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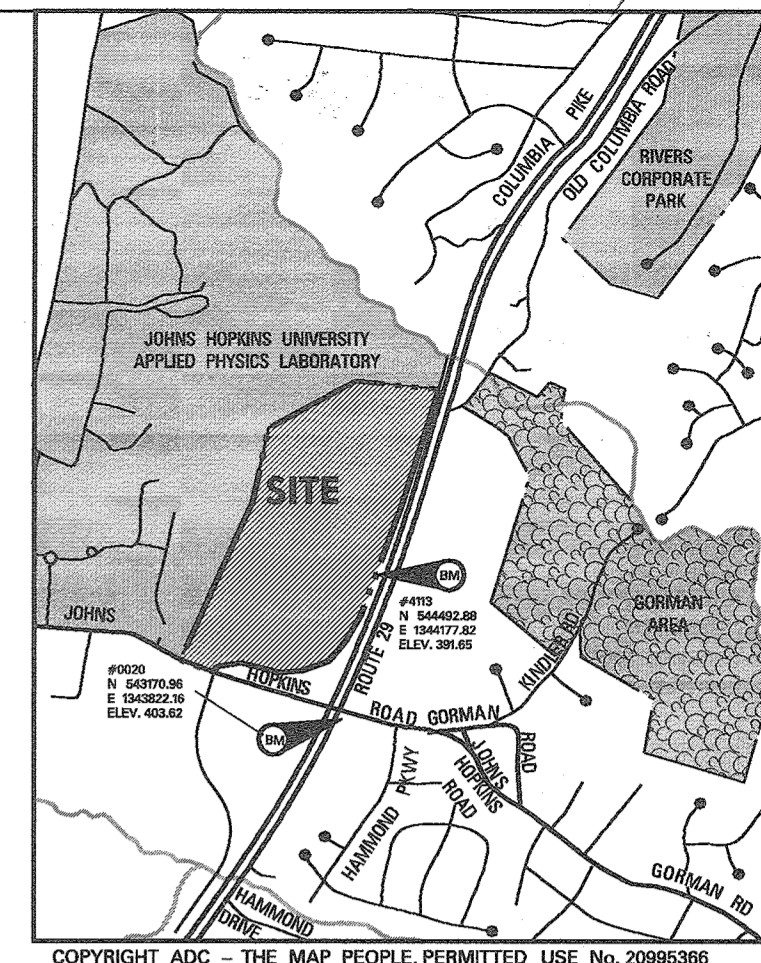
Final Construction Plans

for

Montpelier

Research Park

Howard County Maryland



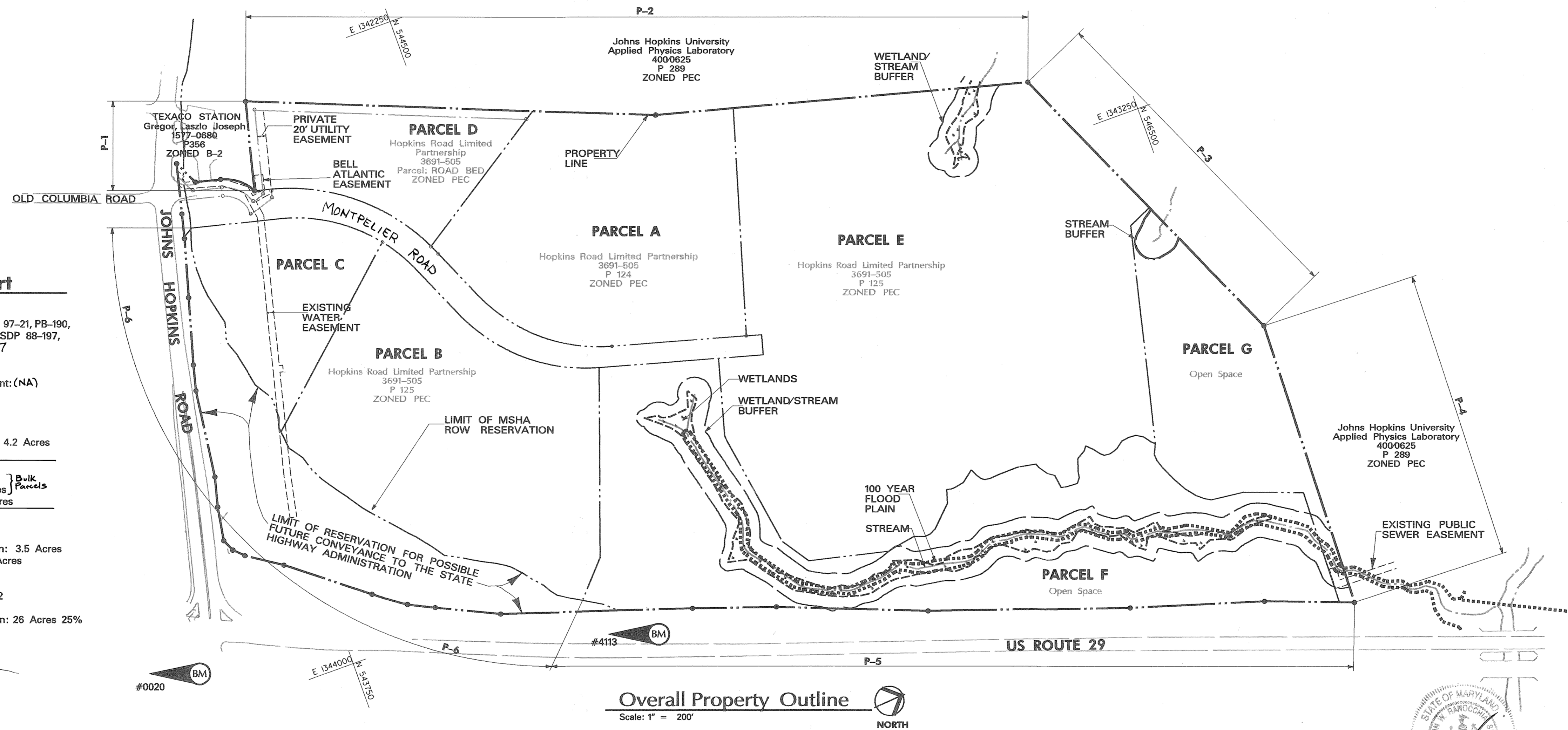
LOCATION MAP
SCALE: 1" = 200'

HORIZONTAL CONTROL
THE COURSES AND COORDINATES SHOWN HEREON ARE BASED UPON THE NAD 83 MARYLAND COORDINATE SYSTEM AND ARE DERIVED FROM THE FOLLOWING HOWARD COUNTY SURVEY CONTROL STATIONS:

NO.	NORTH	EAST
0020	543170.96	1343822.16
4113	544492.88	1344177.82

VERTICAL CONTROL
ELEVATIONS SHOWN HEREON ARE REFERRED TO THE NATIONAL GEODETIC VERTICAL DATUM (NGVD29) WITH LOCAL REFERENCE TO HOWARD COUNTY SURVEY CONTROL STATIONS:

NO.	ELEVATION
0020	403.62
4113	391.65



Site Analysis Data Chart

- General Site Data
 - a. Present Zoning: Planned Employment Center
 - b. Applicable DPZ File Reference: BA96-31, WP 97-21, PB-190, vp 86-64, wp 91-93, ZB 802 & 767, FDP #1, SDP 88-197, SDP 89-88, SDP 98-011, WP 98-12, WP 98-37
 - c. Proposed Use of Site: Employment Center
 - d. Proposed Water and Sewer System: Public
 - e. Any Other Information Which May Be Relevant: (NA)
- Area Tabulation
 - a. Total Area of Site: 104 Acres
 - b. Area of 100-Year Floodplain: +/- 1.9 Acres
 - c. Area of Steep Slopes (25% or Greater): +/- 4.2 Acres
 - d. Net Area of Site: 97.9 Acres
 - e. Area of This Plan Submission: 104 Acres
 - f. Area of Proposed Building Lots: 67.35 Acres
 - g. Area of Proposed Open Space Lots: 26 Acres
 - h. Area of Proposed Preservation Parcels: 0 Acres
 - i. Area of Bulk Parcels: 93.5 Acres
 - j. Area of Proposed Public Roads: 3.5 Acres
 - k. Area of Proposed Private Roads: 0 Acres
 - l. Area of Proposed Public Road RW Dedication: 3.5 Acres
 - m. Other Area: MSHA RW Reservation 7.15 Acres
- Open Space Data
 - a. Total Number of Open Space Lots Proposed: 2
 - b. Open Space Required: 26 Acres 25%
 - c. Total Open space Provided on this submission: 26 Acres 25%

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 54326. REVISION ONLY. SEAL APPLICABLE TO 03/03/2007. EXPIRATION DATE: 05/12/21.

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Andrew M. Daniels 3-2-98
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Paul J. Jumper 3/4/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hannta 3/9/98
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH DATE

General Notes

- All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable or as specified.
- Approximate location of existing utilities are based on contract numbers 44-1160 and 30-1757-d, and supplemented with field survey by DMW in August 1997. Contractor shall verify the location of any utilities which may be impacted by the work. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractor's operation shall be repaired immediately at the contractor's expense.
- The contractor shall test pit existing utilities at least five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.
- The contractor shall notify 'Miss Utility' at 1-800-257-7777 at least 48 hours prior to any excavation work being done, and 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 the start of work. Contact Bell Atlantic: See Note, Sheet 3/11.
- Any damage caused by the Contractor to existing public right-of-way, existing paving, existing curb and gutter, existing utilities, etc. shall be repaired at the Contractors expense.
- Topography at 2' intervals is based on the mass grading shown on SDP-98-011, aerial photogrammetry by Photogrammetric Data Services in June 1986, and by supplementary topo along Johns Hopkins Road by DMW in August 1997.
- All hydraulic data is for the 10-year storm unless otherwise noted.
- Existing public water and sewer contract number (44-1160, 30-1757-d). Water and sewer are Public, Contract Number (34-3254-D). Drainage area is the Middle Patuxent.
- The subsurface exploration and geotechnical engineering analysis for this project was made by Hillis Carnes, Inc. on Jan 31, 1997.
- All fill areas shall be compacted to a minimum of 95% of the maximum dry density as determined and verified in accordance with AASHTO T-180.
- The coordinates shown hereon are based upon the Howard County geodetic control which is based upon the NAD83 Maryland Coordination System. Howard County monument nos. 0020, 4113, were used for this project (See Location Map).
- Storm water management quantity and quality for Parcels A, B, C and D is provided by a retention facility per SPD-98-011. Stormwater Management for the North end of the site will be provided in a separate facility at the time of development.
- 100 year floodplain limits per DMW floodplain study. Wetland delineation on Jan. 29, 1988 by Envirens: jurisdictional determination reconfirmed by Corps of Engineers in April 1996.
- There are no known cemeteries or burial grounds on this site. However, upon discovery of any evidence of burials or graves, the developer will be subject to section 16.1305 of the Howard County Subdivision and Land Development Regulations.
- The traffic study was prepared by Cunningham & Assoc. dated October 1997. The improvements shown on these plans are for Phase 1 only as shown in the report.
- Electric, gas, cable and telephone lines designed by others.
- State & Federal permit tracking number 199765674.
- WP98.12 granted on 8-22-97 for deferral of landscaping requirements to Final and/or Site Development Plans and for waiver of Sketch & Preliminary Plan for initial stage of subdivision.
- There are no noise studies required for this project.
- Waivers to the Howard County Design Manual Volume III include a waiver to the typical section for a minor arterial, waiver to the 670' radius requirement for a minor arterial, and a waiver to the intersection spacing requirement at Montpelier Road and Johns Hopkins Road. APPROVED OCT. 23, 1997.
- Provide handicap ramps where shown in plan. See Howard County Std. Detail R-4.01 and R-4.02.
- Trench compaction for storm drains within the road or street right of way limits shall be in accordance with Howard County Design Manual Volume IV, Std. No. G-2.01.
- Sag and Crest vertical curves were designed in accordance with Howard County Design Manual Volume III.
- Street trees in accordance with Subdivision and Land Development Regulations, section 16.124 AND SECTION 2-12-2, HOWARD COUNTY DESIGN MANUAL VOL. III.
- Street lights will be required in this development in accordance with the Design Manual. Street light placement and the type of fixture and pole selected shall be in accordance with the latest Howard County Design Manual, Volume III (1993) and as modified by "Guidelines for Street Lights in Residential Developments (June 1993). The June 1993 policy includes guidelines for lateral and longitudinal placement. A minimum spacing of 20' shall be maintained between any street light and any tree.
- The contractor shall maintain traffic at all times.
- Unless otherwise noted, dimensions from the curb are measured from face of curb.
- Erosion and Sediment Controls are provided by SDP-98-011. They are to be refurbished and maintained to their approved condition.
- P-1, P-2, and P-3 are landscape edges adjacent to perimeter properties; P-6 is a landscape edge adjacent to road right-of-way. The landscape type will be determined and provided on the site development plan for each adjoining parcel. P-4 and P-5 perimeters are open space / environmental parcels, and may obtain credit for existing vegetation.

AS-BUILT

Professional Engr. No. 16572

Professional Engr. No. 16572

Professional Engr. No. 16572

Montpelier Research Park
 HOWARD COUNTY MARYLAND

OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9330 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

DMW
 Daft McCune Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 286 3333
 Fax 296 4705

Date	No.	Revision Description

11-21-97
 Date

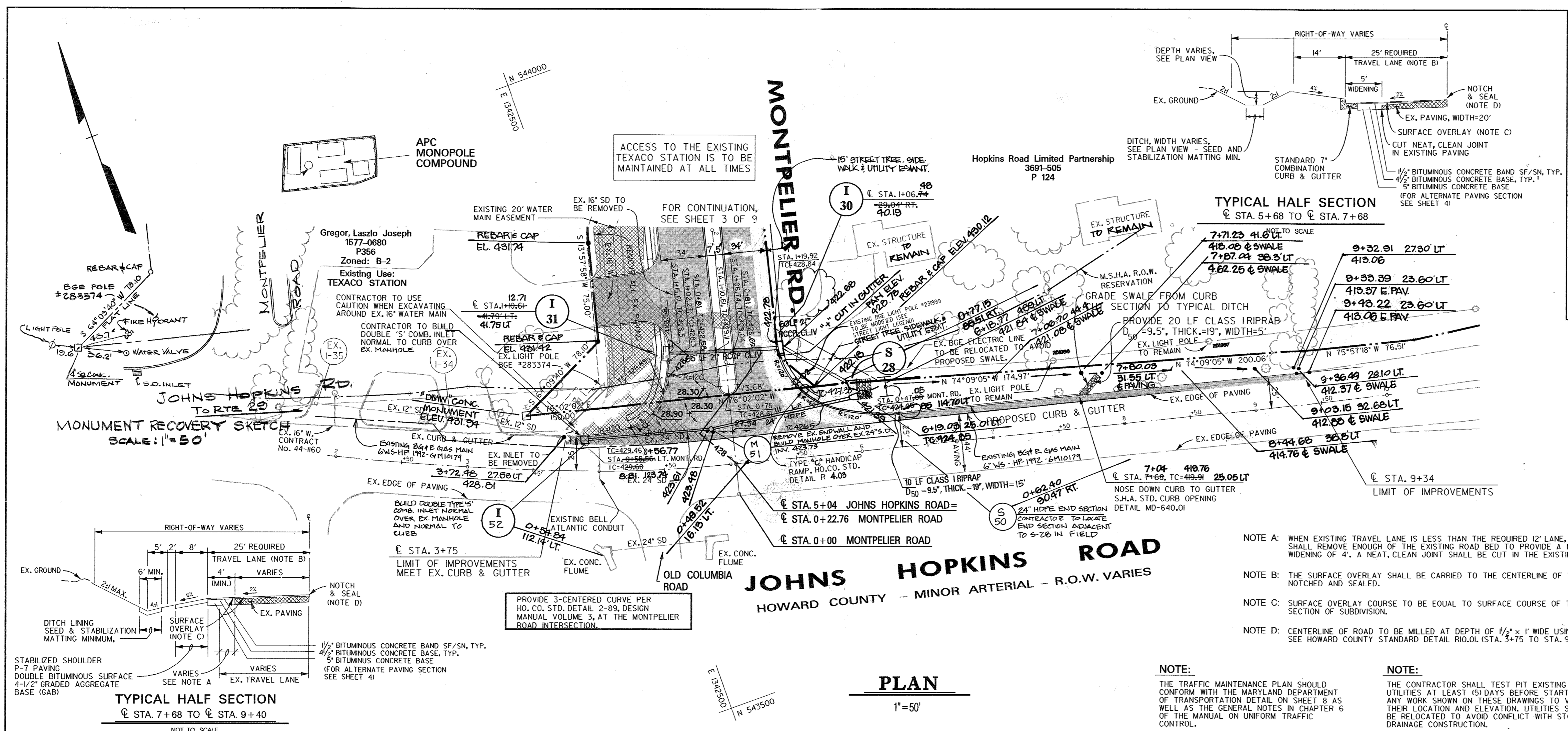
SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
Montpelier	124.125, & ROAD BED	

PLAT # OR BLOCK #	PLAT # OR BLOCK #	PLAT # OR BLOCK #	PLAT # OR BLOCK #
L3691.F505	17	PEC	41

WATER CODE: E 21 SEWER CODE: 6440000

TITLE: COVER SHEET

Des By: ZAL	Scale: As Shown	Proj. No. 941712a
Drn By: TPC, MSS	Date: JAN. 28, 1998	1 OF 13
Chk By:	Approved:	



REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
 1/30/98
 U.S. NATURAL RESOURCE CONSERVATION SERVICE

DEVELOPER'S CERTIFICATION:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY 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.

ENGINEER'S CERTIFICATION:
 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.

