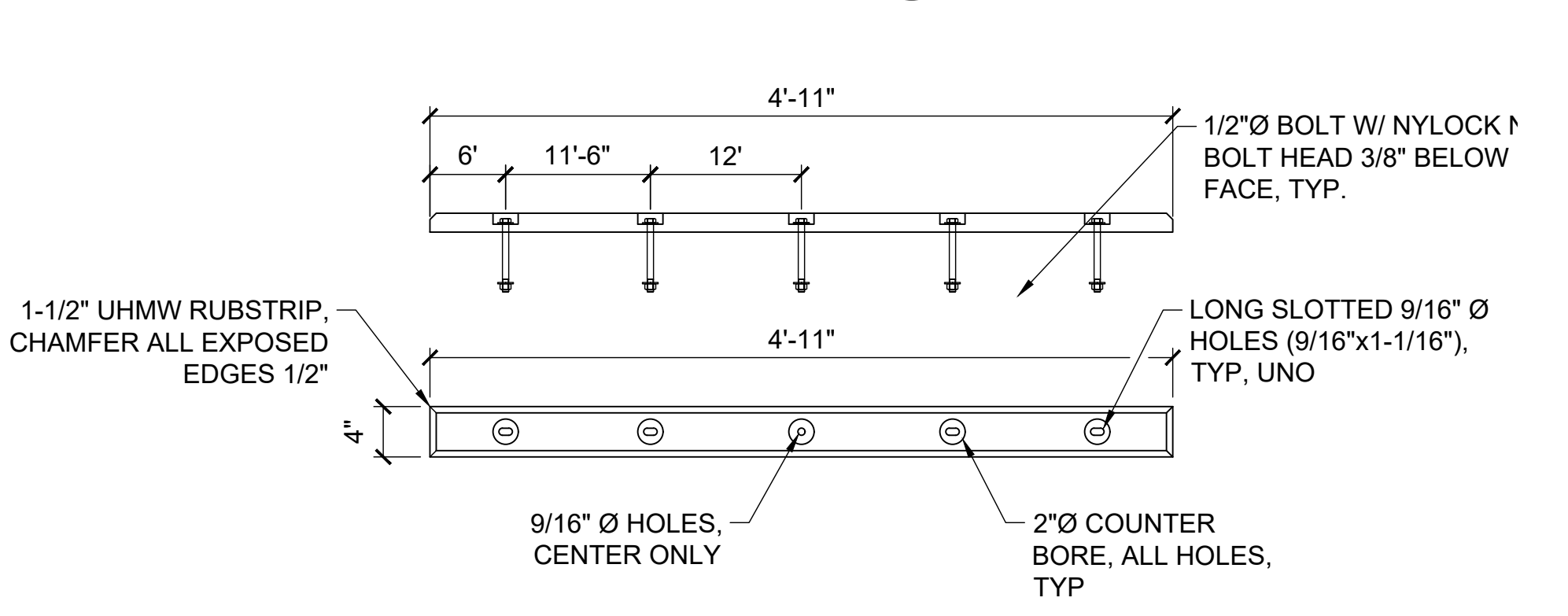
3 TYPICAL PIANO HINGE RUBBER BUSHING
28 NTS



4 CLEAT DETAIL
28 NTS

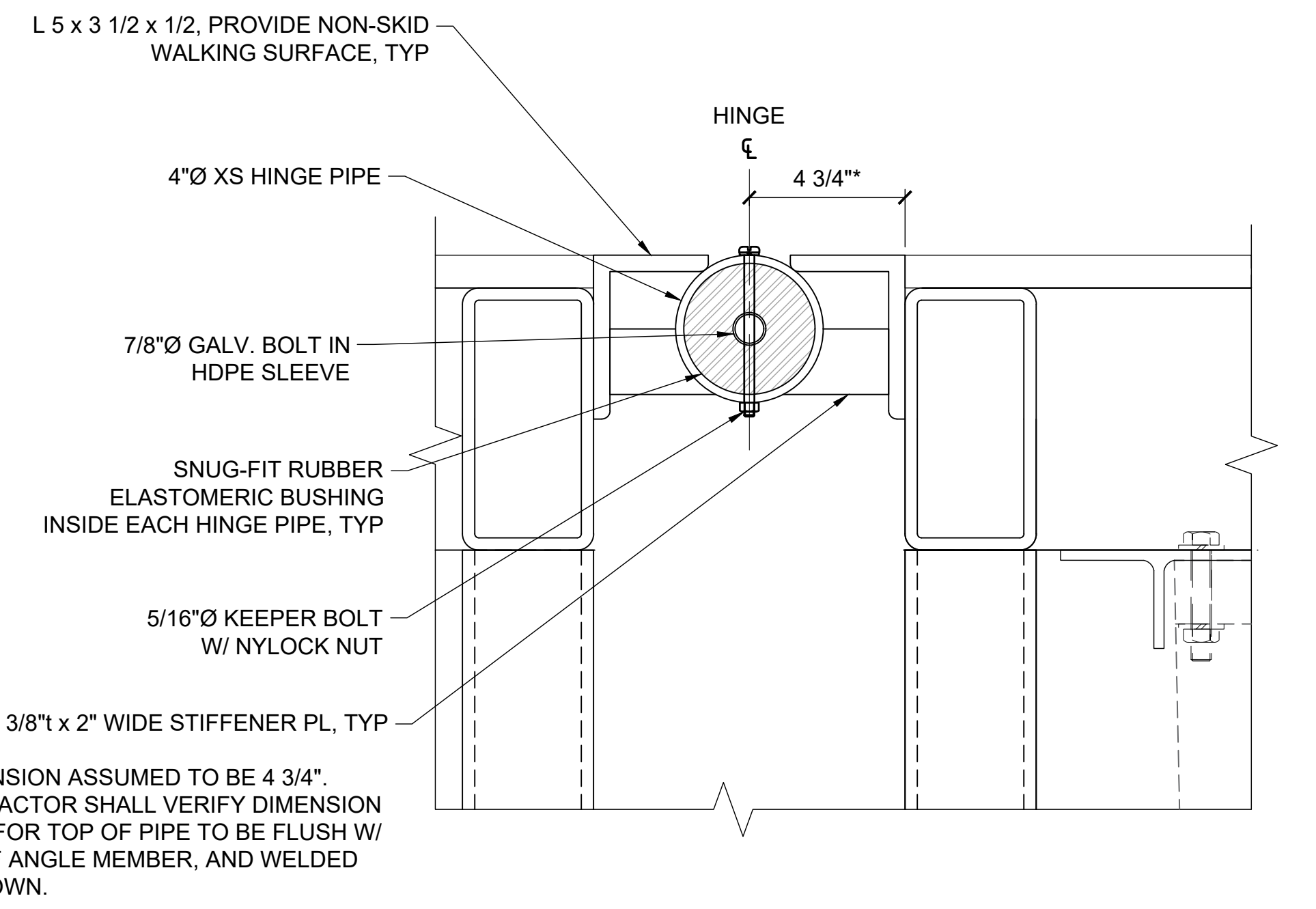


5 RUB STRIP DETAILS
28 NTS

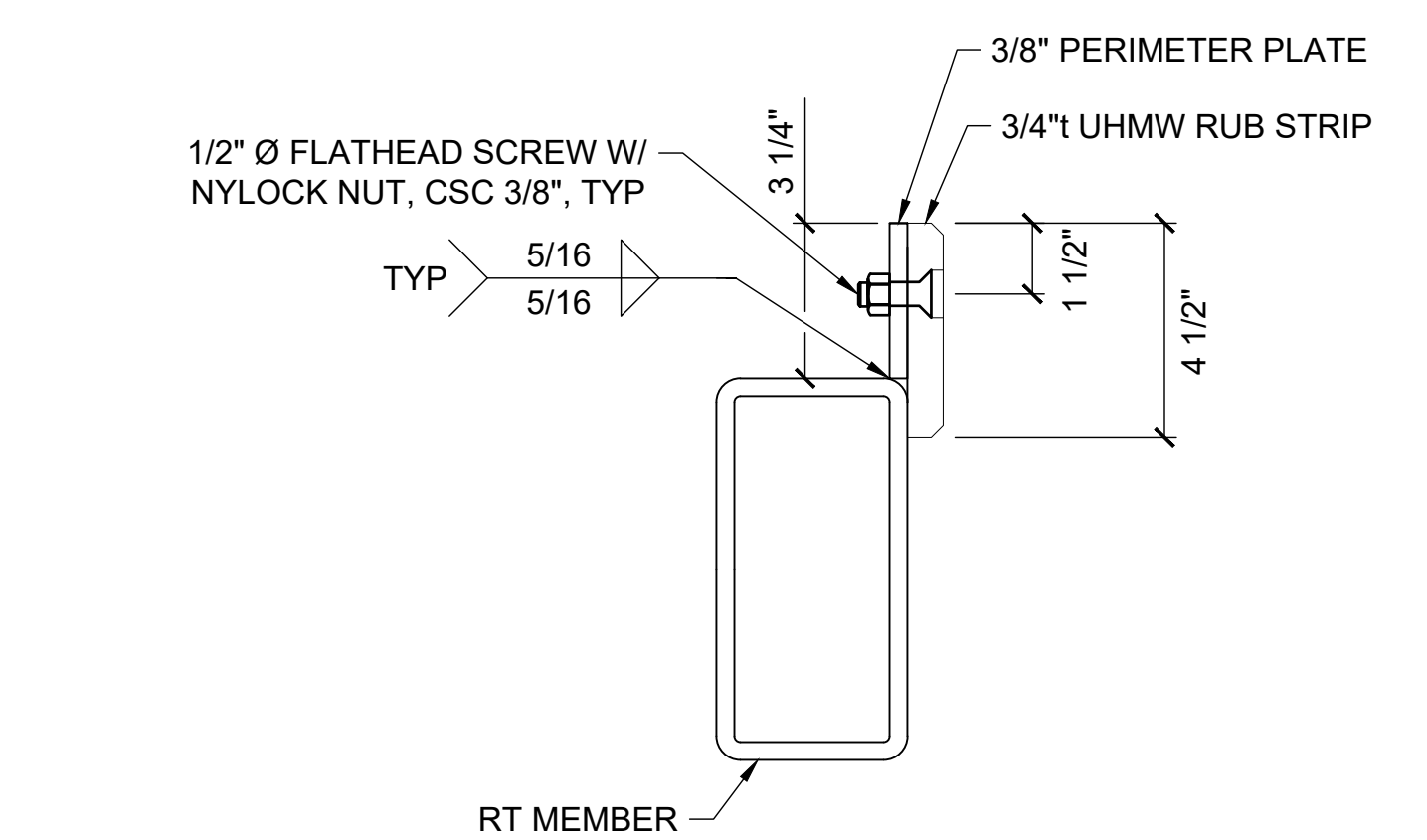


6 LANDING SKID DETAIL
28 NTS

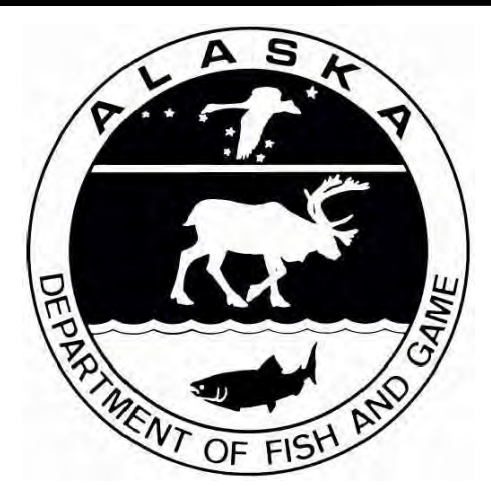
- SHEET NOTES:**
1. ALL JOINTS ARE TO BE WELDED WITH 1/4" FILLET WELDS OR EQUIVALENT BEVEL WELDS UNO.
 2. ALL MATERIAL ALUMINUM UNO.
 3. PROVIDE ELECTRIC ISOLATION BETWEEN ALL DISSIMILAR METALS.



9 PIANO HINGE DETAIL
28 NTS



8 UHMW CONNECTION AT HOOP DETAIL
28 NTS



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REV	DATE	DESCRIPTION

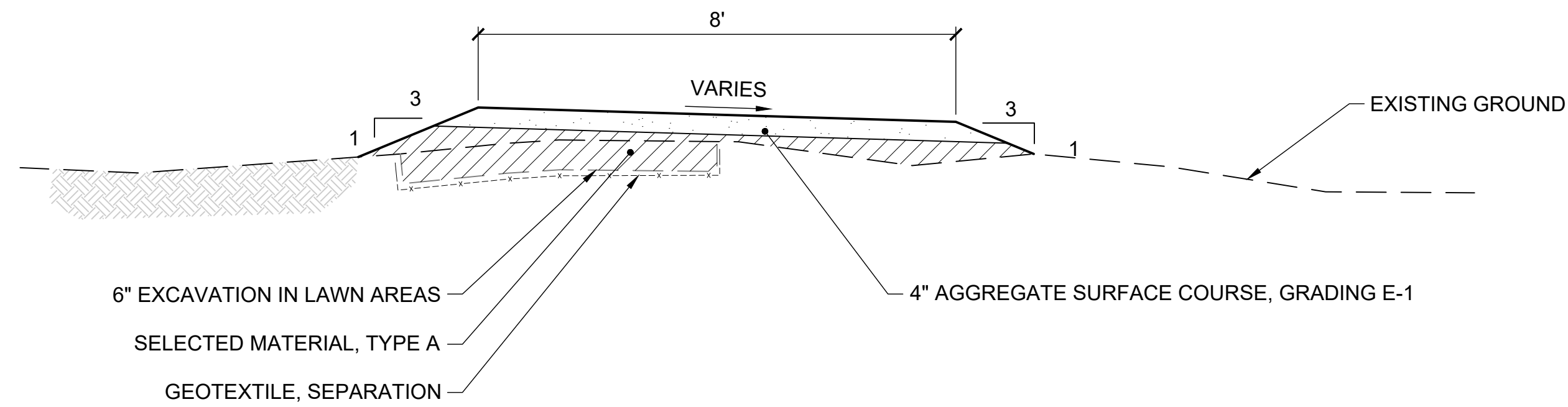


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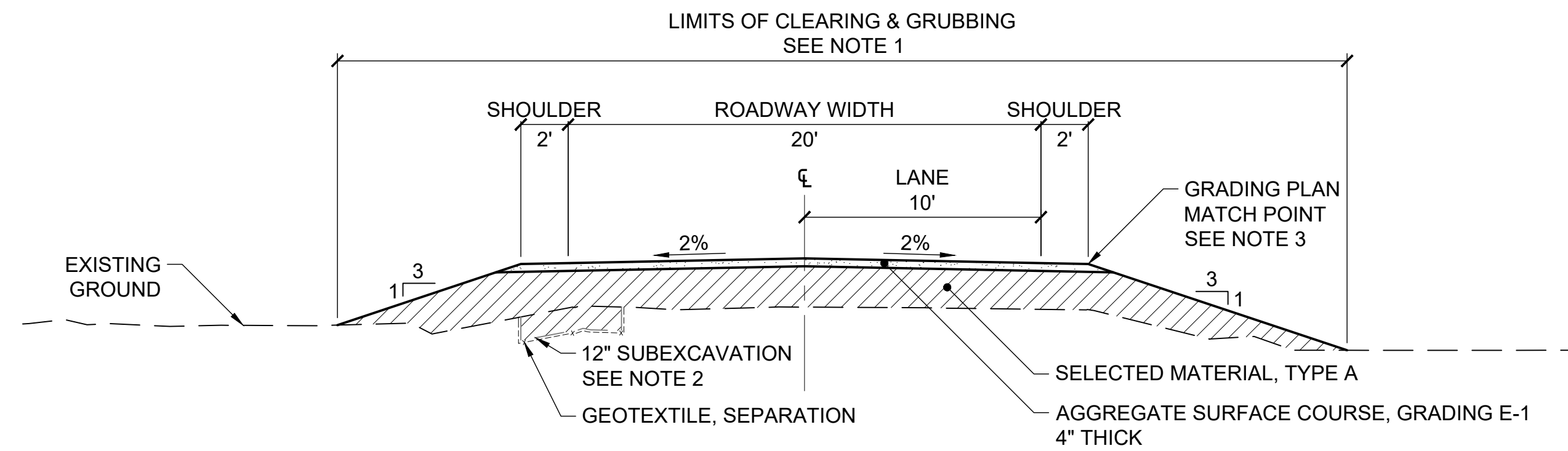
P | N | D
ENGINEERS, INC.

PROJECT:		SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE:		FLOAT DETAILS	
DESIGNED BY:	PK	DATE:	6/26/26
CHECKED BY:	CC	PROJECT NO.:	251029
SHEET NO.:			28 OF 63

6/1/26 - CROSS - 1:2025/05/029 Susitna Landing Boat Launch & Facility Renovation(C, Drawings\Civil\29-30 - Site Sections.dwg



1 PEDESTRIAN PATHWAY TYPICAL SECTION
SCALE: 1" = 2'



NOTES:

1. LIMIT EXTENTS OF CLEARING AND GRUBBING TO THE MINIMUM REQUIRED TO COMPLETE CONSTRUCTION.
2. WHERE NEW ROADWAY EXTENDS BEYOND EXISTING ROADWAY FOOTPRINT, EXCAVATE 12" BELOW EXISTING GROUND, PLACE GEOTEXTILE, AND BACKFILL WITH SELECTED MATERIAL, TYPE A. ENSURE SELECTED MATERIAL, TYPE A IS A MINIMUM OF 20" THICK IN THESE AREAS.
3. AT GRADING PLAN MATCH POINT, OMIT THE FILL SLOPE AND MATCH GRADING PROVIDED IN THE GRADING PLAN. SEE SHEETS 14 & 15 FOR GRADING PLAN

2 TYPICAL ROAD SECTION
STA 101+37.00 TO STA 104+59.96



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6/26/2026

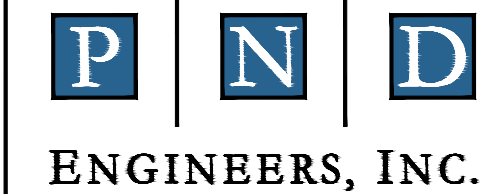
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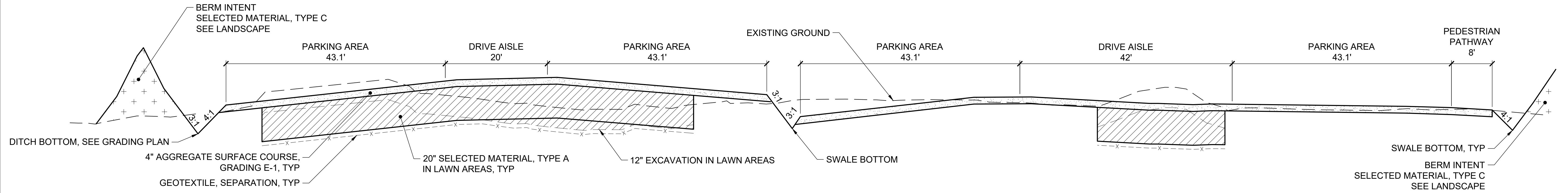


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

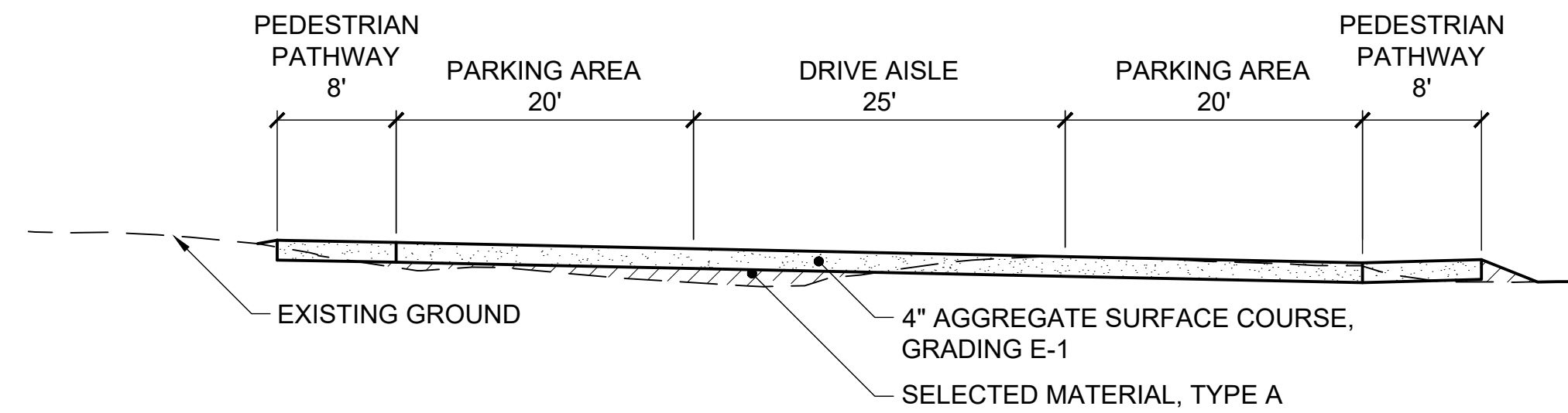
TITLE: TYPICAL SECTIONS

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 29	OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029		

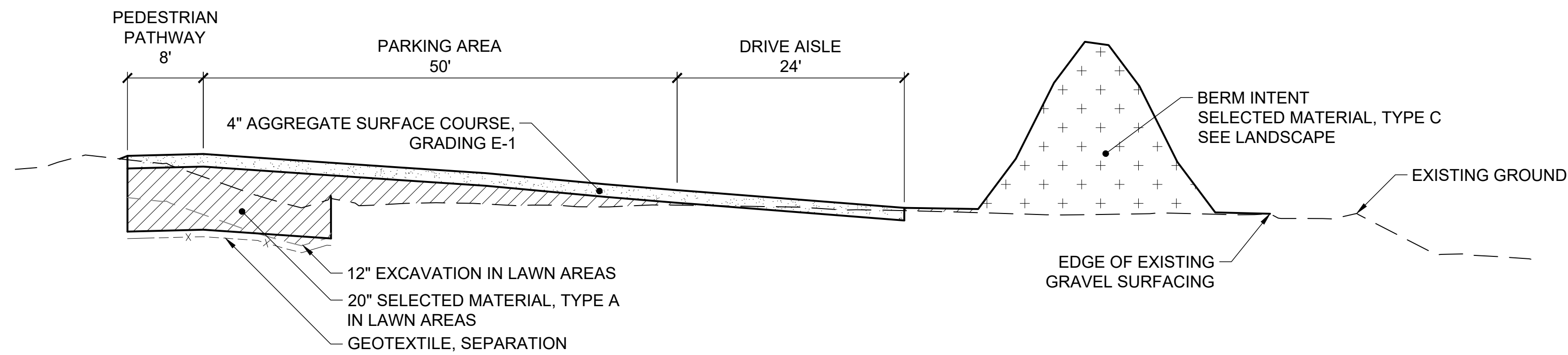
6/1/26 - CROSS - 1:2025/05/029 Susitna Landing Boat Launch & Facility Renovation(C, Drawings\Civil\29-30 - Site Sections.dwg



1 BOAT LAUNCH PARKING SECTION
SCALE: H: 1"=10', V: 1"=2.5'



2 DAY USE PARKING SECTION
SCALE: H: 1"=10', V: 1"=2.5'



3 DAY USE PARKING SECTION
SCALE: H: 1"=10', V: 1"=2.5'



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6/26/2026

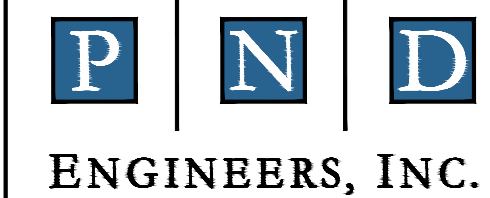
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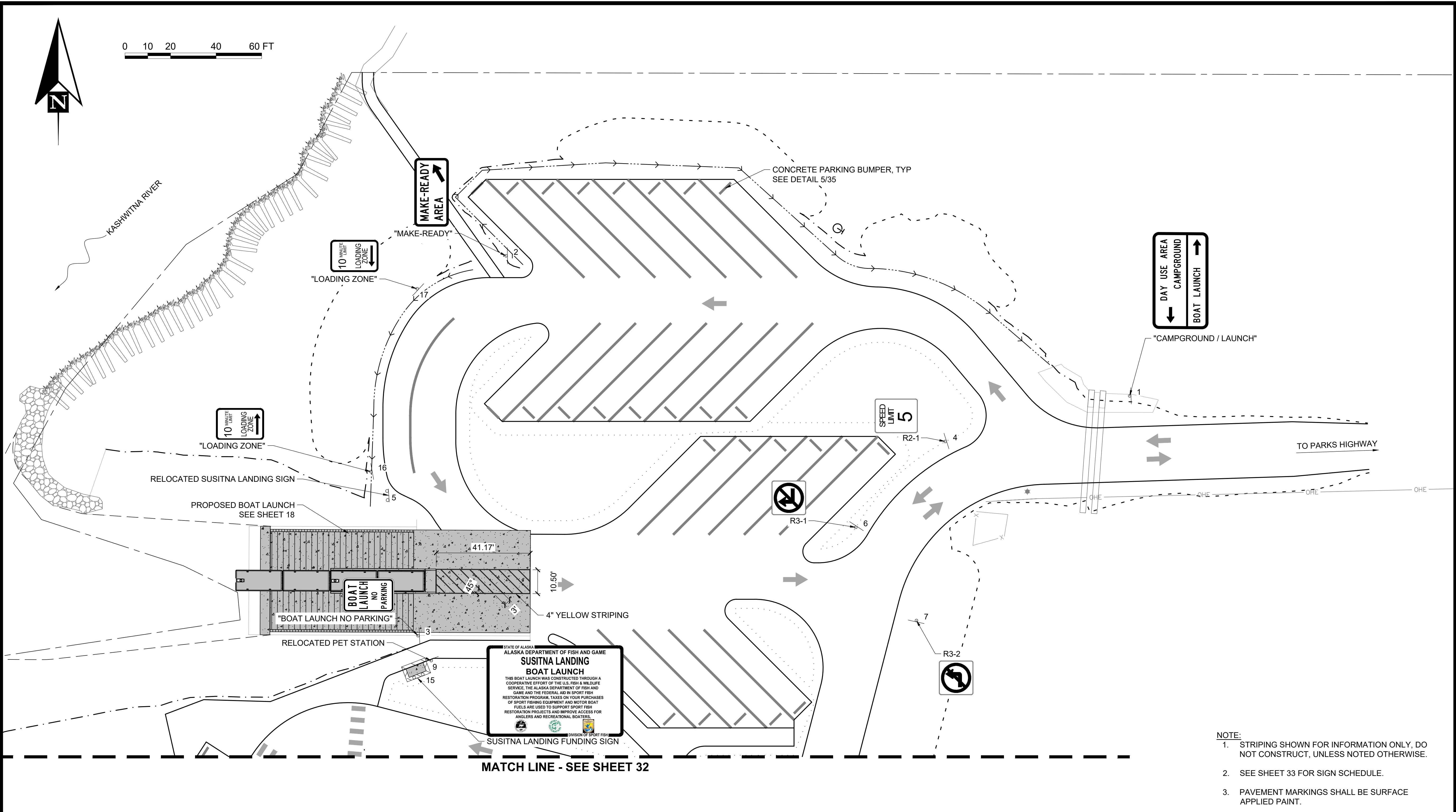
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **SITE SECTIONS**

DESIGNED BY:	OTR	DATE:	6/26/26
CHECKED BY:	AWJ	PROJECT NO.:	251029

SHEET NO: **30** OF 63

6/2/26 - OROHLER - 1\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\31-33 - Striping & Signing Plan.dwg



- NOTE:**
1. STRIPING SHOWN FOR INFORMATION ONLY, DO NOT CONSTRUCT, UNLESS NOTED OTHERWISE.
 2. SEE SHEET 33 FOR SIGN SCHEDULE.
 3. PAVEMENT MARKINGS SHALL BE SURFACE APPLIED PAINT.

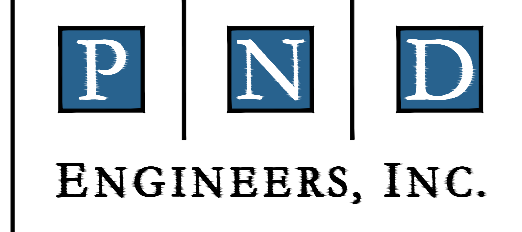


ISSUED FOR BID
6/26/2026

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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION
TITLE: **SIGN & STRIPING PLAN**

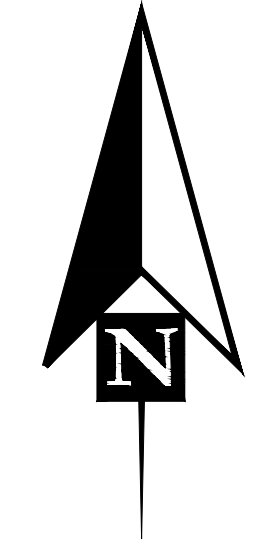
REV	DATE	DESCRIPTION

DATE: 6/26/2026

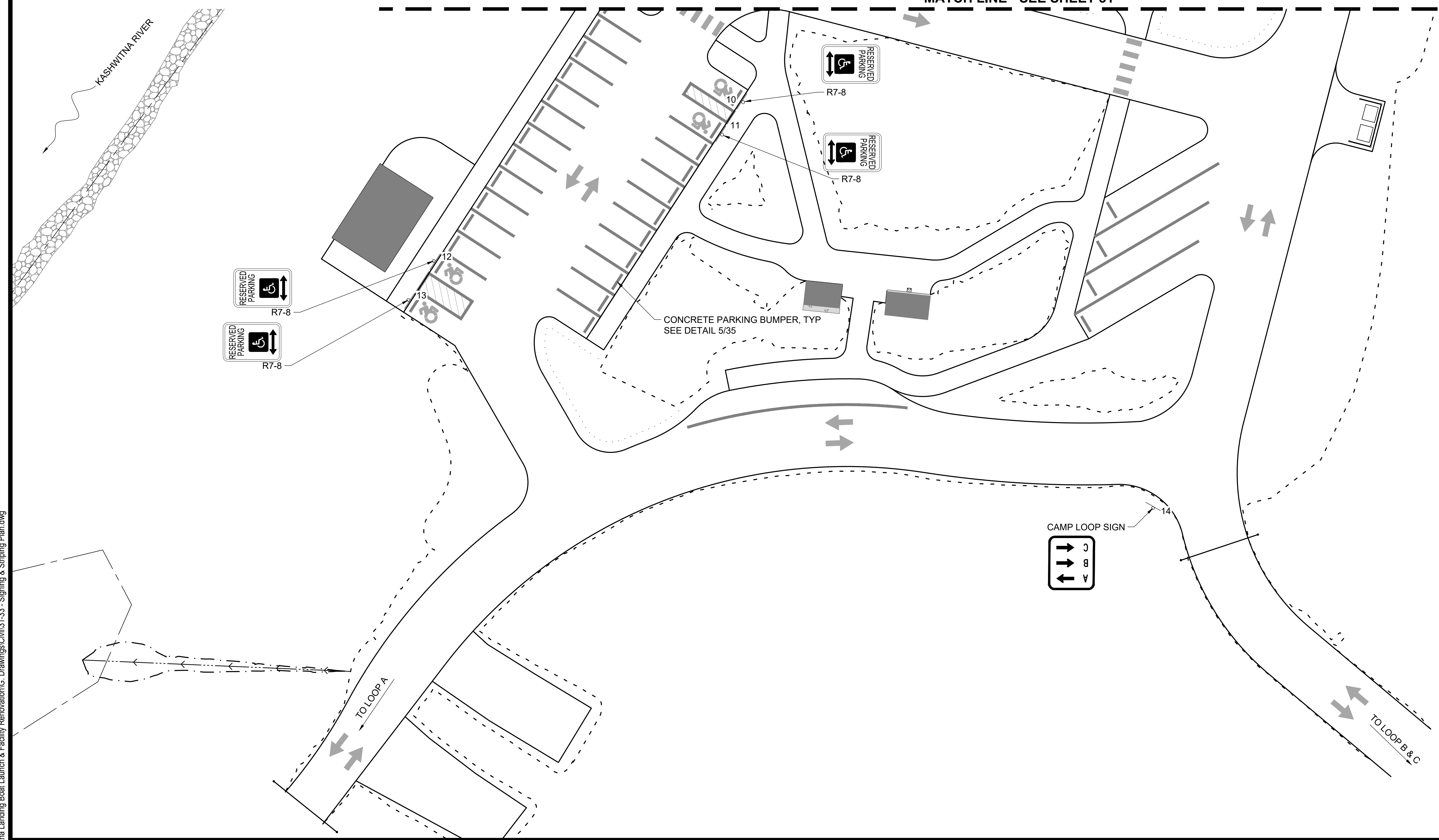
DESIGNED BY: OTR DATE: 6/26/26
CHECKED BY: AWJ PROJECT NO: 251029

SHEET NO: **31** OF 63

MATCH LINE - SEE SHEET 31



- NOTES:**
1. STRIPING SHOWN FOR INFORMATION ONLY, DO NOT CONSTRUCT.
 2. SEE SHEET 33 FOR SIGN SCHEDULE.



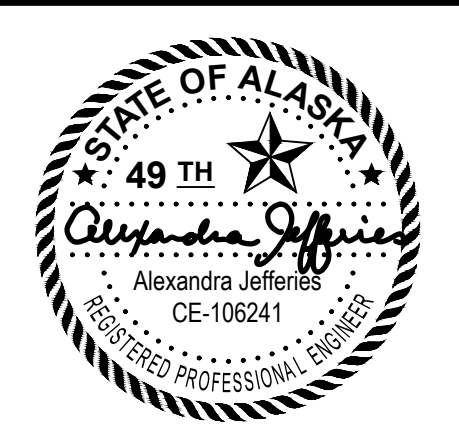
6/2/26 - OROHLER - I:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\31-33 - Striping & Signing Plan.dwg



ISSUED FOR BID
6/26/2026

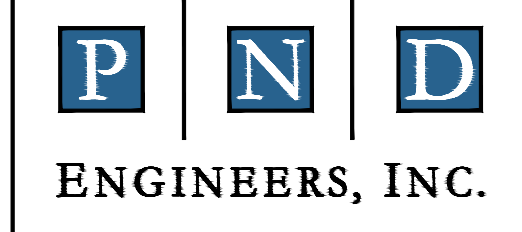
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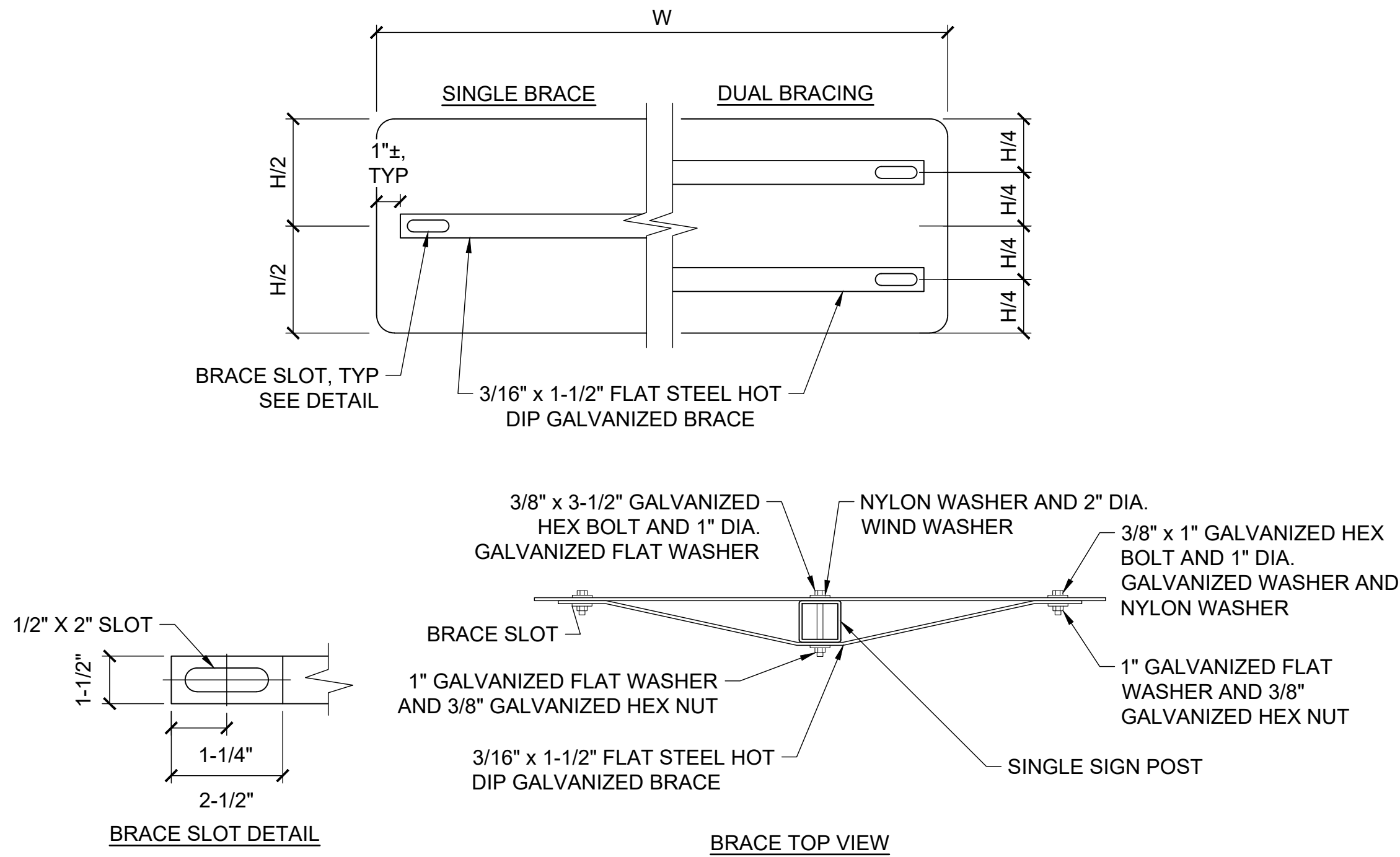


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION
TITLE: **SIGN & STRIPING PLAN**

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 32 OF 63
CHECKED BY:	AWJ	PROJECT NO.:	251029	

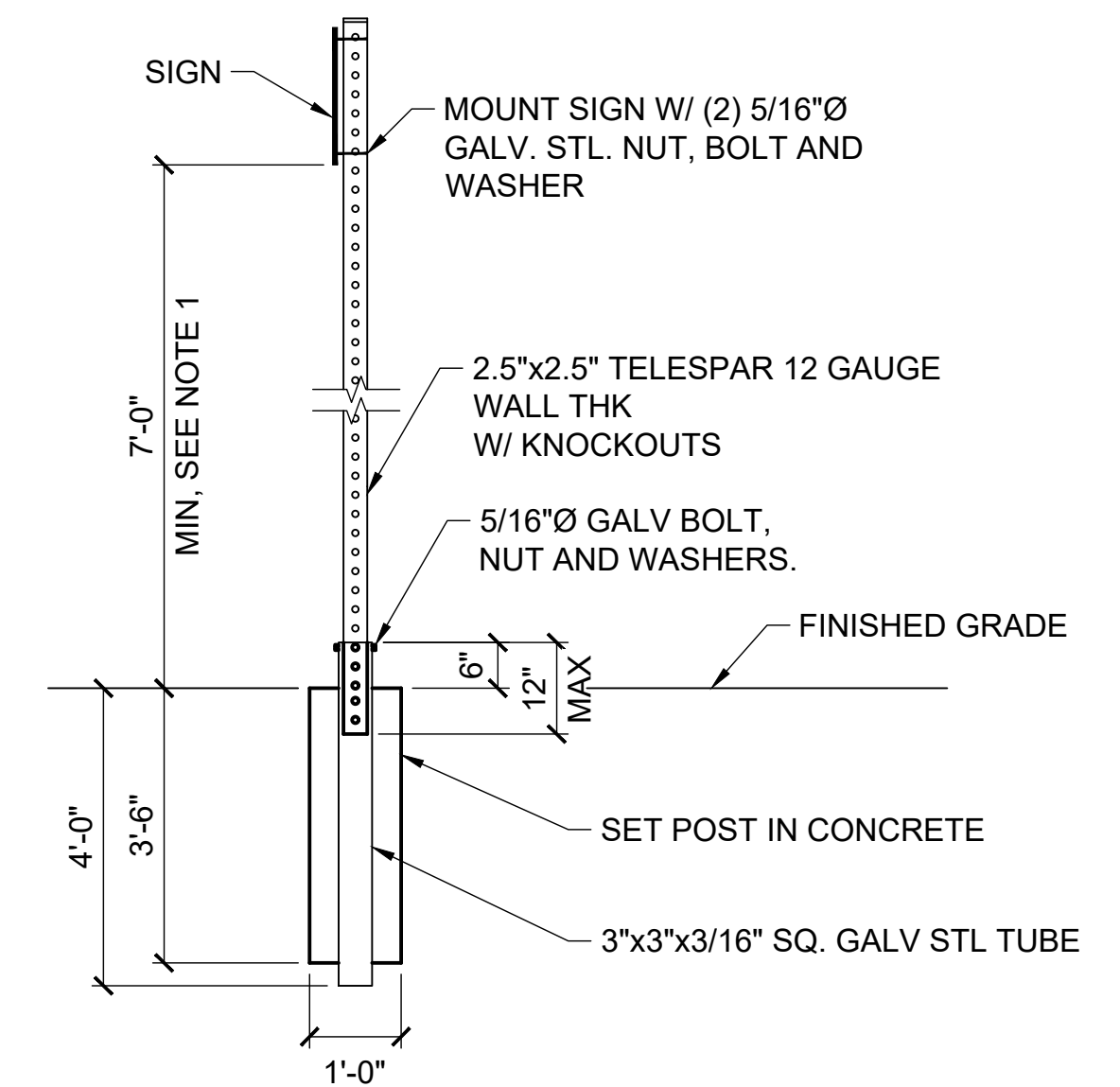
SIGN SCHEDULE						
SIGN / POST ID	NORTHING	EASTING	SIGN NAME / NUMBER	NEW OR REUSED	SIZE	NO. OF POSTS
1	2,891,257.42	1,623,675.89	CAMPGROUND/LAUNCH	NEW	42"x18"	SINGLE
2	2,891,318.94	1,623,402.15	MAKE-READY	NEW	12"x24"	SINGLE
3	2,891,152.12	1,623,363.52	BOAT LAUNCH NO PARKING	NEW	12"x18"	SINGLE
4	2,891,237.42	1,623,594.91	R2-1	NEW	18"x24"	SINGLE
5	2,891,213.71	1,623,350.68	SUSITNA LANDING	REUSE	-	DOUBLE*****
6	2,891,199.71	1,623,555.66	R3-1	NEW	24"x24"	SINGLE
7	2,891,158.80	1,623,582.30	R3-2	NEW	24"x24"	SINGLE
9	2,891,141.16	1,623,369.30	PET STATION	REUSE	-	SINGLE
10	2,891,062.78	1,623,321.54	R7-8	OWNER PROVIDED	-	SINGLE
11	2,891,050.20	1,623,313.37	R7-8	OWNER PROVIDED	-	SINGLE
12	2,891,001.20	1,623,201.56	R7-8	OWNER PROVIDED	-	SINGLE
13	2,890,986.11	1,623,191.75	R7-8	OWNER PROVIDED	-	SINGLE
14	2,890,905.38	1,623,480.37	CAMP LOOP	NEW**	18"x21"	SINGLE
15	2,891,133.83	1,623,363.90	SUSITNA LANDING FUNDING	NEW	72"x48"	*****
16	2,891,224.15	1,623,342.79	LOADING ZONE	NEW	12"x18"	SINGLE
17	2,891,304.45	1,623,363.11	LOADING ZONE	NEW	12"x18"	SINGLE
18	2,890,538.01	1,622,921.58	R7-8***	OWNER PROVIDED	-	SINGLE
19	2,890,973.68	1,623,726.64	R7-8***	NEW	12"x18"	SINGLE
20	2,890,220.14	1,623,481.55	R7-8***	NEW	12"x18"	SINGLE

*PROVIDE NEW SIGN POSTS FOR OWNER PROVIDED SIGNS.
 **REUSE EXISTING SIGN POST.
 ***SIGNS FOR ADA CAMPSITES NOT SHOWN ON PLAN.
 ****SIGNS FOR VAULT TOILETS NOT SHOWN. SEE VAULT TOILET DETAILS.
 *****MOUNT SIGN ON THE BACKSIDE OF PAY KIOSK STRUCTURE.
 *****DOUBLE TIMBER POST MOUNTED. SEE DETAIL 3 THIS SHEET.



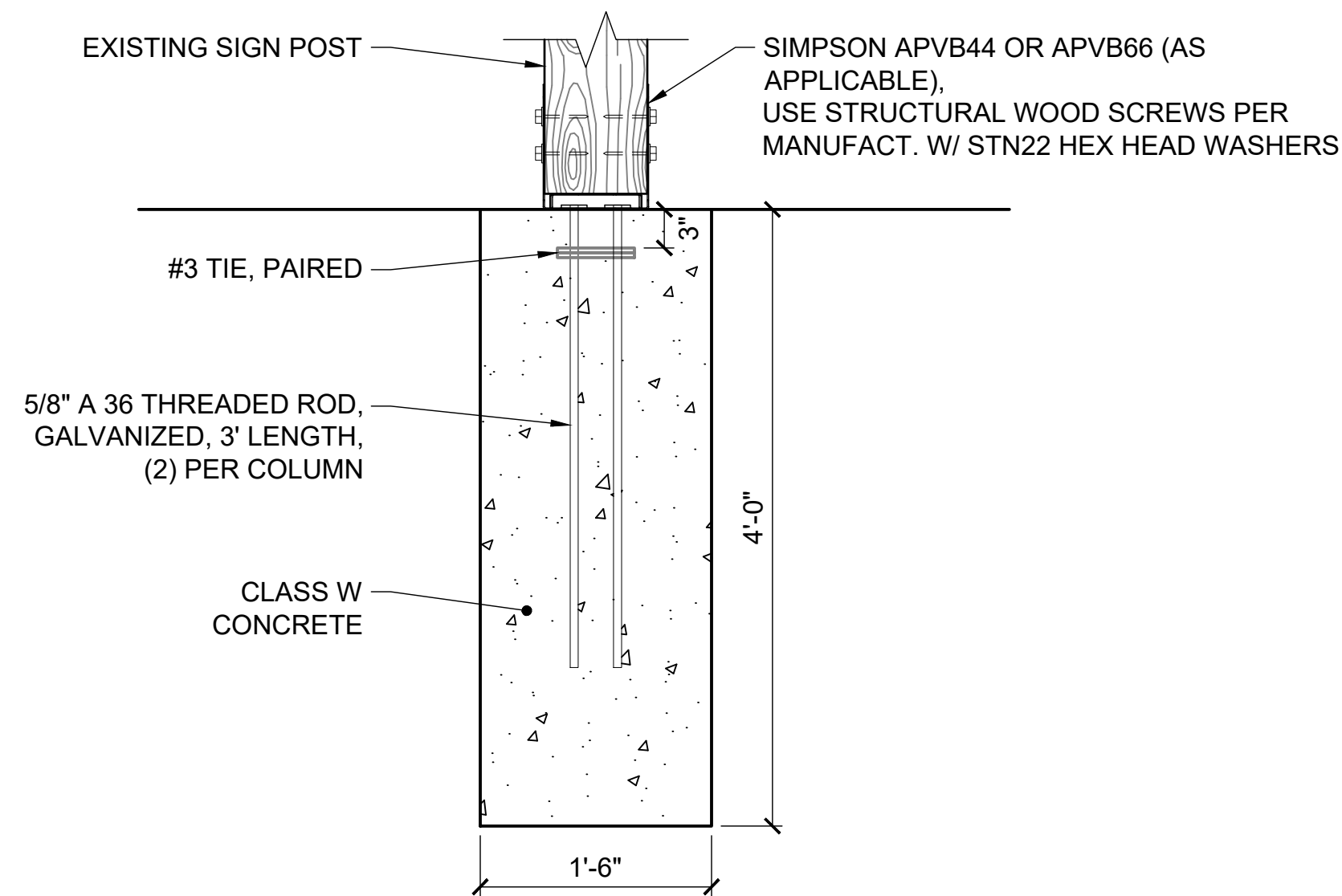
NOTE:
 BRACING IS REQUIRED WHEN $W \geq 30"$. USE A SINGLE BRACE WHEN $H \leq 18"$. USE TWO BRACES WHEN $H > 18"$.

1
33 NTS
SIGN BRACING DETAIL



NOTE:
 1. MEASURED FROM ADJACENT ROADWAY GRADE TO BOTTOM OF SIGN.
 2. SIGNS MAY BE MOUNTED ON OPPOSITE SIDES OF POST USING SAME NUT, BOLT, AND WASHER.

2
33 NTS
TYPICAL SIGN DETAIL



3
33 NTS
TYPICAL TIMBER SIGN POST DETAIL



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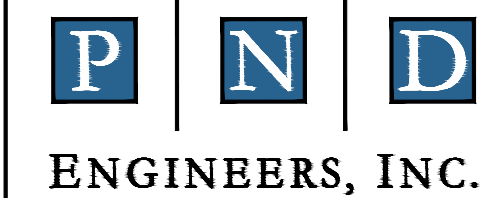
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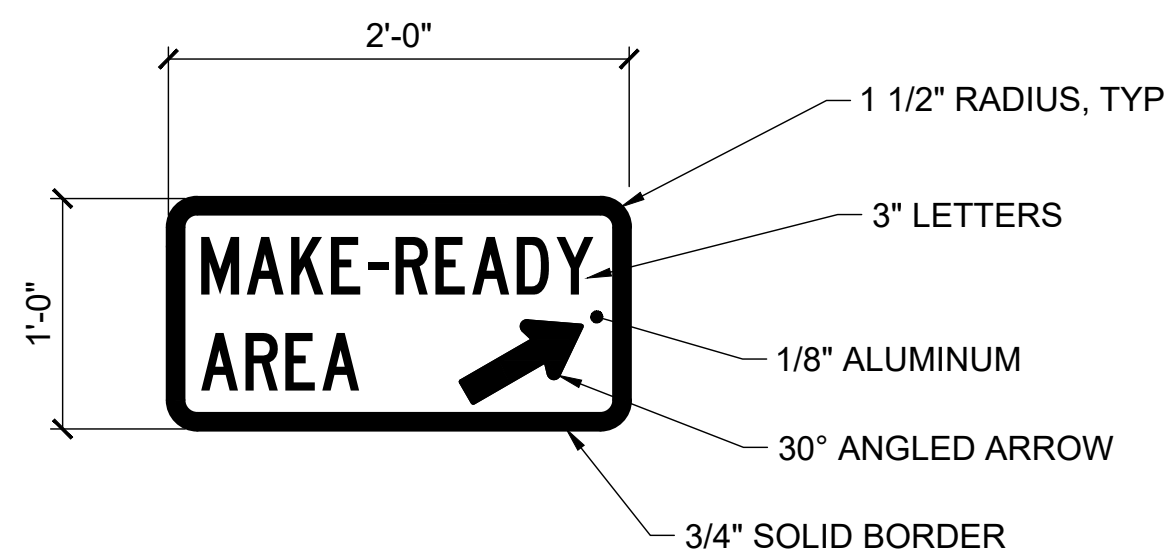
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

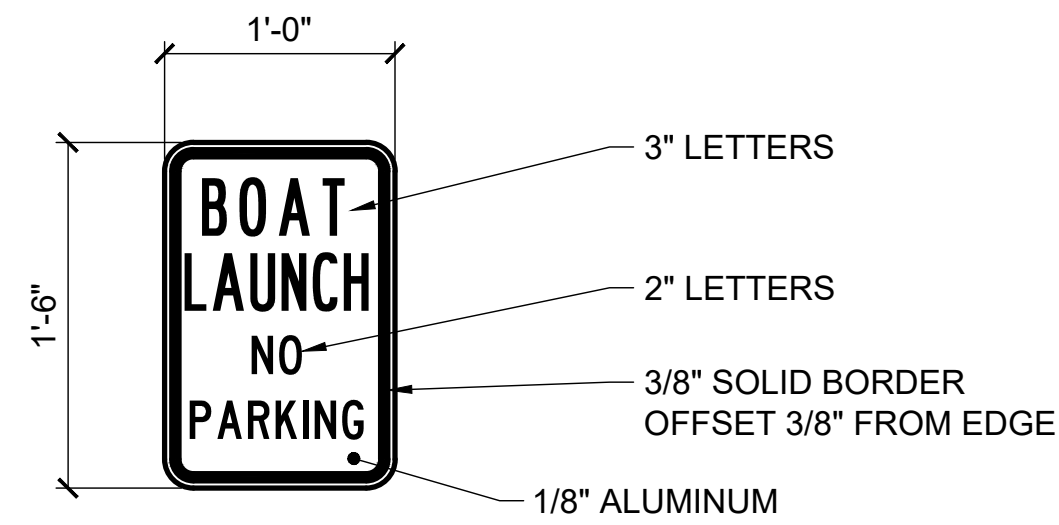
SIGN SCHEDULE

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 33 OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029	



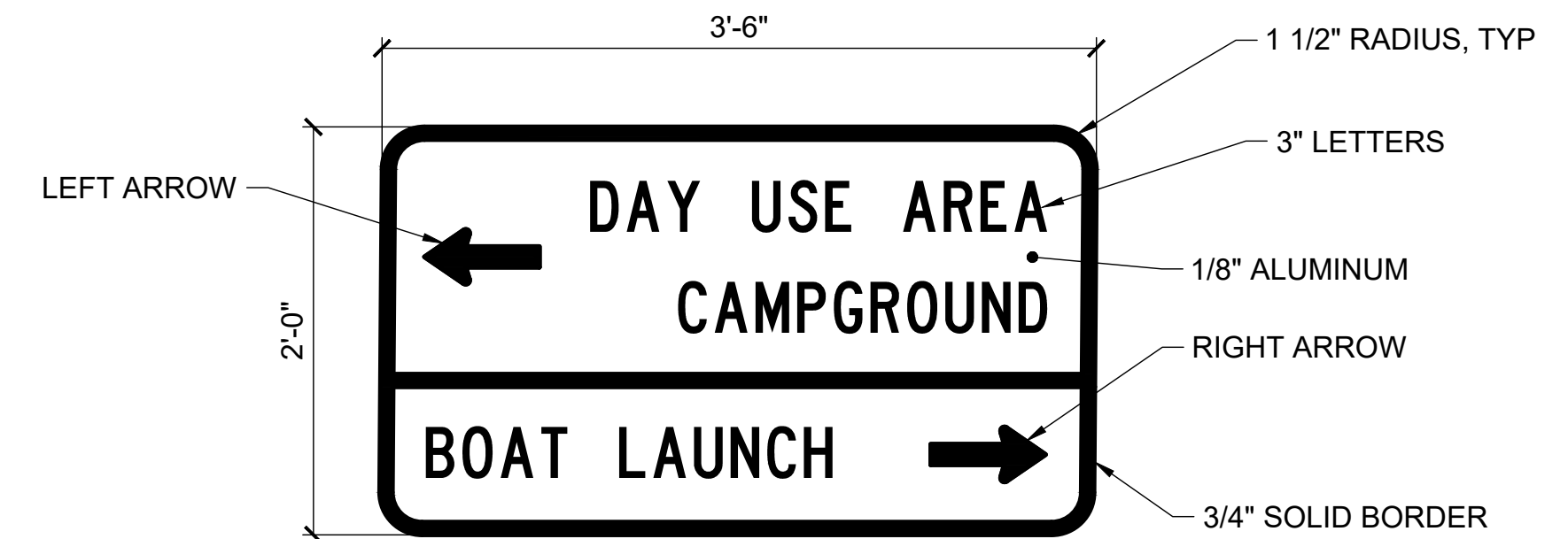
NOTE:
SIGN SHALL BE ALUMINUM WITH WHITE LETTERS ON BROWN BACKGROUND.

