

LAND USE	AREA AS SHOWN (AC)	% AS SHOWN	REQUIRED AREA (MIN/MAX)	REQUIRED % (MIN/MAX)
HOSPITAL/MOB/PARKING			52.36	80%
PHASE 1 *	48.34	74%		
PHASE 2	17.10	26%		
PHASE 1 OPEN SPACE TOTAL			13.08	20%
WETLANDS/FPL EASEMENT	11.83	18%		
LAKES	4.50	7%		
DRY DETENTION	2.15	3%		
OTHER OPEN SPACE	9.69	15%		
TOTAL PCD	65.44	100%	65.44	100%

\* PHASE 1 DEVELOPABLE AREA IS GREATER THAN PHASE 1 AREA IN THIS TABLE

# UTILITY RECORD DRAWINGS FOR

## SARASOTA MEMORIAL HOSPITAL - VENICE PHASE 1

### PARTIAL WATER SUBMITTAL ONLY

#### PART OF SECTION 33, TOWNSHIP 38S SOUTH, RANGE 19E EAST, SARASOTA COUNTY, FLORIDA

A DEVELOPMENT BY  
**SARASOTA COUNTY PUBLIC HOSPITAL BOARD**  
 1700 SOUTH TAMiami TRAIL  
 SARASOTA, FLORIDA 34239  
 (941) 917-2048

#### SITE DEVELOPMENT DATA:

PROJECT: SARASOTA MEMORIAL LAUREL ROAD ACUTE CARE  
 ENGINEER: STANTEC, INC.  
 6900 PROFESSIONAL PKWY EAST  
 SARASOTA, FL 34240

SURVEYOR: STANTEC, INC.  
 6900 PROFESSIONAL PKWY EAST  
 SARASOTA, FL 34240

DEVELOPER/OWNER: SARASOTA COUNTY PUBLIC HOSPITAL BOARD  
 1700 SOUTH TAMiami TRAIL  
 (941) 917-2048

ZONING: PCD

FDOT PERMIT APP#: 2019-0-194-00006  
 SR NUMBER: 93/1-75, SECTION: 17075, MP:25.545±

FLOOD ZONE: PER FIRM #12115C0243F  
 FLOOD ZONE B & C

EXISTING LAND USE: PASTURE - AGRICULTURE - VACANT

PROPOSED LAND USE: HOSPITAL + HEALTH CARE RELATED FACILITIES (COMMERCIAL)

SEWER PROVIDER: CITY OF VENICE WITH TEMPORARY SARASOTA COUNTY CONNECTION

WATER PROVIDER: CITY OF VENICE UTILITIES

ELECTRIC PROVIDER: FLORIDA POWER & LIGHT

GARBAGE: CITY OF VENICE

PROJECT AREA: 48.34 AC - PHASE 1\*  
 17.10 AC - PHASE 2  
 65.44 AC WITHIN PCD

\* PHASE 1 DEVELOPABLE AREA IS GREATER THAN PHASE 1 AREA

PID: PID # 038703-0001

DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD) OF 1988, (UNLESS SPECIFIED OTHERWISE)

CAMPUS PARKING CALCULATION TABLE:			
*LAND USE AND RATIO REQUIRED	TOTAL GSF OR BEDS	REQUIRED PARKING	PROPOSED PARKING
MOB (1 SPACE PER NON-STORAGE GSF)	48,000 NON-STORAGE GSF	320	320
HOSPITAL (1.5 SPACES PER BED)	80 BEDS	120	120
	TOTAL CAMPUS	440	440
	**TOTAL ADA SPACES REQUIRED	9	23
	TOTAL ADA SPACES PROVIDED		50

CAMPUS PARKING CALCULATION TABLE:			
LAND USE	TOTAL GSF OR BEDS	REQUIRED LOADING	PROPOSED LOADING
MOB	48,000 NON-STORAGE GSF		
HOSPITAL	80 BEDS/353,741 GSF		
CUMULATIVE GSF	431,741 GSF	7	13

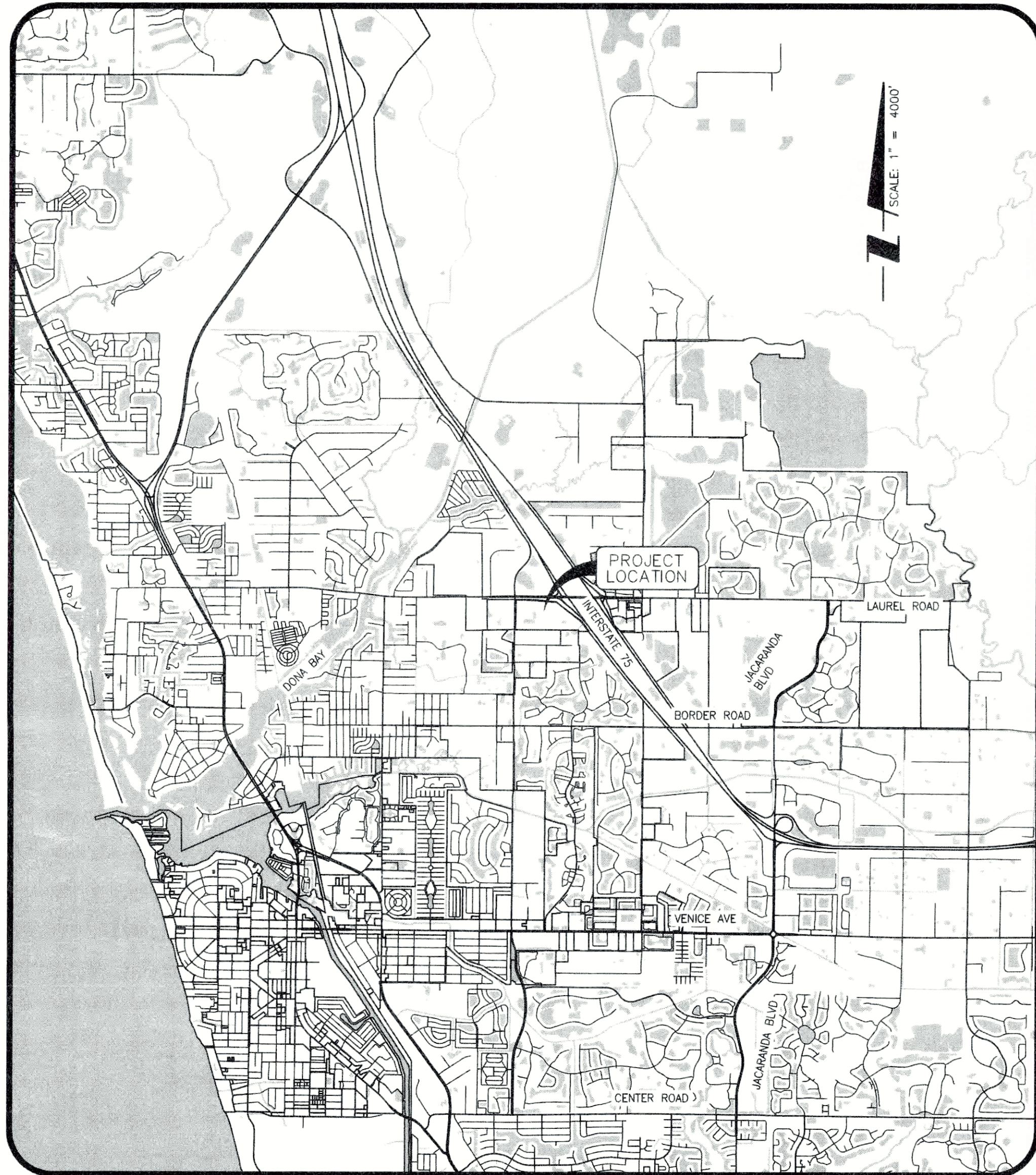
PER CITY ZONING CODE SEC 16-422 (D)  
 PER TABLE 208.2 FLORIDA ACCESSIBILITY CODE

SARASOTA COUNTY UTILITY CONSTRUCTION, FDOT AND FDOT WATER CITY OF VENICE WASTEWATER PERMITS ARE REQUIRED. (COUNTY SEWER CONNECTION TO BE PROVIDED ON A TEMPORARY BASIS; FUTURE CITY CONNECTION IS REQUIRED.)

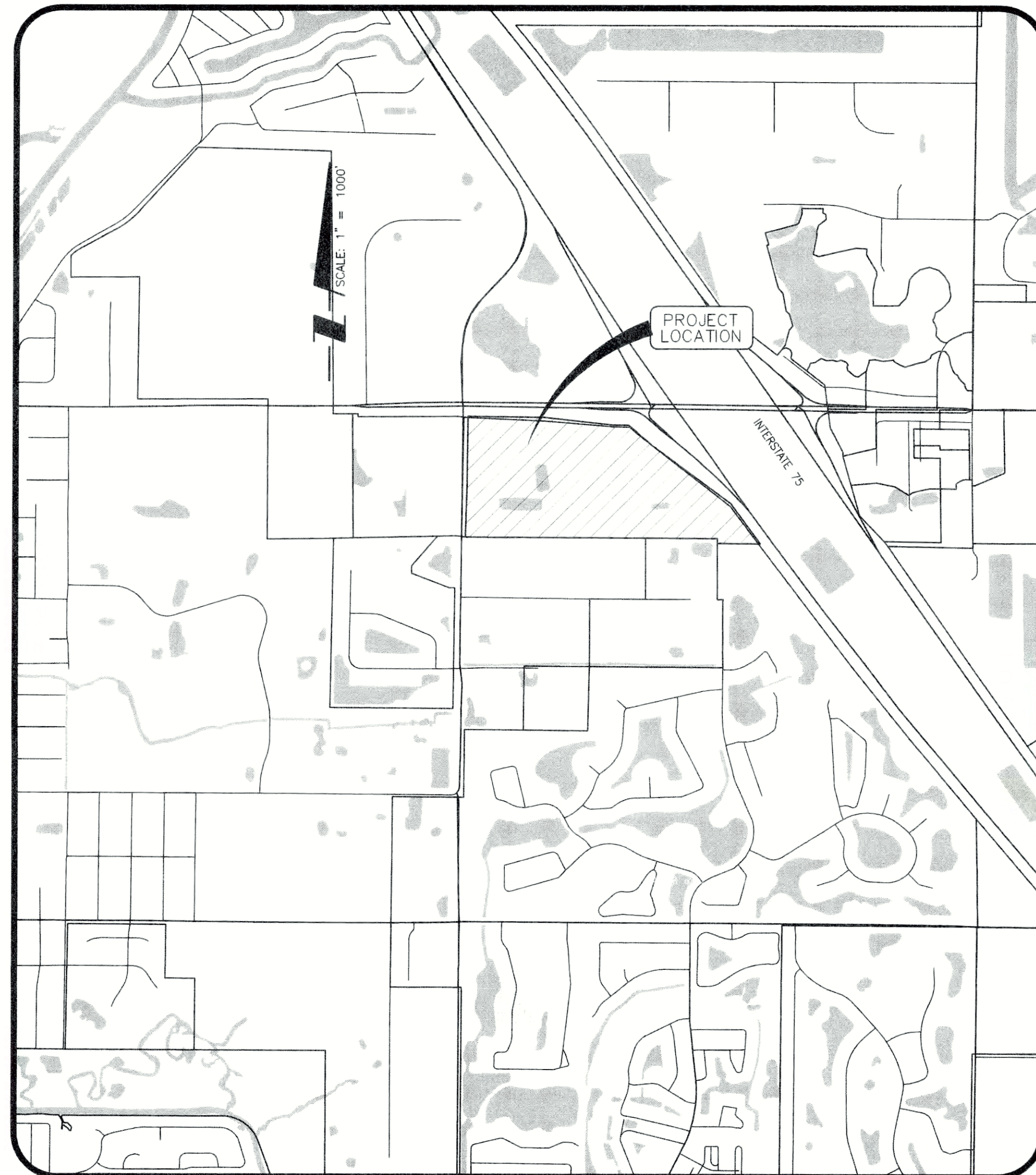
- GENERAL NOTES:
- THE OWNER IS RESPONSIBLE FOR THE MAINTENANCE OF THE COMMON AREAS, STORMWATER MANAGEMENT SYSTEM, IRRIGATION, ON SITE WATER, ON SITE SEWER AND ROADS. THE OFF SITE WATER SYSTEM SHALL BE TURNED OVER TO THE CITY OF VENICE FOR OWNERSHIP AND MAINTENANCE. THE OFF SITE WATER AND SANITARY SEWER SYSTEM SHALL BE TURNED OVER TO THE CITY OF VENICE FOR OWNERSHIP AND MAINTENANCE.
  - THE DATUM OF THE ELEVATIONS SHOWN ARE NAVD 1988
  - TO CONVERT FROM THE GRADES SHOWN HEREIN IN THE NAVD 1988 DATUM TO THE NAVD 1929 DATUM, ADD 1.24 FT.
  - DEVELOPMENT ON THE .465 ACRES IS CONSISTENT WITH THE LAND USE ILLUSTRATED ON THE PCD PLAN.
  - ANY WELLS ON SITE THAT WILL NOT BE USED MUST BE PLOTTED BY A LICENSED WELL DRILLING CONTRACTOR IN AN APPROVED MANNER PURSUANT TO RULE 400-3.33(1) F.A.C.
  - ANY WELL DISCOVERED DURING EXCAVATION, EARTHMOVING OR CONSTRUCTION MUST BE REPORTED TO THE SARASOTA COUNTY HEALTH DEPARTMENT, ENVIRONMENTAL HEALTH WITHIN 24 HOURS OF DISCOVERY.
  - IRRIGATION SHALL BE BY PRIVATE SYSTEM THROUGH LAKE AND WELL SUPPLEMENT.
  - ALL IMPROVEMENTS WILL COMPLY WITH THE LATEST VERSION OF THE STANDARD CITY DETAILS.
  - COMMON USE IMPROVEMENTS REGULATED BY THE CITY STANDARD DETAILS SHALL MEET THE MINIMUM DESIGN STANDARDS ESTABLISHED IN THE CITY STANDARD DETAILS AND SUBDIVISIONS DESIGN STANDARDS.

#### CITY OF VENICE NOTES:

- ALL WORK CONDUCTED IN THE CITY OF VENICE RIGHT-OF-WAY (ROW) WILL REQUIRE THE ISSUANCE OF A ROW PERMIT.
- ALL WORK CONDUCTED IN SARASOTA COUNTY AND/OR FDOT ROW SHALL REQUIRE A COPY OF THE ISSUED PERMIT.
- THREE REMOVAL PERMIT MUST BE OBTAINED FROM SARASOTA COUNTY NATURAL RESOURCES DEPARTMENT.
- POST DEVELOPMENT RUNOFF DOES NOT EXCEED PRE-DEVELOPMENT RUNOFF VOLUME OR RATE FOR A 24-HOUR, 25-YEAR STORM EVENT.
- ALL FIRE SERVICE BACKFLOW ASSEMBLIES SHALL BE INSTALLED BY A CERTIFIED CONTRACTOR WITH A CLASS I, II, OR V CERTIFICATE OF COMPETENCY ISSUED BY THE STATE FIRE MARSHALL AS PER F.S. 633.021
- CONSTRUCTION SITE MUST BE POSTED WITH 24-HOUR CONTACT INFORMATION.
- ALL UTILITIES, WHETHER PUBLIC OR PRIVATE, SHALL MEET CITY OF VENICE AND / OR SARASOTA COUNTY STANDARDS.
- CONTACT PUBLIC WORKS SOLID WASTE DIVISION (941-486-2422) FOR APPROVAL OF DUMPSTER LOCATION AND LAYOUT PRIOR TO CONSTRUCTION.
- ENGINEER'S QUANTITY ESTIMATE OF INFRASTRUCTURE IMPROVEMENTS (PHASE 1) :  
 LINEAR FEET OF RECLAIMED WATER 0 LF  
 LINEAR FEET OF (PUBLIC/PRIVATE) TREATABLE WATER MAIN 4,200 LF  
 LINEAR FEET OF GRAVITY SEWER MAIN 5,000 LF  
 LINEAR FEET OF FORCE MAIN 3,000 LF (EST)  
 NUMBER OF MANHOLES 23



LOCATION MAP



SITE MAP

#### ENGINEER'S CERTIFICATE

BASED ON THE RECORD INFORMATION SHOWN HEREON, CERTIFIED BY A FLORIDA LICENSED SURVEYOR AND MAPPER, I HERBY CERTIFY THAT THIS PROJECT'S IMPROVEMENTS HAVE BEEN CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED PLANS.



RYAN D. BRADY, P.E.  
 FLORIDA LICENSE # 84132

11-13-20  
 DATE



**Stantec**

6900 Professional Parkway East, Sarasota, FL 34240-8414  
 Phone 941-907-6900 • Fax 941-907-6910  
 Certificate of Authorization #27013 • www.stantec.com

**RECORD  
DRAWING**

NOTE: AS-BUILT INFORMATION IS SHOWN IN BRACKETS [ ]  
 NOTE: AS-BUILT INFORMATION PROVIDED BY CONTRACTOR IS SHOWN IN PARENTHESES ( )

#### AS-BUILT DRAWING

**CROSS SURVEYING, L.L.C.**

CERTIFICATE OF AUTHORIZATION LB 0007977  
 5055 OFFICE PARK BLVD, SUITE 101, BRANDENBURG, FLORIDA 34203  
 (941) 748-6340 (941) 596-9858 FAX

I HEREBY CERTIFY THAT THE AS-BUILT DRAWING OF THE IMPROVEMENTS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND A SEAL OF FLORIDA TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF A TRUE AND CORRECT REPRESENTATION OF THE IMPROVEMENTS AS SHOWN AND WERE COLLECTED IN THE FIELD BY A REPRESENTATIVE UNDER THE DIRECT SUPERVISION OF THE SURVEYOR AND MAPPER.

DATE OF CERTIFICATION 02-23-2020  
 DATE OF FIELD SURVEY 02-23-2020

#### INDEX TO SHEETS

SHEET NO.	DESCRIPTION
C-100	COVER
C-101	AERIAL LOCATION MAP
C-200	EXISTING CONDITIONS PLAN
C-300	MASTER SITE PLAN
C-301-307	SITE PLANS
C-400	MASTER GRADING AND DRAINAGE PLAN
C-401-407	GRADING AND DRAINAGE PLANS
C-500	MASTER WATER AND SEWER PLAN
C-501	PLAN AND PROFILE KEY SHEET
C-502	PINEBROOK ROAD WATER CONNECTION & DRIVEWAY A (STA 0 - 2+00)
C-503	DRIVEWAY A (STA 2+00 - 6+00)
C-504	DRIVEWAY A (STA 6+00 - 10+00)
C-505	DRIVEWAY A (STA 10+00 - 14+00)
C-506	DRIVEWAY A (STA 14+00 - 18+00)
C-507	DRIVEWAY A (STA 18+00 - 21+00)
C-508	LAUREL ROAD WATER CONNECTION
C-509	DRIVEWAY B (STA 30+00 - 34+00)
C-510	DRIVEWAY B (STA 34+00 - 38+00)
C-511	DRIVEWAY B (STA 38+00 - 42+00)
C-512	DRIVEWAY C (STA 50+00 - 54+00)
C-513	DRIVEWAY C (STA 54+00 - 58+00)
C-514	DRIVEWAY C (STA 58+00 - 62+00)
C-515	DRIVEWAY C (STA 62+00 - 66+00)
C-516	DRIVEWAY C (STA 66+00 - 70+00)
C-517	DRIVEWAY C (STA 70+00 - 74+00)
C-518	DRIVEWAY C (STA 74+00 - 78+00)
C-519	DRIVEWAY C (STA 78+00 - 82+00)
C-520	DRIVEWAY C (STA 82+00 - 86+00)
C-521	DRIVEWAY C (STA 86+00 - 88+00) & LIFT STATION
C-522	DRIVEWAY D (STA 90+00 - 91+50)
C-523	DRIVEWAY D (STA 91+50 - 94+00)
C-524	DRIVEWAY D (STA 94+00 - 96+00)
C-601	PAVING DETAILS
C-602	DRAINAGE DETAILS
C-603	CONTROL STRUCTURE DETAILS
C-604	WEIR AND TRENCH DETAILS
C-605	STORM STRUCTURE TABLE / STORM WATER SUMP PUMP
C-606	GENERAL DETAILS
C-607	WATER DETAILS
C-608	WASTEWATER DETAILS
C-701	LIFT STATION DETAILS
C-702	LIFT STATION DETAILS
C-800	LAUREL ROAD IMPROVEMENTS
C-801	PINEBROOK ROAD IMPROVEMENTS
C-802	LAUREL ROAD SIGNING AND MARKING PLAN
C-803	PINEBROOK ROAD SIGN AND MARKING PLAN
C-804	SIGNAL ADJUSTMENT PLAN
C-805-806	OFFSITE UTILITY IMPROVEMENTS
C-900	BEST MANAGEMENT PRACTICES PLAN
C-901	BEST MANAGEMENT PRACTICES DETAILS
C-1000	LIFT STATION DETAIL - COV

**APPROVED**  
**November 19, 2020**  
**RECORD DRAWINGS**

NO.	DATE	DESCRIPTION	BY
1	06/04/20	CB1028	RLB/117073
2	03/04/20	CB1020	RLB/117073
3	12/04/19	CB1015	RTD/28450
4	07/31/19	CB1005	RTD/28450
5	04/24/19	CONSTRUCTION DOCUMENTS	RTD/28450

#### STATUS : REVISIONS

PROJECT SURVEYOR ROBERT R. CUNNINGHAM P.S.M. No. 3924	PROJECT PLANNER KATIE LABARRI, AICP	PROJECT MANAGER MELANIE DELEHANTY SMITH, P.E. FLORIDA LICENSE NO. 75447
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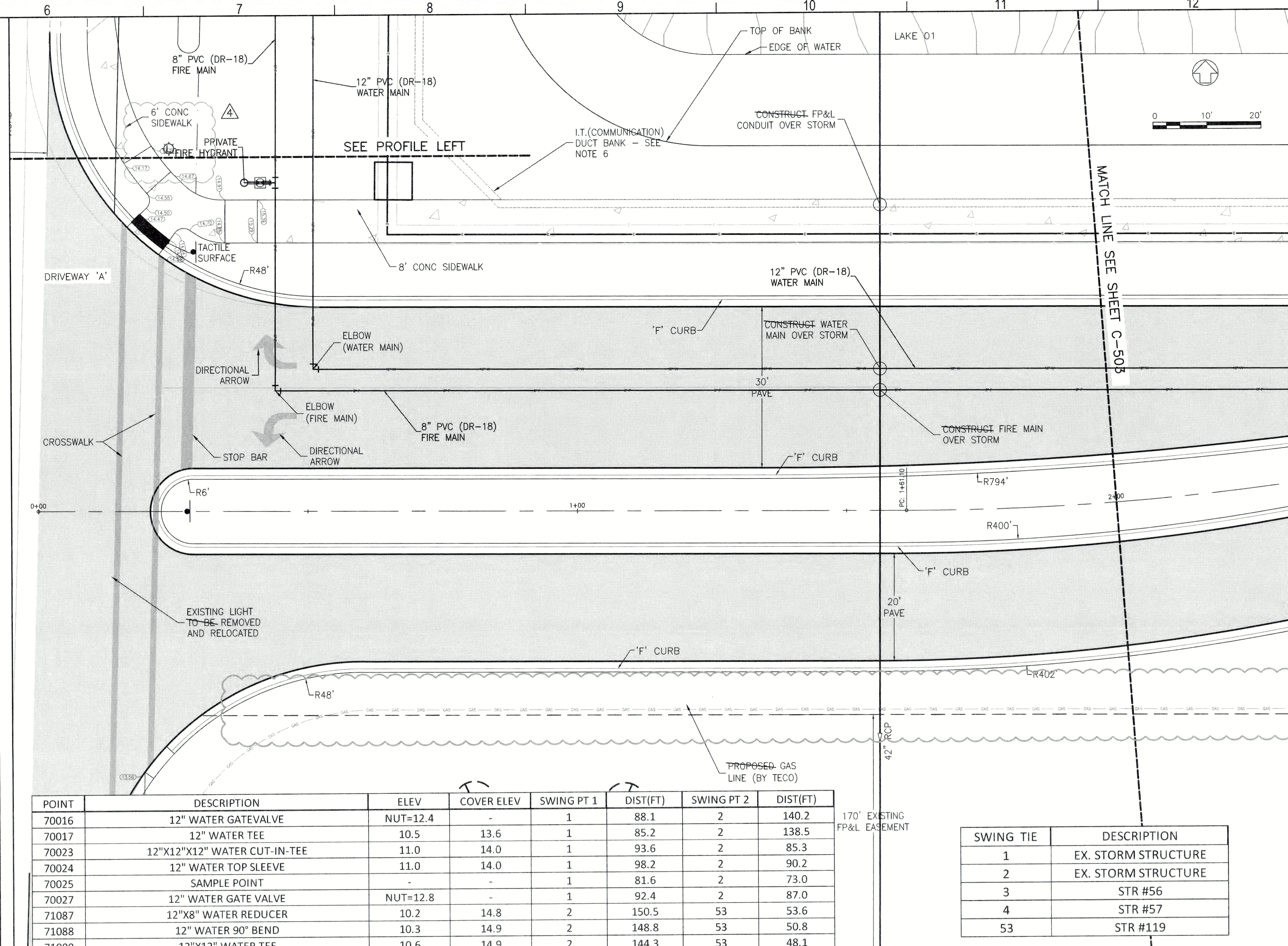
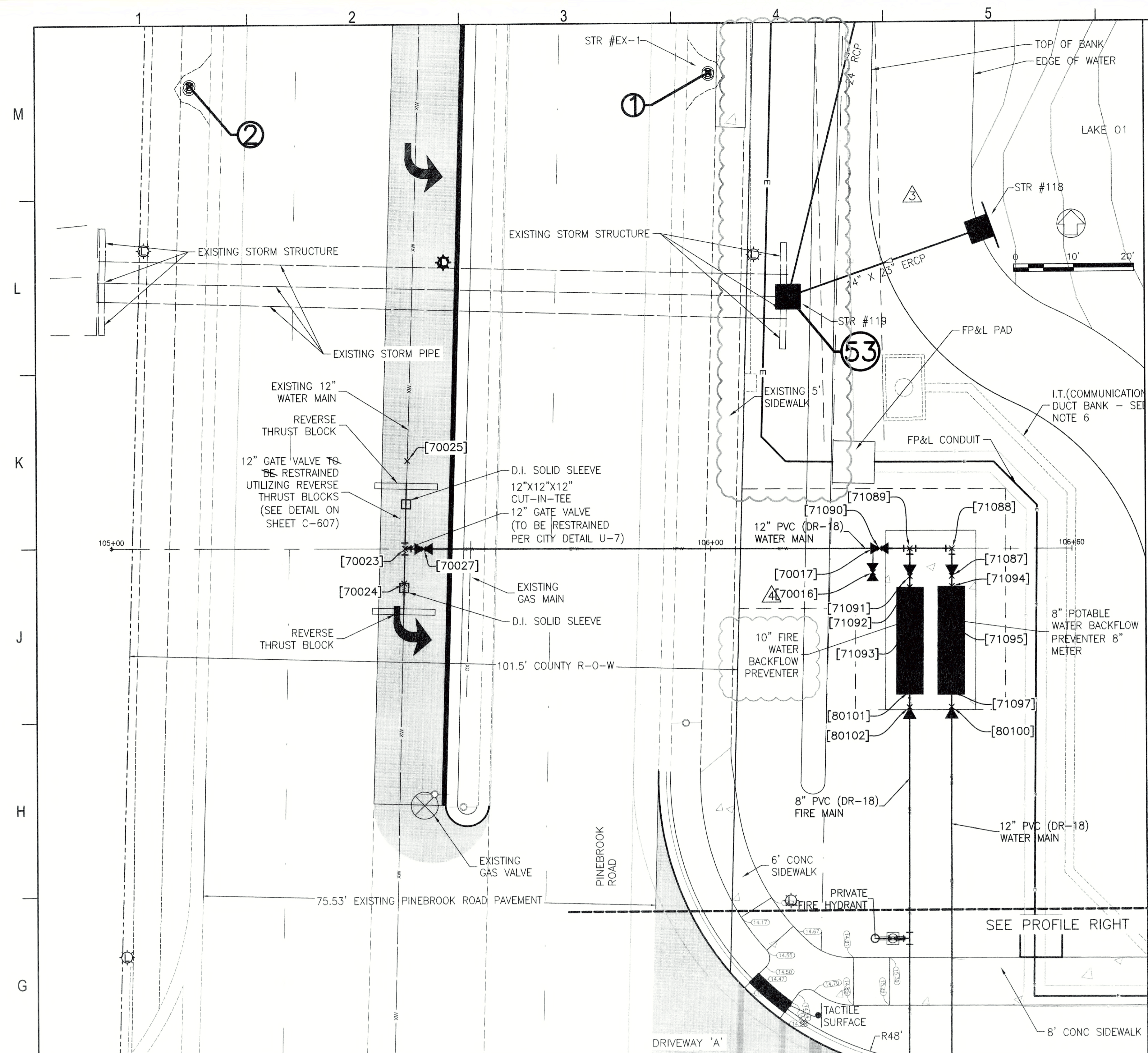
DATE \_\_\_\_\_ CHECKED BY \_\_\_\_\_

RESERVED FOR STATUS AND DATE STAMPS

PROJECT NUMBER  
**215614375**

DATE  
**07/2019**

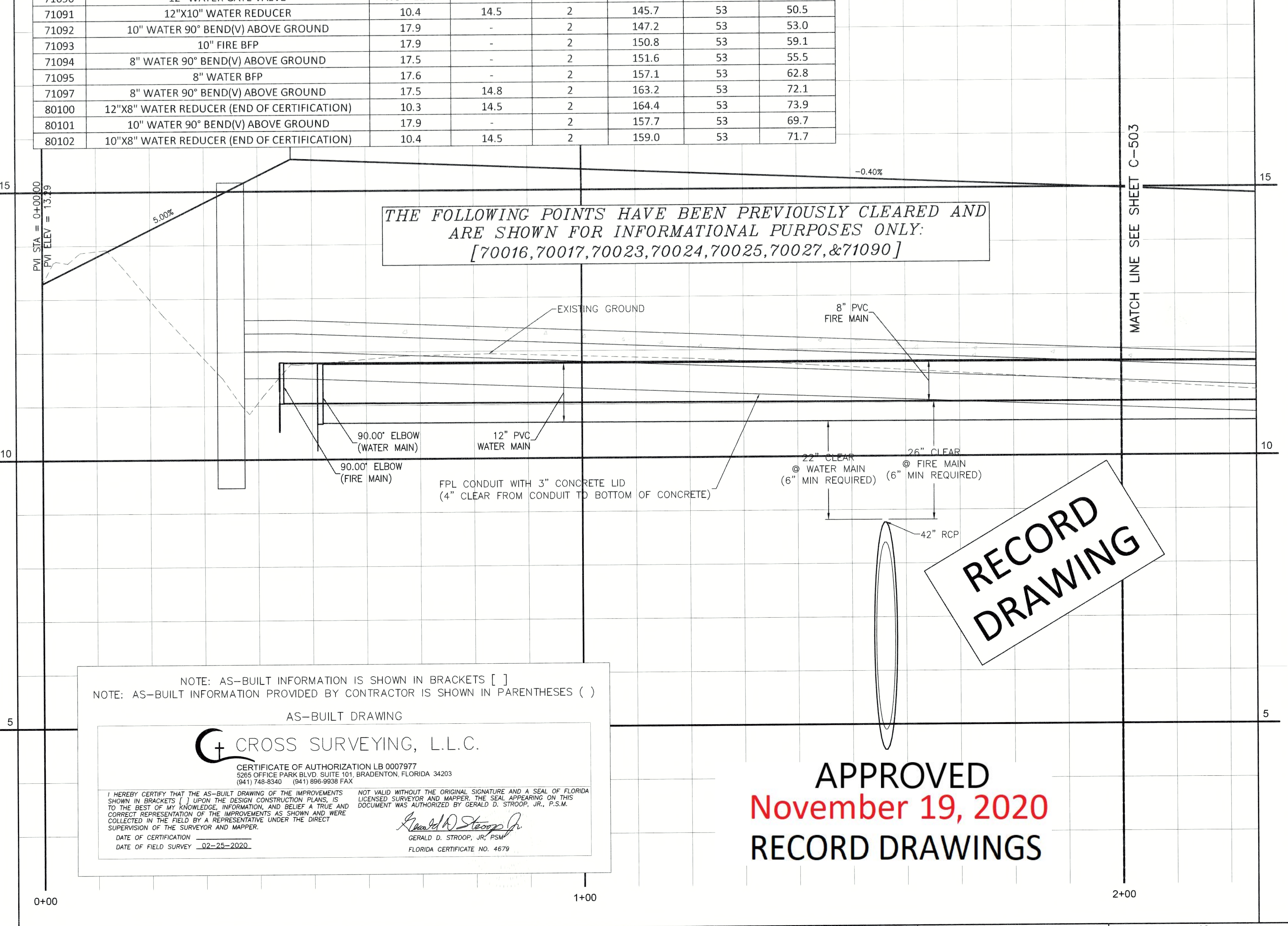
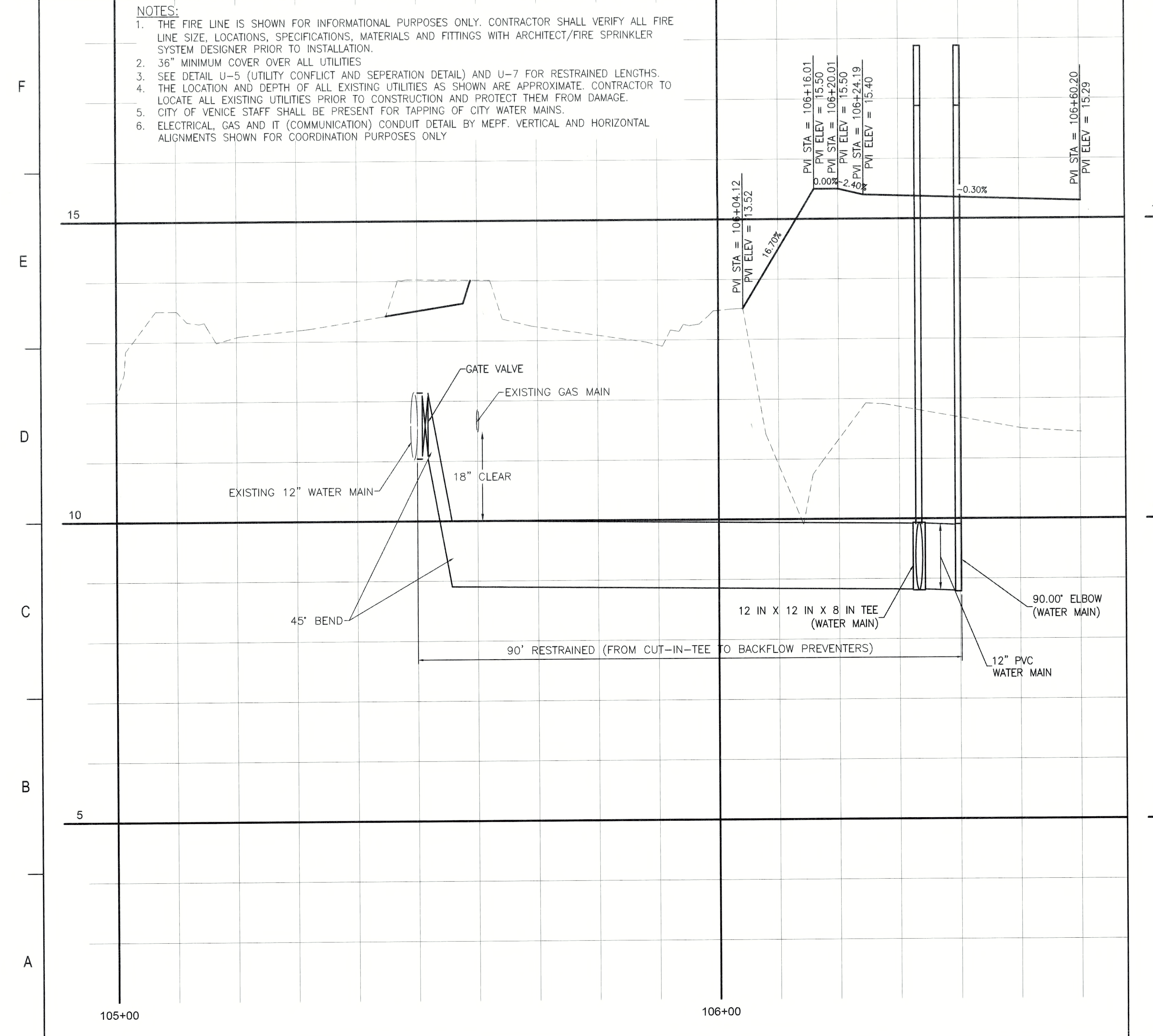
INDEX NUMBER  
**ASB C-100**



POINT	DESCRIPTION	ELEV.	COVER ELEV.	SWING PT 1	DIST(FT)	SWING PT 2	DIST(FT)
70016	12" WATER GATE VALVE	NUT=12.4	-	1	88.1	2	140.2
70017	12" WATER TEE	10.5	13.6	1	85.2	2	138.5
70023	12"x12"x12" WATER CUT-IN-TEE	11.0	14.0	1	93.6	2	85.3
70024	12" WATER TOP SLEEVE	11.0	14.0	1	98.2	2	90.2
70025	SAMPLE POINT	-	-	1	81.6	2	73.0
70027	12" WATER GATE VALVE	NUT=12.8	-	1	92.4	2	87.0
71087	12"x8" WATER REDUCER	10.2	14.8	2	150.5	53	53.6
71088	12" WATER 90° BEND	10.3	14.9	2	148.8	53	50.8
71089	12"x12" WATER TEE	10.6	14.9	2	144.3	53	48.1
71090	12" WATER GATE VALVE	NUT=12.6	-	2	141.3	53	46.2
71091	12"x10" WATER REDUCER	10.4	14.5	2	145.7	53	50.5
71092	10" WATER 90° BEND(V) ABOVE GROUND	17.9	-	2	147.2	53	53.0
71093	10" FIRE BFP	17.9	-	2	150.8	53	59.1
71094	8" WATER 90° BEND(V) ABOVE GROUND	17.5	-	2	151.6	53	55.5
71095	8" WATER BFP	17.6	-	2	157.1	53	62.8
71097	8" WATER 90° BEND(V) ABOVE GROUND	17.5	14.8	2	163.2	53	72.1
80100	12"x8" WATER REDUCER (END OF CERTIFICATION)	10.3	14.5	2	164.4	53	73.9
80101	10" WATER 90° BEND(V) ABOVE GROUND	17.9	-	2	157.7	53	69.7
80102	10"x8" WATER REDUCER (END OF CERTIFICATION)	10.4	14.5	2	159.0	53	71.7

SWING TIE	DESCRIPTION
1	EX. STORM STRUCTURE
2	EX. STORM STRUCTURE
3	STR #56
4	STR #57
53	STR #119

- NOTES:
- THE FIRE LINE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL VERIFY ALL FIRE LINE SIZE, LOCATIONS, SPECIFICATIONS, MATERIALS AND FITTINGS WITH ARCHITECT/FIRE SPRINKLER SYSTEM DESIGNER PRIOR TO INSTALLATION.
  - 36" MINIMUM COVER OVER ALL UTILITIES.
  - SEE DETAIL U-5 (UTILITY CONFLICT AND SEPERATION DETAIL) AND U-7 FOR RESTRAINED LENGTHS.
  - THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND PROTECT THEM FROM DAMAGE.
  - CITY OF VENICE STAFF SHALL BE PRESENT FOR TAPPING OF CITY WATER MAINS.
  - ELECTRICAL, GAS AND IT (COMMUNICATION) CONDUIT DETAIL BY MEFP. VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN FOR COORDINATION PURPOSES ONLY.



THE FOLLOWING POINTS HAVE BEEN PREVIOUSLY CLEARED AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY:  
[70016, 70017, 70023, 70024, 70025, 70027, & 71090]

**RECORD  
DRAWING**

NOTE: AS-BUILT INFORMATION IS SHOWN IN BRACKETS [ ]  
NOTE: AS-BUILT INFORMATION PROVIDED BY CONTRACTOR IS SHOWN IN PARENTHESES ( )

AS-BUILT DRAWING

**CROSS SURVEYING, L.L.C.**

CERTIFICATE OF AUTHORIZATION LB 0007877  
2005 OFFICE PARK BLVD SUITE 101 BRADENTON, FLORIDA 34203  
(841) 785-5544 (841) 895-9538 FAX

I HEREBY CERTIFY THAT THE AS-BUILT DRAWING OF THE IMPROVEMENTS SHOWN IN BRACKETS [ ] UPON THE DESIGN CONSTRUCTION PLANS, IS TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF A TRUE AND CORRECT REPRESENTATION OF THE IMPROVEMENTS AS SHOWN AND WERE COLLECTED IN THE FIELD BY A REPRESENTATIVE UNDER THE DIRECT SUPERVISION OF THE SURVEYOR AND MAPPER.

DATE OF CERTIFICATION 02-25-2020  
DATE OF FIELD SURVEY 02-25-2020

GERALD D. STROOP, JR., P.S.M.  
FLORIDA CERTIFICATE NO. 4679

**APPROVED  
November 19, 2020  
RECORD DRAWINGS**

**Flad Architects**  
Flad & Associates of Florida, Inc.  
AA0000558  
2202 N. Westshore Blvd., Ste. 125  
Tampa, FL 33607  
Tel: 813-850-6612  
www.flad.com

**Flad Structural Engineers**  
Flad & Associates, Inc.  
27676  
644 Science Drive  
Madison, WI 53711  
Tel: 608-238-2661  
Fax: 608-238-6727  
www.flad.com

**AEI Affiliated Engineers**  
LICENSE # CA 5140  
Affiliated Engineers SE, Inc.  
777 S Harbour Island Blvd. #450  
Tampa, FL 33602  
Tel: (813) 405-3800

**Stantec**  
LICENSE # 75477  
STANTEC CONSULTING SERVICES  
6900 Professional Parkway East  
Sarasota, FL 34240  
Tel: (941) 907-6900

Project Key Plan

Rev	Date	Description
1	7/20/20	RECORD DRAWINGS
2	8/24/20	CB1028
3	9/04/20	CB1029
4	12/04/19	CB1016
5	7/21/19	CB1035
6	12/24/19	Construction Documents

Project Title

**smh**

**Sarasota County Public Hospital District**  
2600 Laurel Road  
Nokomis, FL 34275  
**90 Bed New Hospital**

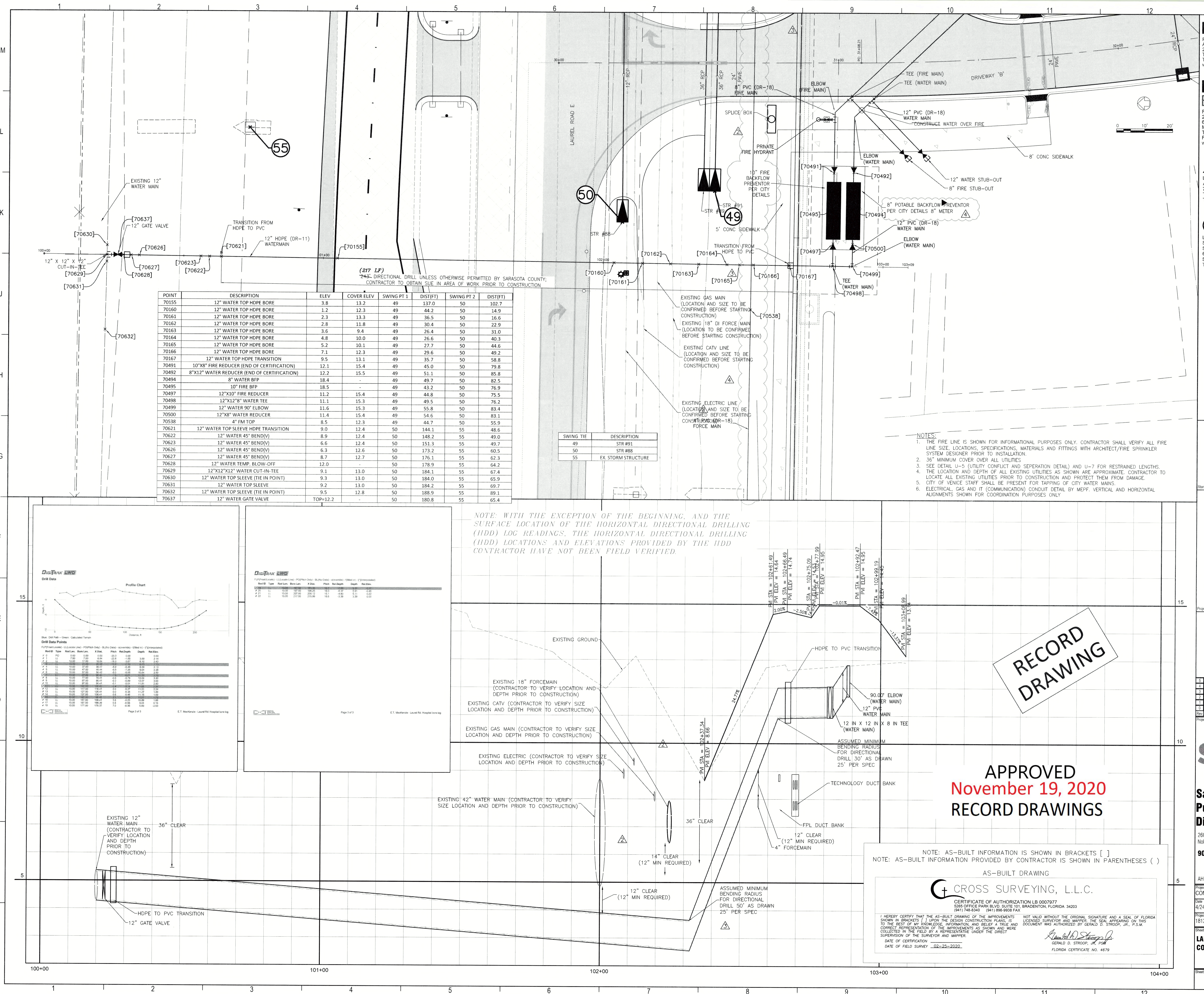
AHCA #: 23/23960161-101-1

Project Phase  
**CONSTRUCTION DOCUMENTS**

Date 4/24/2019	Drawn By STANTEC
Project Number 18122-00	Checked By STANTEC

Sheet Title  
**PINEBROOK ROAD WATER CONNECTION & DRIVEWAY 'A' (STA 0 + 2+00)**

Sheet Number <b>C-502</b>	Rev. No. <b>4</b>
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POINT	DESCRIPTION	ELEV	COVER ELEV	SWING PT 1	DIST(FT)	SWING PT 2	DIST(FT)
70155	12" WATER TOP HDPE BORE	3.8	13.2	49	137.0	50	102.7
70160	12" WATER TOP HDPE BORE	1.2	12.3	49	44.2	50	14.9
70161	12" WATER TOP HDPE BORE	2.3	13.3	49	36.5	50	16.6
70162	12" WATER TOP HDPE BORE	2.8	11.8	49	30.4	50	22.9
70163	12" WATER TOP HDPE BORE	3.6	9.4	49	26.4	50	31.0
70164	12" WATER TOP HDPE BORE	4.8	10.0	49	26.6	50	40.3
70165	12" WATER TOP HDPE BORE	5.2	10.1	49	27.7	50	44.6
70166	12" WATER TOP HDPE BORE	7.1	12.3	49	29.6	50	49.2
70167	12" WATER TOP HDPE TRANSITION	9.5	13.1	49	35.7	50	58.8
70491	10"X8" FIRE REDUCER (END OF CERTIFICATION)	12.1	15.4	49	45.0	50	79.8
70492	8"X12" WATER REDUCER (END OF CERTIFICATION)	12.2	15.5	49	51.1	50	85.8
70494	8" WATER BFP	18.4	-	49	49.7	50	82.5
70495	10" FIRE BFP	18.5	-	49	43.2	50	76.9
70497	12"X10" FIRE REDUCER	11.2	15.4	49	44.8	50	75.5
70498	12"X12"8" WATER TEE	11.1	15.3	49	49.5	50	76.2
70499	12" WATER 90° ELBOW	11.6	15.3	49	55.8	50	83.4
70500	12"X8" WATER REDUCER	11.4	15.4	49	54.6	50	83.1
70538	4" FM TOP	8.5	12.3	49	44.7	50	55.9
70621	12" WATER TOP SLEEVE HDPE TRANSITION	9.0	12.4	50	144.1	55	48.6
70622	12" WATER 45° BEND(V)	8.9	12.4	50	148.2	55	49.0
70623	12" WATER 45° BEND(V)	6.6	12.4	50	151.3	55	49.7
70626	12" WATER 45° BEND(V)	6.3	12.6	50	173.2	55	60.5
70627	12" WATER 45° BEND(V)	8.7	12.7	50	176.1	55	62.3
70628	12" WATER TEMP. BLOW-OFF	12.0	-	50	178.9	55	64.2
70629	12"X12"X12" WATER CUT-IN-TEE	9.1	13.0	50	184.1	55	67.4
70630	12" WATER TOP SLEEVE (TIE IN POINT)	9.3	13.0	50	184.0	55	65.9
70631	12" WATER TOP SLEEVE	9.2	13.0	50	184.2	55	69.7
70632	12" WATER TOP SLEEVE (TIE IN POINT)	9.5	12.8	50	188.9	55	89.1
70637	12" WATER GATE VALVE	TOP=12.2	-	50	180.8	55	65.4

SWING TIE	DESCRIPTION
49	STR #91
50	STR #88
55	EX STORM STRUCTURE

- NOTES:
1. THE FIRE LINE IS SHOWN FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL VERIFY ALL FIRE LINE SIZE, LOCATIONS, SPECIFICATIONS, MATERIALS AND FITTINGS WITH ARCHITECT/FIRE SPRINKLER SYSTEM DESIGNER PRIOR TO INSTALLATION.
  2. 36" MINIMUM COVER OVER ALL UTILITIES.
  3. SEE DETAIL U-5 (UTILITY CONFLICT AND SEPERATION DETAIL) AND U-7 FOR RESTRAINED LENGTHS.
  4. THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AS SHOWN ARE APPROXIMATE. CONTRACTOR TO LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND PROTECT THEM FROM DAMAGE.
  5. CITY OF VENICE STAFF SHALL BE PRESENT FOR TAPPING OF CITY WATER MAINS.
  6. ELECTRICAL, GAS AND IT (COMMUNICATION) CONDUIT DETAIL BY MEFP. VERTICAL AND HORIZONTAL ALIGNMENTS SHOWN FOR COORDINATION PURPOSES ONLY.

