

PACKAGE #8: 12/20/05
PERMIT AND CONSTRUCTION SET

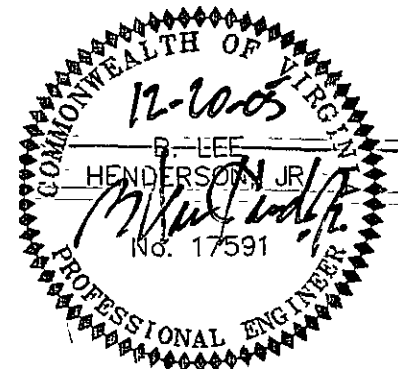
PACKAGE #5: 12/5/05
FOUNDATION PERMIT SET

PACKAGE #4: 11/15/05
SITE DEVELOPMENT SUBMISSION

PACKAGE #3: 11/18/05
85% CONSTRUCTION DOC. SET

PACKAGE #2: 19/16/05
DESIGN DEVELOPMENT SET

PACKAGE #1: 6/30/05
SCHEMATIC DESIGN SET



PERKINS EASTMAN ARCHITECTS P

1101 LIBERTY AVE
P.O. BOX 13222
ROANOKE, VA 24002
412-456-06
FAX 456-05

Owner:
VIRGINIA LUTHERAN HOMES, INC.
117 SHERATON DRIVE
SALEM, VA 24153 TEL 540-562-5443

Civil / Site:
LUMSDEN ASSOCIATES
4654 BRAMBLETON AVENUE
ROANOKE, VA 24018 TEL 540-774-4411

Structural:
DAY & KINDER CONSULTING ENGINEERS
3238 ELECTRIC ROAD, BUILDING C
ROANOKE, VA 24018 TEL 540-774-5706

MEP:
LAWRENCE PERRY & ASSOCIATES
30A W CHURCH STREET
ROANOKE, VA 24026 TEL 540-342-1816

Landscape:
DAN CHITWOOD DESIGN
PO BOX 22812
ROANOKE, VA 24018 TEL 540-989-6040

GENERAL CONTRACTOR:
LIONBERGER CONSTRUCTION
5903 STARKEY ROAD
PO BOX 20209
ROANOKE, VA 24018 TEL 540-989-5301

PROJECT TITLE:

BRANDON OAKS PHASE ONE- ADDITION & RENOVATIONS

3804 BRANDON AVE.
ROANOKE, VA 24018
PROJECT No: 19412

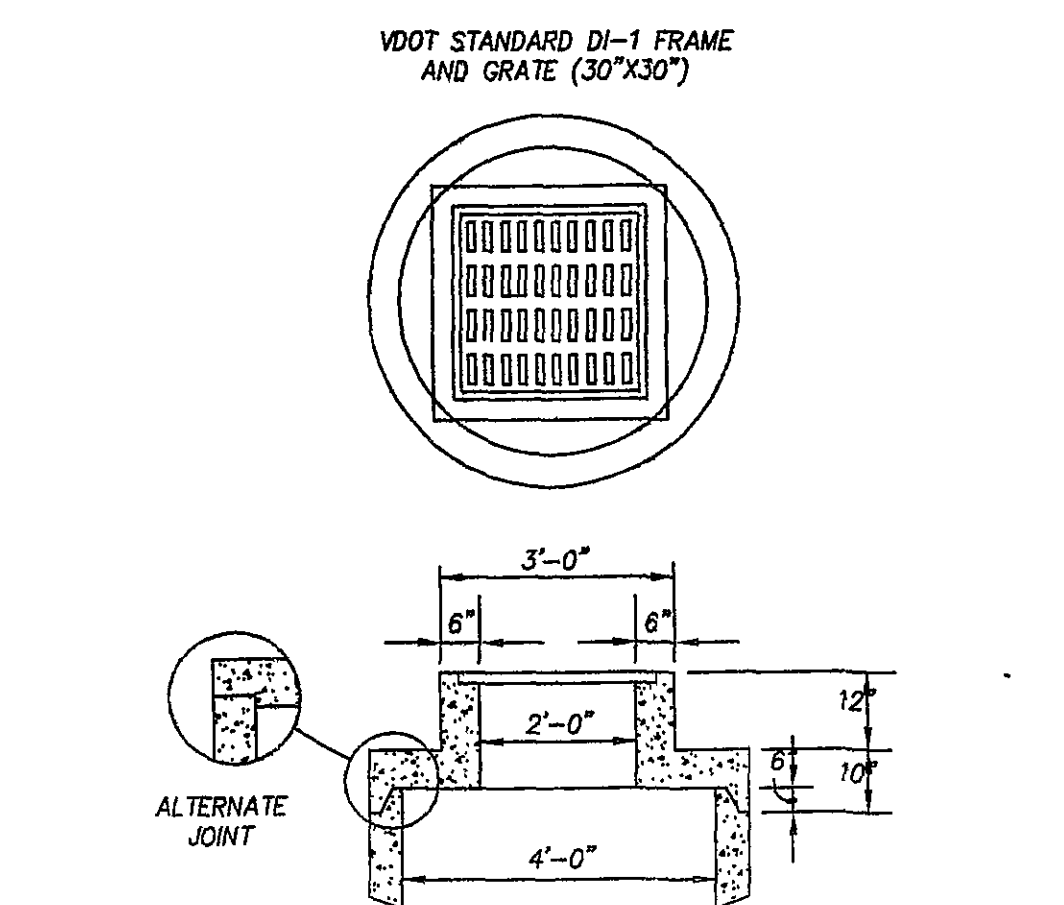
DRAWING TITLE:

DETAILS

SCALE: NO SCALE

C-108

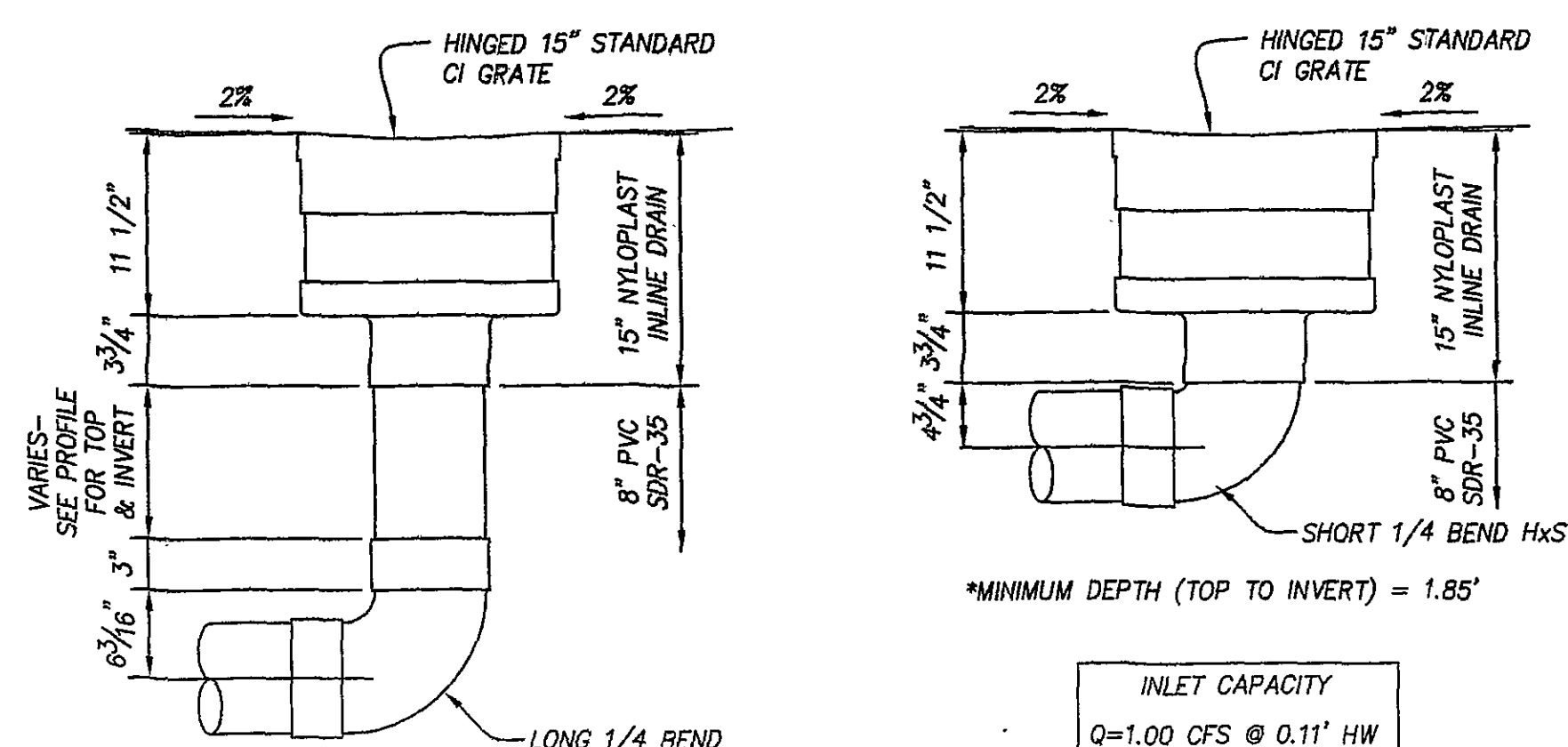
PACKAGE #6
PERMIT AND CONSTRUCTION SET
12/20/2005



- NOTES:
- 4000 PSI CONCRETE.
 - MAINHOLE SHALL MEET ASTM C468.
 - WHEN LESS THAN 6", THERE IS CONTINUOUS CIRCUMFERENTIAL REINFORCING STEEL ABOVE PIPE OPENING.
 - REFER TO CONTRACT DOCUMENTS FOR PIPE SIZES, LOCATIONS, AND ELEVATIONS.
 - 3" DIA. WEEP HOLE TO BE PROVIDED IN FIRST RISER SECTION WHEN SUBSURFACE DRAINAGE IS REQUIRED.
 - REINFORCING STEEL PER ASTM C478; ASHTO M-199, VDOT STANDARD FOR SPACING AND LOCATION.
 - STRUCTURE HAS BEEN APPROVED FOR H-20 LOADING.

