G. STRUCTURAL - GENERAL

G1 SCOPE
THE NOTES AND DETAILS ON THIS SHEET ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

G2 APPLICABLE SPECIFICATIONS AND CODES
CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2009 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) AND THE CITY AND BOROUGH OF JUNEAU TITLE 19 BUILDING CODE. THE ABOVE SHALL GOVERN EXCEPT WHERE OTHER APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.

G3 ALTERNATIVE DESIGNS
THE STRUCTURAL SYSTEMS AND DETAILS ON THESE PLANS ARE THE PRIORITY DESIGN. HOWEVER, ALTERNATIVE SYSTEMS AND DETAILS MAY BE USED IF THE CONTRACTOR SUBMITS PLANS WITH SUBSTANTIATING CALCULATIONS AND TEST DATA WHICH BEAR A ALASKA STATE LICENSED ENGINEERS SEAL AND SIGNATURES.

G4 DIMENSIONS
STRUCTURAL DIMENSIONS CONTROLLED BY OR RELATED TO MECHANICAL AND ELECTRICAL EQUIPMENT AND EXISTING STRUCTURES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

G5 PROVISIONS FOR EQUIPMENT
MECHANICAL AND ELECTRICAL EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, PIPE SLEEVES, RECESSES AND REVEALS NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT REQUIRED BY OTHER CONTRACT DRAWINGS SHALL BE PROVIDED FOR, PRIOR TO CASTING CONCRETE.

G6 CONSTRUCTION LOADS
STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND SUPPORTS WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR.

G7 DRAINAGE SURFACES
SLOPE DRAINAGE SURFACES UNIFORMLY TO DRAIN. SLOPE SHALL BE 1/4" PER FOOT EXCEPT WHERE NOTED OTHERWISE ON THE PLANS.

G8 FLOOR DRAINS
SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR LOCATION AND SIZES.

G9 FLOOR ELEVATIONS
SEE ARCHITECTURAL AND CIVIL DRAWINGS FOR ELEVATIONS NOT CALLED OUT.

F. STRUCTURAL DESIGN

F1 DESIGN CODE
DESIGN IS IN ACCORDANCE WITH THE 2009 INTERNATIONAL BUILDING CODE AND THE CITY AND BOROUGH OF JUNEAU TITLE 19 BUILDING CODE, EXCEPT WHERE OTHER APPLICABLE CODES OR THE FOLLOWING NOTES ARE MORE RESTRICTIVE.

F2 GEOTECHNICAL INFORMATION
PER GEOTECHNICAL REPORT #133-95014 BY GOLDER ASSOCIATES, DATED DEC 26 2013
A. FROST DEPTH 32 INCHES

B. ALLOWABLE BEARING PRESSURE 3500 PSF

C. 1/3 ALLOWABLE SOIL BEARING PRESSURE INCREASE FOR SEISMIC AND WIND LOAD COMBINATIONS

L. DESIGN LIVE LOADS

A. SNOW
1. GROUND Pg 70 PSF
2. FLAT ROOF P: 52 PSF
3. EXPOSURE Ce 0.8
4. IMPORTANCE I 1.1
5. TEMPERATURE Ct 1.2

B. WIND
1. BASIC WIND SPEED 116 MPH
2. IMPORTANCE I 1.15
3. OCCUPANCY CATEGORY III
4. WIND EXPOSURE D

C. SEISMIC LOADING
1. OCCUPANCY CATEGORY III
2. IMPORTANCE I 1.25
3. Ss 0.57, S 0.27
4. SITE CLASS D
5. S_{DS} 0.51, S_{D1} 0.34
6. SEISMIC DESIGN CATEGORY D

C. CONCRETE

C1 APPLICABLE CODE
CONCRETE CONSTRUCTION SHALL CONFORM TO THE 2008 EDITION OF THE ACI BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, ACI-318, AS MODIFIED BY THE IBC.

C2 REINFORCING STEEL DETAILS
DETAILING, FABRICATION AND ERECTION OF REINFORCING STEEL, UNLESS OTHERWISE NOTED, SHALL BE IN ACCORDANCE WITH DETAILS AND DETAILING OF CONCRETE REINFORCEMENT ACI 315.

C3 DESIGN STRENGTHS
A. CAST-IN-PLACE CONCRETE
1. GENERAL USE - 'c 5000 psi 28 DAYS

B. REINFORCING STEEL SHALL BE ASTM A 615, GRADE 60. WELDED WIRE FABRIC SHALL BE ASTM A 185 SMOOTH WIRE - y 60 KSI MINIMUM.

C4 CONCRETE COVER
CONCRETE COVER FOR REINFORCING BARS SHALL BE AS FOLLOWS.

A. WALLS, FOOTINGS AND FOUNDATION MATS CAST ON GROUND OR IN CONTACT WITH SALT WATER - 3"
B. ALL OTHER CONDITIONS - 2"

C5 MINIMUM REINFORCEMENT
CONCRETE CONSTRUCTION SHALL BE REINFORCED CONCRETE EXCEPT WHERE PLAIN CONCRETE IS CALLED OUT ON THE DRAWINGS, IN WHICH CASE NO REINFORCEMENT SHALL BE USED. CONCRETE THAT IS NOT DESIGNATED AS PLAIN CONCRETE AND HAS NO REINFORCEMENT INDICATED SHALL BE REINFORCED PER ACI 318 AND THE FOLLOWING SCHEDULES:

WALL THICKNESS	SIZE	SPACING, EW	POSITION
6"	#4	12"	OC
8"	#5	12"	OC
12"OR GREATER	#6	12"	EF

MASS CONCRETE SHALL BE REINFORCED WITH #5 15 OC EW MINIMUM IN ALL FACES.

C6 SHRINKAGE AND TEMPERATURE STEEL
UNLESS OTHERWISE NOTED, SHRINKAGE AND TEMPERATURE REINFORCING STEEL SHALL BE PROVIDED FOR SLABS IN ACCORDANCE WITH THE FOLLOWING SCHEDULES:

SLAB THICKNESS	SIZE	SPACING
4"	#3	12"
6"	#4	12"
8"	#5	12"
12"	#4	12" T&B

C7 EXTRA ACCESSORY BARS
ASIDE FROM NORMAL ACCESSORIES USED TO HOLD REINFORCING STEEL IN POSITION THE FOLLOWING SHALL BE ADDED:
A. IN SLABS NO. 4 RAISER BARS 48"MAXIMUM TO SUPPORT TOP REINFORCING STEEL.
B. IN WALLS WITH TWO CURTAINS, NO. 3 U OR Z SHAPE SPACERS 6'-0"OC EW.

C8 DOWELS
DOWELS SHALL BE AT LEAST THE SAME SIZE AND SPACING AS BARS WITH WHICH THEY ARE LAPPED. THE LAP EMBEDMENT SHALL BE AS RECOMMENDED BY ACI 318 OR AS NOTED.

