



WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

I-82 PONDS 4 & 5 REDEVELOPMENT YA:A595:2022-1

SHEET INDEX

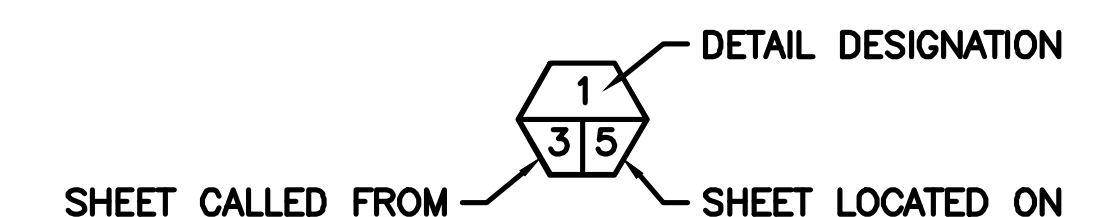
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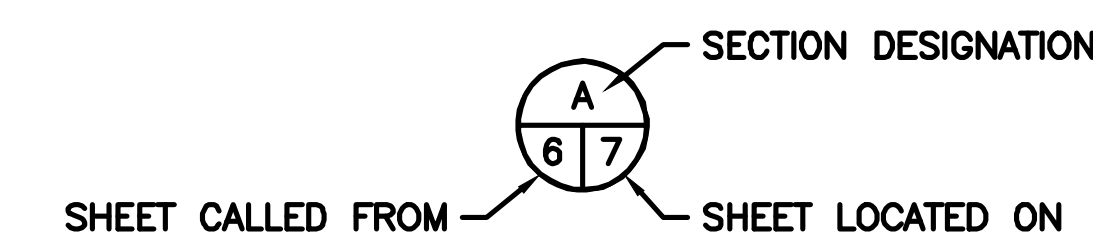
ABBREVIATIONS

ALUM	-	ALUMINUM
L	-	ANGLE
APPROX	-	APPROXIMATELY
BM	-	BENCH MARK
CL	-	CENTERLINE
CMP	-	CORRUGATED METAL PIPE
CLR	-	CLEARANCE
CONC	-	CONCRETE
CSBC	-	CRUSHED SURFACE BASE COURSE
CSTC	-	CRUSHED SURFACE TOP COURSE
DIA	-	DIAMETER
ELEV	-	ELEVATION
FB	-	FLAT BAR
FTG	-	FOOTING
GALV	-	GALVANIZED
ID	-	INSIDE DIAMETER
IE	-	INVERT ELEVATION
MFG	-	MANUFACTURER'S
MISC	-	MISCELLANEOUS
OC	-	ON CENTER
OD	-	OUTSIDE DIAMETER
PL	-	PLATE
REQ'D	-	REQUIRED
SEC	-	SECTION
SPEC'S	-	PROJECT SPECIFICATIONS
SS	-	STAINLESS STEEL
TYP	-	TYPICAL
WS	-	WATER SURFACE

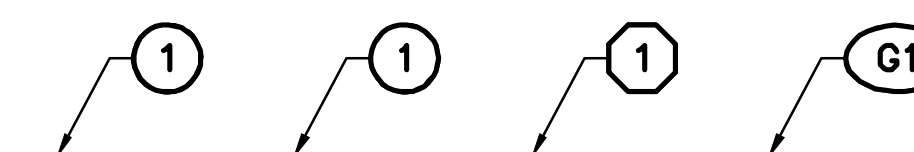
SHEET SYMBOLS



DETAIL



SECTION

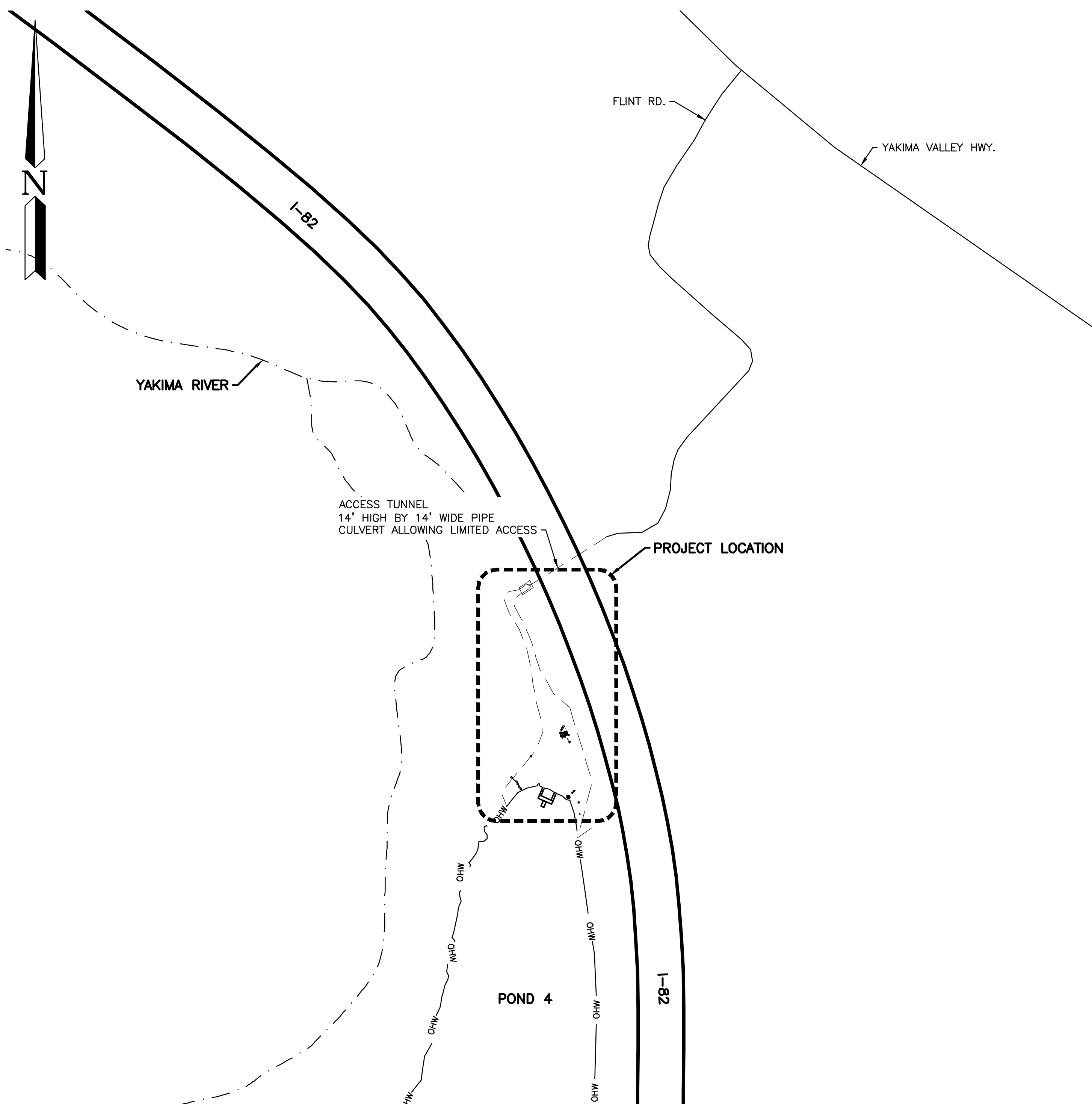


NOTE REFERENCE

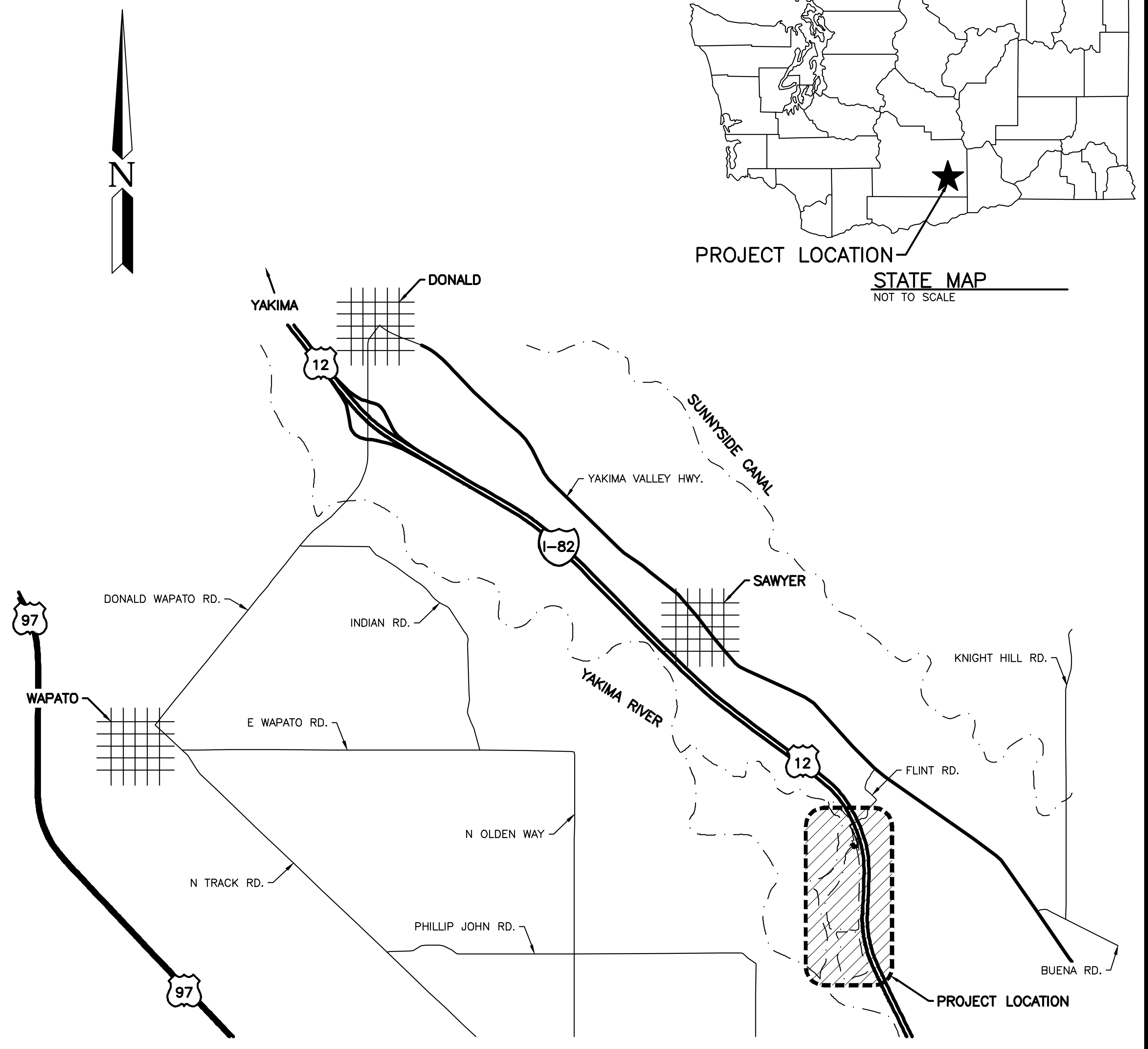
REFERENCE DESIGNATION TO A
NOTE, A PART, OR MATERIAL IN A
SCHEDULE/TABLE

NOT APPROVED
FOR
CONSTRUCTION

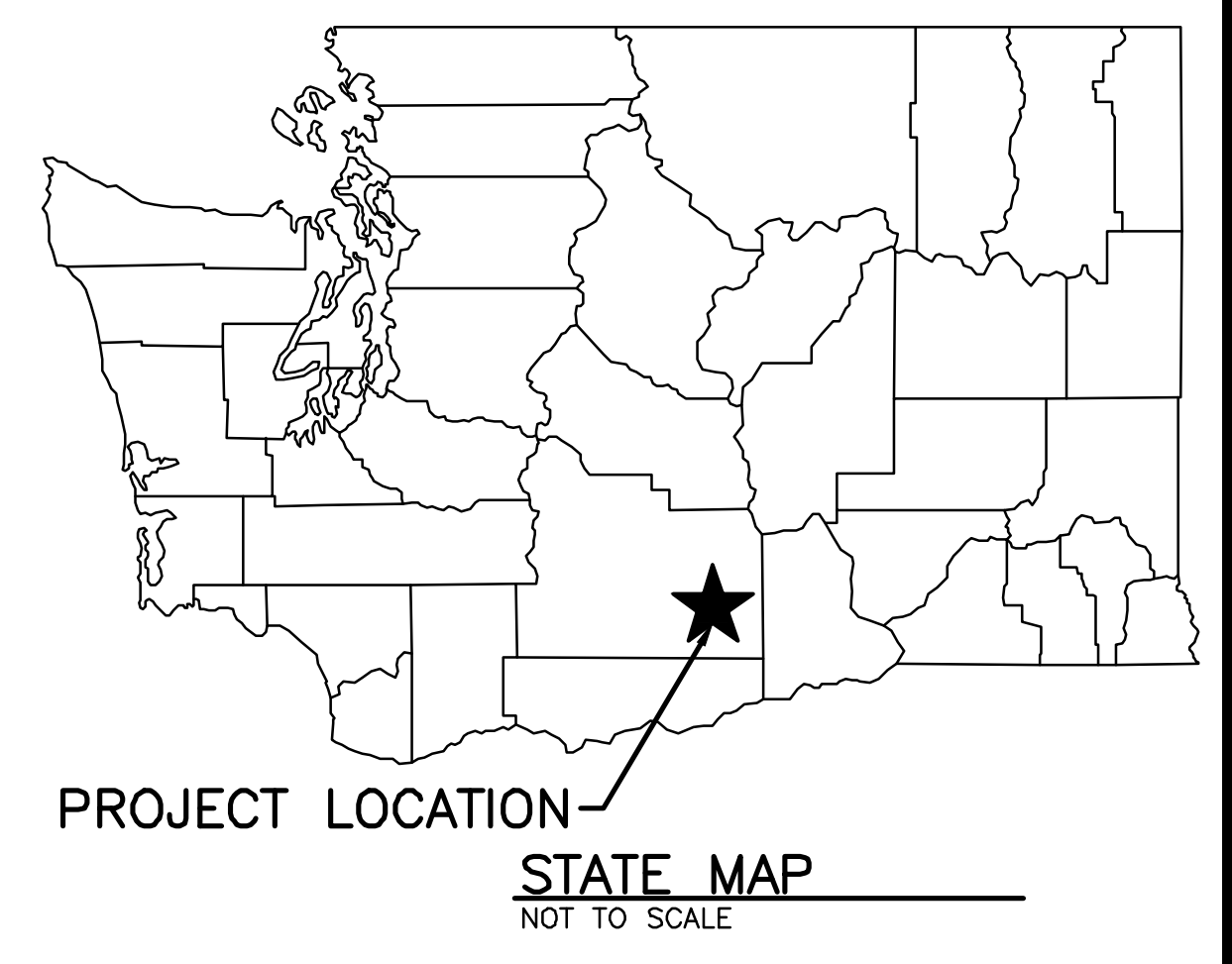
PROJECT NO. YA:A595:2022-1	
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OVERALL SITE PLAN
 1"=200' 22x34
 1"=400' 11x17
 0 100 200 400



VICINITY MAP
 NOT TO SCALE



DIRECTIONS
 FROM YAKIMA, TAKE I-82 E FOR 6.8 MILES TO EXIT 40. TURN RIGHT ONTO YAKIMA VALLEY HWY. CONTINUE FOR 7.1 MILES AND TURN RIGHT ONTO FLINT RD. FOLLOW FLINT RD. FOR 0.5 MILES TO THE ACCESS.

