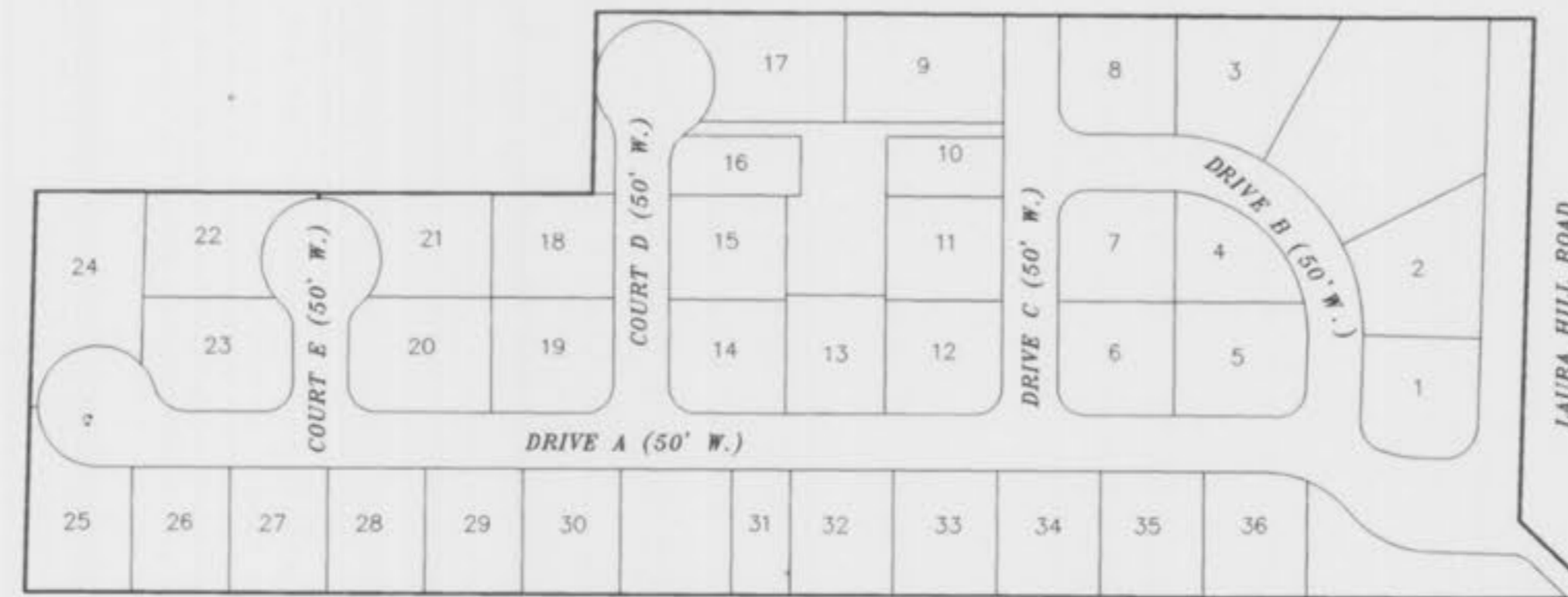
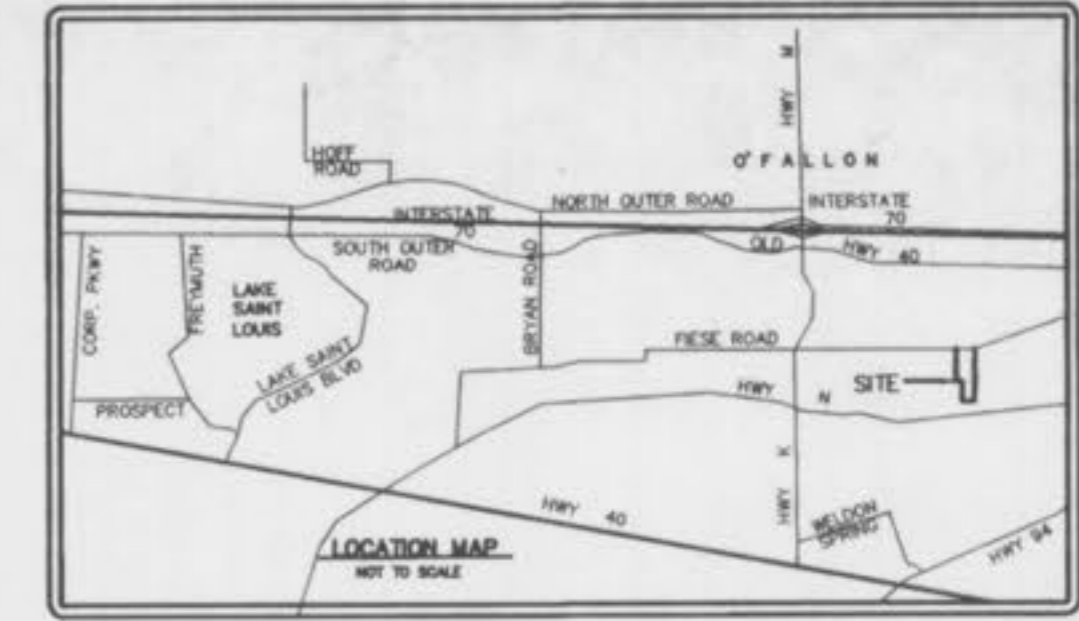


A SET OF STORM AND SEWER AS-BUILTS FOR  
**WHITEGATE VILLAS (PHASE ONE)**  
 A TRACT OF LAND BEING PART OF THE NORTHWEST QUARTER OF  
 SECTION 4, TOWNSHIP 46 NORTH, RANGE 3 EAST, AND PART  
 OF SECTION 33, TOWNSHIP 47 NORTH, RANGE 3 EAST,  
 ST. CHARLES COUNTY, MISSOURI



THIS IS TO CERTIFY THAT WE HAVE DURING THE MONTH OF NOVEMBER, 2000, BY ORDER OF T.R. HUGHES INC., EXECUTED AN AS-BUILT SURVEY OF EXISTING SANITARY SEWERS, AND STORM SEWERS, WITHIN "WHITEGATE VILLAS PHASE ONE", A SUBDIVISION ACCORDING TO THE PLAT THEREOF RECORDED IN PLAT BOOK 37, PAGE 113 OF THE ST. CHARLES COUNTY RECORDS. THE SANITARY LATERALS THAT ARE SHOWN WERE TAKEN FROM INFORMATION SUPPLIED TO BAX ENGINEERING BY THE SEWER CONTRACTOR, THEREFORE THEIR LOCATION IS ASSUMED APPROXIMATE. ALL SEWERS SHOWN LIE WITHIN THE EASEMENTS AS SHOWN ON SAID RECORDED PLAT UNLESS OTHERWISE NOTED. THE RESULTS OF THIS AS-BUILT SURVEY ARE SHOWN ON THIS PLAT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

WILLIAM S. KANKLENSKI  
 BAX ENGINEERING CO., INC.  
 MO. PRO. L.S. #2197

AS-BUILTS ADDED NOVEMBER 2000

PREPARED FOR: **WHITEGATE VILLAS**  
 T. R. HUGHES INC.  
 239 FOX HILL ROAD  
 ST. CHARLES, MO 63301  
 (314) 940-9300

DISCLAIMER OF RESPONSIBILITY  
 I hereby certify that the documents included to be submitted by me and are limited to this sheet and I hereby disclaim any responsibility for all other drawings, specifications, estimates, reports or other documents or instruments relating to or intended to be used for any part or parts of the architectural or engineering project or survey.

