

GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications, if applicable.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor is to notify the following utilities or agencies at least five days before starting work on these drawings:
 - Miss Utility: 1-800-257-7777
 - Verizon: 410-754-6281
 - Howard County Bureau of Utilities: 313-2364
 - AT&T Cable Location Division: 343-3553
 - B.G.&E. Co. Contractor Services: 850-4620
 - B.G.&E. Co. Underground Damage Control: 787-4620
 - State Highway Administration: 531-5533
- Site analysis:
 - Area of parcel: 2.044 Ac.
 - Present zoning: BI (Per 2/2/2004 Comp. Rezoning Plan)
 - Use of structure: Dry Cleaning (1600sf), Take-Out Restaurant (4145 sf), **RETAIL (5163sf)**, Professional/General Office (1968 sf) **CARPET STORE (4800sf)**
 - Building area: 17376 sf
 - Disturbed area: 89,036 sf or 2.04 Ac.
 - Building coverage on site: 0.39 Ac. or 19 % of gross area
 - Paved parking lot/area: 0.67 Ac. or 32 % of gross area
 - Area of landscape island: 0.06 Ac. = 2,517 sf
 - There are no steep slopes on site
 - Cut: 149 CY Fill: 4,473 CY
- Project background:
 - Location: Jessup, Md.; Tax Map 43, Block 21, Parcel 246
 - Subdivision: N/A
 - Section/Area: N/A
 - Site Area: 2.044 Acres
 - DPZ references: Variance Petition 00-47V
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to start of work.
- Any damage to public right-of-ways, paving, or existing utilities will be corrected at the contractor's expense.
- Existing utilities located from Road Construction Plans, Field Surveys, Public Water and Sewer Extension Plans and available record drawings. Approximate location of existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- All reinforced concrete for storm drain structures shall have a minimum of 28 days strength of 3,500 p.s.i.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Estimates of earthwork quantities are provided solely for the purpose of calculating fees.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test prior to construction.
- All storm drain pipe bedding shall be Class 'C'.
- The existing topography is taken from field run survey with two foot contour intervals prepared by Frederick Ward & Associates, Inc. dated 5/22/01, and topographic survey prepared by others. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System.
- A noise study is not required for this project.
- All paving to be P-2 paving per Howard County.
- All curb and gutter to be Howard County Standard concrete Detail 3.01 unless otherwise specified.
- Contractor responsible to construct all handicap parking and handicap access in accordance with current ADA requirements.
- Where drainage flows away from curb, contractor to reverse the gutter pan.
- All elevations are to finished/bottom of curb unless otherwise noted.
- All dimensions are to face of curb unless otherwise noted.
- Public Water available along Dorsey Run Road (12" Water) Contract #454-H; Public Sewer available along Dorsey Run Road (8" Sewer) Contract #412-S.
- Stormwater Management:
 - WQV, Rev, and Cpv are being provided by a proposed infiltration system.
 - Pre-Treatment is provided by a proposed stormceptor.
- All exterior lighting shall conform to Zoning Regulations Section 134.
- Building to have Inside Water Meter setting.
- Traffic Impact Study prepared by The Traffic Group, dated August, 2002.
- Geotechnical report prepared by Herbst Benson Associates, Inc., dated March, 2002, and a supplemental infiltration testing report dated April 5, 2002.
- Lighting will be provided per detail shown on sheet 5.
- There are no wetlands on-site.
- Stormwater management system to be infiltration. The facility will be privately owned and maintained.
- This plan is subject to BA-00-47V, a variance petition to Section 123.D.2.(A) and Section 123.D.2.(C) of the Zoning Regulations, approved May 8, 2001*, to reduce setback from Dorsey Run Road Right-of-Way from 30 feet to 10 feet for parking and from Maryland Route 175 Right-of-Way from 30 feet to 24 feet for parking and to reduce structure and use setback from a residential district from 150 feet to 30 feet subject to the following conditions:
 - The variances shall apply only to the proposed development as described in the petition, and as depicted on the variance plans entitled "Exhibit to Accompany Variance Petition - Dorsey Run Road" submitted on January 8, 2001, or as may be revised by the Board, and not to any other activities, uses, or structures on the Property.
 - The Petitioner shall establish and maintain a landscaped berm along the southwest and northwest buffers. The berm shall be three to four feet high, and shall be landscaped on top with a Type C (Heavy Buffer) landscape edge which is expressly in addition to the berm.
 - The Petitioner shall construct and maintain a masonry enclosure around the trash receptacle area which shall be of sufficient height to screen this area, shall have a durable opaque gate, and shall be constructed of masonry materials which shall be similar to or compatible with the materials used for the building.
- * Expired May 8, 2003. The property was rezoned to BI-1 therefore the variances are not necessary and the conditions attached to that approval are not applicable.
- Financial surety for the required landscaping has been posted as part of the developer's agreement in the amount of \$19,830.00 for the required 34 shade trees, 35 evergreens and 146 shrubs.
- Fee-in-lieu of afforestation is proposed in the amount of \$6,751.80, for 0.31 acre.
- The deadline to obtain a building permit for the proposed improvements is May 8, 2003 (2 years from the date of approval of the Decision and Order for BA-00-47V) and the deadline for "substantial completion" of the construction is May 8, 2004 (3 years).
- This plan is subject to the Fifth Edition of the Subdivision Regulations and the Amended Zoning Regulations, per Council Bill 75-2003.

SITE DEVELOPMENT PLAN

DORSEY RUN CENTER

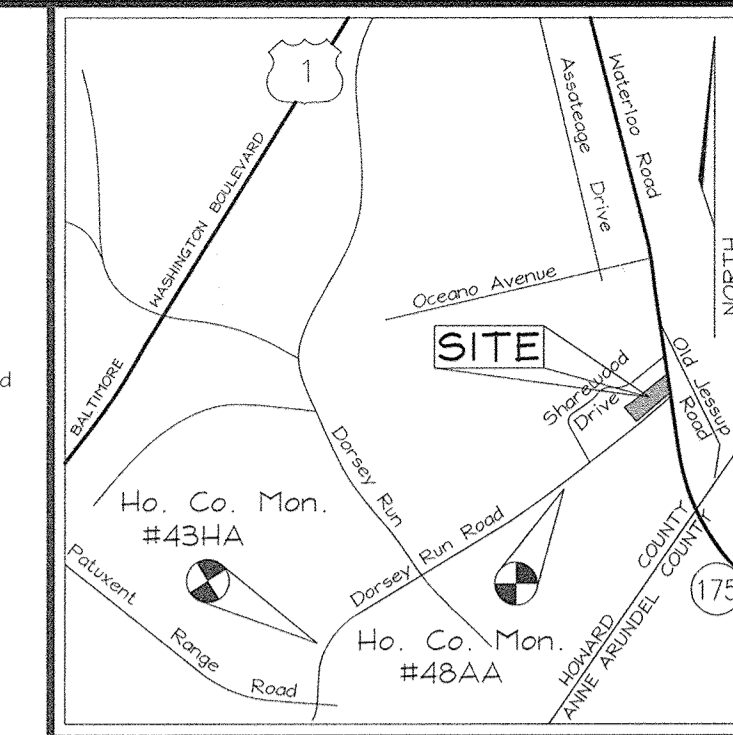
LEGEND

- Existing Contour
- Proposed Contour
- Existing Spot Elevation
- Proposed Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Light Poles: □-□ Single Overhead □-□-□ Double Overhead
- Concrete

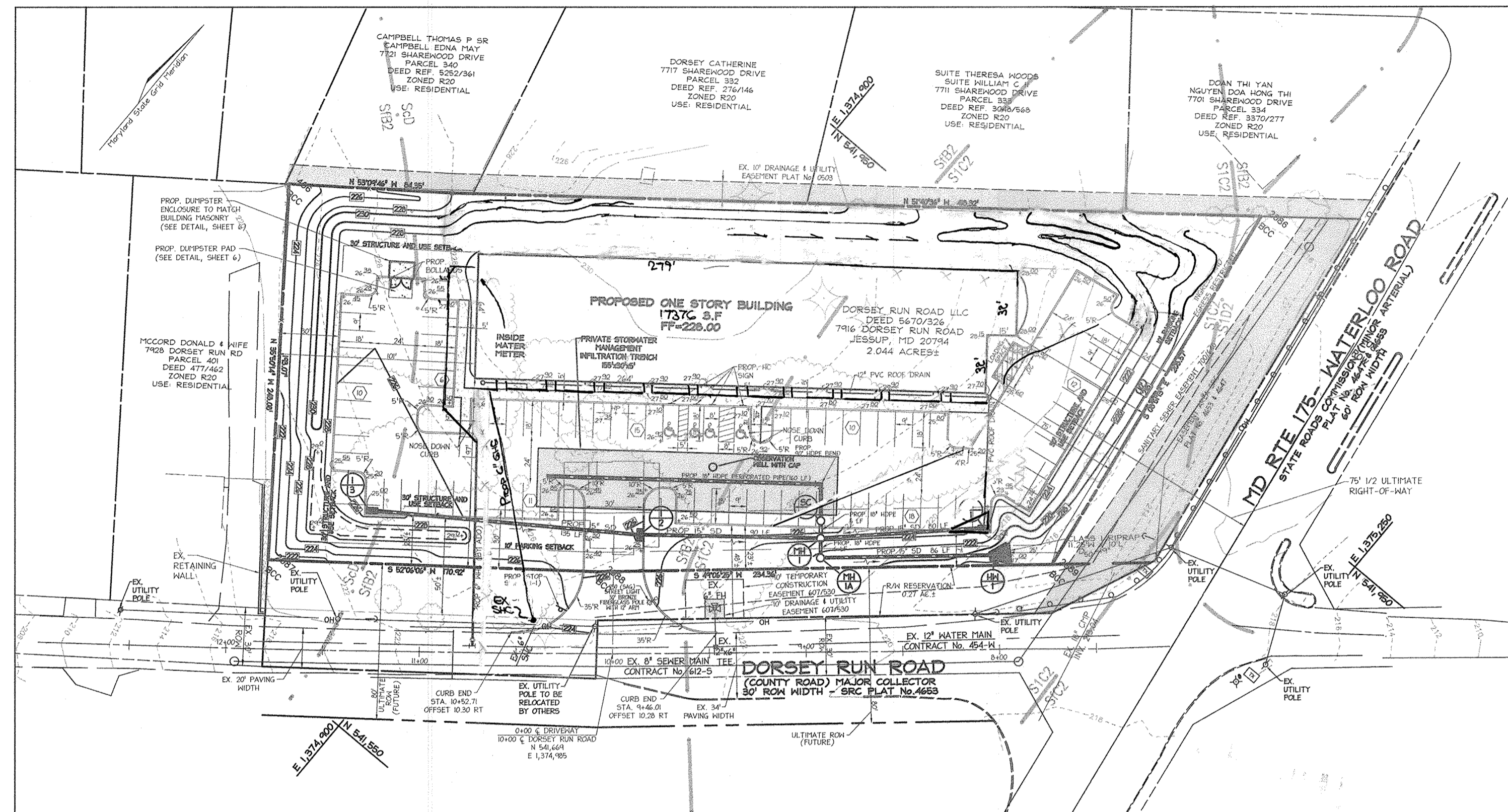
BENCHMARKS

HOWARD COUNTY BENCHMARK 43HA
N 540761.716 E 1373837.365 ELEV. 224.907

HOWARD COUNTY BENCHMARK 48AA
N 539314.900 E 1371539.251 ELEV. 240.809



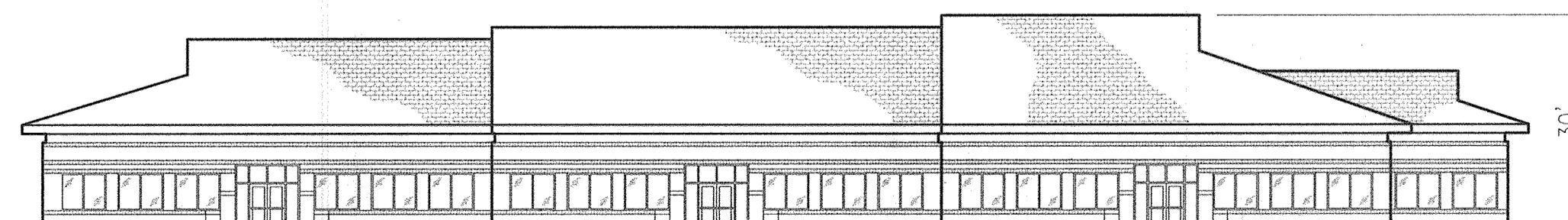
VICINITY MAP
SCALE: 1"=2000'



LOCATION MAP
SCALE: 1"=50'

SHEET INDEX

DESCRIPTION	SHEET NO.
Cover Sheet	1 of 8
Site Layout and Grading Plan	2 of 8
Sediment and Erosion Control Plan	3 of 8
Sediment and Erosion Control and Lighting Details	4 of 8
Storm Drain Drainage Area Map, Soil Borings and Site Details	5 of 8
Storm Drain, Water and Sewer Profiles	6 of 8
Site Landscape Plan	7 of 8
Forest Stand Delineation and Forest Conservation Plan	8 of 8



FRONT ELEVATION
NOT TO SCALE

PARKING TABULATION

Net Accessible Area: 17376 sf	REQUIRED
Dry Cleaning: 1600sf @ 5 spaces/1000sf.	8 spaces
Take-Out Restaurant: 4145sf @ 6 spaces/1000sf.	24.9 spaces
RETAIL: 5163sf @ 5 spaces/1000sf.	25.8 spaces
Professional/General Office: 1968sf @ 3.5 spaces/1000sf.	6.9 spaces
Total Parking Required:	65.6 spaces
Total Parking Provided:	82 spaces*

* Total spaces provided includes 3 regular and 1 van accessible handicapped spaces.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/3/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/15/04
DIRECTOR DATE

OWNER/DEVELOPER
Dorsey Run Road LLC
3251 Gamber Road
Finksburg, MD 21048
410-795-8200

ADDRESS CHART	
LOT/PARCEL#	STREET ADDRESS
246	7916 DORSEY RUN ROAD

PERMIT INFORMATION CHART					
SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER			
N/A	N/A	246			
DEED REF.	GRID NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
5670/326	21	BI*	43	6th	6069.01
WATER CODE: B02			SEWER CODE: 3020000		

* Per 2/2/2004 Comp. Rezoning Plan



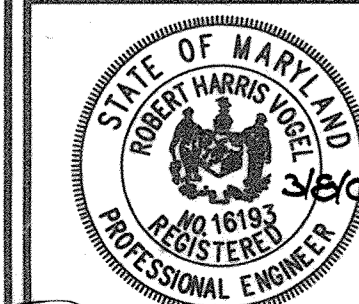
6/13/19
FOR REV. #2 ONLY
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 16597, Expiration Date: 8/15/19

NO	REVISION	DATE
2	REVISED PARKING & USES	6/13/19
1	REV. BODS, GRASS, UMUNES	8/1/04

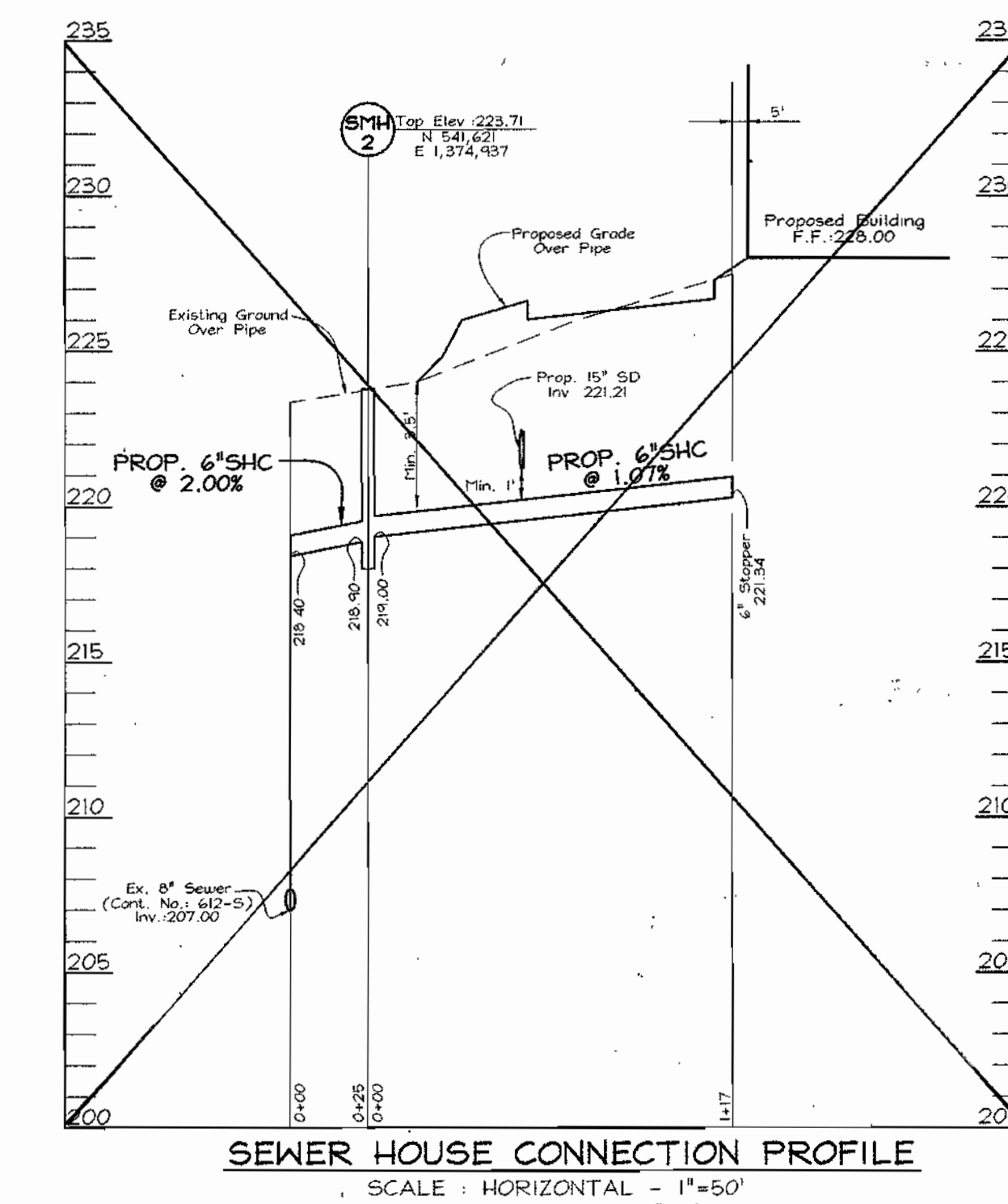
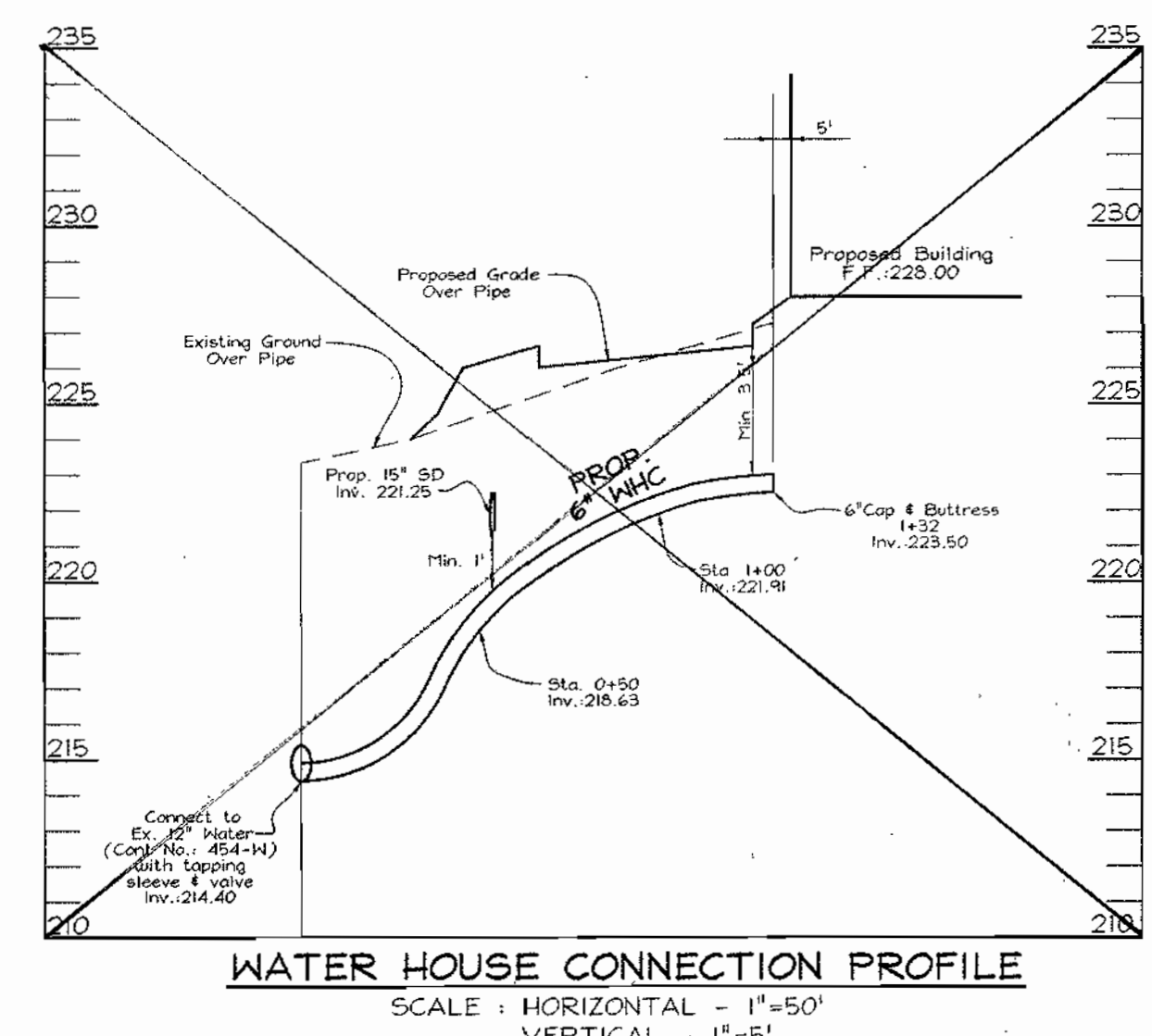
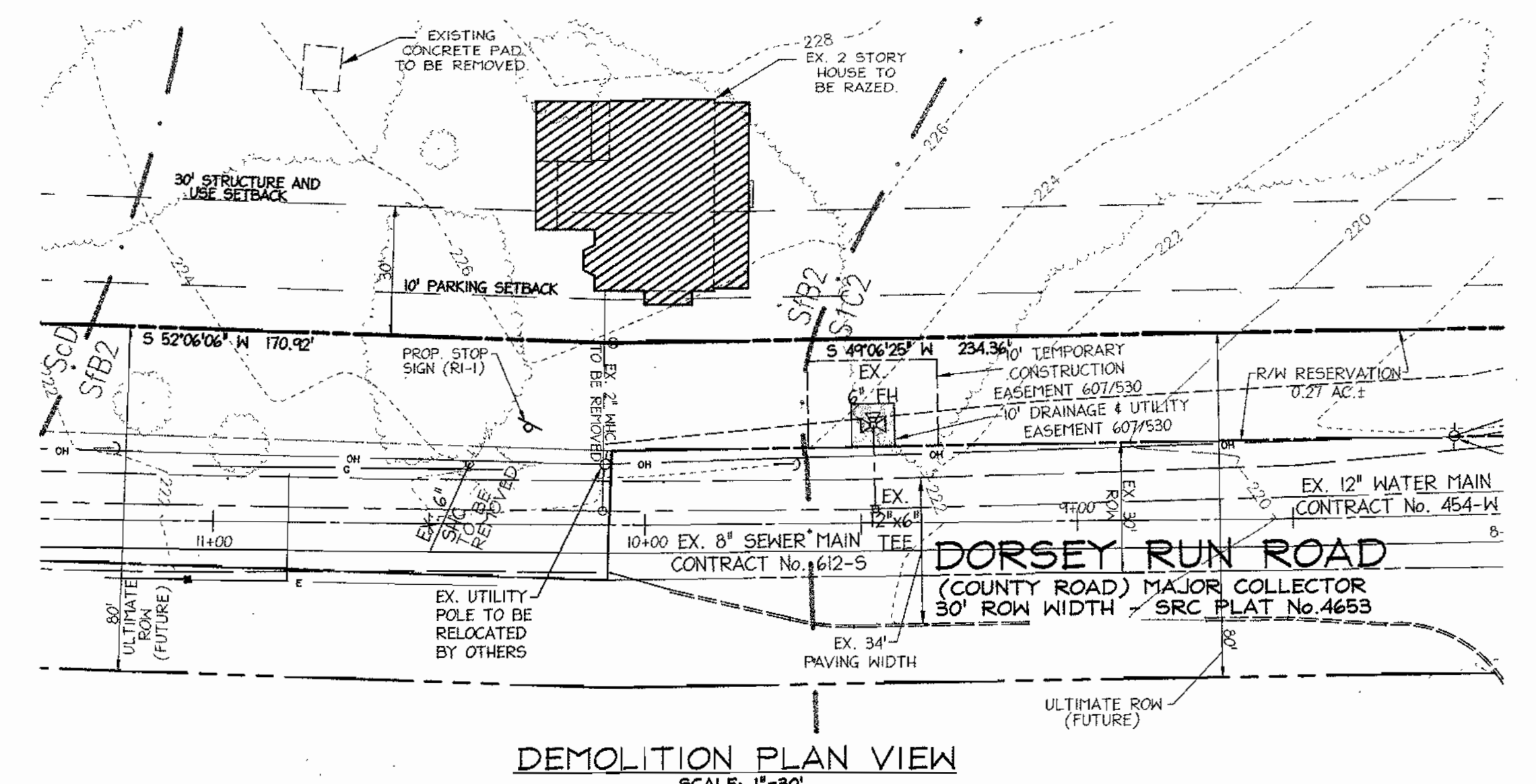
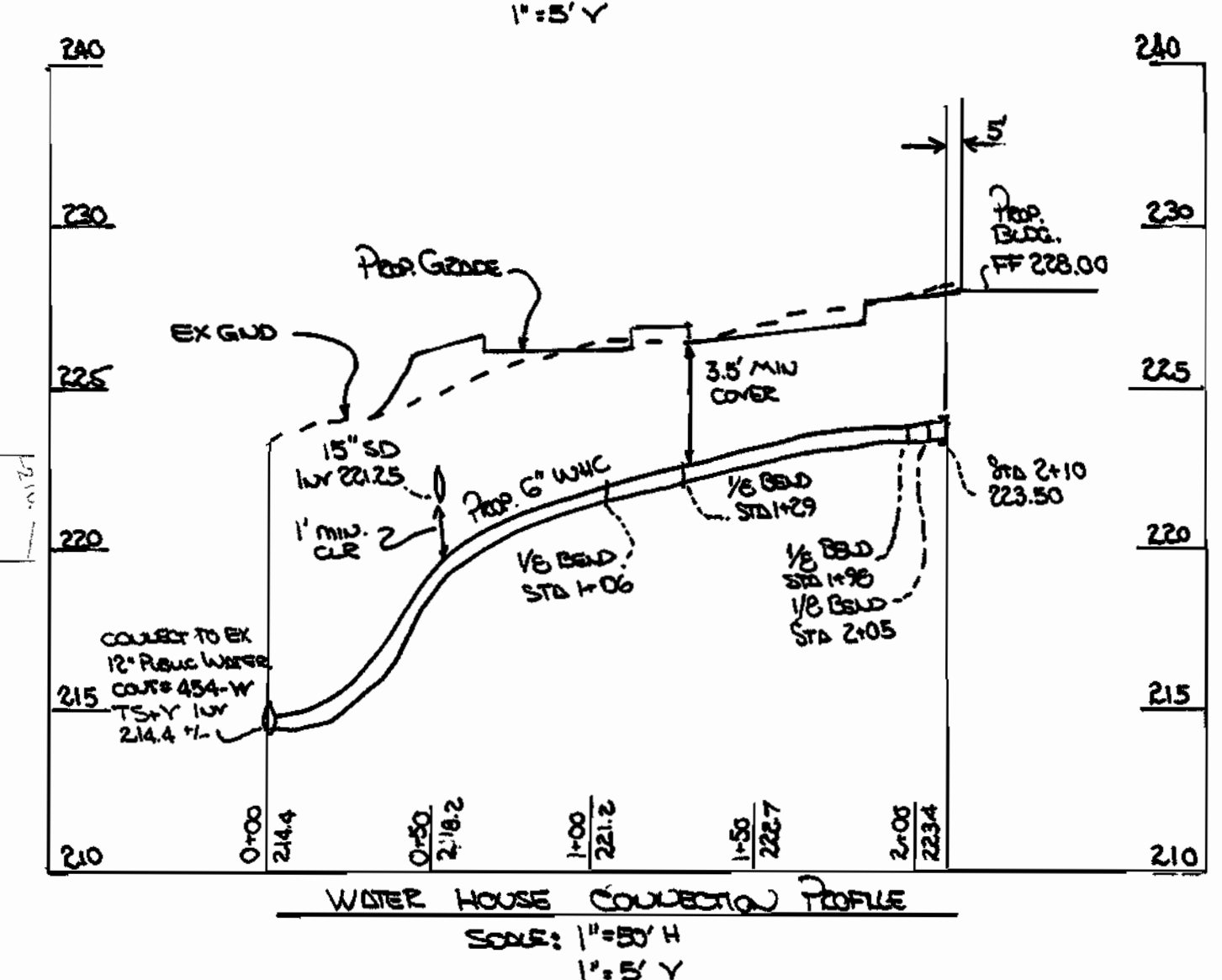
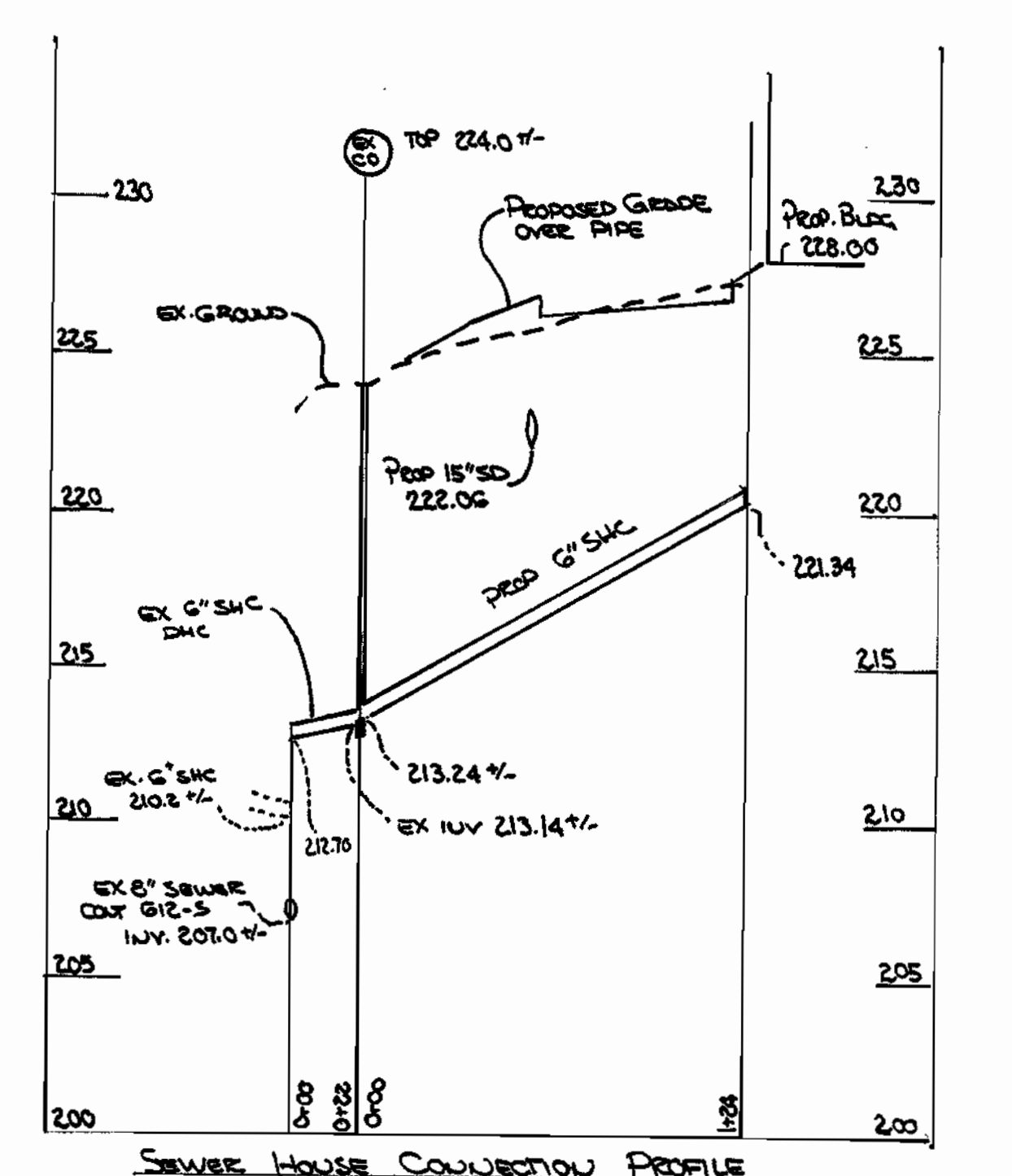
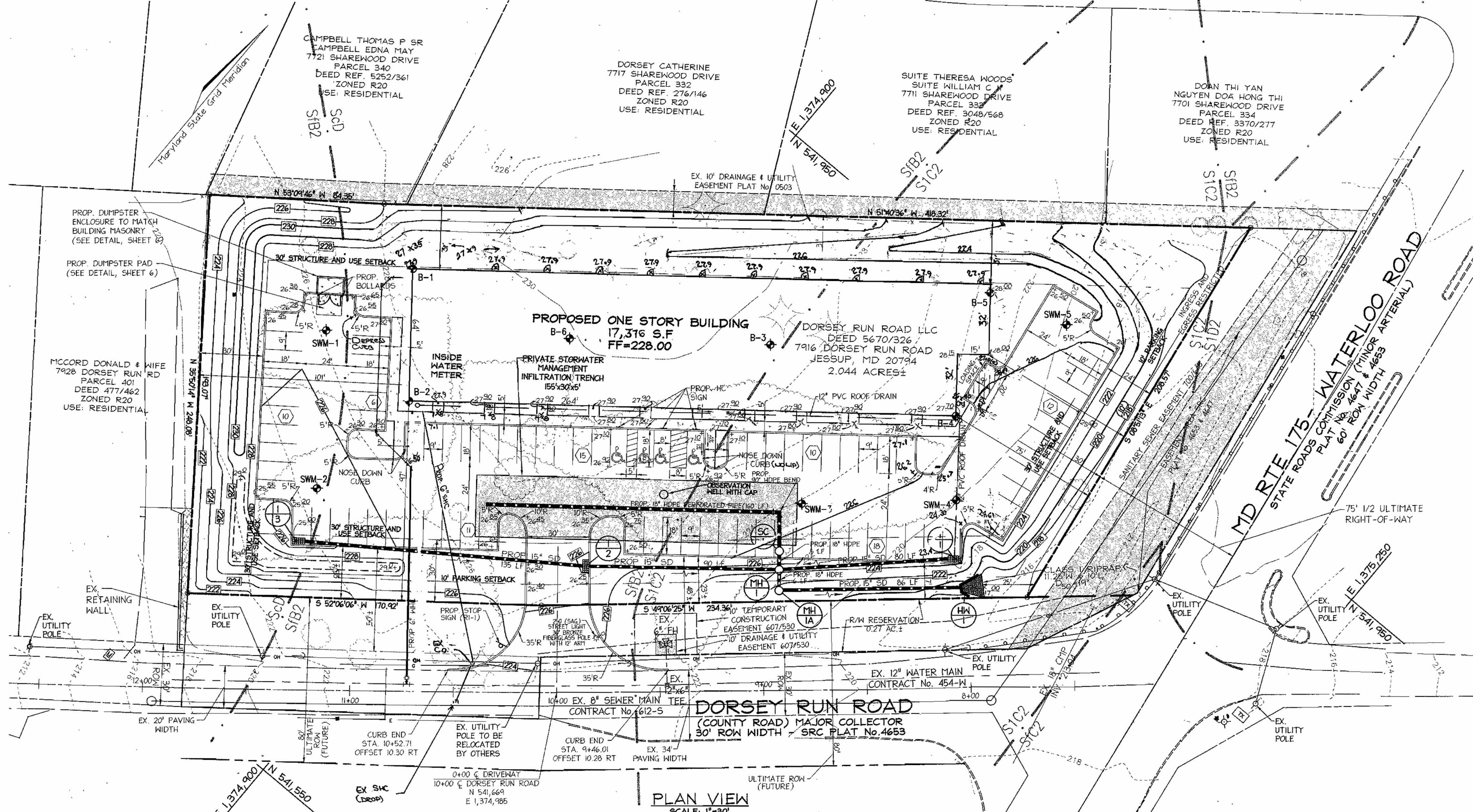
COVER SHEET
SITE DEVELOPMENT PLAN
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226
SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia



DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: AS SHOWN
W.O. NO.: 2017089



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3/30/04

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/1/04

DIRECTOR
 DATE: 4/1/04

NO.	REVISION	DATE
1	REUSE PLAN GEOMETRIES & UTILITIES	8/1/04

SITE LAYOUT, GRADING AND DEMOLITION PLAN
DORSEY RUN CENTER

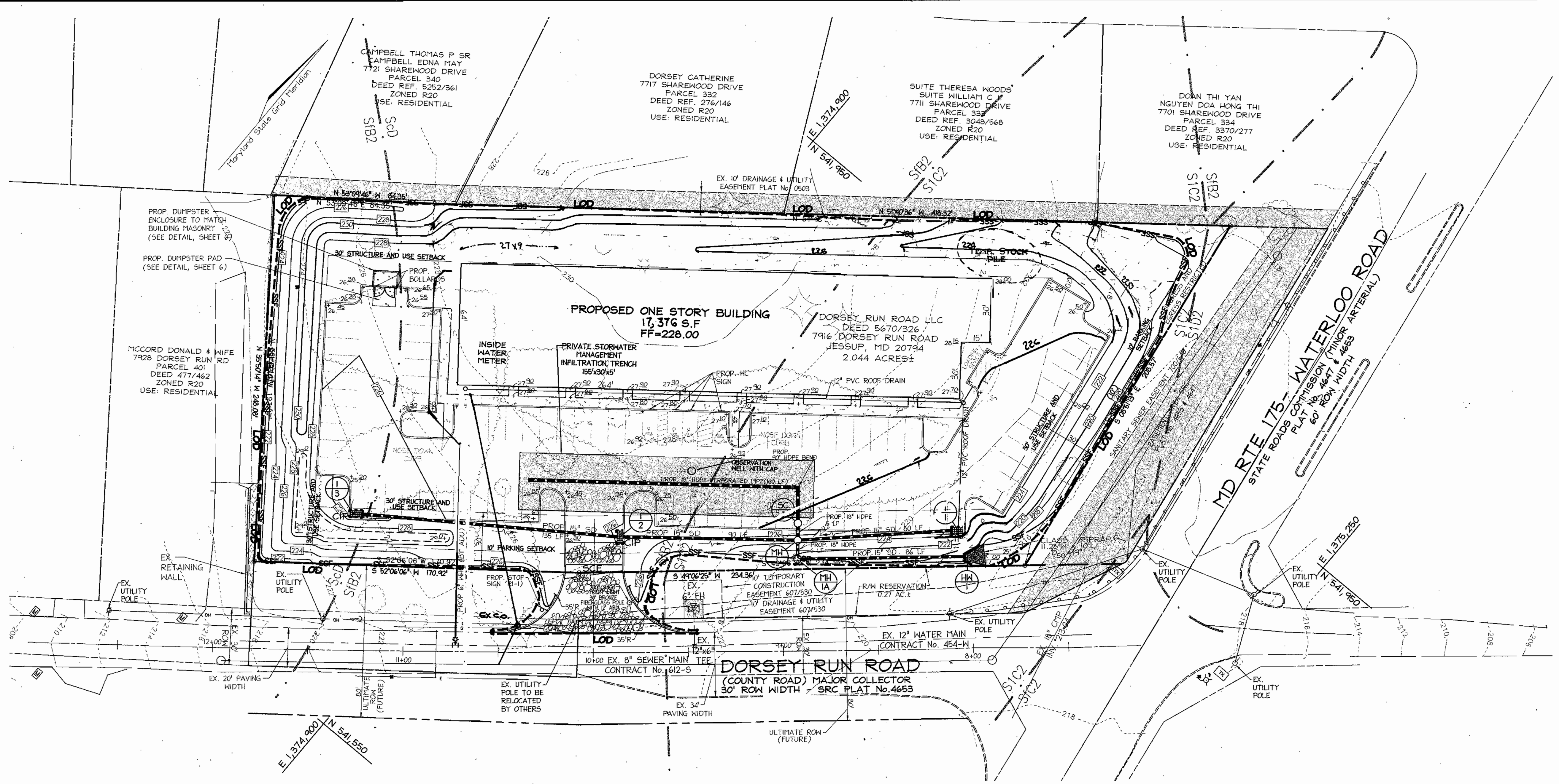
TAX MAP 43 BLOCK 21
6TH ELECTION DISTRICT

PARCEL '246'
HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS ARCHITECTS SURVEYORS
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
 DRAWN BY: JAJ
 CHECKED BY: RHY
 DATE: MARCH 2004
 SCALE: 1"=30'
 W.O. NO.: 2017069

2 OF 8



LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING GUY WIRE
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING BOLLARD
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	EXISTING SD MANHOLE
	EXISTING STORM DRAIN
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	EXISTING PAVING TO BE REMOVED AND REPLACED
	PROPOSED P-2 PAVING
	PROPOSED BUILDING ADDITION
	CURB INLET PROTECTION
	EROSION CONTROL MATTING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 3/30/04	REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS. DATE: 3/25/04 USDA-NATURAL RESOURCES CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.	BY THE DEVELOPER: DATE: 3/9/04 SIGNATURE OF DEVELOPER	BY THE ENGINEER: DATE: 3/9/04 I 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 ROBERT H. VOGEL, P.E. NO. 1698
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 3/11/04	APPROVED: HOWARD S.C.D. DATE: 3/25/04	APPROVED: HOWARD S.C.D. DATE: 3/25/04	APPROVED: HOWARD S.C.D. DATE: 3/25/04

NO.	REVISION	DATE
1	Blue Grading, Utility Easements	3/10/04

SEDIMENT AND EROSION CONTROL PLAN
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS: 7125 Riverwood Drive Columbia, Maryland 21046-2354
 ARCHITECTS: Phone: 410-290-9550 Fax: 410-720-8226
 SURVEYORS: Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

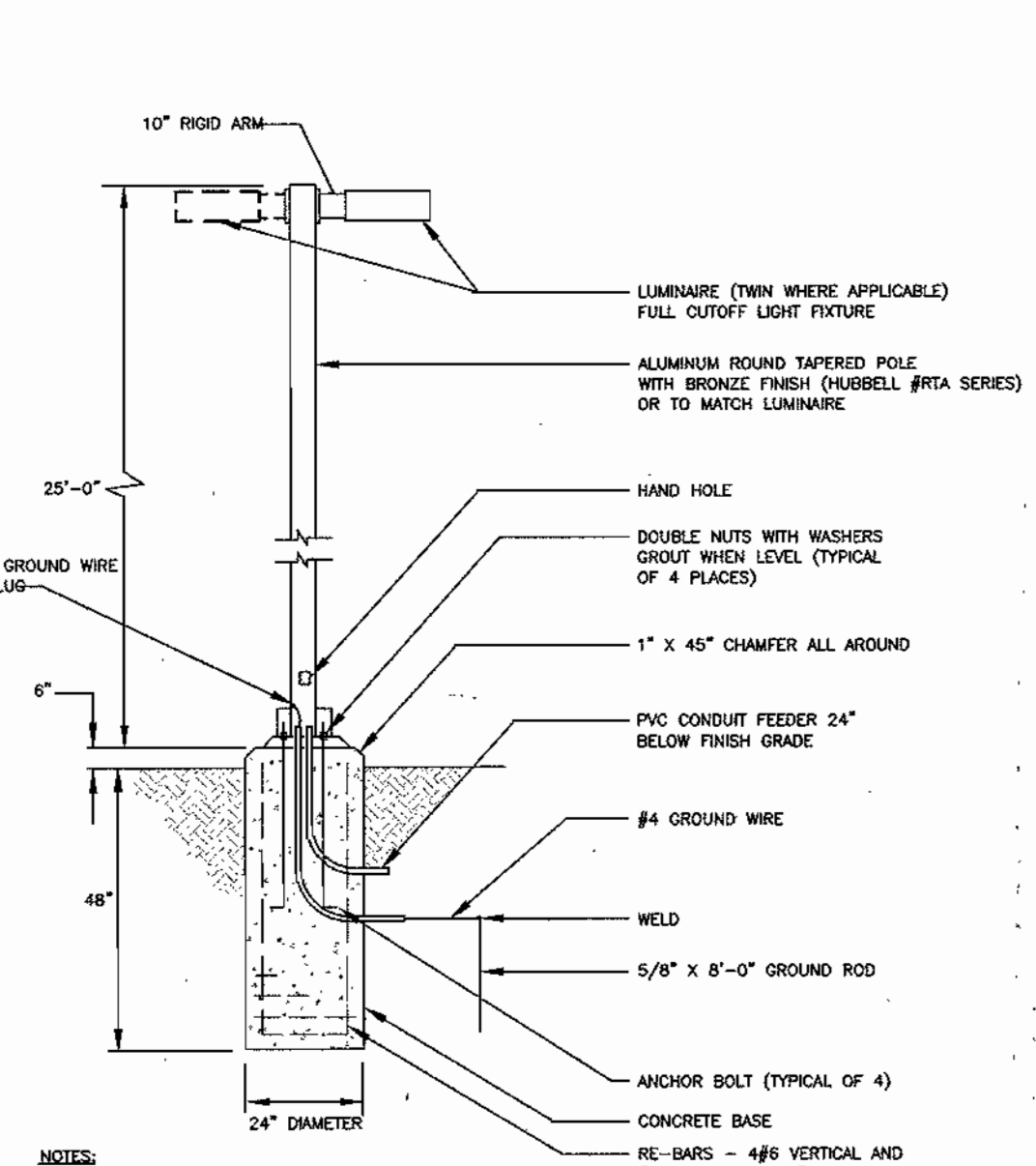
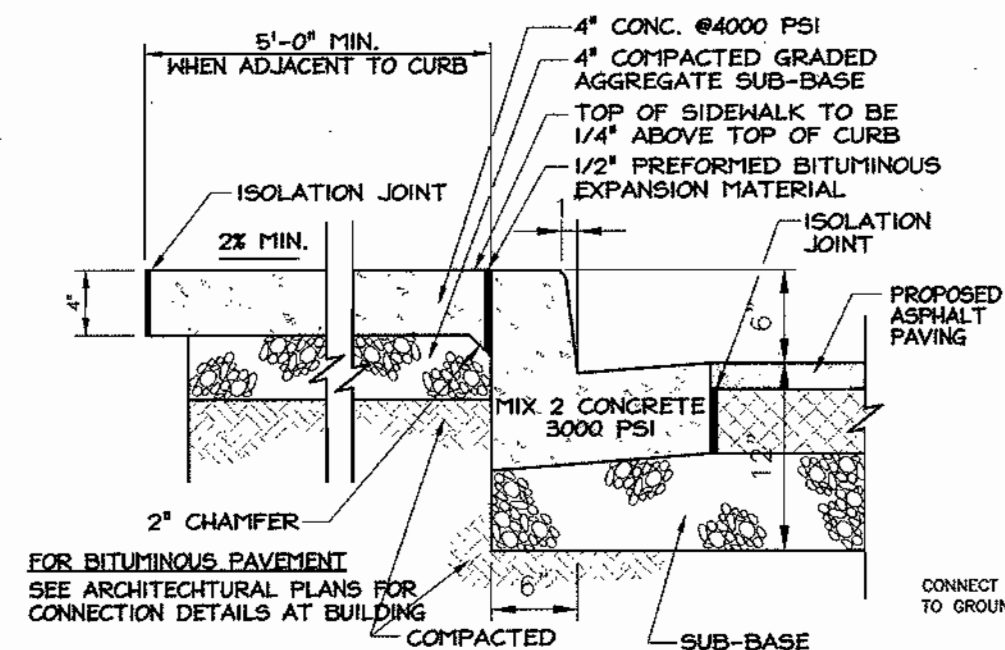
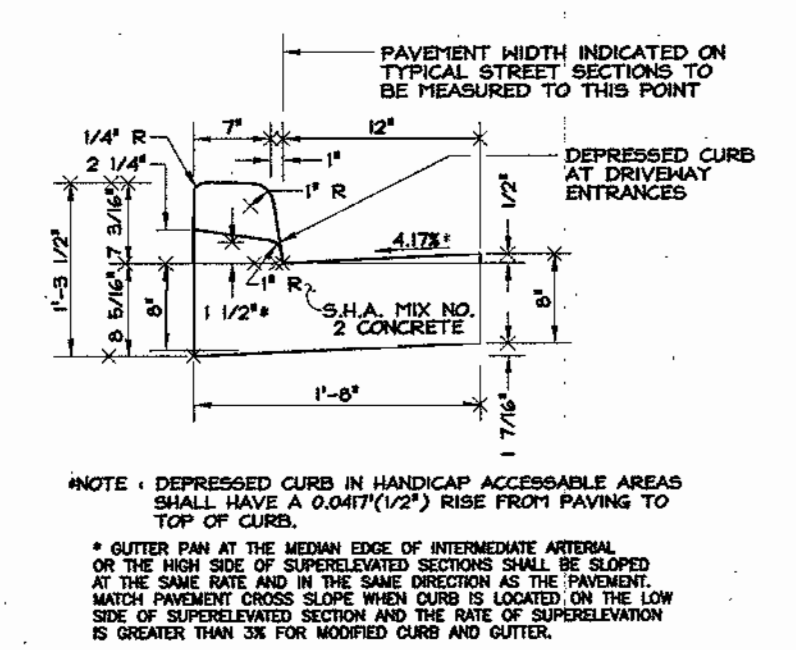
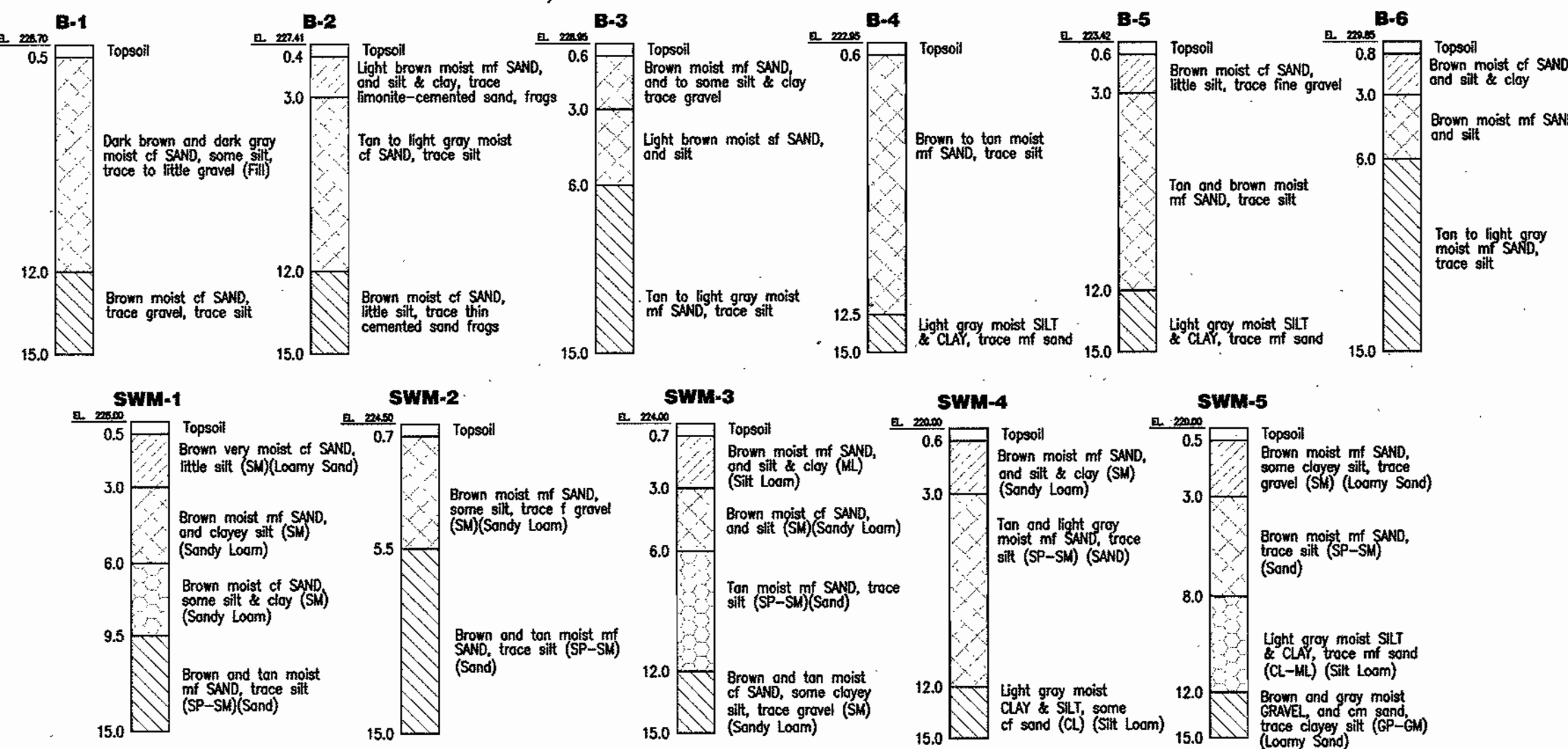
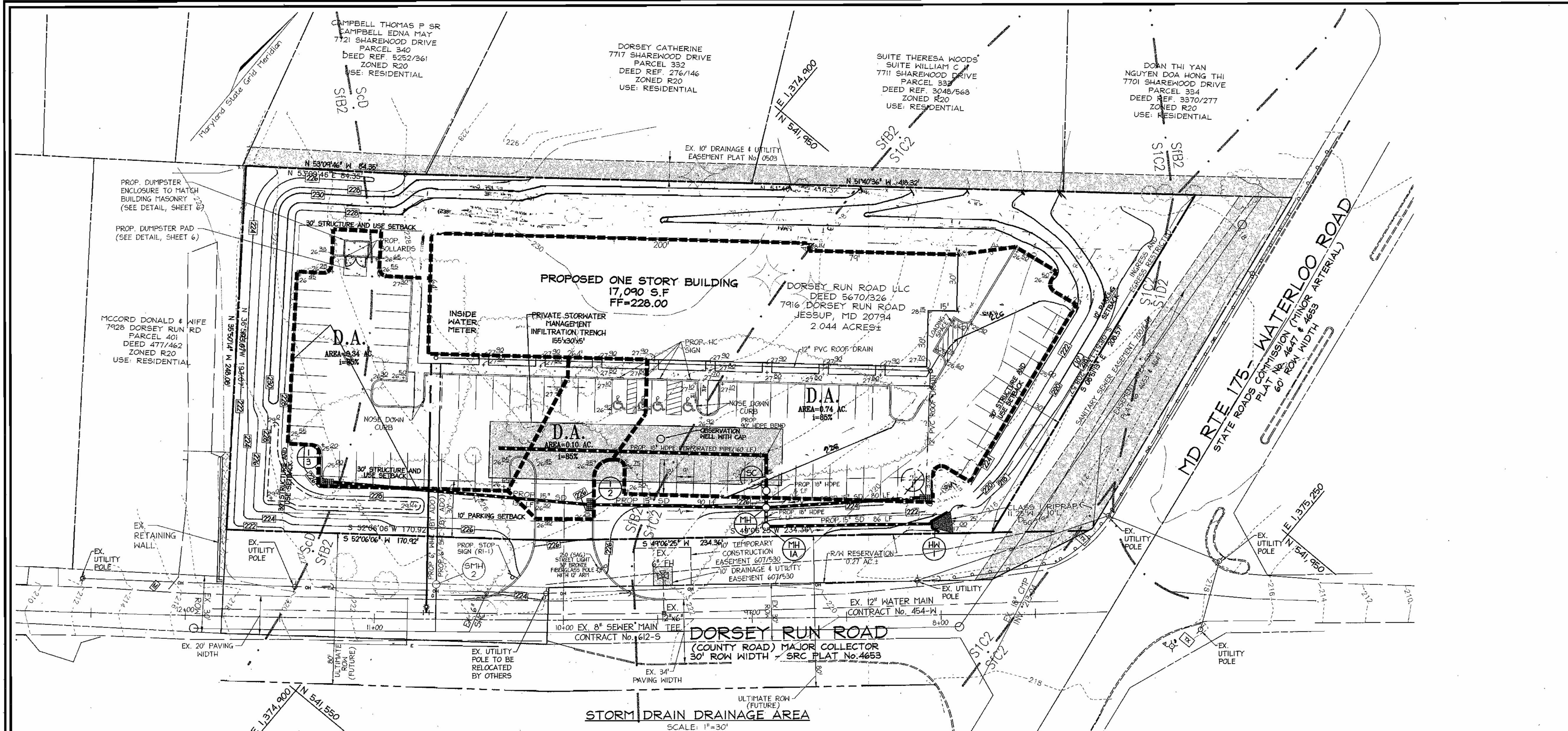
DESIGN BY: MMR
 DRAWN BY: JAJ
 CHECKED BY: RHV
 DATE: MARCH 2004
 SCALE: 1"=30'
 H.O. NO.: 207069

3 SHEET OF 8

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LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING GUY WIRE
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING BOLLARD
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	EXISTING SD MANHOLE
	EXISTING STORM DRAIN
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	SILT FENCE
	DRAINAGE DIVIDE
	LIMIT OF DISTURBANCE
	EXISTING PAVING TO BE REMOVED AND REPLACED
	PROPOSED P-2 PAVING
	PROPOSED BUILDING ADDITION



STORMWATER MANAGEMENT SUMMARY TABLE

REQUIREMENT	VOLUME REQUIREMENT	NOTES
WQV	0.139 Ac-ft. (6055 c.f.)	Infiltration
Rev	0.036 Ac-ft. (1569 c.f.)	Infiltration
Cpv	0.199 Ac-ft. (8668 c.f.)	Infiltration, using truncated hydrograph
QP ₁₀	Not Required	
QP ₁₀₀	Not Required	

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/30/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/1/04
DIRECTOR DATE

1
NO. REVISION DATE

STORM DRAIN DRAINAGE AREA MAP, SOIL BORINGS AND SITE DETAILS, DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

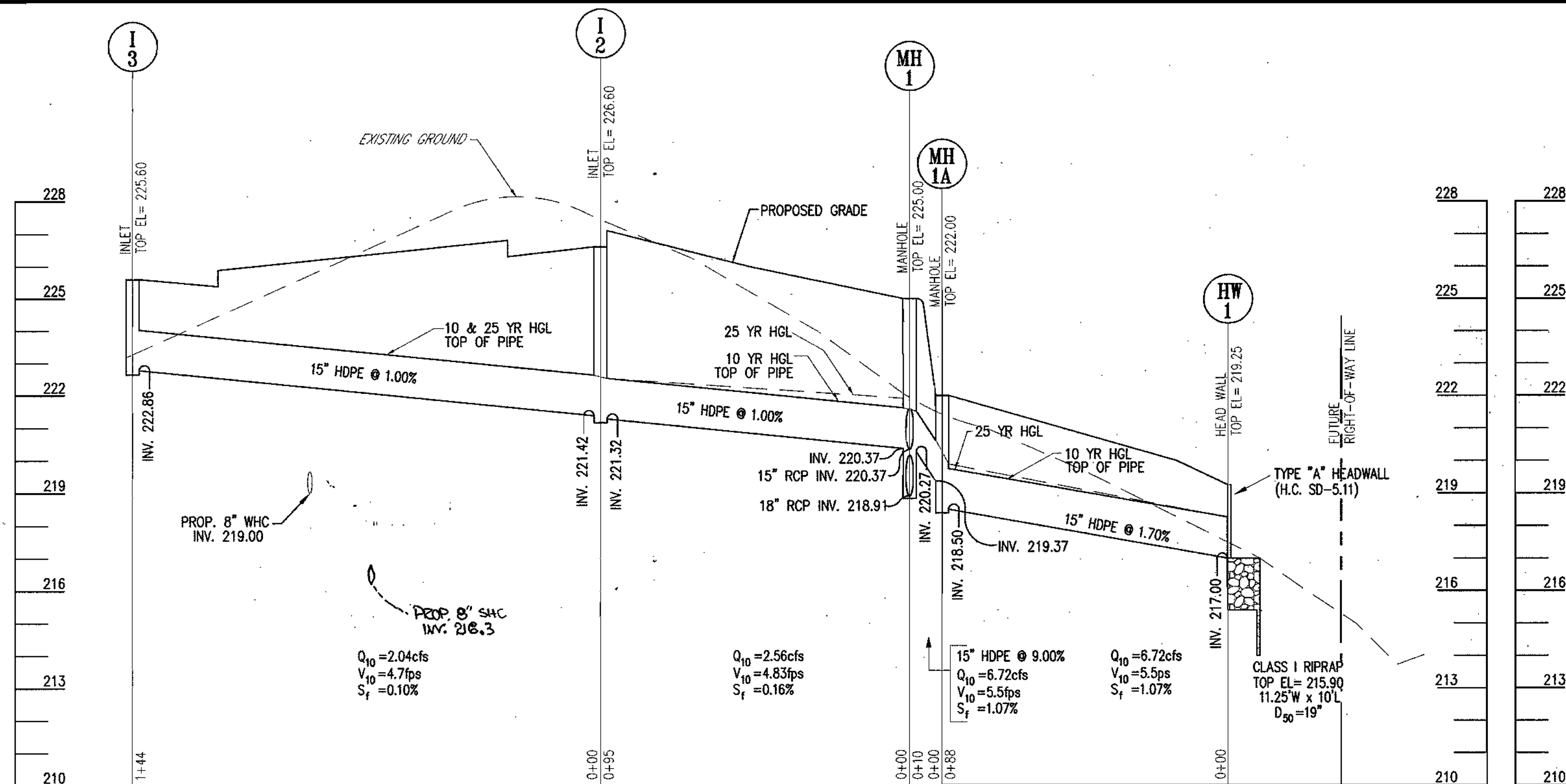
FREDERICK WARD ASSOCIATES, INC.
ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
ARCHITECTS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia
SURVEYORS

DESIGN BY: MTR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: 1"=30'
W.O. NO.: 2017069

