

WATER QUALITY FACILITY
(INFILTRATION/SHALLOW MARSH)

The Contractor shall provide all labor, materials and equipment necessary to construct, complete in place the water quality facility, as required.

The water quality facility shall be installed to the lines and grades as indicated on the site development plan drawings.

All materials and construction methods in installation of water quality facility shall conform to Standards and Specifications for Infiltration Practices, State of Maryland, Department of the Environment, Sediment and Stormwater Administration. In the event of a conflict the more stringent criteria shall govern.

EROSION AND SEDIMENT CONTROL MEASURES

The Contractor shall provide all labor, materials and equipment necessary to construct, complete in place the silt fence, inlet protection and stabilized construction entrance as required.

The sediment and erosion control measures shall be installed to the lines and grades as indicated on the site development plan drawings.

All materials (silt fence, lumber and stone) and construction methods in installation of erosion and sediment control measures shall conform to Maryland Standards and Specifications for Soil Erosion and Sediment Control, Soil Conservation Service, Water Resources Administration. In the event of a conflict, the more stringent criteria shall govern.

4-INCH PRIVATE SANITARY SEWER MAIN

The Contractor shall provide all labor, materials and equipment necessary to construct, complete in place, the private sanitary sewer main; including all excavation, backfill, sheeting, shoring, bracing and pumping as required.

The private sanitary sewer main shall be installed to the lines and grades as indicated on the site development plan drawings. The sewer main shall be installed to a point within five (5) feet of the face of the proposed building addition as indicated on the site development plans.

All materials (pipe, fittings, clean-outs, plugs and associated appurtenances) and construction methods utilized in installation of the private sanitary sewer main shall conform to the Howard County Volume IV Design Manual, Standard Specifications and Details for Construction and the Howard County Plumbing Code. In the event of a conflict, the more stringent criteria shall govern.

Upon completion of installation of the private sanitary sewer main the entire line shall be tested in accordance with the applicable sections of the Howard County Plumbing Code.

6-INCH PRIVATE WATER SEWER MAIN

The Contractor shall provide all labor, materials and equipment necessary to construct, complete in place, the private water main; including all excavation, backfill, sheeting, shoring, bracing and pumping as required.

The private water main shall be installed to the lines and grades as indicated on the site development plan drawings. The water main shall be installed to a point within five (5) feet of the face of the proposed building addition as indicated on the site development plans.

All materials (pipe, fittings, plugs and associated appurtenances) and construction methods utilized in installation of the private water main shall conform to the Howard County Volume IV Design Manual, Standard Specifications and Details for Construction and the Howard County Plumbing Code. In the event of a conflict, the more stringent criteria shall govern.

Upon completion of installation of the private water main the entire line shall be tested in accordance with the applicable sections of the Howard County Plumbing Code.

DRY WELL

The contractor shall provide all labor materials and equipment necessary to construct, complete in place, the drywells, as required.

The dry wells shall be installed to the lines and grades as indicated on the site development plan.

All materials (stone, filter fabric, sand, p.v.c. perforated pipe and splash block) and construction methods utilized in installation of dry well shall conform to the Standards and Specification for Infiltration Practices State of Maryland, Department of the Environment, Sediment and Stormwater Administration. In the event of a conflict, the more stringent criteria shall govern.

TRENCH BEDDING

The Contractor shall provide all labor materials and equipment to construct complete in place the trench bedding for 4-inch private sanitary sewer as required.

The trench bedding shall be installed to the lines and grades as indicated on the site development plan drawings.

All materials and construction methods in installation of trench bedding shall conform to Howard County Volume IV Design Manual, Standard Specifications and Details for Construction. In the event of a conflict the more stringent criteria shall govern.

CONCRETE SIDEWALK AND PAVED SIDEWALK

The Contractor shall provide all labor, materials and equipment necessary to construct, complete in place the concrete and paved sidewalks as required.

The sidewalk shall be installed to the lines and grades as indicated on the site development plan drawings.

All materials (concrete, bituminous concrete, expansion joints, stone scribed intervals) and construction methods in installation of sidewalks shall conform to Howard County Volume IV Design Manual, Standard Specifications and Details for Construction. In the event of a conflict, the more stringent criteria shall govern.

TREE PROTECTION FENCE

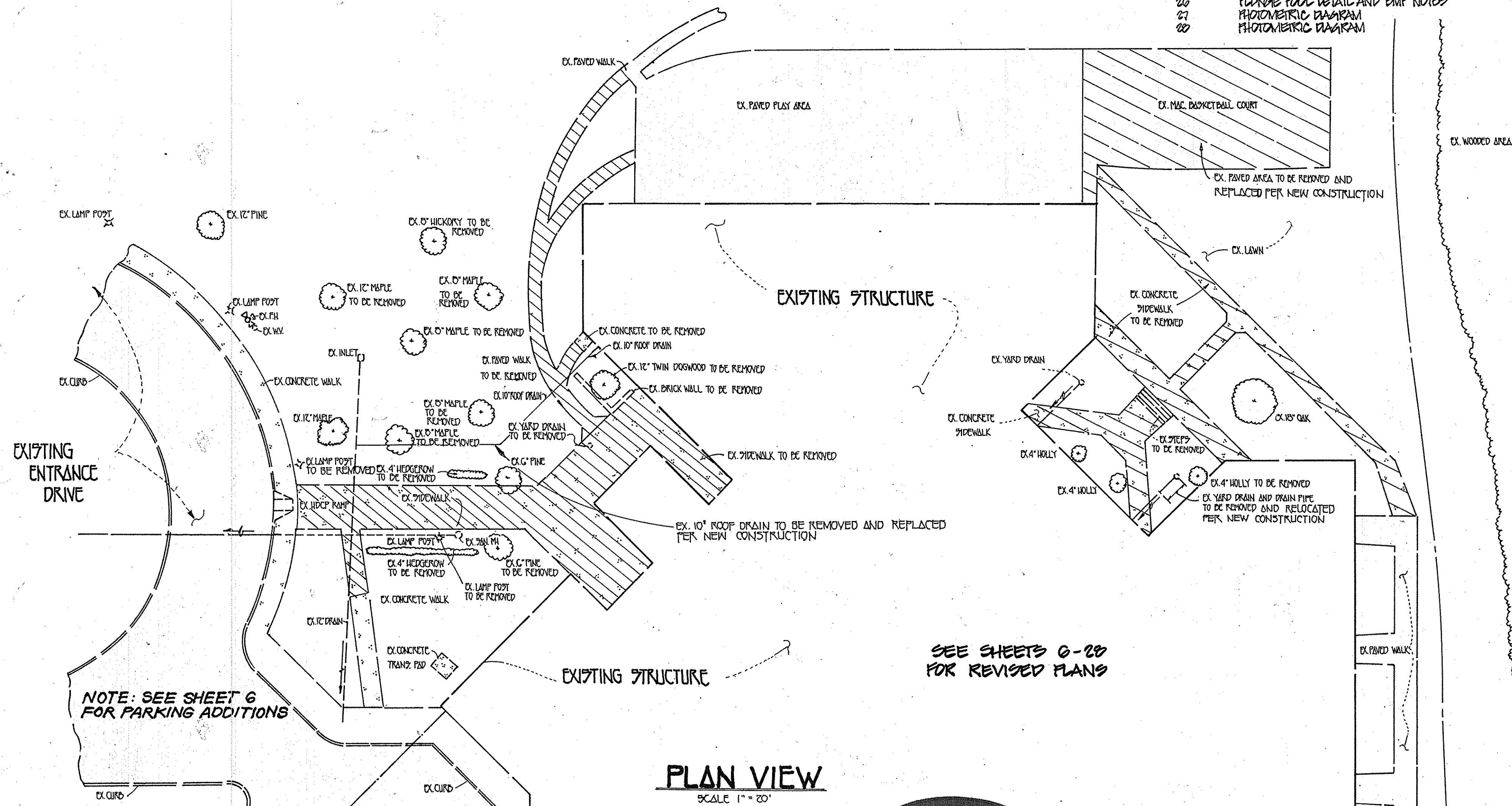
The Contractor shall provide all labor, materials and equipment necessary to construct, complete in place the tree protection fence, as required.

The tree protection fence shall be installed to the lines and grades as indicated on the site development plan.

All materials (blaze orange plastic mesh anchor post and flagging) and construction methods utilized in installation of tree protection fence shall conform to the Howard County Forest Conservation Manual. In the event of a conflict, the more stringent criteria shall govern.

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PLAN VIEW
SCALE 1" = 20'

SEE SHEETS G-28 FOR REVISED PLANS

NOTE: SEE SHEET 6 FOR PARKING ADDITIONS

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
7171 BALTIMORE NATIONAL PIKE, SUITE 100
ELLICOTT CITY, MARYLAND 21042
TELEPHONE: (410) 451-1255
FAX: (410) 750-3704

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Severnside Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
THIS IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET
D.A.D. 08/16/93
D. ANDREW DORSEY, P.E. DATE 08/16/93
MARYLAND REGISTERED PROFESSIONAL ENGINEER, NO. 45261

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: August 19, 1993
JA

OWNER AND DEVELOPER
HOWARD COUNTY BOARD OF EDUCATION
10910 MARYLAND ROUTE 105
ELLICOTT CITY, MARYLAND 21043

NOTE:
THE PURPOSE OF THIS REDLINE IS TO ADD 3 PORTABLE CLASSROOMS ON SHEET 3 ALONG WITH THEIR UTILITY PROFILES SHOWN ON SHEET 12

No.	REVISIONS	Date
4	AS-BUILT PLAN	2/16
3	REVISED SHEET INDEX AND SHEET NUMBERS	7/18/93
2	REVISED SHEET INDEX AND SHEET NUMBERS	9/19/93
1	Add Sheet Index & Rev. Sheet Numbers	1-31-08

ENGINEER'S CERTIFICATE
I HEREBY 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.
Chalice 8/26/93
SIGNATURE OF ENGINEER DATE

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
Cathleen Conley Young 8/26/93
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James M. Williams 8/31/93
S.O. SOIL CONSERVATION SERVICE DATE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Robertson 8/31/93
DISTRICT DATE
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPT. OF PLANNING AND ZONING
James S. Miller 10/12/92
PLANNING DIRECTOR DATE

Gina Zimmerman 10/7/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH, SA DATE

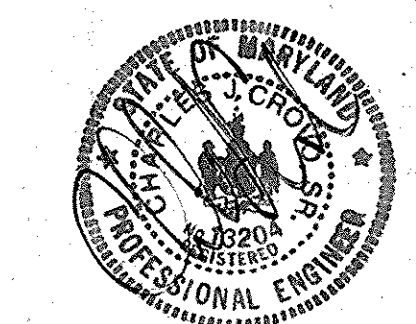
APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS
Gregory B. Lewis 9-13-93
HEALTH OFFICER DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.
James S. Miller 9/3/93
DIRECTOR, PUBLIC WORKS DATE

Charles S. Sisson 3/2/93
CHIEF, BUREAU OF ENGINEERING 08/16/93 DATE

PROPERTY	SECTION/AREA	LOT NO.
LONGFELLOW ELEMENTARY SCHOOL	5	4
PLAT NO. 1519	BLOCK NO. 70	ZONE N.T.
	TAX/ZONE 27	ELEC. DIST. 5TH
		CENSUS TR. 6055
WATER CODE 7120	SEWER CODE 588000	

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. 13204, Expiration Date: November 3, 2008.

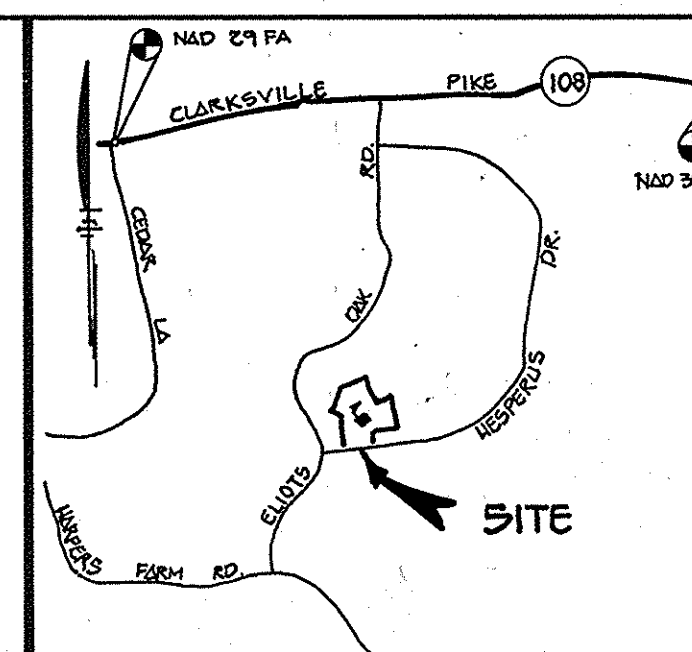
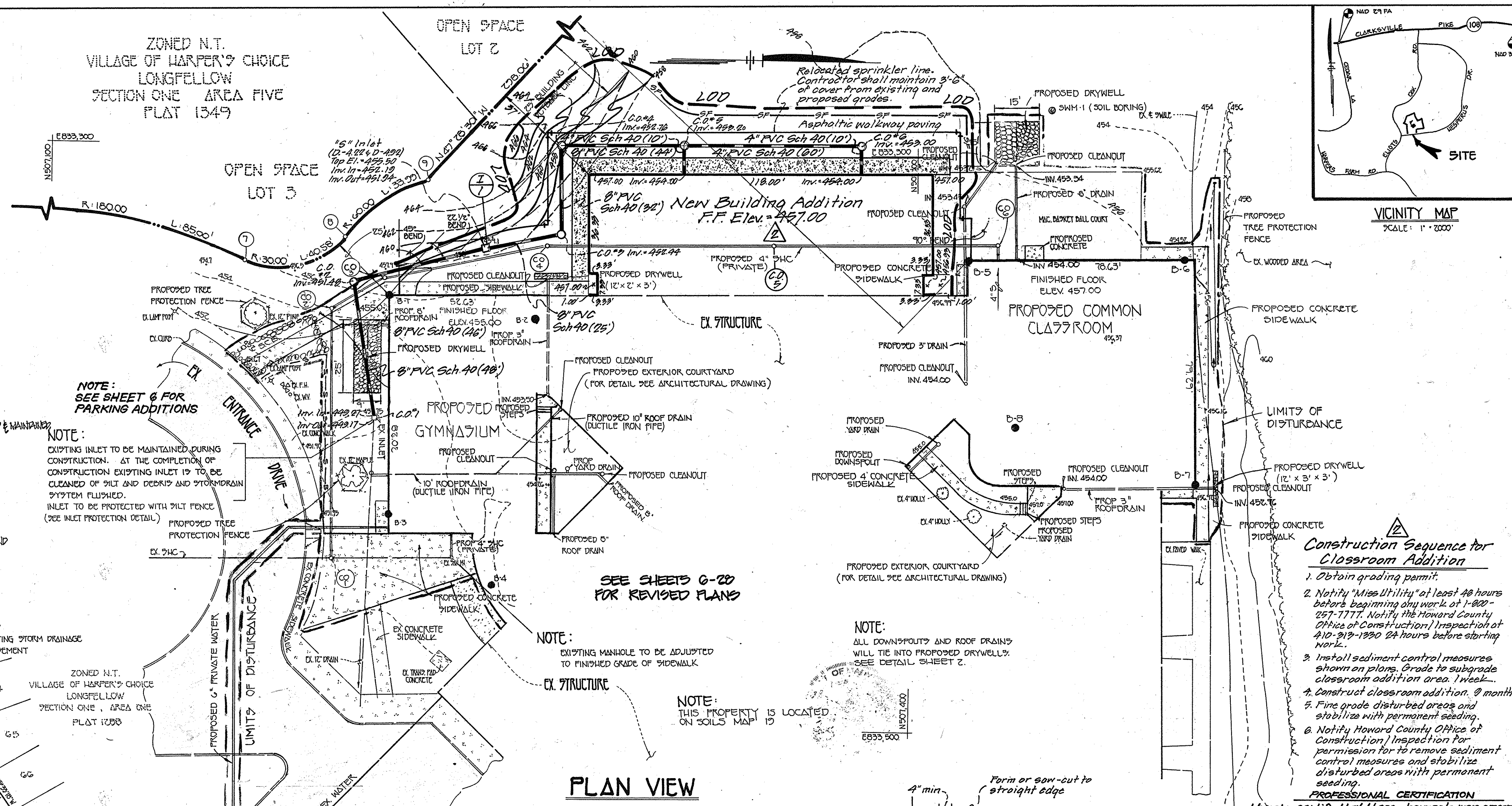


AS-BUILT
DEMOLITION PLAN AND CONSTRUCTION SPECIFICATION
SITE DEVELOPMENT PLAN
ADDITION TO
LONGFELLOW
ELEMENTARY SCHOOL
VILLAGE OF HARPERS CHOICE
SECTION 1 AREA 5 LOT 4
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TAX MAP 27 BLOCK 10
SCALE: AS SHOWN SHEET 1 OF 28 DATE: JULY 5, 1993

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT 313-1000 1825-22.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- 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.
- ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- TOPOGRAPHIC SURVEY WAS PERFORMED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT FEBRUARY 15, 1993.
- PUBLIC WATER AND SEWER WILL BE UTILIZED.
- EXISTING UTILITIES WERE LOCATED BY TOPOGRAPHIC SURVEY AND EXISTING WATER AND SEWER CONTRACT.
- TOPOGRAPHIC SURVEY WAS BASED ON MARYLAND STATE GRID SYSTEM COORDINATES.
- THIS PLAN IS SUBJECT OF FINAL DEVELOPMENT PLAN PHASE 33 RECORDED AS PLAT BOOK 14 AT FOLIO 44 THRU FOLIO 46.
- THIS PARCEL IS RECORDED IN PLAT BOOK 13 AT FOLIO 79.
- CONTRACTOR TO VERIFY BY TEST PIT THE VERTICAL AND HORIZONTAL LOCATION OF ALL UTILITIES BEFORE STARTING CONSTRUCTION.
- SITE ANALYSIS
 - TOTAL AREA OF PARCEL: 9.498 AC.±
 - LIMIT OF DISTURBANCE: 1.76 AC.±
 - PROPOSED FLOOR AREA
 - GYMNASIUM: 4,316 SQ. FT.
 - COMMON CLASSROOM: 6,234 SQ. FT.
 - EXISTING ZONING NEW TOWN: OPEN SPACE
 - BUILDING LOT COVERAGE:
 - TOTAL SITE = 0.400 ACRES
 - SCHOOL PLAZA = 1.504 ACRES, FUTURE LOTS = 0.170 ACRES = TOTAL AREA = 1.708 ACRES
 - 1.708 ACRES = 118,000 SQ. FT. LOT COVERAGE
- STORMWATER MANAGEMENT: CONTROL IS BY INFILTRATION AND WILL BE PRIVATELY OWNED & MAINTAINED.
- Parking Space Data
 - The number of parking spaces in accordance with the Public School Systems Requirements = 50
 - Total Number of Parking Spaces Provided on Site Including Handicap Parking = 50
 - Total Number of Handicapped Parking Spaces Provided, Including Handicap Van Spaces = 4
- Non-Credited Open Space Recorded in Plat Book 14 Folio 44 & P. Criteria Phase 33 = 0.250 Acres
Non-Credited Open Space Provided = 0.25 Acres
- ALL OUTSIDE LIGHTING SHALL COMPLY WITH ZONING REGULATIONS SECTION 124 WHICH REQUIRES LIGHTS TO BE INSTALLED TO DIRECTLY REFLECT LIGHT DOWNWARDS AND INWARDS ON THE SITE AND AWAY FROM ALL PUBLIC STREETS AND RESIDENTIAL AREAS.

ZONED N.T.
VILLAGE OF HARPER'S CHOICE
LONGFELLOW
SECTION ONE AREA FIVE
PLAT 1349



NOTE:
SEE SHEET 6 FOR
PARKING ADDITIONS

NOTE:
EXISTING INLET TO BE MAINTAINED DURING CONSTRUCTION. AT THE COMPLETION OF CONSTRUCTION EXISTING INLET IS TO BE CLEANED OF SILT AND DEBRIS AND STORMDRAIN SYSTEM FLUSHED.
INLET TO BE PROTECTED WITH SILT FENCE (SEE INLET PROTECTION DETAIL)

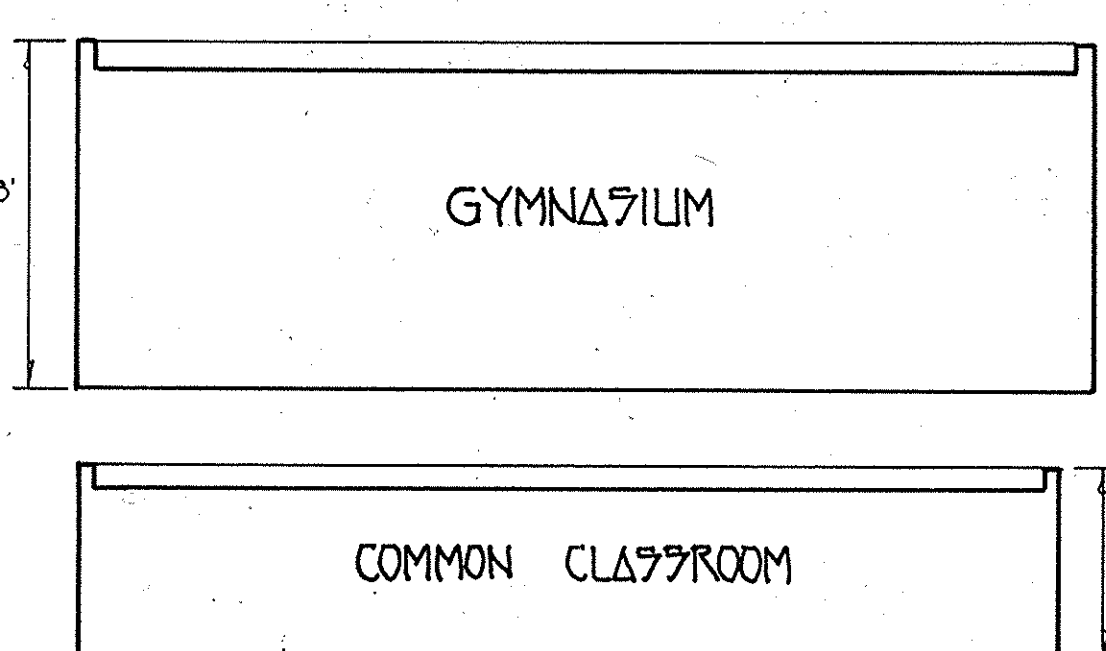
SEE SHEETS G-20
FOR REVISED PLANS

NOTE:
EXISTING MANHOLE TO BE ADJUSTED TO FINISHED GRADE OF SIDEWALK

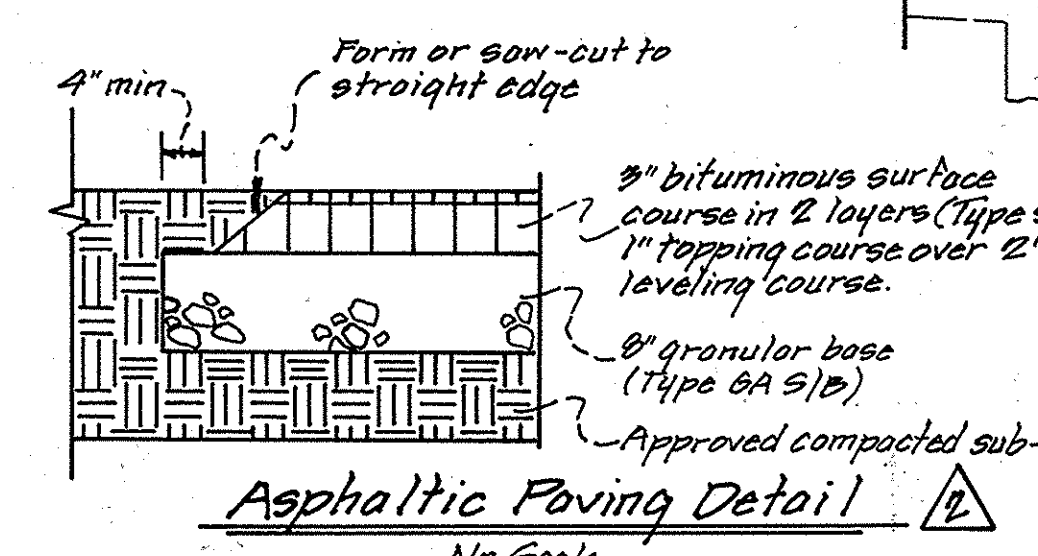
NOTE:
ALL DOWNSPOUTS AND ROOF DRAINS WILL TIE INTO PROPOSED DRYWELLS. SEE DETAIL SHEET Z.

NOTE:
THIS PROPERTY IS LOCATED ON SOILS MAP 19

PLAN VIEW
SCALE: 1" = 20'



TYPICAL BUILDING PROFILE
NOT TO SCALE



Asphaltic Paving Detail
No Scale

- Construction Sequence for Classroom Addition**
- Obtain grading permit.
 - Notify "Miss Utility" at least 48 hours before beginning any work at 1-800-257-7777. Notify the Howard County Office of Construction/Inspection at 410-919-1300 24 hours before starting work.
 - Install sediment control measures shown on plans. Grade to subgrade classroom addition area. 1 week.
 - Construct classroom addition. 9 months.
 - Final grade disturbed areas and stabilize with permanent seeding.
 - Notify Howard County Office of Construction/Inspection for permission for to remove sediment control measures and stabilize disturbed areas with permanent seeding.

PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed engineer under the laws of the State of Maryland, License No. 13204, Expiration Date: 10/13/2006.

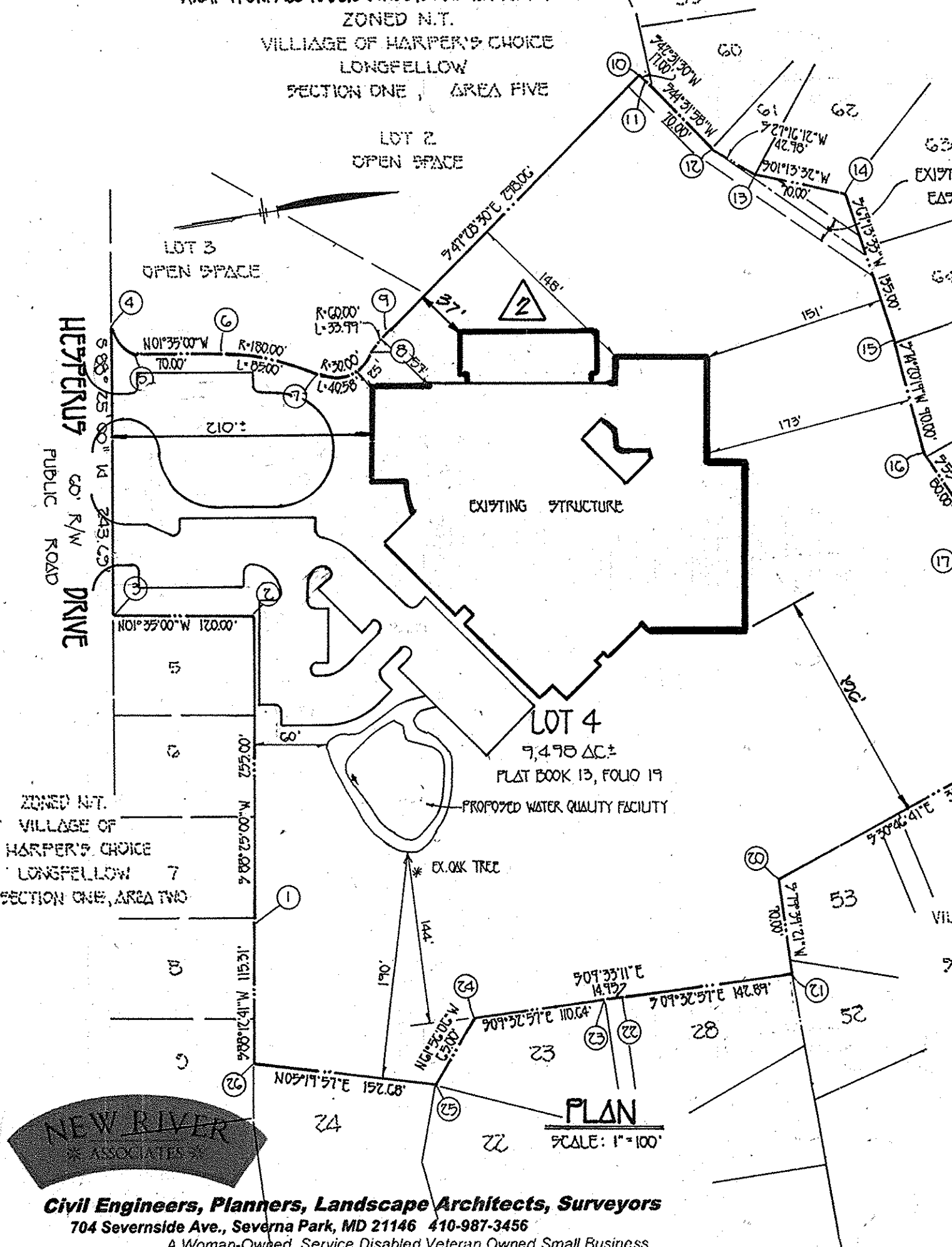


AS-BUILT ENGINEER CONSULTANT CERTIFICATION
I hereby certify that the information provided on this sheet was prepared or approved by me, and that I am a duly licensed engineer under the laws of the State of Maryland, License No. 45261.

OWNER AND DEVELOPER
HOWARD COUNTY BOARD OF EDUCATION
10910 MARYLAND ROUTE 100
ELLCOTT CITY, MARYLAND 21043

AS-BUILT PLAN VIEW

APPROVED PLANNING BOARD OF HOWARD COUNTY
DATE: August 19, 1993



NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Severna Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business

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

[Signature]
SIGNATURE OF ENGINEER
DATE: 8/26/93

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

[Signature]
SIGNATURE OF DEVELOPER
DATE: 8-26-93

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

[Signature] 8/31/93
DATE

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

[Signature] 8/31/93
DATE

APPROVED: DEPT. OF PLANNING AND ZONING

[Signature] 10/12/93
PLANNING DIRECTOR DATE

[Signature] 10/17/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS

[Signature] 9.13.93
HEALTH OFFICER DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.

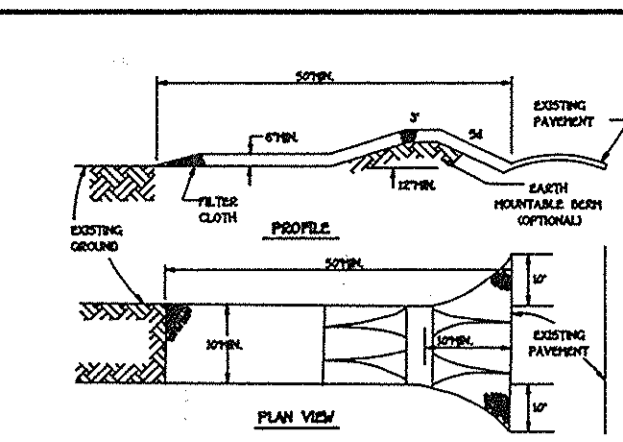
[Signature] 9/3/93
DIRECTOR, PUBLIC WORKS DATE

[Signature] 2/2/93
CHIEF, BUREAU OF ENGINEERING DATE

PROPERTY/SUBDIVISION	SECTION/AREA	PARCEL/LOT NO.
LONGFELLOW ELEMENTARY SCHOOL	1	4
PLAT NO./L.F.	BLOCK NO.	TAX/ZONE
1317	10	N.T.
WATER CODE	SEWER CODE	ELEC. DIST.
I-02	5583000	5TH
CENSUS TR.		
6055		

SITE DEVELOPMENT PLAN
ADDITION TO LONGFELLOW ELEMENTARY SCHOOL
VILLAGE OF HARPER'S CHOICE

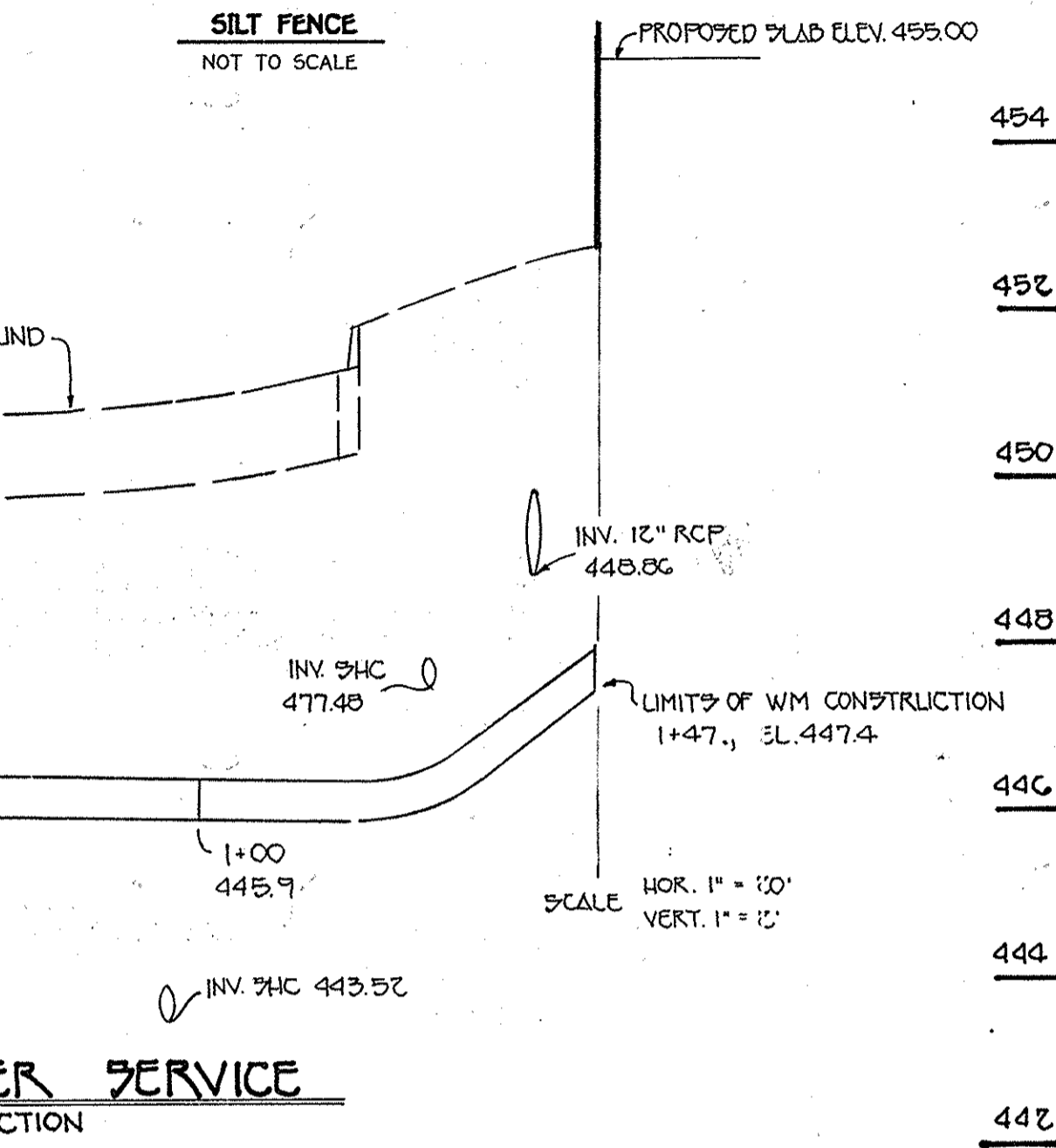
SECTION 1 AREA 5 LOT 4
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TAX MAP 29 BLOCK 10
SCALE: AS SHOWN SHEET 2 OF 22 DATE: AUGUST 13, 1993
7DP 94-08



CONSTRUCTION SPECIFICATIONS

- STONE CURB - USE OF STONE OR RECYCLED CONCRETE EQUIVALENT.
- CONCRETE - AS ORDERED, BUT NOT LESS THAN 4000 PSI (COMPACTED) OF A SINGLE BLENDED LITE WEIGHT 4000 PSI PORTLAND CEMENT MORTAR MIXTURE.
- THICKNESS - NOT LESS THAN 6" ON SIDES.
- WEIR - USE 2" OR 3" WEIR, BUT NOT LESS THAN 2" FROM THE WALL WITH AT LEAST 1/2" CLEARANCE FROM THE WEIR.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- GRAVEL - 1/2" TO 3/4" GRAVEL, 100% PASSING NO. 20 SIEVE, 10% PASSING NO. 40 SIEVE.
- GRAVEL MATRIX - ALL GRAVEL MATRIX PLACING OR EXPOSED TOWARD CONSTRUCTION OPERATIONS SHALL BE PROTECTED BY THE PROVISIONS OF EROSION CONTROL.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED AS A CURB WHICH WILL PREVENT TRACKING OF FLOES OR DEBRIS INTO PUBLIC ADJACENT-WAYS. THIS MAY REQUIRE PERIODIC TRIMMING AND CLEANING AS CONDITIONS DEMAND.
- WEIR - WEIR SHALL BE PLACED TO PROVIDE SUFFICIENT FLOW TO MAINTAIN PROPER PUBLIC ADJACENT-WAY. WEIR SHALL BE MAINTAINED AS A CURB WHICH WILL PREVENT TRACKING OF FLOES OR DEBRIS INTO PUBLIC ADJACENT-WAY. WEIR SHALL BE MAINTAINED AS A CURB WHICH WILL PREVENT TRACKING OF FLOES OR DEBRIS INTO PUBLIC ADJACENT-WAY.
- INSPECTION - PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE - 2
NOT TO SCALE



6" PRIVATE WATER SERVICE
FOR FIRE PROTECTION

SEDIMENT CONTROL NOTES

- 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: (1) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER SLOPES AND ALL GRATES; (2) 30 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 50 SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 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: 9.50 ACRES
 - AREA DISTURBED: 1.76 ACRES
 - AREA TO BE ROOFED OR PAVED: 0.24 ACRES
 - AREA TO BE VEGETATIVELY STABILIZED: 1.52 ACRES
 - TOTAL CUT: 1100 CU.YDS.
 - TOTAL FILL: 1100 CU.YDS.
- OFFSITE WASTE/BORROW AREA LOCATION: CLAYS.
- 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 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.

PERMANENT SEEDING NOTES

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:

SEEDING PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS:
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-10 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE 0-15-15 FERTILIZER (10-20-20 FERTILIZER).

SEEDING:
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.02 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY: OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING; OPTION (2) - USE 300, OPTION (3) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEED.

MULCHING:
APPLY 11 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 FEET OR HIGHER USE 340 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING.

MAINTENANCE:
INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVEGET AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

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. 13201, Expiration Date: Nov. 3, 2008

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
917 BALTHORE NATIONAL PIKE, SUITE 100
ELLICOTT CITY, MARYLAND 21042
410-461-2995

AS-BUILT PLAN
REVISED SHEET NUMBER: 2/16
REVISED SHEET NUMBER: 7/15/13
REVISED SHEET NUMBER: 3/12/13
Rev. Sheet Number: 1-31-08
REVISIONS: Date

ENGINEER'S CERTIFICATE
I HEREBY 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.

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS
James M. Helm / 8/31/93
U.S. SOIL CONSERVATION SERVICE

APPROVED: DEPT. OF PLANNING AND ZONING
10/12/93
Gina Swinmark / 10/7/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS
John R. Robertson / 8/31/93
HEALTH OFFICER

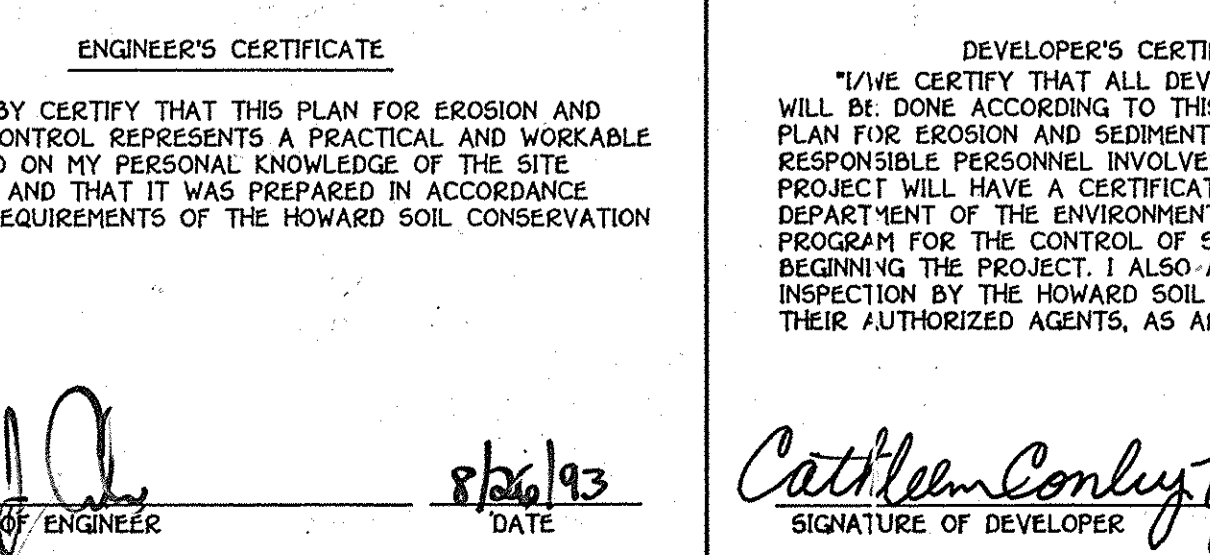
APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.
9/3/93
DIRECTOR, PUBLIC WORKS
2/2/03
CHIEF, BUREAU OF ENGINEERING

PROPERTY: LONGFELLOW ELEMENTARY SCHOOL
SECTION/A: 5
LOT NO.: 4
PLAT NO.: 1319
BLOCK NO.: 10
ZONE: N.T.
TAX/ZONE: 29
ELEC. DIST.: 5TH
CENSUS TR.: 6055
WATER CODE: I-02
SEWER CODE: 5580000

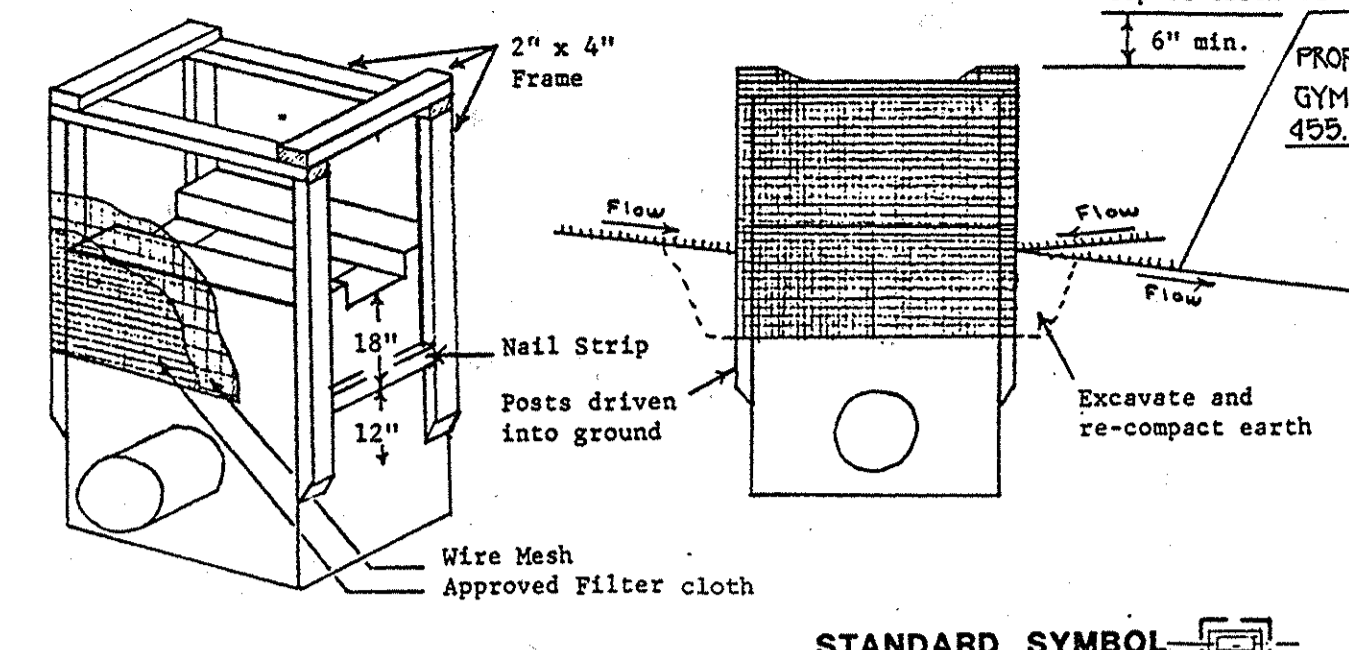
OWNER AND DEVELOPER
HOWARD COUNTY BOARD OF EDUCATION
10910 MARYLAND ROUTE 108
ELLICOTT CITY, MARYLAND 21043

SECTION 1 AREA 5 LOT 4
5TH ELECTION DISTRICT
TAX MAP 29
SCALE: AS SHOWN
SHEET 3 OF 22
DATE: JULY 8, 1993

S.D.P. 34-08

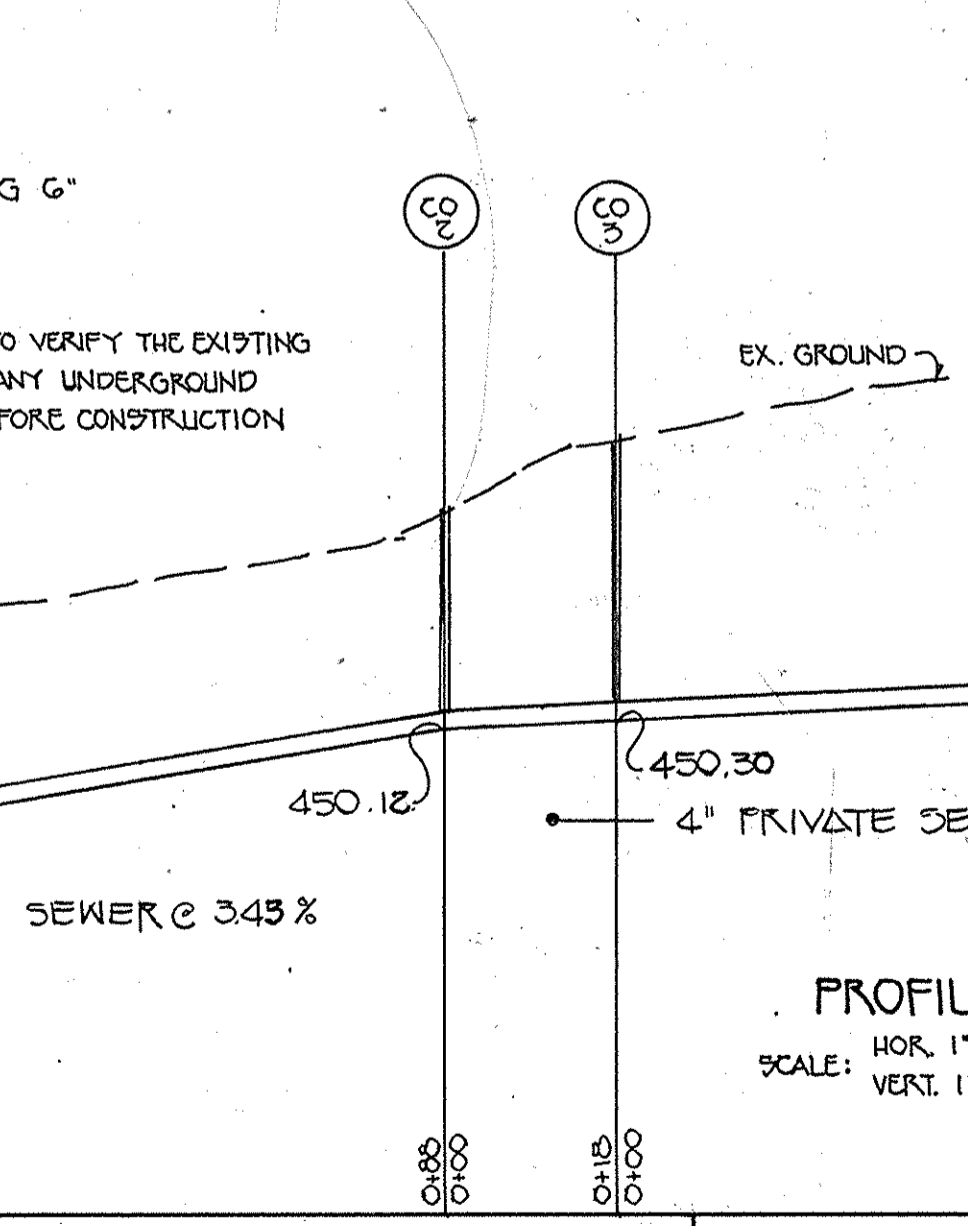


YARD INLET DETAIL
NOT TO SCALE



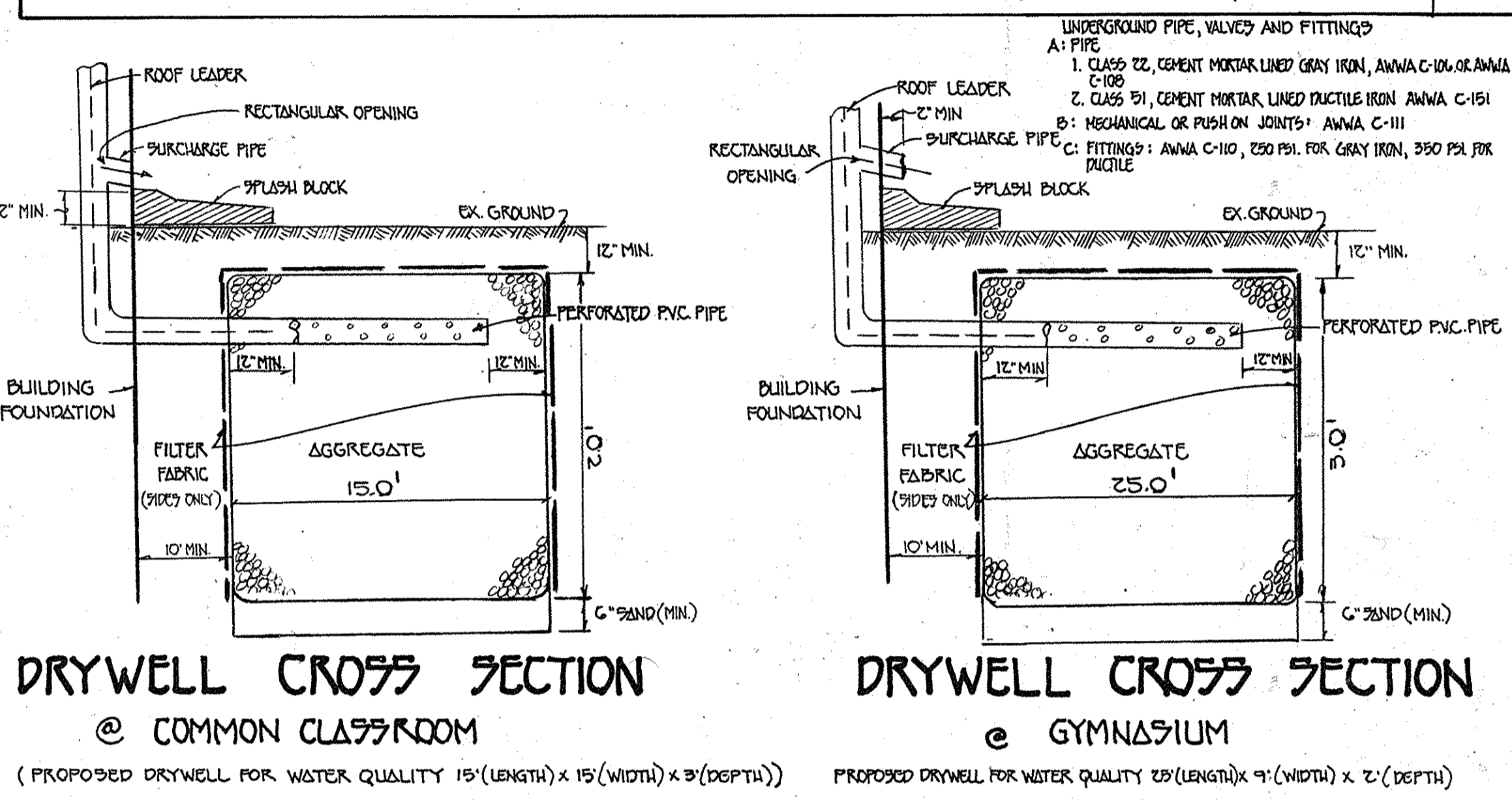
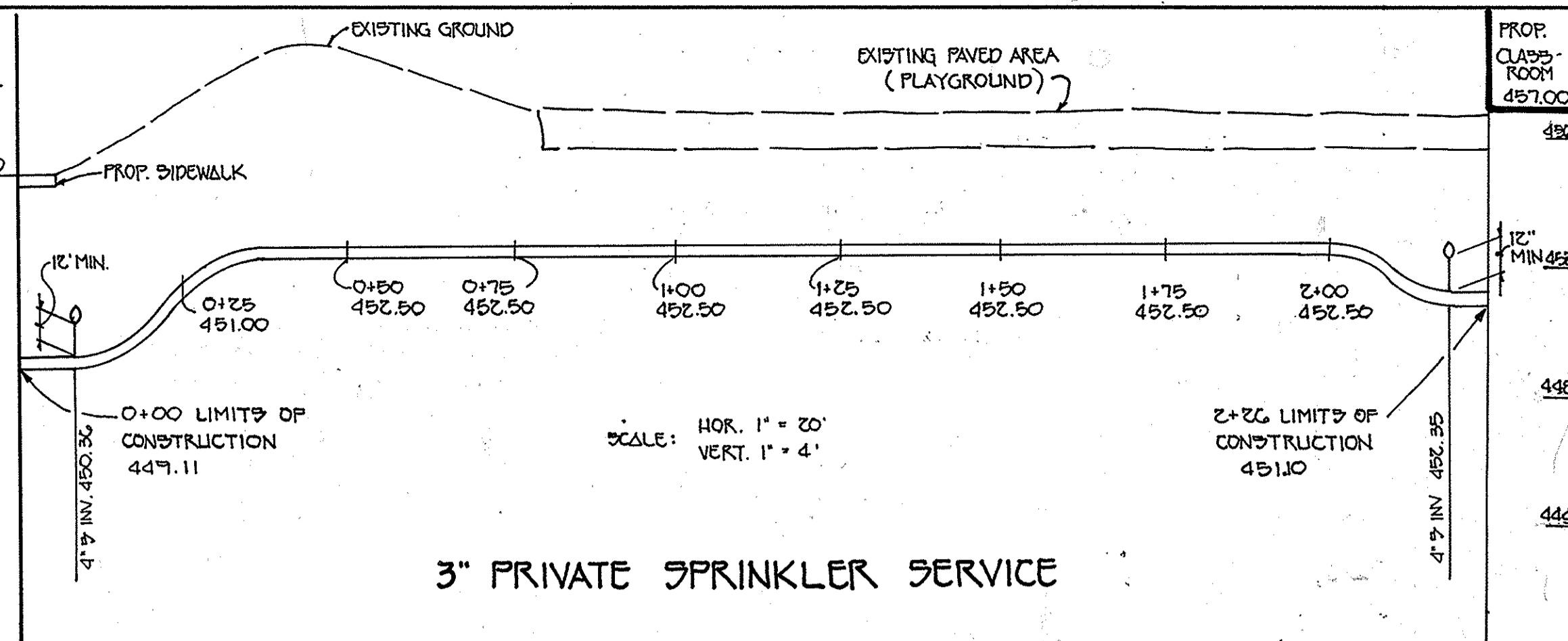
- STANDARD SYMBOL**
- A swale, ditchline or yard inlet protection.
 - Excavate completely around inlet to a depth of 18" below notch elevation.
 - Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
 - Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
 - Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
 - Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
 - If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
 - This structure must be inspected frequently and the filter fabric replaced when clogged.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT.
 - INSTALL TREE PROTECTION FENCE. (1 DAY)
 - INSTALL SEDIMENT AND EROSION CONTROL DEVICE AS SHOWN ON PLAN. (2 DAYS)
 - CLEAN AND GRUB SITE. (5 DAYS)
 - ROUGH GRADE SITE. (2 DAYS)
 - CONSTRUCT BUILDING. (120 TO 160 DAYS)
 - CONSTRUCT FOND AND UTILITIES. (3 DAYS)
 - CONSTRUCT STONE TRENCHES AND FINE GRADE DITE. INSTALL PERMANENT SEEDING. (5 DAYS)
 - REMOVE SEDIMENT CONTROL DEVICES AS PERMISSION IS GRANTED BY E/S INSPECTOR. (1 DAY)



