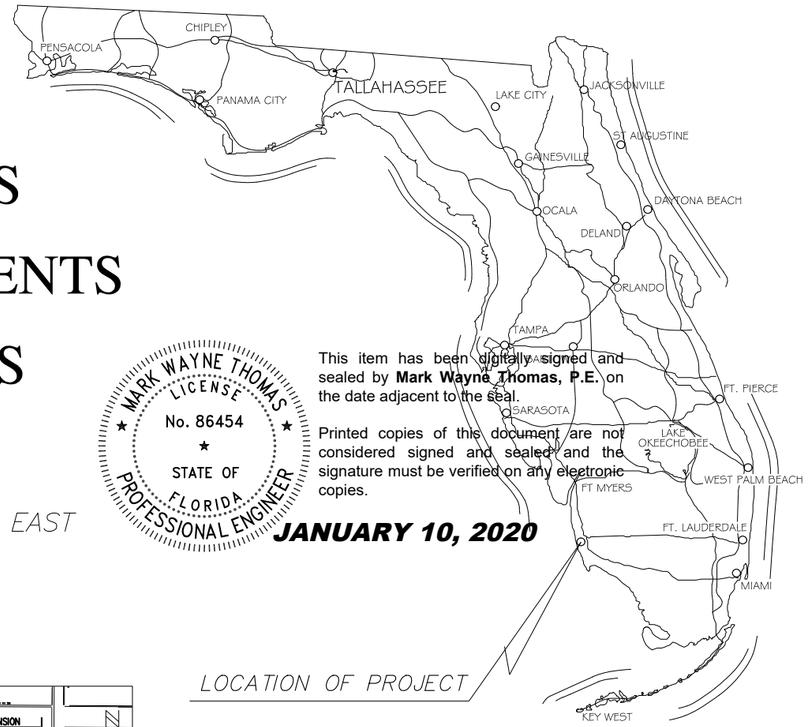
CONSTRUCTION PLANS
FOR
LIFT STATION IMPROVEMENTS
FOR
BACKUP DIESEL PUMPS
FOR
CITY OF NAPLES
LOCATED IN
SECTION 14, TOWNSHIP 50 SOUTH, RANGE 25 EAST
COLLIER COUNTY, FLORIDA
JANUARY 10, 2020



LOCATION OF PROJECT

MARK WAYNE THOMAS LICENSE No. 86454 STATE OF FLORIDA PROFESSIONAL ENGINEER

This item has been digitally signed and sealed by **Mark Wayne Thomas, P.E.** on the date adjacent to the seal.

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JANUARY 10, 2020

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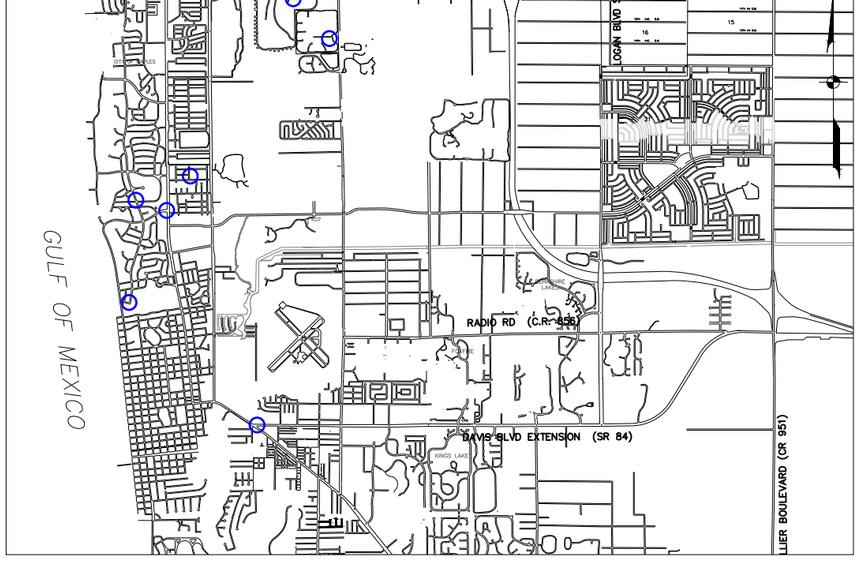

LOCATIONS MAP

N.T.S.

NOTICE TO ALL CONTRACTORS

IT'S THE LAW IN FLORIDA
2 BUSINESS DAYS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770

STATE, COUNTIES & CITIES ARE "NOT" PART OF THE ONE CALL SYSTEM. THEY MUST BE CALLED INDIVIDUALLY.

BEFORE YOU DIG STOP CALL SUNSHINE 1-800-432-4770 AVOID DAMAGE TO UNDERGROUND FACILITIES

For Information Regarding This Project, Contact:
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MARK WAYNE THOMAS, PE
FL License No. 86454

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Backup Diesel Pumps
Lift Station Improvements
City of Naples

REVISIONS

NO.	DESCRIPTION	DATE

DATE: JANUARY 10, 2020
PROJECT NO. 20150110-011
FILE NO. 14-50-25
SCALE: AS SHOWN

Construction Plans
Cover

SHEET NUMBER
01

ABBREVIATIONS

ABD	=	Abandoned
AE	=	Access Easement
ALT	=	Alternate
ARV	=	Air Release Valve
ASPH	=	Asphalt
BLDG	=	Building
BTM	=	Bottom
CATV	=	Cable Television
CB	=	Catch Basin
CMP	=	Corrugated Metal Pipe
CO	=	Cleanout
DE	=	Drainage Easement
DIP	=	Ductile Iron Pipe
DR	=	Dimensional Ratio
EOP	=	Edge of Pavement
EX	=	Existing
FE	=	Flared End Section
FH	=	Fire Hydrant
FLG	=	Flanged
FM	=	Force Main
GV	=	Gate Valve
HDPE	=	High Density Poly Ethylene
INV	=	Invert
IRR	=	Irrigation
MH	=	Manhole
ME	=	Mitered End Section
MJ	=	Mechanical Joint
OC	=	On Center
PAVT	=	Pavement
PKWY	=	Parkway
PS	=	Pump Station
PV	=	Plug Valve
PVC	=	Polyvinyl Chloride
RCWM	=	Reclaimed Water Main
RD	=	Road
REQ	=	Required
ROW	=	Right-of-way
SAN	=	Sanitary
SD	=	Storm Drain
SPEC	=	Specification
SS	=	Sanitary Sewer
ST	=	Street
STA	=	Station
STD	=	Standard
STM	=	Storm
TEL	=	Telephone
TYP	=	Typical
UE	=	Utility Easement
WM	=	Water Main

LEGEND

EX XX" FM = EXISTING FORCE MAIN & PIPE SIZE

XX" FM = PROPOSED FORCE MAIN & PIPE SIZE

EX XX" WM = EXISTING POTABLE WATER MAIN & SIZE

XX" WM = PROPOSED WATER MAIN & PIPE SIZE

XX" SS = PROPOSED SANITARY SEWER MAIN & SIZE

EX XX" SS = EXISTING SANITARY SEWER MAIN & SIZE

XX" RCWM = PROPOSED RECLAIMED WATER MAIN & SIZE

EX XX" RCWM = EXISTING RECLAIMED WATER MAIN & SIZE

= PROPOSED GATE VALVE

= EX GATE VALVE

= EXISITNG FIRE HYDRANT

= PROPOSED FIRE HYDRANT

= PROPOSED AUTOMATIC AIR RELEASE VALVE

= PROPOSED REDUCER

EX. MH XX = EXISTING SANITARY MANHOLE

MH XX = PROPOSED SANITARY MANHOLE

= EXISTING PUMP STATION

= PROPOSED PLUG

= BENCHMARK

SB XX = SOIL BORING

= CATCH BASIN

= WOOD POWER POLE

= CONCRETE POWER POLE

= EXISTING WATER METER

= EXISTING CLEANOUT

= PROPOSED SINGLE CLEANOUT

= PROPOSED WATER METER

= PROPOSED CONSTRUCTION SIGN

= PROPOSED SIDEWALK

= EXISTING SAN. SEWER AND WATER MAIN OUTSIDE OF PAVEMENT TO BE GROUTED AND ABANDONED

= EXISTING SAN. SEWER AND WATER MAIN UNDER PAVEMENT TO BE REMOVED

= PROPOSED JACK AND BORE

= TEMPORARY BLOW-OFF

= FLOW ARROW

= PROPOSED UTILITY ROLLDOWN

MH XX = EXISTING MH TO BE REHABBED

GENERAL NOTES:

1. ALL FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NAPLES STANDARD DETAILS AND SPECIFICATIONS. THE MINIMUM COVER FOR ALL PROPOSED UTILITIES SHALL BE 36" UNLESS OTHERWISE INDICATED ON THE CONSTRUCTION PLANS.
2. THE CONTRACTOR SHALL CONTACT THE CITY OF NAPLES GIS MANAGER TO OBTAIN COPIES OF THE GEODATA TEMPLATE (DATA BASE) TO PREPARE RECORD DRAWINGS.
3. THE CONTRACTOR IS REQUIRED TO MAINTAIN A "RED-LINE" "MARKUP" SET OF PLANS FOR THE PROJECT, CONVERTED AS THE CONTRACTOR'S AS-BUILT'S, AND TURN THEM OVER TO THE ENGINEER. "THE CITY SHALL BE PROVIDED WITH A COPY OF THESE DOCUMENTS."
4. CONTRACTOR SHALL NOT EXCEED 75 % OF THE MANUFACTURERS RECOMMENDED MAXIMUM DEFLECTION WHEN DEFLECTING PIPE. ENGINEER WILL DETERMINE MAXIMUM DEFLECTION AFTER PIPE MANUFACTURER IS SELECTED.
5. THE CONTRACTOR SHALL KEEP A RECORD OF ALL CHANGES AND MAINTAIN AN AS-BUILT PLAN. PRIOR TO FINAL ACCEPTANCE, THIS PLAN WILL BE FURNISHED TO THE ENGINEER. THE CONTRACTOR SHALL ALSO FURNISH THE ENGINEER WITH A STATEMENT THAT THE AS-BUILT PLAN REPRESENTS ALL CHANGES MADE AND THAT THE LOCATION OF UTILITY LINES SHOWN ARE WITHIN 2'.
6. CONTRACTOR TO MAINTAIN EXISTING TRAFFIC/ACCESS, EXISTING DRAINAGE & EXISTING UTILITIES DURING CONSTRUCTION.
7. ALL FINAL FITTING AND VALVE LOCATIONS TO BE APPROVED IN THE FIELD BY THE OWNER/ENGINEER.
8. THE LOCATION OF EXISTING UTILITIES HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE INFORMATION IS NOT GUARANTEED. THEREFORE THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF ALL UTILITIES IN THE FIELD PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
9. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN THE AREA 48 HOURS MINIMUM PRIOR TO START OF CONSTRUCTION, AND SHALL HAVE ALL SERVICE LINES LOCATED AND FLAGGED PRIOR TO ANY EXCAVATION.
10. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL UTILITY LINES AND SERVICES DAMAGED DURING CONSTRUCTION, INCLUDING IRRIGATION LINES AND SERVICES. THE APPROPRIATE UTILITY SHALL BE NOTIFIED OF ALL DAMAGED LINES PRIOR TO REPAIR. ALL NECESSARY REPAIRS SHALL BE PERFORMED IMMEDIATELY UPON DAMAGE OF LINE.
11. ALL DRIVEWAYS, LANDSCAPING, SIGNS, GRASS, FENCING, ETC. SHALL BE RESTORED TO A CONDITION EQUIVALENT TO PRE-CONSTRUCTION CONDITION UNLESS OTHERWISE APPROVED BY THE ENGINEER AND CITY.
12. ALL ELEVATIONS ARE BASED ON NORTH AMERICAN VERTICAL DATUM (NAVD 1988).
13. THE CONTRACTOR IS REQUIRED TO OBTAIN WRITTEN APPROVAL FROM THE ENGINEER FOR ANY DEVIATIONS FROM THE PLANS AND/OR SPECIFICATIONS.
14. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY REQUIRED PLAN DEVIATIONS.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A NPDES PERMIT FROM FDEP AND A DEWATERING PERMIT FROM THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT AS REQUIRED, IF NECESSARY.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND USAGE OF THE EXISTING STREETS ADJACENT TO THE PROJECT AREA. ALL TRAFFIC MAINTENANCE CONTROL SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX 600 SERIES. CONTRACTOR SHALL SUBMIT MAINTENANCE OF TRAFFIC PLAN TO OWNER/ENGINEER PRIOR TO CONSTRUCTION.
17. ALL UTILITY CONNECTIONS SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE AGENCY HAVING JURISDICTION OF EACH INDIVIDUAL UTILITY LINE.
18. THE UNDERGROUND CONTRACTOR SHALL MINIMIZE THE WORK AREA AND WIDTH OF TRENCHES TO AVOID DISTURBANCES OF NATURAL VEGETATION, SPOIL FROM TRENCHES SHALL BE PLACED ONLY ON PREVIOUSLY CLEARED AREAS, EXISTING RIGHT-OF-WAY OR APPROVED EASEMENT. THE CONTRACTOR SHALL NOT REMOVE OR DISTURB ANY TREES OR SHRUBS WITHOUT PRIOR APPROVAL FROM THE OWNER/ENGINEER.
19. ALL FITTINGS SHALL BE RESTRAINED WITH MEGALUG OR APPROVED EQUAL.
20. ALL IN LINE VALVES SHALL BE MAIN SIZE MECHANICAL JOINT AND RESTRAINED WITH MOLDED FLANGE ADAPTOR WITH STEEL RETAINING RING AS SUPPLIED BY PIPE MANUFACTURER.
21. THE CONTRACTOR SHALL NOTIFY RESIDENCES AND BUSINESS AT LEAST 48 HOURS IN ADVANCE OF ANY DISRUPTION IN SERVICE, INCLUDING DRIVEWAY CUTS.
22. CONTRACTOR IS ADVISED TO VISIT CONSTRUCTION SITE PRIOR TO BIDDING PROJECT. BID IS FINAL AND ACKNOWLEDGES THAT CONTRACTOR IS FAMILIAR WITH EXISTING SITE CONDITIONS.
23. CONTRACTOR IS TO LOCATE AND VERIFY ALL SEWER SERVICES FROM HOMES OR BUSINESSES FOR MULTIPLE TAPS AT THE BUILDING ENVELOPE.
24. TEMPORARY CONNECTIONS MAY BE NECESSARY THROUGH OUT THE CONSTRUCTION TO MAINTAIN SEWER SERVICE. LOCATIONS WILL BE MADE IN COORDINATION WITH CITY STAFF.
25. CONTRACTORS SHALL PROVIDE COMPLETE LIST OF 24 HR EMERGENCY PHONE NUMBERS.
26. THE CITY OF NAPLES WILL SUPPLY, AND THE CONTRACTOR WILL INSTALL, THOMPSON DIESEL DRIVEN BYPASS PUMPS AND THE FOLLOWING, AS APPLICABLE: SUBMERSIBLE PUMPS, FLOAT RACKS, TRANSDUCER CONDUIT, PUMP BASES, GUIDE RAILS, AND GUIDE RAIL MOUNTS. THE CITY WILL SUPPLY AND INSTALL ALL ELECTRICAL COMPONENTS, INCLUDING CONTROL PANEL, RTU, ANTENNA, FPL TRANSFORMER, METER, POWER SERVICE, SENSORS AND CONTROL CABLES, CONDUIT AND JUNCTION BOXES TO/FROM BY-PASS PUMP, CONTROL PANEL, AND FLOATS AS APPLICABLE. ALL OTHER MATERIALS, INCLUDING PIPING, VALVES, FITTINGS, COMPONENTS, AND APPURTENANCES WILL BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

