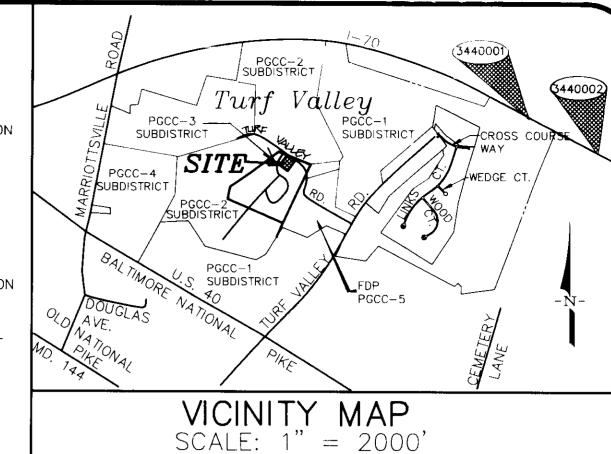
3440001 - HOWARD COUNTY GEODETIC CONTROL STATION CONC. MON. @ SURFACE 21'± N OF N EDGE MAC. SHOULDER OF W. BOUND LANE. 242'± W OF W END GUARD RAIL. STATION IS 1.55± MILES EAST OF MARRIOTTSVILLE ROAD. ELEVATION = 486.341

COORDINATES: N 534735.478 E 836286.297

3440002 - HOWARD COUNTY GEODETIC CONTROL STATION CONC. MON. @ SURFACE ON SLOPE, 3000" + W OF BETHANY LANE. 14'± S OF MAC. SHOULDER OF E. BOUND LANE. 485'± E OF E. END OF GUARD RAIL @ W END OF 3 rd CUT.

ELEVATION = 462.306COORDINATES: N 533593.800 E 837983.249



GENERAL NOTES

 AREA OF PGCC—3 SUBDISTRICT: PHASE 1-A = 1,5076 AC. OR 65,669,68 S.F. REMAINDER = 27.3324 AC. TOTAL GROSS AREA OF PGCC-3 SUBDISTRICT = 29.5 ACRES

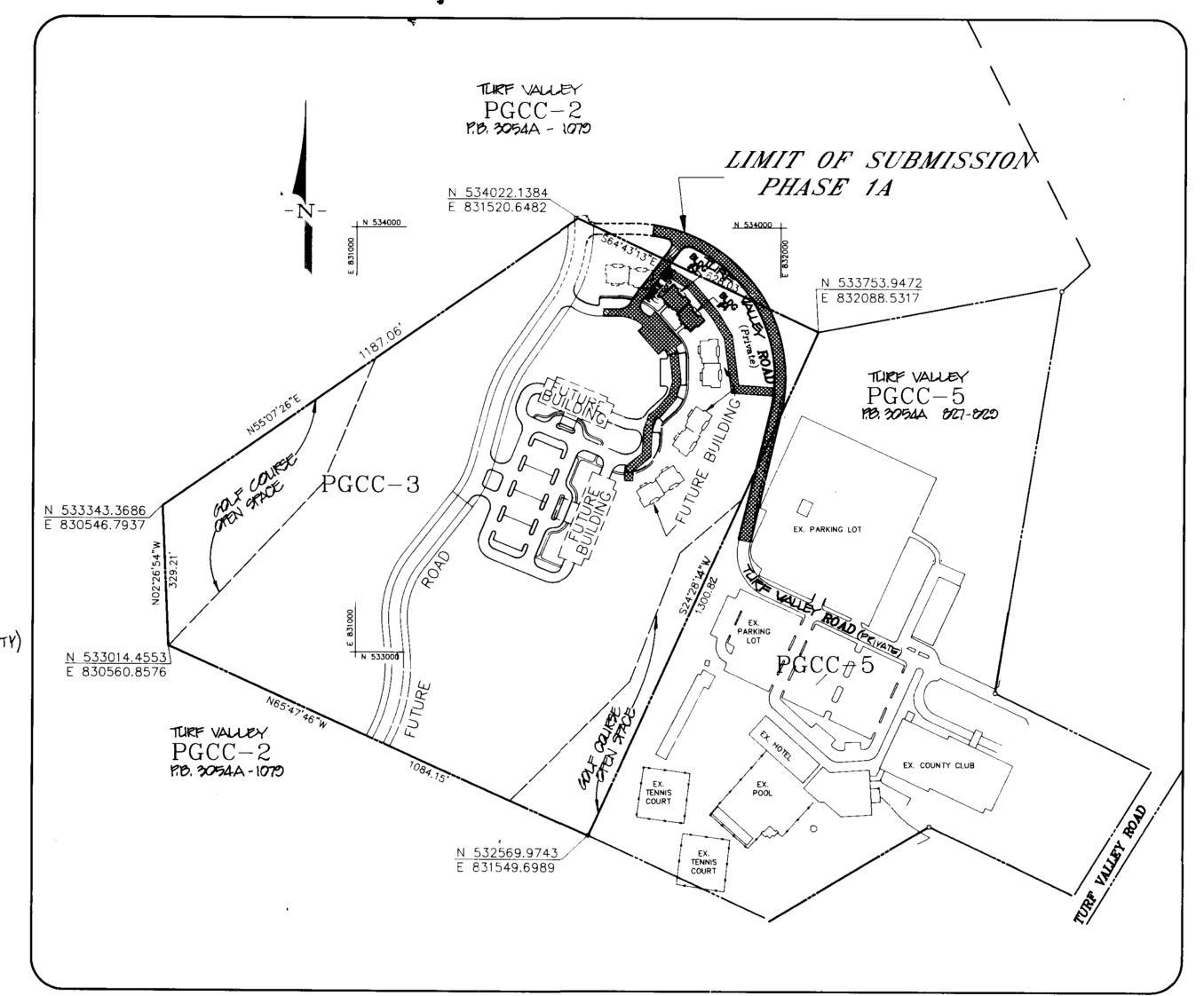
- 2. ZONE: PGCC-3 RESIDENTIAL HIGH DENSITY FDP #4 PLAT NO. 3054A-1079 DATED 10/6/89. PLANNING BOARD CASE #181 DATED 8/30/89..
- 3. PROPOSED USE: EXECUTIVE SUITES (RENTAL).
- 4. TOTAL NUMBER OF UNITS ALLOWED UNDER THIS ZONE: 150 UNITS PROPOSED NUMBER OF UNITS WITHIN PHASE 1A: 6 UNITS
- 5. NUMBER OF PARKING SPACES REQUIRED (PHASE 1A): 2 SPACES PER UNIT
- NUMBER OF PARKING SPACES PROVIDED: 17 TOTAL (INCLUDES 2 HANDICAP)
- 6. OPEN SPACE PROVIDED WITHIN PGCC-3 SUBDISTRICT: 4.5 ACRES OR 15% OF GROSS AREA.

7. BUILDING COVERAGE OF SITE: 35% (SEE PLAN AND ELEVATION VIEW FOR SQUARE FOOTAGE).

- 8. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORK/CONSTRUCTION INSPECTION
- DIVISION AT (410) 313-1080 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- EXCAVATION WORK. 10. THE TOPOGRAPHY SHOWN WAS GENERATED FROM AERIAL PHOTOGRAHY PROVIDED BY WINGS MAPPING CO., INC.

9. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 LEAST 48 HOURS PRIOR TO ANY

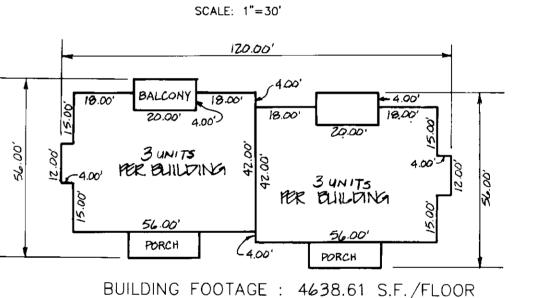
- 11. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH
- IS BASED UPON MARYLAND GRID SYSTEM NAD 27 HOWARD COUNTY MONUMENTS NO.'S 3440001 AND
- 12. STORMWATER MANAGEMENT IS PROPOSED AS EXTENDED DETENTION UNDER THIS SDP SUBMISSION. (PRIVATE FACILITY)
- 13. ANY DAMAGE TO COUNTY OWNED RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- 14. THE CONTRACTOR SHALL VERIFY LOCATION OF UTILITIES AND EASEMENTS PRIOR TO CONSTRUCTION.
- 15. HOWARD COUNTY RELATED REFERENCE PLANS: S-86-13, S-90-15, WP-90-32, FDP PGCC-2/PGCC-3.
- 16. WAVIER PETITION WP-90-32 WAS APPROVED MARCH 21,1991 TO WAIVE THE REQUIREMENT OF PRELIMINARY AND FINAL PLAN SUBMISSION.
- 17. ALL ROADS AND DRIVEWAY INDICATED SHALL BE PRIVATELY OWNED AND MAINTAINED.
- 18. NO WETLANDS OR FLOODPLAINS EXIST WITHIN THE PROJECT LIMITS.
- 19. DEED REFERENCE FOR THIS PARCEL IS LIBER 920 AT FOLIO, 285.
- 20. ACCESS TO THESE UNITS WILL BE PROVIDED BY A PRIVATE ROAD, THROUGH LOT 1 OF TURF VALLEY COUNTY CLUB AS RECORDED IN LIBER 3064 AT FOLIO 550, UNTIL SUCH TIME THAT THE PUBLIC COLLECTOR ROADS ARE BUILT LINKING THE SITE WITH U.S. ROUTE 40 AND MARRIOTTSVILLE ROAD.
- 21. WATER SERVICE UNDER THIS SDP WILL BE PUBLIC. SEWER SERVICE WITHIN PGCC-3 SUBDISTRICT AND THIS SDP WILL BE PRIVATE.
- 22. LANDSCAPE REQUIREMENTS ARE IN ACCORDANCE WITH THE APPROVED FDP #4, PGCC-2 AND PART OF PACC-3 SUBDISTRICT RECORDED AG PLAT NO. 3054A-1079 DATED OCTOBER 6, 1980.
- 23, THE "TEMPORARY ROAD" WILL BE REMOVED ONCE THE EXTENSION OF FLITLIRE STREET A' IS BLILLT,



LOCATION MAP SCALE: 1" = 200'



SIDE ELEVATION SECTION



PLAN VIEW SCALE: 1"=30'

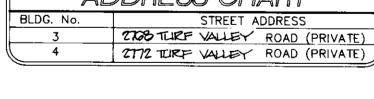
SHEET INDEX

FLAN COVER SHEET

- SITE DEVELOPMENT PLAN PRIVATE ROAD PROFILE AND DETAILS
- PROFILES
- DETAILS/STORMWATER MANAGEMENT NOTES STORMWATER MANAGEMENT NOTES AND DETAILS
- EROSION/SEDIMENT CONTROL PLAN
- 8 SEDIMENT CONTROL NOTES AND DETAILS 9 DRAINAGE AREA MAP, SOILS MAP AND STEEP SLOPES

ADDRESS CHART STREET ADDRESS

PERMIT INFORMATION CHART



HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING CHEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER GE, STORM DRAINAGE SYSTEMS AND ROADS

CHIEF, BUREAU OF ENGINEERING (> CICCOU

10/25/94

HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER & SEWERAGE SX COUNTY HEALTH OFFICER

OWNER/DEVELOPER MANGIONE ENTERPRISES OF TURF VALLEY 1205 YORK ROAD - PENTHOUSE SUITE LUTHERVILLE, MARYLAND 21093 (410) 825-8400

ENGINEER/SURVEYOR

ATTN: MR. LOUIS MANGIONE

MILDENBERG, MOCHI & ASSOCIATES, Inc. 3300 NORTH RIDGE ROAD, SUITE 235 ELLICOTT CITY, MARYLAND 21043 (410) 461-0078

3 3D/#8 F. 285 S-86-13; FDP PGCC-2/PGCC PLAT No. BLOCK No. ZONE TAX MAP ELEC. DIST. CENSUS 3054A- 16 PGCC 16 3rd 6030 WATER CODE HO 6 SEWER CODE 599-2500	TERMIT INTORMATION CHART									
3 3D/#8 L.920 S-90-15; WP-90 S-86-13; FDP PGCC-2/PGCC PLAT No. BLOCK No. ZONE TAX MAP ELEC. DIST. CENSUS 3054A- 16 PGCC 16 3rd 6030 WATER CODE SEWER CODE 599-2500	PLANNING BOARD APPROVAL:	TURF VALLEY VILLAS - PHASE 1A								
3054A- 16 PGCC 16 3rd 6030	*	,		3D/#8		L 920	S-90-1 S-86-1	S-90-15; WP-90-		
HO 6 599-2500	12 12 23 June 94	3054A-						CENSUS 6030		
SCALE: AS SHOWN DECEMBER 9, 1993		SCALE: AS SHOWN								