MODIFIED DI-1 DROP INLET

NO SCALE

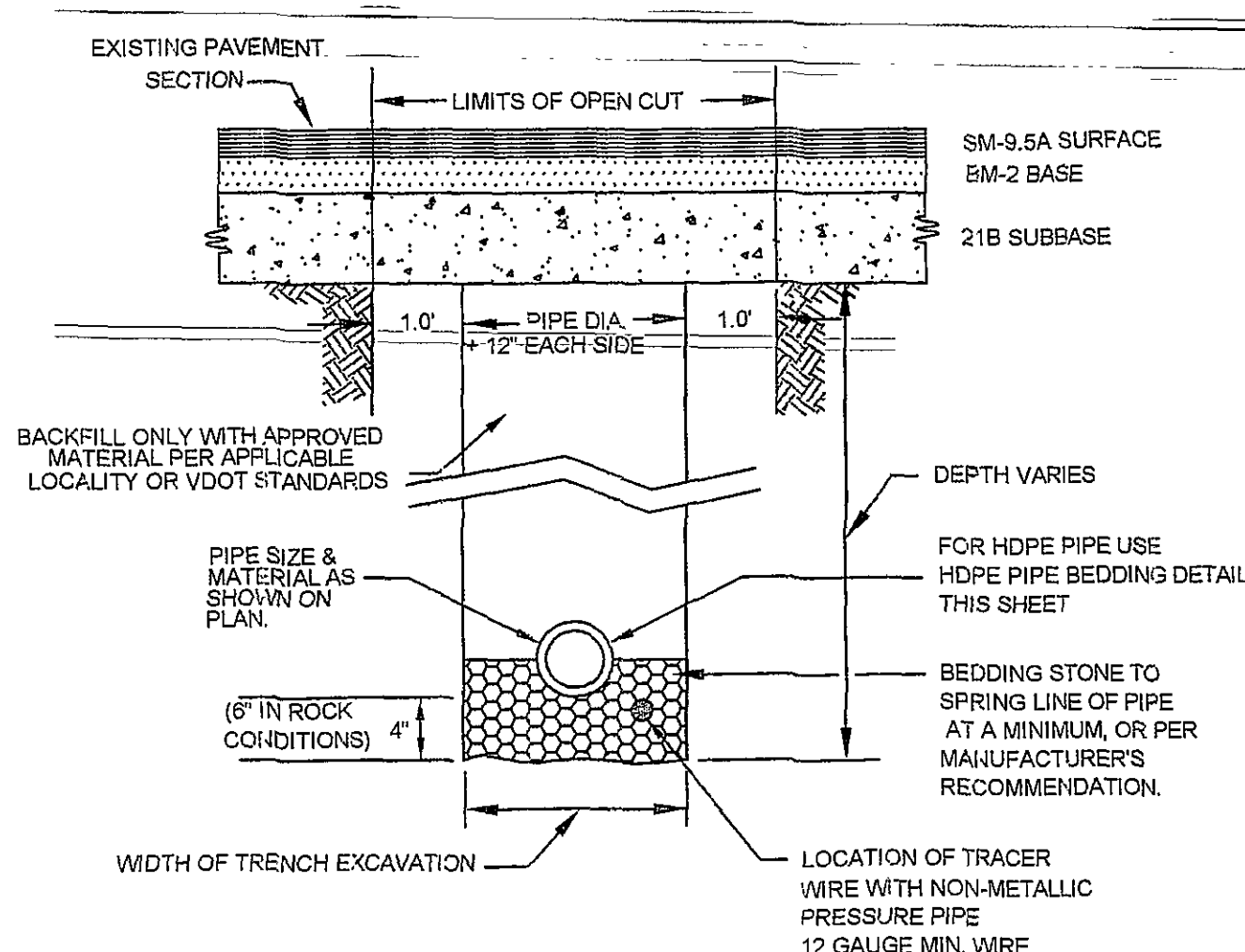


*MINIMUM DEPTH (TOP TO INVERT) = 2.5'

LAWN AREA DRAIN - SUPPLEMENTAL

- NOTES:
- 15" NYLOPLAST H-20 (OR APPROVED EQUAL), CI GRATE TO 8" PVC SDR 35
 - SEE MANUFACTURE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION
 - HDPE TO BE ADS N-12 SMOOTH WALL OR APPROVED EQUAL