C9 BAR SPLICES
SPLICES OF REINFORCING STEEL BAR SHALL BE IN ACCORDANCE WITH SCHEDULE SHOWN ON THE DRAWINGS AND ACI 318 AND SHALL BE CLASS B UNLESS OTHERWISE NOTED. THE LENGTH OF LAP SPLICE OF BARS OF DIFFERENT DIAMETER SHALL BE BASED ON THE SMALLER DIAMETER. BAR SPLICES MAY ALSO BE MADE BY WELDING IN ACCORDANCE WITH AWS SPEC D 1.4 IF APPROVED BY THE ENGINEER.

C10 RESTRICTED BAR ANCHORAGE
IN CASES WHERE REINFORCING BARS CANNOT BE EXTENDED AS FAR AS REQUIRED DUE TO THE LIMITED EXTENT OF THE ADJACENT CONCRETE STRUCTURE, THE BARS SHALL EXTEND AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.

C11 STANDARD HOOKS
BARS ENDING IN RIGHT ANGLE BENDS OR HOOKS SHALL CONFORM TO THE REQUIREMENTS OF ACI 318.

C12 CAST-IN-PLACE CONCRETE ANCHORS
ANCHORS SHALL BE HEADED BOLTS OF ASTM F1554 GRADE 55 MATERIAL WITH ASTM A563 HEAVY HEXAGONAL NUTS AND ASTM A36 PLATE WASHERS WITH MINIMUM SIZE CONFORMING TO TABLE 14-2 OF THE CURRENT AISC STEEL CONSTRUCTION MANUAL, UNLESS NOTED OTHERWISE. ALTERNATELY, ANCHORS SHALL BE THREADED AND NUTTED ROD CONFORMING TO ASTM F1554 GRADE 55 (WITH SUPPLEMENT S1) WITH THE EMBEDDED NUT THREADED ON AND WELDED TO THE ROD. ALL MATERIALS EXPOSED TO MOISTURE OR WEATHER SHALL BE HOT DIP GALVANIZED UNLESS NOTED OTHERWISE.

C13 POST-INSTALLED CONCRETE ANCHORS
MECHANICAL (EXPANSION) ANCHORS SHALL BE SIMPSON STRONG-BOLT 2 OR APPROVED EQUAL. ADHESIVE ANCHORS SHALL BE HILTI HIT HY 200-R ADHESIVE ANCHORING SYSTEM OR APPROVED EQUAL. POST-INSTALLED ANCHORS SHALL NOT BE SUBJECT TO VIBRATORY OR SHOCK LOADS. INSTALL ANCHORS IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. ALL MATERIALS TO BE HOT DIP GALVANIZED UNLESS NOTED OTHERWISE.

C14 EXPANSION/ISOLATION JOINTS
PREFORMED EXPANSION/ISOLATION JOINT FILLER SHALL BE NONEXTRUDING, RESILIENT BITUMINOUS TYPE CONFORMING TO ASTM D1751. MATERIAL THICKNESS SHALL BE 1/4 INCH FOR EXPANSION/ISOLATION JOINTS, UNLESS NOTED OTHERWISE.

C15 CONSTRUCTION JOINTS
LOCATION OF ANY CONSTRUCTION JOINTS NOT SHOWN ON THE DRAWINGS SHALL HAVE THE APPROVAL OF THE ENGINEER. ALL CONSTRUCTION JOINTS SHALL BE ROUGHENED TO A MINIMUM 1/4" AMPLITUDE AND SHALL BE THOROUGHLY CLEANED TO REMOVE GREASE, LOOSE CONCRETE, AND LAITENCE OR OTHER BOND REDUCING MATERIAL. SATURATE SURFACE DRY PRIOR TO PLACING FRESH CONCRETE.

C16 CHAMFERS
EXCEPT AS OTHERWISE REQUIRED, EXPOSED CONCRETE CORNERS AND EDGES SHALL HAVE 3/4" CHAMFERS. RE-ENTRANT CORNERS SHALL NOT HAVE FILLETS.

C17 CONCRETE SPECIFICATIONS
THE NOTES ABOVE SHALL SERVE AS MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE IN PROJECT DOCUMENTS.

I. SPECIAL INSPECTION
SPECIAL INSPECTIONS SHALL BE CARRIED OUT ACCORDING TO THE PROJECT SPECIFICATIONS.

O. STRUCTURAL OBSERVATIONS
STRUCTURAL OBSERVATIONS SHALL CONFORM TO SECTION 1709 OF THE 2009 INTERNATIONAL BUILDING CODE. THE OWNER SHALL EMPLOY A REGISTERED DESIGN PROFESSIONAL (R.D.P.) TO PERFORM STRUCTURAL OBSERVATION. THE R.D.P. SHALL PERFORM VISUAL OBSERVATION OF THE STRUCTURAL SYSTEM FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES AND AT COMPLETION OF THE STRUCTURAL SYSTEM. AT COMPLETION OF THE WORK INCLUDED IN THE PERMIT, THE R.D.P. SHALL SUBMIT TO THE BUILDING OFFICIAL AND THE ENGINEER A WRITTEN STATEMENT THAT THE OBSERVATIONS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT HAVE NOT BEEN RESOLVED.

STRUCTURAL OBSERVATION DOES NOT INCLUDE OR WAIVE THE RESPONSIBILITY FOR THE INSPECTION REQUIRED BY SECTION 109 OR 1704 OF THE IBC.

STRUCTURAL OBSERVATIONS SHALL BE MADE AS A MINIMUM AT THE FOLLOWING STAGES IN THE CONSTRUCTION:

1. VERIFICATION OF SOIL BEARING CAPACITY AT FOOTINGS
2. VERIFICATION OF LATERAL SYSTEMS FOR CONFORMANCE TO CONTRACT DOCUMENTS

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STATE OF ALASKA
49th
HAMID REZA NADERI-ASRAMI
No. SE 13969
REGISTERED PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION	BY

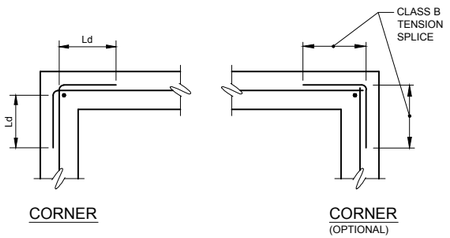
CITY AND BOROUGH OF JUNEAU
E16-126. DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

GENERAL STRUCTURAL NOTES

Project No.:	135-12554-15003
Designed By:	TJT
Drawn By:	TJT
Checked By:	HRN

S-001

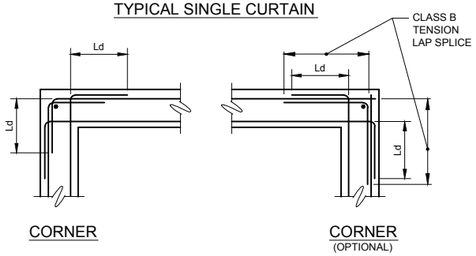
Bar Measures 1 inch



CORNER

CORNER
(OPTIONAL)