BEFORE YOU DIG STOP CALL SUNSHINE 1-800-432-4770 AVOID DAMAGE TO UNDERGROUND FACILITIES

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STATE OF FLORIDA DOT
ALL INTERSTATE RIGHT-OF-WAY
HIGHMAST LIGHTING
7-DAY NOTICE REQUIRED
239-656-7811
239-656-7742 FAX

SEPARATION OF WATER AND SEWER LINES

HORIZONTAL SEPARATION OF PIPELINES

Minimum Separation Distance	Between The Outside Of The Water Main And The Outside Of Any Existing Or Proposed
Three feet	Storm sewer, stormwater force main, or reclaimed water main
Three feet, and preferably ten feet	Vacuum-type sanitary sewer.
Six feet, and preferably ten feet	Gravity- or pressure-type sanitary sewer, wastewater force main, or reclaimed water main not regulated under part III of chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.
Ten feet	"On-site sewage treatment and disposal system"

VERTICAL SEPARATION OF PIPELINES

Minimum Separation Distance From The (Outside To The Outside)	New Or Relocated, Underground Water Mains Crossing Any Existing Or Proposed
Six inches, and preferably 12 inches above	Gravity- or vacuum-type sanitary sewer or storm sewer
12 inches below	Gravity- or vacuum-type sanitary sewer or storm sewer
12 inches above or below	Pressure-type sanitary sewer, wastewater, stormwater force main, or pipeline conveying reclaimed water main

One full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline.

Alternatively, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or reclaimed water mains, and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or reclaimed water mains.

ALTERNATE CONSTRUCTION

Where an underground water main is being laid less than the required minimum horizontal distance from another pipeline and where an underground water main is crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline

1. Use of pressure-rated pipe conforming to the American Water Works Association standards incorporated into Rule 62-555.330, F.A.C., for the other pipeline if it is a gravity- or vacuum-type pipeline;
2. Use of welded, fused, or otherwise restrained joints for either the water main or the other pipeline; or
3. Use of watertight casing pipe or concrete encasement at least four inches thick for either the water main or the other pipeline.

Where an underground water main is being laid less than three feet horizontally from another pipeline and where an underground water main is crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline

1. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for the water main; and
2. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for the other pipeline if it is new and is conveying wastewater or reclaimed water.

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MARK WAYNE THOMAS, PE
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Backup Diesel Pumps Lift Station Improvements City of Naples

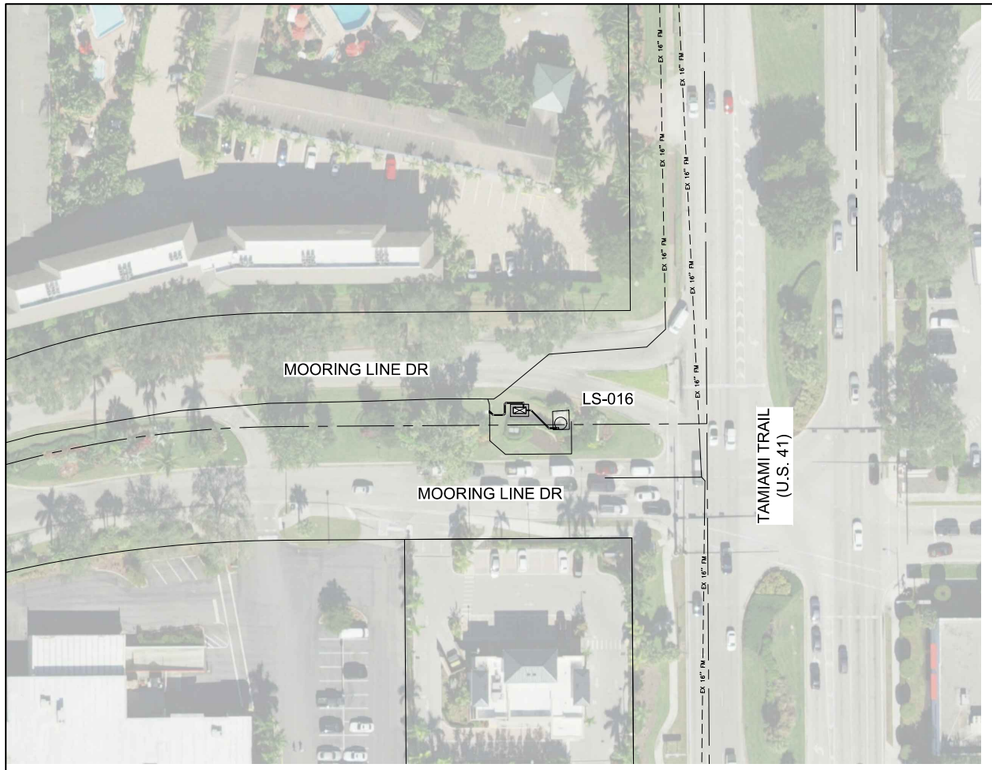
REVISIONS

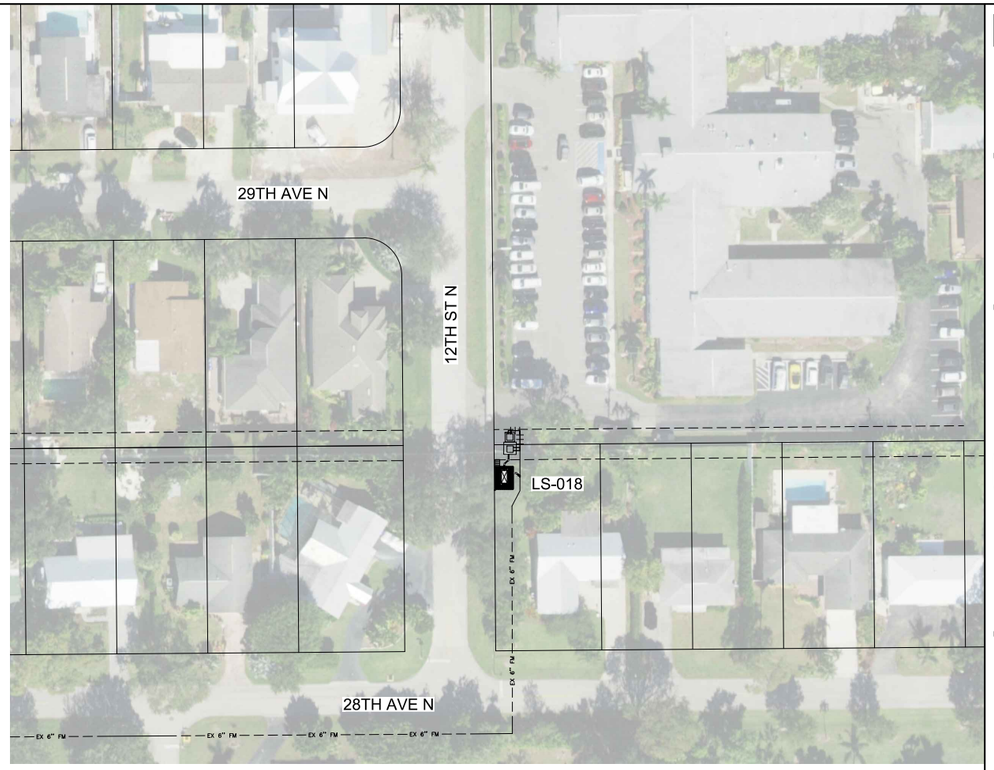
NO.	DESCRIPTION	DATE

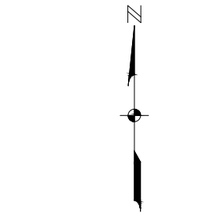
DATE: JANUARY 10, 2020
PROJECT NO. 20150110-011
FILE NO. 14-50-25
SCALE: AS SHOWN

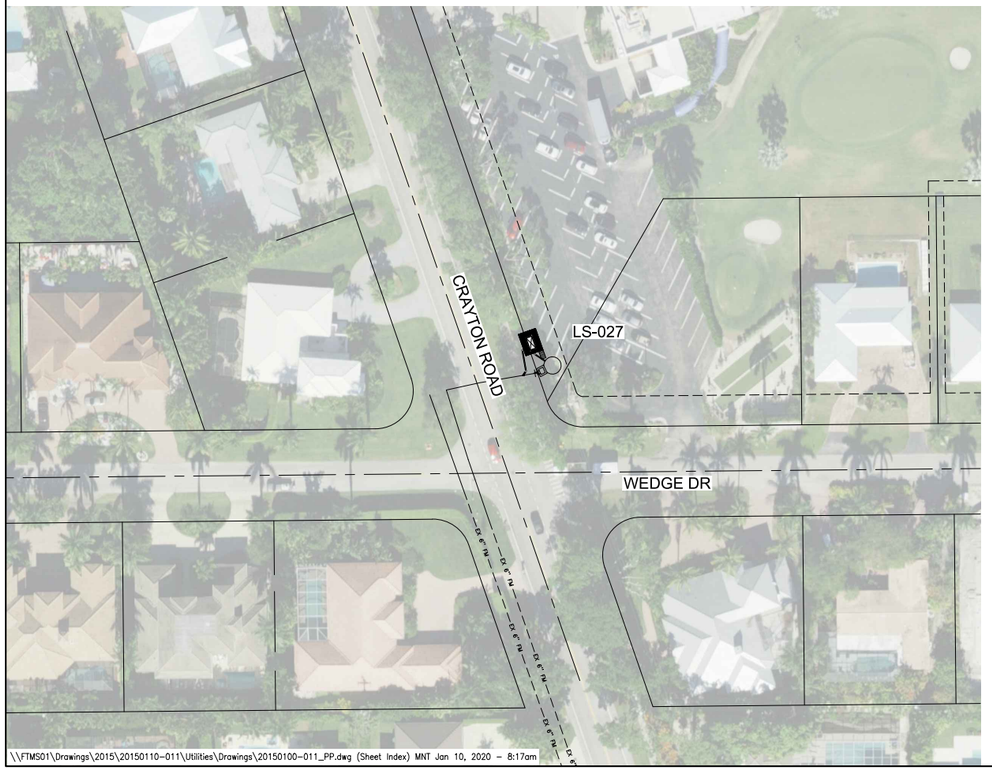
Construction Plans
Notes & Legends

SHEET NUMBER
02









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Backup Diesel Pumps
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City of Naples

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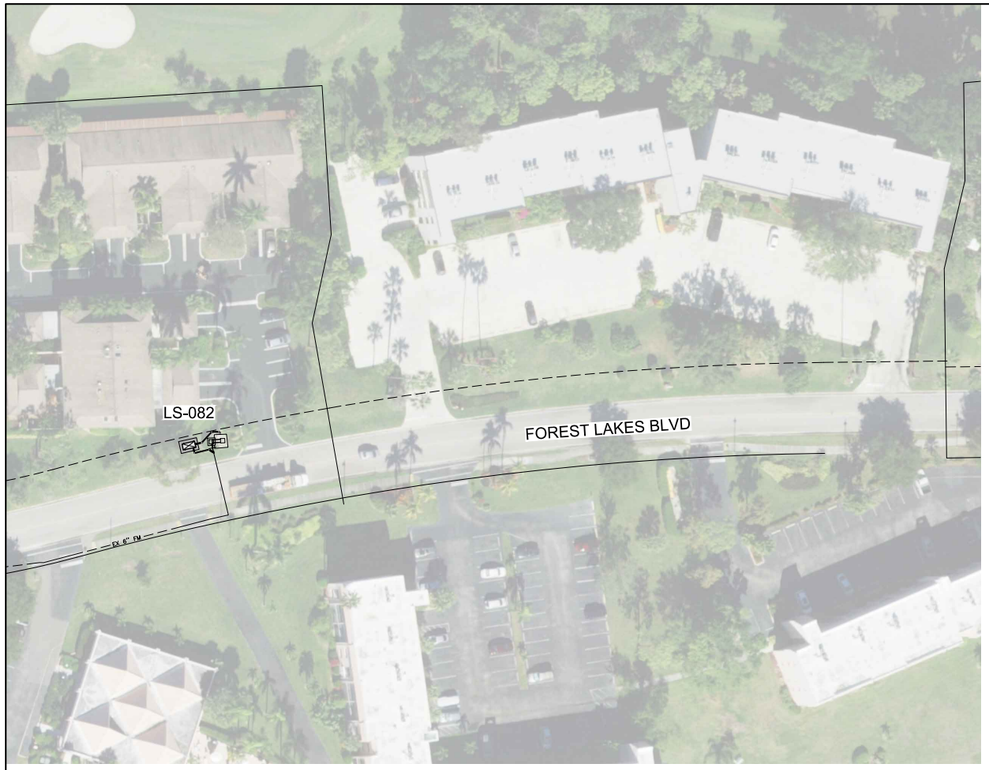
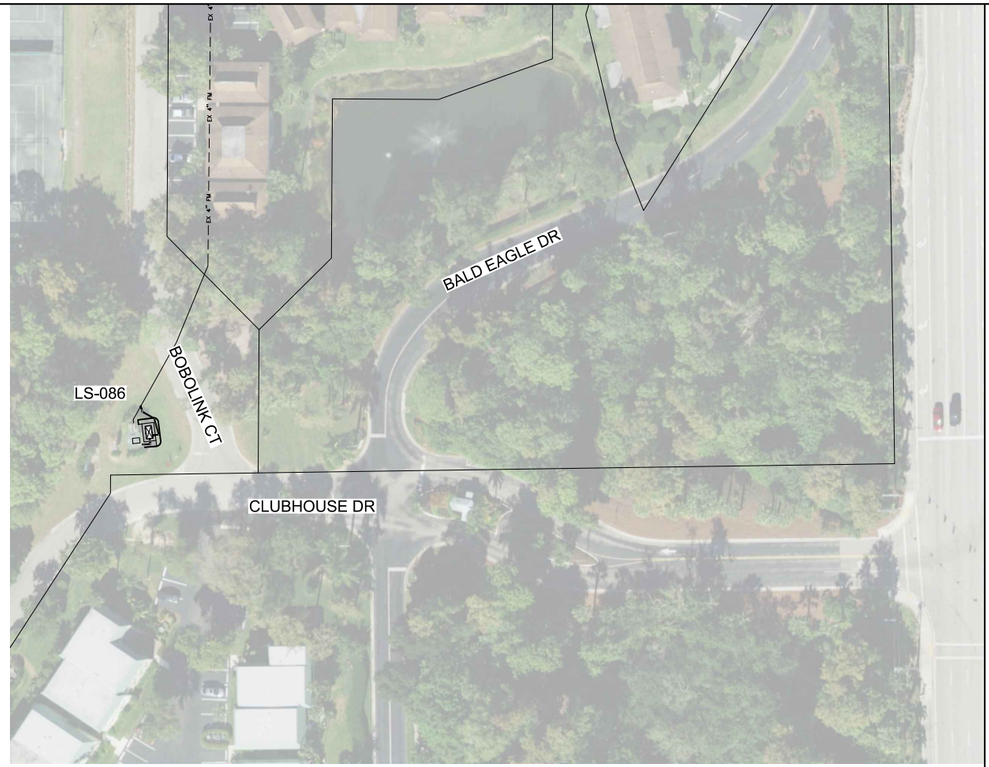
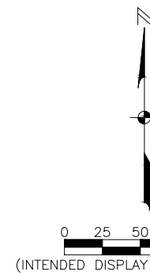
Construction Plans
Sheet Index 1 of 2