NOTE: WITH THE EXCEPTION OF THE BEGINNING, AND THE SURFACE LOCATION OF THE HORIZONTAL DIRECTIONAL DRILLING (HDD) LOG READINGS, THE HORIZONTAL DIRECTIONAL DRILLING (HDD) LOCATIONS AND ELEVATIONS PROVIDED BY THE HDD CONTRACTOR HAVE NOT BEEN FIELD VERIFIED.

RECORD  
DRAWING

APPROVED  
November 19, 2020  
RECORD DRAWINGS

NOTE: AS-BUILT INFORMATION IS SHOWN IN BRACKETS [ ]  
NOTE: AS-BUILT INFORMATION PROVIDED BY CONTRACTOR IS SHOWN IN PARENTHESES ( )

AS-BUILT DRAWING

CROSS SURVEYING, L.L.C.

CERTIFICATE OF AUTHORIZATION LB 0007977

6285 OFFICE PARK BLVD, SUITE 101, BRADENTON, FLORIDA 34203

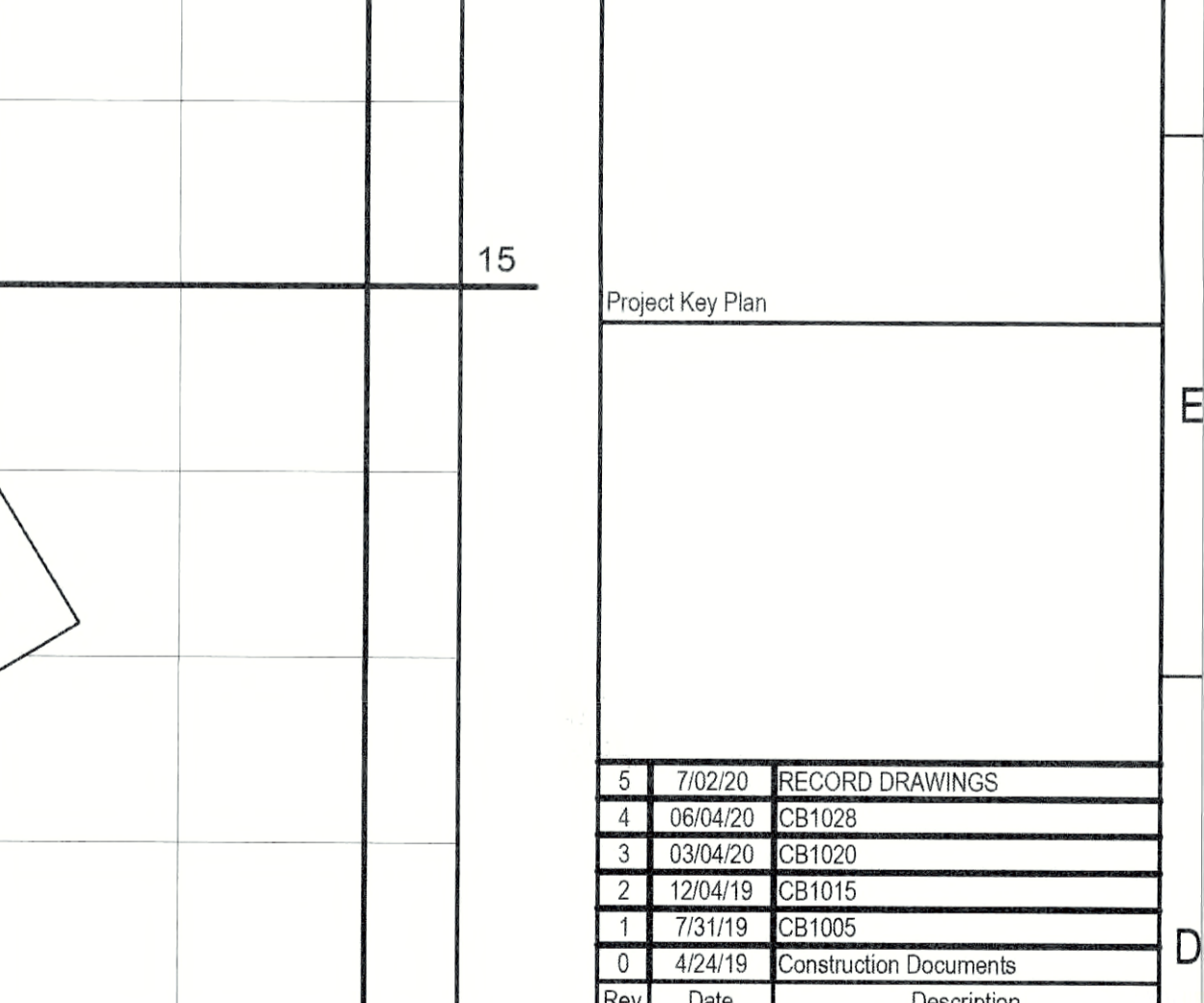
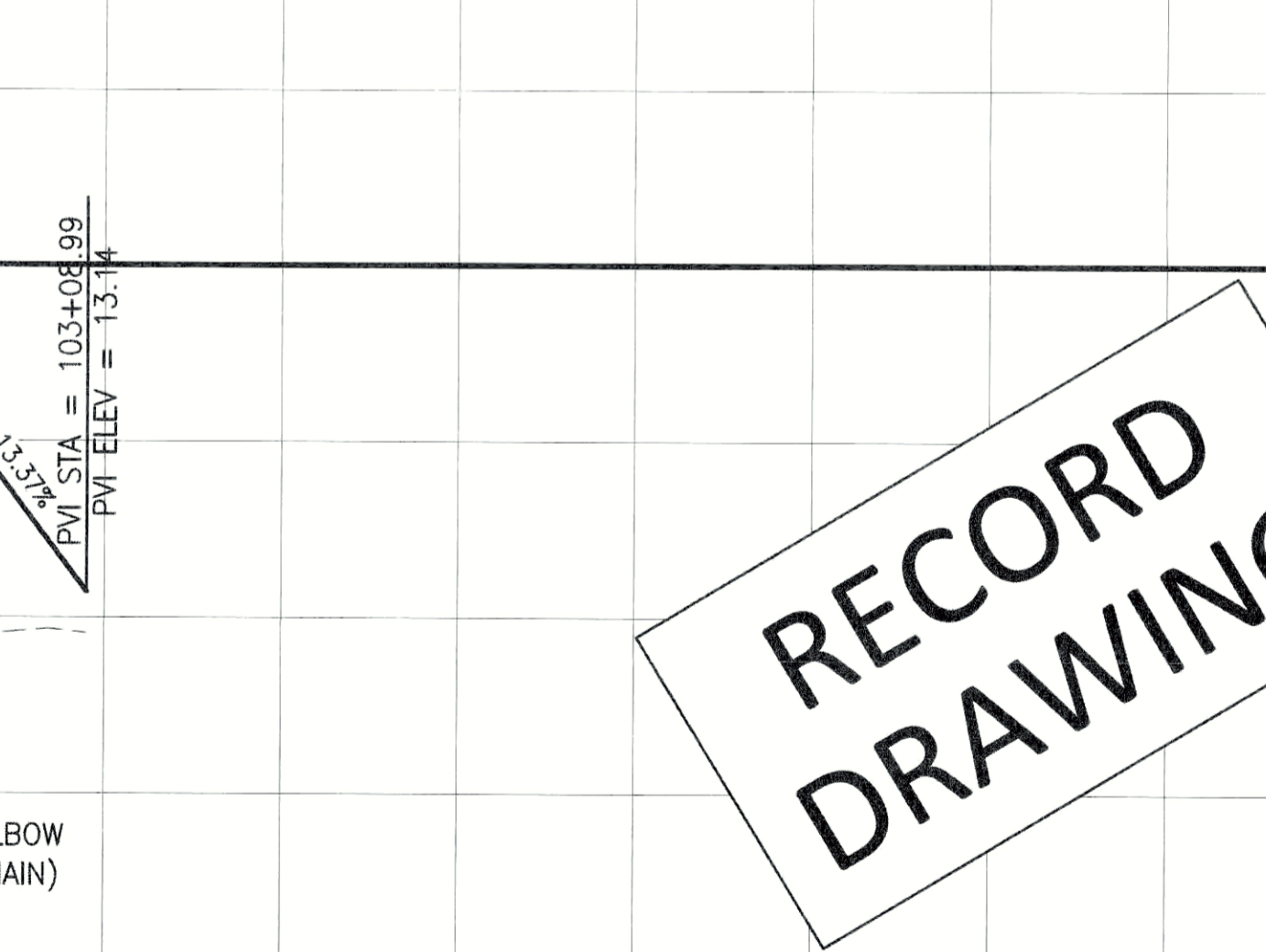
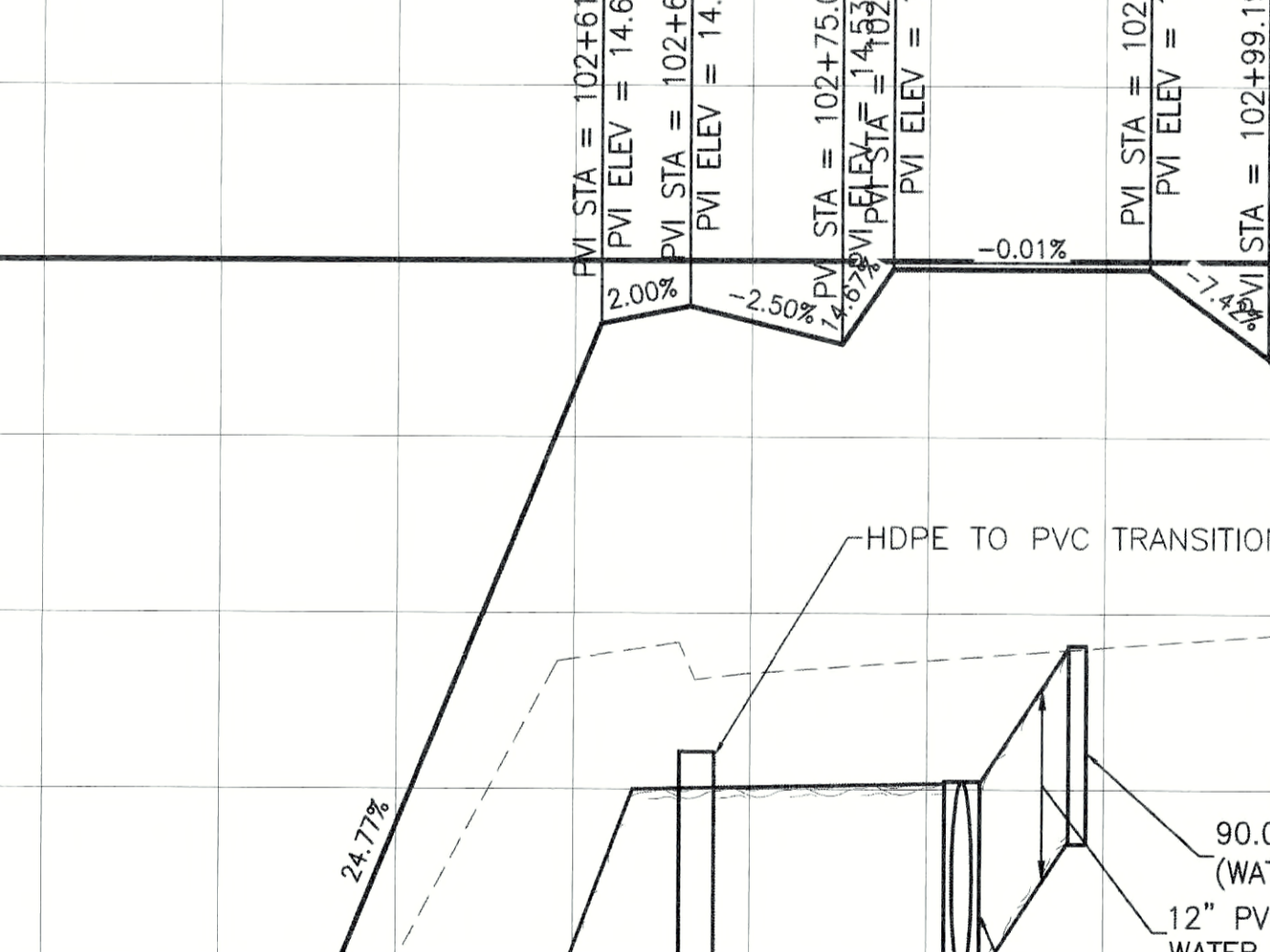
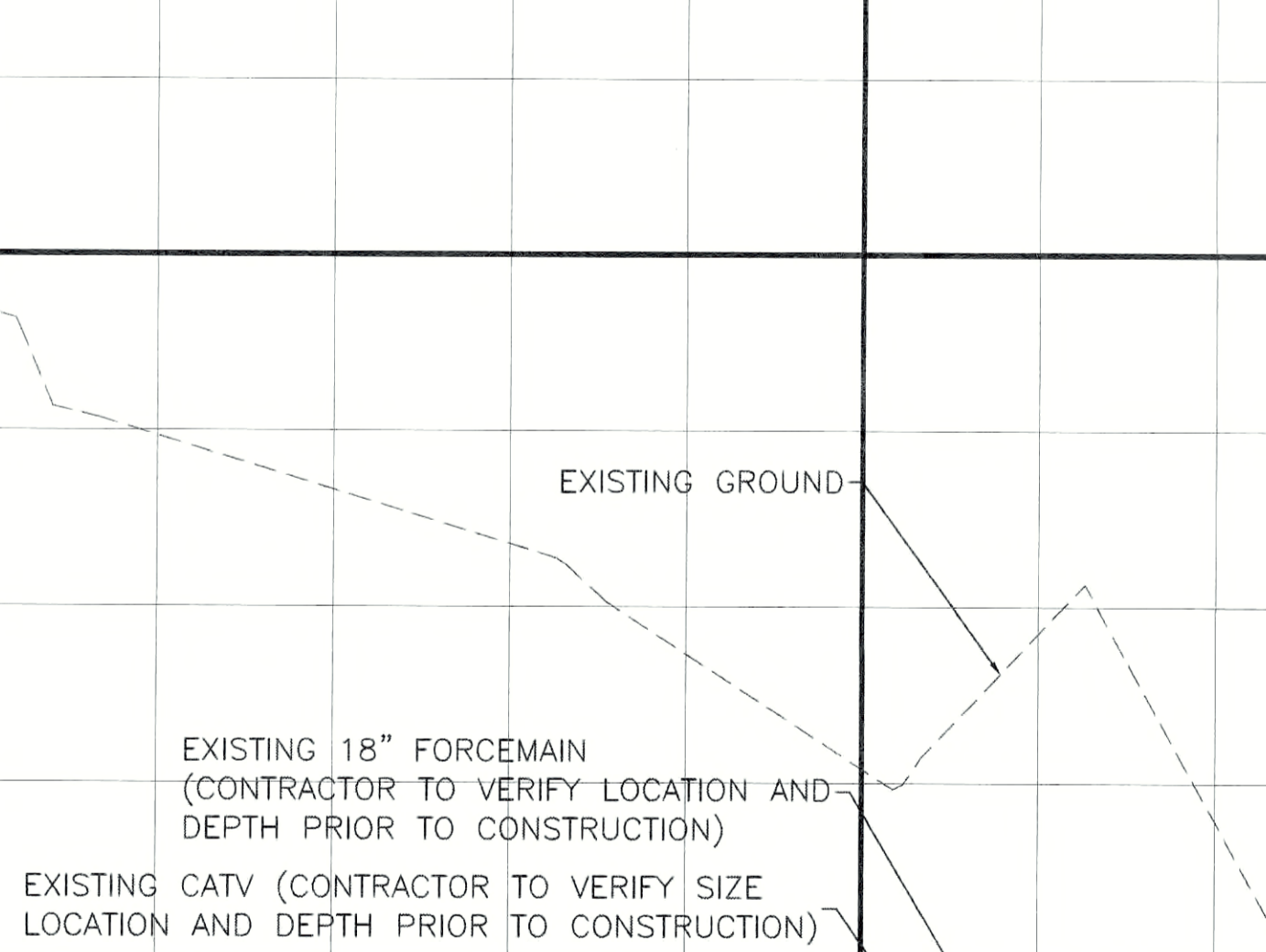
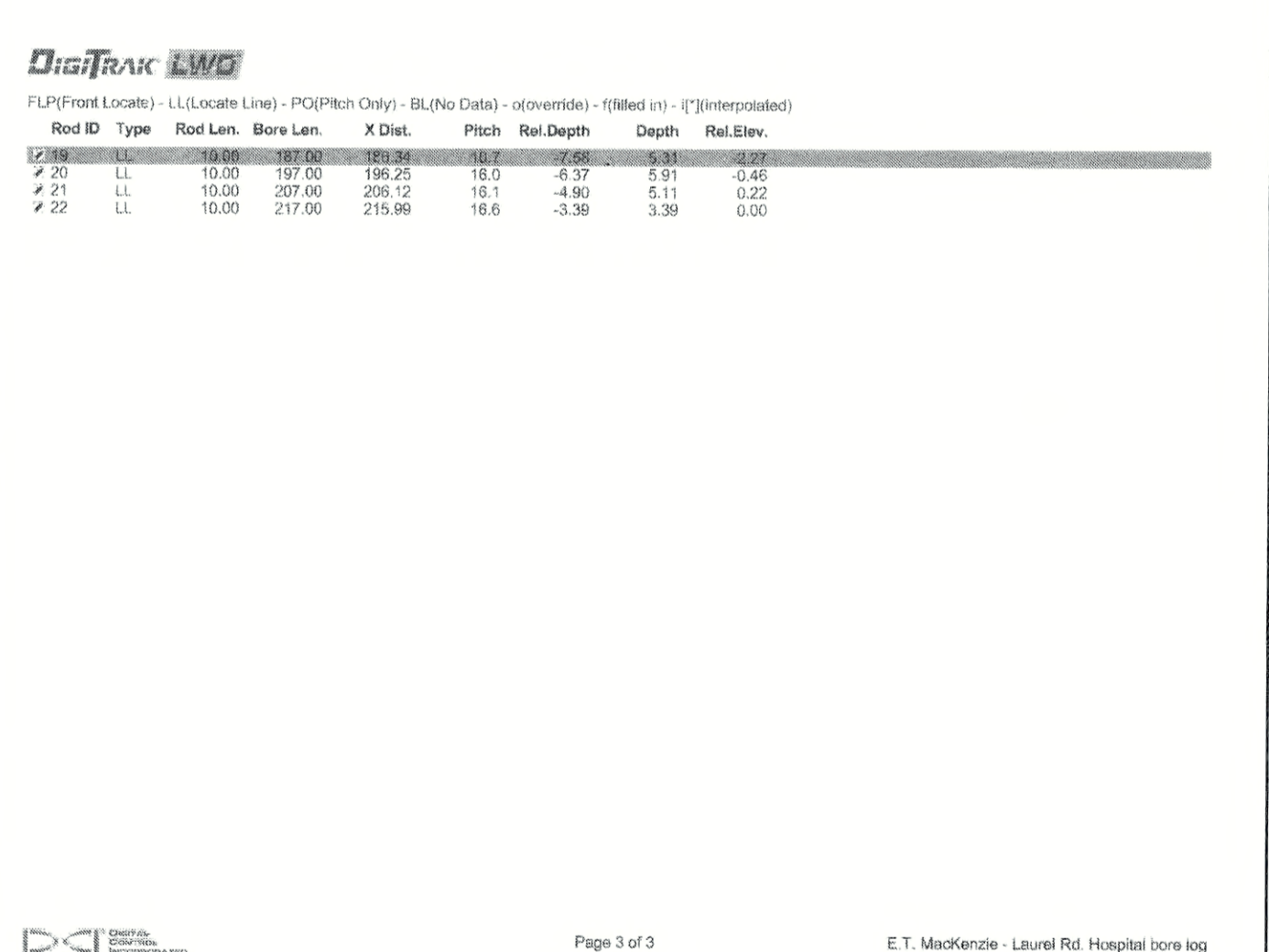
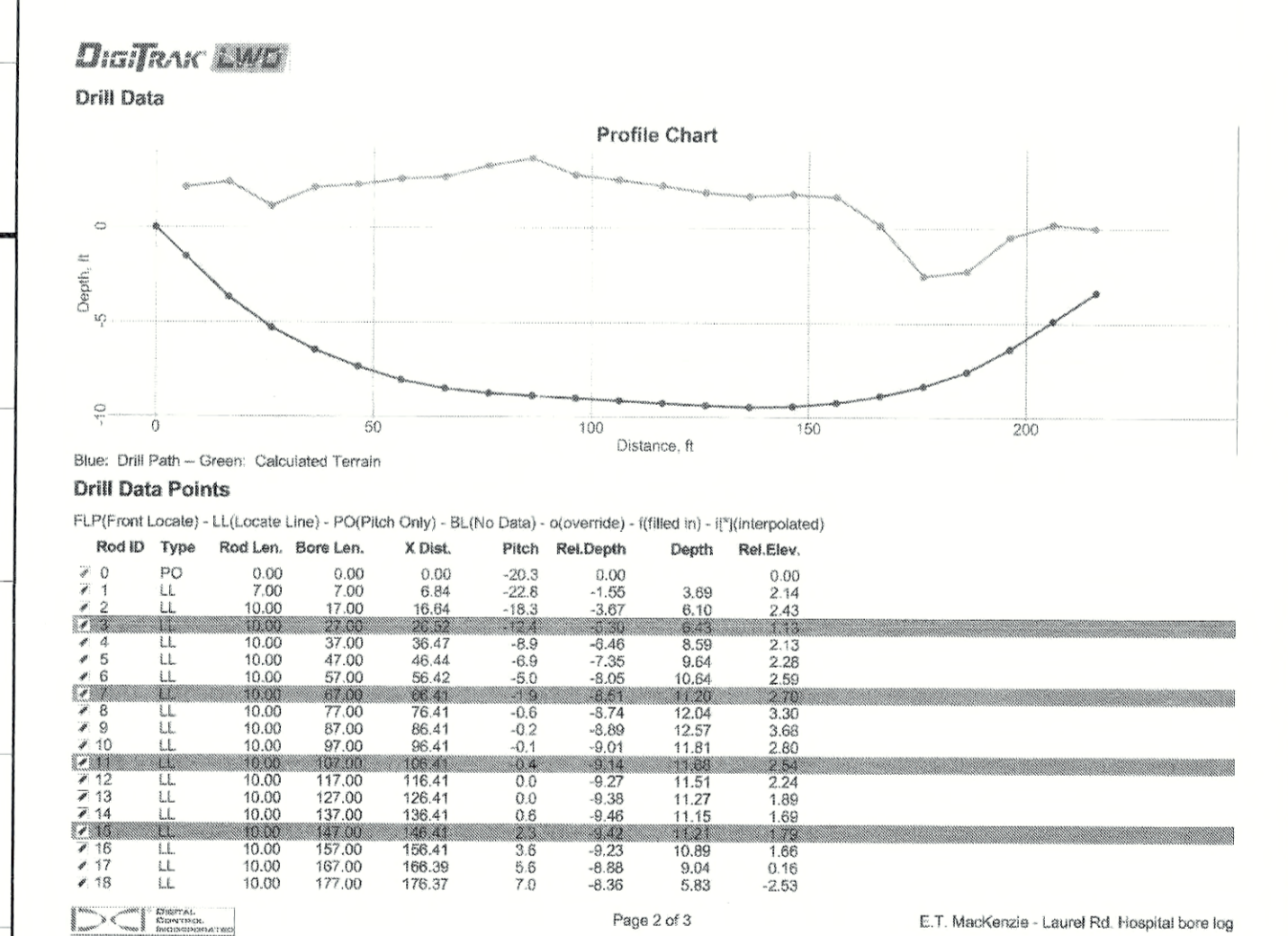
(813) 748-8340 (813) 888-8838 FAX

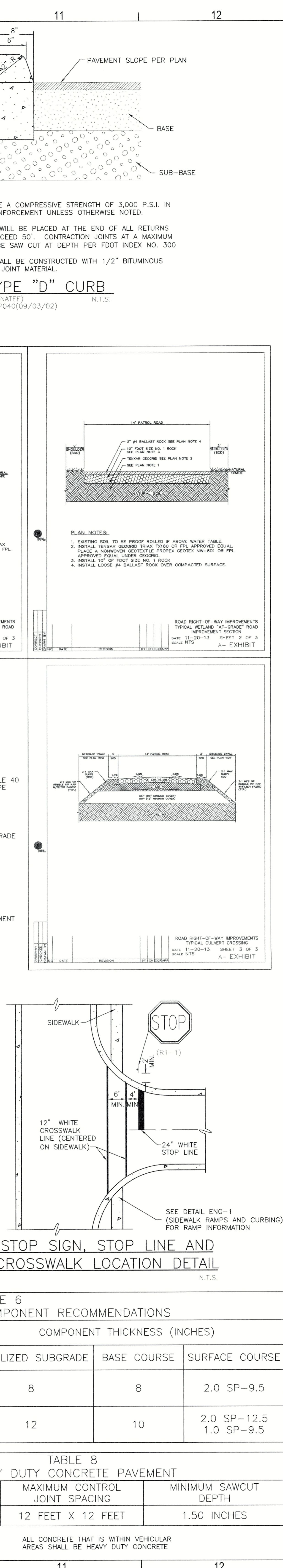
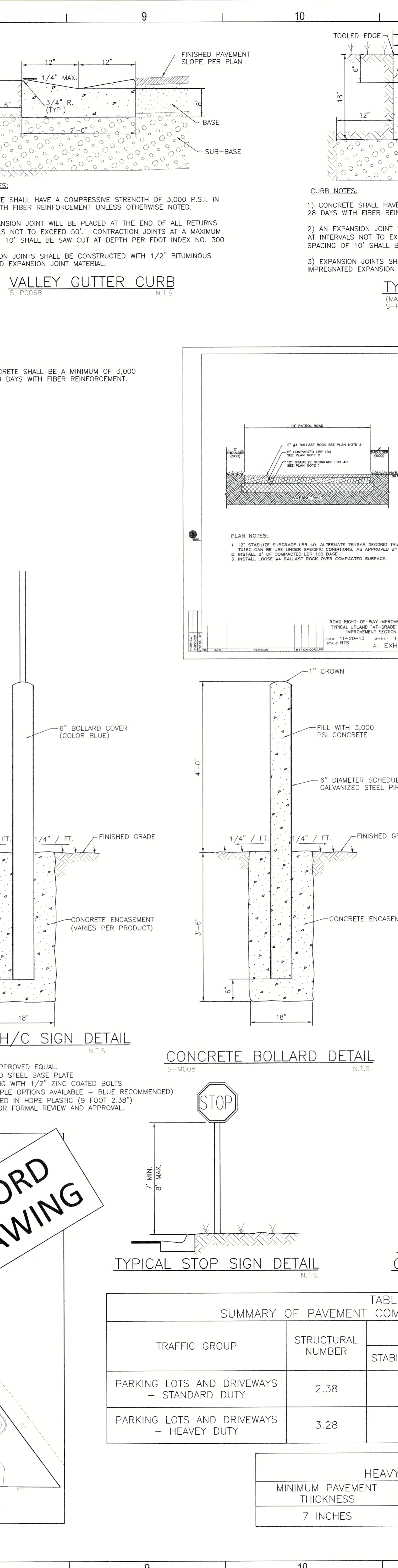
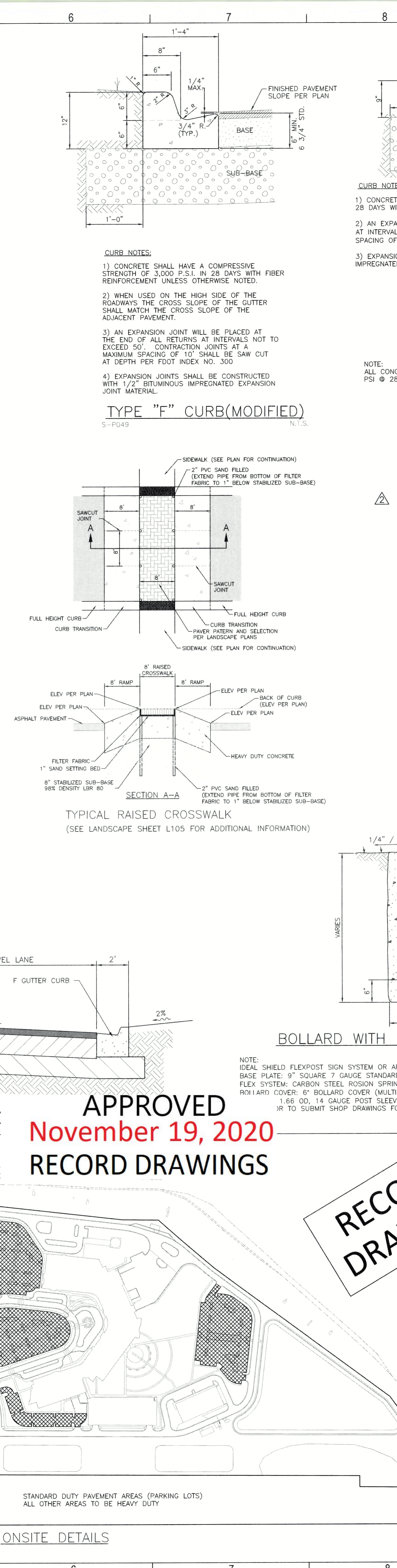
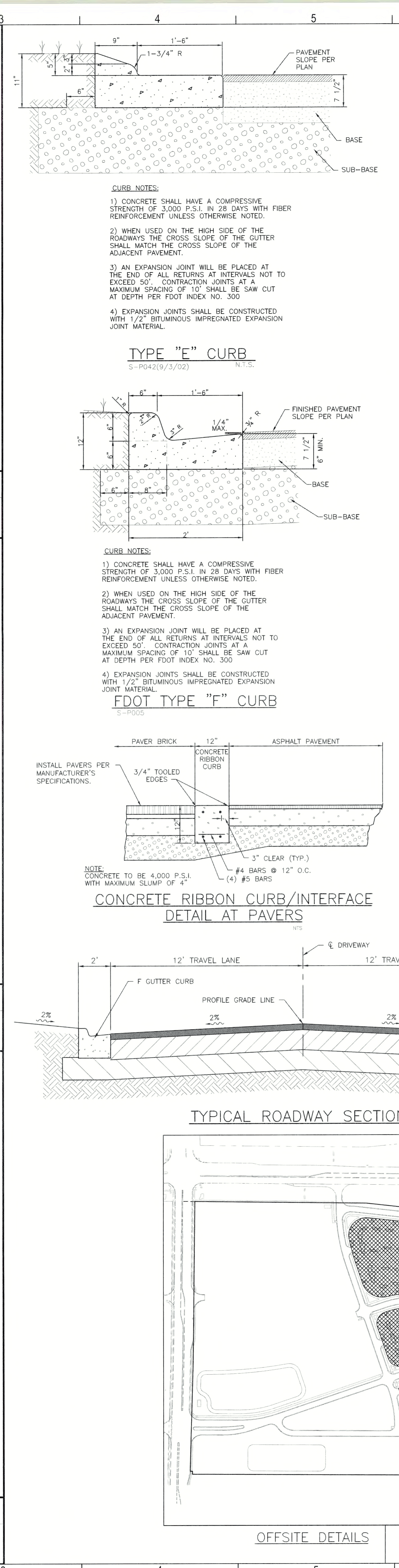
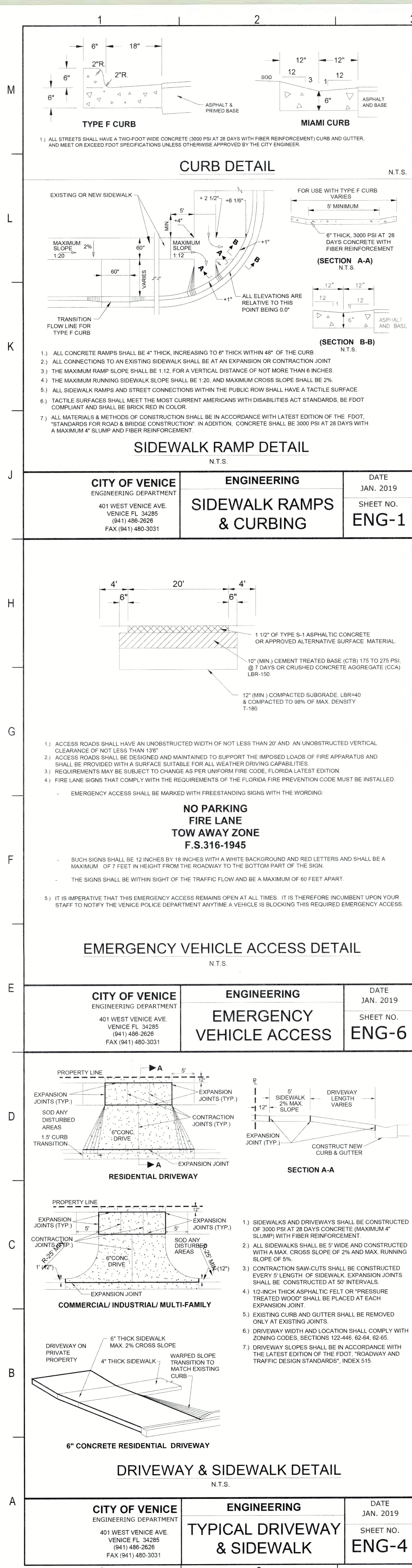
I HEREBY CERTIFY THAT THE AS-BUILT DRAWING OF THE IMPROVEMENTS SHOWN IN BRACKETS [ ] UPON THE DESIGN CONSTRUCTION PLANS, IS TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF A TRUE AND CORRECT REPRESENTATION OF THE IMPROVEMENTS AS SHOWN AND WERE COLLECTED IN THE FIELD BY A REPRESENTATIVE UNDER THE DIRECT SUPERVISION OF THE SURVEYOR AND MAPPER.


DATE OF CERTIFICATION: DATE OF FIELD SURVEY: 02-25-2020

GERALD D. STROOP, JR., P.S.M.

FLORIDA CERTIFICATE NO. 4879

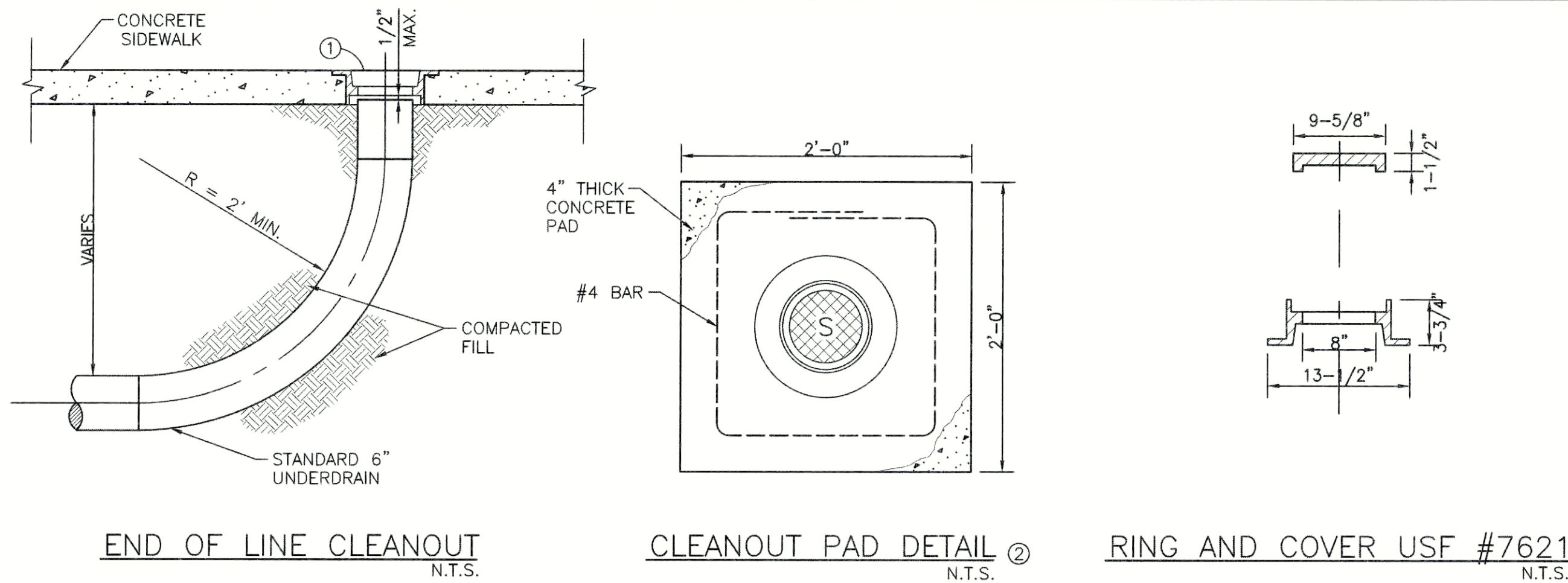




<div><div><div>Flad Architects</div><div>Flad &amp; Associates of Florida, Inc. AAC000658 2202 N. Westshore Blvd., Ste. 125 Tampa, FL 33607 Tel: 813-830-6812 www.flad.com</div></div><div><div>Flad Structural Engineers</div><div>Flad &amp; Associates, Inc. 27676 644 Science Drive Madison, WI 53711 Tel 608-238-2661 Fax 608-238-6727 www.flad.com</div></div><div><div><div>A&amp;E</div><div>Affiliated Engineers</div></div><div>LICENSE # CA 5140 Affiliated Engineers SE, Inc 777 S Harbour Island Blvd. #450 Tampa, FL 33602 Tel: (813) 405-3800</div></div><div><div><div></div><div>Stantec</div></div><div>LICENSE # 75477 STANTEC CONSULTING SERVICES 6800 Professional Parkway East Sarasota, FL 34240 Tel: (941) 907-6900</div></div></div>		
Stamps & Approvals		
Project Key Plan		
Project Title		
<div><div>smh</div><div>Sarasota County Public Hospital District</div><div>2600 Laurel Road Nokomis, FL 34275</div><div>90 Bed New Hospital</div></div>		
AHCA# : 23/23960161-101		
Project Phase		
CONSTRUCTION DOCUMENTS		
Date	Drawn By	
4/24/2019	STANTEC	
Project Number	Checked By	
18122-00	STANTEC	
Sheet Title		
PAVING DETAILS		
Sheet Number	Rev No	
C-601	2	

APPROVED  
November 19, 2020  
RECORD DRAWINGS

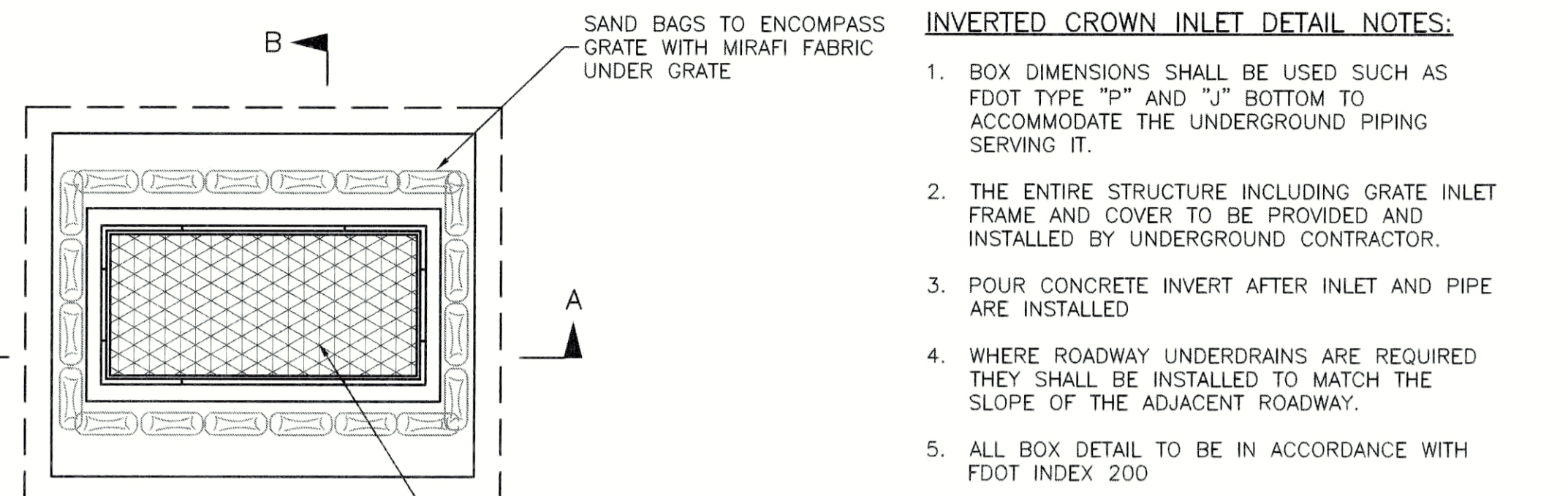
RECORD  
DRAWING



END OF LINE CLEANOUT N.T.S.  
CLEANOUT PAD DETAIL 2 N.T.S.  
RING AND COVER USF #7621 N.T.S.

1. CAST IRON REVERSIBLE HANDHOLE RING & COVER, UNITED STATES FOUNDARY NUMBER 7621 OR EQUAL SET FLUSH TO SIDEWALK.
2. WHERE PROPOSED CLEANOUTS ARE NOT IN SIDEWALK AREAS, THE CLEANOUT SHALL INCLUDE A CONCRETE PAD AS DETAILED, SET FLUSH TO FINAL GRADE. CONCRETE = 3000 P.S.I. @ 28 DAYS MINIMUM COMPRESSIVE STRENGTH.

UNDERDRAIN CLEANOUT DETAILS  
S-D031 (11/04/05) N.T.S.

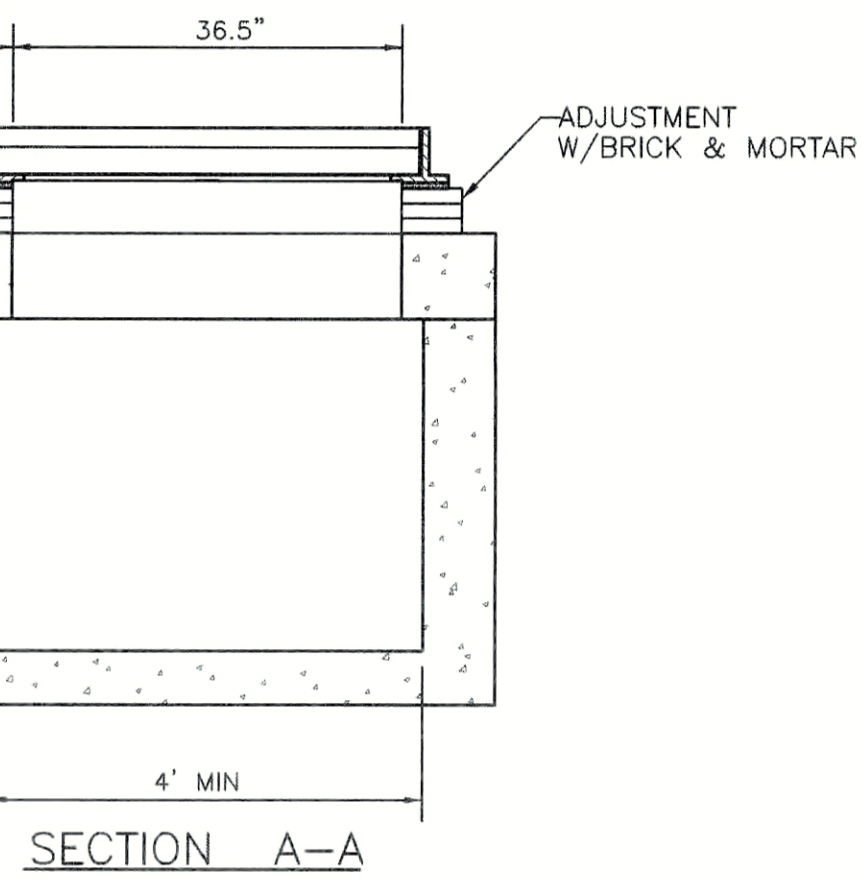


INVERTED CROWN INLET DETAIL NOTES:

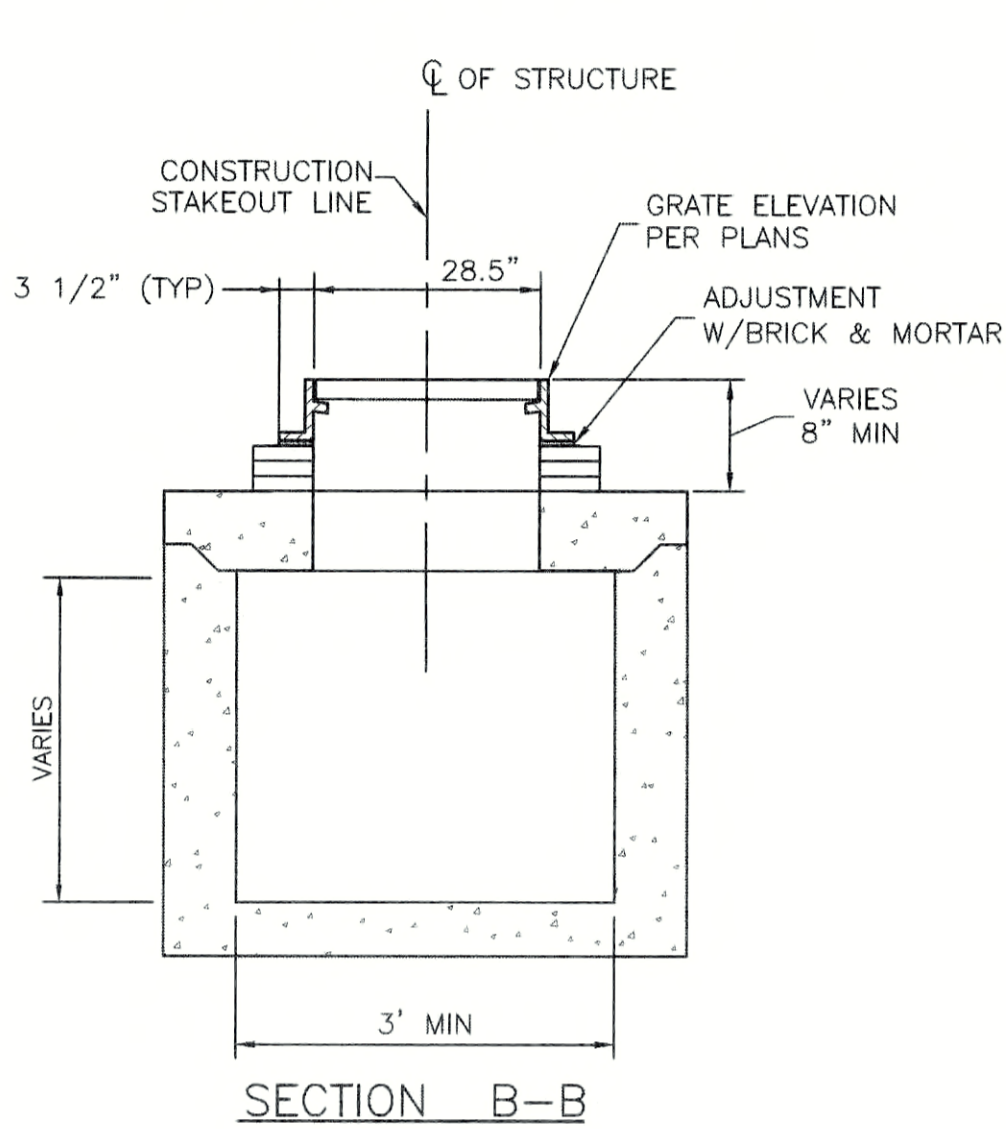
1. BOX DIMENSIONS SHALL BE USED SUCH AS FOOT TYPE '7' AND 'J' BOTTOM TO ACCOMMODATE THE UNDERGROUND PIPING SERVING IT.
2. THE ENTIRE STRUCTURE INCLUDING GRATE INLET FRAME AND COVER TO BE PROVIDED AND INSTALLED BY UNDERGROUND CONTRACTOR.
3. POUR CONCRETE INVERT AFTER INLET AND PIPE ARE INSTALLED.
4. WHERE ROADWAY UNDERDRAINS ARE REQUIRED THEY SHALL BE INSTALLED TO MATCH THE SLOPE OF THE ADJACENT ROADWAY.
5. ALL BOX DETAIL TO BE IN ACCORDANCE WITH FOOT INDEX 200



PLAN

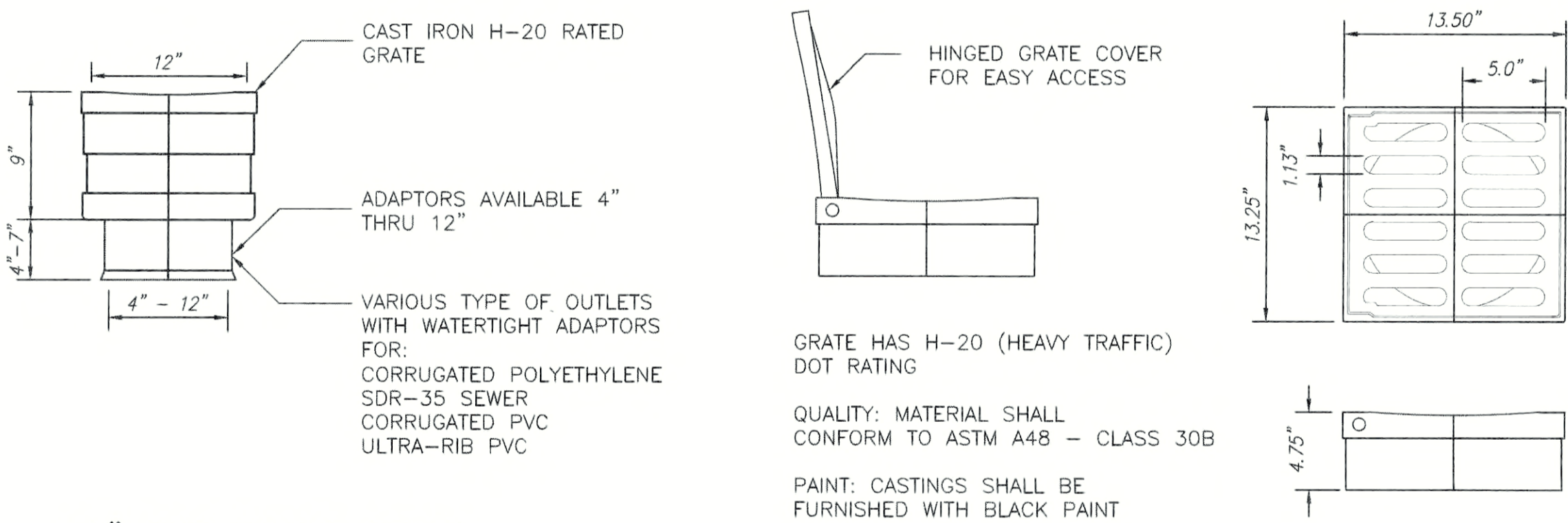


SECTION A-A



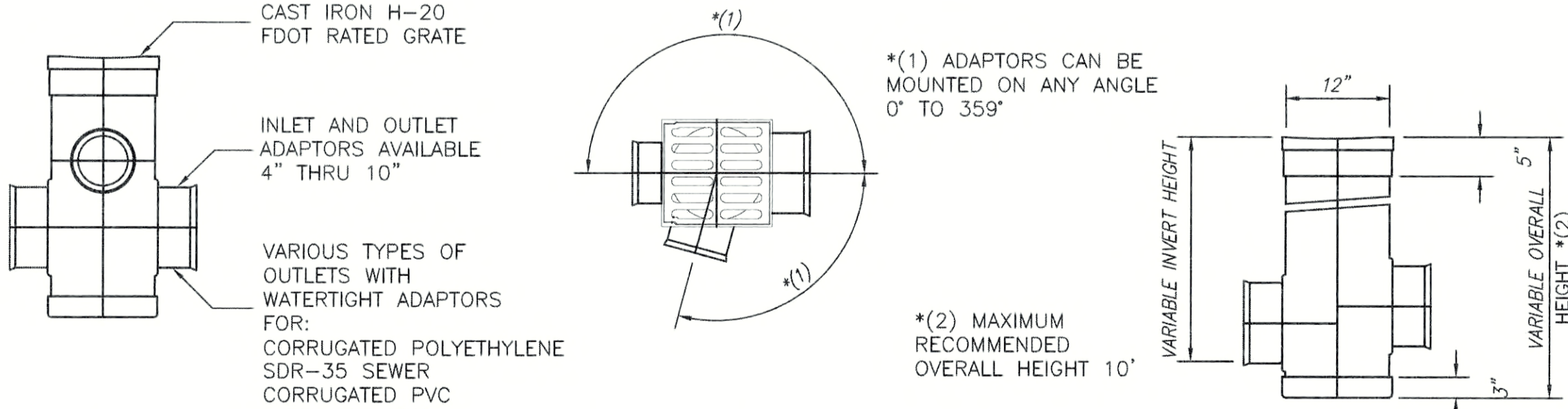
SECTION B-B

GRATE INLET  
N.T.S.