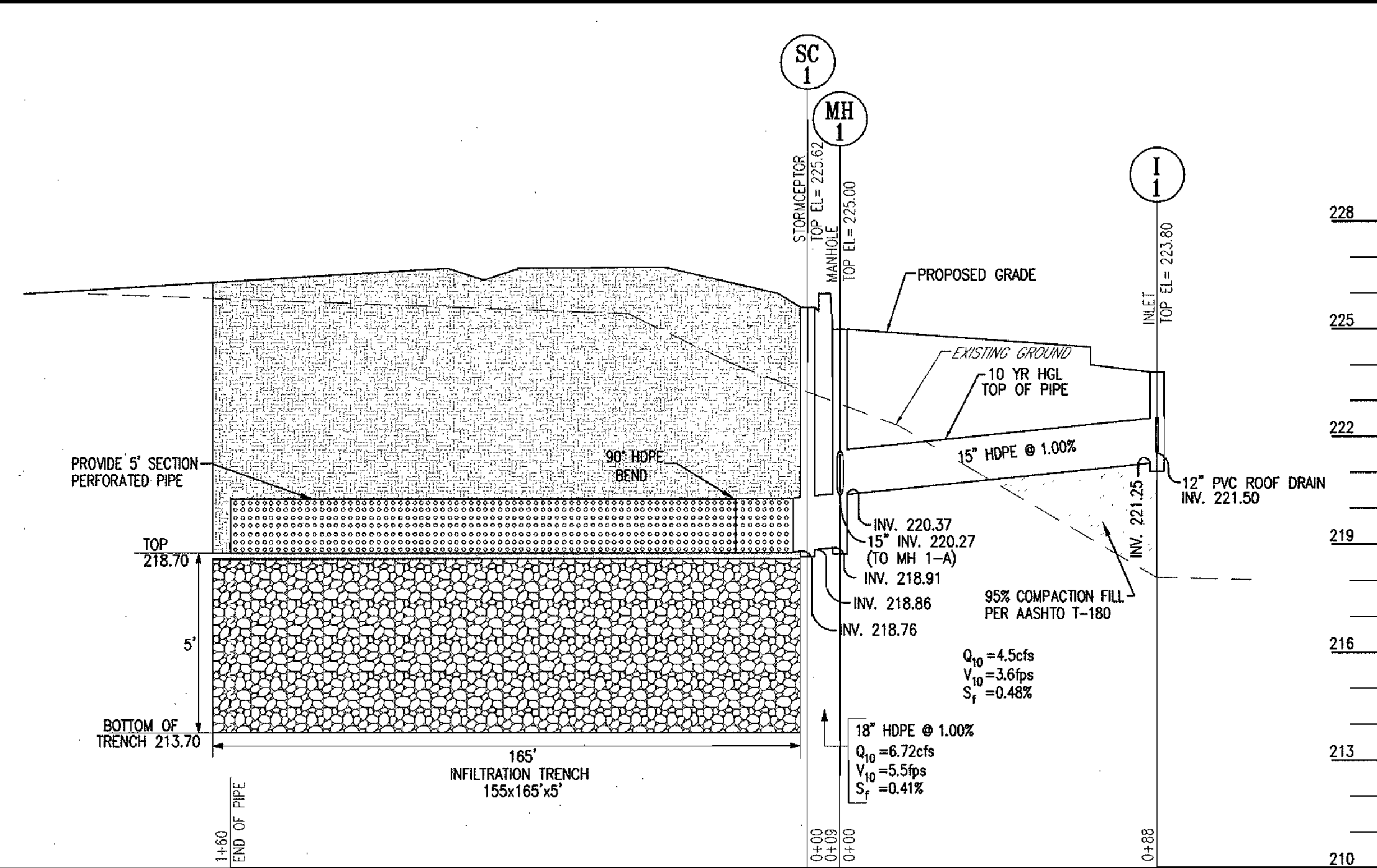
5 SHEET OF 8

ROBERT H. VOGEL, P.E. NO. 16185

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STORM DRAIN PROFILE
SCALE: HOR.: 1"=30'
VERT.: 1"=3'



STORM DRAIN PROFILE
SCALE: HOR.: 1"=30'
VERT.: 1"=3'

Precast Concrete Stormceptor® Order Request Form

CONTRACTOR INFORMATION

Name _____
Address _____
City _____
State _____
Zip Code _____
Contact _____
Phone _____
Fax _____

OWNER INFORMATION

Name **DORSEY RUN ROAD LLC**
Phone _____
Fax _____

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

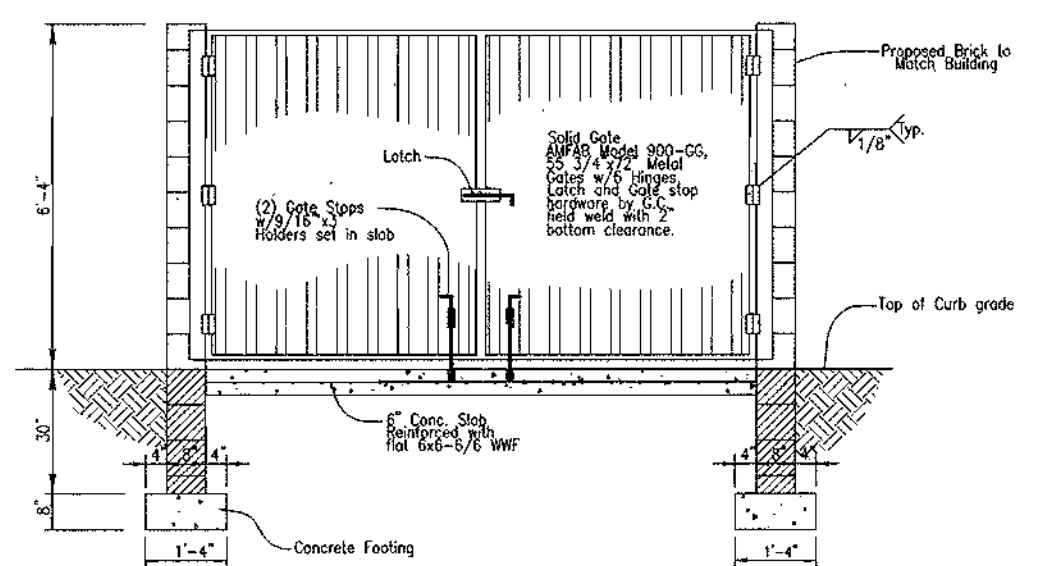
Stormceptor® Model	Insert Size	Manhole Number
900	SINGLE INLET DISC	SC-1
1200	MULTIPLE INLET DISC	Top Elevation (ft) 225.62
1800		Inlet Pipe Invert (ft) 218.86
2400		Outlet Pipe Invert (ft) 218.76
		Pipe Type 18" RCP
		Inlet Pipe Inside Diameter (ID) 18"
		Inlet Pipe Outside Diameter (OD) -
		Outlet Pipe Inside Diameter (ID) 18"
		Outlet Pipe Outside Diameter (OD) -

Project Name **DORSEY RUN ROAD**
Approximate time frame of delivery (weeks) _____
Delivery Address: Street **7916 DORSEY RUN ROAD**
City: **JESSUP** State: **MARYLAND** Zip Code: **20794**
Designer Company: **FREDERICK WARD ASSOCIATES**
Designer Contact: **ROBERT H. VOGEL** Phone: **(410) 720-6900** Fax: **(410) 720-6226**

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR Hydro Conduit**
ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)313-6389
FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)313-6399

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Ed O'Malley 3/20/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION
Robert H. Vogel 4/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT
Robert H. Vogel 4/15/04
DIRECTOR

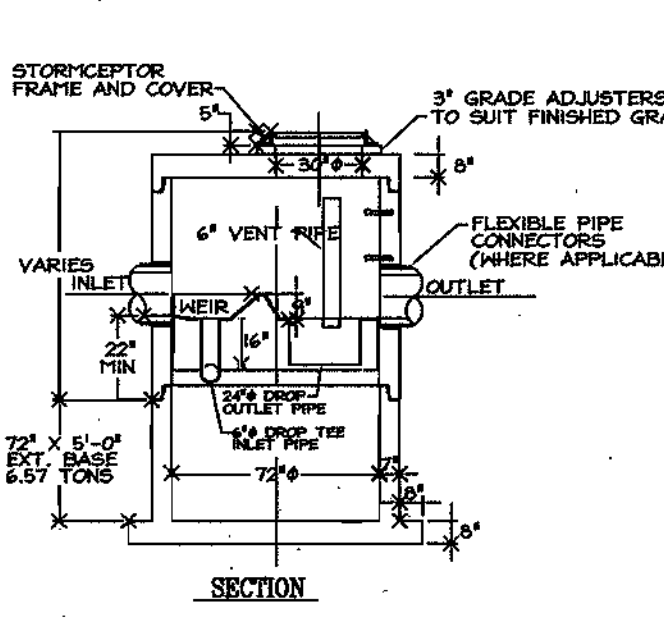
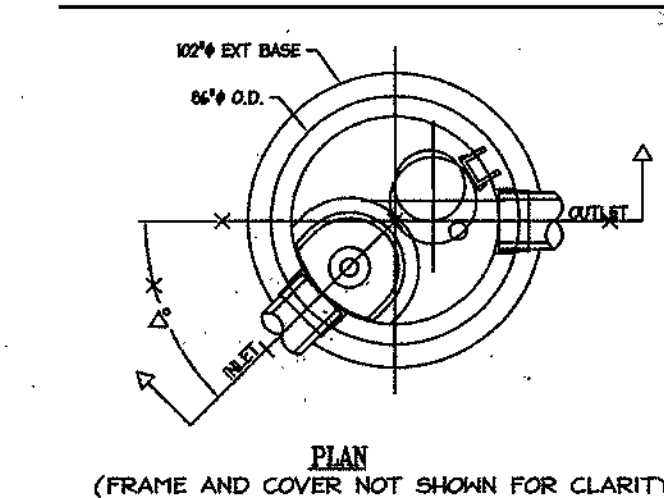


TRASH ENCLOSURE GATE DETAIL
(NOT TO SCALE)

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY STRUCTURE

- The Stormceptor Water Quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum, utilizing the Stormceptor inspection/monitoring form. Inspections shall be done by using a clear Plexiglas tube ("blowby tube") to extract a water column sample. When the sediment depth exceeds the level specified in table 4 of the Stormceptor Technical Manual, the unit must be cleaned.
- The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.
- The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner.
- The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.
- The owner shall retain and make the Stormceptor Inspector/Monitoring Forms available to the Howard County officials upon their request.

STC 900 PRECAST CONCRETE STORMCEPTOR

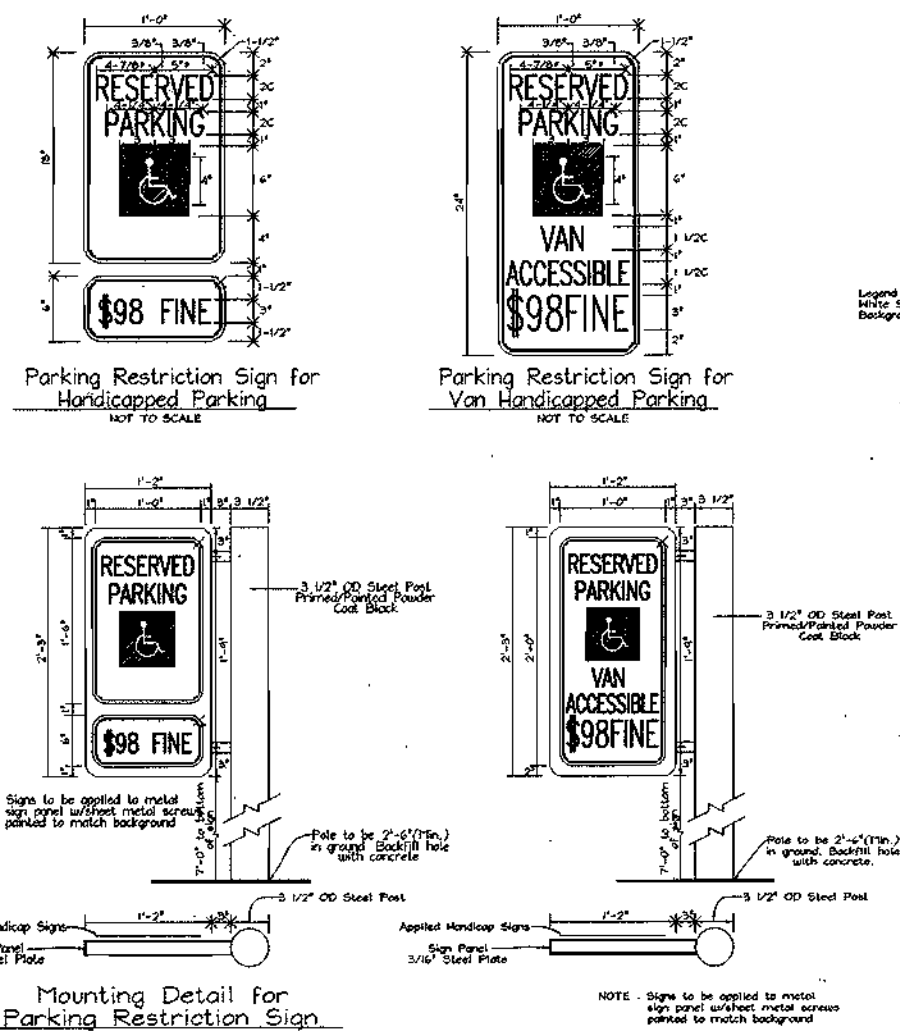


GENERAL NOTES

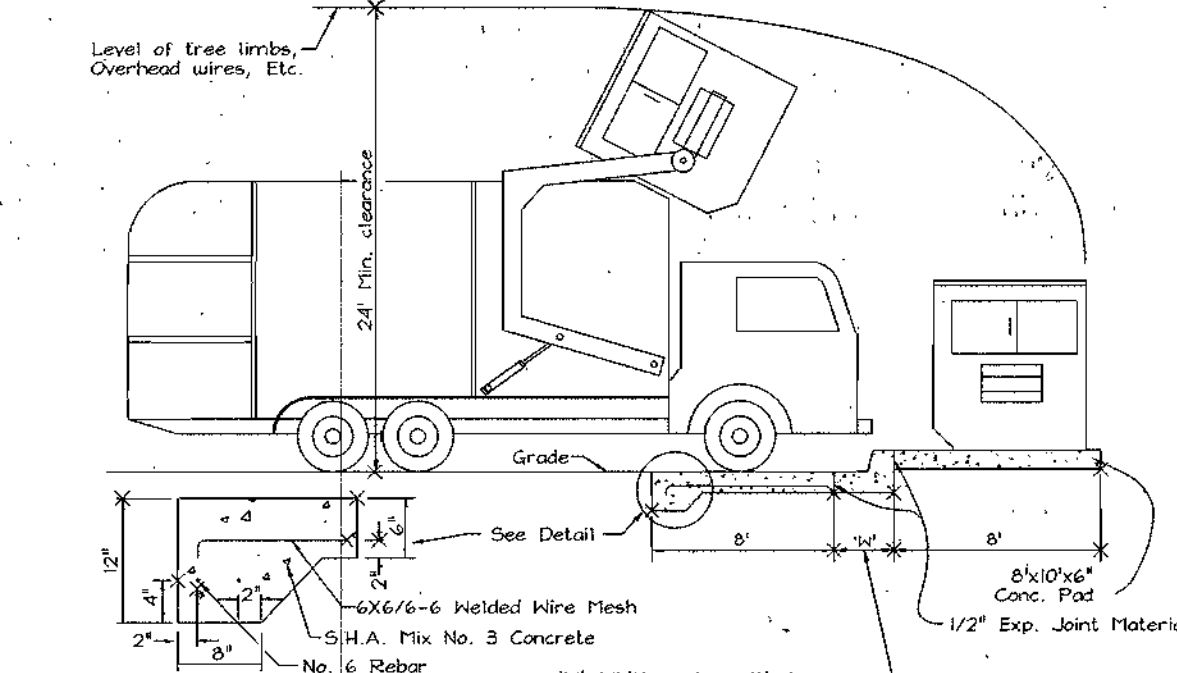
- STORMCEPTOR SECTIONS SHALL CONFORM TO ASTM C 475, PROFILE GASKETED JOINTS CONFORMING TO ASTM C 443.
- MANHOLE STEPS PROVIDED ABOVE INSET AT 12" O.C. AND SHALL BE COPOLYMER POLYPROPYLENE PLASTIC ENHANCED GR. 60 STEEL.
- MINIMUM CONCRETE STRENGTH FOR 4,000 PSI MINIMUM STEEL STRENGTH IS 60,000 PSI.
- REINFORCEMENT DESIGN SHALL MEET ASTM C 478.
- FLEXIBLE PIPE CONNECTORS SHALL MEET ASTM C 923.
- HANDLING: A. ALL RISERS SHALL HAVE 2 EA. 1 1/2" HOLES FOR LIFTING. B. ALL LG. DIM. BASE SECTIONS FLATTEN AND REDUCES TO HAVE LIFT HOOPS.
- DESIGNED FOR AASHTO H-20 LOADING.
- FLEXIBLE STORMCEPTOR INSERT REFERENCE DRAWING CA-0225-01

STORMCEPTOR ORDER INFORMATION

STORMCEPTOR MODEL: 900
TOP ELEVATION: 225.62
INLET PIPE INVERT: 218.86
OUTLET PIPE INVERT: 218.76
PIPE TYPE: 18" RCP
INLET PIPE INSIDE DIAMETER (ID): 18"
INLET PIPE OUTSIDE DIAMETER (OD): -
OUTLET PIPE INSIDE DIAMETER (ID): 18"
OUTLET PIPE OUTSIDE DIAMETER (OD): -
NOTE: DRAINAGE AREA MAP FOR CONTRIBUTING IMPERVIOUS AREA TO STORMCEPTOR. AREA: 2.04 Acres

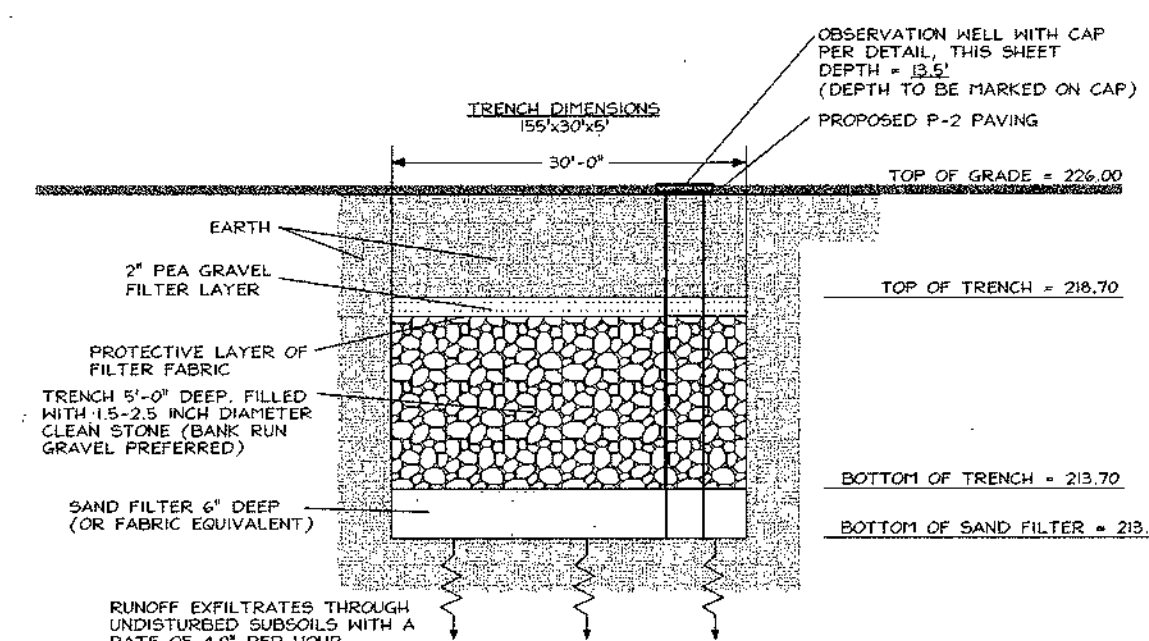


HANDICAP PARKING SIGNS
(NOT TO SCALE)

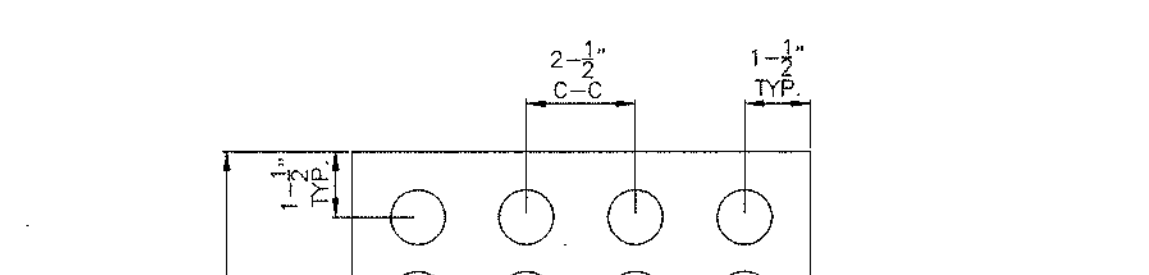


SOLID WASTE SERVICE PAD

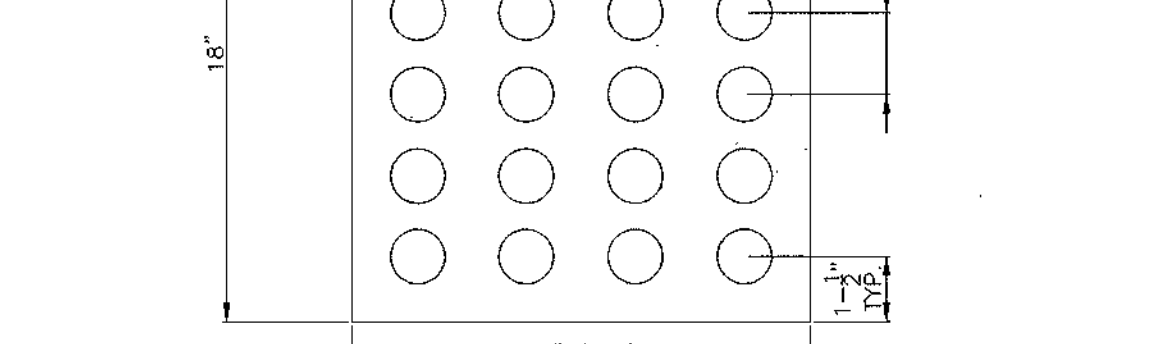
HOWARD COUNTY STD. R 11.01
NOT TO SCALE



INFILTRATION TRENCH DETAIL
NOT TO SCALE



OBSERVATION WELL DETAIL
NOT TO SCALE

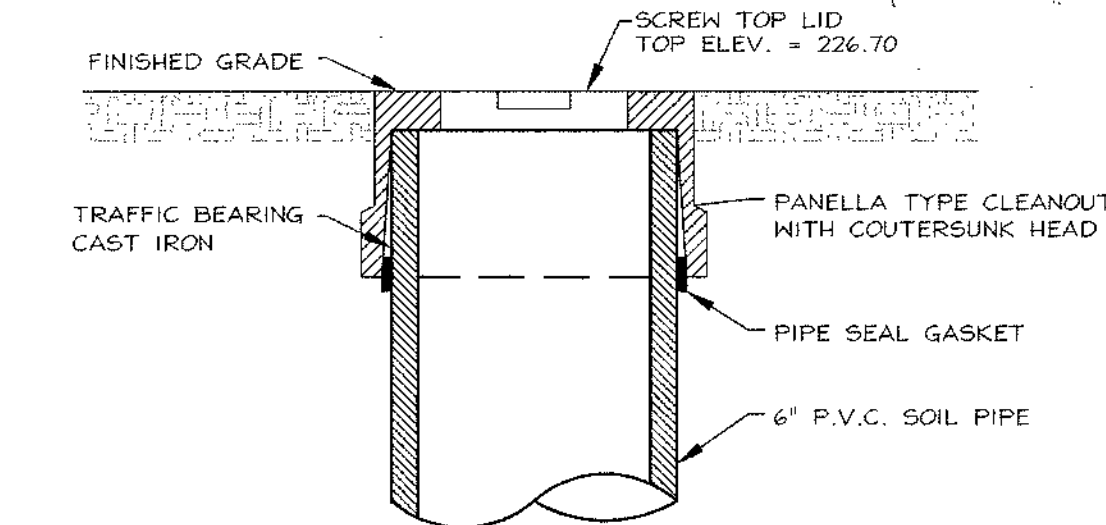


PERFORATED PIPE SECTION INTO INFILTRATION TRENCH
NOT TO SCALE

NOTES:
1. 24 Perforations per foot of pipe to be provided.
2. 18" perforated pipe to extend 24" into trench.

PIPE SCHEDULE		
SIZE	TYPE	LENGTH
15"	HDPE	425 LF
18"	HDPE (PERFORATED IN TRENCH)	160 LF
18"	HDPE	9 LF

STRUCTURE SCHEDULE			
NUMBER	DESCRIPTION	INV IN	INV. OUT TO ELEV.
I-1	TYPE S COMB. INLET (NO. CO. SD 4.32)	-	221.25 223.80
I-2	TYPE S COMB. INLET (NO. CO. SD 4.32)	221.42	221.32 226.60
I-3	TYPE S COMB. INLET (NO. CO. SD 4.32)	-	222.86 225.60
MH-1	STANDARD PRECAST MANHOLE (NO. CO. GS-12)	220.37	218.91/220.37 225.00
MH-1A	STANDARD PRECAST MANHOLE (NO. CO. GS-12)	219.37	218.50 222.00
HW-1	TYPE "A" HEADWALL (NO. CO. SD 5.11)	217.00	217.00 219.25
SC-1	900 STORMCEPTOR	218.86	218.76 225.62



- EACH OBSERVATION WELL/CLEANOUT SHALL INCLUDE THE FOLLOWING:
1. FOR AN UNDERGROUND FLUSH MOUNTED OBSERVATION WELL/CLEANOUT, PROVIDE A TUBE MADE OF NON-CORROSIVE MATERIAL, SCHEDULE 40 OR EQUIVALENT, AT LEAST FEET LONG WITH AN INSIDE DIAMETER OF AT LEAST 6 INCHES.
2. THE TUBE SHALL HAVE A FACTORY ATTACHED CAST IRON OR HIGH IMPACT PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING SCREEN TOP LID. THE SCREEN TOP LID SHALL BE CAST IRON OR HIGH IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET RAYS.

OBSERVATION WELL DETAIL
NOT TO SCALE

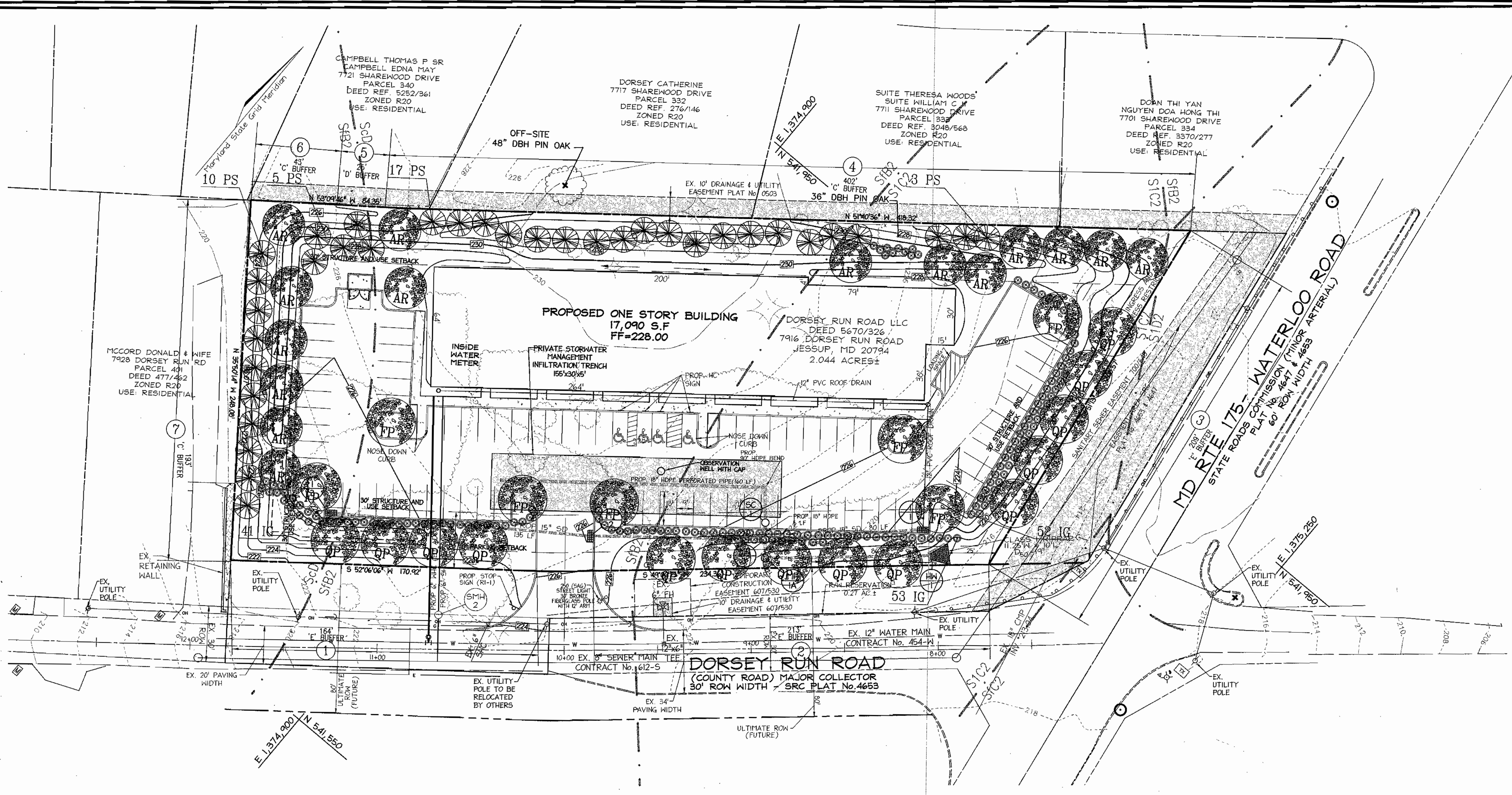
NO.	REVISION	DATE
1	Rev. SH. Connor	8/1/04

STORM DRAIN, WATER AND SEWER PROFILES DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS ARCHITECTS SURVEYORS
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: 1"=30'
W.O. NO.: 2017069
ROBERT H. VOGEL, P.E. NO. 1493



LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING GUY WIRE
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING BOLLARD
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	EXISTING SD MANHOLE
	EXISTING STORM DRAIN
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	EXISTING/PROPOSED EASEMENT
	PERIMETER LANDSCAPING

LANDSCAPE SCHEDULE NOTES:

1. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AMI SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAW PLANTING SPECIFICATIONS.
2. MAINTENANCE TO INCLUDE MONITORING AND HAND WATERING AS NEEDED FOR THE FIRST TWO GROWING SEASONS TO ESTABLISH WOODY PLANTS. SPECIALIZED PLANTING AREAS INCLUDING FOUNDATION PLANTING OR ANNUAL BEDS MAY REQUIRE REGULAR HAND WATERING OR IRRIGATION.
3. CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
4. CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

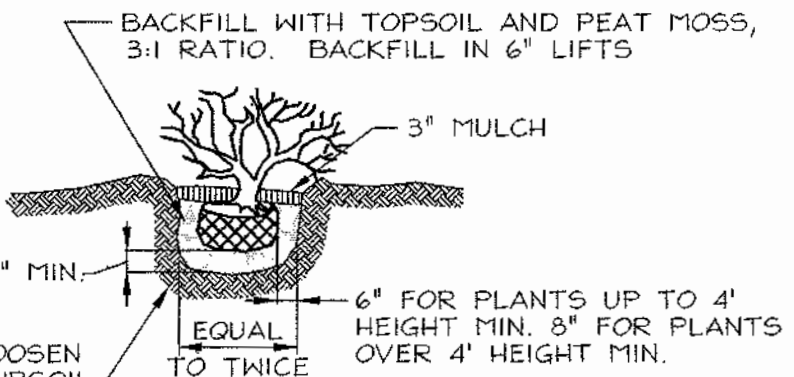
LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
AR	15	Acer rubrum 'October Glory' October Glory Red Maple	2 1/2"-3" CAL.	B & B
FP	7	Fraxinus p. 'Patmore' Patmore Green Ash	2 1/2"-3" CAL.	B & B
PS	35	Pinus strobus Eastern White Pine	7-9" HT.	B & B
QP	14	Quercus phellos Willow Oak	2 1/2"-3" CAL.	B & B
IG	156	Ilex glabra 'Compacta' Compact Inkberry	24"-30" HT.	B & B

**SCHEDULE 'B'
PARKING LOT INTERNAL LANDSCAPING**

NUMBER OF PARKING SPACES REQUIRED AND PROVIDED	82
NUMBER OF TREES AND ISLANDS EXISTING	0
NUMBER OF TREES AND ISLANDS REQUIRED	4
NUMBER OF TREES AND ISLANDS PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	-

- GENERAL NOTES:**
1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
 2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$19,830.00 FOR THE REQUIRED 34 SHADE TREES, 35 EVERGREEN TREES AND 146 SHRUBS.