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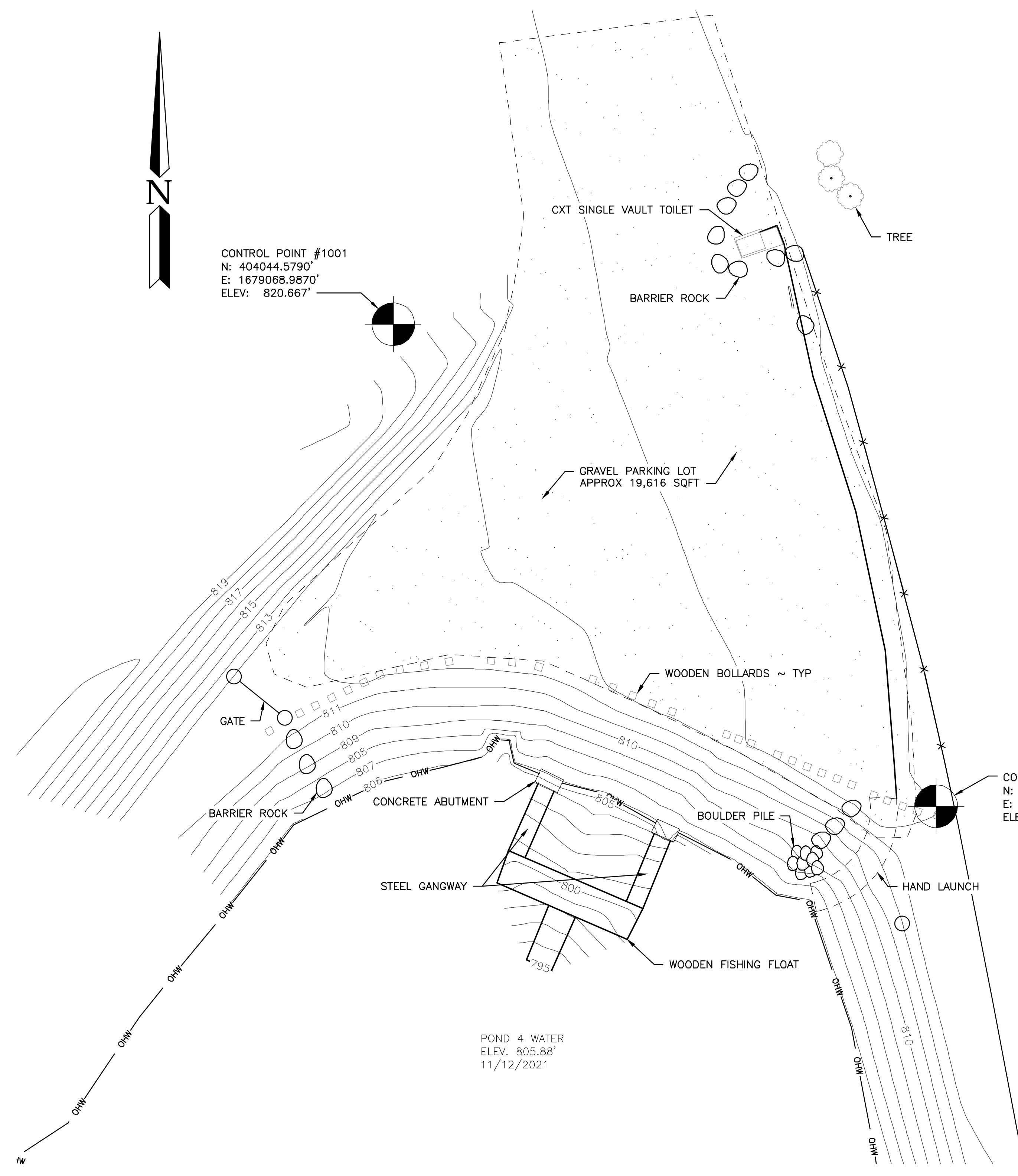
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DESIGNED BY J. HANSEN
 CHECKED BY D. SMITH
 DRAWN BY C. TORSTVET
 DATE 3/24/2022

I-82 PONDS 4 & 5
 REDEVELOPMENT
 OVERALL SITE, STATE &
 VICINITY MAPS & PLAN

PROJECT NO.
 YA:A595:2022-1

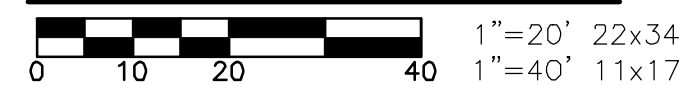
SHEET OF
 2 15



LEGEND

- EDGE OF GRAVEL
- OHW --- ORDINARY HIGH WATER
- SW --- STRAW WATTLE
- MAJOR CONTOUR
- MINOR CONTOUR

EXISTING SITE



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NO.	DATE	REVISION DESCRIPTION	BY

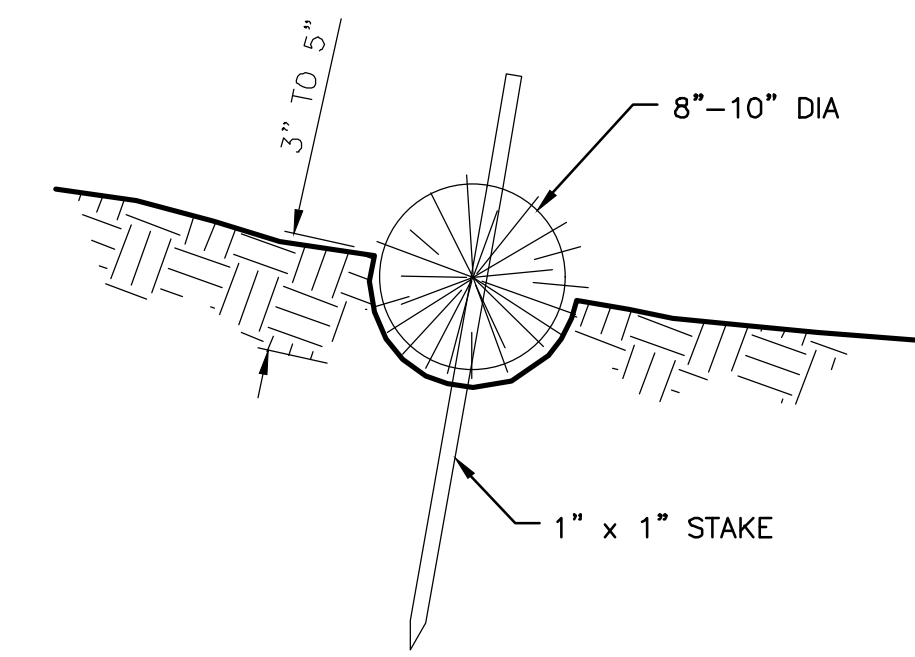
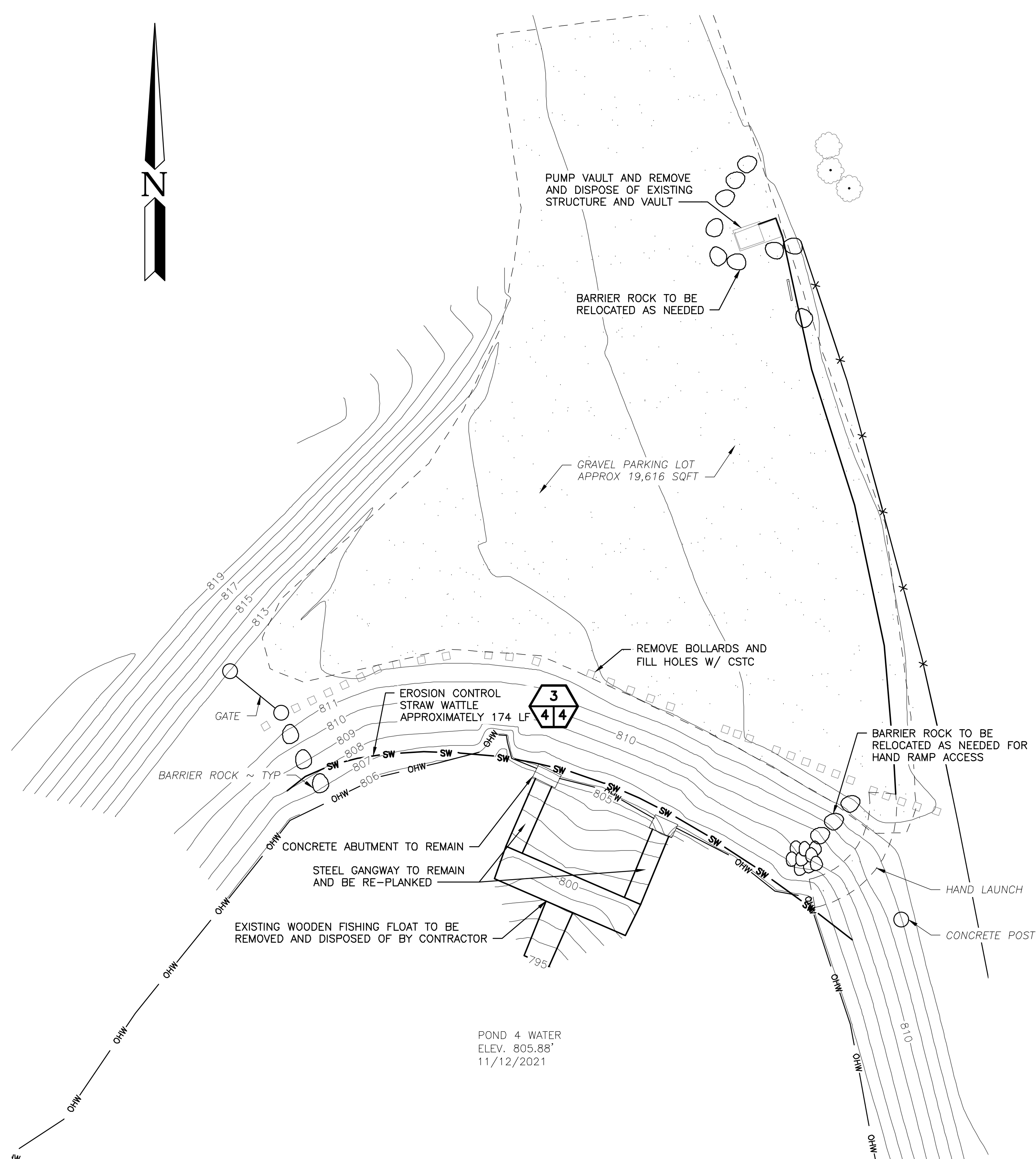
APPROVED AND RELEASED FOR CONSTRUCTION

CHIEF ENGINEER: _____ DATE: _____
PROGRAM: _____ DATE: _____

DESIGNED BY J. HANSEN
CHECKED BY D. SMITH
DRAWN BY C. TORSTVET
DATE 3/24/2022

I-82 PONDS 4 & 5
REDEVELOPMENT
EXISTING SITE PLAN

PROJECT NO. YA:A595:2022-1	
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STRAW WATTLE DETAIL 3
44
NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS:**
1. PREPARE THE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED. SMOOTH SHALLOW GULLIES AS WORK PROGRESSES.
 2. DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR, TO PLACE ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE.
 3. ROLLS SHALL BE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
 4. BUILD TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP.
 5. CONSTRUCT TRENCHES AT CONTOUR INTERVALS 3-12 FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES. 1:1=10' 2:1=20' 3:1=30' 4:1=40'
 6. LAY THE ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
 7. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WILLOW OR WOODEN STAKES.
 8. DRIVE THE STAKE THROUGH PREPARED HOLE INTO SOIL. LEAVE ONLY 1 OR 2 INCHES OF STAKE EXPOSED ABOVE ROLL.
 9. IF USING WILLOW STAKES REFER TO LIVE STAKING BEST MANAGEMENT PRACTICES.
 10. INSTALL STAKES AT LEAST EVERY 4 FEET APART THROUGH THE WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSION OR VERY STEEP SLOPES.
 11. INSPECT THE STRAW ROLLS AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE ROLLS ARE IN CONTACT WITH THE SOIL.
 12. REPAIR ANY RILLS OR GULLIES PROMPTLY.
 13. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL SLOPES ARE STABILIZED.

LEGEND

- EDGE OF GRAVEL
- OHW — ORDINARY HIGH WATER
- SW — STRAW WATTLE
- MAJOR CONTOUR
- MINOR CONTOUR

DEMOLITION & EROSION CONTROL PLAN



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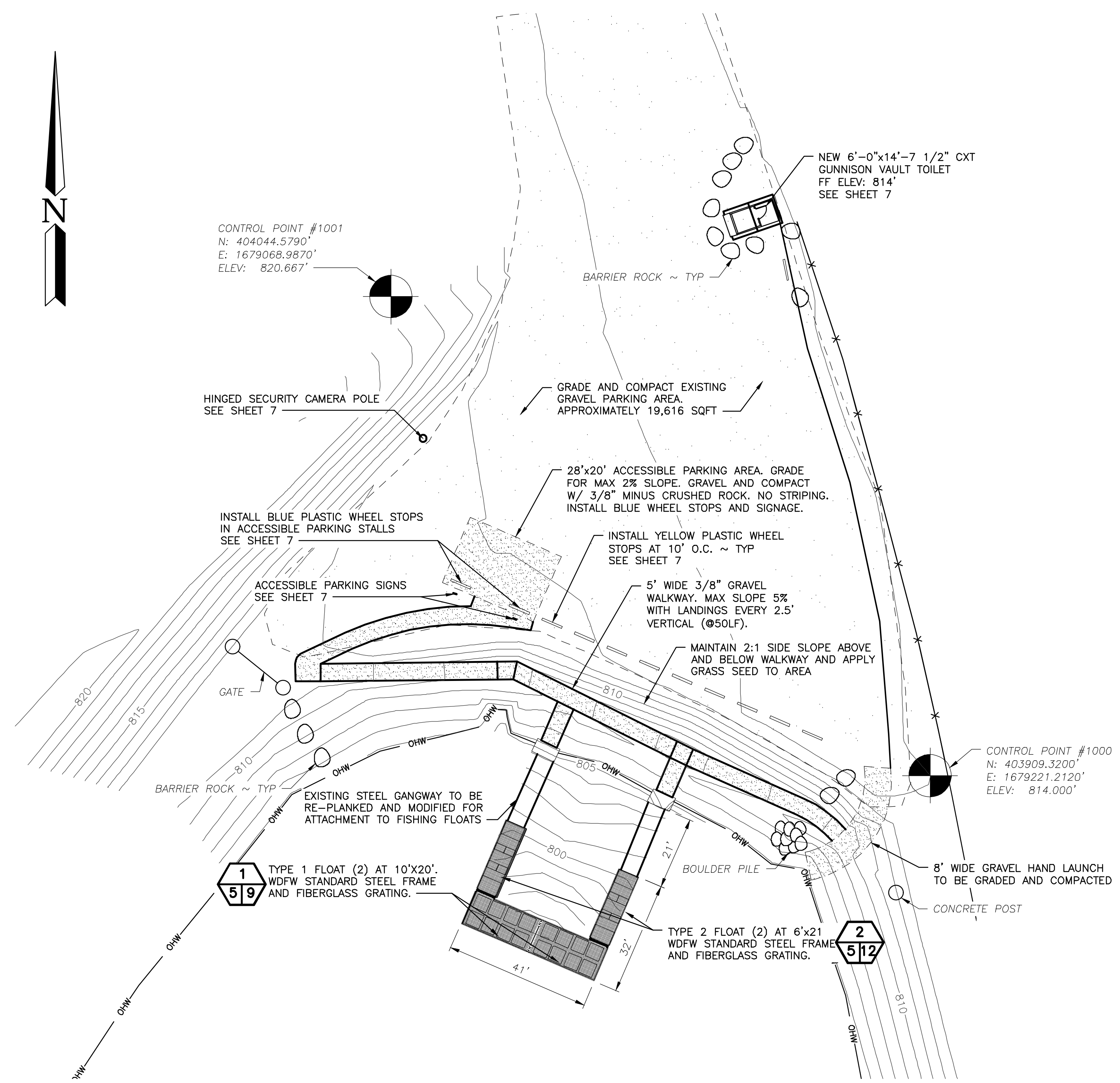
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I-82 PONDS 4 & 5
REDEVELOPMENT
DEMOLITION & EROSION CONTROL
PLAN & DETAIL

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FISHING FLOATS AND GANGWAY	
PROPOSED FISHING FLOATS FOOTPRINT:	670 SQ.FT.
ESTIMATED UNOBSTRUCTED FISHING FLOATS GRATING:	142 SQ.FT.
ESTIMATED UNOBSTRUCTED GANGWAY GRATING:	198 SQ.FT.



