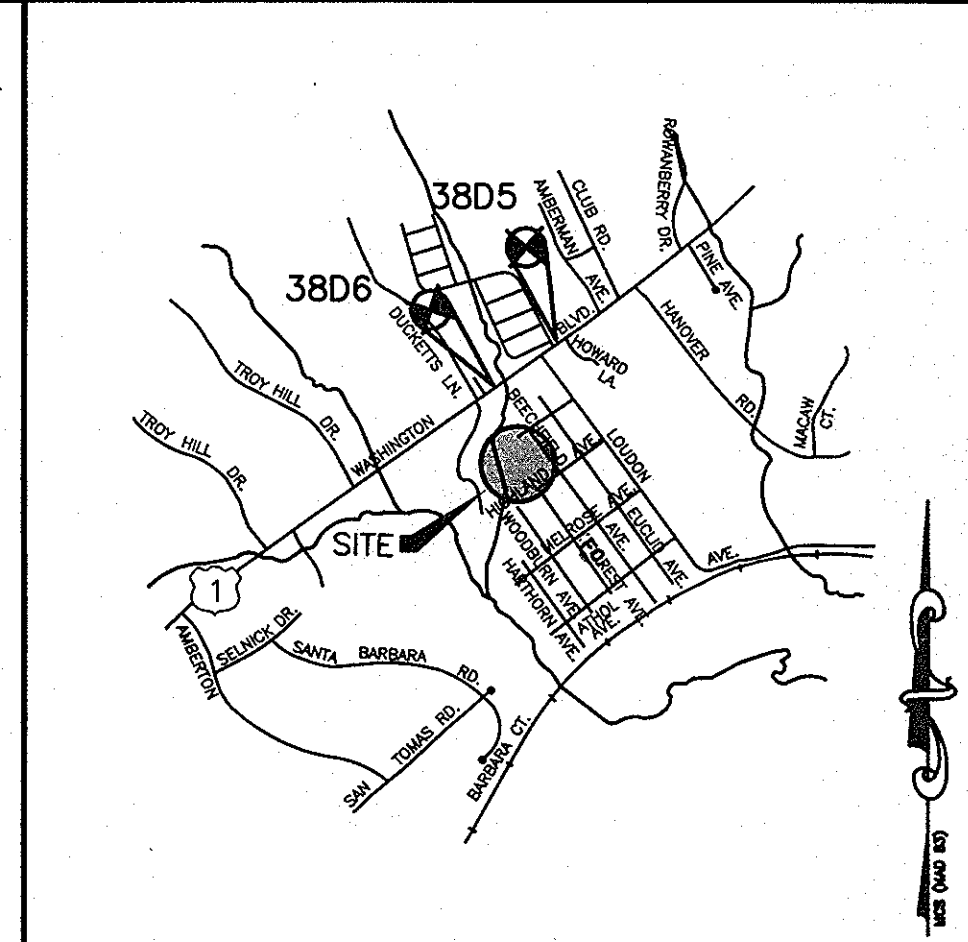


SHEET INDEX			
NO	DESCRIPTION	NO	DESCRIPTION
1	TITLE SHEET	7	SEDIMENT CONTROL DETAILS
2	SITE PLAN AND STREET TREES	8	STREET TREE PLANT DETAILS
3	PROFILES	9	RETAINING WALL #1 PLAN AND CONSTRUCTION DETAILS
4	GRADING & SEDIMENT CONTROL PLAN	10	RETAINING WALL #1 ELEVATION
5	DETAILS AND PROFILES	11	MOT PLAN
6	SEDIMENT CONTROL NOTES AND DETAILS	12	INLET DRAINAGE AREA MAP

- GENERAL NOTES**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
 - 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 THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - 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.
 - STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS, (JANUARY 1998). A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
 - THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD STUDY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY PATTON HARRIS RUST AND ASSOCIATES, DATED FEBRUARY, 2003.
 - THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NOS. 38D5 AND 38D6.
 - PROPOSED WATER IS PUBLIC. CONTRACT NO: 14-4360-D
 - PROPOSED SEWER IS PUBLIC. CONTRACT NO: 14-4360-D
 - THE HOA OWNED STORMWATER MANAGEMENT FOR THIS SITE WILL BE PROVIDED BY PRIVATELY MAINTAINED GRASS CHANNEL CREDIT AND LEVEL SPREADERS.
 - APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. 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. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
 - THE WETLANDS DELINEATION FOR THIS PROJECT WAS TAKEN FROM A REPORT PREPARED BY WILDMAN ENVIRONMENTAL SERVICES.
 - THE TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.
 - A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
 - THE BOUNDARY SURVEY FOR THIS PROJECT WAS PREPARED BY PATTON HARRIS RUST AND ASSOCIATES DATED AUGUST 2002.
 - SUBJECT PROPERTY ZONED R-12 PER 02-02-04 COMPREHENSIVE ZONING PLAN.
 - ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
 - SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S: SDP-01-93, WP-04-87, WP-05-129, SP-04-12
 - THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
 - CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
 - PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
 - NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
 - ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
 - PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
 - DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. III. ALL 40' RIGHT OF WAYS 20 M.P.H.
 - ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MIN. OF 95% COMPACTION OF AASHTO T180.
 - ALL STREET CURB RETURNS SHALL HAVE 25' RADII UNLESS OTHERWISE NOTED.
 - ALL STREET LIGHTS SHALL BE LOCATED BETWEEN 2'-0" AND 4'-0" BEHIND FACE OF CURB.
 - TYPE AND NUMBER OF STREET TREES SHOWN ON THIS PLAN ARE TENTATIVE AND ARE USED FOR BOND PURPOSES ONLY. THE FINAL LOCATION AND VARIETY OF TREES MAY VARY TO ACCOMMODATE FIELD CONDITIONS INCLUDING 20' CLEARANCE OF ANY STREET LIGHT AND SHALL BE IN ACCORDANCE WITH THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. BOND RELEASE IS CONTINGENT UPON SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS, AS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING.
 - WETLANDS, 100 YEAR FLOODPLAIN, AND +15% SLOPES HAVE BEEN SHOWN.
 - BASED ON AVAILABLE COUNTY MAPS AND RECORDS, THERE ARE NO HISTORIC STRUCTURES OR KNOWN CEMETERIES LOCATED ON THE SUBJECT PROPERTY.
 - THIS SUBDIVISION IS EXEMPT FROM FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1202(B)(1)(iii) OF THE FOREST CONSERVATION MANUAL SINCE IT HAS PRELIMINARY PLAN APPROVAL PRIOR TO 12/31/92.
 - THE SUBDIVISION IS EXEMPT FROM PERIMETER LANDSCAPING SINCE IT HAD A PRELIMINARY PLAN AND PLAT RECORDATION PRIOR TO 1993. IN ADDITION, THE SUBJECT LOTS ARE INTERIOR TO AN EXISTING SUBDIVISION, AND THIS PLAN DOES NOT PROPOSE ANY NEW BUILDING LOTS OR ADDITIONAL ACREAGE. STORM WATER MANAGEMENT PERIMETER LANDSCAPING IS NOT REQUIRED SINCE THE FORBAY HAS BEEN ELIMINATED. STREET TREE PLANTINGS WILL BE REQUIRED AND PROVIDED AS SHOWN ON THE ROAD CONSTRUCTION DRAWINGS. SURETY WILL BE POSTED WITH THE DPW DEVELOPER'S AGREEMENT UNDER THIS PLAN, F-08-133.
 - THIS PROJECT IS EXEMPT FROM THE 35' ENVIRONMENTAL SETBACK REQUIREMENT SINCE IT HAD A PRELIMINARY PLAN AND PLAT RECORDATION PRIOR TO 1993. HOWEVER, ENVIRONMENTAL BUFFERS AND RESTRICTIONS IN ACCORDANCE WITH SECTIONS 16.115 AND 16.116 OF THE AMENDED FIFTH EDITION OF THE SUBDIVISION REGULATIONS APPLY TO THIS PROJECT BECAUSE THESE LOTS PRE-DATE THOSE REGULATIONS. ANY IMPACT TO THESE PROTECTED AREAS FOR THE CONSTRUCTION OF HOMES WILL BE CONSIDERED ESSENTIAL, PROVIDED THAT THOSE IMPACTS ARE MINIMIZED.
 - ALL FEDERAL AND STATE PERMITS FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT WILL BE APPLIED FOR AS APPLICABLE PRIOR TO ANY GRADING OR DISTURBANCE IN THE ENVIRONMENTAL AREAS AS SHOWN ON THIS PLAN.
 - WP-04-87 A PERMITS TO REACTIVATE SDP-01-93 WAS APPROVED ON DECEMBER 30, 2005
 - WP-05-129 PERMITS STORMWATER MANAGEMENT ACCESS TO THE STORMWATER MANAGEMENT FACILITY LOCATED ON OPEN SPACE LOT 704 SHALL EXACTLY FOLLOW AND BE PLACED OVER THE EXISTING 20' WIDE PUBLIC SEWER AND UTILITY EASEMENT WHICH CROSSES LOTS 707 TO 711.
 - PROPERTY OWNERS OF LOTS WHICH ARE NOT PART OF THIS DEVELOPMENT HAVE BEEN NOTIFIED BY CERTIFIED MAIL OF THE PROPOSED LOCATION OF THE RETAINING WALLS WITHIN THE RIGHT-OF-WAY, WHICH MAY PROHIBIT ACCESSIBILITY ONTO FORREST AVENUE.
 - ALL OF THE RETAINING WALLS AND STORMWATER MANAGEMENT OUTSIDE PUBLIC RIGHT-OF-WAY WILL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. RETAINING WALLS WITHIN THE PUBLIC RIGHT-OF-WAY WILL BE PUBLICLY OWNED AND MAINTAINED. ALL GRAFFITI SHALL BE REMOVED FROM THE RETAINING WALLS BY THE HOME OWNERS ASSOCIATION.
 - STORMWATER MANAGEMENT FOR LOTS 677 - 682 AND LOTS 550 TO 557 OF 8650 HIGHLAND AVENUE WILL BE REQUIRED AT THE SITE DEVELOPMENT PLAN STAGE.
 - ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-3/4" GALVANIZED STEEL PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3" LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
 - OPEN SPACE LOTS 704-A AND 706-A SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION.

ROADWAYS, STORM DRAINS AND STORMWATER MANAGEMENT TIMBER RIDGE PLAT OF HARWOOD PARK LOTS 683-688 & 707-720 AND OPEN SPACE LOTS 704-A & 706-A 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=200'

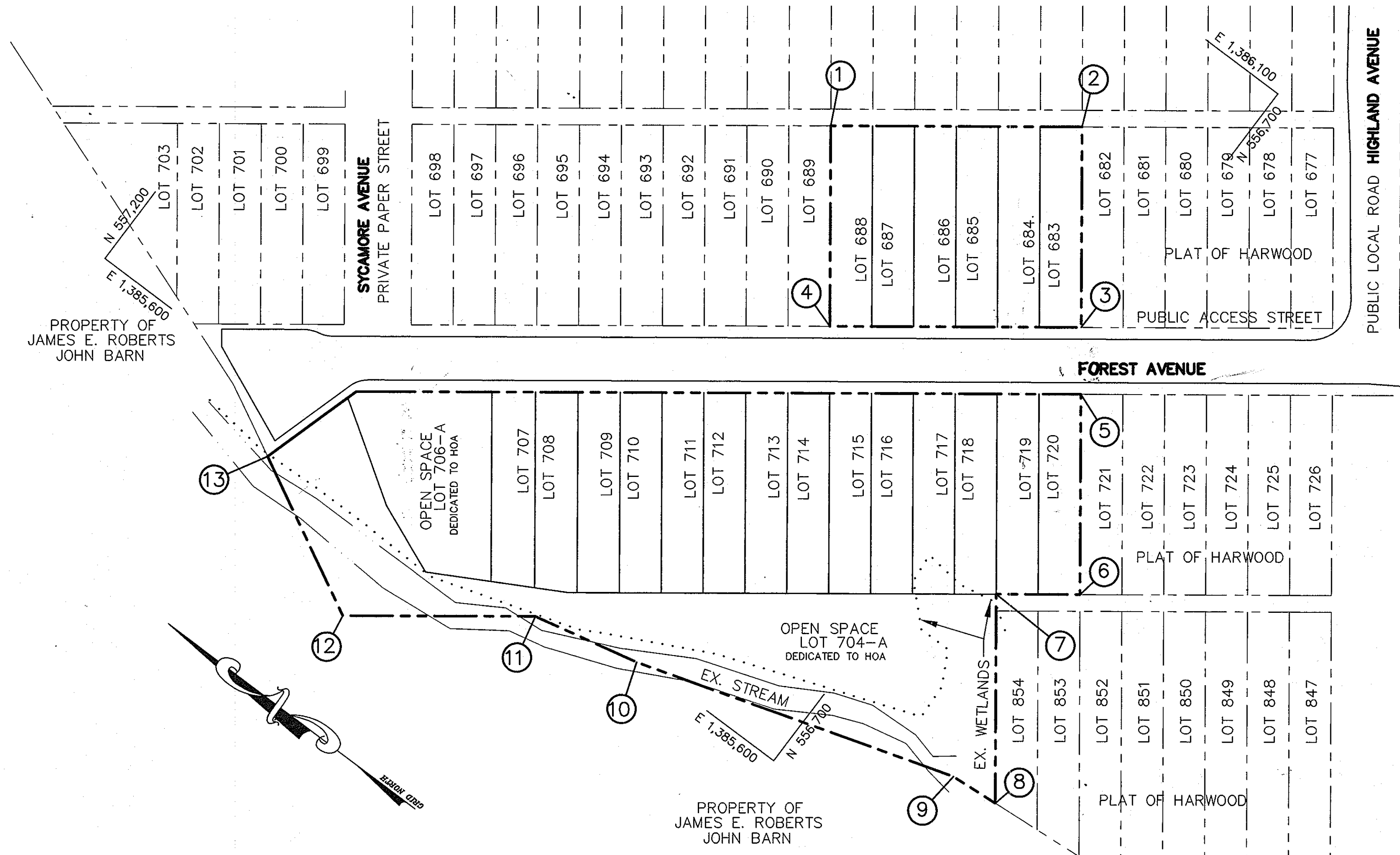
BENCH MARK

HOWARD COUNTY CONTROL
STATION 38D5
N 558,378.575
E 1,386,524.158
ELEV. 193.726

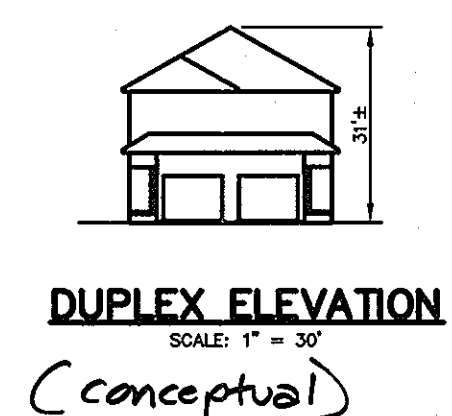
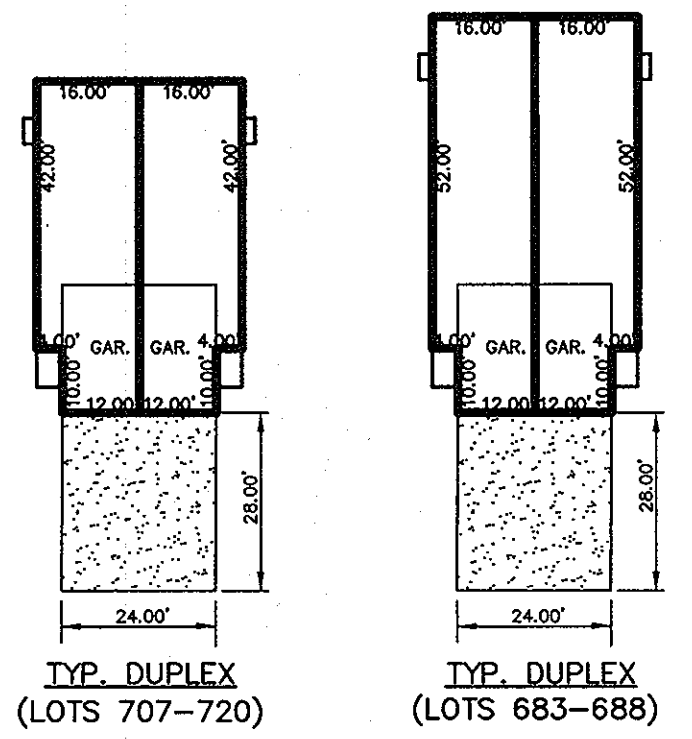
HOWARD COUNTY CONTROL
STATION 38D6
N 557,155.459
E 1,384,992.262
ELEV. 175.228

SITE TABULATION

EXISTING ZONING	R-12
GROSS AREA OF PROPERTY	2.1958 AC ±
LIMIT OF DISTURBANCE	3.32 ACRES
AREA IN 100 YR. FLOODPLAIN	0.20 AC (8,563 SF)
AREA OF STEEP SLOPE	0.74 AC
AREA OF R.O.W. TO BE RECORDED	0.0322 AC
NET TRACT AREA	2.1636 AC ±
AREA OF PROPOSED BUILDABLE LOTS	1.3783 AC ±
NUMBER OF BUILDABLE LOTS	20
PROPOSED WATER AND SEWER	PUBLIC



PLAN
SCALE: 1"=100'



COORDINATE LIST

1	N 556,901.59	E 1,385,924.05
2	N 556,781.40	E 1,386,013.80
3	N 556,709.60	E 1,385,917.65
4	N 556,829.79	E 1,385,827.90
5	N 556,685.67	E 1,385,885.60
6	N 556,613.87	E 1,385,789.45
7	N 556,653.93	E 1,385,759.54
8	N 556,579.08	E 1,385,659.29
9	N 556,608.58	E 1,385,657.01
10	N 556,800.93	E 1,385,598.03
11	N 556,865.69	E 1,385,583.49
12	N 556,957.84	E 1,385,514.70
13	N 557,051.06	E 1,385,563.75

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
William F. White 9-5-07
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Cindy Hamer 9/2/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Robert J. ... 9/12/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

1/04/08 | REVISED STREET NAME SPELLING TO FOREST AVENUE.
DATE NO. REVISION

OWNER/DEVELOPER
MEADOWLARK, LLC
ATTN: MARK PRITCHETT, ALAN YOUNG
P.O. BOX 484
HANOVER, MARYLAND 21076
410-796-6505

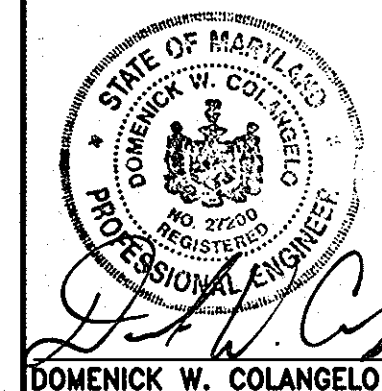
PROJECT
TIMBER RIDGE
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720
AND OPEN SPACE LOTS 704-A & 706-A

AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE SHEET

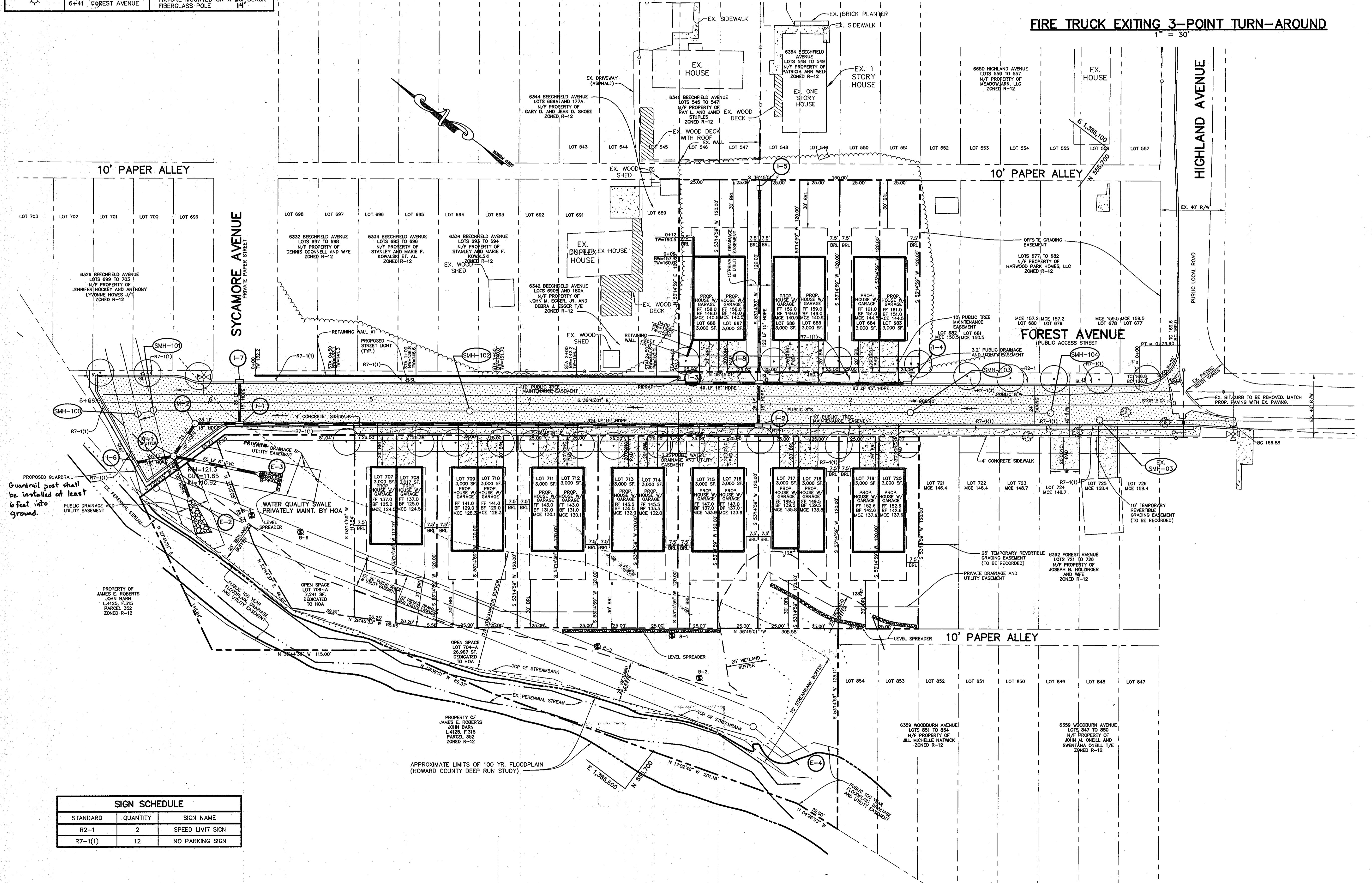
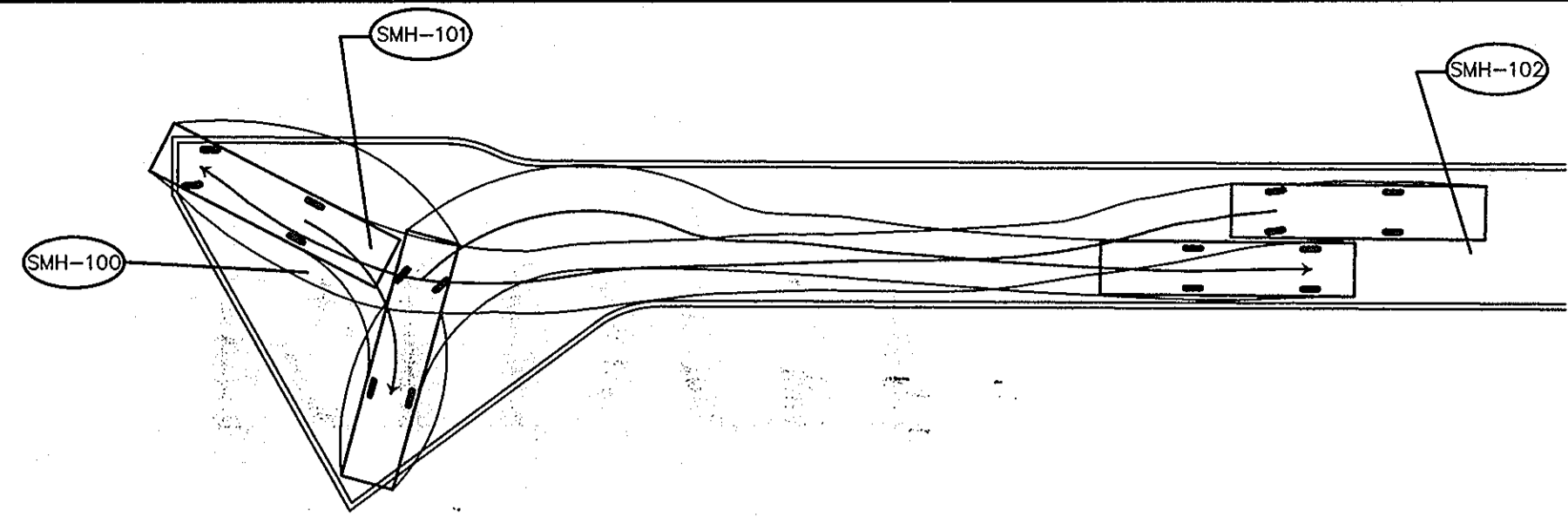
Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

DESIGNED BY: ESF
DRAWN BY: EMR
PROJECT NO. 11563/1-0/ENGR/PLANS/FINAL/C000CV.DWG
DATE: AUGUST 16, 2007
SCALE: AS SHOWN
DRAWING NO. 1 OF 12



P:\Project\11563\02-06-06\1-0\Engr\Plans\FINAL\C000CV.dwg, 8/14/2007 9:58:19 AM

STREET LIGHT CHART		
SYMBOL	LOCATION	DESCRIPTION
☼	20' RT. CL STA. 0+05.0, FOREST AVENUE	100 WATT HPS VAPOR "PREMIER" FIXTURE MOUNTED ON A 36" BLACK FIBERGLASS POLE 14'
☼	15.5' RT. CL STA. 0+55.0, FOREST AVENUE	100 WATT HPS VAPOR "PREMIER" FIXTURE MOUNTED ON A 36" BLACK FIBERGLASS POLE 14'
☼	15' RT. CL STA. 2+53.0, FOREST AVENUE	100 WATT HPS VAPOR "PREMIER" FIXTURE MOUNTED ON A 36" BLACK FIBERGLASS POLE 14'
☼	14' RT. CL STA. 4+76.0, FOREST AVENUE	100 WATT HPS VAPOR "PREMIER" FIXTURE MOUNTED ON A 36" BLACK FIBERGLASS POLE 14'
☼	18' RT. CL STA. 6+41.0, FOREST AVENUE	100 WATT HPS VAPOR "PREMIER" FIXTURE MOUNTED ON A 36" BLACK FIBERGLASS POLE 14'
☼	27' LT. CL STA. 6+41.0, FOREST AVENUE	100 WATT HPS VAPOR "PREMIER" FIXTURE MOUNTED ON A 36" BLACK FIBERGLASS POLE 14'



LEGEND

- PROPERTY LINE AND RIGHT OF WAY
- EXISTING STORM DRAIN
- PROPOSED STORM DRAIN
- OVERHEAD WIRES
- EXISTING TREELINE
- PROPOSED TREE
- PROP. SPOT ELEVATION
- SETBACK LINES
- P-2 PAVING
- EXISTING WATER
- EXISTING CURB
- PROPOSED CURB
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED DEPRESSED CURB
- PROPOSED DEPRESSED SIDEWALK
- PROPOSED GUARDRAIL
- PROPOSED SIDEWALK

LEGEND

- REQUIRED OFF-STREET PARKING = 2 SP/LOT
- PROVIDED PARKING:
LOTS 683 - 688 = 1 GARAGE SPACE & 1 DRIVEWAY SPACE
LOTS 707 - 720 = 1 GARAGE SPACE & 1 DRIVEWAY SPACE

Guardrail post shall be installed at least 6 feet into ground.

SIGN SCHEDULE		
STANDARD	QUANTITY	SIGN NAME
R2-1	2	SPEED LIMIT SIGN
R7-1(1)	12	NO PARKING SIGN

PLAN
1" = 30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
William J. M... 9-5-07
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
Chris... 9/16/07
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John... 9/12/07
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION
1/04/08	1	REVISED STREET NAME SPELLING TO FOREST AVE.

OWNER/DEVELOPER: MEADOWLARK, LLC
 ATTN: MARK PRITCHETT, ALAN YOUNG
 P.O. BOX 484
 HANOVER, MARYLAND 21076
 410-796-6505

PROJECT: **TIMBER RIDGE**
 PLAT OF HARWOOD PARK
 LOTS 683-688 & 707-720,
 AND OPEN SPACE LOTS 704-A & 706-A

AREA: TAX MAP #38 PARCEL 873 ZONED R-12
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

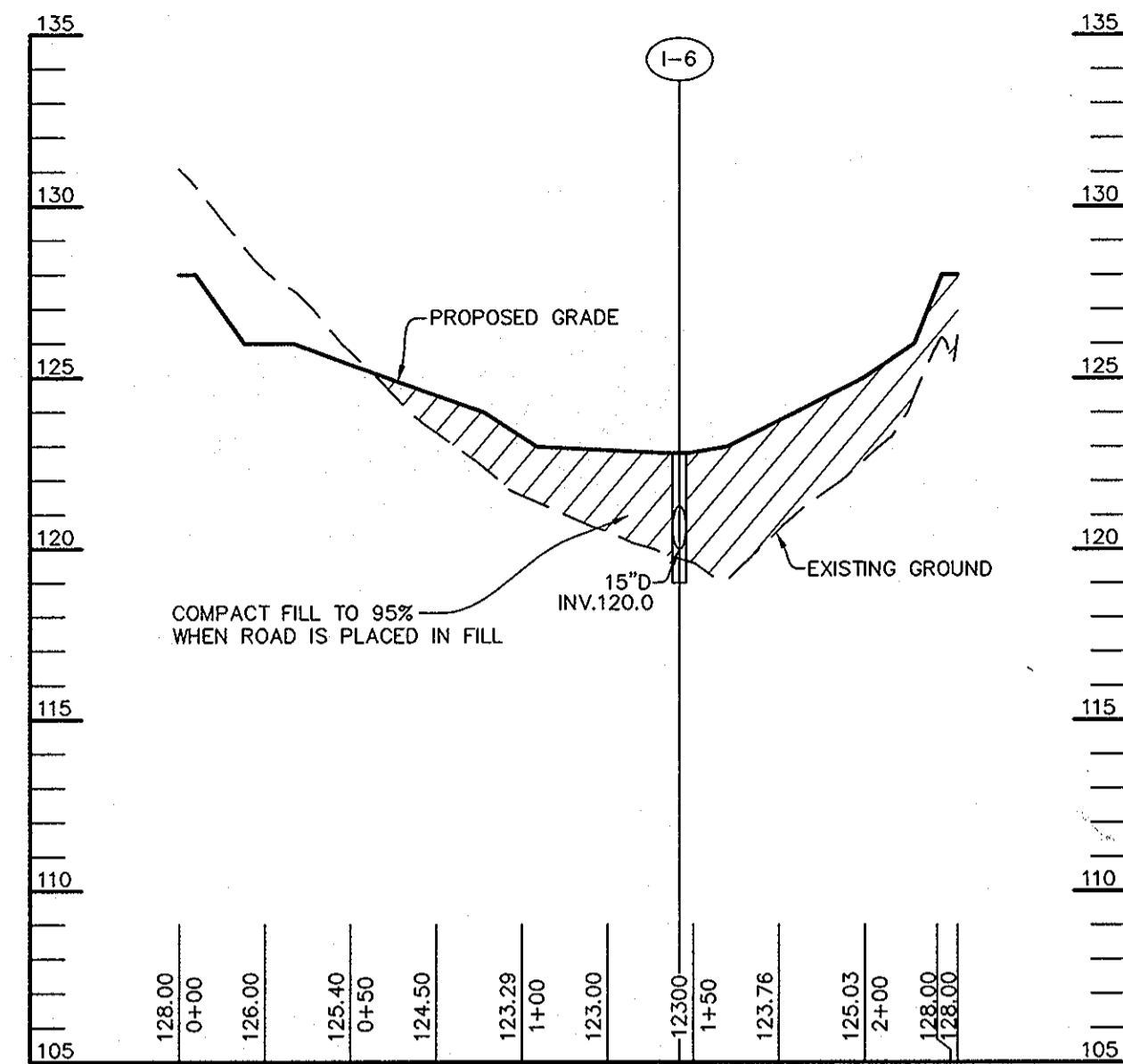
TITLE: **SITE PLAN AND STREET TREES**

Patton Harris Rust & Associates, pc
 Engineers, Surveyors, Planners, Landscape Architects.
 8818 Centre Park Drive
 Columbia, MD 21045
 T 410.997.8900
 F 410.997.9282

8/14/07
 DATE

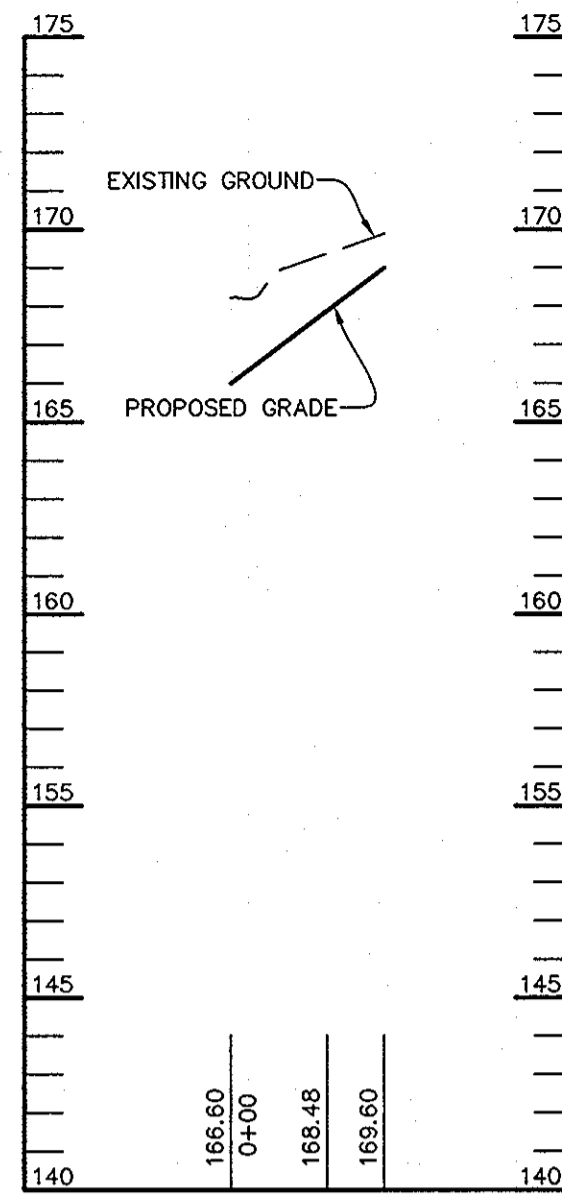
DESIGNED BY: ESF
 DRAWN BY: EMR
 PROJECT NO.: 11563/1-0/ENR/PLANS
 C400SIT.DWG
 DATE: AUGUST 16, 2007
 SCALE: AS SHOWN
 DRAWING NO.: 2 OF 12

DOMENICK W. COLANGELO #27200
 PROFESSIONAL ENGINEER



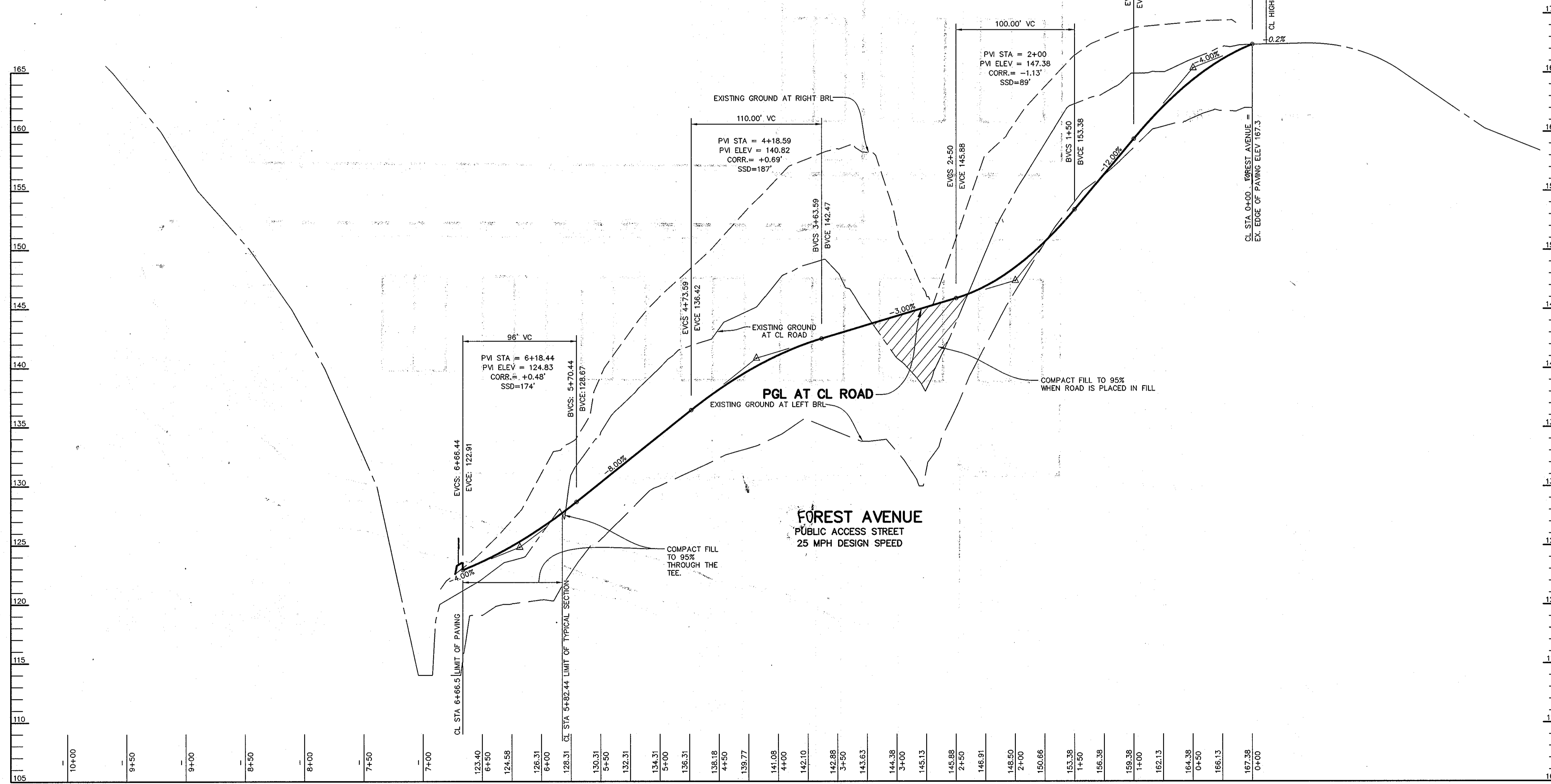
LINEAR PROFILE
FOREST AVENUE TURN AROUND

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



FILLET PROFILE
INTERSECTION OF FOREST AVENUE
AND HIGHLAND AVENUE

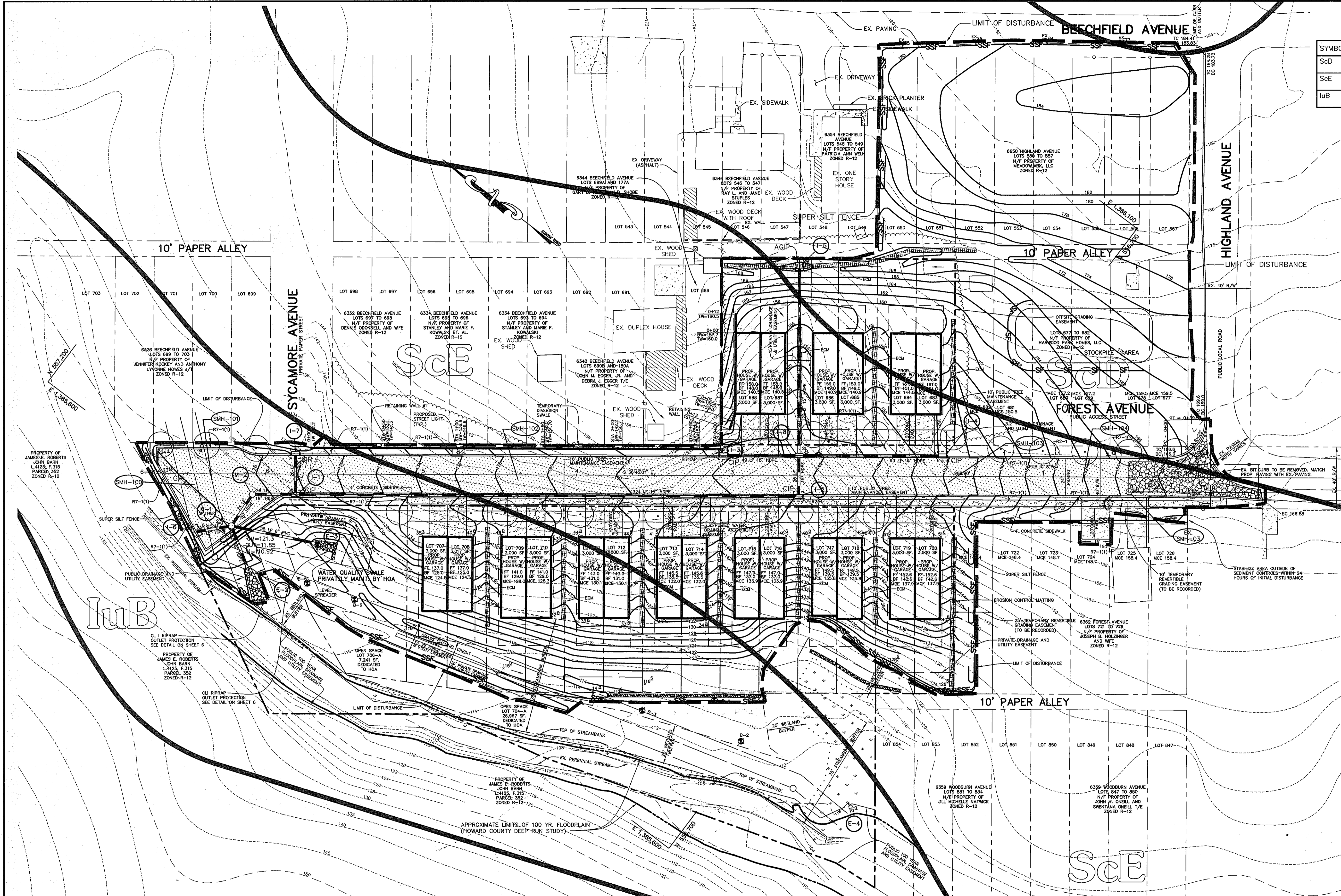
SCALE :
HOR. - 1" = 50'
VERT. - 1" = 5'



PROFILE

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

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.	
<i>Walter F. Walsh</i> CHIEF, BUREAU OF HIGHWAYS	9-5-07 DATE
APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>Carolee Stewart</i> CHIEF, DIVISION OF LAND DEVELOPMENT	9/12/07 DATE
<i>John DeMunn</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9/12/07 DATE
1/04/08	1 REVISD STREET NAME SPELLING TO FOREST AVENUE.
DATE NO.	REVISION
OWNER/DEVELOPER MEADOWLARK, LLC ATTN: MARK PRITCHETT, ALAN YOUNG P.O. BOX 484 HANOVER, MARYLAND 21076 410-796-6505	
PROJECT TIMBER RIDGE PLAT OF HARWOOD PARK LOTS 683-688 & 707-720, AND OPEN SPACE LOTS 704-A & 706-A	
AREA TAX MAP #38 PARCEL 873 ZONED R-12 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE PROFILES	
Patton Harris Rust & Associates, pc Engineers, Surveyors, Planners, Landscape Architects. 8818 Centre Park Drive Columbia, MD 21045 T 410.997.8900 F 410.997.9282	
<i>Domenick W. Colangelo</i> DATE 8/14/07	DESIGNED BY : ESF
	DRAWN BY: EMR
	PROJECT NO. 11563/1-0/ENGR/PLANS FINAL/C401SIT
	DATE : AUGUST 16, 2007
	SCALE : AS SHOWN
	DRAWING NO. 3 OF 12



SOIL CHART		
SYMBOL	DESCRIPTION	HYDROLOGIC SOIL GROUP
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C
ScE	SANDY AND CLAYEY LAND, MODERATELY STEEP	C
IuB	IUKA LOAM, LOCAL ALLUVIUM, 1 TO 5 PERCENT SLOPES	C

BY THE DEVELOPER :

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Mark Pritchett 8/15/07
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.

