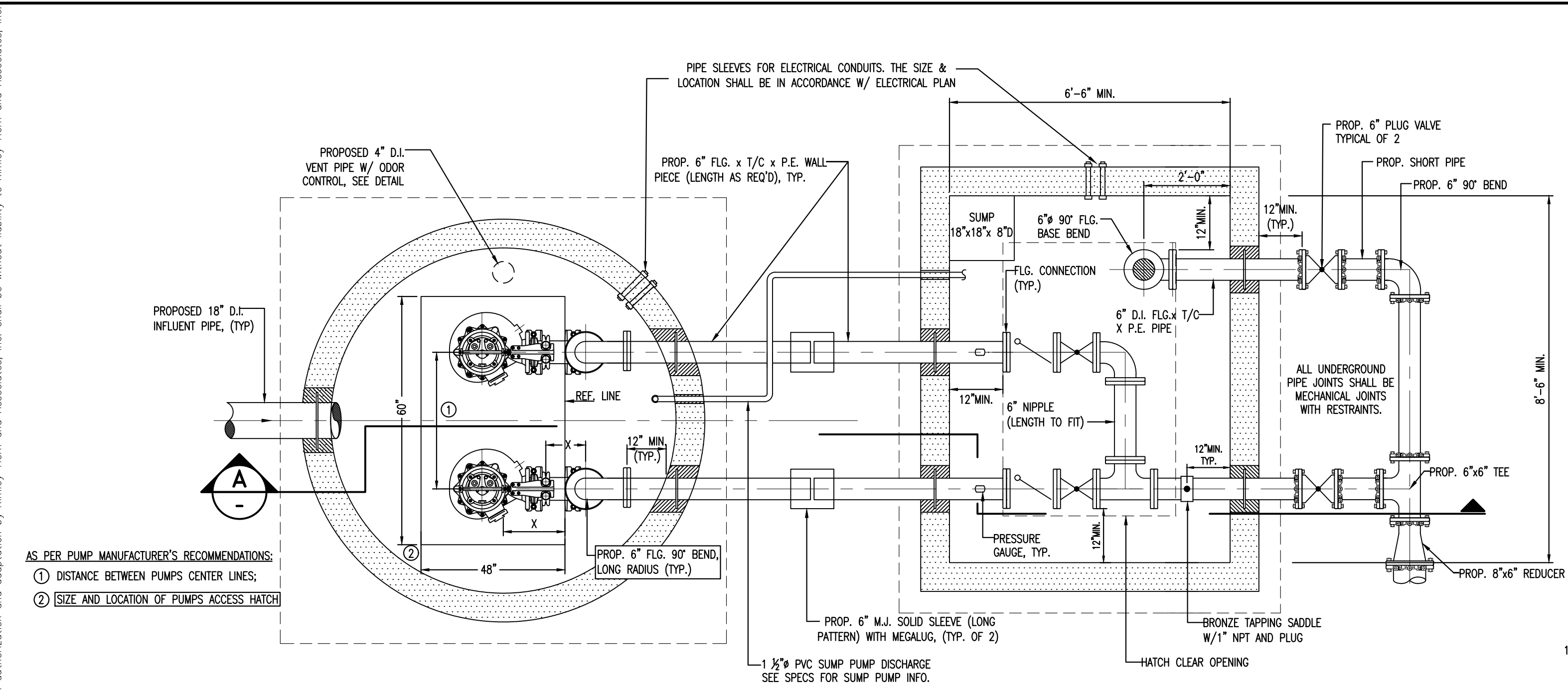
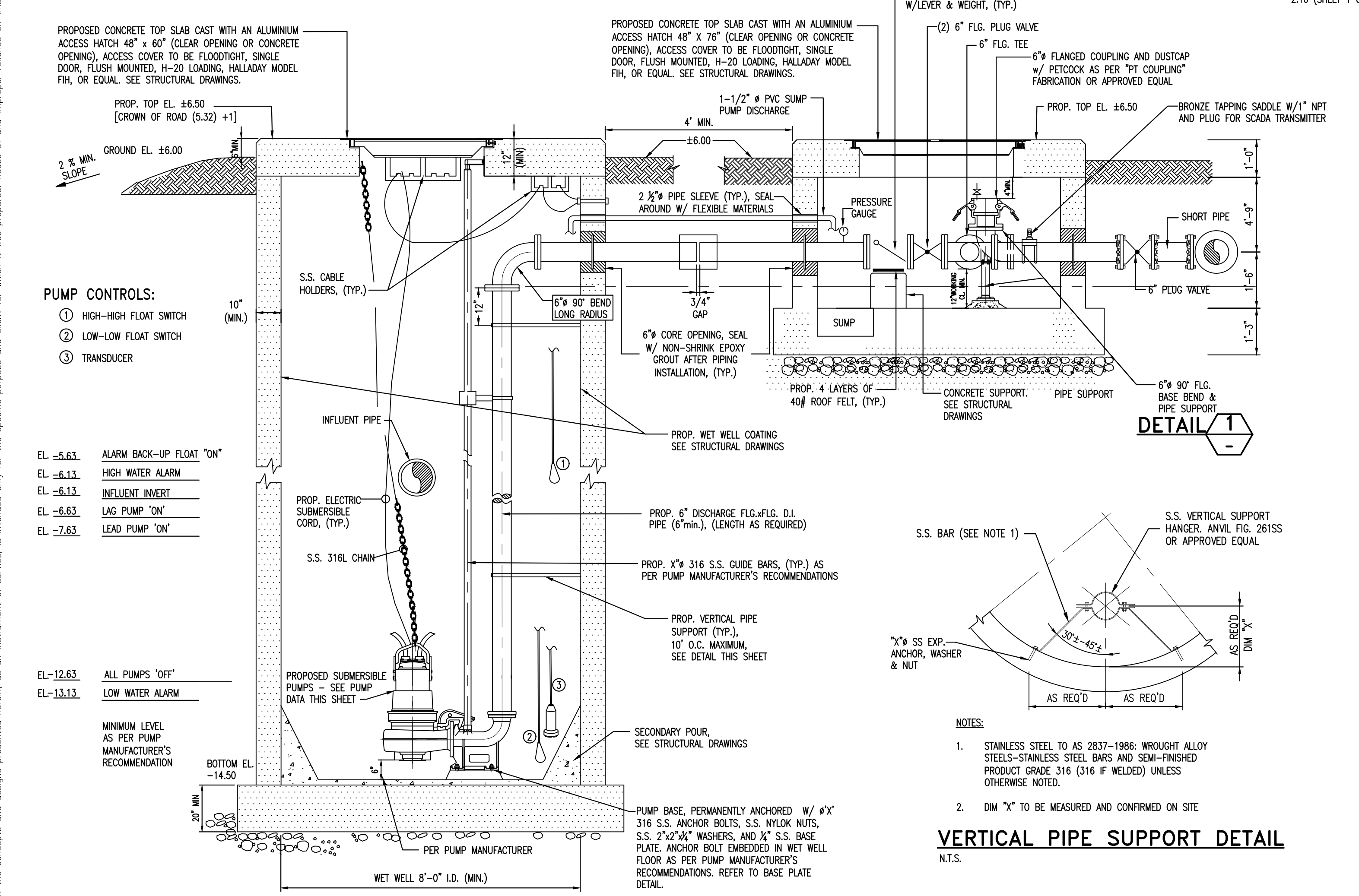




