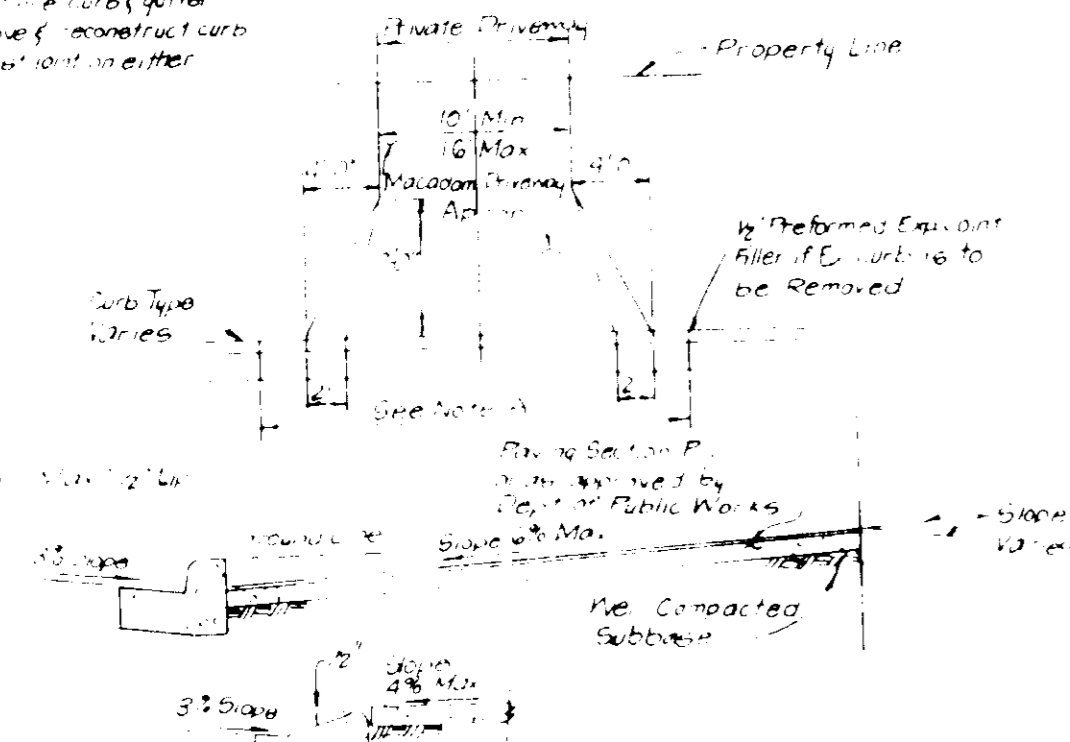
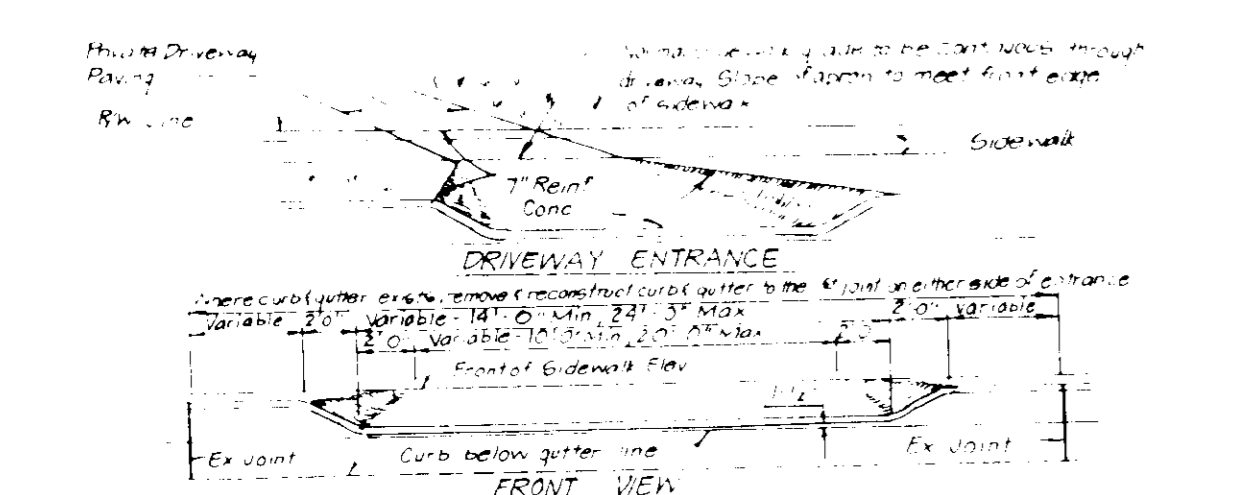


