

# 2015 WATER SYSTEM IMPROVEMENTS CRITTENDEN \ LIVINGSTON COUNTY WATER DISTRICT

## 400,000 GALLON ELEVATED WATER STORAGE TANK



### BOARD MEMBERS

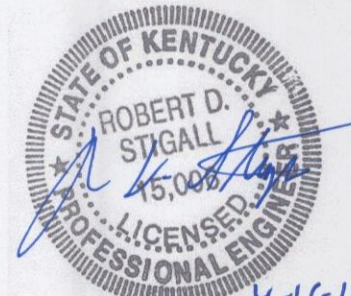
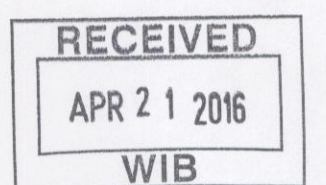
Randell O'Bryan, Chairman  
Ronnie Slayden, Superintendent  
Bill Barrett, Secretary/Treasurer  
Larry Barnes, Commissioner  
Stephen Hill, Commissioner  
Alan Hunt, Commissioner  
Joseph Kaiser, Commissioner

## *STIGALL ENGINEERING ASSOCIATES, INC.* *CONSULTING ENGINEERS*

4117 HILLSBORO PIKE - SUITE 206  
NASHVILLE, TENNESSEE 37215

# OCTOBER 2015

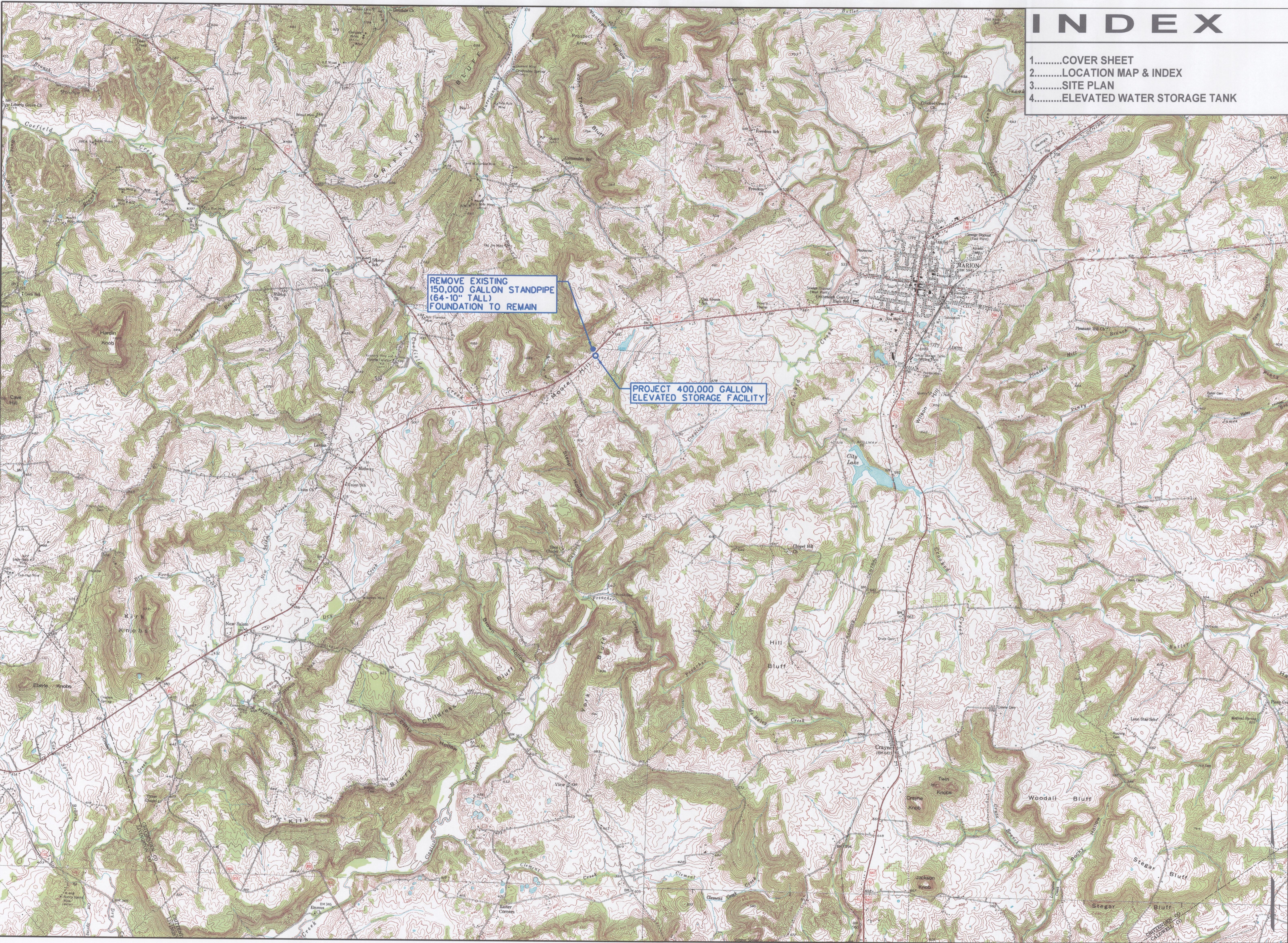
2727APE 20150003



4-15-16  
PROJECT NO. 0650

# INDEX

- 1.....COVER SHEET
- 2.....LOCATION MAP & INDEX
- 3.....SITE PLAN
- 4.....ELEVATED WATER STORAGE TANK



**STIGALL ENGINEERING ASSOCIATES, INC.**

4117 HALLBORO PIKE, SUITE 209  
NASHVILLE, TENNESSEE 37215

TELEPHONE: (615) 465-7515  
FACSIMILE: (615) 465-7517

NO.	DATE	BY	DESCRIPTION	REVISIONS

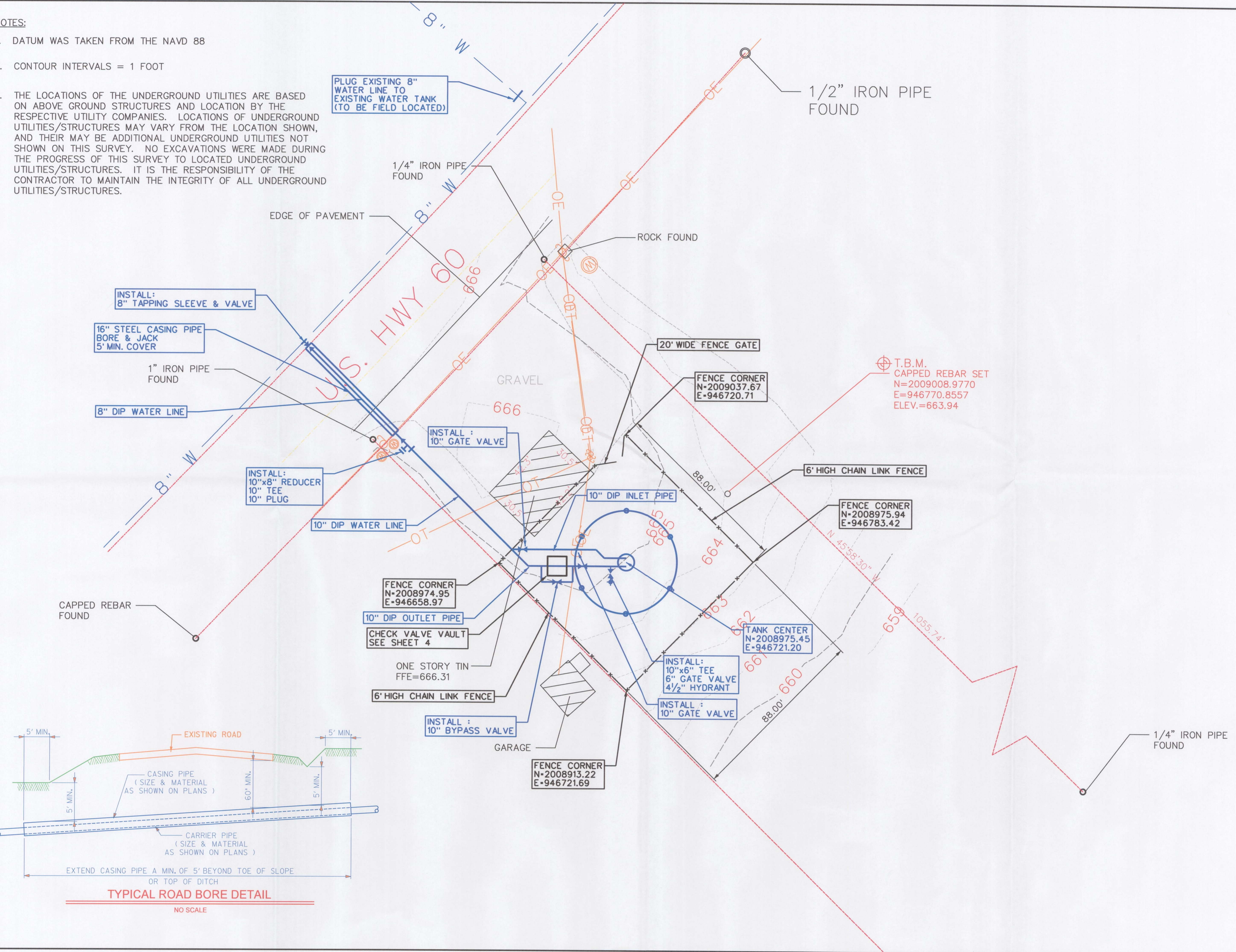


**2015 WATER SYSTEM IMPROVEMENTS  
CRITTENDEN/LIVINGSTON WATER DIST.  
400,000 GALLON ELEVATED WATER STORAGE TANK  
