# SHEET INDEX A

			·
SHEET	DESCRIPTION		
1	COVER SHEET	10	DETAIL SHEET AND BUILDINGELEVATIONS
2	SITE DEVELOPMENT PLAN	11	STORMWATER MANAGEMENT DETAILS AND NOTES
3	EROSION AND SEDIMENT CONTROL PLAN	SEE	SHEET 12 BPL ADDITIONAL SHEETS (4)
. 4	EROSION AND SEDIMENT CONTROL DETAILS	,	And the total transfer Manage Transfer
5	STORM WATER MANAGEMENT DRAINAGE AREA MAP		
6	DEMOLITION PLAN		
7	SITE DEVELOPMENT PLAN AND SEDIMENT CONTROL PLAN		
		<u>-</u> 1	

8 ENLARGEMENTS OF BUILDING ADDITIONS 9 ENLARGEMENT OF TEMP. FORTABLE CLASSROOMS! RELOCATED BASEBALL FIELD General Notes

I. All construction shall be performed in accordance with the latest standards and specifications of Howard County, plus MSHA standards and specifications if applicable

2. Approximate location of existing utilities are shown from best available information. The contractor shall take all necessary precautions to protect the existing utilities and maintain uninterrupted service. Any damage incurred due to contractor soperation shall be repaired immediately at the contractor sexpense.

3. The contractor shall test pit existing utilities at least—five (5) days before starting work shown on these drawings to verify their location and elevation. The contractor shall notify the engineer immediately if location of utilities is other than shown.

4. The contractor shall notify •Miss Utility• at I-800-257-777 at least 48 hours prior to any excavation work being done, and shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.

5. Traffic controldevices, markings, and signing shallbe in accordance with the latest edition of the Manual of Uniform Traffic ControlDevices (MUTCD). All street and regulatory signs shallbe in place prior to the placement of any asphalt.

6. All plan dimensions are to face of curb unless otherwise noted.

7. No floodplain exist within limits of disturbance.

# 8. No wetlands exist within limits of disturbance.

9. Storm Water Management Quantity & Quality control for this site is provided in an existing extended detention facility, infiltration facility, and a stormceptor; privately owned & maintained. 10. The Existing topography is taken from a field run survey with the two foot contour intervals prepared by Daft McCune Walker, Inc., dated April, 1997

II. All Inlets shall be constructed in accordance with Howard County Standards or MSHA Standards as specified on structure schedule.

12. Operating existing valves, switches, services or start up of new services shall be

13. Required soilerosion and sedimentation controlpians shall be provided, installed and

14. Contractor shall carefully remove from the area to be disturbed all trees, shrubs and plant materials using procedures recommended by the American Nurseryman's Association so as to maximize the continual survival and health of the materials. These trees, shrubs and plant materials shall be transported to a designated location on the owner's property, and heeled into a mulch holding bed for future use by the owner in locations other than those involved in the contract work.

15. Where demolition is indicated on the drawings, it means to completely demolish feature, clear area of all debris, and dispose of off-site at a legal dumpsite. Abandon means to leave in place and cut where required, and bulkhead all cut ends with a plug or cap, or construct a 9 thick brick and mortar bulkhead conforming to existing utility

16. Public water and sewer are to be utilized, contract 71W, 32S, and 2738S-B.

17. There are no known grave sites or cemeteries on this site.

18. The coordinates shown hereon are based upon the Howard County geodetic control which is based upon the Maryland State plane coordination system. Howard County monument numbers ITEA and ITEB were used for this project. 19. No traffic study is required for this project.

20. Existing utilities where test pitted and located by Rapid Rooter & J. Vinton Schafer & Sons, Inc., June 1997.

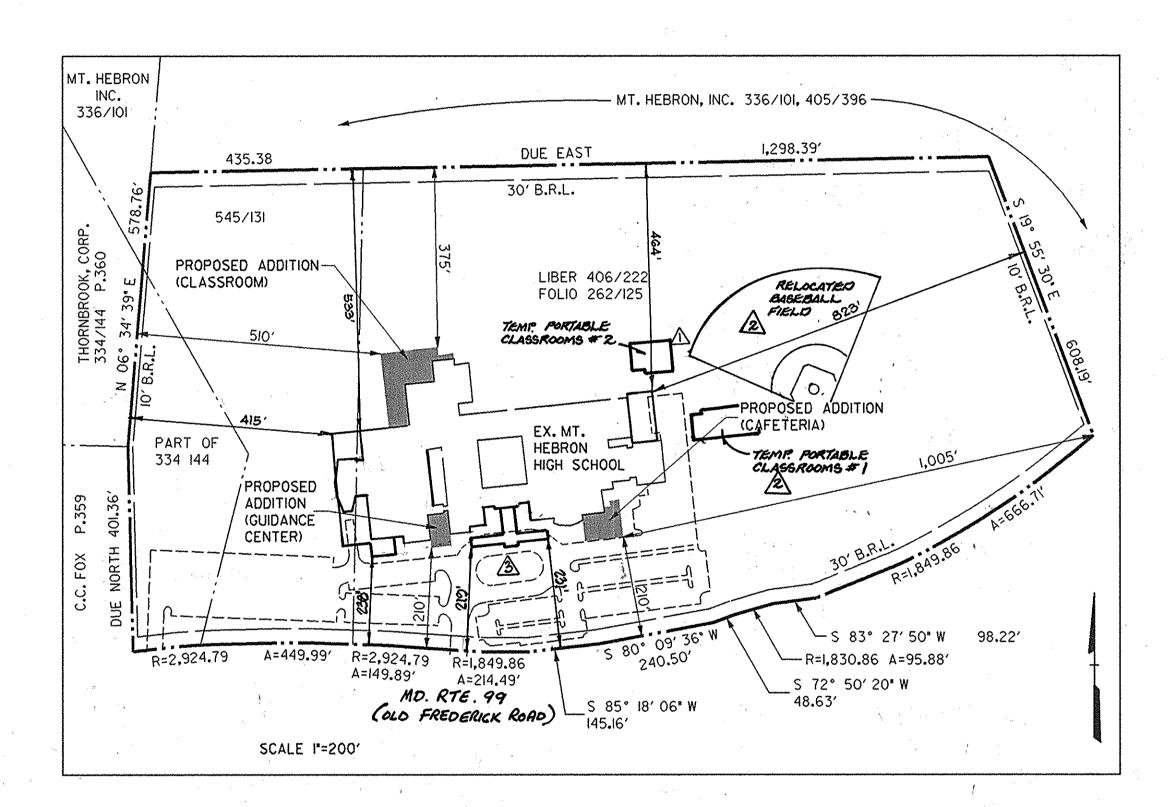
NORTH ELEVATION-CLASSROOM ADDITION

CLASSROOM ADDITION

GUIDANCE ---

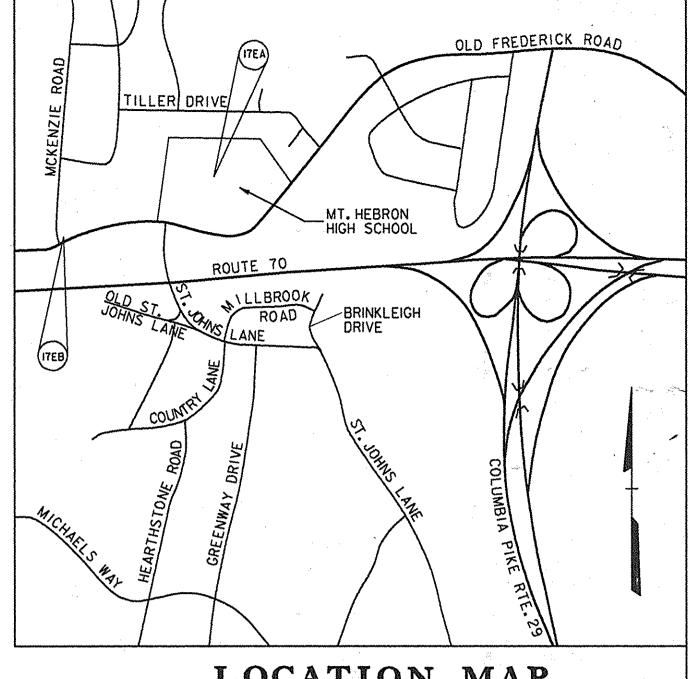
PARTIAL SOUTH ELEVATION-GUIDANCE ADDITION

# SITE DEVELOPMENT PLAN Mt. Hebron High School Additions



---- KITCHEN ADDITION -----

PARTIAL SOUTH ELEVATION-KITCHEN ADDITION



# LOCATION MAP

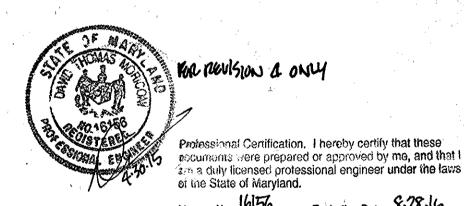
SCALE: |" = 1000'

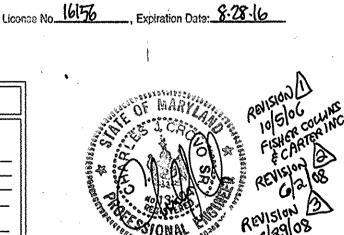
4.30.15 @ REVISED SHEET TOTAL & INDEX

A REVISED LEFT SIDE BUILDING ADDITION AND CANOPY

413772.7247 METERS ELEV.479.46 413227.8979 METERS ELEV.454.23

ADDRESS CHART PARCEL NUMBER STREET ADDRESS 9440 Old Frederick Road Rte. 99 PARCEL 471





PROPERTY RECORDED IN LIBER: 406, FOLIO 222 LIBER: 545, FOLIO 131 LIBER: 334, FOLIO 144 (PART OF



OWNER /DEVELOPER:



MT. HEBRON HIGH SCHOOL

**ADDITIONS** 

HOWARD COUNTY PUBLIC SCHOOL SYSTEM SCHOOL PLANNING AND CONSTRUCTION

10910 ROUTE 108, ELLICOTT CITY, MD 21042

MT. HEBRON HIGH SCHOOL PLAT# OR LF | BLOCK # ZONE | TAXZONE MAP | SEE LIST | 9,10,15,16 | R-20 | 17

COVER SHEET

Scale AS SHOWN Proj. No. 96108.S JWM 7-23-97 △ 1 0F# Approved MK

a. Open Space Required on Site: N/A Acres % of Gross Area of POR Area b. Open Space Proposed N/A Acres % of POR Area 5. Parking Space Data (See parking justification in file) a. Number of Parking Spaces Required by Zoning Regulations <u>O spaces</u> b. Total Number of Parking Spaces Existing On-Site: 455 spaces per SDP 95-127 c. Number of Handicapped Parking Spaces Existing: 9 spaces per SDP 95-127 d. Number of Standard Parking Spaces Existing: 446 spaces per SDP 95-i27 Professional Engr. No.16872

SDP 95-127, SDP 78-27, SDP 75-106, SDP 87-167

SITE ANALYSIS DATA CHART

I. General Site Data g. Present Zoning:

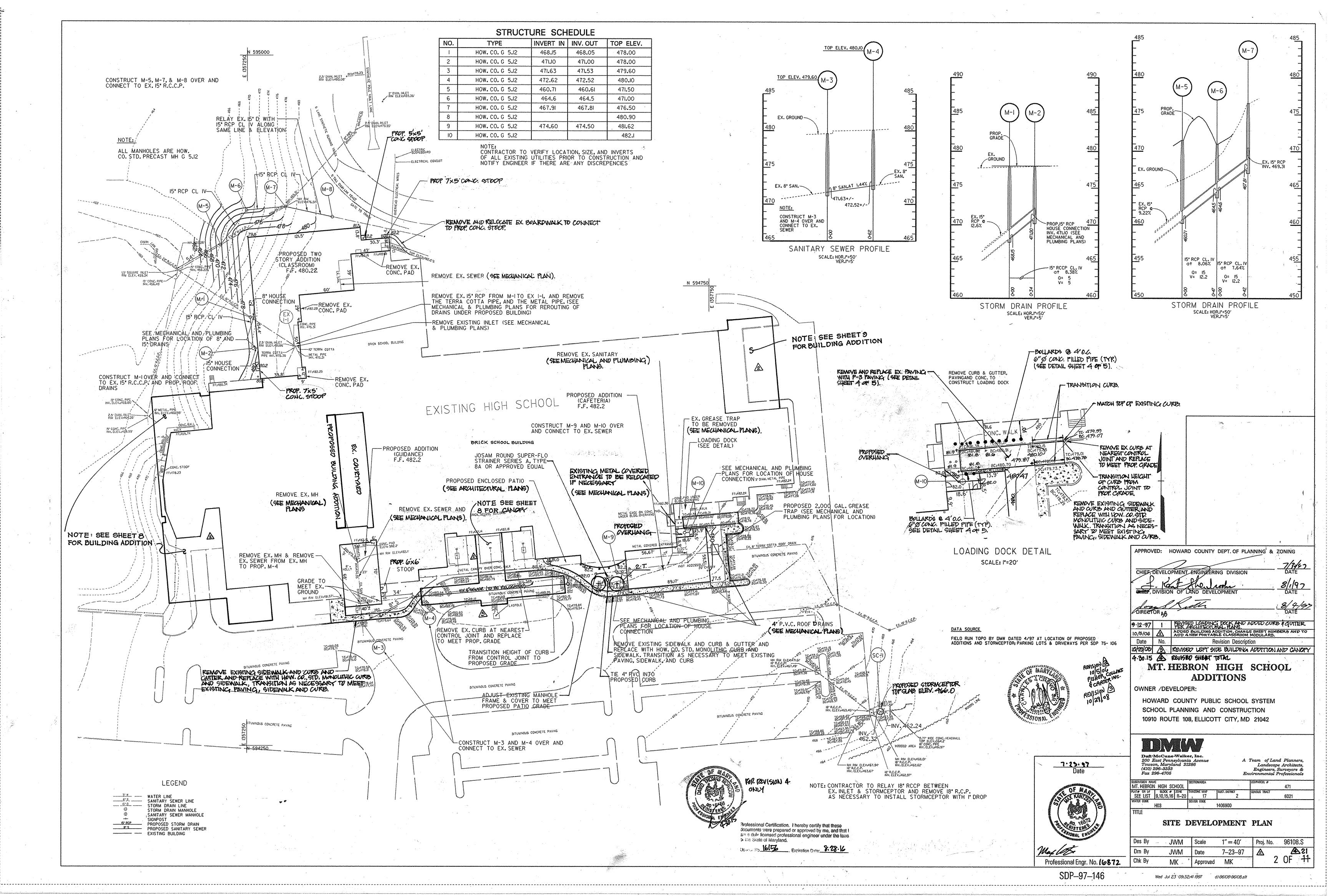
2. Area Tabulation

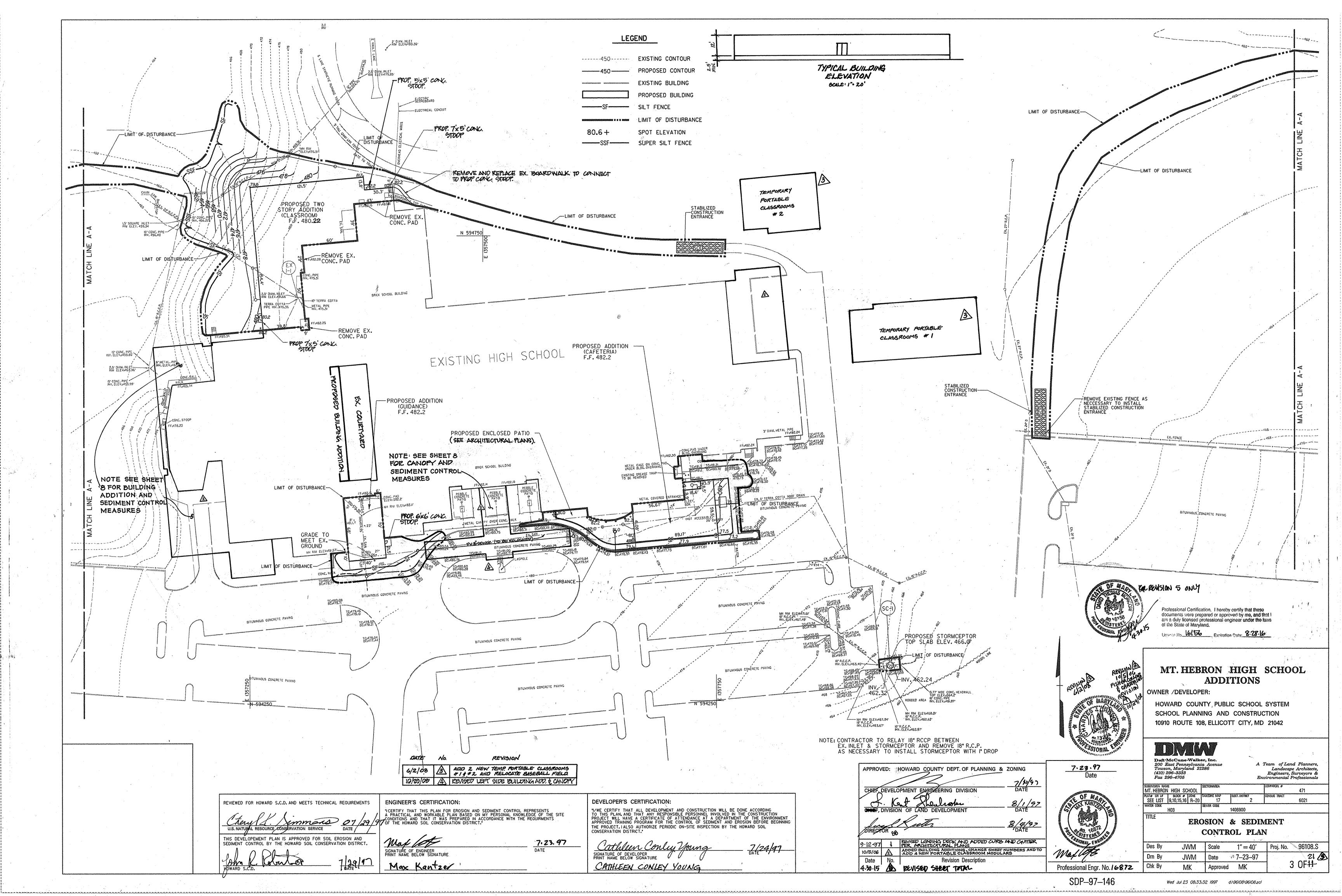
Applicable DPZ File References: \_

Proposed Use of Site or Structure(s): HIGH SCHOOL
Proposed Water and Sewer Systems: YES Public -

Any Other Information Which May be Relevant:

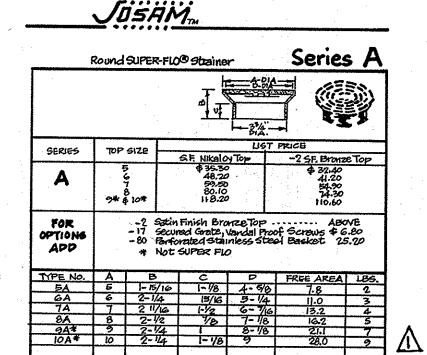
SDP-97-146





- I. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
- 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
- SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1
- FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE
- 4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. I, CHAPTER 12, OF THE "HOWARD COUNTY DESIGN MANUAL," STORM DRAINAGE.
- 5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL' FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDING, AND MULCHING (SECTION G). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- 6. 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.
- 7. SITE ANALYSIS:
  - 40.055 ACRES 1.90 ACRES TOTAL AREA OF SITE AREA DISTURBED A CRES AREA TO BE ROOFED OR PAVED VEGETATIVELY STABILIZED 0.40 ACRES CUBIC YARDS CUBIC YARDS OFF-SITE WASTE/BORROW AREA LOCATION WASTE = N/A
- 8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- 9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- IO. 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.