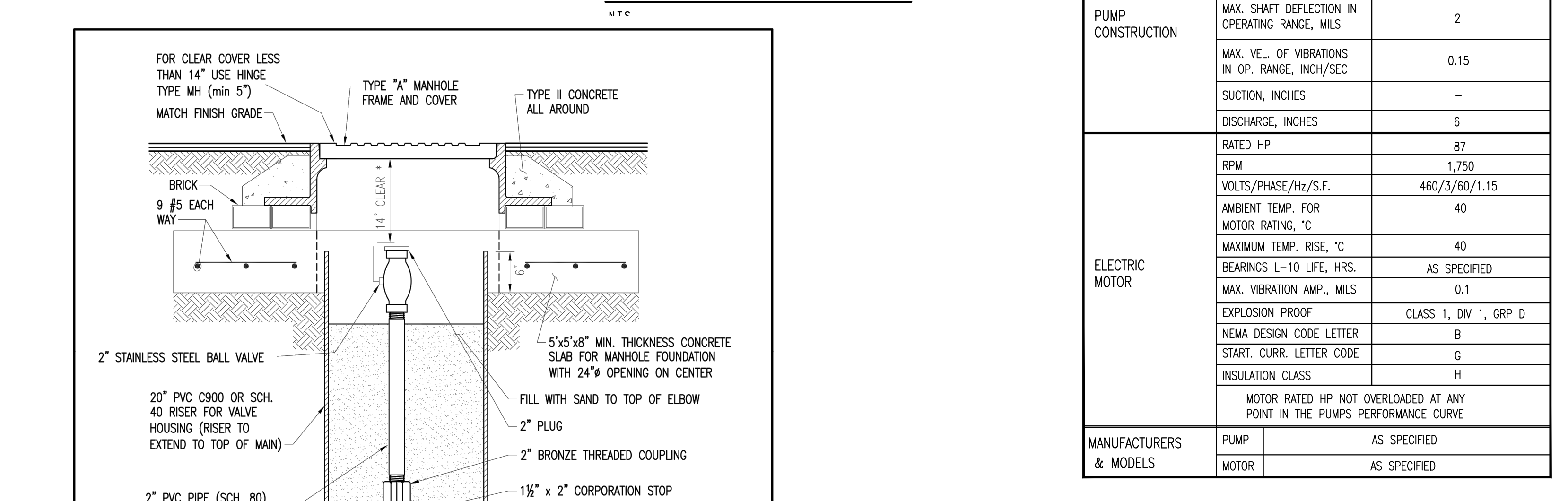
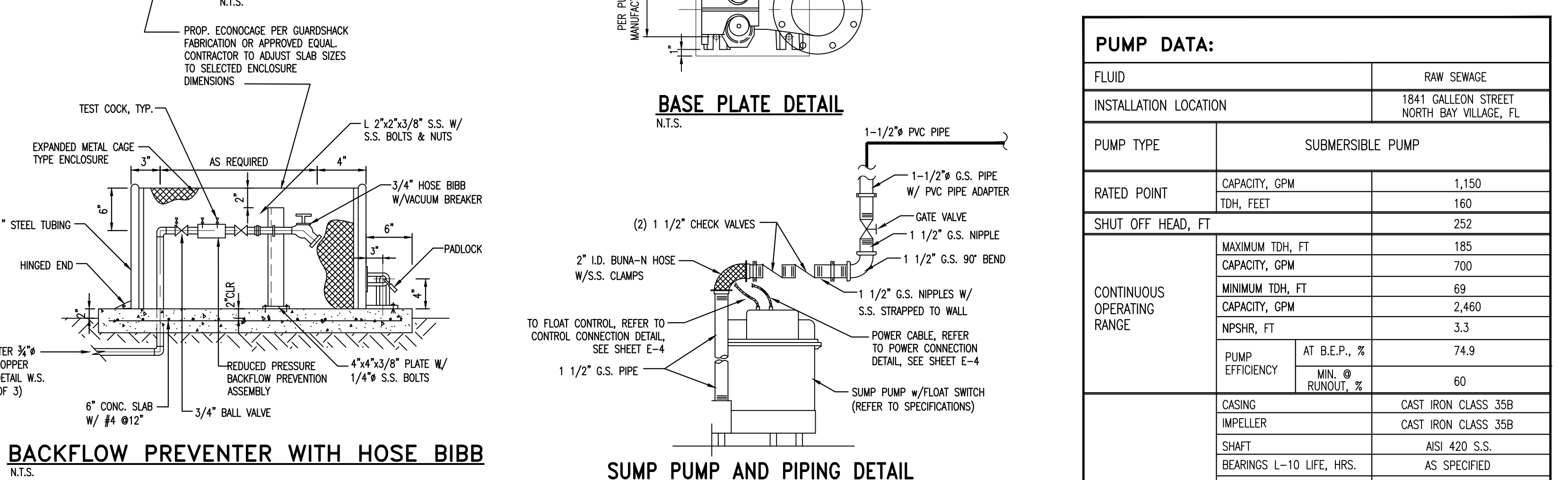
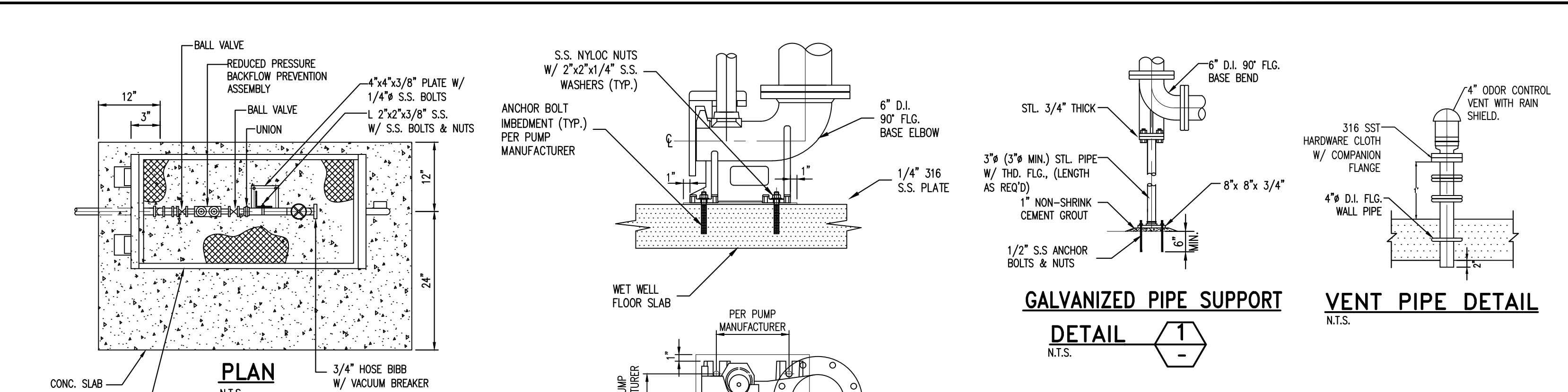
Plotted By: LaBonia, Stephen  
 Sheet: North Bay Village Main Pump Station Improvements - Layout: C300.0 - Pump Station Details  
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**WET WELL AND VALVE VAULT PLAN**  
N.T.S.