D.W. Colangelo 8/14/07
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Jim Muzny 8/23/07
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Polenta 8/23/07
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

William J. ... 9-5-07
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Chris ... 9/12/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John ... 9/12/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

1/04/08 | REVISED STREET NAME SPELLING TO FOREST AVE.
DATE NO. REVISION

OWNER/DEVELOPER
MEADOWLARK, LLC
ATTN: MARK PRITCHETT, ALAN YOUNG
P.O. BOX 484
HANOVER, MARYLAND 21076
410-796-6505

PROJECT
TIMBER RIDGE
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720,
AND OPEN SPACE LOTS 704-A & 706-A

AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
GRADING & SEDIMENT CONTROL PLAN

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

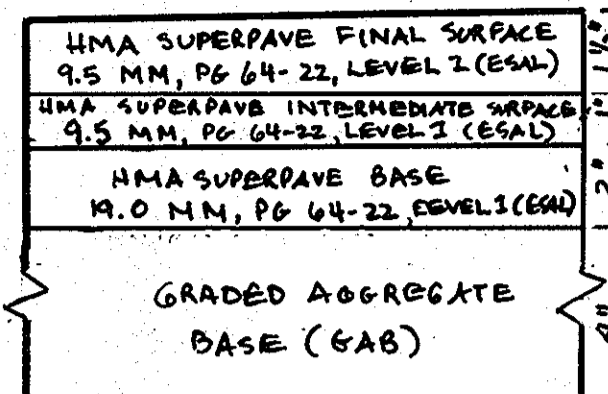
8/15/07
DATE

DESIGNED BY : ESF
DRAWN BY : EMR
PROJECT NO: 11563/1-0/ENGR/PLANS /C200CS
DATE : AUGUST 16, 2007
SCALE : 1" = 30'
DRAWING NO. 4 OF 12

D.W. Colangelo
DOMENICK W. COLANGELO #27200

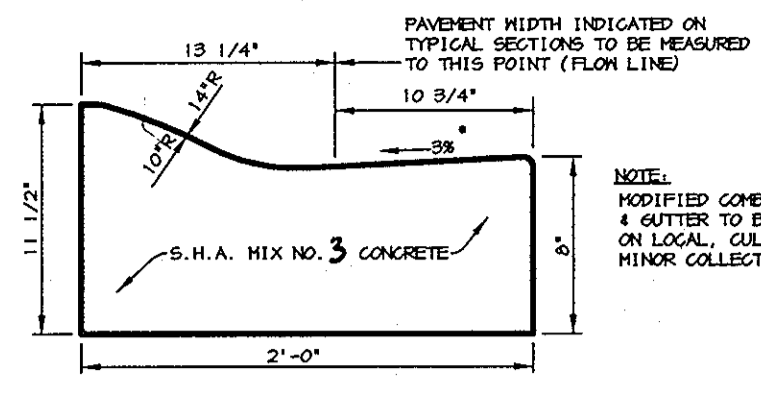
LEGEND		
SOIL LINES BASED ON SOILS MAP 31		15%-24.9% STEEP SLOPES
STABILIZED CONSTRUCTION ENTRANCE		25% OR GREATER STEEP SLOPES
LIMIT OF DISTURBANCE		REINFORCED EARTH
SUPER SILT FENCE		
EROSION CONTROL MATTING		
INLET PROTECTION		
STORM DRAIN DRAINAGE DIVIDE		

P:\Project\1563\06-06-06\1-0-ENGR\PLANS\FINAL\C200CS.dwg, 8/14/2007 10:17:51 AM



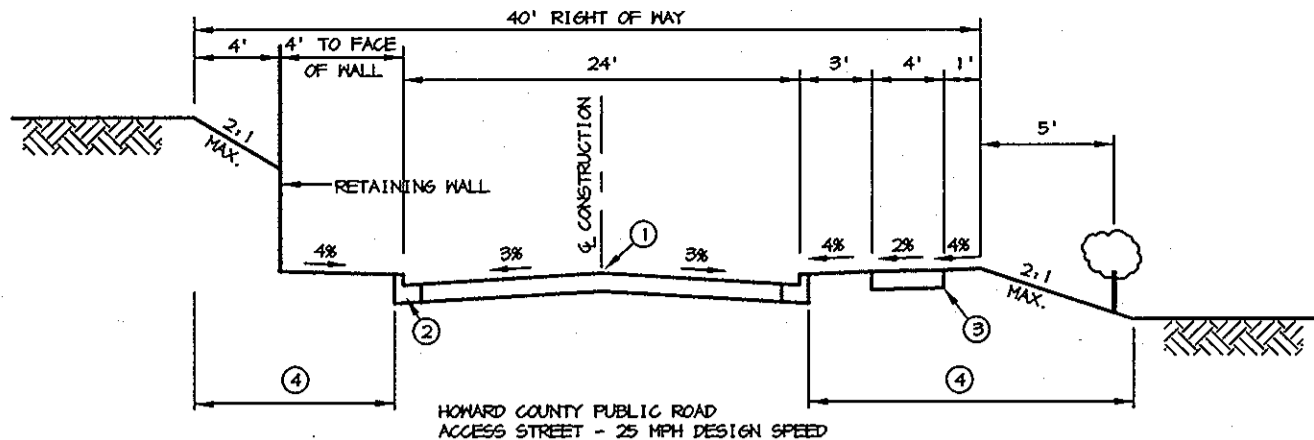
HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)
 THE PAVING SECTION SHOWN HAS NOT BEEN DESIGNED FOR ACTUAL SOIL CONDITIONS, IN PLACE COMPACTION RESULTS, OR TRAFFIC VOLUMES SPECIFIC TO THIS PROJECT. IT IS RECOMMENDED THAT THE USER CONSULT WITH A LICENSED PROFESSIONAL GEOTECHNICAL ENGINEER FOR A SPECIFIC PAVING DESIGN BASED ON THE APPROPRIATE PARAMETERS PRIOR TO INSTALLATION OF THIS PAVING SECTION.

P-2 PAVING
NO SCALE



MODIFIED COMBINATION CURB AND GUTTER

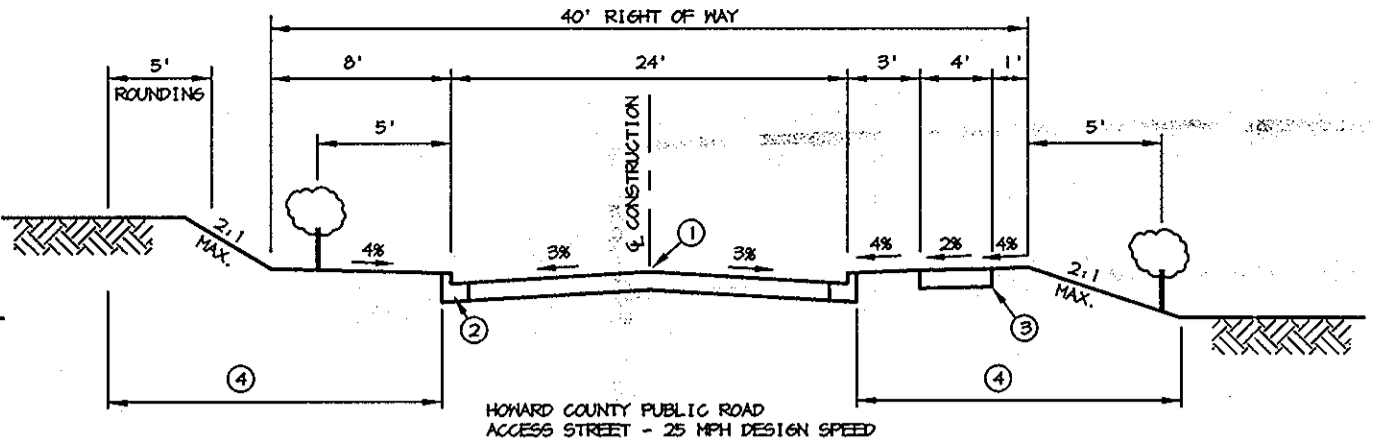
GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.



CLOSED SECTION

- ① PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
- ② TYPE OF CURB VARIES (MOD. COMB. CURB)
- ③ 4" CONCRETE SIDEWALK AS REQUIRED BY SUBDIVISION REGULATIONS.
- ④ INDICATES 2" TOPSOIL, SEED AND MULCH.

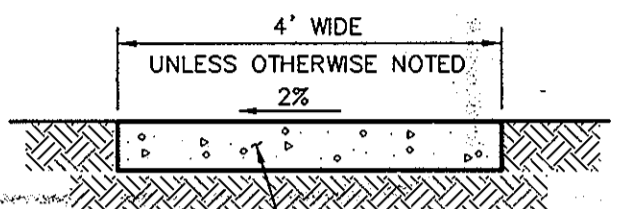
TYPICAL SECTION FOREST AVENUE WITH RETAINING WALL
NO SCALE
FROM CL STA 0+55 TO CL STA 1+60
FROM CL STA 3+09 TO CL STA 5+71



CLOSED SECTION

- ① PROFILE GRADE LINE (PGL), SEE DESIGN MANUAL.
- ② TYPE OF CURB VARIES (MOD. COMB. CURB)
- ③ 4" CONCRETE SIDEWALK AS REQUIRED BY SUBDIVISION REGULATIONS.
- ④ INDICATES 2" TOPSOIL, SEED AND MULCH.

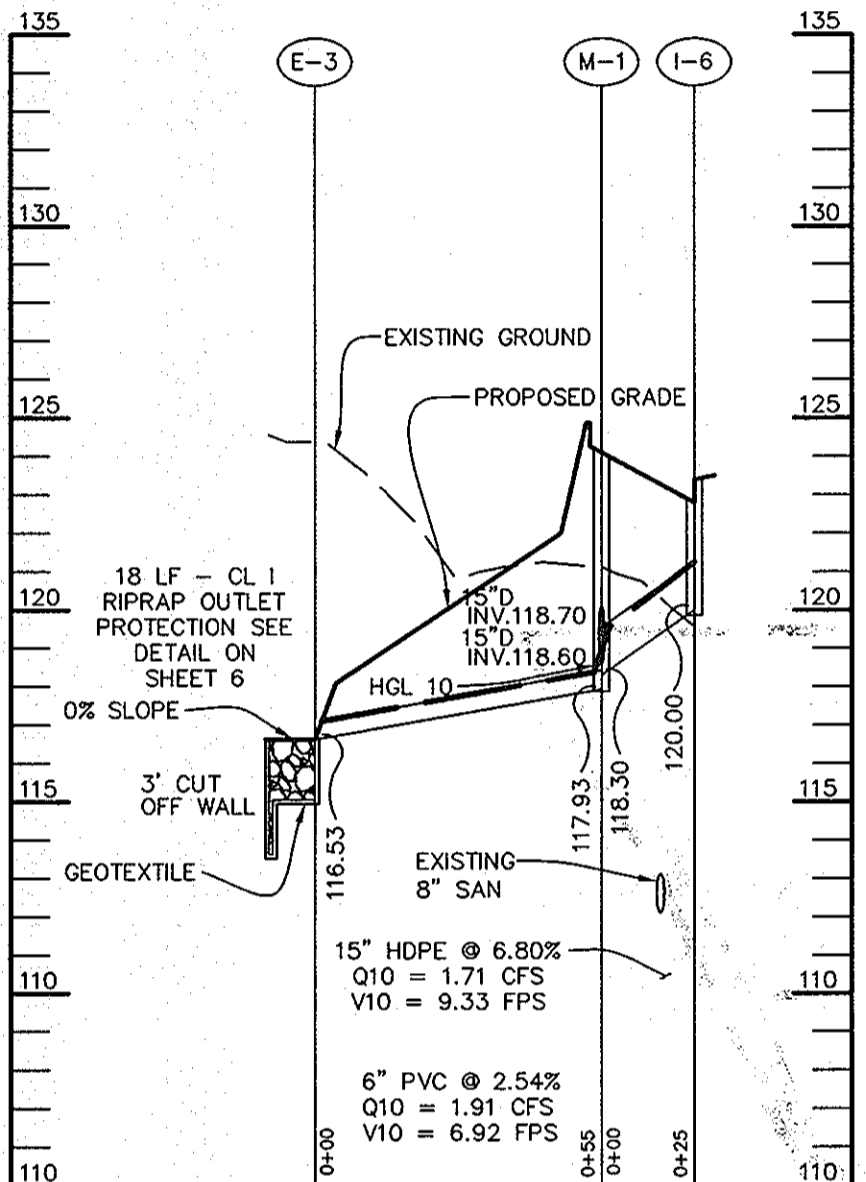
TYPICAL SECTION FOREST AVENUE
NO SCALE



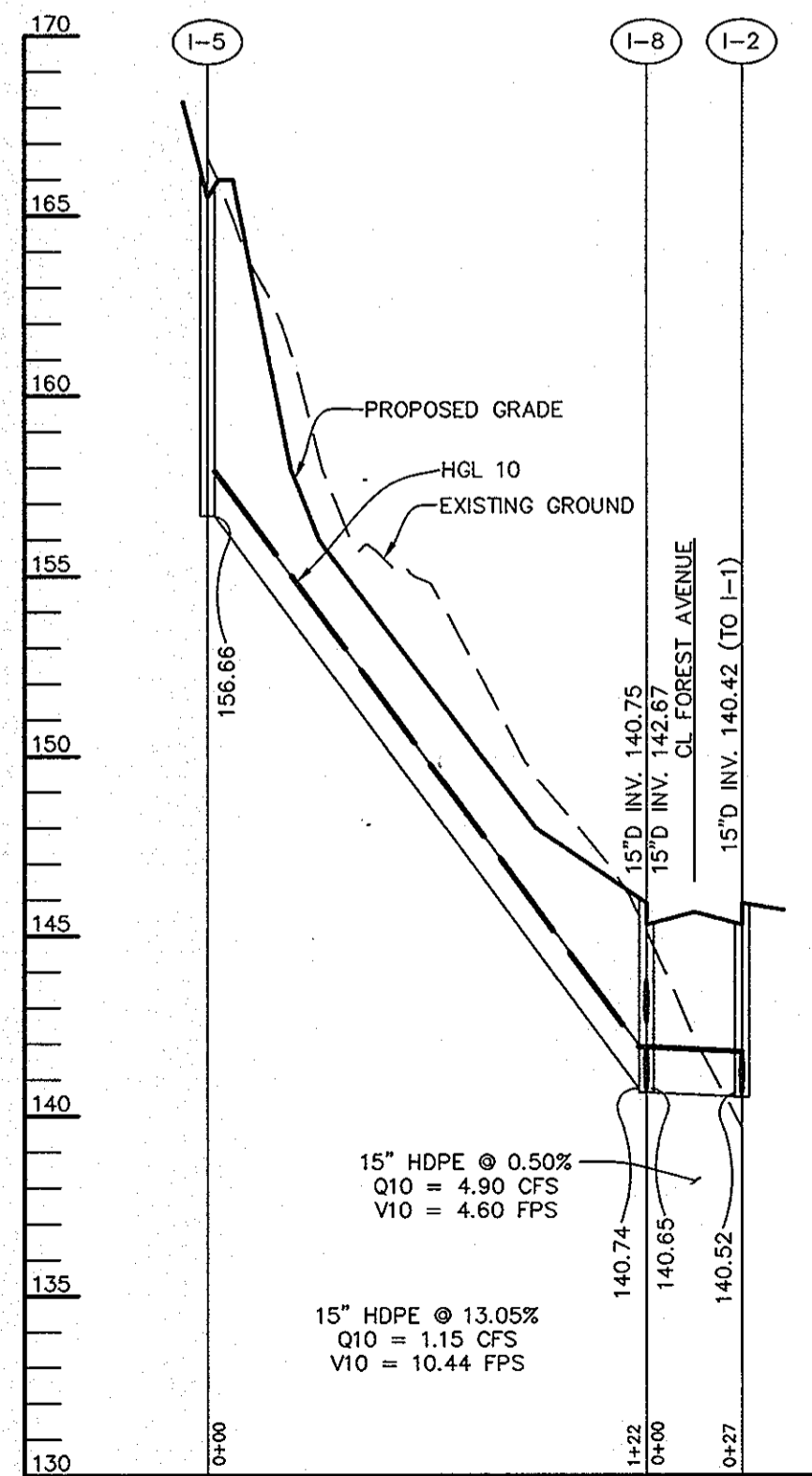
UNLESS OTHERWISE NOTED, 2%
 S.H.A. MIX NO. 3 CONCRETE
 STIFF BROOM FINISH
 EDGING TOOL MARKS IN FINISHING

SIDEWALK DETAIL
NO SCALE

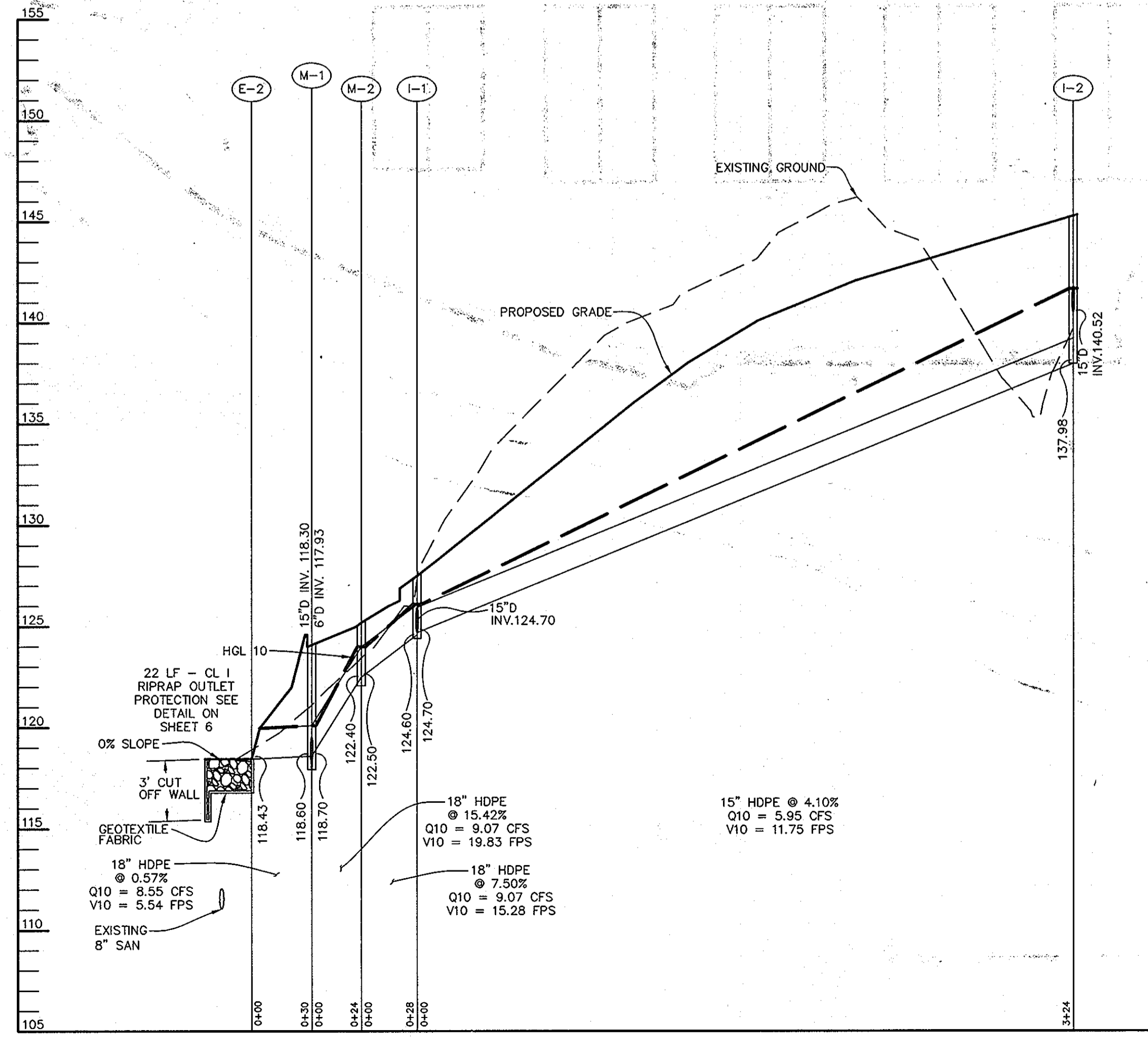
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	A-5 INLET	N 557030 E 1385639	124.70 124.85	124.60	127.51	HOCO STD. DETAIL D-4.01
I-2	A-5 INLET	N 556771 E 1385832	140.52	140.42	145.31	HOCO STD. DETAIL D-4.01
I-3	A-5 INLET	N 556824 E 1385822	-	141.00	143.66	HOCO STD. DETAIL D-4.01
I-4	A-10 INLET	N 556711 E 1385907	-	147.35	151.43	HOCO STD. DETAIL D-4.03
I-5	YARD INLET	N 556859 E 1385950	-	156.66	165.50	HOCO STD. DETAIL D-4.14
I-6	A-10 INLET	N 557068 E 1383580	-	120.00	122.80	HOCO STD. DETAIL D-4.03
I-7	A-10 INLET	N 557044 E 1385658	-	124.87	127.51	HOCO STD. DETAIL D-4.03
I-8	A-5 INLET	N 556785 E 1385852	142.75 142.92	140.65	145.31	HOCO STD. DETAIL D-4.01
M-1	STD. MH	N 557049 E 1385596	118.30 118.70	118.60 (15') 117.93 (6')	124.10	HOCO STD. DETAIL G-5.12
M-2	STD. MH	N 557051 E 1385621	122.50	122.40	125.20	HOCO STD. DETAIL G-5.12
E-2	18" CMP END SECTION	N 557025 E 1385581	-	118.43	-	MSHA STD. DETAIL MD-374.66
E-3	6" CMP END SECTION	N 556983 E 1385628	-	116.53	-	MSHA STD. DETAIL MD-374.66