SHEET NUMBER

03







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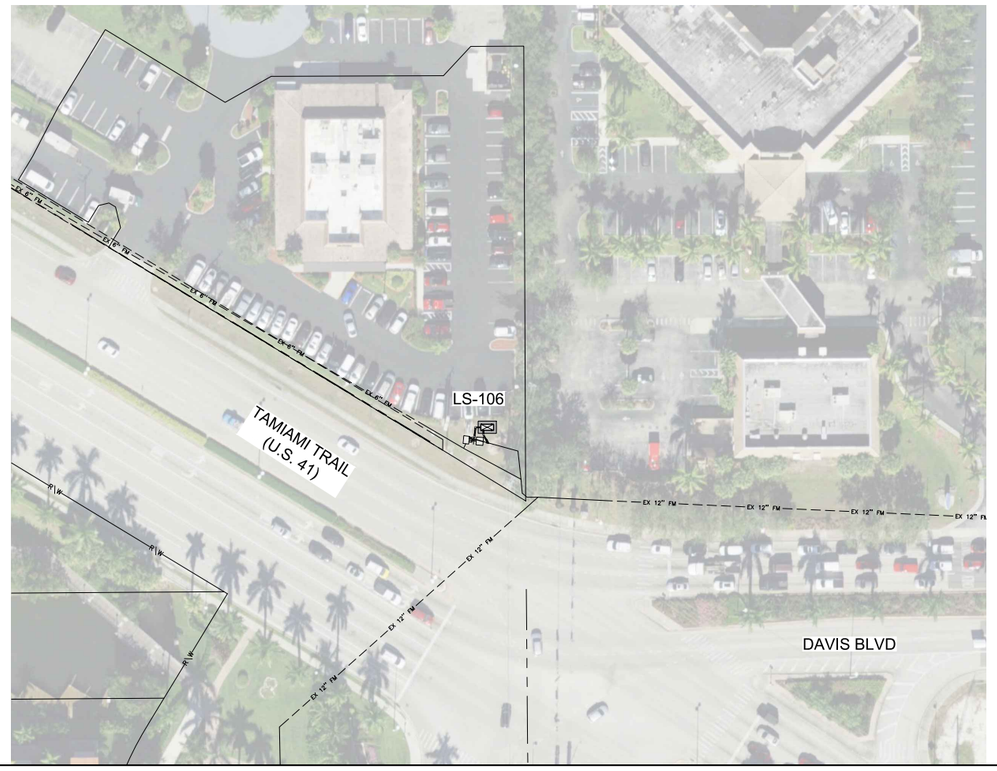

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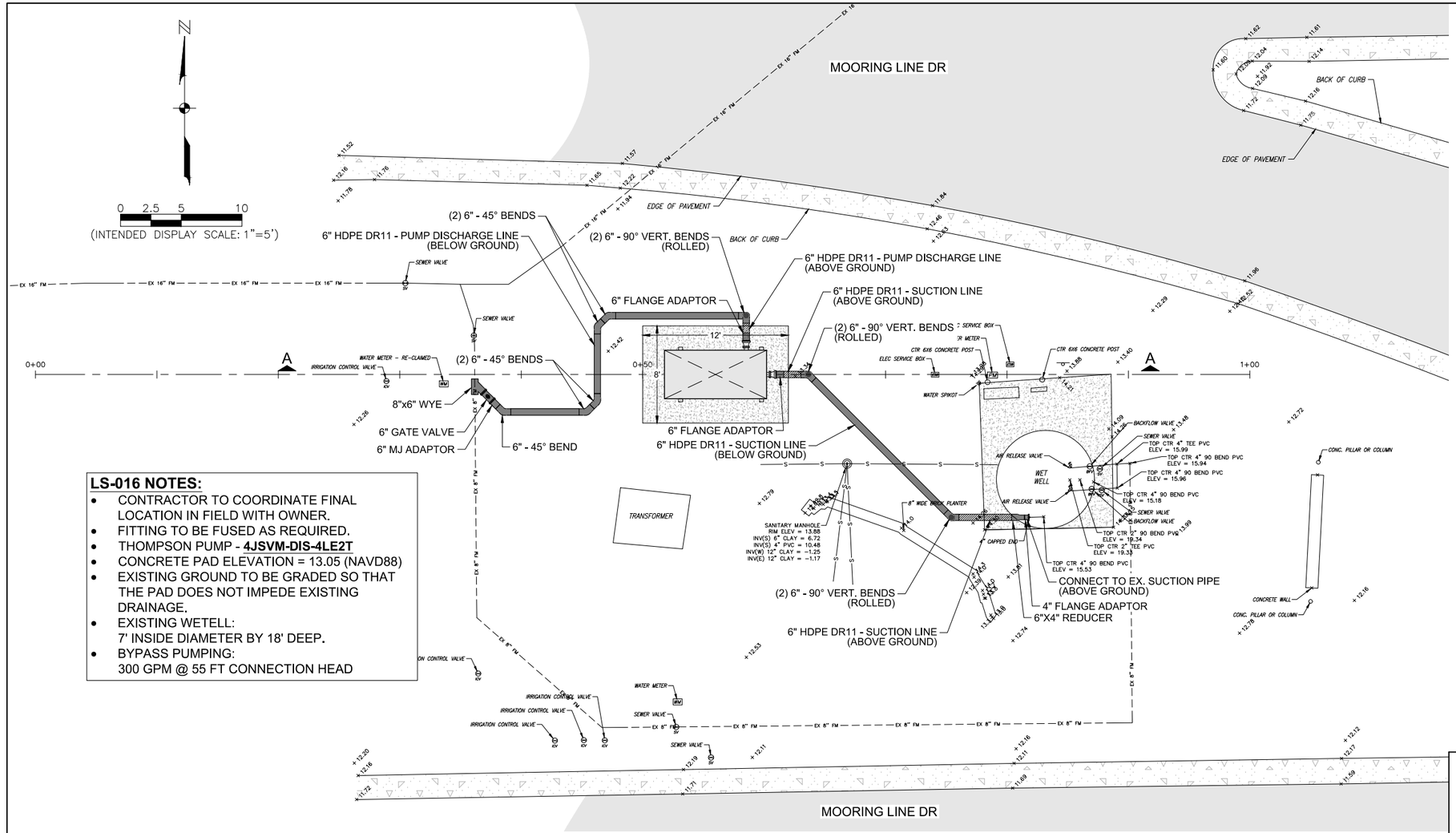
Construction Plans
Sheet Index 2 of 2

SHEET NUMBER

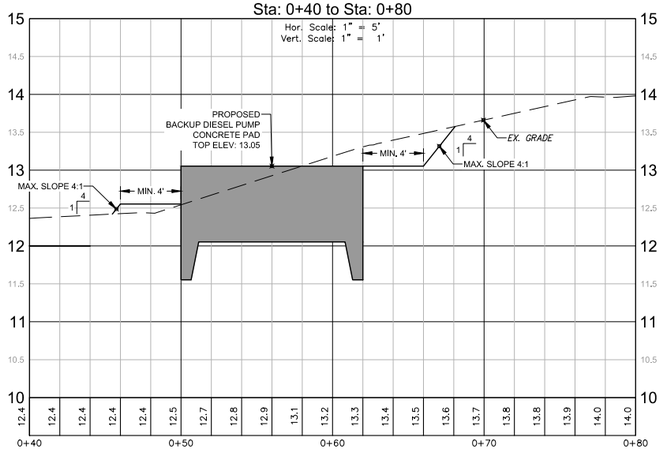
04

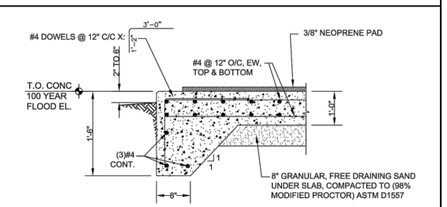


LS-016 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **4JSVM-DIS-4LE2T**
- CONCRETE PAD ELEVATION = 13.05 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PAD DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL: 7' INSIDE DIAMETER BY 18' DEEP.
- BYPASS PUMPING: 300 GPM @ 55 FT CONNECTION HEAD

Lift Station 16 Cross Section A-A
Sta: 0+40 to Sta: 0+80

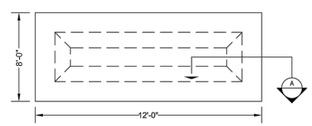




SECTION A
SCALE: N.T.S.

GENERATOR (SLAB/REINF.)

NOTE: CONTRACTOR SHALL PROVIDE A 3/8" CLOSED CELL NEOPRENE PAD ON THE SLAB TO MATCH THE BASE FOOTPRINT OF THE GENERATOR OR THE DIESEL PUMP.



STAND-BY GENERATOR OR DIESEL PUMP CONCRETE SLAB DETAIL (TYP.) – N.T.S.

STRUCTURAL NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH; W/C = 0.45, AIR CONTENT 6% (±) 1%; SLUMP = 4" BEFORE ADDING WATER REDUCING AGENT.
2. ALL STEEL SHALL BE ASTM A615, GR 60.
3. ALL DIMENSIONS SHOWN ARE TYPICAL ONLY. CONTRACTOR TO VERIFY OVERALL SLAB SIZE WITH EQUIPMENT MANUFACTURER AND ENGINEER PRIOR TO CONSTRUCTION.
4. ALL SLABS SHALL HAVE TOOLED EDGES ON ALL SIDES

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LS-016

SHEET NUMBER

05

VALVE VAULT & WET WELL NOTES:

- ABANDON EXISTING VALVE VAULT AND FILL WITH CONCRETE OR REMOVE.
- REPLACE EXISTING DISCHARGE PIPING (FROM PUMP TO FORCE MAIN CONNECTION) WITH NEW 4" HDPE ABOVE-GROUND PIPING (PER DETAILS WW-17 & WW-18 SHOWN ON SHEET 12). CONTRACTOR TO VERIFY SIZING & COORDINATE PIPING ORIENTATION WITH OWNER.
- EXISTING WET WELL LID & HATCH TO BE REPLACED (APPROXIMATE 7'-6" SQUARE, THICKNESS PER DETAIL WW-17. CONTRACTOR TO VERIFY SIZING).
- EXISTING WET WELL TO BE RELINED USING SEWPERCOAT LINING SYSTEM.
- PUMPS, GUIDE RAILS, PIPE SUPPORTS AND OTHER INTERIOR COMPONENTS TO BE REINSTALLED / REPLACED. (SEE GENERAL NOTE #26 ON SHEET 3).

N

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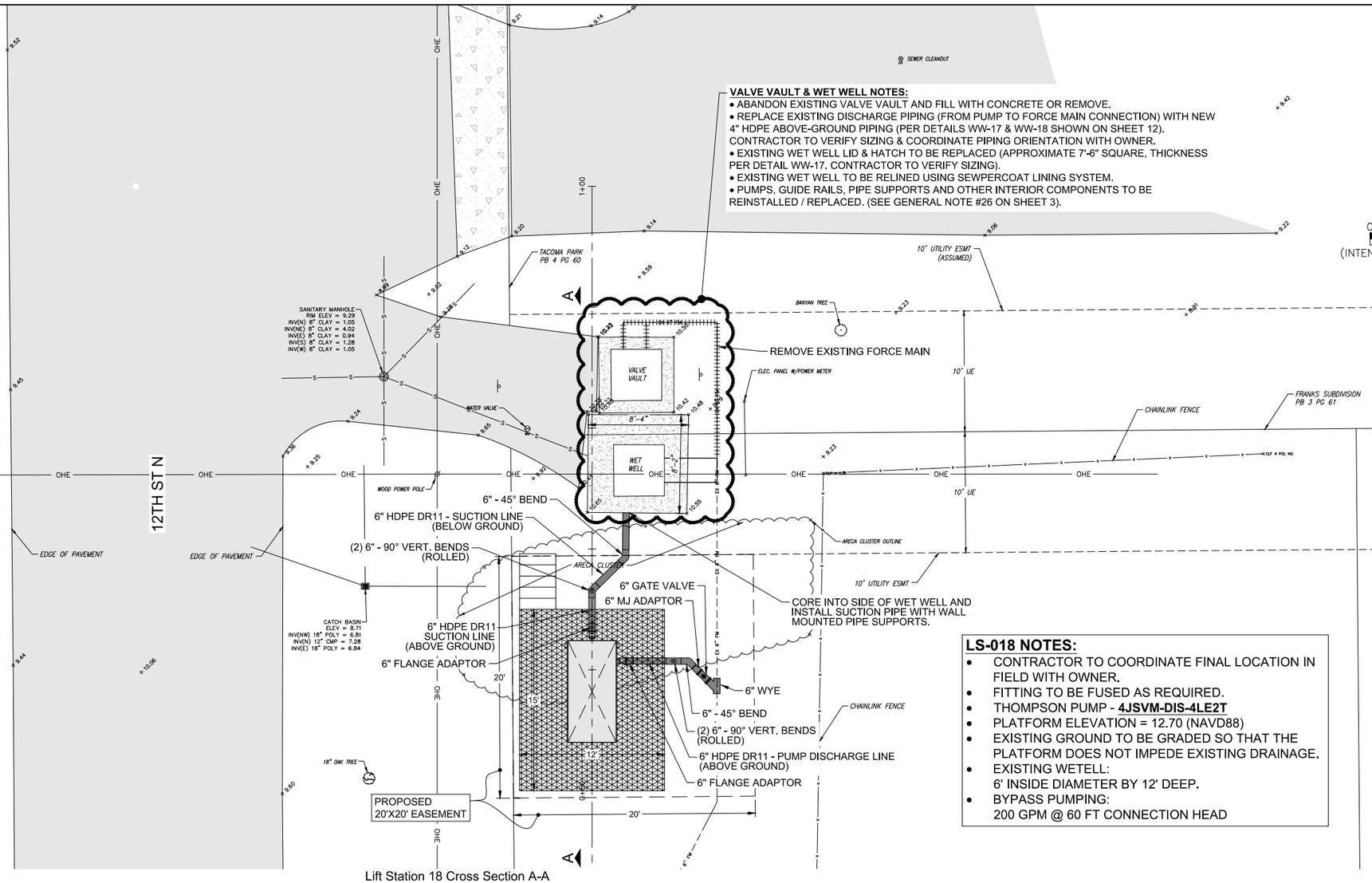
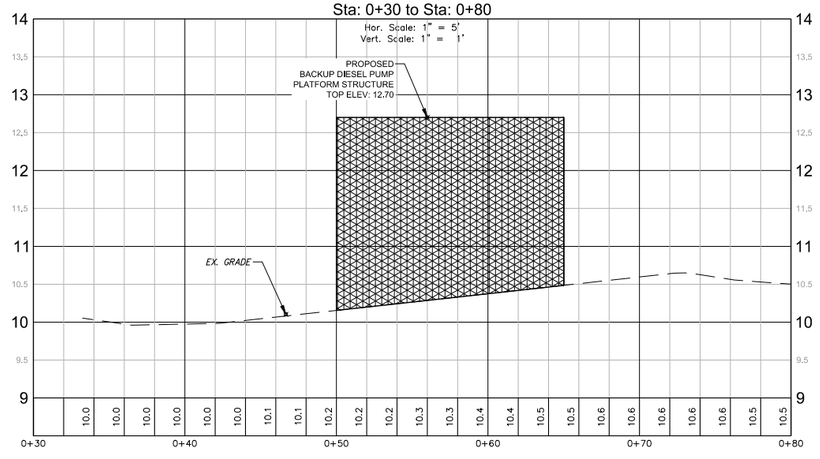