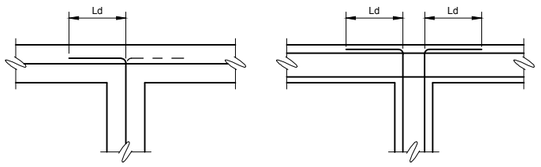
TYPICAL SINGLE CURTAIN



CORNER

CORNER
(OPTIONAL)

TYPICAL DOUBLE CURTAIN



SINGLE CURTAIN

DOUBLE CURTAIN
(OPTIONAL)

TYPICAL INTERSECTION

REINFORCING AT WALL INTERSECTIONS

1 DETAIL
SCALE: NONE

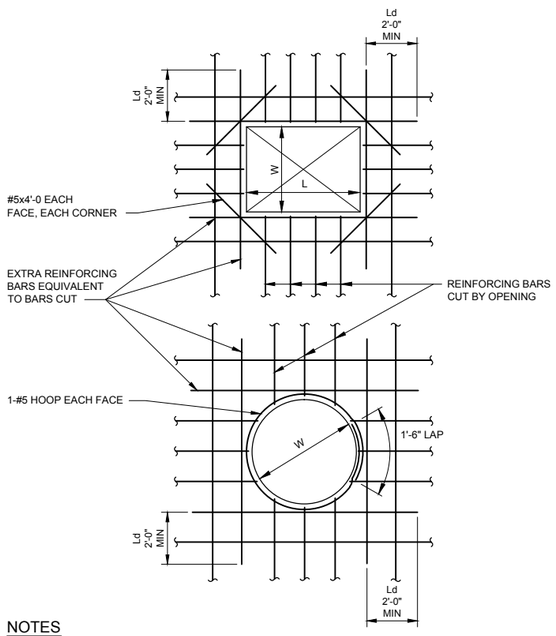
TENSION DEVELOPMENT AND SPLICE LENGTHS							
BAR SIZE	Ld		CLASS B TENSION LAP		STD 90° HOOK		
	TOP BARS (NOTE 2)	OTHER BARS	TOP BARS (NOTE 2)	OTHER BARS	Ldh	HOOK LENGTH	BEND DIA
#3	17	13	22	17	7	5	3
#4	23	17	29	23	9	6	3
#5	28	22	36	28	11	8	4
#6	34	26	44	34	13	9	5
#7	49	38	63	49	15	11	6
#8	56	43	72	56	17	12	6
#9	63	48	81	63	20	14	10
#10	71	54	92	71	22	16	11
#11	78	60	102	78	24	17	12

NOTES

1. FOR GRADE 60 UNCOATED BARS AND NORMAL WEIGHT CONCRETE, □c □ 5000 PSI.
2. "TOP BARS" ARE HORIZONTAL REINFORCING BARS WHERE 12" OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE.

REINFORCING DEVELOPMENT AND LAP SPLICE LENGTHS

2 DETAIL

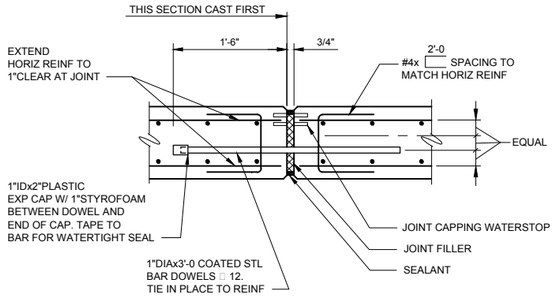


NOTES

1. REINFORCEMENT IN OTHER DIRECTION SHALL BE TREATED IN A SIMILAR MANNER.
2. "W" AND "L" □ DIMENSION OF OPENING. FOR CIRCULAR OPENINGS, "W"□ DIAMETER.
3. ALL OPENINGS IN WALLS AND SLABS LARGER THAN OR EQUAL TO 10" IN ANY ONE DIRECTION SHALL CONFORM TO DETAILS.
4. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR SLAB AND WALL OPENINGS NOT SHOWN ON STRUCTURAL DRAWINGS.
5. SUPPLEMENTARY BARS MAY BE OMITTED WHERE OPENING IS FRAMED BY BEAMS.
6. OPENING DETAILS SHOWN ARE TYPICAL UNLESS NOTED OTHERWISE.
7. THE NUMBER OF ADDITIONAL BARS AT EACH SIDE OF THE OPENING EQUALS HALF THE NUMBER OF TYPICAL REINFORCING BARS THAT ARE INTERRUPTED BY THE OPENING.

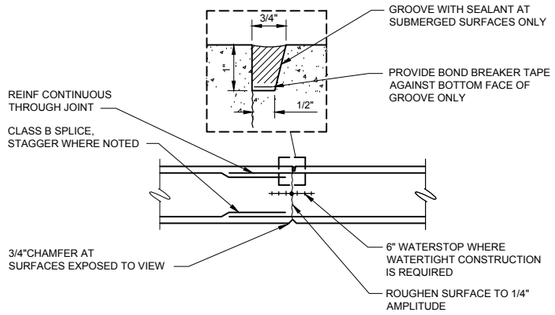
REINFORCING AT WALL AND SLAB OPENINGS

3 DETAIL
SCALE: NONE



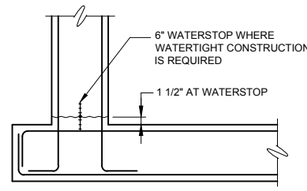
EXPANSION JOINT

4 DETAIL
SCALE: NONE



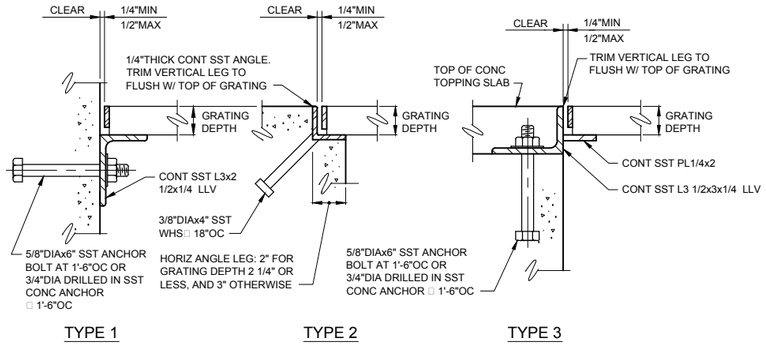
TYPICAL CONSTRUCTION JOINT
AT VERTICAL WALL OR STRUCTURAL SLAB
HYDRAULIC STRUCTURES

