

GENERAL NOTES

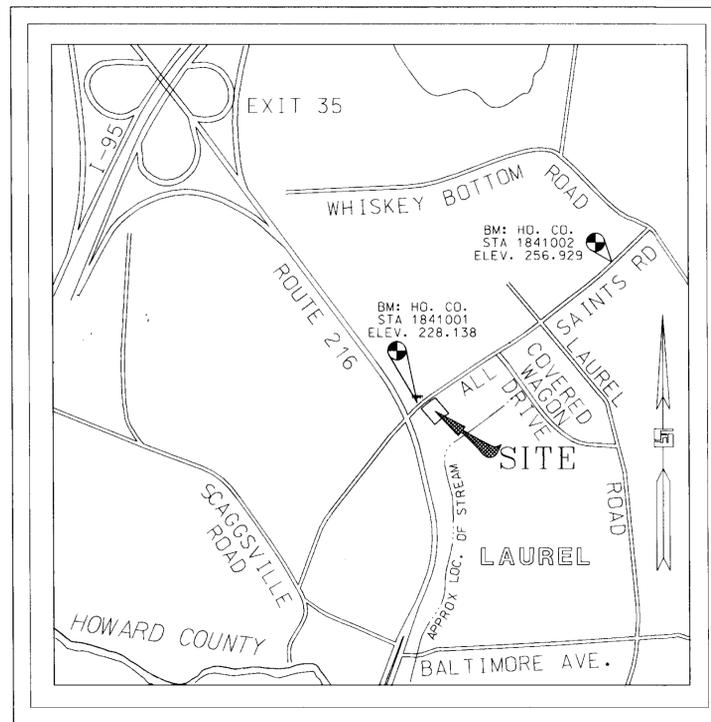
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION LATEST EDITION" AND MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE LOCATION AND ELEVATIONS OF THE EXISTING UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, AND DEPTH OF EXISTING UTILITIES IN THE WORK AREA AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR NOTIFYING FREDERICK WARD ASSOC., INC. AT (410)-879-2090 IN THE EVENT OF ANY DISCREPANCIES ON THE PLAN OR IN THE RELATIONSHIP OF EXISTING GRADES WITH PROPOSED GRADES PRIOR TO BEGINNING WORK.
- THE CONTRACTOR SHALL NOTE THAT IN THE CASE OF A DISCREPANCY BETWEEN A SCALED DIMENSION AND A FIGURED DIMENSION SHOWN ON THE PLANS, THE FIGURED DIMENSION SHALL GOVERN.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT THE FAILURE TO MENTION SPECIFICALLY, WORK THAT WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT, SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 5 WORKING DAYS PRIOR TO BEGINNING WORK:
 MISS UTILITY: 1-800-257-7777
 C&P TELEPHONE CO. 725-9976
 HOWARD COUNTY BUREAU OF UTILITIES 313-2366
 AT&T CABLE LOCATION DIVISION 393-3553
 BG&E 685-0123
 NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION AT LEAST 48 HOURS PRIOR TO START (313-1855)
 HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410) 313-1880
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS, UNLESS STATED OTHERWISE.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE PURPOSE OF THIS SITE DEVELOPMENT PLAN IS TO CONSTRUCT A GASOLINE STATION, CONVENIENCE STORE, AND CAR WASH.
- THE STORMWATER QUANTITY MANAGEMENT AND WATER QUALITY STRUCTURE WILL BE PRIVATELY OWNED AND MAINTAINED.
- SECTION 404 OF THE MD DEPARTMENT OF NATURAL RESOURCES DOES NOT APPLY NOR ARE ANY WETLANDS PERMITS REQUIRED FOR THIS PROJECT.
- ALL WASTE MATERIAL WHICH HAS BEEN GENERATED AS A RESULT OF THE CONVENIENCE STORE SHALL BE EITHER STORED ON SITE AND LATER SHIPPED FOR RECYCLING OR PROPERLY DISPOSED OF AT A COUNTY APPROVED LANDFILL.
- ALL DETERGENT USED IN THE CAR WASH FACILITY SHALL BE "PHOSPHATE FREE" AS PER HOWARD COUNTY REGULATIONS.
- PUBLIC WATER AND SEWER WILL BE UTILIZED. A 1" WATER METER SHALL BE LOCATED WITHIN THE CAR WASH AND WILL MEET ALL HOWARD COUNTY STANDARDS. ON SITE WATER AND SEWER SHALL BE PRIVATE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL SITE LIGHTING MUST BE DIRECTED AWAY FROM THE ADJACENT PUBLIC RIGHT OF WAY AND THE VICINITAL RESIDENTIAL PROPERTIES.
- REVISED TRAFFIC STUDY INCORPORATING PROPOSED SERVICE STATION COMPLETED BY TRAFFIC CONCEPTS DATED NOVEMBER 6, 1995.
- WETLANDS STUDY COMPLETED IN MARCH, 1995 BY FREDERICK WARD ASSOCIATES INC. AT WHICH TIME IT WAS DETERMINED THAT NON-TIDAL WETLANDS DO OCCUR WITHIN THE BOUNDARIES OF THIS SITE. THESE LIMITS ARE SHOWN ON THESE PLANS. REFER TO SHEET 3 FOR BEARINGS AND DISTANCES DEFINING THE LIMITS OF THE WETLANDS.
- SEE SHEET 3 OF 17 FOR NOTES PERTAINING TO FOREST CONSERVATION EASEMENT.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLAND AND STREAM BUFFERS INDICATED ON THIS PLAN.

SITE ANALYSIS

- AREA OF PARCEL:
49,596 SQ. FT. = 1.138 AC. ±
NOTE: SEE FINAL RECORD PLAT, F-96-113 PLAT NO. 12308
- ZONING:
B-2
ZONING INFORMATION: SEE UPPER RIGHT CORNER THIS SHEET
- EXISTING USE: VACANT LOT WITH 1-STORY DWELLING (TO BE RAZED).
PROPOSED USE: GASOLINE SERVICE STATION WITH CONVENIENCE STORE AND CAR WASH.
- FLOOR SPACE:
a. CONVENIENCE STORE:
1) GROSS AREA: 1,431 SQ.FT. (TOTAL BLDG. SQ. FT.)
2) RETAIL AREA: 880 SQ.FT.
3) STORAGE AREA: 551 SQ.FT.
b. CAR WASH:
GROSS AREA: 756 SQ.FT.
- MAXIMUM NUMBER OF EMPLOYEES: TWO (2)
- PARKING:
REQUIRED:
1,431 SQ. FT. X 2 SPACES/1000 SQ. FT. = 3 SPACES
STATION WITH CAR WASH = 4 SPACES
TOTAL REQUIRED (INCLUDING 1 HANDICAP SPACE) = 7 SPACES
PROVIDED: 9 SPACES, INCLUDING 1 HANDICAP SPACE
- OPEN SPACE (LANDSCAPING)
a. REQUIRED: 20% FOR ENTIRE SITE, = 9,919 SQ.FT. = 0.228 A±
b. PROVIDED: 48.5% FOR ENTIRE SITE, = 24,054 SQ.FT. = 0.552 A±
- BUILDING COVERAGE:
a. CONVENIENCE STORE: 1,431 SQ.FT
b. CAR WASH: 871 SQ.FT.
c. CANOPY: 4,668 SQ.FT.
d. CANOPY OVERHANG ON CONVENIENCE STORE: 72 SQ.FT. (DEDUCT)
TOTAL BUILDING COVERAGE: 6,898 SQ.FT. (13.91%)
TOTAL BUILDING COVERAGE PERMITTED: 24,798 SQ.FT. (50%)
- CAR WASH STACKING:
a. REQUIRED: 15 SPACES
b. PROVIDED: 15 SPACES



9275 ALL SAINTS ROAD
LAUREL, MARYLAND 20723
RAS# 2-6588



LOCATION MAP

SCALE: 1"=500'

HOWARD COUNTY ADC MAP
PAGE NUMBER 19
GRID J 10

BENCHMARK INFORMATION

- BEARINGS, DISTANCES, AND COORDINATES AS SHOWN HEREON ARE BASED ON THE FOLLOWING HOWARD COUNTY SURVEY CONTROL POINTS:
1841001: NORTH 468261.305 EAST 841944.308
1841002: NORTH 468957.312 EAST 943025.754
- ELEVATIONS AS SHOWN HEREON ARE BASED ON HOWARD COUNTY SURVEY CONTROL STATION NO. 1841001, ELEVATION 228.138, AND HOWARD COUNTY SURVEY CONTROL STATION NO. 1841002, ELEVATION 256.929.

SHEET INDEX

SHEET NUMBER	DRAWING TITLE
1	COVER SHEET
2	EXISTING CONDITIONS AND DEMOLITION PLAN
3	SITE LAYOUT PLAN
4	SITE GRADING PLAN
5	SITE UTILITY AND PIPING PLAN
6	SEDIMENT & EROSION CONTROL PLAN
7	SEDIMENT AND EROSION CONTROL PLAN NOTES & DETAILS
8	STORM DRAIN AND STORMWATER MANAGEMENT PROFILES
9	STORM DRAIN PROFILES & DETAILS, GRADING SECTIONS
10	STORMWATER MANAGEMENT / STORMCEPTOR DETAILS
11	STORMWATER MANAGEMENT DETAILS
12	BUILDING PLAN
13	SIGNAGE PLAN
14	SITE DETAILS
15	LANDSCAPE PLAN
16	TRAFFIC CONTROL PLAN
17	SEDIMENT CONTROL AND STORMWATER MANAGEMENT INFORMATION SHEET

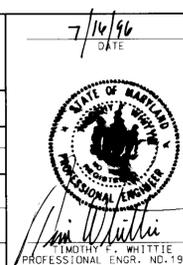
ADDRESS CHART

PARCEL NO.	STREET ADDRESS
PARCEL A-1	9275 ALL SAINTS ROAD
SUBDIVISION NAME	SECT./AREA LOT/PARCEL NO.
ALL SAINTS ROAD EXXON	N/A PARCEL A-1/631
PLAT NO. BLOCK NO. ZONE TAX-ZONE ELECT. DIST. CENSUS TR.	
12308 21 B-2 BUSINESS GENERAL 47 6th 6069.03	
WATER CODE	SEWER CODE
C057142500	C057142500

ZONING INFORMATION

- PROPERTY WAS INCLUDED IN THE FOLLOWING ZONING DISTRICTS AS PART OF THE ADOPTION OF THE COUNTY'S COMPREHENSIVE ZONING PLAN:
1948 - RESIDENTIAL
1954 - R (RESIDENTIAL)
1961 - R-12 (RESIDENTIAL : SINGLE)
1977 - R-SC (RESIDENTIAL : SINGLE CLUSTER)
1985 - R-SC (RESIDENTIAL : SINGLE CLUSTER)
1993 - B-2 (BUSINESS : GENERAL)
- BOARD OF APPEALS AND ZONING BOARD CASES:
A. CASE NO. ZB826: REQUEST TO REZONE 1.53 ACRES FROM R-SC TO B-1 AND 1.11 ACRES FROM R-SC TO B-2. DENIED ON 6-24-88
B. CASE NO. BA 95-10E & V: REQUEST FOR SPECIAL EXCEPTION FOR A GASOLINE SERVICE STATION AND VARIANCE TO REDUCE THE 30 FOOT REQUIRED STRUCTURE AND USE SETBACK FROM A PUBLIC STREET RIGHT-OF-WAY TO 10 FEET FOR A VEHICLE STACKING LANE. GRANTED ON 5-24-95.
- WAIVER PETITION WP-96-85 REQUESTING A WAIVER FROM SECTION 16.144(c) AND (f) TO NOT REQUIRE THE SUBMISSION OF SKETCH AND PRELIMINARY PLANS FOR A NON-RESIDENTIAL SUBDIVISION (F-96-113) WAS APPROVED ON APRIL 3, 1996.

DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
		<i>[Signature]</i> 8/2/96 CHIEF-DEVELOPMENT ENGINEERING DIVISION
		<i>[Signature]</i> 8/13/96 CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH
		<i>[Signature]</i> 8/14/96 DIRECTOR
		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
		<i>[Signature]</i> 8/5/96 COUNTY HEALTH OFFICER
		BY THE ENGINEER: "I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT." <i>[Signature]</i> 7/17/96 SIGNATURE OF ENGINEER
		BY THE DEVELOPER: "I WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A 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." <i>[Signature]</i> 7/17/96 SIGNATURE OF DEVELOPER
		REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS. <i>[Signature]</i> 7/17/96 M.A. SMART AGENCY & ATTORNEY IN CHARGE
		U.S. NATURAL RESOURCES CONSERVATION SERVICE DATE
		THIS DEVELOPMENT PLAN IS AS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
		OWNER EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511
		DEVELOPER EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511
		FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090 FWA JOB NUMBER 93397 FWA DRAWING FILE NAME CD17L.DGN
		CENSUS TRACT NO. 6069.03
		TAX MAP 47 PARCEL 631, P.O. 184 6th. ELECTION DISTRICT HOWARD COUNTY, MARYLAND
		TITLE COVER SHEET FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1
		DESIGN BY: JBG SCALE: N.T.S. PROJECT NO.: 93397-01 DRAWN BY: MSM/KDN DATE: 02/02/96 DRAWING NUMBER CHECKED BY: TFW APPROVED: 1 OF 17



SDP-96-97

FOREST CONSERVATION EASEMENT NOTES

1. THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16-1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED. THE FOREST CONSERVATION EASEMENT WAS RECORDED ON FINAL PLAT F-95-38, PLAT NO. 11882.
2. BEARINGS AND DISTANCES SHOWN FOR THE FOREST CONSERVATION EASEMENT (FCE) APPLY FOR ALL PLAN SHEETS IN THIS SET.

NOTE: DURING DEMOLITION AND CONSTRUCTION ACTIVITY ALONG MCDONALDS FRONTAGE, SAFE VEHICULAR ACCESS TO MCDONALDS FROM ALL SAINTS ROAD SHALL BE MAINTAINED AT ALL TIMES.

TAX MAP 47
BLOCK 21 PARCEL 556
MARGARET A. McALLISTER
& MELVIN F. BEACH
PARCEL 2 OF CMP 1690/137
ZONED R-SC

WETLAND BEARING AND DISTANCE

1	N50°22'58"E	21.96
2	N40°30'36"E	17.30
3	N43°20'38"E	18.20
4	N49°48'15"E	26.74
5	N67°33'05"E	22.28
6	N34°22'05"E	29.84
7	N51°00'33"E	44.55
8	N42°26'23"E	27.57

PARCEL A-1:
TAX MAP 47 GRID 21
EXXON CORPORATION
FINAL RECORD PLAT NO. F-96 113
PLAT NO.
ZONED B-2

ROAD WIDENING LAYOUT INFORMATION

POINT	NORTHING	EASTING	REMARK
2502	468272.938	842070.570	
2505	468245.189	842065.118	
2539	468177.466	941939.977	
2542	468200.617	842040.762	
2533	468312.342	842032.394	
2535	468288.927	941997.526	
2545	468260.739	841959.954	
2547	468220.852	841904.526	
2552	468196.780	841876.354	
2553	468260.739	841959.954	
2801	468261.305	841944.308	TRAVERSE POINT - NOT SHOWN ON PLAN - HOWARD COUNTY CONTROLLING
2802	468957.312	843025.754	TRAVERSE POINT - NOT SHOWN ON PLAN - HOWARD COUNTY CONTROLLING
2526	468468.637	842359.699	ON SHEET 4
2527	468347.647	842207.015	ON SHEET 4

GENERAL NOTES

- B.S. - BUILDING SUPPLIER
- G.C. - GENERAL CONTRACTOR
- E. - EXXON
- O. - OTHER
- ★ - BUILDING ORIENTATION POINT
- ② - IMPROVEMENT ITEM
- NEW CONCRETE (ON PLAN)
- EXISTING TO REMAIN
- INDICATES TRAFFIC FLOW ONLY. DOES NOT REFLECT PAINTED TRAFFIC CONTROLS.

ITEM NUMBER	QUANTITY	DESCRIPTION	DRAWING NUMBER
1	BS	BUILDING TYPE (28'x55' EXXON SHOP W/3 PHASE SECURITY CASHIER ENCLOSURE) YES NO METAL	
2	GC	BUILDING DOWNSPOUTS DRAIN UNDERGROUND ABOVE GROUND	SHT 5 OF 17
3	GC	BUILDING SIGN	SHT 12 OF 17
4	GC	CAR WASH 90 SERIES W/3 PHASE ELECTRIC 120/208 METAL	
5	D	CAR WASH EQUIPMENT W/ RECLAIM W/3 RECLAIM	4711A
6	GC	CAR WASH "ENTER" SIGN	1-7 & SA1
7	GC	"DO NOT ENTER" SIGN	SHTS 12 & 13 OF 17
8	GC	CAR WASH "INSTRUCTION" SIGN	
9	GC	CAR WASH "BUILDING" SIGN "EXIT" ONLY	
10	E	COIN BOX FOR CAR WASH	
11	GC	CARWASH "WASH" BUILDING SIGN	SHTS 12 & 13 OF 17
12	BS	PROP. CANOPY (42'x90' W/ 37'x24' CONN.)	
13	E	DISPENSING EQUIPMENT (6) MPD ADVANTAGE W/CRIND	2026 1M & 2M
14	GC	TRANSC SYSTEM TCR-15 (2 REQUIRED)	
15	GC	TOP HAT (BLANK) TYP. OF 6	
16	GC	CANDY DOWNSPOUT DRAIN UNDERGROUND ABOVE GROUND	SHT 5 OF 17
17	E	GC PROPOSED TANKS FOR MOTOR FUELS (1) 112 K REGULAR (1) 112 K PLUS (1) 112 K SUPREME (3) 1 1/2 HP	7006 F, 1-5 7035, 1

ITEM NUMBER	QUANTITY	DESCRIPTION	DRAWING NUMBER
18	GC	ENVIRONMENTAL PRODUCT PIPING	7006 F
19	GC	VAPOR RECOVERY SYSTEM (STAGE 1 AND II) YARD AREA - OTHER	
20	GC	ON-SITE ASPHALT PAVING PER HOWARD COUNTY SPECIFICATIONS	SHT 13 OF 17
21	GC	6" CONCRETE W/3 REBAR 18" D.C. EACH WAY	1090 1-4
22	GC	6" CURB WITH 16" GUTTER	
23	GC	INSTALL (1) HANDICAPPED PARKING ONLY SIGN PER ADA & LOCAL CODE	SHT 13 OF 17
24	GC	VACUUMS (2) TRASH RECEPTILES (2)	1090-7
25	E	(10) NEW YARD LIGHTS, FIXTURES & POLES	SHT 13 OF 17
26	E/OC	AIR/WATER WITH INFORMATION SIGN (NO LIGHT)	1090, 1A, 2 & 3
27	GC	3" x 4" REINFORCED CONCRETE MAT W/CONDUIT FOR PUBLIC TELEPHONES	1090 1-4
28	GC	LANDSCAPE / IRRIGATION	1090, 1 & 2 SPTS. 14 & 17
29	GC	TRASH ENCLOSURE ON 6" REINFORCED CONCRETE SLAB.	1090 1 & 2
30	E	MAJOR I.D. SIGN 17.71 S.F. EXXON I.D. 15.93 S.F. ANCILLARY (TIGER MART) NOTE: 17' POLES. 24.86 S.F. PRF. SEE SIGNAGE PLAN. 58.50 S.F. TOTAL SYSTEM	SHT 13 OF 17
31	GC	EXXON TRENCH DRAIN W/NEENAH R-4999 TYPE I GRATE, GUTTER PANS TO BE WAPPED TO PROVIDE POSITIVE DRAINAGE TO TRENCH DRAINS	SHT 5 OF 17
32	GC	BUILDING SAN. SEWER SERVICE TIE INTO EXISTING SAN. SEWER LINE PER EXXON'S FIELD ENGINEER & PER HO. CO. DPW CODES.	1090 2
33	GC	BUILDING 1 1/2" WATER SUPPLY PER EXXON'S FIELD ENGINEER & PER HOWARD COUNTY D.P.W. CODES. 1" FOR CARMASH.	
34	GC	BUILDING ELECTRICAL & TELEPHONE SERVICE ROUTE UNDERGROUND PER EXXON'S FIELD ENGINEER & PER HOWARD COUNTY D.P.W.	SHT 5 OF 17
35	GC	HANDICAP RAMP PER COUNTY CODES.	SHT 11 OF 17
36	GC	MATCH EXISTING CURB AND GUTTER FOR GRADE AND LOCATION	
37	GC	PAINT STRIPING	
38	GC	OFF-SITE CURB AND GUTTER PER HOWARD COUNTY STANDARDS	HO.CO.STD. R-3.01
39	GC	STORMWATER MANAGEMENT OUTFALL STRUCTURE	HO.CO.STD. SD-4.37
40	GC	STORMWATER MANAGEMENT OUTFALL STRUCTURE	SHA 384.07
41	GC	STORMWATER MANAGEMENT OUTFALL STRUCTURE	SHT 10 OF 17
42	GC	STORMWATER MANAGEMENT OUTFALL STRUCTURE	SHT 10 OF 17
43	GC	10" TRANSITION FORM HO. CO. STD. CURB & GUTTER TO EXXON STD. CURB & GUTTER	
44	GC	1" METER I.A.W. HO. CO. STD. STOPS (1) 5/8" CAR WASH STORAGE ROOM	HO.CO.STD. W3.29
45	GC	"STOP" SIGN I.A.W. MUTCD, LATEST EDITION	
46	GC	TYPE "S" COMBINATION INLET	HO.CO.STD. MD-362.01
47	GC	DOUBLE TYPE "S" COMBINATION INLET	HO.CO.STD. SD-4.34
48	GC	STANDARD PRECAST MANHOLE	HO.CO.STD. SD-05.11
49	GC	STANDARD TYPE "H" ENDWALL	SHA STD. MD-362.01
50	GC	MATCH EXISTING TRANSITION FROM ENDWALL TO EX CHANNEL PLACE 1/2" EXPANSION JOINT AT EX. CHANNEL	
51	GC	INSTALL 175 L.F. GUARDRAIL, MATCH EX GUARDRAIL IN KIND	SHA STD. 660.71
52	GC	SHA CL. I RIPRAP	1090.5 SHT. 14 OF 17
53	GC	OFF-SITE PAVING FOR ROAD WIDENING PER HO.CO. PAVING SECTION P-3	SHT 13 OF 17
54	GC	5" HIGH SOLID WOOD FENCE	HO.CO.STD. SD-4.37
55	GC	PRECAST SINGLE WR INLET	SHA STD. MD-350.01
56	GC	HEAVY WALL	SHT 14 OF 17
57	GC	CONCRETE CURB CUT WITH CONCRETE CHANNEL TO EX INLET	

NOTE: SEE SITE UTILITY AND PIPING PLAN, SHT. 5 OF 17, FOR LOCATION OF EXISTING UNDERGROUND UTILITIES AND PROPOSED STRUCTURES FOR STORMWATER MANAGEMENT