LS-018 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **4JSVM-DIS-4LE2T**
- PLATFORM ELEVATION = 12.70 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PLATFORM DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL:
  6' INSIDE DIAMETER BY 12' DEEP.
- BYPASS PUMPING:
  200 GPM @ 60 FT CONNECTION HEAD

Lift Station 18 Cross Section A-A
Sta: 0+30 to Sta: 0+80



JOHNSON ENGINEERING

JOHNSON ENGINEERING, INC.
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PHONE: (239) 334-0046
FAX: (239) 334-3661
E.B. #642 & L.B. #642

MARK WAYNE THOMAS
FL License No. 86454

Backup Diesel Pumps
Lift Station Improvements
City of Naples

REVISIONS

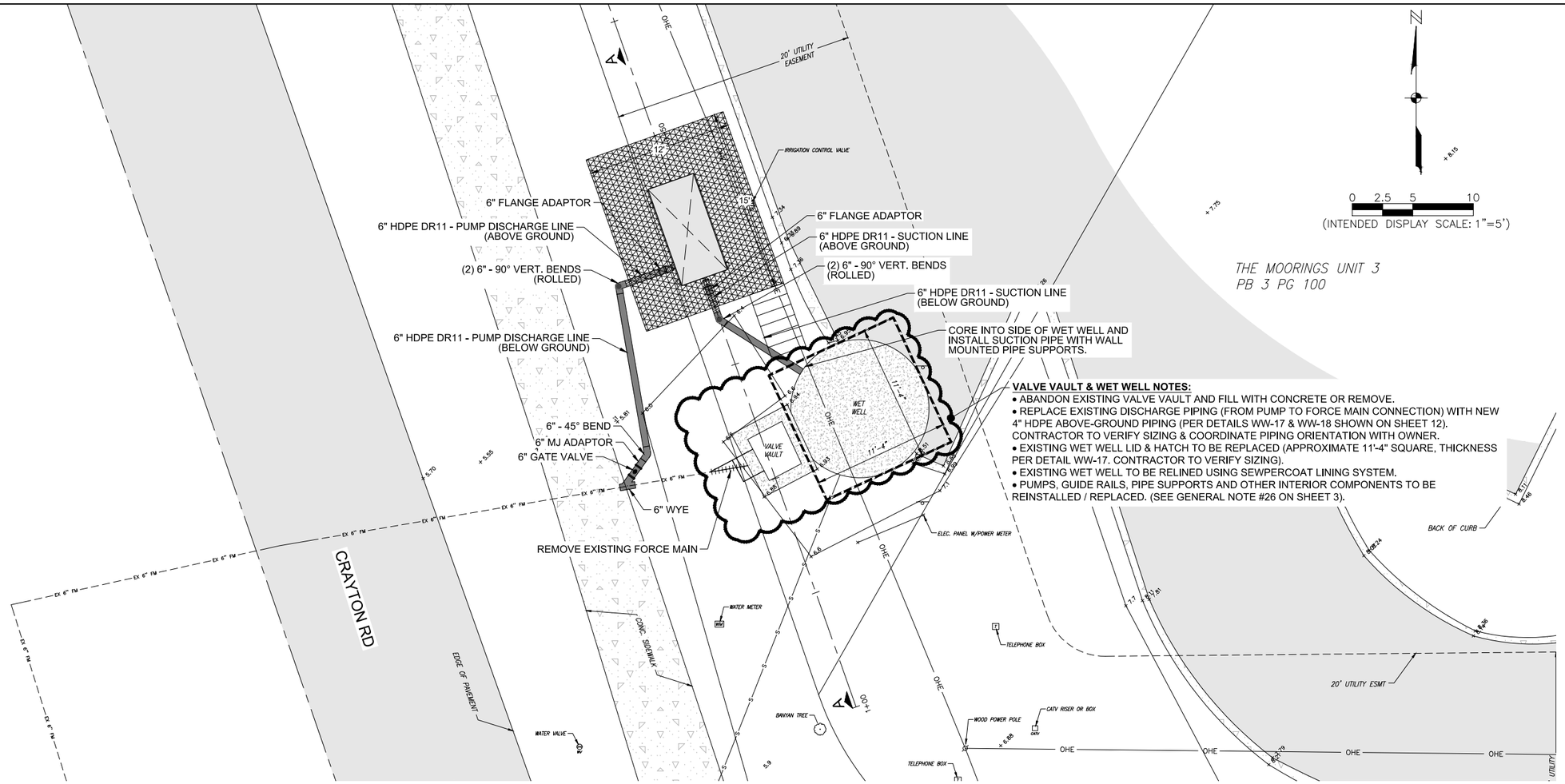
NO.	DESCRIPTION	DATE

DATE: JANUARY 10, 2020
PROJECT NO. 20150110-011
FILE NO. 14-50-25
SCALE: AS SHOWN

LS-018

SHEET NUMBER

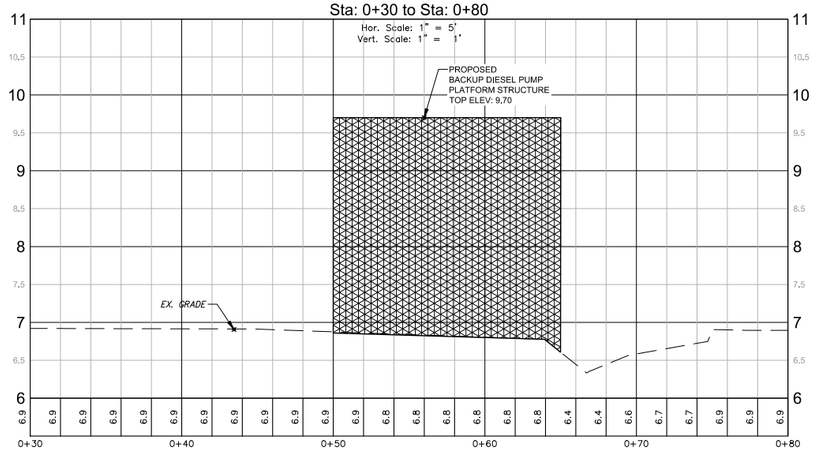
06



VALVE VAULT & WET WELL NOTES:

- ABANDON EXISTING VALVE VAULT AND FILL WITH CONCRETE OR REMOVE.
- REPLACE EXISTING DISCHARGE PIPING (FROM PUMP TO FORCE MAIN CONNECTION) WITH NEW 4" HDPE ABOVE-GROUND PIPING (PER DETAILS WW-17 & WW-18 SHOWN ON SHEET 12). CONTRACTOR TO VERIFY SIZING & COORDINATE PIPING ORIENTATION WITH OWNER.
- EXISTING WET WELL LID & HATCH TO BE REPLACED (APPROXIMATE 11'-4" SQUARE, THICKNESS PER DETAIL WW-17. CONTRACTOR TO VERIFY SIZING).
- EXISTING WET WELL TO BE RELINED USING SEWPERCOAT LINING SYSTEM.
- PUMPS, GUIDE RAILS, PIPE SUPPORTS AND OTHER INTERIOR COMPONENTS TO BE REINSTALLED / REPLACED. (SEE GENERAL NOTE #26 ON SHEET 3).

Lift Staion 27 Cross Section A-A
Sta: 0+30 to Sta: 0+80



LS-027 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **4JSVM-DIS-4LE2T**
- PLATFORM ELEVATION = 9.70 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PLATFORM DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL:
  10' INSIDE DIAMETER BY 15' DEEP.
- BYPASS PUMPING:
  250 GPM @ 20 FT CONNECTION HEAD

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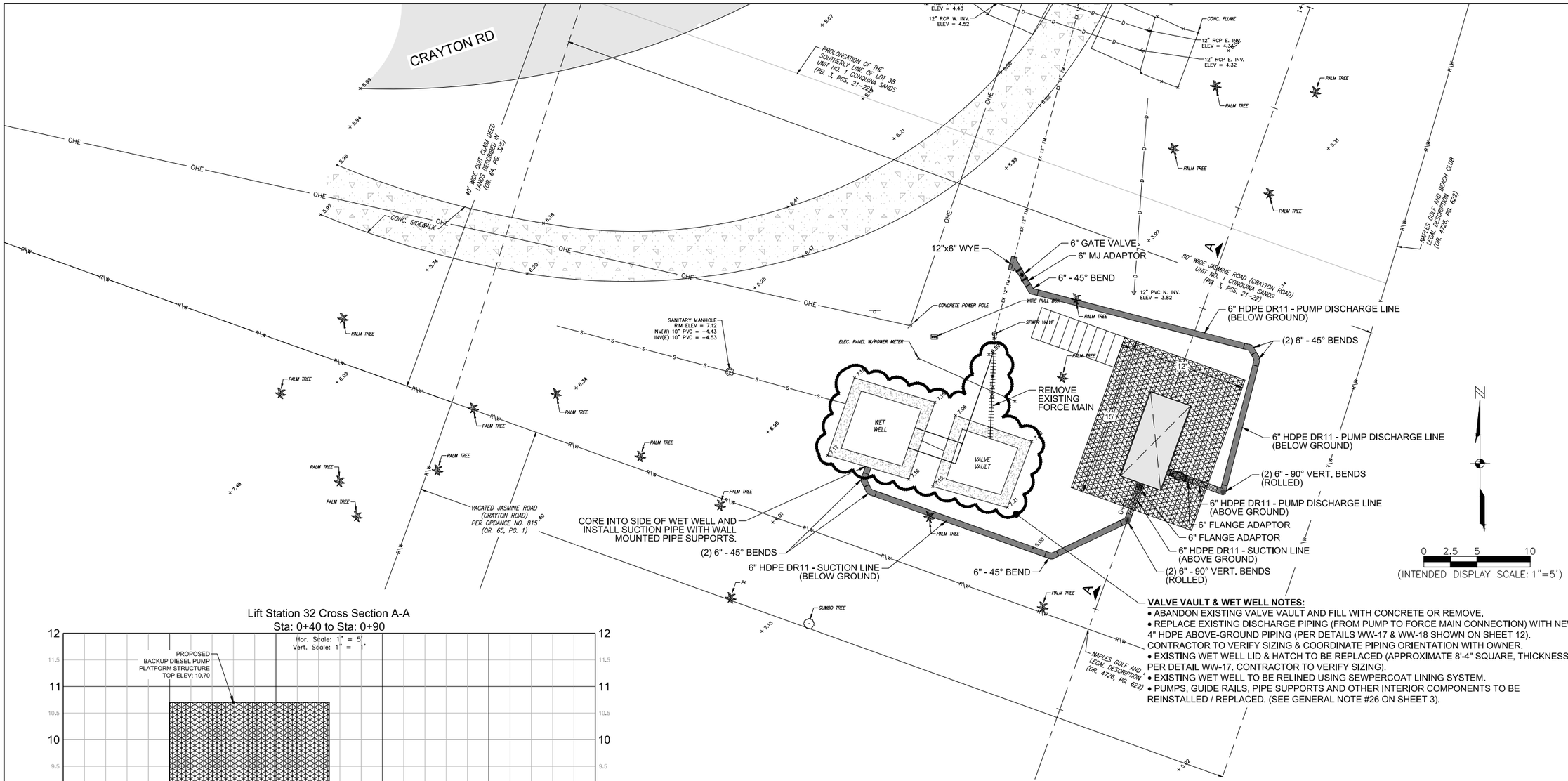
FILE NO. 14-50-25
SCALE: AS SHOWN

LS-027

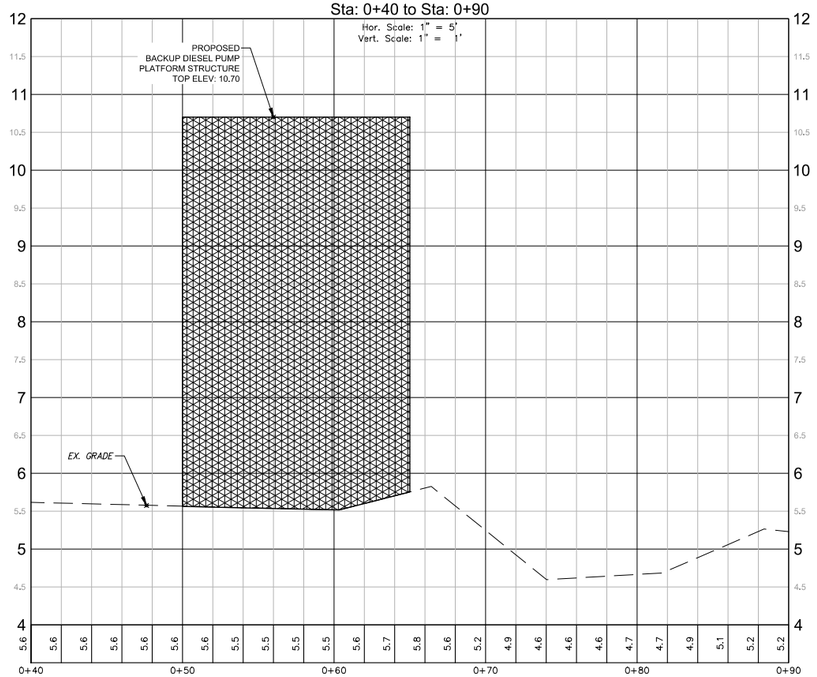
SHEET NUMBER
07



VALVE VAULT & WET WELL NOTES:

- ABANDON EXISTING VALVE VAULT AND FILL WITH CONCRETE OR REMOVE.
- REPLACE EXISTING DISCHARGE PIPING (FROM PUMP TO FORCE MAIN CONNECTION) WITH NEW 4" HDPE ABOVE-GROUND PIPING (PER DETAILS WW-17 & WW-18 SHOWN ON SHEET 12). CONTRACTOR TO VERIFY SIZING & COORDINATE PIPING ORIENTATION WITH OWNER.
- EXISTING WET WELL LID & HATCH TO BE REPLACED (APPROXIMATE 8'-4" SQUARE, THICKNESS PER DETAIL WW-17. CONTRACTOR TO VERIFY SIZING).
- EXISTING WET WELL TO BE RELINED USING SEWPERCOAT LINING SYSTEM.
- PUMPS, GUIDE RAILS, PIPE SUPPORTS AND OTHER INTERIOR COMPONENTS TO BE REINSTALLED / REPLACED. (SEE GENERAL NOTE #26 ON SHEET 3).