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REVISIONS

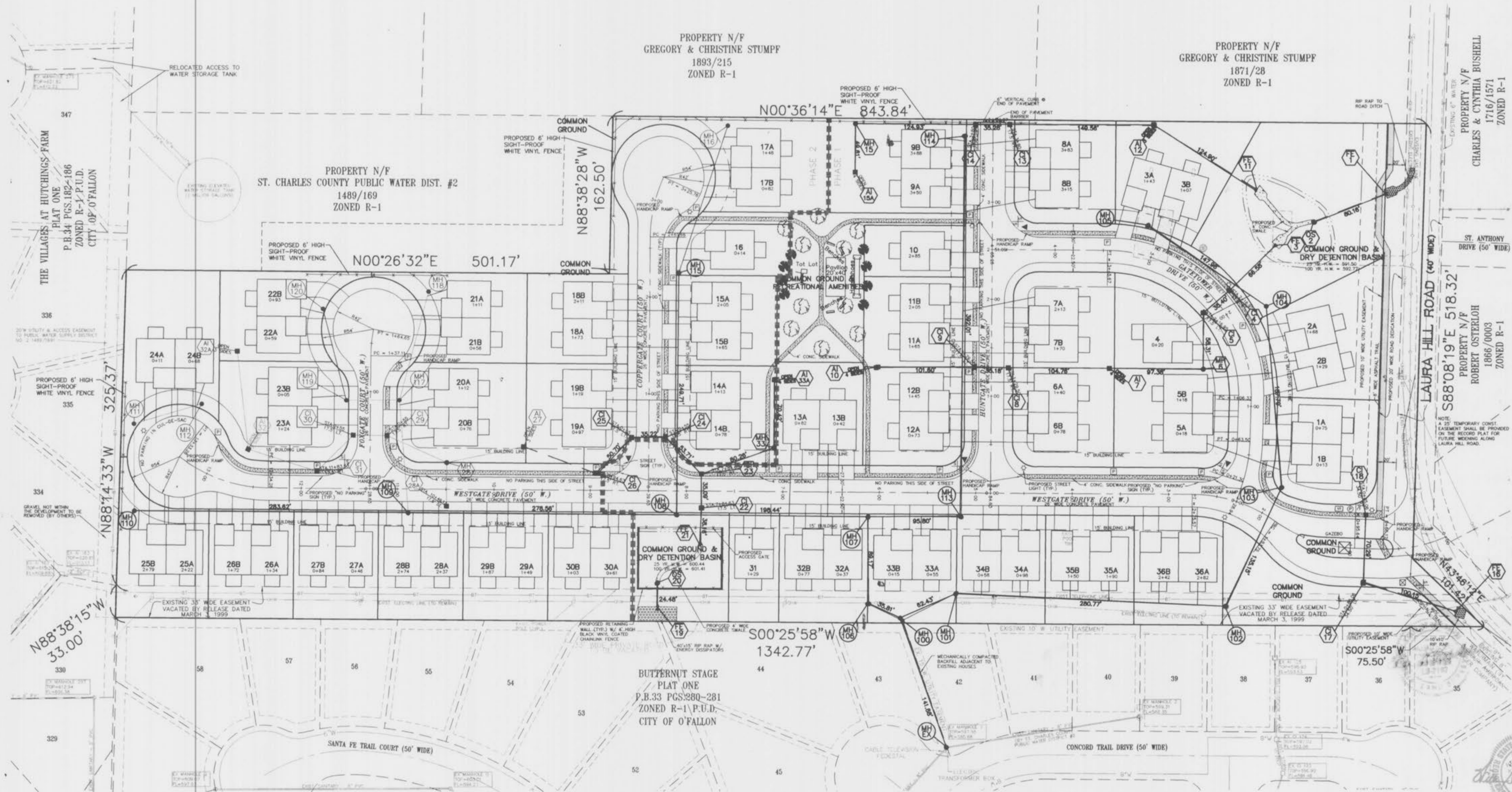
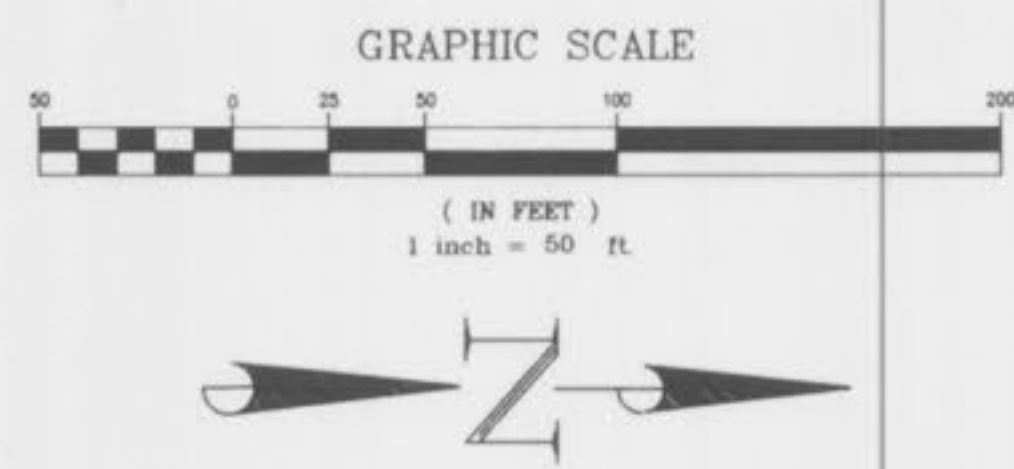
NO.	DATE	DESCRIPTION



ENGINEERING  
 PLANNING  
 SURVEYING

1052 South Cloverleaf Drive  
 St. Peters, MO. 63376-6445  
 314-928-5552  
 FAX 928-1718

11-30-00  
 DATE  
 98-10343  
 PROJECT NUMBER  
 1 OF 6  
 SHEET OF  
 10343ASB.DWG  
 FILE NAME  
 T.L.T. WSK  
 DRAWN CHECKED