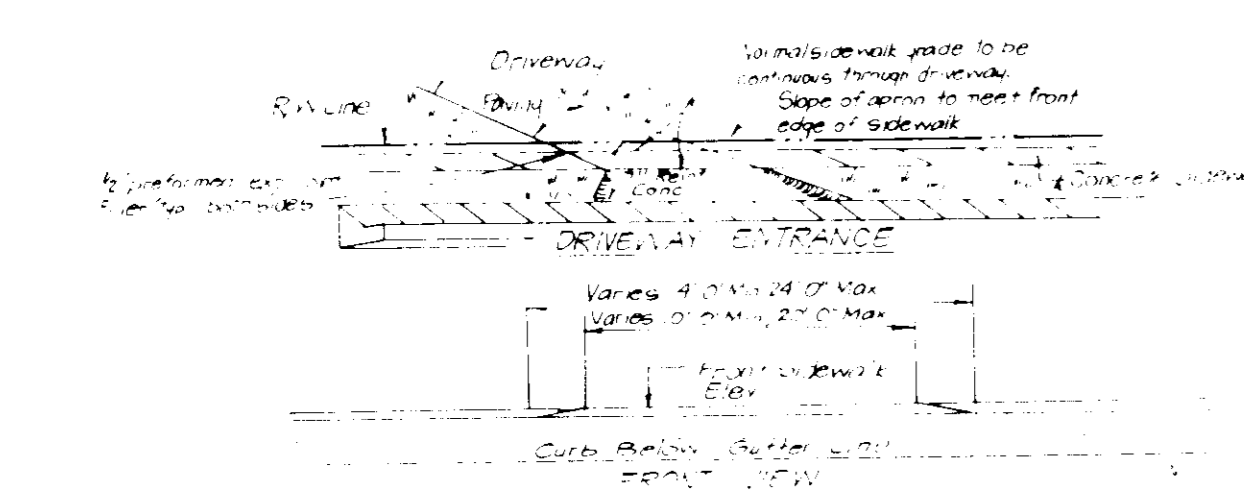
NOTE A: ...



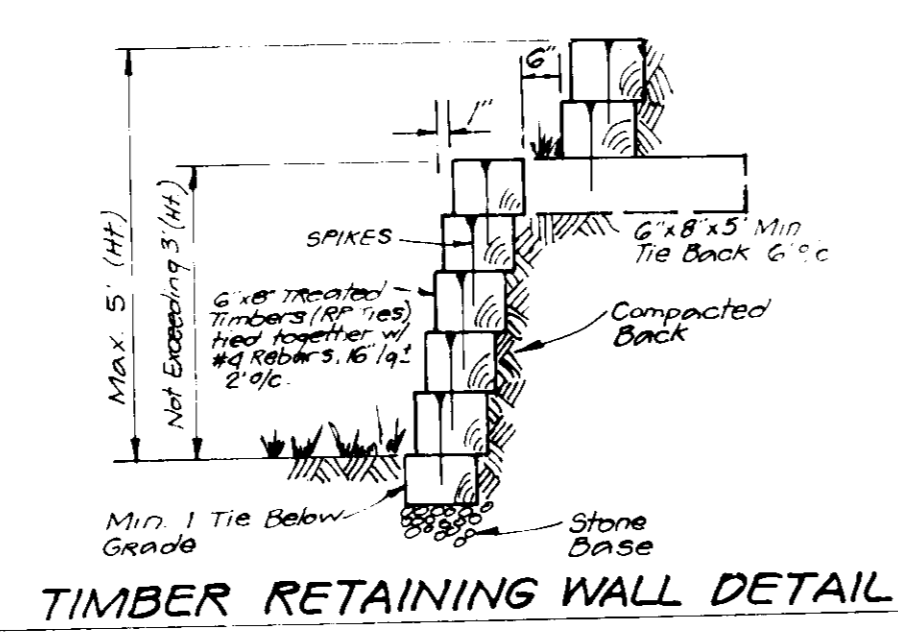
DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK



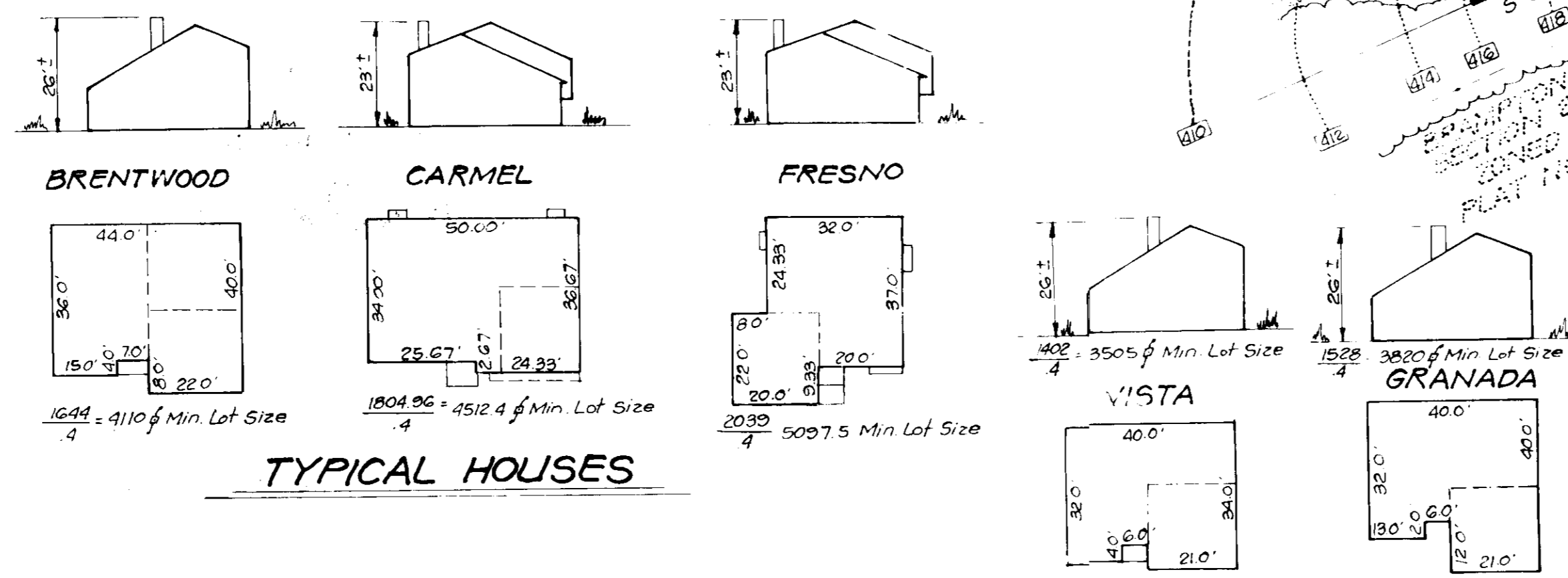
DRIVEWAY ABUTTING CLOSED SECTION WITH STD. 7" COMB. CURB & GUTTER & SIDEWALK SET BACK FROM CURB