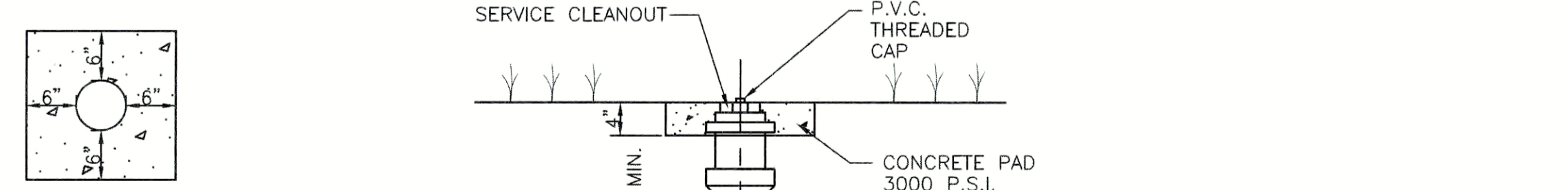


12" PVC INLINE DRAIN  
N.T.S.

12" CAST IRON GRATE  
N.T.S.

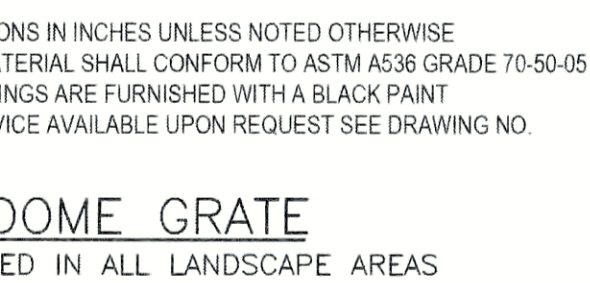


12" PVC DRAIN BASIN  
S-D046 N.T.S.

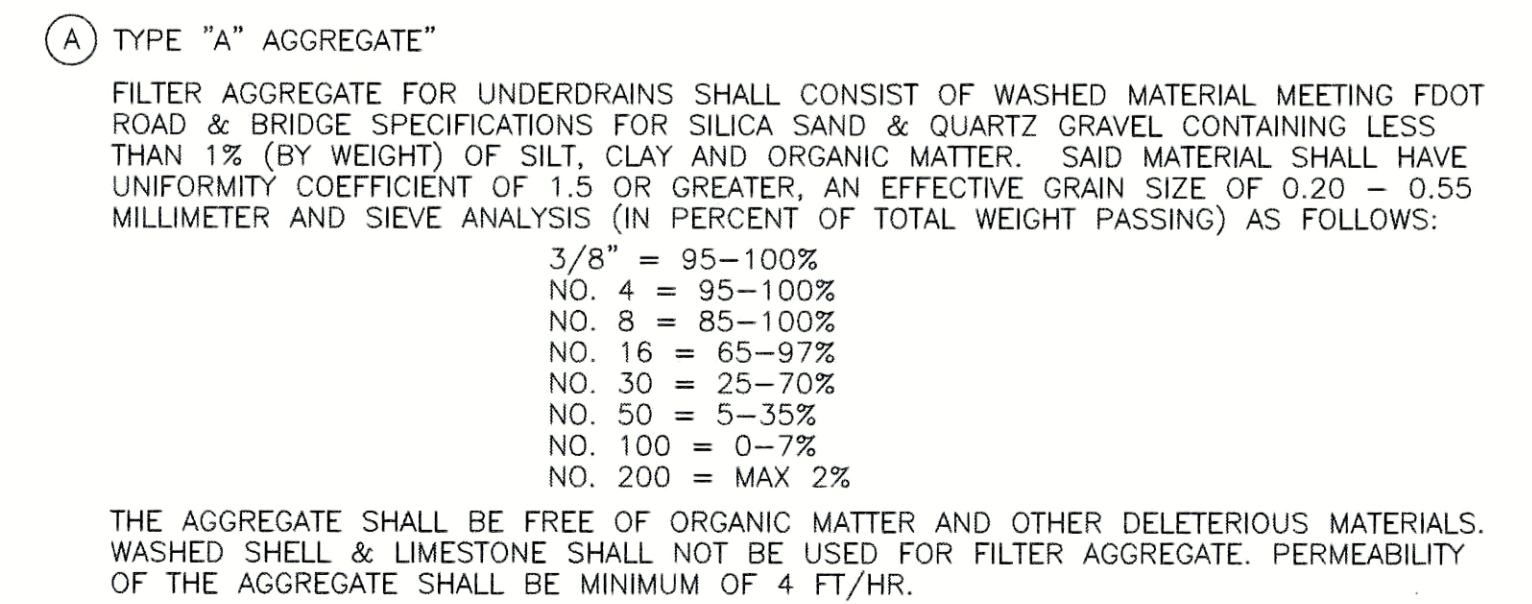
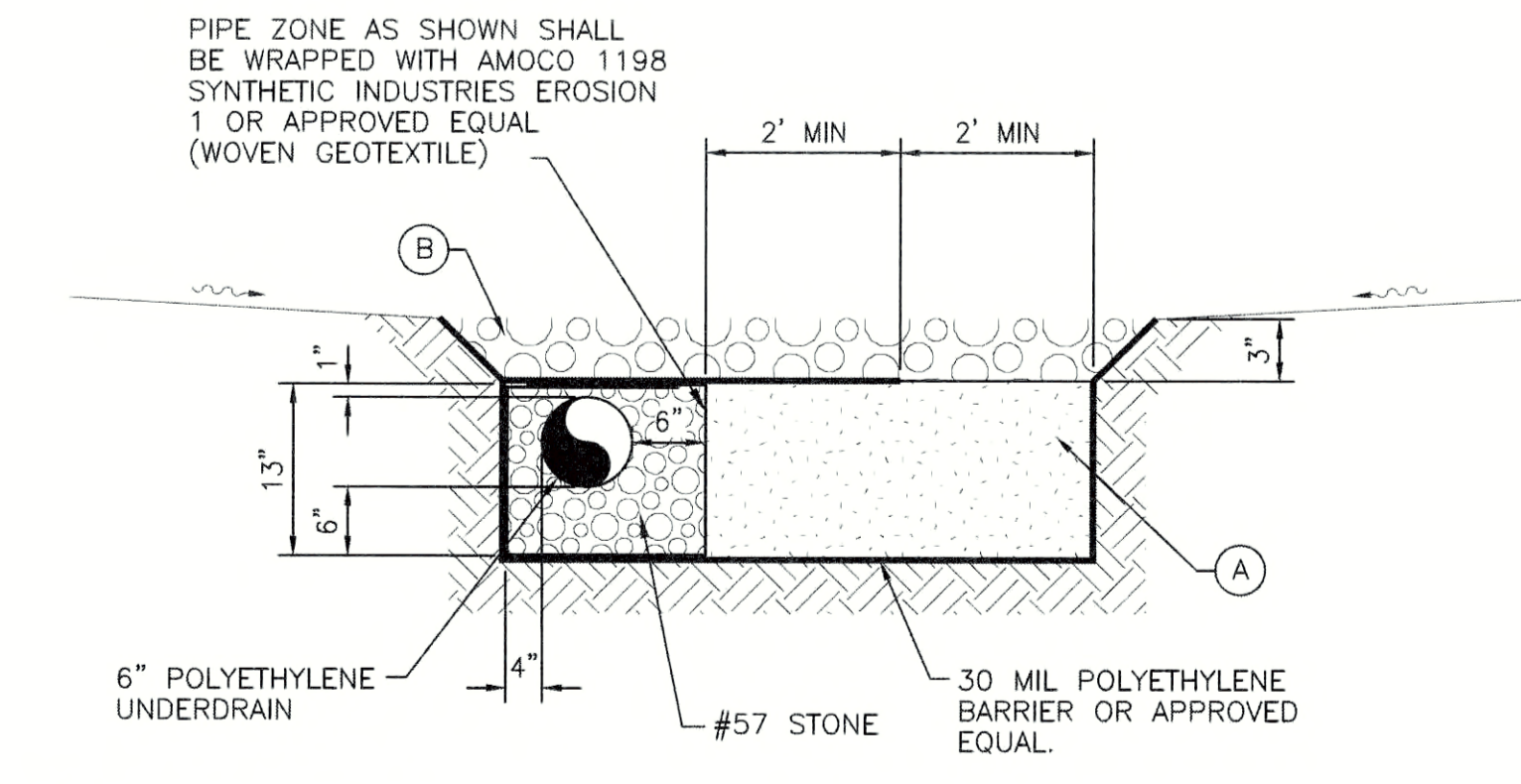


CLEANOUT DETAIL  
FOR SINGLE UNDERDRAIN  
FILTER SYSTEM  
S-D016 N.T.S.

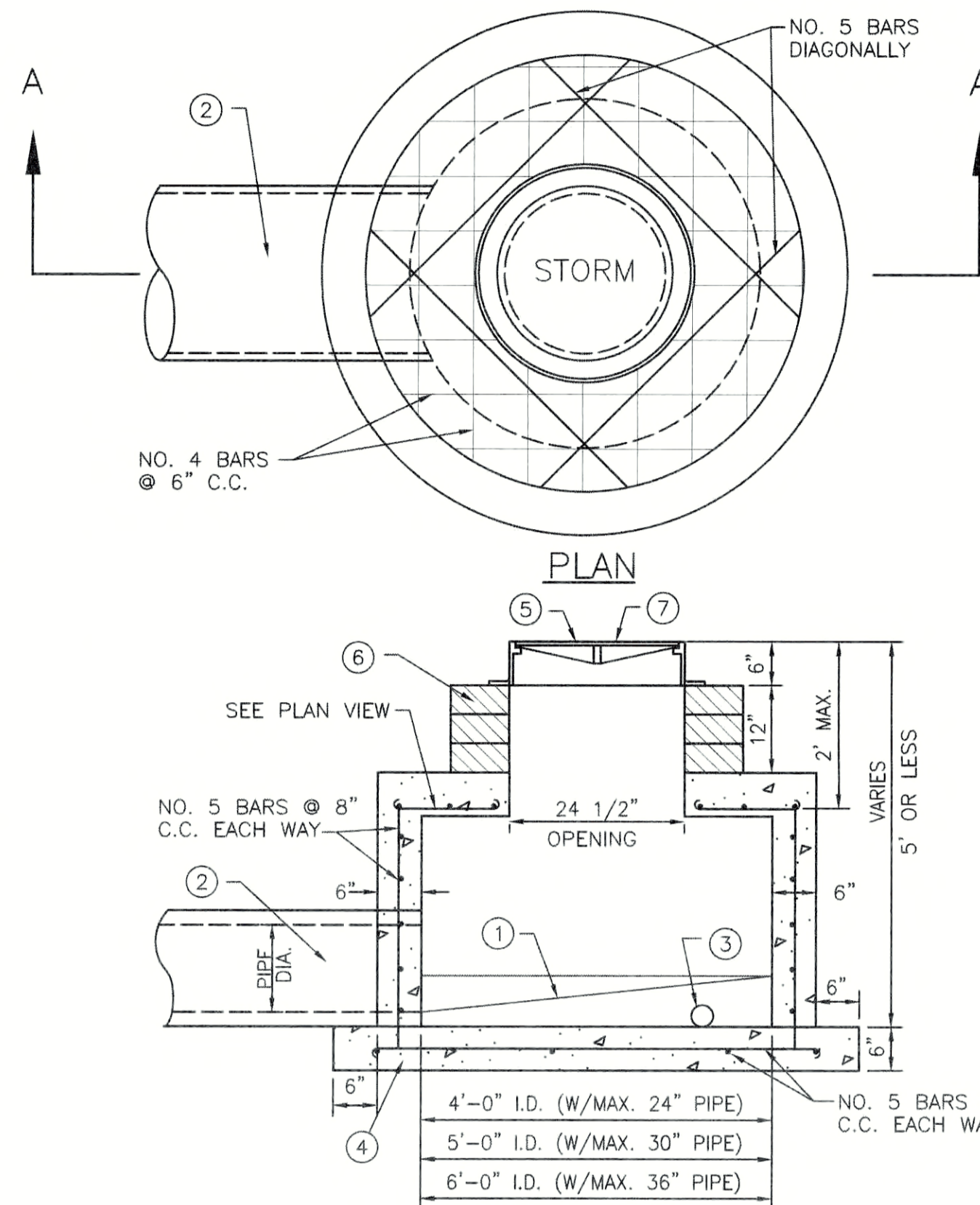
TYPICAL CONNECTION FOR  
UNDERDRAIN TO STRUCTURE  
S-D019 N.T.S.



DOME GRATE  
TO BE USED IN ALL LANDSCAPE AREAS

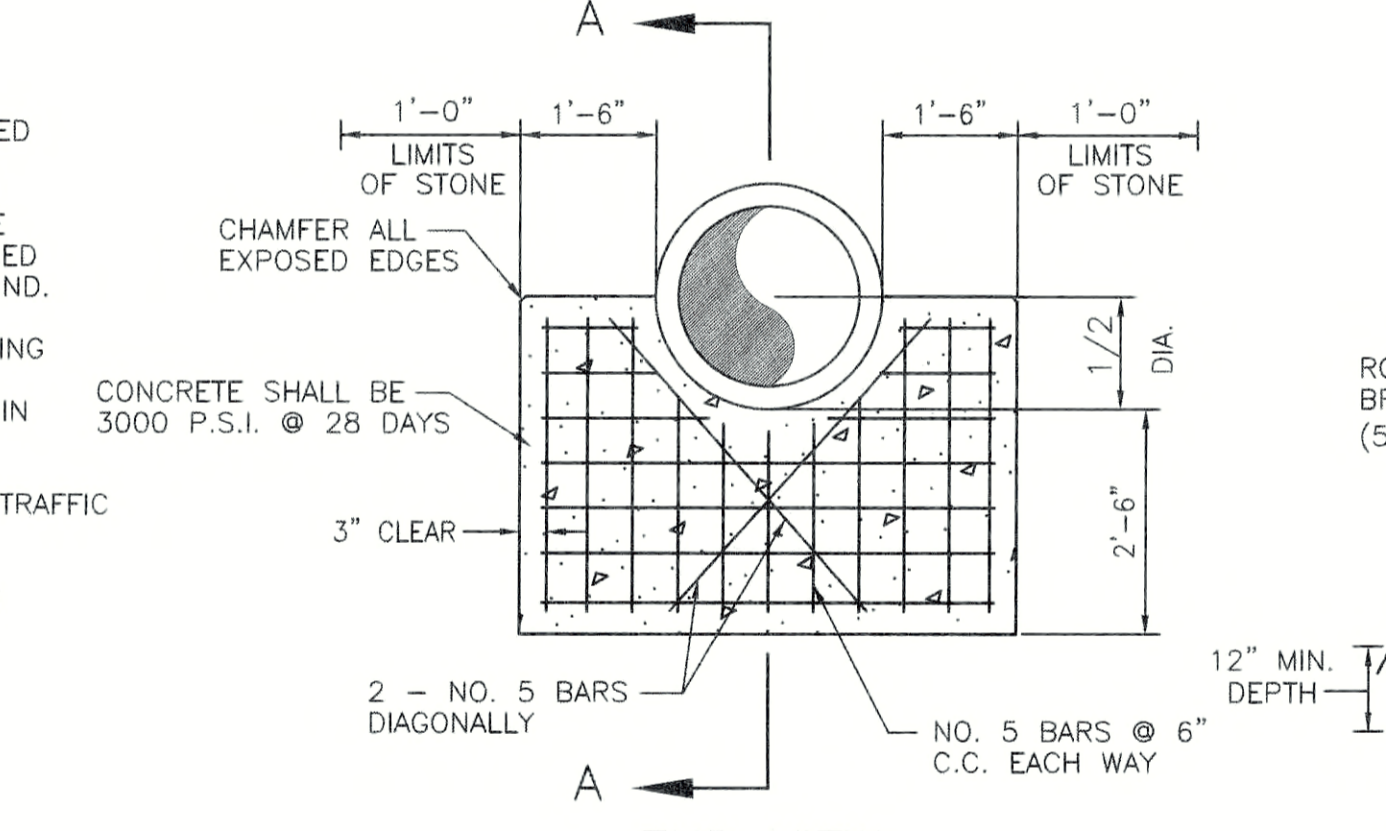


TYPICAL SHALLOW BOTTOM TREATMENT UNDERDRAIN  
S-D004 (8/11/03) N.T.S.



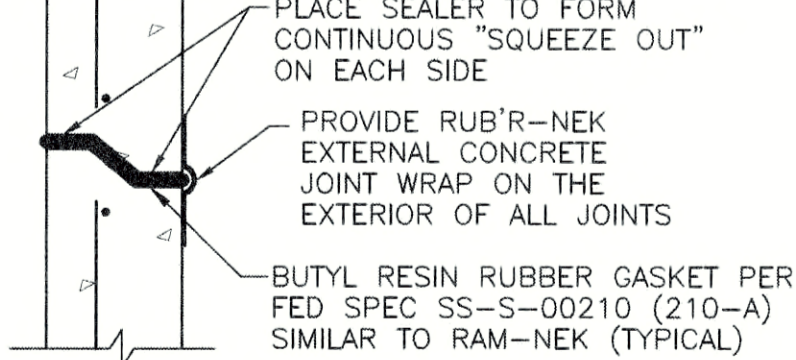
STORM MANHOLE  
SHALLOW - 5' OR LESS  
S-D011 N.T.S.

1. POURED CONCRETE INVERT AFTER INLET & PIPE ARE PLACED IN GROUND, 3,000 P.S.I. CONCRETE @ 28 DAYS.
2. SEE PLAN & PROFILE DRAWINGS FOR PIPE SIZE & ALIGNMENT.
3. ALL INLETS & STORM MANHOLES SHALL HAVE A 3" DIAMETER HOLE AT THE BOTTOM OF THE BOX, CLEAR OF PIPE CONSTRUCTION & TO BE PLUGGED WHEN CONCRETE INVERT IS FORMED. (N.I.C.)
4. MANHOLE WALLS & BOTTOM SLAB SHALL BE REINFORCED CLASS "A" CONCRETE POURED IN PLACE OR APPROVED PRECAST BOXES. CONTRACTOR SHALL SUBMIT SHOP DWGS. FOR PRECAST BOXES. WALL REINFORCING SHALL CONFORM WITH A.S.T.M. C-478, LATEST REVISION. CONCRETE SHALL BE 3,000 P.S.I. @ 28 DAYS.)
5. MANHOLE FRAMES & LIDS SHALL BE ADJUSTED TO CONFORM WITH FINISHED SURFACES. ALL ADJUSTMENTS SHALL BE INCLUDED IN PRICE. BID. NO ADDITIONAL COMPENSATION WILL BE MADE BY THE OWNER. MANHOLES IN GRASSED AREAS SHALL BE 0.1' ABOVE FINISHED GROUND.
6. 4" MASONRY BRICKS SHALL BE USED TO BRING A MANHOLE COVER TO REQUIRED GRADE. IF NECESSARY, PRECAST RINGS MAY BE USED IN LIEU OF BRICK.
7. MANHOLE RING & COVER NO. 170-J U.S.F. TRAFFIC BEARING TYPE, NON-SKID SURFACE.
8. ALTERNATE: FOOT INDEX 200, SHOP DRAWING REQUIRED.



1. CONCRETE SHALL BE 3000 P.S.I. @ 28 DAYS
2. CHAMFER ALL EXPOSED EDGES 3/4".
3. RIPRAP SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 530, RIPRAP, SPECIFICALLY SEC. 530-3.3 RUBBLE. NO BROKEN CONCRETE SHALL BE USED.
4. FILTER FABRIC SHALL BE SUPPLIED AND CONSTRUCTED AS DEFINED IN THE F.D.O.T. SPECIFICATIONS SEC. 514, PLASTIC FILTER FABRIC, SPECIFICALLY SEC. 514-3.4 RIPRAP, INCLUDED IN UNIT COST OF ENDWALL.

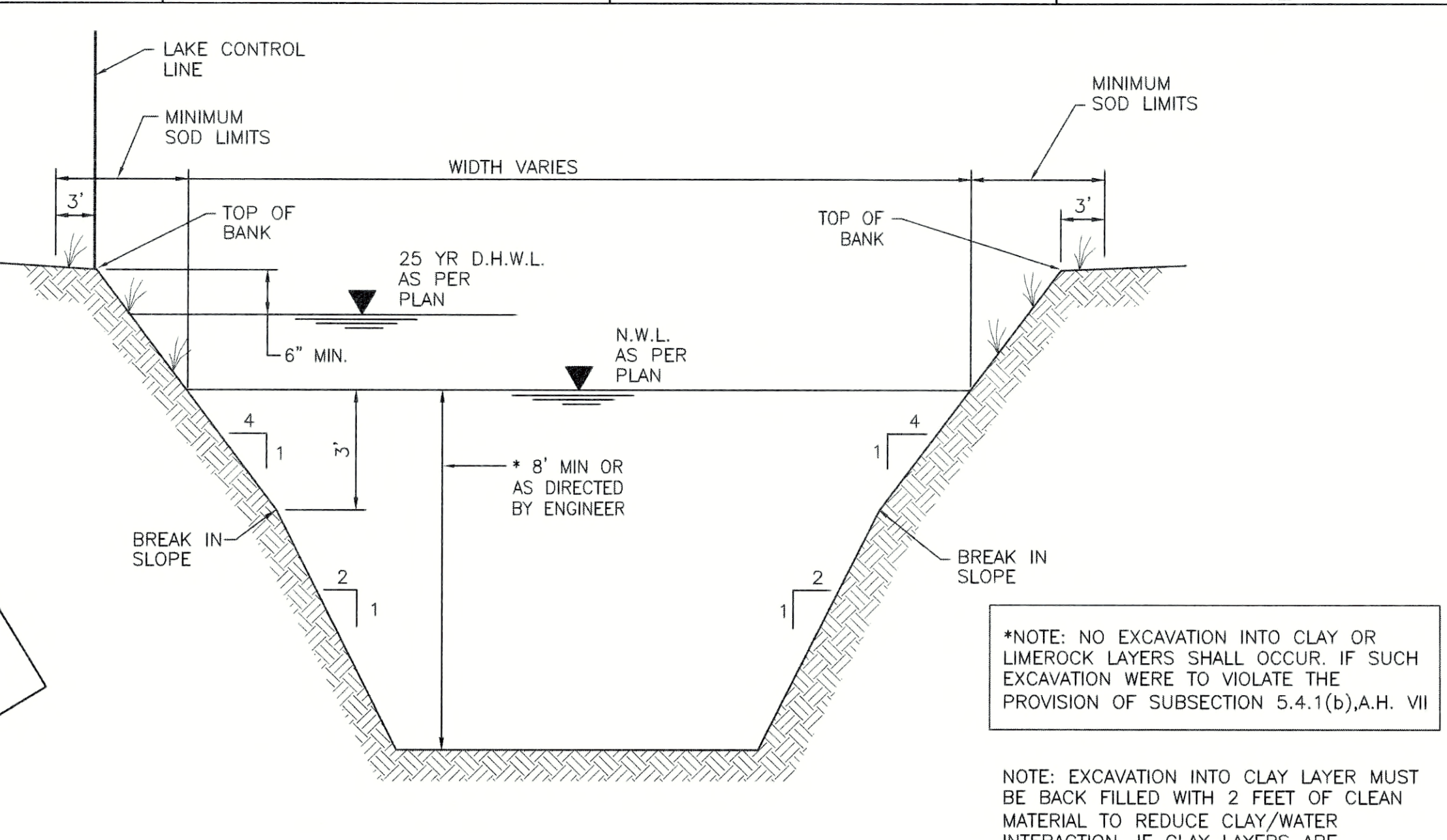
ENDWALL DETAIL  
S-D010



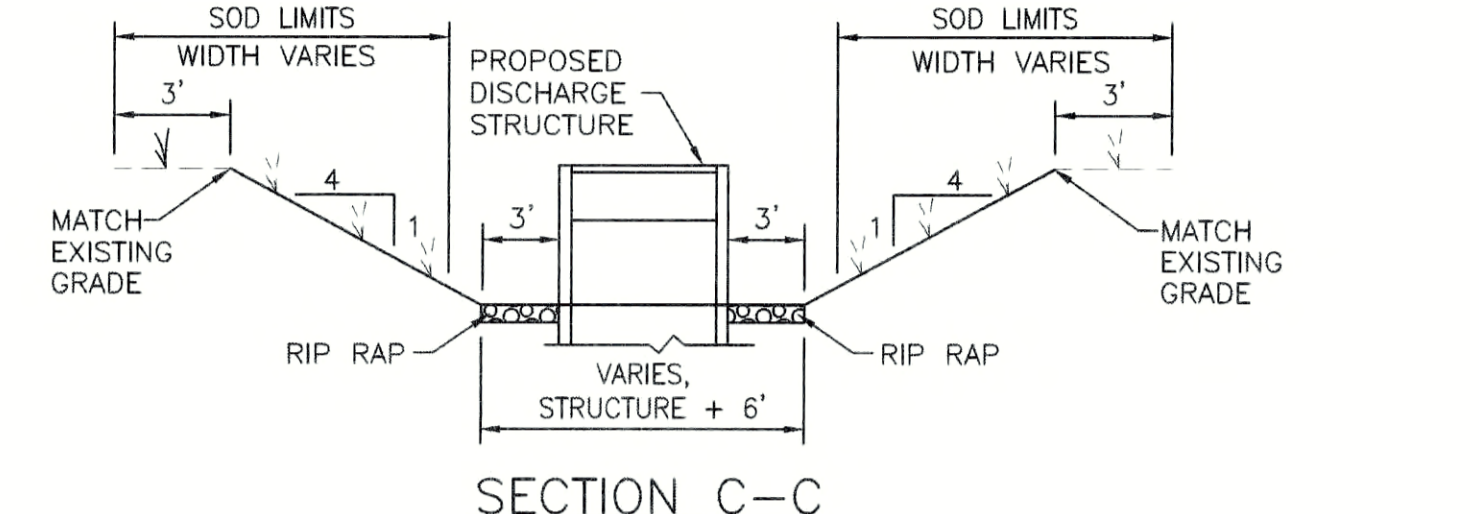
TYPICAL JOINT DETAIL

1. POURED CONCRETE INVERT AFTER INLET & PIPE ARE PLACED IN GROUND, 3,000 P.S.I. CONCRETE @ 28 DAYS.
2. SEE PLAN & PROFILE DRAWINGS FOR PIPE SIZE & ALIGNMENT.
3. ALL INLETS & STORM MANHOLES SHALL HAVE A 3" DIAMETER HOLE AT THE BOTTOM OF THE BOX, CLEAR OF PIPE CONSTRUCTION & TO BE PLUGGED WHEN CONCRETE INVERT IS FORMED. (N.I.C.)
4. MANHOLE WALLS & BOTTOM SLAB SHALL BE REINFORCED CLASS "A" CONCRETE POURED IN PLACE OR APPROVED PRECAST BOXES. CONTRACTOR SHALL SUBMIT SHOP DWGS. FOR PRECAST BOXES. WALL REINFORCING SHALL CONFORM WITH A.S.T.M. C-478, LATEST REVISION. CONCRETE SHALL BE 3,000 P.S.I. @ 28 DAYS.)
5. MANHOLE FRAMES & LIDS SHALL BE ADJUSTED TO CONFORM WITH FINISHED SURFACES. ALL ADJUSTMENTS SHALL BE INCLUDED IN PRICE. BID. NO ADDITIONAL COMPENSATION WILL BE MADE BY THE OWNER. MANHOLES IN GRASSED AREAS SHALL BE 0.1' ABOVE FINISHED GROUND.
6. 4" MASONRY BRICKS SHALL BE USED TO BRING A MANHOLE COVER TO REQUIRED GRADE, IF NECESSARY.
7. MANHOLE RING & COVER NO. 170-J U.S.F. TRAFFIC BEARING TYPE, NON-SKID SURFACE.

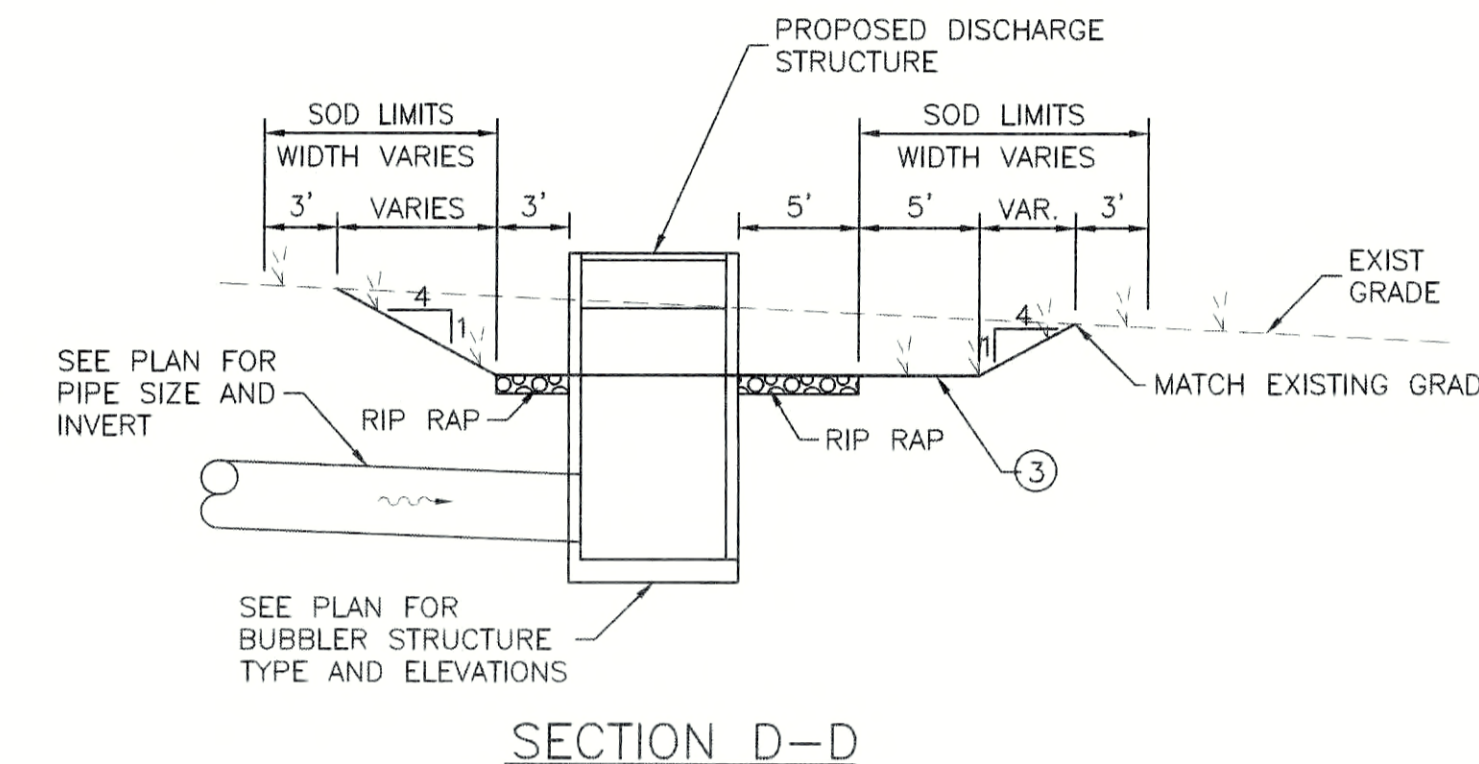
STORM MANHOLE  
DEPTH - 5' OR GREATER  
S-D023 N.T.S.



TYPICAL LAKE SECTION  
S-D032 (07/26/02) N.T.S.

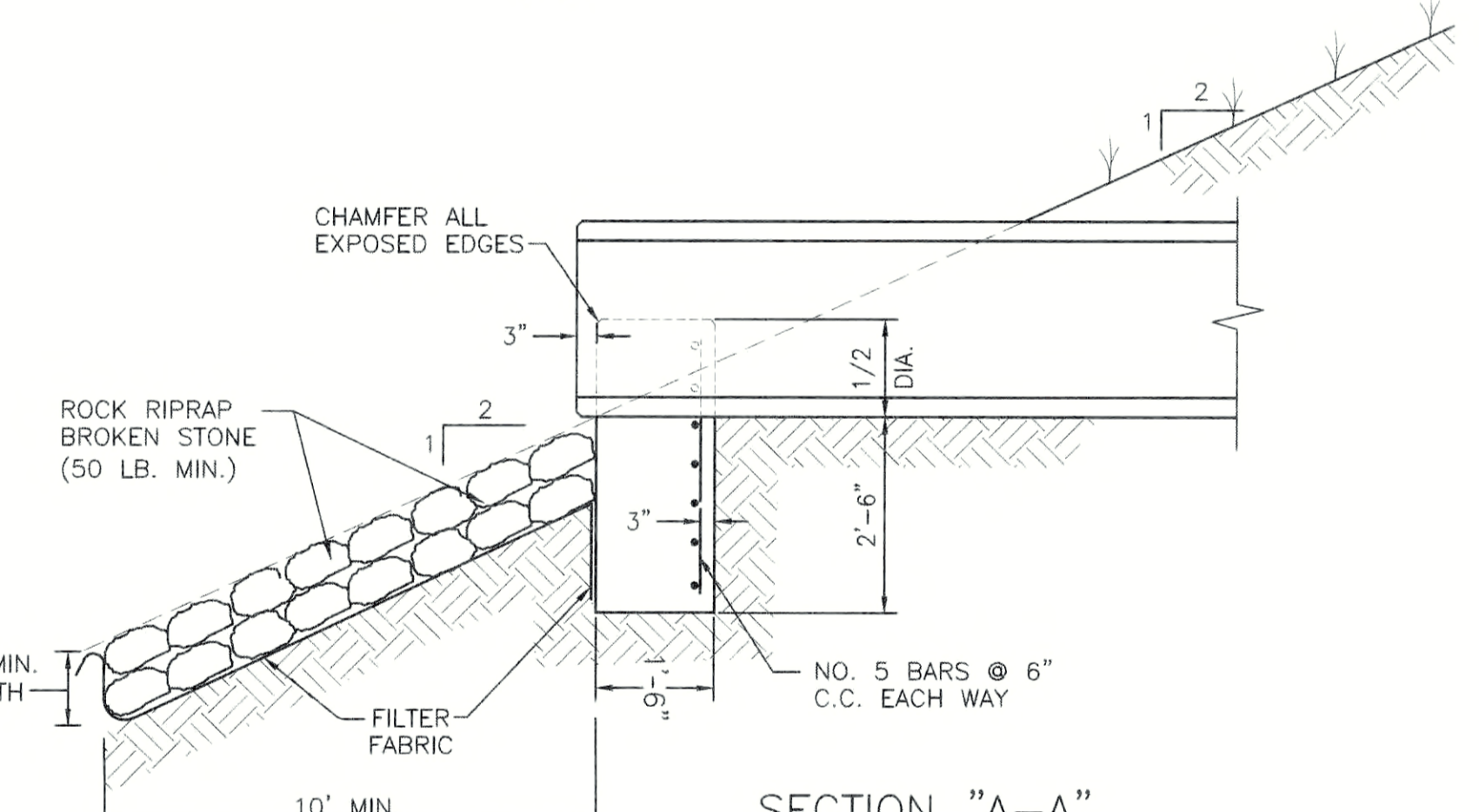


SECTION C-C



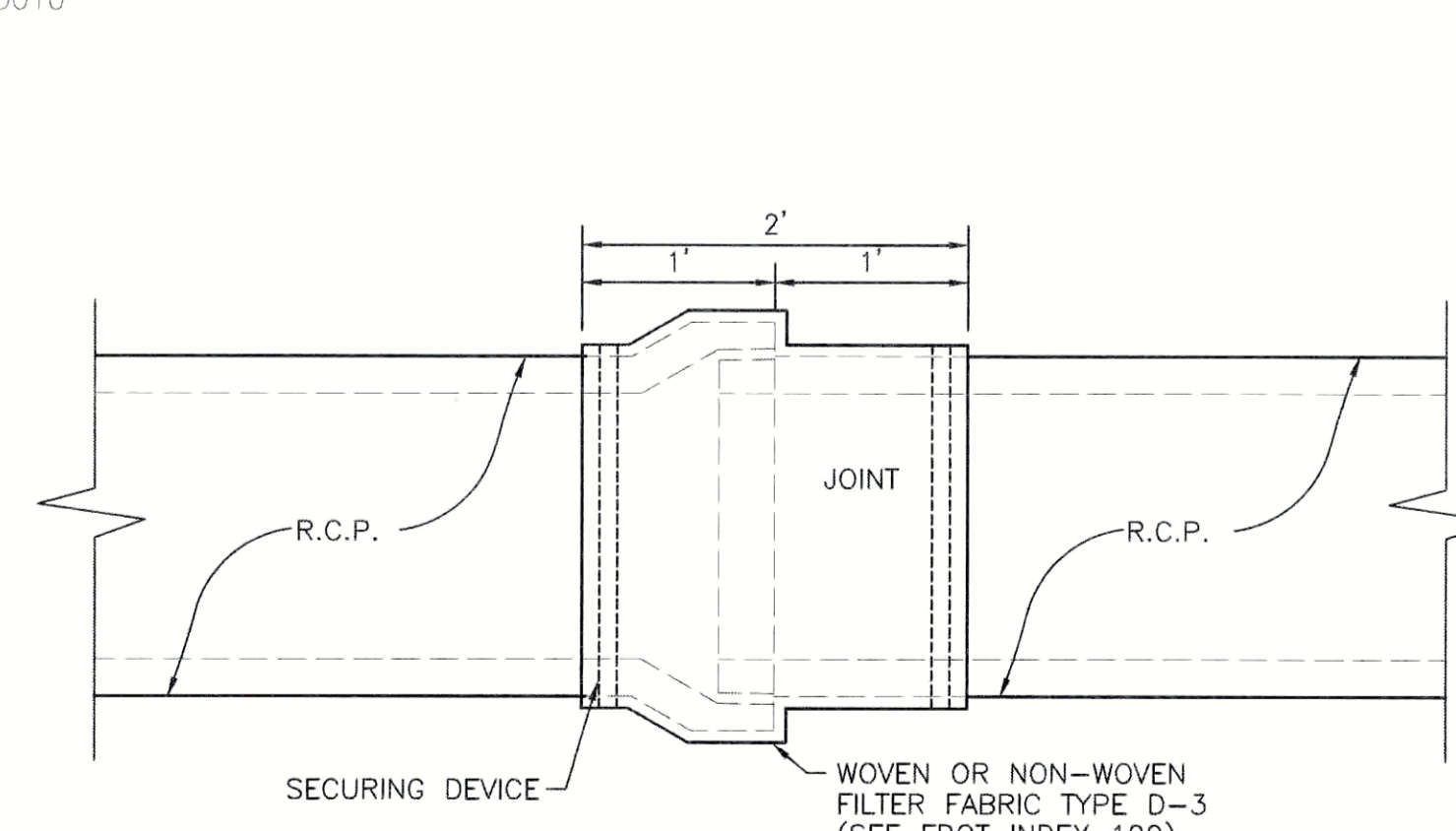
SECTION D-D

DISCHARGE SPREADER SWALE  
N.T.S.



SECTION A-A

ENDWALL DETAIL  
S-D010



PLAN VIEW

1. CENTER FILTER FABRIC ON PIPE JOINT.
2. FILTER FABRIC TO OVERLAP A MIN. OF ONE FOOT.
3. FILTER FABRIC TO BE INSTALLED ON ALL ELIPTICAL PIPE JOINTS, ALL PIPE JOINTS WITHIN THE RIGHT OF WAY, AND THE FIRST PIPE JOINT OUT OF ANY STRUCTURE WITHIN THE RIGHT OF WAY.
4. PRICE OF FILTER FABRIC JACKET TO BE INCLUDED IN PRICE OF PIPE.