DRYWELL CROSS SECTION @ COMMON CLASSROOM
(PROPOSED DRYWELL FOR WATER QUALITY 15'(LENGTH) X 15'(WIDTH) X 3'(DEPTH))

DRYWELL CROSS SECTION @ GYMNASIUM
(PROPOSED DRYWELL FOR WATER QUALITY 25'(LENGTH) X 9'(WIDTH) X 2'(DEPTH))



3" PRIVATE SPRINKLER SERVICE

DRYWELL CROSS SECTION @ COMMON CLASSROOM
(PROPOSED DRYWELL FOR WATER QUALITY 15'(LENGTH) X 15'(WIDTH) X 3'(DEPTH))

DRYWELL CROSS SECTION @ GYMNASIUM
(PROPOSED DRYWELL FOR WATER QUALITY 25'(LENGTH) X 9'(WIDTH) X 2'(DEPTH))

AS-BUILT ENGINEER CONSULTANT CERTIFICATION

DATE: August 19, 1993

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: August 19, 1993

AS-BUILT NOTES AND DETAILS

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: August 19, 1993

AS-BUILT NOTES AND DETAILS

APPROVED: DEPT. OF PLANNING AND ZONING
10/12/93
Gina Swinmark / 10/7/93
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWERAGE SYSTEMS
John R. Robertson / 8/31/93
HEALTH OFFICER

APPROVED: DEPARTMENT OF PUBLIC WORKS FOR PUBLIC WATER & SEWER AND STORM DRAINAGE SYSTEMS AND ROADS.
9/3/93
DIRECTOR, PUBLIC WORKS
2/2/03
CHIEF, BUREAU OF ENGINEERING

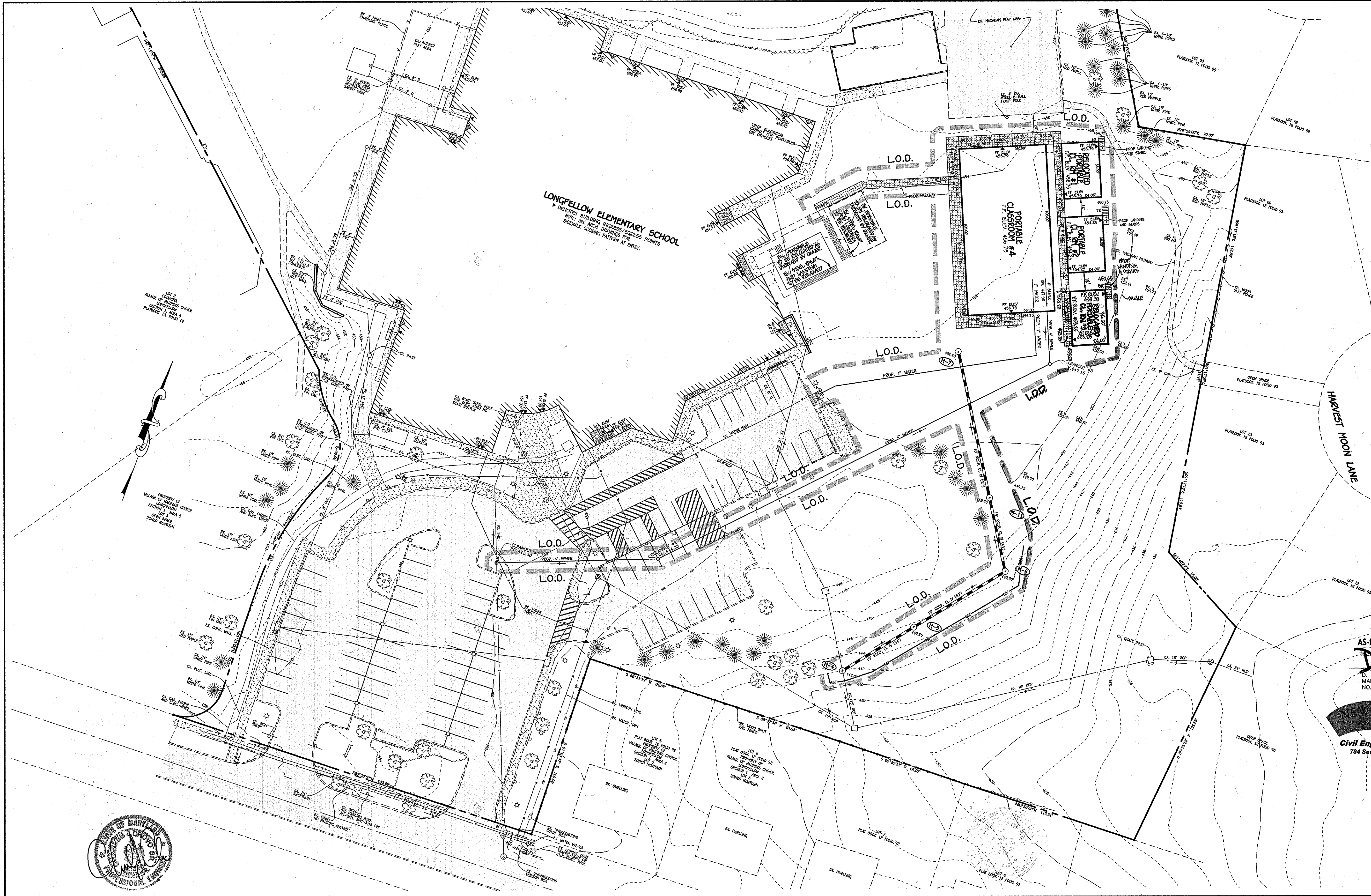
PROPERTY: LONGFELLOW ELEMENTARY SCHOOL
SECTION/A: 5
LOT NO.: 4
PLAT NO.: 1319
BLOCK NO.: 10
ZONE: N.T.
TAX/ZONE: 29
ELEC. DIST.: 5TH
CENSUS TR.: 6055
WATER CODE: I-02
SEWER CODE: 5580000

OWNER AND DEVELOPER
HOWARD COUNTY BOARD OF EDUCATION
10910 MARYLAND ROUTE 108
ELLICOTT CITY, MARYLAND 21043

SECTION 1 AREA 5 LOT 4
5TH ELECTION DISTRICT
TAX MAP 29
SCALE: AS SHOWN
SHEET 3 OF 22
DATE: JULY 8, 1993

S.D.P. 34-08

LEGEND	
SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
X	EXISTING FENCE
--- 448 ---	PROPOSED CONTOUR 2' INTERVAL
+ 450.70	SPOT ELEVATION
---	EXISTING CONCRETE WALK
---	EXISTING MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	L.O.D. LIMIT OF DISTURBANCE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED STORM DRAIN



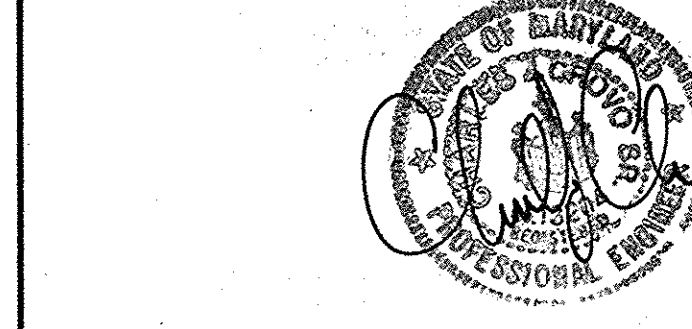
LONGFELLOW ELEMENTARY SCHOOL
 P DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWING FOR SIGNALING SCORING PATTERNS AT ENTRY.

AS-BUILT
 03/09/16

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 INFORMATION PROVIDED ON THIS SHEET
 D. ANDREW DORSEY, PE DATE 03/09/16
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severna Ave., Severna Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE PORTABLE CLASSROOM ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.



ENGINEER'S CERTIFICATE "I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District." Signature of Engineer: <i>Charles J. Cepko, Sr.</i> Date: 4/16/13	
DEVELOPER'S CERTIFICATE "I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I authorize periodic on-site inspection by the Howard Soil Conservation District." Signature of Developer: <i>Sumit</i> Date: 4/16/13	

"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. 13204, Expiration Date: November 3, 2014." Signature: <i>Charles J. Cepko, Sr.</i> Date: 4/16/13 CHARLES J. CEPKO, SR., P.E.	
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT. Signature: <i>John K. Blanton</i> Date: 4/16/13 Howard SCD	

2/16	AS-BUILT PLAN	
7/19/13	RELOCATED PORTABLE CLASSROOM & REPAID W.O.P.	
DATE	DESCRIPTION	REVISION BLOCK
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
Signature: <i>Paul L. Gwell</i>	Date: 4/25/13	
Director - Department of Planning and Zoning	Date: 4/25/13	
Signature: <i>Kate Schuch</i>	Date: 4/19/13	
Chief, Division of Land Development	Date: 4/19/13	
Signature: <i>William</i>	Date:	
Chief, Development Engineering Division	Date:	

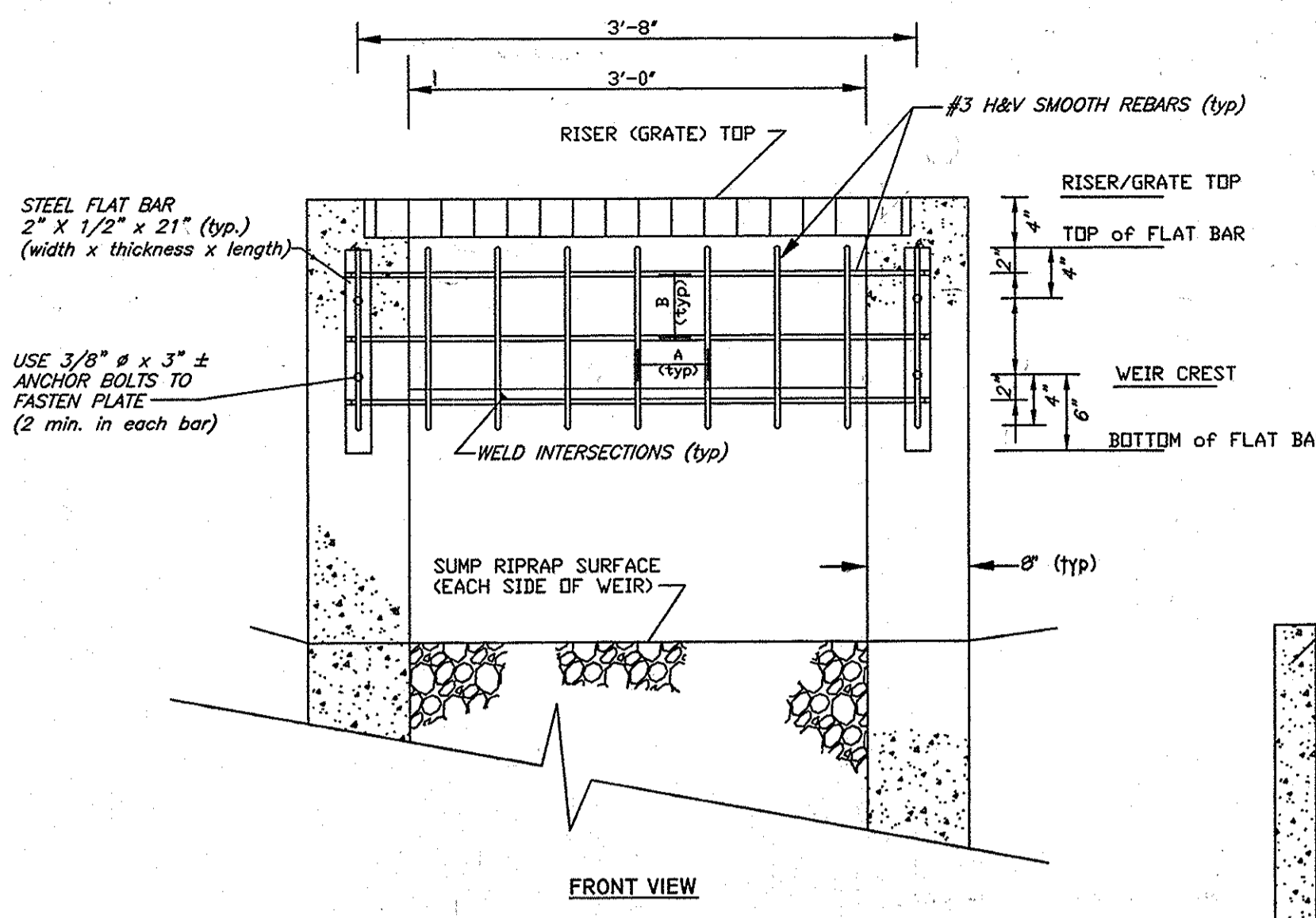
PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 102
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

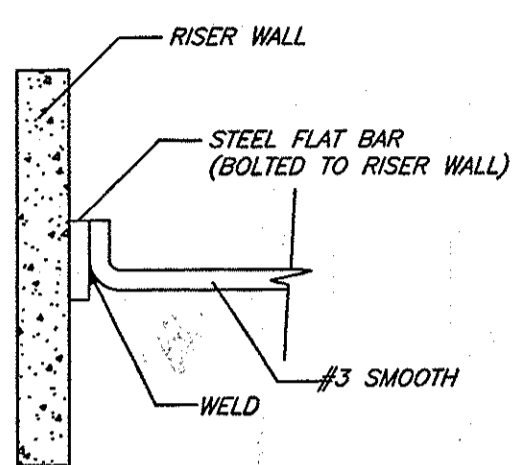
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

PROJECT	LONGFELLOW ELEMENTARY SCHOOL	SECTION/AREA	1/5	PARCELS	261
DEED REF.	1319	BLOCK NO.	18	NT O.S.	29
		TAX MAP	FIFTH	ELEC. DIST.	6055
WATER CODE	1-02	SEWER CODE	5583000		

SITE IMPROVEMENT PLAN	
"REVISED SITE DEVELOPMENT PLAN"	
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION	
PARCEL No.:	261
TAX MAP No.:	29
GRID No.:	18
FIFTH ELECTION DISTRICT	HOWARD COUNTY, MARYLAND
SCALE:	1" = 30' DATE: MARCH 18, 2013
SHEET 4 OF 22	

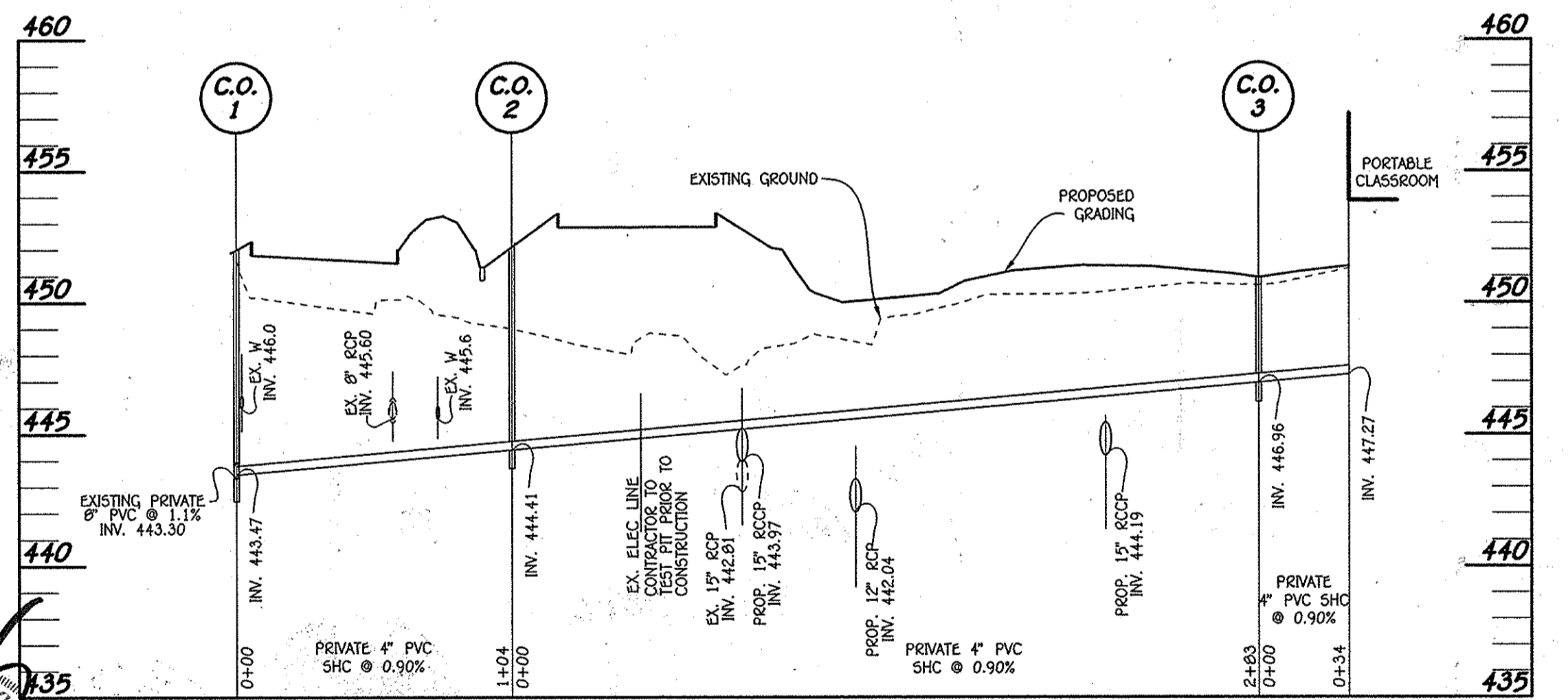
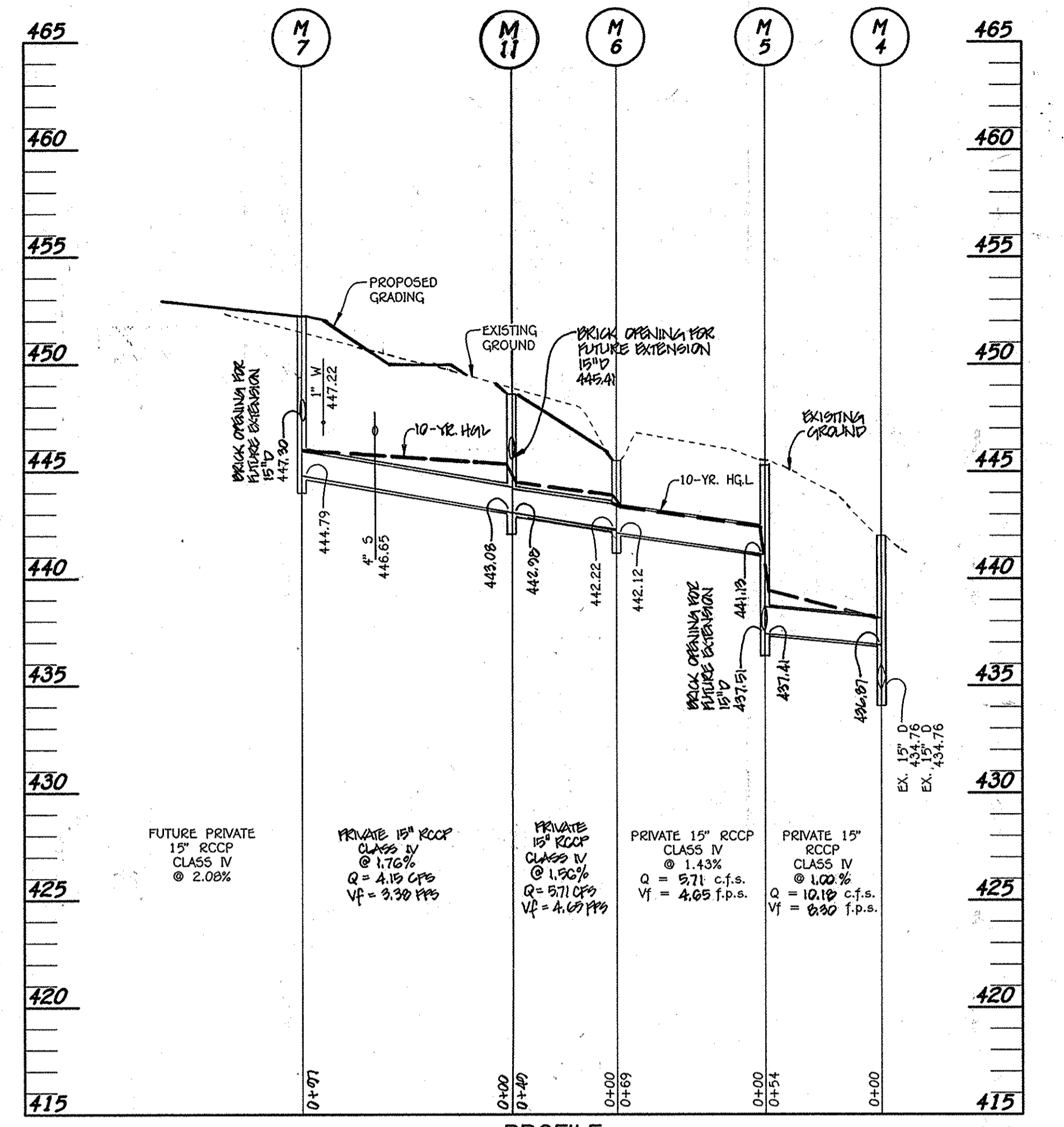
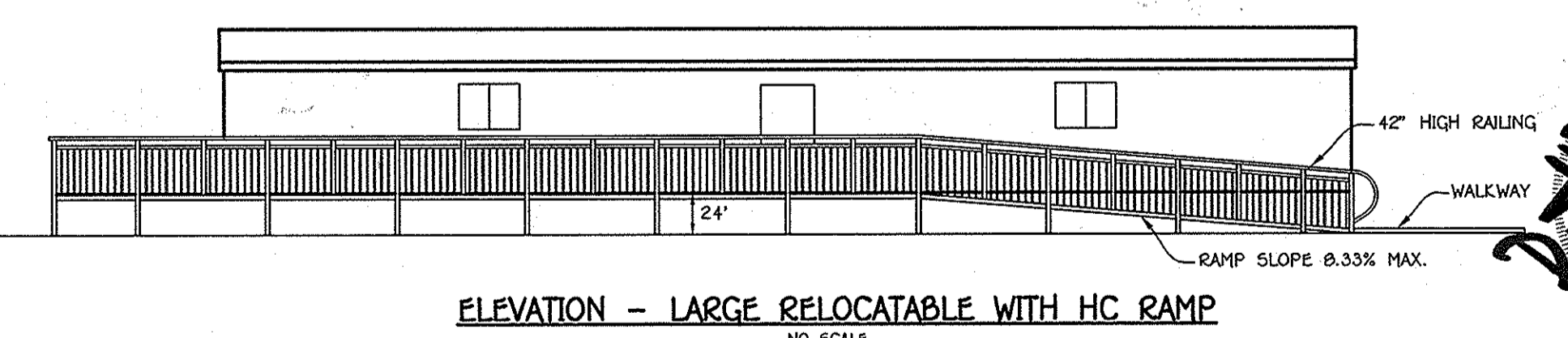
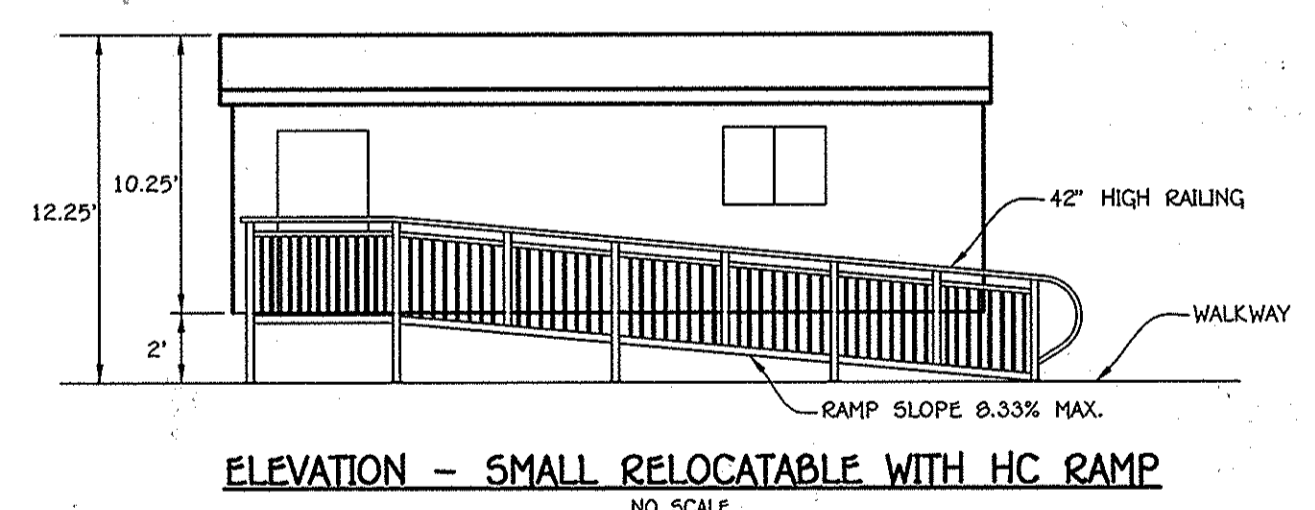
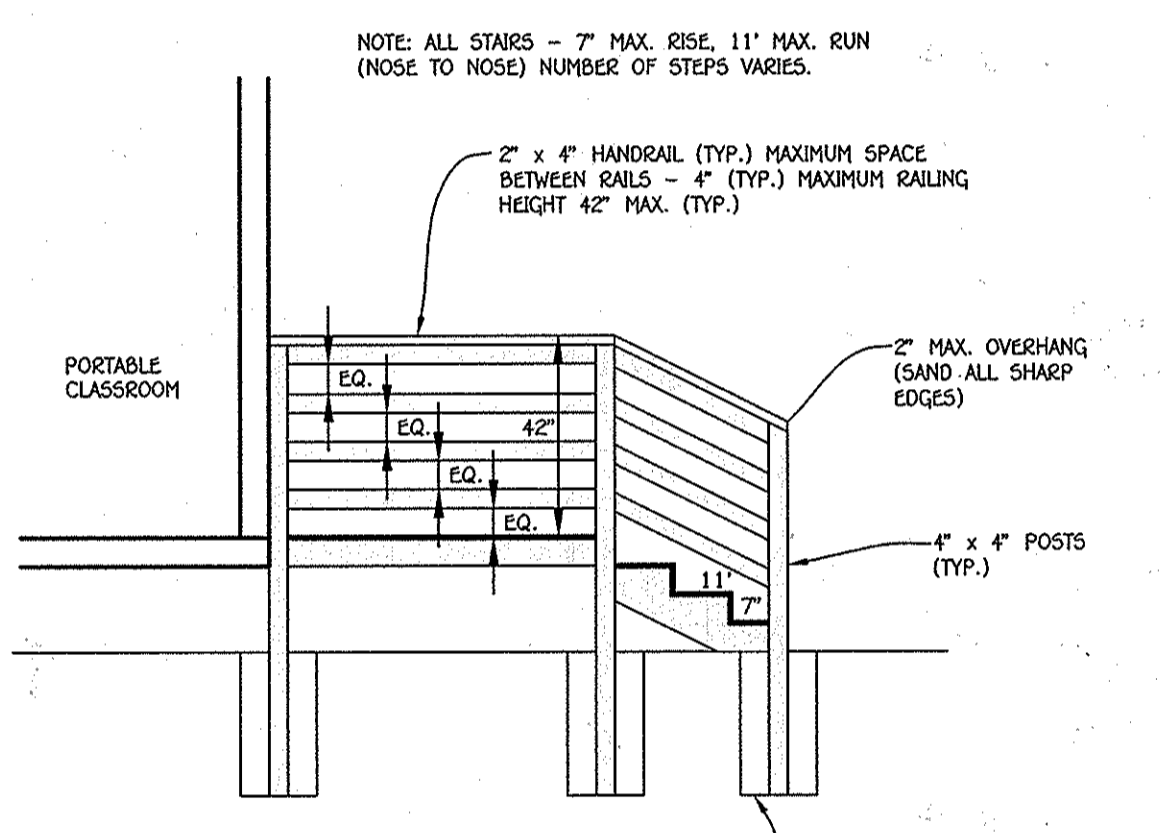
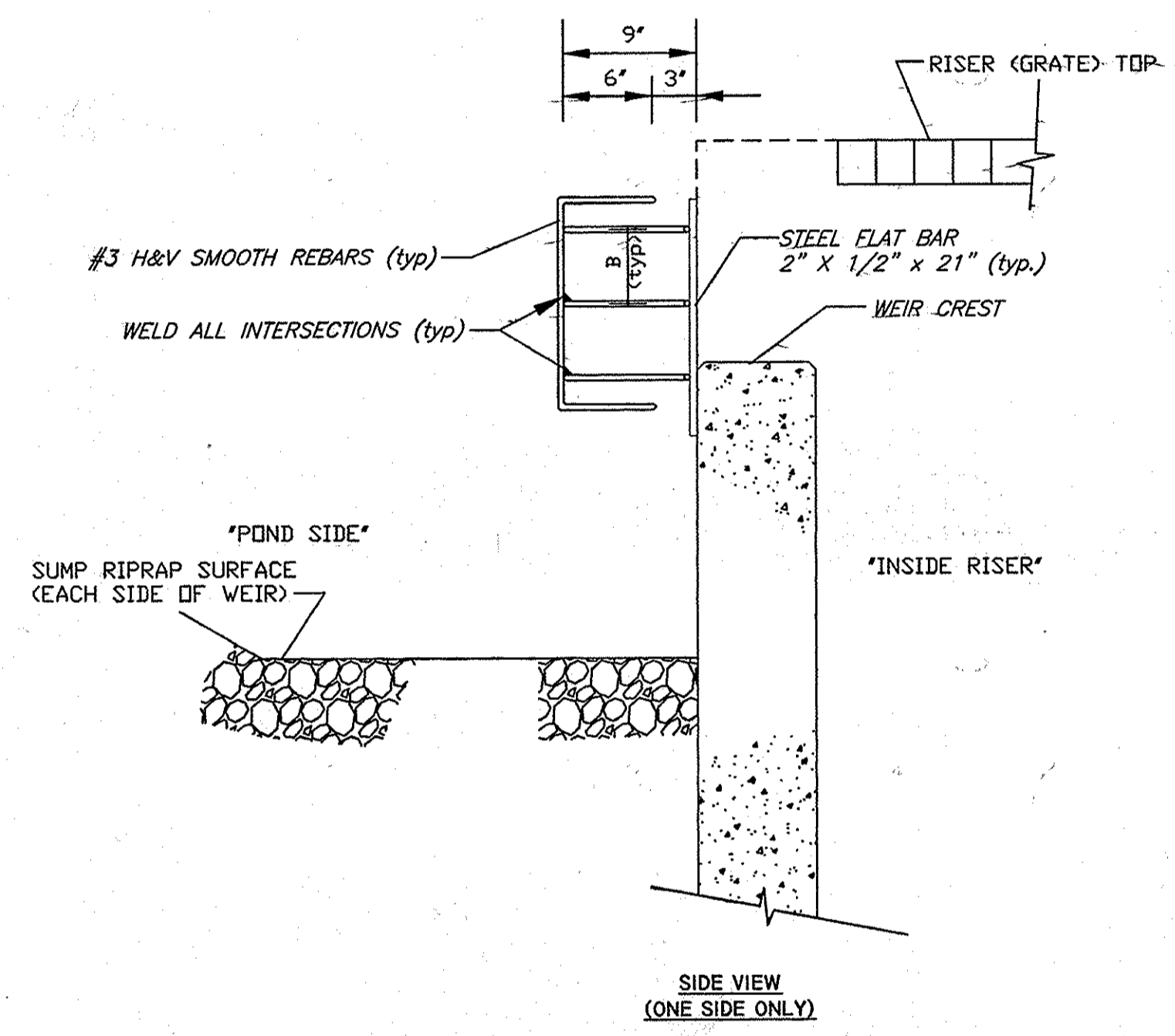


BAR SPACING TABLE	
TRASH RACK	
DIMENSION	VALUE
A	6"±
B	6"±



STRUCTURE SCHEDULE									
STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV. IN	INV. OUT	COORDINATES	WIDTH	TYPE	REMARKS	
M-4	PRIVATE	442.00	434.00 (15')	430.07 (15')	434.76 (15')	N 507162.70 E 833695.99	4'	STD. MANHOLE	G - 5.12
M-5	PRIVATE	445.05	437.91 (15')	441.13 (15')	437.41 (15')	N 507204.07 E 833729.69	4'	STD. MANHOLE	G - 5.12
M-6	PRIVATE	445.50	442.22 (15')	442.12 (15')	N 507250.09 E 833772.06	4'	STD. MANHOLE	G - 5.12	
M-7	PRIVATE	452.24	447.90 (15')	444.79 (15')	N 507302.54 E 833695.91	4'	STD. MANHOLE	G - 5.12	
M-11	PRIVATE	442.00	445.41 (15')	443.06 (15')	442.70 (15')	N 507300.91 E 833742.14	4'	STD. MANHOLE	G - 5.12

PIPE SCHEDULE (PRIVATE)		
SIZE	CLASS	LENGTH
15"	RCCP, CLASS IV	289 L.F.



TRASH RACK NOTES

- See SWM Riser Detail S-1 for structure dimensions not shown on this detail.
- Detail shown is typical for both (opposite) sides.
- The trash rack shall be galvanized (2 coats) after fabrication and painted "battleship gray" (2 coats) and conform to Howard County Specifications.
- Rebar shall be #3 smooth steel bars.
- The trash rack fabricator may substitute angle bars for flat bars.
- The trash rack shall be installed so as to extend 8" below the weir crest with 12" clearance above the riprap surface (clearance measured from concrete pad to center of lowest horizontal bar).
- The concrete riser shall be field-measured prior to the trash rack fabrication to ensure a reasonable trash rack fit. The fabricator can make minor adjustments to the trash rack dimensions (1/4") to maintain the overall dimensions and covering the openings as shown. The maximum opening dimension (i.e., along diagonal) shall not exceed 15" and 7.5" for the weir and orifice trash racks, respectively.

WEIR TRASH RACK DETAIL
R-1 ONLY
SCALE: 1" = 1'

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
DATE: 03/09/16
D. ANDREW DORSEY, PE
MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE PORTABLE CLASSROOM ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10732 BALDWIN INDUSTRIAL PARK
ELICOTT CITY, MARYLAND 21142
(410) 461-2895

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Sevenside Ave., Severna Park, MD 21146 410-887-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business



"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. 13204. Expiration Date: November 3, 2014."
Charles J. Crovo, Sr., P.E. 4/16/13 DATE

DATE	DESCRIPTION
2/16	AS-BUILT PLAN
1/6/14	ADDED WEIR TRASH RACK DETAIL
7/19/13	REVISED STORM DRAIN PROFILE & STRUCTURE SCHEDULE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning Date: 4/25/16
Chief, Division of Land Development PL Date: 4/25/13
Chief, Development Engineering Division Date: 4/19/13

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Elicott City, Maryland 21042
Attention: Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCARD DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
FAX 301-330-3224

Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

DEED REF.	BLOCK NO.	NT O.S.	TAX MAP	ELEC. DIST.	CENSUS TR.
1319	18	29	FIFTH	6055	

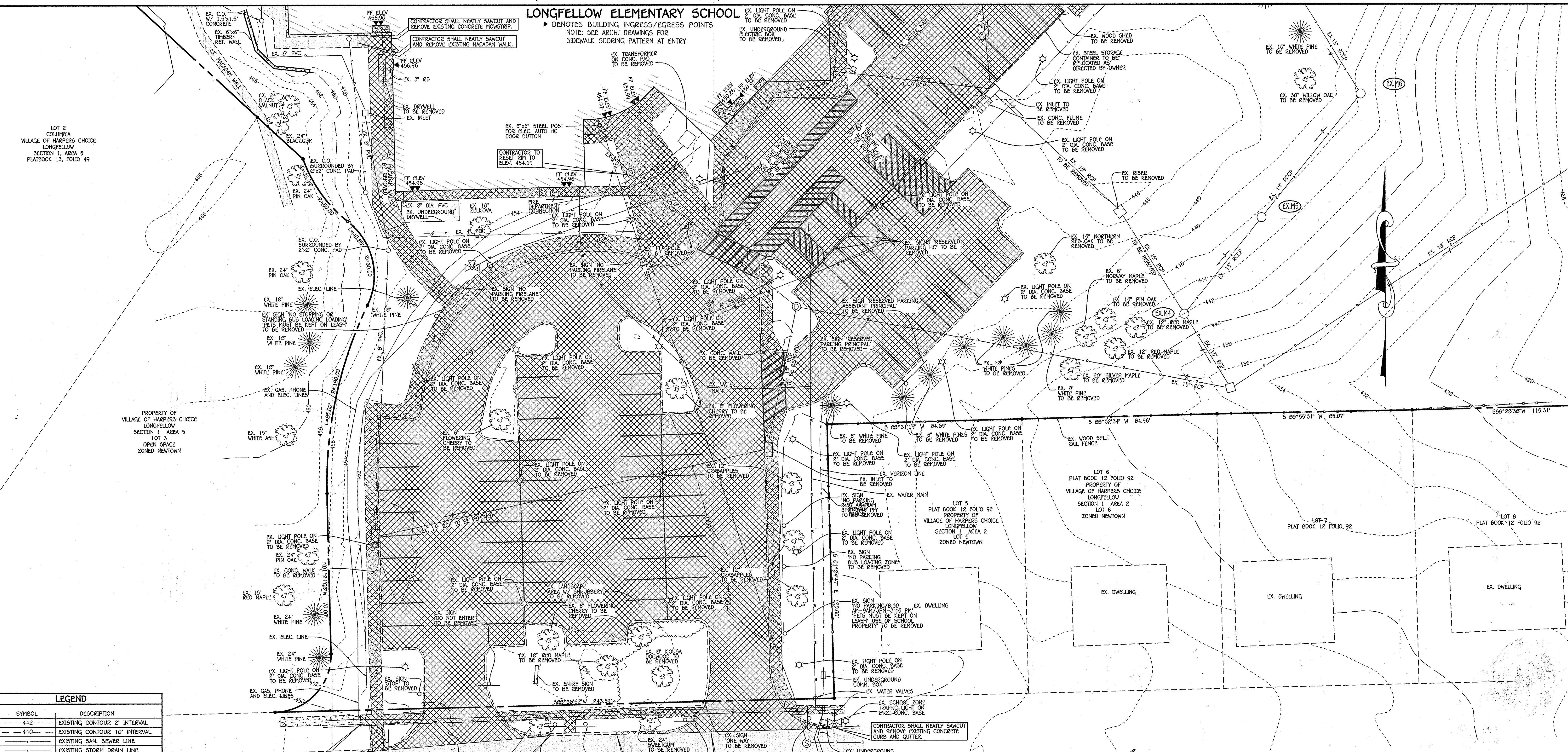
WATER CODE	SEWER CODE
1-02	5583000

PROFILE AND DETAILS
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW
ELEMENTARY SCHOOL
CLASSROOM ADDITION AND
PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: MARCH 18, 2013
SHEET 9 OF 29

MATCHLINE SEE SHEET 7

LONGFELLOW ELEMENTARY SCHOOL

► DENOTES BUILDING INGRESS/EGRESS POINTS
NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.



LEGEND	
SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
- - -	EXISTING SAN. SEWER LINE
- - -	EXISTING STORM DRAIN LINE
- - -	EXISTING WATER LINE
- - -	EXISTING ELECTRIC LINE
- - -	EXISTING CABLE LINE
- - -	EXISTING GAS LINE
- - -	EXISTING FENCE
- - -	EXISTING CONCRETE WALK
- - -	EXISTING MACADAM PAVING
- - -	EXISTING TREES
- - -	EXISTING TREELINE
- - -	LIMIT OF CLEARING
- - -	LIMIT OF DISTURBANCE
- - -	APPROXIMATE DEMOLITION AREA

CONTRACTOR SHALL NEATLY SAWCUT AND REMOVE EXISTING CONCRETE WALK.
CONTRACTOR SHALL NEATLY SAWCUT AND REMOVE EXISTING CONCRETE CURB AND GUTTER.
CONTRACTOR SHALL NEATLY SAWCUT AND REMOVE EX. MACADAM PAVEMENT.
CONTRACTOR SHALL NEATLY SAWCUT AND REMOVE EX. CONCRETE WALK.
CONTRACTOR SHALL NEATLY SAWCUT AND REMOVE EX. CONCRETE CURB AND GUTTER.

HESPERUS DRIVE
MINOR COLLECTOR
EXISTING 60' R/W
(COUNTY OWNED AND MAINTAINED)

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
THERE IS NO BUT INFORMATION PROVIDED ON THIS SHEET.
D. Andrew Dorsey
D. ANDREW DORSEY, DATE
MARYLAND REGISTERED PROFESSIONAL ENGINEER -
NO. 45261

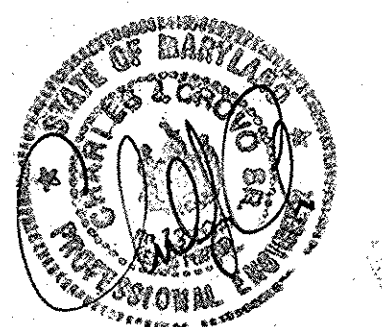
APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE DEMOLITION AREAS AFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALDORRE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461 - 2995

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Severna Ave., Severna Park, MD 21146 410-987-3458
A Woman-Owned, Service Disabled Veteran Owned Small Business.



"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. 13204, Expiration Date: November 3, 2014."
Charles J. Crovo, Sr.
CHARLES J. CROVO, SR., P.E. 7/16/13 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Franklin Lewis 7/31/13 DATE
Director - Department of Planning and Zoning
Michael... 7/31/13 DATE
Chief, Division of Land Development
... 7/26/13 DATE
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 109
Ellicott City, Maryland 21042
Attention Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCADILLY DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
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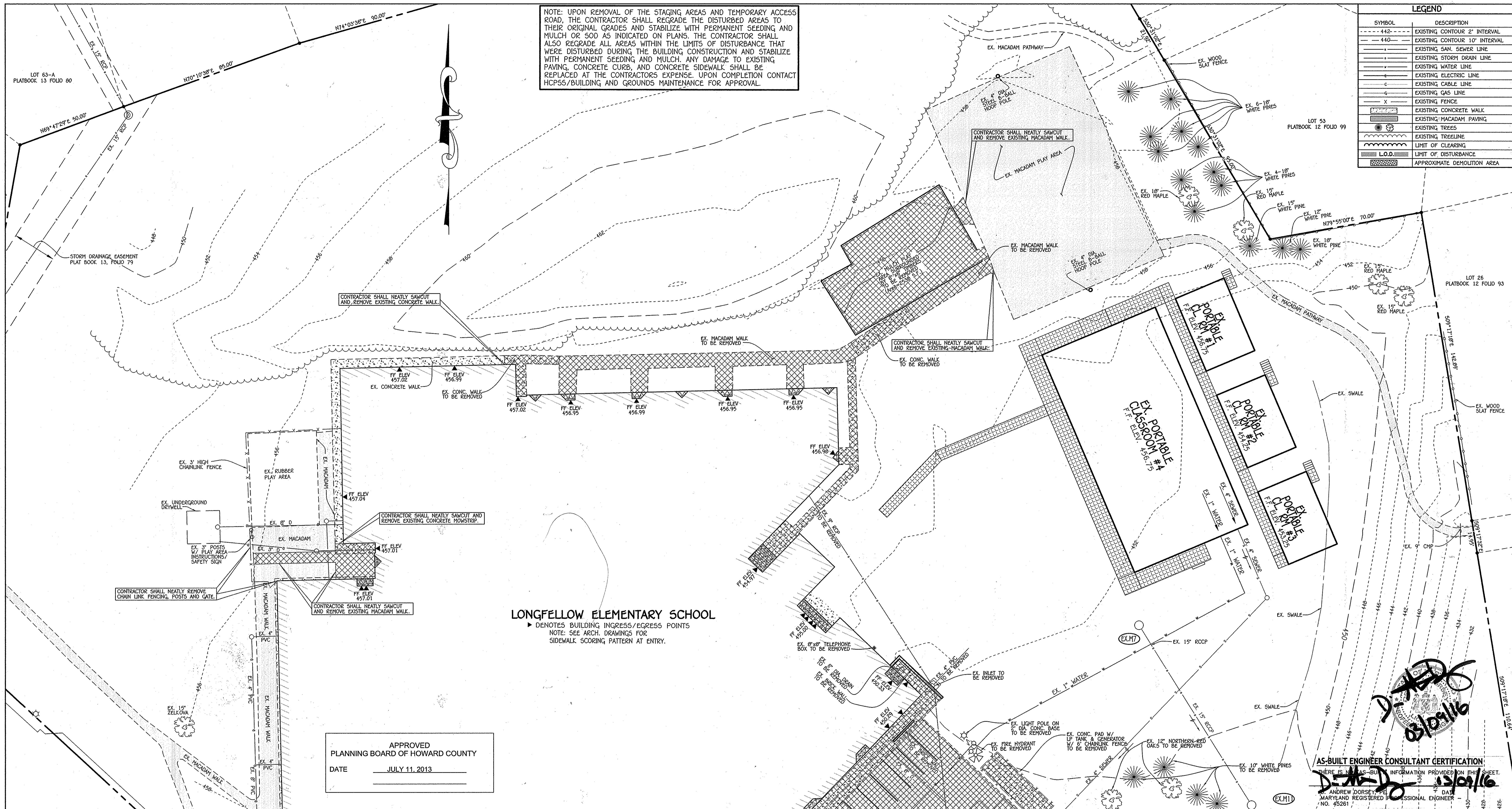
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE	
1-02		5583000

DEMOLITION PLAN
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: APRIL 29, 2013
SHEET 6 OF 28



MATCHLINE SEE SHEET 6

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE DEMOLITION AREAS AFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SOURCE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-1200

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severna Ave., Severna Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business



"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. 13204, Expiration Date: November 3, 2014."