PROPOSED SITE PLAN



LEGEND

- EDGE OF GRAVEL
- OHW --- ORDINARY HIGH WATER
- SW --- STRAW WATTLE
- MAJOR CONTOUR
- MINOR CONTOUR

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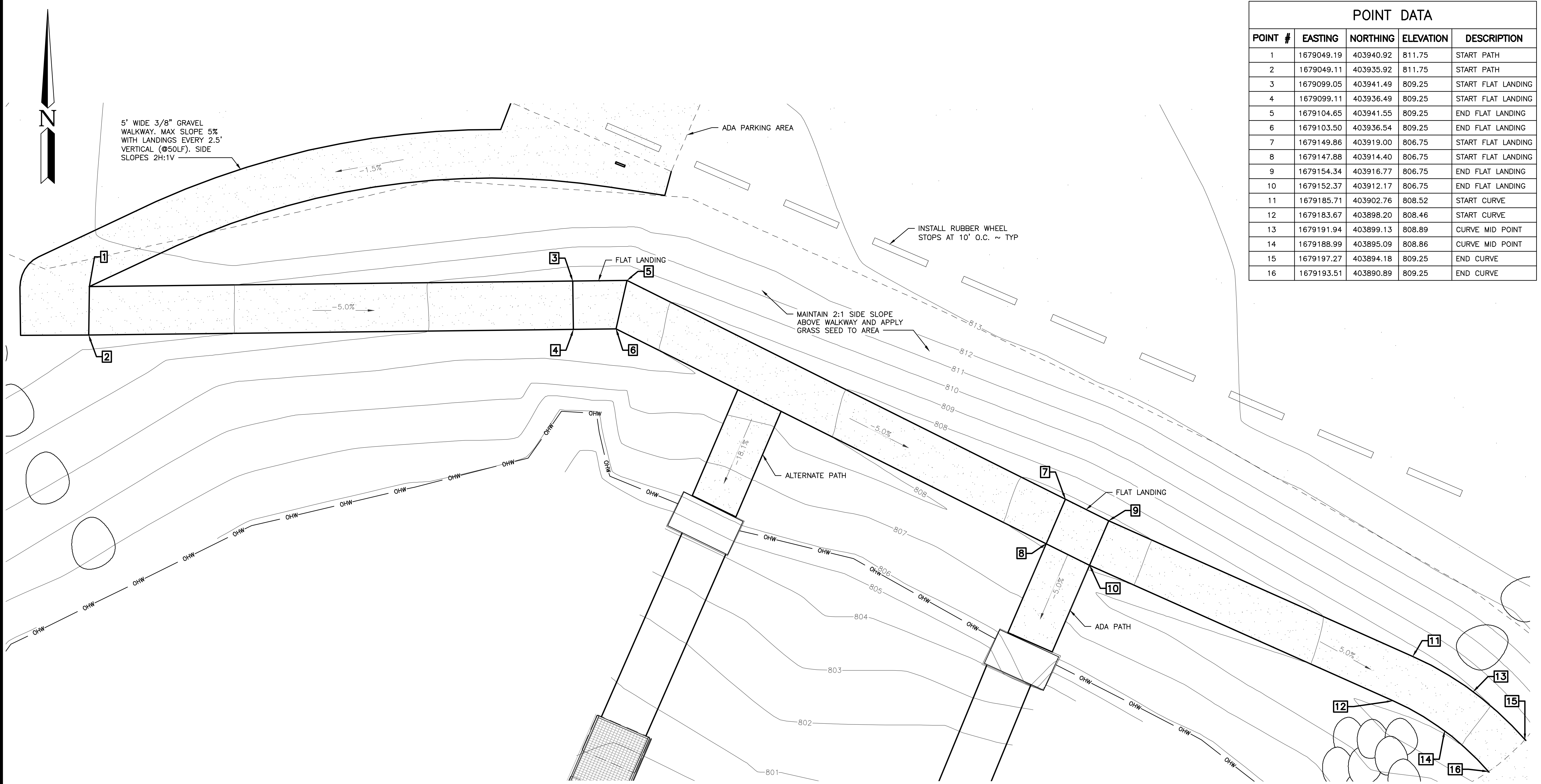
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I-82 PONDS 4 & 5
REDEVELOPMENT
PROPOSED SITE PLAN

PROJECT NO.
YA:A595:2022-1
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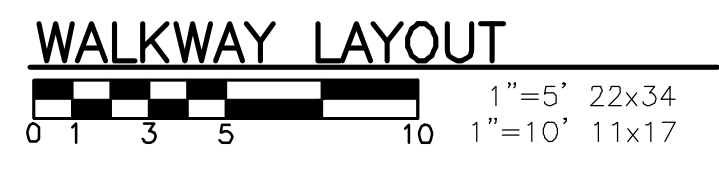
DESIGNED BY J. HANSEN
CHECKED BY D. SMITH
DRAWN BY C. TORSTVET
DATE 3/24/2022

POINT DATA				
POINT #	EASTING	NORTHING	ELEVATION	DESCRIPTION
1	1679049.19	403940.92	811.75	START PATH
2	1679049.11	403935.92	811.75	START PATH
3	1679099.05	403941.49	809.25	START FLAT LANDING
4	1679099.11	403936.49	809.25	START FLAT LANDING
5	1679104.65	403941.55	809.25	END FLAT LANDING
6	1679103.50	403936.54	809.25	END FLAT LANDING
7	1679149.86	403919.00	806.75	START FLAT LANDING
8	1679147.88	403914.40	806.75	START FLAT LANDING
9	1679154.34	403916.77	806.75	END FLAT LANDING
10	1679152.37	403912.17	806.75	END FLAT LANDING
11	1679185.71	403902.76	808.52	START CURVE
12	1679183.67	403898.20	808.46	START CURVE
13	1679191.94	403899.13	808.89	CURVE MID POINT
14	1679188.99	403895.09	808.86	CURVE MID POINT
15	1679197.27	403894.18	809.25	END CURVE
16	1679193.51	403890.89	809.25	END CURVE



LEGEND

- EDGE OF GRAVEL
- OHW --- ORDINARY HIGH WATER
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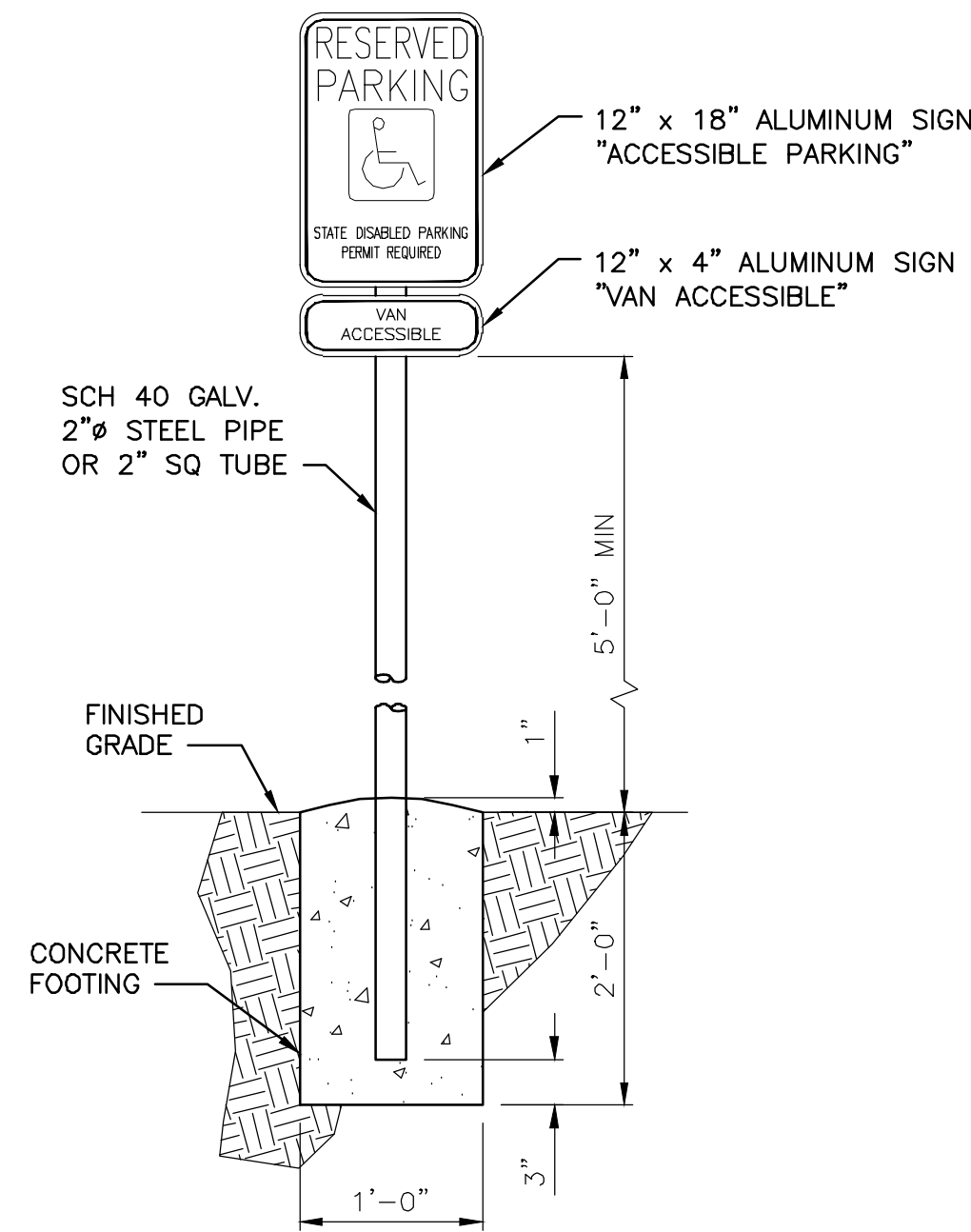
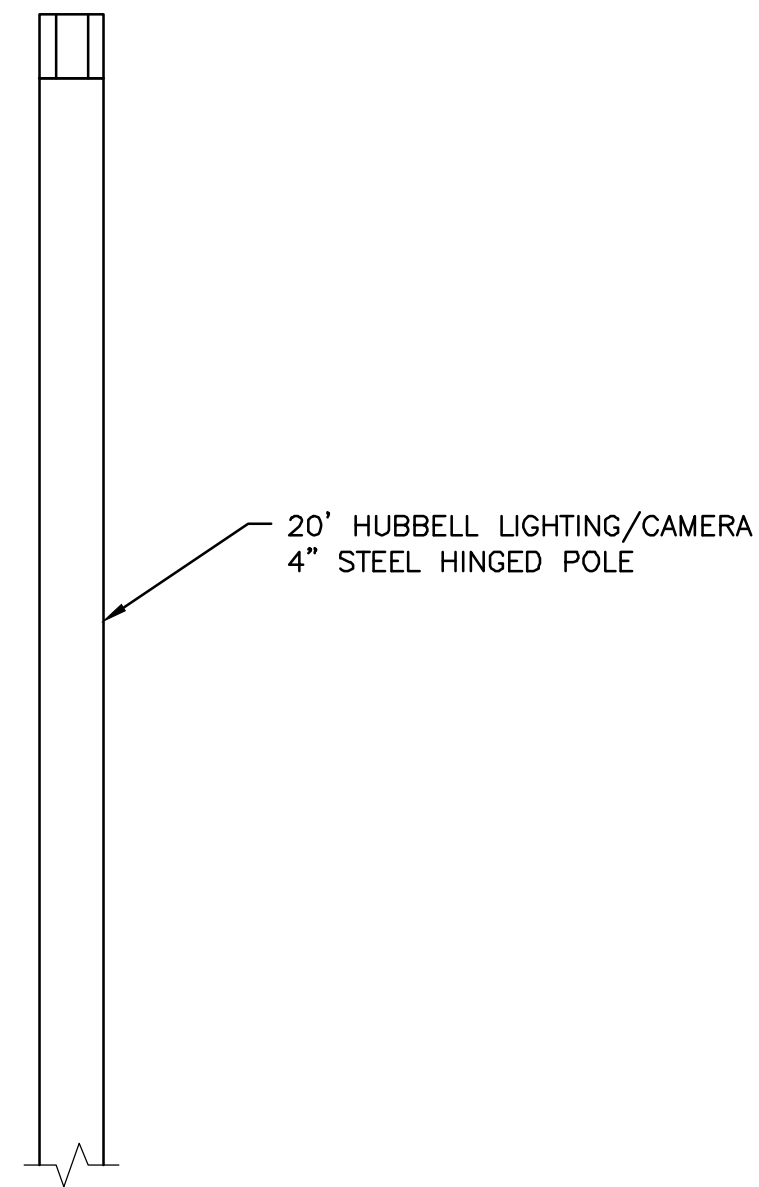
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I-82 PONDS 4 & 5
REDEVELOPMENT
WALKWAY LAYOUT PLAN

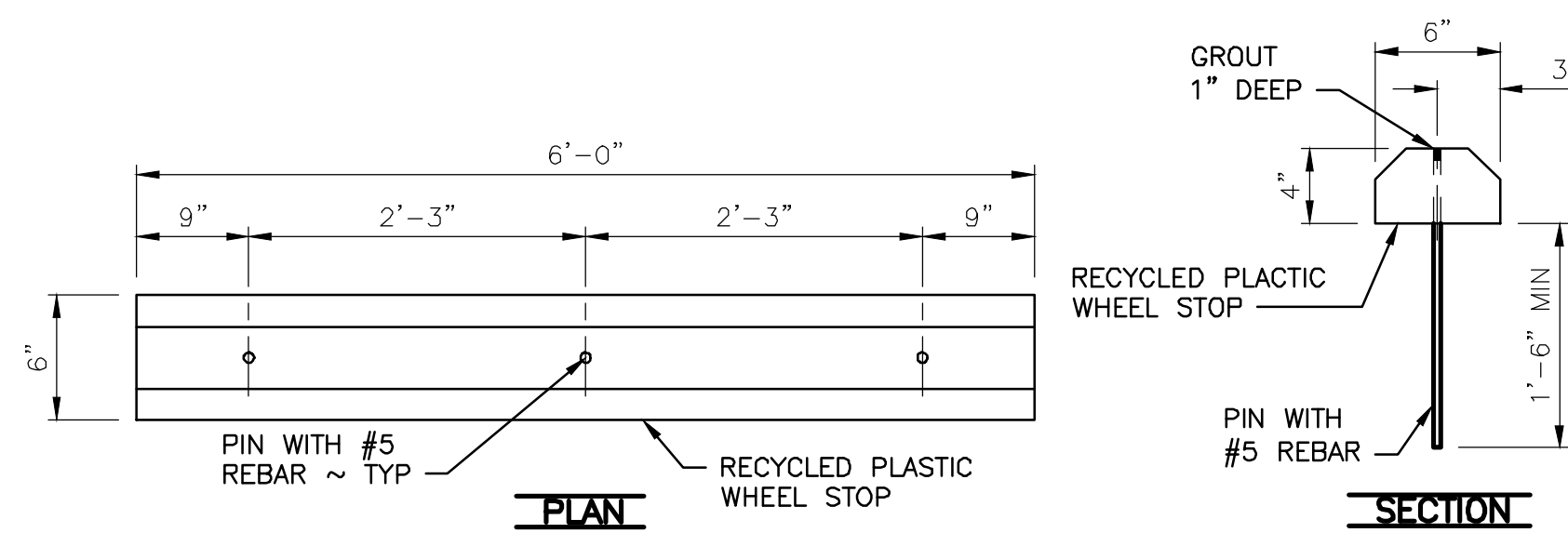
PROJECT NO.
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ACCESSIBLE PARKING SIGN
NOT TO SCALE

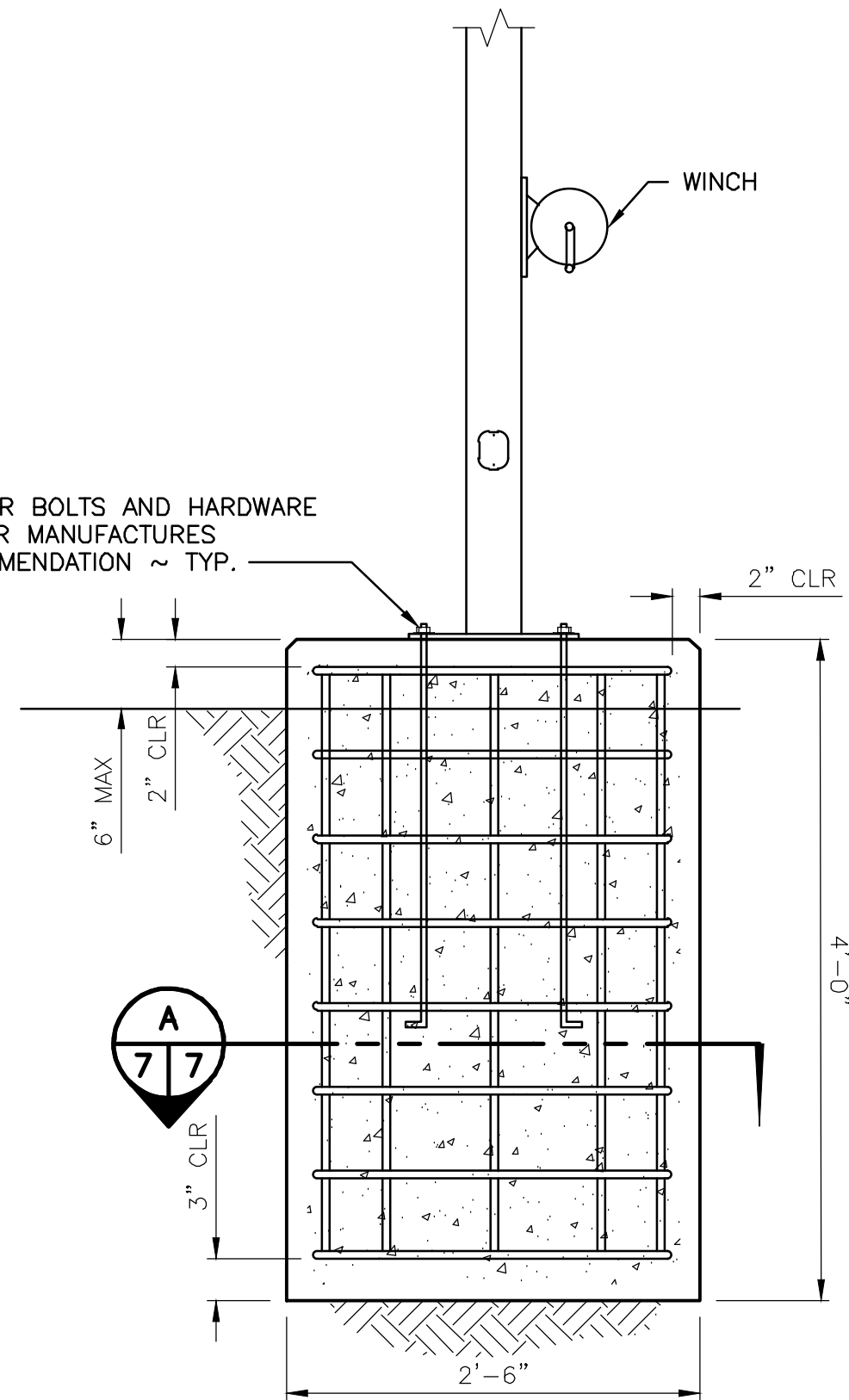
NOTE:

USE TAMPER RESISTANT NUTS TO ATTACH SIGNS TO POST.

