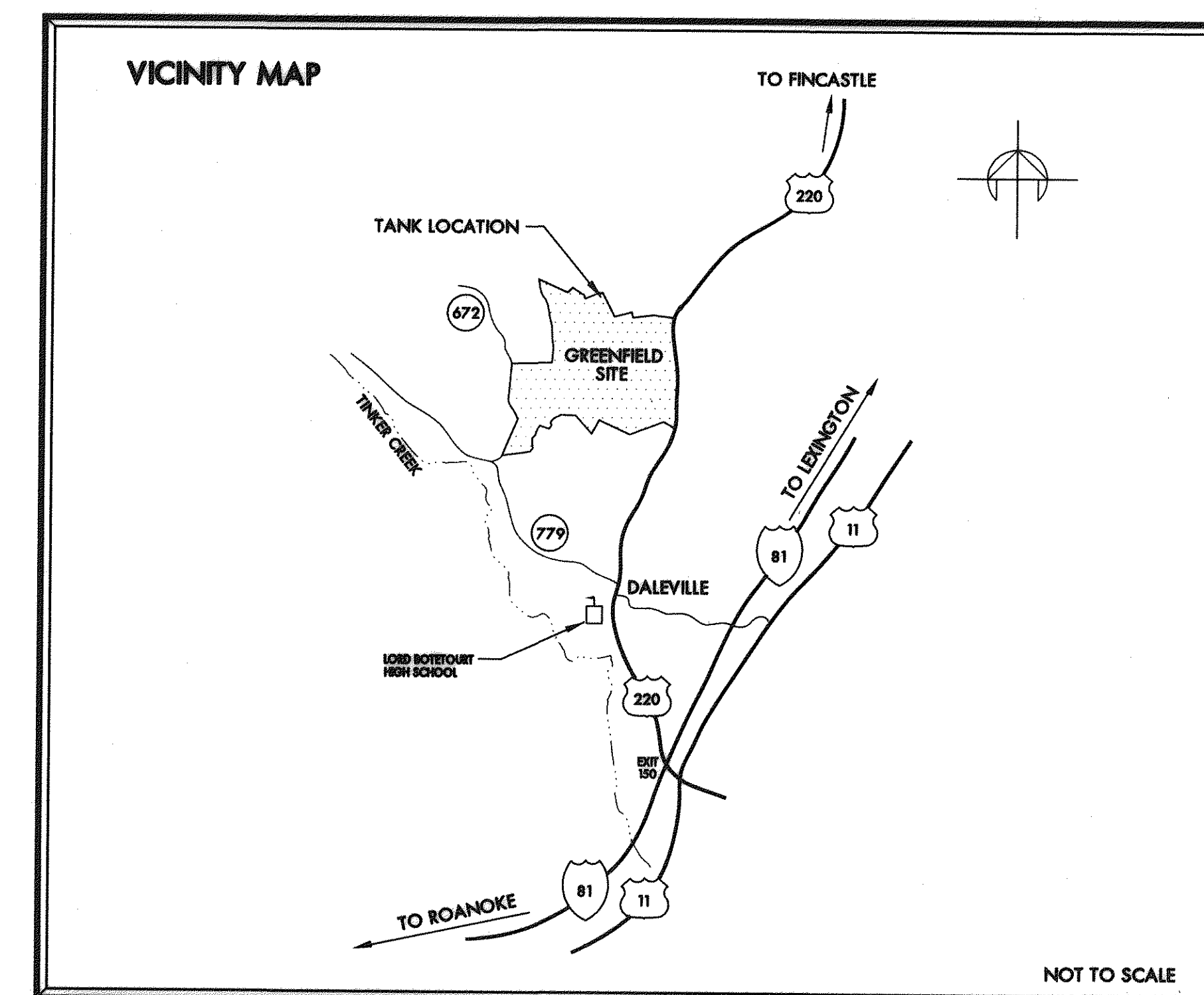
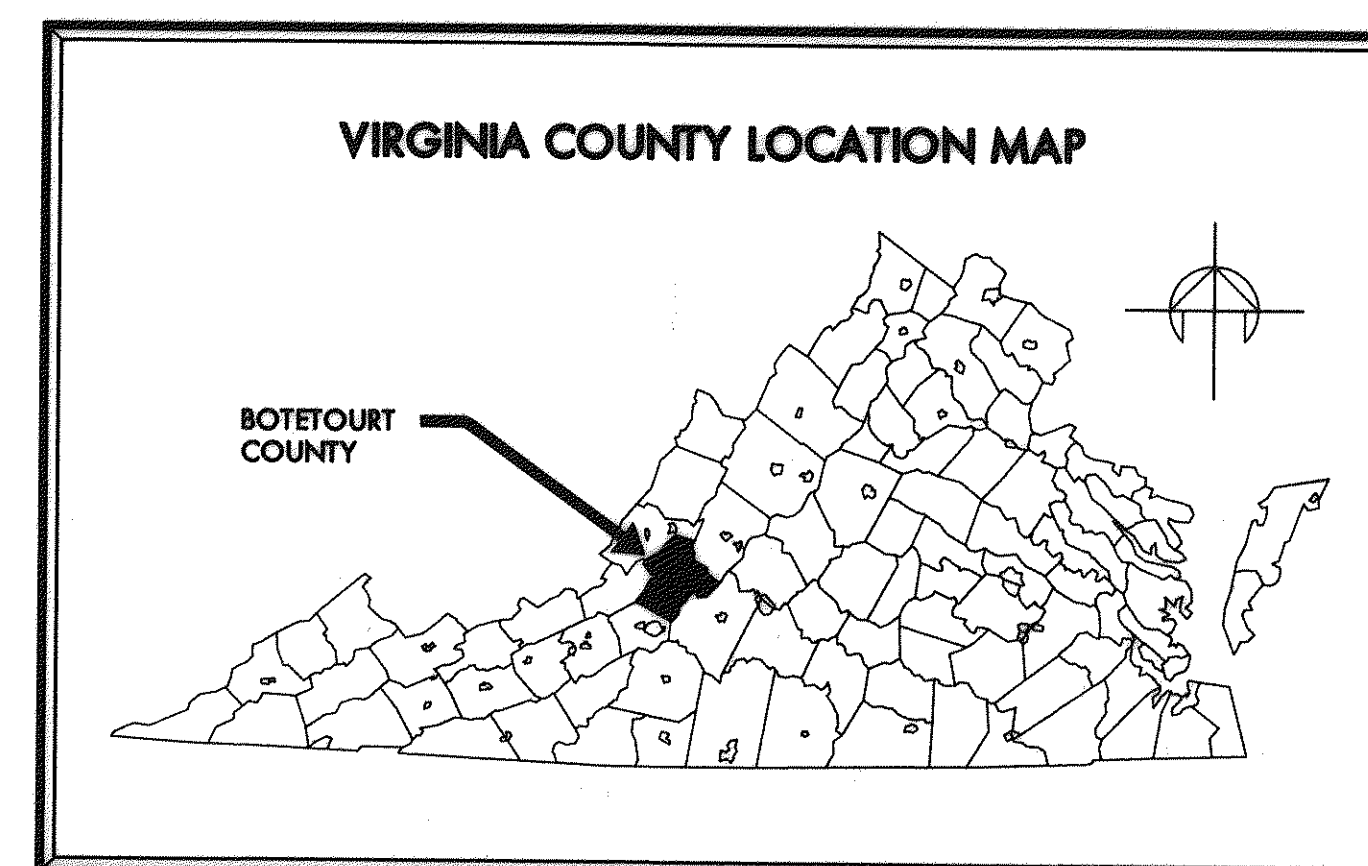