NOTE:

NOTE:

NOTE:

NOTE:

NOTE:

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NOTE:

NOTE:

Flad Architects  
Flad & Associates of Florida, Inc.  
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STANTEC CONSULTING  
SERVICES  
6900 Professional Parkway East  
Sarasota, FL 34240  
Tel: (941) 907-6900

Stamps & Approvals

Project Key Plan

Rev	Date	Description
1	07/20/20	RECORD DRAWINGS
2	7/21/19	CHANGES
3	4/24/19	Construction Documents

smh

Sarasota County  
Public Hospital  
District  
2600 Laurel Road  
Nokomis, FL 34275

90 Bed New Hospital

AHCA#: 23/29860161-101-1

Project Phase

CONSTRUCTION DOCUMENTS

Date

4/24/2019

Drawn By

STANTEC

Project Number

18122-00

Checked By

STANTEC

Sheet Title

DRAINAGE DETAILS

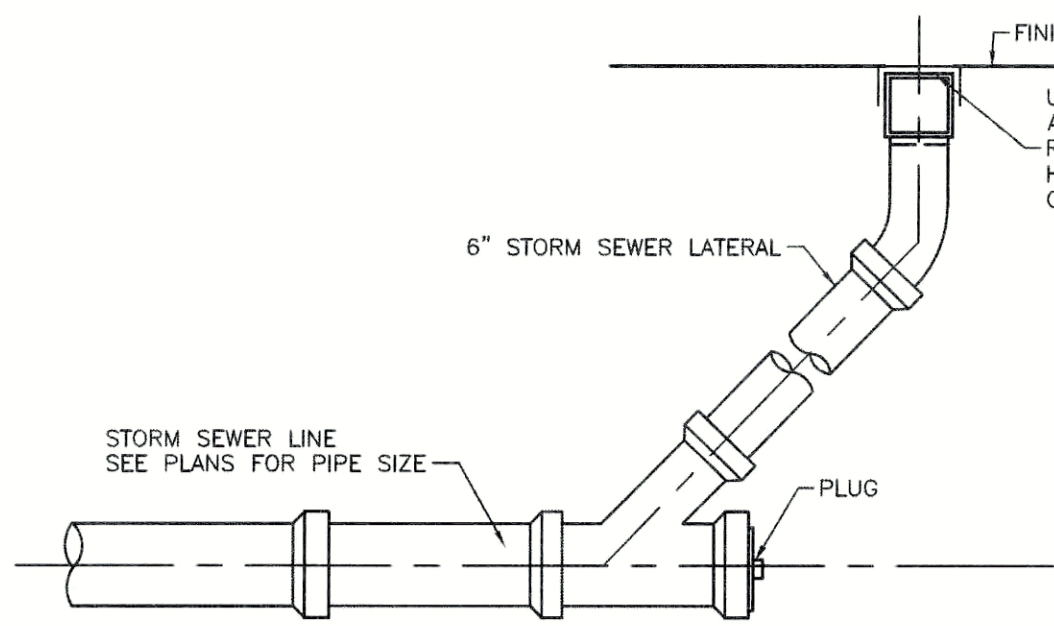
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C-602

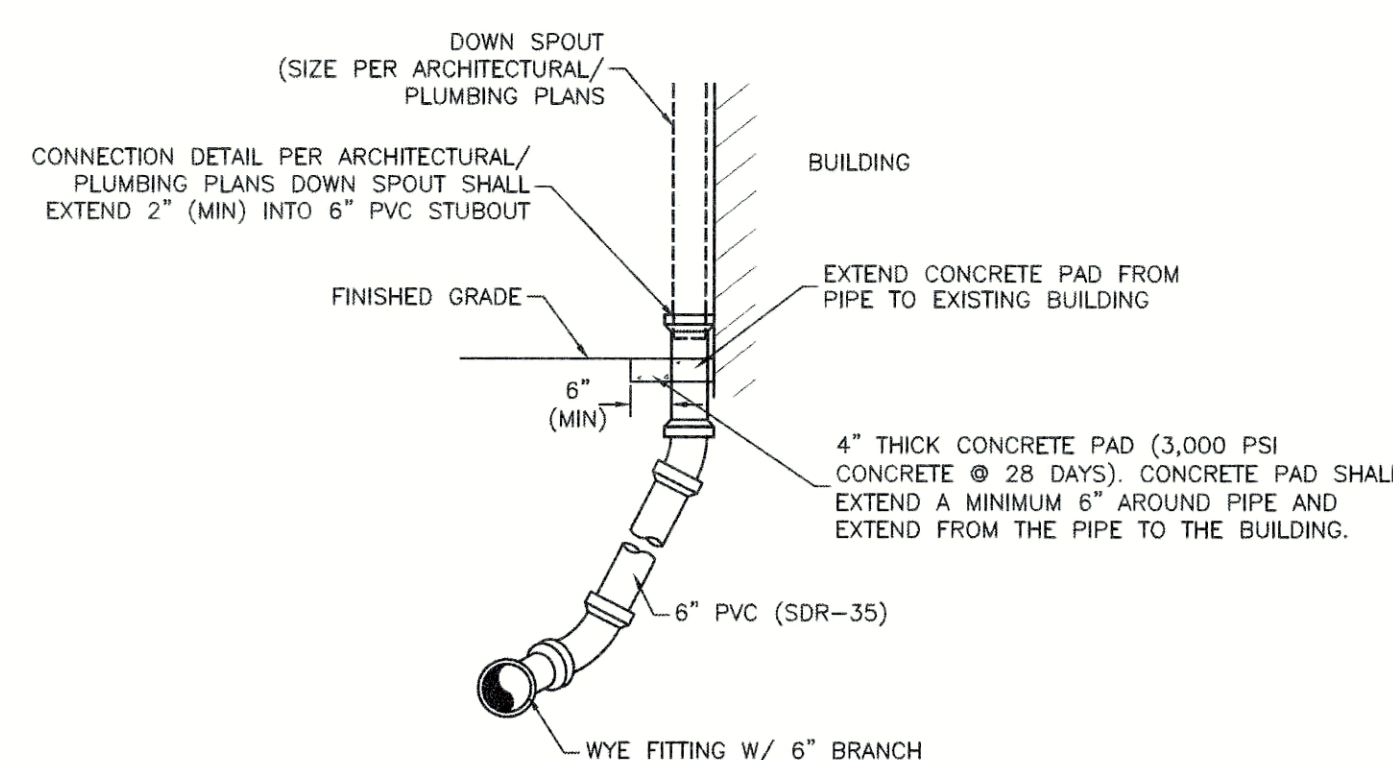
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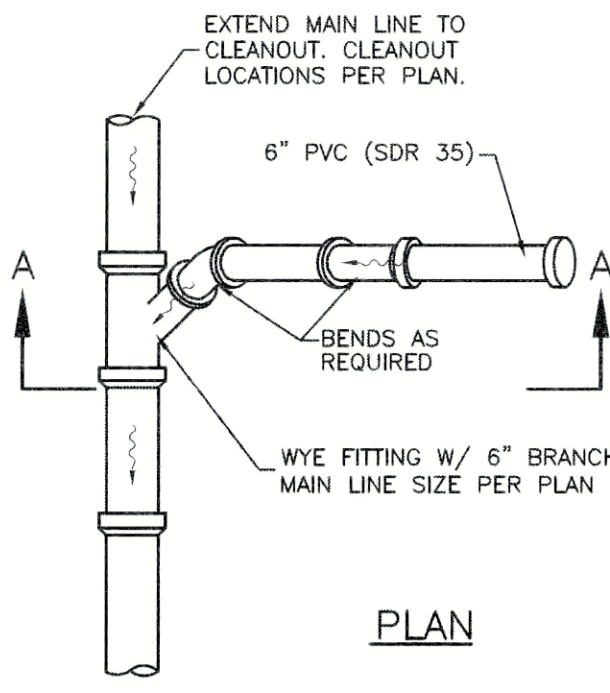
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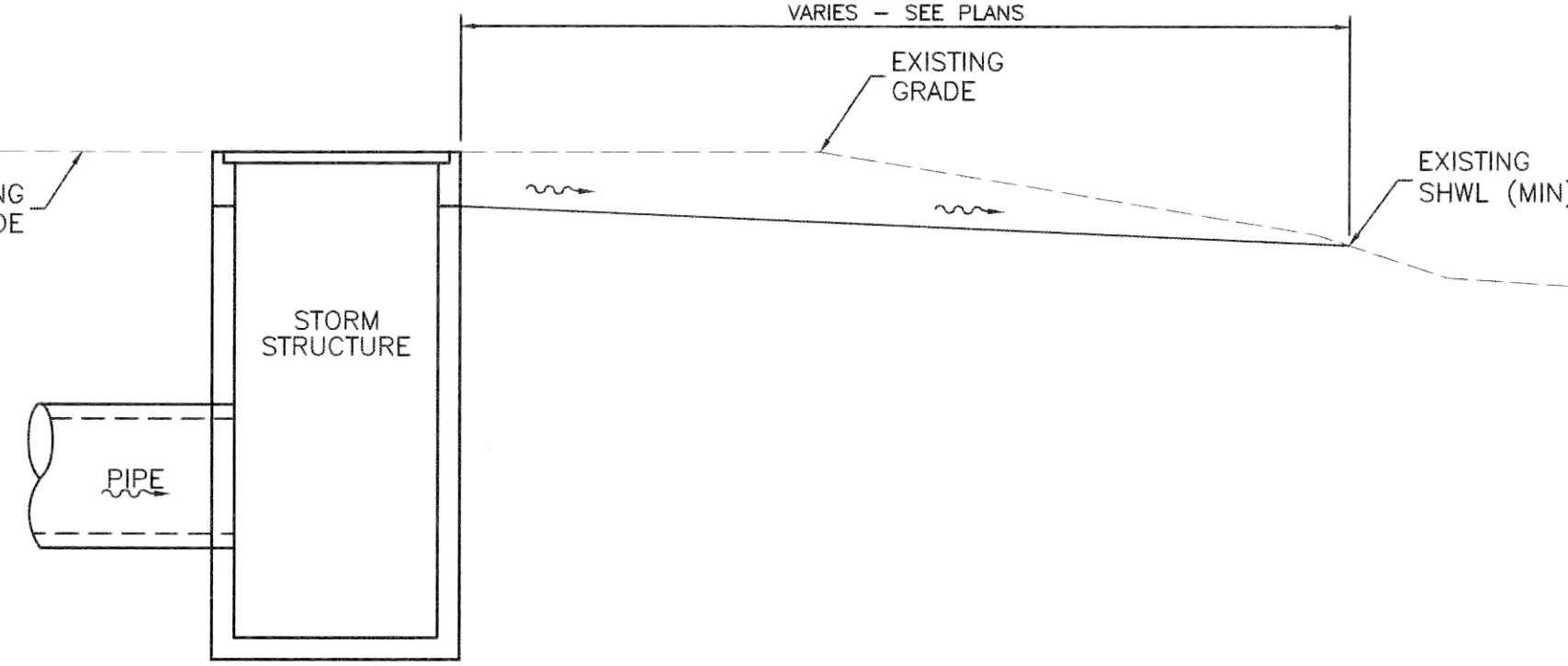
STORM CLEANOUT DETAIL  
N.T.S.



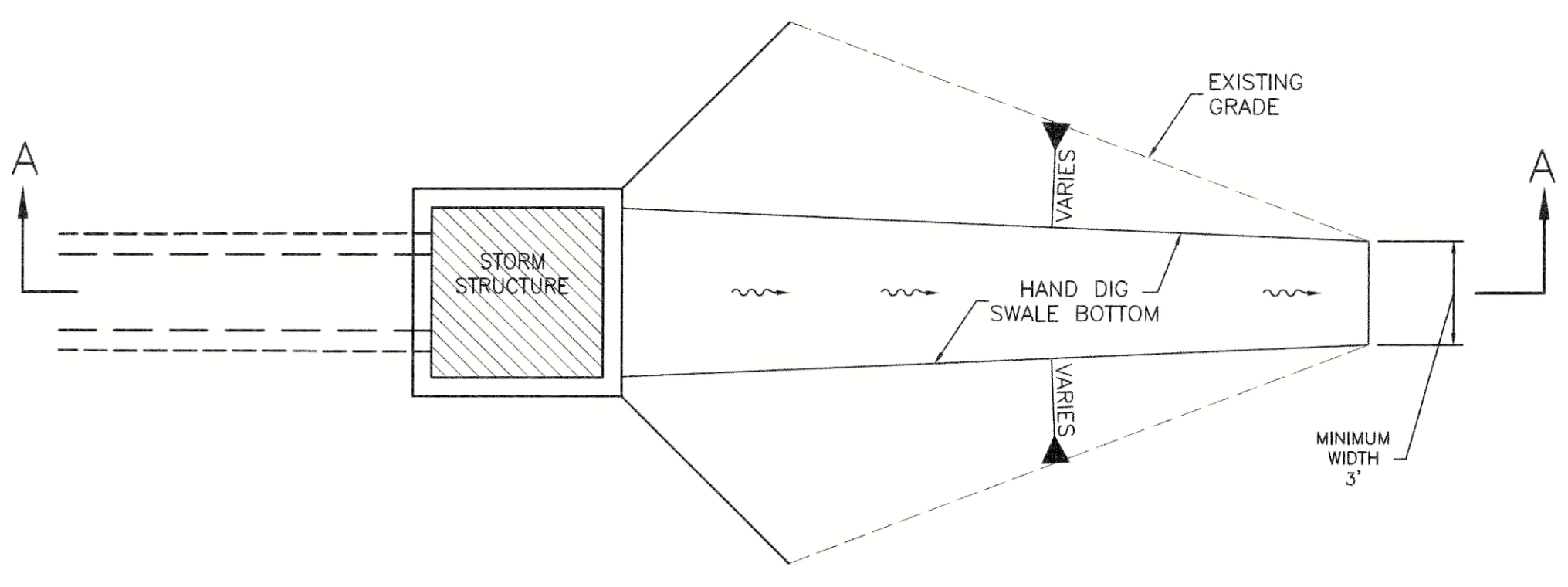
SECTION "A-A"  
TYPICAL ROOF DRAIN SERVICE/ CONNECTION DETAIL  
N.T.S.



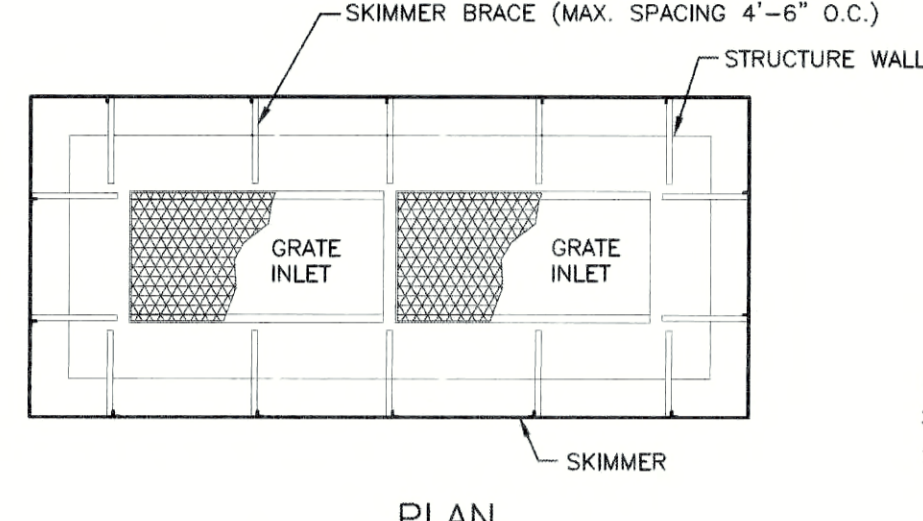
PLAN



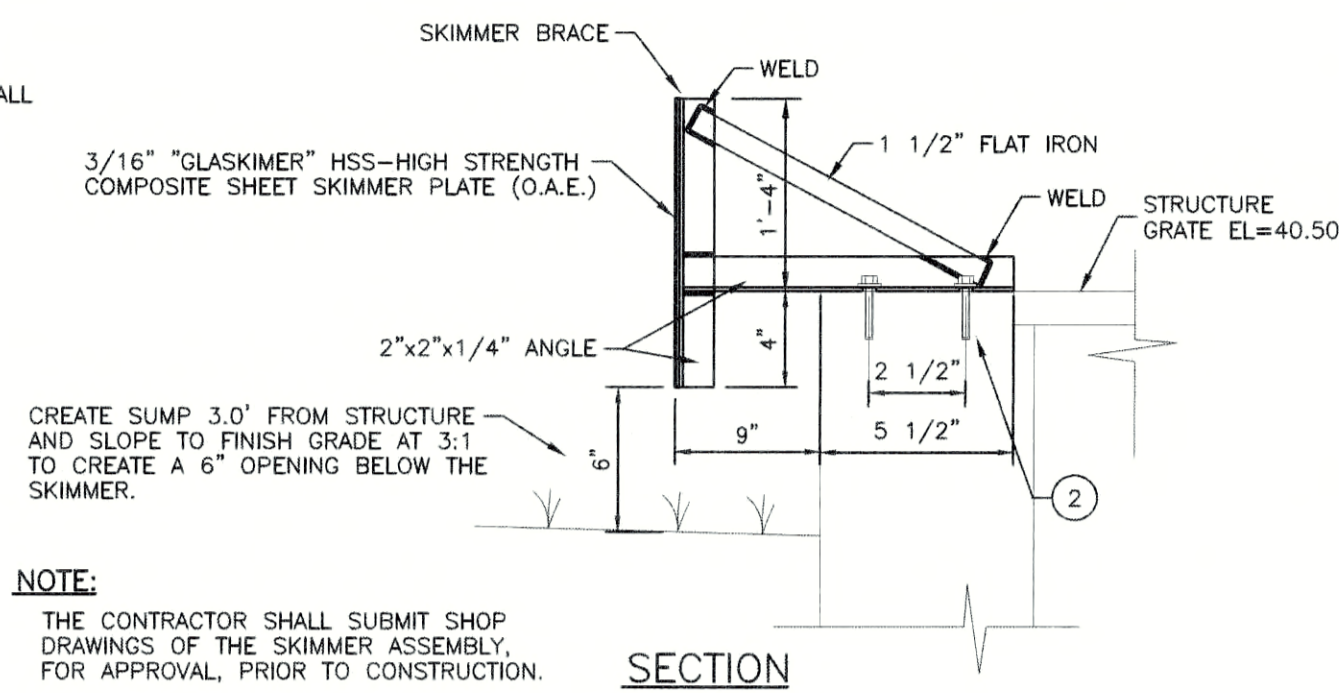
SECTION A-A



DISCHARGE SWALE  
N.T.S.



PLAN

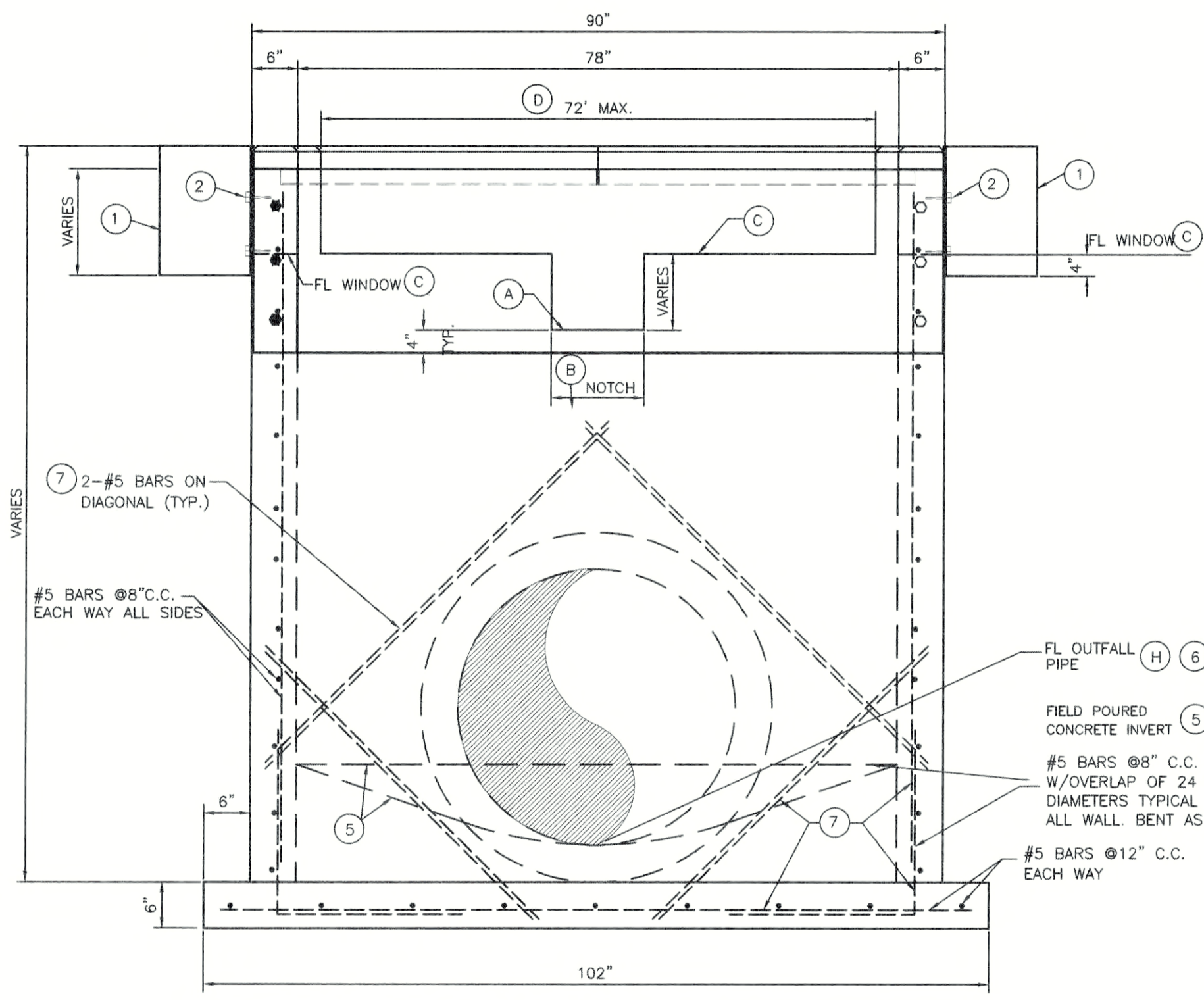


SECTION

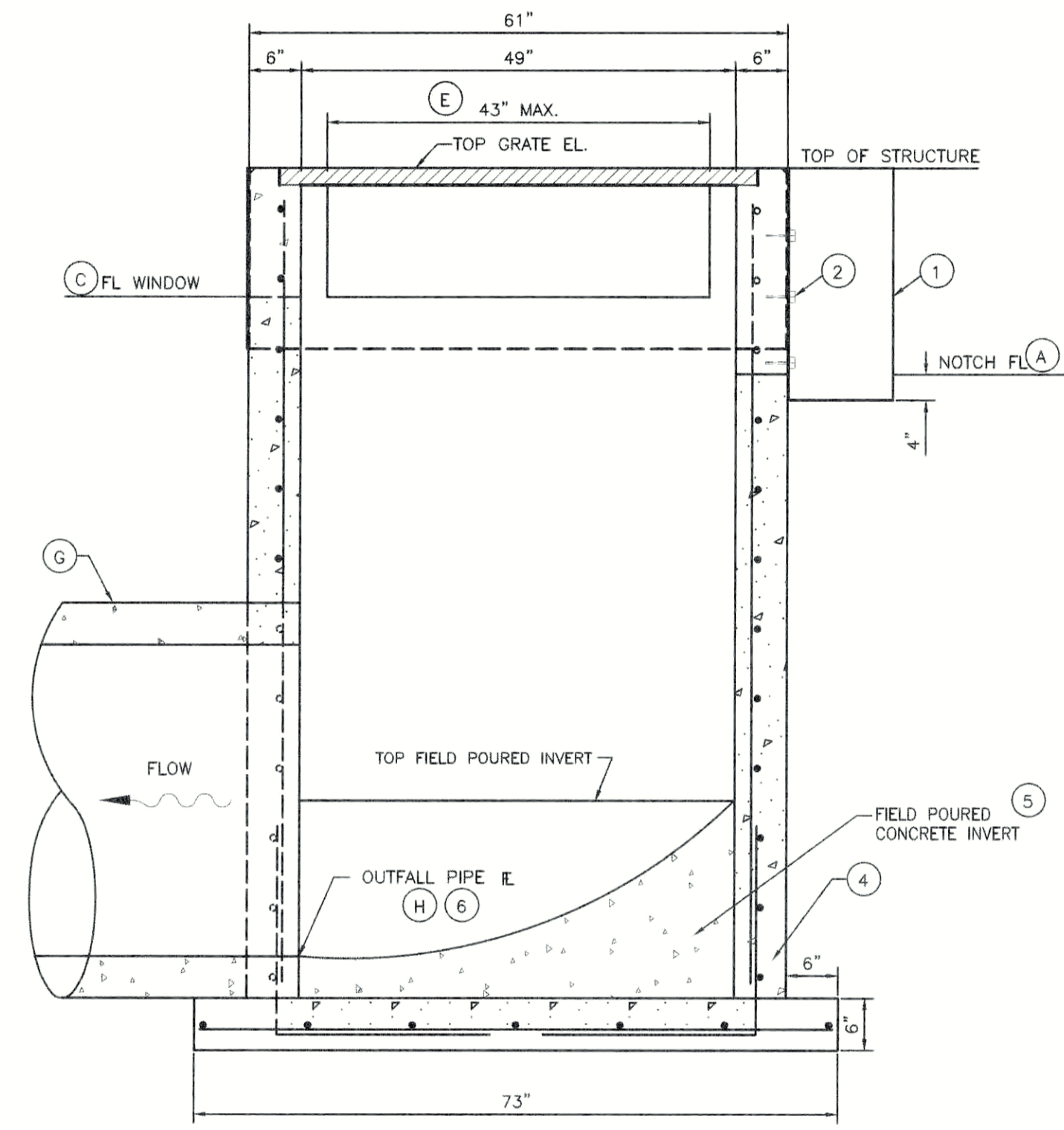
SPECIAL SKIMMER DETAIL  
N.T.S.

NOTE:  
THE CONTRACTOR SHALL SUBMIT SHOP  
DRAWINGS OF THE SKIMMER ASSEMBLY,  
FOR APPROVAL, PRIOR TO CONSTRUCTION.

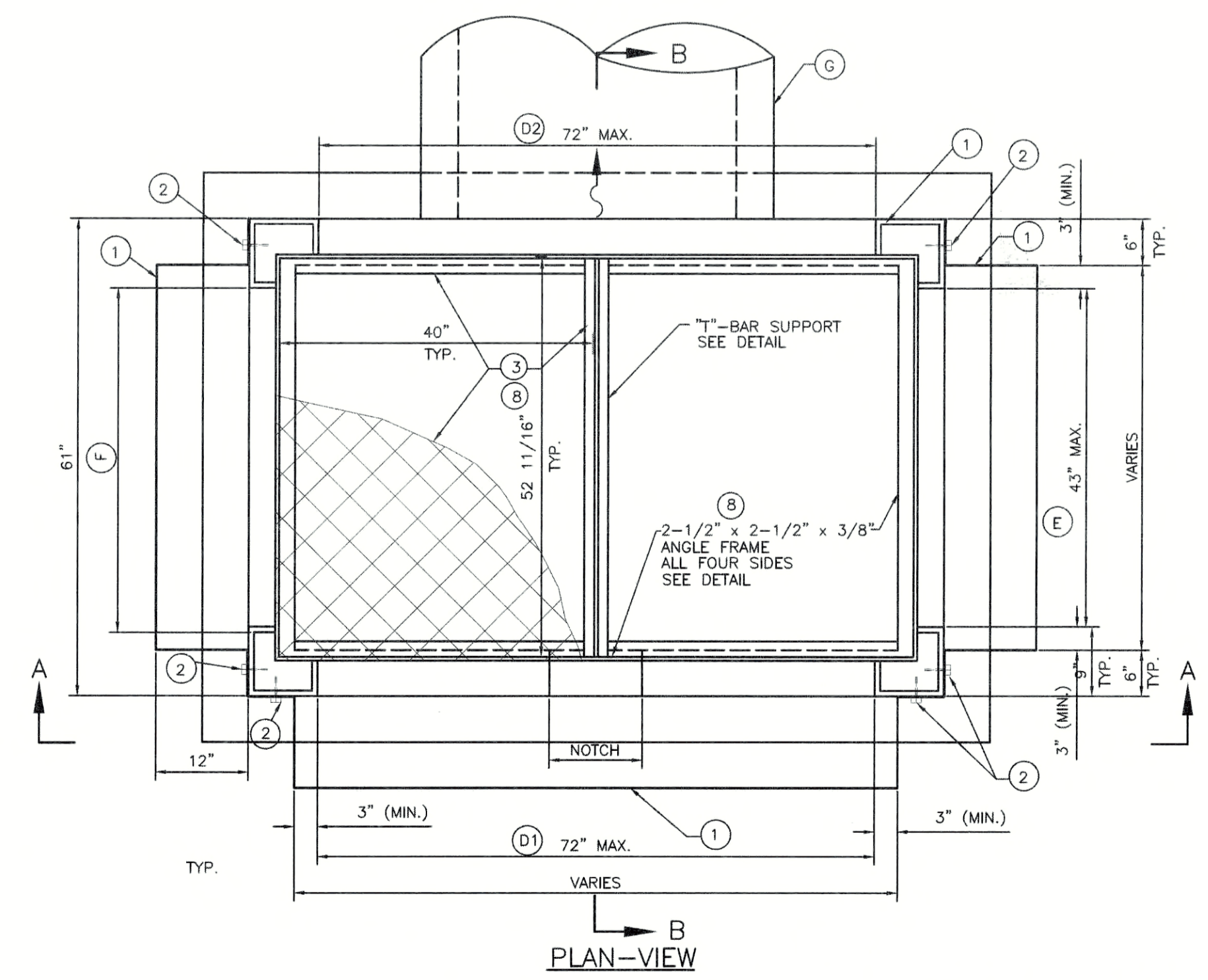
APPROVED  
November 19, 2020  
RECORD DRAWINGS



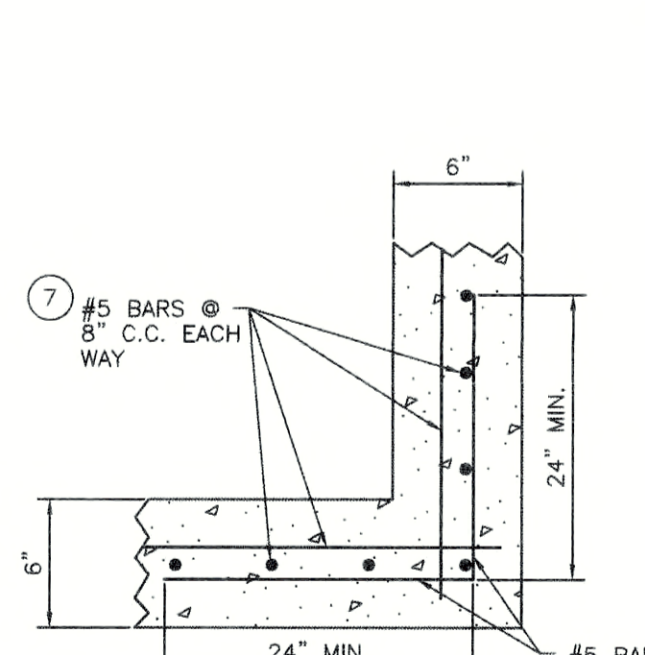
SECTION A-A



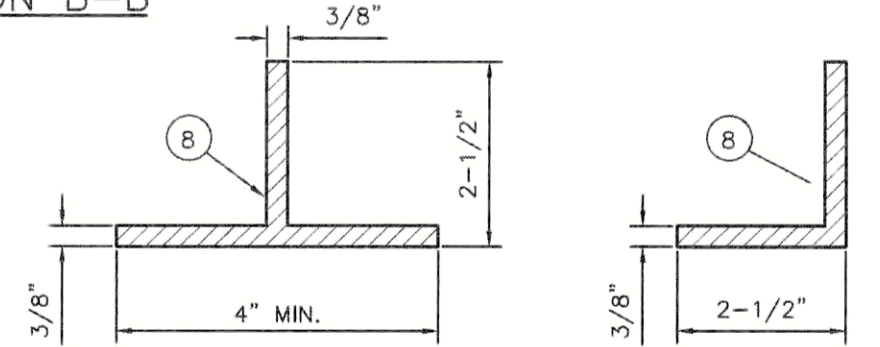
SECTION B-B



PLAN-VIEW



WALL CORNER REINFORCEMENT DETAIL



GRATE SUPPORT DETAIL

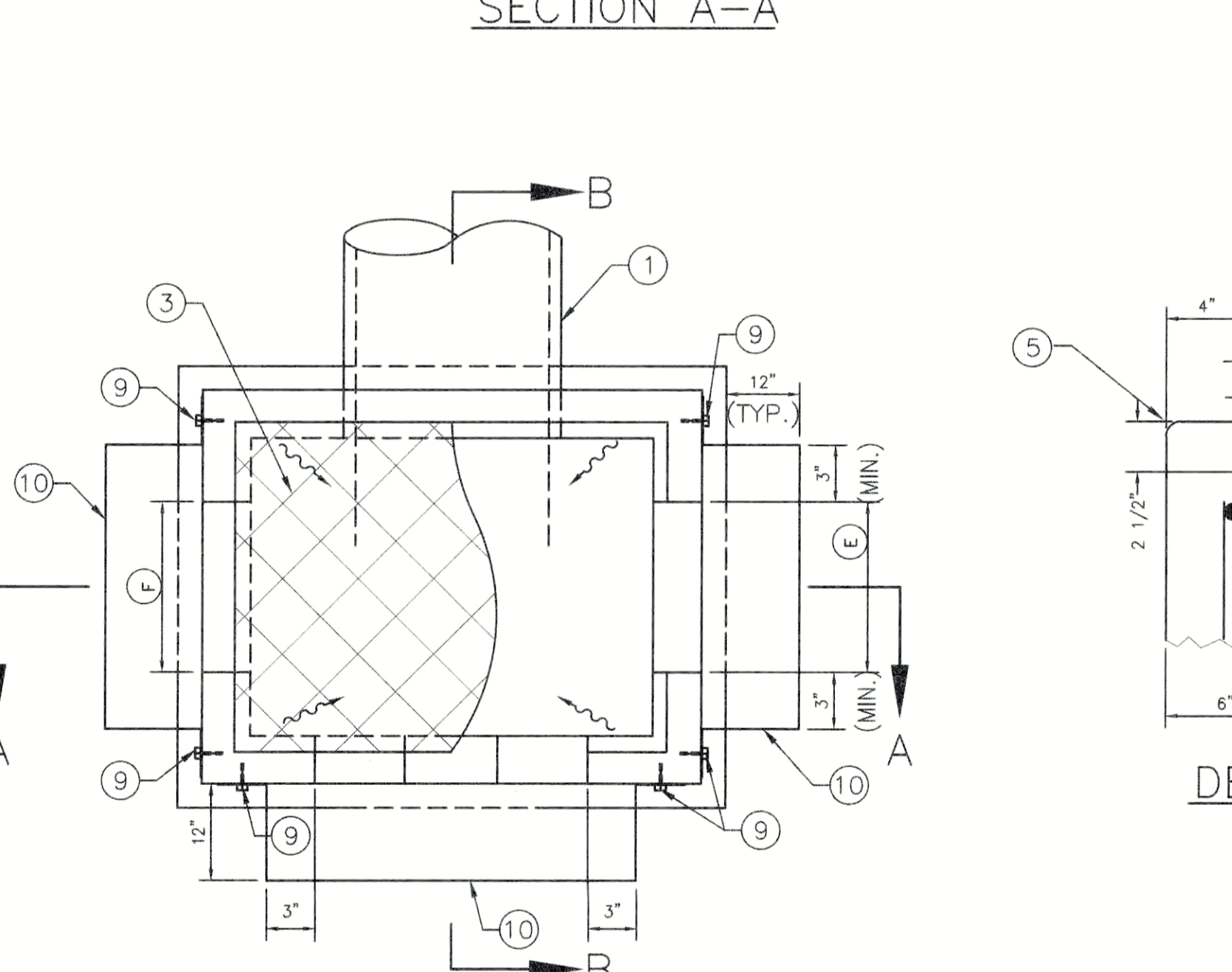
- DOUBLE GRATE CONTROL STRUCTURE NOTES:
- 3/16" THICK STAINLESS STEEL 1/4" THICK ALUMINUM OR 3/16" "GLASKIMER" HSS-HIGH STRENGTH COMPOSITE SHEET SKIMMER PLATE WITH OPEN TOP AND BOTTOM. SKIMMER TO EXTEND 4" BELOW NOTCH ELEVATION.
  - 3/8" DIAMETER STAINLESS STEEL EXPANSION ANCHORS, 3" LONG MINIMUM WITH STAINLESS STEEL WASHERS AND NUTS. IF HEIGHT OF SKIMMER IS 12" OR LESS, 2 EACH SIDE REQUIRED. IF SKIMMER IS OVER 12" HEIGHT, SPACE BOLTS ONE FOR EACH 6" C.C. MAXIMUM SPACING EACH SIDE OF SKIMMER.
  - U.S.F. GRATE NO. 6615 (40" x 52-11/16" x 2") (2 REQUIRED).
  - 3000 PSI CONCRETE @ 28 DAYS SHALL BE USED THROUGHOUT, UNLESS DESIGNATED OTHERWISE.
  - FIELD POURED CONCRETE INVERT AFTER INLET AND PIPE ARE PLACED IN GROUND, 3000 PSI CONCRETE @ 28 DAYS.
  - SEE STORMWATER PLAN TO VERIFY PIPE SIZE AND ALIGNMENT.
  - REINFORCING STEEL SHALL BE INTERMEDIATE GRADE BILLET WITH DEFORMATIONS CONFORMING TO ASTM A-615-76A. ALL STEEL SHALL BE 2" CLEAR (MINIMUM) UNLESS OTHERWISE NOTED.
  - FRAME & GRATE SHALL BE OF STEEL CONSTRUCTION COATED WITH 2 APPLICATIONS OF BLACK ENAMEL, 4.0 MILS DRY FILM THICKNESS EACH COAT, 8 MILS TOTAL. COATING SHALL MEET OR EXCEED FOOT SPECIFICATION 971-8. CONTRACTOR SHALL APPLY ONE FIELD COAT TO ANY BARE AREAS AS DETERMINED BY ENGINEER.
  - BENCH MARK REQUIRED TO BE SET ON STRUCTURE AFTER CONSTRUCTION IS COMPLETE. ELEVATION TO BE NOTED IN RECORD DRAWINGS.
  - STAKEOUT POINT TO BE CENTER OF STRUCTURE. FIELD LOCATION TO FIT LAKE BANK OR FILL SLOPE MAY BE NECESSARY. LOCATION TO BE REVIEWED BY ENGINEER OR HIS REPRESENTATIVE.
  - PROVIDE A MINIMUM 6" CLEARANCE UNDER SKIMMER.

DOUBLE GRATE CONTROL STRUCTURE TYPICAL DETAIL  
N.T.S.

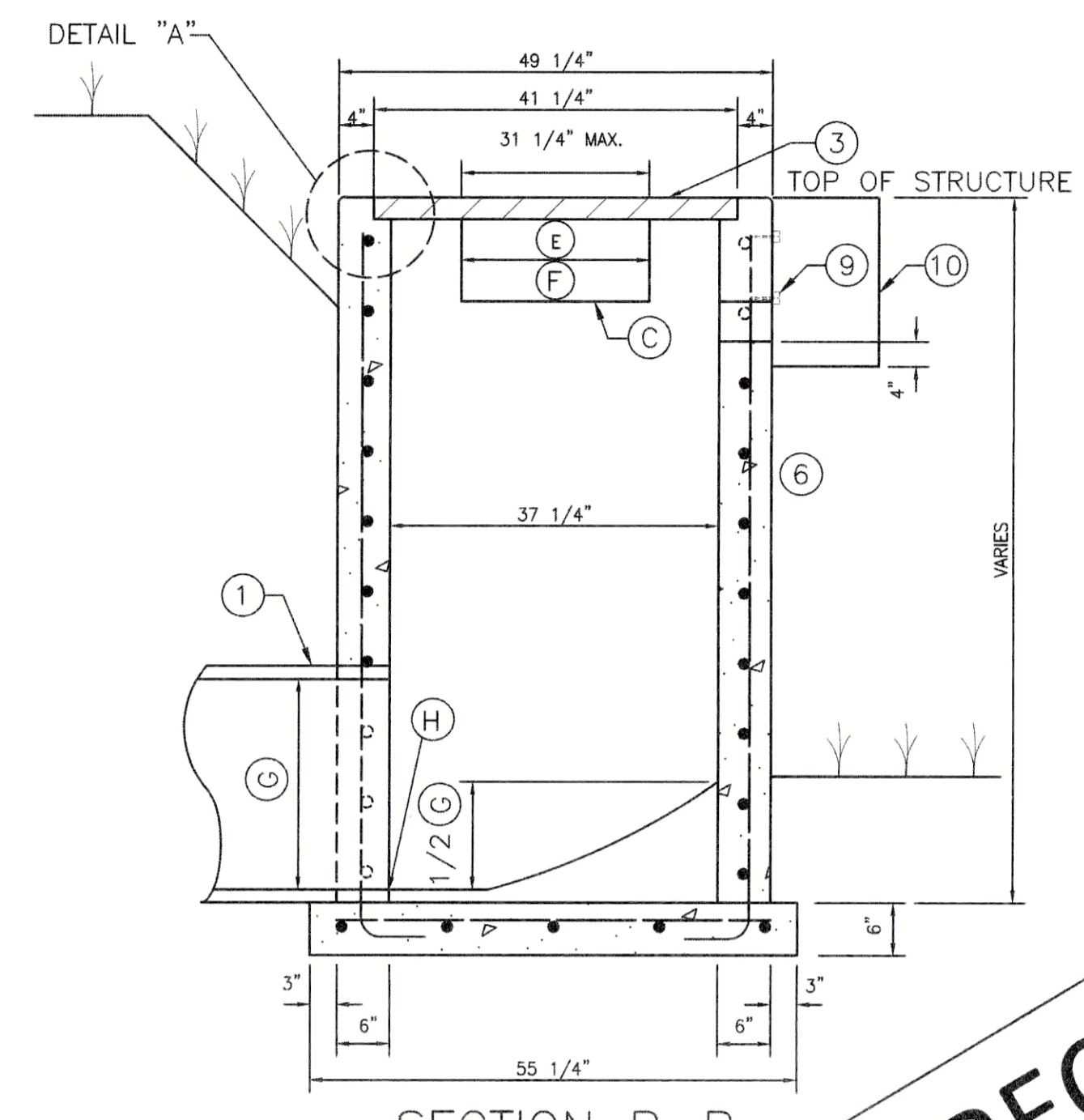
DATA TABLE

ICPR LINK	STRUCTURE NUMBER	TOP GRATE EL.	PIPE EL.	DIAMETER OF OUTLET PIPE	FL. EL. OF NOTCH	WIDTH OF NOTCH	FL. EL. WINDOW	WIDTH OF WINDOW	WIDTH OF WINDOW	WIDTH OF WINDOW	SPECIAL REMARKS
SMH-1-DS2-REV	STR #121	14.39	INV EL. = 6.00 N	42" RCP	N/A	N/A	11.5	36" W X 12" T	N/A	N/A	PROVIDE SLOT ON SECTION A SIDE OF STRUCTURE (NO SKIMMER REQUIRED)

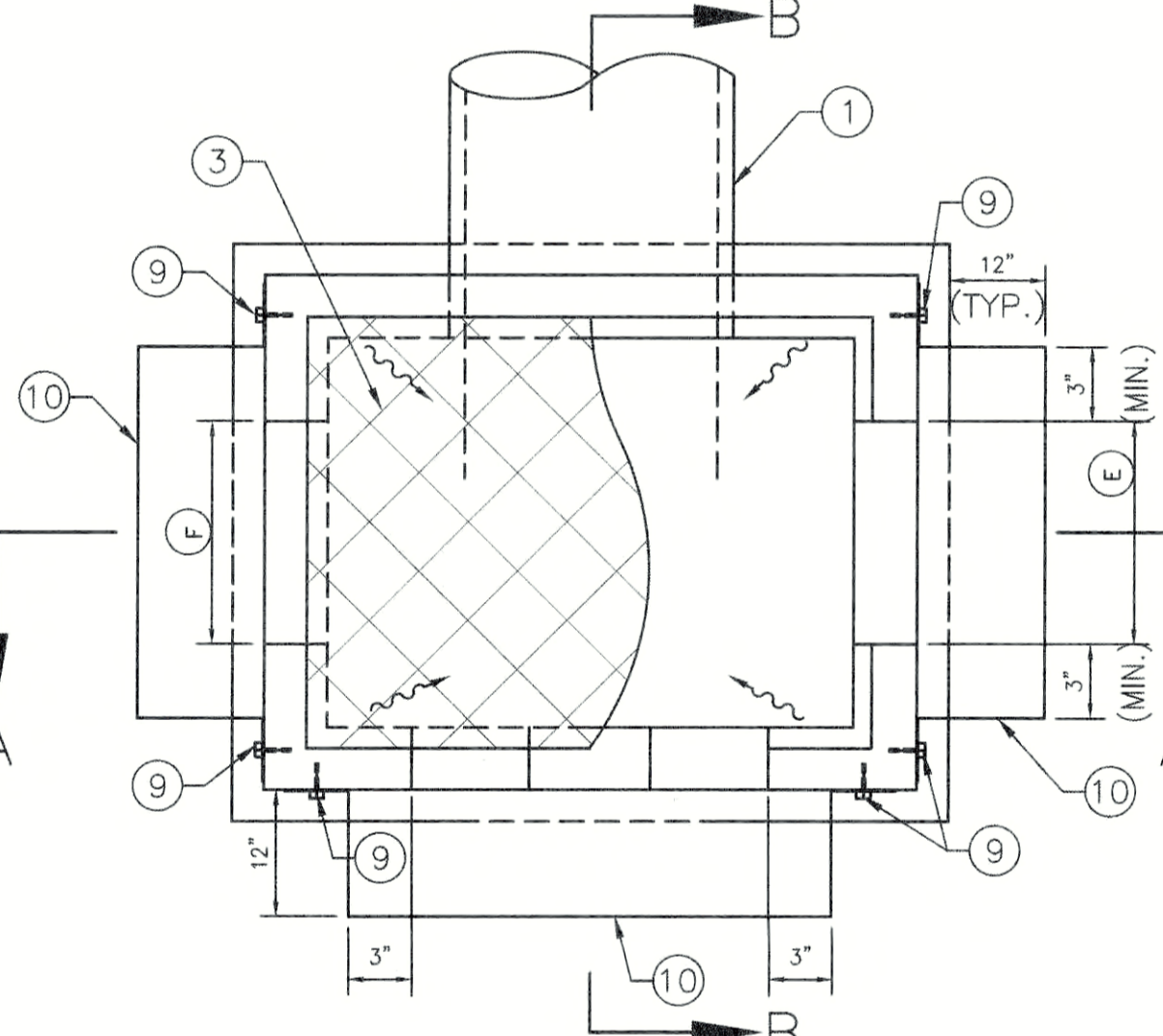
DOUBLE GRATE CONTROL STRUCTURE  
N.T.S.



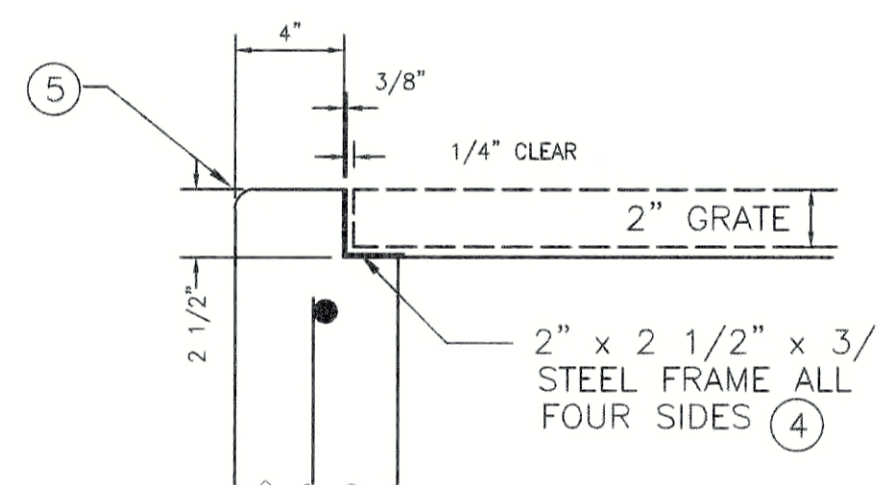
SECTION A-A



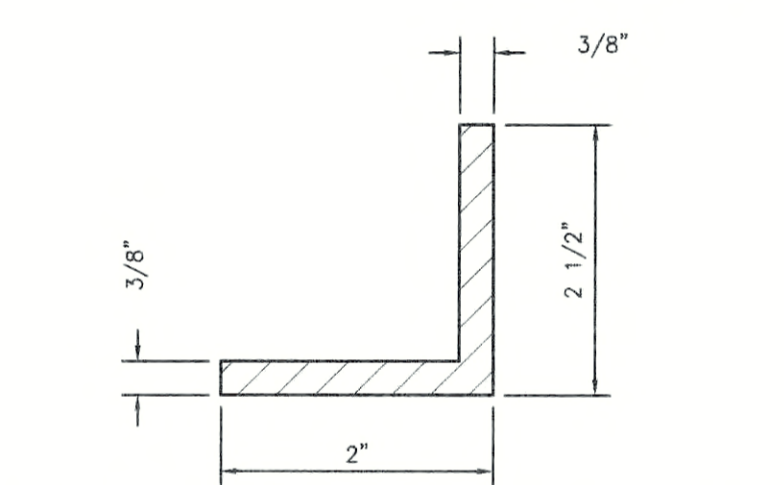
SECTION B-B



PLAN



DETAIL "A"



ANGLE FRAME DETAIL  
N.T.S.

SINGLE GRATE CONTROL STRUCTURE NOTES:

- SEE STORM PIPING PLAN DRAWINGS FOR PIPE SIZE, ALIGNMENT, FLOWLINE AND GRATE ELEVATIONS.
- BENCH MARK REQUIRED TO BE SET ON STRUCTURE AFTER CONSTRUCTION IS COMPLETE. ELEVATION TO BE NOTED IN RECORD DRAWINGS.
- U.S.F. GRATE NO. 6615 (STEEL 40" x 52 11/16" x 2")
- FRAME & GRATE SHALL BE OF STEEL CONSTRUCTION COATED WITH 2 APPLICATIONS OF BLACK ENAMEL, 4.0 MILS DRY FILM THICKNESS EACH COAT, 8 MILS TOTAL. COATING SHALL MEET OR EXCEED FOOT SPECIFICATION 971-8. CONTRACTOR SHALL APPLY ONE FIELD COAT TO ANY BARE AREAS AS DETERMINED BY ENGINEER.
- 3/4" CHAMFER ALL EXPOSED EDGES.
- 3000 PSI CONCRETE @ 28 DAYS SHALL BE USED THROUGHOUT.
- POURED CONCRETE INVERT AFTER INLET AND PIPE PLACED IN GROUND, 3000 PSI @ 28 DAYS.
- REINFORCING STEEL SHALL BE INTERMEDIATE GRADE BILLET WITH DEFORMATIONS CONFORMING TO ASTM A-615-76A. ALL STEEL SHALL BE 1 1/2" CLEAR UNLESS OTHERWISE NOTED.
- 3/8" DIAMETER STAINLESS STEEL EXPANSION ANCHORS, 3" LONG MINIMUM WITH STAINLESS STEEL WASHERS AND NUTS. IF HEIGHT OF SKIMMER IS 12" OR LESS, 2 EACH SIDE REQUIRED. IF SKIMMER IS OVER 12" HEIGHT, SPACE BOLTS ONE FOR EACH 6" C.C. MAXIMUM SPACING EACH SIDE OF SKIMMER.
- 3/16" THICK STAINLESS STEEL 1/4" THICK ALUMINUM OR 3/16" "GLASKIMER" HSS-HIGH STRENGTH COMPOSITE SHEET SKIMMER PLATE WITH OPEN TOP AND BOTTOM. SKIMMER TO EXTEND 4" BELOW NOTCH ELEVATION.
- STAKEOUT POINT TO BE CENTER OF STRUCTURE. FIELD LOCATION TO FIT LAKE BANK OR FILL SLOPE MAY BE NECESSARY. LOCATION TO BE REVIEWED BY ENGINEER OR HIS REPRESENTATIVE.
- PROVIDE MINIMUM 6" CLEARANCE UNDER SKIMMER.

SINGLE GRATE CONTROL STRUCTURE TYPICAL DETAIL  
N.T.S.