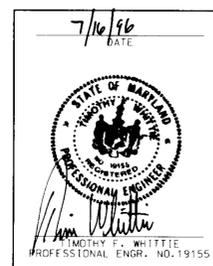
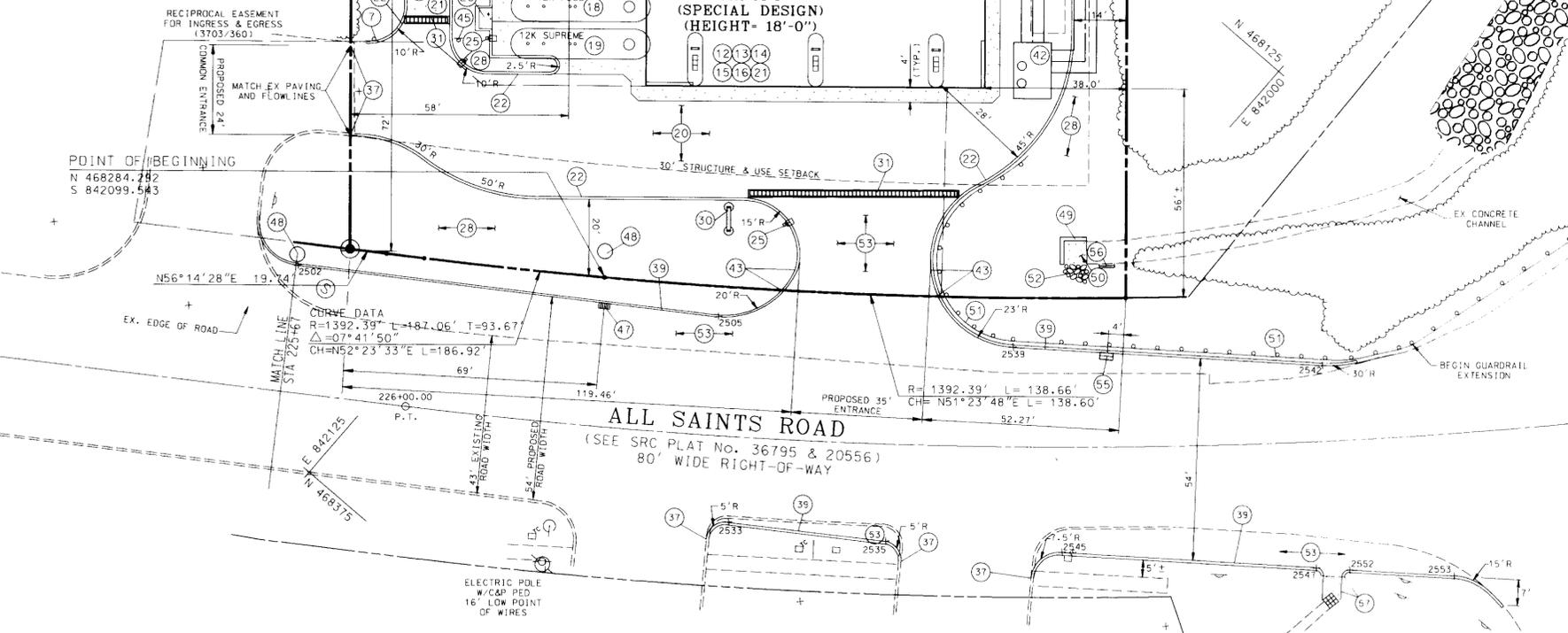
GENERAL SITE LAYOUT NOTES

1. VENT PIPES FROM FUEL TANKS TO BE LOCATED IN THE FIELD AT THE DIRECTION OF THE EXXON FIELD ENGINEER.
2. LOCATION OF PEDESTAL FOR ELECTRIC TRANSFORMER TO BE COORDINATED BETWEEN BGE AND THE EXXON FIELD ENGINEER.
3. REFER TO TRAFFIC CONTROL PLAN SHEET 16 FOR STRIPING OF ALL SAINTS ROAD UPON COMPLETION OF ROAD WIDENING ACTIVITIES.
4. ON-SITE CURBING SHALL HAVE REVERSE GUTTER PANS WHERE GRADES DRAIN AWAY FROM CURBING. SEE GRADING PLAN ON SHEET 4.
5. FOR LAYOUT OF ROAD WIDENING IN FRONT OF MCDONALD'S SITE, SEE "GRADING FOR PROPOSED ROAD WIDENING" INSET ON SHEET 4.
6. [] INDICATES VEHICLE STACKING FOR CARWASH (15 SPACES)
7. PORTION OF SOLID WOOD FENCE PROPOSED BEHIND THE EXISTING TREE TO REMAIN SHALL BE SET IN THE FIELD SUCH THAT THE FENCE IS ON THE DOWNHILL SIDE OF THE TREE. THE DIMENSIONS OF 9' ± AND 10' ± ARE FOR GUIDELINES AND ESTIMATING PURPOSES ONLY.
8. LOCATION OF PEDESTAL FOR ELECTRICAL TRANSFORMER TO BE COORDINATED BETWEEN BGE AND THE EXXON FIELD ENGINEER.
9. SEE SITE UTILITY AND PIPING PLAN, SHT 5 OF 17, FOR LOCATION OF EXISTING UNDERGROUND UTILITIES AND PROPOSED STRUCTURES FOR STORMWATER MANAGEMENT.

STATE ROADS COMMISSION
RHM 329/377
ZONED R SC

ROUTE 216
(SEE SRC PLAT NO. 20556)
(RIGHT-OF-WAY VARIES)

TAX MAP 47
BLOCK 21 PARCEL 184
OTHER LAND OF
MIRZA H.A. BAIG & AMINA J. BAIG
CMP 1889/042
ZONED B-2
FINAL RECORD PLAT F-95-38
PLAT NO. 11882
MCDONALDS RESTAURANT SDP NO. 95-83



SDP# 96-97
PLANNING BOARD APPROVAL

DATE	NUMBER	REVISION DESCRIPTION
8/2/96		APPROVED: DEPARTMENT OF PLANNING AND ZONING
8/12/96		CHIEF DEVELOPMENT ENGINEERING DIVISION
8/1/96		CHIEF DIVISION & LAND DEVELOPMENT & RESEARCH
8/5/96		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

OWNER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301)-513-7511

DEVELOPER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301)-513-7511

ARCHITECTS: **FREDERICK WARD ASSOCIATES INC.**
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090

CENSUS TRACT NO. 6069.03

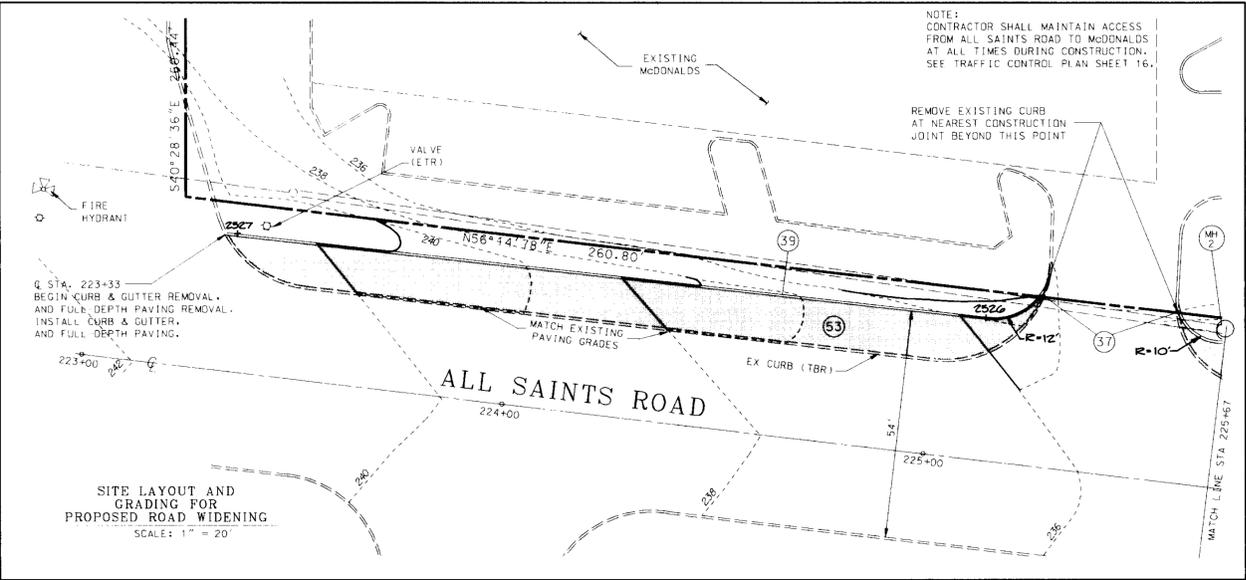
TAX MAP 47 PARCEL 631, R.O.P. 184
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1
SITE LAYOUT PLAN

DESIGN BY: JBG SCALE: 1"=20'
DRAWN BY: MSM/KON DATE: 04/15/96 PROJECT NO.: 93397-01
CHECKED BY: TFW APPROVED: DATE: 03 OF 17

SDP-96-97

NOTE:
DURING DEMOLITION AND CONSTRUCTION ACTIVITY ALONG
MCDONALDS FRONTAGE, SAFE VEHICULAR ACCESS TO MCDONALDS
FROM ALL SAINTS ROAD SHALL BE MAINTAINED AT ALL TIMES.



NOTE:
CONTRACTOR SHALL MAINTAIN ACCESS
FROM ALL SAINTS ROAD TO MCDONALDS
AT ALL TIMES DURING CONSTRUCTION.
SEE TRAFFIC CONTROL PLAN SHEET 16.

TAX MAP 47
BLOCK 21 PARCEL 184
OTHER LAND OF
MIRZA H.A. BAIG & AMINA J. BAIG
CMP 1889/042
ZONED B-2
FINAL RECORD PLAT F-95-38
PLAT NO 11882
McDONALDS RESTAURANT SDP NO. 95-83

TAX MAP 47
BLOCK 21 PARCEL 556
MARGARET A. McALLISTER
& MELVIN F. BEACH
PARCEL 2 OF CMP 1690/137
ZONED R-5C

STATE ROADS COMMISSION
RHM 329/377
ZONED R-5C

- LEGEND
- 261 --- EXISTING CONTOUR
 - 263 --- PROPOSED CONTOUR
 - + 232.95 PROPOSED SPOT ELEVATION
 - + EX 232.95 EXISTING SPOT ELEVATION
 - PROPOSED FLOW ARROWS
 - TG 229.8 + TOP GRATE ELEVATION
 - T/L 229.8 + TOP OF LID ELEVATION
 - PAVING FOR ROAD WIDENING

DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
8/2/96		CHIEF DEVELOPMENT ENGINEERING DIVISION
8/13/96		CHIEF DIVISION & LAND DEVELOPMENT & RESEARCH
8/1/96		DIRECTOR

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

DOUG M. BRYNDLORFF 8/5/96
COUNTY HEALTH OFFICER

OWNER
EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301) 513-7511

DEVELOPER
EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301) 513-7511

FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 879-2090

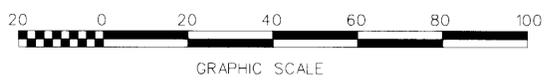
FWA JOB NUMBER: 93397 FWA DRAWING FILE NAME: CGR49D.DGN

CENSUS TRACT NO: 6069.03

TAX MAP 47 PARCEL 631, P.O. 184
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
FOR AN EXXON STATION AT
ALL SAINTS ROAD EXXON
PARCEL A-1
SITE GRADING PLAN

DESIGN BY: JBG SCALE: 1"=20' PROJECT NO.: 93397-01
DRAWN BY: MSW DATE: 04/15/96 DRAWING NUMBER
CHECKED BY: TFW APPROVED: . 4 OF 17



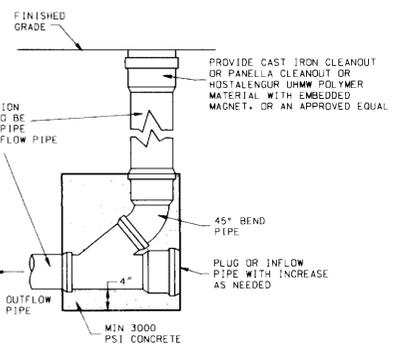
7/16/96
DATE

TIMOTHY P. WHITTIE
PROFESSIONAL ENGR. NO. 19155

FWA FILE NAME: CGR49D.DGN

NOTE:
DURING DEMOLITION AND CONSTRUCTION ACTIVITY ALONG MCDONALDS FRONTAGE, SAFE VEHICULAR ACCESS TO MCDONALDS FROM ALL SAINTS ROAD SHALL BE MAINTAINED AT ALL TIMES.

TAX MAP 47
BLOCK 21 PARCEL 556
MARGARET A. McALLISTER
& MELVIN F. BEACH
PARCEL 2 OF CMP 1690/137
ZONED R-SC



DETAIL: STORM DRAIN AND SANITARY SEWER CLEANOUT (MODIFIED HO. CO. STD. S-2.22)
NOT TO SCALE

GENERAL NOTES FOR UTILITY CONSTRUCTION

1. INFORMATION CONCERNING THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES WAS TAKEN FROM RECORDS PROVIDED BY UTILITY COMPANIES AND HOWARD COUNTY DPW. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. FREDERICK WARD ASSOCIATES, INC. MAKES NO GUARANTEE AS TO THE COMPLETENESS OR ACCURACY OF UTILITIES AND THEIR LOCATIONS, SHOWN OR NOT SHOWN, ON THESE DRAWINGS. SUCH INFORMATION PROVIDED ON THESE PLANS IS FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE CONTRACTOR SHALL VERIFY THE PRESENCE, ABSENCE, AND LOCATIONS OF ALL UTILITIES TO HIS SATISFACTION. PRIOR TO ANY WORK UNDER THIS CONTRACT.
2. THE CONTRACTOR IS TO NOTIFY MISS UTILITY AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION AND EXCAVATION. PHONE 1-800-257-7777.
3. PRIOR TO ANY CONSTRUCTION UNDER THIS CONTRACT, CONTRACTOR SHALL TEST PIT TO VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WHERE UTILITY TIE-INS AND CROSSINGS WILL BE ENCOUNTERED. ANY DISCREPANCIES IN HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DRAWINGS, PARTICULARLY AT PROPOSED STORM DRAIN, SANITARY, AND WATER CONNECTIONS, SHALL BE IMMEDIATELY REPORTED TO FREDERICK WARD ASSOCIATES PRIOR TO ANY CONTINUATION OF WORK UNDER THIS CONTRACT. THIS IS FOR THE PURPOSE OF IDENTIFYING ANY CONFLICTS WHICH MAY IMPACT THE PROPOSED DESIGN, AND RESOLUTION OF SAID CONFLICTS PRIOR TO CONTINUATION OF WORK.
4. ANY EXISTING UTILITIES AND AMENITIES WHICH ARE DAMAGED DUE TO TEST PITTING AND UTILITY CONSTRUCTION SHALL BE REPAIRED IN KIND AT THE SOLE EXPENSE OF THE CONTRACTOR.
5. ANY SEDIMENT CONTROL MEASURES REMOVED FOR THE PURPOSE OF UTILITY CONSTRUCTION SHALL BE REPLACED AT THE END OF THE DAY BY THE UTILITY CONTRACTOR.
6. ALL STORM DRAIN, WATER, SEWER, AND PRODUCT PIPING UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION, AND EXXON SPECIFICATIONS.
7. ANY PROPOSED GAS AND ELECTRIC SERVICE TO BE COORDINATED IN THE FIELD BY THE EXXON FIELD ENGINEER WITH RGE FOR LOCATION AND SIZE OF SERVICE.

GENERAL NOTES FOR WATER AND SEWER CONSTRUCTION

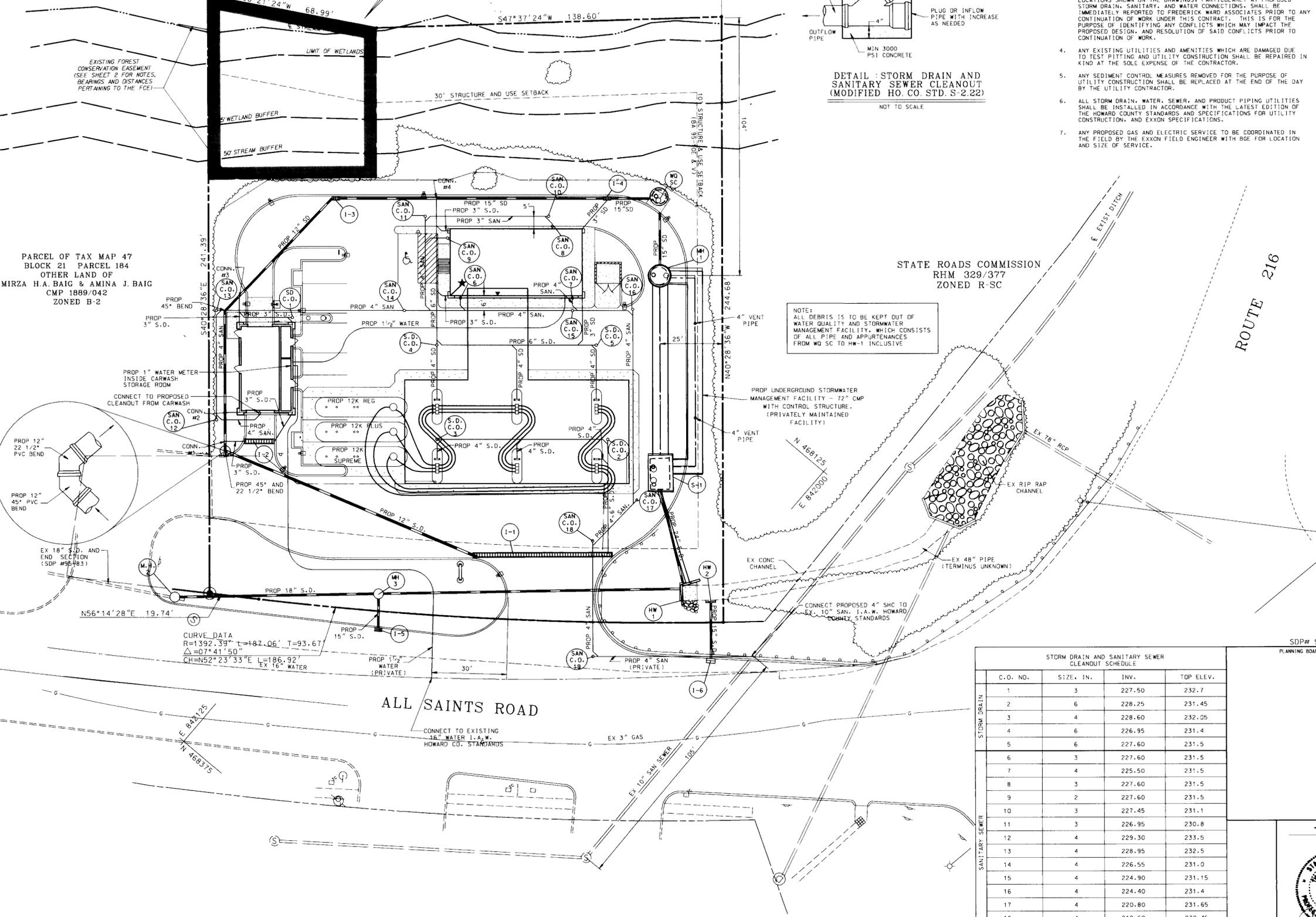
1. WATER METER LID AND SANITARY CLEANOUT TOPS TO BE ADJUSTED TO MATCH CROSS-PITCH AND SLOPE OF PROPOSED GRADES. CLEANOUT TOPS TO BE IDENTIFIED AS SANITARY CLEANOUTS, THREADED, AND CONTAIN COUNTERSUNK PLUGS.
2. UTILITIES SHALL MAINTAIN A MINIMUM 12-INCH CLEARANCE WHEN CROSSING EXISTING AND PROPOSED UTILITIES ON AND OFF SITE.
3. WATER SERVICES SHALL HAVE A MINIMUM 3.5 FOOT COVER OVER CROWN OF PIPE.
4. WATER SERVICE SHALL BE TYPE K COPPER TUBING. SANITARY SEWER PIPE SHALL BE SDR 26.
5. WATER AND SEWER SERVICES TO BE INSTALLED TO 12" INSIDE FACE OF BUILDING, WHEREIN CONNECTION TO BUILDING UTILITIES SHALL BE COORDINATED WITH THE BUILDING CONTRACTOR.

GENERAL NOTES FOR STORM DRAIN CONSTRUCTION

1. INSTALL EXPANSION JOINTS BETWEEN CONCRETE APRONS AND TRENCH DRAINS.
2. REFER TO SITE GRADING PLAN FOR TRENCH DRAIN GRATE ELEVATIONS.
3. TRENCH DRAIN GRATE AT 1-1 SHALL BE 56 FEET LONG. WARP GUTTER PANS DRAINING TO THESE DRAINS SUCH THAT RUNOFF WILL NOT BYPASS DRAINS. TRENCH DRAIN GRATE AT 1-2 SHALL EXTEND FROM FACE OF CURB TO FACE OF CURB.
4. MANHOLE LIDS AND INLET GRATES SHALL BE TRAFFIC BEARING AND BICYCLE SAFE.
5. ALL MANHOLE LIDS, INLET GRATES AND CLEANOUT TOPS TO BE ADJUSTED TO MATCH CROSS-PITCH AND SLOPE OF PROPOSED GRADES. CLEANOUT TOPS TO BE THREADED AND CONTAIN COUNTERSUNK PLUGS.
6. STORM DRAIN PIPE TO BE PVC SDR 40.