# GREENFIELD WATER TANK

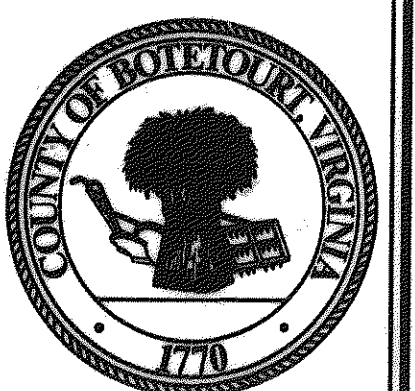
## BOTETOURT COUNTY PUBLIC FACILITIES AND PROGRAMS

### BOTETOURT COUNTY, VIRGINIA NOVEMBER, 1997

PROJECT NAME: GREENFIELD WATER TANK  
 DATE: April 6, 2000  
 TYPE: AS-BUILT  
 LOCATION: Greenfield  
 TOTAL # SHEETS: 4  
 AE FIRM: ECI  
 # OF SETS: 1



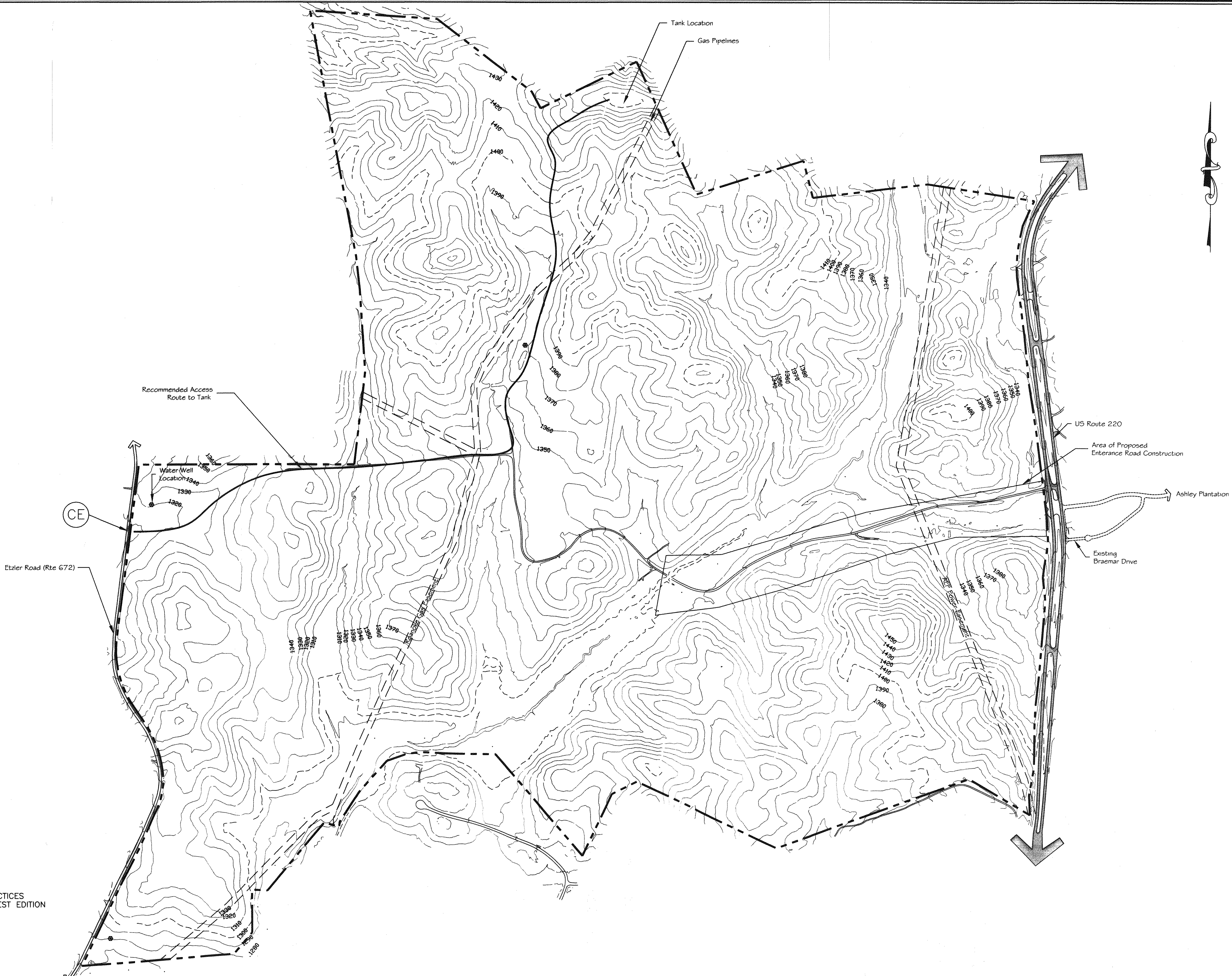
AS-BUILT  
APRIL 6, 2000



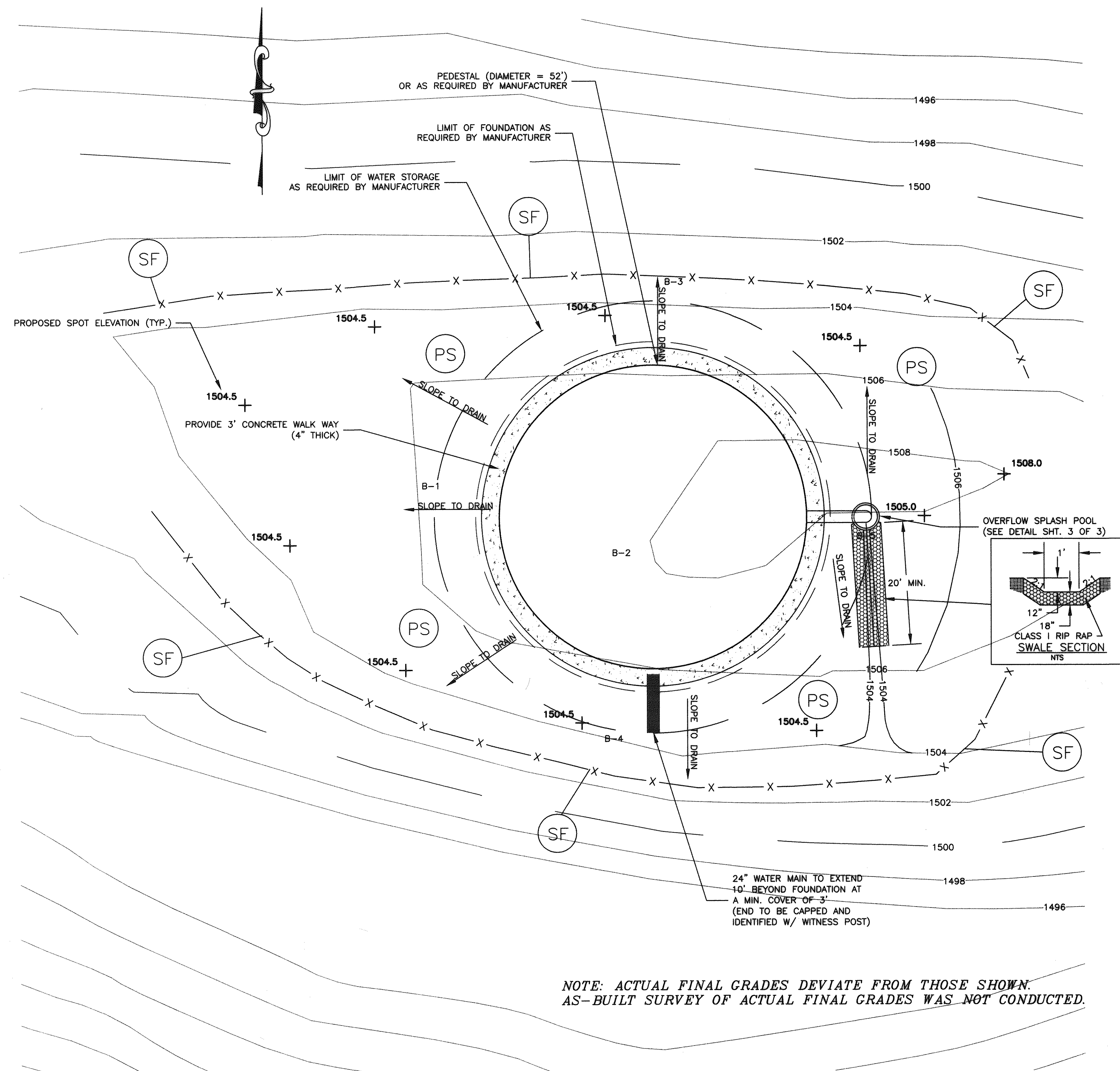


# GENERAL NOTES

1. INFORMATION ON THESE DRAWINGS CONCERNING THE LOCATION AND ELEVATION OF EXISTING UTILITIES, STRUCTURES, AND OBSTRUCTIONS HAS BEEN PREPARED FROM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THE ACCURACY AND COMPLETENESS OF THIS INFORMATION ARE NOT GUARANTEED, HOWEVER, NOR DOES THE ENGINEER ACCEPT ANY RESPONSIBILITY WHATSOEVER FOR DEVIATIONS OF THE EXISTING UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTIONS FROM THE LOCATIONS AND ELEVATIONS INDICATED OR FOR THE EXISTENCE OF UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTIONS NOT INDICATED ON THESE DRAWINGS.
2. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO ELIMINATE ANY POSSIBILITY OF ANY DISTURBANCE OF OR DAMAGE TO PUBLIC AND PRIVATELY-OWNED UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTION RESULTING FROM HIS ACTIVITIES. TO THIS END, CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, TAKE ALL MEASURES NECESSARY TO PROVIDE, AND SHALL BE SOLELY RESPONSIBLE FOR, TEMPORARY SUPPORT AND SHORING, ADEQUATE PROTECTION, AND MAINTENANCE OF CONTINUOUS OPERATION OF ALL UNDERGROUND AND ABOVEGROUND WATER, SEWER, AND GAS MAINS AND SERVICE LINES; PETROLEUM LINES; TELEPHONE, TELEVISION, AND ELECTRICAL LINES; CABLES; AND POLES; EQUIPMENT CABLES AND CONDUITS; STORM SEWERS; BUILDINGS; TANKS; FENCES; AND ALL OTHER UTILITIES, STRUCTURES, FACILITIES, AND OBSTRUCTIONS, WHETHER OR NOT INDICATED ON THESE DRAWINGS. ALL DISTURBED OR DAMAGED UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTIONS SHALL BE IMMEDIATELY REPAIRED, REPLACED, OR COMPENSATED FOR BY THE CONTRACTOR TO OWNER'S SATISFACTION, AND AT NO ADDITIONAL COST TO THE OWNER.
3. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR THE CHARACTER AND ACTUAL LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES, STRUCTURES, OTHER FACILITIES, AND OBSTRUCTIONS WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, CONTACT THE OWNERS/OPERATORS OF ALL UTILITIES AND ARRANGE FOR THE VERIFICATION AND MARKING OF UTILITY LOCATIONS BY SAID OWNERS/OPERATORS. THE CONTRACTOR SHALL ASSIST THE UTILITY OWNERS/OPERATORS BY EVERY MEANS POSSIBLE TO DETERMINE THE LOCATION OF UTILITIES. THE CONTRACTOR SHALL BEAR SOLE RESPONSIBILITY FOR ALL DISTURBANCE OF ANY DAMAGE TO UTILITIES RESULTING FROM THE CONTRACTOR'S FAILURE TO ARRANGE FOR THE LOCATION OF UTILITIES BY THE OWNERS/OPERATORS OF THE UTILITIES. CONTACT MISS UTILITY (800) 552-7001.