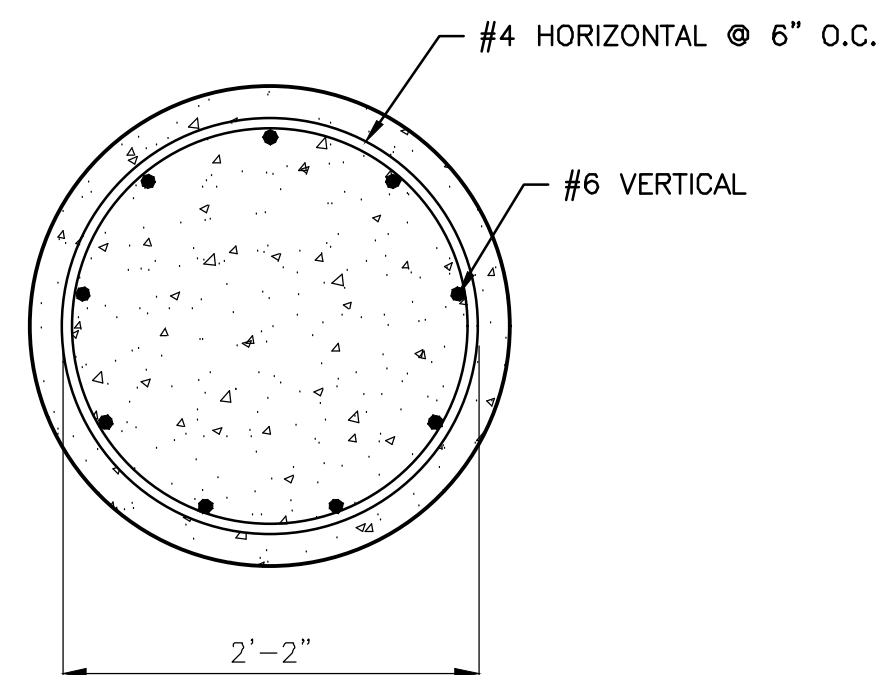


RECYCLED PLACTIC WHEEL STOP
NOT TO SCALE

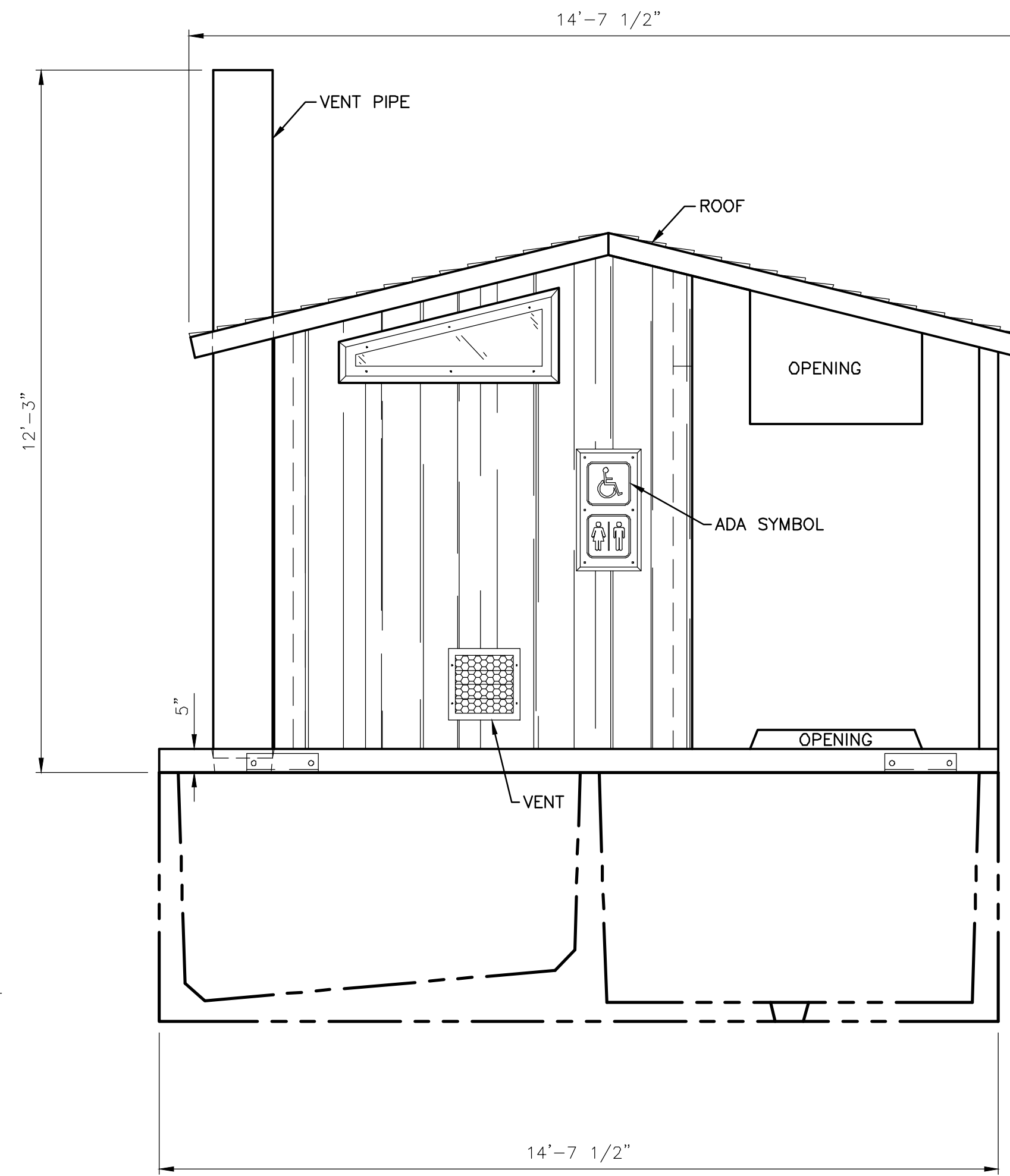
ANCHOR BOLTS AND HARDWARE AS PER MANUFACTURES RECOMMENDATION ~ TYP.



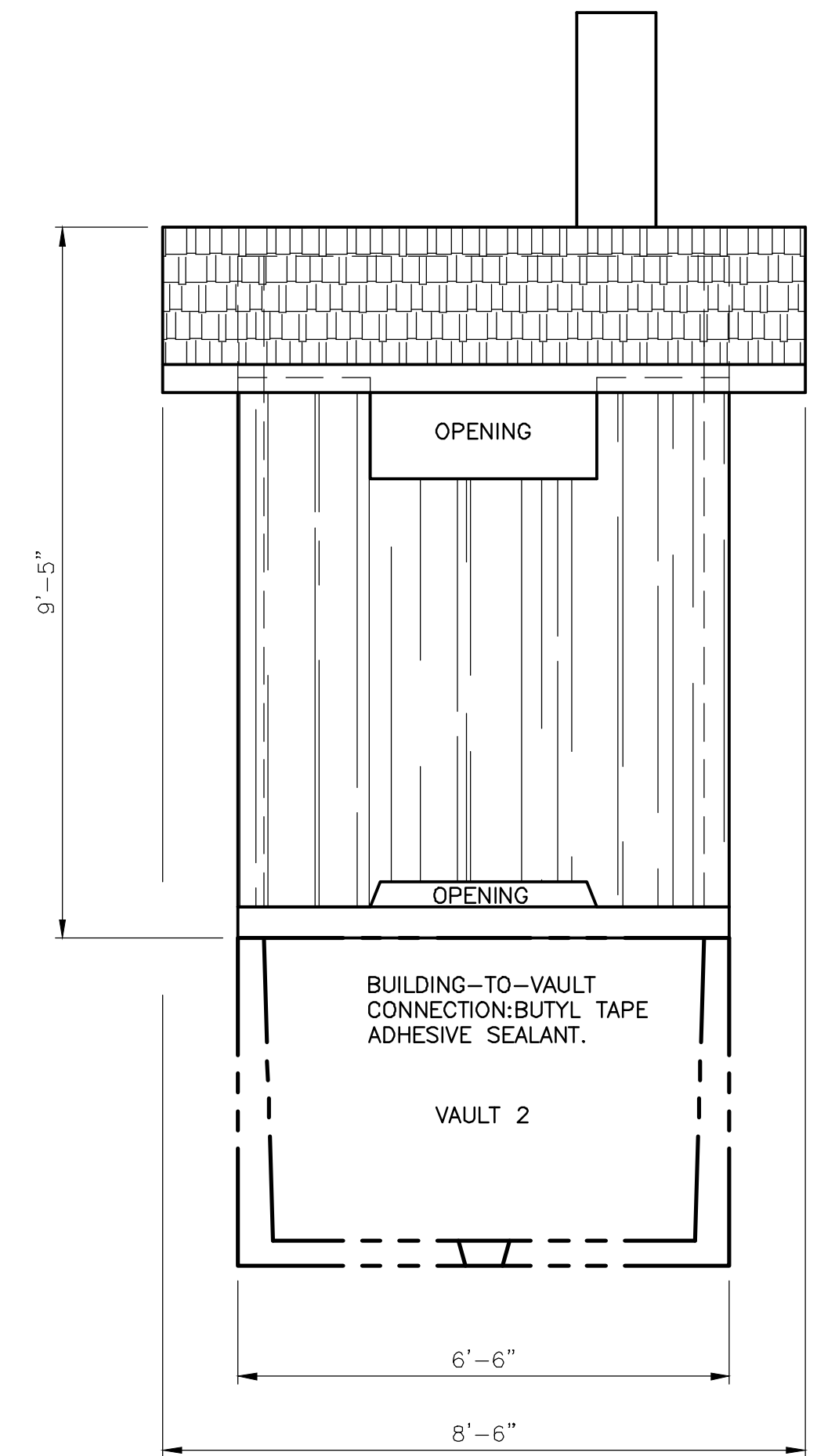
HINGED SECURITY CAMERA POLE
NOT TO SCALE



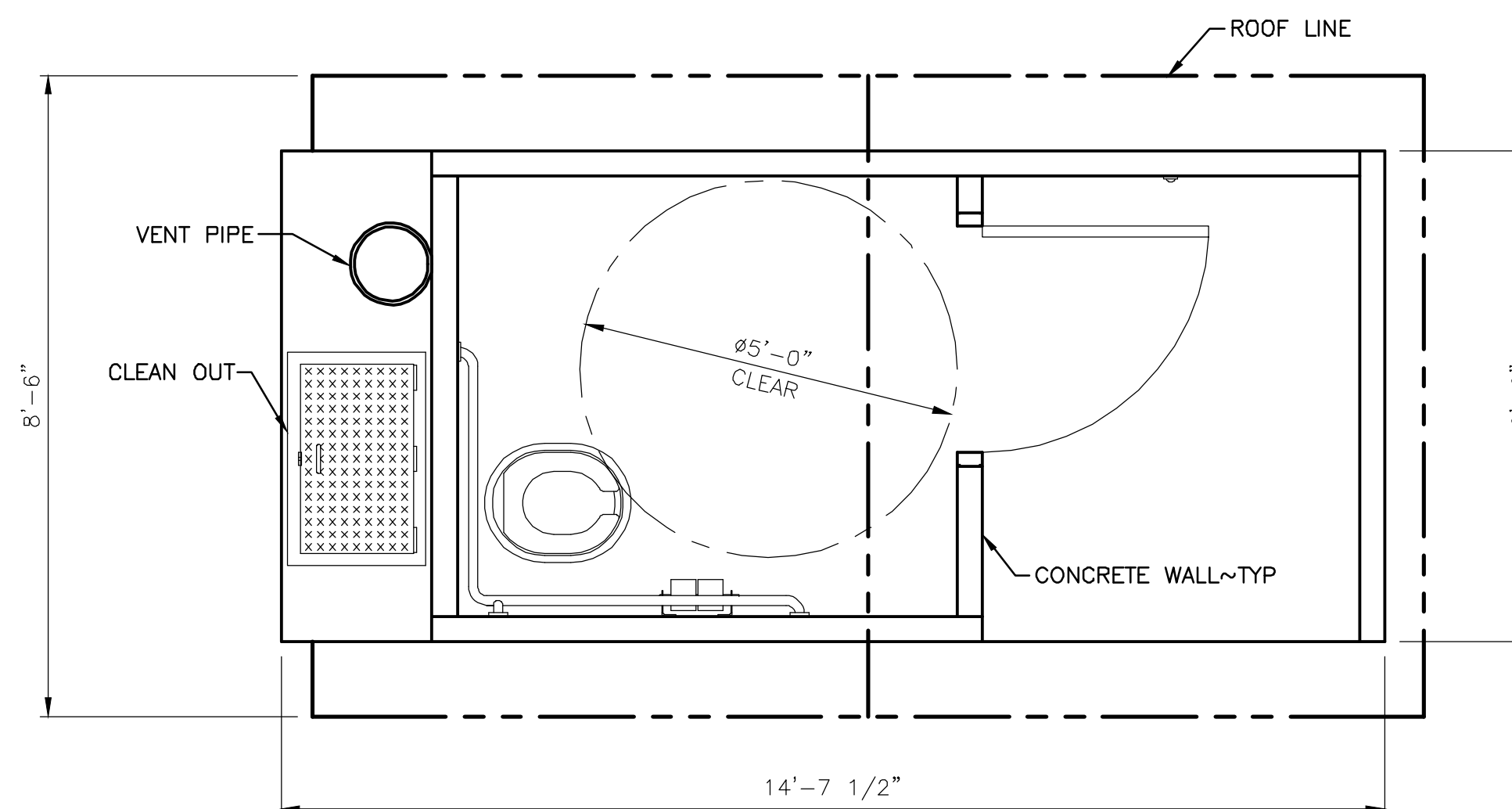
SECTION
NOT TO SCALE



FRONT ELEVATION
NOT TO SCALE



SIDE ELEVATION
NOT TO SCALE



CXT VAULT TOILET PLAN
NOT TO SCALE

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I-82 PONDS 4 & 5
REDEVELOPMENT
MISCELLANEOUS ACCESS
PLANS & DETAILS

PROJECT NO. YA:A595:2022-1	
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GENERAL NOTES

- DRAWINGS ARE CONCEPTUAL ONLY. FINAL CONSTRUCTION/SHOP DRAWINGS SHALL BE SUBMITTED BY CONTRACTOR TO MEET ALL DESIGN CRITERIA LISTED IN PROJECT SPECIFICATIONS. SUBMITTED CONSTRUCTION/SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY OWNER PRIOR TO FABRICATION. SEE PROJECT SPECIFICATIONS.
- VERIFY ALL DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. ANY DIMENSIONAL DEVIATION FROM THAT SHOWN ON THE CONSTRUCTION DOCUMENTS THAT MAY AFFECT THE INTENT OF DESIGN SHALL BE BROUGHT TO THE ENGINEERS ATTENTION PROMPTLY AND RESOLUTION OBTAINED PRIOR TO PROCEEDING.
- SITE LOCATION: SHELTERED SITES WITHIN WASHINGTON STATE. FLOATS IN AREAS WITH SEVERE WINTER STORMS WILL BE SEASONALLY REMOVED.
- FLOTATION TUBS AND STEEL FRAMING ARE SUSCEPTIBLE TO DAMAGE IF LEFT IN-PLACE OVER WINTER IN AN AREA WHERE THE WATER BODY FREEZES OVER.
- FLOATS AND PILING SHALL BE INSTALLED SUCH THAT THE FLOATS DO NOT BIND ON PILE HOOPS FOR THE FULL DESIGN RANGE OF WATER ELEVATIONS.