Charles J. Cervo, Sr., P.E.
 CHARLES J. CERVO, SR., P.E.
 7/16/13 DATE

DATE	DESCRIPTION	REVISION BLOCK
2/16	AS-BUILT PLAN	
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>William Lawes</i>	7/31/13	Date
<i>Mark Schuch</i>	7/31/13	Date
<i>William Lawes</i>	7/26/13	Date

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
Pb.13 F.79	1B	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE
1-02	5583000

DEMOLITION PLAN

"REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION

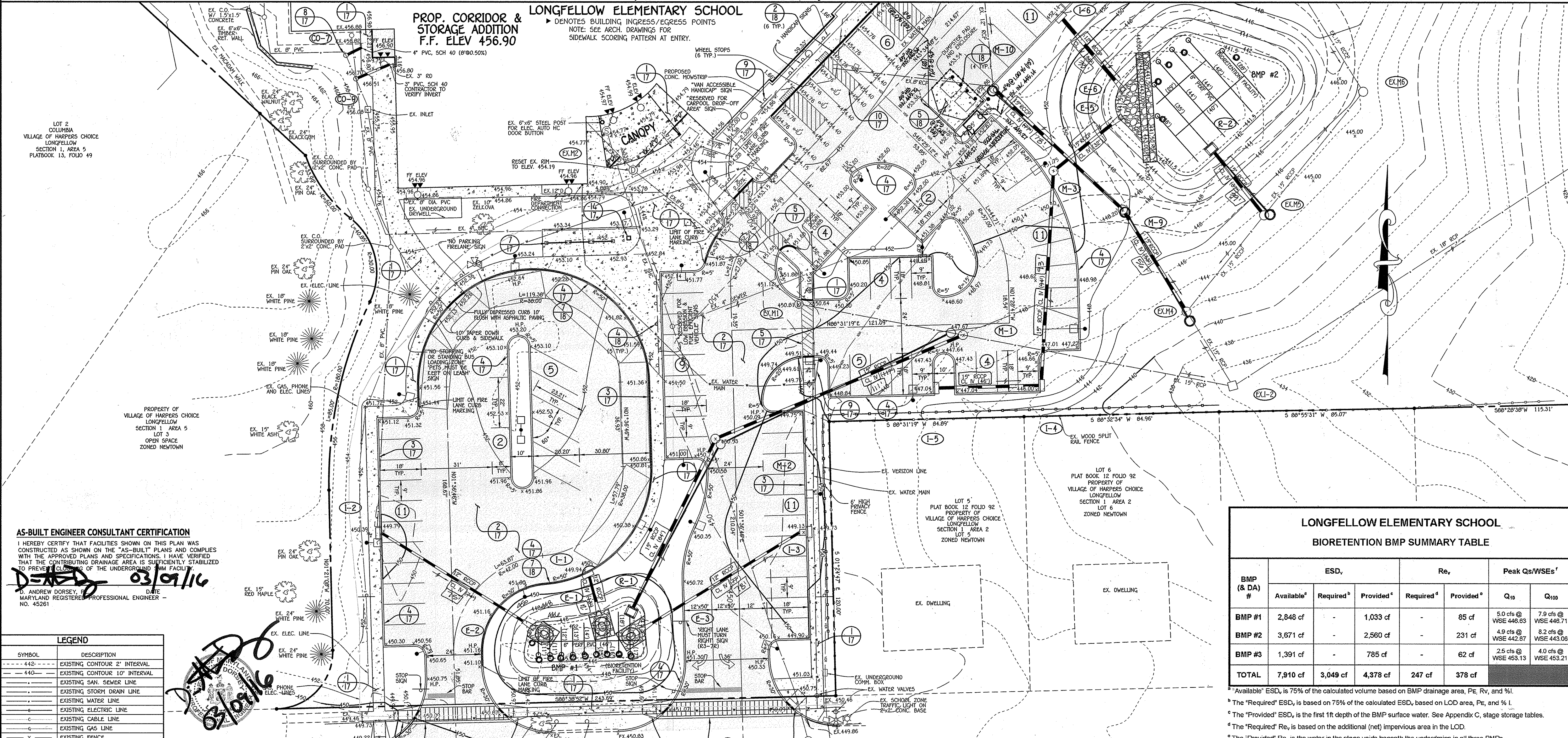
PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 1B
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013

SHEET 7 OF 28

MATCHLINE SEE SHEET 9

PROP. CORRIDOR & STORAGE ADDITION
F.F. ELEV 456.90

LONGFELLOW ELEMENTARY SCHOOL
 DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.



AS-BUILT ENGINEER CONSULTANT CERTIFICATION

I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT EROSION OF THE UNDERGROUND SWM FACILITY.

D. Andrew Dorsey 03/09/16
 D. ANDREW DORSEY, P.E. DATE
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	L.O.D. LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE

NOTE:
 THE UNDERGROUND STORM DRAIN PIPE SECTION THRESHOLDS FOR REFERENCE ONLY AND IS ASSUMED TO BE ON A STRAIGHT LINE BETWEEN THE GROUND SURFACE LOCATED STRUCTURES. THE CERTIFICATIONS FOR GROUND SURFACE STRUCTURES AND INJECTIONS OF THE SAME ONLY. TEST PITS ARE REQUIRED TO DETERMINE THE EXACT LOCATION OF UNDERGROUND PIPE.

THE FIELD WORK FOR THIS SURVEY WAS COMPLETED ON DECEMBER 11, 2015!

LONGFELLOW ELEMENTARY SCHOOL
BIORETENTION BMP SUMMARY TABLE

BMP (# & DA)	ESD _v			Re _v		Peak Qs/WSEs ^f	
	Available ^a	Required ^b	Provided ^c	Required ^d	Provided ^e	Q ₁₀	Q ₁₀₀
BMP #1	2,848 cf	-	1,033 cf	-	85 cf	5.0 cfs @ WSE 446.63	7.9 cfs @ WSE 448.71
BMP #2	3,671 cf	-	2,560 cf	-	231 cf	4.9 cfs @ WSE 442.87	8.2 cfs @ WSE 443.06
BMP #3	1,391 cf	-	785 cf	-	62 cf	2.5 cfs @ WSE 453.13	4.0 cfs @ WSE 453.21
TOTAL	7,910 cf	3,049 cf	4,378 cf	247 cf	378 cf		

^a Available^a ESD_v is 75% of the calculated volume based on BMP drainage area, Pe, Rv, and % I.
^b The "Required" ESD_v is based on 75% of the calculated ESD_v, based on LOD area, Pe, and % I.
^c The "Provided" ESD_v is the first 1ft depth of the BMP surface water. See Appendix C, stage storage tables.
^d The "Required" Re_v is based on the additional (net) impervious area in the LOD.
^e The "Provided" Re_v is the water in the stone voids beneath the underdrains in all three BMPs.
^f See Appendix C for peak discharge (TR-20) results and stage discharge tables.

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

D. Andrew Dorsey 03/09/16
 D. ANDREW DORSEY, P.E. DATE
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

"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. 13204, Expiration Date: November 3, 2014."

Charles J. Grovo 7/16/13
 CHARLES J. GROVO, SR., P.E. DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SERVICE OFFICE: P.O. BOX 10722 BALTIMORE NATIONAL FIRE
 ELICOTT CITY, MARYLAND 21042
 (410) 441-1200

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severnside Ave., Severna Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Franklin Lewis 7/31/13
 Director - Department of Planning and Zoning
Kristin Lewis 7/31/13
 Chief, Division of Land Development
John Lewis 7/26/13
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart

Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

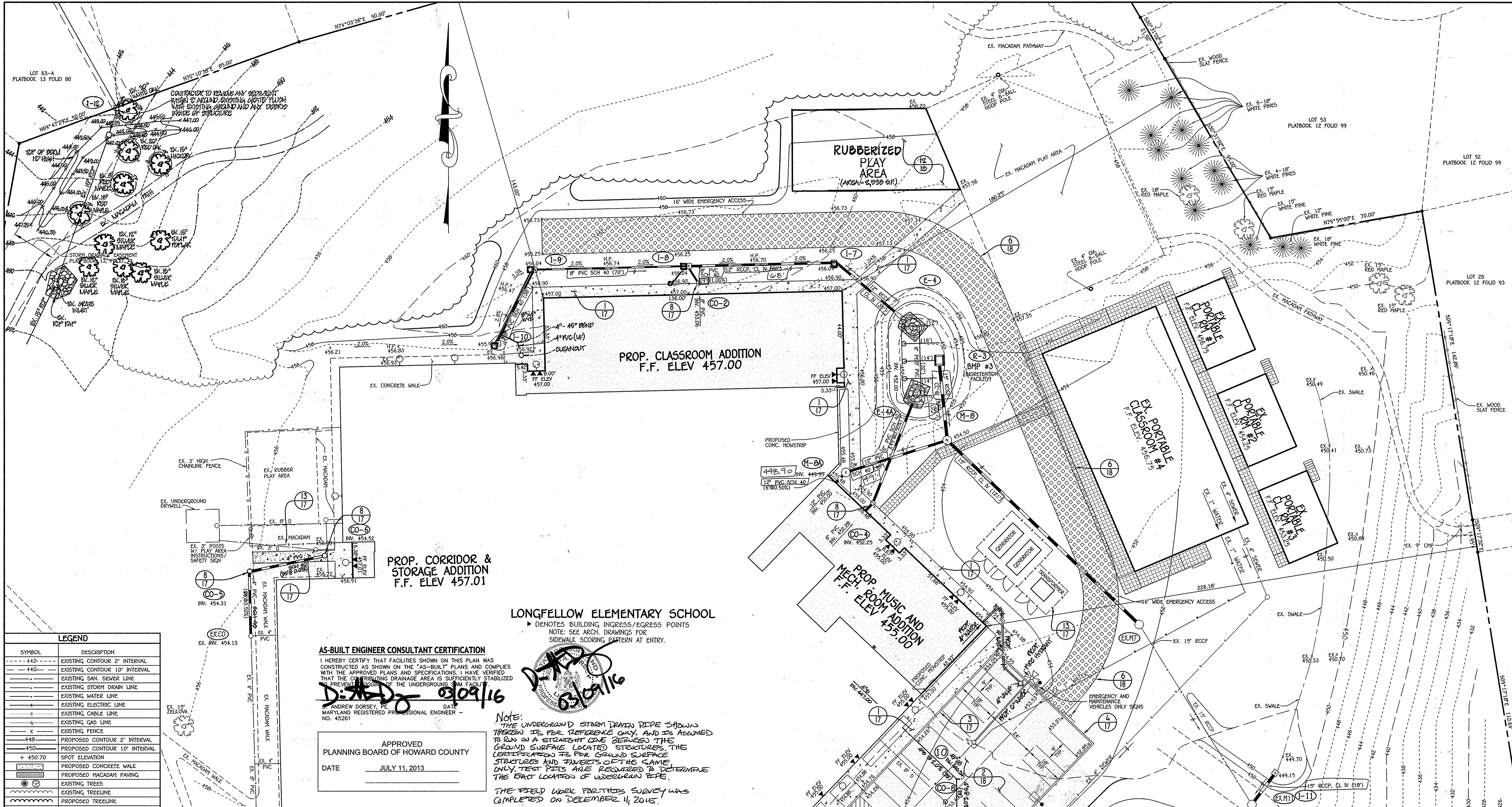
PROJECT: LONGFELLOW ELEMENTARY SCHOOL SECTION/AREA: 1/5 PARCELS: 261
 PLAT REF.: PB.13 F.79 BLOCK NO.: 10 ZONE: NT O.S. TAX MAP: 29 ELEC. DIST.: FIFTH CENSUS TR.: 6055
 WATER CODE: I-02 SEWER CODE: 5503000

SITE IMPROVEMENT PLAN
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
 CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: JULY 11, 2013

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

SHEET 8 OF 28



LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	EXISTING CHAINLINK FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	L.O.D. LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORM DRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT EROSION OF THE UNDERGROUND SWM FACILITY.

D. Dorsey 03/09/16
 ANDREW DORSEY, PE DATE 03/09/16
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE JULY 11, 2013

LONGFELLOW ELEMENTARY SCHOOL
 ▶ DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.

NOTE:
 THE UNDERGROUND STORM DRAIN PIPE SHOWN THROUGH IS FOR REFERENCE ONLY, AND IS ASSUMED TO RUN ON A STRAIGHT LINE BETWEEN THE GROUND SURFACE LOCATED STRUCTURES. THE CERTIFICATION IS FOR GROUND SURFACE STRUCTURES AND TRENCHES OF THE SAME ONLY. TEST PITS ARE REQUIRED TO DETERMINE THE EXACT LOCATION OF UNDERGROUND PIPE.
 THE FIELD WORK FOR THIS SURVEY WAS COMPLETED ON DECEMBER 11, 2015.

MATCHLINE SEE SHEET 8

NOTE: WHEN THE NEW ARCHITECT FOR THE DOMESTIC SUPPLY IS MADE, THE EXISTING DOMESTIC ARCHITECT SHALL BE ABANDONED PER THE ARCHITECT.

NOTE ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461 - 2095

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severnside Ave., Severn Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

D. Dorsey 03/10/16
 ANDREW DORSEY, PE DATE 03/10/16
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

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. 13204, Expiration Date: November 3, 2014.

Charles J. Govo 7/16/13
 CHARLES J. GOVO, SR., P.E. DATE 7/16/13

AS-BUILT PLAN

DATE	DESCRIPTION
2/16	AS-BUILT PLAN
6/9/14	APPROV. PROP. 4" WATER, CLEANOUT AND 4" PVC
1/6/14	REVISED PLAY AREA, ROOF DRAIN TO STORAGE ADDITION, ADDED SEWER MAIN

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Julia M. Lawler 7/31/13
 Director - Department of Planning and Zoning

West Se... .. 7/31/13
 Chief, Division of Land Development

... 7/26/13
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart

Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261
PLAT REF.	BLOCK NO.	ZONE
PB.13 F.79	18	NT O.S.
TAX MAP	ELEC. DIST.	CENSUS TR.
29	FIFTH	6055
WATER CODE	SEWER CODE	
I-02	5583000	

SITE IMPROVEMENT PLAN
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION

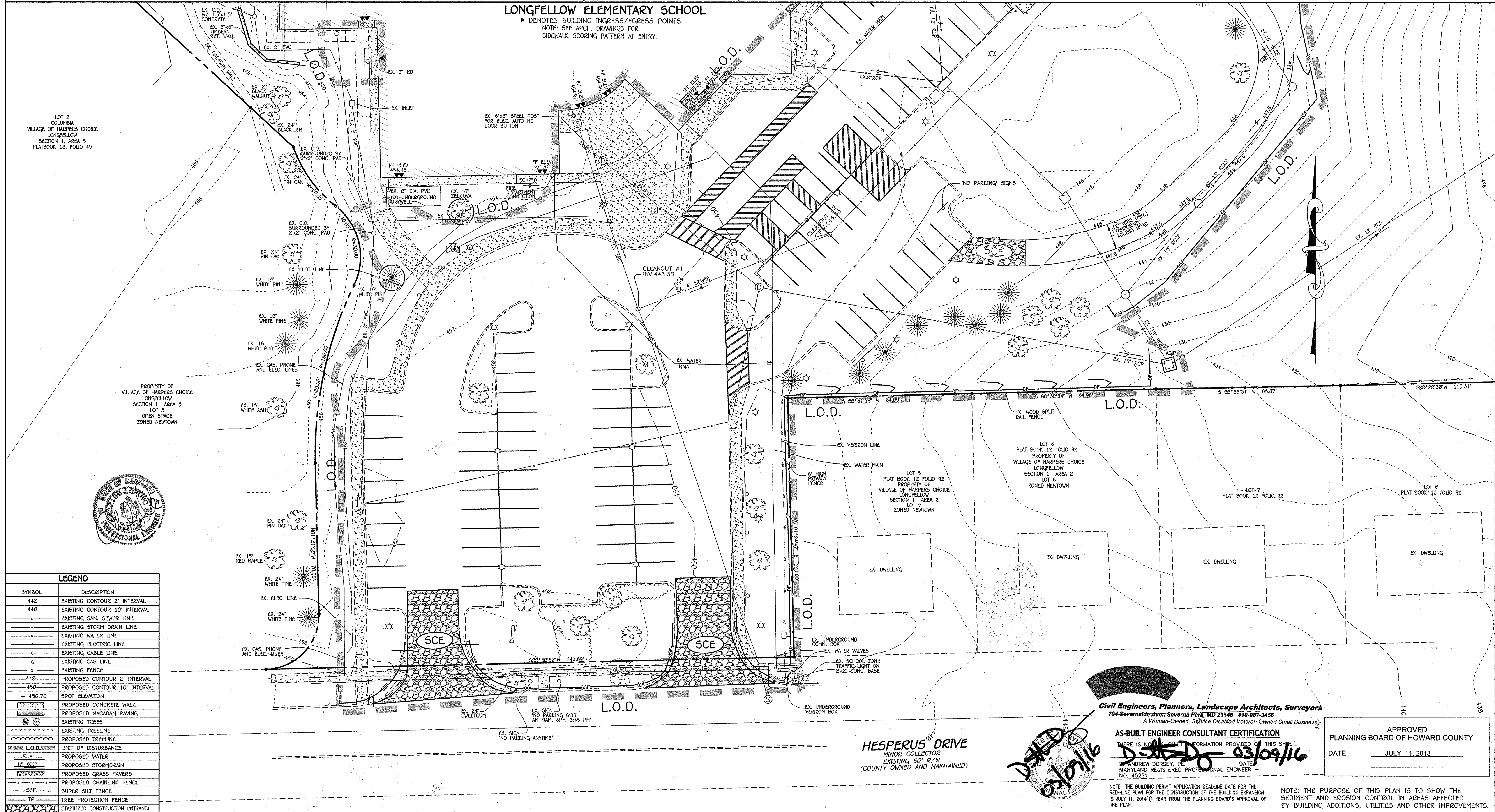
PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013

SHEET 9 OF 28

MATCHLINE SEE SHEET 11

LONGFELLOW ELEMENTARY SCHOOL

▶ DENOTES BUILDING INGRESS/EGRESS POINTS
NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.



SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
-	EXISTING SAN. SEWER LINE
-	EXISTING STORM DRAIN LINE
-	EXISTING WATER LINE
-	EXISTING ELECTRIC LINE
-	EXISTING CABLE LINE
-	EXISTING GAS LINE
-	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
○	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	L.O.D. LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE
---	SUPER SILT FENCE
---	TREE PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
304 Severnside Ave., Severn Park, MD 21146 410-987-3456
A Woman-Owned, Se/Vice Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
THERE IS NO NEW INFORMATION PROVIDED ON THIS SHEET.
ANDREW DORSEY, P.E.
MARYLAND REGISTERED PROFESSIONAL ENGINEER
NO. 45281

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.)

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE SEDIMENT AND EROSION CONTROL IN AREAS AFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
Civil Engineering Consultants & Land Surveyors
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21114
(410) 481-2055

ENGINEER'S CERTIFICATE
"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
Signature of Engineer: *[Signature]* Date: 7/16/13

DEVELOPER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
Signature of Developer: *[Signature]* Date: 7/16/13

"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. 13204, expiration Date: November 3, 2014."
Signature: *[Signature]* Date: 7/16/13
CHARLES J. DOROW, SR., P.E.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Signature: *[Signature]* Date: 7/16/13
Howard SCD

2/16/13 AS-BUILT PLAN
DATE DESCRIPTION REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning: *[Signature]* Date: 7/31/13
Chief, Division of Land Development: *[Signature]* Date: 7/31/13
Chief, Development Engineering Division: *[Signature]* Date: 7/26/13

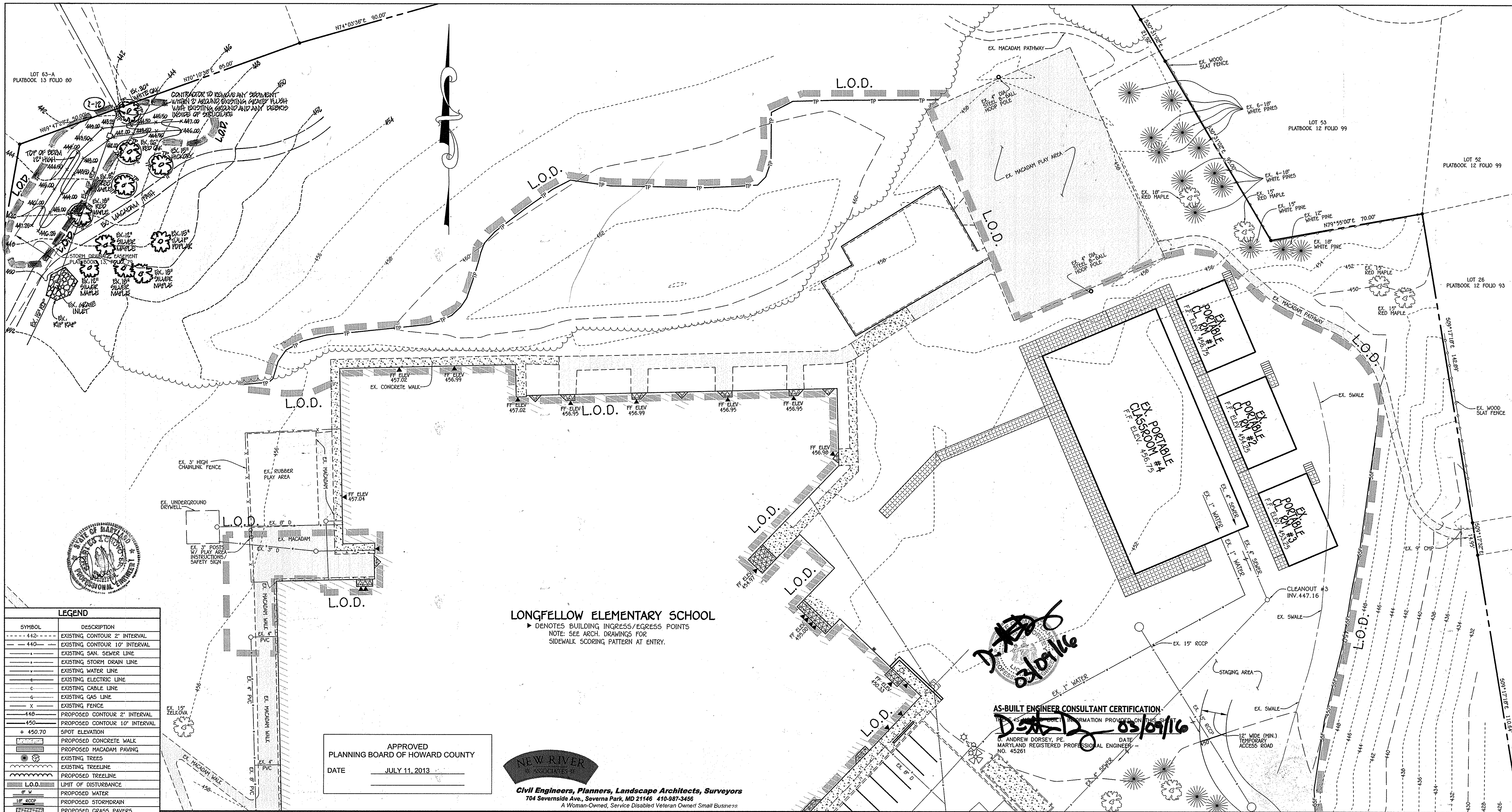
PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCARD DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
FAX 301-330-3224

Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS			
LONGFELLOW ELEMENTARY SCHOOL	1/5	261			
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	SEWER CODE				
I-02	5583000				

SEDIMENT AND EROSION CONTROL PLAN
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: APRIL 29, 2013
SHEET 10 OF 28



LEGEND

SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+ 450.70	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
L.O.D.	LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE
---	SUPER SILT FENCE
---	TREE PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

LONGFELLOW ELEMENTARY SCHOOL
 ▶ DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWINGS FOR
 SIDEWALK SCORING PATTERN AT ENTRY.

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severna Ave., Severna Park, MD 21146 410-587-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 D. ANDREW DORSEY, P.E. DATE 03/09/16
 MARYLAND REGISTERED PROFESSIONAL ENGINEER
 NO. 45261

MATCHLINE SEE SHEET 10

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE SEDIMENT AND EROSION CONTROL IN AREAS AFFECTED BY BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2255

ENGINEER'S CERTIFICATE
 "I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
 Signature of Engineer: [Signature] DATE: 7/16/13

DEVELOPER'S CERTIFICATE
 "I/we certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
 Signature of Developer: [Signature] DATE: 7/15/13

"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. 13204, Expiration Date: November 3, 2014."
 Signature: [Signature] DATE: 7/16/13
 CHARLES J. CROVO, SR., P.E.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Signature: [Signature] DATE: 7/16/13
 Howard SCD

2/16 AS-BUILT PLAN
 1/6/14 REVER EXISTING TREES & CONTOURS TO NW CORNER OF PROPERTY

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director - Department of Planning and Zoning: [Signature] DATE: 7/16/13
 Chief, Development Engineering Division: [Signature] DATE: 7/16/13

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart

Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE
1-02	5583000

SEDIMENT AND EROSION CONTROL PLAN
 "REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013

SHEET 11 OF 28

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (8-4-2)

A. Soil Preparation

1. Temporary Stabilization
 - a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
 - b. Apply fertilizer and lime as prescribed on the plans.
 - c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
2. Permanent Stabilization
 - a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
 - i. Soil pH between 6.0 and 7.0.
 - ii. Soluble salts less than 500 parts per million (ppm).
 - iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is lovegrass which will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
 - iv. Soil contains 1.5 percent minimum organic matter by weight.
 - v. Soil contains sufficient pore space to permit adequate root penetration.
 - b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
 - c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.
 - d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
 - e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Make lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seeded preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

B. Topsoiling

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Site of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
2. Topsoil salvaged from an existing site may be used provided 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-NRCS.
3. Topsoiling 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.
4. Areas having slopes steeper than 2:1 require special consideration and design.
5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
 - a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
 - b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
 - c. 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.
6. Topsoil Application
 - a. Erosion and sediment control practices must be maintained when applying topsoil.
 - b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to 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 must be corrected in order to prevent the formation of depressions or water pockets.
 - c. Topsoil must not be placed if 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 seedbed preparation.

- C. Soil Amendments (Fertilizer and Lime Specifications)**
1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
 2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Fertilizer may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 90 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
 5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

PERMANENT SEEDING NOTES (8-4-5)

A. Seed Mixtures

1. General Use

- a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
- b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.
- c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency. d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.

2. Turfgrass Mixtures

- a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
- b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
- i. Kentucky Bluegrass/ Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
- ii. Kentucky Bluegrass/Perennial Ryegrass: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
- iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium maintenance in full sun to medium shade. Recommended mixture includes Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
- iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 square feet.

Notes:
 Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"
 Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line.

3. Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5a, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zone: 6b) Southern MD: Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a, 7b)

- d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.
- e. If soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

Permanent Seeding Summary

Hardness Zone (from Figure B.3): 6b				Fertilizer Rate (10-20-20)				
Seed Mixture (from Table B.3):				Lime Rate				
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depth	N	P ₂ O ₅	K ₂ O	
1	TALL FESCUE	100	Mar. 1-May 15 Aug. 15-Oct. 15	1/4-1/2 in.	45 lbs. per acre (1.0 lb./1000 sq ft)	90 lb/ac (2 lb./1000 sq ft)	90 lb/ac (2 lb./1000 sq ft)	2 tons/ac (50 lb./1000 sq ft)

TEMPORARY SEEDING NOTES (8-4-4)

Definition: To stabilize disturbed soils with vegetation for up to 6 months.

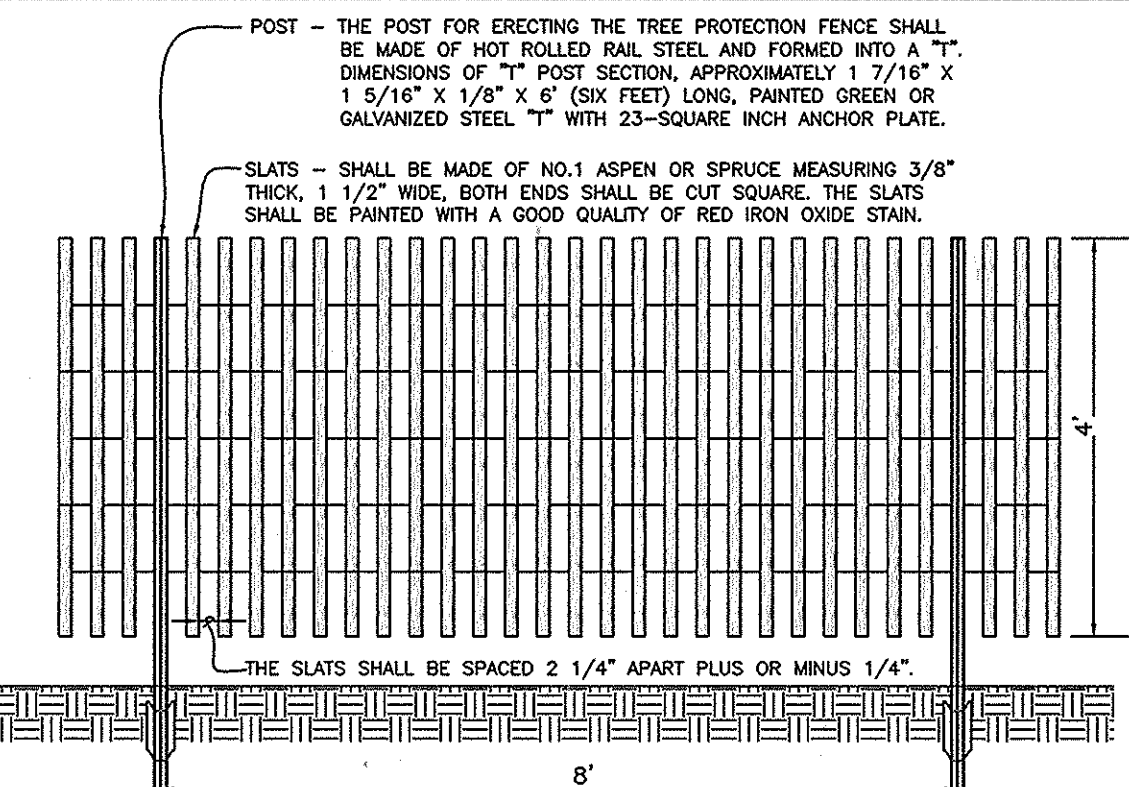
Purpose: To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies: Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.
3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section 8-4-3A.1.b. and maintain until the next seeding season.

Temporary Seeding Summary

Hardness Zone (from Figure B.3): 6b				Fertilizer Rate (10-20-20)			
Seed Mixture (from Table B.1):				Lime Rate			
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depth	N	P ₂ O ₅	K ₂ O	
BARLEY	96	3/1 - 5/15	1"	436 lb/ac (1.0 lb./1000 sq ft)			2 tons/ac (50 lb./1000 sq ft)
OATS	72	8/15 - 10/15	1"				
RYE	112		1"				



TREE PROTECTION FENCE DETAIL

POST - THE POST FOR ERECTING THE TREE PROTECTION FENCE SHALL BE MADE OF HOT ROLLED RAIL STEEL AND FORMED INTO A "T" DIMENSIONS OF 1" POST SECTION, APPROXIMATELY 1 1/2" X 1 5/16" X 1/8" X 6" (SIX FEET) LONG, PAINTED GREEN OR GALVANIZED STEEL "T" WITH 23-SQUARE INCH ANCHOR PLATE.

SLATS - SHALL BE MADE OF NO. 11 ASPEN OR SPRUCE MEASURING 3/8" THICK, 1 1/2" WIDE, BOTH ENDS SHALL BE CUT SQUARE, THE SLATS SHALL BE PAINTED WITH A GOOD QUALITY OF RED IRON OXIDE STAIN.

THE SLATS SHALL BE SPACED 2 1/4" APART PLUS OR MINUS 1/4".

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (1 DAY)
 2. NOTIFY MASS UTILITY AT 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-297-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 48 HOURS BEFORE STARTING WORK.
 3. INSTALL ALL TREE PROTECTION FENCE FOR TREES TO BE UNDISTURBED AS INDICATED ON THE PLANS (1 DAY). INSTALL STABILIZED CONSTRUCTION ENTRANCES. (1 DAY)
 4. INSTALL SEDIMENT CONTROL MEASURES SHOWN ON SHEET 10 AND 11. (1 WEEK)
 5. INSTALL TEMPORARY ACCESS ROAD. (1 WEEK)
 6. BEGIN BUILDING CONSTRUCTION. (18 MONTHS)
 7. BEGIN DEMOLITION WORK SHOWN ON SHEETS 6 AND 7. (3 WEEKS)
 8. INSTALL STORM DRAIN SYSTEM AND BMP FACILITIES. (6 WEEKS)
 9. INSTALL CURBS AND GUTTER, PAVING AND SIDEWALKS AS SHOWN ON SHEETS 8 AND 9. (6 WEEKS)
 10. FINE GRADE ALL AREAS, INSTALL PERMANENT SEEDING, AND LANDSCAPING. (6 WEEKS)
 11. FOLLOWING SUCCESSFUL STABILIZATION (i.e. ESTABLISHED VEGETATION OR PAVING) OBTAIN PERMISSION FROM HOWARD COUNTY SEDIMENT CONTROL INSPECTOR TO REMOVE ALL EXPOSING SEDIMENT AND EROSION CONTROL DEVICES. THEN STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS WITH PERMANENT SEEDING. (1 WEEK)
 12. NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION OF THE COMPLETED PROJECT.
- SEQUENCE NOTE:** THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES THROUGHOUT THE PROJECT PERIOD AND ON A DAILY BASIS. REMOVE SEDIMENT FROM THE SUPER SILT FENCE IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS.

DUST CONTROL

DEFINITION: CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.

PURPOSE: TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS AND IMPROVE TRAFFIC SAFETY.

CONDITIONS WHERE PRACTICE APPLIES: THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS

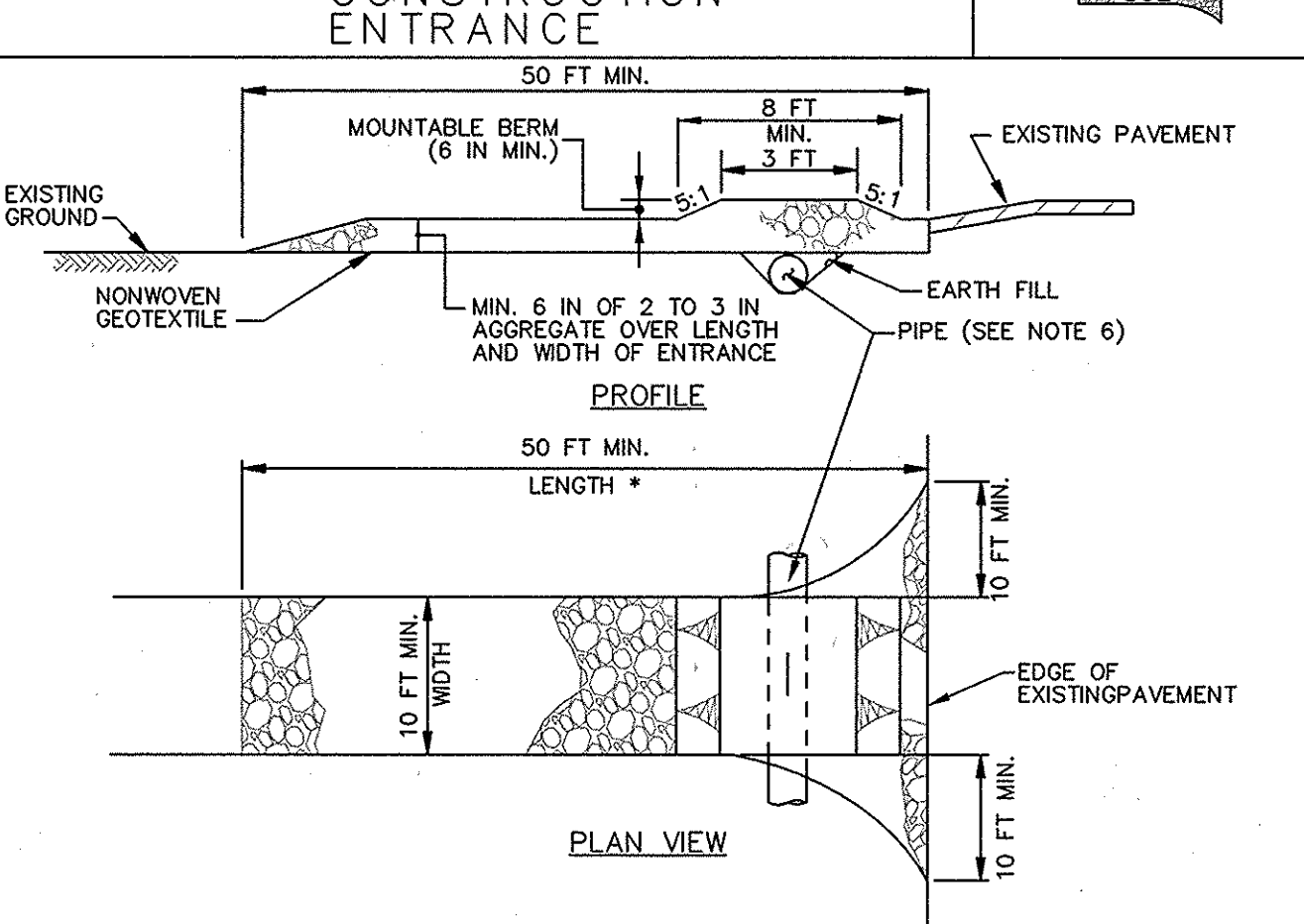
TEMPORARY METHODS

1. MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
2. VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
3. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN FLOWING ON WINDWARD SIDE OF THE SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12' APART, SPRING-TOOTHED HARROWS AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
4. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
5. BARRIERS - SOLID BOARD FENCES SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALE DICES AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
6. CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS

1. PERMANENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER AND PERMANENT STABILIZATION WITH SOO. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE.
2. TOPSOILING - COVERING WITH LESS EROSION SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE



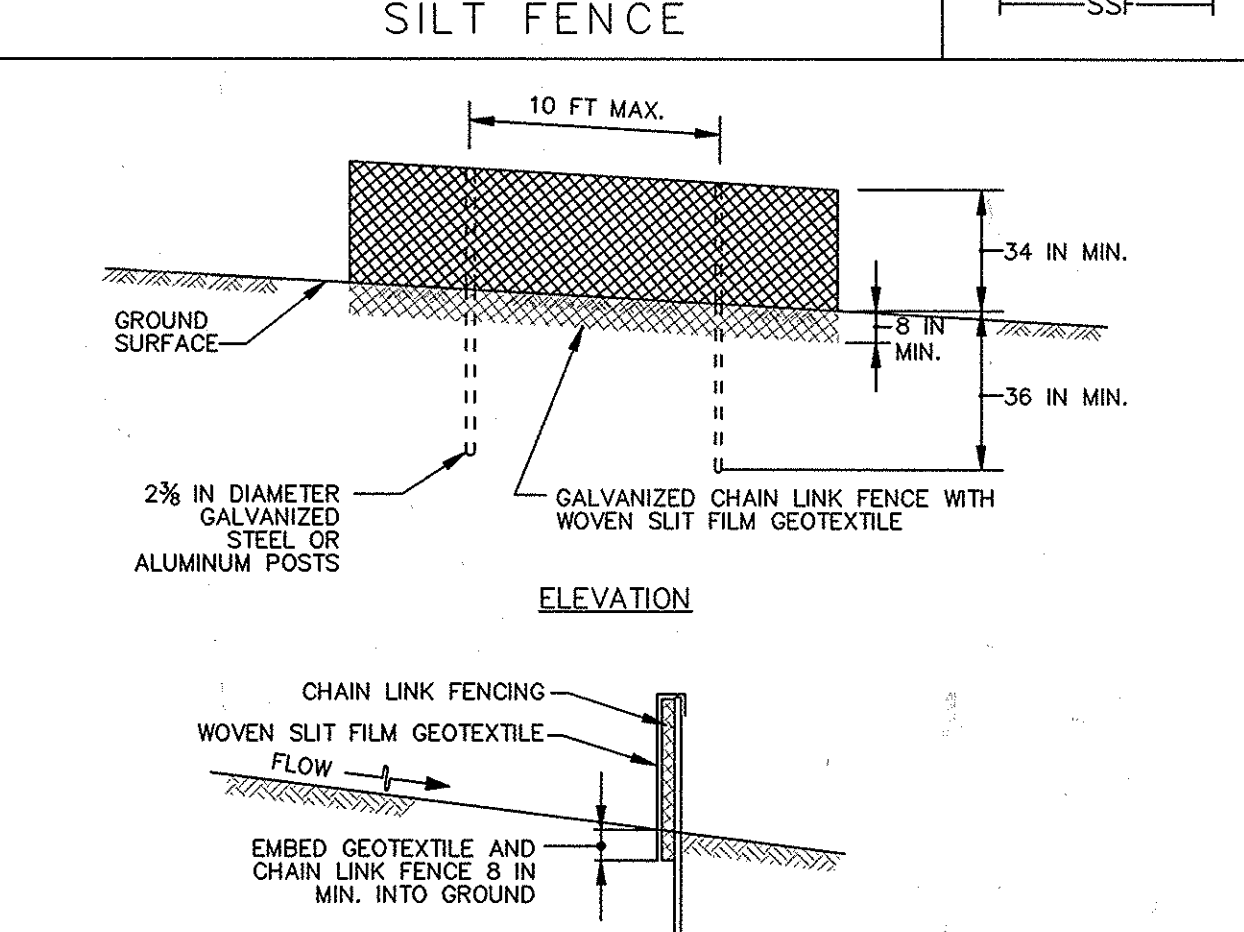
CONSTRUCTION SPECIFICATIONS

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (450 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE. MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
- 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
- 3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- 4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 8-4-5), TEMPORARY SEEDING (SEC. 8-4-4) AND MULCHING (SEC. 8-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 5) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 6) SITE ANALYSIS:
 TOTAL AREA OF SITE: 9.00 ACRES
 AREA DISTURBED: 3.91 ACRES
 AREA TO BE ROOFED OR PAVED: 1.64 ACRES
 AREA TO BE VEGETATIVELY STABILIZED: 2.27 ACRES
 TOTAL CUT: 2800 CUYDS.
 TOTAL FILL: 2800 CUYDS.
 OFFSITE WASTE/BORROW AREA LOCATION: N/A
- 7) ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 8) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- 9) 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.
- 10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- 11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
- 12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

DETAIL E-3 SUPER SILT FENCE



CONSTRUCTION SPECIFICATIONS

1. INSTALL 2 3/8 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 3/8 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:

- A) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
- B) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

ENGINEER'S CERTIFICATE

"I certify that this plan for sediment and erosion control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer: *[Signature]* Date: 7/16/13

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible persons 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."

Signature of Developer: *[Signature]* Date: 7/16/13

"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. 13204, Expiration Date: November 3, 2014."

Signature: *[Signature]* Date: 7/16/13
 CHARLES J. CROVO, SR., P.E.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Signature: *[Signature]* Date: 7/16/13
 Howard SO



PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805

2116 AS-BUILT PLAN
 DATE DESCRIPTION REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *[Signature]* Date: 7/31/13

Signature: *[Signature]* Date: 7/31/13
 Signature: *[Signature]* Date: 7/26/13

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart
 Lot Number: 261
 Street Address: 5470 HESPERUS DRIVE
 COLUMBIA, MD. 21044

PROJECT: LONGFELLOW ELEMENTARY SCHOOL
 SECTION/AREA: 1/5
 PARCELS: 261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	SEWER CODE				
1-02	5583000				

