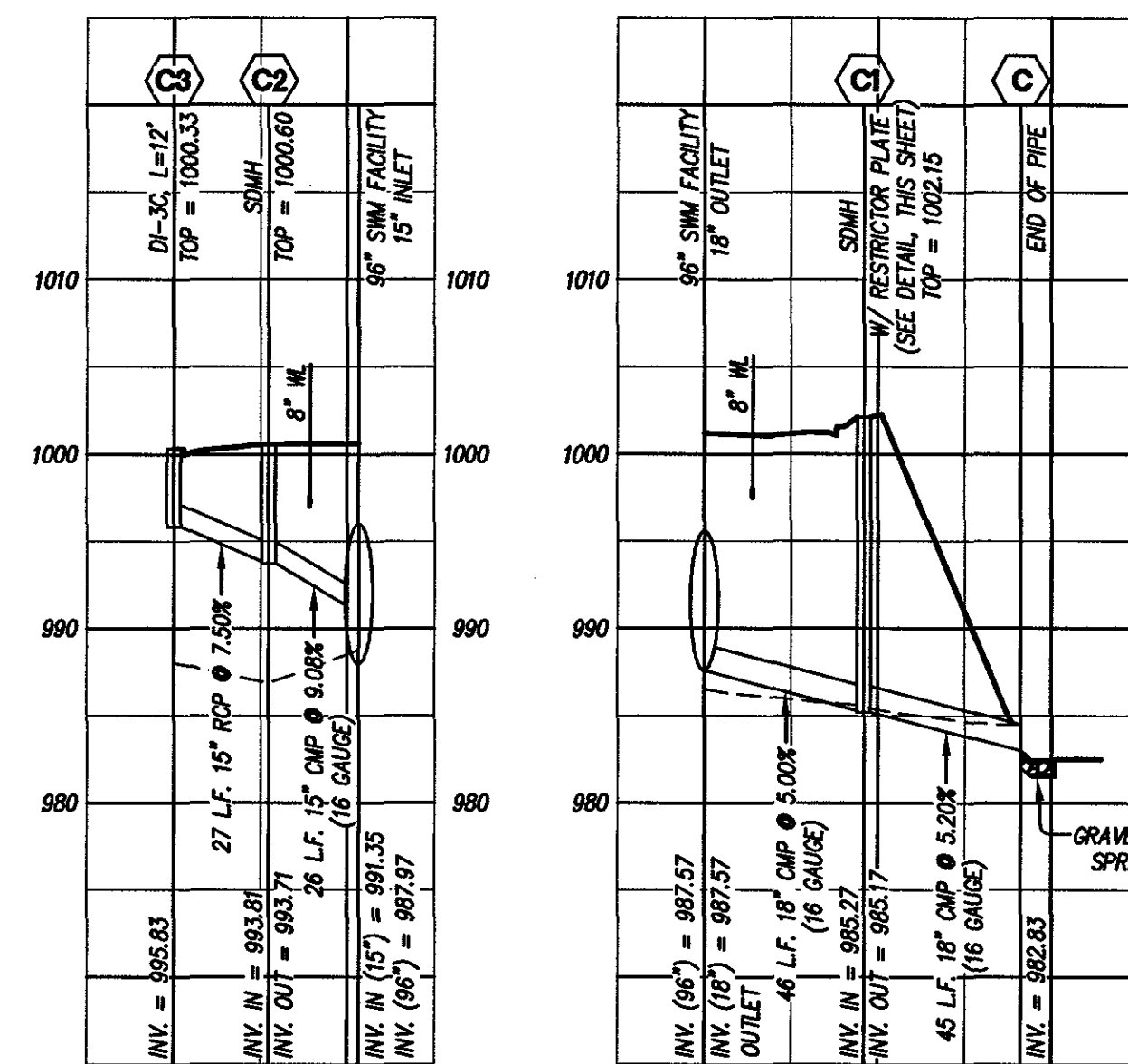
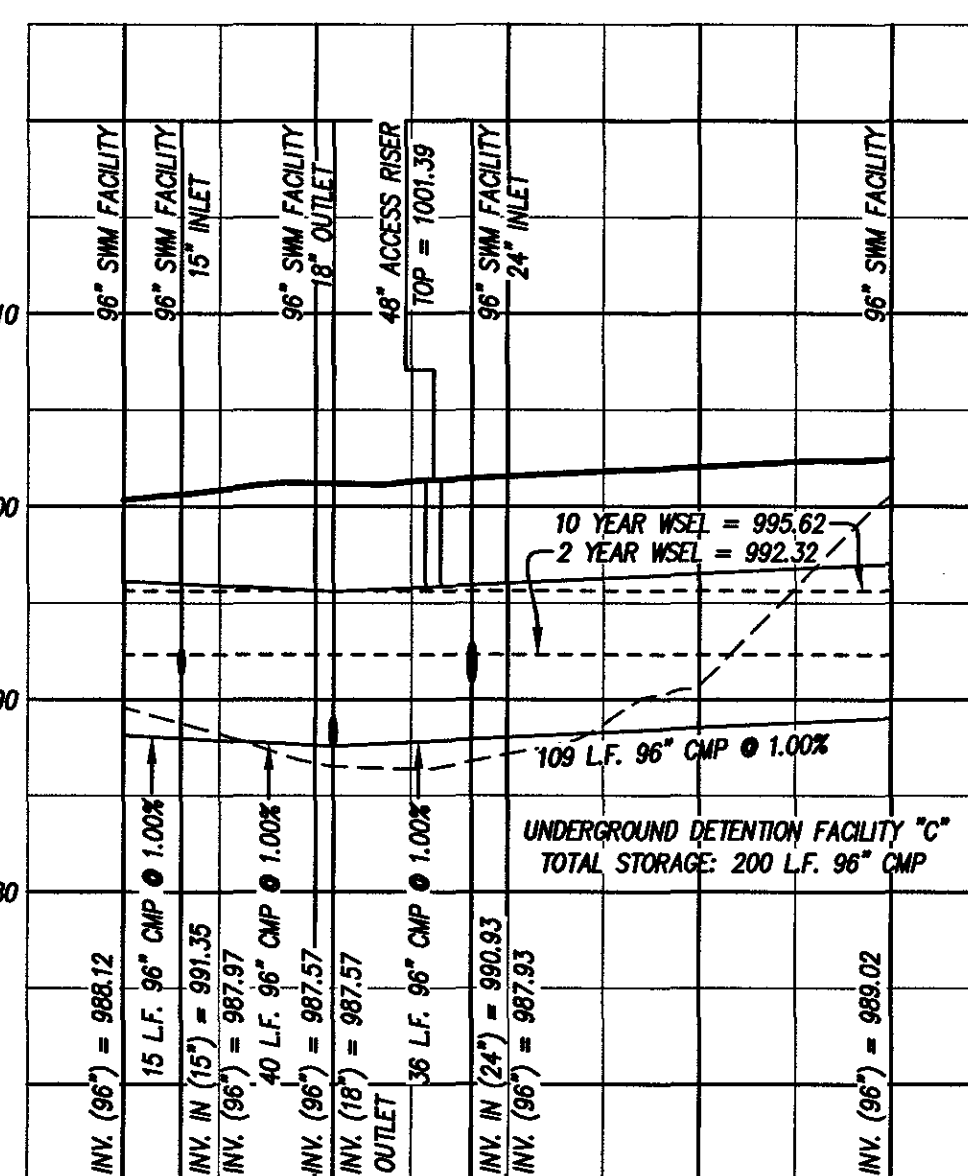