FLOAT DESIGN CRITERIA

- DESIGN LIVE LOAD = 30 PSF
- DEAD LOAD TARGET FREEBOARD = 17"
- LIVE LOAD TARGET FREEBOARD = 6" MIN.
- GANGWAY REACTION (LANDING FLOAT) = 2,250 LBS (DESIGNED FOR 5' X 60' ALUMINUM GANGWAY)
- NET OPEN AREA: FLOATS SHOWN HAVE BEEN DESIGNED WITH NO NET OPEN AREA REQUIREMENT. IF SPECIFIC PROJECT HAS A NET OPEN AREA REQUIREMENT, FLOAT DESIGN MAY NEED TO BE MODIFIED - SEE PROJECT SPECIFICATIONS.
- EXPOSURE: SITE IS TO BE FAIRLY SHELTERED FROM WIND/WAVES/CURRENTS.
- STEEL PILES: PILE DESIGN IS SITE-SPECIFIC AND NOT INCLUDED IN THE STANDARD FLOAT DESIGN - SEE PROJECT SPECIFICATIONS.
- SEASONAL REMOVAL: IF REQUIRED, FLOAT WILL BE SEASONALLY REMOVED TO PREVENT EXPOSURE TO SEVERE WIND/WAVES.
- SNOW: SNOW LOAD CONSIDERED TO BE LESS THAN LIVE LOAD, AND WILL NOT ACT CONCURRENTLY WITH LIVE LOAD.
- ICE: FLOATS ARE NOT DESIGNED TO RESIST ICE LOADS, AND DAMAGE TO IN-WATER COMPONENTS WOULD LIKELY OCCUR IF THEY WERE LEFT IN-PLACE THROUGH THE WINTER IN A WATER BODY THAT WILL FREEZE OVER.

GANGWAY LANDING

- AS SHOWN, TYPE 1 FLOAT FLOTATION IS SIZED TO SUPPORT A 5' X 60' ALUMINUM GANGWAY. DEPENDING ON SIZE OF PROJECT SPECIFIC GANGWAY, FLOAT TUB SIZE/DEPTH UNDER GANGWAY LANDING MAY NEED ADJUSTMENT TO MAINTAIN LEVEL FLOATS AND TARGET FREEBOARDS.
- GANGWAY ROLLER GUIDES SHALL BE DESIGNED AND/OR PROVIDED BY THE GANGWAY MANUFACTURER. ROLLER GUIDES SHALL BE LOCATED ON THE TYPE 1 FLOAT (LANDING FLOAT) SUCH THAT GANGWAY REMAINS FUNCTIONAL AT ALL WATER LEVELS.

CONTRACTOR SHALL ATTACH ROLLER GUIDES TO TYPE 1 FLOAT PER GANGWAY MANUFACTURER'S INSTRUCTIONS. SEE PROJECT SPECIFICATIONS.

LIFTING OF FLOAT MODULES

FLOAT MAY BE LIFTED FROM DESIGNATED LIFTING POINTS ON THE FLOAT FRAMING AS SHOWN.

ALWAYS FULLY VISUALLY INSPECT THE LIFTING POINTS AND FLOAT FRAMING FOR DAMAGE PRIOR TO LIFTING.

NEVER LIFT THE FLOAT OVER PERSONNEL OR EQUIPMENT, AND KEEP THE FLOAT AS CLOSE TO THE GROUND AS POSSIBLE WHILE HANDLING.

MATERIALS

A SUMMARY OF PROJECT MATERIALS IS PROVIDED BELOW. FOR DETAILS MATERIAL REQUIREMENTS, SEE PROJECT SPECIFICATIONS.

- STEEL SHAPES
HSS: ASTM 500 GRADE B 46 KSI
PIPE: ASTM A53 GRADE B 35 KSI
ANGLE: ASTM A36
BAR/PLATE: ASTM A36

- MISC PRODUCTS

FLOAT TUBS: ACE ROLO-MOLD FOAM FILLED HDPE FLOAT TUBS BY DEN HARTOG INDUSTRIES OR APPROVED EQUAL.

FIBERGLASS GRATING: 1" TALL FIBERGRATE ECOGRATE 62, LIGHT GRAY, INTEGRAL GRIT NON-SKID TOP SURFACE. ATTACHED TO STEEL FRAME WITH MANUFACTURER RECOMMENDED CLIPS AND SS SELF-TAPPING SCREWS.

UHMW: UV STABILIZED, FULLY OR PARTIALLY CROSS-LINKED ULTRA-HIGH MOLECULAR WEIGHT (UHMW) POLYETHYLENE, BLACK IN COLOR.

RUBBER HINGE BUSHINGS: EPDM RUBBER WITH DUROMETER 60 MINIMUM.

TOP AND BOTTOM RAILINGS: BEDFORD SELECTFORCE PLASTIC LUMBER, COLOR LIGHT GRAY, OR APPROVED EQUAL.

BOLTS: UNLESS NOTED OTHERWISE, ALL STEEL TO STEEL CONNECTIONS SHALL USE A307, HOT-DIP GALVANIZED BOLTS. ALL PLASTIC TO STEEL CONNECTIONS SHALL USE 316 STAINLESS STEEL (SS) BOLTS.

HINGE PIN: ASTM A307, HOT-DIP GALVANIZED

- BENCHES

BENCHES SHALL BE 4' LONG, 18" WIDE, 18" HIGH, SIMILAR TO MANUFACTURER "PILOT ROCK". BENCH 1 AND 2 SHALL HAVE BACK (PWRB/G-4PC) AND ONE ARM REST (AR/G-3). BENCH 3 SHALL HAVE NO BACK (PWD/G-4PN).

15" X 3 1/2" X 5/16" BENCH SUPPORT LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATED. CONTRACTOR TO VERIFY LAYOUT DIMENSIONS REQUIRED FOR ATTACHING SUPPLIED BENCHES TO FLOAT FRAMING PER MANUFACTURER RECOMMENDATIONS. SEE PROJECT SPECIFICATIONS.

COATING

- HOT-DIP GALVANIZE ALL STEEL COMPONENTS AFTER FABRICATION. FLOAT FRAME TO BE HOT-DIP GALVANIZED USING A PROGRESSIVE DIP. SEE PROJECT SPECIFICATIONS.
- HOT-STICK REPAIR ONLY.

FLOAT NOTES

- SITE LOCATION: SHELTERED SITES WITHIN WASHINGTON STATE. FLOATS IN AREAS WITH SEVERE WINTER STORMS WILL BE SEASONALLY REMOVED.
- FLOTATION DRUMS AND STEEL FRAMING SUSCEPTIBLE TO DAMAGE IF LEFT IN-PLACE OVERWINTER IN AN AREA WHERE THE WATER BODY FREEZES OVER.
- FLOATS ARE DESIGNED AS BOAT LAUNCH BOARDING FLOATS AND SHALL NOT BE USED AS MARINA FLOATS OR GANGWAY LANDING FLOATS.
- FLOATS SHALL GROUND OUT ON AN IMPROVED SURFACE (SUCH AS CONCRETE OR GRAVEL).
- ONE PILE PER FLOAT UNIT SHALL BE PROVIDED FOR LATERAL RESTRAINT. PILE WILL BE LOCATED AT MID-LENGTH OF FLOAT UNIT.
- ABUTMENT HINGE CONNECTION SHALL BE INSTALLED WITH CARE, MAKING SURE IT ALIGNS CORRECTLY WITH THE PILING.
- FLOATS AND PILING SHALL BE INSTALLED SUCH THAT THE FLOATS DO NOT BIND ON PILE HOOPS FOR THE FULL DESIGN RANGE OF WATER ELEVATIONS.
- PILE HOOPS NOT DESIGNED TO BE USED AS A DRIVING TEMPLATE. CONTRACTOR MAY USE THE PILE HOOPS AS A DRIVING TEMPLATE AT THEIR OWN RISK, AND ANY DAMAGE TO THE FLOATS WILL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- THREADED AND TAPPED HOLES SHALL BE SIZED WITH CONSIDERATION FOR THE THICKNESS OF THE GALVANIZED COATING.

LIFTING OF FLOAT MODULES

FLOAT MAY BE LIFTED FROM DESIGNATED LOCATIONS ALONG BULLRAIL. MAKE SURE BULLRAIL AND SCUPPER BLOCKS ARE NOT SUBJECTED TO BENDING LOADS DURING LIFTING.

ALWAYS FULLY VISUALLY INSPECT THE BULLRAIL AND SCUPPER BLOCKS FOR DAMAGE PRIOR TO USING THE BULLRAIL FOR LIFTING. IT IS FEASIBLE THAT THE BULLRAIL COULD BE DAMAGED DURING FACILITY USE, COMPROMISING THE ABILITY OF THE BULLRAILS TO RESIST LIFTING LOADS. NOT ALL DAMAGE WILL BE READILY VISUALLY APPARENT. RISK OF BULLRAIL FAILURE DURING LIFTING IS ELIMINATED BY STRAPPING AROUND THE ENTIRE FLOAT TO FACILITATE LIFTING.

NEVER LIFT THE FLOAT OVER PERSONNEL OR EQUIPMENT, AND KEEP THE FLOAT AS CLOSE TO THE GROUND AS POSSIBLE WHILE HANDLING.

DESIGN CRITERIA

- DESIGN WAVE HEIGHT = 2.5 FEET.
- DESIGN WAVE PERIOD = 3 SECONDS
- LIVE LOAD = 30 PSF (FOR STRUCTURAL FRAMING, FLOATS GROUNDED ON RAMP)
- LIVE LOAD = ## PSF FOR BUOYANCY AND FLOAT STABILITY
- EXPOSURE: SITE IS TO BE FAIRLY SHELTERED FROM WIND/WAVES/CURRENTS.
- SEASONAL REMOVAL: IF REQUIRED, FLOATS WILL BE SEASONALLY REMOVED TO PREVENT EXPOSURE TO SEVERE WIND/WAVES.
- ICE: FLOATS ARE NOT DESIGNED TO RESIST ICE LOADS, AND DAMAGE TO IN-WATER COMPONENTS WOULD LIKELY OCCUR IF THEY WERE LEFT IN-PLACE THROUGH THE WINTER IN A WATER BODY THAT WILL FREEZE OVER.
- CURRENT VELOCITY: 1.5 FEET PER SECOND
- VESSEL: 26' TRAILERABLE RECREATIONAL VESSEL
- DESIGN HIGH WATER = ##' [DATUM]
- DESIGN LOW WATER = ##' [DATUM]

IN ADDITION TO STRUCTURAL WELDS SHOWN, PROVIDE A MINIMUM 1/8" FILLET OR EQUIVALENT GROOVE WELD AS REQUIRED TO COMPLETELY SEAL ALL EDGES OF CONTACTING SURFACES PRIOR TO GALVANIZING.

MATERIALS

A SUMMARY OF PROJECT MATERIALS IS PROVIDED BELOW. FOR DETAILED MATERIAL REQUIREMENTS SEE PROJECT SPECIFICATIONS.

- STEEL SHAPES
CHANNEL: ASTM A36
HSS: ASTM A500 Gr. B 46 ksi
PIPE: ASTM A500 MIN 46 ksi
ANGLE: ASTM A36
PLATE: ASTM A36

- MISC PRODUCTS

FIBERGLASS GRATING: 1" FIBERGRATE ECOGRATE 62, LIGHT GRAY, INTEGRALLY APPLIED STANDARD QUARTZ GRIT SURFACE.

UHMW: TIVAR UV RESISTANT OR APPROVED EQUAL WITH EQUAL OR GREATER TENSILE STRENGTH (5,800 psi), AND NO BREAK FOR ASTM D256 TYPE A TEST, AND 47.6 LB-FT FOR A DOUBLE-NOTCH TEST. COLOR TO BE BLACK UNLESS OTHERWISE NOTED.

RUBBER HINGE BUSHINGS: HIGH-QUALITY UHMW

HDPE RUB STRIP: BEDFORD FIBERFORCE (MOLDED), COLOR LIGHT GRAY, OR APPROVED EQUAL

BOLTS: ASTM A307, HOT DIP GALVANIZED

HINGE PIN, END PLATE AND COTTER PIN: 316SS

- COATINGS: FLOAT FRAME IS TO BE HOT DIP GALVANIZED AFTER FABRICATION USING A PROGRESSIVE DIP.

GALVANIZING

- HOT-STICK REPAIR ONLY
- BRUSH ALL THREADED AND TAPPED HOLES AFTER HOT-DIP-GALVANIZING WHILE THE FLOAT FRAME IS STILL HOT. HOLES SHALL BE TESTED TO ENSURE COMPATIBILITY WITH THE SPECIFIED BOLTS AT GALVANIZER PRIOR TO SHIPPING FLOAT FRAME. THREADED AND TAPPED HOLES EXIST AT THE FOLLOWING LOCATIONS:
 - GROUNDING SHOE BASE PLATES
 - OPTIONAL GRAB BAR
 - YELLOW HDPE AROUND INTERNAL PILE HOOP
 - RUB STRIP WITHIN 5 FEET OF INTERNAL PILE HOOP

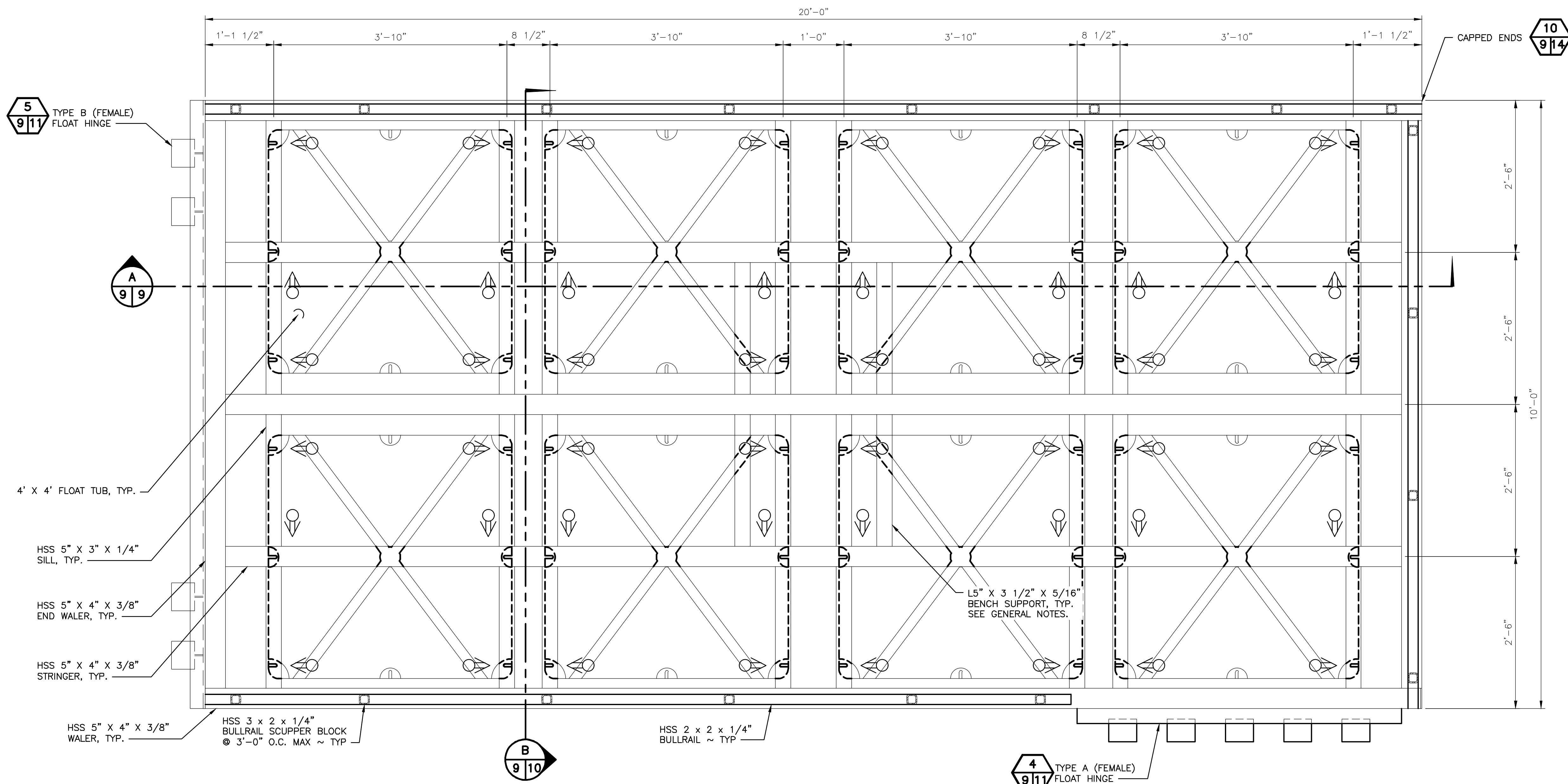
TYPE 1 FISHING FLOAT NOTES
NOT TO SCALE

TYPE 2 FISHING FLOAT NOTES
NOT TO SCALE

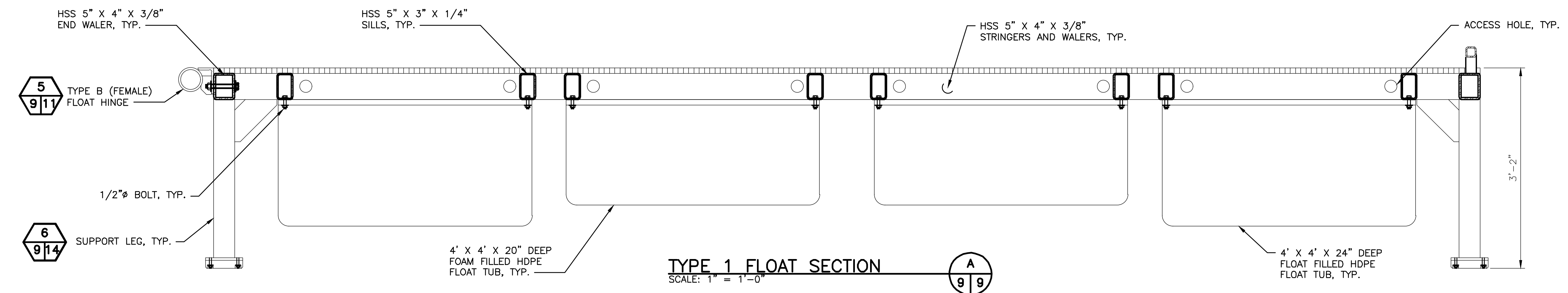
WASHINGTON DEPARTMENT OF
FISH & WILDLIFE

