

TOWN OF UNION VALE

SANITARY LANDFILL CLOSURE

DUTCHESS COUNTY, NEW YORK

LEGEND

PROPOSED CONTOURS

PROPOSED GRASS LINED DRAINAGE DITCH

AS-BUILT CONTOURS

EXISTING NATURAL CONTOURS

EXISTING SURFACE DRAINAGE

LIMIT OF WASTE

EXISTING GROUNDWATER MONITORING WELL

PROPOSED METHANE GAS VENT

4

G-5

DETAIL IDENTIFICATION NO.

SHEET NO. WHERE DETAIL IS SHOWN

EXISTING UTILITY POLE

PROPERTY LINE (APPROX.)

FENCE LINE

LIMIT OF TREES OR SHRUBS

PROPOSED ACCESS ROAD

EXISTING ACCESS ROAD

PROJECT LIMIT LINE

4

G-2

DETAIL IDENTIFICATION NO.

DETAIL TITLE

SHEET NO. WHERE DETAIL IS CALLED OUT

SITE LOCATION MAP

GENERAL NOTES:

- IT IS RECOMMENDED THAT THE CONTRACTOR INSPECT THE SITE PRIOR TO BID SO THAT THE EXTENT OF VARIANCE OF ACTUAL GROUND FEATURES WITH THOSE SHOWN ON THE PLANS MAY BE REFLECTED IN THE BID.
- CONTRACTOR SHALL LAY OUT LIMIT OF WASTE AND CONSTRUCTION GRID AS SHOWN ON THE DRAWINGS. LAYOUT TO BE VERIFIED BY THE ENGINEER IN THE FIELD.
- THE CONTRACTOR SHALL CONDUCT ALL CONSTRUCTION ACTIVITIES IN SUCH A MANNER TO PROVIDE FOR RUNOFF AND PREVENT PONDING OF WATER OVER THE LANDFILL SURFACE AT ALL TIMES.
- PROTECT ALL EXISTING MONITORING WELLS FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGED WELLS SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR SHALL PROVIDE FOR GENERAL EROSION CONTROL DURING CONSTRUCTION IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS. SILT FENCING AND HAY BALES SHALL BE INSTALLED AS INDICATED. HAY BALES SHALL BE TIGHTLY BOUND FRESH HAY. NO ROTTED OR MILDEWED HAY OR BINDING WILL BE ACCEPTED.
- ALL COVER LAYER THICKNESSES SHALL BE MEASURED PERPENDICULAR TO THE GROUND SURFACE.
- ALL INSTALLATION PROCEDURES AND QA/QC TESTING FOR MATERIALS USED IN THE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS FOR THE PROJECT. ALL QA/QC TESTING SHALL BE PROVIDED BY THE CONTRACTOR WHO SHALL COORDINATE HIS SCHEDULE AND COOPERATE FULLY WITH ALL TESTING PROCEDURES.
- ALL CONSTRUCTION SHALL BE PERFORMED UNDER THE OBSERVATION OF A REPRESENTATIVE OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW YORK.
- RECORD DRAWINGS SHALL BE PREPARED BY THE CONTRACTOR FOR SUBMISSION TO THE ENGINEER IN ACCORDANCE WITH THE GENERAL REQUIREMENTS OF THIS CONTRACT.
- CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF COVER SYSTEM STABILITY, EROSION CONTROL, DAMAGE, AND ESTABLISHMENT OF VEGETATIVE GROWTH FOR 12 MONTHS AFTER FINAL ACCEPTANCE OF THE PROJECT.
- CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS WITHIN THE PROJECT LIMIT LINE.
- OWNER SHALL OBTAIN ALL REQUIRED WORK PERMITS AND INSURANCE FOR WORK IN NYSDOT RIGHT-OF-WAY.
- ALL AREAS DISTURBED DURING PERFORMANCE OF THE WORK SHALL BE TOPSOILED, SEEDED AND MULCHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- CONTRACTOR SHALL LIMIT THE PLAN AREA OF THE WASTE EXCAVATION AND FILL LOCATIONS AS REQUIRED TO MINIMIZE ODORS AND THE RELEASE OF VOLATILE ORGANIC COMPOUNDS.
- A MINIMUM OF 6 INCHES OF DAILY COVER SHALL BE PLACED ON ANY EXPOSED OR DISTURBED WASTE AT THE END OF EACH DAY.

DRAWING INDEX

- G-1 TOPOGRAPHIC BASE MAP
- G-2 WASTE GRADING PLAN
- G-3 FINAL CLOSURE PLAN
- G-4 GENERAL DETAILS
- G-5 GENERAL DETAILS
- G-6 GENERAL DETAILS
- MPT-1 MAINTENANCE & PROTECTION OF TRAFFIC

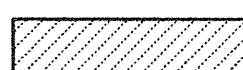
NOVEMBER 1994

CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS, PLANNERS
& LANDSCAPE ARCHITECTS
111 WINNERS CIRCLE ALBANY, NEW YORK 12205

CHA Project No. 2230.07

CONSTRUCTION CONTROL POINTS

GRADING NOTES:

1. EXCAVATED WASTE WITHIN SHADED AREA, ANY WASTE EXCAVATED DURING SLOPE REGRAVING, TIE-IN CONSTRUCTION SHALL BE PLACED ON CENTER OF LANDFILL PRIOR TO CAPPING.
2. CLEAR TREES AND VEGETATION AS NECESSARY.
3. NO WASTE IS TO BE PLACED BEYOND LIMIT OF EXISTING WASTE.
4. SILT FENCE SHALL BE INSTALLED AT THE BOTTOM OF SLOPES AROUND THE LIMITS OF CONSTRUCTION.
6.  AREA TO REMAIN AS 30' WIDE BUFFER ZONE ALONG WEST SIDE OF ROUTE 55. EXCAVATE AND REMOVE WASTE FROM THIS AREA, BACKFILL WITH SELECTED FILL.

BENCH MARK
R.R. SPIKE IN POLE
CH&E 155795
NYT 212
ELEV. 100' OF ASSUMED

SURVEY NOTES:

1. BASE MAPPING PREPARED BY CLOUGH, HARBOUR & ASSOCIATES FROM A FIELD SURVEY COMPLETED IN DECEMBER 1989 AND SEPTEMBER 1990.
2. NORTH REFERENCE IS BASED ON A MAGNETIC READING TAKEN DECEMBER 27, 1989.
3. ELEVATIONS, BENCHMARK AND CONTOURS ARE BASED ON AN ASSUMED DATUM.
4. UNDERGROUND UTILITIES ARE SHOWN FROM FIELD LOCATION IF POSSIBLE, OTHERS ARE SHOWN FROM RECORD DATA. THEIR EXACT LOCATION MAY DIFFER FROM THAT AS SHOWN AND OTHERS MAY EXIST.
5. PROPERTY LINES SHOWN ARE APPROXIMATE AND FOR INFORMATION ONLY. PROPERTY LINES ARE SHOWN BY COMPARING INFORMATION TAKEN FROM A MAP ENTITLED "SHEVED MAP PREPARED FOR TOWN OF UNION VALE" DATED MARCH 15, 1989 AND LAST REVISED AUGUST 18, 1989 AS PREPARED BY KEVEN CUNNINGHAM, L.S. WITH LIMITED EVIDENCE LOCATED IN THE FIELD WHILE CONDUCTING THE TOPOGRAPHIC SURVEY.

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
C.S.H.	11/94
Drawn By:	Date:
M.C.	11/94
Checked By:	Date:
C.H.F.	11/94
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TOWN OF UNION VALE
SANITARY LANDFILL CLOSURE

TOWN OF UNION VALE DUTCHESS COUNTY
STATE OF NEW YORK

LANDFILL CLOSURE PLAN

WASTE GRADING PLAN

Drawing No.

G-2

SCALE: 1"=40'