1
34 NTS **MAKE-READY SIGN**



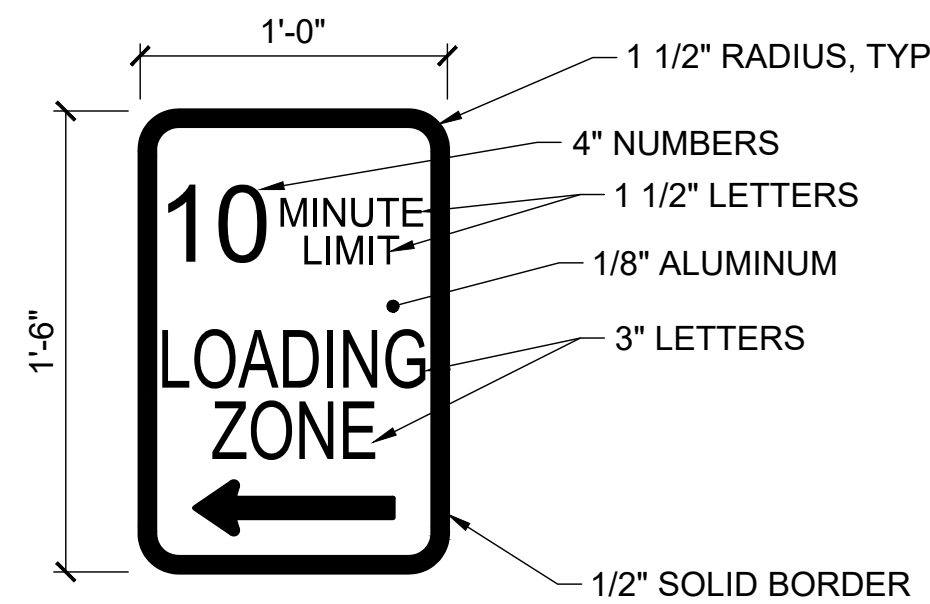
NOTE:
SIGN SHALL BE ALUMINUM WITH RED LETTERS ON WHITE BACKGROUND.

2
34 NTS **BOAT LAUNCH NO PARKING SIGN**



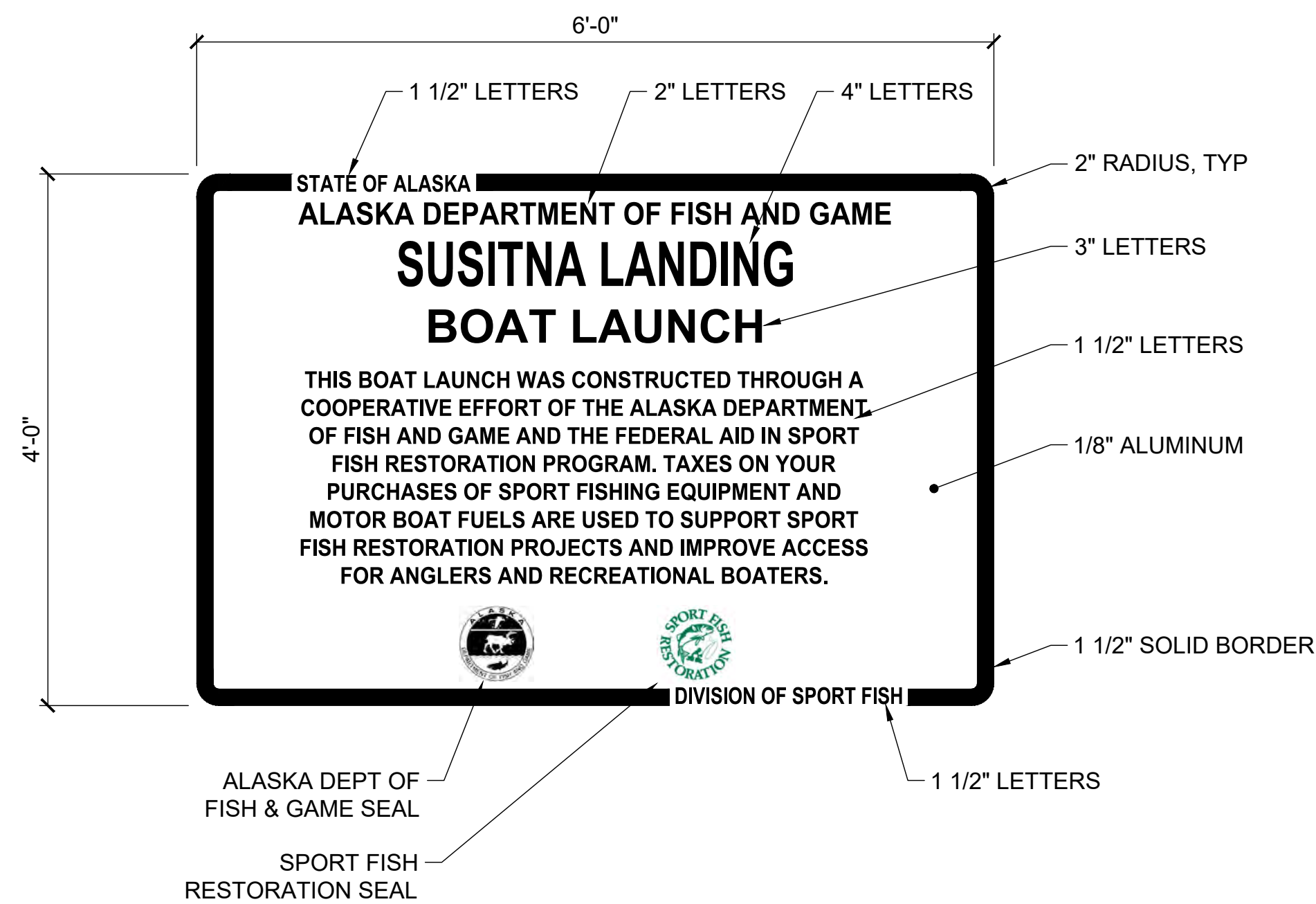
NOTE:
SIGN SHALL BE ALUMINUM WITH WHITE LETTERS ON BROWN BACKGROUND.

3
34 NTS **CAMPGROUND BOAT LAUNCH SIGN**



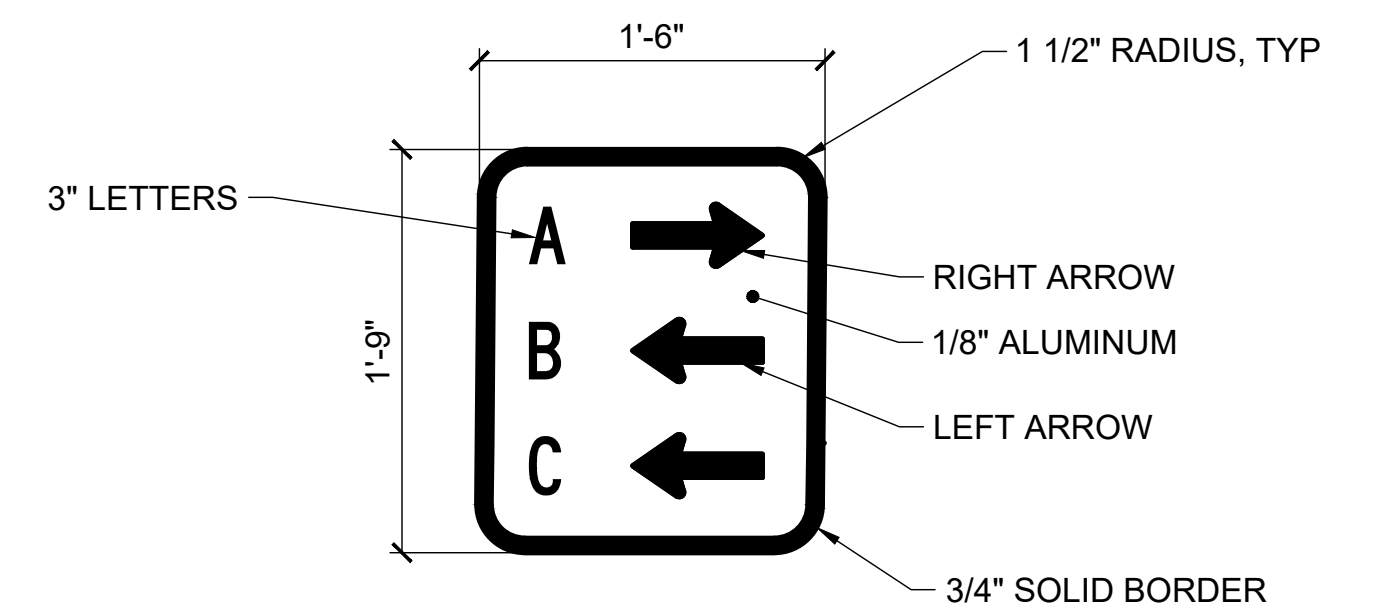
NOTES:
1. SIGN SHALL BE ALUMINUM WITH RED LETTERS ON WHITE BACKGROUND.
2. ONLY ONE SIGN CONFIGURATION SHOWN IN DETAIL. MATCH ARROWS TO THOSE SHOWN ON PLAN.

4
34 NTS **LOADING ZONE SIGN**



NOTE:
SIGN SHALL BE ALUMINUM WITH WHITE LETTERS ON GREEN BACKGROUND.

5
34 NTS **SUSITNA LANDING FUNDING SIGN**



NOTE:
SIGN SHALL BE ALUMINUM WITH BLACK LETTERS ON WHITE BACKGROUND.

6
34 NTS **CAMPGROUND LOOP SIGN**

6/1/26 - CROHLER - 1\2025\25\029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\34 - Signing and Striping Details.dwg



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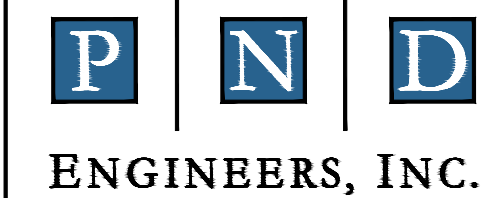
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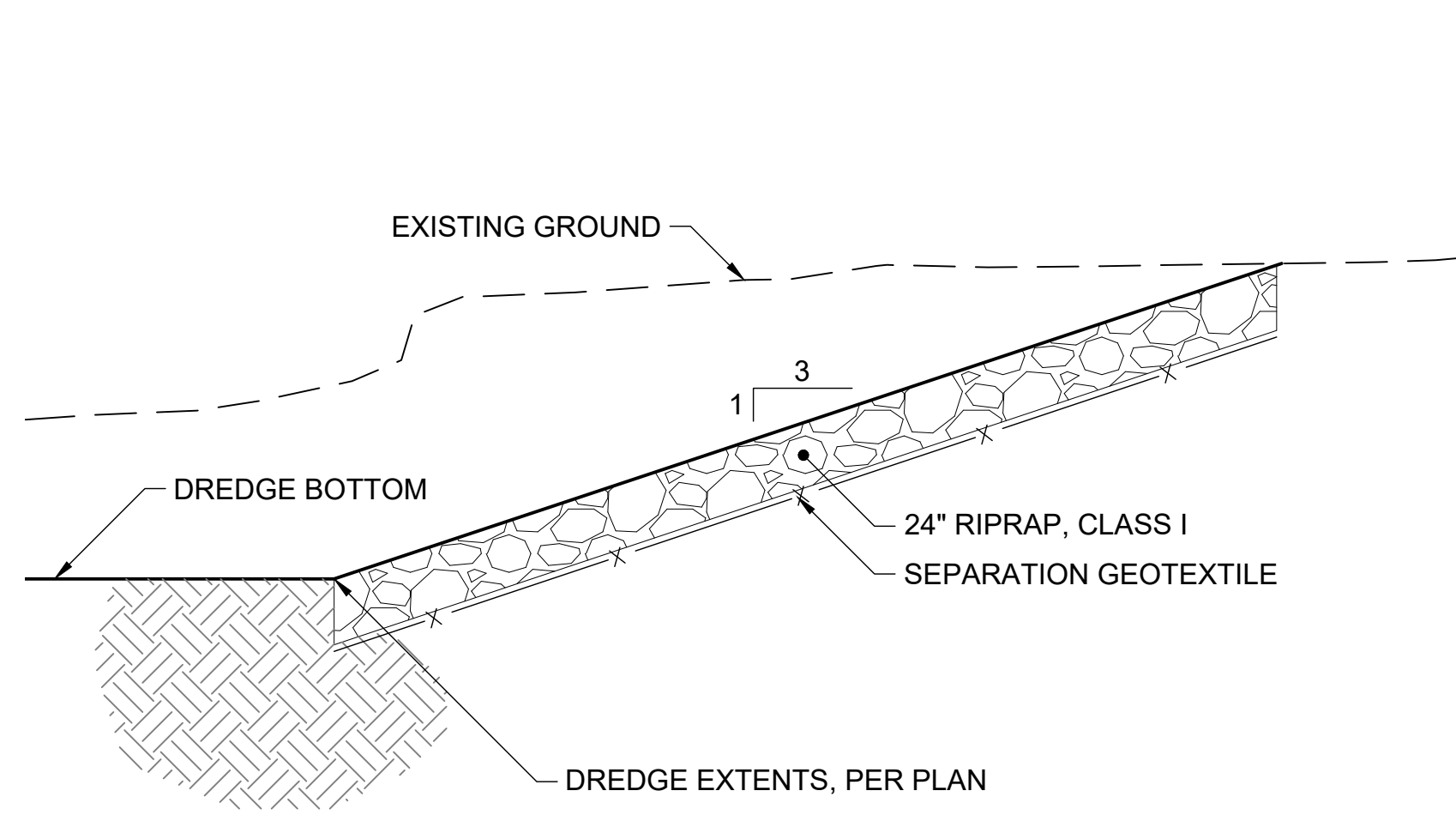
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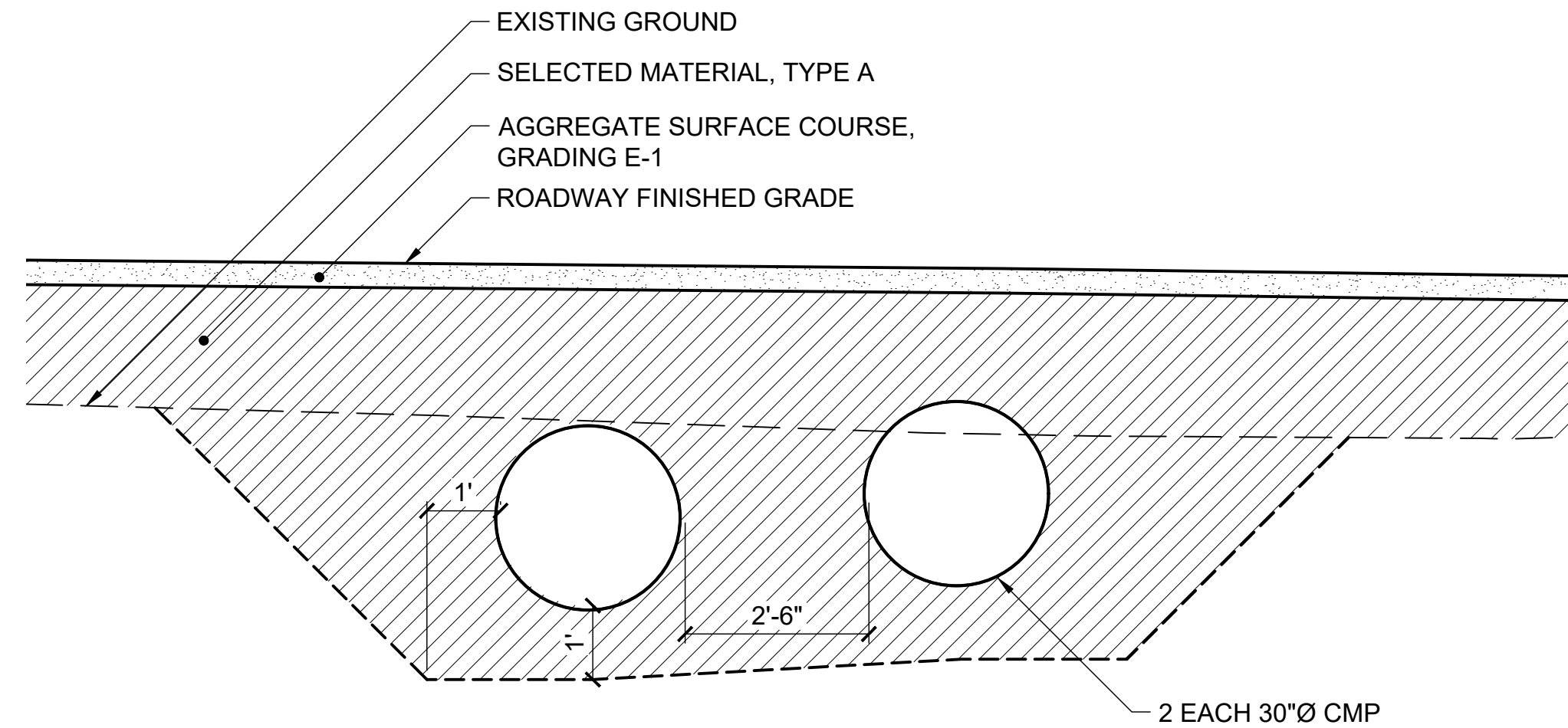
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **SIGN AND STRIPING DETAILS**

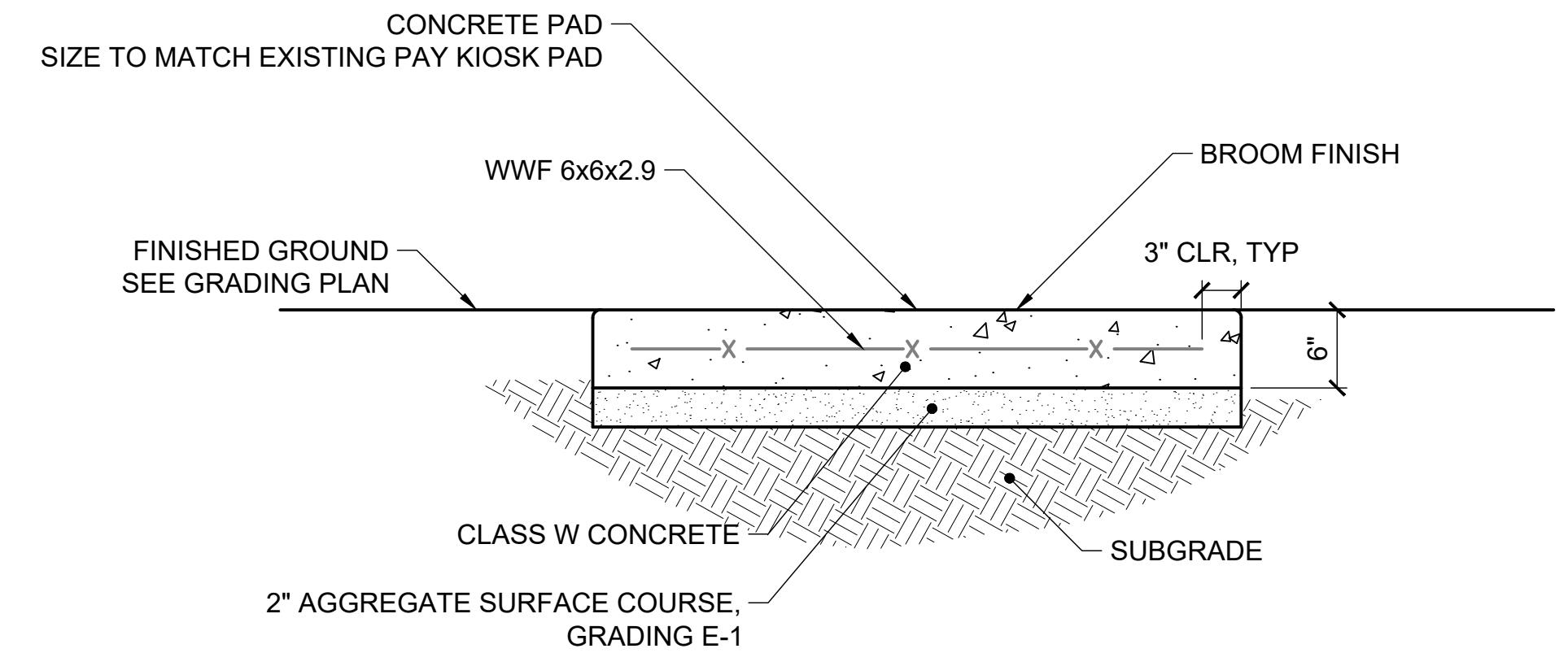
DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 34 OF 63
CHECKED BY:	AWJ	PROJECT NO.:	251029	



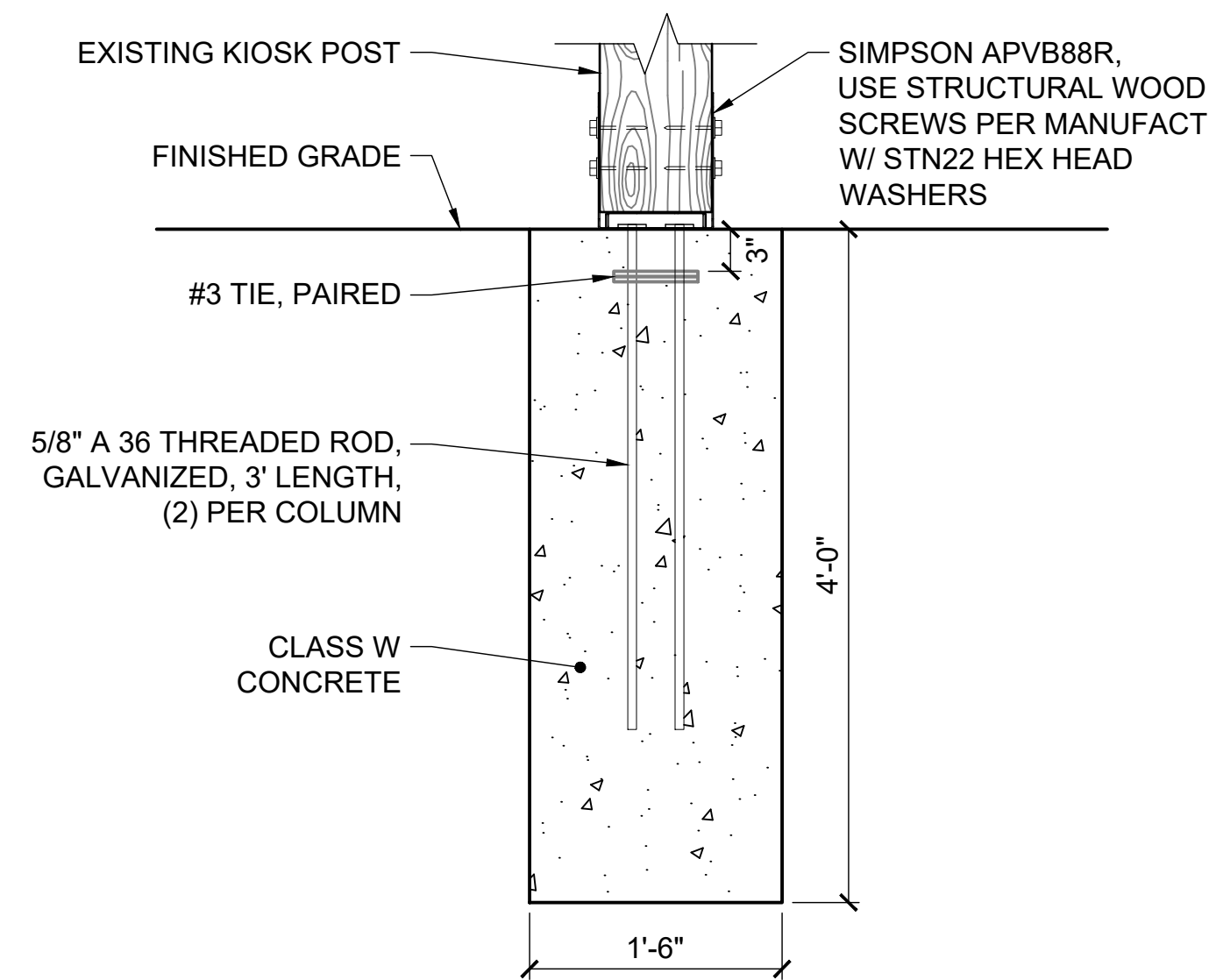
1 BASIN PROTECTION
35 NTS



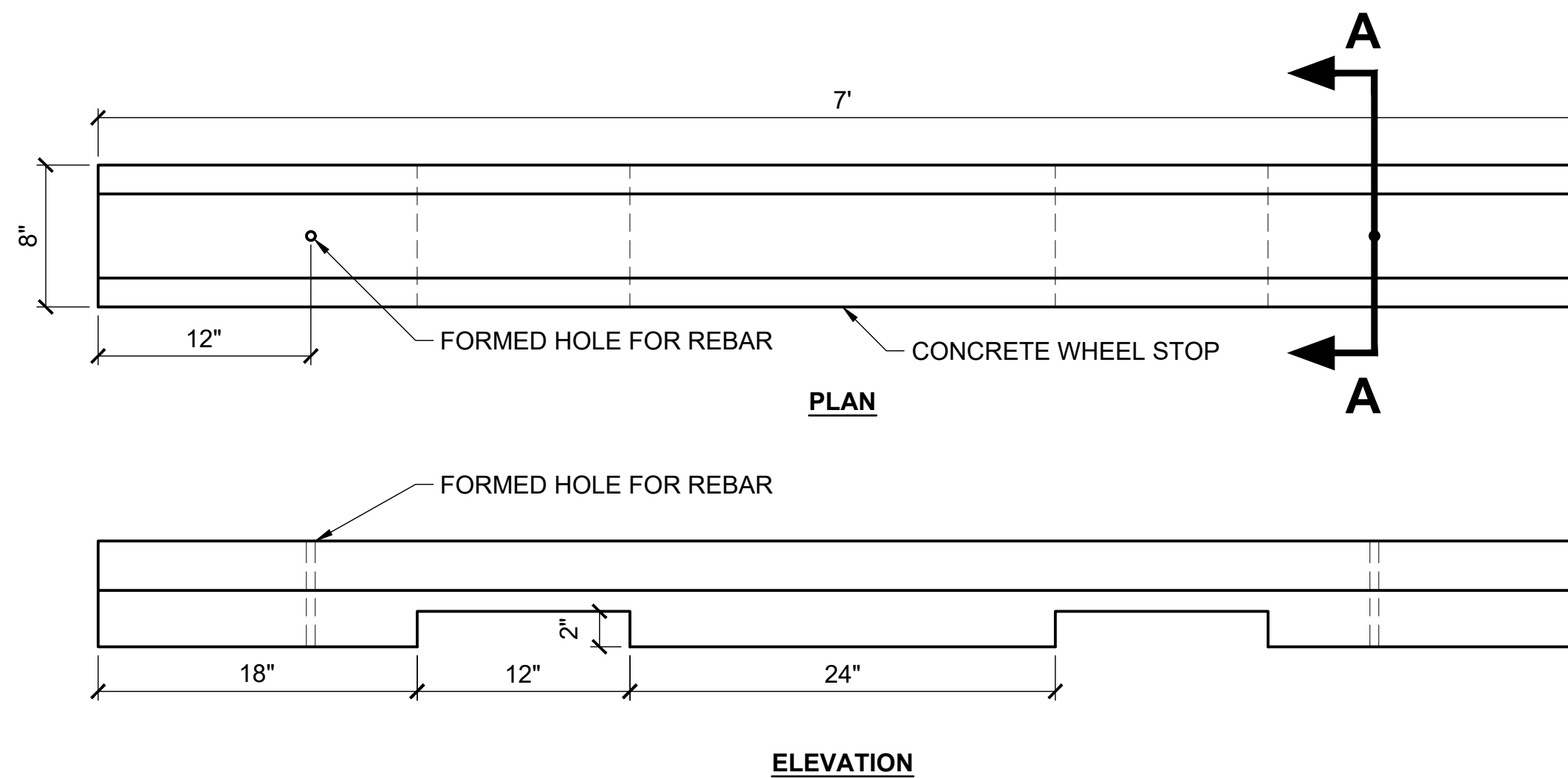
2 CULVERT TRENCH DETAIL
35 NTS



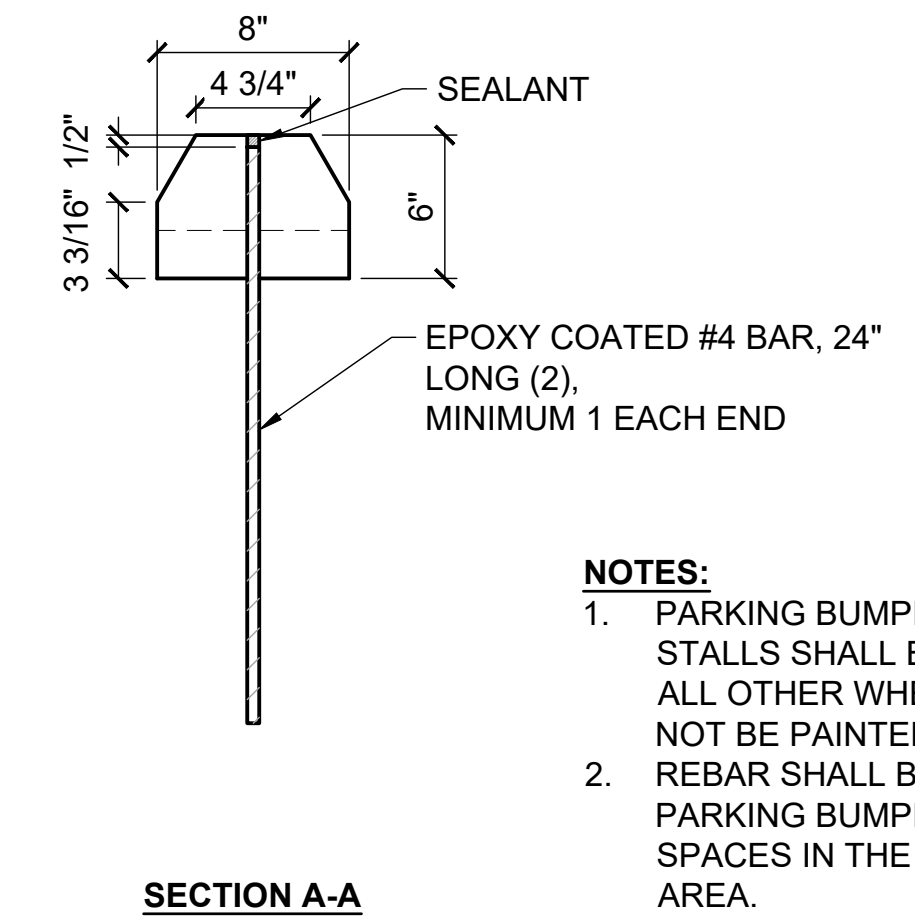
3 PAY KIOSK CONCRETE PAD
35 NTS



4 PAY KIOSK POST FOUNDATION
35 NTS



5 CONCRETE PARKING BUMPER DETAIL
35 NTS



- NOTES:**
1. PARKING BUMPERS AT ADA STALLS SHALL BE PAINTED BLUE. ALL OTHER WHEEL STOPS SHALL NOT BE PAINTED.
 2. REBAR SHALL BE OMITTED FOR PARKING BUMPERS IN PARKING SPACES IN THE BOAT LAUNCH AREA.

6/2/26 - OROHLER - 1\2025\25\029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\35-36 - Civil Details.dwg



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6/26/2026

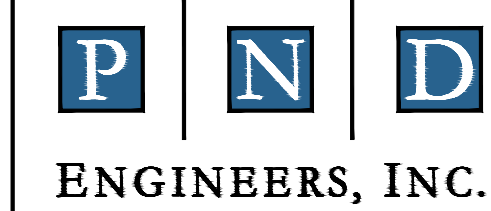
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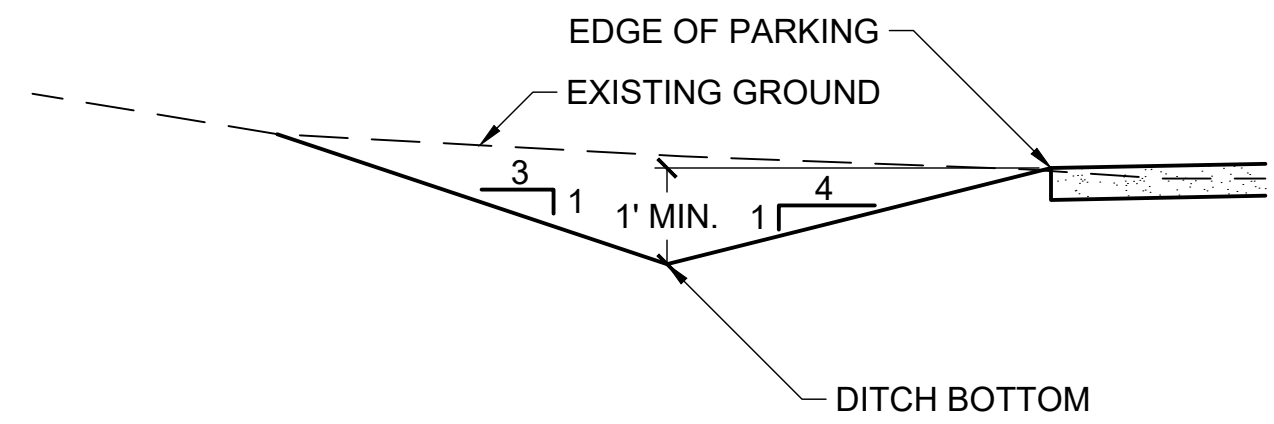
DATE: 6/26/2026

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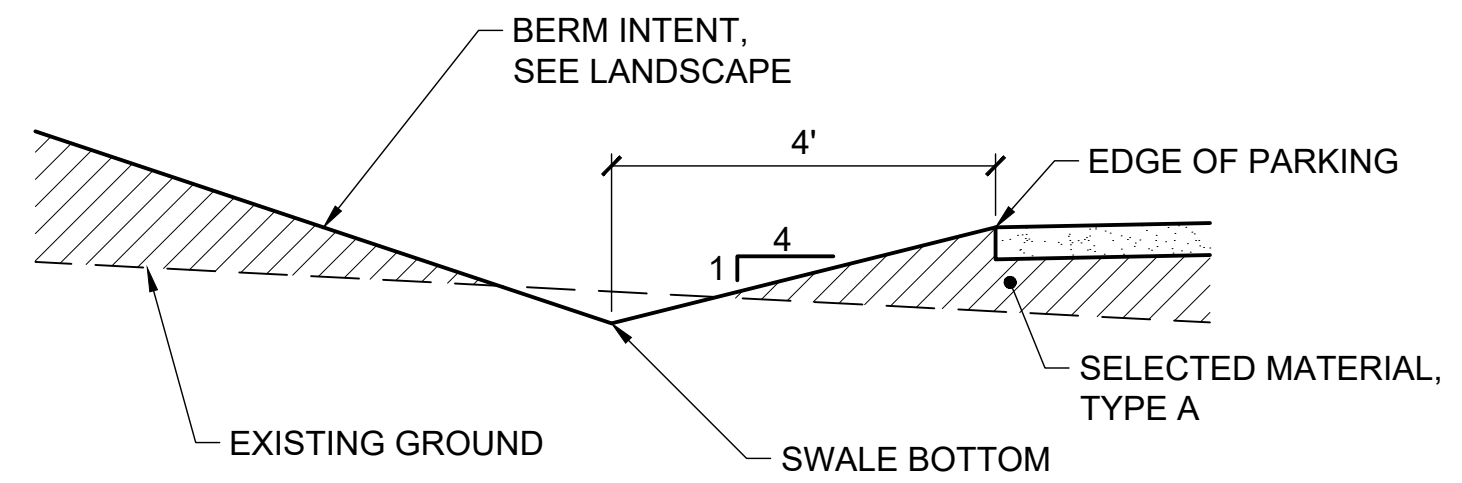


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
CIVIL DETAILS	
DESIGNED BY: OTR	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 35 OF 63	

6/2/26 - OROHLER - 1\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\35-36 - Civil Details.dwg

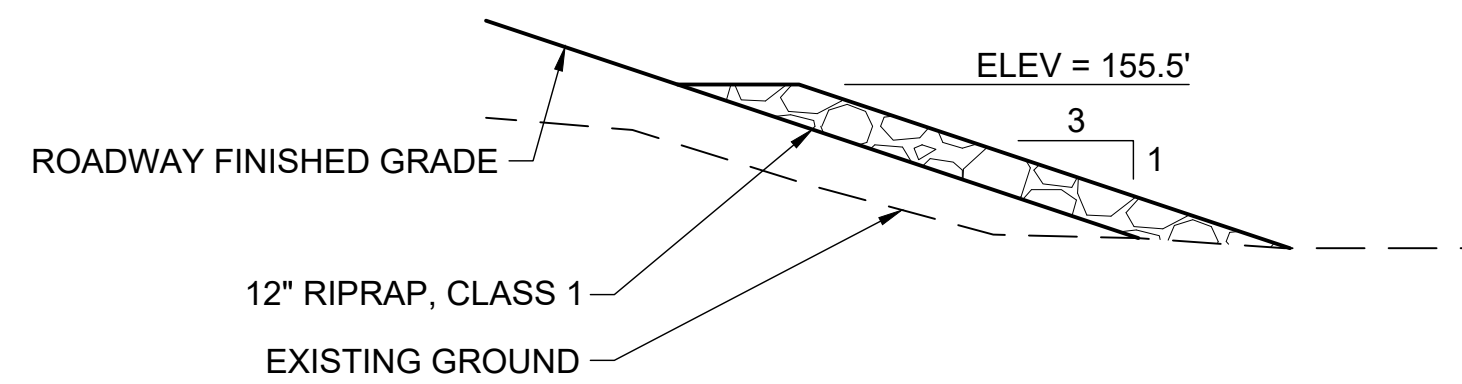


1
36 DITCH DETAIL
NTS



NOTE:
INCREASE LENGTH FROM 4' TO 6' AND INCREASE SLOPE TO 3H:1V
WHERE INDICATED ON GRADING PLANS.

2
36 SWALE DETAIL
NTS



3
36 RIPRAP CULVERT PROTECTION DETAIL
NTS



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6/26/2026

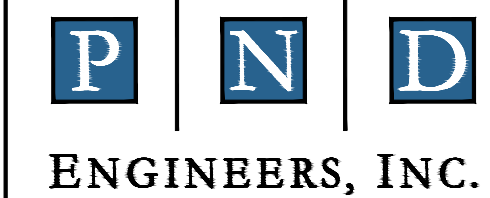
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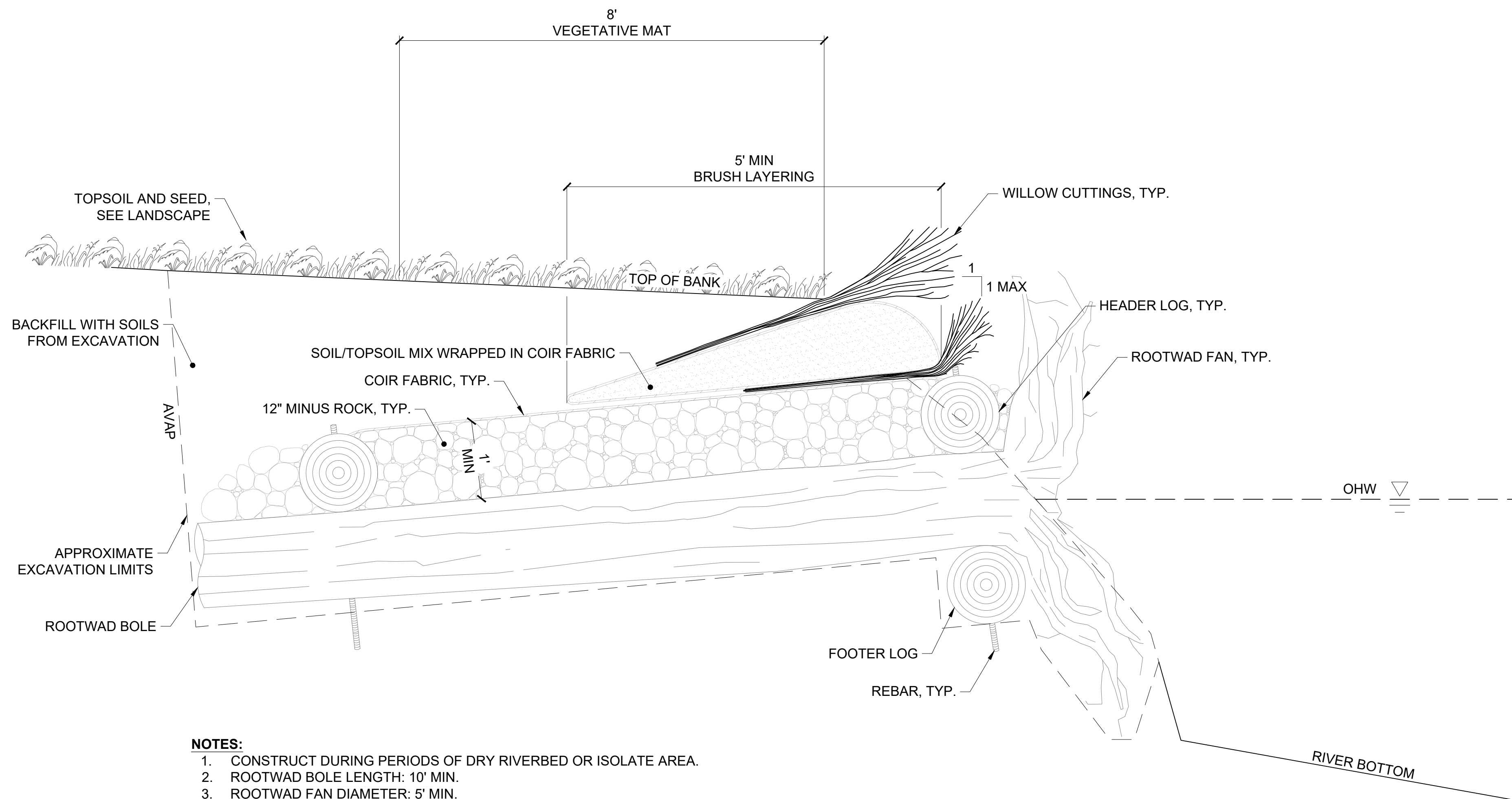


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

CIVIL DETAILS

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO: 36
CHECKED BY:	AWJ	PROJECT NO.:	251029	

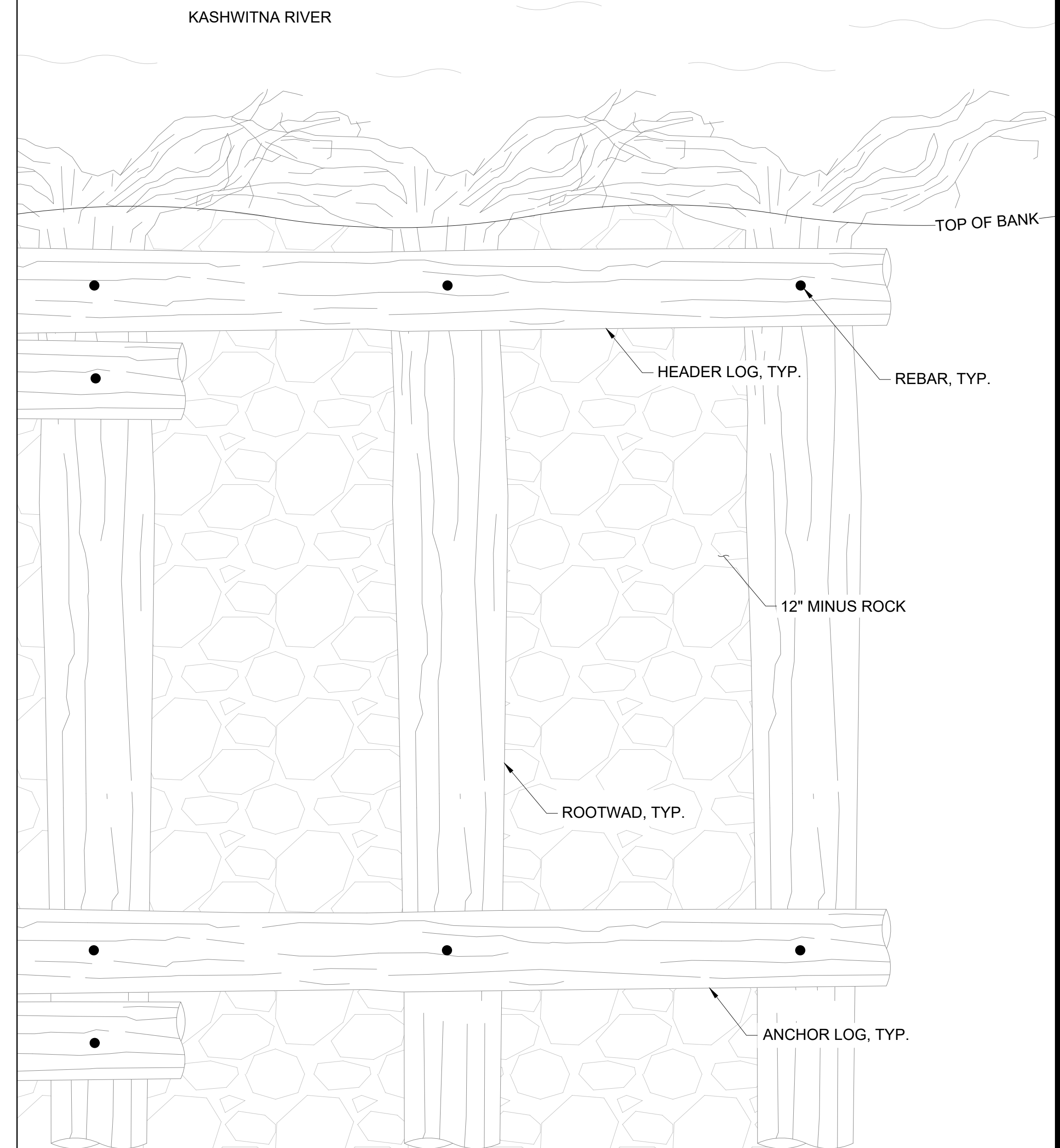
5/21/26 - JDIETERS - J:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G Drawings\Civil\37 - Stream Bank Details.dwg



NOTES:

1. CONSTRUCT DURING PERIODS OF DRY RIVERBED OR ISOLATE AREA.
2. ROOTWAD BOLE LENGTH: 10' MIN.
3. ROOTWAD FAN DIAMETER: 5' MIN.
4. ENTRENCH FOOTER LOG (APPROXIMATELY 1' DIAMETER) INTO RIVERBED.
5. EXCAVATION SHOULD BE ANGLED DOWN INTO THE BANK SO THAT THE ROOTWAD FANS WILL BE SLIGHTLY HIGHER THAN THE END OF THE TRUNK.
6. EMBED ROOTWAD BOLE PERPENDICULAR TO THE RIVER AND ROOTWAD FAN PARALLEL TO THE BANK AND EMBED FAN PARTIALLY INTO THE RIVERBED.
7. PLACE ROOTWAD SO THAT CENTERLINE OF BOLE IS AT OHW AND SUCH THAT FANS OVERLAP.
8. PIN ROOTWAD TRUNKS TO HEADER AND FOOTER LOG WITH REBAR.
9. FILL CRIBBING WITH 12" MINUS ROCK ENCASED IN CF7 AND ENC2 BIODEGRADABLE COIR FABRIC OR EQUIVALENT. USE 3" MINUS ROCK AND FINES TO FILL ANY VOIDS.
10. CONSTRUCT BRUSH LAYERING LIFTS USING SOIL/TOPSOIL MIX WRAPPED IN CF7 AND ENC2 BIODEGRADABLE COIR FABRIC OR EQUIVALENT.
11. ADD OR REMOVE BRUSH LAYERING LIFTS AS NECESSARY TO ACHIEVE FINISHED GRADE.
12. INSTALL WILLOW CUTTINGS 15 STEMS PER LINEAR FOOT OVER WRAPPED SOIL AND SURROUND WILLOW CUTTINGS WITH SOIL/TOPSOIL BETWEEN WRAPS.
13. TRIM WILLOWS SO 1/3 OF TOTAL CUTTING LENGTH IS ABOVE GROUND.
14. FILL ABOVE CRIBBING WITH NATIVE SOILS OR SIMILAR SOIL/TOPSOIL AND REVEGETATE WITH TOPSOIL AND SEED ACCORDING TO LANDSCAPE PLANS.