NOTE:
THIS SHEET FOR LANDSCAPE ONLY. SEE SHEET 2 FOR LAYOUT AND CROSSINGS.

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

James J. Bean 3/9/04
SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
William J. Williams 5/30/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

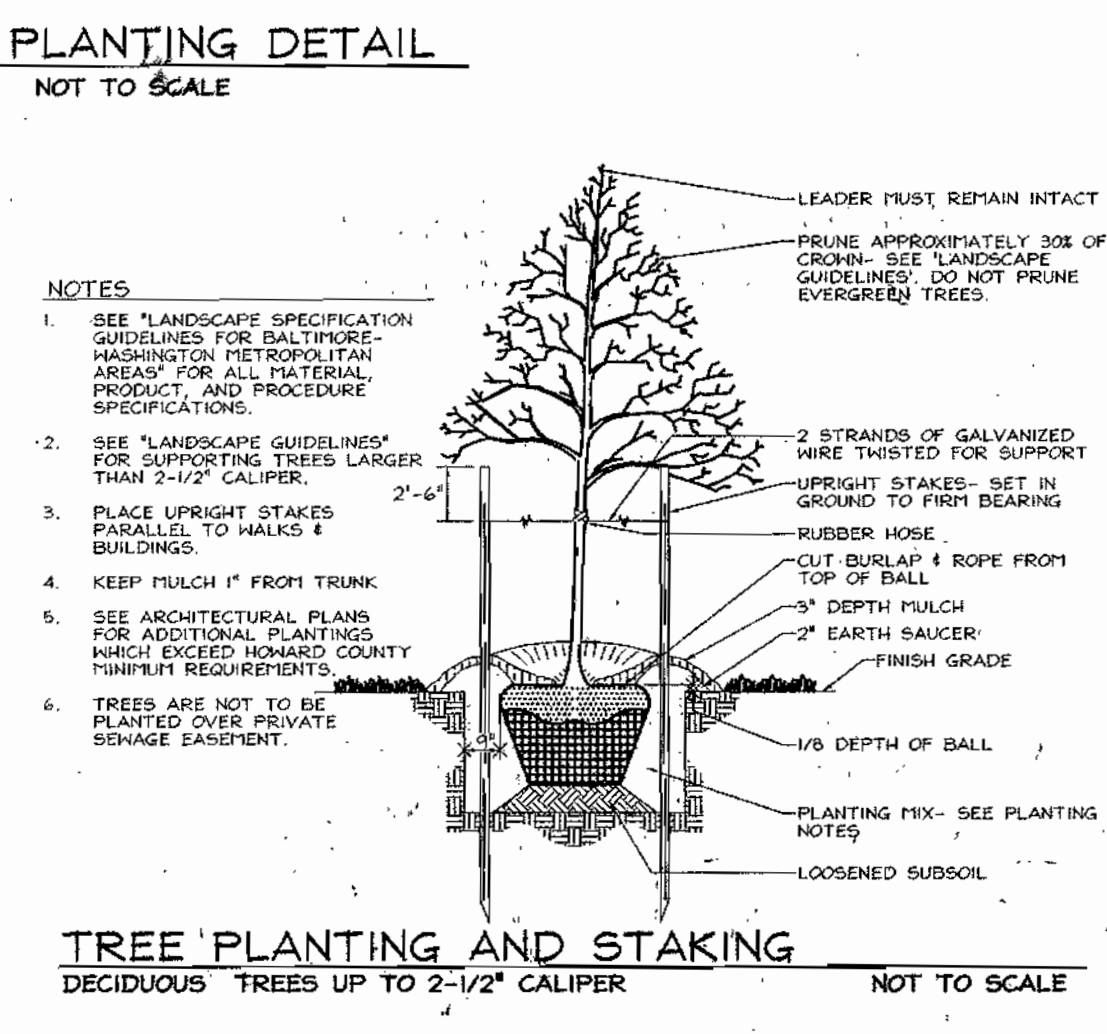
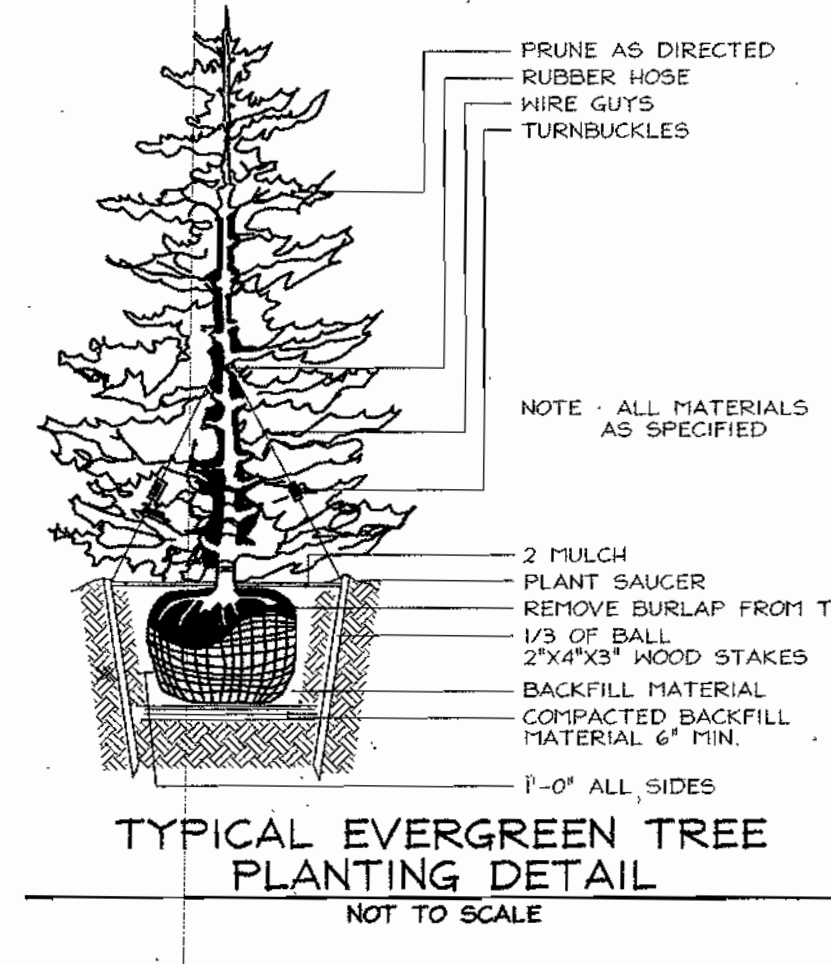
John H. Hensley 5/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David L. Taylor 5/1/04
DIRECTOR DATE

**SCHEDULE 'A'
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAY							ADJACENT TO PER. PROPERTIES						
	1	2	3	4	5	6	7	1	2	3	4	5	6	7
PERIMETER/FRONTAGE DESIGNATION LANDSCAPE TYPE	164	213	209	402	25	43	193							
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO							
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO							
NUMBER OF PLANTS REQUIRED	1:4 4	1:40 5	1:40 5	1:40 10	1:60 0	1:40 1	1:40 5							
SHADE TREES	1:4 4	1:40 5	1:40 5	1:40 10	1:60 0	1:40 1	1:40 5							
EVERGREEN TREES				1:20 20	1:10 3	1:20 2	1:20 5							
SHRUBS	1:4 41	1:4 53	1:4 52											
NUMBER OF PLANTS PROVIDED														
SHADE TREES	4	5	5	9*	-	1	5							
EVERGREEN TREES	-	-	-	20	3	2	10							
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	-	-	-							
SHRUBS (2:1 SUBSTITUTION)	41	53	52	10*	-	-	-							

* 10 SHRUBS SUBSTITUTED FOR 1 SHADE TREE NEXT TO 36" DBH PIN OAK. ONE OF THE 9 PROVIDED SHADE TREES IS THAT PIN OAK.



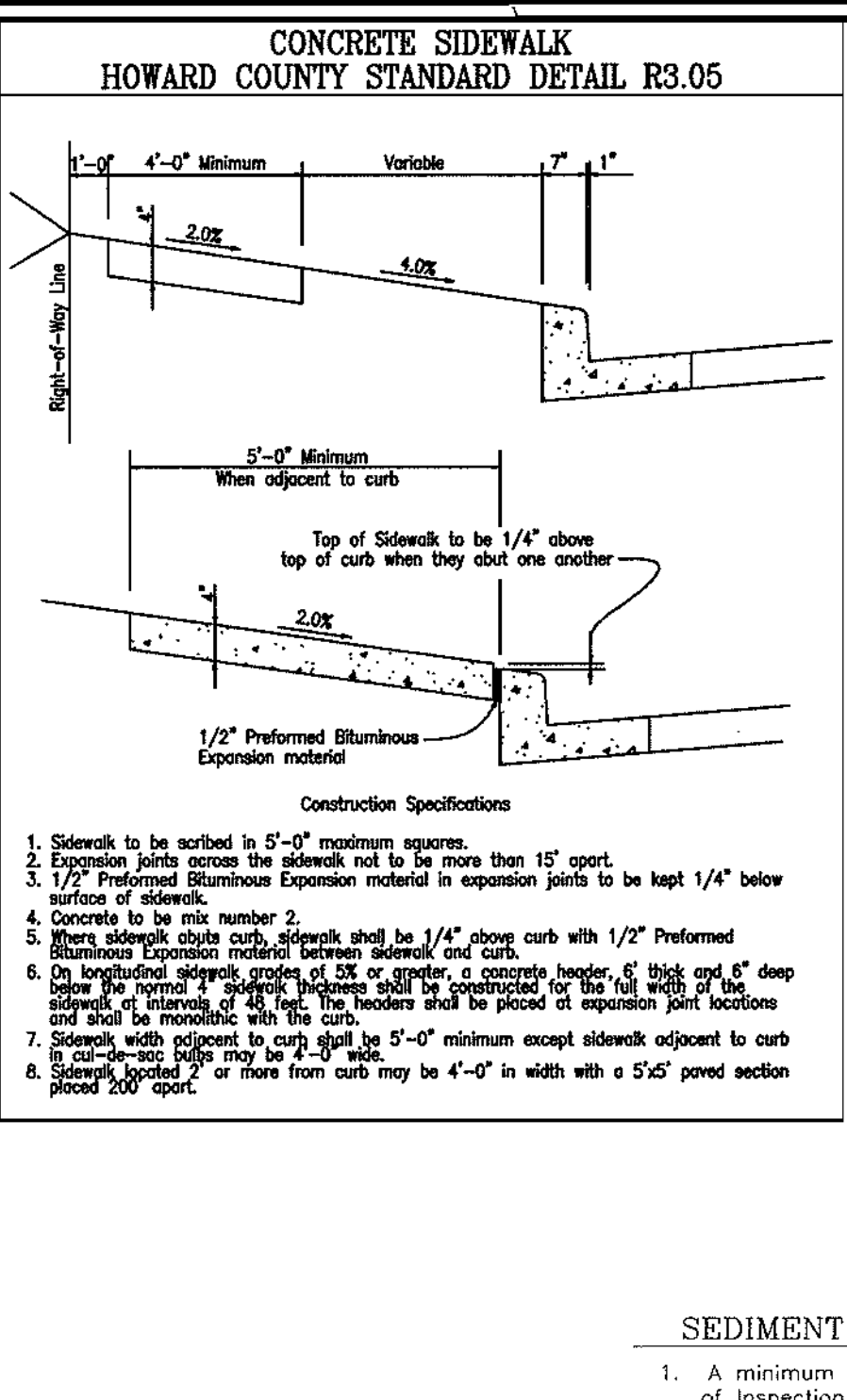
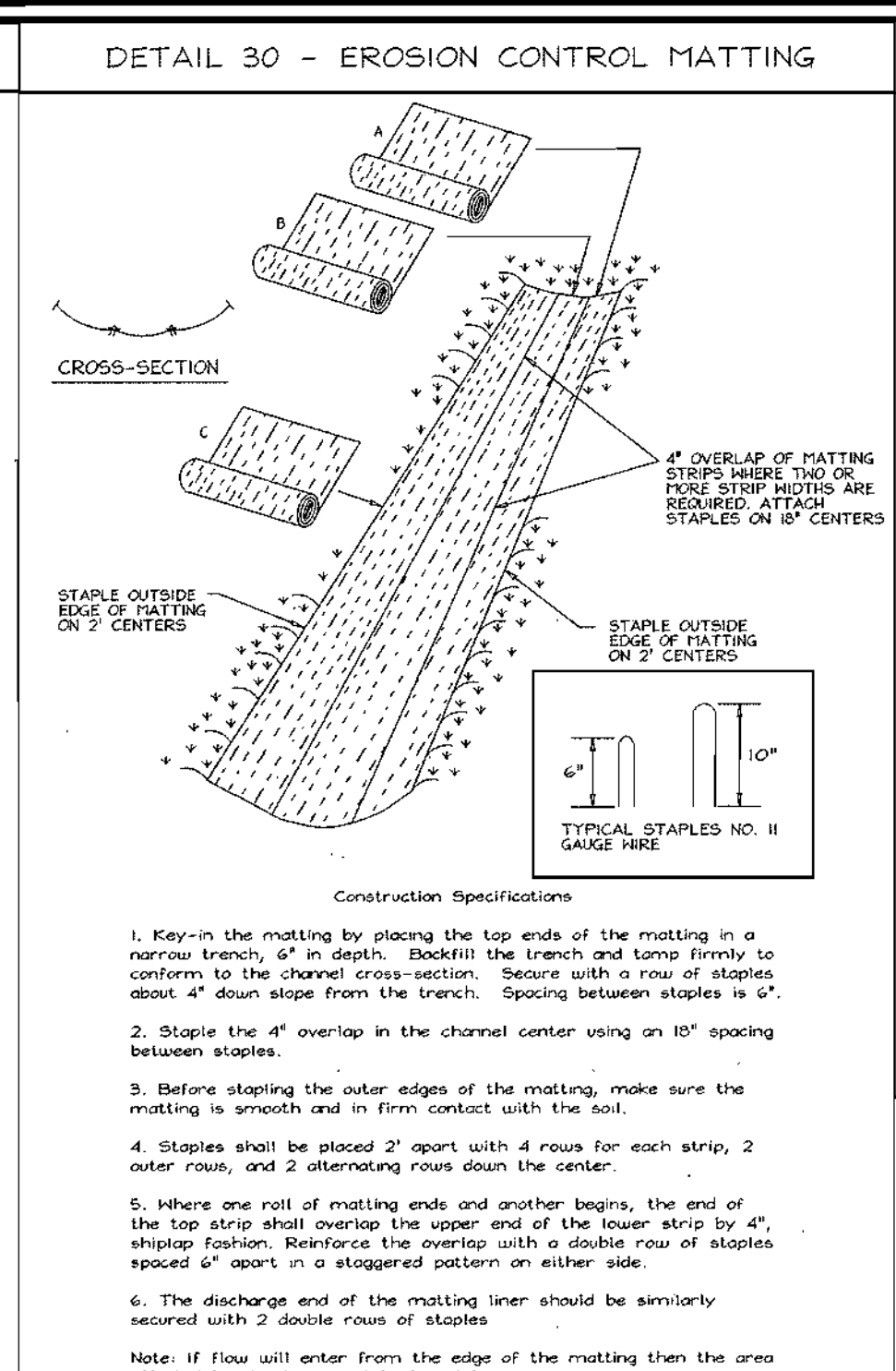
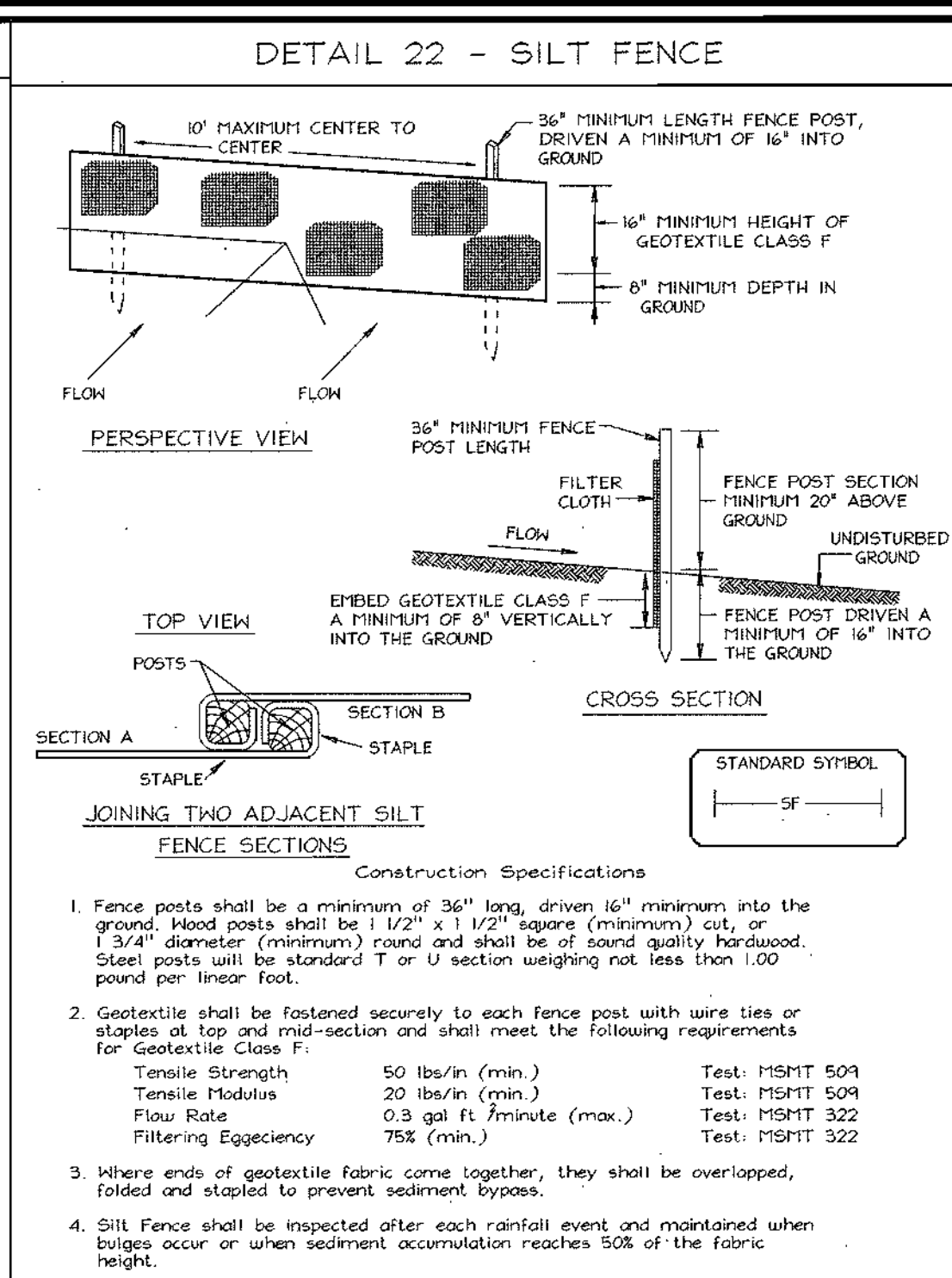
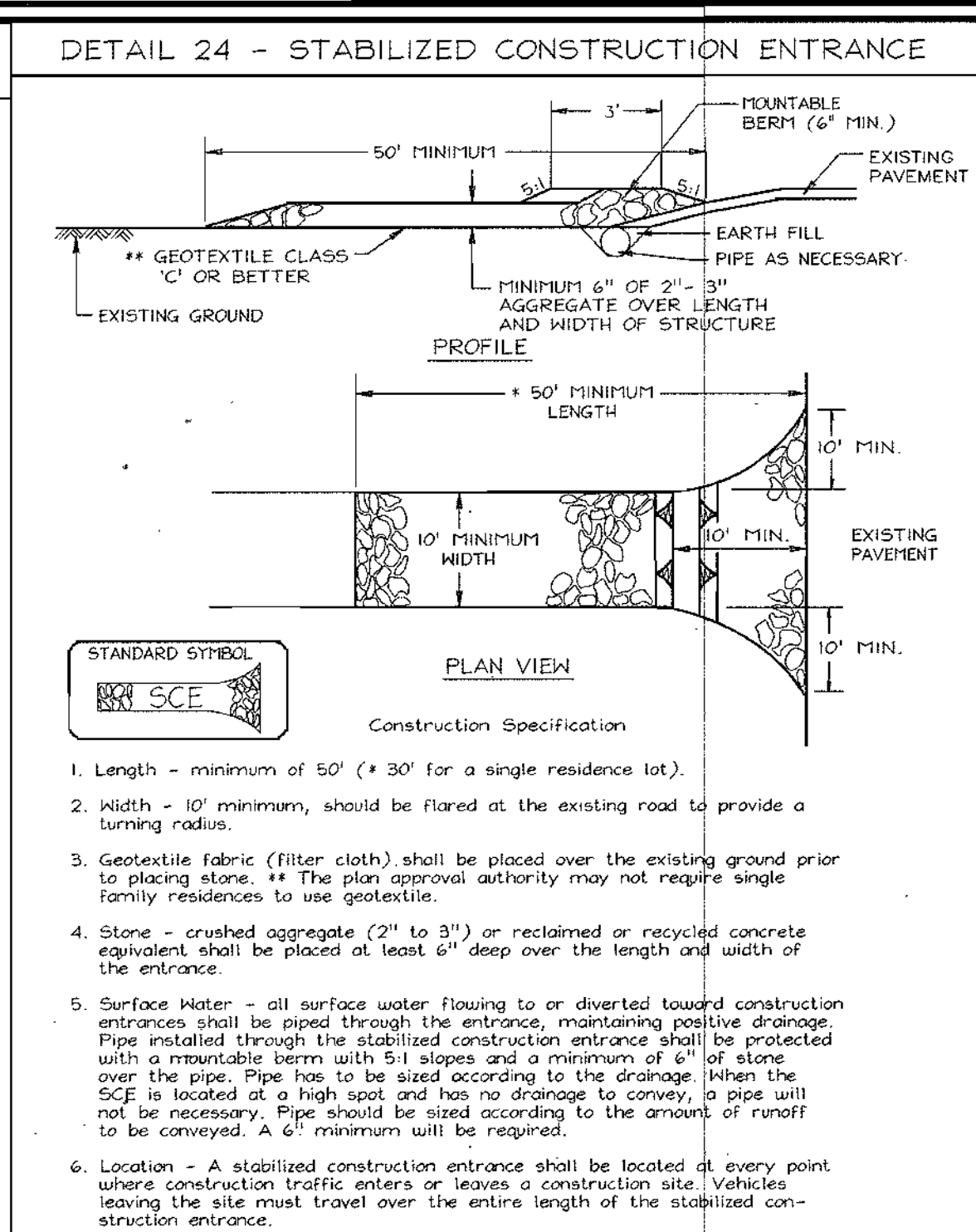
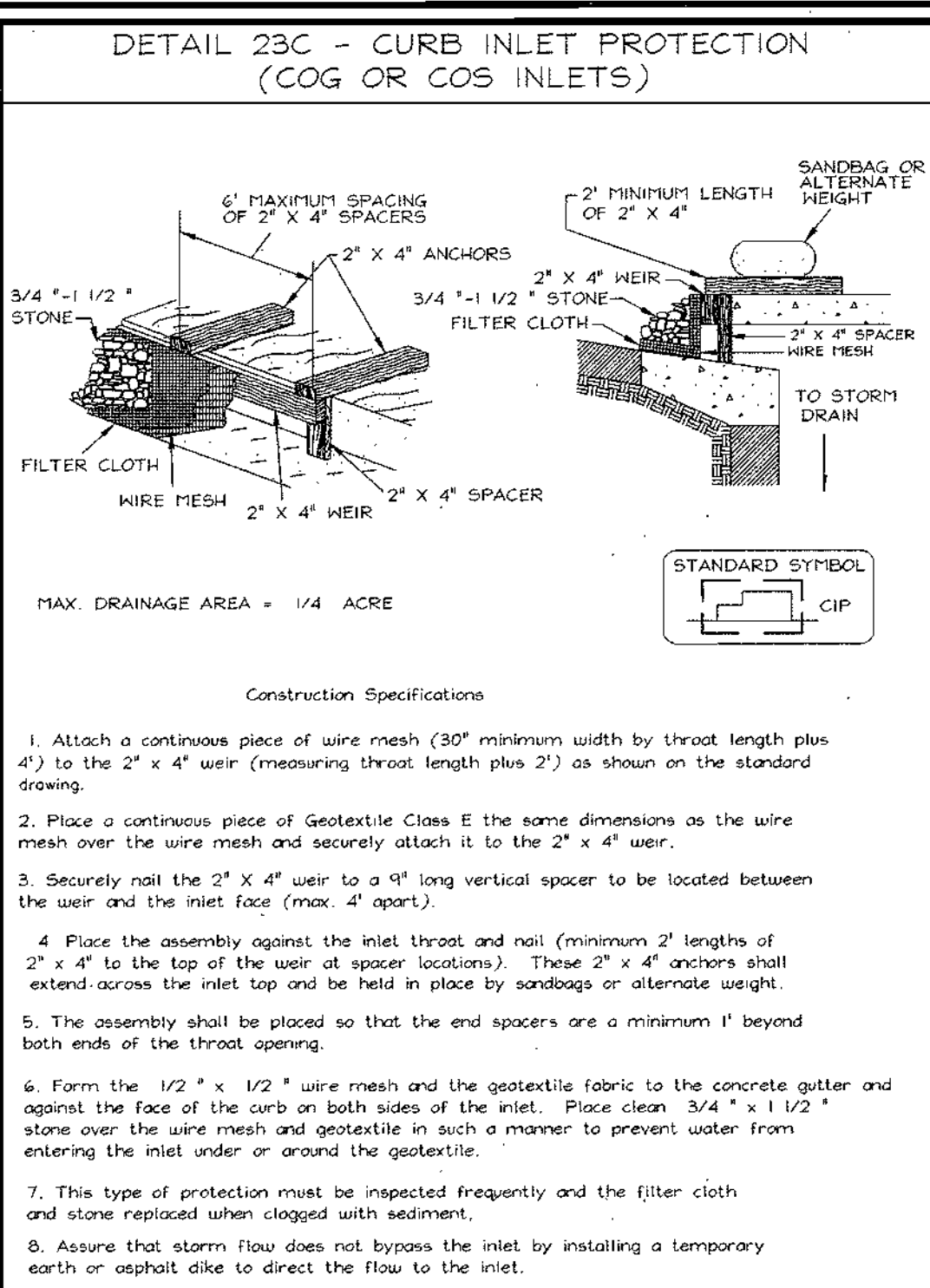
**SITE LANDSCAPE PLAN
DORSEY RUN CENTER**

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: 1"=30'
N.O. NO.: 2017069

7 SHEET OF 8



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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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:

- 1) 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. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 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 apply 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow 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 (0.5 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 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 1/2 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.

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Definition
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose
To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

- I. This practice is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - c. The original soil to be vegetated contains material toxic to plant growth.
 - d. The soil is so acidic that treatment with limestone is not feasible.
- II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- I. Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
- II. Topsoil Specifications — Soil to be used as topsoil must meet the following:
 - i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 and 1/2" in diameter.
 - ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutseeds, poison ivy, thistle, or others as specified.
 - iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
 - iv. For sites having disturbed areas under 5 acres:
 - a. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization—Section I—Vegetative Stabilization Methods and Materials.

INFILTRATION TRENCH GENERAL NOTES AND SPECIFICATIONS

An infiltration trench may not receive run-off until the entire contributing drainage area to the infiltration trench has received final stabilization.

1. Heavy equipment and traffic shall be restricted from traveling over the proposed location of the infiltration trench to minimize compaction of the soil.
2. Excavate the infiltration trench to the design dimensions. Excavated materials shall be placed away from the trench sides to enhance trench wall stability. Large tree roots must be trimmed flush with the trench sides in order to prevent fabric puncturing or tearing of the filter fabric during subsequent installation procedures. The side walls of the trench shall be roughened where sheared and sealed by heavy equipment.
3. A Class "C" geotextile or better (see Section 24.0, Material Specifications, 1994 Standards and Specifications for Soil Erosion and Sediment Control, MDC, 1994) shall interface between the trench side walls and between the stone reservoir and gravel filter layers. A partial list of non-woven filter fabrics that meet the Class "C" criteria follows; any alternative filter fabric must be approved by the plan approval authority.

Ammoco 4552	Carthane FX-80S
CEOLON N70	Mirafi 180-N
WETEC N07	
4. The width of the geotextile must include sufficient material to conform to trench perimeter irregularities and for a 6-inch minimum top overlap. The filter fabric shall be tucked under the sand layer on the bottom of the infiltration trench for a distance of 6 to 12 inches. Stones or other anchoring objects should be placed on the fabric at the edge of the trench to keep the trench open during windy periods. When overlaps are required between rolls, the uphill roll should lap a minimum of 2 feet over the downhill roll in order to provide a shingled effect.
5. If a 6 inch sand filter layer is placed on the bottom of the infiltration trench, the sand for the infiltration trench shall be washed and meet AASHTO-M-43, Size No. 9 or No. 10. Any alternative sand gradation must be approved by the plan approval authority.
6. The stone aggregate should be placed in a maximum loose lift thickness of 12 inches. The gravel (rounded "bank run" gravel is preferred) for the infiltration trench should be washed and meet one of the following AASHTO-M-43, Size No. 2 or No. 3, following the stone aggregate placement, the filter fabric shall be folded over the stone aggregate to form a 6-inch minimum longitudinal lap. The desired fill soil or stone aggregate shall be placed over the top at sufficient intervals to maintain the lap during subsequent backfilling.
7. Care shall be exercised to prevent natural or fill soils from intermixing with the stone aggregate. All contaminated stone aggregate shall be removed and replaced with uncontaminated stone aggregate.