DATA TABLE

ICPR LINK	STRUCTURE NUMBER	TOP GRATE EL.	PIPE EL.	DIAMETER OF OUTLET PIPE	FL. EL. OF NOTCH	WIDTH OF NOTCH	FL. EL. WINDOW	WIDTH OF WINDOW	WIDTH OF WINDOW	WIDTH OF WINDOW	SPECIAL REMARKS
SMH-1-DS1	STR #118	14.39	INV EL. = 9.50 W	23" RCP	N/A	N/A	11	6"x6"	N/A	N/A	SKIMMER REQUIRED
SMH-2-DS2	STR #116	14.91	INV EL. = 7.11 N	30" RCP	N/A	N/A	11.79	28" W X 8" T	N/A	N/A	PROVIDE SLOT ON SECTION A SIDE OF STRUCTURE (NO SKIMMER REQUIRED)

SINGLE GRATE CONTROL STRUCTURE  
N.T.S.

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Sarasota, FL 34240  
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RECORD  
DRAWING

Stamps & Approvals

Project Key Plan

Rev	Date	Description
3	07/20/20	RECORD DRAWINGS
2	12/28/19	CS1015
1	7/31/19	CS1005
0	4/24/19	Construction Documents

smh

Sarasota County  
Public Hospital  
District

2600 Laurel Road  
Nokomis, FL 34275

90 Bed New Hospital

AHCA #: 23/23960161-101-1

Project Phase

CONSTRUCTION DOCUMENTS

Date

4/24/2019

Drawn By

STANTEC

Project Number

16122-00

Checked By

STANTEC

Sheet Title

CONTROL STRUCTURE  
DETAILS

Sheet Number

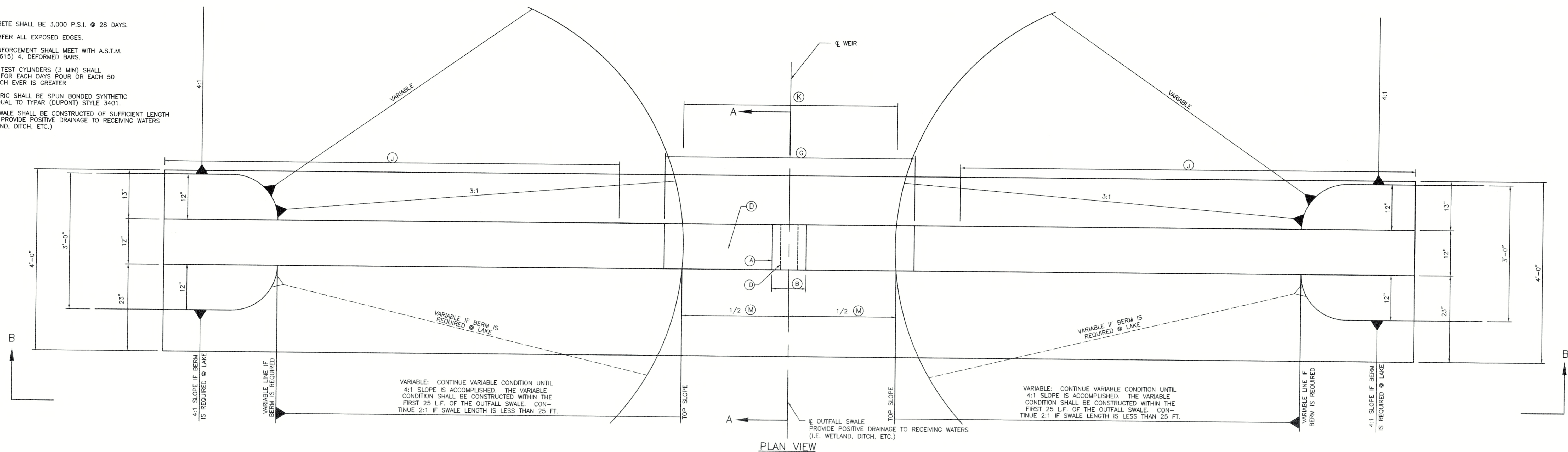
Rev. No.

C-603

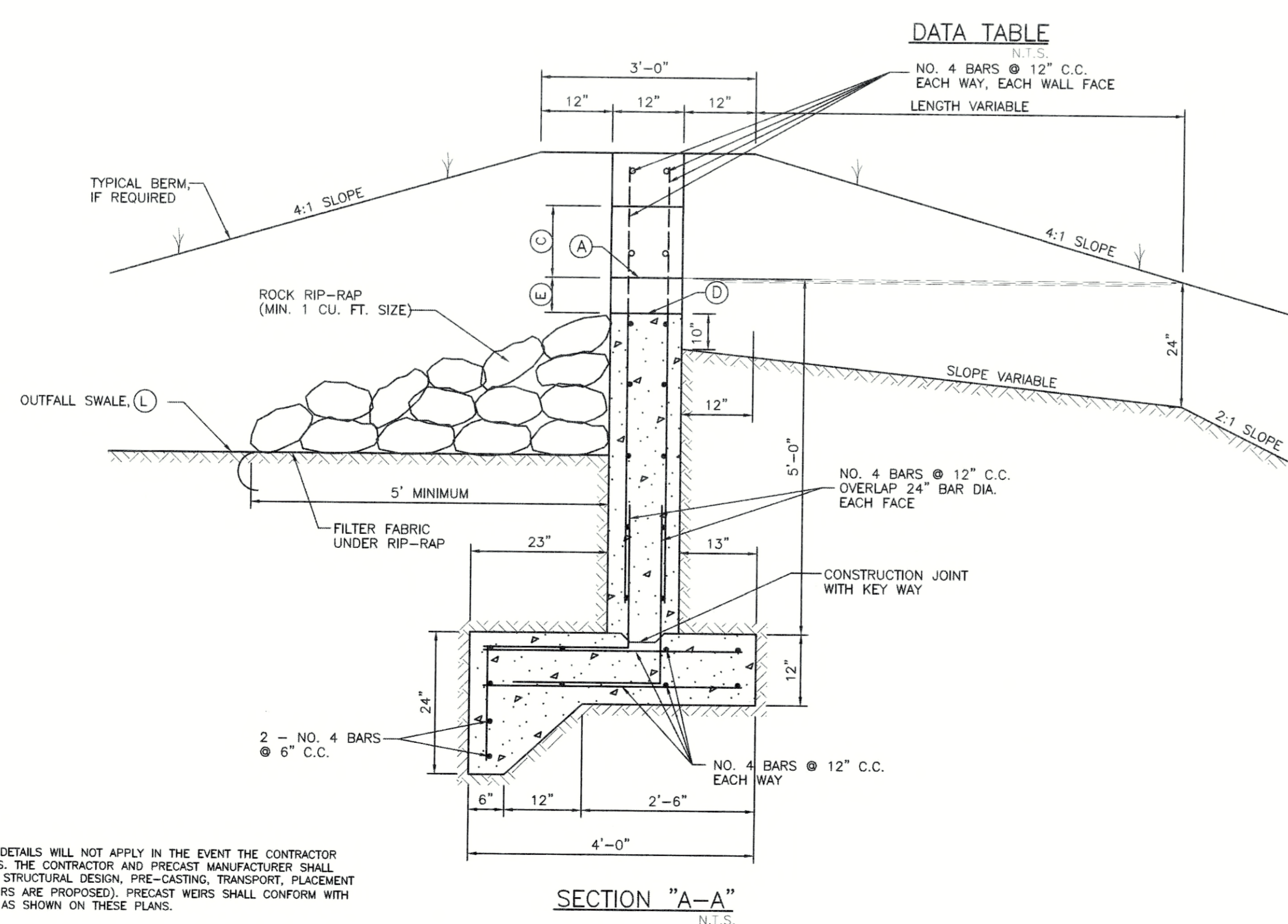
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APPROVED  
November 19, 2020  
RECORD DRAWINGS

- NOTES:
1. ALL CONCRETE SHALL BE 3,000 P.S.I. @ 28 DAYS.
  2. 3/4" CHAMFER ALL EXPOSED EDGES.
  3. STEEL REINFORCEMENT SHALL MEET WITH A.S.T.M. SPEC. (A-615) 4. DEFORMED BARS.
  4. CONCRETE TEST CYLINDERS (3 MIN.) SHALL BE TAKEN FOR EACH DRY POUR OR EACH 50 YARDS WHICH EVER IS GREATER.
  5. FILTER FABRIC SHALL BE SPUN BONDED SYNTHETIC FABRIC, EQUAL TO TYMAR (GURUNT) STYLE 1401.
  6. OUTFALL SWALE SHALL BE CONSTRUCTED OF SUFFICIENT LENGTH SO AS TO PROVIDE POSITIVE DRAINAGE TO RECEIVING WATERS (I.E. WETLAND, DITCH, ETC.).



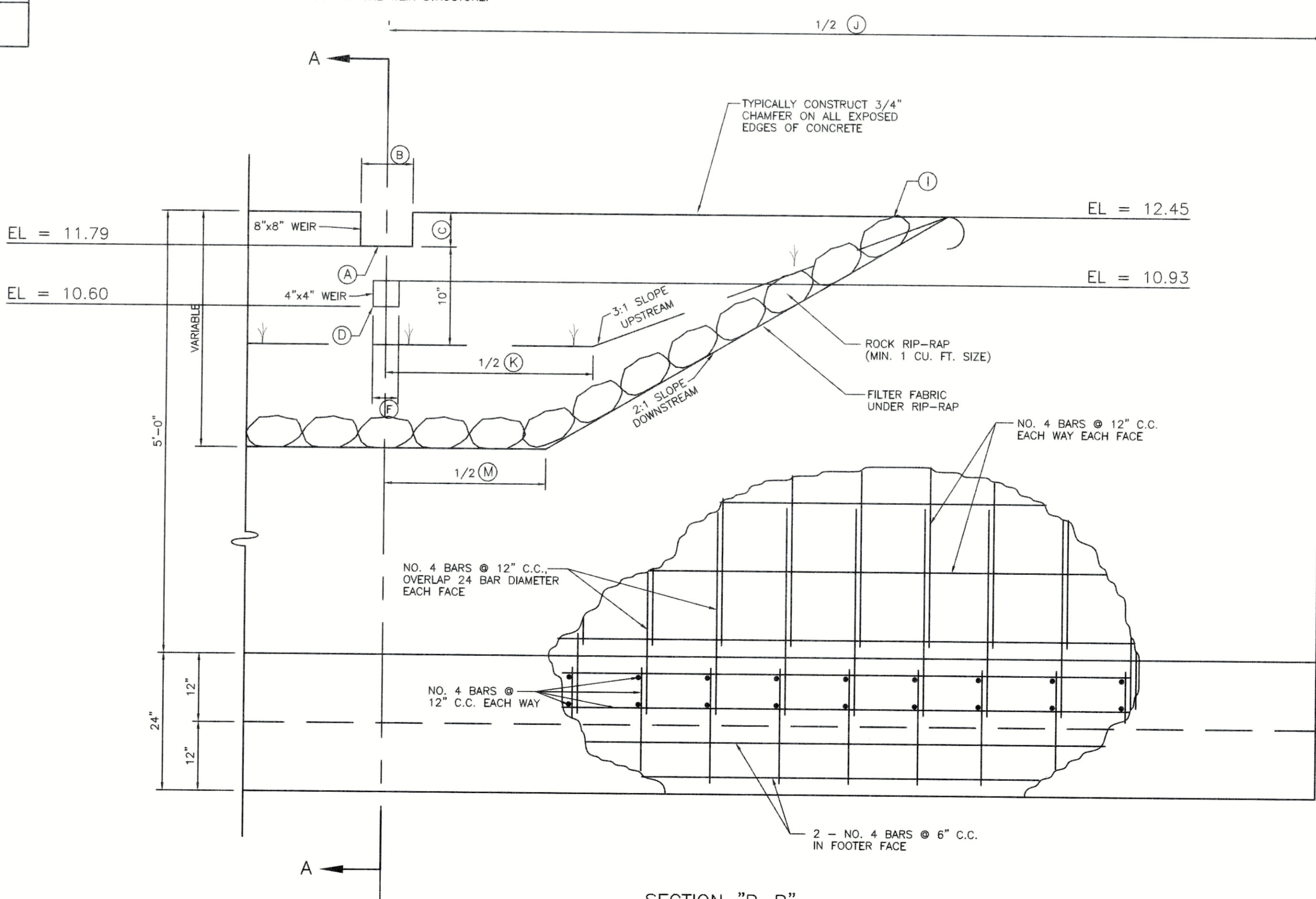
STRUCTURE NUMBER	ADICR LINK NAME	LAKE N.W.L.	E ELEVATION WEIR NOTCH	WIDTH OF WEIR	HEIGHT OF WEIR	L.F. ELEVATION NOTCH	HEIGHT OF NOTCH	WIDTH OF NOTCH	UNUSED	UNUSED	E ELEVATION WEIR NOTCH	LENGTH OF WEIR	WIDTH OF INCOMING SWALE (FT)	E ELEVATION OF OUTFALL SWALE	WIDTH OF OUTFALL SWALE (FT)	SPECIAL REMARKS
W-1	SMH-WET-A-W1 SMH-WET-A-W2	N/A	11.79	8"	8"	10.60	4"	4"	N/A	N/A	12.45	7' 8"	2'	10.35	2'	NO SKIMMER REQUIRED



NOTE THAT THE WEIR FOOTERS AND DETAILS WILL NOT APPLY IN THE EVENT THE CONTRACTOR ERECTS TO PREVENT THE WEIR WALLS. THE CONTRACTOR AND PRECAST MANUFACTURER SHALL TAKE FULL RESPONSIBILITY FOR THE STRUCTURAL DESIGN, PRE-CASTING, TRANSPORT, PLACEMENT AND CURE (OURS IF SOON HOURS ARE PROPOSED). PRECAST WORKS SHALL CONFORM WITH THE GEOMETRY OF THE WEIR WALLS AS SHOWN ON THESE PLANS.

SECTION "A-A"

NOTE: THE COST OF THE SPREADER SWALE CONSTRUCTION SHALL BE INCLUDED IN THE COST OF THE WEIR STRUCTURE.



SECTION "B-B"  
(HALF SECTION)  
SYMMETRICAL ABOUT C-C

RECORD  
DRAWING

**Flad Architects**  
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Stamps & Approvals

Project Key Plan

Rev	Date	Description
1	07/02/20	RECORD DRAWINGS
2	08/04/20	REVISION
3	07/19/19	REVISION
4	02/19/19	Construction Documents

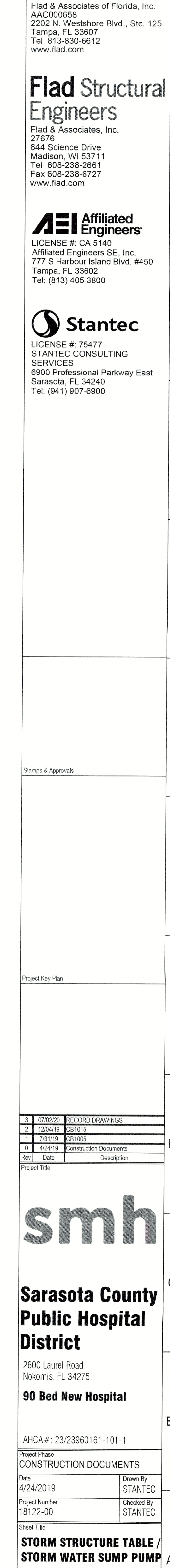
**smh**

**Sarasota County Public Hospital District**  
2600 Laurel Road  
Nokomis, FL 34275  
**90 Bed New Hospital**

AHCA #: 23/23960161-101-1

Project Phase	CONSTRUCTION DOCUMENTS
Date	4/24/2019
Project Number	18122-00
Sheet Title	WEIR AND TRENCH DETAILS

Sheet Number	Rev. No.
C-604	2



APPROVED  
November 19, 2020  
RECORD DRAWINGS

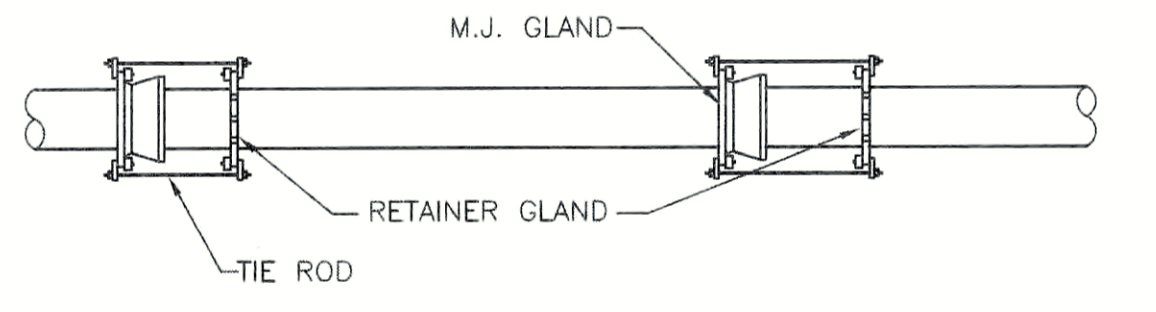
TRENCH NOTES:

- WHERE WATER, REUSE AND/OR SEWER MAINS CROSS WITH LESS THAN EIGHTEEN INCHES (18") VERTICAL CLEARANCE, ONE OF THE FOLLOWING METHODS OF PROTECTION SHALL BE UTILIZED:
  - WHERE A CONFLICT ARISES WITH AN EXISTING SEWER OR REUSE MAIN, THE PROPOSED WATER MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC OR CL-51 D.I.P. CENTERED ON THE POINT OF CROSSING.
  - WHERE A CONFLICT ARISES WITH AN EXISTING WATER OR REUSE MAIN, THE PROPOSED SEWER MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC, CENTERED ON THE POINT OF CROSSING.
  - WHERE A CONFLICT ARISES WITH PROPOSED WATER, REUSE AND/OR SEWER MAINS, THE WATER AND REUSE MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC, OR CL-51 D.I.P., WHILE THE SEWER MAIN SHALL BE A MINIMUM OF TWENTY FEET (20') OF AWWA C-900 DR-14 PVC, CENTERED ON THE POINT OF CROSSING.
- WHEN A WATER MAIN PARALLELS A WASTEWATER LINE, A HORIZONTAL SEPARATION OF AT LEAST TEN FEET (10') FROM OUTSIDE EDGE TO OUTSIDE EDGE SHOULD BE MAINTAINED. WHEN SEPARATED BY LESS THAN 10 FEET (10') HORIZONTALLY, THE WATER MAIN SHALL BE AWWA C-900 DR-14 PVC, OR CLASS-51 D.I.P. AND SEWER LINES SHALL BE AWWA C-900 DR-14 PVC. JOINTS SHALL BE STAGGERED TO MAXIMIZE JOINT SEPARATION.
- WHEN A WATER MAIN OR WASTEWATER LINE PARALLELS A REUSE MAIN, A HORIZONTAL SEPARATION OF AT LEAST FIVE FEET (5') CENTER OF PIPE TO CENTER OF PIPE SHOULD BE MAINTAINED. IN NO CASE SHALL THE HORIZONTAL SEPARATION BE LESS THAN THREE FEET (3') FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE.
- TRENCH SHALL BE BRACED OR SHORED IN ACCORDANCE WITH THE "FLORIDA TRENCH & SAFETY ACT".
- WIDTH OF TRENCH BOTTOM SHALL BE OUTSIDE DIAMETER OF PIPE PLUS TWELVE INCHES (12") EACH SIDE, MAXIMUM.
- CONTRACTOR SHALL PLACE METALLIC BURIAL IDENTIFICATION TAPE DIRECTLY ABOVE WATER MAIN IN CONFORMANCE WITH CITY CODE.
- ALL WELL POINT HOLES SHALL BE FILLED WITH COARSE SAND OR OTHER SATISFACTORY GRANULAR MATERIAL AT TIME WELL POINTS ARE PULLED.
- DISCHARGE FROM DE-WATERING OPERATION SHALL BE DISPOSED OF IN SUCH A MANNER THAT IT SHALL NOT INTERFERE WITH THE NORMAL DRAINAGE OF THE AREA IN WHICH THE WORK IS BEING PERFORMED. CREATE A PUBLIC NUISANCE OR FORM PONDING. THE OPERATIONS SHALL NOT CAUSE INJURY TO ANY PORTION OF THE WORK COMPLETED, OR IN PROGRESS, OR TO THE SURFACE OF STREETS, OR TO PRIVATE PROPERTY.
- THE PROPOSED DE-WATERING METHOD(S) AND SCHEDULE SHALL BE COORDINATED WITH THE UTILITY AND/OR THE ENGINEER OF RECORD AND OTHER NECESSARY REGULATORY AGENCIES PRIOR TO CONSTRUCTION. ADDITIONALLY, WHERE PRIVATE PROPERTY SHALL BE INVOLVED, ADVANCE PERMISSION SHALL BE OBTAINED BY THE CONTRACTOR AND/OR DEVELOPER.
- THE CONTRACTOR SHALL PROVIDE SOIL COMPACTION TESTING IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. IF THE SPECIFICATIONS DO NOT ADDRESS COMPACTION TESTS, THEY SHALL BE DONE IN ACCORDANCE WITH CITY OF VENICE UNIFORM WATER AND WASTEWATER SYSTEM AND REUSE CODE, LATEST EDITION. ALL SOIL COMPACTION TESTS RESULTS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD.
- ALL CONSTRUCTION SHALL ADHERE TO CITY OF VENICE STANDARD DETAILS

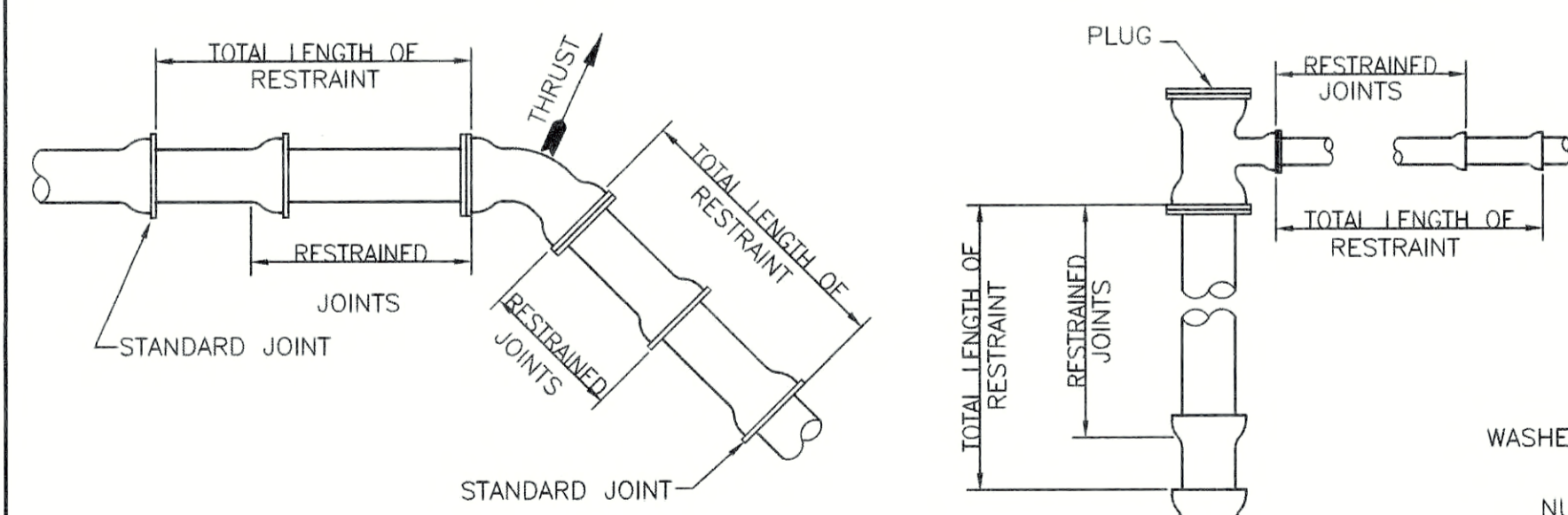
THE FOLLOWING TABLES SHOULD BE USED TO DETERMINE THE LENGTH OF PIPE IN FEET FROM EACH BEND, TEE, REDUCER, VALVE, DEAD END OR FITTING THAT SHALL BE RESTRAINED. CALCULATIONS ARE BASED ON EBAA IRON SALES, INC. RESTRAINT LENGTH CALCULATOR V7.1.2. THE DESIGN CRITERIA FOR THESE TABLES ARE AS FOLLOWS:

TRENCH CONDITION (ANSI/AWWA C150/A21.50)	4
SOIL CLASSIFICATION (ASTM STANDARD D2487)	SM
DEPTH OF COVER (FT.)	1.50
DESIGN PRESSURE (PSI)	2
SAFETY FACTOR	2.0
TYPICAL PIPE LENGTH (FT.)	20

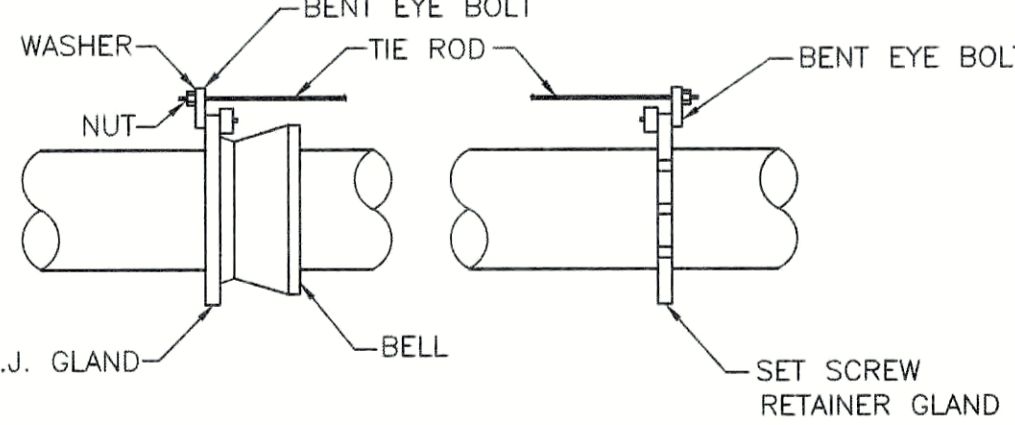
- NOTES:
- VERTICAL OFFSET CALCULATIONS ASSUME .3FT. OF COVER ON BOTH THE UPPER & LOWER SIDES OF VERTICAL OFFSET.
  - WHEN TEE BRANCH SIZE IS LARGER THAN THE RUN SIZE, REFER TO EBAA IRON, INC. CALCULATIONS FOR ADDITIONAL RESTRAINT REQUIRED UNLESS INDICATED.
  - RESTRAIN ONE FULL LENGTH(20') OF PIPE MINIMUM, ON EACH SIDE OF ALL FITTINGS REGARDLESS OF THE VALUES INDICATED IN THESE TABLES.



METHOD OF RESTRAINING PUSH-ON JOINT PIPE  
N.T.S.



RESTRAINED JOINTS STANDARD  
N.T.S.



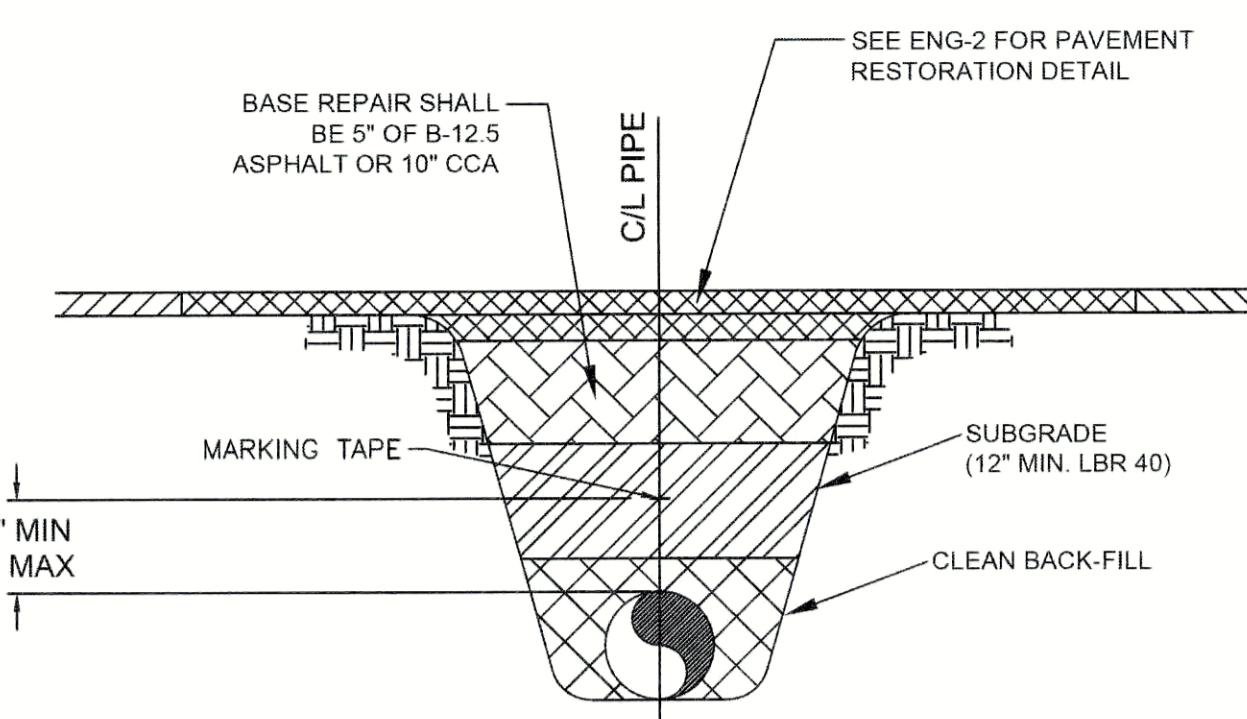
NOTE: TIE RODS TO BE FIELD COATED WITH BITUMINOUS COATING.

DETAIL PUSH-ON JOINT  
N.T.S.

DETAIL M.J. JOINT  
N.T.S.

RESTRAINED JOINT TABLES FOR ON-SITE PRESSURE MAINS

S-W029

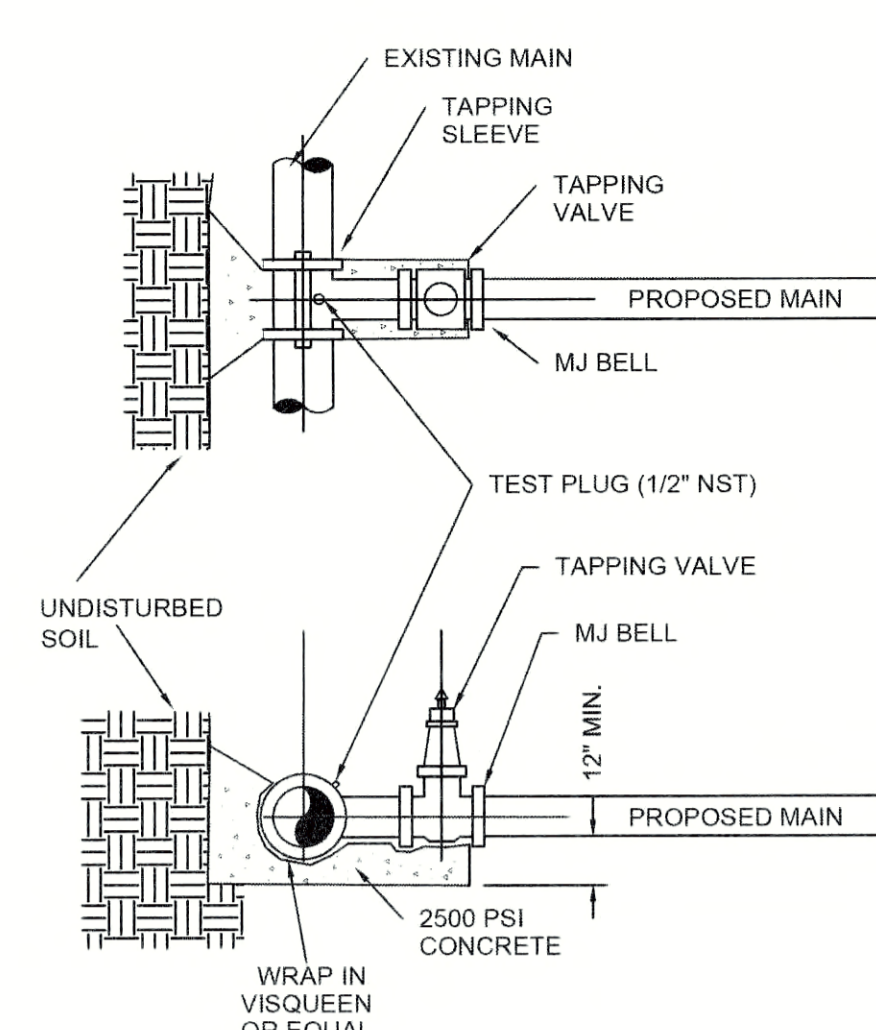


MARKING TAPE AND MESSAGES		
PIPE	TAPE COLOR	MESSAGE
PVC STORM WATER	WHITE	CAUTION STORM WATER OR STORM DRAIN BELOW
POTABLE WATER MAIN	BLUE	CAUTION POTABLE WATER MAIN BELOW
REUSE WATER MAIN	PURPLE	CAUTION REUSE WATER MAIN BELOW
SEWER FORCE MAIN	GREEN	CAUTION SEWER FORCE MAIN BELOW
SEWER & SERVICE LATERALS	GREEN	CAUTION SEWER MAIN BELOW

- COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE ATTACHED TO TOP OF PIPE AT 20' INTERVALS ON ALL RECLAIMED WATER, FORCE OR POTABLE WATER MAINS. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES (BLUE = WATER, GREEN = SEWER, PURPLE = REUSE).
- MINIMUM COVER SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. MAXIMUM COVER SHALL BE 42" FROM FINISHED GRADE UNLESS OTHERWISE APPROVED.
- INSTALLATION OF PIPE SHALL BE IN CONFORMANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PAVEMENT RESTORATION SHALL CONFORM WITH DETAIL ENG-2 OF THESE CITY STANDARDS.
- CONFLICTS - UTILIZE 45° BENDS WITH SEPARATION AS PER CITY DETAILS.
- ALL UTILITIES (PUBLIC & PRIVATE) THAT CROSS A DITCH/SWALE SHALL BE 36" MIN. BELOW THE ACTUAL DESIGN BOTTOM OF CONVEYANCE.
- MARKING TAPE SHALL BE 3" WIDE (MIN.) DETECTIBLE UNDERGROUND WARNING TAPE. INSTALL CENTERED DIRECTLY OVER THE PIPE.
- SEE S-6 FOR GRAVITY SEWER PIPE TRENCH DETAIL.

PRESSURE PIPE TRENCH DETAIL  
N.T.S.

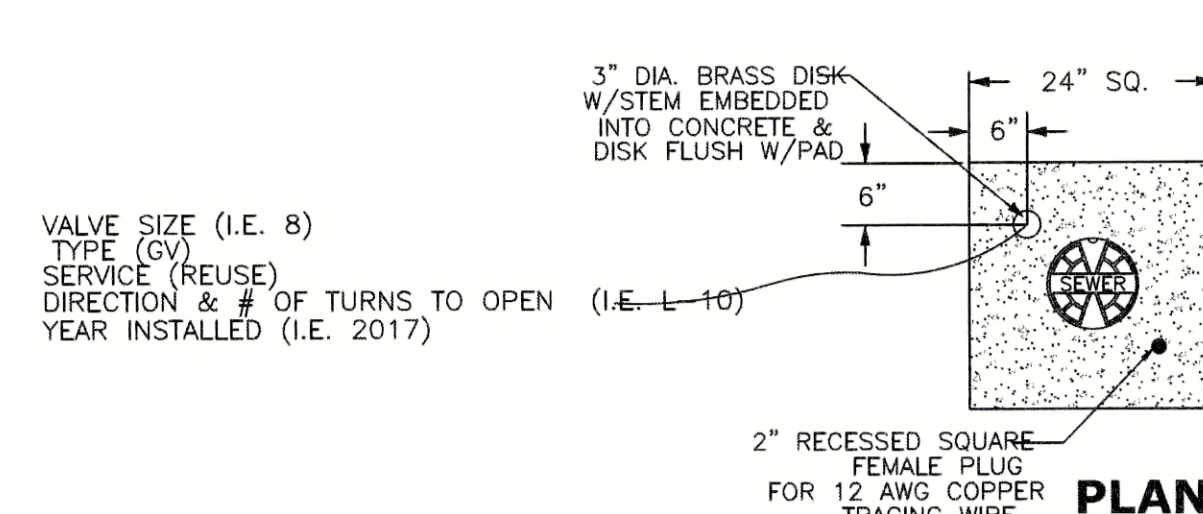
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITY PIPE TRENCH	SHEET NO. U-1



- EXISTING MAIN SHALL NOT BE TAPPED UNTIL THE ASSEMBLED SLEEVE AND VALVE ARE TESTED IN PLACE AT A MINIMUM OF 150 PSI FOR THIRTY MINUTES.
- UPON SUCCESSFUL TAPPING SLEEVE PRESSURE TEST (NOTE 1), THE THRUST BLOCK SHALL BE POURED AND HAVE SET FOR 24 HRS PRIOR TO TAPPING. READY-MADE THRUST BLOCKS SHALL BE USED WITH CITY APPROVAL.
- STAINLESS STEEL TAPPING SLEEVE SHALL BE FORD. ALL HARDWARE SHALL BE STAINLESS STEEL. GASKETS SHALL BE VIRGIN 88R COMPOUND.
- GATE VALVES SHALL BE RESILIENT WEDGE TYPE MANUFACTURED BY MUELLER OR AMERICAN VALVE. ALL GATE VALVES SHALL BE FUSION BONDED EPOXY COATED (INTERIOR AND EXTERIOR) MEET ANSI/AWWA C550, AND BE NSF1 CERTIFIED.
- TAPPING SLEEVES MAY ONLY BE USED WHEN THE TAP DIAMETER IS AT LEAST ONE PIPE SIZE SMALLER THAN THE DIAMETER OF THE MAIN BEING TAPPED.
- VALVE BOX ALIGNMENT DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH W-1.

TAPPING SLEEVE & VALVE DETAIL  
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	TAPPING SLEEVE & VALVE	SHEET NO. U-3

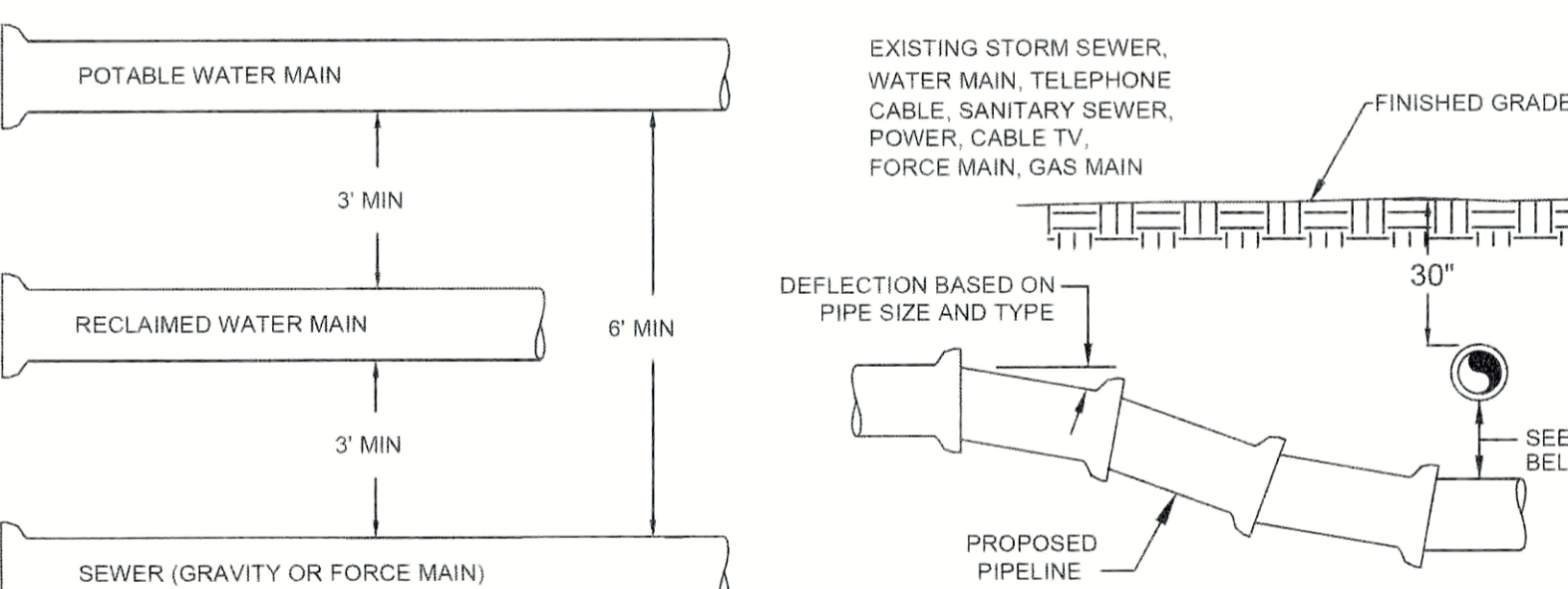


COVER DETAIL  
APPROPRIATE SERVICE TYPE SHALL BE INDICATED (WATER, SEWER, REUSE, OR FIRE)

- PAVED AREAS: SET CONCRETE PAD AND COVER FLUSH WITH FINISHED PAVEMENT SURFACE.
- UNPAVED AREAS: SET PAD AND COVER 1 INCH ABOVE FINISHED GRADE.
- VALVES LOCATED IN DITCH AND COVER 4" DEPTH (LINE) MUST USE TRENCH ADAPTER.
- VALVE BOX (AMERICAN FLOW CONTROL).
- COPPERHEAD TRACING WIRE #12 AWG OR EQUAL SHALL BE USED. IT SHALL BE COLOR CODED TO REFLECT WHAT THE PIPE CARRIES (BLUE = WATER, GREEN = SEWER, PURPLE = REUSE).
- PRE-CAST PADS MAY BE USED WITH CITY APPROVAL.
- FOR CURBED ROADWAYS: CURB SHALL BE ETCHED WITH THE LETTER "V" DIRECTLY PERPENDICULAR TO THE VALVE BOX.
- VALVE BOX COVERS SHALL BE PAINTED BLUE FOR POTABLE WATER, PURPLE FOR REUSE WATER, AND GREEN FOR SEWER.

VALVE BOX DETAIL  
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	VALVE BOX	SHEET NO. U-4



MINIMUM HORIZONTAL SEPARATION DISTANCES (FT)  
(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)

	WATER MAIN	FORCE MAIN	SANITARY SERVICE	STORM WATER	OTHER UTILITIES (TELEPHONE CABLE ETC.)
WATER MAIN	3	6	3	3	3
FORCE MAIN	6	3	3	3	3
SANITARY SEWER	6	3	3	3	3
REUSE MAIN	3	3	3	3	3
STORM WATER	3	3	3	3	3
OTHER UTILITIES	3	3	3	3	3

MINIMUM VERTICAL SEPARATION DISTANCES (IN)  
(OUTSIDE OF PIPELINE TO OUTSIDE OF PIPELINE)

	WATER MAIN	FORCE MAIN	SANITARY SERVICE	STORM WATER	OTHER UTILITIES (TELEPHONE CABLE ETC.)
WATER MAIN	6	12	12	6	6
FORCE MAIN	12	6	6	6	6
SANITARY SEWER	12	6	6	6	6
REUSE MAIN	6	6	6	6	6
STORM WATER	6	6	6	6	6
OTHER UTILITIES	6	6	6	6	6

- MAXIMUM JOINT DEFLECTION SHALL BE 80% OF MANUFACTURER'S RECOMMENDATION.
- WHEREVER POSSIBLE, THE LAYOUT OF UTILITIES SHALL PLACE SANITARY SEWER AND SEWER FORCE MAINS BELOW RECLAIMED MAINS AND BELOW WATER MAINS, RESPECTIVELY. WHERE WATER MAINS ARE ABOVE GRAVITY SEWERS OR WASTEWATER FORCE MAINS, A VERTICAL CLEARANCE OF 5 INCHES IS ACCEPTABLE. STORM SHALL BE PLACED BELOW BOTH WATER AND SEWER WHERE POSSIBLE.
- ACCEPTABLE VARIANCES:
  - WHERE HORIZONTAL SEPARATION CANNOT BE MAINTAINED, C900 DR14 PVC PIPE SHALL BE USED FOR ONE OF THE PIPELINES.
  - WHERE VERTICAL CLEARANCE CANNOT BE MAINTAINED, SPECIAL PROTECTION OR PIPE MATERIAL UPGRADE MAY BE REQUIRED AT THE DISCRETION OF THE UTILITY DEPARTMENT.
- NO UTILITY PIPE SHALL PASS THROUGH, OR COME IN CONTACT WITH ANY PART OF A SANITARY MAN-HOLE OR STORMWATER STRUCTURE WITHOUT APPROVAL FROM THE UTILITIES DIRECTOR OR CITY ENGINEER.

UTILITY CONFLICT & SEPARATION DETAIL  
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	UTILITY CONFLICTS & SEPARATIONS	SHEET NO. U-5

PIPE FITTINGS  
N.T.S.

SERVICE	COLOR	MATERIAL/CLASS
POTABLE WATER MAIN	BLUE	
RAW WATER MAIN	WHITE	AWWA C900 PVC / DR 18
REUSE MAIN	PURPLE	FUSIBLE C900 PVC / DR 18
FORCE MAIN (MIN. 4" DIAMETER)	GREEN	HDPE PPI PE 4710 / DR 11 (DUCTILE IRON PIPE SIZE)
WATER SERVICE	BLUE	PE (POLYTUBING) / DR 9
REUSE SERVICE	PURPLE	PE (POLYTUBING) / DR 9
GRAVITY SEWER MAIN (MIN. 8" DIAMETER)	GREEN	ASTM D3034 / SDR 26 FUSIBLE PVC / SDR 26
SEWER LATERAL (MIN. 6" DIAMETER)	GREEN	ASTM D3034 / SDR 35 / SCH 40 PVC

PIPE MATERIAL SCHEDULE  
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	PIPE FITTINGS & MATERIAL	SHEET NO. U-6

FITTING		MINIMUM LENGTH (FT.) OF FORCE MAIN TO BE RESTRAINED ON EACH SIDE OF FITTING											
		PIPE SIZE (INCHES)											
		4	6	8	10	12	16	18	20	24			
45 BEND:	H	6	9	12	14	16	21	23	25	29			
	VU	4	6	7	9	10	13	15	16	19			
	VD	12	20	26	32	37	48	53	28	68			
22.5 BEND:	H	3	4	6	7	8	10	11	12	14			
	VU	2	3	4	4	5	6	7	8	9			
	VD	7	10	13	15	18	23	26	28	33			
11.25 BEND:	H	2	2	3	3	4	5	5	6	7			

FITTING		MINIMUM LENGTH (FT.) OF WATER OR REUSE MAIN TO BE RESTRAINED ON EACH SIDE OF FITTING											
		PIPE SIZE (INCHES)											
		4	6	8	10	12	16	18	20	24			
90 BEND:	H	23	33	43	51	60	76	83	90	104			
45 BEND:	H	10	14	18	21	25	31	34	37	43			
	VU	6	8	11	13	16	20	22	24	28			
	VD	22	30	40	48	56	72	80	87	102			
22.5 BEND:	H	5	7	8	10	12	15	17	18	21			
	VU	3	4	5	6	7	10	11	12	14			
	VD	10	15	19	23	27	35	38	42	49			
11.25 BEND:	H	2	3	4	5	6	7	8	9	10			
PLUGS:		52	73	96	115	136	174	193	211	246			

- ABBREVIATIONS: H=HORIZONTAL VU=VERTICAL UP, VD=VERTICAL DOWN.
- FOR TEE OR REDUCER FITTINGS SUBMIT RESTRAINED JOINT LENGTH CALCULATIONS TO CITY ENGINEER FOR REVIEW AND APPROVAL, USING THE ASSUMPTIONS LISTED ABOVE.
  - RESTRAINED JOINT LENGTH FOR WATER AND REUSE MAINS BASED ON TEST PRESSURE OF 150 PSI. RESTRAINED JOINT LENGTH FOR FORCE (SEWER) MAINS BASED ON TEST PRESSURE OF 100 PSI. CALCULATIONS WERE MADE USING EBAA IRON SOFTWARE (AVAILABLE AT WWW.EBAA.COM) AND THE FOLLOWING ASSUMPTIONS: GRANULAR MATERIAL (GM) SOIL TYPE, TRENCH TYPE 3, BURY DEPTH OF 3 FT. AND SAFETY FACTOR OF 2 TO 1. IF FIELD CONDITIONS DIFFER FROM ABOVE ASSUMPTIONS EOR SHALL PROVIDE CALCULATIONS BASED ON ACTUAL CONDITIONS.
  - RESTRAINED JOINT SHALL BE USED ON ALL JOINTS FROM ANY MAIN TEE TO ANY FIRE HYDRANT ASSEMBLY.
  - THRUST BLOCKS WILL NOT BE ACCEPTED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
  - ALL HARDWARE SHALL BE SS (316 WHEN AVAILABLE) OR EPOXY COATED.