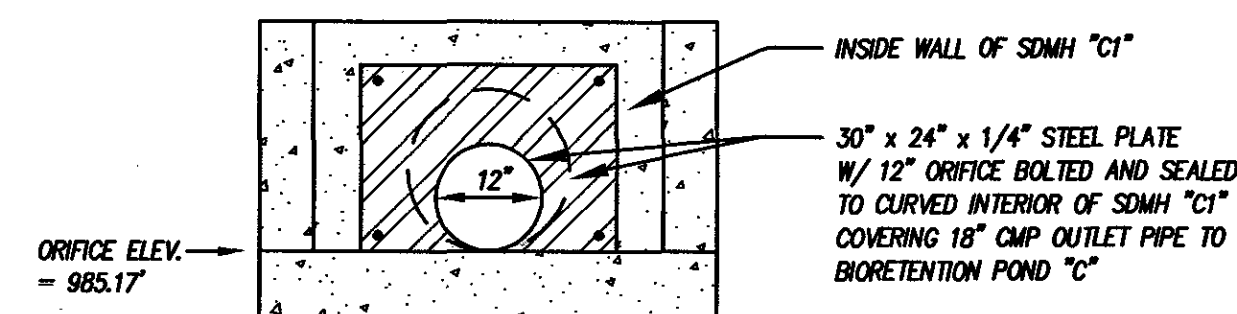
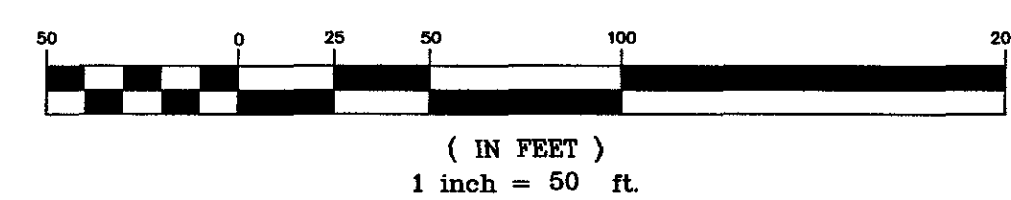