LOCATION MAP & INDEX**

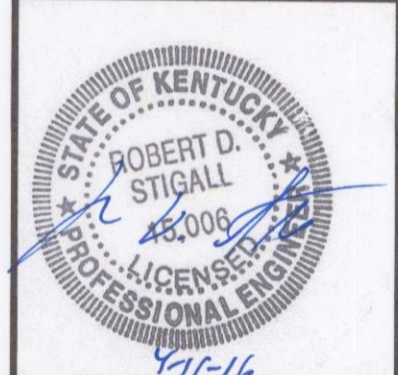
DESIGNED:	RDS
DRAWN:	RLP
CHECKED:	RDS
APPROVED:	RDS
DATE:	OCTOBER 2015
SCALE:	1" = 2000'
SHEET NO.:	<b>2 of 5</b>
SEA PROJECT NO.:	0650

**NOTES:**

1. DATUM WAS TAKEN FROM THE NAVD 88
2. CONTOUR INTERVALS = 1 FOOT
3. THE LOCATIONS OF THE UNDERGROUND UTILITIES ARE BASED ON ABOVE GROUND STRUCTURES AND LOCATION BY THE RESPECTIVE UTILITY COMPANIES. LOCATIONS OF UNDERGROUND UTILITIES/STRUCTURES MAY VARY FROM THE LOCATION SHOWN, AND THEIR MAY BE ADDITIONAL UNDERGROUND UTILITIES NOT SHOWN ON THIS SURVEY. NO EXCAVATIONS WERE MADE DURING THE PROGRESS OF THIS SURVEY TO LOCATED UNDERGROUND UTILITIES/STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE INTEGRITY OF ALL UNDERGROUND UTILITIES/STRUCTURES.



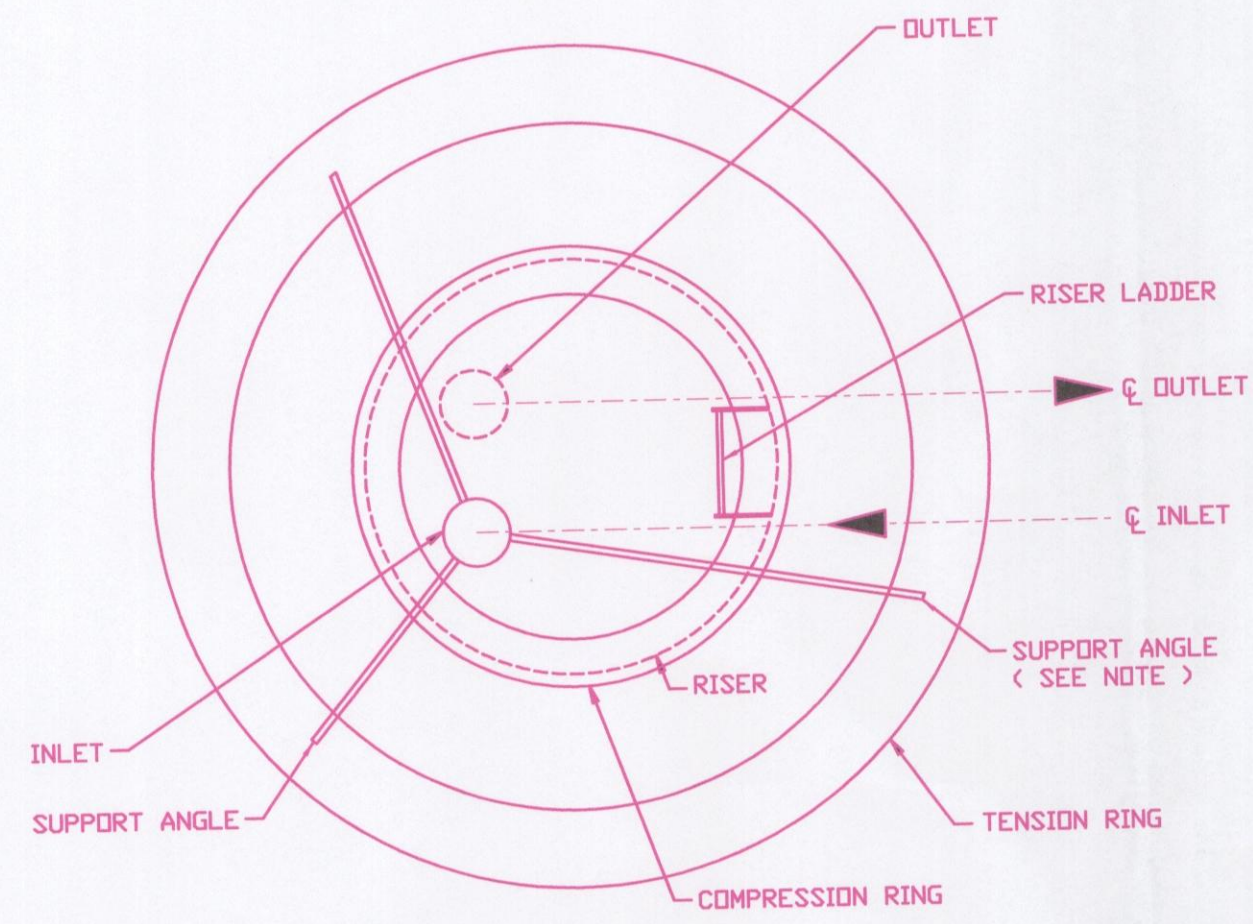
NO.	DESCRIPTION	DATE	BY



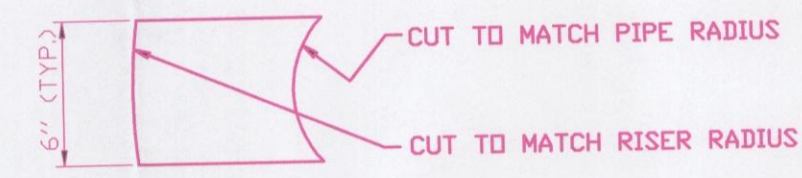
**2015 WATER SYSTEM IMPROVEMENTS  
 CRITTENDEN/LIVINGSTON WATER DIST.  
 400,000 GALLON ELEVATED WATER STORAGE TANK  
 SITE PLAN**

DESIGNED:	RDS
DRAWN:	RLP
CHECKED:	RDS
APPROVED:	RDS
DATE:	OCTOBER 2015
SCALE:	1" = 20'
SHEET NO.:	3 of 5
SEA PROJECT NO.:	0650