DATE: NOVEMBER, 1994

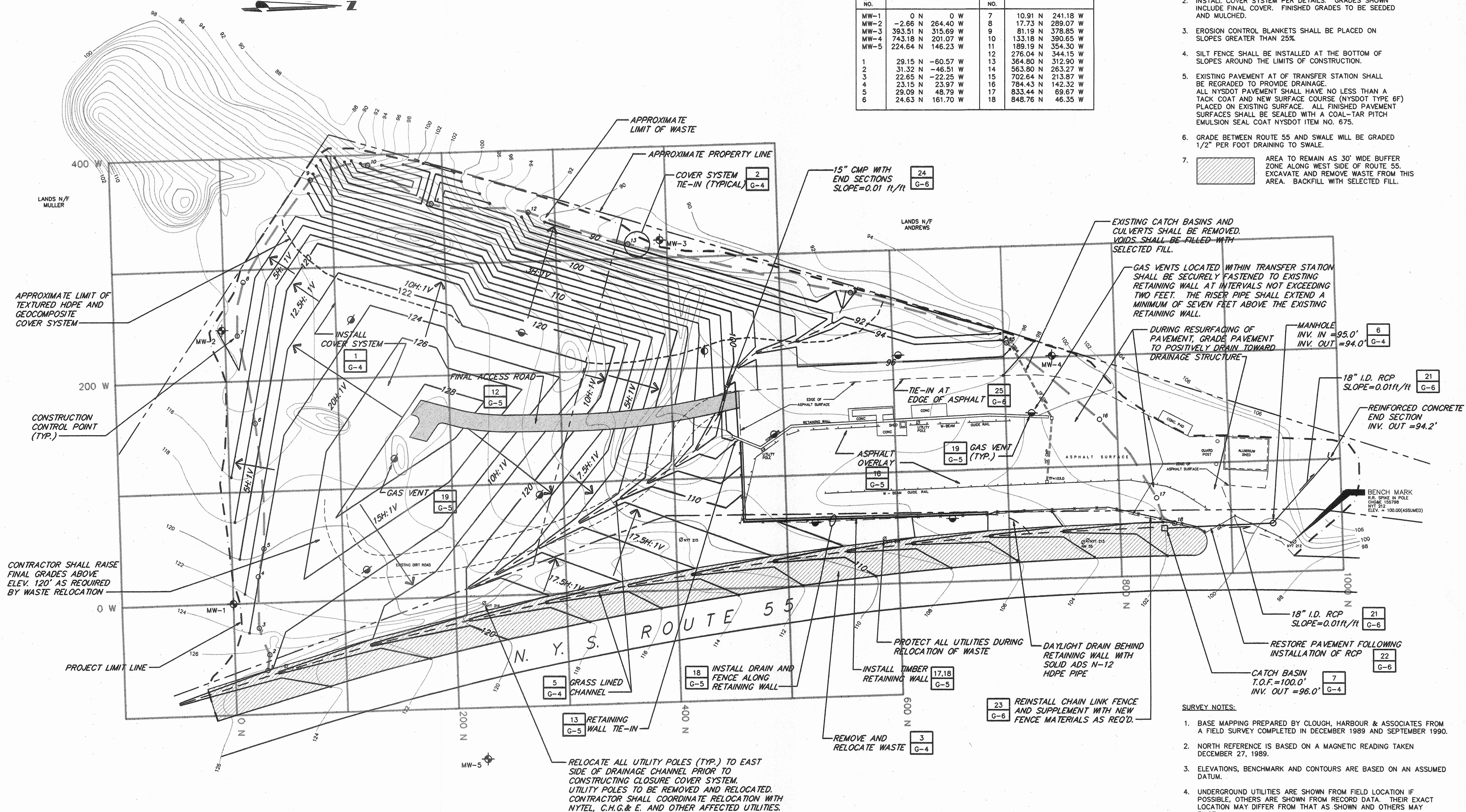
SHEET 2 OF 7

CONSTRUCTION CONTROL POINTS

POINT NO.	COORDINATES	POINT NO.	COORDINATES
MW-1	0 N 0 W	7	10.91 N 241.18 W
MW-2	-2.66 N 264.40 W	8	17.73 N 289.07 W
MW-3	393.51 N 315.69 W	9	81.19 N 378.85 W
MW-4	743.18 N 201.07 W	10	133.18 N 390.65 W
MW-5	224.64 N 146.23 W	11	189.19 N 354.30 W
1	29.15 N -60.57 W	12	276.04 N 344.15 W
2	31.32 N -46.51 W	13	364.80 N 312.90 W
3	22.65 N -22.25 W	14	563.80 N 263.27 W
4	23.15 N 23.97 W	15	702.64 N 213.87 W
5	29.09 N 48.79 W	16	784.43 N 142.32 W
6	24.63 N 161.70 W	17	833.44 N 69.67 W
		18	848.76 N 46.35 W

GRADING NOTES:

- CLEAR TREES AND VEGETATION WITHIN PROJECT LIMITS AS NECESSARY.
- INSTALL COVER SYSTEM PER DETAILS. GRADES SHOWN INCLUDE FINAL COVER. FINISHED GRADES TO BE SEEDED AND MULCHED.
- EROSION CONTROL BLANKETS SHALL BE PLACED ON SLOPES GREATER THAN 25%.
- SILT FENCE SHALL BE INSTALLED AT THE BOTTOM OF SLOPES AROUND THE LIMITS OF CONSTRUCTION.
- EXISTING PAVEMENT AT OF TRANSFER STATION SHALL BE REGRADED TO PROVIDE DRAINAGE. ALL NYSDOT PAVEMENT SHALL HAVE NO LESS THAN A TACK COAT AND NEW SURFACE COURSE (NYSDOT TYPE 6F) PLACED ON EXISTING SURFACE. ALL FINISHED PAVEMENT SURFACES SHALL BE SEALED WITH A COAL-TAR PITCH EMULSION SEAL COAT NYSDOT ITEM NO. 675.
- GRADE BETWEEN ROUTE 55 AND SWALE WILL BE GRADED 1/2" PER FOOT DRAINING TO SWALE.
- AREA TO REMAIN AS 30' WIDE BUFFER ZONE ALONG WEST SIDE OF ROUTE 55. EXCAVATE AND REMOVE WASTE FROM THIS AREA. BACKFILL WITH SELECTED FILL.



SURVEY NOTES:

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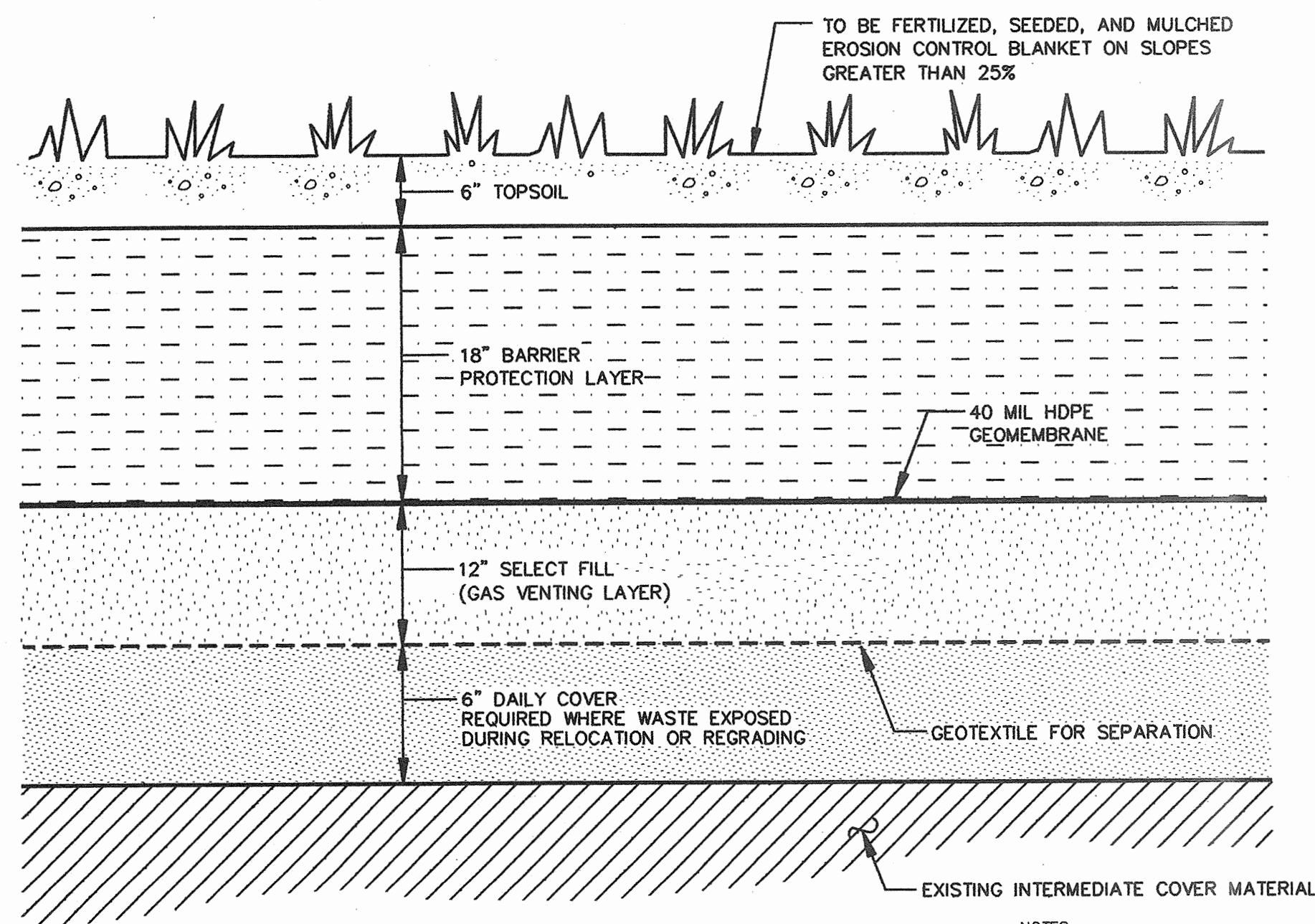
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TOWN OF UNION VALE
 SANITARY LANDFILL CLOSURE
 TOWN OF UNION VALE DUTCHESS COUNTY
 STATE OF NEW YORK