NO.	DESCRIPTION	INV. IN	INV. OUT	GRATE EL.
I-1	STD. EXXON TRENCH DRAIN WITH NEENAH R-4999 TYPE L GRATE	228.0	227.0	SEE GRADING PLAN
I-2	STD. EXXON TRENCH DRAIN WITH NEENAH R-4999 TYPE L GRATE	228.5	228.2	SEE GRADING PLAN
I-3	TYPE "S" COMBINATION INLET HO. CO. STD. SD-4.32	226.3	226.05	229.8
I-4	TYPE "S" COMBINATION INLET HO. CO. STD. SD-4.32	225.5	225.4	229.5
MH-1	96" DIAMETER PRECAST MANHOLE SHA STD. MD-384.09	226.0 229.91	(N) 221.75 (N) 221.57	231.5 ✓
MH-2	STANDARD PRECAST MANHOLE HO. CO. STD. GS-11	230.5	230.4	235.0
HW-1	STANDARD TYPE H ENDWALL SHA STD. MD-362.01	-	-	230.45
WO	WATER QUALITY STORMCEPTOR SC STA 1200	225.60 225.60	225.52 225.52	230.45
S-1	STORMWATER MANAGEMENT OUTFALL STRUCTURE	221.72 (Δ) 221.62 (m)	221.63	SEE GRADING PLAN
I-5	DOUBLE TYPE 'S' COMBINATION INLET HO. CO. STD. SD-4.34	-	227.5	231.7
MH-3	STANDARD PRECAST MANHOLE HO. CO. STD. GS-11	225.55 (N) 225.3 (E)	225.1 (W)	232.7
I-6	PRECAST SINGLE WR INLET HO. CO. STD. 4.37	-	222.65	227.55
HW-2	HEADWALL SHA STD 350.01*	-	217.9**	-

* IF PRECAST, USE SHA STD 350.02
** ADJUST AS NECESSARY TO MATCH TOP OF CONCRETE CHANNEL



STORM DRAIN AND SANITARY SEWER CLEANOUT SCHEDULE

C.O. NO.	SIZE, IN.	INV.	TOP ELEV.
1	3	227.50	232.7
2	6	228.25	231.45
3	4	228.60	232.05
4	6	226.95	231.4
5	6	227.60	231.5
6	3	227.60	231.5
7	4	225.50	231.5
8	3	227.60	231.5
9	2	227.60	231.5
10	3	227.45	231.1
11	3	226.95	230.8
12	4	229.30	233.5
13	4	228.95	232.5
14	4	226.55	231.0
15	4	224.90	231.15
16	4	224.40	231.4
17	4	220.80	231.65
18	4	219.60	230.45
19	4	217.40	228.9

SDP# 96-97
PLANNING BOARD APPROVAL

DATE: NUMBER REVISION DESCRIPTION
APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF-DEVELOPMENT ENGINEERING DIVISION
CHIEF DIVISION & LAND DEVELOPMENT & RESEARCH
DIRECTOR

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.
Joyce M. Boyd, Health Officer, 8/5/96

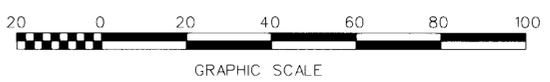
OWNER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301)-513-7511

DEVELOPER: **EXXON COMPANY, U.S.A.**
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FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090

CENSUS TRACT NO. 6065.03
TAX MAP 47 PARCEL 631, P.O. 184
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
FOR AN EXXON STATION AT
ALL SAINTS ROAD EXXON
PARCEL A-1

SITE UTILITY AND PIPING PLAN
DESIGN BY: JBG SCALE: 1"=20' PROJECT NO.: 93397-01
DRAWN BY: MCM/KON DATE: 4/17/96 DRAWING NUMBER
CHECKED BY: TFW APPROVED: DATE: 7/10/96 5 OF 17



LEGEND

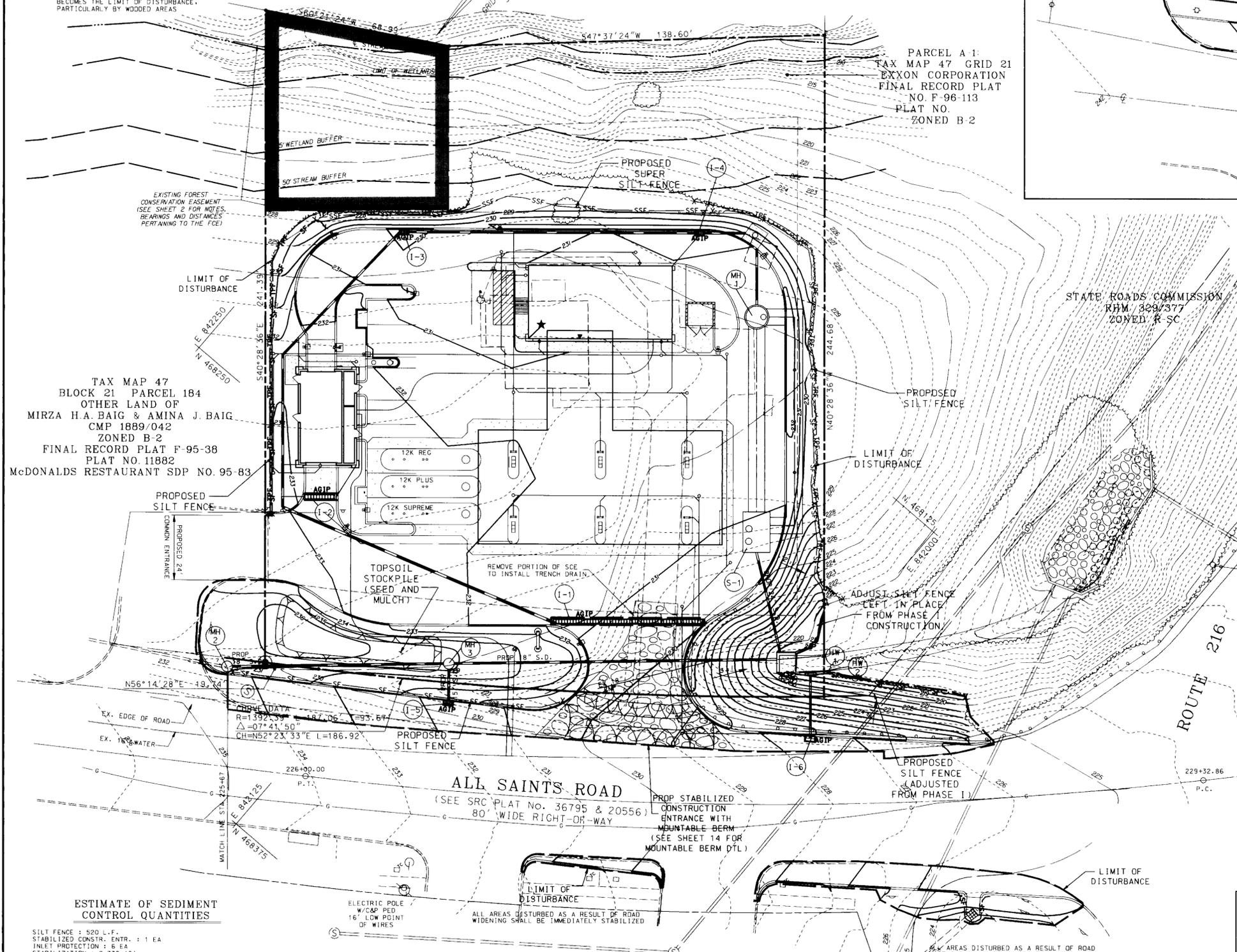
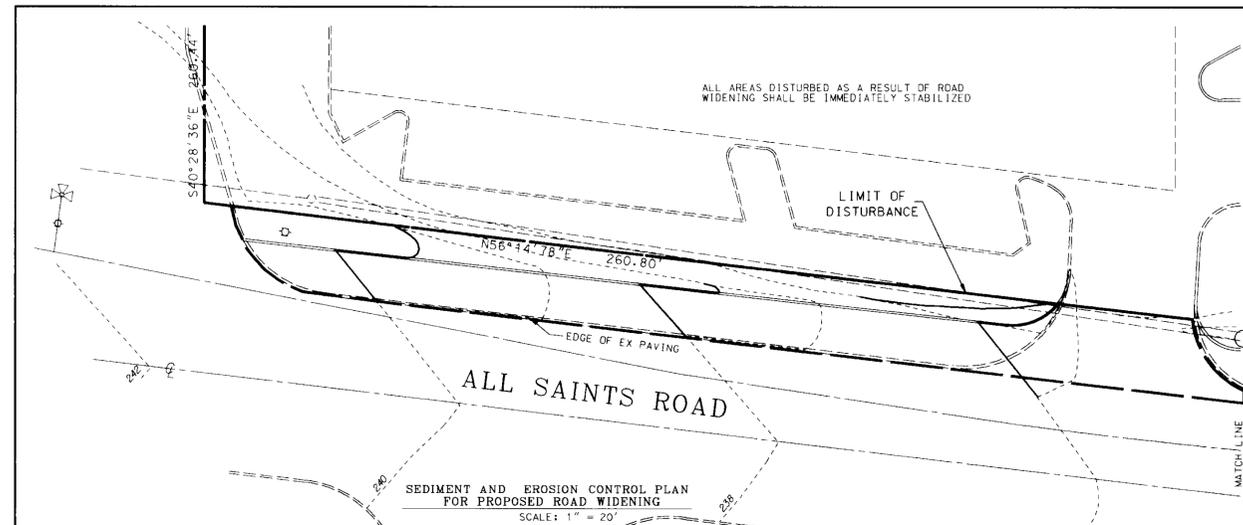
- STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM
- SILT FENCE
- STOCKPILE AREA
- AT GRADE INLET PROTECTION DEVICE
- TREE PROTECTION FENCING
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE*

* IT IS THE INTENTION OF THIS PLAN THAT, WHERE GRAPHICALLY INDICATED, SILT FENCE BECOMES THE LIMIT OF DISTURBANCE, PARTICULARLY BY WOODED AREAS

NOTE:
DURING DEMOLITION AND CONSTRUCTION ACTIVITY ALONG MCDONALDS FRONTAGE, SAFE VEHICULAR ACCESS TO MCDONALDS FROM ALL SAINTS ROAD SHALL BE MAINTAINED AT ALL TIMES.

TAX MAP 47
BLOCK 21 PARCEL 556
MARGARET A. McALLISTER
& MELVIN F. BEACH
PARCEL 2 OF CMP 1690/137
ZONED R-SC

PARCEL A-1
TAX MAP 47, GRID 21
EXXON CORPORATION
FINAL RECORD PLAT
NO. F-96-113
PLAT NO.
ZONED B-2



TAX MAP 47
BLOCK 21 PARCEL 184
OTHER LAND OF
MIRZA H.A. BAIG & AMINA J. BAIG
CMP 1889/042
ZONED B-2
FINAL RECORD PLAT F-95-38
PLAT NO. 11882
MCDONALDS RESTAURANT SDP NO. 95-83

STATE ROADS COMMISSION
RHM/329/377
ZONED R-SC

NOTE:
PRIOR TO ANY WORK UNDER THIS CONTRACT CONTRACTOR SHALL INSTALL TREE PROTECTION FENCING ALONG EDGE OF WOODED AREAS TO REMAIN

- SEQUENCE OF OPERATIONS**
- OBTAIN HOWARD COUNTY GRADING PERMIT.
 - NOTIFY HOWARD COUNTY AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION.
- THIS SEQUENCE IS BROKEN DOWN INTO THREE PHASES. CONTRACTOR MAY WORK ON ALL PHASES SIMULTANEOUSLY AS LONG AS HE RECEIVES PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR AND THE INTENTION OF THIS SEDIMENT CONTROL PLAN IS CARRIED OUT.
- PHASE I - INSTALLATION OF 18" STORM DRAIN FROM HW-1 TO MH-2 (SEE SEDIMENT CONTROL PHASE I PLAN VIEW ON SHEET 7)
- NOTE:** CONTRACTOR SHALL COORDINATE PHASE I WORK SUCH THAT IT CAN BE PERFORMED DURING FIVE-DAY CLEAR WEATHER FORECAST.

- REMOVE ENOUGH PAVING TO ALLOW FOR INSTALLATION OF SEE UP TO PROPERTY LINE. INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM UP TO PROPERTY LINE. (WEEK 1)
- REMOVE ENOUGH OF THE CONCRETE CHANNEL TO INSTALL HW-1. INSTALL HW-1 AND BLOCK OFF THE OPENING IN A MANNER APPROVED BY THE SEDIMENT CONTROL INSPECTOR. (WEEK 1)
- INSTALL SILT FENCE BY HW-1 AT NORTHWESTLY CORNER OF PROPERTY. CLEAR AND GRUB ONLY THAT MUCH WOODED AREA NECESSARY TO INSTALL THE SILT FENCE. (WEEK 1)
- INSTALL 18" STORM DRAIN FROM HW-1 TOWARD EXISTING END SECTION NEAR NORTHERLY PROPERTY CORNER. REMOVE EXISTING 18" CMP AND APPURTENANCES UNDER EXISTING DRIVE. REMOVE ONLY ENOUGH OF THE CONCRETE CHANNEL SUCH THAT A TEMPORARY DITCH CAN BE GRADED FROM THE CHANNEL TO THE OPEN END OF THE 18" STORM DRAIN AT THE END OF EACH DAY. INSTALL THE TEMPORARY DITCH, AND INSTALL RIPRAP INSIDE DITCH FROM CHANNEL TO PIPE. (NOTE: CONTRACTOR MAY USE AN ALTERNATE METHOD OF MAINTAINING OPEN CHANNEL FLOW TO THE PIPE UPON RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR.) (WEEK 1)
- COMPLETE CONSTRUCTION OF STORM DRAIN IN THE SAME MANNER OBTAINED IN STEP 4 ABOVE. REMOVE END SECTION AND INSTALL MH-2. CLEAR AND GRUB ONLY THAT MUCH WOODED AREA NECESSARY TO INSTALL STORM DRAIN. (WEEK 1)
- INSTALL ENOUGH MATERIAL FOR THE PROPOSED ENTRANCE AND EXTEND THE STABILIZED CONSTRUCTION ENTRANCE TO ITS FULL PROPOSED SPECIFICATIONS. (WEEK 1)

- PHASE II - SITEMARK**
- CLEAR AND GRUB ONLY THAT MUCH WOODED AREA NECESSARY TO INSTALL SILT FENCE. (WEEK 2)
 - INSTALL SUPER SILT FENCE TOWARD REAR OF PROPOSED CONSTRUCTION AREA. (WEEK 2)
 - INSTALL REMAINDER OF SILT FENCE AS INDICATED ON PLANS. (WEEK 2)
 - REMOVE EXISTING HOUSE AND DRIVEWAY. ABANDON EXISTING WELL AND SEPTIC SYSTEM. REMOVE ALL DEMOLISHED MATERIAL TO AN APPROVED LOCATION. (WEEK 2)
 - CLEAR AND GRUB REMAINDER OF SITE. (WEEK 3)
 - ROUGH GRADE SITE. THE SLOPES LEADING FROM THE SITE DOWN TO HW-1 SHALL BE IMMEDIATELY STABILIZED WITH SOD AND PEGGING UPON GRADING. PLACE RIPRAP AT HW-1 AS INDICATED ON GRADING PLAN. STOCKPILE TOPSOIL, AND TEMPORARILY STABILIZE STOCKPILE. PLACE SILT FENCE ON LOW SIDE OF STOCKPILE. (WEEK 4)
 - INSTALL STORM DRAIN AND STORMWATER MANAGEMENT SYSTEM. BLOCK 15" STORM DRAIN OUTLET INSIDE 7-4 SUCH THAT ANY SEDIMENT-LADEN RUNOFF WHICH MAY GET INTO STORM DRAINS WILL NOT ENTER THE WATER QUALITY AND STORMWATER MANAGEMENT SYSTEM. INSTALL AT-GRADE INLET PROTECTION DEVICES OVER 1-1, 1-2, 1-3, AND 1-4. (WEEK 4)
 - INSTALL TIGER MART, CARWASH, CANOPY, AND MPO'S. (WEEK 4-10)
 - INSTALL CURB AND GUTTER, BASE AND PAVING. REMOVE INLET PROTECTION DEVICES AS WORK PROCEEDS. (WEEK 11)
 - FINE GRADE SITE AND SPREAD TOPSOIL. DO SOIL. INSTALL LANDSCAPING AND SOIL TO WOOD FENCE. (WEEK 12)

- PHASE III - ROAD WIDENING**
- BOX OUT SHOULDERS FOR ROAD WIDENING. (WEEK 13)
 - INSTALL CURB AND GUTTER. INSTALL CONCRETE CHANNEL FROM EDGE OF PROPOSED CURB AND GUTTER NEAR ALL SAINTS ROAD/ROUTE 216 INTERSECTION TO CONCRETE CHANNEL AND INLET. INSTALL S.D. FROM 1-5 TO MH-3 AND S.D. FROM 1-6 TO HW-2. (WEEK 13)
 - INSTALL BASE AND PAVING FOR ROAD WIDENING. FINE GRADE AND PERMANENTLY STABILIZE BACKFILLED AREAS BEHIND PORTIONS OF ALL SAINTS ROAD WHICH ARE WIDENED. (WEEK 14)
 - REMOVE ALL REMAINING SEDIMENT CONTROL MEASURES INSTALLED UNDER PHASES I-III AFTER RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR. (WEEK 15)

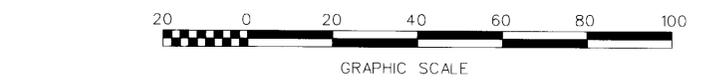
NOTE:
THIS PLAN FOR SEDIMENT CONTROL USE ONLY

DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
		CHIEF-DEVELOPMENT ENGINEERING DIVISION
		CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH
		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
		HOWARD COUNTY HEALTH DEPARTMENT
BY THE ENGINEER		
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."		
BY THE DEVELOPER		
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A 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."		
REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.		
OWNER: EXXON COMPANY, U.S.A.		
DEVELOPER: EXXON COMPANY, U.S.A.		
FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS		
CENSUS TRACT NO.: 6069.03		
TAX MAP 47 PARCEL 631, P.O. 184		
ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: ALL SAINTS ROAD EXXON PARCEL A-1		
SEDIMENT AND EROSION CONTROL PLAN		
DESIGN BY: JBG	SCALE: 1"=20'	PROJECT NO.: 93397.01
DRAWN BY: MSM/KON	DATE: 04/16/96	DRAWING NUMBER
CHECKED BY: TFW	APPROVED:	6 OF 17

ESTIMATE OF SEDIMENT CONTROL QUANTITIES

SILT FENCE : 520 L.F.
STABILIZED CONSTR. ENTR. : 1 EA
INLET PROTECTION : 6 EA
STABILIZATION : 0.330 AC±
SUPER SILT FENCE : 150 LF

NOTE: THESE QUANTITIES ARE FOR SEDIMENT CONTROL USE ONLY. CONTRACTOR SHALL NOT RELY ON THESE QUANTITIES FOR ESTIMATING AND BIDDING PURPOSES.

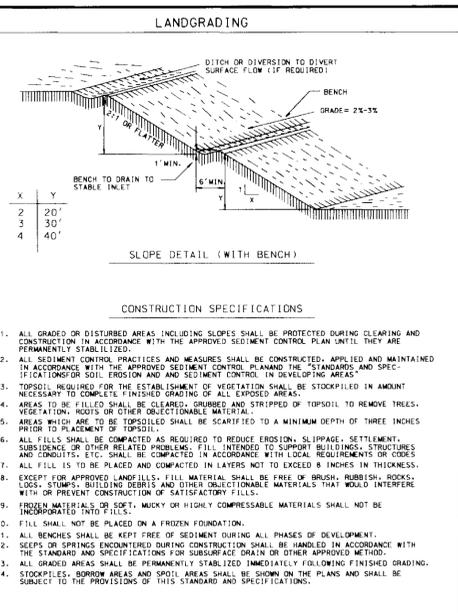
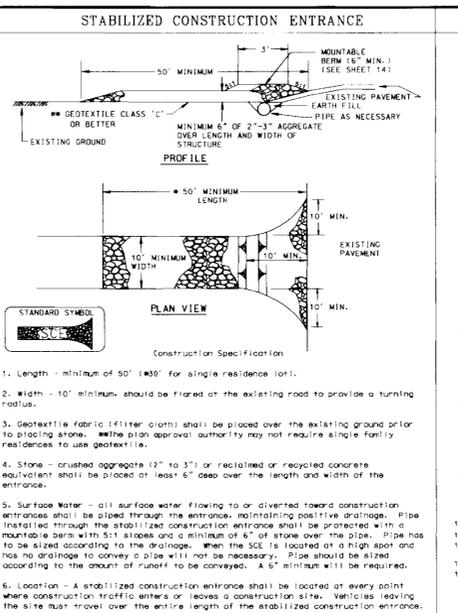
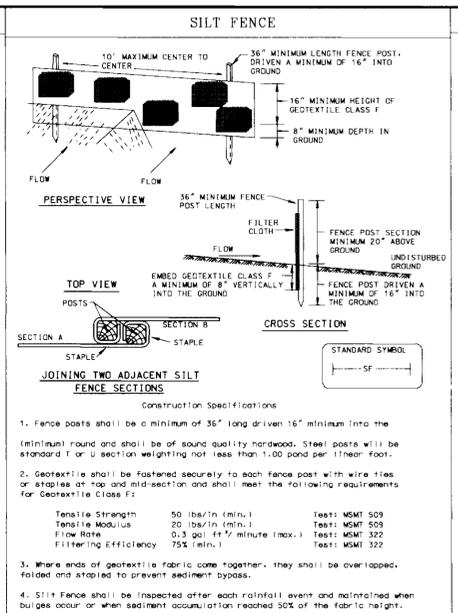
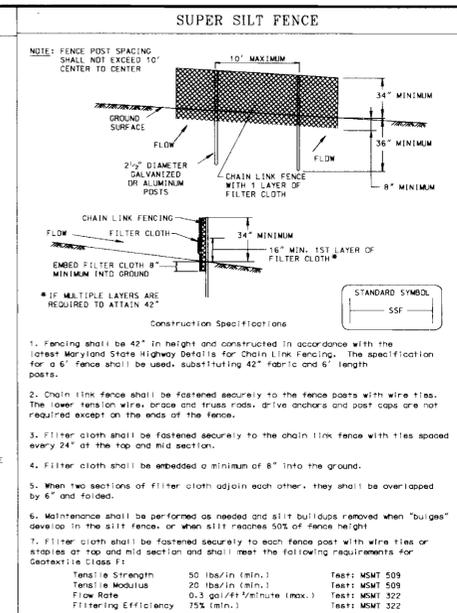
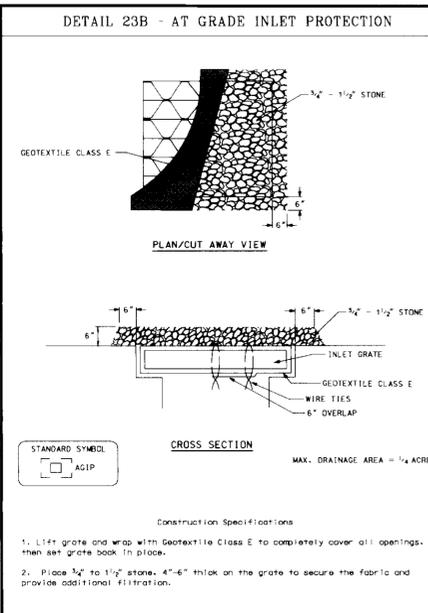


SEDIMENT AND EROSION CONTROL PHASES II & III
(SEE SHEET 7 FOR PHASE I)

- SITE ANALYSIS DATA**
- TOTAL SITE AREA : 1.38 AC±
 - TOTAL DISTURBED AREA : 1.072 AC±
 - TOTAL IMPERVIOUS AREA : 0.742 AC±
 - AREA TO BE VEGETATIVELY STABILIZED : 0.330 AC±
 - EARTHWORK :
CUT - 1260 CY
FILL - 1560 CY
TOPSOIL - 260 CY

NOTE: THESE QUANTITIES ARE FOR SEDIMENT CONTROL USE ONLY. CONTRACTOR SHALL NOT RELY ON THESE QUANTITIES FOR ESTIMATING AND BIDDING PURPOSES.

FWA FILE NAME: C05021.DGN



SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING AND THE SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (1531-1955).
- 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 EROSION STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1. 14 DAYS TO ALL OTHER AREAS PERTAINING TO THE CONSTRUCTION SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED, AROUND THEIR PERIMETER, IN ACCORDANCE WITH VOL. 1, CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED HEREIN IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 50) AND MAINTENANCE (SEC. 52). TEMPORARY STABILIZATION WITHIN 7 CALENDAR DAYS SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS UNLESS OTHERWISE SPECIFIED. RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMSSION FOR THE REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:
 - AREA OF SITE 1.568 ACRES
 - AREA DISTURBED BY CONSTRUCTION 0.82 ACRES
 - AREA TO BE RESEED OR PAVED 0.82 ACRES
 - STABILIZED DITCH 0.58 ACRES
 - TOTAL CUT 1393 CU YDS
 - TOTAL FILL 1393 CU YDS
 - OFF-SITE WASTEWATER AREA LOCATION (ALL MATERIAL TO LEAVE SITE MUST BE TAKEN TO A SITE APPROVED BY THE SEDIMENT CONTROL INSPECTOR).
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY OR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED IF DETERMINED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF ALL EROSION AND SEDIMENT CONTROL STRUCTURES, BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR ROADWORK BEGINS OR GRADING OPERATION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS OBTAINED.
- FILLS SHALL NOT BE PLACED ON A FROZEN FOUNDATION.
- ALL BENCHES SHALL BE KEPT FREE OF SEDIMENT DURING ALL PHASES OF DEVELOPMENT.
- SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
- ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.
- STOCKPILES, BORROW AREAS AND SPOIL AREAS SHALL BE SHOWN ON THE PLAN AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS.