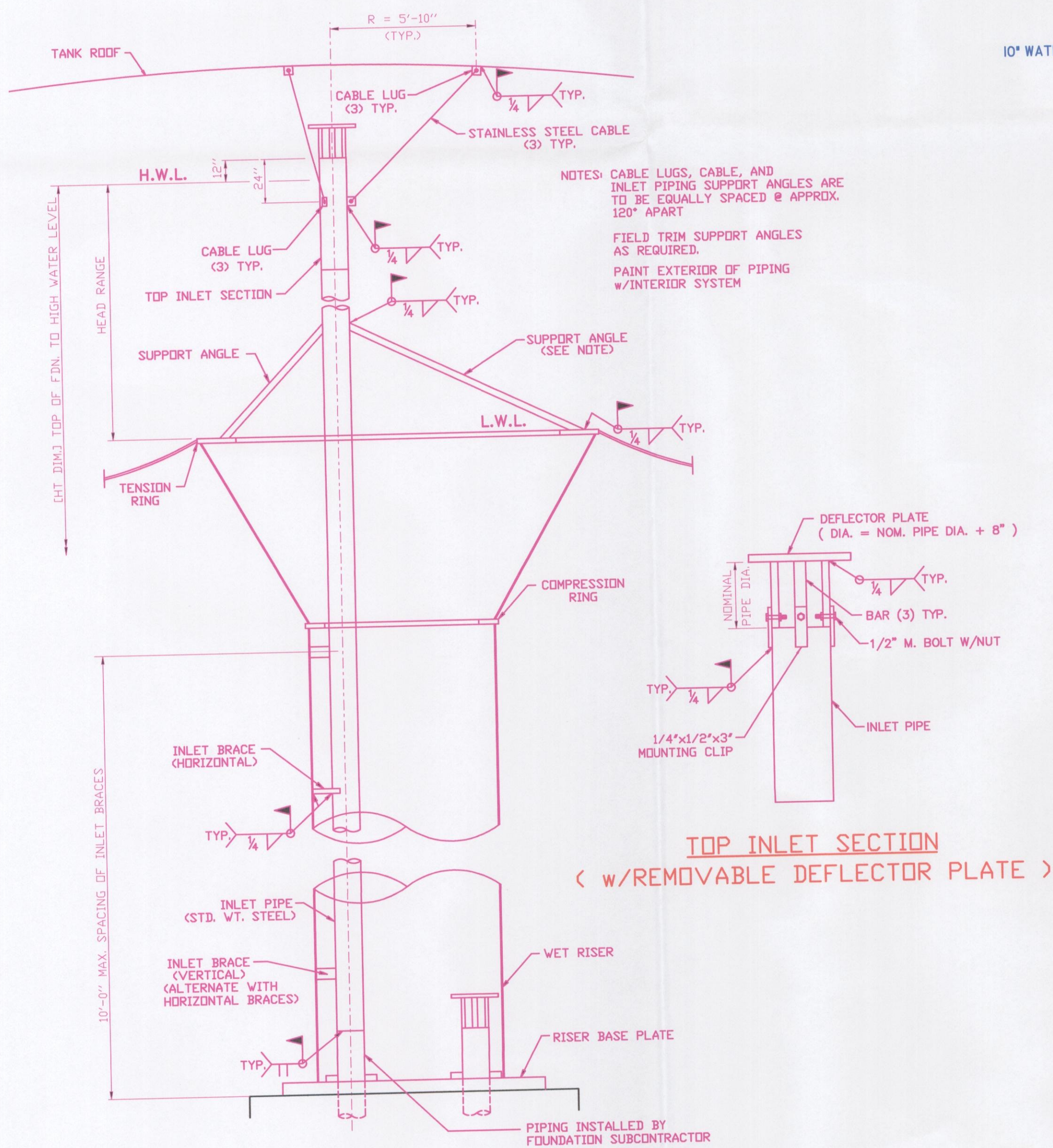
INLET PIPE DISCHARGE MAY BE ABOVE OR BELOW H.W.L. AS REQUIRED.