Drawing No.	G-3
SCALE:	1"=40'
DATE:	NOVEMBER, 1994
SHEET	3 OF 7

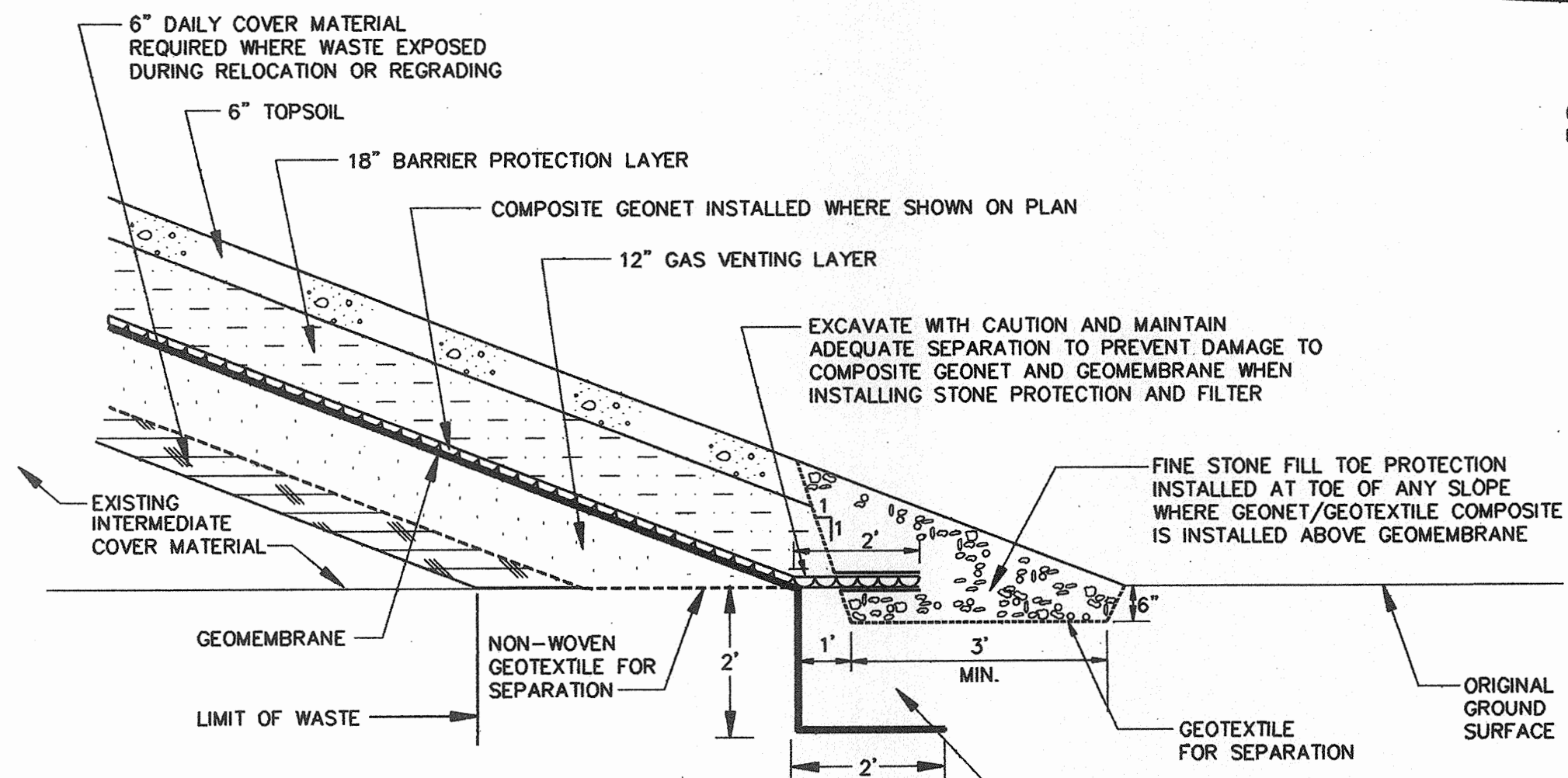


1
G-3 **TYPICAL SYNTHETIC CLOSURE COVER SYSTEM DETAIL**

NO SCALE

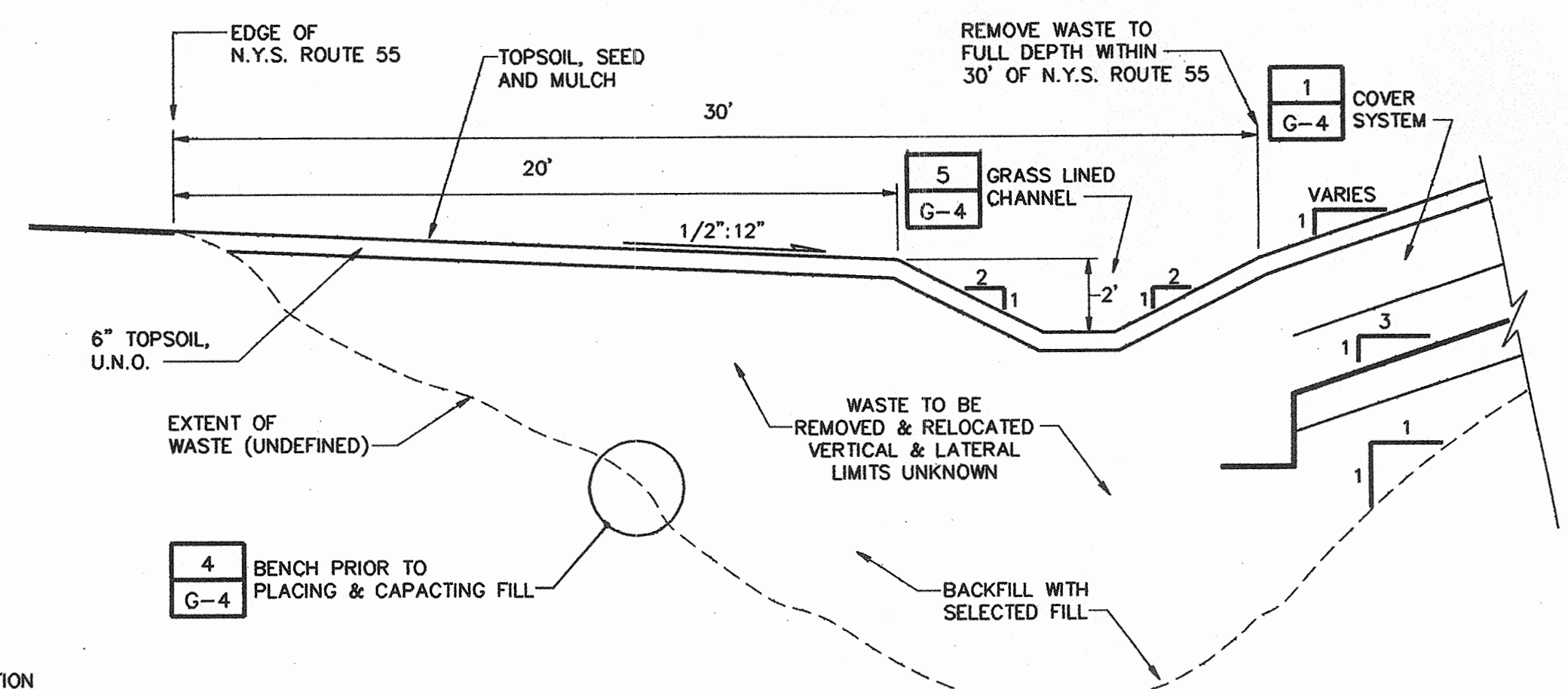
NOTES:

1. TEXTURED GEOMEMBRANE SHALL BE INSTALLED ON SLOPES EQUAL TO OR GREATER THAN 4H:1V. TEXTURED GEOMEMBRANE SHALL EXTEND TO A MINIMUM OF 25 FEET BEYOND BREAK IN SLOPE. SEAM BETWEEN SMOOTH AND TEXTURED MATERIAL SHALL BE LOCATED AT THIS POINT.
2. GEONET/GEOTEXTILE COMPOSITE (GEOTEXTILE ON BOTH SIDES) SHALL BE INSTALLED ON SLOPES EQUAL TO OR GREATER THAN 4H:1V. COMPOSITE SHALL EXTEND TO A MINIMUM OF 25 FEET BEYOND BREAK IN SLOPE.
3. MINIMUM SLOPE OF CLOSURE COVER SYSTEM SHALL BE 25H:1V (I.E. 45°). MAXIMUM SLOPE OF CLOSURE COVER SYSTEM SHALL BE 3H:1V (I.E. 33°).



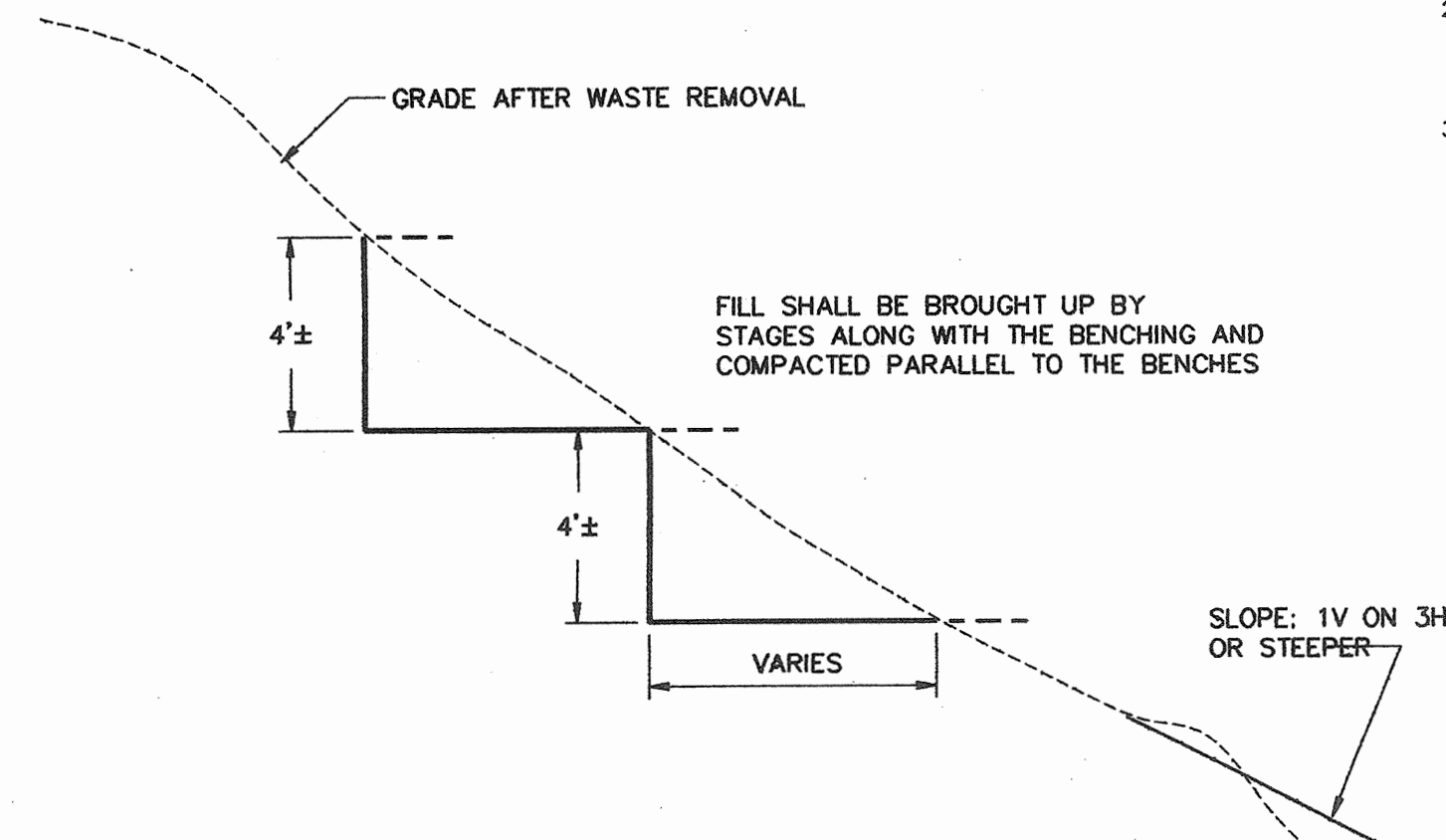
2
G-3 **COVER SYSTEM TIE-IN TO SOIL**

NO SCALE



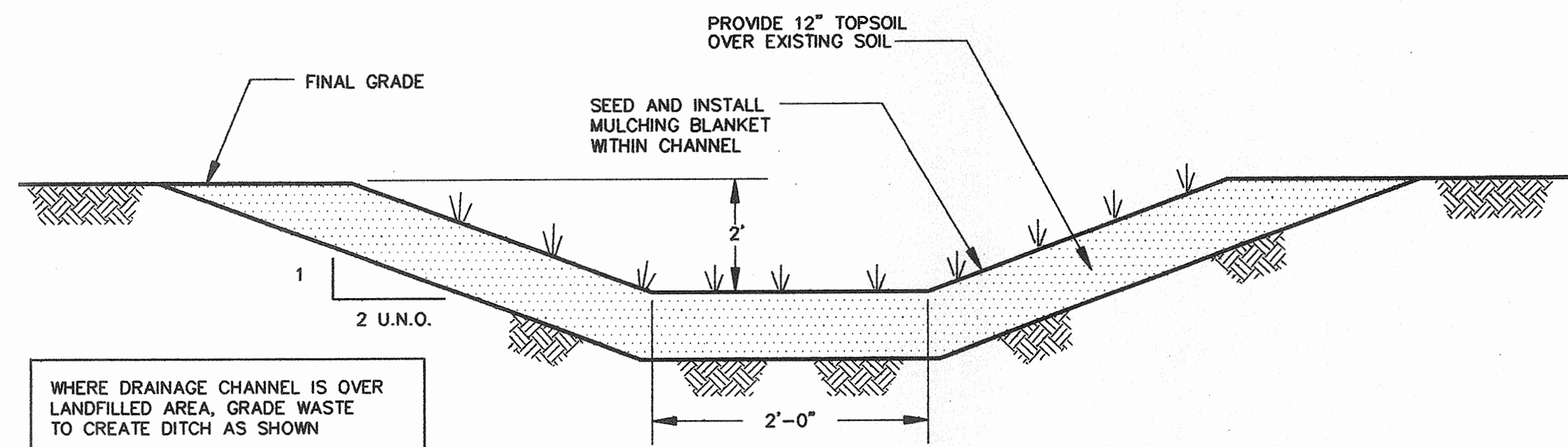
3
G-3 **WASTE REMOVAL & GRADING ON WEST SIDE ON N.Y.S. ROUTE 55**

