RIVERS PARK FIRE STATION

FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

CAPITAL PROJECT 5509

FEDCO SYSTEMS INCORPORATED
PROSPECT SQUARE SUITE 200
10903 INDIAN HEAD HIGHWAY
FORT WASHINGTON MD 20744

P.M. COMPANY INCORPORATED
PLANNING • ENGINEERING • SYSTEMS • ECONOMICS

LIST OF DRAWINGS

CIVIL

C1 SITE LAYOUT
C2 GRADING PLAN
C3 SITE DETAILS
C4 LANDSCAPING PLAN
C5 SEDIMENT CONTROL PLAN
C6 SEDIMENT & EROSION CONTROL
C7 SOILS MAP
C8 DRAINAGE AREA MAP

ARCHITECTURAL

A1 FLOOR PLAN & FINISH SCHEDULE
A2 ELEVATIONS & BUILDING SECTIONS
A3 REFLECTED CEILING & MISCELLANEOUS DETAILS
A4 ROOF PLAN
A5 DOOR/WINDOW SCHEDULES & DETAILS
A6 WALL SECTIONS
A7 WALL SECTIONS
A8 WALL SECTIONS
A9 ROOFING DETAILS
A10 INTERIOR ELEVATIONS & DETAILS
A11 HOSE TOWER DETAILS

STRUCTURAL

S1 FOUNDATION PLAN & DETAILS
S2 ROOF FRAMING PLAN & DETAILS
S3 SECTIONS & DETAILS
S4 GENERAL NOTES

PLUMBING

PE1 SITE PLAN
P1 FLOOR PLAN - PLUMBING
P2 PLUMBING RISER DIAGRAM

MECHANICAL

M1 FLOOR PLAN - MECHANICAL

ELECTRICAL

E1 FLOOR PLAN - LIGHTING
E2 FLOOR PLAN - POWER
E3 RISER DIAGRAMS AND SCHEDULES

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY MARYLAND

Robert M Berning for GFN 2-28-86
DIRECTOR OF PUBLIC WORKS DATE

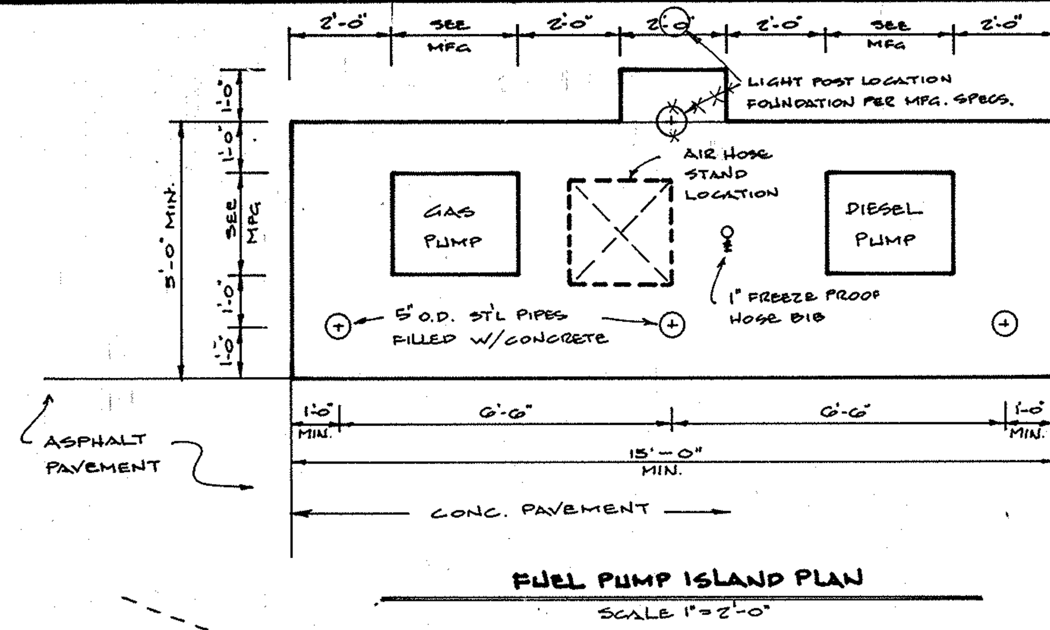
2-28-86
CHIEF, BUREAU OF ENGINEERING DATE

SDP86-165

PROFESSIONAL CERTIFICATE:

I HEREBY CERTIFY THAT THE INFORMATION CLOUDED AND LISTED UNDER REVISION #4 ON THIS DOCUMENT WAS PREPARED OR APPROVED BY ME.

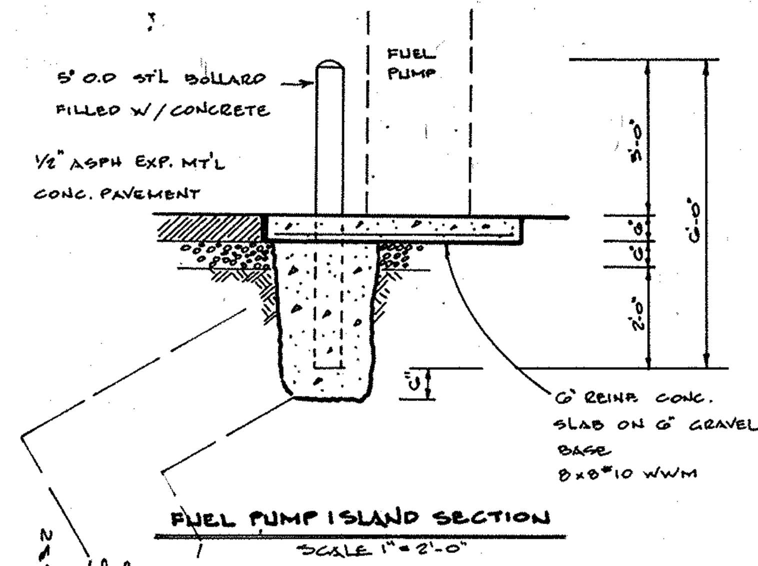
8-31-15



FUEL PUMP ISLAND PLAN

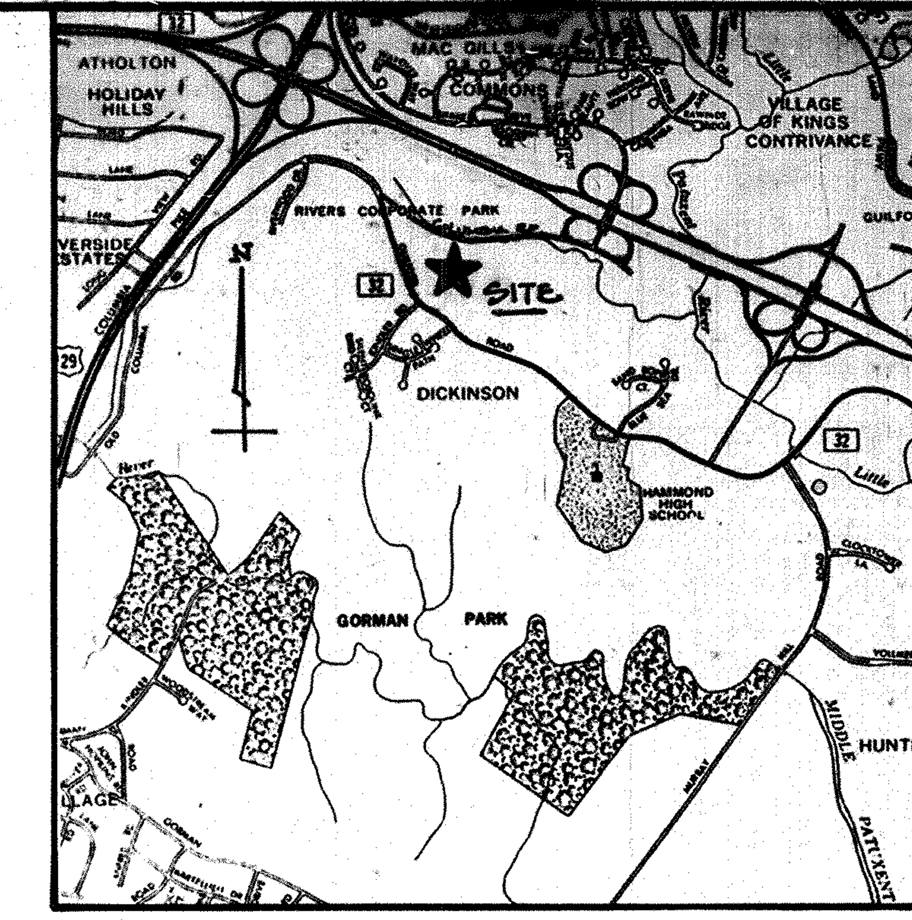
SCALE 1"=2'-0"

FUEL PUMP MECHANICAL SPECS AND DIMENSIONS PER MFG. PROVIDE OPENING PER MFG. SPECS.