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL NEW ABOVE AND BELOW GRADE PIPING, STRUCTURES, ELECTRICAL EQUIPMENT AND CONDUIT, AND OTHER FACILITIES AT THE PROJECT SITE, FROM ALL DISTURBANCE OR DAMAGE WHICH MAY RESULT FROM THE PERFORMANCE OF WORK ON THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLETE REPAIR OR REPLACEMENT OF ALL NEW ABOVE AND BELOW GRADE PIPING STRUCTURES, ELECTRICAL EQUIPMENT AND CONDUIT, AND OTHER FACILITIES AT THE PROJECT SITE WHICH MAY BE DISTURBED OR DAMAGED AS A RESULT OF THE PERFORMANCE OF WORK ON THIS PROJECT.
5. SITE CONDITIONS MAY NECESSITATE SLIGHT DEVIATIONS IN ALIGNMENT, GRADE, AND/OR LOCATION OF NEW FACILITIES FROM THE ALIGNMENT, GRADE, AND/OR LOCATION INDICATED ON THESE DRAWINGS. THE CONTRACTOR SHALL CONSTRUCT THE NEW FACILITIES TO SUCH DEVIATIONS AS DIRECTED BY THE ENGINEER WITHOUT INCREASE IN THE CONTRACT PRICE OR FINE.
6. THE CONTRACTOR SHALL MAINTAIN A CLEAR FLOW PATH TO AND THROUGH ALL SURFACE WATER AND STORM WATER DRAINAGE FACILITIES AT ALL TIMES.
7. THE CONTRACTOR SHALL GRADE, SEED, AND/OR SOD, AND MULCH THE ENTIRE AREA(S) DISTURBED BY CONSTRUCTION ACTIVITIES.
8. CONSTRUCTION AND START-UP OF ALL WORK SHALL NOT INTERFERE WITH THE OPERATION OF WATER AND SEWERAGE FACILITIES. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE ALL WORK WITH THE OWNERS AS REQUIRED.
9. MINIMUM COVER ON ALL PIPE SHALL BE 3 FEET, UNLESS OTHERWISE SPECIFICALLY INDICATED ON THESE DRAWINGS.
10. ALL PIPING SHALL BE CLASS 52 DUCTILE IRON, AWWA C150/151. AS MANUFACTURED BY GRIFFIN PIPE OR APPROVED EQUAL.
11. ALL PIPING SHALL BE PROPERLY SUPPORTED. ALL PIPING WHICH WILL BE PRESSURIZED DURING OPERATION SHALL BE PROPERLY RESTRAINED.
12. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE CURRENT BOCA AND/OR STATE AND LOCAL BUILDING CODES.
13. CONTRACTOR SHALL MAINTAIN THE CONSTRUCTION AREA IN A MANNER ACCEPTABLE TO OWNER AND SHALL BE RESPONSIBLE FOR REMEDIATING ANY DAMAGES RESULTING FROM FAILURE TO DO SO.
14. CONTRACTOR SHALL MAINTAIN LIMITS OF CONSTRUCTION WITHIN THE BOUNDARIES OF THE PROPERTY AS INDICATED ON THE SITE PLAN.
15. CONTRACTOR SHALL PROVIDE AN ACCESS ROUTE TO THE TANK SITE ALONG THE RECOMMENDED ROUTE SEEN ON THIS SHEET.
16. CONTRACTOR SHALL PROVIDE ADEQUATE EROSION AND SEDIMENT CONTROL PRACTICES DURING THE CONSTRUCTION OF THE ACCESS ROUTE THAT ADHERE TO THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