DRIVEWAY ABUTTING CLOSED SECTION WITH MODIFIED COMB CURB & GUTTER & SIDEWALK

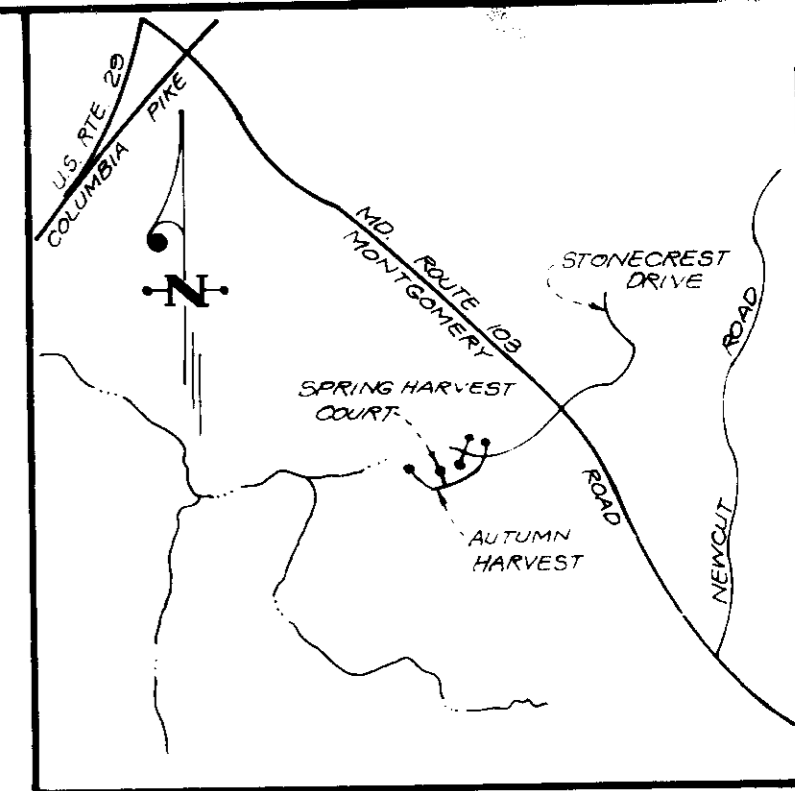


TIMBER RETAINING WALL DETAIL



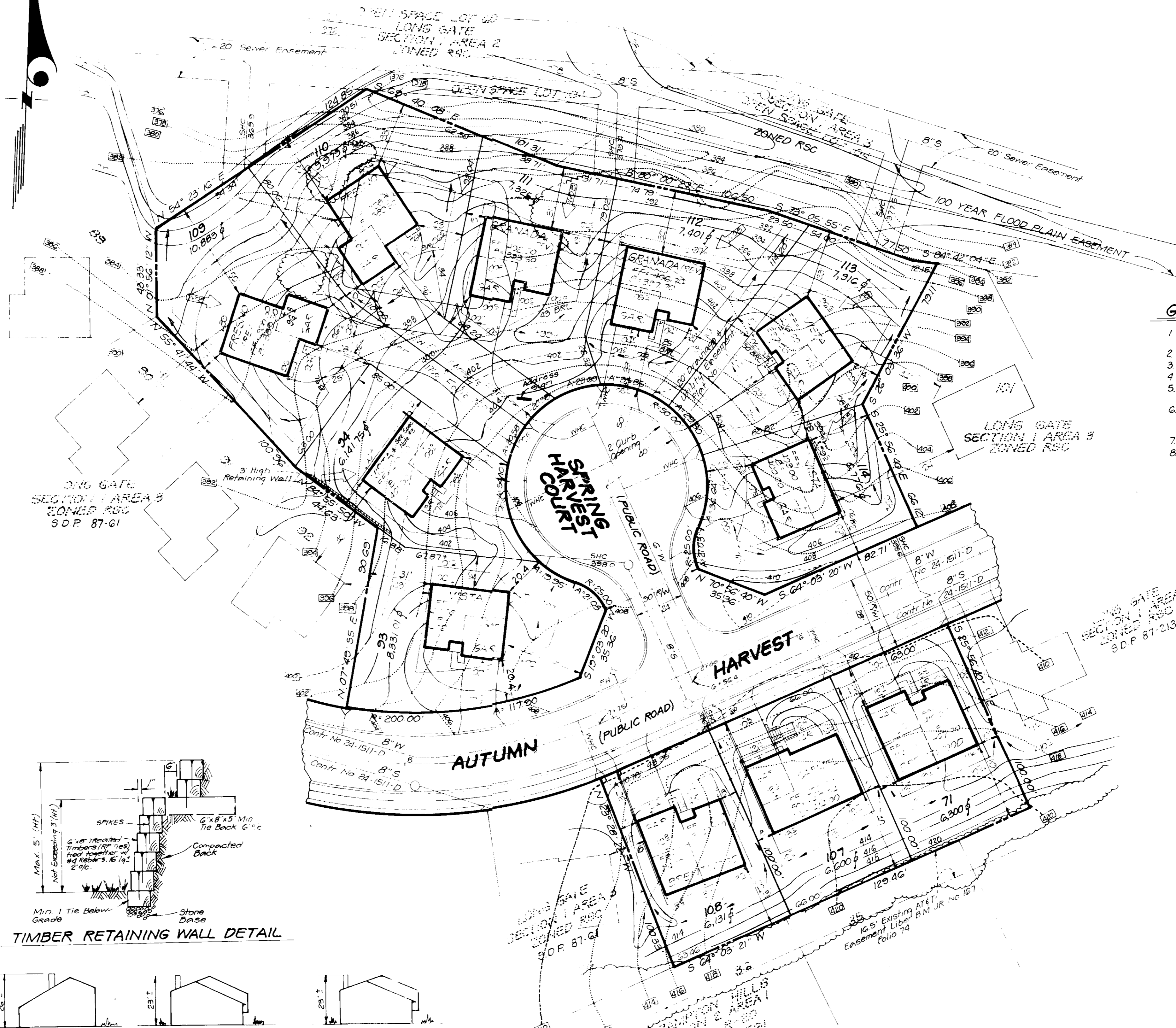
TYPICAL HOUSES

- LEGEND**
- 1 Contour Interval 2 FT
 - 2 Existing Contour
 - 3 Proposed Contour
 - 4 Spot Elevation
 - 5 Direction of Drainage
 - 6 Ex Trees to be Saved
 - 7 Walk-out Basement
 - 8 Timber Retaining Wall
 - 9 Location of Address Sign



VICINITY MAP
SCALE 1" = 2000'