SDP-94-80

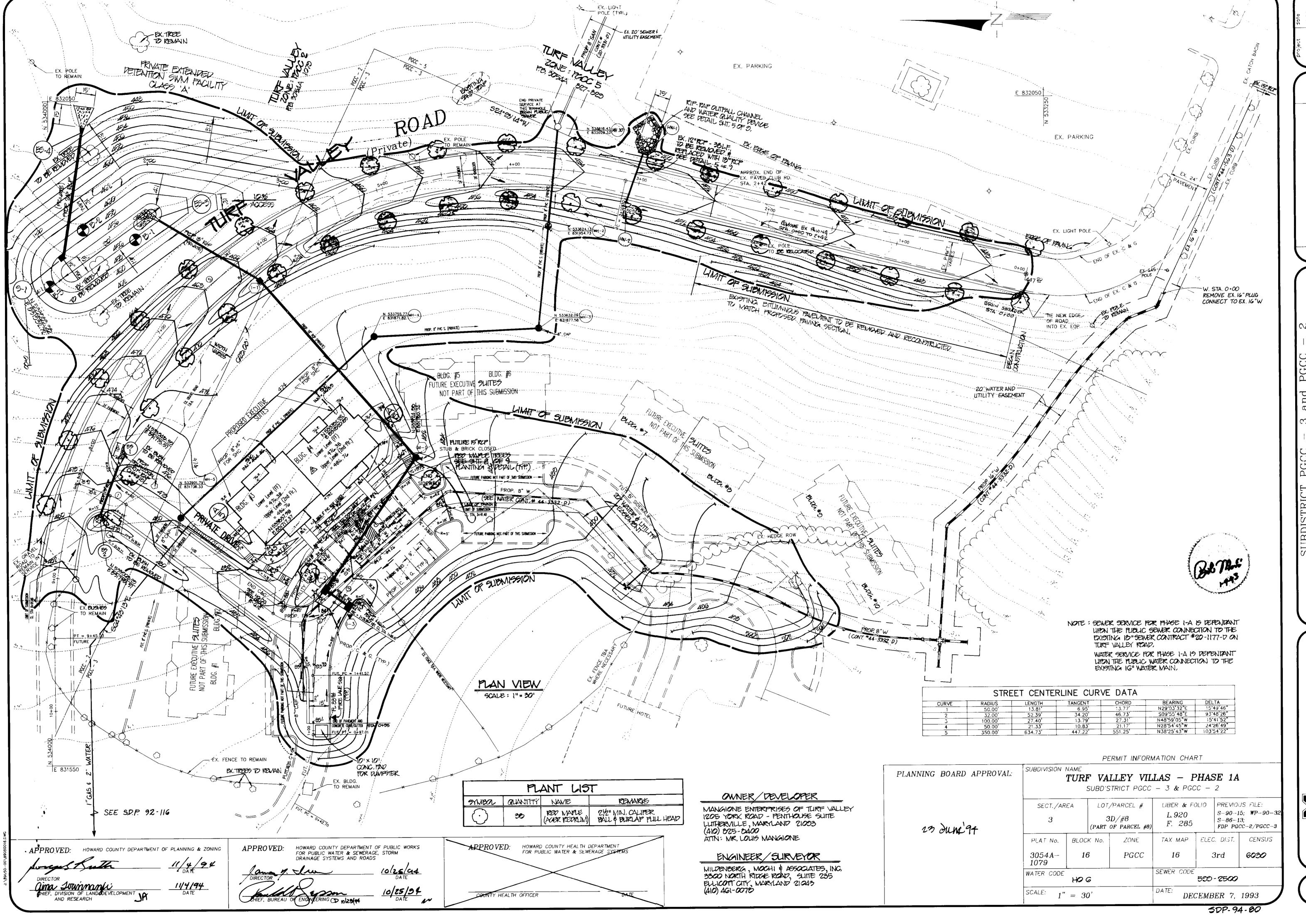
ST SUBMITTAL

田

 $\sum_{i \in \mathcal{S}} \sum_{j \in \mathcal{S}_i} \mathbf{x}_{i,j}$

ည် **က**

OF ${\mathfrak O}$



SUBDISTRICT PGCC - 3 and PGCC - 2

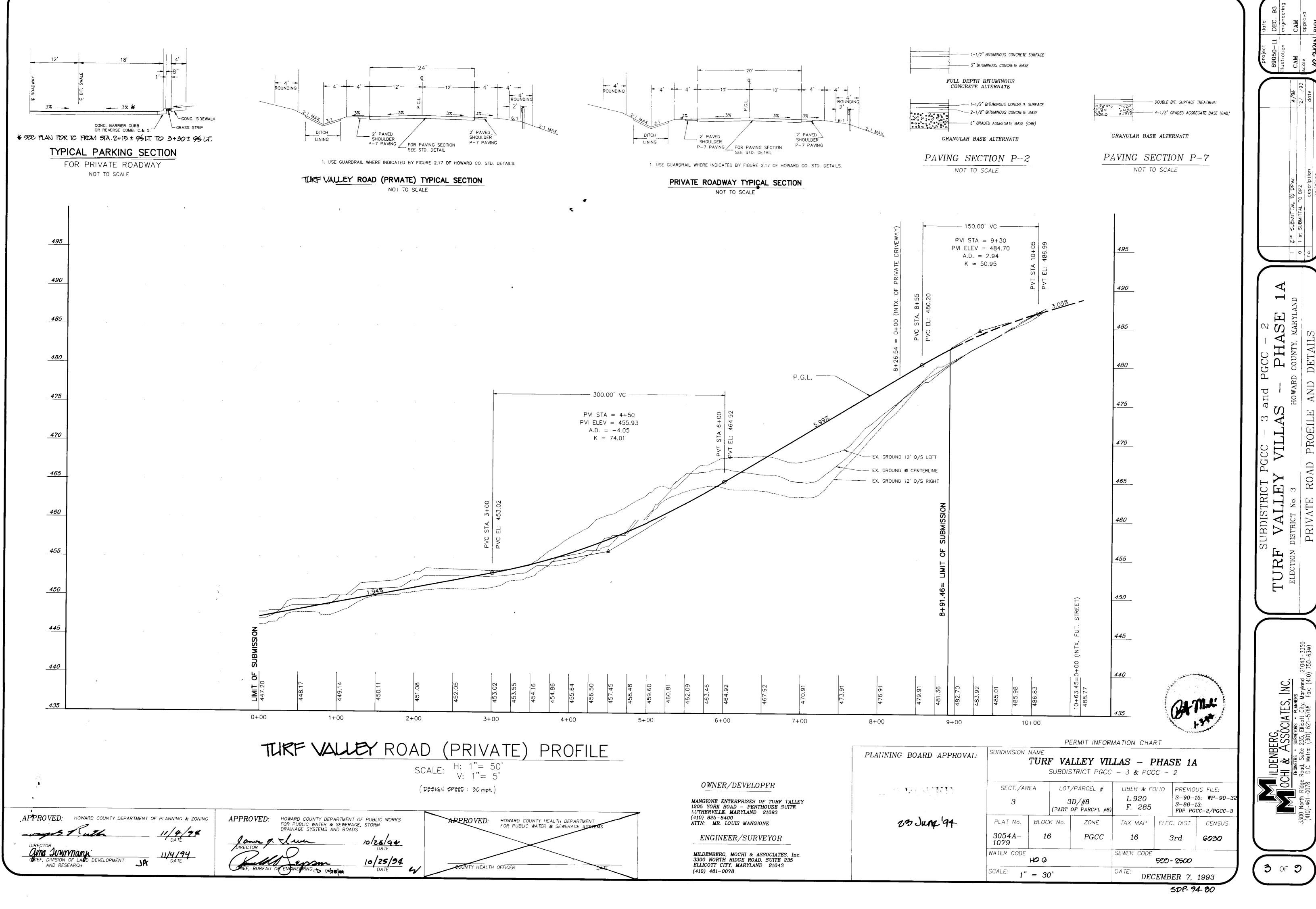
TURF VALLEY VILLAS - PHASE 1A

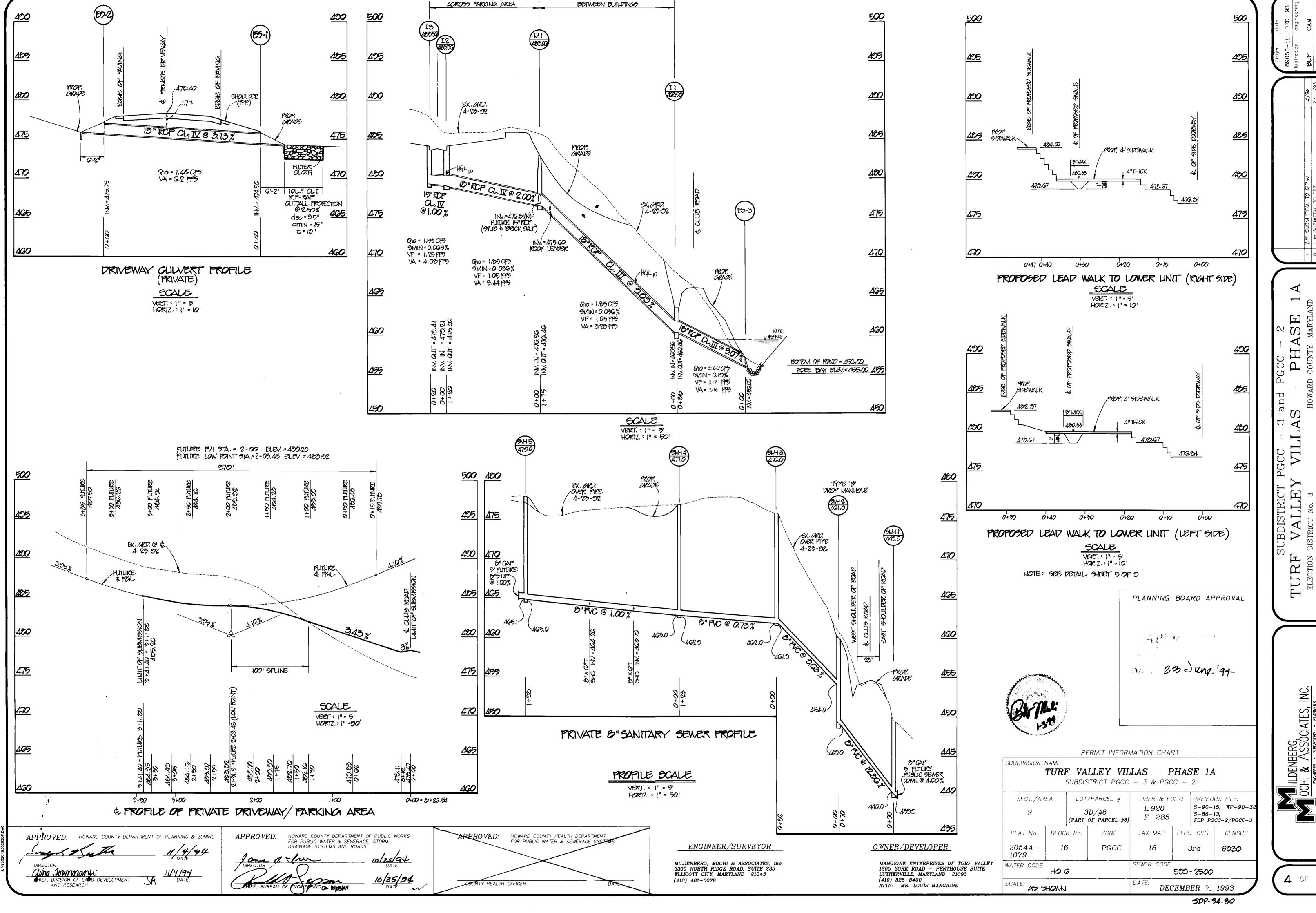
RIECTION DISTRICT No. 3

HOWARD COUNTY, MARYLAND

ADDED REVISE 2 No 5 1 st S

3300 North Ricye Road, Suite 235, Elicott City, Maryland 2 (301) 461-0078





Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other hijectionable material shall be removed. Channel ___ not be less than 95% of maximum dry density with a

Areas to be covered by the reservoir will be cleared of the time of construction. All compaction is to be all trees, brush, logs, fences, rubbish and other determined by AASHTO Method T-99. objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut - Cut Off Trench - The cutoff trench shall be excavated approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 50 of the embankment as shown on the plans. The foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir lent below existing grade or as shown on the plans. as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpilled in a suitable location for use on the embankment and other designated areas.

Earth Fil

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the layers not to exceed four inches in thickness and center of the embankment and cut off tranch shall conform to Unified Soil Classification GC, SC, CH, or CL. Consideration may be given to the use of other materials in the embankment if design and construction. At no time during the backfilling operation shall driven are supervised by a geotechnical engineer.

Placement - Areas on which fill is to be placed shall be ... Under no circumstances shall equipment be driven scarified prior to placement of IIII. Fill materials shall be over any part of a concrete structure or pipe, unless placed in maximum 6 Inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the Pipe Conduits embankment. The principal spillway must be installed concurrently with fill placement and not excavated Into the embankment.

Compection - The movement of the hauting and shall apply for corrugated metal pipe: spreading equipment over the fill shall be controlled

by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber threa or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fift material shall contain sufficient moisture so that if formed kito a ball it will not crumble yet not be so wet that water can be squeezed out.

Where a minimum required density is specified, it shall banks and sharp breaks shall be sloped to no steeper moisture content within $\pm 2\%$ of the optimum. Each layer of IIII shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at

> Into impervious material along or parallel to the centerline bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure madmum density and minimum permeability.

Backfill adjacent to pipes or structures shall be of the 2. type and quality conforming to that specified for the actioning fill material. The fill shall be placed in horizontal compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. there is a compacted fill of 24° or greater over the

The second second second second second

HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

All pipes shall be circular in cross section

Corrugated Metal Pipe - All of the following griteria

Materials (Steel Pipe). This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any biliuminous roating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coations shall have a minimum coation thickness of 0.01 Inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Blac Klad, and Beth Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the regularments of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or otherwise removed-shall be replaced with cold applied bituminous coating