Lift Station 32 Cross Section A-A
Sta: 0+40 to Sta: 0+90



LS-032 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **6JSCEE-DIS-4LE2T-UC**
- PLATFORM ELEVATION = 10.70 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PLATFORM DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL:
  7' INSIDE DIAMETER BY 17' DEEP.
- BYPASS PUMPING:
  300 GPM @ 45 FT CONNECTION HEAD

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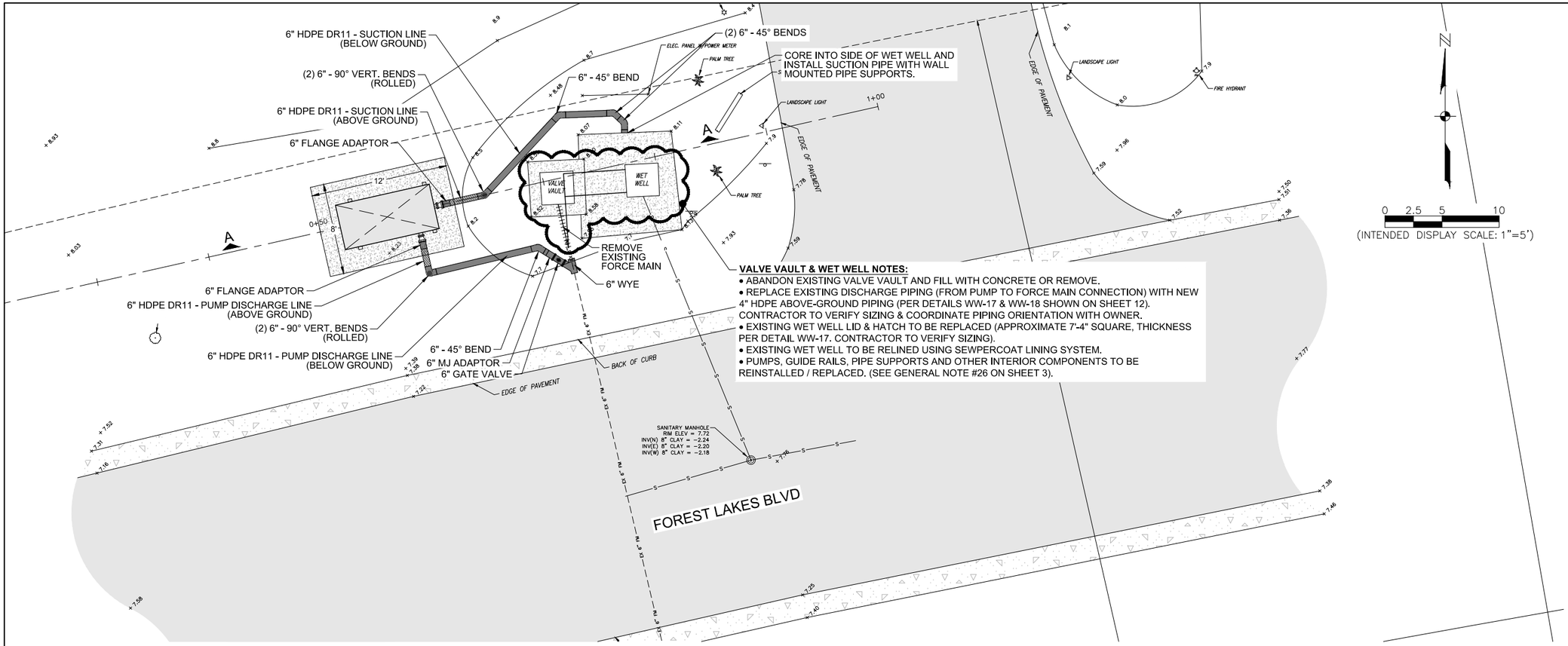
REVISIONS

NO.	DESCRIPTION	DATE

DATE:	JANUARY 10, 2020
PROJECT NO.	20150110-011
FILE NO.	14-50-25
SCALE:	AS SHOWN

LS-032

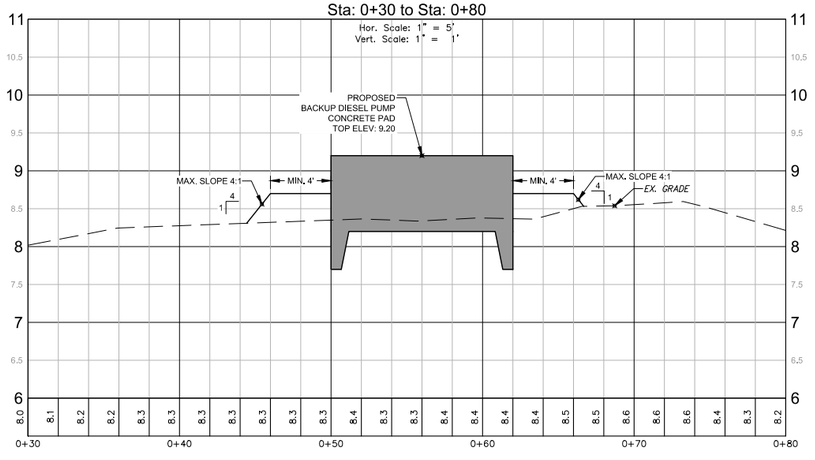
SHEET NUMBER
08



VALVE VAULT & WET WELL NOTES:

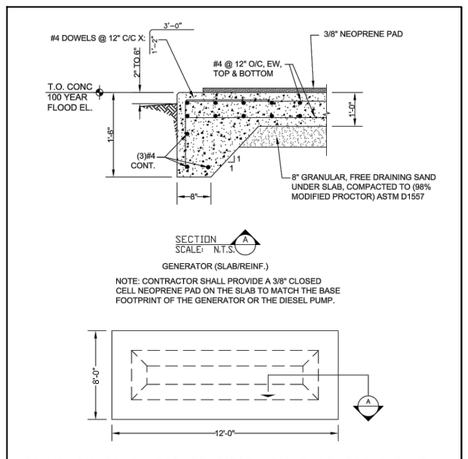
- ABANDON EXISTING VALVE VAULT AND FILL WITH CONCRETE OR REMOVE.
- REPLACE EXISTING DISCHARGE PIPING (FROM PUMP TO FORCE MAIN CONNECTION) WITH NEW 4" HDPE ABOVE-GROUND PIPING (PER DETAILS WW-17 & WW-18 SHOWN ON SHEET 12). CONTRACTOR TO VERIFY SIZING & COORDINATE PIPING ORIENTATION WITH OWNER.
- EXISTING WET WELL LID & HATCH TO BE REPLACED (APPROXIMATE 7'-4" SQUARE, THICKNESS PER DETAIL WW-17. CONTRACTOR TO VERIFY SIZING).
- EXISTING WET WELL TO BE RELINED USING SEWPERCOAT LINING SYSTEM.
- PUMPS, GUIDE RAILS, PIPE SUPPORTS AND OTHER INTERIOR COMPONENTS TO BE REINSTALLED / REPLACED. (SEE GENERAL NOTE #26 ON SHEET 3).

Lift Station 82 Cross Section A-A
Sta: 0+30 to Sta: 0+80



LS-082 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **4JSVM-DIS-4LE2T**
- CONCRETE PAD ELEVATION = 9.20 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PAD DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL: 6' INSIDE DIAMETER BY 13' DEEP.
- BYPASS PUMPING: 150 GPM @ 70 FT CONNECTION HEAD



GENERATOR (SLAB/REINF.)

NOTE: CONTRACTOR SHALL PROVIDE A 3/8" CLOSED CELL NEOPRENE PAD ON THE SLAB TO MATCH THE BASE FOOTPRINT OF THE GENERATOR OR THE DIESEL PUMP.

STAND-BY GENERATOR OR DIESEL PUMP CONCRETE SLAB DETAIL (TYP.) - N.T.S.

STRUCTURAL NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH; W/C = 0.45, AIR CONTENT 6% (±) 1%; SLUMP = 4" BEFORE ADDING WATER REDUCING AGENT.
2. ALL STEEL SHALL BE ASTM A615, GR 60.
3. ALL DIMENSIONS SHOWN ARE TYPICAL ONLY. CONTRACTOR TO VERIFY OVERALL SLAB SIZE WITH EQUIPMENT MANUFACTURER AND ENGINEER PRIOR TO CONSTRUCTION.
4. ALL SLABS SHALL HAVE TOOLED EDGES ON ALL SIDES

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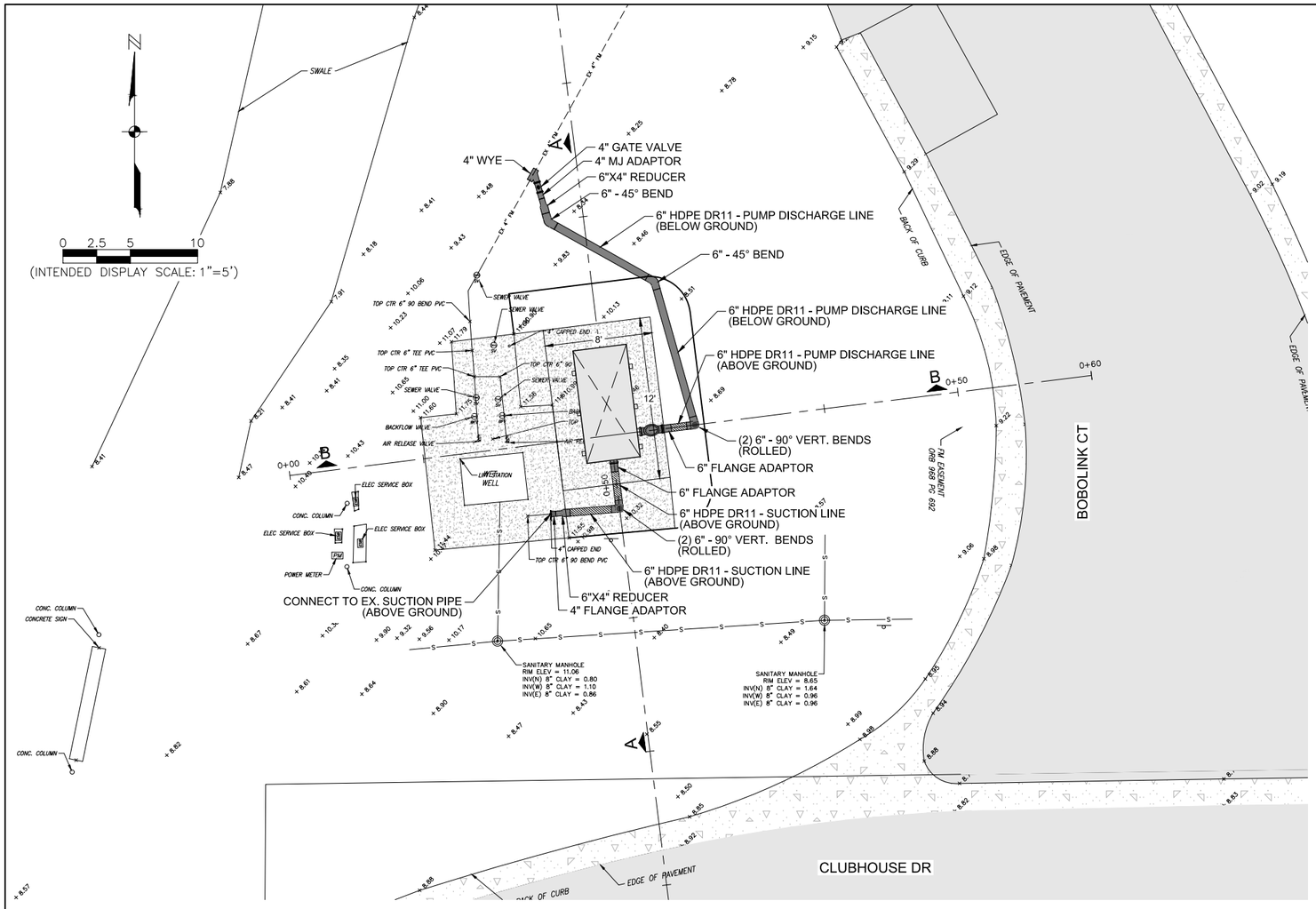
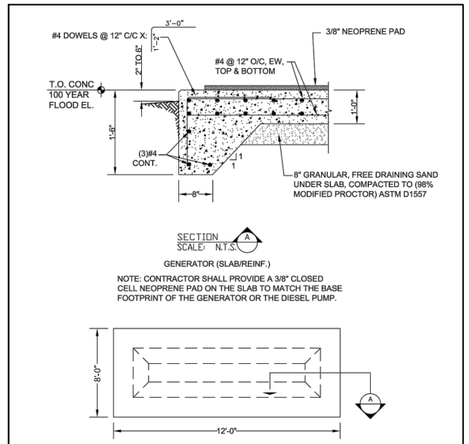
SCALE: AS SHOWN

LS-082

SHEET NUMBER
09





GENERATOR (SLAB/REINF.)

NOTE: CONTRACTOR SHALL PROVIDE A 3/8" CLOSED CELL NEOPRENE PAD ON THE SLAB TO MATCH THE BASE FOOTPRINT OF THE GENERATOR OR THE DIESEL PUMP.

STAND–BY GENERATOR OR DIESEL PUMP CONCRETE SLAB DETAIL (TYP.) – N.T.S.