1
37 NTS **ROOTWAD BANK STABILIZATION**



2
37 NTS **ROOTWAD BANK STABILIZATION PLAN**



ISSUED FOR BID
6/26/2026

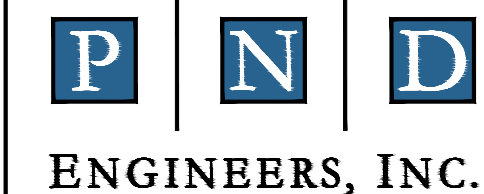
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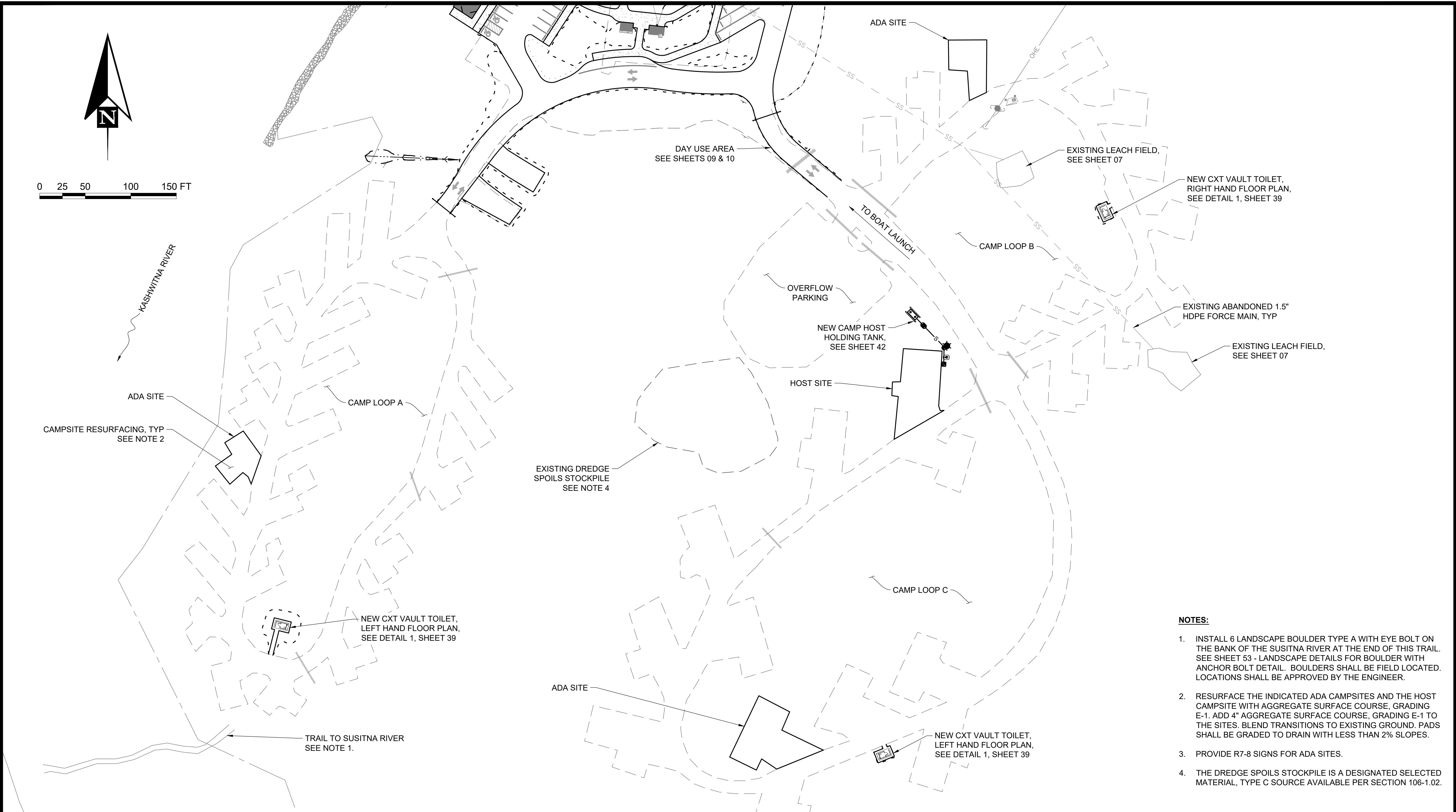


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **STREAMBANK DETAILS**

DESIGNED BY: AG	DATE: 6/26/26	SHEET NO: 37 OF 63
CHECKED BY: AWJ	PROJECT NO: 251029	

6/1/26 - OROHLER - 1\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\38 - Campground Site Plan.dwg



- NOTES:**
1. INSTALL 6 LANDSCAPE BOULDER TYPE A WITH EYE BOLT ON THE BANK OF THE SUSITNA RIVER AT THE END OF THIS TRAIL. SEE SHEET 53 - LANDSCAPE DETAILS FOR BOULDER WITH ANCHOR BOLT DETAIL. BOULDERS SHALL BE FIELD LOCATED. LOCATIONS SHALL BE APPROVED BY THE ENGINEER.
 2. RESURFACE THE INDICATED ADA CAMPSITES AND THE HOST CAMPSITE WITH AGGREGATE SURFACE COURSE, GRADING E-1. ADD 4" AGGREGATE SURFACE COURSE, GRADING E-1 TO THE SITES. BLEND TRANSITIONS TO EXISTING GROUND. PADS SHALL BE GRADED TO DRAIN WITH LESS THAN 2% SLOPES.
 3. PROVIDE R7-8 SIGNS FOR ADA SITES.
 4. THE DREDGE SPOILS STOCKPILE IS A DESIGNATED SELECTED MATERIAL, TYPE C SOURCE AVAILABLE PER SECTION 106-1.02.



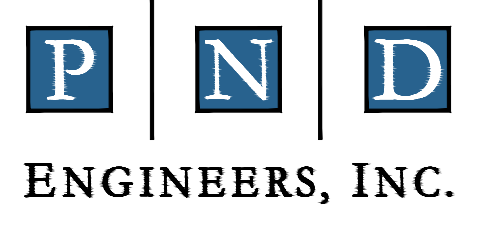
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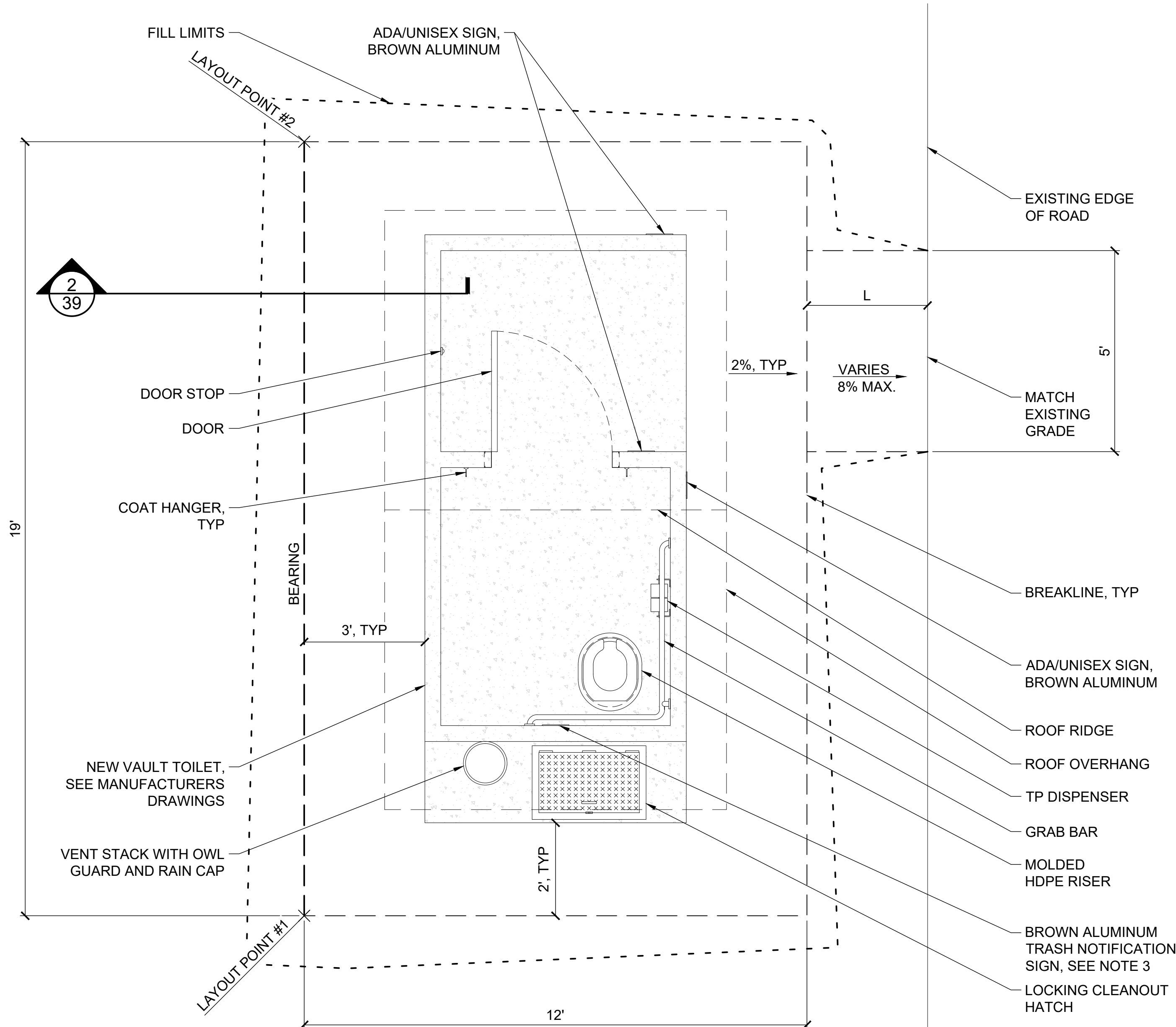


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **CAMPGROUND SITE PLAN**

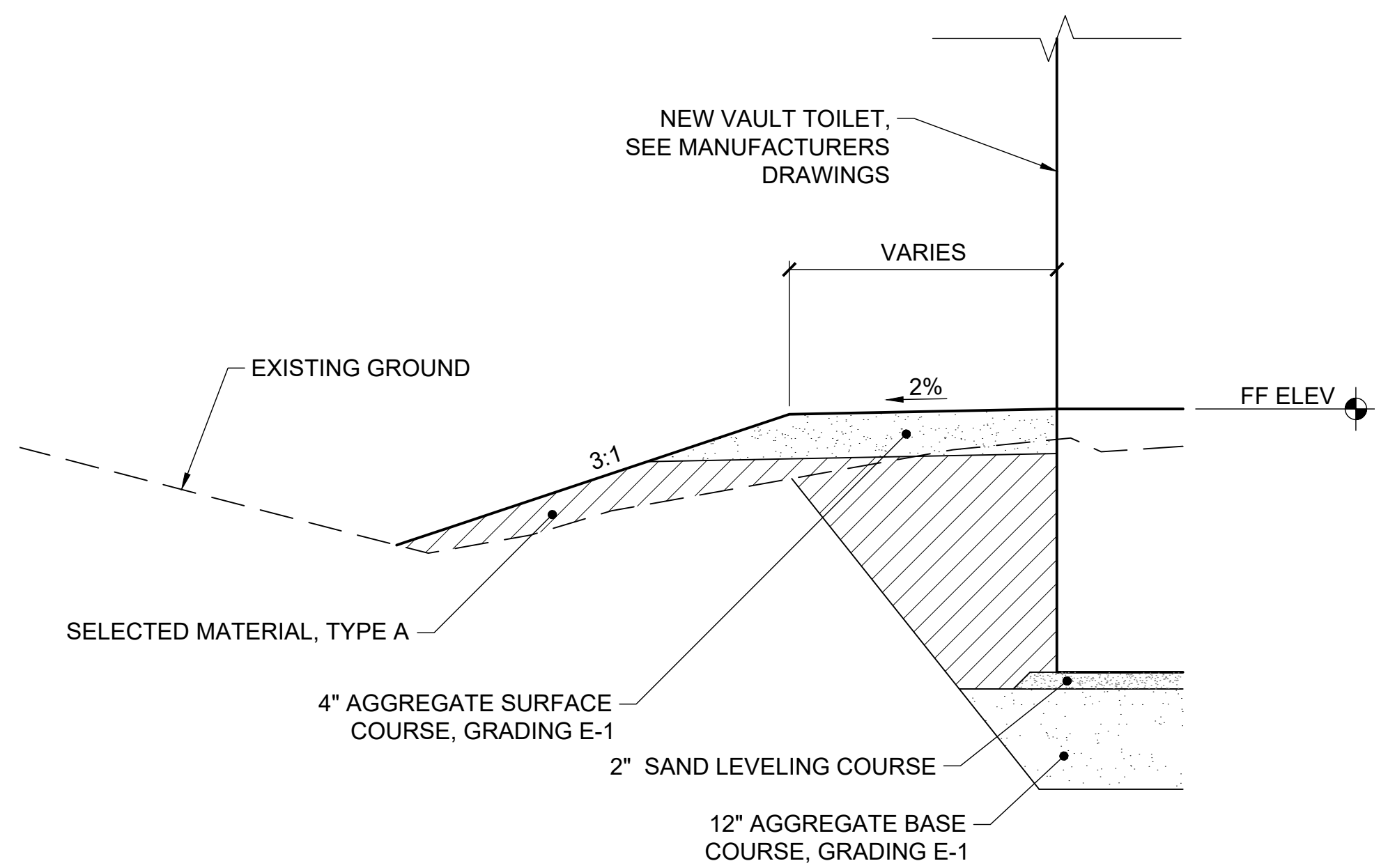
DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO:	38	OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029			

6/1/26 - CROSS - 1:2025/05/029 Susitna Landing Boat Launch & Facility Renovation/C. Drawings/Civil/39 - Vault Toilet Details.dwg



- NOTES:**
- SEE VAULT TOILET LAYOUT TABLE FOR LENGTH "L", BEARING, AND LAYOUT POINT NORTHING/EASTING.
 - RIGHT-HANDED LAYOUT SHOWN. LEFT HANDED LAYOUT SIMILAR.
 - TRASH NOTIFICATION SIGN SHALL READ "PLEASE... DO NOT PUT TRASH IN TOILETS, IT IS EXTREMELY DIFFICULT TO REMOVE. THANK YOU".
 - ATTACHED CXT I.D. TAG PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - COORDINATE WALL VENT LOCATION WITH THE MANUFACTURER FOR EACH VAULTED TOILET. LOCATION OF WALL VENT MUST BE BASED ON THE VAULTED TOILET'S ORIENTATION AND PREVAILING WIND DIRECTION.
 - PROVIDE SMOOTH TRANSITIONS BETWEEN RAMP AND EXISTING GRADE.

1 39 NTS VAULT TOILET TYPICAL LAYOUT



2 39 NTS TYPICAL VAULT TOILET SECTION

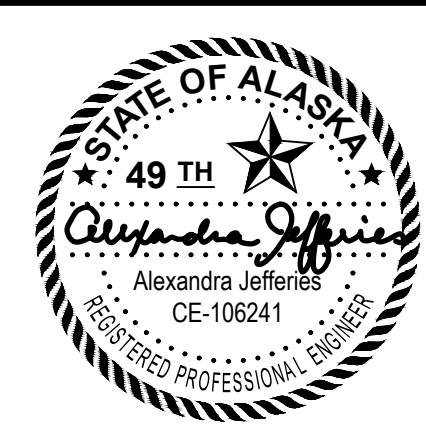
- NOTES:**
- LIMIT EXCAVATION TO PERMIT A SAFE WORKABLE AREA AND PLACEMENT OF THE VAULT TOILET.
 - PREPARE AND PROOF ROLL SUBGRADE MATERIAL FOR PLACEMENT OF CLASSIFIED BACKFILL MATERIAL.
 - INSTALL CXT ROCKY MOUNTAIN VAULT RESTROOM PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - AGGREGATE 6" AND LARGER ARE NOT PERMITTED IN MATERIAL BACKFILLED AGAINST EXTERIOR WALLS OF VAULT.

LOCATION	POINT #1		POINT #2		BEARING	L	LT/RT HANDED LAYOUT	FF ELEV
	NORTHING	EASTING	NORTHING	EASTING				
LOOP A	2,890,339.36	1,622,965.75	2,890,334.74	1,622,984.44	S76°07'05"E	27.75'	LT	158.04'
LOOP B	2,890,773.63	1,623,875.55	2,890,791.16	1,623,867.59	N24°25'18"W	8.25'	RT	157.99'
LOOP C	2,890,184.66	1,623,647.45	2,890,177.34	1,623,629.65	S67°39'15"W	6'	LT	159.69'

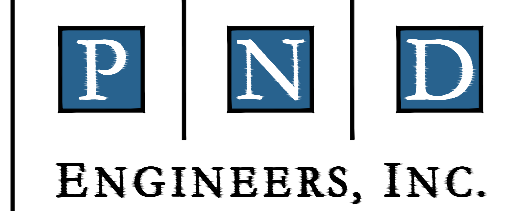


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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **VAULT TOILET DETAILS**

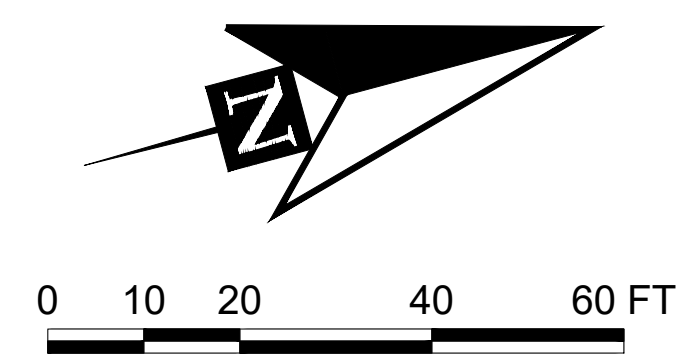
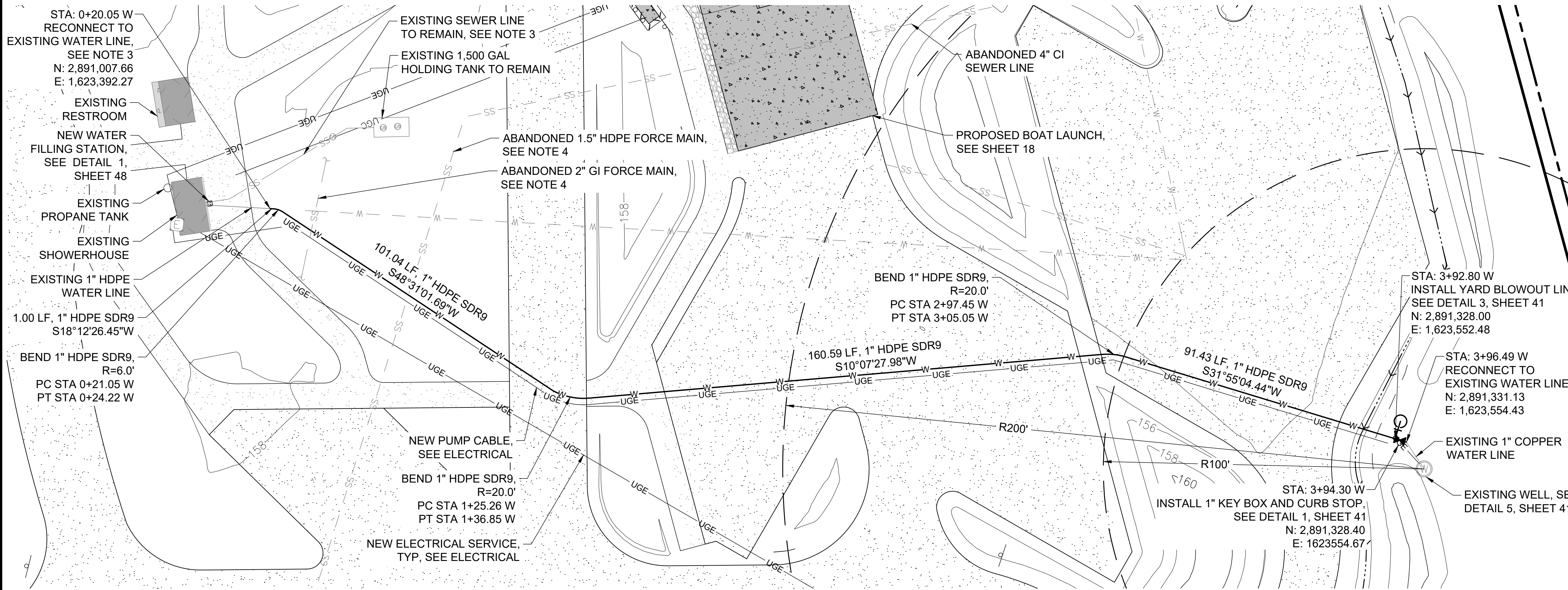
DESIGNED BY: OTR DATE: 6/26/26
CHECKED BY: AWJ PROJECT NO: 251029

SHEET NO: **39** OF 63

REV	DATE	DESCRIPTION

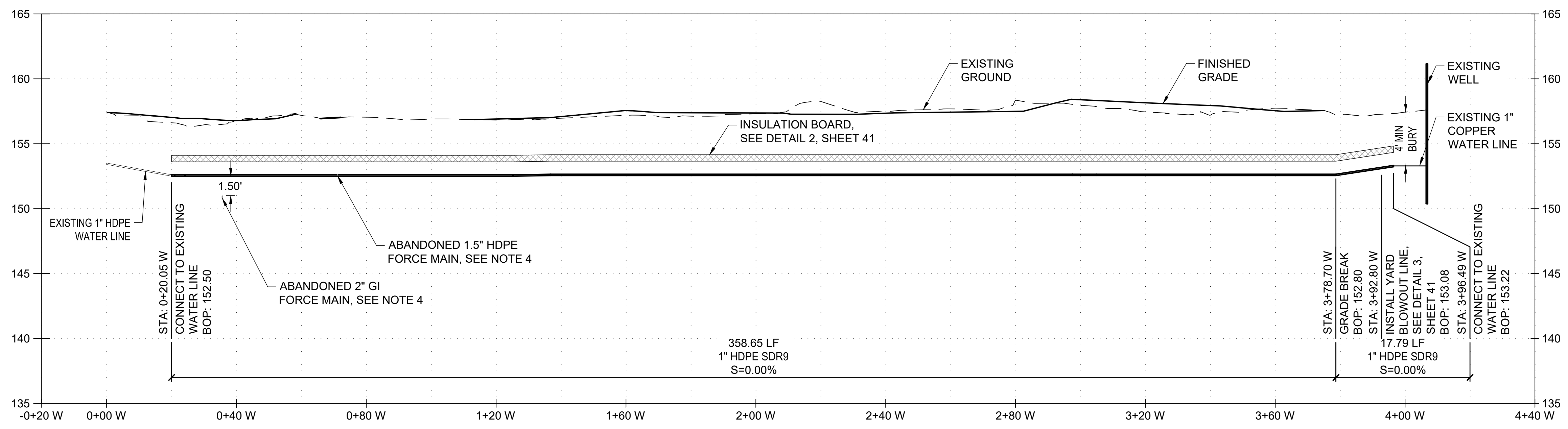
DATE: 6/26/2026

5/28/26 - JKINNEY - 11/2025/029 Susitna Landing Boat Launch & Facility Renovation(Civil)40 - Water Utilities.dwg



- SHEET NOTES:**
- THE INSTALLATION OF POTABLE WATER LINES SHALL BE IN STRICT CONFORMANCE WITH THE REQUIREMENTS OF ALASKA ADMINISTRATION CODES, 18 AAC 80, AND PER APPLICABLE CODES, REGULATIONS, AND STANDARDS.
 - LOCATIONS OF EXISTING AND ABANDONED UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN. VERIFY ALL UTILITY LOCATIONS IN THE FIELD PRIOR TO BEGINNING WORK. CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL NEW AND EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION. CHANGES TO NEW AND EXISTING UTILITIES SHALL BE APPROVED AND RECORDED IN SURVEY NOTES AND REDLINED PLANS.
 - CONTRACTOR MUST LOCATE THE EXISTING SHOWERHOUSE SEWER LINE AND VERIFY THE SEPARATION DISTANCE FROM THE WATER LINE. PERFORM EXFILTRATION TEST ON EXISTING SEWER LINE FOR WATER TIGHTNESS.
 - WHERE ABANDONED SEWER UTILITIES ARE ENCOUNTERED REMOVE AND DISPOSE OF ABANDONED LINES A MINIMUM OF 10' FROM THE NEW WATER LINE. ALL ABANDONED SEWER PIPE, RISERS, AND CLEANOUT ENDS MUST BE PLUGGED WITH WATER TIGHT CAP OR END PLUG. PIPE 4" AND LARGER MUST BE FILLED WITH SAND SLURRY PRIOR TO BEING PERMANENTLY SEALED.
 - NEW WATER LINE SHALL BE PLACED NO CLOSER THAN: 10' HORIZONTALLY MEASURED TO ANY SANITARY SEWER MAIN, SANITARY SEWER SERVICE, STORM SEWER, FOOTING DRAIN, STREET LIGHT, TRANSFORMER PAD, ELECTRICAL/TELEPHONE/ CABLE BOX AND UTILITY POLE; AND 5' HORIZONTALLY MEASURED TO ANY SIDE OF LOT LINE.
 - THE CONTRACTOR SHALL PROVIDE ALL SETUP AND TEAR DOWN REQUIRED TO OPEN BORE FLUSH, DISINFECT, AND PRESSURE TEST WATER LINES.
 - PIPE LENGTHS INDICATED ON DRAWINGS ARE APPROXIMATE. PROVIDE PIPE AS REQUIRED.
 - WATER LINE ALIGNMENT AND STATIONING SHOWN IS ALONG CENTERLINE OF PIPE.
 - REMOVE ABANDONED WATER LINES WITHIN 5' OF NEW LINE. EXPOSED ENDS OF ABANDONED WATER LINES MUST BE CUT AND PLUGGED WITH WATERTIGHT CAP.

PLAN
1" = 20'



PROFILE
1" = 20' H 1" = 5' V



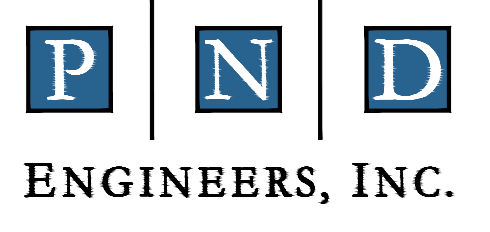
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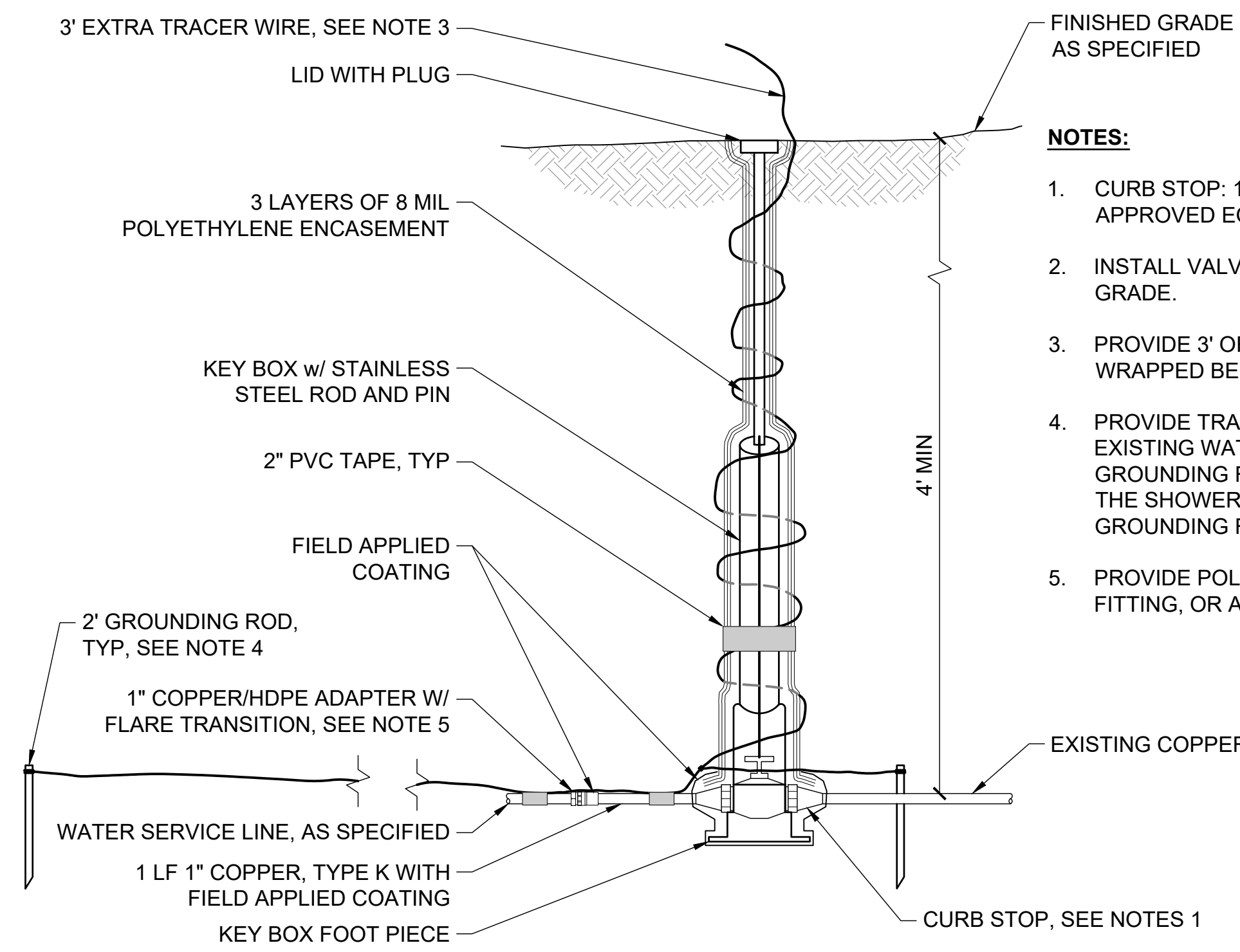


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

WATER PLAN & PROFILE

DESIGNED BY: JBK DATE: 6/26/26
CHECKED BY: AWJ PROJECT NO: 251029

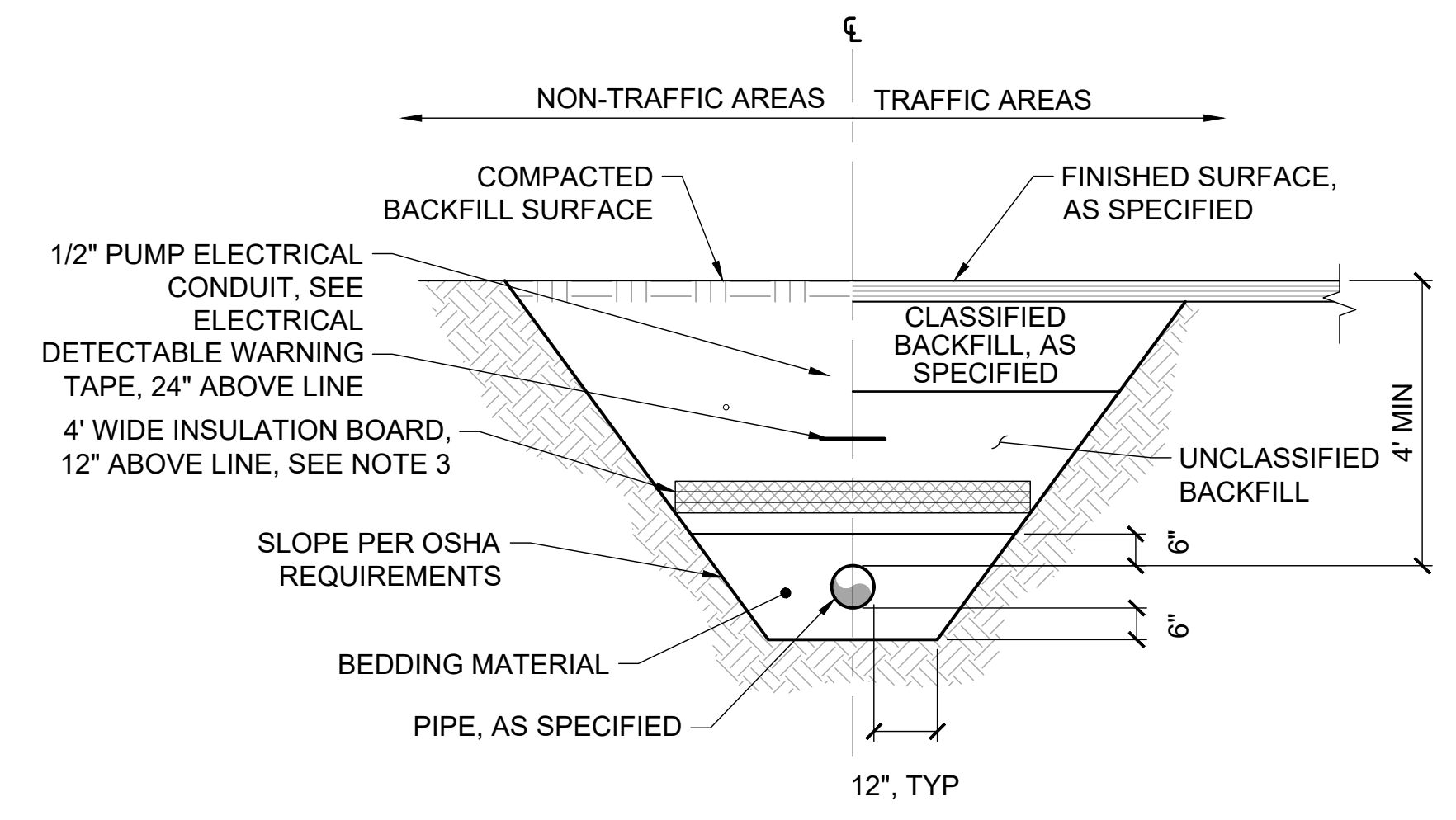
SHEET NO: **40** OF 63



NOTES:

1. CURB STOP: 1" MUELLER H-15204N OR APPROVED EQUAL.
2. INSTALL VALVE TOP 1/2" BELOW FINISH GRADE.
3. PROVIDE 3' OF EXTRA TRACER WIRE WRAPPED BELOW THE PLUG AND LID.
4. PROVIDE TRACER WIRE ALONG THE EXISTING WATER LINE AND INSTALL A GROUNDING ROD AT LEAST 10' FROM THE SHOWER HOUSE. PROVIDE GROUNDING ROD AT EACH END.
5. PROVIDE POLY-CAM HDPE TRANSITION FITTING, OR APPROVED EQUAL.

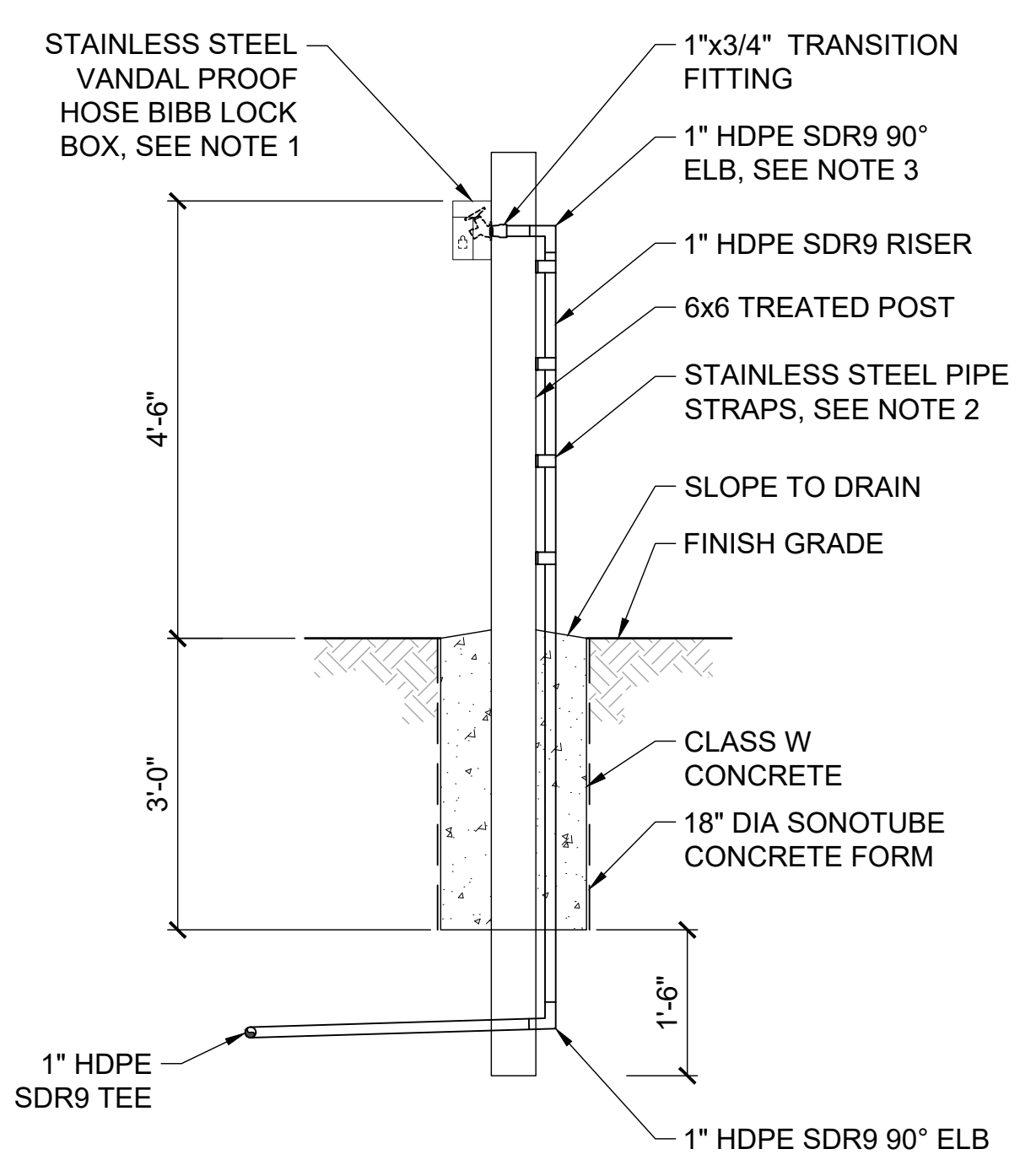
1
41 NTS
KEY BOX



NOTES:

1. HDPE PIPE BENDING RADII SHALL BE NO LESS THAN THE MANUFACTURER'S RECOMMENDED MINIMUM BENDING RADIUS.
2. ALL WATER MAINS AND SERVICES SHALL HAVE A MINIMUM OF 4' OF BURY AT ALL POINTS.
3. 3 LAYERS OF 2" THICK x 4' WIDE x 8' LONG (6" TOTAL THICKNESS) INSULATION BOARD. STAGGER END JOINTS, 2' MIN.
4. PLACE AND COMPACT TRENCH BACKFILL MATERIAL TO DEPTHS SHOWN IN THE DRAWINGS OR AS DETERMINED BY THE ENGINEER. COMPACT TRENCH BACKFILL TO 95% MIN OF MAXIMUM DENSITY.

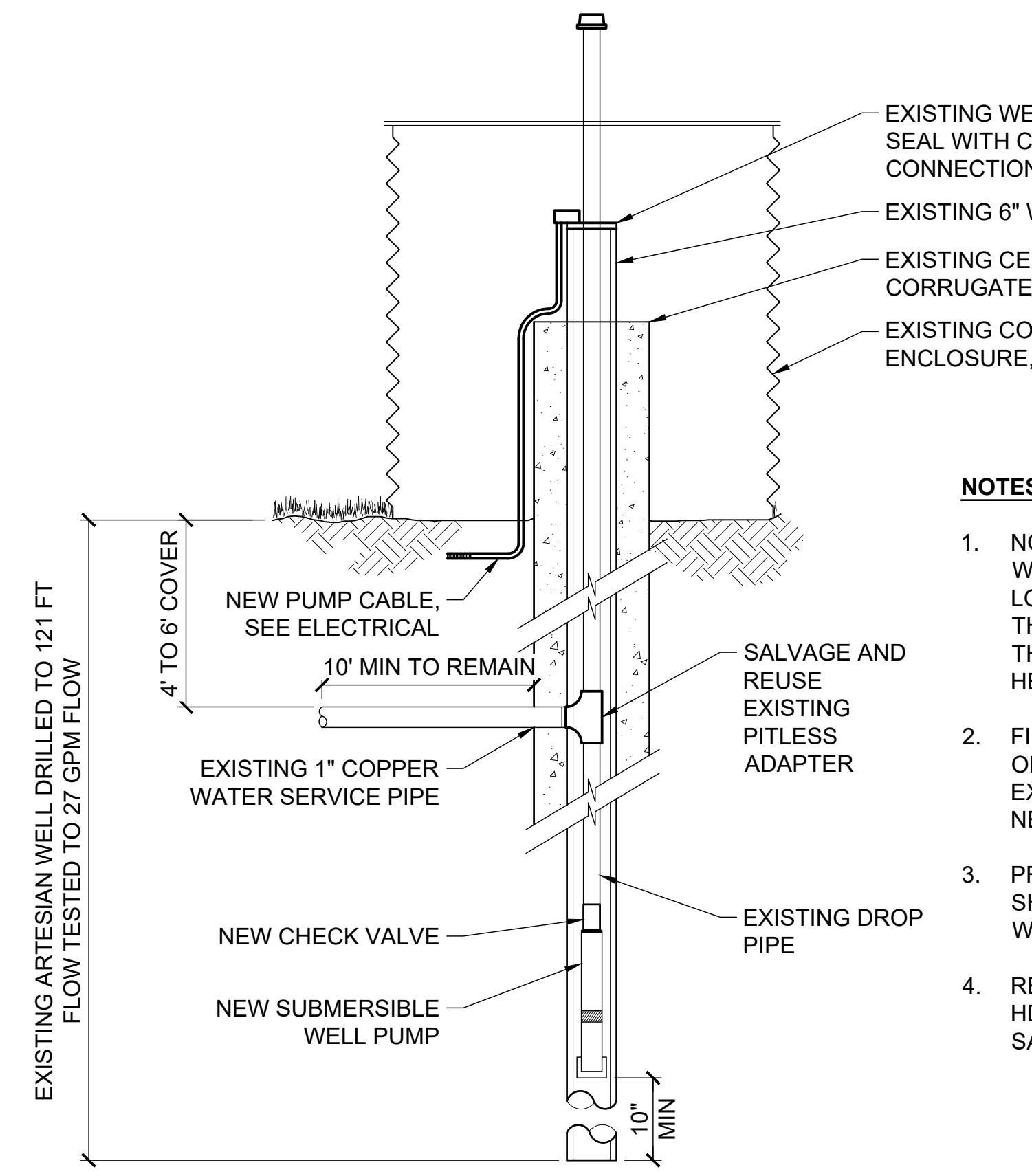
2
41 NTS
WATER TRENCH SECTION



NOTES:

1. VANDAL PROOF HOSE BIBB LOCK BOX SHALL BE MOUNTED 6" BELOW TOP OF POST WITH STAINLESS STEEL LAG BOLTS. CORE HOLE LARGE ENOUGH TO FEED HDPE LINE AND FITTINGS INTO POST. INSTALL HOSE BIBB WITHIN LOCK BOX AND FASTEN TO POST. OWNER SHALL FURNISH LOCK FOR LOCK BOX. HOSE BIBB SHALL BE NSF 61, NO-LEAD, 3/4" QUARTER TURN ANGLED HOSE BIBB OR APPROVED EQUIVALENT. OUTLET SHALL HAVE FEMALE NPT THREADS AND SILLCOCK KEY. PROVIDE REMOVABLE NFS 61, LEAD-FREE BRASS PLUG.
2. FASTEN STAINLESS STEEL PIPE STRAPS TO TREATED POST USING 1/4" HEX DRIVE WOOD SCREWS WITH EPDM BONDED WASHERS. PROVIDE PIPE STRAP BELOW 90° ELB AND PLACE STRAPS 12" OC TO BASE OF POST.
3. BUTTFUSE 90° HDPE ELB TO RISER AND POLY-CAM TRANSITION FITTING. CONTRACTOR MAY SUBMIT ALTERNATIVE ASSEMBLY FOR APPROVAL.
4. PROVIDE POLY-CAM HDPE TRANSITION FITTING, OR APPROVED EQUAL.
5. HDPE PIPE BENDING RADII SHALL BE NO LESS THAN THE MANUFACTURER'S RECOMMENDED MINIMUM BENDING RADIUS.

3
41 NTS
YARD BLOWOUT LINE ASSEMBLY

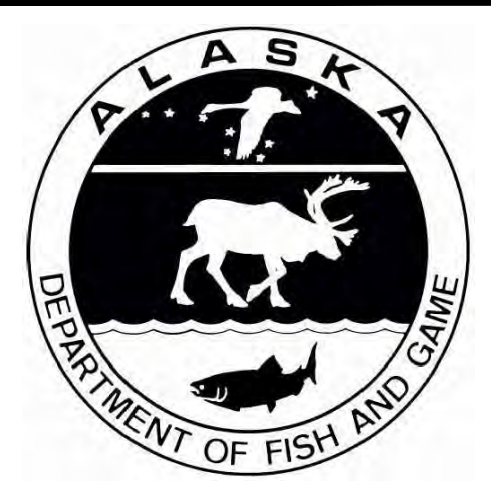


NOTES:

1. NO RECORD DRAWINGS ARE AVAILABLE FOR THE WELL. INFORMATION SHOWN WAS TAKEN FROM LOCAL DRILLERS FAMILIAR WITH THIS WELL. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN.
2. FIELD VERIFY CONDITIONS AND CONFIGURATION OF EXISTING WELL. REPORT THE CONDITION OF EXISTING WELL COMPONENTS AND AS-BUILT NEW WELL.
3. PROVIDE NEW PUMP CONTROLLER IN THE SHOWER HOUSE FOR OPERATION OF THE NEW WELL PUMP, SEE ELECTRICAL.
4. REPLACE PLYWOOD COVER WITH SOIL TIGHT HDPE END CAP. CORE HOLE FOR PIPE ABOVE SANITARY SEAL.

4
41 NTS
EXISTING WELL

6/1/26 - CROHLER - 1/2025/25/029 Susitna Landing Boat Launch & Facility Renovation/G. Drawings/Civil/41 - Water Details.dwg

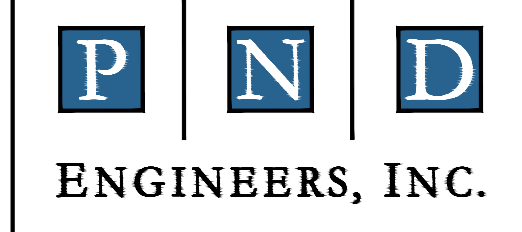


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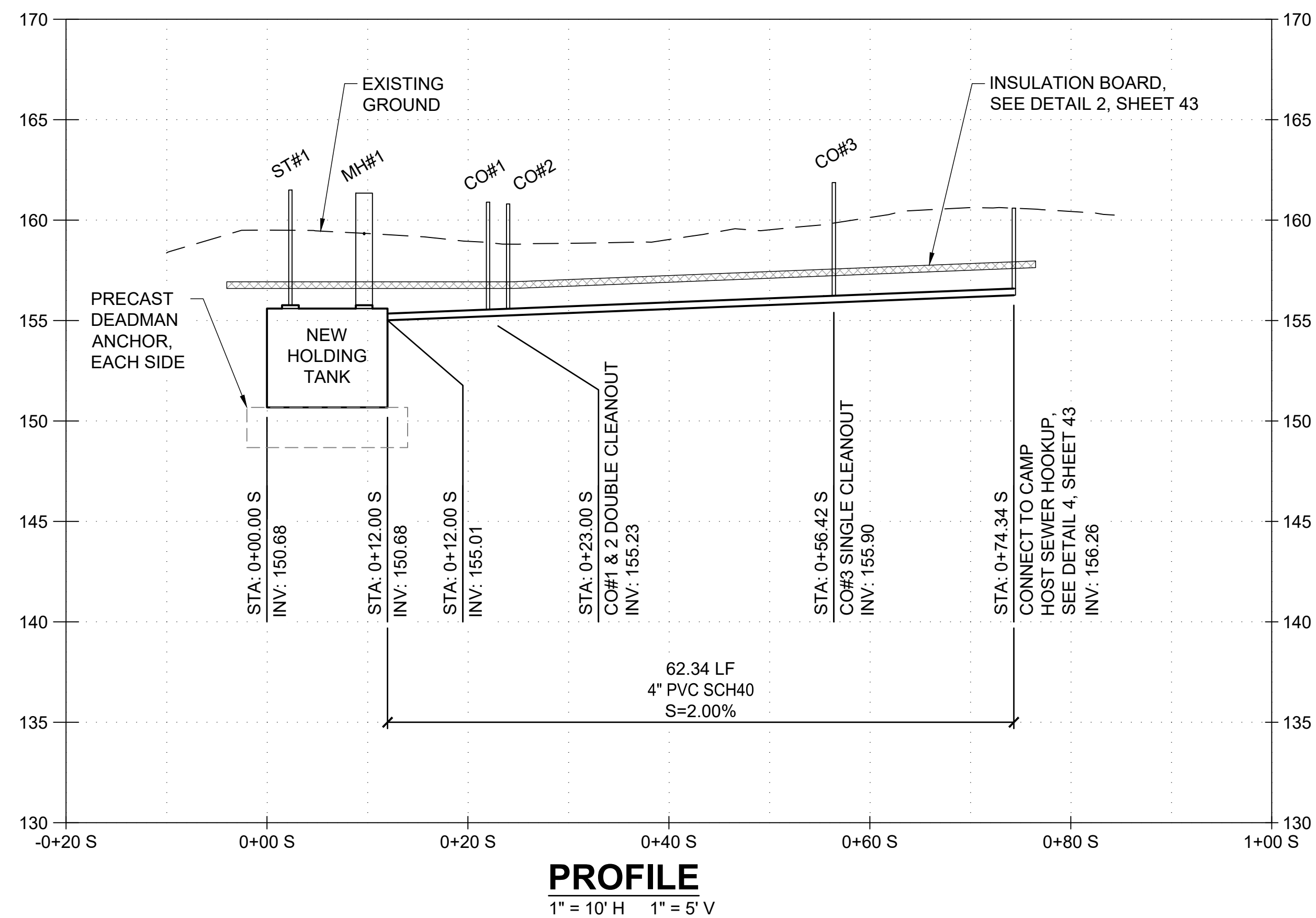
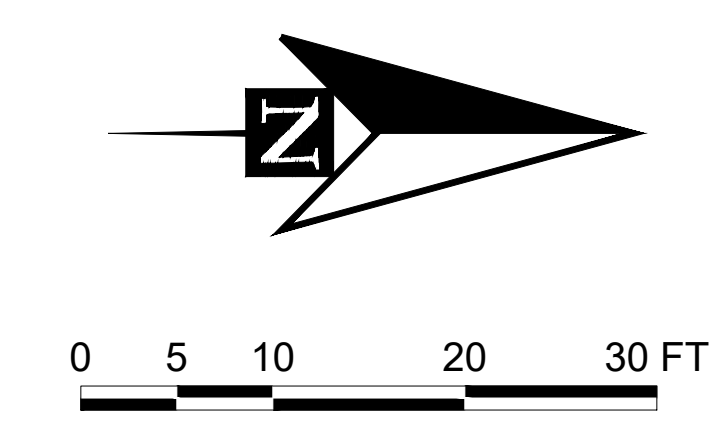
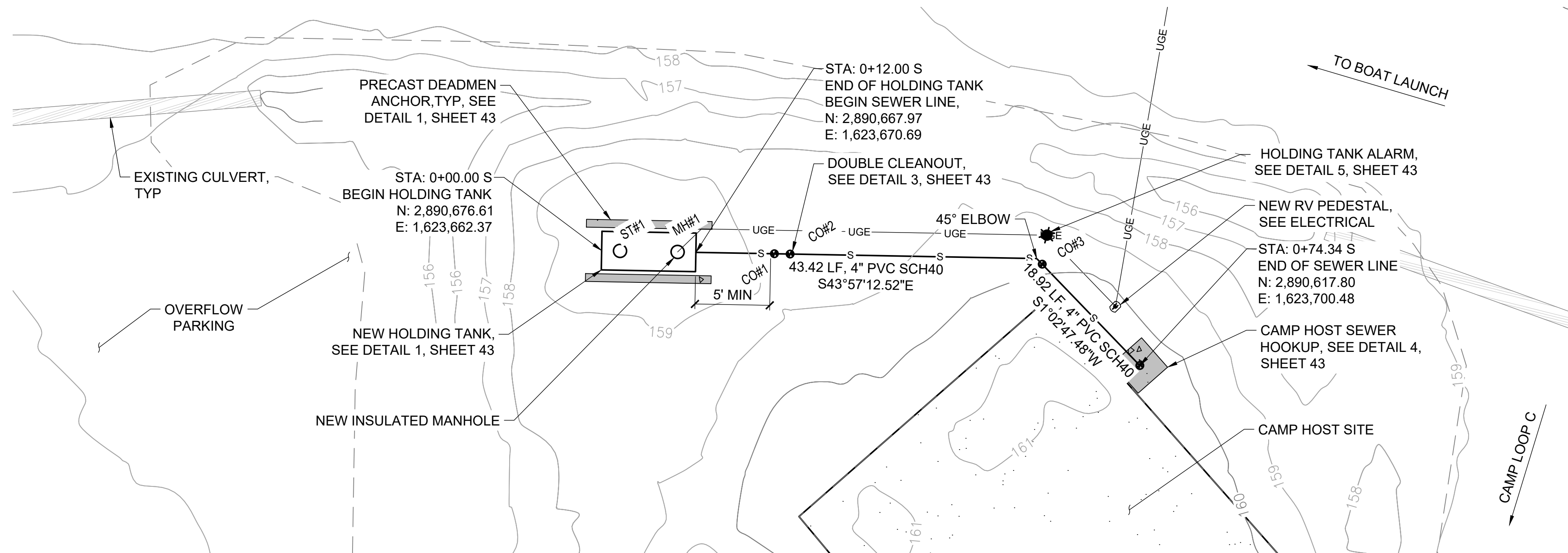
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: WATER DETAILS	
DESIGNED BY: JBK	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 41 OF 63	



SHEET NOTES:

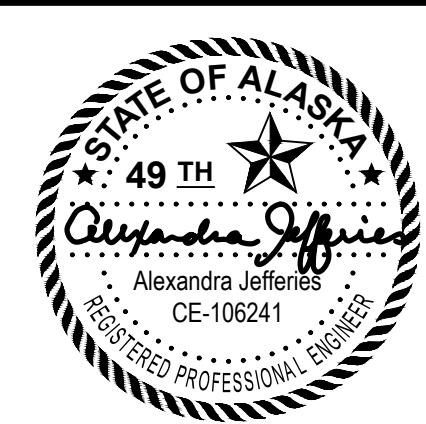
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2020 ALASKA DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES STANDARD SPECIFICATION FOR HIGHWAY CONSTRUCTION (SSH), THE SPECIAL PROVISIONS, AND ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION (ADEC) REQUIREMENTS FOR ALTERNATIVE WASTEWATER SYSTEMS. WHERE CONFLICT EXISTS BETWEEN THE ADEC, SPECIAL PROVISIONS, AND THE SSH, THE ORDER OF PRECEDENCE FOR THE ALTERNATIVE WASTEWATER SYSTEM IS: ADEC REQUIREMENTS, SPECIAL PROVISIONS, PLANS, AND THEN SSH.
- LOCATIONS OF EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE. ADDITIONAL UTILITIES MAY BE PRESENT THAT ARE NOT SHOWN. VERIFY ALL UTILITY LOCATIONS IN THE FIELD PRIOR TO BEGINNING WORK. CONTRACTOR SHALL VERIFY AND RECORD THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL NEW AND EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION. CHANGES TO NEW AND EXISTING UTILITIES SHALL BE APPROVED AND RECORDED IN SURVEY NOTES AND REDLINED PLANS.
- SEWER LINE ALIGNMENT AND STATIONING SHOWN IS ALONG CENTERLINE OF PIPE.
- ALL SEPARATION DISTANCE REQUIRED BY ADEC SHALL BE MET.
- NEW EPOXY COATED, 10' MAXIMUM BURIAL, 1,500 GALLON STEEL TANK INSTALLED PER MANUFACTURER'S INSTRUCTIONS. INSULATED WATER TIGHT 20" MINIMUM RISER ON INLET SIDE OF TANK.
- MARK CLEANOUTS, STAND PIPES, AND MANHOLE WITH ORANGE REFLECTIVE INDICATORS.