TEMPORARY SEEDING NOTES

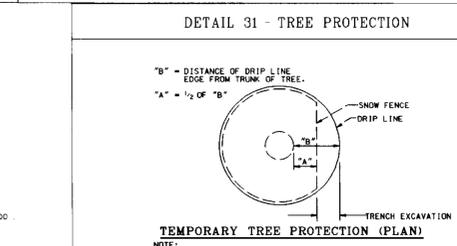
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING UNLESS PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (8 LBS./1000 SQ.FT.)

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2 1/2 BU. PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.). FOR THE PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WEEPING LOVEGRASS (0.7 LBS./1000 SQ.FT.). FOR THE PERIOD NOVEMBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING USE SOD.

MULCHING: APPLY 1/2 TO 2 TONS PER ACRE (70-80 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALS. PER ACRE (5 GALS./1000 SQ.FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS OR SLOPES 8 FEET OR HIGHER, USE 348 GALS. PER ACRE (8 GALS./1000 SQ.FT.) FOR ANCHORING.



TOPSOIL CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENT STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

- TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAM, SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. RECOMMENDED TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CONCRETE, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH OR OTHER MATERIALS LARGER THAN 1/2\"/>

III. WHERE THE SUBSOIL IS EITHER HEAVILY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIME/STONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN COMBINATION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

IV. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES

- PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

TOPSOIL APPLICATION

- WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DICES, SLOPE SALT FENCE AND SEDIMENT TRAPS AND BASINS.
- GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBERT 4\"/>

III. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4\"/>

IV. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MOIST CONDITION WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION.

V. THESE TOPSOIL SPECIFICATIONS HAVE BEEN EDITED FROM THE 1994 EROSION AND SEDIMENT CONTROL STANDARDS TO FIT THIS PROJECT. IT IS STILL THE INTENTION TO FOLLOW THE REFERENCED 1994 EROSION AND SEDIMENT CONTROL STANDARDS IN THEIR ENTIRETY.

SEDIMENT CONTROL PHASE I

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE: 8/2/96

CHIEF-DEVELOPMENT ENGINEERING DIVISION

CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH

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

DATE: 8/5/96

BY THE ENGINEER: *Timothy F. Whittie* 7/17/96

BY THE DEVELOPER: *Stewart M. Schminow* 7/17/96

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

DATE: 8/7/96

OWNER: EXXON COMPANY, U.S.A. 8301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511

DEVELOPER: EXXON COMPANY, U.S.A. 8301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)781-2090

CENSUS TRACT NO. 6069.03

TAX MAP 47 PARCEL 631, P.O. 184 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1

SEDIMENT & EROSION CONTROL PLAN, NOTES & DETAILS

DESIGN BY: JBG SCALE: N.T.S. PROJECT NO.: 93391-01

DRAWN BY: MSM/KDN DATE: 04/16/96 DRAWING NUMBER:

CHECKED BY: TFW APPROVED: DATE: 7 OF 17

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER 3 INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING UNLESS PREVIOUSLY LOOSENED.

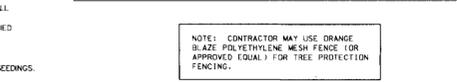
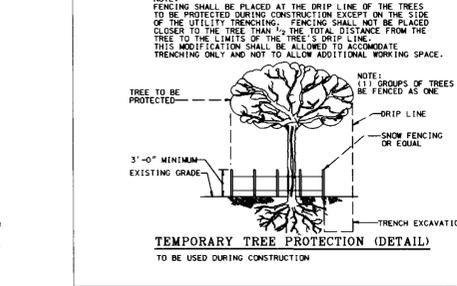
SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 10-10-10 FERTILIZER (8 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL AT TIME OF SEEDING. APPLY 400 LBS. PER ACRE 30-0-0 UREA-FORM FERTILIZER (8 LBS./1000 SQ.FT.)
- ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (123 LBS./1000 SQ.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 15, SEED WITH 40 LBS. PER ACRE (4 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS. KENTUCKY 31 TALL FESCUE. PER ACRE AND 2 LBS. PER ACRE (0.5 LBS./1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 80 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

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

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



TEMPORARY STOCKPILE AREA FOR STORM DRAIN INSTALLATION

IF STORM DRAIN EXTENSION IS NOT COMPLETED AT THE END OF THE DAY, GRADE A TEMPORARY DITCH FROM CONCRETE CHANNEL TO OPEN END OF PIPE. PLACE SHA CL. I RIPRAP ON FILTER CLOTH IN DITCH FROM CHANNEL TO PIPE. PLACE SOD ON AREAS GRADED FOR DITCH.

NOTE:

THIS PLAN VIEW IS MEANT FOR GRAPHIC REPRESENTATION OF WHAT THIS WORK IS TO LOOK LIKE. IT IS NOT MEANT TO ESTABLISH ANY LIMITS ON LENGTH OF INSTALLATION. CONTRACTOR MAY USE AN ALTERNATE METHOD OF MAINTAINING CHANNEL FLOW TO THE PIPE UPON RECEIVING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR.

STANDARD AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION WITH SOD

SPECIFICATIONS:

- CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD.
- SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS SHALL EXCLUDE TOP GROWTH AND THATCH.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRAB ON THE UPPER 10 PERCENT OF THE SECTION.
- INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIERS WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
- SOD SHALL NOT BE HARVESTED OR TRANSPORTED WHEN MOISTURE CONTENT EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
- SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPORTED WITHIN THIS PERIOD SHALL BE INSPECTED AND APPROVED PRIOR TO ITS INSTALLATION.

SITE PREPARATION:

FERTILIZER AND LIME APPLICATION RATES SHALL BE DETERMINED BY SOIL TEST. UNDER UNUSUAL CIRCUMSTANCES WHERE THERE IS INSUFFICIENT TIME FOR A COMPLETE SOIL TEST, FERTILIZER AND LIME MATERIALS MAY BE APPLIED IN AMOUNTS SHOWN UNDER B. BELOW.

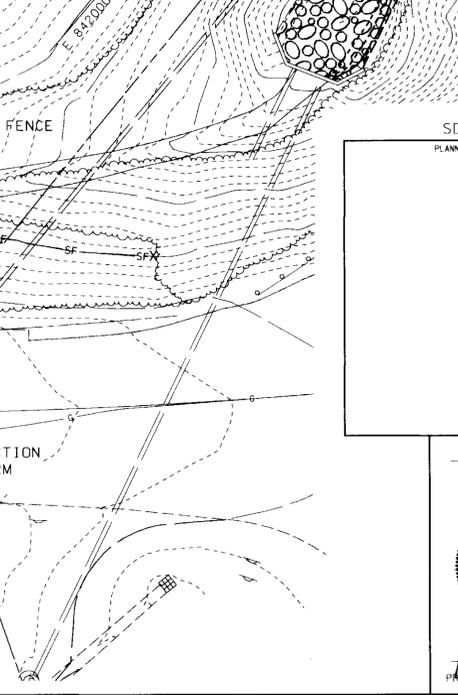
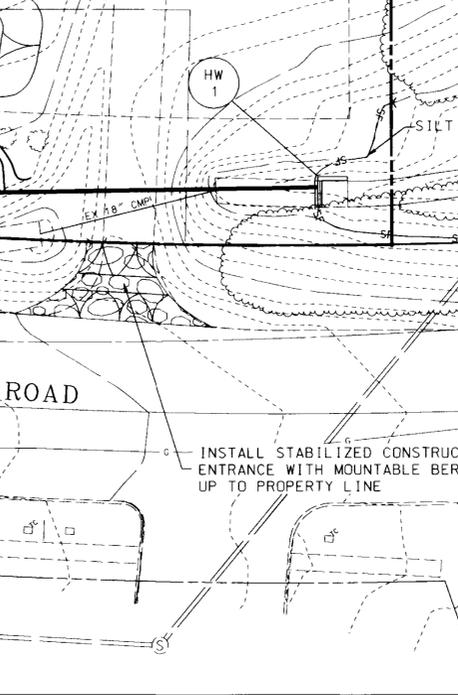
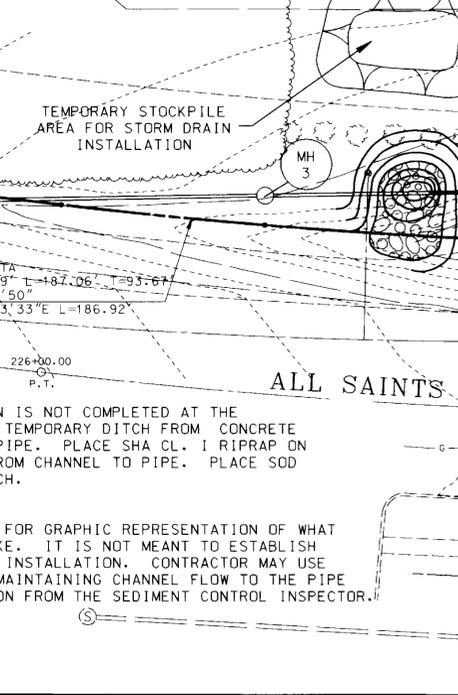
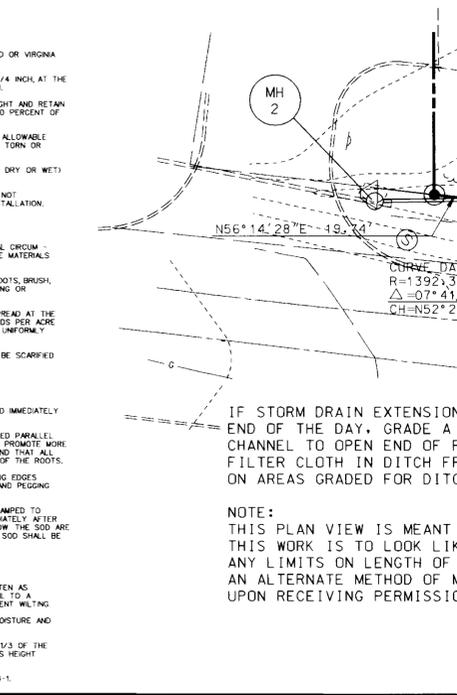
- PRIOR TO SODDING, THE SURFACE SHALL BE CLEARED OF ALL TRASH, DEBRIS, AND OF ALL ROOTS, BRUSH, WIRE, DRINK STAKES AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
- WHERE THE SOIL IS ADD OR COMPOSED OF HEAVY CLAYS, GROUND LIME/STONE SHALL BE SPREAD AT THE RATE OF 2 TONS/ACRE OR 200 POUNDS PER 1000 SQUARE FEET OR 25 POUNDS PER 1000 SQUARE FEET OF 10-10-10 FERTILIZER OR EQUIVALENT SHALL BE UNIFORMLY APPLIED AND MIXED INTO THE TOP 3 INCHES OF SOIL WITH THE REQUIRED LIME.
- ALL AREAS RECEIVING SOD SHALL BE UNIFORMLY FINE GRADED. HARD-PACKED EARTH SHALL BE SCARIFIED PRIOR TO PLACEMENT OF SOD.

SOD INSTALLATION:

- DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE THE SOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD.
- THE FIRST ROW OF SOD SHALL BE LAD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND TIGHTLY WEDGED AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. INSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
- ON SLOPING AREAS WHERE EROSION MAY BE A PROBLEM, SOD SHALL BE LAD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERED JOINTS. SECURE THE SOD BY TAMING AND PLUGGING OR OTHER APPROVED METHODS.
- AS SODDING IS COMPLETED IN ANY ONE SECTION, THE ENTIRE AREA SHALL BE ROLLED OR TAMPED TO INSURE SOIL CONTACT OF ROOTS WITH THE SOIL SURFACE. SOD SHALL BE WATERED IMMEDIATELY AFTER ROLLING OR TAMING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. THE OPERATIONS OF LAYING, TAMING AND IRRIGATING FOR ANY PIECE OF SOD SHALL BE COMPLETED WITHIN EIGHT HOURS.

SOD MAINTENANCE:

- IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATERING SHOULD BE DONE DURING THE HEAT OF THE DAY TO PREVENT WILTING.
- AFTER THE FIRST WEEK, SOD SHALL BE WATERED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE AND INSURE ESTABLISHMENT.
- FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF SHALL BE REMOVED BY THE MOWER. CUTTING OR SUBSEQUENT CUTTINGS GRASS HEIGHT SHALL BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.
- MAINTENANCE OF ESTABLISHED SOD SHOULD FOLLOW SPECIFICATIONS OUTLINED IN TABLE 54-1.



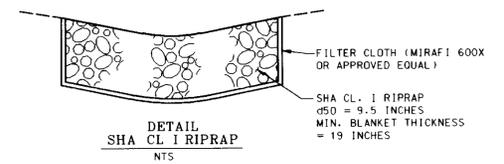
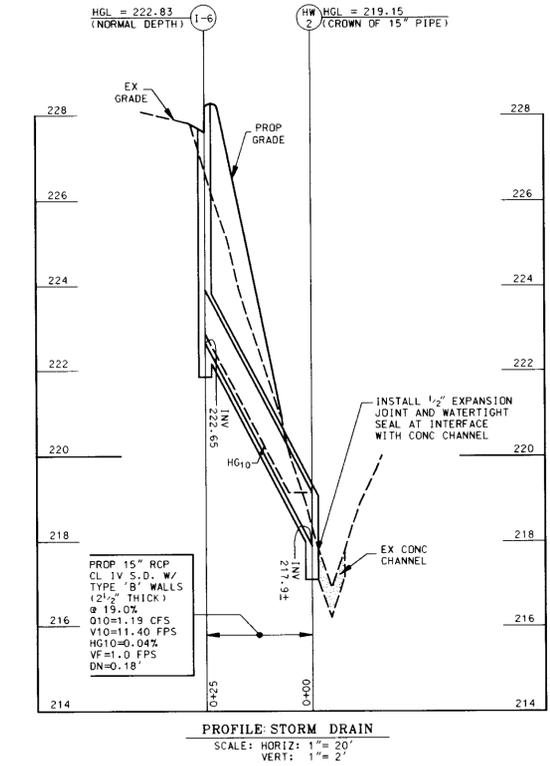
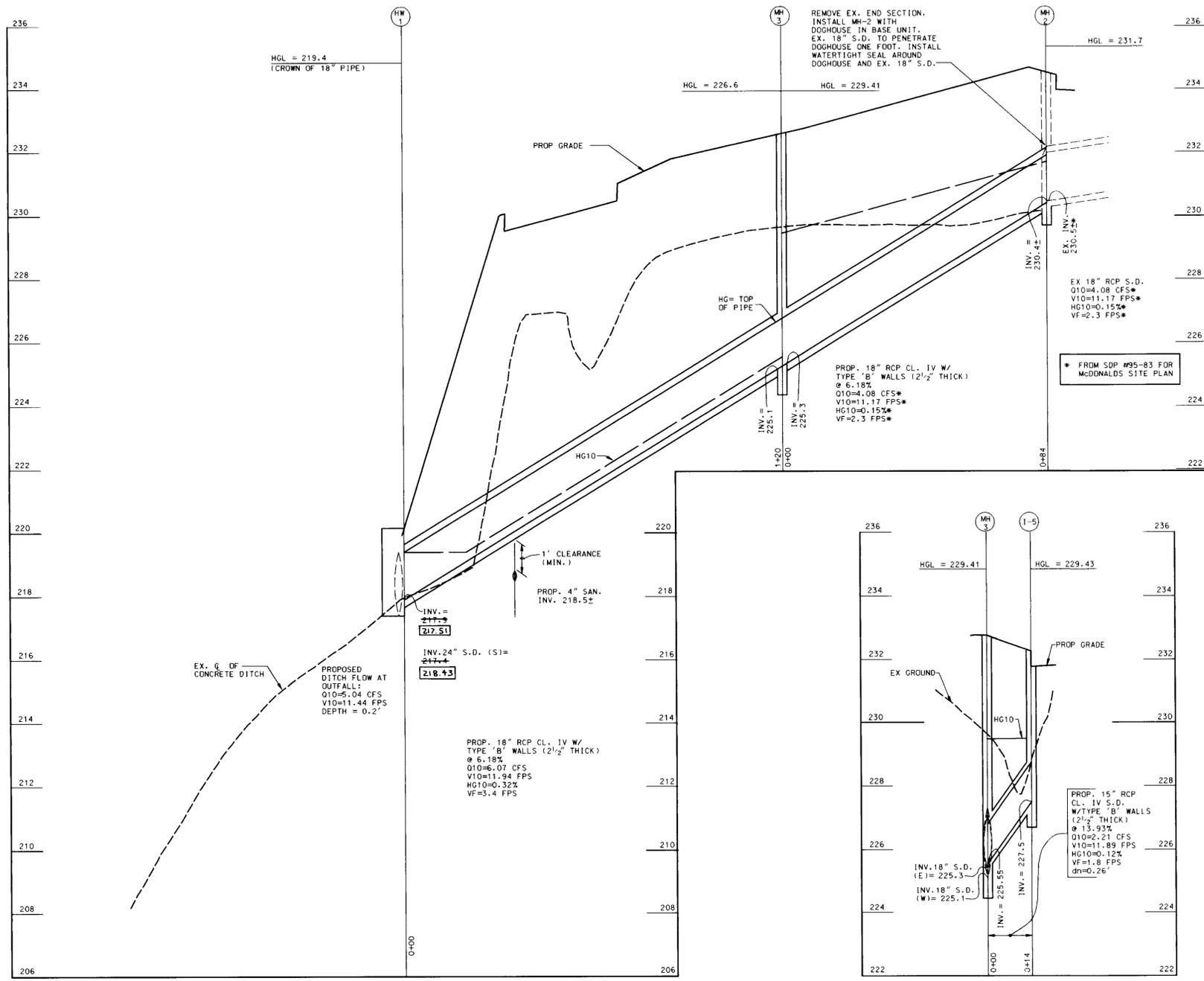
SDP# 96-97

PLANNING BOARD APPROVAL

DATE: 7/16/96

STATE OF MARYLAND PROFESSIONAL ENGINEERING

TIMOTHY F. WHITTIE PROFESSIONAL ENGR. NO. 19155



DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
		CHIEF-DEVELOPMENT ENGINEERING DIVISION
		APPROVED: DIVISION OF LAND DEVELOPMENT & RESEARCH
		DIRECTOR
		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
		COUNTY HEALTH OFFICER

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

BY THE DEVELOPER:
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."
 SIGNATURE OF DEVELOPER
 DATE

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.
 SIGNATURE OF REVIEWER
 DATE

THIS DEVELOPMENT PLAN IS AS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF REVIEWER
 DATE

OWNER
EXXON COMPANY, U.S.A.
 6301 IVY LANE
 SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: MR. MIKE SPECHT
 PHONE: (301)-513-7511

DEVELOPER
EXXON COMPANY, U.S.A.
 6301 IVY LANE
 SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: MR. MIKE SPECHT
 PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC.
 ENGINEERS ARCHITECTS SURVEYORS
 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090

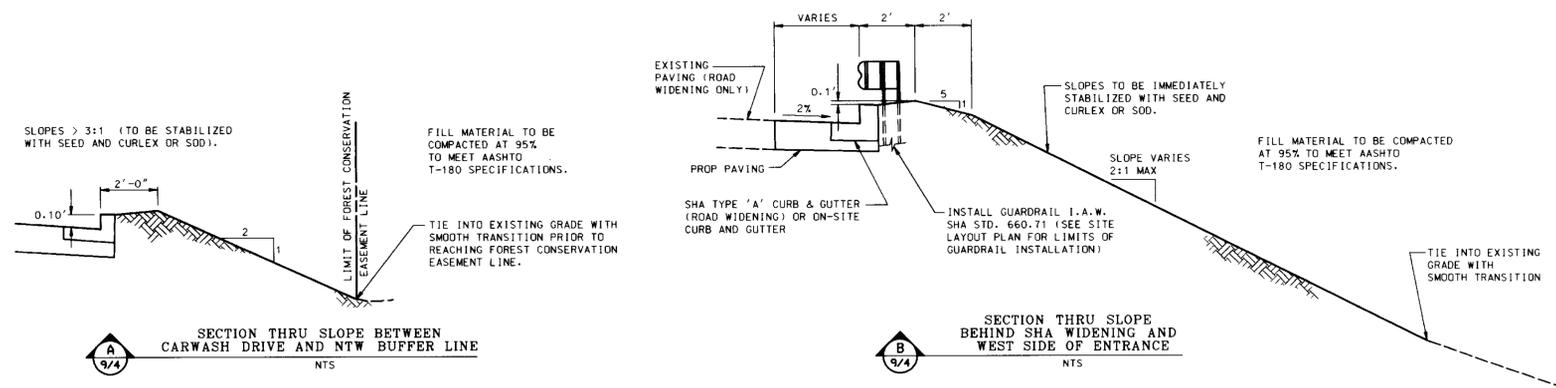
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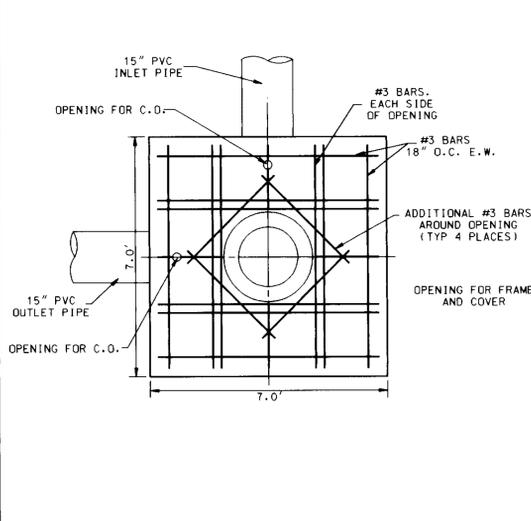
TAX MAP 47 PARCEL 631, P.O. 184
 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE
 FOR AN EXXON STATION AT
 ALL SAINTS ROAD EXXON
 PARCEL A-1
**STORM DRAIN PROFILES AND DETAILS,
 GRADING SECTIONS**

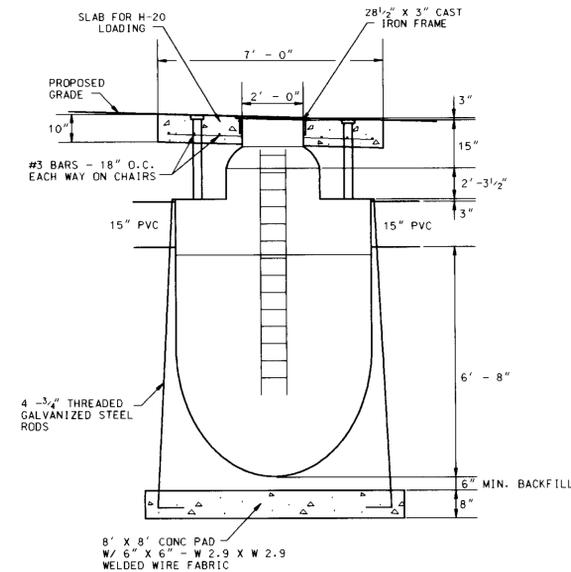
DESIGN BY: JBG SCALE: AS NOTED PROJECT NO.:
 DRAWN BY: MSW/KDN DATE: 04/16/96 DRAWING NUMBER
 CHECKED BY: TFW APPROVED: DATE: 4/17/96
 TIMOTHY F. WHITTIE
 PROFESSIONAL ENGR. - NO. 19155



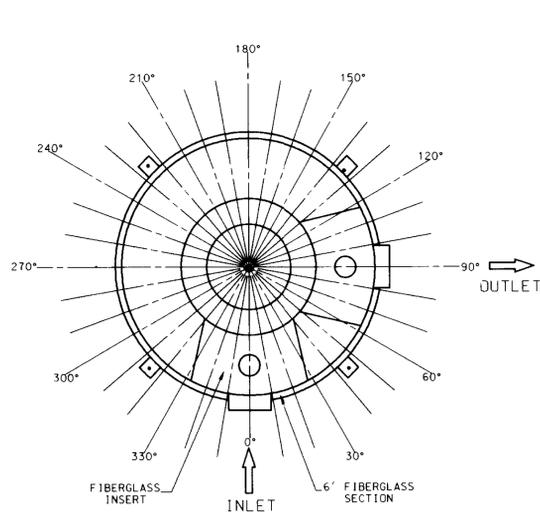
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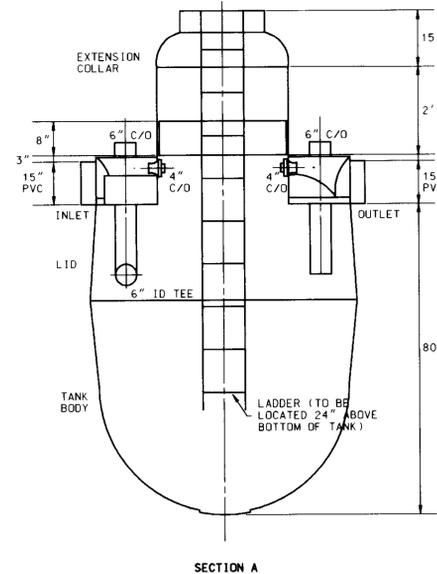
STORMCEPTOR TOP SLAB FOR H-20 LOADING
NOT TO SCALE



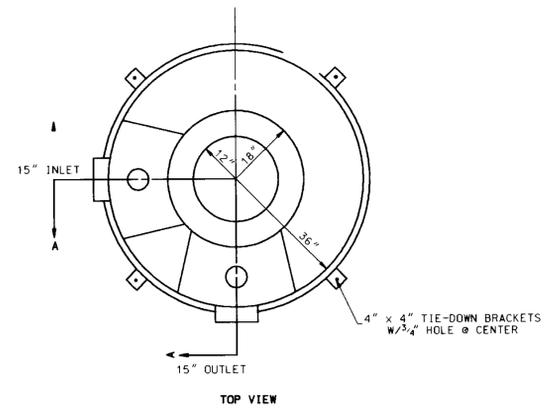
STORMCEPTOR PROFILE
NOT TO SCALE



STORMCEPTOR INSERT OUTLET LOCATION
NOT TO SCALE



STORMCEPTOR STA 1200
NOT TO SCALE



TOP VIEW

NOTE: CONTRACTOR SHALL VERIFY THE DIMENSIONS ON THESE DETAILS TO HIS SATISFACTION PRIOR TO ORDERING THE STORMCEPTOR UNIT AND ALL COMPONENTS. CONTRACTOR MAY USE AN EQUIVALENT CONCRETE STORMCEPTOR IF HE OBTAINS APPROVAL FROM HOWARD COUNTY PRIOR TO INSTALLATION.