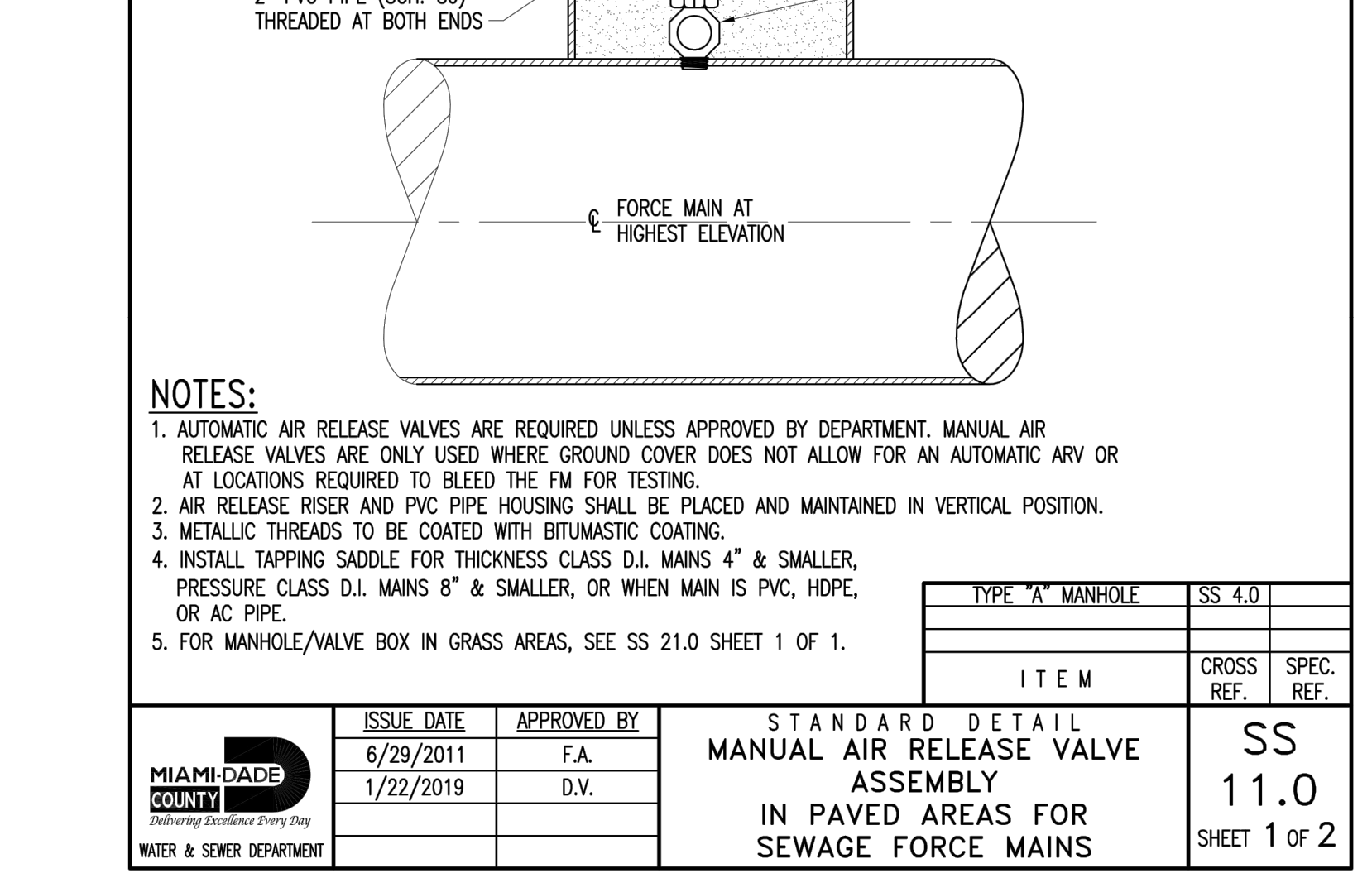


**SECTION A**  
N.T.S.



PUMP DATA:		RAW SEWAGE
INSTALLATION LOCATION	1841 GALLEON STREET NORTH BAY VILLAGE, FL	
PUMP TYPE	SUBMERSIBLE PUMP	
RATED POINT	CAPACITY, GPM	1,150
	TDH, FEET	160
SHUT OFF HEAD, FT	252	
CONTINUOUS OPERATING RANGE	MAXIMUM TDH, FT	185
	CAPACITY, GPM	700
	MINIMUM TDH, FT	69
	CAPACITY, GPM	2,460
	NPSHR, FT	3.3
PUMP EFFICIENCY	AT B.E.P., %	74.9
	MIN. @ RUNOUT, %	60
PUMP CONSTRUCTION	CASING	CAST IRON CLASS 35B
	IMPELLER	CAST IRON CLASS 35B
	SHAFT	ALSI 420 S.S.
	BEARINGS L-10 LIFE, HRS.	AS SPECIFIED
	MAX. SHAFT DEFLECTION IN OPERATING RANGE, MILS	2
	MAX. VEL. OF VIBRATIONS IN OP. RANGE, INCH/SEC	0.15
	SUCTION, INCHES	-
	DISCHARGE, INCHES	6
	RATED HP	87
	RPM	1,750
ELECTRIC MOTOR	VOLTS/PHASE/Hz/S.F.	460/3/60/1.15
	AMBIENT TEMP. FOR MOTOR RATING, °C	40
	MAXIMUM TEMP. RISE, °C	40
	BEARINGS L-10 LIFE, HRS.	AS SPECIFIED
	MAX. VIBRATION AMP., MILS	0.1
	EXPLOSION PROOF	CLASS 1, DIV 1, GRP D
	NEMA DESIGN CODE LETTER	B
	START. CURR. LETTER CODE	G
	INSULATION CLASS	H
	MOTOR RATED HP NOT OVERLOADED AT ANY POINT IN THE PUMPS PERFORMANCE CURVE	
MANUFACTURERS & MODELS	PUMP	AS SPECIFIED
	MOTOR	AS SPECIFIED

- MECHANICAL NOTES:**
- 1) THE STANDARD DRAWINGS PRESENTED ARE BASED ON MINIMUM OF 6" DISCHARGE FORCE MAIN.
  - 2) CONTRACTOR SHALL VERIFY EXISTING UNDERGROUND UTILITIES IN APPLICATIONS, ELEVATIONS, AND QUALITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY EXISTING PIPING TO REMAIN BEFORE ORDERING NEW PIPE AND FITTINGS FOR CONNECTIONS. THE CONTRACTOR SHALL INSPECT AND VERIFY ALL SITE CONDITIONS, DIMENSIONS, ELEVATIONS ETC. AND COORDINATE WITH OTHER TRADES PRIOR TO CONSTRUCTION. WORK SHALL BE SCHEDULED ACCORDING TO SPECIFIED CONSTRUCTION SEQUENCE.
  - 3) PAY ATTENTION TO AVOID DISTURBING EXISTING ELECTRICAL SERVICE IN THE AREA UNDER CONSTRUCTION (FOR EXISTING FACILITIES ONLY).
  - 4) ALL ELEVATIONS FOR UNDERGROUND UTILITIES SHOWN ARE T.O.P. ELEVATIONS UNLESS OTHERWISE SPECIFIED.
  - 5) ALL PIPING, UNLESS SPECIFIED, TO USE DUCTILE IRON WITH LINING OF SEWER APPLICATION. FITTINGS AND CONNECTIONS UNDERGROUND TO USE MECHANICAL JOINT WITH RESTRAINTS; FITTINGS ABOVE GROUND OR IN VAULT TO USE FLANGE JOINT.
  - 6) PROTECT ALL UNDERGROUND FITTING WITH BOLT CONNECTIONS IN DIRECT CONTACT WITH SOIL WITH TWO COATS OF BITUMASTIC MATERIAL OR APPROVED EQUAL.
  - 7) PIPE SUPPORTS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.
  - 8) PROPOSED WET WELL SHALL BE CYLINDRICAL TYPE MADE OF REINFORCED CONCRETE WITH DEPTH NO GREATER THAN 24 FEET.
  - 9) PROVIDE SPARK-PROOF CONTACT BETWEEN PUMPS AND GUIDE RAIL SYSTEM.
  - 10) ALL PUMP CONTROLS SHALL BE SET AS PER DESIGN REQUIREMENTS.



ISSUE DATE	APPROVED BY	STANDARD DETAIL	SS
6/29/2011	F.A.	MANUAL AIR RELEASE VALVE ASSEMBLY	11.0
1/22/2019	D.V.	IN PAVED AREAS FOR SEWAGE FORCE MAINS	SHEET 1 OF 2

No.	REVISIONS	DATE	BY
1	REVISION 1	3/2/2022	SL

**Kimley-Horn**

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 WWW.KIMLEY-HORN.COM REGISTRY No. 35106