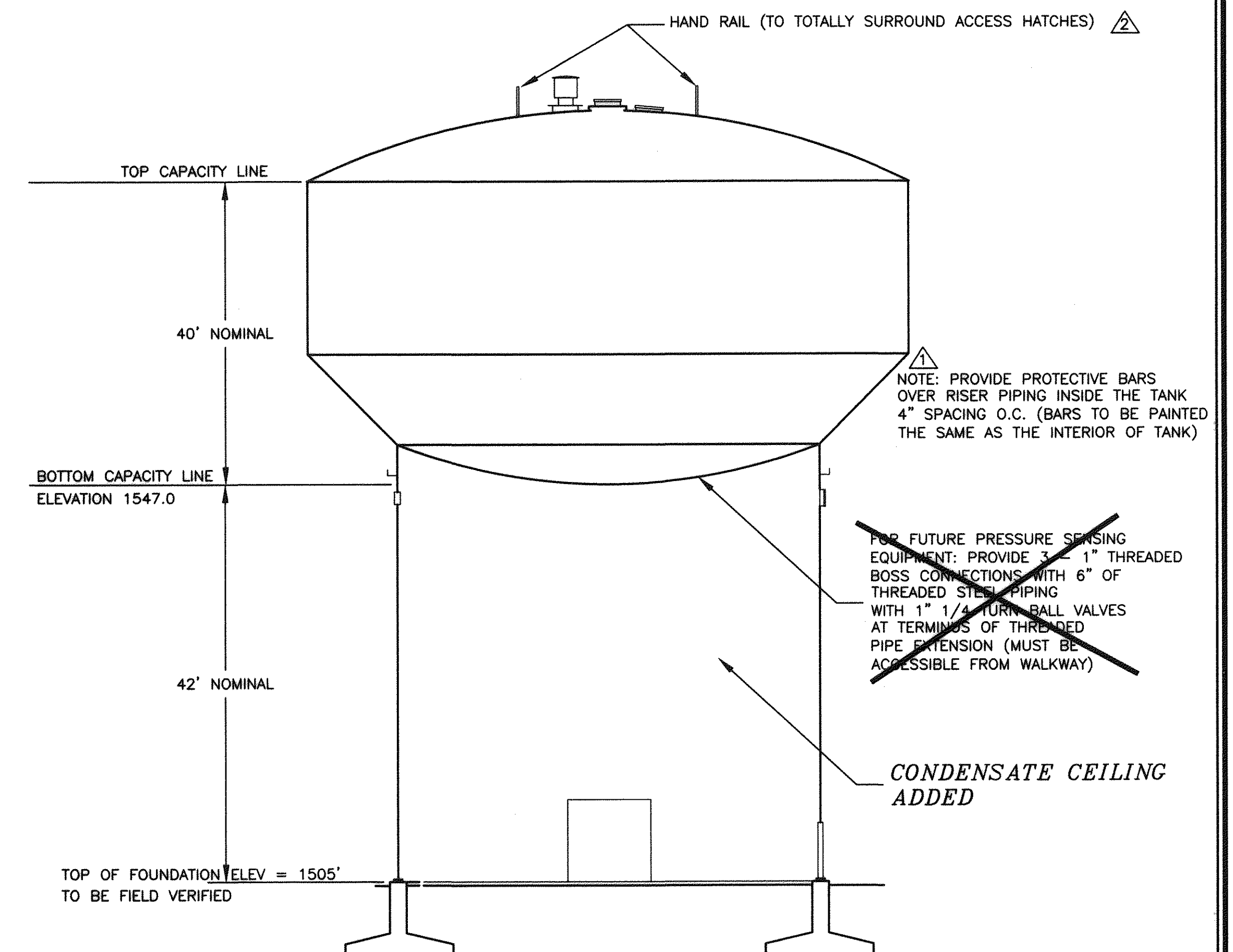






**SITE PLAN**  
SCALE: 1"=10'

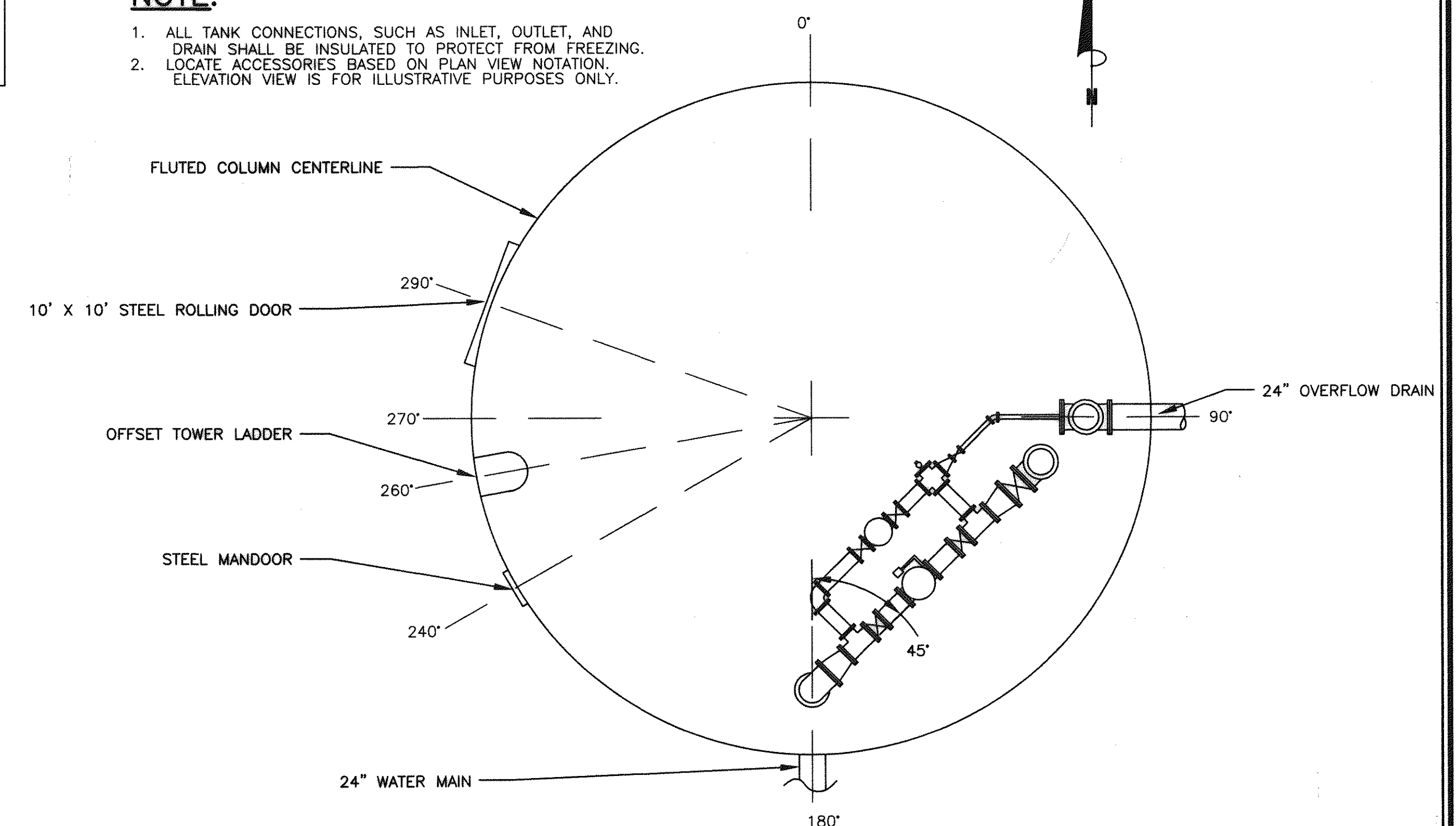
FONT DESIGNATES AS BUILT CHANGES TO DESIGN PLANS