SEQUENCE OF CONSTRUCTION

1. OBTAIN HOWARD COUNTY GRADING PERMIT. (WEEK 1)
2. NOTIFY HOWARD COUNTY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. (WEEK 1)
3. CONDUCT A PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR PRIOR TO ANY LAND DISTURBANCE. (WEEK 1)
4. INSTALL ALL SUPER SILT FENCE AS INDICATED ON PLANS. (WEEK 2)
5. INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM. (WEEK 2)
6. SEED AND STOCKPILE TOPSOIL. STABILIZE STOCKPILE WITH SEED AND MULCH. (WEEK 3)
7. ROUGH GRADE SITE. (WEEK 3)
8. INSTALL STORM DRAIN UTILITIES AND STORMWATER MANAGEMENT INFILTRATION FACILITY. STABILIZE INLET WITH INLET PROTECTION, IMMEDIATELY UPON COMPLETION OF STORM DRAIN INSTALLATION. SLUMP PITS ALONG WITH PUMPS, FOR Dewatering. (WEEK 4)
9. COMPLETE INSTALLATION OF STORM DRAIN/SWM FACILITY SYSTEM AND REMAINING ON-SITE UTILITIES. STORM DRAINS SHALL BE BLOCKED TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM. (WEEK 4)
10. INSTALL CURB AND GUTTER. (WEEK 6)
11. BEGIN BUILDING CONSTRUCTION. (WEEK 6)
12. COMPLETE BUILDING CONSTRUCTION. (WEEK 26)
13. INSTALL PAVING BASE COURSE. REMOVE INLET PROTECTION PER THE SEDIMENT CONTROL INSPECTOR AS WORK PROGRESSES. (WEEK 27)
14. COMPLETE PAVING SURFACE COURSE. (WEEK 28)
15. FINE GRADE AND STABILIZE REMAINING SITE. INSTALL LANDSCAPING. (WEEK 29)
16. CLEAN AND FLUSH OUT STORM DRAIN SYSTEM. DISPOSE OF SEDIMENT LADEN MATERIAL CLEANED OUT OF STORM DRAIN IN A MANNER APPROVED BY THE SEDIMENT CONTROL INSPECTOR. (WEEK 30)
17. REMOVE ALL SEDIMENT CONTROL MEASURES AFTER RECEIVING APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR. (WEEK 30)

INFILTRATION TRENCH MAINTENANCE SCHEDULE

1. Infiltration practices may not serve as a sediment control device during the site construction phase. In addition, the erosion and sediment control plan for the site must clearly indicate how sediment will be prevented from entering the infiltration site.
2. An observation well shall be installed in every infiltration trench, consisting of an anchored six-inch diameter perforated PVC pipe with a lockable cap. (See detail this sheet)
3. It is recommended that infiltration designs include dewatering methods in the event of failure. This can be done with underdrain pipe systems that accommodate drawdown.
4. It is recommended that infiltration designs include dewatering methods in the event of failure. This can be done with underdrain pipe systems that accommodate drawdown.
5. Direct access shall be provided to all infiltration practices for maintenance and rehabilitation.
6. Infiltration practices should not be covered by an impermeable surface.
7. OSHA safety standards should be consulted for trench excavation.

TEMPORARY SEEDING NOTES

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 1/2 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 (0.7 lbs./1000 sq.ft.). For the period November 1 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 sod.

MULCHING: Apply 1 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.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

BY THE DEVELOPER:

BY THE ENGINEER:

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Jim Mauer 3/25/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

John R. Rowland 3/25/04
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

Robert H. Vogel 3/25/04
DIRECTOR
DATE

Jim Mauer 3/25/04
DATE

John R. Rowland 3/25/04
DATE

Robert H. Vogel 3/25/04
DATE

Robert H. Vogel 3/25/04
DATE

Robert H. Vogel 3/25/04
DATE

Robert H. Vogel 3/25/04
DATE

Robert H. Vogel 3/25/04
DATE

SEDIMENT AND EROSION CONTROL SITE DEVELOPMENT PLAN AND LIGHTING DETAILS

DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 6TH ELECTION DISTRICT PARCEL '246' HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-8226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHY
DATE: MARCH 2004
SCALE: AS SHOWN
I.O. NO.: 2017069

4 SHEET OF 8

NO.	REVISION	DATE

FOREST STAND ANALYSIS TABLE

KEY	A. TYPE OF COMMUNITY	B. AREA	C. SOILS INFORMATION			D. EXISTING VEGETATION	E. STAND CHARACTERISTICS			F. FOREST AREA IN SEN. ENV	G. HABITAT
			1. SOILS TYPES	2. TYPICAL FOREST COVER FOR SOILS TYPE	3. WOODLAND SUITABILITY INDEX		1. SIZE (DIA)	2. AGE (YRS)	3. GENERAL CONDITION		
L-1	RESIDENTIAL YARD	2.04 Ac	ScD SfB2 SfC2	MIXED UPLAND HARDWOODS MAINLY OAKS	n/a	RED MAPLE, SYCAMORE, EASTERN RED CEDAR, CRABAPPLE, PIN OAK, SILVER MAPLE, CHERRY	3" TO 36"	20 TO 90	GOOD	0.00 Ac	G

FOREST STAND TOTALS

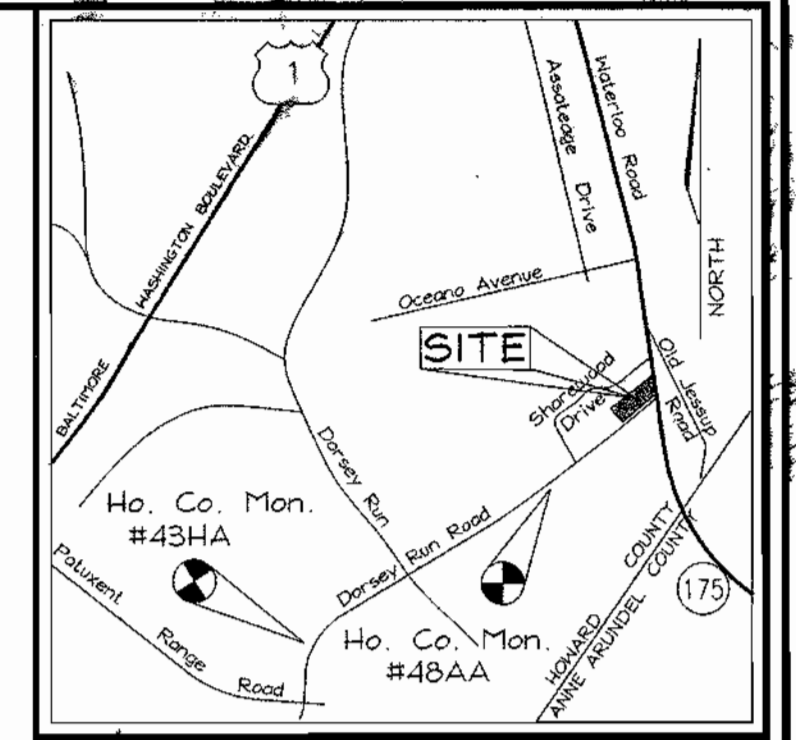
STAND L-1	2.04 ACRES
TOTAL	2.04 ACRES

SUPPLEMENTAL INFORMATION

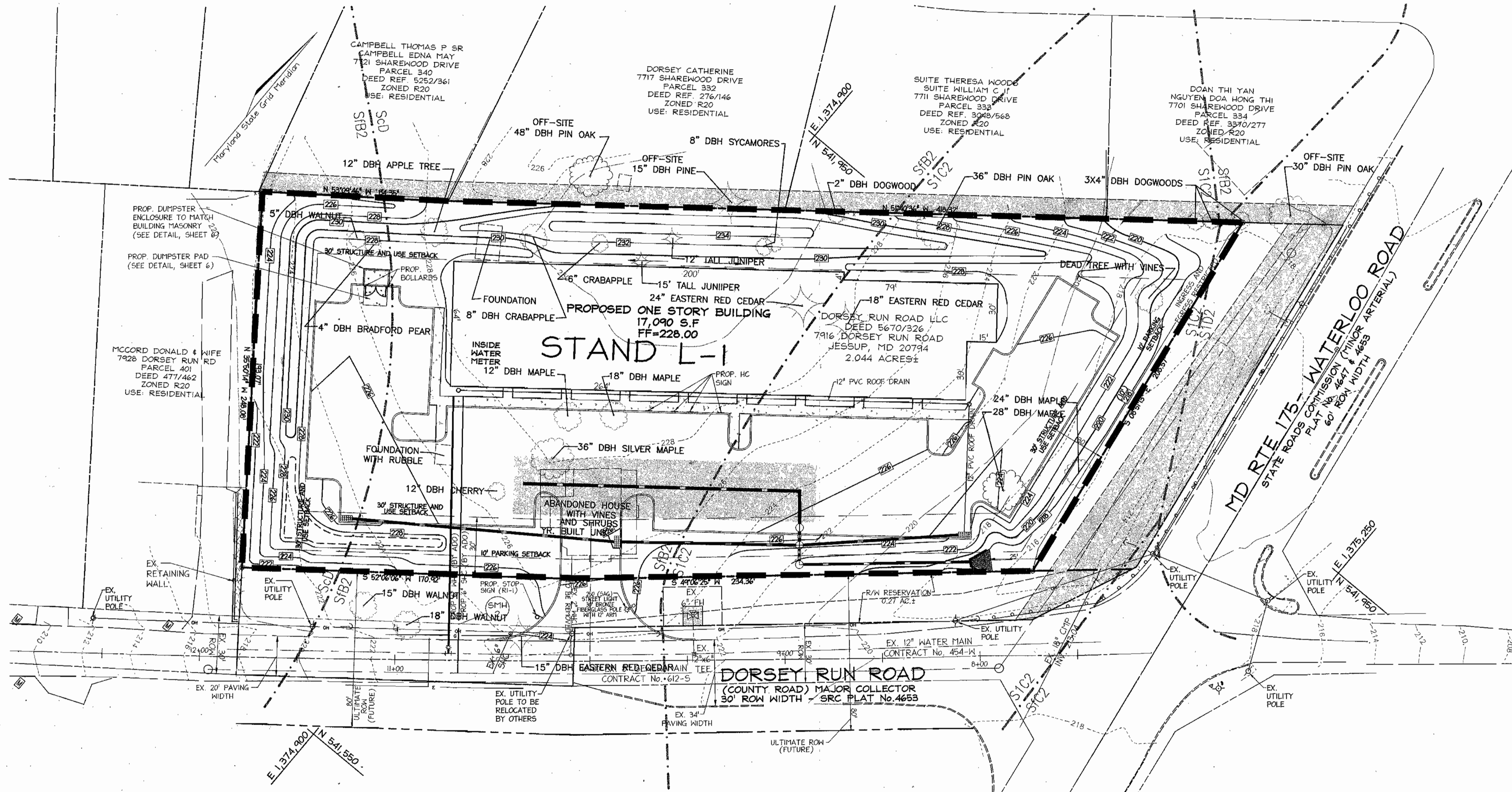
GROSS SITE AREA	2.04 ACRES
ZONED	M-2
PROPOSED USE	COMMERCIAL DEVELOPMENT

LEGEND

ChB2	SOILS DIVISION LINE
410	SOIL TYPE (SEE TABLE THIS SHEET)
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	PROPERTY EVIDENCE
---	PROPERTY LINE
○	EXISTING TREE
---	STAND DELINEATION LINE



VICINITY MAP
SCALE: 1"=2000'



ZONE: M-2
FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A. TOTAL TRACT AREA	2.044 AC
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.00 AC
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	0.00 AC
D. NET TRACT AREA	2.044 AC

LAND USE CATEGORY (FROM TABLE 3.2.1, PAGE 40, MANUAL)

INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY.

ARA	MQR	IDA	HDR	MPD	CIA
0	0	0	0	0	1

E. AFFOREST THRESHOLD 15% X D = 0.31 AC
F. CONSERVATION THRESHOLD 15% X D = 0.31 AC

EXISTING FOREST COVER:

G. EXISTING FOREST COVER (EXCLUDING FLOODPLAIN)	=	0.00 AC
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD	=	0.00 AC
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	=	0.00 AC

BREAK EVEN POINT: (0.2 X 0.21) + (0.31) = 0.35 AC

J. FOREST RETENTION WITH NO MITIGATION = 0.35 AC
K. CLEARING PERMITTED WITHOUT MITIGATION = 0.17 AC

PROPOSED FOREST CLEARING:

L. TOTAL AREA OF FOREST TO BE CLEARED	=	0.00 AC
M. TOTAL AREA OF FOREST TO BE RETAINED	=	0.00 AC

PLANTING REQUIREMENTS:

N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	=	0.00 AC
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	=	0.00 AC
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	=	0.00 AC
R. TOTAL AFFORESTATION REQUIRED	=	0.00 AC
S. TOTAL AFFORESTATION REQUIRED	=	0.31 AC (13,503.6 SqFt)
T. TOTAL AFFORESTATION AND AFFORESTATION REQUIRED	=	0.31 AC (13,503.6 SqFt)

FEE-IN-LIEU OF AFFORESTATION IS PROPOSED IN THE AMOUNT OF \$6,751.80 (13503.6 X 0.50).

- NOTES
1. THE PROPERTY OUTLINE IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY FREDERICK WARD, ASSOCIATES, INC. IN JULY, 2001.
 2. THE EXISTING FEATURES AND CONTOURS SHOWN HEREON ARE BASED ON FIELD RUN TOPOGRAPHY PERFORMED BY FREDERICK WARD, ASSOCIATES IN JULY, 2001.
 3. THERE IS NO 100 YEAR FLOODPLAIN ON SITE
 4. THERE ARE NO WETLANDS ON SITE
 5. THERE ARE NO HISTORIC SITES ON THE SUBJECT PARCEL

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/6/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/1/04
DIRECTOR DATE

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	K VALUE	WOOD SUITA	HABIT	SOIL GROUP
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	.17	N/A	N/A	N/A
SfB2	SASSAFRAS GRAV. SANDY LOAM, 1% TO 5% SLOPES, MODER. ERODED	.20	7	G	B
SfC2	SASSAFRAS LOAM, 5% TO 10% SLOPES, MODERATELY ERODED	.28	8	G	B
SfD2	SASSAFRAS LOAM, 10% TO 15% SLOPES, MODERATELY ERODED	.28	8	G	B

HOWARD COUNTY SOILS MAP NO. 30

NOTE:
THIS SHEET FOR FOREST STAND DELINEATION - FOREST CONSERVATION ONLY. SEE SHEET 2 FOR LAYOUT AND GEOMETRY.

NO. REVISION DATE

FOREST STAND DELINEATION AND FOREST CONSERVATION PLAN
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226
SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: 1"=30'
W.O. NO.: 2017069

OWNER/DEVELOPER
DORSEY RUN ROAD, LLC
7916 DORSEY RUN ROAD
JESSUP, MARYLAND 20794

8 SHEET OF 8

GENERAL NOTES

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications, if applicable.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor is to notify the following utilities or agencies at least five days before starting work on these drawings:
 - Miss Utility: 1-800-257-7777
 - Verizon: 410-754-6281
 - Howard County Bureau of Utilities: 313-2366
 - AT&T Cable Location Division: 303-3553
 - B.G. & E. Co. Contractor Services: 850-4620
 - B.G. & E. Co. Underground Damage Control: 787-4620
 - State Highway Administration: 531-5533
- Site analysis:
 - Area of parcel: 2.044 Ac.
 - Present zoning: B1 (Per 2/2/2004 Comp. Rezoning Plan)
 - Use of structure: Dry Cleaning (2000sf), Take-Out Restaurant (5000sf), Bank (2000sf), Professional/General Office (5376sf)
 - Building area: 17376 sf
 - Disturbed area: 89,036 sf or 2.04 Ac.
 - Building coverage on site: 0.39 Ac. or 19 % of gross area
 - Paved parking lot/area: 0.67 Ac. or 32 % of gross area
 - Area of landscape island: 0.06 Ac. = 2,517 sf
 - There are no steep slopes on site.
 - Cut: 149 CY Fill: 4,473 CY
- Project background:
 - Location: Jessup, Md.; Tax Map 43, Block 21, Parcel 246
 - Subdivision: N/A
 - Section/Area: N/A
 - Site Area: 2.044 Acres
 - DPZ references: Variance Petition 00-47V
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to start of work.
- Any damage to public right-of-ways, paving, or existing utilities will be corrected at the contractor's expense.
- Existing utilities located from Road Construction Plans, Field Surveys, Public Water and Sewer Extension Plans and available record drawings. Approximate location of existing utilities are shown for the contractor's information. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- All reinforced concrete for storm drain structures shall have a minimum of 28 days strength of 3,500 p.s.i.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- Estimates of earthwork quantities are provided solely for the purpose of calculating fees.
- Soil compaction specifications, requirements, methods and materials are to be in accordance with the recommendations of the project Geotechnical Engineer. Geotechnical Engineer to confirm acceptability of proposed paving section, based on soil test prior to construction.
- All storm drain pipe bedding shall be Class 'C'.
- The existing topography is taken from field run survey with two foot contour intervals prepared by Frederick Ward & Associates, Inc. dated 5/22/01, and topographic survey prepared by others. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System.
- A noise study is not required for this project.
- All paving to be P-2 paving per Howard County.
- All curb and gutter to be Howard County Standard concrete Detail 3.01 unless otherwise specified.
- Contractor responsible to construct all handicap parking and handicap access in accordance with current ADA requirements.
- Where drainage flows away from curb, contractor to reverse the gutter pan.
- All elevations are to finished/bottom of curb unless otherwise noted.
- All dimensions are to face of curb unless otherwise noted.
- Public Water available along Dorsey Run Road (12" Water) Contract #454-W;
- Public Sewer available along Dorsey Run Road (8" Sewer) Contract #612-S.
- Stormwater Management:
 - WQV, Rev, and Cpv are being provided by a proposed infiltration system.
 - Pre-Treatment is provided by a proposed stormceptor.
- All exterior lighting shall conform to Zoning Regulations Section 134.
- Building to have inside Water Meter setting.
- Traffic Impact Study prepared by The Traffic Group, dated August, 2002.
- Geotechnical report prepared by Herbst Benson Associates, Inc., dated March, 2002, and a supplemental infiltration testing report dated April 5, 2002.
- Lighting will be provided per detail shown on sheet 5.
- There are no wetlands on-site.
- Stormwater management system to be infiltration. The facility will be privately owned and maintained.
- This plan is subject to BA-00-47V, a variance petition to Section 123.D.2.(A) and Section 123.D.2.(C) of the Zoning Regulations, approved May 8, 2001, to reduce setback from Dorsey Run Road Right-of-Way from 30 feet to 10 feet for parking and from Maryland Route 175 Right-of-Way from 30 feet to 24 feet for parking and to reduce structure and use setback from a residential district from 150 feet to 30 feet subject to the following conditions:
 - The variances shall apply only to the proposed development as described in the petition, and as depicted on the variance plans entitled "Exhibit to Accompany Variance Petition - Dorsey Run Road" submitted on January 8, 2001, or as may be revised by the Board, and not to any other activities, uses, or structures on the Property.
 - The Petitioner shall establish and maintain a landscaped berm along the southwest and northwest buffers. The berm shall be three to four feet high, and shall be landscaped on top with a Type C (Heavy Buffer) landscape edge which is expressly in addition to the berm.
 - The Petitioner shall construct and maintain a masonry enclosure around the trash receptacle area which shall be of sufficient height to screen this area, shall have a durable opaque gate, and shall be constructed of masonry materials which shall be similar to or compatible with the materials used for the building.
- * Expired May 8, 2003. The property was rezoned to B-1 therefore the variances are not necessary and the conditions attached to their approval are not applicable.
- Financial surety for the required landscaping has been posted as part of the developer's agreement in the amount of \$19,830.00 for the required 34 shade trees, 35 evergreens and 146 shrubs.
- Fee-in-lieu of afforestation is proposed in the amount of \$6,751.80, for 0.31 acre.
- The deadline to obtain a building permit for the proposed improvements is May 8, 2003 (2 years from the date of approval of the Decision and Order for BA-00-47V) and the deadline for "substantial completion" of the construction is May 8, 2004 (3 years).
- This plan is subject to the Fifth Edition of the Subdivision Regulations and the Amended Zoning Regulations, per Council Bill 75-2003.

SITE DEVELOPMENT PLAN

DORSEY RUN CENTER

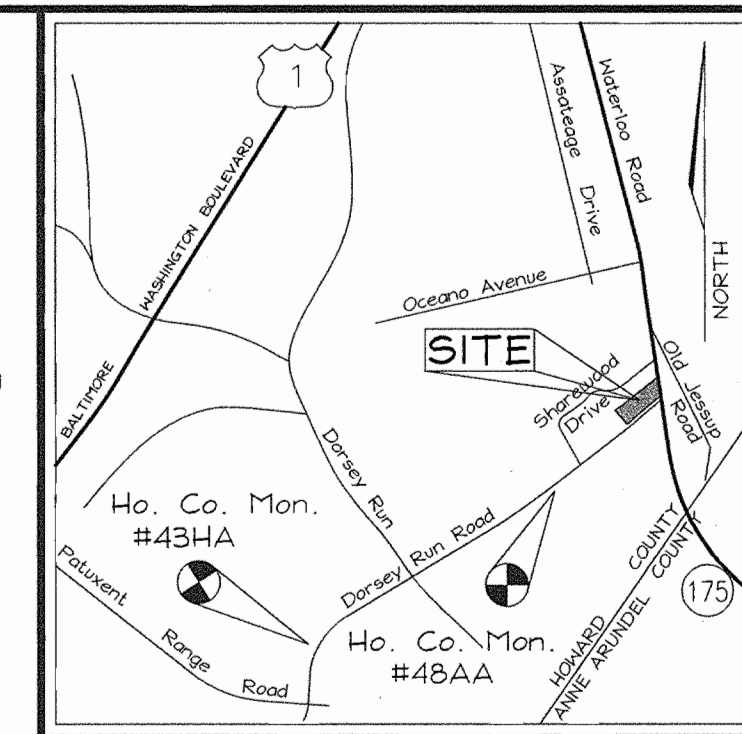
LEGEND

- Existing Contour: -382
- Proposed Contour: -382.50
- Existing Spot Elevation: +82.53
- Proposed Spot Elevation: +82.53
- Direction of Flow: [Symbol]
- Existing Trees to Remain: [Symbol]
- Light Poles: [Symbol] Single Overhead [Symbol] Double Overhead
- Concrete: [Symbol]

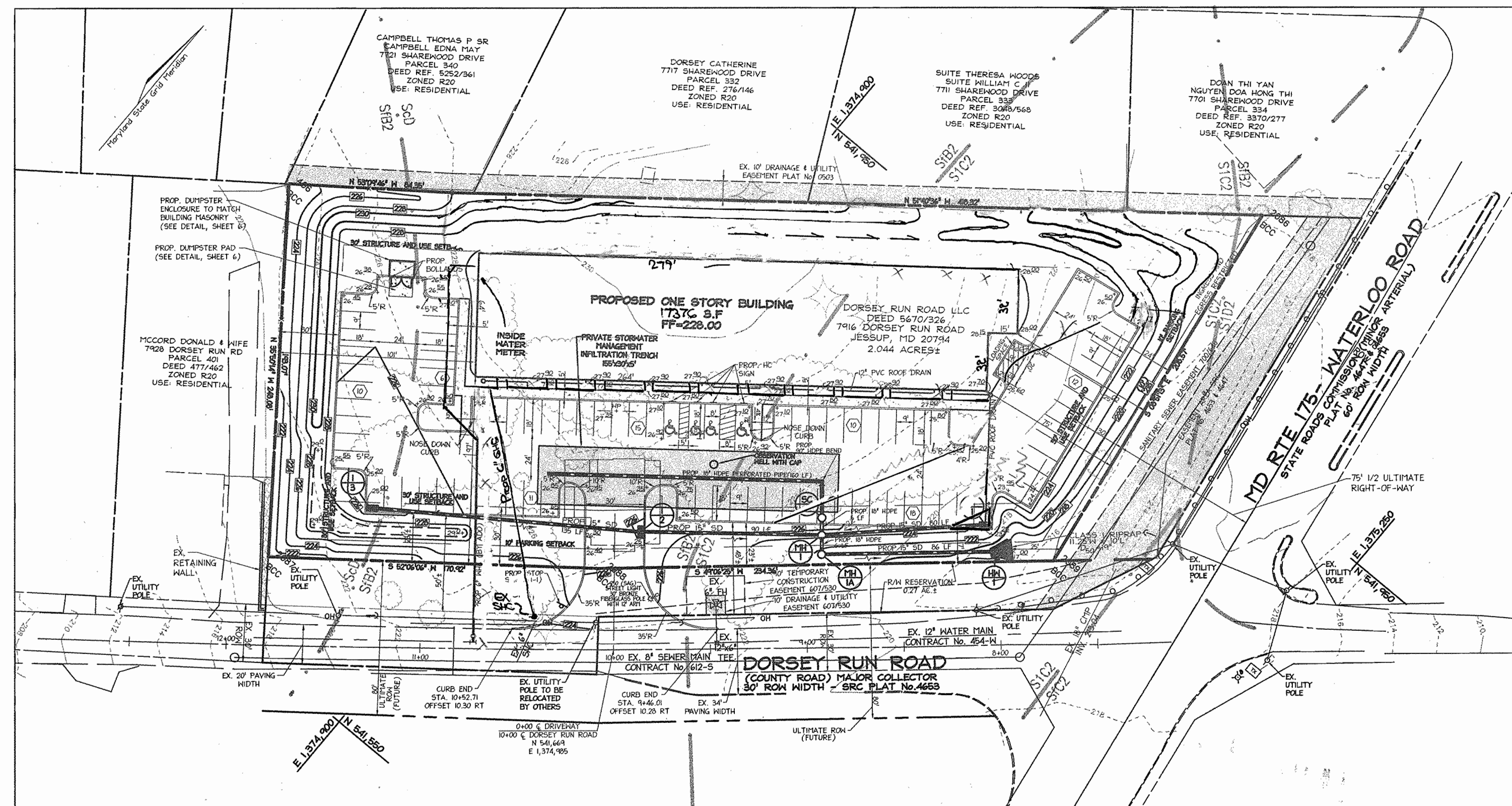
BENCHMARKS

HOWARD COUNTY BENCHMARK 43HA
N 540761.716 E 1373837.365 ELEV. 224.907

HOWARD COUNTY BENCHMARK 48AA
N 539314.900 E 1371539.251 ELEV. 240.809



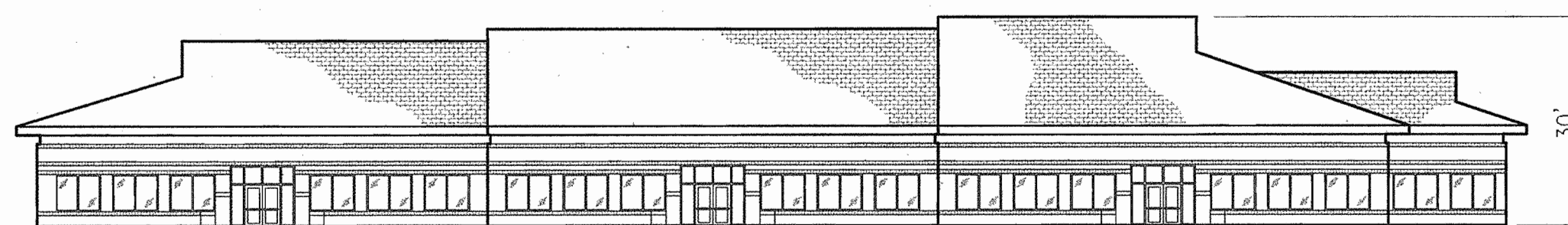
VICINITY MAP
SCALE: 1"=2000'



LOCATION MAP
SCALE: 1"=50'

SHEET INDEX

DESCRIPTION	SHEET NO.
Cover Sheet	1 of 8
Site Layout and Grading Plan	2 of 8
Sediment and Erosion Control Plan	3 of 8
Sediment and Erosion Control and Lighting Details	4 of 8
Storm Drain Drainage Area Map, Soil Borings and Site Details	5 of 8
Storm Drain, Water and Sewer Profiles	6 of 8
Site Landscape Plan	7 of 8
Forest Stand Delineation and Forest Conservation Plan	8 of 8



FRONT ELEVATION
NOT TO SCALE

OWNER/DEVELOPER

Dorsey Run Road LLC
3251 Gamber Road
Finksburg, MD 21048
410-795-8200

ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
246	7916 DORSEY RUN ROAD

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
N/A	N/A	246
DEED REF. 5670/326	GRID NO. 21	ZONE B1*
	TAX/ZONE ELECT. 43	DIST. 6th
	CENSUS TR. 6069.01	
WATER CODE: B02	SEWER CODE: 3020000	

* Per 2/2/2004 Comp. Rezoning Plan

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3/30/04

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/1/04

DIRECTOR
 DATE: 4/15/04

PARKING TABULATION

Net Leasable Area	REQUIRED
Dry Cleaning 2000s.f. @ 5 spaces/1000s.f.	10 spaces
Take-Out Restaurant 6000s.f. @ 6 spaces/1000s.f.	30 spaces
Bank 2000s.f. @ 5 spaces/1000s.f.	10 spaces
Professional/General Office 5376s.f. @ 3.3 spaces/1000s.f.	28 spaces
Total Parking Required:	78 spaces
Total Parking Provided:	82 spaces*

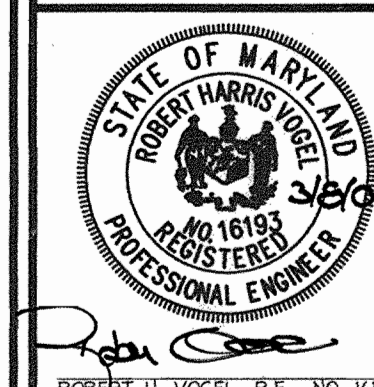
* Total spaces provided includes 3 regular and 1 van accessible handicapped spaces.