INSTALLATION INSTRUCTIONS

- EXCAVATE TO A DEPTH OF 6" BELOW THE ELEVATION OF THE STRUCTURE.
- PREPARE A COMPACTED MATERIAL BED IN THE BOTTOM OF THE EXCAVATION 6" DEEP. ENSURE COMPACTION TO 95% MODIFIED PROCTOR.
- PLACE UNIT IN EXCAVATION AT CORRECT ELEVATION AND CORRECT INLET/OUTLET DRAINS AFTER THE STRUCTURE IS LEVEL.
- FILL TANK ONE-THIRD WITH WATER.
- BACKFILL WITH MATERIAL IN LAYERS NOT EXCEEDING 8" THICK, COMPACTING CAREFULLY TO 95% MODIFIED PROCTOR. CONTINUE TO FILL UNIT WITH WATER AS BACKFILLING PROGRESSES.
- INSTALL EXTENSION COLLAR/COVER OVER NECK OF UNIT. LEVEL THE COVER PLATE AND MEASURE THE DISTANCE FROM THE PLATE TO THE FINISHED GRADE.
- REMOVE EXTENSION AND CUT TO CORRECT LENGTH IF REQUIRED.
- REPLACE EXTENSION, LEVEL AND SQUARE, AND SEAL TO UNIT BY ONE OF THE FOLLOWING: WRAP OUTSIDE OF JOINT WITH FIBERGLASS IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED WITH A FIBERGLASSING KIT. NOTE THAT THIS METHOD APPLIES ONLY WHERE UNIT HAS BEEN SPECIFIED AND SUPPLIED WITH A FIBERGLASSING KIT. DRILL FOUR EQUALLY SPACED HOLES AROUND THE COLLAR SO THAT THE EXTENSION AND THE NECK OF THE UNIT ARE BOTH DRILLED. USE POP RIVETS, OR PLATED THREADED FASTENERS TO JOINT. THEN FILL JOINT FROM THE INSIDE WITH A SILICONE BASED CAULK. WHERE A FLEXIBLE JOINT MUST BE PROVIDED TO PREVENT LOAD TRANSFER, THE JOINT SHOULD BE FILLED FROM THE INSIDE WITH A SILICONE BASED CAULK. THE INSIDE SURFACE OF THE EXTENSION COLLAR WHERE IT OVERLAPS THE NECK OF THE UNIT MUST BE ROUGH Sanded, AND CARE MUST BE TAKEN THAT THE EXTENSION DOES NOT REST ON THE RIBS OR TOP OF THE UNIT.
- COMPLETE BACKFILLING TO FINISH ELEVATION AND POUR FLOOR. IF THE UNIT IS OUTDOORS A SMALL CONCRETE PAD IS REQUIRED TO STABILIZE THE LID.
- IF THERE IS NO FLOOR ABOVE THE UNIT, A CONCRETE PAD MUST BE POURED ABOVE THE UNIT TO PREVENT FLOTATION. ALTERNATIVELY, A CONCRETE PAD MAY BE PLACED BELOW THE UNIT STRAPPED AND OR THREADED ROD USED TO HOLD THE UNIT IN PLACE. PLEASE SEE INSTALLATION INSTRUCTIONS.
- ACCEPTABLE MATERIALS USED IN INSTALLATION ARE AS FOLLOWS: CLEAN NATURALLY-ROUNDED AGGREGATE WITH PARTICLE SIZE NOT LESS THAN 1/8" OR MORE THAN 3/4" IN DIAMETER. WASHED STONE OR GRAVEL CRUSHINGS WITH ANGULAR PARTICLE SIZE NOT LESS THAN 1/8" OR MORE THAN 1/2" ARE ACCEPTABLE AS AN ALTERNATE MATERIAL. WASHED SAND OR OTHER MATERIALS ACCEPTABLE TO THE INSPECTOR.

GENERAL NOTES

- SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.
- ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- VARIOUS TYPES OF EQUIPMENT ARE AVAILABLE COMMERCIALY FOR THE CLEANOUT OF SYSTEMS. THE MOST COMMONLY USED EQUIPMENT AND TECHNIQUES USED FOR CLEANING SUBSURFACE SYSTEMS ARE VACUUM PUMP & WATERJET SPRAY. BOTH SYSTEMS ARE GENERALLY MOUNTED ON A SELF-CONTAINED VEHICLE AND CAN EFFECTIVELY REMOVE STONES, LEAVES, LITTER, AND SEDIMENT DEPOSITS FROM SUMPS AND CHAMBERS.

STORM DRAIN CONSTRUCTION NOTES

- ALL STORM DRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS OF THE MARYLAND STATE HIGHWAY ADMINISTRATION AND HOWARD COUNTY STANDARDS AND SPECIFICATIONS FOR UTILITY CONSTRUCTION.
- ALL MANHOLE LIDS AND GRATES TO BE TRAFFIC BEARING AND BICYCLE SAFE, EXCEPT I-3.
- STORM DRAINS IN SHA RIGHT-OF-WAY TO BE CONSTRUCTED PER SHA PERMIT.

REQUIRED PROCEDURES AND INSPECTIONS FOR INGROUND WQ FACILITY

THE FOLLOWING INSPECTIONS ARE REQUIRED DURING CONSTRUCTION. ADDITIONAL INSPECTIONS MAY BE REQUIRED AND NOTED BY THE INSPECTOR.

- PRECONSTRUCTION MEETING: AN OPPORTUNITY TO REVIEW SITE PLANS, DISCUSS THE PURPOSE OF THE FACILITY AND TO ANSWER QUESTIONS REGARDING CONSTRUCTION AND/OR INSPECTION PROCEDURES.
- CONSTRUCTION: INSPECTION(S) WILL BE MADE DURING THE CONSTRUCTION OF THE FACILITY TO ENSURE ACCORDANCE WITH THE PLANS SPECIFIC INSPECTION REQUIREMENTS WILL BE DETERMINED AT THE PRECONSTRUCTION MEETING.
- FINAL INSPECTION: A FINAL CHECK WILL BE MADE TO CHECK DESIGN DIMENSIONS. IF CONSTRUCTION IS SATISFACTORY.

STORMWATER QUANTITY MANAGEMENT AND WATER QUALITY MAINTENANCE NOTES (PRIVATELY MAINTAINED)

- INSPECT THE STORMCEPTOR ON A MONTHLY BASIS AND NOTE SEDIMENT AND OIL ACCUMULATIONS. MORE FREQUENT INSPECTIONS ARE APPROPRIATE WHERE OIL SPILLS OCCUR REGULARLY. STORMCEPTOR CANADA INC. CAN PROVIDE ADVICE ON SAMPLING EQUIPMENT. PHONE 1-800-565-4801.
- SEDIMENT SHOULD BE REMOVED ANNUALLY, OR WHENEVER THE ACCUMULATION REACHES 50% OF THE OPERATING DEPTH, FROM BASE TO DRAIN INVERT. IN AREAS OF NEW CONSTRUCTION, OR WHERE VEGETATION HAS NOT YET BEEN ESTABLISHED MORE FREQUENT REMOVAL MAY BE NECESSARY.
- VACUUM TRUCKS ARE USED TO REMOVE THE SEDIMENT AND OIL FROM THE STORMCEPTOR TREATMENT CHAMBER. OIL LEVELS GREATER THAN 2.5 CM SHOULD BE REMOVED IMMEDIATELY BY A LICENSED WASTE MANAGEMENT FIRM, AND SIGNIFICANT SPILLS MUST BE REPORTED TO THE APPROPRIATE REGULATORY AGENCY.
- THE PIPES AND STRUCTURAL PARTS SHALL BE CLEANED AND REPAIRED AS NEEDED.
- ALL MAINTENANCE SHALL BE PERFORMED BY THE OWNER OR BY THE OWNER'S REPRESENTATIVE AT THE OWNER'S EXPENSE.
- MINIMIZE SURFACE EROSION FROM PVIOUS SURFACES AT ALL TIMES; MAINTAIN GRASS, SOO, AND/OR MULCH COVERAGE UPON LANDSCAPINGS.
- REMOVE DEBRIS ON TOP OF INLET GRATES AFTER EVERY RAINFALL.
- AT INTERVALS NOT EXCEEDING 1 YEAR OR AS NEEDED, REMOVE ALL GREASE AND OILS, SILTS AND AGGREGATES, AND DEBRIS FROM ALL INLETS AND STRUCTURES.
- THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:
 - ALL LIQUID MATERIAL IN THE SEPARATOR INLET SHALL BE PUMPED INTO A SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.
 - THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.
- THE 72" ACCMP, OUTFALL STRUCTURE, 24" PIPE AND HW-1 SHALL BE INSPECTED BIANNUALLY AT 6-MONTH INTERVALS. ANY DEBRIS SHALL BE REMOVED. STRUCTURAL DEFICIENCIES SHALL BE NOTED AND REPAIRED IMMEDIATELY IN KIND.

CONSTRUCTION SPECIFICATIONS

- Geo-textile or Filter Fabric

Acceptable Geo-textiles:

Amoco	45/45, 45/57
Mirafit	140-N, 180-N
Polyfelt	TS500, TS700
Spartan Tech.	ST-45, ST-80
Supac	4.5MP, 8MP
Terratex	SD, ND-8

Note: This is a partial list only and should not be limited to or endorse any products.
- Site Preparation

Areas designated for borrow areas, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 2:1.

All cleared and grubbed material shall be disposed of as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use designated areas.
- Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials.
- Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. 580 psi low-strength concrete may be used in place of earth backfill at the discretion of the stormwater management inspector.
- Concrete

Concrete must meet the requirements of Maryland Department of Transportation State Highway Administration Standard Specifications for Construction and Materials, Section 918 (Portland Cement Concrete Mixtures), Mix No. 3, concrete shall have a minimum 28 day compressive strength $f_c = 3500$ psi. Reinforcing steel must be ASTM A615, Grade 60, Steel angles and anchor bars must be ASTM A36.
- Reinforced Concrete Culvert Pipe (RCCP)

RCCP shall conform to SHA Specification Section 908.03. Rubber gaskets for pipe joints shall conform to SHA Specification Section 908.14.01.
- Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.2.

SEQUENCE OF CONSTRUCTION AND INSPECTOR'S CHECK-OFF LIST FOR SWM FACILITIES				
STAGE	DEVELOPER'S/ENGINEER APPROVAL		INSPECTOR'S APPROVAL	
	INITIALS	DATE	INITIALS	DATE
1. PRE-CONSTRUCTION MEETING. *				
2. INSTALLATION OF STRUCTURES AND ASSOCIATED STORM DRAINAGE: *				
A. FOOTING SUBGRADE PRIOR TO POURING. *				
B. FOOTING FORMED AND STEEL SET PRIOR TO POURING. *				
C. STRUCTURE SIDES FORMED AND STEEL SET PRIOR TO POURING. *				
D. PRIOR TO TOP SLAB AND MANHOLES BEING SET ON, INSPECTOR MUST INSPECT ALL CAST-IN-PLACE AND PRE-CAST STRUCTURES FOR PROPER ASSEMBLY. *				
3. INSTALLATION OF 72" ACCMP AND VENT PIPE. *				
4. SITE IS PERMANENTLY STABILIZED, SEDIMENT CONTROL MEASURES REMOVED AND ALL SEDIMENT AND DEBRIS REMOVED FROM THE STRUCTURE. *				
5. FINAL INSPECTION. *				
NOTE: SEE CONSTRUCTION SPECIFICATIONS FOR DETAILED REQUIREMENTS.				
* MANDATORY NOTIFICATION/APPROVAL OF INSPECTOR PRIOR TO PROCEEDING WITH NEXT STAGE.				

4035M-4 (REV 4-89)

Stormceptor® Order Request Form

Contractor Information

Name: _____
Address: _____
City: _____ State: _____ Zip Code: _____
Contact: _____ Phone: _____ Fax: _____

Owner Information

Name: _____
Phone: _____
Fax: _____

Please draw orientation of inlet and outlet pipes on diagram along with pipe inside diameter (in.) and invert elevation (ft.). Clearly mark inlet pipes with an I and outlet pipes with an O and provide the inlet/outlet pipe angle in degrees.

Stormceptor® Model	Insert Size	Manhole
900 <input type="checkbox"/>	3600 <input type="checkbox"/>	22" <input type="checkbox"/>
1200 <input type="checkbox"/>	4800 <input type="checkbox"/>	32" <input type="checkbox"/>
1800 <input type="checkbox"/>	6000 <input type="checkbox"/>	44" <input type="checkbox"/>
2400 <input type="checkbox"/>	7200 <input type="checkbox"/>	Custom <input type="checkbox"/>

Top Elevation (ft.) _____
Inlet Pipe Invert (ft.) _____
Outlet Pipe Invert (ft.) _____
Pipe Type: _____
Pipe Inside Diameter (in) [10] _____
Pipe Outside Diameter (in) [00] _____

Project Name: _____
Approximate time frame until required delivery (weeks): _____
Delivery Address: Street _____ City _____ State _____ Zip Code _____
Designer Company: _____ Phone _____ Fax _____
Designer Contact: _____

Please fax this sheet back to Hydro Conduit/Virginia Precast at (804) 798-3426 Attn: Dave Brinser / Bryant Lowery (Phone: 1-800-999-2278)

For credit information/applications contact Carole Brusdas at (804) 798-6068 For Technical Assistance Please Call Stormceptor Corporation at (301) 762-8361 or toll free at 1-800-762-4703

09/12/95

DATE	NUMBER	REVISION DESCRIPTION

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chris Dammann 8/29/96
CHIEF-DEVELOPMENT ENGINEERING DIVISION DATE

Gina Dammann 8/31/96
CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH DATE

James M. Boyd 8/5/96
COUNTY HEALTH OFFICER DATE

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

BY THE ENGINEER:

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

Jim Whittle 9/17/96
SIGNATURE OF ENGINEER DATE

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A 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."

W. J. Specht 9/12/96
SIGNATURE OF DEVELOPER DATE

REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

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

J. H. Warkentin 8/7/96
NATURAL RESOURCES CONSERVATION SERVICE DATE

Heather W. Selmon 8/7/96
HOWARD S.C.D. DATE

OWNER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511

DEVELOPER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 879-2090

FWA JOB NUMBER 03307 FWA DRAWING FILE NAME: SDPM01

CENSUS TRACT NO. 6069.03

TAX MAP 47 PARCEL 631, P.O. 184
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1 STORMWATER MANAGEMENT / STORMCEPTOR DETAILS

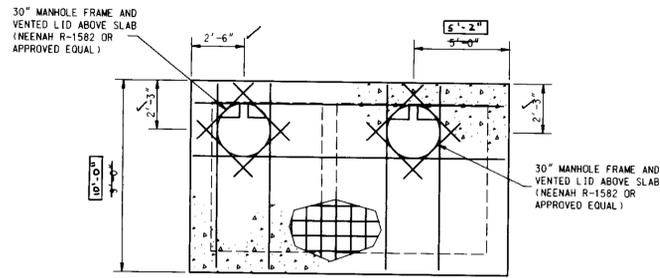
DESIGN BY: JBG SCALE: AS SHOWN PROJECT NO.: _____
DRAWN BY: KDN/MSH DATE: 04/16/1996 DRAWING NUMBER _____
CHECKED BY: TFW APPROVED: _____ 10 OF 17

SDP# 96-97
PLANNING BOARD APPROVAL

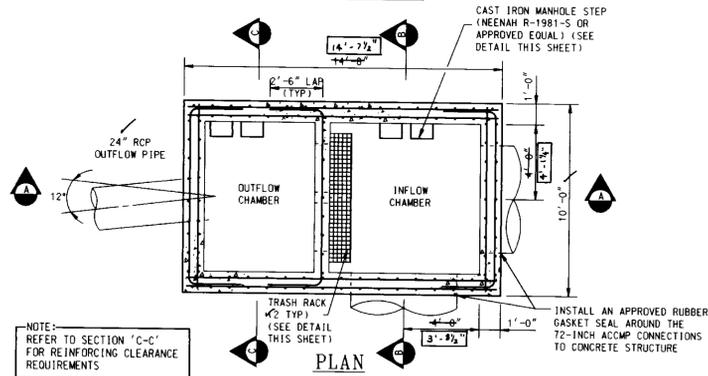
DATE: 4/17/96

Jim Whittle
MORTIMER F. WHITTLE
PROFESSIONAL ENGINEER NO. 19155

NOTE:
USE NEENAH R-4999
TYPE L GRATE AT 1-1

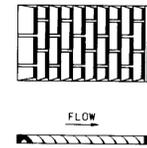
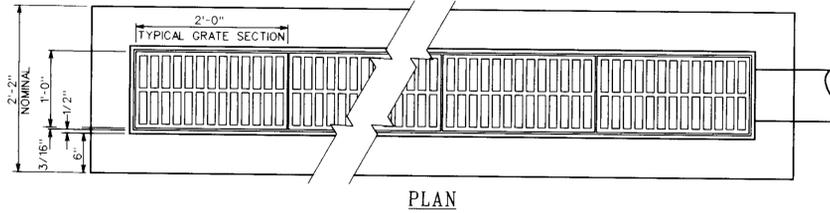
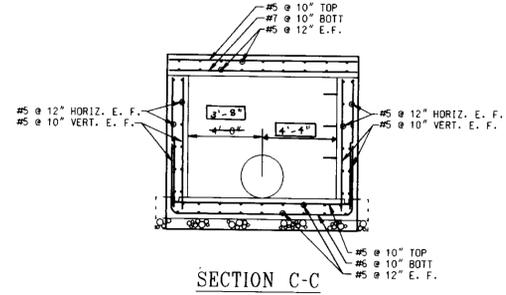
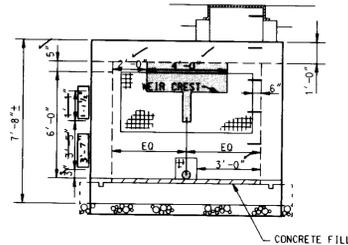


PLAN - TOP SLAB

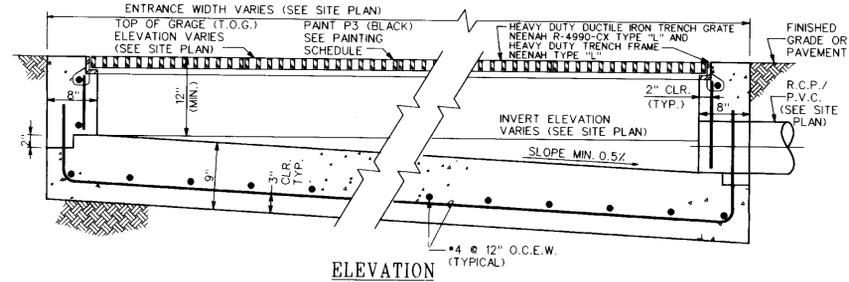


PLAN

NOTE: REFER TO SECTION "C-C" FOR REINFORCING DETAILS

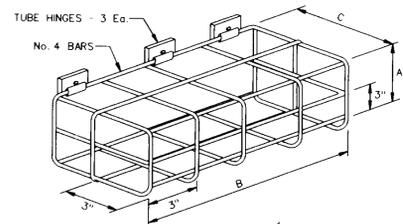


NEENAH TYPE L GRATE DETAIL
NOT TO SCALE



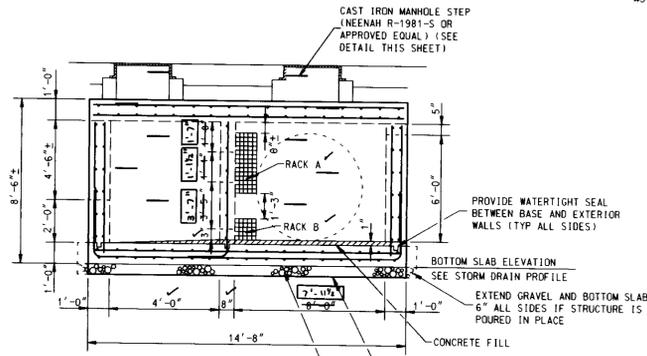
TYPICAL TRENCH DRAIN DETAIL

PIPE INLET AND OUTLET LOCATION MAY VARY (SEE SITE PLAN) N.T.S.