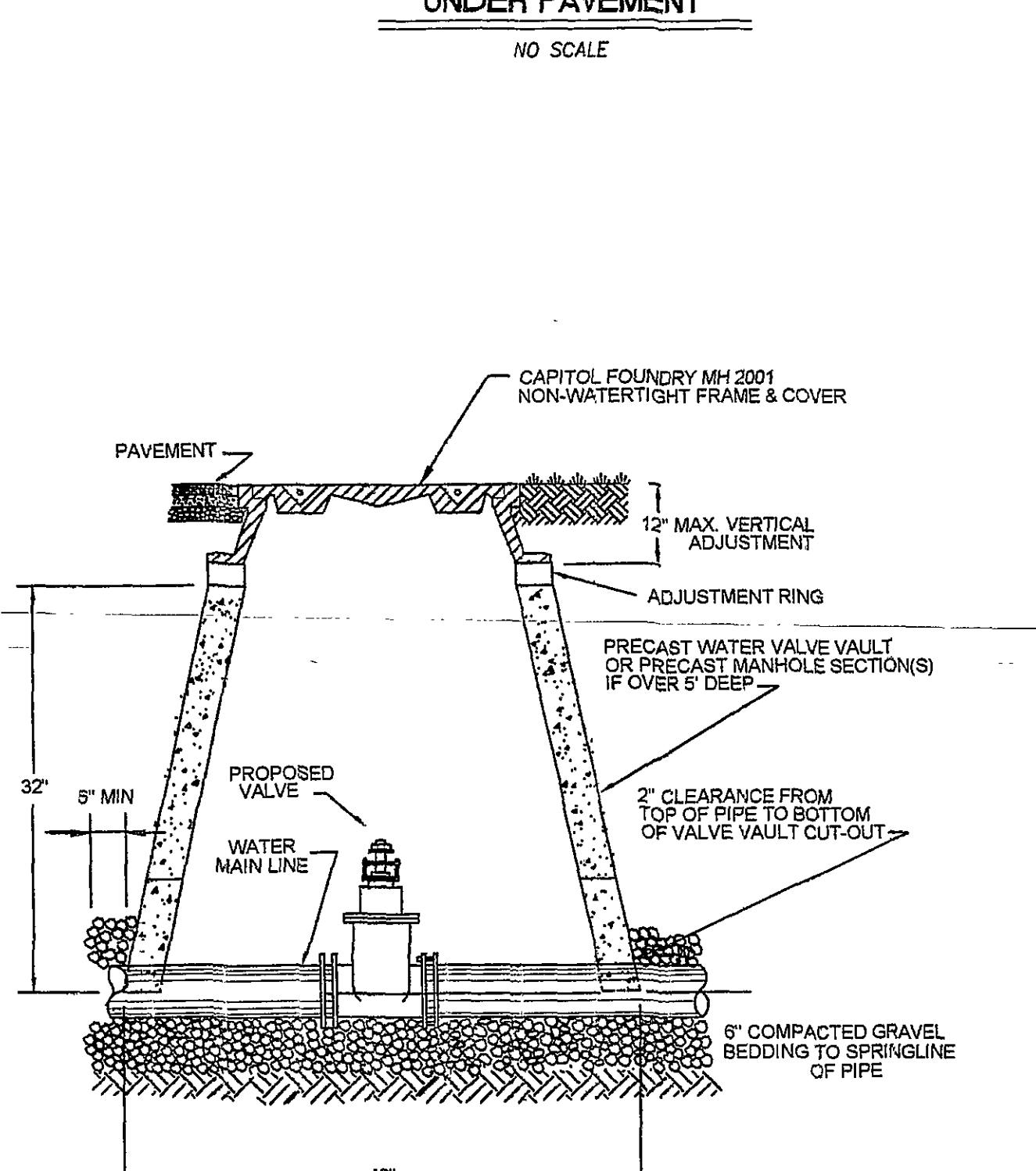
NO SCALE



- NOTES:
- IN ROANOKE CITY, THE CONTRACTOR SHALL REPLACE THE OPEN CUT WITH A MINIMUM TOP COURSE OF 2" VDOT SM-9.5A, BASE COURSE OF 3" VDOT SM-2, AND SUBBASE OF 8" VDOT 21B, OR AS REQUIRED BY VDOT. IN ROANOKE CITY, CONTRACTOR SHALL MATCH EXISTING PAVEMENT LAYERS OR AS REQUIRED BY CITY STANDARDS
 - ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT-OF-WAY SHALL BE AS SPECIFIED BY VDOT OR APPLICABLE LOCALITY
 - PRIOR TO CONSTRUCTION, CONTRACTOR IS RESPONSIBLE FOR SECURING ALL REQUIRED PERMITS FROM VDOT AND/OR APPLICABLE LOCALITY
 - ALL WATER LINES BENEATH PAVEMENT SHALL BE DUCTILE IRON UNLESS INSTALLED IN CASING PIPE OR BY DIRECTIONAL BORING
 - IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, BEDDING STONE AND FILL SHALL BE PLACED IN 6" LIFTS AND SHALL BE COMPACTED TO AT LEAST 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 698
 - ALL SEWER LINE PIPE SHALL BE BEDDED IN COMPACTED GRANULAR MATERIAL. BEDDING REQUIREMENTS FOR DUCTILE WATER LINE ARE DEPENDENT ON MANUFACTURER'S BEDDING CRITERIA

