	SHEET INDEX						
NO.	DESCRIPTION						
1	TITLE SHEET						
2	SITE DEVELOPMENT PLAN						
3	DAM. AND PROFILE MD ROUTE 103						
4	S.W.M. AND SEDIMENT CONTROL PLAN						
5	DETAILS AND PROFILE						
6	SEDIMENT CONTROL NOTES AND DETAILS						
7	S.W.M. PROFILES, NOTES AND DETAILS	·					
8	PLANTING PLAN	,					

SITE DEVELOPMENT PLAN WHEATFIELDS CENTER

PHASE I 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

GENERAL NOTES

- 1. ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- CORRUGATED STEEL PIPE SECTIONS WILL BE JOINED WITH A SINGLE OR TWO PIECE CORRUGATED BAND WITH A WATERTIGHT NEOPRENE GASKET. DIMPLETED BAND CON-
- 3. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN, THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAI UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- 5. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES, WHERE DIRECTED BY THE
- 6. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THIS/THESE DRAWINGS:

C & P TELEPHONE COMPANY
HOWARD COUNTY BUREAU OF UTILITIES
992-2366
AT&T CABLE LOCATION DIVISION
393-3553
BALTIMORE GAS AND ELECTRIC COMPANY
531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION
992-2417/2418

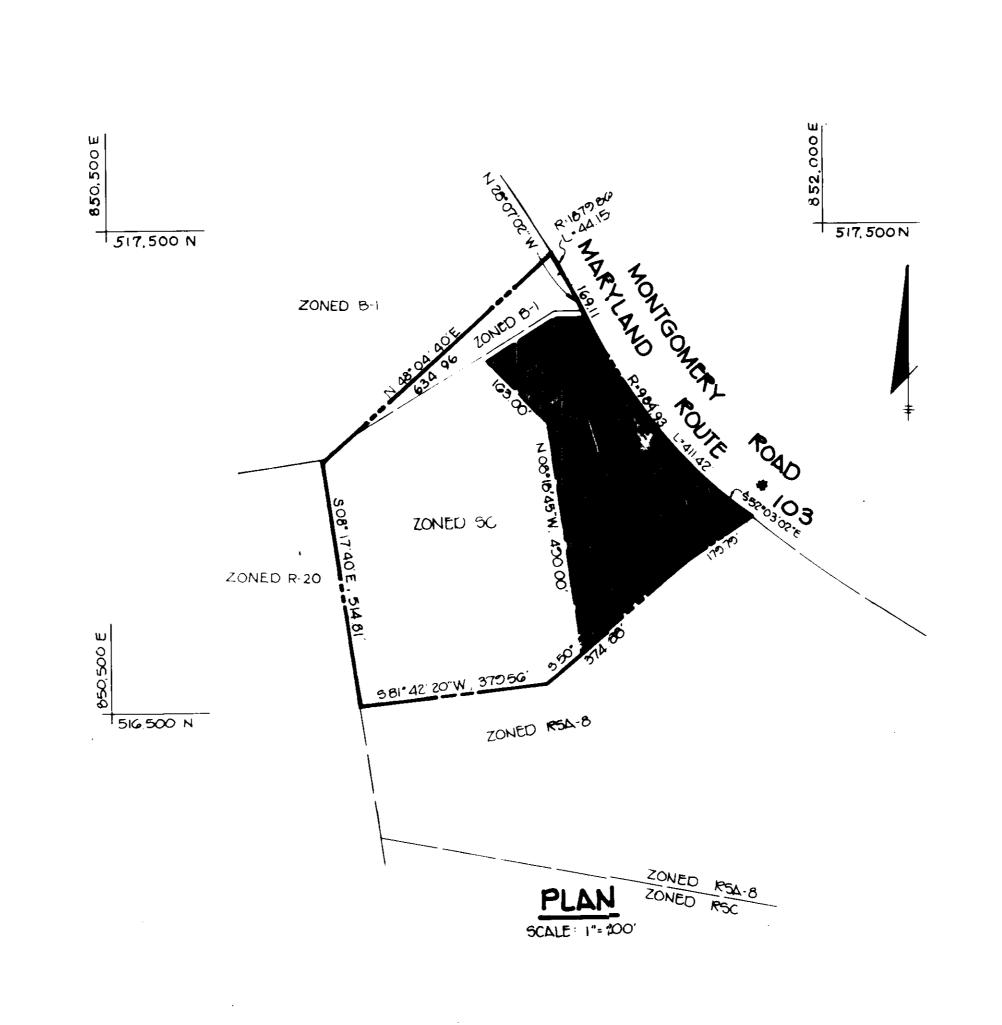
- 7. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- 8. ALL PIPE ELEVATIONS SHOWN ARE INVERT ____ELEVATION

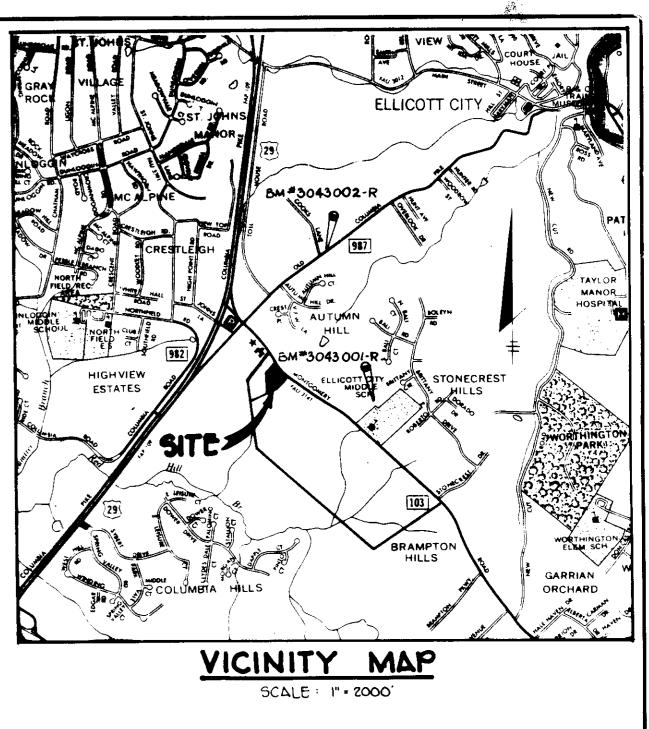
BUILDING COVERAGE

- 9. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITH 2'-0" OF EXTERIOR MANHOLE WALLS.
- 10. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- 11. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- 12. TOPO TAKEN FROM AERIAL PHOTOGRAMMETRY BY MAPPING ASSOCIATES, FLOWN AUGUST 1966.

	į	5.0	•	B-1	R5A-8	JATOT
EXISTING ZONING	· · · · · · · · · · · · · · · · · · ·	50				16.151 Ac
TOTAL AREA OF SITE			OAC.	0.0005 AC.	_	100.131 🕮
total area of phase I			,444.23	8f. (3.55 AC.)		
· · · · · · · · · · · · · · · · ·						
landscaped area 🏭 .			68 9 5.f.	(57.4%)		
PARKING (
REQUIRED (1/2003) of K	RETAIL = 31, \$1000 s.f. OF	FICE = 8)				
PROVIDED					lн	
				۴		
AREA TO BE RESENDED		138			35	
WALL - TO - WALL AREA					4	
6,040 s.f. RETAIL @ 1	200 s f				교	
2,600 s.f. Office @ 3						
(MAXIMUM NUMBER		3 = 17)				
· · · · · · · · · · · · · · · · · · ·	=		105 - 6			

8,640 s.f. (6.8%)





BM *3043001-R ELEV. 437.919
CONCRETE MONUMENT AT & IN TRANSMISSION
LINES BACK OF SCHOOL

BM #3043002-R ELEV. 377.581

CONCRETE MONUMENT 0.5' BELOW SURFACE 14'±

N.W. LOLD COLUMBIA PIKE 175' N.E. LOF COOKS LANE

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				E SYSTEMS AND PUBLIC ROADS.
	HOMAE. CO	INTY DEPARTMENT OF PUBLI	C WORKS	
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	X Ome	m-fu		
	•	DIRECTOR		DATE
	%C~	sem & Ran		8.12
		CHIEF, BUREAU OF ENGIR		DATE
	APPROVED:	FOR PUBLIC WATER AND PU	BLIC SEWERAGE SYSTEMS, HOWA	ARD COUNTY HEALTH DEPARTMENT.
		<i>u. 1</i> 1 -		0 10 CC
_	John	M. Boy Mup 5.		8 - 19 - 88
		COUNTY HEALTH OFFICE	11:	DATE
	APPROV	ED: HOWARD COUNTY OFFIC	E OF PLANNING AND ZONING.	
	.#	$II \circ A$.		
4		MAN	•	9.288
		PLANNING DIREC	CTOR	DATE
4	_		•	
	man	she J. Zi.ca	ngh!	8.25-82
'	CHIE	F, DIVISION OF COMMUNICAND DEVELOPMENT.	TY PLANNING AND	DATE A-
+		LAND DEVELOPMENT.		
NO	DATE		REVISION	
p	olanning • arc	HULTE & ASSOCIATES Chitecture • engineering tional Pike • Suite 34 • Ellicott C	INC. ity. Maryland 21043 • (301) 465-6105	Manage and S
-			· · · · · · · · · · · · · · · · · · ·	Camus Ko Trong
OW	NER		PROJECT	
1		TEO PARTNERSHIP 180X 417		LOS CENTER
	ELLICOTT (CITY, MD. 21043	LOCATION: TAX MAI	
	VELOPER		TITLE	III, MAN I CAINL
SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY,MD. 21043			TITLE	
			DATE JANUARY 1,198 MAY 3,1988	PROJECT NO SGIL SDP
DE	S. JKT/JRS	DRN.: KMN	SCALE: AS SHOWN	DRAWINGOF

Vbbeon

4260 MONTGOMERY ROAD (MD RT 103)

SEWER CODE

SECT. / AREA LOT / PARCEL *

PHASE I PARCEL 676

ADDRESS CHART
STREET ADDRESS

PLAT + OR L/F BLOCK # ZONE TAX / ZONE MAP ELECT. DIST. CENSUSTR. 2005305

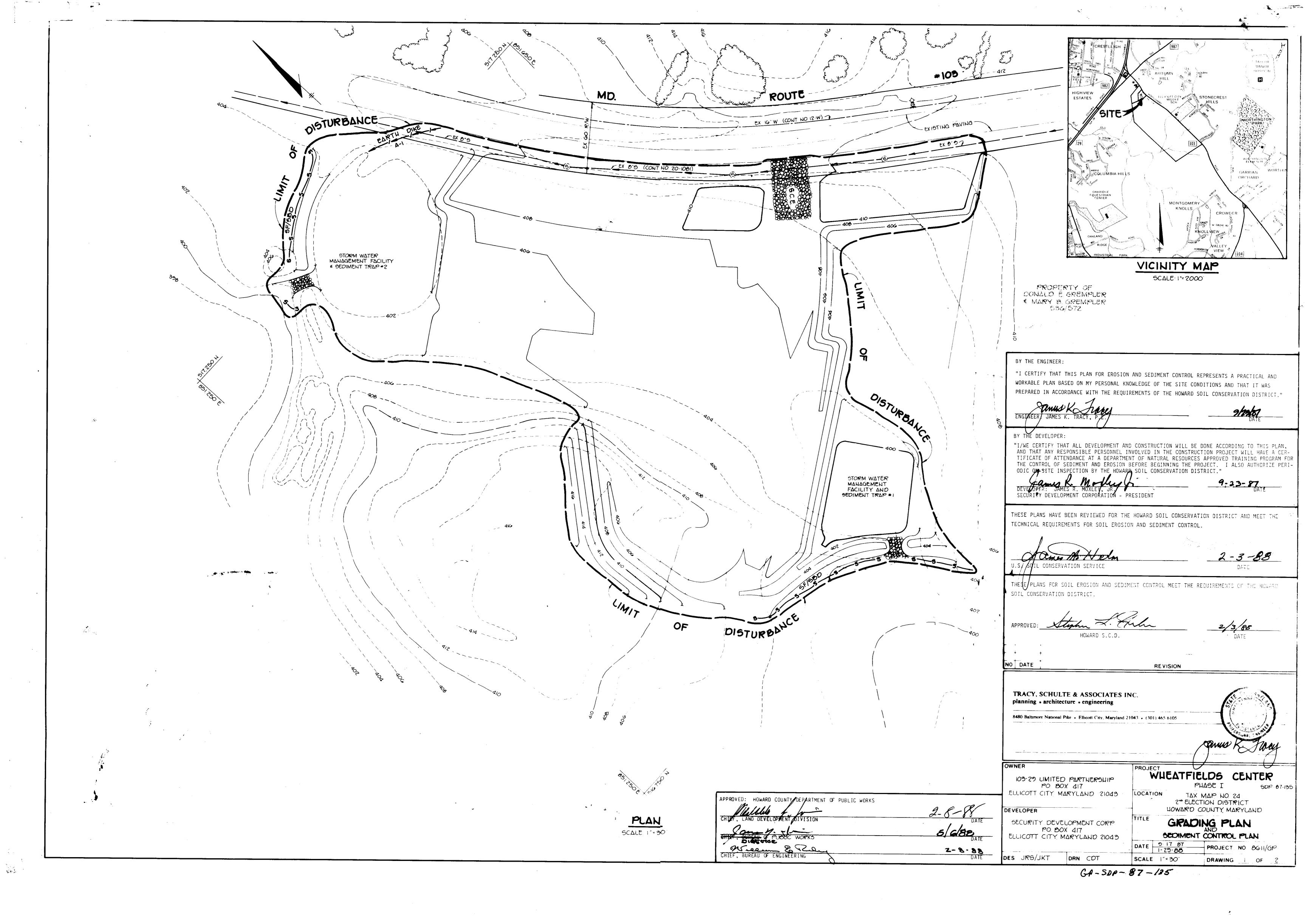
SUBDIVISION NAME

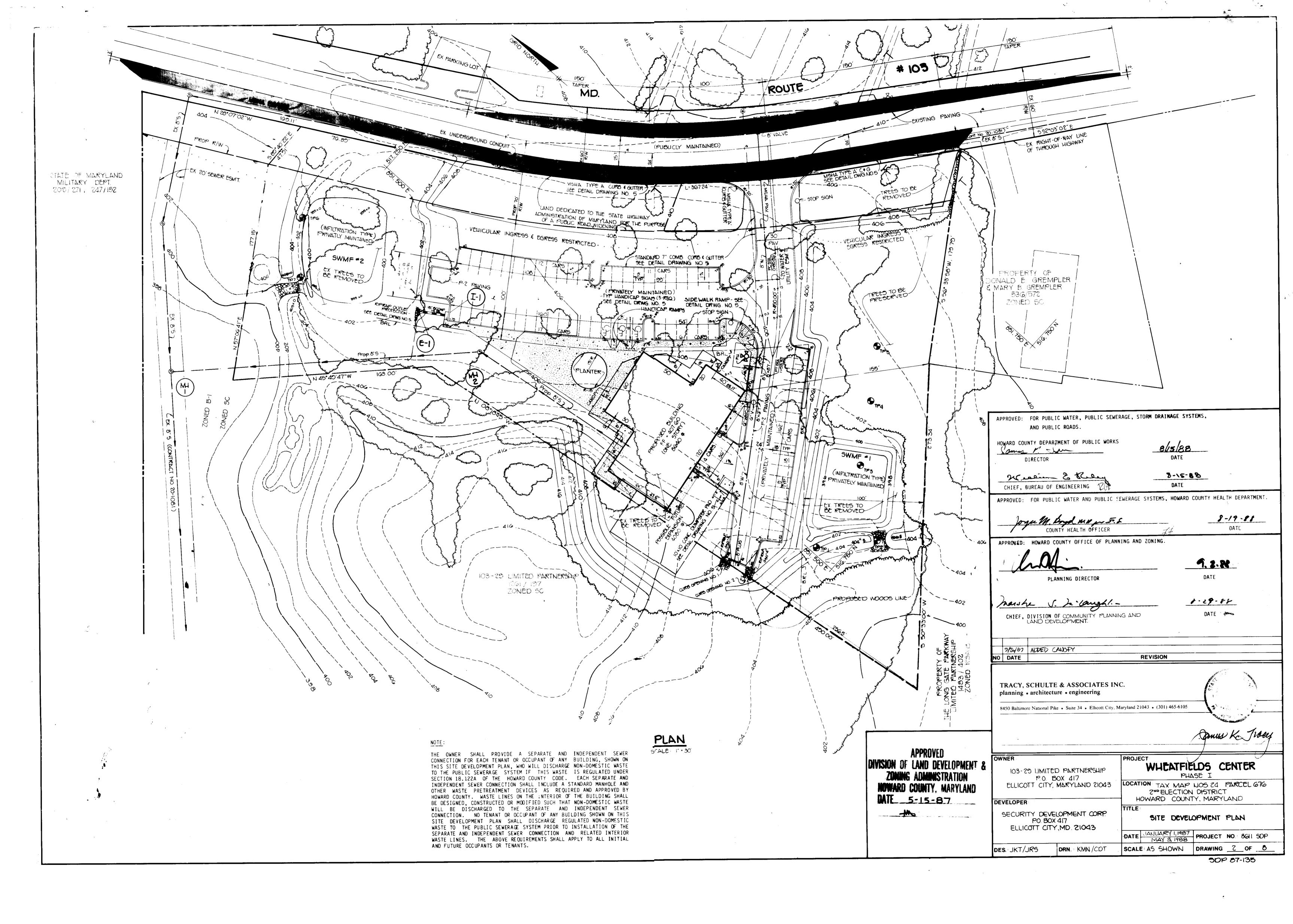
WATER CODE

WHEATFIELDS CENTER

F-00

SDP 87-135





PERMANENT SEEDBED PREPARATION

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 1bs/1000 sq ft) ANO 600 lbs PER ACRE 10-10-10 FERTILIZER (14 1bs/1000 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 1bs/10000 sq ft)

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 1bs/1000 sq ft) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 lbs/1000 sq ft) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

FOR THE PERIODS MARCH 1 THRU APRIL 30 AND AUGUST 1 THRU OCTOBER 15. SEED WITH 60 LBS PER ACRE (1.4 1bs/1000 sq ft) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 1bs/1000 sq ft) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS THE PERIOD OF SOTOBER 16 THE PERIOD THAN THE PERIOD STAND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW. MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 16s/1000 sq ft) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 gal/1000 sq ft) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 gal/1000 sq ft) FOR ANCHORING. MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED. SOIL AMEHOMENIS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 16s/1000 sq SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER JEEO WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 165/1000 sq ft). FOR THE PERIOD MAY I THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS .07 1bs/1000 sq ft). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD. MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 to 90 1bs/1000 sq ft) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (70 to 90 1bs/1000 sq ft) OF T

OR HIGHER, USE 348 GALLONS PER ACRE (8 gal/1000 sq ft) FOR ANCHORING. REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

ACRE (5 gal/1000 sq ft) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT.

SEQUENCE OF CONSTRUCTION

 OBTAIN GRADING PERMIT. CLEAR AND GRUB AREA FOR AND INSTALL STABILIZED CONSTRUCTION

ENTRANCE (SCE).

CLEAR AND GRUB REMAINING AREAS FOR SEDIMENT CONTROL DEVICE INSTALLATION.

DAY 7-21 4. INSTALL SWMF/SEDIMENT TRAPS 1 AND 2 AS FOLLOWS:

A. SWMF #1 TO BE CONSTRUCTED INITIALLY WITH A BOTTOM ELEVATION OF 4000 WHILE IT IS BEING USED AS A SEDIMENT TRAP AND STABILIZED AS PER TEMPORARY SEEDING NOTES. SWMF #2 TO BE CONSTRUCTED INITIALLY WITH A BOTTOM ELEVATION OF 400.2 WHILE IT IS BEING USED AS A SEDIMENT TRAP AND STABILIZED AS PER TEMPORARY SEEDING NOTES.

DAY 21-25 5. INSTALL REMAINDER OF SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.

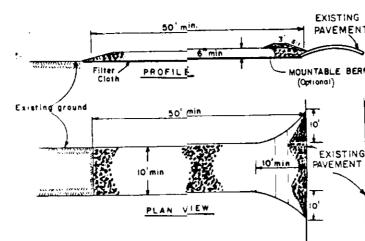
DAY 25-30 6. CLEAR AND GRUB REMAINDER OF SITE.

DAY 30-50 7. GRADE SITE.

STABILIZE ALL SLOPES IN ACCORDANCE WITH PERMANENT SEEDING

DAY 53-57 9. STABILIZE ALL OTHER AREAS IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.

> UPON COMPLETION OF ALL STABILIZATION, CLEAN TRAPS 1 AND 2 TO ELEVATION 4000 AND 400.2, RESPECTIVELY, AND SEED IN ACCORDANCE WITH TEMPORARY SEEDING NOTES IN PREPARATION FOR FUTURE SITE CONSTRUCTION ACTIVITY.



STANDARD SYMBOL

CONSTRUCTION STECIFICATIONS

Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).

dence lot where a 30 foot minimum length would apply).

3. Thickness - Not less than six (6) inches.

4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.

5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot. Filter will not be required on a single family residence lot.

6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopss will be permitted.

7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

We removed immediately.

Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping 9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION

ENT RANCE NO SCALE

CROSS SECTION

POSITIVE DRAINAGE -GRADE SUFFICIENT TO DRAIN

CONTRACTION SPECIFICATIONS

ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.

ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.

I OF WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.

ETELD LOCATION SHOULD BE ADJUSTED AS NEELED TO UTILIZE A STABILIZED SAFE CUTLET.

EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF EROSION. "JUST SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SELLY BASIN WHERE EITHER THE DIKE DHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ACQUIRED."

ACQUARTLY STABILIZED.

STABILIZED: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEE!
AND STRAM MULCH OR STRAM MULCH IF NOT IN SEEDING SEASON, (E) FLOW CHANNEL AS FEE
THE CHART BELOW.

<u>eloh charrel stabilization</u>

___DIKE A

A. SIDNE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 1 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION IDDIPMENT.

B. RIP-NAP TO BE 4-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.

THE SOIL.

C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE NO SCALE

OPTION: A one foot layer of 2" stone May be pieced on the upstream side of the ciprap in place of the embedded filter floth.

b. The structure shall be inspected after each rain and repairs made as needed

. Construction operations shall be carried out in such a manner than atosion and water pollution is minimized.

5.1-8.0% SEED WITH JUTE, OR SOD; LINED RIP-RAP 4-8"

.5-3,0% SEED AND STRAW MULCH

3.1-5.0% SEED AND STRAW MULCH

ZI SLOPE OR FLATTER

STABILIZATION AS REQUIRED. ON STEEP SLOPES EXCAVATE TO PROVIDE REQUIRED FLOW WIDTH AT FLOW DEPTH

STANDARD SYMBOL

____DIME E

BEDDING DETAIL

DEDIMENT CONTROL NOTES*

TO A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD HORRY DEFICE OF INSPECTIONS

1) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PRO-

VISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS

3) FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILI ZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 14

OF ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND MARNING STONE POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANCAL,

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 SEEDING (Sec. 51) 300 (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

TO ALC REDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN PRESTIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE

) ANY SEDIMENT CONTROL PRACTICE WHICH IS DR. TURBER BY SRADING ACTIVITY FOR FLACEMENT.

ADDITIONAL PEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED SEPERSARY BY THE BOWARD

10) ALL SEDIMENT TRAPS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL.

DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-1)

AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

ERMINATION AND ESTABLISHMENT OF GRASSES.

HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

OFFSITE WASTE/BORROW AREA COCATES LONG GATE 2

OF FILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANGE.

DOTAL AREA OF SITE

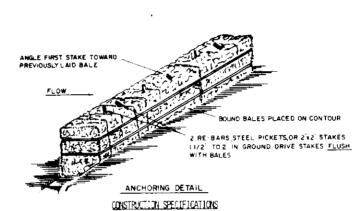
AREA TO BE ROOFED OR PAVED AREA TO BE VEGETATIVELY STABILIZE

COUNTY DEW CEDIMENT CONTROL INSPECTOR.

AREA DISTURBED

STORM DRAINAGE.

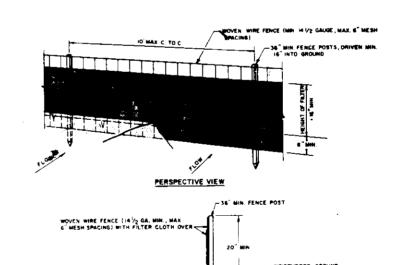
STORM DRAINAGE.



 BALES SHALL BE PLACED AT THE TOE OF # SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. . EACH BALE SHALL BE EMBEDDED IN THE SCIL A MINIMUM OF (4) INCHES, AND PLACED SCINE BINDINGS ARE MORIZONTAL.

BALES SMALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE Inspection shall be frequent and gepair replacement shall be made promptly as necied.

. BALES SHALL BE REMOVED HIEN THEY HAVE SERVED THETH USEFULNESS SO AS NOT TO BLOCK OR THIRDE STORM FLOM OR DRAINAGE. STRAW BALE DIKE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

POSTS: STEEL EITHER T OF U

WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. Filter cloth to be fastened securely to woven hire fence with ties spaced every 24" at top and mid section.

EMBED FILTER CLOTH
MIN 8"INTO GROUND -

FENCE: HOVEN HIRE, 14. GA. 6 MAX. MESH OPENING FILTER CLOTH: FILTER X,
MIRAGI 100X, STABILINAK I 140N OR APPROVED
EQUAL . When two sections of filter cloth adjoin each other they shall be over-lapped by six inches and folded. PREFABRICATED UNIT. GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE

NO SCALE

STONE OUTLET SEDIMENT TRAP NO SCALE

SEDIMENT TRAP NO. ! 2.75 Ac. DRAINAGE AREA , 1.58 Ac. DISTURBED AREA STORAGE VOWME 4,950.0 cf. REQUIRED 6,476 C.f. PROVIDED 401.97 CREST ELEVATION 400.00 BOTTOM ELEVATION 400.00 CLEANOUT ELEVATION 110 WEIR LENGTH 80' x 100' x 2.0' TRAP DIMENSIONS

SEDIMENT TRAP NO. 2 2.03 MC. DRAINAGE AREA 1.59 Ac. DISTURBED AREA STORAGE VOLUME 3,654.0 c.f. REQUIRED 8,503 c.f. PROVIDED CREST ELEVATION .402.00 BOTTOM ELEVATION 402.36 CLEANOUT ELEVATION **8**.01 WEIR LENGTH 95 x 100 x 71 TRAP DIMENSIONS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS 2-8-88 CHIEF, BUREAU OF ENGINEERING BY THE ENGINEER:

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

ENGINEER: JAMES K. TRACY, P.

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CER-TIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR

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

TWESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD S.C.D.

PROJECT

REVISION

TRACY, SCHULTE & ASSOCIATES INC.

planning • architecture • engineering

NO DATE

SOIL CONSERVATION SERVICE

OWNER 103-29 LIMITED PARTNERSHIP PO BOX 417 ELLICOTT CITY MARYLAND 21043

WHEATFIELDS CENTER PUASE I TAX MAP NO 24 LOCATION 2 ELECTION DISTRICT HOWARD COUNTY, MARYLAND

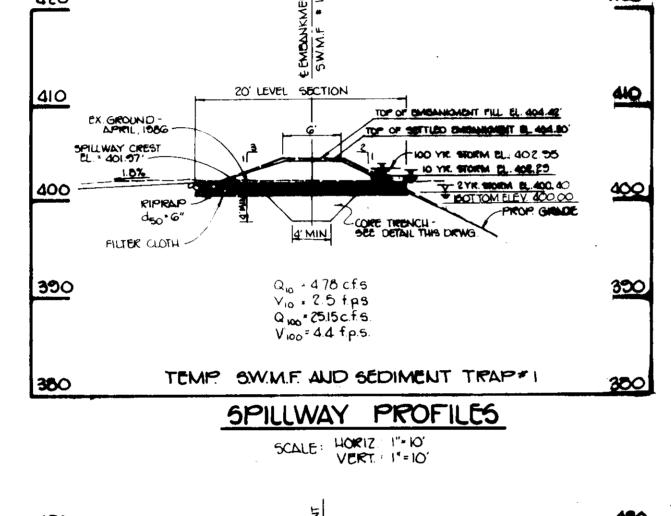
DEVELOPER SECURITY DEVELOPMENT CORP. PO. BOX 417 ELLICOTT CITY, MARYLAND 21043

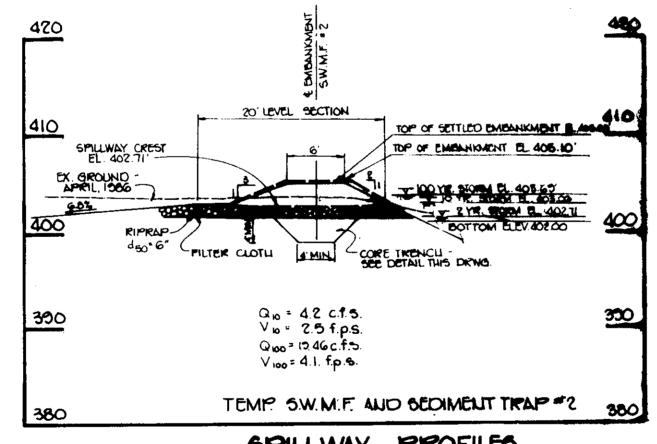
DRN KMN/JCA

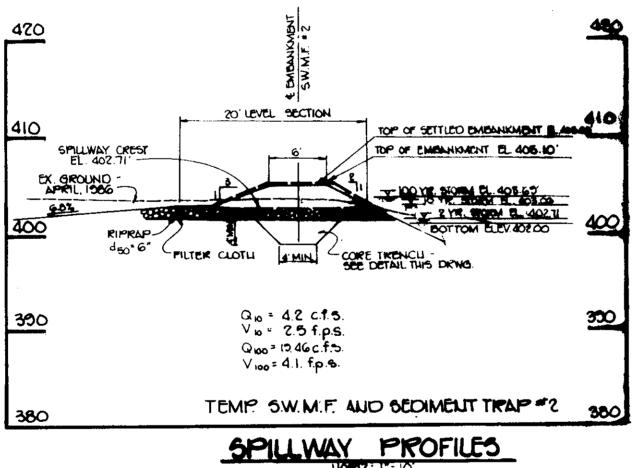
SEDIMENT CONTROL NOTES AND DETAILS PROJECT NO 8611/GP SCALE NO SCALE DRAWING 2 OF

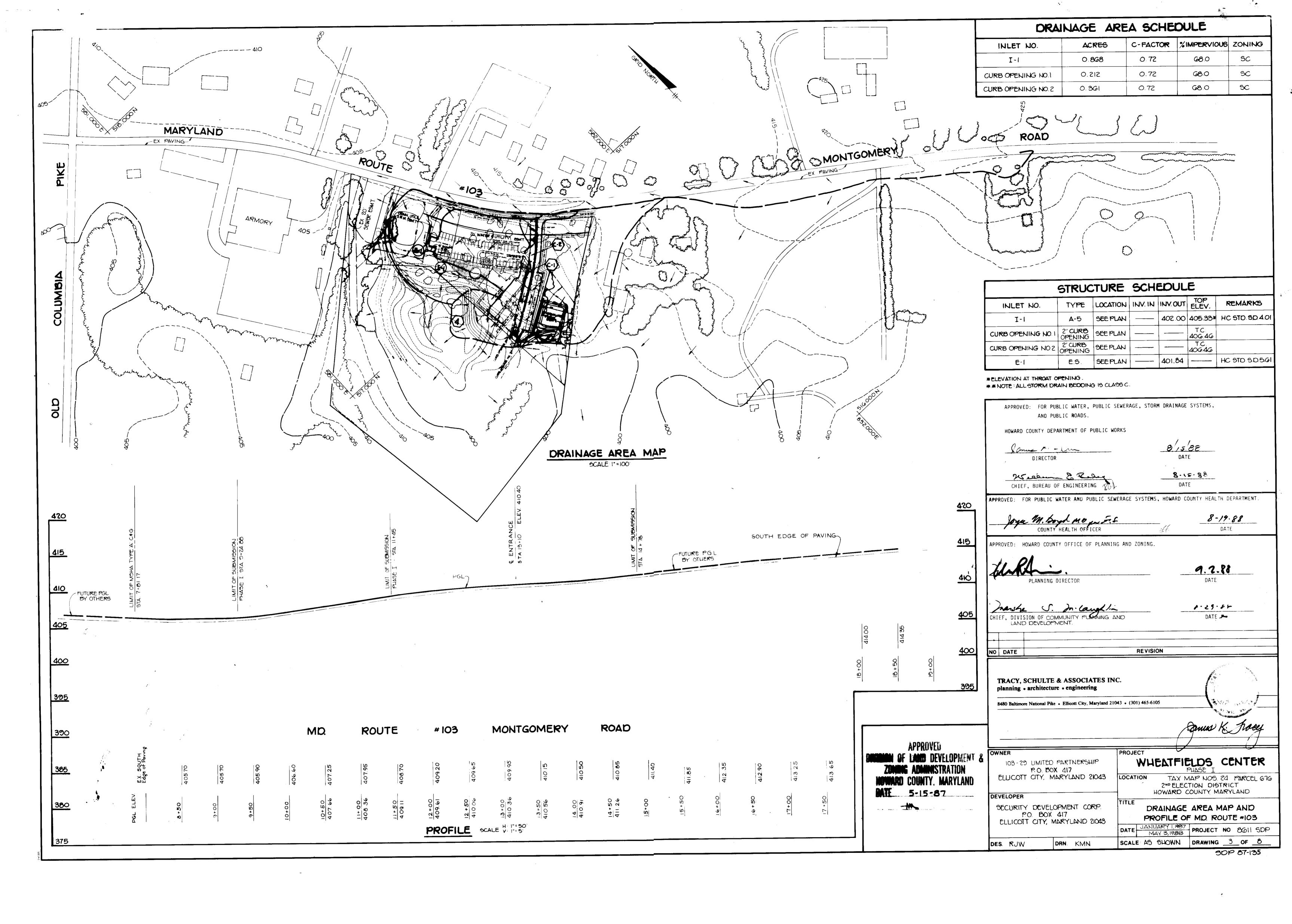
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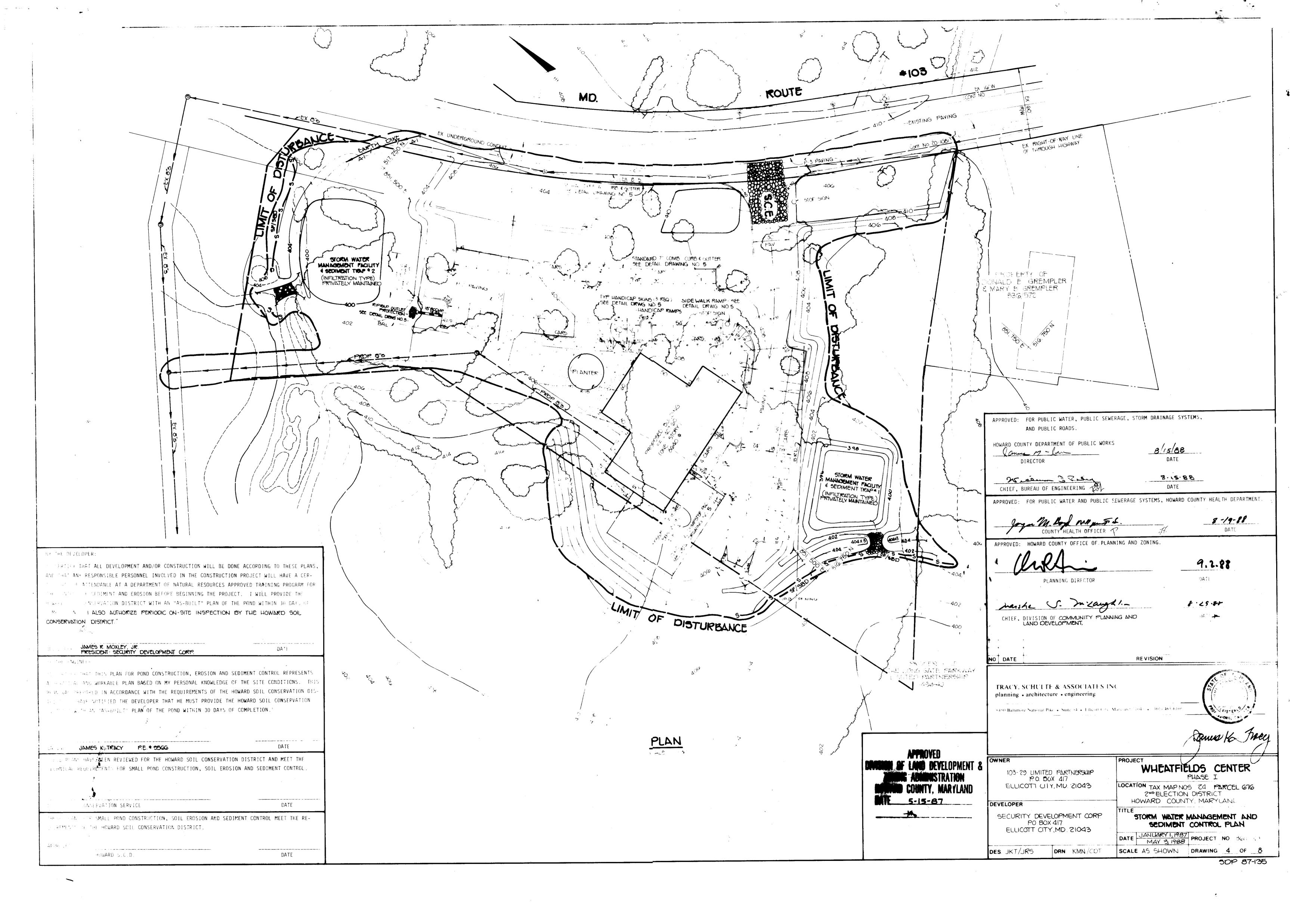
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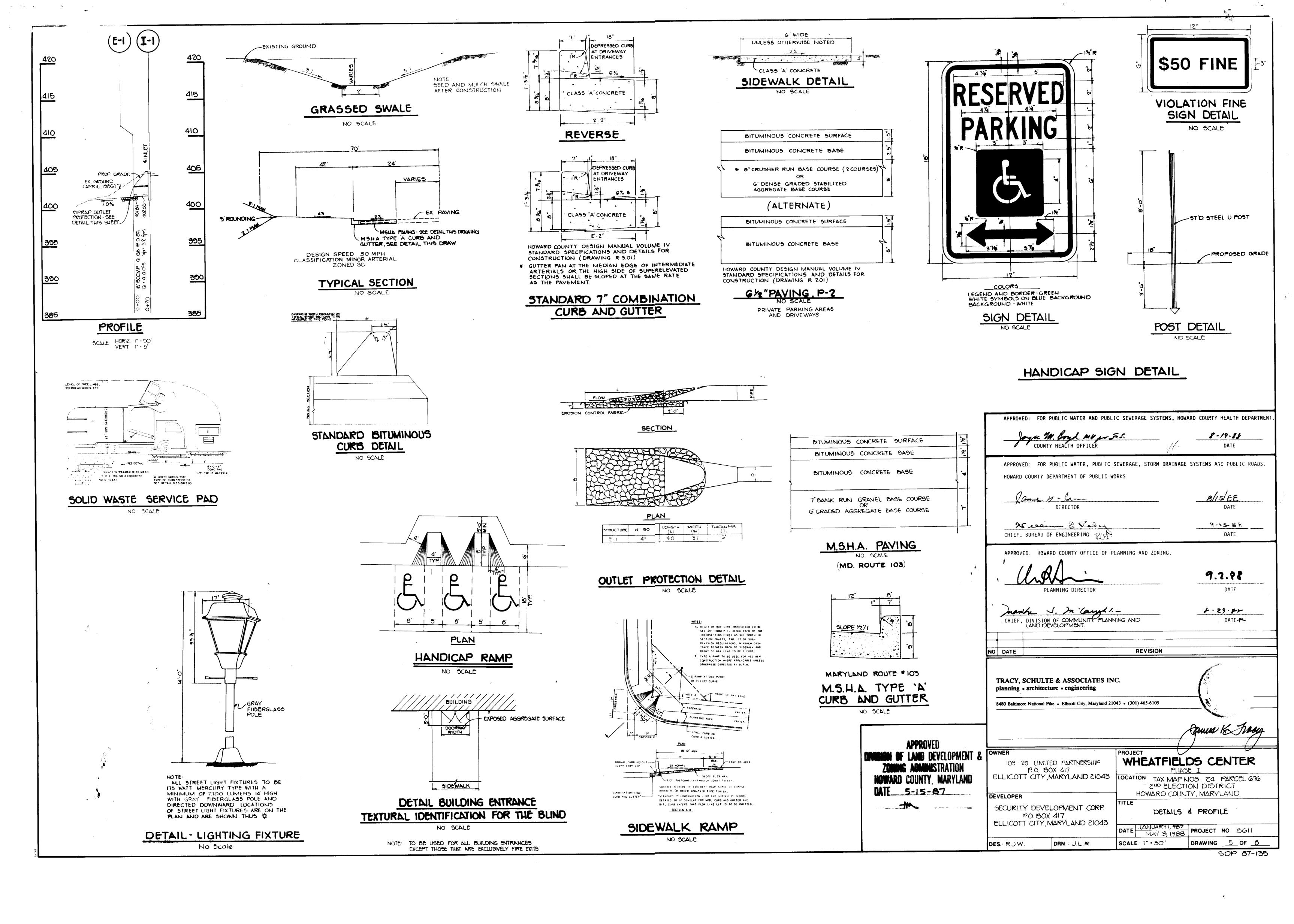












SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. DAY 1 2. CLEAR AND GRUB AREA FOR AND INSTALL DAY 2-3 STABILIZED CONSTRUCTION ENTRANCE (SCE). 3. CLEAR AND GRUB REMAINING AREAS FOR SEDIMENT DAY 3-7 CONTROL DEVICE INSTALLATION 4. INSTALL SEDIMENT TRAPS NO. 1 & 2 AND DAY 7-12 STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.

DAY 12-14 5. INSTALL REMAINDER OF SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.

DAY 14-38 6. INSTALL SWMF/SEDIMENT TRAPS AS FOLLOWS:

A. SWMF #1 TO BE CONSTRUCTED INITIALLY WITH A BOTTOM ELEVATION OF 397.0 WHILE IT IS BEING USED AS A SEDIMENT TRAP AND STABILIZED AS PER TEMPORARY SEEDING

SWMF #2 TO BE CONSTRUCTED INITIALLY WITH A BOTTOM ELEVATION OF 400.0 WHILTE IT IS BEING USED AS A SEDIMENT TRAP AND STABILIZED AS PER TEMPORARY SEEDING NOTES.

7. CLEAR AND GRUB REMAINDER OF SITE. DAY 38-45

DAY 45-60 GRADE SITE.

INSTALL UTILITIES (WATER, SEWER, AND STORM DRAINS).

STABILIZE ALL SLOPES IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

DAY 99-124 11. COMPLETE ALL ROADWAY CONSTRUCTION AND STABILIZE ALL DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

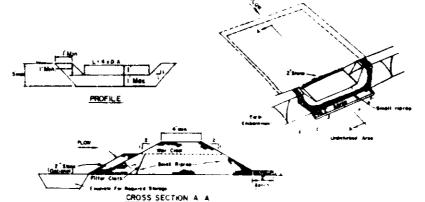
DAY 124-129 12. UPON APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES AND CONVERT SEDIMENT TRAP NO. 1 AND NO. 2 TO PERMANENT STORM WATER MANAGEMENT FACILITY AS FOLLOWS:

> DEWATER BASIN BY PUMPING INTO A SEDIMENT TRAP OR WELL STABILIZED VEGETATED AREA AS DIRECTED BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

REMOVE SILT AND STONE FILTER AND RESTORE POND TO ORIGINAL DIMENSIONS. STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING

REMOVED SILT SHALL BE SPREAD ACROSS THE AREA NORTHWEST OF SWMF #2 AND SEEDED IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

GRADE S.W.M.F. * L AND S.W.M.F. #2 TO FINISHED BOTTOM ELEV 306.00 AND 399.00 AS SHOWN ON DRAWING NO. 7 OF 8. GRADING SHALL BE DONE WITH A GRADEALL TYPE MACHINE TO MINIMIZE BOTTOM COMPACTION. SEED IN ACCORDANCE WITH PERMANENT SEEDING NOTES.



OPTION: A one foot layer of 2" stone may be pieced on the opetron side of the riprap in place of the embedded filter cloth.

The full material for the embaskment shall be free of soots and other woody regatation as well as over-sized atomas, rocks, organic material or other objectionable material. The embankment shall be compected by traversing with equipment while it is being constructed.

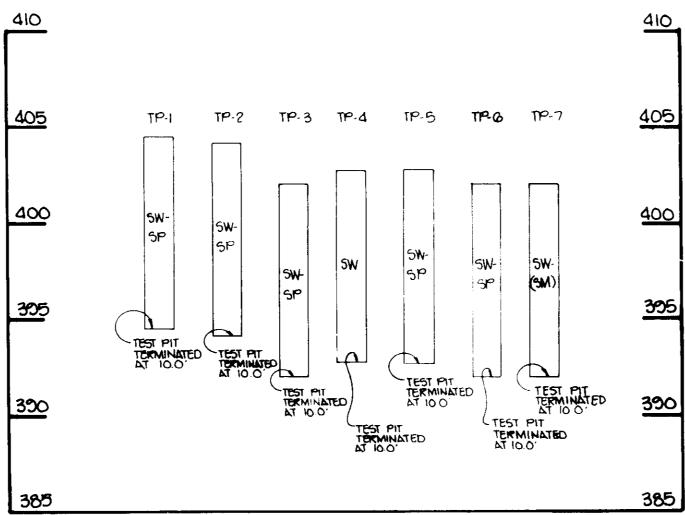
4. The score used in the outlet shall be small ripray 4"-8" along with a 1" thickness of 1 aggraphic placed on the up-grade side on the small riprep in subsedded filter cloth in the ripres.

 Sediment shall be removed and trap restored to its original dimensions when the sediment
has accumulated to h the design depth of the trap. 4. The structure shall be imspected after each rain and repairs made as needed. Construction operations shall be carried out in such a manner than erosion and water pollution is minimized.

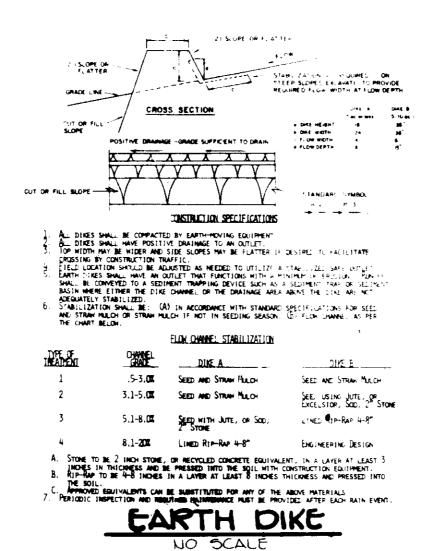
8. The structure shall be removed and the area stabilized when the drainage area has been

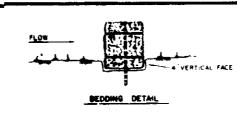
STONE OUTLET SEDIMENT TRAP DETAIL

NO SCALE

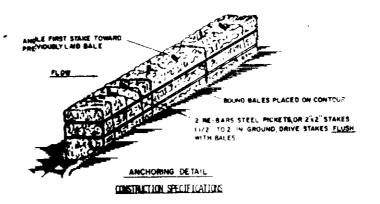


TEST PIT DATA SCALE HORIZ NO SCALE





STANDARD SYMBOL F-340 - -



1. BALES SMIL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW MITH BIGS TIMPTLY ABUTTING THE ADJACENT BALES. 2. EACH BAS SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BIRDHORS ARE HUMIZONTAL.

3. BALES WALL BE SECURELY ANCHORED IN PLACE BY EITHER THE STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREYTOURLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHAY. BE DRIVEN CLASH WITH THE BALE.

4. IMPRECTION BHALL SE PREGUENT AND REPAIR REPLACEMENT SHALL SE MADE PROMPTLY AS MEETED.

5. BALES SMALL BE REPONED INCENTINEY HAVE SERVED THETE USEFULNESS SO AS NOT TO BLOCK OR INVESTIGATE STORM FLOW OR DISAINAGE.

STRAW BALE DIKE DETAIL

NO SCALE

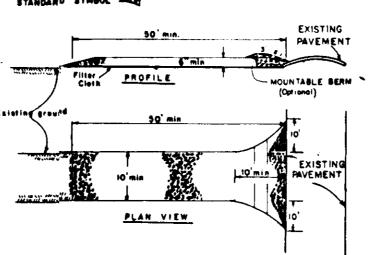
PERSPECTIVE VIEW - 36 MM FENCE POST WEN MACHE THE THE THE SALES CLOTH OVER THE EMBER FALTER CLETH STANDARD SYMBOL

> SECTION CONSTRUCTION HORES FOR FARFLICATED SILT FENCE

POSTS: STEEL EITHER T OF U FENCE: HOVEN HIRE, 14. GA. 6 Max, MESH OPENING FILTER CLOTH: FILTER X.
MIRAFI TUX, SINETLINKA TIVON OR APPLOYED

Maintenance shall be performed as seeded and haterial memowed when bulbes" develop in the silt penc

SILT FENCE DETAIL



NO SCALE

CONSTRUCTION SPECIFICATIONS

Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 Length - As required, but not less than 50 feet (except on a single residence lot where a 18 foot minimum length would apply).
 Thickness - Not less than six (6) inches.
 Width - ren (18) foot minimum, but not less than the full width at points where ingress or egress occurs.
 Filter cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 Surface Mater - All surface water flowing or diverted thward construction entrances shall be piped across the entrance. If piping is impractical, a mountable herm with 5:1 slopes will be permitted.
 Heintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand

require periodic top dressing with additional atoms as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.

Mashing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping 9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

NO SCALE

2) ALL VEGETATIVE AND STRUCTURAL SMACTICES ARE TO BE LESTALLED ACCORDING TO THE PRO-VISIONS OF THIS PLAN AND ARE TO BE IN COMPONNANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL BROSION AND SEPTEMENT CONTROL.

3) POLLOWING ESTITAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILI-PATION SMALL BE CONFLETED WITHIN: a) ? CALENDAR DAYS FOR ALL PERDMITER SEDIMENT CONTROL STRUCTURES, DIRES, PERINETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR CHADED AREAS OF THE PROJECT SITE.

4) ALL SEDIMENT TRAPS/BASINS SHOWN HOST BE FERICED AND WARNING SIGHS POSTED AROUND THEFE PPRIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN HANGAL.

5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE II ACCORDANCE WITH THE 1983 MARTLAND STANDARDS AND SPECIFICATIONS FOR SOIL ENGINE AND SEDIMENT CONTROL FOR PROPARED SEEDING (Sec. 51) SOD (Sec. 54), TEMPORARY SEEDING (Sec. 50) AND MULCHING (Sec. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE BONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER CEMINATION AND ESTABLISHMENT OF CRASSES.

6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REDAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE COMBITION UNTIL PROMISSION FOR THEIR REMOVAL WAS BEEN OBTAINED FROM THE HOUARD COUNTY SEDEMENT CONTROL INSPECTOR.

AREA TO BE SOOFED OR PAVED

I) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT F UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

10) ALL SEDIMENT TRAPS SHOWN HOST BE PENCED AND VARNETIC SIGHS POSTED AROUND THEIR

PERIMETER IN ACCOMMANCE WITH VOL. 1, CHAPTER 12, OF THE HOMARD COUNTY DESIGN MARRIES

AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 lbs/1800 es ft) REPORT SERVING BARROW OR DISC INTO UPPER THREE LUCKES OF SOIL. AT TIME OF SEMBING, APPLY 400 LBG, PER ACRE 30-0-0 URRAFORM FERTILIZES (9 Ibe/1000 eq ft). 2) ACCEPTABLE APPLY 2 TORS PER ACRE DOLORITIC LINESTONE (92 160/1000 on ft) AND 1000 LES PER ACRE 10-10-10 FERTILIZER (23 the/1000 og fc) SEPONE SEEDENC.

FOR THE PERIODS MARCE-1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED HAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL PESCUE PER ACRE AND 2 LBS PER ACRE (.05 15m/1000 pe ft) OF WEEPING LOYEGRASS. DURING THE PERIOD OF OCTOBER 16 THE FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW HERLCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOO. OPTION (3) SEED WITH MULCHING - APPLY 15 TO 2 TONS PER ACRE (70 TO 90 16s/1000 eq ft) OF MUNOTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH AMCHORING TOOL OR 218 GALLONS PER ACRE (5 gal/1000 eq ft) OF EMULSIFIED ASPHALT ON PLAT AREAS. ON SLOPES & FEET OR HICHER, USE 348 GALLONS PER ACRE (8 gal/

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESPECTIVES.

TENPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE SOIL AMERIMMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 lbs/1000 mg ft) FFDING: FOR PERIODS MARCH 1 THRU APRIL 36 AND FROM AUGUST 15 THRU NOVEMBER 15, SRB BUSHEL PER ACRE OF ASSUAL RYE (3.2 16s/1000 sq ft). FOR THE PERIOD HAY 1 THRU THE PERIOD NOVEMBER 14 THRU FERRUARY 28, PROTECT SITE BY APPLYING 2 TOHS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 14 TO 2 TONS PER ACRE (70 to 90 16s/1000 sq ft) OF UNBOTTED SMALL GRALE STRAN IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 gal/1000 sq ft) OF ENGLSIFIED ASPHALT OF FLAT AREAS ON SLOPES, 8 FT OR HICHER, USE 348 GAL PER ACRE (8 gal/1000 eq ft) FOR ANCHORING. REFER TO THE 1981 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENT A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONCITIONS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL COMSCENATION TRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL DONSERVAND DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION

ENGINE 7

5.3.88

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PER AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A GE TIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM

THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS 03 COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOLD CONSERVATION DISTRICT.

JAMES R. MOXLEY, JR. A PRISIDENT SECURITY DEVELOPMENT CORP.

5-3-88

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

SOIL CONSERVATION SERVICE

PLANS FOR SOIL EROSION AND SCIDIMENT CONTROL MEET THE AREA OWAREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

lepten J. 97 HOWARD S.C.D.

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

Joya M. boyd MD prot.

HOWARD COULTY DEPARTMENT OF PUBLIC WORKS

8-19-88

iA':

LATTE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND POLICE READS

DIRECTOR

Wesama & Res

CHIEF, BUREAU OF ENGINEERING CLANNING AND ZONING

- PLANNIN , DIFFCTOR

9.2.48

THIEF, DIVISION OF COMMUNITY PLANNING AND

LAND DEVELOPMENT.

4.57.22

NO DATE

TRACY, SCHULTE & ASSOCIATES INC. planning • architecture • engineering

8450 Baltimore National Pike • Suite 34 • Ellicott City, Maryland 21043 • (301) 465-6105

WHEATFIELDS CENTER

103 - 29 LIMITED PARTNERSLIP P.O. BOX 417 ELLICOTT CITY, MD 21043

DEVELOPER

DES. RJW

PHASE : LOCATION TAX MAP NOS 74 PARCEL 676 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE SEDIMENT CONTROL SECURITY DEVELOPMENT CORP PO BOX 417 ELLICOTT CITY,MD 21043

DRN: KAM

NOTES AND DETAILS PROJECT NO. 8611 SDF MAY 3,1988

REVISION

SCALE AS SHOWN DRAWING _____OF

1.58 AC-REQUIRED 4,950.0 of 18,542.0 c.f PROVIDED 401.97 **35**7.00 398.99 80'x 100'x 4.0' TRAP DIMENSIONS

DRAINAGE AREA 2.03 AC. 1.59 AC. DISTURBED AREA STORAGE VOLUME REQUIRED PROVIDED 407.71 CREST ELEVATION 400.00 BOTTOM ELEVATION 400.86 CLEANOUT ELEVATION TRAP DIMENSIONS

1.5 4 8 P 5-15-87

3,654.0 c.f. 13,500.0 c.f. 95 x 100 x 1.71

2.75 AC DRAINAGE AREA DISTURBED AREA STORAGE VOWME CREST ELEVATION BOTTOM ELEVATION CLEANOUT ELEVATION

SEDIMENT TRAP NO. I

SEDIMENT TRAP NO. 2

SITE PREPARALLON

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.

Areas to be covered by the pond or 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.

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.

II. EARTH FILL

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown B. on the plans.

Placement

Areas on which fill to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of 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 the 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 can be obtained with the equipment used.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain that density and is to be certified by the Engineer.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material 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 compaction equipment. The material needs to fill 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 twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

Materials - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specifications M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminized Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274-791 with waterright coupling bands or flanges.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTQ Specification M-196 or M-211 with watertight coupling bands or flanges. Coupling bands, anti-seep collars, end sections, etc. must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of Aubber or plastic insulating materials at least 24 mils in thickness. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be less than 9 and greater than 4.

- 2. Connections All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to the completely watertight. Dimple bands are not considered to be 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 6. all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
- 4. Laying pipe The pipe shall be placed withinside circumferential laps pointing downstream and with the longitudinal laps at the sides
- 5. Backfilling shall conform to structural b. kfill as shown above.
- 6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe

- 1. Materials Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. An approved equivalent is AWWA Specification C-301.
- 2. Bedding All reinforced conrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3". or as shown on the drawings.
- 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.
- 4. Backfilling shall conform to structural backfill as shown above.
- 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
- 1. For pipes of other materials, specific specifications shall be shown on the drawings

V. CONCRETE

Materials

- a. Cement Normal Portland cement shall conform to the latest ASTM Specification C-150.
- b. Water The water used in concrete shall be clean. free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- c. Sand The sand used in concrete shall be clean. hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
- d. Coarse Aggregate The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1) inches.
- e. Reinforcing Steel The reinforcing steel shall be deformed bars of intermediate grade billet steel conforming to ASTM Specification A-615.
- 2. Design Mix The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1 to 6 U.S. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.
- Mixing The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.
- 4. Forms The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a nonstaining mineral oil or thoroughly wetted before concrete is placed.

Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

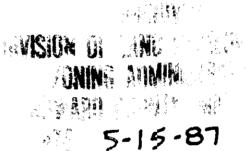
- Reinforcing Steel All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.
- Consolidating Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be suplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.
- 7. Finishing Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.
- 8. Protection and Curing Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.
- 9. Placing Temperature Concrete may not be placed at temperatures below 37°F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

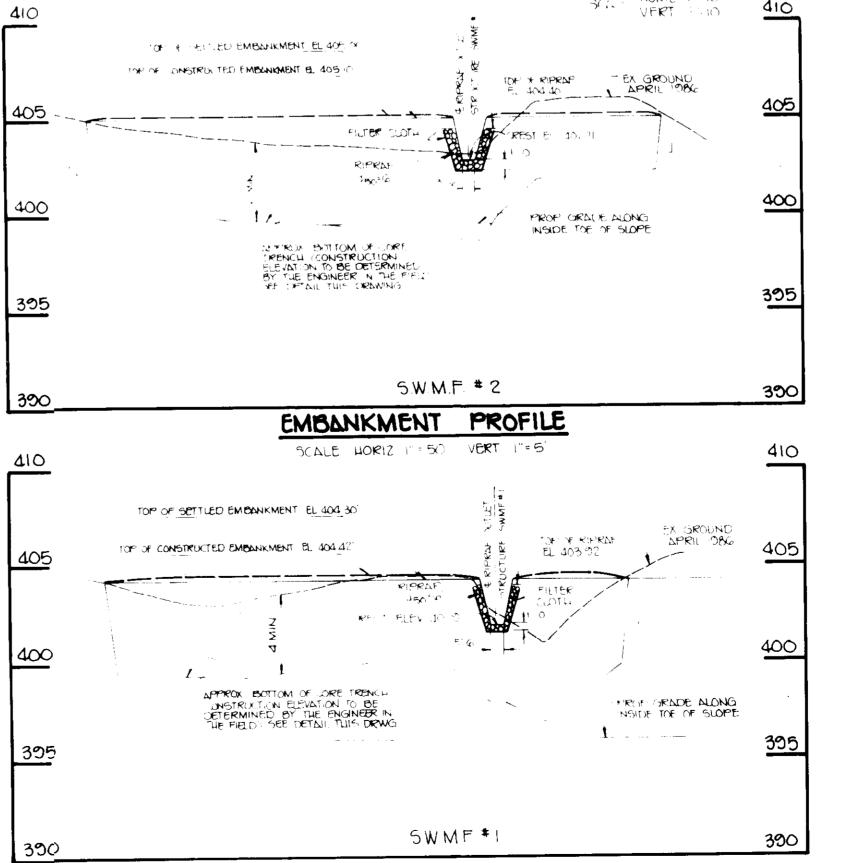
All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. 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 to be employed during the construction process.



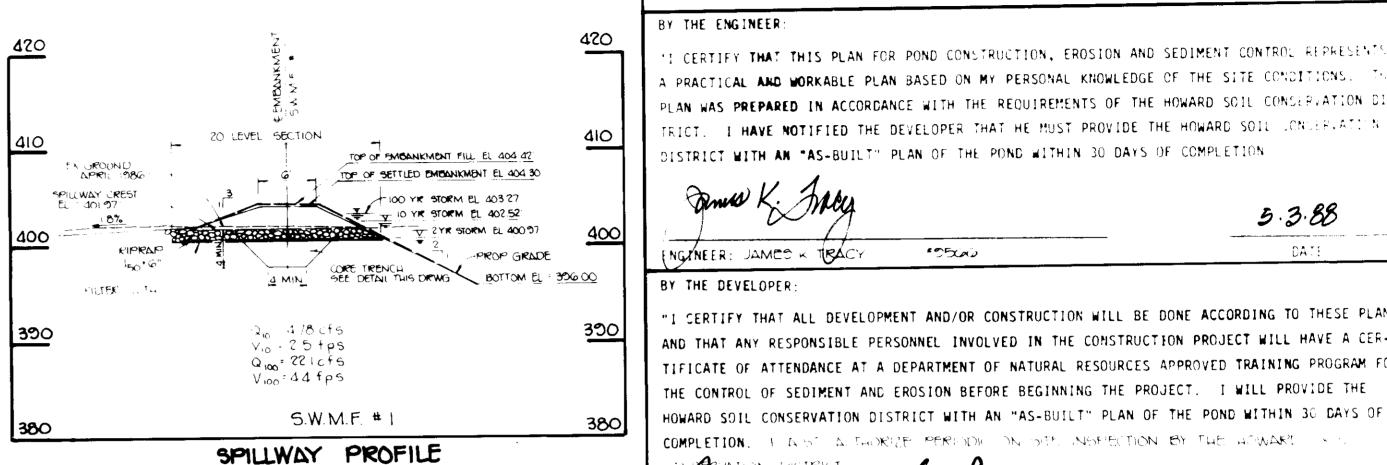
TOP OF SETTLED EMBANKMENT EL 40500 TOP OF EMBLYKMENT EL 405 10 V 100 YR STORM EL 403 84 BOTTOM EL 300 00 4 MIN CORE TRENCH SEE DETAIL THIS DRWG V6 25 fps 2000 - 166cf5 100 = 4 1 fp S SWMF * 2 SPILLWAY PROFILE



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

EXISTING GROUND SECTION -95% COMPACTION IN ACCORDANCE WITH APPROVED FOR BOILING WATER AND POBLIC SEWERAGE OF TEMS, HOWARD COUNTY HE HOWARD COUNTY SPECIFICATIONS

TRENCH SECTION NO SCALE



SCALE HORIZ 1"=10"

VERT 1"=10"

COMPLETION. I A 57 A THORIZE PERIODIC ON SITE INSPECTION BY THE HOWAR! IN tamo R moles

Joya M. Boyl My 5.5.

COUNTY HEALTH OFFICER

BY THE ENGINEER:

FINGTHEER: JAMES K TRÁC

BY THE DEVELOPER:

5-3-88

5.3.88

DATE

8-19-88

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

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS

PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DIS

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS

AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CER-

THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE

HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF

TIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR

TRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONCERNATION

DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION

S SOIL CONSERVATION SERVICE

DATE

THESE PLANS FOR BOIL EROSION AND SEDIMENT CONTROL MEET THE RE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Mees was to Welling

9.2-41

: I COMMUNITY PLANNING AND LAND DEVELOPMENT.

7.25. EP

TRACY, SCHULTE & ASSOCIATES INC. planning • architecture • engineering

8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (301) 465 6105

WHEATFIELDS CENTER 103-29 LIMITED PARTNERSLIP PO BOX 417 TAX MAP NOS Z4 PARCEL 676 ELLICOTT CITY, MARYLAND 21043 LOCATION 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DEVELOPER SECURITY DEVELOPMENT CORP. PO BOX 417 ELLICOTT CITY, MARYLAND 21043

STORM WATER MANAGEMENT NOTES AND DETAILS DATE JANUARY 1, 1987

MAY 3,1988 PROJECT NO 8611 SDE SCALE AS SHOWN DRAWING DRN KMN DES. SJB