UTILITY NOTES:

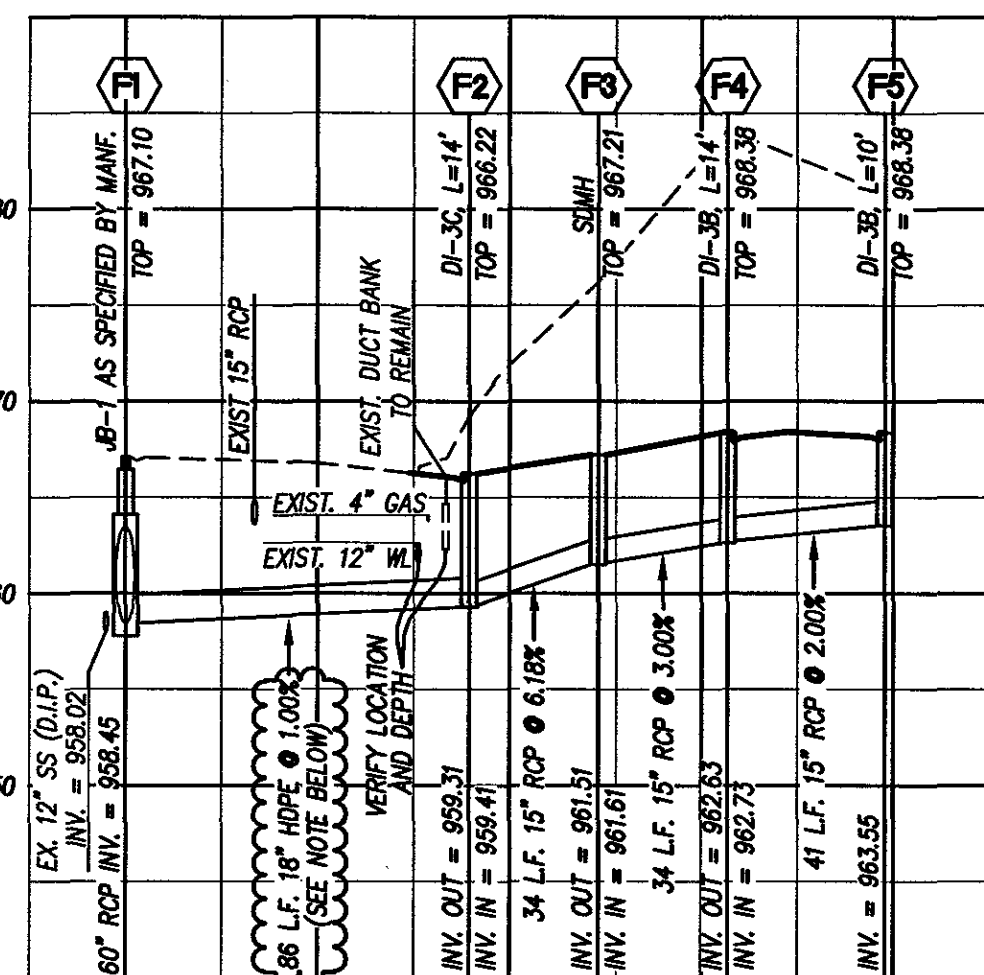
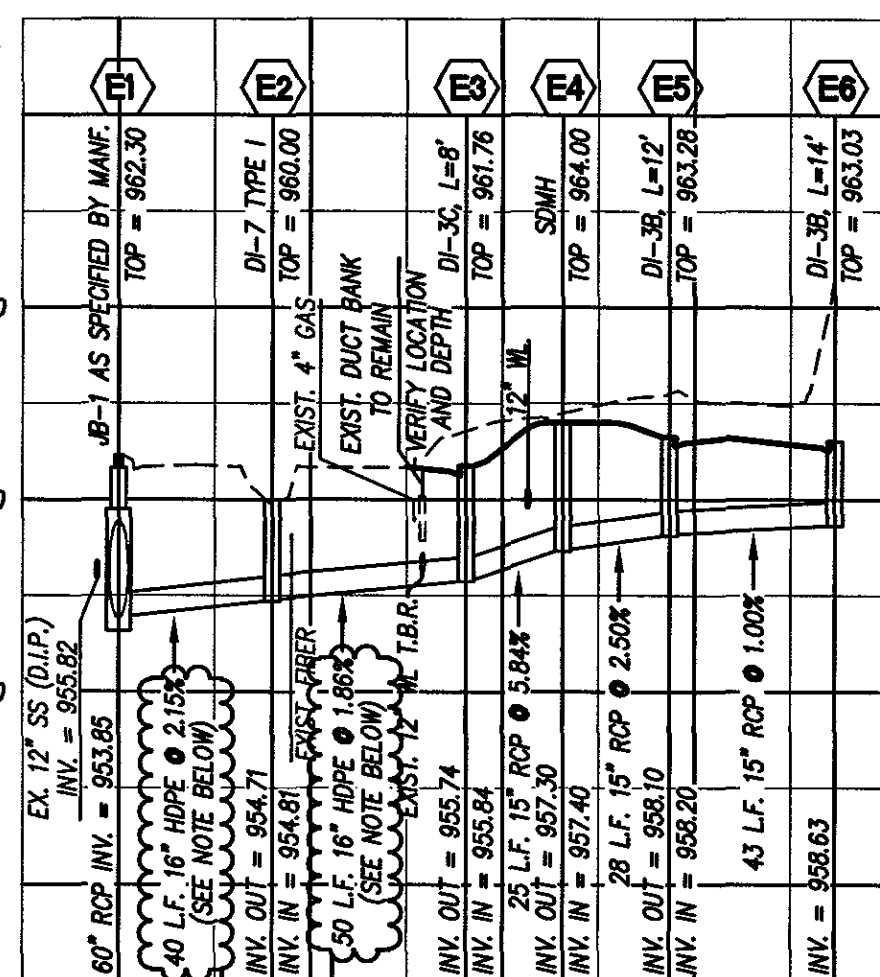
- ALL WATER AND SANITARY SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE WESTERN VIRGINIA REGIONAL DESIGN AND CONSTRUCTION STANDARDS.
- ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH VDOT'S ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS.
- ALL WATER AND SANITARY SEWER LINES SHALL HAVE A MINIMUM OF 3.0 FEET OF COVER.
- MAINTAIN A MINIMUM OF 18" CLEARANCE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE AT ALL WATER, SANITARY SEWER, AND STORM DRAIN CROSSINGS. WHERE THIS CLEARANCE CAN NOT BE ACHIEVED, CONCRETE PIERS SHALL BE UTILIZED IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS.
- SANITARY SEWER MAIN PIPE MATERIAL SHALL BE PVC, SDR-35, EXCEPT AS NOTED, OR APPROVED EQUAL.
- ALL SANITARY SEWER LATERAL PIPE MATERIAL SHALL BE, PVC, SDR-26.
- CONNECTION TO EXISTING SANITARY SEWER MANHOLE WILL BE BY MEANS OF A CORE DRILL WITH NEW RUBBER BOOT INSTALLED. A WESTERN VIRGINIA WATER AUTHORITY INSPECTOR MUST BE ON SITE DURING CONNECTION TO MANHOLE. 48 HOUR NOTICE REQUIRED.
- NEW WATERLINE MAIN PIPE MATERIAL SHALL BE C900 PVC DRY 18" WATERLINES, UNLESS OTHERWISE INDICATED, OR APPROVED EQUAL.
- ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH VDOT STANDARDS.
- ALL CMP PIPE SHALL BE ALUMINIZED STEEL, TYPE II.
- 96" CMP PIPE SHALL BE 12 GAUGE. SEE PROFILE FOR SPECIFIED GAUGE FOR ALL OTHER CMP PIPE.
- CMP PIPE BANDS SHALL BE MIN. 2" WIDE & ALL FITTINGS SHALL BE REINFORCED PER ASTM 988.
- ALL HDPE PIPE SHALL BE ADS N-12, OR APPROVED EQUAL.
- ALL RCP PIPE SHALL BE CLASS III UNLESS OTHERWISE INDICATED.
- ALL NEW DROP INLETS AND STORM DRAIN MANHOLES SHALL HAVE VDOT STD. IS-1, INLET SHAPING.
- ALL DRAINAGE STRUCTURES DEEPER THAN 4.0 FEET SHALL HAVE STEPS (VDOT STD. ST-1) INSTALLED.
- SAFETY SLABS (VDOT STD. SL-1) ARE REQUIRED IN ALL NEW DRAINAGE STRUCTURES WITH A DEPTH OF 12.0 FEET OR GREATER. THE SPACING OF THE SLABS SHOULD BE 8 TO 12 FEET WITH NO SAFETY SLAB LOCATED WITHIN 6 FEET FROM THE TOP OR BOTTOM OF THE STRUCTURE.
- NYLOPLAST DRAIN BASINS ARE A PRODUCT OF ADS. CONTACT ADS FOR ORDERING INFORMATION.
- NEW STORM PIPE SHALL BE CUT OR CORE DRILLED INTO EXISTING STORM STRUCTURES AND SEALED WITH MORTAR, AND CONCRETE MASONRY UNITS IF NEEDED, IN THE PUBLIC RIGHT-OF-WAY. SEALING SHALL BE COMPLETED ON INSIDE OF STORM STRUCTURE OR INSIDE AND OUTSIDE OF STRUCTURE.