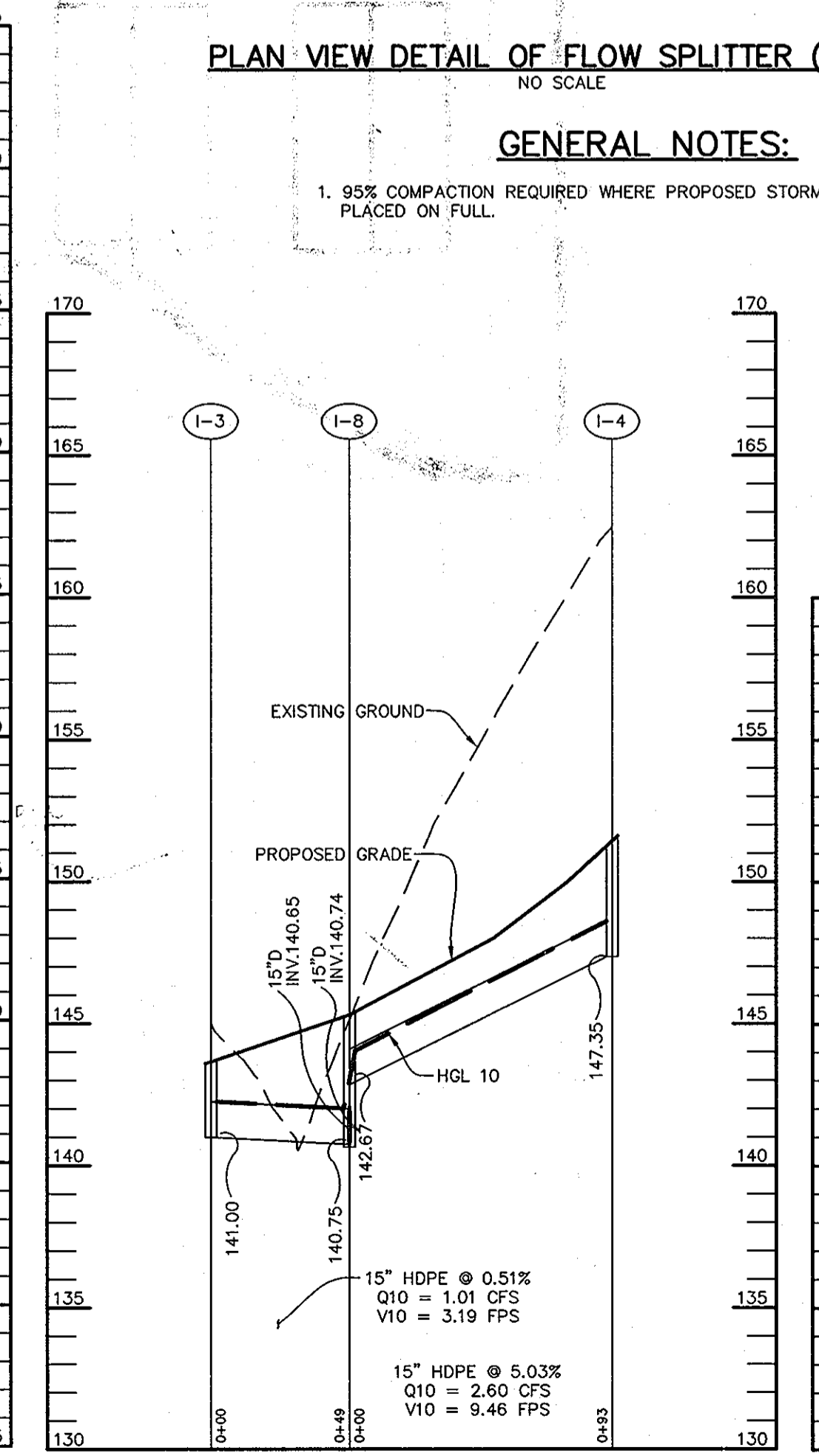
STORM DRAIN PROFILE



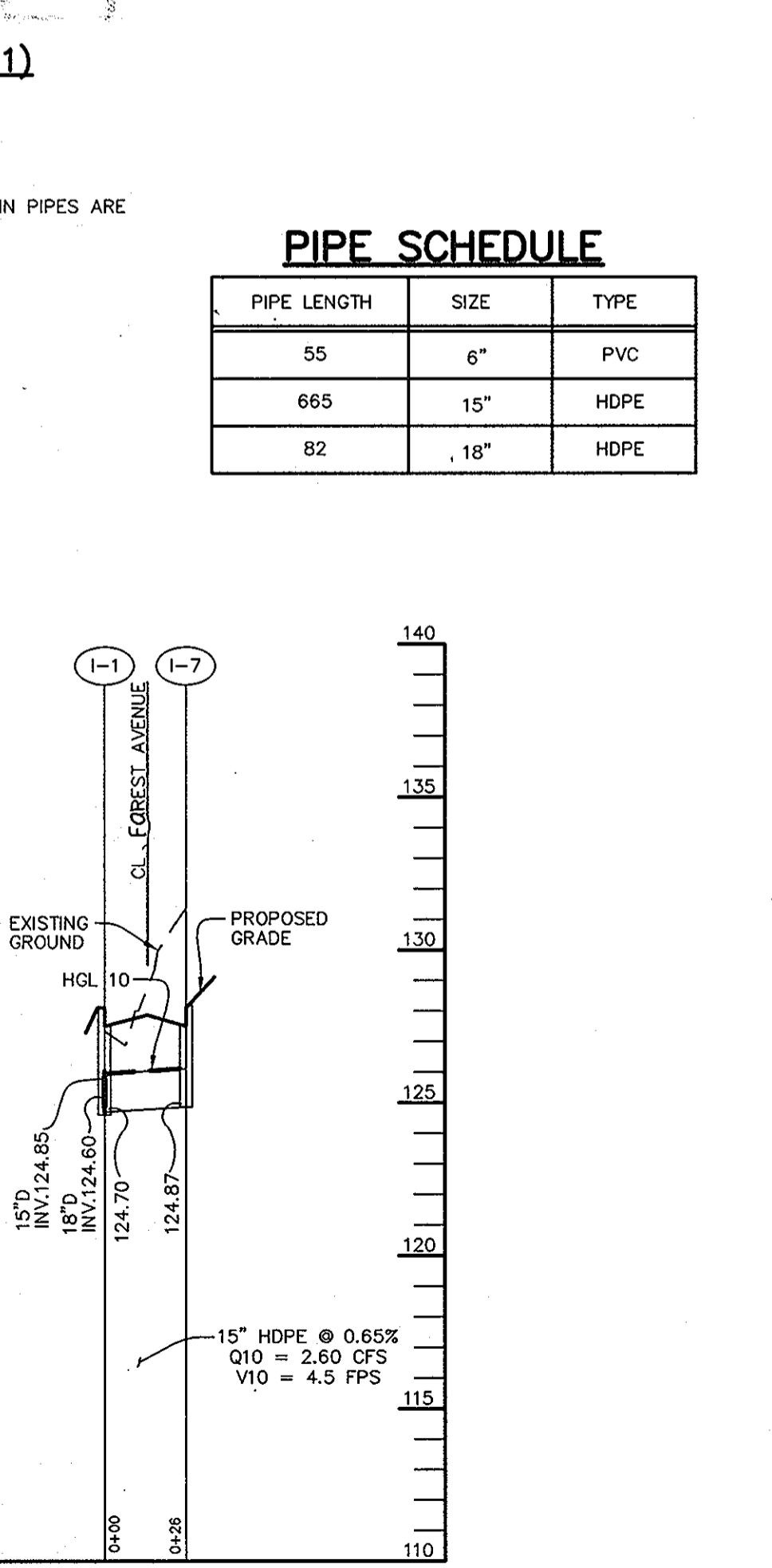
STORM DRAIN PROFILE



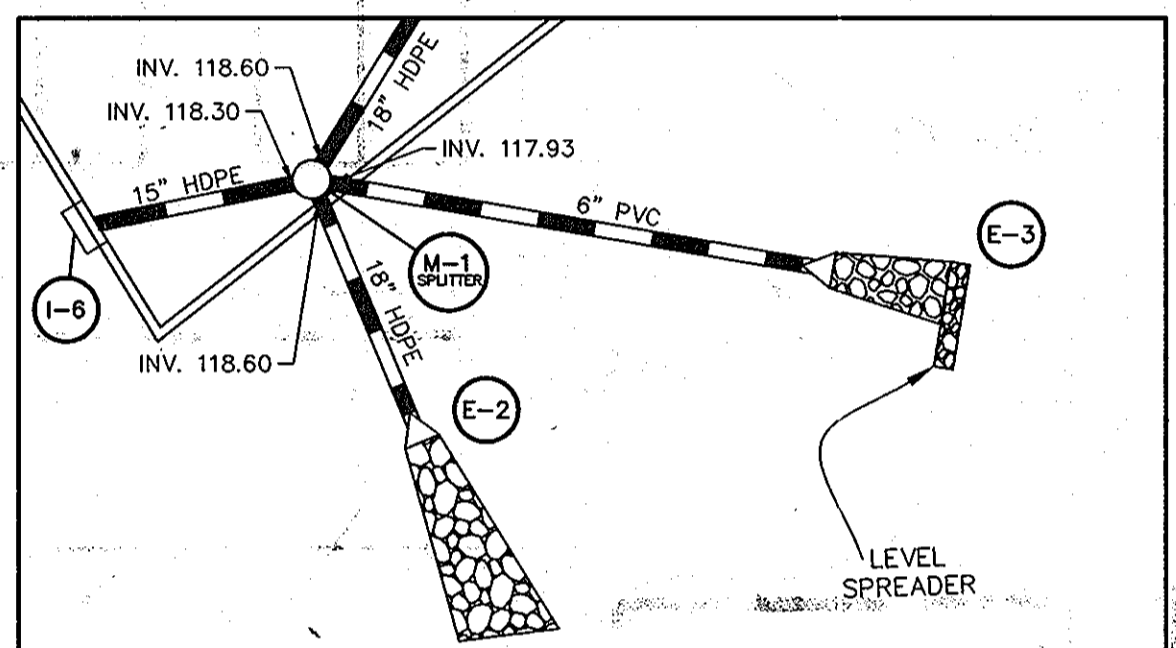
STORM DRAIN PROFILE



STORM DRAIN PROFILE



STORM DRAIN PROFILE

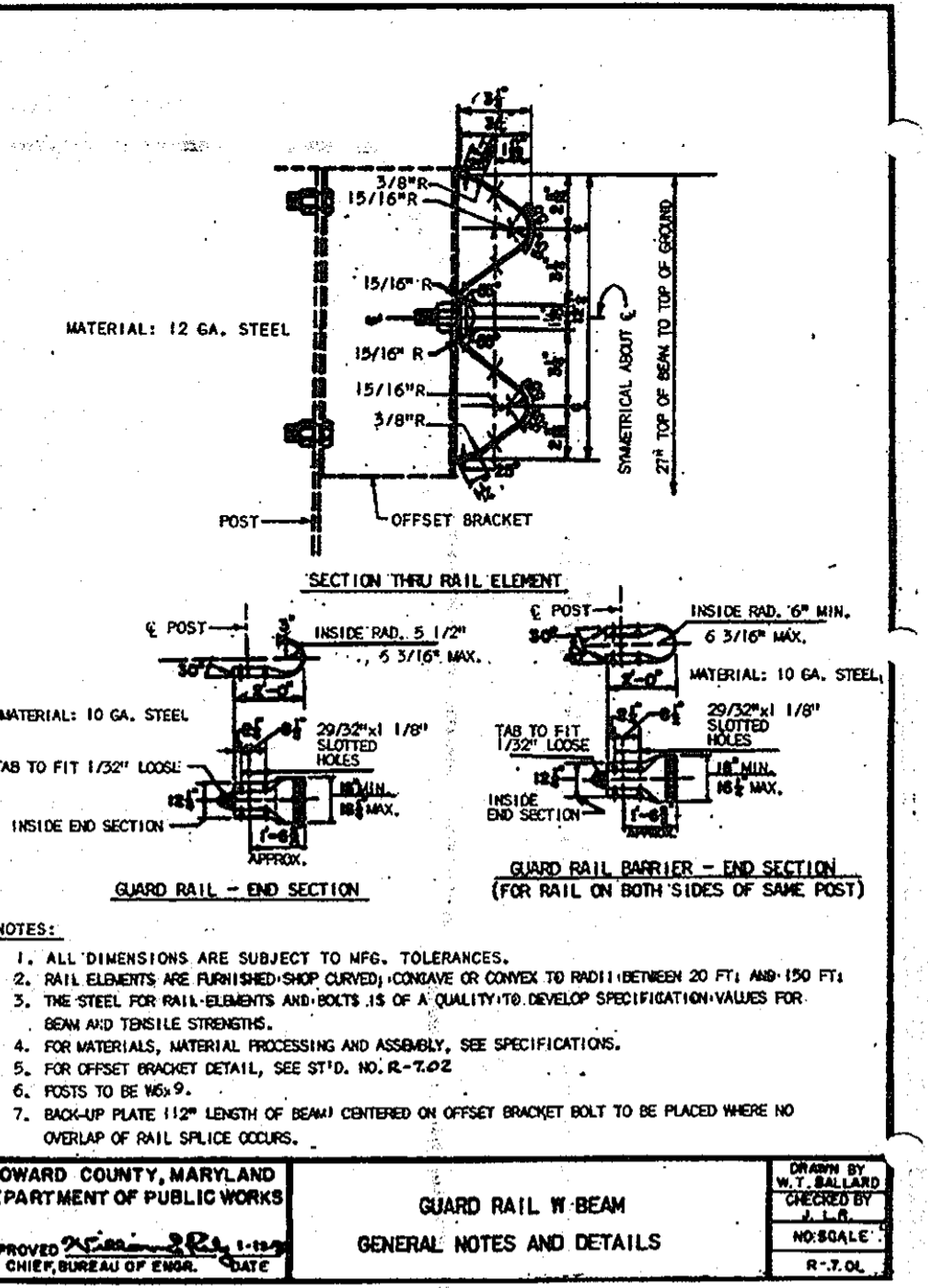


PLAN VIEW DETAIL OF FLOW SPLITTER (M-1)
NO SCALE

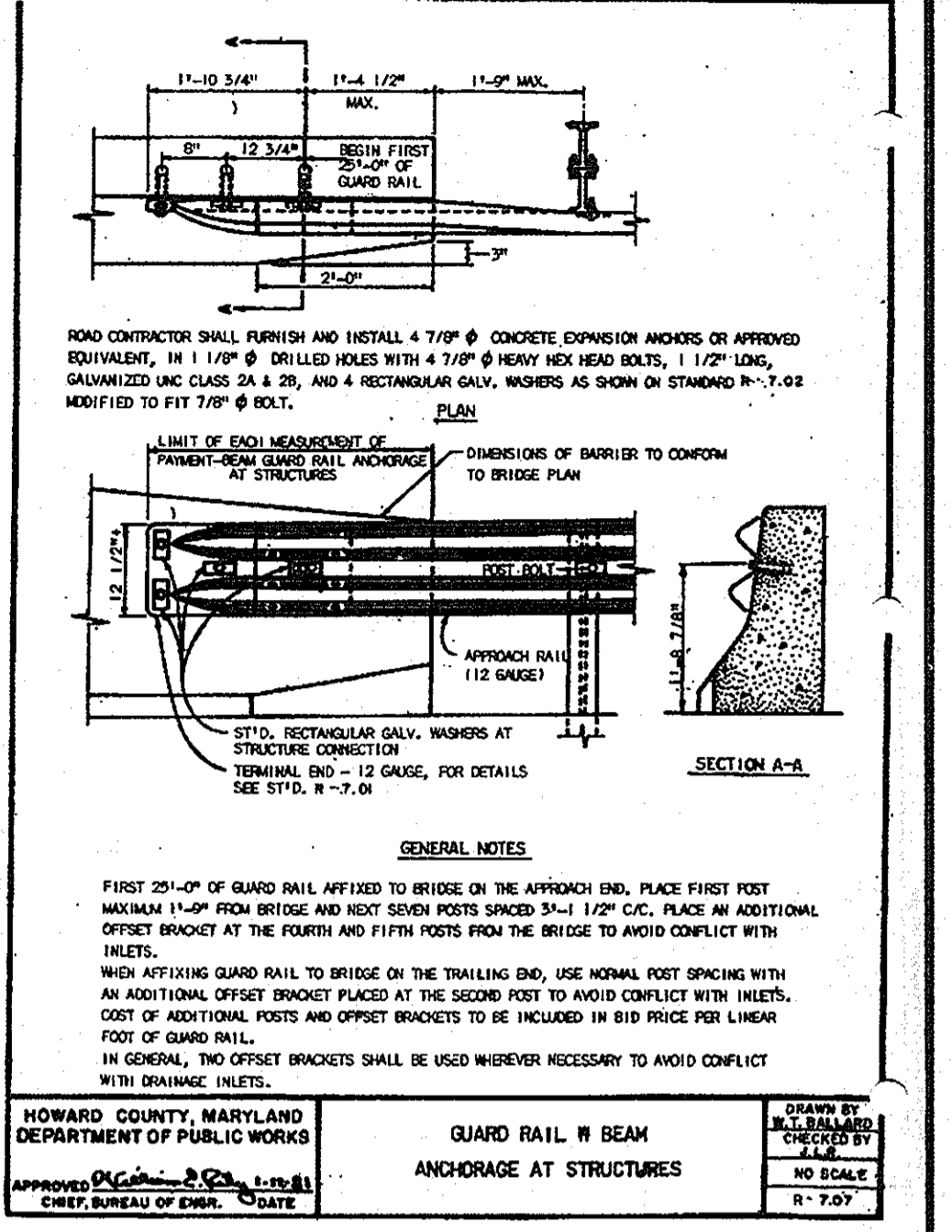
GENERAL NOTES:
 1. 95% COMPACTION REQUIRED WHERE PROPOSED STORM DRAIN PIPES ARE PLACED ON FULL.