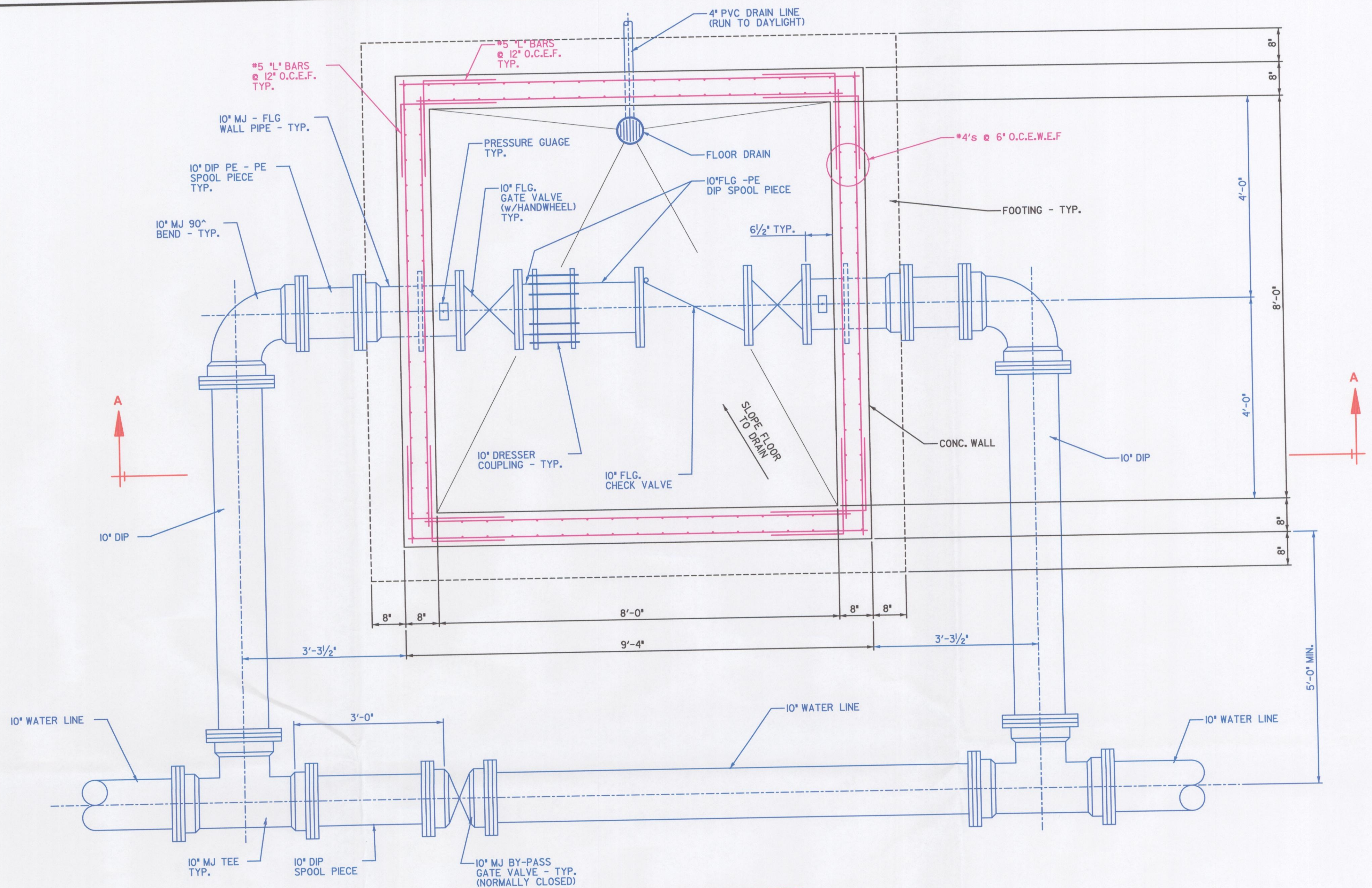
PLAN VIEW



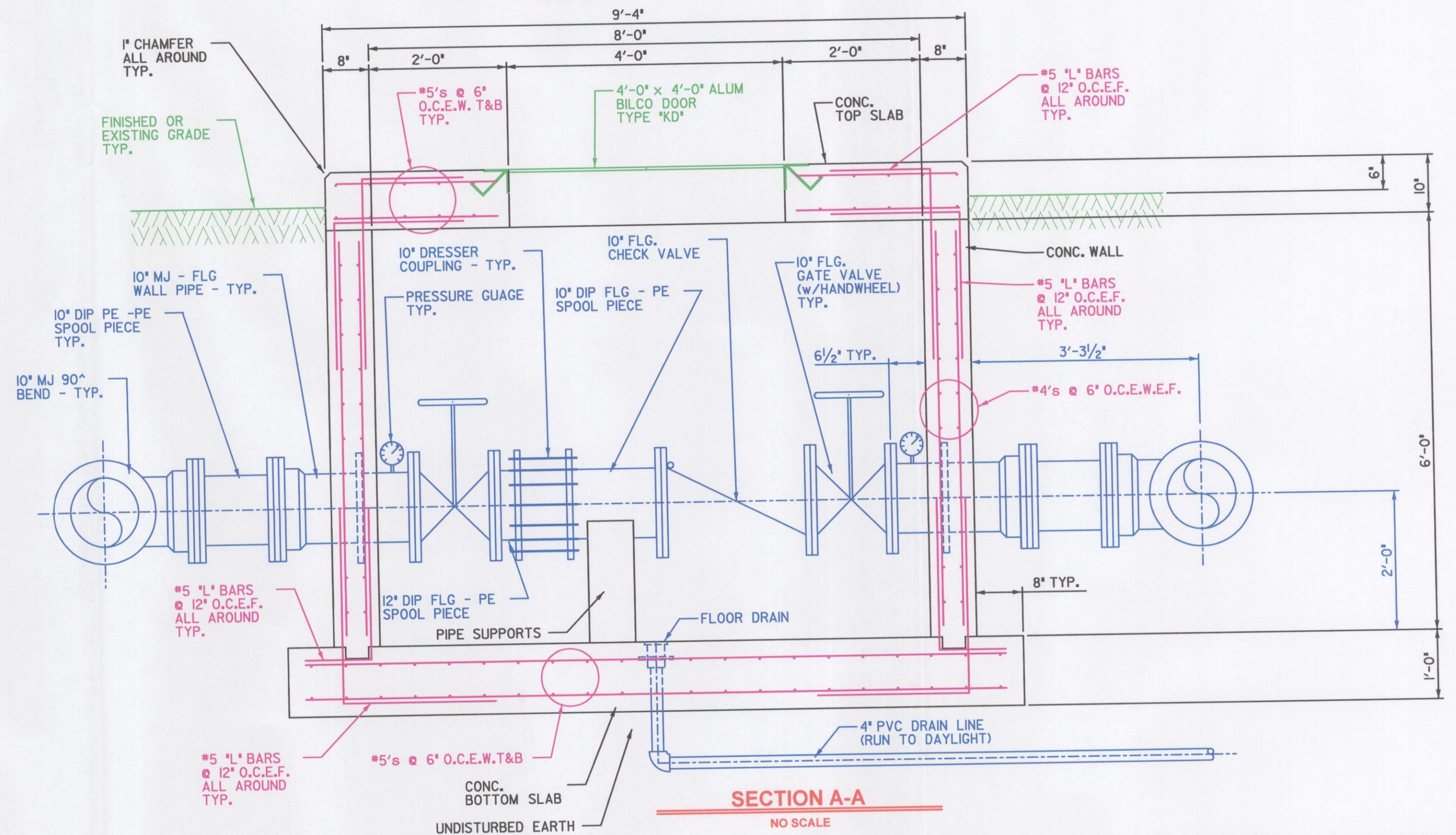
PIPE BRACE (HORIZONTAL)



TOP INLET SECTION  
(w/REMOVABLE DEFLECTOR PLATE)



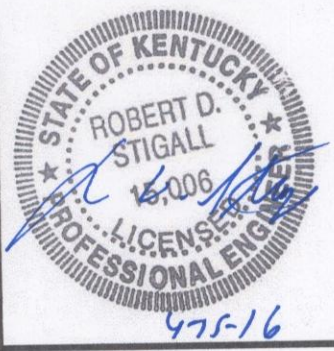
10" CHECK VALVE VAULT  
NO SCALE



SECTION A-A  
NO SCALE

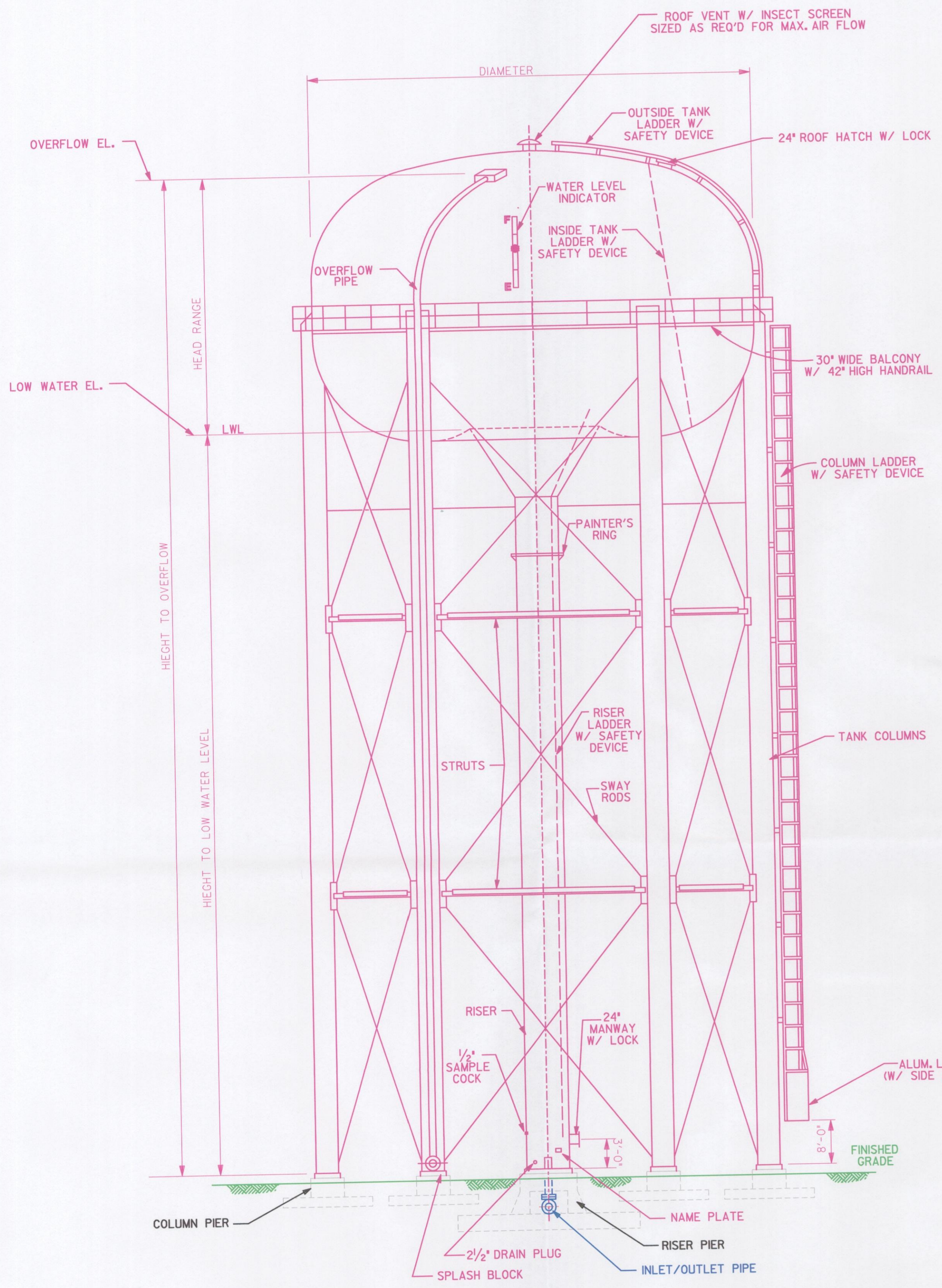


NO.	DATE	DESCRIPTION	REVISIONS



2015 WATER SYSTEM IMPROVEMENTS  
CRITTENDEN/LIVINGSTON WATER DIST.  
400,000 GALLON ELEVATED WATER STORAGE TANK  
TANK DETAILS