GRAPHIC SCALE

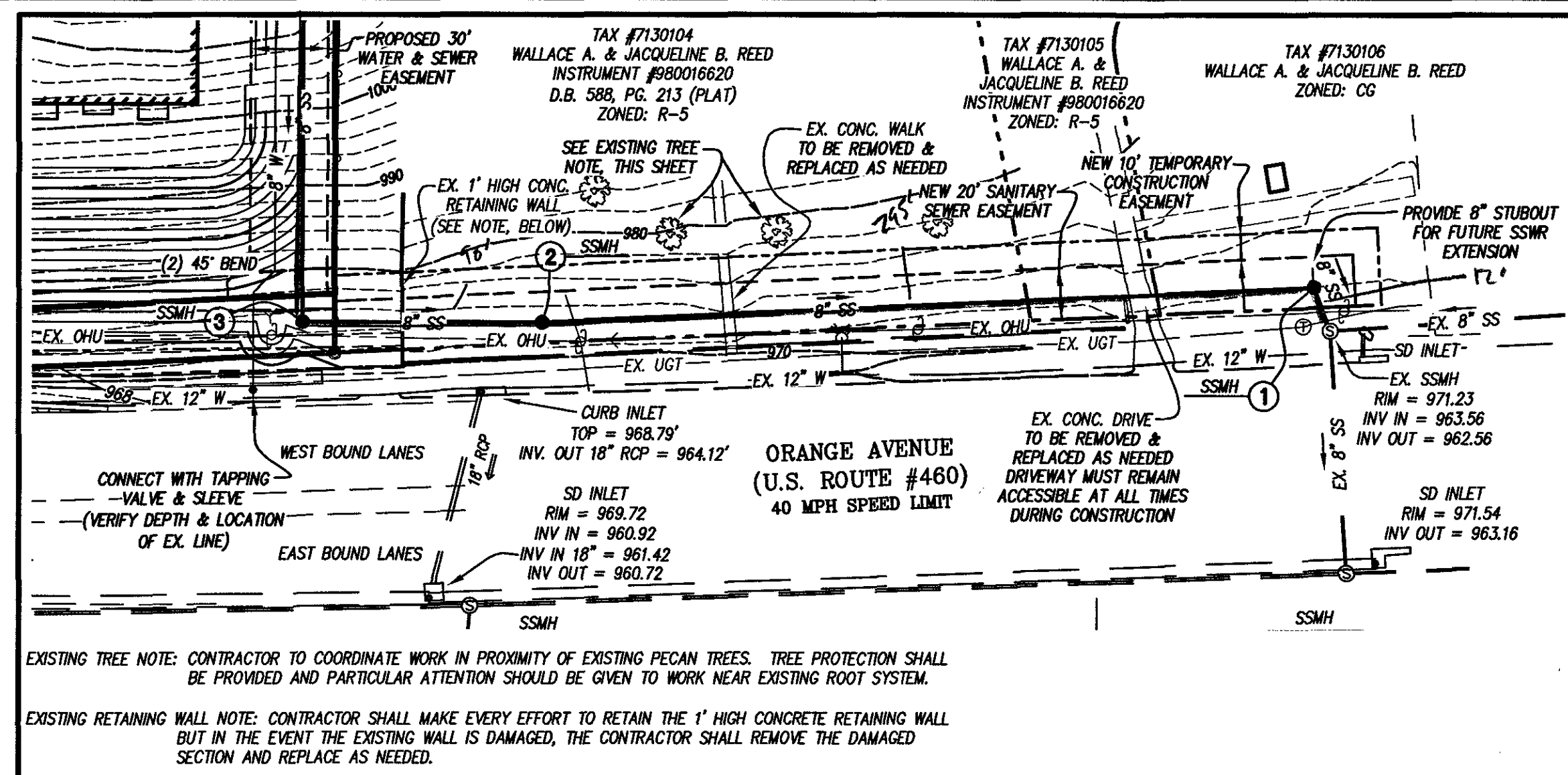


SDMH "C1" WITH RESTRICTOR PLATE

NO SCALE

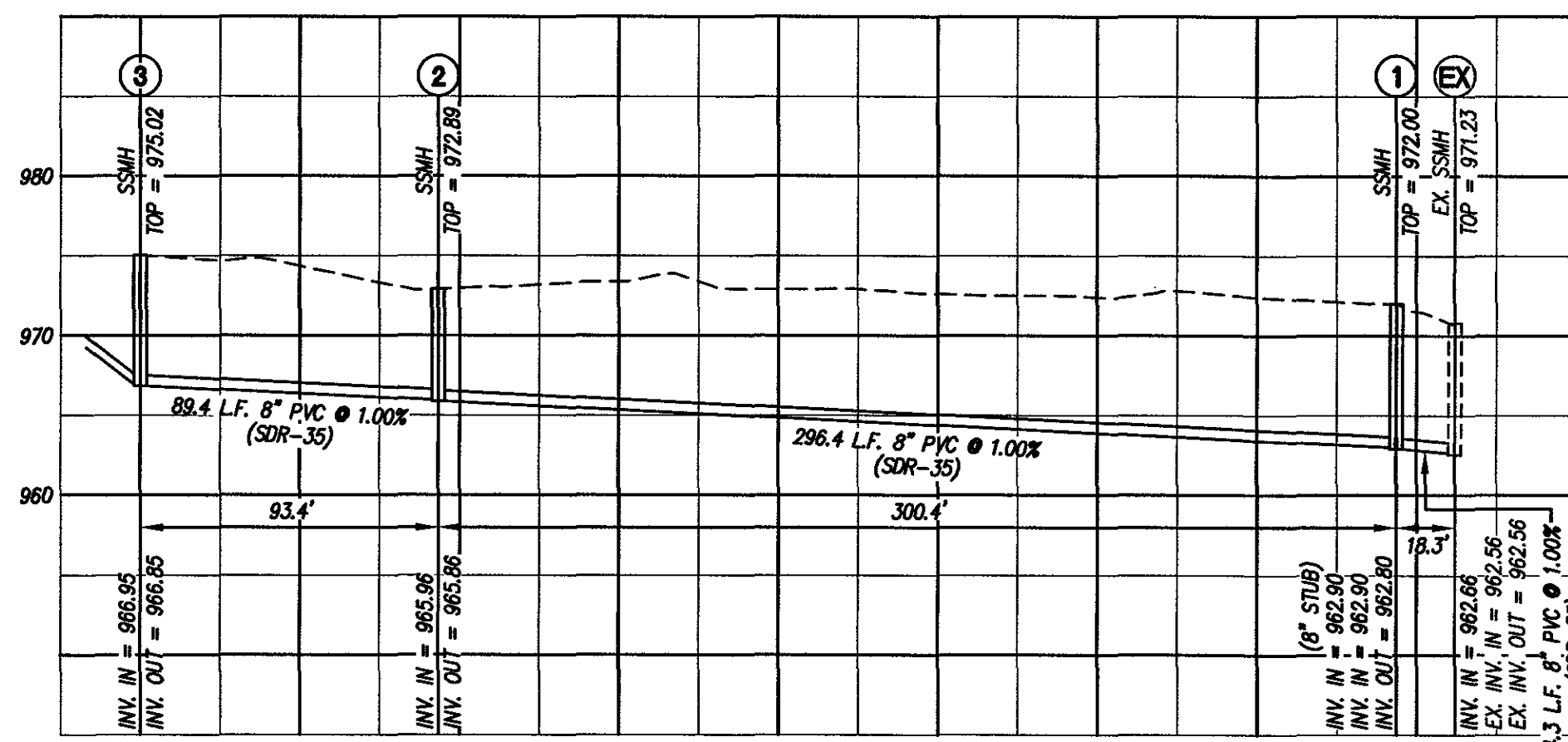


NOTE: STORM DRAIN PIPE INSTALLATION FROM "E3" TO "E1" AND "F2" TO "F1" SHALL UTILIZE DIRECTIONAL DRILLING METHODS. HDPE PIPE MATERIAL SHALL BE TYPE DiscoPlex 4000 DIPS DR-11.



OFFSITE SANITARY SEWER PLAN

SCALE: 1" = 50'