SYM	DATE	REVISION DESCRIPTION	BY	
APPROVED AND RELEASED FOR CONSTRUCTION				
CHIEF ENGINEER	DATE:		DESIGNED BY J. HANSEN	
PROGRAM	DATE:		CHECKED BY D. SMITH	
			DRAWN BY C. TORSTIVET	
			DATE 3/24/2022	

1-82 PONDS 4 & 5		PROJECT NO.
REDEVELOPMENT		YA:A595:2022-1
FISHING FLOATS TYPE 1 & 2	SHEET	OF
GENERAL NOTES	8	15



TYPE 1 FLOAT PLAN
SCALE: 1" = 1'-0"



TYPE 1 FLOAT SECTION
SCALE: 1" = 1'-0"

- NOTES**
1. PROVIDE 3/8"Ø WEEP HOLES AT THE UNDERSIDE OF EACH END OF EACH HSS TUBE WITH ACCESS HOLES TO PREVENT MEMBERS FROM HOLDING WATER. SEE WEEP HOLES DETAILS ON STANDARD DETAILS SHEET.
 2. PROVIDE 1"Ø VENT HOLES IN SIDES OF THE HSS MEMBERS AT ALL WELDED INTERSECTIONS TO FACILITATE COMPLETE DRAINING DURING HOT-DIP GALVANIZING. SEE VENT HOLES DETAIL ON STANDARD DETAILS SHEET.
 3. 10' X 20' TYPE 3 FLOAT:
SELF WEIGHT = 6,220 LBS
NET OPEN AREA = 17.1%
FLOTATION FOOTPRINT = 64.0%
- LEGEND**
- 2-3/8"Ø DRILLED (NOT FLAME CUT) BOLT ACCESS OR VENT HOLE CENTERED VERTICALLY IN HSS TUBE. PROVIDE MINIMUM 1" AWAY FROM WELDED CONNECTIONS. SMOOTH EDGES PRIOR TO GALVANIZING. SEE ACCESS HOLES DETAILS ON STANDARD DETAILS SHEET.

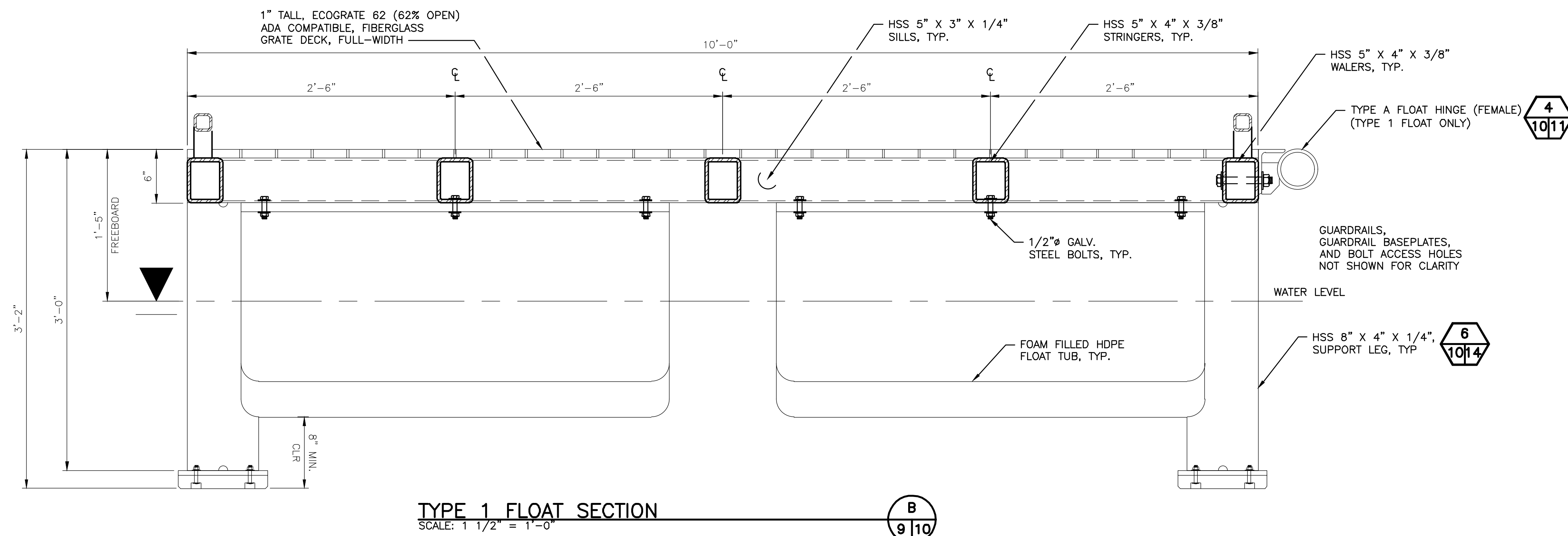
WASHINGTON DEPARTMENT OF
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		DRAWN BY C. TORSTVET	
		DATE 3/24/2022	

I-82 PONDS 4 & 5
REDEVELOPMENT
FISHING FLOAT TYPE 1 PLAN & SECTION

PROJECT NO.
YA:A595:2022-1

SHEET 9 OF 15



TYPE 1 FLOAT SECTION
SCALE: 1 1/2" = 1'-0"

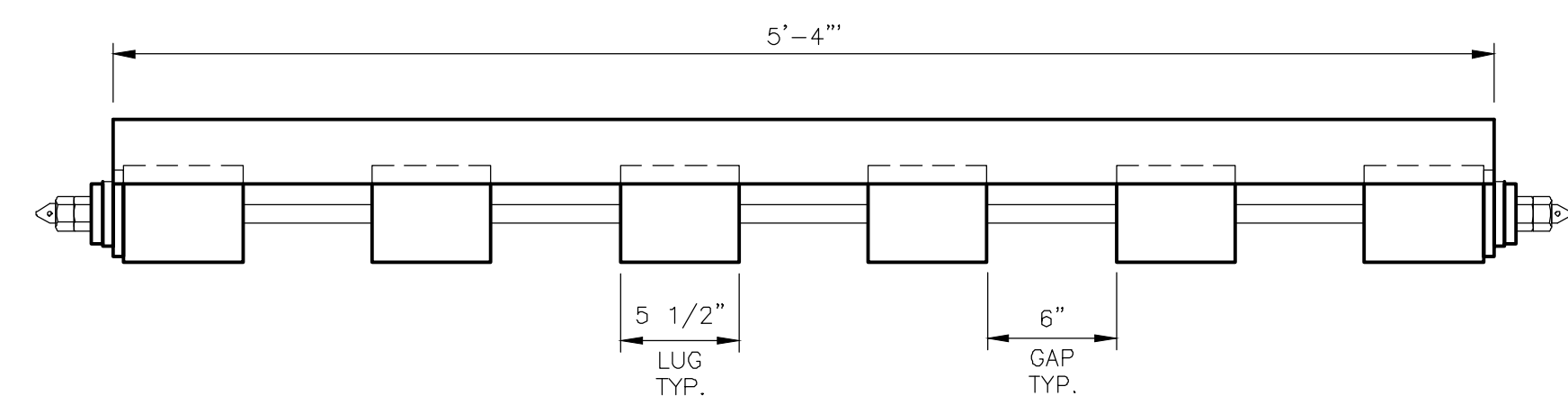
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		DATE 3/24/2022	

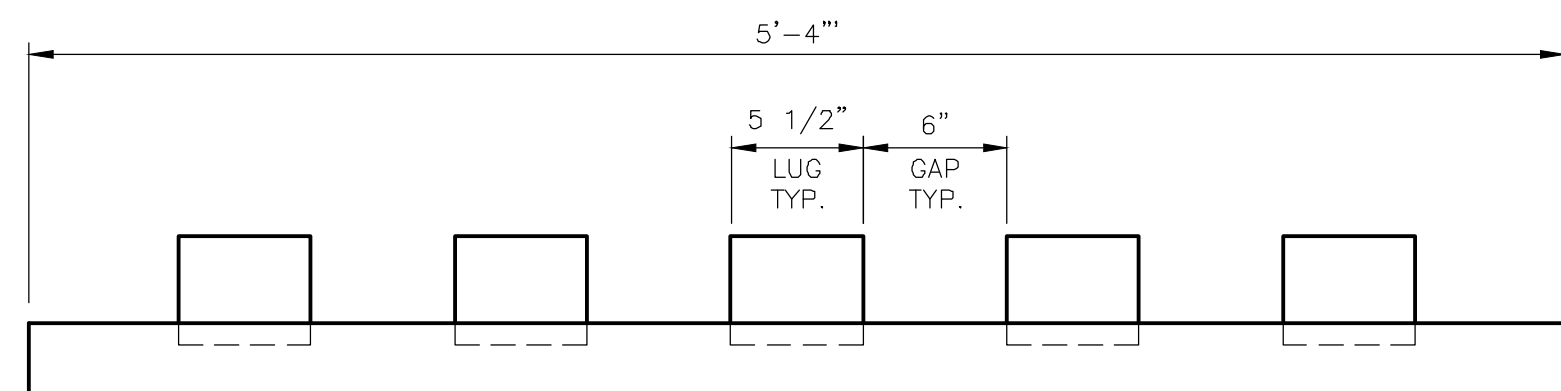
I-82 PONDS 4 & 5
REDEVELOPMENT
FISHING FLOAT TYPE 1 SECTION

PROJECT NO.
YA:A595:2022-1

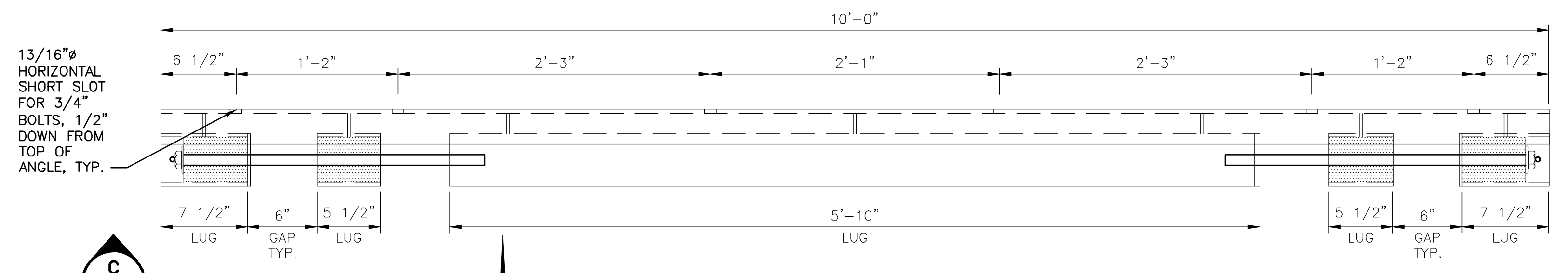
SHEET OF
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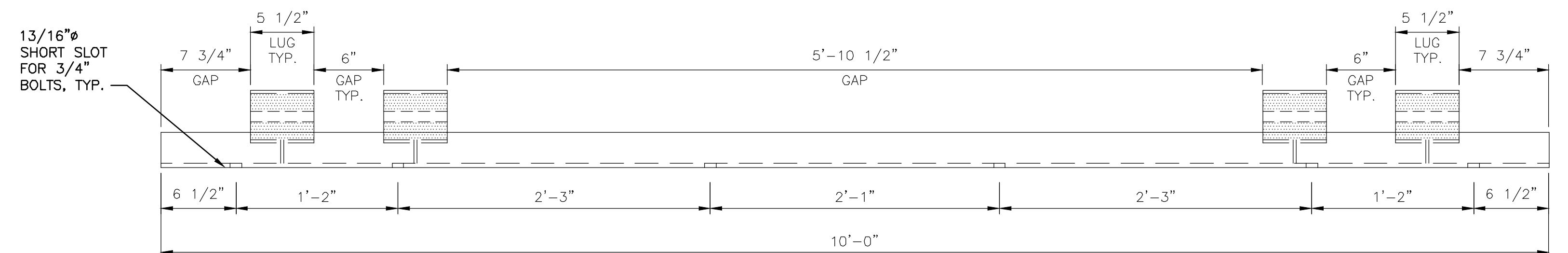
FLOAT HINGE TYPE A - MALE 17
9/11
SCALE: 1 1/2" = 1'-0"



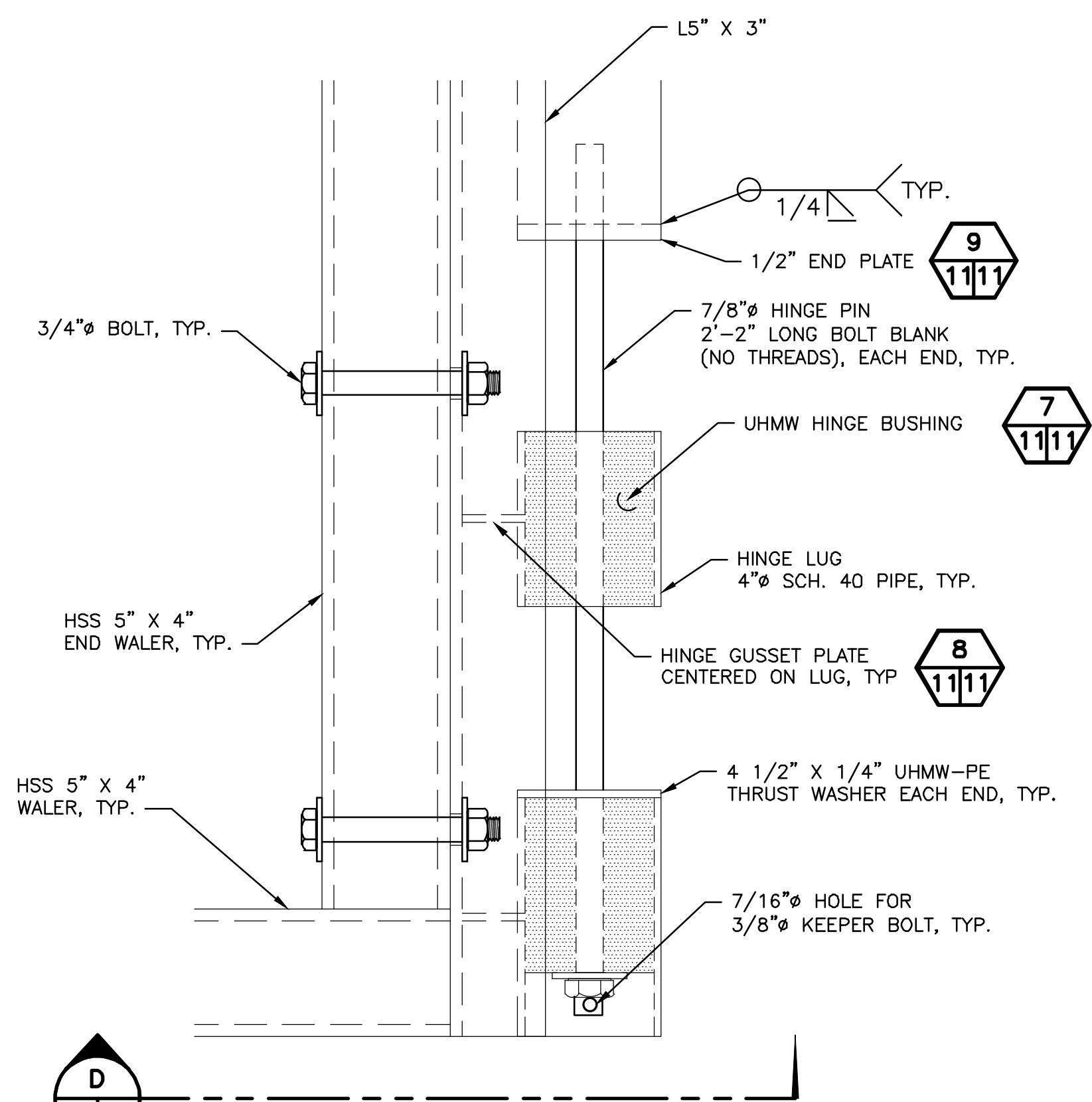
FLOAT HINGE TYPE A - FEMALE 4
9/11
SCALE: 1 1/2" = 1'-0"