DESIGNED	RDS
DRAWN	RLP
CHECKED	RDS
APPROVED	RDS
DATE	APRIL 2016
SCALE	AS SHOWN
SHEET NO.	4 of 5
SEA PROJECT NO.	0650

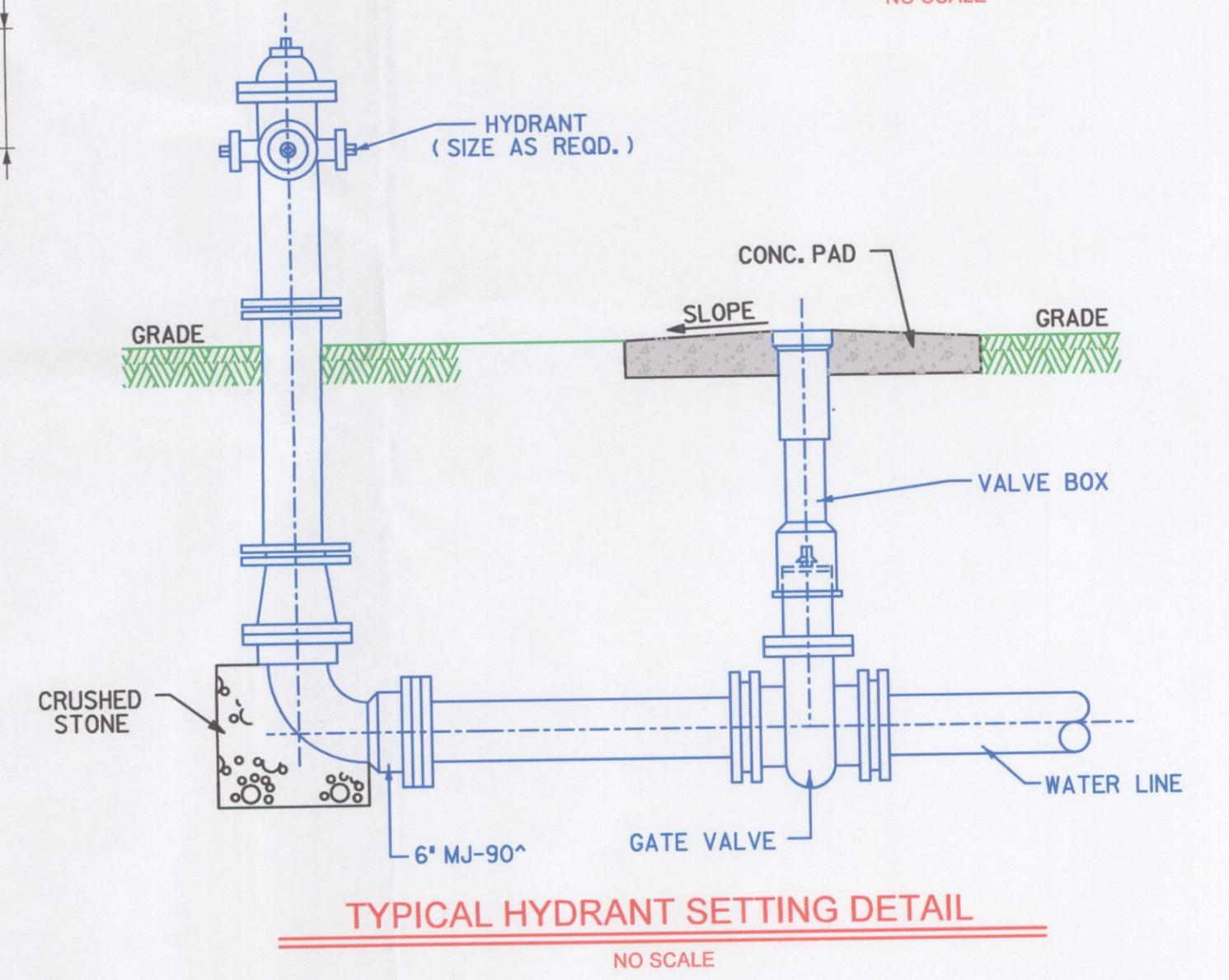