5 DETAIL
SCALE: NONE



WALL BASE CONSTRUCTION JOINT

6 DETAIL
SCALE: NONE



TYPE 1 TYPE 2 TYPE 3

GRATING SUPPORT

7 DETAIL
SCALE: NONE

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STATE OF ALASKA
49th
HAMID REZA NADERI-ASRAMI
No. SE 13969
REGISTERED PROFESSIONAL ENGINEER

MARK	DATE	DESCRIPTION	BY

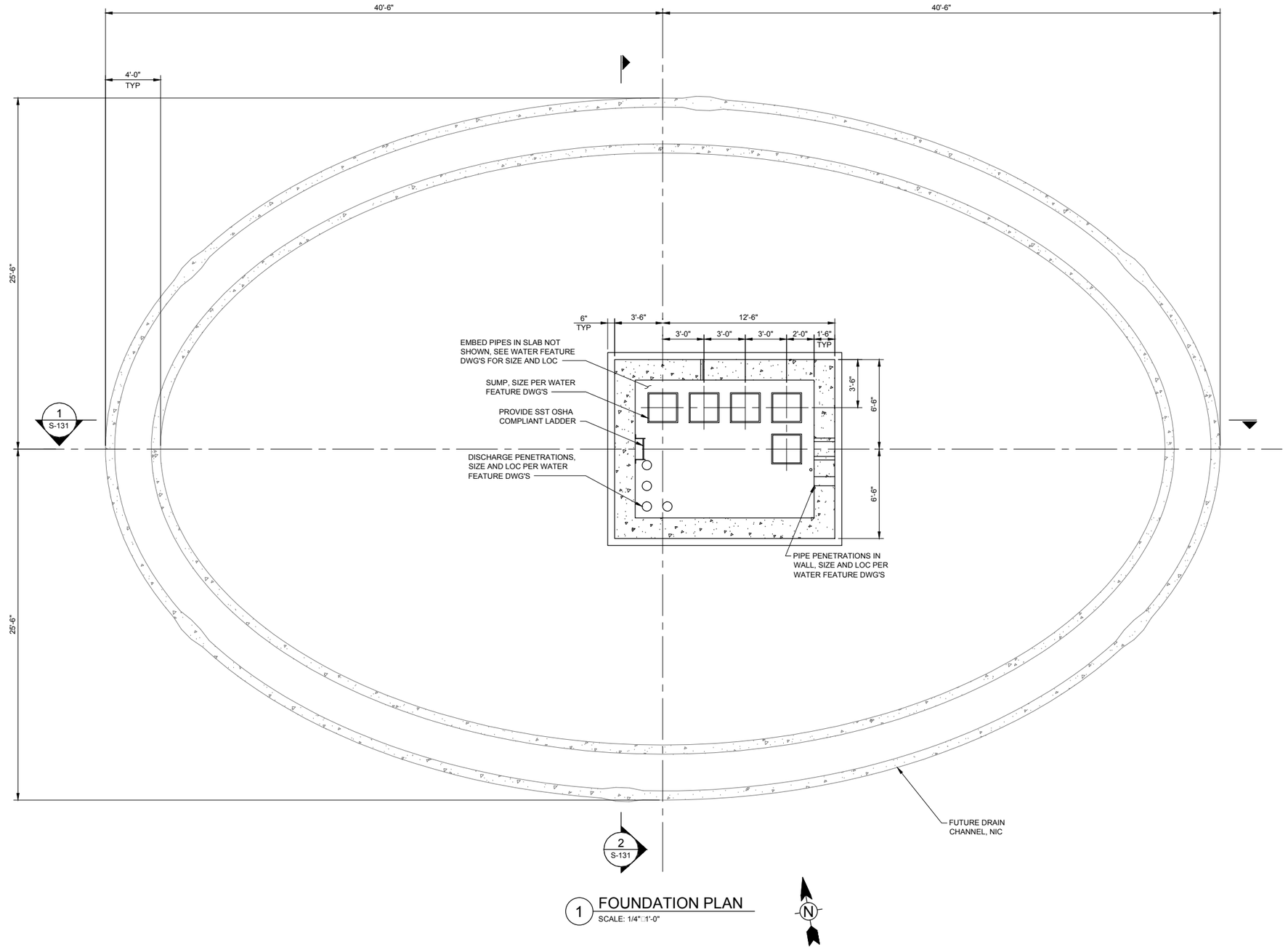
CITY AND BOROUGH OF JUNEAU
E16-126 DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

TYPICAL STRUCTURAL DETAILS

Project No.:	135-12554-15003
Designed By:	TJT
Drawn By:	TJT
Checked By:	HRN

S-002

Bar Measures 1 inch



1 FOUNDATION PLAN
SCALE: 1/4"□1'-0"

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MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
E16-126, DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK

PHASE 1 SITEWORK

FOUNDATION PLAN BRIDGE PARK SCULPTURE AND POOL

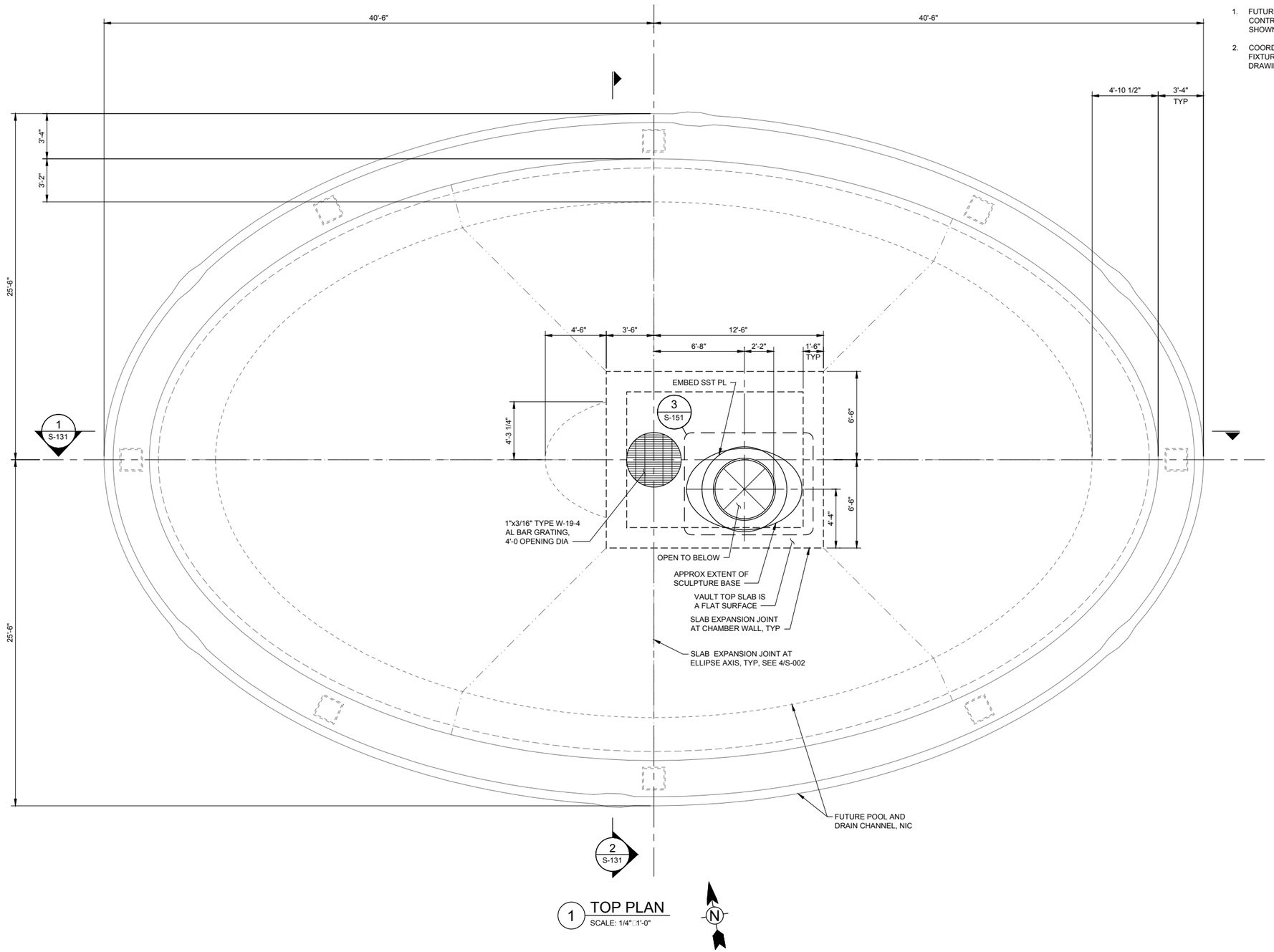
Project No.:	135-12554-15003
Designed By:	TJT
Drawn By:	TJT
Checked By:	HRN