**NORTH BAY VILLAGE MAIN PUMP STATION IMPROVEMENTS**

PREPARED FOR  
**NORTH BAY VILLAGE**

FLORIDA DATE: 3/2/2022

LICENSED PROFESSIONAL

GARY R. RATAY

FLORIDA LICENSE NUMBER  
 46682

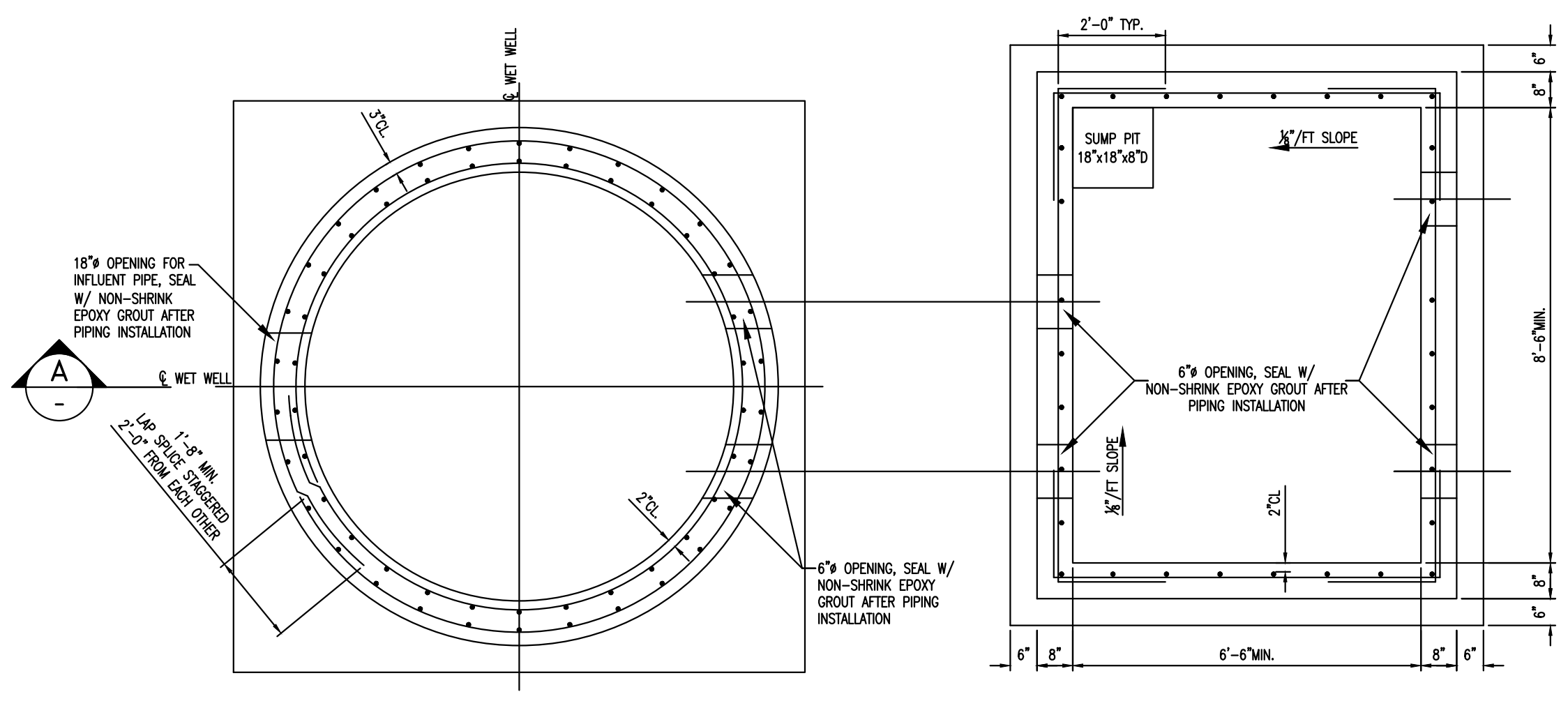
**PUMP STATION DETAILS**

SHEET NUMBER  
**C300.0**

FOR BIDDING

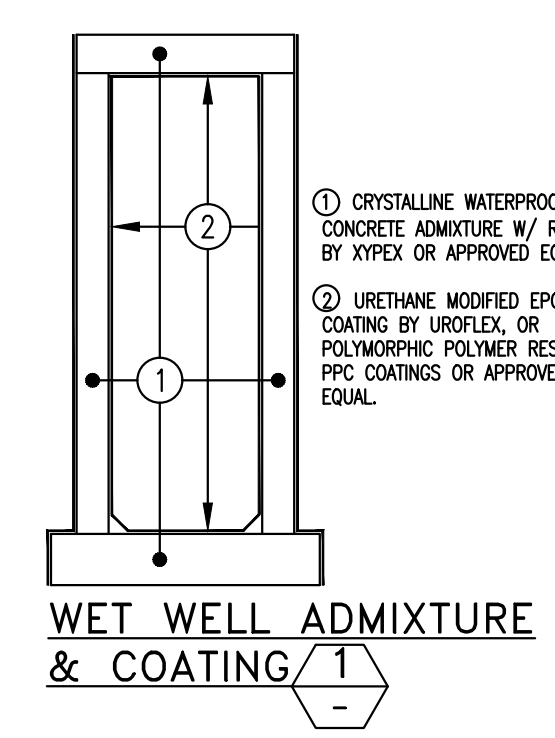


Sheet: S-NORTH BAY VILLAGE MAIN PUMP STATION IMPROVEMENTS - Layout: C400.1 - March 02, 2022 - 12:13:17pm - k:\VTL\Civil\043 - Jobs\043\18041 - Wk. Auto - 18-03 - W.W. Station Improv\CAD\Drawings\Main L.H. Station\C400.1 WET WELL AND VALVE VAULT STRUCTURAL PLAN, SECTIONS, AND DETAILS  
 Plotted By: LaBonia, Stephen  
 This document, together with the concepts and design presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