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

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
 Andrew M. Daniel 3-2-98
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Linda Hamilton 3/1/98
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH

Date	No.	Revision Description
1-15-98	2	REVISED STORM DRAINAGE LAYOUT
8-25-98	1	REVISED ROAD WIDTH, SIDEWALK & STORM DRAINAGE

Montpelier Research Park
 HOWARD COUNTY MARYLAND
 OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

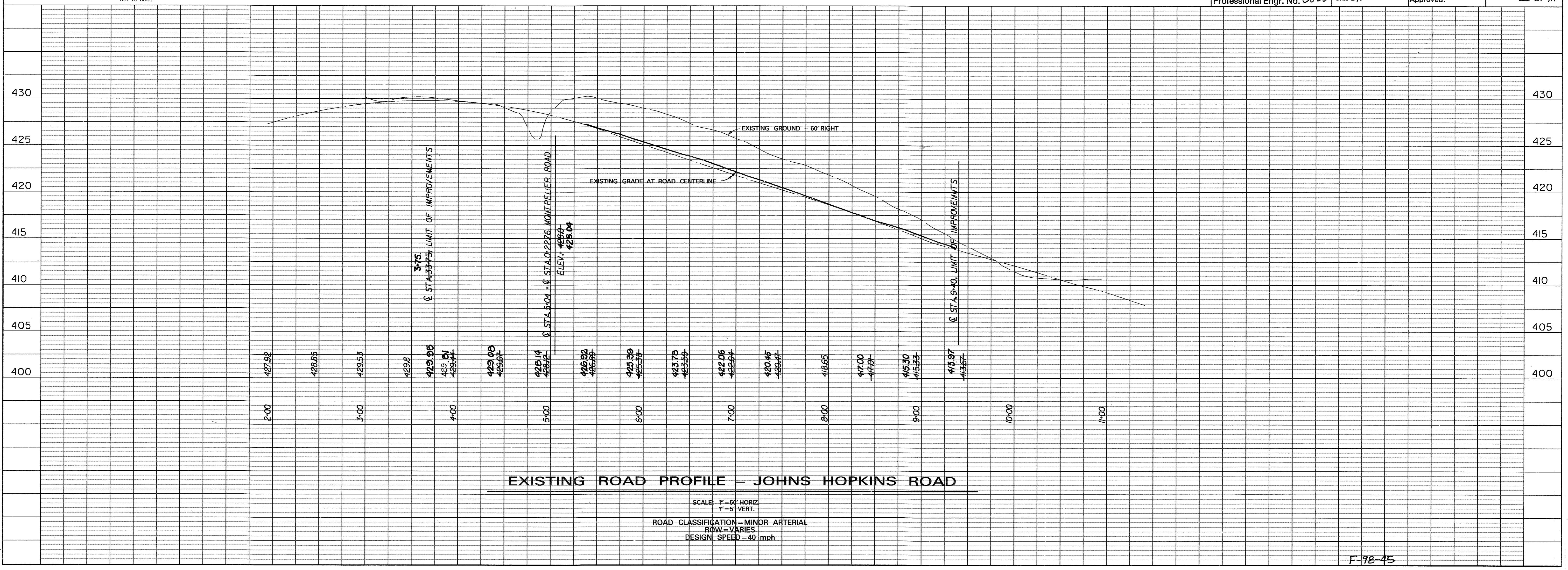
DMW
 Daf McCune Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue, Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

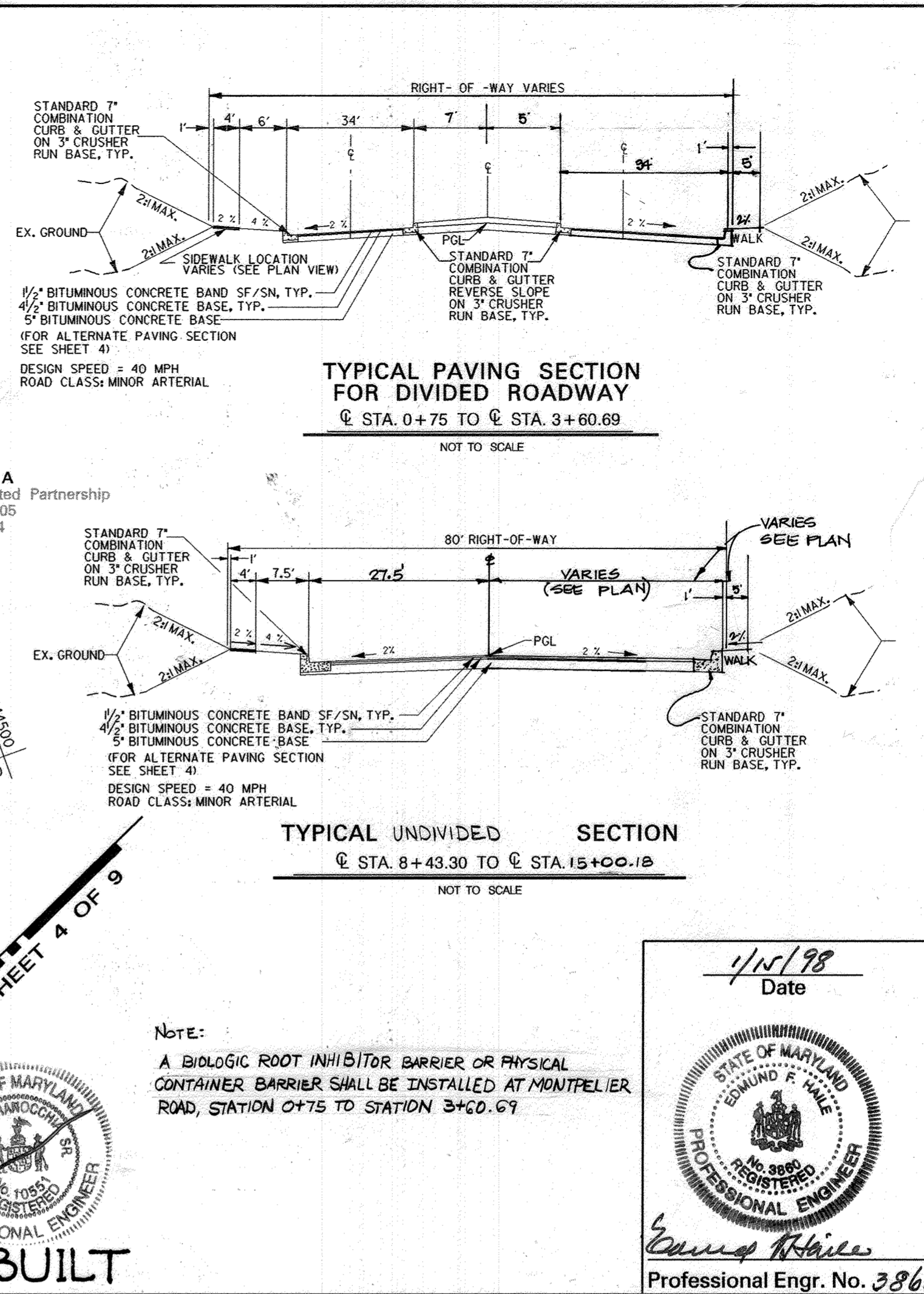
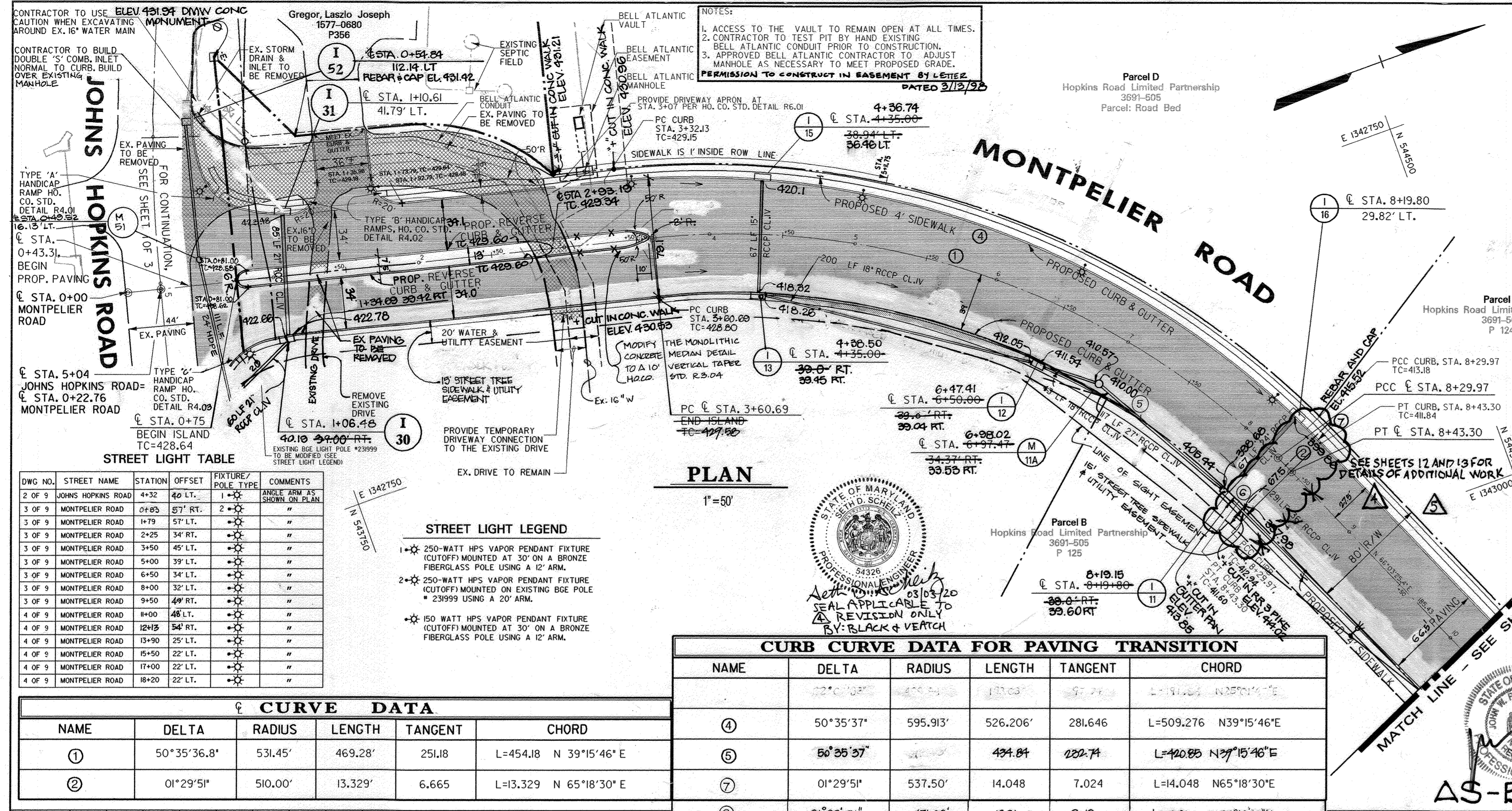
AS-BUILT
 1/15/98
 Date

Professional Engr. No. 3860

JOHN HOPKINS ROAD ROAD CONSTRUCTION PLANS

Des By: ZAL Scale: As Shown Proj. No. 941712a
 Drn By: MSS Date: Jan. 20, 1998
 Chk By: Approved: 2 OF 13





APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Andrew M. Davelle 3-2-98
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Michael J. Williams 3/4/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hamilton 3/19/98
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH DATE

Date	No.	Revision Description
11/22	5	ADDITION TO MP8 OSP DUCTBANK
03/03/98	4	MP8 OSP DUCTBANK
1/16/98	3	REVISED STORM DRAIN LAYOUT AND CENTER MEDIAN
6/25/98	2	REVISED ROAD WIDTH, SIDEWALK, STREET LIGHTS AND STORM DRAINS
5/15/98	1	REVISED ROAD WIDTH, SIDEWALK, STREET LIGHTS & STORM DRAINS

Montpelier Research Park
 HOWARD COUNTY MARYLAND

OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue Towson, Maryland 21286
 410 296 3333 Fax 296 4705

DATE: 1/15/98

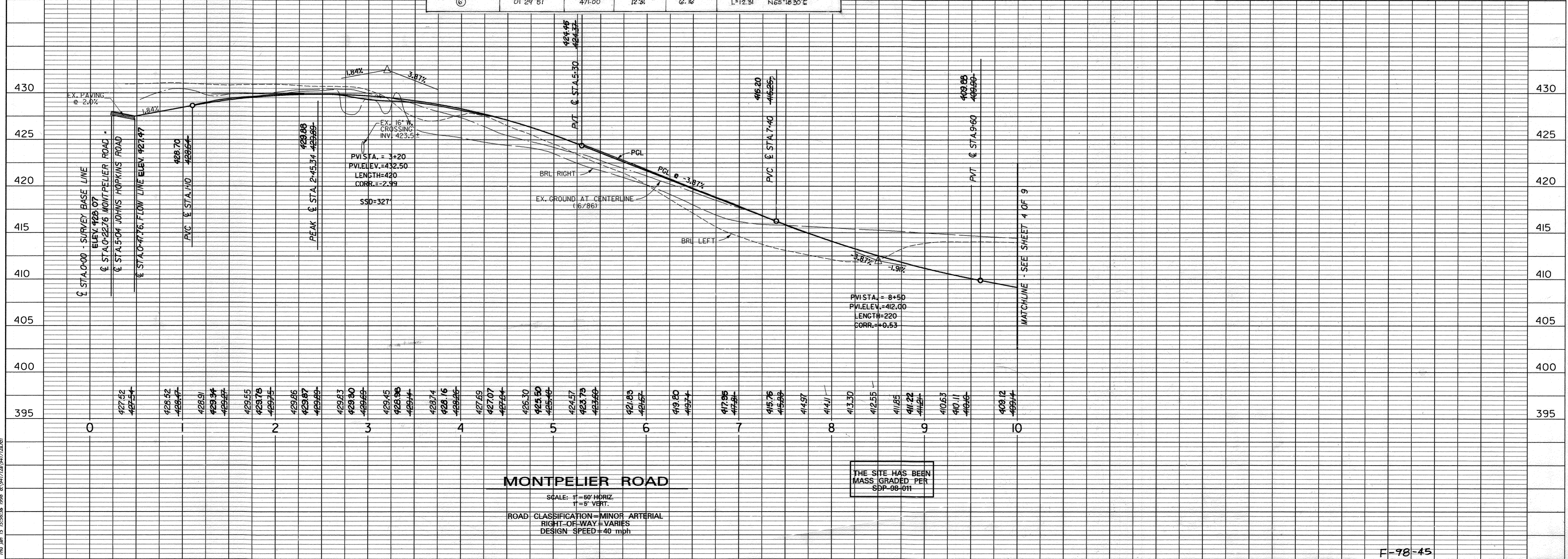
Professional Engineer
James H. White
 Professional Engr. No. 3860

TITLE
 MONTPELIER ROAD CONSTRUCTION PLANS

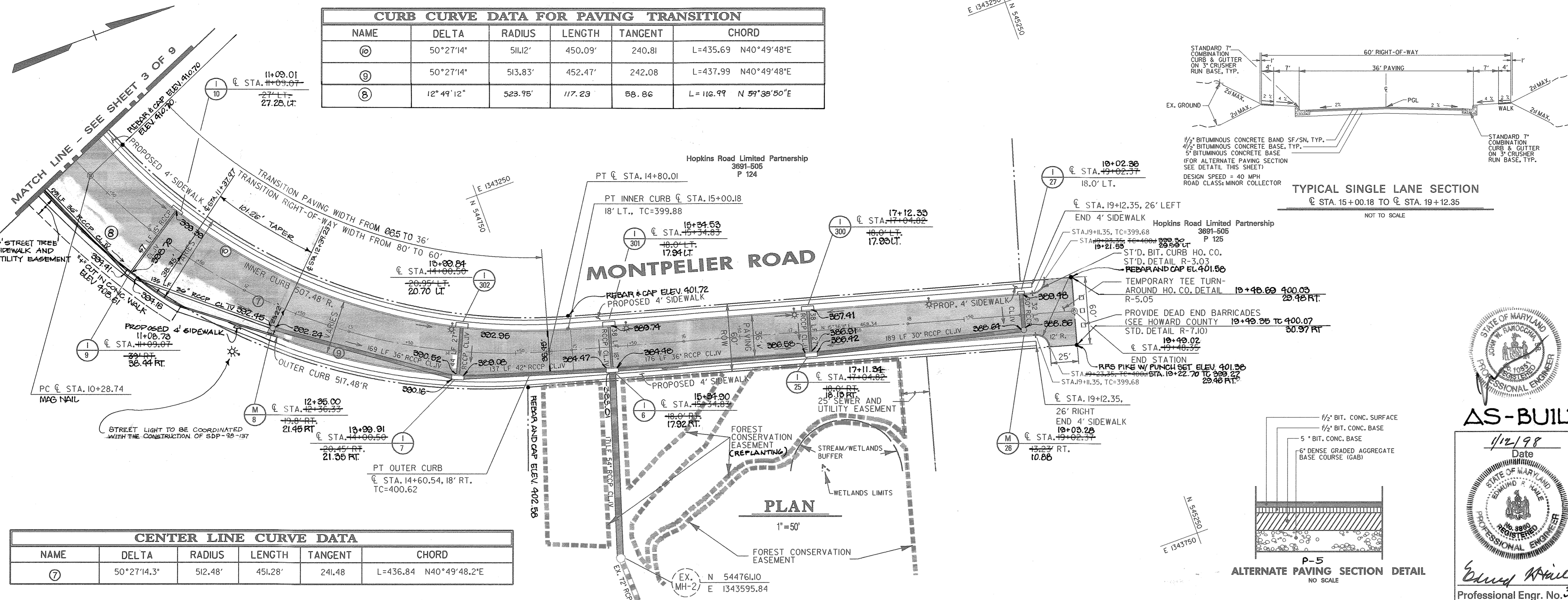
Des By: ZAL Scale: As Shown Proj. No. 941712a
 Dwn By: TPC, MSS Date: Jan. 26, 1998
 Chk By: MM Approved: 3 OF 11

CURVE DATA FOR PAVING TRANSITION

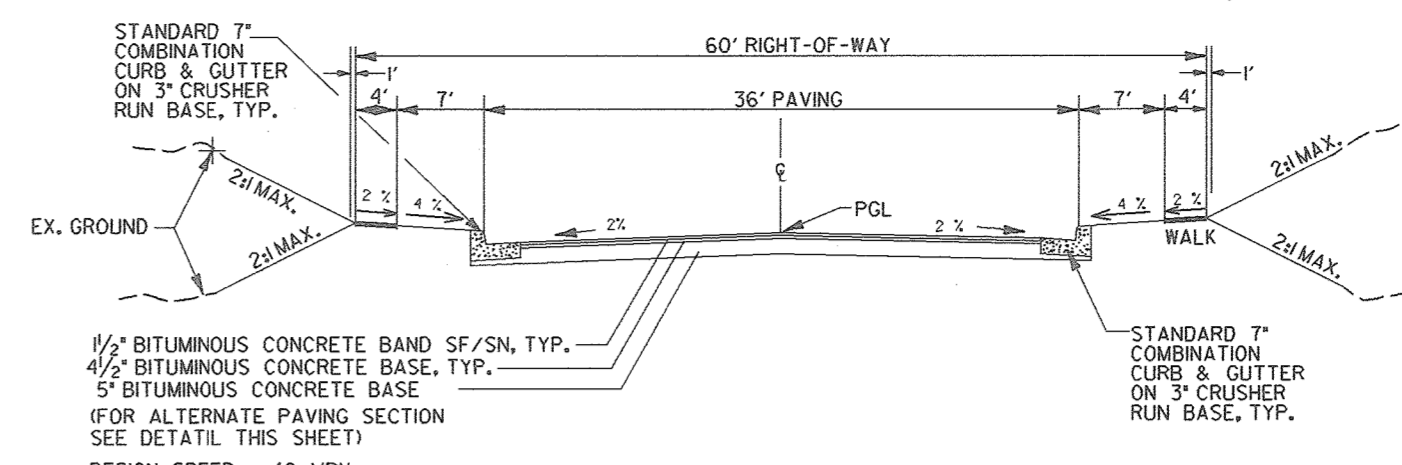
NAME	DELTA	RADIUS	LENGTH	TANGENT	CHORD
④	50°35'37"	595.91'	526.206'	281.646	L=509.276 N39°15'46"E
⑤	50°35'37"	494.84'	420.74'	220.74'	L=420.85 N27°15'46"E
⑦	01°29'51"	537.50'	14.048	7.024	L=14.048 N65°18'30"E
⑧	01°29'51"	471.00'	12.31	6.16	L=12.31 N65°18'30"E