PIPE LENGTH	SIZE	TYPE
55	6"	PVC
665	15"	HDPE
82	.18"	HDPE

PIPE SCHEDULE



GUARD RAIL W BEAM
GENERAL NOTES AND DETAILS



GUARD RAIL W BEAM
ANCHORAGE AT STRUCTURES

NOTE: GUARDRAIL POSTS SHALL BE INSTALLED AT LEAST 6 FEET INTO GROUND.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

William E. ... 9-5-07
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Cindy ... 9/12/07
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

... 9/12/07
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

1/04/08 REVISED STREET NAME SPELLING TO FOREST AVENUE

DATE NO. REVISION

OWNER/DEVELOPER
 MEADOWLARK, LLC
 ATTN: MARK PRITCHETT, ALAN YOUNG
 P.O. BOX 484
 HANOVER, MARYLAND 21076
 410-796-6505

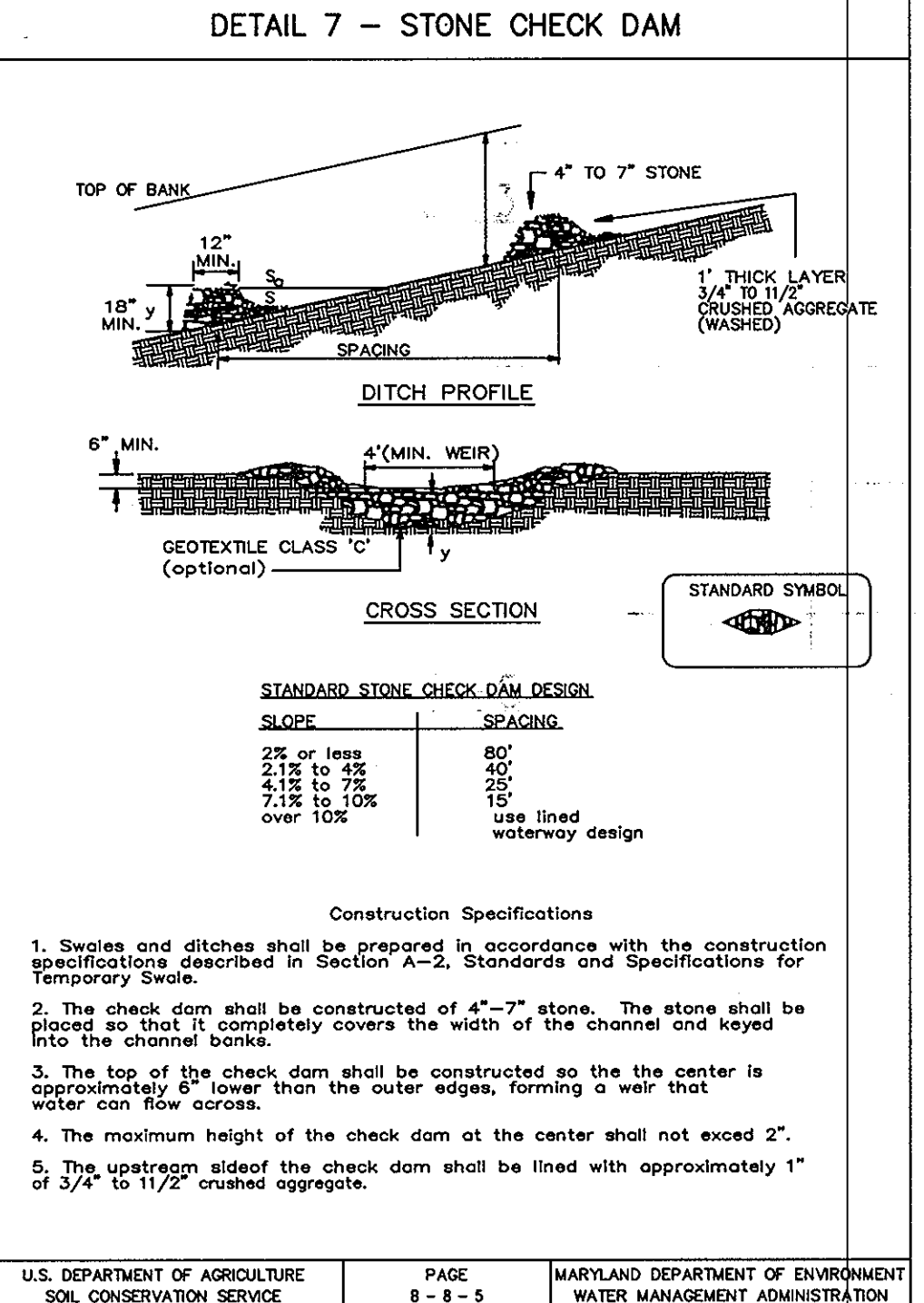
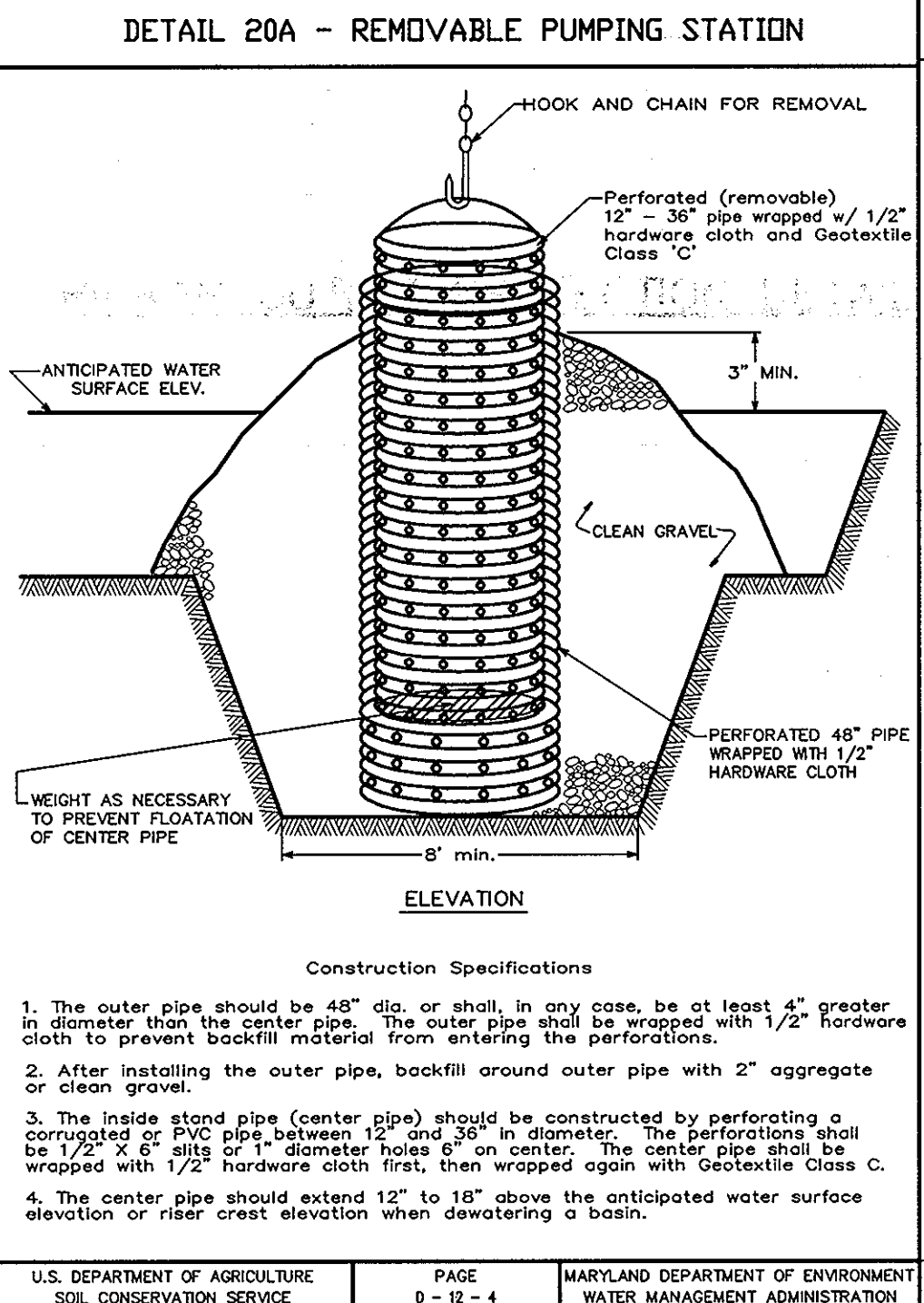
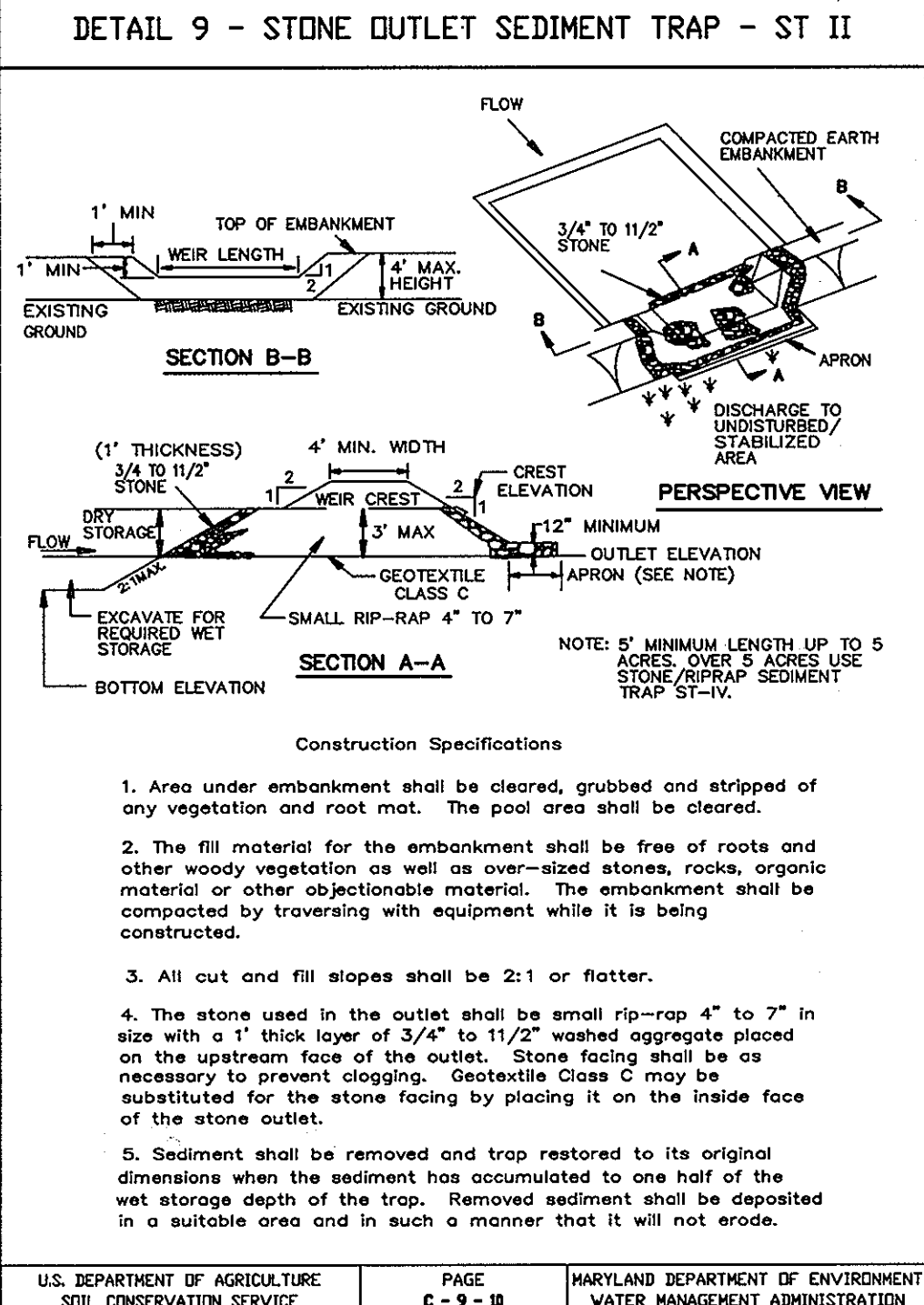
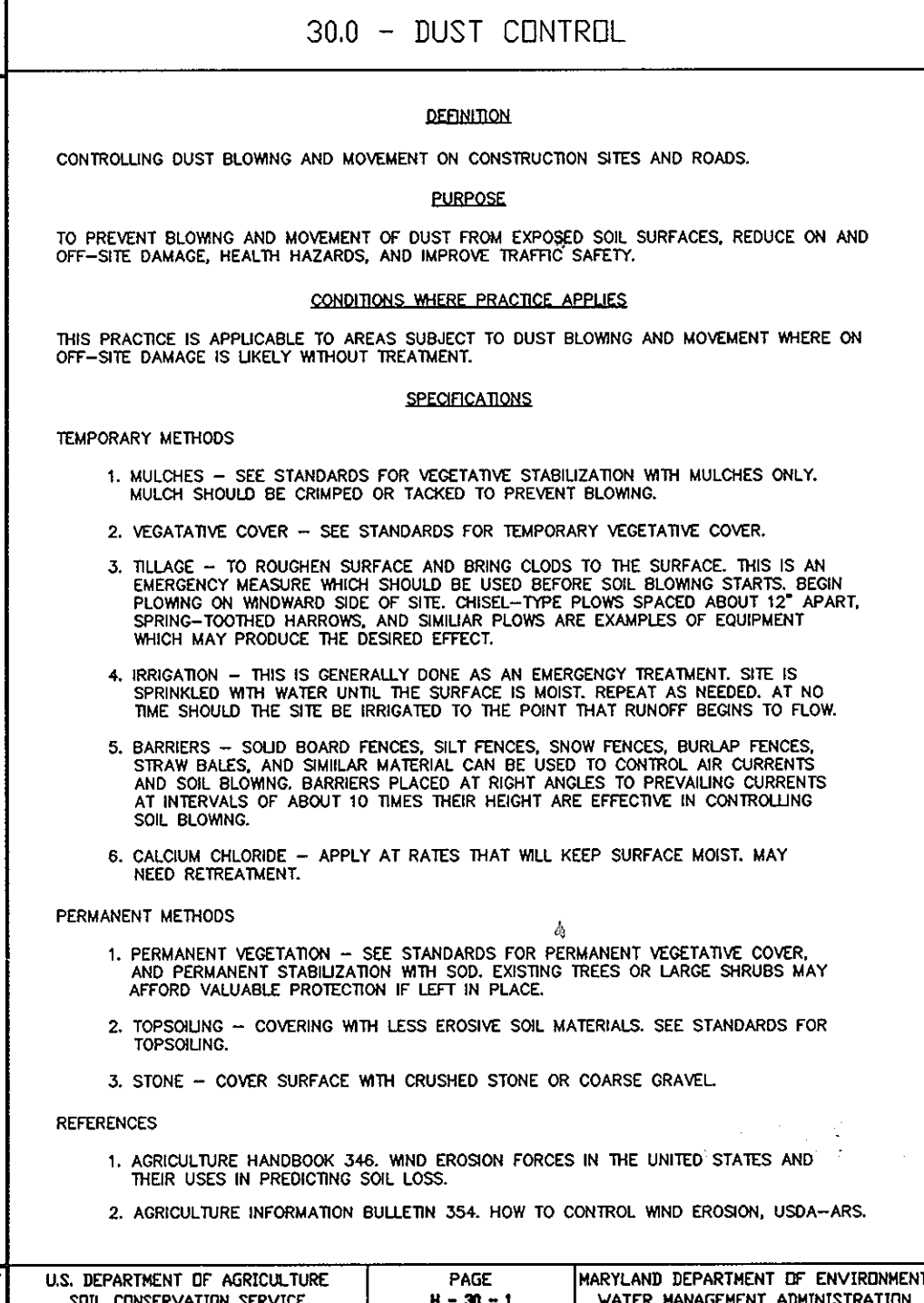
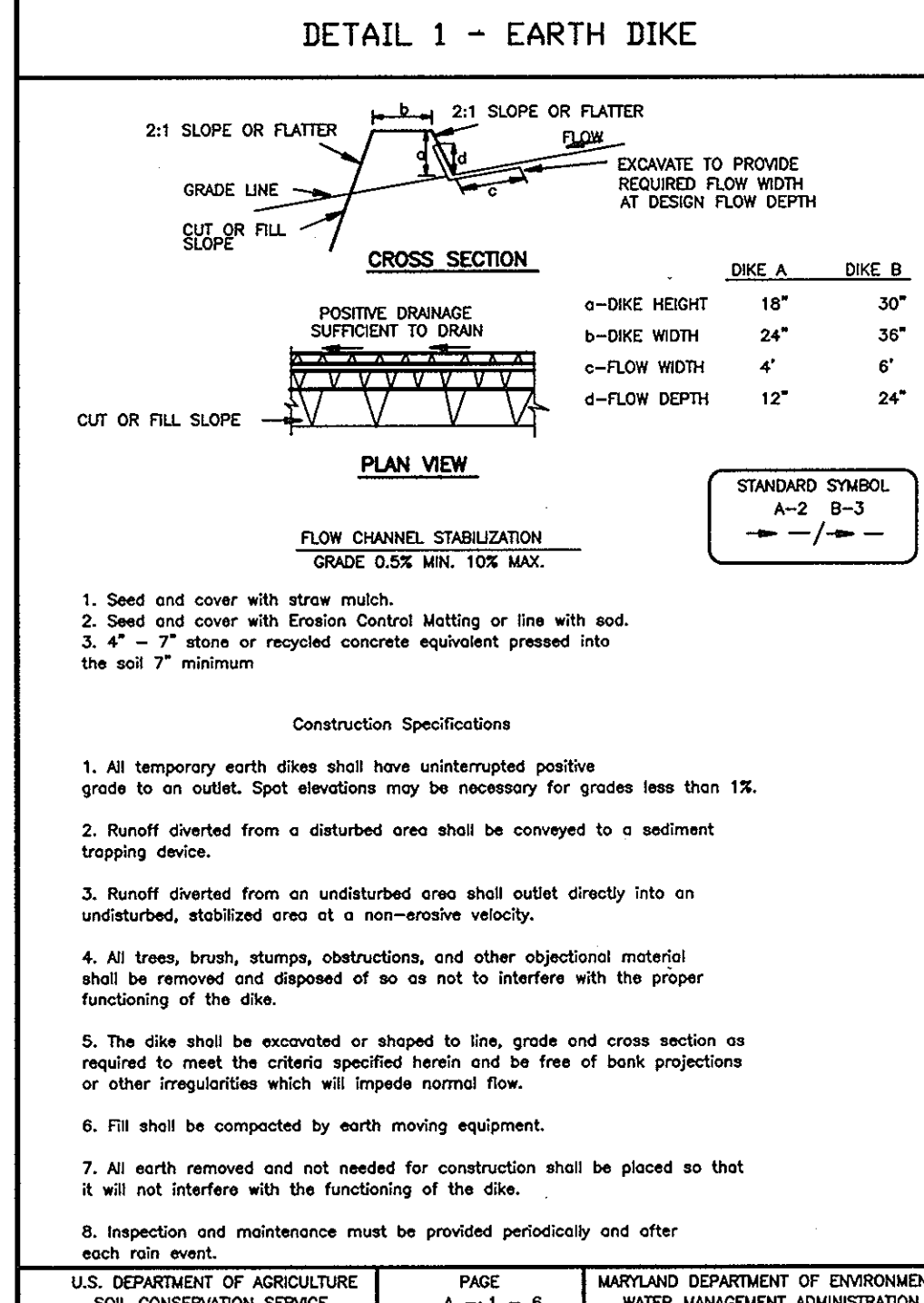
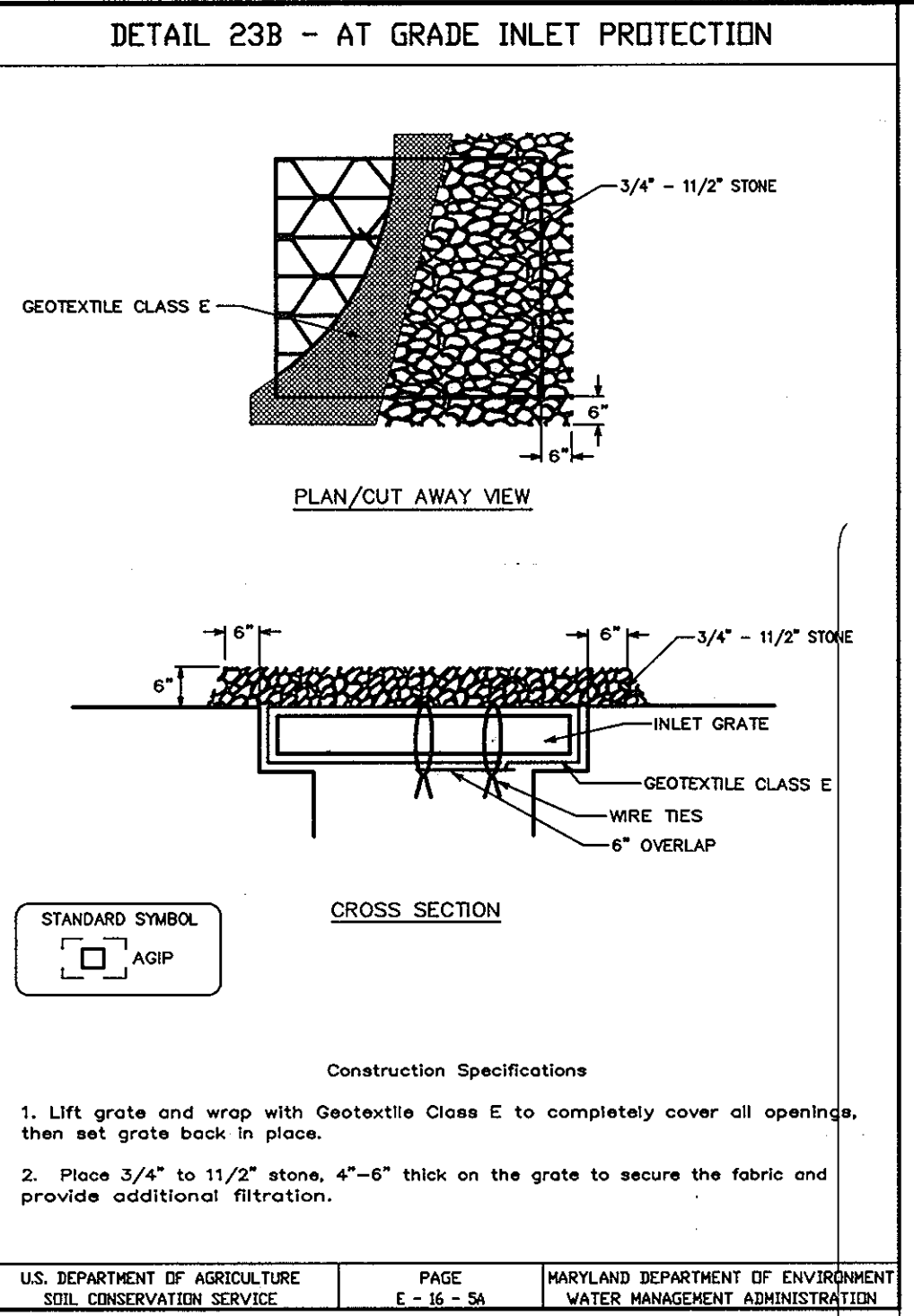
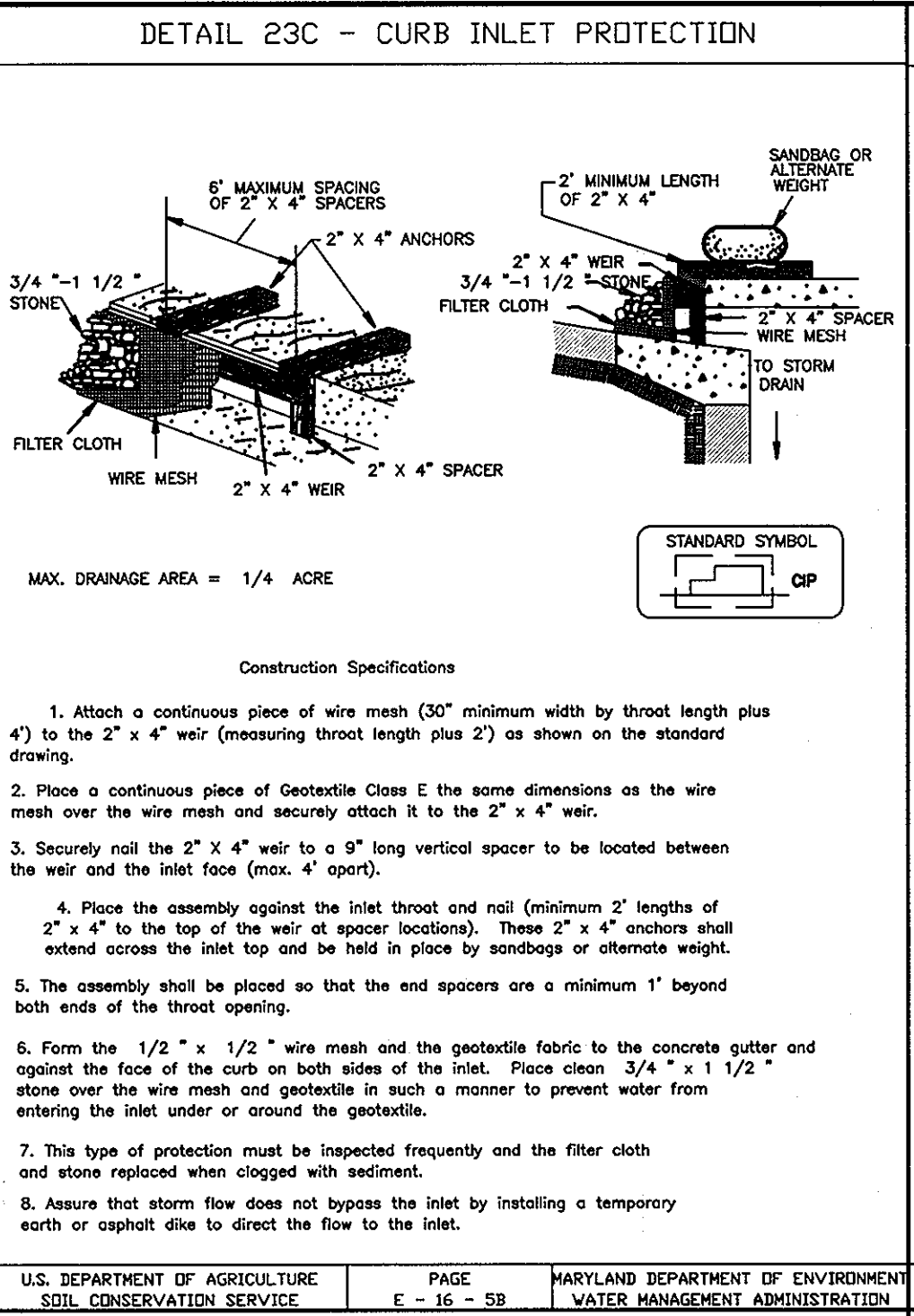
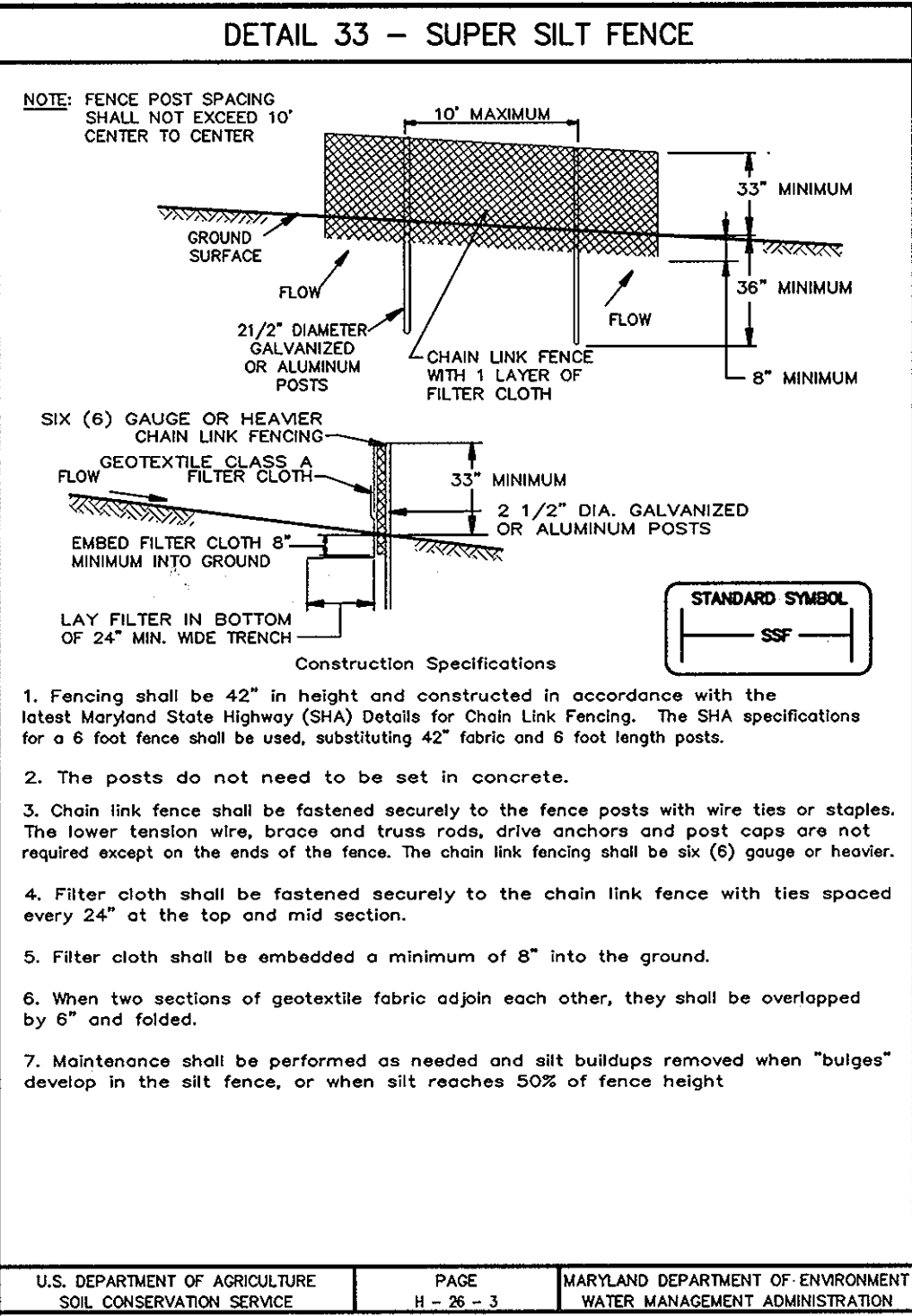
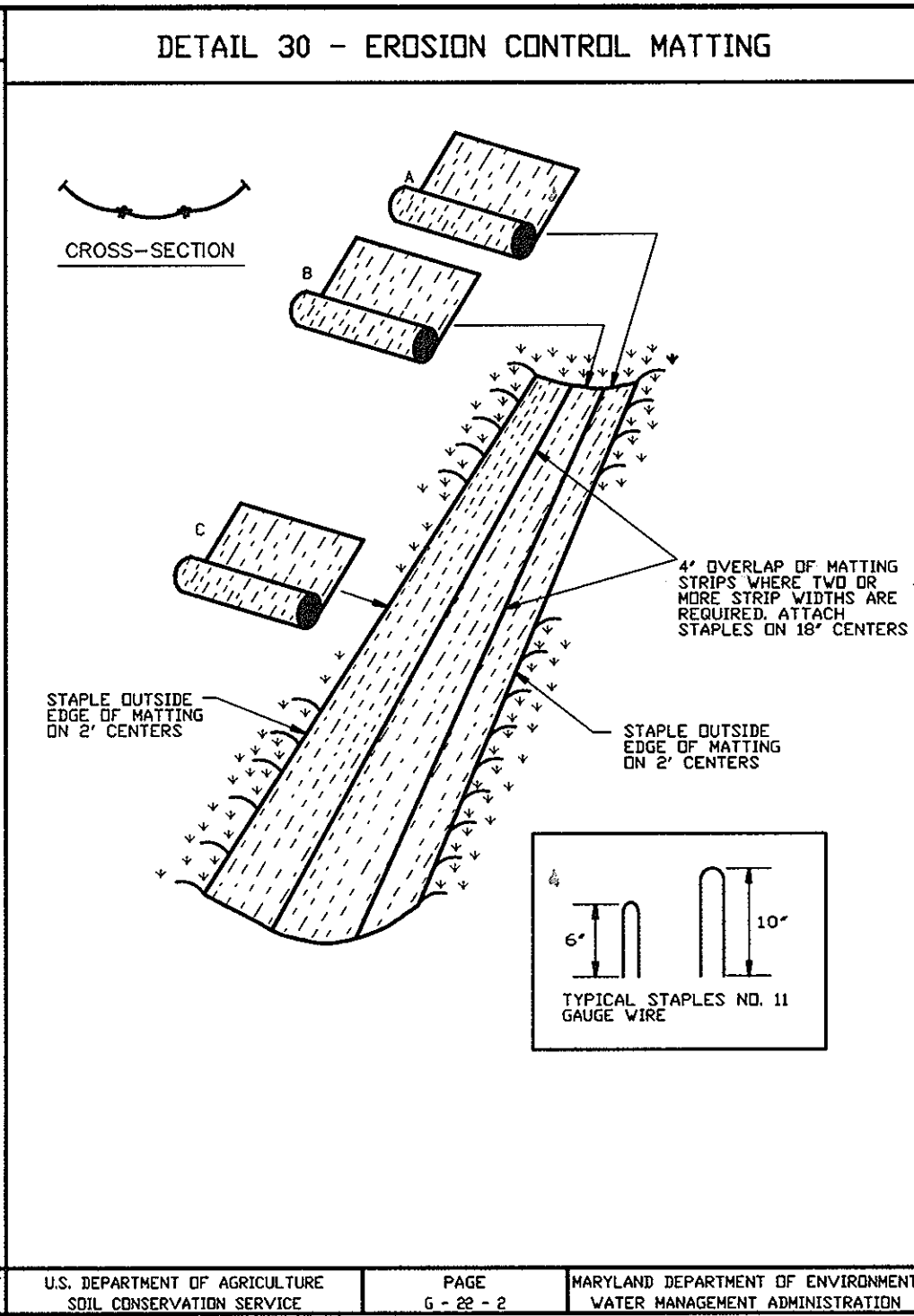
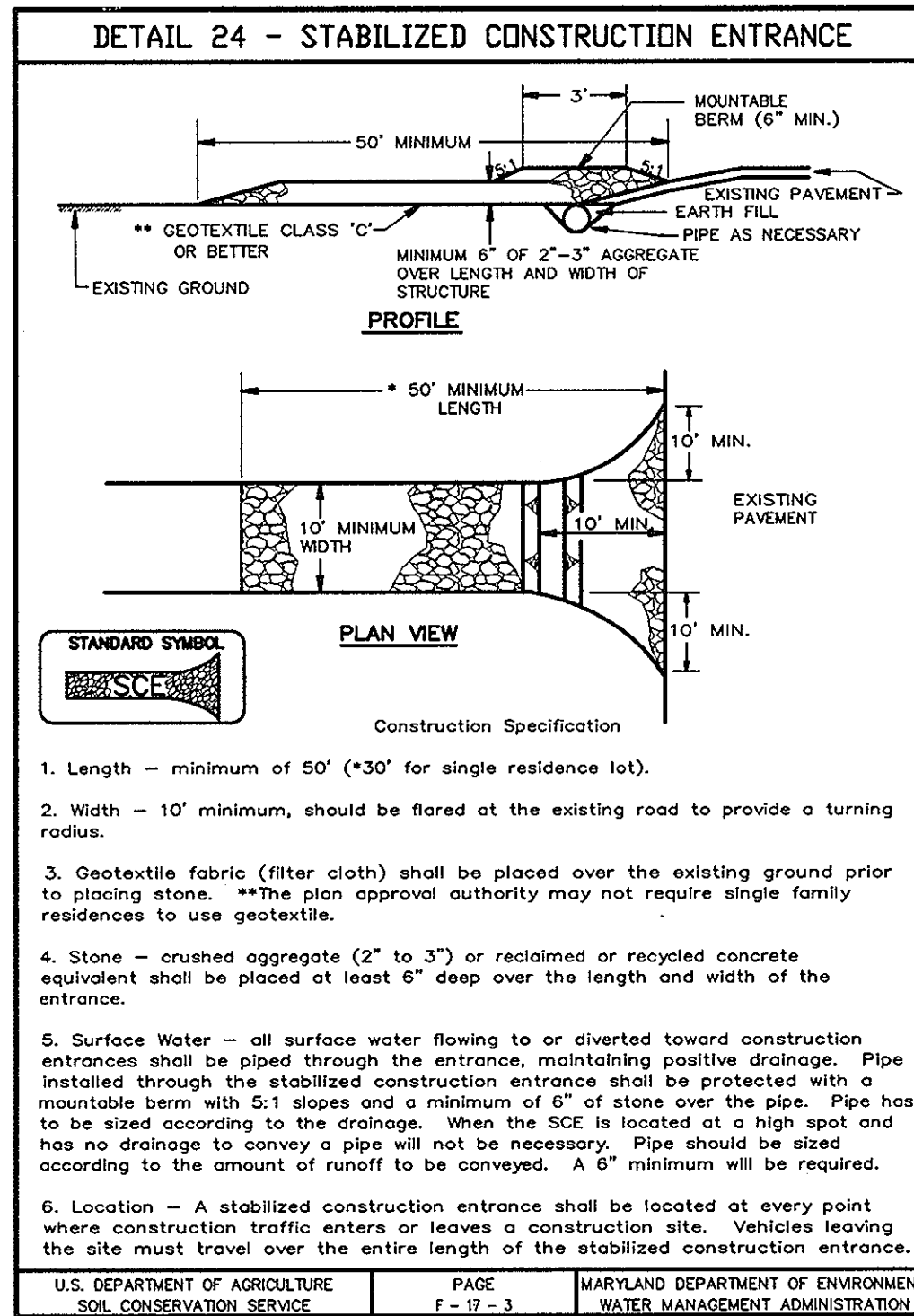
PROJECT
 TIMBER RIDGE
 PLAT OF HARWOOD PARK
 LOTS 683-688 & 707-720,
 AND OPEN SPACE LOTS 704-A & 706-A