PRESSURE MAIN RESTRAINED JOINT TABLE  
N.T.S.

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	RESTRAINED JOINT TABLE	SHEET NO. U-7

(TO BE USED WITH PUBLIC PRESSURE MAINS)

RECORD  
DRAWING

THE FOLLOWING NOTES APPLY TO THE INTERIM COUNTY SEWER PAVEMENT, AS STATED ON THE COVER, SEWER IS TO BE INITIALLY SARASOTA COUNTY. THE LIFT STATION WILL BE CONVERTED TO CITY OF VENICE IN THE FUTURE THEREOF CITY OF VENICE DETAILS ARE SHOWN HEREIN.

- WASTEWATER COLLECTION GENERAL NOTES:**
- THE FOLLOWING NOTES ARE INTENDED AS A SUPPLEMENT TO THE PROJECT SPECIFICATIONS AND ARE NOT INTENDED TO SUPERSEDE THE SPECIFICATIONS.
1. ALL CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF SARASOTA COUNTY ORDINANCE #89-058 AND #89-063 (UNIFORM WATER, WASTEWATER AND REUSE SYSTEMS CODE), LATEST REVISION, AND EXCEED THE REQUIREMENTS OF THAT ORDINANCE WHERE INDICATED ON THESE CONSTRUCTION DRAWINGS OR IN THE PROJECT SPECIFICATIONS.
  2. ELEVATIONS SHOWN ON THE PLANS FOR FLOWLINES OF PROPOSED WASTEWATER MAINS SHALL BE ADHERED TO, IN MOST CASES THE DESIGN GRADES ARE CRITICAL AND ADJUSTMENTS CAUSED BY MIS-ALIGNMENT OR IMPROPER GRADES ARE IMPRACTICAL. COST TO RELAY MAIN, IF NECESSARY, SHALL BE BORNE BY THE CONTRACTOR.
  3. THE CONTRACTOR SHALL INVESTIGATE AND VERIFY OR HAVE VERIFIED THE LOCATION OF EXISTING UTILITIES AND ANY OTHER SUBSURFACE FACILITIES BEFORE STARTING WORK. HE SHALL BE LIABLE FOR ANY EXPENSE RESULTING FROM DAMAGE TO SAME. ANY CONFLICTS WITH EXISTING UTILITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AS SOON AS POSSIBLE.
  4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE COUNTY, UTILITY COMPANIES AND THE ENGINEER 48 HOURS PRIOR TO ANY WORK AT SITE AND 48 HOURS PRIOR TO ANY TESTING.
  5. THE CONTRACTOR SHALL COORDINATE HOLDING OF POLES WITH UTILITY COMPANIES IN ADVANCE SO UNNECESSARY DELAYS OF PROJECT SHALL NOT BE INCURRED. THE COST FOR THE HOLDING OF THE POWER POLES SHALL BE INCLUDED IN THE WASTEWATER MAIN UNIT COST ITEMS CONTAINED IN THE PROPOSAL.
  6. ALL DISTURBED AREAS IN EXISTING LAWNS SHALL BE REPLACED WITH SOIL EQUAL TO OR BETTER THAN EXISTING AND OF THE SAME TYPE. SMALL SLOPES AND KNOTS SHALL BE SOODED TO ELIMINATE EROSION. RESTORATION OF EROSION OCCURRING PRIOR TO GRASS ROOTING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL WATER AS NECESSARY ALL SOODED AREAS UNTIL GRASS ROOTS.
  7. DUE TO THE PROXIMITY OF EXISTING DRAINAGE STRUCTURES, ROADWAY PAVEMENT, COLLECTOR PATHS, CURBS, CURBVERTS, RESIDENTIAL STRUCTURES, MAILBOXES, ETC., THE CONTRACTOR SHALL USE EXCAVATING METHODS WHICH SHALL PREVENT ANY DAMAGE TO SAME UNLESS REMOVAL IS REQUIRED. THE COST OF ANY DAMAGE AND THE REPLACEMENT OF ALL PRIVATE PROPERTY DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE BORNE BY THE CONTRACTOR.
  8. RESTORATION OF ALL EXISTING ROADWAYS TO SARASOTA COUNTY STANDARDS AND THE REPLACEMENT OF EXISTING CURBVERTS AND DRIVEWAYS ETC., SHALL BE INCLUDED IN THE UNIT BID PRICE OF THE SEWER MAIN ITEMS.
  9. FOR PAINTING AND SURFACE FINISHING REQUIREMENTS, REFER TO APPROPRIATE DIVISION OF THE PROJECT SPECIFICATIONS.
  10. PIPE AND FITTINGS FOR P.V.C. GRAVITY PIPE SHALL MEET THE REQUIREMENTS OF A.S.T.M. SPECIFICATION D-3034 (SDR 26).
  11. FORCE MAINS SHALL BE RESTRAINED JOINT IN ACCORDANCE WITH THE WATER MAIN DETAILS UNLESS OTHERWISE SPECIFIED.
  12. ALL P.V.C. FORCE MAINS SHALL BE GREEN IN COLOR. COLOR CODED PLASTIC COATED METAL TAPE 3" WIDE WITH THE WORD "FORCE MAIN" SHALL BE PLACED 18 INCHES BELOW FINISHED GROUND AND ABOVE FORCE MAIN. ALSO ATTACH A COLOR-CODED NUMBER 12 INSULATED WIRE ON TOP OF THE FORCE MAIN AND AS INDICATED ON THE DETAILS. FOR VALVES, HYDRANTS, BLOWOFFS, ETC. THE COST FOR COLOR TAPE AND COPPER TRACING WIRE SHALL BE INCLUDED IN THE FORCE MAIN UNIT PRICES.

- SEWER TESTING:**
1. TESTING SHALL BE IN CONFORMANCE WITH SARASOTA "UNIFORM WATER, WASTEWATER AND REUSE SYSTEMS CODE", OR THE SPECIFICATIONS, WHICHEVER IS MORE STRICT.
  2. THE CONTRACTOR SHALL INCLUDE IN HIS COST FOR THE VARIOUS ITEMS CONTAINED IN THE BID SCHEDULE, THE ADDITIONAL COSTS INVOLVED WITH LAMPING THE NEWLY LAID SEWER PIPE, EXFILTRATION OR INFILTRATION TESTING AND PIPE "REFLECTION" TESTS, ALL AS OUTLINED IN THE SARASOTA COUNTY "UNIFORM WATER, WASTEWATER AND REUSE SYSTEMS CODE".
  3. THE CONTRACTOR SHALL HAVE THE NEW SEWER SYSTEM TVI INSPECTED AS PER THE SARASOTA COUNTY "UNIFORM WATER, WASTEWATER AND REUSE SYSTEMS CODE".

- AS-BUILTS:**
1. THE CONTRACTOR SHALL LOCATE MANHOLES, SERVICES, ETC. BY USING A TWO (2) POINT SWING MEASUREMENT FROM PERMANENT PHYSICAL FEATURES THAT CAN READILY BE FOUND ON THE DRAWING AND IN THE FIELD. THESE MEASUREMENTS SHALL BE SHOWN ON THE AS-BUILT DRAWING BY THE CONTRACTOR.
  2. THE CONTRACTOR SHALL FURNISH "AS-BUILT" STATIONING OF SEWER WYES USING EACH DOWN STREAM MANHOLE AS STA. 0+00.
  3. TOP OF PIPE ELEVATIONS FOR ALL FORCE MAINS ARE REQUIRED AT A MAXIMUM INTERVAL OF EVERY 100' AND ON EACH FITTING OR CHANGE IN GRADE.
  4. RECORD DRAWINGS, IF PREPARED BY THE CONTRACTOR OR CONTRACTOR'S SURVEYOR, DRAFT COPIES OF THE RECORD DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINALIZING THE DRAWINGS. ONCE ACCEPTABLE TO THE ENGINEER THE CONTRACTOR/SURVEYOR WILL PROVIDE 9 SETS OF SIGNED AND SEALED FINALIZED DRAWINGS FOR SUBMITTAL TO THE COUNTY. ONCE APPROVED BY THE COUNTY, CONTRACTOR/SURVEYOR IS RESPONSIBLE TO PROVIDE THE ENGINEER OF RECORD ONE SET OF YEARS AND A DIGITAL COPY OF RECORD DRAWINGS IN ACAD 14.0 FORMAT. RECORD INFORMATION SHALL BE ON UNIQUE LAYER(S), USING TEXT SHAPE FILE THAT COMES WITH STANDARD ACAD.

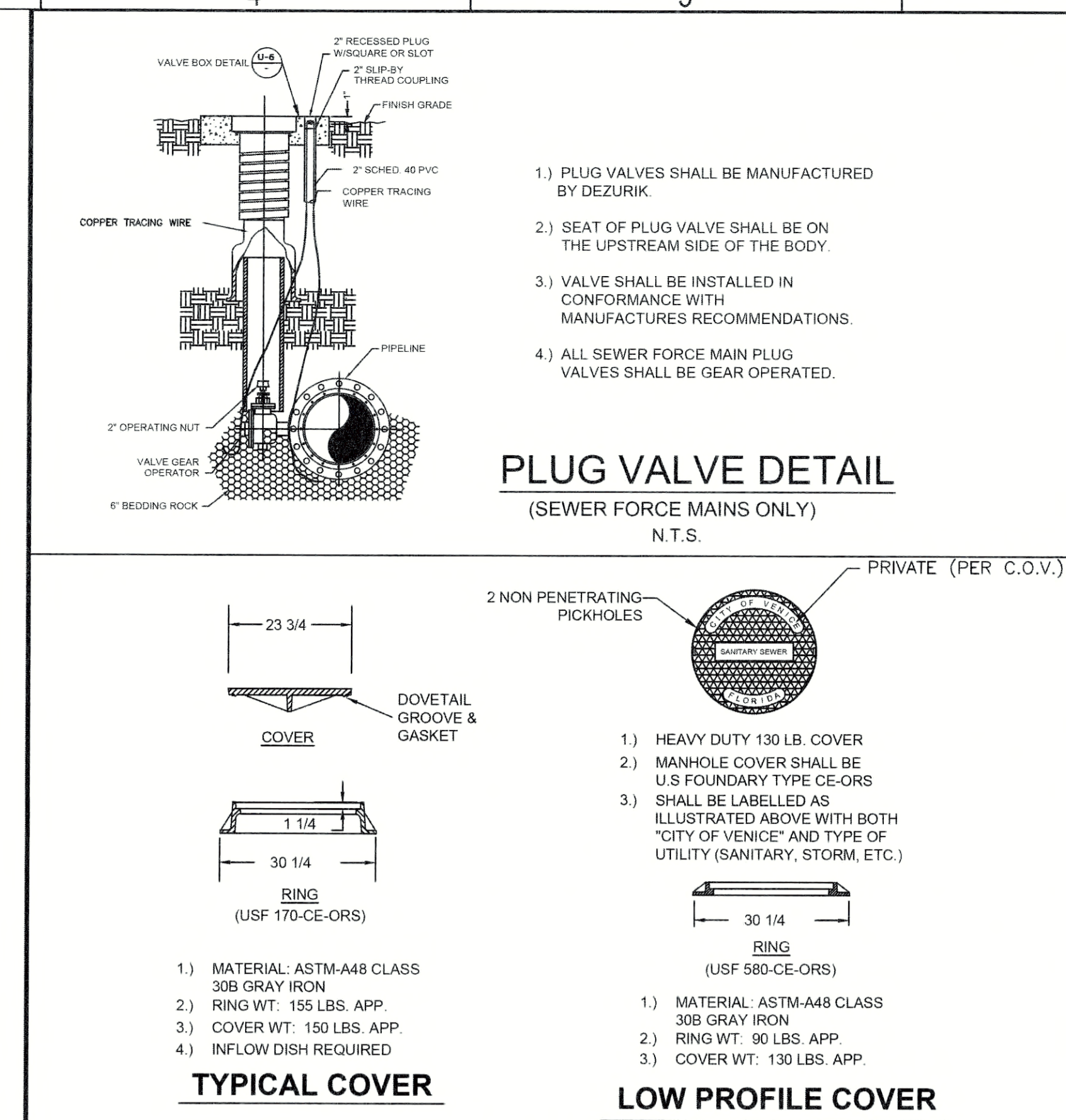
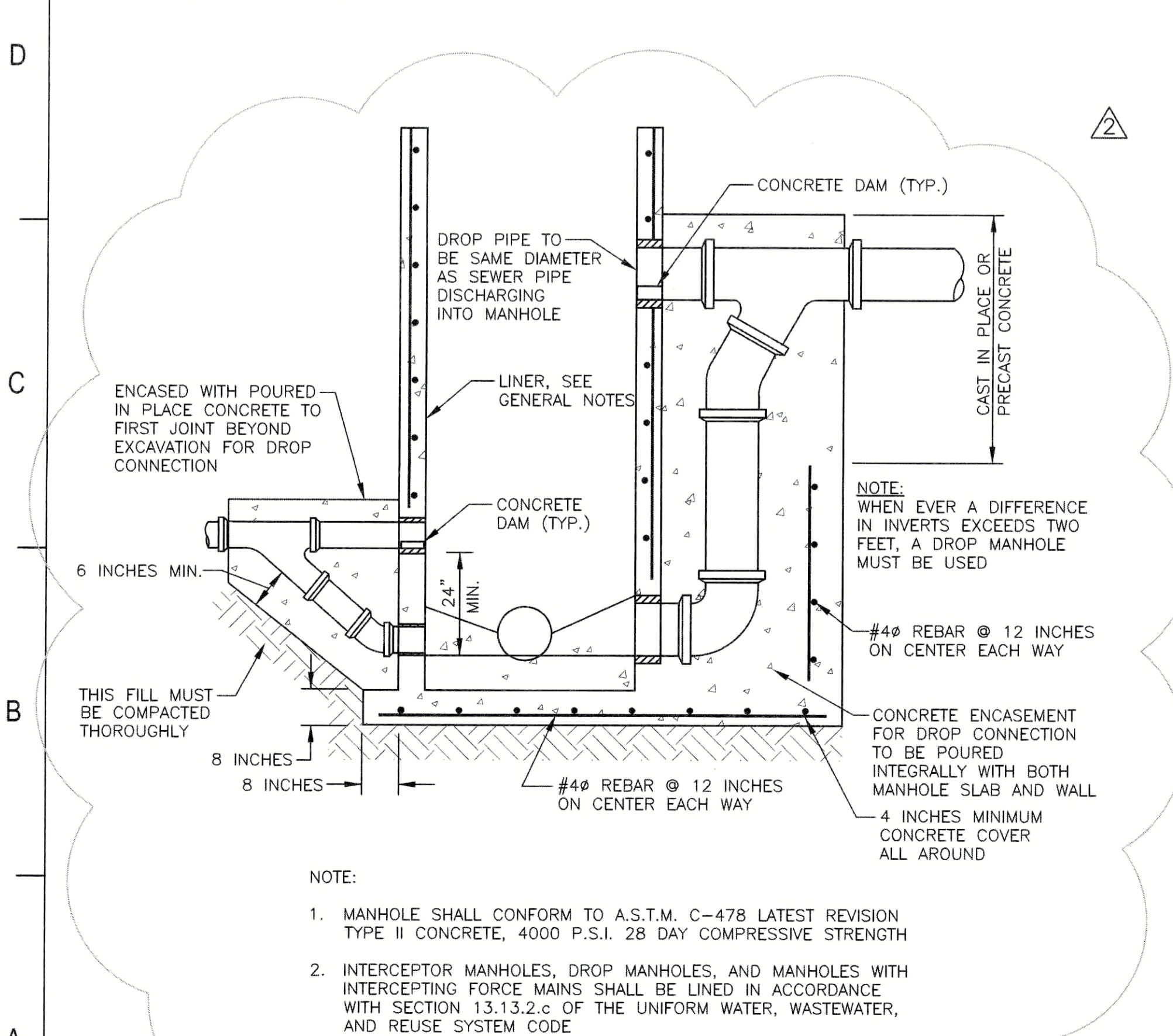
- SANITARY MANHOLE NOTES:**
1. LIFT HOLES THROUGH PRECAST STRUCTURES ARE NOT PERMITTED. ALL OPENINGS SHALL BE SEALED AND WATERPROOFED AS SPECIFIED AND DIRECTED BY THE ENGINEER.
  2. MANHOLES SHALL COMPLY WITH A.S.T.M. SPECIFICATION C-478, LATEST REVISION, "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS", EXCEPT AS EXCEEDED BY THE DETAILS AND SPECIFICATIONS.
  3. CEMENT SHALL BE TYPE II.
  4. CONCRETE SHALL BE 4000 P.S.I. @ 28 DAY MINIMUM STRENGTH, UNLESS OTHERWISE NOTED.
  5. MORTAR SHALL BE TWO (2) PARTS CLEAN SAND AND ONE (1) PART CEMENT WITH NO MORE THAN 1/4 PART HYDRATED LIME.
  6. MORTAR JOINTS SHALL BE FULL AND STRUCK FLUSH.
  7. DROP CONSTRUCTION SHALL BE PROVIDED FOR A WASTEWATER PIPE ENTERING A MANHOLE AT AN ELEVATION OF TWENTY FOUR INCHES (24") OR MORE ABOVE THE DISCHARGE CHANNEL FLOW LINE.
  8. NO STEPS SHALL BE USED.
  9. PROVIDE SIX (6) INCH MINIMUM BASE SLAB LIP AS SHOWN IN DETAIL FOR MANHOLE DEPTHS GREATER THAN 13". CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATIONS, BASED ON THE CALCULATIONS, ADDITIONAL CONCRETE BALLAST OR A BASE SLAB LIP IN EXCESS OF 6" MAY BE REQUIRED.

10. HAVING THE RUBBER GASKET SEAL INTEGRALLY POURED INTO MANHOLE SECTIONS AT A NON-PLAN POSITION SHALL BE CAUSE FOR THAT SECTION TO BE REJECTED. IT IS IMPORTANT FOR MANUFACTURERS OF PRECAST MANHOLES TO BE INFORMED BY THE CONTRACTOR OF THE REJECTION POSSIBILITY.
11. MANHOLE RING AND COVER SHALL BE AS SPECIFIED.
12. MANHOLE RINGS AND COVERS SHALL BE ADJUSTED TO CONFORM WITH FINISHED SUR-FACES INCLUDING SLOPE IF ANY (USING BEVELED ADJUSTMENT RINGS). ALL ADJUSTMENTS SHALL BE INCLUDED IN THE PRICE BID. NO ADDITIONAL COMPENSATION SHALL BE MADE BY THE OWNER. MANHOLES IN GRASSED AREAS SHALL BE SET 0.1' ABOVE FINISHED GROUND.

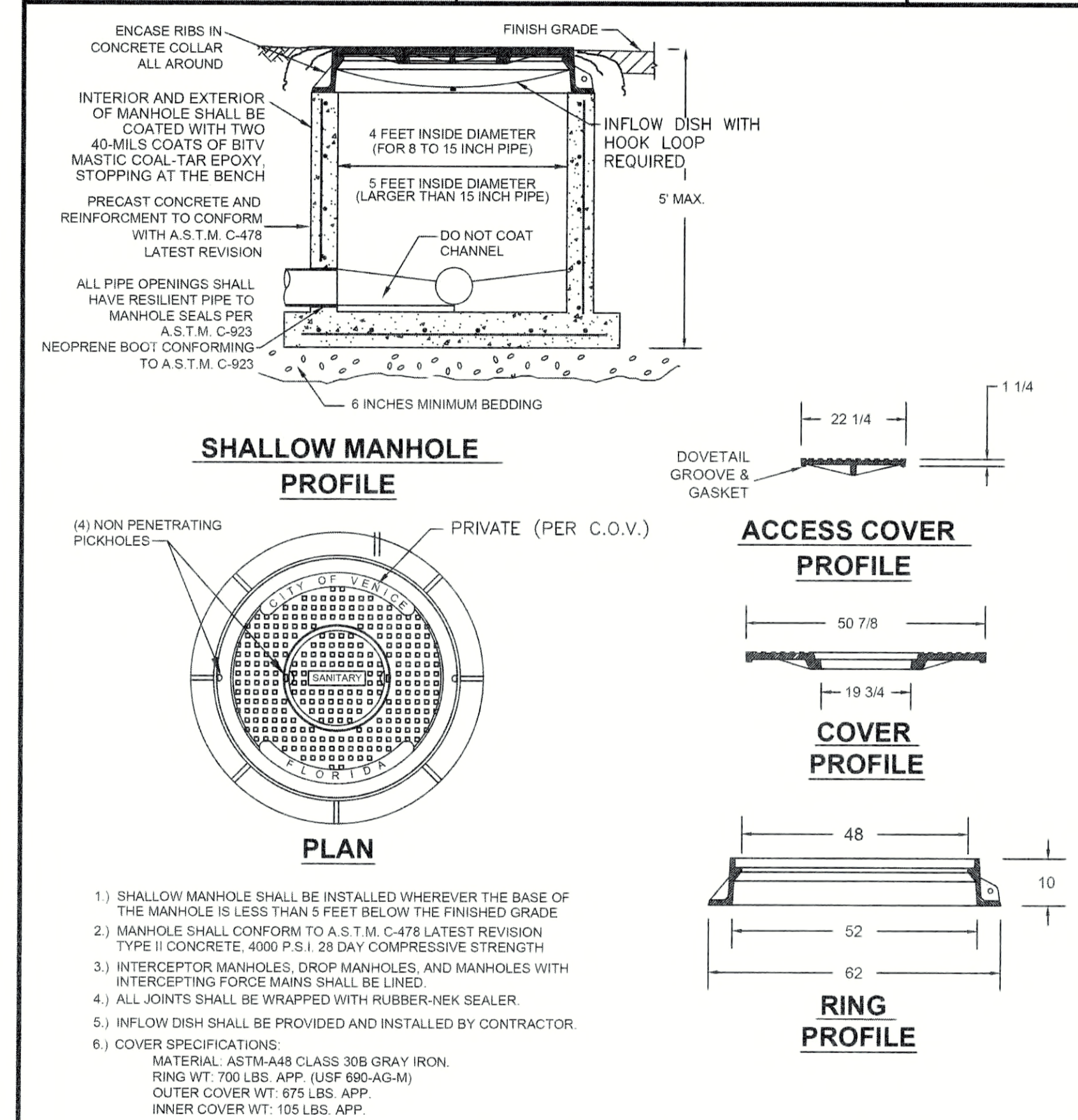
- CLEAN-OUT NOTES:**
1. CLEAN-OUTS ARE REQUIRED ON ALL SERVICES.
  2. CLEAN-OUTS SHALL BE ADJUSTED TO CONFORM WITH FINISHED SURFACES. ALL ADJUSTMENTS SHALL BE INCLUDED IN THE PRICE BID. NO ADDITIONAL COMPENSATION SHALL BE MADE BY THE OWNER.
- SANITARY SEWER SERVICE NOTES:**
1. AN "S", "V" OR "W" SHALL BE STAMPED IN CURB WHERE SEWER SERVICE, VALVE OR MANHOLE IS LOCATED IN ACCORDANCE WITH THE COUNTY CODE. A MEASURED FROM THE EDGE OF CURB, TAKEN BY THE CONTRACTOR, SHALL BE SHOWN ON THE "AS BUILT" PLANS FOR REFERENCE IN LOCATING SERVICE, VALVE, OR MANHOLE.
  2. ON UNCURBED STREETS, THE LOCATION FOR EACH INSTALLED SERVICE, VALVE OR MANHOLE SHALL BE MARKED BY USING AN ALUMINUM BAND OR LABEL BY NATIONAL BAND AND TAG CO. THE HORIZONTAL DISTANCE TO THE SERVICE, VALVE OR MANHOLE IS TO BE ENGRAVED ON THE TAG AND THE TAG SHALL BE MOUNTED IN THE PAVEMENT, WITHIN 6" FROM THE EDGE.
  3. METALLIC IDENTIFICATION TAPE SHALL EXTEND FROM WYE CONNECTION TO THE END OF THE SERVICE AND TERMINATE TWELVE INCHES (12") ABOVE GROUND. THE CONTRACTOR SHALL BURY THE IDENTIFICATION TAPE IN THE PAVEMENT, WITHIN 6" FROM THE EDGE.

4. WHERE SERVICE WYE CONNECTIONS EXCEED EIGHT FEET IN DEPTH, THE WYE AND SERVICE PIPE SHALL BE ENCASED IN CONCRETE. WHERE THE SERVICE PIPE GRADE IS 10% OR GREATER, THE ENCASUREMENT SHALL EXTEND FROM THE WYE TO A POINT WHERE THE SERVICE PIPE GRADE IS LESS THAN 10% AS SHOWN. CONCRETE SHALL BE 3000 PSI @ 28 DAYS, MINIMUM 6" THICK.
5. WHERE A HOUSE OR OTHER CONNECTION TERMINATES, THE CONTRACTOR SHALL PROVIDE AND INSTALL 2" x 4" STAKE WITH A MINIMUM OF FOUR (4) FEET ABOVE GROUND AND TWO (2) FEET BELOW GROUND. THE TOP TWELVE INCHES (12") ARE TO BE PAINTED GREEN.

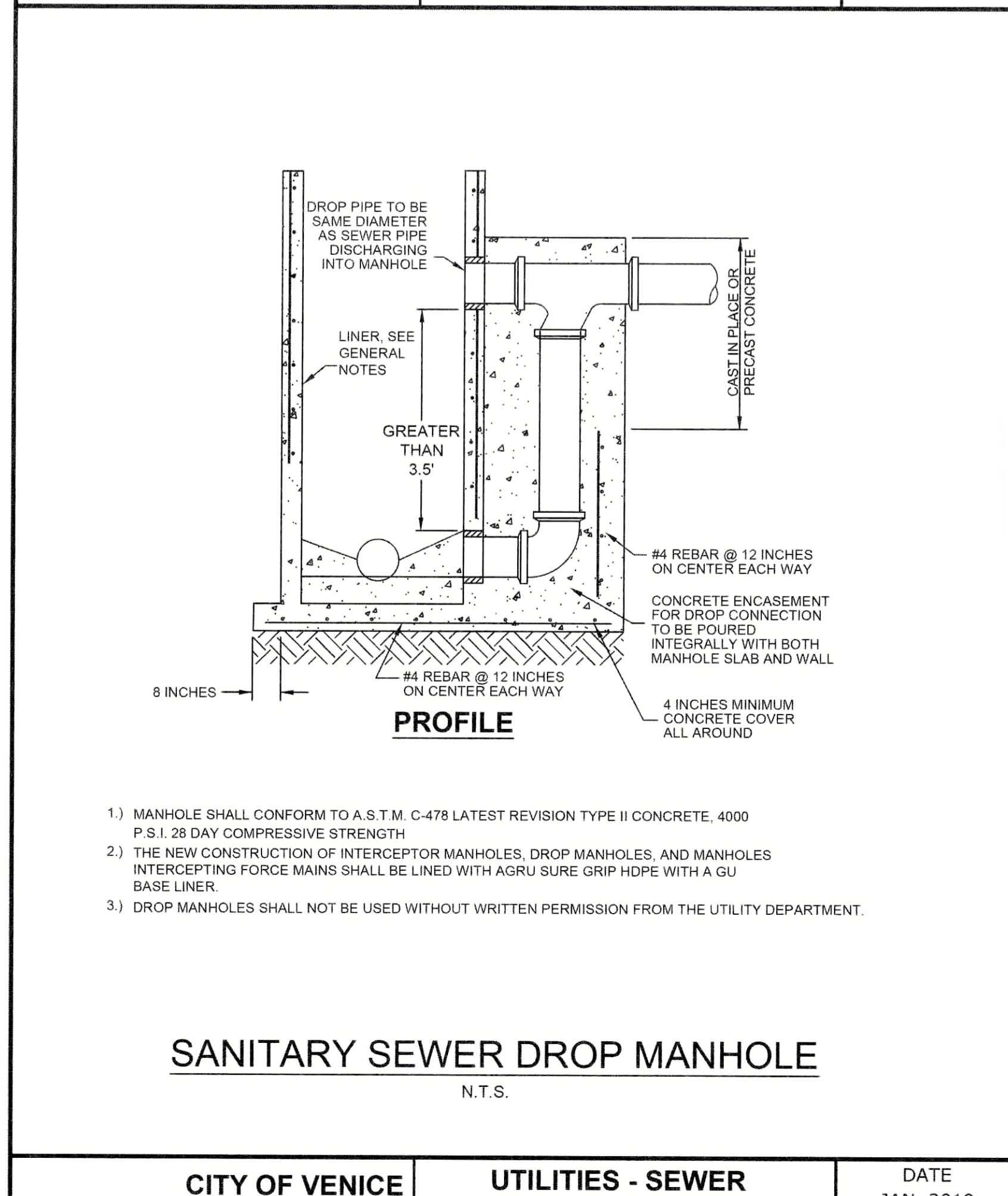
- CITY OF VENICE REQUIREMENTS:**
- ALL ASPECTS OF THE PROJECT ARE SUBJECT TO THE CITY OF VENICE STANDARD DETAILS, GENERAL NOTES AND TESTING REQUIREMENTS UPDATED JANUARY 2019.



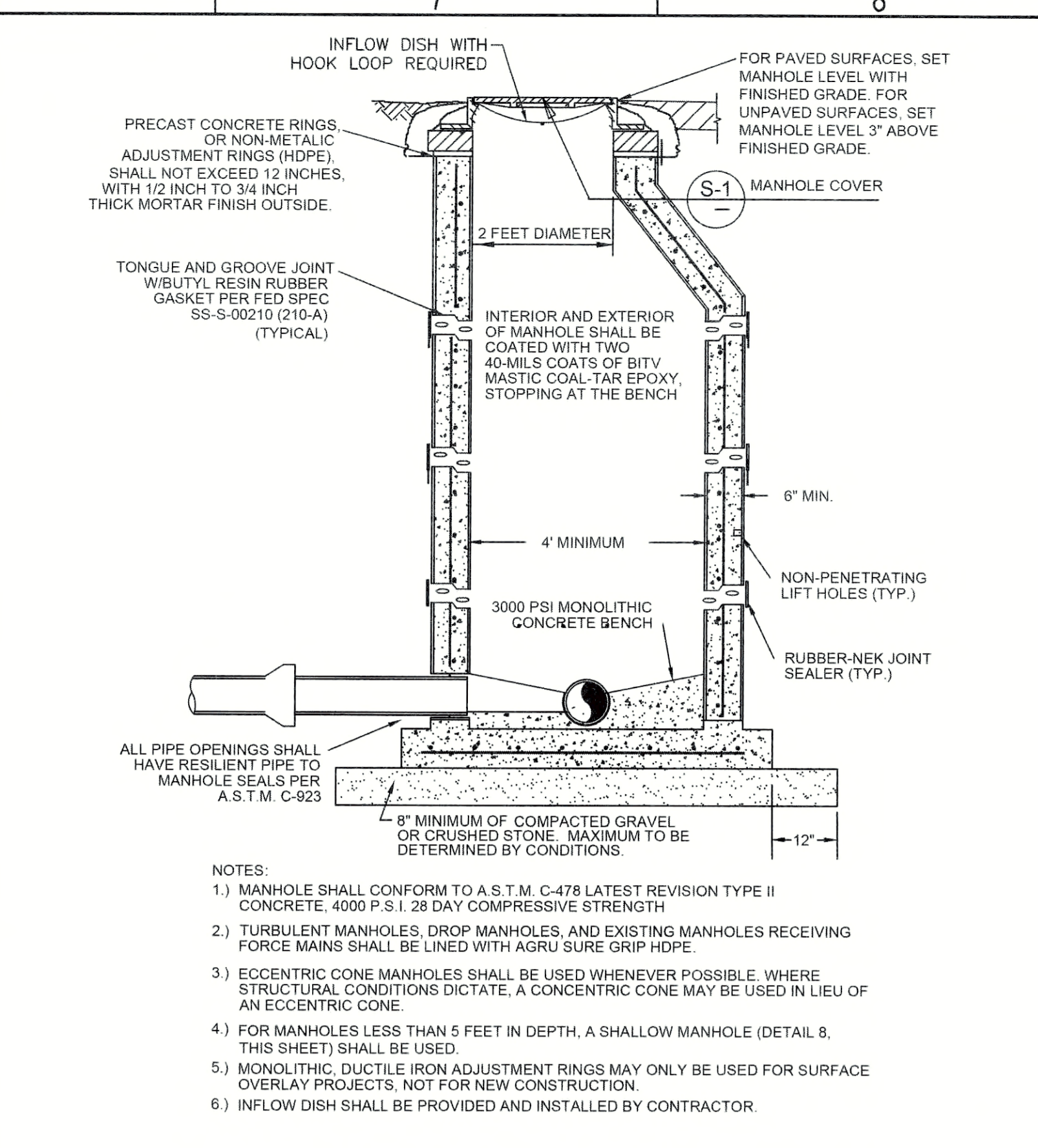
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - SEWER	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 486-3031	<b>PLUG VALVE &amp; MANHOLE COVERS</b>	SHEET NO. <b>S-1</b>



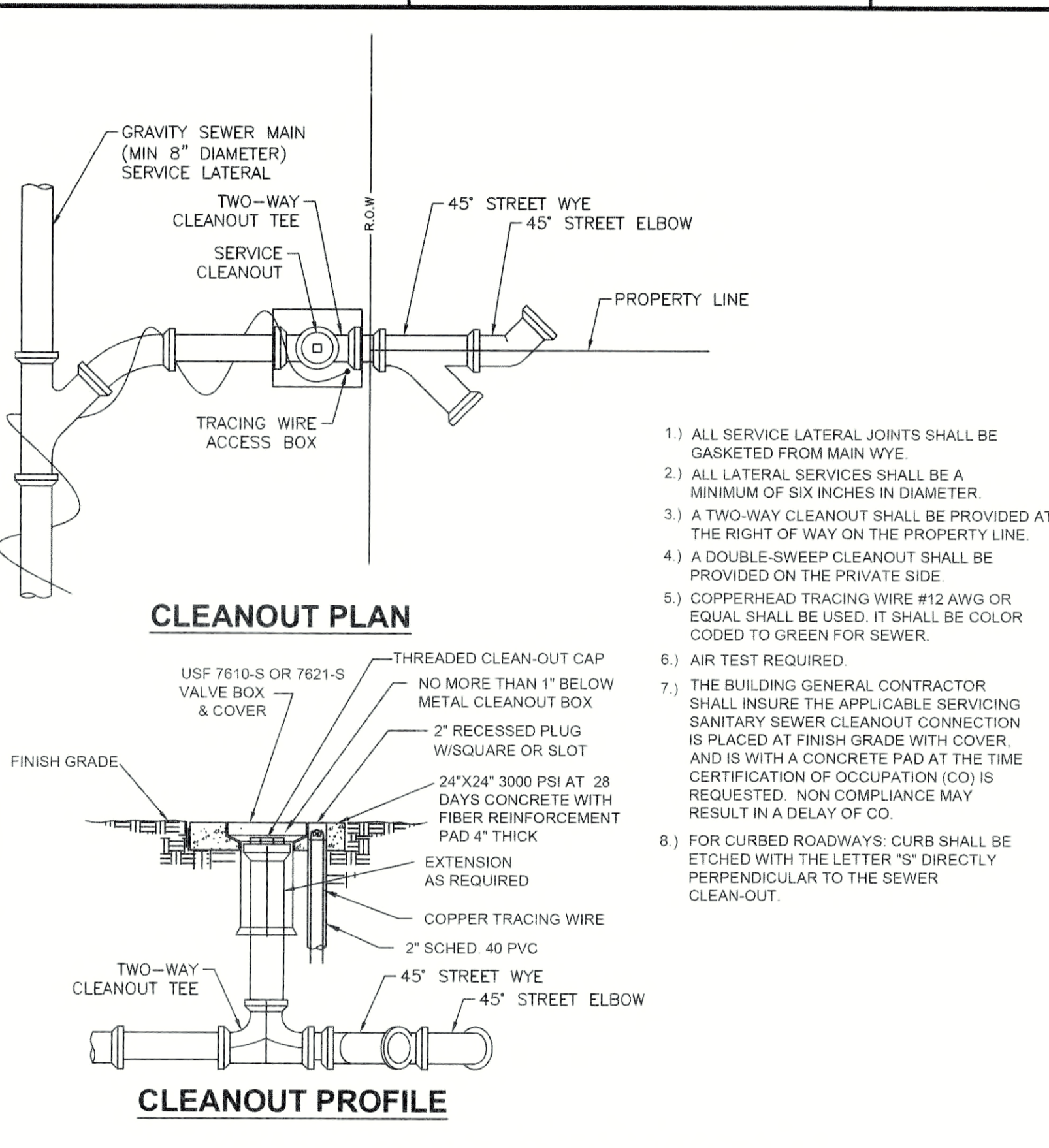
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - SEWER	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 486-3031	<b>PRECAST SHALLOW MANHOLE</b>	SHEET NO. <b>S-3</b>



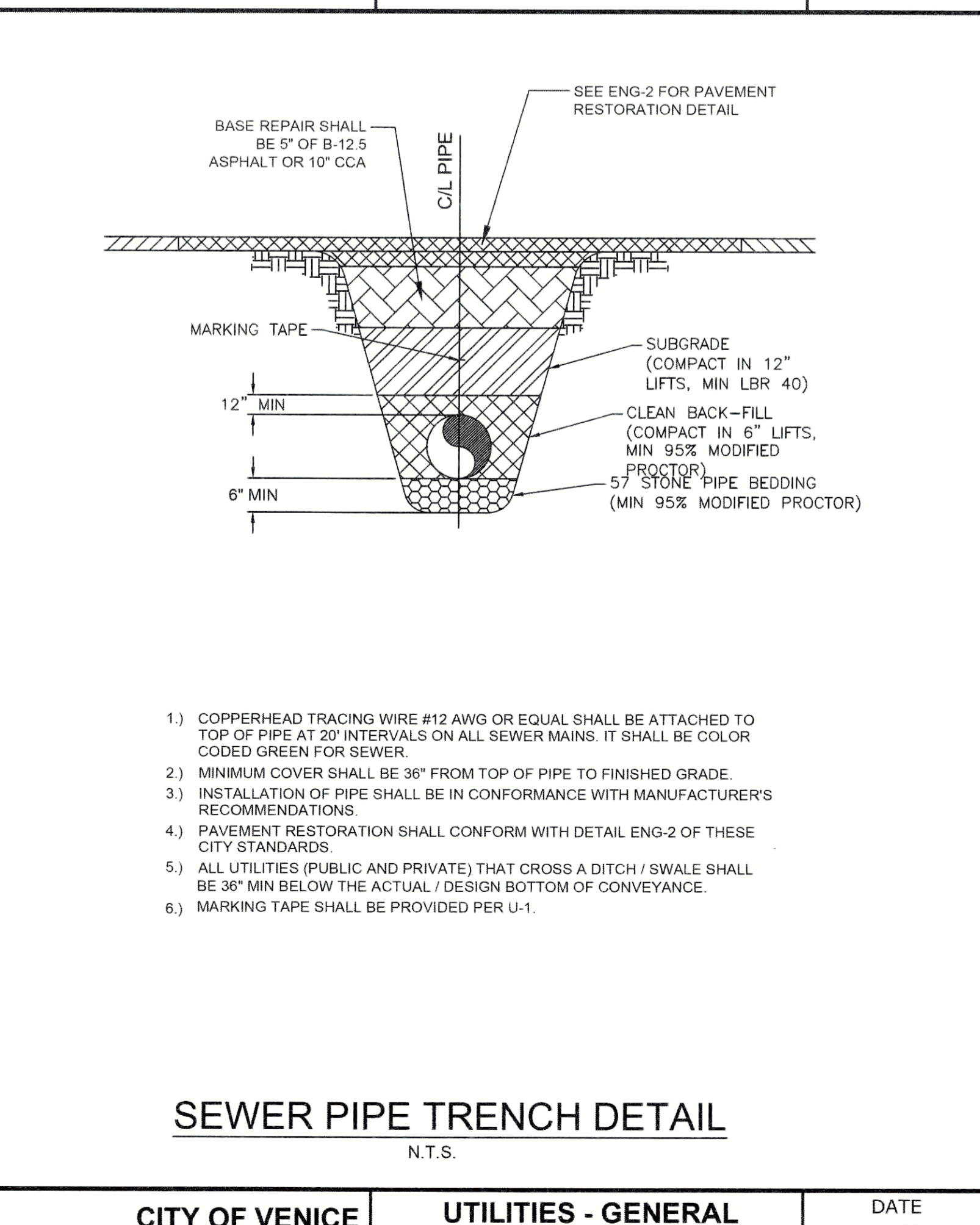
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - SEWER	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 486-3031	<b>SANITARY DROP MANHOLE</b>	SHEET NO. <b>S-5</b>



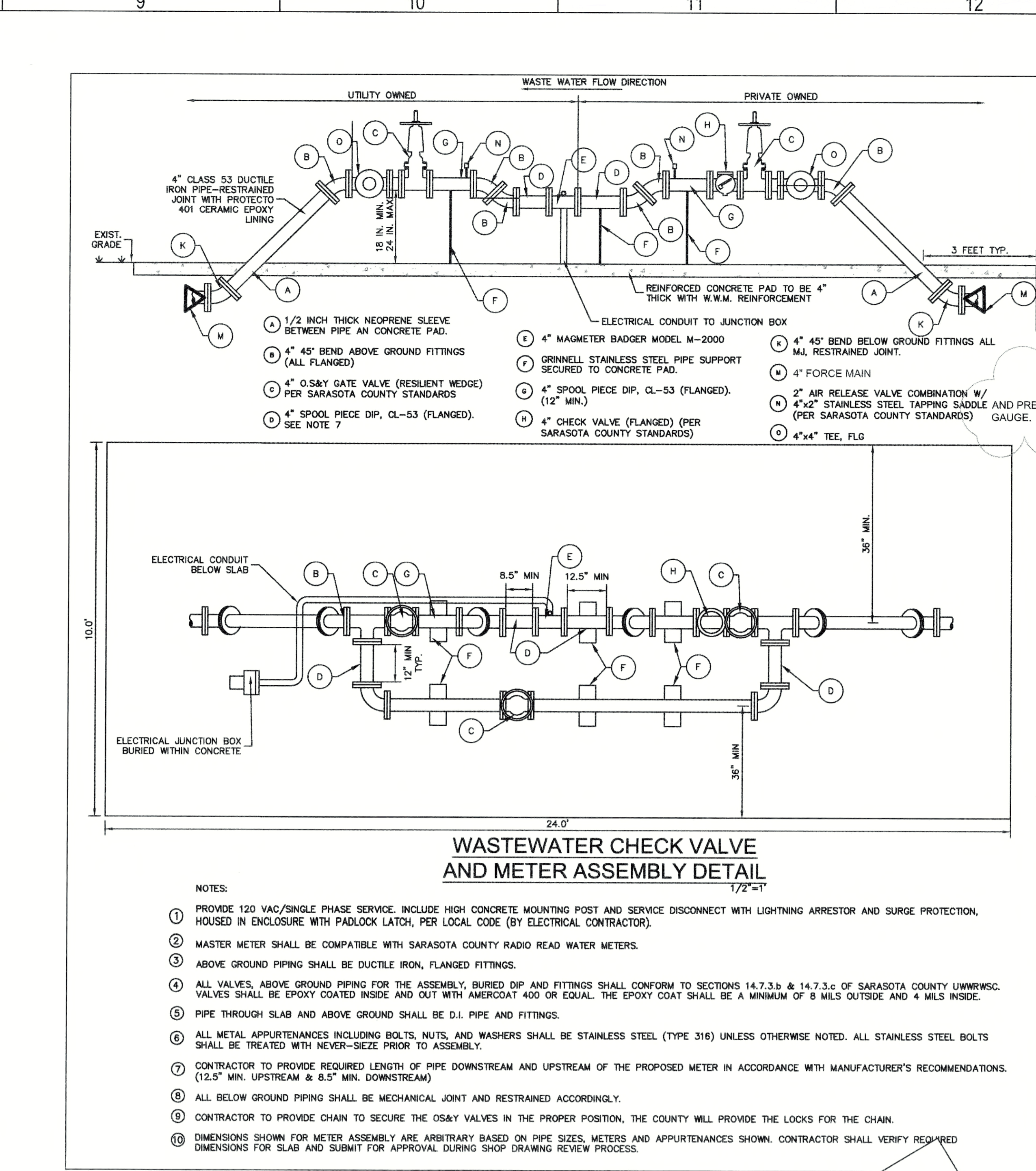
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - SEWER	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 486-3031	<b>SANITARY SEWER MANHOLE</b>	SHEET NO. <b>S-2</b>



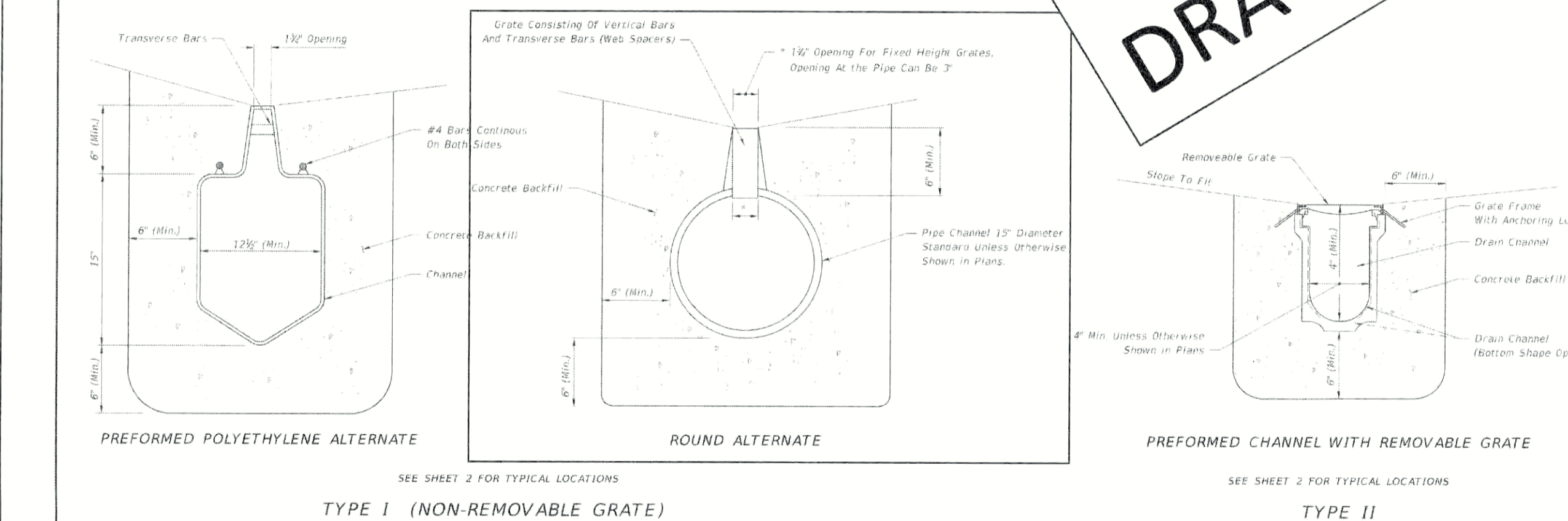
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - SEWER	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 486-3031	<b>SEWER SERVICE &amp; CLEANOUT</b>	SHEET NO. <b>S-4</b>



CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - GENERAL	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 486-3031	<b>SEWER PIPE TRENCH</b>	SHEET NO. <b>S-6</b>