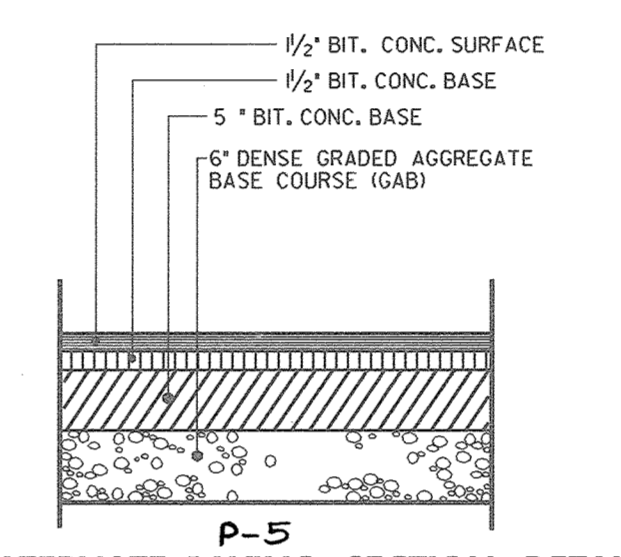
CURB CURVE DATA FOR PAVING TRANSITION					
NAME	DELTA	RADIUS	LENGTH	TANGENT	CHORD
Ⓒ	50°27'14"	511.2'	450.09'	240.81	L=435.69 N40°49'48"E
Ⓓ	50°27'14"	513.83'	452.47'	242.08	L=437.99 N40°49'48"E
Ⓔ	12°49'12"	523.75'	117.29	88.86	L=116.99 N59°38'50"E



CENTER LINE CURVE DATA					
NAME	DELTA	RADIUS	LENGTH	TANGENT	CHORD
Ⓒ	50°27'14.3"	512.48'	451.28'	241.48	L=436.84 N40°49'48.2"E



TYPICAL SINGLE LANE SECTION
 @ STA. 15+00.18 TO @ STA. 19+12.35
 NOT TO SCALE



P-5
 ALTERNATE PAVING SECTION DETAIL
 NO SCALE

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Andrew M. Daniels 3-2-98
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Chris Damann 3/4/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cathy Hamilton 3/19/98
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH DATE

AS-BUILT
 1/12/98
 Date
Edward White
 Professional Engr. No. 3860

Montpelier Research Park
 HOWARD COUNTY MARYLAND

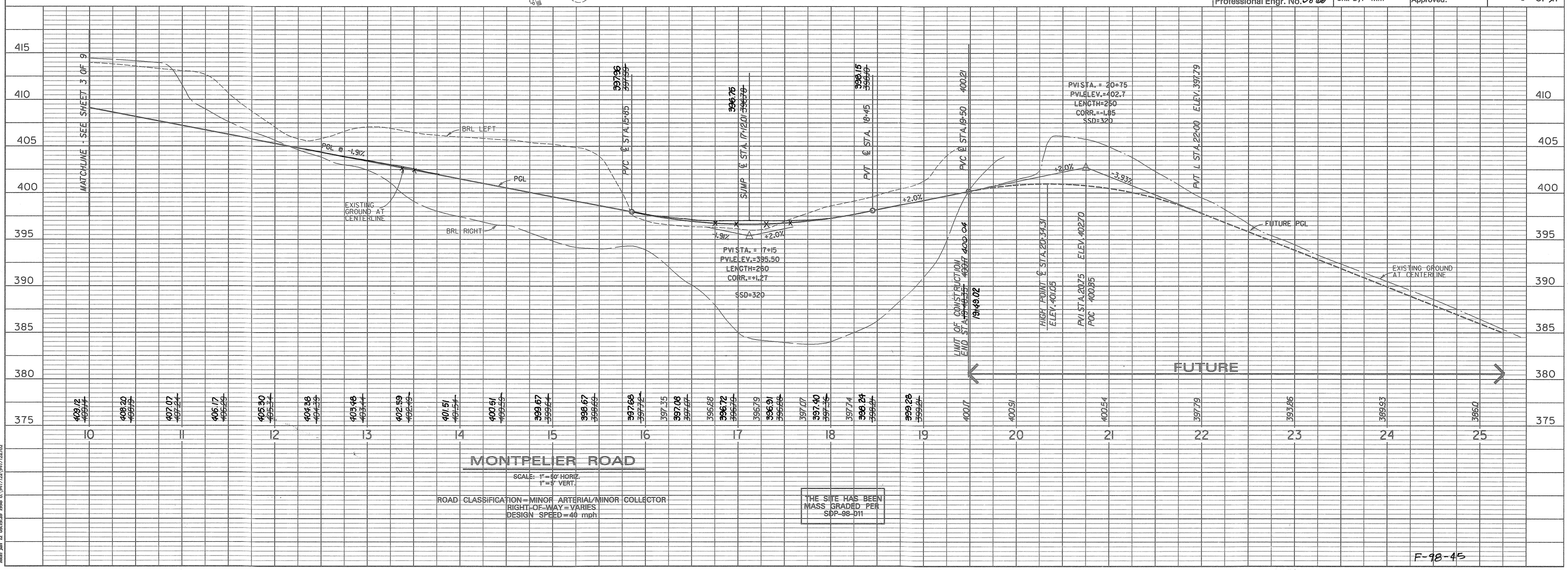
OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

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 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 296 3333
 Fax 296 4705

PLAN OR LF	BLOCK #	ZONE	FAVORABLE MAP	ELECT. DISTRICT	CENSUS TRACT
L3091.F505	17	PEC	41	5th	6051.02
WATER CODE	SEWER CODE		SECTION AREA		
E 21	8440000		124,125, & ROAD BED		

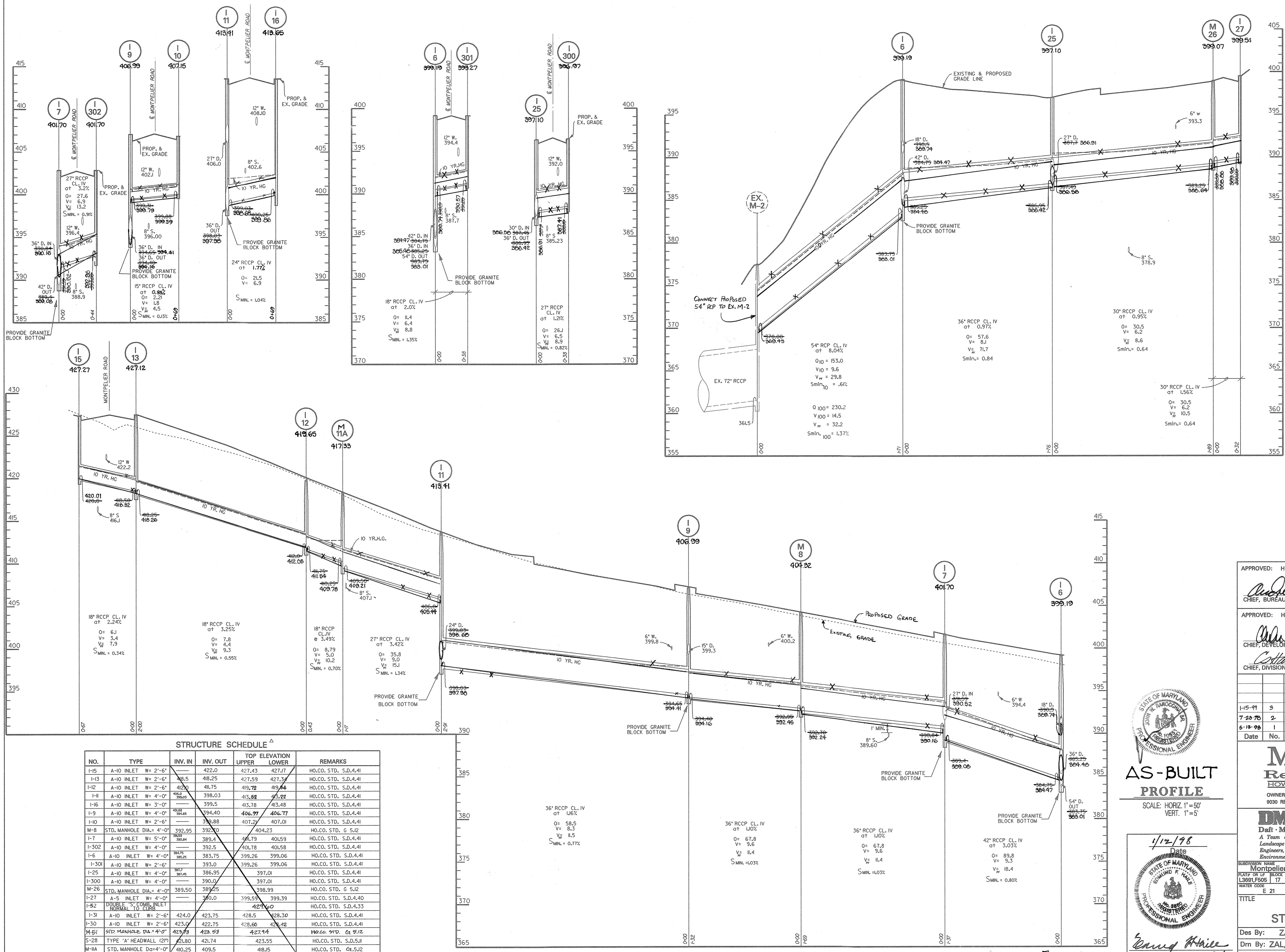
TITLE
MONTPELIER ROAD CONSTRUCTION PLANS

Des By: ZAL Scale: As Shown Proj. No. 941712a
 Dwn By: TPC, MSS Date: Jan. 28, 1998
 Chk By: MM Approved: 4 OF 11



MONTPELIER ROAD
 SCALE: 1"=80' HORIZ.
 1"=5' VERT.
 ROAD CLASSIFICATION - MINOR ARTERIAL/MINOR COLLECTOR
 RIGHT-OF-WAY - VARIES
 DESIGN SPEED = 40 mph

THE SITE HAS BEEN
 MASS GRADDED PER
 SDP-88-011



STRUCTURE SCHEDULE

NO.	TYPE	INV. IN	INV. OUT	TOP ELEVATION		REMARKS
				UPPER	LOWER	
I-5	A-10 INLET W=2'-6"	422.0	422.0	427.43	427.17	HO.CO. STD. S.D.4.41
I-13	A-10 INLET W=2'-6"	418.5	418.25	427.59	427.34	HO.CO. STD. S.D.4.41
I-12	A-10 INLET W=2'-6"	417.0	417.0	419.72	419.54	HO.CO. STD. S.D.4.41
I-11	A-10 INLET W=4'-0"	406.0	398.03	413.82	413.22	HO.CO. STD. S.D.4.41
I-16	A-10 INLET W=3'-0"	399.5	399.5	413.78	413.48	HO.CO. STD. S.D.4.41
I-9	A-10 INLET W=4'-0"	404.0	394.0	406.97	406.77	HO.CO. STD. S.D.4.41
I-10	A-10 INLET W=2'-6"	399.88	399.88	407.21	407.01	HO.CO. STD. S.D.4.41
M-8	STD. MANHOLE DIA=4'-0"	392.95	392.95	404.23		HO.CO. STD. G.5/2
I-7	A-10 INLET W=5'-0"	389.4	389.4	401.79	401.59	HO.CO. STD. S.D.4.41
I-302	A-10 INLET W=4'-0"	392.5	392.5	401.78	401.58	HO.CO. STD. S.D.4.41
I-6	A-10 INLET W=4'-0"	383.75	383.75	399.26	399.06	HO.CO. STD. S.D.4.41
I-301	A-10 INLET W=2'-6"	393.0	393.0	399.26	399.06	HO.CO. STD. S.D.4.41
I-25	A-10 INLET W=4'-0"	387.0	386.95	397.01		HO.CO. STD. S.D.4.41
I-300	A-10 INLET W=4'-0"	390.0	390.0	397.01		HO.CO. STD. S.D.4.41
M-26	STD. MANHOLE DIA=4'-0"	389.50	389.25	398.99		HO.CO. STD. G.5/2
I-27	A-5 INLET W=4'-0"	380.0	380.0	399.59	399.39	HO.CO. STD. S.D.4.40
I-52	DOUBLE 'S' COMB. INLET ORIGINAL TO CURB			421.00		HO.CO. STD. S.D.4.33
I-31	A-10 INLET W=2'-6"	424.0	423.75	428.5	428.30	HO.CO. STD. S.D.4.41
I-30	A-10 INLET W=2'-6"	423.0	422.75	428.60	428.42	HO.CO. STD. S.D.4.41
M-51	STD. MANHOLE DIA=4'-0"	423.95	423.95	427.94		HO.CO. STD. G.5/2
S-28	TYPE 'A' HEADWALL (2P)	421.80	421.74	423.55		HO.CO. STD. S.D.5.11
M-18	STD. MANHOLE DIA=4'-0"	410.25	409.5	418.15		HO.CO. STD. G.5/2

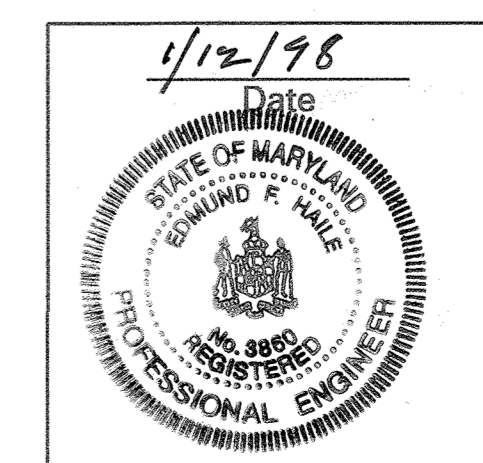
ALL INVERTS TO BE FULLY DEVELOPED. FOR STR. TOP ELEV. & PIPE INVERTS SEE PROFILES

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Howard M. Dunbar
 CHIEF, BUREAU OF HIGHWAYS 3-2-98 DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John J. DeWinn
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 3/4/98 DATE
Catherine
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH 3/11/98 DATE



AS-BUILT PROFILE
 SCALE: HORIZ. 1"=50'
 VERT. 1"=5'



Edward H. White
 Professional Engr. No. 3860

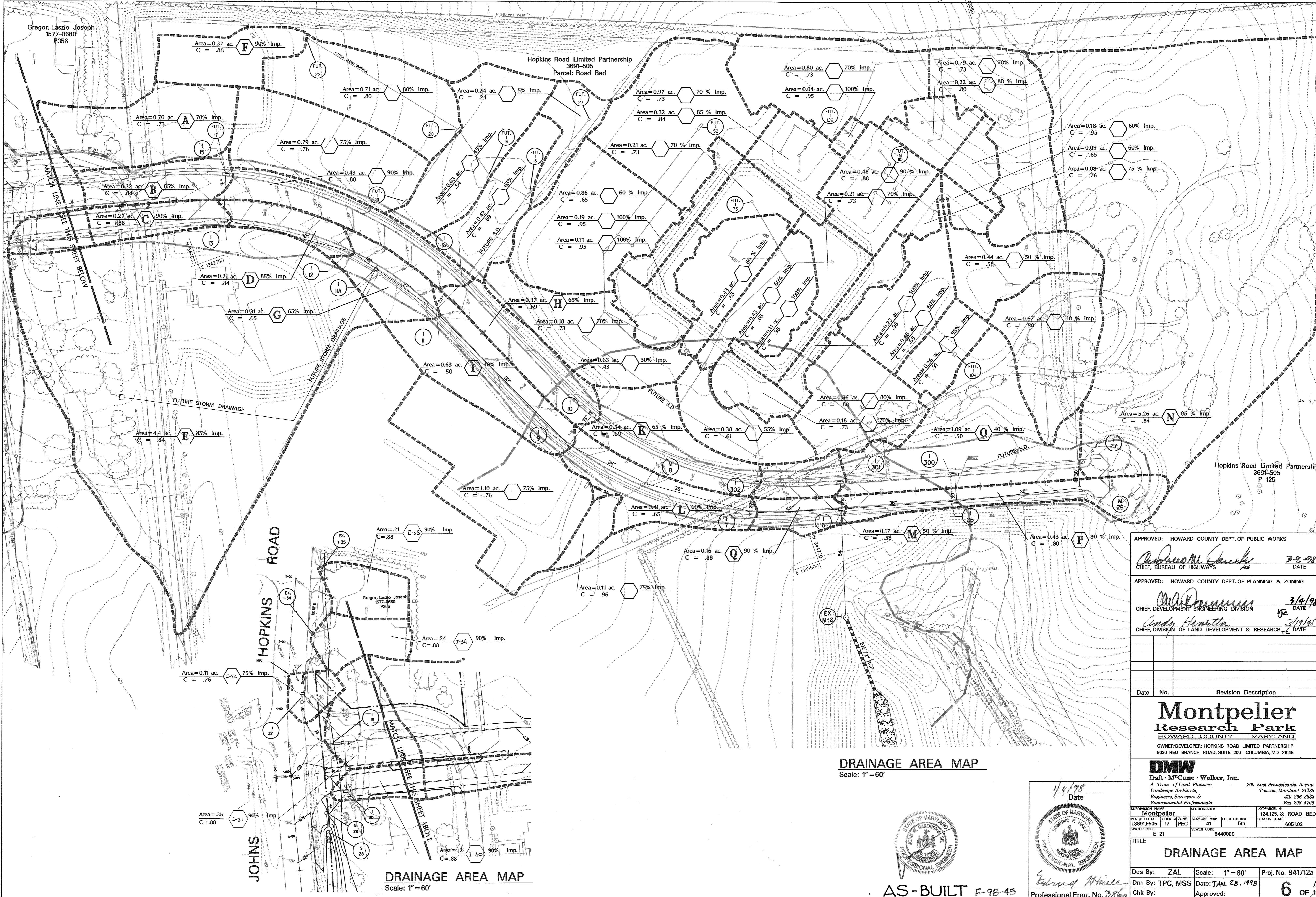
Date	No.	Revision Description
1-15-99	3	REVISED STRUCTURE SCHEDULE
7-28-98	2	REVISED STRUCTURE SCHEDULE
6-13-98	1	REVISED PROFILE LENGTHS AND INLETS TOPS

Montpelier Research Park
 HOWARD COUNTY MARYLAND
 OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

DMW
 Daft - McCune - Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 286 3333
 Fax 286 4705

Montpelier Road STORM DRAIN PROFILES
 Des By: ZAL Scale: As Shown Proj. No. 941712a
 Drn By: ZAL, MSS Date: Jan. 28, 1998
 Chk By: Approved: 5 OF 13

F-98-45



APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Andrew M. Carole 3/2/98
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Michael Dammann 3/4/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Linda Harshbarger 3/19/98
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH DATE

Date	No.	Revision Description

Montpelier Research Park
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 OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

DMW
 Daft · McCune · Walker, Inc.
 A Team of Land Planners, 200 East Pennsylvania Avenue
 Landscape Architects, Towson, Maryland 21286
 Engineers, Surveyors & 410 295 3333
 Environmental Professionals Fax 295 4705

SUBDIVISION NAME Montpelier	SECTION/AREA 124,125 & ROAD BED	LOT/PARCEL #
PLAN # OR RECORD # L3691.F505 17 PEC	AXONOMETRIC MAP 41	ELECT. DISTRICT 5th
WATER CODE E 21	SEWER CODE 6440000	CENSUS TRACT 6051.02