AREA TAX MAP #38 PARCEL 873 ZONED R-12
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE
DETAILS AND PROFILES

Patton Harris Rust & Associates, pc
 Engineers, Surveyors, Planners, Landscape Architects.
 8818 Centre Park Drive
 Columbia, MD 21045
 T 410.997.8900
 F 410.997.9282

8/14/07 DATE
 DESIGNED BY: ESF
 DRAWN BY: EMR
 PROJECT NO./FINAL/CA00PROF.DWG
 DATE: AUGUST 16, 2007
 SCALE: AS SHOWN
 DRAWING NO. 5 OF 12



BY THE DEVELOPER:

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Mark A. Pritchett 8/15/07
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.

D. W. Costello 8/14/07
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Jim Maylan 8/23/07
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John K. Robertson 8/23/07
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Walter F. Smith 9-5-07
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Clayton Hunt 9/12/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John P. Decker 9/12/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION

OWNER/DEVELOPER
MEADOWLARK, LLC
ATTN: MARK PRITCHETT, ALAN YOUNG
P.O. BOX 484
HANOVER, MARYLAND 21076
410-796-6505

PROJECT
TIMBER RIDGE
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720
AND OPEN SPACE LOTS 704-A & 706-A

AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
SEDIMENT CONTROL DETAILS

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

D. W. Costello 8/15/07
DATE

DESIGNED BY: ESF
DRAWN BY: EMR
PROJECT NO: 11563/1-0/ENGR/PLANS
/FINAL/C902DET.DWG
DATE: AUGUST 16, 2007
SCALE: AS SHOWN
DRAWING NO. 7 OF 12

John P. Decker
DOMENICK W. COLANGELO #27200
F-06-133

STREET TREE CALCULATIONS FOREST AVENUE		
LENGTH= 1,350'	1918'/40'	34 SHADE TREES
TOTAL TREES REQUIRED		34 SHADE TREES
TOTAL TREES PROVIDED		24 SHADE TREES*

*DUE TO RETAINING WALL SHOWN ON PLANS, AND THE REQUIRED 10' NO TREE ZONE BEHIND THE WALL, NO STREET TREES ARE SHOWN ALONG THE TOP OF THE WALL.

STREET TREE SCHEDULE - FOREST AVENUE					
SYMBOL	QTY.	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREES					
---	24	GINKGO BILOBA 'AUTUMN GOLD' AUTUMN GOLD GINKGO	2.5-3" CAL.	B&B	FULL CANOPY, MALE SP. ONLY

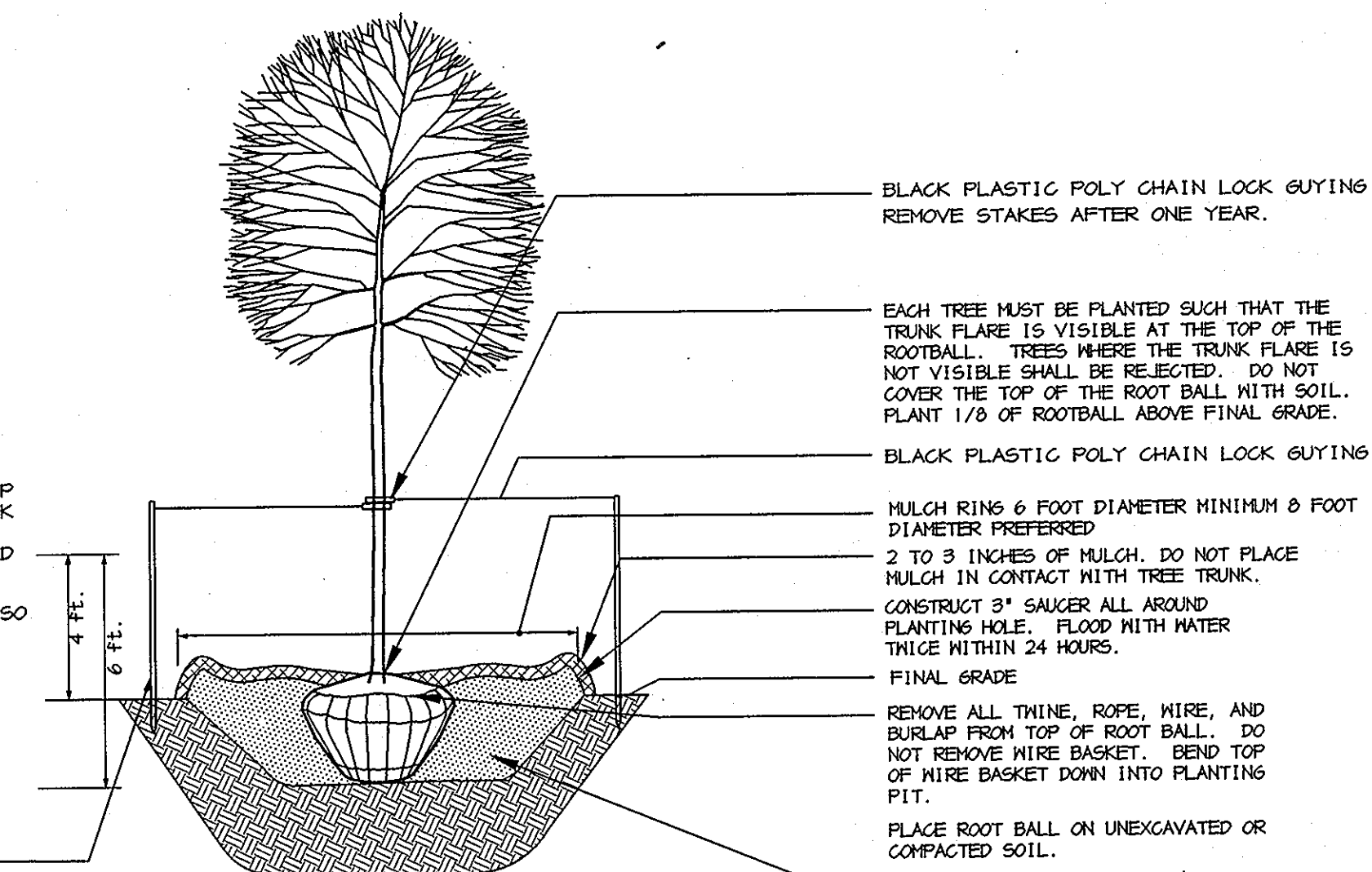
PLANTING SPECIFICATIONS

- Plants, related material, and operations shall meet the detailed description, as given on the plans and as described herein. Where discrepancies exist between Standards & Guidelines referenced within these specifications and the Landscape Manual of the applicable jurisdiction, the latter takes precedence.
- All plant material, unless otherwise specified, that is not nursery grown, uniformly branched, does not have a vigorous root system, and does not conform to the most recent edition of the American Association of Nurserymen (AAN) Standards will be rejected. Plant material that is not healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements will be rejected. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will be rejected. All B & B plants shall be freshly dug; no heated-in plants or plants from cold storage will be accepted.
- Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to the most recent edition of the "Landscape Specification Guidelines by the Landscape Contractors Association of MD, DC, & VA", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects.
- Contractor shall guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section on the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
- Contractor shall be responsible for notifying all relevant and appropriate utility companies, utility contractors, and "Miss Utility" a minimum of 48 hours prior to the beginning of any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Major changes will require the approval of the landscape architect. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- Protection of existing vegetation to remain shall be accomplished via the temporary installation of 4 foot high snow fence at the drip line, see detail.
- Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within growing season of completion of site construction. Do not plant *Pinus strobus* or *Xcupressocyparis leylandii* between November 15 and March 15. Landscape plants are not to be installed before site is graded to final grade.
- Contractor to regrade, fine grade, sod, hydroseed and straw mulch all areas disturbed by their work.
- Bid shall be based on actual site conditions. No extra payment shall be made for work arising from actual site conditions differing from those indicated on drawings and specifications.
- Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence. Where discrepancies on the plan exist between the symbols and the callout leader, the number of symbols take precedence.
- All shrubs and groundcover areas shall be planted in continuous planting beds, prepared as specified, unless otherwise indicated on plans. (See Specification 13). Beds to be mulched with minimum 2" and maximum 3" of composted, double-shredded hardwood mulch throughout.
- Positive drainage shall be maintained on planting beds (minimum 2 percent slope).
- Bed preparation shall be as follows: Till into a minimum depth of 6" 1 yard of Compro or Leafgro per 200 SF of planting bed, and 1 yard of topsoil per 100 SF of bed. Add 3 lbs of standard 5-10-5 fertilizer per cubic yard of planting mix and till. Ericaceous plants (Azaleas, Rhododendrons, etc.): top dress after planting with iron sulfate or comparable product according to package directions. *Taxus baccata* 'Repandens' (English weeping yews): Top dress after planting with 1/4 to 1/2 cup lime each.
- Planting mix: For trees not in a prepared bed, mix 50% Compro or Leafgro with 50% soil from tree hole to use as backfill, see tree planting detail.
- Weed & insect control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. For tree planting, apply a pre-emergent on top of soil and root ball before mulching. Caution: For areas to be planted with a ground cover, be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated. Maintain the mulch weed-free for the extent of the warranty period. Under no circumstances is a pesticide containing *chlorpyrifos* to be used as a means of pest control.
- Water: All plant material planted shall be watered thoroughly the day of planting. All plant material not yet planted shall be properly protected from drying out until planted. At a minimum, water unplanted plant material daily and as necessary to avoid desiccation.
- Pruning: Do not heavily prune trees and shrubs at planting. Prune only broken, dead, or diseased branches.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded, grass seed planted, and covered with straw mulch.