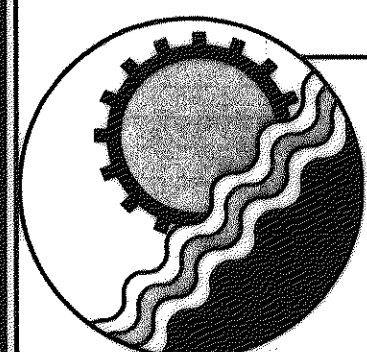
TANK ELEVATION DETAIL  
NOT TO SCALE

NOTE:

1. ALL TANK CONNECTIONS, SUCH AS INLET, OUTLET, AND DRAIN SHALL BE INSULATED TO PROTECT FROM FREEZING.
2. LOCATE ACCESSORIES BASED ON PLAN VIEW NOTATION. ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES ONLY.



PLAN  
SCALE: 1/8"=1'-0"



**ENGINEERING CONCEPTS, INC.**

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AS-BUILT

No.	Revision	By	Appd.	Date	Drawn	<div><div>GREENFIELD WATER TANK</div><div>TANK SITE PLAN</div></div>	AS SHOWN	
1	NOTE ADDED	PSN	JST	1-26-98	Designed		PSN	NOVEMBER 1997
2	HAND RAIL ADDED	PSN	JST	1-26-98	Checked		JST	PROJECT: 97075
					Approved			
							JST	2 of 3



### GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRECONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING
- ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUN-OFF PRODUCING RAINFALL EVENT, ANY NECESSARY REPAIR OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

(PS) PERMANENT SEEDING MIXTURES  
FOR APPALACHIAN/MOUNTAIN AREA

<u>MINIMUM CARE LAWN</u>	<u>TOTAL LBS. PER ACRE</u>
COMMERCIAL OR RESIDENTIAL	200-250 LBS.
- KENTUCKY 31 OR TURF-TYPE TALL FESCUE	90-100%
- IMPROVED PERENNIAL RYEGRASS*	0-10%
- KENTUCKY BLUEGRASS	0-10%

## HIGH MAINTENANCE LAWN

MINIMUM OF THREE (3) UP TO FIVE (5) VARIETIES OF BLUEGRASS FROM APPROVED LIST FOR USE IN VIRGINIA.	125 LBS.
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GENERAL SLOPE (3:1 OR LESS)

- KENTUCKY 31 FESCUE	128 LBS.
- RED TOP GRASS	2 LBS.
- SEASONAL NURSE CROP**	20 LBS.
	<u>150 LBS.</u>

LOW-MAINTENANCE SLOPE (STEEPER THAN 3:1)

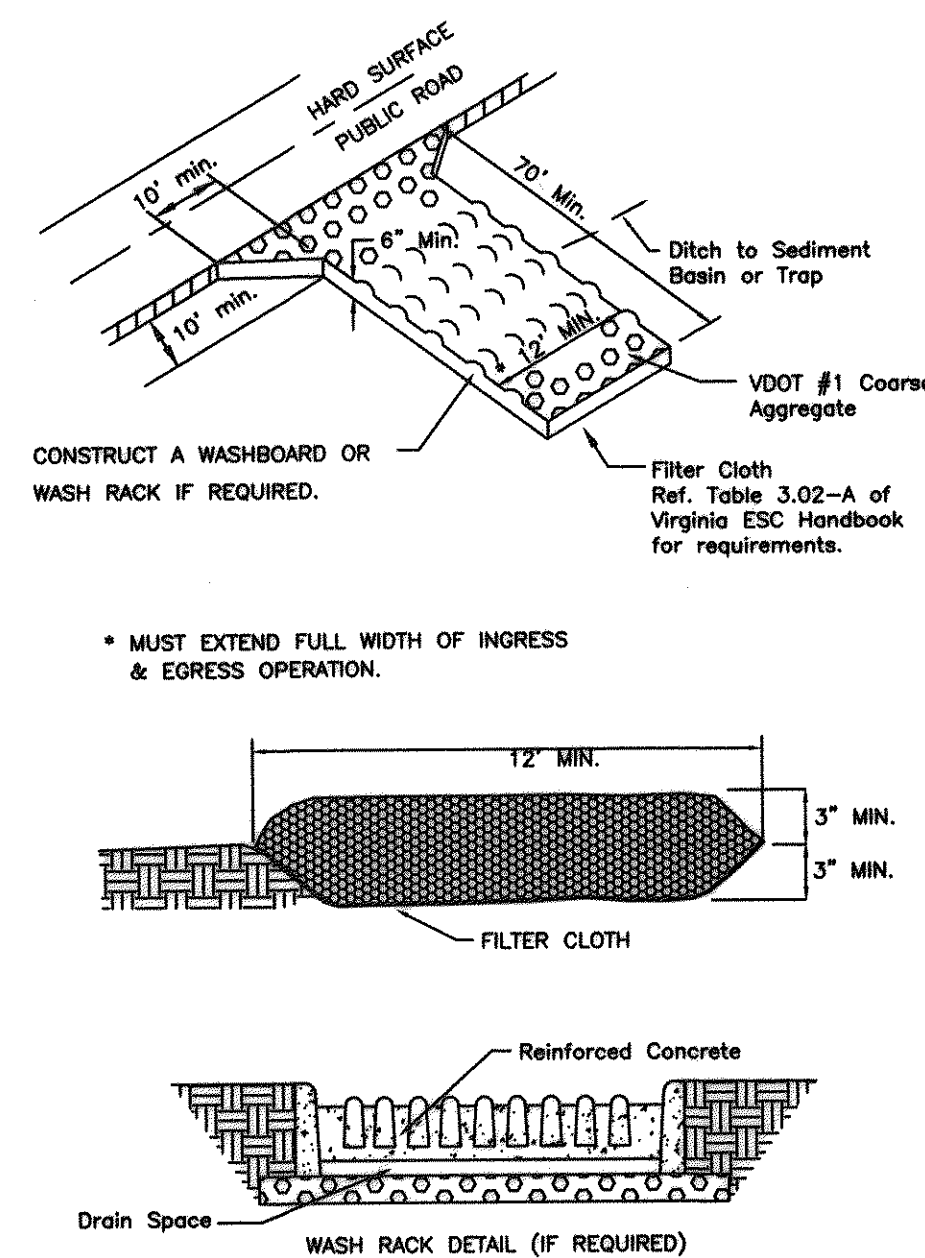
- KENTUCKY 31 FESCUE	108 LBS.
- RED TOP GRASS	2 LBS.
- SEASONAL NURSE CROP**	20 LBS.
- CROWNVETCH***	20 LBS.
	<u>150 LBS.</u>

\* PERENNIAL RYEGRASS WILL GERMINATE FASTER AND AT LOWER SOIL TEMPERATURE THAN FESCUE. THEREBY PROVIDING COVER AND EROSION RESISTANCE FOR SEEDBED.