NOTES AND DETAILS

"REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL

CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013

DATE: JULY 11, 2013
 SHEET 12 OF 28

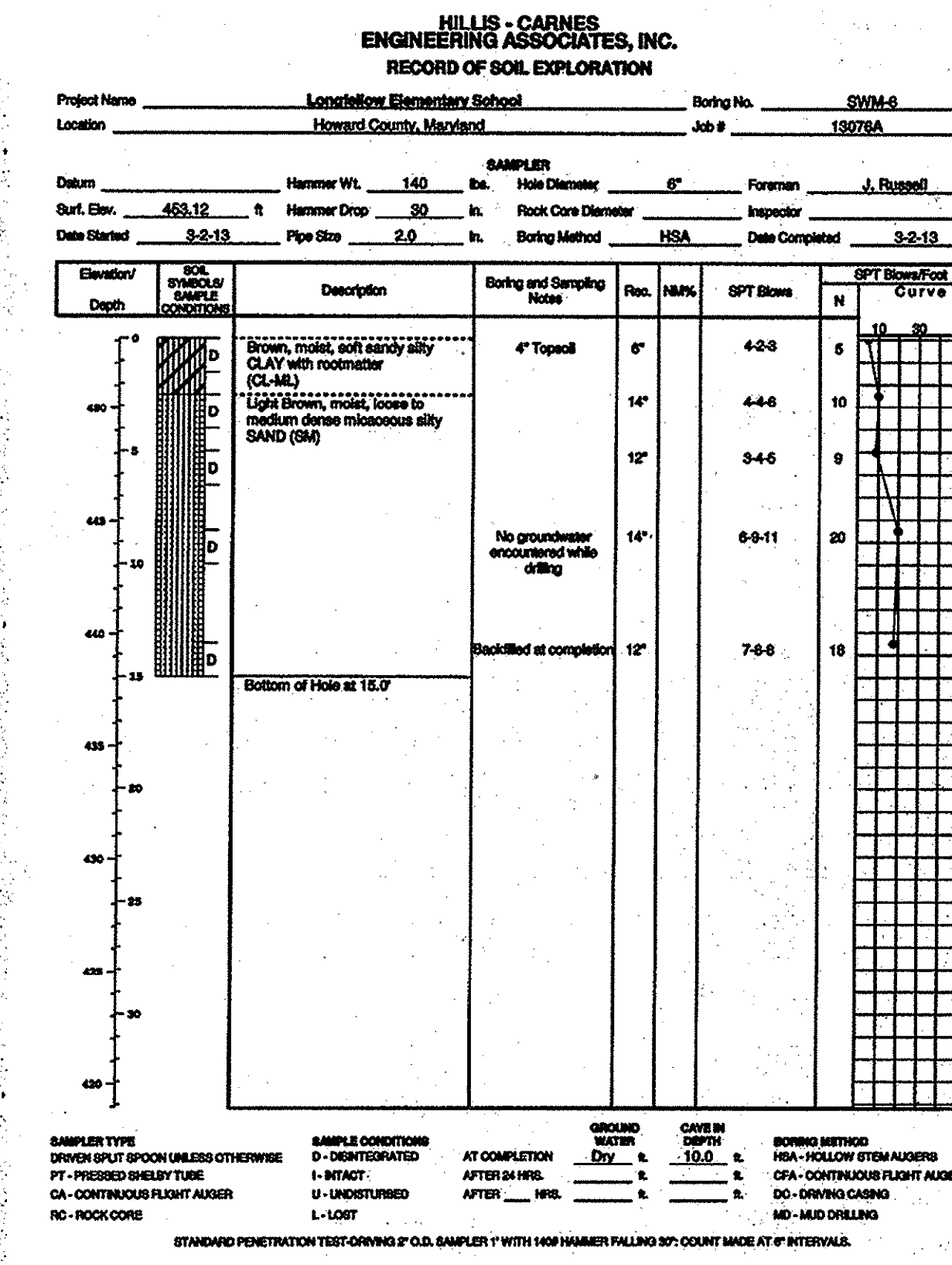
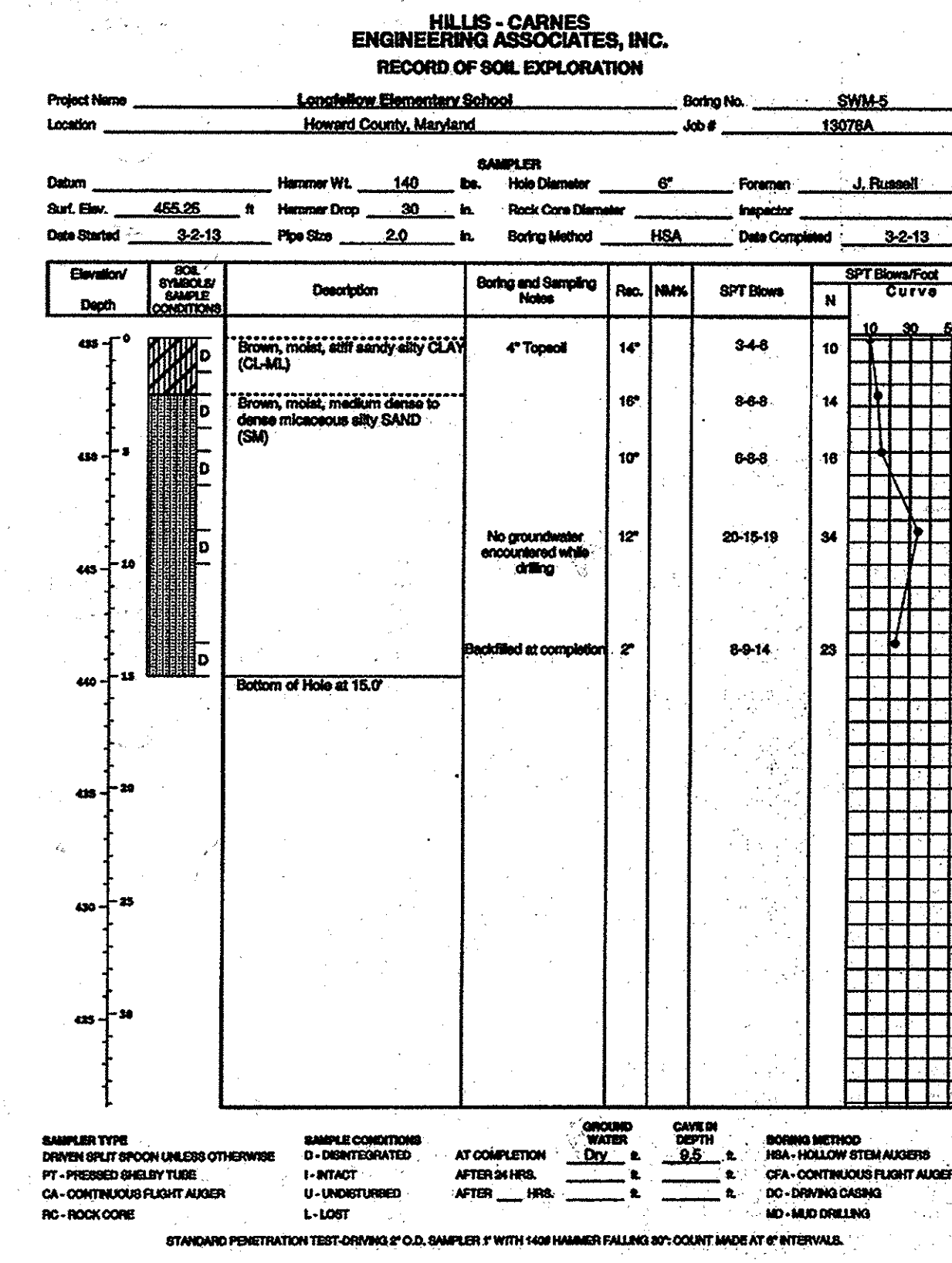
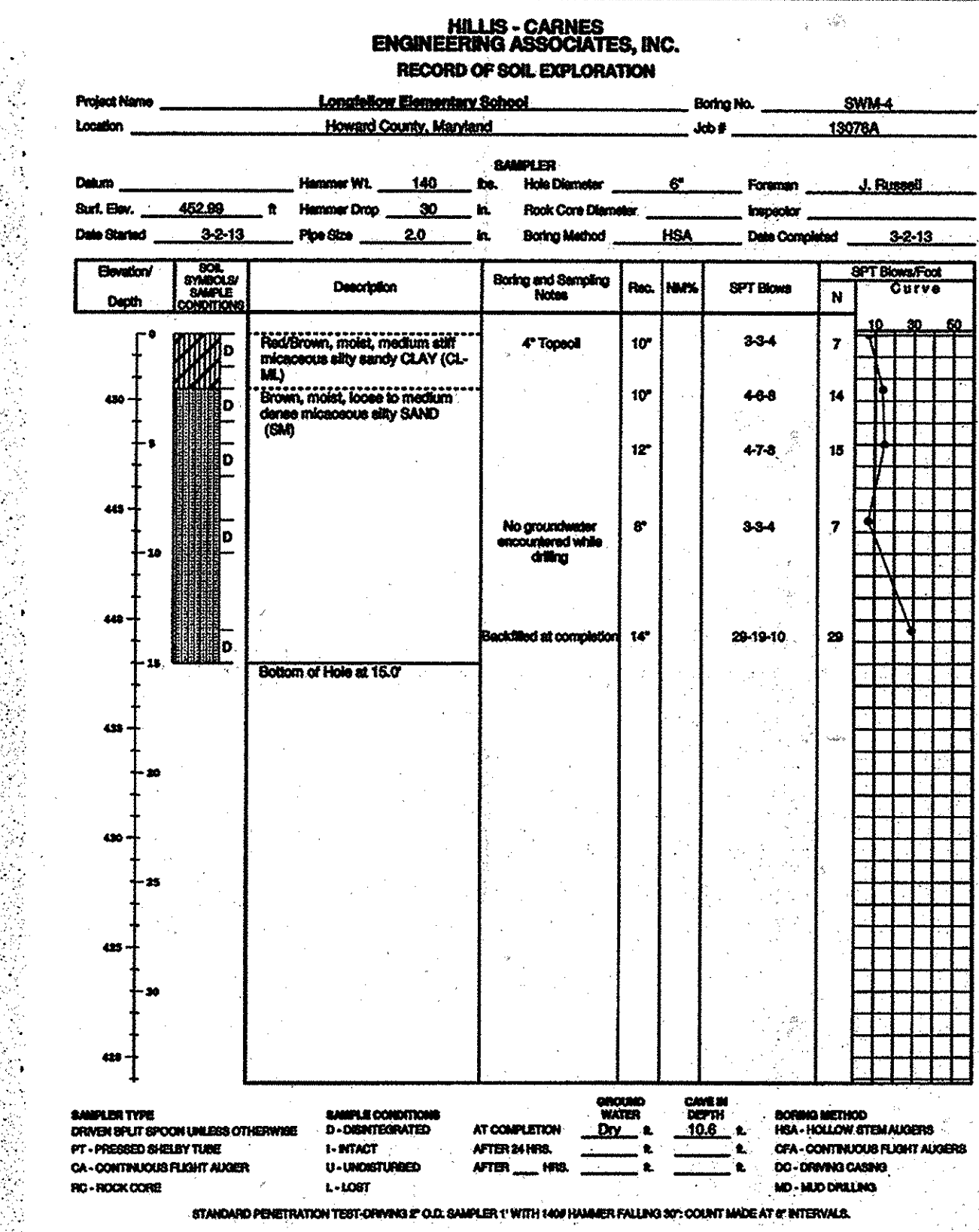
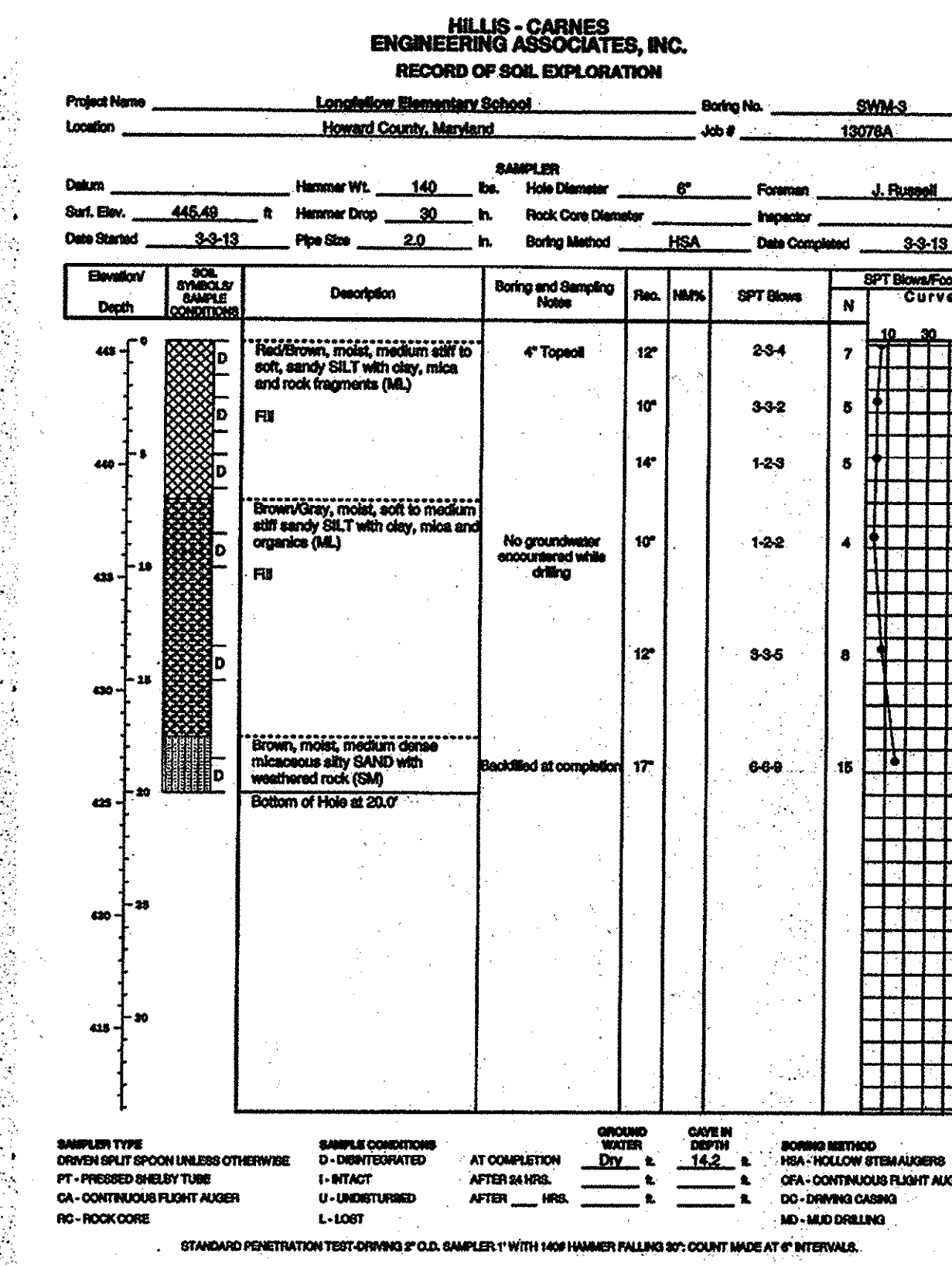
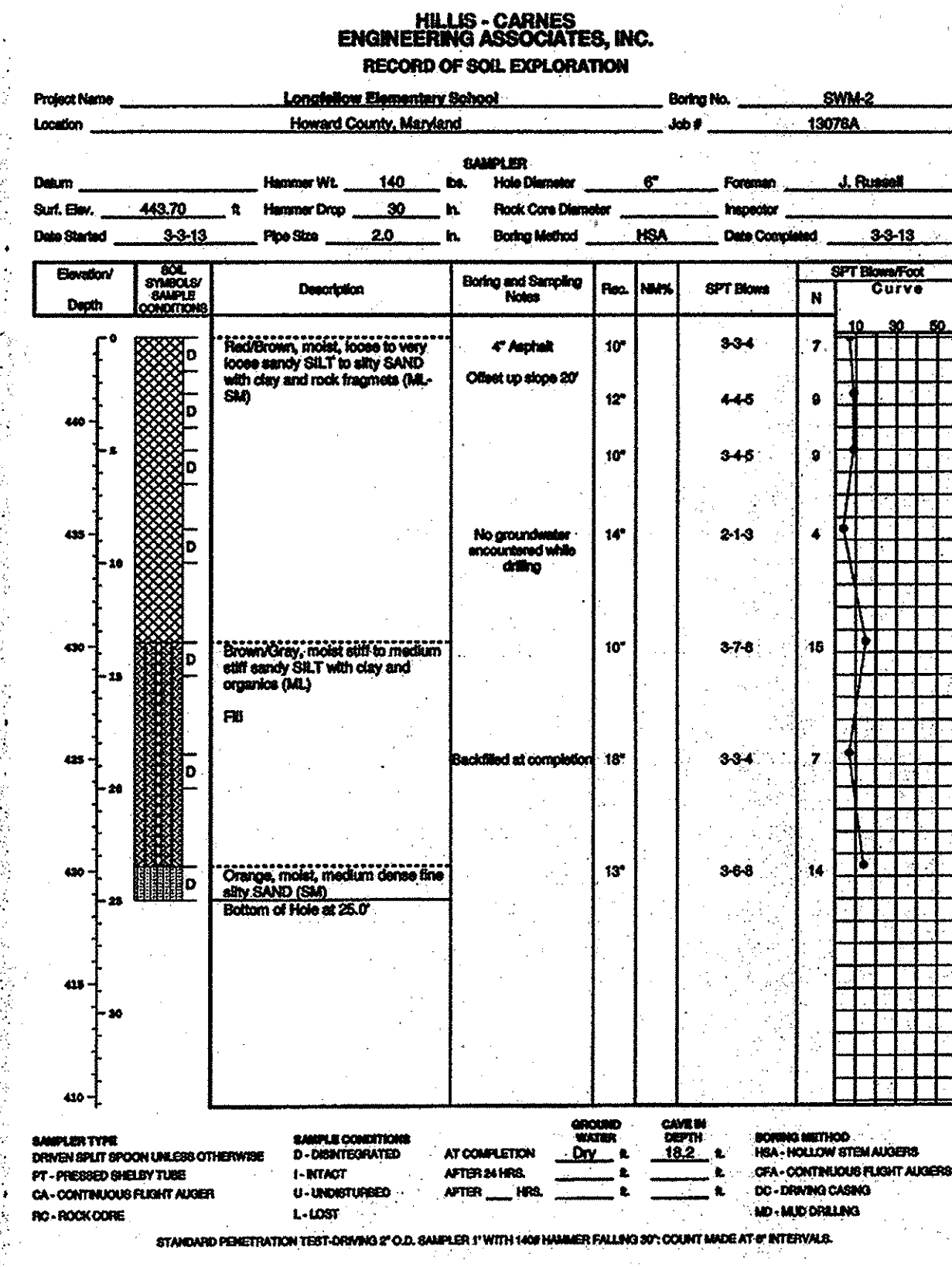
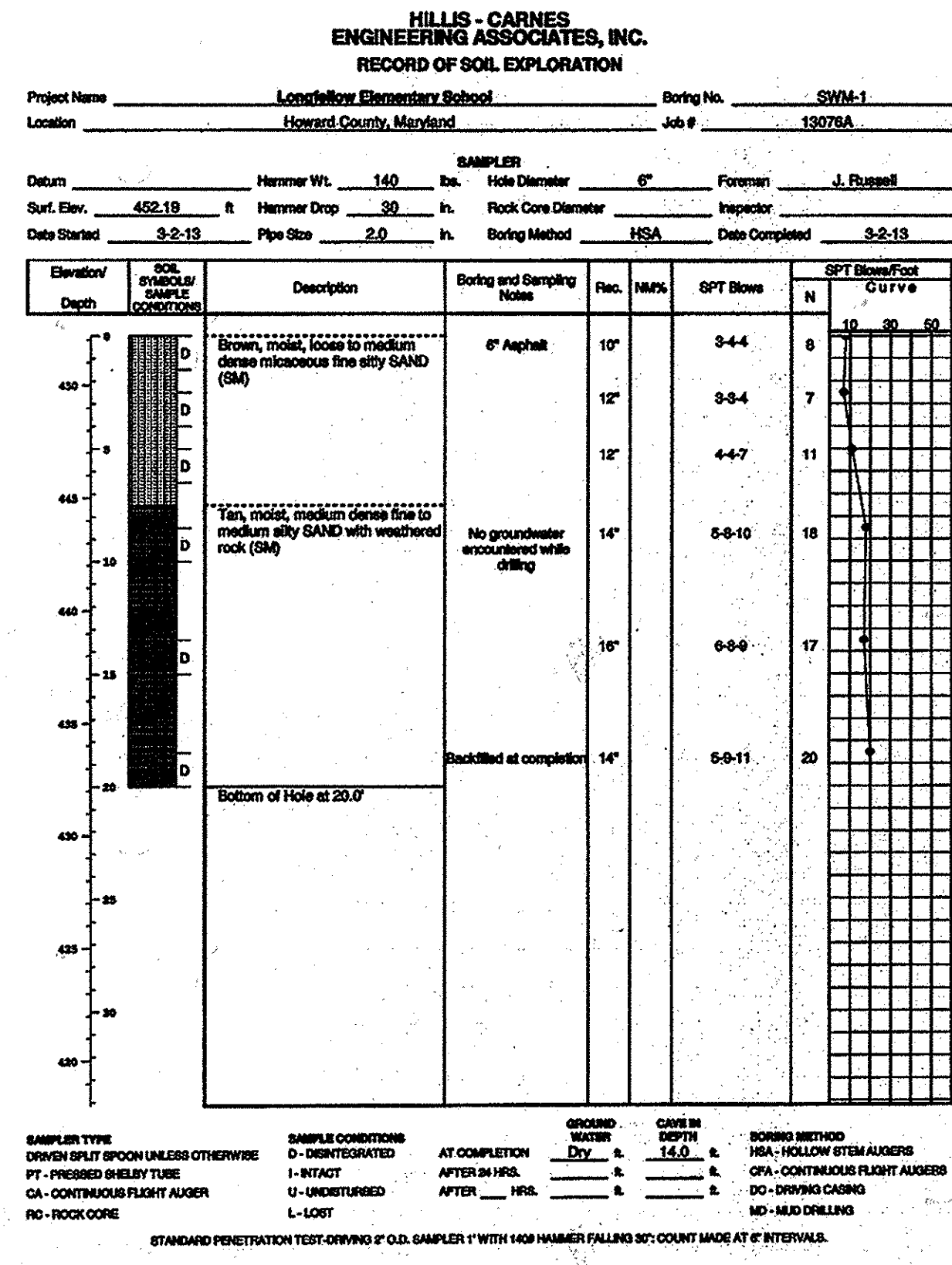
NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Sovereign Ave., Sovereign Park, MD 21148 410-987-3456
 A Woman-Owned, Service Disabled, Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 THESE ARE THE AS-BUILT INFORMATION PROVIDED ON THIS SHEET
 Signature: *[Signature]* Date: 03/09/16
 D. ANDREW DORSEY, DATE
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXHAUSTION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.)

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW VARIOUS NOTES AND DETAILS.



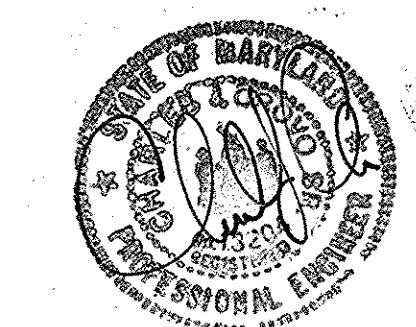
NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Sevenside Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
I, D. H. D. 03/02/16
DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.)
NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW BORING LOGS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21142
(410) 461-2005



"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. 13204, Expiration Date: November 3, 2014."
Charles J. O'Dovo, Sr., P.E.
DATE: 7/16/13

2116 AS-BUILT PLAN
DATE: 7/31/13
APPROVED, DEPARTMENT OF PLANNING AND ZONING
Richard Lawrence 7/31/13
Director - Department of Planning and Zoning
Walter Lewis 7/31/13
Chief, Division of Land Development
W. Lewis 7/26/13
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCARD DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
FAX 301-330-3224

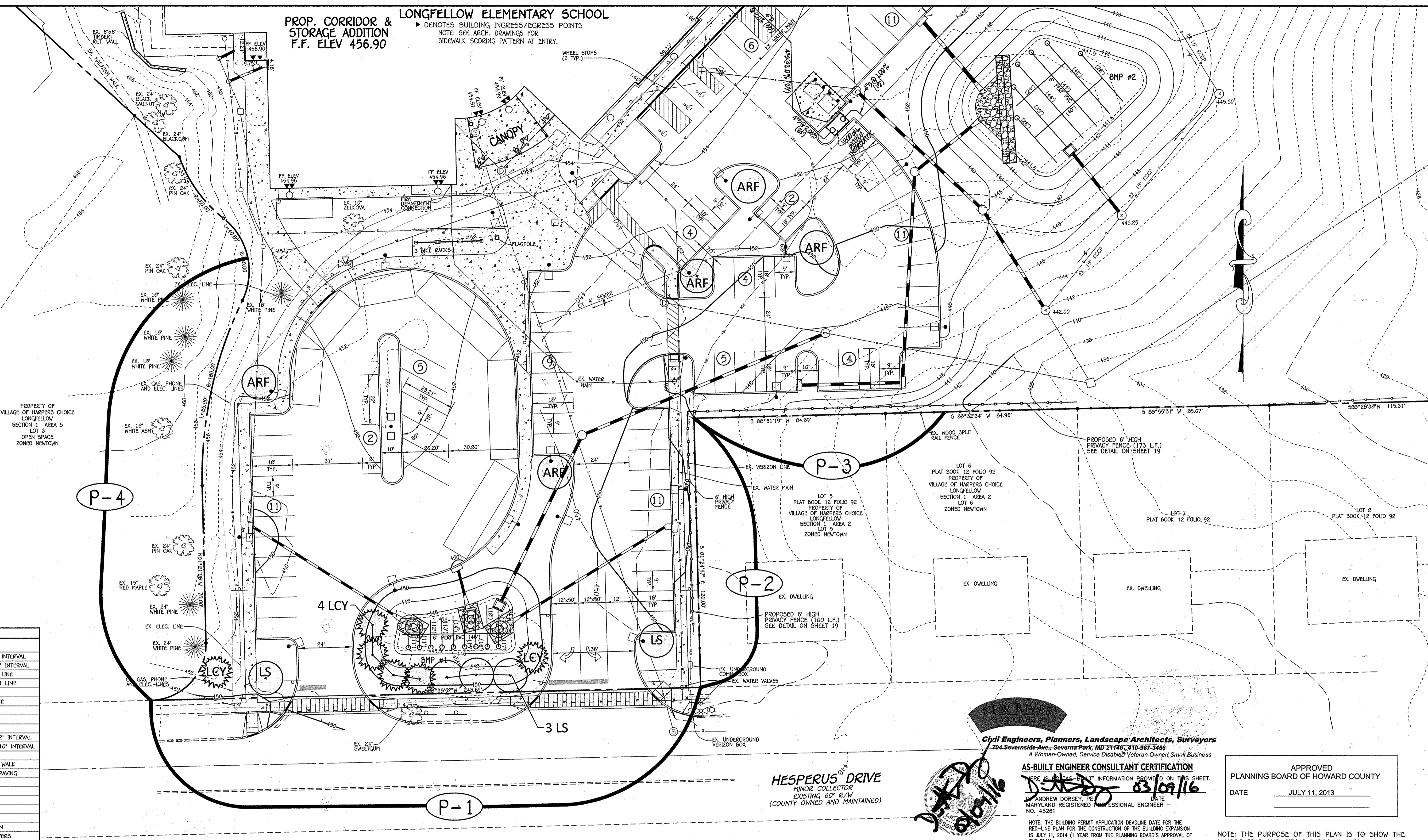
Address Chart					
Lot Number	Street Address				
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044				
PROJECT	SECTION/AREA				
LONGFELLOW ELEMENTARY SCHOOL	1/5				
PARCELS	261				
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	1-02	SEWER CODE	5583000		

BORING LOGS
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: APRIL 29, 2013
SHEET 13 OF 28

PROP. CORRIDOR & STORAGE ADDITION
F.F. ELEV 456.90

LONGFELLOW ELEMENTARY SCHOOL
 ■ DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.

LOT 2
 COLUMBIA
 VILLAGE OF HARPERS CHOICE
 LONGFELLOW
 SECTION 1, AREA 5
 PLATBOOK 13, FOLIO 49



LEGEND

SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORM DRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 104 Sevenside Ave., Severna Park, MD 21146, 410-981-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business



AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.
 Andrew Dorsey, PE, DATE 03/09/16
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE LANDSCAPING AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 461-2095

DEVELOPER'S / BUILDER'S CERTIFICATE
 I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *David M. Jones* DATE: 7/15/13

"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. 13204, Expiration Date: November 3, 2014."

Charles J. Grovo, Sr., P.E. DATE: 7/15/13

CHARLES J. GROVO, SR., P.E.

DATE	DESCRIPTION	REVISION BLOCK
2/16	AS-BUILT PLAN	
5/6/14	ADDED ROOF DRAIN TO CANOPY	
1/3/14	ADDED ROOF DRAIN & SEWER MAIN	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Kristen L. Lauer DATE: 7/31/13
 Director - Department of Planning and Zoning

Victor S. ... DATE: 7/31/13
 Chief, Division of Land Development

... DATE: 7/26/13
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart

Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
Pb.13 F.79	18	NT O.S.	29	FIFTH	6095

WATER CODE	SEWER CODE
I-02	5583000

LANDSCAPE PLAN
 "REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW
 ELEMENTARY SCHOOL
 CLASSROOM ADDITION AND
 PARKING LOT ADDITION

PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013

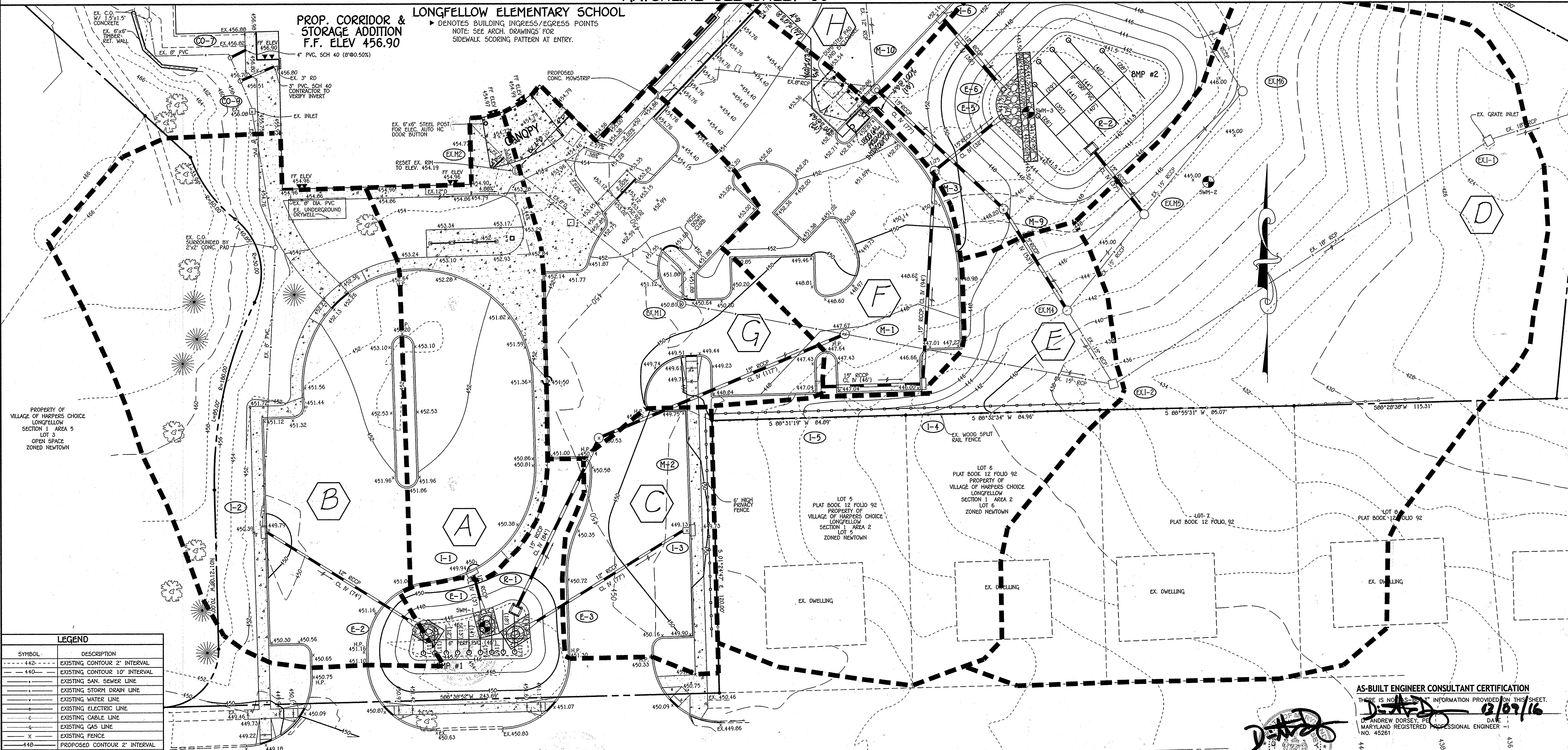
SHEET 14 OF 28

MATCHLINE SEE SHEET 16

PROP. CORRIDOR & STORAGE ADDITION
F.F. ELEV 456.90

LONGFELLOW ELEMENTARY SCHOOL

► DENOTES BUILDING INGRESS/EGRESS POINTS
NOTE: SEE ARCH. DRAWINGS FOR
SIDEWALK SCORING PATTERN AT ENTRY.



SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORM DRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.
[Signature] 02/10/16
ANDREW DORSEY, PE
MARYLAND REGISTERED PROFESSIONAL ENGINEER
NO. 45261

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: JULY 11, 2013

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Sevenside Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned/Service Disabled Veteran Owned Small Business

HESPERUS DRIVE
MINOR COLLECTOR
EXISTING 60' R/W
(COUNTY OWNED AND MAINTAINED)

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.)

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE DRAINAGE LIMITS FOR THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALDORRE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2295



"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. 13204, Expiration Date: November 3, 2014."
[Signature] 7/16/13
CHARLES J. GROVO, SR., P.E. DATE

DATE	DESCRIPTION	REVISION BLOCK
2/16/14	AS-BUILT PLAN	
5/9/14	ADDED ROCK DRAIN TO CANOPY	
1/16/14	ADDED SEWER MAIN	

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 7/31/13
Date
Chief, Department of Planning and Zoning
[Signature] 7/31/13
Date
Chief, Division of Land Development
[Signature] 7/20/13
Date
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCARD DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
FAX 301-330-3224

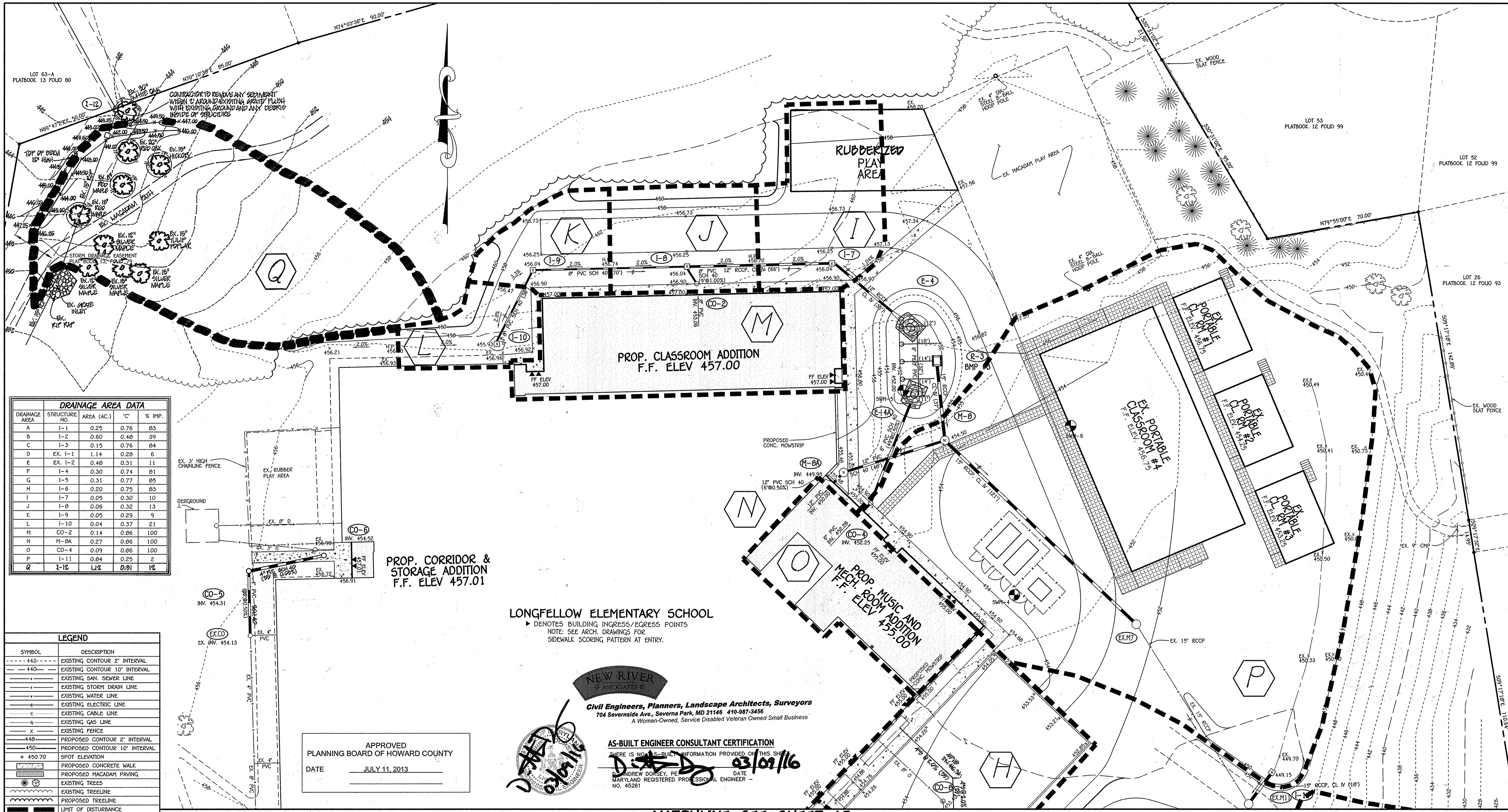
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE
I-02	5583000

DRAINAGE AREA MAP
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW
ELEMENTARY SCHOOL
CLASSROOM ADDITION AND
PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: APRIL 29, 2013
SHEET 15 OF 20



DRAINAGE AREA DATA				
DRAINAGE AREA	STRUCTURE NO.	AREA (AC.)	"C"	% IMP.
A	I-1	0.25	0.76	83
B	I-2	0.60	0.48	39
C	I-3	0.15	0.76	84
D	EX. I-1	1.14	0.28	6
E	EX. I-2	0.48	0.31	11
F	I-4	0.30	0.74	81
G	I-5	0.31	0.77	85
H	I-6	0.20	0.75	83
I	I-7	0.05	0.30	10
J	I-8	0.06	0.32	13
K	I-9	0.05	0.29	9
L	I-10	0.04	0.37	21
M	CO-2	0.14	0.86	100
N	M-2A	0.27	0.86	100
O	CO-4	0.09	0.86	100
P	I-11	0.84	0.25	2
Q	I-12	1.12	0.91	12

LEGEND	
SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN. SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
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---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+ 450.70	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

LONGFELLOW ELEMENTARY SCHOOL
 ▶ DENOTES BUILDING INGRESS/EGRESS POINTS
 NOTE: SEE ARCH. DRAWINGS FOR SIDEWALK SCORING PATTERN AT ENTRY.

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Sovereign Ave., Severna Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.
 Andrew Dorsey, P.E. DATE 03/09/16
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

MATCHLINE SEE SHEET 15

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

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FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLSWORTH CITY, MARYLAND 21042
 (410) 461-2095



"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. 13204, Expiration Date: November 3, 2014."
 Charles J. Crovo, Sr., P.E. DATE 7/16/13

2/11/16 AS-BUILT PLAN
 1/6/16 REAR PLAY AREA & ADDED POWER MAIN
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Director: Department of Planning and Zoning
 Chief, Division of Land Development
 Chief, Development Engineering Division

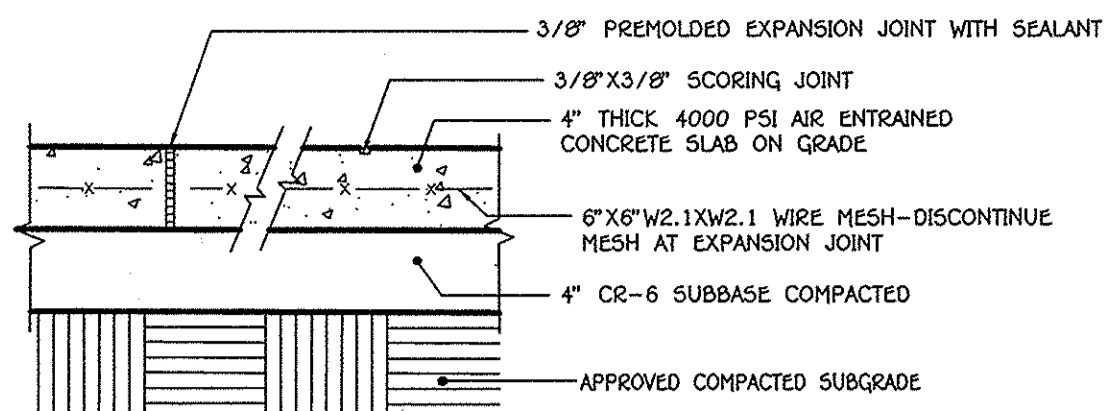
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Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

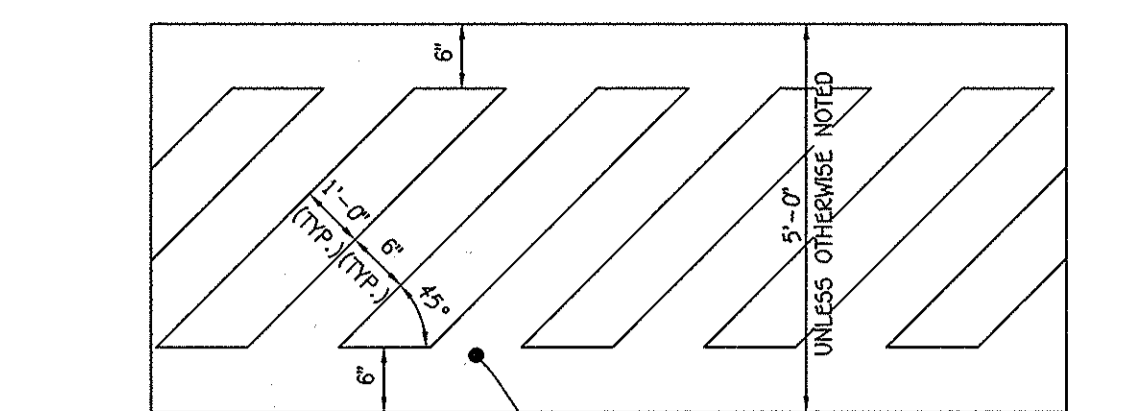
PROJECT		SECTION/AREA		PARCELS	
LONGFELLOW ELEMENTARY SCHOOL		1/5		261	
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE		SEWER CODE			
I-02		5583000			

DRAINAGE AREA MAP
 "REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013
 SHEET 16 OF 28

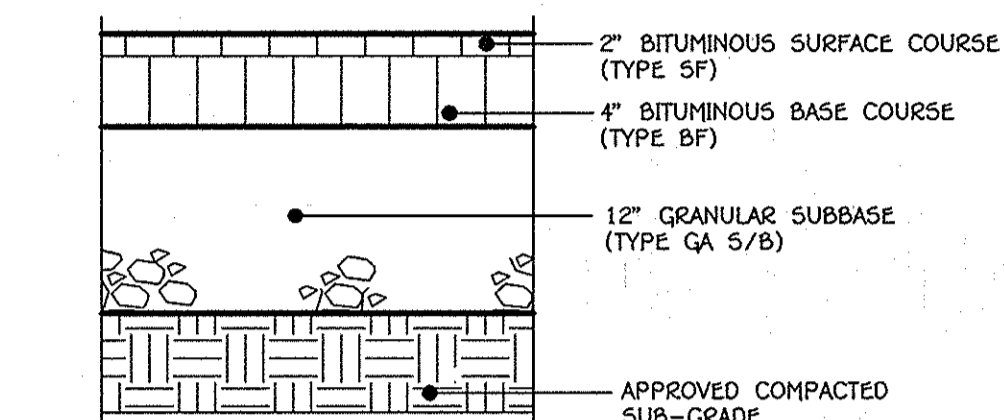


NOTE: INSTALL EXPANSION JOINTS AT MAX. 15'-0" O.C. AND INSTALL SCORING JOINTS AT MAX. 5'-0" O.C.
 SLOPE ACROSS SIDEWALK SHALL BE MIN. 1/8"/FT.

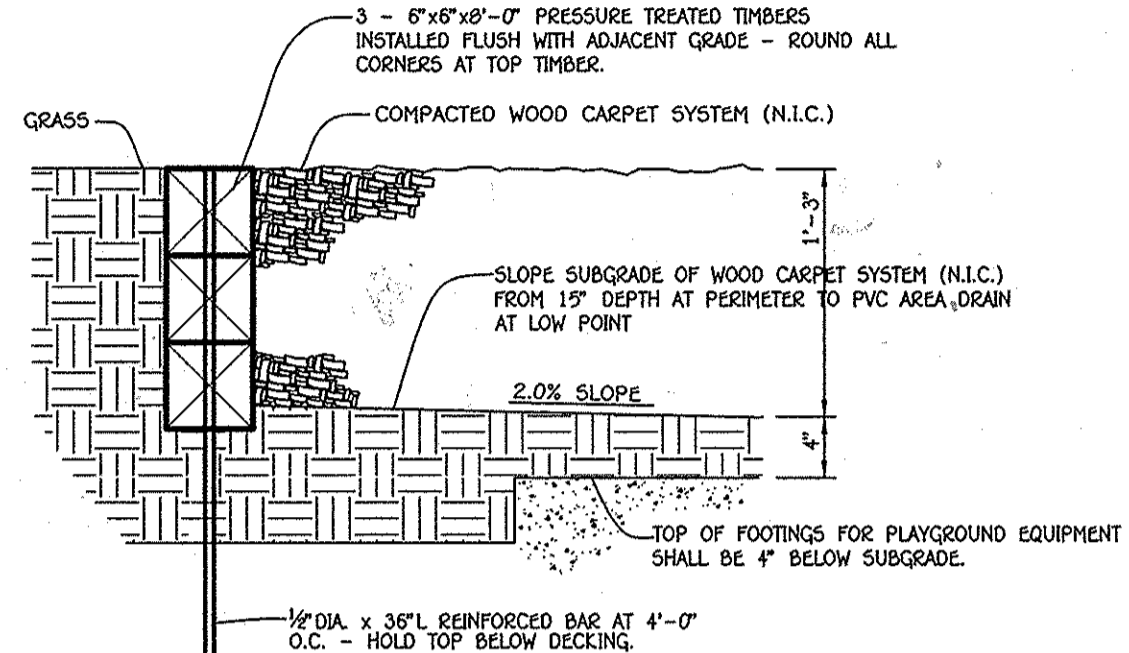
1 CONCRETE WALK DETAIL
 NO SCALE



5 CROSSWALK DETAIL
 NO SCALE



2 HEAVY DUTY ASPHALTIC PAVING DETAIL
 NO SCALE

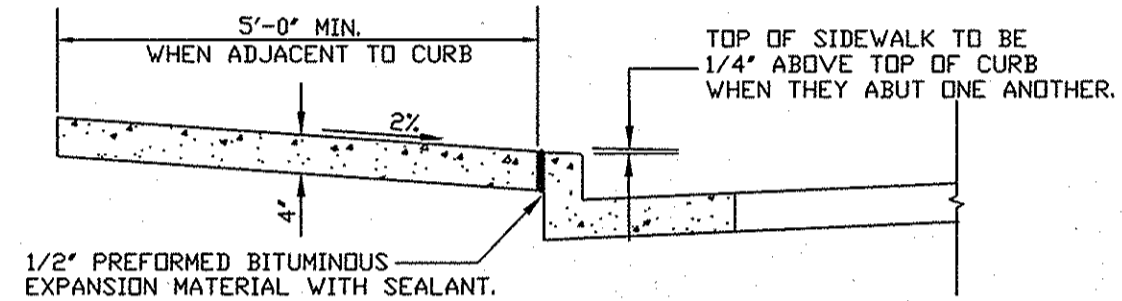


6 PLAY AREA SURFACE/DRAINAGE DETAIL
 NO SCALE
 NOTE: ALL LUMBER TO BE PRESSURE TREATED. STAGGER JOINTS.



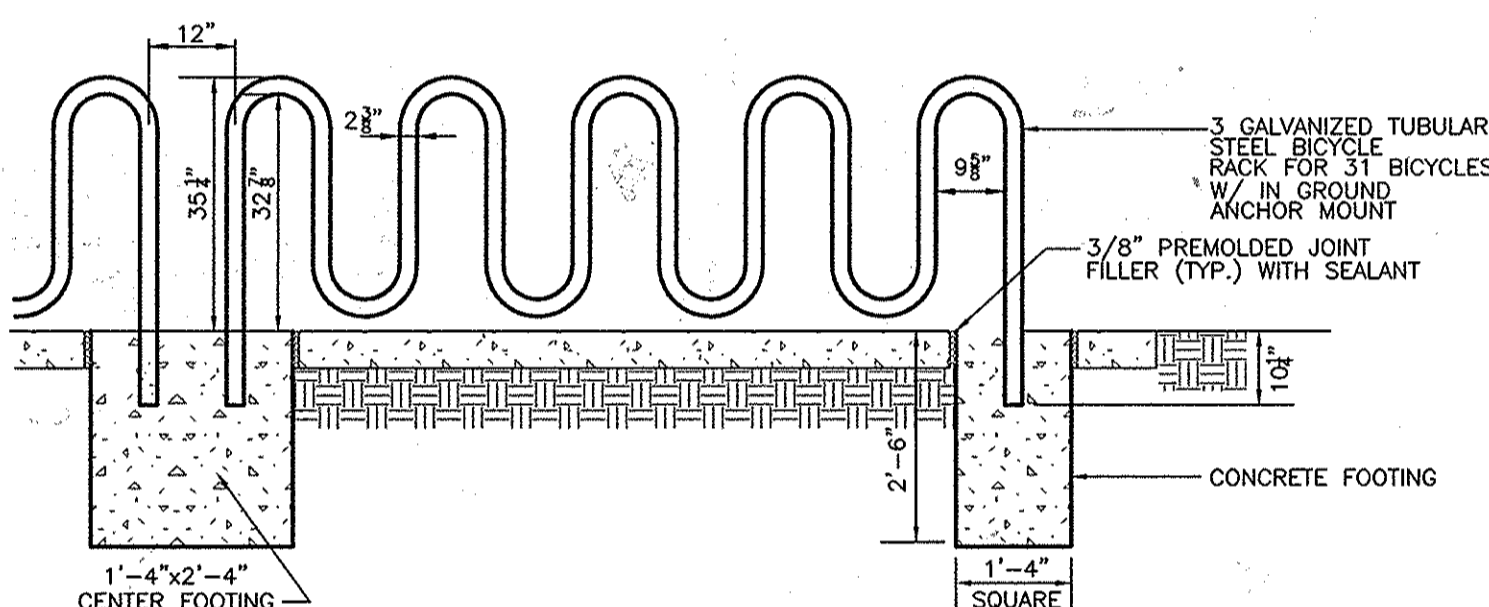
GENERAL NOTES:
 1. SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
 2. ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE IMPROVEMENT PLAN.
 3. SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/TOP OF SIGNS 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
 4. SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
 5. COLORS: LEGEND AND BORDER-GREEN SYMBOL-WHITE ON BLUE BACKGROUND BACKGROUND-WHITE
 6. CONTRACTOR SHALL COORDINATE ARROW DIRECTION WITH LOCATION OF ADJACENT AISLE.
 7. SPACES INDICATED ON SITE DEVELOPMENT PLANS AS "VAN ACCESSIBLE" SHALL BE SIGNED ACCORDINGLY.

9 HANDICAP PARKING SIGN DETAIL
 NOT TO SCALE

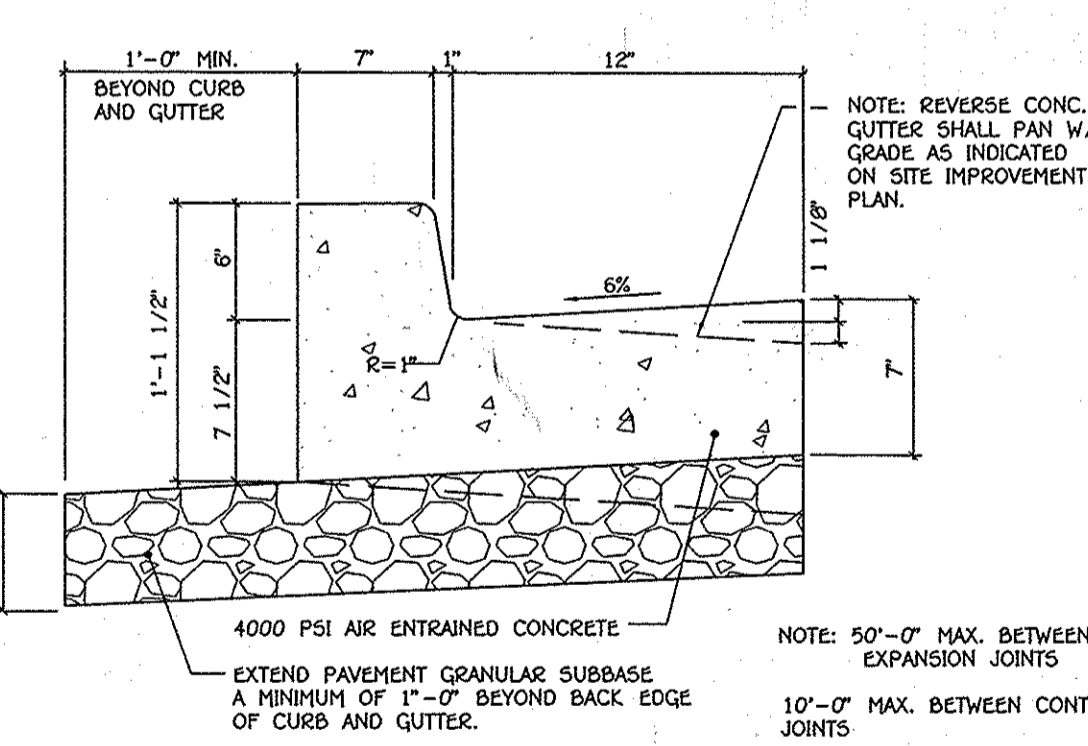


NOTES:
 1. SIDEWALK TO BE SCRIBED IN EQUALLY 5'-0" MAXIMUM SQUARES.
 2. EXPANSION JOINTS ACROSS THE SIDEWALK NOT TO MORE THAN 15' APART.
 3. 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK-FILL WITH SEALANT.
 4. 4000 PSI AIR ENTRAINED CONCRETE SHALL BE USED.
 5. WHEN SIDEWALK ABUTS CURB, WALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB.
 6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT EXPANSION JOINT LOCATIONS AND SHALL BE MENDLITHIC WITH THE SIDEWALK.
 7. SIDEWALK WIDTH ADJACENT TO CURB SHALL BE 5'-0" MIN.
 8. SIDEWALK LOCATED 2' OR MORE FROM CURB MAY BE 4'-0" IN WIDTH WITH A 5' X 5' PAVED SECTION PLACED 200' APART.
 9. PROVIDE 1/2" EXPANSION JOINT WHERE WALKS ABUT EXISTING CONCRETE SURFACES TO REMAIN.