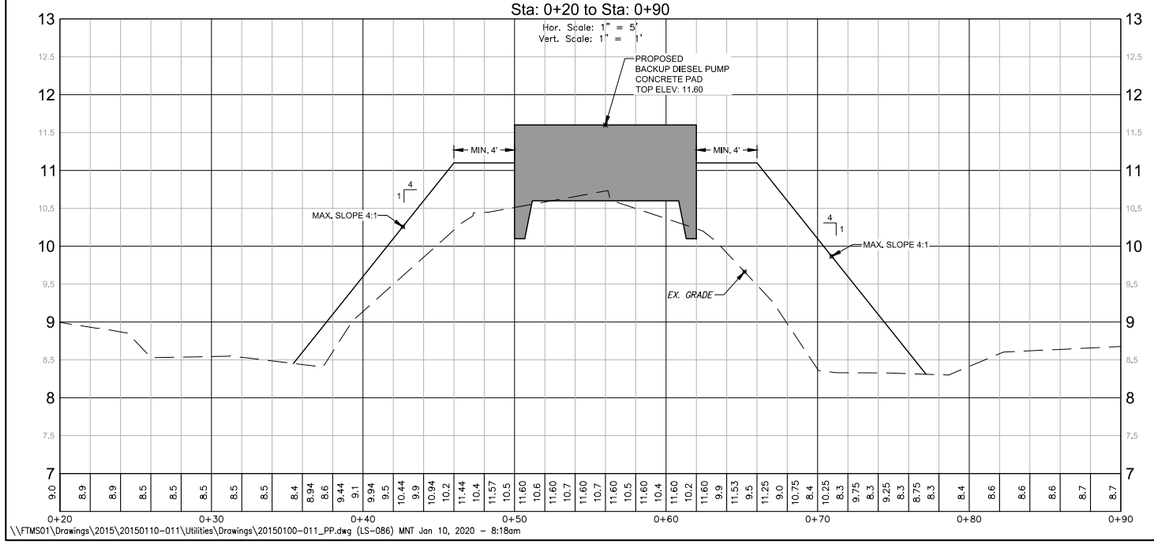
STRUCTURAL NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH; W/C = 0.45, AIR CONTENT 6% (±) 1%; SLUMP = 4" BEFORE ADDING WATER REDUCING AGENT.
2. ALL STEEL SHALL BE ASTM A615, GR 60.
3. ALL DIMENSIONS SHOWN ARE TYPICAL ONLY. CONTRACTOR TO VERIFY OVERALL SLAB SIZE WITH EQUIPMENT MANUFACTURER AND ENGINEER PRIOR TO CONSTRUCTION.
4. ALL SLABS SHALL HAVE TOOLED EDGES ON ALL SIDES

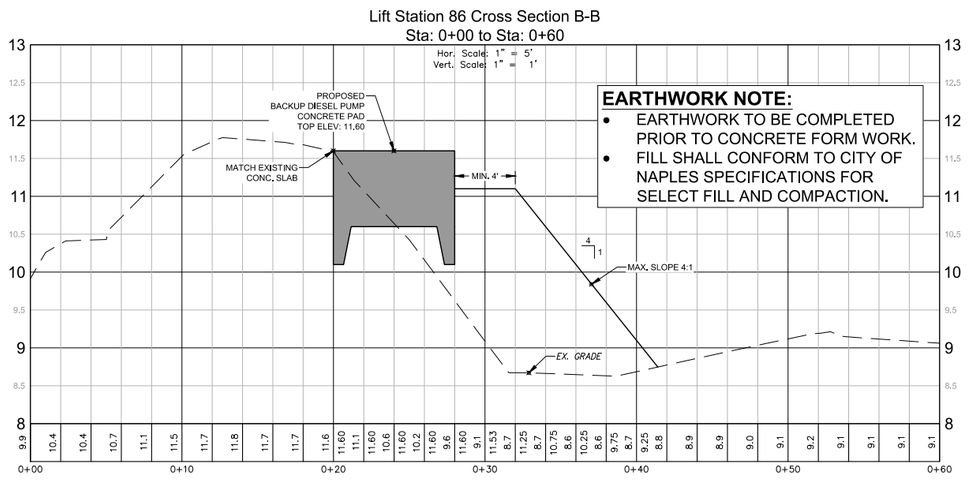
LS-086 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **6JSCEE-DIS-4LE2T-UC**
- CONCRETE PAD ELEVATION = 11.60 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PAD DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL: 7.5' INSIDE DIAMETER BY 17' DEEP.
- BYPASS PUMPING: 250 GPM @ 55 FT CONNECTION HEAD

Lift Station 86 Cross Section A-A
Sta: 0+20 to Sta: 0+90



Lift Station 86 Cross Section B-B
Sta: 0+00 to Sta: 0+60



EARTHWORK NOTE:

- EARTHWORK TO BE COMPLETED PRIOR TO CONCRETE FORM WORK.
- FILL SHALL CONFORM TO CITY OF NAPLES SPECIFICATIONS FOR SELECT FILL AND COMPACTION.

\\FTMS01\Drawings\2015\20150110-011\Utilities\Drawings\20150100-011_PP.dwg (LS-086) MNT Jan 10, 2020 - 8:18am

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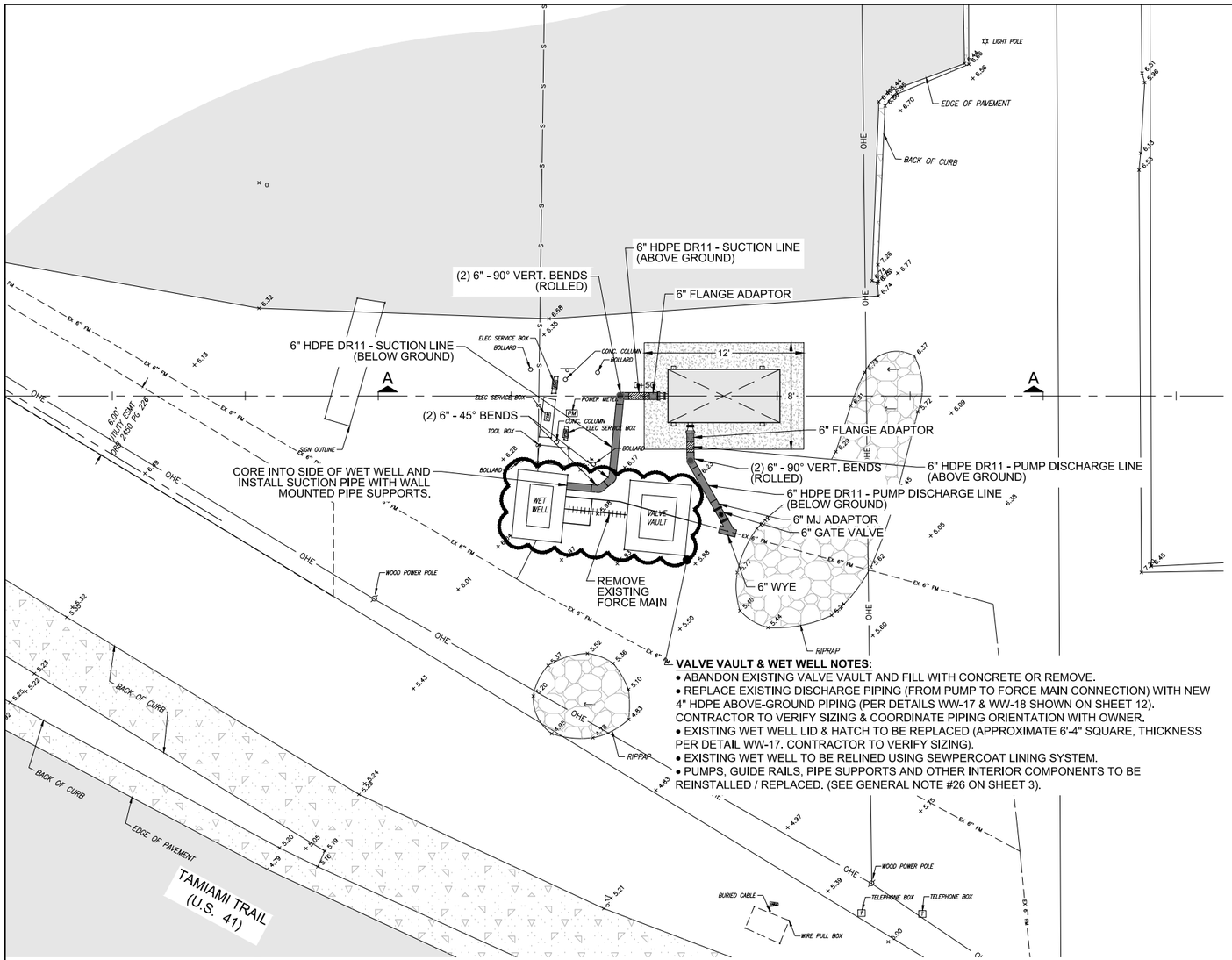
LS-086

SHEET NUMBER

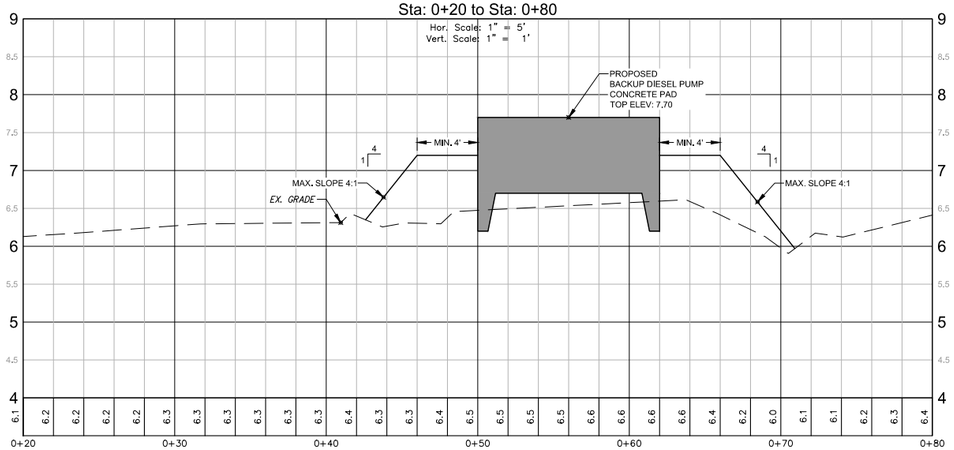
10

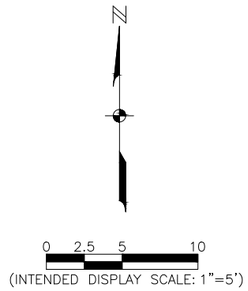


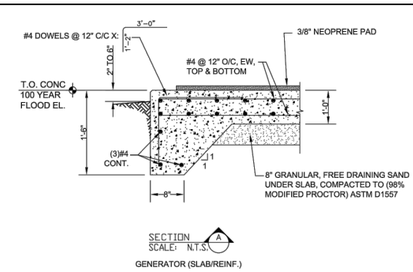
VALVE VAULT & WET WELL NOTES:

- ABANDON EXISTING VALVE VAULT AND FILL WITH CONCRETE OR REMOVE.
- REPLACE EXISTING DISCHARGE PIPING (FROM PUMP TO FORCE MAIN CONNECTION) WITH NEW 4" HDPE ABOVE-GROUND PIPING (PER DETAILS WW-17 & WW-18 SHOWN ON SHEET 12). CONTRACTOR TO VERIFY SIZING & COORDINATE PIPING ORIENTATION WITH OWNER.
- EXISTING WET WELL LID & HATCH TO BE REPLACED (APPROXIMATE 6'-4" SQUARE, THICKNESS PER DETAIL WW-17. CONTRACTOR TO VERIFY SIZING).
- EXISTING WET WELL TO BE RELINED USING SEWPERCOAT LINING SYSTEM.
- PUMPS, GUIDE RAILS, PIPE SUPPORTS AND OTHER INTERIOR COMPONENTS TO BE REINSTALLED / REPLACED. (SEE GENERAL NOTE #26 ON SHEET 3).

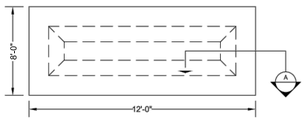
Lift Station 106 Cross Section A-A
Sta: 0+20 to Sta: 0+80







NOTE: CONTRACTOR SHALL PROVIDE A 3/8" CLOSED CELL NEOPRENE PAD ON THE SLAB TO MATCH THE BASE FOOTPRINT OF THE GENERATOR OR THE DIESEL PUMP.



STAND-BY GENERATOR OR DIESEL PUMP CONCRETE SLAB DETAIL (TYP.) – N.T.S.

STRUCTURAL NOTES:

1. ALL CONCRETE SHALL BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH; W/C = 0.45, AIR CONTENT 6% (±) 1%; SLUMP = 4" BEFORE ADDING WATER REDUCING AGENT.
2. ALL STEEL SHALL BE ASTM A615, GR 60.
3. ALL DIMENSIONS SHOWN ARE TYPICAL ONLY. CONTRACTOR TO VERIFY OVERALL SLAB SIZE WITH EQUIPMENT MANUFACTURER AND ENGINEER PRIOR TO CONSTRUCTION.
4. ALL SLABS SHALL HAVE TOOLED EDGES ON ALL SIDES

LS-106 NOTES:

- CONTRACTOR TO COORDINATE FINAL LOCATION IN FIELD WITH OWNER.
- FITTING TO BE FUSED AS REQUIRED.
- THOMPSON PUMP - **4JSVM-DIS-4LE2T**
- CONCRETE PAD ELEVATION = 7.70 (NAVD88)
- EXISTING GROUND TO BE GRADED SO THAT THE PAD DOES NOT IMPEDE EXISTING DRAINAGE.
- EXISTING WETELL: 5' INSIDE DIAMETER BY 10' DEEP.
- BYPASS PUMPING: 150 GPM @ 40 FT CONNECTION HEAD

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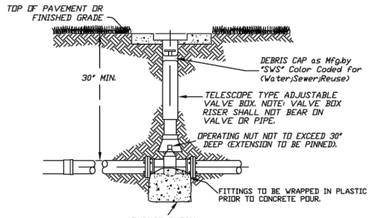
SCALE:	AS SHOWN

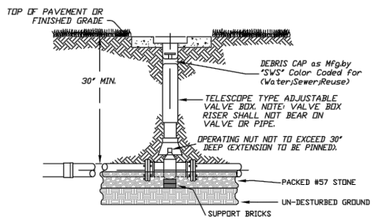
LS-106

SHEET NUMBER

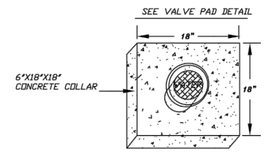
11



TYPICAL APPLICATION FOR UN- RESTRAINED PIPE SYSTEMS AND WHERE CONNECTED TO EXISTING AC & CI PIPES

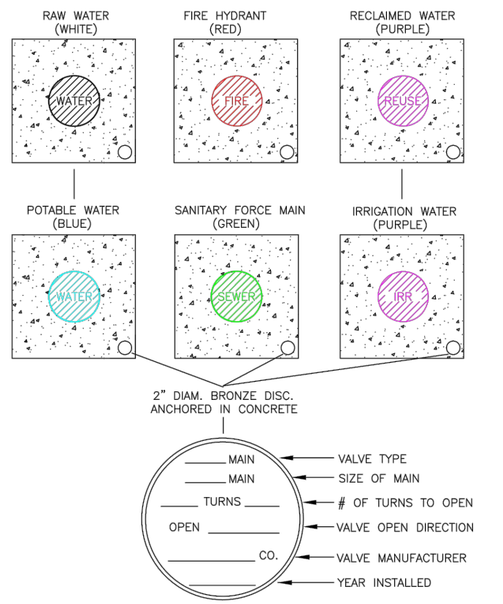


TYPICAL APPLICATION FOR NEW RESTRAINED PIPE SYSTEMS



THIS DETAIL CONSTITUTES MINIMUM STANDARDS. DESIGN ENGINEERS SHALL PROVIDE STANDARDS EQUAL TO OR GREATER THAN THESE.