TRASH RACK TO BE HOT-DIPPED GALVANIZED, AND PAINTED BATTLESHIP GREY

RACK	DIMENSIONS		
	A	B	C
A	2'-9"	5'-0"	1'-0"
B	1'-0"	2'-0"	1'-0"

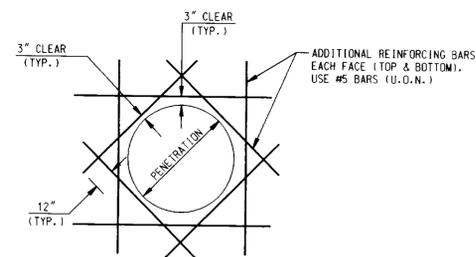
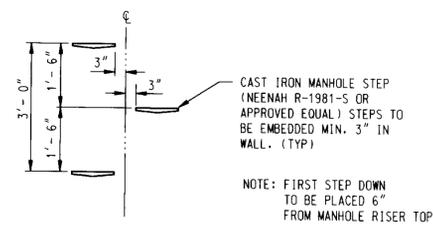


SWM OUTFALL STRUCTURE DETAILS

NOT TO SCALE

MANHOLE STEP DETAIL

NOT TO SCALE



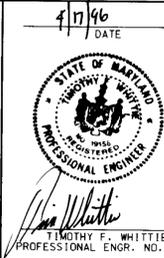
GENERAL NOTES

- ALL STRUCTURES DETAILED ON THIS SHEET SHALL BE CAPABLE OF SUPPORTING AASHTO HS-20 LOADING, AND SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH ACI 318, LATEST EDITION.
- CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH $f_c' = 3,500$ psi.
- ALL REINFORCING SHALL CONFORM TO ASTM A-615 GRADE 60.
- CONTRACTOR MAY PRE-CAST STRUCTURE IN WHOLE OR IN PART, SUBJECT TO THE PRIOR APPROVAL OF PRE-CAST SHOP DRAWING SUBMITTED TO HOWARD COUNTY BUREAU OF ENGINEERING PRIOR TO MANUFACTURING.
- SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED.
- ALL OPENINGS TO THE STRUCTURE SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.

SDP# 96-97

PLANNING BOARD APPROVAL

DATE: 4/17/96



DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
		CHIEF-DEVELOPMENT ENGINEERING DIVISION
8/2/96		DATE
		CHIEF DIVISION & LAND DEVELOPMENT & RESEARCH
8/13/96		DATE
		DIRECTOR
		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
8/5/96		DATE

OWNER: EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301)-513-7511

DEVELOPER: EXXON COMPANY, U.S.A.
6301 IVY LANE
SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090

TAX MAP 47 PARCEL 631, P.O. 184
6 TH. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: FOR AN EXXON STATION ALL SAINTS ROAD EXXON PARCEL A-1

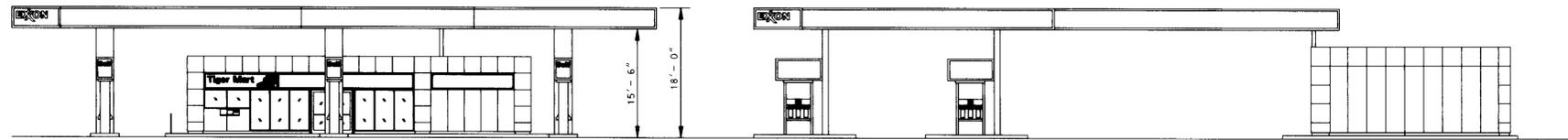
STORMWATER MANAGEMENT DETAILS

DESIGN BY: JBG SCALE: AS SHOWN PROJECT NO.:

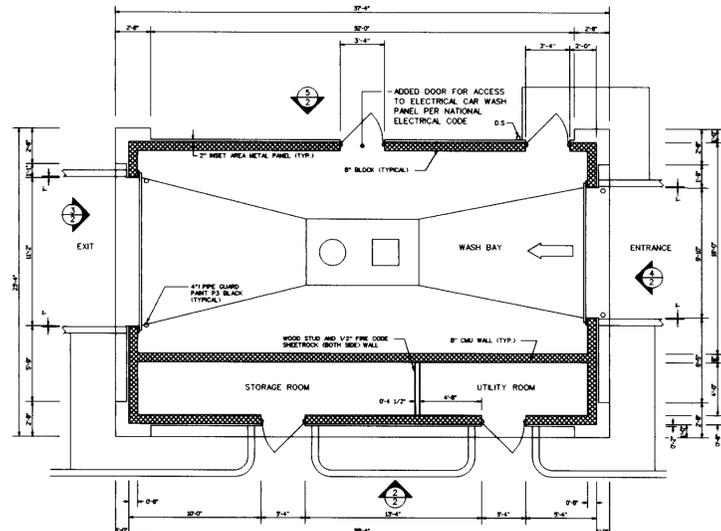
DRAWN BY: MM/KN DATE: 02/05/1996 DRAWING NUMBER

CHECKED BY: TFW APPROVED: 11 OF 17

SDP-96-97



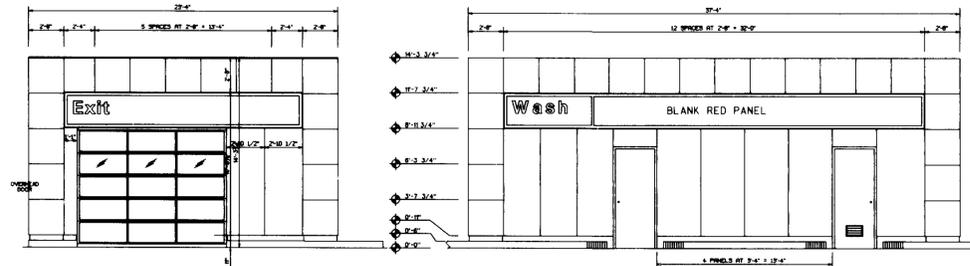
CANOPY ELEVATIONS
NTS



FLOOR PLAN
NOT TO SCALE

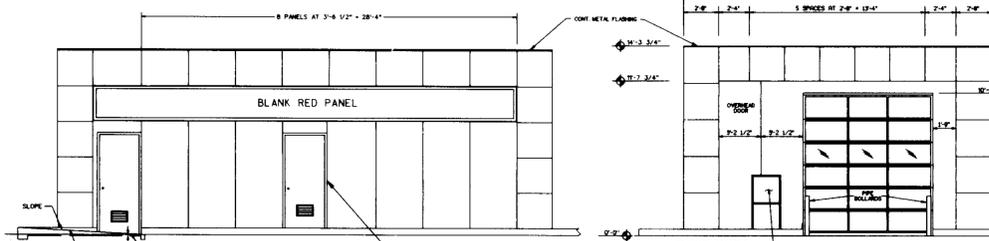
CAR WASH FLOOR PLAN & ELEVATIONS
NTS

NOTE: CAR WASH TO BE FURNISHED WITH RECLAIM SYSTEM. CAR WASH ALSO TO BE FURNISHED WITH A MUD AND GREASE TRAP/OIL AND GRIT INTERCEPTOR, WHICH WILL DISCHARGE TREATED RUNOFF TO SANITARY SYSTEM.



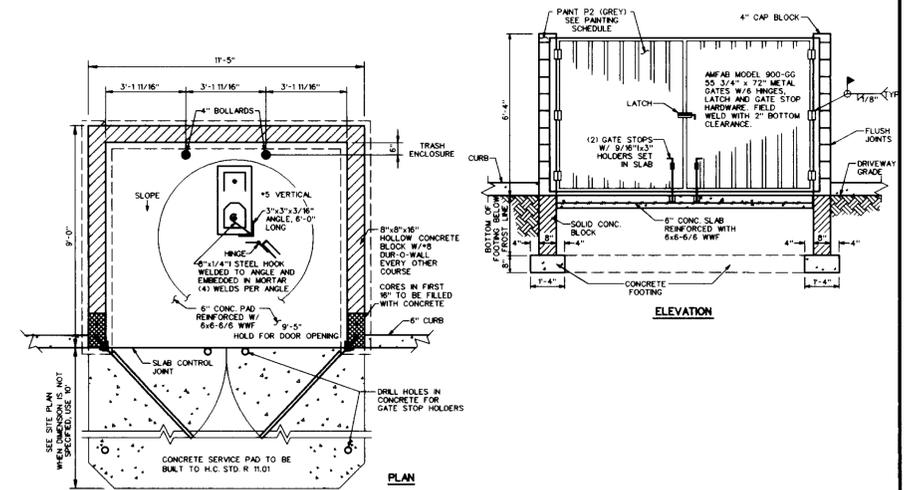
EXIT ELEVATION
NOT TO SCALE

FRONT ELEVATION
NOT TO SCALE

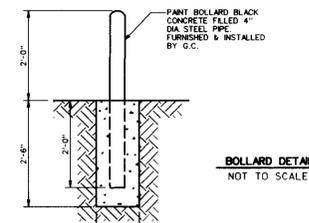


REAR ELEVATION
NOT TO SCALE

ENTRANCE ELEVATION
NOT TO SCALE



TRASH ENCLOSURE
NTS

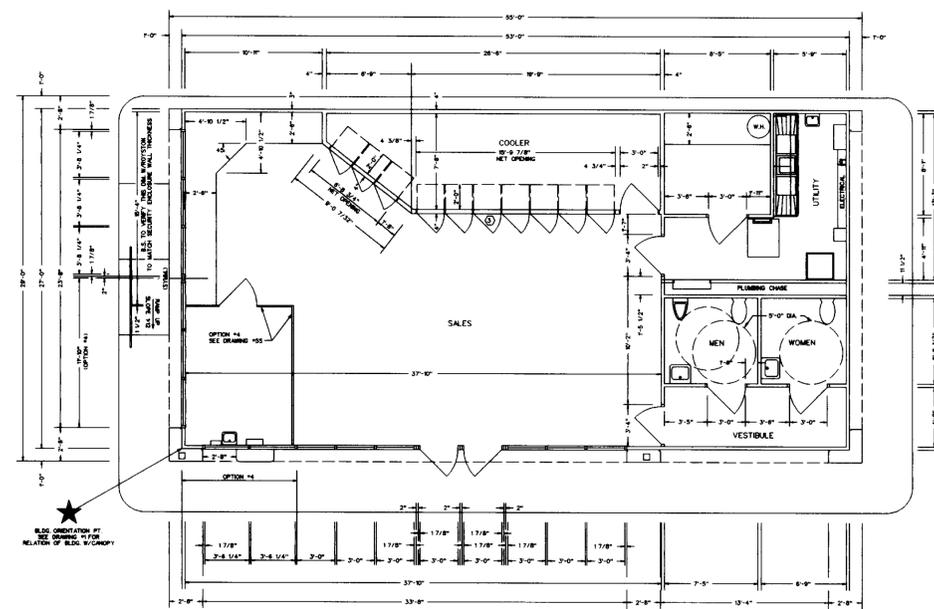


BOLLARD DETAIL
NOT TO SCALE

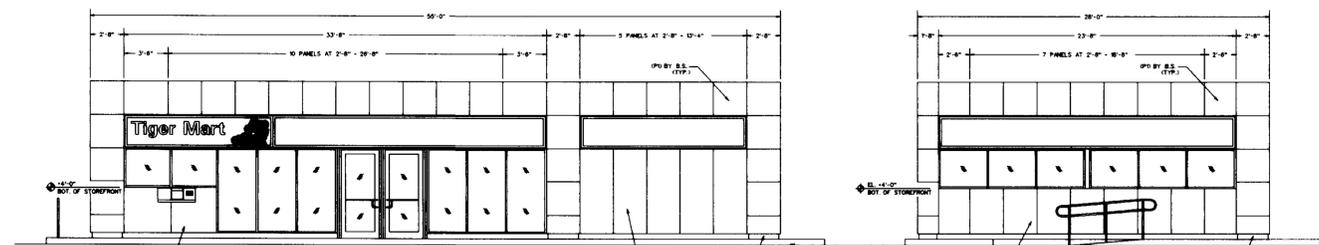
SDP# 96-97
PLANNING BOARD APPROVAL

7/17/96
DATE

STATE OF MARYLAND
TIMOTHY F. WHITTE
PROFESSIONAL ENGINEER
NO. 19155

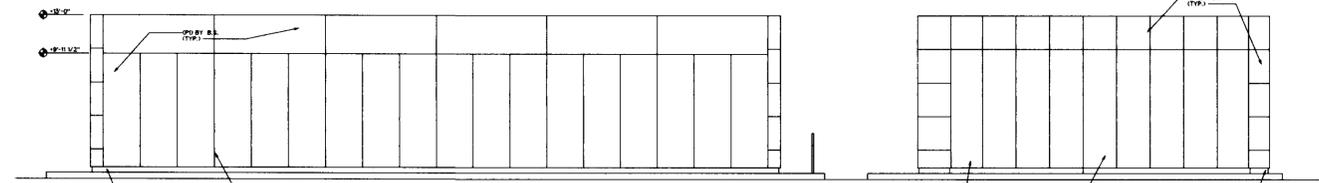


FLOOR PLAN
NOT TO SCALE



ELEVATION
NOT TO SCALE

ELEVATION
NOT TO SCALE



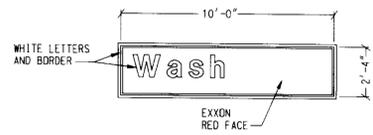
ELEVATION
NOT TO SCALE

ELEVATION
NOT TO SCALE

C-STORE FLOOR PLAN & ELEVATIONS
NTS

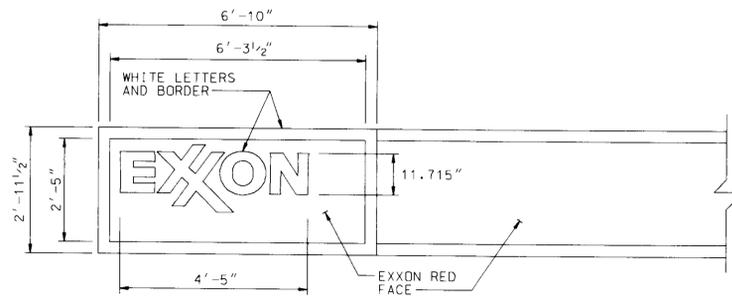
COLOR CODE:
P1 - EXXON TAN
P2 - EXXON GREY
P3 - BLACK
P4 - WHITE

DATE	NUMBER	REVISION DESCRIPTION
7/17/96		APPROVED: DEPARTMENT OF PLANNING AND ZONING
8/2/96		CHIEF-DEVELOPMENT ENGINEERING DIVISION
8/13/96		CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH
8/14/96		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
8/5/96		COUNTY HEALTH OFFICER
OWNER: EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511		
DEVELOPER: EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511		
FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)79-2090		
CENSUS TRACT NO: 6069.03		
TAX MAP 47 PARCEL 631, P.O. 184 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1 BUILDING PLAN		
DESIGN BY: JBG	SCALE: AS SHOWN	PROJECT NO.:
DRAWN BY: KDN	DATE: 04/15/1996	DRAWING NUMBER
CHECKED BY: TFW	APPROVED:	12 OF 17



PROPOSED CAR WASH SIGN - 23.33 SQ.FT.

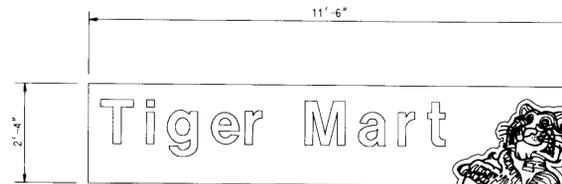
INTERNALLY ILLUMINATED, SINGLE FACE
SCALE: 1/4" = 1'-0"



PROPOSED CANOPY FASCIA SIGN - 15.20 SQ.FT.

SCALE: 1/2" = 1'-0"

TWO (2) SINGLE SIDED SIGNS = 30.40 SQ.FT.
INTERNALLY ILLUMINATED SINGLE FACE

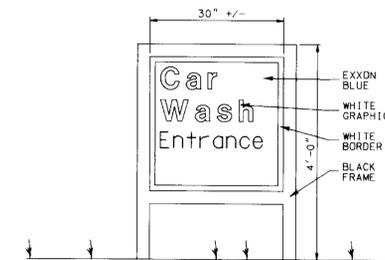


PROPOSED BUILDING SIGN - 26.83 SQ.FT.

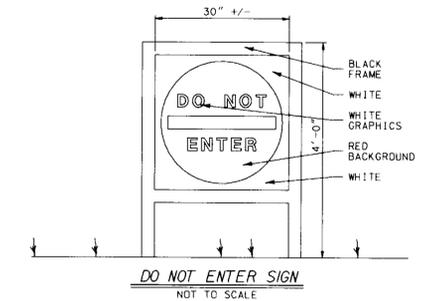
INTERNALLY ILLUMINATED, SINGLE FACE
SCALE: 1/2" = 1'-0"

SIGNAGE CALCULATIONS

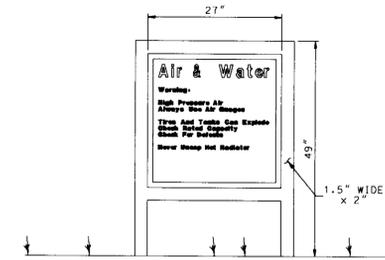
A. ALLOWABLE SIGNAGE:			
1. C-STORE:	2 SQ.FT./L.F.T. X 55'	=	110.00 SQ.FT.
2. CAR WASH:	2 SQ.FT./L.F.T. X 23'-4"	=	46.66 SQ.FT.
TOTAL ALLOWABLE SIGN AREA		=	156.66 SQ.FT.
B. PROPOSED SIGNAGE:			
1. NOMINAL 20 SERIES MAJOR I.D. SIGN W/(2) ANCILLARY SIGNS			
"EXXON" I.D.	=	2.52 SQ.FT.	
"TIGER MART/WASH"	=	8.09 SQ.FT.	
PRICE SIGN	=	23.21 SQ.FT.	
SUB TOTAL		=	33.82 SQ.FT.
(ALLOWED FOR PRICE SIGN)		=	23.21 SQ.FT.
TOTAL MAJOR I.D. SIGN AREA		=	10.61 SQ.FT.
2. BUILDING SIGNAGE: (SINGLE SIDE ONLY)			
A. CANOPY SIGNS:			
(2) "EXXON" @ 15.20 SQ.FT. EACH	=	30.40 SQ.FT.	
B. CONVENIENCE STORE:			
(1) "TIGER MART"	=	26.83 SQ.FT.	
C. CAR WASH			
(1) "WASH"	=	23.33 SQ.FT.	
TOTAL BUILDING SIGN AREA		=	80.56 SQ.FT.
TOTAL PROPOSED ON SITE SIGNAGE		=	91.17 SQ.FT.



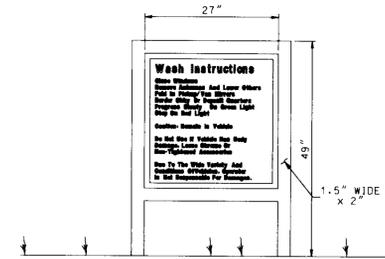
CAR WASH ENTRANCE SIGN
NOT TO SCALE



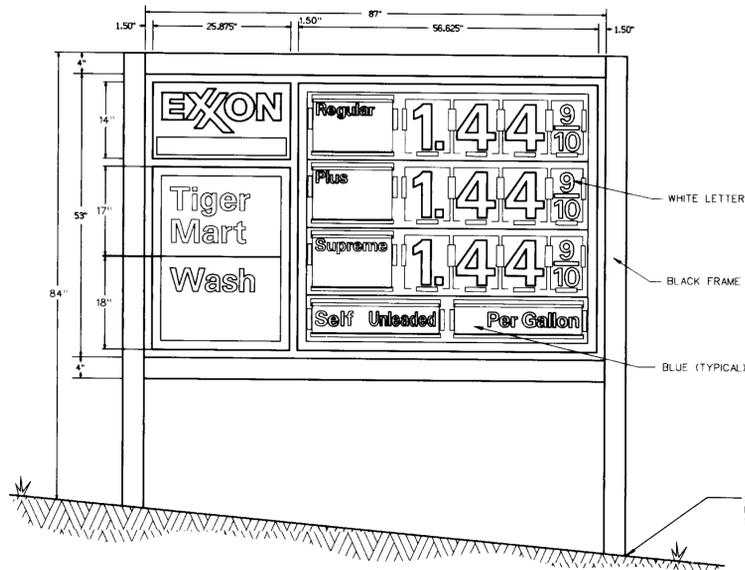
DO NOT ENTER SIGN
NOT TO SCALE



AIR/WATER SIGN
NOT TO SCALE



WASH INSTRUCTION SIGN
NOT TO SCALE



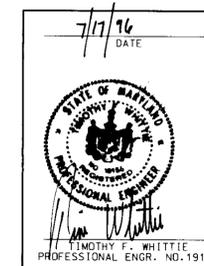
PROPOSED MAJOR I.D. SIGN

(ILLUMINATED)(TWO-SIDED)

SCALE: 3/4" = 1'-0"

PROPOSED EXXON I.D.	=	2.52 SQ.FT.
PROPOSED ANCILLARY (TIGER MART/WASH)	=	8.09 SQ.FT.
PROPOSED PRICE	=	23.21 SQ.FT.
TOTAL SYSTEM	=	33.82 SQ.FT.