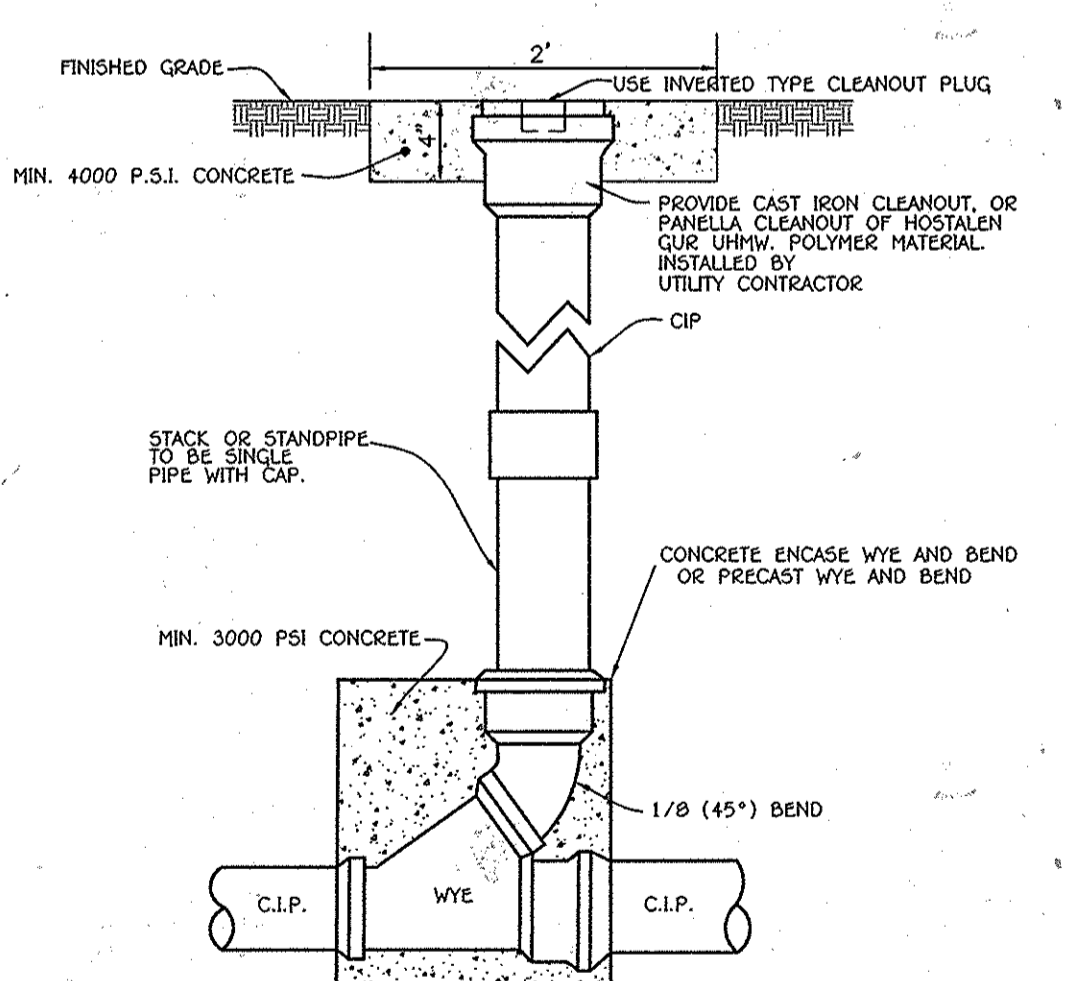
3 CONCRETE SIDEWALK DETAIL
 NO SCALE



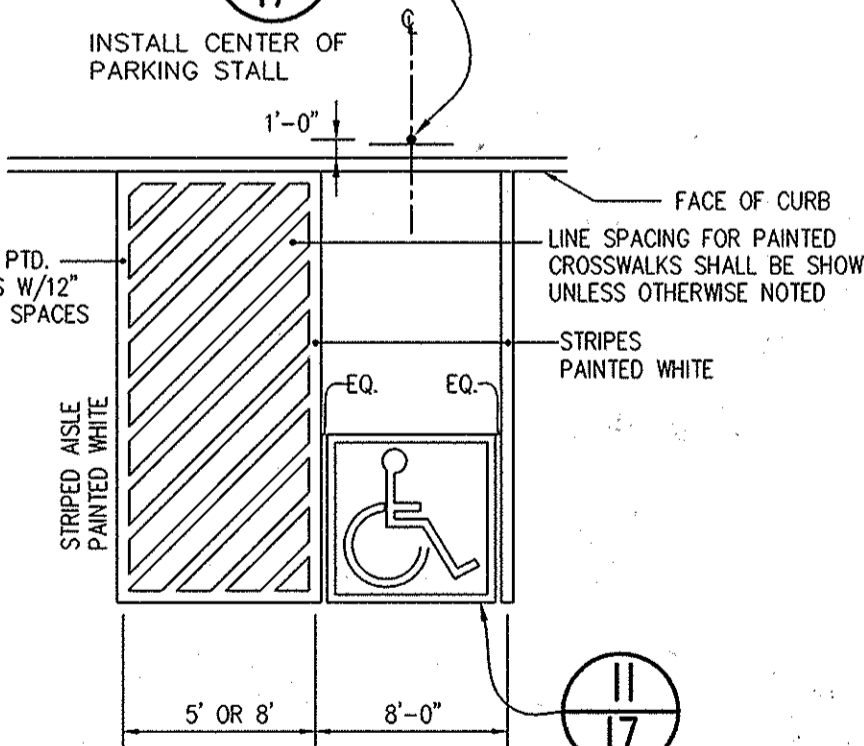
7 BICYCLE RACK DETAIL
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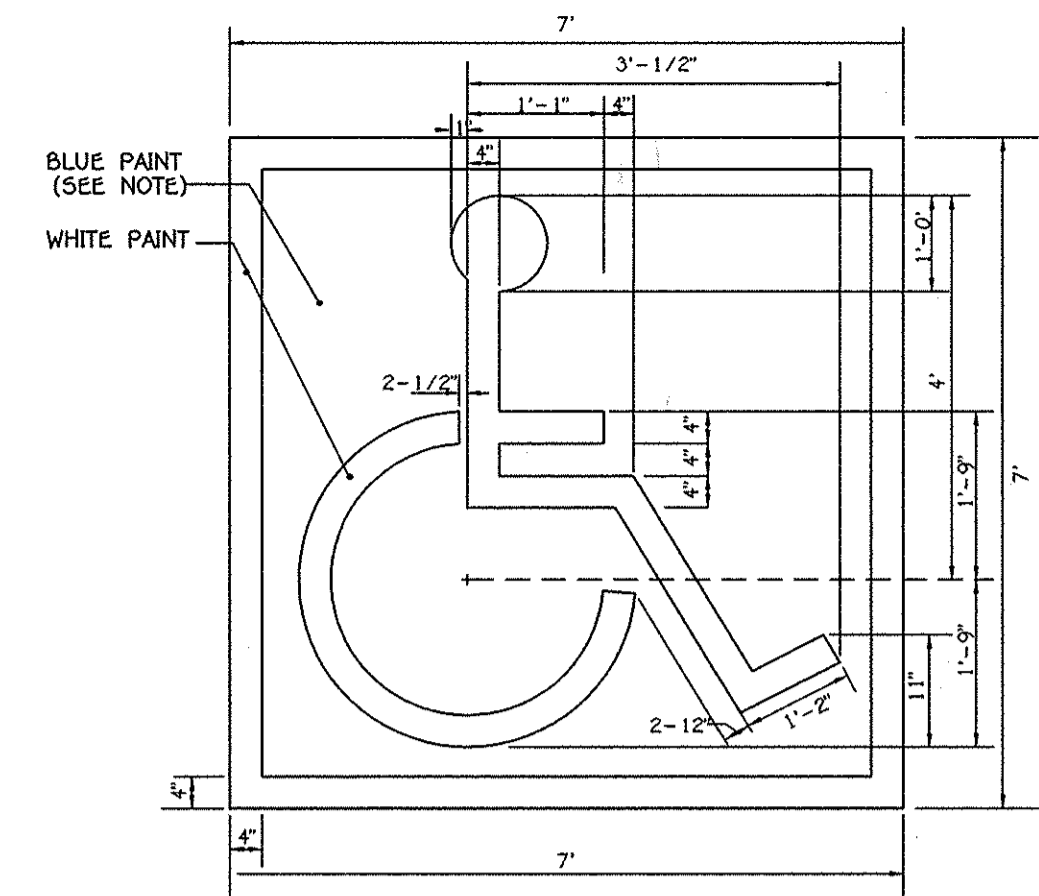
4 STANDARD 6" COMB. CONC. CURB AND GUTTER
 NO SCALE



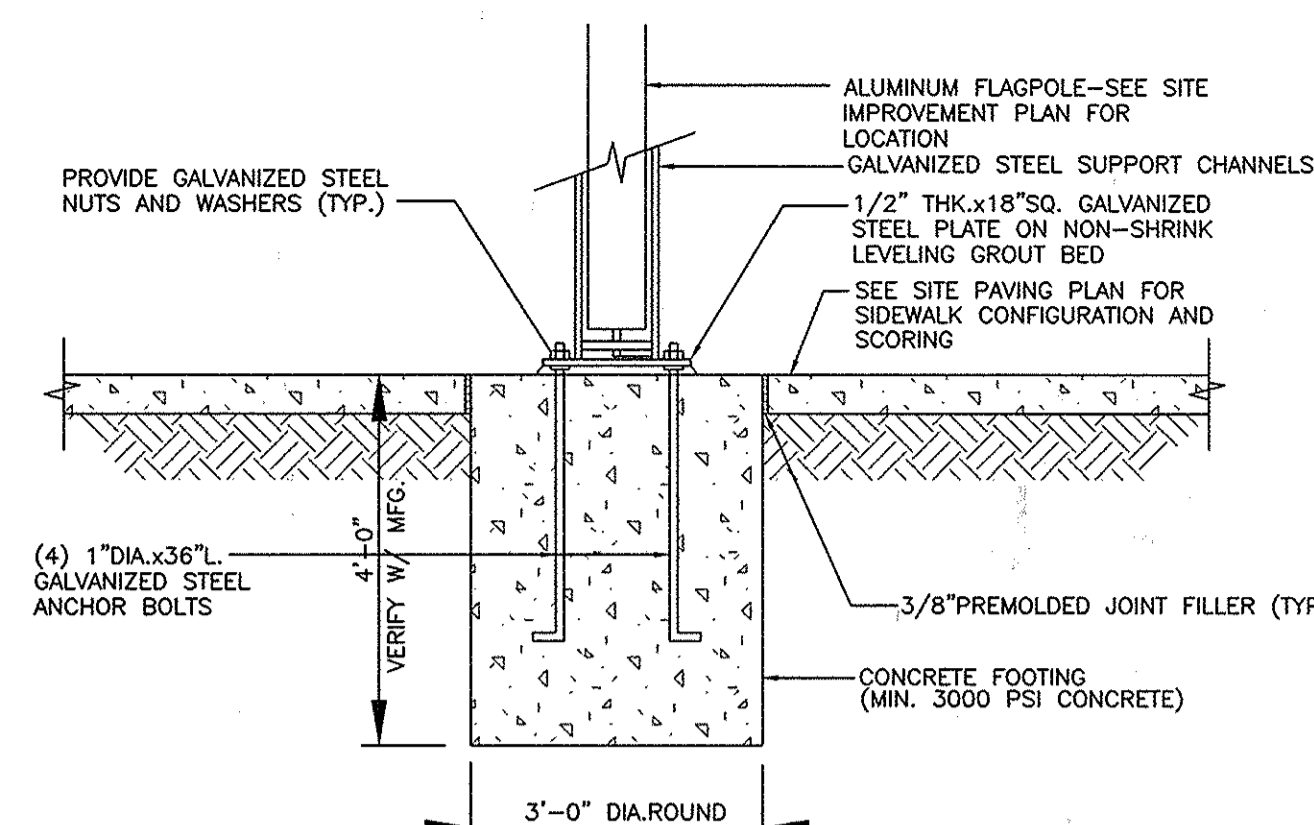
8 TYPICAL ROOF LEADER CLEAN-OUT
 NO SCALE



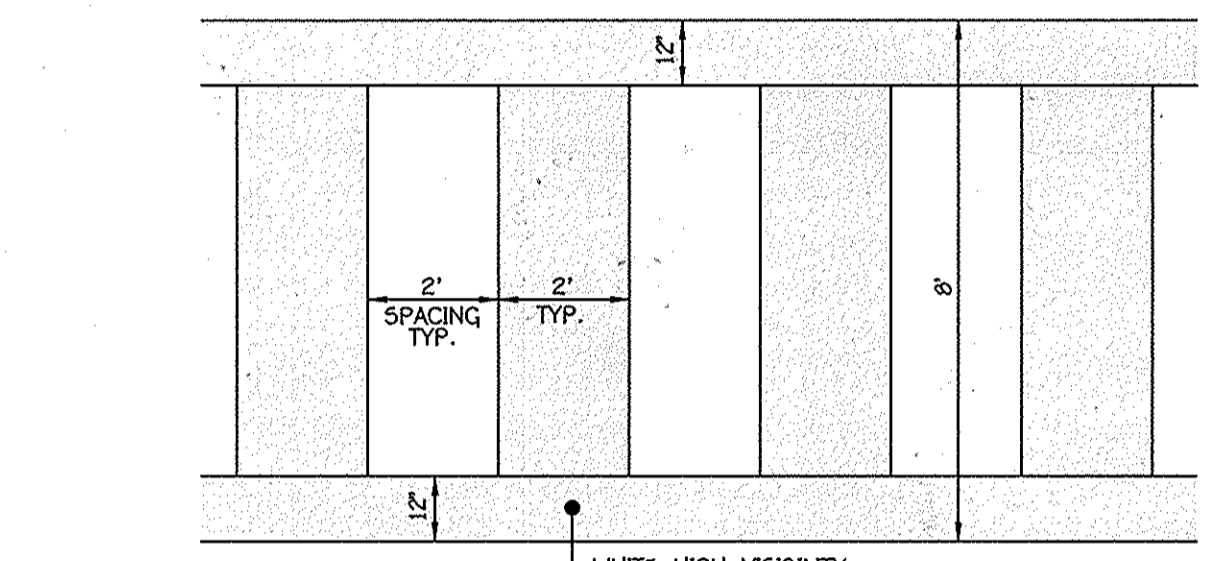
10 ACCESSIBLE SPACE LAYOUT
 NO SCALE



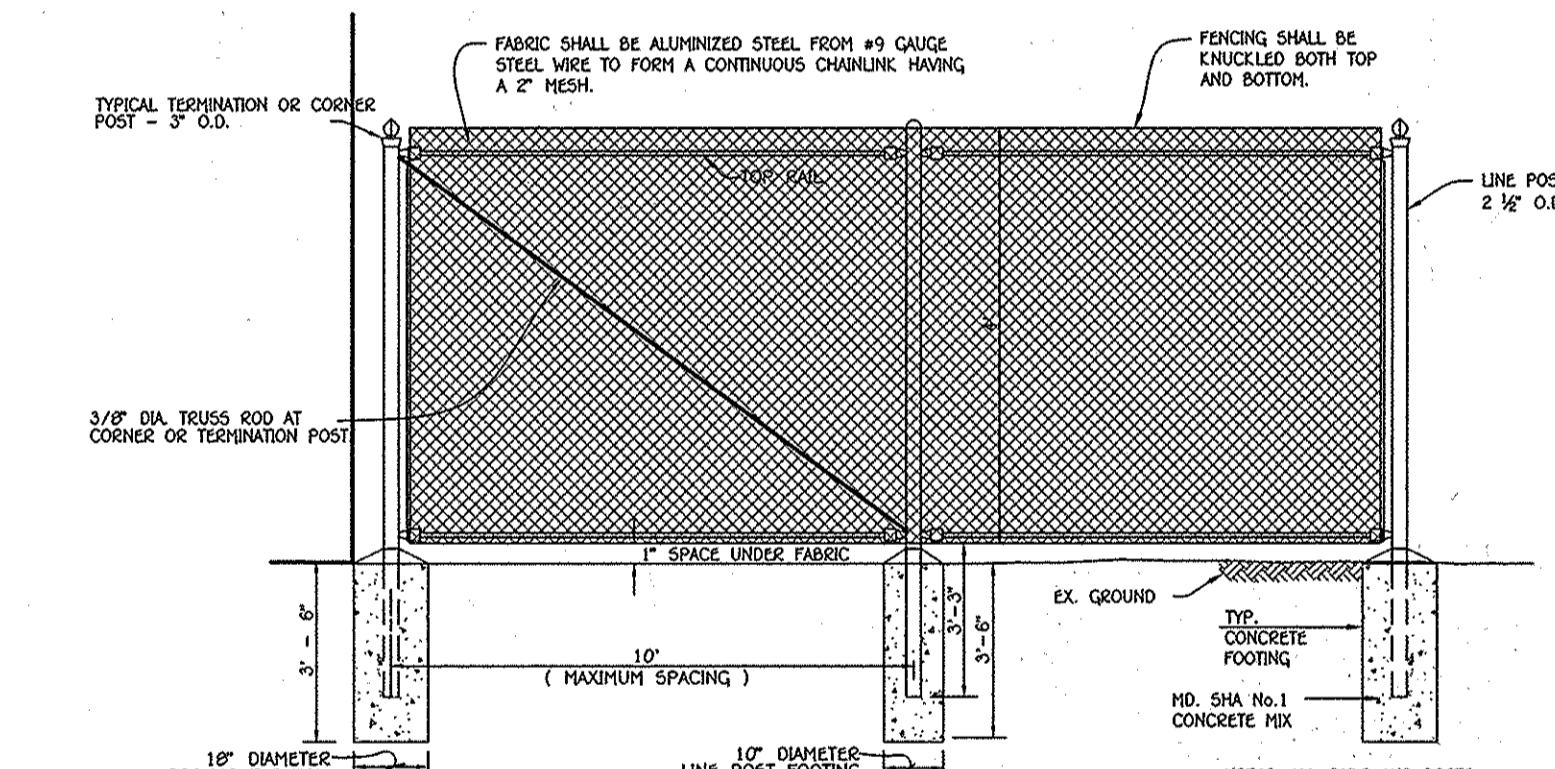
11 HANDICAP SPACE STENCIL LAYOUT
 NO SCALE



14 TILT FLAGPOLE DETAIL
 NO SCALE



12 PEDESTRIAN CROSSWALK DETAIL - HESPERUS DRIVE
 HOWARD COUNTY STANDARD DETAIL T-7.03
 NO SCALE



13 CHAIN LINK FENCE DETAIL
 NO SCALE

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Sevenside Ave., Severna Park, MD 21146 410-981-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE JULY 11, 2013

D. J. DORSEY
 03/09/16

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 THIS IS NO INFORMATION PROVIDED ON THIS SHEET
 D. J. DORSEY
 03/09/16
 D. ANDREW DORSEY, PE. DATE
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45281

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.
 NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW DETAILS FOR THE PROPOSED BUILDING ADDITIONS AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21117
 (410) 461-2000



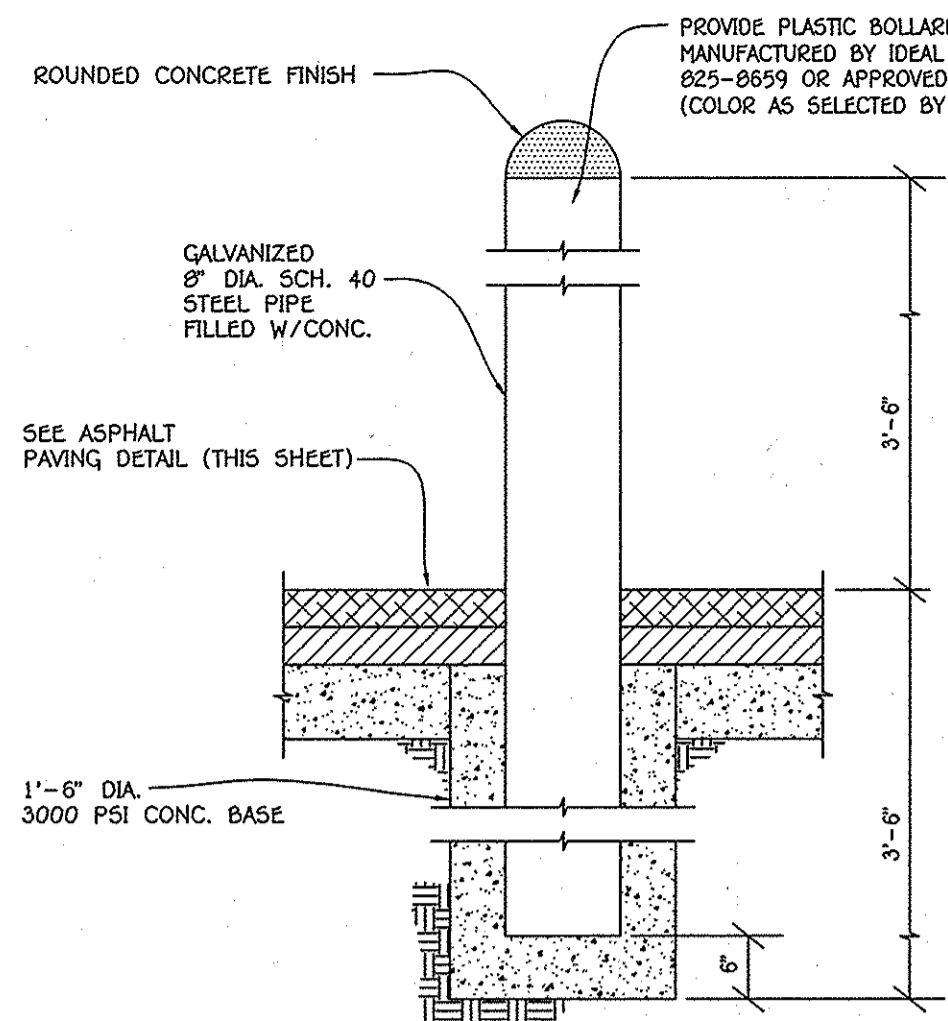
"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."
 Charles J. Grovo, Sr., P.E.
 7/16/13 DATE

2/16/13 AS-BUILT PLAN
 DATE DESCRIPTION REVISION BLOCK
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Bruce Gist
 Director - Department of Planning and Zoning
 Chief, Development Engineering Division
 7/31/13 DATE
 7/26/13 DATE

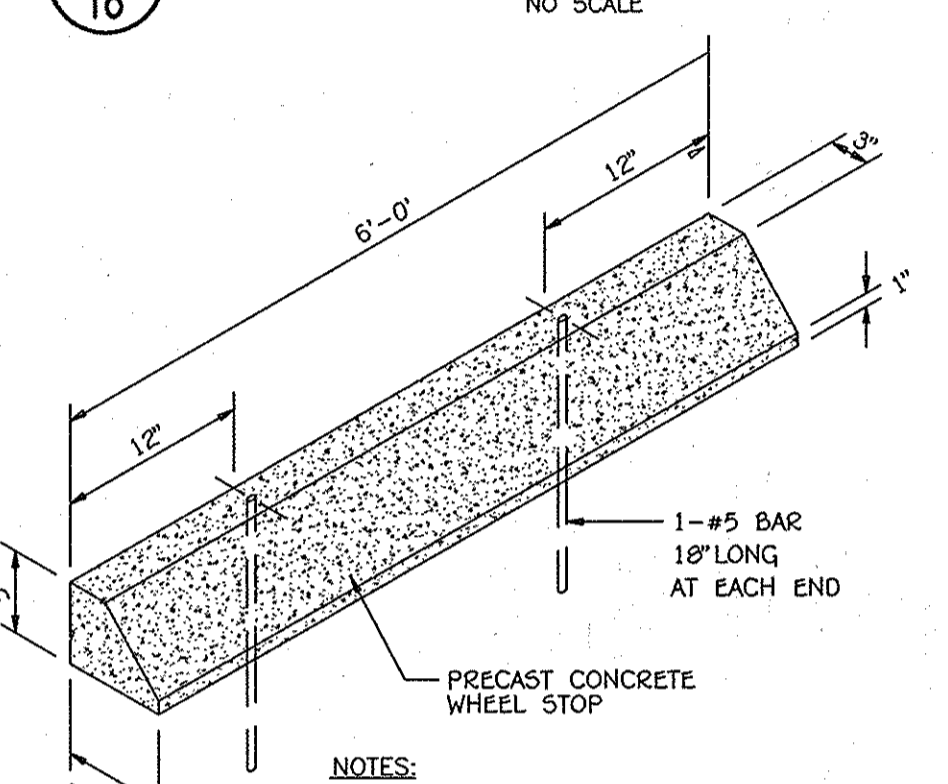
PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805
 SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart					
Lot Number	Street Address				
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044				
PROJECT	SECTION/AREA	PARCELS			
LONGFELLOW ELEMENTARY SCHOOL	1/5	261			
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	SEWER CODE				
I-02	5583000				

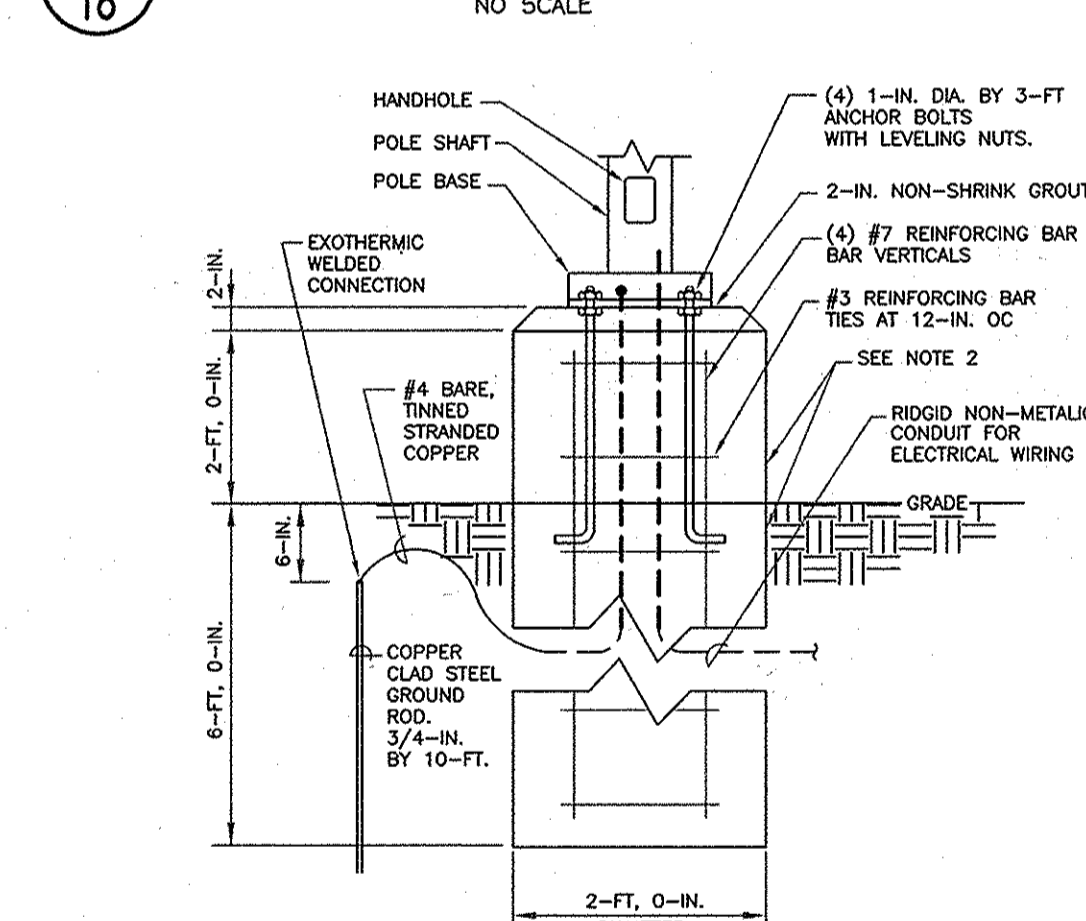
DETAIL SHEET
 "REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
 CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL 29, 2013
 SHEET 17 OF 28



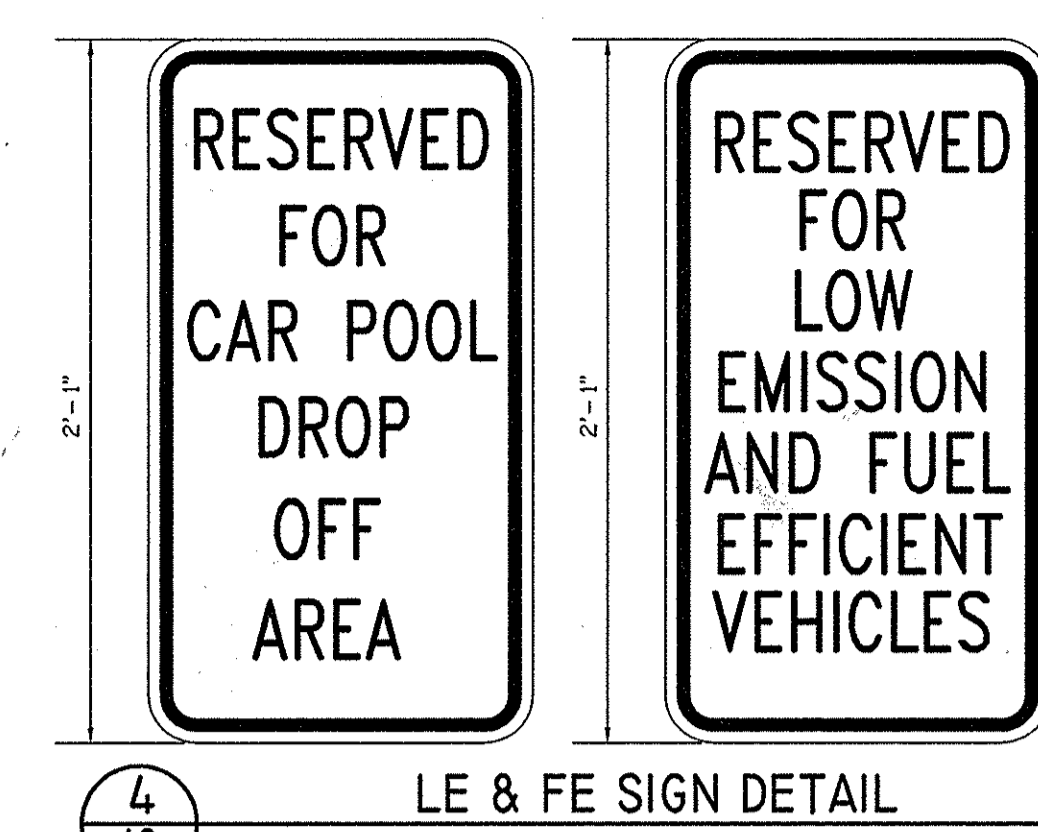
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18 BOLLARD DETAIL
NO SCALE



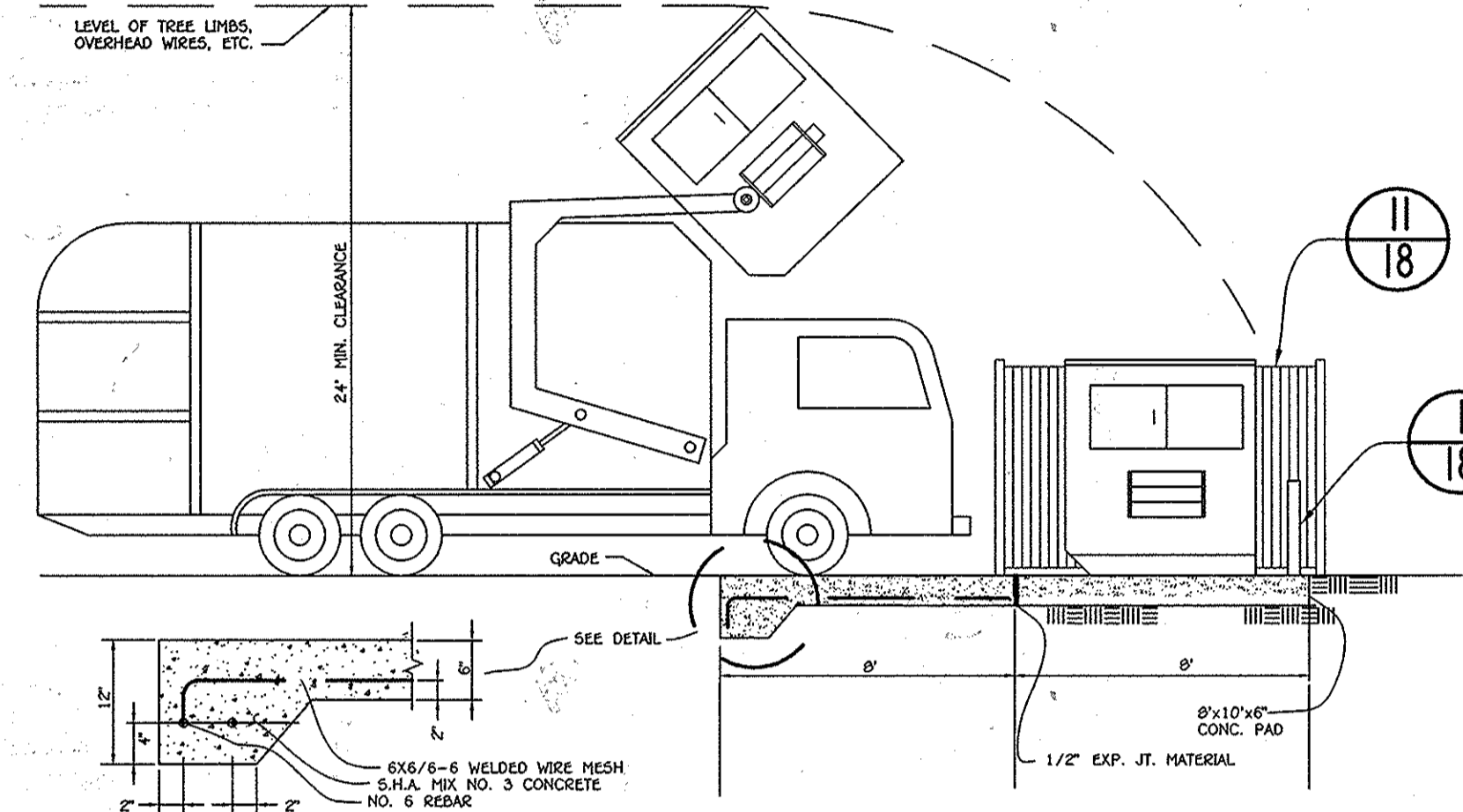
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18 WHEEL STOP DETAIL
NO SCALE



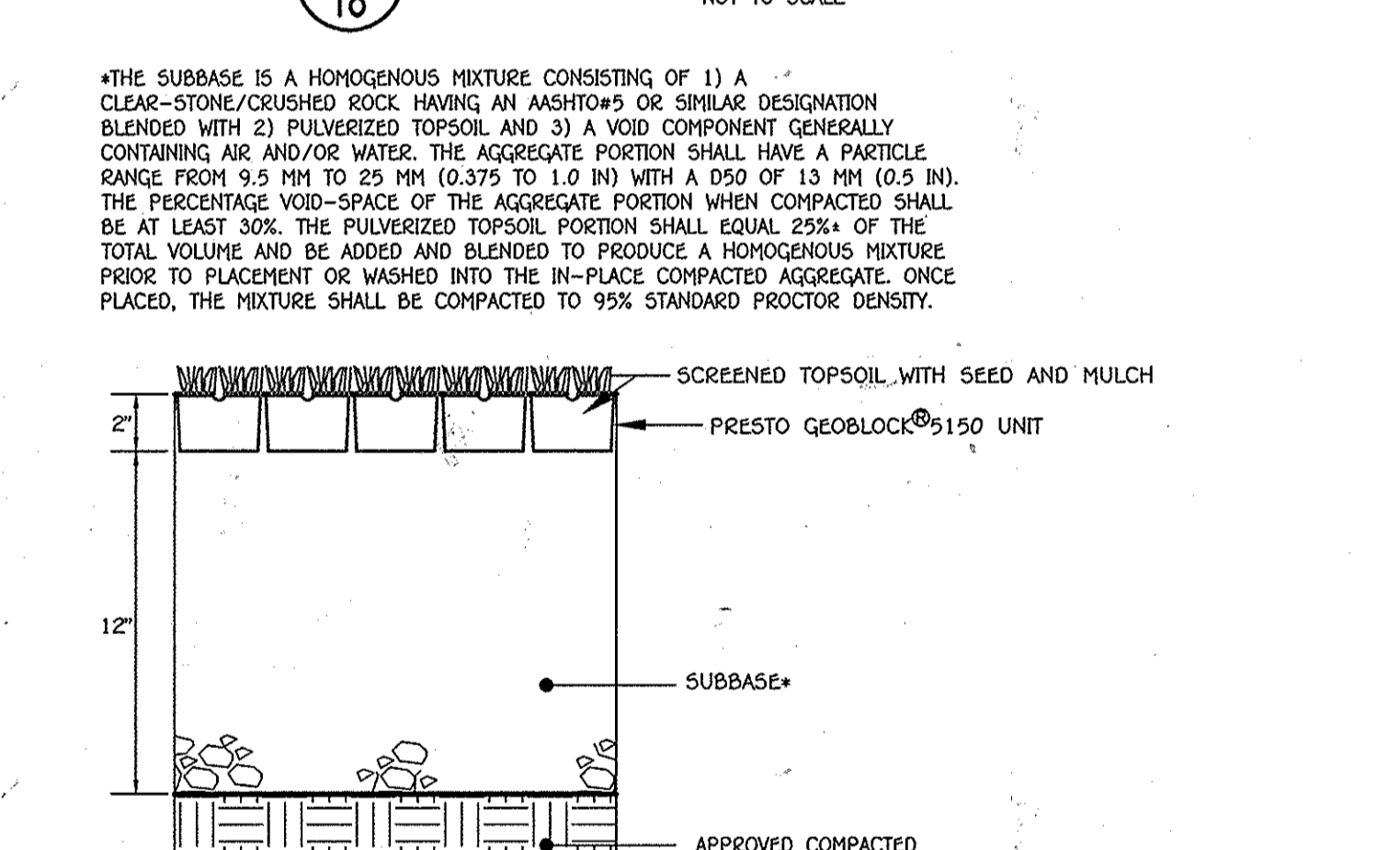
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18 LIGHTING FIXTURE
SEE ELEC. DETAIL 8/ED.3 FOR INFORMATION
NO SCALE



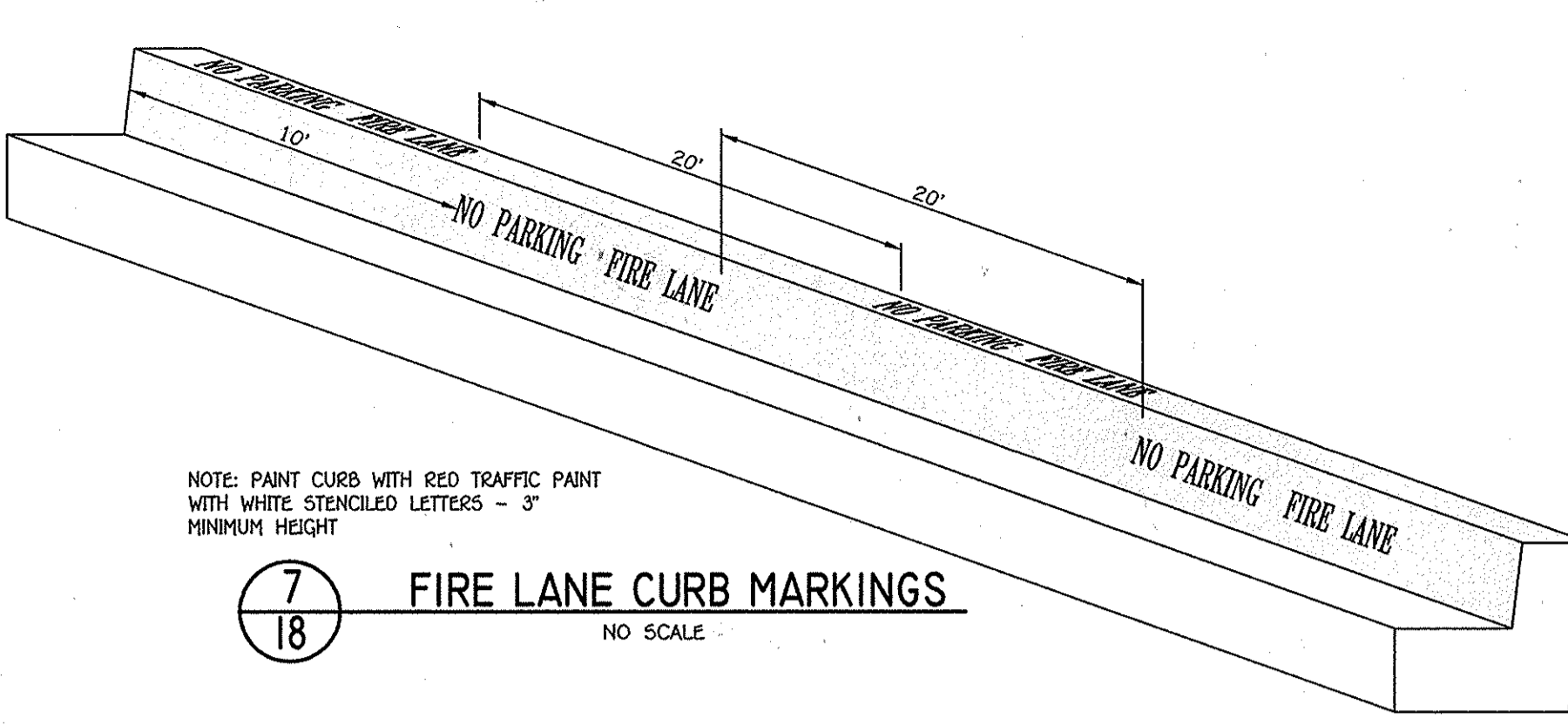
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18 LE & FE SIGN DETAIL
NOT TO SCALE



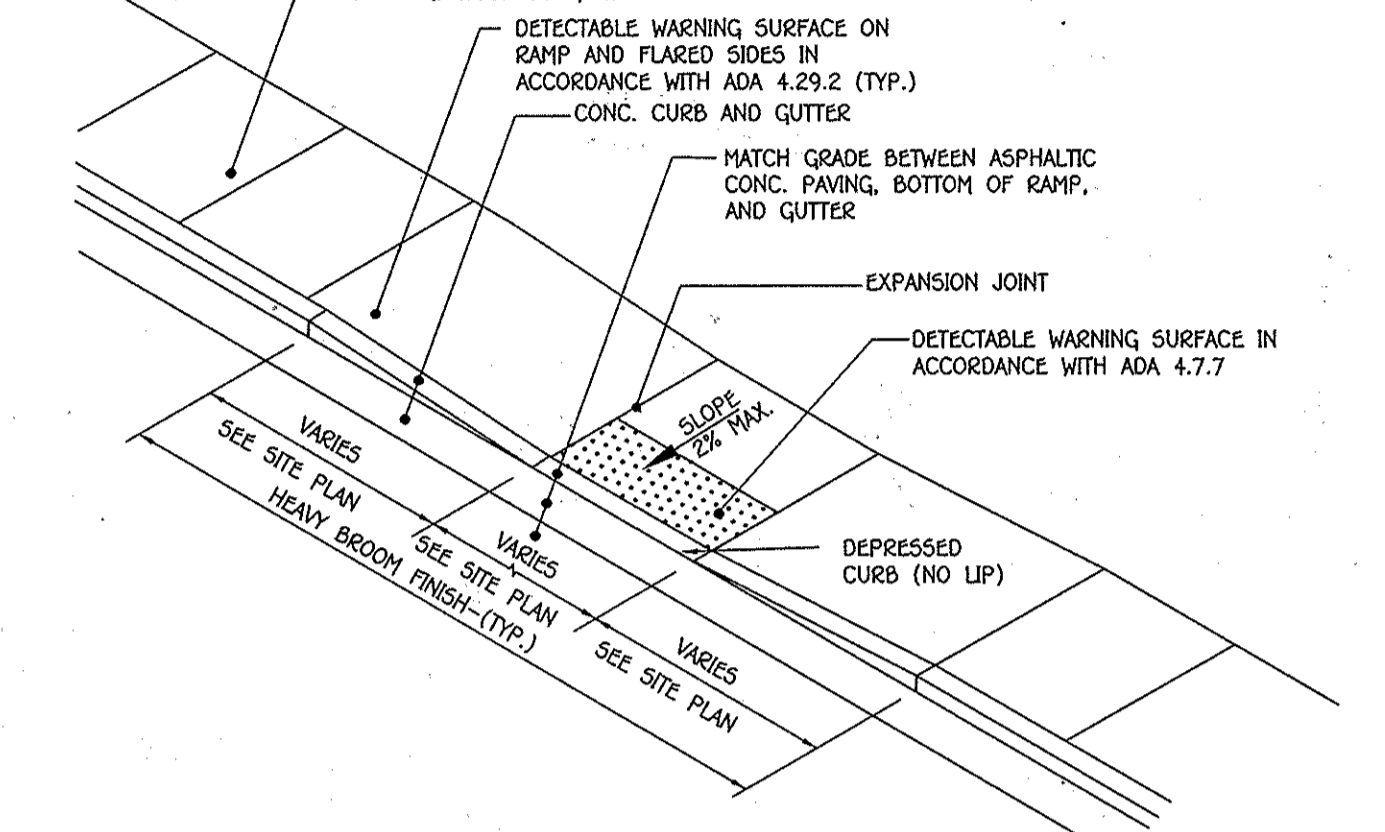
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18 SOLID WASTE SERVICE DETAIL
HOWARD COUNTY STANDARD DETAIL R-8.03
NOT TO SCALE



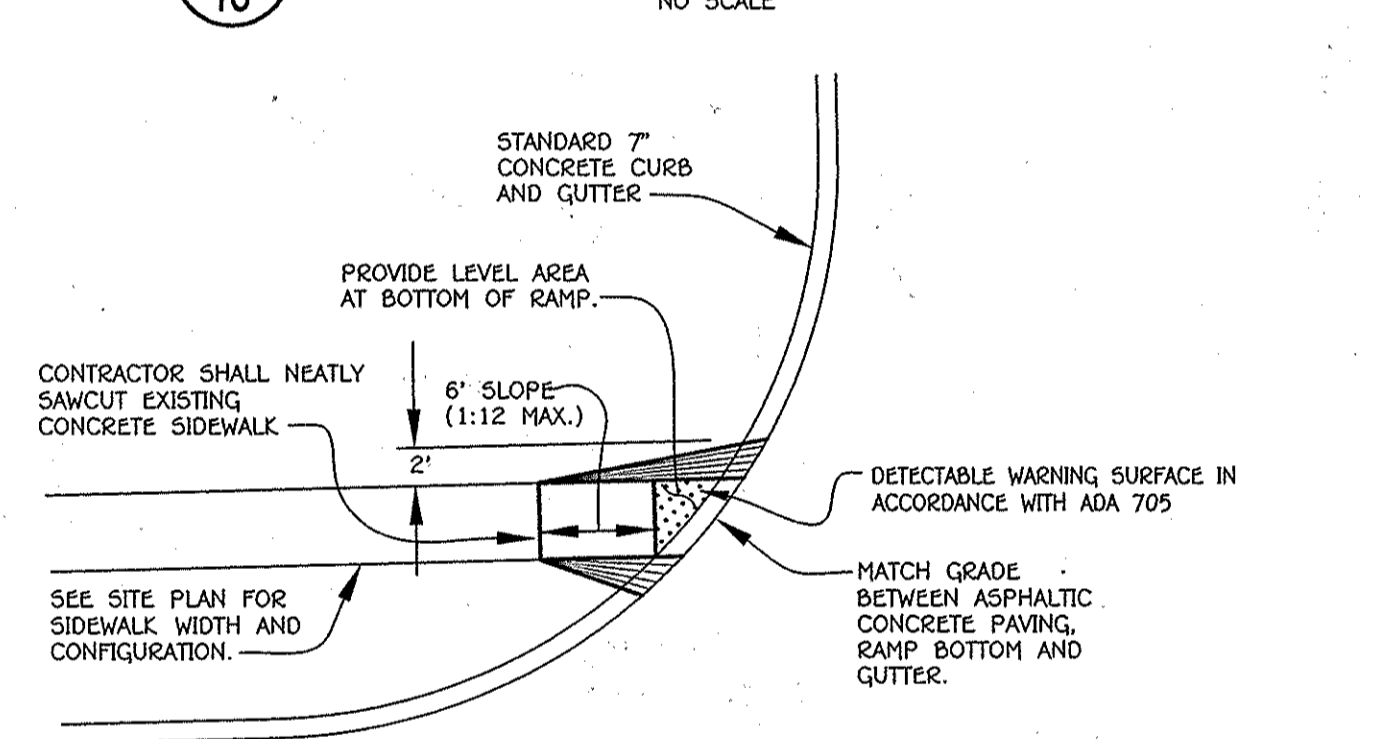
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18 GRASS PAVER SYSTEM
PRESTO GEOSYSTEMS - GEOBLOCK® 5150
NO SCALE



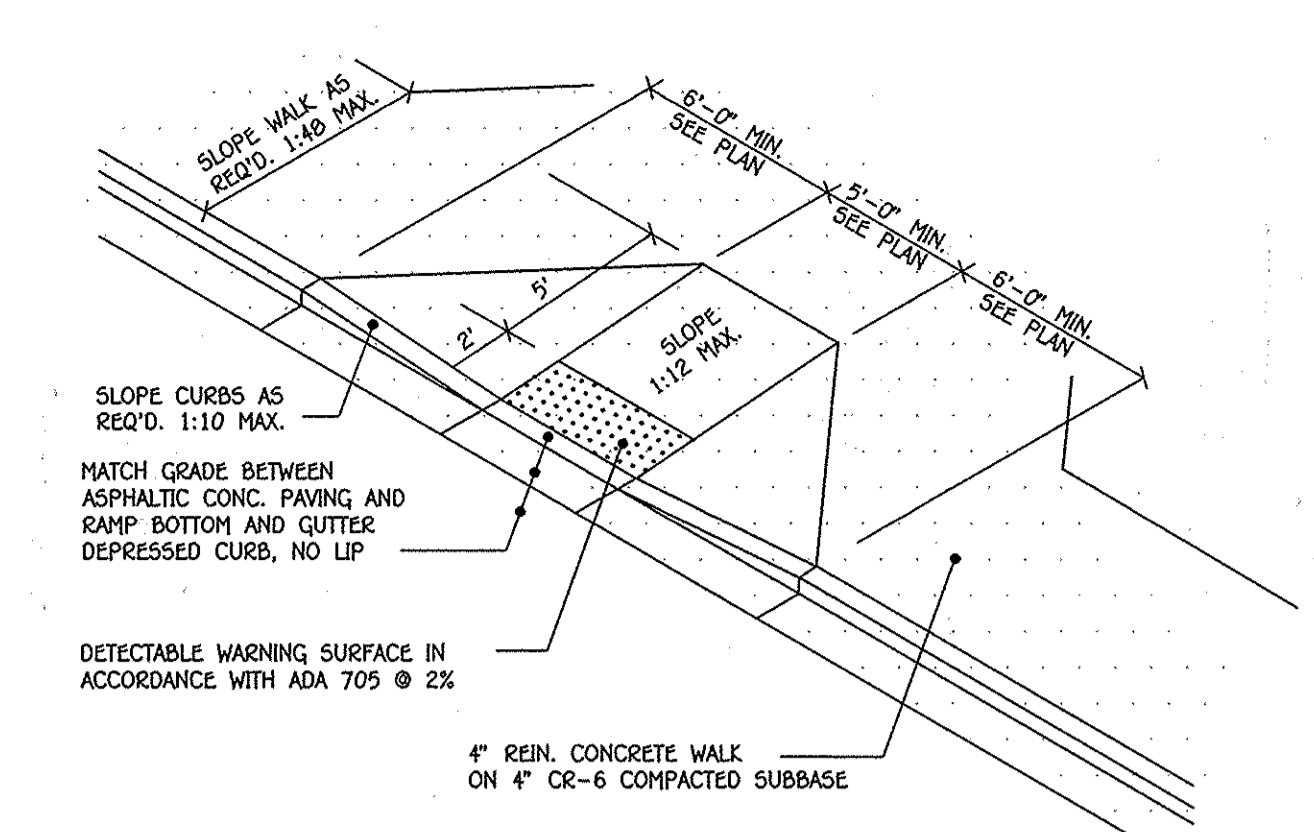
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18 FIRE LANE CURB MARKINGS
NO SCALE



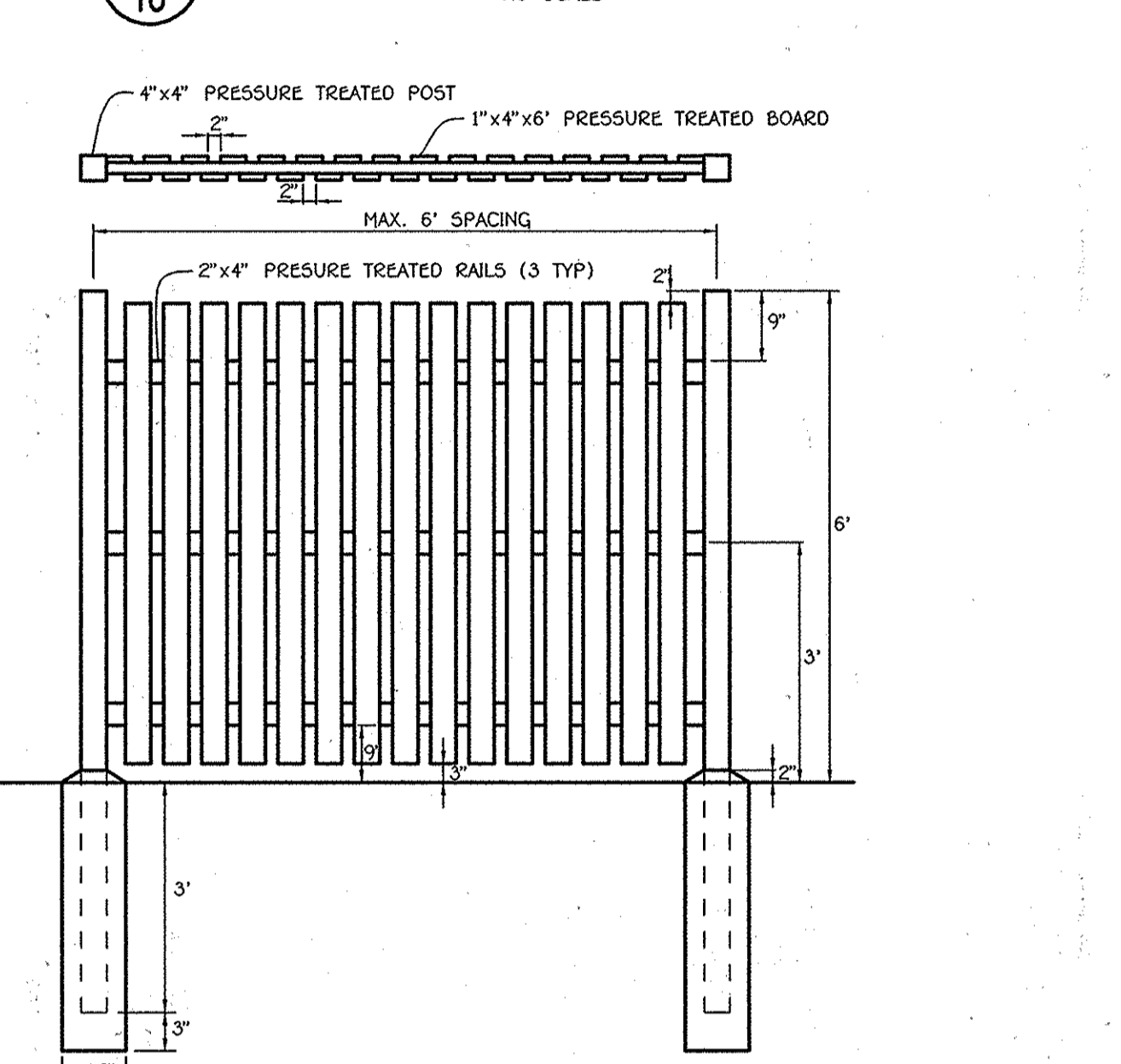
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18 HANDICAP CURB RAMP DETAIL
NO SCALE



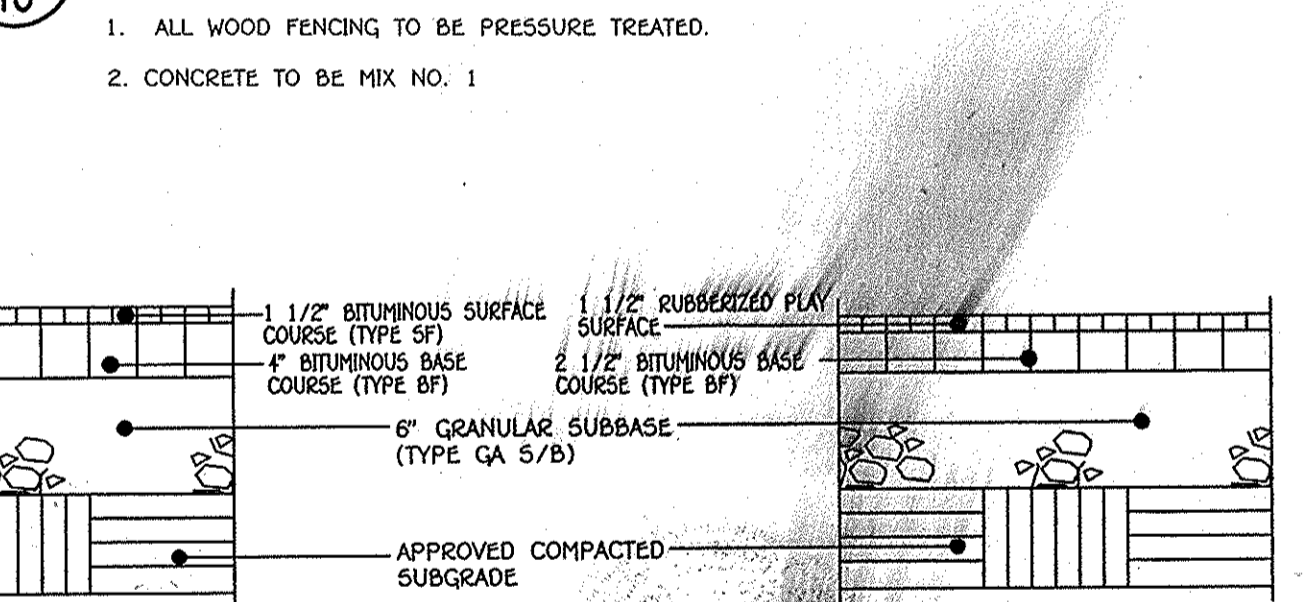
9
18 HANDICAP RAMP 'C' DETAIL
NO SCALE



10
18 SIDEWALK RAMP DETAIL
NO SCALE



11
18 BOARD ON BOARD FENCE
NO SCALE



12
18 RUBBERIZED PLAY SURFACE DETAIL
NO SCALE

NOTES:
[1] CONTRACTOR SHALL TEST EACH DRILLED HOLE FOR POLE FOUNDATION WHEN DRILLED INTO COHESIVE SOILS (CLAYS) TO DETERMINE IF A THUMB CAN BE INSERTED EASILY INTO SOIL ON SIDE OF HOLE. IF SO, NOTIFY ENGINEER. FOUNDATION DEPTH MAY NEED TO INCREASE TO 7-FT.
[2] FORM 2-FT ROUND BASE ABOVE GRADE AND 6-FT BELOW GRADE WITH SONOTUBE. CONCRETE STRENGTH SHALL BE AS FOLLOWS:
S'C = 3,000 PSI
S'y = 60,000 PSI
POUR IN THE RANGE OF 4 TO 5-IN. SLUMP.
CONCRETE FINISH FOR EXPOSED PORTIONS OF FOUNDATION SHALL BE SMOOTH AND FREE OF VOIDS OR HONEYCOMBS. CONTRACTOR SHALL VIBRATE EXPOSED PORTION AND USE MEANS NECESSARY TO ACHIEVE ACCEPTABLE FINISH.
[3] COORDINATE FOUNDATION CONSTRUCTION WITH BASE PLATE, ANCHOR BOLT TEMPLATE, AND BOLT COVER CONFIGURATION OF APPROVED LIGHT POLE.