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate. primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9

- Coupling bands, anti-seep collars, end sections, etc., must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.
- Connections All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the gipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the band width. The following type connections are acceptable for pipes less than 24° in diameter. flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide by 3/8" thick closed cell circular.

neoptene gasket; and a 12" wide hugger type hand with 0-ring gaskets having a minimum diameter of 1/2" greater than the conjugation depth Pipes 24" in diameter and larger shall be connected. by a 24" long annular corrugated band using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24".

Helically corrugated pipe shall have either continuously welded seems or have lock seams. with internal caulking or a neoprene bead.

Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soft is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate

Backfilling shall conform to "Structure Backfill."

Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

leinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

- Materials Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.
- Bedding All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high sturmo concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.
- Laying pipe Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are fifled. Care shall be exercised to prevent any deviation: from the original line and grade of the pipe. The first joint must be located within 2 feet from the
- Backfilling shall conform to "Structure Backfill."
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings

Polyvinyl Chloride (PVC) Pipe - All of the following Materials - PVC pipe shall be PVC-1120 or PVC-1229 conforming to ASTM D-1785 or ASTM D-

Joints and connections to anti-seep collars shall be completely watertight.

- Bedding The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered.
- 4. Backfilling shall conform to "Structure Backfill."

all such material shall be removed and replaced

5. Other details (anti-seep colfars, valves, etc.) shalf be as shown on the drawings.

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608, Mbx No. 3

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction

and Materials, Section 919.12.

CRADE

Q10= 2.52CFS

Vp=11.7 F75

PRIVATE

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct

to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the DEPRESS CURB various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer. for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet with suitable earth compacted to provide adequate works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory. performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining

26LF RIP-RAP OUTFALL CHANNEL AND WATER QUALITY

DEVICE d50=6"

dmax = 9"

EX. GRD.

A-23-92

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soll Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

the water to sumps from which the water shall be

and maintain all temporary dikes, levees, cofferdams

rtrainage channels, and stream diversions necessary.

Erosion and Sediment Control

2'SHOULDER

INV = 446.0

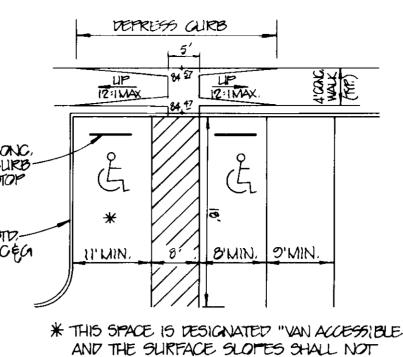
CLOTH

PROFILE SCALE VERT,: 1"=5' HORIZ,: 1"=10'

numped.

mariner that brosion will be controlled and water and air poliution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

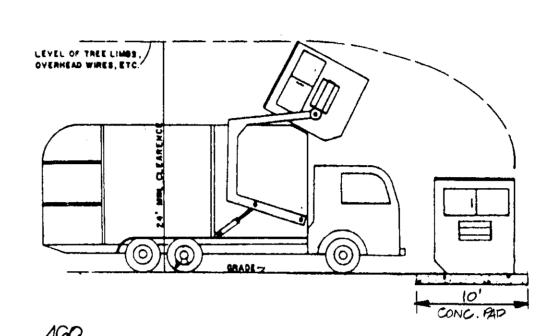
Construction operations will be carried out in such a



EXCEED 2% IN ANY DIRECTION

TYPICAL PARKING AND HANDICAP PARKING

NOT TO SCALE



DUMPSTER PAD

DETAIL

TOW-AWAY

ZONE

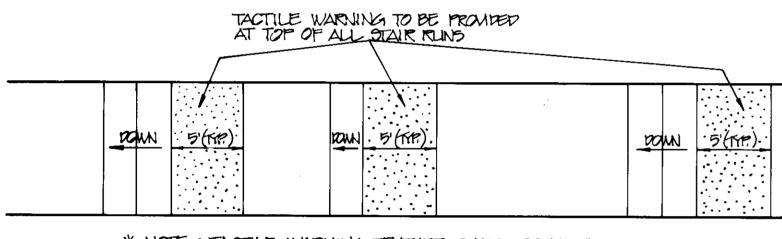
COLOR: RED LETTERS & BORDER ON WHITE

REPLECTIVE BACKGROUND.