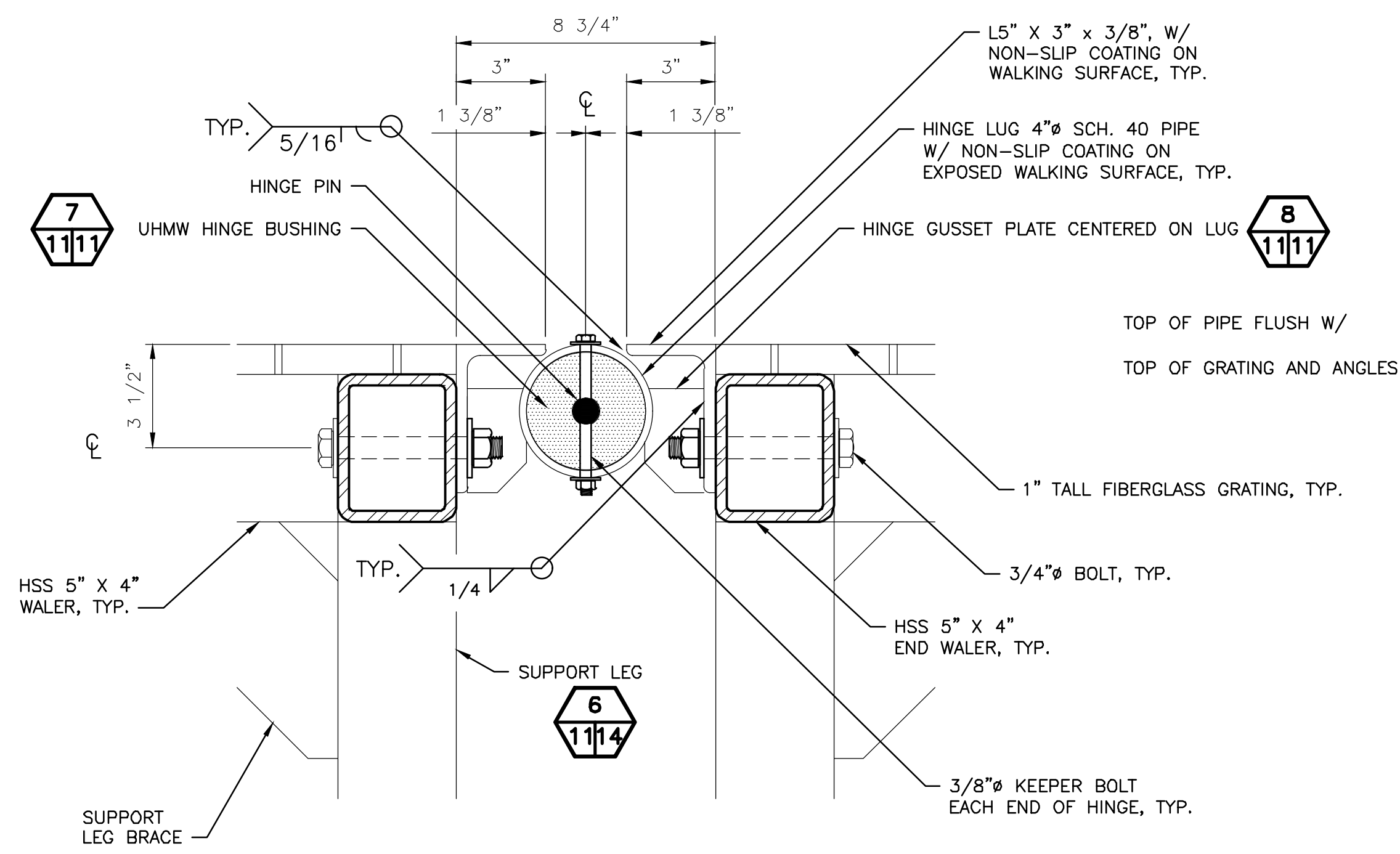
FLOAT HINGE TYPE B - MALE 18
11/11
SCALE: 1 1/2" = 1'-0"



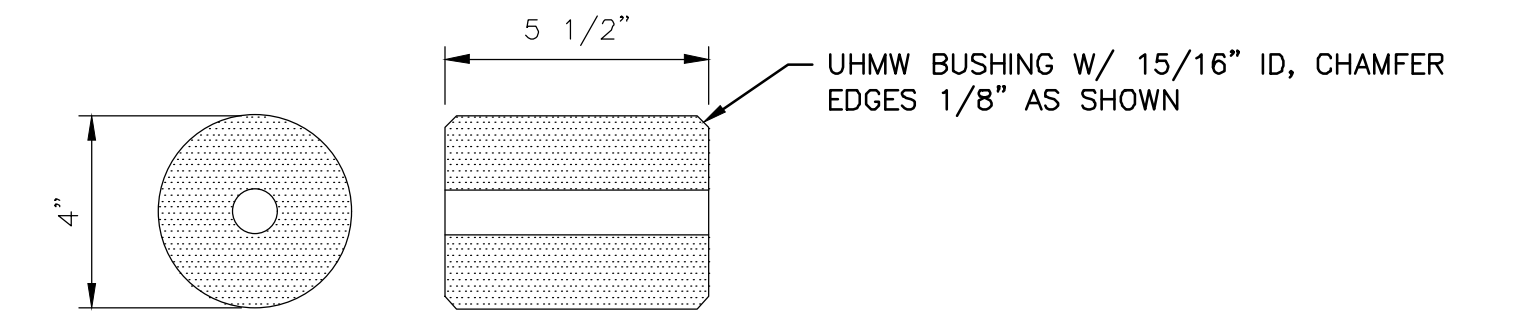
FLOAT HINGE TYPE B - FEMALE 5
9/11
SCALE: 1 1/2" = 1'-0"



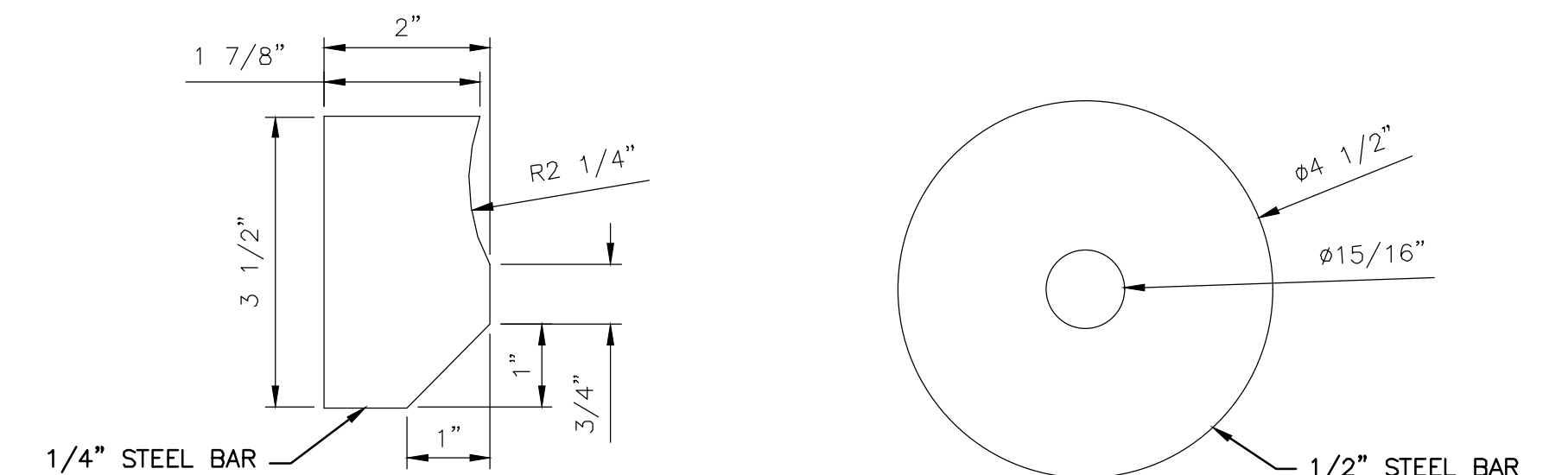
FLOAT HINGE DETAIL C
11/11
SCALE: 3" = 1'-0"



FLOAT HINGE SECTION D
11/11
SCALE: 3" = 1'-0"



UHMW HINGE BUSHING 7
11/11
SCALE: 3" = 1'-0"



HINGE GUSSET PLATE 8
11/11
SCALE: 8" = 1'-0"

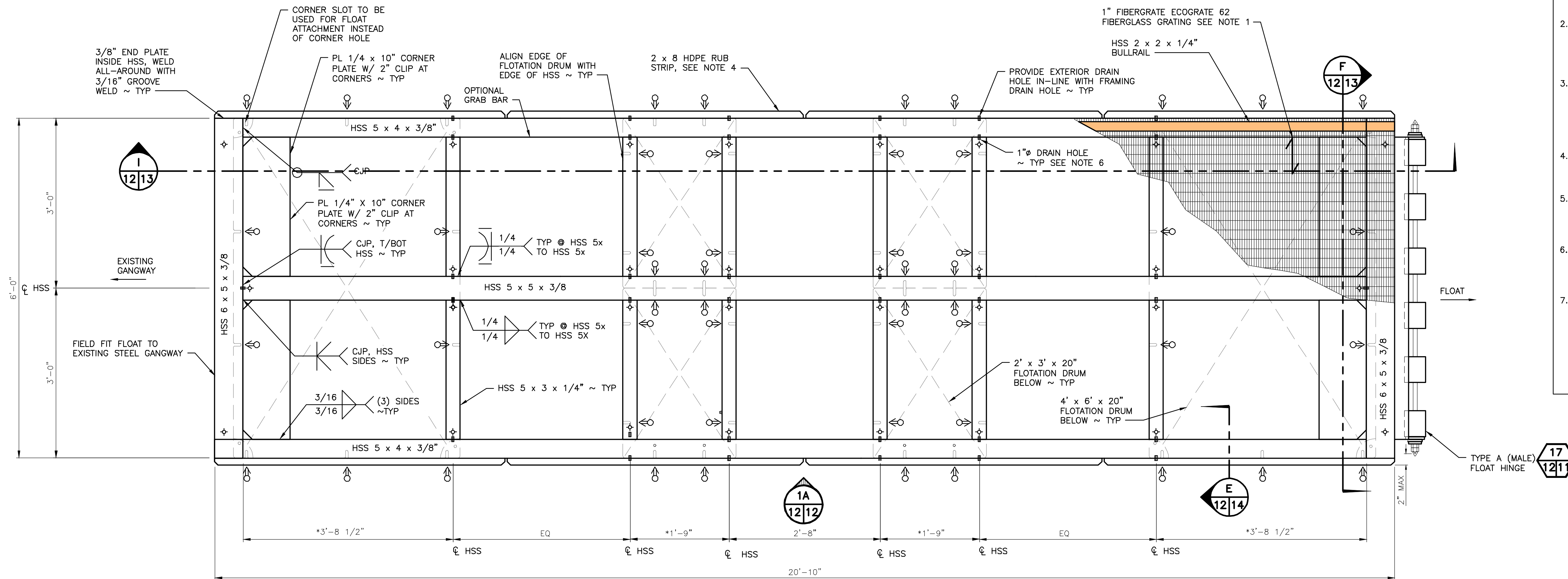
HINGE LUG END PLATE 9
11/11
SCALE: 6" = 1'-0"

WASHINGTON DEPARTMENT OF
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DRAWN BY	C. TORSTVET	DATE	3/24/2022
CHIEF ENGINEER		DATE:	
PROGRAM		DATE:	

I-82 PONDS 4 & 5
REDEVELOPMENT
FISHING FLOAT TYPE 1 & 2 HINGE DETAILS

PROJECT NO.
YA:A595:2022-1
SHEET 11 OF 15



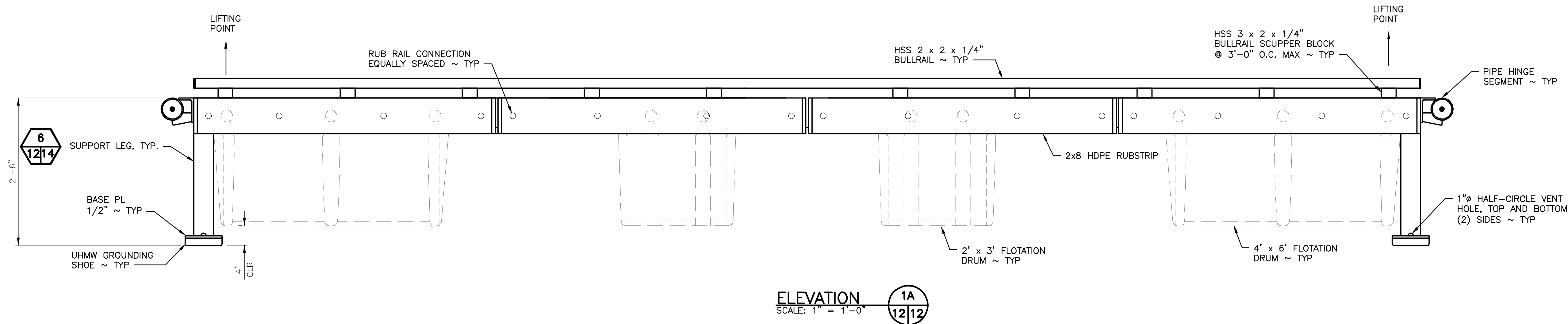
- NOTES:**
1. SECURE GRATING IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS. EACH GRATING PANEL IS TO BE FULLY SUPPORTED ON ALL FOUR EDGES.
 2. FLOAT FRAME TO BE HOT DIP GALVANIZED AFTER FABRICATION. CONTRACTOR TO PROVIDE REQUIRED DRAIN HOLES. PROPOSED DRAIN HOLE LOCATIONS ARE SHOWN. SHOW ALL DRAIN HOLE LOCATIONS IN FLOAT SHOP DRAWINGS.
 3. FIELD-LEVEL FLOAT WITH COUNTERWEIGHTS. CONTRACTOR TO PROVIDE (6) PL 1/2" x 4" x 2'-0" PER FLOAT MODULE. COUNTERWEIGHT ASSEMBLY SHALL BE SECURED WITH FOUR 3/4" THRU BOLTS. PROVIDE RECESS IN RUB STRIP TO ACCOMMODATE THRU BOLT HEAD.
 4. HDPE RUB STRIP, MAX 5'-6" LENGTH, PROVIDE 3/4" CHAMFER AT ENDS. 1/2" GAP BETWEEN SEGMENTS, COLOR LIGHT GRAY.
 5. PROVIDE 3/8" WEEP HOLES AT THE UNDERSIDE OF EACH END OF EACH HORIZONTAL CROSS-BEAM TO PREVENT MEMBERS FROM HOLDING WATER.
 6. PROVIDE 1" VENT HOLES IN SIDES OF HSS MEMBERS INSIDE OF CONNECTING TUBE TO FACILITATE COMPLETE DRAINING DURING HOT DIP GALVANIZING, CENTERED IN HSS 5x.
 7. HINGE PIN TO BE SECURED WITH A DOUBLE-JAM NUT (DO NOT OVER-TIGHTEN, PREVENT GALLING), AND SHALL BE FREE TO ROTATE AFTER INSTALLATION. THE END OF THE HINGE PIN IS TO HAVE A 30 DEGREE BEVEL, WITH A 1/4" DIAMETER ROUNDED END TO FACILITATE INSERTION INTO THE HINGE BUSHINGS. HINGE PIN IS TO HAVE A HOLE AND 1/4" 316SS COTTER PIN EACH END.

TYPE 2 FLOAT PLAN

SCALE: 1" = 1'-0"

NOTE: BULLRAIL, SCUPPER BLOCKS, WEEP HOLES, GROUNDING LEGS NOT SHOWN FOR CLARITY.