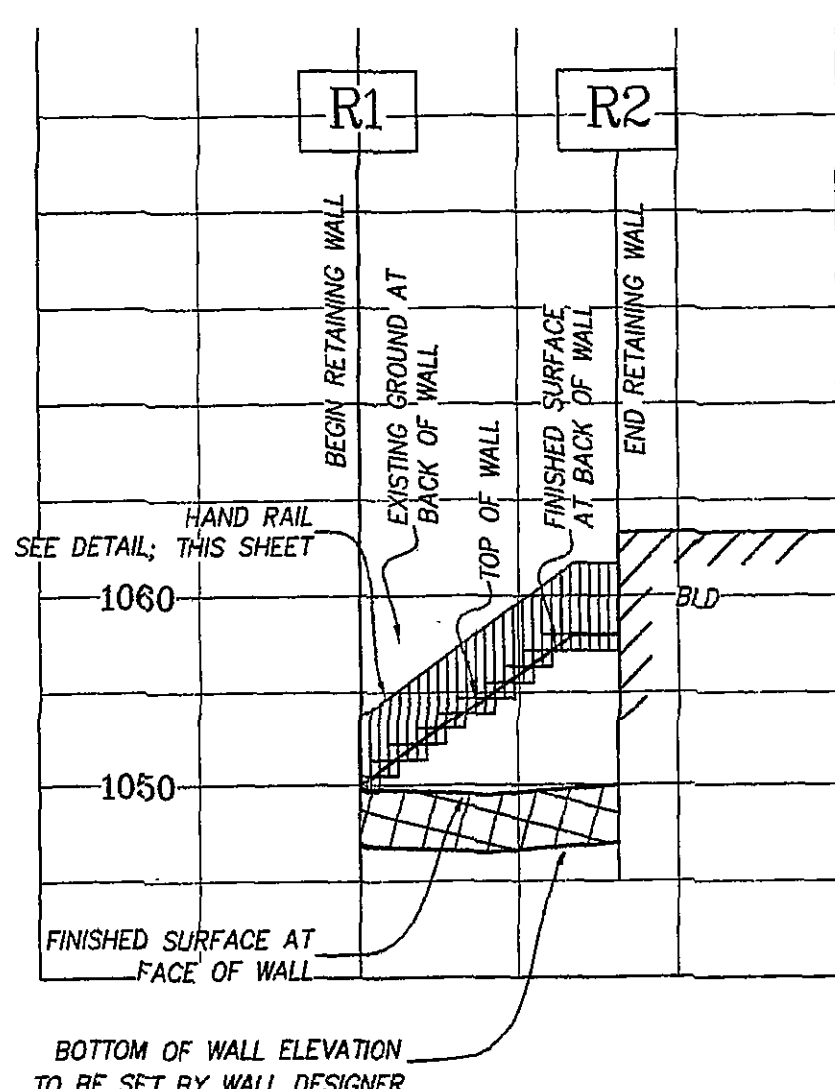
WATER, SANITARY SEWER, AND STORM DRAIN BEDDING AND BACKFILL UNDER PAVEMENT

NO SCALE



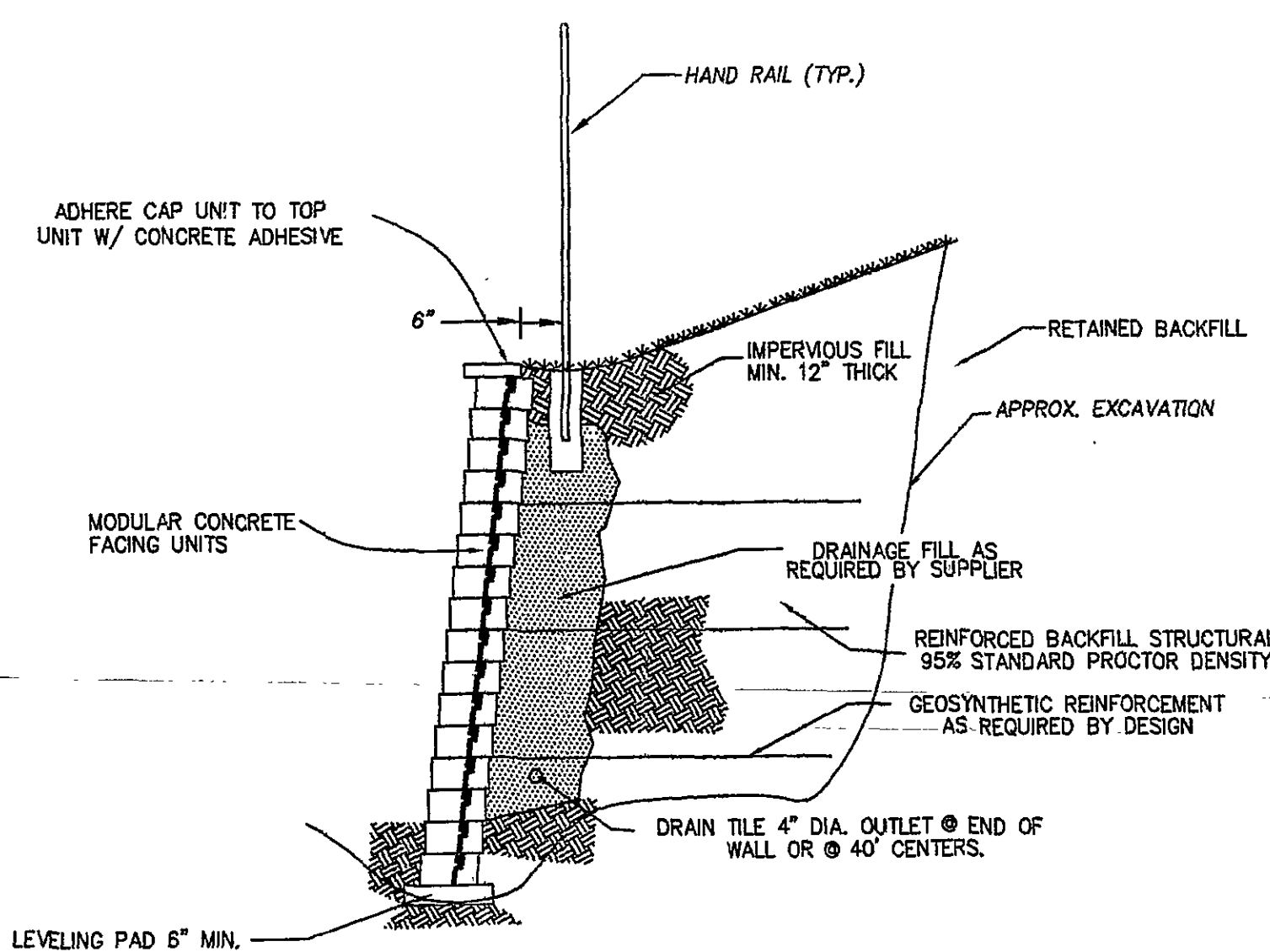