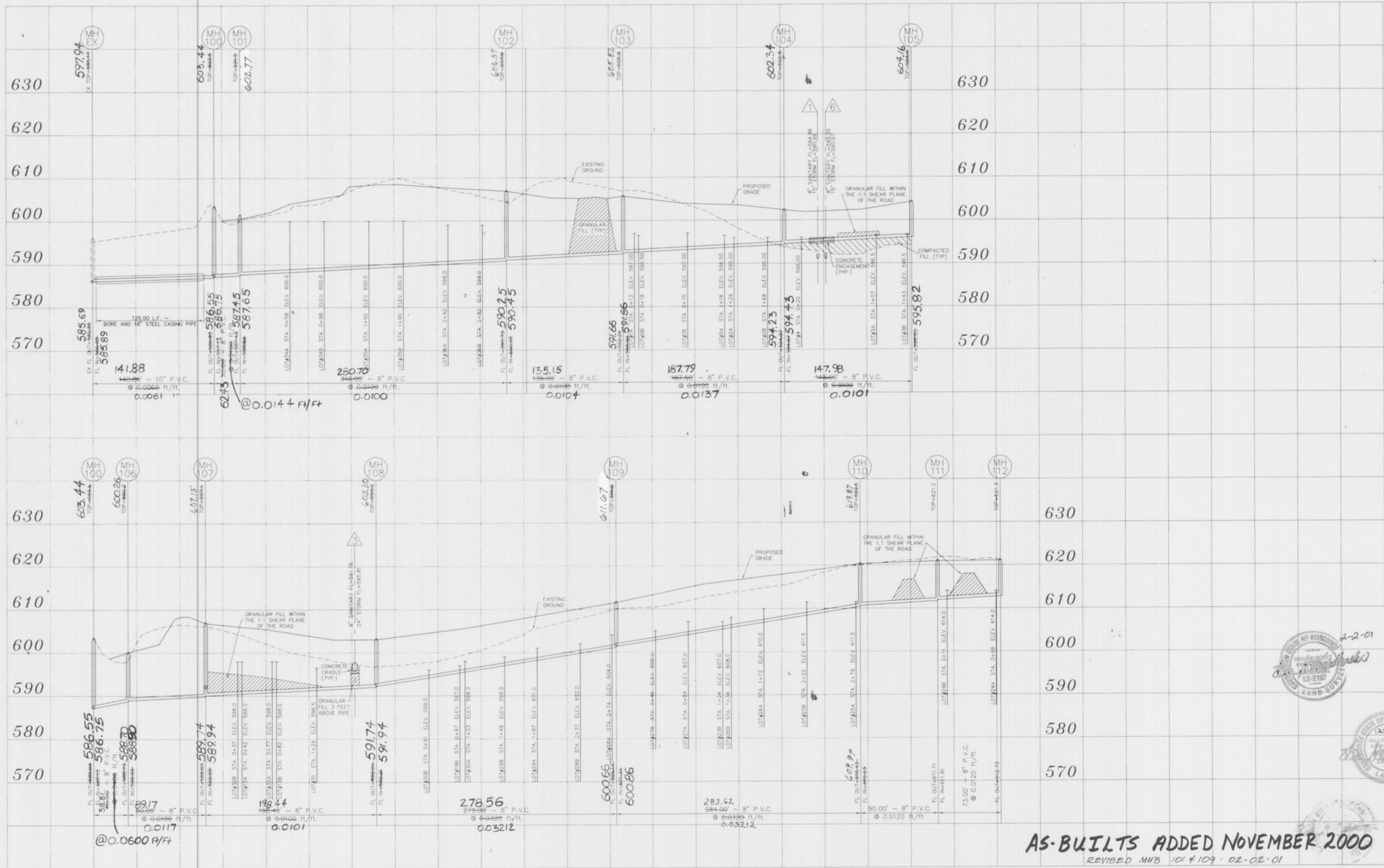
Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of any underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.

AS-BUILTS ADDED NOVEMBER 2000

SIGN LEGEND	
	STOP SIGN
	YIELD SIGN
	SPEED LIMIT SIGN
	PERMANENT NO OUTLET SIGN
	NO PARKING THIS SIDE OF STREET SIGN
	END OF PAVEMENT SIGN/BARRIER

White Gate Villas Phase 1

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**AS-BUILTS ADDED NOVEMBER 2000**  
 REVISED MHS 101 & 109 - 02-02-01

Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.

NOTE:  
 All sanitary sewer lateral tailstake elevations have been designed for 8.0' basements.

SCALE:  
 VERTICAL = 1:10  
 HORIZONTAL = 1:50

3  
 6



AS-BUILTS ADDED NOVEMBER 2000

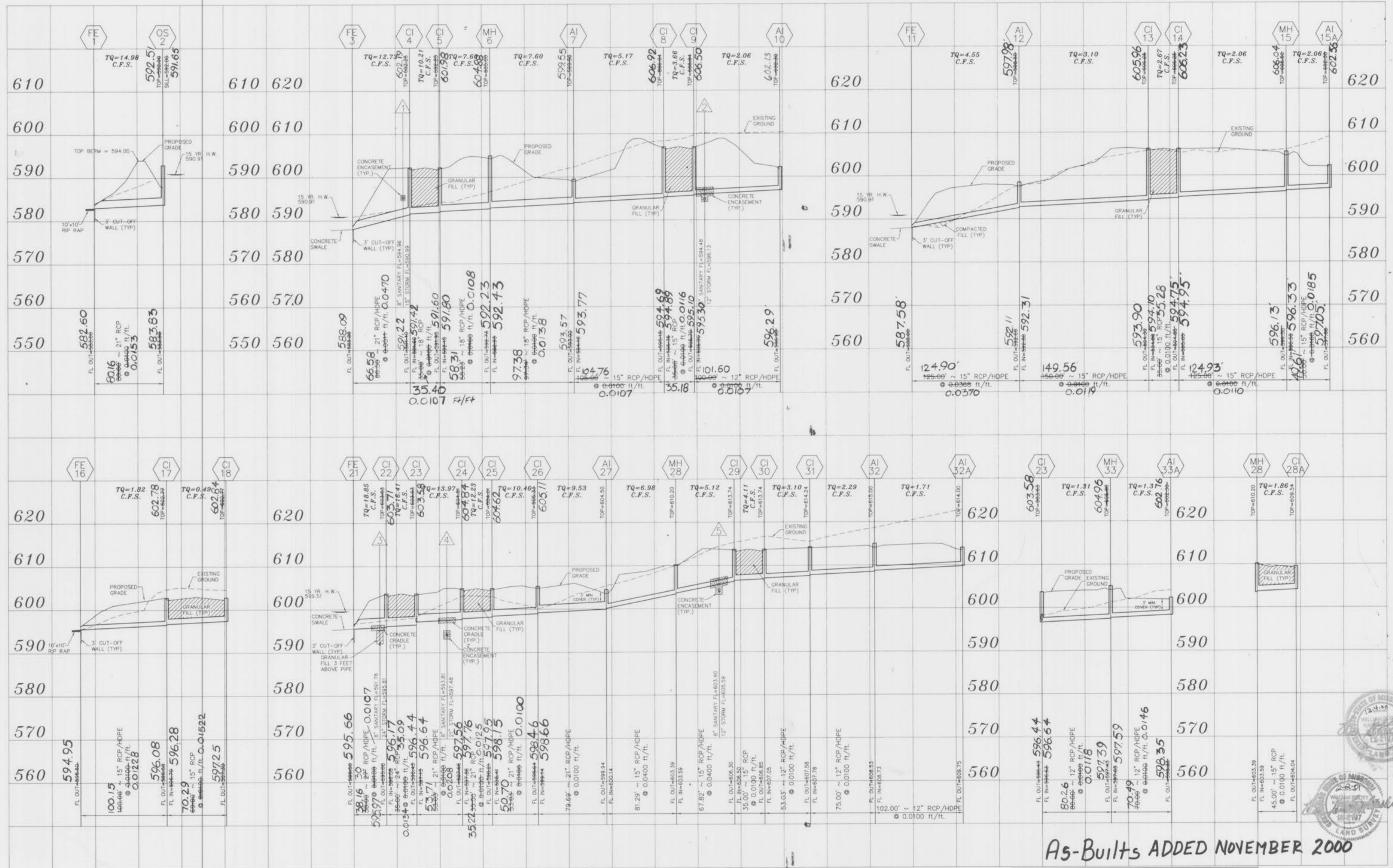
NOTE:  
 All sanitary sewer lateral fallstake elevations have been designed for 8.0' basements.