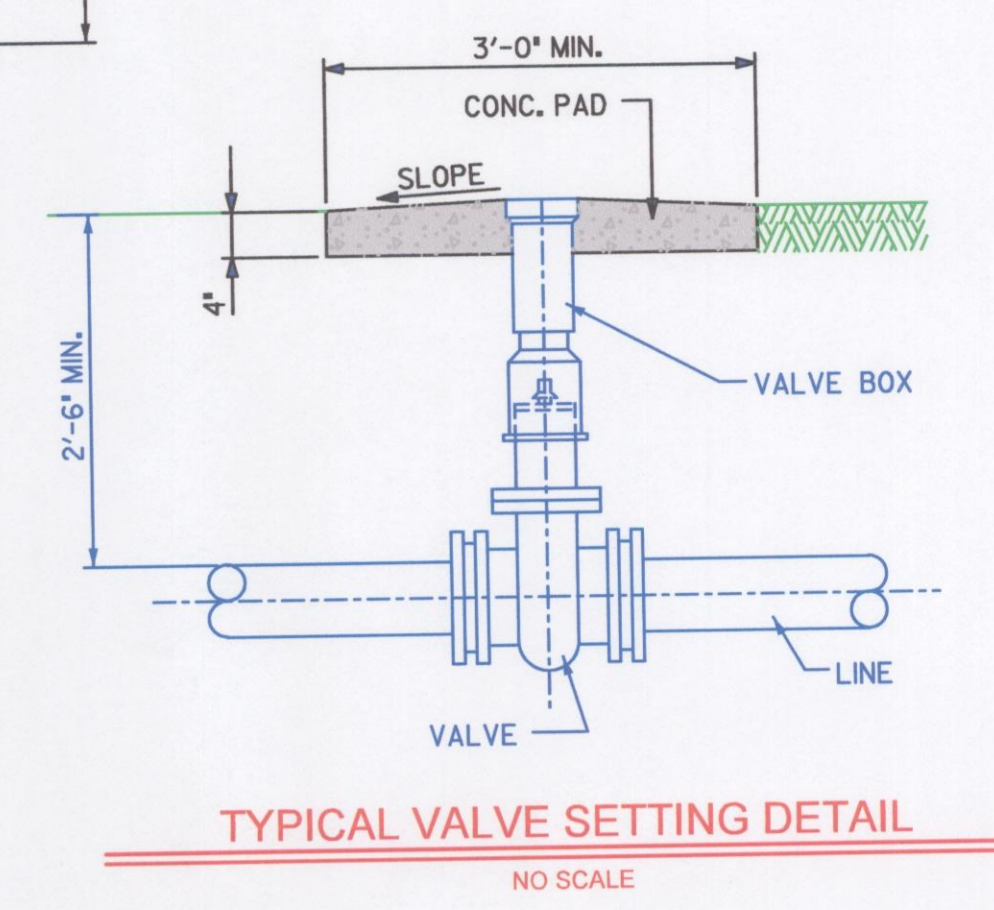
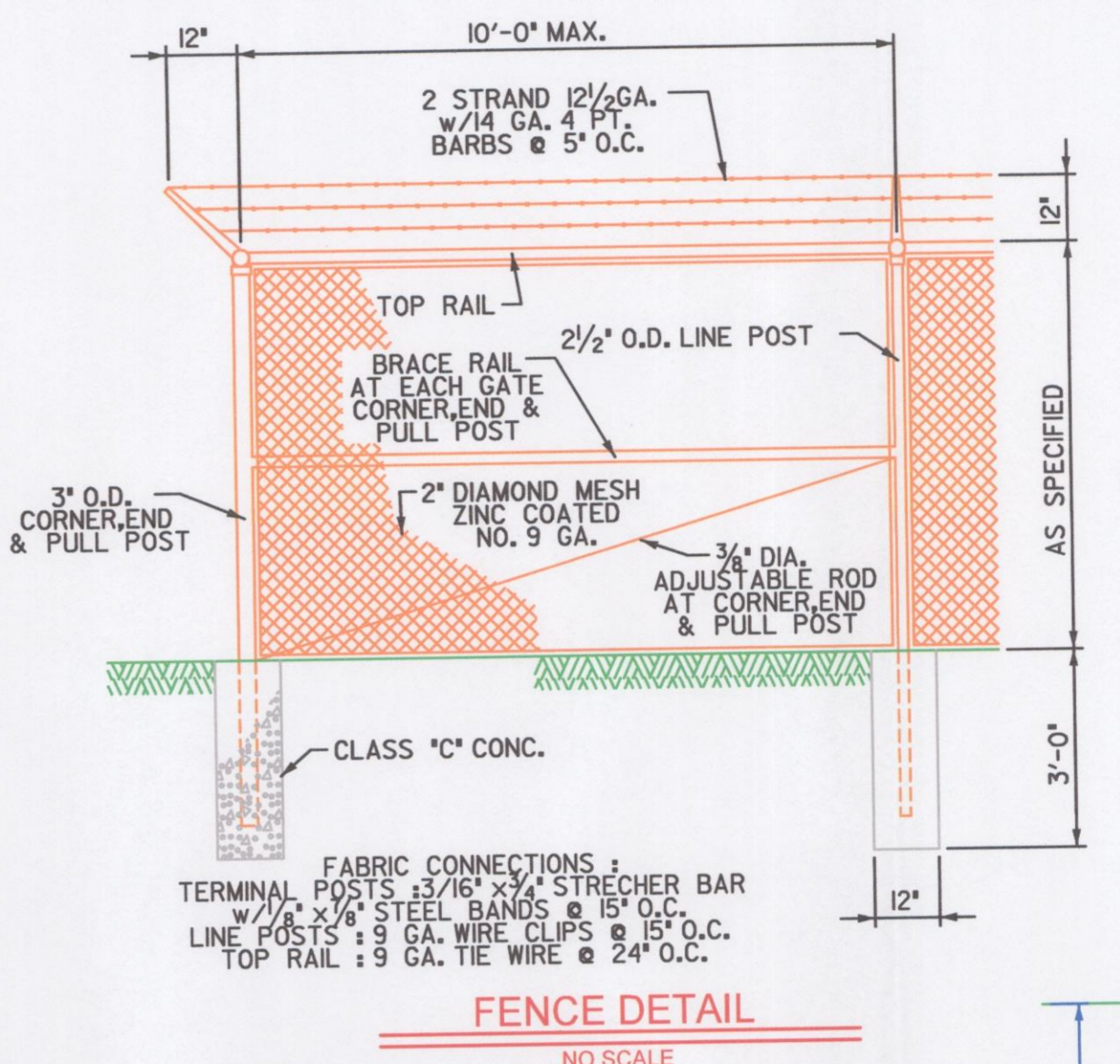
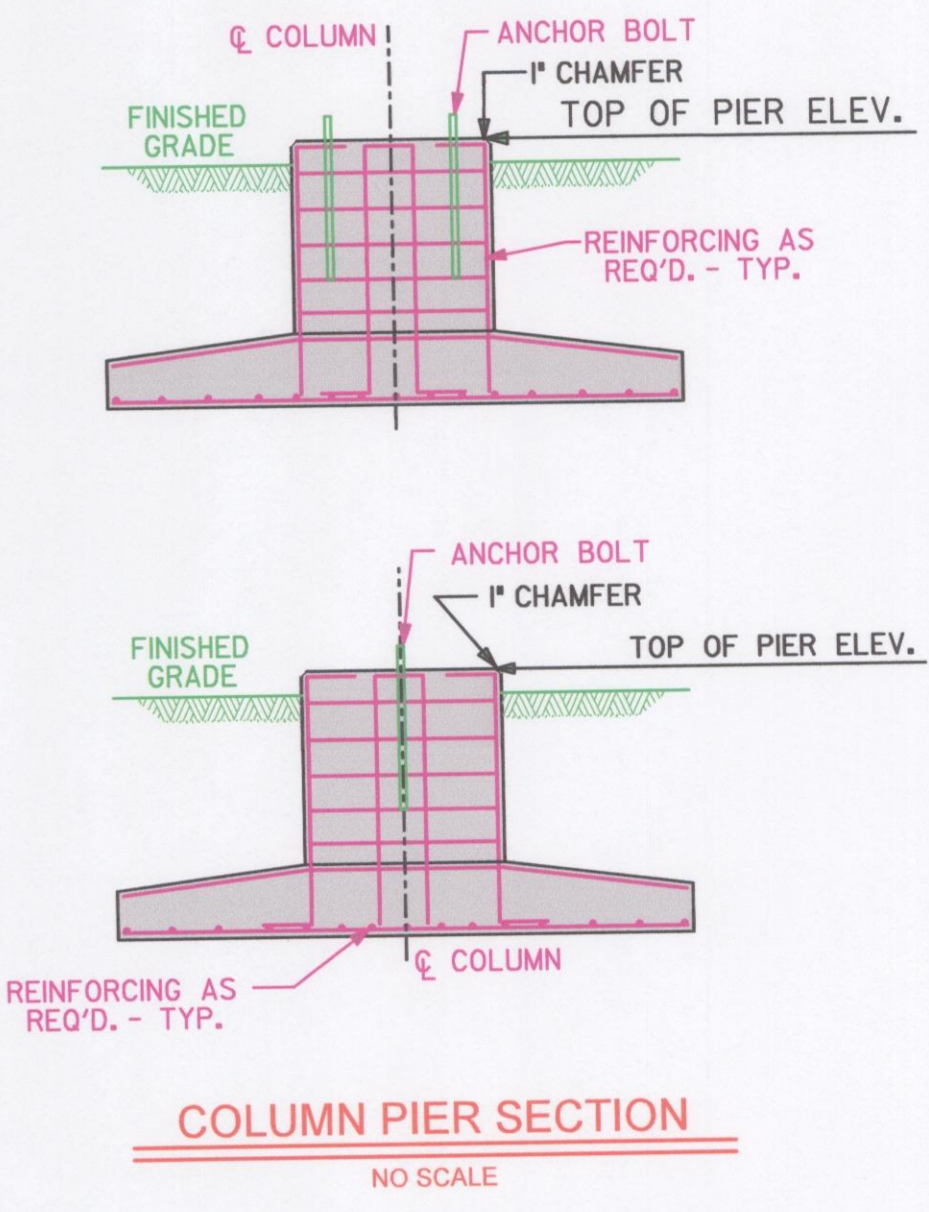
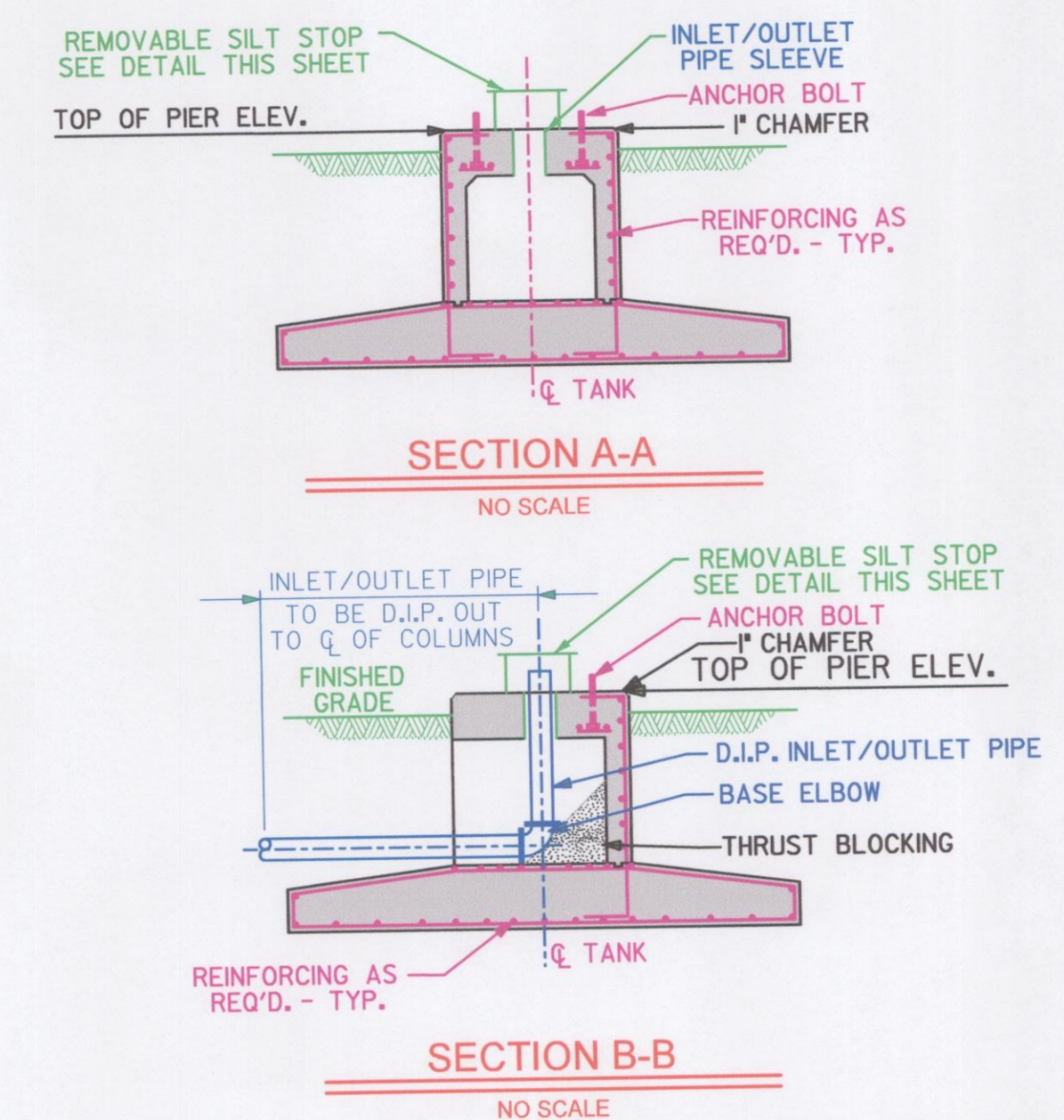