NOTE:
The proposed grading on open space lots 60 & 104 is taken from Roadway, Storm Drain, & Stormwater Management drawings, Howard County No. F-86-120



TRAP NO. 1 (S.O.S.T. ST. IV)

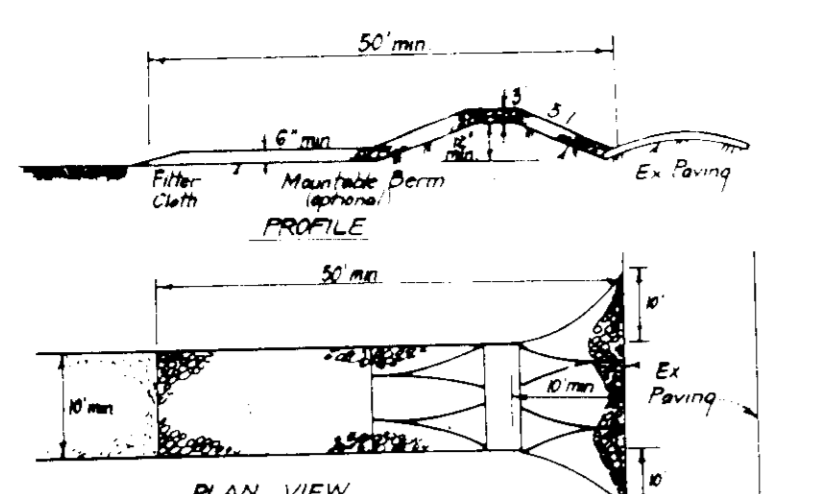
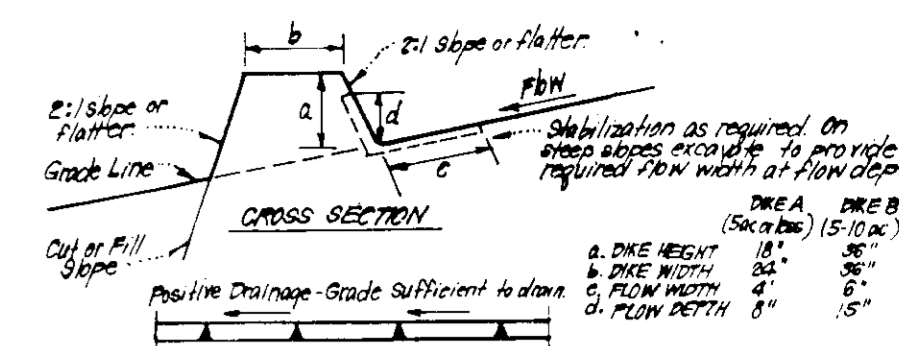
DA=14 Acres
 Storage Required=1.4 x 1800=2520 cf
 Storage Provided=2535 cf
 Depth=3'
 Stone Crest Elevation=377.0
 Bottom Elevation=373.0
 Bottom Dimensions=10' x 65'
 Cleanout Elevation=374.5