SCALE:  
 VERTICAL = 1:10  
 HORIZONTAL = 1:50

Whitegate Villas Phase 1

\\basrv10-drive1\eng\10343\10343.dwg Tue May 02 15:48:03 2000 RLA





**As-BUILTS ADDED NOVEMBER 2000**

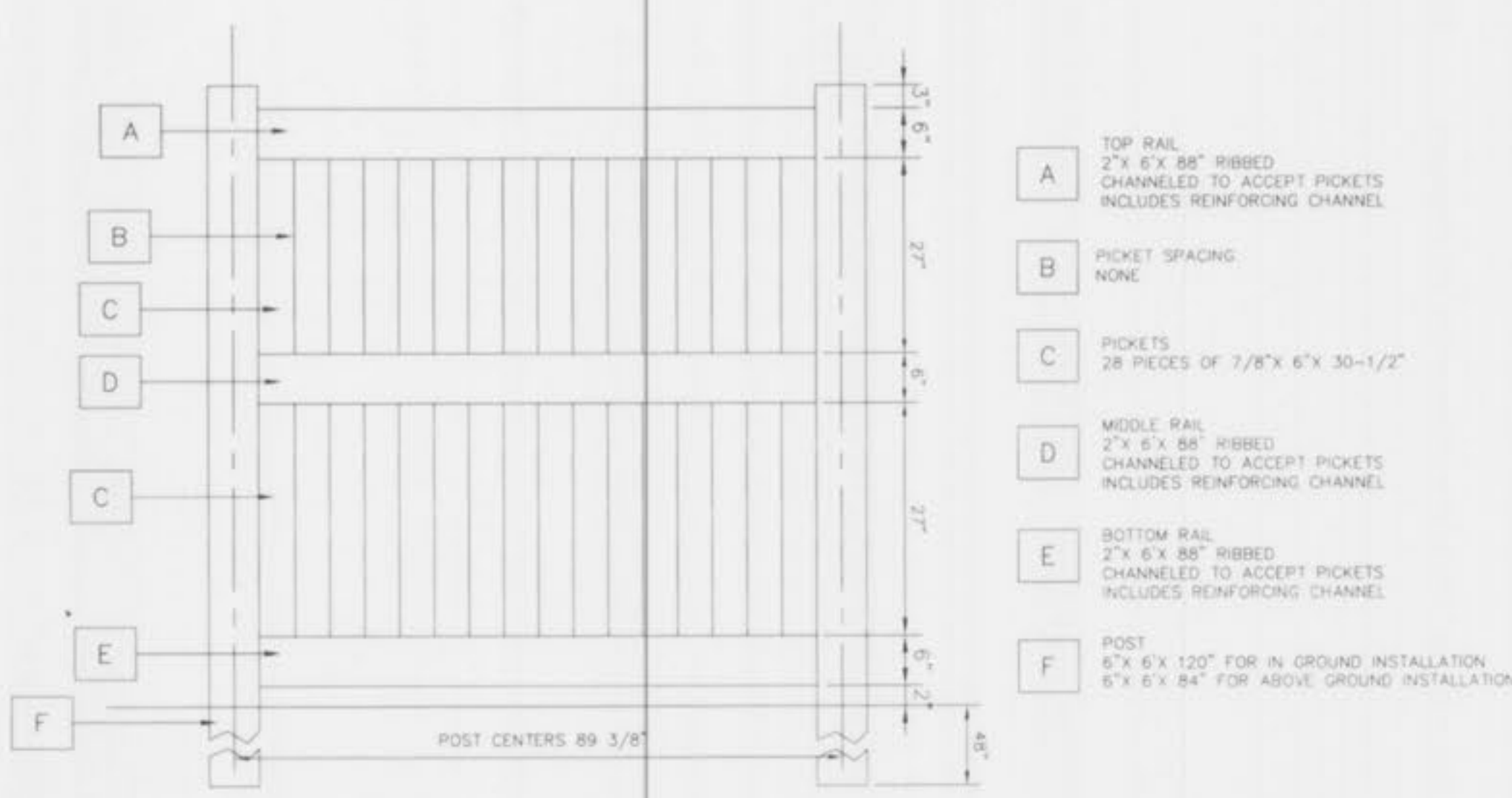
Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.

NOTE:  
 IF CONTRACTOR/DEVELOPER USES ALTERNATIVE HDPE PIPE,  
 ALL SEWER CROSSINGS SHALL BE CONCRETE ENCASED.  
 ALL FLARED END SECTIONS AND INLET STRUCTURES WILL BE CONCRETE.

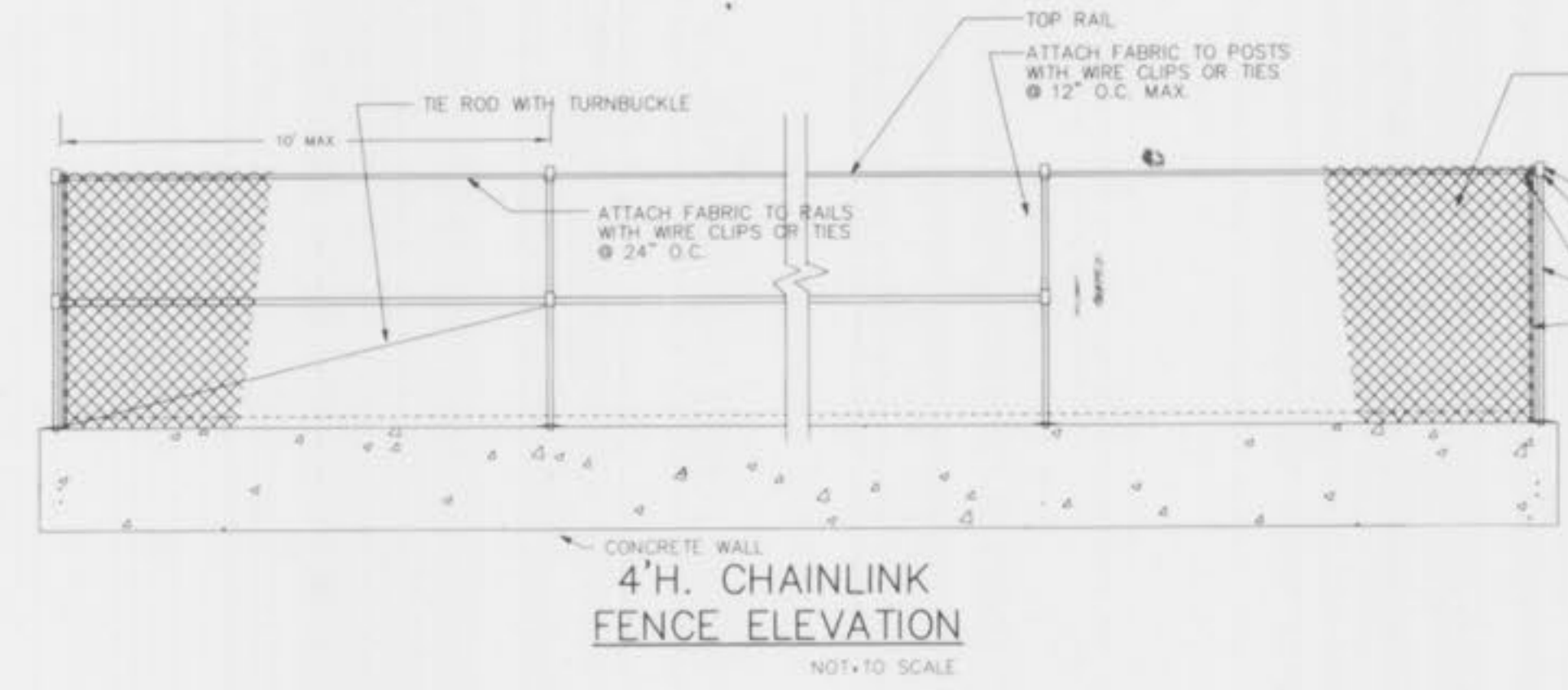
SCALE:  
 VERTICAL = 1:10  
 HORIZONTAL = 1:50