SDP# 96-97
PLANNING BOARD APPROVAL

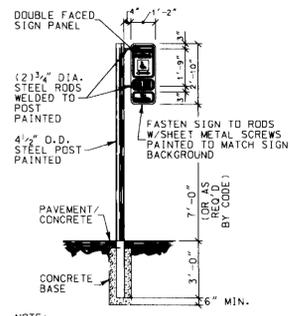


DATE:	NUMBER:	REVISION DESCRIPTION:
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>Chris Damann</i> 8/2/96		
CHIEF-DEVELOPMENT ENGINEERING DIVISION	DATE	
<i>Uma Sumaryanti</i>	8/13/96	
CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH	DATE	
<i>James South</i>	8/19/96	
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.		
<i>Joyce M. Bond</i> 8/13/96		
COUNTY HEALTH DEPARTMENT PLANNING BOARD APPROVAL		
OWNER:	EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511	
DEVELOPER:	EXXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511	
FREDERICK WARD ASSOCIATES INC. ENGINEERS ARCHITECTS SURVEYORS 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090		
FWA JOB NUMBER 93397 FWA DRAWING FILE NAME CDSIGN.DGN		
CENSUS TRACT NO. 6069.03		
TAX MAP 47 PARCEL 631, P.O. 184 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1 SIGNAGE PLAN		
DESIGN BY: JBG	SCALE: AS SHOWN	PROJECT NO.:
DRAWN BY: KDN	DATE: 04/15/1996	DRAWING NUMBER
CHECKED BY: TFW	APPROVED: .	13 OF 17

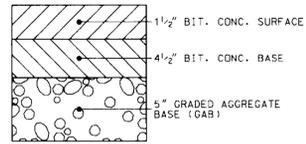
SDP-96-97



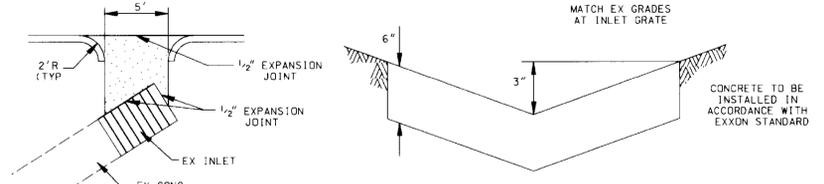
HANDICAP SIGN DETAILS
 NOT TO SCALE



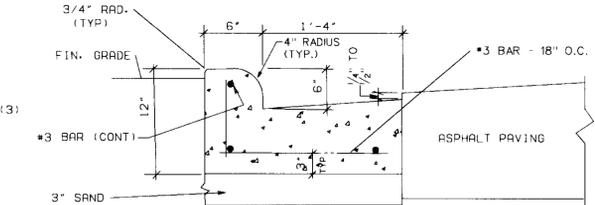
ON-SITE PAVING SECTION
 HOWARD COUNTY STD. DETAIL R-2.01
 SECTION NUMBER P-2
 NOT TO SCALE



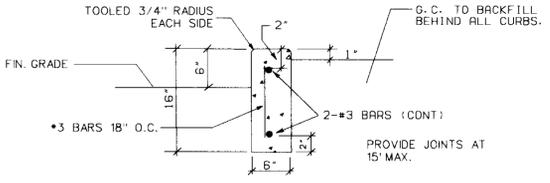
OFF-SITE PAVING SECTION
 HOWARD COUNTY STD. DETAIL R-2.01
 SECTION NUMBER P-3
 NOT TO SCALE



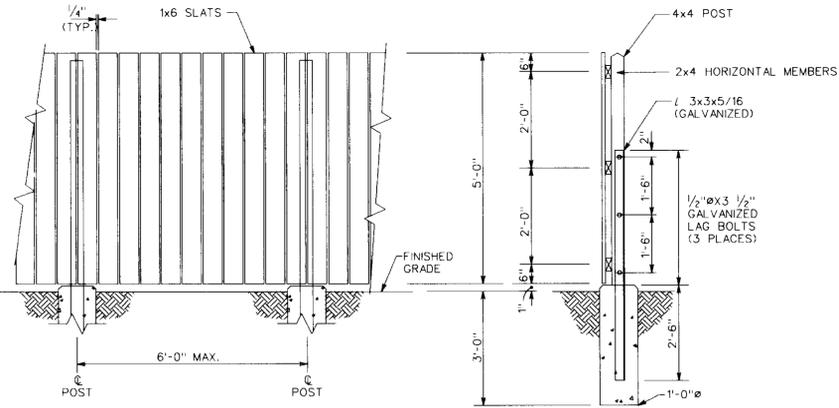
DETAIL: CONCRETE CHANNEL TO EX INLET
 NOT TO SCALE



ON-SITE CURB AND GUTTER
 NOT TO SCALE

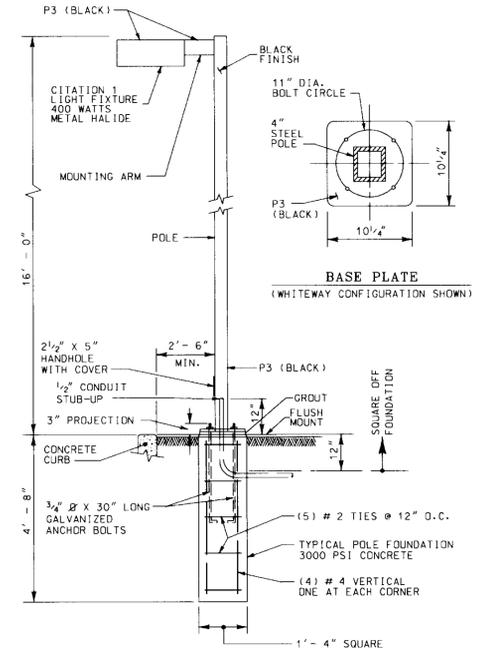


6"X16" CONCRETE CURB
 NOT TO SCALE

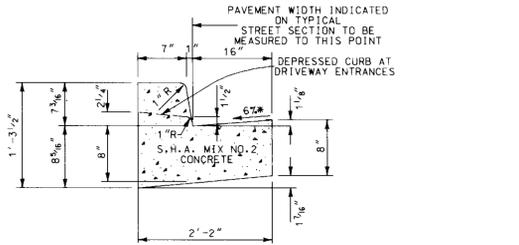


SOLID WOOD FENCE - SINGLE FACE
 NOT TO SCALE

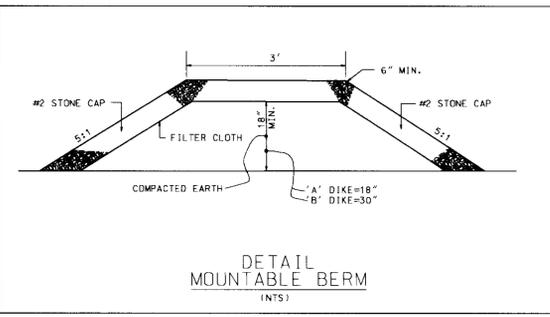
- GENERAL NOTES:
 1. ALL MATERIAL AND INSTALLATION BY G.C.
 2. ALL LUMBER TO BE ROUGH SAWN CEDAR, GRADE #2 SELECT
 3. FINISH: APPLY ONE COAT OF JONES-BLAIR LATEX EXXON TAN STAIN
 4. CONCRETE: 3,000 PSI @ 30 DAYS



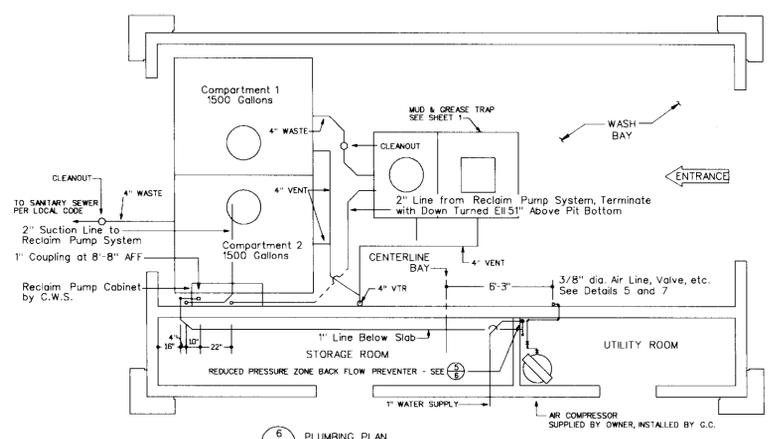
TYPICAL YARD LIGHT DETAIL
 NOT TO SCALE



STANDARD 7" COMBINATION CURB AND GUTTER
 HOWARD COUNTY STD. DETAIL R-3.01
 NOT TO SCALE

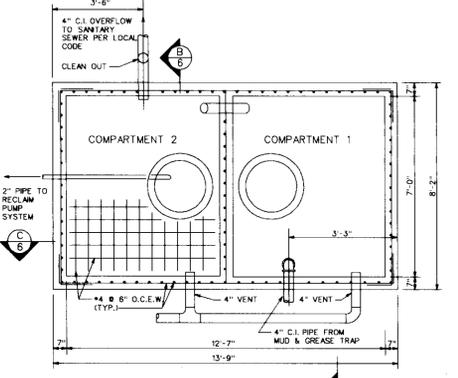


DETAIL MOUNTABLE BERM (INTS)



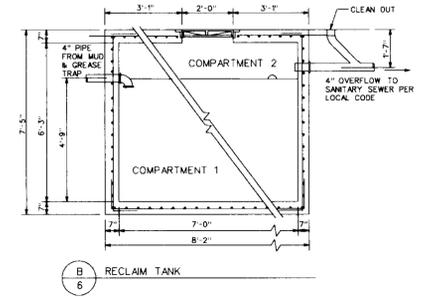
PLUMBING PLAN

NOTE:
 1/2" WATER SUPPLY FROM 16" MAIN IN ALL SAINTS ROAD TO COME INTO STORAGE ROOM TO 1" METER. SUPPLY FOR CARWASH AND 1/2" SUPPLY FOR TIGER MARY TO COME OFF THIS SERVICE. SEE PLUMBING PLANS ON CARWASH AND C-STORE DRAWINGS. WATER SUPPLY TO BE PRIVATE.

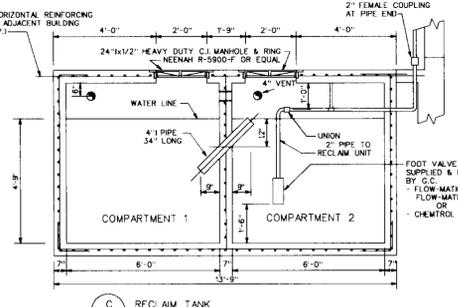


RECLAIM TANK

CAR WASH RECYCLING SYSTEM
 NOT TO SCALE



RECLAIM TANK



RECLAIM TANK

NOTE: PRECAST UNITS MEETING THESE DWG. SPECIFICATIONS ARE ACCEPTABLE.

SDP# 96-97
 PLANNING BOARD APPROVAL

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief-Development Engineering Division
 Chief-Division & Land Development & Research
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT.

OWNER: **EXXON COMPANY, U.S.A.**
 6301 IVY LANE, SUITE 700, GREENBELT, MARYLAND 20770
 ATTN: MR. MIKE SPECHT, PHONE: (301)-513-7511

DEVELOPER: **EXXON COMPANY, U.S.A.**
 6301 IVY LANE, SUITE 700, GREENBELT, MARYLAND 20770
 ATTN: MR. MIKE SPECHT, PHONE: (301)-513-7511

DATE: 7/17/96
 PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 LICENSE NO. 19155
 TIMOTHY E. WHITTIE

FREDERICK WARD ASSOCIATES INC.
 ENGINEERS ARCHITECTS SURVEYORS
 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090
 FWA JOB NUMBER 93397 FWA DRAWING FILE NAME CDS7DTEL
 CENSUS TRACT NO. 6069.03
 TAX MAP 47 PARCEL 631, P.O. 184
 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 TITLE: FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1
SITE DETAILS
 DESIGN BY: JBG SCALE: AS SHOWN PROJECT NO.:
 DRAWN BY: KDN DATE: 04/15/1996
 CHECKED BY: TFW APPROVED: 14 OF 17

TAX MAP 47
BLOCK 21 PARCEL 556
MARGARET A. McALLISTER
& MELVIN F. BEACH
PARCEL 2 OF CMP 1690/137
ZONED R-SC

PARCEL A-1:
TAX MAP 47 GRID 21
EXXON CORPORATION
FINAL RECORD PLAT NO. F-96 113
PLAT NO.
ZONED B-2

TAX MAP 47
BLOCK 21 PARCEL 184
OTHER LAND OF
MIRZA H.A. BAIG & AMINA J. BAIG
CMP 1889/042
ZONED B-2
FINAL RECORD PLAT F-95-38
PLAT NO. 11882
McDONALDS RESTAURANT SDP NO. 95-83

EVERGREEN TREE PLANTING DETAIL

DECIDUOUS TREE PLANTING (UP TO 3" CALIPER)

SHRUB PLANTING DETAIL

General Planting Notes

- All plant material shall conform to the sizes given in the plant list and shall be nursery grown in accordance with the "USA Standard for Nursery Stock", latest edition.
- All planting shall be in accordance with standard American Association of Nurserymen procedures and specifications.
- Contractor and Owner's Representative shall verify the correct location of all underground utilities in the field prior to installation of any plant materials.
- Plant material location to be staked in the field and approved by the Landscape Architect prior to planting.
- All plant beds and planting areas to be mulched to a depth of 3" unless otherwise noted on drawings or specifications.
- All areas disturbed by planting operations shall be fine graded and sodded.
- Obtain approval from Architect's or Owner's Representative before making any substitutions or changes.
- All plant beds shall be contained with a spaced edge unless otherwise noted on drawings.
- Quantities shown on plant list are for the Contractor's convenience only and are not guaranteed to be accurate. In the event of a discrepancy between quantities shown on the plan and quantities shown on the plant list, the quantities on the plan shall apply.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and the Landscape Manual.
- Financial surety for the required landscaping must be posted as part of the Developers Agreement in the amount of \$5,500.00 by Exxon.

SYMBOL	QUANTITY	BOTANICAL/Common NAME	SIZE	REMARKS
	7	ACER RUBRUM 'RED SUNSET' RED SUNSET MAPLE	2 1/2 - 3" CAL 13' - 15' HT	B & B FULL
	7	PRUNUS SARGENTII SARGENT CHERRY	6-8' HT.	B & B FULL 15" D.C.
	30	CUPRESSOCYPARIS LEYLANDII LEYLAND CYPRESS	2 1/2 - 3" CAL 8' - 10' HT	B & B FULL 5" D.C.
	28	EUONYMUS ALATUS COMPACT COMPACT WINGED EUONYMUS	2 - 2 1/2' HT. 2 - 2 1/2' SPD	B & B FULL 3" D.C.
	21	PINUS STROBUS WHITE PINE	6-7' HT.	B & B FULL 8" D.C.
	8	PINUS MUGO MUGO PINE	3-3 1/2' SPRD.	B & B FULL 5" D.C.
	13	JUNIPERUS CHINENSIS 'SARGENTII' SARGENT JUNIPER	15-18" HT. 2-2 1/2' SPD	B & B FULL 2 1/2" D.C.
	150	PETUNIA X HYBRIDA 'SUPER CASCADE WHITE' WHITE PETUNIA	4" POT	CONT 8" D.C.
	150	PETUNIA X HYBRIDA 'SUPER CASCADE RED' RED PETUNIA	4" POT	CONT 8" D.C.

CATEGORY	SCHEDULE A PERIMETER LANDSCAPE EDGE		
	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES	
LANDSCAPE TYPE	E	C (SOUTHEAST)	A (SOUTHEAST)
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	206.80	448.98	244.68'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	YES - ALONG SOUTHEASTERN PROPERTY LINE (207.59') AND NORTHEASTERN LINE (75')	YES - (75')
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES - 3' BERM ALONG FRONT (120')	YES - 5' SOLID WOOD FENCE ALONG REAR OF PROPERTY (204')	NO
NUMBER OF PLANTS REQUIRED			
SHADE TREES	1:40 = 6	1:40 = 12	1:60 = 5
EVERGREEN TREES		1:20 = 23	
SHRUBS	1:4 = 52		
NUMBER OF PLANTS PROVIDED			
SHADE TREES	5	0 + 7 CREDIT = 7	2 + 2 CREDIT = 4
EVERGREEN TREES (2:1 SUBSTITUTION)		47 + 14 CREDIT = 61	
OTHER TREES (2:1 SUBSTITUTION)			
SHRUBS (10:1 SUBSTITUTION)	28 + 30 CREDIT = 58 FOR PROPOSED BERM		

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF PARKING SPACES	(10 SPACES)
NUMBER OF TREES REQUIRED	1
NUMBER OF TREES PROVIDED	
SHADE TREES	4
OTHER TREES (2:1 SUBSTITUTION)	



SDP# 96-97
PLANNING BOARD APPROVAL

7/16/96 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF-DEVELOPMENT, ENGINEERING DIVISION: *[Signature]* DATE: 8/2/96

CHIEF-DIVISION & LAND DEVELOPMENT & RESEARCH: *[Signature]* DATE: 8/13/96

DIRECTOR: *[Signature]* DATE: 8/19/96

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

OWNER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE, SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301) 513-7511

DEVELOPER: **EXXON COMPANY, U.S.A.**
6301 IVY LANE, SUITE 700
GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301) 513-7511

FREDERICK WARD ASSOCIATES INC.
ENGINEERS ARCHITECTS SURVEYORS
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410) 879-2090

FWA JOB NUMBER: 93397 FWA DRAWING FILE NAME: COLANDRON

CENSUS TRACT NO. 6069-03

TAX MAP 47 PARCEL 631, P.O. 184
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **ALL SAINTS ROAD EXXON PARCEL A-1**

FOR AN EXXON STATION AT

LANDSCAPE PLAN

DESIGN BY: JBG SCALE: 1"=20' PROJECT NO.: 93397-01
DRAWN BY: NSM/KDN DATE: 01/25/96 DRAWING NUMBER
CHECKED BY: KLS APPROVED: DATE: 15 OF 17

SDP-96-97

TWO LANES, TWO-WAY
MULTI-LANE UNDIVIDED
DIVIDED UNCONTROLLED CONVENTIONAL
EXPRESSWAY/FREEWAY

- FLASHING WARNING LIGHTS AND/OR FLAGS MAY BE USED TO CALL ATTENTION TO EARLY WARNING SIGNS.
- WARNING LIGHTS MAY BE USED TO MARK CHANNELIZING DEVICES AS NEEDED.
- CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC. A FULL TAPER LENGTH (ON TWO LANE, TWO-WAY ROADWAYS) SHALL ALWAYS BE PROVIDED IN ADVANCE OF CURVES.
- TAPER FORMULA
 $L = SW$ FOR SPEEDS GREATER THAN (>) 40 MPH
 $L = WS^2/60$ FOR SPEEDS EQUAL TO OR LESS THAN (<=) 40 MPH
 WHERE:
 L = MINIMUM LENGTH OF TAPER
 S = NUMERICAL VALUE OF VEHICLE SPEED
 W = WIDTH OF OFFSET
- MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES:
 A. TAPER - APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT.
 B. TANGENT - TWICE THE ABOVE TAPER VALUE.
- FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGGER STATIONS AT NIGHT.
- IF FLAGGERS ARE NOT ABLE TO SEE EACH OTHER, TWO-WAY RADIO COMMUNICATIONS SHALL BE USED.
- IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGGER MAY BE USED.
- PAVEMENT MARKINGS NO LONGER APPLICABLE SHALL BE REMOVED OR OBLITERATED AS SOON AS PRACTICABLE. TEMPORARY MARKINGS SHALL BE USED AS NECESSARY.

ALTERNATE TRAFFIC CONTROL PLANS MAY BE PRESENTED TO THE SHA DISTRICT OFFICE FOR APPROVAL IN ACCORDANCE WITH SECTION 814.02 OF THE MDOT'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, JANUARY 1982 AND ANY REVISIONS THERETO.

FOR EMERGENCY REPAIR OPERATIONS, A MINIMUM NUMBER OF TRAFFIC CONTROL DEVICES (TCD'S) MAY BE USED. THIS GENERALLY WILL CONSIST OF ONE SIGN PER DIRECTION, FLASHING LIGHTS ON THE VEHICLE, A MINIMUM NUMBER OF CHANNELIZING DEVICES AND FLAGS OR HIGH LEVEL DEVICES. ADDITIONAL TCD'S SUCH AS ARROW PANEL(S), MORE SIGNING, ETC., WILL BE PLACED AS SOON AS POSSIBLE TO PRESENT AN ARRAY OF DEVICES WHICH ARE CONSISTENT WITH THE STANDARD WORK ZONE TRAFFIC CONTROL TYPICAL.

AN ARROW PANEL IN THE FLASHING ARROW MODE SHALL BE USED ANYTIME THERE IS A LANE CLOSURE ON A MULTI-LANE HIGHWAY. ARROW PANELS SHALL NOT BE USED ALONG TWO LANE TWO-WAY ROADWAYS UNLESS THEY DISPLAY MSHA'S "FOUR CORNER" LAMP ARRAY.

VEHICLES SHOULD NOT OCCUPY OR BE STOPPED IN A LANE BEYOND A HORIZONTAL CURVE OR A VERTICAL CURVE (HILL). INSTEAD VEHICLES STOPPING ARE TO BE PULLED AS FAR OFF THE ROAD AS POSSIBLE OR BE OTHERWISE PARKED IN A MANNER AS TO INHIBIT THE MOVEMENT OF TRAFFIC AS LITTLE AS POSSIBLE. IF STOPPING IS NECESSARY AND NO BACKUP VEHICLE IS AVAILABLE, PLACE CHANNELIZING DEVICES IN ACCORDANCE WITH GENERAL NOTE #3 ALONG WITH THE APPROPRIATE SIGNING.

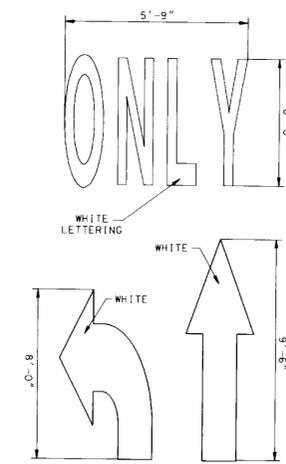
WARNING SIGNS MOUNTED ON WOOD POST(S) FOR THE OVER 24 HOUR OPERATIONS SHALL BE INSTALLED AS SHOWN IN FIGURE 6-1, PART VI OF THE MUTCD. THE BOTTOM OF THE SIGNS MOUNTED ON PORTABLE SUPPORTS SHALL BE NOT LESS THAN ONE FOOT ABOVE THE PAVEMENT ELEVATION. ALL SIGNS SHALL BE INSTALLED IN SUCH A MANNER AS TO PROVIDE ADEQUATE VISIBILITY FOR THESE SIGNS AND ALL OTHER EXISTING SIGNS ON THE HIGHWAY TO THE DRIVER.

IN URBAN AREAS ALONG STREETS WHERE THE PREVAILING SPEED IS 35 MPH OR LESS, AND ALONG SECONDARY ROADS WHERE THE AVERAGE DAILY TRAFFIC (ADT) IS LESS THAN 1,000 VEHICLES, THE MINIMUM SIZE OF 36" X 36" MAY BE USED.

FOR UTILITY OPERATIONS, ADVANCE WARNING SIGNS MAY UTILIZE THE WORD "AHEAD" IN LIEU OF DISTANCES UP TO AND INCLUDING 1,500 FEET. AT GREATER DISTANCES, SUCH AS 1/2 MILE OR 1 MILE; HOWEVER, THE CORRECT DISTANCE VALUE IS TO BE USED ON SUCH WARNING SIGNS. ALSO THE UTILITY WORK AHEAD SIGN MAY BE USED IN LIEU OF ROAD CONSTRUCTION, ROAD WORK, OR SHOULDER WORK SIGNS ONLY.

NO WORK OPERATIONS WHICH INTERFERES WITH THE FLOW OF TRAFFIC MAY TAKE PLACE DURING PEAK HOURS 6 A.M. - 9 A.M. AND 3 P.M. - 7 P.M. MONDAY - FRIDAY UNLESS WRITTEN APPROVAL IS RECEIVED FROM THE HOWARD COUNTY INSPECTOR.

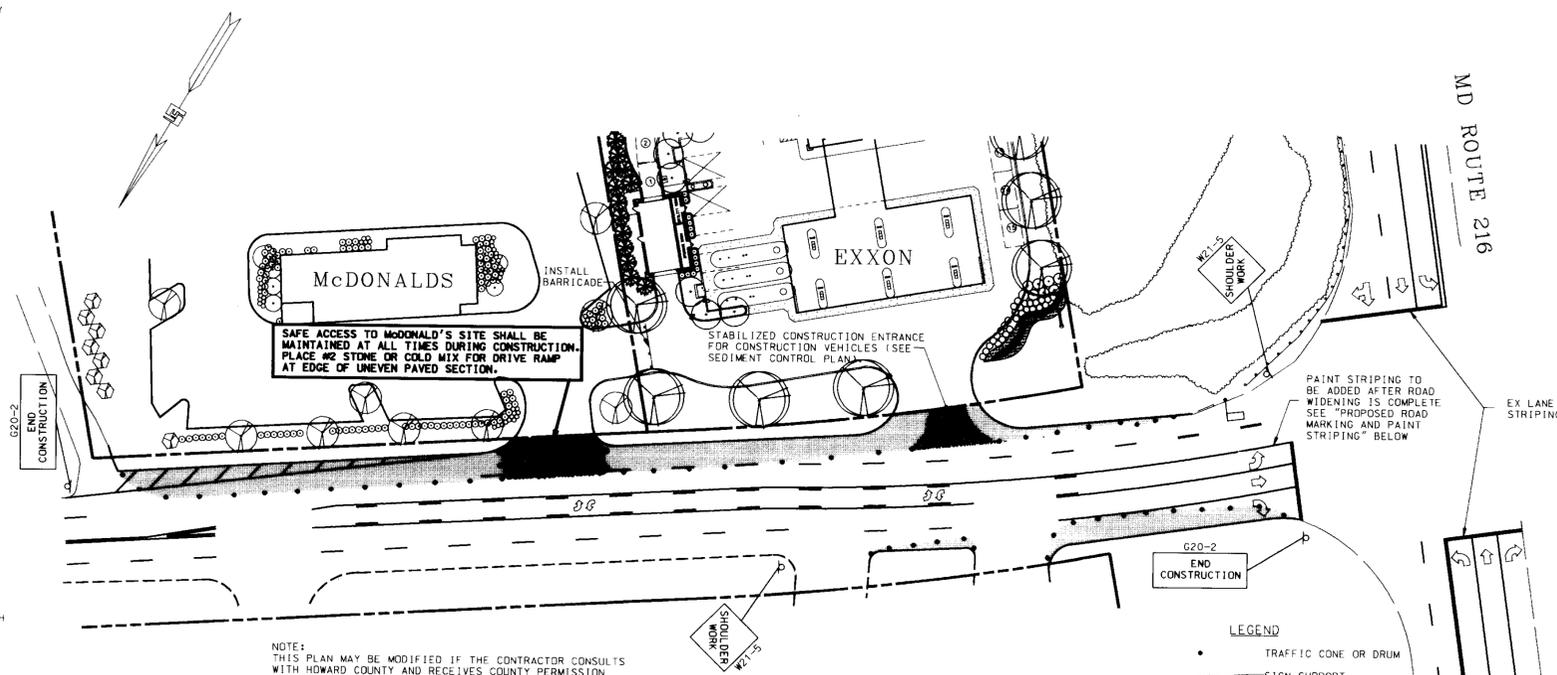
ALL SIGNS, CHANNELIZING DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).