NOTES:

- DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR THINS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.
- STAKE TREES AS SHOWN.
- DIG PLANTING PIT THREE AS WIDE AS THE DIAMETER OF THE TOP OF THE ROOT BALL WITH A MINIMUM PLANTING PIT DIAMETER OF 5'.
- TIGHTEN GUYS ONLY ENOUGH TO KEEP FROM SLIPPING. ALLOW FOR SOME TRUNK MOVEMENT. GUYS SHALL BE LONG ENOUGH TO ACCOMMODATE 1.5 IN. OF GROWTH AND BUFFER ALL BRANCHES.
- TUCK ANY LOOSE ENDS OF THE GUY SO THAT NO LOOSE ENDS ARE EXPOSED.

INSTALL TWO STAKES ON OPPOSITE SIDES OF TREE, PARALLEL TO THE DIRECTION OF THE PREVAILING WINDS, UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOT BALL INTO PREFERABLY UNEXCAVATED SOIL.



DECIDUOUS B&B TREE PLANTING DETAIL (TREES 3" CAL. OR SMALLER)
NOT TO SCALE

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.
- NO FINANCIAL SURETY IS REQUIRED FOR THE PROPOSED LANDSCAPING. STREET TREE SURETY PROVIDED UNDER PUBLIC ROAD BONDS.
- THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION.
- AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS SHALL BE OF THE PROPER HEIGHT AND/OR SPREAD REQUIREMENTS IN ACCORDANCE WITH THIS PLAN AND THE HOWARD COUNTY LANDSCAPE MANUAL.
- NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY. ANY DEVIATION FROM THIS LANDSCAPE PLAN MAY RESULT IN A REQUIREMENT FOR SUBMITTAL OF AN OFFICIAL "REDLINE REVISION" TO THE SITE DEVELOPMENT PLAN(S) AND/OR DENIAL IN THE RELEASE OF LANDSCAPE SURETY.

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 YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Michael P. Schmitt 8/15/07
SIGNATURE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Walter Z. Wabnitz 9-5-07
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Cindy Hunter 9/18/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Allen D. Dismore 9/18/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION
1/4/08	1	REVISED STREET NAME SPELLING TO FOREST AVENUE

OWNER/DEVELOPER
MEADOWLARK, LLC
ATTN: MARK PRITCHETT, ALAN YOUNG
P.O. BOX 484
HANOVER, MARYLAND 21076
410-796-6505

PROJECT
TIMBER RIDGE
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720,
AND OPEN SPACE LOTS 704-A & 706-A

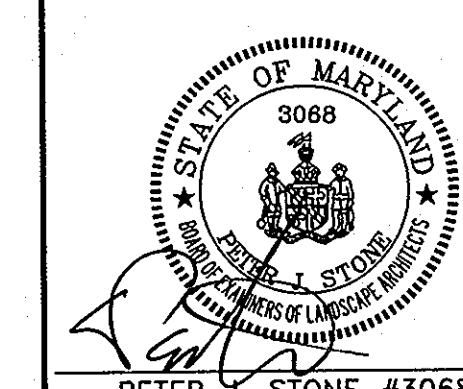
AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

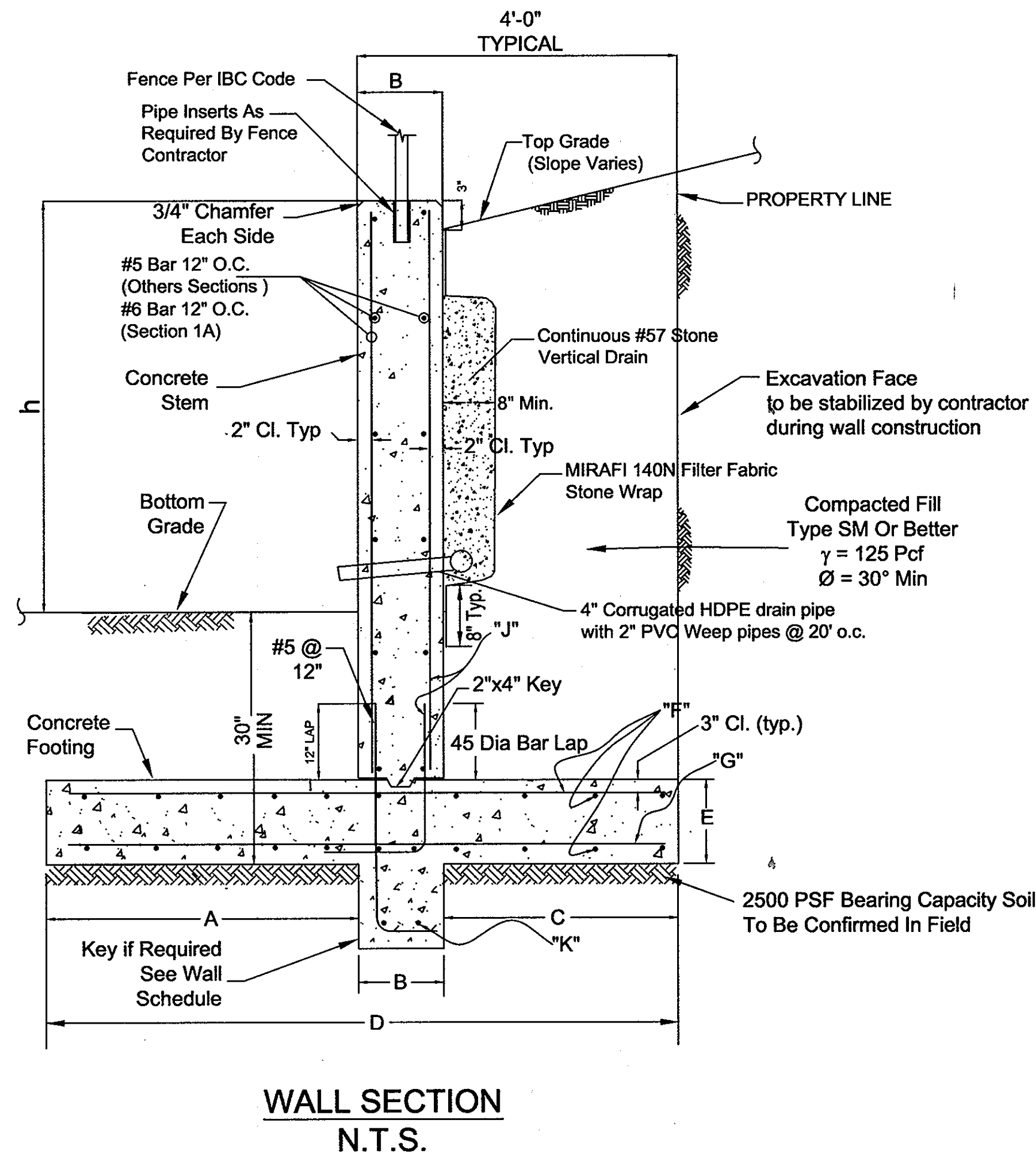
TITLE
STREET TREE
PLANT DETAILS

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

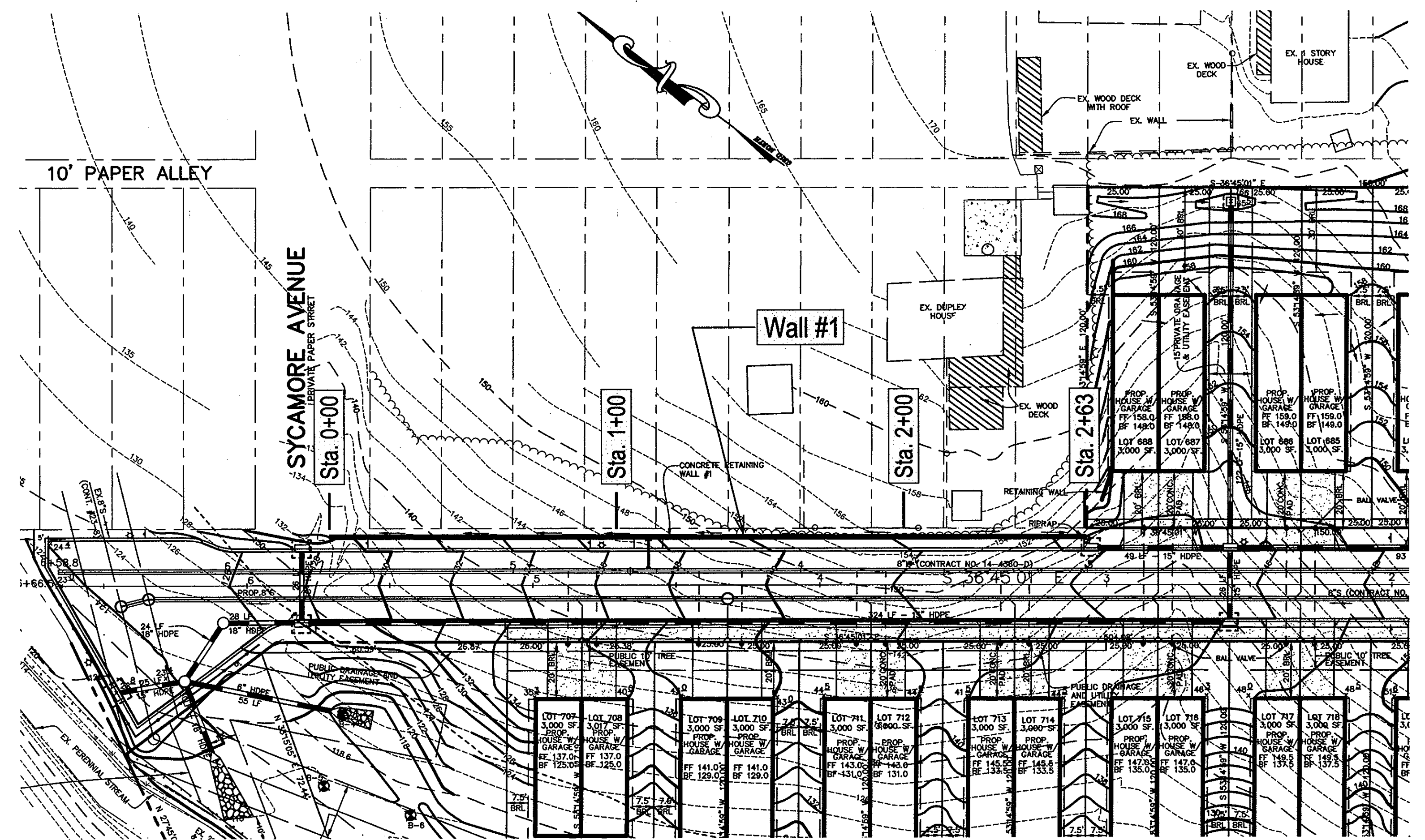
8-15-07
DATE

DESIGNED BY: ESF
DRAWN BY: EMR
PROJECT NO: 11563/1-0/ENGR/PLANS
/FINAL/C900DET.DWG
DATE: AUGUST 16, 2007
SCALE: AS SHOWN
DRAWING NO. 8 OF 12

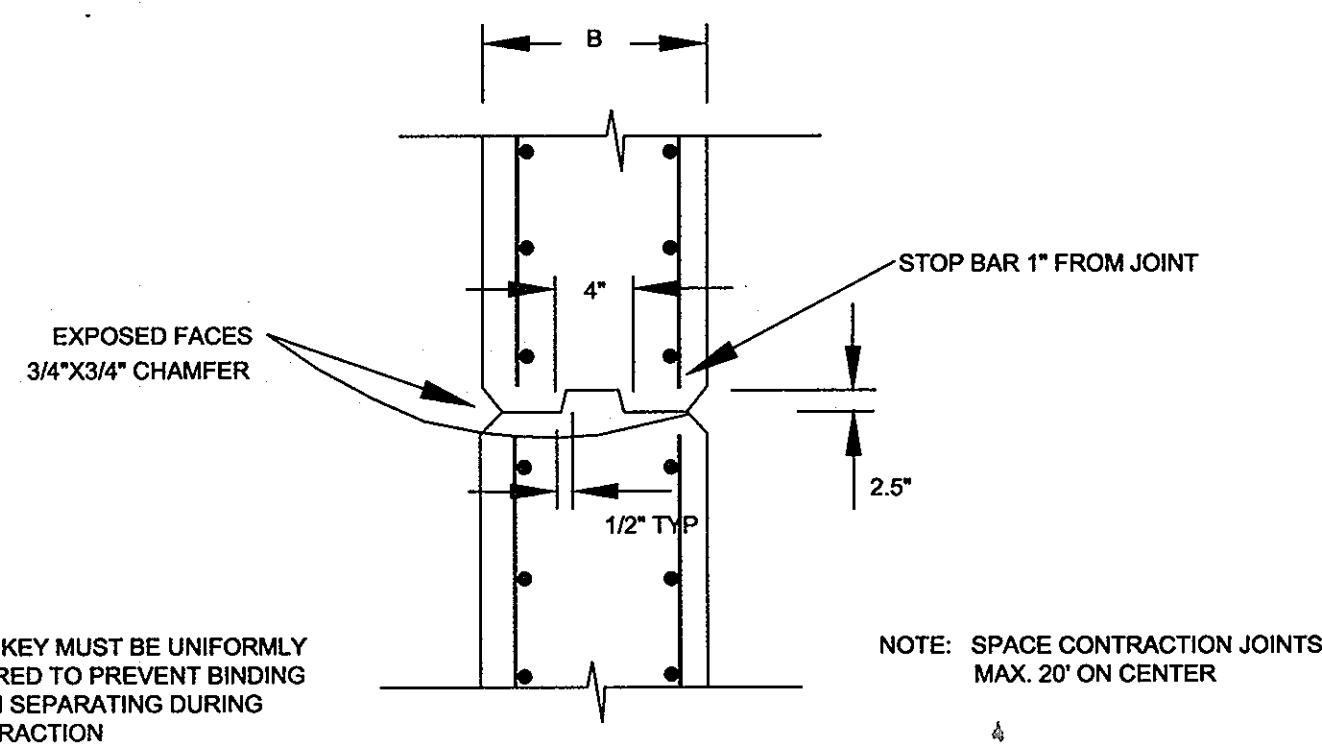




WALL SECTION
N.T.S.



WALL LOCATION PLAN
1"=30'



WALL STEM VERTICAL
CONTRACTION JOINT DETAIL
N.T.S.

- NOTES:**
- 1.) No trees shall be planted within 10 feet of the top of the retaining wall.
 - 2.) Retaining walls shall only be constructed under the observation of a registered professional engineer and a (NICET, WACEL, or equiv.) certified soils technician.
 - 3.) The required bearing pressure beneath the wall system shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to start of construction. The required bearing test shall be the Dynamic Cone Penetrometer test ASTM STP-399.
 - 4.) The suitability of fill material shall be confirmed by the on-site soils technician. Each 8" lift must be compacted to a minimum 95% standard proctor density and the testing report shall be made available to the Howard County Inspector upon completion of construction.

Wall Type	A	B	C	D	E	Max. h	KEY	"F" Footing Reinf	"G" Stem Reinf	"J" Stem Reinf	"K" Key Reinf
1A	7'-9"	14"	2'-10"	11'-9"	22"	14'-6"	18"X18"	#7 @ 12"	#8 @ 12"	#9 @ 12"	#6 @ 12"
1B	5'-0"	14"	2'-10"	9'-0"	18"	12'-6"	14"X14"	#6 @ 12"	#7 @ 12"	#8 @ 12"	#5 @ 12"
2	3'-8"	14"	2'-10"	7'-8"	16"	10'-6"	14"X14"	#6 @ 12"	#6 @ 12"	#7 @ 12"	#5 @ 12"
3	2'-6"	14"	2'-10"	6'-6"	14"	9'-0"	14"X14"	#5 @ 12"	#5 @ 12"	#6 @ 12"	#5 @ 12"
4	1'-10"	14"	2'-10"	5'-8"	12"	7'-0"	NONE	#5 @ 12"	#5 @ 12"	#5 @ 12"	

WALL SCHEDULE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING: PUBLIC WORKS.

Walter T. Whitt 9-5-07
DIRECTOR CHIEF, BUREAU OF HIGHWAYS DATE

Chris Quinn 9/2/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Judy Hamer 9/13/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER/DEVELOPER: MEADOWLARK, LLC
6375 HANOVER CROSSING WAY
HANOVER, MARYLAND 21076
410-796-6505

PROJECT: **TIMBER RIDGE**
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720 AND OPEN
SPACE LOTS 704-706

AREA: TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

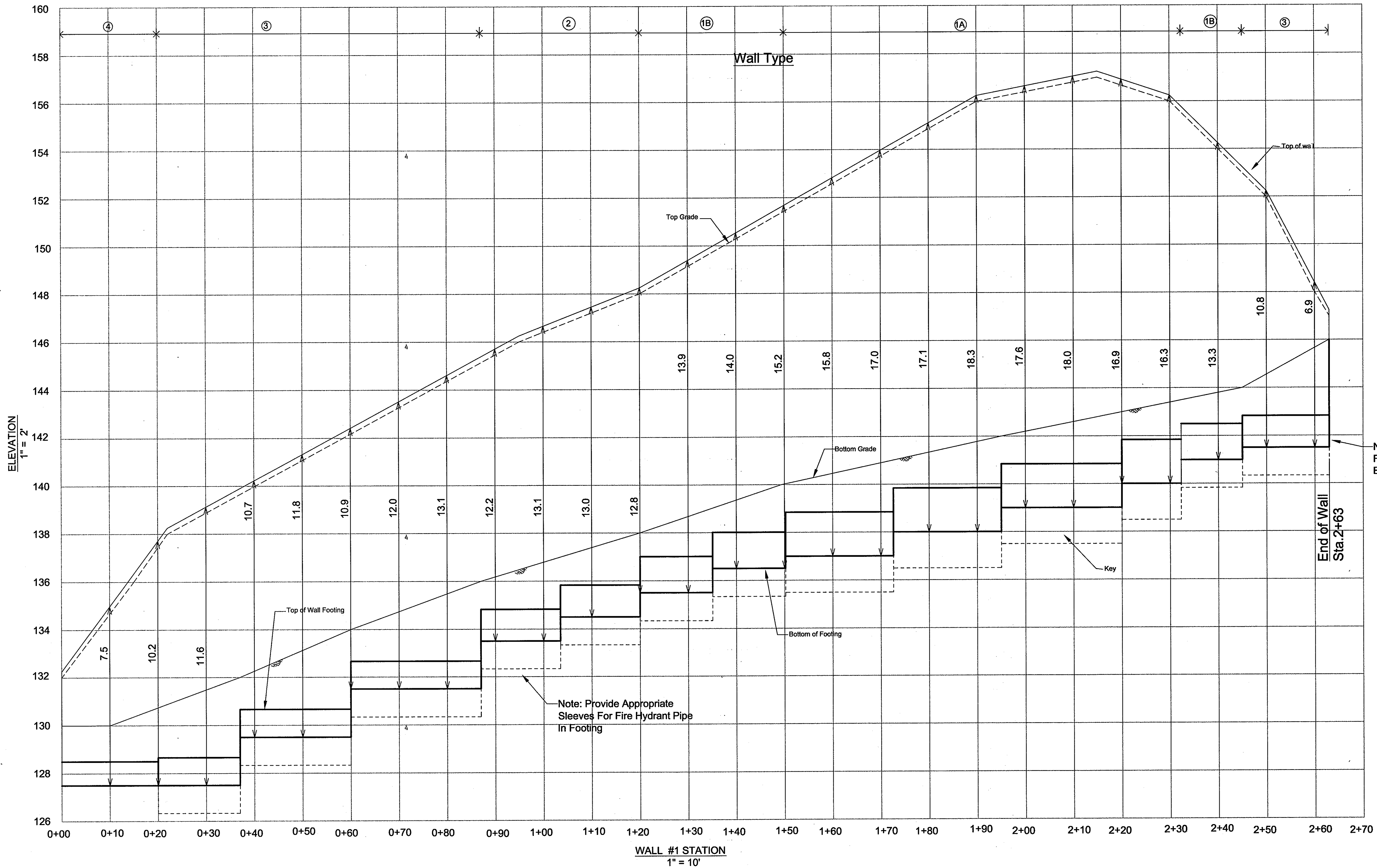
TITLE:
RETAINING WALL #1 PLAN & CONSTRUCTION DETAILS

HILLIS-CARNES
ENGINEERING ASSOCIATES
10975 Guilford Road, Suite A Annapolis Junction, MD
(410) 880-4788 Fax: (410) 880-4098



DESIGNED BY: CX
DRAWN BY: CX
PROJECT NO: 04264-C
DATE: AUGUST 16, 2007
SCALE: AS SHOWN
DRAWING NO. 9 OF 12

- NOTE:**
1. All retaining wall concrete shall be 4000 psi at 28 days with air entrainment.
 2. Reinforcing steel shall conform to ASTM-615 Grade 60
 3. Wall backfill shall be compacted to 95% of T-99
 4. Concrete work shall comply with the latest ACI 318 Building code for concrete structures
 5. All rebar splices not shown shall be a minimum 30 bar diam.
 6. All wall exposed surfaces shall be mortar patched and sack-rubbed finished with grout and brush.