S-101

Bar Measures 1 inch

NOTES

1. FUTURE POOL AND DRAIN CHANNEL IS NOT IN CONTRACT, TO BE INSTALLED BY OTHERS, AND IS SHOWN FOR DESIGN COORDINATION ONLY.
2. COORDINATE ALL EMBEDS, PIPING, CONDUIT, AND FIXTURE PENETRATIONS WITH WESCO WATER FEATURE DRAWINGS AND "POUR ITEM" QUOTATIONS.



1 TOP PLAN
SCALE: 1/4" = 1'-0"

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MARK	DATE	DESCRIPTION	BY

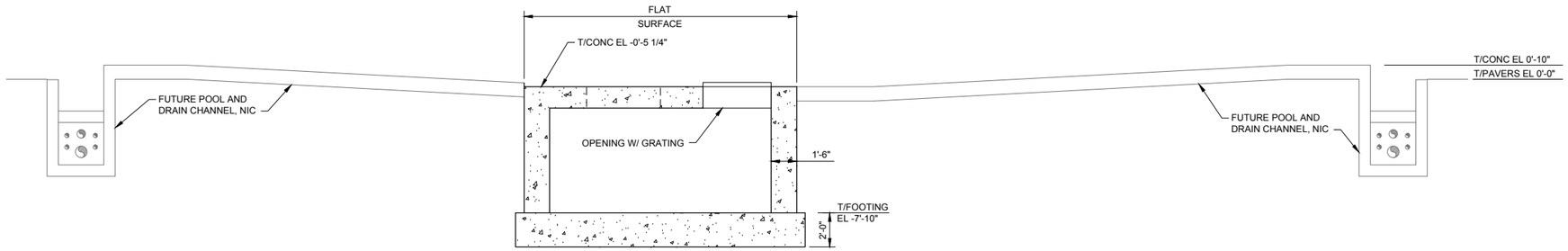
CITY AND BOROUGH OF JUNEAU
E16-126, DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

TOP PLAN
BRIDGE PARK SCULPTURE AND POOL

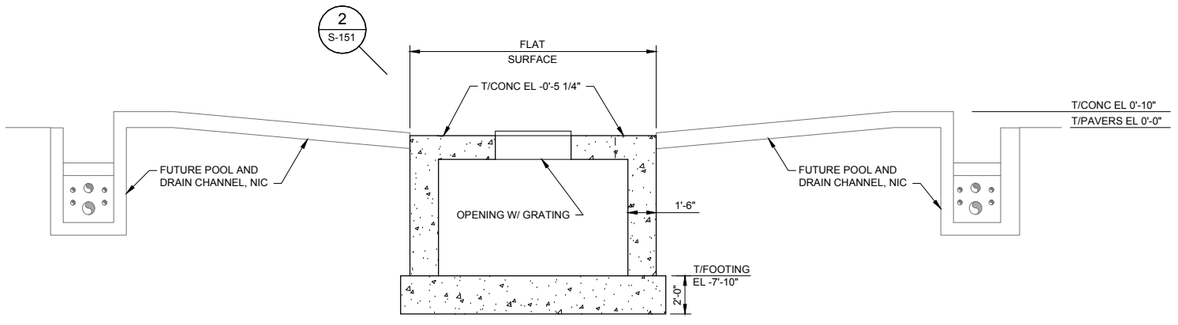
Project No.:	135-12554-15003
Designed By:	TJT
Drawn By:	TJT
Checked By:	HRN

S-102

Bar Measures 1 inch



1 S-101 SECTION
SCALE: 1/4"=1'-0"



2 S-101 SECTION
SCALE: 1/4"=1'-0"

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49th
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MARK	DATE	DESCRIPTION	BY

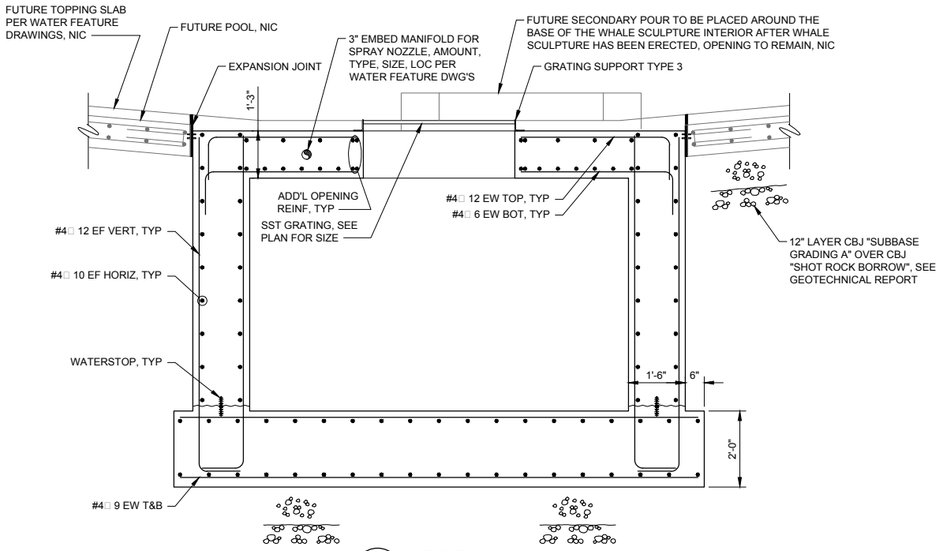
CITY AND BOROUGH OF JUNEAU
E16-126. DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