NO.	REVISION	DATE
1	Rev Bug Grades & Utilities	8/1/04

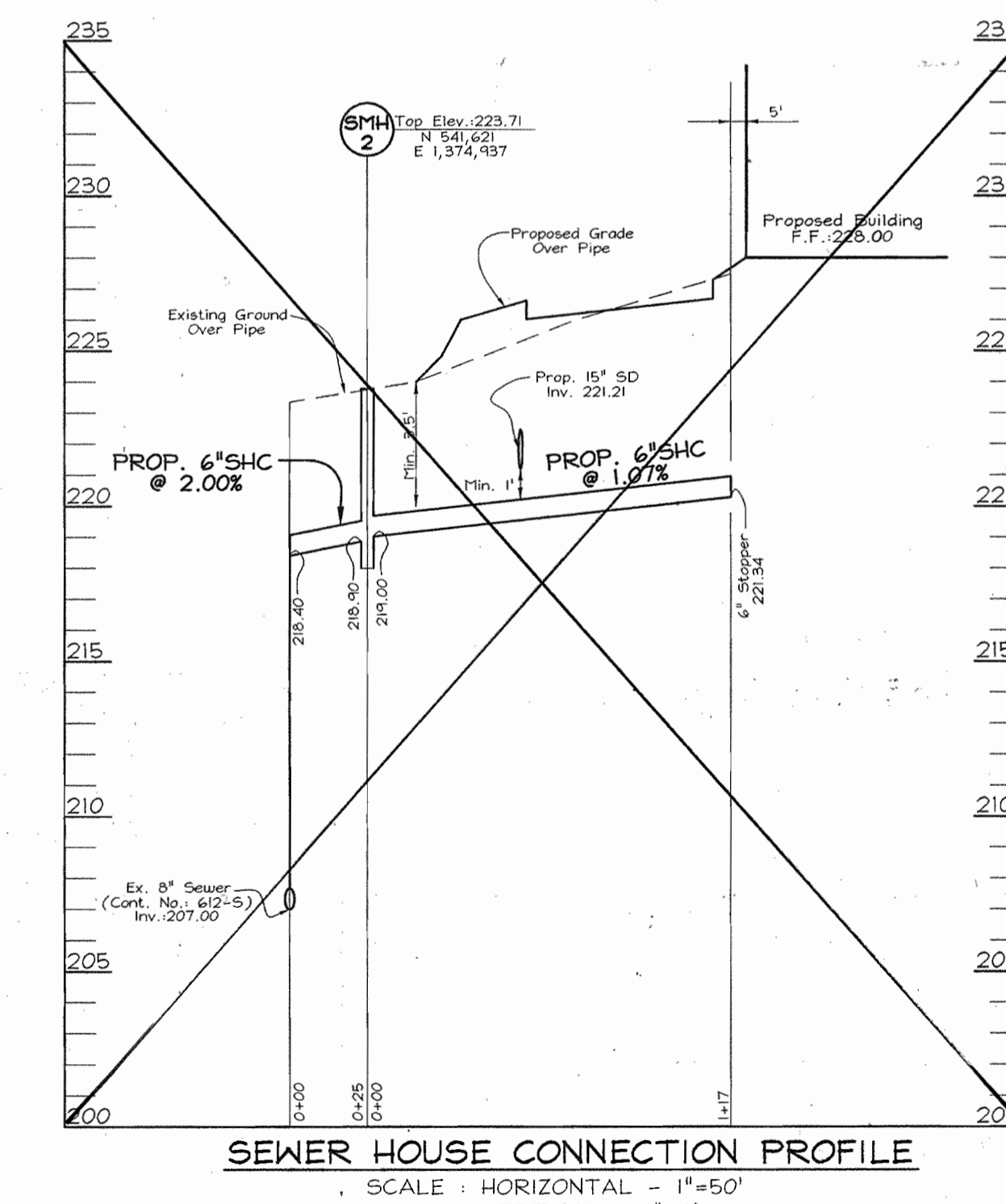
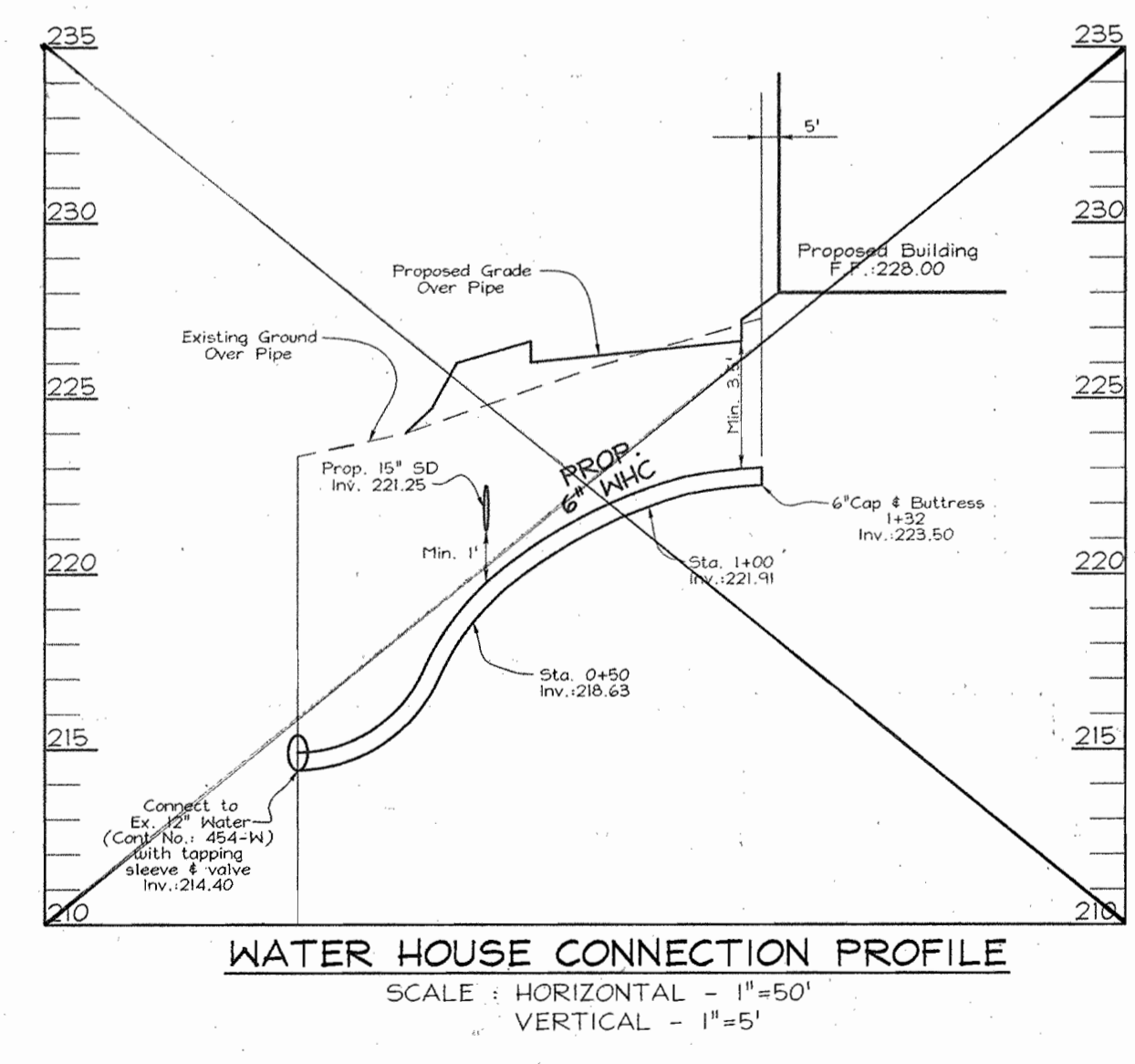
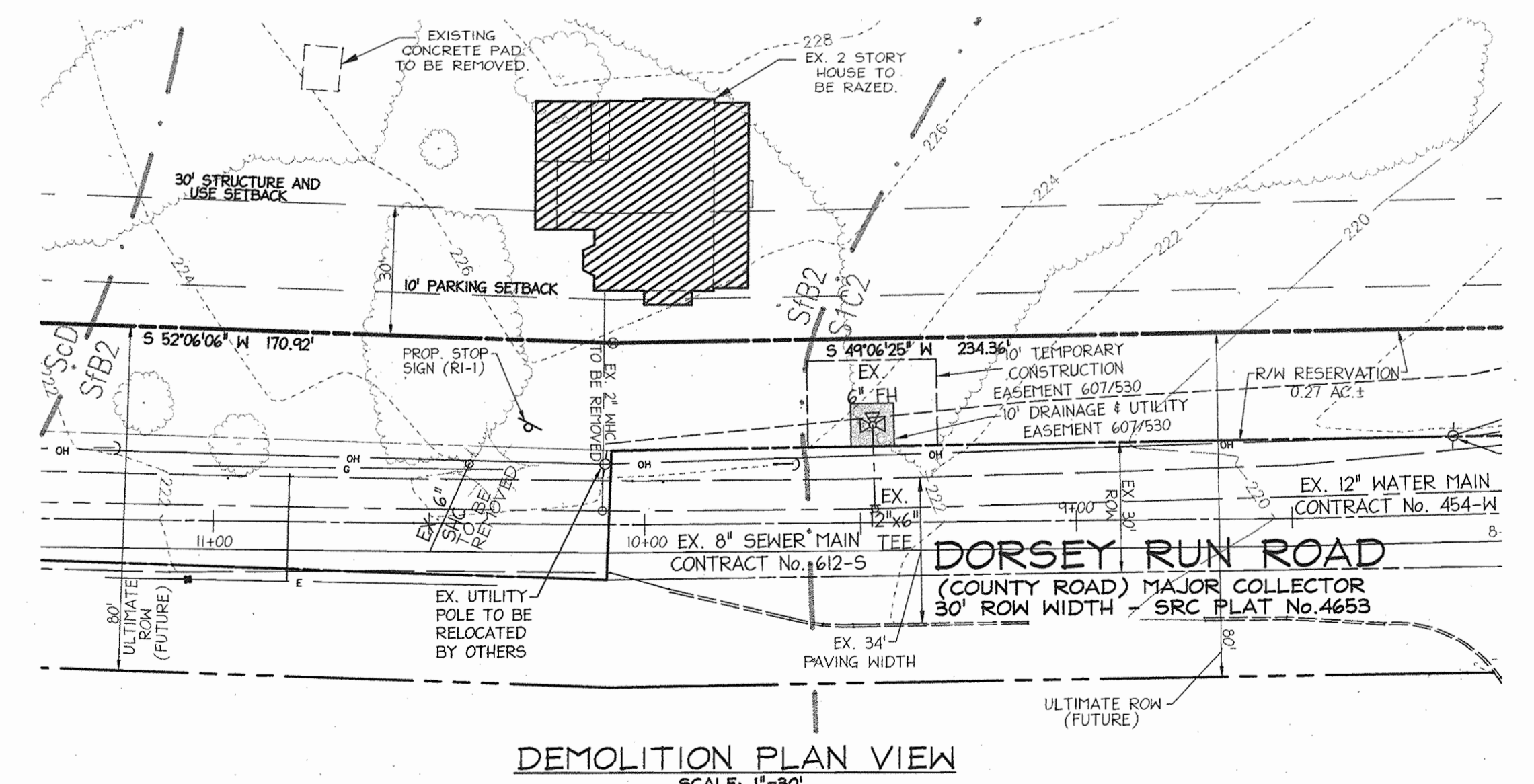
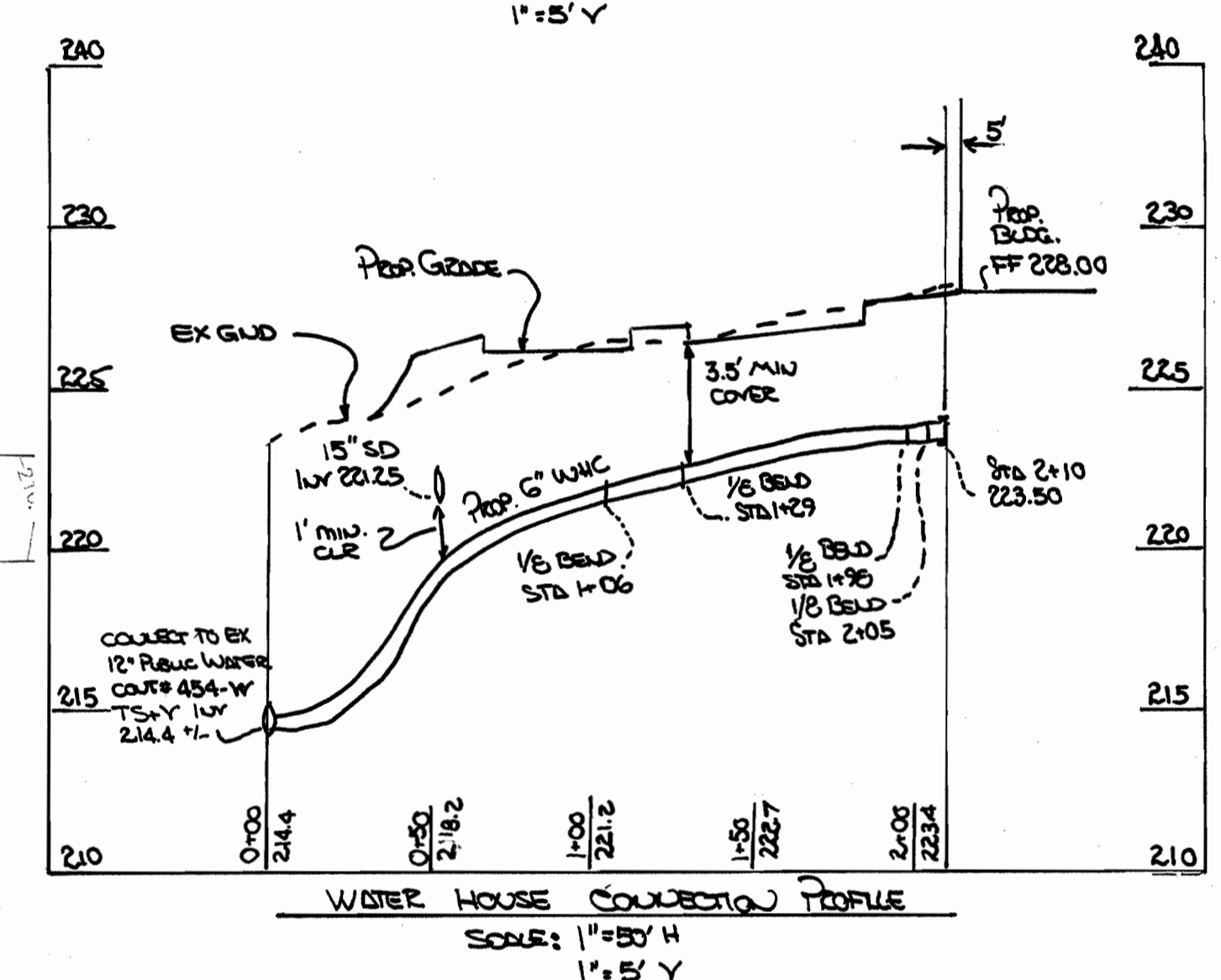
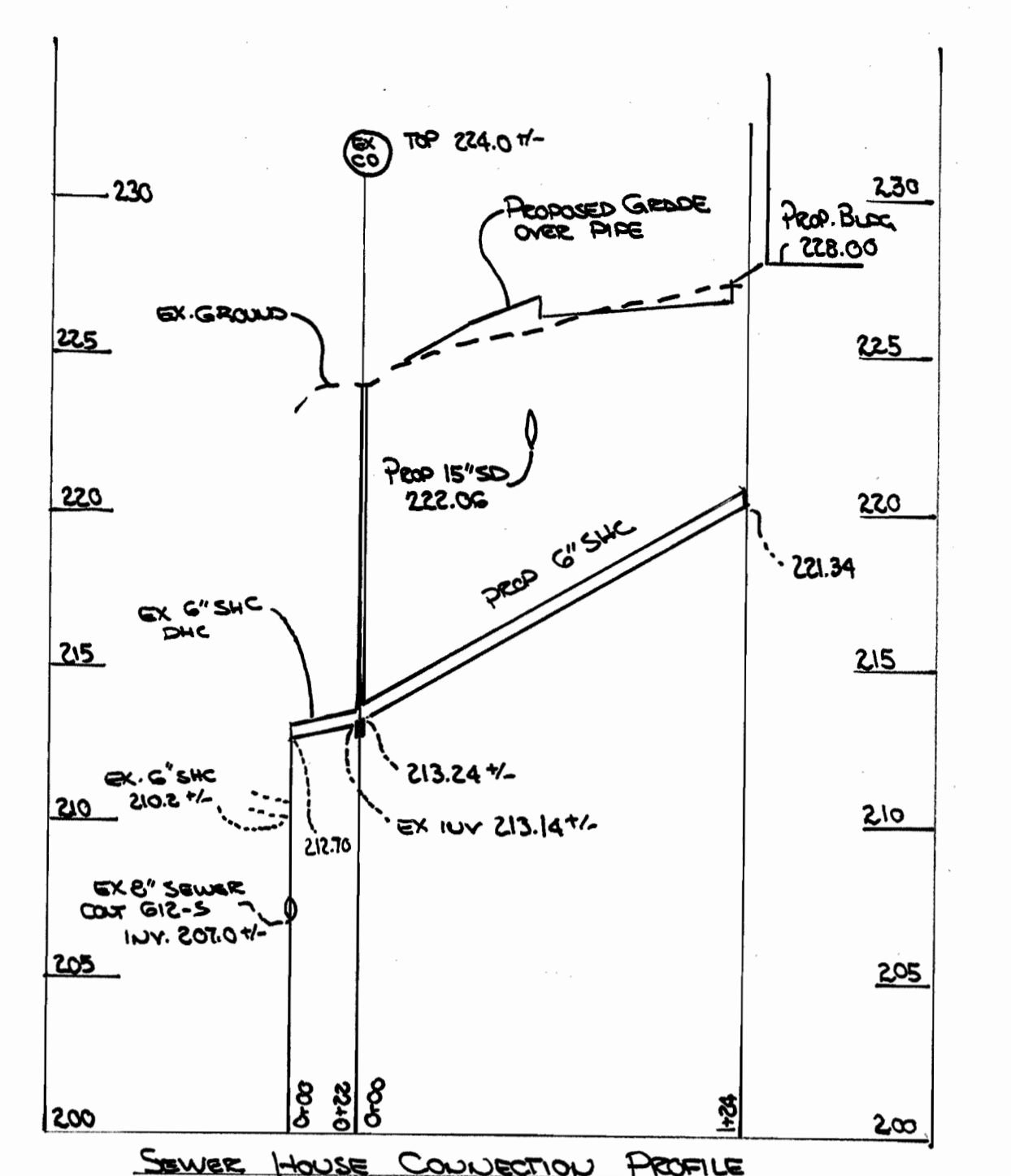
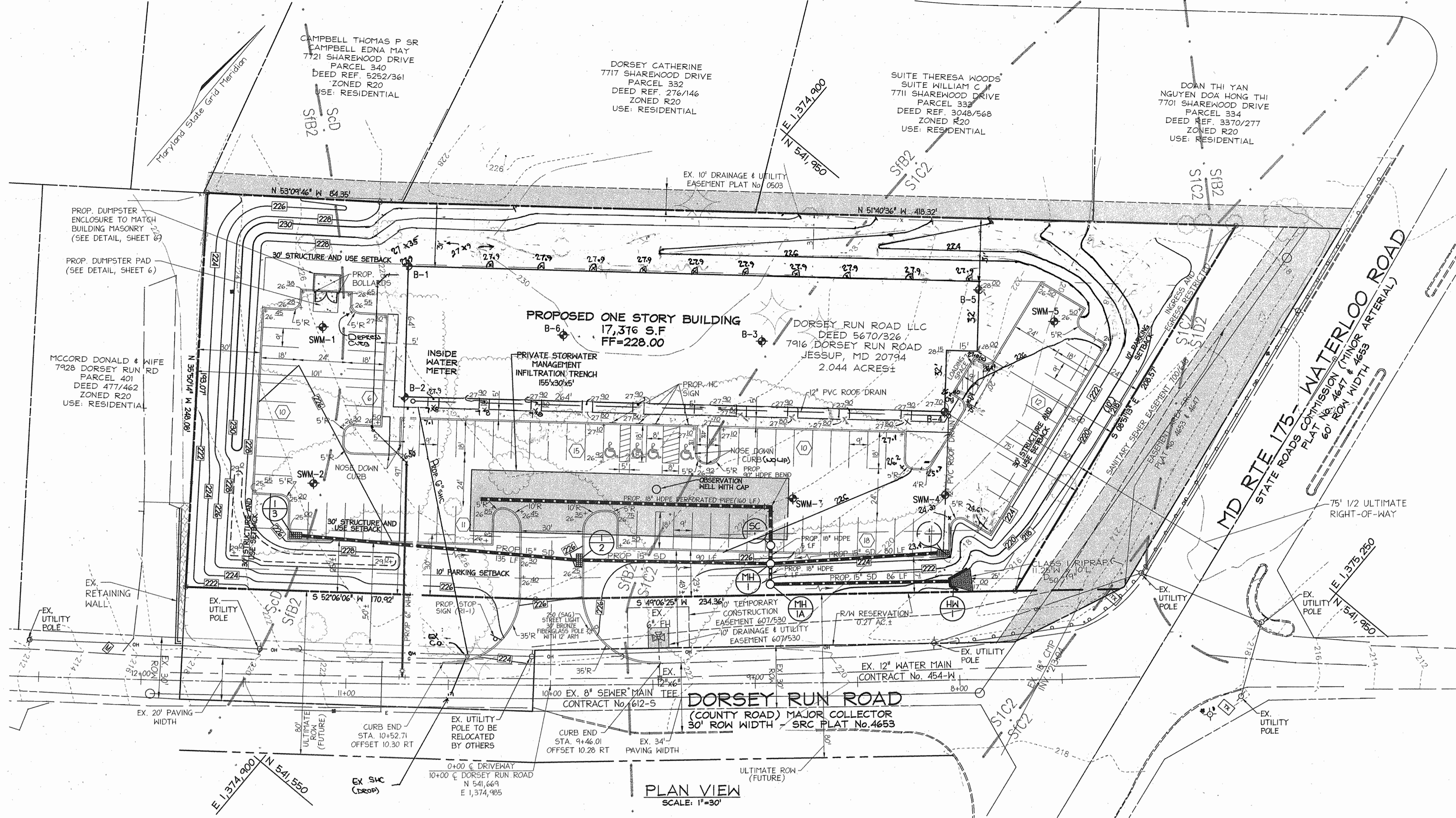
COVER SHEET
SITE DEVELOPMENT PLAN
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
 ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226
 SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia



DESIGN BY: MMR
 DRAWN BY: JAJ
 CHECKED BY: RHV
 DATE: MARCH 2004
 SCALE: AS SHOWN
 W.O. NO.: 2017069



1		Re-use Block Grades & Utilities	8/1/04
NO.	REVISION	DATE	

SITE LAYOUT, GRADING AND DEMOLITION PLAN
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21
6TH ELECTION DISTRICT

PARCEL '246'
HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
ENGINEERS ARCHITECTS SURVEYORS
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: 1"=30'
W.O. NO.: 2017069

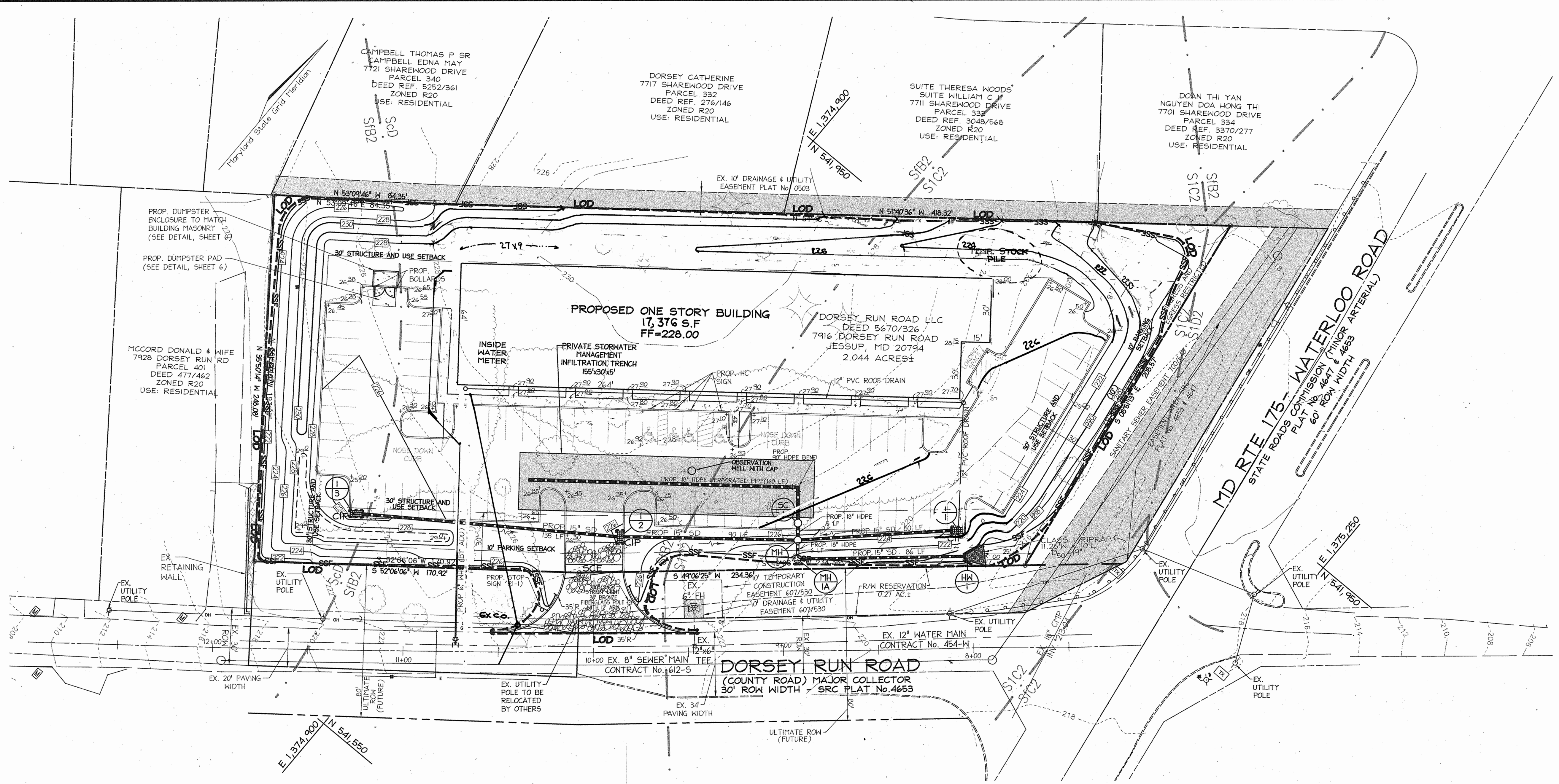
2 OF 8

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/30/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/04
DIRECTOR DATE



LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING GUY WIRE
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING BOLLARD
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	EXISTING SD MANHOLE
	EXISTING STORM DRAIN
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING VEGETATION (APPROXIMATE LOCATION)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	SILT FENCE
	SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	EXISTING PAVING TO BE REMOVED AND REPLACED
	PROPOSED P-2 PAVING
	PROPOSED BUILDING ADDITION
	CURB INLET PROTECTION
	EROSION CONTROL MATTING

NO.	REVISION	DATE
1	Blue Grading, Utility Easements	8/1/04

SEDIMENT AND EROSION CONTROL PLAN
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
 ARCHITECTS Phone: 410-290-9550 Fax: 410-720-8226
 SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MPM
 DRAWN BY: JAJ
 CHECKED BY: RHV
 DATE: MARCH 2004
 SCALE: 1"=30'
 H.O. NO.: 2017069