NOTE

The proposed clearing on open space lots 104 & 105 is taken from Reemore, 18th Edition of Stormwater Management drawings Howard County No. F-86/120

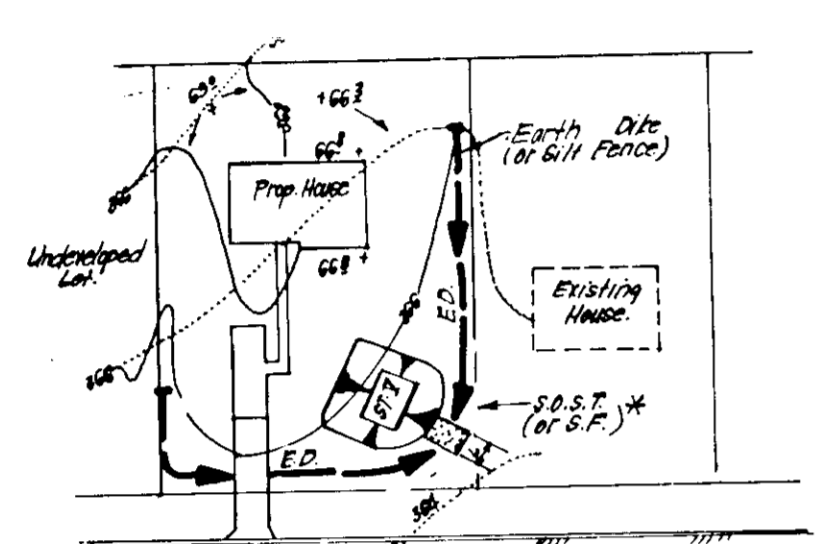
LEGEND

- 1. Proposed Contour 2.71
- 2. Proposed Contour 1.04
- 3. Proposed Contour 1.00
- 4. Spot Elevation 1.87
- 5. Direction of Drainage
- 6. Trees to be Saved
- 7. 1/2" x 1/2" Basement



- CONSTRUCTION SPECIFICATIONS**
1. Stone size: Use 2" stone or equivalent or recycled concrete equivalent.
 2. Length: As required, but not less than 50 feet (exception a single residence lot where a 30 foot minimum length would apply).
 3. Thickness: Not less than six (6) inches.
 4. Width: Ten (10) feet minimum, but not less than the full width of paths where ingress or egress occurs.
 5. Filter Cloth: Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence.
 6. Surface Water: All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a stone apron with a 5' slope will be permitted.
 7. Maintenance: The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment into public rights of way. This may require periodic top dressing with additional stone. No concrete should be used for repair and/or cleanup of any measure used to trap sediment. All sediment applied, dropped, washed or tracked onto public rights of way must be removed immediately.
 8. Warning: When it shall be obtained to remove sediment from the entrance into public rights of way, when warning is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 9. Periodic inspection and record maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



*** NOTE: Single lot detail cannot be utilized if any two lots adjoining the trap are to be disturbed at the same time or on any lots showing a sediment trap. The trap area must be as given or greater.**

NO.	TRAP SIZE	TRAP AREA	TRAP VOLUME
1	10' x 65'	650 sq ft	2535 cf
2	10' x 65'	650 sq ft	2535 cf
3	10' x 65'	650 sq ft	2535 cf
4	10' x 65'	650 sq ft	2535 cf
5	10' x 65'	650 sq ft	2535 cf
6	10' x 65'	650 sq ft	2535 cf
7	10' x 65'	650 sq ft	2535 cf
8	10' x 65'	650 sq ft	2535 cf
9	10' x 65'	650 sq ft	2535 cf
10	10' x 65'	650 sq ft	2535 cf
11	10' x 65'	650 sq ft	2535 cf
12	10' x 65'	650 sq ft	2535 cf
13	10' x 65'	650 sq ft	2535 cf
14	10' x 65'	650 sq ft	2535 cf
15	10' x 65'	650 sq ft	2535 cf
16	10' x 65'	650 sq ft	2535 cf
17	10' x 65'	650 sq ft	2535 cf
18	10' x 65'	650 sq ft	2535 cf
19	10' x 65'	650 sq ft	2535 cf
20	10' x 65'	650 sq ft	2535 cf

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded Preparation: Loosen upper three inches of soil by raking, dicing or other acceptable means before seeding.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 400 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Narrow or disc into upper three inches of soil. At time of seeding, apply .00 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Narrow or disc into upper three inches of soil.