WATER LINE VALVE INSTALLATION

NO SCALE



RETAINING WALL SCHEMATIC

NO SCALE



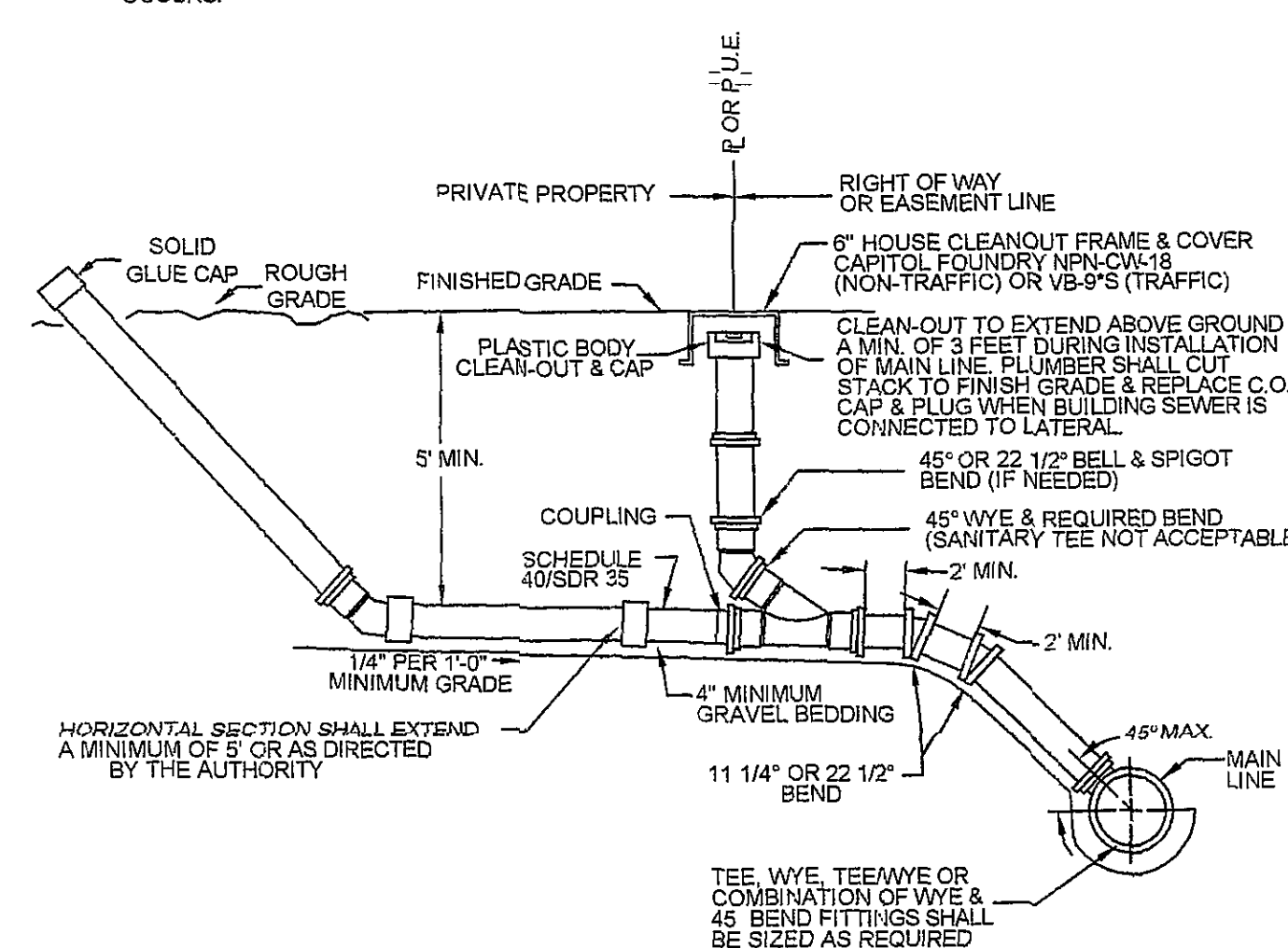
RETAINING WALL WITH HAND RAIL

NO SCALE

RETAINING WALL NOTES:

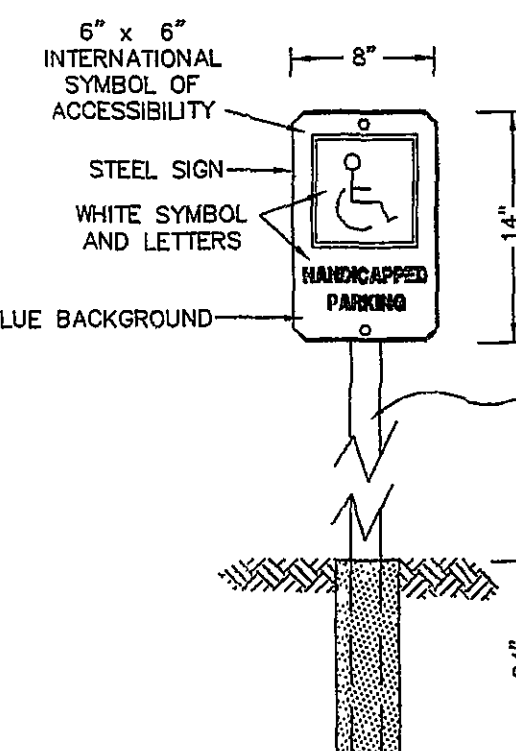
- 1) RETAINING WALL DESIGNER SHALL PROVIDE, TO THE OWNER, DESIGN DRAWINGS OF THE RETAINING WALLS. SUCH DRAWINGS SHALL INCLUDE TYPE AND STYLE, DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED ENGINEER. WALL DETAILS AND PROFILES SHOWN IN THESE PLANS ARE FOR SCHEMATIC DETAIL ONLY.
- 2) PRIOR TO CONSTRUCTION WALL SUPPLIER SHALL SUBMIT SHOP DRAWINGS TO ROANOKE CITY FOR REVIEW. DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED ENGINEER.

- GENERAL NOTES:
1. TRAFFIC BEARING BOX REQUIRED IN TRAFFIC AREA
 2. ALL PIPE AND FITTINGS SHALL BE OF SIMILAR MATERIAL
 3. ALL PIPE SHALL BE OF SAME SIZE
 4. NO BENDS ARE ALLOWED IN THE LATERAL FROM THE MAIN TO THE CLEAN-OUT STACK WYE (EXCEPT AS NOTED)
 5. ALL MAIN LINE TAPS ON ACTIVE MAINS WILL BE PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY
 6. PIPING BEHIND CLEANOUT TO BE INSTALLED PER BOCA CODE
 7. MINIMUM LATERAL SIZE:
 8. 4" FOR RESIDENTIAL SERVICE
 9. 6" FOR NON-RESIDENTIAL SERVICE
 10. PROPERTY OWNER RESPONSIBLE FOR INSTALLING CLEANOUT ON PROPERTY LINE WHEN MAINTENANCE OCCURS.



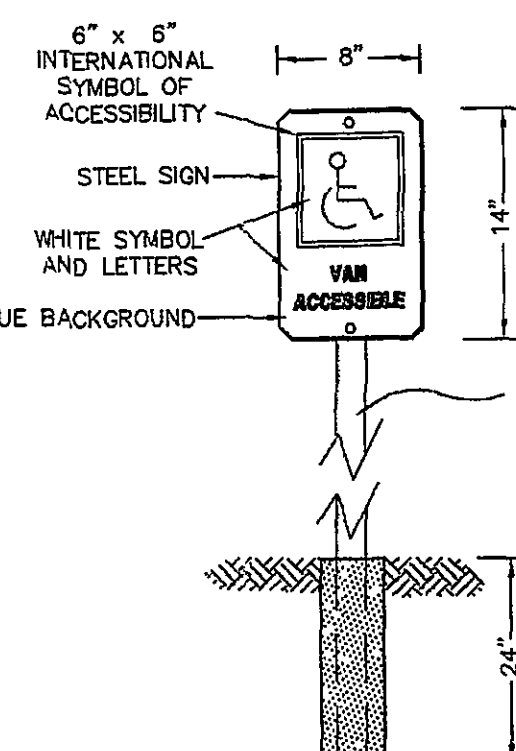
SANITARY SEWER LATERAL FOR DEEP SEWER

NO SCALE



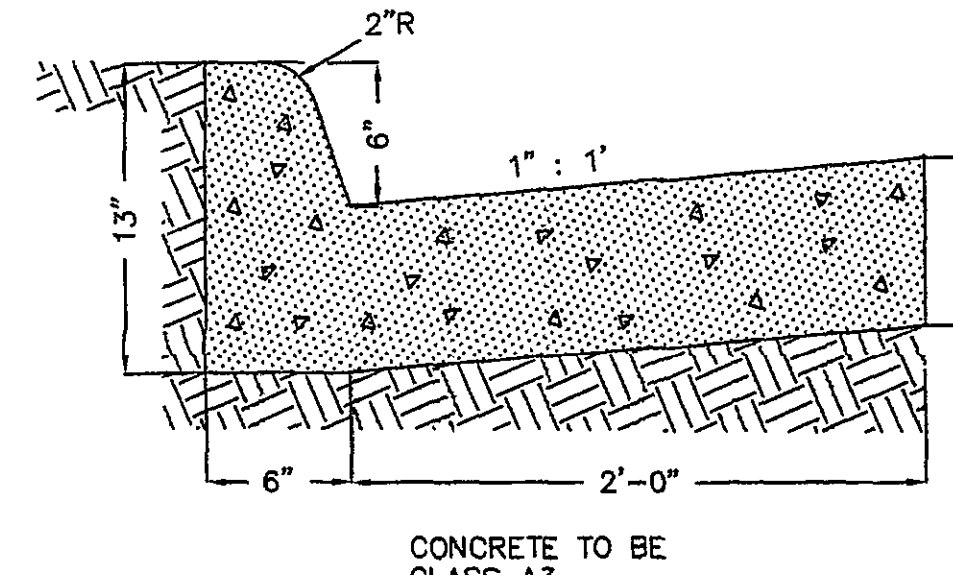
HANDICAP PARKING SIGN (S1)