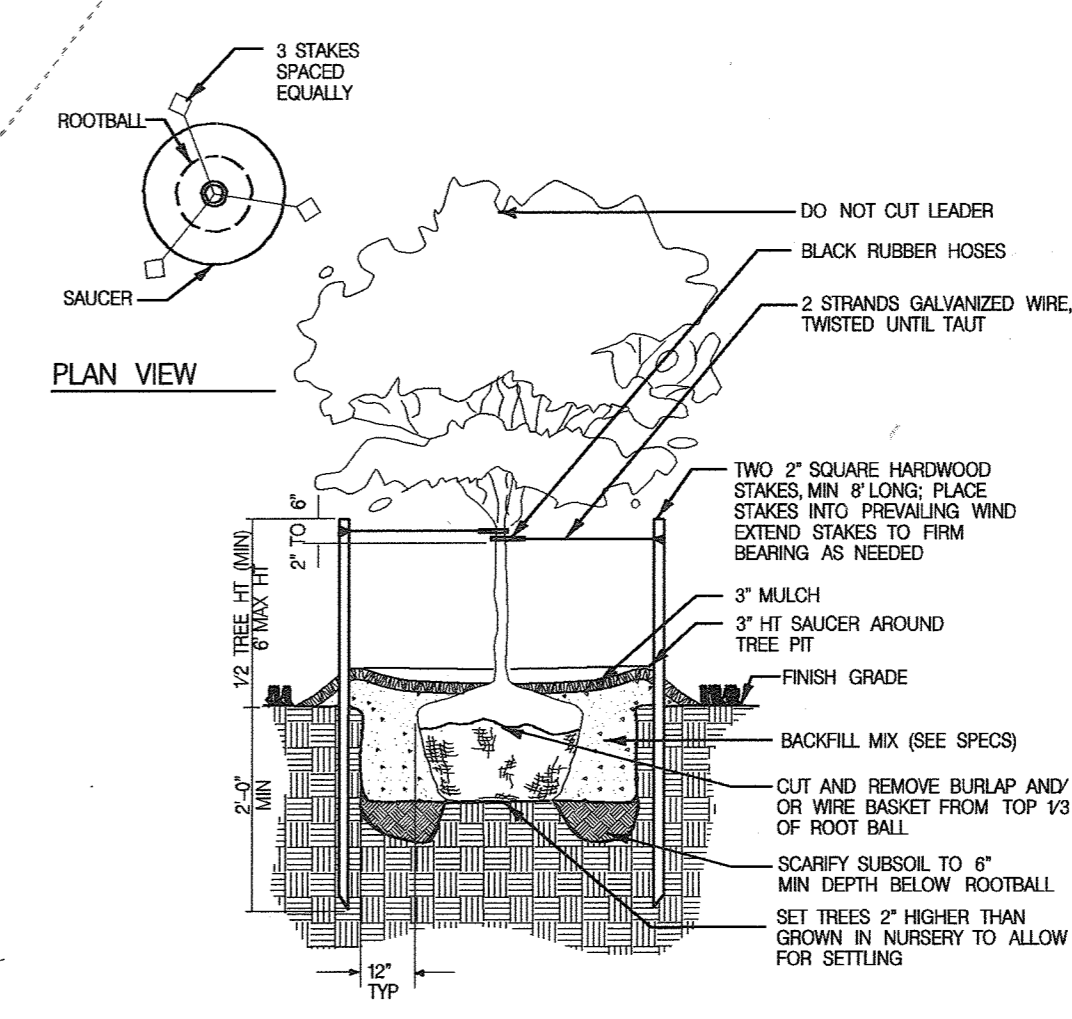
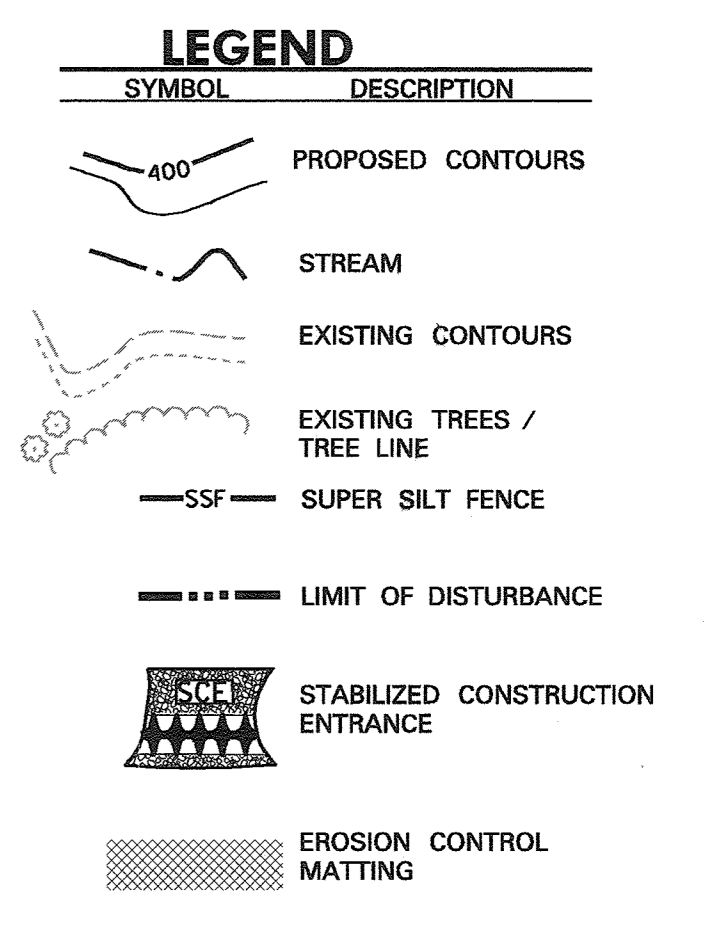
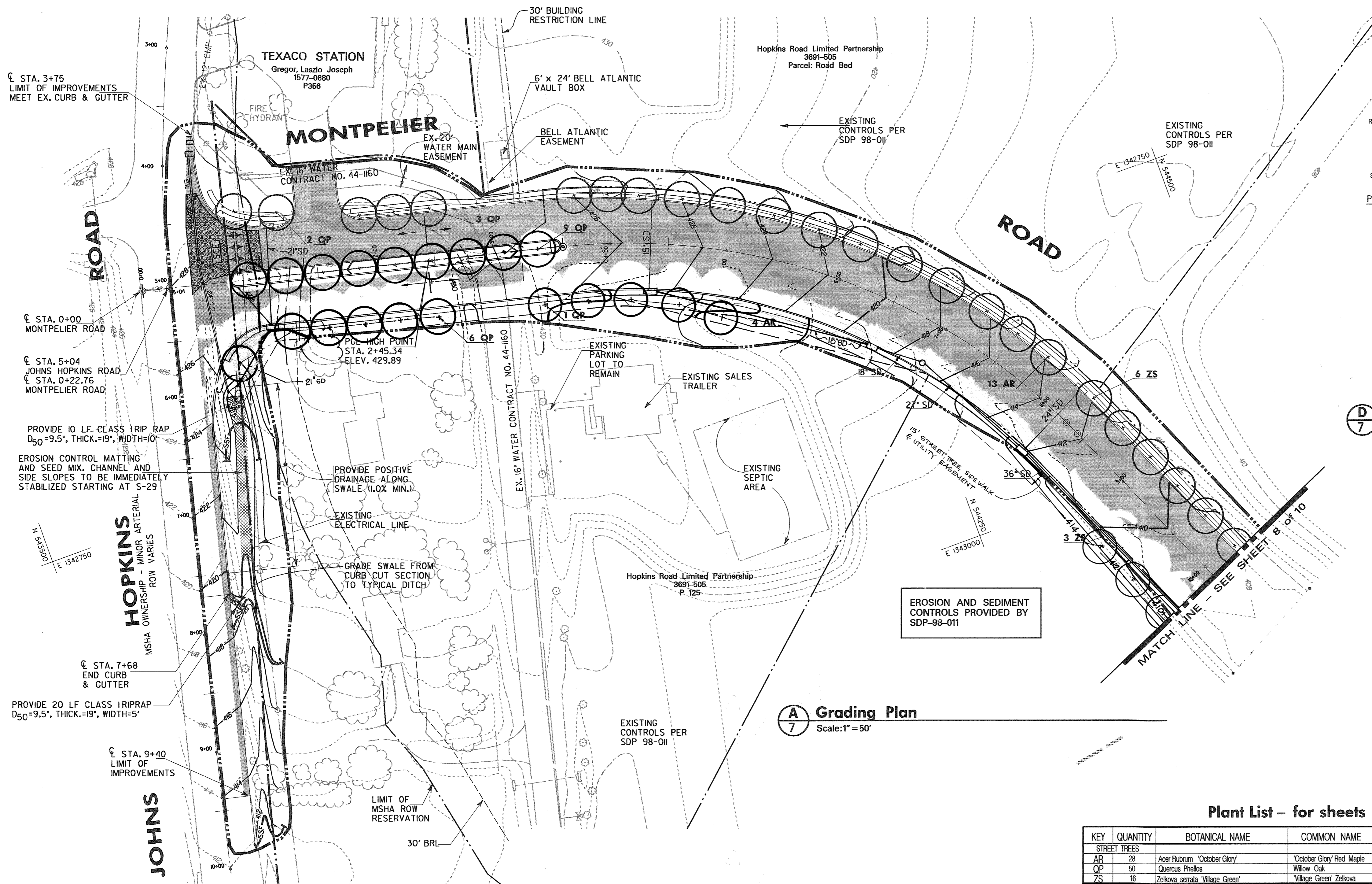
TITLE
DRAINAGE AREA MAP

Des By: ZAL Scale: 1" = 60' Proj. No. 941712a
 Drn By: TPC, MSS Date: JAN. 28, 1998
 Chk By: Approved: 6 OF 13



1/4/98
 Date
Edward M. Carole
 Professional Engr. No. 3860

AS-BUILT F-98-45



D Street Tree Planting
Not to Scale

A Grading Plan
Scale: 1" = 50'

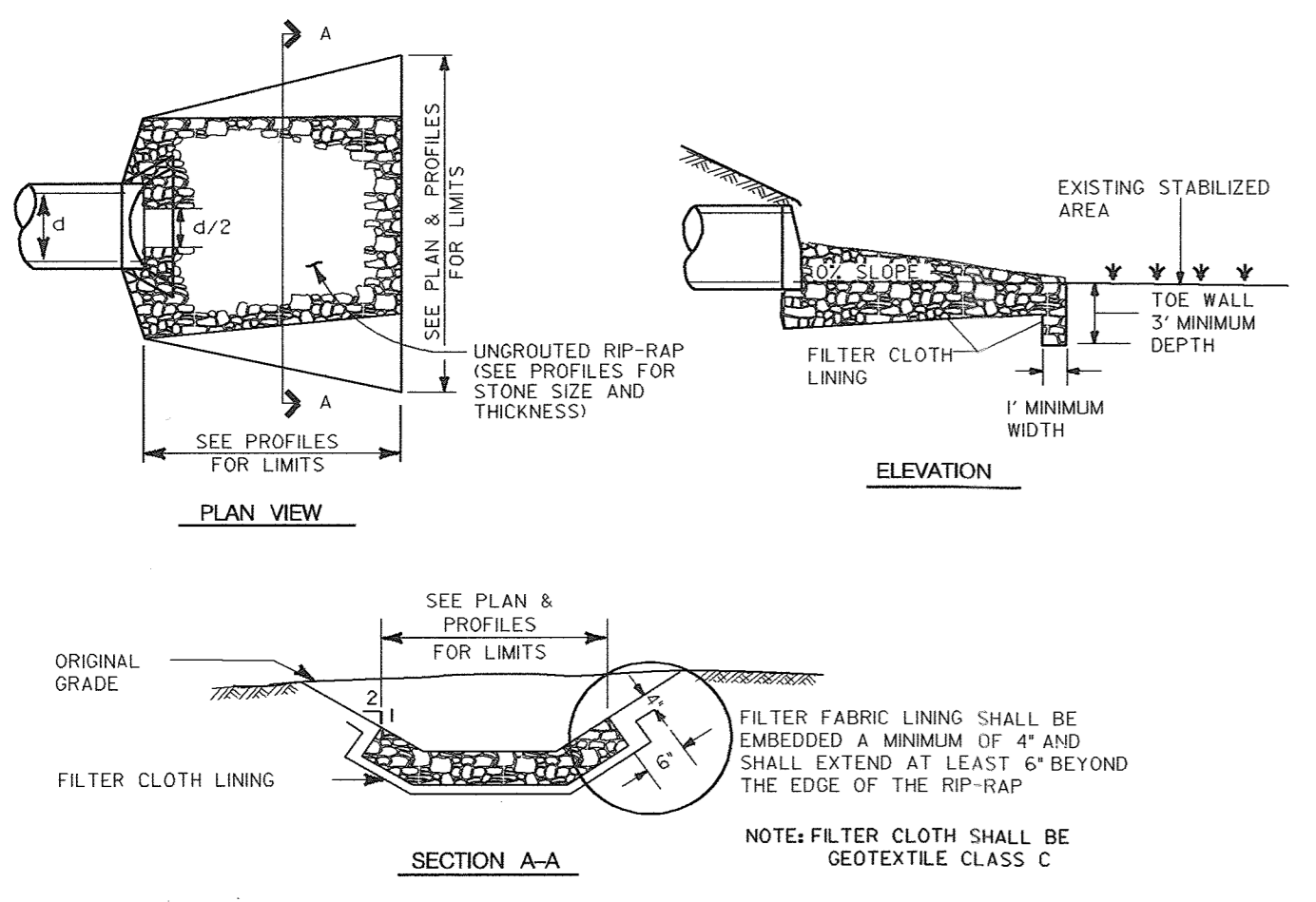
EROSION AND SEDIMENT CONTROLS PROVIDED BY SDP-98-011

Plant List - for sheets 7 & 8

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	REMARKS
AR	28	Acer Rubrum 'October Glory'	'October Glory' Red Maple	2 1/2" - 3" cal	B&B	Full Head
QP	50	Quercus Phellos	Willow Oak	2 1/2" - 3" cal	B&B	Full Head
ZS	16	Zelkova serrata 'Village Green'	'Village Green' Zelkova	2 1/2" - 3" cal	B&B	Full Head

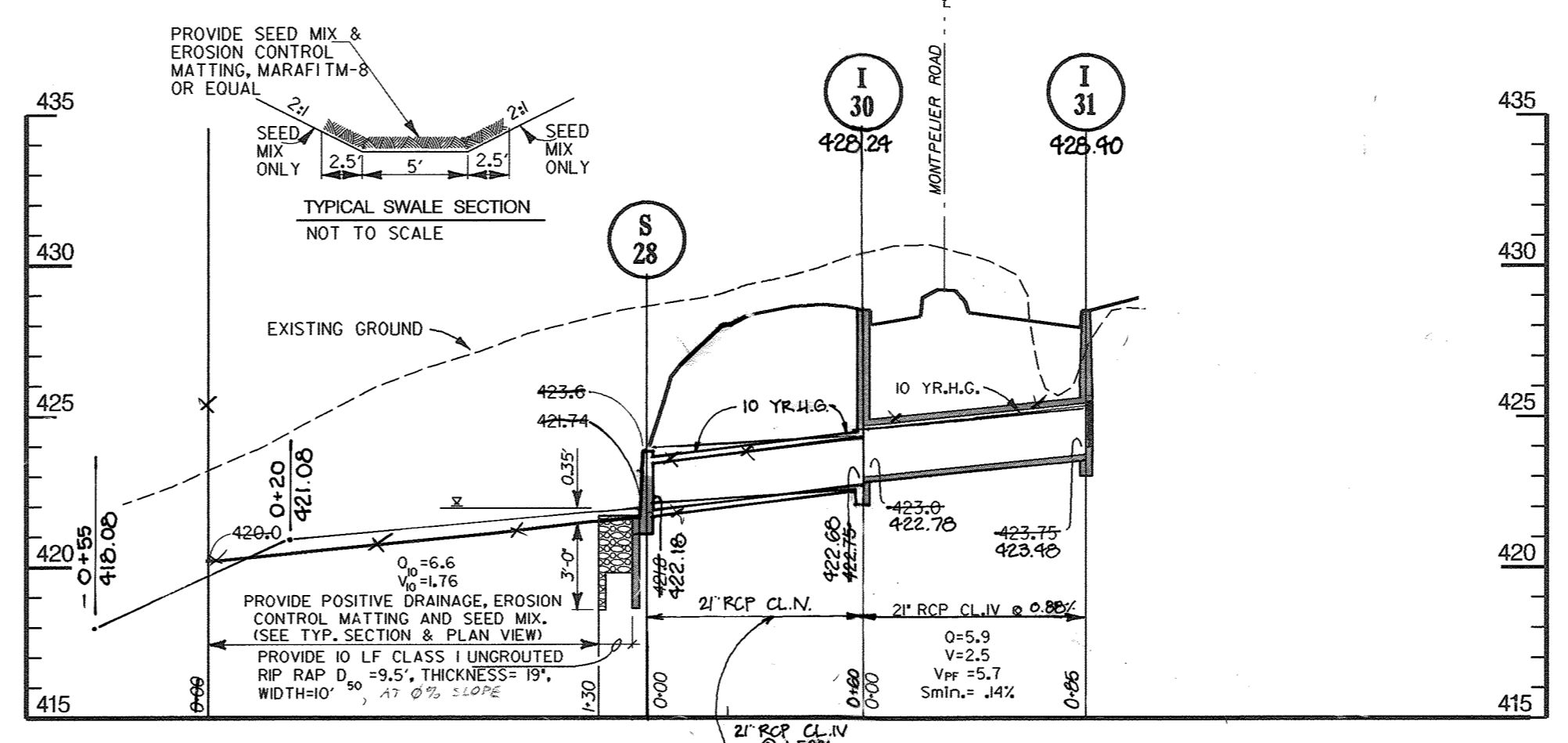
Construction Specifications

- The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.
- Geotextile class C shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining two pieces of geotextile shall be a minimum of one foot.
- Stone for the rip-rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.
- The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.



B Stone Outlet Protection III
Not to Scale

Stone Outlet Protection Specifications



C Storm Drain Profile
Scale: Horiz. 1" = 50'
Vert. 1" = 5'

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
Cheryl Simons 1/24/98
 U.S. NATURAL RESOURCE CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Edmund F. Haile 1/15/98
 HOWARD S.C.D.