SEDIMENT CONTROL GENERAL NOTES



# PERMANENT SEEDING NOTES

DISK INTO UPPER THREE INCHES OF SOIL.

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES: I. PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SO.F.T.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SO.F.T.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1000 SQ.FT.)
2. ACCEPTABLE - APPLY 2 TOMS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR

SEEDING - FOR THE PERIODS MARCH ITHRU APRIL 30, AND AUGUST ITHRU OCTOBER 15, SEED WITH 60 LBS. PER ACRE (1.4 LBS/1000 SO.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY ITHRU JULY 3I SEED WITH 60 LBS. KENTUCKY 3I TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (.05 LBS/1000 SO.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) - 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION (2) - USE SOD. OPTION (3) -SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATIONS USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

 $\underline{\mathsf{MAINTENANCE}}$  - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

# TEMPORARY SEEDING NOTES

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

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

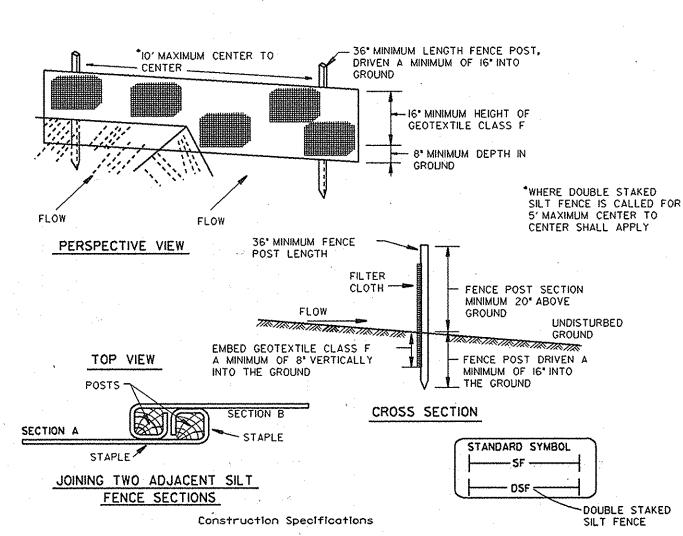
SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ.FT.)

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

MULCHING - APPLY I-I/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ.FT.) OF UNROTTED WEED FREE SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL. PER ACRE (5 GAL/1000 SQ.FT.) OF EMULSIFIED ASPHLAT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE 348 GAL. PER ACRE (8 GAL/1000 SQ.FT.) FOR ANCHORING.

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

PERMANENT SEEDING NOTES



i. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be  $1\frac{1}{2}$  ×  $1\frac{1}{2}$  square (minimum) cut, or  $1\frac{1}{2}$  diameter (minimum) round and shallbe of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shallbe fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements

Tensile Strength Tensile Modulus

for Geotextile Class F:

50 lbs/in (min.) 20 lbs/in (min.) 0.3 gaift/minute

Test: MSMT 509 Test: MSMT 509 Test: MSTM 322

Flitering Efficiency 75% (min.) Test: MSMT 322 3. Where ends of geotextile fabric come together, they shall be overlapped,

folded and stapled to prevent sediment bypass. 4. Silt Fence shallbe inspected after each rainfall event and maintained when

buiges occur or when sediment accumulation reached 50% of the fabric helaht.

E - 15 - 3

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SILT FENCE

NOT TO SCALE

IDAY

IDAY

14 DAYS

14 DAYS

120 DAYS

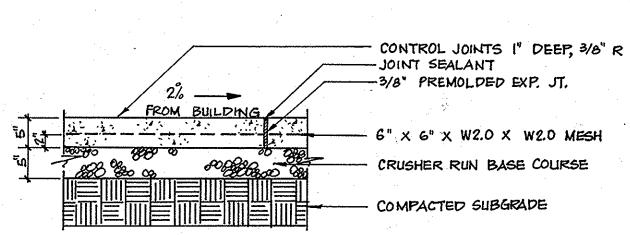
14 DAYS

14 DAYS

FISHER, COLLINS

& CARTER INC.

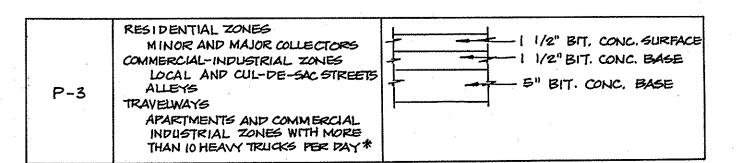
Max Kantzer



# CONCRETE STOOP DETAIL

# SEQUENCE OF OPERATIONS

- I. OBTAIN GRADING PERMIT.
- 2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.
- 3. REMOVE, RELOCATE AND CONSTRUCT UTILITIES, STORMCEPTOR AND MANHOLES.
- 4. EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE FOR BUILDINGS. 5. CONSTRUCT BUILDINGS, SIDEWALKS, AND RECONSTRUCT PAVING.
- 6. FINE GRADE AND STABILIZE DISTURBED AREAS ON SITE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS.
- 7. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE.
- NOTE: EROSION AND SEDIMENT CONTROL FOR THE CLASSROOM ADDITION, GUIDENCE ADDITION, AND CAFETERIA ADDITION MAY BE INSTALLED INDEPENDENTLY OF EACH OTHER DEPENDING ON THE SCHEDULE FOR CONSTRUCTION.



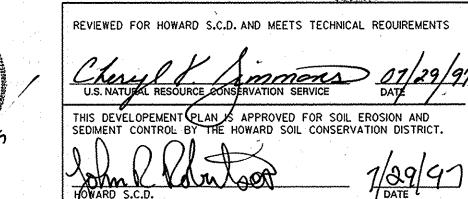
# P-3 PAVING SECTION

Experition Data 8.28.16

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duty licensed professional engineer under the laws of the State of Maryland.

1,1-2000 Mg 16156

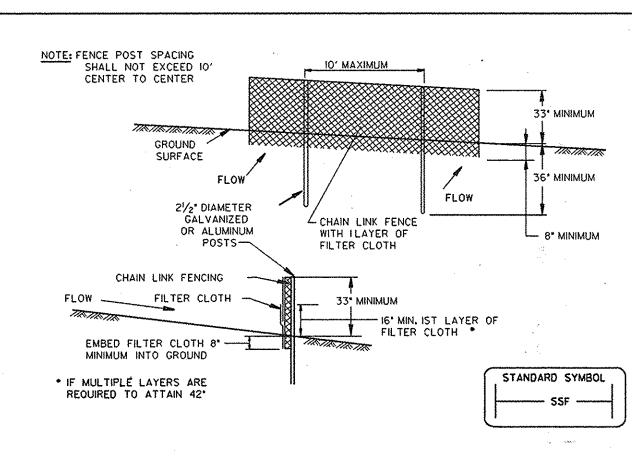
POIL DEVISION 3 ONU



**ENGINEER'S CERTIFICATION:** "ICERTIFY 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 REQUIRMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." Was life

7.23.97

4" P.V.C. TYING INTO PROPOSED CURB NTS. **DEVELOPER'S CERTIFICATION:** "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL Cathleen Conly young 7/24/97



# Construction Specifications

I. Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42' fabric and 6' length posts.

2. The posts do not need to be set in concrete.

-SMOOTH CONCRETE TO A ROUNDED SURFACE

FLUSH WITH THE TOP OF STEEL PIPE

2 COATS RUSTOLEUM - COLOR

- FILL AND COMPACT CONCRETE

-FINISHED GRACE (SEE SITEPLAN)

3. Chain link fence shall be fastened securely to the fence posts with wire ties or staples The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. The chain link fencing shallbe six (6) guage or heavier.

4. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24' at the top and mid section.

5. Filter cloth shall be embedded a minimum of 8 into the ground.

6. When two sections of fliter cloth adjoin each other, they shall be overlapped

7. Maintenance shallbe performed as needed and slit buildups removed when 'builges' develop in the slit fence, or when slit reaches 50% of fence height

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

- MOUNTABLE

--- EARTH FILL

MINIMUM 6" OF 2"-3" AGGREGATE

OVER LENGTH AND WIDTH OF

STRUCTURE

LENGTH

Construction Specification

PROFILE

PLAN VIEW

2. Width - 10' minimum, should be flored at the existing road to provide a turning

3. Geotextile fabric Class C (filter cloth) shall be placed over the existing ground

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe

installed through the stabilized construction entrance shallbe protected with a

according to the amount of runoff to be conveyed. A 6 minimum will be required.

where construction traffic enters or leaves a construction site. Vehicles leaving

F - 17 - 3

the site must travelover the entire length of the stabilized construction entrance.

6. Location - A stabilized construction entrance shall be located at every point

mountable berm with 5: slopes and a minimum of 6 of stone over the pipe. Pipe has

to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete

equivalent shall be placed at least 6° deep over the length and width of the

prior to placing stone. ..The plan approval authority may not require single family

1. Length - minimum of 50' (+30' for single residence lot).

BERM (SEE DETAIL

— PIPE AS NECESSAR'

PAVEMENT

EXISTING PAVEMENT

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

SUPER SILT FENCE

· 6" ad. Steel Pipe

18.79 LBS/FT.

BY ARCHITECT

FOOTING 4000 P.S.I.

WITHIN PIPE

H - 26 - 3

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

NOT TO SCALE

## STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

I. LONGITUDINAL JOINT BETWEEN SIDEWALK AND CURB SHALL BE CONTINUOUS AND TO A DEPTH OF 1/4 THE SIDEWALK THICKNESS OR I"MAX. LATITUDINAL JOINTS SHALL RUN FROM BACK EDGE OF SIDEWALK, CONTINUOUS TO THE BOTTOM FACE OF CURB TO A DEPTH OF 1/4" AND SPACED 5' APART.

2. PROVIDE 1/2" EXPANSION JOINTS AT 15' INTERVALS, IN LATITUDINAL JOINTS TO FULL CROSS-SECTION.

\*\* GEOTEXTILE CLASS 'C'

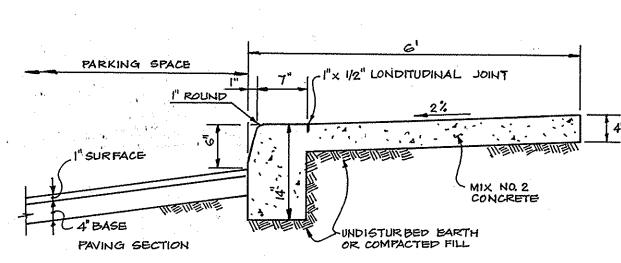
OR BETTER

- EXISTING GROUND

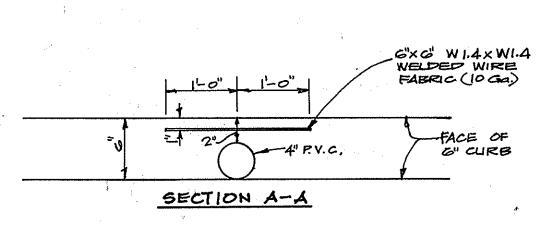
STANDARD SYMBOL

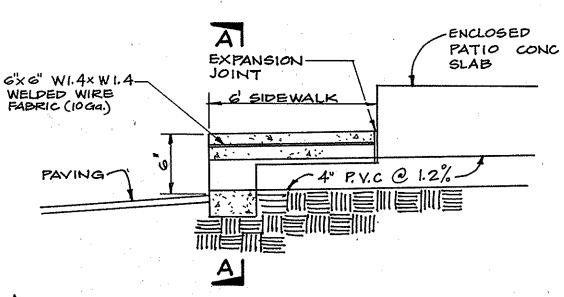
SCE

residences to use geotextile.



MONOLITHIC CURB AND SIDEWALK R.3.07





A BOLLARD DETAIL NT.S. NOTE: SET TREE 4" ABOVE FINISHED GRADE TO ALLOW FOR SETTLEMEN" SPIRAL WRAP TRUNK WITH BURLAPOR APPROVED EQUAL TO AND ABOVE FIRST BRANCH. 2" PEBBLE OR GRAVEL MULCH 4" PERPORATED ASPHALTIC PIPE FILLED WITH 142" WASHED STONE 4FT, LONG FLUSH WITH FINISHED -REHOVE BURLAP FROM TOP 1/3 OF BALL BURLAP TO BE ROTTABLE - Planting soil Mix to be 100% Native Topsoil free of Stones Lumps of Clay greater than 2" and all roots or other extransous material SCARIFY BOTTOM OF PIT - UNDISTURBED SUBSOIL OR COMPACTED

Tree Planting-Paved Area N.T.S. PLANT LIST

1-6

SQUARE

REMARKS TILLA CORDATA 21/2-3" CAI green-spire linden 10-12' HT. FULL HEAD

Date

Professional Engr. No. 16872

1.23.97

POURED-IN-PLACE CONCRETE APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING CHEF, DEVELOPMENT ENGINEERING DIVISION DIVISION OF LAND DEVELOPMEN 8/4/97 DATÉ

9-12-97 | ADDED DETAILS FER ARCHITECT REQUEST 10/5/06 CHANGED SEDIMENT CONTROL NOTES, CHANGED SHEET NUMBERS AND TO ADD 4 NEW PORTABLE CLASS ROOM MODULARS Date No. Revision Description 430.15 (\$ PEVISED SHEET TOTAL

MT. HEBRON HIGH SCHOOL **ADDITIONS** 

# OWNER /DEVELOPER

HOWARD COUNTY PUBLIC SCHOOL SYSTEM SCHOOL PLANNING AND CONSTRUCTION 10910 ROUTE 108, ELLICOTT CITY, MD 21042

Daft McCune Walker, Inc

A Team of Land Planners, Landscape Architect Engineers, Surveyors pronmental Professiona (410) 296-3333 Fax 296-4705

MT. HEBRON HIGH SCHOOL 471 SEE LIST 9,10,15,16 B-20

**EROSION & SEDIMENT** CONTROL DETAILS

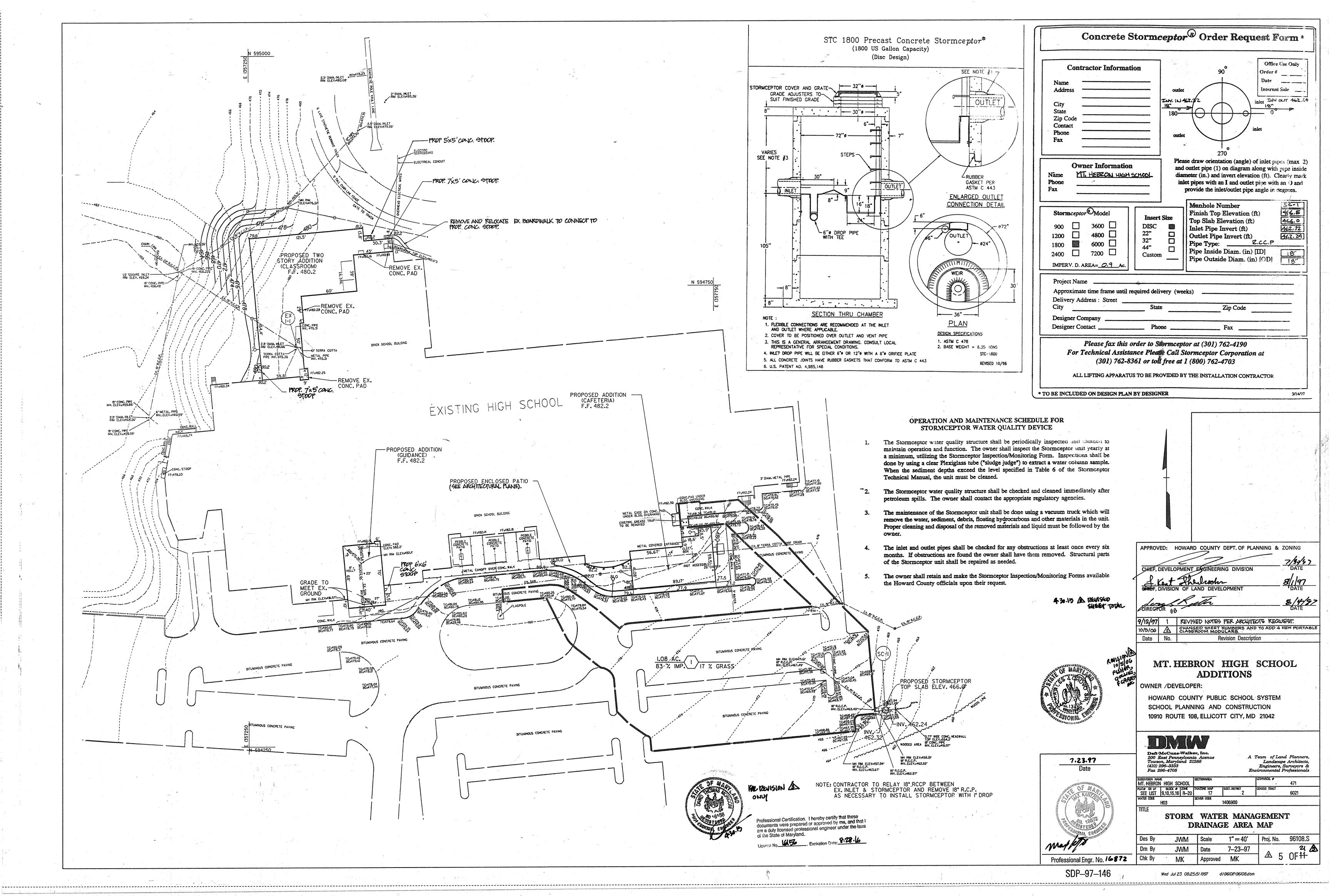
Scale AS SHOWN Proj. No. Des By JWM JWM 7-23-97 **鱼 4 OF 并 鱼** Approved MK MK