Note: Notch Footing for Inlet Box Installation

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING, PUBLIC WORKS.

William F. McCall 9-5-07
DIRECTOR CHIEF, BUREAU OF HIGHWAYS MS DATE

Robert Williams 9/2/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Janice Kromer 9/19/07
CHIEF, DIVISION OF LAND DEVELOPMENT 68 DATE

DATE NO. REVISION

OWNER/DEVELOPER
MEADOWLARK, LLC
6375 HANOVER CROSSING WAY
HANOVER, MARYLAND 21076
410-796-6505

PROJECT
TIMBER RIDGE
PLAT OF HARWOOD PARK
LOTS 685-688 & 707-720 AND OPEN
SPACE LOTS 704-706

AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
RETAINING WALL #1
ELEVATION

HILLIS-CARNES
ENGINEERING ASSOCIATES

10975 Guilford Road, Suite A Annapolis Junction, MD
(410) 880-4788 Fax: (410) 880-4098



DESIGNED BY : CX
DRAWN BY: CX
PROJECT NO : 04264-C
DATE : AUGUST 16, 2007
SCALE : AS SHOWN
DRAWING NO. 10 OF 12

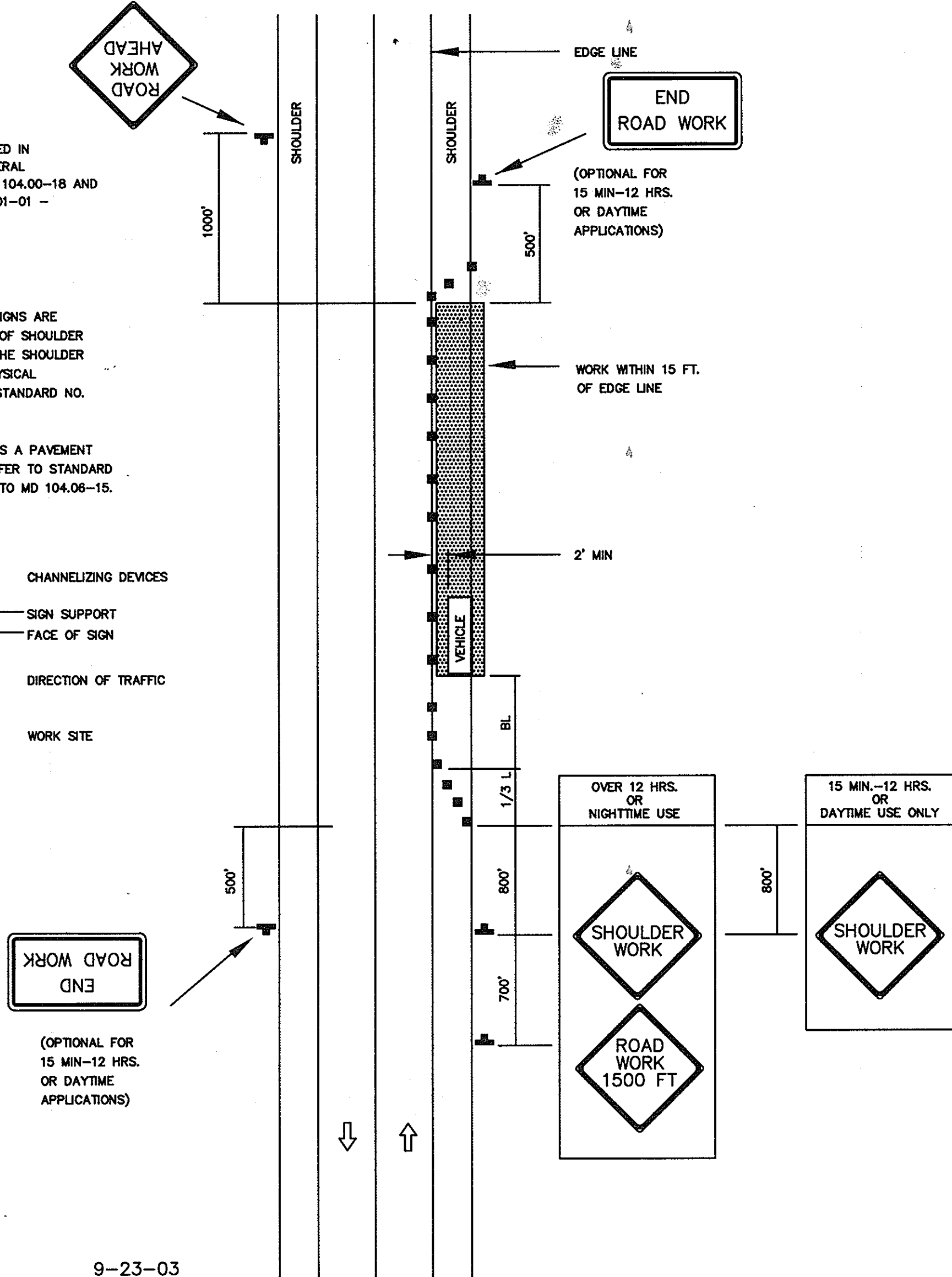
TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT:
THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES MD 104.00-01 - MD 104.00-18 AND STANDARD DETAILS MD 104.01-01 - MD 104.01-62

NOTES:
SHOULDER CLOSED SIGNS ARE REQUIRED IN PLACE OF SHOULDER WORK SIGNS WHEN THE SHOULDER IS CLOSED BY A PHYSICAL BARRIER REFER TO STANDARD NO. MD 104.06-14.

WHEN WORK INVOLVES A PAVEMENT EDGE DROP-OFF, REFER TO STANDARD NOS. MD 104.06-11 TO MD 104.06-15.

KEY:
 CHANNELIZING DEVICES
 SIGN SUPPORT
 FACE OF SIGN
 DIRECTION OF TRAFFIC
 WORK SITE



8-20-03 9-23-03

MD. 104.02-02
SHOULDER WORK, 2 LANE, 2-WAY TRAFFIC, ≤ 40MPH

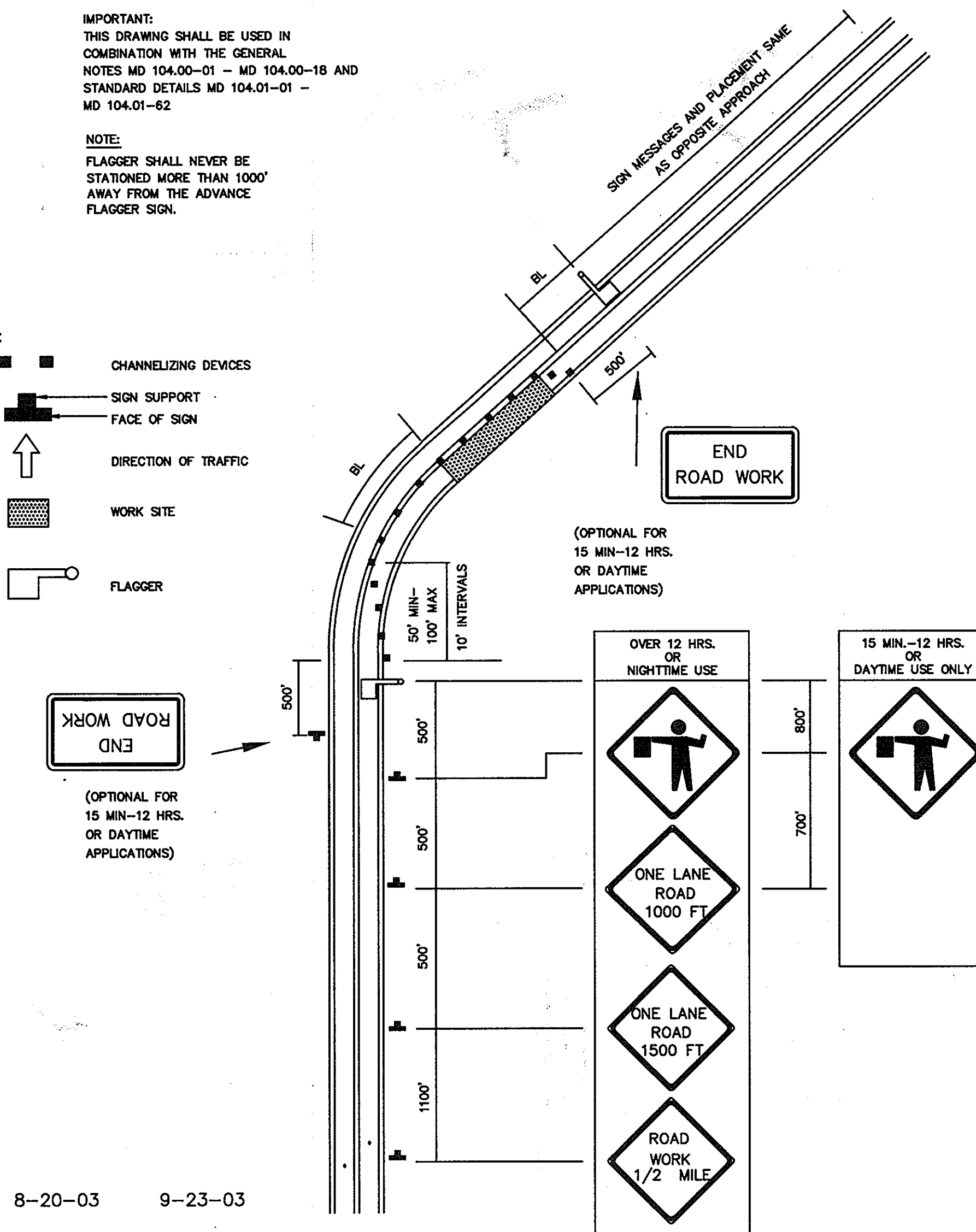
NO SCALE

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATION

IMPORTANT:
THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES MD 104.00-01 - MD 104.00-18 AND STANDARD DETAILS MD 104.01-01 - MD 104.01-62

NOTE:
FLAGGER SHALL NEVER BE STATIONED MORE THAN 1000' AWAY FROM THE ADVANCE FLAGGER SIGN.

KEY:
 CHANNELIZING DEVICES
 SIGN SUPPORT
 FACE OF SIGN
 DIRECTION OF TRAFFIC
 WORK SITE
 FLAGGER



8-20-03 9-23-03

MD. 104.02-10
FLAGGING OPERATION, 2 LANE, 2-WAY TRAFFIC, ≤ 40MPH

NO SCALE

- NOTES
- HIGHLAND AVENUE IS AN EXISTING 2 LANE, 2-WAY ROAD. THE POSTED SPEED LIMIT FOR THE ROAD IS 25 MPH.
 - REFER TO MSHA STANDARDS MD 104.01-80 AND MD 104.01-81 FOR BUFFER LENGTHS AND TAPER LENGTHS. FOR GENERAL NOTES FOR CHANNELIZATION DEVICES, REFER TO MSHA STANDARD MD 104.00-10.
 - REFER TO MSHA STANDARD MD 104.00-12 FOR GENERAL NOTES FOR FLAGGING OPERATION.

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Walter Z. ... 9-5-07
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

John ... 9/18/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

... 9/12/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE NO. REVISION

OWNER/DEVELOPER
MEADOWLARK, LLC
ATTN: MARK PRITCHETT, ALAN YOUNG
P.O. BOX 484
HANOVER, MARYLAND 21076
410-796-6505

PROJECT
TIMBER RIDGE
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720,
AND OPEN SPACE LOTS 704-A & 706-A

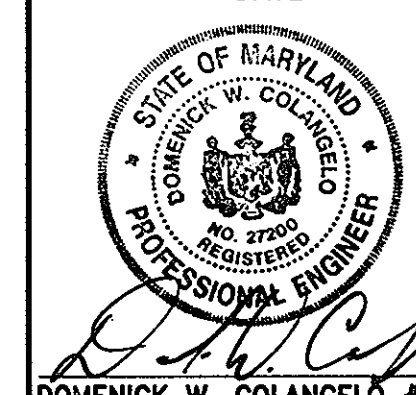
AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
MOT PLAN

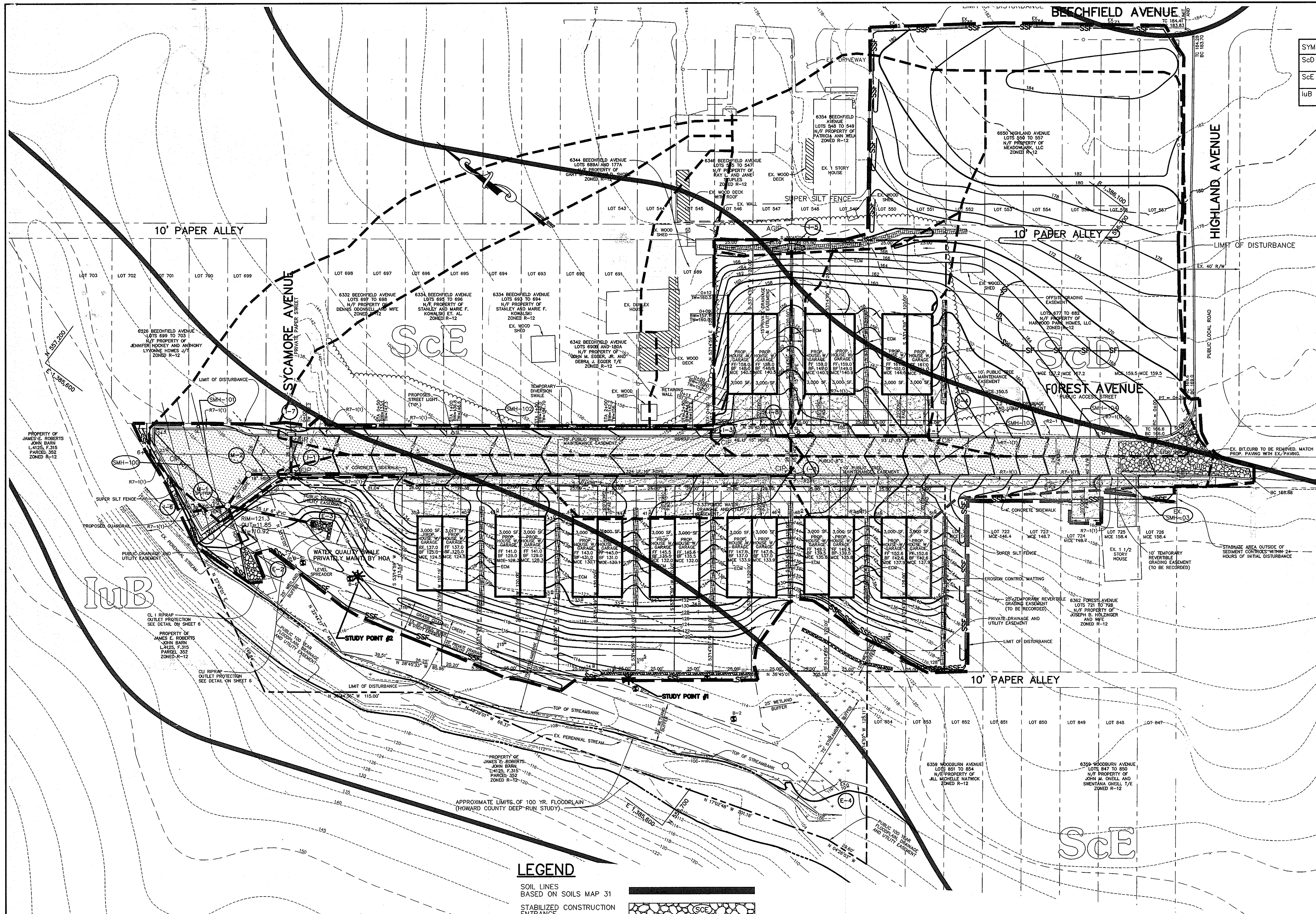
Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

9/14/07
DATE

DESIGNED BY : ESF
DRAWN BY: EMR
PROJECT NO.: 11565/1-0/ENGR/PLANS
C803DET
DATE : AUGUST 16, 2007
SCALE : NO SCALE
DRAWING NO. 11 OF 12



DOMENICK W. COLANGELO #27200



SOIL CHART

SYMBOL	DESCRIPTION	HYDROLOGIC SOIL GROUP
ScD	SANDY AND CLAYEY LAND, MODERATELY SLOPING	C
ScE	SANDY AND CLAYEY LAND, MODERATELY STEEP	C
IuB	IUKA LOAM, LOCAL ALLUVIUM, 1 TO 5 PERCENT SLOPES	C

BY THE DEVELOPER :

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Mark Pritchett 8/15/07
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.

D.W. C. Smith 8/14/07
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE DATE

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

HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

William F. Mullen 9/5/07
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Chris Sumner 9/5/07
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Michael Williams 9/12/07
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

1/1/08 REVISED STREET NAME SPELLING TO FOREST AVENUE
DATE NO. REVISION

OWNER/DEVELOPER MEADOWLARK, LLC
ATTN: MARK PRITCHETT, ALAN YOUNG
P.O. BOX 484
HANOVER, MARYLAND 21076
410-796-6505

PROJECT **TIMBER RIDGE**
PLAT OF HARWOOD PARK
LOTS 683-688 & 707-720,
AND OPEN SPACE LOTS 704-A & 706-A

AREA TAX MAP #38 PARCEL 873 ZONED R-12
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE **INLET DRAINAGE AREA MAP**

Patton Harris Rust & Associates, pc
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive
Columbia, MD 21045
T 410.997.8900
F 410.997.9282

D.W. C. Smith 8/14/07
DATE

DESIGNED BY : ESF
DRAWN BY: EMR

PROJECT NO. 11563/1-0/ENGR/PLANS
C5000SW.DWG
DATE : AUGUST 16, 2007
SCALE : 1" = 30'

D.W. C. Smith
DOMENICK W. COLANGELO #27200
DRAWING NO. 12 OF 12

LEGEND

SOIL LINES BASED ON SOILS MAP 31	
STABILIZED CONSTRUCTION ENTRANCE	
LIMIT OF DISTURBANCE	
SUPER SILT FENCE	
EROSION CONTROL MATTING	
INLET PROTECTION	
STORM DRAIN DRAINAGE DIVIDE	
15%-24.9% STEEP SLOPES	
25% OR GREATER STEEP SLOPES	
STUDY POINT	

STORMWATER MANAGEMENT SUMMARY TABLE

	DRAINAGE AREA (AC)	WQv (CF)	Rev (CF)	Cpv (AC-FT)	Op 1 (CFS)	Op 10 (CFS)	Op 100 (CFS)	COMMENTS
STUDY POINT 1	0.56	1011	131	N/A	1.27	3.02	-	SHEET FLOW TO BUFFER
STUDY POINT 2	1.31	2581	336	0.110	3.03	7.36	-	GRASS CHANNEL CREDIT

FOR DRAINAGE AREA #1 THE SHEET FLOW TO BUFFER CREDIT WILL PROVIDE FOR THE REQUIRED WQv AND Rev. THE 1-YEAR PEAK DISCHARGE AT STUDY POINT 1 IS LESS THAN 2 CFS; THEREFORE, Cpv IS NOT REQUIRED.

FOR DRAINAGE AREA #2 GRASS CHANNEL CREDIT WILL PROVIDE THE REQUIRED WQv AND Rev.

DRAINAGE DATA

INLET NOS.	AREA IN ACRES	C FACTOR
1-1	0.21	0.87
1-2	0.18	0.81
1-3	0.34	0.35
1-4	0.85	0.36
1-5	0.41	0.33
1-6	0.49	0.41
1-7	0.71	0.43
1-8	0.28	0.43

P:\Project\11563\02-06-09\11-0\Engr\Plans\FINAL\C5000SW.dwg, 8/14/2007 10:31:41 AM