Seeding - For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 15 thru February 28, protect site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching - Apply 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

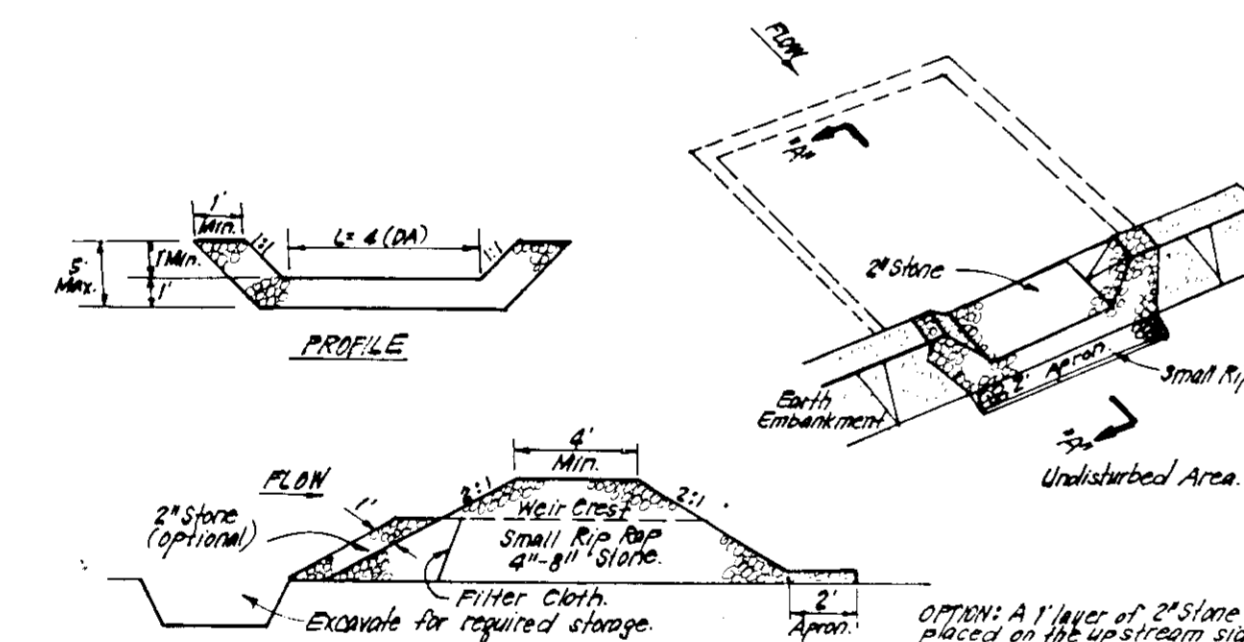
Seeded Preparation: Loosen upper three inches of soil by raking, dicing or other acceptable means before seeding.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

Seeding - For periods March 1 thru April 30 and from August 15 thru November 15, seed with 25 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 15 thru February 28, protect site by seeding 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

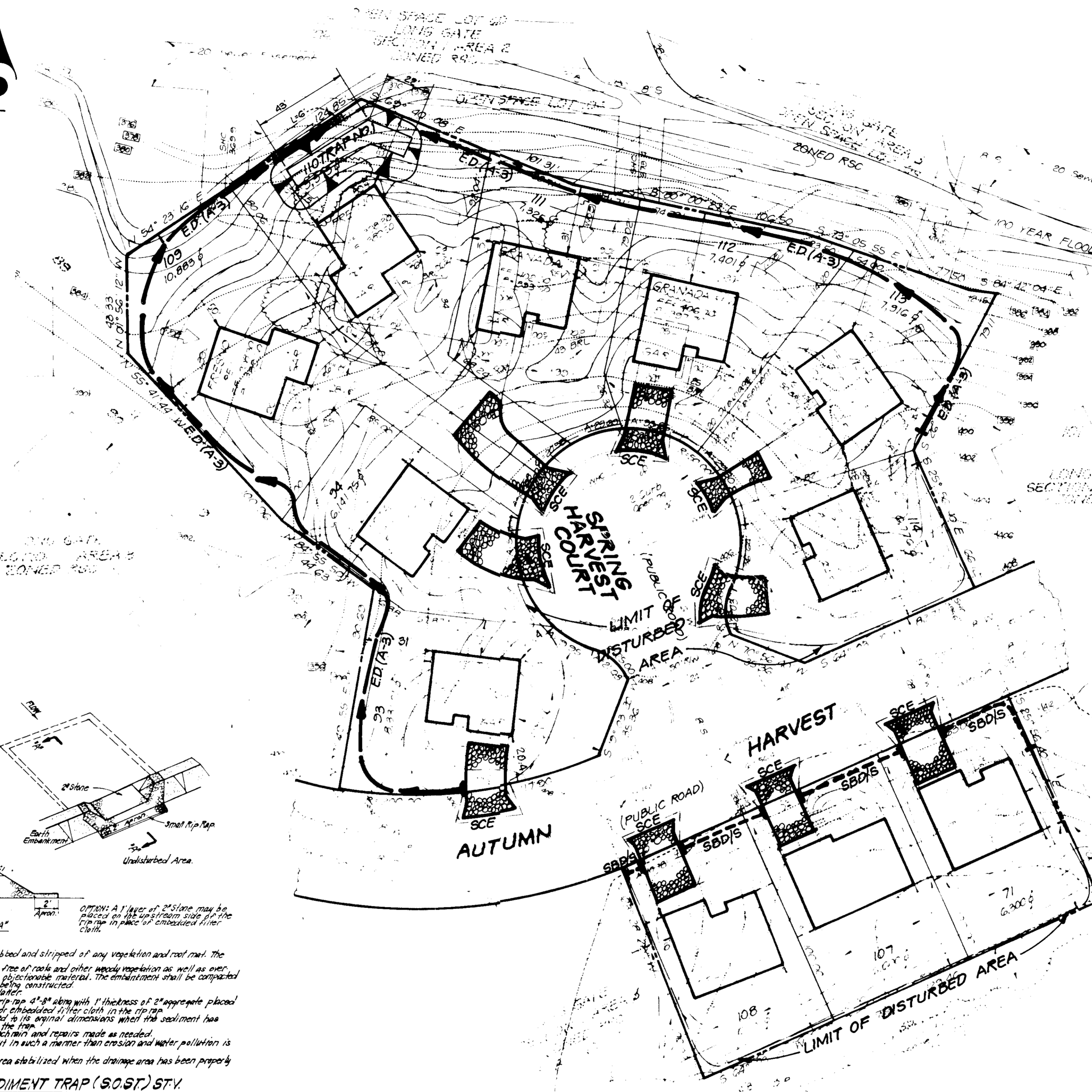
Mulching - Apply 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