**APPROVED**  
**November 19, 2020**  
**RECORD DRAWINGS**



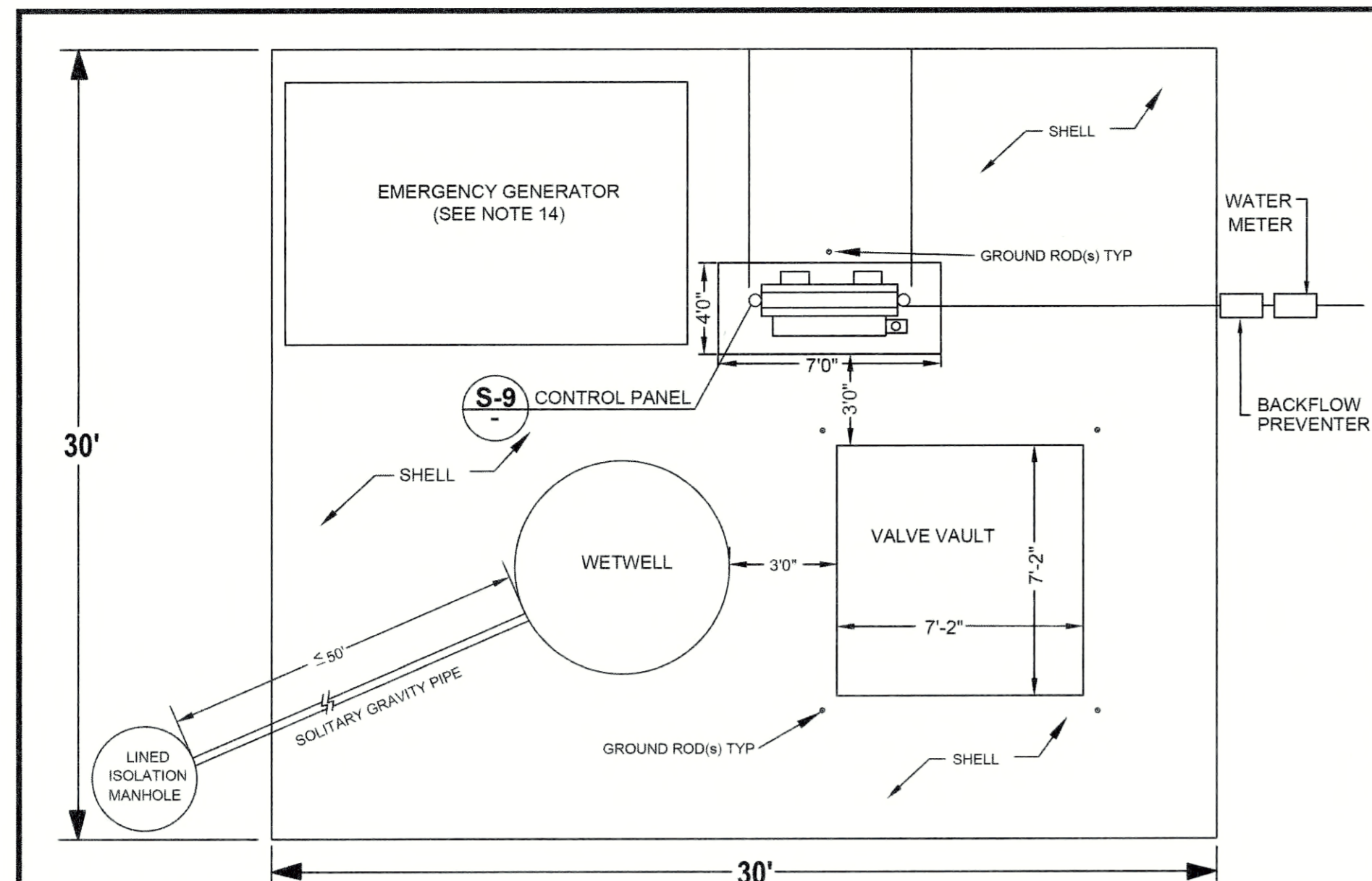
APPROVED  
November 19, 2020  
RECORD DRAWINGS

Flad Architects  
Flad & Associates of Florida, Inc.  
AAC000658  
2202 N. Westshore Blvd., Ste. 125  
Tampa, FL 33607  
Tel: 813-850-6612  
www.flad.com

Flad Structural  
Engineers  
Flad & Associates, Inc.  
27676  
644 Science Drive  
Madison, WI 53711  
Tel: 608-238-2661  
Fax: 608-238-6727  
www.flad.com

AEI Affiliated  
Engineers  
LICENSE # CA 5140  
Affiliated Engineers SE, Inc.  
777 S Harbour Island Blvd., #450  
Tampa, FL 33602  
Tel: (813) 405-3800

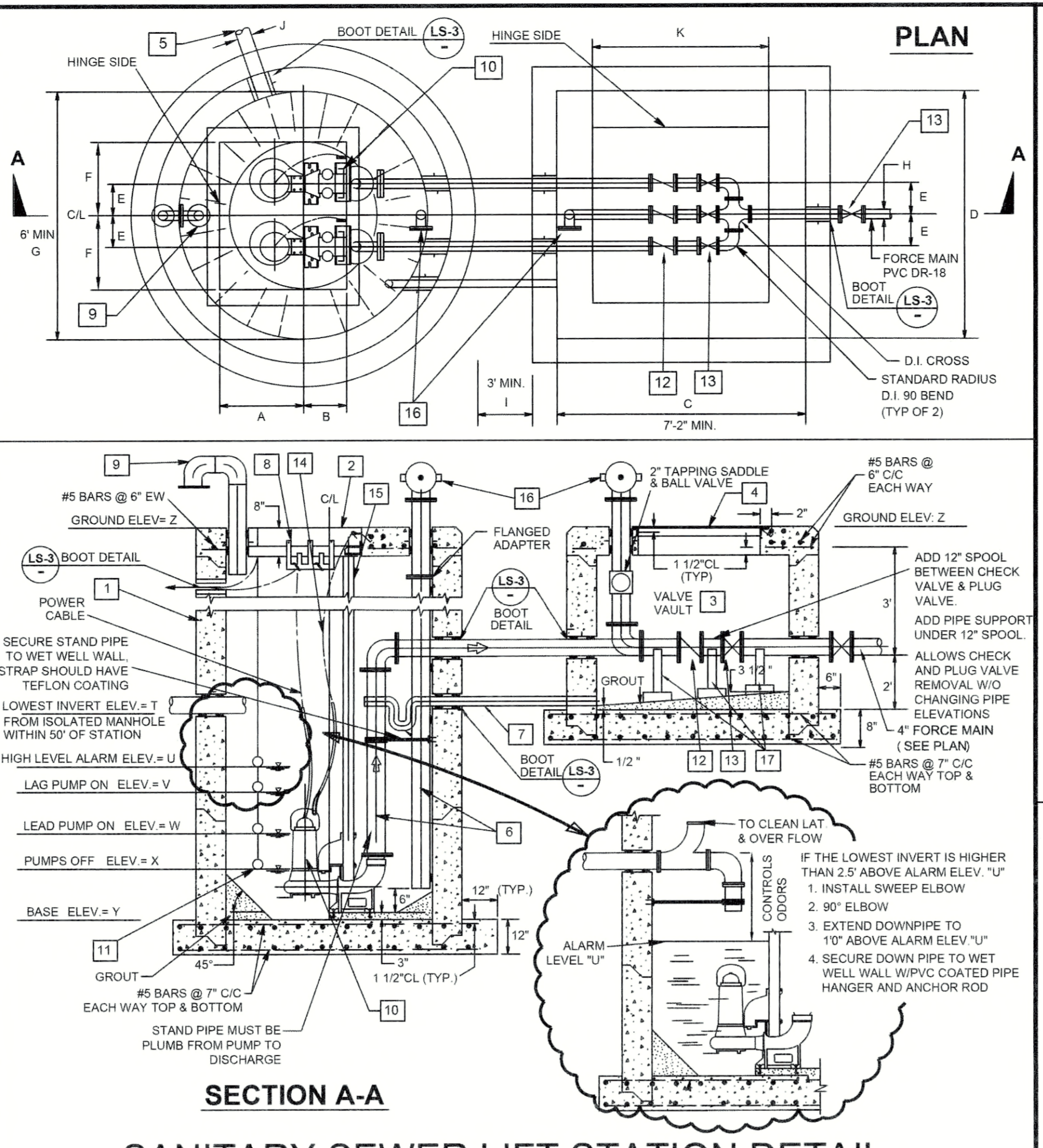
Stantec  
LICENSE # 75477  
STANTEC CONSULTING  
SERVICES  
6800 Professional Parkway East  
Sarasota, FL 34240  
Tel: (941) 907-6900



- UTILITY OWNED LIFT STATIONS SHALL HAVE A MINIMUM DIMENSION OF THIRTY FEET (30') BY THIRTY FEET (30') WITHIN AN "EXCLUSIVE" EASEMENT GRANTED TO THE CITY OF VENICE.
- THE ENGINEER OF RECORD MUST PROVIDE A LIFT STATION LAYOUT PLAN WHICH INCLUDES DIMENSIONS, EXISTING AND PROPOSED GRADES WHICH DEMONSTRATE POSITIVE DRAINAGE AWAY FROM THE LIFT STATION AND CALCULATIONS VERIFYING NO SITE FLOODING WILL OCCUR DURING THE 25YR, 24 HR EVENT.
- CONTRACTOR TO PLANT TREES AND SHRUBS SURROUNDING THE LIFT STATION WITH EXCEPTION OF A 12 FOOT ENTRANCE, THE LOCATION OF THE 12 FOOT ENTRANCE SHALL BE APPROVED BY THE UTILITIES DEPARTMENT. TREES & SHRUBS SHALL NOT INTERFERE WITH STRUCTURE, PANELS, ACCESS TO WETWELL OR VALVE VAULT. ALL TREES & SHRUBS SHOULD MATCH SURROUNDINGS SO AS TO MAKE THE LIFT STATION INCONSPICUOUS.
- THE HOME OWNER ASSOCIATION OR ENTITY RESPONSIBLE FOR COMMON AREA MAINTENANCE IS RESPONSIBLE TO MAINTAIN THE TREES & SHRUBS PLANTED AT LIFT STATION.
- FENCING MAY BE REQUIRED AT THE DISCRETION OF THE UTILITY DEPARTMENT WHEN IT IS DETERMINED THAT GENERAL PUBLIC SAFETY MAY BE AT RISK OR INCREASED VISUAL BUFFERING IS NECESSARY.
- CONDUIT CORDS IN WETWELL SHALL BE DIRECTED TOWARDS THE CONTROL PANEL TO MINIMIZE DEFLECTIONS.
- ENTIRE LIFT STATION SITE SHALL BE LINED WITH 2 LAYERS OF VESQUEEN AND WASHED SHELL AT A MINIMUM OF 6" THICKNESS.
- MINIMUM 12" WIDE ACCESS ROADWAY TO LIFT STATION MUST BE PROVIDED.
- AN ADDITIONAL FOUR FOOT WALK THRU GATE MAY BE REQUIRED.
- F.P.L. POINT OF CONNECTION (P.O.C.) TO BE ADDED ON AS LOCATED TO L.S. METER CAN.
- METER CAN TO L.S. P.O.C. LOCATE TO BE ADDED ON REFERENCE DRAWINGS.
- ALL SPARE PARTS FROM THE SPARE PARTS LIST SHALL BE DELIVERED TO COV UTILITIES DEPARTMENT PRIOR TO ACCEPTANCE OF LIFT STATION.
- ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR DESIGNING GROUNDING SYSTEM FOR LIFT STATION.
- EMERGENCY GENERATOR SHALL BE REQUIRED AT ALL LIFT STATIONS UNLESS PRIOR WRITTEN APPROVAL IS GRANTED BY UTILITIES DIRECTOR.

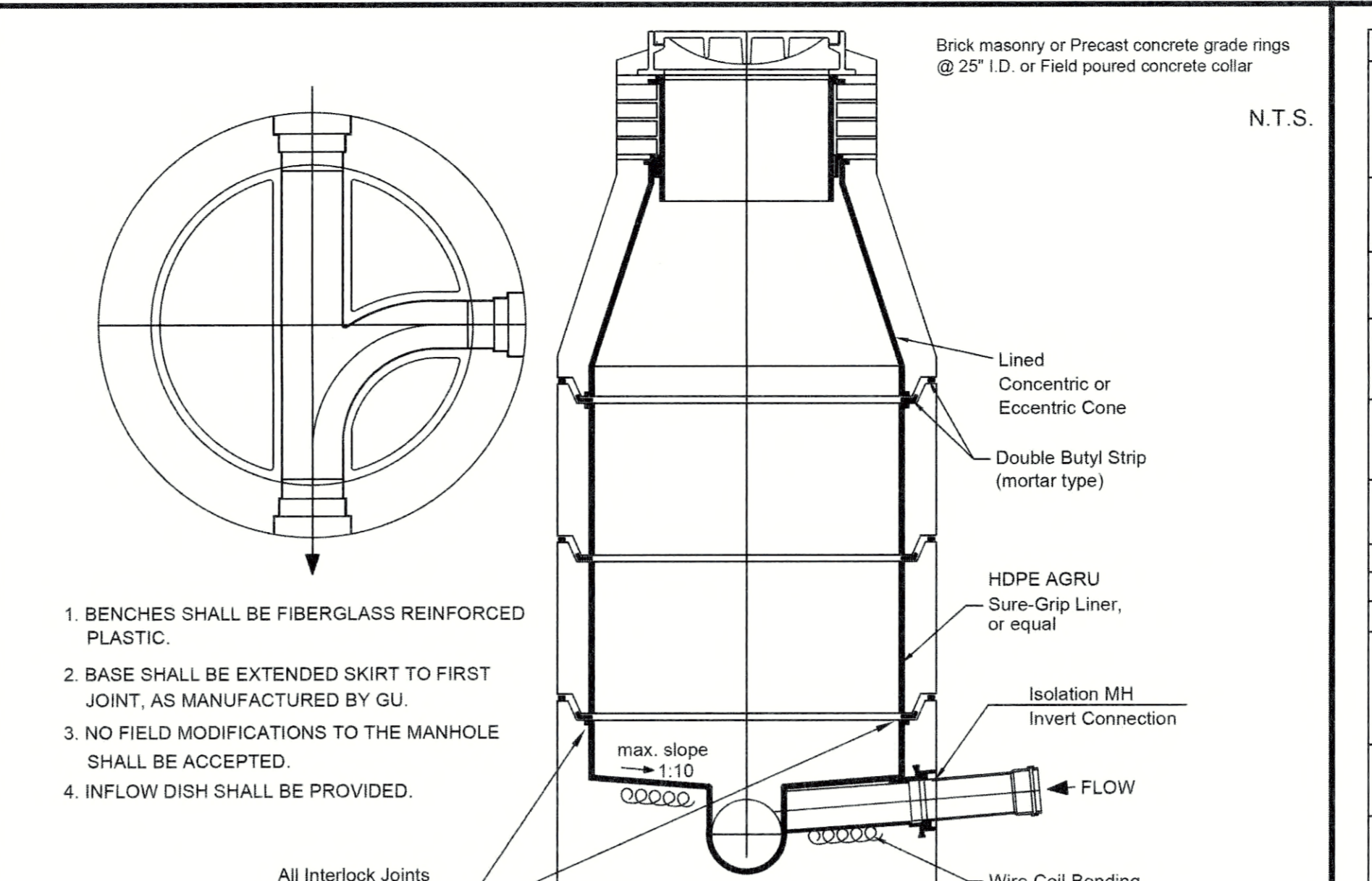
LIFT STATION SITE LAYOUT

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION SITE LAYOUT	SHEET NO. LS-1

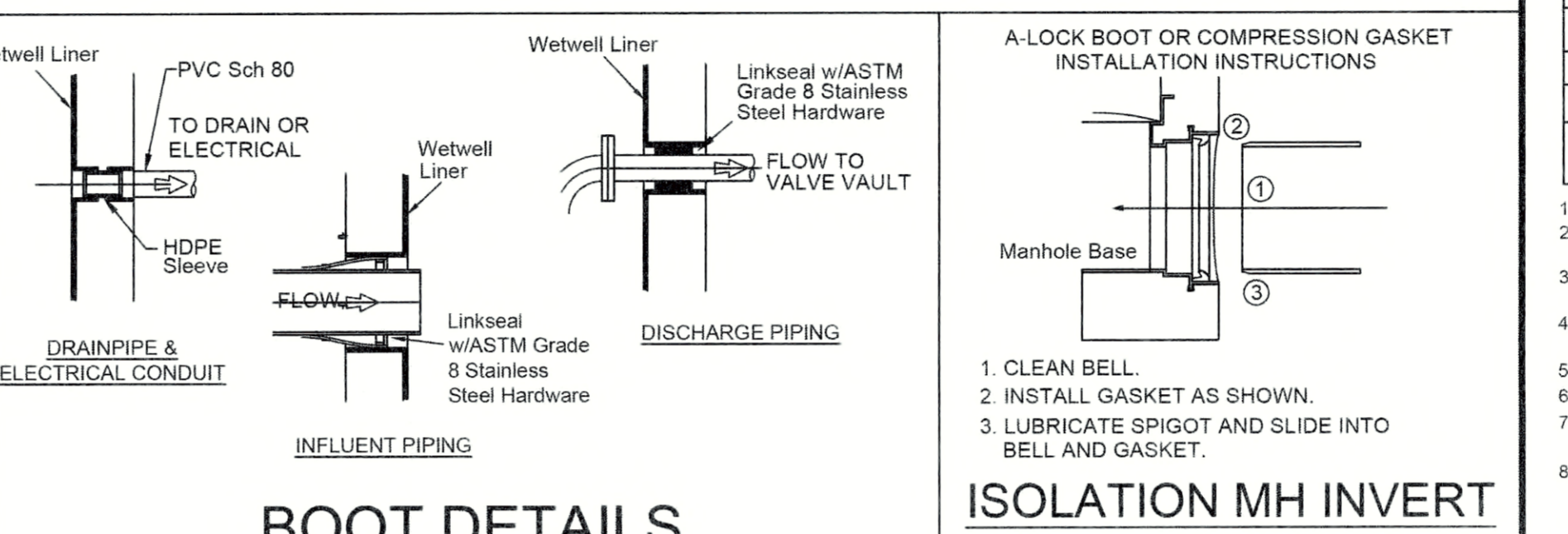


SANITARY SEWER LIFT STATION DETAIL

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION	SHEET NO. LS-2



COMPLETELY LINED ISOLATION MANHOLE DETAIL



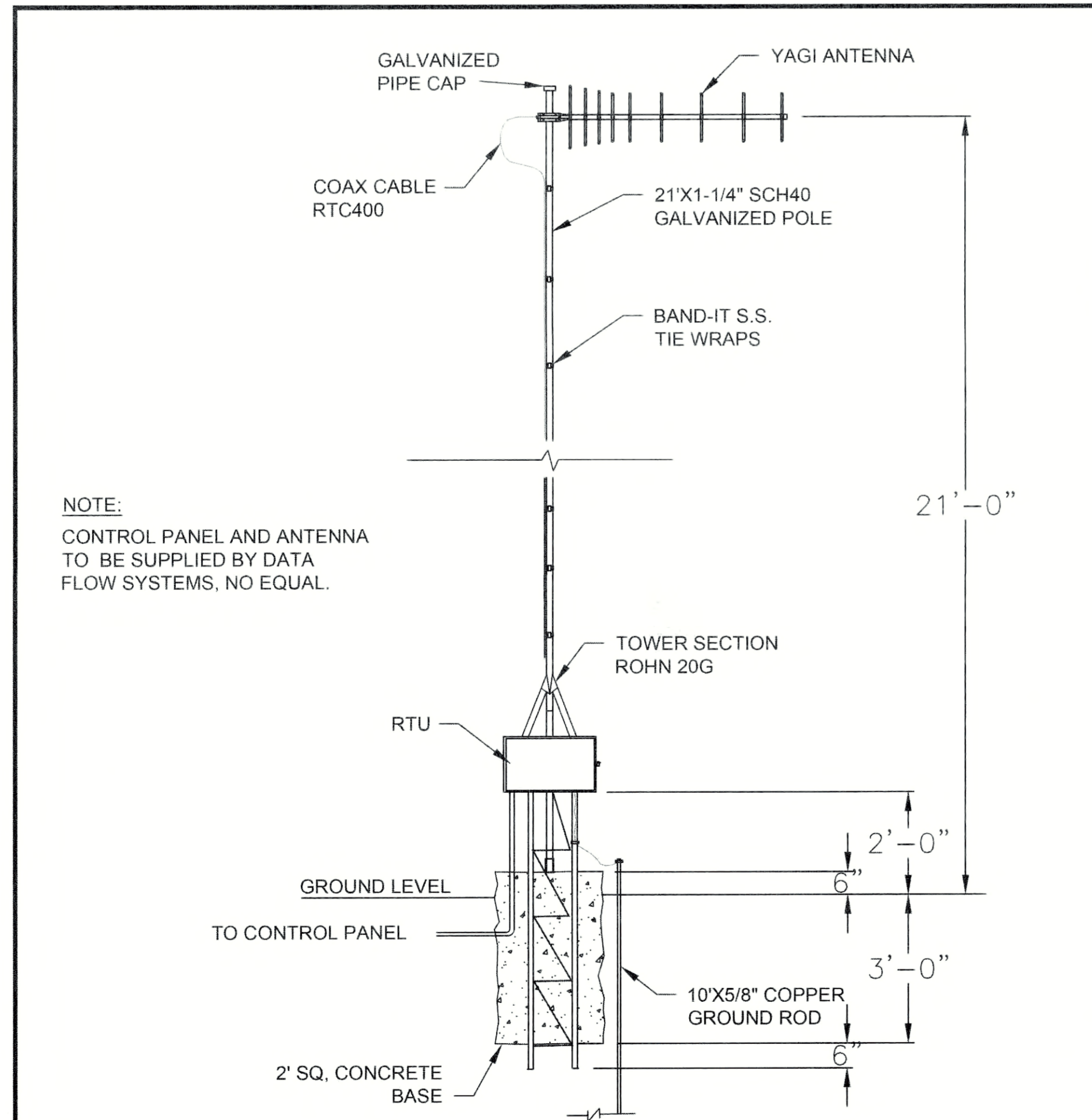
BOOT DETAILS

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	ISOLATION MANHOLE & BOOT DETAILS	SHEET NO. LS-3

Item	Quantity	Description
1	1	WETWELL: Shall be reinforced pre-cast concrete as specified by ASTM C-475, latest revision. Minimum 6'-ft. interior diameter. Joints shall be sealed with Butyl seal conforming to Federal Specification SS-5-00210. Interior shall be lined with HDPE Agri-Sure-Grip and welded by an Agri-certified welder, or equal. Exterior shall be coated with coal tar based sealant as manufactured by Concrete Sealants, New Canale, Ohio or equal, including the bottom of the shell. All exterior joints shall be wrapped with rubberneck tape. Wetwell shall be set on a minimum base of 6 inches of gravel. A minimum of three 2-inch PVC conduits shall be provided for electrical connections to the meter control panel. All hardware supplied shall be 316 SS. No wetwell shall be constructed with a depth greater than 12'-6".
2	1	WETWELL ACCESS HATCH COVER: 2 door access as manufactured by Holiday Products or equal. Access frame and covers shall be fabricated of 14 inch aluminum diamond pattern plate, withstand a minimum live load of 150 psf, and provide support for 316 SS guide rails and 316 SS cable holder for electrical wiring. Covers shall provide lifting handle and safety latch to hold cover in open position. Locking latches shall be furnished for each cover.
3	1	VALVE VAULT: Shall be pre-cast concrete. All piping shall have 12 inch clearance to floor and walls. Interior and exterior shall be coated with two coats of Koppers Internal 40 or equal. Install 2 inch 316 SS saddle clamp & ball valve on vertical riser by-pass piping inside of valve vault. All piping entering or exiting the valve vault shall have a rubber boot.
4	1	VALVE VAULT COVER: Shall have a 2-door access as manufactured by Holiday Products or equal. Access frame and covers shall be fabricated of 14 inch aluminum diamond pattern plate and withstand a minimum live load of 150 psf. Each cover shall provide a lifting handle and safety latch to hold cover in open position. Locking latches shall be furnished for each cover. All hardware supplied shall be 316 SS.
5	1	ISOLATION MANHOLE AND INFLUENT PIPING: Isolation manhole shall be located within fifty (50) feet of the wetwell and discharge through a solitary gravity pipe directly into the wetwell. The isolation manhole shall be lined with Agri-Sure-Grip while the manhole invert and bottom shall be lined with a GULF/PP liner or equal. All interior seams/joints to be welded by an Agri-certified welder. Isolation manhole shall be located outside of traffic area.
6	1	PIPING: All piping within the wetwell (discharge, standpipe, and vent) shall be solvent-weld Schedule 80 PVC with a minimum diameter of four inches, except for the ductile iron spool leading outside the wetwell to the can-lock. All piping and fittings in the valve vault shall be flanged ductile iron and coated with 2 coats of coal-tar epoxy.
7	1	VALVE VAULT DRAIN: 2-inch PVC drain with trap. Locate trap to inside of wet well.
8	1	FLOAT CABLE RACK: 316 Stainless Steel (Do NOT install on wall w/vent)
9	1	VENT PIPE: 4-inch solvent-weld Schedule 80 PVC pipe with stainless steel screen.
10	2	PUMPS: Shall be 24V 3-phase power, submersible-type hydrostatic or ABS, no equal. Pumps shall be a minimum of 100gpm. No vortex or grinder pumps are allowed. A pump curve shall be attached to this set of plans including points of operation or design conditions. Each pump power cable shall have a separate conduit exiting the wetwell and a single additional 2-inch conduit shall be provided for the float control cable. (1 spare pump, same as specs, 1 spare impeller & wear ring for each pump). Impellers shall be 316 stainless steel. SEE BELOW FOR PUMP DETAILS.
11	4	FLOAT LEVEL SWITCHES: Manufacturer: Anchor Scientific Inc. normally open type control duty float switch Single Throw - Double Pole (STDP) 10 amp @ 120 Vac narrow angle mercury switch Model: SSNO-EZC (Spare set of floats). Do not install on wall with vent.
12	3	CHECK VALVES: Use only valves manufactured by Kennedy. Valves shall be iron body, bronze-mounted, stainless steel flanges pin, outside lever and weigh-operated, swing non-stem type, and equipped with removable inspection covers. Units shall be rated for 150 psi minimum working pressure and shall permit full flow and equal to that of the connecting pipe. All check valves shall have a petcock tapped into the top of the bonnet providing a 1/4-inch NPT, female fitting for attachment of a pressure gauge.
13	4	PLUG VALVES: Valves shall be DeZurk. Bodies shall be cast iron per ASTM A 126, Class B. Ends shall be flanged, Class 125 per ANSI B16.1. Plugs shall be cast iron (ASTM A 126, Class B), or ductile iron (ASTM A 536, Grade 65-45-12) with neoprene flange. Valve body seats shall be 316 stainless steel or have a raised resilient overlay of Neoprene 1/8-inch thick and not less than 90% neoprene. Body cap screws and bolts shall be Type 316 stainless steel. Packing shall be Teflon-filled Teflon and replaceable with valve body under full pressure. Plug valves, 4 inches through 12 inches, shall be non-lubricated type. Minimum pressure rating shall be 175 psi.
14	2	LIFT CABLE: 316 Stainless Steel installed on each pump.
15	1	GUIDE RAILS: 2-inch diameter x 1/4 inch 316 Stainless Steel, shall be installed parallel from top to bottom, max. 12" from top of lid.
16	1	CAN-LOCK: Ductile iron spool piping with quick disconnect, dust cover, and chain. Position towards by-pass pump access.
17	1	PIPE SUPPORT: Adjustable iron pipe support stands in valve vault, minimum seven (7) and shall be coated with 2 coats of coal-tar epoxy. All above ground by-pass piping to be lined epoxy coated ductile iron.

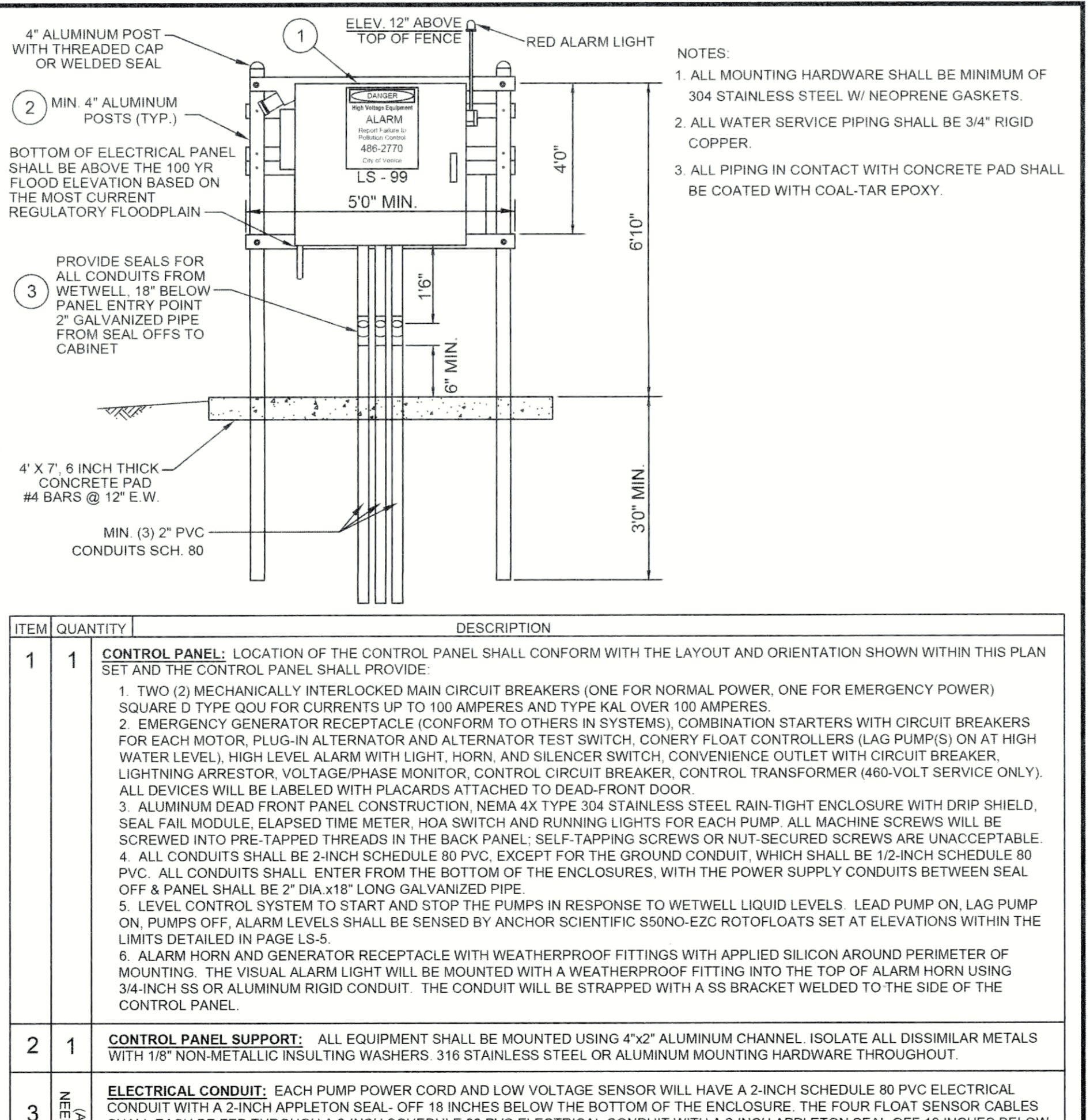
LIFT STATION SCHEDULE AND NOTES

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION SCHEDULE	SHEET NO. LS-4



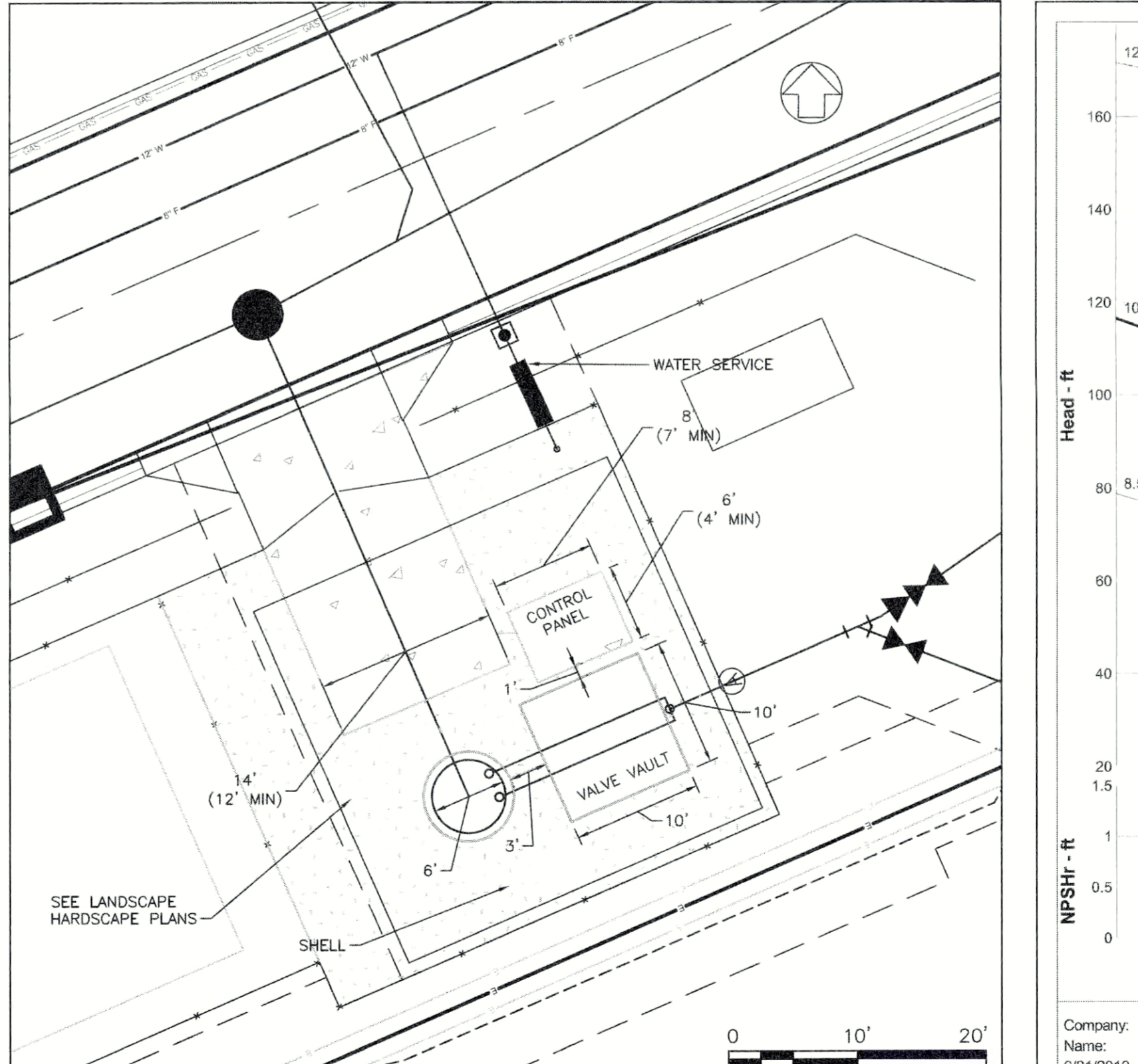
TELEMETRY CONTROL PANEL & ANTENNA

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION TELEMETRY	SHEET NO. LS-5



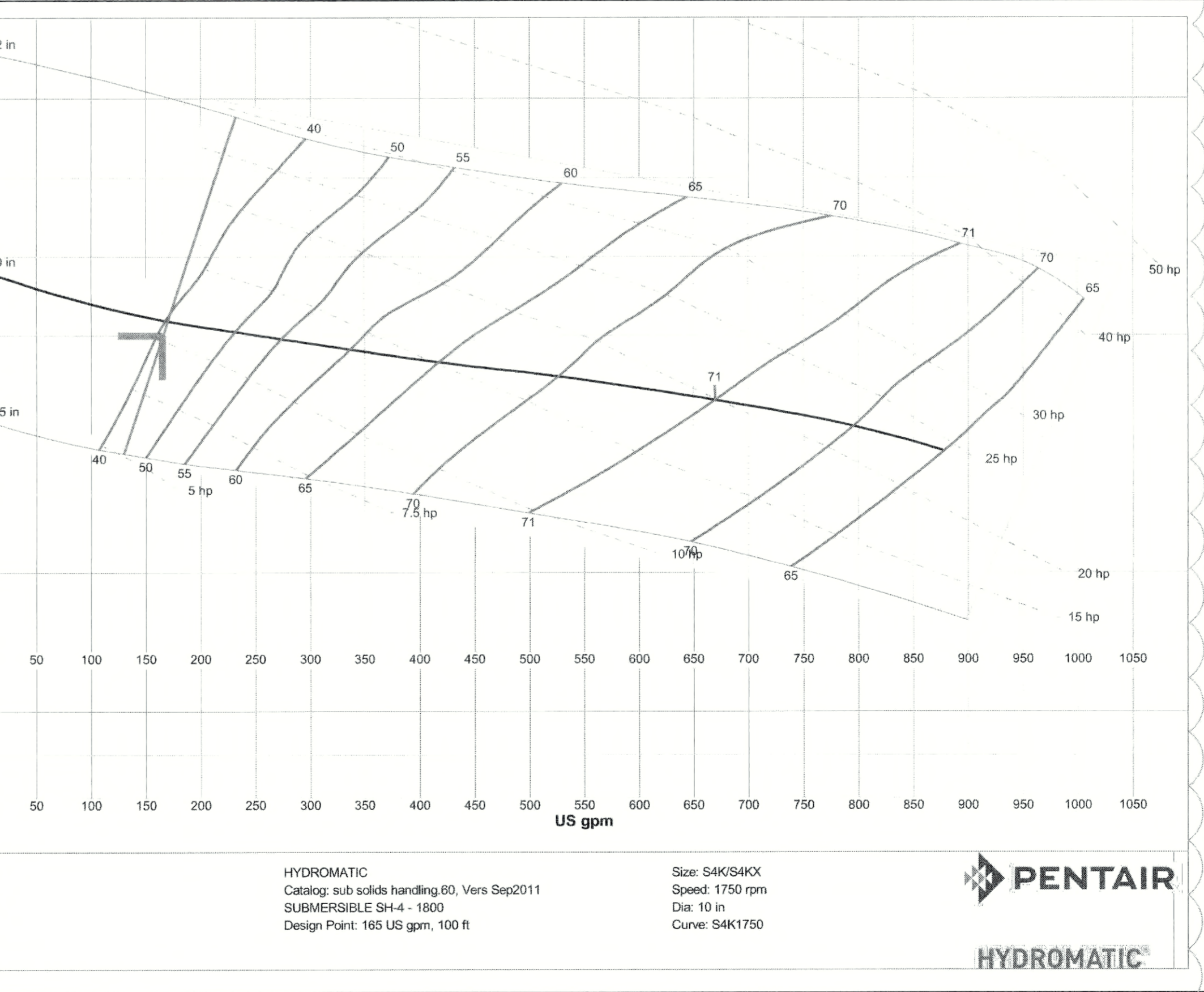
LIFT STATION CONTROL PANEL FRONT

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	CONTROL PANEL FRONT	SHEET NO. LS-6



LIFT STATION #1 SITE PLAN

- GENERAL NOTES
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL PAY FOR ANY PERMITS AND/OR INSPECTIONS REQUIRED AND SHALL NOTIFY OWNER AND ENGINEER IN WRITING 24 HOURS PRIOR TO START OF CONSTRUCTION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY THE ENGINEER WITH AS-BUILT ELEVATIONS WHEREVER ELEVATIONS ARE SHOWN ON THIS DRAWING.
  - THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE LIFT STATION WATER SERVICE AND SETTING THE METER BOX TO FINAL GRADE.
- STANDARDS FOR LIFT/PUMP STATIONS
- The top of the wet well slab and the top of the control panel/RTU slab shall be at the same elevation at the top of the lift station site.
  - Install 6 inches of compacted 1 inch, washed, crushed shell over one layer of weed barrier over all exposed ground surfaces. One layer of weed barrier is to be laid and extend to a line 4 feet outside of the fence line. The weed barrier shall be Microscope manufactured by Mirafi or approved equal. All finished grade surfaces shall slope away from the concrete slabs at a minimum slope of 2%, extending to a line 4 feet outside of the fence line. All disturbed ground shall be compacted to 95% max density, ASTM 1-180, before installing the weed barrier.
  - All lift station driveways shall be 6-inch thick Class 1, minimum 3,000 psi, Fibermesh reinforced concrete with 3 lbs/cy of 100x virgin polypropylene colored, 100-mil fibers from Fibermesh Co. or equal, extending from the back of the curb to one foot inside the fence gate opening. The 14-foot wide driveway shall align with the center of the fence gate and the wet well. The top 12-inches of the driveway subgrade shall be compacted to 98% density, ASTM 1-180.
  - All hardware within the wet well shall be 316 SST. All flanged joints on above ground valve assembly must use 316 SST nuts & bolts. Uni-Flanges, insto-flange or flange adapters are prohibited. Anti-seize lubricant to be applied on all bolt threads. Painting of nuts & bolts prohibited.
  - Survey markers, steel bar and cap, shall mark the exact easement lines of the lift station site.
  - The location of all buried piping and electrical conduits are to be included on the Record Drawings.



LIFT STATION AND FORCE MAIN  
DESIGN CRITERIA

NUMBER OF EQUIVALENT POTENTIAL DWELLING UNITS	80 EDU'S
AVERAGE DAILY FLOW	15,000 GPD
PEAK DAILY FLOW @ 3.21 X ADF	12.5 GPM
NUMBER OF PUMPS IN PUMP STATION	50.0 GPM
PUMPING CAPACITY OF EACH PUMP	165 GPM
TOTAL STORAGE VOLUME OF WET WELL BETWEEN OPERATING LEVELS	243 GALLONS
MAXIMUM CYCLE STARTS OF EACH PUMP	4.3 STARTS/HOUR
WEIGHT OF WET WELL (WITHOUT EQUIPMENT) **	157,885 LBS.
BUOYANCY OF WET WELL	68,160 LBS.

\*\* NOTE: INCLUDES WEIGHT OF BACKFILL ACTING ON BASE SLAB LIP  
PUMP DETAILS  
THE PUMP SHALL BE A HYDROMATIC S4K 1750 RPM, 9.875 DIAMETER IMPELLER, 4 IN DISCHARGE, 240 V WITH AN OPERATING POINT OF 165 GPM AT 100 FT TDH

RECORD  
DRAWING

Stamps & Approvals

3	07/02/20	RECORD DRAWINGS
2	12/04/19	CS-0115
1	7/21/19	CS-0105
0	4/24/19	Construction Documents
Rev	Date	Description
Project Title		

PENTAIR  
HYDROMATIC

Sarasota County  
Public Hospital  
District

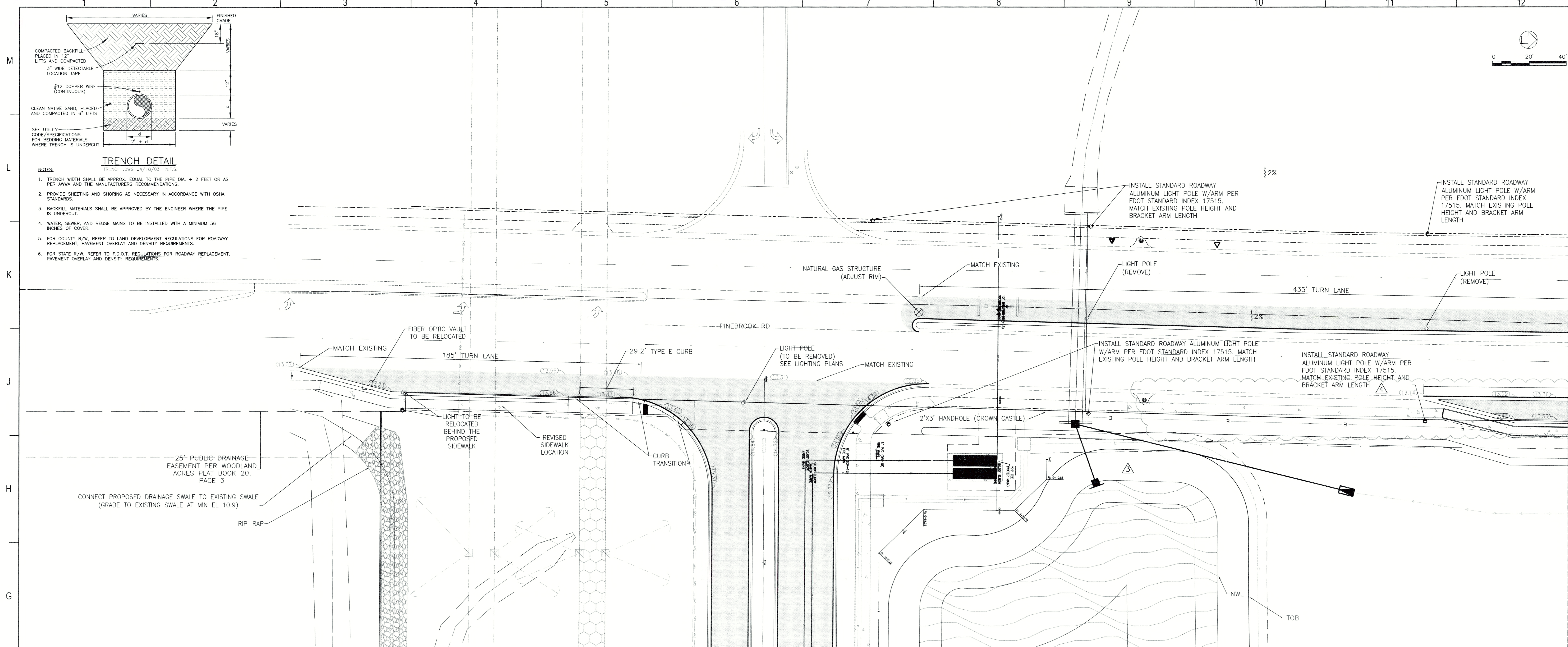
2600 Laurel Road  
Nokomis, FL 34275  
90 Bed New Hospital

AHCA #: 23/23960161-101-1

Project Phase	
CONSTRUCTION DOCUMENTS	
Date	Drawn By
4/24/2019	STANTEC
Project Number	Checked By
18122-00	STANTEC

Sheet Title  
LIFT STATION DETAILS

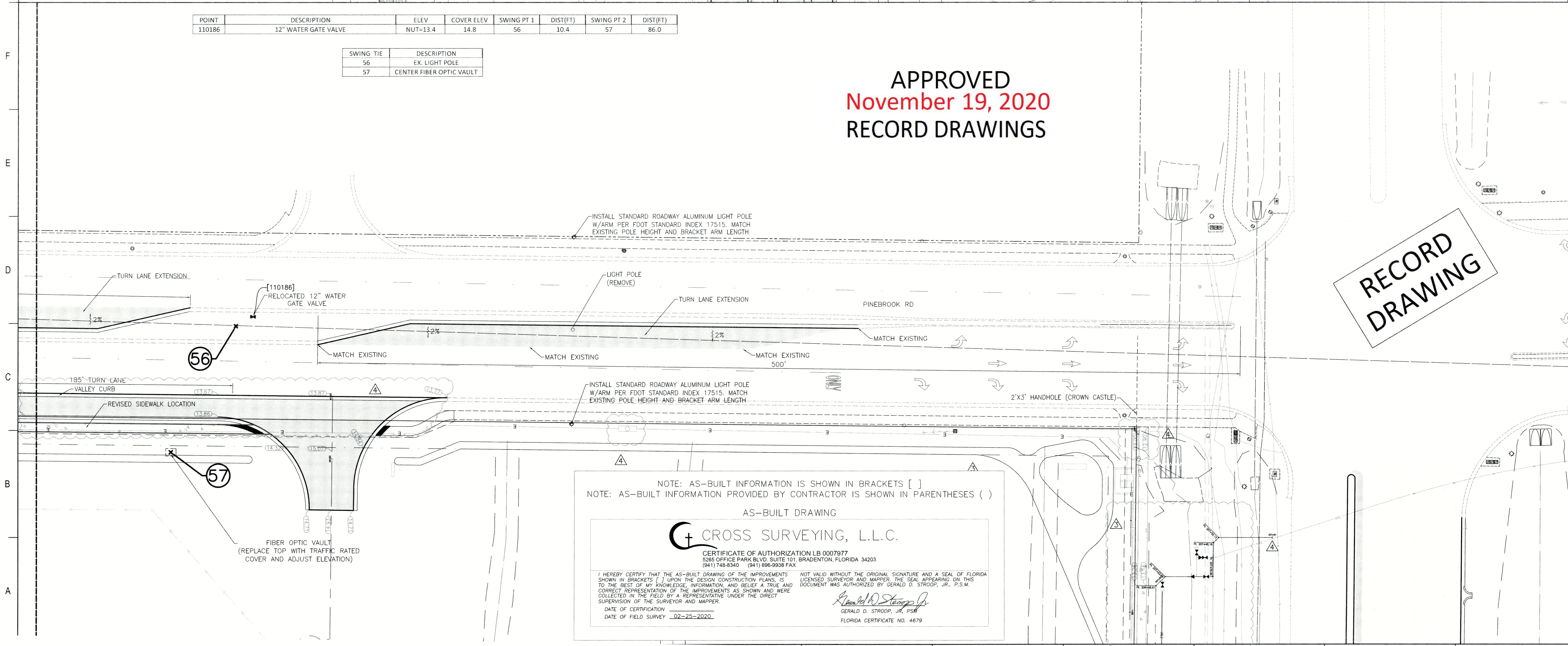
Sheet Number	Rev. No.
C-701	2



POINT	DESCRIPTION	ELEV	COVER ELEV	SWING PT 1	DIST(FT)	SWING PT 2	DIST(FT)
110186	12" WATER GATE VALVE	NUT=13.4	14.8	56	10.4	57	86.0

SWING TIE	DESCRIPTION
56	EX. LIGHT POLE
57	CENTER FIBER OPTIC VAULT

APPROVED  
November 19, 2020  
RECORD DRAWINGS



NOTE: AS-BUILT INFORMATION IS SHOWN IN BRACKETS [ ]  
NOTE: AS-BUILT INFORMATION PROVIDED BY CONTRACTOR IS SHOWN IN PARENTHESES ( )

AS-BUILT DRAWING

**CROSS SURVEYING, L.L.C.**

CERTIFICATE OF AUTHORIZATION LB 0007977  
6085 OFFICE PARK BLVD, SUITE 101, BRADENTON, FLORIDA 34203  
(941) 748-8340 (941) 896-9938 FAX

I HEREBY CERTIFY THAT THE AS-BUILT DRAWING OF THE IMPROVEMENTS SHOWN IN BRACKETS [ ] UPON THE DESIGN CONSTRUCTION PLANS, IS TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF A TRUE AND CORRECT REPRESENTATION OF THE IMPROVEMENTS AS SHOWN AND WERE COLLECTED IN THE FIELD BY A REPRESENTATIVE UNDER THE DIRECT SUPERVISION OF THE SURVEYOR AND MAPPER.