5  
 6

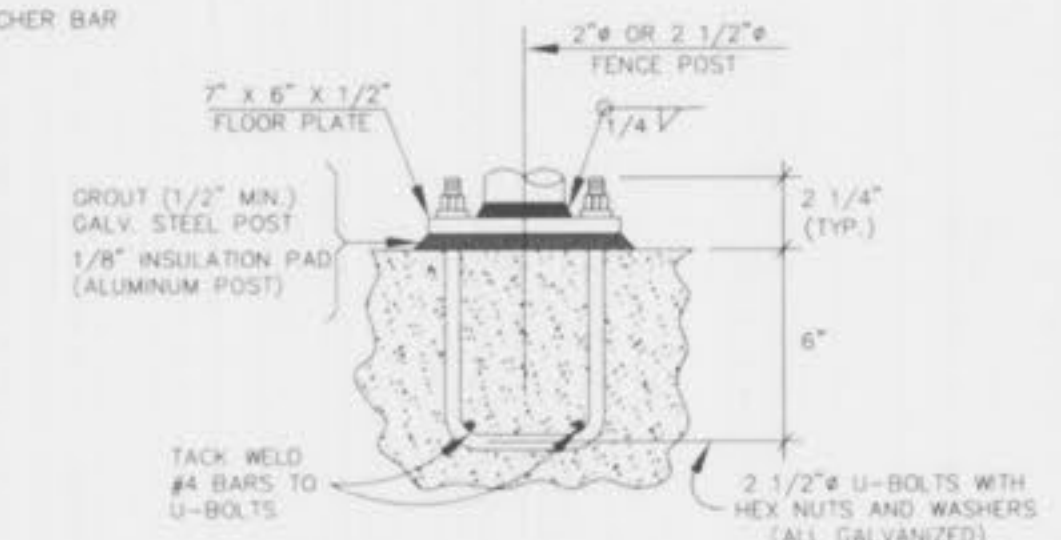
White Gate Villas Phase 1



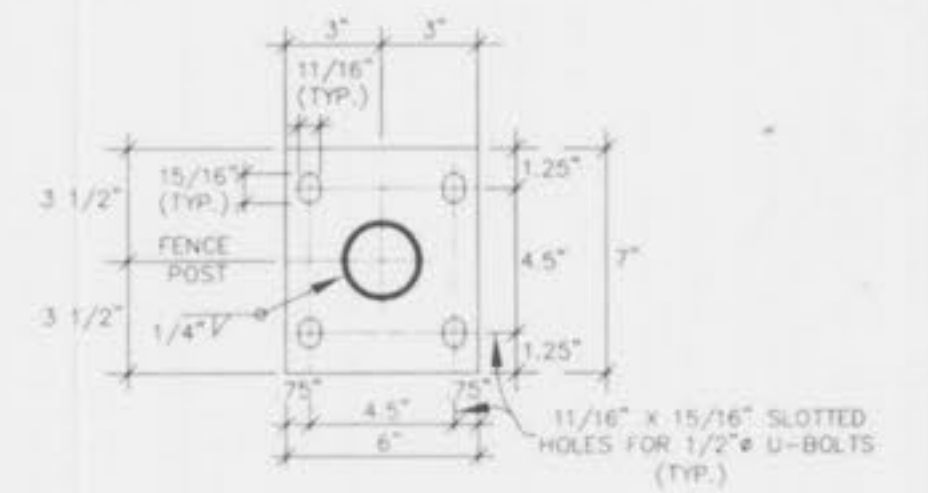
- A** TOP RAIL  
2" x 6" x 88" RIBBED CHANNELLED TO ACCEPT PICKETS INCLUDES REINFORCING CHANNEL
- B** PICKET SPACING  
NONE
- C** PICKETS  
28 PIECES OF 7/8" x 6" x 30-1/2"
- D** MIDDLE RAIL  
2" x 6" x 88" RIBBED CHANNELLED TO ACCEPT PICKETS INCLUDES REINFORCING CHANNEL
- E** BOTTOM RAIL  
2" x 6" x 88" RIBBED CHANNELLED TO ACCEPT PICKETS INCLUDES REINFORCING CHANNEL
- F** POST  
6" x 6" x 120" FOR IN GROUND INSTALLATION  
6" x 6" x 84" FOR ABOVE GROUND INSTALLATION