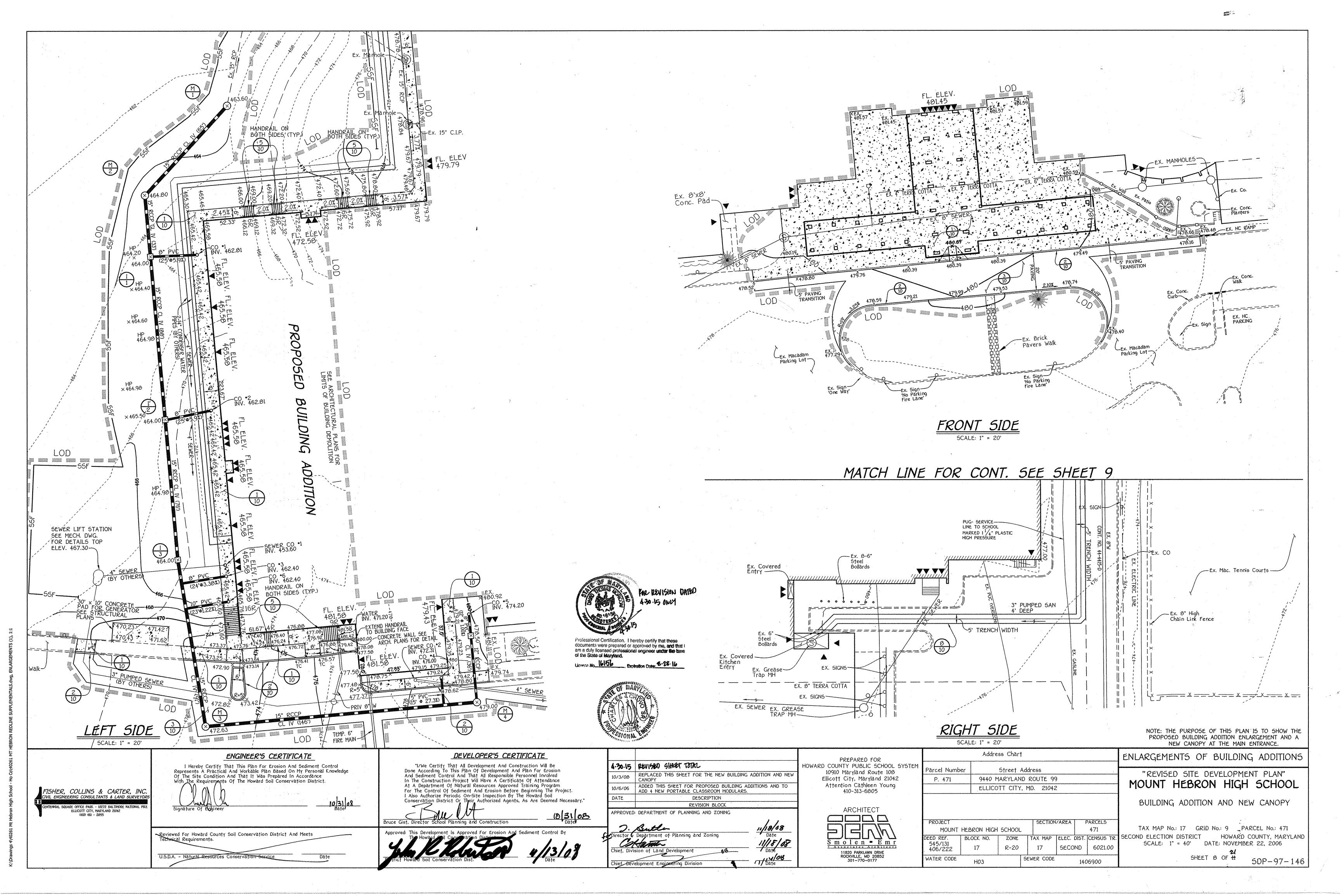
Wed Jul 23 08:16:06 1997

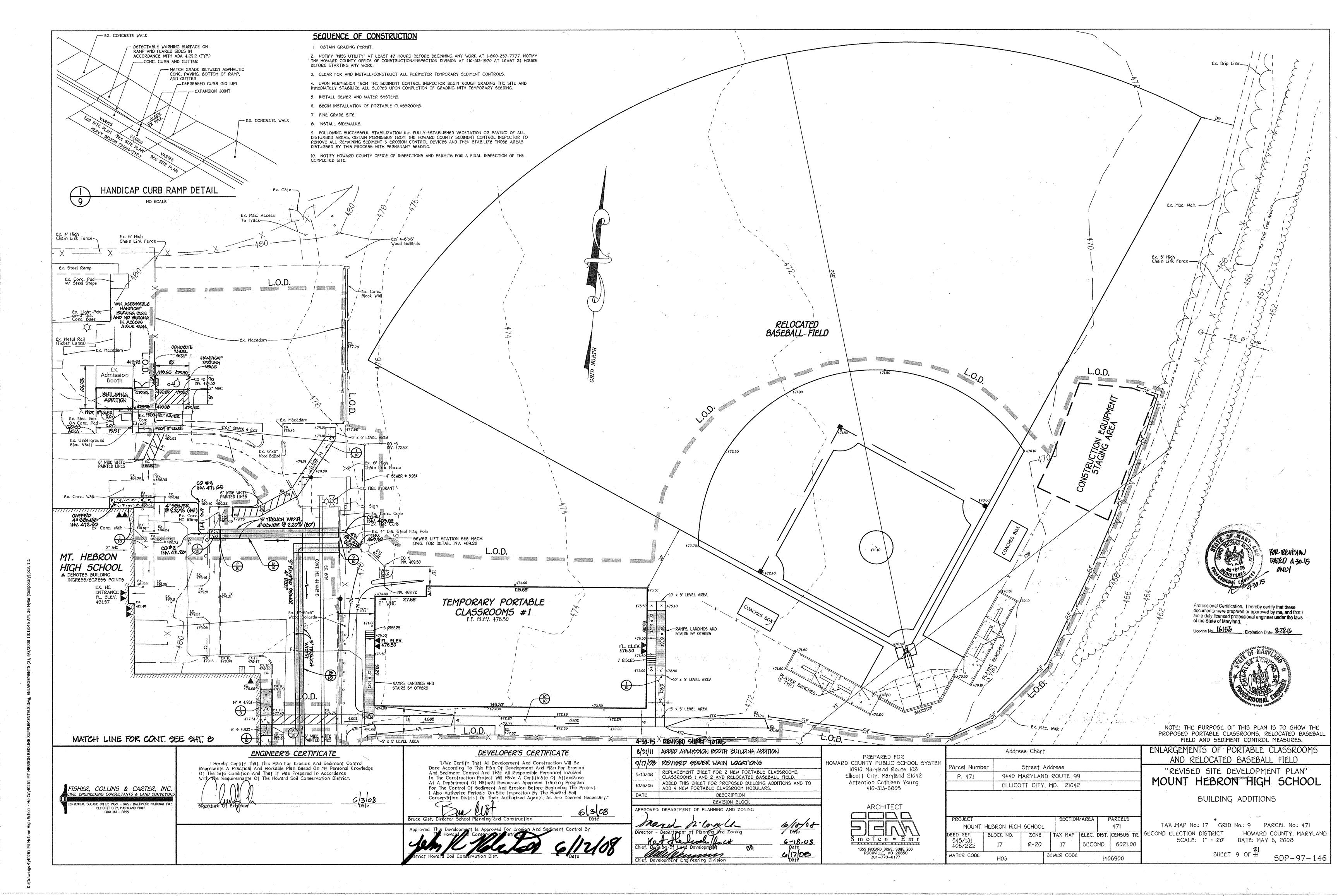
SDP-97-146

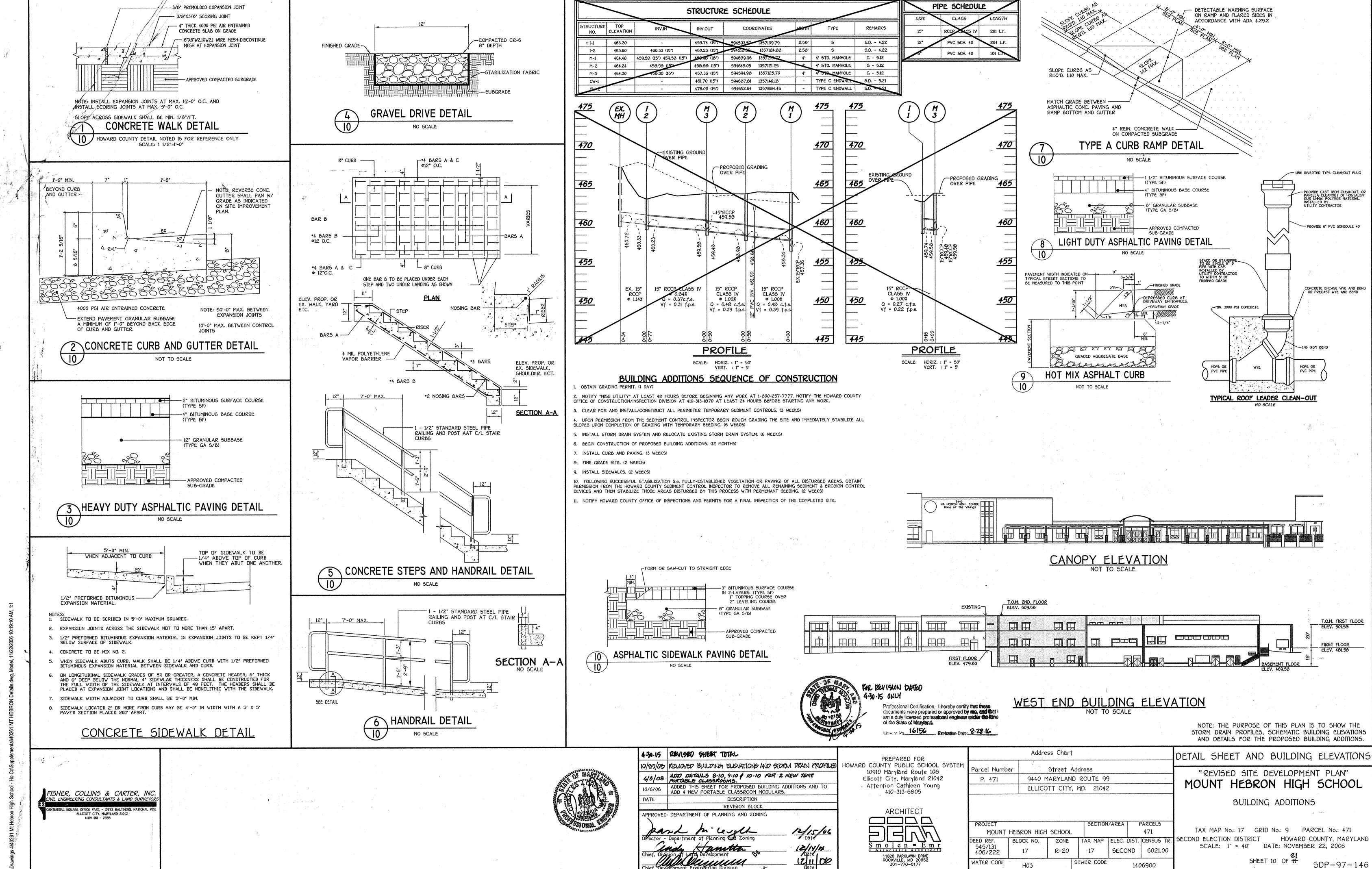
CATHLEEN CONLEY YOUNG

Chk By









2. The utility locations are approximate. Contractor shall test pit all known existing utilities to verify, size, shape, location, and type prior to performing construction. Utility relocations, whether shown or not, are the responsibility of the owner. Any utility damaged due to construction must be repaired immediately.

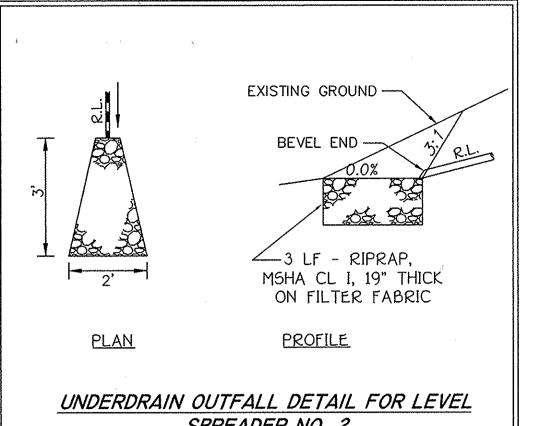
- 3. Should the contractor discover discrepancies between the plans and field conditions, the engineer is to be notified immediately to resolve the situation. If the contractor makes field corrections or adjustments without notifying the engineer, then the contractor assumes all responsibility for those changes.
- 4. The topography and boundary shown on this plan was prepared by Fisher Collins and Carter.
- 5. Contractor shall notify Miss Utility 1-800-257-7777 and Howard County Construction Inspection Division five (5) working days prior to beginning construction.
- 6. Fisher Collins & Carter 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.
- 7. The level spreader can be graded and constructed/stabilzed, however, it shall not receive water until all upstream areas have been stabilized. (i.e., good grass cover or paved).
- 8. The Stormwater Management Facilities (i.e., Level Spreaders) shown on this sheet shall be privately owned and maintained by the Howard County Public School System.
- 9. Roof leaders to have watertight joints.

# MATERIAL SPECIFICATIONS

- 1. The permeable soil shall consist of well mixed 35% sand, and 65% topsoil. The soil shall be free of stones, stumps, roots, or other similar material greater than 2". No other material shall be mixed or dumped within the permeable soil that may hinder plant growth. The planting soil shall be free of Bermuda grass, Quackgrass, Johnson grass, or other noxious weeds as specified under COMAR 15.08.01.05. The permeable soil shall loosely compacted in 8" lifts and be flooded after placement. Any settlement shall be refilled to the design elevation, and as outlined below. Sand shall meet AASHTO M-6 or ASTM C-33, Size: 0.02" to 0.04". The sand must be clean; free of fines, roots, etc. See the the bioretention soil standards as set for in the Maryland Department of the Environment's 2000 SWM Design Manual for all other applicable soil specifications.
- 2. Mulch shall be double-shredded hardwood aged 6 to 12 months. No woods chips or pine mulch.
- 3. The "washed gravel" shall be washed pea gravel (ASTM D448) or uniformly sized stone meeting AASHTO M-43 (0.375" to 0.75") surrounded by geotextile Mirafi 180N or approved equal (alternative geotextiles are outlined in MDE's 2000 SWM Manual in Appendix B, Class "C" criteria). Stone shall be carefully placed to prevent damage to geotextile. The geotextile shall be installed per the manufacturer's specifications with a 6" overlap. Stone agareaate must be free of fines and clean.
- 4. The curlex matting shall be stapled and installed per the manufacturer's specifications.
- 5. The gabion shall be pvc-coated and have an "open" bottom (i.e., use a 1/2 standard 1.5'x3'xL gabion basket). Gabion to be filled with 4"-8" stone. Gabion top surface to be level (0.0%) in all directions.
- 6. Earthen fill adjacent to the gabion level spreader shall meet MD-378 standards and specifications regarding compaction and fill materials.