NO SCALE



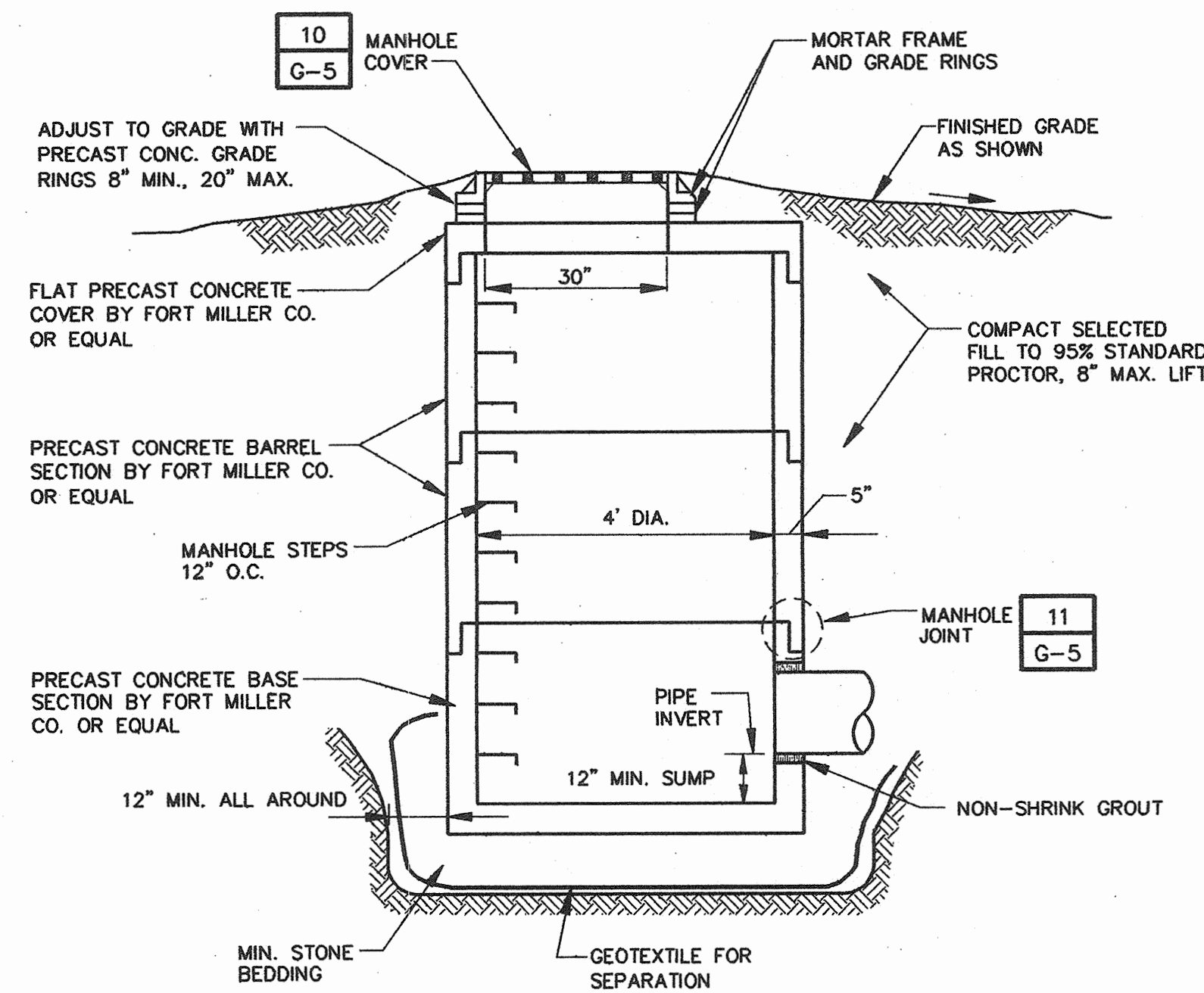
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G-4 **TYPICAL EARTH BENCHING**

NO SCALE



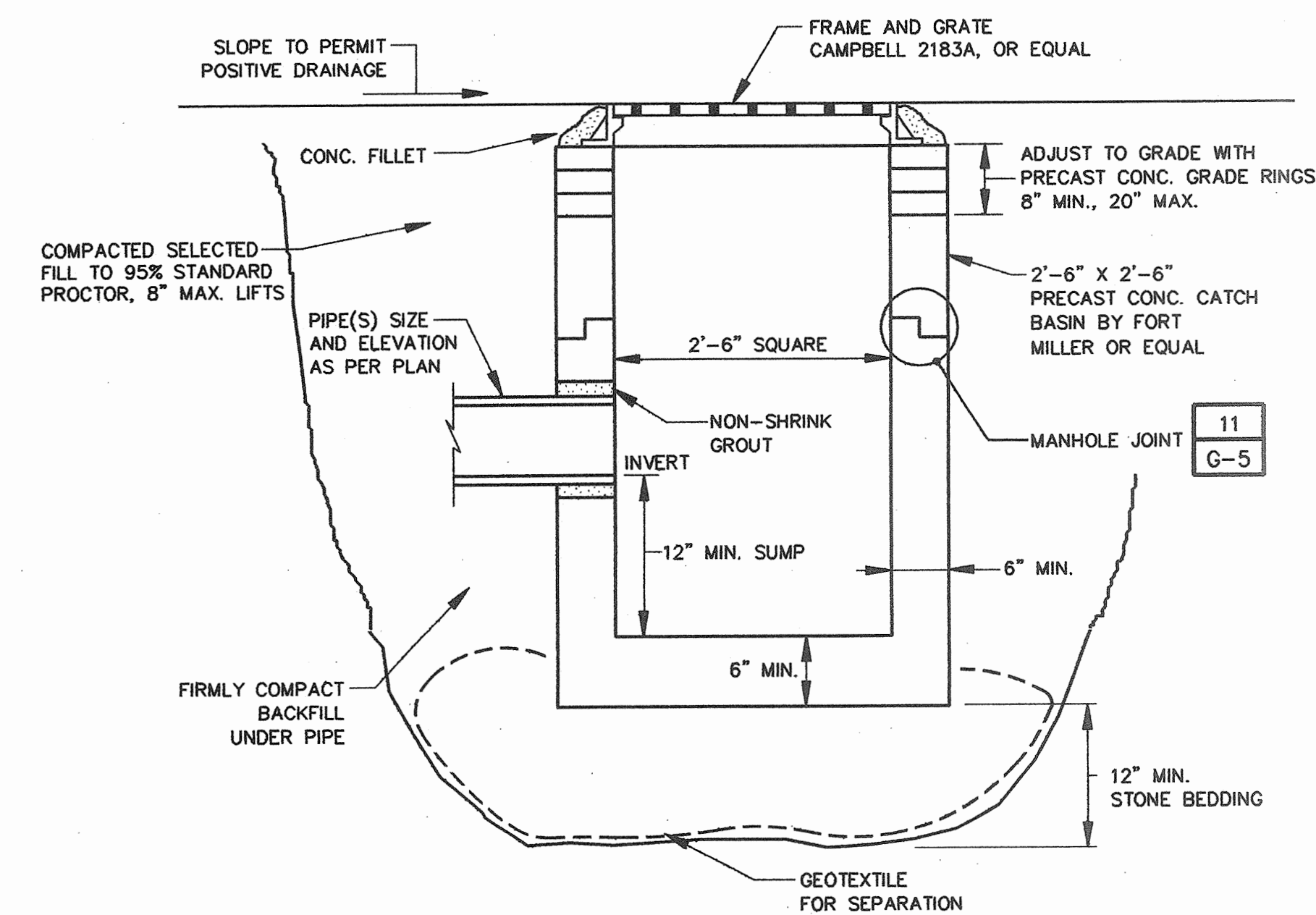
5
G-3 **TYPICAL GRASS LINED DRAINAGE CHANNEL**