NO SCALE



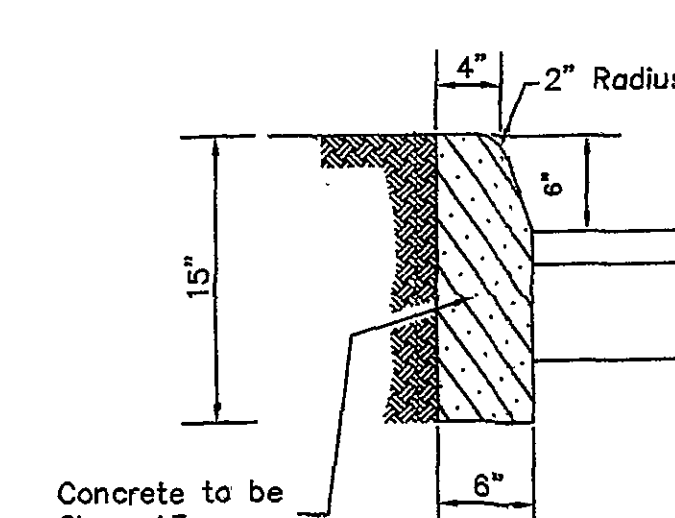
VAN ACCESSIBLE HANDICAP PARKING SIGN (S2)

NO SCALE



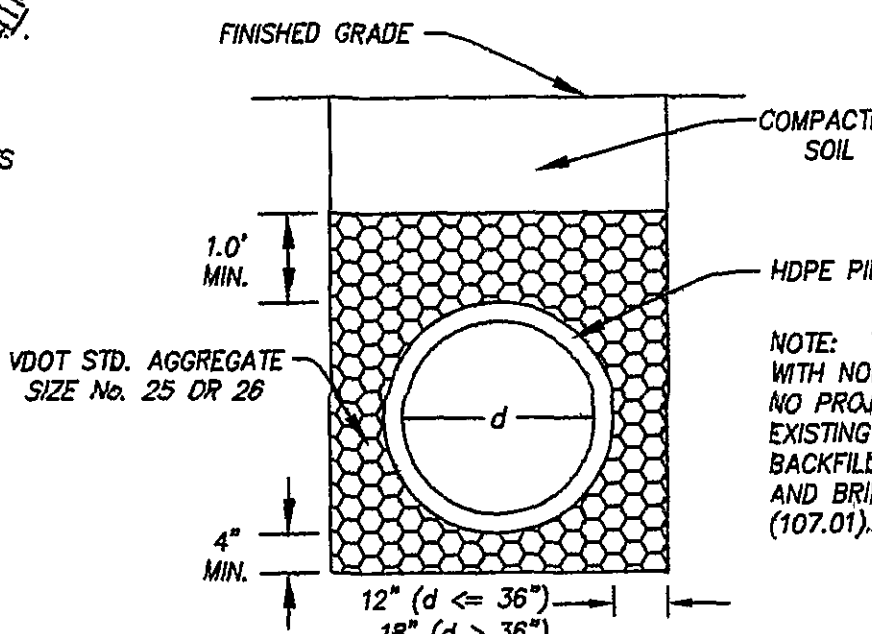
CONCRETE CURB AND GUTTER (CG-6)

NO SCALE



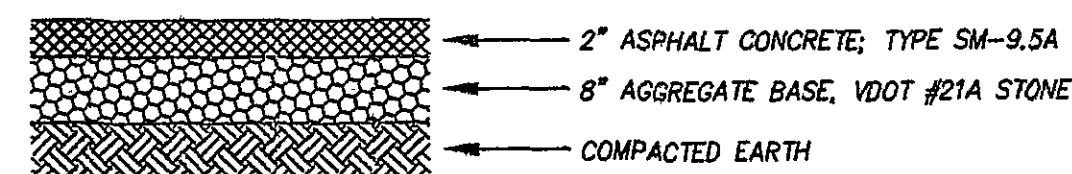
CONCRETE CURB (CG-2)

NO SCALE



HDPE PIPE BEDDING

NO SCALE



PAVEMENT DETAIL

NO SCALE

PAVEMENT NOTES:

1. THE SIZE 21B AGGREGATE SHALL BE PRIMED WITH APPROXIMATELY 0.35 GAL/SY OF RC-250 ASPHALT AND COVERED WITH 16 TO 18 LBS/SY OF SIZE 8-P AGGREGATE BEFORE PLACING SM-9.5A.
2. EXISTING PAVEMENT IS TO BE SAW CUT WHERE NEW PAVEMENT IS TO MATCH. SAW CUT IS TO BE MADE WITH A MECHANICAL SAW AND SIDES TO BE TACKED WITH BITUMINOUS MATERIAL, TYPE RC-250, OR EQUAL.