DEVELOPER'S CERTIFICATION:
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY 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.
Edward C. Remeck 1/24/98
 SIGNATURE OF DEVELOPER
 PRINT NAME BELOW SIGNATURE

ENGINEER'S CERTIFICATION:
 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.
Edmund F. Haile 1/15/98
 SIGNATURE OF ENGINEER
 PRINT NAME BELOW SIGNATURE

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Andrew M. Daniels 3-2-98
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
William Dammann 3/4/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Cindy Hamilton 3/11/98
 CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH

Date	No.	Revision Description
1-15-99	3	REVISED STORM DRAIN PROFILES
7-20-98	2	REVISED ROAD GRADING/STREET TREES + STORM DRAIN PROFILES
5-13-98	1	REVISED ROAD GRADING + STREET TREES



AS-BUILT
Date: 1/15/98



Edmund F. Haile
Professional Engr. No. 3860

Montpelier Research Park
 HOWARD COUNTY MARYLAND
 OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

DMW
 Daft - McCune - Walker, Inc.
 A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 410 396 3333
 Fax 396 4705

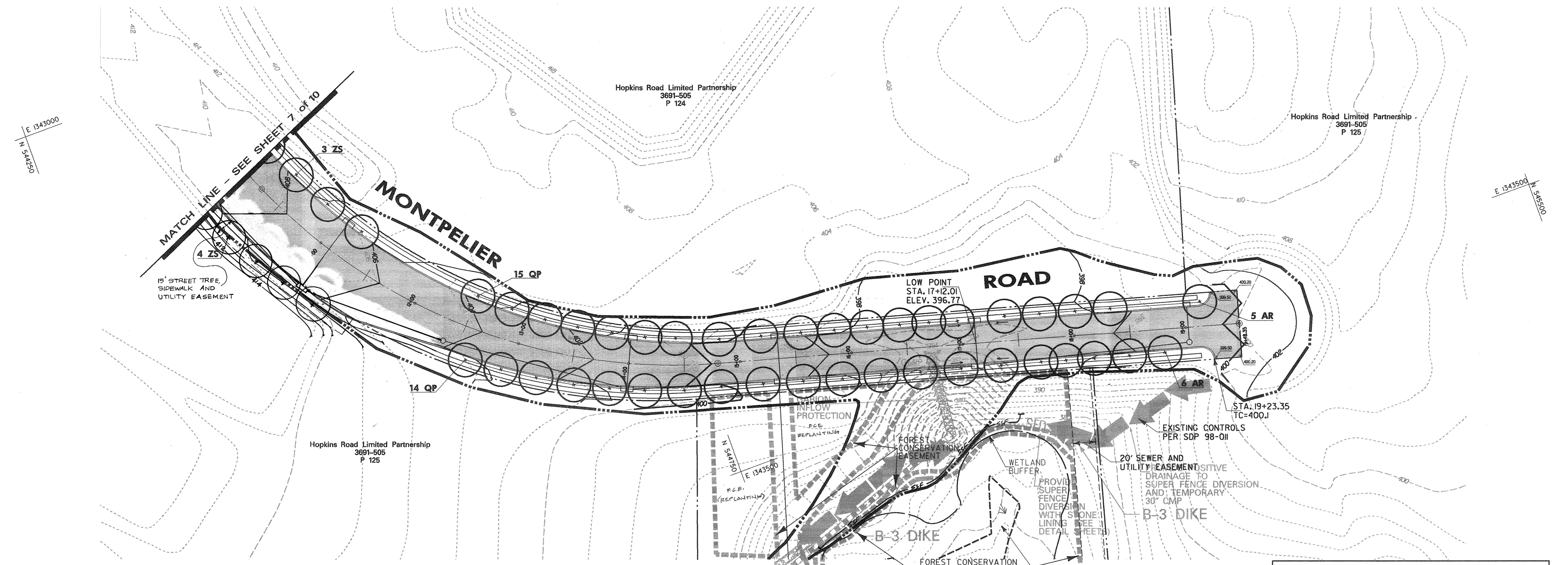
SUBDIVISION NAME	SECTION/AREA	LOTPARCEL #
Montpelier		124,125, & ROAD BED
PLAT OR DEED BOOK #	ZONE	SELECT DISTRICT
L3681,F505	17	PEC
WATER CODE	SEWER CODE	PROJECT TRACT
E 21	6440000	6051.02

TITLE
ROAD GRADING, STREET TREE, EROSION & SEDIMENT CONTROL

Des By: ZAL Scale: As Shown Proj. No. 94172a
 Drn By: TPC, MSS Date: JAN. 28, 1998
 Chk By: Approved: 7 OF 11

F-98-45

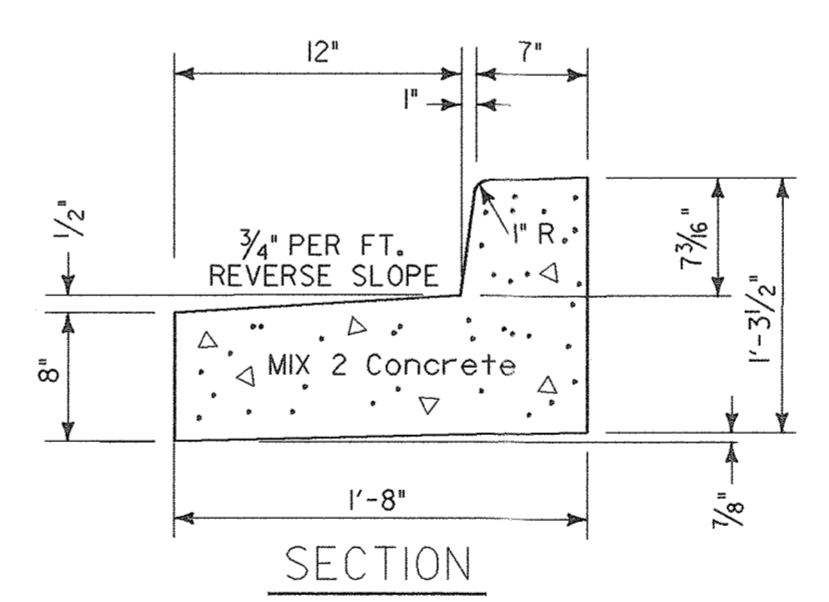
LEGEND	
SYMBOL	DESCRIPTION
	PROPOSED CONTOURS
	STREAM
	EXISTING CONTOURS
	EXISTING TREES/ TREE LINE
	SSF SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	STABILIZED CONSTRUCTION ENTRANCE



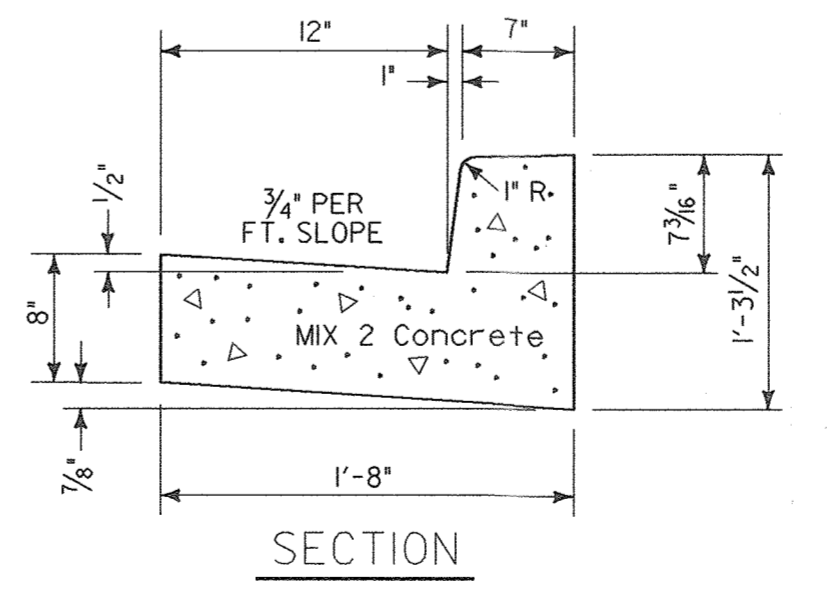
EROSION AND SEDIMENT CONTROLS ARE PROVIDED BY SDP-98-011. THEY ARE TO BE REFURBISHED AND MAINTAINED TO THEIR APPROVED CONDITION.

SEE SHEET 7 FOR PLANT LIST AND DETAIL.

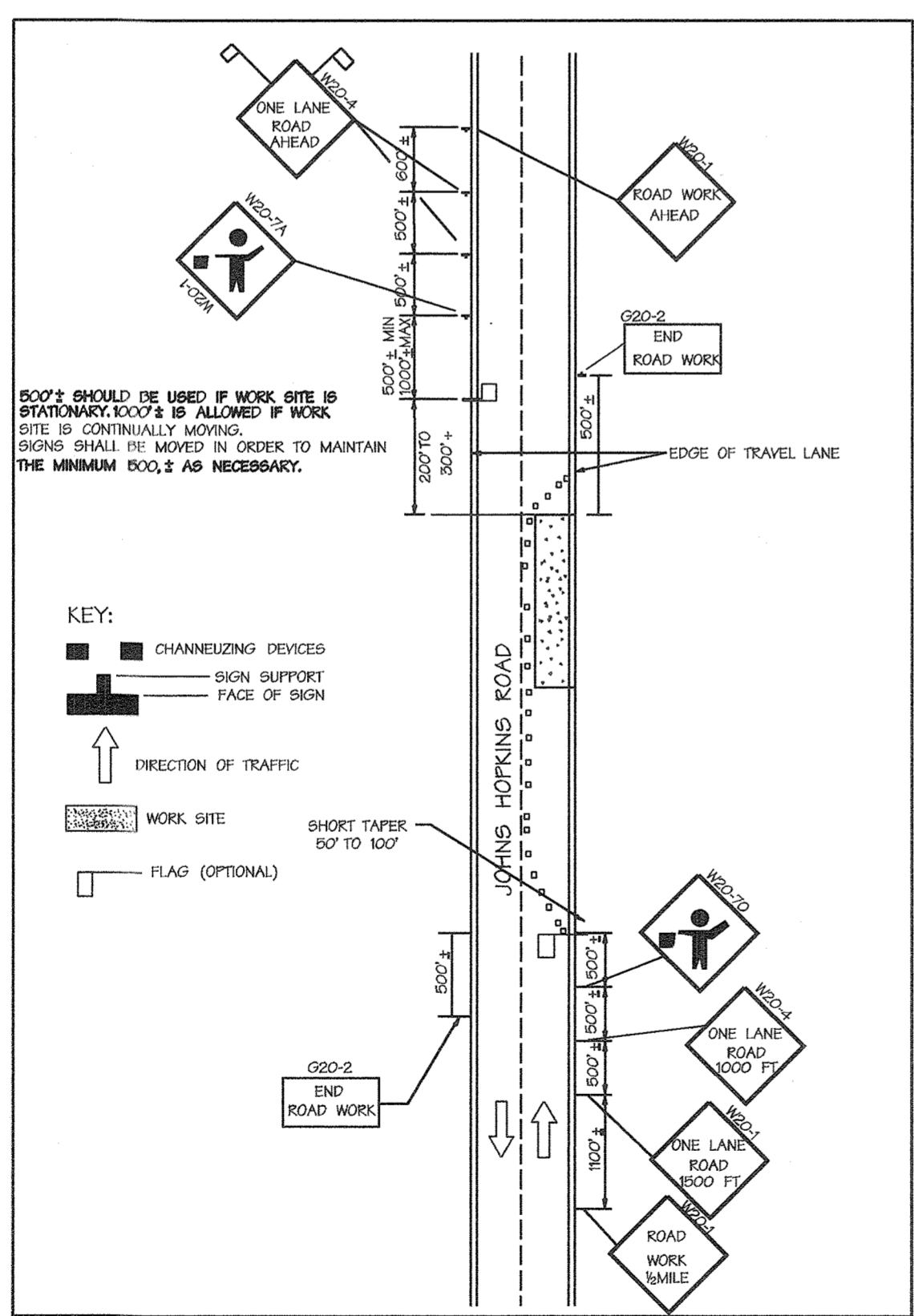
A Grading Plan
Scale: 1" = 50'



7" REVERSE COMBINATION CURB AND GUTTER



7" STANDARD COMBINATION CURB AND GUTTER



MODIFIED FLAGGING OPERATION DETAIL FOR SHOULDER WORK
Not to Scale

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Howard M. Danek 3-2-98
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Mark Damman 3/4/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Linda Hamilton 3/19/98
CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH DATE

5-13-98	1	REVISED GRADING & STREET TREES
Date	No.	Revision Description

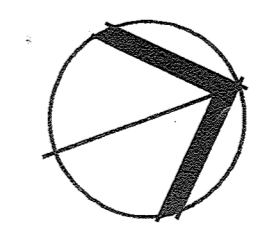
Montpelier Research Park
HOWARD COUNTY MARYLAND
OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21046

DMW
Daft · McCune · Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax: 296 4705



AS-BUILT
1/27/99
Date

Edmund P. Haile
Professional Engr. No. 3860

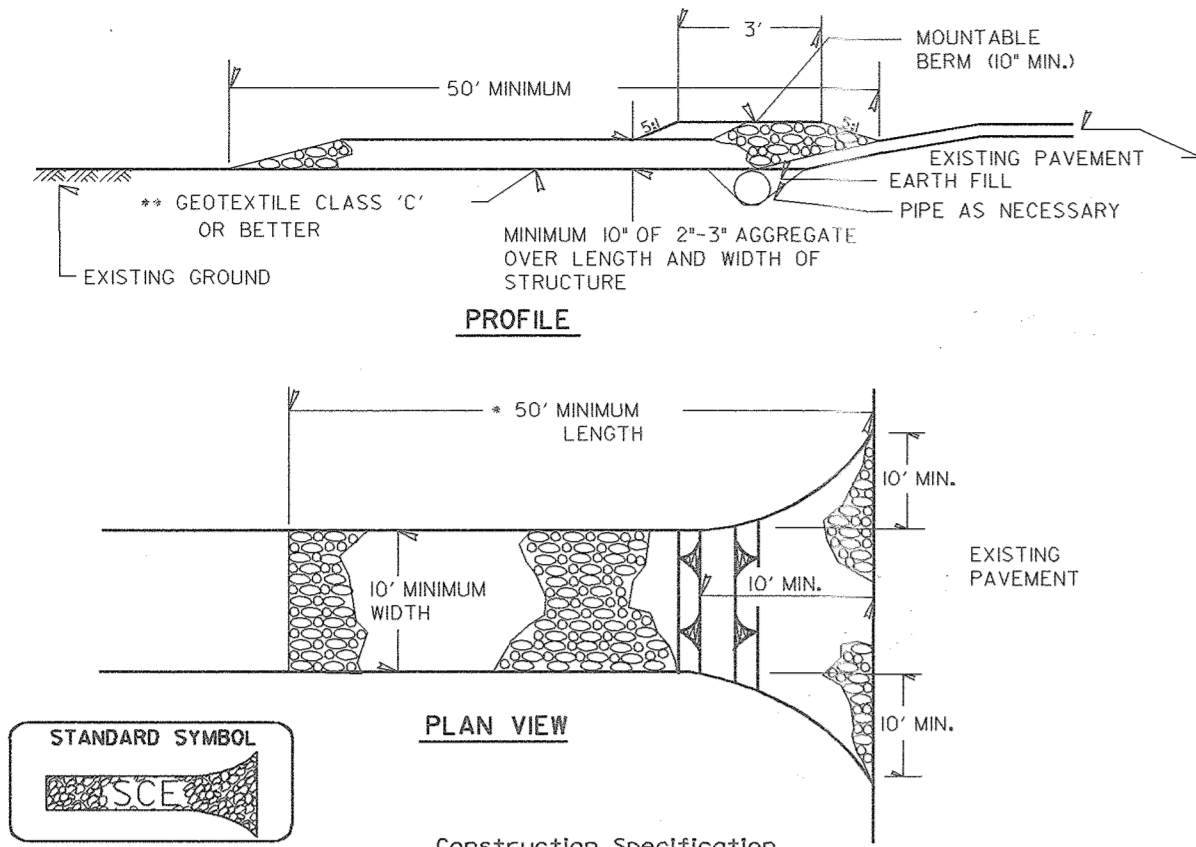


NORTH F-98-45

DEVELOPER'S CERTIFICATION:
I, THE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY 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.
Howard L. Rameck
DATE: 1/27/99

ENGINEER'S CERTIFICATION:
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND HONORABLE 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.
Edmund P. Haile
DATE: 1/27/99

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS
Carol Simms 1/30/98
U.S. NATURAL RESOURCE CONSERVATION SERVICE DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Jeffery Kelly 1/30/98
HOWARD S.C.D. DATE



- Construction Specifications**
- Length - minimum of 50' (+30' for single residence lot).
 - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
 - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.
 - Stone - crushed aggregate (2 to 3) or reclaimed or recycled concrete equivalent shall be placed at least 10' deep over the length and width of the entrance.
 - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5 slopes and a minimum of 10' of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6' minimum will be required.
 - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE F-17-4 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Heavy Duty Stabilized Construction Entrance

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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED** - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.)
- ACCEPTABLE** - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISK 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 (14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31 SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) - USE 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 APPLICATIONS USING MULCH ANCHORING TOOL OR 28 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 SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

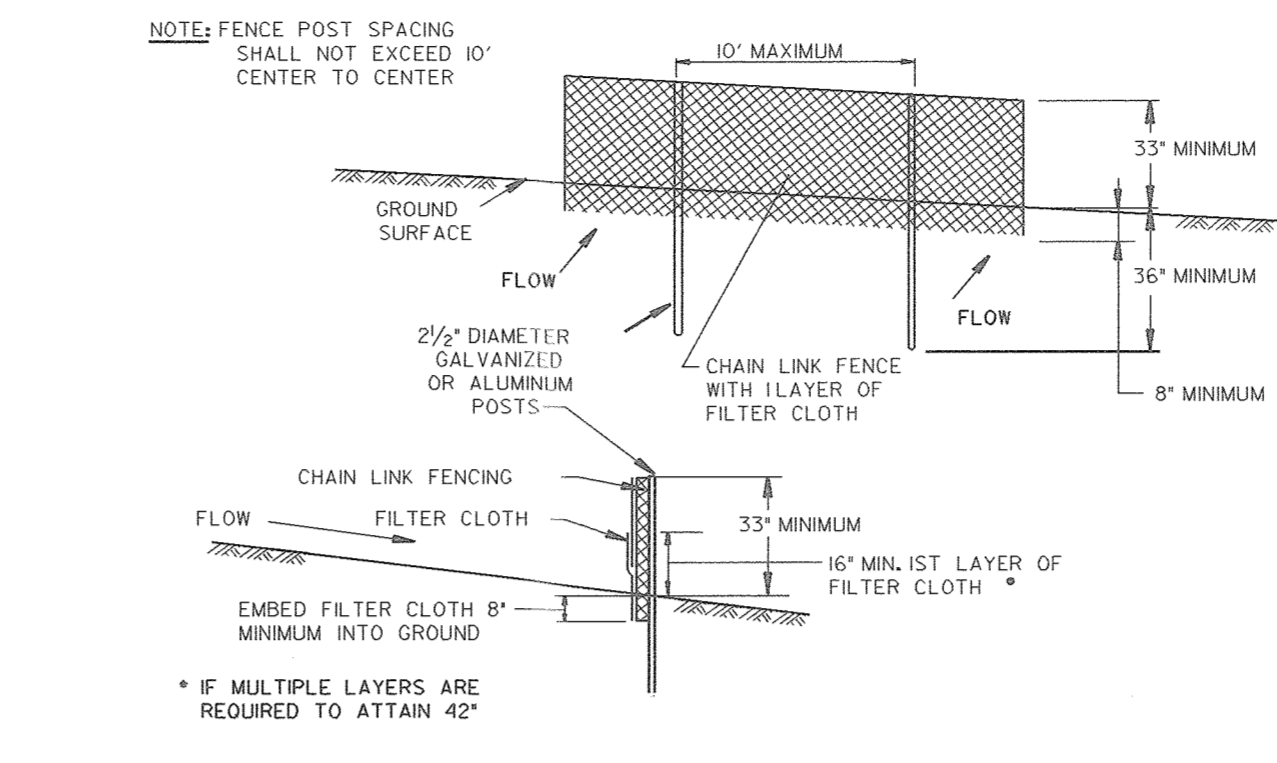
SEEDBED PREPARATION - LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (4 LBS./1000 SQ.FT.)

SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 TO OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED WEEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 28 GAL. PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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



- Construction Specifications**
- Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
 - The posts do not need to be set in concrete.
 - Chain link fence shall be fastened securely to the fence posts with wire ties or staples. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. The chain link fencing shall be six (6) gauge or heavier.
 - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
 - Filter cloth shall be embedded a minimum of 8" into the ground.
 - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
 - Maintenance shall be performed as needed and slit buildup removed when "bumps" develop in the slit fence, or when slit reaches 50% of fence height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE H-25-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Super Silt Fence Not to Scale

- 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).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1
 - FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12, OF THE "HOWARD COUNTY DESIGN MANUAL," (STORM DRAINAGE).
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDING, AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:**

TOTAL AREA OF SITE	104.0 ACRES
AREA DISTURBED	5.8 ACRES
AREA TO BE ROOFED OR PAVED	2.7 ACRES
AREA TO BE VEGETATIVELY STABILIZED	3.1 ACRES
TOTAL CUT	1490 CUBIC YARDS
TOTAL FILL	200 CUBIC YARDS
OFF-SITE WASTE/BORROW AREA LOCATION WASTE	ON-SITE OR SITE WITH AN ACTIVE GRADING PERMIT
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

Howard County Sediment Control General Notes

21.0 STANDARD 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 vegetative 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 as 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 soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slags, coarse fragments, gravel sticks, roots, trash, and other materials larger 1 1/2 inch in diameter.
ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, 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.

Topsoil Specifications FOR SEDIMENT CONTROL /STABILIZATION PURPOSES

DEVELOPER'S CERTIFICATION:
I, THE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THE 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 PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. (ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.)

ENGINEER'S CERTIFICATION:
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: Howard L. Remick DATE: 1/28/98
Signature: Edmund F. Haile DATE: 1/27/98

Temporary And Permanent Seeding Notes

I. For sites having disturbed areas under 5 acres:
I. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
III. For sites having disturbed areas over 5 acres:
I. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
b. Organic contents of topsoil shall be not less than 1.5 percent by weight.
c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
d. No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
Note: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
II. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
V. Topsoil Application
i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

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

Signature: [Name] DATE: 1/27/98
Signature: [Name] DATE: 1/27/98

Landscape Specifications SEE SHEET SHEET 7 & 8 FOR PLANTING PLAN

- The contractor shall review engineering plans to become thoroughly familiar with the grading.
- All equipment and tools shall be placed so as not to interfere or hinder the vehicular traffic flow.
- The contractor shall coordinate with the general contractor regarding timing of installation of plant material.
- The contractor shall insure that his work does not interrupt established or projected drainage patterns.
- During planting operations, excess waste materials shall be promptly and frequently removed from the site.
- Call/Miss Utility a minimum of three days prior to any excavation. The contractor is advised of the existence of underground utilities on the site. Their exact location shall be verified in the field with the owner or general contractor prior to the commencement of any digging operations. In the event they are uncovered the contractor shall be held responsible for all damage to utilities and such damage shall not result in any additional expenses to the owner. Any damage to unreported lines shall not be the responsibility of the contractor.
- If utility lines are encountered in excavation of tree pits, other locations for trees shall be made by the contractor without additional compensation. No changes of location shall be made without approval of the landscape architect.
- In the event of variation between quantities shown on the plant list and the plans, the plans shall control. The contractor is responsible for verifying all plant quantities prior to the commencement of work. All discrepancies shall be reported to the landscape architect for clarification prior to bidding. The contractor shall furnish plant material in sizes as specified in the plant list.
- Plants shall be located as shown on the drawings or as designated in the field.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regard to size, growth, size of ball, and density of branch structure. Plant material shall be tagged at the source by the landscape architect unless this requirement is specifically waived.
- All plants (B&B or container) shall be properly identified by weather-proof labels securely attached thereto before delivery to project site. Labels shall identify plants by name, species, and size. Labels shall not be removed until the final inspection by the landscape architect or agent in charge.
- Any material and/or work may be rejected by the landscape architect if it does not meet the requirements of the specifications. All rejected materials shall be removed from the site by the contractor.
- No substitutions shall be made without written consent of the owner or landscape architect.
- The landscape architect or owner shall have the right, at any stage of the operations, to reject any and all work and material which, in his opinion, does not meet the requirements of these plans and specifications.
- The contractor shall be wholly responsible for stability and conditions of all trees and shrubs and shall be legally liable for any damage caused by instability of any plant materials. Staking of all trees shall be done utilizing a method agreed upon by the landscape architect, as indicated on this sheet.
- Maintenance shall begin after each plant has been installed and shall continue until 90 days after final acceptance by the architect or owner representative. Maintenance includes watering, pruning, weeding, fertilizing, mulching, replacement of sick or dead plants, and any other care necessary for the proper growth of the plant material. The contractor must be able to provide continued maintenance if requested by the owner.
- Upon completion of all landscaping, an acceptance of the work shall be held. The contractor shall notify the landscape architect or owner for scheduling the inspection at least seven (7) days prior to the anticipated inspection date.
- All trees shall be guaranteed for 12 months from the date of acceptance. All shrubs shall be guaranteed for 12 months from the date of acceptance. Replacement plants used shall be guaranteed for an additional 90 days.
- The contractor shall dispose of stumps and major roots of all plants to be removed. Any depressions caused by removal operations shall be refilled with fertile, friable soil placed and compacted so as to reestablish proper grade for new planting and/or lawn areas.
- All disturbed areas of the site not planted shall be fine graded and seeded.

Sequence of Construction

SEQUENCE	NUMBER OF DAYS
1. OBTAIN A GRADING PERMIT.	7
2. REFURBISH AND MAINTAIN CONTROLS IN ACCORDANCE WITH SDP-98-011	14
3. INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZATION	21
4. CONSTRUCT STORM DRAINAGE	21
5. CONSTRUCT UTILITIES.	60
6. CLEAR AND GRUB AND ROUGH GRADE TYPICAL SECTION ALONG JOHN'S HOPKINS ROAD.	14
7. FINE GRADE AND CONSTRUCT PAVING	60
8. STABILIZE ALL AREAS IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS.	14
9. UPON APPROVAL OF THE SEDIMENT AND EROSION CONTROL INSPECTOR, REMOVE ALL EROSION CONTROL MEASURES AND STABILIZATION.	7
10. PROVIDE STREET TREES AND REMAINING LANDSCAPING.	14

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
Signature: Howard M. Danek DATE: 3-2-98
CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Signature: [Name] DATE: 3/4/98
Signature: [Name] DATE: 3/17/98
CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH

Montpelier Research Park
HOWARD COUNTY MARYLAND
OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

DMW
Daft - McCune - Walker, Inc.
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals
200 East Pennsylvania Avenue
Towson, Maryland 21286
410 296 3333
Fax: 296 4705

AS-BUILT
Date: 1/27/98

Professional Engr. No. 3860

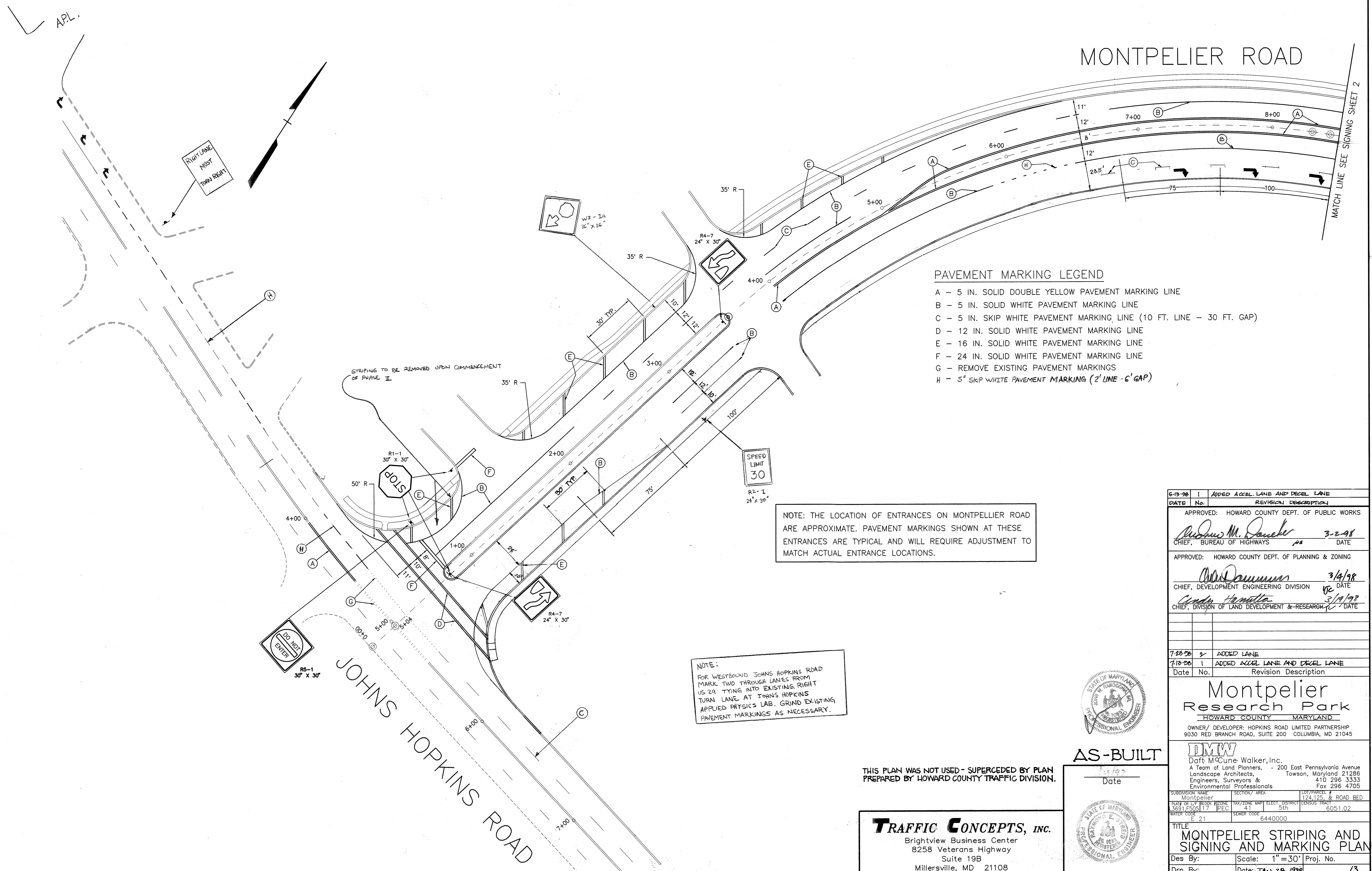
Subdivision Name: Montpelier SECTION AREA: 124.125 & ROAD BED
FLAT OR IF BLOCK # NONE PHONE: 41 FAX: NONE MAP: 41 ELECT. DISTRICT: 5th CENSUS TRACT: 6051.02
WATER CODE: E 21 SEWER CODE: 6440000

EROSION AND SEDIMENT CONTROL DETAILS

Des By: ZAL Scale: No Scale Proj. No. 941712a
Dwn By: TPC, MSS Date: JAN 28, 1998
Chk By: Approved: [Signature] 9 OF 13

F-98-45

MONTPELIER ROAD



PAVEMENT MARKING LEGEND

- A - 5 IN. SOLID DOUBLE YELLOW PAVEMENT MARKING LINE
- B - 5 IN. SOLID WHITE PAVEMENT MARKING LINE
- C - 5 IN. SKIP WHITE PAVEMENT MARKING LINE (10 FT. LINE - 30 FT. GAP)
- D - 12 IN. SOLID WHITE PAVEMENT MARKING LINE
- E - 16 IN. SOLID WHITE PAVEMENT MARKING LINE
- F - 24 IN. SOLID WHITE PAVEMENT MARKING LINE
- G - REMOVE EXISTING PAVEMENT MARKINGS
- H - 5' SKIP WHITE PAVEMENT MARKING (2' LINE - 6' GAP)

NOTE: THE LOCATION OF ENTRANCES ON MONTPELIER ROAD ARE APPROXIMATE. PAVEMENT MARKINGS SHOWN AT THESE ENTRANCES ARE TYPICAL AND WILL REQUIRE ADJUSTMENT TO MATCH ACTUAL ENTRANCE LOCATIONS.

NOTE:
FOR WESTBOUND JOHNS HOPKINS ROAD MARK TWO THROUGH LANES FROM US 29 TYING INTO EXISTING RIGHT TURN LANE AT JOHNS HOPKINS APPLIED PHYSICS LAB. GRIND EXISTING PAVEMENT MARKINGS AS NECESSARY.

DATE	No.	REVISION DESCRIPTION
6-19-98	1	ADDED ACCEL. LANE AND DECEL LANE
7-23-98	2	ADDED LANE
7-19-98	1	ADDED ACCEL LANE AND DECEL LANE

Montpelier Research Park
HOWARD COUNTY MARYLAND
OWNER/ DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

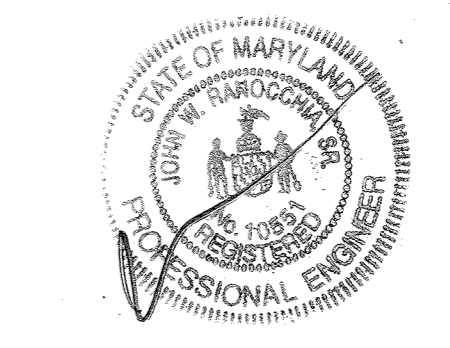
DMW
DRAFT McCune-Walker, Inc.
A Team of Land Planners, - 200 East Pennsylvania Avenue
Landscape Architects, - Towson, Maryland 21286
Engineers, Surveyors & 410 296 3333
Environmental Professionals Fax 296 4705

SUBDIVISION NAME	SECTION/ AREA	LOT/PARCEL #
Montpelier	124, 125, & ROAD BED	
PLAT OR LOT BLOCK #/ZONE	TAX/ZONE MAP ELECT. DISTRICT	CENSUS TRACT
3681.F505/17	41 5th	6051.02
WATER CODE	SEWER CODE	
E 21	6440000	

TITLE		
MONTPELIER STRIPING AND SIGNING AND MARKING PLAN		
Des By:	Scale: 1" = 30'	Proj. No.
Drn By:	Date: JAN. 28, 1998	
Chk By:	Approved:	10 OF 13

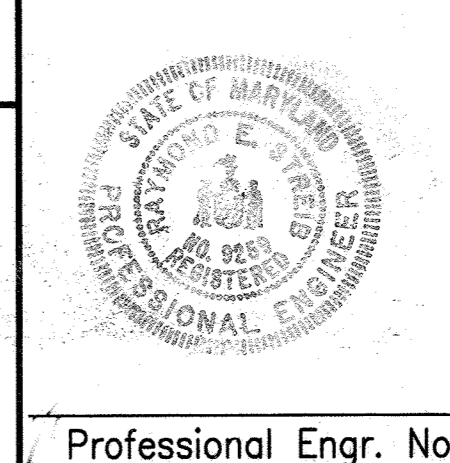
THIS PLAN WAS NOT USED - SUPERCEDED BY PLAN PREPARED BY HOWARD COUNTY TRAFFIC DIVISION.

TRAFFIC CONCEPTS, INC.
Brightview Business Center
8258 Veterans Highway
Suite 19B
Millersville, MD 21108
(410) 987-0427 F-98-45



AS-BUILT

Date



PAVEMENT MARKING LEGEND

- A - 5 IN. SOLID DOUBLE YELLOW PAVEMENT MARKING LINE
- B - 5 IN. SOLID WHITE PAVEMENT MARKING LINE
- C - 5 IN. SKIP WHITE PAVEMENT MARKING LINE (10 FT. LINE - 30 FT. GAP)
- D - 12 IN. SOLID WHITE PAVEMENT MARKING LINE
- E - 16 IN. SOLID WHITE PAVEMENT MARKING LINE
- F - 24 IN. SOLID WHITE PAVEMENT MARKING LINE
- G - REMOVE EXISTING PAVEMENT MARKINGS

NOTE: THE LOCATION OF ENTRANCES ON MONTPELLIER ROAD ARE APPROXIMATE. PAVEMENT MARKINGS SHOWN AT THESE ENTRANCES ARE TYPICAL AND WILL REQUIRE ADJUSTMENT TO MATCH ACTUAL ENTRANCE LOCATIONS.

MONTPELLIER ROAD

TYPE III BARRICADE

ROAD CLOSED

R11-2
48" x 30"

ROAD CLOSED
5' x 30' SIGN

W20-3
36" x 36"



AS-BUILT

11/29/97
Date

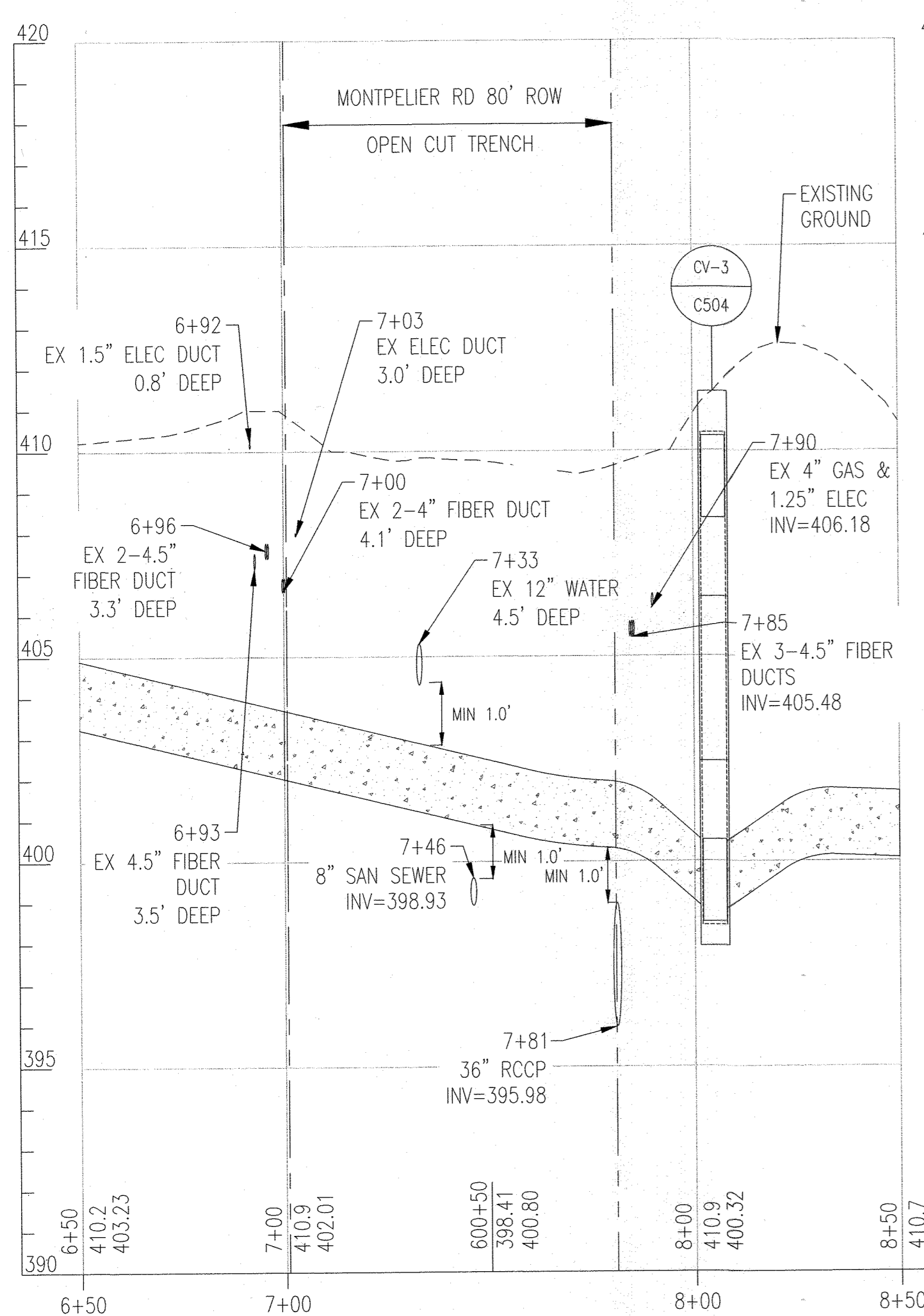


THIS PLAN WAS NOT USED - SUPERCEDED BY PLAN PREPARED BY HOWARD COUNTY TRAFFIC DIVISION.