**4'H. CHAINLINK FENCE ELEVATION**  
 NOT TO SCALE

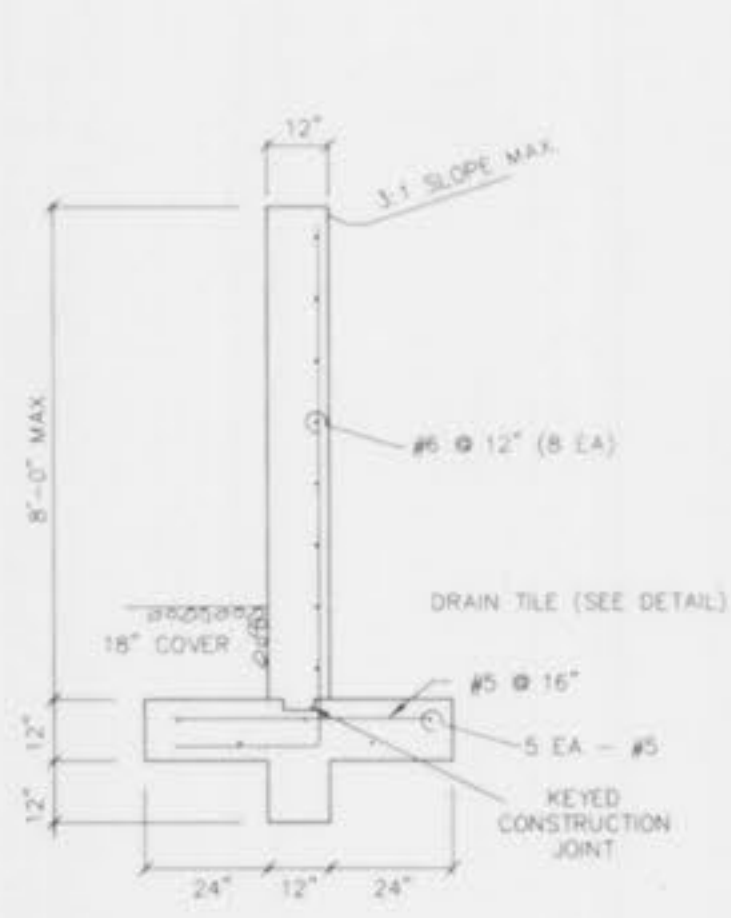


**TYPICAL FENCE POST CONNECTION**  
 N.T.S.

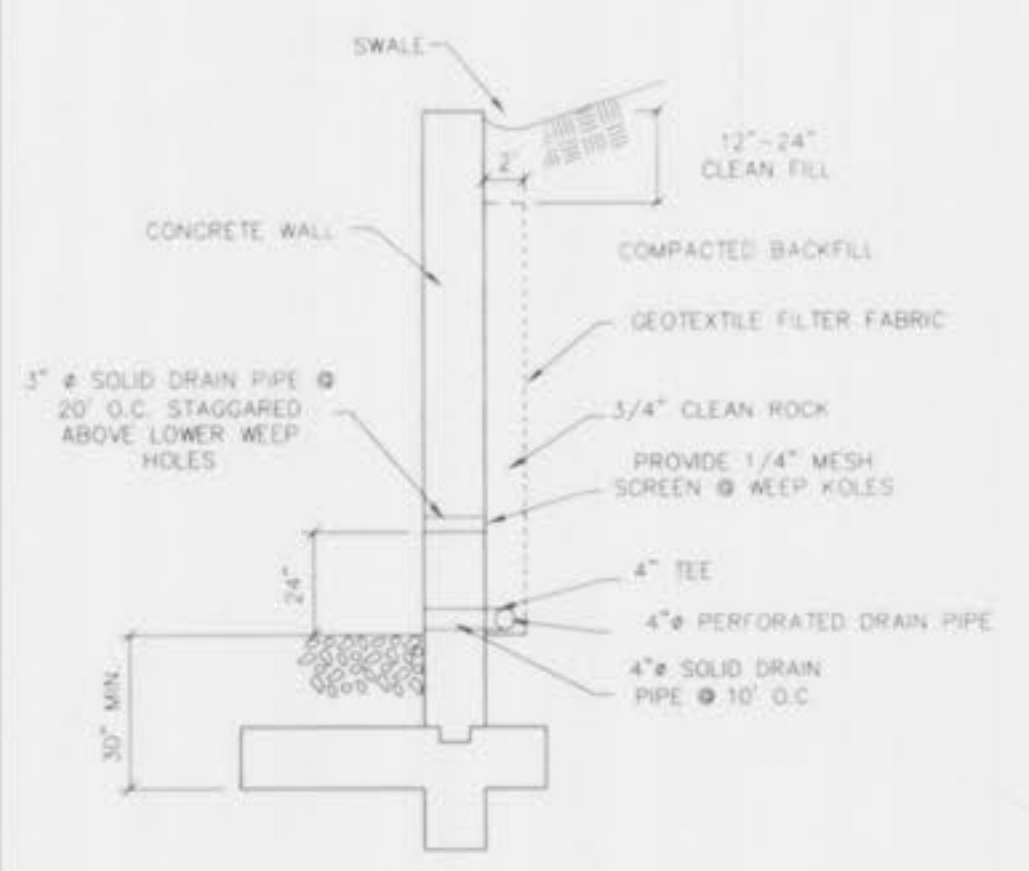


**PLAN OF FLOOR PLATE**  
 N.T.S.

**8' HIGH VINYL PRIVACY FENCE**  
 NOT TO SCALE

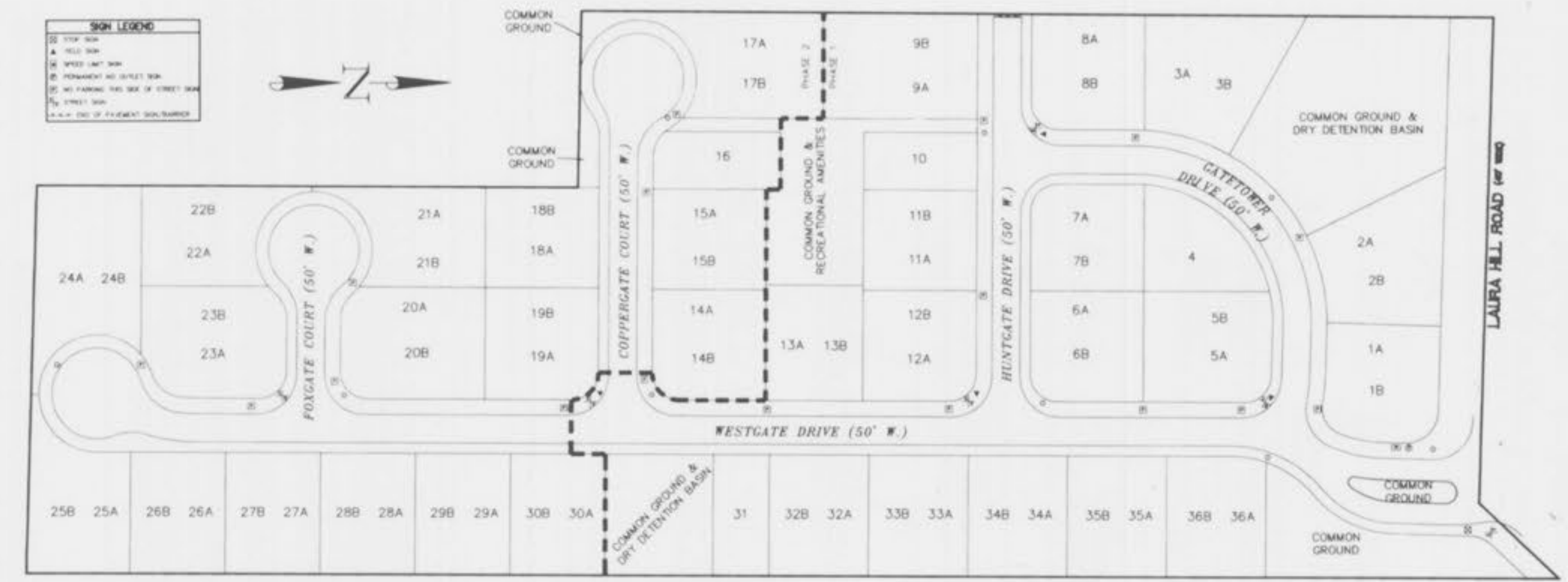


**SECTION**  
 NOT TO SCALE

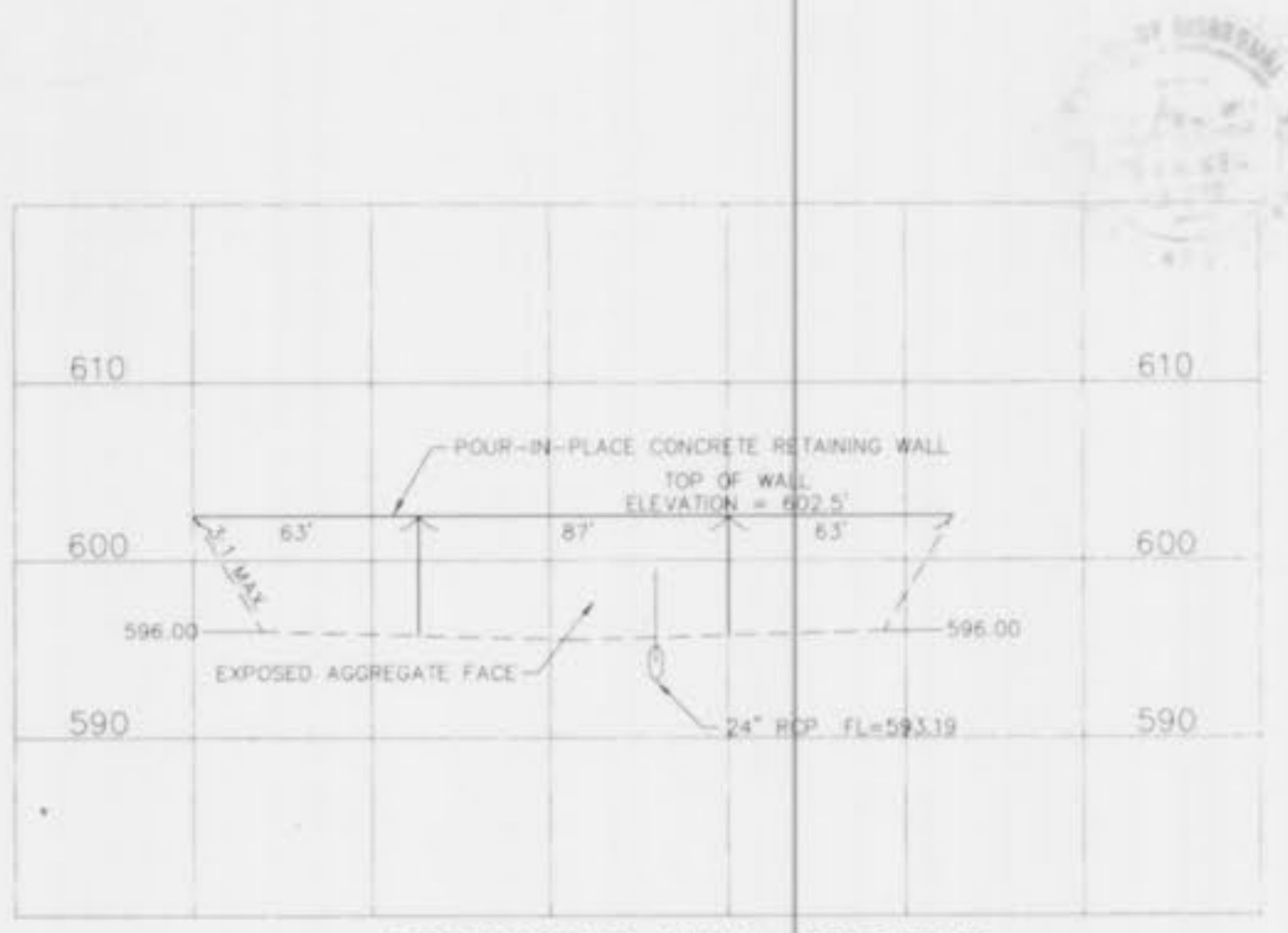


**DRAIN TILE DETAIL**  
 NOT TO SCALE

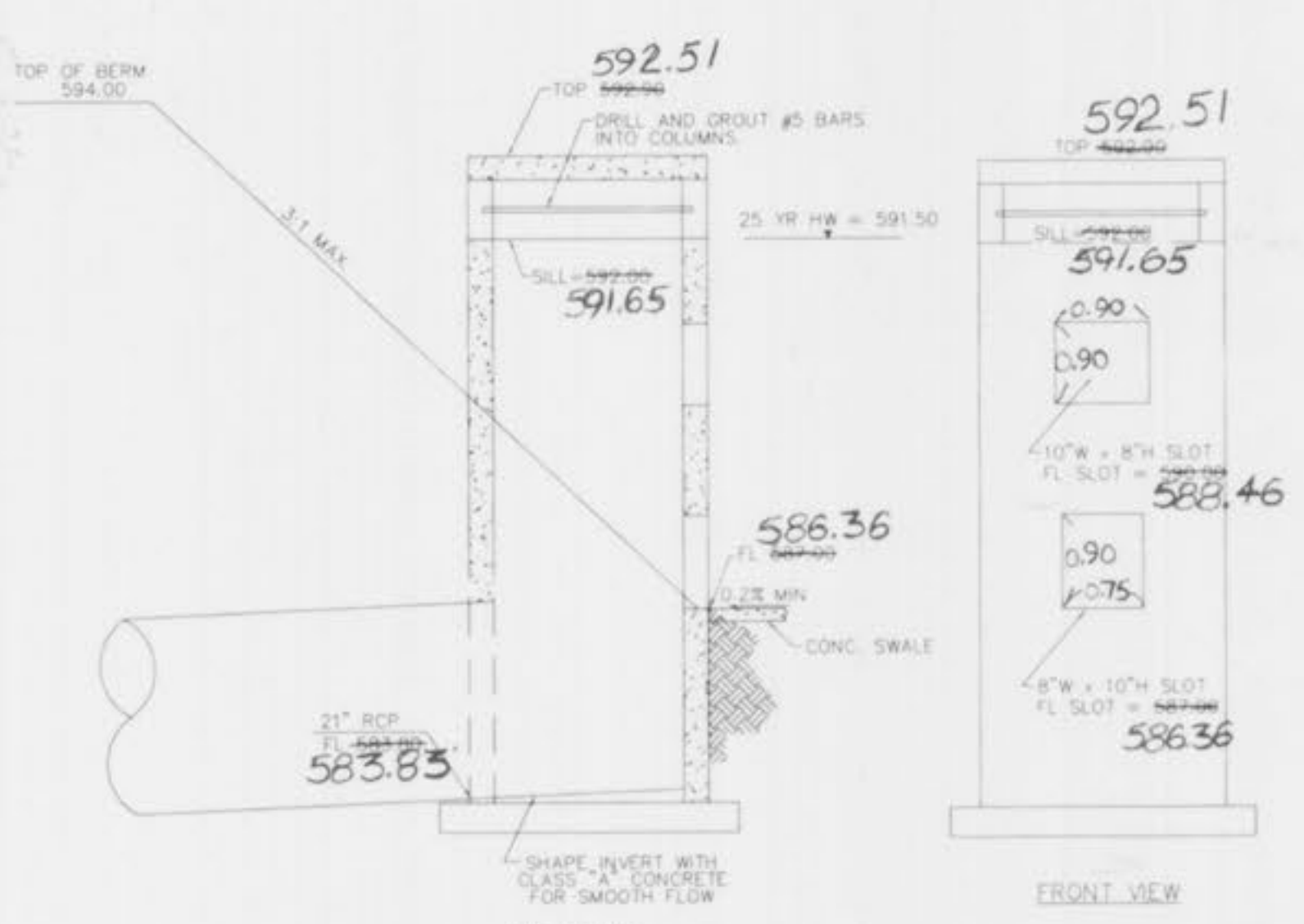
- GENERAL DETAIL NOTES**
- Concrete  $f_c = 3000$  p.s.i.
  - Reinforced steel: Grade 60 (mm)  $f_y = 60,000$  p.s.i.,  $f_s = 24,000$  p.s.i. (mm)
  - Soil beneath footing to have allowable soil pressure of 2,000 p.s.i. minimum.
  - Clear distance for reinforcement: Bottom reinforcement of footings = 3" all other locations = 2"
  - Construction joints to be at 35' minimum on center.
  - Backfill to be compacted to 90% of maximum density as determined by the Modified AASHTO T-180 Compaction Test.
  - Bottom of footings of reinforced concrete retaining wall shall be minimum of 30" below ground surface.
  - Underground utilities have been plotted from available information and therefore their locations shall be considered approximate only. The verification of the location of all underground utilities, either shown or not shown on these plans shall be the responsibility of the contractor, and shall be located prior to any grading or construction of the improvements.
  - When stem wall and foundation are poured separately, a 2"x6" keyed construction joint shall be provided between stem wall and foundation.
  10. Rails or Fencing shall be constructed along the top of all walls.