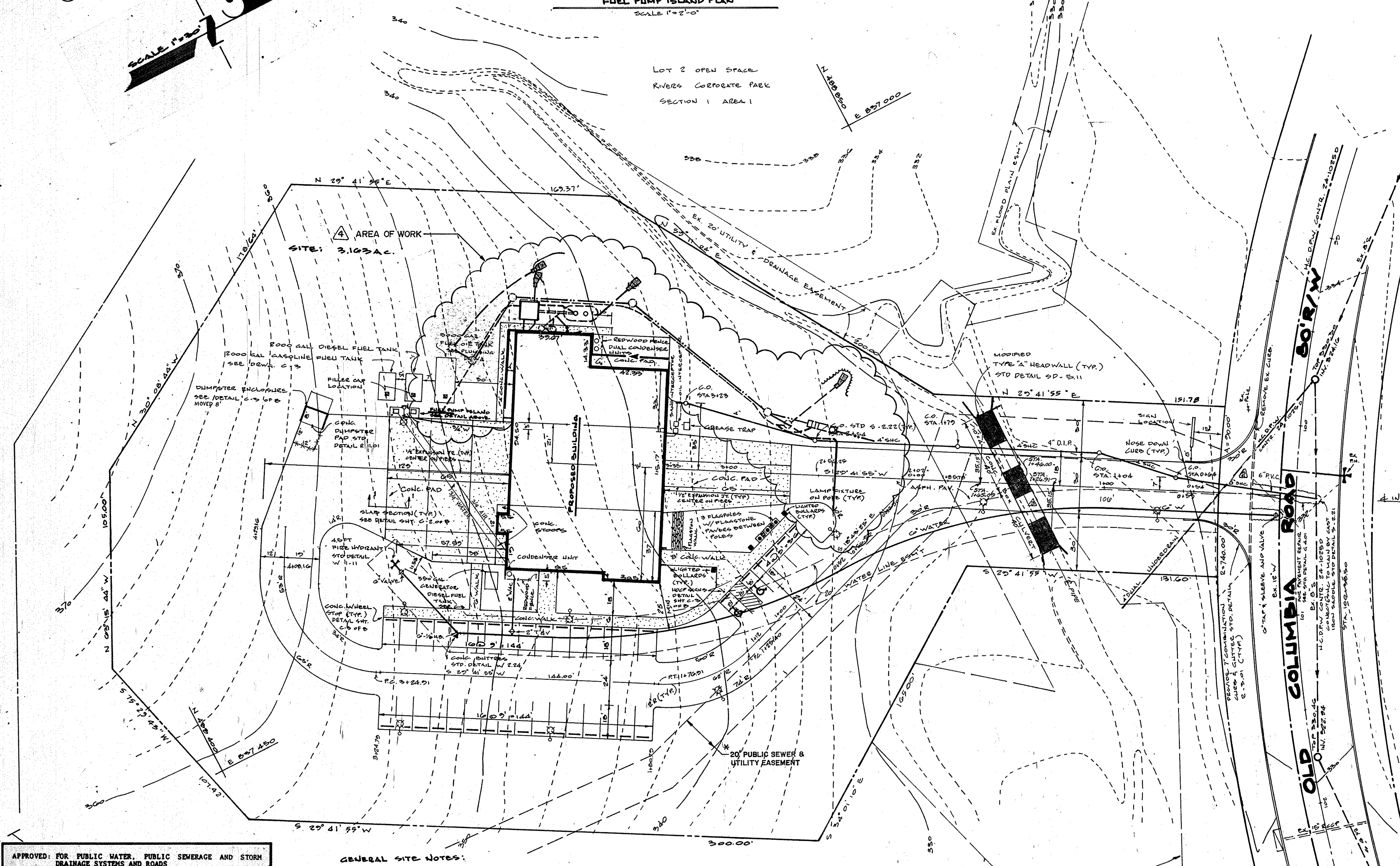


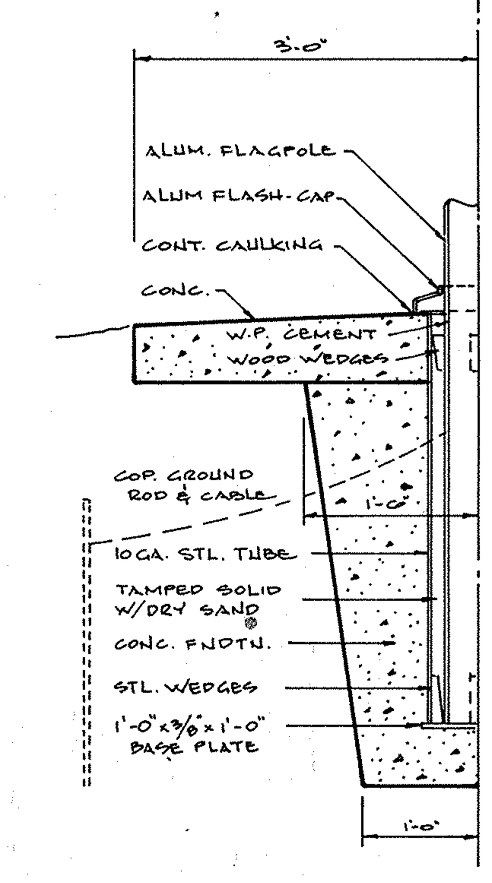
FUEL PUMP ISLAND SECTION

SCALE 1"=2'-0"



LOCATION MAP 1"=2000'





FLAG POLE BASE DETAIL

N.T.S.

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS	
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
DIRECTOR	2/28/86 DATE
CHIEF, BUREAU OF ENGINEERING	2/28/86 DATE
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT	
COUNTY HEALTH OFFICER	3-7-86 DATE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
PLANNING DIRECTOR	4-18-86 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION	4-18-86 DATE

GENERAL SITE NOTES:

1. ALL STD. DETAILS REFERED TO HEREIN ARE FROM H.C.D.P.W. "STD SPECIFICATION AND DETAILS FOR CONSTRUCTION.
2. ALL WALKS TO BE 4" CONCRETE AS PER STD DETAIL R-3.05.
3. ALL ASPHALT PAVING TO BE PAVING SECTION P-3 OF STD DETAIL R-2.01
4. 6" W TO BE DUCTILE IRON PIPE AND IN ACCORDANCE WITH ALL THE REQUIREMENTS OF AWWA SPECIFICATION C-151. 2" WHC TO BE SOFT TEMPER TYPE K COPPER.
5. 4" SHC TO BE CAST IRON.
6. 10'x4' PRECAST BOX CULVERT, MANUFACTURED BY A. ROTONDO & SONS, INC. AVON, CONN., OR EQUIVALENT.
7. ALL UTILITY CONSTRUCTION TO CONFORM TO THE HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DESIGN MANUAL VOLUME IV.

NOTE:

REMOVAL OF ANY EXISTING LANDSCAPE PLANTINGS DURING CONSTRUCTION OF THE RAINWATER HARVESTING AND VEHICLE WASH FACILITY MUST BE REPLACED WITH NEW PLANT MATERIALS OF THE SAME TYPE AND QUANTITY TO ENSURE CONTINUED COMPLIANCE WITH THE APPROVED LANDSCAPE PLAN, AS SHOWN ON SHEET C4 OF 8 OF THIS PLAN SET.

4 THIS SHEET WAS MODIFIED TO INCLUDE THE RAINWATER HARVESTING FACILITIES DESIGN INFORMATION. REFER TO THE SOUTH COUNTY RAINWATER HARVESTING AND WASH PAD DESIGN PACKAGE, CAPITAL PROJECT C-0313, ORIGINALLY DATED APRIL 2015, (LATEST REVISION).

1 =30 — scale 30 0 30 60 feet

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

ENGINEER

BOLLING W. HAXALL, JR.
FEDCO SYSTEMS, INC.
10903 INDIAN HEAD HIGHWAY
SUITE 200
FORT WASHINGTON, MARYLAND 20744

OWNER

DEPARTMENT OF PUBLIC WORKS OF
HOWARD COUNTY, MARYLAND
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

RIVERS CORPORATE PARK SECTION 1, AREA 1, PHASE 1
RIVERS PARK FIRE STATION NO. 10
CAPITAL PROJECT F5509
PLAT NO. 5079
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND
SCALE 1"=30'
DATE: DECEMBER 20, 1985

SITE ANALYSIS

AREA OF PARCEL = 3.1603 AC. = 137,762 SQ. FT.

ZONED: OPEN SPACE - AMENDED FDP PHASE 184-A-I

FLOOR SPACE: 5822 SQ. FT.

TOTAL PARKING PROVIDED: 36 REGULAR SPACES
2 HANDICAPPED SPACES
TOTAL 38 SPACES

SUBDIVISION NAME				SECT./AREA	LOT/PARCEL #
RIVERS CORPORATE PARK				1/1	P/O OF LOT 2
PLAT # OR L/F	BLOCK #	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
5078*	7	NT-O.S.	42	6	6061.02
WATER CODE			SEWER CODE		
E 16			5290000		

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
2	10155 OLD COLUMBIA RD.

* 20' PUBIC SEWER & UTILITY EASEMENT, PLAT #21853

SDP-86-165c

AS-BUILT JOHN E. HARMS JR. + ASSOC. DEC. 1987

RIVERS PARK FIRE STATION

FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F 5509

Sheet Title **SITE LAYOUT**

4 REDLINE REVISIONS - SEE NOTE

Revisions	
6/6/86	3 DIMENSION BOX CULVERT
3/5/86	2 6" SHC TO EXIST'G 8" SAN.
2/28/86	1 20' WATER ESM'T
2/12/86	FIRST SUBMISSION

Drawn	Approved	Date
Z.P.	R.E.B.	6-12-86

Fedco Systems, Incorporated
Prospect Square, Suite 200
10903 Indian Head Highway
Fort Washington, MD. 20744
(301)292-0200
(301)932-1900

architects, engineers, landscape architects, planners, surveyors, construction managers

Sheet No. C1 OF 8

Project No. 85.0.034

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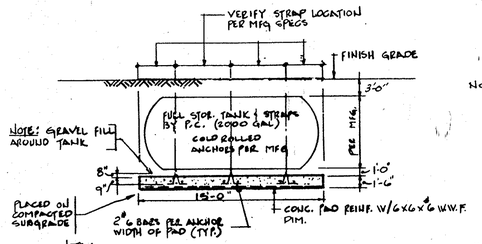
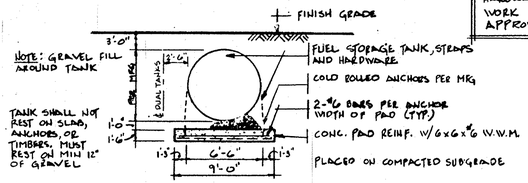


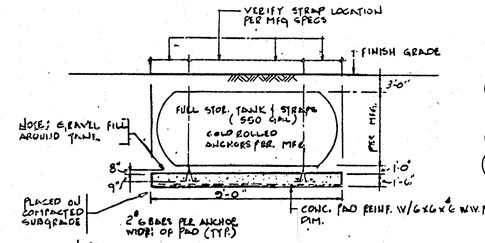
NOTE: ALL TANKS TO HAVE REINFORCED BOTTOMS UNDER OPENINGS FOR STICK GAUGE.

NOTE: G.C. SHALL VERIFY LOCATION, TYPE & SPACING OF ANCHORS & STRAPS WITH TANK MFG

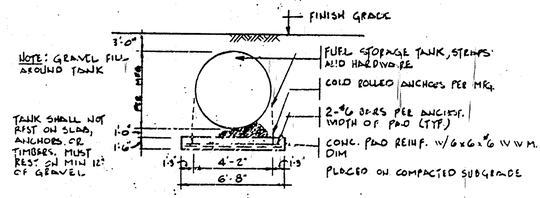
NOTE: SHOP DRAWINGS FOR FUEL TANK, HARDWARE, PLUMBING, ELECTRICAL WORK SHALL BE FURNISHED FOR APPROVAL PRIOR TO INSTALLATION.



U.G. FUEL STORAGE TANK DETAIL (TYP)
N.T.S



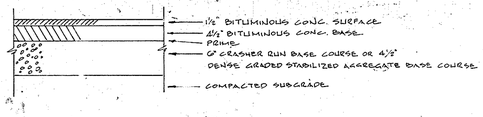
NOTE: G.C. SHALL VERIFY LOCATION, TYPE & SPACING OF ANCHORS & STRAPS WITH TANK MFG



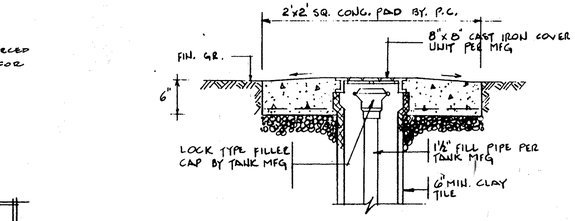
U.G. FUEL STORAGE TANK DETAIL
N.T.S.

GENERAL FUEL STORAGE TANK NOTES

1) The (2) 2000 Gallon Storage Tanks Shall Be Placed With A Minimum Of 5' Horizontal Clearance Between Them.
2) All Electrical Wiring To Tank, Pump And Electrical Panel To Be Placed In Rigid Conduit. Voltage Arrestors, Ground, Switching, Etc... Per MFG. Specifications And 1984 NEC.
3) All Fittings, Hook-Ups, Plumbing, Electrical Work, Fuel Tanks, And Hardware To Be Supplied And Installed By The Contractor.
4) New Fuel Tanks Shall Be Of Fiberglass (Owens-Corning Or Equal) Construction And Installed Per MFG. Specs. Backfill And Bedding Material Shall Be Pea-Gravel Type Material. Washed Clean, Naturally Rounded Aggregate Of 1/4" Nominal Size Is To Be Used. Do Not Use Sand Or Dirt BackFill.
5) Installation Must Be In Accordance With The Latest National Fire Protection Assoc. Regulations.

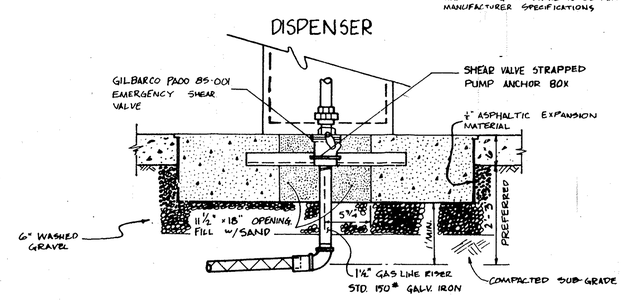


PAVING SECTION
STD DETAIL HCMDPW P-3
N.T.S.

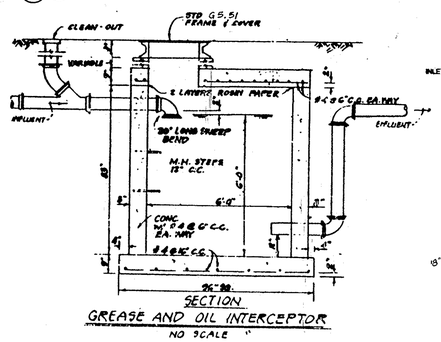


FUEL STORAGE TANK FILL CAP (TYP.)
N.T.S.

NOTE: ALL MOUNTING HARDWARE TO BE PER MANUFACTURER SPECIFICATIONS



CONCRETE FUEL PUMP ISLAND
N.T.S.



GREASE AND OIL INTERCEPTOR
NO SCALE

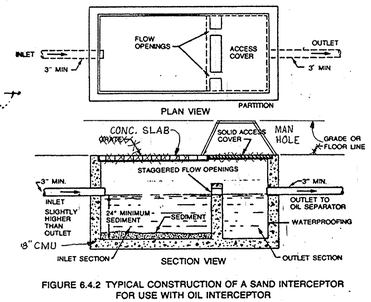
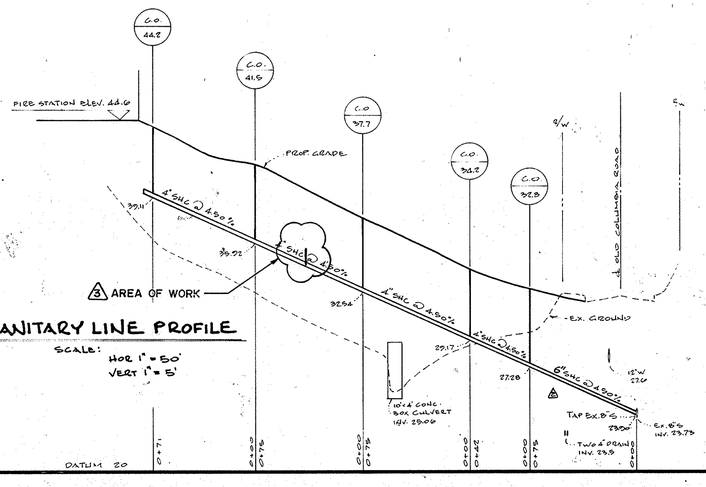
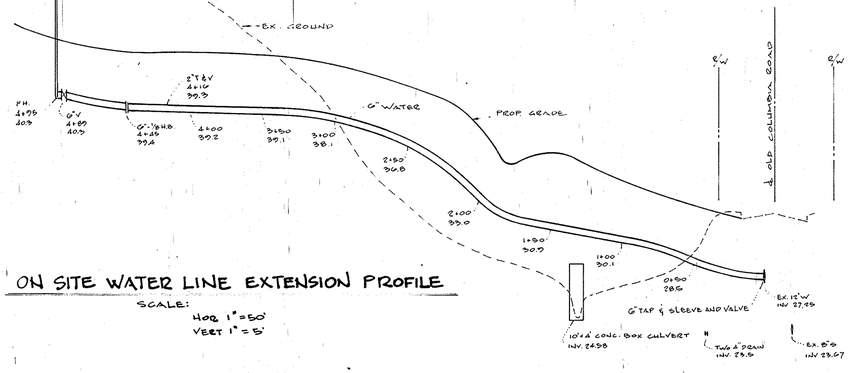


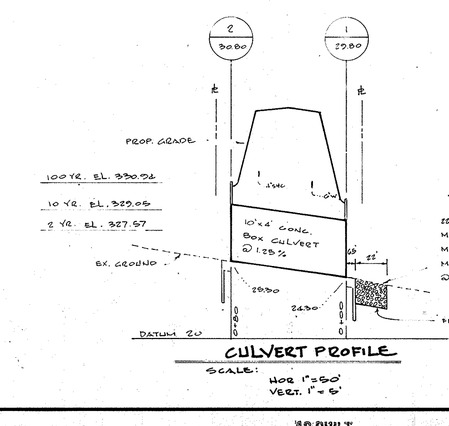
FIGURE 6.4.2 TYPICAL CONSTRUCTION OF A SAND INTERCEPTOR FOR USE WITH OIL INTERCEPTOR



SANITARY LINE PROFILE
SCALE: HOR 1"=50'
VERT 1"=5'



ON SITE WATER LINE EXTENSION PROFILE
SCALE: HOR 1"=50'
VERT 1"=5'



CULVERT PROFILE
SCALE: HOR 1"=50'
VERT. 1"=5'

15 L.F. UNGROUTED RIP-RAP
MEDIAN STONE DIAMETER = 10"
MAXIMUM STONE DIAMETER = 16"
MINIMUM BLANKET THICKNESS = 20"
@ 2.00%

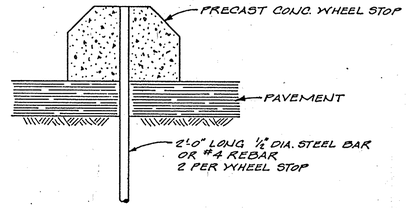
APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

OWNER:
DEPARTMENT OF PUBLIC WORKS OF
HOWARD COUNTY, MARYLAND
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

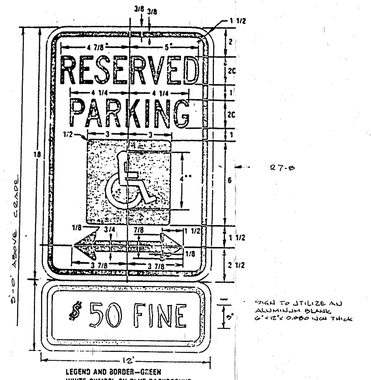
SDP-86-165c

PROFESSIONAL CERTIFICATE:
I HEREBY CERTIFY THAT THE INFORMATION CLOUDED AND LISTED UNDER REVISION #3 ON THIS DOCUMENT WAS PREPARED OR APPROVED BY ME.
8-31-15

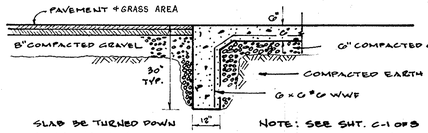
3 THIS SHEET WAS MODIFIED TO INCLUDE THE RAINWATER HARVESTING FACILITIES DESIGN INFORMATION. REFER TO THE SOUTH COUNTY RAINWATER HARVESTING AND WASH PAD DESIGN PACKAGE, CAPITAL PROJECT C-0313, ORIGINALLY DATED APRIL 2015, (LATEST REVISION).



CONC. WHEEL STOP DETAIL
NO SCALE



HANDICAPPED SIGN DETAIL
N.T.S.



SLAB BE TURNED DOWN AS SHOWN ALONG EDGES AWAY FROM BUILDING.

NOTE: SEE SHT. C-1 OF 8 FOR LOCATION OF ½" EXPANSION JOINT MATERIAL

EDGES OF ALL EXTERIOR SLABS ARE TURNED DOWN

TYPICAL SLAB SECTION
N.T.S.

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 3.7.86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 4-18-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4/18/86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 4/28/86
CHIEF BUREAU OF ENGINEERING — DATE 2/28/86

RIVERS PARK FIRE STATION
FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F 5509

Sheet Title: SITE DETAILS

Revisions	Drawn	Approved	Date
3 5/18/15 C & SHC AT FIRST & 3rd SAN 2 10/8/14 ADD SHEET 8 DELINEATE RAINWATER HARVESTING FACILITIES	J.L.F.	K.E.B.	6-12-86

REVISION No. 3 / REDLINE REVISIONS - SEE NOTE

Fedco Systems, Incorporated
Prospect Square, Suite 200
10903 Indian Head Highway
Fort Washington, MD. 20744
(301)292-0200
(301)932-1900
architects, engineers, landscape architects, planners, surveyors, construction managers

Sheet No. C3 OF 8
Project No. 85-0-034

AS-BUILT JOHN E. HARMS JR. & ASSOC. DEC. 1987

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SCALE 1"=30'

Lot 2 open space
Rivers Corporate Park
Section 1 Area 1

N 488,800 E 807,000

N 29° 41' 55" E 163.37'

INFILTRATION BASIN

SITE: 3.103 Ac.

LIMIT OF DISTURBANCE

Ex. 20' utility & drainage easement

PROPOSED 100 YR. FLOOD PLAIN ESHT

Ex. FLOOD PLAIN ESHT

N 30° 08' 45" W 374.28

N 59° 51' 15" E 105.00

S 29° 41' 55" W 371.62

N 60° 08' 05" W 370

N 59° 51' 15" E 105.00

S 29° 41' 55" W 361.49

N 29° 41' 55" E 131.78

S 25° 41' 55" W 131.60'

S 54° 01' 10" E 300.00'

VEH. SIGN LOCATION 15' OFF EDGE OF CURB 151.78

Ex. 15" CMP CULVERT

Ex. 30" CMP CULVERT

Ex. 18" CMP CULVERT

Ex. 24" CMP CULVERT

Ex. 10" SAN. MH

Ex. 8" SAN. MH

Ex. 8" SAN. MH

Ex. 8

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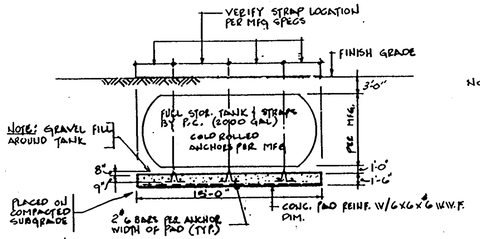

NOTE: G.C. SHALL VERIFY LOCATION, TYPE & SPACING OF ANCHORS & STRAPS WITH TANK MFG

NOTE: ALL TANKS TO HAVE REINFORCED BOTTOMS UNDER OPENINGS FOR STICK GAUGE.

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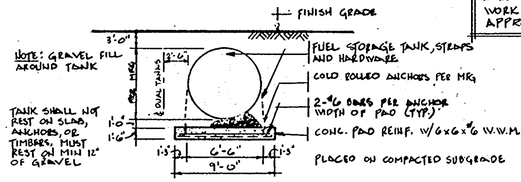
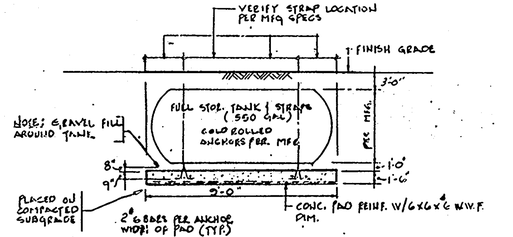


U.G. FUEL STORAGE TANK DETAIL (TYP)
N.T.S.



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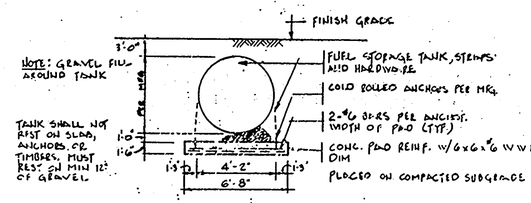

U.G. FUEL STORAGE TANK DETAIL
N.T.S.

GENERAL FUEL STORAGE TANK NOTES

1) The (2) 8000 Gallon Storage Tanks Shall Be Placed With A Minimum Of 5' Horizontal Clearance Between Them.
2) All Electrical Wiring To Tank, Pump And Electrical Panel To Be Placed In Rigid Conduit. Voltage Arrestors, Ground, Switching, Etc... Per NFG. Specifications And 1984 NEC.
3) All Fittings, Hook-Ups, Plumbing, Electrical Work, Fuel Tanks, And HardwareTo Be Supplied And Installed By The Contractor.
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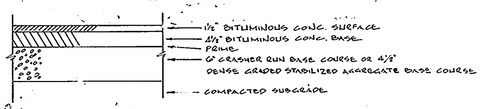
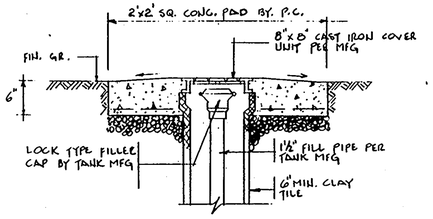
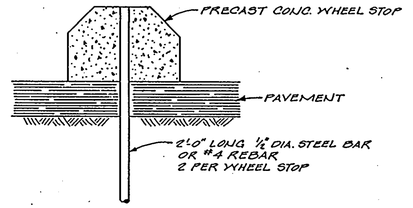
5) Installation Must Be In Accordance With The Latest National Fire Protection Assoc. Regulations.



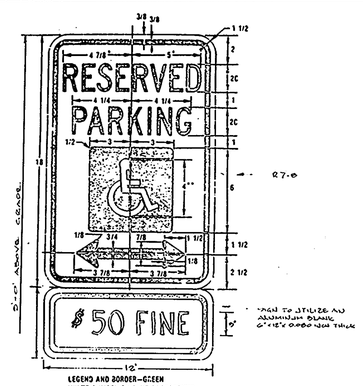
PAVING SECTION
STD DETAIL HCHDPW F-5
N.T.S.



FUEL STORAGE TANK FILL CAP (TYP.)
N.T.S.

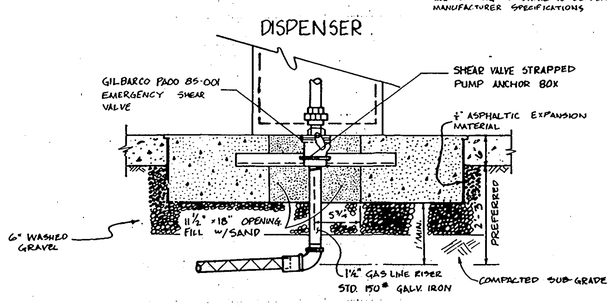


CONC. WHEEL STOP DETAIL
NO SCALE

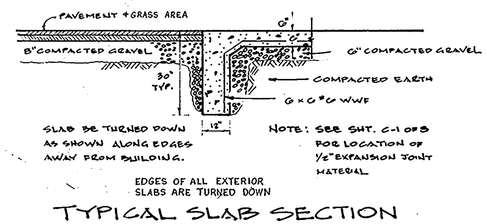


HANDICAPPED SIGN DETAIL
N.T.S.

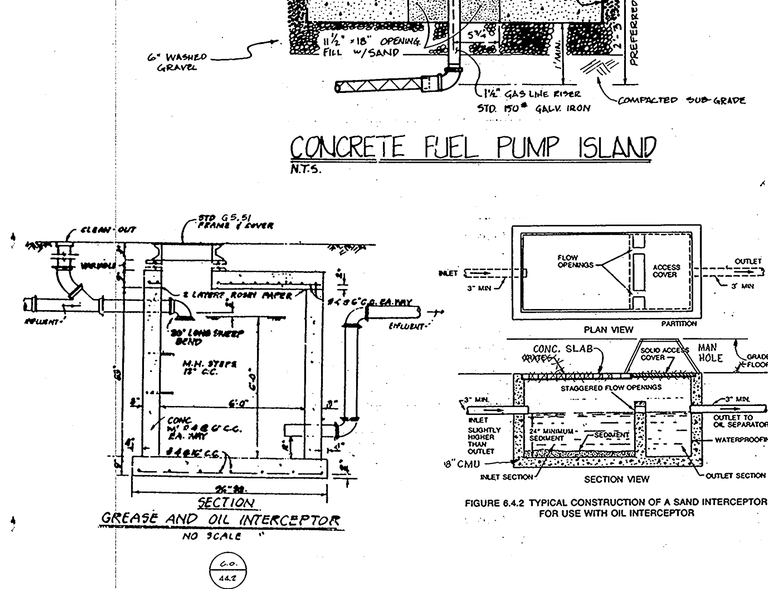
NOTE: ALL MOUNTING HARDWARE TO BE PER MANUFACTURER SPECIFICATIONS



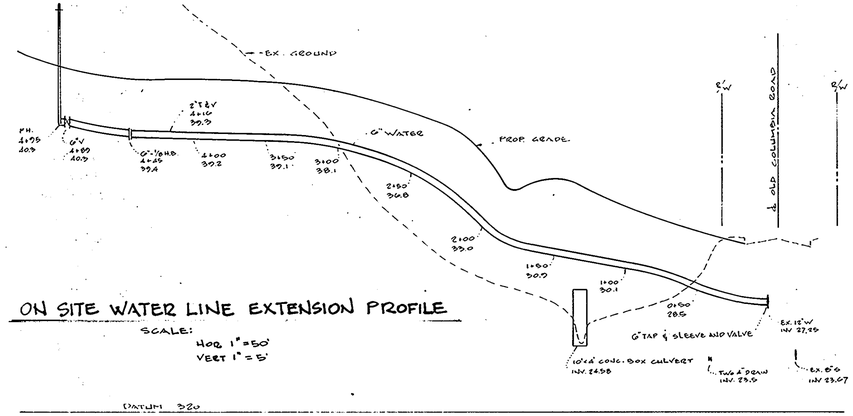
CONCRETE FUEL PUMP ISLAND
N.T.S.



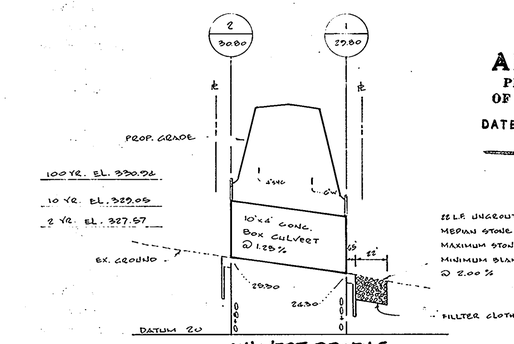
TYPICAL SLAB SECTION
N.T.S.



SANITARY LINE PROFILE
SCALE: HOR 1" = 50'
VERT 1" = 5'



ON SITE WATER LINE EXTENSION PROFILE
SCALE: HOR 1" = 50'
VERT 1" = 5'



CULVERT PROFILE
SCALE: HOR 1" = 50'
VERT 1" = 5'

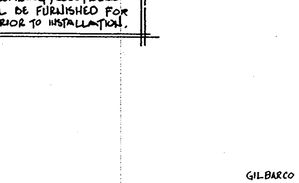


FIGURE 6.4.2 TYPICAL CONSTRUCTION OF A SAND INTERCEPTOR FOR USE WITH OIL INTERCEPTOR

GREASE AND OIL INTERCEPTOR
NO SCALE

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

STATE OF MARYLAND

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 3.7.86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR — DATE 4-18-86
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4/18/86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 2/28/86
CHIEF BUREAU OF ENGINEERING — DATE 2/28/86

OWNER:
DEPARTMENT OF PUBLIC WORKS OF HOWARD COUNTY, MARYLAND
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

SDP-86-165c

AS-BUILT JOHN E. HARMS JR. & ASSOC. DEC. 1987

Revisions

3/5/86	ADDED SIGN DETAIL & SAND		
2/28/86	ADDED WOOD BOX & DN TABLE		
2/14/86	FIRST SUBMISSION		
Drawn	Approved	Date	
C.F.T.		2-14-86	

Sheet Title: SITE DETAILS

RIVERS PARK FIRE STATION
FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F 5509

Fedco Systems, Incorporated
Prospect Square, Suite 200
10903 Indian Head Highway
Fort Washington, MD. 20744
(301)292-0200
(301)932-1900

architects, engineers, landscape architects, planners, surveyors, construction managers

FSI

Sheet No. C3 OF 8

Project No. 85-0-036

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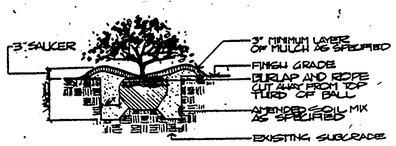
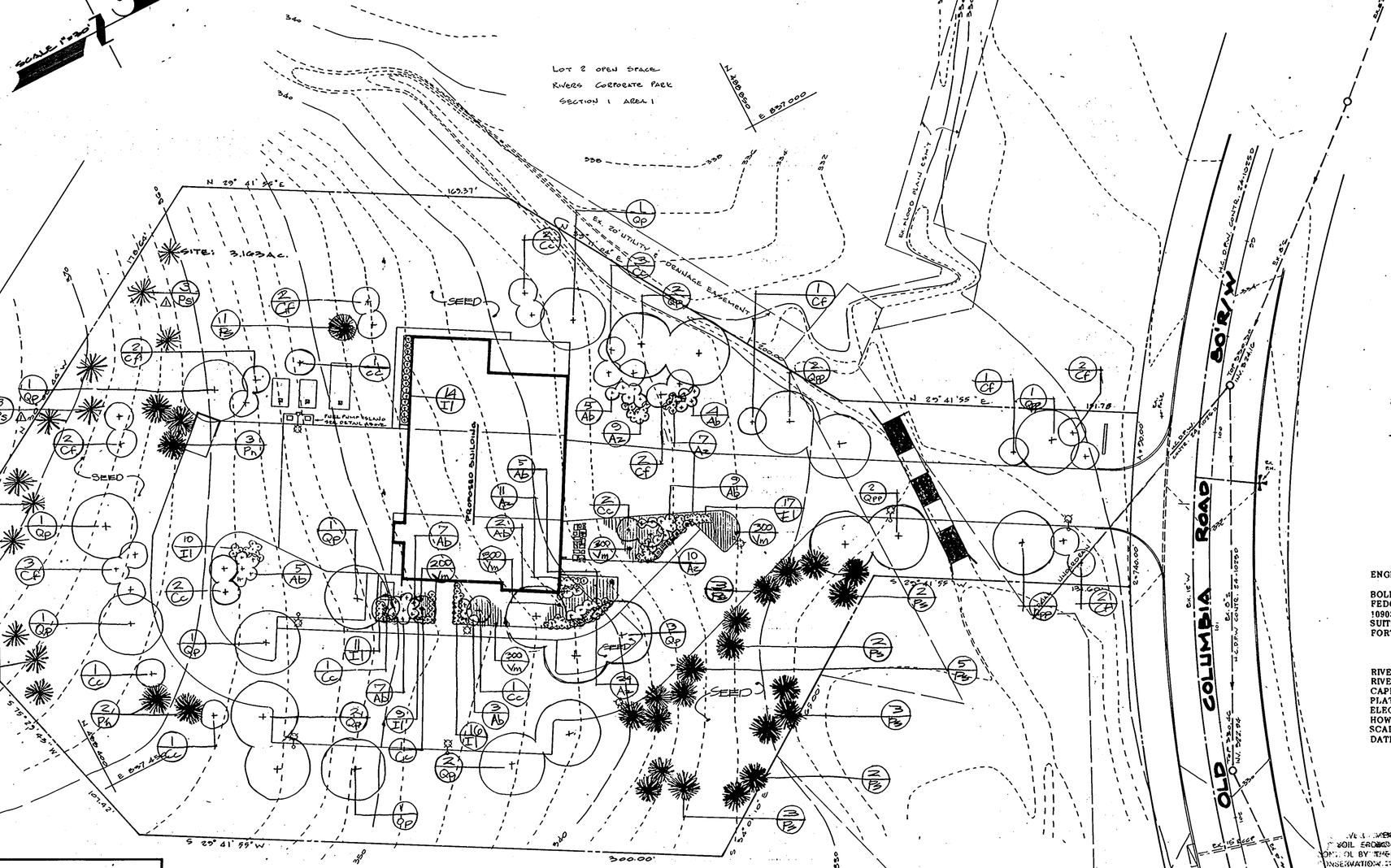
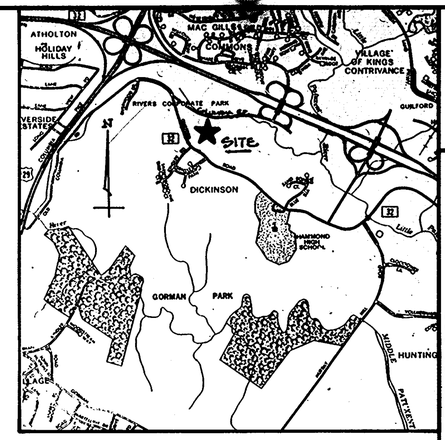


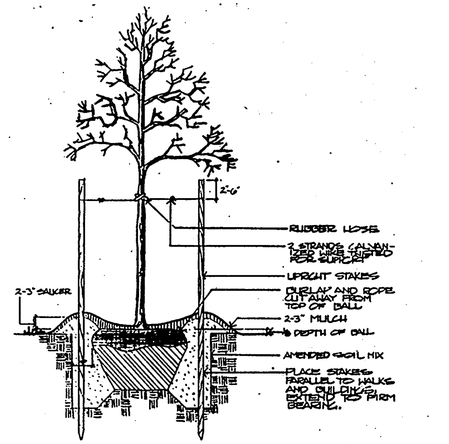
TYPICAL SHRUB PLANTING DETAIL
NO SCALE

SCALE 1"=50'





LOCATION MAP 1"=2000'



TYPICAL TREE STAKING DETAIL
NO SCALE

KEY	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	METH.	SPCG.	CMNTS.
QPP	9	Quercus Palustris	Pin Oak	2½-3" Cal.	B+B		Clear 5' trunk
Qp	13	Quercus phellos	Willow Oak	2½-3" Cal.	B+B		Clear 5' trunk
Cc	15	Cercis canadensis	Eastern Redbud	6-8' High	B+B		
Cf	17	Cornus florida	Flowering Dogwood	6-8' High	B+B		
Ps	33	Pinus strobus	Eastern White Pine	6-8' High	B+B	15' O.C.	
Ab	70	Abelia grandiflora	Glossy abelia	18-24" ht	Cont.	5' O.C.	
Az	61	Azalea Delaware Valley White	Delaware Valley White Azalea	12-15" ht	Cont.	3' O.C.	
Ci	76	Ilex cornuta Rotunda	Dwarf Chinese Holly	12-15" ht	Cont.	3' O.C.	
Vm	1350	Vinca minor	Periwinkle	3" Pots		8" O.C.	
Pn	5	Pinus nigra	Austrian Pine	6-8' High	B&B		

1=30 scale 30 0 30 60 feet

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 2/28/86
CHIEF, BUREAU OF ENGINEERING — DATE 2/28/86

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER — DATE 3-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
PLANNING DIRECTOR — DATE 4-18-86
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-18-86

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

NOTES:

1. This sheet is to be used for planting purposes only.
2. All plant materials are to be tagged with a label bearing the botanical name and common name. All tags are to remain on plants until release of final use and occupancy permit for the building.
3. See written specifications for planting details, seeding and sod, and additional requirements.
5. Provide shredded hardwood mulch as indicated around shrubs.
6. All edging to be cut sod unless otherwise shown.

SDP-86-165c

ENGINEER
BOLLING W. HAXALL, JR.
FEDCO SYSTEMS, INC.
10903 INDIAN HEAD HIGHWAY
SUITE 200
FORT WASHINGTON, MARYLAND 20744

OWNER
DEPARTMENT OF PUBLIC WORKS OF HOWARD COUNTY, MARYLAND
9250 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

RIVERS CORPORATE PARK SECTION 1, AREA 1, PHASE 1
RIVERS PARK FIRE STATION NO. 10
CAPITAL PROJECT F5509
PLAT NO. 5079
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND
SCALE 1"=50'
DATE: DECEMBER 20, 1985

Revisions	Date
2/28/86 Landscape Plan Revised per Howard County Comments	2-28-86
2/27/86 Landscape Revisions	2-27-86
Drawn E.F.	Approved E.C.S.	Date 2-12-86

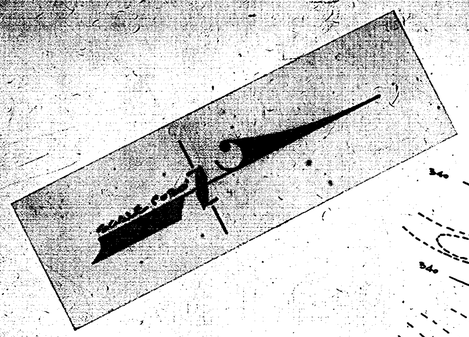
Sheet Title: LANDSCAPE PLAN

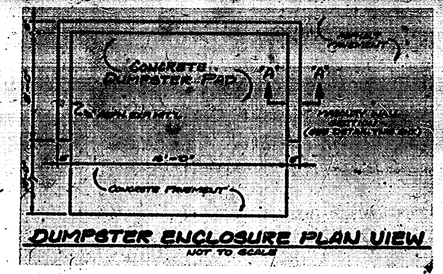
RIVERS PARK FIRE STATION
FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F 5509

Fedco Systems, Incorporated
Prospect Square, Suite 200
10903 Indian Head Highway
Fort Washington, MD. 20744
(301)292-0200
(301)932-1900

architects. engineers. landscape architects.
planners. surveyors. construction managers

Sheet No. C4 OF 8
Project No: 23-0-034

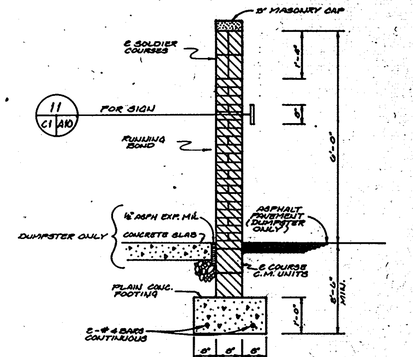




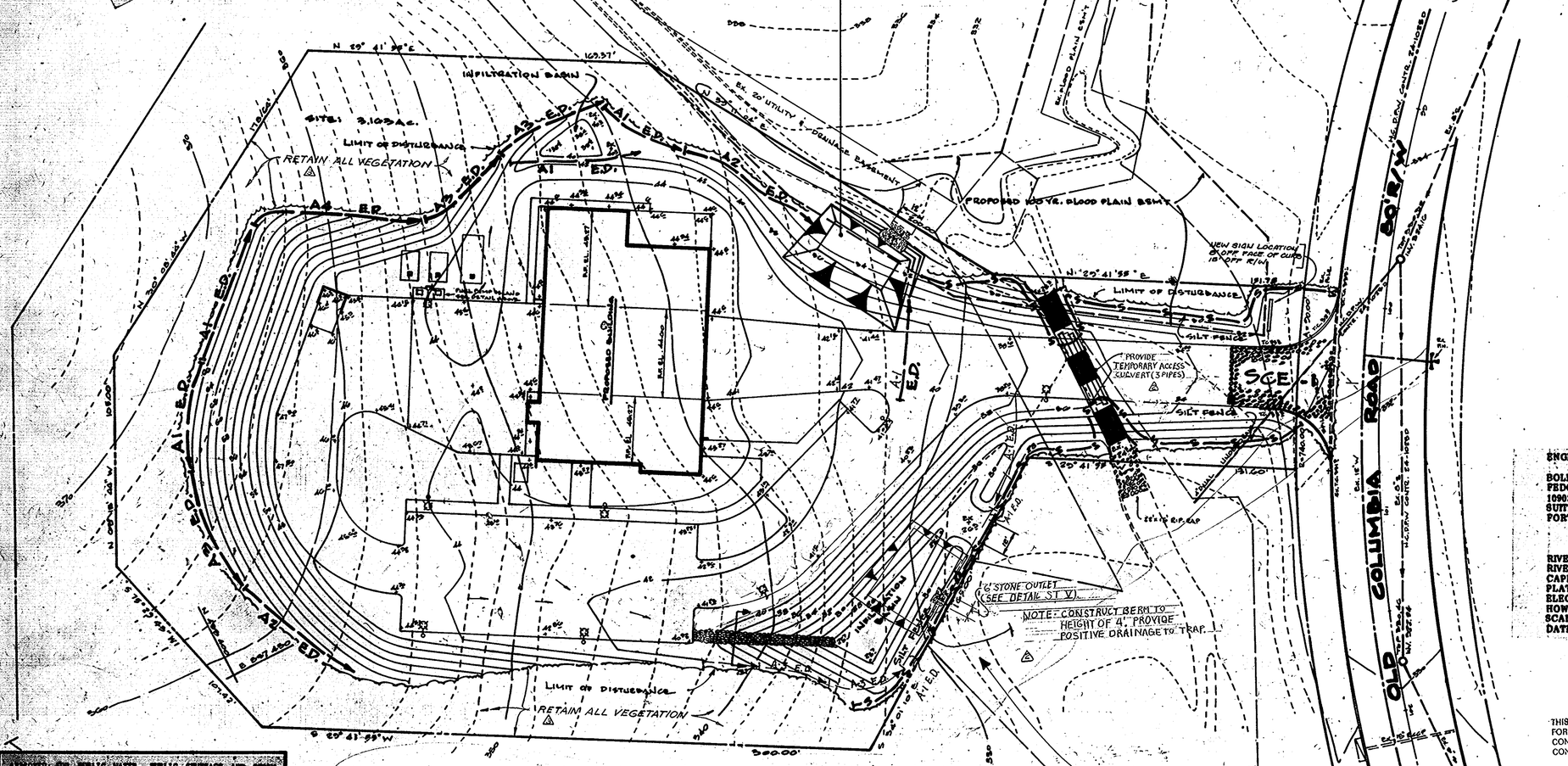
STONE OUTLET SEDIMENT TRAP (1)

MAX. D.A.	=	0.90 AC
VOL. REQ'D	=	1620 CF
VOL PROV'D	=	2260 CF
DIMENSIONS (MID)	=	48'x20'x4'
(BOTTOM)	=	38'x10'
OUTLET L.	=	12"
OUTLET EL.	=	331.2
CLEANOUT EL.	=	329.2
BOTTOM EL.	=	327.2

LOCATION MAP 1"=2000'



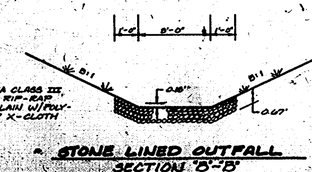
SIGN AND MASONRY DUMPSTER ENCLOSURE
WALL SECTION "A-A"
NOT TO SCALE



FLOOD PLAIN
STORM OUTLET SED TRAP 2
MAX. D.A. = 0.95Ac.
VOL REQ'D = 1674 CF
VOL. PROVIDED: 1677 CF
DIMENSIONS (MID) = 45'x30'x1.3
(BOTTOM) = 41.7'x 27'
OUTLET L.= 6'
OUTLET EL = 328.2
CLEANOUT EL = 327.2
BOTTOM EL = 326.2

NOTE: EXCESS SPOIL TO BE TAKEN TO A SITE WITH AN APPROVED SED-N-EROT CONTROL PLAN.

NOTE: SEED SHALL NOT BE USED FOR STABILIZATION PURPOSED BETWEEN NOV. 1 AND MARCH 15 ANCHORED MULCH ONLY SHALL BE USED.



STONE LINED OUTFALL
SECTION "B-B"
NOT TO SCALE

1"=30' Scale 30 0 30 60 Feet

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 2/28/86
CHIEF, BUREAU OF ENGINEERING — DATE 2/28/86

APPROVED: WATER AND SEWER SYSTEMS ARE PUBLIC
HOWARD COUNTY HEALTH DEPARTMENT
DIRECTOR — DATE 3-7-86

APPROVED: ROADS UNDER JURISDICTION OF PLANNING AND ZONING
DIRECTOR — DATE 4-18-86
CHAIRMAN, DEPARTMENT OF PLANNING AND ZONING — DATE 4-18-86

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE SOIL CONSERVATION DISTRICT.
Approved: Stephen K. Hinkle Date 3/4/86
S.C.D.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

ENGINEER
BOLLING W. HAXALL, JR.
FEDCO SYSTEMS, INC.
10903 INDIAN HEAD HIGHWAY
SUITE 200
FORT WASHINGTON, MARYLAND 20744

OWNER
DEPARTMENT OF PUBLIC WORKS OF HOWARD COUNTY, MARYLAND
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

RIVERS CORPORATE PARK SECTION 3, AREA 1, PHASE 1
RIVERS PARK FIRE STATION NO. 10
CAPITAL PROJECT FS509
PLAT NO. 5079
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND
SCALE 1"=30'
DATE: DECEMBER 20, 1985

STATE OF MARYLAND — BOLLING W. HAXALL, JR. — No. 7883 — REGISTERED PROFESSIONAL ENGINEER

Fedco Systems, Incorporated
Prospect Square, Suite 200
10903 Indian Head Highway
Fort Washington, MD. 20744
(301)292-0200
(301)932-1900

fsi

architects, engineers, landscape architects, planners, surveyors, construction managers

RIVERS PARK FIRE STATION
FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F-5509

SEDIMENT CONTROL PLAN

C5
6 OF 8

SDP-86-165c

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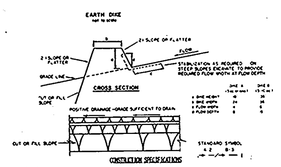
CHARLES COUNTY SOIL CONSERVATION DISTRICT
LA PLATA, MARYLAND
APPROVED
DATE 2-18-86

EARTH DIKE



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EQUIPMENT DURING CONSTRUCTION.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. ALL DIKES SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
4. DIKE OUTLET SHALL BE STABILIZED. (SEE SCE)
5. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
6. EARTH DIKES SHALL HAVE AN EXCAVATED FLOW CHANNEL WITH A MINIMUM OF 5% GRADE.
7. DIKES CONSTRUCTED TO A DESIGNED TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN SHALL BE CONSTRUCTED ON THE DOWNSLOPE AREA ABOVE THE DIKE AND NOT IMMEDIATELY BEHIND IT.
8. STABILIZATION SHALL BE: (ED) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH (IF NOT IN SEEDING SEASON, SEE FLOW CHANNEL AS PER THE CHART BELOW.

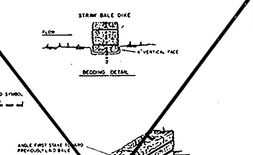
FLOW CHANNEL STABILIZATION

TYPE OF DEVICE	CHANNEL GRADE	FOR A	FOR B
1	5-9.0%	Sod and Straw Mulch	Sod and Straw Mulch
2	3.1-5.0%	Sod and Straw Mulch	Sod (over 3/4" Gravel Excelsior, 100' Roll)
3	5.1-8.0%	Sod with Anti-Sp Soil Stone	Lined Rip-Rap 6-8"
4	8.1-10%	Lined Rip-Rap 6-8"	Engineering Design

A. Stone to be 2" inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil, with no more than 1/3 of the stone's diameter buried.
B. Rip Rap to be 6" to 8" inches in a layer at least 2 inches thickness and pressed into the soil.
C. Erosion control blankets can be substituted for sod and straw mulch.
7. Periodic inspection and required maintenance must be provided after each rain event.

EARTH DIKE | ED-1

STRAW BALE DIKE



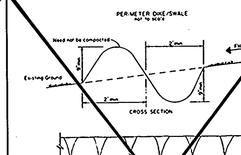
CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR IN THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR INCHES AND PLACED SO THAT BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR REINFORCING RODS PER BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO AID IN FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR SPILL STORM FLOW OR DRAINAGE.

Max. Drainage Area Limit 2 Acres

STRAW BALE DIKE | SBD-1

PERIMETER DIKE/SWALE



CONSTRUCTION SPECIFICATIONS

1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DISTURBED AREAS FROM A DISTURBANCE AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DISTURBED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITIES.
4. ALL TRAPS SHALL HAVE OBSTRUCTIONS REMOVED OR OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIKE/SWALE.
5. THE SWALE SHALL BE EXCAVATED OR FORMED TO LINE, GRADE, AND CROSS SECTION AS SHOWN ON THE PLANS AND SHALL BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE CHART BELOW.

FLOW CHANNEL STABILIZATION

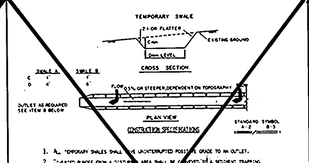
TYPE OF DEVICE	CHANNEL GRADE	A (C or D soil)	B (C or D soil)
1	0.5-3.0%	Sod and Straw Mulch	Sod and Straw Mulch
2	3.1-5.0%	Sod and Straw Mulch	Sod (over 3/4" Gravel Excelsior, 100' Roll)
3	5.1-8.0%	Sod with Anti-Sp Soil Stone	Lined Rip-Rap 6-8"
4	8.1-10%	Lined Rip-Rap 6-8"	Engineering Design

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

Maximum Drainage Area Limit 5 Acres

PERIMETER DIKE/SWALE | PDS-1

TEMPORARY SWALE



CONSTRUCTION SPECIFICATIONS

1. ALL "TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DISTURBED RUNOFF FROM A DISTURBANCE AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DISTURBED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITIES.
4. ALL TRAPS SHALL HAVE OBSTRUCTIONS REMOVED OR OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIKE/SWALE.
5. THE SWALE SHALL BE EXCAVATED OR FORMED TO LINE, GRADE, AND CROSS SECTION AS SHOWN ON THE PLANS AND SHALL BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
8. STABILIZATION SHALL BE AS PER THE CHART BELOW.

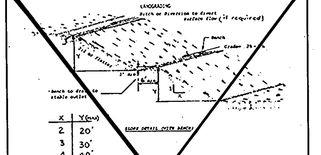
FLOW CHANNEL STABILIZATION

TYPE OF DEVICE	CHANNEL GRADE	A (C or D soil)	B (C or D soil)
1	0.5-3.0%	Sod and Straw Mulch	Sod and Straw Mulch
2	3.1-5.0%	Sod and Straw Mulch	Sod (over 3/4" Gravel Excelsior, 100' Roll)
3	5.1-8.0%	Sod with Anti-Sp Soil Stone	Lined Rip-Rap 6-8"
4	8.1-10%	Lined Rip-Rap 6-8"	Engineering Design

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

TEMPORARY SWALE | TS-1

LANDGRADING



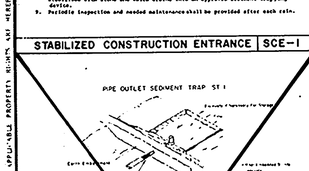
X	Y Grade
2	20°
3	30°
4	40°

Conversion to Percentages

1. All graded or disturbed areas shall be protected during clearing and construction in accordance with the approved sediment control plan until they are permanently stabilized.
2. All sediment control practices and measures shall be constructed, applied and maintained in accordance with the minimum standards of the Maryland Sediment Control Law and Regulations and this sediment control plan.
3. All cut and fill slopes shall be stabilized as soon as possible after grading is completed. All necessary measures for the establishment of vegetation shall be installed to assure adequate vegetative stabilization.
4. All sediment control practices and measures shall be maintained in a functional condition until areas to be filled shall be graded, grubbed and final cover established.
5. Sediment basins or other sediment control devices shall be installed to a minimum depth of 4 inches below the lowest point of discharge.
6. Fill material shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other problems. Fill intended to support buildings, structures, conduits, roads, etc. shall be compacted in accordance with local requirements or codes.
7. All fill material shall be free of trash, debris, stumps, roots, frozen soil or other objectionable materials.
8. Except for approved landfills, fill material shall be free of rock, boulders, rocks, or soil fragments greater than 6 inches in diameter. Useful fragments may be used in the construction of fills if approved by the inspection agency.
9. Fill material shall be placed in horizontal layers not to exceed 8 inches in depth.
10. Fill shall not be placed on a frozen foundation.
11. Fill shall be placed and compacted to minimize all forms of settlement.
12. Fill slopes shall not be steeper than 2:1 (horizontal to vertical). All slopes in accordance with these regulations shall be stabilized as soon as practicable after grading is completed. Fill slopes shall be keyed into stable soil or other approved method.
13. Fill shall not be placed on unsuitable soils or soils unsuitable for supporting such fill, such as frozen soils, soils with excessive organic content, highly plastic clays, or marshes.
14. Excess or unsuitable fill material shall be disposed of in a manner approved by the inspection agency.
15. Diversion, berms, terrace and swale areas shall be shown on the plans and shall conform to the provisions of this Standard and Specifications.

LANDGRADING | LG-1

STABILIZED CONSTRUCTION ENTRANCE

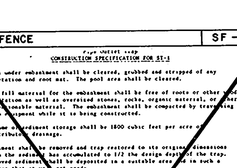


CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) feet minimum, but not less than the full width at all points where ingress or egress occurs.
5. Filter - Will be placed over the entire area prior to placing of stone. 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 slopes 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 cleaning of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. 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 device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE | SCE-1

SILT FENCE



CONSTRUCTION SPECIFICATIONS FOR FILTER FENCE (SF-1 thru 3)

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 10' AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

POSTS: STEEL EITHER T OR U TYPE OR 1" WOODEN STAKES

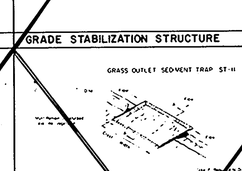
FENCE: WOVEN WIRE (14½ GA. MINIMUM) 6' LONG OR THE LENGTH OF THE ROLL MINIMUM

FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL

PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

SILT FENCE | SF-1

GRADE STABILIZATION STRUCTURE



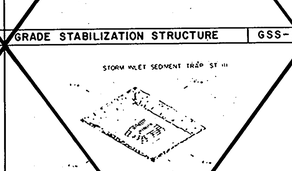
CONSTRUCTION SPECIFICATIONS

1. THE PIPE SLOPE DRAIN SHALL HAVE A SLOPE OF 8% OR STEEPER.
2. TOP OF THE EARTH DIKE OVER THE INLET PIPE AND ALL SIDES SHALL BE HIGHER THAN THE TOP OF THE PIPE. SHALL BE AT LEAST ONE FOOT HIGHER THAN THE TOP OF THE PIPE.
3. USE 0.3 FOOT OF DIKE HEIGHT FOR SETTLEMENT.
4. SOIL UNDERNEATH AND UNDER THE SLOPE PIPE SHALL BE HAND TAMPED IN 4" LAYERS.
5. THE CONNECTION BE CORRUGATED METAL PIPE WITH WATERTIGHT 2" INCH CONNECTING BANDS AT ALL POINTS OF CONNECTION.
6. RIPRAP SHALL BE PLACED IN A LAYER AT LEAST 8 INCHES THICK AND PRESSED INTO THE SOIL.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

Maximum Drainage Area 5 Acres

GRADE STABILIZATION STRUCTURE | GSS-2

GRADE STABILIZATION STRUCTURE



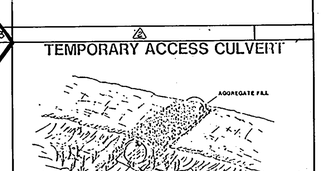
CONSTRUCTION SPECIFICATIONS

1. THE PIPE SLOPE DRAIN SHALL HAVE A SLOPE OF 8% OR STEEPER.
2. TOP OF THE EARTH DIKE OVER THE INLET PIPE AND ALL SIDES SHALL BE HIGHER THAN THE TOP OF THE PIPE. SHALL BE AT LEAST ONE FOOT HIGHER THAN THE TOP OF THE PIPE.
3. USE 0.3 FOOT OF DIKE HEIGHT FOR SETTLEMENT.
4. SOIL UNDERNEATH AND UNDER THE SLOPE PIPE SHALL BE HAND TAMPED IN 4" LAYERS.
5. THE CONNECTION BE CORRUGATED METAL PIPE WITH WATERTIGHT 2" INCH CONNECTING BANDS AT ALL POINTS OF CONNECTION.
6. RIPRAP SHALL BE PLACED IN A LAYER AT LEAST 8 INCHES THICK AND PRESSED INTO THE SOIL.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

Maximum Drainage Area 5 Acres

GRADE STABILIZATION STRUCTURE | GSS-3

TEMPORARY ACCESS CULVERT



TAC 1

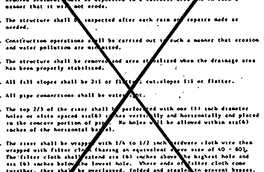
PIPE OUTLET SEDIMENT TRAP

For Construction Specification see sheet 15 OF 8

The riser shall be anchored with either a concrete base or steel plate base to prevent flotation. For concrete bases the depth shall be 12 inches for the riser embedded two (2) inches. A 1/4 inch metal anti-vortex metal plate shall be attached to the riser by a continuous weld around the bottom to form a watertight connection and then place two (2) feet of stone, gravel, or tamped earth on the plate.

PIPE OUTLET SEDIMENT TRAP | ST-I

CONSTRUCTION SPECIFICATIONS FOR



Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.

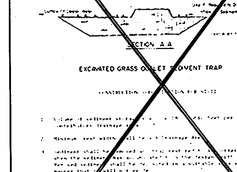
2. Fill material for the embankment shall be free of roots or other woody vegetation as well as oversized stones, rocks, organic material, or other objectionable material. The embankment shall be compacted by traversing equipment while it is being constructed.
3. Volume of sediment storage shall be 1800 cubic feet per acre of contributing drainage.
4. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
5. The structure shall be inspected after each rain and repairs made as needed.
6. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
7. The structure shall be removed and area stabilized when the drainage area has been properly stabilized.
8. All fill slopes shall be 2:1 or flatter, outslopes 3:1 or flatter.
9. All pipe connections shall be watertight.
10. The top 2/3 of the riser shall be perforated with one (1) inch diameter holes or slots spaced evenly about the riser vertically and horizontally and placed in the concrete portion of pipe. No holes will be allowed within six(6) inches of the horizontal base.
11. The riser shall be wrapped with 1/4 to 1/2 inch hardware cloth wire then wrapped with filter cloth. Overlap on reverse side shall be at least 40 - 80%. The filter cloth shall extend six (6) inches above the highest hole and six (6) inches below the lowest hole. The filter cloth shall be secured together, they shall be overlapped, folded and stapled to prevent bypass.
12. Straps or connecting bands shall be used to hold the fabric cloth and wire mesh in place. Place one strap at the top and one at the bottom of the cloth.
13. Fill material around the pipe spillway shall be hand compacted in four(4) inch layers. A minimum of two (2) feet of hand compacted backfill shall be placed over the pipe spillway before operating with any heavy equipment.
14. The crest shall be anchored with either a concrete base or steel plate base to prevent flotation. For concrete bases the depth shall be 12 inches with the riser embedded two (2) inches. A 1/4 inch metal anti-vortex metal plate shall be attached to the riser by a continuous weld around the bottom to form a watertight connection and then place two (2) feet of stone, gravel, or tamped earth on the plate.

THIS SECTION IS APPLICABLE

Maximum Drainage Area: 2 Acres

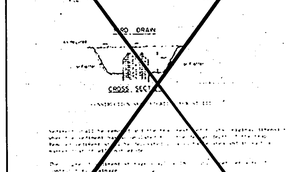
CONSTRUCTION SPECIFICATIONS FOR | ST-I

GRASS OUTLET SEDIMENT TRAP



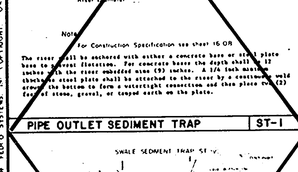
GRASS OUTLET SEDIMENT TRAP | ST-2

STORM INLET SEDIMENT TRAP



STORM INLET SEDIMENT TRAP | ST-III

SWALE SEDIMENT TRAP



CONSTRUCTION SPECIFICATIONS FOR ST-IV

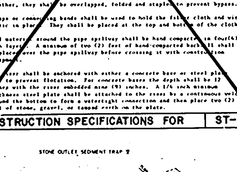
1. The swale sediment trap shall be constructed in the location shown and to the dimensions specified on the plans. The trap shall have a minimum storage volume of 1800 cubic feet of storage for each acre of drainage area.
2. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ of the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
3. The structure shall be inspected after each rain and repairs made as needed.
4. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
5. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

The swale sediment trap will be properly maintained and the swale stabilized.

Maximum Drainage Area: 2 Acres

SWALE SEDIMENT TRAP | ST-IV

STONE OUTLET SEDIMENT TRAP



CONSTRUCTION SPECIFICATIONS FOR ST-V

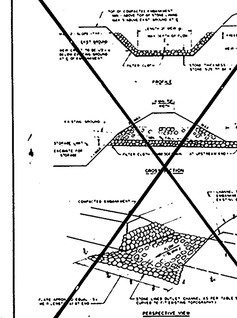
Use a well graded mixture of stone 2" or larger as indicated on the plans. Stone used in the section shall be small riprap 4" to 7" inch or gravel filled gabions. Place stone over the entire outlet.

1. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ of the design depth of the trap.
2. The structure shall be inspected after each rain and repairs made as needed.
3. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
4. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

STONE OUTLET SEDIMENT TRAP | ST-V

RIPRAP OUTLET SEDIMENT TRAP



RIPRAP OUTLET SEDIMENT TRAP | SV-VI

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

COUNTY HEALTH OFFICER — DATE 3-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR — DATE 4-18-86

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 4-18-86

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

DIRECTOR — DATE 2-28-86

CHIEF BUREAU OF ENGINEERING — DATE 2/28/86

LIST OF STANDARD SYMBOLS

Earth Dike	A-E / B-S
Straw Bale Dike	SBD
Silt Fence	S / S
Temporary Swale	A-E / B-S
Stabilized Construction Entrance	SCE
Grade Stabilization	GSS-1 thru GSS-3
Pipe Slope Drain	GSS-1 thru GSS-3
Perimeter Dike/Swale	PDS
Inlet Protection	
Diversion	
Grassed Waterway	
Lined Waterway	
Rock Outlet Protection	
Subsurface Drain	
Limit of Work	
Existing Contour	50
Proposed Finished Contour	50
Proposed Finished Elevation	89.2
Drainage Divides	
Drainage Flow	

Notes:

1. Arrows point downslope or to the outlet.
2. Dike and diversion symbols shall have a cross mark to clearly show where the structure begins and ends.

Total Site Area = 3.16 Ac.

Total Disturbed Area = 2.45 Ac.

Total Undisturbed Area = 0.71 Ac.

Construction Time Schedule:

1) Clear as necessary to Construct Perimeter Sediment Control Devices(i.e.-E.S. &I. Fence, SCE, Stone Outlet, Trapsand Temporary Stream Crossing. — 1 wk
2) Clear & Grub. — 1 wk.
3) Rough Grade Note: Be Sure to Direct Runoff around Infiltration Areas. Reseed Tops of CMPS and Construct 48" RCPs with Headwalls as shown. — 2 wks.
4) Construct Building and Complete Site Work. Construct C/G Entrance and pave Site. — 6 mos.
5) Fine Grade & Stabilize Site. Convert temp (2) into Permanent infiltration devices. — 3 days
6) Remove Sediment Control Devices upon approval by Field Inspector & Stabilized Disturbed Areas. — 3 days

The developer is responsible for the acquisition of all required easements, right, and/or rights-of-way pursuant to the discharge from the sediment and erosion control practices, storm water management practices and the discharge of storm water onto or across and grading or other work to be performed on adjacent or downstream properties affected by this plan.

Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a.) seven calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1) and b.) fourteen days as to all other disturbed or graded areas on the project site. The inplace sediment control measures will be maintained on a continuing basis until the site is permanently stabilized and all permit requirements are met.

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; and

Approval shall be requested upon final stabilization of all sites with disturbed areas in excess of 2 acres before removal of controls.

OWNER'S/DEVELOPER'S CERTIFICATION

"I/We hereby certify that I have reviewed this erosion and sediment control plan and that all clearing, grading, construction and/or development will be done pursuant to this plan and that any responsible personnel involved in the construction project will have a certificate of attendance at a Department of Natural Resources approved training program for the control of sediment and erosion before beginning the project."

Signature [illegible] Date 2/28/86

Name Walter A. Bolton, Jr. Title Chief Equip. Phone No. 992-2040

Firm DEPT. OF PUBLIC WORKS Complete Address HOWARD COUNTY

ENGINEER'S CERTIFICATE

I hereby certify that this plan of development and the plan for control of silt and erosion control meet the requirements, standards and specifications of the Soil Conservation District. I hereby certify that all proposed grading and other work meet the requirements of the County Grading and Sediment Ordinance.

Date: 12/19/85

Engineer: [illegible]

Phone: (301) 292-0200

NOTE:
In accordance with the Maryland Sediment Control Law, Natural Resources Article 8-1103.1; a Foreman, Superintendent, or Project Engineer, who is in charge of on-site clearing and grading operations or sediment control must have a certificate of attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion. For additional information contact: Mr. Gary C. Stanton, Sediment Control Office, Water Resources Administration, Taves State Office Building, Annapolis, Maryland 21401 (301) 269-3871

SEDIMENT CONTROL NOTES

1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2439)
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 1983 MARYLAND STANDARDS and SPECIFICATIONS FOR SOIL EROSION and SEDIMENT CONTROL.
3) Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS and SPECIFICATIONS FOR SOIL EROSION and SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52.) Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6) All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector
7) Site Analysis:
   Total Area of Site 3.16 Acres
   Area Disturbed 2.45 Acres
   Area to be roofed or paved 1.64 Acres
   Area to be vegetatively stabilized 0.77 Acres
   Total Cut ____ Cu. yds
   Total Fill ____ Cu. yds
   Offsite waste/borrow area location ____
8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10) 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.

Temporary stabilization (to conform to pages 50.01 - 50.05 of the "Standards and Specifications").

Fertilizer: 600 lbs/ac. or 15 lbs/1000 sq. ft., 10-10-10 or equivalent. Lime if needed for high acid soils.

Seed Bed: Disc, rake or otherwise loosen soil.

Lime: 46 lbs/1000 SF Dolomitic Lime Stone.

Seeding: Seed uniformly with cyclone seeder, drill, cultipaker or hydroseeder.

Seed Mixture: Qbs/1000 sq. ft.)

Spring (2/1-4/30) (rye-1.6 and lespedeza-0.5) or perennial ryegrass - 0.5 and ryegrass - 0.5).
Fall (8/15-11/15) rye (3.2) or perennial ryegrass (0.92).
Winter (12/1-1.31 sod or mulch only.

Mulch: Straw 70-90 lbs/1000 sq. ft.) woodfiber or paper-fibre 35 lbs/1000 sq. ft.) or netting.

Permanent stabilization (to conform to pages 51.01 - 51.08 of the "Standards & Specifications").

Seed bed: Disc, rake or otherwise loosen soil to depth of 3 in. Lime and fertilizer according to soil tests or as follows

Lime: 92 lbs/1000 sq. ft. Dolomite Limestone

Fertilizer: 23 lbs/1000 sq. ft. 10-10-10 or equivalent.

Seeding: Seed uniformly with cyclone seeder, drill, cultipaker or hydroseeder.

Mulch: Straw 70-90 lbs/1000 sq. ft.) wood fiber or paper fiber 35 lbs/1000 sq. ft.) or netting.

Seed Mixture:

Mix. No.	Seeding Mixtures for Low-Certified Seed if available	Seeding Rate/Acre	Rate Lbs/1000 sq. ft.	Spring 3/1-4/30	Summer 5/1-8/14	Fall 8/15-10/3
1.	"Kentucky 31" Tall Fescue"	100	2.30	X	-	X
2.	"Kentucky 31" Tall Fescue"	100	2.30	-	X	-
	Weeping Lovegrass	3	.03			
3.	"Kentucky 31" Tall Fescue"	50	1.15	X	-	-
	Kobe or Lespedeza (b) unscarified	15	.34	-	-	X
4.	"Kentucky 31" Tall Fescue"	40	.92	X	-	X
	Sericia Lespedeza (b) inoculated	20	.46	-	-	-
4.	Crownvetch, inoculated Reclop	15	.34	X	-	-
		8	.07			
	Seven & High Maintenance Areas					
14.	"Manor" Kentucky Bluegrass"	40	.92	X	-	X
	Common Kentucky Bluegrass" (c)	40	.92			
	Red Fescue, "Pennlawn" or "Jamestown"	20	.46			
15.	"Kentucky 31" Tall Fescue" (g)	120-160	5-6	X	X(+)	X

*Use certified seed only + 92 lbs/1000 sq. ft. mulch; water

Reviewed for the HOWARD S. C. D. and meets technical requirements
by J. Helms Jr. Date 3/7/86
U. S. SOIL CONSERVATION SERVICE

This plan approved for sediment and erosion control
by Stephen L. Huber Date 3/7/86
Howard Soil Cons. Dist.

Control No. ____

Expiration Date: ____

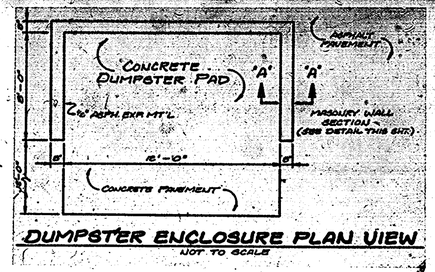
Request for extension must be submitted in writing.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

OWNER:
DEPARTMENT OF PUBLIC WORKS OF HOWARD COUNTY, MARYLAND
3430 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

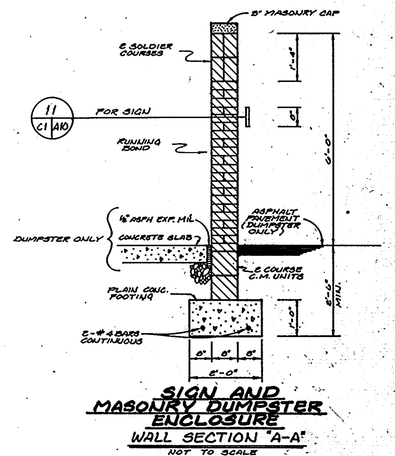
SDP-86-165c

Revisions	

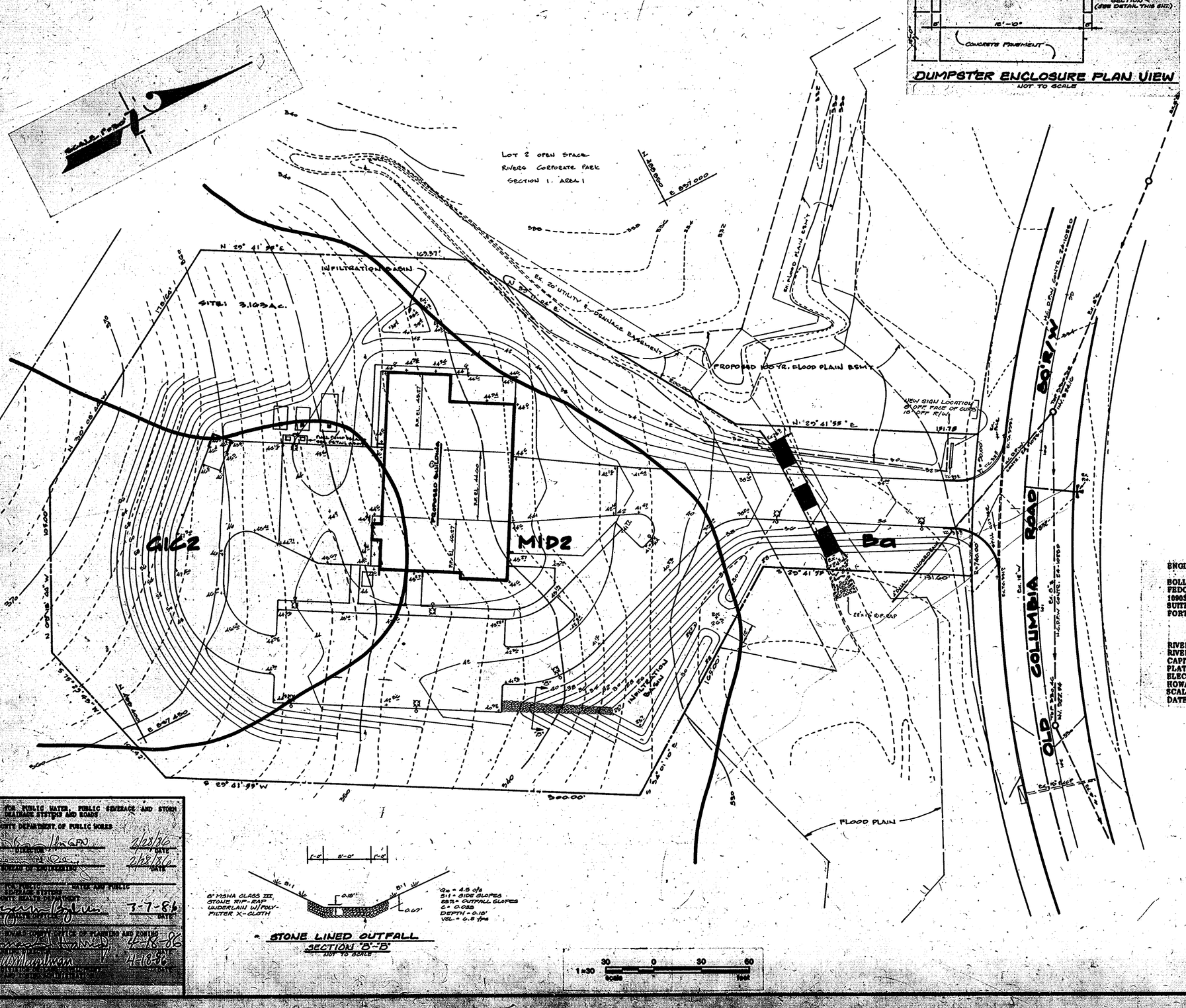


DUMPSTER ENCLOSURE PLAN VIEW
NOT TO SCALE

LOCATION MAP 1"=2000'



SIGN AND MASONRY DUMPSTER ENCLOSURE
WALL SECTION "A-A"
NOT TO SCALE



STONE LINED OUTFALL
SECTION "B"-"B"
NOT TO SCALE

1"=30' Scale 30 0 30 60 Feet

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 2/28/86
HOWARD COUNTY BOARD OF ENGINEERING — DATE 2/28/86

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT
DIRECTOR — DATE 3-7-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
DIRECTOR — DATE 4-18-86
CHIEF, DEVELOPMENT DIVISION — DATE 4-10-86

ENGINEER	OWNER
BOLLING W. HAXALL, JR. FEDCO SYSTEMS, INC. 10903 INDIAN HEAD HIGHWAY SUITE 200 FORT WASHINGTON, MARYLAND 20744	DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 3430 COURT HOUSE DRIVE ELLICOTT CITY, MD 21043

RIVERS CORPORATE PARK SECTION 1, AREA 1, PHASE 1
RIVERS PARK FIRE STATION NO. 10
CAPITAL PROJECT F5509
PLAT NO. 5079
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND
SCALE 1"=30'
DATE: DECEMBER 20, 1985

STATE OF MARYLAND — BOLLING W. HAXALL, JR. — No. 6603 — PROFESSIONAL ENGINEER

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

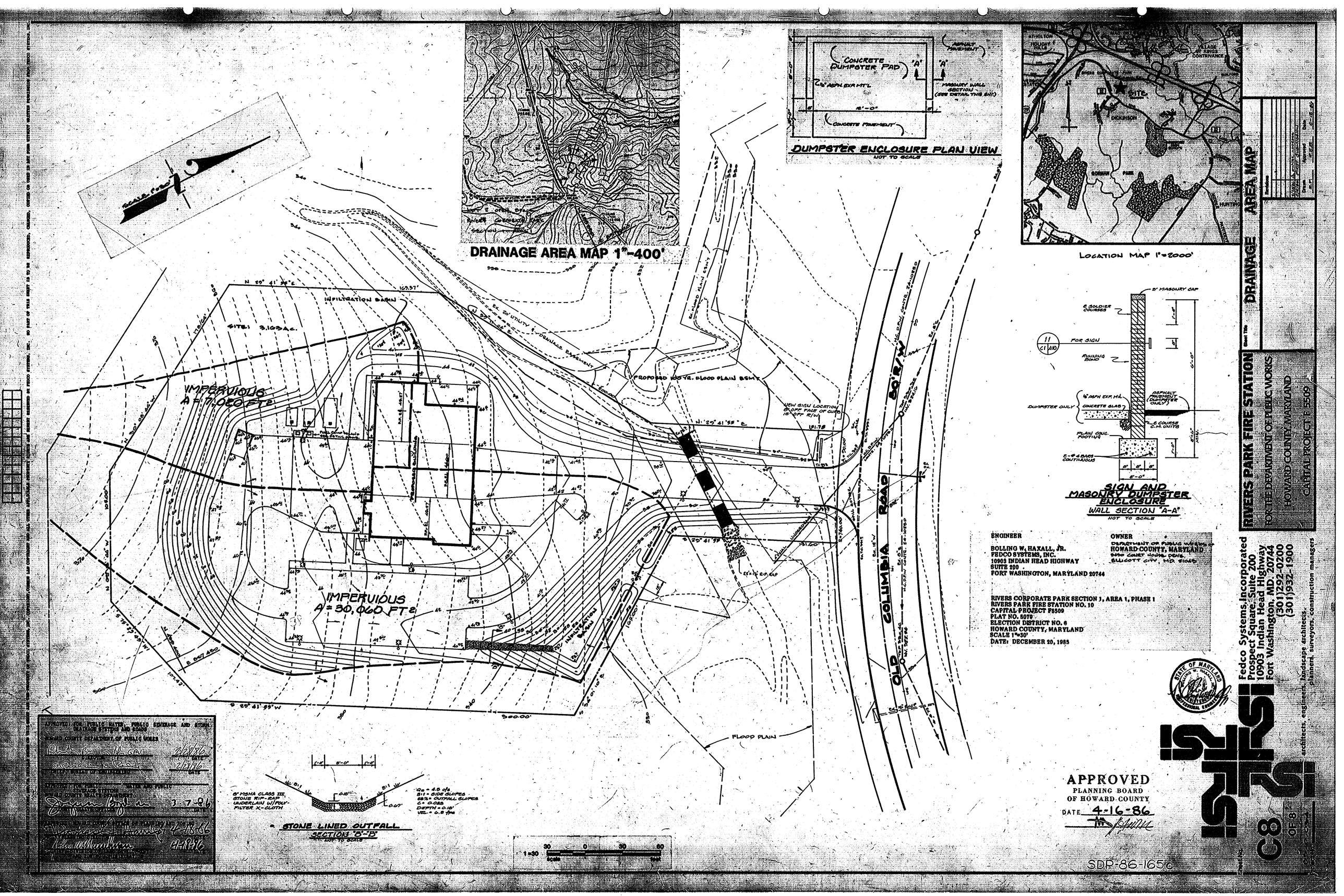
RIVERS PARK FIRE STATION
DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F5509

SOILS MAP

Fedco Systems, Incorporated
Prospect Square, Suite 200
10903 Indian Head Highway
Fort Washington, MD 20744
(301)292-0200
(301)932-1900
architects, engineers, landscape architects,
planners, surveyors, construction managers

SHEET C7 OF 8 SHEETS

SDP-86-165c



ENGINEER

BOLLING W. HAXALL, JR.
FEDCO SYSTEMS, INC.
10903 INDIAN HEAD HIGHWAY
SUITE 200
FORT WASHINGTON, MARYLAND 20744

OWNER

DEPARTMENT OF PUBLIC WORKS OF
HOWARD COUNTY, MARYLAND
9450 COURT HOUSE DRIVE
ELLICOTT CITY, MD. 21043

RIVERS CORPORATE PARK SECTION 1, AREA 1, PHASE 1
RIVERS PARK FIRE STATION NO. 10
CAPITAL PROJECT F5509
PLAT NO. 5079
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND
SCALE 1"=30'
DATE: DECEMBER 20, 1985

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE 4-16-86

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE AND STORM DRAINAGE SYSTEMS AND ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — DATE 2/28/86
CHIEF, BUREAU OF ENGINEERING — DATE 2/28/86
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE 3-7-86
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
DATE 4-18-86
DIRECTOR — DATE 4-18-86
CHIEF, DIVISION OF DEVELOPMENT
HOWARD COUNTY ADMINISTRATION

SDP-86-165c

Sheet No. C8 OF 8

RIVERS PARK FIRE STATION
FOR THE DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT F 5509

Sheet Title: DRAINAGE AREA MAP

Revisions

Drawn — Approved — Date

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