TRAFFIC CONCEPTS, INC.
Brightview Business Center
8258 Veterans Highway
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(410) 987-0427 F-98-45

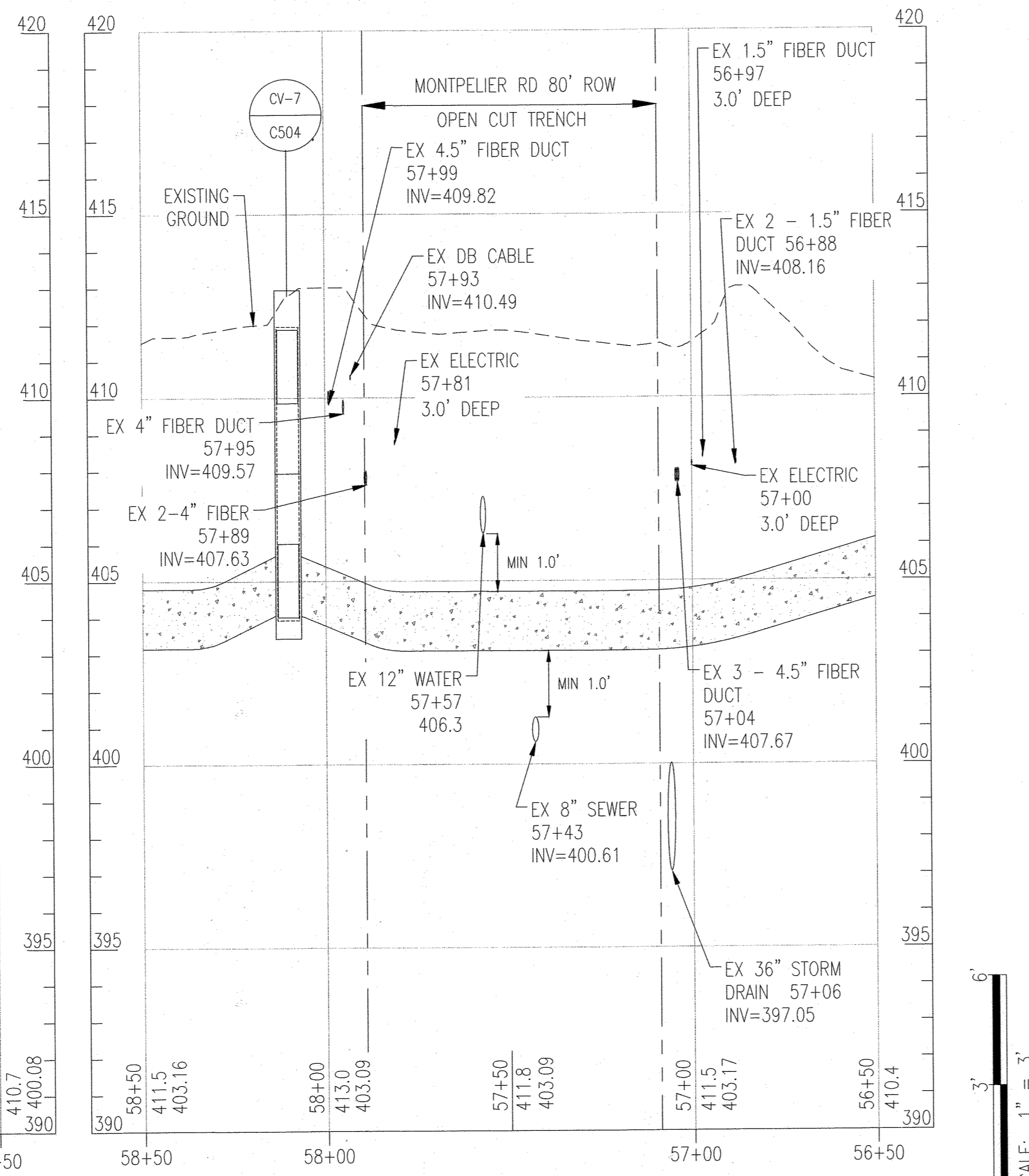
Professional Engr. No.

5-13-98	1	ADDED ACCEL. LANE AND DECEL. LANE
DATE	No.	REVISION DESCRIPTION
APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS		
<i>Andrew M. Rancek</i>		3-2-98
CHIEF, BUREAU OF HIGHWAYS		DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING		
<i>Mike Cummings</i>		3/4/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE
<i>Cindy Hamilton</i>		3/19/98
CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH		DATE
Date	No.	Revision Description
<p>Montpelier Research Park HOWARD COUNTY MARYLAND</p> <p>OWNER/ DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP 9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045</p> <p>DMW Daft McCune Walker, Inc. A Team of Land Planners, - 200 East Pennsylvania Avenue Landscape Architects, Towson, Maryland 21286 Engineers, Surveyors & Environmental Professionals 410 296 3333 Fax 296 4705</p>		
SUBDIVISION NAME	SECTION/ AREA	LOT/PARCEL
Montpelier		124, 125, & ROAD BED
PLAT OR L/T BLOCK # ZONE	TAX/ZONE MAP ELECT. DISTRICT	CENSUS TRACT
13691 P505 17 PEC	41 5th	6051.02
WATER CODE	SEWER CODE	
E 21	6440000	
TITLE		
MONTPELLIER STRIPING AND SIGNING AND MARKING PLAN		
Des By:	Scale: 1" = 30'	Proj. No.
Drn By:	Date: JAN 20 1998	13
Chk By:	Approved:	11 OF 14



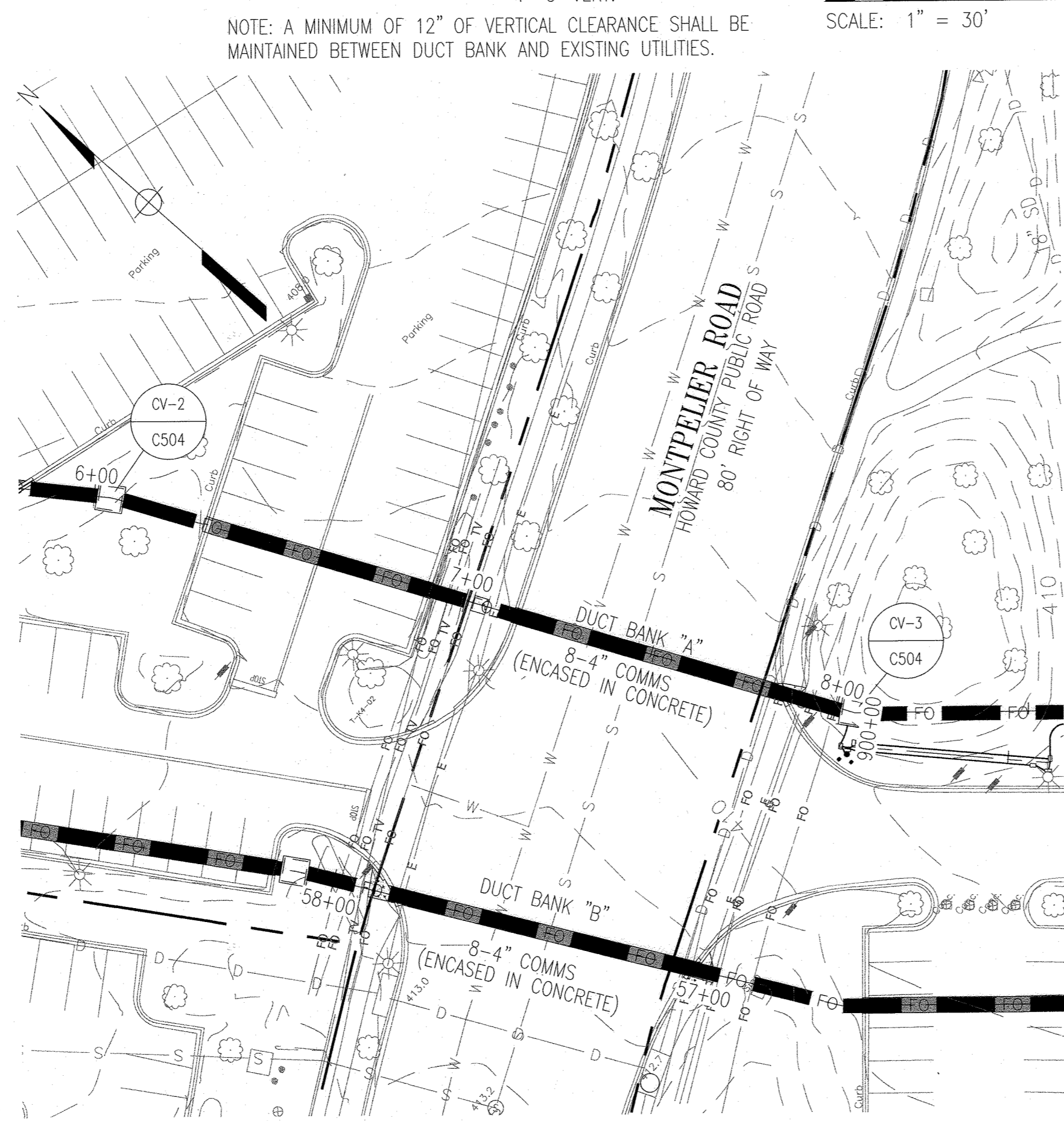
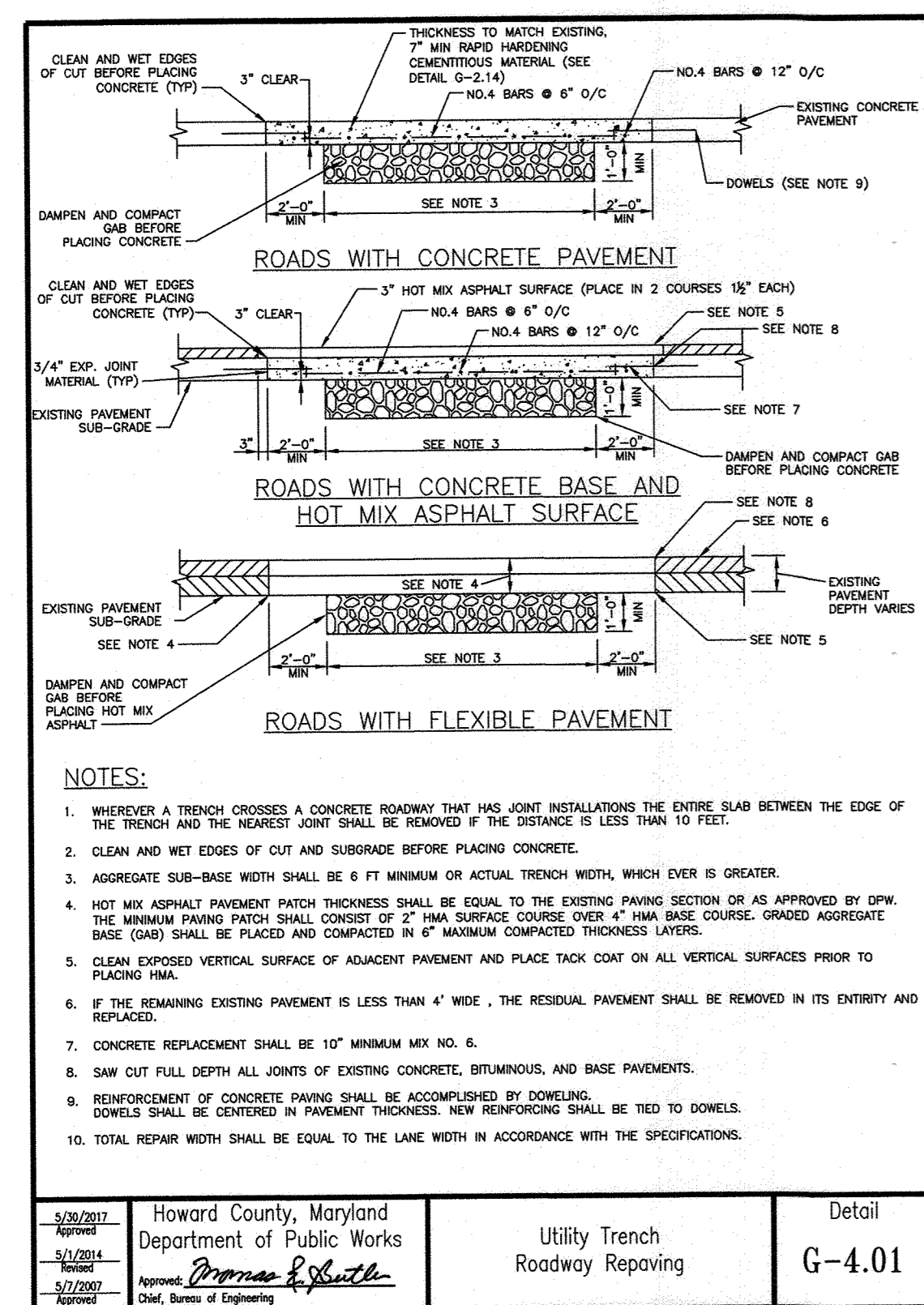
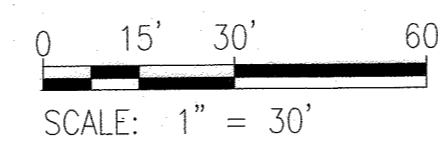
MONTPELIER RD ROW CROSSING - DUCT BANK A

SCALE: 1"=30' HORIZ.
1"=3' VERT.



MONTPELIER RD ROW CROSSING - DUCT BANK B

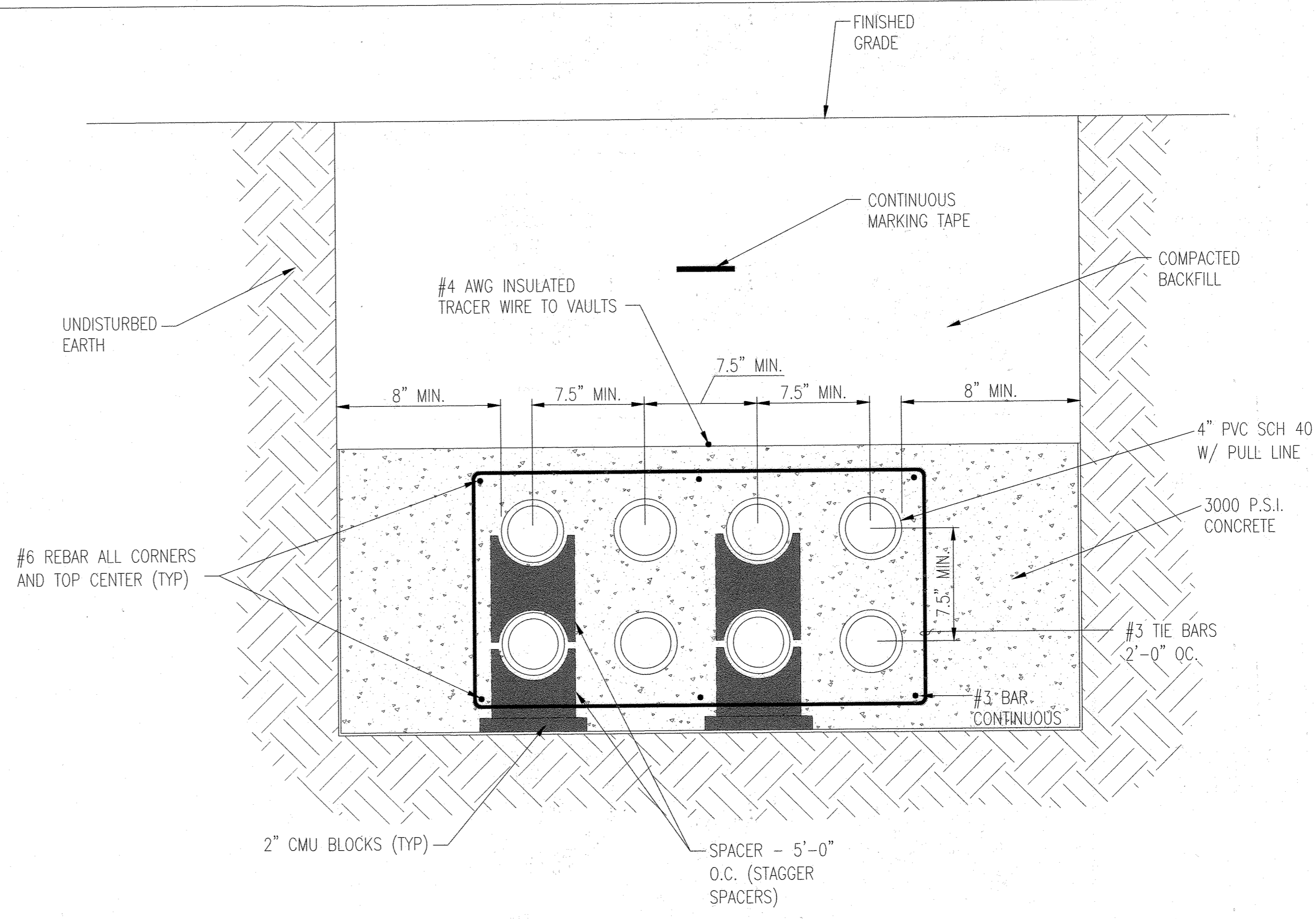
SCALE: 1"=30' HORIZ.
1"=3' VERT.



NOTE: A MINIMUM OF 12" OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN DUCT BANK AND EXISTING UTILITIES.