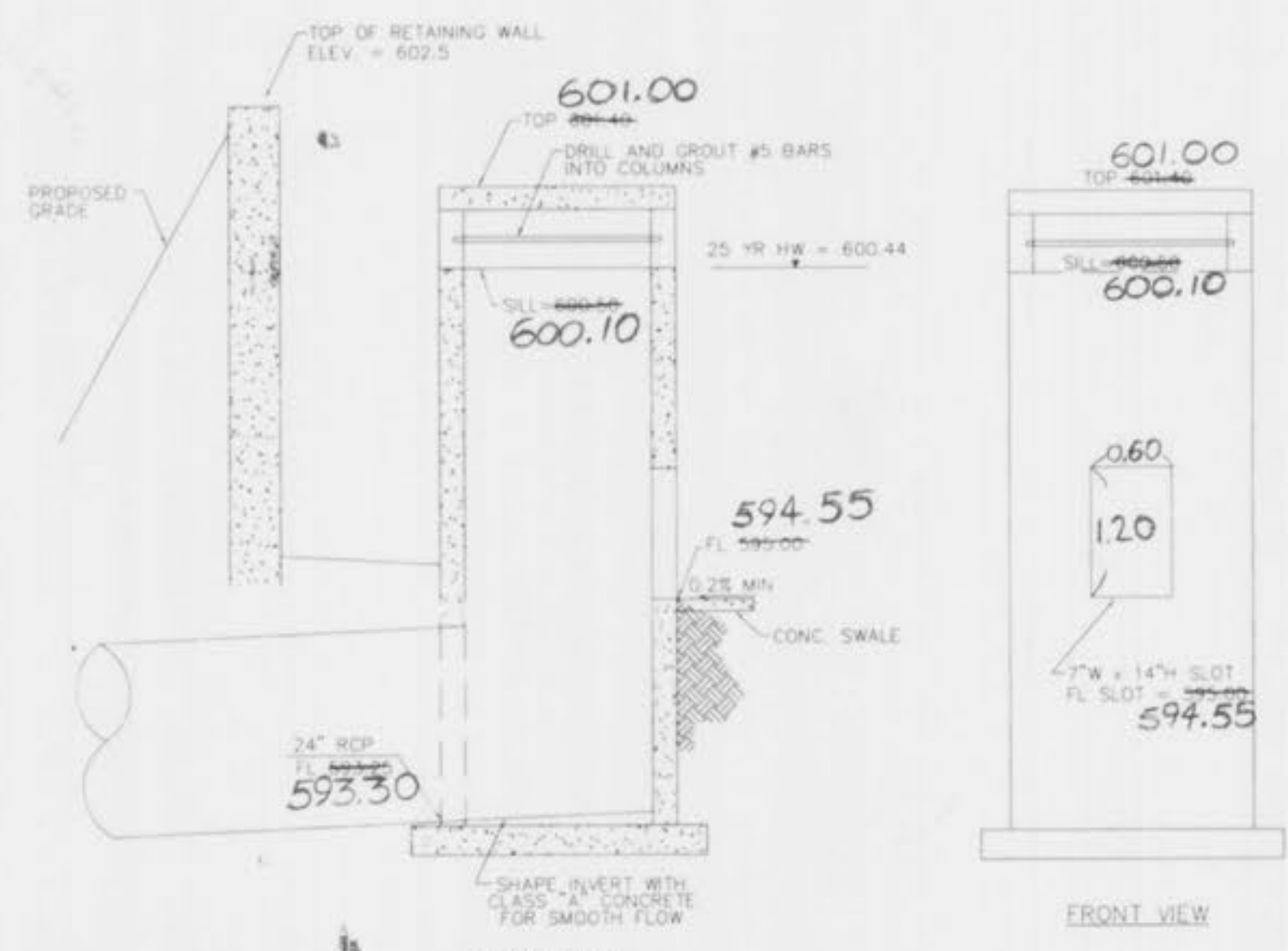
**LIGHTING & SIGN DETAIL**  
 NOT TO SCALE



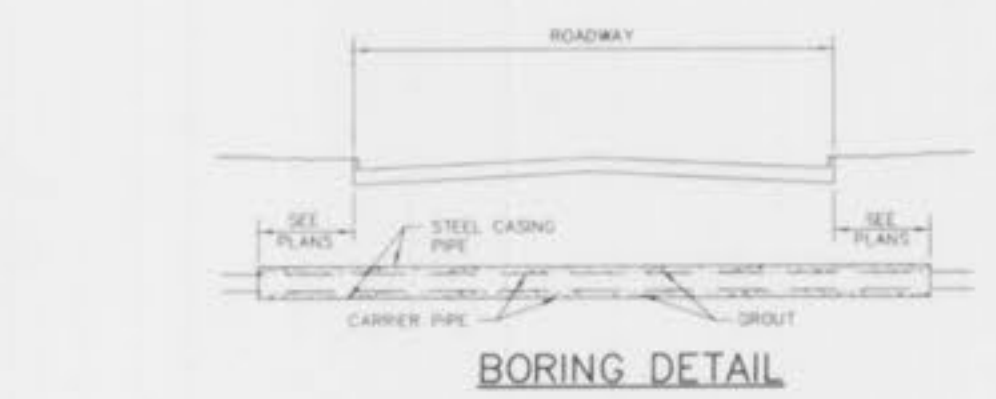
**RETAINING WALL PROFILE**  
 SCALE: 1" = 50' HOR  
 1" = 10' VER



**OVERFLOW STRUCTURE #2 DETAIL**  
 NOT TO SCALE

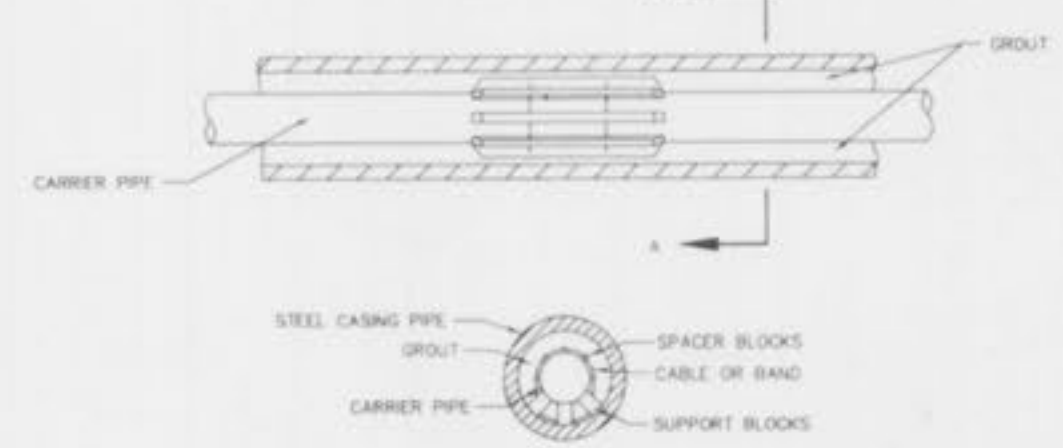


**OVERFLOW STRUCTURE #20 DETAIL**  
 NOT TO SCALE



**BORING DETAIL**

- NOTES**
- 1) INSIDE DIAMETER OF CASING PIPE TO BE A MINIMUM OF 4" GREATER THAN COUPLING DIAMETER OF CARRIER PIPE.
  - 2) ENGAGEMENTS TO BE INSTALLED UNDER THE ROAD BY MEANS OF JACKING IT THROUGH, OR BY DRY-BORING A HOLE THAT WILL RECEIVE THE CASING WITH A SNUG FIT.
  - 3) THE OUTSIDE DIAMETER OF THE CASING SHALL NOT BE LESS THAN, NOR MORE THAN ONE INCH GREATER THAN THE BORED HOLE.
  - 4) THE ANNUAL SPACE BETWEEN THE CASING PIPE AND THE BORED HOLE SHALL BE FILLED WITH GROUT.



**SECTION A - A**

**AS-BUILTS ADDED NOVEMBER 2000**

Whitegate Villas Phase 1