PROP GRADE BLDG, #3 E#4 477,17 8" FVC @ 0.50% *475* INV = 476.22 INV, = 475,6 460 STORM DRAIN ROOF LEADER

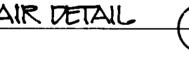
FRONT OF UNIT

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



* NOTE : TACTILE WARNING TEXTURE SHALL CONSIST OF EXPOSED AGGREGATE CONCRETE, RUBBER, OR PLASTIC CLISHIONED SURFACE, RAISED STRIPS OR GROOVES.

TYPICAL TACTILE WARNING STAIR DETAIL NOT TO SCALE



A. Specifications

- Fire Lane Signs
- Size 12" wide x 18" high Alternate when specified: 24" wide x 30" high
- Thickness .080"
- Material Aluminum
- Color Reflective red letters and border on a reflective white background
- e) Lettering -

NO PARKING (3") FIRE LANE DIRECTIONAL ARROW (1 1/2")

The use of international symbol type signs is not authorized

Tow Away Zone Signs

The authorized sign is designated R7-201 in the Manual on Uniform

Size - 12" wide x 6" high

- Material type and thickness to be same as Fire Lane Sign Color - Red letters and border on reflective white background Lettering - 2 line text using 1 inch letters
- Placement of Signs

APPROVED:

- Limits of zones The enforceable limits of any Fire Lane shall be delineated by the placement of Fire Lane signs at both termination points. If signs are installed, all fire lanes will require a minimum of two signs.
- a) Short Zones (200 feet or less)

Fire Lane signs shall be placed at each end of the marked lane with opposing arrows. (See Exhibit 1)

b) Long Zones (in excess of 200 feet)

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

FOR PUBLIC WATER & SEWERAGE, STORM

DRAINAGE SYSTEMS AND ROADS

NGINERRING (> WESSELOW

Fire Lane signs should be spaced approximately 100-150 feet apart, but in no case will they be spaced more than a distance of 200 feet apart. All long zones will require a minimum of three signs. When signing "long Zones," it is necessary to incorporate a double pointing arrow on the middle sign(s) and a single pointing arrow on the end signs indicating the limits of the regulation

TURF VALLEY ROAD CHILVERT PIPE PROFILE Tow Away Zone Sign The "Tow Away Zone" sign shall be mounted immediately below each Fire Lane sign on the same

HW10=451,25

INV,=450,5-

maintaining a clear fire lane. Positioning of Signs

It is recommended that Fire Lane and Tow Away signs be mounted on new posts approximately one foot back of curb for best effectivity. Where applicable, mounting may also be on posts installed in grass areas beyond a sidewalk where such sidewalk does not exceed five feet in width and adjoins the curb. The mounting of signs on the face of buildings is specifically discouraged as being ineffective from an enforcement standpoint and shall not be used in the absence of stenciled curbs.

support. The "Tow Away" sign is necessary to ensure

All signs shall be mounted parallel to the Fire Lane curb unless orders to the contrary are received from the Office of Director, D.F.R.S., concerning special circumstances which require alternative signing.

Mounting Height

Fire Lane signs shall be mounted at the height of 7 feet to the bottom of the sign. However, slightly lower mounting height may be approved if existing construction conditions so require. No Fire Lane signs shall be mounted so as to interfere with pedestrian movement.

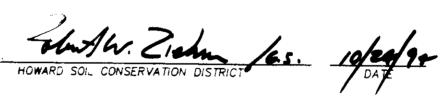
Tow Away Zone signs shall be mounted directly below the Fire Lane sign such that the height is 6 1/2 feet to the bottom of the sign.

Existing Parking Spaces

Any existing parking spaces along a designated Fire Lane curb must be eliminated. This shall be accomplished by removing the lines.

HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER & SEWERAGE SYSTEM

THESE PLANS FOR SMALL FOND CONSTRUCTION SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSDIBUATION DISTRICT,



DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THOSE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROCRAM FOR THE CONTROL OF SEDIMENT AND EXOSION BEFORE BEGINNING THE PROJECT, I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

aus //ancione

ENGINEER'S CERTIFICATE

"I OBETIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, THIS FLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT, I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

10-12-94

11

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND WEST THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL BROSION AND SERIMBUT CONTROL.



PLANNING BOARD APPROVAL:

APPROVED

PLANNING BO 100

of MONAMO CONTRACT

SUBDIVISION NAME

OWNER/DEVELOPER MANGIONE ENTERPRISES OF TURF VALLEY 1205 YORK ROAD - PENTHOUSE SUITE

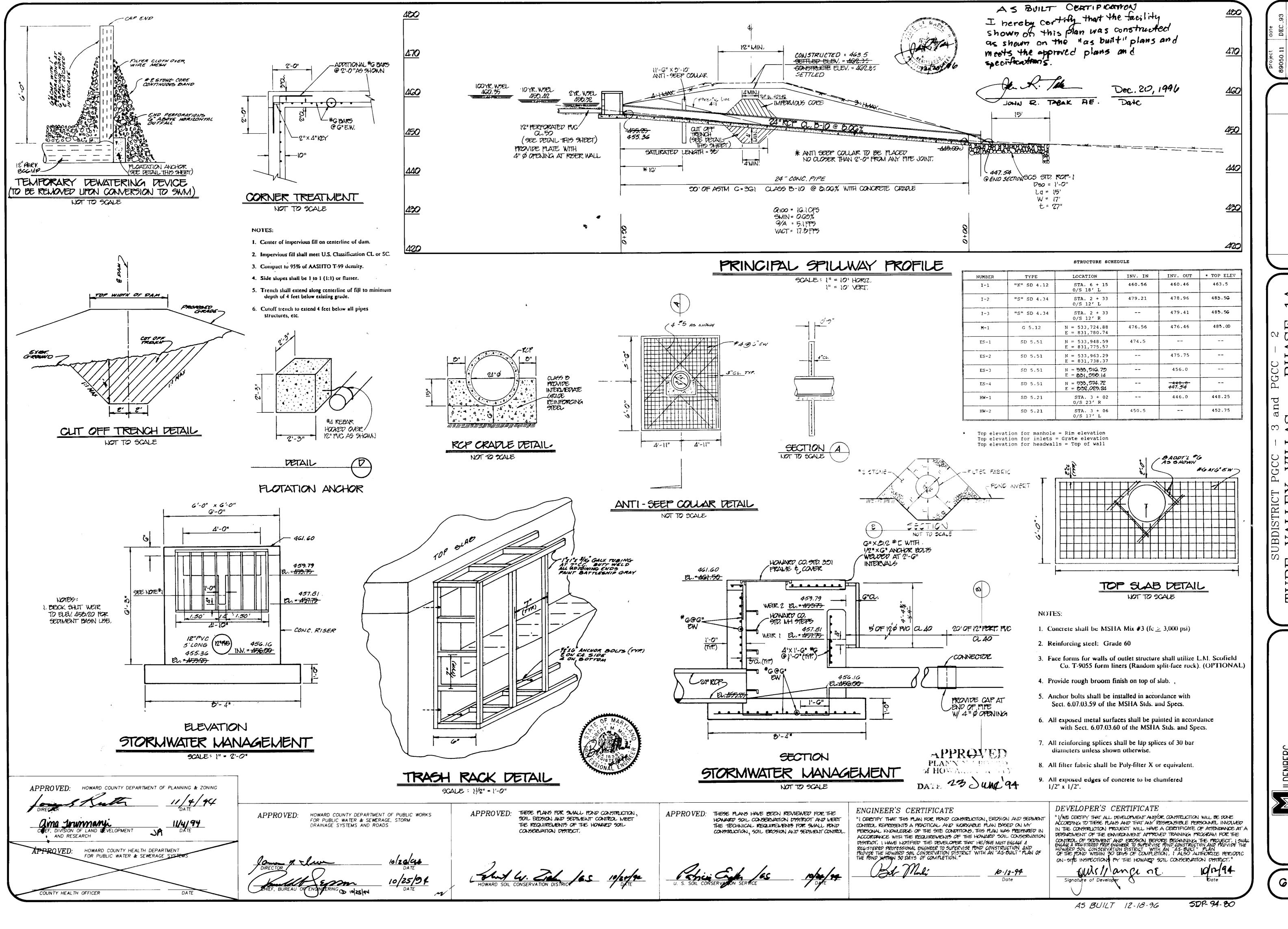
LITHERVILLE, MARYLAND 21003 (410) 825-8400 ATTN: MR, LOUIS MANGIONE