5/28/26 - JKINNEY - 11/2025/051029 Susitna Landing Boat Launch & Facility Renovation(C, Drawings\Civil\42 - Sewer Utilities.dwg

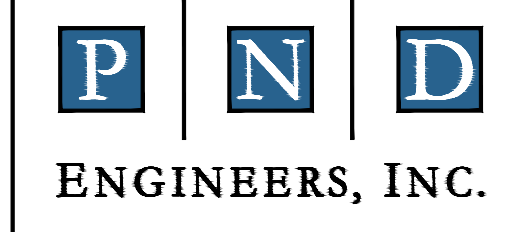


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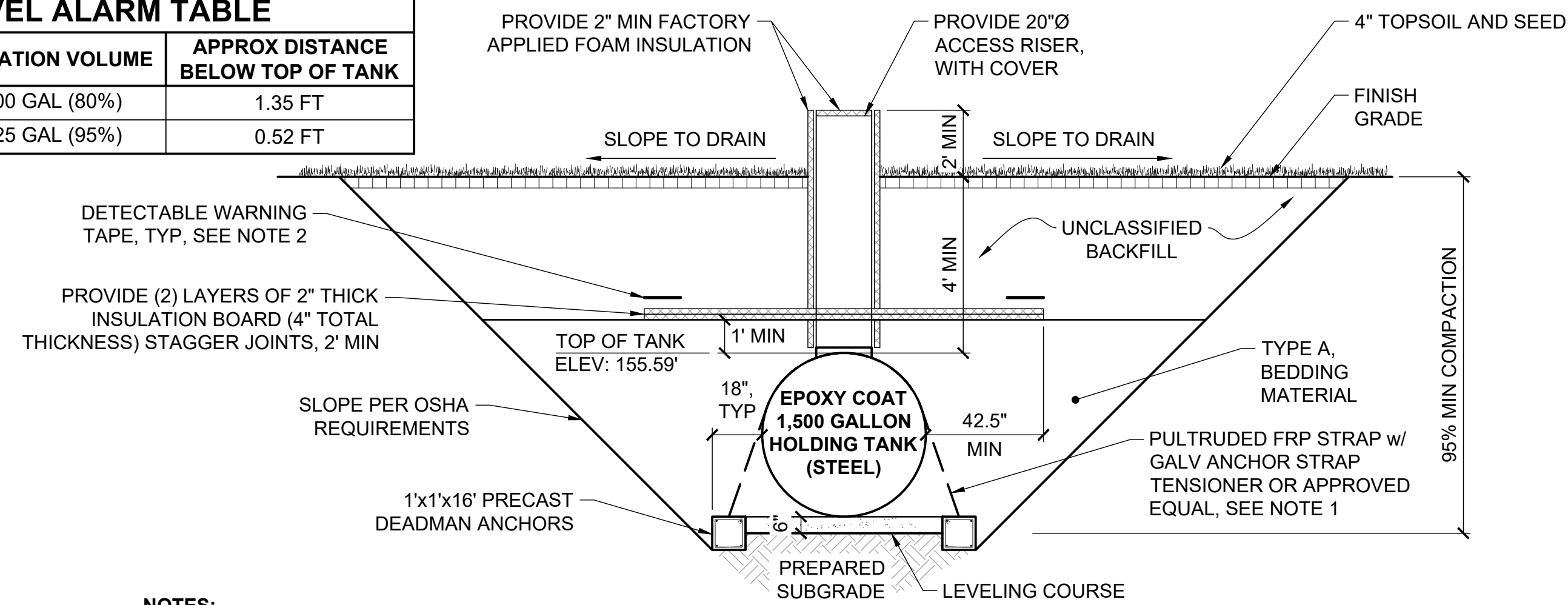


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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
SEWER PLAN & PROFILE	
DESIGNED BY: JBK	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 42 OF 63	

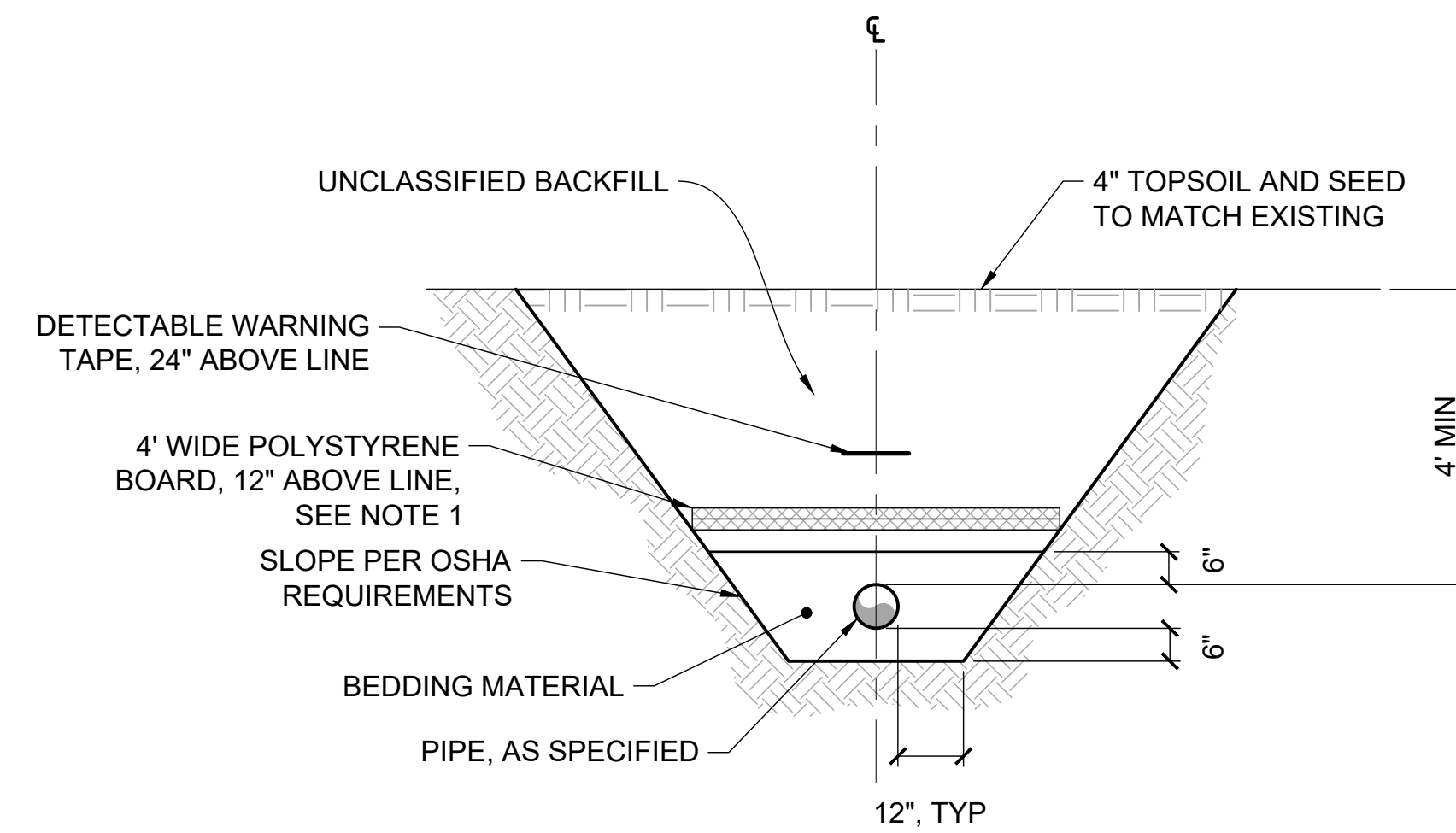
WATER LEVEL ALARM TABLE		
ALARM	ACTIVATION VOLUME	APPROX DISTANCE BELOW TOP OF TANK
EARLY ALERT FLOAT	1,200 GAL (80%)	1.35 FT
HIGH WATER FLOAT	1,425 GAL (95%)	0.52 FT



NOTES:

- WHERE CONTACT IS MADE PROVIDE NEOPRENE RUBBER STRAP LINER BETWEEN THE ANCHOR STRAP AND TANK, TYP.
- PLACE DETECTABLE WARNING TAPE AROUND PERIMETER OF INSULATION.
- PLACE AND COMPACT BACKFILL MATERIAL TO DEPTHS SHOWN IN THE DRAWINGS OR AS DETERMINED BY THE ENGINEER. COMPACT BACKFILL MATERIAL TO 95% MIN OF MAXIMUM DENSITY.
- INSTALL 6" OF BENTONITE AROUND TANK CONNECTIONS, ALL BANDED RUBBER COUPLINGS JOINTS WITH PIPE, AND MANHOLE PENETRATIONS FOR ALARM CABLES. PROVIDE 6" MINIMUM OF BENTONITE AROUND MANHOLE BASE.

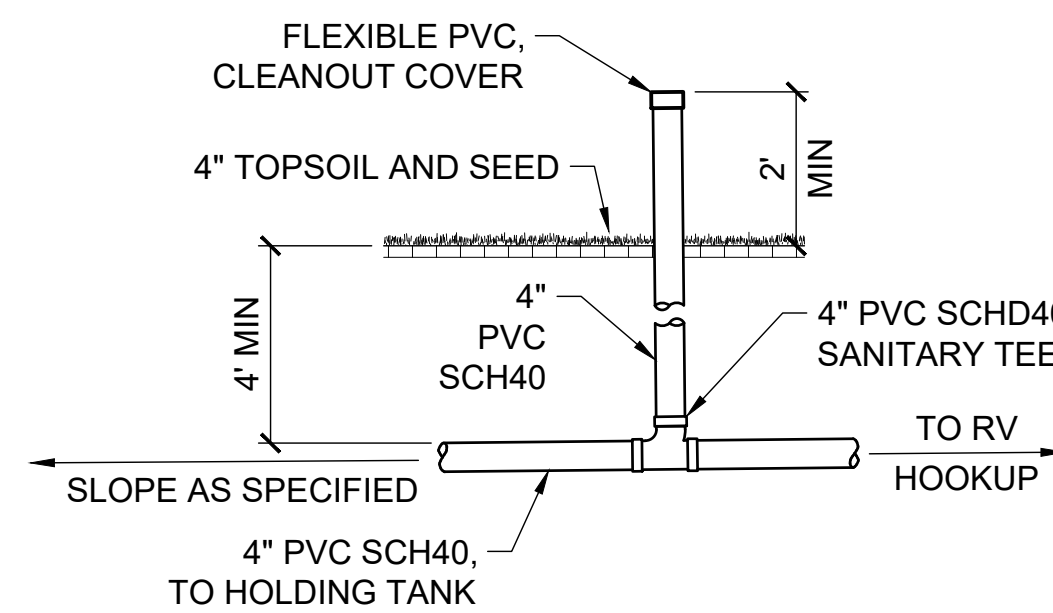
1
43
NTS
HOLDING TANK SECTION



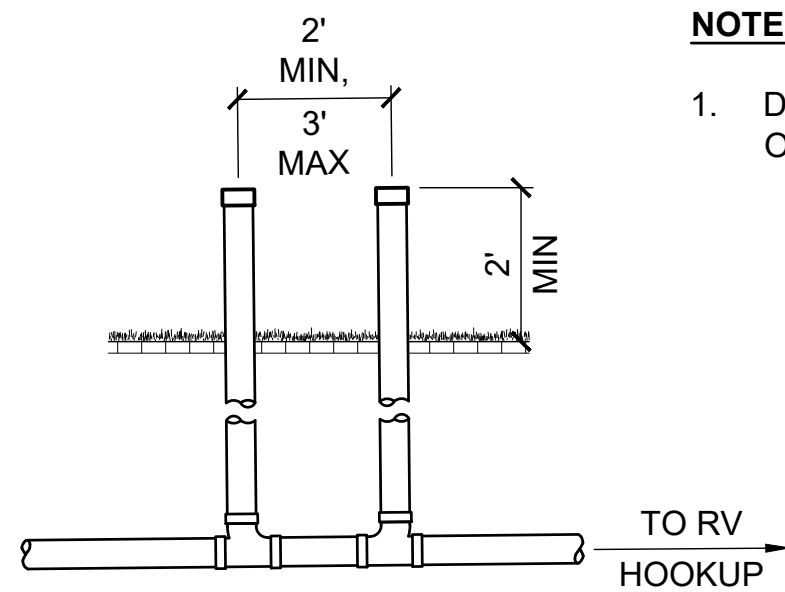
NOTES:

- 2 LAYERS OF 2" THICK x 4' WIDE x 8' LONG (4" TOTAL THICKNESS) INSULATION BOARD. STAGGER END JOINTS, 2' MIN.
- PLACE AND COMPACT TRENCH BACKFILL MATERIAL TO DEPTHS SHOWN IN THE DRAWINGS OR AS DETERMINED BY THE ENGINEER. COMPACT TRENCH BACKFILL TO 95% MIN OF MAXIMUM DENSITY.

2
43
NTS
SEWER TRENCH SECTION



SINGLE CLEANOUT

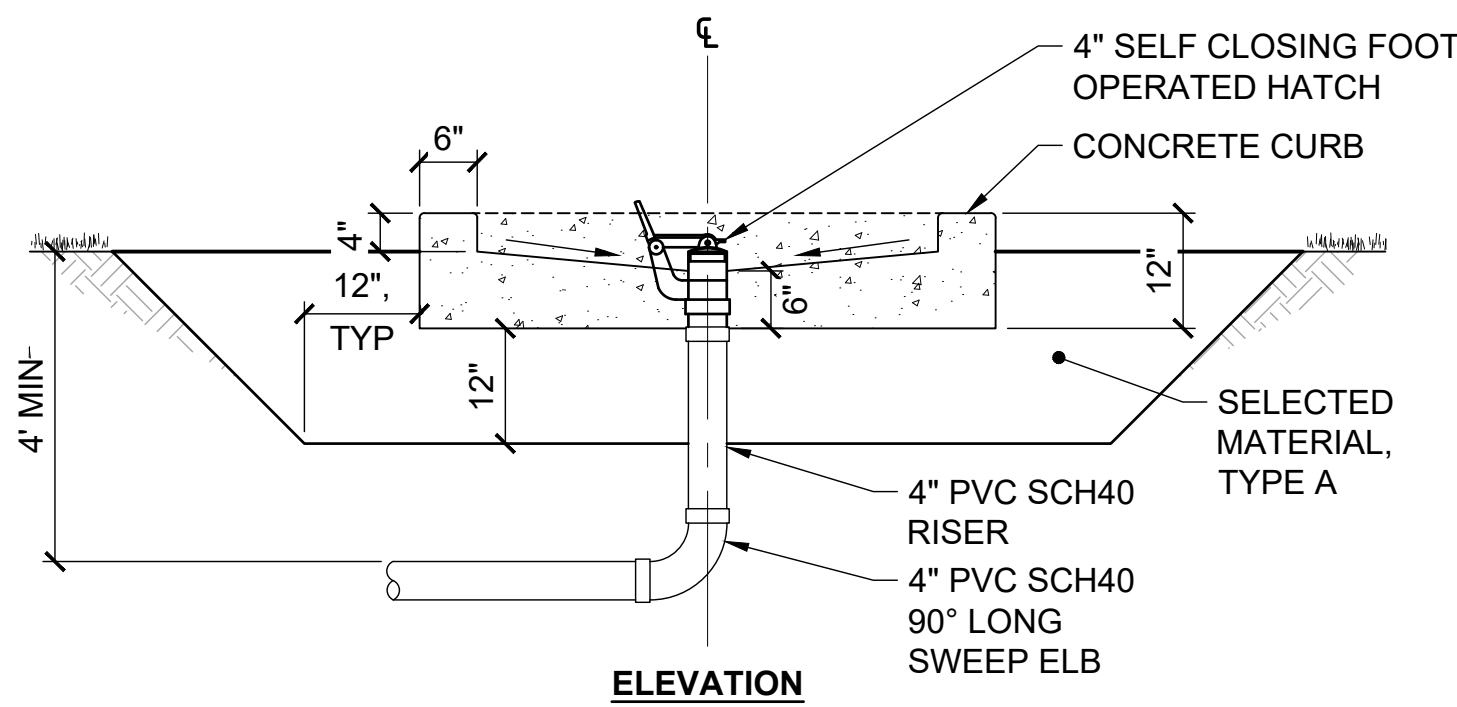


DOUBLE CLEANOUT

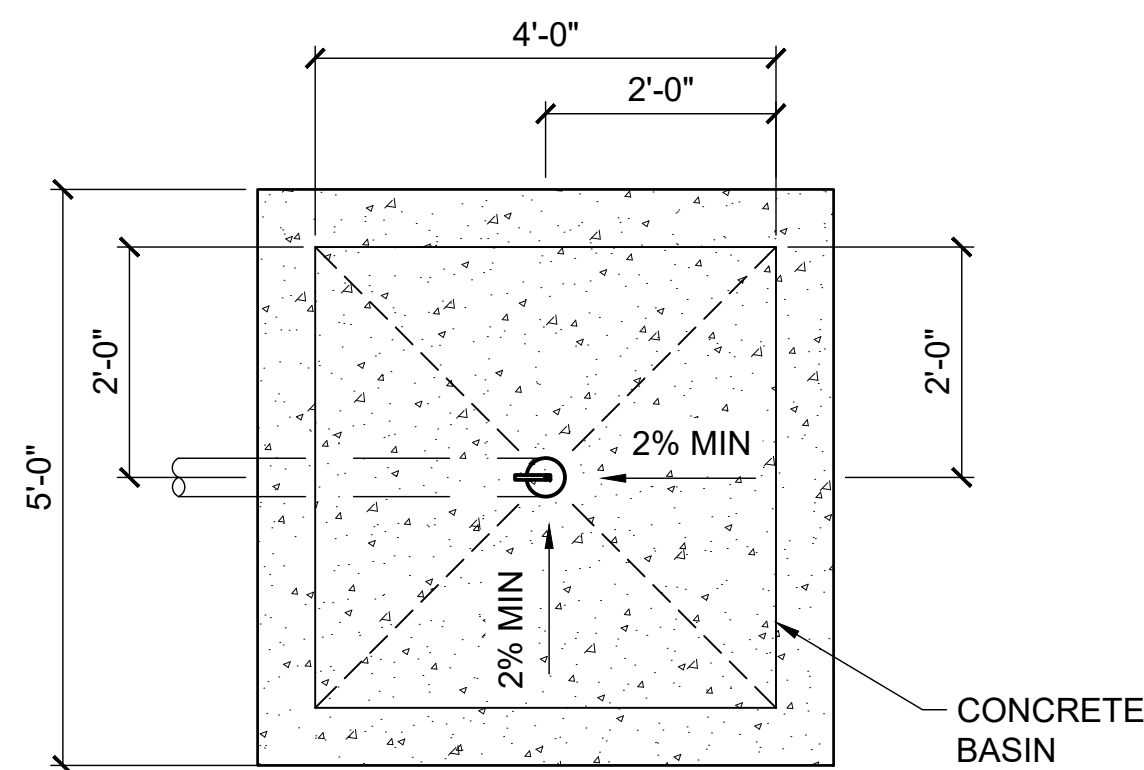
NOTES:

- DO NOT CUT OFF PIPING OR BURY BELOW GRADE.

3
43
NTS
SEWER CLEANOUT

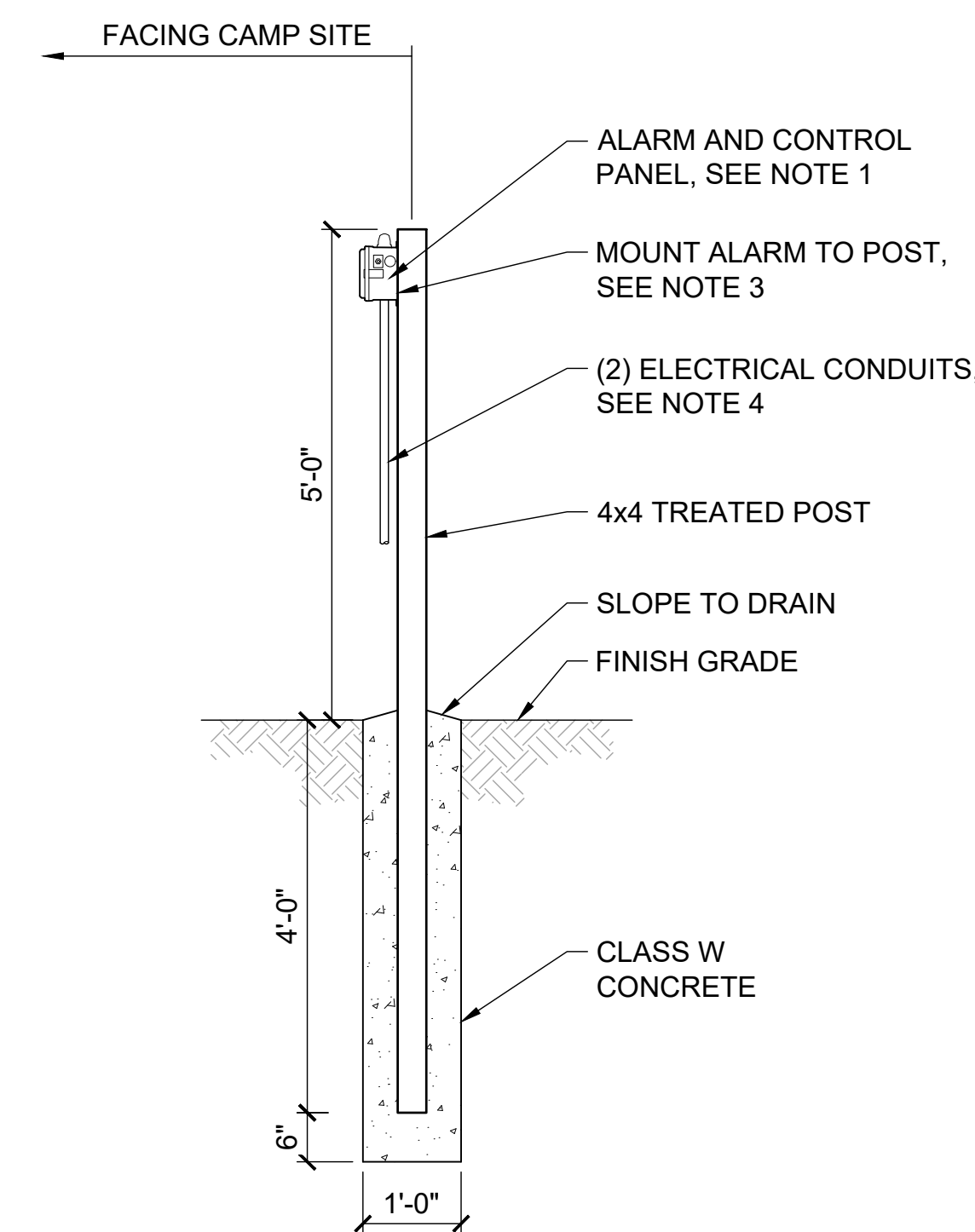


ELEVATION



PLAN

4
43
NTS
CAMP HOST SEWER HOOKUP



5
43
NTS
HOLDING TANK ALARM SYSTEM

NOTES:

- PROVIDE ALARM AND CONTROL PANEL FOR THE HOLDING TANK SUITABLE FOR OUTDOOR USE.
- ALARM SYSTEM SHALL INCLUDE BOTH AUDIO AND VISUAL ALARMS.
- ALARM AND CONTROL PANEL SHALL BE FASTEN TO 4x4 POST WITH MANUFACTURER'S INCLUDED MOUNTING KIT.
- ALL WIRE SHALL BE ROUTED IN WATER TIGHT ELECTRICAL CONDUIT. SEE ELECTRICAL FOR POWERING ALARM AND CONTROL PANEL.



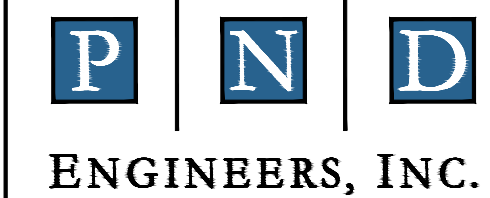
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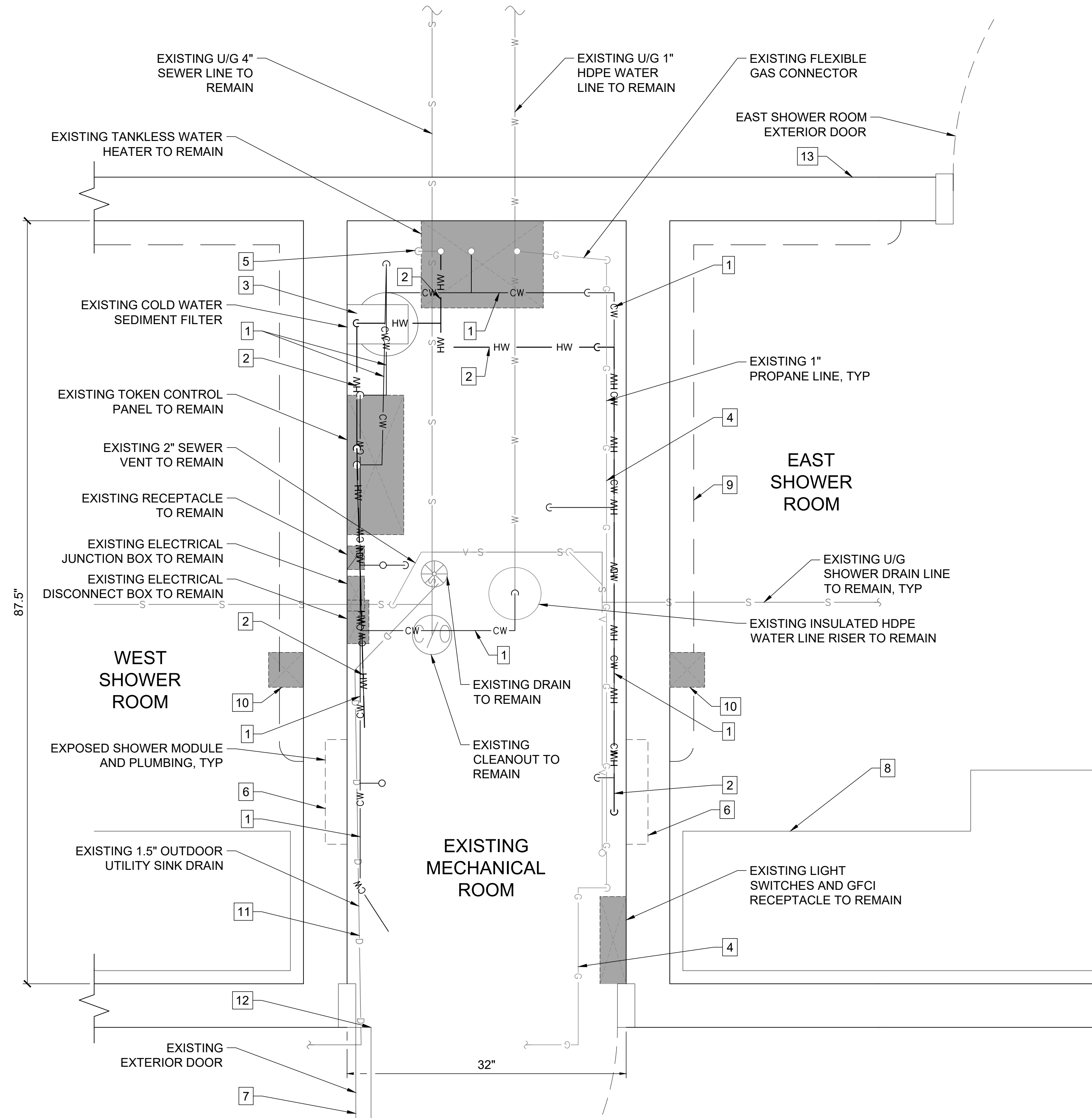
SEWER DETAILS

DESIGNED BY: JBK	DATE: 6/26/26	SHEET NO: 43 OF 63
CHECKED BY: AWJ	PROJECT NO: 251029	

6/2/26 - J.KINNEY - J:\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\44 - Sewer Details.dwg



2 44 NTS **SHOWERHOUSE EXISTING MECHANICAL ROOM**



2 44 NTS **SHOWERHOUSE - DEMOLITION PLAN**

SHEET NOTES:

1. INFORMATION SHOWN IS FROM FIELD MEASUREMENTS. LOCATION, SIZE OF PIPING, AND FIXTURES SHOWN ARE APPROXIMATED. FIELD VERIFY EXISTING CONDITIONS.
2. NOT ALL ELECTRICAL EQUIPMENT, WIRE CONDUITS, JUNCTION BOXES, CONTROL PANELS, PIPING, EQUIPMENT, EXHAUSTS, VENTS, AND OTHER ITEMS ARE SHOWN.
3. THIS DRAWING IS INTENDED TO DEPICT THE EXISTING CONDITIONS THAT REQUIRE DEMOLITION TO ACCOMMODATE NEW WORK. ITEMS REQUIRING DEMOLITION MAY NOT BE SHOWN. ADDITIONAL PLUMBING, FIXTURES, AND EQUIPMENT MAY REQUIRE DEMOLITION.
4. SHOWER SIGN, GRAB BAR, AND FOLDING BENCH SHALL BE REMOVED, SALVAGED, AND PROTECTED FROM DAMAGE. COORDINATE STORAGE LOCATION WITH THE OWNER.

DEMOLITION NOTES:

1. REMOVE AND DISPOSE OF ALL COLD WATER PLUMBING SUPPORTS AND PIPING.
2. REMOVE AND DISPOSE OF ALL HOT WATER PLUMBING SUPPORTS AND PIPING.
3. REMOVE AND DISPOSE OF COLD WATER SEDIMENT FILTER.
4. PROPANE LINE TO REMAIN, PROTECT IN PLACE.
5. PRESSURE RELIEF LINE TO REMAIN, PROTECT IN PLACE.
6. SHOWER FIXTURE PLUMBING, VALVES, HOT & COLD WATER CONNECTORS, AND FITTINGS, AND ASSOCIATED APPURTENANCES TO REMAIN, PROTECT IN PLACE OR REMOVE AND REINSTALLATION.
7. REMOVE AND DISPOSE OF EXISTING DOOR.
8. REMOVE AND SALVAGE ADA FOLDING BENCH.
9. REMOVE AND SALVAGE ADA GRAB BAR.
10. REMOVE AND DISPOSE OF EXISTING TOKEN MACHINE, SEE ELECTRICAL.
11. REMOVE AND DISPOSE OF ENTIRE INTERIOR AND EXTERIOR DRAIN LINE.
12. REMOVE AND DISPOSE OF EXISTING UTILITY SINK HOT AND COLD WATER SUPPLY LINES ABOVE DOORWAY.
13. REMOVE AND SALVAGE EXTERIOR SHOWER SIGN.

5/28/26 - JKINNEY - 11/2025/051029 Susitna Landing Boat Launch & Facility Renovation/Civil/44 - Plumbing Demolition.dwg



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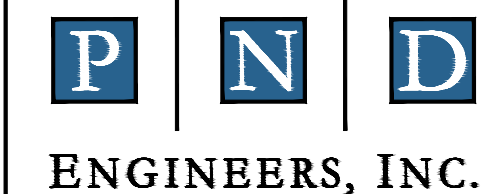
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DATE: 6/26/2026

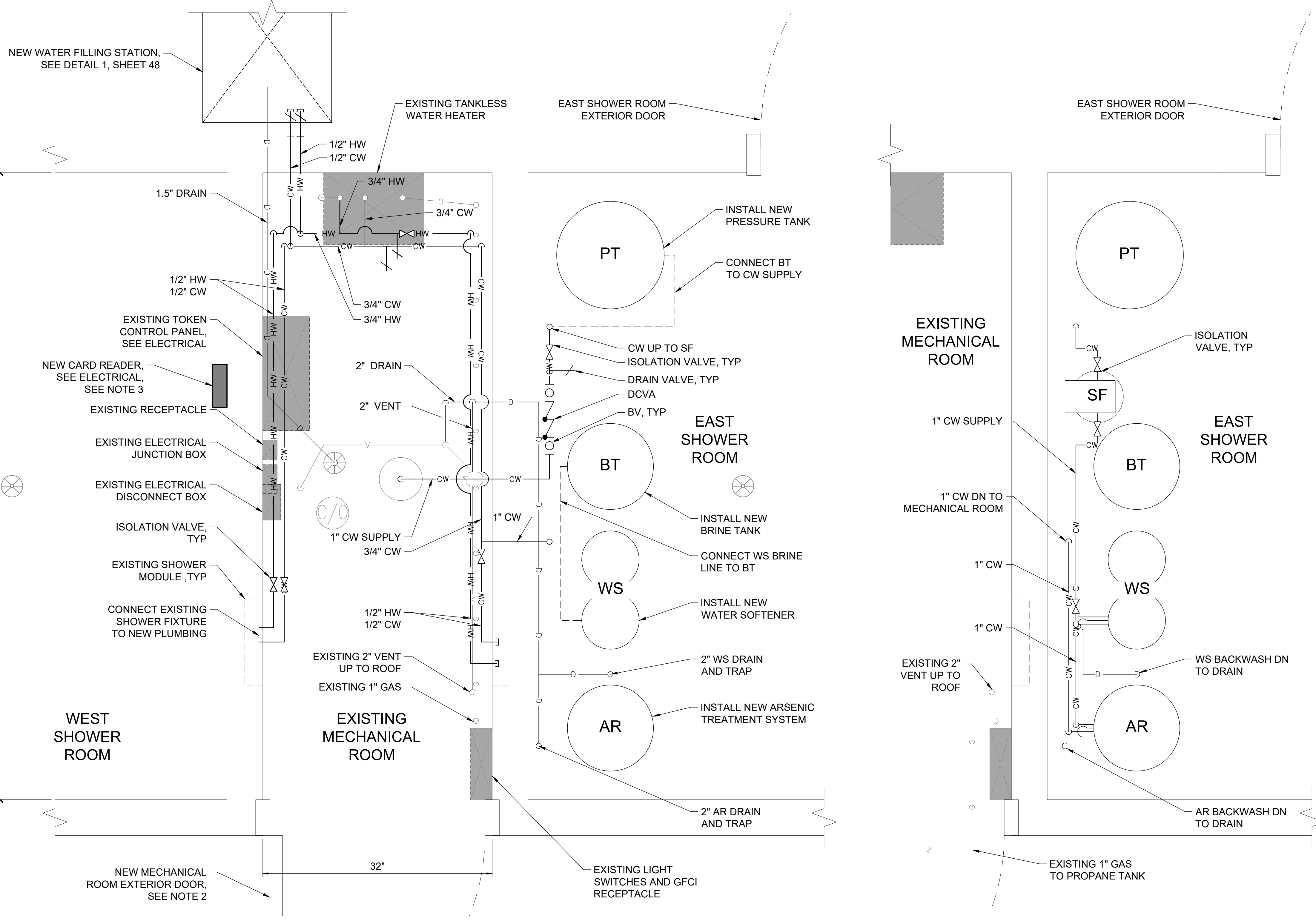
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

PLUMBING DEMOLITION PLAN

DESIGNED BY: JK	DATE: 6/26/26	SHEET NO: 44 OF 63
CHECKED BY: AWJ	PROJECT NO: 251029	



LEGEND (PLUMBING SHEETS ONLY)

- PIPE AND TEE UP
- ◐ PIPE DOWN
- ◑ TEE DOWN
- ⊓ CAP
- ⊗ FLOOR DRAIN
- ⊙ CLEANOUT
- PIPE CONTINUATION
- ⊕ PRESSURE/TEMPERATURE RELIEF VALVE
- ⊞ UNION
- ⊘ BALL VALVE (BV)
- ⊚ ISOLATION VALVE (ISO)
- ⊛ DOUBLE CHECK VALVE ASSEMBLY (DCVA)
- ⊜ HOSE BIBB, DRAIN VALVE (PLAN, 2D, AND 1D VIEW)

ABBREVIATIONS (PLUMBING SHEETS ONLY)

- AR ARSENIC TREATMENT SYSTEM
- BT BRINE TANK
- CW COLD WATER
- DN DOWN
- ELB ELBOW
- HW HOT WATER
- PT PRESSURE TANK
- SF SEDIMENT FILTER
- WS WATER SOFTENER

SHEET NOTES:

1. THE PLUMBING DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO SHOW MECHANICAL DETAILS IN A SCHEMATIC FASHION. THE MECHANICAL SYSTEM LAYOUT SHOWN IS FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FINAL DESIGN, SIZING, CONFIGURATION, AND PERFORMANCE OF THE SYSTEM.
2. REPLACE AND MATCH EXISTING DOOR, SUPPLIED FROM CXT INC.
3. PATCH EXISTING TOKEN MACHINE HOLES AND PAINT ACCORDING TO CXT INC.'S RECOMMENDATIONS. MATCH EXISTING PAINT COLOR AND FINISH.

1 SHOWERHOUSE - PLUMBING PLAN
45 NTS

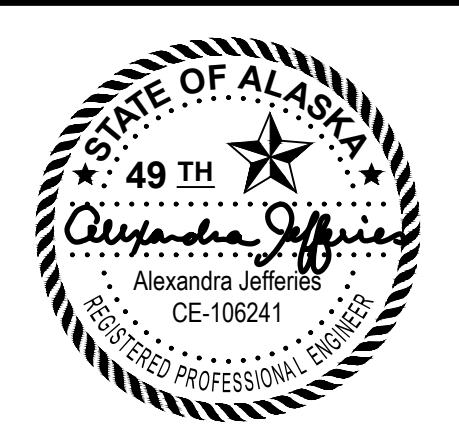
2 EAST SHOWER ROOM - UPPER LEVEL PIPE PLUMBING PLAN
45 NTS

5/28/26 - JKINNEY - 11/2025/051029 Susitna Landing Boat Launch & Facility Renovation/Civil/45 - Plumbing Plans.dwg

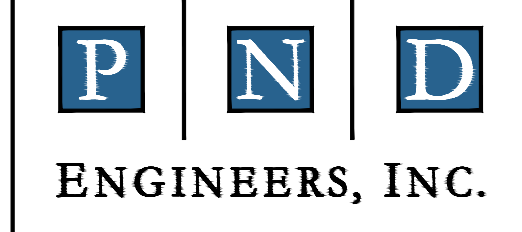


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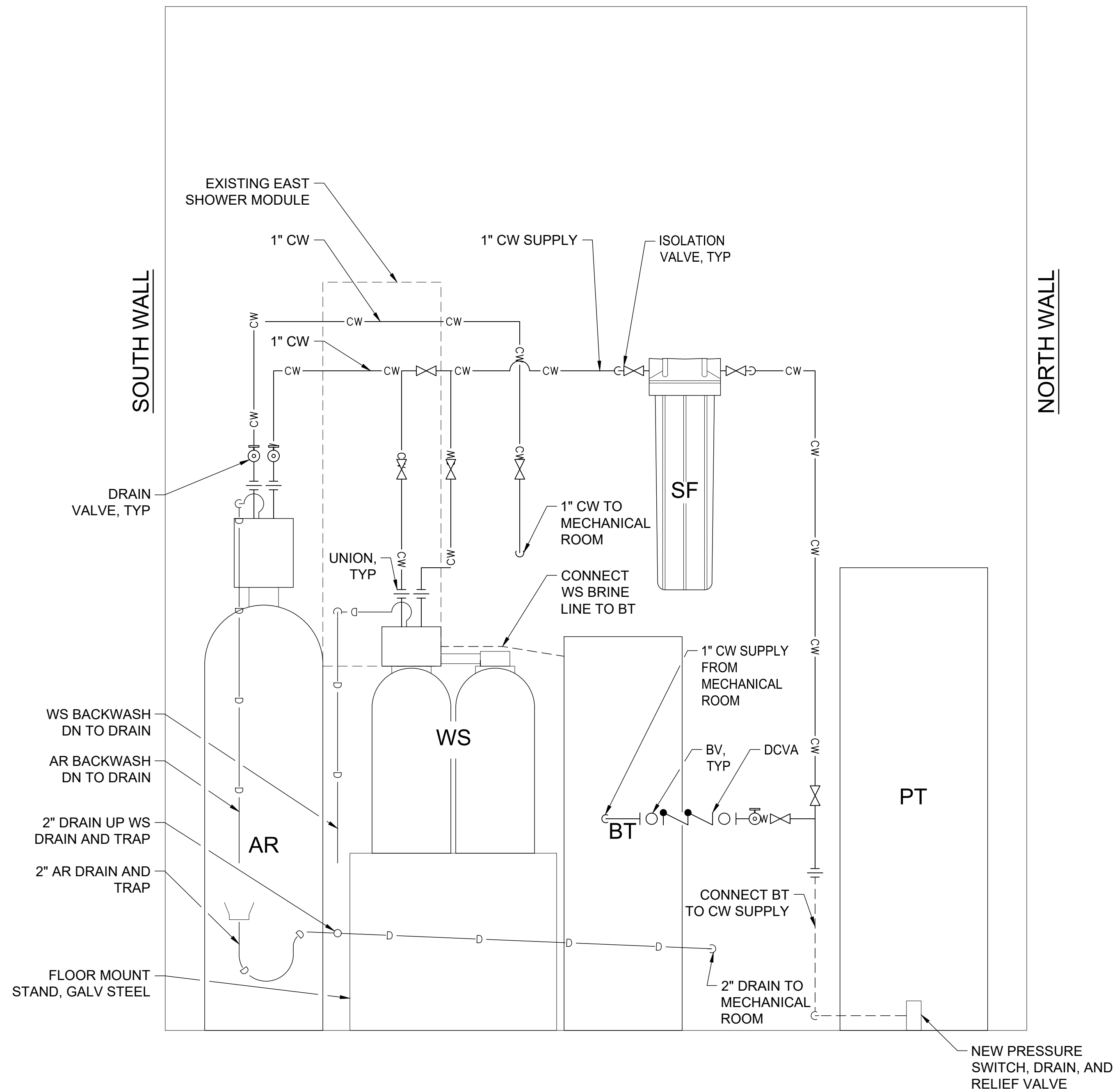
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: PLUMBING PLAN	
DESIGNED BY: JJK	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 45 OF 63	

REV	DATE	DESCRIPTION

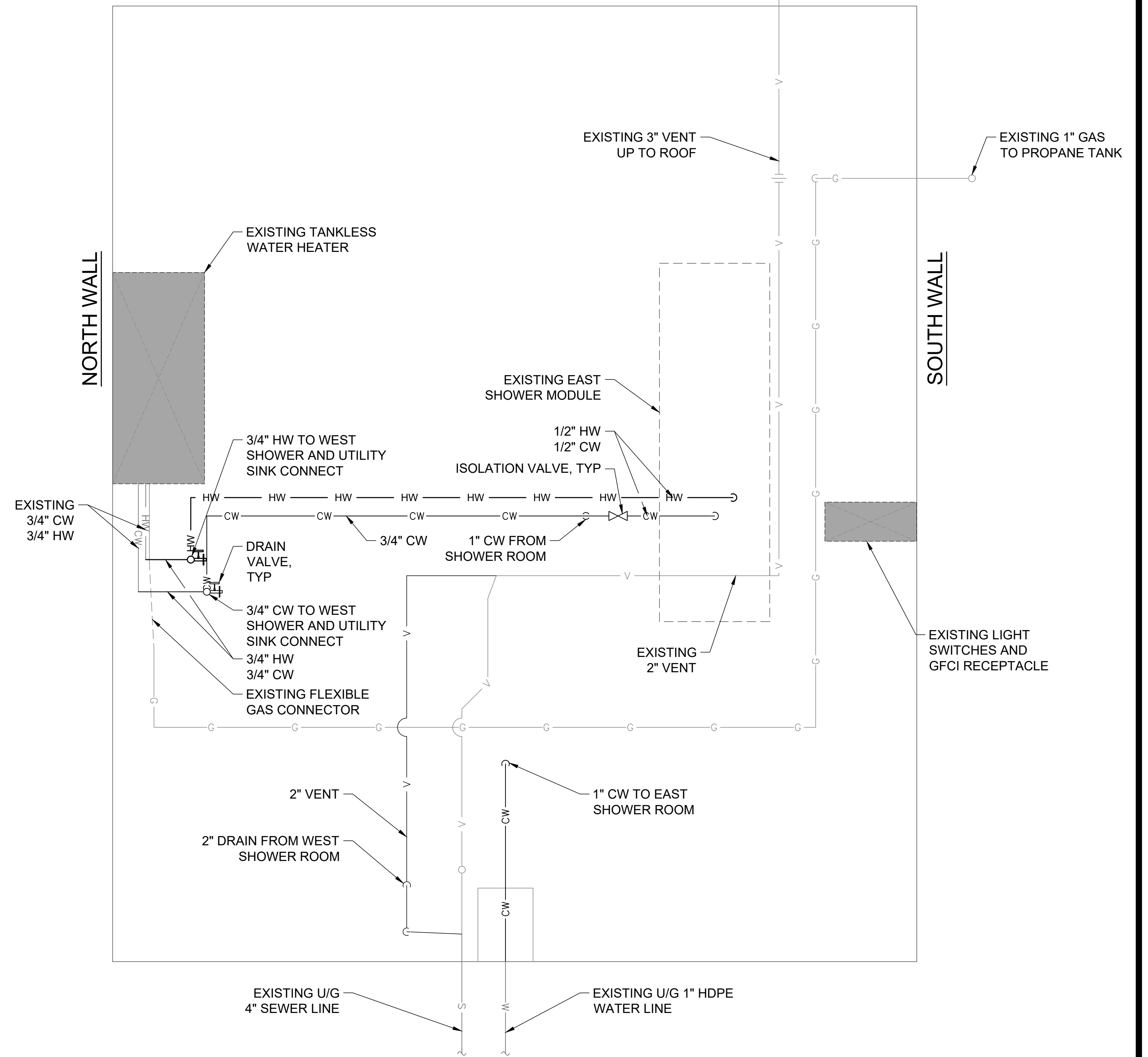
DATE: 6/26/2026

SHEET NOTES:

1. THE PLUMBING DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO SHOW MECHANICAL DETAILS IN A SCHEMATIC FASHION. THE MECHANICAL SYSTEM LAYOUT SHOWN IS FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FINAL DESIGN, SIZING, CONFIGURATION, AND PERFORMANCE OF THE COMPLETE SYSTEM.



1 EAST SHOWER ROOM PLUMBING SCHEMATIC - FACING WEST WALL
46 NTS



2 EXISTING MECHANICAL ROOM PLUMBING SCHEMATIC - FACING EAST WALL
46 NTS

5/28/26 - JKINNEY - 11/2025/051029 Susitna Landing Boat Launch & Facility Renovation/Civil/46-48 - Plumbing Details.dwg



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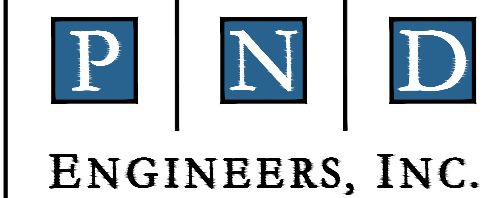
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REV	DATE	DESCRIPTION



DATE: 6/26/2026

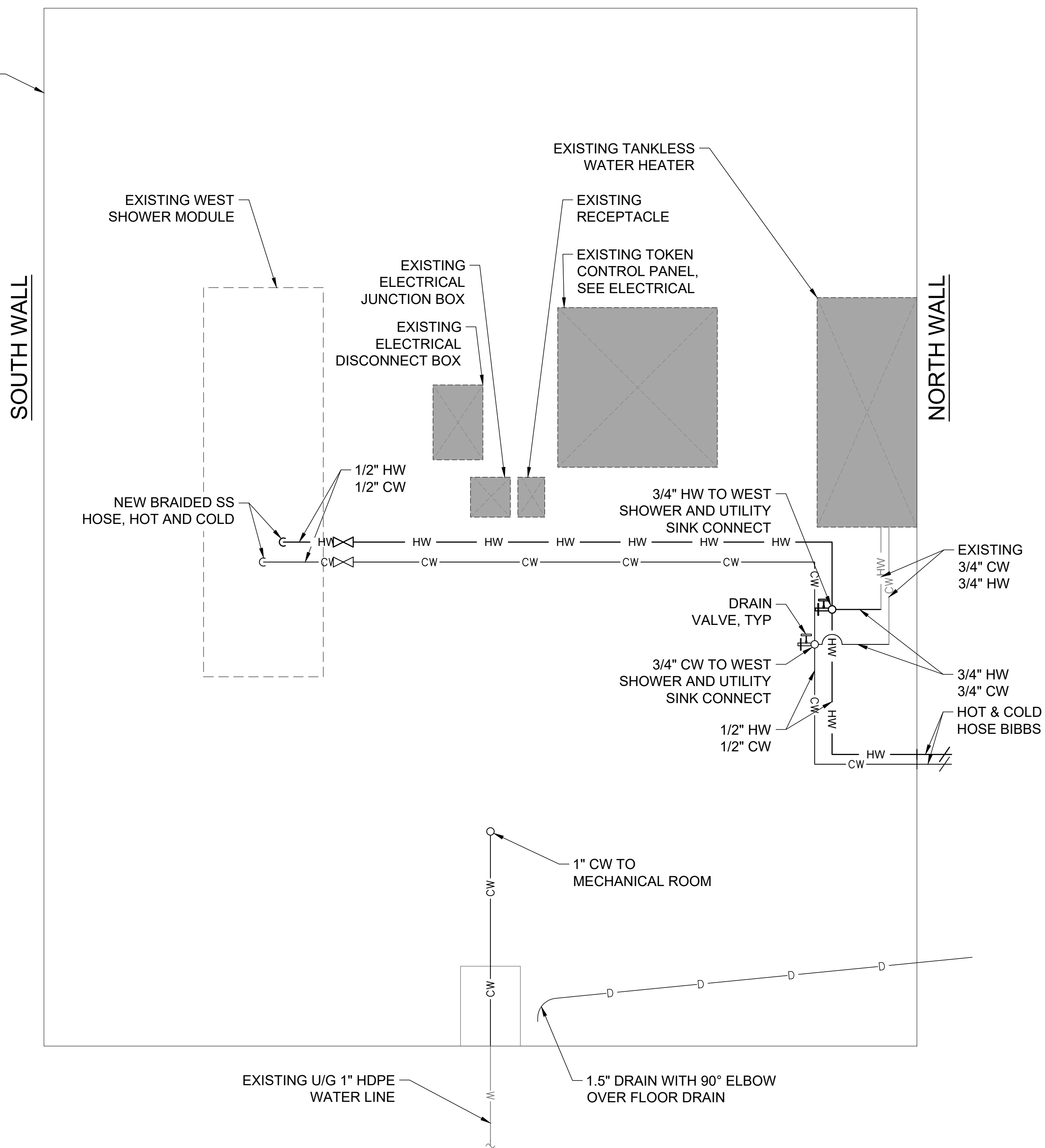
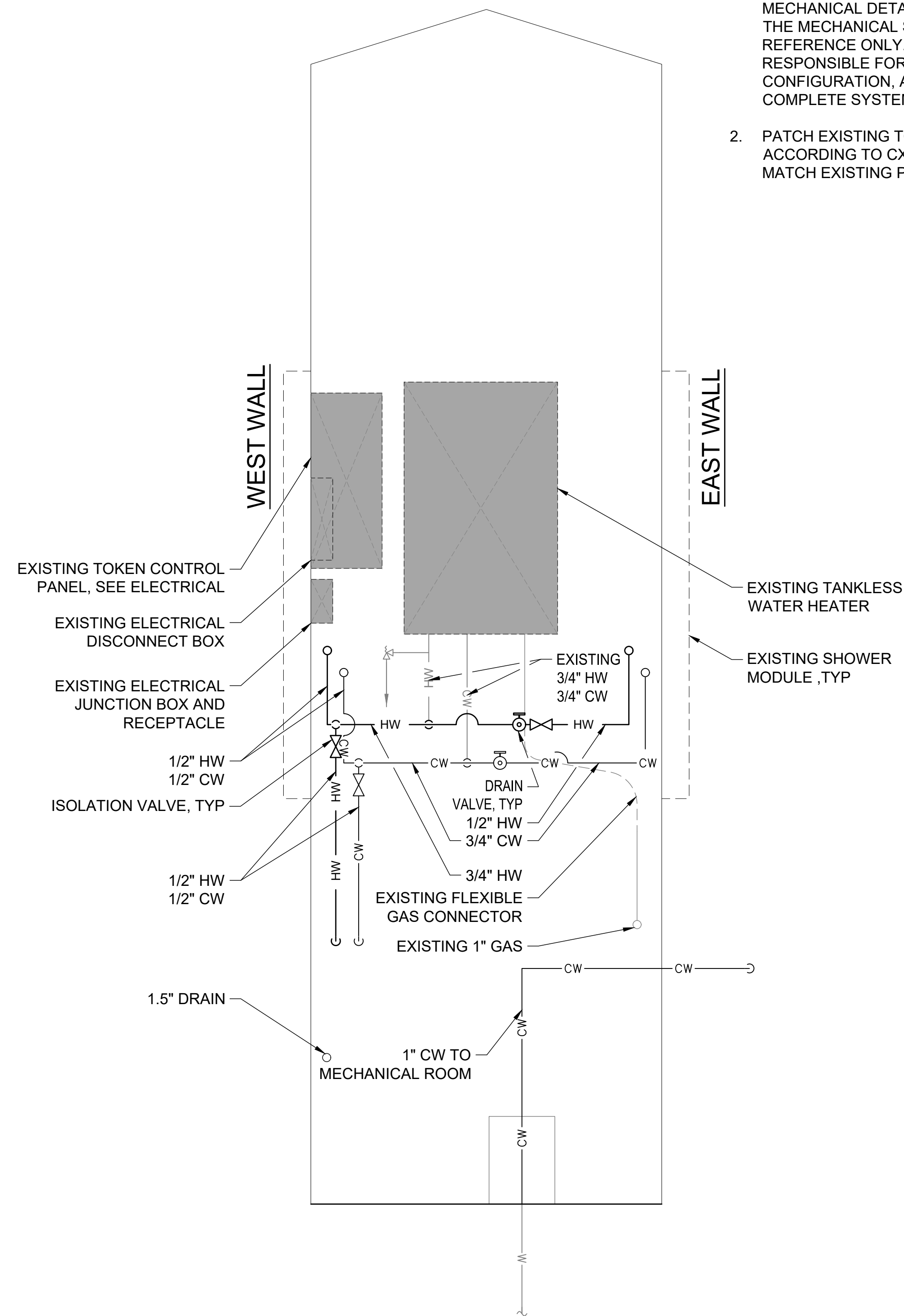
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Anchorage, Alaska 99503
Phone: 907.561.1011
www.pndengineers.com
AK LIC# AECC250



SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: PLUMBING DETAILS	
DESIGNED BY: JK	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029
SHEET NO: 46 OF 63	

SHEET NOTES:

1. THE PLUMBING DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO SHOW MECHANICAL DETAILS IN A SCHEMATIC FASHION. THE MECHANICAL SYSTEM LAYOUT SHOWN IS FOR REFERENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR FINAL DESIGN, SIZING, CONFIGURATION, AND PERFORMANCE OF THE COMPLETE SYSTEM.
2. PATCH EXISTING TOKEN MACHINE HOLES AND PAINT ACCORDING TO CXT INC.'S RECOMMENDATIONS. MATCH EXISTING PAINT COLOR AND FINISH.