*THE SUBBASE IS A HOMOGENOUS MIXTURE CONSISTING OF 1) A CLEAR-STONE/CRUSHED ROCK HAVING AN AASHTOFF'S OR SIMILAR DESIGNATION BLENDED WITH 2) PULVERIZED TOPSOIL AND 3) A VOID COMPONENT GENERALLY CONTAINING AIR AND/OR WATER. THE AGGREGATE PORTION SHALL HAVE A PARTICLE RANGE FROM 9.5 MM TO 25 MM (0.375 TO 1.0 IN) WITH A 90% OF 13 MM (0.5 IN). THE PERCENTAGE VOID-SPACE OF THE AGGREGATE PORTION WHEN COMPACTED SHALL BE AT LEAST 30%. THE PULVERIZED TOPSOIL PORTION SHALL EQUAL 25% OF THE TOTAL VOLUME AND BE ADDED AND BLENDED TO PRODUCE A HOMOGENOUS MIXTURE PRIOR TO PLACEMENT OR WASHED INTO THE IN-PLACE COMPACTED AGGREGATE. ONCE PLACED, THE MIXTURE SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

CONTRACTOR TO NEATLY SAWCUT EXISTING CONCRETE SIDEWALK.
CONTRACTOR SHALL INSTALL MACADAM PAVING OUTSIDE RUBBERIZED PLAY AREA.
CONTRACTOR TO INSTALL RUBBERIZED PLAY SURFACE WITHIN PLAY EQUIPMENT AREA TO A MINIMUM 6 FEET FROM EDGE OF PLAY EQUIPMENT.



AS-BUILT ENGINEER CONSULTANT CERTIFICATION
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.
D. A. D. 03/09/16
ANDREW DORSEY, PE DATE
MARYLAND REGISTERED PROFESSIONAL ENGINEER NO. 45261

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704 Sevenside Ave., Severna Park, MD 21146 410-987-3456
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APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

"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. 13204, Expiration Date: November 3, 2014."
Charles J. Carvo, Sr., P.E. 7/16/13 DATE

2/16	AS-BUILT PLAN	
1/6/14	REVISED RUBBERIZED PLAY SURFACE DETAIL	
	DESCRIPTION	REVISION BLOCK
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
Director - Department of Planning and Zoning		
Chief, Division of Land Development		
Chief, Development Engineering Division		
	7/31/13	DATE
	7/31/13	DATE
	7/26/13	DATE

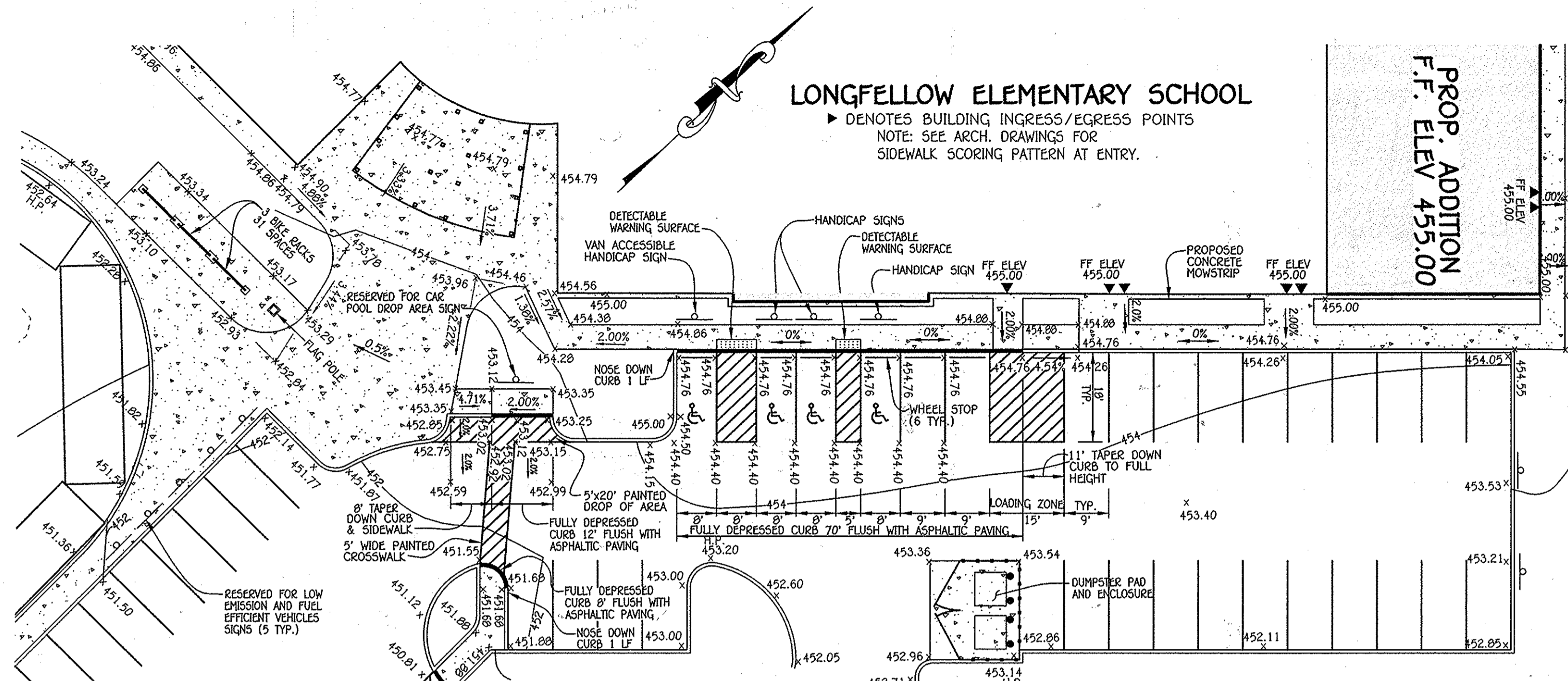
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044
PROJECT	SECTION/AREA
LONGFELLOW ELEMENTARY SCHOOL	1/5
PARCELS	261
PLAT REF.	BLOCK NO.
PB.13 F.79	18
ZONE	TAX MAP
NT O.S.	29
ELEC. DIST.	FIFTH
CENSUS TR.	6055
WATER CODE	SEWER CODE
1-02	5583000

DETAIL SHEET
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL 29, 2013
SHEET 18 OF 28

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21046
(410) 461-2095



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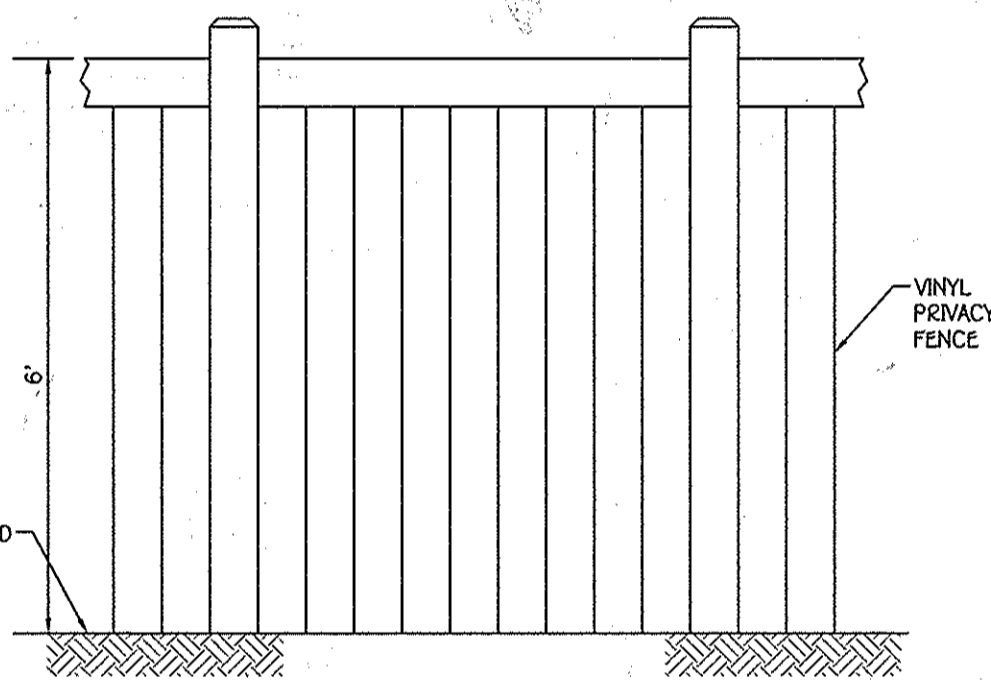


HANDICAP PARKING AND ACCESS PLAN

SCALE: 1" = 20'

SIGNAGE AND PAVEMENT MARKING NOTES:

1. ALL SIGN LOCATIONS AND PAVEMENT MARKINGS TO BE INSTALLED IN THE COUNTY RIGHT-OF-WAY OR AT A COUNTY INTERSECTION MUST BE APPROVED BY THE HOWARD COUNTY TRAFFIC DIVISION (410-313-2430).
2. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
3. SIGNAGE ALONG HESPERUS DRIVE SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE PARKING LOT PAVING.
4. ALL PAINT FOR PARKING STRIPING, BUS LOOP STRIPING, HANDICAPPED SYMBOLS AND CROSSWALKS TO BE ACRYLIC OR LATEX PAINT ESPECIALLY FORMULATED AND MANUFACTURED FOR USE ON ASPHALTIC CONCRETE UNDER TRAFFIC CONDITIONS. ACCEPTABLE STRIPING PAINTS ARE "NON-REFLECTIONIZED" BY SHERWIN WILLIAMS OR "IRON-CLAD" BY BENJAMIN MOORE. PARKING STRIPES SHALL BE 4" WIDE WHITE UNLESS OTHERWISE NOTED. ACCESSIBLE SPACE STENCIL SHALL BE PAINTED BLUE IN ACCORDANCE WITH FEDERAL STANDARD 5952.



PRIVACY FENCE SECTION

NO SCALE

PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. 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 NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECT, LATEST EDITION, INCLUDING ALL AGENDA.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF 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.

BID SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.

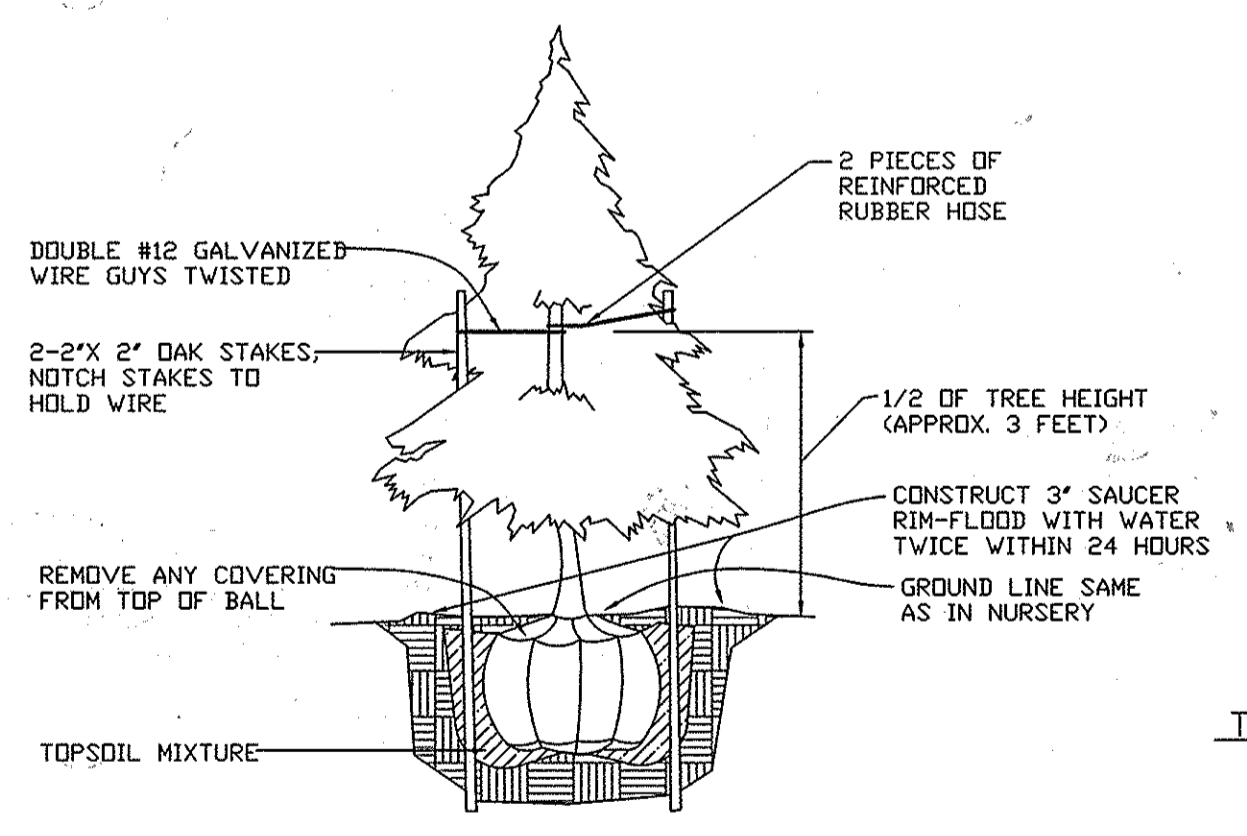
ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE.

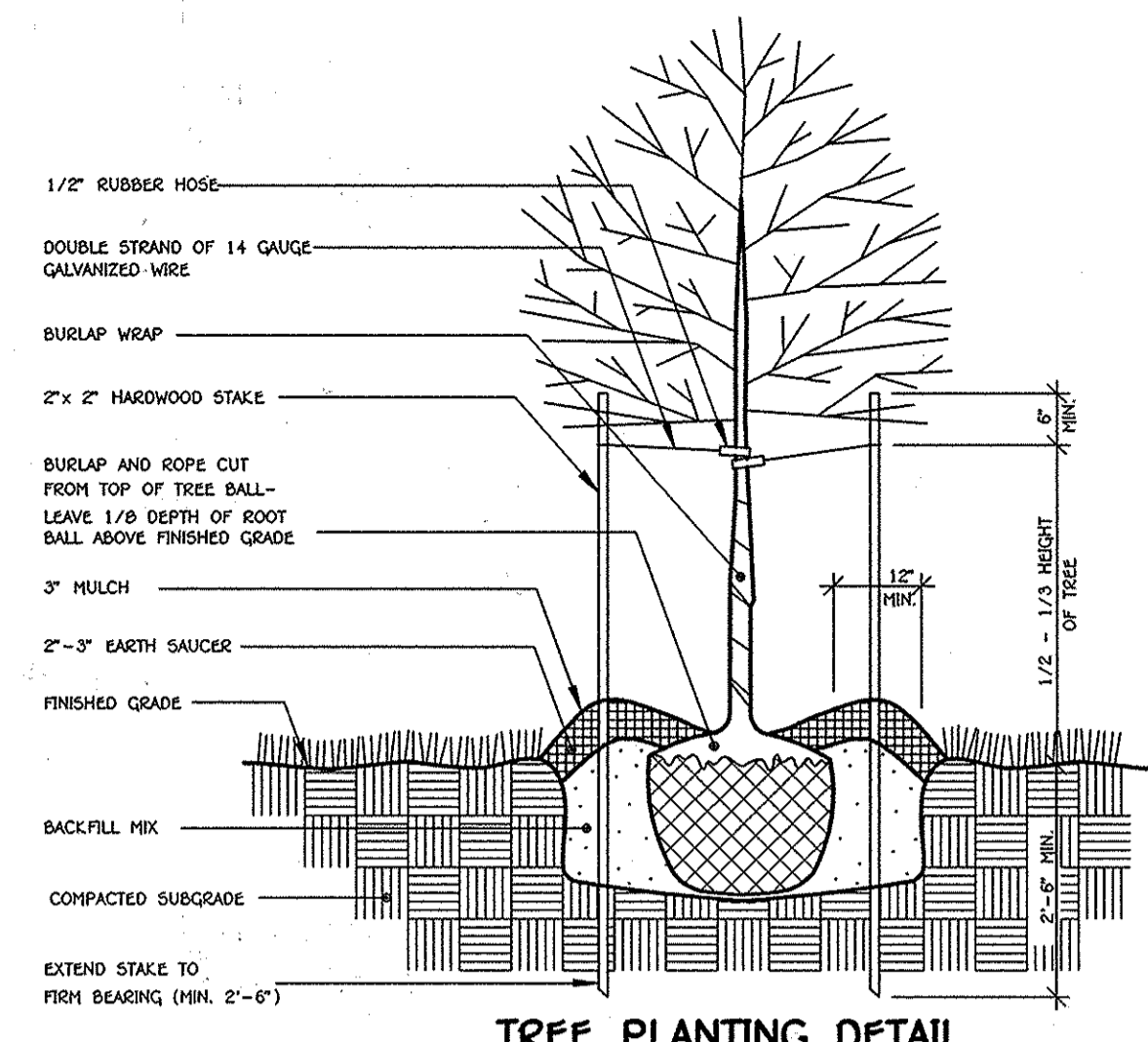
PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-SORTED COV OR HORSE MANURE, ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL, ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED.



EVERGREEN PLANTING DETAIL



TREE PLANTING DETAIL

SCHEDULE A PERIMETER LANDSCAPE EDGE (P-#)				
PERIMETER	P1	P2	P3	P4
CATEGORY	Non-Res. Adjacent to Roadway	Non-Res. Adjacent to Residential	Non-Res. Adjacent to Residential	Non-Res. Adjacent to Non-Res
LANDSCAPE TYPE	B	E	E	A
LINEAR FEET OF PERIMETER	243.69'	120.00'	110.00'	195.00'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	NO	YES (98')	YES (173')	YES (195')
NUMBER OF PLANTS PROVIDED				
SHADE TREES	5	0	0	0
EVERGREEN TREES	6	0	0	0
SHRUBS	0	0	0	0
NUMBER OF PLANTS PROVIDED				
SHADE TREES	5	0	0	0
EVERGREEN TREES	6	0	0	0
OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION)	0	0	0	0
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	0	0	0	0

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	95
NUMBER OF TREES REQUIRED (1/20 SP)	5
NUMBER OF TREES PROVIDED	
SHADE TREES	5
OTHER TREES (2:1 SUBSTITUTION)	-

PLANT LIST

QTY.	KEY	BOTANICAL NAME COMMON NAME	SIZE	CONT.	REMARKS
TREES - DECIDUOUS SHADE					
5	ARF	Acer x freemanii 'Autumn Blaze'	3" - 3-1/2" cal.	B & B	Seedless
		Freeman Maple			
5	LS	Acer rubrum 'October Glory'	2-1/2" - 3" cal.	B & B	
		October Glory Red Maple			
TREES - EVERGREEN					
6	LCY	Cupressocyparis leylandii	6" - 8" Ht.	B & B	
		Leyland Cypress			

PLANTING NOTES:

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND IS TO BE USED FOR PLANTING ONLY. LANDSCAPING SHALL BE PROVIDED AS SHOWN ON THIS PLAN SHEET. NO SURETY IS REQUIRED SINCE THIS IS A HOWARD COUNTY BOARD OF EDUCATION PROJECT.
2. CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK. ALL GENERAL NOTES FROM SHEET 1, SHALL APPLY.
3. FIELD VERIFY UNDERGROUND UTILITY LOCATIONS AND EXISTING CONDITIONS BEFORE STARTING PLANTING WORK, EVEN WHERE PLANT LOCATIONS ARE DIMENSIONED. CONTACT CONSTRUCTION MANAGER IF ANY RELOCATION ARE REQUIRED.
4. PLANT QUANTITIES SHOWN ON PLANT LIST ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON THE PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL TAKE PRECEDENCE.
5. ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE A.A.N. SPECIFICATIONS, AND BE INSTALLED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
6. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES BUT NOT OTHERWISE PLANTED, PAVED OR MULCHED SHALL BE SEEDED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
7. ALL EXPOSED EARTH WITHIN THE LIMITS OF THE PLANTING BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH PER PLANTING DETAILS.
8. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING IF SOIL OR DRAINAGE CONDITIONS ARE ENCOUNTERED WHICH MAY BE DETRIMENTAL TO THE GROWTH OF PLANTS.
9. NO SUBSTITUTION SHALL BE MADE WITHOUT WRITTEN CONSENT OF THE OWNER OR HIS REPRESENTATIVE.
10. REFER TO OTHER SITE DWGS. FOR ADDITIONAL SEEDING REQUIREMENTS.

Note: THERE IS NO LANDSCAPING SURETY FOR THE LANDSCAPE PLAN.

NOTE: TREE AND SHRUB TYPES ARE ONLY A RECOMMENDATION. THESE MAY BE REVISED TO A COUNTY APPROVED EQUIVALENT FROM THE HOWARD COUNTY LANDSCAPE MANUAL. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

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 LETTER OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

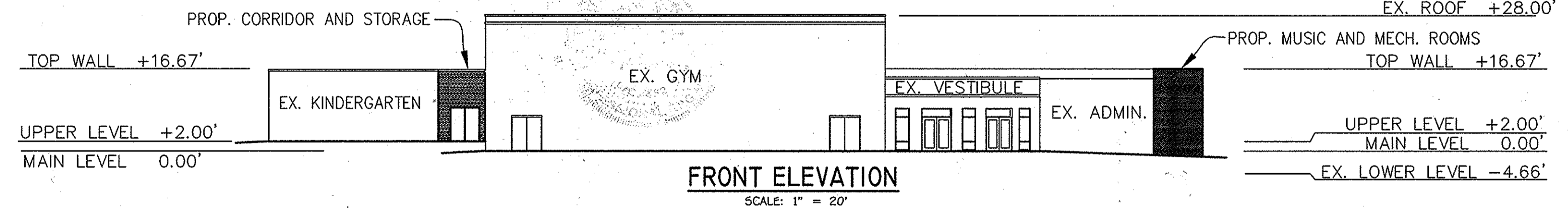
Sam Plavin 7/15/13
 NAME DATE

DELETED
 03/09/16

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 THERE IS NO AS-BUILT INFORMATION PROVIDED IN THIS SET.
D. J. ... 03/09/16
 D. ANDREW DORSETT, DATE MARYLAND REGISTERED PROFESSIONAL ENGINEER NO. 45261

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE JULY 11, 2013

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FRONT ELEVATION

SCALE: 1" = 20'

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALDWIN NATIONAL PIKE
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 A Woman-Owned, Service Disabled Veteran Owned Small Business

"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. 13204, Expiration Date: November 3, 2014."

Charles J. Cravo, Sr., P.E. 7/16/13
 DATE



PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805

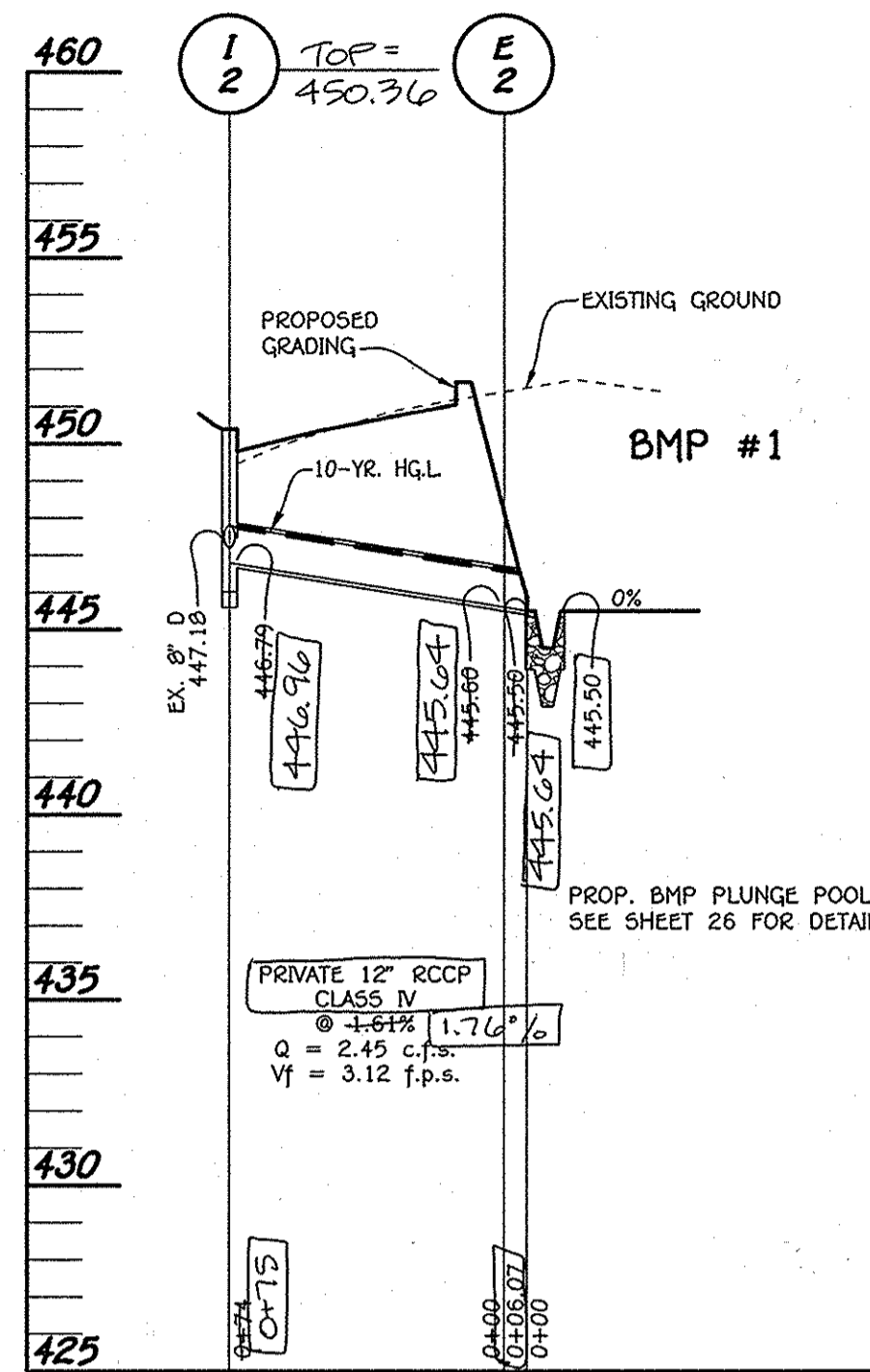
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Andrew Gowers 7/21/13
 Director - Department of Planning and Zoning
Matthew ... 7/31/13
 Chief, Division of Planning and Development
... 7/24/13
 Chief, Development Engineering Division

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
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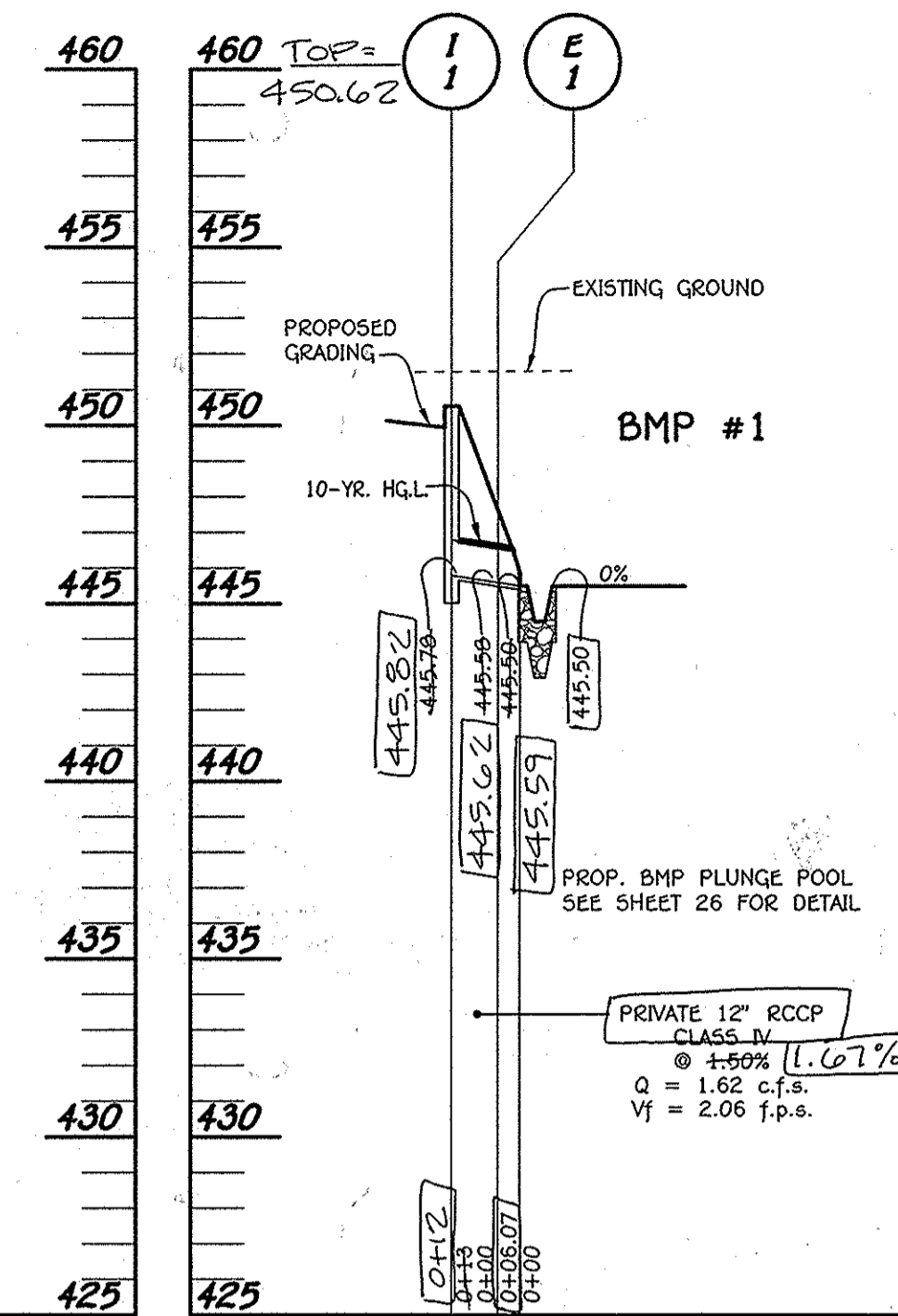
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE
	COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS			
LONGFELLOW ELEMENTARY SCHOOL	1/5	261			
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	SEWER CODE				
1-02		5583000			

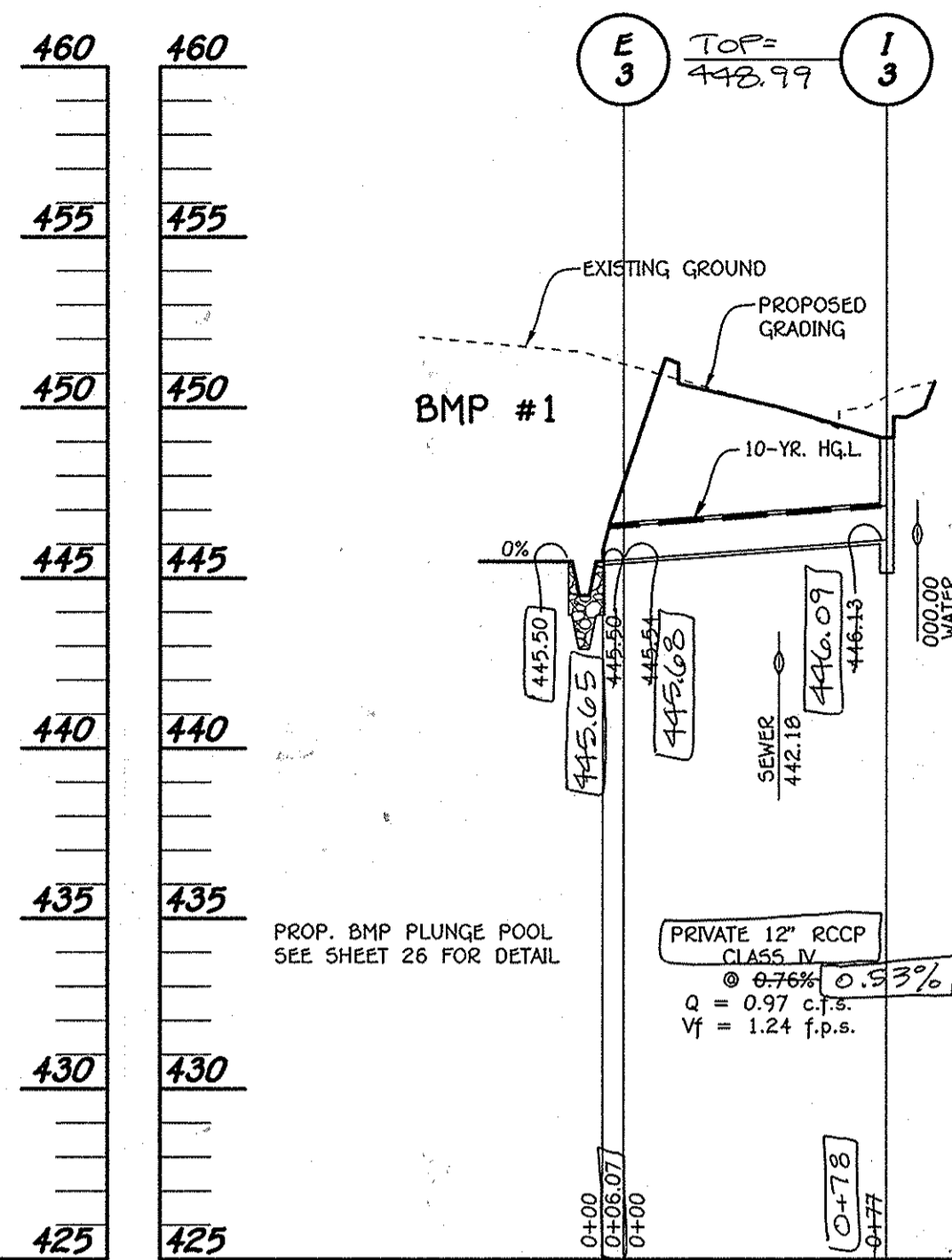
HANDICAP RAMP ENLARGEMENT AND DETAIL SHEET
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
 CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL 29, 2013
 SHEET 19 OF 28



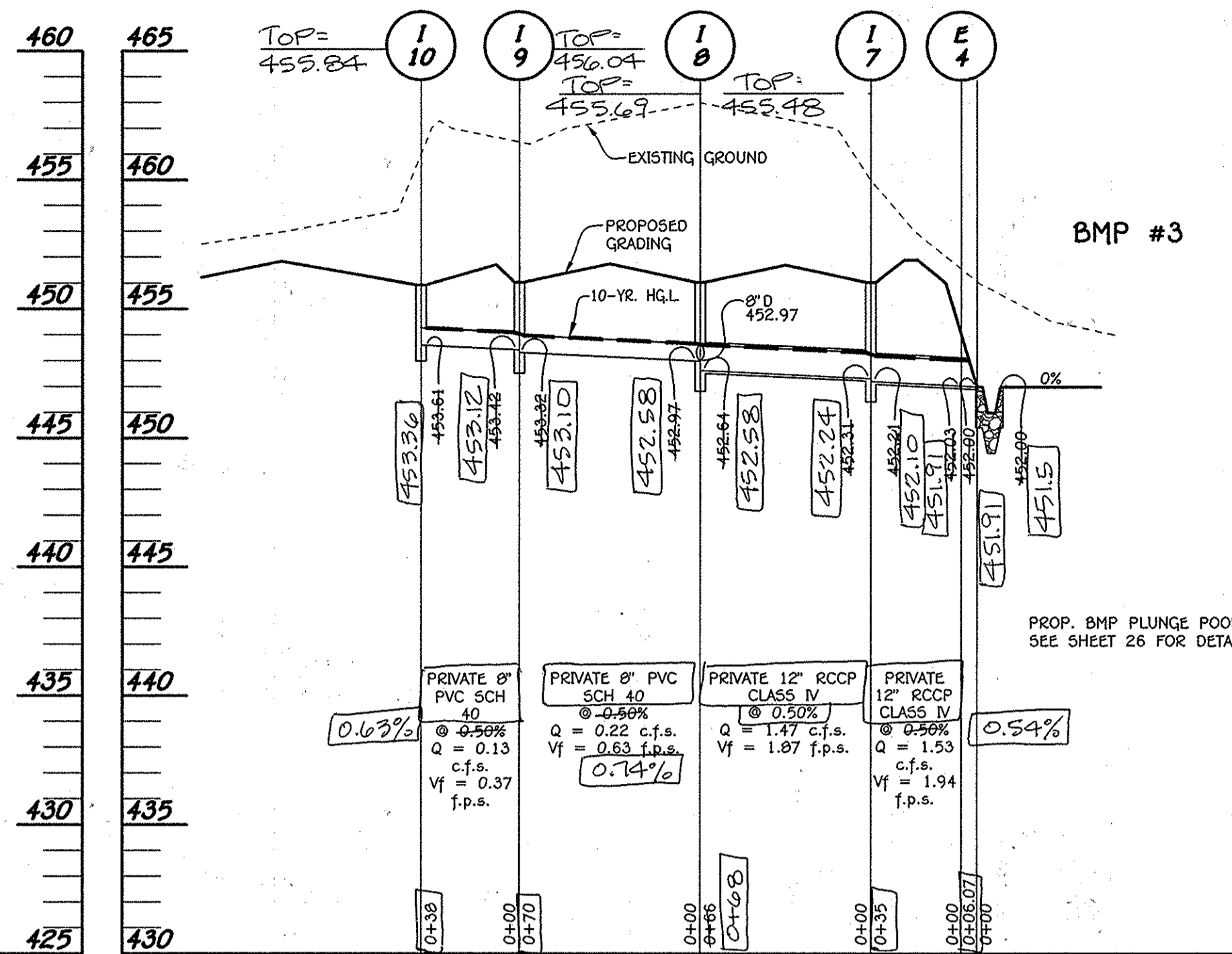
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VERT. : 1" = 5'