3 SHEET OF 8

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION 3/30/04 DATE

 CHIEF, DIVISION OF LAND DEVELOPMENT 3/11/04 DATE
 DIRECTOR DATE

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

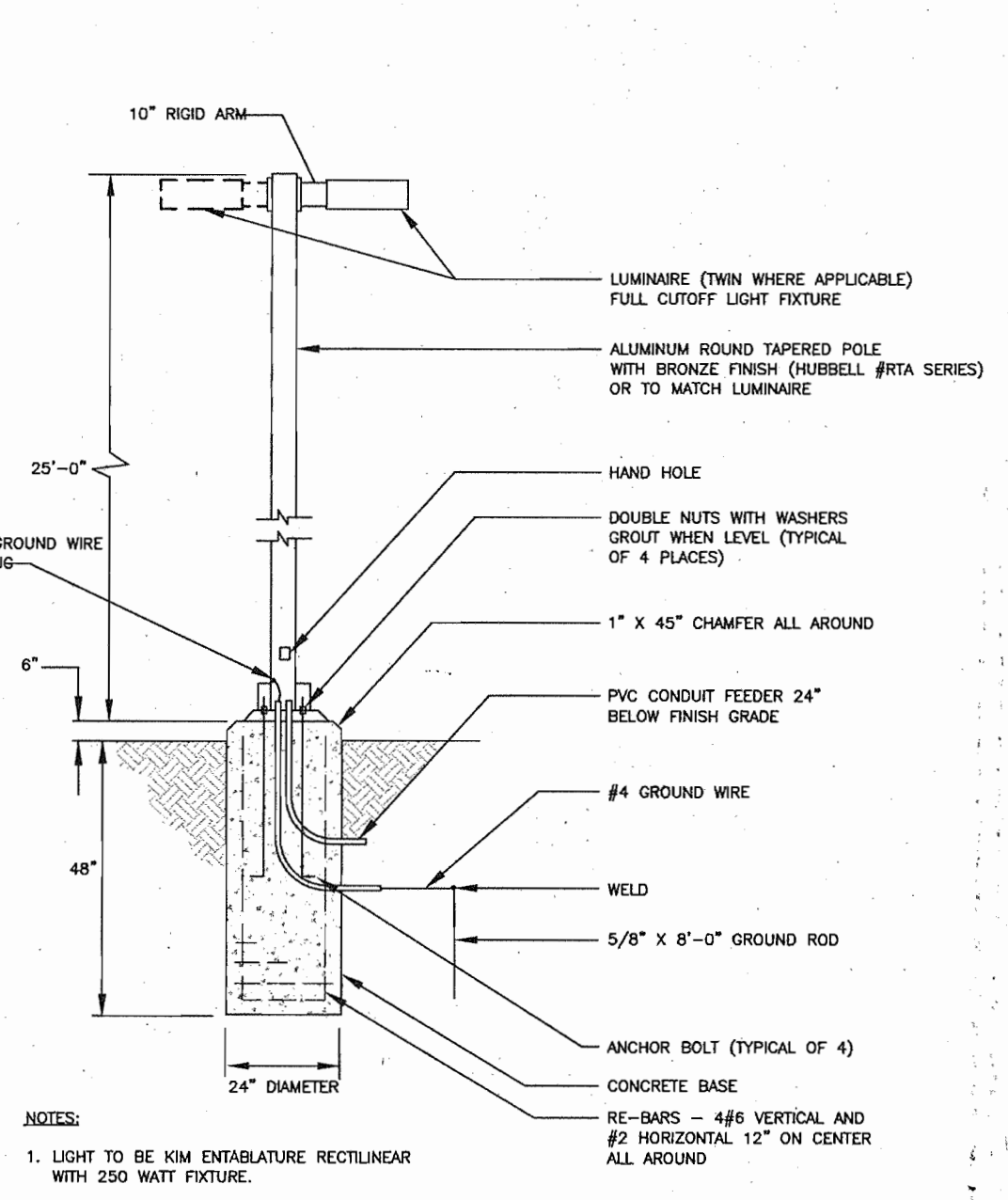
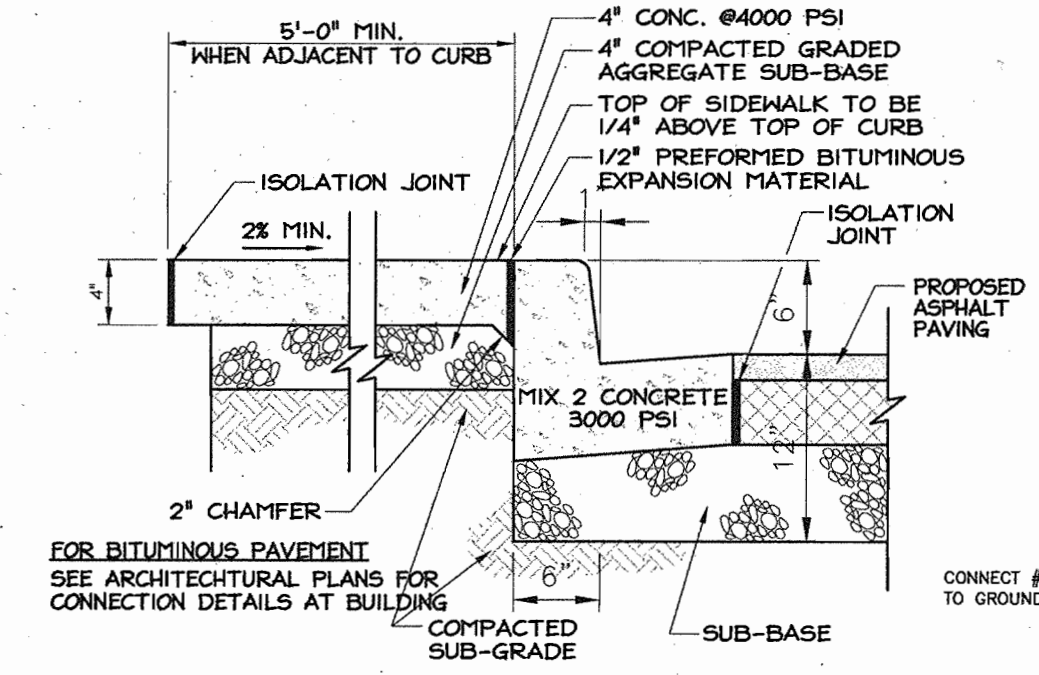
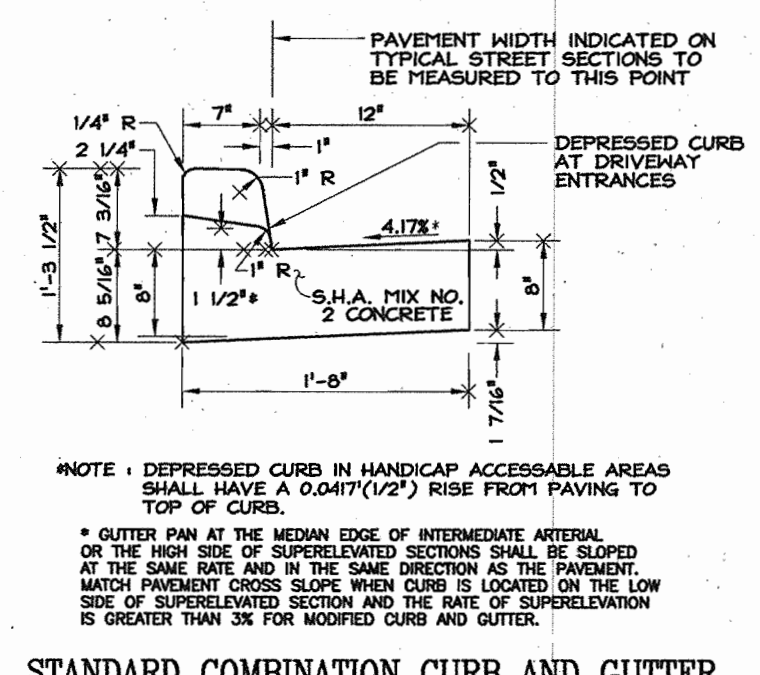
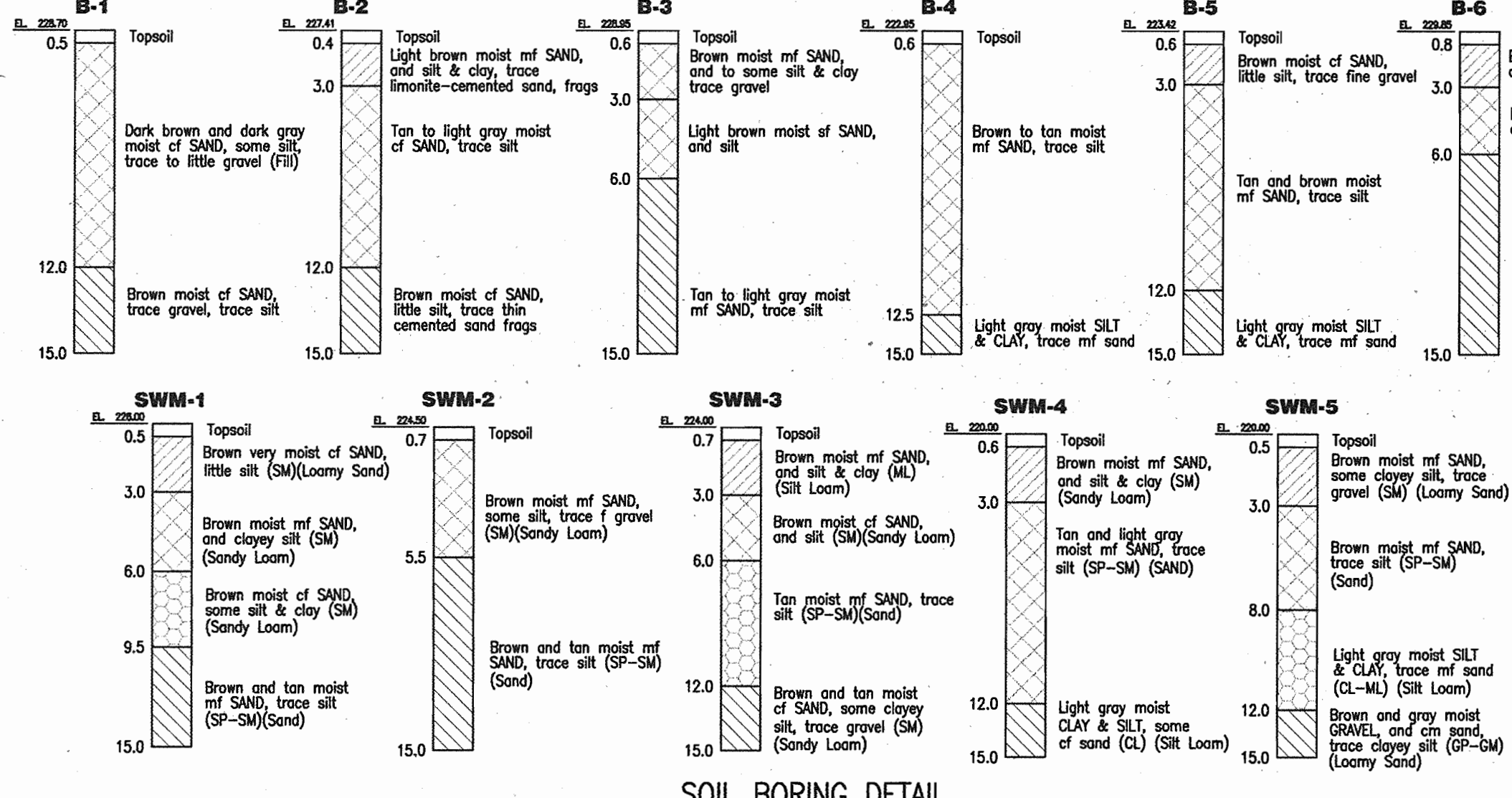
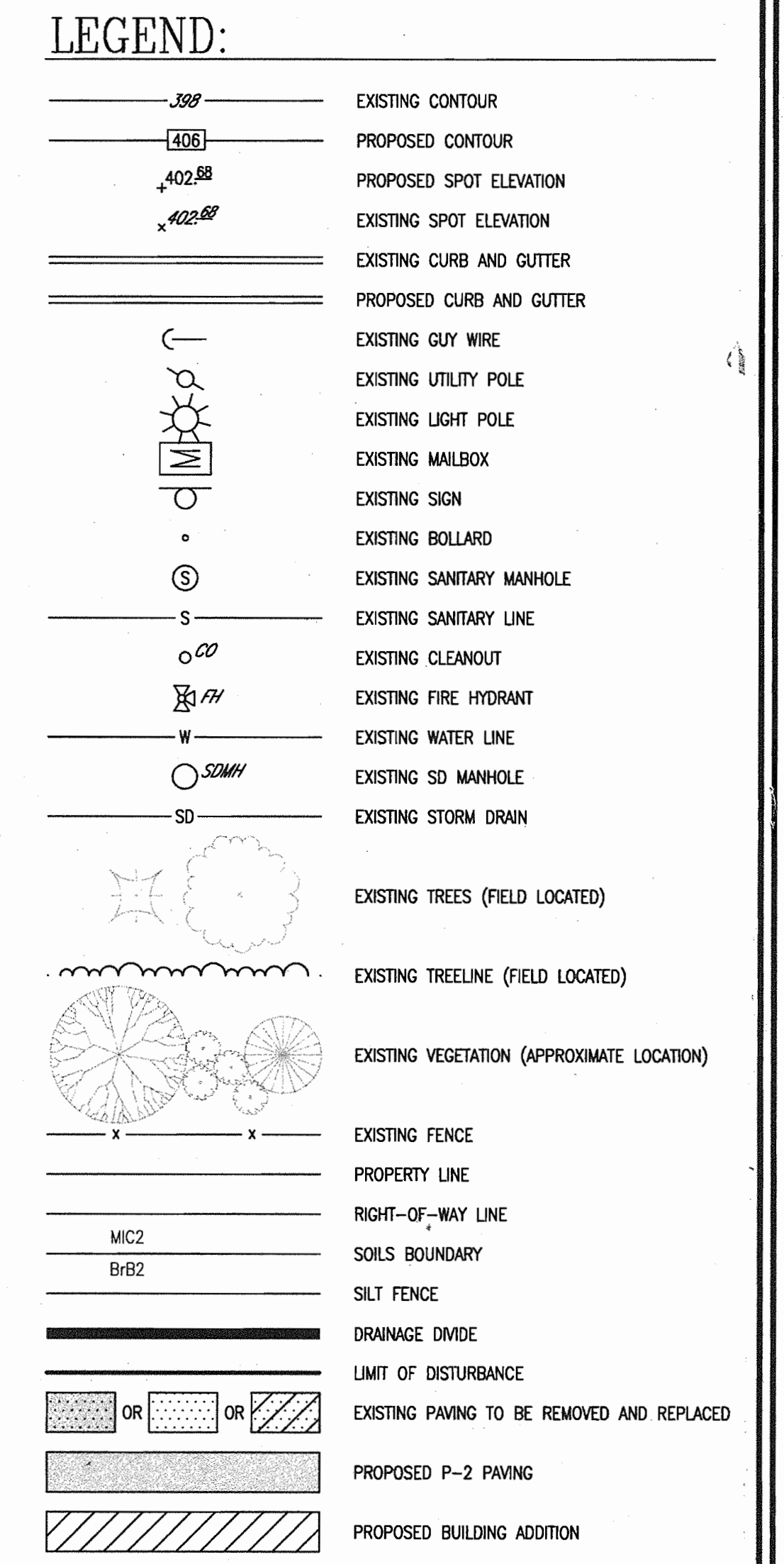
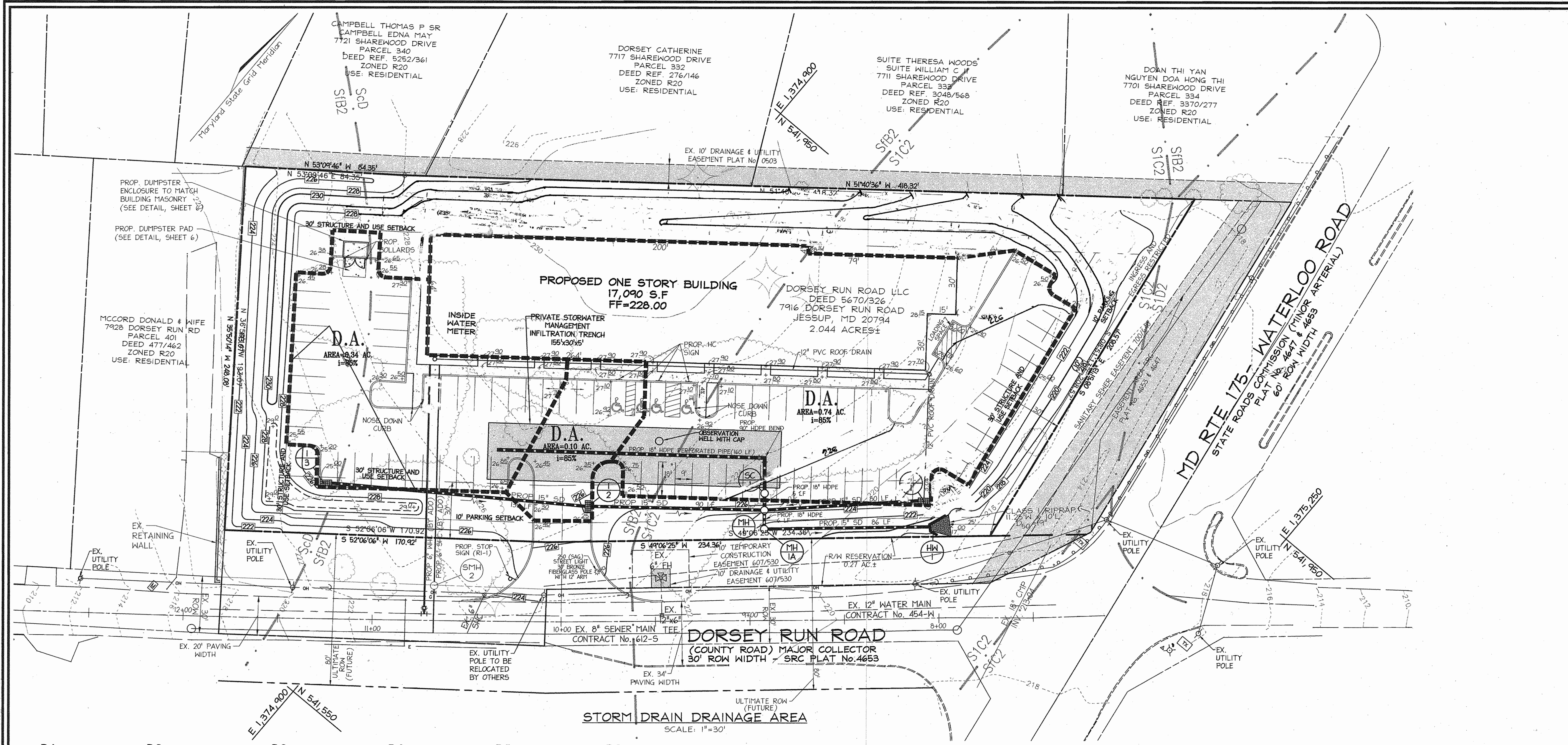
 JIM MUES 3/25/04 DATE
 USDA - NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

 JANET S. BEAN 3.9.04 DATE
 SIGNATURE OF DEVELOPER DATE

BY THE ENGINEER:
 I 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.

 ROBERT H. VOGEL 3/9/04 DATE
 SIGNATURE OF ENGINEER DATE



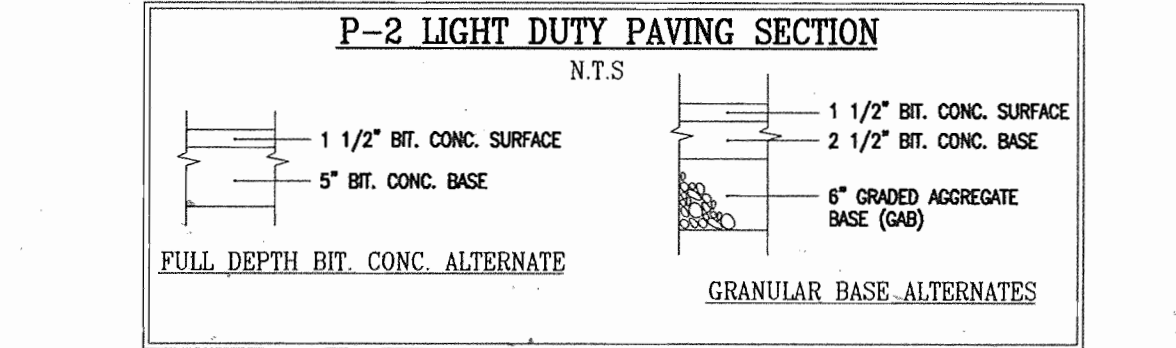
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/30/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/1/04
DIRECTOR DATE

STORMWATER MANAGEMENT SUMMARY TABLE		
REQUIREMENT	VOLUME REQUIREMENT	NOTES
WQv	0.139 Ac.-ft. (6055 c.f.)	Infiltration
Rev	0.036 Ac.-ft. (1569 c.f.)	Infiltration
Cpv	0.199 Ac.-ft. (8668 c.f.)	Infiltration, using truncated hydrograph
OP ₀	Not Required	
OP ₁₀₀	Not Required	



1. *Revised Growing Bldg. Utilities*

NO.	REVISION	DATE

STORM DRAIN DRAINAGE AREA MAP, SOIL BORINGS AND SITE DETAILS
DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 6TH ELECTION DISTRICT PARCEL '246'
HOWARD COUNTY, MARYLAND

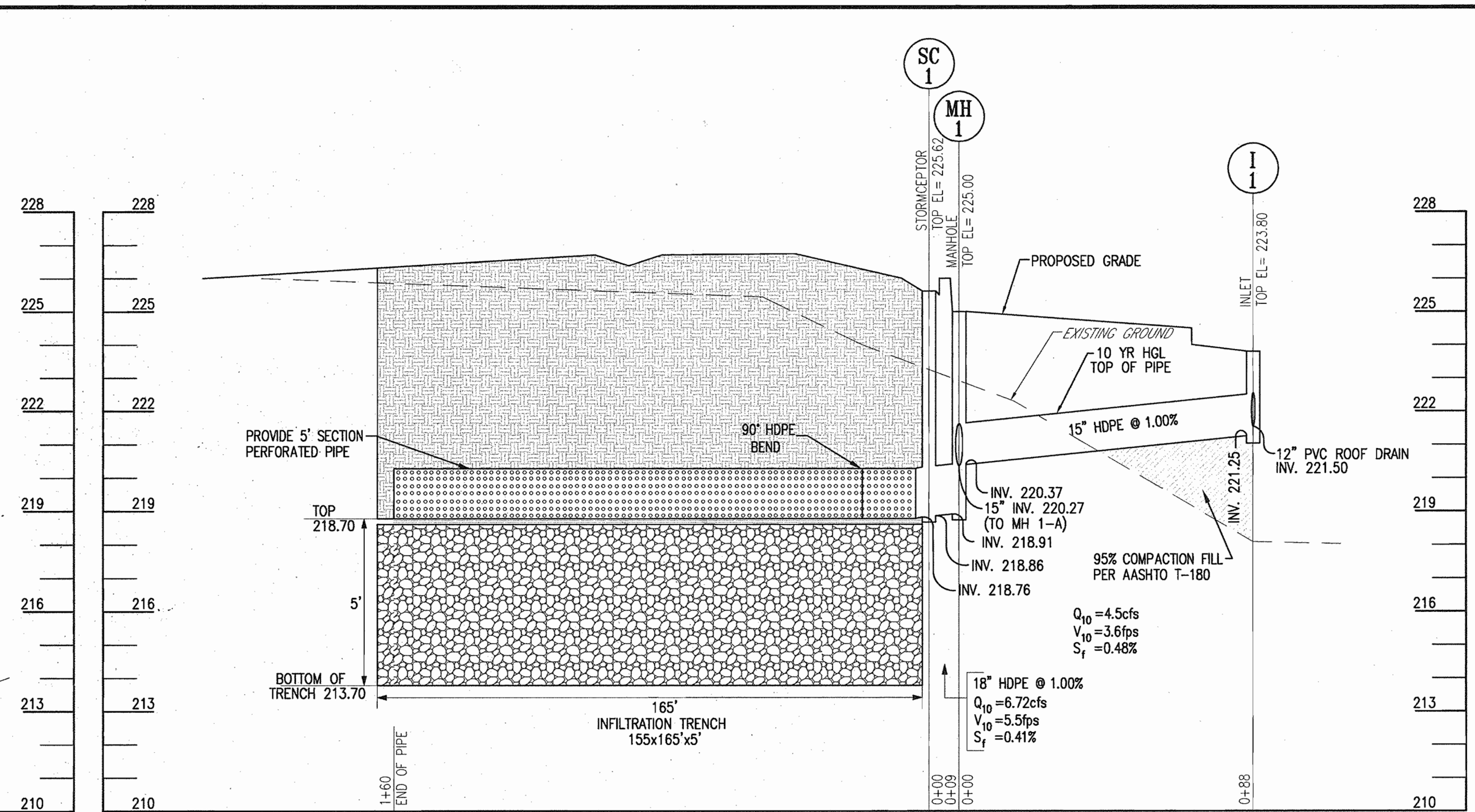
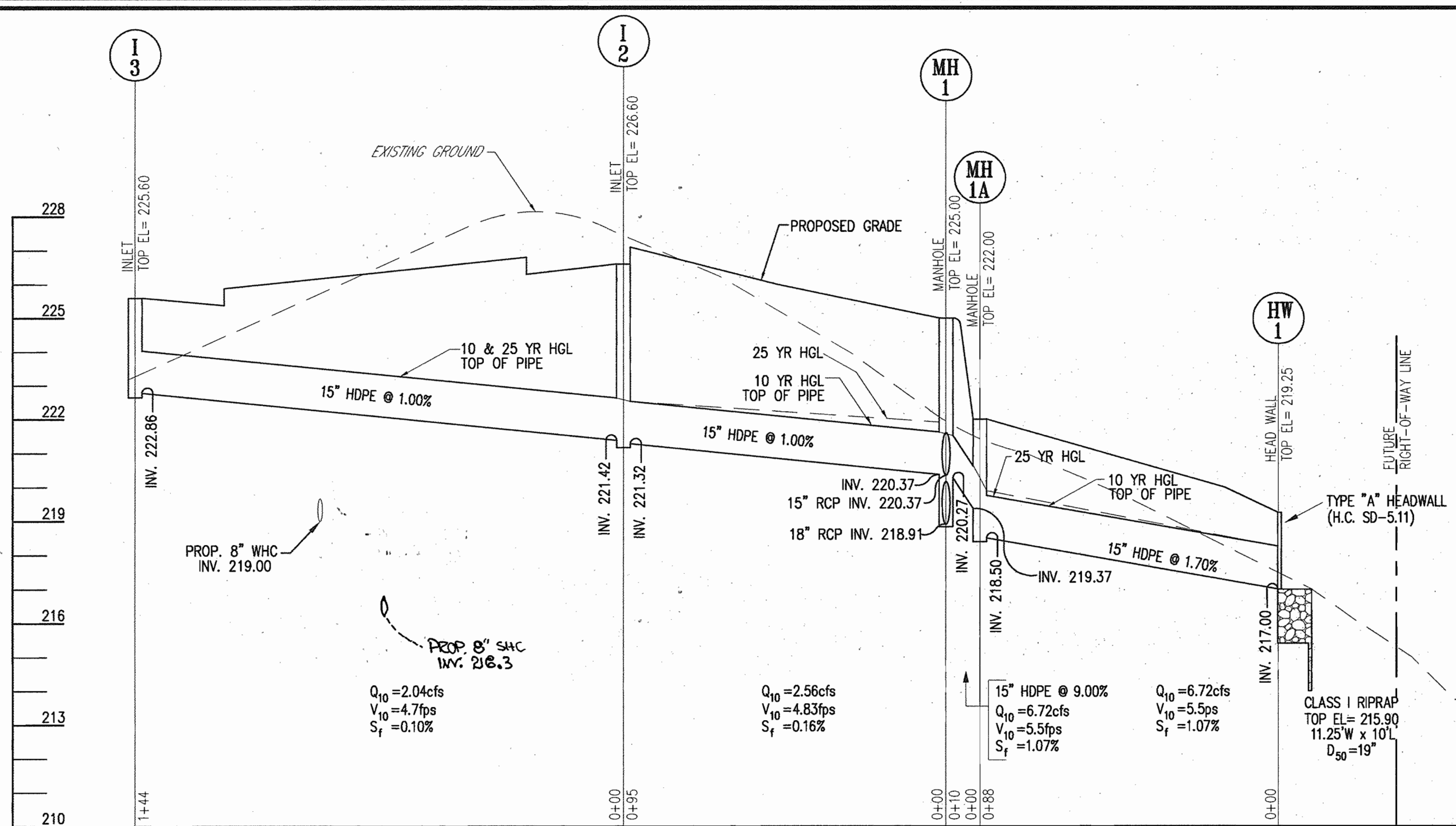
FREDERICK WARD ASSOCIATES, INC.
ENGINEERS ARCHITECTS SURVEYORS
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
DRAWN BY: JAJ
CHECKED BY: RHV
DATE: MARCH 2004
SCALE: 1"=30'
W.O. NO.: 207069

ROBERT W. VOGEL, P.E. NO. 1698

5 SHEET OF 8

K:\PROJECTS\2017069\ENGR\DWG\CD05.dwg Men Mar 01 11:47:01 2004 DC



Precast Concrete Stormceptor® Order Request Form
* TO BE INCLUDED ON SWM PLAN BY DESIGNER

CONTRACTOR INFORMATION
Name: _____
Address: _____
City: _____
State: _____
Zip Code: _____
Contact: _____
Phone: _____
Fax: _____

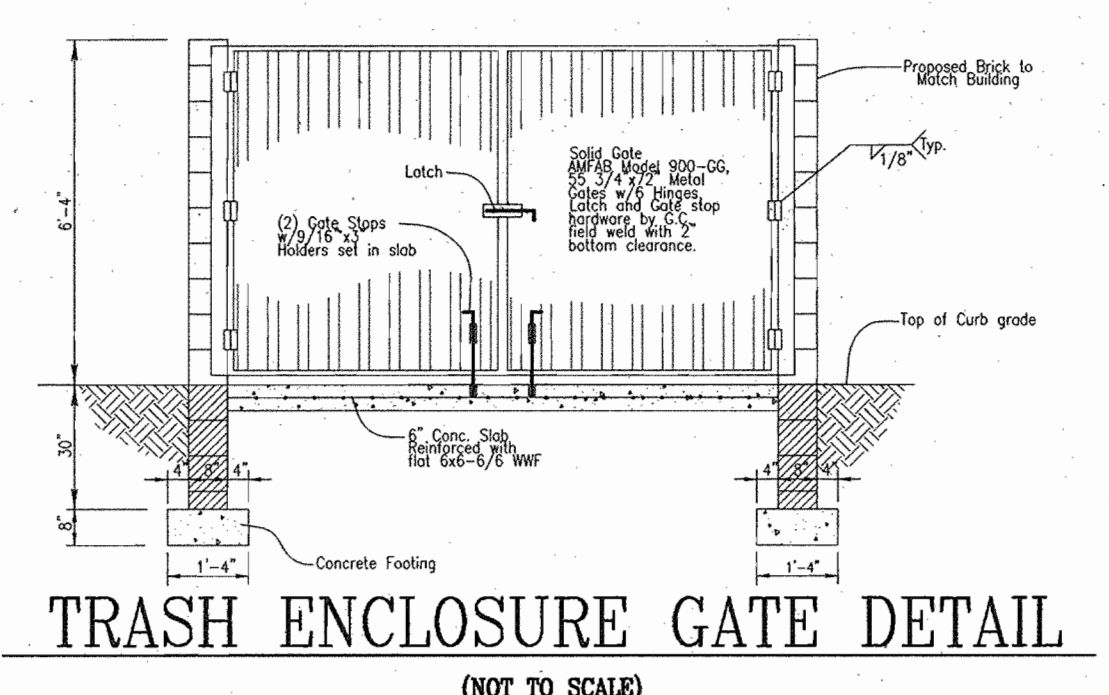
OWNER INFORMATION
Name: **DORSEY RUN ROAD LLC**
Phone: _____
Fax: _____

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

Stormceptor® Model	Insert Size	Manhole Number
STC	SINGLE INLET DISC	SC-1
900	<input checked="" type="checkbox"/> 3600	Top Elevation (ft) 225.62
1200	<input type="checkbox"/> 4800	Inlet Pipe Invert (ft) 218.86
1800	<input type="checkbox"/> 6000	Outlet Pipe Invert (ft) 218.76
2400	<input type="checkbox"/> 7200	Pipe Type 18" RCP
	MULTIPLE INLET DISC	Inlet Pipe Inside Diameter (ID) 18"
	CUSTOM	Inlet Pipe Outside Diameter (OD) -
		Outlet Pipe Inside Diameter (ID) 18"
		Outlet Pipe Outside Diameter (OD) -

Project Name: **DORSEY RUN ROAD**
 Approximate time frame of delivery (weeks): _____
 Delivery Address: Street **7916 DORSEY RUN ROAD**
 City: **JESSUP** State: **MARYLAND** Zip Code: **20794**
 Designer Company: **FREDERICK WARD ASSOCIATES**
 Designer Contact: **ROBERT H. VOGEL** Phone: **(410) 720-6900** Fax: **(410) 720-6226**

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR Hydro Conduit**
 ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)313-6389
 FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)313-6399



OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY STRUCTURE

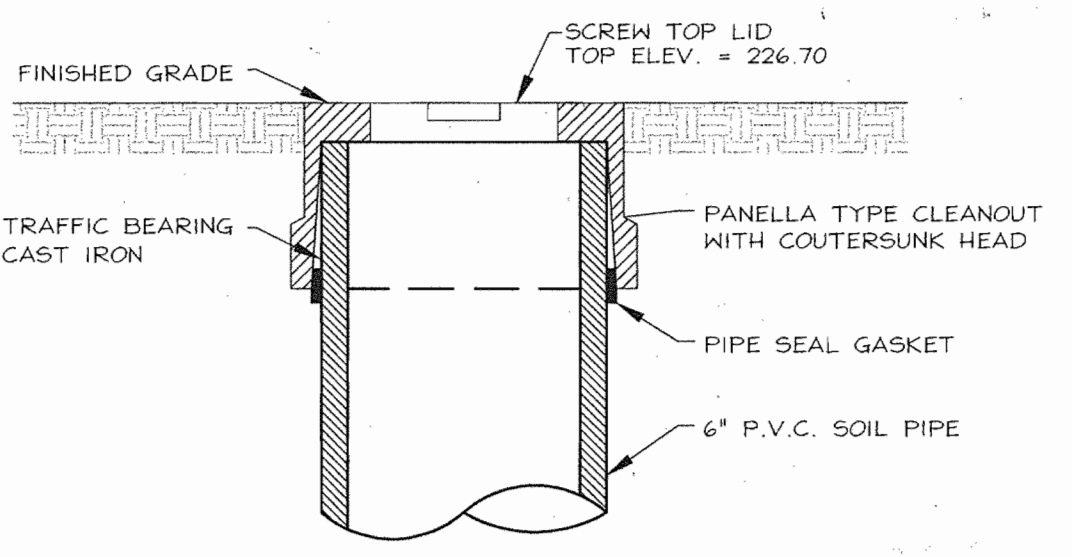
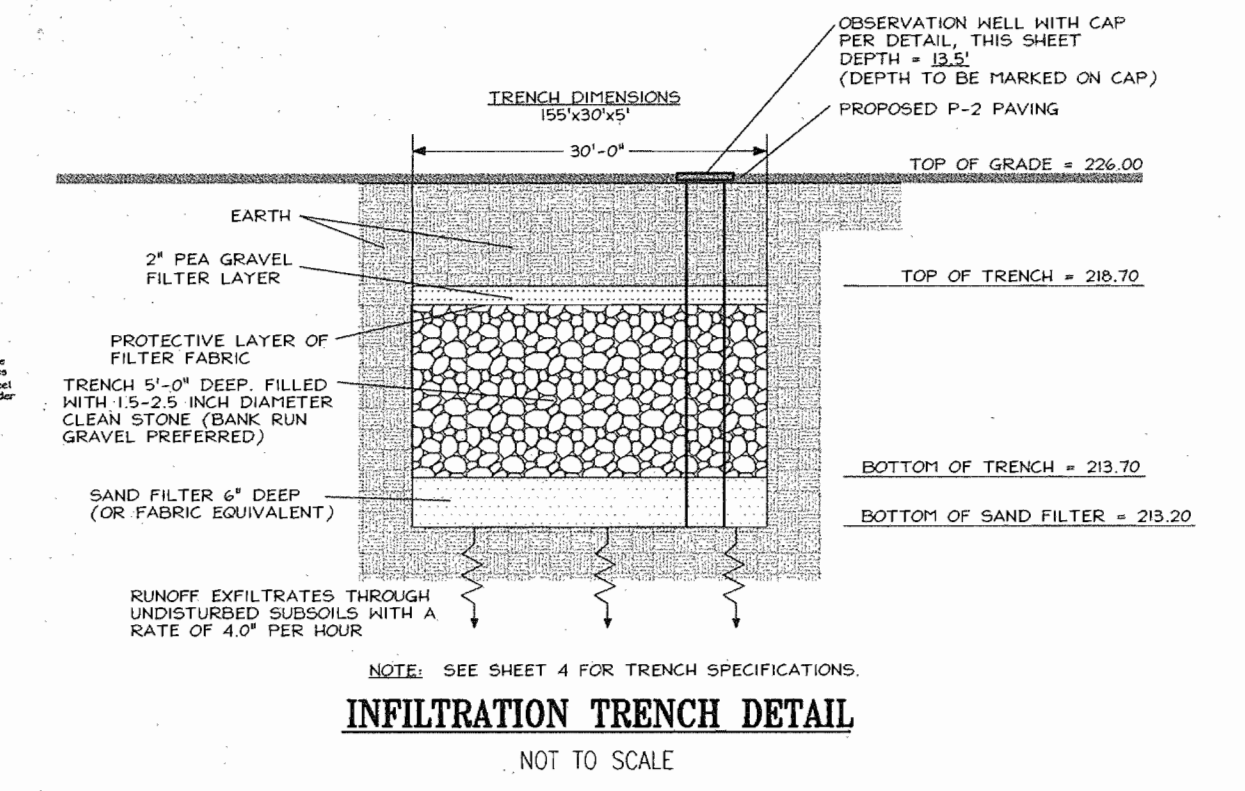
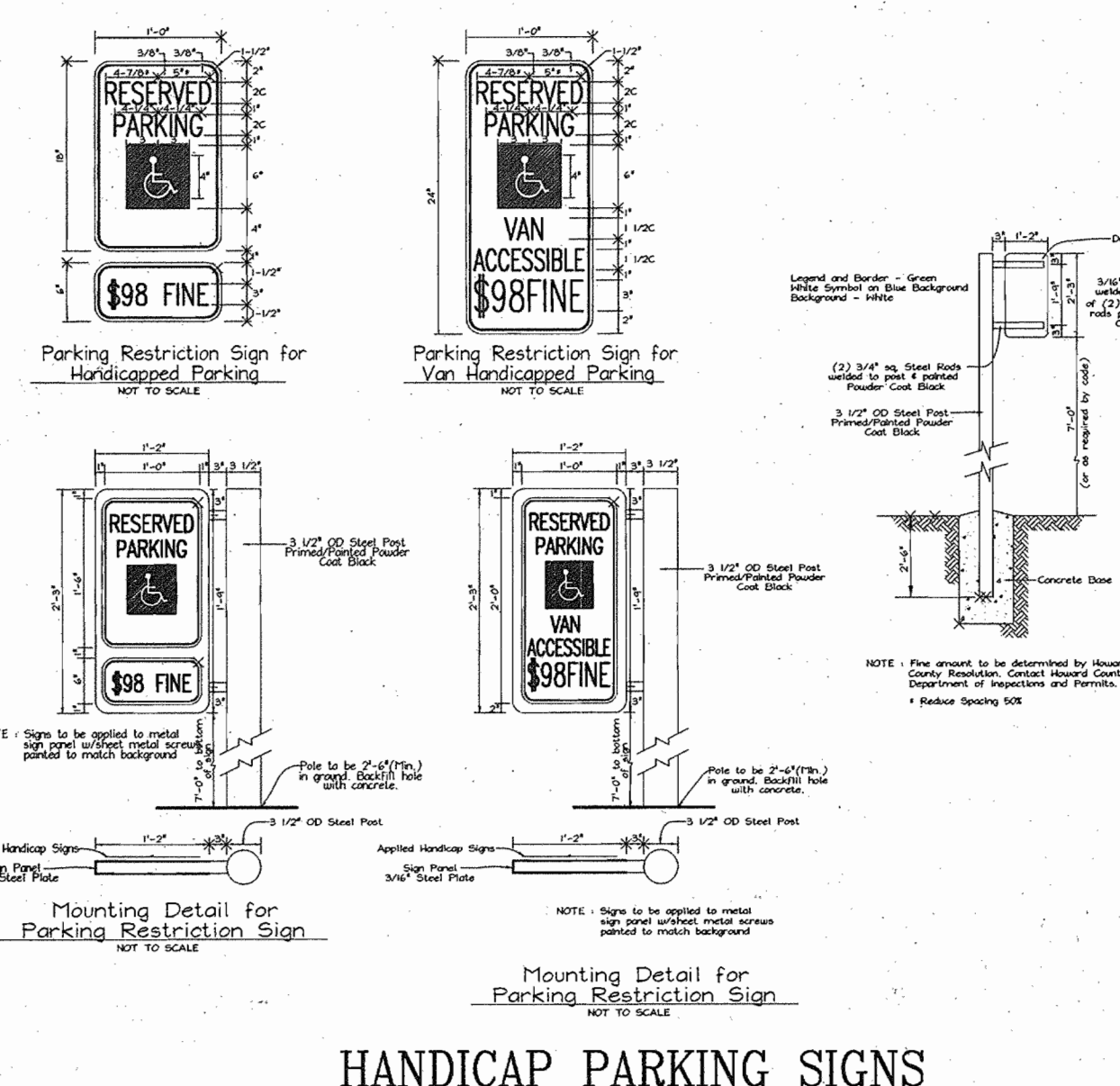
A. The Stormceptor Water Quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum, utilizing the Stormceptor inspection/monitoring form. Inspections shall be done by using a clear Plexiglas tube ("snorkel") to extract a water column sample. When the sediment depth exceeds the level specified in table 4 of the Stormceptor Technical Manual, the unit must be cleaned.

B. The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.

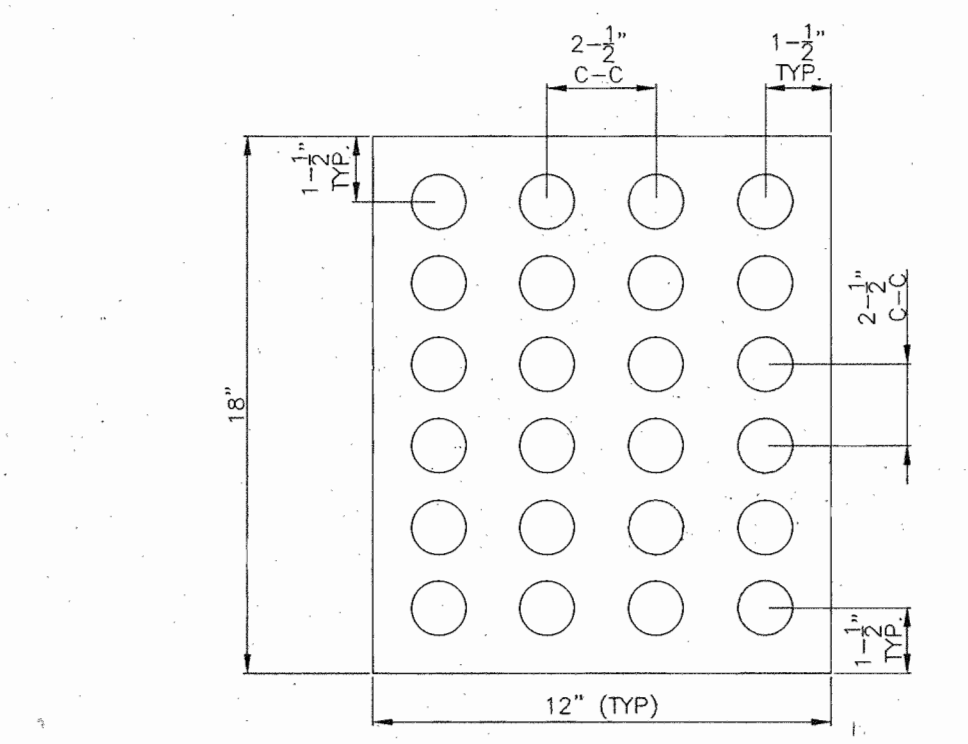
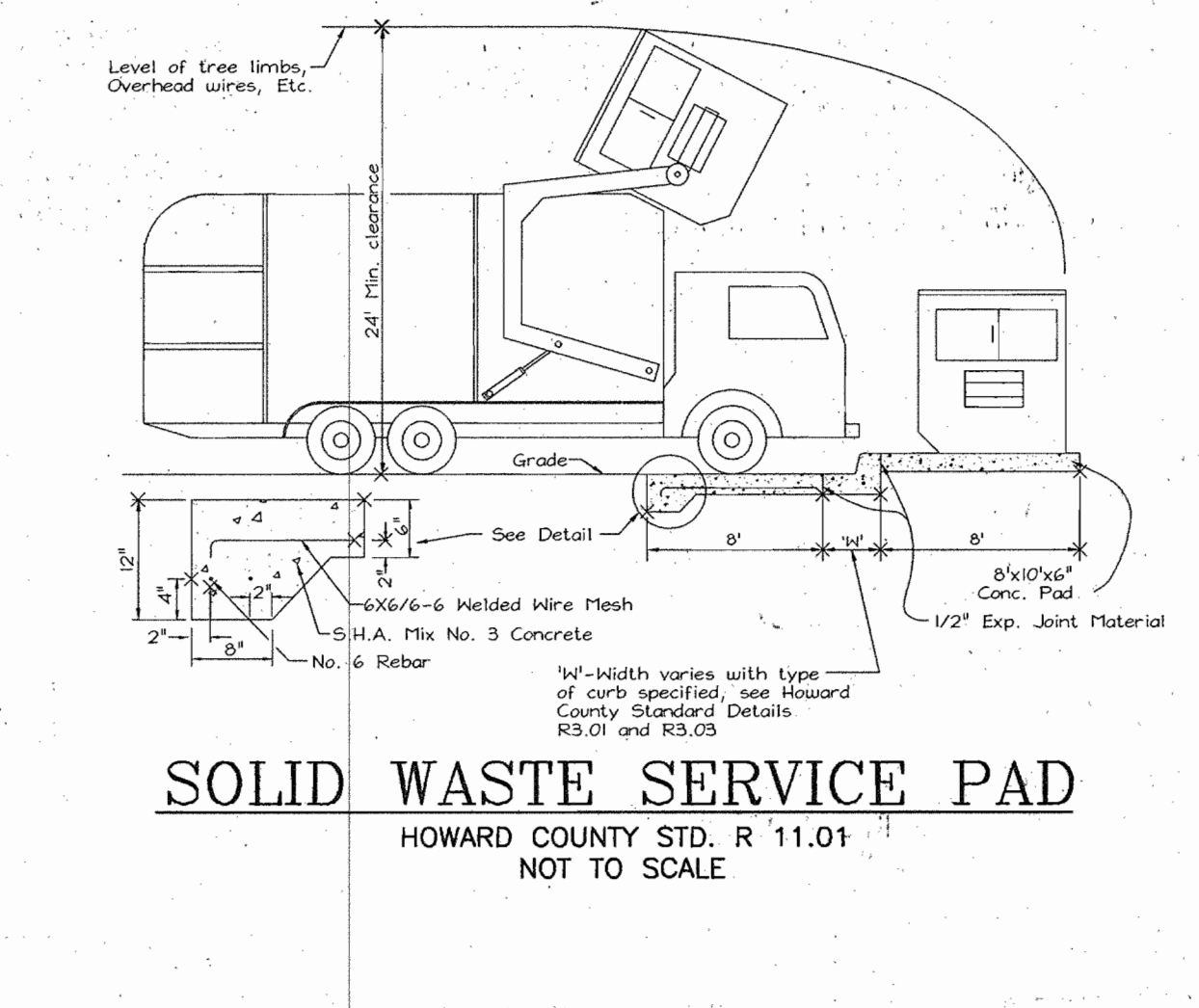
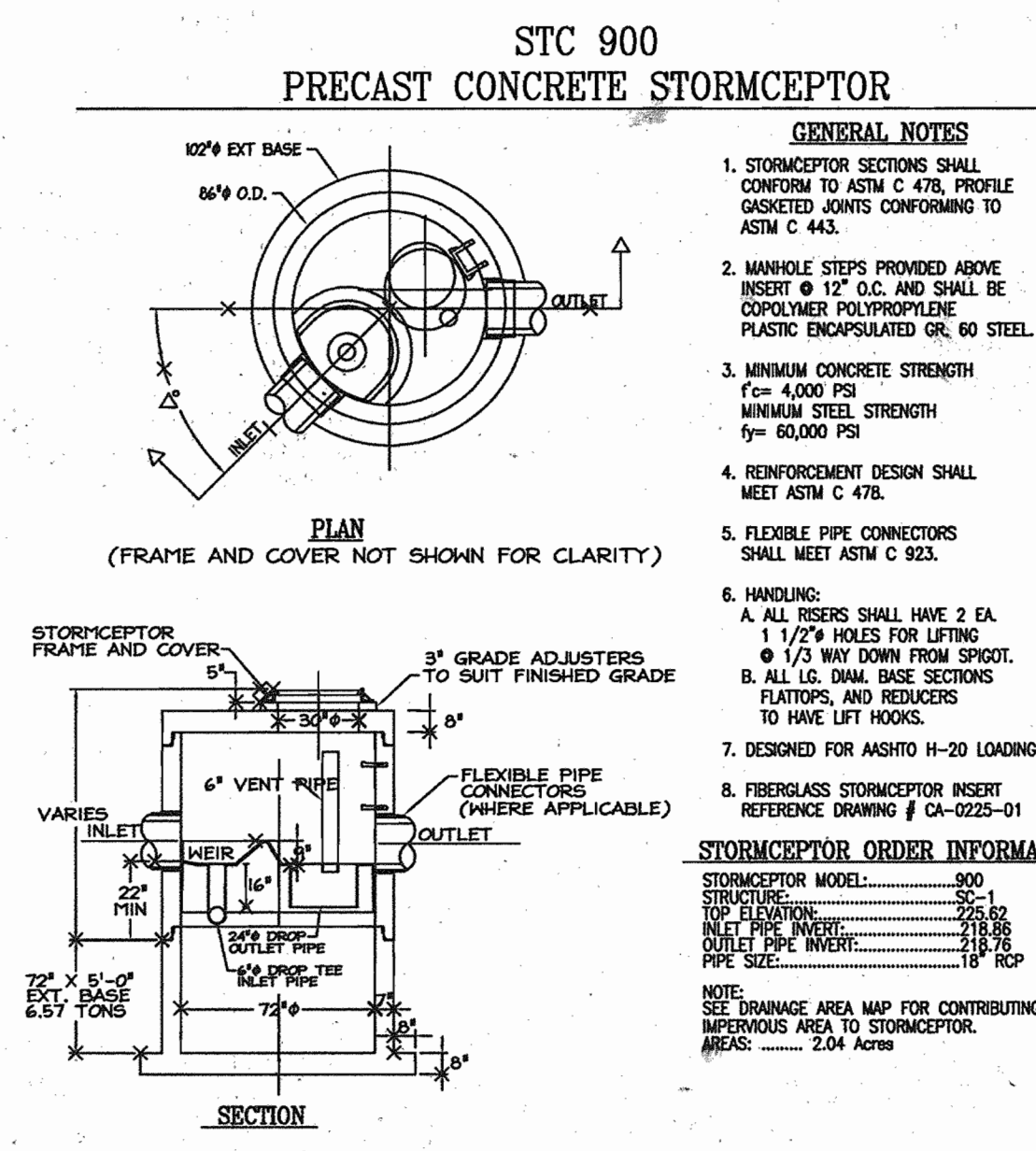
C. The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the owner.

D. The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.

E. The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available to the Howard County officials upon their request.



EACH OBSERVATION WELL/CLEANOUT SHALL INCLUDE THE FOLLOWING:
 1. FOR AN UNDERGROUND FLUSH MOUNTED OBSERVATION WELL/CLEANOUT, PROVIDE A TUBE MADE OF NON-CORROSIVE MATERIAL, SCHEDULE 40 OR EQUAL, AT LEAST FEET LONG WITH AN INSIDE DIAMETER OF AT LEAST 6 INCHES.
 2. THE TUBE SHALL HAVE A FACTORY ATTACHED CAST IRON OR HIGH IMPACT PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING SCREEN TOP LID. THE SCREEN TOP LID SHALL BE CAST IRON OR HIGH IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET RAYS.



NOTES:
 1. 24 Perforations per foot of pipe to be provided.
 2. 18" Perforated pipe to extend 24" into trench.

PIPE SCHEDULE

SIZE	TYPE	LENGTH
15"	HDPE	425 LF
18"	HDPE (PERFORATED IN TRENCH)	160 LF
18"	HDPE	9 LF

STRUCTURE SCHEDULE

NUMBER	DESCRIPTION	INV. IN	INV. OUT	TG ELEV.
I-1	TYPE S COMB. INLET (HO. CO. SD 4.32)	-	221.25	223.80
I-2	TYPE S COMB. INLET (HO. CO. SD 4.32)	221.42	221.32	226.60
I-3	TYPE S COMB. INLET (HO. CO. SD 4.32)	-	222.86	225.60
MH-1	STANDARD PRECAST MANHOLE (HO. CO. GS.12)	220.37	218.91/220.27	225.00
MH-1A	STANDARD PRECAST MANHOLE (HO. CO. GS.12)	219.37	218.50	222.00
HW-1	TYPE 'A' HEADWALL (HO. CO. SD 5.11)	217.00	219.25	219.25
SC-1	900 STORMCEPTOR	218.86	218.76	225.62

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Ed O'Malley 3/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 3/20/04

Mike Barg 4/1/04
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/1/04

Robert H. Vogel 4/15/04
 DIRECTOR
 DATE: 4/15/04

NO. Rev. SHC Case REVISION DATE 8/1/04

STORM DRAIN, WATER AND SEWER PROFILES
DORSEY RUN CENTER

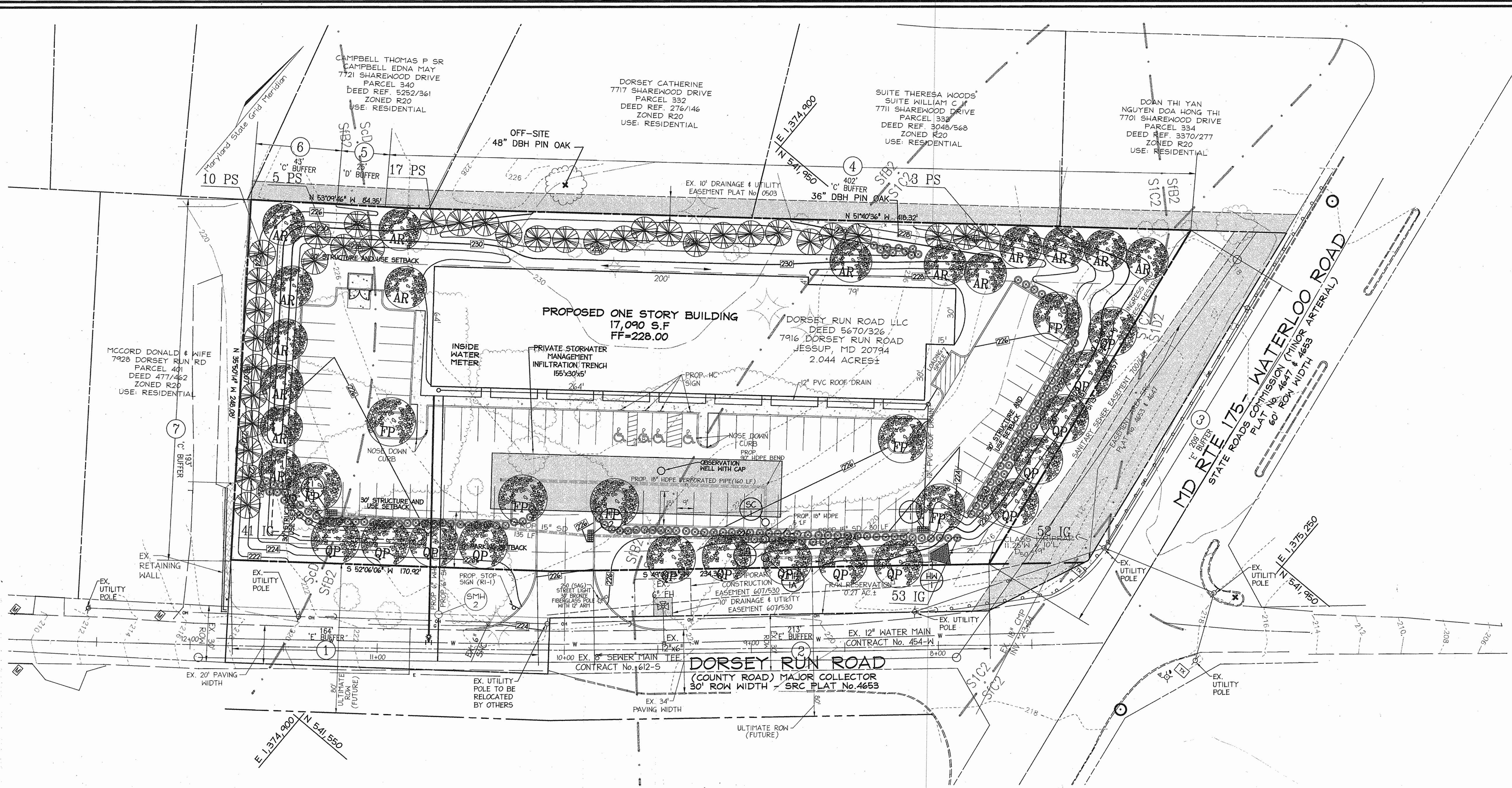
TAX MAP 43 BLOCK 21 PARCEL '246'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
 ENGINEERS 7125 Riverwood Drive Columbia, Maryland 21046-2354
 ARCHITECTS Phone: 410-290-9550 Fax: 410-720-6226
 SURVEYORS Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

DESIGN BY: MMR
 DRAWN BY: JAJ
 CHECKED BY: RHV
 DATE: MARCH 2004
 SCALE: 1"=30'
 W.O. NO.: 2017069

ROBERT H. VOGEL, P.E. NO. 16193
 PROFESSIONAL ENGINEER

6 SHEET OF 8



LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING GUY WIRE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING BOLLARD
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING SD MANHOLE
- EXISTING STORM DRAIN
- EXISTING TREES (FIELD LOCATED)
- EXISTING TREELINE (FIELD LOCATED)
- EXISTING FENCE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- EXISTING/PROPOSED EASEMENT
- PERIMETER LANDSCAPING

LANDSCAPE SCHEDULE NOTES:

- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT ANN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH LCAMW PLANTING SPECIFICATIONS.
- MAINTENANCE TO INCLUDE MONITORING AND HAND WATERING AS NEEDED FOR THE FIRST TWO GROWING SEASONS TO ESTABLISH WOODY PLANTS. SPECIALIZED PLANTING AREAS INCLUDING FOUNDATION PLANTING OR ANNUAL BEDS MAY REQUIRE REGULAR HAND WATERING OR IRRIGATION.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

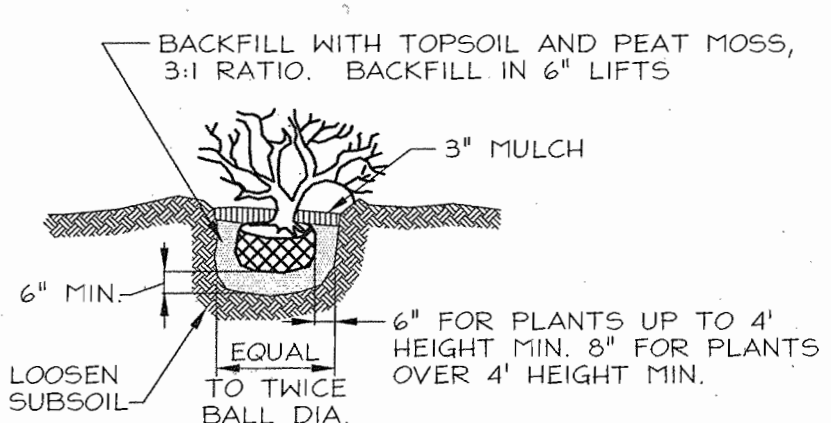
LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	REMARKS
AR	15	Acer rubrum 'October Glory' October Glory Red Maple	2 1/2"-3" CAL.	B & B
FP	7	Fraxinus p. 'Patmore' Patmore Green Ash	2 1/2"-3" CAL.	B & B
PS	35	Pinus strobus Eastern White Pine	7-9" HT.	B & B
QP	14	Quercus phellos Willow Oak	2 1/2"-3" CAL.	B & B
IG	156	Ilex glabra 'Compacta' Compact Inkberry	24"-30" HT.	B & B

SCHEDULE 'B' PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES REQUIRED AND PROVIDED	82
NUMBER OF TREES AND ISLANDS EXISTING	0
NUMBER OF TREES AND ISLANDS PROVIDED	4
NUMBER OF TREES AND ISLANDS REQUIRED	4
SHADE TREES	4
OTHER TREES (2:1 SUBSTITUTION)	-

- ### GENERAL NOTES:
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$19,830.00 FOR THE REQUIRED 34 SHADE TREES, 35 EVERGREEN TREES AND 146 SHRUBS.



NOTE:
THIS SHEET FOR LANDSCAPE ONLY. SEE SHEET 2 FOR LAYOUT AND GRADING.

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Signature 3/9/04
SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Signature 5/30/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

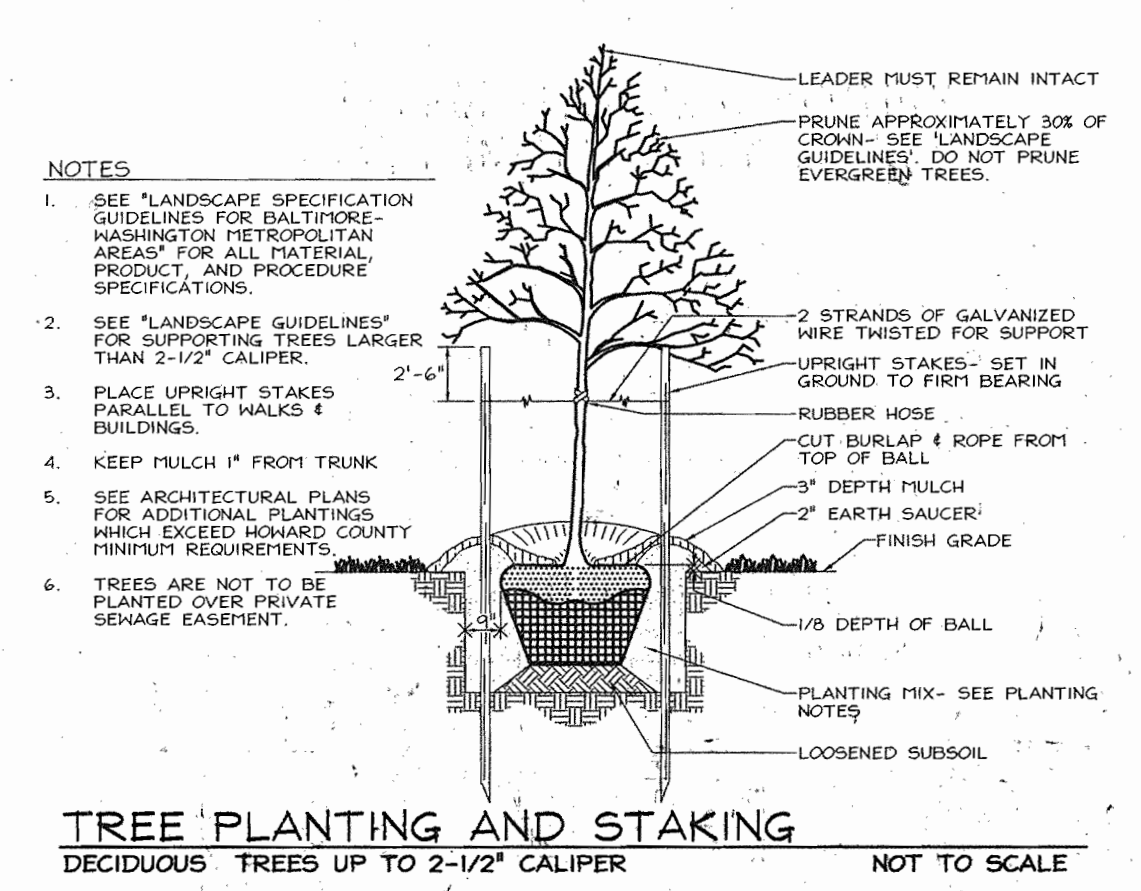
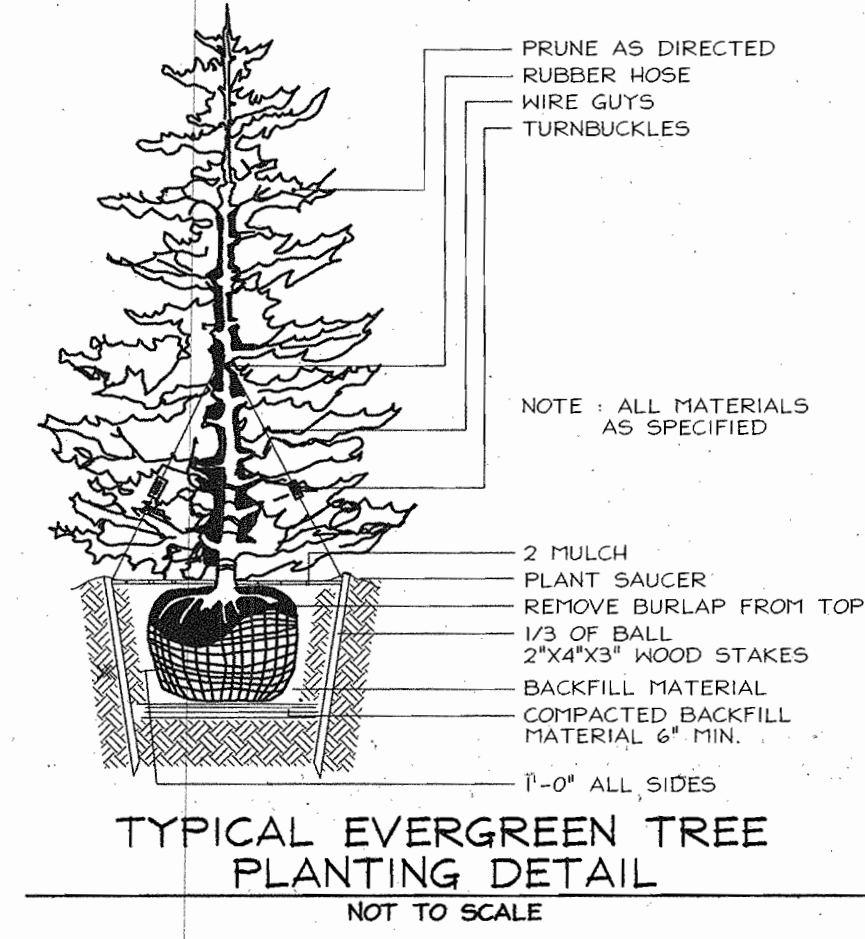
Signature 2/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Signature 2/1/04
DIRECTOR DATE

SCHEDULE 'A' PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAY							ADJACENT TO PER. PROPERTIES								
	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
PERIMETER/FRONTAGE DESIGNATION	1	2	3	4	5	6	7	1	2	3	4	5	6	7		
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	164	213	209	402	25	43	193									
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO									
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO									
NUMBER OF PLANTS REQUIRED	1:4	4	1:4	5	1:4	5	1:4	10	1:20	20	1:10	3	1:4	1	1:4	5
SHADE TREES	1:4	41	1:4	53	1:4	52	10*									
EVERGREEN TREES																
SHRUBS																
NUMBER OF PLANTS PROVIDED																
SHADE TREES	4	5	5	9*			5									
EVERGREEN TREES																
OTHER TREES (2:1 SUBSTITUTION)																
SHRUBS (2:1 SUBSTITUTION)	41	53	52	10*												
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)																

* 10 SHRUBS SUBSTITUTED FOR 1 SHADE TREE NEXT TO 36" DBH PIN OAK. ONE OF THE 9 PROVIDED SHADE TREES IS THAT PIN OAK.



SITE LANDSCAPE PLAN

DORSEY RUN CENTER

TAX MAP 43 BLOCK 21 PARCEL '246'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FREDERICK WARD ASSOCIATES, INC.
7125 Riverwood Drive Columbia, Maryland 21046-2354
Phone: 410-290-9550 Fax: 410-720-6226
Bel Air, Maryland Columbia, Maryland Warrenton, Virginia

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