BRIDGE PARK SCULTPURE AND POOL SECTIONS

Project No.:	135-12554-15003
Designed By:	TJT
Drawn By:	TJT
Checked By:	HRN

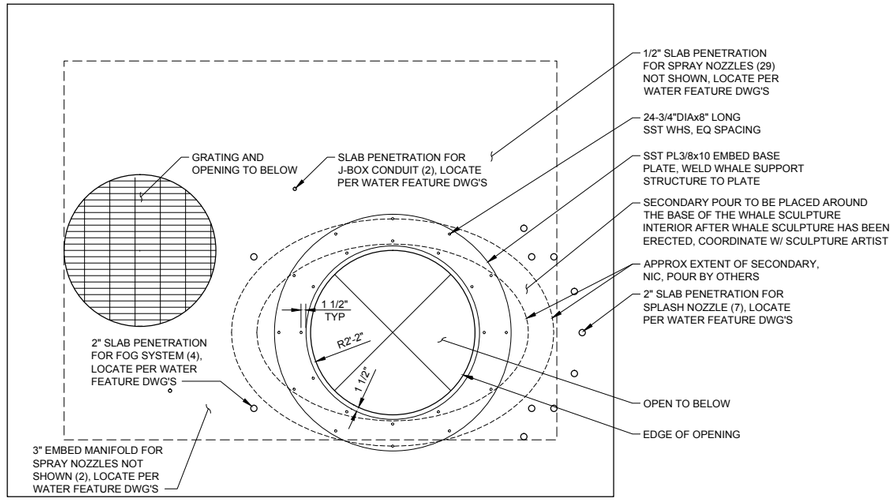
S-131

Bar Measures 1 inch



1 NOT USED
SCALE: N/A

2 SECTION
S-131
SCALE: 1/2"@1'-0"



3 PARTIAL PLAN
S-102
SCALE: 1/2"@1'-0"

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No. SE 13969

MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
E16-126. DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

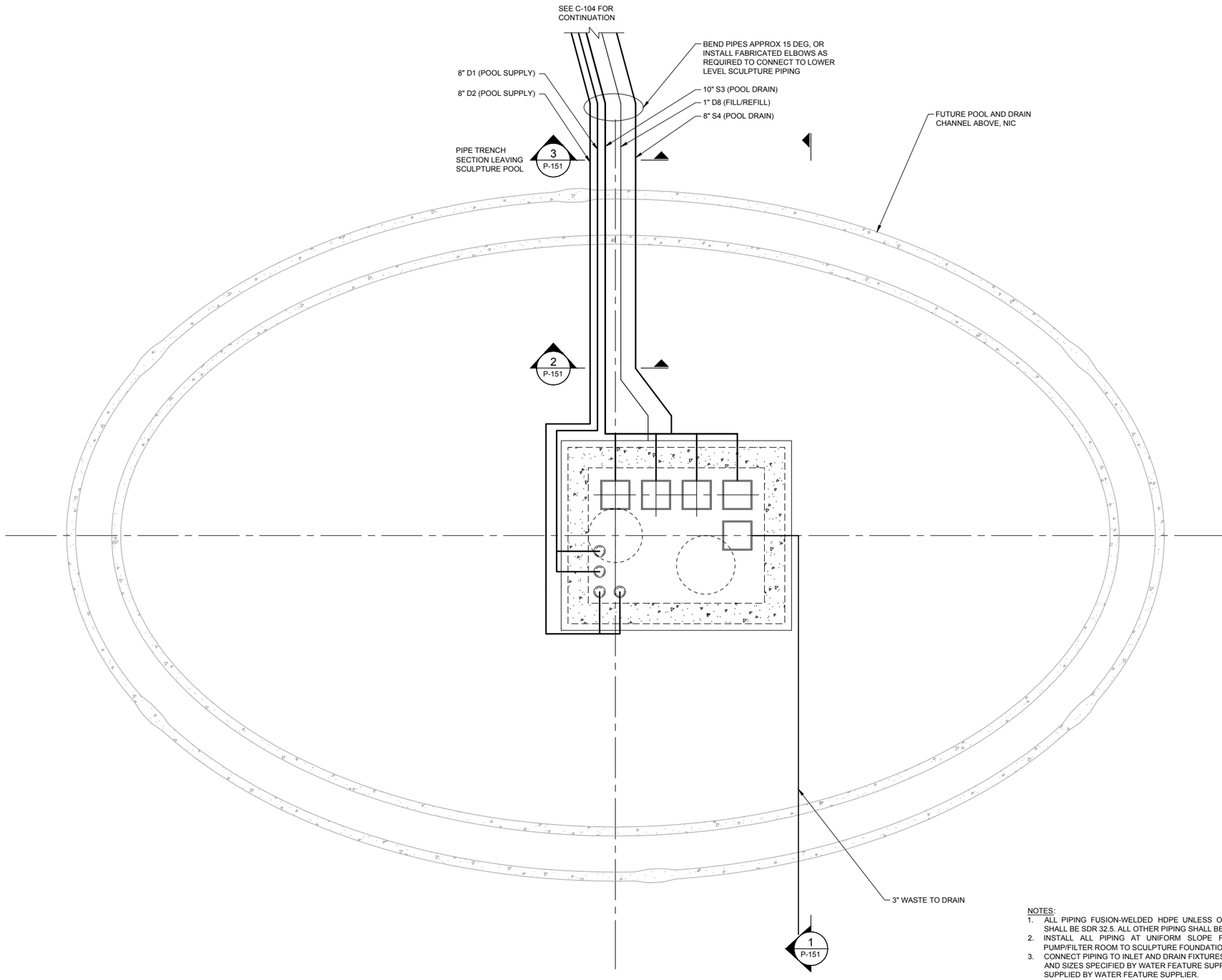
BRIDGE PARK STRUCTURAL DETAILS

Project No.:	135-12554-15003
Designed By:	TJT
Drawn By:	TJT
Checked By:	HRN

S-151

Bar Measures 1 inch

11/19/2015 2:20:06 PM - P:\12554\135-12554-15003\CAD\SHEETFILES\PHASE 1 RE-BID\S-151 PH01 DETAILS BRIDGE PARK.DWG - TIPTON, TIM



NOTES:
1. ALL PIPING FUSION-WELDED HDPE UNLESS OTHERWISE NOTED. DRAIN PIPING SHALL BE SDR 32.5. ALL OTHER PIPING SHALL BE SDR 17
2. INSTALL ALL PIPING AT UNIFORM SLOPE FROM TERMINATION AT FUTURE PUMP/FILTER ROOM TO SCULPTURE FOUNDATION VAULT.
3. CONNECT PIPING TO INLET AND DRAIN FIXTURES INDICATED AT THE LOCATIONS AND SIZES SPECIFIED BY WATER FEATURE SUPPLIER. FIXTURES TO BE SUPPLIED BY WATER FEATURE SUPPLIER.