1
47 NTS **EXISTING MECHANICAL ROOM PLUMBING SCHEMATIC - FACING NORTH WALL**

2
47 NTS **EXISTING MECHANICAL ROOM PLUMBING SCHEMATIC - FACING WEST WALL**

5/28/26 - JKINNEY - 112025051029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\46-48 - Plumbing Details.dwg



ISSUED FOR BID
6/26/2026

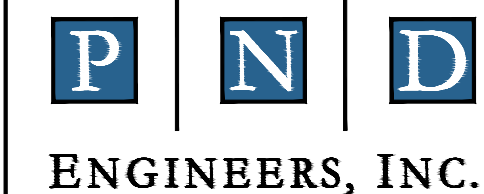
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REV	DATE	DESCRIPTION



DATE: 6/26/2026

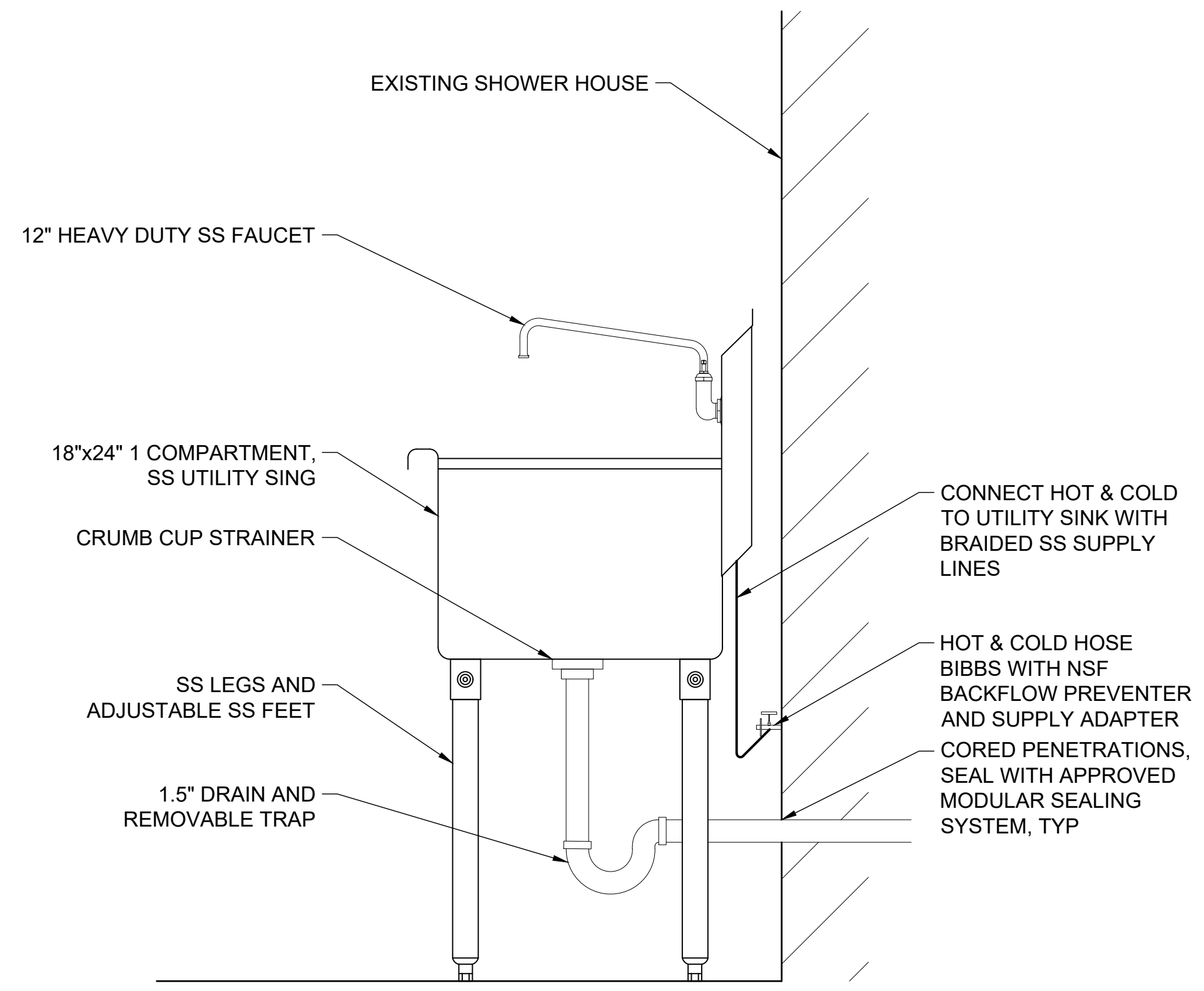
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **PLUMBING DETAILS**

DESIGNED BY: JK	DATE: 6/26/26	SHEET NO: 47 OF 63
CHECKED BY: AWJ	PROJECT NO: 251029	



SHEET NOTES:

1. ALL PARTS AND COMPONENTS SHALL BE NSF CERTIFIED.

1
48 **WATER FILLING STATION**
NTS

5/28/26 - JKINNEY - 112025051029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\46-48 - Plumbing Details.dwg



ISSUED FOR BID
6/26/2026

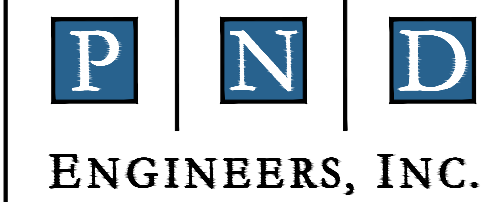
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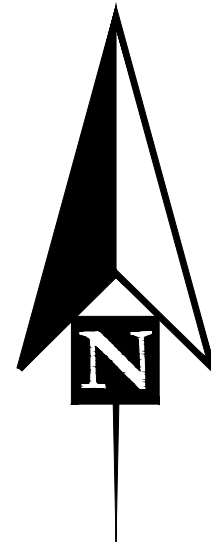
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

PLUMBING DETAILS

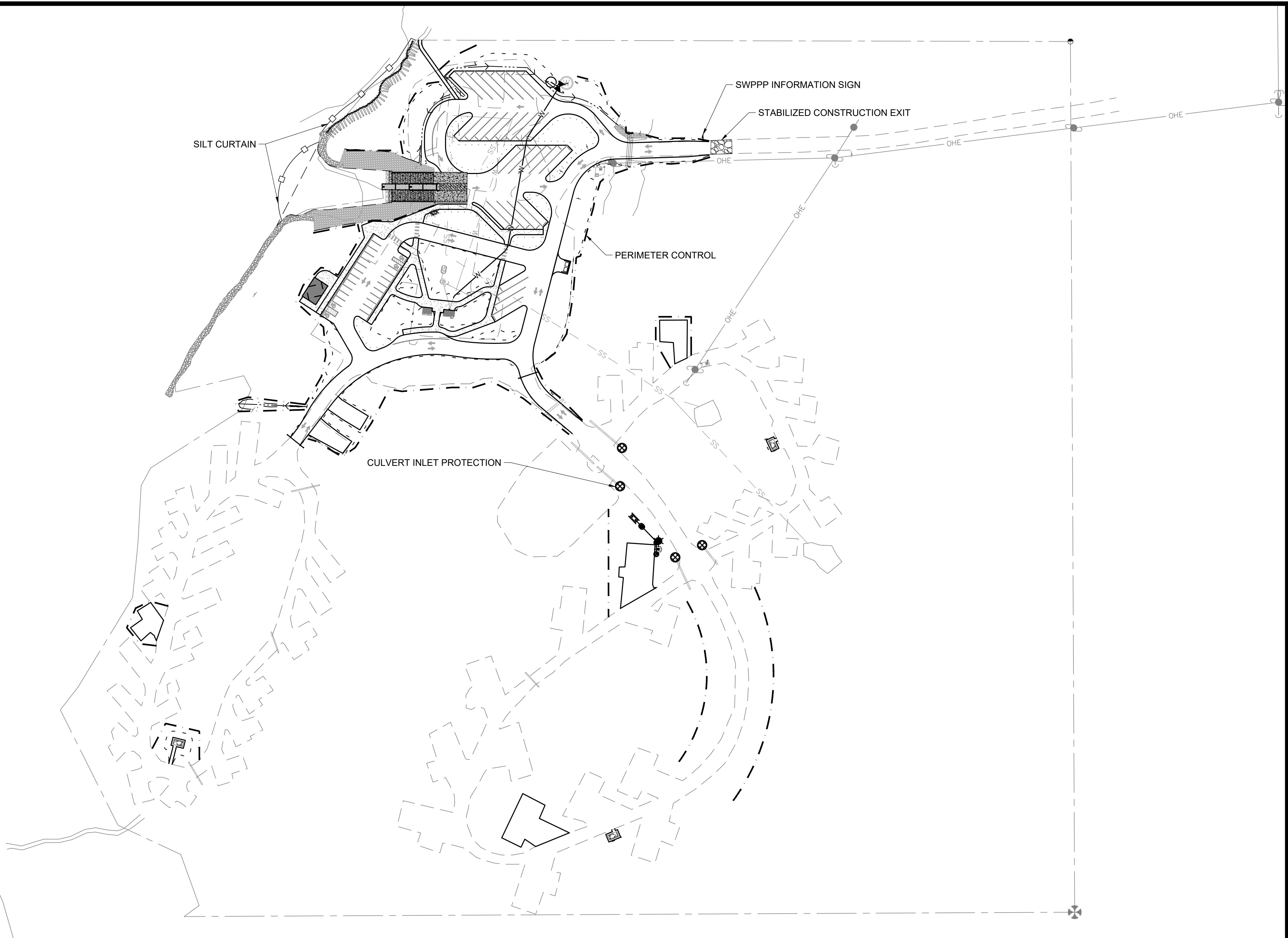
DESIGNED BY: JK	DATE: 6/26/26
CHECKED BY: AWJ	PROJECT NO: 251029

SHEET NO: **48** OF 63

6/1/26 - OROHLER - 1/2025/251029 Susitna Landing Boat Launch & Facility Renovation/G. Drawings/Civil/49 - Erosion and Sediment Control Plan.dwg



0 25 50 100 150 FT



LEGEND:

- SILT CURTAIN
- PERIMETER CONTROL
- CULVERT INLET PROTECTION
- STABILIZED CONSTRUCTION EXIT

NOTES:

1. PLAN SHOWS RECOMMENDED BMPS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SUBMIT A SWPPP AND NOI AND COMPLY WITH THE CONSTRUCTION GENERAL PERMIT.
2. SUGGESTED SWPPP INFORMATION SIGN LOCATION SHOWN. MUST BE POSTED NEAR THE PROJECT ENTRANCE.
3. INFORMATION SHOWN ON THE SWPPP INFORMATION SIGN MUST CONFORM TO THE REQUIREMENTS OF THE ALASKA CONSTRUCTION GENERAL PERMIT.
4. ADJUST LIMITS OF SILT CURTAIN AS REQUIRED.



ISSUED FOR BID

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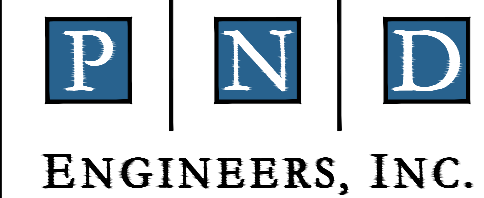
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REV	DATE	DESCRIPTION



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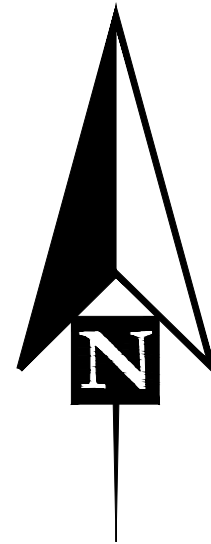
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Phone: 907.561.1011
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PROJECT: SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: EROSION & SEDIMENT CONTROL PLAN

DESIGNED BY: OTR	DATE: 6/26/26	SHEET NO: 49 OF 63
CHECKED BY: AWJ	PROJECT NO: 251029	



0 25 50 100 150 FT

SUGGESTED PHASING:

PHASE 1 - FALL 2026:

- FULL SITE CLOSURE
- SEDIMENT AND EROSION CONTROL
- CLEARING AND GRUBBING
- CONSTRUCT UTILITY IMPROVEMENTS
- CONSTRUCT PARKING AREAS
- RESURFACE CAMPSITES

PHASE 2 - SPRING 2027:

- CONSTRUCT BOAT LAUNCH
- INSTALL ROOTWADS
- INSTALL VAULT TOILETS

PHASE 3 - SUMMER 2027:

- INSTALL ALL LANDSCAPE FEATURES
- INSTALL SIGNAGE AND STRIPING
- INSTALL CONCRETE PARKING BUMPERS

NOTES:

1. SITE MUST BE OPEN FOR WINTER USE BETWEEN NOVEMBER 16, 2026 AND APRIL 14, 2027. PAY KIOSK SHALL BE USABLE DURING THIS TIME.
2. FULL CLOSURE OF THE FACILITY IS ALLOWED WITH APPROVAL FROM THE DEPARTMENT, OUTSIDE OF THE TIMEFRAME PRESENTED IN NOTE 1. COORDINATE 2027 CLOSURE DURING WINTER SHUTDOWN.

PHASE 1:
CONSTRUCT UTILITY IMPROVEMENTS

PHASE 1:
RESURFACE CAMPSITES

PHASE 2:
INSTALL VAULT TOILETS

PHASE 2:
CONSTRUCT BOAT LAUNCH
INSTALL ROOTWADS

PHASE 3:
INSTALL ALL LANDSCAPE FEATURES
INSTALL SIGNAGE AND STRIPING

PHASE 1:
CONSTRUCT PARKING AREAS

6/11/26 - OROHLER - J:\2025\251029_Susitna Landing Boat Launch & Facility Renovation\G_Drawings\Civil\50 - Phasing Plan.dwg



ISSUED FOR BID
6/26/2026

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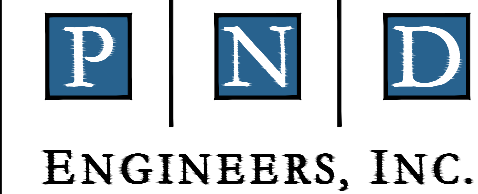
DATE: 6/26/2026

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Phone: 907.561.1011

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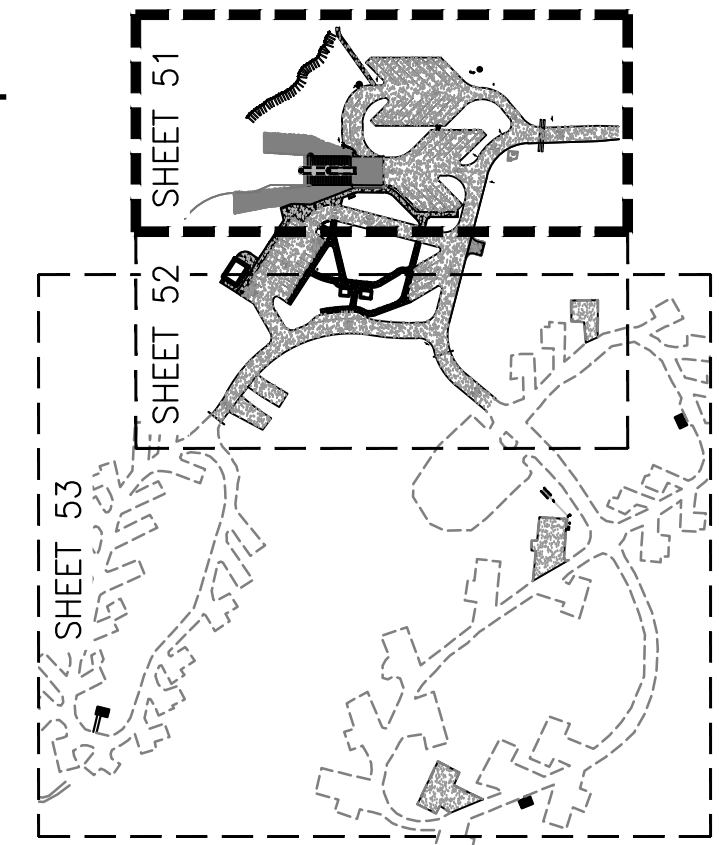
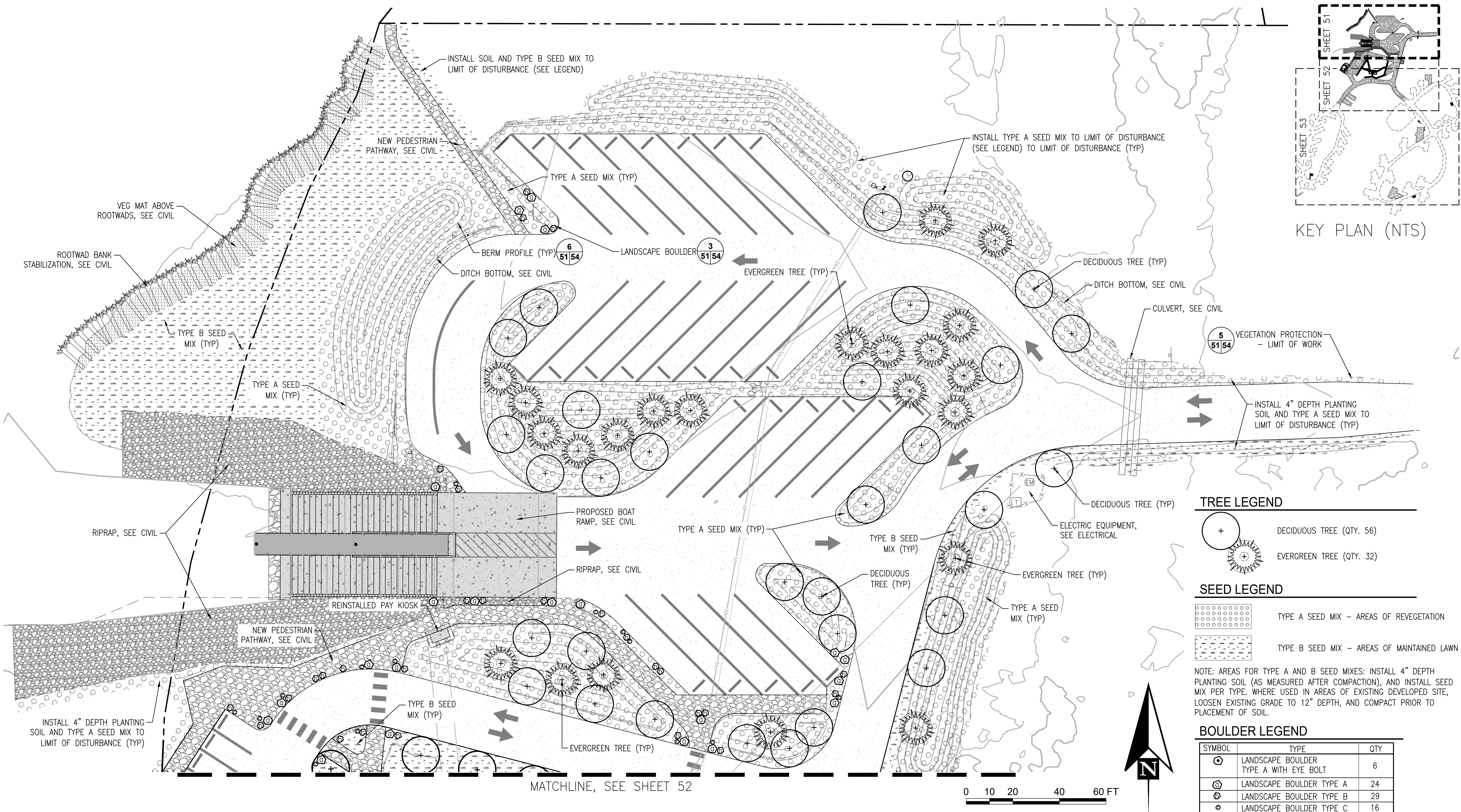
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**SUSITNA LANDING BOAT LAUNCH
& FACILITY RENOVATION**

PROJECT PHASING PLAN

DESIGNED BY:	OTR	DATE:	6/26/26	SHEET NO:	50 OF 63
CHECKED BY:	AWJ	PROJECT NO:	251029		



KEY PLAN (NTS)

TREE LEGEND

- ⊕ DECIDUOUS TREE (QTY. 56)
- ⊕ EVERGREEN TREE (QTY. 32)

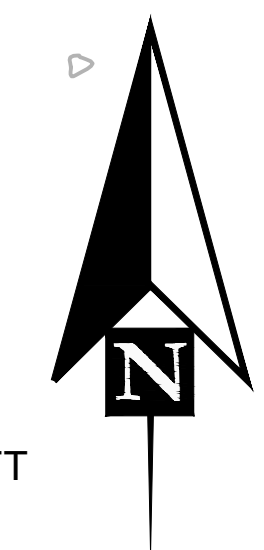
SEED LEGEND

- ▢ TYPE A SEED MIX - AREAS OF REVEGETATION
- ▢ TYPE B SEED MIX - AREAS OF MAINTAINED LAWN

NOTE: AREAS FOR TYPE A AND B SEED MIXES: INSTALL 4" DEPTH PLANTING SOIL (AS MEASURED AFTER COMPACTION), AND INSTALL SEED MIX PER TYPE. WHERE USED IN AREAS OF EXISTING DEVELOPED SITE, LOOSEN EXISTING GRADE TO 12" DEPTH, AND COMPACT PRIOR TO PLACEMENT OF SOIL.

BOULDER LEGEND

SYMBOL	TYPE	QTY
⊕	LANDSCAPE BOULDER TYPE A WITH EYE BOLT	6
⊕	LANDSCAPE BOULDER TYPE A	24
⊕	LANDSCAPE BOULDER TYPE B	29
⊕	LANDSCAPE BOULDER TYPE C	16



MATCHLINE, SEE SHEET 52

6/12/26 - BLITTLE - J:\PND-25-04 Susitna Landing2 - CAD\Corvus-Sheets.dwg



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06/12/2026

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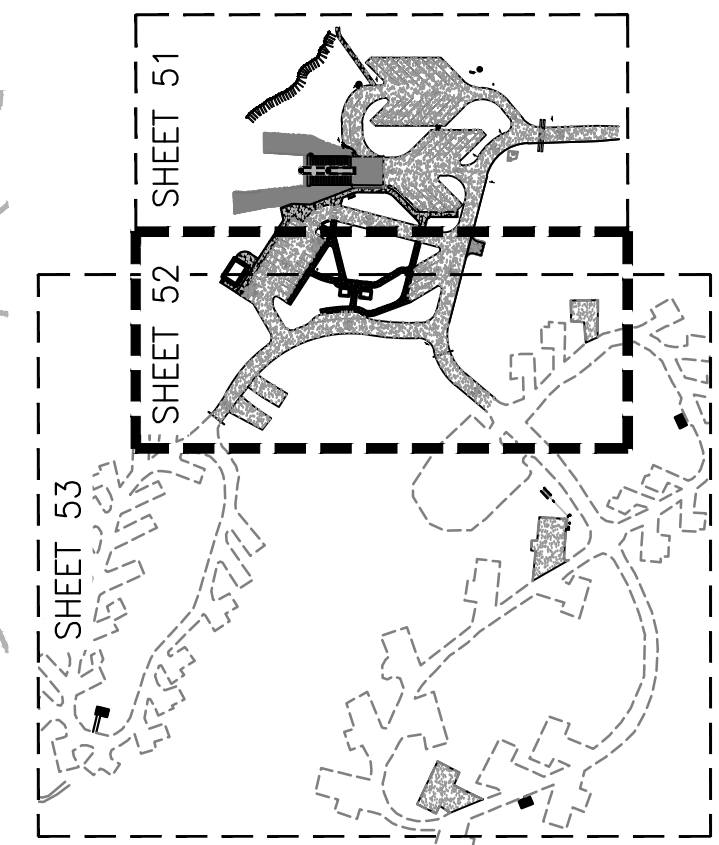
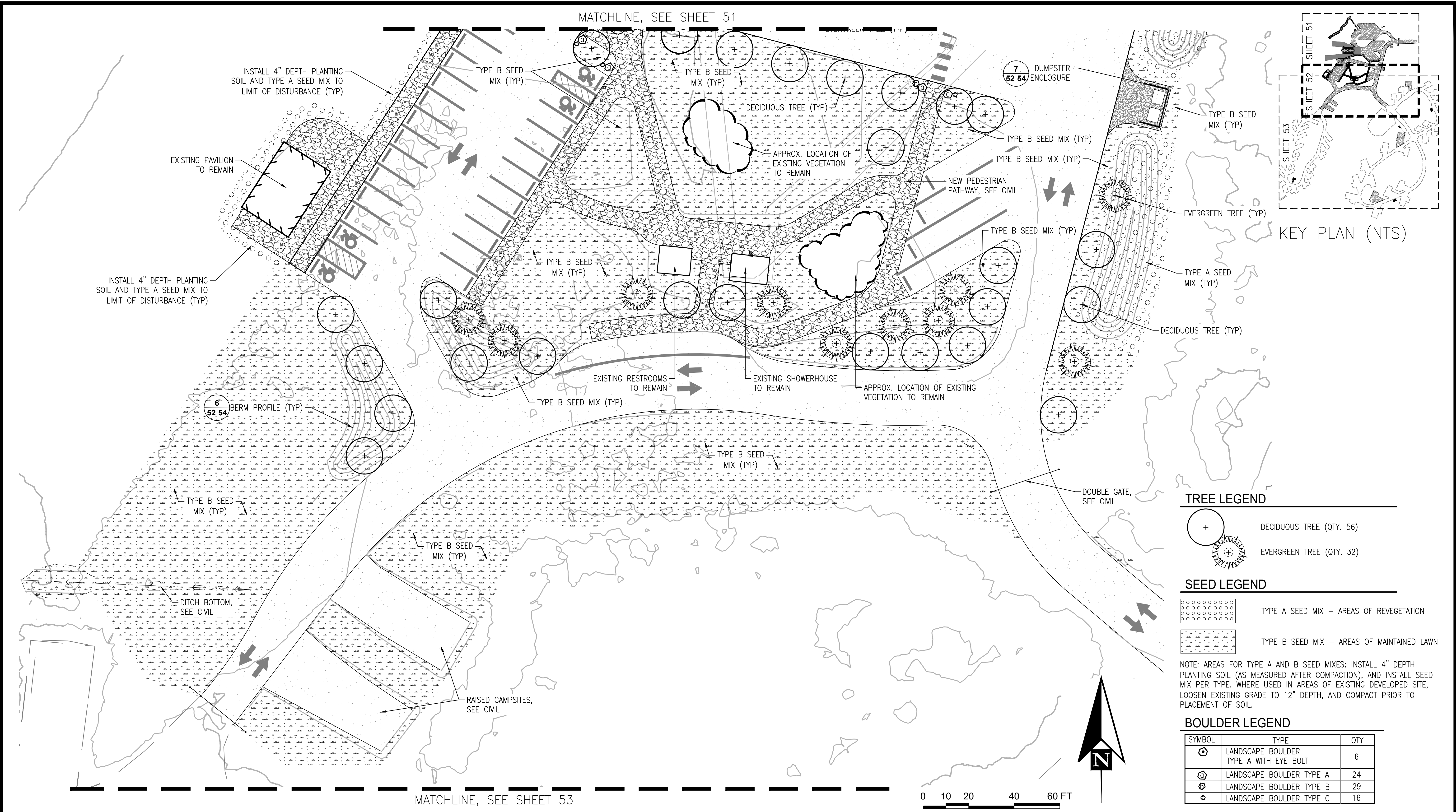
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

LANDSCAPE SITE PLAN - NORTH

DESIGNED BY: # DATE: 06/12/2026
CHECKED BY: # PROJECT NO: 251029

SHEET NO: **51** OF 63

6/12/26 - BLITTLE - J:\PND-25-04 Susitna Landing2 - CAD\Corvus-Sheets.dwg



KEY PLAN (NTS)

TREE LEGEND

- DECIDUOUS TREE (QTY. 56)
- EVERGREEN TREE (QTY. 32)

SEED LEGEND

- TYPE A SEED MIX - AREAS OF REVEGETATION
- TYPE B SEED MIX - AREAS OF MAINTAINED LAWN

NOTE: AREAS FOR TYPE A AND B SEED MIXES: INSTALL 4" DEPTH PLANTING SOIL (AS MEASURED AFTER COMPACTION), AND INSTALL SEED MIX PER TYPE. WHERE USED IN AREAS OF EXISTING DEVELOPED SITE, LOOSEN EXISTING GRADE TO 12" DEPTH, AND COMPACT PRIOR TO PLACEMENT OF SOIL.

BOULDER LEGEND

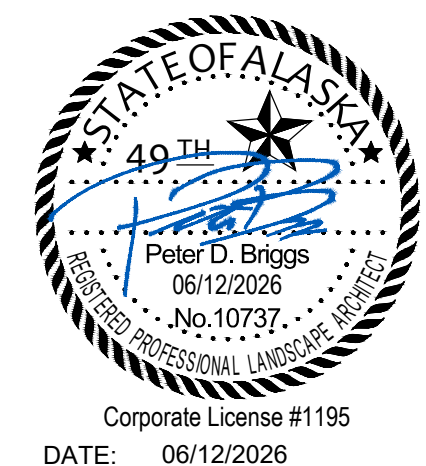
SYMBOL	TYPE	QTY
	LANDSCAPE BOULDER TYPE A WITH EYE BOLT	6
	LANDSCAPE BOULDER TYPE A	24
	LANDSCAPE BOULDER TYPE B	29
	LANDSCAPE BOULDER TYPE C	16

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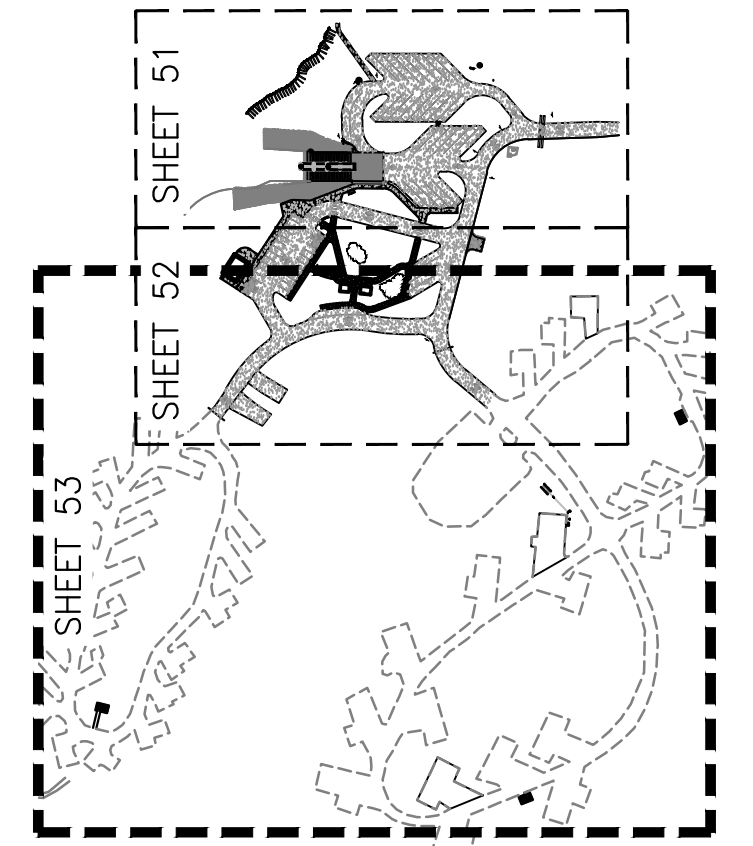
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

LANDSCAPE SITE PLAN - SOUTH

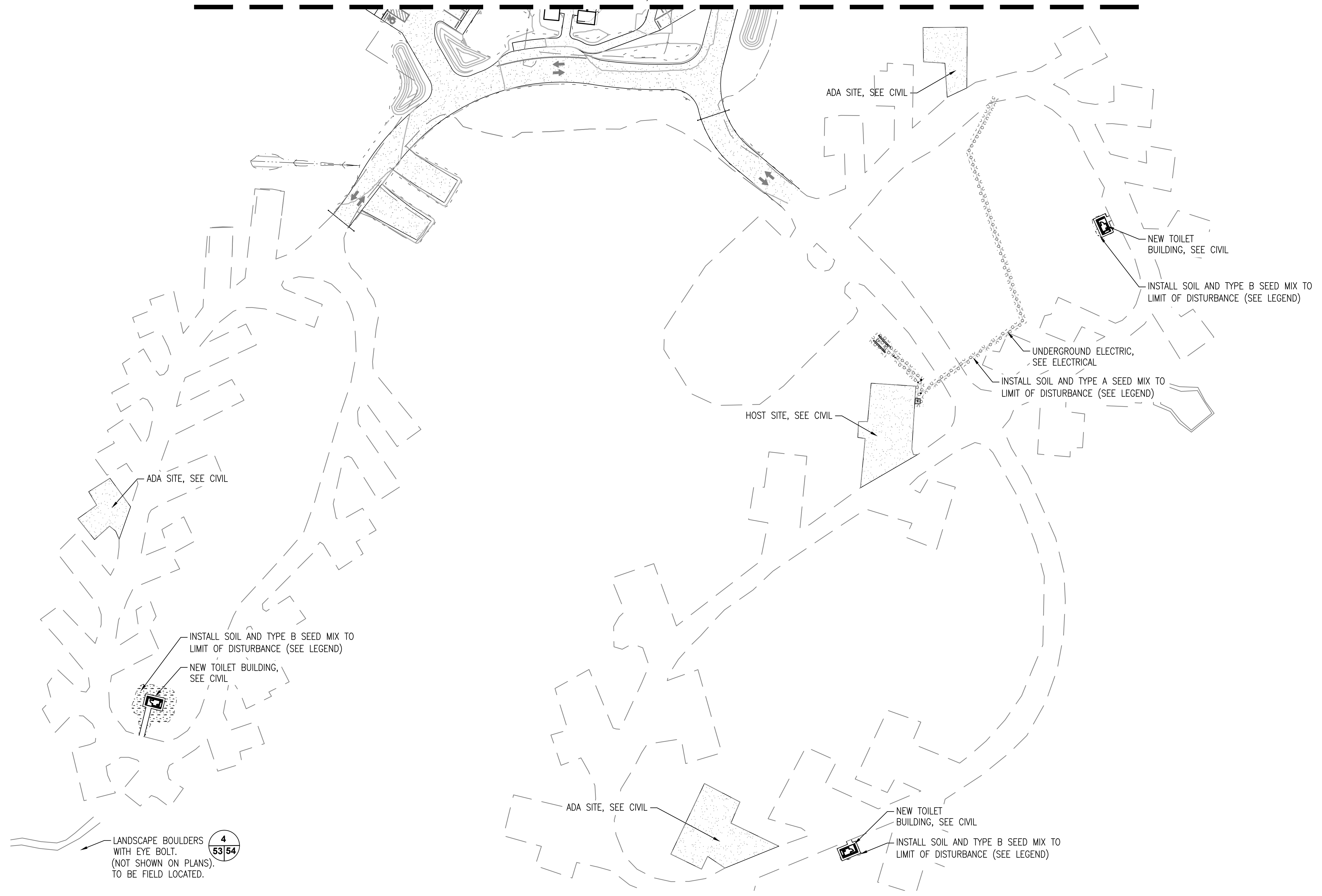
DESIGNED BY:	#	DATE:	06/12/2026
CHECKED BY:	#	PROJECT NO.:	251029

SHEET NO. **52** OF 63

MATCHLINE, SEE SHEET 52



KEY PLAN (NTS)



LANDSCAPE BOULDERS WITH EYE BOLT. (NOT SHOWN ON PLANS). TO BE FIELD LOCATED.



0 25 50 100 150 FT

6/12/26 - BLITTLE - J:\PND-25-04 Susitna Landing2 - CAD\Corvus-Sheets.dwg



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REV	DATE	DESCRIPTION



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DATE: 06/12/2026

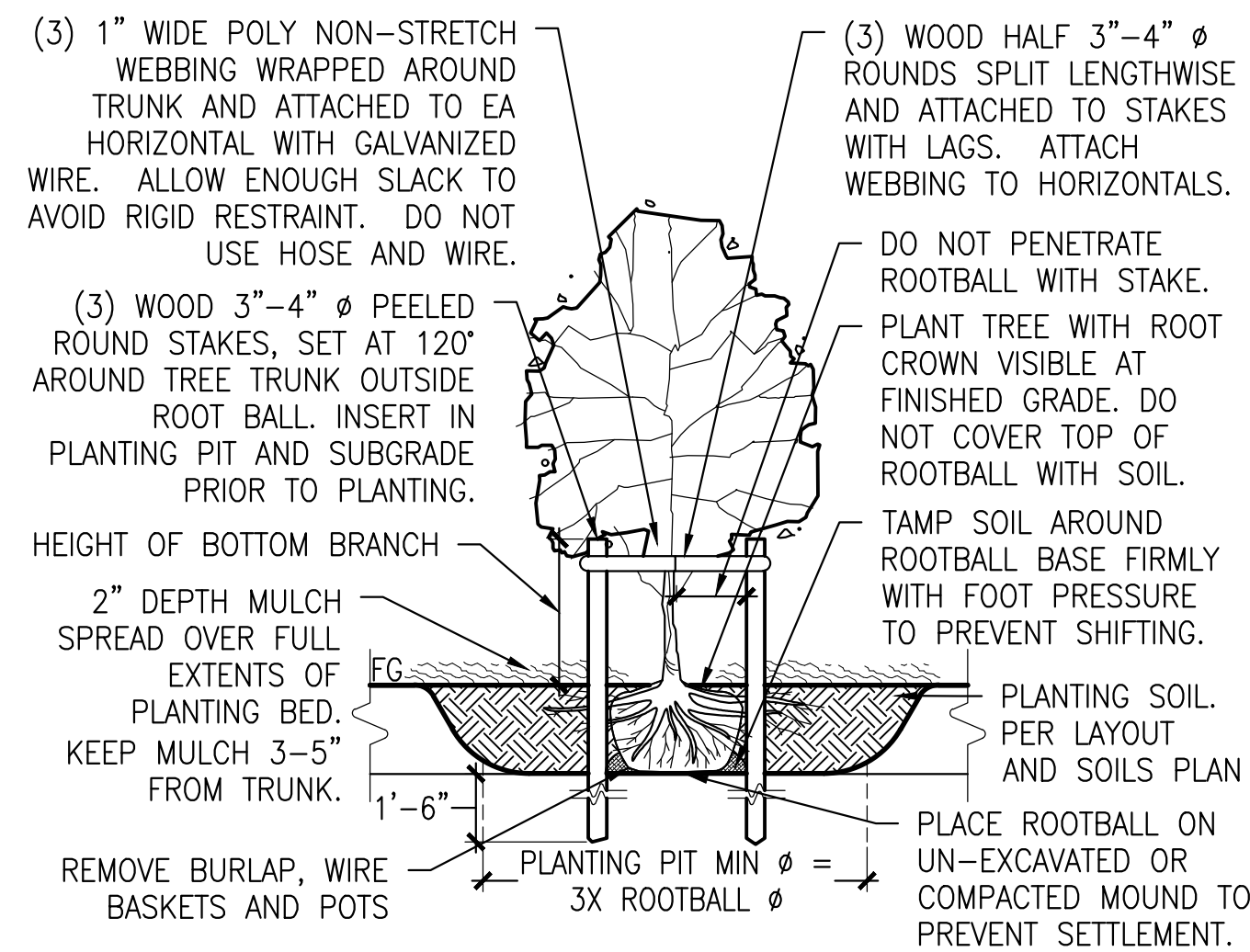
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Landscape Architecture
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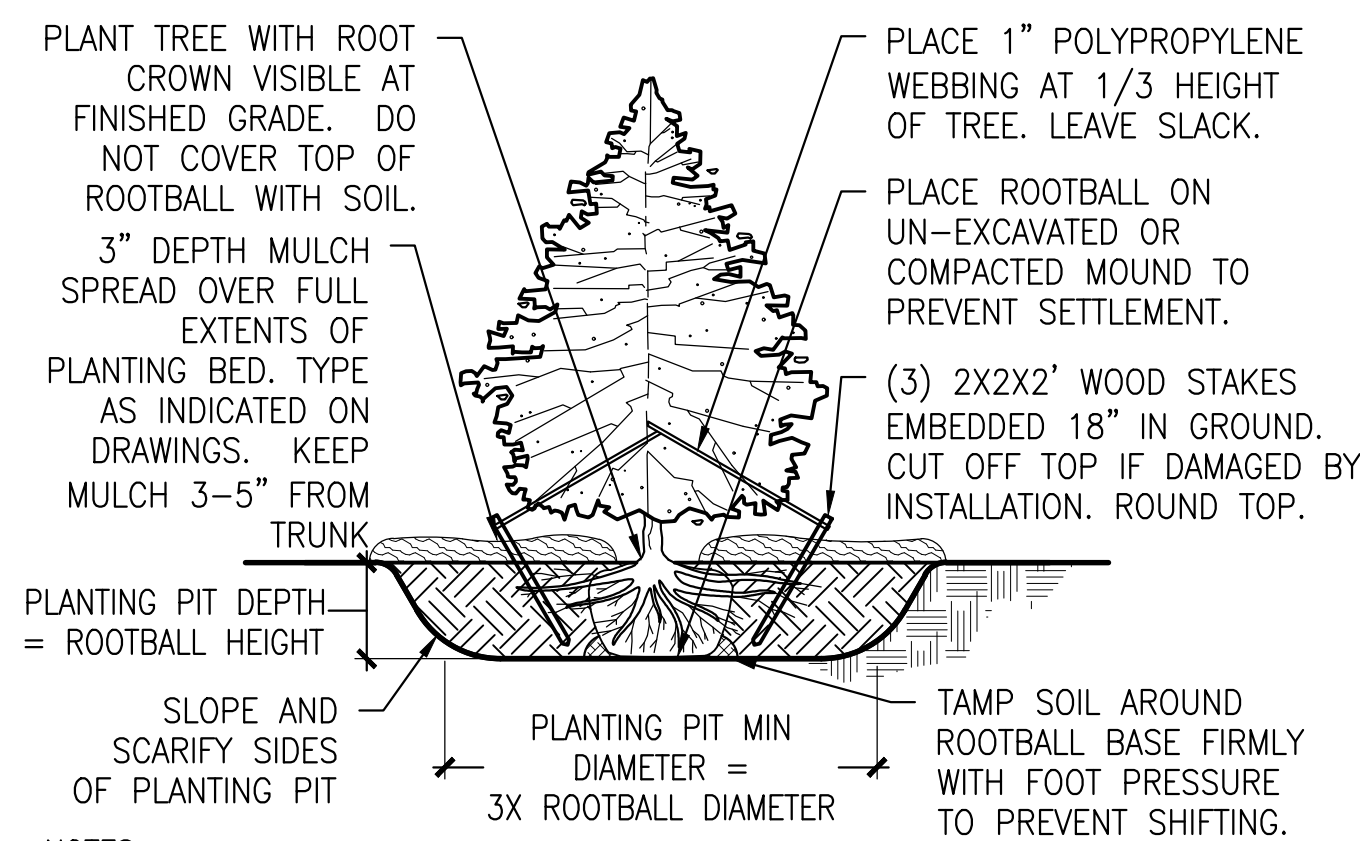
TITLE: **LANDSCAPE SITE PLAN - CAMPGROUND**

DESIGNED BY: # DATE: 06/12/2026
CHECKED BY: # PROJECT NO: 251029

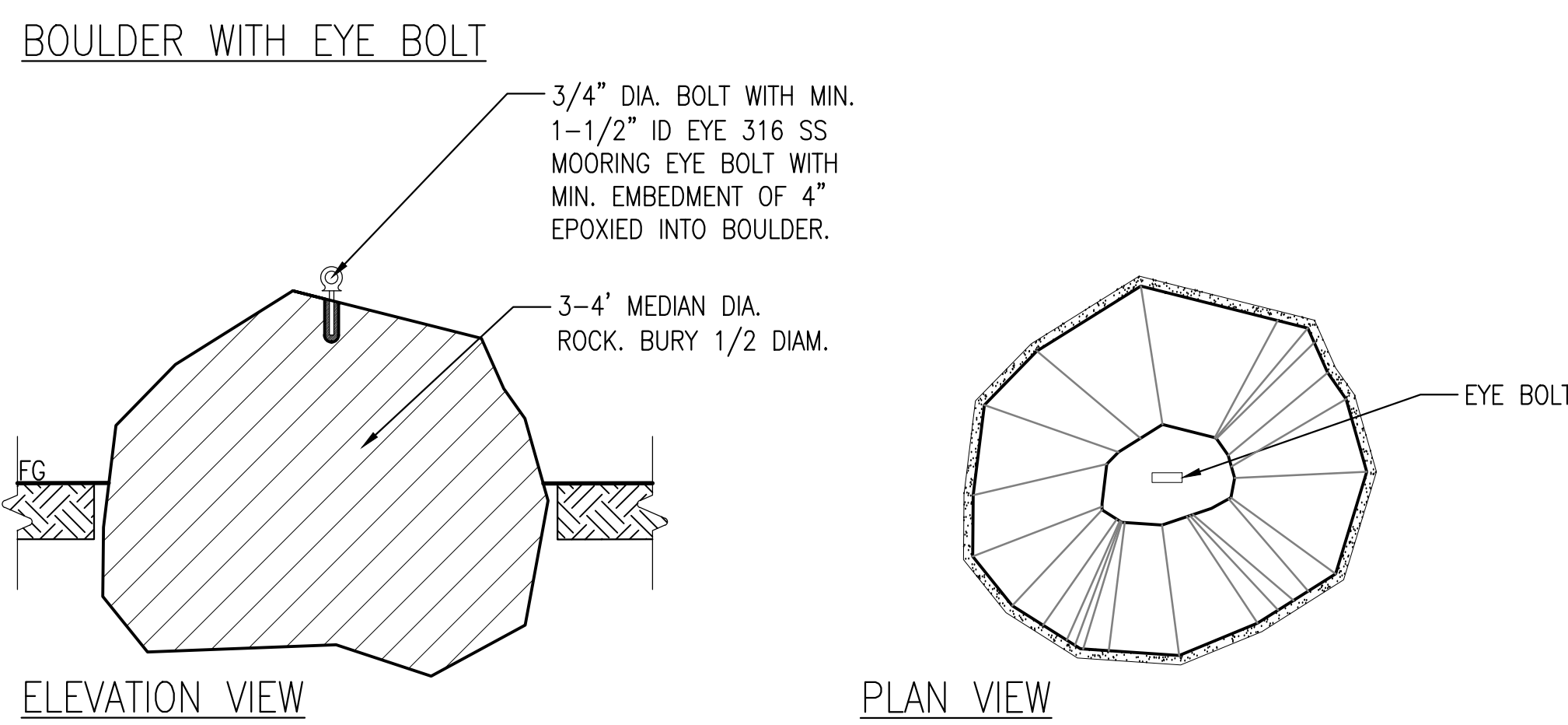
SHEET NO: **53** OF 63



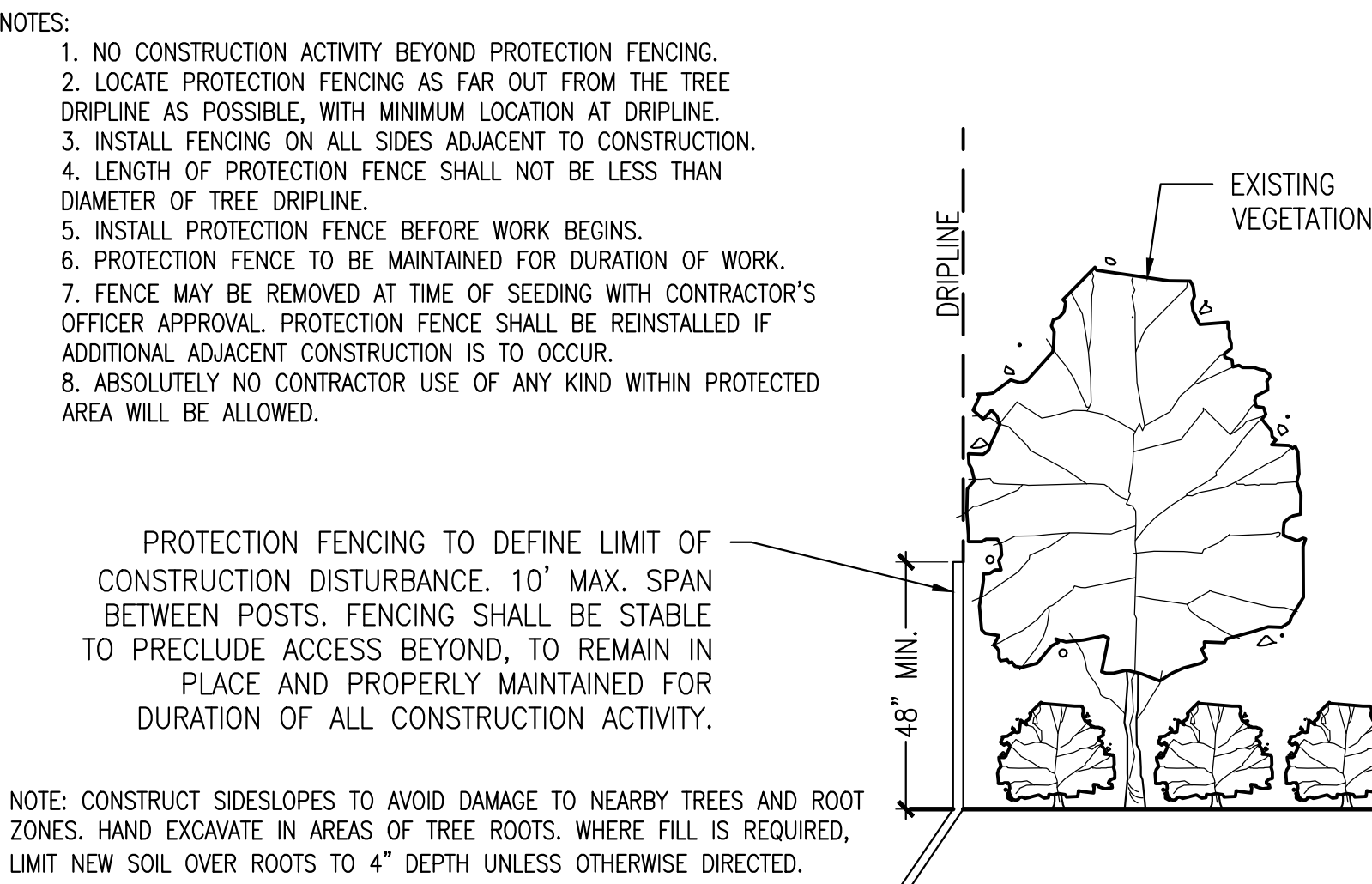
1 DECIDUOUS TREE PLANTING - STAKED
SCALE: NTS @22x34



2 EVERGREEN TREE PLANTING - STAKED
SCALE: NTS @22x34



4 LANDSCAPE BOULDER WITH EYE BOLT
SCALE: NTS @22x34

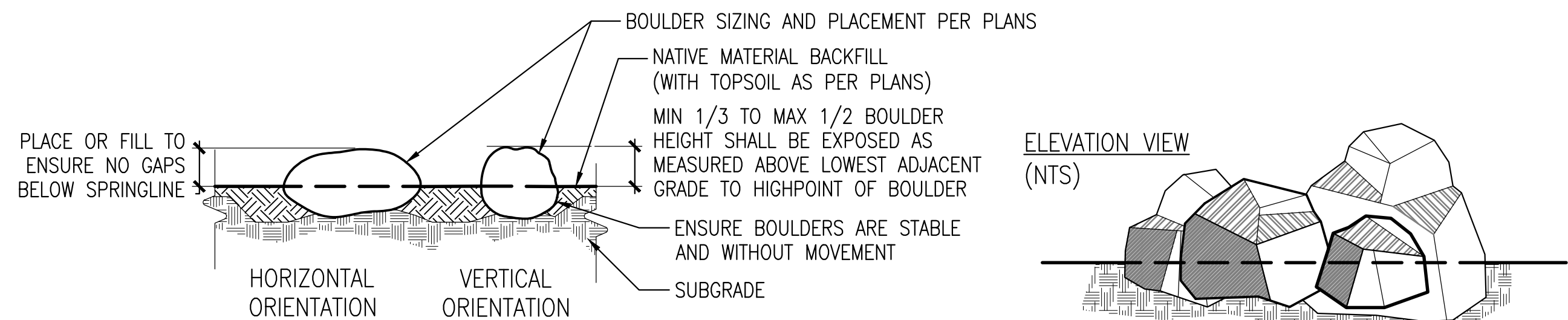


5 VEGETATION PROTECTION - LIMIT OF WORK
SCALE: NTS @22x34

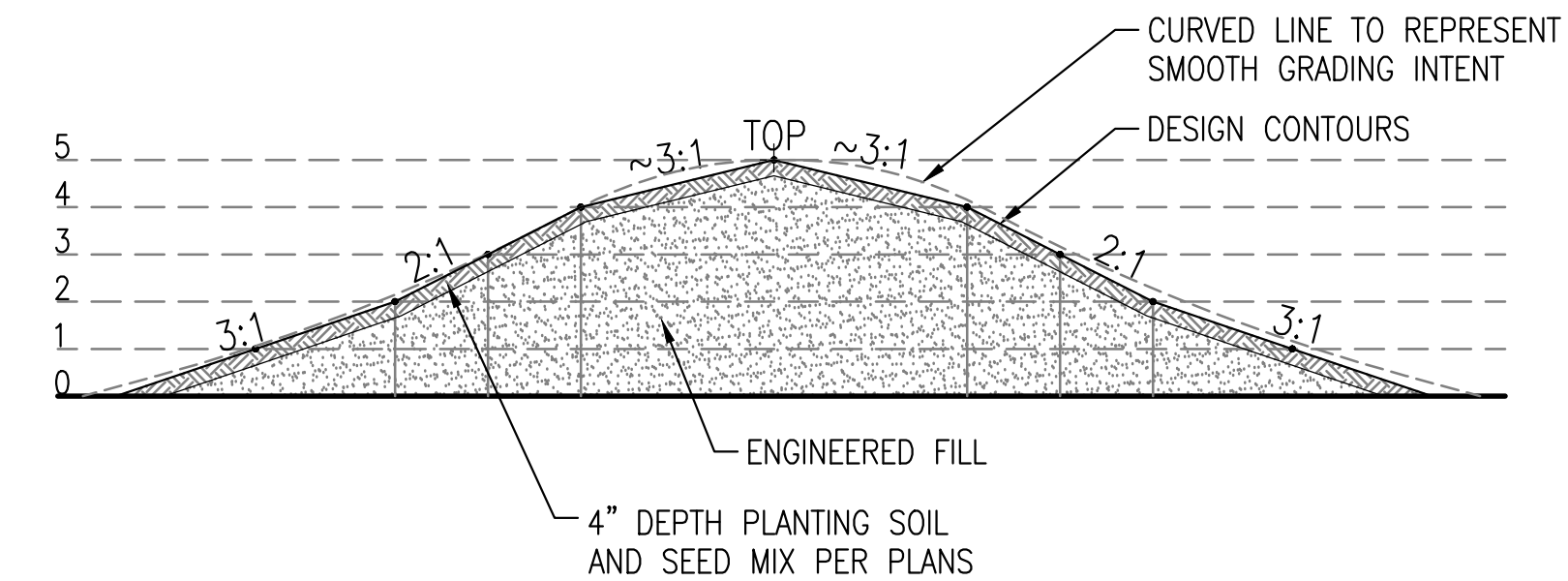
LANDSCAPE BOULDER SIZING SCHEDULE

BOULDER SYMBOL	CIRCUMFERENCE	HEIGHT
	12' +/- 1'	45" +/- 3"
	9' +/- 1'	33" +/- 3"
	6' +/- 1'	21 +/- 3"

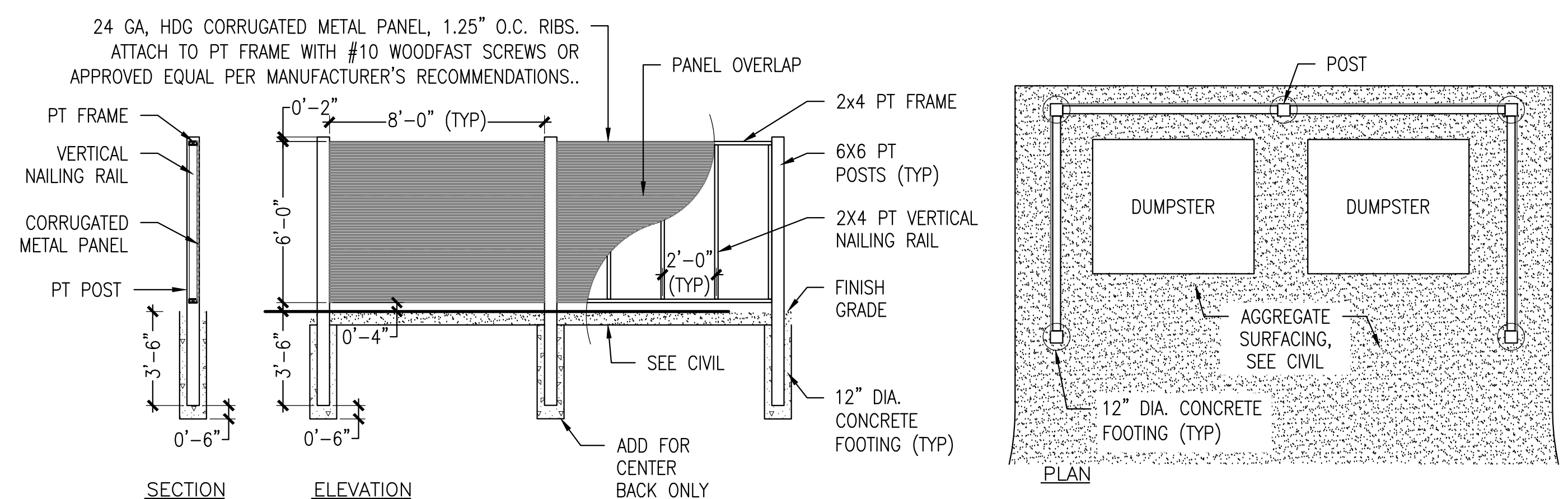
- NOTES:**
- LOCATION AND ORIENTATION OF BOULDERS SHALL BE FIELD APPROVED BY CONTRACTOR'S OFFICER.
 - LANDSCAPE BOULDERS SHOULD BE NO HIGHER THAN 30" ABOVE ANY ADJACENT GRADE.
 - CIRCUMFERENCE REFERS TO THE LARGEST CIRCUMFERENCE OF THE BOULDER.
 - HEIGHT IS MEASURED PERPENDICULAR TO AXIS USED FOR DETERMINING CIRCUMFERENCE.
 - SELECT AND PLACE BOULDERS FOR VARIATION IN SHAPE TO REDUCE VISUAL REPETITIVENESS.



3 LANDSCAPE BOULDERS
SCALE: NTS @22x34



6 BERM PROFILE
SCALE: NTS @22x34



7 DUMPSTER ENCLOSURE
SCALE: 1/4" = 1'-0" @22x34



8 EXISTING PAY KIOSK TO BE REINSTALLED
SCALE: NTS @22x34



100% DESIGN
06/12/2026

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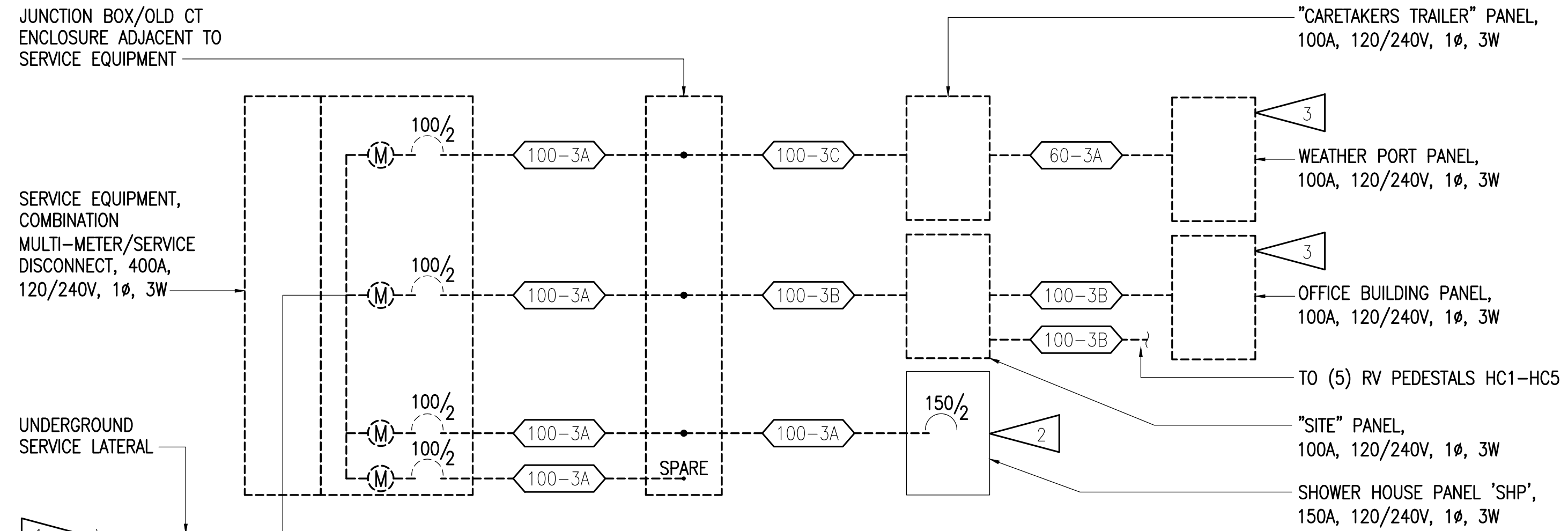
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **LANDSCAPE DETAILS**

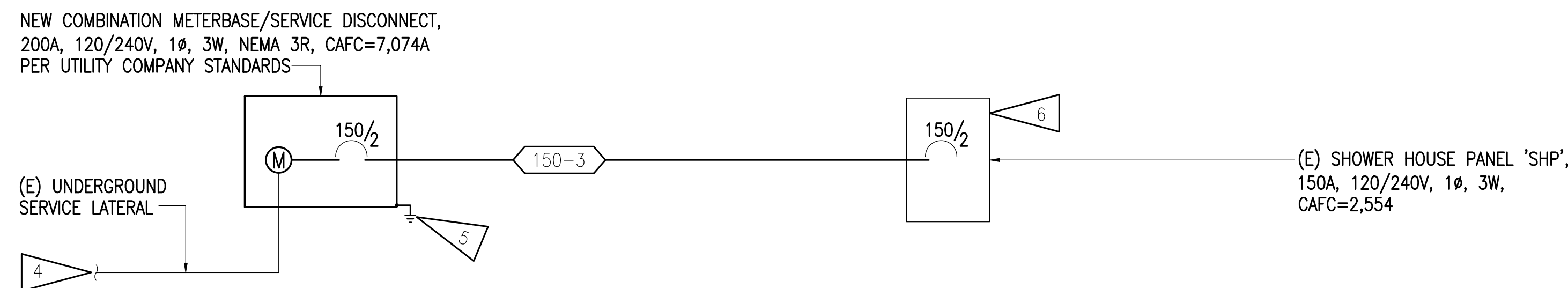
DESIGNED BY: # DATE: 06/12/2026
CHECKED BY: # PROJECT NO: 251029

SHEET NO: **54** OF 63

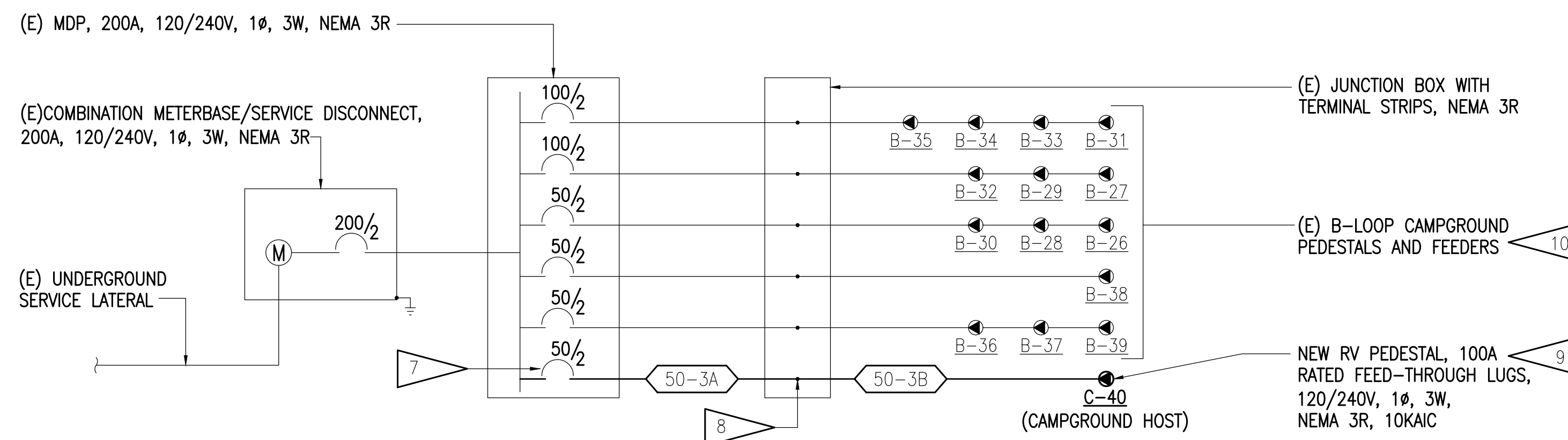
LEGEND	
	POLE MOUNTED AREA LIGHT - OUTDOORS, WEATHERPROOF
	UNDERGROUND ELECTRICAL LINE
	UNDERGROUND TELECOMMUNICATIONS LINE
	NUMBER AND SIZE OF WIRES (NO MARKS = 3 #12)
	HOMERUN TO PANEL (PANEL AND CIRCUIT No.)
	PANEL
	DUPLEX RECEPTACLE WITH GROUND FAULT CIRCUIT INTERRUPTER
	RV POWER PEDESTAL PER NEC ARTICLE 551
	JUNCTION BOX
	MOTOR (SIZED AS NOTED)
	FRACTIONAL HORSEPOWER MOTOR STARTER
	DISCONNECT SWITCH
	IN GRADE EXTERIOR JUNCTION BOX
	TELECOMMUNICATIONS OUTLET (COMBINATION TELEPHONE & DATA)
	CLOSED CIRCUIT TELEVISION CAMERA (WALL MOUNTED)
	CLOSED CIRCUIT TELEVISION CAMERA CLUSTER (POST MOUNTED)
	DUPLEX RECEPTACLE TO BE REMOVED (DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED TYPICAL)
	NOTE TAG (No. INDICATES NOTE)
AFG	ABOVE FINISHED GRADE
C	CONDUIT
CAFC	CALCULATED AVAILABLE FAULT CURRENT
E	DENOTES EXISTING ITEM
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GRSC	GALVANIZED RIGID STEEL CONDUIT
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PoE	POWER-OVER-ETHERNET
RV	RECREATIONAL VEHICLE
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF



1 DAY-USE AREA POWER ONE-LINE DIAGRAM - DEMOLITION
NO SCALE



2 DAY USE AREA POWER ONE-LINE DIAGRAM - REMODEL
NO SCALE



3 B/C CAMPGROUND LOOP POWER ONE-LINE DIAGRAM - REMODEL
NO SCALE

GENERAL NOTES:

- THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
- DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

B/C CAMPGROUND LOOP SERVICE LOAD ANALYSIS:

THE NEC CALCULATED LOAD ON THE B-LOOP SERVICE EQUIPMENT IS 127A AT 120/240V, 1φ, 3W AS SHOWN ON THE SYSTEM DRAWINGS STAMPED/SIGNED 8/9/2006. THE EXISTING SERVICE EQUIPMENT AND PANEL HAVE THE CAPACITY FOR THE ADDITION OF (1) 50A RV PEDESTAL.

SHEET NOTES:

- COORDINATE WITH THE UTILITY COMPANY TO DISCONNECT AND SALVAGE THE UNDERGROUND SERVICE LATERAL FOR REUSE. UTILITY COMPANY TO DEMOLISH ALL METERS, REMAINING SERVICE EQUIPMENT DEMOLITION BY CONTRACTOR.
- PANEL AND BRANCH CIRCUITS TO REMAIN. SEE SHEET E2 GENERAL NOTE C.
- OFFICE BUILDING AND WEATHERPORT TO BE REMOVED BY OTHERS. SEE SHEET E2 GENERAL NOTE C.
- COORDINATE WITH THE UTILITY COMPANY TO RECONNECT EXISTING UNDERGROUND SERVICE LATERAL TO NEW SERVICE EQUIPMENT.
- SEE 2/E5 FOR GROUNDING DETAIL.
- CONNECT NEW FEEDER TO EXISTING PANEL 'SHP' MCB. SEE SHEET E3 AND PANEL SCHEDULE ON SHEET E5 FOR NEW BRANCH CIRCUIT BREAKERS REQUIRED WITHIN (E) PANEL 'SHP'.
- PROVIDE NEW BREAKER, SIZED AS SHOWN, LISTED FOR USE WITHIN EXISTING PANEL. FIELD VERIFY PANEL MAKE, MANUFACTURER, AND AIC RATING PRIOR TO BEGINNING WORK.
- PROVIDE NEW TERMINAL BLOCKS WITHIN EXISTING JUNCTION BOX TO SPLICE CONDUCTORS SHOWN. INTENT IS TO ACCOMMODATE FOR VOLTAGE DROP WHILE ALLOWING FOR THE SMALLER CONDUCTORS TO TERMINATE WITHIN THE NEW BREAKER.
- SEE 1/E5 FOR RV PEDESTAL DETAIL.
- SEE SHEET E4 FOR ADDITIONAL MAINTENANCE WORK REQUIRED WITHIN B-LOOP CAMPGROUND PEDESTALS.

EXISTING & NEW FEEDER SCHEDULE	
TAG	CONDUIT AND CONDUCTOR SIZES
50-3A	1" C, 3#6 AWG, 1#10 AWG GND, CU, XHHW
50-3B	1.25" C, 3#2 AWG, 1#6 AWG GND, CU, XHHW
60-3A	1" C, 3#6 AWG, 1#8 AWG GND, AL, XHHW
100-3A	1.25" C, 3#2 AWG, 1#8 AWG GND, CU, XHHW
100-3B	1.5" C, 3#1/0 AWG, 1#4 AWG GND, AL, XHHW
100-3C	1.5" C, 3#4/0 AWG, 1#1 AWG GND, AL, XHHW
150-3	2" C, 3#2/0 AWG, 1#4 AWG GND, CU, XHHW

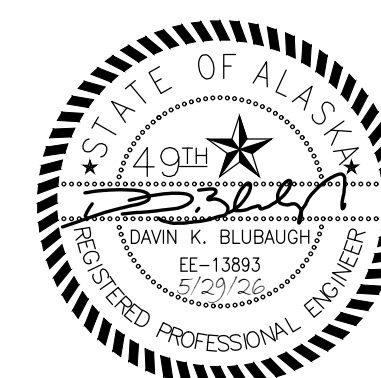
5/29/2026 - DAVIN BLUBAUGH - G:\2025\15024\15024-Eseries.dwg



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(907) 276-0521
Corporate No.: AECC542

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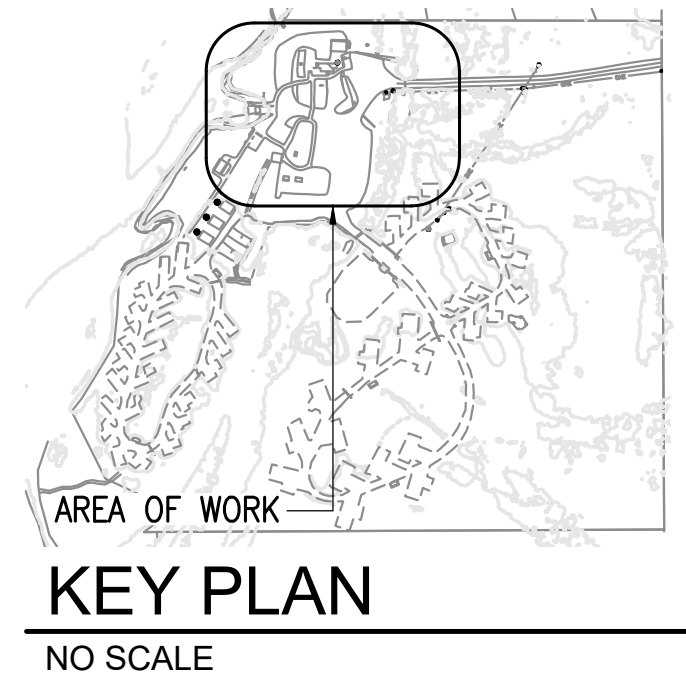
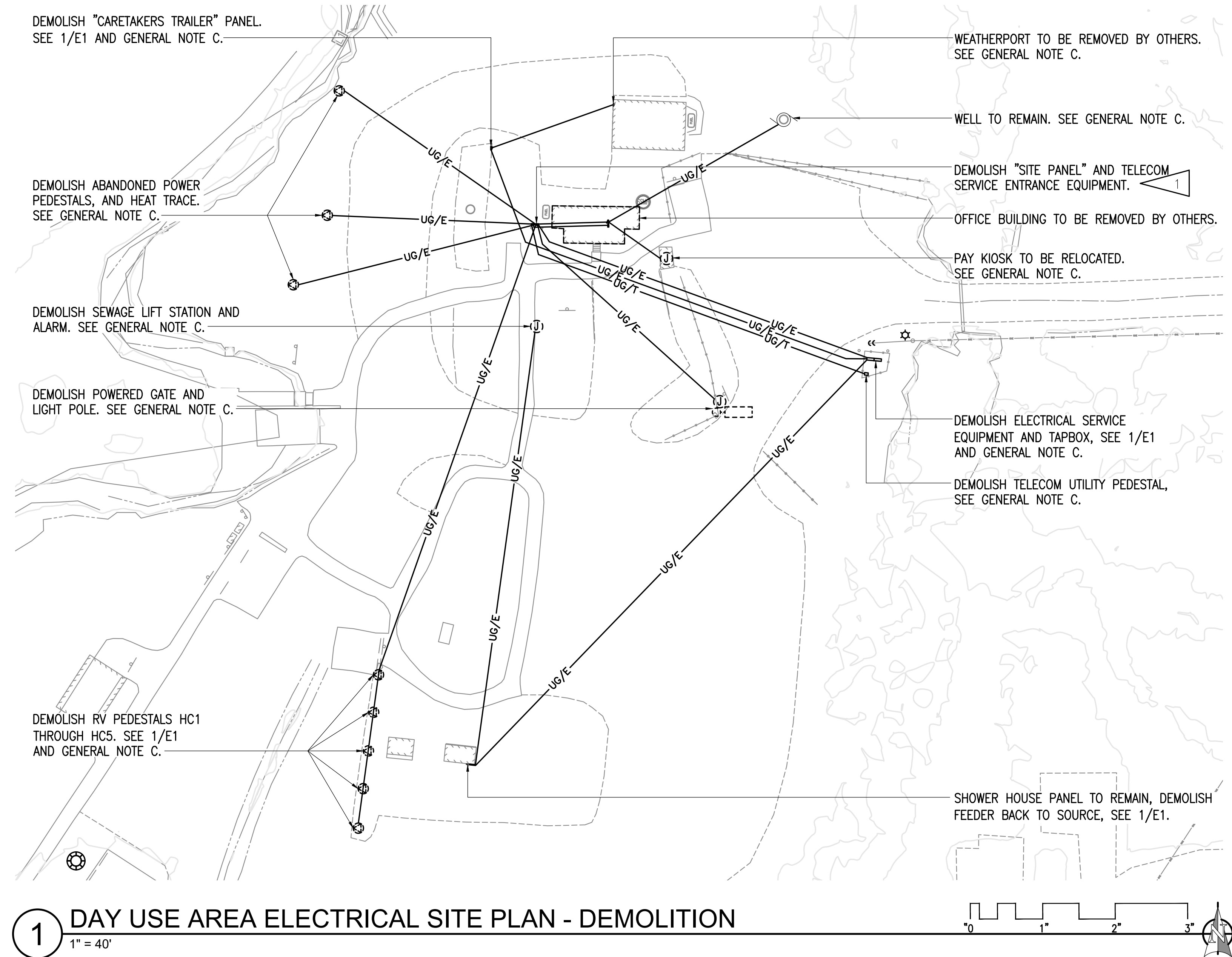
PROJECT: SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
TITLE: ELECTRICAL LEGEND AND ONE-LINE DIAGRAMS	
DESIGNED BY:	DB
CHECKED BY:	DB, XPT
DATE:	5/29/2026
PROJECT NO.:	M5024
SHEET NO.:	E1 55 OF 63

GENERAL NOTES:

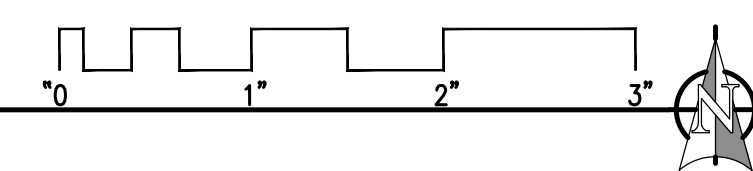
- A. THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM AS-BUILT DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
- B. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS TO A WAREHOUSE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
- C. ALL EXISTING UNDERGROUND ELECTRICAL POWER AND TELECOMMUNICATION FEEDERS, BRANCH CIRCUITS, CONDUIT, WIRING, CABLING, ETC. SHOWN ON THIS SHEET ARE TO BE ABANDONED. DEMOLISH ALL EXPOSED CONDUIT AND/OR WIRING TO 18" BELOW FINAL GRADE SO IT WILL NOT BE VISIBLE AFTER CONSTRUCTION COMPLETION. ANY EXISTING CONDUIT AND/OR CONDUCTORS EXPOSED DURING CONSTRUCTION ACTIVITIES SHALL BE DEMOLISHED IN A SIMILAR FASHION. DEMOLISH ALL CONDUIT AND EQUIPMENT RACKS COMPLETELY.
- D. REFERENCE THE CIVIL DRAWINGS FOR LOCATIONS OF UNDERGROUND UTILITIES. PERFORM UTILITY LOCATES PRIOR TO BEGINNING EXCAVATION WORK.

SHEET NOTES:

- 1. "SITE PANEL" AND TELECOM SERVICE ENTRANCE EQUIPMENT ARE RACK MOUNTED IN APPROXIMATE LOCATION SHOWN. DEMOLISH "SITE PANEL", TELECOM SERVICE ENTRANCE EQUIPMENT, EQUIPMENT RACK, AND ALL EXPOSED CONDUIT AND WIRING. SEE GENERAL NOTE C.



1 DAY USE AREA ELECTRICAL SITE PLAN - DEMOLITION
1" = 40'



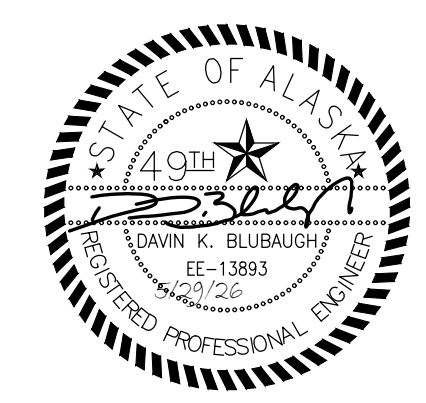
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5/29/2026

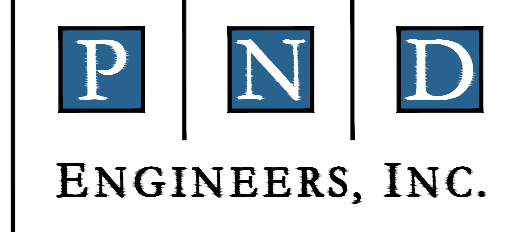
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Corporate No.: AECC542



**SUSITNA LANDING BOAT LAUNCH
& FACILITY RENOVATION**
TITLE:
DAY USE AREA ELECTRICAL SITE PLAN - DEMOLITION

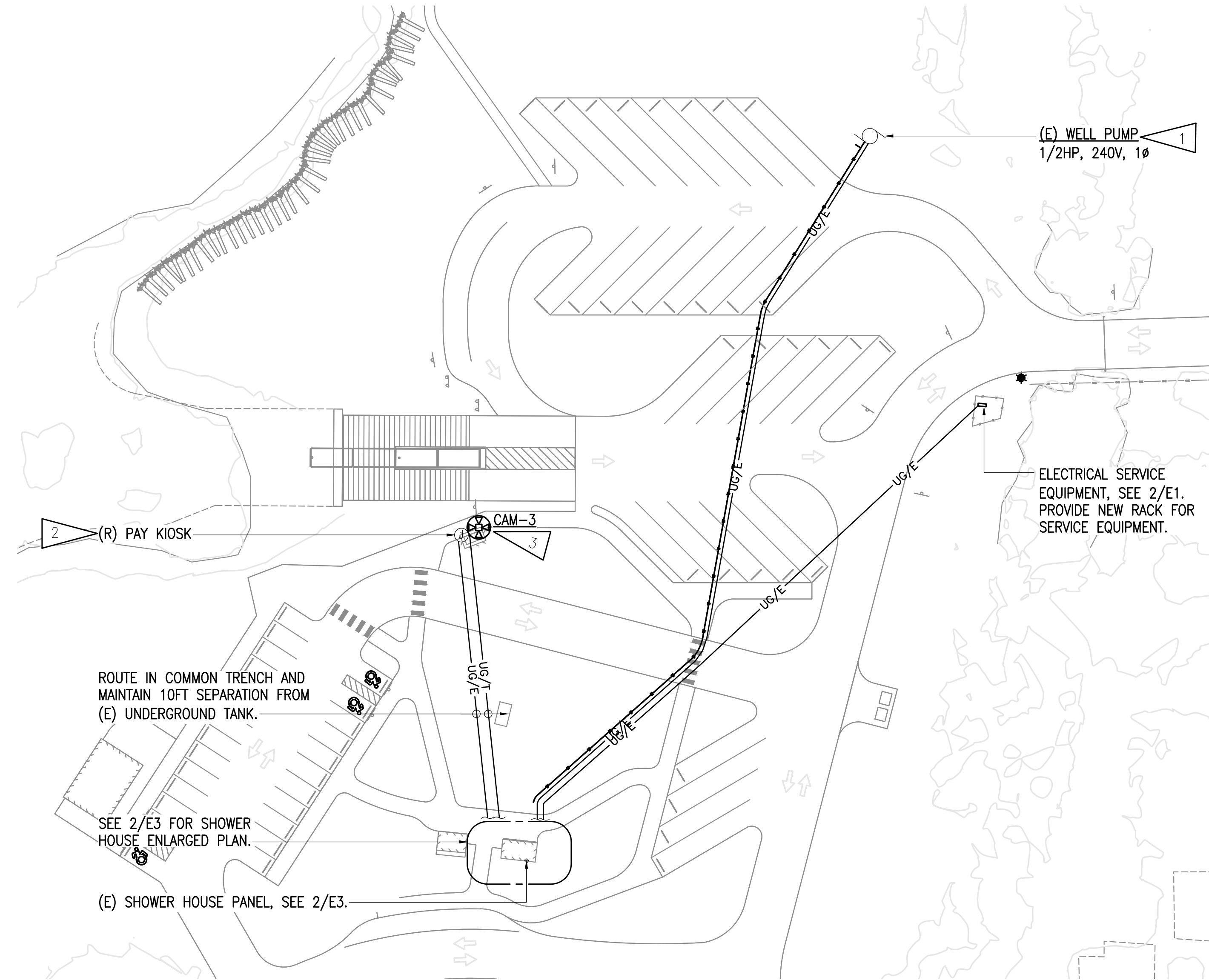
DESIGNED BY: DB	DATE: 5/29/2026	SHEET NO: E2 56 OF 63
CHECKED BY: DB.XPT	PROJECT NO: M5024	

GENERAL NOTES:

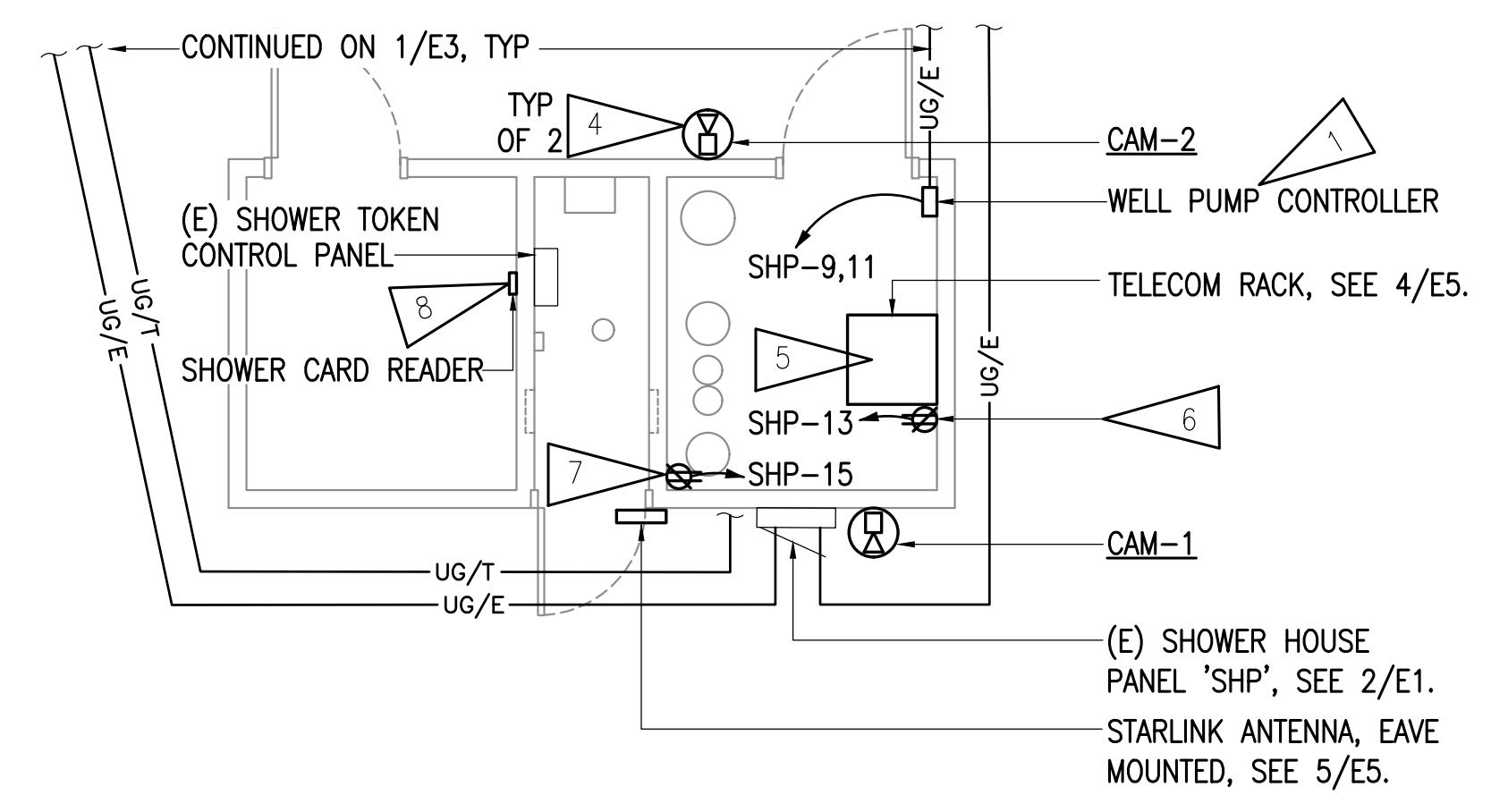
- A. SEE GENERAL NOTES ON SHEET E2.
- B. UON, ROUTE UNDERGROUND ELECTRICAL IN COMMON TRENCHES WITH OTHER ELECTRICAL AND OTHER NEW SITE UTILITIES TO THE EXTENT PRACTICAL. SEE 3/E5 FOR TYPICAL TRENCHING DETAIL.
- C. EXISTING SHOWER HOUSE PANEL IS A GE PANELBOARD. FIELD VERIFY EXACT MAKE AND MODEL NUMBER PRIOR TO BEGINNING WORK. NEW BREAKERS SHALL BE LISTED FOR USE WITHIN EXISTING PANELBOARD.

SHEET NOTES:

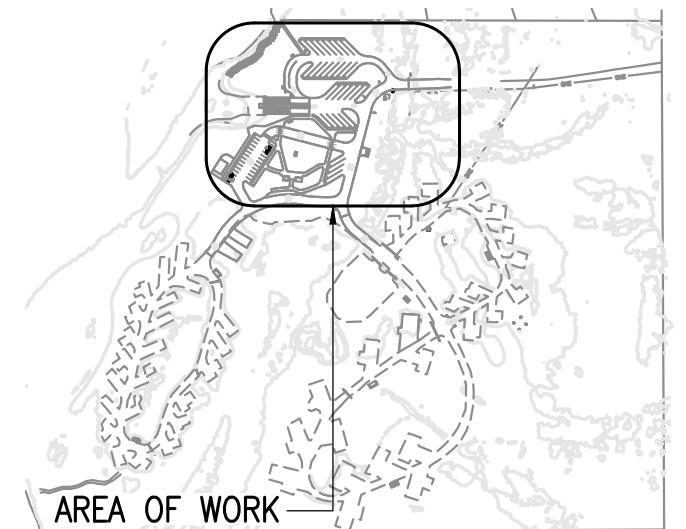
- 1. PROVIDE NEW 1" C, 3#6 AWG CU, XHHW BRANCH CIRCUIT FROM NEW WELL PUMP CONTROLLER IN SHOWER HOUSE TO (E) WELL PUMP. CONDUCTORS ARE OVERSIZED FOR VOLTAGE DROP AND CAN BE REDUCED AT THE WELL PUMP CONTROLLER TO ACCOMMODATE LUG SIZE. PROVIDE NEW 15A, 2-POLE CIRCUIT BREAKER WITHIN (E) SHOWER HOUSE PANEL 'SHP' AND CONNECT TO WELL PUMP CONTROLLER WITH 1/2" C, 3#12 AWG. NEW WELL PUMP CONTROLLER AND PRESSURE SWITCH SPECIFIED/PROVIDED BY OTHERS AND INSTALLED BY ELECTRICAL. FIELD VERIFY (E) WELL PUMP SIZE PRIOR TO BEGINNING WORK.
- 2. PROVIDE NEW 1" C, 3#6 AWG CU, XHHW BRANCH CIRCUIT FROM (E) SHOWER HOUSE PANEL TO (R) PAY KIOSK. PROVIDE NEW 20A, 1-POLE CIRCUIT BREAKER WITHIN (E) SHOWER HOUSE PANEL 'SHP' CIRCUIT 17. CONDUCTORS ARE OVERSIZED FOR VOLTAGE DROP AND CAN BE REDUCED AT PANEL TO ACCOMMODATE LUG SIZE.
- 3. PROVIDE 4-CAMERA CLUSTER. POLE MOUNT TO KIOSK CANOPY STRUCTURE, SEE 6/E5. PROVIDE 1" C WITH (2) OUTDOOR RATED CATEGORY 6 CABLES FROM THE CAMERA CLUSTER BACK TO THE NEW TELECOM RACK LOCATED WITHIN THE SHOWER HOUSE, SEE 4/E5.
- 4. PROVIDE WALL MOUNT CAMERA AND MOUNT TO EXISTING SHOWER HOUSE IN APPROXIMATE LOCATION SHOWN. PROVIDE 1" C WITH (1) CATEGORY 6 CABLE FROM EACH CAMERA BACK TO THE NEW TELECOM RACK LOCATED WITHIN THE SHOWER HOUSE, SEE 4/E5.
- 5. PROVIDE NEW TELECOM RACK WITHIN THE SHOWER HOUSE BUILDING IN APPROXIMATE LOCATION SHOWN. PROVIDE GFCI RECEPTACLE ADJACENT TO RACK AS SHOWN. SEE 4/E5 FOR TELECOMMUNICATION RACK REQUIREMENTS. STARLINK SYSTEM COMPONENTS ARE OFCI. INSTALL THE STARLINK ANTENNA ON THE EXTERIOR OF THE SHOWER HOUSE, SEE 5/E5.
- 6. NEW GFCI RECEPTACLE FOR TELECOM RACK, SEE 4/E5.
- 7. NEW GFCI RECEPTACLE FOR ARSENIC TREATMENT SYSTEM, COORDINATE WITH CIVIL.
- 8. PROVIDE NEW SHOWER CARD READER TO ALLOW FOR CREDIT CARD PAYMENT FOR SHOWER USE. SHOWER CARD READER SHALL HAVE WATER RESISTANT STAINLESS STEEL HOUSING, IP 65 RATED, INTEGRAL CREDIT/DEBIT CARD READER, INTEGRAL ANTENNA, AND INTERACTIVE LED-TYPE END-OF-SESSION BUTTON, SEM TIMER #3510T-0X, OR APPROVED EQUAL. CONNECT CARD READER 4-WIRE WIRING HARNESS TO (E) SHOWER TOKEN CONTROL PANEL IN ACCORDANCE WITH MANUFACTURER WRITTEN INSTRUCTIONS. A WIRING DIAGRAM OF THE (E) SHOWER TOKEN PANEL IS LOCATED INSIDE OF THE PANEL FOR CONTRACTOR USE DURING INSTALLATION.



1 DAY USE ELECTRICAL SITE PLAN - REMODEL
1" = 40'



2 SHOWER HOUSE ENLARGED PLAN
1/4" = 1'-0"



KEY PLAN
NO SCALE

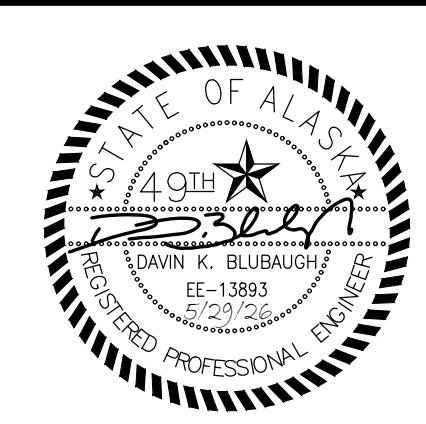
5/29/2026 - DAVIN BLUBAUGH - G:\2025\15024\M5024-Eseries.dwg



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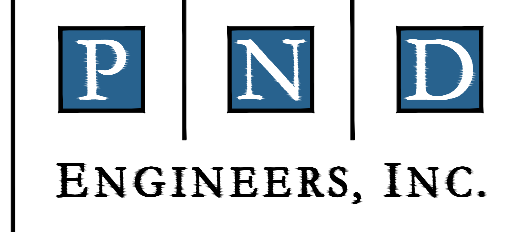
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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION
DAY USE AREA ELECTRICAL SITE PLAN - REMODEL

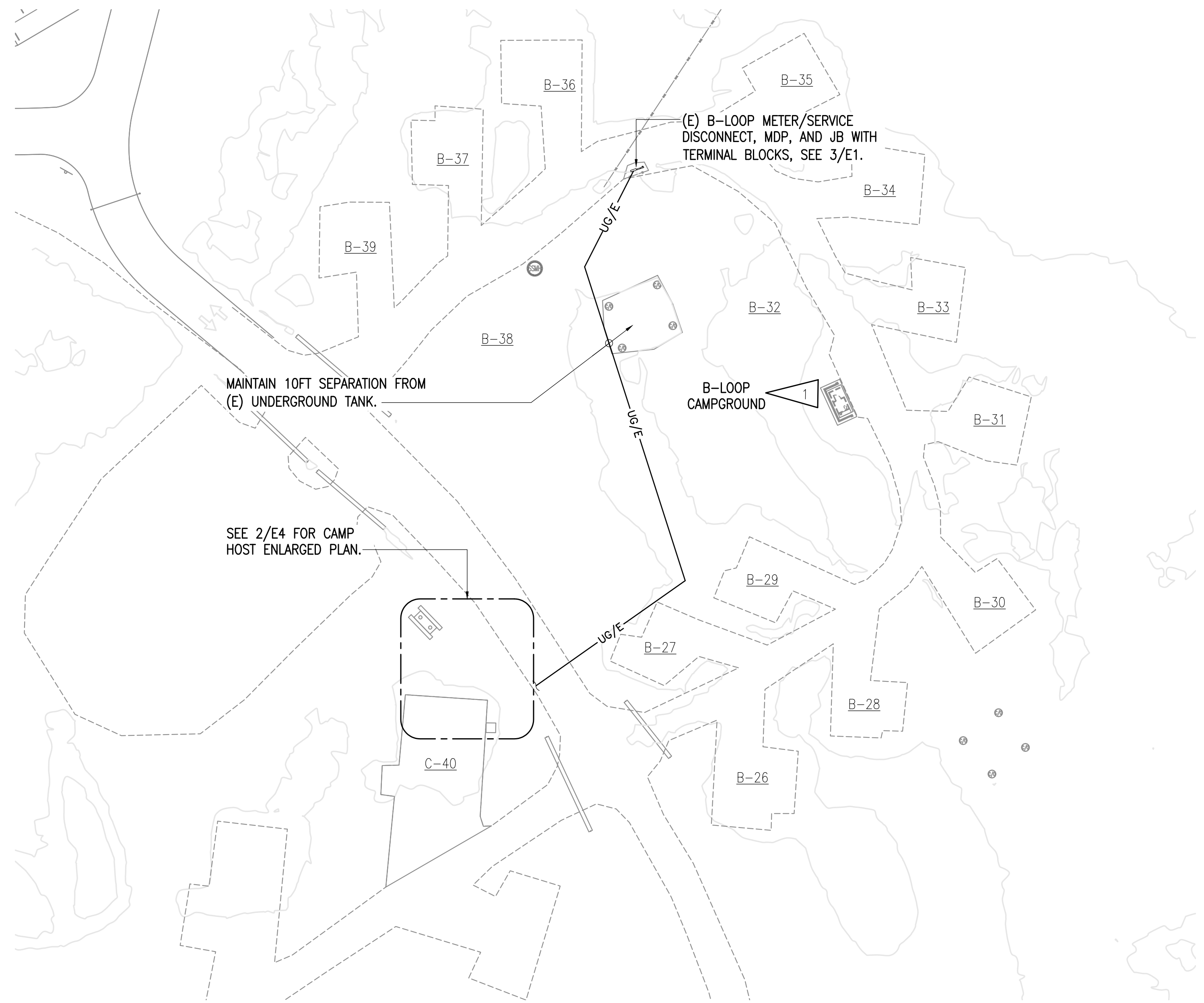
DESIGNED BY: DB	DATE: 5/29/2026	SHEET NO: E3 57 OF 63
CHECKED BY: DB,XPT	PROJECT NO: M5024	

GENERAL NOTES:

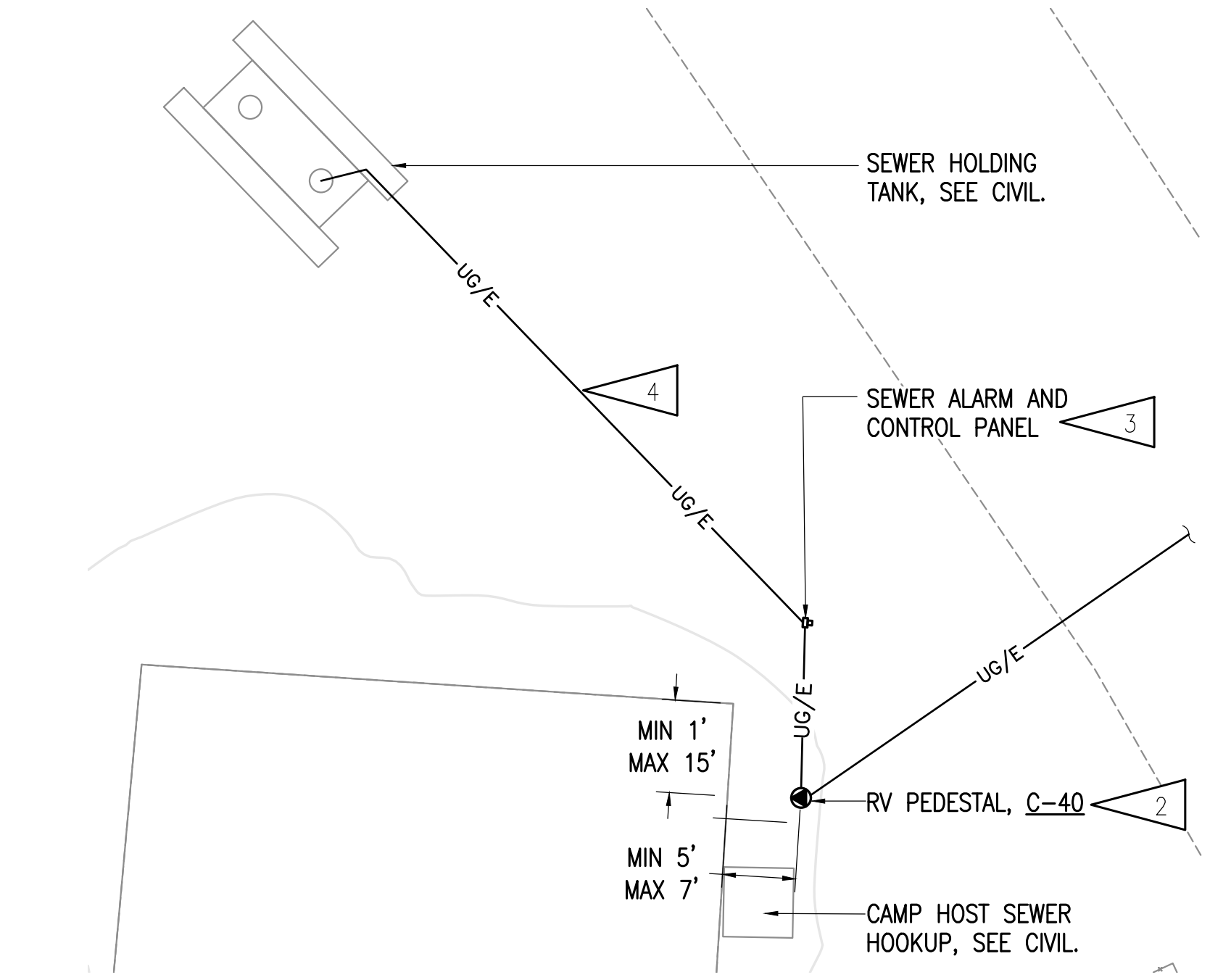
A. SEE GENERAL NOTES ON SHEET E2 AND E3.

SHEET NOTES:

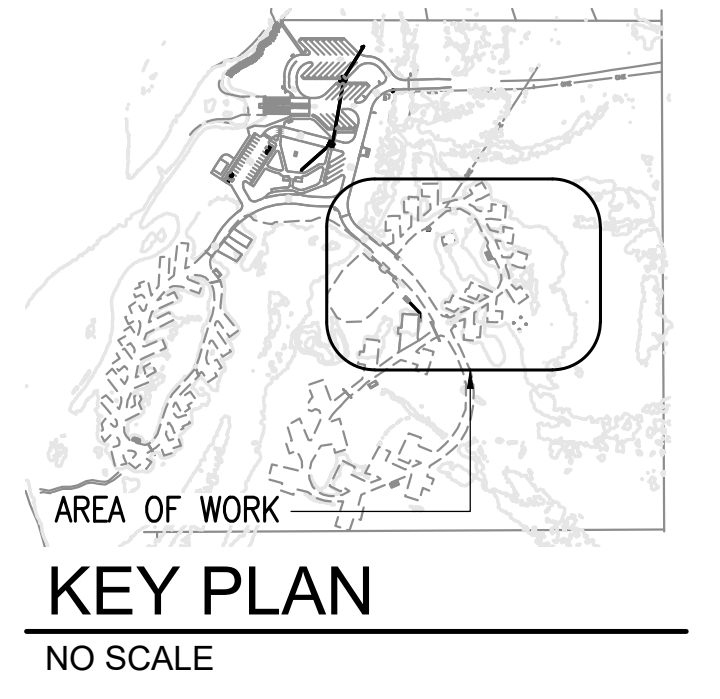
1. B-LOOP CAMPGROUND ELECTRICAL SCOPE OF WORK: CONTRACTOR SHALL PERFORM ROUTINE MAINTENANCE, CLEANING, AND LABELING OF THE (14) POWER PEDESTALS ON B-LOOP. THE PEDESTALS ARE A COMBINATION OF 30A/30A/20A RECEPTACLES AND 50A/30A/20A RECEPTACLES. WORK SHALL INCLUDE CLEANING OF CONTACTS, CLEANING OF ENCLOSURE INTERIOR, TORQUING OF ALL BOLTS/CONDUCTOR LUGS PER MANUFACTURER REQUIREMENTS, AND LABELING OF ALL PEDESTALS WITH THE SITE NUMBER AND PANEL/CIRCUIT OF THE SOURCE BREAKER.
2. PROVIDE NEW RV PEDESTAL FOR CAMPGROUND HOST, SEE 1/E5. LOCATE PEDESTAL IN ACCORDANCE WITH NEC 551.77. PROVIDE NEW UNDERGROUND FEEDER TO PEDESTAL FROM (E) B-LOOP MDP, SEE 3/E1.
3. SEWER ALARM AND CONTROL PANEL IS MOUNTED ON A 4x4 TREATED POST, SEE CIVIL SHEETS FOR ADDITIONAL REQUIREMENTS. PROVIDE 1" C, 3#12 AWG, CU, XHHW FROM THE EXTRA 20A, 1-POLE BREAKER WITHIN THE NEW POWER PEDESTAL TO THE INCOMING POWER TERMINALS OF THE SEWER ALARM AND CONTROL PANEL.
4. PROVIDE (2) 1" C UNDERGROUND FROM SEWER ALARM AND CONTROL PANEL TO THE SEWER HOLDING TANK FOR THE TANK FLOATS. COORDINATE WITH CIVIL SHEETS.



1 B/C CAMPGROUND LOOP ELECTRICAL SITE PLAN - REMODEL
1" = 40'



2 CAMP HOST ENLARGED PLAN
1" = 10'



KEY PLAN
NO SCALE

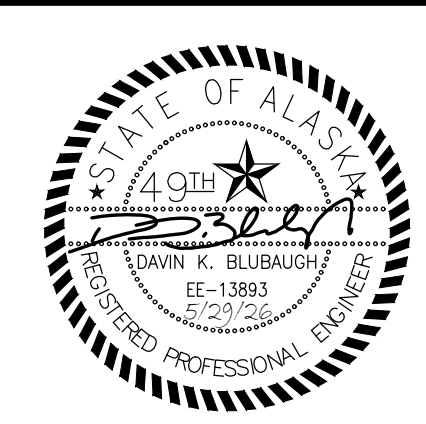
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DATE: 5/29/2026

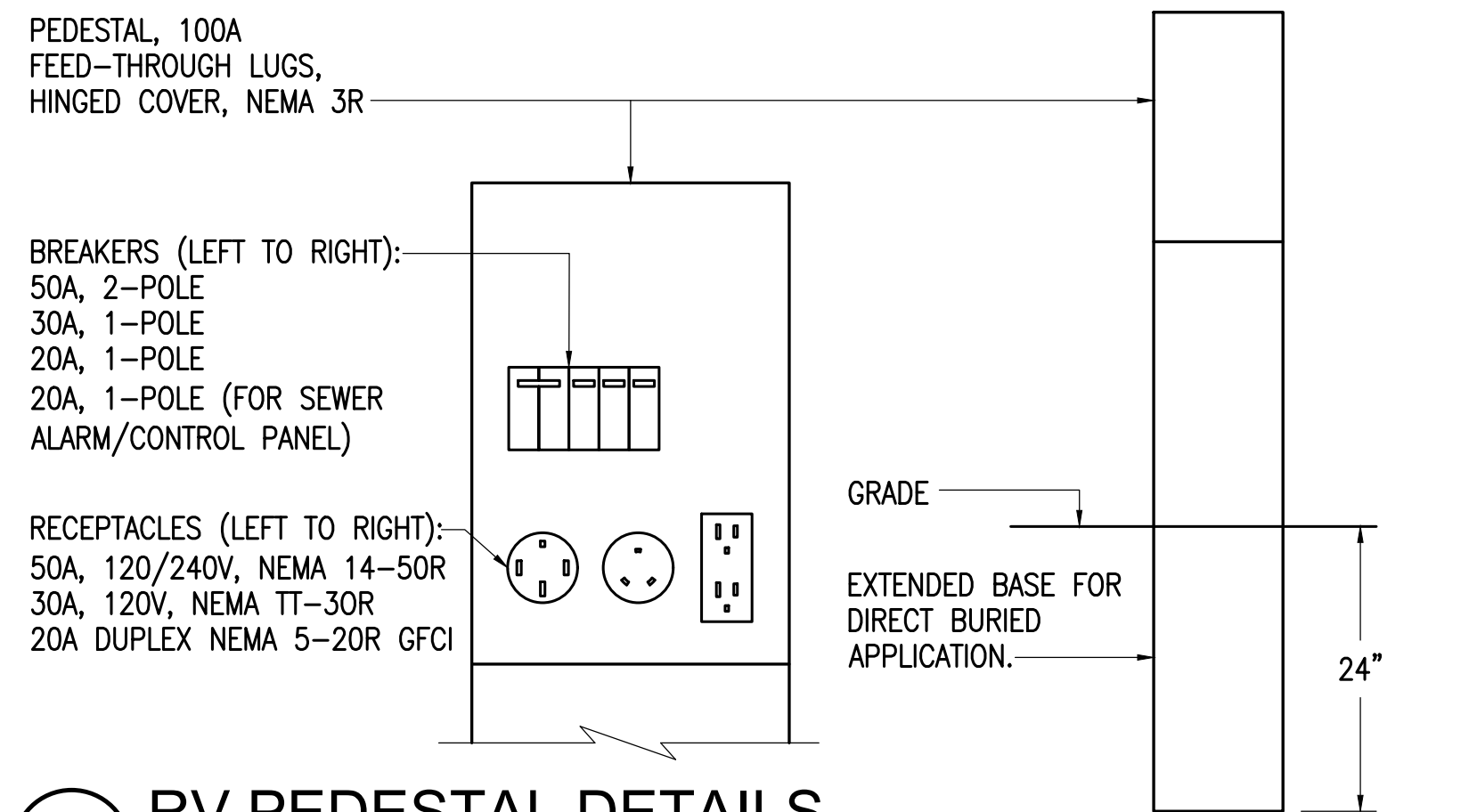
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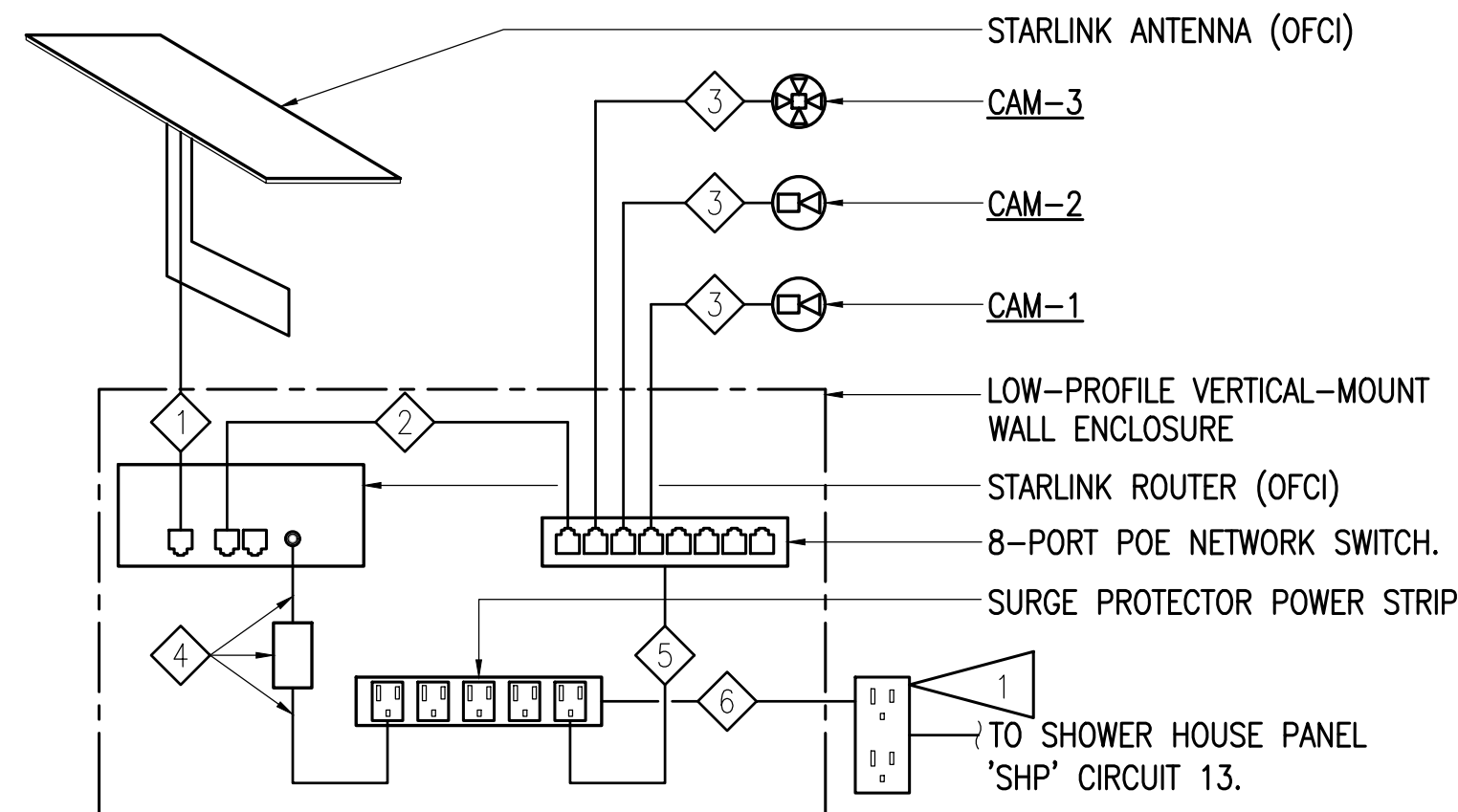
SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: B/C CAMP LOOP ELECTRICAL SITE PLAN - REMODEL

DESIGNED BY: DB	DATE: 5/29/2026	SHEET NO: E4
CHECKED BY: DB.XPT	PROJECT NO: M5024	58 OF 63



1 RV PEDESTAL DETAILS
NO SCALE



4 TELECOMMUNICATIONS SCHEMATIC
NO SCALE

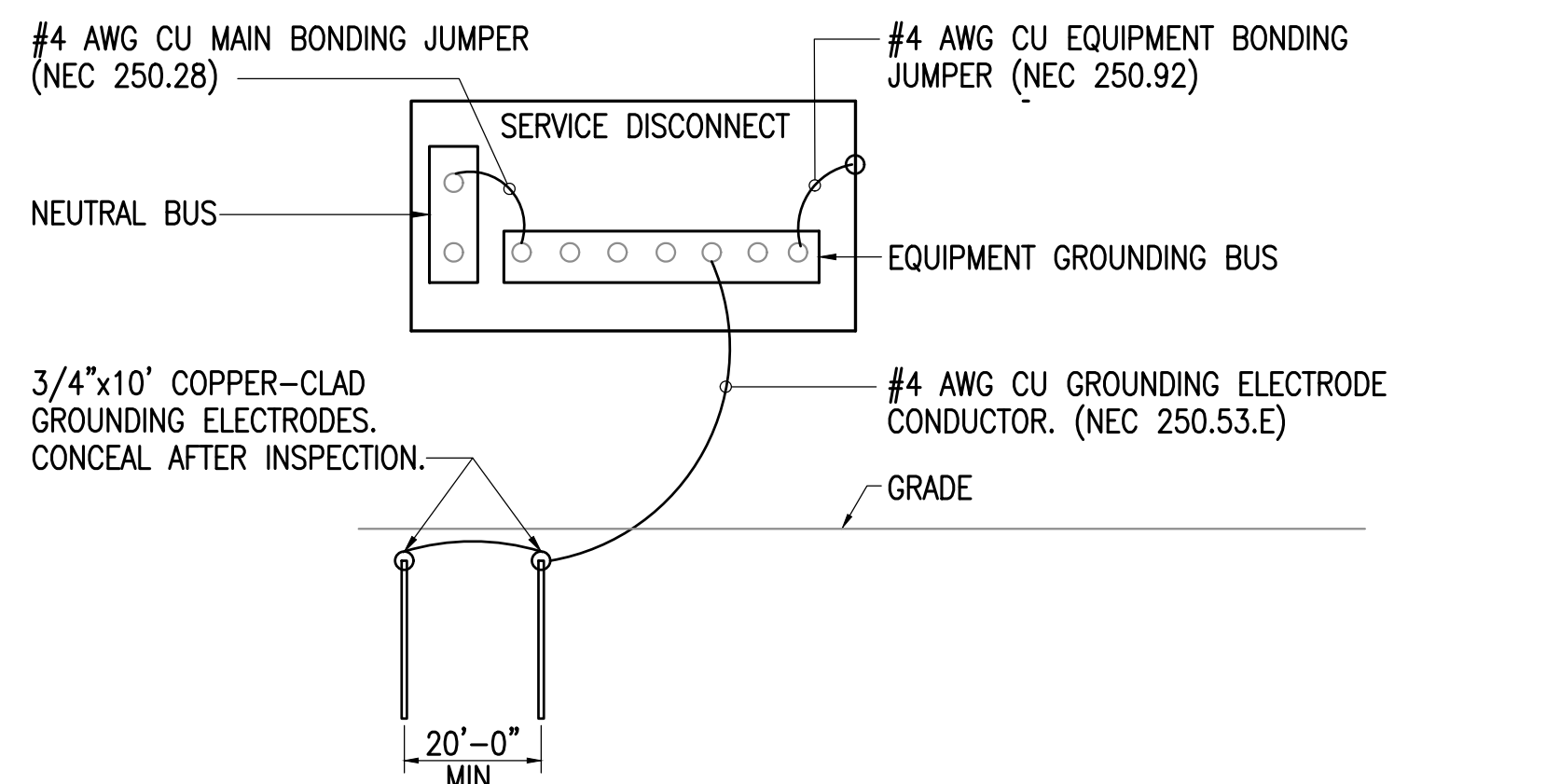
TELECOMMUNICATIONS WIRING	
TAG	CONDUIT AND WIRE
1	STARLINK ANTENNA CABLE, SEE 5/E5 FOR CONDUIT REQUIREMENTS.
2	CATEGORY 6 PER SPECIFICATION 271000, CONDUIT N/A.
3	1°C, CATEGORY 6 PER SPECIFICATION 271000.
4	STARLINK POWER ADAPTER AND ASSOCIATED CABLES (OFCI), CONDUIT N/A.
5	POE SWITCH POWER CABLE, CONDUIT N/A.
6	SURGE PROTECTOR POWER CABLE, CONDUIT N/A.

GENERAL NOTES:

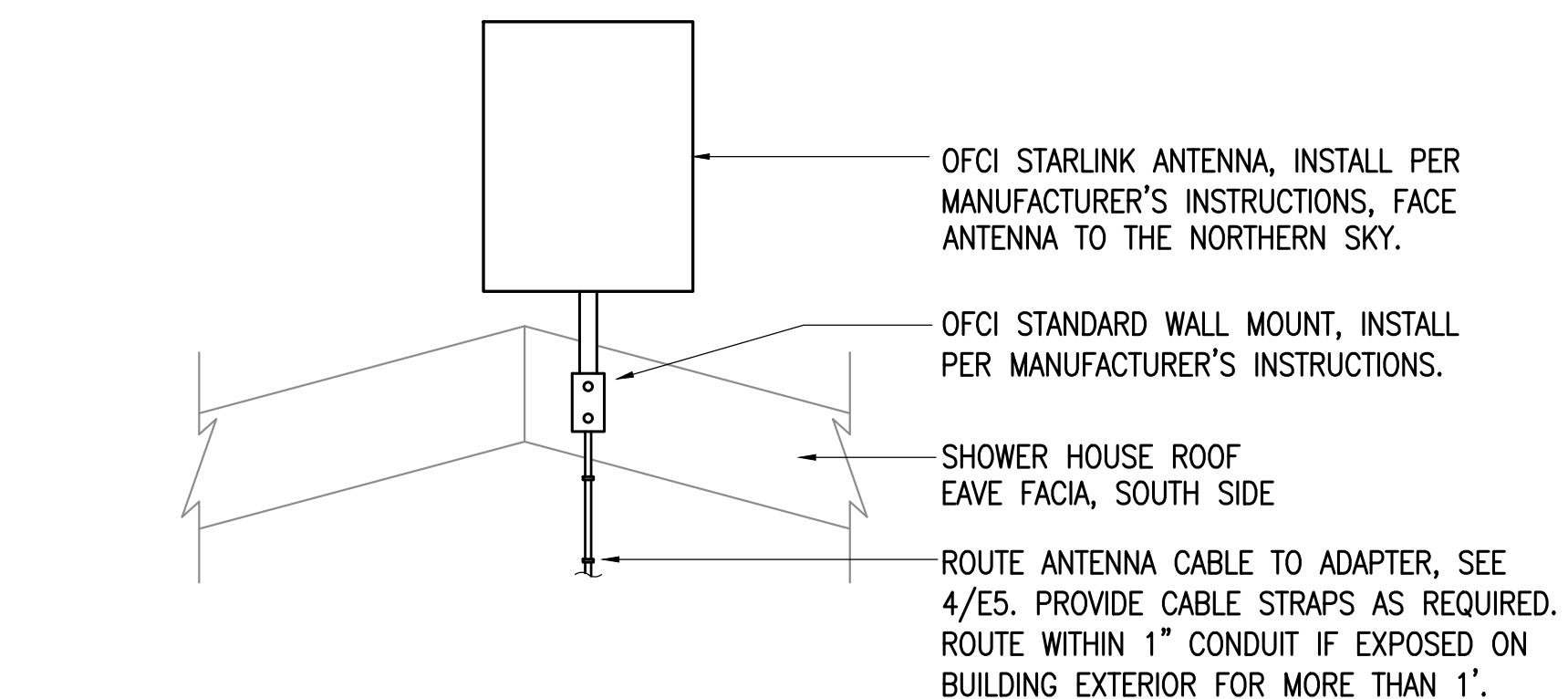
A. SEE GENERAL NOTES ON SHEET E2 AND E3.

SHEET NOTES:

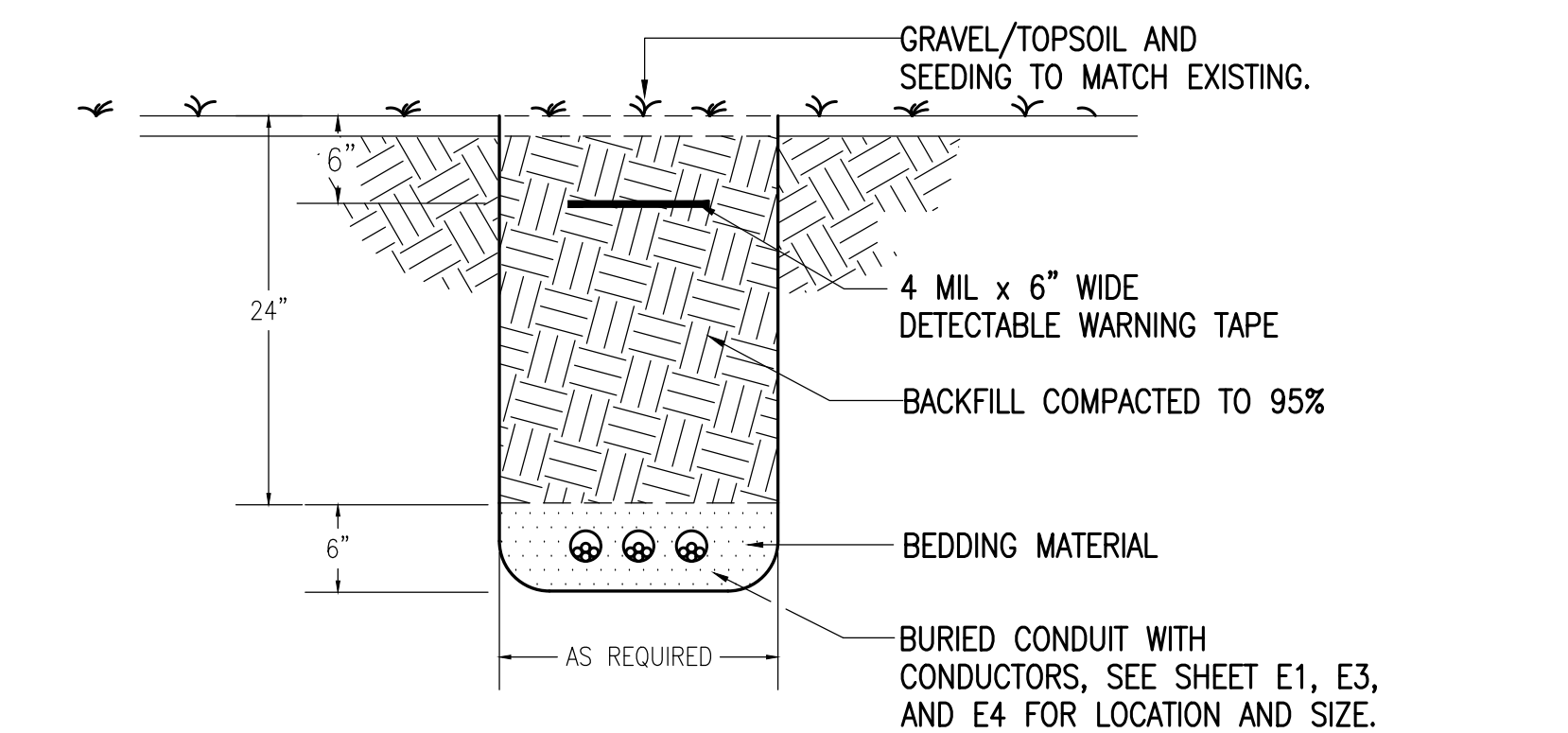
1. PROVIDE DUPLEX RECEPTACLE WITHIN THE SHOWER HOUSE NEAR THE NEW TELECOM RACK AND CONNECT TO THE (E) SHOWER HOUSE PANEL. PROVIDE NEW 20A, 1-POLE CIRCUIT BREAKER LISTED FOR USE WITHIN EXISTING PANEL. SEE GENERAL NOTE C ON SHEET E3.



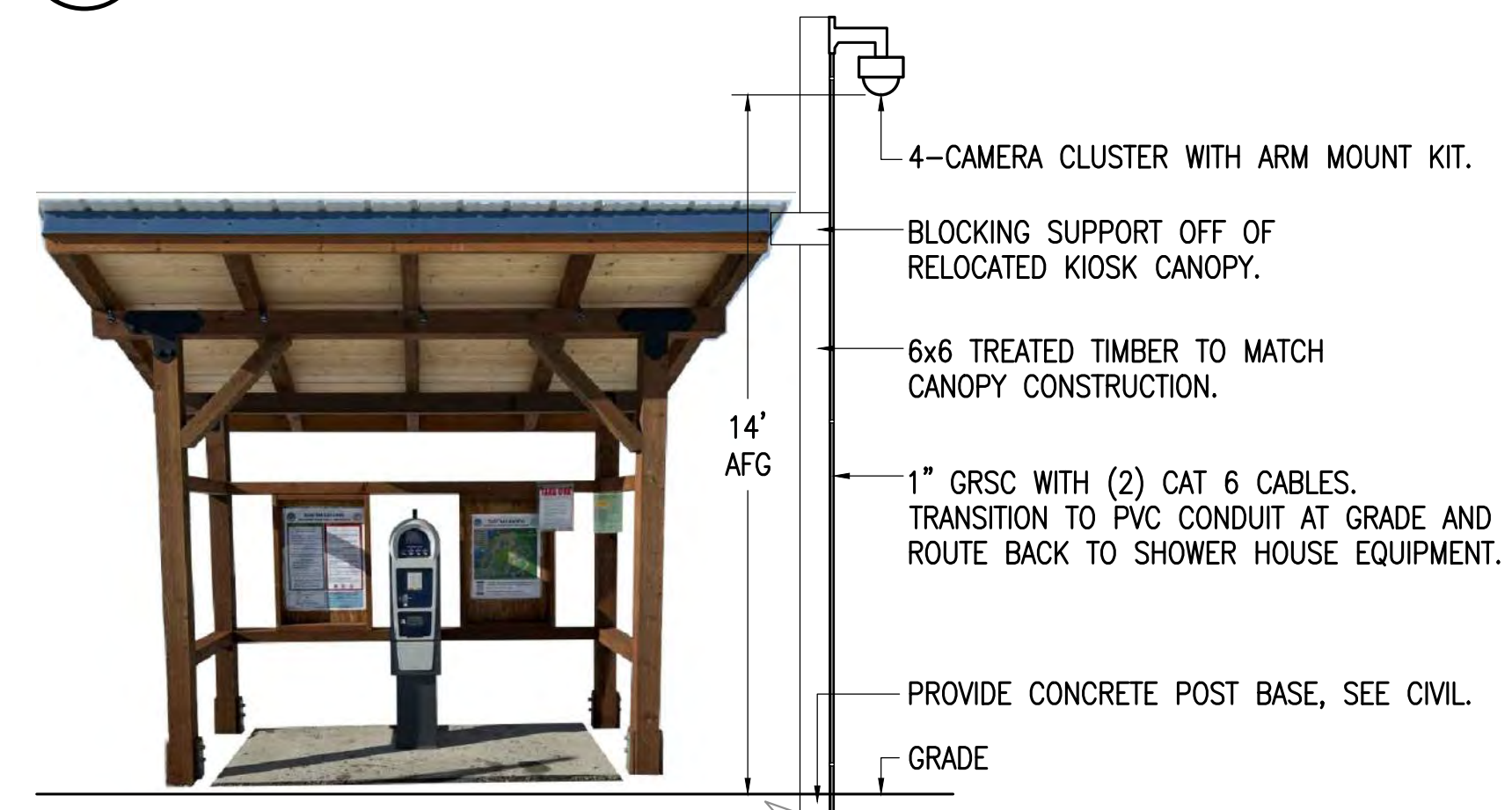
2 DAY USE AREA SERVICE GROUNDING DETAIL
NO SCALE



5 STARLINK ANTENNA MOUNTING DETAIL
NO SCALE



3 TRENCHING DETAIL
NO SCALE



6 CAMERA CLUSTER MOUNTING DETAIL
NO SCALE

EXISTING PANEL 'SHP'													
MFR/MODEL: GE FIELD VERIFY		VOLTS: 120/240V, 1PH, 3W		ENCLOSURE: NEMA 3R		225 A							
TYPE: PANELBOARD				VOLT-AMPS		MTG: SURFACE							
NOTE	CIRC	POLE	AMPS	SERVICE	TYPE	A	B	TYPE	SERVICE	AMPS	POLE	CIRC	NOTE
a	1	1	20	OUTSIDE LIGHTS	LTG			LTG	INSIDE LIGHTS	20	1	2	a
a	3	1	20	BOILER RECEP	MISC			MOTR	EXHAUST FANS	20	1	4	a
a	5	2	30	UNKNOWN LOAD				RECP	BOILER RM RECEPS	20	1	6	a
a	7	2	30	^^					SPARE	30	2	8	a
b	9	2	15	WELL PUMP	MOTR	588			^^	30	2	10	a
b	11	2	15	^^	MOTR		588		SPACE	-	1	12	a
b	13	1	20	TELECOM RACK RECEP	MISC	500			SPACE	-	1	14	a
b	15	1	20	ARSENIC TREAT RECEP	MISC		500		SPACE	-	1	16	a
b	17	1	20	PAY KIOSK	MISC	1020			SPACE	-	1	18	a
a	19	1	-	SPACE					SPACE	-	1	20	a
a	21	1	-	SPACE					SPACE	-	1	22	a
a	23	1	-	SPACE					SPACE	-	1	24	a
ADDED VA						2,108	1,088	3,196 VA					
ADDED A						18	9	13 A					
A.I.C. RATING: 10,000													
CONNECTED LOAD IN KVA (THIS PANEL):				LTG	RECP	MOTR	LG.MT	MISC	SPEC	TOTAL	AMPS		
CONNECTED LOAD IN KVA (BRANCH PANELS):				0.00	0.00	1.18	0.29	2.02	0.00	3.2 KVA	13 A		
TOTAL CONNECTED LOAD IN KVA:				0.00	0.00	1.18	0.29	2.02	0.00	0.0 KVA	0 A		
DEMAND LOAD IN KVA:				0.00	0.00	1.18	0.29	2.02	0.00	3.2 KVA	13 A		
				0.00	0.00	1.18	0.29	2.02	0.00	3.5 KVA	15 A		

PANEL NOTES:
a DENOTES AN EXISTING BREAKER/LOAD/SPACE TO REMAIN.
b DENOTES A NEW BREAKER AND LOAD. PROVIDE NEW BREAKER LISTED FOR USE WITHIN EXISTING PANEL, GE TYPE THHQL, FIELD VERIFY.

PANEL OPTIONS:
MAIN CIRCUIT BREAKER (SEE ONE-LINE FOR SIZE)

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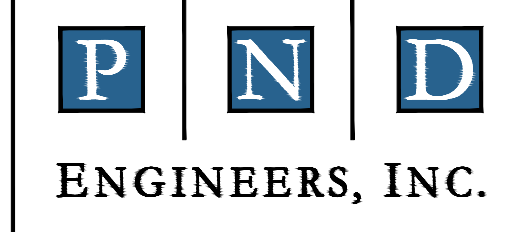


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SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
ELECTRICAL DETAILS	
DESIGNED BY: DB	DATE: 5/29/2026
CHECKED BY: DB_XPT	PROJECT NO: M5024
SHEET NO: E5 59 OF 63	

ELECTRICAL SPECIFICATIONS (CONTINUED ON E7)

26.05.00 – COMMON WORK RESULTS FOR ELECTRICAL

- A. SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR AN EXTENSION TO THE EXISTING ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS.
- B. STANDARDS, CODES AND REGULATIONS: COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND INTERNATIONAL FIRE CODE INCLUDING ALL STATE AND LOCAL AMENDMENTS TO THESE CODES. COMPLY WITH THE LATEST PUBLISHED VERSION OF THE NECA STANDARD OF INSTALLATION.
- C. DRAWINGS: THE DRAWINGS ARE DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. UNLESS SPECIFICALLY DIMENSIONED. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE OWNER. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.
- D. RECORD DRAWINGS: MARK UP A CLEAN SET OF DRAWINGS AS THE WORK PROGRESSES TO SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL ELECTRICAL WORK WHICH WILL BECOME PERMANENTLY CONCEALED. SHOW ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE BUILDING. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN.
- E. WORKMANSHIP: INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS AND IN ACCORDANCE WITH NECA STANDARDS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, NEMA STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS WHERE APPLICABLE.
- F. SUBMITTALS: PROVIDE MATERIAL AND EQUIPMENT SUBMITTALS CONTAINING A COMPLETE LISTING OF MATERIAL AND EQUIPMENT SHOWN ON THE DRAWINGS. INCLUDE CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS AND PERFORMANCE DATA FOR ALL MATERIAL AND EQUIPMENT. SUBMITTALS SHALL BE IN ELECTRONIC .PDF FORMAT, SEPARATE FROM WORK FURNISHED UNDER OTHER DIVISIONS. INDEX AND CLEARLY IDENTIFY ALL MATERIAL AND EQUIPMENT BY ITEM, NAME OR DESIGNATION USED ON THE DRAWINGS. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTALS ARE NOT CHECKED FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. WHERE DEVIATIONS OF A SUBSTITUTE PRODUCT OR SYSTEM PERFORMANCE HAVE NOT BEEN SPECIFICALLY NOTED IN THE SUBMITTAL BY THE CONTRACTOR, PROVISIONS OF A COMPLETE AND SATISFACTORY WORKING INSTALLATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- G. OPERATION AND MAINTENANCE MANUALS: PROVIDE OPERATION AND MAINTENANCE MANUALS FOR TRAINING OF THE OWNER'S PERSONNEL. DESCRIBE THE PROCEDURES NECESSARY TO OPERATE THE SYSTEM INCLUDING START-UP, OPERATION, EMERGENCY OPERATION AND SHUTDOWN. PROVIDE INSTRUCTIONS AND A SCHEDULE OF PREVENTIVE MAINTENANCE IN TABULAR FORM FOR ALL ROUTINE CLEANING, INSPECTION AND LUBRICATION WITH RECOMMENDED LUBRICANTS. PROVIDE INSTRUCTIONS FOR MINOR REPAIR OR ADJUSTMENTS REQUIRED FOR PREVENTIVE MAINTENANCE ROUTINES. PROVIDE MANUFACTURER'S DESCRIPTIVE LITERATURE INCLUDING APPROVED SHOP DRAWINGS COVERING DEVICES USED IN ANY CONTRACTOR-PROVIDED EQUIPMENT OR SYSTEMS WITH ILLUSTRATION, EXPLODED VIEWS, ETC.
- H. WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM BENEFICIAL OCCUPANCY. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.
- I. PERMITS: SECURE AND PAY FOR ALL FEES, PERMITS, ETC. REQUIRED BY LOCAL AND STATE AGENCIES AND ALL LOCAL UTILITY COMPANIES.
- J. REFERENCE SYMBOLS: THE ELECTRICAL "LEGEND" ON THE DRAWINGS IS A STANDARDIZED VERSION, AND ALL SYMBOLS SHOWN MAY NOT BE USED. USE THE "LEGEND" AS A REFERENCE FOR THE SYMBOLS USED ON THE DRAWINGS.

26.05.05 – SELECTIVE DEMOLITION FOR ELECTRICAL

- A. DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATION AND EXISTING RECORD DRAWINGS. REPORT DISCREPANCIES TO OWNER/ENGINEER BEFORE DISTURBING THE EXISTING INSTALLATION. DISCONNECT ELECTRICAL SYSTEMS IN WALLS, FLOORS, AND CEILINGS SCHEDULED FOR REMOVAL. PROVIDE TEMPORARY WIRING AND CONNECTIONS TO MAINTAIN ALL EXISTING ELECTRICAL SYSTEMS (TELEPHONE, FIRE ALARM, LIGHTING, ELECTRICAL SERVICE, ETC.) IN SERVICE DURING CONSTRUCTION. DISABLE SYSTEMS ONLY TO MAKE SWITCHOVERS AND CONNECTIONS.
- B. OBTAIN PERMISSION FROM OWNER AT LEAST 24 HOURS BEFORE PARTIALLY OR COMPLETELY DISABLING SYSTEM. MINIMIZE OUTAGE DURATION AND MAKE TEMPORARY CONNECTIONS TO MAINTAIN SERVICE IN AREAS ADJACENT TO WORK AREA. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.
- C. REMOVE, RELOCATE AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION. REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY. REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. WHERE ABANDONED CONDUIT ENTERS EXISTING SURFACES TO REMAIN, CUT CONDUIT FLUSH WITH WALLS AND FLOORS, AND PATCH SURFACES. DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS WHICH ARE NOT REMOVED.
- D. DISCONNECT AND REMOVE ABANDONED PANELBOARDS AND DISTRIBUTION EQUIPMENT. DISCONNECT AND REMOVE ELECTRICAL DEVICES AND EQUIPMENT SERVING UTILIZATION EQUIPMENT THAT HAS BEEN REMOVED. DISCONNECT AND REMOVE ABANDONED LUMINAIRES. REMOVE BRACKETS, STEMS, HANGERS AND OTHER ACCESSORIES. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE.

26.05.19 – WIRE AND CABLE

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS:
 - 1. ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW-2 INSULATION. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE SHALL BE #12 AWG. MINIMUM CONTROL CIRCUIT CONDUCTOR SIZE SHALL BE #18 AWG.
 - 2. CONTROL CIRCUITS SHALL BE COPPER, STRANDED CONDUCTOR, 600V INSULATION, THHN/THWN, MINIMUM SIZE 18 AWG.
- C. INSTALLATION:
 - 1. COLOR CODE WIRES BY LINE OR PHASE. COLOR CODE THE 120/240V CONDUCTORS BLACK, RED AND WHITE.
 - 2. DO NOT SHARE NEUTRAL CONDUCTORS. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT THAT REQUIRES A NEUTRAL.
 - 3. USE PROPERLY SIZED INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR ALL CONDUCTORS #8 AWG AND SMALLER. TERMINATE #6 AWG AND LARGER CONDUCTORS WITH CRIMP OR COMPRESSION TYPE CONNECTORS INSTALLED WITH TOOL RECOMMENDED BY CONNECTION MANUFACTURER AND INSULATE WITH PROPERLY SIZED 600 VOLT RATED HEAT SHRINK TUBING.
 - 4. INSTALLATION SCHEDULE: BUILDING WIRE IN RACEWAYS AT ALL LOCATIONS UNLESS OTHERWISE NOTED. PROVIDE XHHW-2 FOR FEEDERS AND IN EXTERIOR LOCATIONS.

26.05.26 – GROUNDING AND BONDING

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR GROUND RODS.
- B. MATERIAL: SOLID GROUND RODS: COPPER-ENCASED STEEL, 3/4 INCH DIAMETER, MINIMUM LENGTH 10 FEET.
- C. INSTALLATION:
 - 1. PROVIDE A SEPARATE, INSULATED EQUIPMENT GROUNDING CONDUCTOR IN ALL BRANCH CIRCUITS AND FEEDERS. TERMINATE EACH END ON A GROUNDING LUG, BUS, OR BUSHING.
 - 2. MECHANICAL CONNECTORS: NON-REVERSIBLE CRIMP TYPE LUGS ONLY. USE FACTORY MADE COMPRESSION LUG FOR ALL TERMINATIONS. FOR TELECOMMUNICATION SYSTEMS USE COPPER, COPPER ALLOY, OR TIN-PLATED COPPER, NON-REVERSIBLE LONG BARREL CRIMP TYPE BOLT LUGS WITH TWO BOLT TONGUES FOR 6 AWG OR LARGER CONDUCTORS. CRIMP TYPE ONE HOLE FOR CONDUCTORS SMALLER THAN 6 AWG.
 - 3. BOND TOGETHER SYSTEM NEUTRALS, SERVICE EQUIPMENT ENCLOSURES, EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT, METAL RACEWAY SYSTEMS, GROUNDING CONDUCTOR IN RACEWAYS AND CABLES, RECEPTACLE GROUND CONNECTORS, AND PLUMBING AND FUEL SYSTEMS.

26.05.29 – HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIAL: SUPPORT CHANNEL SHALL BE GALVANIZED OR PAINTED STEEL. HARDWARE SHALL BE CORROSION RESISTANT.
- C. INSTALLATION: EQUIPMENT WEIGHING MORE THAN 50 POUNDS SHALL BE ADEQUATELY ANCHORED TO THE BUILDING STRUCTURE TO RESIST LATERAL EARTHQUAKE FORCES.

26.05.33 – RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS
 - 1. RIGID STEEL CONDUIT: ANSI C80.1. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; THREADED TYPE WITH INSULATED THROAT BUSHINGS, MATERIAL TO MATCH CONDUIT.
 - 2. INTERMEDIATE METAL CONDUIT (IMC): GALVANIZED STEEL FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; USE FITTINGS AND CONDUIT BODIES SPECIFIED ABOVE FOR RIGID STEEL CONDUIT.
 - 3. ELECTRICAL METALLIC TUBING CONDUIT (EMT): ANSI C80.3. GALVANIZED TUBING. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON, COMPRESSION TYPE OR SET SCREW FITTINGS WITH INSULATED THROAT BUSHINGS. DIE-CAST FITTINGS ARE NOT ACCEPTABLE. MAXIMUM SIZE SHALL BE 2". PROVIDE FACTORY ELBOWS ON SIZES 1-1/2" AND LARGER.
 - 4. FLEXIBLE METAL CONDUIT: FS WW-C-566; STEEL, FULL WALL OR REDUCED WALL THICKNESS. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST FITTINGS ARE NOT ACCEPTABLE.
 - 5. LIQUIDTIGHT FLEXIBLE CONDUIT: FLEXIBLE METAL CONDUIT WITH PVC JACKET. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST FITTINGS ARE NOT ACCEPTABLE.
 - 6. RIGID NONMETALLIC CONDUIT: NEMA TC 2; SCHEDULE 40 OR 80 PVC, RATED FOR 90° C CABLE.
 - 7. PROVIDE GALVANIZED OR CADMIUM PLATED, ONE PIECE PRESSED STEEL OUTLET BOXES 4 INCH SQUARE OR OCTAGONAL, 1 1/2 INCHES DEEP MINIMUM SIZE FOR USE IN INTERIOR AREAS.
 - 8. PROVIDE CAST ALUMINUM OR FERROALLOY TYPE BOXES WITH GASKETED COVER, THREADED HUBS AND NEMA 3R RATING FOR USE IN EXTERIOR OR WET LOCATIONS.
- C. INSTALLATION:
 - 1. INSTALL CONDUIT FOR ALL SYSTEMS UNLESS OTHERWISE NOTED, 1/2 INCH MINIMUM SIZE, EXCEPT CONDUIT FOR SPECIAL SYSTEMS SHALL BE 3/4" MINIMUM. IN SLAB ABOVE GRADE, EXPOSED OUTDOOR LOCATIONS, WET INTERIOR LOCATIONS, AND FEEDERS SHALL BE RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT. BELOW SLAB MAY BE NON-METALLIC PVC CONDUIT. EXPOSED DRY INTERIOR LOCATIONS MAY BE EMT.
 - 2. MOTOR AND EQUIPMENT CONNECTIONS SHALL BE SHORT EXTENSIONS OF FLEXIBLE METAL CONDUIT TO ALLOW FOR VIBRATION. LIQUIDTIGHT FLEXIBLE CONDUIT AND FITTINGS SHALL BE USED FOR THESE CONNECTIONS IN DAMP OR WET LOCATIONS.
 - 3. INSTALL RACEWAY AND BOXES PER THE LATEST NECA (NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION) STANDARDS
 - 4. INSTALL RACEWAYS LEVEL AND SQUARE TO A TOLERANCE OF 1/8 INCH PER 10 FEET. ROUTE EXPOSED RACEWAYS AND RACEWAYS ABOVE ACCESSIBLE CEILINGS PARALLEL AND PERPENDICULAR TO WALLS, CEILING, STRUCTURAL MEMBERS AND ADJACENT PIPING.
 - 5. ALL CONDUIT FOR THE TELECOMMUNICATIONS DISTRIBUTION SYSTEM SHALL BE INSTALLED WITH NO MORE THAN THREE 90-DEGREE BENDS BETWEEN PULLBOXES. PULL BOXES SHALL NOT BE USED IN LIEU OF CONDUIT BENDS. CONDULETS (LB FITTINGS) SHALL NOT BE INSTALLED IN ANY TELECOMMUNICATIONS RACEWAY.
 - 6. PROVIDE OUTLET BOXES AS SHOWN ON THE DRAWINGS, AND AS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, DEVICE INSTALLATION AND CODE COMPLIANCE.
 - 7. SUPPORT BOXES INDEPENDENTLY OF CONDUIT.

26.05.53 – IDENTIFICATION FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS
 - 1. NAMEPLATES: ENGRAVED THREE-LAYER LAMINATED PLASTIC, WHITE LETTERS ON A BLACK BACKGROUND. NAMEPLATES SHALL BE PROVIDED TO IDENTIFY ALL ELECTRICAL DISTRIBUTION AND CONTROL EQUIPMENT AND LOADS SERVED.
 - 2. TAPE LABELS: ADHESIVE TAPE LABELS, WITH 3/16 INCH BOLD BLACK LETTERS ON CLEAR BACKGROUND MADE USING DYMO RHINOPRO 5000 OR EQUAL LABEL PRINTER.
 - 3. WIRE AND CABLE MARKERS: CLOTH MARKERS, SPLIT SLEEVE OR TUBING TYPE.
- C. INSTALLATION:
 - 1. GEAR: PROVIDE ENGRAVED THREE-LAYER LAMINATED PLASTIC NAMEPLATES WITH WHITE LETTERS ON A BLACK BACKGROUND TO IDENTIFY ALL ELECTRICAL DISTRIBUTION, CONTROL EQUIPMENT, LOADS SERVED, AND LOW-VOLTAGE SYSTEM PANELS.
 - 2. CONDUITS: MARK ALL CONDUITS ENTERING OR LEAVING PANELBOARDS WITH INDELIBLE BLACK MAGIC MARKER WITH THE CIRCUIT NUMBERS OF THE CIRCUITS CONTAINED INSIDE. LABEL FEEDER CONDUITS AND SPARE CONDUITS AT EACH END WITH SOURCE AND TERMINATION POINT.
 - 3. JUNCTION BOXES: MARK ALL CIRCUIT NUMBERS OF WIRING ON ALL JUNCTION BOXES WITH SHEET STEEL COVERS. MARK WITH INDELIBLE BLACK MARKER. ON EXPOSED JUNCTION BOXES IN PUBLIC AREAS, MARK ON INSIDE OF COVER. MARK ALL OTHER SPECIAL SYSTEM JUNCTION BOXES WITH SHEET STEEL COVERS.
 - 4. WIRE IDENTIFICATION: PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN PANELBOARD GUTTERS, PULL BOXES, OUTLET AND JUNCTION BOXES, AND AT LOAD CONNECTION. MARKERS SHALL BE LOCATED WITHIN ONE INCH OF EACH CABLE END, EXCEPT AT PANELBOARDS, WHERE MARKERS FOR BRANCH CIRCUIT CONDUCTORS SHALL BE VISIBLE WITHOUT REMOVING PANEL DEADFRONT.
 - 5. DEVICE PLATES: LABEL EACH RECEPTACLE DEVICE PLATE OR POINT OF CONNECTION DENOTING THE PANELBOARD NAME AND CIRCUIT NUMBER. INSTALL LABEL ON THE TOP OF EACH PLATE.

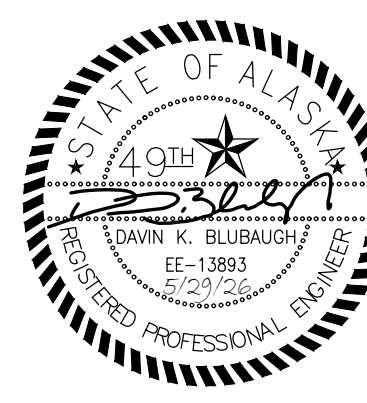
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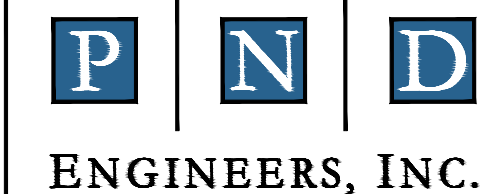
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REV	DATE	DESCRIPTION



DATE: 5/29/2026

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PROJECT: **SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION**

TITLE: **ELECTRICAL SPECIFICATIONS**

DESIGNED BY:	DB	DATE:	5/29/2026	SHEET NO: E6
CHECKED BY:	DB,XPT	PROJECT NO.:	M5024	

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ELECTRICAL SPECIFICATIONS (CONTINUED FROM E6)

26.21.00 - LOW-VOLTAGE ELECTRICAL SERVICE ENTRANCE

A. SUMMARY: THIS SECTION INCLUDES EQUIPMENT AND COORDINATION WITH LOCAL UTILITY TO OBTAIN PERMANENT ELECTRICAL SERVICE FOR THE FACILITY. THIS WILL INVOLVE COORDINATING WITH THE UTILITY TO INSTALL A NEW UNDERGROUND LINE TO FEED THE FACILITY. SEE POWER ONE-LINE DIAGRAM FOR SERVICE SIZE AND CONFIGURATION.

B. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

C. MATERIALS:

- METER/MAIN: COMBINATION NEMA 3R METERBASE/MAIN DISCONNECT WITH RATINGS AS INDICATED ON THE PLANS.
- METER: FURNISHED AND INSTALLED BY THE UTILITY COMPANY.

D. INSTALLATION:

- MAKE ARRANGEMENTS WITH UTILITY COMPANY TO OBTAIN PERMANENT ELECTRIC SERVICE TO THE PROJECT.
- PROVIDE EQUIPMENT RACK SUITABLE FOR INSTALLATION OF THE SERVICE EQUIPMENT.
- METER SOCKETS SHALL BE INSTALLED WITH THE CENTERLINE OF THE SOCKET OPENING NO MORE THAN 72 INCHES AND NO LESS THAN 60 INCHES ABOVE FINISHED GRADE. THE METER SOCKET SHALL BE INSTALLED WITH A MINIMUM 10 INCHES OF SIDE CLEARANCE TO EACH SIDE OF THE SOCKET.
- INSTALL PERMANENT LABEL AT SERVICE EQUIPMENT INDICATING THE MAXIMUM AVAILABLE FAULT CURRENT PER NEC 110.24.
- ALL SERVICE ENTRANCE EQUIPMENT SHALL HAVE SIGNAGE FOR ARC HAZARD INSTALLED. THE MARKING SHALL BE LOCATED TO BE CLEARLY VISIBLE TO QUALIFIED PERSONNEL BEFORE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE OF THE EQUIPMENT. AT A MINIMUM THE 3-LINE SIGNAGE SHALL STATE THE FOLLOWING: WARNING - ARC FLASH AND SHOCK HAZARD - APPROPRIATE PPE REQUIRED.

26.24.16 - PANELBOARDS

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

B. MATERIAL:

- MANUFACTURERS: MATCH EXISTING.
- NEW BREAKERS IN EXISTING PANELS: NEMA AB 1; UL LISTED FOR USE IN THE PANEL, AMPERE RATING AND NUMBER OF POLES AS INDICATED ON PLANS. AIC RATING SHALL MATCH THE LOWEST RATED DEVICE IN THE PANEL.

C. INSTALLATION:

- INSTALL NEW BREAKER(S) IN EXISTING PANEL(S) AND TEST FOR PROPER OPERATION.
- UPDATE CIRCUIT DIRECTORY TO REFLECT ALL CHANGES.
- PROVIDE NEW NAMEPLATE FOR EXISTING PANEL.

26.27.26 - WIRING DEVICES

A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.

B. MATERIALS:

- RECEPTACLES: CONVENIENCE AND STRAIGHT BLADE RECEPTACLES SHALL BE NEMA AND FEDERAL SPECIFICATION FS W-C-596, TYPE 5-20R, WHITE NYLON FACE. SPECIFIC USE RECEPTACLES SHALL BE NEMA WD1 OR WD5; AS REQUIRED TO MATCH LOAD SERVED, BLACK PHENOLIC FACE. GFCI RECEPTACLES SHALL BE 20A, DUPLEX CONVENIENCE RECEPTACLE WITH INTEGRAL CLASS 'A' GROUND FAULT CURRENT INTERRUPTER AND LOCKOUT FEATURE. TAMPER-RESISTANT RECEPTACLES SHALL BE UL 489.
- WALL PLATES: WEATHERPROOF COVER PLATES SHALL BE GASKETED STAINLESS STEEL WITH HINGED GASKETED DEVICE COVERS. DEVICE PLATES FOR WET LOCATION RECEPTACLES SHALL BE "IN USE" TYPE. PROVIDE 1/2 INCH RAISED, SQUARE, GALVANIZED OR CADMIUM PLATED, PRESSED STEEL COVER PLATE SUPPORTING DEVICES INDEPENDENT OF THE OUTLET BOX FOR ALL EXPOSED WORK.
- RV PEDESTALS: UL LISTED METALLIC RV PEDESTAL, NEMA 3R RATED WITH HINGED COVER, EXTENDED METALLIC POST SUITABLE FOR EARTH BURIAL, PROVIDED WITH RECEPTACLES AND CIRCUIT BREAKERS AS SHOWN ON THE DRAWINGS, MIDWEST ELECTRIC #U075CP6010D, OR APPROVED EQUAL.

C. INSTALLATION:

- UNLESS OTHERWISE NOTED ON THE DRAWINGS, INSTALL RECEPTACLES 18 INCHES ABOVE FINISH FLOOR WITH GROUNDING POLE ON BOTTOM. UNLESS OTHERWISE NOTED DIMENSIONS ARE TO CENTERLINE OF OUTLET.
- INSTALL GALVANIZED STEEL PLATES ON OUTLET BOXES AND JUNCTION BOXES IN UNFINISHED AREAS, ABOVE ACCESSIBLE CEILINGS, AND ON SURFACE-MOUNTED OUTLETS.
- INSTALL RV PEDESTALS IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.

27.10.00 - STRUCTURED CABLING

A. SUMMARY: THIS SECTION INCLUDES REQUIREMENTS FOR THE DESIGN AND INSTALLATION OF A TELECOMMUNICATIONS CABLING SYSTEM INCLUDING COMMUNICATIONS CABLE, EQUIPMENT RACKS, PATCH PANELS, TELECOMMUNICATIONS JACKS, RACEWAYS, ETC. AS REQUIRED FOR A COMPLETE AND FUNCTIONAL TELECOMMUNICATIONS CABLING SYSTEM. QUALITY ASSURANCE: ALL PRODUCTS SHALL BE OF ONE MANUFACTURER'S STRUCTURED CABLING SYSTEM. THE MANUFACTURER SHALL BE A COMPANY SPECIALIZING IN MANUFACTURING THE PRODUCTS SPECIFIED WITH A MINIMUM 5 YEARS DOCUMENTED EXPERIENCE. THE INSTALLER SHALL BE A COMPANY SPECIALIZING IN PERFORMING THIS TYPE OF WORK WITH A MINIMUM 3 YEARS DOCUMENTED EXPERIENCE AND MANUFACTURER'S CERTIFICATION TO INSTALL THE PRODUCT. ALL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS: ANSI/TIA 568-B.1-3, ANSI/TIA 569_A, AND ANSI/TIA 607.

B. SUBMITTALS: SUBMIT PRODUCT DATA AND DETAILED SHOP DRAWINGS FOR APPROVAL.

C. MATERIALS:

- WALL ENCLOSURE: LOW-PROFILE, VERTICAL-MOUNT, MAX 20" WIDE X 7" DEEP WITH VERTICAL RACK UNIT SIZE BY CAMERA SYSTEM INTEGRATOR TO SUPPORT THE EQUIPMENT SHOWN ON THE DRAWINGS, TRIPP-LITE SERIES SMART RACK OR APPROVED EQUAL.
- UTP TELECOMMUNICATION CABLE: PLENUM-RATED CL2P, CATEGORY 6, 4 PAIR, 24 AWG SOLID COPPER CONDUCTOR TELECOMMUNICATIONS CABLE. SUPERIOR ESSEX "DATAGAIN" CMP OR APPROVED EQUAL.
- UTP TELECOMMUNICATIONS JACK: RJ-45, CATEGORY6, T568A/B, 8P8C, SINGLE, WHITE FINISH, TELECOMMUNICATIONS JACK WITH FLUSH EXIT WITH SINGLE-GANG FACEPLATES WITH FINISH TO MATCH JACK. ORTRONICS "TRACJACK CLARITY 6" #OR-TJ600 OR APPROVED EQUAL.
- 8-PORT PoE SWITCH: 8 X GIGABIT ETHERNET PoE+ PORTS, 20GB/S SWITCHING CAPACITY, 14.88 MPPS FORWARDING RATE, CISCO OR EQUAL.
- PROVIDE ADDITIONAL COMPONENTS AS SHOWN ON THE DRAWINGS AND AS REQUIRED FOR A COMPLETE AND OPERATIONAL TELECOMMUNICATIONS SYSTEM.

D. INSTALLATION:

- UNLESS OTHERWISE NOTED, ALL CABLES SHALL BE INSTALLED IN CONDUIT. CABLES SHALL BE ROUTED A MINIMUM OF 5 INCHES FROM POWER LINES 2 KVA OR LESS, 12 INCHES FROM FLUORESCENT OR HID BALLASTS, 36 INCHES FROM POWER LINES 5 KVA OR GREATER, 40 INCHES FROM TRANSFORMERS AND MOTORS. STORE A MAXIMUM OF 12 INCHES OF SLACK CABLE AT EACH OUTLET AND A MINIMUM OF 10 FEET OF SLACK CABLE AT EACH RACK. CABLE JACKET SHALL BE MAINTAINED TO WITHIN .5 INCH OF JACK AND TWISTS SHALL BE MAINTAINED TO WITHIN .25 INCH OF TERMINATION POINT. COMPLY WITH CABLE MANUFACTURERS MAXIMUM PULLING TENSION AND MINIMUM BEND RADIUS REQUIREMENTS. DO NOT STRETCH, STRESS, TIGHTLY COIL, BEND OR CRIMP CABLES. CABLES SHALL BE ROUTED SO THAT CABLE LENGTHS DO NOT EXCEED 90 METERS PER ANSI/TIA REQUIREMENTS. PERFORM END-TO-END TESTS OF EACH CABLE AFTER INSTALLATION AND TERMINATION TO SHOW COMPLIANCE WITH ANSI/TIA REQUIREMENTS.
- EACH UTP CABLE SHALL BE TESTED FOR COMPLIANCE WITH ANSI/TIA 568-B.1 AND ANSI/TIA 568B.2 CATEGORY 6 STANDARDS AFTER INSTALLATION USING A FLUKE #DTX OR APPROVED EQUAL TESTER. PROVIDE TEST RESULTS FOR ALL TESTS NOTED ABOVE IN THE FORM OF PRINTOUTS FROM THE TEST EQUIPMENT AND PROVIDE AN ELECTRONIC COPY OF THE TEST DATA FOR EACH CABLE. WHERE ANY PORTION OF THE SYSTEM DOES NOT MEET THE SPECIFICATIONS, THE CONTRACTOR SHALL CORRECT THE DEVIATION AND REPEAT ANY APPLICABLE TESTING AT NO ADDITIONAL COST TO THE OWNER. ACCEPTANCE OF THE TELECOMMUNICATIONS SYSTEM SHALL BE BASED ON THE RESULTS OF THE ABOVE TESTS, FUNCTIONALITY, AND THE RECEIPT OF DOCUMENTATION.
- INSTALL OWNER FURNISHED STARLINK ANTENNA AND ASSOCIATED COMPONENTS IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS. CONNECT TO THE TELECOMMUNICATIONS SYSTEM TO PROVIDE SATELLITE INTERNET SERVICE FOR THE SITE.

28.23.00 - VIDEO SURVEILLANCE

A. SUMMARY: THIS SECTION INCLUDES A NEW VIDEO SURVEILLANCE SYSTEM FOR THE FACILITY COMPLETE WITH EXTERIOR IP CAMERAS, CLOUD VIDEO STORAGE, AND VIDEO MANAGEMENT SYSTEM SOFTWARE. ALL CAMERAS SHALL BE CONNECTED TO THE NVR SERVER AND SURVEILLANCE SHALL BE ACCESSIBLE VIA NETWORK CONNECTION FROM REMOTE LOCATIONS.

B. SUBMITTALS: SUBMIT PRODUCT DATA AND DETAILED SHOP DRAWINGS FOR APPROVAL.

C. MATERIALS:

- VIDEO APPLIANCE: CLOUD BASED SOFTWARE AND STORAGE ONLY.
- EXTERIOR IP CAMERA (SINGLE): 12.5MP RESOLUTION, OUTDOOR RATED TO -40°F, WALL MOUNTED, VERKADA CF83-E SERIES OR APPROVED EQUAL. PROVIDE 180 DEG FIXED FIELD OF VIEW WHERE MOUNTED ON FLAT WALL.
- EXTERIOR IP CAMERA (4-CAMERA CLUSTER): FOUR 1/2.8" PROGRESSIVE CMOS IMAGE SENSORS, 5MP RESOLUTION, FOUR VARIFOCAL LENSES WITH 2.55X OPTICAL ZOOM PER LENS, OUTDOOR RATED TO -40°F, POST MOUNTED, VERKADA CH53-E OR APPROVED EQUAL.
- GENERAL HARDWARE AND MOUNTS: AS REQUIRED FOR A COMPLETE AND OPERABLE SYSTEM.
- VIDEO FIELD CABLE: AS RECOMMENDED BY THE SECURITY INTEGRATOR
- WIRE AND CABLE: PER SECTION 27 10 00.
- UTP COMPONENTS: PER SECTION 27 10 00.

D. INSTALLATION:

- INSTALL AND TEST WIRING PER SECTION 27 10 00.
- NO WIRING OTHER THAN THAT DIRECTLY ASSOCIATED WITH THE VIDEO SURVEILLANCE SYSTEM SHALL BE PERMITTED IN VIDEO SURVEILLANCE SYSTEM CONDUITS AND PATHWAYS.
- COORDINATE ALL FINAL CAMERA LOCATIONS WITH OWNER'S REPRESENTATIVE PRIOR TO ROUGH-IN AND AVOID CONFLICTS WITH EXISTING EQUIPMENT AND OBJECTS THAT MAY OBSTRUCT THE FIELD OF VIEW OR, IN THE CASE OF LIGHT FIXTURES, MAY AFFECT THE CAMERA PERFORMANCE AND QUALITY OF THE VIDEO IMAGE.
- COORDINATE ALL CAMERA, OUTLET BOX, AND CONDUIT LOCATIONS TO AVOID CONFLICTS WITH MECHANICAL PIPING AND DUCTWORK, STRUCTURAL MEMBERS, AND OTHER MATERIALS ABOVE THE ACCESSIBLE CEILINGS AND ALONG THE ENTIRE CABLE PATHWAY.
- ANY CAMERA THAT IS LOCATED SO THAT CAMERA PERFORMANCE OR FIELD OF VIEW IS ADVERSELY AFFECTED SHALL BE RELOCATED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- LABEL ALL VIDEO SURVEILLANCE SYSTEM JUNCTION BOXES. FOR JUNCTION BOXES ABOVE CEILINGS, MARK THE BOX COVER WITH "IP VIDEO" USING PERMANENT BLACK MARKER. FOR JUNCTION BOXES IN FINISHED AREAS, MARK THE INSIDE OF THE COVER.
- FIXED CAMERAS: THE CONTRACTOR SHALL COORDINATE WITH THE OWNER TO OBTAIN THE DESIRED FIELD OF VIEW FOR EACH NEW CAMERA. THIS INCLUDES, BUT IS NOT LIMITED TO, ADJUSTING CAMERA AIMING POINT, WHITE BALANCE, BACKLIGHT COMPENSATION, AGC, IRIS CONTROL, VIEWING ANGLE, AND ADJUSTING VARI-FOCAL LENSES.
- VMS SOFTWARE: THE CONTRACTOR SHALL COMPLETELY CONFIGURE EACH VIDEO INPUT FOR CAMERA TITLE, FRAME RATE, RESOLUTION, COMPRESSION, MOTION DETECTION, ALARMS, PRE/POST EVENT RECORDING, MACROS, AND ALL OTHER FEATURES OF THE SOFTWARE. THE SOFTWARE SHALL BE INITIALLY CONFIGURED FOR A COMPLETE AND OPERABLE SYSTEM TO THE OWNER'S SATISFACTION.
- INSTALL AND TEST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- TRAINING: FURNISH 6 HOURS OF INSTRUCTION EACH FOR TWO PERSONS, TO BE CONDUCTED AT PROJECT SITE WITH MANUFACTURER'S REPRESENTATIVE.

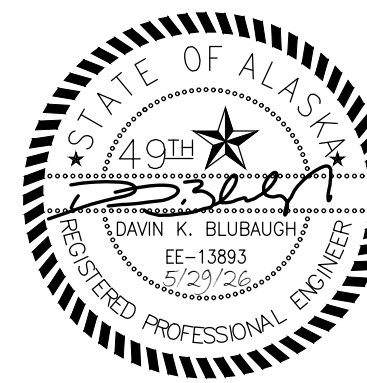
5/29/26 - DAVIN BLUBAUGH - G:\2025\15024\15024-Eseries.dwg



100% DESIGN
5/29/2026

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REV	DATE	DESCRIPTION



DATE: 5/29/2026

RSA
Mechanical and Electrical Consulting Engineers
670 West Fireweed Lane, Suite 200
Anchorage, AK 99503
(907)276-0521
Corporate No.: AECC542

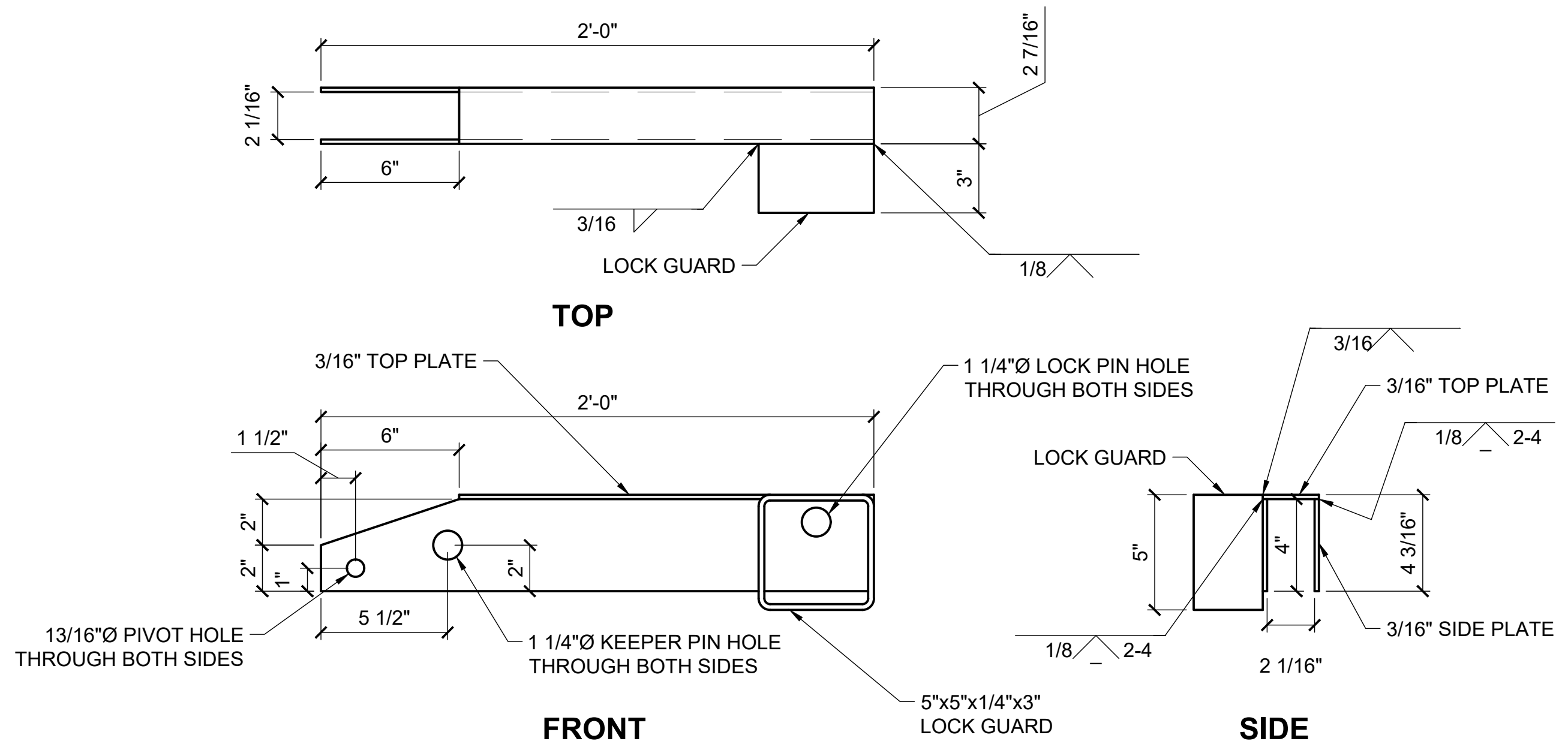
P | N | D
ENGINEERS, INC.

SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

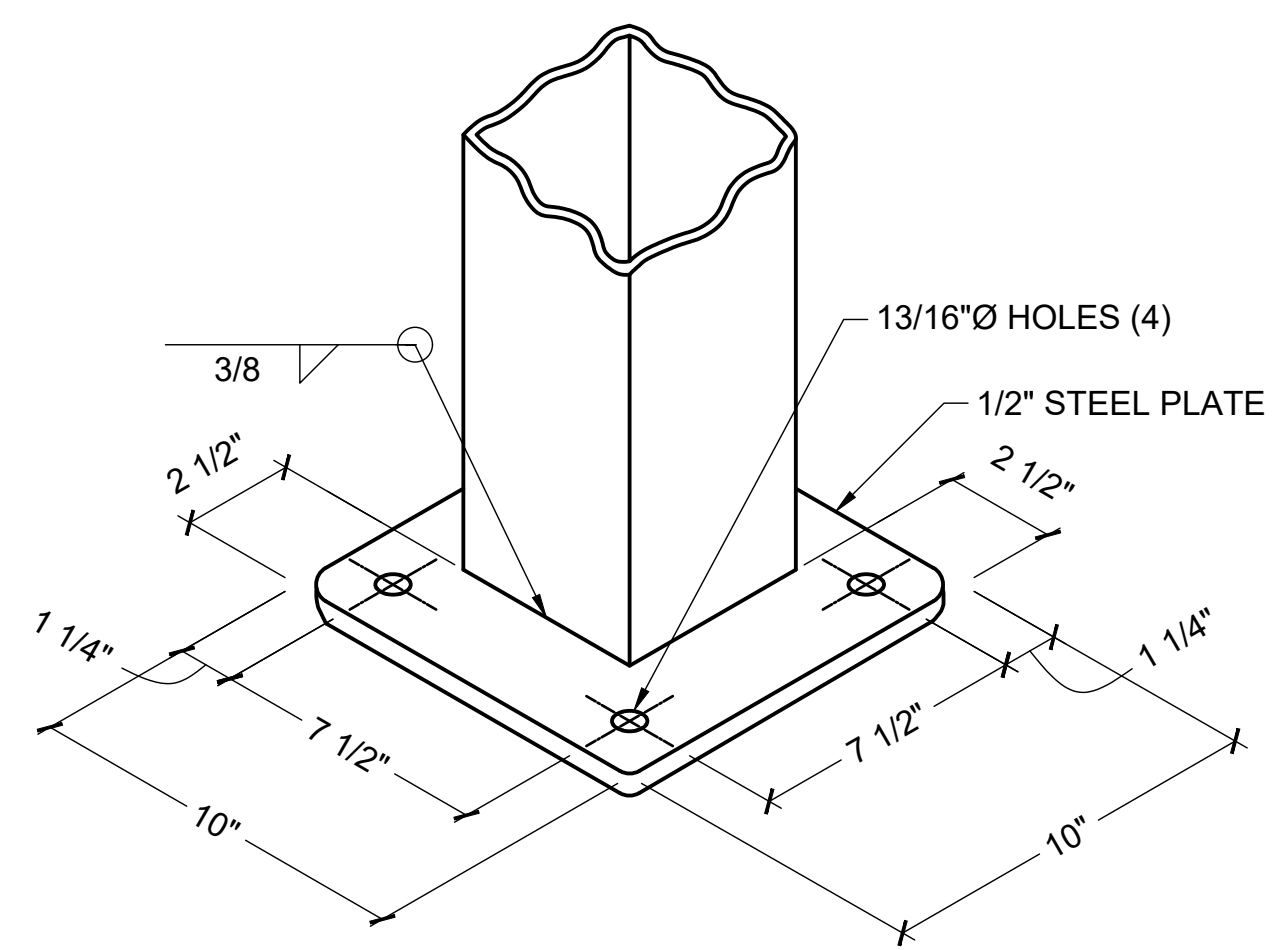
ELECTRICAL SPECIFICATIONS

DESIGNED BY: DB	DATE: 5/29/2026	SHEET NO: E7 61 OF 63
CHECKED BY: DB_XPT	PROJECT NO: M5024	

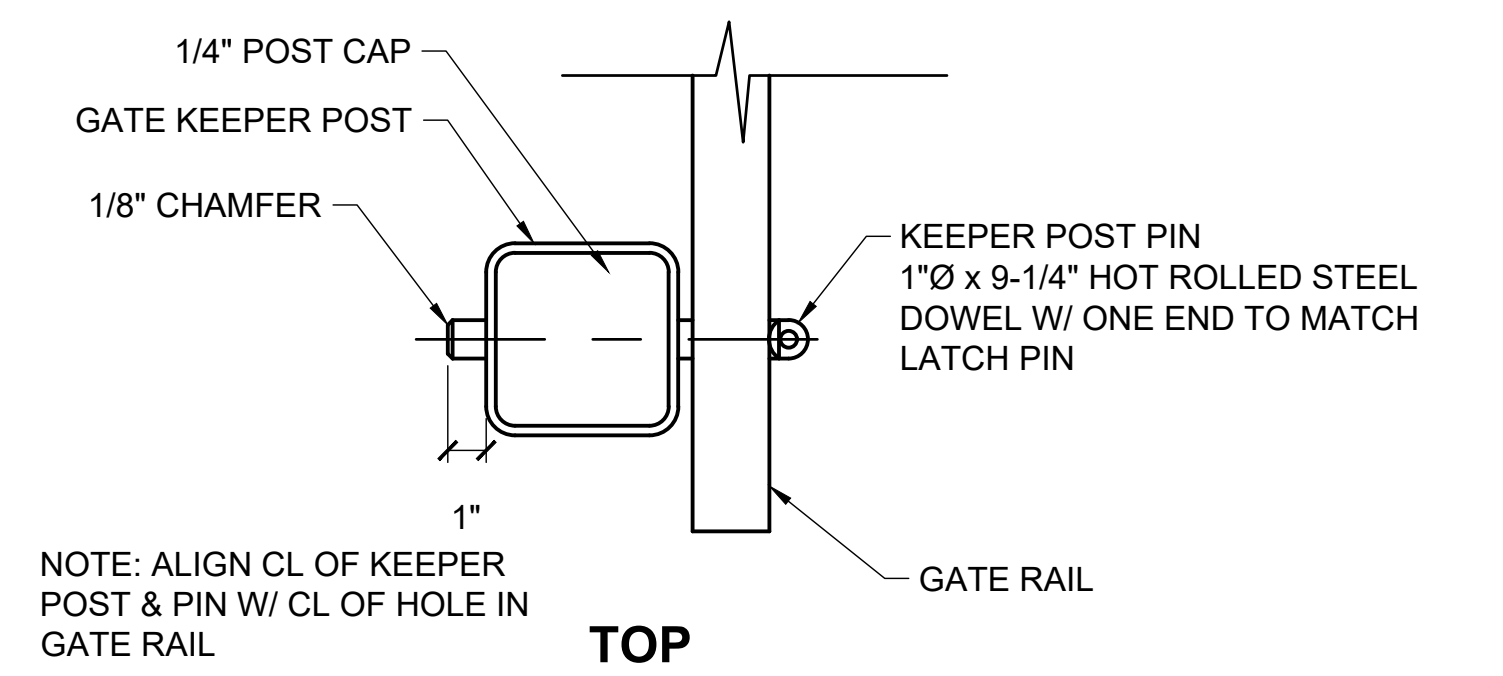
6/2/26 - OROHLER - 1\2025\25\029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\62-63 - Gate Details.dwg



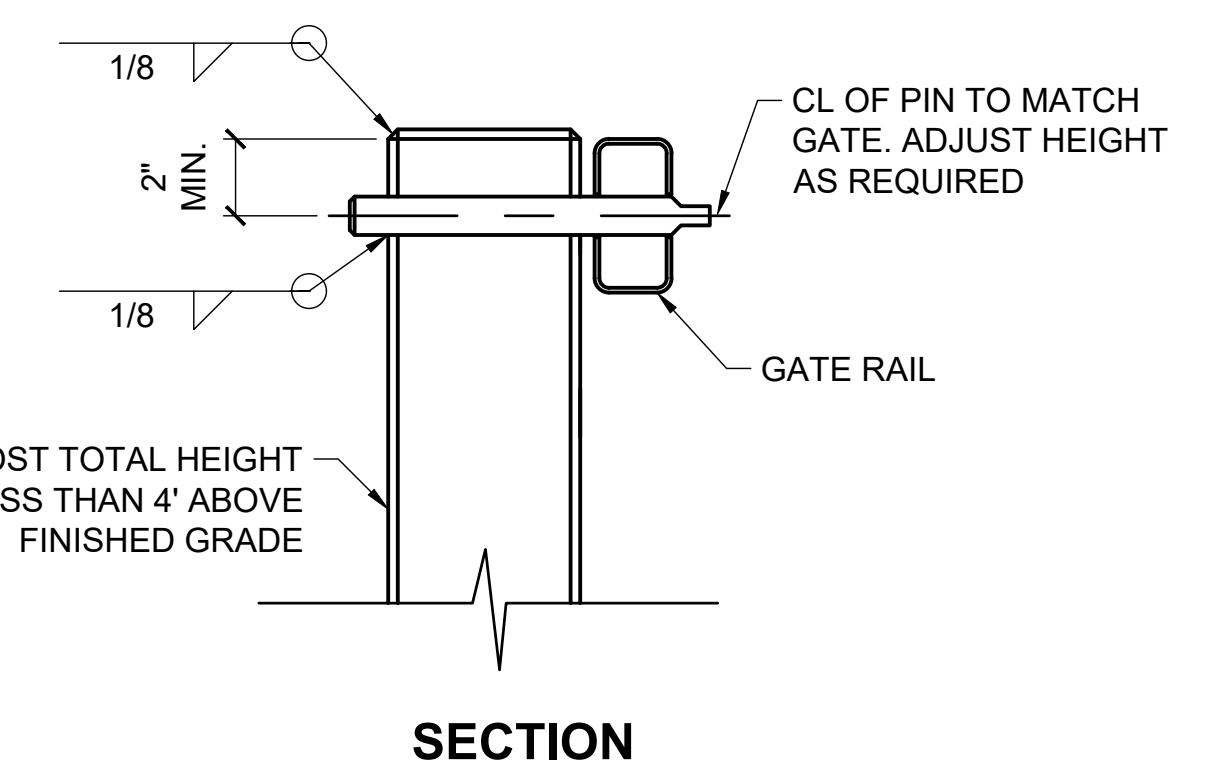
1 LATCH
62 NTS



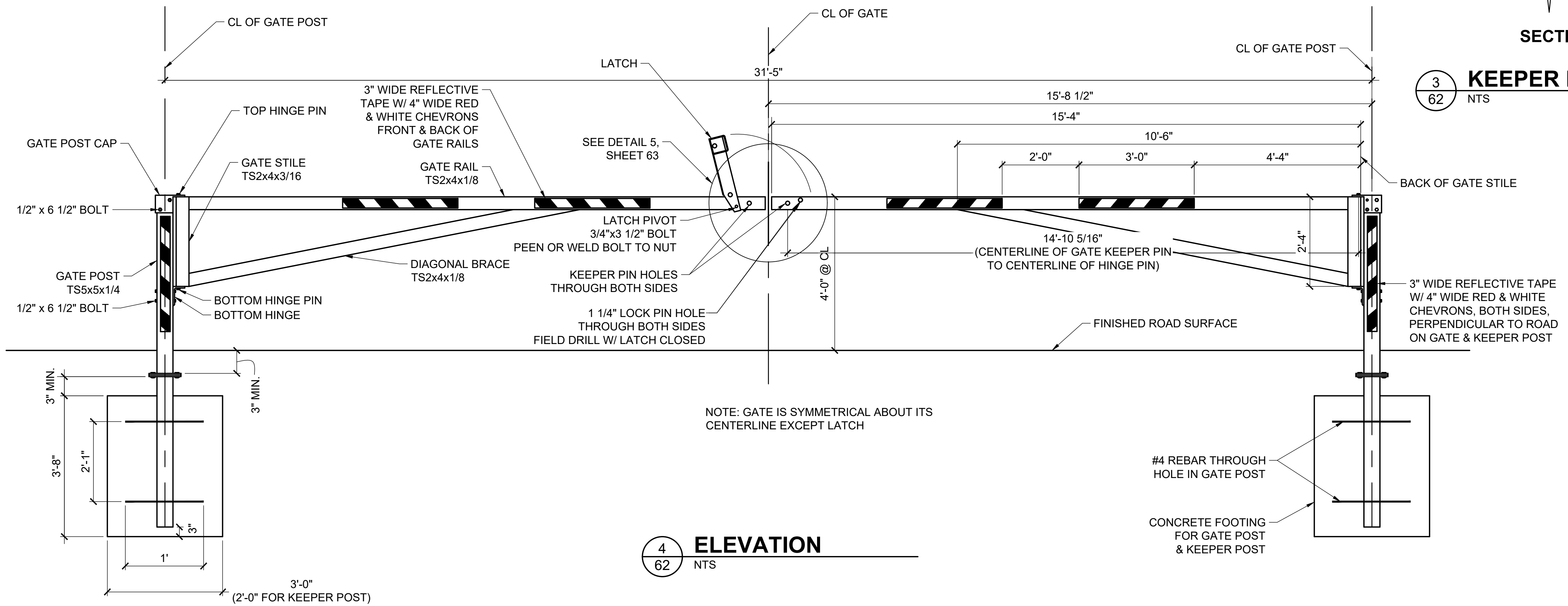
2 STEEL PLATE (TYP.)
62 NTS



NOTE: ALIGN CL OF KEEPER POST & PIN W/ CL OF HOLE IN GATE RAIL



3 KEEPER POST
62 NTS



4 ELEVATION
62 NTS

NOTE: GATE IS SYMMETRICAL ABOUT ITS CENTERLINE EXCEPT LATCH



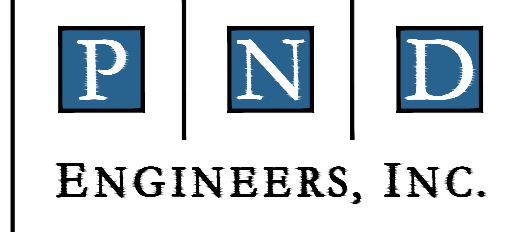
ISSUED FOR BID
6/26/2026

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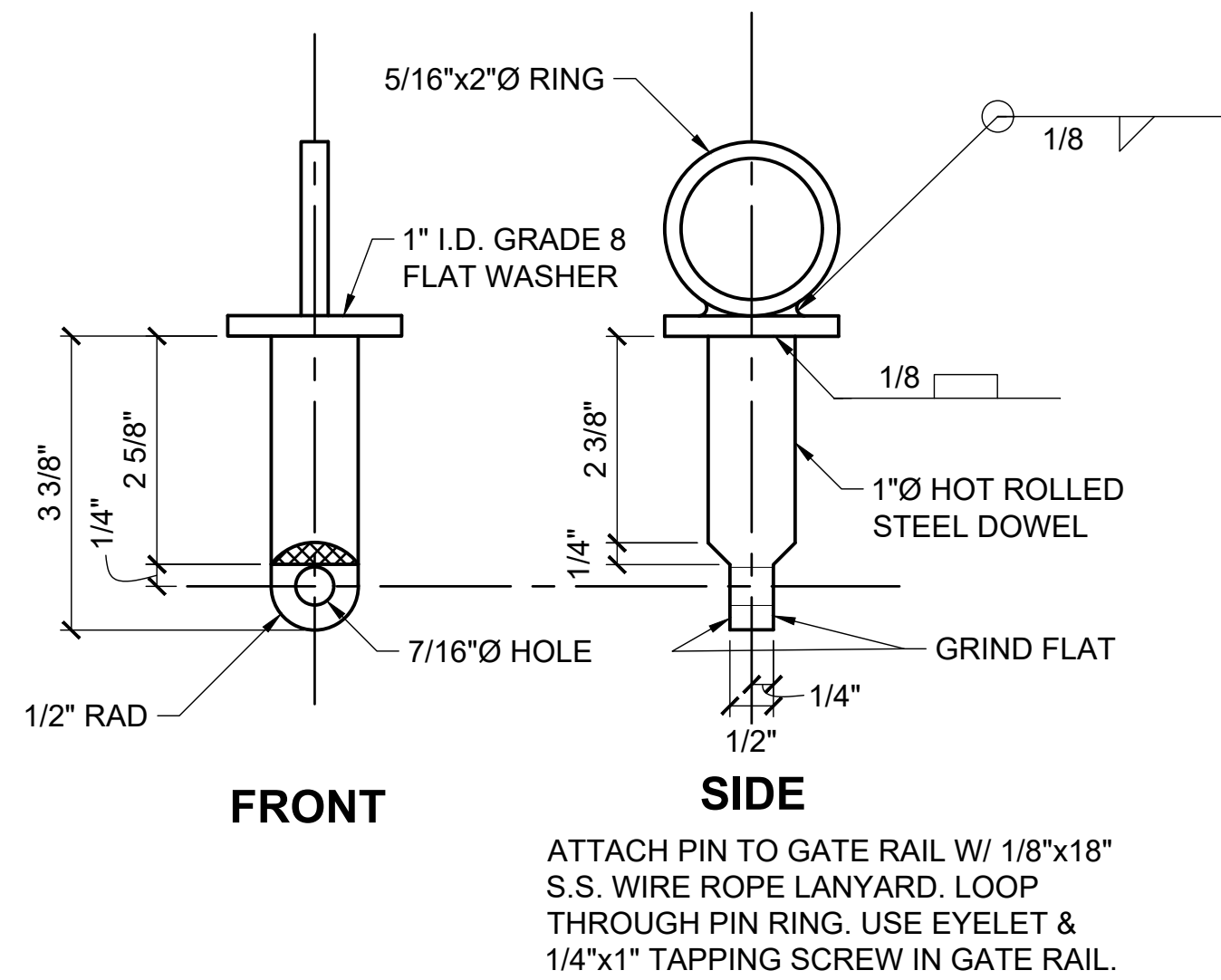
REV	DATE	DESCRIPTION



1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
www.pndengineers.com
AK. LIC# AECC250

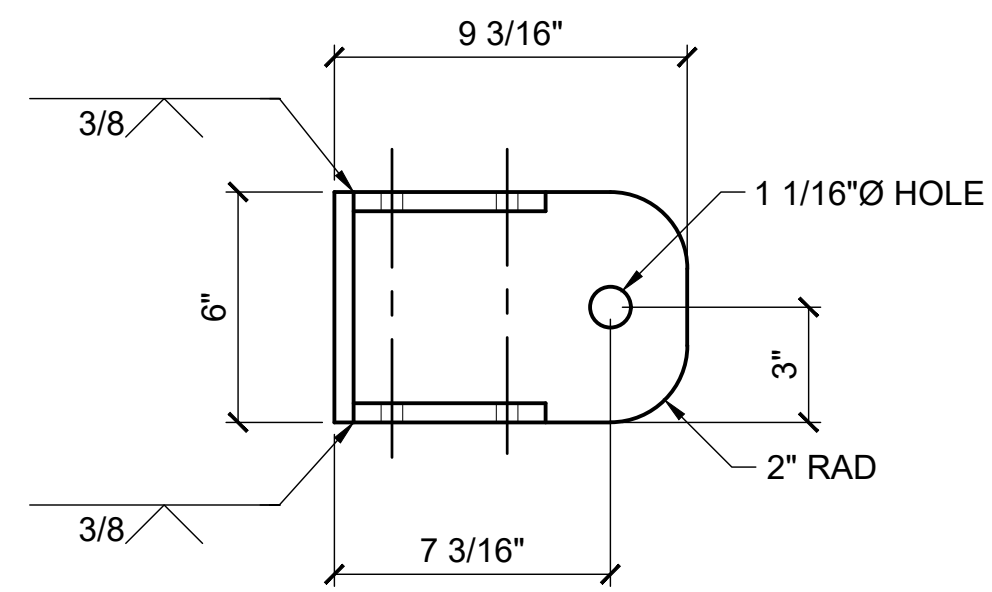


SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION	
GATE DETAILS	
DESIGNED BY:	DATE: 6/26/26
CHECKED BY:	PROJECT NO: 251029
SHEET NO: 62 OF 63	

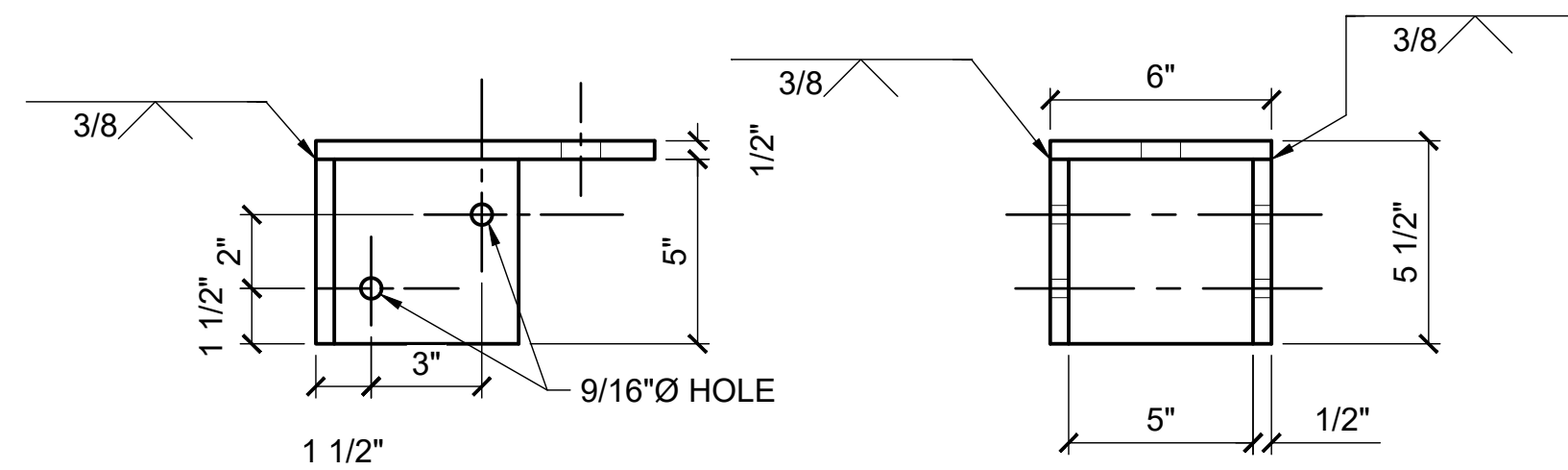


1 LATCH PIN
63 NTS

ATTACH PIN TO GATE RAIL W/ 1/8"x18" S.S. WIRE ROPE LANYARD. LOOP THROUGH PIN RING. USE EYELET & 1/4"x1" TAPPING SCREW IN GATE RAIL.

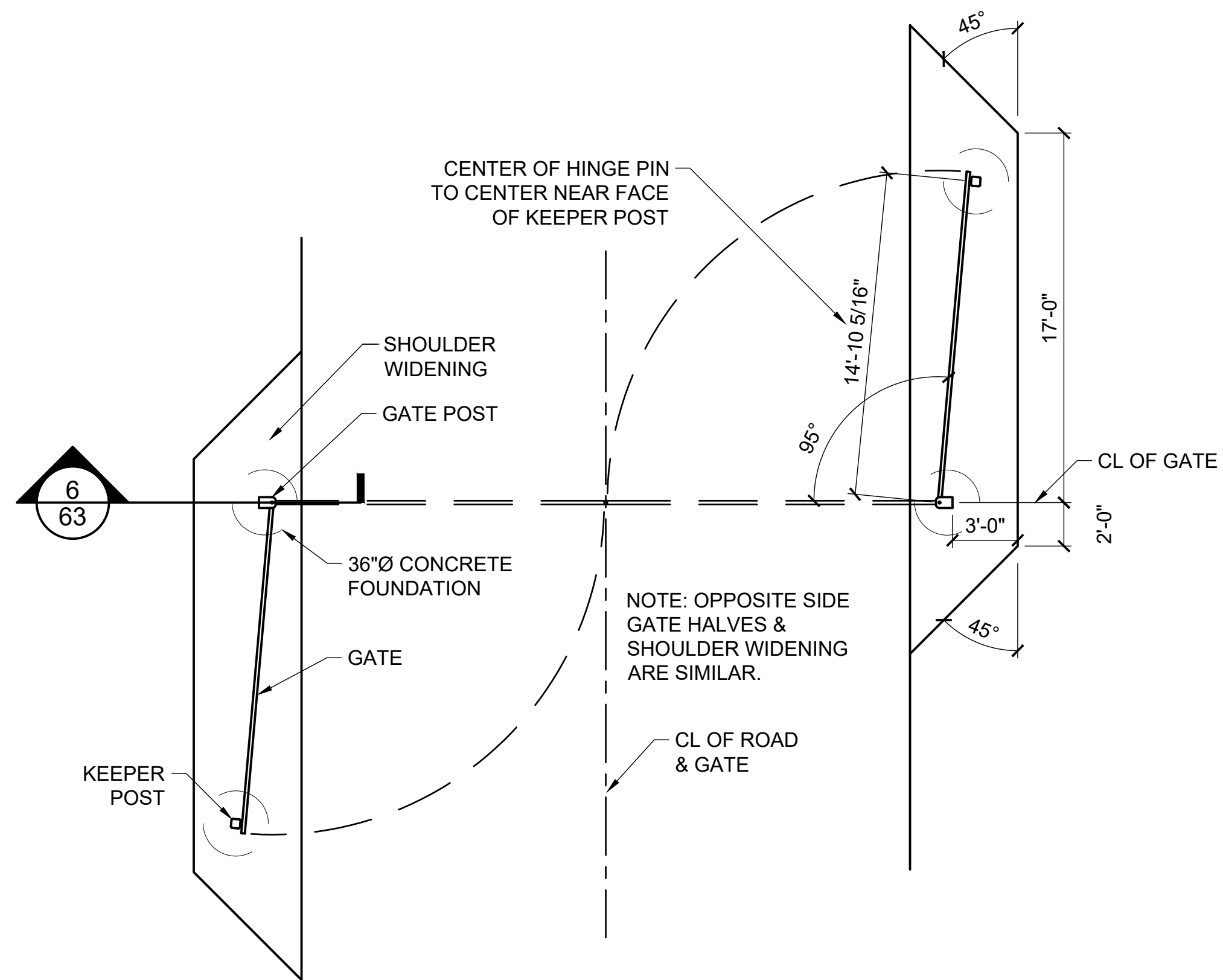


2 GATE POST CAP
63 NTS

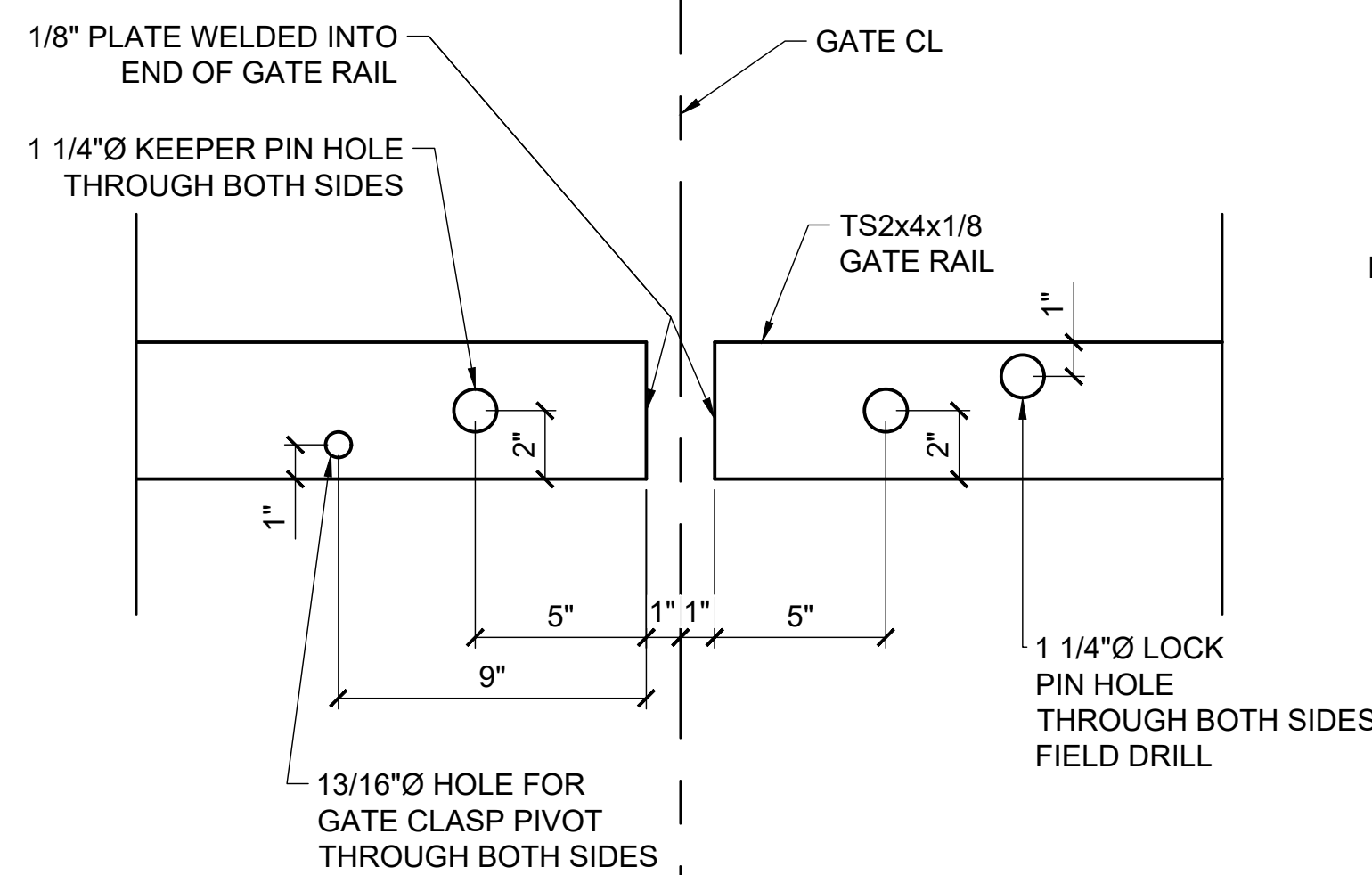


3 SECTION
63 NTS

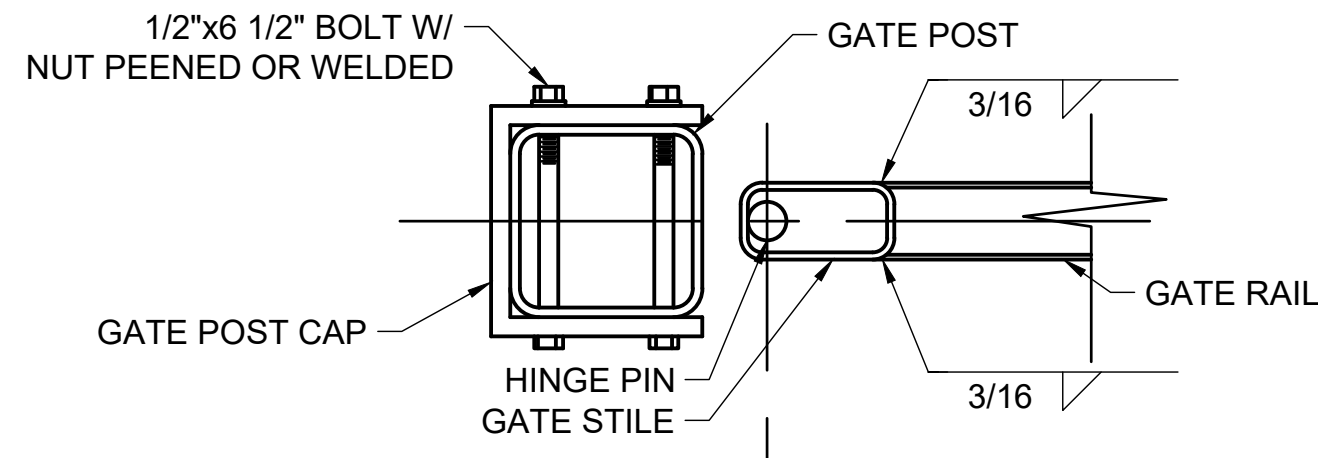
4 SITE PLAN
63 NTS



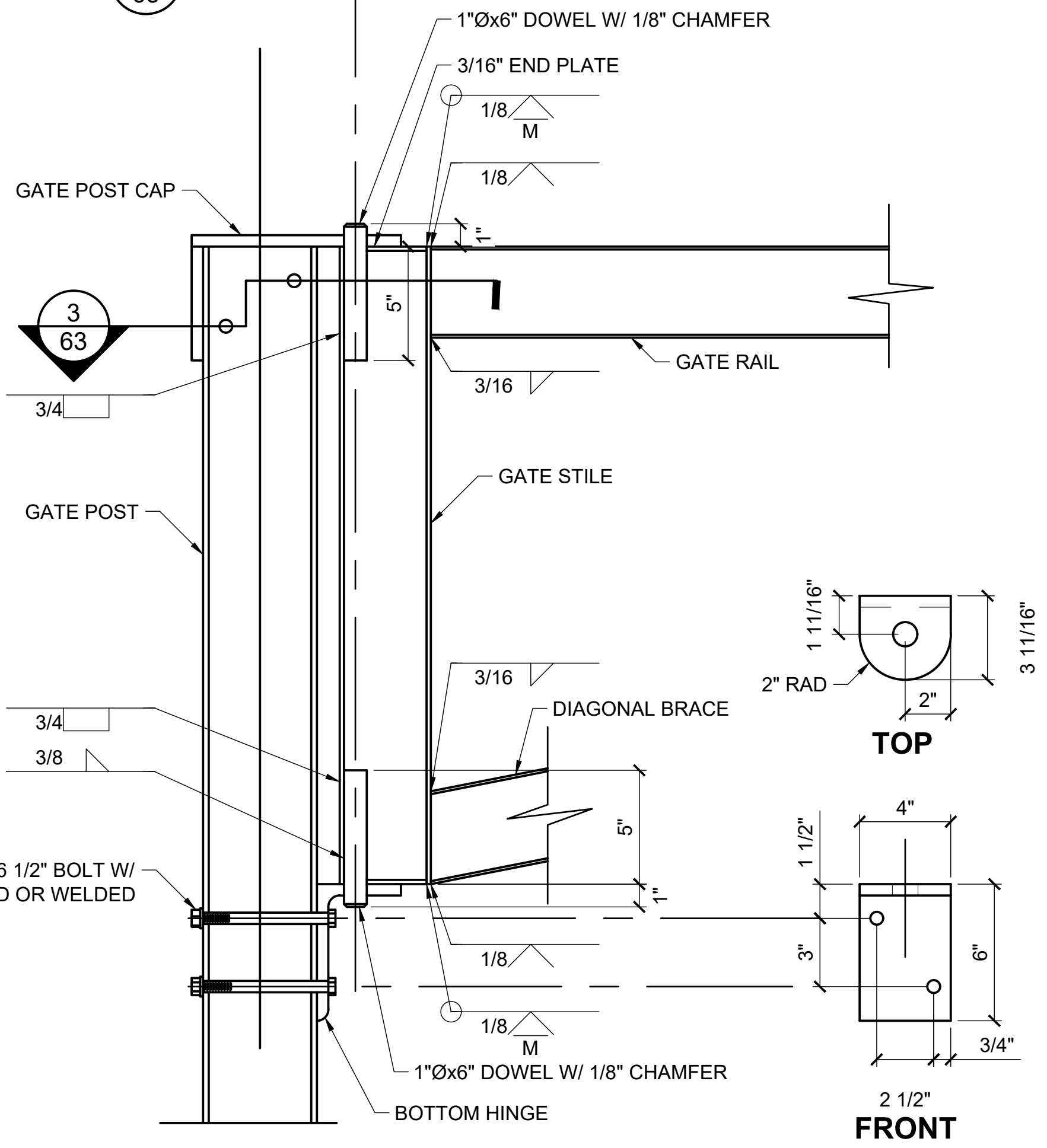
5 DETAIL
63 NTS



6 SECTION
63 NTS



7 BOTTOM HINGE
63 NTS



8 SECTION
63 NTS

9 BOTTOM HINGE
63 NTS

6/2/26 - CROHLER - 1\2025\251029 Susitna Landing Boat Launch & Facility Renovation\G. Drawings\Civil\62-63 - Gate Details.dwg



ISSUED FOR BID
6/26/2026

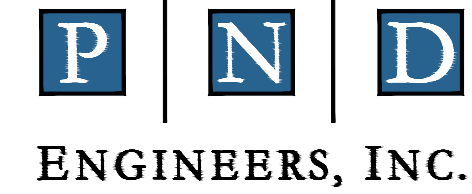
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REV	DATE	DESCRIPTION



DATE: 6/26/2026

1506 West 36th Avenue
Anchorage, Alaska 99503
Phone: 907.561.1011
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AK. LIC# AECC250



SUSITNA LANDING BOAT LAUNCH & FACILITY RENOVATION

TITLE: **GATE DETAILS**

DESIGNED BY:	DATE:	6/26/26
CHECKED BY:	PROJECT NO.:	251029

SHEET NO: **63** OF 63