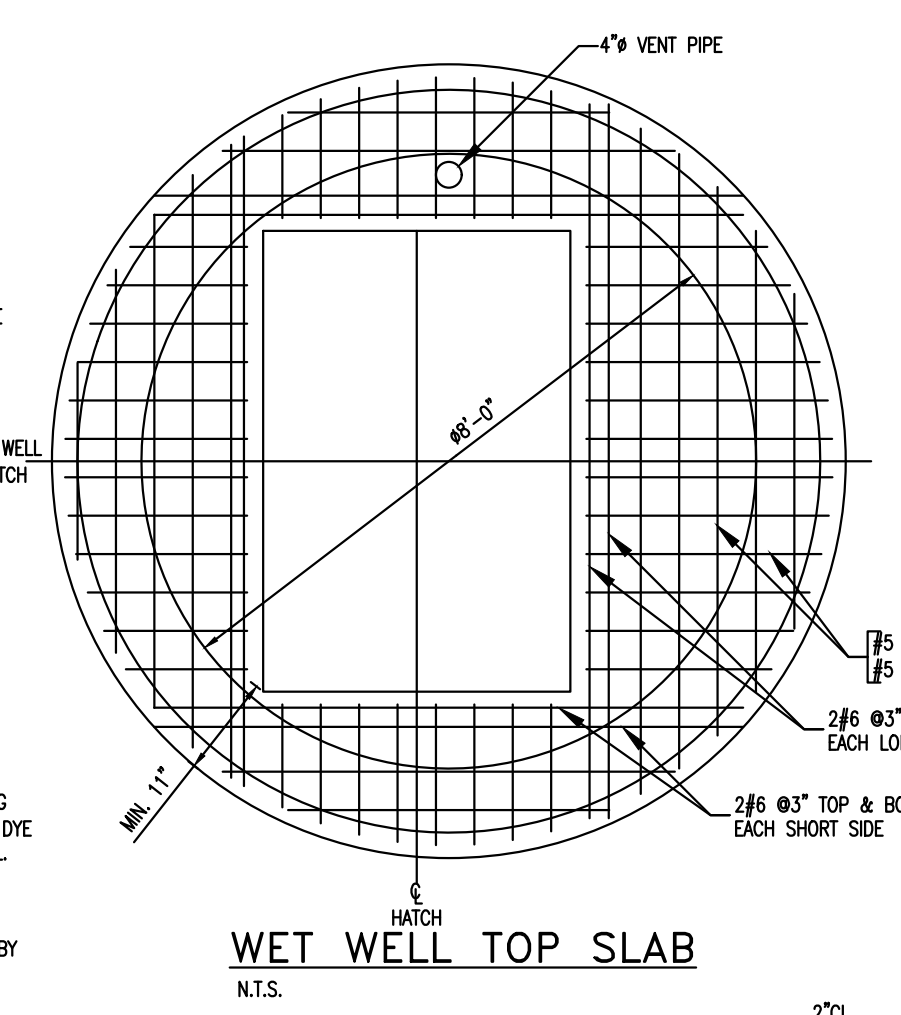


**WET WELL AND VALVE VAULT SECTION PLAN**  
N.T.S.

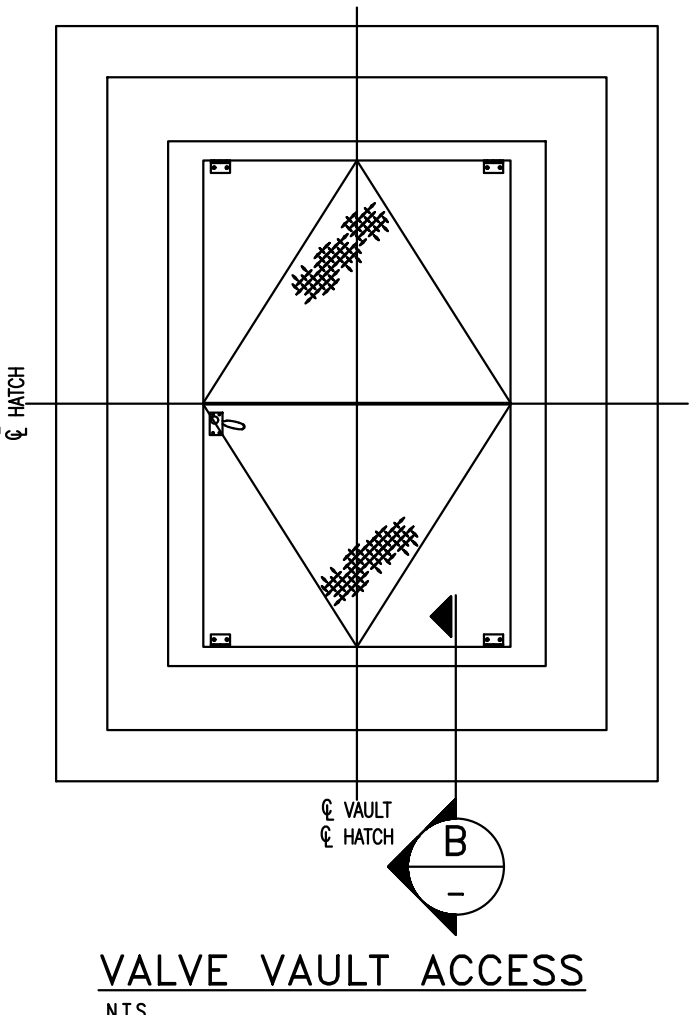
**NOTE:**  
THE SIZE AND LOCATION OF THE OPENINGS FOR THE PIPES, CONDUITS AND FLOOR ACCESS DOORS SHALL BE IN ACCORDANCE WITH