# LEVEL SPREADER NOTES

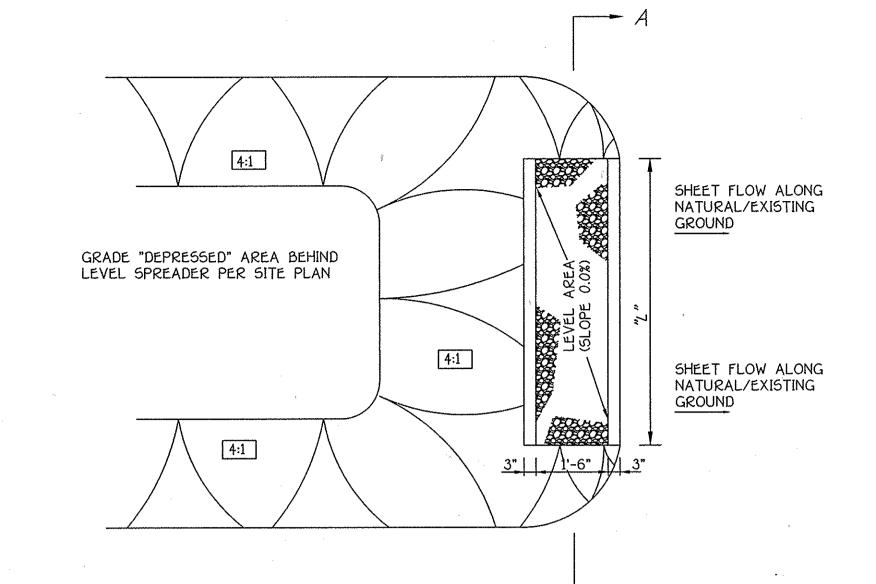
- 1. Place 6" perforated (slotted) PVC underdrain pipe at 0.0% beneath the level spreader "depressed" area as shown on the plan and then slope toward the outfall at 1.0% minimum. The outfall shall be to the storm drain system (west side) or to a grassed swale (east side). The PVC shall be Schedule 40 or stronger. Cap upstream ends.
- 2. Should field conditions necessitate, the contractor shall provide positive drainage downstream of the level spreader (i.e., grade land to "daylight"). The grading shall be performed such that water flows in a sheet flow fashion (i.e. evenly spreads out as it flows downhill). All disturbed area shall be stabilized prior to allowing roof water to enter the level spreader.
- 3. The level spreader and permeable soil/stone bedding and underdrain shall not receive water until ALL upstream areas have been stabilized (i.e., paved or have established vegetation).
- 4. Use 4:1 side slopes around the inside of the depressed area except where 2:1 is used to tie in to the roof leader concrete endwall.



SPREADER NO. 2

NOTE: This detail shows the "east side" level spreader underdrain outfall to the grass swale adjacent to the tennis courts.

LEVEL SPREADER (L.S.) DIMENSION TABLE					
	L.S. #1 (WEST)	L.S. #2 (EAST)			
L.S. LENGTH "L"	15'	<i>6'</i>			
L.S. CREST ELEV.	461.80	476.00			
DEPRESSED AREA DEPTH "D"	0.7'	0.5'			
DEPRESSED AREA DIMENSIONS (L'xW')	15'x18'±	8'x6'±			



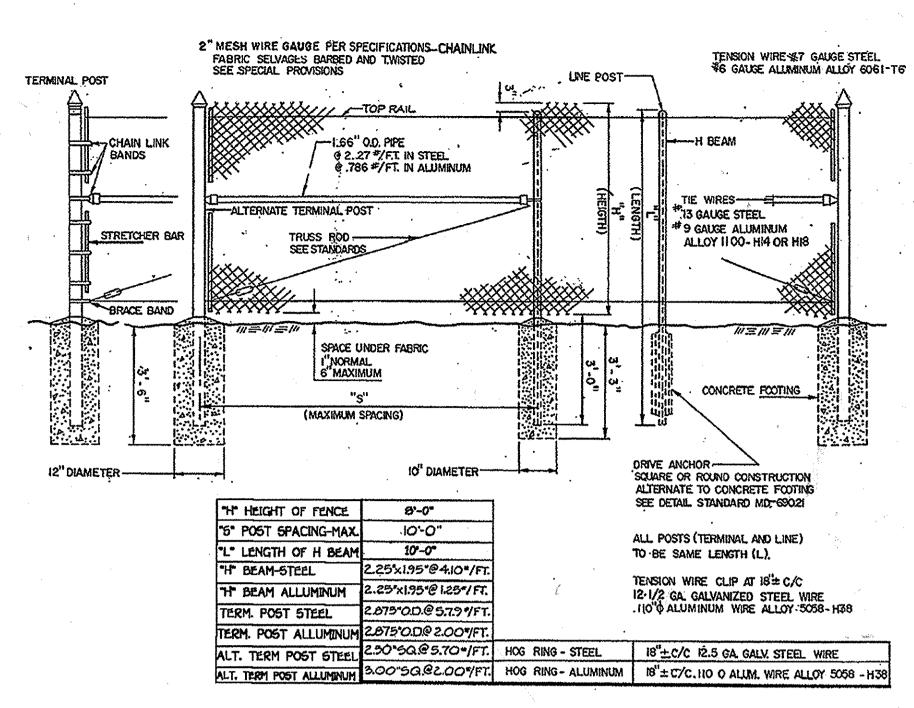
LEVEL SPREADER - TYPICAL PLAN



WEST SIDE (LS #1) = 6"

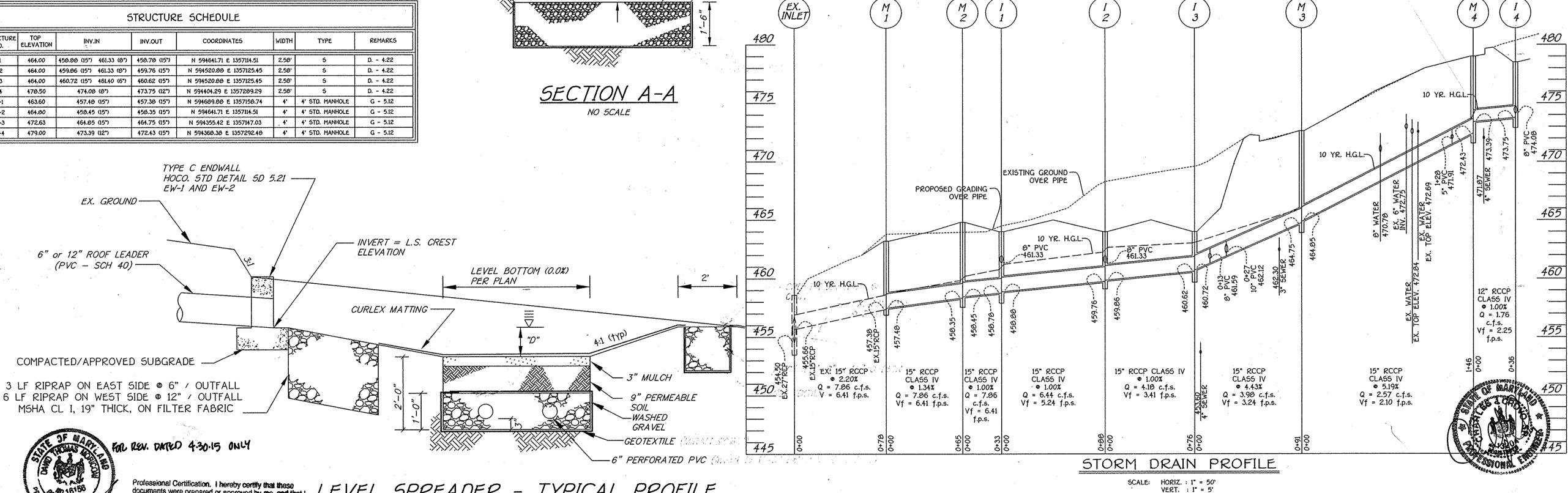
EAST SIDE (LS #2) = 3"

GROUND (typ) \_\_\_\_



CHAIN LINK FENCE NO SCALE

STRUCTURE SCHEDULE									
STRUCTURE NO.	TOP ELEVATION	Ni.VAI	тио.уи	COORDINATES	WIDTH	TYPE	REMARKS		
I-1	464.00	450.00 (15") 461.33 (0")	458.78 (15)	N 594641.71 E 1357114.51	2.58'	5	D 4:22		
1-2	464.00	459.86 (15") 461.33 (8")	459.76 (15")	N 594520.88 E 1357125.45	2.58'	5	D 4.22		
1-3	464.00	460.72 (15") 461.40 (6")	460.62 (15*)	N 594520.88 E 1357125.45	2.58	5	D 4.22		
I-4	478.50	474.08 (8")	473.75 (12°)	N 594404.29 E 1357289.29	2.58'	5	D 4.22		
M-1	463.60	457.40 (15")	457.38 (15°)	N 594609.00 E 1357150.74	4'	4' STD. MANHOLE	G - 5.12		
M-2	464.80	450.45 (15")	450.35 (15")	N 594641.71 E 1357114.51	4'	4° STD. MANHOLE	G - 5.12		
M-3	472.63	464.05 (15*)	464.75 (15")	N 594355.42 E 1357147.03	, 4°	4' STD. MANHOLE	G - 5.12		
M-4	479.00	473.39 (12")	472.43 (15")	N 594360.30 E 1357292.40	4'	4' STD. MANHOLE	G - 5.12		



- LEVEL SPREADER

CREST ELEVATION

Liconse No. 16156 Expiration Date: 9-28-16

EX. GROUND ---

6" or 12" ROOF LEADER (PVC - SCH 40) --

, REV. DATED 4.30.15 ONLY

of the State of Maryland.

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 taws

NO SCALE

EED REF.

545/131 406/222

WATER CODE

BLOCK NO.

R-20

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

STØRMWATER MANAGEMENT

FISHER, COLLINS & CARTER, INC. IVIL ENGINEERING CONSULTANTS & LAND SURVEYORS 4.30.15 PEVISED SHEET TOTAL 10/20/08 ADDED STORM DRAIN PROFILE ADDED THIS SHEET FOR PROPOSED BUILDING ADDITIONS AND TO ADD 4 NEW PORTABLE CLASSROOM MODULARS. 10/6/06 DATE DESCRIPTION REVISION BLOCK APPROVED: DEPARTMENT OF PLANNING AND ZONING 12/15/02 park pruise Hamitia 12/11/06

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

> **ARCHITECT** Smolen = Em 11820 PARKLAWN DRIVE ROCKVILLE, MD 20852 301-770-0177

Address Chart Parcel Number Street Address 9440 MARYLAND ROUTE 99 P. 471 ELLICOTT CITY, MD. 21042 PROJECT PARCELS SECTION/AREA MOUNT HEBRON HIGH SCHOOL

17

SEWER CODE

TAX MAP | ELEC. DIST. CENSUS T

SECOND

6021.00

1406900

DETAILS AND NOTES "REVISED SITE DEVELOPMENT PLAN" MOUNT HEBRON HIGH SCHOOL

BUILDING ADDITIONS

TAX MAP No.: 17 GRID No.: 9 PARCEL No.: 471 SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1" = 40' DATE: NOVEMBER 22, 2006

SHEET 11 OF 4

5DP-97-146

# MT. HEBRON HIGH SCHOOL IMPROVEMENTS

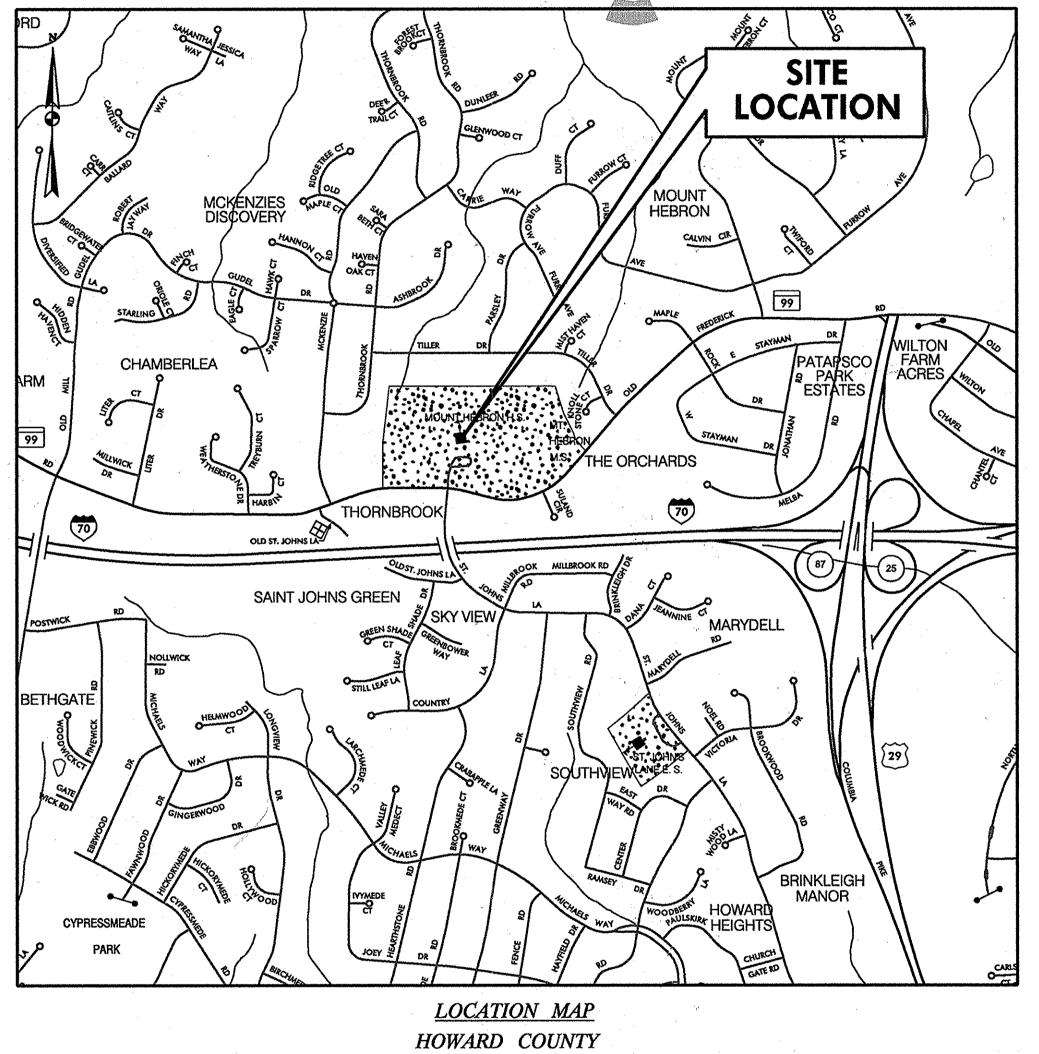
# INDEX OF DRAWINGS CONTINUED

- TITLE SHEET
- **EXISTING PLAN/DEMOLITION PLAN**
- STAKE-OUT PLAN
- SITE PLAN AND EROSION & SEDIMENT CONTROL PLAN
- SITE DETAILS I, II, III & IV
- PIPE PROFILES
- **EROSION AND SEDIMENT CONTROL NOTES AND DETAILS**

# DEVELOPER'S CERTIFICATION "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN. AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. 1 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT." 5-17-15 ENGINEER'S CERTIFICATION "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." URS CORPORATION 4 NORTH PARK DRIVE HUNT VALLEY. MD 21030 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY HOWARD SOIL CONSERVATION

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT 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. 16156
EXPIRATION DATE: 8/28/2016.

# 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND



SCALE: 1' = 1000

APPROVED: DEPARTMENT OF PLANNING AND ZONING 5.11.15 CHIEF DEVELOPMENT ENGINEERING DIVISION 5-26-15 DATE 5-28-2015 DATE

# **GENERAL NOTES**

- THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 HOWARD COUNTY PUBLIC SCHOOLS AT 410-313-6600 AND MISS UTILITY AT 1-800-257-7777 AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK
- COORDINATES SHOWN HERON ARE BASED ON THE MARYLAND STATE REFERENCE SYSTEM NAD 183/11 AS PROJECTED BY HOWARD COUNTY PROJECT CONTROL STATIONS 17ED, FLY5, URS1, URS2, URS3, AND URS4

17ED N:594,314.8580 E:1,357,380.9430 ELEV:478.2700 HOWARD COUNTY DISK FOUND

FLY5 N:594,732.8714 E:1,357,636.4313 ELEV:480.6810 URS MAGNAIL FOUND

N:594,632.4182 E:1,358,237.0319 ELEV:469.1510 URS MAGNAIL FOUND

N:594,908.7686 E:1,357,873.7521 ELEV:480.0910 URS MAGNAIL FOUND

URS3 N:594,866.0318 E:1,357,345.2842 ELEV:480.5910 URS MAGNAIL FOUND

N:594,558.2879 E:1,356,756,5456 ELEV:458.5310

THE SYSTEM OF COORDINATES USED IS BASED ON THE FOLLOWING DATUMS

HORIZONTAL: NAD83/2011 VERTICAL: NAVD88

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," ISSUED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND THE NATURAL RESOURCES CONSERVATION SERVICE.
- TOPOGRAPHIC SURVEYS WERE PERFORMED BY URS CORPORATION IN OCTOBER 2014.
- THE PROPERTY LINES AND EASEMENT LINES ARE APPROXIMATE.
- SHOULD THE CONTRACTOR DISCOVER DISCREPANCIES BETWEEN THE PLANS AND THE FIELD CONDITIONS, THE ENGINEER IS TO BE NOTIFIED IMMEDIATELY TO RESOLVE THE SITUATION. SHOULD THE CONTRACTOR MAKE FIELD CORRECTIONS OR ADJUSTMENTS WITHOUT NOTIFYING THE ENGINEER. THEN THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR THOSE CHANGES.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS. METHOD, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND
- APPROXIMATE UTILITIES ARE SHOWN FROM AVAILABLE RECORDS AND/OR FIELD RECONNAISSANCE. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS. **UTILITY CONTACTS:** 

(410) 637-8713

BGE (CONSTRUCTION SERVICES)
BGE (EMERGENCY) HOCO BUREAU OF UTILITIES COLONIAL PIPELINE CO. MISS UTILITY

(410) 685-0123 (410) 313-4900 (410) 795-1390 1-800-257-7777 (410) 531-5533 STATE HIGHWAY ADMINISTRATION 1-800-743-0033

THIS REVISION FOR FIELD IMPROVEMENTS IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION IN ACCORDANCE WITH APPENDIX O OF THE HOWARD COUNTY FOREST CONSERVATION MANUAL. THIS COUNTY CAPITAL PROJECT IS EXEMPT BECAUSE IT DOES NOT RESULT IN CUTTING, CLEARING OR GRADING OF MORE THAN 40,000 SQUARE FEET OF FOREST.

HOWARD COUNTY PUBLIC SCHOOL SYSTEM HOWARD COUNTY. MARYLAND







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·	DATE:04/2015		BY	NO.	REVISION	DATE	

TITLE SHEET

REVISED SITE DEVELOPMENT PLAN MT. HEBRON HIGH SCHOOL FIELD IMPROVEMENTS

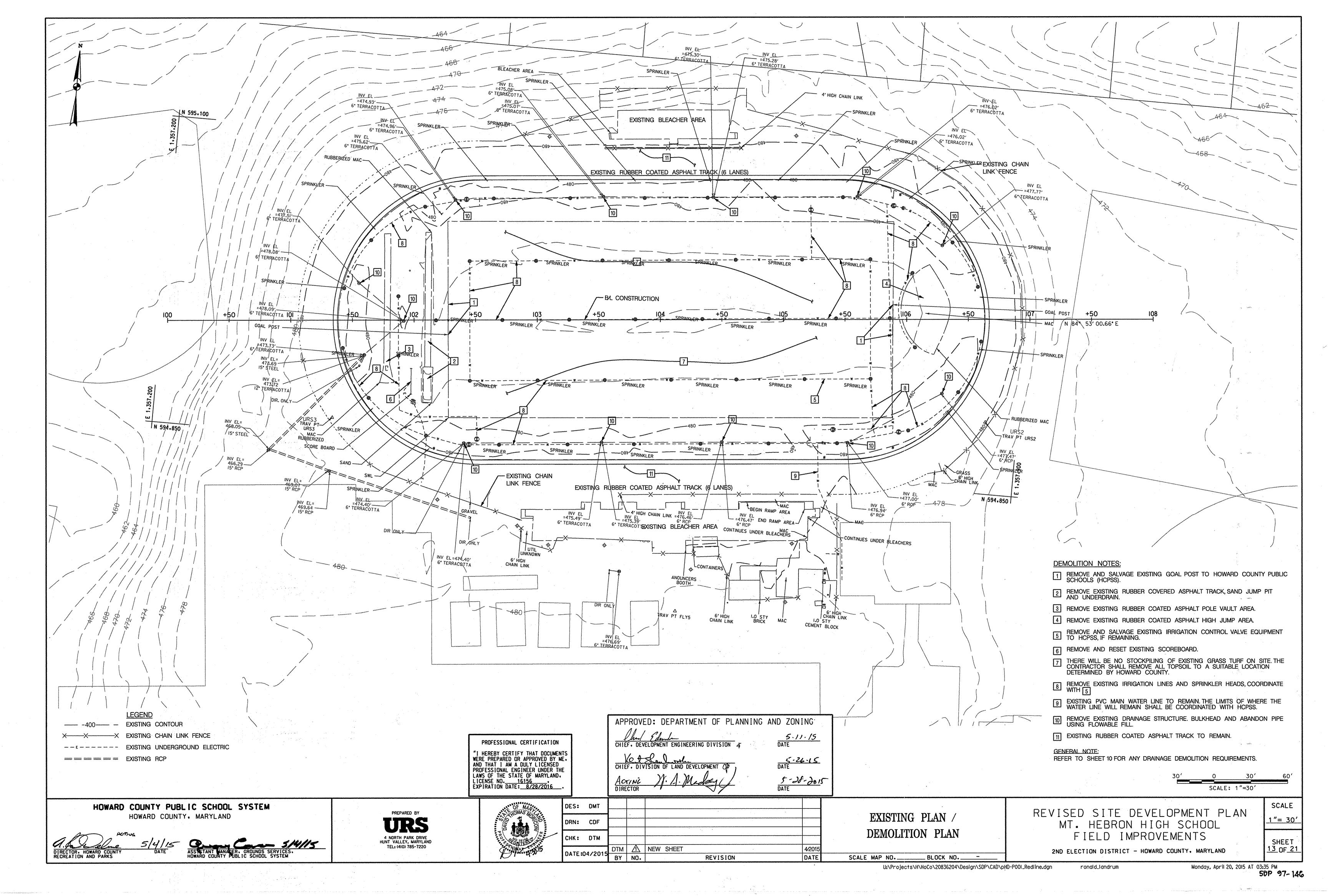
2ND ELECTION DISTRICT - HOWARD COUNTY. MARYLAND

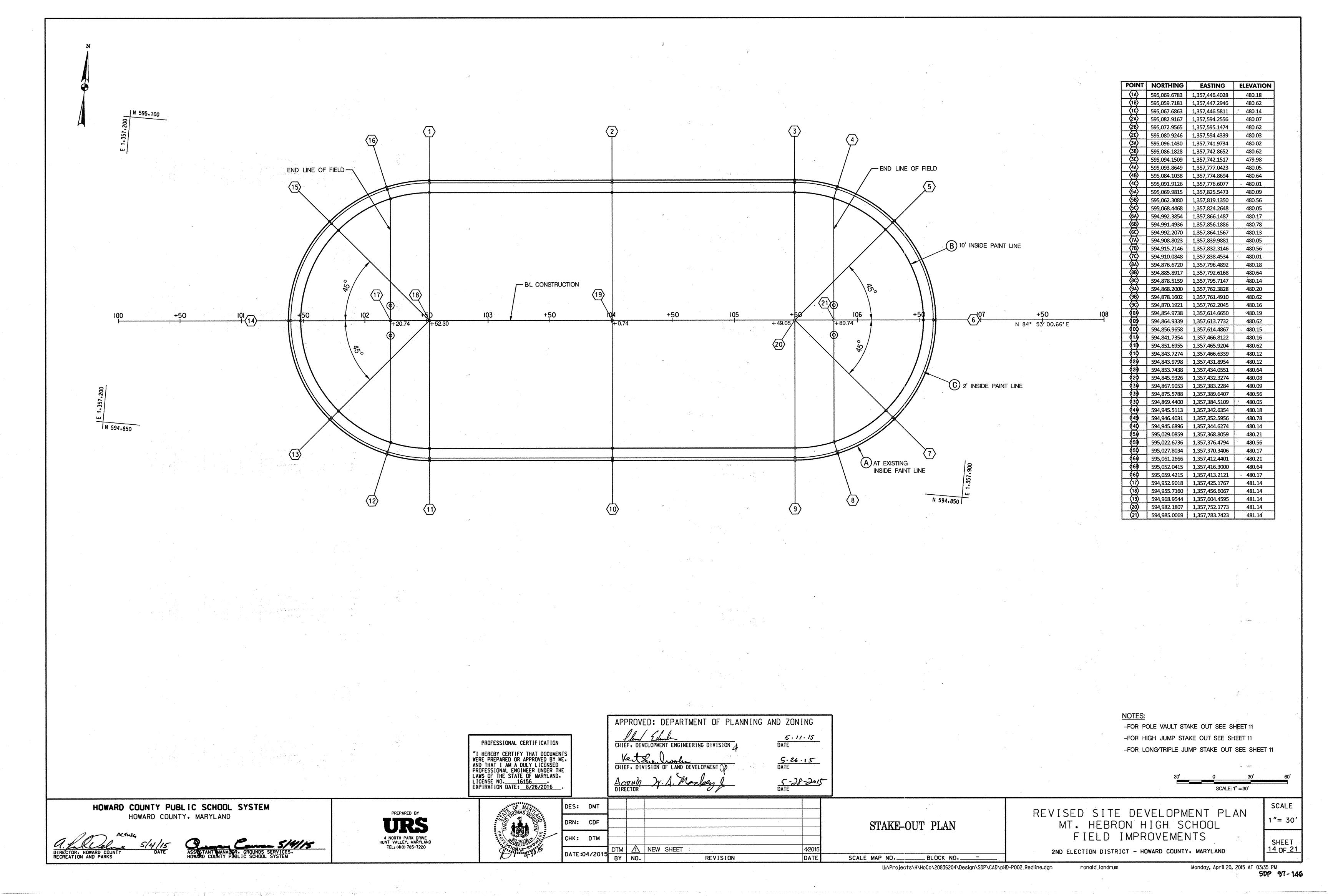
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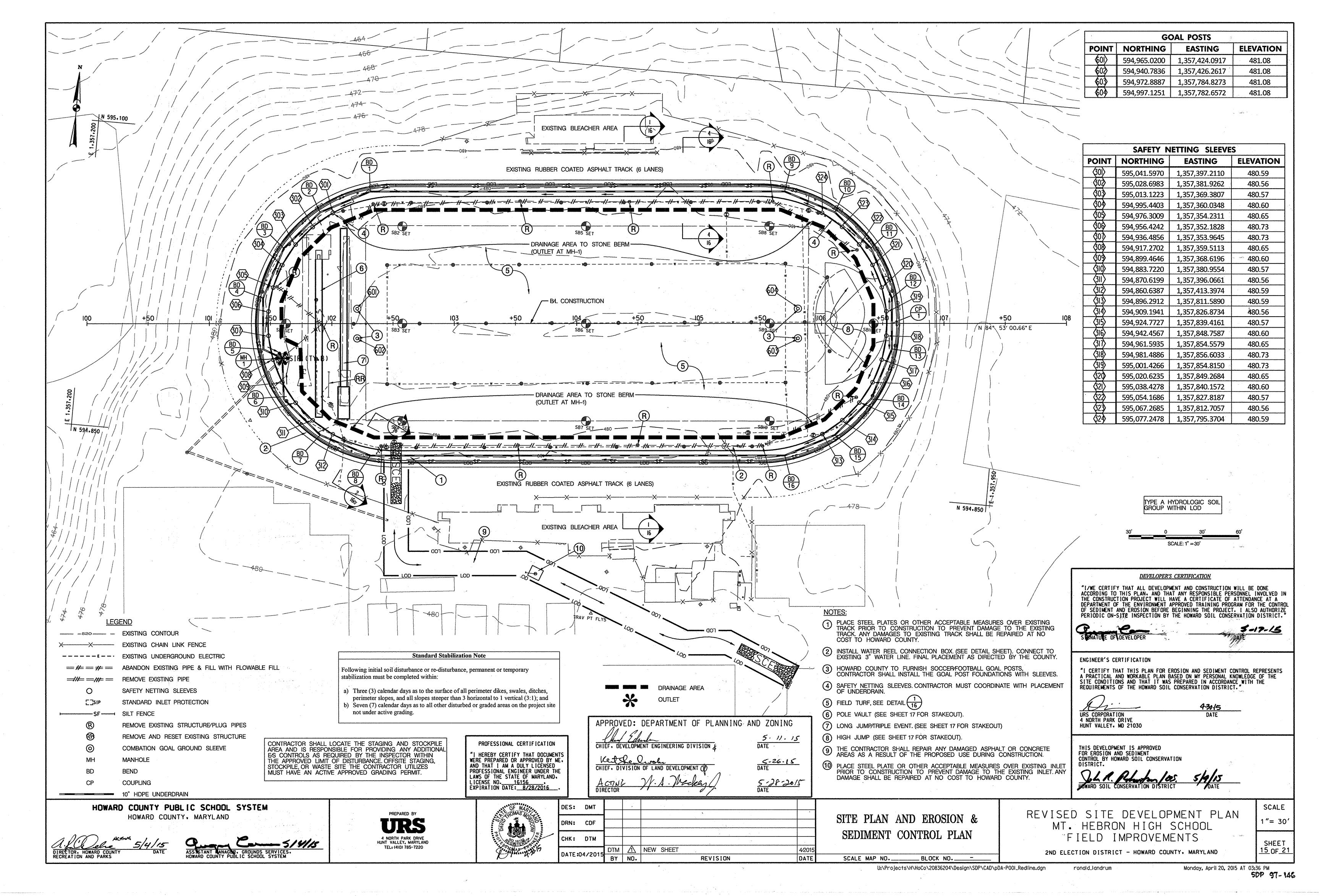
SHEET <u>12 of 21</u>

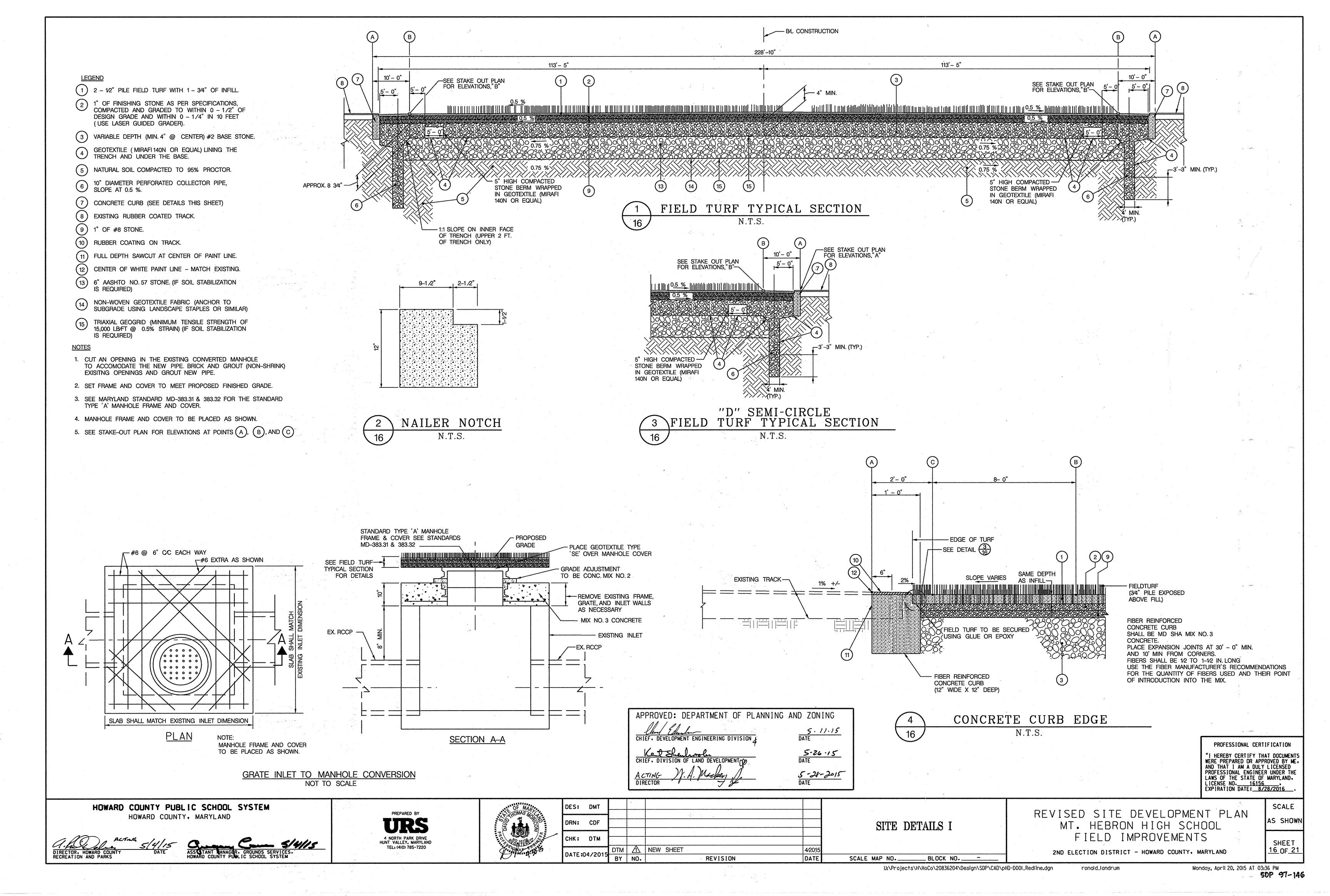
SCALE

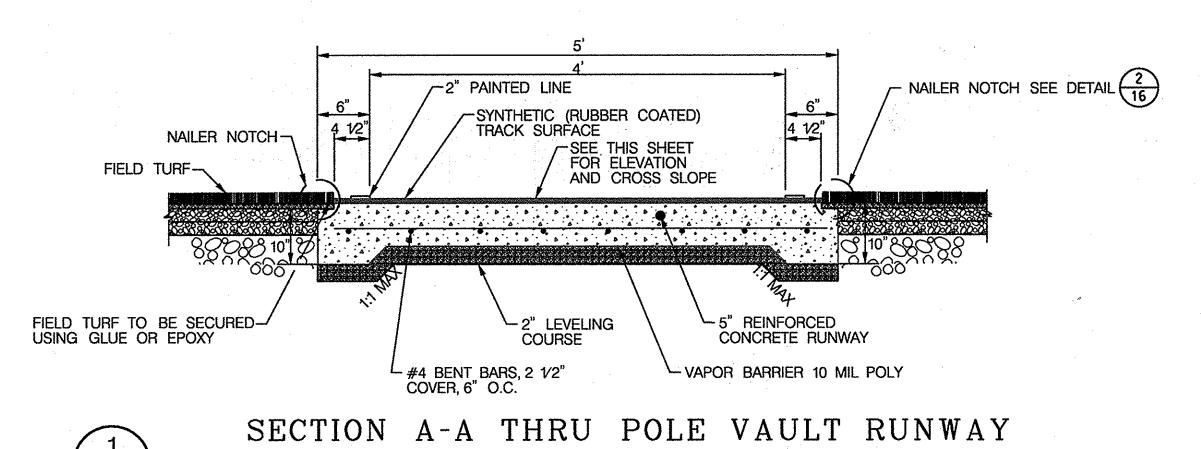
AS SHOWN



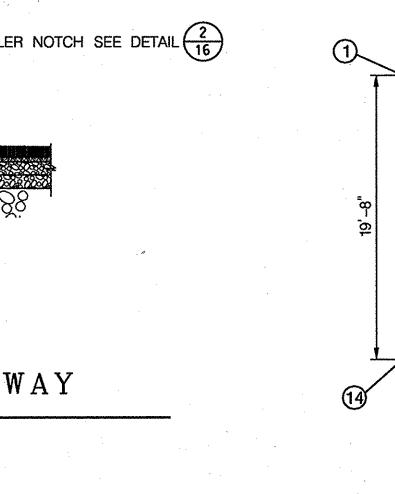


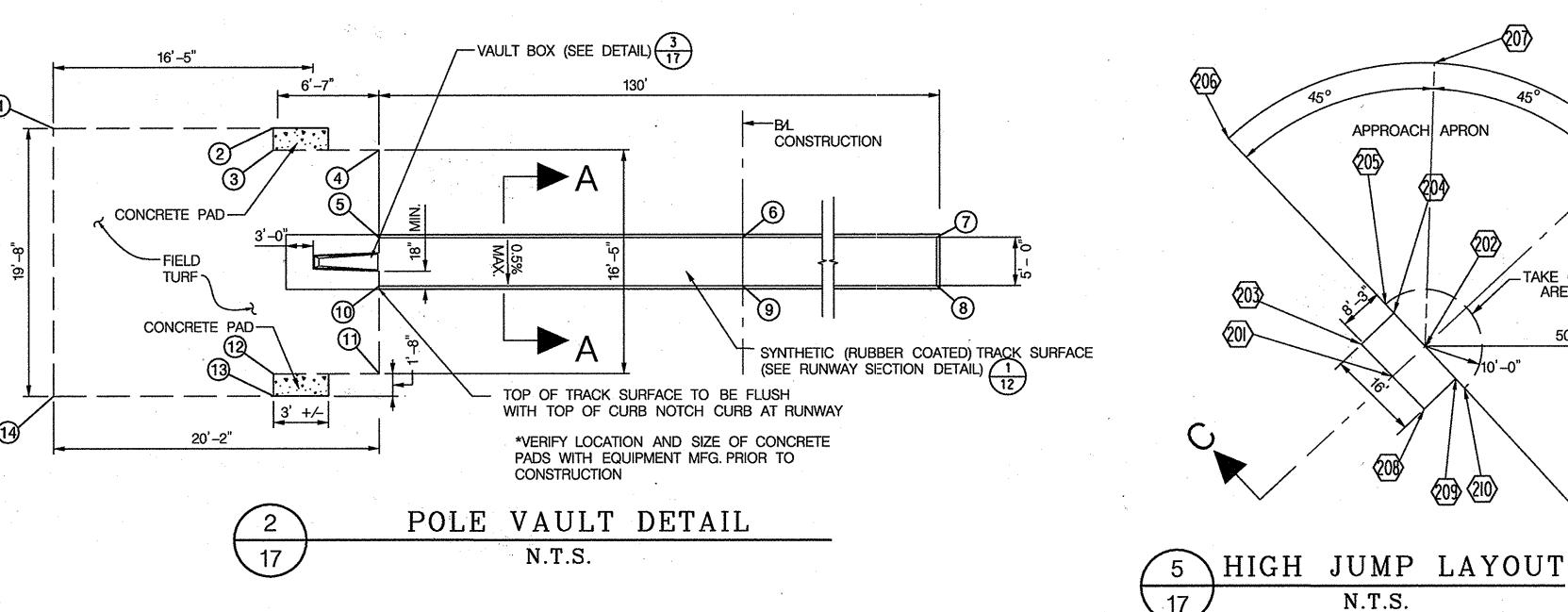


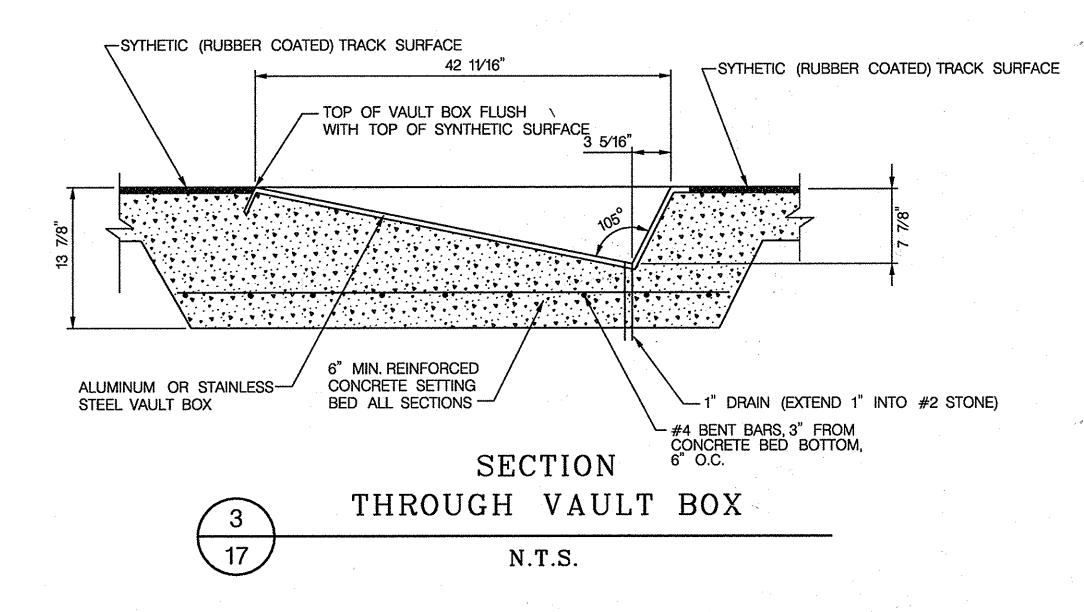


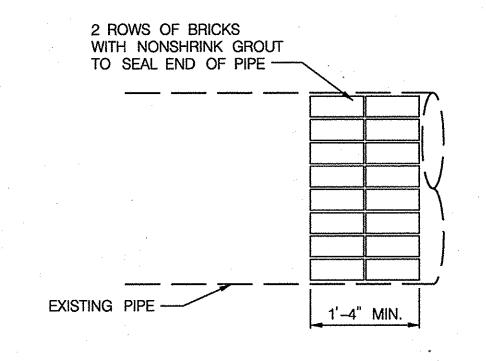


N.T.S.









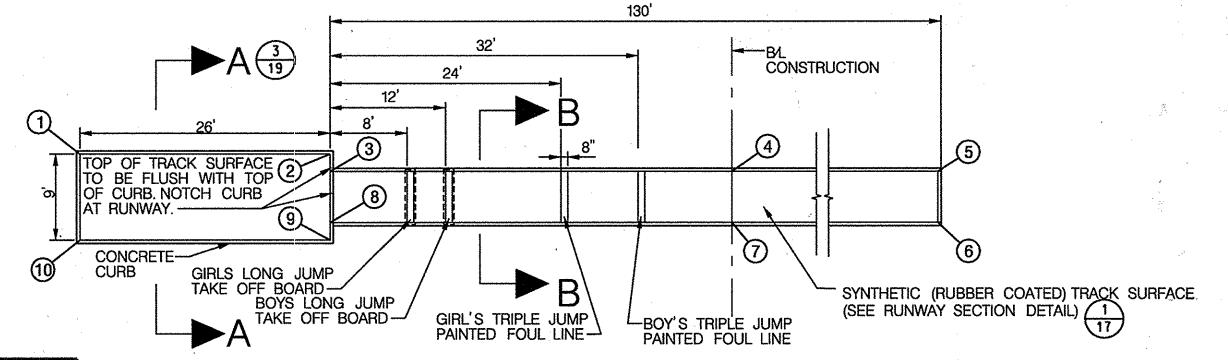


2 ' 12" FIELD TURE WITH 1' 34" INFILL  15" HOT MIX ASPHALT, SUPERPAVE 9.5 MM FOR SURFACE P6 64-22  SYNTHETIC (RUBBER COATED) TRACK SURFACE  SEE DETAIL  TILL  FIELD TURE NOTCH  SEE DETAIL  THE TOTAL SUPERPAVE 12.5" HOT MIX ASPHALT, SUPERPAVE 12.5" HOT MIX ASPHALT, SUPERPAVE 12.5" HOT MIX ASPHALT, SUPERPAVE 12.5 MM PGR 64-22 FOR BASE  0.5% MAX  VARIABLE DEPTH  #2 BASE STONE (MIN. 4' DEPTH)			•		· ·	ut-	
FINISHING STONE  NAILER NOTCH  12.5" HOT MIX ASPHALT, SUPERPAVE 12.5 MM P6 64-22 FOR BASE  0.5% MAX  13.5% MAX  14.5% MAX  15.5% MAX		-2 1/2" FIELD TURF WITH 1' 3/4" INFILL	,			•	
VARIABLE DEPTH #2 BASE STONE  P. 5.5" HOT MIX ASPHALT, STAPLED EVERY 8" (+/- 4")	2" OF FINISHING	FIBER REINFORCED CONCRETE CURB	-SYNTHET TRACK S			/ SEE DI	ETAIL 11
VARIABLE DEPTH #2 BASE STONE  ON THE PROPERTY OF THE PROPERTY	SIONE			C 2.5" HOT MIX ASPHALT SUPERPAVE 12.5 MM P6 64-22 FOR BASE	0.5% MAX		
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VARIABLE DEPTH #2 BASE STONE  OCCUPANT AND THE DEPTH  6" GRADED AGGREGATE BASE  OCCUPANT AND THE DEPTH  OCCUPANT AND THE DEPTH						\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$66000600 266000600
VARIABLE DEPTH #2 BASE STONE  OCCUPANT AND THE DEPTH  6" GRADED AGGREGATE BASE  OCCUPANT AND THE DEPTH  OCCUPANT AND THE DEPTH		0008800				BOOO	80000
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#2 BASE STONE / AGGREGATE BASE AGGREGATE BASE VARIABLE DEPTH	$Q_{0}$	16 00006 D	19999999	3999999	2023991	1000 80	1 k8 QQQ
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#2 BASE STONE / VARIABLE DEPTH	VARIABLE DEPTH			6" GRADED			- The state of the
(MIN A" DEPTH)	#2 BASE STONE (MIN. 4" DEPTH)	6"		AGGREGATE	BASE	6"	WARIABLE DEPTH
(Will A DE AT)	,	1 -			•	1	(MIN. 4" DEPTH)
6 SECTION C-C THROUGH HIGH JUMP			SECTION C-0	C THROUGH	HIGH JU	MP	

N.T.S.

POINT	NORTHING	EASTING	ELEVATION		*	HI	GH JUMP	No. of the second		
(40)	595,023.7724	1,357,397.1978	480.67		POINT	NORTHING	EASTING	ELEVATION		
<b>(402)</b>	595,011.0732	1,357,398.3349	480.73		(20)	594,986.2561	1,357,797.6934	481.07		
<b>(403)</b>	595,010.9283	1,357,396.7164	480.72		(202)	594,986.9918	1,357,805.9105	481.03		LONG
404	595,003.5411	1,357,397.3778	480.76		<b>(203)</b>	594,994.2242	1,357,796.9799	481.03	POINT	NORTHING
<b>(405)</b>	595,003.0320	1,357,391.6922	480.73		<b>(204)</b>	594,994.9599	1,357,805.1971	480.99	(50)	594,873.8303
(406)	594,950.3262	1,357,396.4114	481.00		<b>205</b>	594,996.9520	1,357,805.0187	480.98	<b>(502)</b>	594,899.7267
(407)	594,874.0480	1,357,403.2412	480.62		<b>(206)</b>	595,036.7926	1,357,801.4515	480.78	<b>(503)</b>	594,899.9051
(408)	594,873.6021	1,357,398.2611	480.59		<b>20</b> 7	595,025.3593	1,357,837.9720	480.68	<b>(504)</b>	594,951.6979
<b>(409</b> )	594,949.8803	1,357,391.4313	480.97		<b>(208)</b>	594,978.2879	1,357,798.4068	481.03	<b>(505)</b>	595,029.3871
410	595,002.5861	1,357,386.7122	480.70		<b>(</b> 20 <b>9</b> )	594,979.0237	1,357,806.6240	480.99	<b>(506)</b>	595,029.8330
(411)	595,002.0771	1,357,381.0266	480.67		(210)	594,977.0317	1,357,806.8023	480.98	(507)	594,952.1438
(412)	595,009.4679	1,357,380.4067	480.63		(211)	594,937.1910	1,357,810.3695	480.78	<b>(508)</b>	594,900.3510
<b>(413)</b>	595,009.3193	1,357,378.7467	480.62	and the second	(212)	594,954.9304	1,357,844.2780	480.68	<b>(</b> 509 <b>)</b>	594,900.5293
(414)	595,022.0185	1,357,377.6096	480.56		(213)	594,991.4509	1,357,855.7113	480.78	<b>(510)</b>	594,874.6329

LONG/TRIPLE JUMP							
POINT	NORTHING	EASTING	ELEVATION				
<b>(50)</b>	594,873.8303	1,357,416.6946	480.67				
<b>(</b> 502 <b>)</b>	594,899.7267	1,357,414.3759	480.80				
<b>(</b> 503 <b>)</b>	594,899.9051	1,357,416.3679	480.81				
<b>(504)</b>	594,951.6979	1,357,411.7305	481.07				
<b>\$0</b> \$	595,029.3871	1,357,404.7744	480.68				
<b>(506)</b>	595,029.8330	1,357,409.7545	480.71				
(507)	594,952.1438	1,357,416.7106	481.10				
<b>(</b> 508 <b>)</b>	594,900.3510	1,357,421.3480	480.84				
<b>(509)</b>	594,900.5293	1,357,423.3400	480.85				
<b>(510)</b>	594,874.6329	1,357,425.6587	480.72				



APPROVED: DEPARTMENT OF PLANN	ING AND ZONING
Charl Edmile	5.11.15
CHIEF. DEVELOPMENT ENGINEERING DIVISION	DATE
Kent Stenlingh	5-26.15
CHIEF DIVISION OF LAND DEVELOPMENT	DATE
ACTIVE W. A. Wedan	<u>5-28-2013</u> Date
VINCOION /	vn:C

LONG / TRIPLE JUMP DETAIL N.T.S.

PROFESSIONAL CERTIFICATION "I HEREBY CERTIFY THAT 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. 16156 EXPIRATION DATE: 8/28/2016 -

CONSTRUCTION

— HOT MIX \ ASPHALT

211

HOWARD COUNTY PUBLIC SCHOOL SYSTEM HOWARD COUNTY. MARYLAND

POLE VAULT



2. SEE (1) FOR BASE MATERIAL.

NOTES:

1. VARIFY LOCATION AND SIZE OF CONCRETE PADS WITH EQUIPMENT MFG. PRIOR TO CONSTRUCTION.

3. WORK POINTS ALONG POLE VAULT RUN WAY ARE APPLIED TO INSIDE LINE.





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	DRN: CDF				
	CHK: DTM				
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	DATE:04/2015	BY	NO.	REVISION	DATE

SITE DETAILS II

SCALE MAP NO.\_\_

REVISED SITE DEVELOPMENT PLAN MT. HEBRON HIGH SCHOOL FIELD IMPROVEMENTS

2ND ELECTION DISTRICT - HOWARD COUNTY. MARYLAND

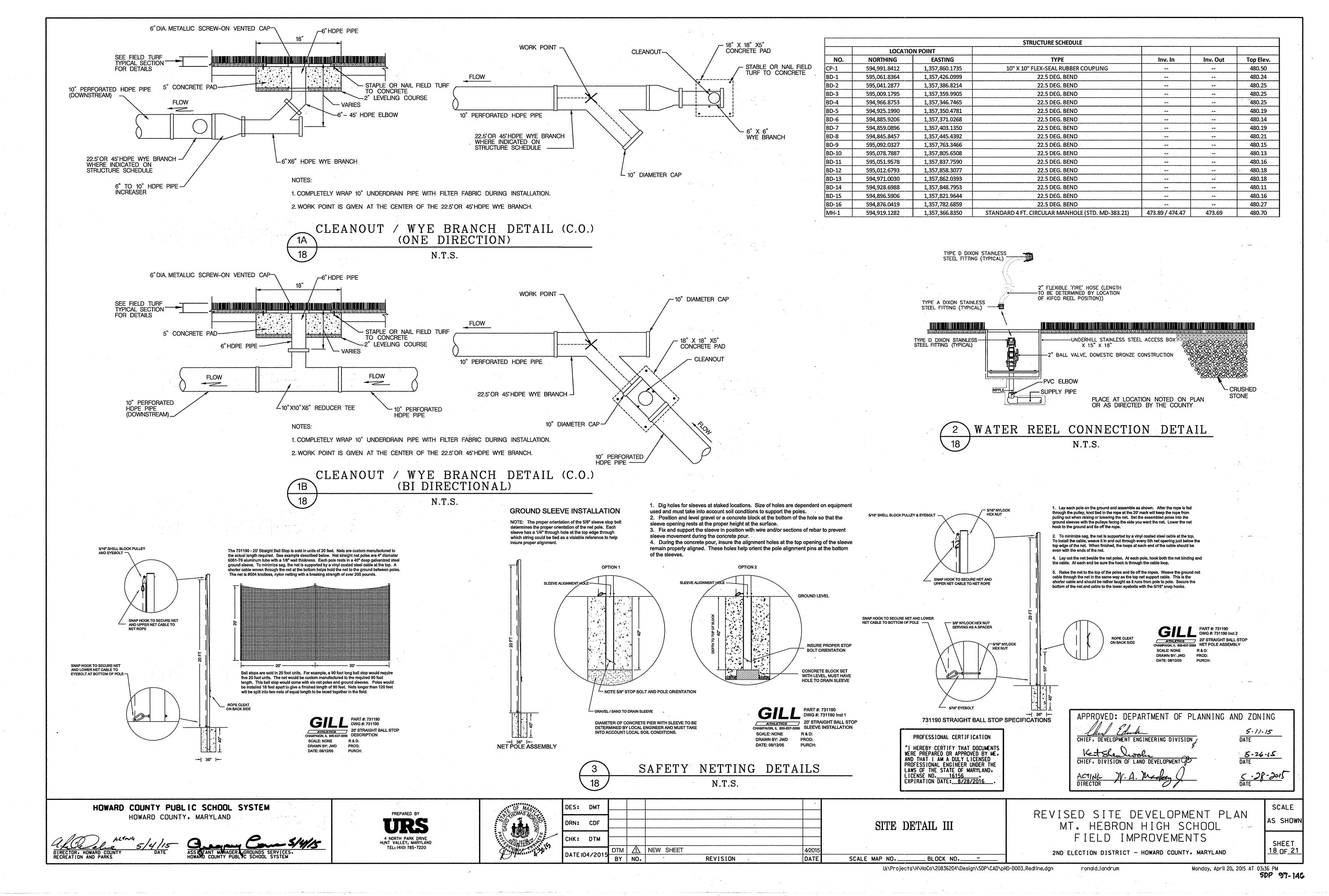
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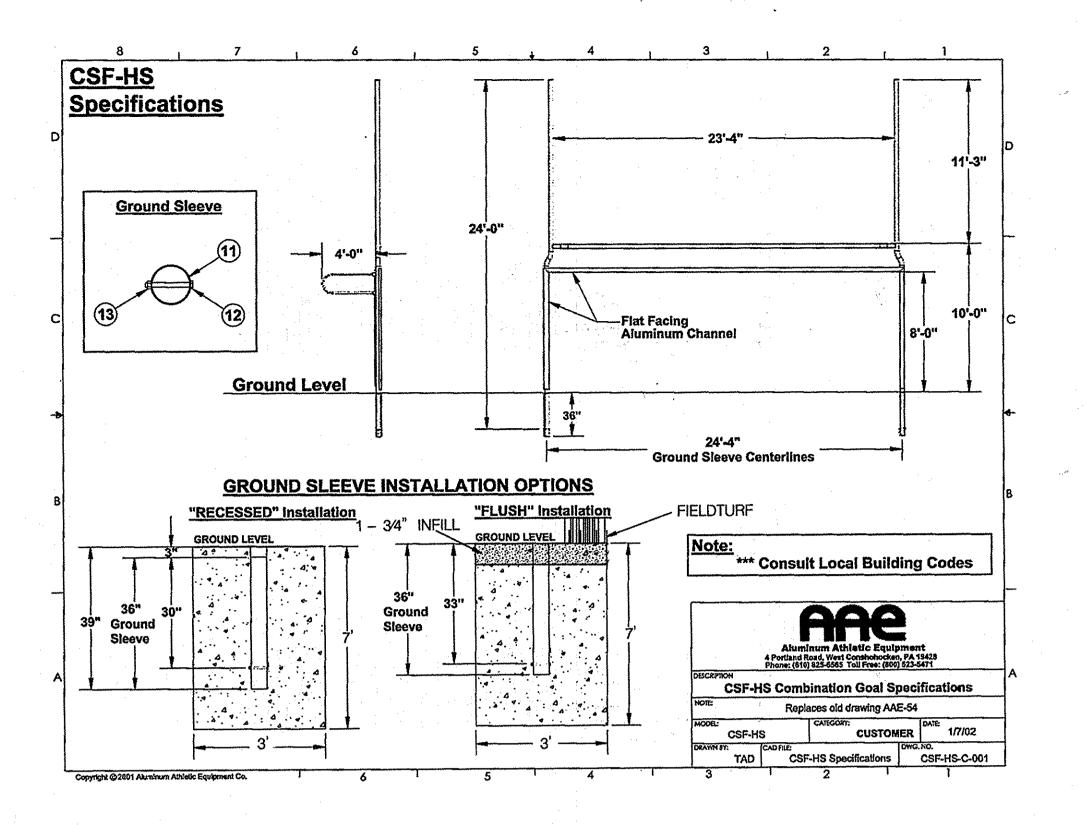
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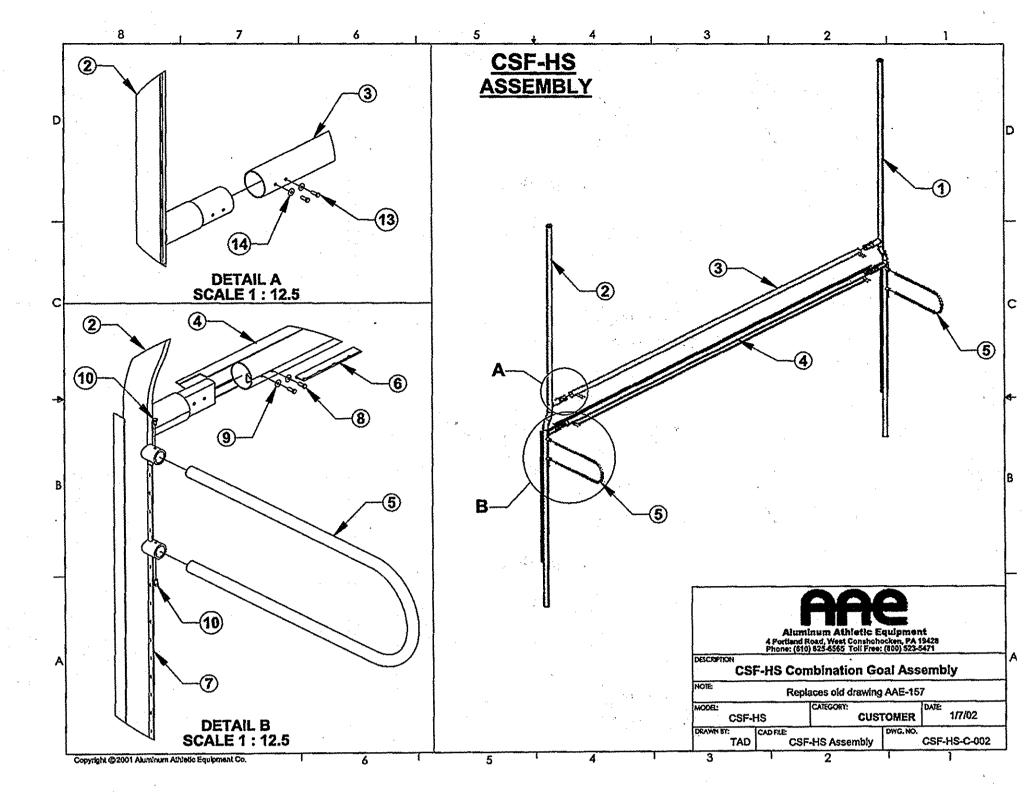
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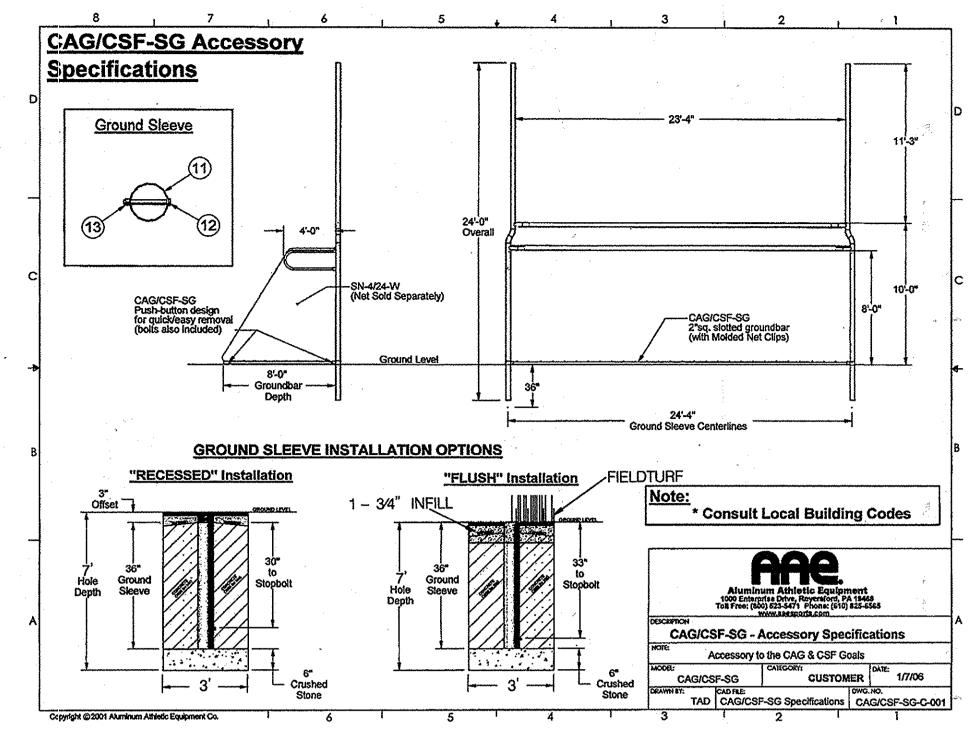
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Monday, April 20, 2015 AT 03:36 PM 97-146









1 COMBINATION GOAL SPECIFICATIONS
19 N.T.S.

2 GROUND BAR ATTACHMENT DETAILS
19 N.T.S.

# CAG-HS/CSF-HS HIGH SCHOOL COMBINATION GOALS PARTS LIST

Part#	ltem	Description	Qty.				
. 1	Upright,LH	4.00 o.d. x .226 x 24' - aluminum extrusion.	2				
*1A							
2	Upright,RH	4.00 o.d. x .226 x 24' - aluminum extrusion.	2				
3	Crossbar (Football)	4.00" o.d x .125 x 22'- 4" 6061T6 - aluminum tube.	2				
4	Crossbar (Soccer)	4.00" o.d. x .125 x 23'-0" - aluminum extrusion.	2				
5	ISA Stay	International Net Stay, 1.688" o.d. x .125 x 43", 17" arc, 6061T6 aluminum.	4				
6	PVC	PVC Net attachment extrusion, 22'-2" lg.					
7	PVC	PVC Net attachment extrusion, 7'-6" lg.					
8	Bolt	3/8"-16 x 1" stainless steel hex bolt	16				
9	Washer	3/8 washer, SS	16				
10	Bolt	3/8"-16 x 5/8" stainless steel hex bolt	8				
11	Ground Sleeve	4.35" o.d. x .100 x 30" 6061T6 aluminum tube.	4				
12	Stopbolt	1/2"-13 x 5" steel hex bolt, plated	4				
13	Stopbolt Nut	1/2"-13 steel hex nut, plated	4				
NOTE:	GOAL POSTS SH	IALL BE WHITE IN COLOR.	<u> </u>				

2 12' FIELD TURE CONCRETE CURB
NAILER NOTCH
12' WASHED SAND
112'

VARIABLE DEPTH
## BASE STONE
(MIN. 4' DEPTH)

VARIABLE DEPTH
(MIN. 4') #2 BASE STONE
(MIN. 4') #2 BASE STONE

4' PERFORATED HOPE
SLOPED @ 0.5% MIN.
CONCRETE CURB SHALL BE
CONCRETED OF METERS AND AT SPUCES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief. Development Engineering Division ()

The Solution of Land Development XD Date

ACTING M. A. Madsen ()

S-26-25-2015

3 SECTION A-A JUMP PIT DETAIL
19 N.T.S.

PROFESSIONAL CERTIFICATION

"I HEREBY CERTIFY THAT 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. 16156 EXPIRATION DATE: 8/28/2016

HOWARD COUNTY PUBLIC SCHOOL SYSTEM
HOWARD COUNTY, MARYLAND

K:\AAE Data\Product Instructions & Parts Lists\CAG-HS\CAG-HS & CSF-HS Parts List.doc

Copyright © 2001 Aluminum Athletic Equipment Co.

DIRECTOR HOWARD COUNTY DATE

ASSISTANT ANAGER, GROUNDS SERVICES.

PREPARED BY

URS

4 NORTH PARK DRIVE
HUNT VALLEY, MARYLAND
TEL: (410) 785-7220

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4.	DATE:04/2015	BY	NO.			REVISION	٧		DATE	

SITE DETAILS IV

SCALE MAP NO.\_\_\_

REVISED SITE DEVELOPMENT PLAN MT. HEBRON HIGH SCHOOL FIELD IMPROVEMENTS

2ND ELECTION DISTRICT - HOWARD COUNTY. MARYLAND

AS SHOWN
SHEET
19 OF 21

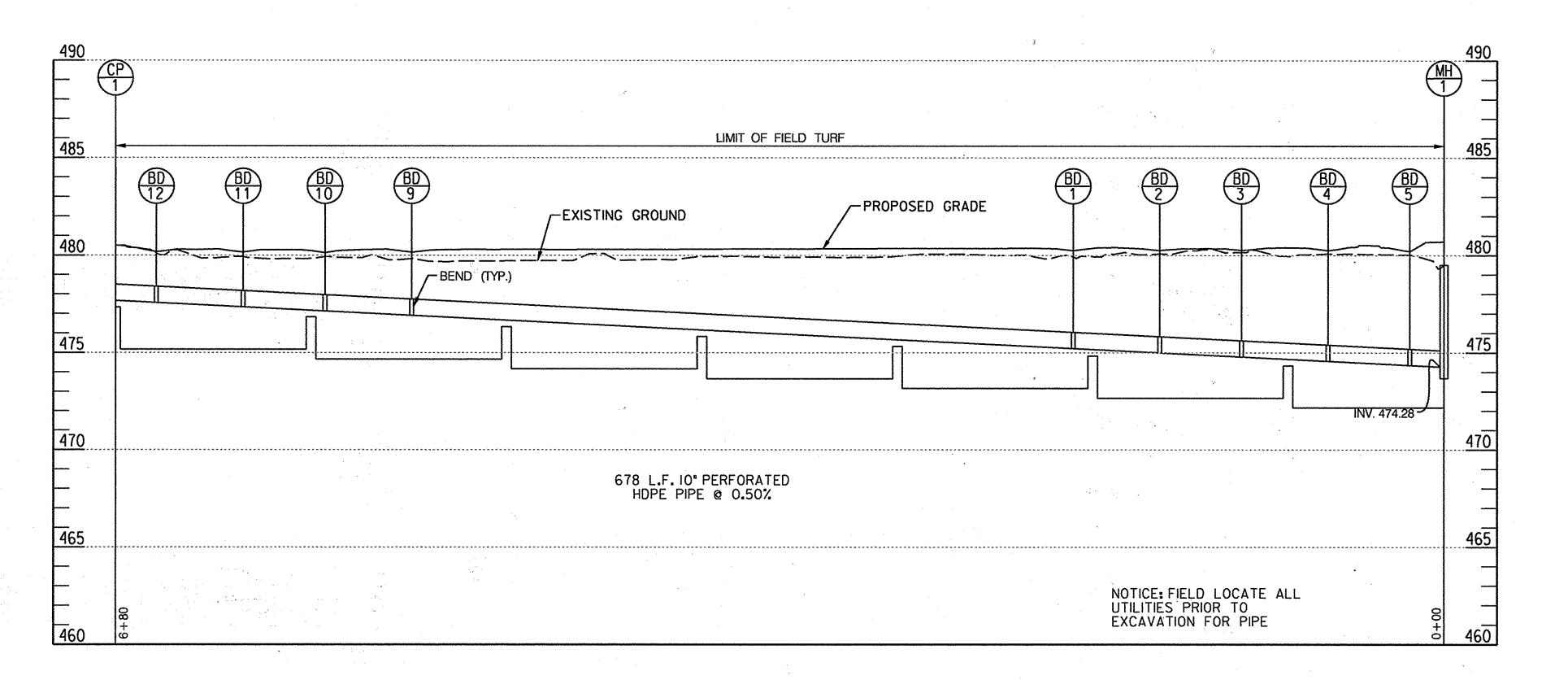
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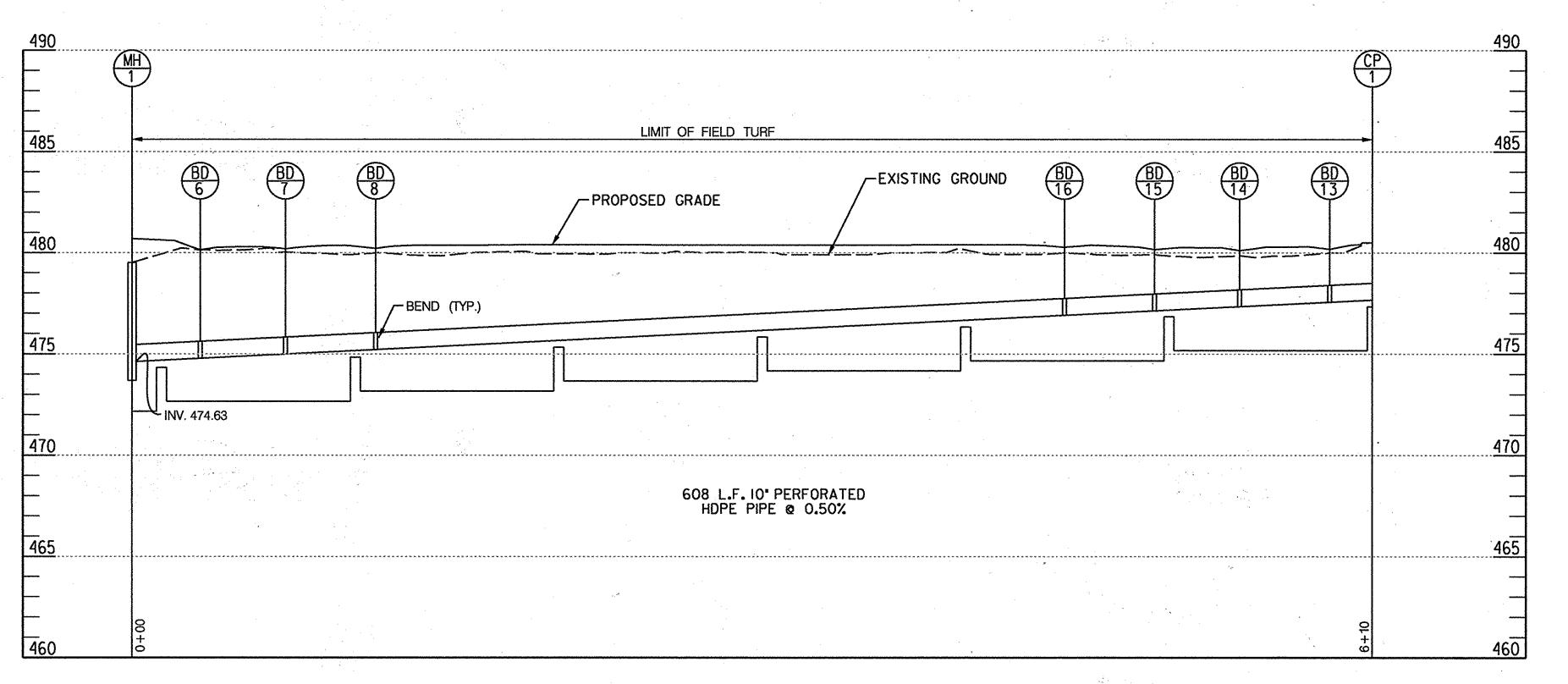
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Monday, April 20, 2015 AT 03:36 PM SDP 97-146

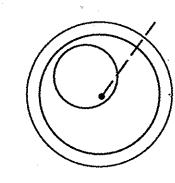


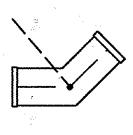
# PIPE PROFILE (STA. 101+44, LT. TO STA. 106+58, LT.) SCALE: HORZ. 1"=40' VERT. 1"=4'



PIPE PROFILE (STA. 101+44, RT. TO STA. 106+58, RT.) SCALE: HORZ. 1"=40' VERT. 1"=4'

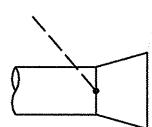
LOCATION POINT





MANHOLE

BEND



END SECTION

SEE SHEET NO.13 FOR STRUCTURE SCHEDULE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF. DEVELOPMENT ENGINEERING DIVISION of 5.26.15 DATE

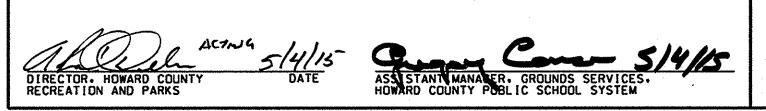
PROFESSIONAL CERTIFICATION "I HEREBY CERTIFY THAT DOCUMENTS WERE PREPARED OR APPROVED BY ME. AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. \_\_\_\_\_\_16156 \_\_\_\_. EXPIRATION DATE: \_\_\_\_\_8/28/2016 \_\_.

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HOWARD COUNTY PUBLIC SCHOOL SYSTEM HOWARD COUNTY. MARYLAND





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PIPE PROFILES

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REVISED SITE DEVELOPMENT PLAN MT. HEBRON HIGH SCHOOL FIELD IMPROVEMENTS

5-21-2015 DATE

2ND ELECTION DISTRICT - HOWARD COUNTY. MARYLAND

# The process of preparing the soils to sustain adequate vegetative stabilization.

To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies

# Where vegetative stabilization is to be established.

## 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
- 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
- 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: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay)
- 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
- 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
- e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake 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 seedbed 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.

- 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. Soils 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.
- 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 1½ inches in diameter b. Toosoil 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.
- Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation

# Soil Amendments (Fertilizer and Lime Specifications)

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT 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. 16156 . EXPIRATION DATE: 8/28/2016

- 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. Manure 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
- 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesiu 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.

the applicable laws and must bear the name, trade name or trademark and warranty of the produce

- 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by 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

# **B-4-3 STANDARDS AND SPECIFICATIONS**

# SEEDING AND MULCHING

The application of seed and mulch to establish vegetative cover.

# protect disturbed soils from erosion during and at the end of construction

## Conditions Where Practice Applie To the surface of all perimeter controls, slopes, and any disturbed area not under active grading

# 1. Specifications

a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is

A. Seeding

- frozen. The appropriate seeding mixture must be applied when the ground thaw
- c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure cultur of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used or than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to kee inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective
- d. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has clapsed (14 days min.) to permit dissipation of phyto-toxic materials.

## 2. Application a. Dry Seeding: This includes use of conventional drop or broadcast spreader i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1,

- ermanent Seeding Table B.3, or site-specific seeding summaries. ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil
- b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least
- ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer)
- i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P<sub>2</sub>O<sub>3</sub> (phosphorous), 200 pounds per acre; K<sub>2</sub>O (potassium), 200 pounds per acre. ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by
- hydrosceding). Normally, not more than 2 tons are applied by hydrosceding at any one time. Do not use burnt or hydrated lime when hydrosceding. iii. Mix seed and fertilizer on site and seed immediately and without interruptio
- iv. When hydroseeding do not incorporate seed into the soil.

# 1. Mulch Materials (in order of preference)

- a. Straw consisting of thoroughly threshed wheat, rve, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in
- areas where one species of grass is desired b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
- i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
- iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings
- iv. WCFM material must not contain elements or compounds at concentration levels that will
- WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

# a. Apply mulch to all seeded areas immediately after seeding.

- b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the
- c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pound of wood cellulose fiber per 100 gallons of water.

SILT

ELEVATION

CROSS SECTION

JOINING TWO ADJACENT SILT

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

FENCE SECTIONS (TOP VIEW

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

HOWARD COUNTY PUBLIC SCHOOL SYSTEM

HOWARD COUNTY. MARYLAND

DETAIL E-1

FENCE

Application

- a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard
- . A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land,
- ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of ii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the
- manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly iv. Lightweight plastic netting may be stapled over the mulch according to manufacture recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000

36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND

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STAPLE----

----STAPLE

MARYLAND DEPARTMENT OF ENVIRONMENT U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

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# B-4-5 STANDARDS AND SPECIFICATIONS

# PERMANENT STABILIZATION

To stabilize disturbed soils with permanent vegetation

# To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils Conditions Where Practice Applies

# Exposed soils where ground cover is needed for 6 months or more.

- a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plan lardiness Zone (from Figure B.3) and based on the site condition or purpose found on Tabl B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seedin 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 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 am shown in the Permanent Seeding Summary
- a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites
- b. Select one or more of the species or mixtures listed below based on the site conditions of purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent
- 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 Blucerass/Perennial Rye: Full Sun Mixture: For use in full sun areas wher rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Rentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentuck bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weigh
- iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prope areas and/or for areas receiving low to medium management 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: 11/2 to 3 pounds per 1000 square feet. Select turfgrass varieties from those listed in the most current University of 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 c. Ideal Times of Seeding for Turf Grass Mixtures
- Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15
- 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 11/2 inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will
- e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (½ to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is pecially true when seedings are made late in the planting season, in abnormally dry or hot

# Permanent Seeding Summary

Hardiness Zone (from Figure B.3): 6B Fertilizer Rate Seed Mixture (from Table B.3): 8 (10-20-20)								Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P <sub>2</sub> O <sub>5</sub>	K₂0	- Dioxe Man
ALL	FESCUE	100	3/1-5/15	1/4- 1/2 in	45 pounds	90 lb/ac	90 lb/ac	2 tons/ac
	,		8/1-10/15	%- ½ in	per acre (1.0 lb/	(2 lb/	(2 lb/ 1000 sf)	(90 lb/ 1000 sf)
				1/4-1/2 in	1000 sf)	1000 sf)		

- B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).
- 1. General Specifications a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to
- b. Sod must be machine cut at a uniform soil thickness of % inch, plus or minus % inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and tom or uneven ends will not be acceptable.
- size and shape when suspended vertically with a firm grasp on the upper 10 percent of the
- d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may
- e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its
- 2. Sod Installation a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly
- wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to revent voids which would cause air drying of the roots. c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering
- joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface. d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

DETAIL E-1

ONSTRUCTION SPECIFICATIONS

FENCE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

4 NORTH PARK DRIVE HUNT VALLEY, MARYLAND

2011

- a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day
- b. After the first week, sod watering is required as necessary to maintain adequate moistur
- c. Do not mow until the sod is firmly rooted. No more than 1/2 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless

# TANDARD SYMBOL USE WOOD POSTS IN X IN = V NCH NAMBARA SQUARE CUT OF SOUND QUALITY HARDWOOD, AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN I POUND PER LINEAR FOOT, USE 36 INCH MINIMUM POSTS DRIVEN IS INCH MINIMUM INTO CROUND NO MORE THAN 6 FEE EMBED GEOTEXTRE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND, BACKFILL AND OMPACT THE SOIL ON BOTH SIDES OF FABRIC. . WHERE INO SECTIONS OF GEOTEXTALE ADJOING OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

DES:

DRN: CDF

CHK: DTM

DATE:04/20

DMT

# **B-4-4 STANDARDS AND SPECIFICATIONS**

# <u>FOR</u>

# TEMPORARY STABILIZATION

# To stabilize disturbed soils with vegetation for up to 6 months

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

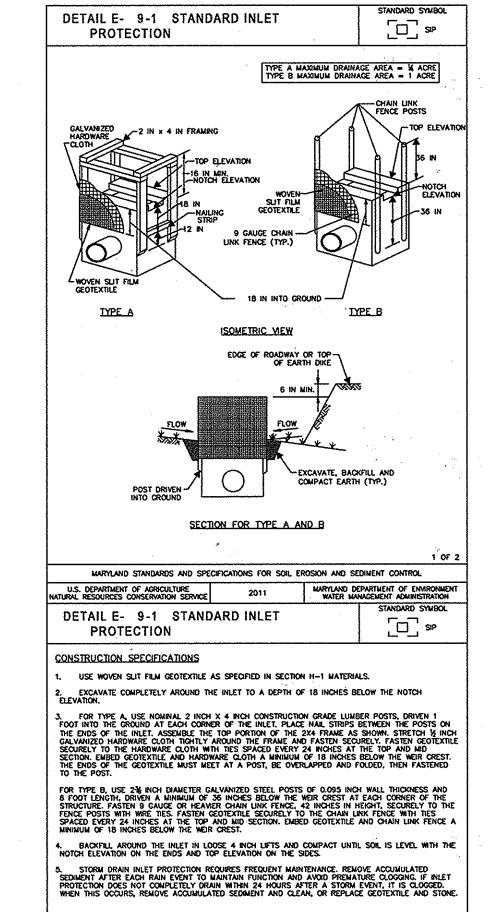
# Conditions Where Practice Applies

## 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 Hardiness 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 B-4-3.A.1.b and maintain until the next seeding season.

# Temporary Seeding Summary

	Hardiness Zor Seed Mixture	Fertilizer Rate	Lime Rate			
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	(10-20-20)	
6	FOXTAIL MILLET	30	5/16 - 7/31	0.5 IN.	436 lb/ac (10 lb/1000 sf)	2 tons/ac
7	PEARL MILLET	20	5/16 - 7/31	0.5 IN.		
		,				(90 lb/1000 sf)



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

REVISION

DTM | 🛕 | NEW SHEET

BY NO.

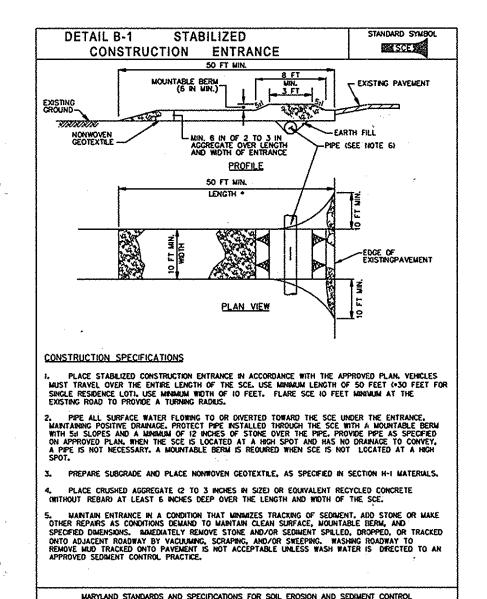
# SEQUENCE OF CONSTRUCTION - GENERAL NOTES

- 1. THE CONTRACTOR SHALL NOTIFY THE HOWARD SOIL CONSERVATION DISTRICT AT (410) 489-7987 AT LEAST SEVEN (7) DAYS PRIOR TO ANY EARTH DISTURBÂNCE TO SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE INSPECTOR.
- 2. UTILITIES AND STORM DRAINS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS ARE FOR THE GUIDANCE OF THE CONTRACTOR ONLY. CONTRACTOR SHALL CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC UTILITY COMPANIES WITH UNDERGROUND UTILITIES IN THE AREA OF THE PROPOSED EXCAVATION AND HAVE THOSE UTILITIES LOCATED BY THE UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.
- 3. THE EROSION AND SEDIMENT CONTROL MEASURES MUST BE IN PLACE AND FUNCTIONING PRIOR TO CLEARING THE ENTIRE SITE. CLEAR AND GRUB FOR EROSION AND SEDIMENT CONTROL MEASURES OR DEVICES ONLY ON COMMENCEMENT OF CONSTRUCTION.
- 4. INSTALL STABILIZED CONSTRUCTION ENTRANCES, AND OTHER EROSION SEDIMENT CONTROL DEVICES AS PER THE EROSION AND SEDIMENT CONTROL PLANS, THE LOCATIONS FOR STABILIZED CONSTRUCTION ENTRANCES SHOWN ON THE PLANS ARE APPROXIMATE, AND EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD WITH APPROVAL FROM THE ENGINEER AND
- 5. MAINTAIN ALL SEDIMENT CONTROL PRACTICES ACCORDING TO THE MARYLAND 2011 STANDARDS UNTIL THE ENTIRE SITE IS STABILIZED.
- 6. CONTRACTOR SHALL LOCATE THE STAGING AND STOCKPILE AREA AND IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL E/S CONTROLS FOR STAGING AND STOCKPILE AREAS AS REQUIRED BY THE INSPECTOR.
- 7. CLEAR AND GRUB AND PROCEED TO CONSTRUCTION ACCORDING TO THE SEQUENCE SPECIFIEDN ON THE TRAFFIC CONTROL PLAN SHEETS. STORM DRAIN SYSTEMS SHALL ALWAYS BE CONSTRUCTED FROM THE DOWNSTREAM ENDS. INLET PROTECTIONS SHALL BE INSTALLED AT EXISTING INLETS BEFORE ANY DISTURBANCE IN THE WORK AREA NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUN OFF IS DIRECTED TO AN MDE APPROVED SEDIMENT CONTROL DEVICE CONTRACTOR SHALL USE PORTABLE SEDIMENT TANK TO DEWATER THE WORKING AREA DURING CONSTRUCTION.
- 8. CONSTRUCTION SHALL BE COMPLETED IN THE FOLLOWING SEQUENCE.

# SEQUENCE OF CONSTRUCTION

- 1. OBTAIN THE GRADING PERMIT PRIOR TO CONSTRUCTION (1 DAY).
- 2. INSTALL THE SEDIMENT CONTROL MEASURES AS INDICATED, PROTECT THE EXISTING TRACK AS INDICATED ON PLAN (1 DAYS).
- 3. REMOVE TOPSOIL AND SUBSOIL WITHIN TRACK AREA. EXCAVATED MATERIAL TO BE HAULED OFFSITE TO AN APPROVED LOCATION (10 DAYS)
- 4. INSTALL INLET PROTECTIONS AS INDICATED (1 DAY). INSTALL NEW STORM DRAIN SYSTEM WITHIN STONE TRENCH (5 DAYS), ABANDON EXISTING STORM DRAIN PIPES WHERE INDICATED AND FILL WITH FLOWABLE FILL. REMOVE EXISTING STORM DRAIN STRUCTURES AND PIPES WHERE INDICATED (2 DAYS).
- 5. INSTALL GRADED AGGREGATE MATERIAL CONCURRENT WITH THE INSTALLATION OF SLEEVES FOR GOAL POSTS AND SAFETY NETTING AND CONCRETE CURBING & RUNWAYS (8 DAYS), PLACE FIELD TURF (10 DAYS),
- 6. UPON THE HOWARD COUNTY INSPECTOR'S APPROVAL REMOVAL ALL EROSION AND SEDIMENT CONTROL DEVICES AND STABILIZE THE REMAINING DISTURBED AREAS WITH PERMANENT SEEDING (1 DAY).

# NOTE: THE TIME LINE EXCLUDES WEATHER RELATED DELAYS.



2011

SCALE MAP NO.

4/201

DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING 5./1.15 DATE CHIEF. DEVELOPMENT ENGINEERING DIVISION &

EROSION AND SEDIMENT CONTROL

DETAILS AND NOTES

5-28-2015 DATE

# SEDIMENT CONTROL-GENERAL 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).

EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

- 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
  - 3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
    - A. THREE (3) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTÙRES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER
    - B. SEVEN (7) CALENDAR DAYS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITECT 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. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC.B-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 - 46.8 ACRES \*

TOTAL FILL - 0 CY

PROCEEDING WITH CONSTRUCTION.

AREA DISTURBED - 2.7 ACRES \* AREAS TO BE ROOFED OR PAVED - 0.0 ACRES (INCLUDES OVERLAY AREA) AREA TO BE VEGETATIVELY STABILIZED - 0.0 ACRES TOTAL CUT - 2,800 CY

OFF-SITE WASTE SITE - HOWARD COUNTY LANDFILL OFF-SITE BORROW SITE - APPROVED SITE WITH AN ACTIVE GRADING PERMIT

- 7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE
- 8. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY 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 WITHIN ONE WORKING DAY, 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
- 12. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. 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 BE 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.
- 13. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- 14. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL STRUCTURAL FILL OR EMBANKMENT MATERIAL NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH
- \* APPROXIMATE

# **DEVELOPER'S CERTIFICATION**

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN. AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE

PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

DATE

URS CORPORATION

4 NORTH PARK DRIVE HUNT VALLEY, MD 21030

ENGINEER'S CERTIFICATION

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

MT. HEBRON HIGH SCHOOL FIELD IMPROVEMENTS

REVISED SITE DEVELOPMENT PLAN

2ND ELECTION DISTRICT - HOWARD COUNTY. MARYLAND

<u> 21 OF 21</u>

SCALE

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ronald\_landrum

AS SHOWN SHEET

5-7-15

5-26.15 DATE

Monday, April 20, 2015 AT 03:36 PM

\_ BLOCK NO. \_\_\_\_

SDP 97-146

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