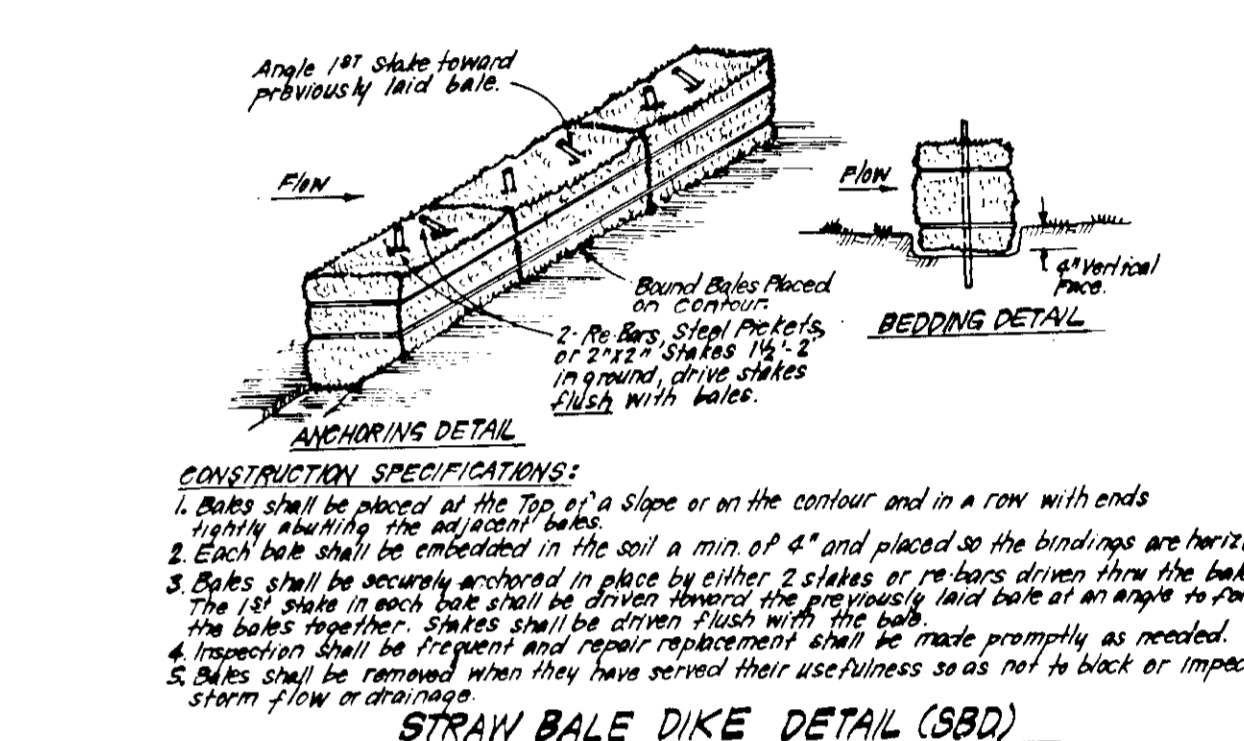
- CONSTRUCTION SPECIFICATIONS:**
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted.
 2. The fill material for the embankment shall be free of rocks and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
 3. All cut and fill slopes shall be 2:1 or flatter.
 4. The stone used in the outlet shall be small rip rap of 3/4" to 1 1/2" thickness of 2" aggregate placed on the upstream side on the small rip rap of 3/4" to 1 1/2" thickness of 2" aggregate placed on the downstream side.
 5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to the design depth of the trap.
 6. The structure shall be inspected after each rain and repairs made as needed.
 7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST. IV
NO SCALE