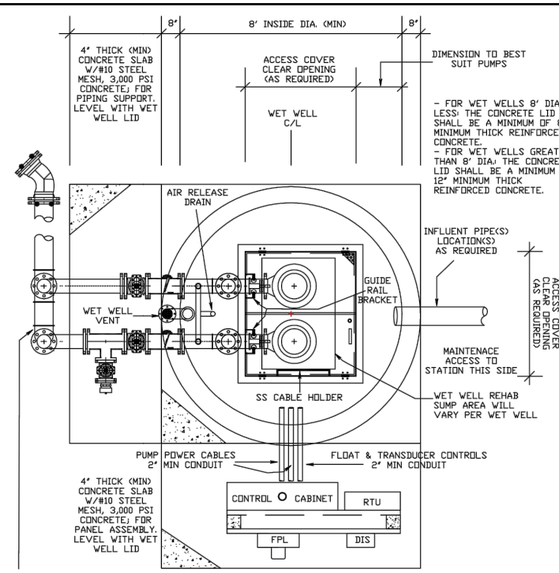
FOR:	UTILITIES DEPARTMENT	CITY OF NAPLES
DATE: JAN. 2016	*TYPICAL IN-LINE VALVE*	SHEET: U-14
DRAWN: DAG/AMH	*(WATER/SEWER/REUSE)*	DIR: UTILSTDS
SCALE: N.T.S.	380 RIVERSIDE CIRCLE, NAPLES, FL 34102	DWG. U-14-16.DWG



VALVE PAD DETAIL

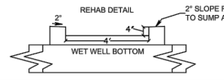
THIS DETAIL CONSTITUTES MINIMUM STANDARDS. DESIGN ENGINEERS SHALL PROVIDE STANDARDS EQUAL TO OR GREATER THAN THESE.

FOR:	UTILITIES DEPARTMENT	CITY OF NAPLES
DATE: JAN. 2016	*VALVE PAD DETAIL*	SHEET: U-15
DRAWN: DAG/AMH		DIR: UTILSTDS
SCALE: N.T.S.	380 RIVERSIDE CIRCLE, NAPLES, FL 34102	DWG. U-15-16.DWG



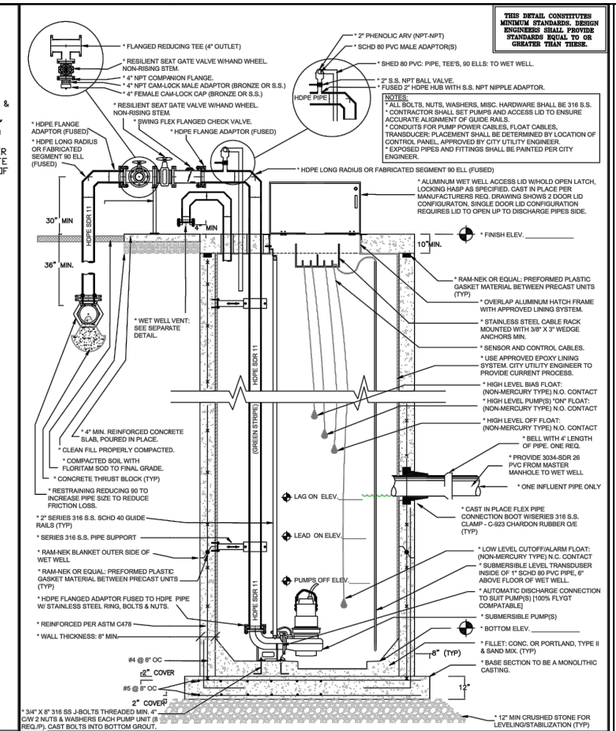
DISCHARGE MANIFOLD PIPING TO BE A MIN. OF ONE (1) PIPE SIZE LARGER THAN PUMP DISCHARGE PIPE.

ALL STATIONS ACCEPTED BY THE CITY SHALL BE PROVIDED WITH A 7' HIGH, 9 GAGE, BLACK VINYL CHAIN LINK FENCE. ALL POSTS SHALL BE 2"+ DIA. AND ENCLOSURE SHALL HAVE BOTH TOP & BOTTOM RAILS (1" MIN). A 10' WIDE MINIMUM, LOCKABLE DOUBLE SWING GATE SHALL BE PROVIDED FOR ACCESS OF MAINTENANCE VEHICLES. A 4' WIDE, LOCKABLE, SWING MAN-GATE SHALL BE PROVIDED AT THE LOCATION OF THE FPL METER.



THIS DETAIL CONSTITUTES MINIMUM STANDARDS. DESIGN ENGINEERS SHALL PROVIDE STANDARDS EQUAL TO OR GREATER THAN THESE.

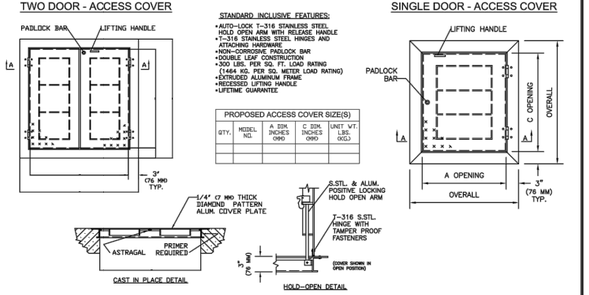
FOR:	UTILITIES DEPARTMENT	CITY OF NAPLES
DATE: SEPT 2010	*WASTEWATER PUMP STATION*	SHEET: WW-17
DRAWN: DAG	*SITE PLAN - PLAN VIEW*	DIR: WASTEWATER
SCALE: N.T.S.	380 RIVERSIDE CIRCLE, NAPLES, FLORIDA 34102	DWG. WW-17.DWG



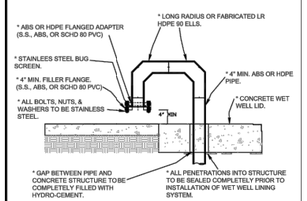
FOR:	UTILITIES DEPARTMENT	CITY OF NAPLES
DATE: JULY 2013	*WASTEWATER PUMP STATION*	SHEET: WW-18
DRAWN: DAG	*CROSS SECTION VIEW*	DIR: WASTEWATER
SCALE: N.T.S.	380 RIVERSIDE CIRCLE, NAPLES, FLORIDA 34102	DWG. WW-18.DWG

WET WELL ALUMINUM ACCESS COVER DETAIL (NTS)

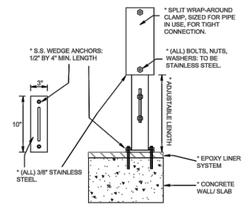
THIS DETAIL CONSTITUTES MINIMUM STANDARDS. DESIGN ENGINEERS SHALL PROVIDE STANDARDS EQUAL TO OR GREATER THAN THESE.



* ACCESS DOOR CONFIGURATION SHALL BE BASED ON THE PUMP MANUFACTURER'S RECOMMENDATIONS, AND APPROVED BY THE CITY OF NAPLES UTILITY ENGINEER.



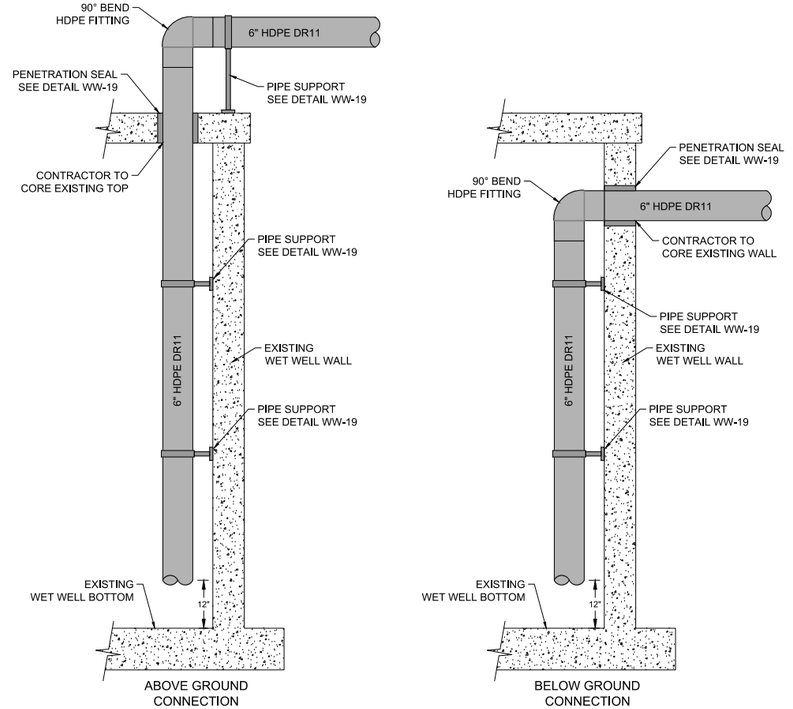
WET WELL VENT DETAIL (NTS)



STAINLESS STEEL WET WELL HDPE PIPE SUPPORT DETAIL (NTS)

FOR:	UTILITIES DEPARTMENT	CITY OF NAPLES
DATE: SEPT 2010	*Wastewater Pump Station*	SHEET: WW-19
DRAWN: DAG	*Pump Station Sub-Details*	DIR: WASTEWATER
SCALE: N.T.S.	380 RIVERSIDE CIRCLE, NAPLES, FLORIDA, 34102	DWG. WW-19.DWG

\\FTMS01\Drawings\2015\20150110-011\Utilities\Drawings\20150100-011_PP.dwg (CC Details) MNT Jan 10, 2020 - 8:18am



SUCTION PIPE DETAILS

NOT TO SCALE

JOHNSON ENGINEERING

JOHNSON ENGINEERING, INC.
2122 JOHNSON STREET
P.O. BOX 1550
FORT MYERS, FLORIDA 33902-1550
PHONE: (239) 334-0046
FAX: (239) 334-3661
E.B. #642 & L.B. #642

MARK WAYNE THOMAS
FL License No. 86464

Backup Diesel Pumps
Lift Station Improvements
City of Naples

REVISIONS

NO.	DESCRIPTION	DATE

DATE: JANUARY 10, 2020
PROJECT NO. 20150110-011
FILE NO. 14-50-25
SCALE: AS SHOWN

City of Naples Utility Details

SHEET NUMBER

12

GENERAL STRUCTURAL NOTES

GENERAL: DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE TYPICAL AND APPLY TO SIMILAR SITUATIONS ELSEWHERE, EXCEPT AS OTHERWISE INDICATED. ADAPT REQUIREMENTS OF DETAILS, SECTIONS, PLANS, AND NOTES AT LOCATIONS WHERE CONDITIONS ARE SIMILAR.

STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH JOB SPECIFICATIONS AND ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SITE DRAWINGS. CONSULT THESE DRAWINGS FOR SLEEVES, DEPRESSIONS, AND OTHER DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

CONTRACTOR SHALL LOCATE ALL BURIED UTILITIES PRIOR TO EXCAVATION FOR BUILDING FOUNDATIONS. THE STRUCTURAL ENGINEER SHALL BE NOTIFIED OF POTENTIAL CONFLICTS BETWEEN FOUNDATIONS AND BURIED UTILITIES.

CODE REQUIREMENTS: THE BUILDING STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2017 6th EDITION OF THE FLORIDA BUILDING CODE. FOLLOW ALL APPLICABLE PROVISIONS FOR ALL PHASES OF CONSTRUCTION. ADDITIONS ARE IN COMPLIANCE WITH THE 2017 EDITION OF THE FLORIDA EXISTING BUILDING CODE.

DESIGN CRITERIA: DESIGN WAS BASED ON STRENGTH AND DEFLECTION CRITERIA OF THE 2017 FLORIDA BUILDING CODE.

WIND SPEED	170 MPH	PER CHAPTER 26 ASCE 7-10
	132 MPH	NOMINAL
RISK CATEGORY	II	
EXPOSURE	C	
INTERNAL PRESSURE COEFF	+/- 0.18	ENCLOSED
WALL PRESSURE	+/- 60 PSF (170 MPH)	

FOUNDATIONS: FOUNDATION DESIGN IS BASED ON AN ASSUMED ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF FOR SILTY SAND AND GRAVELS. FOUNDATIONS SHALL BEAR ON COMPETENT NATIVE SOIL OR COMPACTED STRUCTURAL FILL. IF QUESTIONABLE SOILS OR POTENTIALLY UNSTABLE CONDITIONS ARE ENCOUNTERED, A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO INVESTIGATE AND PROVIDE RECOMMENDATIONS.

SUBMITTALS: SHOP DRAWINGS SHALL BE SUBMITTED TO THE ARCHITECT PRIOR TO FABRICATION AND CONSTRUCTION REGARDING ALL STRUCTURAL ITEMS INCLUDING THE FOLLOWING:

CONCRETE MIX DESIGNS,
CONCRETE AND MASONRY REINFORCING,

SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW WILL BE RETURNED UNCHECKED.

CONCRETE: REINFORCED CONCRETE CONSTRUCTION SHALL CONFORM TO THE FBC AND ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE". CONCRETE STRENGTHS SHALL BE VERIFIED BY STANDARD 28-DAY CYLINDER TESTS PER ASTM C39, AND SHALL BE AS FOLLOWS:

f'c	USE
3000 PSI	FOUNDATIONS/SLAB ON GRADE

CEMENT SHALL CONFORM TO ASTM C150, TYPE 1. FLY ASH CONFORMING TO ASTM C618, TYPE F OR TYPE C, MAY BE USED TO REPLACE UP TO 20% OF THE CEMENT CONTENT, PROVIDED THAT THE MIX STRENGTH IS SUBSTANTIATED BY TEST DATA. COARSE AGGREGATE SHALL CONFORM TO ASTM C33 WITH A MAXIMUM SIZE OF 3/4". FINE AGGREGATE SHALL BE CLEAN, DURABLE, NATURAL SAND CONFORMING TO ASTM C33.