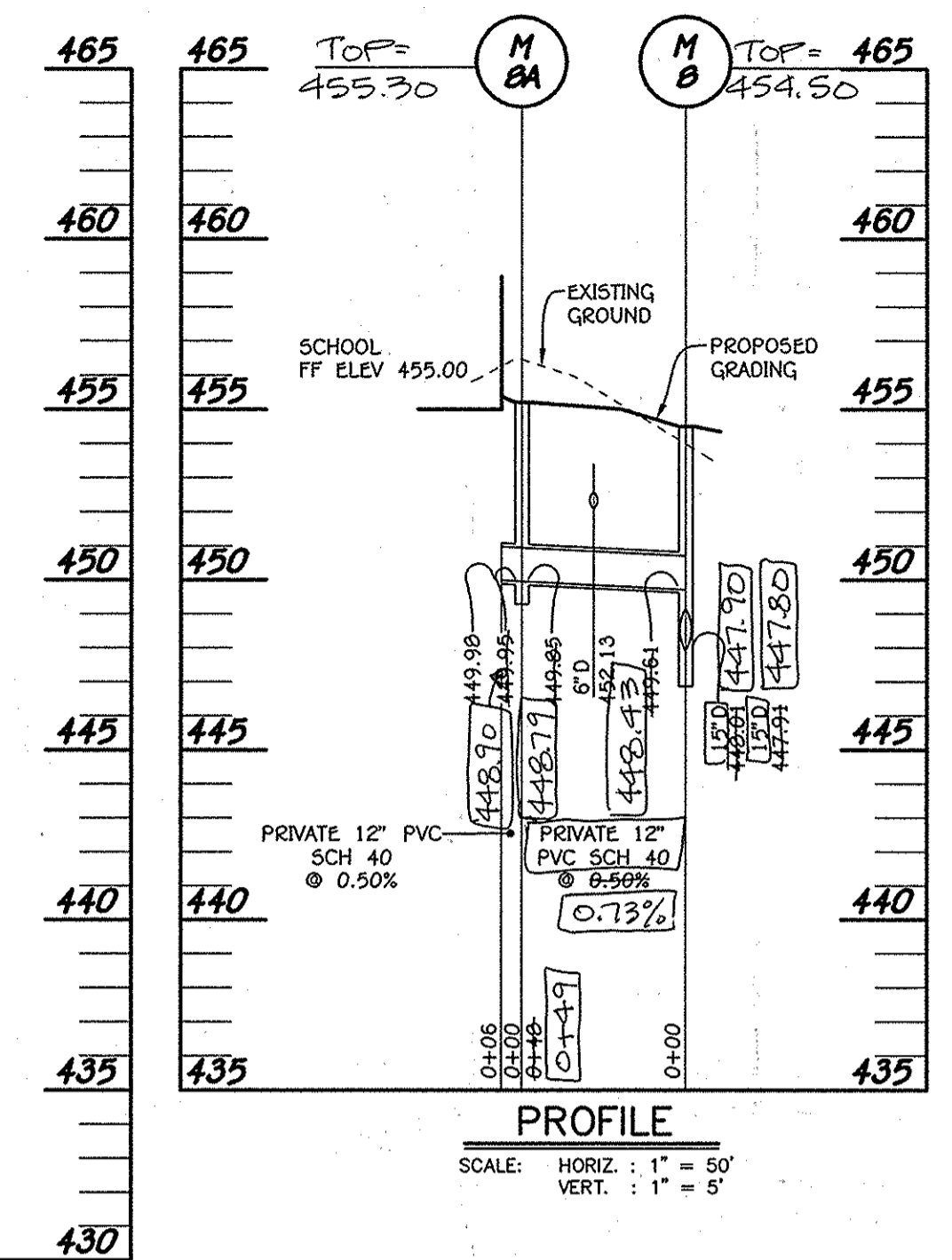
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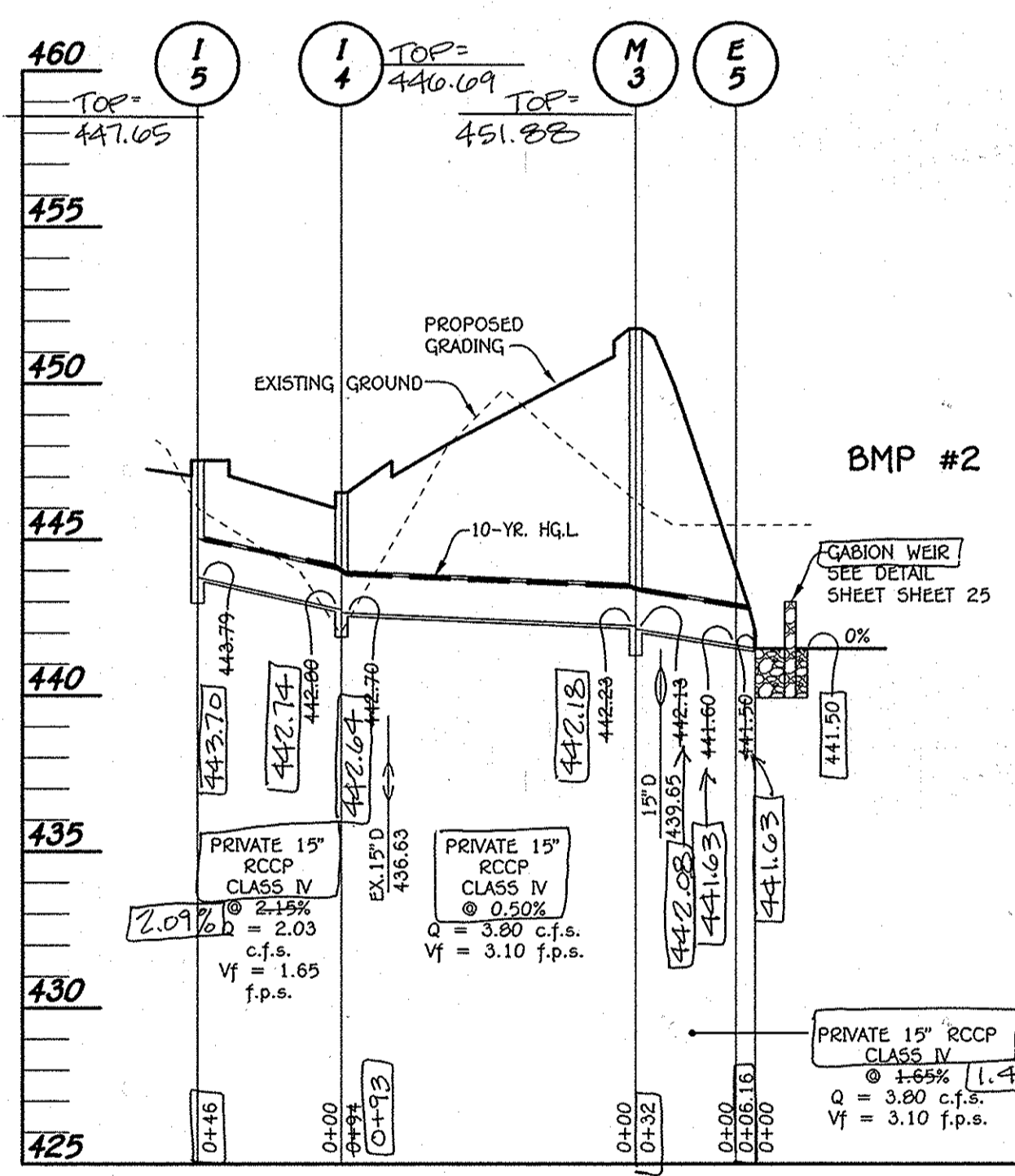
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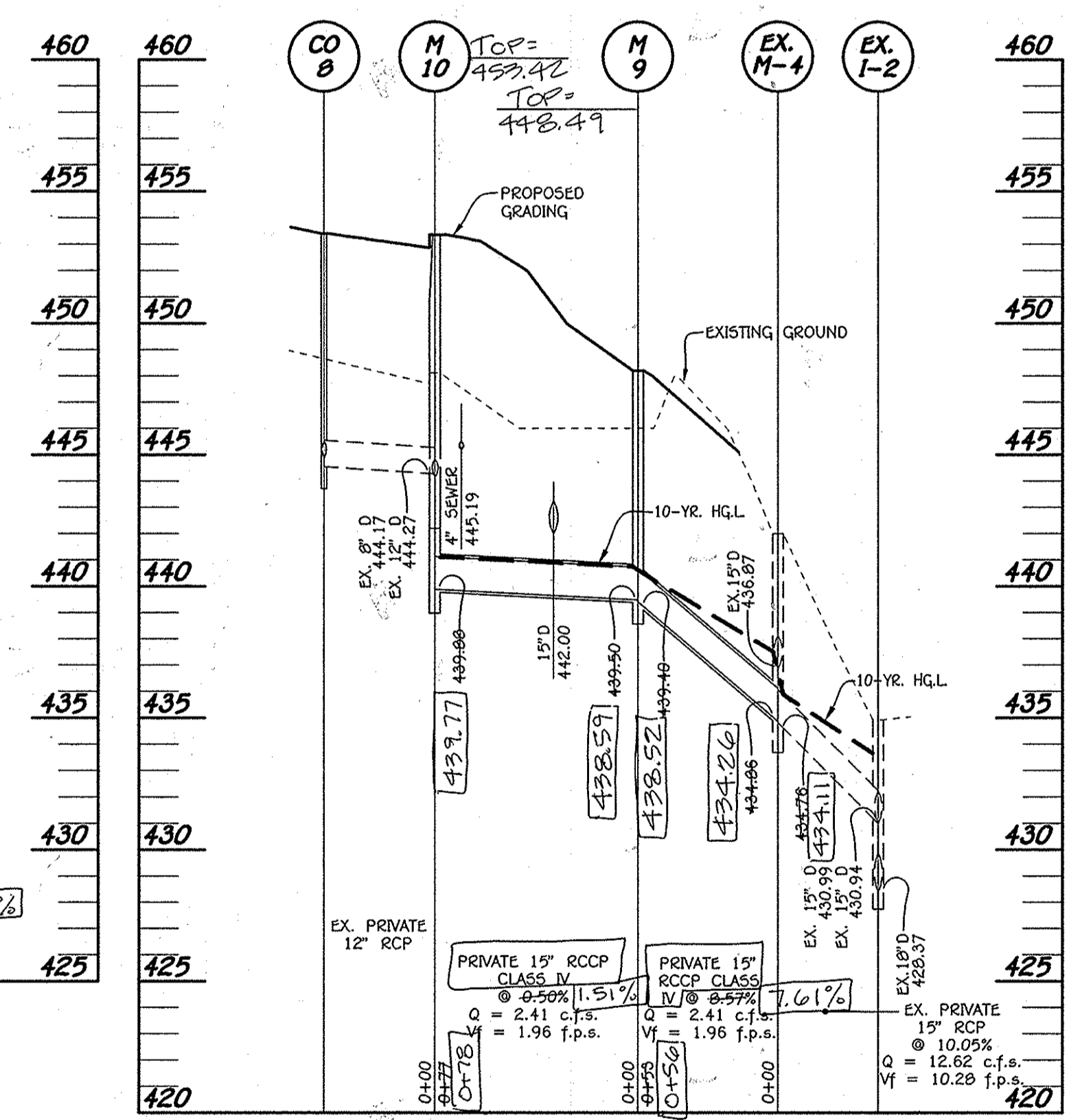
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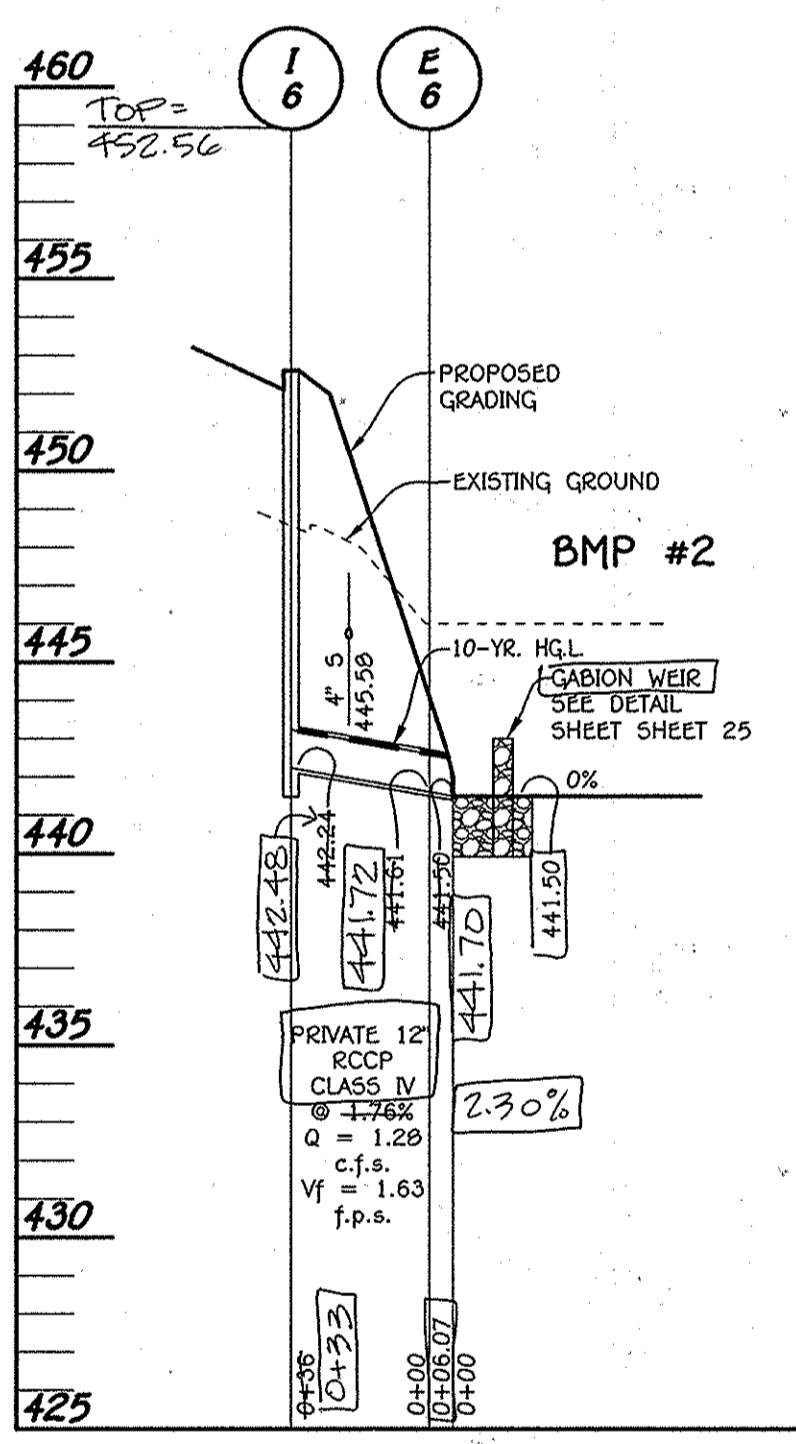
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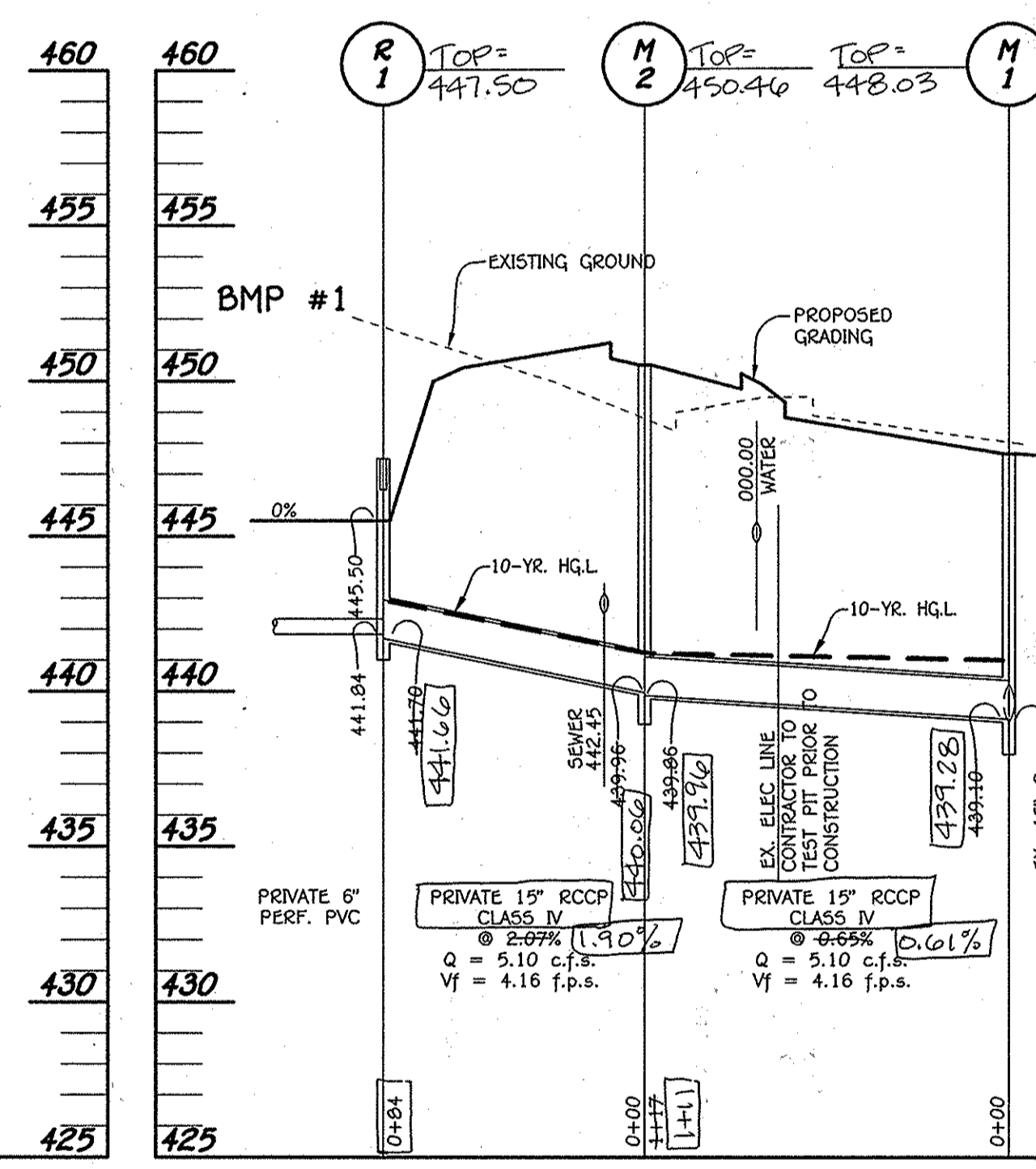
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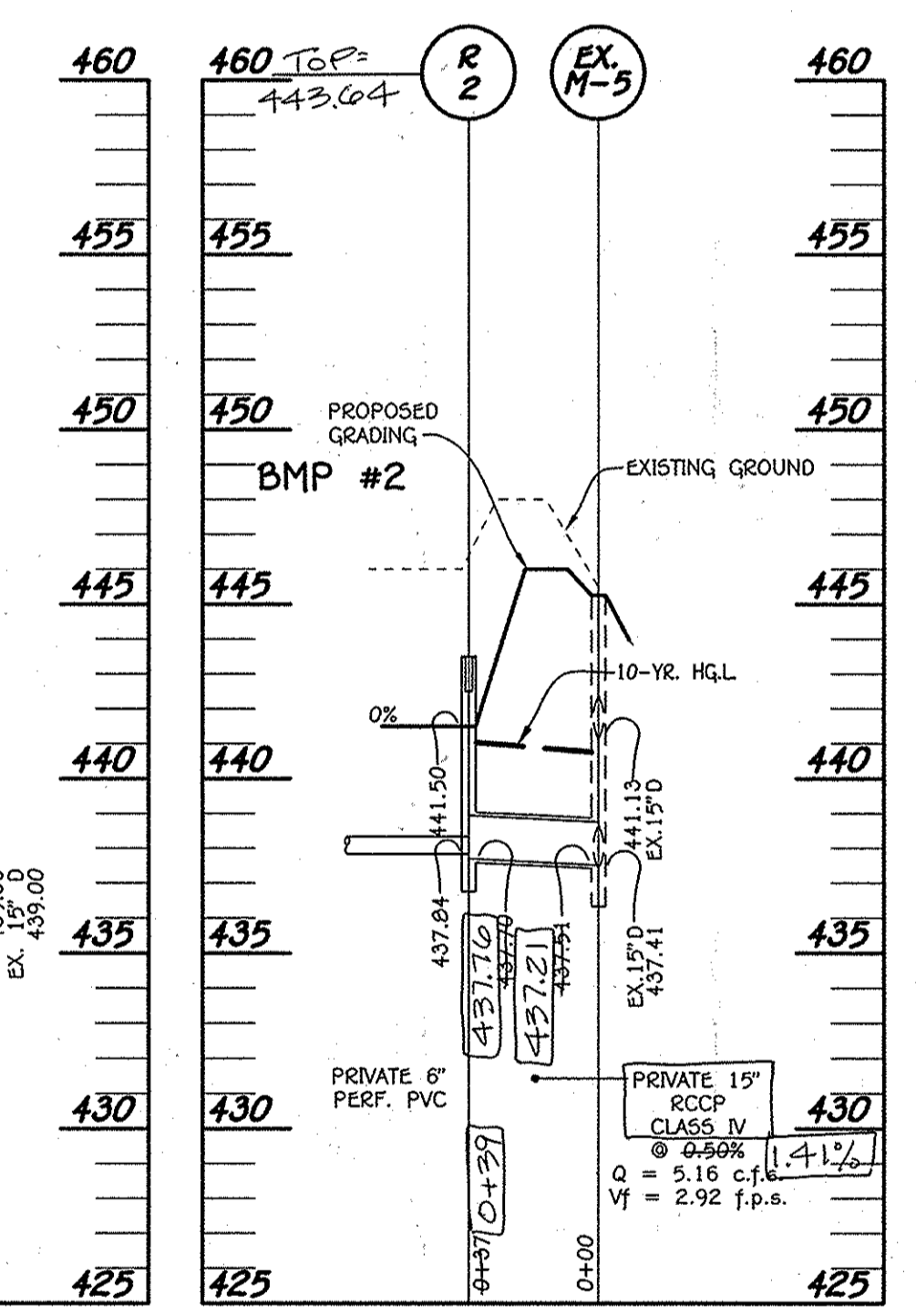
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PROFILE
SCALE: HORIZ. : 1" = 50'
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NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Severna Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT EROSION OF THE UNDERGROUND SWM FACILITY.
Andrew Dorsey 03/09/16
ANDREW DORSEY, PE, DATE
MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).
NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW STORM DRAIN PROFILES FOR THE PROPOSED BUILDING ADDITIONS AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2890



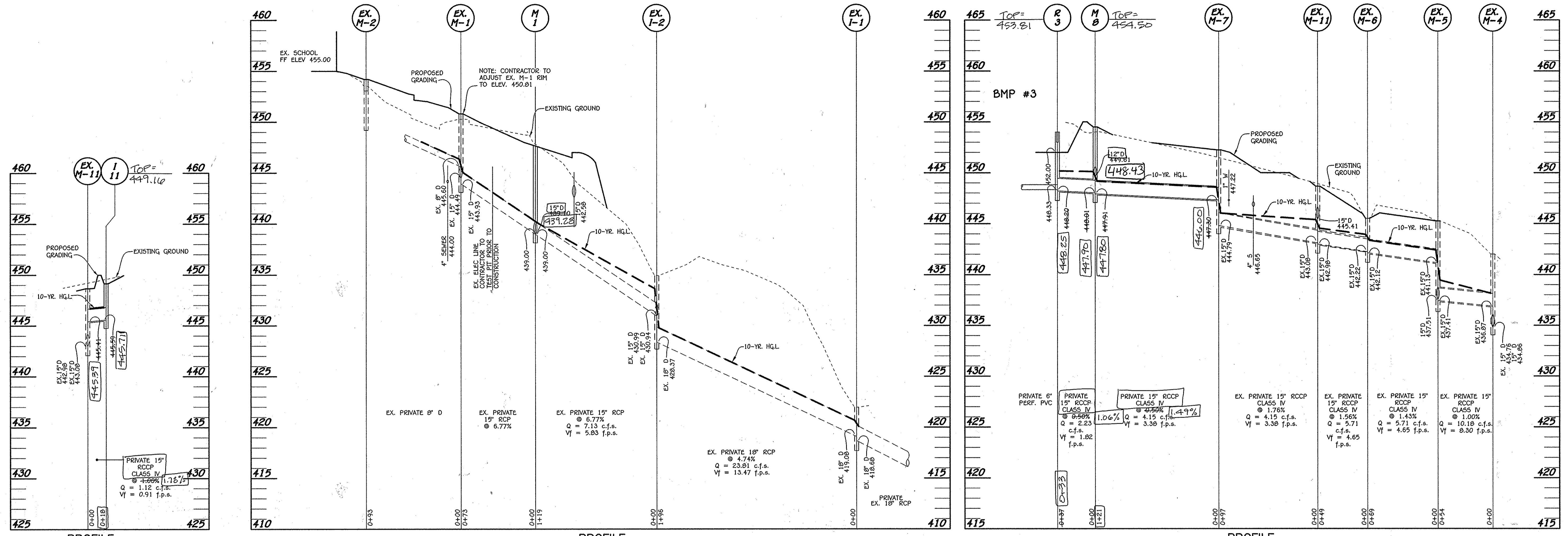
"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."
Charles J. Grovo, Sr., P.E.
CHARLES J. GROVO, SR., P.E. 7/16/13 DATE

2/16 AS-BUILT PLAN
DATE DESCRIPTION REVISION BLOCK
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Frank Jones 7/31/13
Director - Department of Planning and Zoning
W. DeLore 7/31/13
Chief, Division of Land Development
W. DeLore 7/26/13
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 MARYLAND ROUTE 108
ELICOTT CITY, MARYLAND 21042
Attention: Bruce Gist
410-313-6805
SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCADILLY DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
FAX 301-330-3224

Address Chart	
Lot Number	Street Address
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COLUMBIA, MD. 21044	
PROJECT	SECTION/AREA
LONGFELLOW ELEMENTARY SCHOOL	1/5
PARCELS	261
PLAT REF.	BLOCK NO.
PB.13-F.79	18
ZONE	TAX MAP
NT O.S.	29
ELEC. DIST.	FIFTH
CENSUS TR.	6055
WATER CODE	SEWER CODE
I-02	5583000

STORM DRAIN PROFILES
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL 29, 2013
SHEET 20 OF 28



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

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LONGFELLOW ELEM. SCHOOL AS-BUILT STRUCTURE SCHEDULE

STRUCTURE NO.	DESIGN AS-BUILT	DESIGN PIPE	AS-BUILT PIPE	INV. IN	INV. OUT
I-1	450.54	450.62	8 IN	447.18	445.82
I-2	449.73	448.99	8 IN	446.13	446.09
I-3	447.64	447.65	15 IN	442.74	442.64
I-4	446.60	446.69	15 IN	442.74	442.64
I-5	447.64	447.65	15 IN	442.74	442.64
I-6	452.71	452.56	12 IN	452.24	452.12
I-7	456.04	455.48	8 IN	452.71	452.12
I-8	456.04	455.69	8 IN	452.71	452.12
I-9	456.04	456.04	8 IN	453.12	453.32
I-10	455.93	455.84	8 IN	453.61	453.36
I-11	449.15	449.16	15 IN	445.59	445.74
I-12	442.00	442.14	15 IN	437.76	437.65
M-1	447.67	448.03	15 IN	439.28	439.00
M-2	450.53	450.46	15 IN	440.06	439.86
M-3	451.75	451.88	15 IN	442.10	442.13
M-8A	455.20	455.30	12 IN	448.90	448.79
M-8	454.50	454.50	12 IN	448.43	447.91
M-9	448.20	448.49	15 IN	438.59	438.52
M-10	453.36	453.42	8 IN	439.88	439.77
R-1	447.50	447.50	6 IN	441.70	441.66
R-2	443.50	443.64	6 IN	437.70	437.76
R-3	454.00	453.81	6 IN	448.20	448.25
E-1	446.58	445.58	12 IN	445.62	445.59
E-2	446.60	445.60	12 IN	445.64	445.64
E-3	446.54	445.54	12 IN	445.68	445.65
E-4	453.03	452.03	12 IN	451.91	451.91
E-4A	452.50	452.00	6 IN	452.00	452.00
E-5	442.85	441.60	15 IN	441.63	441.63
E-6	442.61	441.61	12 IN	441.72	441.70

PIPE SCHEDULE (PRIVATE)

SIZE	CLASS	LENGTH
6"	PERF PVC	560 LF.
6"	PVC, SCH. 40	51 LF.
8"	PVC, SCH. 40	429 LF.
12"	PVC, SCH. 40	54 LF.
12"	RCCP, CLASS IV	501 LF.
15"	RCCP, CLASS IV	746 LF.

STRUCTURE SCHEDULE

STRUCTURE NO.	OWNER	TOP ELEVATION	INV. IN	INV. OUT	COORDINATES	WIDTH	TYPE	REMARKS
I-1	PRIVATE	450.54	-	445.78	N 507049.15 E 833434.55	2.5'	A-5 INLET	D - 4.01
I-2	PRIVATE	450.39	447.18	445.78	N 507065.85 E 833345.25	2.5'	A-5 INLET	D - 4.01
I-3	PRIVATE	449.73	-	446.13	N 507066.33 E 833530.31	3.42'	S COMBINATION	D - 4.32
I-4	PRIVATE	446.60	442.80	442.70	N 507130.46 E 833631.56	2.5'	A-5 INLET	D - 4.01
I-5	PRIVATE	447.64	-	443.79	N 507129.27 E 833585.58	2.5'	A-5 INLET	D - 4.01
I-6	PRIVATE	452.71	-	442.24	N 507292.20 E 833640.29	2.5'	A-5 INLET	D - 4.01
I-7	PRIVATE	456.04	452.31	452.21	N 507547.70 E 833557.05	2.50'	S INLET	D - 4.22 & D - 4.93
I-8	PRIVATE	456.04	452.97	452.64	N 507546.27 E 833490.91	2.50'	S INLET	D - 4.22 & D - 4.93
I-9	PRIVATE	456.04	453.42	453.32	N 507544.62 E 833420.61	2.50'	S INLET	D - 4.22 & D - 4.93
I-10	PRIVATE	455.93	-	453.61	N 507510.87 E 833404.09	2.50'	S INLET	D - 4.22 & D - 4.93
I-11	PRIVATE	449.15	-	445.59	N 507314.79 E 833757.77	2.50'	S INLET	D - 4.22 & D - 4.93
M-1	PRIVATE	447.67	439.10	439.00	N 507152.43 E 833598.54	4'	OFFSET MANHOLE	G - 5.12
M-2	PRIVATE	450.53	439.96	439.86	N 507107.17 E 833490.66	4'	STD. MANHOLE	G - 5.12
M-3	PRIVATE	451.75	442.23	442.13	N 507224.15 E 833638.03	4'	STD. MANHOLE	G - 5.12
I-12	PRIVATE	442.00	442.00	442.00	N 507070.05 E 833227.46	2.5'	D INLET	D - 4.10
M-4	PRIVATE	455.20	449.95	449.85	N 507452.00 E 833562.39	4'	STD. MANHOLE	G - 5.12
M-8	PRIVATE	454.50	449.61	449.51	N 507466.67 E 833608.56	4'	STD. MANHOLE	G - 5.12
M-9	PRIVATE	448.20	439.50	439.40	N 507207.33 E 833668.16	4'	STD. MANHOLE	G - 5.12
M-10	PRIVATE	453.36	444.17	444.27	N 507260.22 E 833612.19	4'	OFFSET MANHOLE	G - 5.12
R-1	PRIVATE	447.50	441.83	441.70	N 507031.45 E 833454.11	3'	MOD. E INLET	SEE SHEET 24
R-2	PRIVATE	443.50	437.83	437.70	N 507233.77 E 833706.78	3'	MOD. E INLET	SEE SHEET 24
R-3	PRIVATE	454.00	448.33	448.20	N 507903.13 E 833604.98	3'	MOD. E INLET	SEE SHEET 24
E-1	PRIVATE	446.58	445.58	445.50	N 507035.88 E 833438.65	12"	CONC. END SECTION	D - 5.51
E-2	PRIVATE	446.60	445.60	445.50	N 507027.45 E 833406.83	12"	CONC. END SECTION	D - 5.51
E-3	PRIVATE	446.54	445.54	445.50	N 507026.67 E 833463.42	12"	CONC. END SECTION	D - 5.51
E-4	PRIVATE	453.03	452.03	452.00	N 507525.55 E 833584.49	12"	CONC. END SECTION	D - 5.51
E-4A	PRIVATE	452.50	-	452.00	N 507483.44 E 833592.80	6"	PVC PIPE	-
E-5	PRIVATE	442.85	441.60	441.50	N 507244.46 E 833663.29	15'	CONC. END SECTION	D - 5.51
E-6	PRIVATE	442.61	441.61	441.50	N 507263.80 E 833664.04	12"	CONC. END SECTION	D - 5.51

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Sevenside Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business

AS-BUILT ENGINEER CONSULTANT CERTIFICATION

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D. Andrew Dorsey 03/09/16
D. ANDREW DORSEY, PE. DATE
MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013



NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW PROFILES AND DETAILS FOR THE PROPOSED BUILDING ADDITIONS AND OTHER IMPROVEMENTS.

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Charles J. Cravo, Sr.
CHARLES J. CRAVO, SR., P.E.
7/16/13 DATE

2/16 AS-BUILT PLAN
1/10/14 REVISE STRUCTURE SCHEDULE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Shirley Lewis 7/11/13
Director - Department of Planning and Zoning
Mark Shantz 7/31/13
Chief, Division of Land Development
Michael... 7/26/13
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Elicott City, Maryland 21042
Attention: Bruce Gist
410-313-6805

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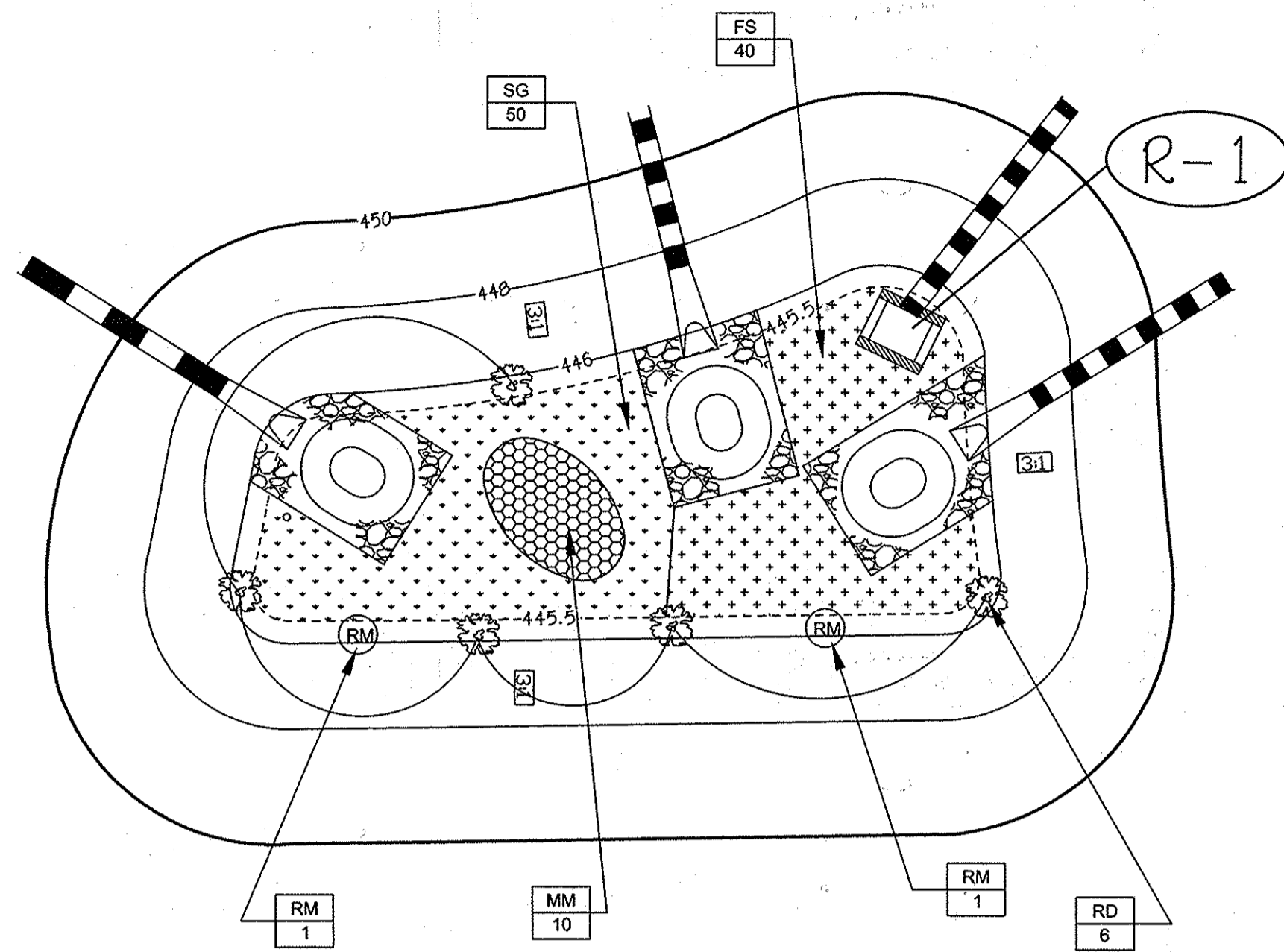
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WATER CODE	SEWER CODE				
I-02	5583000				

STORM DRAIN PROFILES

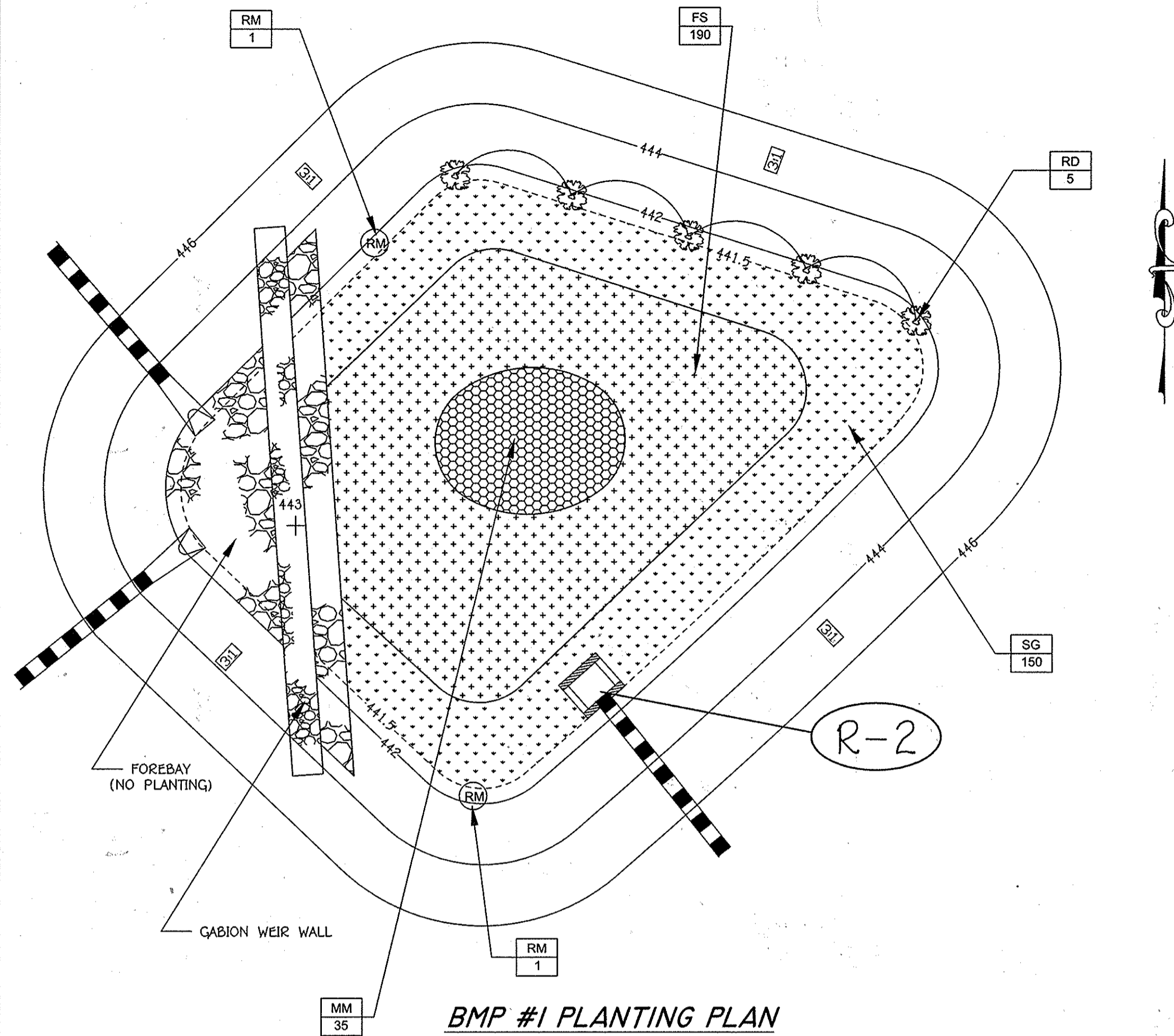
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW
ELEMENTARY SCHOOL
CLASSROOM ADDITION AND
PARKING LOT ADDITION

PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL 29, 2013

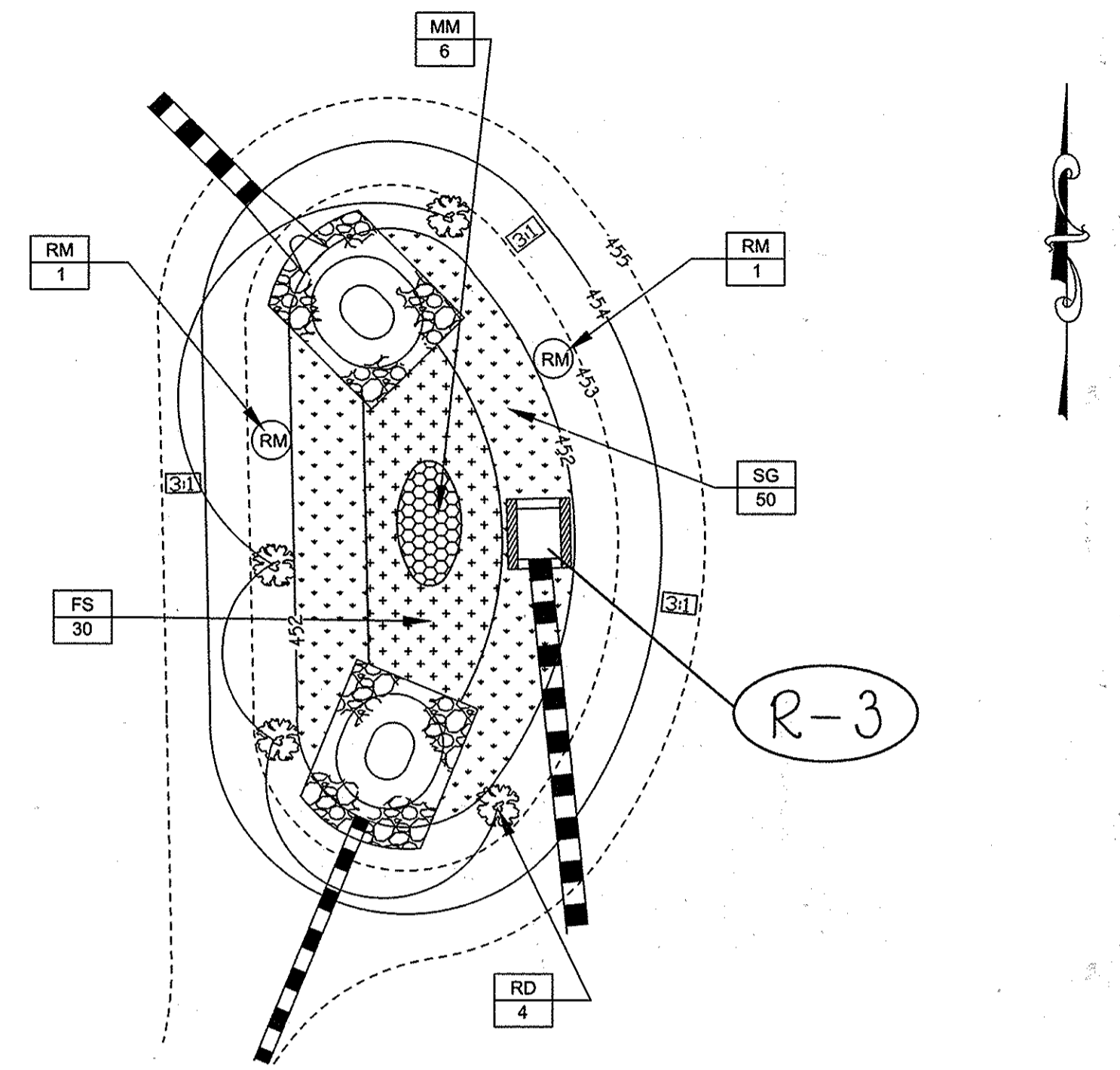
SHEET 21 OF 28



BMP #2 PLANTING PLAN
SCALE:
1" = 10'



BMP #1 PLANTING PLAN
SCALE:
1" = 10'



BMP #3 PLANTING PLAN
SCALE:
1" = 10'

BMP #1 BIORETENTION FACILITY PLANTING SCHEDULE				
PLANT NAME	FORM	KEY	QUANTITY ^b	SYMBOL
SWITCH GRASS (<i>panicum virgatum</i>)	Grass ^a	SG	50	[Symbol]
FOX SEDGE (<i>carex vulpinoidea</i>)	Grass ^a	FS	40	[Symbol]
MARSH MARIGOLD (<i>caltha palustris</i>)	Perennial	MM	10	[Symbol]
RED OSIER DOGWOOD (<i>cornus sericea</i>)	Shrub	RD	5	[Symbol]
RED MAPLE (<i>acer rubrum</i>)	Tree (4-6')	RM	2	[Symbol]

^a Grasses can be planted with plugs, quarts, or gallons.
^b Plant BMP level surface as shown with an even distribution density. Stabilize side slopes w/ permanent grass seed per NRCS specifications or sod. Side slopes shall be at least 4" of clean top-soil on tilled sub-soil.

BMP #2 BIORETENTION FACILITY PLANTING SCHEDULE				
PLANT NAME	FORM	KEY	QUANTITY ^b	SYMBOL
SWITCH GRASS (<i>panicum virgatum</i>)	Grass ^a	SG	150	[Symbol]
FOX SEDGE (<i>carex vulpinoidea</i>)	Grass ^a	FS	190	[Symbol]
MARSH MARIGOLD (<i>caltha palustris</i>)	Perennial	MM	35	[Symbol]
RED OSIER DOGWOOD (<i>cornus sericea</i>)	Shrub	RD	5	[Symbol]
RED MAPLE (<i>acer rubrum</i>)	Tree (4-6')	RM	2	[Symbol]

^a Grasses can be planted with plugs, quarts, or gallons.
^b Plant BMP level surface as shown with an even distribution density. Stabilize side slopes w/ permanent grass seed per NRCS specifications or sod. Side slopes shall be at least 4" of clean top-soil on tilled sub-soil.

BMP #3 BIORETENTION FACILITY PLANTING SCHEDULE				
PLANT NAME	FORM	KEY	QUANTITY ^b	SYMBOL
SWITCH GRASS (<i>panicum virgatum</i>)	Grass ^a	SG	50	[Symbol]
FOX SEDGE (<i>carex vulpinoidea</i>)	Grass ^a	FS	30	[Symbol]
MARSH MARIGOLD (<i>caltha palustris</i>)	Perennial	MM	6	[Symbol]
RED OSIER DOGWOOD (<i>cornus sericea</i>)	Shrub	RD	4	[Symbol]
RED MAPLE (<i>acer rubrum</i>)	Tree (4-6')	RM	2	[Symbol]

^a Grasses can be planted with plugs, quarts, or gallons.
^b Plant BMP level surface as shown with an even distribution density. Stabilize side slopes w/ permanent grass seed per NRCS specifications or sod. Side slopes shall be at least 4" of clean top-soil on tilled sub-soil.

NOTES:
1. THIS SHEET FOR PLANTING PURPOSES ONLY
2. UNDERDRAINS NOT SHOWN FOR CLARITY

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

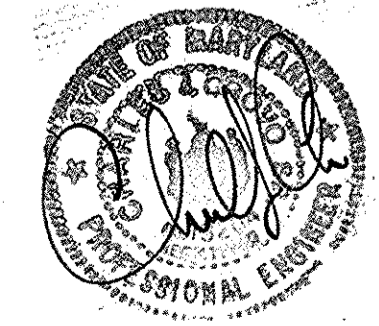
AS-BUILT ENGINEER CONSULTANT CERTIFICATION
D. ANDREW DORSEY, P.E.
DATE 03/09/16
NO. 45261

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Civil Engineers, Planners, Landscape Architects, Surveyors
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NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP PLANTINGS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2000



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. 13204, Expiration Date: November 3, 2014.
Charles J. Cravo, Sr., P.E.
7/16/13 DATE

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Director - Department of Planning and Zoning
Chief, Division of Land Development
Chief, Development Engineering Division

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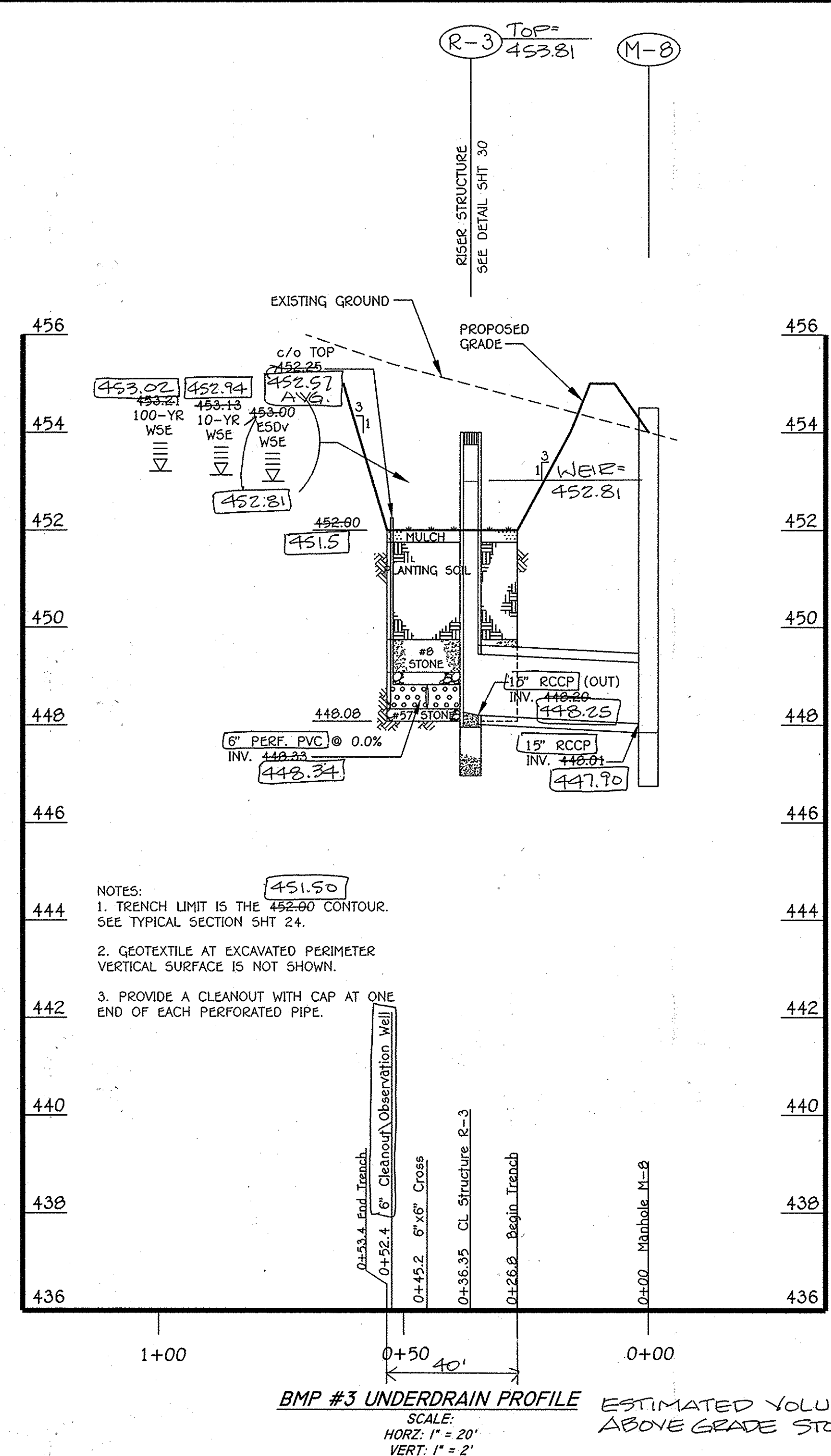
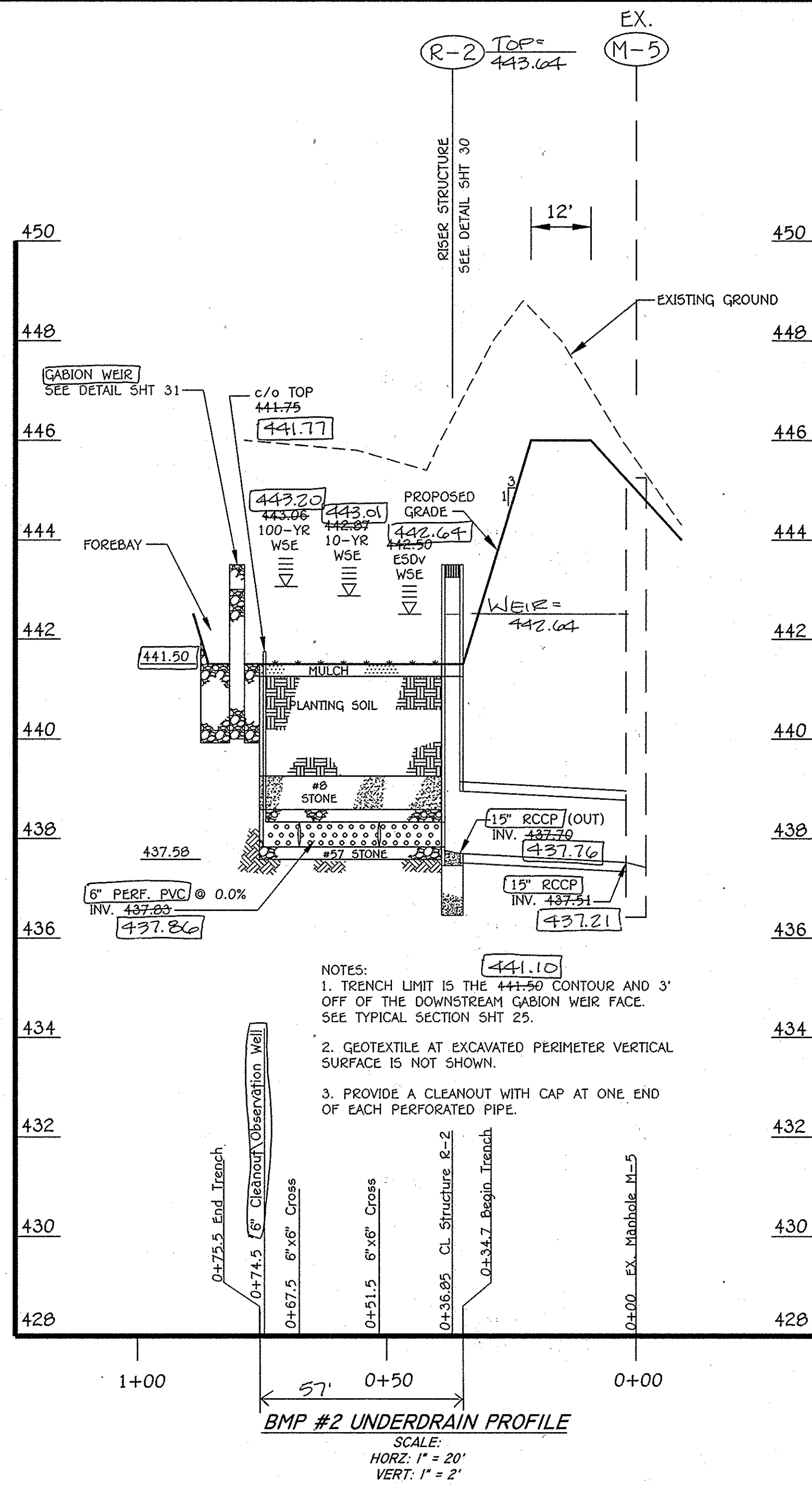
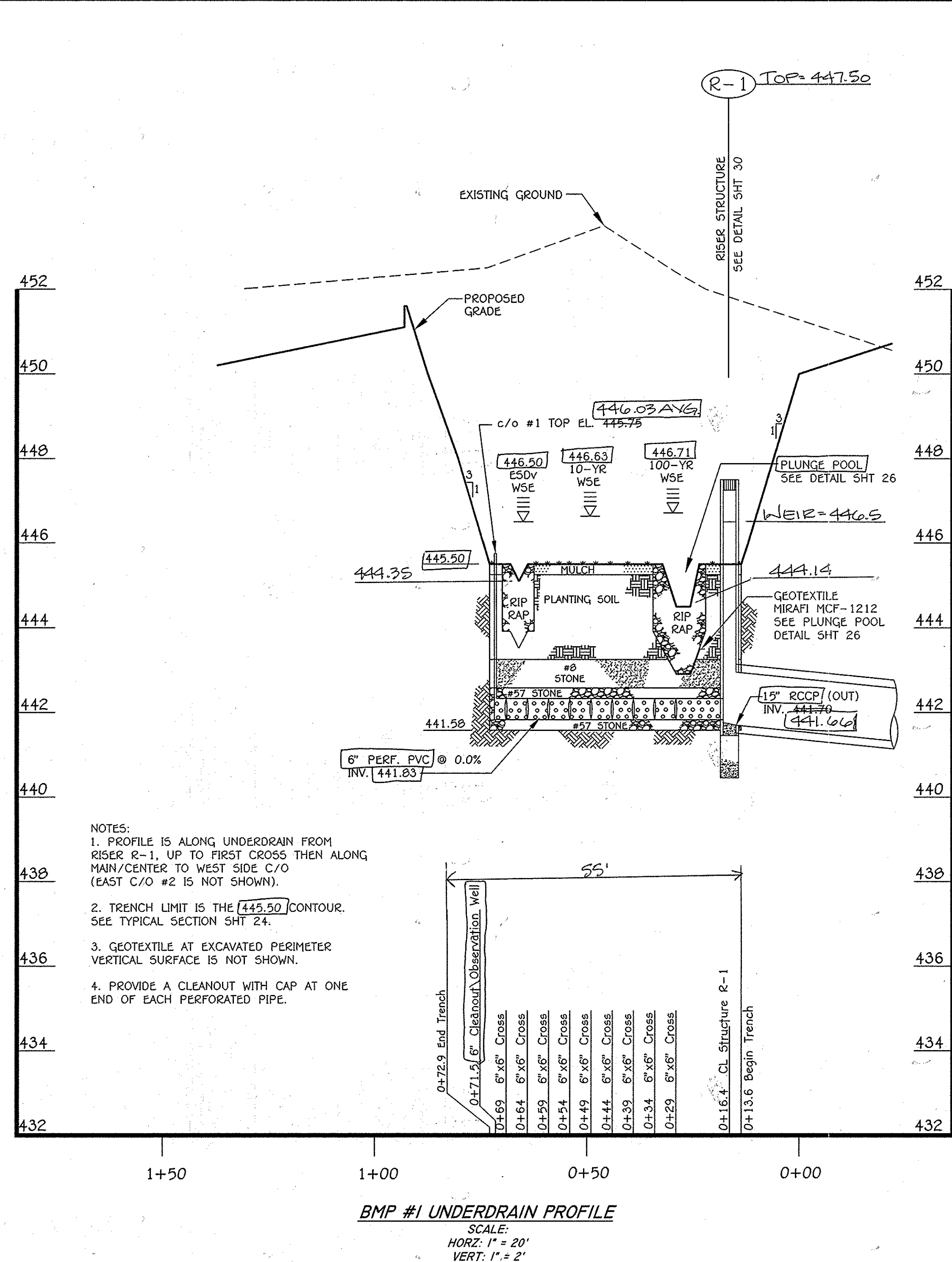
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE
1-02	5503000

BEST MANAGEMENT PRACTICE (BMP) #1, #2, #3 PLANTING PLANS
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: APRIL 29, 2013
SHEET 22 OF 28



- NOTES:
1. PROFILE IS ALONG UNDERDRAIN FROM RISER R-1, UP TO FIRST CROSS THEN ALONG MAIN/CENTER TO WEST SIDE C/O (EAST C/O #2 IS NOT SHOWN).
 2. TRENCH LIMIT IS THE 445.50 CONTOUR. SEE TYPICAL SECTION SHT 24.
 3. GEOTEXTILE AT EXCAVATED PERIMETER VERTICAL SURFACE IS NOT SHOWN.
 4. PROVIDE A CLEANOUT WITH CAP AT ONE END OF EACH PERFORATED PIPE.

- NOTES:
1. TRENCH LIMIT IS THE 441.50 CONTOUR AND 3' OFF OF THE DOWNSTREAM GABION WEIR FACE. SEE TYPICAL SECTION SHT 25.
 2. GEOTEXTILE AT EXCAVATED PERIMETER VERTICAL SURFACE IS NOT SHOWN.
 3. PROVIDE A CLEANOUT WITH CAP AT ONE END OF EACH PERFORATED PIPE.

- NOTES:
1. TRENCH LIMIT IS THE 452.00 CONTOUR. SEE TYPICAL SECTION SHT 24.
 2. GEOTEXTILE AT EXCAVATED PERIMETER VERTICAL SURFACE IS NOT SHOWN.
 3. PROVIDE A CLEANOUT WITH CAP AT ONE END OF EACH PERFORATED PIPE.

Andrew Dorsey
 05/09/16

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severnside Ave., Severn Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE JULY 11, 2013

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOSING OF THE UNDERGROUND BMP FACILITY.
Andrew Dorsey 05/09/16
 D. ANDREW DORSEY, P.E. DATE
 MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45281

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP PROFILES.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALDOROCK NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21142
 (410) 461-2000



"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. 13204, Expiration Date: November 3, 2014."
Charles J. Dorsey, Sr.
 CHARLES J. DORSEY, SR., P.E. 7/16/13 DATE

2/16 AS-BUILT PLAN
 DATE DESCRIPTION REVISION BLOCK
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Thomas Lewis 7/11/13 DATE
 Director - Department of Planning and Zoning
Neil S. ... 7/11/13 DATE
 Chief, Division of Land Development
... 7/26/13 DATE
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCADILLY DRIVE, SUITE 200,
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 TEL 301-770-0177
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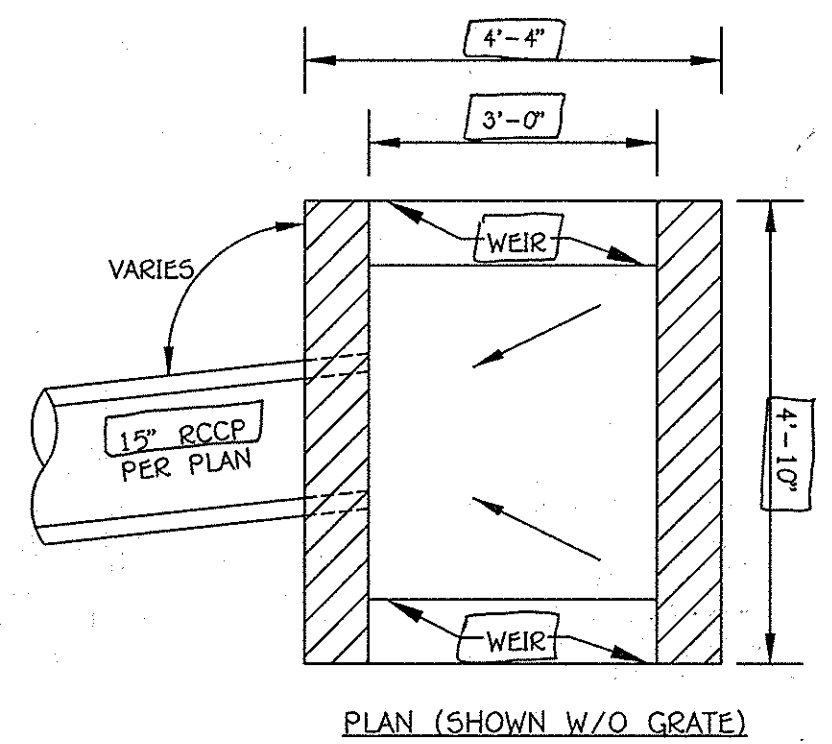
Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

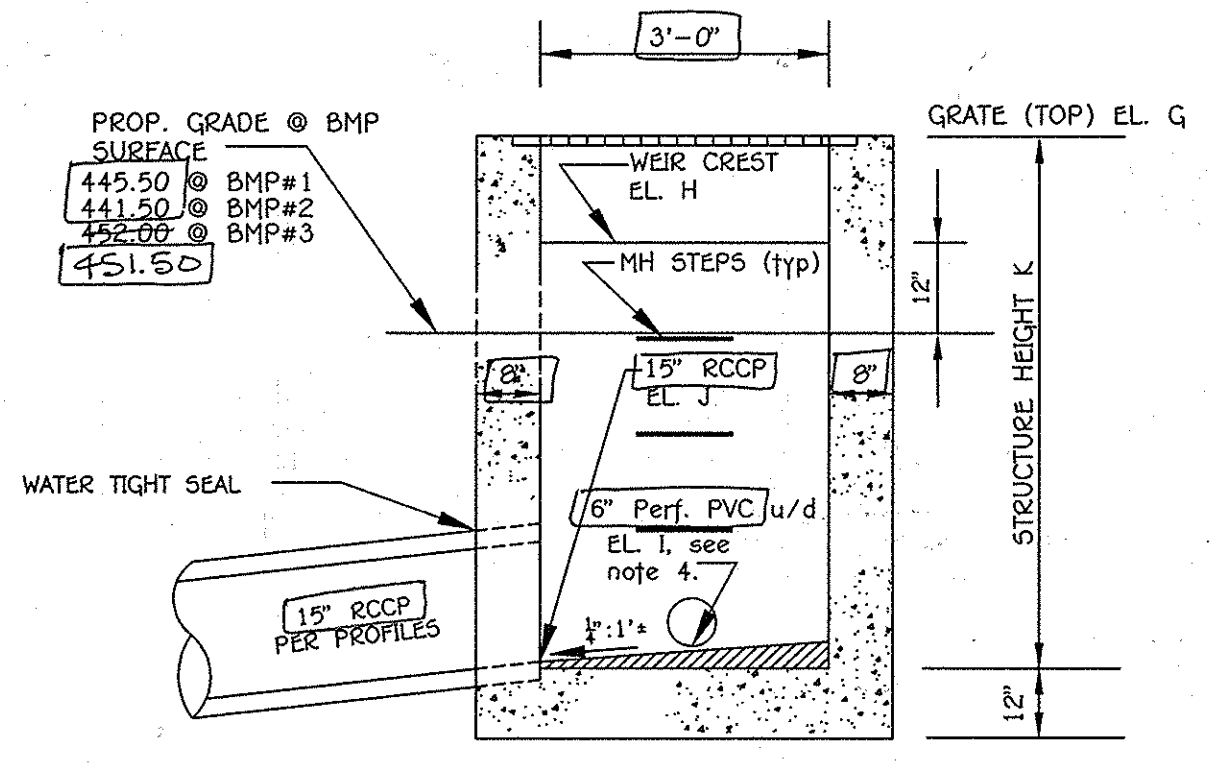
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE
I-02	5583000

BMP #1, #2 and #3 UNDERDRAIN/BMP PROFILES
 "REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL 29, 2013



PLAN (SHOWN W/O GRATE)

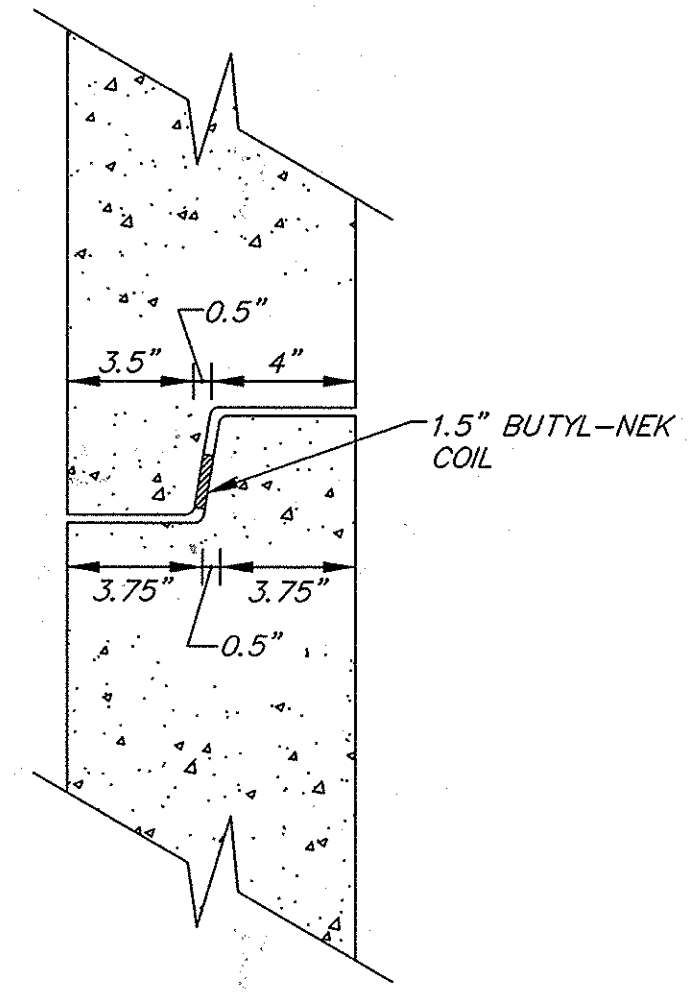


ELEVATION

- NOTES:
- SEE MSHA STD DETAIL MD-378.11 FOR DETAILS NOT SHOWN ABOVE.
 - ALL STRUCTURAL REQUIREMENTS (INCLUDING WALLS) SHALL CONFORM TO THE D-INLET (DETAIL D-4.10) REQUIREMENTS DUE TO THE INCREASED INLET DEPTH.
 - USE DOUBLE OPENING WITH NO CONCRETE GUTTER APPROACHES.
 - PVC UNDERDRAIN MAY ENTER INLET AT AN ANGLE TO BE NEAR CENTER OF STRUCTURE AND BMP. SEE SITE DEVELOPMENT PLAN (SDP) FOR UNDERDRAIN ENTRANCE LOCATION IN RISER WALL.
 - SLOPE RISER INVERT 1/4":1" TOWARD RCCP OUTFALL.
 - PROVIDE STEPS PER MOCO STD. DETAIL G-5.21.
 - CHAMFER EXPOSED EDGES 1/4" R.
 - ORIENT INLET AS SHOWN ON SDP (GRATE SUPPORT WALL IS HATCHED).

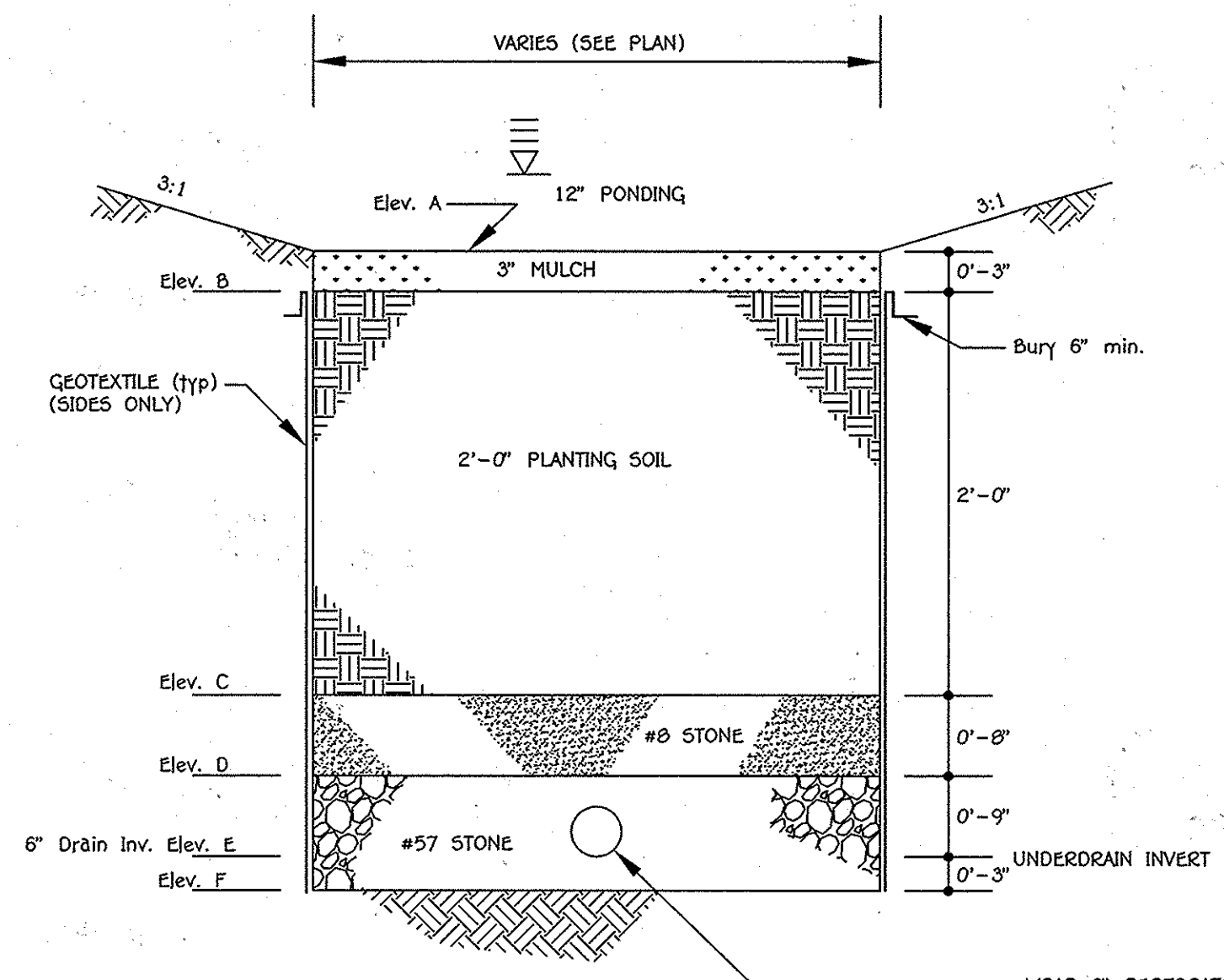
BMP RISER STRUCTURE ELEVATION TABLE				
	R-1 (BMP #1)	R-2 (BMP #2)	R-3 (BMP #3)	NOTES
ELEV. G	447.50	443.04 443.90	443.81 444.00	Top of Grate
ELEV. H	446.50	442.04 442.50	442.81 443.00	Weir Crest
ELEV. I	441.83	437.83 437.83	442.34 442.33	Inv. 6" Perfor. u/d
ELEV. J	441.00 441.70	437.70 437.70	442.25 442.20	RCCP Invert Out
HEIGHT K	6'-0.5"	6'-0.5"	6'-0.5"	Structure Height
	5.84'	5.88'	5.86'	

RISER STRUCTURES R-1, R-2, & R-3 MODIFIED K-INLET TYPICAL SECTION NTS



RISER JOINT DETAIL NTS

- NOTES:
- Riser joints shall join evenly and be watertight. Parge joints after installation.
 - The referenced joint and joint sealant material is used by Frederick Precast, Inc. Similar joints may be used with shop drawing approval by the engineer.



BMP BIORETENTION FACILITY ELEVATION TABLE				
	BMP #1	BMP #2	BMP #3	
Elev. A	445.50	441.50	442.00	451.50
Elev. B	445.25	441.25	441.75	
Elev. C	443.25	439.25	449.75	
Elev. D	442.50	438.50	449.00	
Elev. E	441.83	437.83	448.33	448.34
Elev. F	441.50	437.50	448.00	
		437.80		

BMP BIORETENTION FACILITY NOTES AND SPECIFICATIONS

- THE LIMITS OF THE TYPICAL SECTION (I.E., PLANTING SOIL, SAND ETC.) IS THE ENTIRE LEVEL SURFACE OF THE MICRO-BIORETENTION FACILITIES EXCLUDING THE FOREBAY AREAS AND THE RIPRAP GABION APRONS.
- REFER TO THE 2000 MARYLAND SWM DESIGN MANUAL FOR BIORETENTION SPECIFICATIONS (PG. B.3.7) FOR INFORMATION NOT LISTED HEREIN AND FOR ADDITIONAL INFORMATION.
- THE BIORETENTION BMP MATERIALS ARE AS FOLLOWS:
 - PLANTING SOIL: PER PLANTING SOIL SPECIFICATIONS OUTLINED IN MDE'S 2000 SWM MANUAL.
 - PVC PIPE: SCHEDULE 40, PERFORATED PIPE SHALL HAVE NO SLOPE (0.0%).
 - STONE AGGREGATE: MSHA SPECIFICATIONS AS SHOWN ON TYPICAL SECTION; AGGREGATE MUST BE FREE OF FINES, DIRT & DEBRIS.
 - GEOTEXTILE: PER MDE SWM MANUAL OR MIRAFI 140N.
 - MULCH: SHREDDED, WELL-AGED (6-12 MONTHS) HARDWOOD MULCH; NO WOOD CHIPS OR PINE MULCH.
- THE CONTRACTOR SHALL UNDER NO CIRCUMSTANCES ALLOW SURFACE DRAINAGE INTO THE MICRO-BIORETENTION BMPs UNTIL ALL UPSTREAM AREAS HAVE BEEN STABILIZED (I.E., PAVED, OR HAVE WELL-ESTABLISHED VEGETATION).
- BOARDS SHALL NOT BE LEFT IN PLACE DURING THE CONSTRUCTION OF THE BIORETENTION IMP.
- GEOTEXTILE (FILTER FABRIC) SHALL BE PLACED AGAINST EXCAVATED SURFACES. SCARIFY EARTH PRIOR TO GEOTEXTILE PLACEMENT. INSTALL GEOTEXTILE PER MANUFACTURER'S SPECIFICATIONS/RECOMMENDATIONS AND USE A 2 FT MINIMUM OVERLAP AND NOTCH ENDS WITH A 6" MINIMUM BURY OR EQUIVALENT ANCHORING METHOD.
- THE CONTRACTOR SHALL OBTAIN INDEPENDENT CERTIFICATION THAT THE SOILS AND OTHER MATERIALS MEET THE SPECIFICATIONS DURING THE AS-BUILT STAGE.
- THE BIORETENTION FACILITIES SHALL BE VEGETATED IN ACCORDANCE WITH THE PLANTING SCHEDULE PER MDE SPECIFICATIONS IN THE 2000 SWM DESIGN MANUAL.
- USE PERFORATED PVC PIPE INSIDE THE BIORETENTION FACILITIES AND WRAP PERFORATED PIPE WITH 1/2" HARDWARE CLOTH TO PREVENT AGGREGATE FROM ENTERING THE PERFORATIONS.
- INSTALL CLEANOUTS/OBSERVATION WELLS (SOLID PVC PIPE) AS SHOWN. THE CLEANOUT/OBSERVATION WELL TOP SHALL EXTEND 3" ABOVE TOP OF MULCH.

BMP BIORETENTION FACILITY TYPICAL SECTION NTS



APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: JULY 11, 2013

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT FLOODING OF THE UNDERGROUND SWM FACILITY.
ANDREW DORSEY, DATE 03/09/16
MARYLAND REGISTERED PROFESSIONAL ENGINEER - NO. 45261
NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP DETAILS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 481-2000

NEW RIVER ASSOCIATES
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704 Severnside Ave., Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business



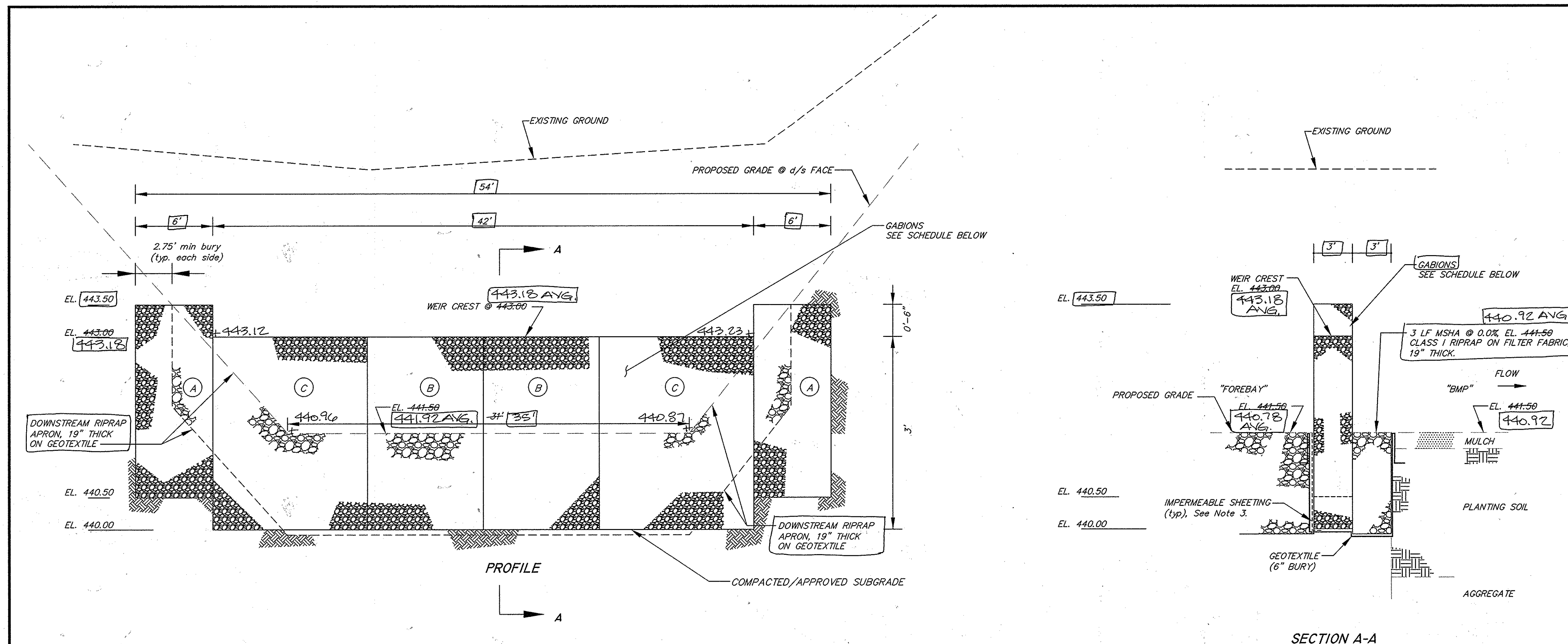
"Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland. License No. 13204, Expiration Date: November 3, 2014."
CHARLES J. CERVO, SR., P.E. 7/16/13 DATE

2110 AS-BUILT PLAN
DATE DESCRIPTION REVISION BLOCK
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning
Chief, Division of Land Development
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
Ellicott City, Maryland 21042
Attention Bruce Gist
410-313-6805
SMOLEN EMR ILKOVITCH ARCHITECTS
1355 PICCARD DRIVE, SUITE 200,
ROCKVILLE, MD 20850
TEL 301-770-0177
FAX 301-330-3224

Address Chart					
Lot Number	Street Address				
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044				
PROJECT	SECTION/AREA	PARCELS			
LONGFELLOW ELEMENTARY SCHOOL	1/5	261			
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	SEWER CODE				
1-02	5583000				

BMP #1, #2 & #3 RISER DETAILS AND BMP TYPICAL SECTION
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL 29, 2013
SHEET 24 OF 28



GABION/FOREBAY WEIR OUTFALL NOTES

- Gabions shall be manufactured by Maccaferri Gabions Inc. or approved equal. The installation shall follow the manufacturer's specifications and installation guidelines.
- The gabion baskets shall be PVC coated and filled with clean 4" - 7" stone. Gabion stone shall be carefully placed as to create a tight interlocking stone wall with minimal voids.
- One sheet of 8 mil or greater vinyl/plastic sheeting or MIRAFI MCF-1212 shall be placed on the buried upstream (forebay side) face of the gabion baskets next to the filter fabric. Use 2 ft overlap where applicable.
- Geotextile fabric (Mirafi 600x or approved equal) shall be placed against all buried gabions (including the buried top of gabions) including the impermeable layer on the upstream buried face.
- Gabions shall be carefully placed with no damaged wire. Earth foundation shall be firm. Fill soil around gabions shall be well-compacted (95%).
- Gabions shall be fastened together with lacing or rings per manufacturer's recommendations/specifications. Rings shall be per ASTM A975-97 section 6.3. Spacing shall not exceed 6". See Maccaferri's Gabion installation guide.
- Minimum Gabion embedment into side slope is a 2'-9" bury.
- Additional gabions may be needed to meet the minimum embedment into the side slopes. Gabions can be "nested".

**BMP #2 FOREBAY
GABION WEIR SCHEDULE**
(Gabion Basket Quantities)

MANUFACTURER'S LETTER CODE/DIMENSIONS	QUANTITY
(A) 6'x3'x3'	2
(B) 9'x3'x3'	2
(C) 12'x3'x3'	2

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT FLOODING OF THE UNDERGROUND SWIM FACILITY.

D. Andrew Dorsey DATE 03/09/16
D. ANDREW DORSEY, P.E. DATE
MARYLAND REGISTERED PROFESSIONAL ENGINEER -
NO. 45261

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

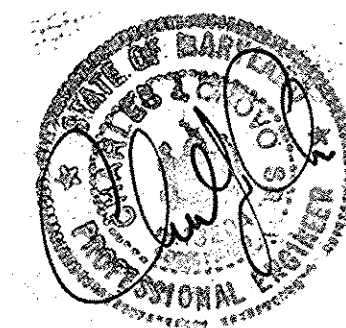
**BMP #2
FOREBAY GABION WEIR @ E-5 & E-6 DETAIL**
SCALE:
HORZ: 1" = 5'
VERT: 1" = 1'

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN.

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP DETAILS AND NOTES.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE: P.O. BOX 10272 BALTIMORE NATIONAL FIRE
ELICOTT CITY, MARYLAND 21114
(410) 461-2099

NEW RIVER ASSOCIATES
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Severnside Ave., Severna Park, MD 21146 410-987-3456
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"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. 13204. Expiration Date: November 3, 2014."

Charles J. Croft, Sr. DATE 7/16/13
CHARLES J. CROFT, SR., P.E.

2/16 AS-BUILT PLAN
DATE DESCRIPTION REVISION BLOCK

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Quintella Jones DATE 7/31/13
Director - Department of Planning and Zoning
Kate Gowan DATE 7/31/13
Chief, Division of Land Development
John Deane DATE 7/26/13
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 10B
Ellicott City, Maryland 21042
Attention: Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
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TEL 301-770-0177
FAX 301-330-3224

Address Chart

Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

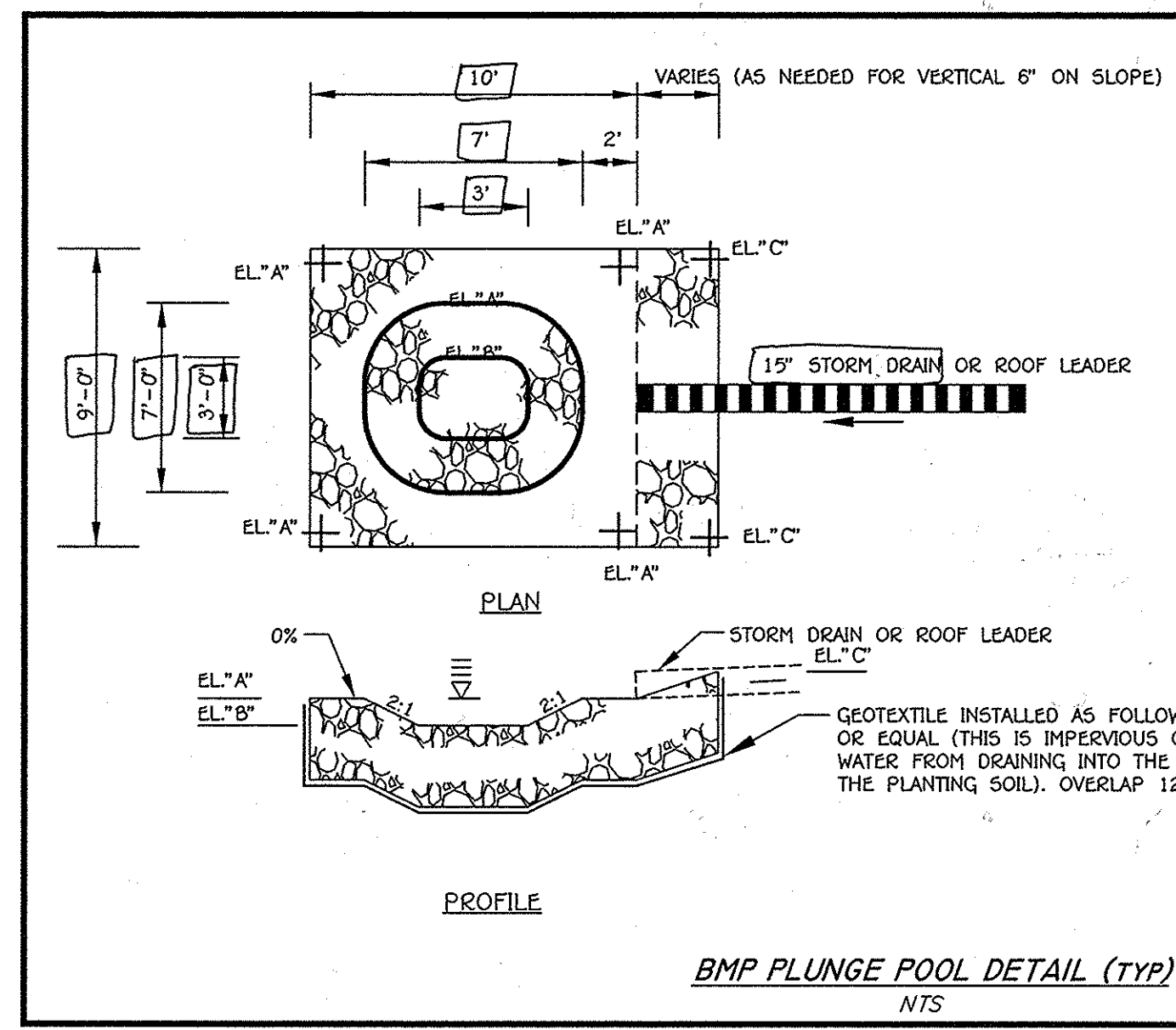
PROJECT	SECTION/AREA	PARCELS			
LONGFELLOW ELEMENTARY SCHOOL	.1/5	261			
PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
P.B.13 F.79	18	NT O.S.	29	FIFTH	6055
WATER CODE	SEWER CODE				
I-02	5583000				

**BEST MANAGEMENT PRACTICE (BMP)
#2 FOREBAY DETAILS AND NOTES**

"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW
ELEMENTARY SCHOOL
CLASSROOM ADDITION AND
PARKING LOT ADDITION

PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: APRIL 29, 2013

SHEET 25 OF 28



BMP PLUNGE POOL TABLE

	BMP #1	BMP #2	BMP #3	BMP #4	BMP #5
	E-1	E-2	E-3	E-4	E-4A
EL. A	445.50	445.50	445.50	452.00	452.00
EL. B	444.50	444.50	444.50	451.00	451.00
EL. C	446.00	446.00	446.00	452.50	452.50

NOTES:
 1. OUTFALL SUMP MATERIALS: MSHA CL I RIPRAP ON 2 TYPES OF GEOTEXTILE (SEE PROFILE NOTE BELOW).
 2. RIPRAP IS 19" THICK.
 3. SEE PLAN FOR EXACT SHAPE OF OUTFALL SUMP.

451.50
 449.73
 452.30

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO BIORETENTION BMP'S #1 - #3

THE BIORETENTION FACILITIES SHALL BE INSPECTED AT LEAST TWICE PER YEAR (ONCE EACH IN THE SPRING AND FALL) AND AFTER HEAVY STORMS. THE OWNER IS RESPONSIBLE FOR MAINTAINING A DETAILED LOG OF THE MAINTENANCE INSPECTION FINDINGS AND A HISTORY OF THE COMPLETED WORK. THE LOG SHALL BE MADE AVAILABLE TO HOWARD COUNTY DPZ AND/OR THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UPON REQUEST.

MICRO-BIORETENTION FACILITY COMPONENTS TO BE INSPECTED AND MAINTAINED INCLUDE THE ITEMS AS FOLLOWS:

- PLANT MATERIAL: PLANTS SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION. REMOVE AND REPLACE DEAD OR DYING VEGETATION CONSIDERED BEYOND TREATMENT (SEE NOTE BELOW). MAINTENANCE ALSO INCLUDES PRUNING, AND REPLACEMENT OF DEFICIENT STAKES AND WIRE.
- MULCH LAYER: SHALL BE REPLACED ONCE EVERY SPRING DUE TO THE HEAVY METALS GENERATED FROM THE PARKING LOT. THE OWNER SHALL PROPERLY DISPOSE OF THE OLD MULCH SO AS NOT TO CAUSE STORMWATER CONTAMINATION ELSEWHERE. WASHED OUT AREAS SHALL BE REPAIRED AS NECESSARY.
- SOIL LAYER: SHOULD STORMWATER POND WATER FOR MORE THAN 48 HOURS, THE TOP 6 INCHES (MINIMUM) OF THE SOIL LAYER SHALL BE REPLACED. THE OLD SOILS SHALL BE PROPERLY DISPOSED OF.
- SPILLWAY OUTFALL, INTERIOR SLOPES: ERODED AREAS SHALL BE REPAIRED (FILLED IN AND SEEDED) AS NEEDED. BARE AREAS SHALL BE TREATED AND RE-SEED.
- INLET: REPAIR CRACKS, DAMAGED CONCRETE, ETC. AS NECESSARY.
- REMOVE AND PROPERLY DISPOSE ACCUMULATED SEDIMENT GREATER THAN ONE (1) INCH.

NOTES:
 1. IF SPECIFIC PLANTS ARE NOT SURVIVING, THE PLANT TYPE SHOULD BE CHANGED TO BETTER SUITED SPECIES.
 2. PLANT WATERING MAY BE NEEDED DURING PROLONGED DRY PERIODS.

GENERAL STORMWATER MANAGEMENT NOTES

- STORMWATER MANAGEMENT HAS BEEN PROVIDED WITH THREE (3) BIORETENTION FACILITIES. PLEASE REFER TO THE SWM REPORT PREPARED BY FISHER, COLLINS, & CARTER, INC. DATED APRIL 8, 2013.
- ALL CONSTRUCTION SHALL MEET THE LATEST EDITION OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS, SMALL EARTHEN DAM SPECIFICATION MD-378, AND THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S CURRENT STORMWATER DESIGN MANUAL, OR AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL CONSULT THE ENGINEER SHOULD THERE BE ANY DISCREPANCIES. SEE BMP BIORETENTION FACILITY NOTES AND SPECIFICATIONS ON SHEET 24.
- THE UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL TEST PIT ALL KNOWN EXISTING UTILITIES TO VERIFY, SIZE, SHAPE, LOCATION, AND TYPE PRIOR TO PERFORMING CONSTRUCTION. ANY UTILITY DAMAGED DUE TO CONSTRUCTION MUST BE REPAIRED IMMEDIATELY.
- SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. IF THE CONTRACTOR MAKES FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER, THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
- CONTRACTOR SHALL NOTIFY MISS UTILITY 1-800-257-7777 AND THE HOWARD COUNTY DEPARTMENT OF INSPECTION LICENSES & PERMITS THREE (3) WORKING DAYS BEFORE BEGINNING CONSTRUCTION.
- FISHER, COLLINS & CARTER, INC. IS NOT RESPONSIBLE FOR THE CONTRACTOR'S UTILIZATION OF MEN, MATERIALS, EQUIPMENT, OR SAFETY MEASURES IN THE PERFORMANCE OF ANY WORK FOR THIS PROJECT. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PERFORMING THE WORK CORRECTLY AND IN CONFORMANCE WITH CODE/SPECIFICATION REQUIREMENTS.
- THE BMPs MAY BE GRADED, HOWEVER, THE PLANTING SOIL AND UNDERDRAINS IN THE BMPs SHALL NOT BE INSTALLED UNTIL ALL UPSTREAM AREAS HAVE BEEN STABILIZED (i.e., THICK GRASS COVER, OR PAVED).
- THE STORMWATER MANAGEMENT BIORETENTION BMPs FOR THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED.

Pond MD-378: N.R.C.S. - JANUARY 2000 CONSTRUCTION SPECIFICATIONS FOR SMALL EARTHEN DAMS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation
 Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.
 Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.
 All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill
 Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.
 Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.
 Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.
 The minimum required density shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).
 Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.
 Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure Backfill
 Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.
 Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi, 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

Pipe Conduits
 All pipes shall be circular in cross section.
Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:
 1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM C-361.
 2. Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding / cradle for their entire length. This bedding / cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 50% of the outside diameter with a minimum thickness of 6 inches. Where a concrete cradle is not needed for structural reasons, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.
 3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 4 feet from the riser.
 4. Backfilling shall conform to "Structure Backfill".
 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
Plastic Pipe - The following criteria shall apply for plastic pipe:
 1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" - 10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M254 Type S.
 2. Joints and connections to anti-seep collars shall be completely watertight.
 3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
 4. Backfilling shall conform to "Structure Backfill".
 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

Concrete
 Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

Rock Riprap
 Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 311.
 Geotextile shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

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

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

Erosion and Sediment Control
 Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures.

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 I HEREBY CERTIFY THAT FACILITIES SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT EROSION OF THE UNDERGROUND SWM FACILITY.

D. Andrew Dorsey
 D. ANDREW DORSEY, PE
 MARYLAND REGISTERED PROFESSIONAL ENGINEER -
 NO. 45261

DATE: 03/09/16

APPROVED
PLANNING BOARD OF HOWARD COUNTY
 DATE: JULY 11, 2013

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BMP DETAILS AND NOTES.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PkE
 GAITHERSBURG, MARYLAND 20878
 (410) 461-2855

NEW RIVER ASSOCIATES
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Severns Ave., Severns Park, MD 21146 410-987-3456
 A Woman-Owned, Service Disabled Veteran Owned Small Business

"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. 13204, Expiration Date: November 3, 2014."

Charles J. Grovo
 CHARLES J. GROVO, SR., P.E.
 DATE: 7/16/13

2116 AS-BUILT PLAN

DATE: 7/16/13

APPROVED: DEPARTMENT OF PLANNING AND ZONING

J. Lewis 7/31/13
 Director - Department of Planning and Zoning

W. Smith 7/31/13
 Chief, Division of Land Development

D. Jones 7/26/13
 Chief, Development Engineering Division

PREPARED FOR
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention: Bruce Gist
 410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart	
Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.5.	29	FIFTH	6055

WATER CODE	SEWER CODE	5563000
I-02		

PLUNGE POOL DETAIL AND BMP NOTES

"REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
 CLASSROOM ADDITION AND PARKING LOT ADDITION

PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: APRIL 29, 2013

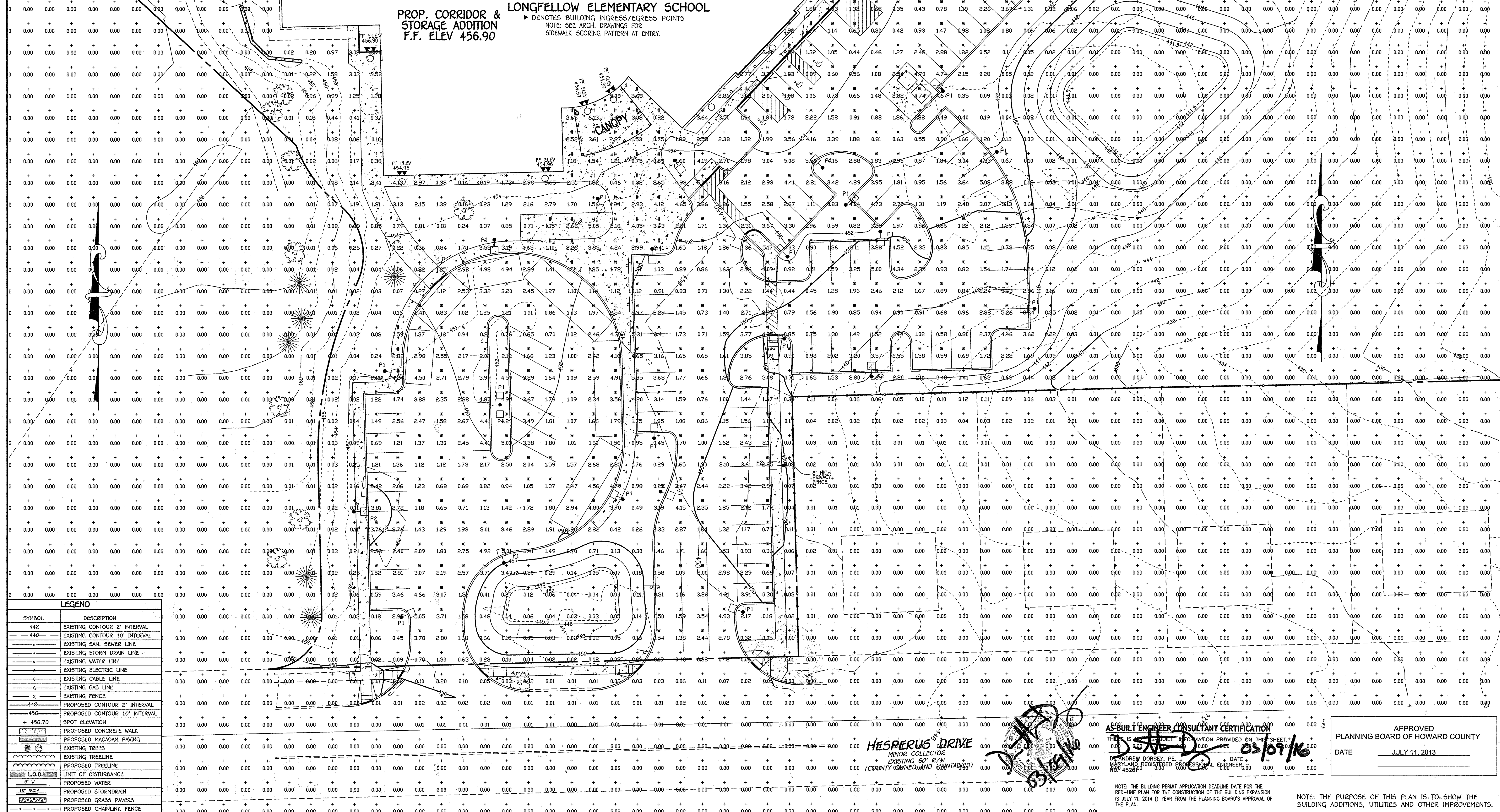
SHEET 26 OF 28

MATCHLINE SEE SHEET 28

PROP. CORRIDOR & STORAGE ADDITION
F.F. ELEV 456.90

LONGFELLOW ELEMENTARY SCHOOL

► DENOTES BUILDING INGRESS/EGRESS POINTS
NOTE: SEE ARCH. DRAWINGS FOR
SIDEWALK SCORING PATTERN AT ENTRY.



LEGEND

SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
---	EXISTING SAN SEWER LINE
---	EXISTING STORM DRAIN LINE
---	EXISTING WATER LINE
---	EXISTING ELECTRIC LINE
---	EXISTING CABLE LINE
---	EXISTING GAS LINE
---	EXISTING FENCE
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
+ 450.70	SPOT ELEVATION
---	PROPOSED CONCRETE WALK
---	PROPOSED MACADAM PAVING
---	EXISTING TREES
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	LIMIT OF DISTURBANCE
---	PROPOSED WATER
---	PROPOSED STORMDRAIN
---	PROPOSED GRASS PAVERS
---	PROPOSED CHAINLINK FENCE

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
 I, **ANDREW DORSEY, P.E.**, a duly licensed professional engineer under the laws of the State of Maryland, License No. 452860, do hereby certify that the information provided on this sheet is true and correct to the best of my knowledge and belief.
 DATE: **03/09/16**

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: **JULY 11, 2013**

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 401-2200

NEW RIVER ASSOCIATES, INC.
 Civil Engineers, Planners, Landscape Architects, Surveyors
 704 Sevenside Ave., Severna Park, MD 21146 410-987-3455
 A Woman-Owned, Service Disabled Veteran Owned Small Business

"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. 13204, Expiration Date: November 3, 2014."
Charles J. Carvo, Sr., P.E.
 DATE: **7/16/13**

AS-BUILT PLAN
 DATE: **7/16/13**
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Christina Carter 7/31/13
 Director, Department of Planning and Zoning
West Schuler 7/31/13
 Chief, Division of Land Development
William 7/26/13
 Chief, Development Engineering Division

PREPARED FOR:
 HOWARD COUNTY PUBLIC SCHOOL SYSTEM
 10910 Maryland Route 108
 Ellicott City, Maryland 21042
 Attention Bruce Gist
 410-313-6805

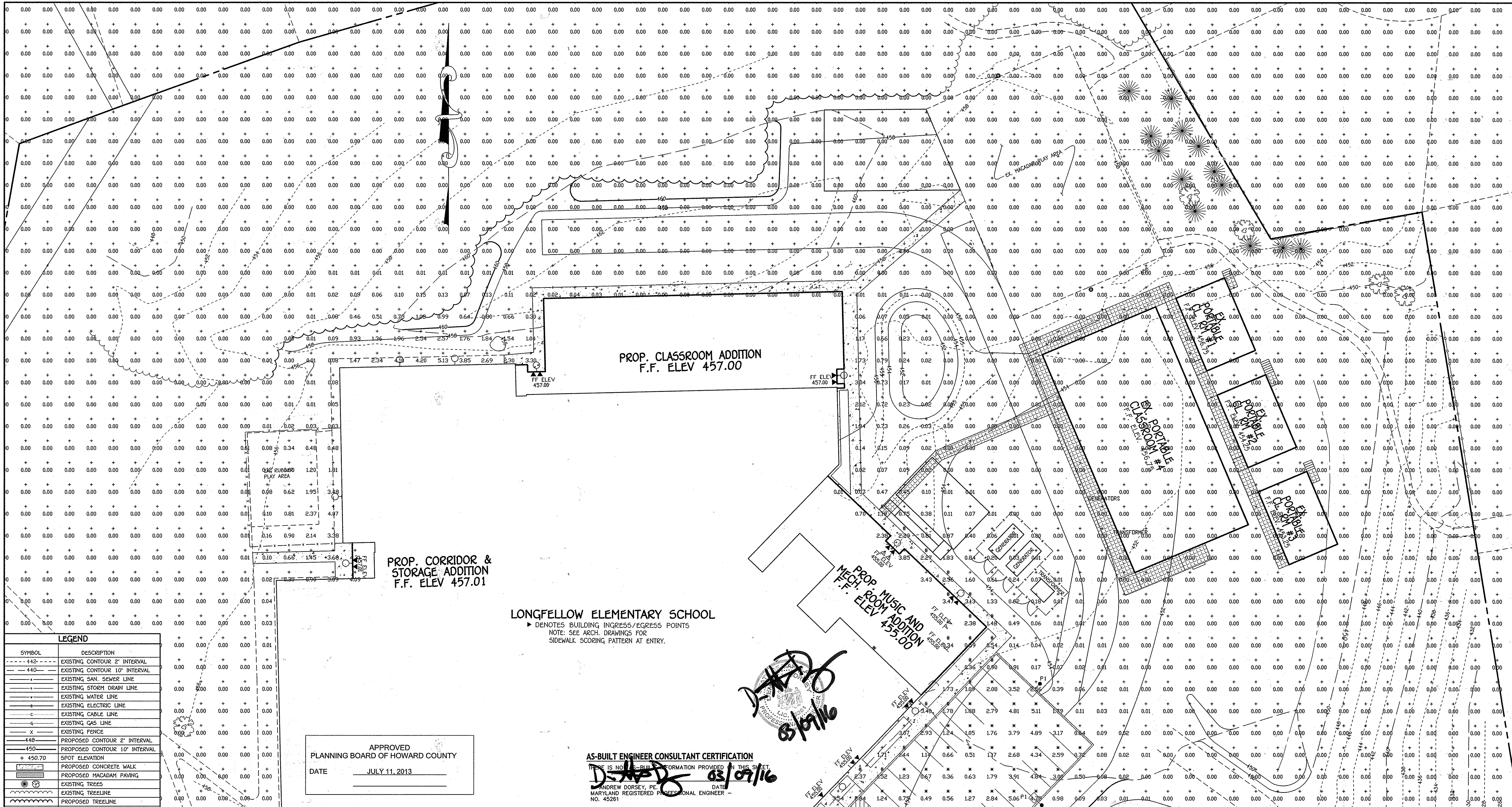
SMOLEN EMR ILKOVITCH ARCHITECTS
 1355 PICCARD DRIVE, SUITE 200,
 ROCKVILLE, MD 20850
 TEL 301-770-0177
 FAX 301-330-3224

Address Chart

Lot Number	Street Address
261	5470 HESPERUS DRIVE COLUMBIA, MD. 21044

PROJECT: LONGFELLOW ELEMENTARY SCHOOL SECTION/AREA: 1/3 PARCELS: 261
 PLAT REF.: PB.13 F.79 BLOCK NO.: 18 ZONE: NT O.S. TAX MAP: 29 ELEC. DIST.: FIFTH CENSUS TR.: 6055
 WATER CODE: I-02 SEWER CODE: 5583000

PHOTOMETRICS DIAGRAM
 "REVISED SITE DEVELOPMENT PLAN"
 AS-BUILT LONGFELLOW ELEMENTARY SCHOOL CLASSROOM ADDITION AND PARKING LOT ADDITION
 PARCEL No.: 261
 TAX MAP No.: 29 GRID No.: 18
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' DATE: APRIL 29, 2013
 SHEET 27 OF 28



LEGEND

SYMBOL	DESCRIPTION
--- 442 ---	EXISTING CONTOUR 2' INTERVAL
--- 440 ---	EXISTING CONTOUR 10' INTERVAL
+	EXISTING SAN SEWER LINE
+	EXISTING STORM DRAIN LINE
+	EXISTING WATER LINE
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+	EXISTING GAS LINE
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+	EXISTING TREES
+	EXISTING TREELINE
---	PROPOSED TREELINE
---	LIMIT OF DISTURBANCE
+	PROPOSED WATER
+	PROPOSED STORM DRAIN
+	PROPOSED GRASS PAVERS
+	PROPOSED CHAINLINK FENCE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE JULY 11, 2013

AS-BUILT ENGINEER CONSULTANT CERTIFICATION
THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.
Andrew Dorsey
ANDREW DORSEY, P.E. DATE 03/07/16
MARYLAND REGISTERED PROFESSIONAL ENGINEER -
NO. 45261

MATCHLINE SEE SHEET 27

NOTE: THE BUILDING PERMIT APPLICATION DEADLINE DATE FOR THE RED-LINE PLAN FOR THE CONSTRUCTION OF THE BUILDING EXPANSION IS JULY 11, 2014 (1 YEAR FROM THE PLANNING BOARD'S APPROVAL OF THE PLAN).

NOTE: THE PURPOSE OF THIS PLAN IS TO SHOW THE BUILDING ADDITIONS, UTILITIES AND OTHER IMPROVEMENTS.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PkE
ELLSWORTH CITY, MARYLAND 21042
410.451.2925

NEW RIVER ASSOCIATES PC
Civil Engineers, Planners, Landscape Architects, Surveyors
704 Severna Park, MD 21146 410-987-3456
A Woman-Owned, Service Disabled Veteran Owned Small Business

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. 13204, Expiration Date: November 3, 2014.
Charles J. Grovo
CHARLES J. GROVO, SR., P.E. 7/16/13 DATE

2116 AS-BUILT PLAN
DATE DESCRIPTION REVISION BLOCK
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Richard Lewis 7/31/13
Director, Department of Planning and Zoning
Scott Shalton 7/31/13
Chief, Division of Land Development
Andrew Dorsey 7/26/13
Chief, Development Engineering Division

PREPARED FOR
HOWARD COUNTY PUBLIC SCHOOL SYSTEM
10910 Maryland Route 108
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Attention Bruce Gist
410-313-6805

SMOLEN EMR ILKOVITCH ARCHITECTS
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Address Chart

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	COLUMBIA, MD. 21044

PROJECT	SECTION/AREA	PARCELS
LONGFELLOW ELEMENTARY SCHOOL	1/5	261

PLAT REF.	BLOCK NO.	ZONE	TAX MAP	ELEC. DIST.	CENSUS TR.
PB.13 F.79	18	NT O.S.	29	FIFTH	6055

WATER CODE	SEWER CODE
I-02	5583000

PHOTOMETRICS DIAGRAM
"REVISED SITE DEVELOPMENT PLAN"
AS-BUILT LONGFELLOW ELEMENTARY SCHOOL
CLASSROOM ADDITION AND PARKING LOT ADDITION
PARCEL No.: 261
TAX MAP No.: 29 GRID No.: 18
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1" = 20' DATE: APRIL 29, 2013

SHEET 28 OF 28