N

1 LOWER LEVEL PIPING PLAN
SCALE: 1/4"□1'-0"

0 2'-0" 4'-0" 8'-0"
SCALE: 1/4" □1'-0"

Bar Measures 1 inch

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No. SE 13969
REGISTERED PROFESSIONAL ENGINEER

STATE OF ALASKA 49th
DONALD R. BEARD
No. CE 4225
REGISTERED PROFESSIONAL ENGINEER

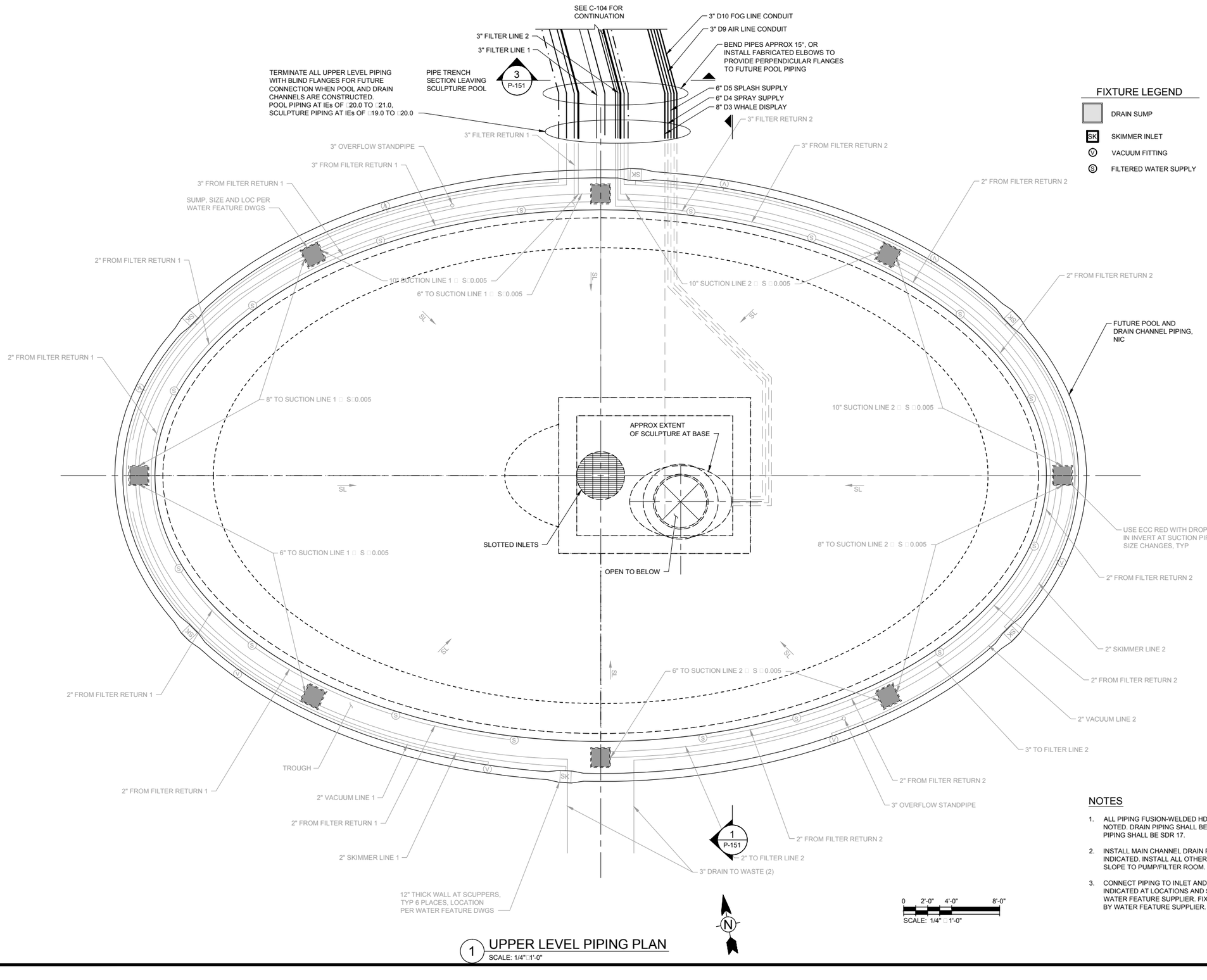
MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
E16-126, DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

LOWER LEVEL PIPING PLAN BRIDGE PARK SCULPTURE AND POOL

Project No.:	135-12554-15003
Designed By:	DRB
Drawn By:	BPL
Checked By:	DRB

P-101



FIXTURE LEGEND

- DRAIN SUMP
- SK — SKIMMER INLET
- V — VACUUM FITTING
- S — FILTERED WATER SUPPLY

NOTES

1. ALL PIPING FUSION-WELDED HDPE UNLESS OTHERWISE NOTED. DRAIN PIPING SHALL BE SDR 32.5. ALL OTHER PIPING SHALL BE SDR 17.
2. INSTALL MAIN CHANNEL DRAIN PIPING AT SLOPES INDICATED. INSTALL ALL OTHER PIPING AT UNIFORM SLOPE TO PUMP/FILTER ROOM.
3. CONNECT PIPING TO INLET AND DRAIN FIXTURES INDICATED AT LOCATIONS AND SIZES INDICATED BY WATER FEATURE SUPPLIER. FIXTURES TO BE SUPPLIED BY WATER FEATURE SUPPLIER.

1 UPPER LEVEL PIPING PLAN
SCALE: 1/4"=1'-0"

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MARK	DATE	DESCRIPTION	BY

CITY AND BOROUGH OF JUNEAU
E16-126: DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