A WATER-REDUCING ADMIXTURE, IF USED, SHALL CONFORM TO ASTM C494 AND USED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, SHALL BE INCORPORATED IN CONCRETE DESIGN MIXES. A HIGH-RANGE WATER-REDUCING ADMIXTURE CONFORMING TO ASTM C494, TYPE F OR G, MAY BE USED IN CONCRETE MIXES, PROVIDING THAT THE SLUMP DOES NOT EXCEED 8".

REINFORCING STEEL: REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, FOR DEFORMED BAR AND ASTM A185 FOR SMOOTH WELDED WIRE FABRIC (WWF), UNLESS OTHERWISE NOTED. REINFORCING STEEL TO BE WELDED SHALL CONFORM TO ASTM A706. REINFORCING STEEL SHALL BE SECURELY TIED IN PLACE WITH #16 ANNEALED IRON WIRE.

REQUIRED CONCRETE COVER FOR REINFORCING STEEL (UNLESS NOTED OTHERWISE):

FOOTINGS 3" BOTTOM AND SIDES, 2" TOP

SLABS ON GRADE: CHAIR WIRE FABRIC DURING CONCRETE PLACEMENT TO ENSURE PROPER POSITION IN SLAB. PROVIDE (1) #5 X 4'-0" DIAGONAL BARS AT SLAB RE-ENTRANT CORNERS.

FOR 8" THICK SLABS ON GRADE, PROVIDE 6X6 W2.9XW2.9 WELDED WIRE FABRIC PLACED 2" BELOW TOP OF SLAB OR 3 POUNDS PER CUBIC YARD OF MACRO SYNTHETIC FIBERS (FORTA FERRO OR EQUAL), UNLESS NOTED OTHERWISE.

MASONRY WALLS: MASONRY UNITS SHALL MEET ASTM C90, TYPE 2. ASSEMBLIES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF f'm= 1500. MORTAR SHALL BE TYPE "M" OR "S" AND MEET ASTM C270. GROUT SHALL BE 2000 PSI MINIMUM COMPRESSIVE STRENGTH AND MEET ASTM C476. GROUT SHALL CONSIST OF A MIXTURE OF CEMENTITIOUS MATERIALS AND AGGREGATE TO WHICH SUFFICIENT WATER HAS BEEN ADDED TO CAUSE THE MIXTURE TO FLOW WITHOUT SEGREGATION OF THE CONSTITUENTS. ALL CELLS CONTAINING VERTICAL BARS, BOND BEAMS, AND ALL CELLS BELOW GRADE SHALL BE FILLED WITH GROUT.

PROVIDE REINFORCING BARS AT CORNERS. PROVIDE HOOKED DOWELS INTO FOOTINGS AND STRUCTURE ABOVE AND/OR BELOW TO PROVIDE CONTINUITY. PROVIDE 9 GAGE GALVANIZED HORIZONTAL JOINT REINFORCING (DUR-O_WAL OR ENGINEER-APPROVED EQUAL) AT 16" O.C. REINFORCING LAPS TO BE 48 BAR DIAMETERS.

Shawn Anderson

Digitally signed by Shawn Anderson
DN: CN=Shawn Anderson, OU=A01410D0000016DC2C0894400000FF0, O=SELECT STRUCTURAL, C=US
Date: 2019.10.14 21:26:50-04'00'

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED USING A DIGITAL SIGNATURE.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHAWN R. ANDERSON LICENSE No 53515 STATE OF FLORIDA PROFESSIONAL ENGINEER

10/14/2019

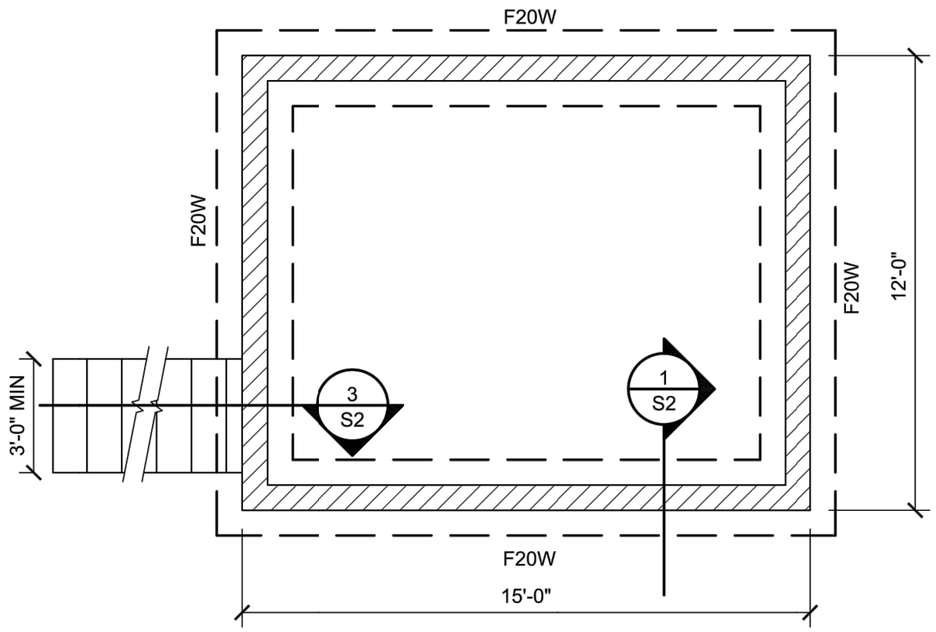
SELECT STRUCTURAL
12573 New Brittany Blvd
Fort Myers, Florida 33907
Phone: (239) 210-5090
Project No.: 19XXX
Certification Auth. 28357

SELECT STRUCTURAL

PROJECT: TYPICAL PUMP PLATFORM
COLLIER COUNTY, FLORIDA

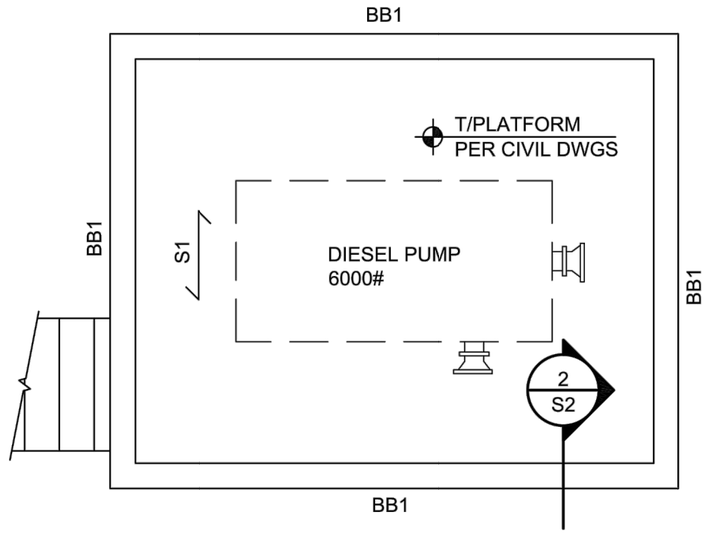
DATE: 10-04-19
SCALE: VARIES
DRAWN BY: MPM

S0



FOUNDATION PLAN

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



PLATFORM FRAMING PLAN

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

FOUNDATION PLAN NOTES:

1. SEE SHEET S0 FOR GENERAL STRUCTURAL NOTES.
2. VERIFY / COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH CIVIL DRAWINGS BEFORE COMMENCING CONSTRUCTION. SEE CIVIL DRAWINGS FOR ADDITIONAL DIMENSIONAL INFORMATION.
3. FX INDICATES FOOTING TYPE, SEE SCHEDULE ON THIS SHEET.
4. TOP OF FOOTING (-)1'-4" U.N.O.
5. ▨ INDICATES 8" CMU WALL W/ AT #5 AT 32" OC MAX AND AT CORNERS IN GROUT FILLED CELLS. REFER TO CIVIL DRAWINGS FOR REQUIRED PLATFORM ELEVATION AT EACH SITE. MAINTAIN BLOCK COURSING TO ACHIEVE REQUIRED HEIGHT.
6. CONTRACTOR TO COORDINATE LOCATION AND DIMENSION OF STAIRS WITH OWNER.
7. USE CLEAN STRUCTURAL FILL. PLACE IN UNIFORM LAYERS NOT GREATER THAN 9" IN LOOSE THICKNESS. THOROUGHLY COMPACT IN PLACE WITH SUITABLE MECHANICAL OR PNEUMATIC TOOLS TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY BY ASTM D 1557.

CONCRETE FOOTING SCHEDULE

MARK	SIZE	DEPTH	REINFORCING
F20W	2'-0" x CONT.	1'-0"	(3) #5 CONTINUOUS

PLATFORM FRAMING PLAN NOTES:

1. SEE SHEET S0 FOR GENERAL STRUCTURAL NOTES.
2. SEE CIVIL DRAWINGS FOR SLOPES AND DROPS.
3. VERIFY / COORDINATE ALL DIMENSIONS AND ELEVATIONS WITH CIVIL DRAWINGS BEFORE COMMENCING CONSTRUCTION.
4. S1 INDICATES SPAN DIRECTION OF 8" SLAB ON FILL W/ 6X6 W2.9xW2.9 W.W.F. OR FIBERMESH. REFER TO CIVIL DRAWINGS FOR REQUIRED ELEVATION AT EACH SITE.

BEAM SCHEDULE

TYPE MARK	WIDTH	DEPTH	REINFORCING		
			TOP	MID	BOT
BB1	8"	8"	(2) #5	-	-

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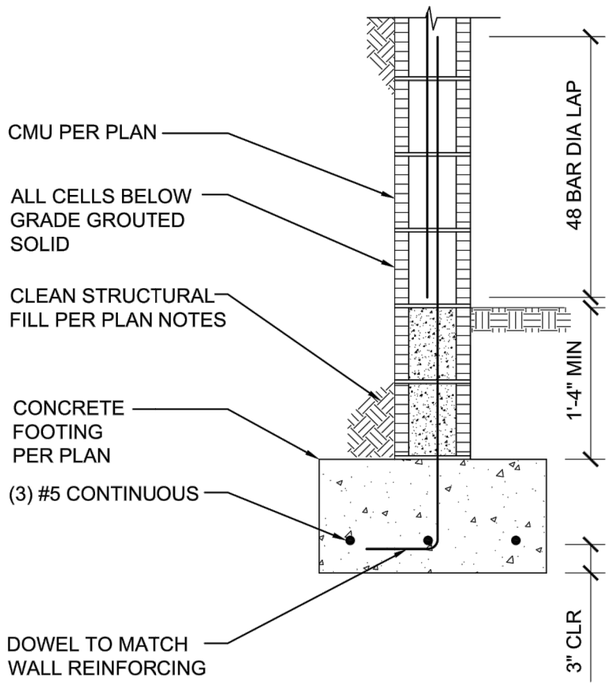
SELECT STRUCTURAL

PROJECT:

TYPICAL PUMP PLATFORM
COLLIER COUNTY, FLORIDA

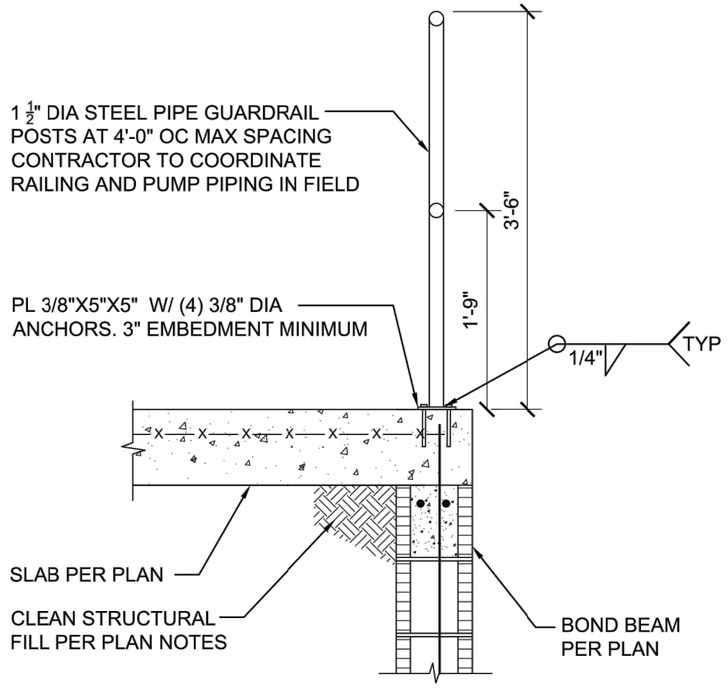
DATE: 10-04-19
SCALE: VARIES
DRAWN BY: MPM

S1



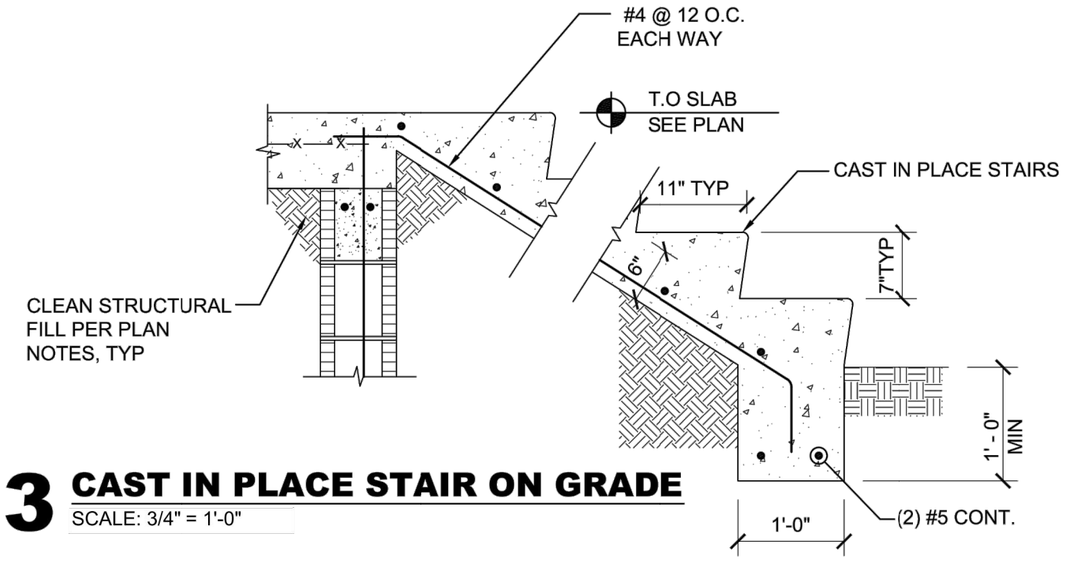
1 CMU FOUNDATION DETAIL

SCALE: 3/4" = 1'-0"



2 SLAB AT BOND BEAM

SCALE: 3/4" = 1'-0"



3 CAST IN PLACE STAIR ON GRADE

SCALE: 3/4" = 1'-0"

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SELECT STRUCTURAL

PROJECT:

TYPICAL PUMP PLATFORM
COLLIER COUNTY, FLORIDA

DATE: 10-04-19

SCALE: VARIES

DRAWN BY: MPM

S2