THE DESIGN OF THE PIPING LAYOUT, THE ELECTRICAL PLAN AND AS PER PUMP MANUFACTURERS RECOMMENDATION.



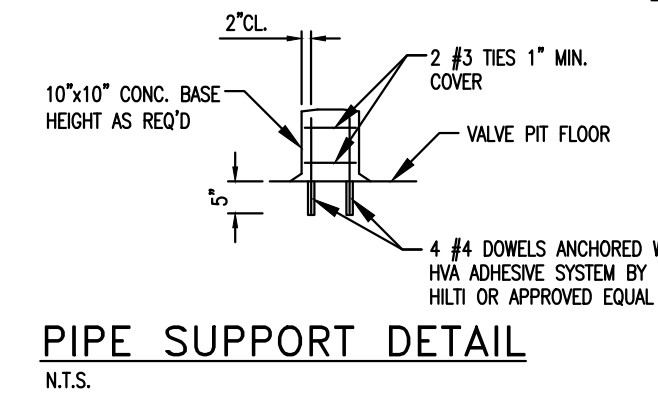
**WET WELL ADMIXTURE & COATING**  
1



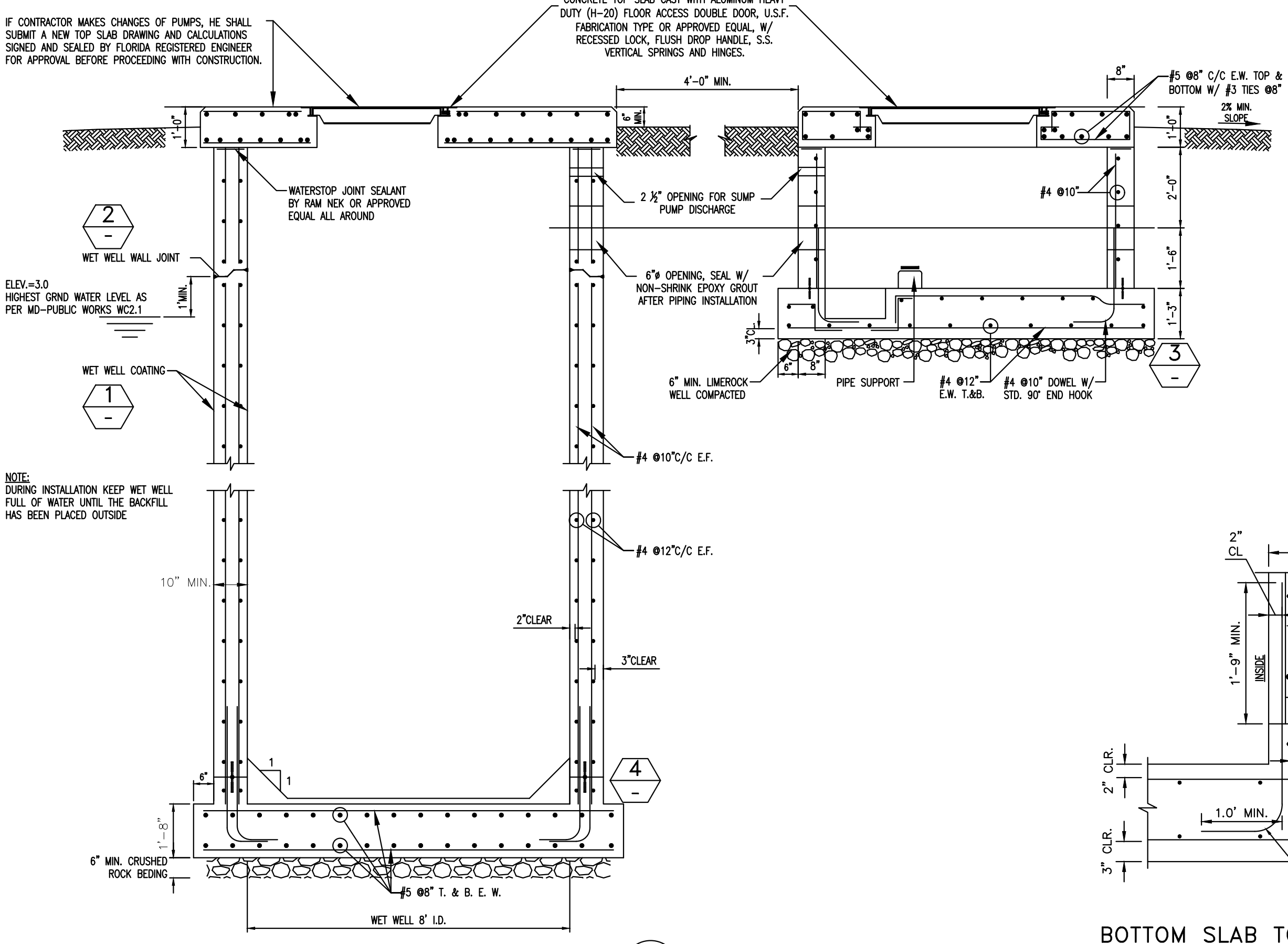
**WET WELL TOP SLAB**  
N.T.S.