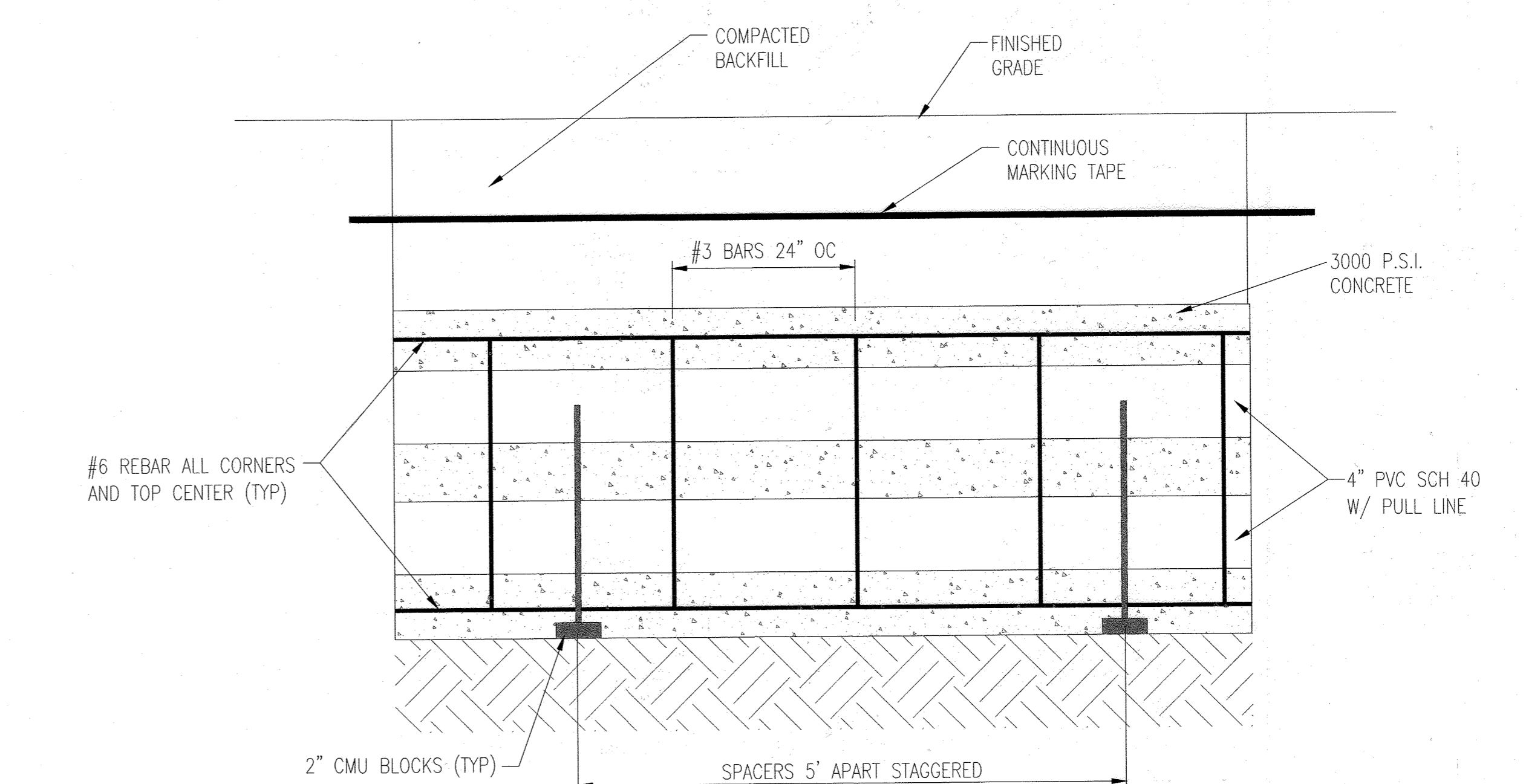
PLAN VIEW SCALE: 1" = 30'

STATION	NORTHING	EASTING
7+00	1358836.750	503606.552
8+00	1358808.321	503720.426
57+00	1358739.872	503668.912
58+00	1358764.444	503571.978



2 CONCRETE ENCASED TELECOM DUCTBANK SECTION

NOT TO SCALE



3 CONCRETE ENCASED TELECOM DUCTBANK PROFILE VIEW

NOT TO SCALE

- GENERAL NOTES:
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-777, AND PROVIDED THE MISS UTILITY NUMBER TO APL, A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION WORK BEGINNING.
 - ALL EXCAVATIONS SHALL COMPLY WITH OSHA 1926 SUBPART P-EXCAVATIONS.
 - OSP SCOPE INCLUDES PATHWAYS ONLY. FIBER CABLING AND END CONNECTIONS BY OTHERS.
 - CONTRACTOR SHALL SUPPORT AND AVOID UNDERMINING EXISTING UTILITIES.
 - CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER.
 - CONTRACTOR SHALL NOT STOCKPILE SOIL WITHIN MONTPELIER ROAD RIGHT OF WAY. ALL EXCAVATION SOIL SHALL BE STOCKPILED IN APPROVED AREAS OF ADJACENT PROPERTIES.
 - BACKFILLS PLACED IN STRUCTURAL AREAS, SUCH AS PARKING LOTS AND ROADWAYS, SHALL BE COMPACTED TO MINIMUM 95 PERCENT OF THE MAXIMUM DRY DENSITY.
 - BACKFILLS PLACED IN THE TOP 12 INCHES OF PAVEMENT SUNGRADE IN A PUBLIC RIGHT OF WAY SHALL BE COMPACTED TO THE REQUIREMENTS OF THE JURISDICTION HAVING AUTHORITY.
 - CONTRACTOR SHALL IMBRICATE SLOPED SILT FENCE PER HSCD STANDARD NOTE #14.
 - WHERE UTILITY TRENCHES ARE REQUIRED WITHIN TREE ROOT ZONES, CONTRACTOR SHALL EXCAVATE UNDER OR AROUND TREE ROOTS BY HAND OR WITH AIR SPADE, OR TUNNEL UNDER THE ROOTS BY DRILLING, AUGER BORING, OR PIPE JACKING. NO STREET TREES WITHIN MONTPELIER ROAD ROW SHALL BE REMOVED OR DISTURBED.

KEY PLAN

PROJECT NORTH

SEAL

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND, THAT I AM A DULY LICENSED PROFESSIONAL ARCHITECT OR ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 19376 EXPIRATION: 09/22/23

JOHNS HOPKINS
APPLIED PHYSICS LABORATORY
11100 JOHNS HOPKINS ROAD LAUREL, MD 20723-6999

Whitman, Requardt & Associates, LLP
Engineers - Architects - Environmental Planners
Est. 1915

ARCHITECTURAL/ENGINEERING DESIGNER

APL

OWNER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH ROAD
SUITE 200
COLUMBIA, MD 21045

DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH ROAD
SUITE 200
COLUMBIA, MD 21045

PROJECT: MONTPELIER RESEARCH PARK
HOWARD COUNTY MARYLAND

AREA: TAX MAP 41 PARCELS 124&125 ZONING PEC
GRID 17 5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PLAT #13691, F505 CENSUS TRACT 6051.02

TITLE: REVISED MONTPELIER ROAD CONSTRUCTION DRAWINGS

DUCT BANKS A & B
MONTPELIER RD CROSSINGS

REVISION LOG		
#	DESCRIPTION	DATE
1	REPLACEMENT SHEET	11/22

DESIGNED BY: JTD	DRAWING NUMBER: C201
CHECKED BY: AUJ	
CODE REVIEW:	

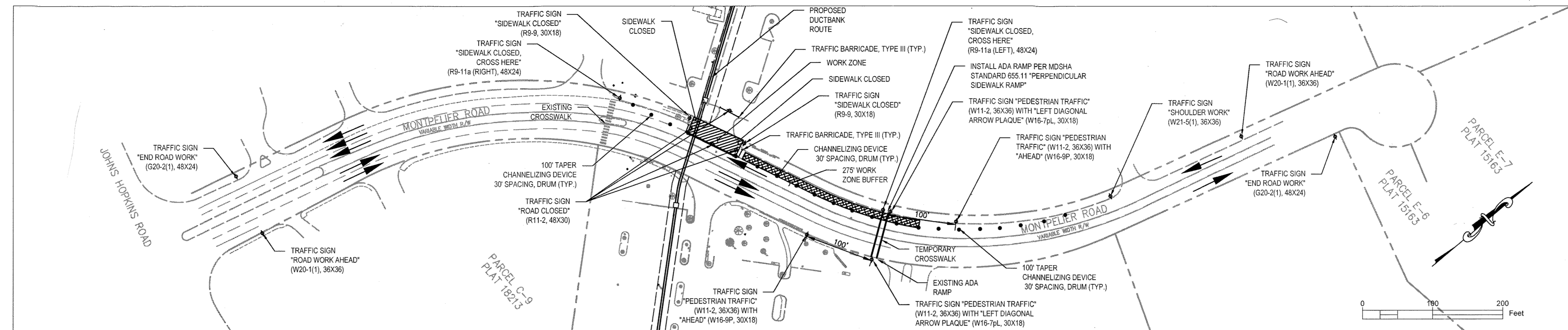
SHEET 12 OF 13
F-98-045

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

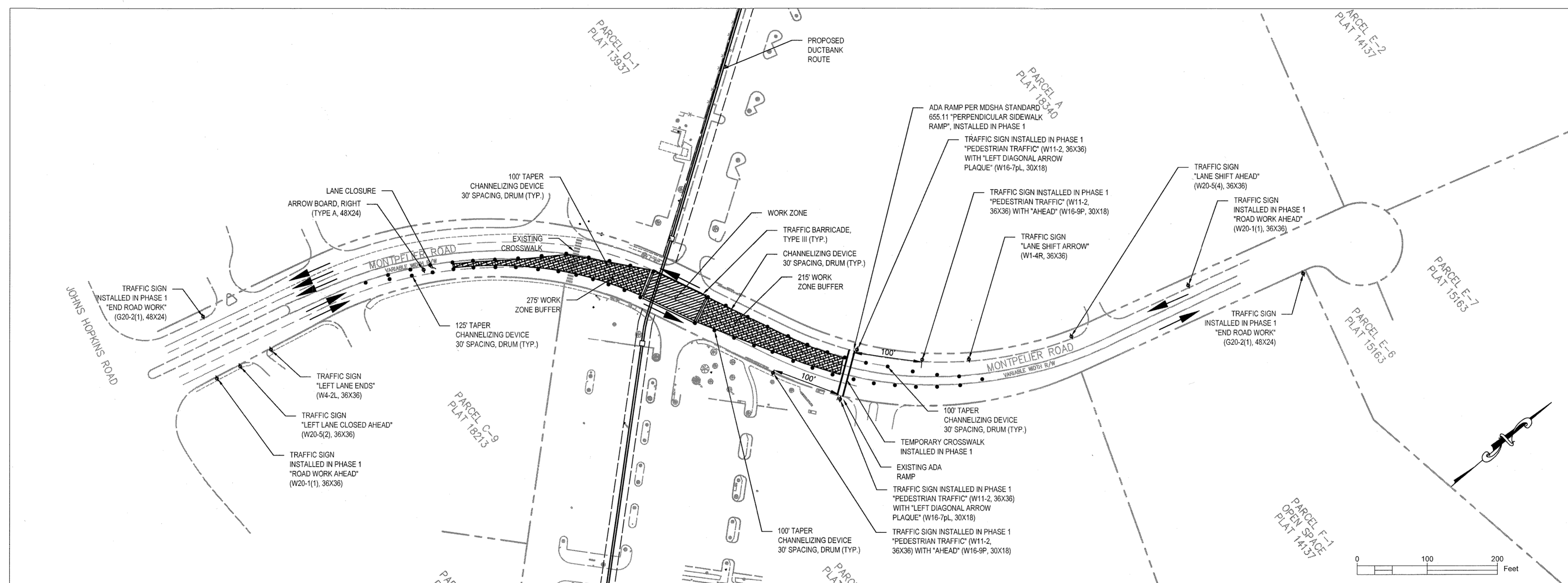
DATE: 9.1.23

DATE: 9/15/23

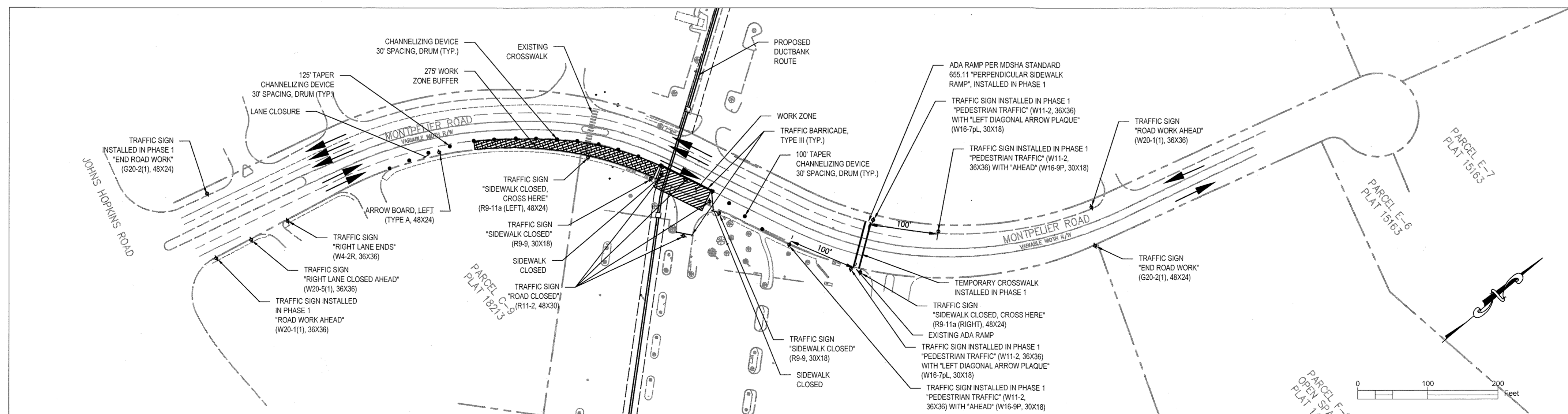
- END ROAD WORK
G20-2(1)
48X24
- SIDEWALK CLOSED
CROSS HERE
R9-11a (RIGHT)
48X24
- SIDEWALK CLOSED
CROSS HERE
R9-11a (LEFT)
48X24
- ROAD CLOSED
R11-2
48X30
- W1-4R
36X36
- W4-2L
36X36
- W4-2R
36X36
- W11-2
36X36
- ROAD WORK AHEAD
W20-1(1)
36X36
- RIGHT LANE CLOSED AHEAD
W20-5(1)
36X36
- SHOULDER WORK
W21-5(1)
36X36
- LEFT LANE CLOSED AHEAD
W20-5(2)
36X36
- LANE SHIFT AHEAD
W20-5(4)
36X36
- W16-7pL
30X18
- AHEAD
W16-9P
30X18
- SIDEWALK CLOSED
R9-9
30X18



1 MAINTENANCE OF TRAFFIC PLAN - PHASE 1
SCALE: 1" = 50'



2 MAINTENANCE OF TRAFFIC PLAN - PHASE 2
SCALE: 1" = 50'



3 MAINTENANCE OF TRAFFIC PLAN - PHASE 3
SCALE: 1" = 50'

- GENERAL NOTES:**
- THE CONTRACTOR TO CONFIRM CONSTRUCTION FOOTPRINT REQUIRED FOR EQUIPMENT AND MATERIALS. WORK ZONE, SIGN PLACEMENT, TAPER LENGTH, CHANNELIZING DEVICES AND BARRICADES SHALL BE ADJUSTED FOR CONSTRUCTION FOOTPRINT FOR THE PURPOSE OF KEEPING CONSTRUCTION PERSONNEL AND THE GENERAL PUBLIC SAFE.
- STANDARD NOTES:**
- THE CONTRACTOR SHALL ADHERE TO THE 2011 MDOT SHA MUTCD OR LATEST ADDITION.
 - THE CONTRACTOR SHALL ADHERE TO THE LATEST EDITION OF THE MDOT SHA BOOK OF STANDARDS.
 - PARKING IS TO BE RESTRICTED FOR 72 HOURS.
 - CONTRACTOR SHALL PRESERVE A MINIMUM SIDEWALK CLEARANCE OF 4 FEET FOR PEDESTRIANS.
 - TRAVEL LANES MUST REMAIN AT A MINIMUM 11'-0" WIDTH.
 - LANE CLOSURE HOURS SHALL BE LIMITED TO 9:00am - 4:00pm.
 - SIGNS NO LONGER REQUIRED OR APPLICABLE SHALL BE REMOVE, COVERED OR TURNED AWAY.
 - SIGNS SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF ALL WORK AND REMOVED IMMEDIATELY AFTER COMPLETION OF ACTIVITIES.
 - ACCESS TO ALL ROADWAYS & DRIVEWAYS MUST BE MAINTAINED AT ALL TIMES.
 - THE CONTRACTOR SHALL PROVIDE AN ADEQUATE WORK ZONE BUFFER PER MD STD. 104.01-81 AND THESE PLANS.
 - THE CONTRACTOR SHALL PROVIDE AN ADEQUATE LANE SHIFT/CLOSURE TAPER PER MD STD. 104.01-80 AND THESE PLANS.
 - THE CONTRACTOR SHALL INSTALL AND REMOVE TRAFFIC CONTROL DEVICES PER MD STD. 104.06-01 THROUGH 104.06-04.
 - THE CONTRACTOR SHALL INSTALL CHANNELIZING DEVICES PER MD STD. 104.01-306 AND 104.01-300 WHILE REFERENCING MD STD. 104.00-09 AND 104.00-10.
 - THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A PEDESTRIAN DETOUR CONSISTENT WITH MDOT SHA MUTCD TYPICAL APPLICATIONS 6H-28, 6H-29, AND THESE PLANS.
 - TEMPORARY CROSSWALK SHALL CONSIST OF 12" PERPENDICULAR TEMPORARY PAINT STRIPES, 8 FEET IN WIDTH.

- SEQUENCE OF CONSTRUCTION NOTES:**
- PHASE 1: THE CONTRACTOR SHALL UTILIZE A RIGHT SHOULDER OPERATION ON SOUTHBOUND MONTPELIER ROAD PER MD STD. 104.02-02 AND THESE PLANS.
 - PHASE 2: THE CONTRACTOR SHALL UTILIZE A LANE SHIFT OPERATION ON SOUTHBOUND MONTPELIER ROAD PER MD STD. 104.02-04 AND THESE PLANS. THE CONTRACTOR SHALL UTILIZE A LEFT LANE CLOSURE ON NORTHBOUND MONTPELIER ROAD PER MD STD. 104.03-04 AND THESE PLANS.
 - PHASE 3: THE CONTRACTOR SHALL UTILIZE A RIGHT LANE CLOSURE OF NORTHBOUND MONTPELIER ROAD PER MD STD. 104.03-06 AND THESE PLANS.

LEGEND:

- WORK ZONE
- WORK ZONE BUFFER
- TRAFFIC DRUM
- PROPOSED TEMPORARY SIGN AND SUPPORTS
- TRAFFIC BARRICADE (TYPE III)

Seth D. Schertz
03/10/20
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. 54326 Expiration Date 05/12/21

APPROVED DEPARTMENT OF PUBLIC WORKS	
<i>Janet</i> Chief, Bureau of Highways	9/3/2020
APPROVED DEPARTMENT OF PLANNING AND ZONING	
<i>dt</i> Chief, Division of Land Development	9/23/20
<i>dt</i> Chief, Development Engineering Division	9/23/20

Date	No.	Revision Description

Montpelier Research Park
HOWARD COUNTY MARYLAND
OWNER/DEVELOPER: HOPKINS ROAD LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE 200 COLUMBIA, MD 21045

APL **JOHNS HOPKINS**
APPLIED PHYSICS LABORATORY
11100 JOHNS HOPKINS ROAD LAUREL, MD 20723-6099

Gensler **BLACK & VEATCH**
ARCHITECTURAL/ENGINEERING DESIGNER
1 East Pratt Street, Suite 202, Baltimore, MD 21202
Tel: 410.539.8776, Fax: 410.539.3744
BLACK & VEATCH, 11401 Lamar Ave., Overland Park, KS 66211

SUBDIVISION NAME: Montpelier	SECTION/AREA: N/A	LOT/PARCEL/F: 124, 125, & ROAD BED
PLAT FILE: L3891.F505	BLOCK # 17	ZONING MAP: 411
WATER CODE: E 21	PEC: 17	ELECT DISTRICT: 5th
	SEWER CODE: 6440000	CENSUS TRACT: 6051.02

TITLE: MP8 OSP DUCTBANK MAINTENANCE OF TRAFFIC PLAN		
Des By: AKR	Scale: As Shown	Proj. No.
Des By: SDS	Date: 2-18-2020	
Chk By:	Approved:	