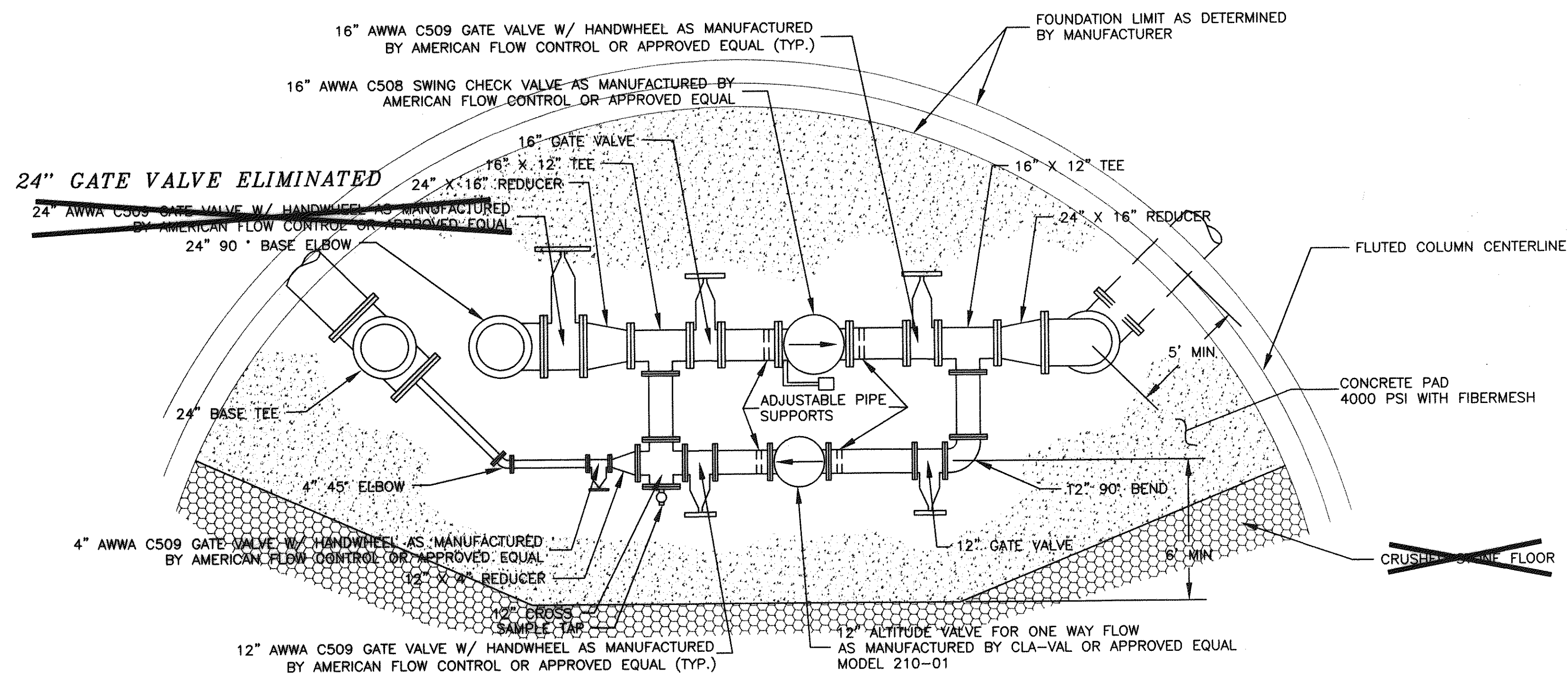
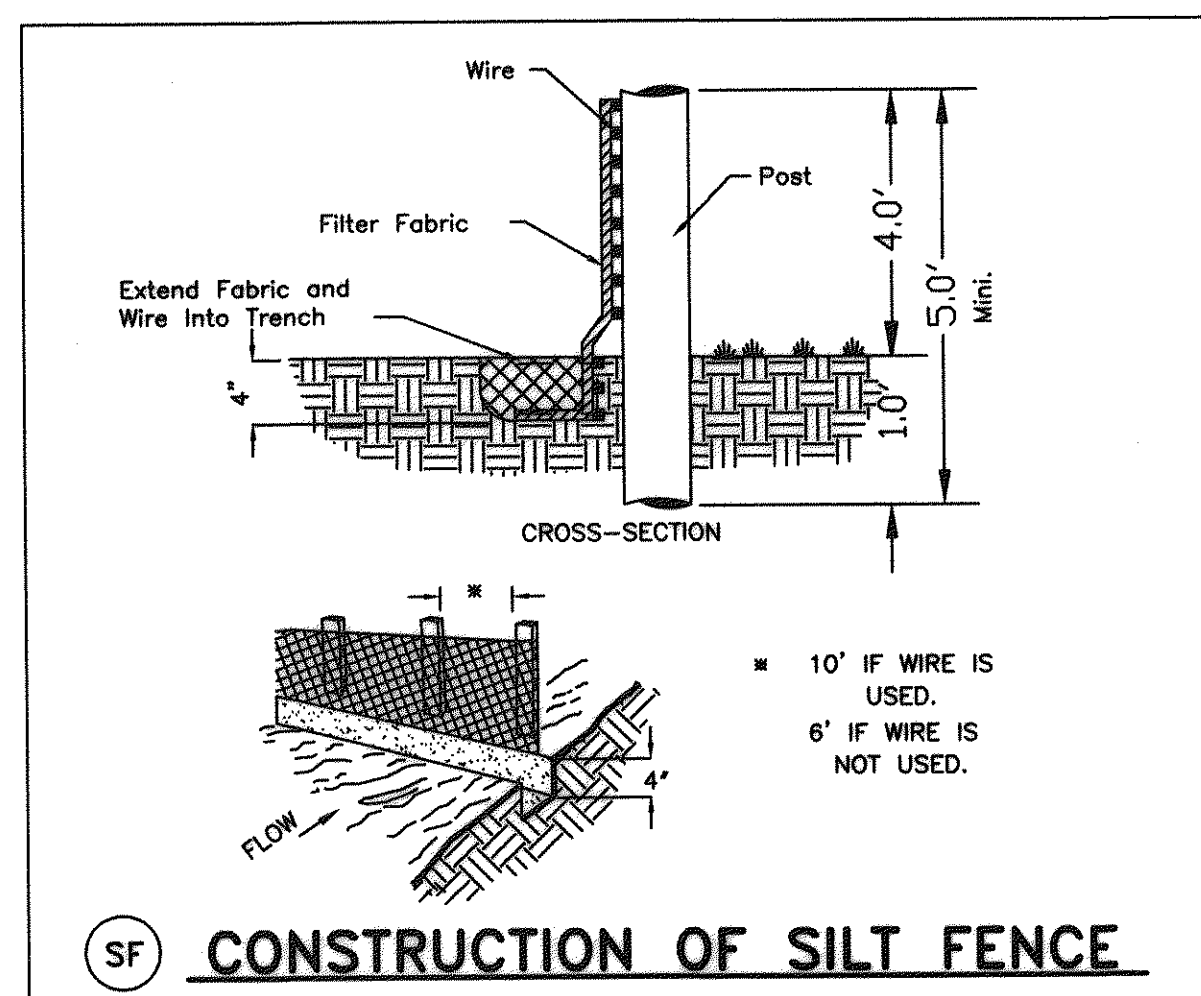
\*\* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES STATED BELOW:

MARCH, APRIL THROUGH MAY 15 TH	— — — — —	ANNUAL RYE
MAY 16 TH THROUGH AUGUST 15TH	— — — — —	FOXTAIL MILLET
AUGUST 16TH THROUGH SEPTEMBER, OCTOBER	— — — — —	ANNUAL RYE
NOVEMBER THROUGH FEBRUARY	— — — — —	WINTER RYE