NO SCALE



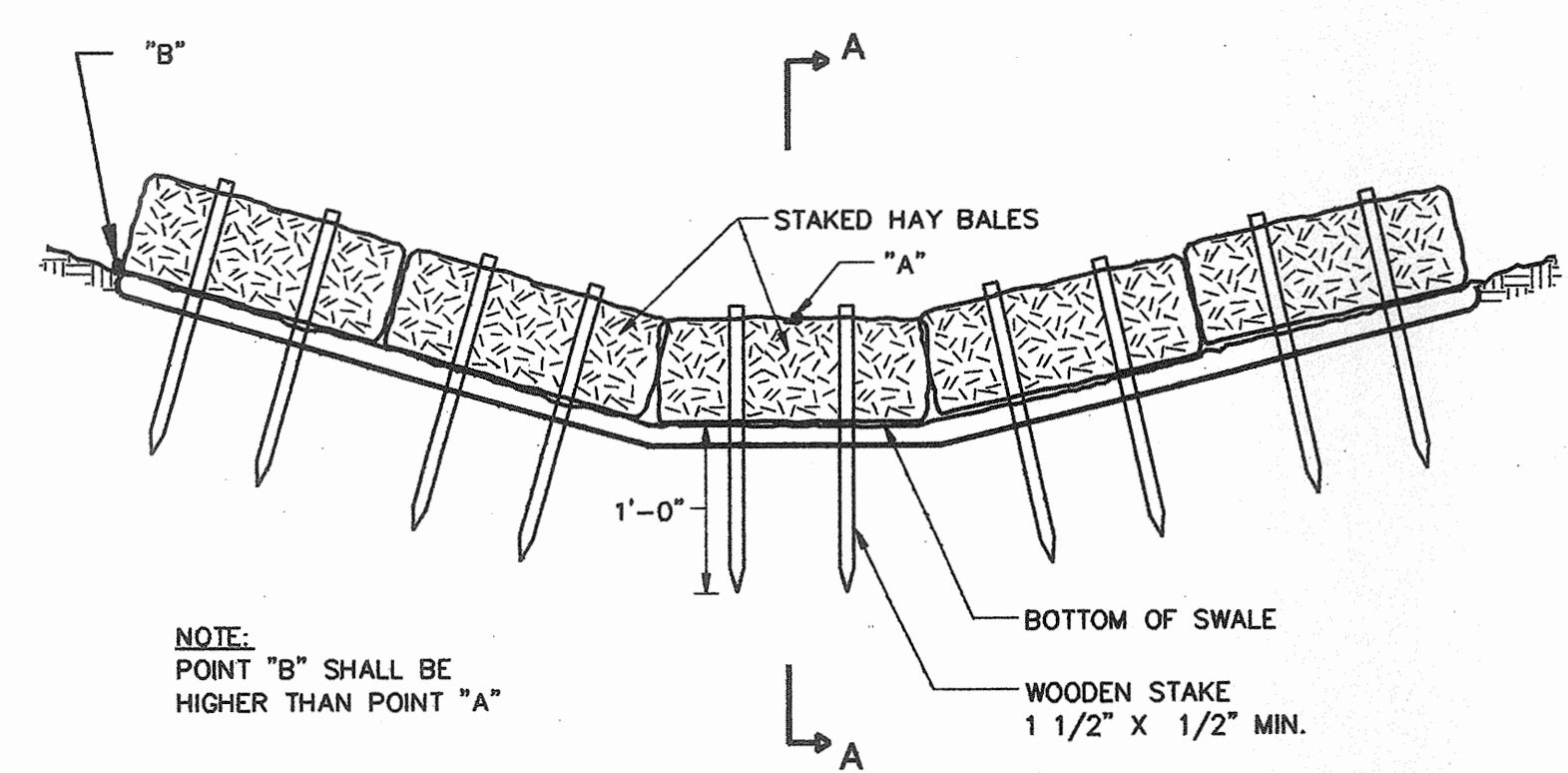
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G-3 **STORM DRAINAGE STRUCTURES**

NO SCALE



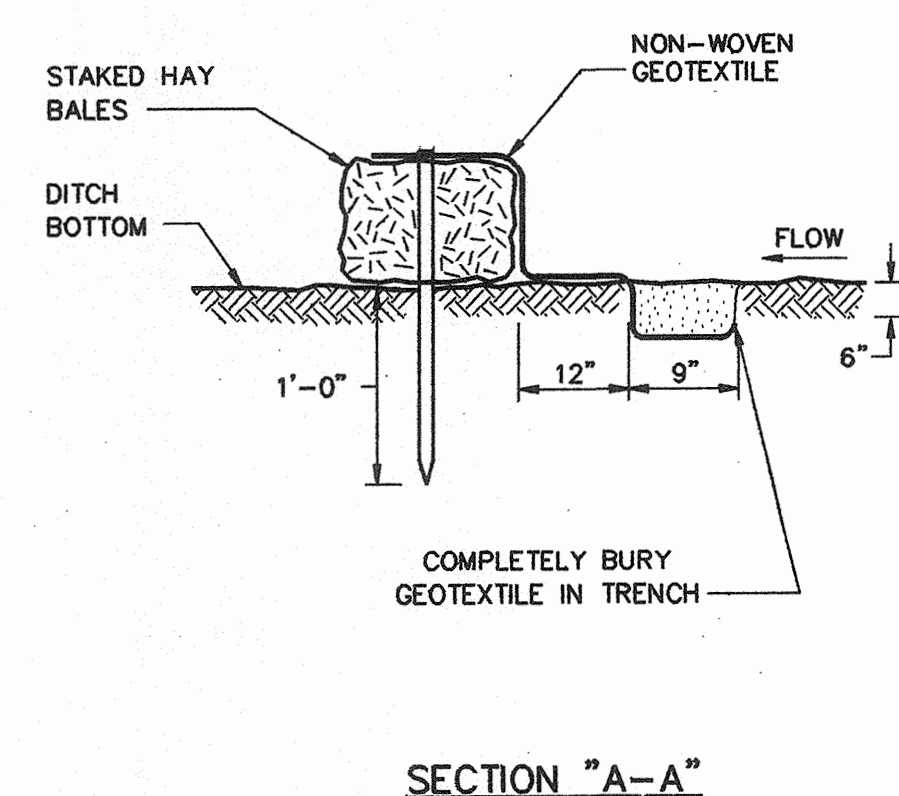
7
G-4 **CATCH BASIN DETAIL**

NO SCALE



8
G-2 **HAY BALE SILTATION CONTROL**

NO SCALE

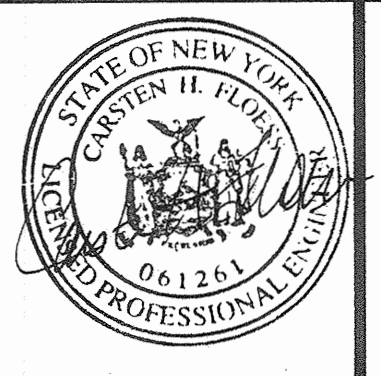


9
- **SILTATION FENCE**

NO SCALE

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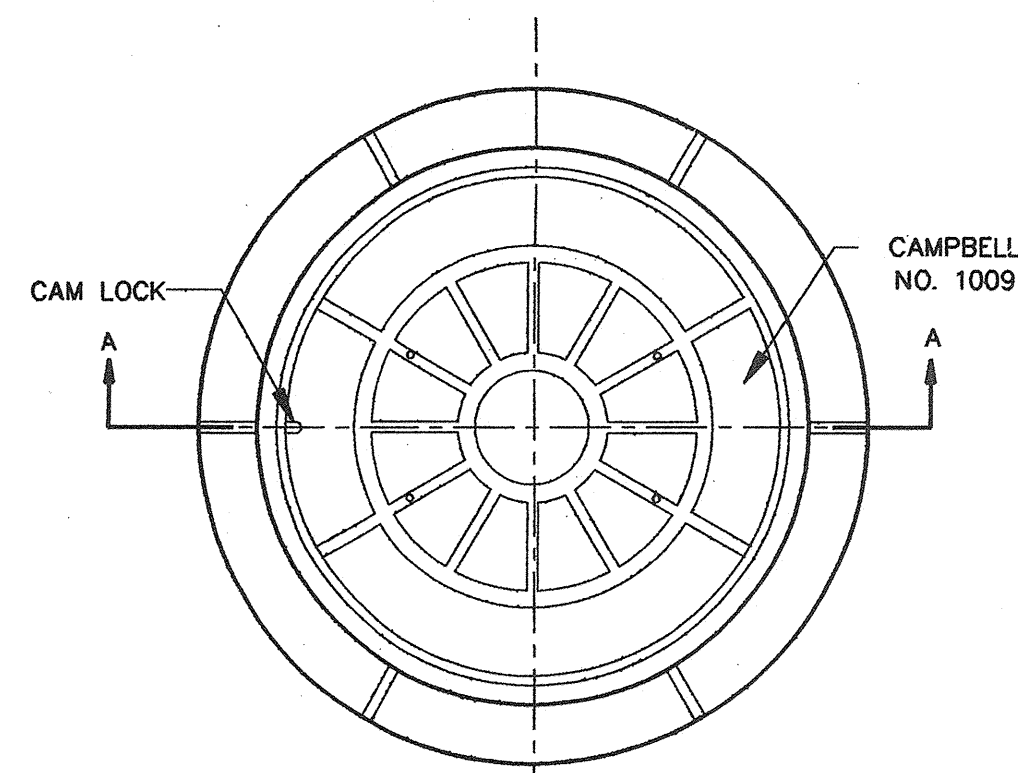


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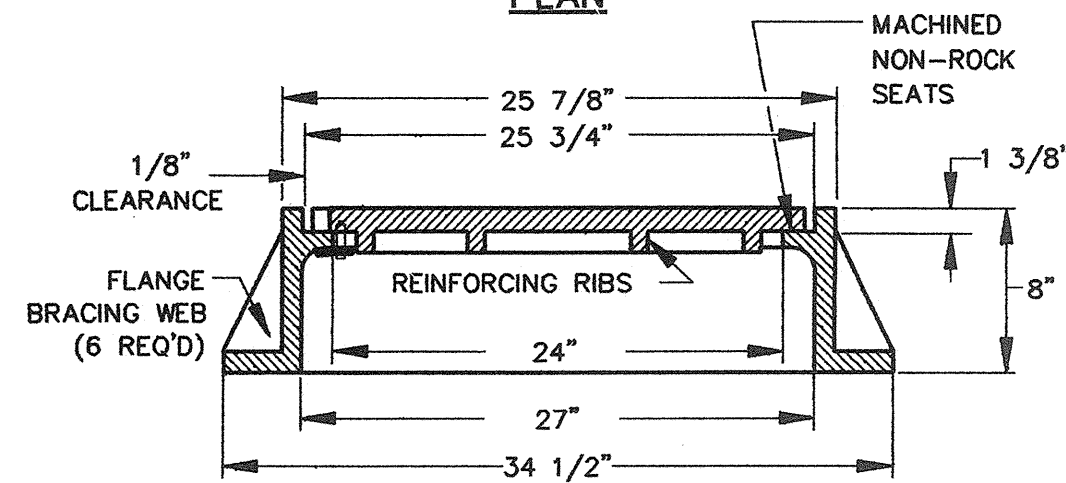
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SANITARY LANDFILL CLOSURE
TOWN OF UNION VALE DUTCHESS COUNTY
STATE OF NEW YORK