ENGINEER/SURVEYOR MILDENBERG, MOCHI & ASSOCIATES, INC. 3300 NORTH RIDGE ROAD. SUITE 235 ELLICOTT CITY, MARYLAND' 21043 (410) 461-0078

PERMIT INFORMATION CHART

SECT./AREA LOT/PARCEL #			LIBER & F	OLIO	PREVIOUS FILE:				
3	3D/#8 (PART OF PARCEL #8			L 920 F. 285		S-90-15; WP-90-3 S-86-13; FDP PGCC-2/PGCC-3			
PLAT No.	BLOCK	No.	ZONE	TAX MAP	ELEC	C. DIST. CENSUS			
3054A- 1079	16		PGCC	16		3rd 6030			
WATER CODE HO G				SEWER CODE 500 - 2500					

5DP-94-80



Submittal to DPZ 12/93
description date revisions

WARD COUNTY, MARYLAND

O 1 S

O 1 S

O 1 S

VALLEY VILLAS — PH
DISTRICT No. 3
HOWARD COUNTY

TURF VALLEY

ELECTION DISTRICT No. 3

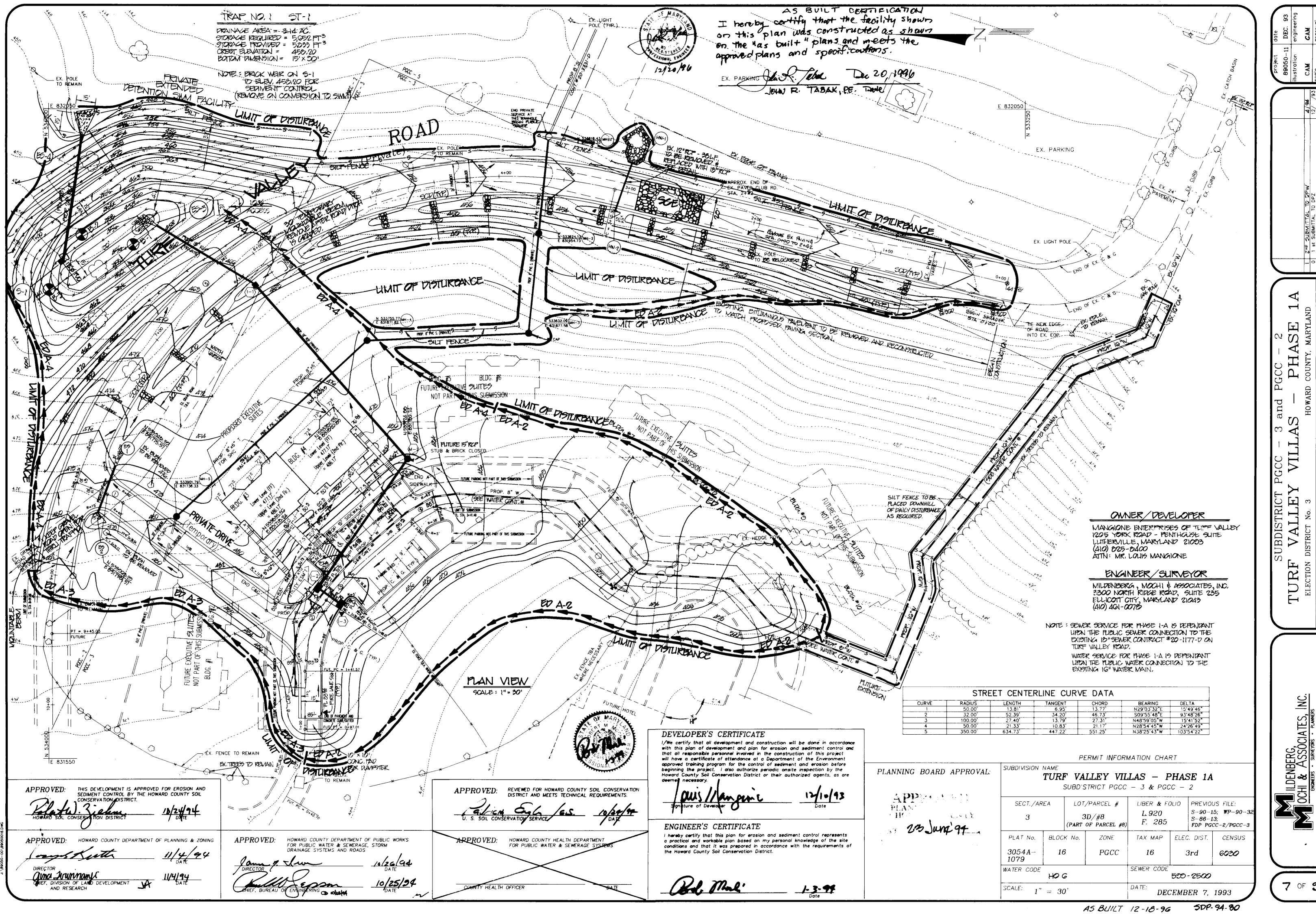
TORMW

OCHI & ASSOCIATES, INC.

ENGINEERS - SURVEYORS - PLANNERS

orth Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

G OF 9



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

Seedbed Preparation: Loosen upper three inches of soil be raking, discing or other acceptable means before seecing. (If not previously loosened)

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

- 1) Preferred Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sf).
- 2) Acceptable Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through 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 1-1/12 to 2 tons per acre (70 to 90 lbs/1000 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) 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 redisturbed where a short-term vegetative cover is needed.

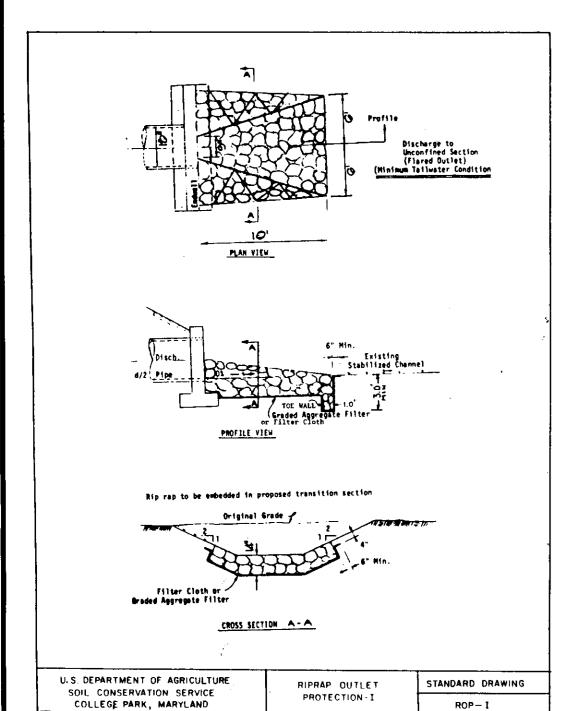
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)

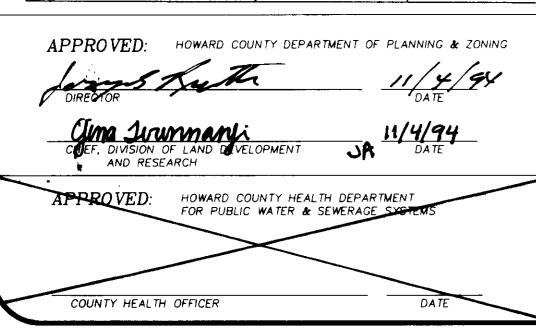
Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).

Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovearass (0.07 lbs/1000 sf). For the period November 16 through 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 sod.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.

Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.





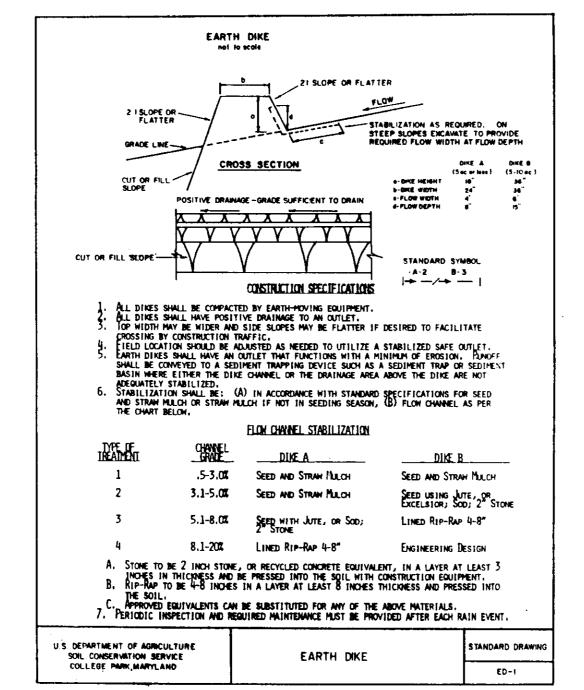
SEDIMENT CONTROL NOTES

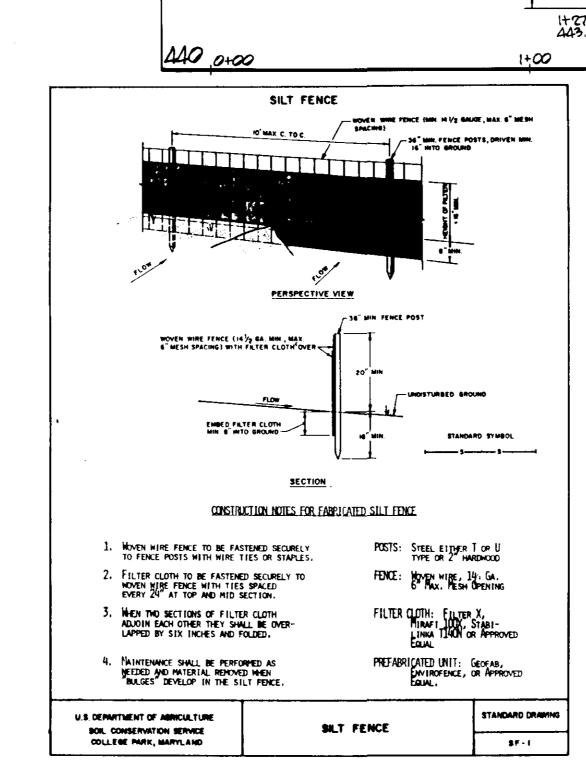
- 1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction. (992-2437)
- 2. All vegetative and structural practices are to be installed accordingly to the provisions of this plan and are to be in conformance with the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment
- 3. Following initial soil disturbances or redisturbance, 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 calendar days as to all other disturbed or graded greas on the project site.
- 4. 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 only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 5. 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.
- 6. Site Analysis: Total Area of Site: (Phase 1A): 1.51 Area to be Disturbed: Area to be roofed or paved: 0.60 Area to be vegetatively stabilized: 4.27 acre 5530 Total Cut: Cy. 3563 Total Fill: Cy. Offsite Waste/Borrow Area Location : *
- 7. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 8. Additional sediment controls must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
- 9. Quantities and estimates shown are for Sediment Control purposes only. Contractor shall prepare his/her own quantity estimates to his/her satisfaction.

* It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

STORMWATER MANAGEMENT POND MAINTENANCE SCHEDULE

- A. ROUTINE MAINTENANCE
- Facility shall be inspected annually and after major storms. Inspections should be performed during wet weather to determine if the pond is functioning properly.
- Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes, the bottom of the pond, and maintenance access should be moved as needed
- Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
- Visible signs of erosion in the pond as well as rip-rap outlet area shall be repaired as soon as it is noticed.
- B. NON-ROUTINE MAINTENANCE
 - Structural components of the pond such as the dam, riser structure and the pipes shall be repaired upon the detection of any damage. The components should be inspected during routine maintenance operations.
 - reduces the design storage, interfere with the function of the riser, when deemed necessary for aesthetic reasons, or when deemed necessary by the Howard County's Department of Public Works.





SEQUENCE OF CONSTRUCTION

3. Construct Sediment Trap/Storm water Management pond including pond structures

4. Brick Weir of pond structure to elevation 458.20 for sediment control (remove brick

5. Remove sediments from trap when clean-out elevation is reached (elevation 457.20).

7. Keep the existing gravel road, north of the proposed Club Road, open for golf

8. Install the proposed storm drain system as indicated on the approved drawings. The

9. Install stone check dams every 40 feet in the ditch along Club Road as indicated on

storm drain system shall remain open and utilized as a sediment conveyance system

All sediment control devices are to be inspected daily and after each rainfall. Repair

permission of the Sediment Control Inspector, these devices may be removed and the

area brought to original grades and stabilized. Remove the temporary vertical de-

watering device, replace the 12 inch diameter perforated horizontal BCCMP with 12

inch diameter perforated PVC as required and convert the structure to function as

100 YR, WHEL 400,35

12. When all contributing areas to the sediment trap have been stabilized and with the

13. Notify Howard County Office of Inspections and Permits for final inspection of the

All sediments must be placed upstream of an approved trapping device.

when trap is converted to Storm water Management).

6. Rough grade Club Road and the Private Drive/Parking Area.

10. Construct remaining site per the approved drawings.

sediment control devices as required.

a storm water management facility.

EXISTING/

GROUND

completed project.

and de-watering devices; Diversion Dikes and Silt Fence as indicated on the

Obtain grading permit.