UPPER LEVEL PIPING BRIDGE PARK SCULPTURE AND POOL

Project No.:	135-12554-15003
Designed By:	DRB
Drawn By:	BPL
Checked By:	DRB

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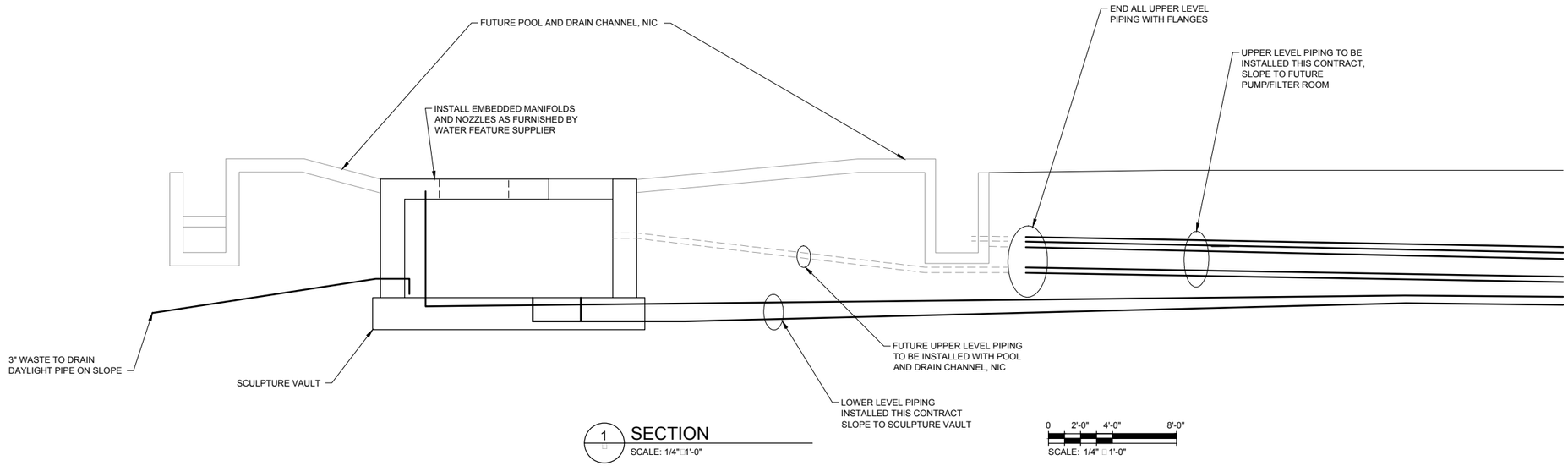
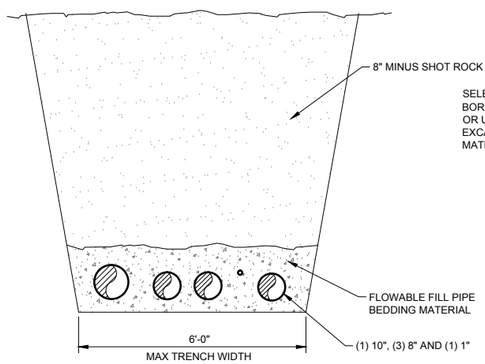
Bar Measures 1 inch



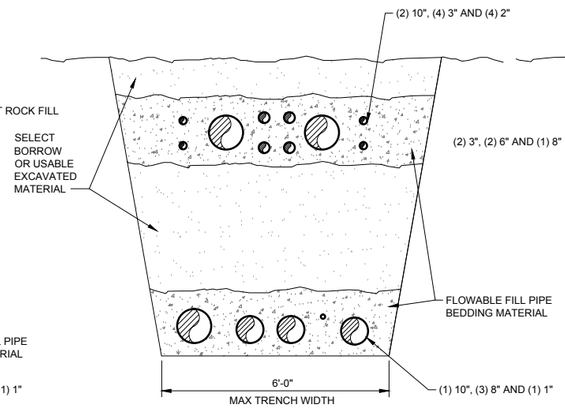
1 SECTION
SCALE: 1/4" = 1'-0"

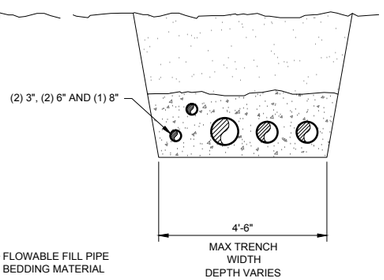
PIPE TRENCH SECTION NOTES :

1. ALL PIPE TO BE FUSION-WELDED HDPE UNLESS OTHERWISE NOTED.
2. FLOWABLE FILL BEDDING MAT'L TO BE LOW-STRENGTH SAND CEMENT MIX, MINIMUM 8" SLUMP, SUITABLE FOR FUTURE EXCAVATION WITH EXCAVATOR OR BACKHOE.
3. MINIMUM CLEARANCES: 4" B/W PIPES, 4" BELOW PIPE TO TRENCH BOTTOM, 6" BETWEEN PIPE AND TRENCH WALL.
4. MINIMUM 6" BEDDING COVER OVER PIPE.
5. PIPES TO BE SECURED IN PLACE AT UNIFORM SLOPES BEFORE BEDDING MAT'L IS PLACED USING SUPPORT SPACERS AND AND ANCHORS.
6. NO BACKFILL SHALL BE PLACED ABOVE PIPE BEDDING MATERIAL UNTIL THE BEDDING MAT'L HAS REACHED A COMPRESSIVE STRENGTH COMPERABLE TO COMPACTED SOIL, PER SPECIFICATIONS.

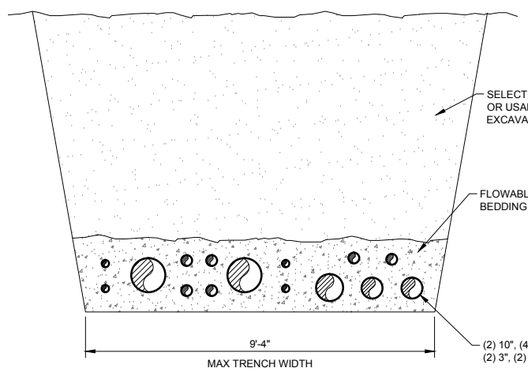


2 LOWER PIPE TRENCH SECT UNDER SCULPTURE POOL
SCALE: 1/2" = 1'-0"

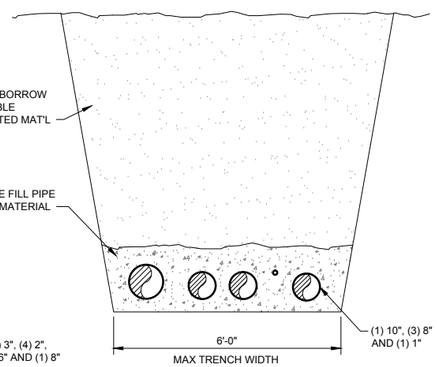




3 PIPE TRENCH SECTIONS LEAVING SCULPTURE POOL
SCALE: 1/2" = 1'-0"



4 UPPER LVL PIPE TRENCH SECT AT PUMP/FILTER ROOM
SCALE: 1/2" = 1'-0"



5 LOWER LVL PIPE TRENCH SECT AT PUMP/FILTER ROOM
SCALE: 1/2" = 1'-0"

0 1'-0" 2'-0" 4'-0"
SCALE: 1/2" = 1'-0"

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CITY AND BOROUGH OF JUNEAU
E16-126, DOWNTOWN SEAWALK - BRIDGE TO GOLD CREEK
PHASE 1 SITEWORK

PIPING DETAILS BRIDGE PARK SCULPTURE AND POOL

Project No.:	135-12554-15003
Designed By:	DRB
Drawn By:	BPL
Checked By:	DRB

P-151

Bar Measures 1 inch