LANDFILL CLOSURE PLAN
GENERAL DETAILS
SCALE: AS SHOWN DATE: NOVEMBER 1994

Drawing No.
G-4
SHEET 4 OF 7

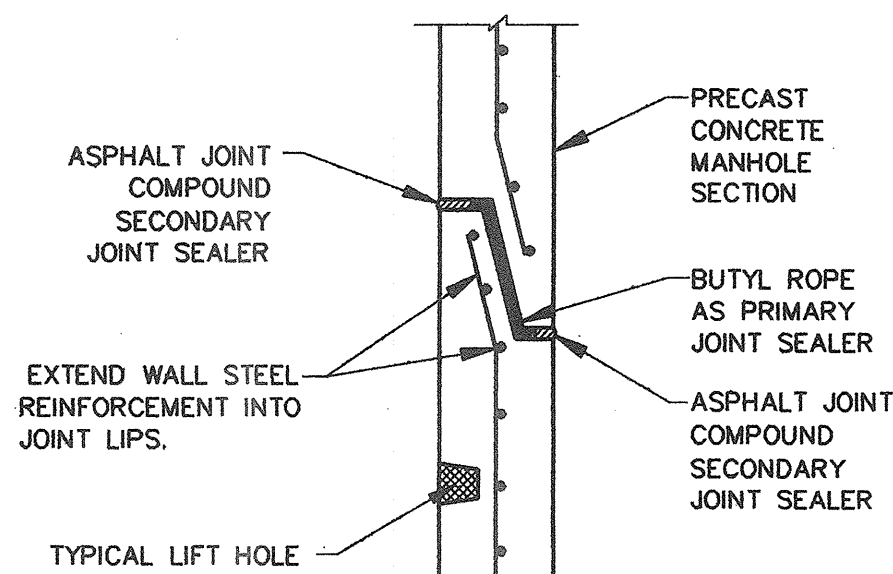


PLAN

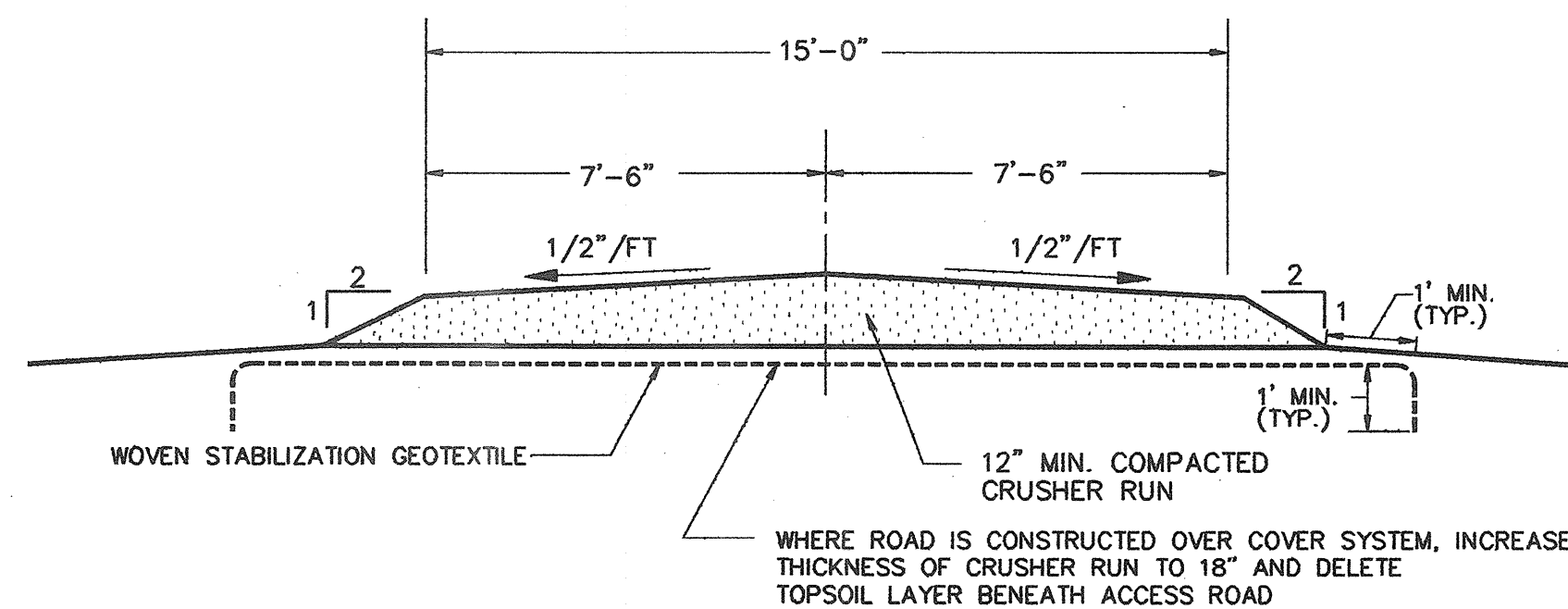


SECTION

10 MANHOLE COVER DETAIL
G-4 NO SCALE



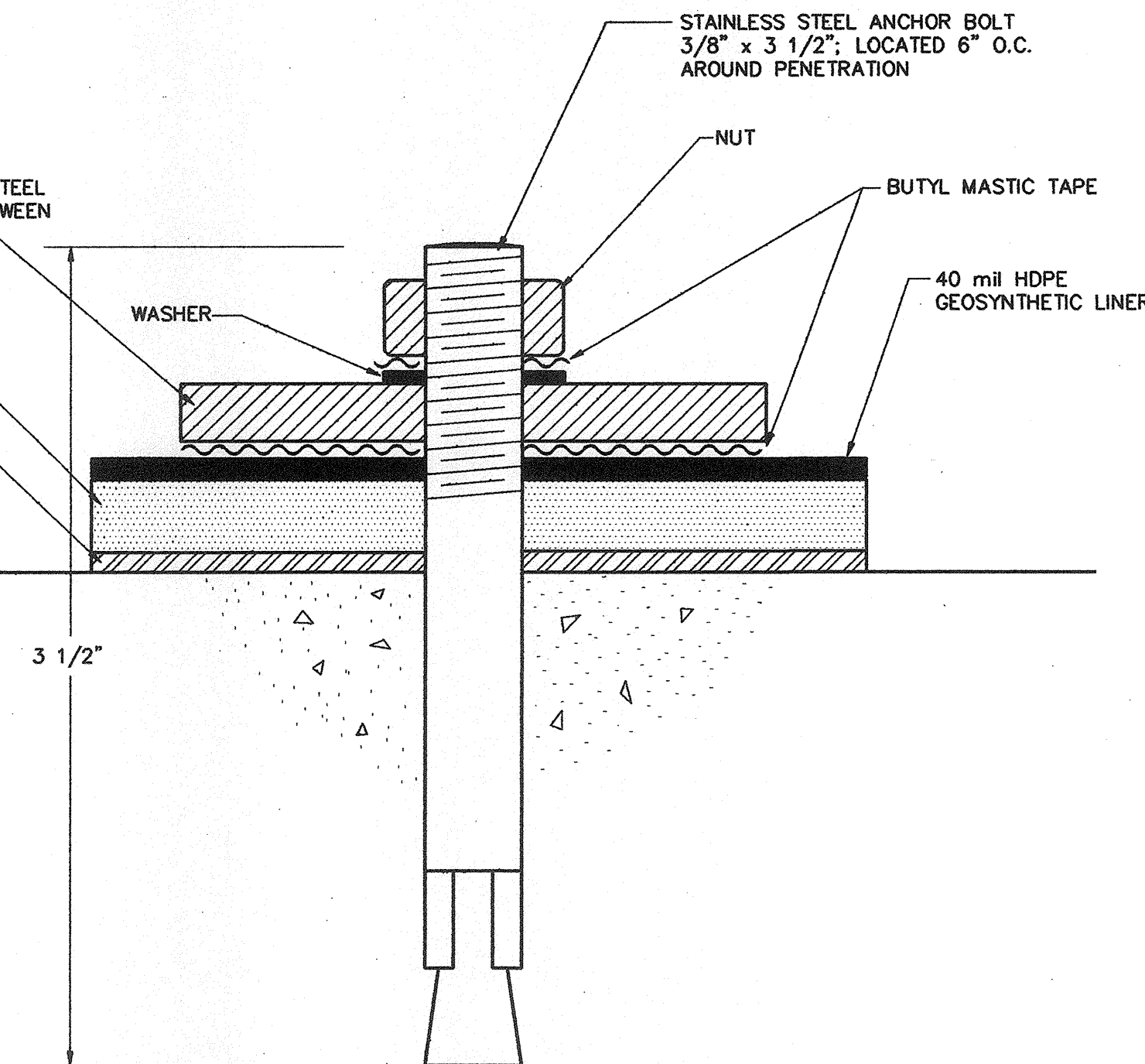
11 MANHOLE JOINT DETAIL
NO SCALE



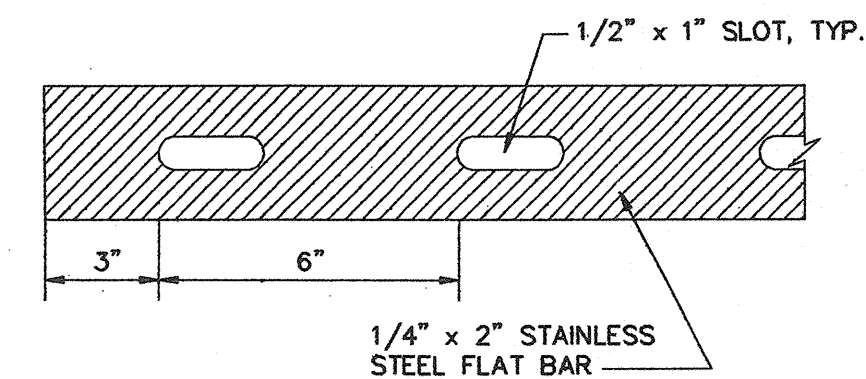
12 ACCESS ROAD
G-3 (TYPICAL) NO SCALE

15 1/4" x 2" STAINLESS STEEL BATTEN EXTENDING BETWEEN ANCHOR BOLTS
G-5

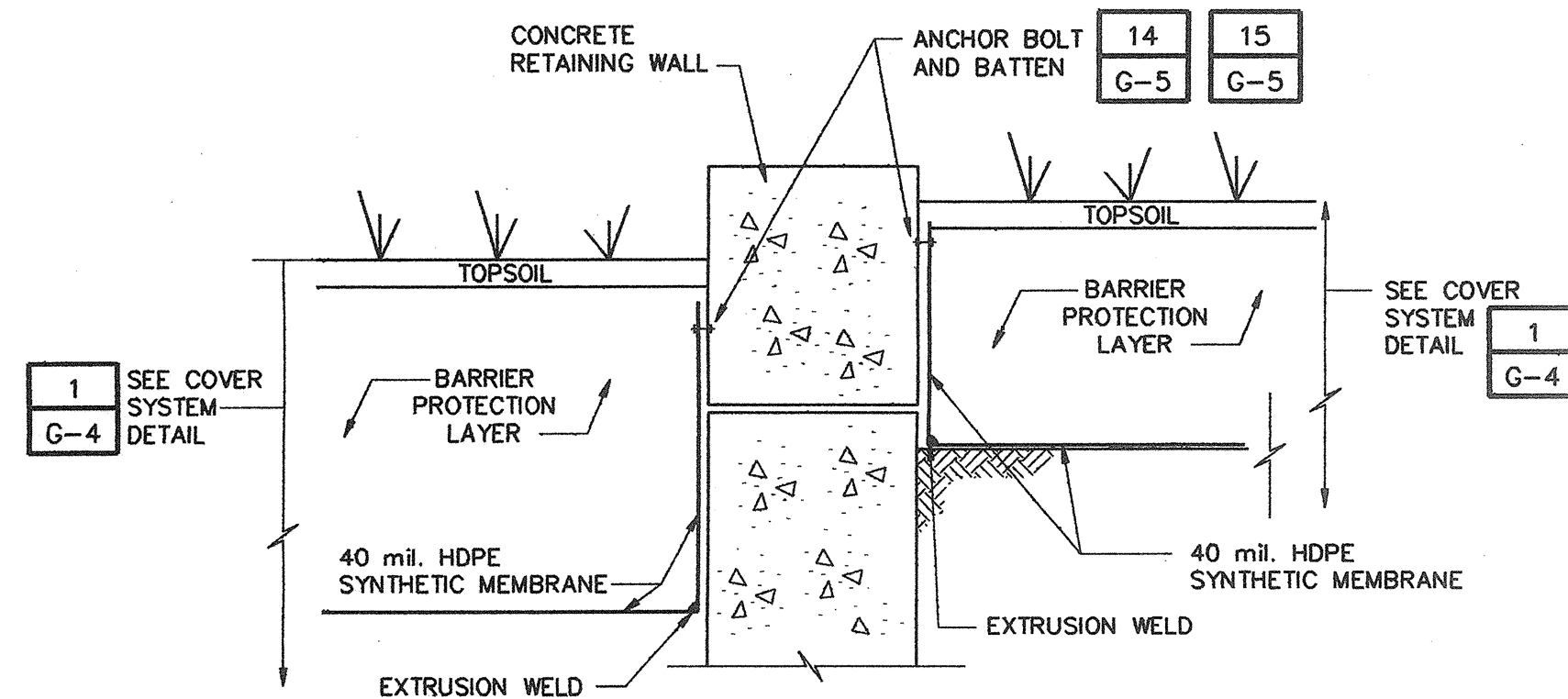
1/4" x 2 1/2" CLOSED CELL NEOPRENE SPONGE
NEOPRENE ADHESIVE