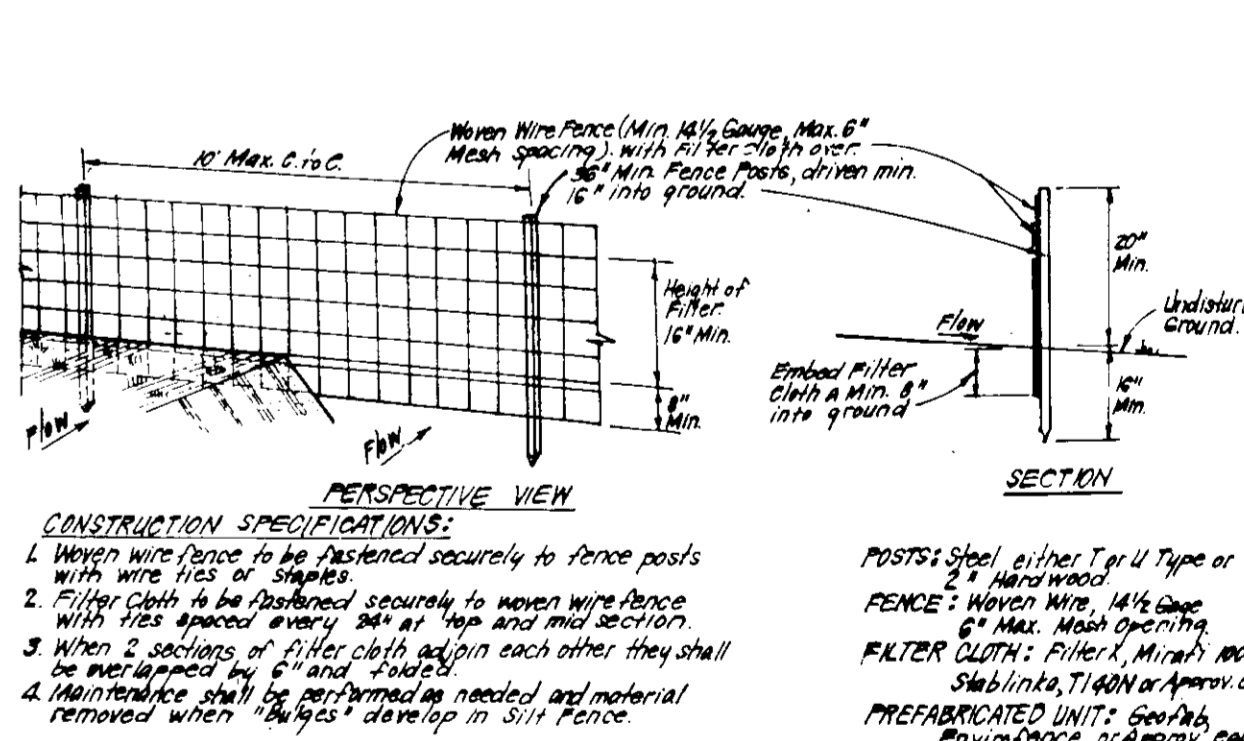
- CONSTRUCTION SPECIFICATIONS:**
1. All dikes shall be compacted by earth-moving equipment.
 2. All dikes shall have positive drainage to an outlet.
 3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
 4. Final location shall be adjusted as needed to utilize a stabilized site outlet.
 5. Earth dikes shall be placed on a minimum of grass. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the site channel or the drainage area above the dike are not adequately stabilized.
 6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if run in seeding season, (B) flow channel as per chart below.
- | TYPE OF VEGETATION | SEEDING | DIKE A | DIKE B |
|--------------------|-----------------------------|---------------------|---------------------|
| 1 | 25-30% Seed or Straw Mulch | Seed or Straw Mulch | Seed or Straw Mulch |
| 2 | 51-60% Seed or Straw Mulch | Seed or Straw Mulch | Seed or Straw Mulch |
| 3 | 61-70% Seed or Straw Mulch | Seed or Straw Mulch | Seed or Straw Mulch |
| 4 | 71-80% Seed or Straw Mulch | Seed or Straw Mulch | Seed or Straw Mulch |
| 5 | 81-90% Seed or Straw Mulch | Seed or Straw Mulch | Seed or Straw Mulch |
| 6 | 91-100% Seed or Straw Mulch | Seed or Straw Mulch | Seed or Straw Mulch |
- A. Stone to be 2" Stone or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.**
B. Riprap to be 4" x 4" in a layer at least 1/2" thick, pressed into soil.
C. Approved equivalents can be substituted for any of the above materials.
- 7. Periodic Inspection and Required Maintenance must be provided after each rain.**

EARTH DIKE DETAIL (E.D.)
NO SCALE



STRAW BALE DIKE DETAIL (SBD)
NO SCALE

- CONSTRUCTION SEQUENCE:**
- Construction of house on lot 110 must be delayed until drainage area to trap 1 is stabilized and sediment control inspector authorizes removal.
 - Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize. 50
 - Excavate for Foundations and Rough Grade & Temporarily Stabilize. 250
 - Construct Structures, Sidewalks and Driveways. 15
 - Final Grade and stabilize in accordance with Stds. & Specs. 15
 - Final approval of the sediment control inspector. 5
 - Remove sediment control devices and stabilize.
 - Rough grade rear of Lot 110 to meet trap.



SILT FENCE DETAIL (S)
NO SCALE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED DIVISION OF LAND DEVELOPMENT & ZONING ADMINISTRATION
 HOWARD COUNTY, MARYLAND

DATE 7-22-87

Developer's/Builder's Certificate

I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Signature of Developer/Builder: ALLAN WASHAK
Date: 6-3-87

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer: G. Nelson
Date: 6-3-87

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS

SEDIMENT & EROSION CONTROL PLAN
 LONG GATE SECTION 1 AREA 3

DATE: 7-22-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS