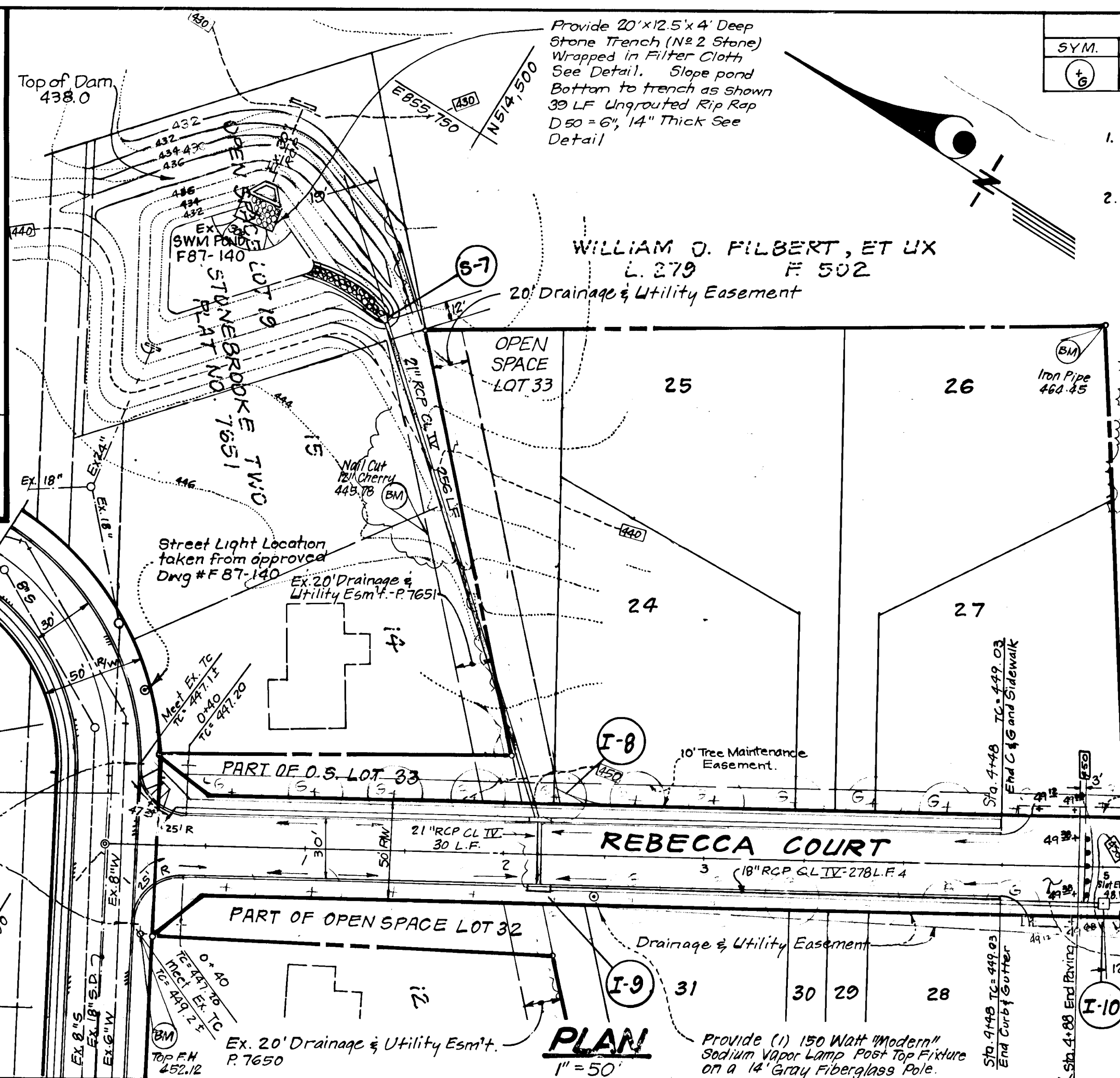


CURB & GUTTER LEGEND:
 Std. 7" C & G

NO.	REVISION	DATE
1	Rev. Storm Drainage I-3 to I-7	7-8-93
2		



SYM.	TYPE	SIZE	QTY.	REMARKS
(6)	ACER SACCHARUM 'Green Mountain'	2 1/2" C	24	8 1/2 Heavy Heads
	'Green Mountain Sugar Maple'	12-14" Ht.		

- The Contractor shall verify location of underground utilities prior to digging. Location of trees may be adjusted slightly to meet field conditions.
- The location, type & number of trees shown are tentative and are used for bond purposes only. The final location and variety of trees may vary to accommodate field conditions and builders landscape program. Bond release is contingent upon Section 16.131 of the Howard County subdivision Regulations as approved by the Office of Planning and Zoning.

Reviewed for HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS and meets Technical Requirements
 Signature: *[Signature]* Date: 11/7/90
 U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *[Signature]* Date: 11/7/90

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 Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard County Conservation District or their authorized agents, as are deemed necessary."

Signature: *[Signature]* Date: 7/10/90
 Richard J. HOStapp

ENGINEER'S CERTIFICATE

I hereby certify that this plan for streets and Erosion Control represents a professional and accurate plan based on my personal knowledge of the site conditions and that it was prepared to conform with the requirements of the Howard County Engineering Code.

Signature: *[Signature]* Date: 7-10-90
 Richard J. HOStapp

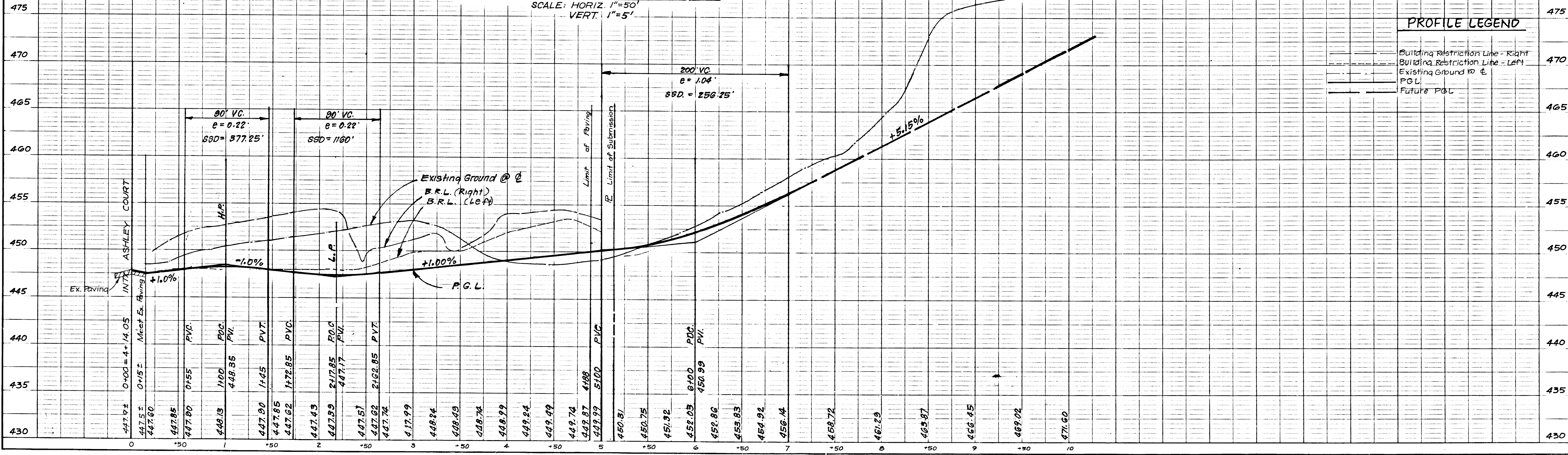
GENERAL NOTES

- All work shall be done in accordance with Ho.Co. Design Manual, Vol. IV Stds. and Specs. and Details for construction, 1982 Amendments.
- Types of storm drainage refer to the standard details of Ho.Co. & MDSHA.
- Trench compaction for storm drains within road or street right-of-way limits shall be in accordance with "Ho.Co. Design Manual, Vol. IV," Std. G.2.01.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of mains by digging test pits, by hand, at all utility crossings, well in advance of construction.
- All utility companies shall be notified 24 hrs. in advance of construction.
- All traffic services, parking and signing to be done in accordance with the "Manual of Uniform Traffic Control Devices," 1985 Edition.
- Sag and Crest Vertical Curves were designed in accordance with "Ho.Co. Design Manual," Vol. III.
- Provide conc. sidewalk ramps. Ho.Co. Std. Type A R-401 where shown in plan.
- Design Speed: 30 mph Zoning: R-20
- The contractor or developer shall contact the Construction Inspection/Survey Division 24 hrs. in advance of commencement of work. Phone 792-7272.
- Stormwater management Quantity Control is provided for in previously approved plan F-87-140.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
<i>[Signature]</i> Chief, Land Development Division	11/30/90	Date
<i>[Signature]</i> Chief, Bureau of Highways	11/9/90	Date
<i>[Signature]</i> Chief, Bureau of Engineering	12-3-90	Date
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING		
<i>[Signature]</i> Chief, Division of Community Planning & Land Development	11/9/90	Date
CLARK & FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO • (301) 621-8100 • WASH.		
DESIGNED: C.V.H.	ROAD CONSTRUCTION PLAN REBECCA COURT	SCALE: As Shown
DRAWN: RMQ	STONEBROOKE THREE-LOTS 24-33	DRAWING: 1 of 3
CHECKED: C.V.H.	A RESUBDIVISION OF STONESTROBE TWO, LOT 13	JOB NO.: 8900G
DATE: July 1990	2 ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND.	FILE NO.: 89-006D
Owner/Developer:	Dorsey Contractors 16347 Frederick Road Woodbine, Md 21777	

PROFILE REBECCA COURT

SCALE: HORIZ. 1"=50'
 VERT. 1"=5'

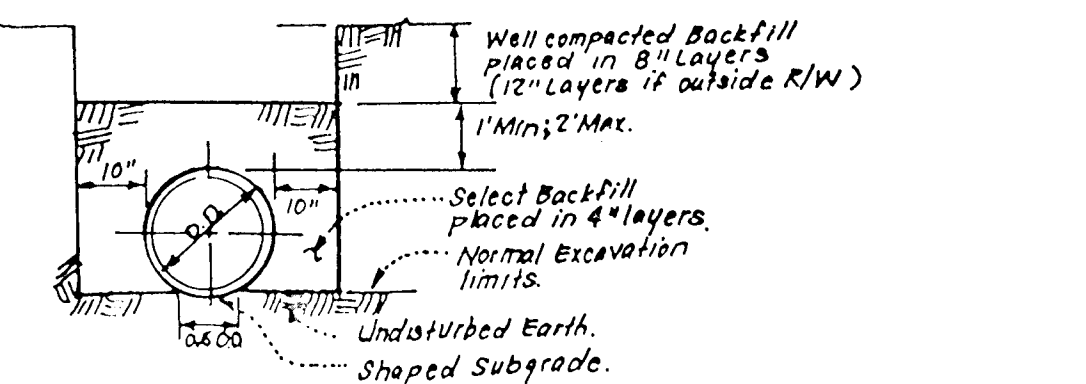


PROFILE LEGEND

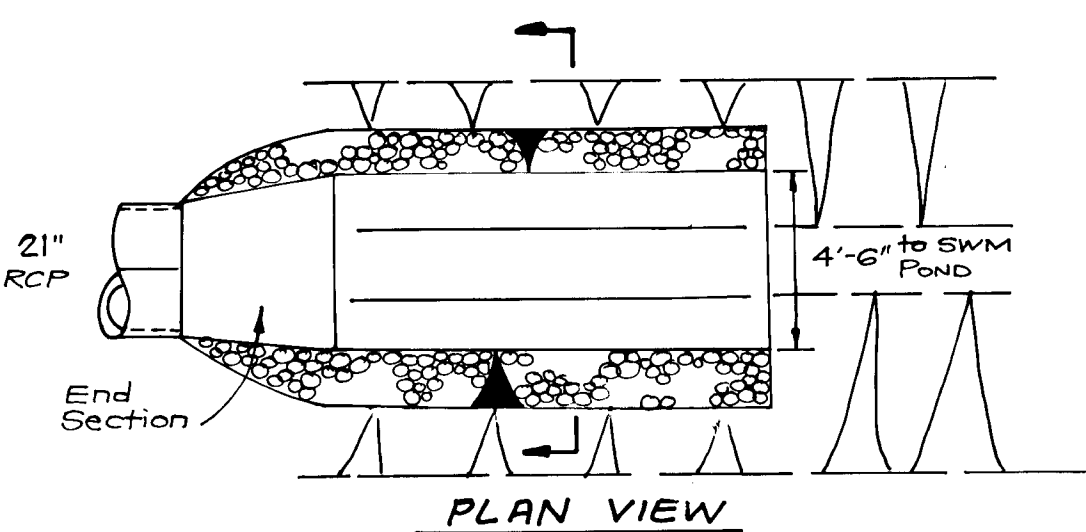
- Building Restriction Line - Right
- Building Restriction Line - Left
- Existing Ground @ 2'
- P.G.L.
- Future P.G.L.

1606

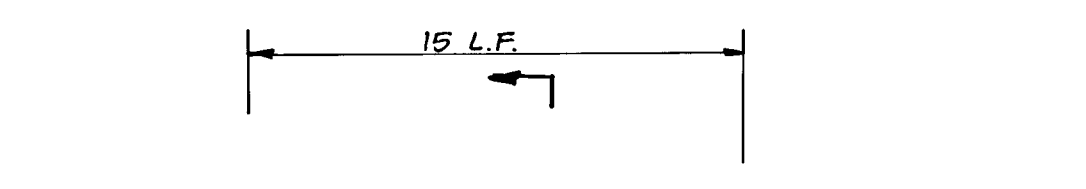
- Notes:
- For 30" of pipe see manufacturer's specs. or 180" measure circumference of pipe and divide by 3.14.
 - Within road R/W, trench compaction density shall be 95% as determined A.S.H.T.O. T-180A.
 - For conditions requiring solid sheeting or trench shields "A" shall not exceed 30'.



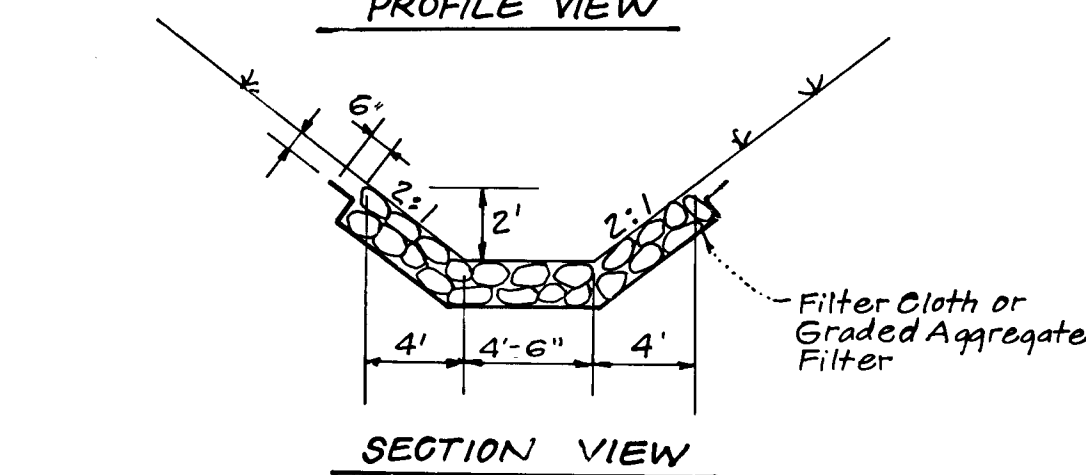
TRENCH COMPACTION DETAIL
NO SCALE



PLAN VIEW

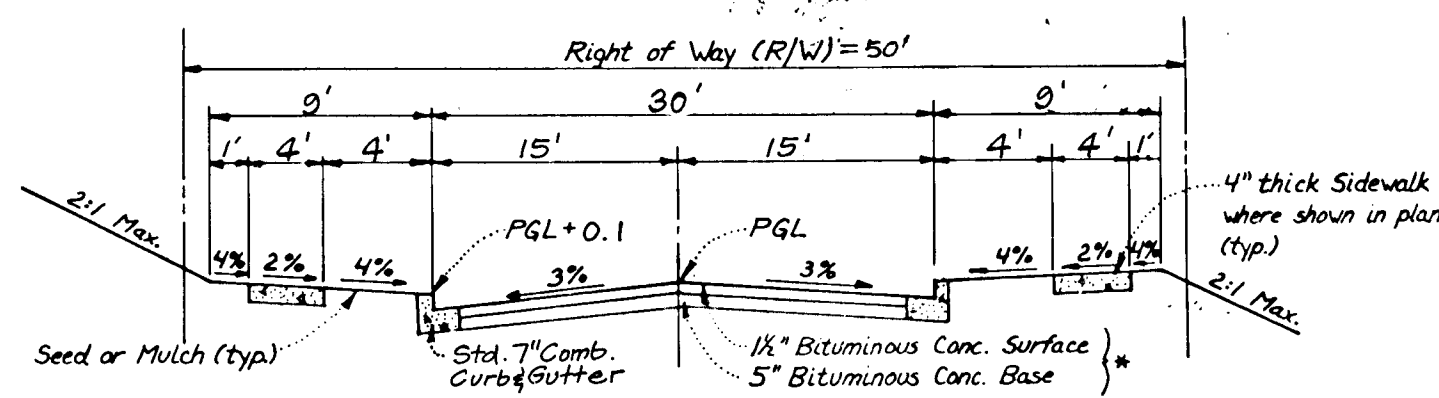


PROFILE VIEW

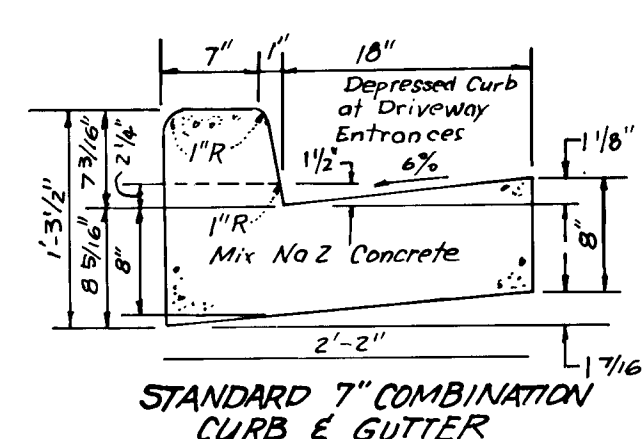


SECTION VIEW

DETAIL - UNGROUTED RIP RAP OUTFALL
STRUCTURE # S-7
NO SCALE



TYPICAL PAVING SECTION - PUBLIC ROADS
REBECCA COURT
NO SCALE



STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE

Bituminous Conc. Surface	1/4"
Bituminous Conc. Base	2 1/2"
Prime	8"
8" Crusher Run Base (Placed in 2 Courses)	8"
6" Dense Graded Stabilized Aggregate Base Course	6"

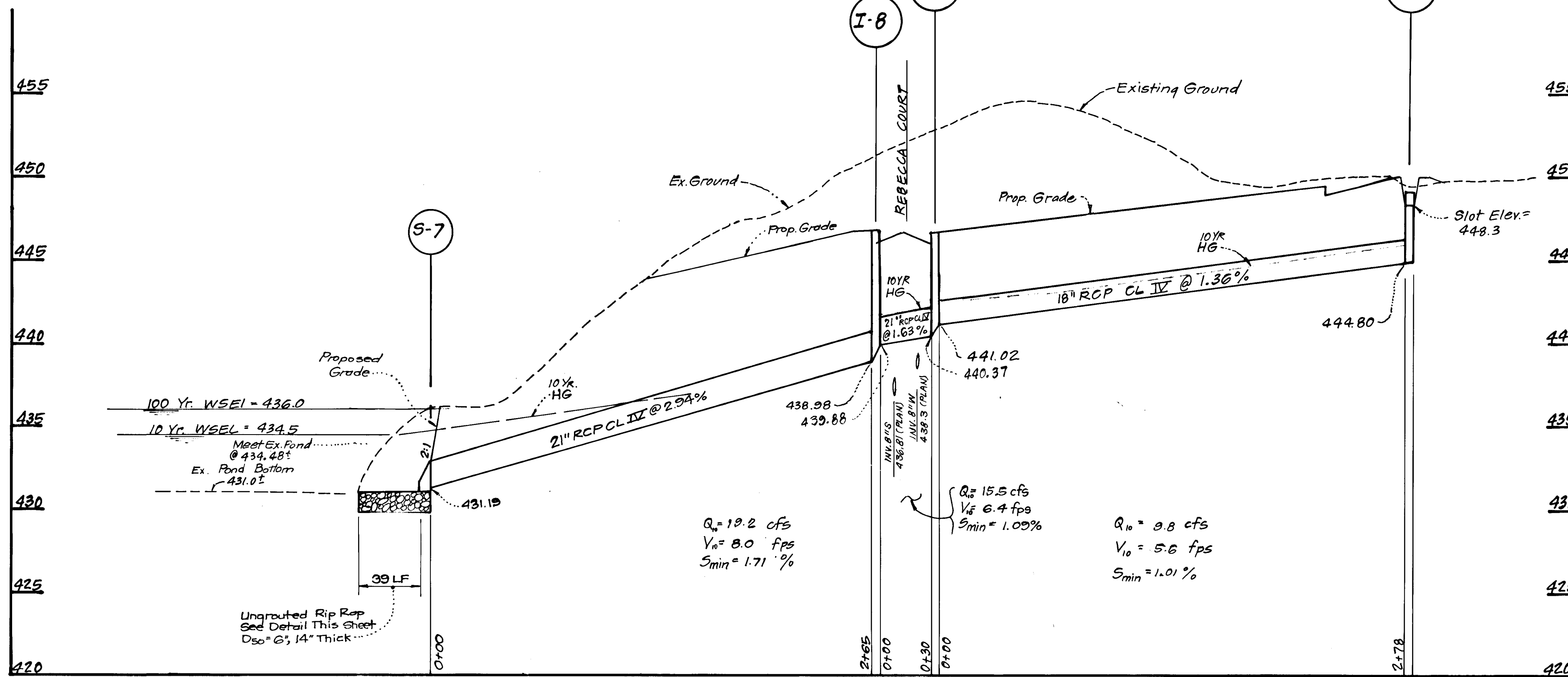
ALTERNATE PAVING SECTION FOR PUBLIC ROADS
(SECTION P-2)

No.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS	LOCATION
				UPPER	LOWER		
I-8	A-10 Inlet	439.88	438.98	447.5		Ho. Co. Std. SD 4.02 W x 2'-6"	6' x 4' REBECCA CT @ 439.88
I-9	A-10 Inlet	441.02	440.97	447.5		Ho. Co. Std. SD 4.02 W x 2'-6"	6' x 4' REBECCA CT @ 441.02
I-10	D- Inlet	444.80	444.13	449.13		Ho. Co. Std. SD 4.11 2'-6" Sq	2' x 2' REBECCA CT @ 444.80
S-7	Conc. End Section	431.19	431.00	-		Ho. Co. Std. SD 5.52 21" R	See Plan.

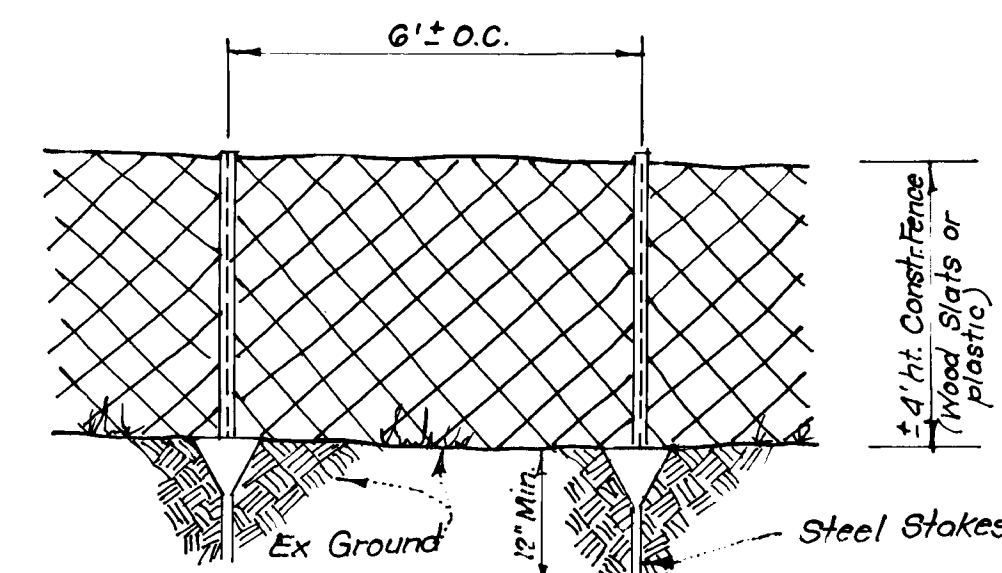
* Provide Slots in all sides
△ All Inverts to be fully developed

SIZE	TYPE	LENGTH
18"	RCP CL IV	278 LF
21"	RCP CL IV	205 LF

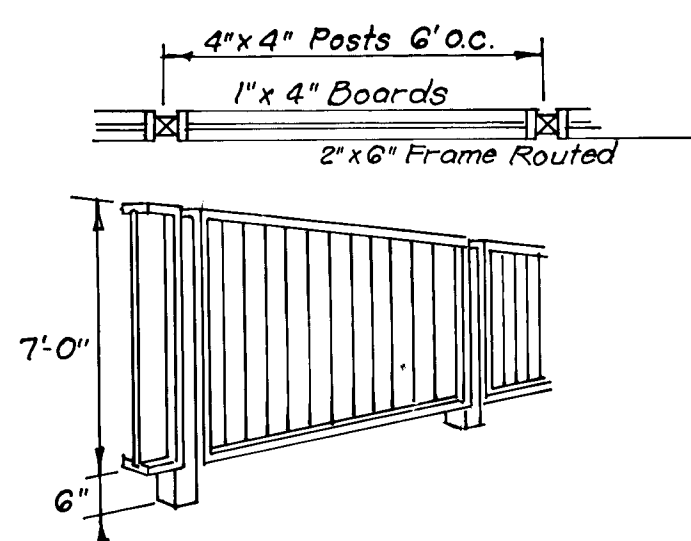
PIPE SCHEDULE



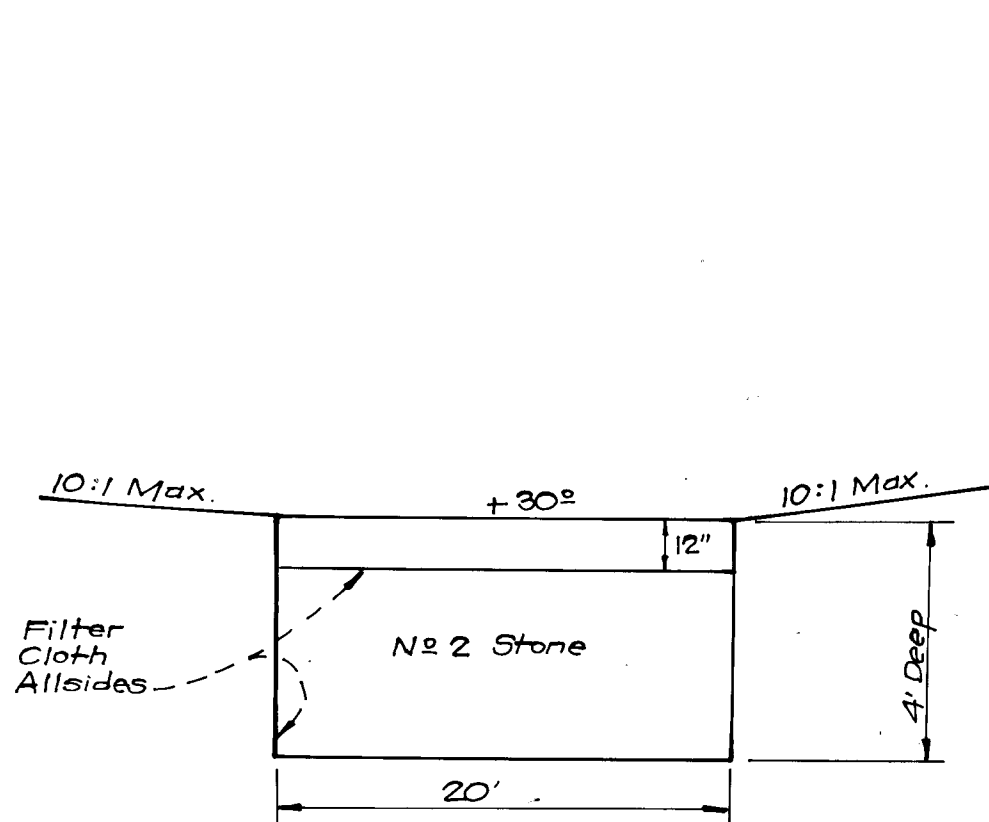
SCALE: HOR. = 1" = 50'
VERT. = 1" = 5'



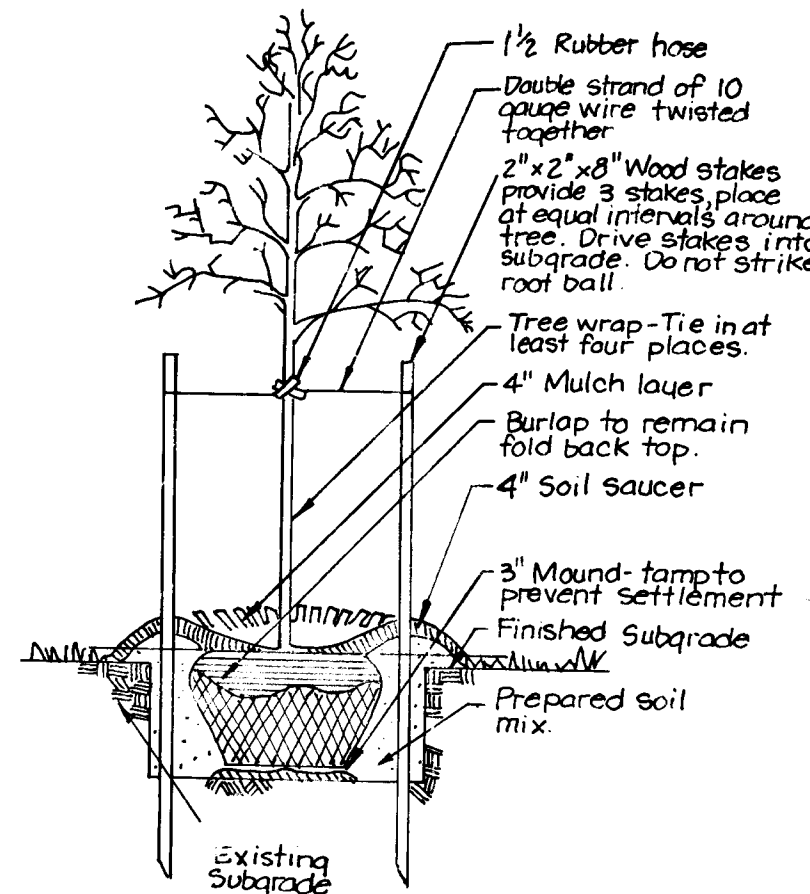
TYPICAL TREE PROTECTION FENCE DETAIL
No Scale



7' HIGH ACOUSTICAL FENCE
No Scale



STONE TRENCH DETAIL
No Scale



TREE PLANTING DETAIL
NO SCALE

Reviewed for HOWARD COUNTY and meets technical requirements of U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT

Approved: *[Signature]* Date: 11/1/90

DEVELOPER'S/BUILDER'S CERTIFICATE

We certify that all development and construction will be done according to the 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 Environment Approved Training Program for the Control of Sedimentation before beginning the project. I also authorize portable site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Approved: *[Signature]* Date: 7/10/90

ENGINEER'S CERTIFICATE

I hereby certify that this plan for erosion and sediment control is 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.

Approved: *[Signature]* Date: 7-10-90

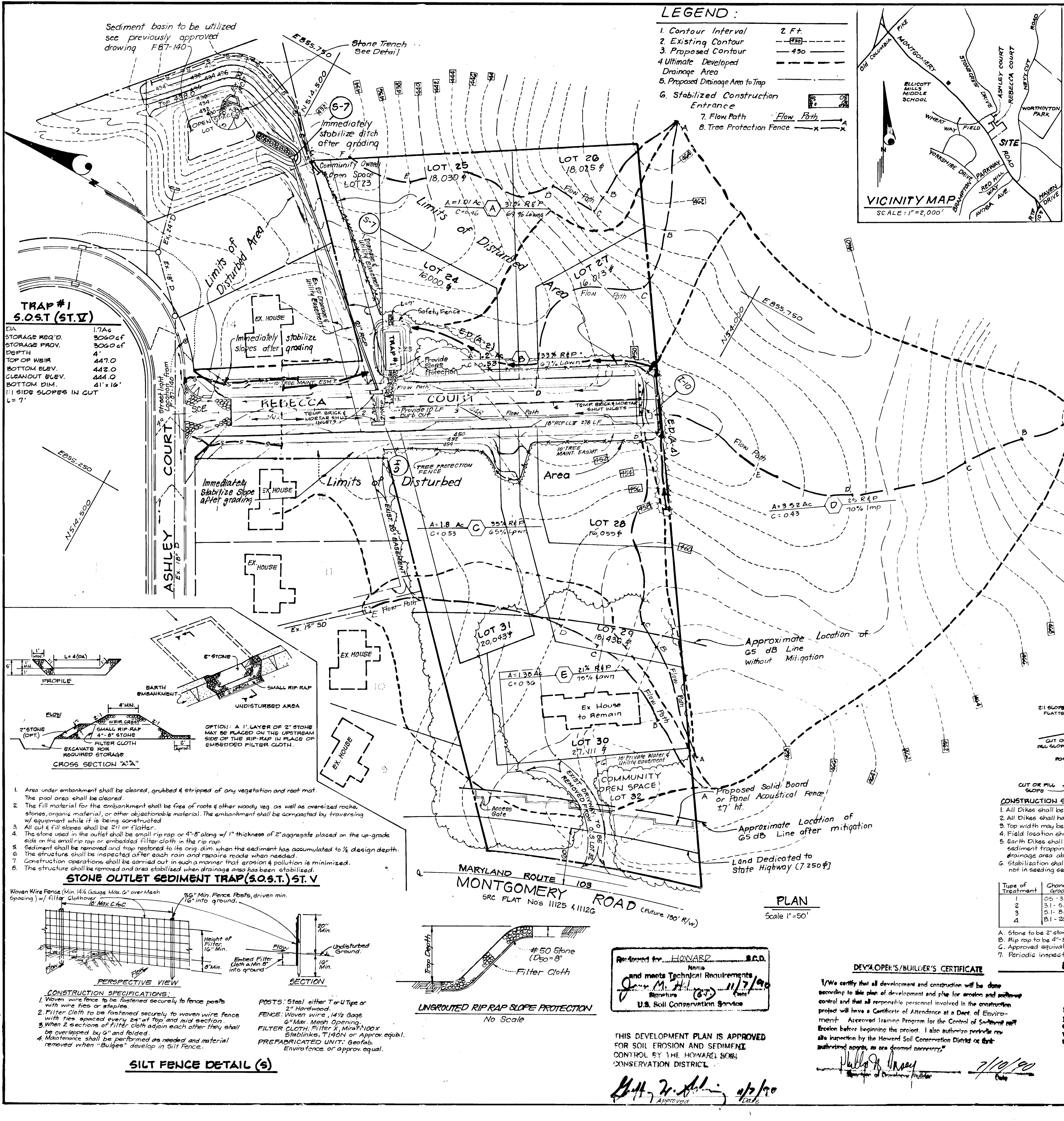
NO.	REVISION	DATE
1	Rev. Storm Drainage I-9 to S-7	7-8-93

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] Chief, Land Development Division
[Signature] Chief, Bureau of Highways
[Signature] Chief, Bureau of Engineering

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature] Chief, Division of Community Planning & Land Development

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINNIE L WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO • (301) 679-8100 • WASH

DESIGNED	ROAD CONSTRUCTION PLAN	SCALE
C.V.H.	PROFILES & DETAILS	As Shown
DRAWN	STONEBROOKE THREE-LOTS 24-33	DRAWING
V.L.M.	A RESUBDIVISION OF STONEBROOKE TWO, LOT 13	2 OF 3
CHECKED		JOB NO.
C.V.H.	2ND ELECTION DISTRICT	89-00G
DATE	OWNER: DORSEY CONTRACTORS	FILE NO.
July 1990	DEVELOPER: 16347 Frederick Road	89-006-D
	Woodbine, Maryland 20717	



PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

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

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 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 400 lbs per acre 30-0-0 urethane fertilizer (9 lbs/1000 sq ft).
- 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 16 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 seed. Option (3) seed with 50 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 14 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated 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 reseedings.

TEMPORARY SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

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 lbs per acre of annual ryegrass (0.2 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 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use seed.

Mulching: Apply 14 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of untreated 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.

SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can likely be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:

Total Area of Site	5.24 Acres
Area Disturbed	1.9 Acres
Area to be roofed or paved	0.47 Acres
Area to be vegetatively stabilized	1.43 Acres
Total Cut	480 Cu. yds
Total Fill	350 Cu. yds

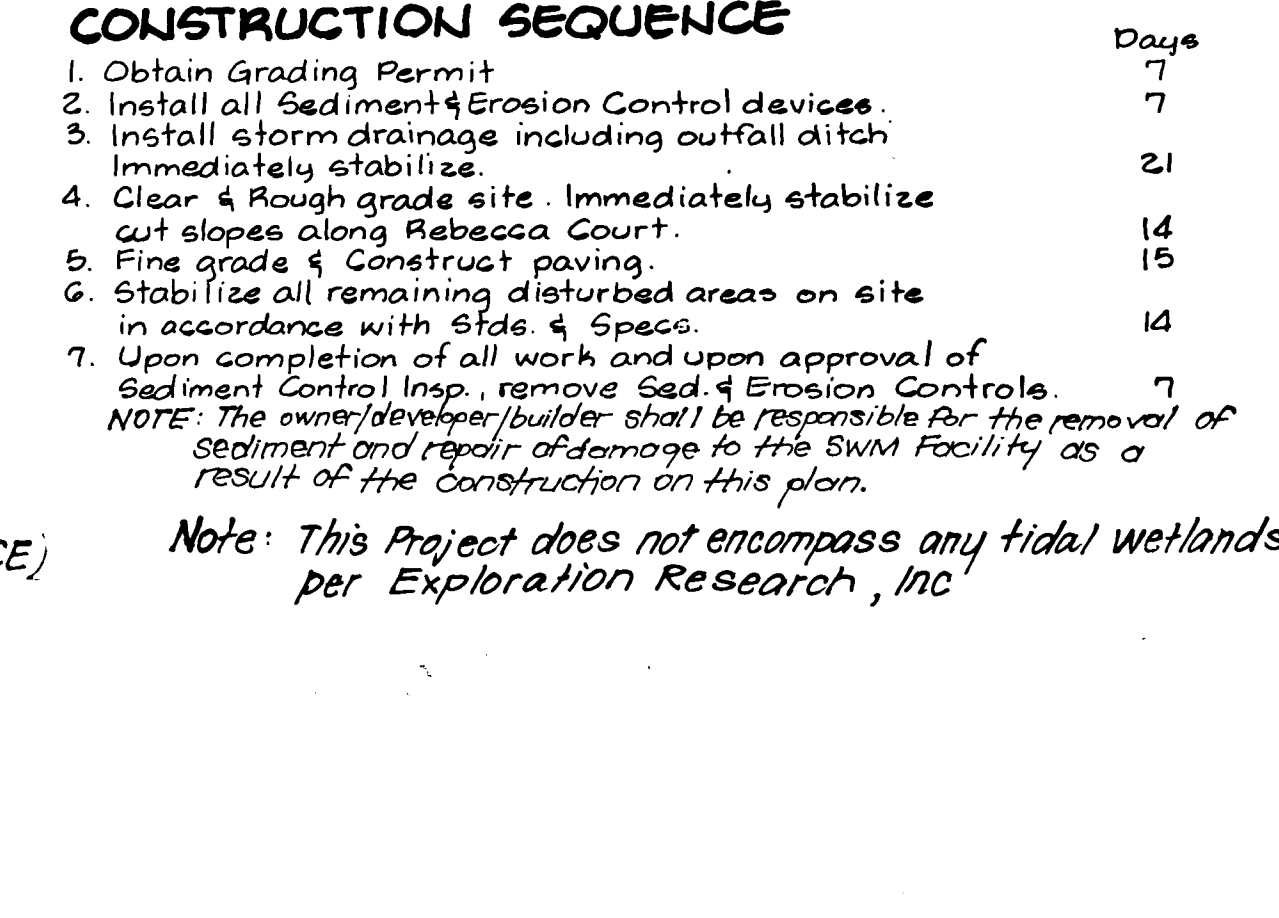
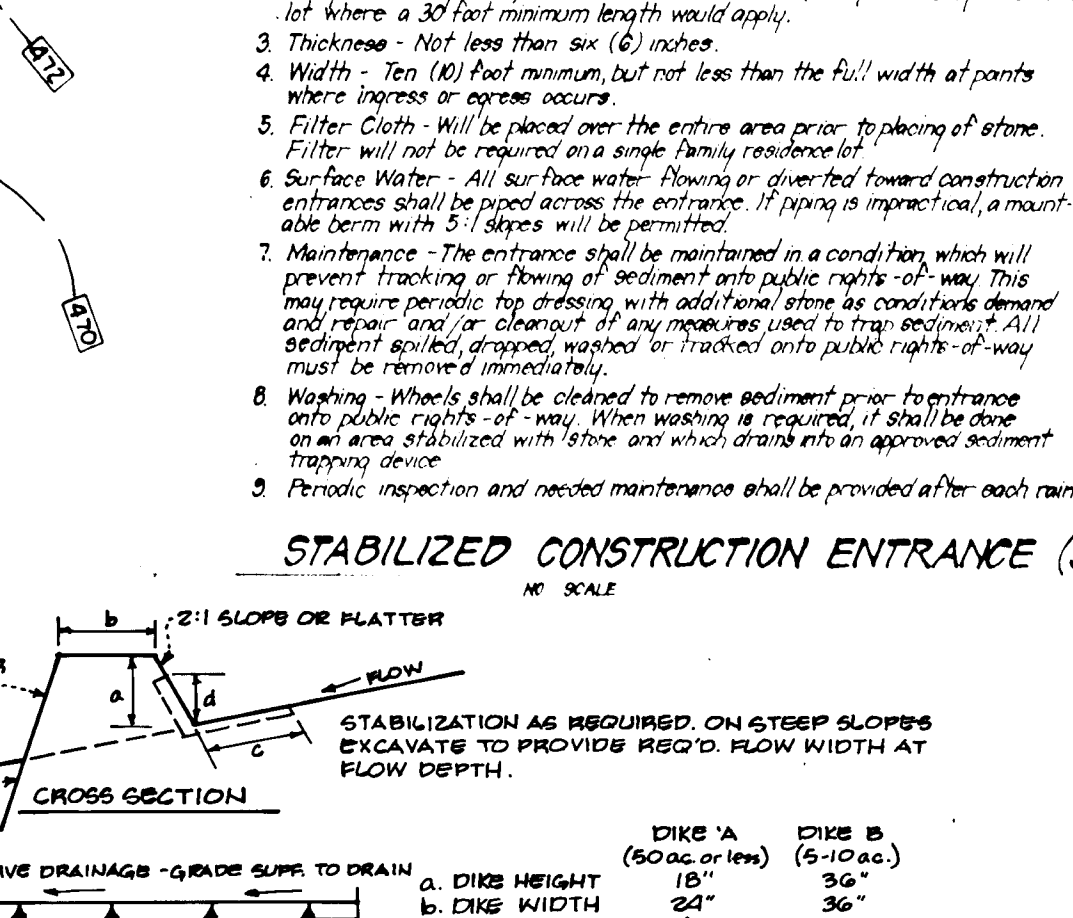
 Offsite waste/borrow area location to be stockpiled/spread on SOP-91-3.
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
- If houses are to be constructed on an "As-Built" basis, at Random, Single Lot Sediment Control as shown below shall be implemented. N/A
- All pipes to be blocked at the end of each day (see detail below).
- The total amount of straw bale dikes/silt fence equals 220 L.F.

CONSTRUCTION SEQUENCE

Task	Days
1. Obtain Grading Permit	7
2. Install all Sediment & Erosion Control devices.	7
3. Install storm drainage including outfall ditch. Immediately stabilize.	21
4. Clear & Rough grade site. Immediately stabilize cut slopes along Rebecca Court.	14
5. Fine grade & Construct paving.	15
6. Stabilize all remaining disturbed areas on site in accordance with Site & Specs.	14
7. Upon completion of all work and upon approval of Sediment Control Insp. remove Sed. & Erosion Controls.	7

NOTE: The owner/developer/builder shall be responsible for the removal of sediment and repair of damage to the SWM Facility as a result of the construction on this plan.

Note: This Project does not encompass any tidal wetlands per Exploration Research, Inc.



REVISIONS

NO.	REVISION	Date
1	Rev. Storm Drainage I-9 to 5-7	7-8-93

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Olga M. Tangam 11/2/90
Chief, Land Development Division

Janville W. Welstead 11/19/90
Chief, Bureau of Highways

Michael B. Ryan 12-3-90
Chief, Bureau of Engineering

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Paul S. J. Gault 12/1/90
Chief, Division of Community Planning & Land Development

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED: C.V.H.
DRAWN: RMQ, VLM
CHECKED: C.V.H.
DATE: July, 1990

SCALE: As Shown
DRAWING: 3 of 3
JOB NO.: 89-006
FILE NO.: 89-006D

Owner: Dorsey Contractors
Developer: 16347 Frederick Road Woodbine MD 21771

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done according to the 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 Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize possible reasonable inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary.

Paul S. J. Gault 7/10/90
Signature of Developer/Builder

Richard J. H. Stepp 7-10-90
Date

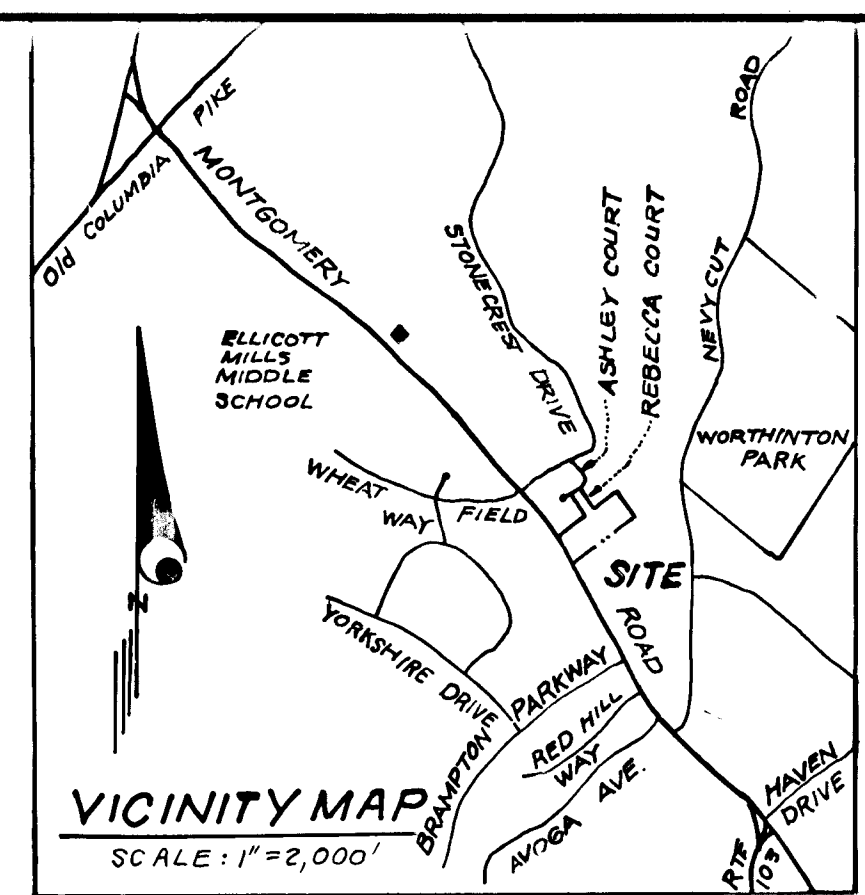
ENGINEER'S CERTIFICATE

I hereby certify that this plan for development and sediment control was prepared by me or under my direct supervision and that I am a duly licensed Professional Engineer in the State of Maryland. I am a member of the Maryland Society of Professional Engineers and the Howard County Soil Conservation District.

Richard J. H. Stepp 7-10-90
Date

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

Paul S. J. Gault 7/10/90
Approved



1606