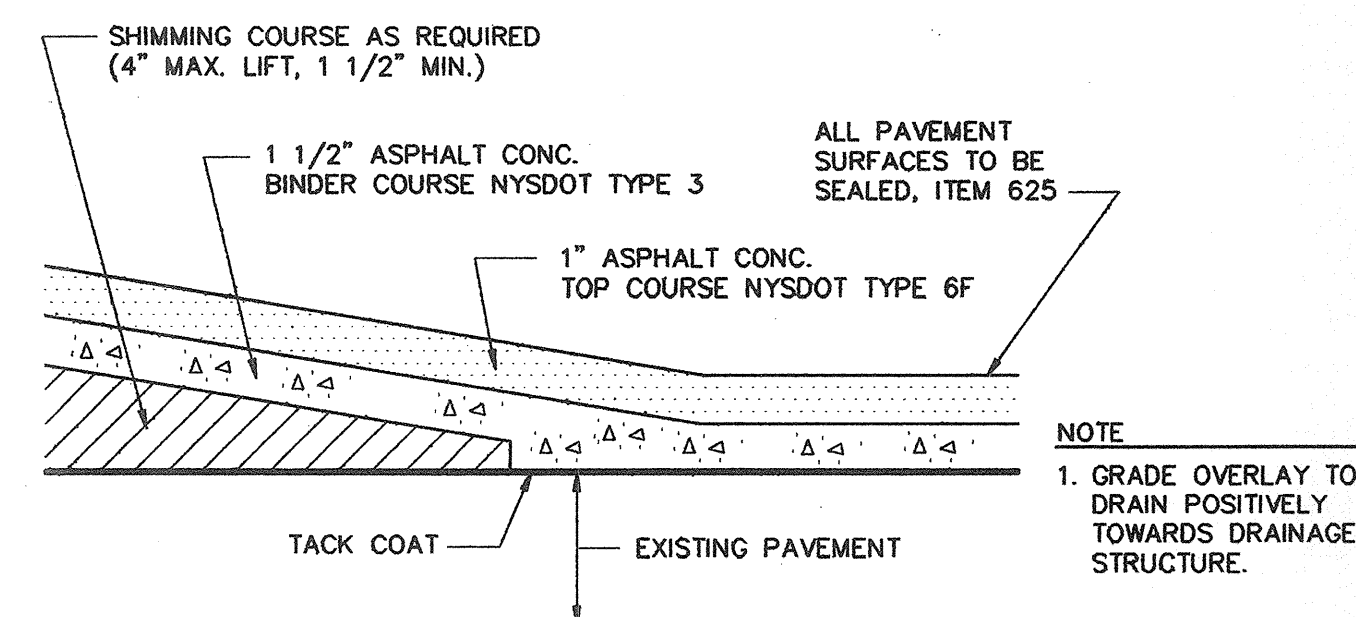
14 ANCHOR BOLT DETAIL
G-5 NO SCALE



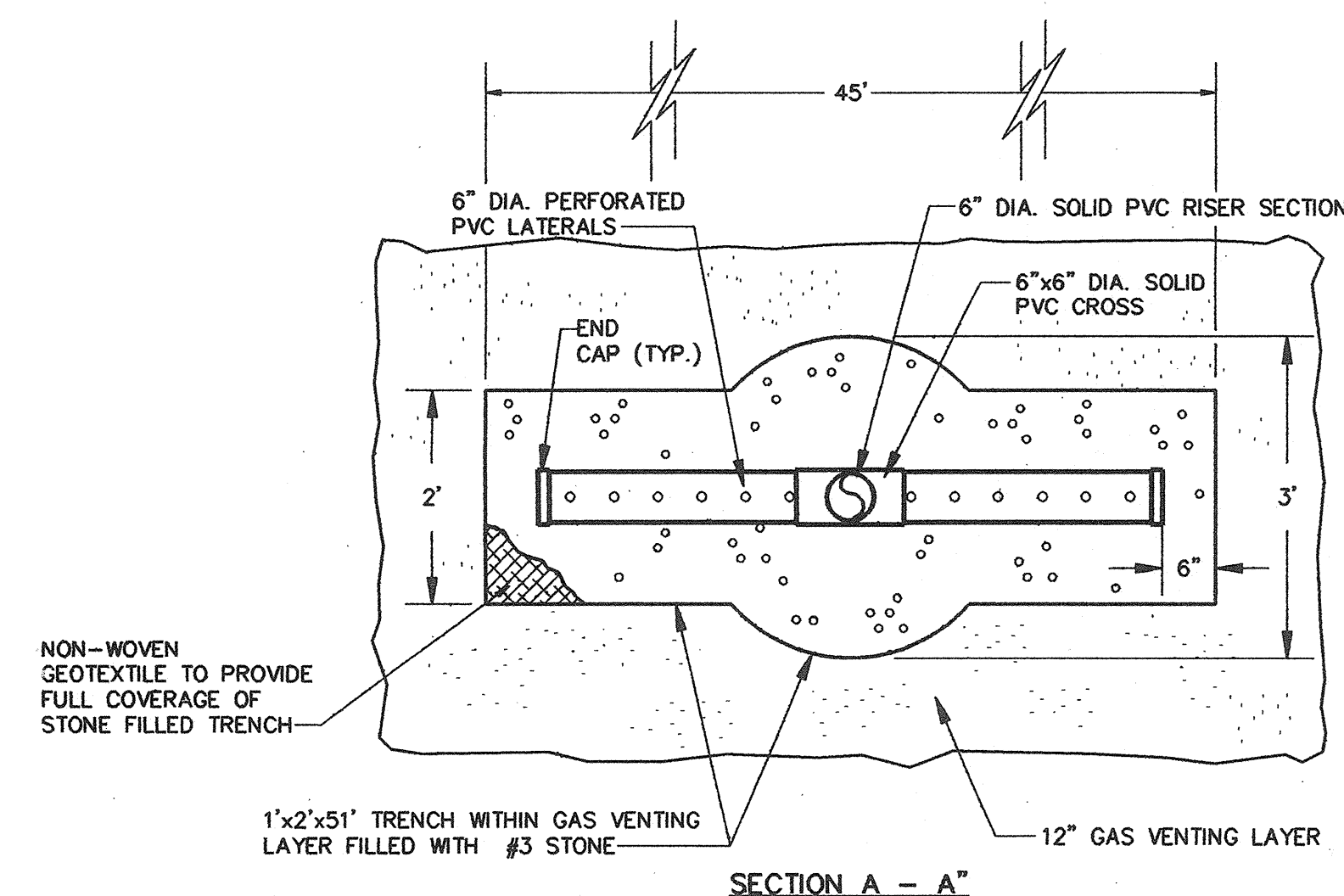
15 STAINLESS STEEL BATTEN
G-5 NO SCALE



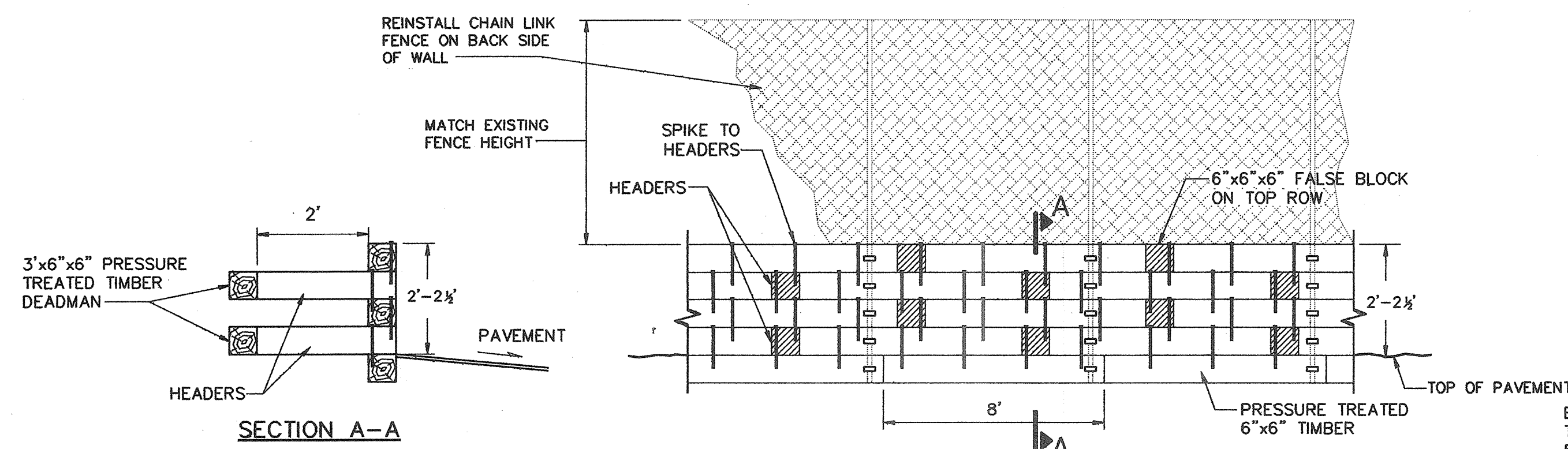
13 RETAINING WALL TIE-IN
G-3 NO SCALE



16 ASPHALT PAVEMENT OVERLAY
G-3 NO SCALE

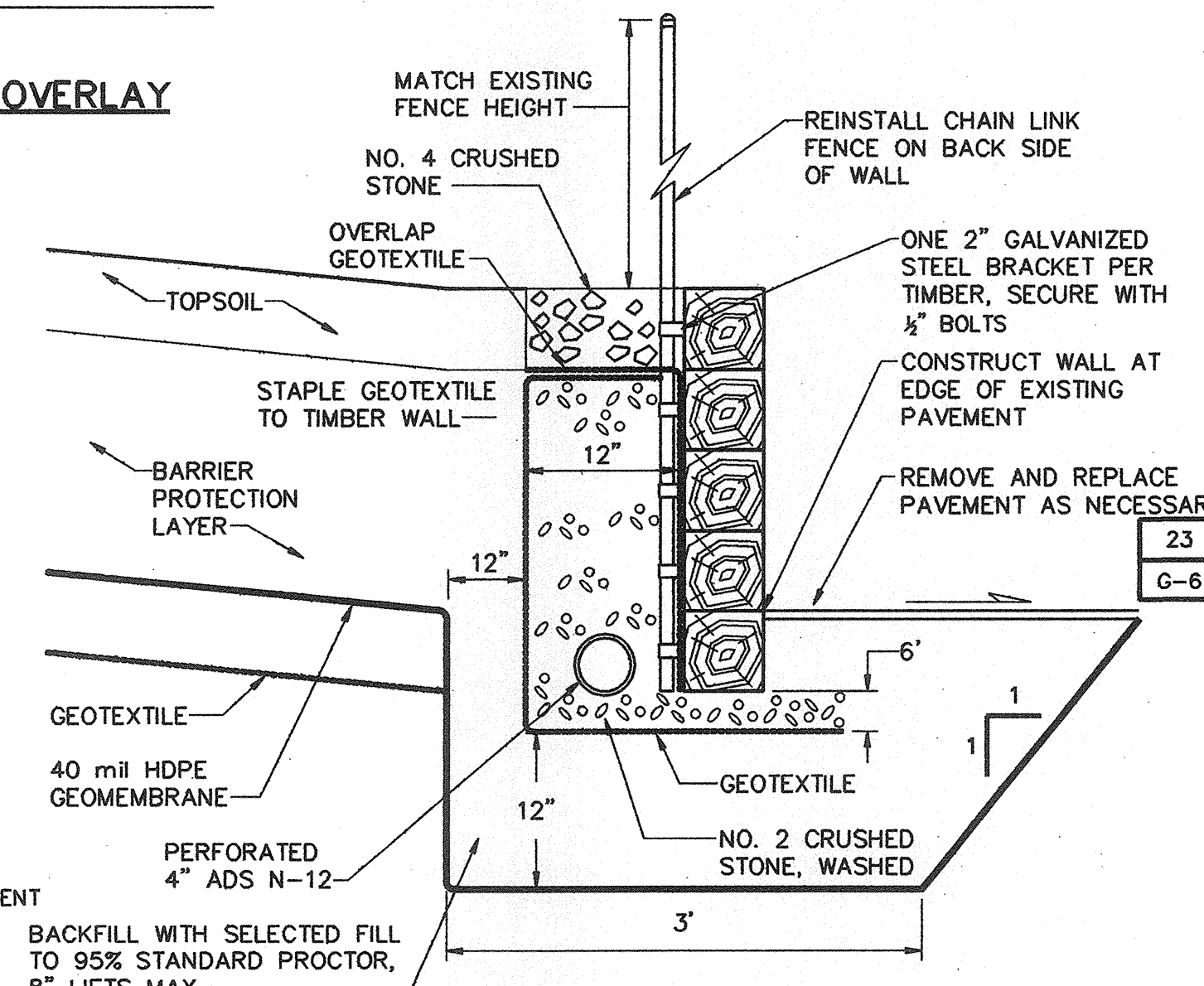


SECTION A - A

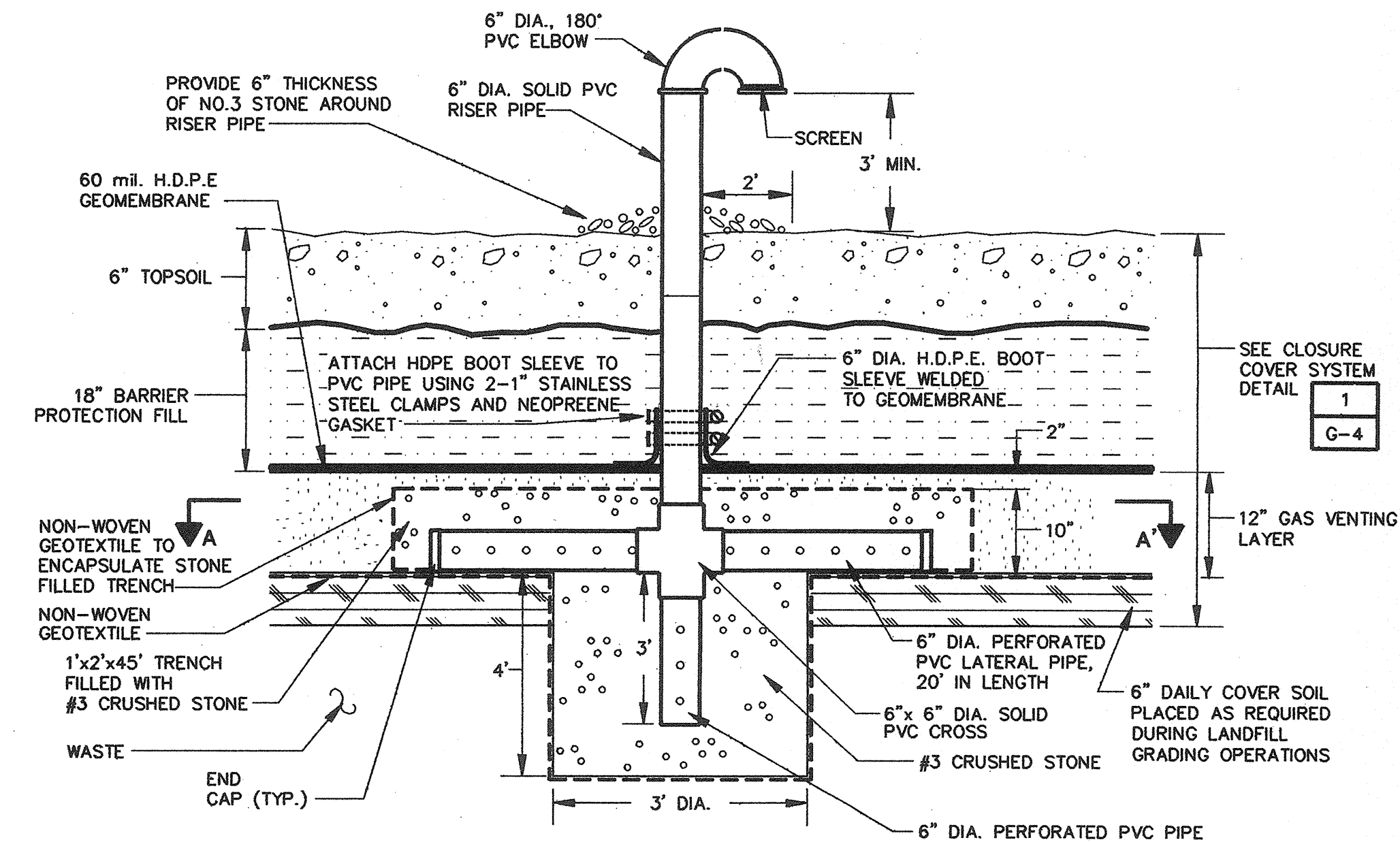


SECTION A-A

17 TIMBER RETAINING WALL
G-3 ELEVATION NO SCALE



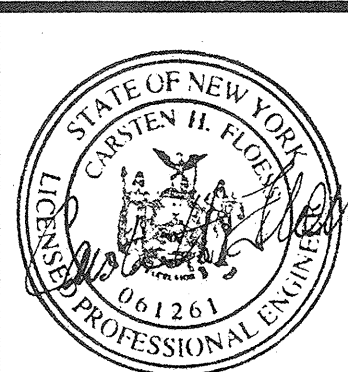
18 TIMBER RETAINING WALL SECTION
G-3 NO SCALE



19 GAS VENTING DETAIL
G-2 G-3 NO SCALE

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LANDFILL CLOSURE PLAN		Drawing No.
GENERAL DETAILS		G-5
SCALE: AS SHOWN	DATE: NOVEMBER 1994	SHEET 5 OF 7



- | | |
|-----|-----------------------------|
| 24 | <u>CULVERT INSTALLATION</u> |
| G-3 | <u>BENEATH ACCESS ROAD</u> |
- NO SCALE



SHEET 6 OF 7