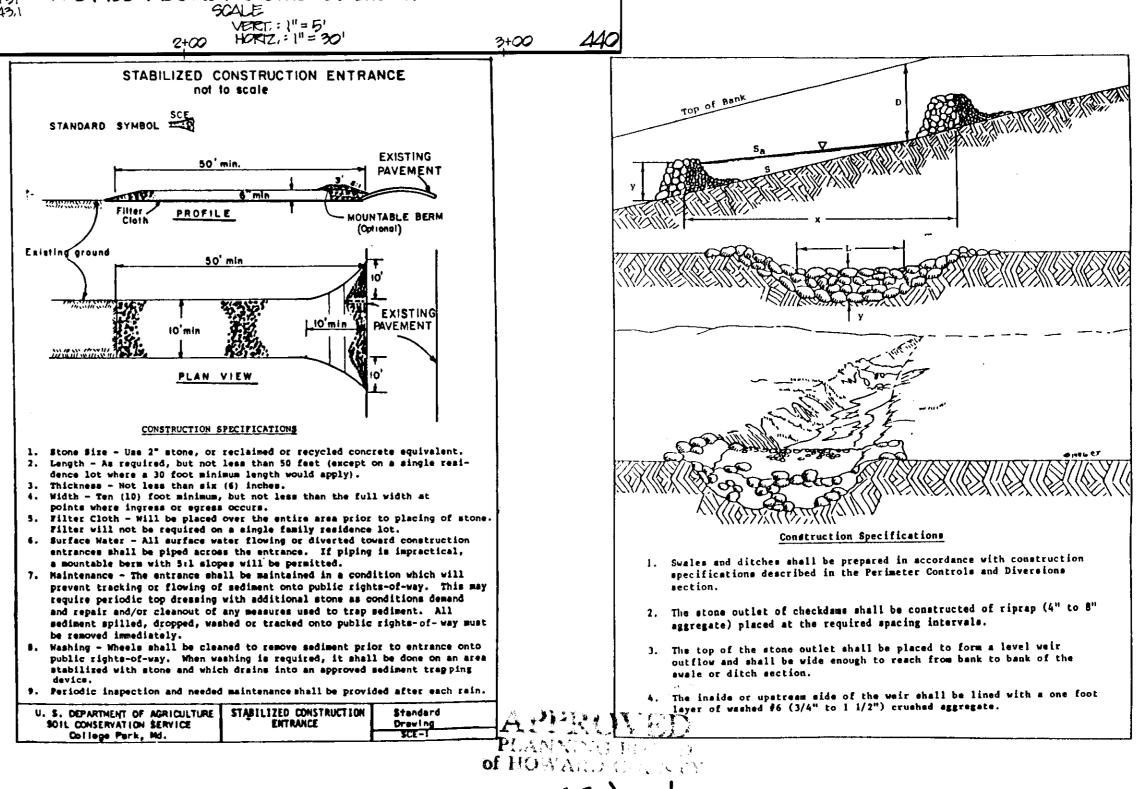
approved drawings.

maintenance traffic.

to the sediment trap.

the approved drawings.

Construct Stabilized Construction Entrance.



on this Blan was constructed as shown on the " as built " plans and meets the approved and specifications. Dec. 20, 1996 Date JOHN R. TABAK P.E. rown moist micaceous SILT. some of sand (MH) Write moist micaceous STLT, some mf sand, trace rock frags (Decomposed Rock)(MH) Brown moist Clayey SILT, some of sand, Brown moist micaceous of SAND. some silt, trace rock frags (SM) trace rock frags and mica (MI Brown moist midaceous of SAND, Brown moist micaceous of SAKD, and clavey (Decomposed Rock) (SM) Gray and white moist micaceous of SAND, some silt, little rock frags 3 days after completion; 14 (Decomposed Rock)(SM) Purple moist CLAY & STLT, trace 3 days after completion; hole dry and caved 3 7. 3 days after completion; SECTION A-A BORING PROFILES TURF VALLEY VILLAS STORM WATER MANAGEMENT FACILITY HOWARD COUNTY, MARYLAND SPECIAL TO THE SCALE COMPANY SCALE COMPANY COM CONSTRUCTED TOP OF DAM -SETTLED TOP OF DAM EL = 462.35 463.7 -TOP IMPERVIOUS CORE GROUND 24R, WSEL 458,

AS BUILT CERTIFICATION

I hereby certify that the facility snown

455 ב- ז'- ז' סבע הזמצבה . שסדם ובידים ובידים אוצב 450 TOP SOIL MIXTUES 2+00 PROFILE ALONG & EMBANKMENT

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWERAGE, STORM DRAINAGE SYSTEMS AND ROADS

SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL

THIS DEVELOPMENT IS APPROVED FOR EROSION AND

APPROVED:

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION

DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

ENGINEER'S CERTIFICATE "I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE /SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

10-12-94

DEVELOPER'S CERTIFICATE //We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and

that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I SHALL ENGAGE A REGISTERED PROFFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT. Mancions

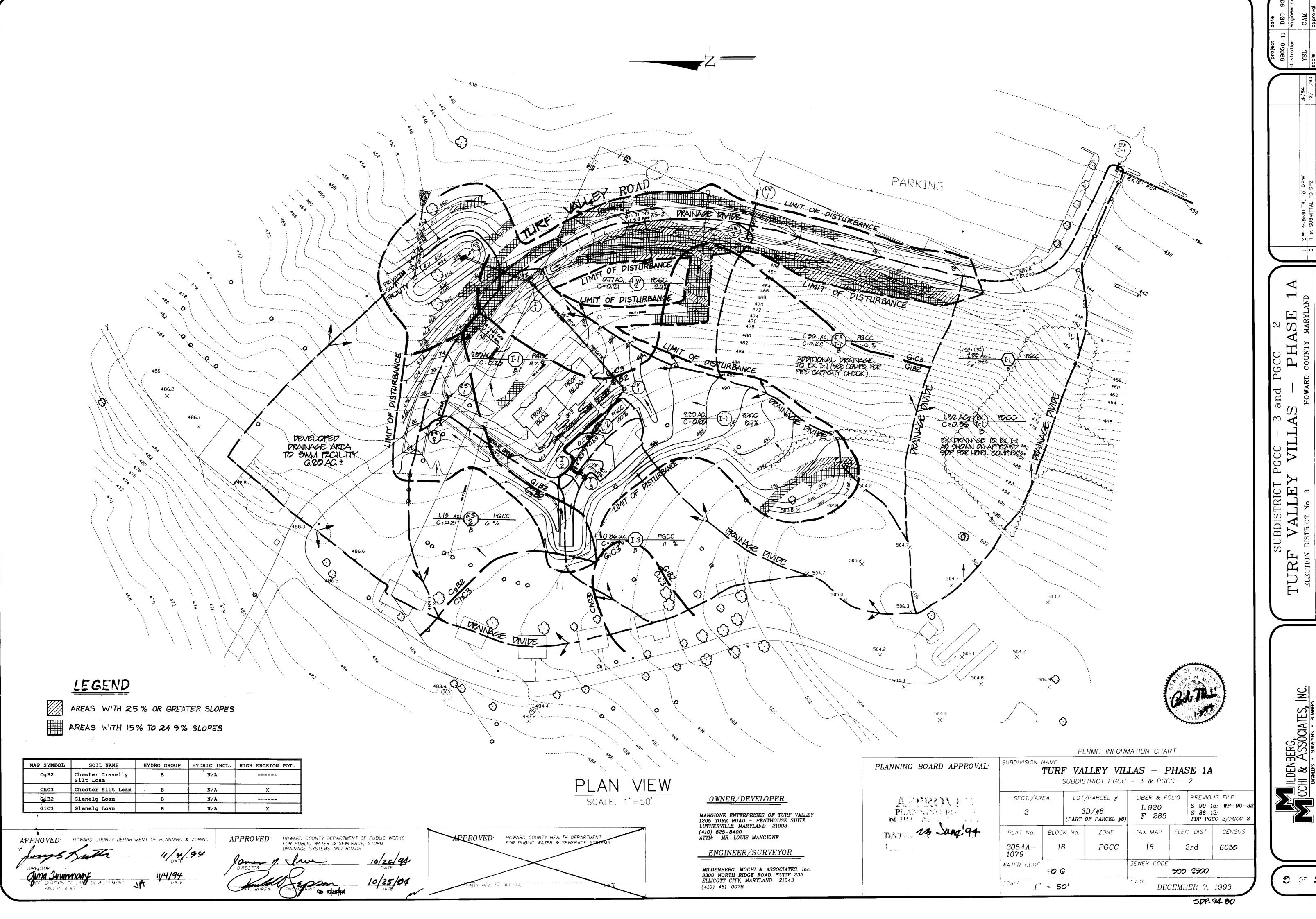
> AS BUILT 12-18-96 5DP-94-80

DET nd NOT

WAY THE LID LARGE BRANCHS WITH WITH PERFECOP TEM WISH TE AT STATE OF METERS AND A STATE OF THE S

-COUNTRUCT S" SALVER TOM-TLCCCC WITH WATER TWICE WITHIN ZELICUE

TREE PLANTING DETAIL N.T.S.



NC.