ELONGATED ARROWS AND LETTERS FOR PAVEMENT MARKINGS

NTS

NOTE:
DIMENSIONS SHOWN ARE MINIMUM DIMENSIONS, PER MUTCD LATEST EDITION. REFER TO HOWARD COUNTY DPW FOR DESIRED DIMENSIONS.

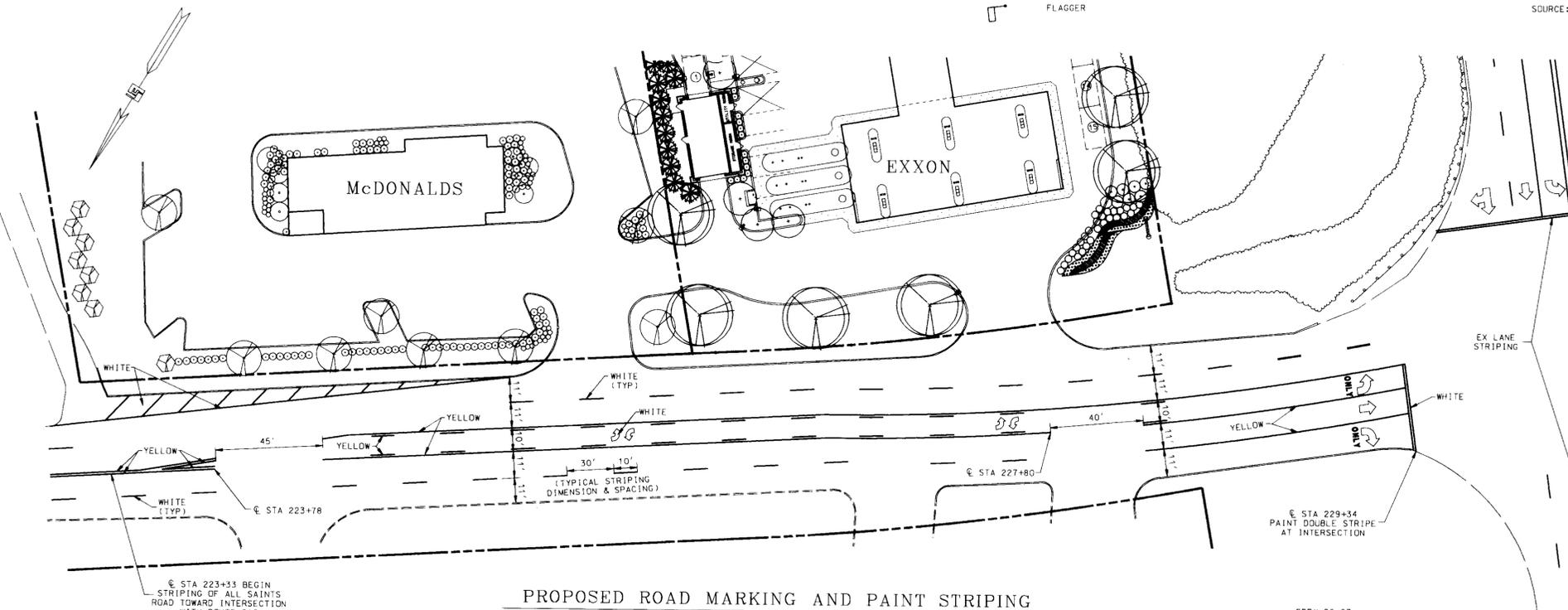


TRAFFIC CONTROL SITE PLAN

SCALE: 1" = 40'

LEGEND

- TRAFFIC CONE OR DRUM
- SIGN SUPPORT FACE OF SIGN
- DIRECTION OF TRAFFIC
- WORK SITE
- FLAGGER



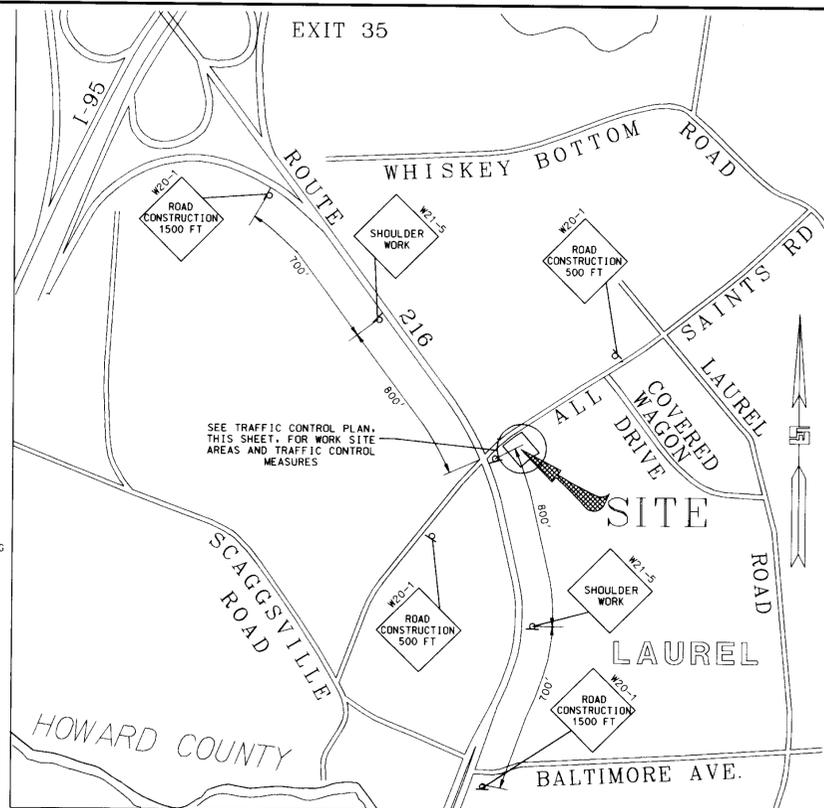
PROPOSED ROAD MARKING AND PAINT STRIPING

SCALE: 1" = 30'

SDP# 96-97
PLANNING BOARD APPROVAL

7/16/96
DATE

TIMOTHY F. WHITTIE
PROFESSIONAL ENGR. NO. 19155



OFF-SITE POSITIONING OF TRAFFIC CONTROL MEASURES

SCALE: 1" = 500'
SOURCE: HOWARD COUNTY ADC MAP 19

DATE	NUMBER	REVISION DESCRIPTION
8/2/96		DATE
8/13/96		DATE
8/14/96		DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF DEVELOPMENT ENGINEERING DIVISION
 CHIEF DIVISION & LAND DEVELOPMENT & RESEARCH
 DIRECTOR

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

OWNER: **EXXON COMPANY, U.S.A.**
 6301 IVY LANE
 SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: MR. MIKE SPECHT
 PHONE: (301)-513-7511

DEVELOPER: **EXXON COMPANY, U.S.A.**
 6301 IVY LANE
 SUITE 700
 GREENBELT, MARYLAND 20770
 ATTN: MR. MIKE SPECHT
 PHONE: (301)-513-7511

FREDERICK WARD ASSOCIATES INC.
 ENGINEERS ARCHITECTS SURVEYORS
 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090

FWA JOB NUMBER 83397 FWA DRAWING FILE NAME CORROAD.DGN
 CENSUS TRACT NO. 6069-03 TAX MAP 47 PARCEL 631, P.O. 184
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: **TRAFFIC CONTROL PLAN**

DESIGN BY: JBG SCALE: AS NOTED PROJECT NO.: 93397-01
 DRAWN BY: MSM DATE: 04/15/96 DRAWING NUMBER
 CHECKED BY: TFW APPROVED: 16 OF 17

STORMWATER MANAGEMENT
EXISTING CONDITIONS DRAINAGE AREA MAP

DRAINAGE AREA	DRAINAGE AREA, AC.	PERCENT IMPERVIOUS	C-RATIONAL METHOD	RCN (TR-55)
A	0.48	12.5	0.24	68.5

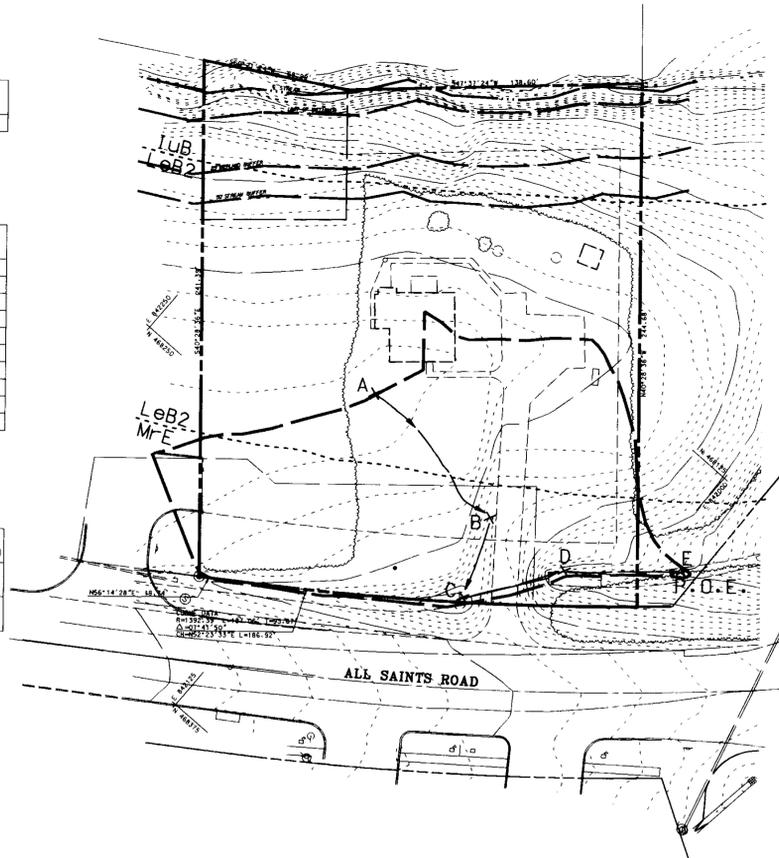
TIME OF CONCENTRATION CHART

FLOW SEGMENT	ELEVATION	LENGTH	SLOPE	TIME (HRS)
A	233.5			
A → B		80'	0.081	0.110
B	227.0			
B → C		45'	0.094	0.003
C	222.75			
C → D		40'	0.096	0.001
D	218.9			
D → E		65'	0.060	0.001
E	215.0			
P.O.E.	215.0			0.12

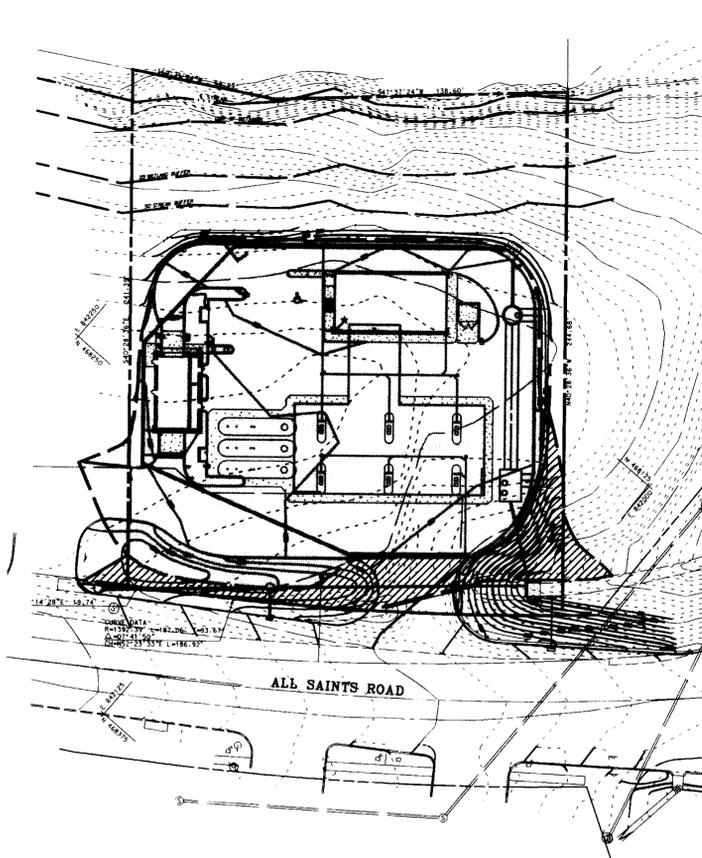
STORMWATER MANAGEMENT
PROPOSED CONDITIONS DRAINAGE AREA MAP

DRAINAGE AREA	DRAINAGE AREA, AC.	PERCENT IMPERVIOUS	C-RATIONAL METHOD	RCN (TR-55)
MANAGED DISCHARGE	0.65	86.2	0.76	93.7
UNCONTROLLED DISCHARGE	0.09	22.2	0.32	70.7

NOTE:
TIME OF CONCENTRATION = 0.12 HRS (FROM STORM DRAIN COMPUTATIONS)



STORMWATER MANAGEMENT
EXISTING CONDITIONS DRAINAGE AREA MAP
SCALE: 1" = 40'



STORMWATER MANAGEMENT
PROPOSED CONDITIONS DRAINAGE AREA MAP
SCALE: 1" = 40'

STORMWATER MANAGEMENT DESIGN SUMMARY

PART I - HYDROLOGY AND HYDRAULICS

DESIGN STORM, YR	PRE-DEV. PEAK DISCHARGE, CFS	POST-DEV. PEAK DISCHARGE, CFS MAINTAINED	POST-DEV. PEAK DISCHARGE, CFS UNCONTROLLED	DISCHARGE RELEASED FROM SWM FACILITY, CFS	STORAGE VOLUME, ACRE- FEET	WATER SURFACE ELEVATION
2	0.49	2.11	0.11	0.37	0.0520	224.25
10	1.35	3.54	0.29	0.90	0.0913	225.88
100	2.44	5.09	0.50	4.44	0.1053	226.51

- ① FROM TR-20
- ② FROM TR-20
- ③ FROM TR-20
- ④ FROM TR-20 SWM ROUTING. THIS DISCHARGE CANNOT EXCEED THE DIFFERENCE BETWEEN ① - ③
- ⑤ INTERPOLATED OFF DISCHARGE-ELEVATION TABLE
- ⑥ FROM TR-20 ROUTING

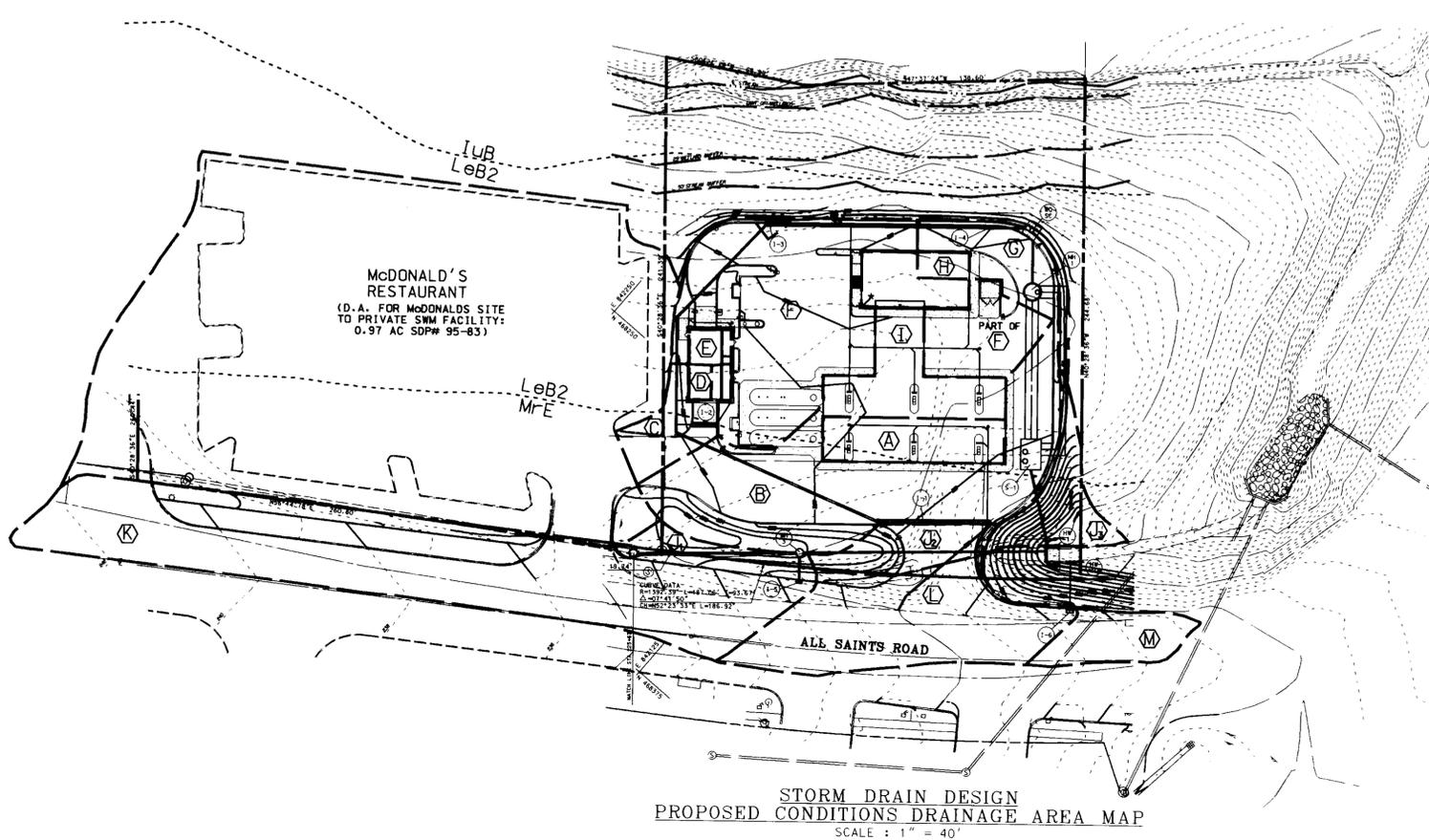
PART II - NOTES

- FACILITY IDENTIFICATION: STORMWATER MANAGEMENT FACILITY CONSISTS OF THAT PORTION OF STRUCTURES AND PIPE BETWEEN WO SC AND HW-1 INCLUSIVE (SEE SITE UTILITY AND PIPING PLAN, SHEET 5, AND STORM DRAIN AND STORMWATER MANAGEMENT PROFILES, SHEET 8).
- TYPE OF FACILITY: UNDERGROUND (72" CMP AND STRUCTURES)
- DRAINAGE AREA TO FACILITY: 0.65 ACRES
- INVERT ELEVATIONS: MH-1 - 221.75
S-1 INFLOW CHAMBER - 221.60
S-1 OUTFLOW CHAMBER - 221.50
- STORMWATER MANAGEMENT FACILITY WILL BE PRIVATELY OWNED AND MAINTAINED.
- HAZARD CLASSIFICATION: THE PROPOSED STORMWATER MANAGEMENT FACILITY WILL BE UNDERGROUND. IT WILL DISCHARGE TO AN EXISTING CONCRETE DITCH WHICH HAS ADEQUATE CAPACITY. THE OUTFALL STRUCTURE WILL BE CONCRETE. THE HAZARD CLASSIFICATION SHOULD BE "A".

SOILS

IuB	IUKA LOAM, GROUP C
LeB2	LEGORE SILT LOAM, GROUP C
MfE	MONTALTO AND RELAY SOILS, GROUP B

SOURCE: HOWARD COUNTY SOIL SURVEY, MAP #34



STORM DRAIN DESIGN
PROPOSED CONDITIONS DRAINAGE AREA MAP
SCALE: 1" = 40'

PROPOSED CONDITIONS DRAINAGE AREA MAP

DRAINAGE AREA	DRAINAGE AREA, AC.	PERCENT IMPERVIOUS	C-RATIONAL METHOD	RCN (TR-55)
A	0.043	100	0.86	98
B	0.209	78.95	0.71	91.1
C	0.033	55.55	0.56	87.1
D	0.001	100	0.86	98
E	0.001	100	0.86	98
F	0.239	89.42	0.79	95.4
G	0.041	73.60	0.68	91.6
H	0.001	100	0.86	98
I	0.086	100	0.86	98
J ₁₋₃	0.090	22.22	0.32	70.7
K*	0.370	79.11	0.71	90.3
L**	0.179	85.90	0.76	92.8
M	0.037	100	0.86	98

* INCLUDES AREA J₁
** INCLUDES AREA J₂
NOTE: TIME OF CONCENTRATION = 0.12 HRS

SDP# 96-97
PLANNING BOARD APPROVAL

DATE: 8/17/96

PROFESSIONAL ENGINEER
TIMOTHY F. WHITTE
DATE: 02/07/1996
PROJECT NO.: 93397

DATE	NUMBER	REVISION DESCRIPTION
		APPROVED: DEPARTMENT OF PLANNING AND ZONING
		CHIEF-DEVELOPMENT ENGINEERING DIVISION
		CHIEF DIVISION & LAND DEVELOPMENT & RESEARCH
		APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.
		COUNTY HEALTH OFFICER
OWNER: EXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511		
DEVELOPER: EXON COMPANY, U.S.A. 6301 IVY LANE SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511		
ENGINEERS ARCHITECTS SURVEYORS FREDERICK WARD ASSOCIATES INC. 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090		
FWA JOB NUMBER 93397 FWA DRAWING FILE NAME CDRW49		
CENSUS TRACT NO. 6069.01		
TAX MAP 47 PARCEL 631, P.D. 184 6TH, ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: FOR AN EXXON STATION AT ALL SAINTS ROAD EXXON PARCEL A-1 STORM DRAIN, SEDIMENT CONTROL AND STORMWATER MANAGEMENT INFORMATION		
DESIGN BY: JBG	SCALE: 1" = 40'	PROJECT NO.: 93397
DRAWN BY: MSM	DATE: 02/07/1996	DRAWING NUMBER
CHECKED BY: TFW	APPROVED:	17 OF 17