* DIMENSION BASED ON FLOAT DRUM MANUFACTURER-PROVIDED INFORMATION CONTRACTOR TO VERIFY AS-BUILT FLOAT DRUM DIMENSIONS



ELEVATION

SCALE: 1" = 1'-0"

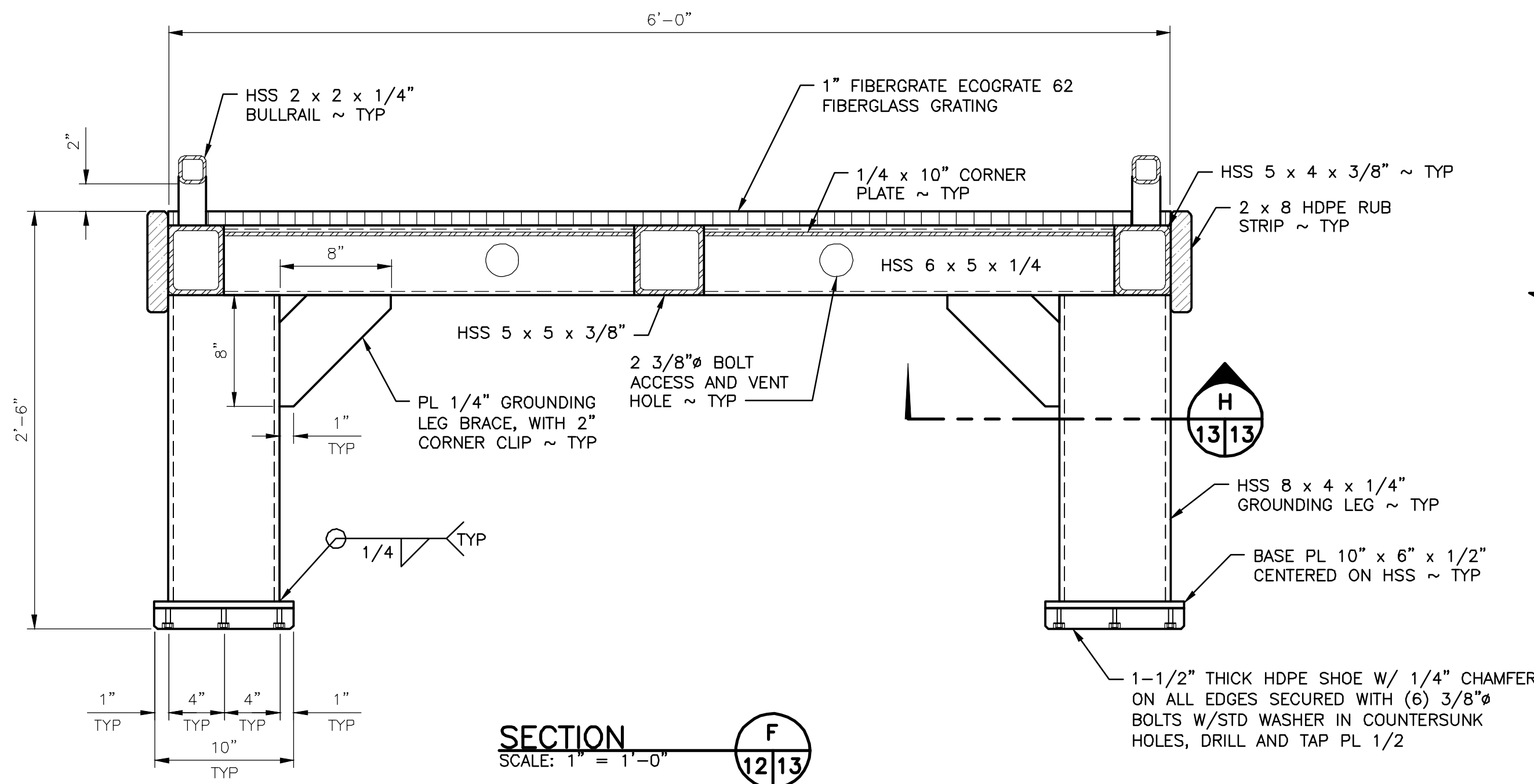
WASHINGTON DEPARTMENT OF
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I-82 PONDS 4 & 5
REDEVELOPMENT
FISHING FLOAT TYPE 2 PLAN & ELEVATION

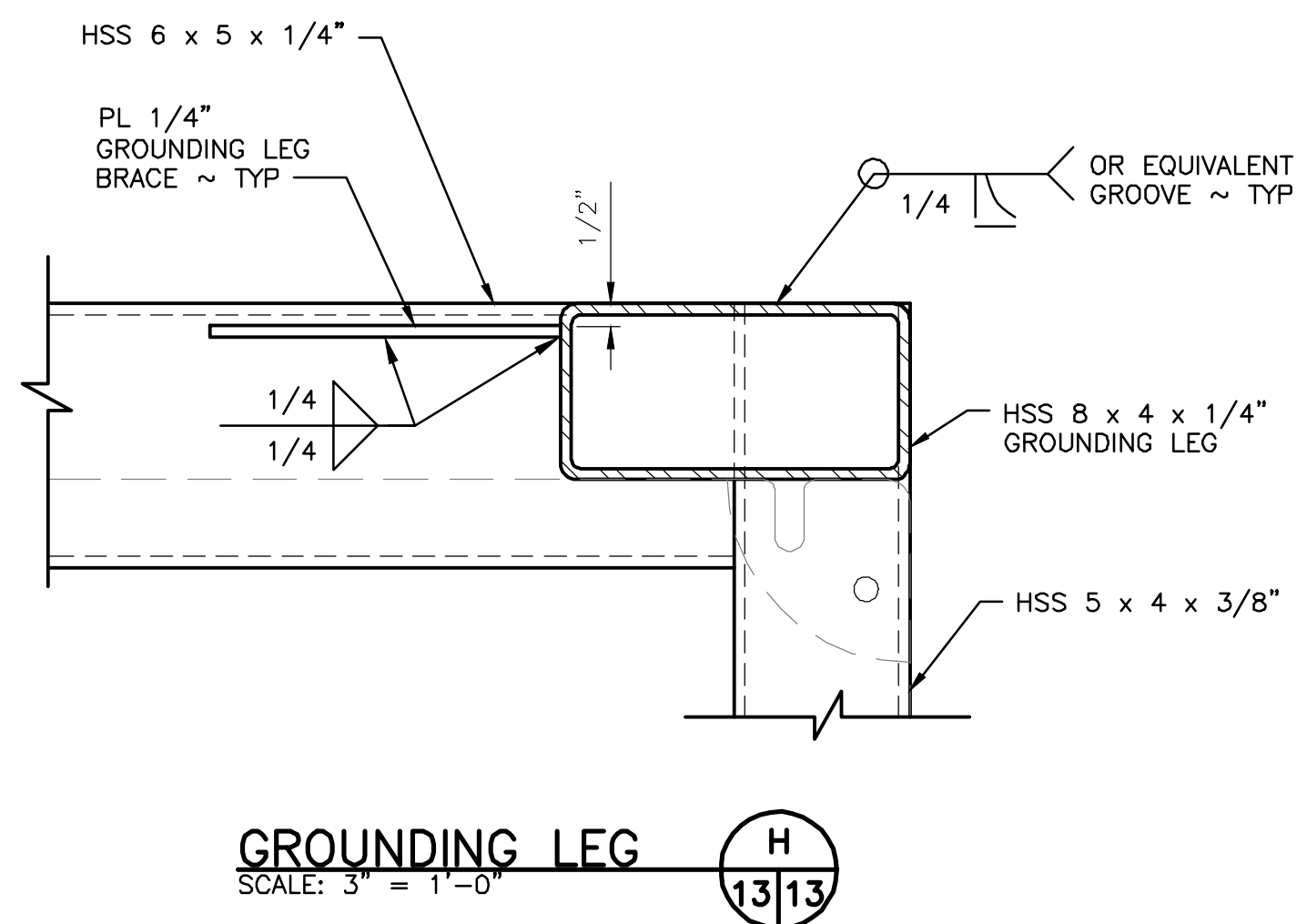
PROJECT NO.
YA:A595:2022-1

SHEET OF
12 15

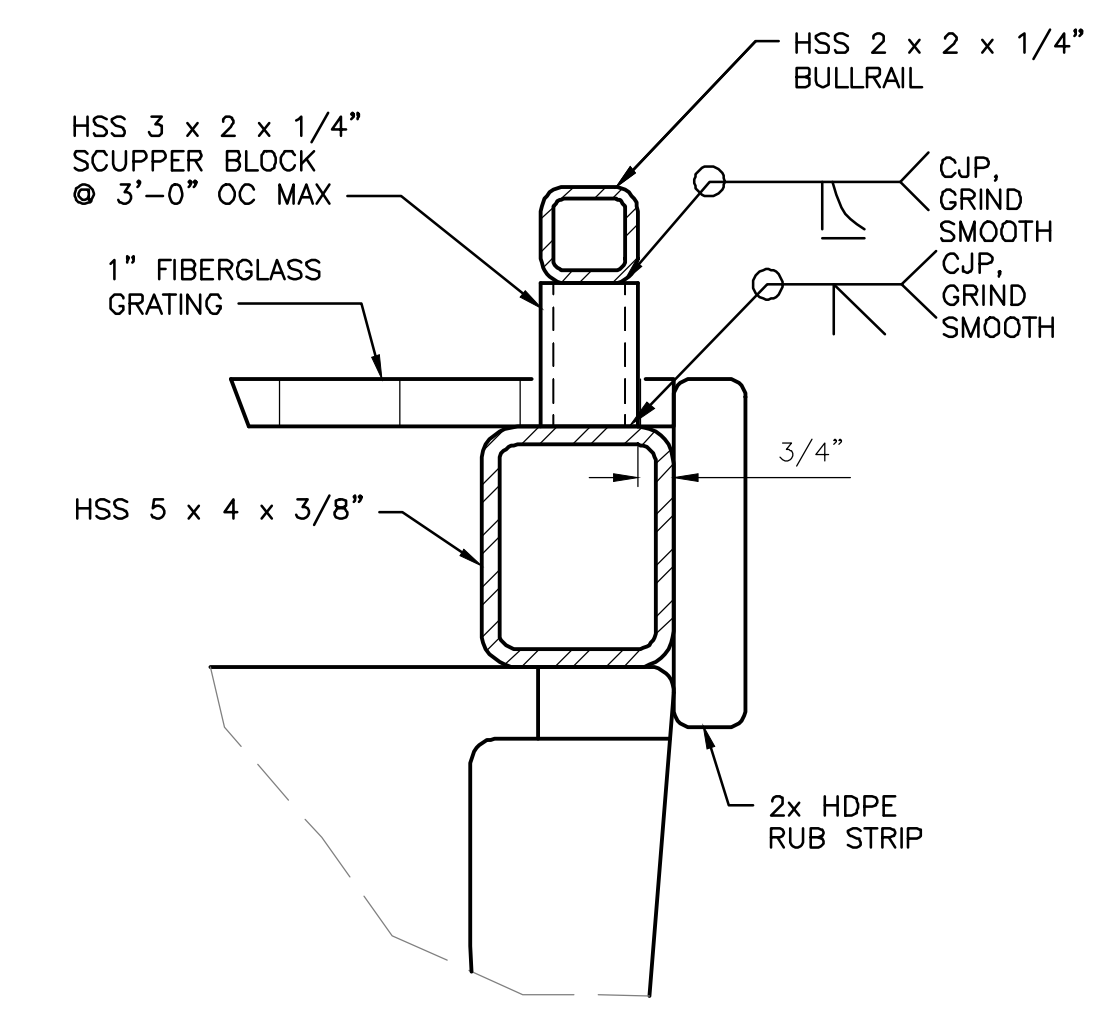


SECTION F
SCALE: 1" = 1'-0"

NOTE:
FLOTATION DRUM NOT SHOWN FOR CLARITY

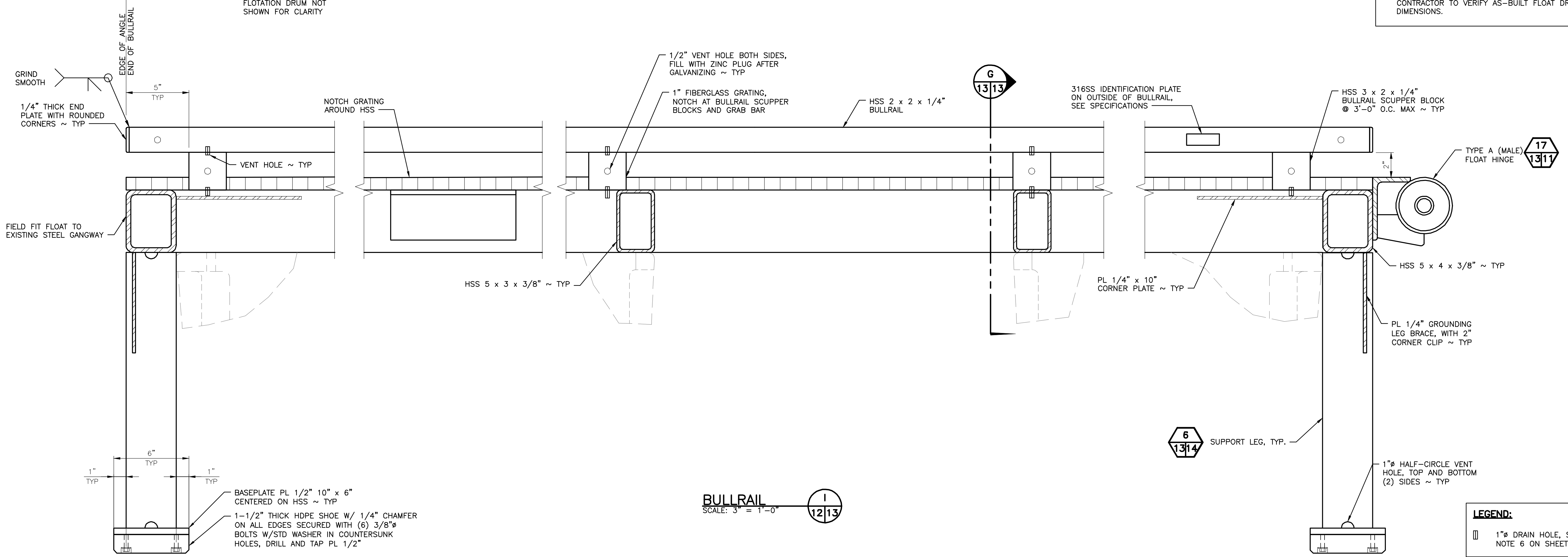


GROUNDING LEG
SCALE: 3" = 1'-0"



SECTION - BULLRAIL
SCALE: 3" = 1'-0"

- NOTES:**
1. SECURE GRATING IN ACCORDANCE WITH TECHNICAL SPECIFICATIONS. EACH GRATING PANEL IS TO BE FULLY SUPPORTED ON ALL FOUR EDGES.
 2. FLOAT FRAME TO BE HOT DIP GALVANIZED AFTER FABRICATION. CONTRACTOR TO PROVIDE REQUIRED DRAIN HOLES. PROPOSED DRAIN HOLE LOCATIONS ARE SHOWN. SHOW ALL DRAIN HOLE LOCATIONS IN FLOAT SHOP DRAWINGS.
 3. RUB STRIP 5'-6" MAX LENGTH, PROVIDE 3/4" CHAMFER AT ENDS, 1/2" GAP BETWEEN SEGMENTS, COLOR LIGHT GRAY.
 4. PROVIDE 3/8" WEEP HOLES AT THE UNDERSIDE OF EACH END OF EACH HORIZONTAL CROSS-BEAM TO PREVENT MEMBERS FROM HOLDING WATER.
 5. PROVIDE 1" DRAIN HOLES IN SIDES OF HSS MEMBERS INSIDE OF CONNECTING TUBE TO FACILITATE COMPLETE DRAINING DURING HOT DIP GALVANIZING, CENTERED IN HSS 5x.
 6. HINGE PIN TO BE SECURED WITH A DOUBLE-JAM NUT (DO NOT OVER-TIGHTEN, PREVENT GALLING), AND SHALL BE FREE TO ROTATE AFTER INSTALLATION. THE END OF THE HINGE PIN IS TO HAVE A 30 DEGREE BEVEL, WITH A 1/4" DIAMETER ROUNDED END TO FACILITATE INSERTION INTO THE HINGE BUSHINGS. HINGE PIN IS TO HAVE A HOLE AND 1/4" 316SS COTTER PIN EACH END.
 7. PROVIDE 2 3/8" DRILLED (NOT FLAME CUT) CENTERED VERTICALLY IN HSS 5x. PROVIDE MINIMUM 5" AWAY FROM WELDED CONNECTIONS OR PRE FLOAT DRUM. SMOOTH ALL EDGES PRIOR TO GALVANIZING.
 8. DIMENSIONS BASED ON FLOAT DRUM MANUFACTURER-PROVIDED INFORMATION. CONTRACTOR TO VERIFY AS-BUILT FLOAT DRUM DIMENSIONS.



BULLRAIL
SCALE: 3" = 1'-0"

LEGEND:
□ 1" DRAIN HOLE, SEE NOTE 6 ON SHEET 12

WASHINGTON DEPARTMENT OF FISH & WILDLIFE

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DATE	3/24/2022		

I-82 PONDS 4 & 5 REDEVELOPMENT FISHING FLOAT TYPE 2 SECTIONS & DETAILS

PROJECT NO. YA:A595:2022-1
SHEET 13 OF 15