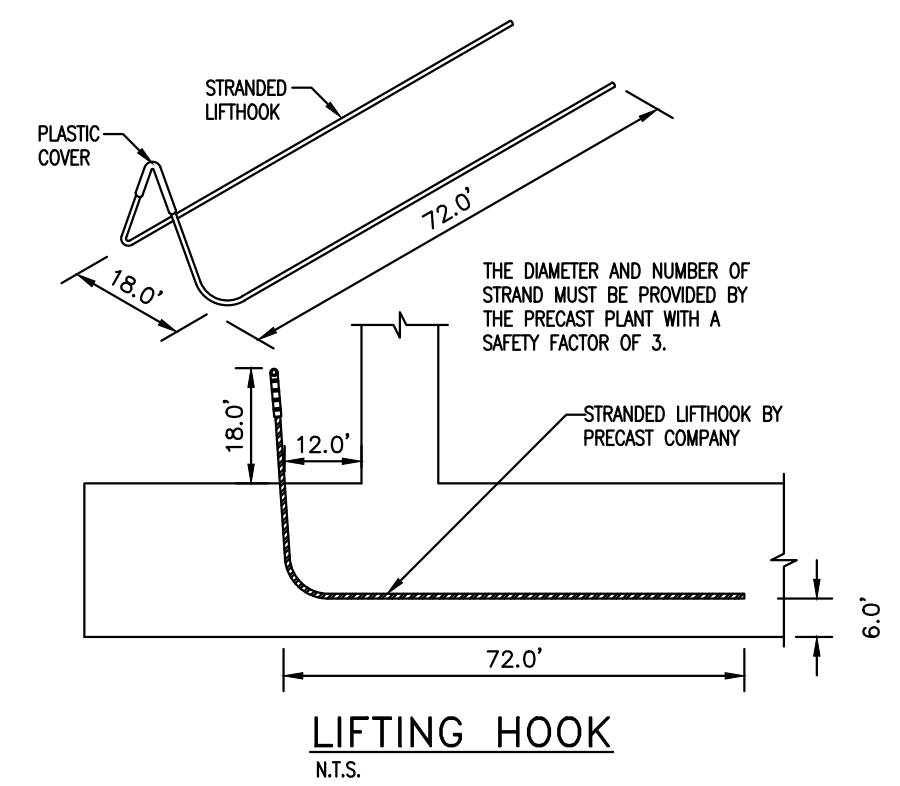
**VALVE VAULT ACCESS**  
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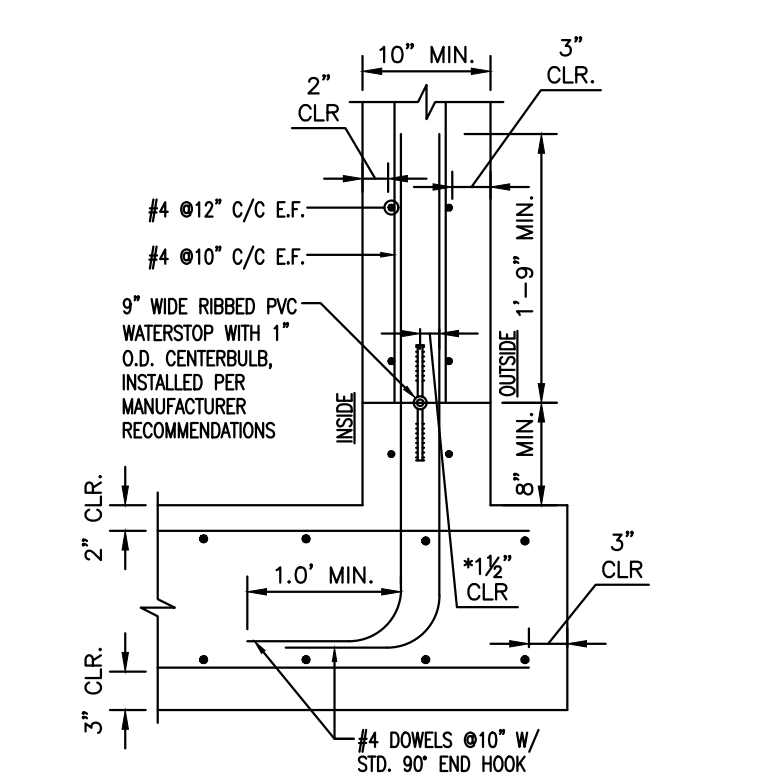
**PIPE SUPPORT DETAIL**  
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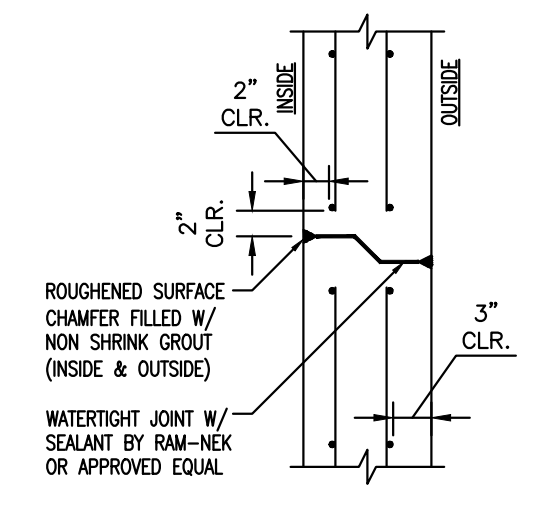
**SECTION A**  
N.T.S.