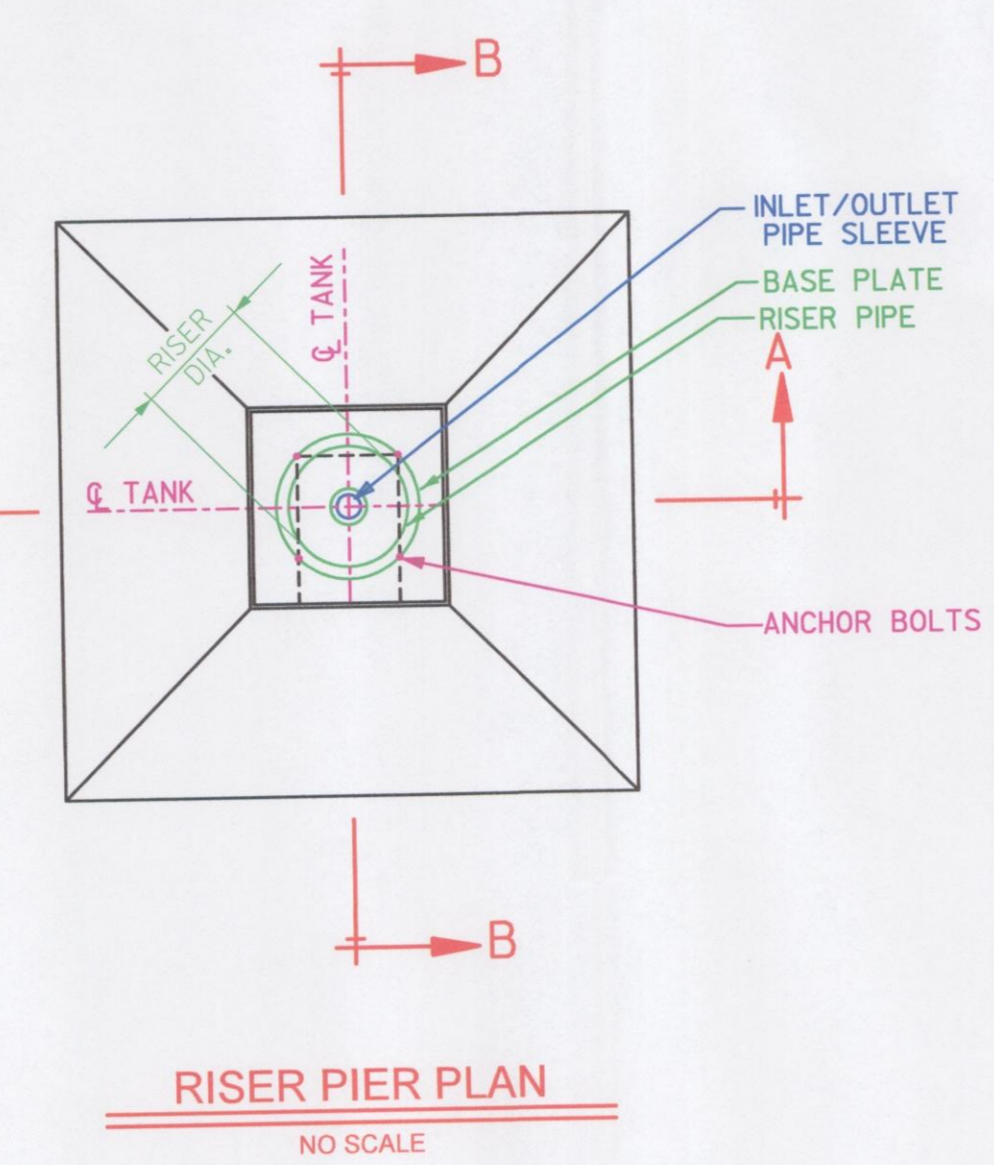
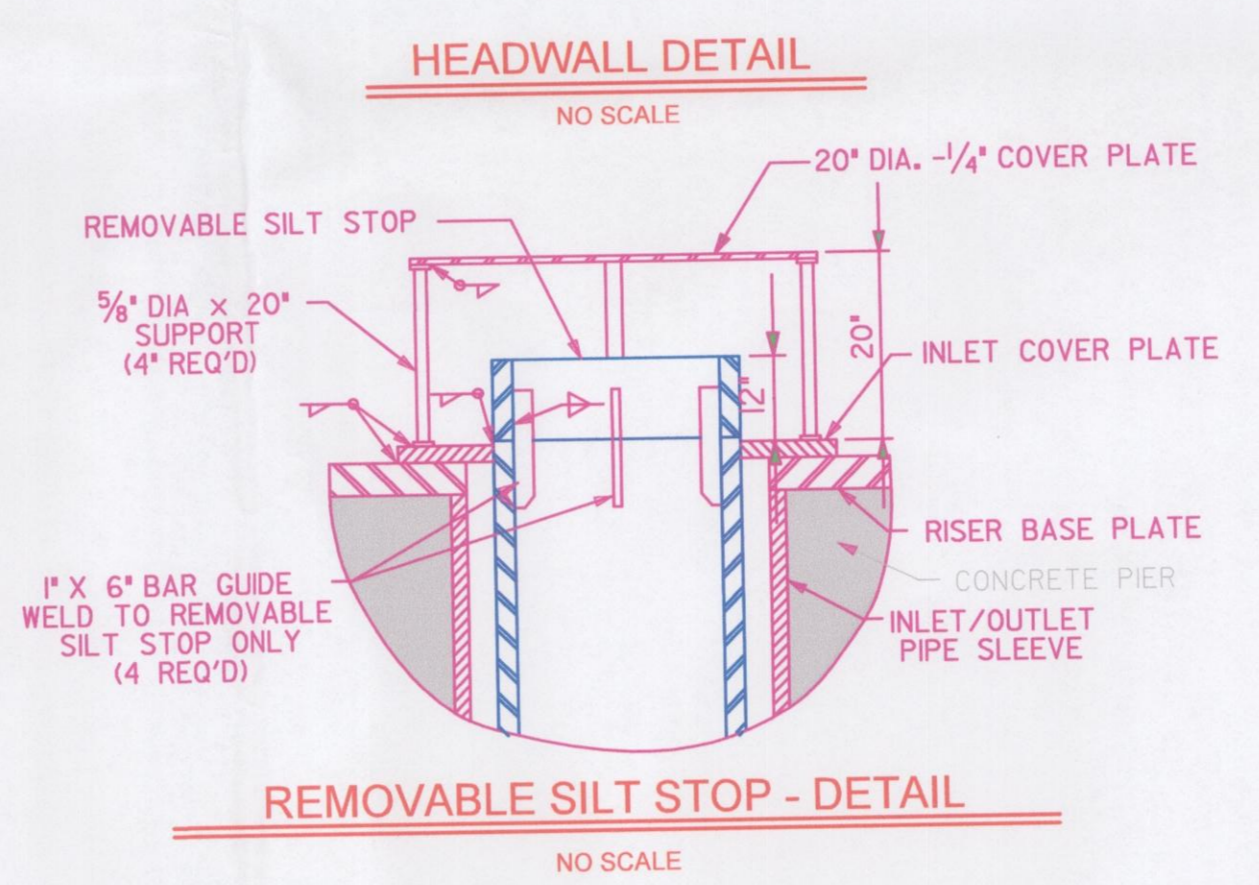
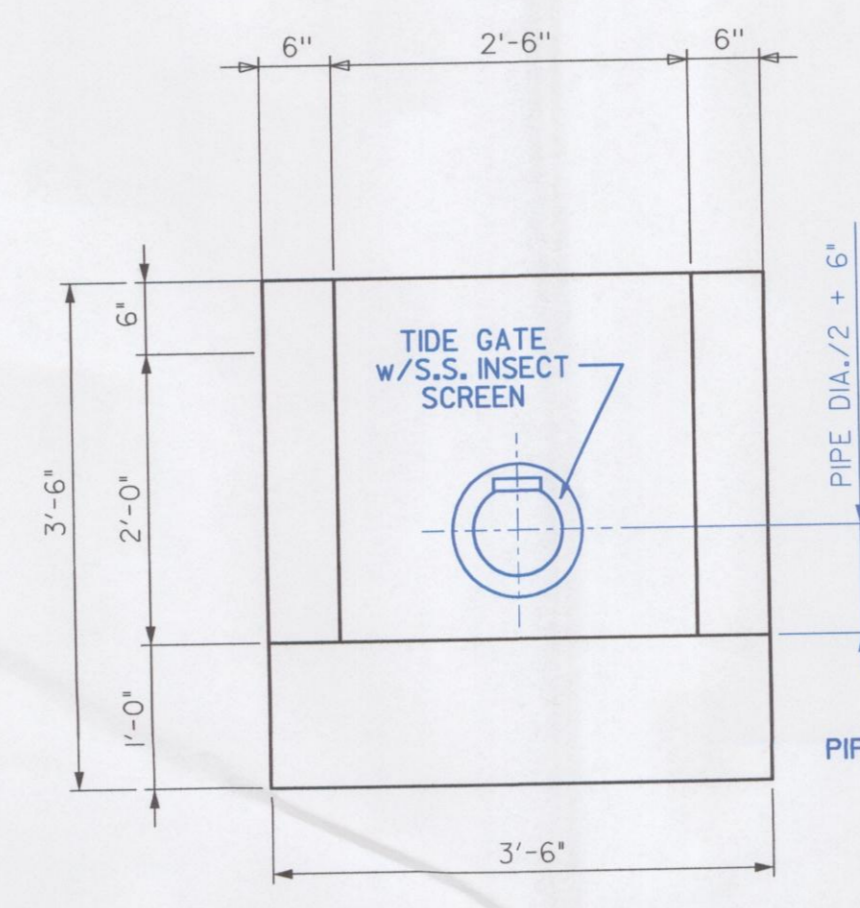
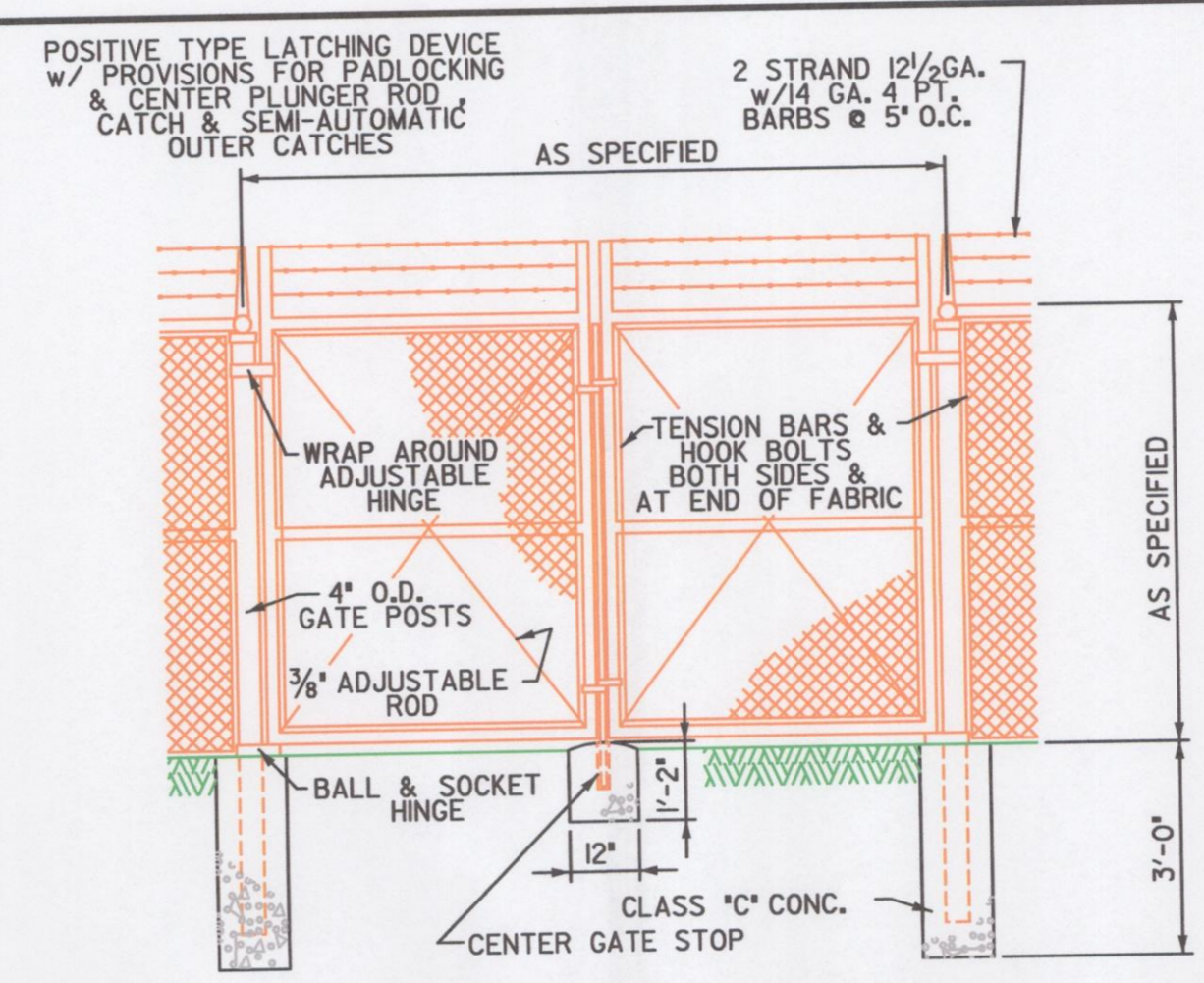