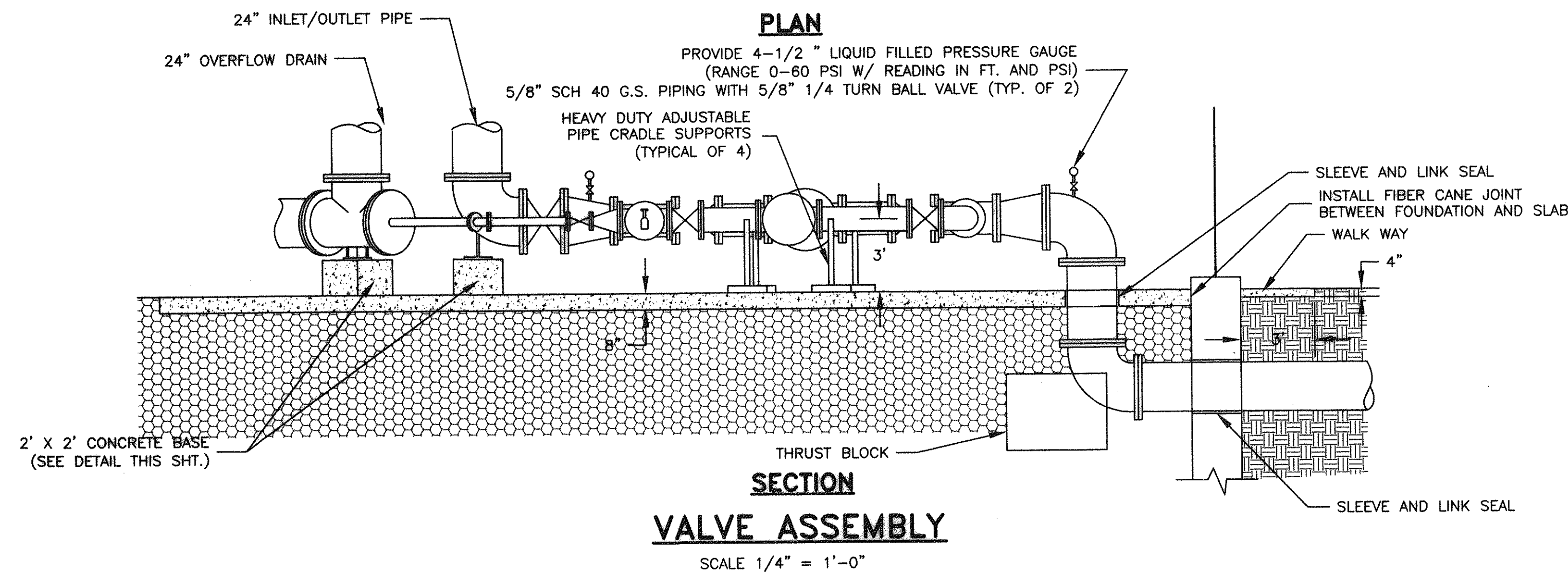
\*\*\* IF FLATPEA IS USED, INCREASE TO 30 LBS./ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY ALSO BE INCLUDED IN ANY SLOPE OR LOW-MAINTENANCE MIXTURE DURING WARMER SEEDING PERIODS; ADD 10-20 LBS/ACRE IN MIXES.



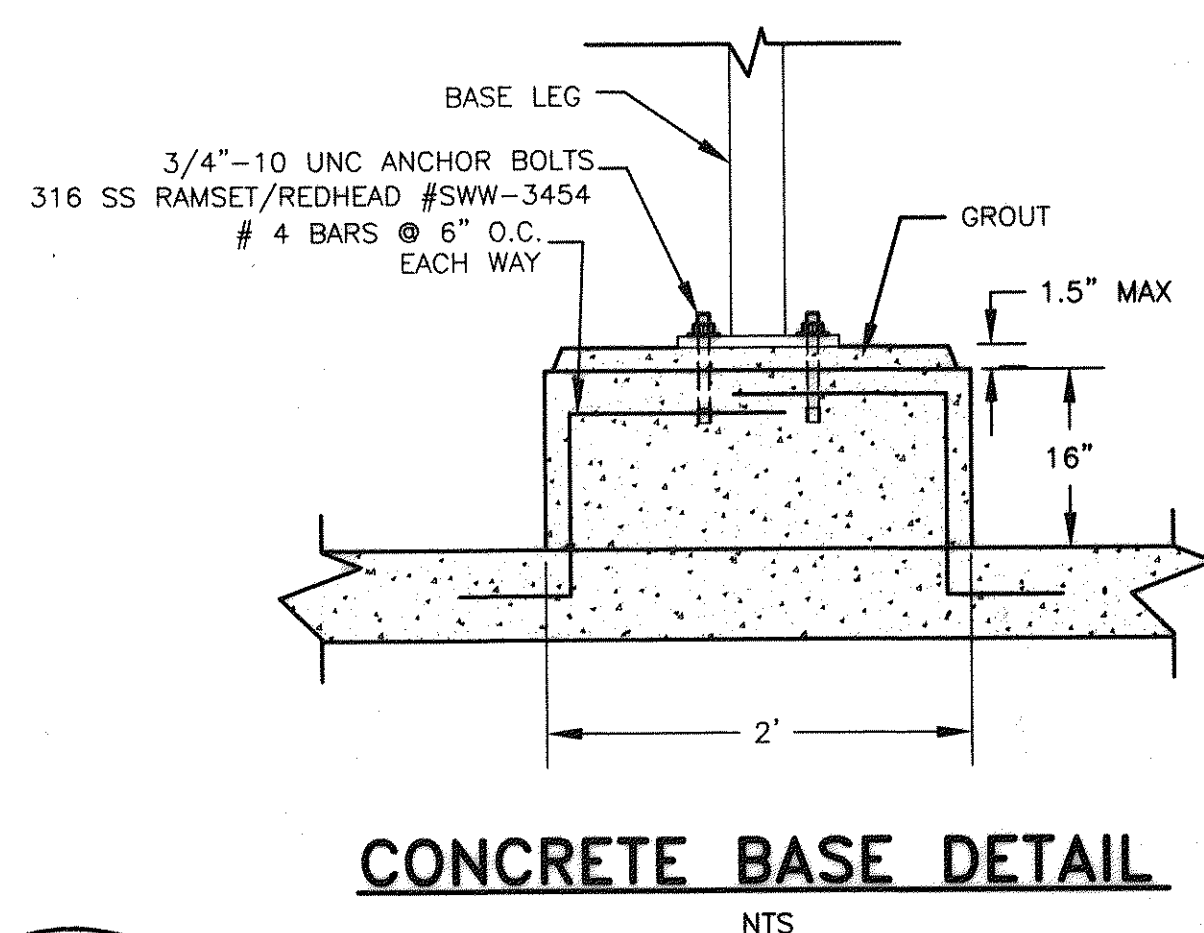
**CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE**