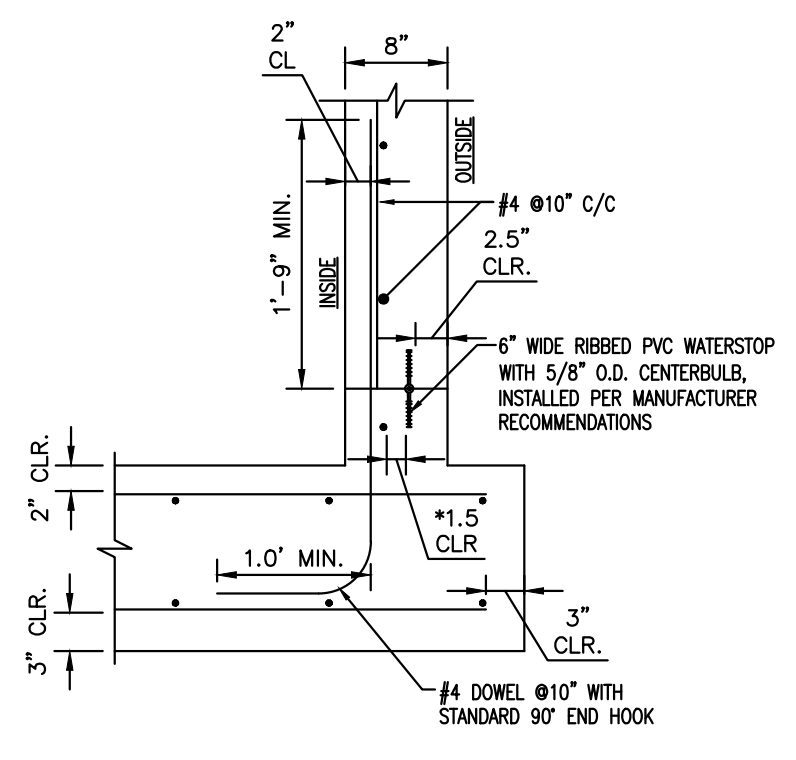
**LIFTING HOOK**  
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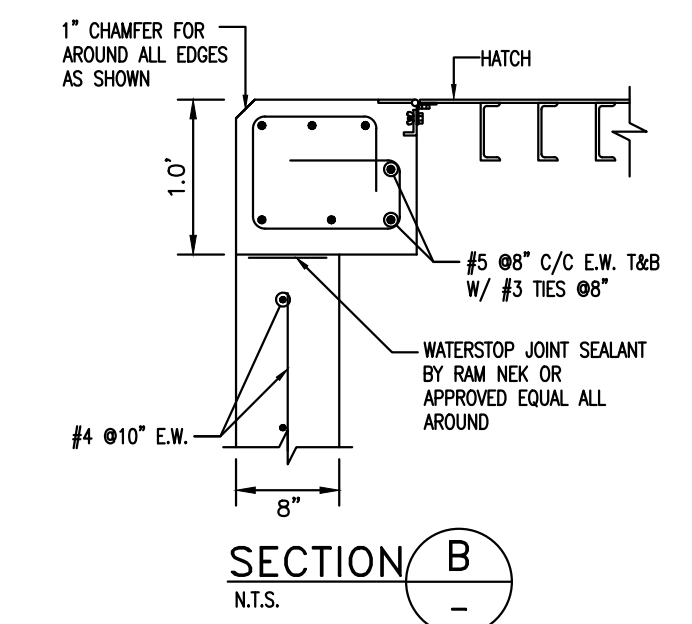
**BOTTOM SLAB TO WALL JOINT**  
N.T.S.



**WALL JOINT**  
N.T.S.

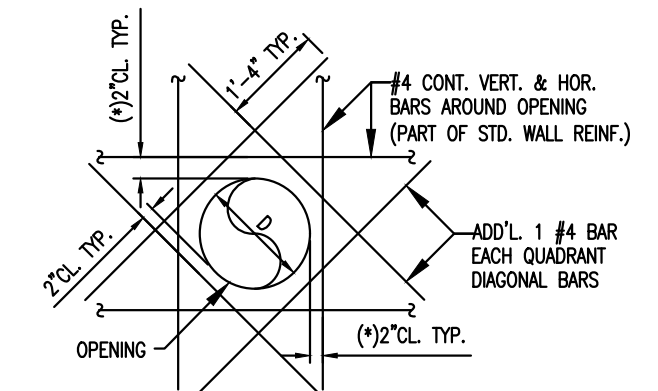


**BOTTOM SLAB TO WALL JOINT**  
N.T.S.



**SECTION B**  
N.T.S.

**VALVE VAULT CONSTRUCTION JOINTS**



**WALL OPENING**  
TYPICAL ADDITIONAL WALL REINFORCING AROUND HOLE OPENINGS (ROUND OR SQUARE).  
(\*) ANY VERTICAL OR HORIZONTAL BAR AT MORE THAN 3\"/>

**WET WELL CONSTRUCTION JOINTS**  
NOTE: THE ENTIRE REINFORCED CONCRETE STRUCTURE FOR THE WET WELL SHALL BE WATER TIGHT. PREFERABLY NO CONSTRUCTION JOINTS UNDER GROUND WATER LEVEL. MINIMUM DISTANCE BETWEEN WALL JOINTS WITH PVC WATER STOP SHALL BE 8 FT.

**FOR BIDDING**



No.	REVISIONS	DATE	BY
1	REVISION 1	3/2/2022	SL

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KHA PROJECT	043138041
DATE	MARCH 2022
SCALE	AS SHOWN
DESIGNED BY	MM
DRAWN BY	MM
CHECKED BY	GR

**NORTH BAY VILLAGE MAIN PUMP STATION IMPROVEMENTS**

PREPARED FOR  
**NORTH BAY VILLAGE**

NORTH BAY VILLAGE FLORIDA

LICENSED PROFESSIONAL	GARY R. RATAY
FLORIDA LICENSE NUMBER	46682
DATE:	3/2/2022

**WET WELL AND VALVE VAULT STRUCTURAL PLAN, SECTIONS, AND DETAILS**

SHEET NUMBER	C400.1
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