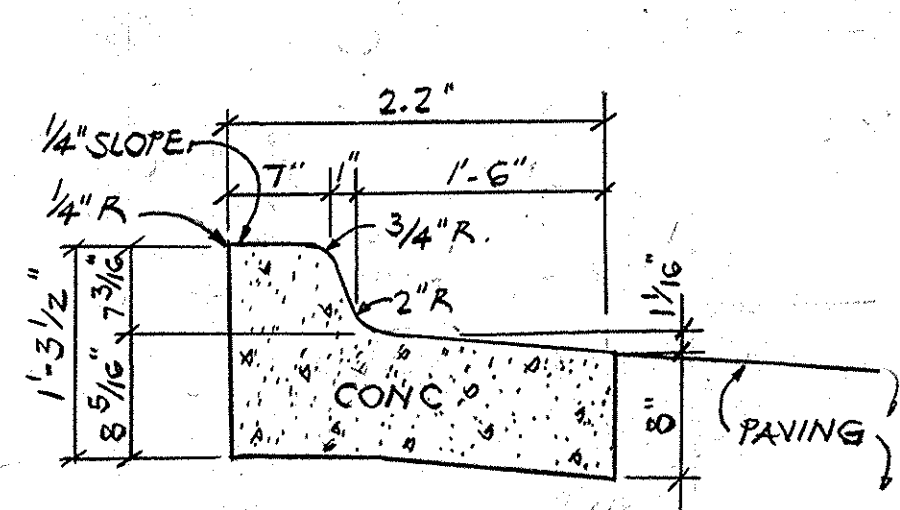
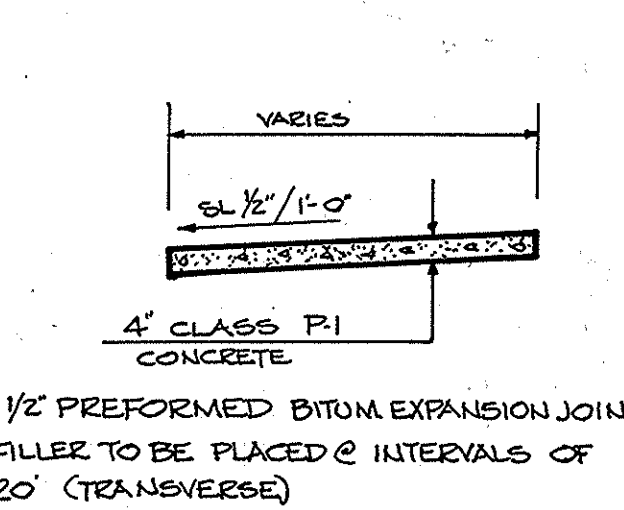


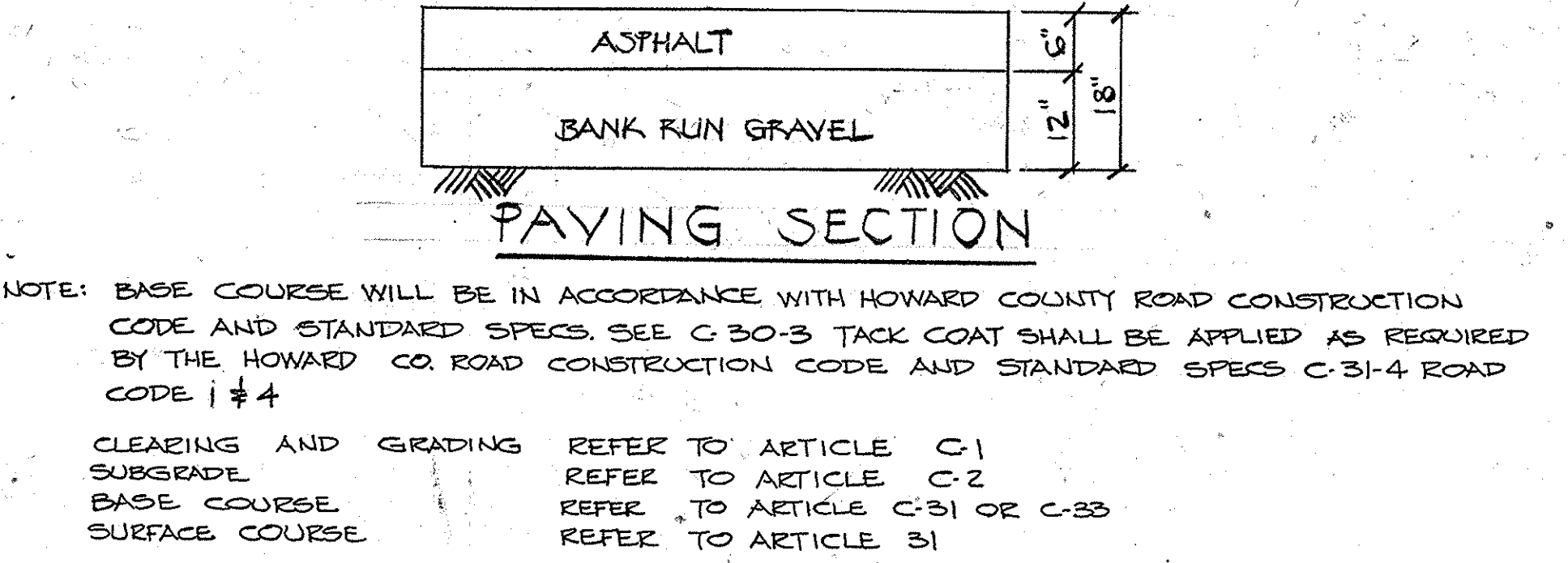
**STANDARD CURB & GUTTER**  
NO SCALE



**STANDARD CURB & GUTTER REVERSE CROWN**  
NO SCALE

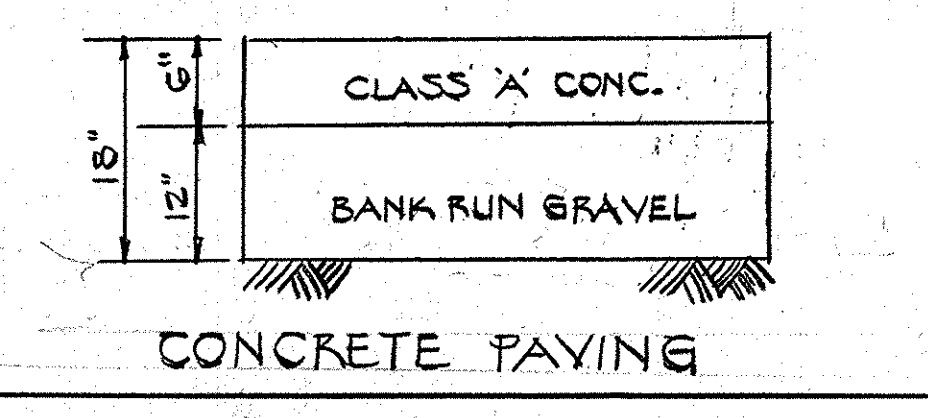


**SIDEWALK DETAIL**  
NO SCALE



**NOTES**

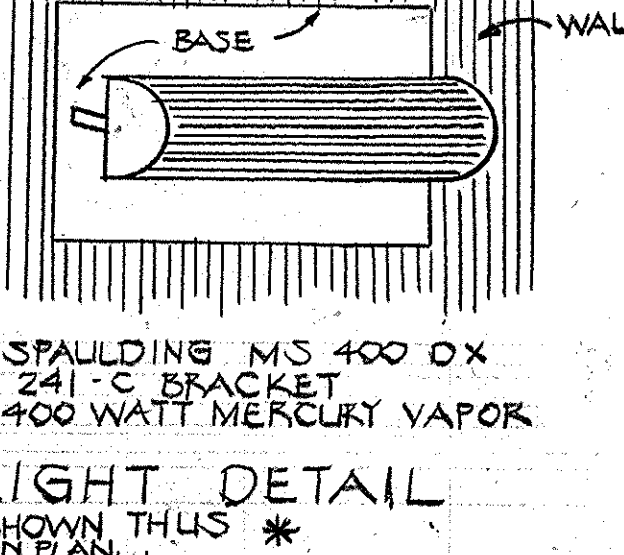
- INSTALLATION OF ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 REVISED EDITION.
- ALL HANDICAPPED SPACES SHALL BE CLEARLY MARKED THIS RESERVED FOR PHYSICALLY HANDICAPPED PERSONS. SIGN SHOWN THUS @
- THIS PLAN IS NOT AFFECTED BY A 100YR FLOOD PLAIN
- ALL MATERIALS & CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD CO ROAD CONSTRUCTION CODE
- ANY DAMAGE TO THE COUNTY RIGHT OF WAY OR PAVING WILL BE CORRECTED AT THE DEVELOPER'S EXPENSE
- BLDG PERMITS WILL NOT BE ISSUED UNTIL A DEVELOPER'S AGREEMENT IS EXECUTED FOR CONSTRUCTION OF THE ON SITE PUBLIC WATER LINE & BOND FOR SAME IS POSTED.



**CONCRETE PAVING**

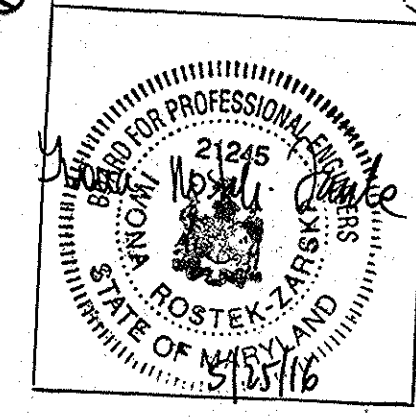
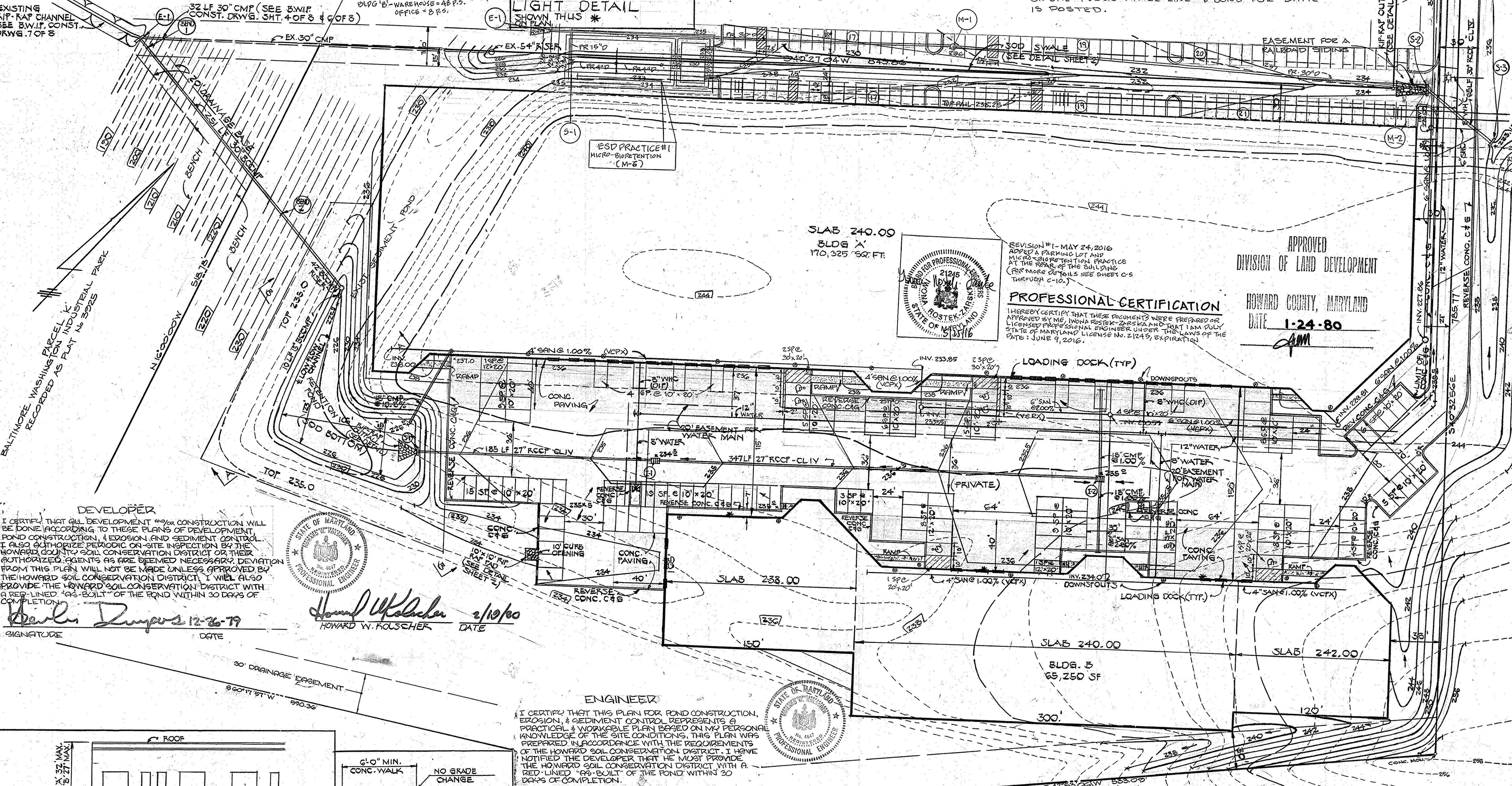
**SITE ANALYSIS**

- AREA OF TRACT = 12.884 AC. ±
- ZONING - M-2
- TOTAL FLOOR AREA = 235,485 SF
- GREEN SPACE PROVIDED = 4.91 AC = 56%
- PARKING REQUIREMENTS:
  - BLDG 'A' WAREHOUSE SPACE - 187,185 SF (170,235 SF) OFFICE SPACE - 2,500 SF
  - BLDG 'B' WAREHOUSE SPACE - 63,000 SF (65,250 SF) OFFICE SPACE - 2,250 SF
  - TOTAL REQ. = 311
  - TOTAL PROVIDED = 191 (INCLUDES 6 HIC SPACES)
- NO RETAIL SALES PERMITTED



**LIGHT DETAIL**  
SHOWN THUS \*

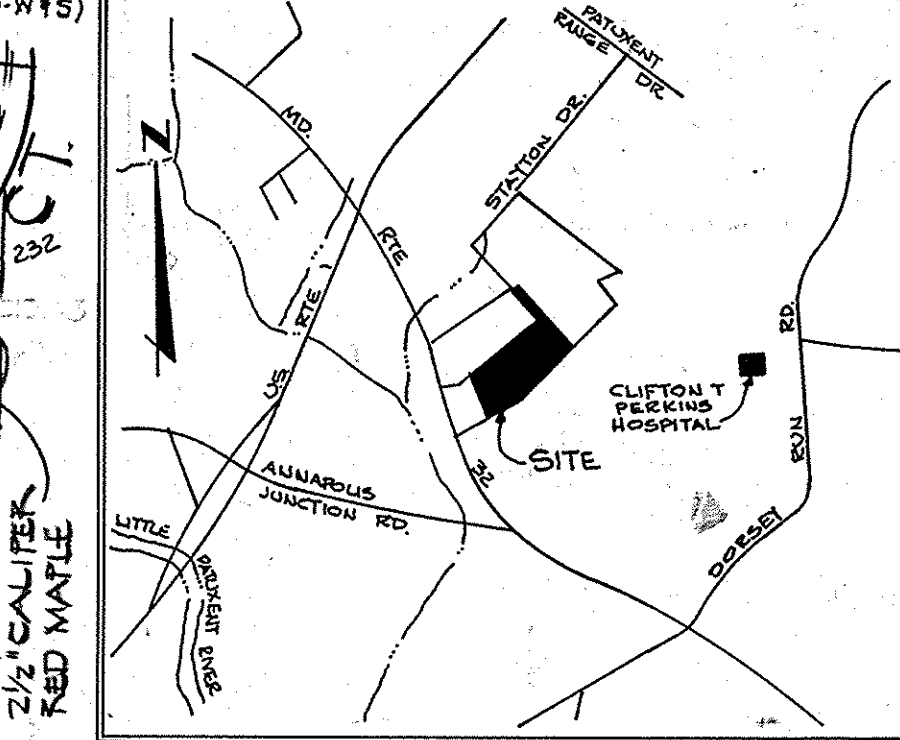
PARCEL 'H'  
BALTIMORE WASHINGTON INDUSTRIAL PARK  
RECORDED AS PLAT No. 3025



REVISION #1 - MAY 24, 2016  
APPROVED A PARKING LOT AND MICRO-SUBMERSED PRACTICE AT THE REAR OF THE BUILDING (FOR THESE DETAILS SEE SHEET C-5 THROUGH C-10.)

**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, HOWARD W. ROLSCHER, A LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2016.

APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE: 1-24-80  
AMM



**VICINITY MAP**  
SCALE: 1" = 2000'

ENGINEER: HUDKINS ASSOCIATES INC.  
101 SHELL BUILDING  
200 E. JOPPA ROAD  
TOWSON 21204 MARYLAND

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS:  
HOWARD COUNTY HEALTH DEPARTMENT.

*James Andrews* 3-26-80  
COUNTY HEALTH DEPT. OFFICER DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Robert Zielow* 3/1/80  
HOWARD S.C. PLAN NO. DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, & SEDIMENT CONTROL.

*James M. Helms* 3-11-80  
US SOIL CONSERVATION SERVICE DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

*Thomas J. Harris* 3-27-80  
DIRECTOR DATE

*Paul M. Heman* 3-27-80  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE & STORM DRAINAGE SYSTEMS & PUBLIC ROADS:  
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Wm. F. Nemmy* 3-15-80  
DIRECTOR DATE

*William S. Reilly* 3-24-80  
CHIEF, BUREAU OF ENGINEERING DATE

**DEVELOPER**  
GLEN ARM CONSTRUCTION & DEVELOPMENT CO.  
11100 OLD CARRIAGE ROAD  
GLEN ARM, MD.

**ARCHITECT**  
ROBERT T. HOFMANN & ASSOC.  
670 OXFORD BUILDING  
TOWSON, MD 21204

**OWNER**  
B.W.I.F. INC.  
21 WEST ROAD  
TOWSON, MD. 21204

PARCEL I-BLOCK 'C'  
THE BALTIMORE WASHINGTON INDUSTRIAL PARK  
PLAT # 3025  
6<sup>TH</sup> ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND.  
TAX MAP 48

**SITE DEVELOPMENT PLAN** OF 10  
SCALE: 1" = 40'  
FEB. 4, 1980

**DEVELOPER**  
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL ALSO PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.

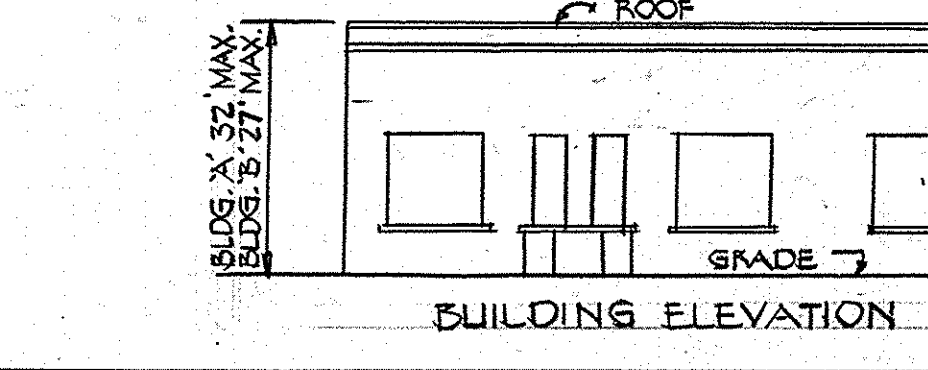
*Barclay Dupont* 12-26-79  
SIGNATURE DATE

*Howard W. Rolscher* 2/19/80  
HOWARD W. ROLSCHER DATE

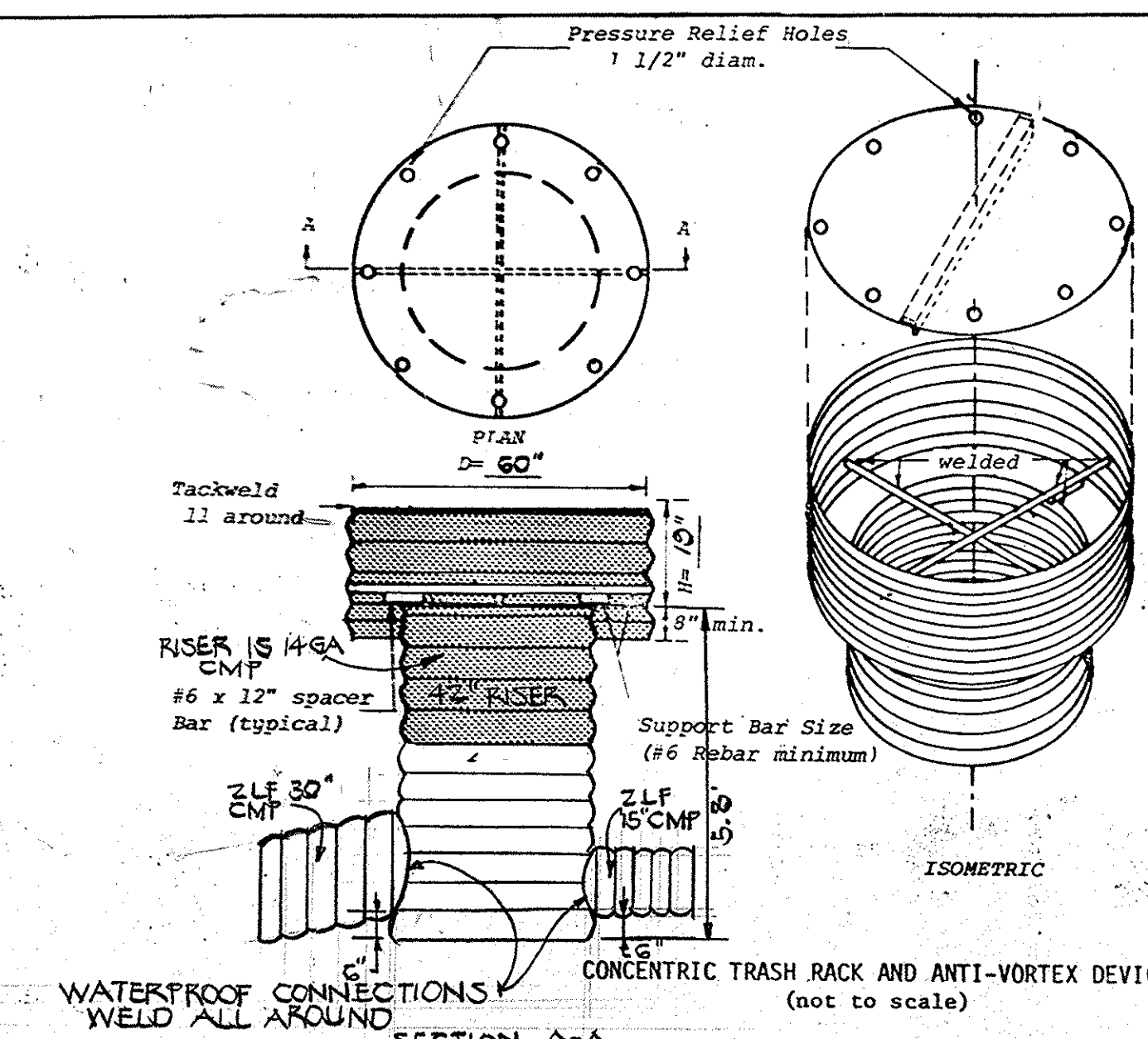
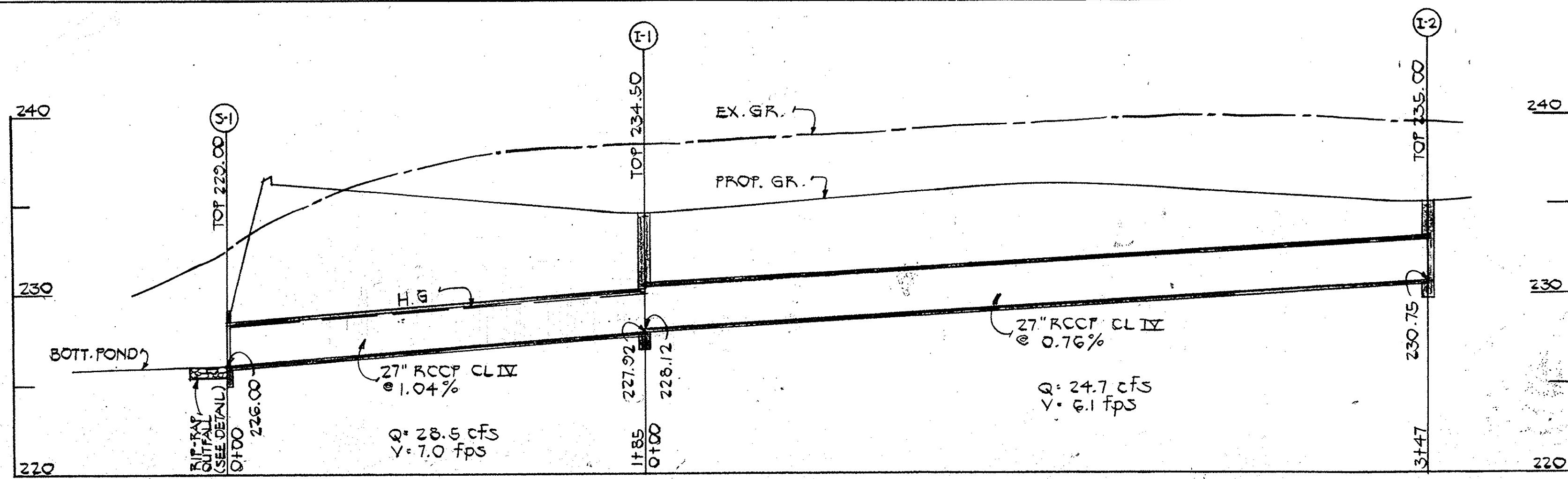
**ENGINEER**  
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION, & SEDIMENT CONTROL REPRESENTS A PRACTICAL & WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HEREBY NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.

*Howard W. Rolscher* 2/19/80  
SIGNATURE DATE

*Larry Tietel* L 725 F 441  
SIGNATURE



**DETAIL OF RAMP FOR PHYSICALLY HANDICAPPED**  
6" O MIN. CONC. WALK  
NO GRADE CHANGE  
PAVING  
MAX. GRADIENT OF 8.33%



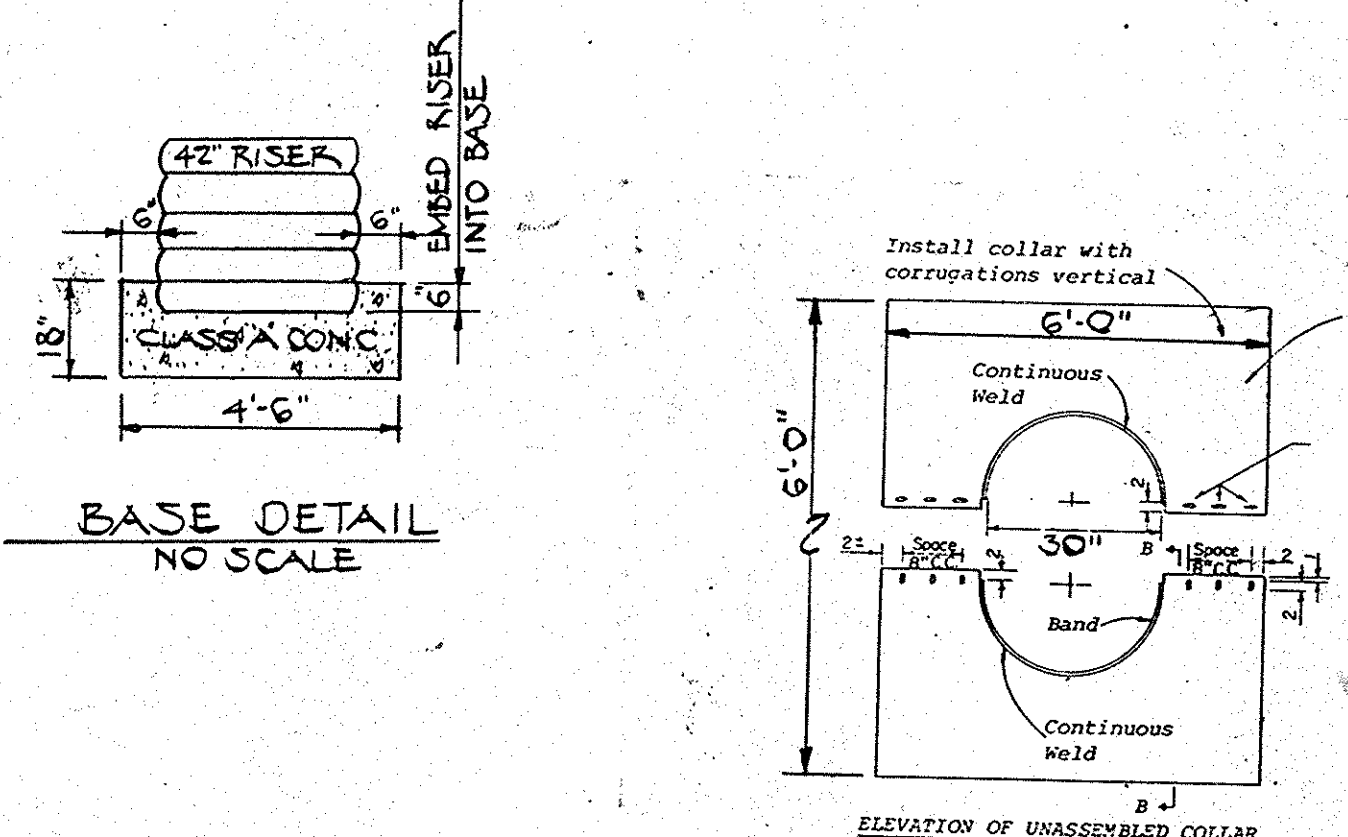
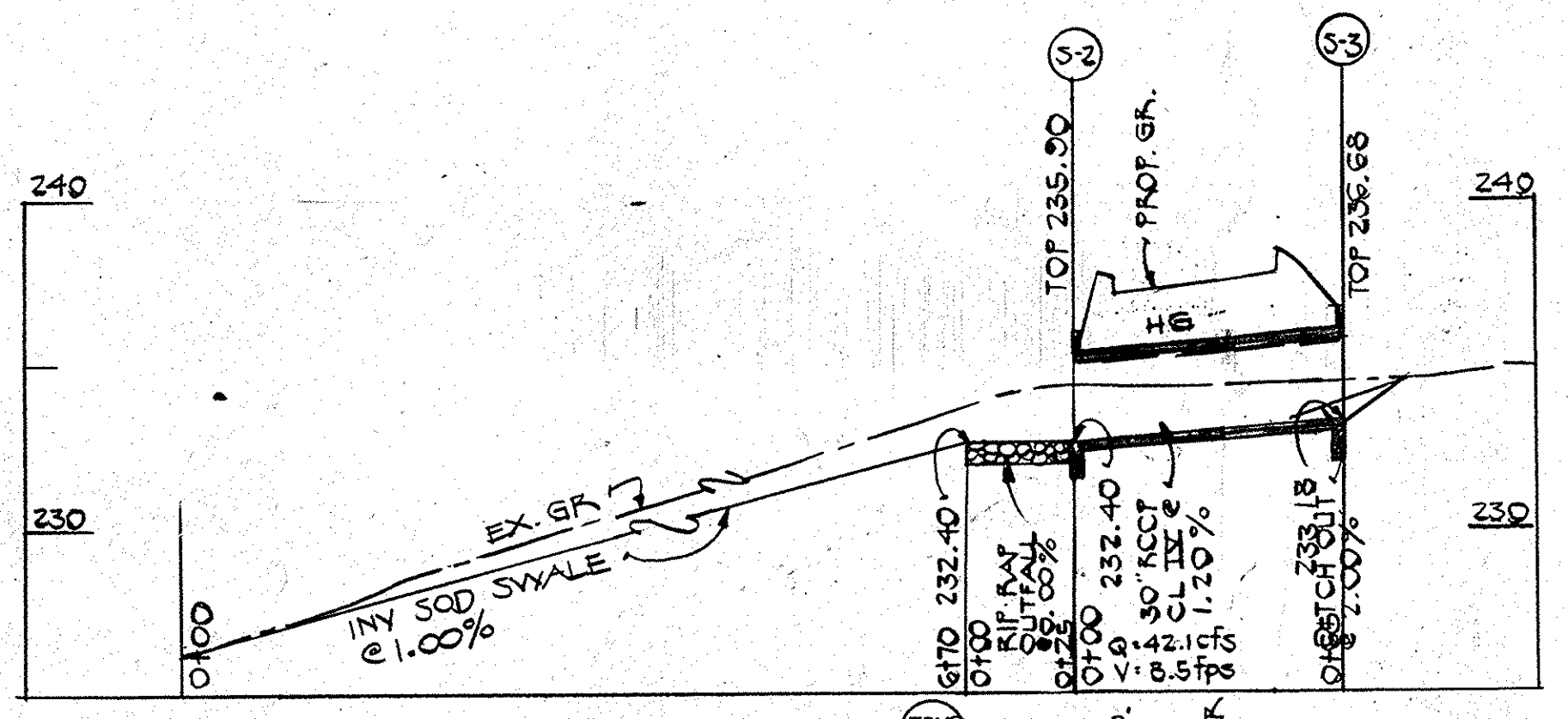
STRUCTURE SCHEDULE					
NO	TYPE	INV. IN	INV. OUT	TOP	HD. CO. STD.
I-1	OBLE S'INLET	228.12	227.92	234.50	0-98 P153
I-2	OBLE S'INLET	-	230.75	235.00	0-98 P153
S-1	C' ENDWALL	-	226.00	229.00	0-52 P107
S-2	"	-	232.40	235.00	0-52 P107
S-3	C' ENDWALL	233.00	-	236.50	0-52 P107

Pressure Relief Holes  
1/2" diam.

Top is 12 gage corrugated metal or 1/8" steel plate. Pressure relief holes may be omitted, if ends of corrugations are left fully open when corrugated top is welded to cylinder.

Cylinder is 14 gage corrugated metal pipe or fabricated from 1/8" steel plate.

Notes:  
1) The cylinder must be firmly fastened to the top of the riser.  
2) Support bars are welded to the top of the riser or attached by straps bolted to top of riser.



WATERPROOF CONNECTIONS WELD ALL AROUND

CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE (not to scale)

SECTION A-A

STRUCTURAL BACKFILL  
BACKFILL MATERIAL SHALL BE OF THE TYPE EQUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED 4 INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR DRIVE EQUIPMENT OVER ANY PART OF A CONCRETE STRUCTURE OR PIPE UNLESS THERE IS A COMPACTED FILL OF 24 INCHES OR GREATER OVER THE STRUCTURE OR PIPE.

APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE: 1-24-80  
JAM

ENGINEER: HUDKINS ASSOCIATES, INC.  
101 SHELL BUILDING  
200 E JOFFA ROAD  
TOWSON MARYLAND 21204

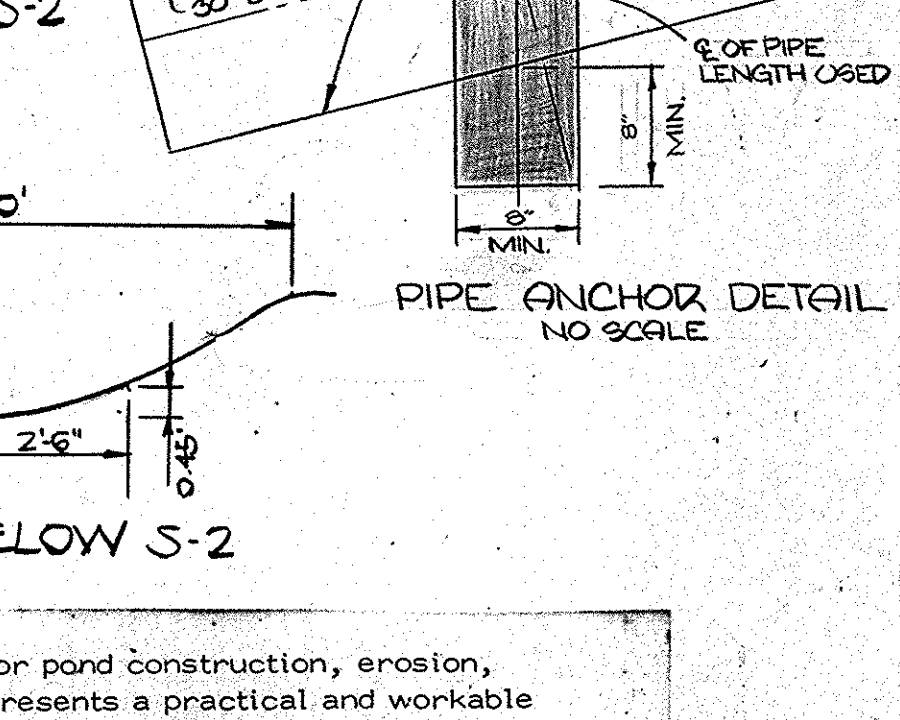
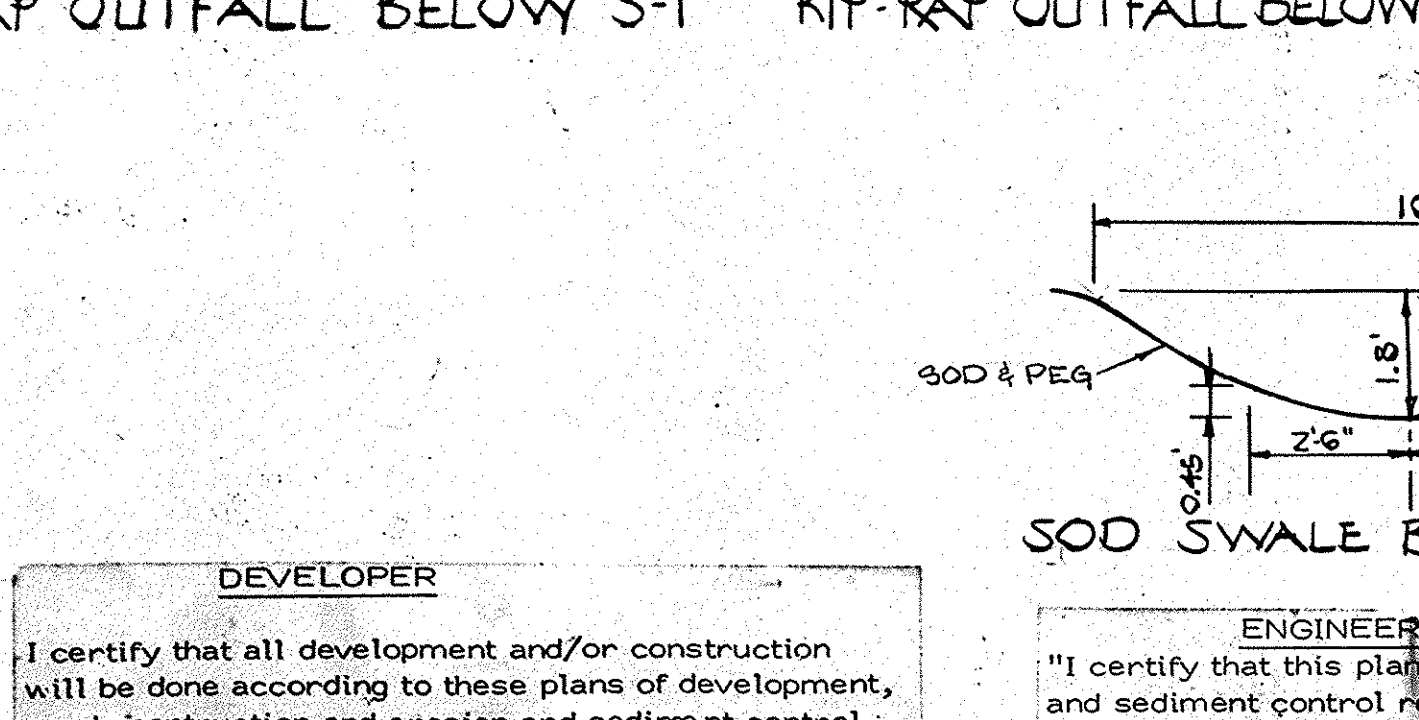
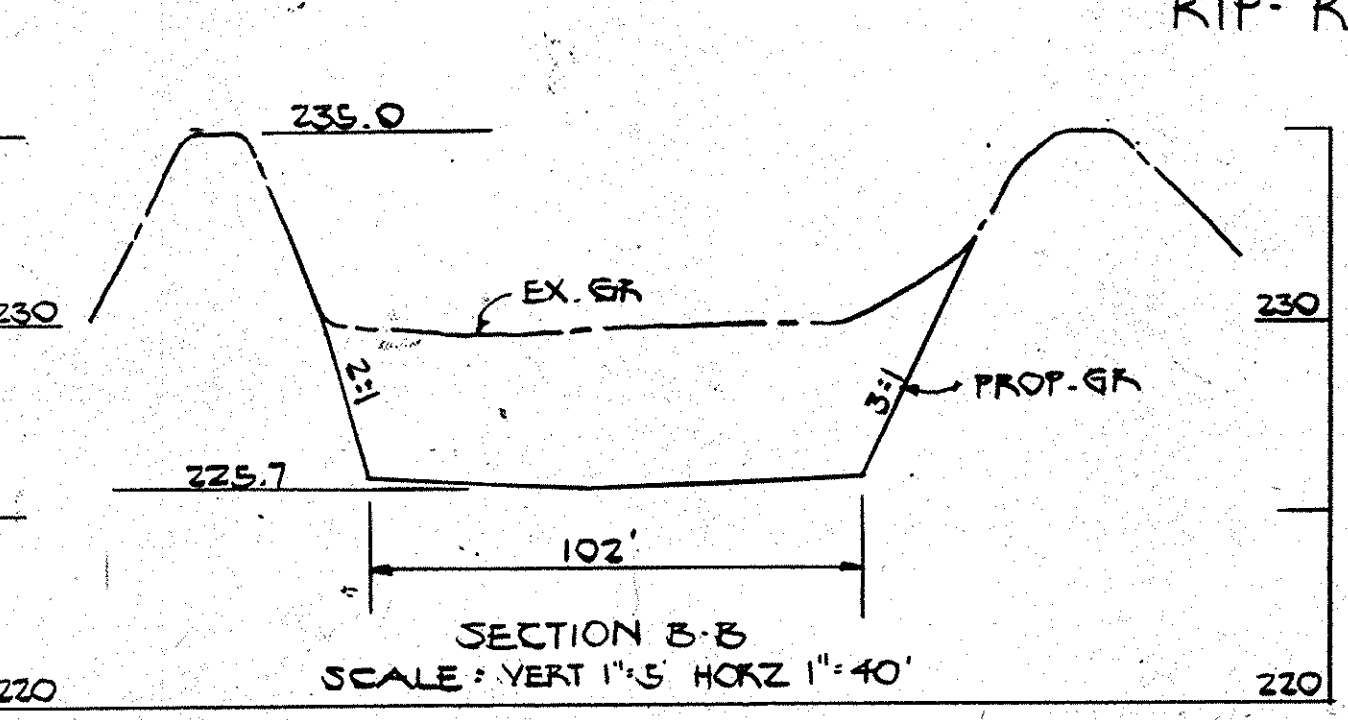
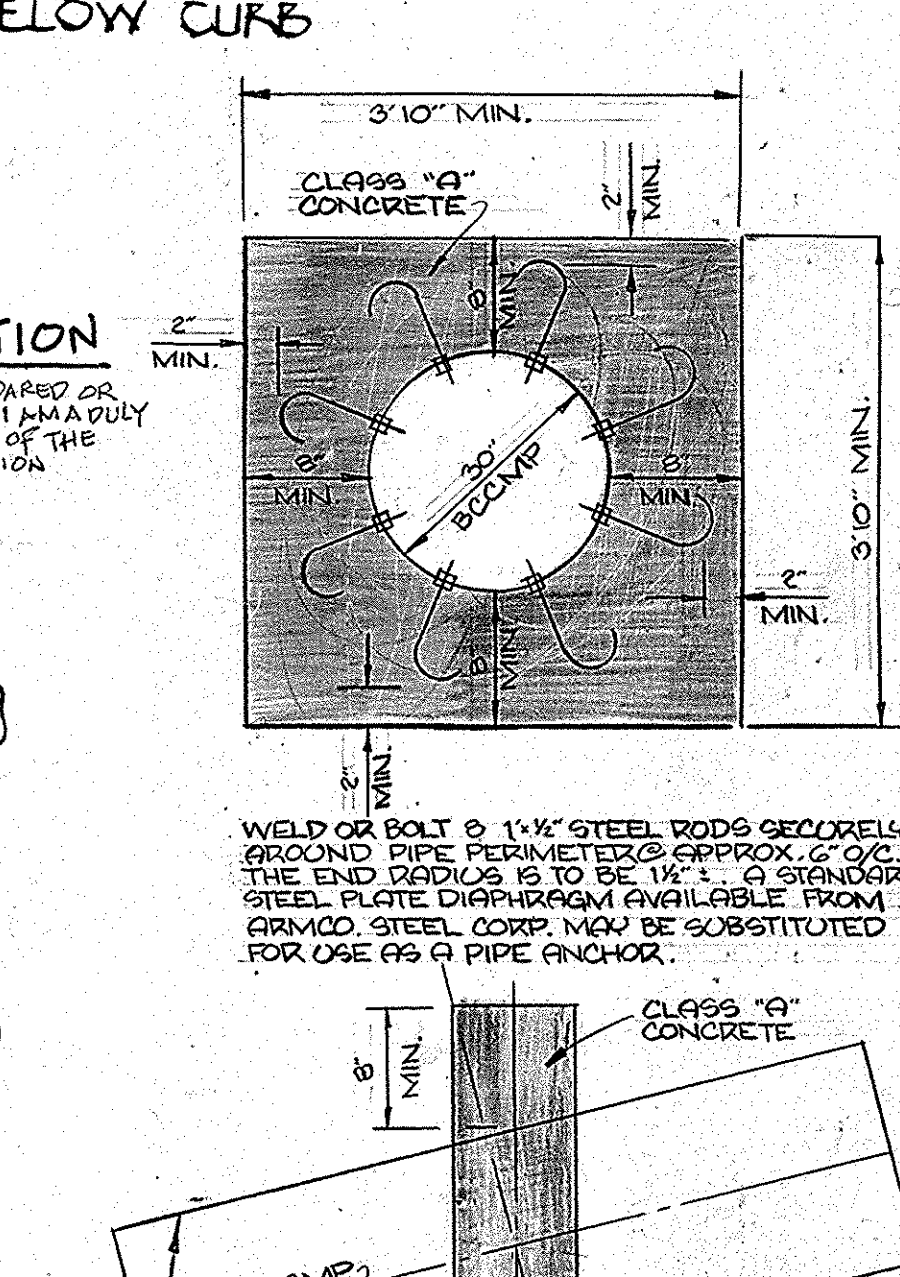
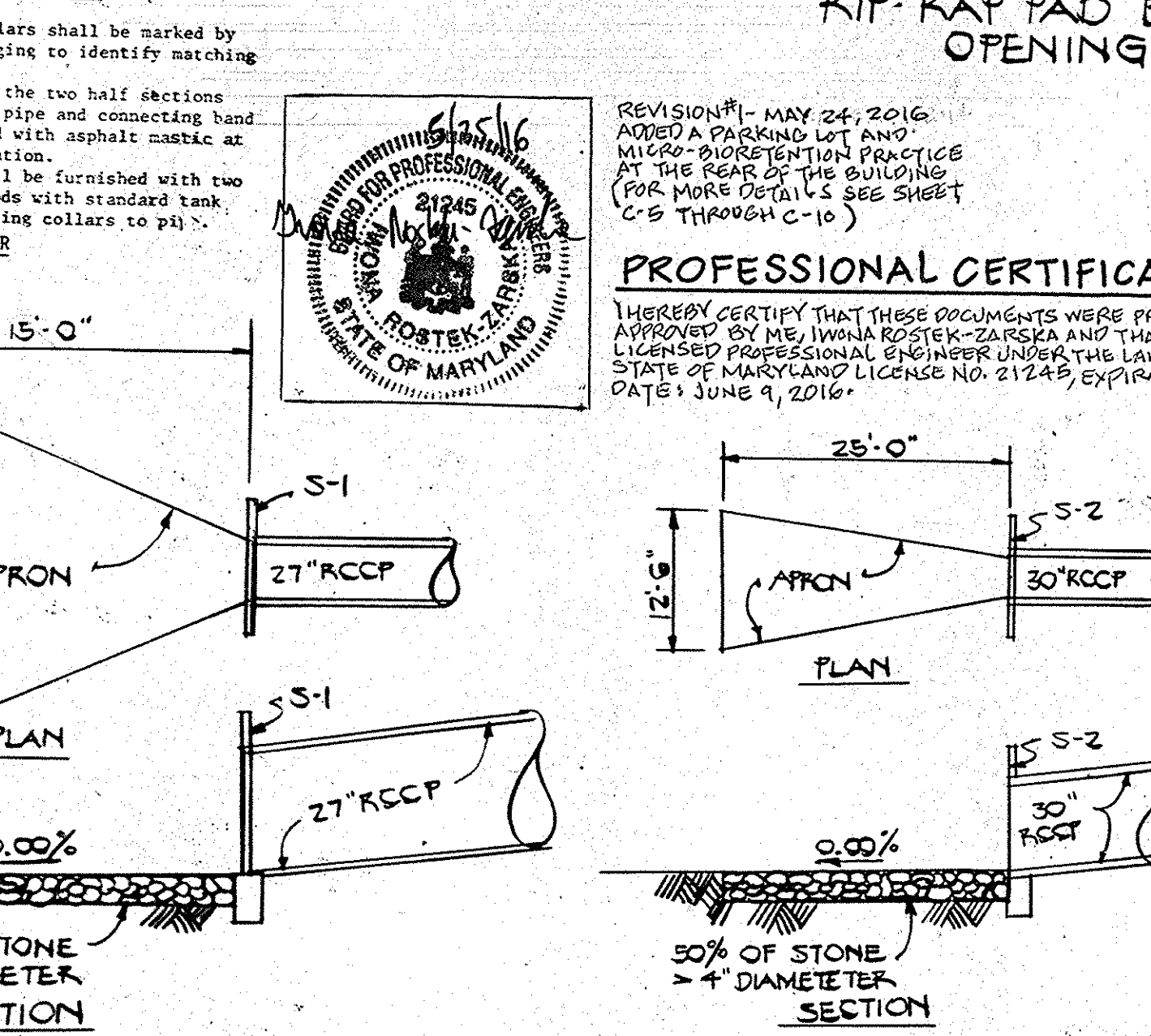
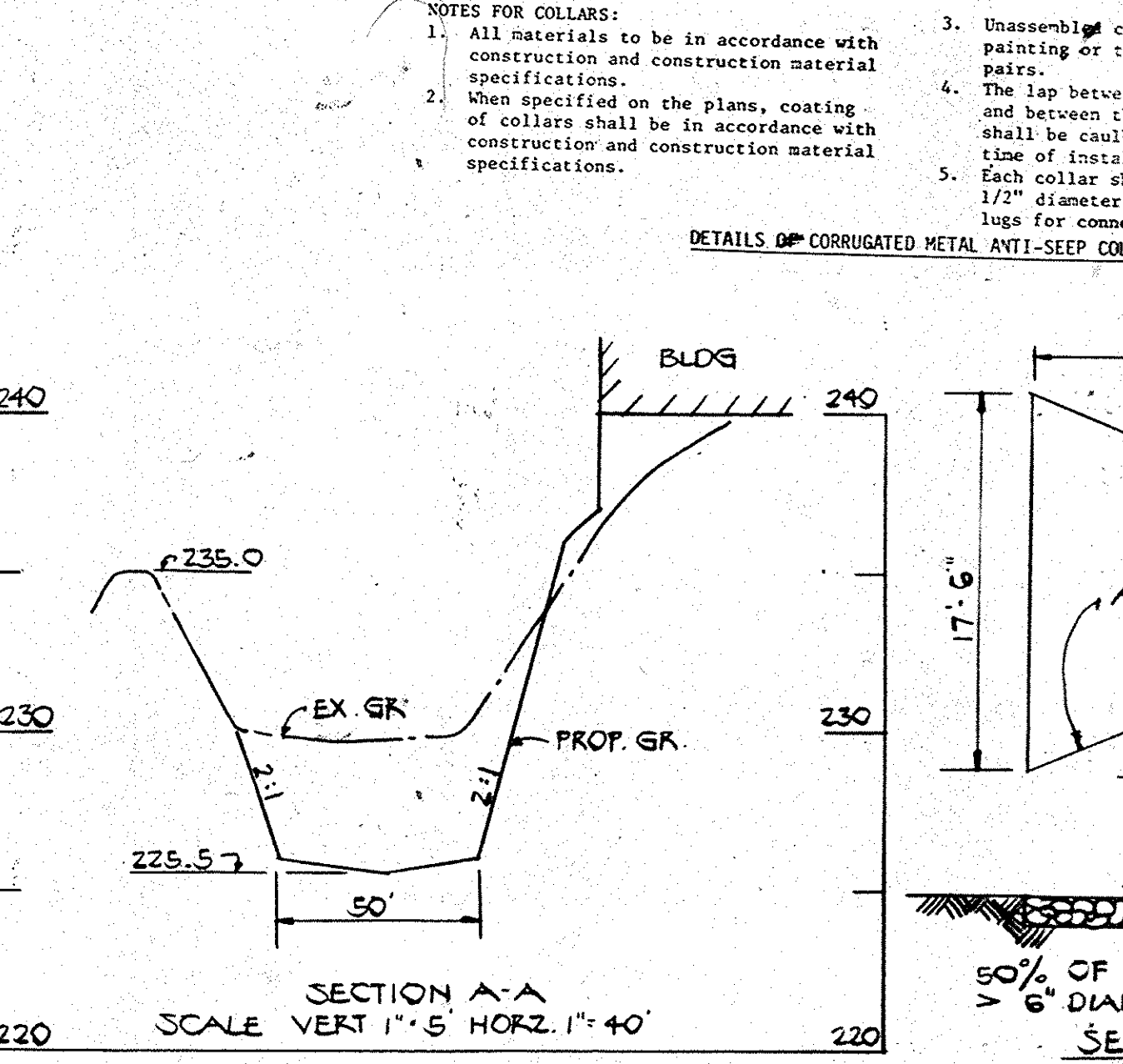
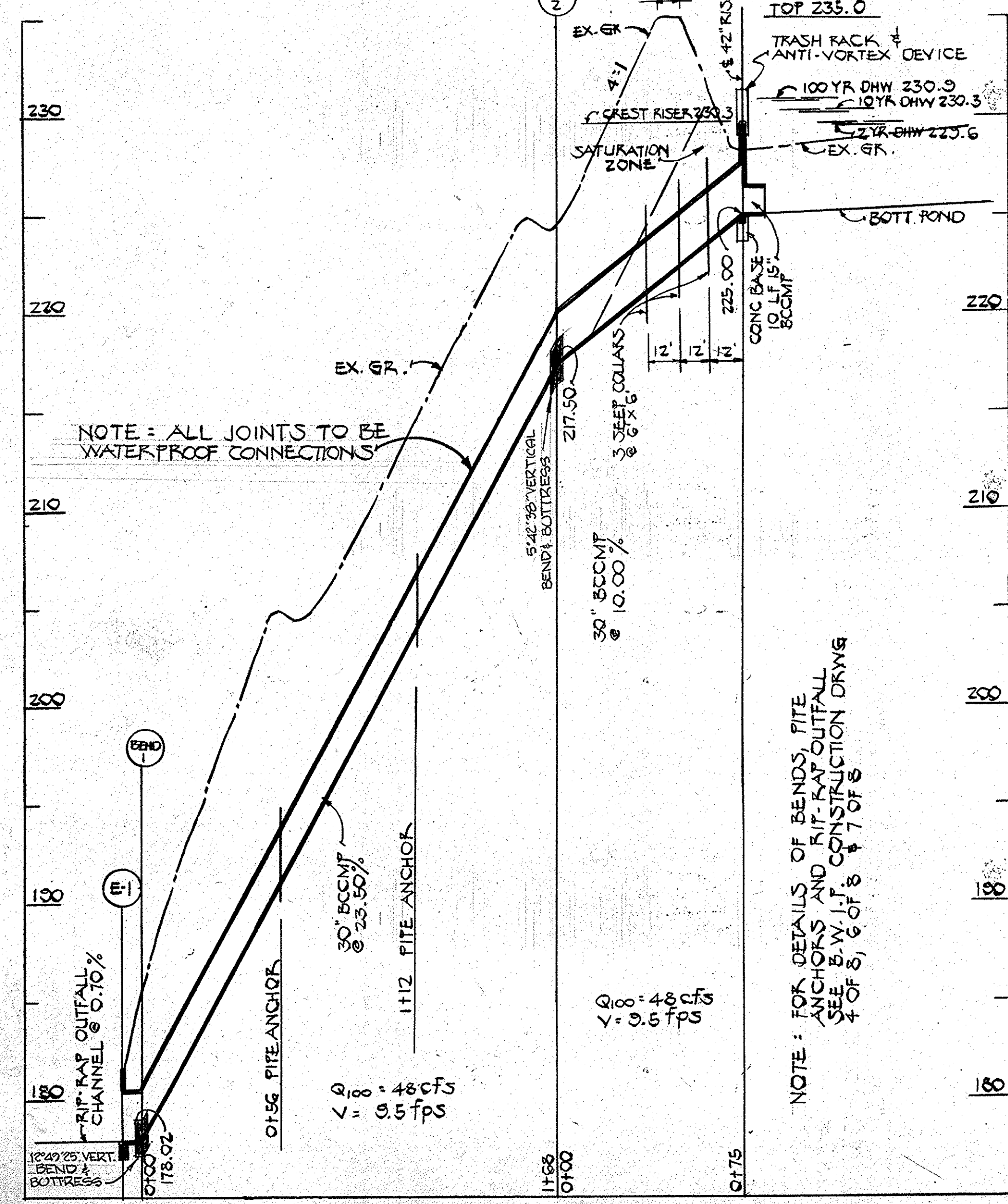
APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT.

APPROVED FOR SMALL POND CONSTRUCTION, SOIL EROSION, & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT.

APPROVED FOR SMALL POND CONSTRUCTION, SOIL EROSION, & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT.



STRUCTURE CLASSIFICATION  
STRUCTURE CLASS A  
STORAGE X HEIGHT PRODUCT 1067 X 5.9 =  
WATERSHED AREA 8.1 AC  
STRUCTURE LOCATION URBAN  
HYDROLOGIC CRITERIA  
PRINCIPAL SPILLWAY ROUTING - 2.10, 100 YR  
FREEBOARD ABOVE 100 YR OHW - 4.1'

DEVELOPER  
I certify that all development and/or construction will be done according to these plans of development, pond construction and erosion and sediment control. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District. I will provide the Howard Soil Conservation District with a red-lined "as built" of the pond within 30 days of completion.

Signature: Charles Dimpers 12-26-79  
DATE: 12-26-79

ENGINEER  
I certify that this plan for pond construction, erosion, and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions, this plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the Developer that he must provide the Howard Soil Conservation District with a red-lined "as built" of the pond within 30 days of completion.

Signature: Howard W. Kelcher 2/19/80  
DATE: 2/19/80

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT.

APPROVED FOR SMALL POND CONSTRUCTION, SOIL EROSION, & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

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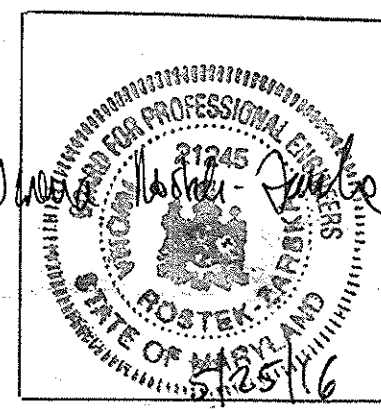
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HOWARD COUNTY HEALTH DEPARTMENT.

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HOWARD COUNTY HEALTH DEPARTMENT.

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APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS  
HOWARD COUNTY HEALTH DEPARTMENT.



REVISION #1 - MAY 24, 2016  
 ADDED A PARKING LOT AND  
 MICRO-BIORETENTION PRACTICE  
 AT THE REAR OF THE BUILDING  
 (FOR MORE DETAILS SEE SHEETS C-5  
 THROUGH C-10)

**PROFESSIONAL CERTIFICATION**

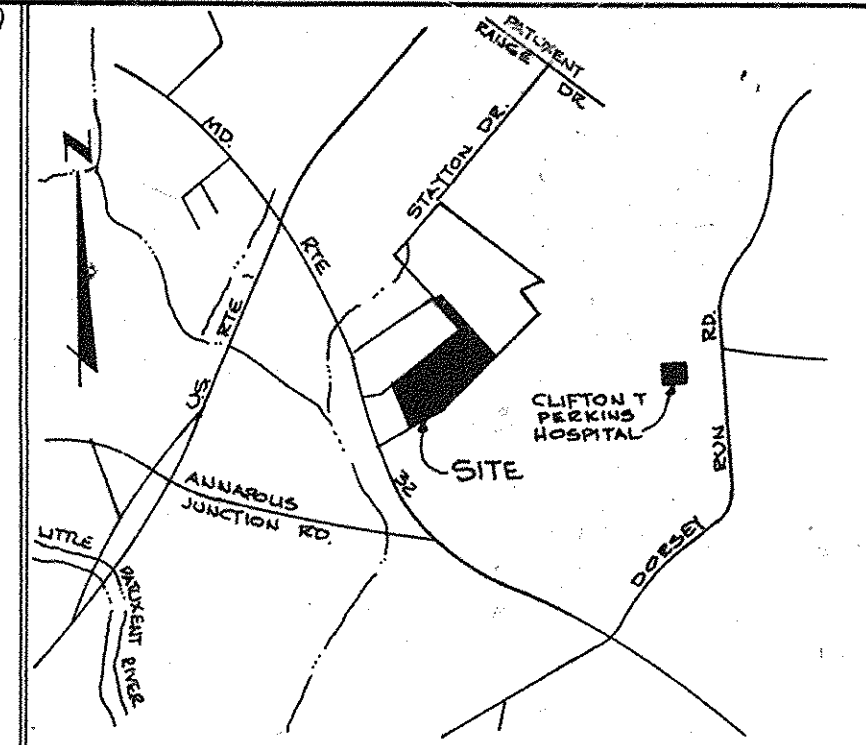
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR  
 APPROVED BY ME, IJONA KOOTER-ZARSKA AND THAT I AM FULLY  
 LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE  
 STATE OF MARYLAND LICENSE NO. 2145, EXPIRATION  
 DATE: JUNE 9, 2016.

APPROVED  
 DIVISION OF LAND DEVELOPMENT

HOWARD COUNTY, MARYLAND

DATE: 1-24-80

PARCEL 'H'  
 BALTIMORE WASHINGTON INDUSTRIAL PARK  
 RECORDED AS PLAT No. 3025



ENGINEER: HUDKINS ASSOCIATES INC.  
 101 SHELL BUILDING  
 200 E. JOPPA ROAD  
 TOWSON 21204 MARYLAND

APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE  
 SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT.

*Joyce Bradford* 3-26-80  
 COUNTY HEALTH DEPT. OFFICER DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION  
 & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE  
 HOWARD SOIL CONSERVATION DISTRICT.

*Raketa Zielke* 3/11/80  
 HOWARD S.C.D. PLAN NO. DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL  
 CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIRE-  
 MENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION,  
 & SEDIMENT CONTROL.

*James Mitchell* 3-11-80  
 U.S. SOIL CONSERVATION SERVICE DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING &  
 ZONING

*Thomas E. Harris* 3-27-80  
 DIRECTOR DATE

*William J. McArthur* 3-27-80  
 CHIEF DIVISION OF LAND DEVELOPMENT DATE

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE &  
 STORM DRAINAGE SYSTEMS & PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*Larry F. Nemej* 3-25-80  
 DIRECTOR DATE

*William E. Rees* 3-24-80  
 CHIEF, BUREAU OF ENGINEERING DATE

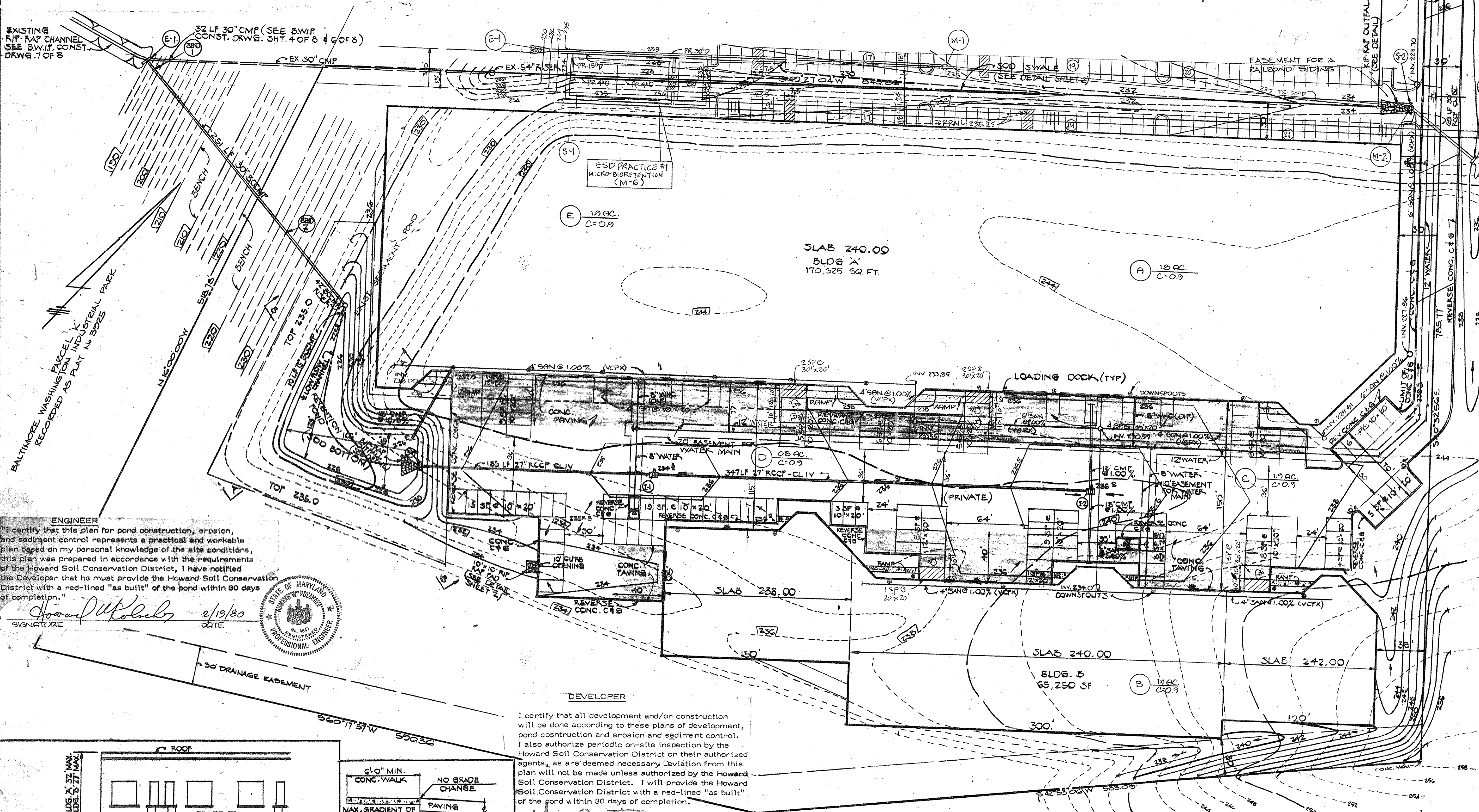
DEVELOPER  
 GLEN ARM CONSTRUCTION & DEVELOPMENT  
 CO.  
 11105 OLD CARRIAGE ROAD  
 GLEN ARM, MD.

ARCHITECT  
 ROBERT T. HOFMANN & ASSOC.  
 615 OXFORD BUILDING  
 TOWSON, MD. 21204

OWNER  
 B.W.I.P. INC.  
 21 WEST ROAD  
 TOWSON, MD. 21204

PARCEL I - BLOCK 'C'  
 THE BALTIMORE WASHINGTON  
 INDUSTRIAL PARK  
 PLAT # 3025  
 6<sup>TH</sup> ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND.  
 TAX MAP 48

DRAINAGE  
 AREA  
 PLAN 3  
 OF 10 SCALE: 1"=40'  
 FEB. 4, 1980

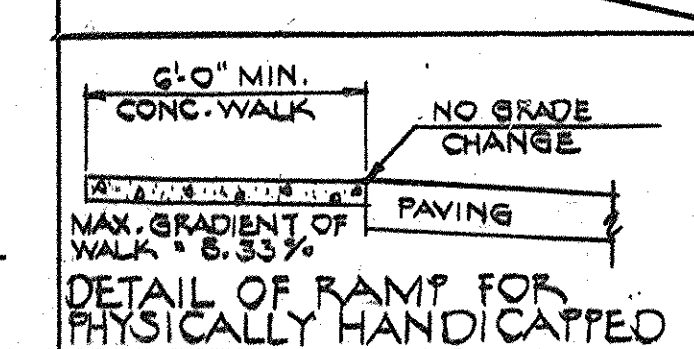
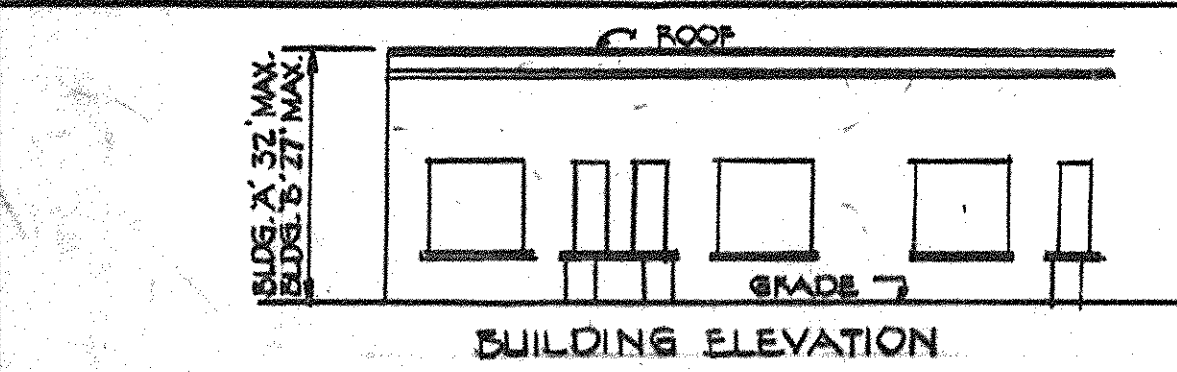


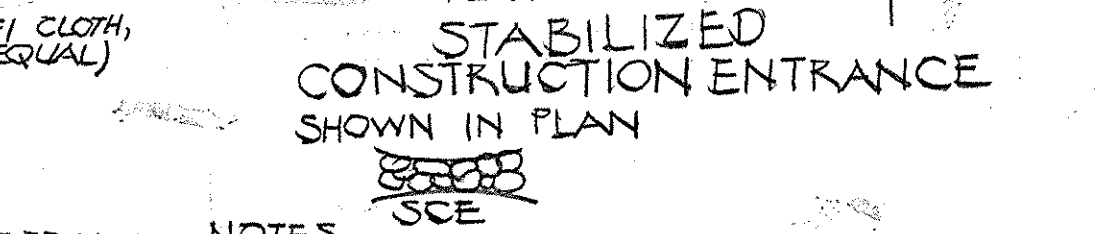
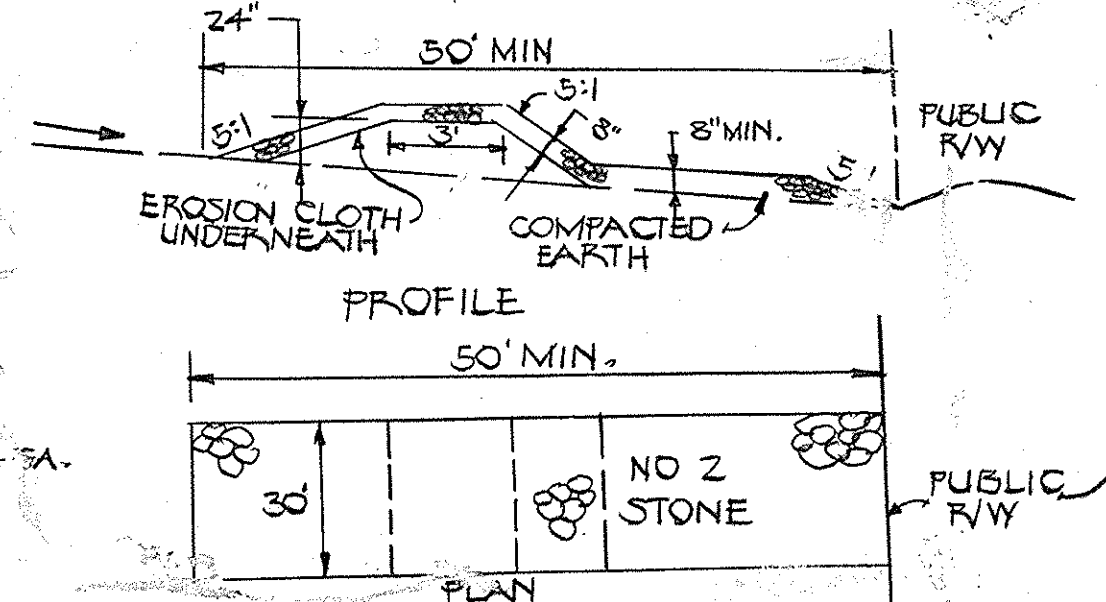
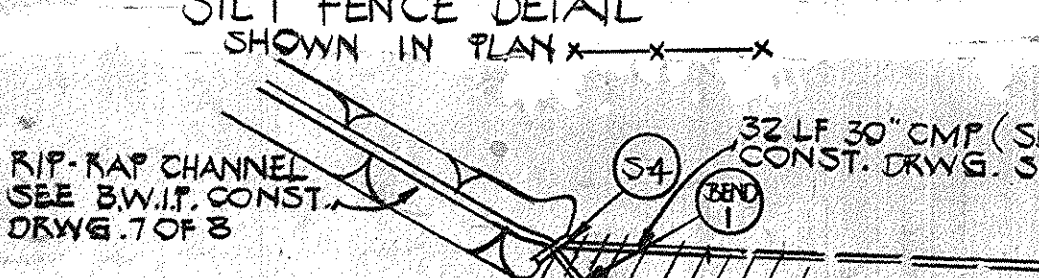
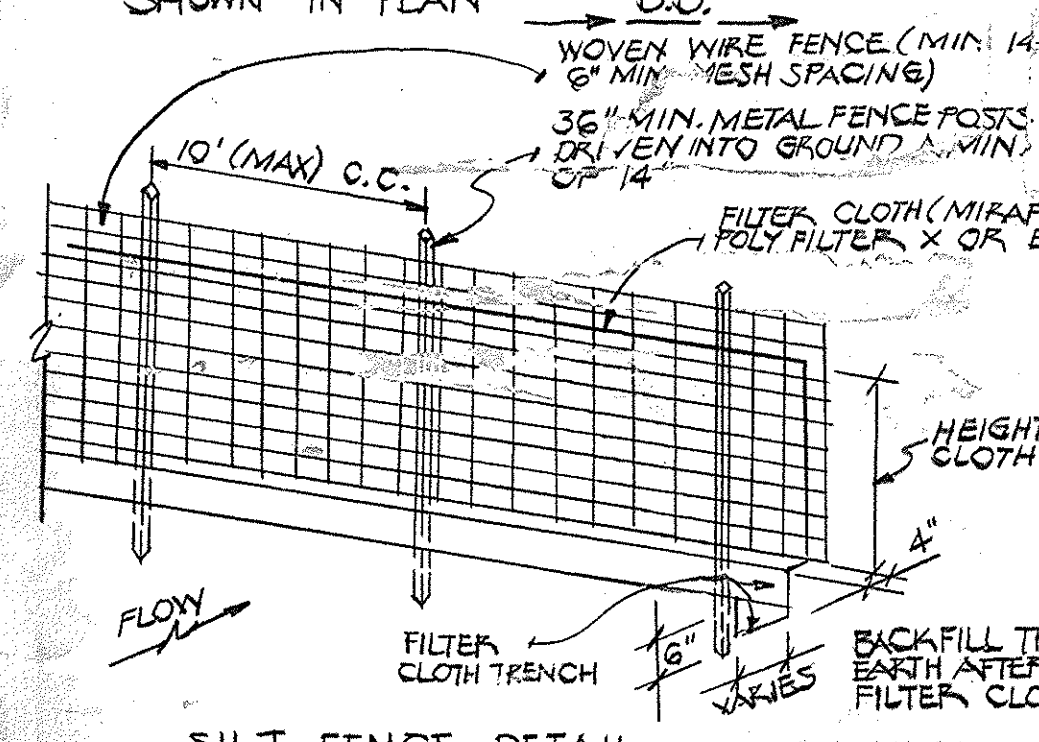
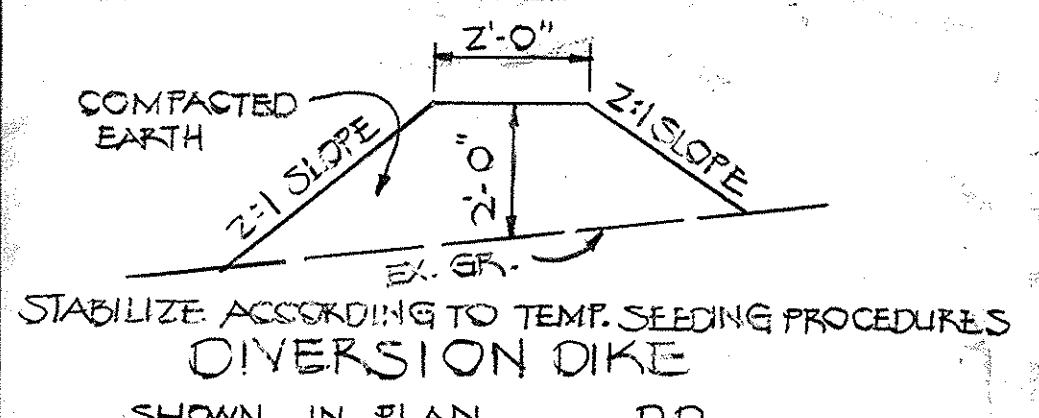
EXISTING R/P-RAP CHANNEL SEE B.W.I.P. CONST. DRWG. 7 OF 8  
 32 LF 30" CMP (SEE B.W.I.P. CONST. DRWG. SH. 4 OF 5 & 6 OF 8)  
 EX. 30" CMP  
 EX. 6" R/SF  
 EX. 12" W/ (CONT. 2770-0-14)  
 EX. 6" SHG (CONT. 2770-0-14)

ENGINEER  
 "I certify that this plan for pond construction, erosion, and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions, this plan was prepared in accordance with the requirements of the Howard Soil Conservation District, I have notified the Developer that he must provide the Howard Soil Conservation District with a red-lined "as built" of the pond within 30 days of completion."  
*Howard W. Kolch* 2/10/80  
 SIGNATURE DATE



DEVELOPER  
 I certify that all development and/or construction will be done according to these plans of development, pond construction and erosion and sediment control. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District. I will provide the Howard Soil Conservation District with a red-lined "as built" of the pond within 30 days of completion.  
*Larry Tietel* 1/25-80  
 SIGNATURE DATE





**NOTES**  
 1. NOTIFY THE HOWARD CO. BUREAU OF INSPECTION & PERMITS AT LEAST 24 HRS BEFORE STARTING WORK.  
 2. ALL SEDIMENT CONTROL DEVICES ARE TO REMAIN IN PLACE UNTIL PERMITS FOR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD CO. BUREAU OF INSPECTION & PERMITS.  
 3. STRUCTURAL MEASURES SUCH AS BERM, DIKE, TRAP BASIN ETC. WILL BE INSTALLED AND STABILIZED ACCORDING TO THE PLAN PRIOR TO ANY DISTURBANCE OF THE EXISTING SURFACE OF THE SITE.  
 4. ON-SITE INSPECTION & MAINTENANCE OF ALL SEDIMENT CONTROL MEASURES, INCLUDING CLEANOUT OF PONDS AND BERMS AND PROPER ESTABLISHMENT OF ALL PLANNED VEGETATIVE MEASURES WILL BE THE RESPONSIBILITY OF THE DEVELOPER OR HIS REPRESENTATIVE ON THE SITE ON A CONTINUING DAILY BASIS.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT
  - NOTIFY HOWARD CO. DEPT. OF INSPECTION & PERMITS
  - CLEAR AND GRUB AREA OF SEDIMENT CONTROL POND & OUTFALL
  - CONSTRUCT SEDIMENT CONTROL POND, OUTFALL, STRUCTURE, PIPE & RIP-RAP CHANNEL
  - CLEAR & GRUB REMAINDER OF SITE
  - INSTALL DIVERSION DIKES, STABILIZED CONSTRUCTION ENT. & SILT FENCE
  - ROUGH GRADE SITE
  - INSTALL STORM DRAINS
  - PROCEED WITH BUILDING & UTILITY CONSTRUCTION
  - PLACE SUB-BASE MATERIAL IN AREAS TO BE PAVED
  - PAVE PARKING AREAS AND STABILIZE REMAINING AREAS ACCORDING TO PERMANENT SEEDING PROCEDURES
  - FLUSH STORM DRAIN SYSTEM
  - DE-WATER POND BY PUMPING THROUGH RIGER
  - REMOVE & DISPOSE OF MUCK. MUCK SHALL BE PLACED IN AN AREA WITH AN APPROVED SEDIMENT CONTROL PLAN
  - STABILIZE POND ACCORDING TO PERMANENT SEEDING PROCEDURES
  - REMOVE END CAP FROM 15' CMP

**ENGINEER**  
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION & SEDIMENT CONTROL REPRESENTS A PRACTICAL & WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.  
 DATE: 2/19/80  
 SIGNATURE: Howard W. Pollock

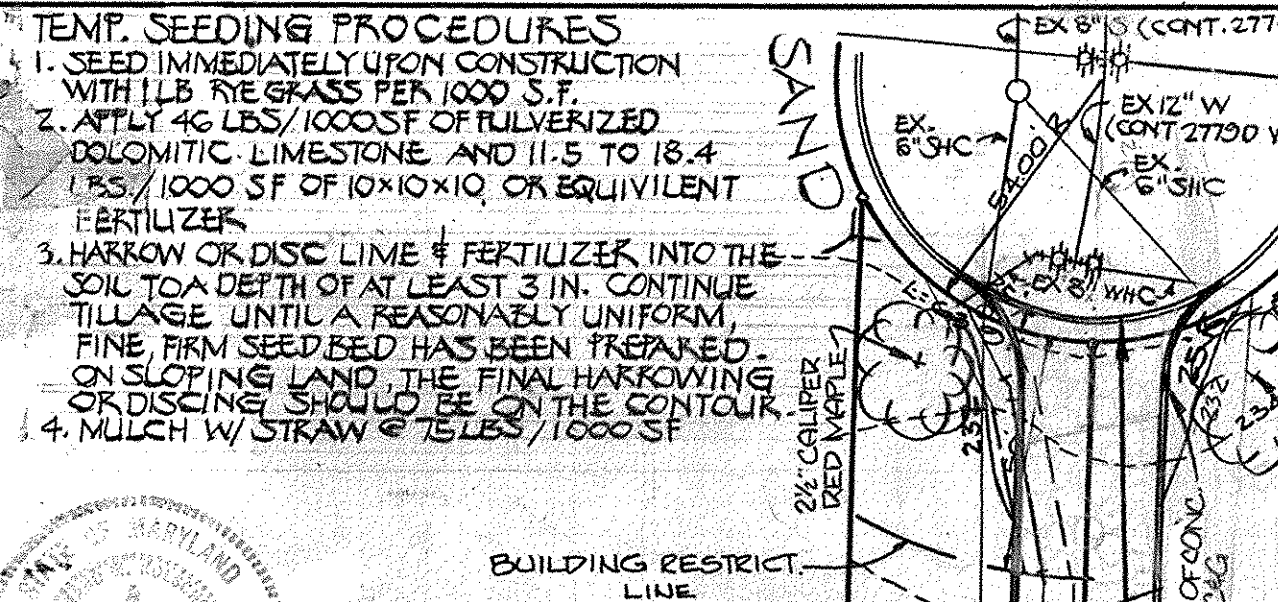
**DEVELOPER**  
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS. I, THE DEVELOPER, POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL BE MADE UNLESS APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL ALSO PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION.  
 DATE: 2-26-79  
 SIGNATURE: David Dupont

**TEMP. SEEDING PROCEDURES**

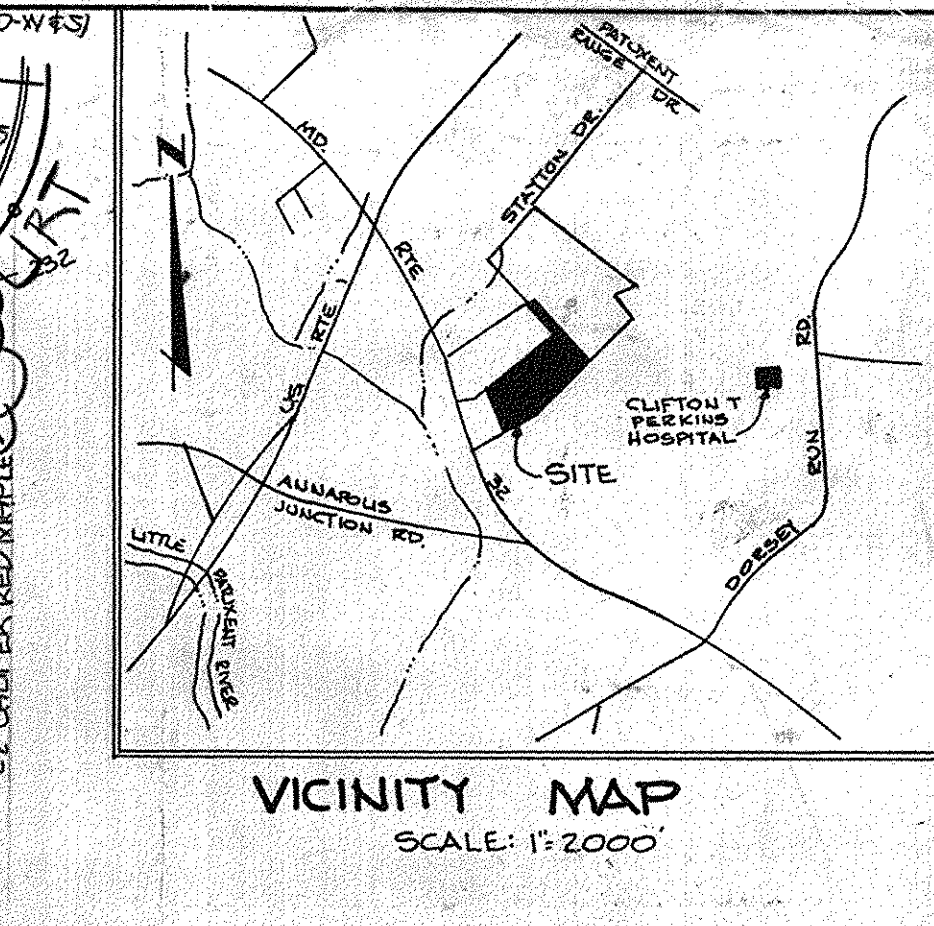
- SEED IMMEDIATELY UPON CONSTRUCTION WITH 1 LB. RE GRASS PER 1000 S.F.
- WITH 4 LB. 1000 SF OF FULVIRIZED DOLOMITIC LIMESTONE AND 11.5 TO 18.4 1000 SF OF 10X10X10 OR EQUIVALENT FERTILIZER
- HARROW OR DISC LIME & FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3 IN. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM FINE FIRM SEEDBED HAS BEEN OBTAINED. ON SLOPING LAND, THE FINAL HARROWING OR DISCING SHOULD BE ON THE CONTOUR
- MULCH W/ STRAW @ 15 LBS / 1000 SF

**PERMANENT SEEDING PROCEDURES**

- APPLY 50 LBS / 1000 SF OF LIMESTONE
- APPLY FERTILIZER @ RATE OF 2 LBS OF 10X10X10 PER 1000 SF DEPENDING ON THE SOIL TESTS
- HARROW OR DISC FERTILIZER & LIMESTONE INTO SOIL TO A DEPTH OF 3 IN.
- SEED W/ KY 31 TALL FESCUE @ RATE OF 5 LBS PER 1000 SF OR OTHER SCS APPROVED SEEDING PLAN
- MULCH W/ SMALL GRAIN STRAW 1.5 TO 2.0 TONS PER ACRE (75# - 30" x 1000 SF)
- ANCHOR MULCH W/ STRAYED ASPHALT @ 0.1 GAL / S.Y.
- NO SLOPE SHALL EXCEED 2:1



**APPROVED**  
 DIVISION OF LAND DEVELOPMENT  
 HOWARD COUNTY, MARYLAND  
 DATE: 1-24-80  
 SIGNATURE: J.W.M.



**ENGINEER: HUDKINS ASSOCIATES INC.**  
 101 SHELL BUILDING  
 200 E. JOPPA ROAD  
 TOWSON 21204 MARYLAND

**APPROVED FOR PUBLIC WATER & PUBLIC SEWERAGE SYSTEMS**  
 HOWARD COUNTY HEALTH DEPARTMENT  
 SIGNATURE: Joyann Boyd  
 DATE: 3-26-80

**THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION & SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.**  
 SIGNATURE: Robert Zielow  
 DATE: 3/11/80

**THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT & MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, & SEDIMENT CONTROL.**  
 SIGNATURE: James M. Niles  
 DATE: 3-11-80

**APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING**  
 SIGNATURE: Thomas L. Hantz  
 DATE: 3-27-80

**APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE & STORM DRAINAGE SYSTEMS; PUBLIC ROADS.**  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 SIGNATURE: Roy F. Nemej  
 DATE: 3-25-80

**CHIEF, BUREAU OF ENGINEERING**  
 SIGNATURE: William S. Ryan  
 DATE: 3-24-80

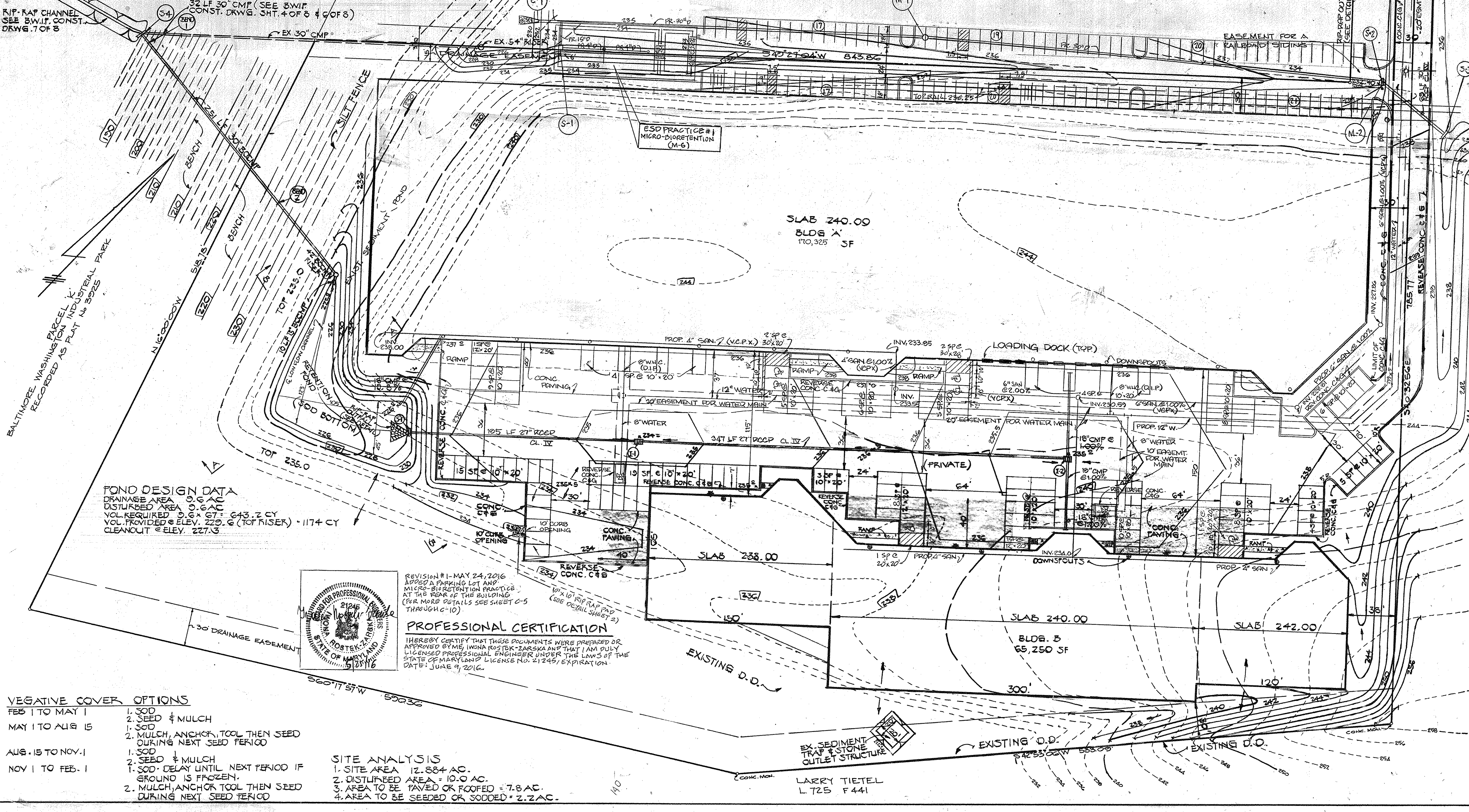
**DEVELOPER**  
 GLEN ARM CONSTRUCTION & DEVELOPMENT CO.  
 1100 OLD CARRIAGE ROAD  
 GLEN ARM, MD.

**ARCHITECT**  
 ROBERT I. HOFMANN & ASSOC.  
 100 GIFFORD BUILDING  
 TOWSON, MD. 21204

**OWNER**  
 B.W.I.P. INC.  
 21 WEST ROAD  
 TOWSON, MD. 21204

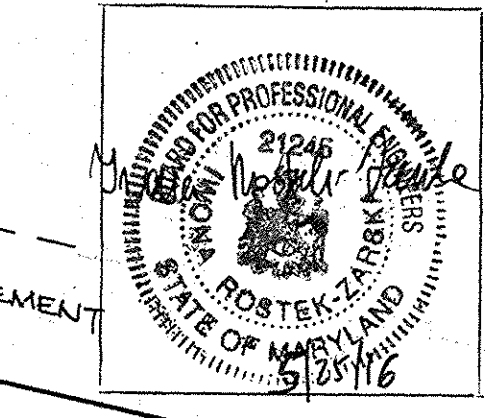
**PARCEL I-BLOCK C**  
 THE BALTIMORE WASHINGTON INDUSTRIAL PARK  
 PLAT # 3925  
 6TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 TAX MAP 48

**SEDIMENT CONTROL PLAN**  
 4 OF 10  
 SCALE: 1"=40'  
 FEB. 4, 1980



**POND DESIGN DATA**  
 DRAINAGE AREA: 0.6 AC  
 DISTURBED AREA: 0.6 AC  
 VOL. REQUIRED @ 8" x 6": 643.2 CY  
 VOL. PROVIDED @ ELEV. 229.6 (TOP RISER): 1174 CY  
 CLEANOUT @ ELEV. 227.3

- VEGETATIVE COVER OPTIONS**
- FEB 1 TO MAY 1: 1. SOD, 2. SEED & MULCH
  - MAY 1 TO AUG 15: 1. SOD, 2. MULCH, ANCHOR TOOL THEN SEED DURING NEXT SEED PERIOD
  - AUG. 15 TO NOV. 1: 1. SOD, 2. SEED & MULCH
  - NOV 1 TO FEB. 1: 1. SOD - DELAY UNTIL NEXT PERIOD IF GROUND IS FROZEN, 2. MULCH, ANCHOR TOOL THEN SEED DURING NEXT SEED PERIOD

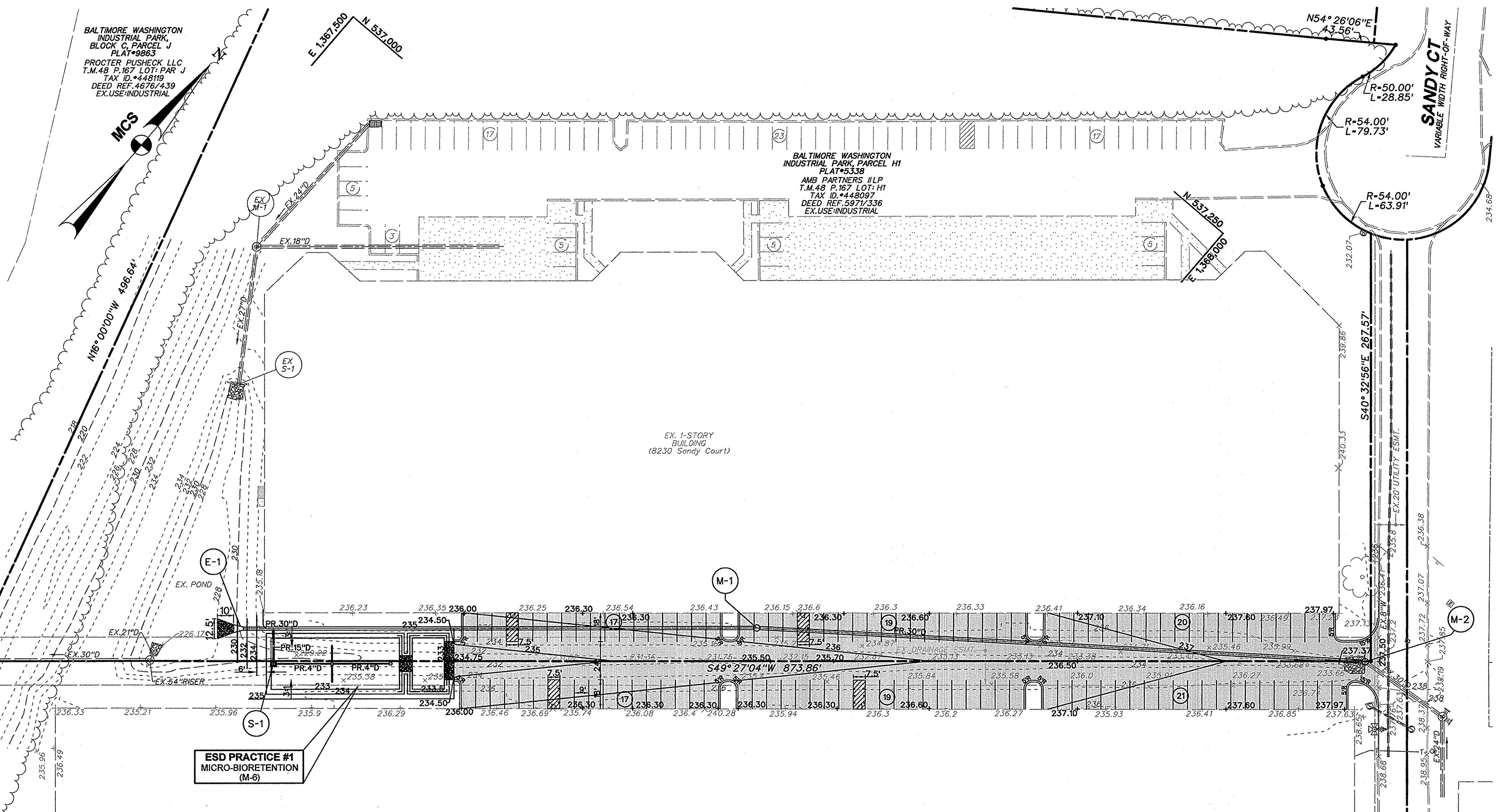


**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, ROBERT I. HOFMANN, AS AN ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 21249, EXPIRATION DATE: JUNE 9, 2016.

**SITE ANALYSIS**

- SITE AREA: 12,884 AC.
- DISTURBED AREA: 10.0 AC.
- AREA TO BE PAVED OR ROOFED: 7.8 AC.
- AREA TO BE SEED OR SODDED: 2.2 AC.

LARRY TIETEL  
 L 725 F 441



### LEGEND

RIGHT-OF-WAY LINE	---
PROPERTY LINE	---
EX. EASEMENT	---
EX. CONCRETE CURB AND GUTTER	---
EX. BUILDING	---
EX. STORM DRAIN, MANHOLE & INLET	---
EX. RIP-RAP	---
EX. SANITARY SEWER, MANHOLE & CLEANOUT	---
EX. WATER MAIN, VALVE & FIRE HYDRANT	---
EX. ELECTRIC LINE	---
EX. GAS LINE	---
EX. TELEPHONE LINE, POLE & BOX	---
EX. POLE WITH LIGHT	---
EX. UTILITY POLE & GUY WIRE	---
EX. INDEX CONTOURS	---
EX. INTERMEDIATE CONTOURS	---
"EXISTING" DESIGNATION	EX.
PR. EASEMENT	---
PR. CONCRETE CURB & GUTTER	---
PR. RIP-RAP	---
PR. STORM DRAIN, MANHOLE & INLET	---
PR. UNDERDRAIN	---
PR. INDEX CONTOURS	---
PR. INTERMEDIATE CONTOURS	---
PARKING COUNT	⑧
"PROPOSED" DESIGNATION	PR.
PROP. PAVING	---

### SITE DATA

- GENERAL SITE DATA:
  - TOTAL SITE AREA:
    - PARCEL H-1: 7.435 Ac
    - PARCEL H-11: 12.682 Ac
  - DEED REFERENCES:
    - PARCEL H-1: 5971/336
    - PARCEL H-11: 13829/453
  - TAX ACCOUNT NUMBERS:
    - PARCEL H-1: 06-443097
    - PARCEL H-11: 06-448100
  - PRESENT ZONING: M-2
  - APPLICABLE DPZ FILE REFERENCES:
    - F-83-047, SDP-80-087, SDP-82-080, SDP-84-130
  - EXISTING USE: WAREHOUSE/OFFICE
  - PROPOSED USE: WAREHOUSE/OFFICE
- AREA TABULATION:
  - TOTAL DISTURBED AREA: 43,250 SF or 0.99 Ac
  - TOTAL PROP. IMPERVIOUS AREA: 32,000 SF or 0.73 Ac
  - EX. BUILDING COVERAGE TO OVERALL SITE:
    - PARCEL H-1 (SDP-82-080): 43%
    - PARCEL H-11 (SDP-80-087): 40%
- PARKING SPACE DATA:
  - EXISTING BUILDINGS AS PER SDP-80-087 & SDP-82-080:
    - A. PARKING SPACES REQUIRED & PROVIDED:
      - PARCEL H-1 (SDP-82-080):
        - WAREHOUSE (123,900 SF) - 0.75 P.S./1,000 SF = 93
        - OFFICE (12,500 SF) - 3.3 P.S./1,000 SF = 42
        - TOTAL REQUIRED = 135
        - TOTAL PROVIDED = 136
        - (INCLUDES 5 HC SPACES)
      - PARCEL H-11 (SDP-80-087):
        - BLDG 'A':
          - WAREHOUSE (167,735 SF) - 0.75 P.S./1,000 SF = 126
          - OFFICE (2,500 SF) - 3.3 P.S./1,000 SF = 9
        - BLDG 'B':
          - WAREHOUSE (63,000 SF) - 0.75 P.S./1,000 SF = 48
          - OFFICE (2,250 SF) - 3.3 P.S./1,000 SF = 8
        - TOTAL REQUIRED = 191
        - TOTAL PROVIDED = 191
        - (INCLUDES 6 HC SPACES)

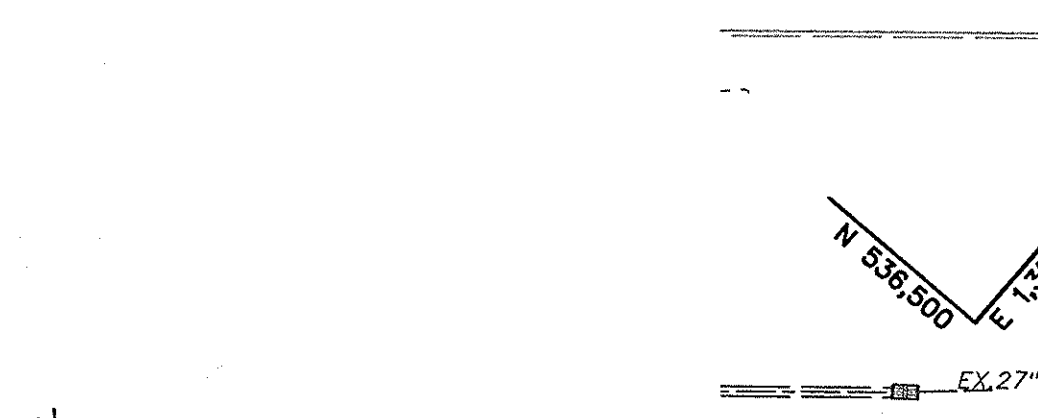
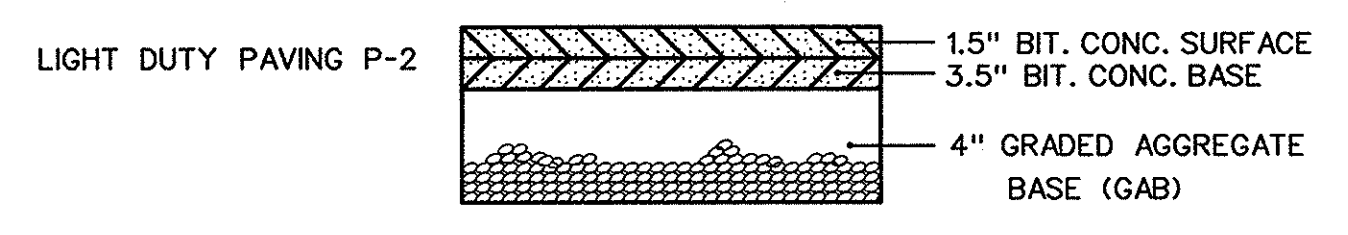
### FOREST CONSERVATION WORKSHEET

Version 1.0

Project: B. W. Industrial Park  
Date: October 6, 2014

NET TRACT AREA		Acre			
A. Total tract area		20.127			
B. Area within 100 Year Floodplain					
C. Area of existing impervious surface/unchanged use		19.135			
D. Net Tract Area		0.992			
LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)					
ARA	MDR	IDA	HDR	MPD	CIA
X					
E. Afforestation Threshold (percentage)	15	0.15			
F. Conservation Threshold (percentage)	15	0.15			
EXISTING FOREST COVER:					
G. Existing forest cover (excluding floodplain)	0				
H. Area of forest above afforestation threshold	-				
I. Area of forest above conservation threshold	-				
BREAK EVEN POINT:					
J. Forest retention above threshold with no mitigation	Break-Even Point	NA			
K. Clearing permitted without mitigation	Break-Even Point				
PROPOSED FOREST CLEARING					
L. Total area of forest to be Cleared or Retained Outside FCE					
M. Total area of forest to be Retained in FCE					
PLANTING REQUIREMENTS					
N. Reforestation for clearing above Conservation Threshold	0				
P. Reforestation for clearing below Conservation Threshold	0				
Q. Credit for retention above conservation threshold	0				
R. Total reforestation required	0				
S. Total afforestation required	0.15				
T. Total reforestation and afforestation required	0.15				

### PAVEMENT SECTION DETAILS



**NOTE:**  
CONTRACTOR TO FIELD VERIFY ALL DOOR LOCATIONS AT THE REAR OF THE BUILDINGS PRIOR TO STARTING CONSTRUCTION. NOTIFY DESIGN TEAM/OWNER OF ANY DISCREPANCIES. PARKING SPACES SHALL NOT BE LOCATED IN FRONT OF ANY DOOR.

### NOTES

- THERE ARE NO KNOWN RARE, THREATENED OR ENDANGERED SPECIES, OR THEIR HABITAT, ON THIS PROJECT SITE.
- THERE ARE NO WETLANDS, STREAMS OR BUFFERS ON THE PROJECT SITE.
- THERE IS NO 100 YEAR FLOODPLAIN ON THE PROJECT SITE.
- THERE IS NO FOREST WITHIN THE PROPOSED LIMITS OF DISTURBANCE ON THE PROJECT SITE.
- THERE ARE NO KNOWN HISTORIC ELEMENTS ON THE PROJECT SITE.
- A WAIVER (WP-15-025) HAS BEEN GRANTED TO ALLOW THE FOREST CONSERVATION ACT REQUIREMENTS TO BE CALCULATED BASED ON THE PROPOSED 43,250 SF LIMIT OF DISTURBANCE AREA. THE WAIVER WAS APPROVED ON OCTOBER 1, 2014.
- THE FOREST CONSERVATION ACT AFFORESTATION OBLIGATION OF 0.15 ACRES WAS ADDRESSED THROUGH A FEE-IN-LIEU PAYMENT OF \$4,500.50 INTO THE HOWARD COUNTY FOREST CONSERVATION FUND.

LIMIT OF DISTURBANCE = 43,250 SF or 0.99 Ac +/-

THE COORDINATE SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN DATUM OF 1983. THE ELEVATION SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.  
HORZ: NAD 83/91; VERT: NAVD 88

**BLDG**  
Baltimore Land Design Group Inc.  
Consulting Engineers  
230 SCHILLING CIRCLE, SUITE 364 • HUNT VALLEY, MARYLAND 21081  
PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM



**PROFESSIONAL CERTIFICATION**  
HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, IWONA ROSTEK-ZARSKA, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2016.

**OWNER**  
LIBERTY SANDY COURT LLC  
500 CHESTERFIELD PKWY  
MALVERN, PA 19355  
(610) 648-1700

**DEVELOPER / APPLICANT**  
LIBERTY PROPERTY TRUST  
9755 PATUXENT WOODS DRIVE, SUITE 350  
COLUMBIA, MD 21046  
(410) 715-7202

REVISIONS			
DATE	NO.	DESCRIPTION	BY

**SITE AND GRADING PLAN**  
**B. W. INDUSTRIAL PARK**  
PARCEL H 1 & 11  
8230 & 8242 SANDY COURT  
(REVISED SITE DEVELOPMENT PLAN)

**DRAWING NO. C-5**

DATE: MAY, 2016 SHEET 5 OF 10  
SDP-80-087

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Development Engineering Division: [Signature] Date: 6-20-16  
Chief, Division of Land Development: [Signature] Date: 6-22-16  
Director: [Signature] Date: 6-22-16

### ADDRESS CHART

LOT / PARCEL NO.	STREET ADDRESS
PARCEL H 1	8230 SANDY COURT
PARCEL 11	8242 SANDY COURT

### PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.
BALTIMORE WASHINGTON INDUSTRIAL PARK	N/A	H1/167 & I1/167
PLAT NO. OF L/F	GRID NO.	ZONING
5338	7	M-2
TAX MAP NO.	ELEC. DIST.	CENSUS TRACT
48	6	606901

**STANDARD SEDIMENT CONTROL NOTES**

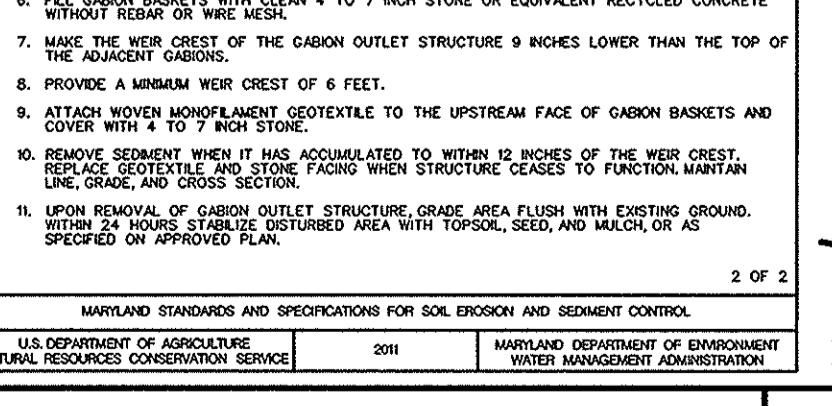
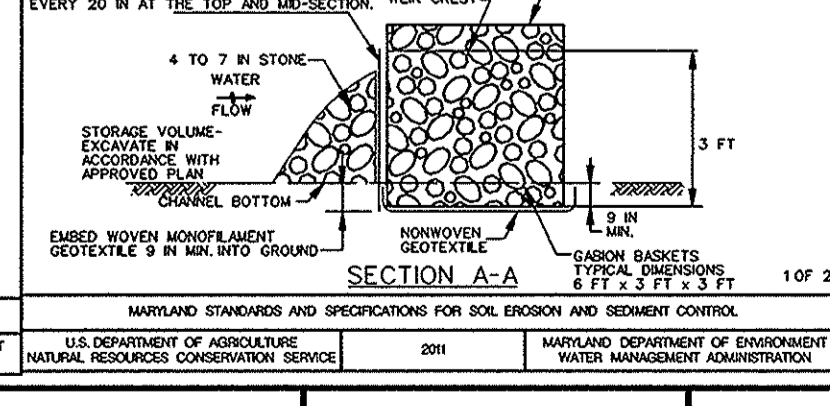
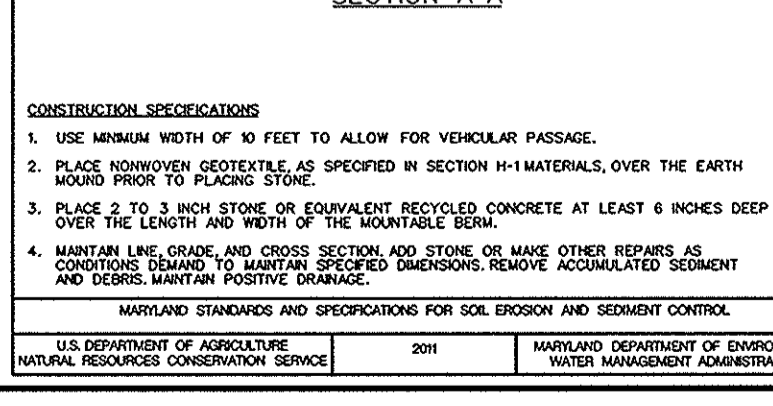
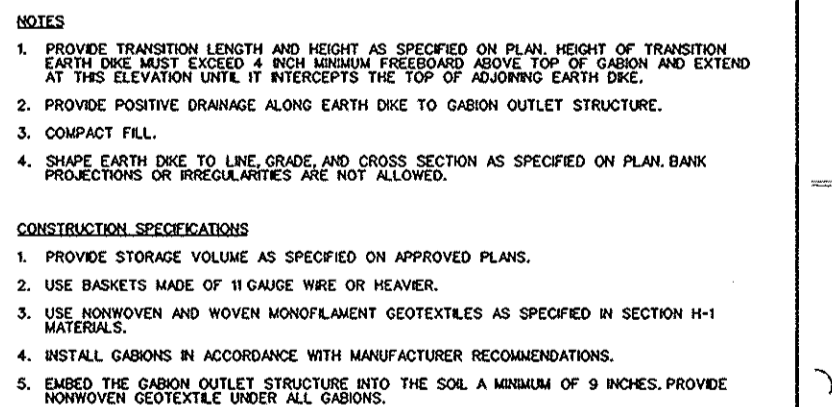
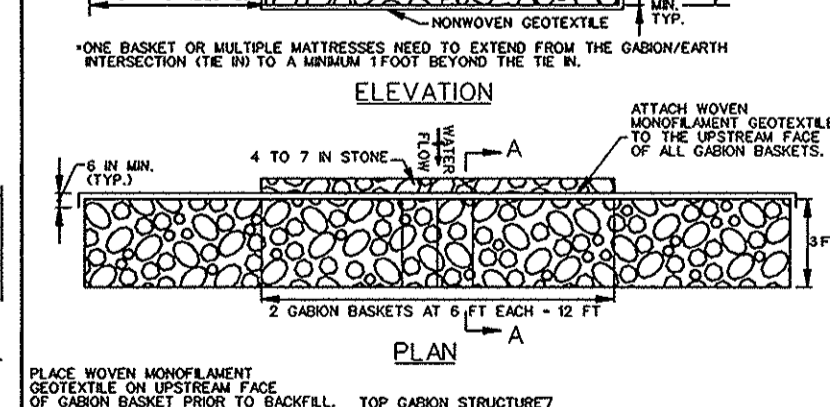
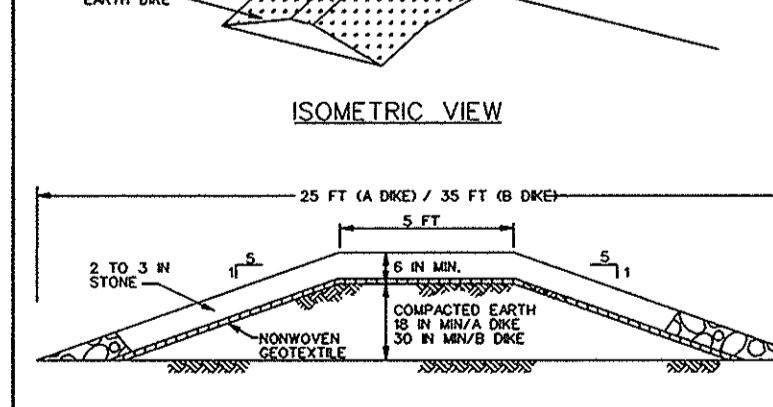
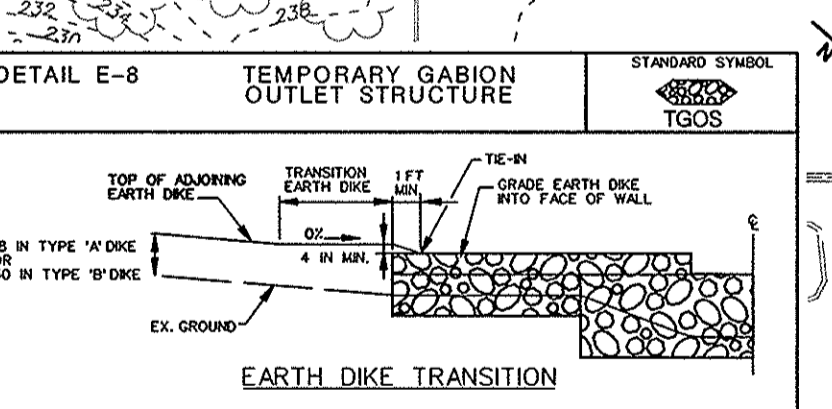
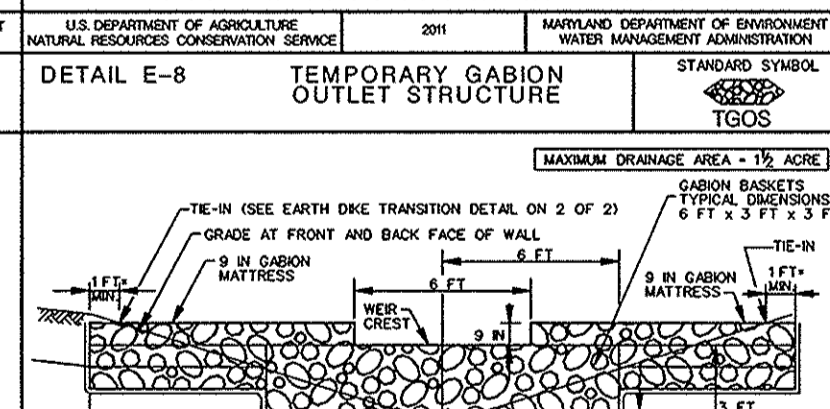
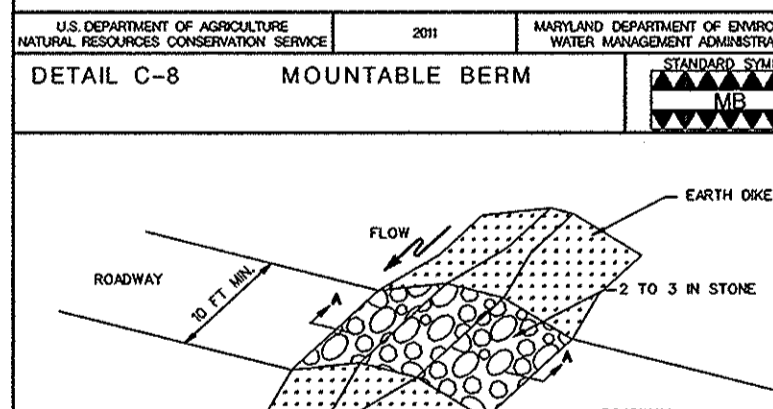
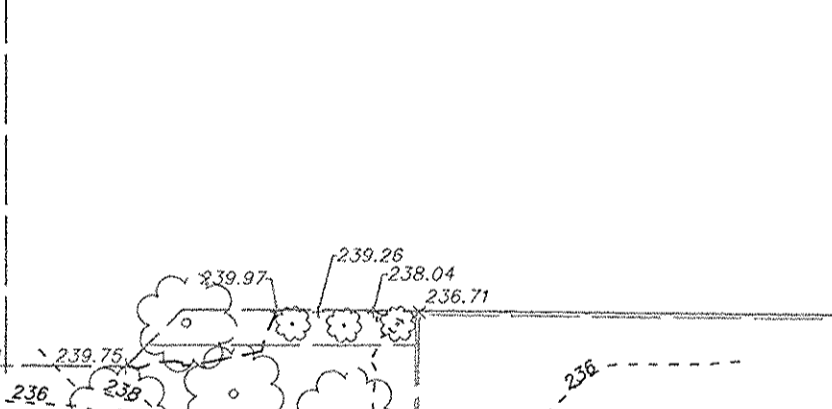
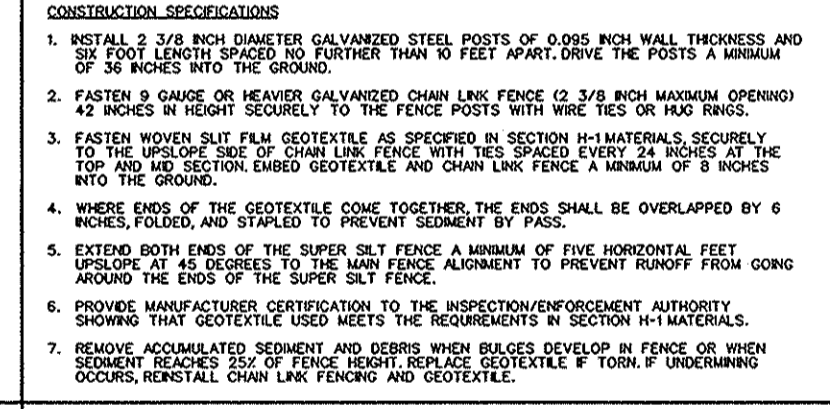
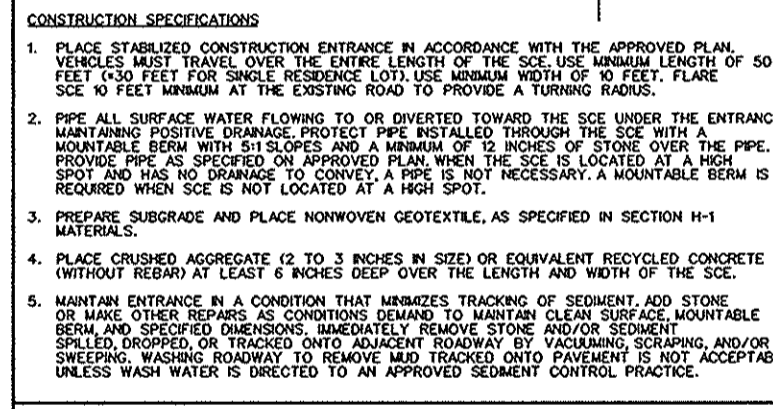
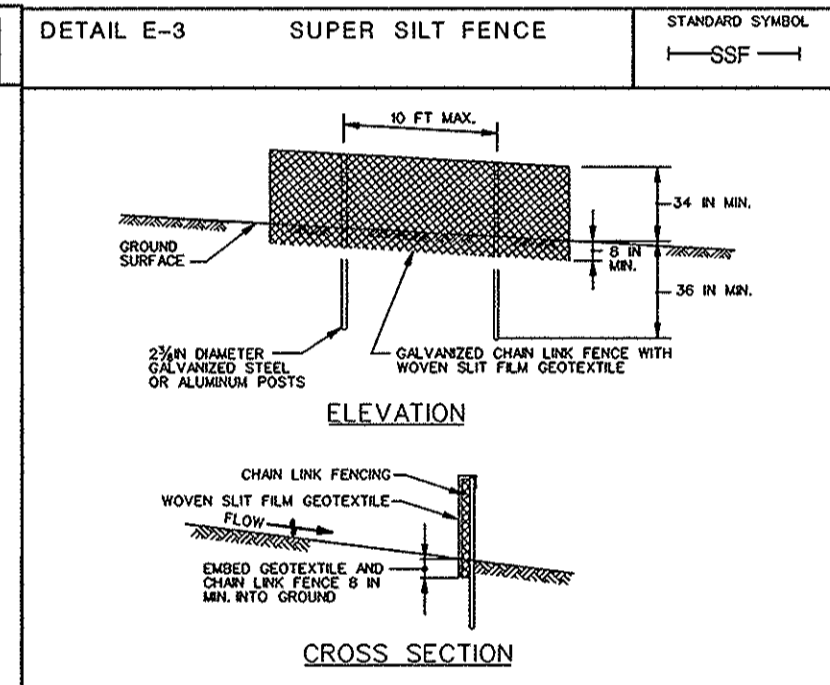
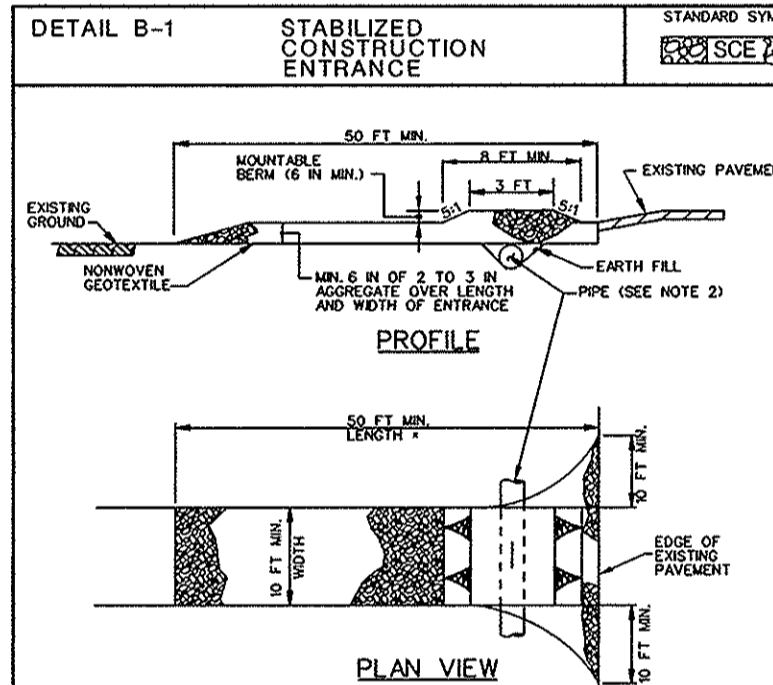
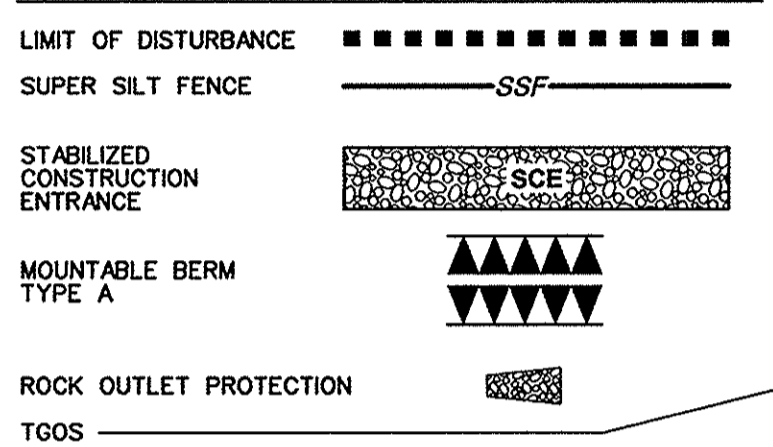
1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES AND THE SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1955).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - A. THREE (3) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
  - B. SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDING (SEC. 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 SITE AREA	20.27	ACRES +/-
AREA TO BE ROOFED OR PAVED	0.99	ACRES +/-
AREA TO BE VEGETATIVELY STABILIZED	0.23	ACRES +/-
TOTAL CUT	2,500	CUBIC YARDS +/-
TOTAL FILL	2,500	CUBIC YARDS +/-
OFF-SITE WASTE/BORROW AREA LOCATION WASTE	N/A	

\* EARTH QUANTITY VOLUMES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR IS ADVISED TO PERFORM HIS OWN ANALYSIS PRIOR TO PLACING A BID ON THIS ITEM.

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 DPW 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 DAY, WHICHEVER IS SHORTER.
11. STOCKPIILING WILL NOT BE PERMITTED ON SITE.

**SEDIMENT CONTROL LEGEND**



**BLDG**  
Baltimore Land Design Group Inc.  
Consulting Engineers  
230 SCHILLING CIRCLE, SUITE 364 • HUNT VALLEY, MARYLAND 21031  
PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM

**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, IWONA ROSTEK-ZARSKA, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2016.

**OWNER**  
LIBERTY SANDY COURT LLC  
500 CHESTERFIELD PKWY  
MALVERN, PA 19355  
(610) 648-1700

**DEVELOPER / APPLICANT**  
LIBERTY PROPERTY TRUST  
9755 PATUXENT WOODS DRIVE, SUITE 350  
COLUMBIA, MD 21046  
(410) 715-7202

DATE	NO.	DESCRIPTION	BY

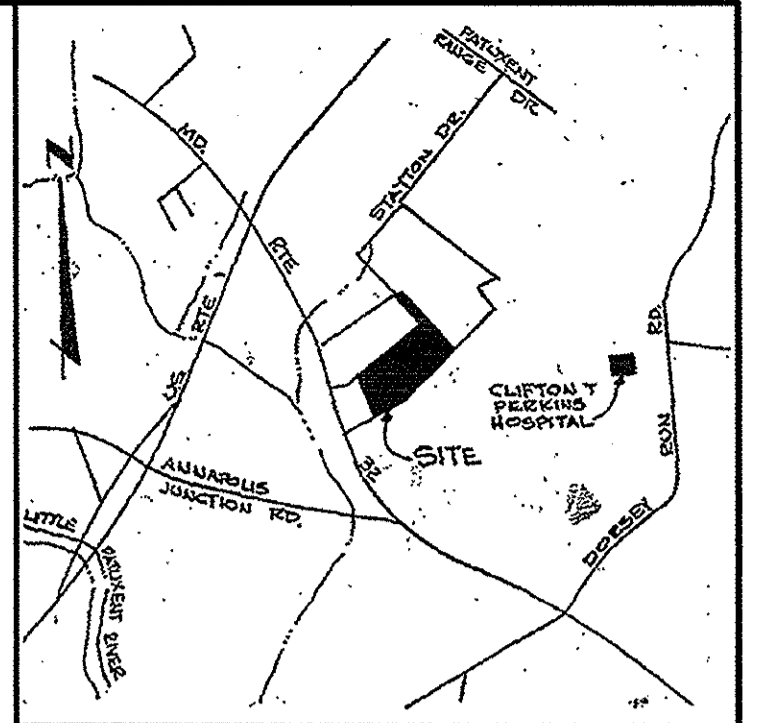
EROSION AND SEDIMENT CONTROL PLAN			
B. W. INDUSTRIAL PARK			
PARCEL H 1 & 11			
8230 & 8242 SANDY COURT			
(REVISED SITE DEVELOPMENT PLAN)			
HOWARD COUNTY, MARYLAND			
SCALE: 1" = 50'			
DATE: MAY, 2016			

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.	
BALTIMORE WASHINGTON INDUSTRIAL PARK	N/A	11/167 & 11/167	
PLAT NO. OR L/F	GRID NO.	ZONING	TAX MAP NO.
5338	7	M-2	48
ELEC. DIST.	CENSUS TRACT		
6	606901		

**DRAWING NO.**  
**C-6**  
SHEET 6 OF 10  
SDP-80-087

SOIL CLASSIFICATION		
UID	Urban Land - Udorthents complex, 0 to 15 percent slopes	D

NOTE: THE URBAN LAND SOIL TYPE ENCOMPASSES AN AREA MUCH LARGER THAN THE SUBJECT SITE. THEREFORE, SOIL LINES ARE NOT SHOWN AT THIS SCALE.



**VICINITY MAP**  
SCALE: 1" = 2,000'  
ADC MAP REFERENCE: 5054-B8

**BENCH MARK**

ELEVATIONS ARE BASED ON NAVD 88 DATUM PER BALTIMORE COUNTY CONTROL POINTS:  
CONTROL POINT 47F5:  
N 535,985.04; E 1,365,653.46; EL. 235.04  
CONTROL POINT 48D2:  
N 535,073.40; E 1,366,524.53; EL. 206.67

**SEQUENCE OF OPERATION**

1. OBTAIN GRADING PERMIT.
2. NOTIFY HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES 48 HOURS PRIOR TO BEGINNING WORK. (1 DAY)
3. CLEAR AND GRUB FOR INSTALLATION OF ALL PERIMETER SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES. (1 DAY)
4. INSTALL ALL PERIMETER SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES INCLUDING STABILIZED CONSTRUCTION ENTRANCE (SCE), TEMPORARY GABION OUTLET STRUCTURE (TGOS) AND SUPER SILT FENCE AS SHOWN ON THE PLAN. (1 DAY)
5. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, INSTALL STORM DRAIN SYSTEM FROM M-2 TO E-1. PROVIDE TWO (2) FEET OF COVER OVER STORM DRAIN PIPE AT ALL TIMES. (4 DAYS)
6. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, BEGIN GRADING OPERATIONS FOR PROPOSED PARKING LOT. MAINTAIN POSITIVE DRAINAGE TO SEDIMENT CONTROL MEASURES AND DEVICES AT ALL TIMES. (5 DAYS)
7. FINE GRADE PARKING LOT AREA EXCEPT AREA WITHIN ESP PRACTICE #1. INSTALL STONE SUBBASE AND CONCRETE CURB AS SHOWN ON THE PLAN. STABILIZE THE REMAINING AREAS EXCEPT AREA WITHIN ESP PRACTICE #D WITH PERMANENT SEED AND MULCH. (3 DAYS)
8. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES. STABILIZE ANY REMAINING DISTURBED AREAS. (2 DAYS)
9. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES. STABILIZE ANY REMAINING DISTURBED AREAS. (2 DAYS)
10. ONCE CONTRIBUTING DRAINAGE AREA IS STABILIZED WITH ESTABLISHED VEGETATION, REMOVE TGOS AND INSTALL ESP PRACTICE #1 AS SHOWN ON THE STORMWATER MANAGEMENT PLANS. (3 DAYS)
11. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES. STABILIZE ANY REMAINING DISTURBED AREAS. (2 DAYS)
12. PROCEED WITH PAVING AND LANDSCAPING. (3 DAYS)

NOTE: ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John R. Blanton* 6/10/16  
Howard Soil Conservation District Date

**DEVELOPER'S CERTIFICATE**  
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.  
*Iwona Rostek-Zarska* 5/15/16  
Iwona Rostek-Zarska Date

**ENGINEER'S CERTIFICATE**  
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.  
*Benjamin O'Neil* 5/15/16  
Benjamin O'Neil, Vice President & City Manager Date

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**  
*John J. Pappalardo* 6-20-16  
Chief, Development Engineering Division Date  
*Walter J. Joffe* 6-22-16  
Chief, Division of Land Development Date  
Director

ADDRESS CHART	
LOT / PARCEL NO.	STREET ADDRESS
PARCEL H 1	8230 SANDY COURT
PARCEL 11	8242 SANDY COURT

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.	
BALTIMORE WASHINGTON INDUSTRIAL PARK	N/A	11/167 & 11/167	
PLAT NO. OR L/F	GRID NO.	ZONING	TAX MAP NO.
5338	7	M-2	48
ELEC. DIST.	CENSUS TRACT		
6	606901		

THE COORDINATE SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN DATUM OF 1983. THE ELEVATION SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.  
HORZ: NAD 83/98; VERT: NAVD 88

LIMIT OF DISTURBANCE = 43,250 SF or 0.99 Ac +/-



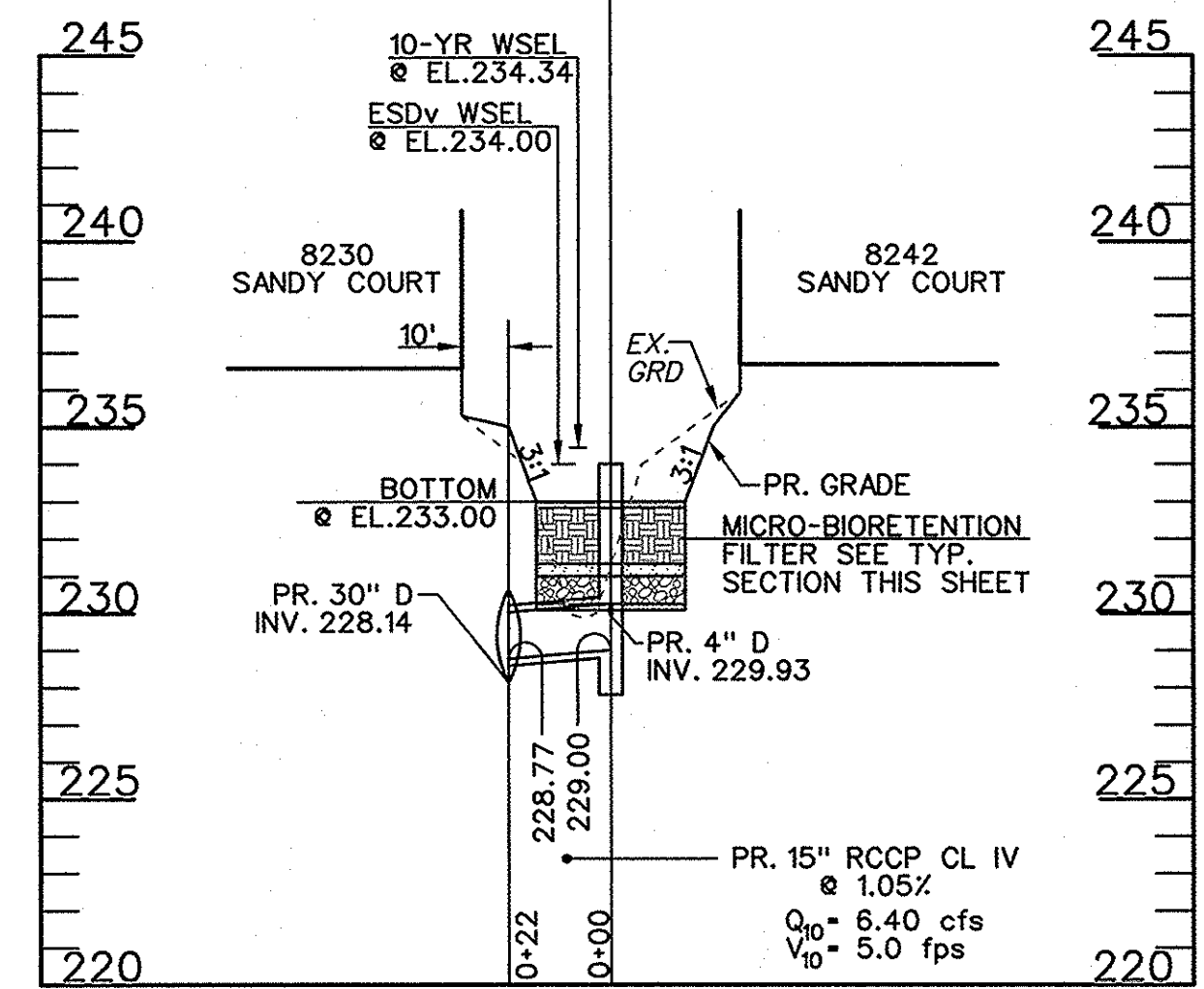


BALTIMORE WASHINGTON INDUSTRIAL PARK, BLOCK C, PARCEL J, PLAT #9863  
 PROCTER PUSHEK LLC, T.M. 48 P. 167 LOT, PAR J, TAX ID #448119  
 DEED REF. 4676/439, EX. USE INDUSTRIAL

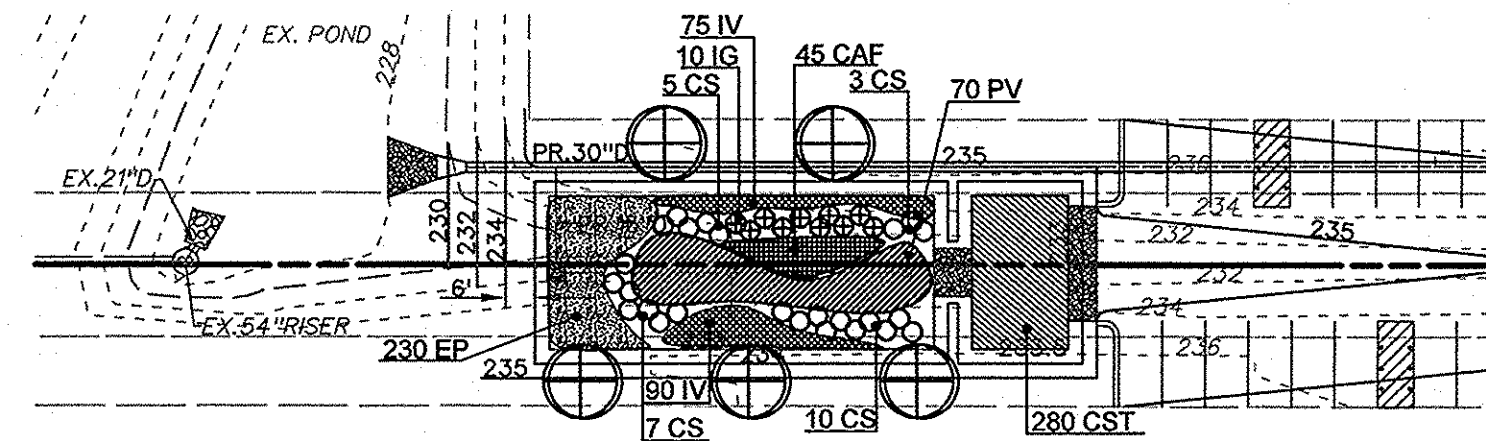
BALTIMORE WASHINGTON INDUSTRIAL PARK, PARCEL H1, PLAT #5338  
 AMB PARTNERS ILLP, T.M. 48 P. 167 LOT, H1, TAX ID #448097  
 DEED REF. 5971/336, EX. USE INDUSTRIAL

BALTIMORE WASHINGTON INDUSTRIAL PARK, PARCEL I1, PLAT #5338  
 LIBERTY SANDY COURT LLC, T.M. 48 P. 167 LOT, I1, TAX ID #448100  
 DEED REF. 13929/453, EX. USE INDUSTRIAL

TYPE 'S' INLET, T.O.G. @ EL. 234.00  
 HOWARD COUNTY STD DETAIL, PLATE D-4.22



SECTION A-A  
 SCALE: H: 1" = 40', V: 1" = 5'



MICRO-BIORETENTION PLANTINGS

MICRO-BIORETENTION PLANT LIST

KEY	QUANTITY	BOTANICAL NAME COMMON NAME	SIZE	COND.	REMARKS
⊕	5	BETULA NIGRA 'DURA-HEAT' MS MULTI-STEM DURA-HEAT RIVER BIRCH	8-10' HT.	B & B	MULTI STEM
CS	25	CORNUS SERICEA 'CARDINAL' 'CARDINAL' RED TWIG DOGWOOD	2-3' HT.	#3 CONT.	SPACE 4' O.C. STAGGER
IG	10	ILEX GLABRA INKBERY HOLLY	2-3' HT.	#3 CONT.	SPACE 4' O.C. STAGGER
CAF	45	CALAMAGROSTIS ACUTIFLORA 'KARL FOERSTER' 'KARL FOERSTER' FEATHER REED GRASS	#1	CONT.	SPACE 2' O.C. STAGGER
PV	70	PANICUM VIRGATUM 'HEAVY METAL' 'HEAVY METAL' SWITCHGRASS	#1	CONT.	SPACE 3' O.C. STAGGER
EP	230	ECHINACEA PUPUREA 'MAGNUS' 'MAGNUS' PURPLE CONEFLOWER	1 QT.	CONT.	SPACE 18" O.C. STAGGER
IV	165	IRIS VERSICOLOR BLUE FLAG IRIS	1 QT.	CONT.	SPACE 18" O.C. STAGGER
CST	280	CAREX STRICTA TUSSOCK SEDGE	1 QT.	CONT.	SPACE 18" O.C. STAGGER

LANDSCAPE SURETY NOTE:  
 FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF:  
 (5) SHADE TREES @ \$300 EACH = \$1,500  
 (0) EVERGREEN TREES @ \$150 = \$0  
 (35) SHRUBS @ \$30 EACH = \$1,050  
 TOTAL \$2,550

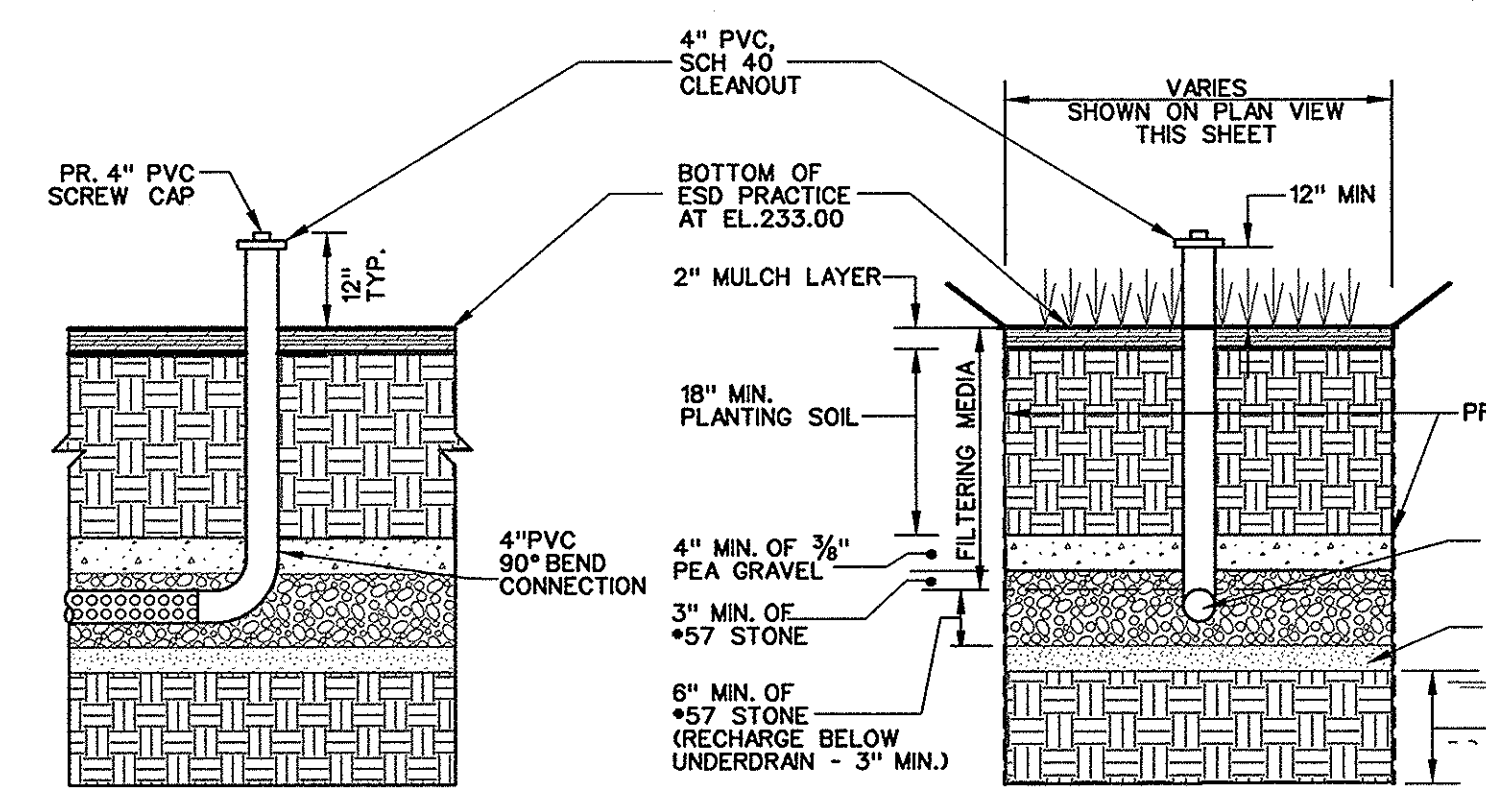
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division JP Date 6-20-16  
 Chief, Division of Land Development Date 6-22-16  
 Director Date 6-22-16

ADDRESS CHART

LOT / PARCEL NO.	STREET ADDRESS
PARCEL H 1	8230 SANDY COURT
PARCEL I1	8242 SANDY COURT

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.
BALTIMORE WASHINGTON INDUSTRIAL PARK	N/A	H1/167 & I1/167
PLAT NO. or L/F	GRID NO.	ZONING
5338	7	M-2
TAX MAP NO.	ELEC. DIST.	CENSUS TRACT
48	8	608901



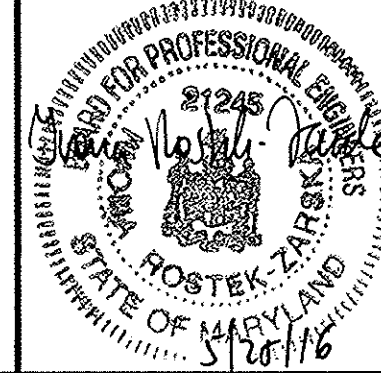
UNDERDRAIN CLEANOUT TYPICAL DETAIL NOT TO SCALE  
 TYPICAL SECTION THROUGH MICRO-BIORETENTION NOT TO SCALE

SUMMARY - OVERALL SWM DESIGN

TOTAL DEVELOPABLE AREA (L0D)	43,250 SF OR 0.99 Ac.
PROPOSED IMPERVIOUS AREA	33,074 SF OR 0.76 Ac.
IMPERVIOUS AREA TREATED	33,074 SF OR 0.76 Ac.
ESD TREATMENT VOLUME REQUIRED	3,592 CF
ESD TREATMENT VOLUME PROVIDED	3,693 CF
TARGET P <sub>6</sub> REQUIRED	1.80
TARGET P <sub>6</sub> PROVIDED	1.80
RECHARGE VOLUME REQUIRED	181 CF
RECHARGE VOLUME PROVIDED	256 CF
TYPE OF ESD PRACTICE	MICRO-BIORETENTION (M-6)
SURFACE AREA OF ESD PRACTICE	2,560 SF

SOIL CLASSIFICATION  
 U/D Urban Land - Udorthents complex, 0 to 15 percent slopes D  
 NOTE: THE URBAN LAND SOIL TYPE ENCOMPASSES AN AREA MUCH LARGER THAN THE SUBJECT SITE. THEREFORE, SOIL LINES ARE NOT SHOWN AT THIS SCALE.

**BLDG**  
 Baltimore Land Design Group Inc.  
 Consulting Engineers  
 230 SCHILLING CIRCLE, SUITE 364 • HUNT VALLEY, MARYLAND 21031  
 PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM



**PROFESSIONAL CERTIFICATION**  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, IWONA ROSTEK-ZARSKA, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2016.

**OWNER**  
 LIBERTY SANDY COURT LLC  
 500 CHESTERFIELD PKWY  
 MALVERN, PA 19355  
 (610) 648-1700

**DEVELOPER / APPLICANT**  
 LIBERTY PROPERTY TRUST  
 9755 PATUXENT WOODS DRIVE, SUITE 350  
 COLUMBIA, MD 21046  
 (410) 715-7202

REVISIONS

DATE	NO.	DESCRIPTION	BY

**STORM WATER MANAGEMENT PLAN**  
 REDEVELOPMENT  
**B. W. INDUSTRIAL PARK**  
 PARCEL H 1 & I1  
 8230 & 8242 SANDY COURT  
 (REVISED SITE DEVELOPMENT PLAN)  
 HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 40'  
 DATE: MAY, 2016

DRAWING NO.  
**C-8**  
 SHEET 8 OF 10  
 SDP-80-087



**CONSTRUCTION SPECIFICATIONS**

**B.4.C Specifications for Micro-Bioretenion, Rain Gardens, Landscape Infiltration & Infiltration Berms**

- Material Specifications:** The allowable materials to be used in these practices are detailed in Table B.4.1.
- Filtering Media or Planting Soil:** The soil shall be a uniform mix, free of stones, stumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the micro-bioretenion practice that may be harmful to plant growth, or prove a hindrance to the planting or maintenance operations. 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 planting soil shall be tested and shall meet the following criteria:

  - Soil Component - Loamy Sand or Sandy Loam (USDA Soil Textural Classification)
  - Organic Content - Minimum 10% by dry weight (ASTM D 2974). In general, this can be met with a mixture of loamy sand (60%-65%) and compost (35% to 40%) or sandy loam (30%), coarse sand (30%), and compost (40%).
  - Clay Content - Media shall have a clay content of less than 5%.
  - pH Range - Should be between 5.5 - 7.0. Amendments (e.g., lime, iron sulfate plus sulfur) may be mixed into the soil to increase or decrease pH.

There shall be at least one soil test per project. Each test shall consist of both the standard soil test for pH, and additional tests of organic matter, and soluble salts. A textural analysis is required from the site stockpiled topsoil. If topsoil is imported, then a texture analysis shall be performed for each location where the topsoil was excavated.
- Compaction:** It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hoers to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment, or light equipment with turf tire tires. Use of equipment with narrow tracks or narrow tires, rubber tires with large lugs, or high-pressure tires will cause excessive compaction resulting in reduced infiltration rates and is not acceptable. Compaction will significantly contribute to design failure.
 

Compaction can be alleviated at the base of the bioretention facility by using a primary tilling operation such as a chiselplow, ripper, or subsoiler. These tilling operations are to restructure the soil profile through the 12 inch compaction zone. Substitute methods must be approved by the engineer. Rototillers typically do not till deep enough to reduce the effects of compaction from heavy equipment.

Rototill 2 to 3 inches of sand into the base of the bioretention facility before backfilling the optional sand layer. Pump any ponded water before preparing (rototilling) base.

When backfilling the topsoil over the sand layer, first place 3 to 4 inches of topsoil over the sand, then rototill the sand/topsoil to create a gradation zone. Backfill the remainder of the topsoil to final grade. When backfilling the bioretention facility, place soil in lifts 12" to 18". Do not use heavy equipment within the bioretention basin. Heavy equipment can be used around the perimeter of the basin to supply soils and sand. Grade bioretention materials with light equipment such as a compact loader or a dozer/loader with marsh tracks.
- Plant Material:** Recommended plant material for micro-bioretenion practices can be found in Appendix A, Section A.2.3 of the "2000 Maryland Stormwater Design Manual Volume 1 & II".
- Plant Installation:** Compost is a better organic material source, is less likely to float, and should be placed in the invert and other low areas. Mulch should be placed in surrounding to a uniform thickness of 2" to 3". Shredded or chipped hardwood mulch is the only accepted mulch. Pine mulch and wood chips will float and move to the perimeter of the bioretention area during a storm event and are not acceptable. Shredded mulch must be well aged (6 to 12 months) for acceptance.
 

Rootstock of the plant material shall be kept moist during transport and on-site storage. The plant root ball should be planted so 1/6th of the ball is above final grade surface. The diameter of the planting pit shall be at least six inches larger than the diameter of the planting ball. Set and maintain the plant straight during the entire planting process. Thoroughly water ground bed cover after installation.

Trees shall be braced using 2" by 2" stakes only as necessary and for the first growing season only. Stakes are to be equally spaced on the outside of the tree ball.

Grasses and legume seed should be drilled into the soil to a depth of at least one inch. Grass and legume plugs shall be planted following the non-grass ground cover planting specifications.

The topsoil specifications provide enough organic material to adequately supply nutrients from natural cycling. The primary function of the bioretention structure is to improve water quality. Adding fertilizers, detritus, or at a minimum, impedes this goal. Only add fertilizer if wood chips or mulch are used to amend the soil. Rototill urea fertilizer at a rate of 2 pounds per 1000 square feet.
- Underdrains:** should meet the following criteria:
 

Pipe - Should be 4" to 6" diameter, slotted or perforated rigid plastic pipe (ASTM F 758, Type PS 28, or AASHTO M-278) in a gravel layer. The preferred material is slotted, 4" rigid pipe (e.g., PVC or HDPE).

Perforations - If perforated pipe is used, perforations should be 3/8" diameter located 6" on center with a minimum of four holes per row. Pipe shall be wrapped with a 1/4" (No. 4 or 4x4) galvanized hardware cloth.

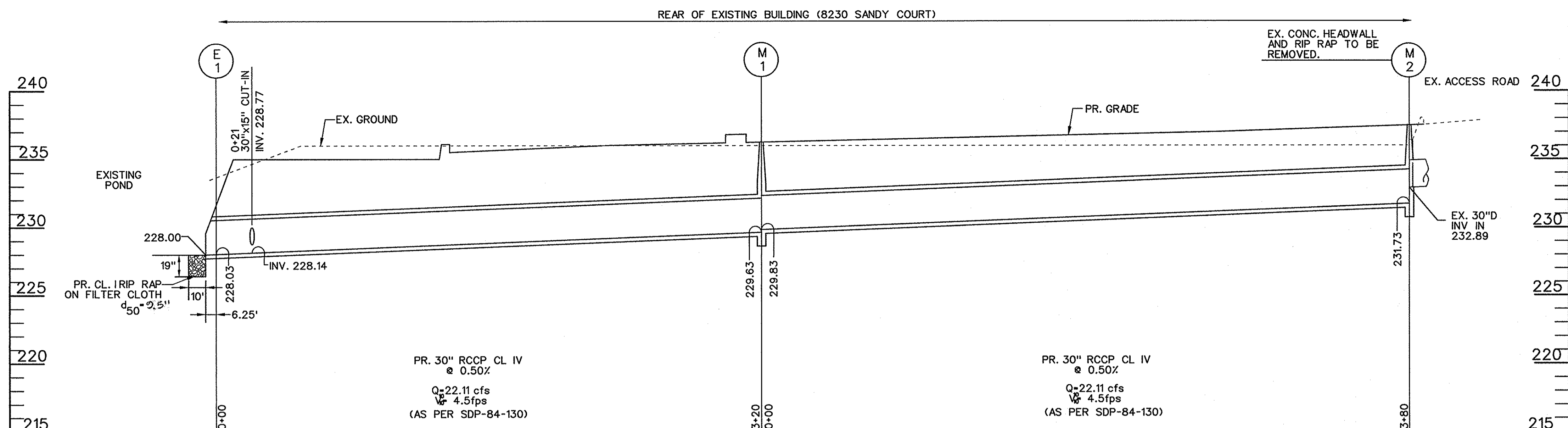
Gravel - The gravel layer (No. 57 stone preferred) shall be at least 3" thick above and below the underdrain.

The main collector pipe shall be at a minimum 0.5% slope.

A rigid, non-perforated observation well must be provided (one per every 1,000 square feet) to provide a clean-out port and monitor performance of the filter.

A 4" layer of pea gravel (1/8" to 3/8" stone) shall be located between the filter media and underdrain to prevent migration of fines into the underdrain. This layer may be considered part of the filter bed when bed thickness exceeds 24".

The main collector pipe for underdrain systems shall be constructed at a minimum slope of 0.5%. Observation wells and/or clean-out pipes must be provided (one minimum per every 1000 square feet of surface area).
- Miscellaneous:** These practices may not be constructed until contributing drainage area has been stabilized.



**STORM DRAIN PROFILE**

SCALE: H: 1" = 40'  
V: 1" = 5'

**CONSTRUCTION CRITERIA, INSPECTION, AND MAINTENANCE CRITERIA**

**M-6. Micro-Bioretenion**

**Construction Criteria:**

The following items should be addressed during construction of projects with micro-bioretenion:

- Erosion and Sediment Control:** Micro-bioretenion practices should not be constructed until the contributing drainage area is stabilized. If this is impractical, runoff from disturbed areas shall be diverted away and no sediment control practices shall be used near the proposed location.
- Soil Compaction:** Excavation should be conducted in dry conditions with equipment located outside of the practice to minimize bottom and sidewall compaction. Only lightweight, low ground-contact equipment should be used within micro-bioretenion practices and the bottom scarified before installing underdrains and filtering media.
- Underdrain Installation:** Gravel for the underdrain system should be clean, washed, and free of fines. Underdrain pipes should be checked to ensure that both the material and perforations meet specifications. The upstream ends of the underdrain pipe should be capped prior to installation.
- Filter Media Installation:** Bioretention soils may be mixed on-site before placement. However, soils should not be placed under saturated conditions. The filter media should be placed and graded using excavators or backhoes operating adjacent to the practice and be placed in horizontal layers (12 inches per lift maximum). Proper compaction of the media will occur naturally. Spraying or sprinkling water on each lift until saturated may quicken setting times.
- Landscape Installation:** The optimum planting time is during the Fall. Spring planting is also acceptable but may require watering.

**Inspection:**

Regular inspections shall be made during the following stages of construction:

- During excavation to subgrade and placement and backfill of underdrain systems.
- During placement of filter media.
- During construction of appurtenant conveyance.
- Upon completion of final grading and establishment of permanent stabilization.

**Maintenance Criteria:**

The following items should be addressed to ensure proper maintenance and long-term performance of micro-bioretenion practices:

- Privately owned practices shall have a maintenance plan and shall be protected by easement, deed restriction, ordinance, or other legal measures preventing its neglect, adverse alteration, and removal.
- The top few inches of filter media should be removed and replaced when water ponds for more than 48 hours. Silts and sediment should be removed from the surface of the filter bed when accumulation exceeds one inch.
- Where practices are used to treat areas with higher concentrations of heavy metals (e.g., parking lots, roads), mulch should be replaced annually. Otherwise, the top two to three inches should be replaced as necessary.
- Occasional pruning and replacement of dead vegetation is necessary. If specific plants are not surviving, more appropriate species should be used. Watering may be required during prolonged dry periods.

**OPERATION AND MAINTENANCE SCHEDULE**

**FOREBAY**

- Forebay shall be inspected annually and after major storm events.
- Check for woody vegetation on dam and within 25 feet of release structure.
- Visible signs of erosion in the forebay as well as the riprap stones or gabion stone outlet area shall be repaired.
- Structural components of the forebay such as the dam, release structure and pipes shall be repaired upon detection of any failure. Grass should be maintained in good condition and be less than 12" in mowing height.
- Debris and litter shall be removed during regular mowing operations.
- Sediment shall be removed from forebay when 50% of storage loss has been achieved or when necessary for aesthetic reasons.

**BIORETENION**

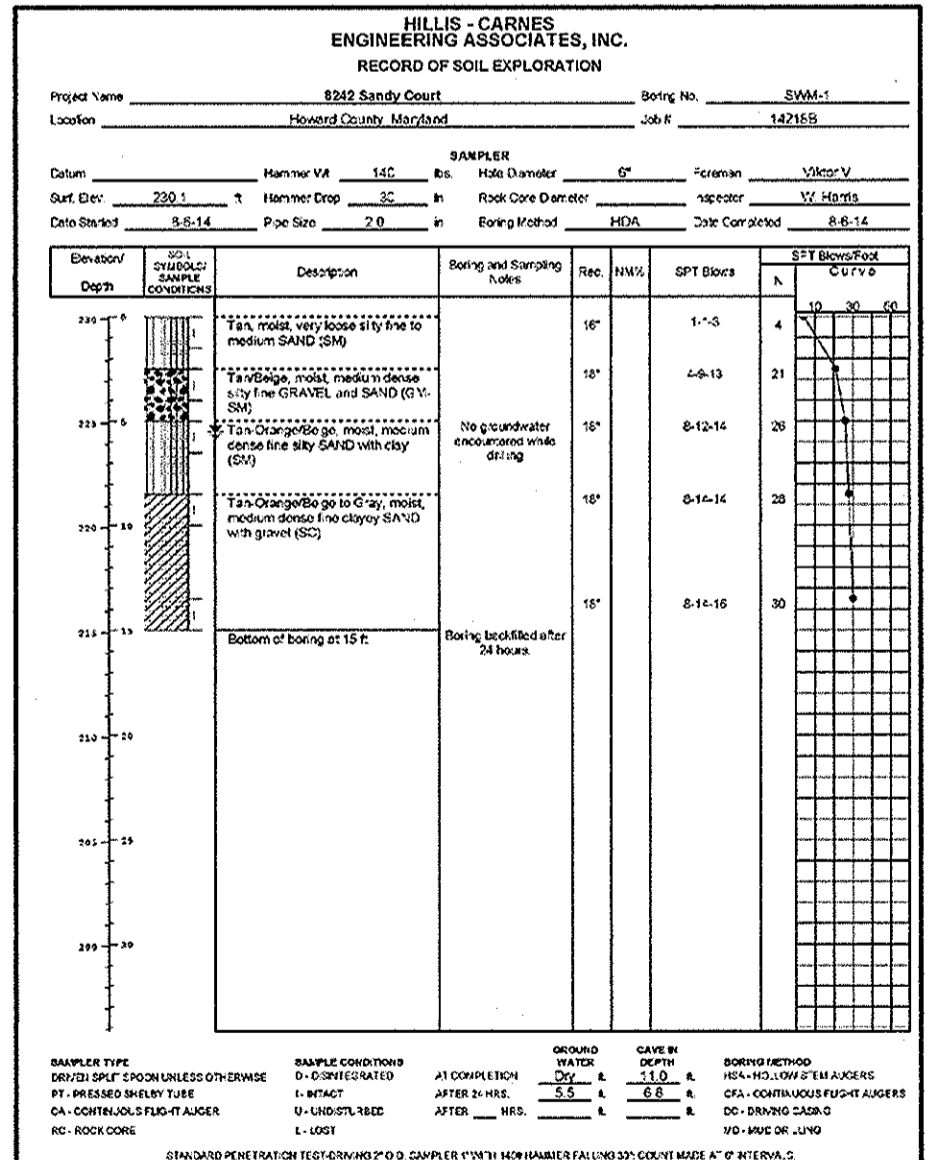
- Annual maintenance of plant material, mulch layer, sand media and soil layer is required. Maintenance of mulch and soils limited to correction areas of erosion or washout. Check for dewatering within 48 hours. When necessary, replace filter media per plan.
- Schedule of plant inspection will be twice a year in spring and fall. This inspection will include removal of dead, diseased and excessive vegetation considered beyond treatment. Replacement of oil diseased trees, shrubs, deficient stakes and wires will be required.
- Mulch layer shall be inspected each spring. Once every 2 to 3 years, remove previous mulch layer and apply new 2 to 3 inch layer.
- Soil erosion and flow blockages to be addressed on an as needed basis with a minimum of once per month and after heavy storms. Inspect clean outs and observation wells along with overflow inlets and outfall/exit pipes at least once a month and after heavy storms.

MANHOLE SCHEDULE					
NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
M-1	60" DIA. PRECAST	229.63	229.83	236.15	HOWARD CO. STD. DETAIL PLATE G-5.13
M-2	60" DIA. PRECAST	EX. 232.89	231.73	237.40	HOWARD CO. STD. DETAIL PLATE G-5.13

STRUCTURE SCHEDULE						
NO.	TYPE	SIZE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
E-1	CONC. END SECTION	30"	228.03	228.00	-----	HOWARD CO. STD. DETAIL PLATE D-5.51

PIPE SCHEDULE			
SIZE	TYPE	ESTIMATED QUANTITY	
30"	RCCP CL. IV	700 LF	

MATERIAL	SPECIFICATION	SIZE	NOTES
Plantings	See Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil (2" to 4" deep)	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loams clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)		
Mulch	shredded hardwood		aged 6 months, minimum no pine or wood chips
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stones: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" to 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe: 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; f'c= 3500 psi @ 28 days, normal weight, air-entrained reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACI Code 350R/89 vertical loading H-10 or H-20B allowable horizontal loading (based on soil pressures) and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO #10 are not acceptable. No calcium carbonate or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *[Signature]* Date: 6-20-16

Chief, Division of Land Development: *[Signature]* Date: 6-22-16

Director: *[Signature]* Date: 6-22-16

ADDRESS CHART

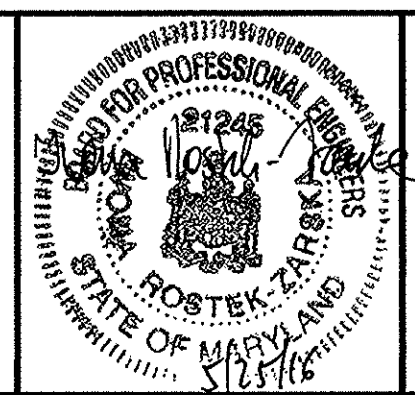
LOT / PARCEL NO.	STREET ADDRESS
PARCEL H 1	8230 SANDY COURT
PARCEL 11	8242 SANDY COURT

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.			
BALTIMORE WASHINGTON INDUSTRIAL PARK	N/A	H1/167 & H1/167			
PLAT NO. or L/F	GRID NO.	ZONING	TAX MAP NO.	ELEC. DIST.	CENSUS TRACT
5338	7	M-2	48	8	608901

THE COORDINATE SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN DATUM OF 1983. THE ELEVATION SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988. HORZ: NAD 83/91; VERT: NAVD 88

**BLDG**  
Baltimore Land Design Group Inc.  
Consulting Engineers  
230 SCHILLING CIRCLE, SUITE 364 • HUNT VALLEY, MARYLAND 21081  
PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM



**PROFESSIONAL CERTIFICATION**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, IWONA ROSTEK-ZARSKA, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21245, EXPIRATION DATE: JUNE 9, 2016.

**OWNER**  
LIBERTY SANDY COURT LLC  
500 CHESTERFIELD PKWY  
MALVERN, PA 19355  
(610) 648-1700

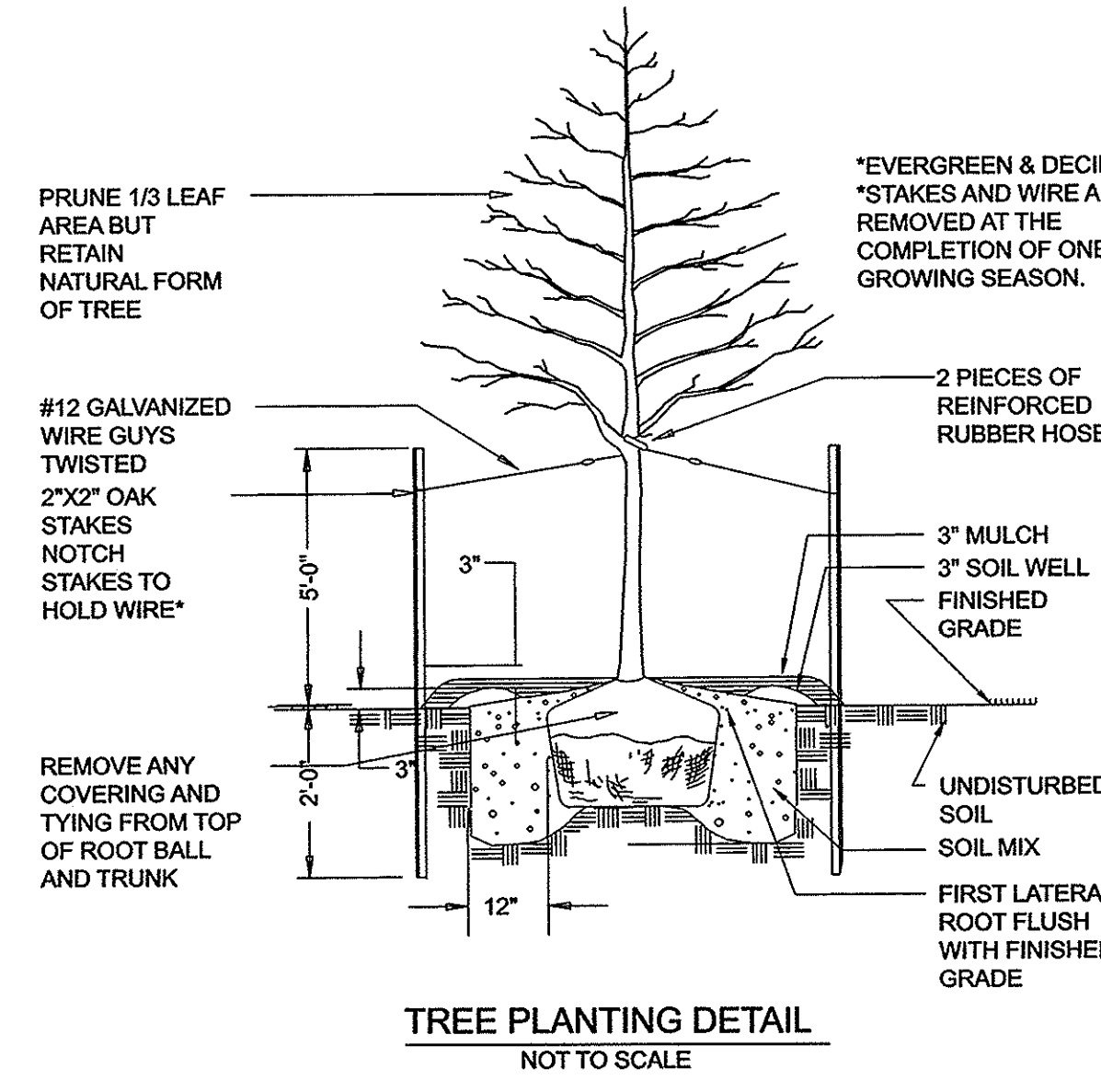
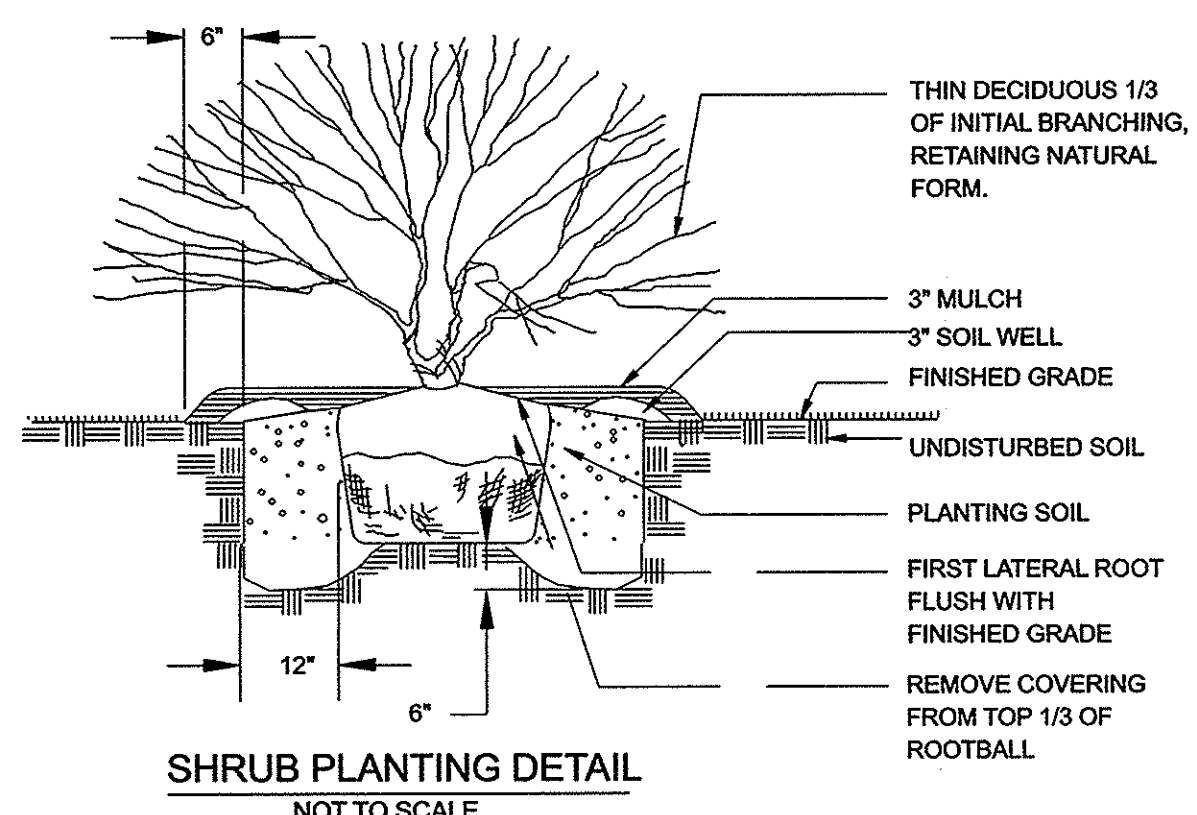
**DEVELOPER / APPLICANT**  
LIBERTY PROPERTY TRUST  
9755 PATUXENT WOODS DRIVE, SUITE 350  
COLUMBIA, MD 21046  
(410) 715-7202

REVISIONS			
DATE	NO.	DESCRIPTION	BY

**STORM WATER MANAGEMENT PLAN**  
NOTES, SPECIFICATIONS AND STORM DRAIN PROFILE  
**B. W. INDUSTRIAL PARK**  
PARCEL H 1 & 11  
8230 & 8242 SANDY COURT  
(REVISED SITE DEVELOPMENT PLAN)

DATE: MAY, 2016

DRAWING NO. **C-9**  
SHEET 9 OF 10  
SDP-80-087



**LANDSCAPE NOTES**

**Plant Identification:** All plants shall be properly marked for identification and checking. List of Plant Materials: The Contractor will verify plant quantities prior to bidding and any discrepancies shall be brought to the attention of the Landscape Architect. The Contractor shall furnish and plant all plants required to complete the work as shown on the drawings. Substitutions shall not be made without the written approval of the Landscape Architect. This contract will be based on the bidder having verified, prior to bidding, the availability of the required plant materials as specified on the Plant List.

**Plant Quantity:** All shrubs shall be dense, heavy to the ground, and well grown, showing evidence of having been sheared regularly, and sound, free of plant disease or insect eggs, and shall have a healthy, normal root system. Plants shall be nursery grown. Plants shall not be pruned prior to delivery. The shape of the plant shall in general conform to its natural growth proportions unless otherwise specified. All plants including container grown shall conform to American Standard for Nursery Stock (ANSI z60.1, latest edition), and shall have a well-shaped, heavy branch structure for the species. Evergreen trees are to have an inside no greater than 24\"/>

**PLANT LIST**

KEY	QUANTITY	BOTANICAL NAME COMMON NAME	SIZE	COND.	REMARKS
○	8	QUERCUS PHELLOS 'HIGH TOWER' 'HIGH TOWER' WILLOW OAK	2 1/2" - 3" CAL.	B & B	AS SHOWN

- PLANTING NOTES:**
- This Plan is for planting purposes only.
  - This Plan has been prepared in accordance with the provisions of section 16.124 of the Howard County Code and the Landscape Manual.
  - All plant material shall be nursery grown and shall conform to American Association of Nurserymen latest standards. Plant installation must conform to the minimum standards cited in the latest edition of the "LANDSCAPE SPECIFICATION GUIDELINES" by the Landscape Contractor's Association.
  - Contractor is to notify Mies Utility a minimum of 72 hours prior to digging. Telephone 1-800-257-7777
  - The Landscape Architect is to be notified 48 hours before planting begins. The location of all plant material is to be approved in field by the Landscape Architect.
  - No tree or shrub planting pits are to be left open or unattended.
  - Shrubs are to be grouped into mulched beds. Beds are to be edged and the grass is to be killed or removed prior to mulching.
  - Sod is to be: Kentucky bluegrass fescue mix
  - "At the time of installment, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates."

**DEVELOPER'S / BUILDER'S CERTIFICATE**

I / We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual.

I / We further certify that upon completion, a Certification of Landscape Installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

*Benjamin O'Neil*  
BENJAMIN O'NEIL, VICE PRESIDENT & CITY MANAGER

**NOTE:**  
THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

**HUMAN & ROHDE, INC.**  
LANDSCAPE ARCHITECTS  
512 VIRGINIA AVENUE  
TOWSON, MARYLAND 21286  
410 825 3885

**OWNER**  
LIBERTY SANDY COURT LLC  
500 CHESTERFIELD PKWY  
MALVERN PA 19355  
(610) 648-1700

**DEVELOPER / APPLICANT**  
LIBERTY PROPERTY TRUST  
9755 PATUXENT WOODS DRIVE, SUITE 350  
COLUMBIA, MD 21046  
(410) 715-7202

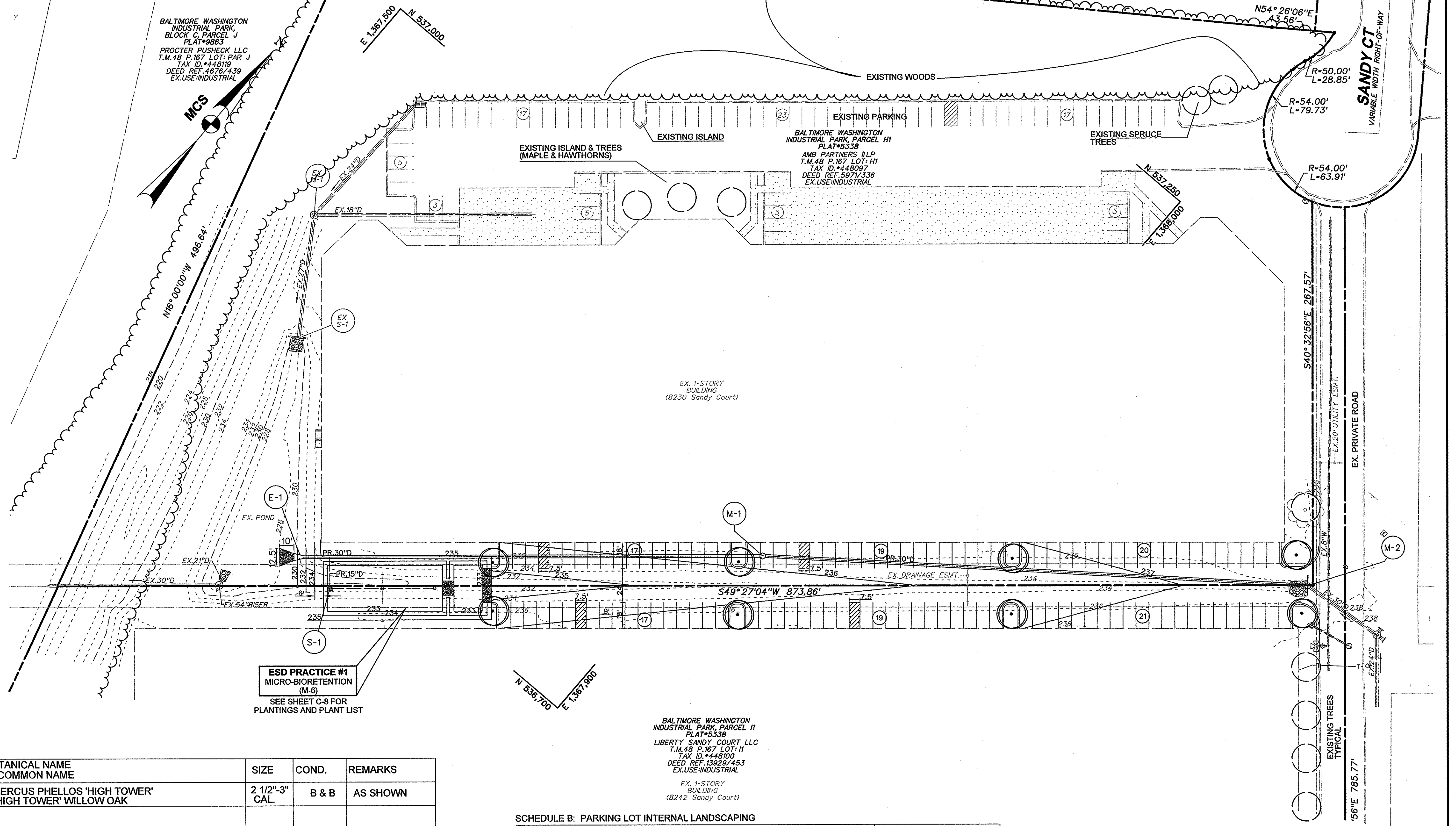
**REVISIONS**

DATE	NO.	DESCRIPTION	BY

**LANDSCAPE PLAN**  
PLAN, NOTES AND DETAILS  
**B. W. INDUSTRIAL PARK**  
PARCEL H 1 & 11  
8230 & 8242 SANDY COURT  
(REVISED SITE DEVELOPMENT PLAN)

**C-10**  
SHEET 10 OF 10

DATE: MAY, 2016



**SCHEDULE B: PARKING LOT INTERNAL LANDSCAPING**

	H1 (SDP 82-060) 80 / 136	I1 (SDP-82-087) 138/191
Number of Parking Spaces Existing / Proposed		
Number of Trees Required (<50%/-50%)	MORE THAN 50% = 7 PUS	LESS THAN 50% = 3 PUS
Number of Trees Provided	7-3 EX./ 4 PROPOSED	4
Shade Trees		
Other Trees (2:1 substitution)		
Internal Islands Required	7	3
Internal Islands Provided (Min. 200 SF)	EX. 4160 SF/200 = 20.8 ISLANDS	3
	PROPOSED 3	

**LANDSCAPE SURETY NOTE:**  
FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF:  
(8) SHADE TREES @ \$300 EACH = \$2,400.  
(0) EVERGREEN TREES @ \$150 = \$0.  
(0) SHRUBS @ \$30 EACH = \$0.  
TOTAL \$2,400.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John J. ...*  
Chief, Development Engineering Division JP  
Date: 6-20-16

*William ...*  
Chief, Division of Land Development  
Date: 6-22-16

*William ...*  
Director  
Date: 6-22-16

**ADDRESS CHART**

LOT / PARCEL NO.	STREET ADDRESS
PARCEL H 1	8230 SANDY COURT
PARCEL I 1	8242 SANDY COURT

**PERMIT INFORMATION CHART**

SUBDIVISION NAME	SECTION / AREA	LOT / PARCEL NO.
BALTIMORE WASHINGTON INDUSTRIAL PARK	N/A	H1/167 & I1/167
PLAT NO. or L/F	GRID NO.	ZONING
5338	7	M-2

TAX MAP NO.	ELEC. DIST.	CENSUS TRACT
48	6	606901

THE COORDINATE SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN DATUM OF 1983. THE ELEVATION SYSTEM OF ALL DRAWINGS IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988.  
HORZ: NAD 83/94; VERT: NAVD 88

SCALE: 1" = 40'