DATE OF CERTIFICATION: 02-25-2020  
DATE OF FIELD SURVEY: 02-25-2020

NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND A SEAL OF FLORIDA LICENSED SURVEYOR AND MAPPER. THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY GERALD D. STROOP, JR., P.S.M.

*Gerald D. Stroop, Jr.*  
GERALD D. STROOP, JR., P.S.M.  
FLORIDA CERTIFICATE NO. 4679

**Flad Architects**  
Flad & Associates of Florida, Inc.  
AACO000558  
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Tampa, FL 33607  
Tel: 813-630-6612  
www.flad.com

**Flad Structural Engineers**  
Flad & Associates, Inc.  
27676  
644 Science Drive  
Madison, WI 53711  
Tel: 608-238-2861  
Fax: 608-238-6727  
www.flad.com

**Affiliated Engineers**  
LICENSE # CA 5140  
Affiliated Engineers SE, Inc.  
777 S Harbour Island Blvd. #450  
Tampa, FL 33602  
Tel: (813) 405-3800

**Stantec**  
LICENSE # 75477  
STANTEC CONSULTING SERVICES  
6500 Professional Parkway East  
Sarasota, FL 34240  
Tel: (941) 907-6900

Project Key Plan

Rev	Date	Description
1	7/26/20	RECORD DRAWINGS
2	09/24/20	CB1020
3	03/04/20	CB1020
2	12/04/19	CB1015
1	07/11/19	CB1009
0	4/24/19	Construction Documents

Project Title

**smh**

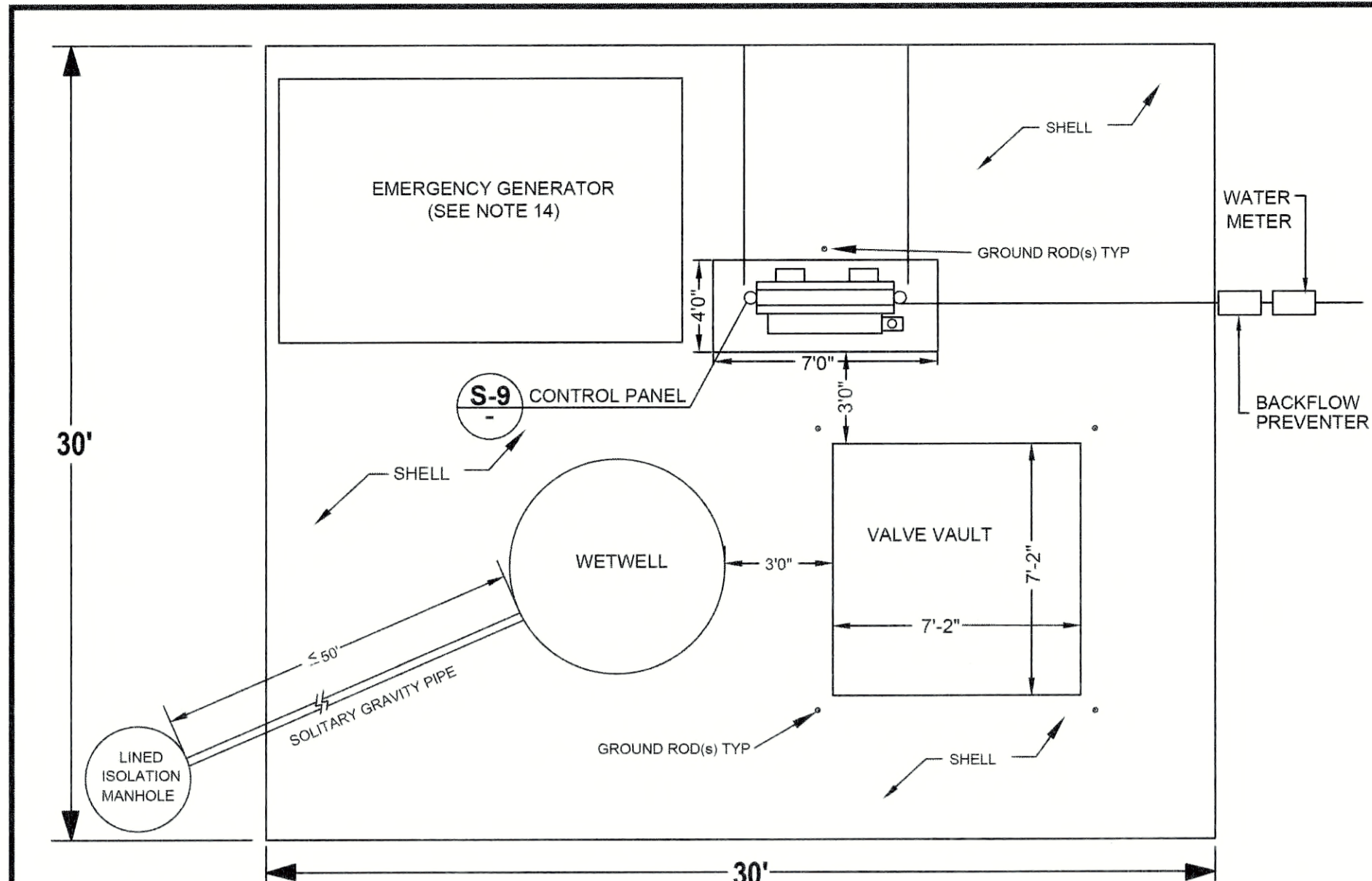
**Sarasota County Public Hospital District**  
2600 Laurel Road  
Nokomis, FL 34275  
**90 Bed New Hospital**

AHCA#: 23/23960161-101-1

Project Phase CONSTRUCTION DOCUMENTS	
Date 4/24/2019	Drawn By STANTEC
Project Number 18122-00	Checked By STANTEC
Sheet Title <b>PINEBROOK ROAD IMPROVEMENTS</b>	
Sheet Number <b>C-801</b>	Rev. No. <b>4</b>

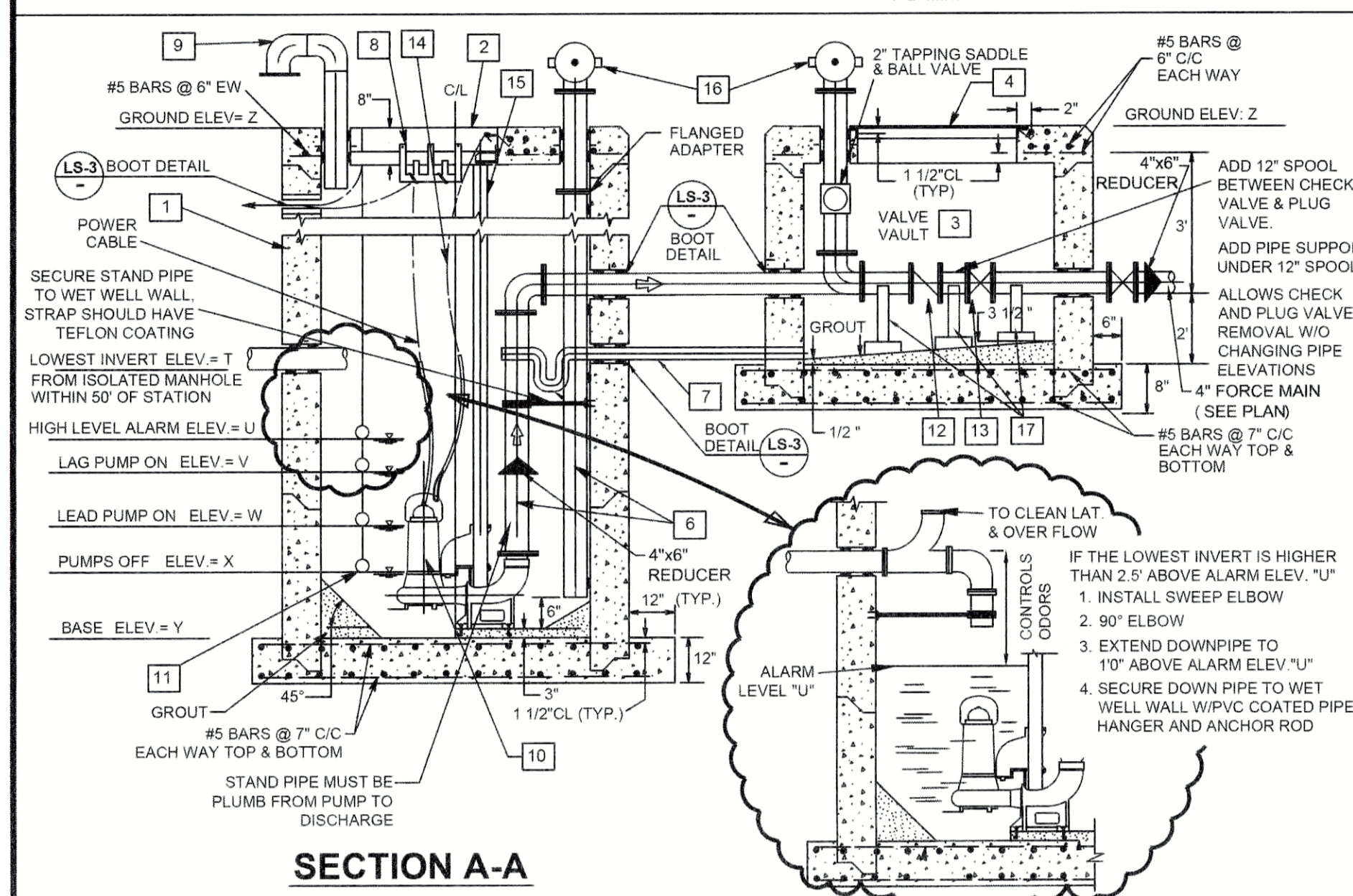
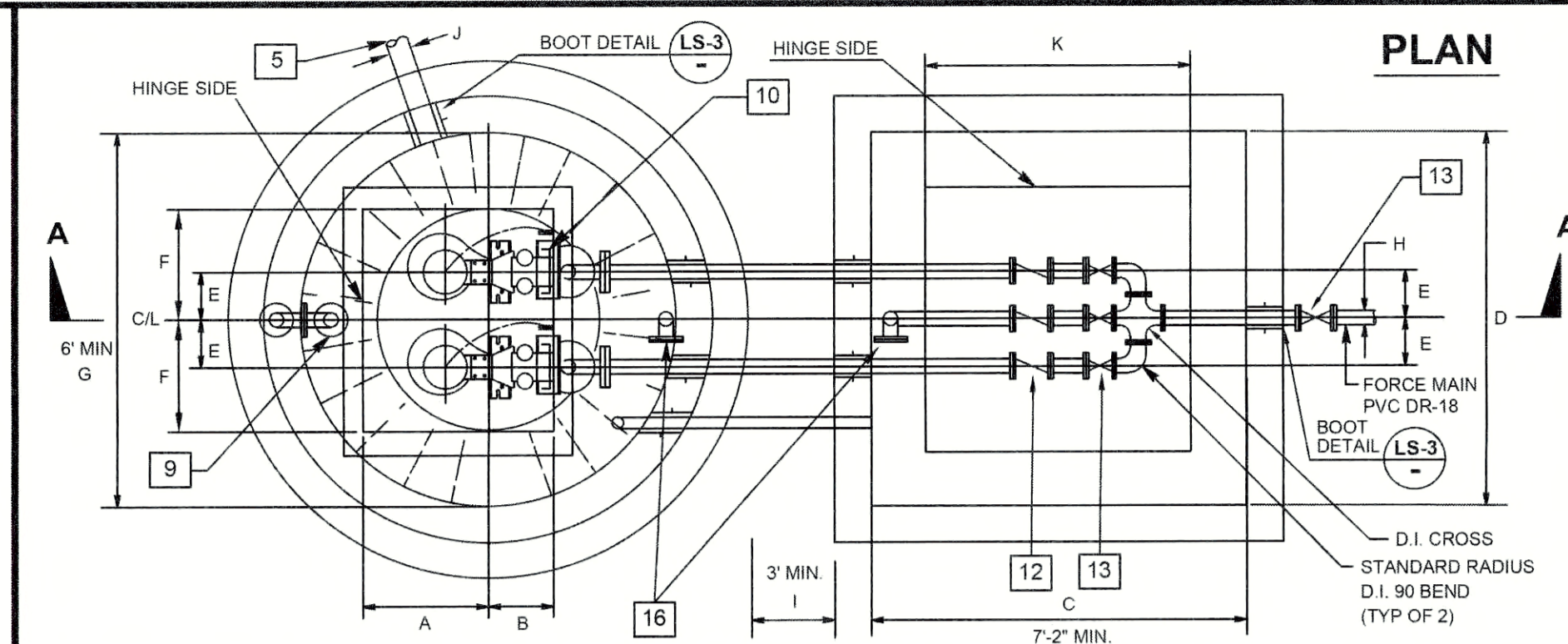
APPROVED  
November 19, 2020  
RECORD DRAWINGS

A = 2' = -2.5  
B = 1' = -3.0  
C = 7'-2" MIN, CONTRACTOR VERIFY  
D-F, H-I = CONTRACTOR VERIFY AND NOTE ON SHOP DRAWINGS FOR EOR AND COV  
G = 8' = -9.40  
J = SEE PLAN  
T = -2.5  
U = -3.5  
V = -4.5  
W = -5.5  
X = -6.5  
Y = -7.5  
Z = 15.00

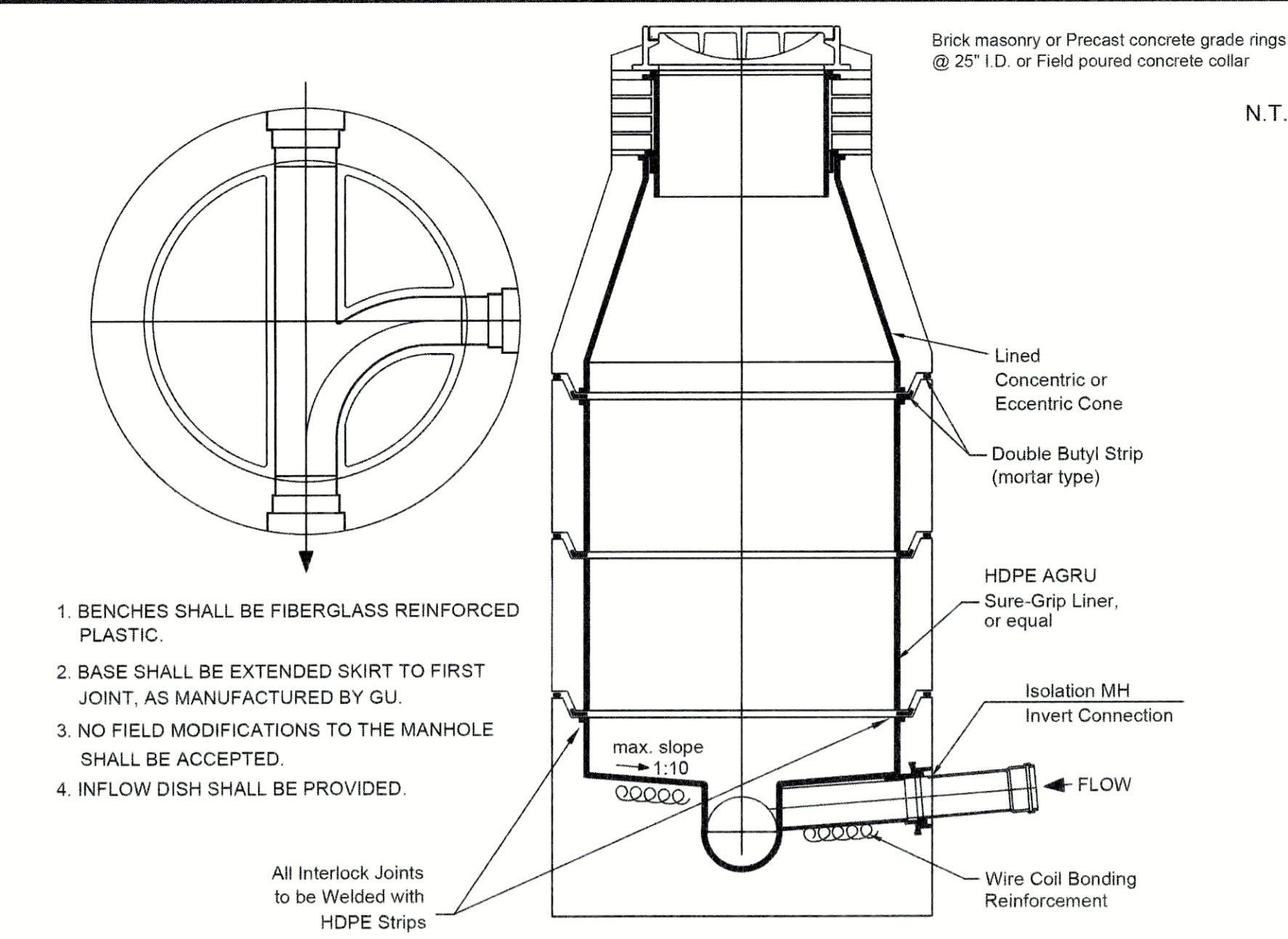


- UTILITY OWNED LIFT STATIONS SHALL HAVE A MINIMUM DIMENSION OF THIRTY FEET (30') BY THIRTY FEET (30') WITHIN AN "EXCLUSIVE" EASEMENT GRANTED TO THE CITY OF VENICE.
- THE ENGINEER OF RECORD MUST PROVIDE A LIFT STATION LAYOUT PLAN WHICH INCLUDES DIMENSIONS, EXISTING AND PROPOSED GRADES WHICH DEMONSTRATE POSITIVE DRAINAGE AWAY FROM THE LIFT STATION AND CALCULATIONS VERIFYING NO SITE FLOODING WILL OCCUR DURING THE 25YR, 24 HR STORM EVENT.
- CONTRACTOR TO PLANT TREES AND SHRUBS SURROUNDING THE LIFT STATION WITH EXCEPTION OF A 12 FOOT ENTRANCE. THE LOCATION OF THE 12 FOOT ENTRANCE SHALL BE APPROVED BY THE UTILITIES DEPARTMENT. TREES & SHRUBS SHALL NOT INTERFERE WITH STRUCTURE, PANELS, ACCESS TO WETWELL OR VALVE VAULT. ALL TREES & SHRUBS SHOULD MATCH SURROUNDINGS SO AS TO MAKE THE LIFT STATION INCONSPICUOUS.
- THE HOME OWNER ASSOCIATION OR ENTITY RESPONSIBLE FOR COMMON AREA MAINTENANCE IS RESPONSIBLE TO MAINTAIN THE TREES & SHRUBS PLANTED AT LIFT STATION.
- FENCING MAY BE REQUIRED AT THE DISCRETION OF THE UTILITY DEPARTMENT WHEN IT IS DETERMINED THAT GENERAL PUBLIC SAFETY MAY BE AT RISK OR INCREASED VISUAL BUFFERING IS NECESSARY.
- CONDUIT CORDS IN WETWELL SHALL BE DIRECTED TOWARDS THE CONTROL PANEL TO MINIMIZE DEFLECTIONS.
- ENTIRE LIFT STATION SITE SHALL BE LINED WITH 2 LAYERS OF VISQUEEN AND WASHED SHELL AT A MINIMUM OF 6" THICKNESS.
- MINIMUM 12" WIDE ACCESS ROADWAY TO LIFT STATION MUST BE PROVIDED.
- AN ADDITIONAL FOUR FOOT WALK-THRU GATE MAY BE REQUIRED.
- F.P.L. POINT OF CONNECTION (P.O.C.) TO BE ADDED ON AS LOCATED TO L.S. METER CAN.
- METER CAN TO L.S. P.O.C. LOCATE TO BE ADDED ON REFERENCE DRAWINGS.
- ALL SPARE PARTS FROM THE SPARE PARTS LIST SHALL BE DELIVERED TO COV UTILITIES DEPARTMENT PRIOR TO ACCEPTANCE OF LIFT STATION.
- ENGINEER OF RECORD SHALL BE RESPONSIBLE FOR DESIGNING GROUNDING SYSTEM FOR LIFT STATION.
- EMERGENCY GENERATOR SHALL BE REQUIRED AT ALL LIFT STATIONS UNLESS PRIOR WRITTEN APPROVAL IS GRANTED BY UTILITIES DIRECTOR.

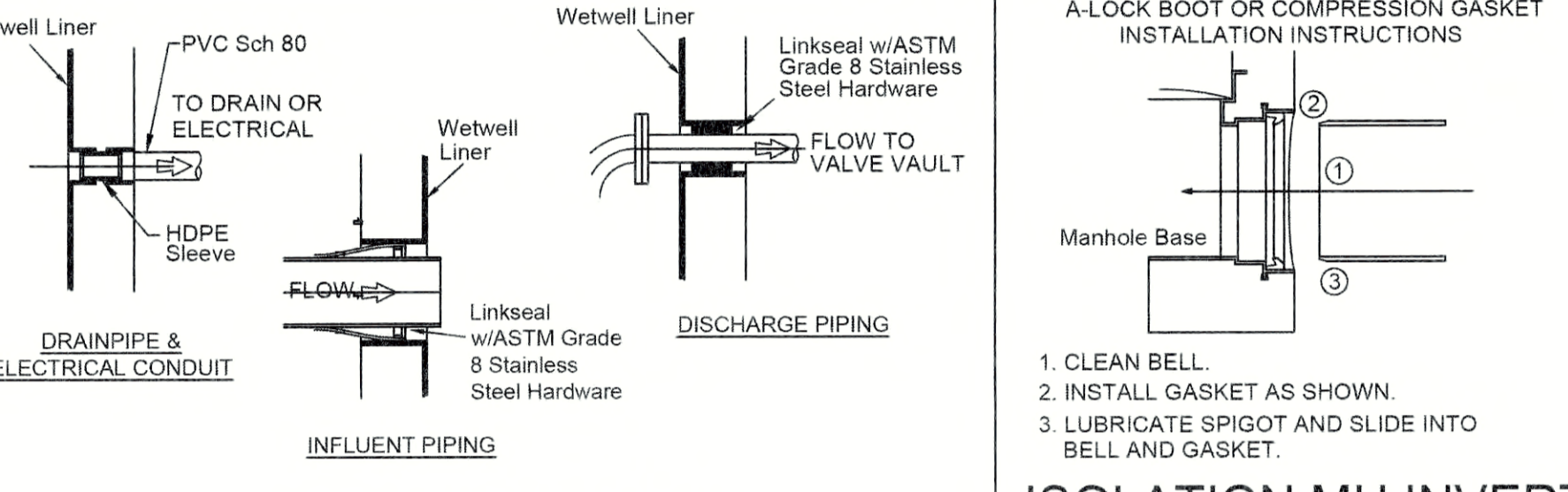
LIFT STATION SITE LAYOUT



SANITARY SEWER LIFT STATION DETAIL



COMpletely lined ISOLATION MANHOLE DETAIL



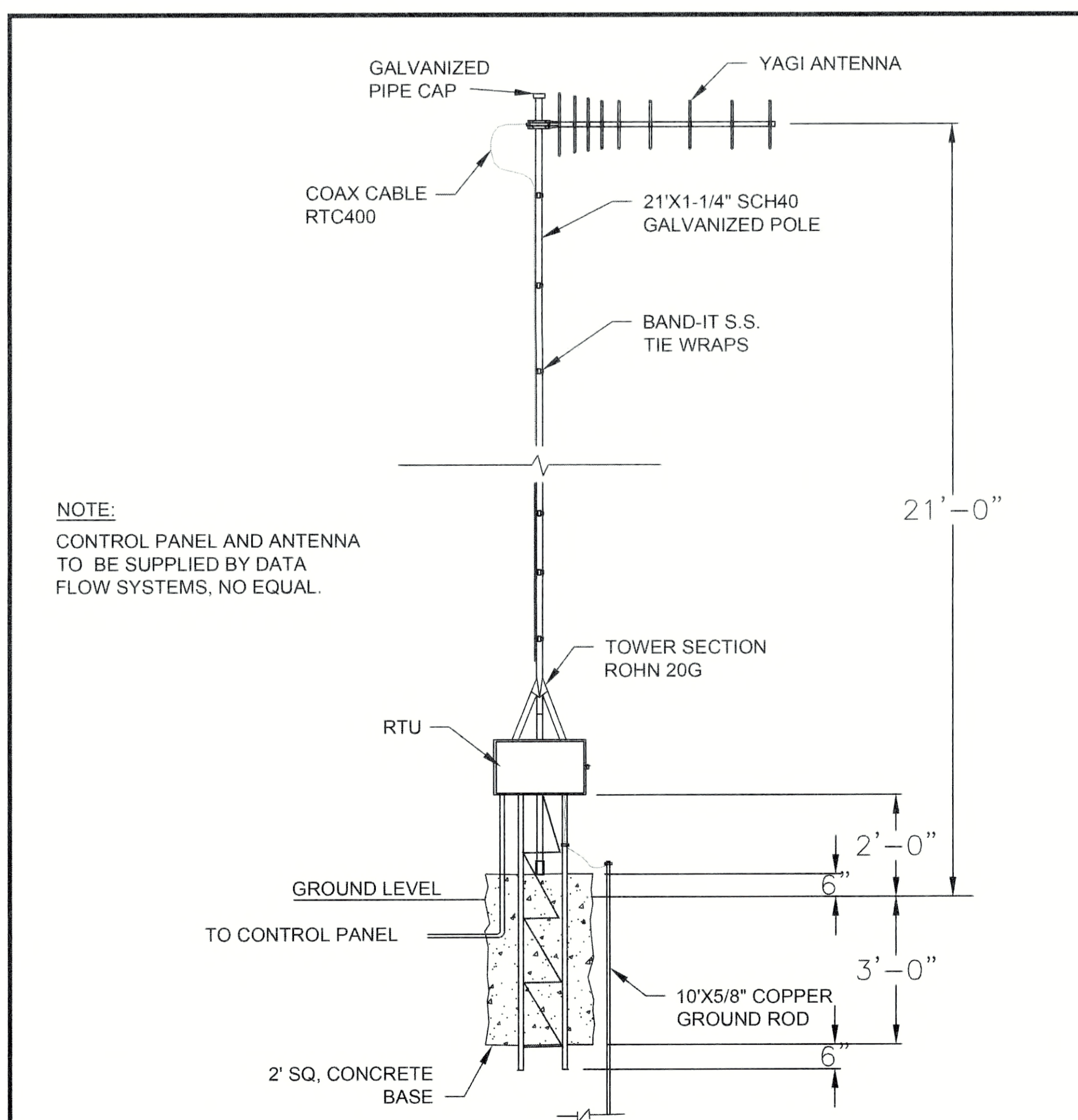
BOOT DETAILS

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION ISOLATION MANHOLE & BOOT DETAILS	SHEET NO. LS-3

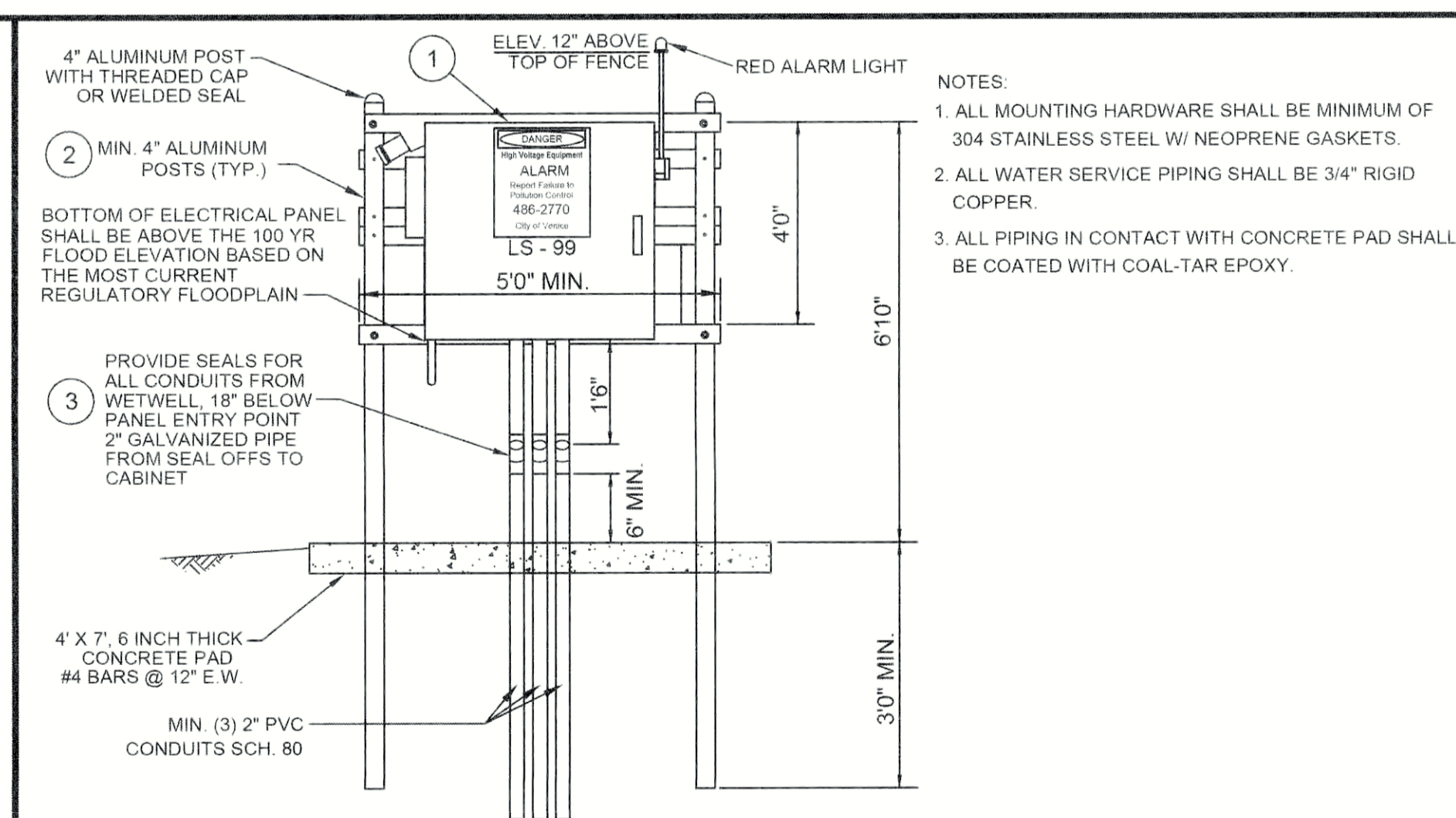
Item	Quantity	Description
1	1	WETWELL: Shall be reinforced pre-cast concrete as specified by ASTM C-478, latest revision. Minimum 6-ft. interior diameter. Joints shall be sealed with Butyl seal conforming to Federal Specification SS-5-00210. Interior shall be lined with HDPE Agri-Sure-Grip and welded by an Agri-certified welder, or equal. Exterior shall be coated with coal tar based sealant as manufactured by Corowall Sealants, New Canaan, Ohio or equal, including the bottom of the slab. All exterior joints shall be wrapped with rubberneck tape. Wetwell shall be set on a minimum base of 6 inches of gravel. A minimum of three 2-inch PVC conduits shall be provided for electrical connections to the meter control panel. All hardware supplies shall be 316 SS. No wetwell shall be constructed with a depth greater than 20 ft.
2	1	WETWELL ACCESS HATCH COVER: 2 door access as manufactured by Halliday Products or equal. Access frame and covers shall be fabricated of 14 inch aluminum diamond pattern plate, withstand a minimum live load of 150 psf, and provide support for 316 SS guide rails and 316 SS cable holder for electrical wiring. Covers shall provide lifting handle and safety latch to hold cover in open position. Locking latches shall be furnished for each cover.
3	1	VALVE VAULT: Shall be pre-cast concrete. All piping shall have 12 inch clearance to floor and walls. Interior and exterior shall be coated with two coats of Koppers Internal 48 or equal. Install 2 inch 316 SS saddle clamp & ball valve on vertical riser by-pass piping inside of valve vault. All piping entering or exiting the valve vault shall have a rubber boot.
4	1	VALVE VAULT COVER: Shall have a 2-door access as manufactured by Halliday Products or equal. Access frame and covers shall be fabricated of 14 inch aluminum diamond pattern plate, withstand a minimum live load of 150 psf. Each cover shall provide a lifting handle and safety latch to hold cover in open position. Locking latches shall be furnished for each cover. All hardware supplies shall be 316 SS. No wetwell shall be constructed with a depth greater than 20 ft.
5	1	ISOLATION MANHOLE AND INFLUENT PIPING: Isolation manhole shall be located within fifty (50) feet of the wetwell and discharge through a solitary gravity pipe directly into the wetwell. The isolation manhole walls shall be lined with Agri-Sure-Grip while the manhole invert and bottom shall be lined with a GULFPP liner or equal. All interior seams/joints to be welded by an Agri-certified welder. Isolation manhole shall be located outside of traffic area.
6	1	PIPING: All piping within the wetwell (discharge, standpipes, and vent) shall be solvent-weld Schedule 80 PVC with a minimum diameter of 1/2 inch, except for the ductile iron spool leading outside the wetwell to the cam-lock. All piping and fittings in the valve vault shall be flanged ductile iron and coated with 2 coats of coal tar epoxy. Contractor to coordinate location of fire reduce with pump manufacturer.
7	1	VALVE VAULT DRAIN: 2-inch PVC drain with trap. Locate trap to inside of wet well.
8	1	FLOAT CABLE RACK: 316 Stainless Steel (Do NOT install on wall w/vent)
9	1	VENT PIPE: 4-inch Solvent-weld Schedule 80 PVC pipe with stainless steel screen.
10	2	PUMPS: Shall be 3 phase power, submersible-type Hydromatic or ABB, no equal. Pumps shall be a minimum of 100gpm. No vortex or grinder pumps are allowed. A pump curve shall be attached to this set of plans including points of operation or design conditions. Each pump power cable shall have a separate conduit exiting the wetwell and a single additional 2-inch conduit shall be provided for the float control cables (1 spare pump, spare cable spares, 1 spare impeller & wear ring for each pump). Impellers shall be 316 stainless steel. SEE BELOW FOR PUMP DETAILS.
11	4	FLOAT LEVEL SWITCHES: Manufacturer - Anchor Scientific Inc. normally open type control duty float switch Single Throw - Double Pole (STDP) 10 amp @ 120 Vac narrow range mercury switch Model - S50NO-EZC (Spare set of floats). Do not install on wall with invert.
12	3	CHECK VALVES: Use only valves manufactured by KENNEDY. Valves shall be iron body, bronze-mounted, stainless steel throngs pin, outside lever and weight-operated, swing stem type, and equipped with removable inspection covers. Units shall be rated for 150 psi minimum working pressure and shall permit full flow area equal to that of the connecting pipes. All check valves shall have a pocket tapped into the top of the bonnet providing a 1/4-inch NPT, female fitting for attachment of a pressure gauge.
13	4	PLUG VALVES: Valves shall be DeZurk. Bodies shall be cast iron per ASTM A126, Class B. Ends shall be flanged, Class 125 per ANSI B16.1. Plugs shall be cast iron (ASTM A126, Class B), or ductile iron (ASTM A306, Grade 65-45-12) with neoprene facing. Valve body seats shall be 316 stainless steel or have a raised welded-in overlay at least 1/8 inch thick of not less than 50% nickel. Body capscrews and bolts and nuts shall be Type 316 stainless steel. Piping shall be butane-filled Teflon and replaceable with valve body under full pressure. Plug valves, 4 inches through 12 inches, shall be non-lubricated type. Minimum pressure rating shall be 175 psi.
14	2	LIFT CABLE: 316 Stainless Steel installed on each pump.
15	1	GUIDE RAILS: 2-inch diameter rods, 316 stainless steel, shall be installed plumb from top to bottom, max. 12" from top of lid.
16	1	CAM-LOCK: Ductile iron spool piping with quick disconnect, dual cover, and chain. Position towards by-pass pump access.
17	5%	PIPE SUPPORT: Adjustable iron pipe support stands in valve vault, minimum seven (7) and shall be coated with 2 coats of coal-tar epoxy. All above ground by-pass piping to be lined epoxy coated ductile iron.

LIFT STATION SCHEDULE AND NOTES

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION SCHEDULE	SHEET NO. LS-4



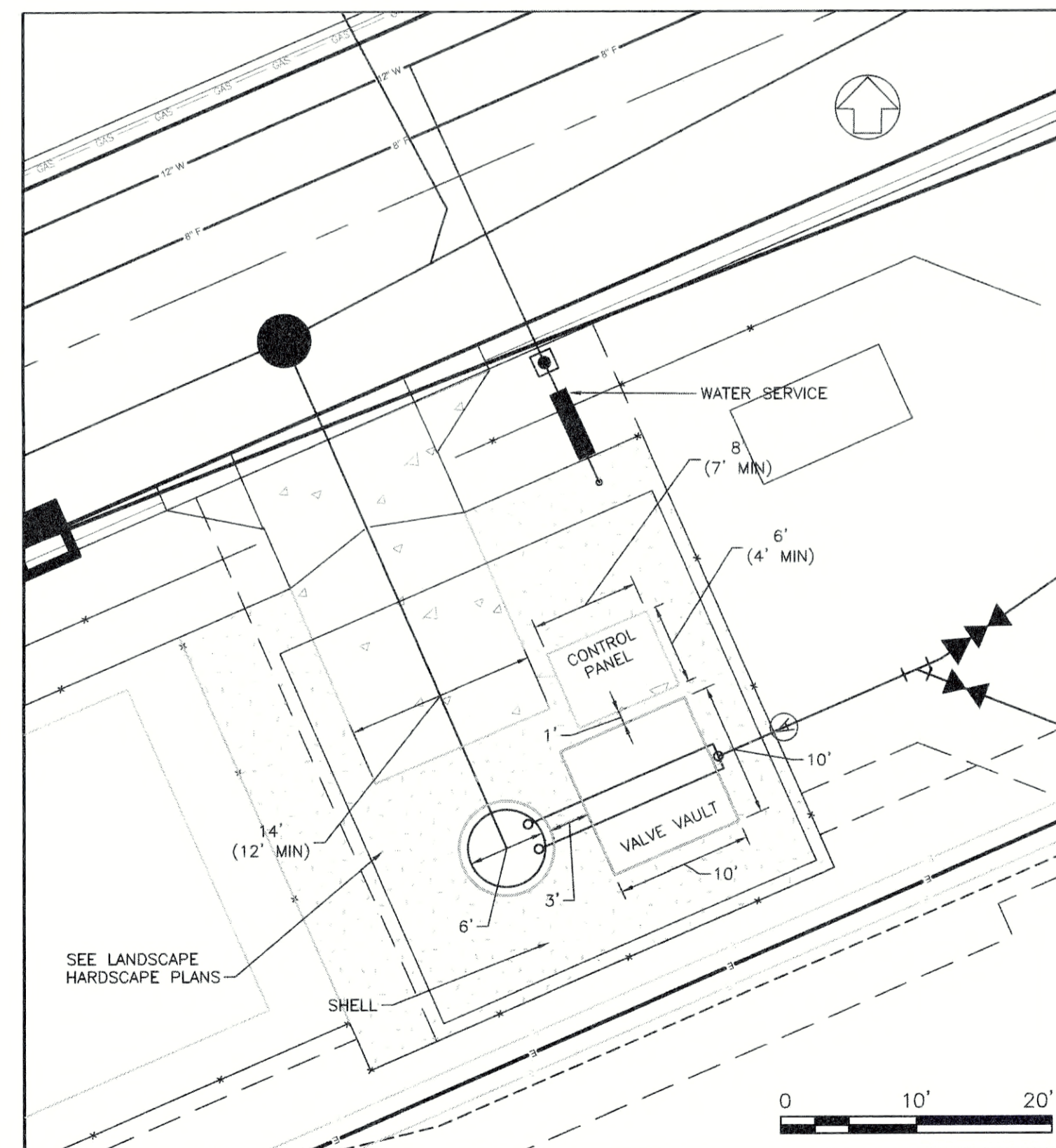
TELEMETRY CONTROL PANEL & ANTENNA



LIFT STATION CONTROL PANEL FRONT

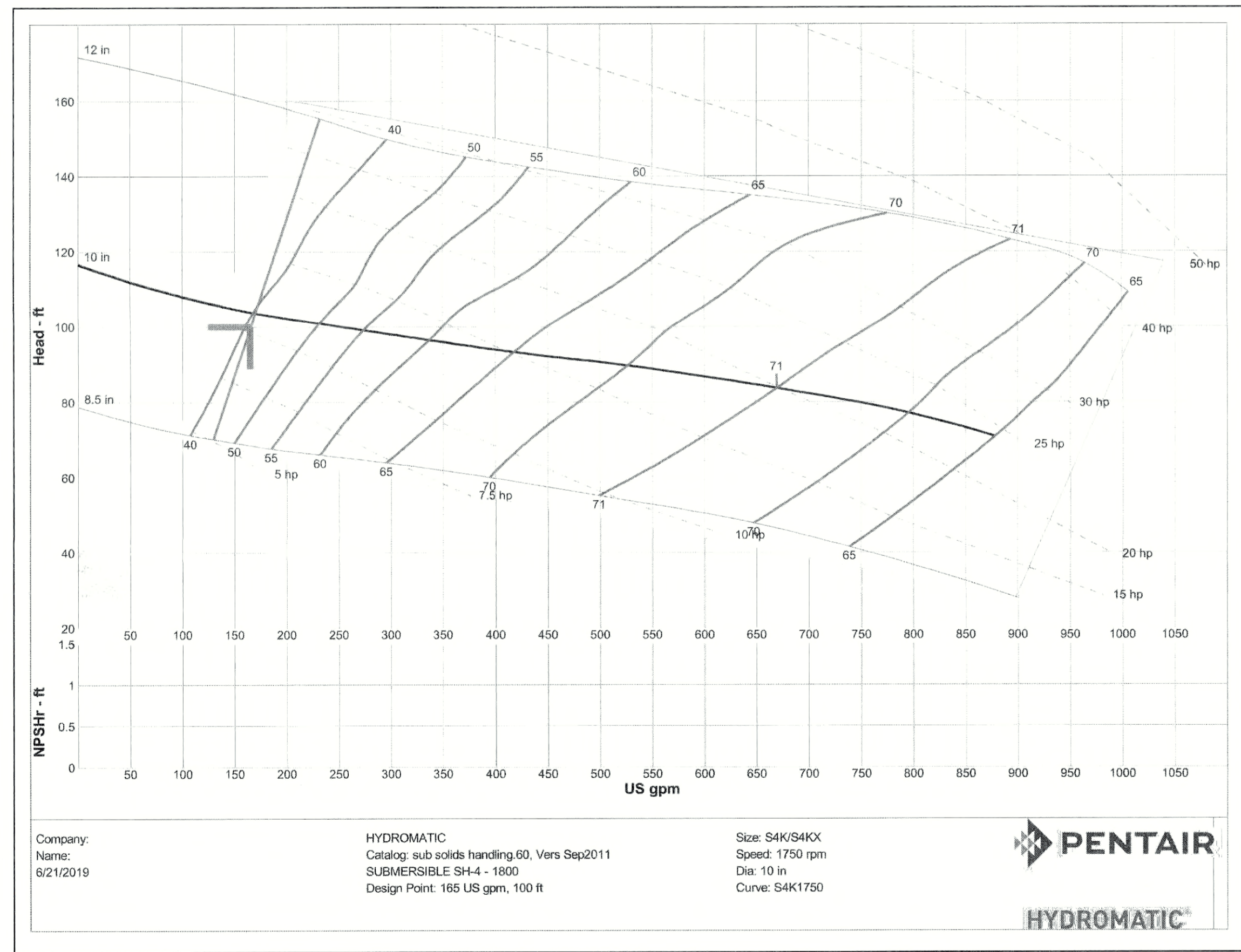
CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	LIFT STATION TELEMETRY	SHEET NO. LS-5

CITY OF VENICE ENGINEERING DEPARTMENT	UTILITIES - LIFT STATION	DATE JAN. 2019
401 WEST VENICE AVE. VENICE FL 34285 (941) 486-2626 FAX (941) 480-3031	CONTROL PANEL FRONT	SHEET NO. LS-6



LIFT STATION #1 SITE PLAN

- GENERAL NOTES
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL PAY FOR ANY PERMITS AND/OR INSPECTIONS REQUIRED AND SHALL NOTIFY OWNER AND ENGINEER IN WRITING 24 HOURS PRIOR TO START OF CONSTRUCTION.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO SUPPLY THE ENGINEER WITH AS-BUILT ELEVATIONS WHEREVER ELEVATIONS ARE SHOWN ON THIS DRAWING.
  - THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING THE LIFT STATION WATER SERVICE AND SETTING THE METER BOX TO FINAL GRADE.
- STANDARDS FOR LIFT/PUMP STATIONS
- The top of the wet well slab and the top of the control panel/RTU slab shall be at the same elevation at the top of the lift station site.
  - Install 6 inches of compacted 1 inch, washed, crushed shell over one layer of weed barrier over all exposed ground surfaces. One layer of weed barrier is to be laid and extend to a line 4 feet outside of the fence line. The weed barrier shall be Wiroseal manufactured by Miroil or approved equal. All finished grade surfaces shall slope away from the concrete slabs at a minimum slope of 2%, extending to a line 4 feet outside of the fence line. All disturbed ground shall be compacted to 95% max density, ASTM D 1-100, before installing the weed barrier.
  - All lift station driveways shall be 6-inch thick Class I, minimum 3,000 psi, Fibermesh reinforced concrete with 3 lbs/cy of 100% virgin polypropylene colored, fibrillated fibers from Fibermesh Co. or equal extending from the back of the curb to one foot inside the fence gate opening. The 14-foot wide driveway shall align with the center of the fence gate and the wet well. The top 12-inches of the driveway subgrade shall be compacted to 98% density, ASTM D 1-180.
  - All hardware within the wet well shall be 316 SST. All flanged joints on above ground valve assembly must use 316 SST nuts & bolts. Uni-Flanges, Insta-Flange or flange adapters are prohibited. Anti-seize lubricant to be applied on all bolt threads. Painting of nuts & bolts prohibited.
  - Survey markers, steel bar and cap, shall mark the exact easement lines of the lift station site.
  - The location of all buried piping and electrical conduits are to be included on the Record Drawings.



LIFT STATION AND FORCE MAIN  
DESIGN CRITERIA

NUMBER OF EQUIVALENT POTENTIAL DWELLING UNITS	90 EDU'S
AVERAGE DAILY FLOW	15,000 GPD
PEAK DAILY FLOW @ 3.21 X ADF	12.5 GPM
NUMBER OF PUMPS IN PUMP STATION	50.0 GPM
PUMP CAPACITY OF EACH PUMP	2
TOTAL STORAGE VOLUME OF WET WELL BETWEEN OPERATING LEVELS	165 GPM
MAXIMUM CYCLE STARTS OF EACH PUMP	432 GALLONS
WEIGHT OF WET WELL (WITHOUT EQUIPMENT) **	134 STARTS/HOUR
BUOYANCY OF WET WELL	207.307 LBS.
	112.110 LBS.

\*\* NOTE: INCLUDES WEIGHT OF BACKFILL ACTING ON BASE SLAB LIP  
PUMP DETAILS  
THE PUMP SHALL BE A HYDRAMATIC 54K 1750 RPM, 9.75 DIAMETER IMPELLER, 4 IN DISCHARGE, 25 HP, 3 PHASE, 460 V WITH AN OPERATING POINT OF 165 GPM AT 97 FT TDH

RECORD  
DRAWING

Flad Architects  
Flad & Associates of Florida, Inc.  
AACC00658  
2202 N. Westshore Blvd., Ste. 125  
Tampa, FL 33607  
Tel: 813-850-6612  
www.flad.com

Flad Structural  
Engineers  
Flad & Associates, Inc.  
27676  
644 Science Drive  
Madison, WI 53711  
Tel: 608-238-2661  
Fax: 608-238-6727  
www.flad.com

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Affiliated Engineers SE, Inc.  
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Tel: (813) 405-3800

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LICENSE # 75477  
STANTEC CONSULTING  
SERVICES  
6800 Professional Parkway East  
Sarasota, FL 34240  
Tel: (941) 907-6900

Stamps & Approvals

Rev	Date	Description
1	07/20/20	RECORD DRAWINGS
2	12/04/19	C81015

smh

Sarasota County  
Public Hospital  
District

2600 Laurel Road  
Nokomis, FL 34275  
90 Bed New Hospital

AHCA #: 23/23960161-101-1  
Project Phase  
CONSTRUCTION DOCUMENTS

Date 12/04/2019	Drawn by STANTEC
Project Number 18122-00	Checked by STANTEC

Sheet Title  
LIFT STATION DETAIL - COV

Sheet Number C-1000	Rev. No. 2
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