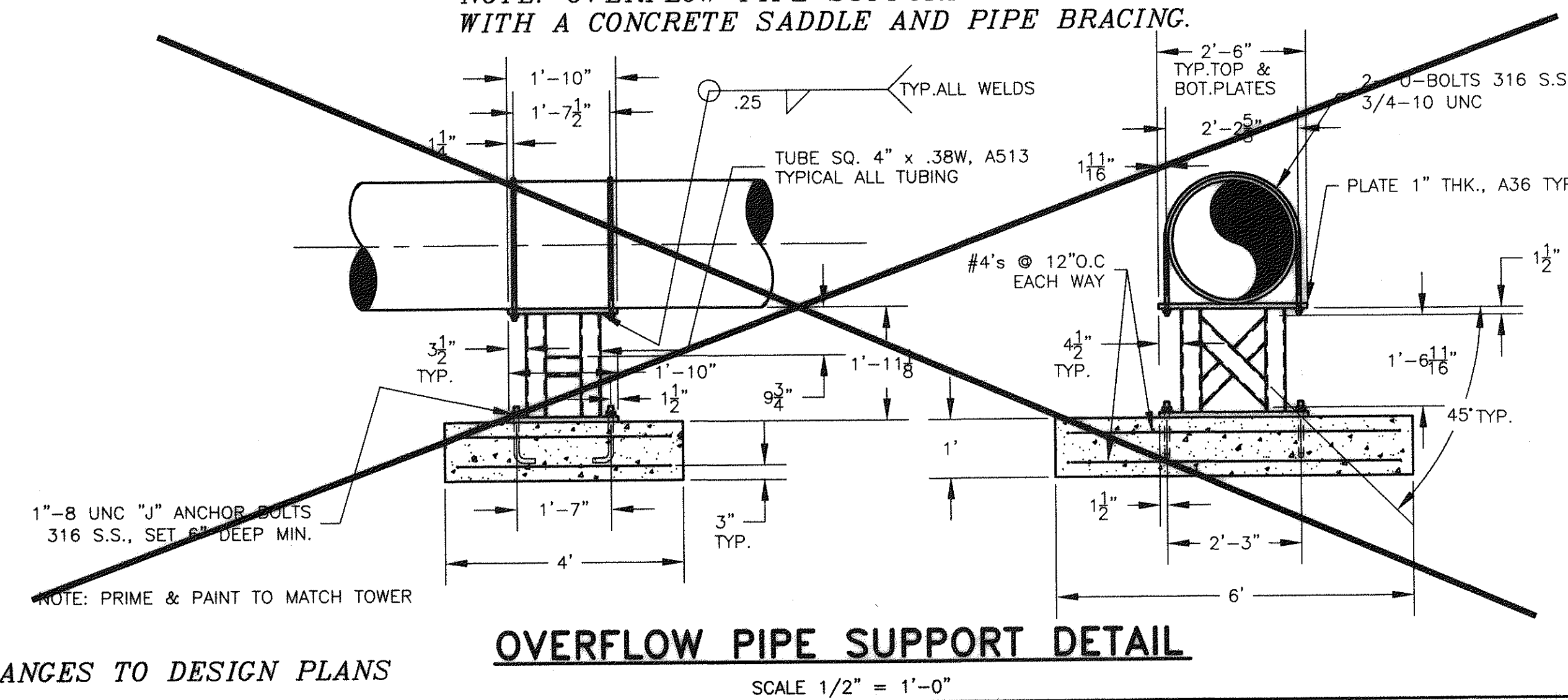
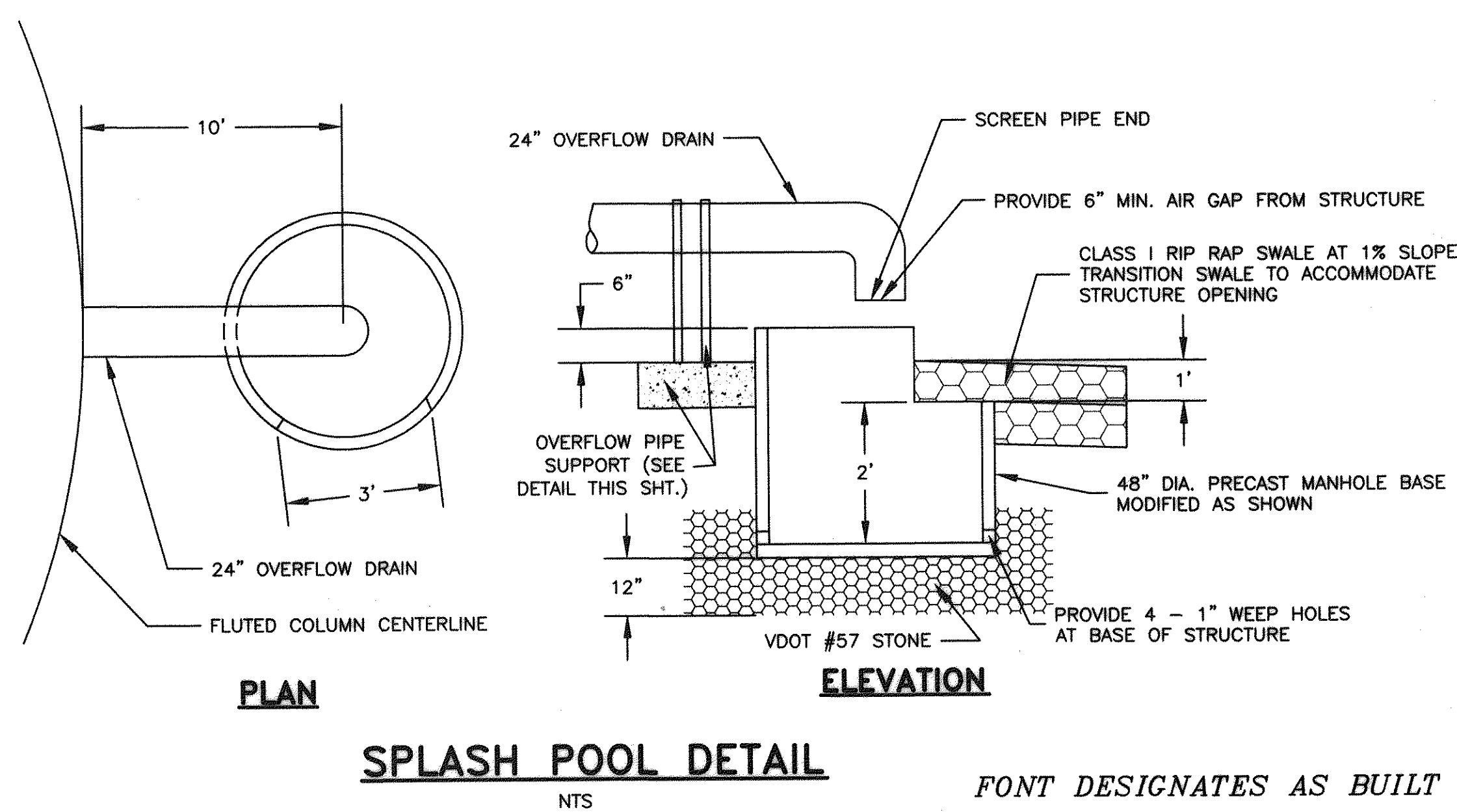
NOTE: CONCRETE SLAB COVERS  
ENTIRE INTERIOR FLOOR.



NOTE: OVERFLOW PIPE SUPPORT WAS CONSTRUCTED WITH A CONCRETE SADDLE AND PIPE BRACING.

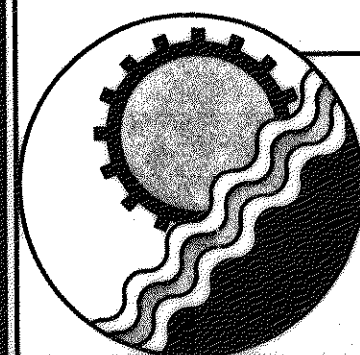


### SPLASH POOL DETAIL



FONT DESIGNATES AS BUILT CHANGES TO DESIGN PLANS

SCALE 1/2" = 1'-0"



## ENGINEERING CONCEPTS, INC.

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Drawn	PSN
Designed	PSN
Checked	JST
Approved	JST

**GREENFIELD  
WATER TANK**

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**DETAILS AND  
NOTES**

AS SHOWN
NOVEMBER 1997
PROJECT: 97075
3 of 3

AS-BUILT