**ELEVATED TANK ELEVATION**  
NO SCALE

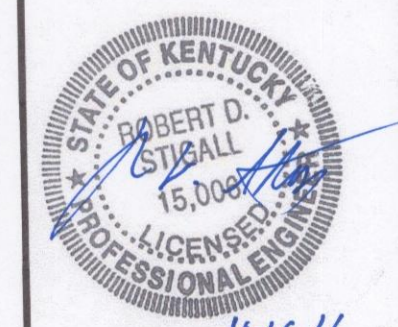
TANK DATA	
SIZE OF TANK (GALLONS)	400,000
OVERFLOW ELEVATION	745.50
LOW WATER ELEVATION (LWL)	714.83
TOP OF PIER ELEVATION	865.50
HEIGHT TO OVERFLOW	80.0'
HEIGHT TO LOW WATER LEVEL	49.33'
DIAMETER	50.0'
HEAD RANGE	30.67'
OVERFLOW PIPE SIZE	8"
ROOF VENT SIZED FOR	SEE SPECS
SEISMIC ZONE	SEE SPECS
SNOW LOAD	SEE SPECS
WIND LOAD	SEE SPECS
SOIL BEARING CAPACITY	SEE SPECS
INLET/OUTLET PIPE SLEEVE	12"
INLET/OUTLET PIPE SIZE	10"
FINISHED GRADE ELEVATION	VARIES
NO. OF COLUMN PIERS	PER MANUF.

**GENERAL NOTES**

- 1.) ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF AWWA D-100 AND ALL FEDERAL, STATE & LOCAL CODES.
- 2.) THE TANK AND FOUNDATIONS DRAWINGS SUBMITTED BY MANUFACTURER SHALL BE STAMPED BY A LICENCED ENGINEER FROM THE STATE IN WHICH THE TANK IS TO BE BUILT.
- 3.) THE FOUNDATION SHALL BE DESIGNED FOR THE SOIL BEARING CAPACITY AS DETERMINED BY THE INDEPENDENT SOIL REPORT. (SEE SPEC.)
- 4.) ALL LOCKS FOR FENCE GATE, LADDER GATES, MANWAYS, ETC. TO BE KEYPED ALIKE.
- 5.) SEE SPEC'S FOR FURTHER REQUIREMENTS.
- 6.) THE CONTRACTOR SHALL MEET WITH THE OWNER AND PERFORM AN 11th MONTH INSPECTION TO CORRECT ANY DEFECTS BEFORE EXPIRATION OF 1 YEAR WARRANTY.



NO.	DESCRIPTION	DATE	BY



2015 WATER SYSTEM IMPROVEMENTS  
CRITTENDEN/LIVINGSTON WATER DIST.  
400,000 GALLON ELEVATED WATER STORAGE TANK  
ELEVATED WATER STORAGE TANK

DESIGNED	RDS
DRAWN	RLP
CHECKED	RDS
APPROVED	RDS
DATE	OCTOBER 2015
SCALE	AS SHOWN
SHEET NO.	5 of 5
SEA PROJECT NO.	0650