OFFSITE SANITARY SEWER PROFILE

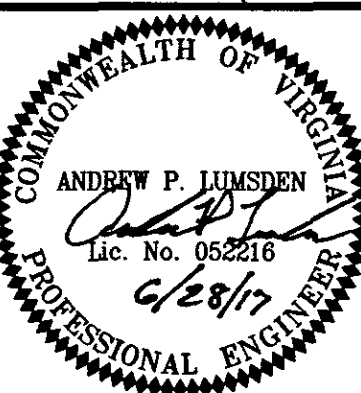
SCALE: 1" = 50' (H)
1" = 10' (V)

City of Roanoke
Planning, Building, & Development
COMPREHENSIVE DEVELOPMENT PLAN

**FIELD REVISION
APPROVED**

by Adrian Gilbert 06/30/2017

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



STORM DRAINAGE &
OFFSITE SANITARY
SEWER PROFILES

COMPREHENSIVE DEVELOPMENT PLAN
FOR
DISTRICT VUE APARTMENTS
PREPARED FOR
SOUTHEASTERN SITE ACQUISITIONS
SITUATED ALONG ORANGE AVENUE
THE CITY OF ROANOKE, VIRGINIA

NO.	DATE	DESCRIPTION
1	1/26/2017	PIPE MATERIAL & INSTALLATION METHOD REVISED BETWEEN "E3-E1" & "F2-F1"
2		
3		
4		
5		

DATE: April 6, 2017

SCALE: 1" = 50' (H); 1" = 10' (V)

COMMISSION NO.: 15-005

SHEET 10 OF 22

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