

**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  
 CAP TELEPHONE CO. 1-410-725-9976  
 HOWARD COUNTY BUREAU OF UTILITIES 1-410-313-2366  
 AT&T CABLE LOCATION DIVISION 1-410-393-3553  
 BG&E 1 410 685 0123  
 NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION AT LEAST 48 HOURS PRIOR TO START (313-1855)  
 NOTIFY HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION AT LEAST 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT (410) 313-1880
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS, UNLESS STATED OTHERWISE.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE PURPOSE OF THIS SITE DEVELOPMENT PLAN IS TO CONSTRUCT A CONVENIENCE STORE AND FAST FOOD RESTAURANT, AND CONSTRUCT 6 PUMP ISLANDS.
- NON-TIDAL WETLANDS AND 25' BUFFER TO BE REMOVED IN ACCORDANCE WITH HOWARD COUNTY DEPT. OF PLANNING AND ZONING APPROVAL LETTER DATED 04/18/97. IMPACT TO WETLANDS AND WETLAND BUFFER HAVE BEEN APPROVED BY THE MARYLAND DEPT OF THE ENVIRONMENT AND THE U.S. ARMY CORPS OF ENGINEERS UNDER A LETTER OF AUTHORIZATION (LOA) AND THE MARYLAND STATE PROGRAMMATIC GENERAL PERMIT (MDSGP) SEE APPLICATION TRACKING #1995665135 AND NON-TIDAL WETLANDS PERMIT #96-NT-0727.
- 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.
- PUBLIC WATER AND SEWER WILL BE UTILIZED. THE EX 1" WATER SERVICE WILL BE REPLACED WITH 4" FIRE SPRINKLER SERVICE 2" DOMESTIC WATER. THE EXISTING WELL SHALL BE ABANDONED PER STATE AND LOCAL REGULATIONS. ONE EXISTING SEWER CONNECTION SHALL BE MAINTAINED, THE OTHER SHALL BE ABANDONED. ON SITE WATER AND SEWER SHALL BE PRIVATE.
- ALL SITE LIGHTING MUST BE DIRECTED AWAY FROM THE ADJACENT PUBLIC RIGHT OF WAY AND THE VICINITAL PROPERTIES, AND SHALL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH HOWARD COUNTY ZONING CODE SECTION 134.

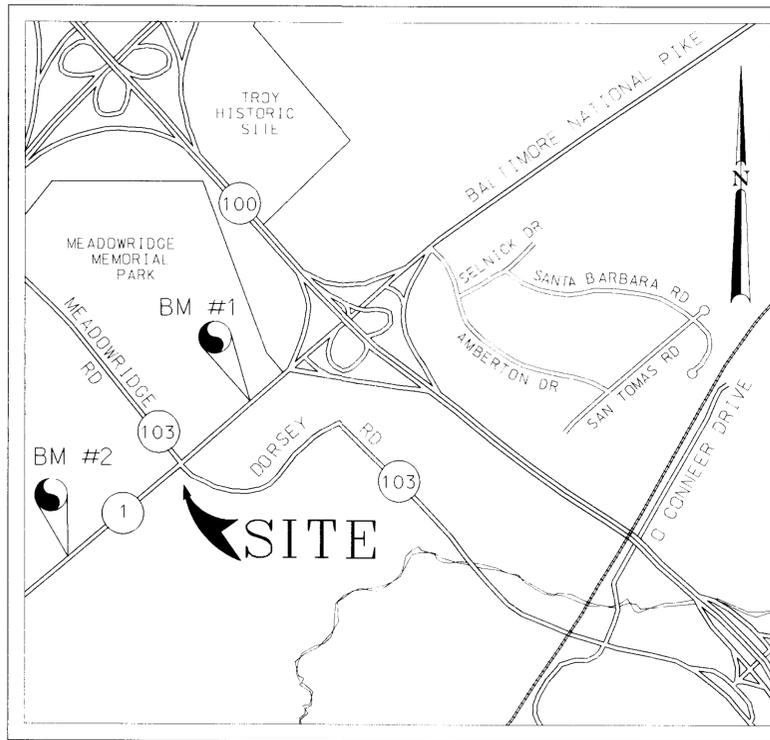
**SITE ANALYSIS**

- AREA OF PARCEL:  
79,763 SQ.FT. OR 1.83 AC.
- LIMIT OF DISTURBED AREA = 1.83 AC.
- ZONING:  
M-2 (MANUFACTURING - HEAVY)
- PROPOSED USE: GASOLINE SERVICE STATION,  
CONVENIENCE STORE WITH QUICK SERVICE FAST FOOD  
AND FAST FOOD RESTAURANT WITH DRIVE-THRU.
- FLOOR SPACE:  
CARRY OUT = 500 SQ.FT.  
GAS CONVENIENCE STORE = 1500 SQ.FT.  
FAST FOOD RESTAURANT = 3400 SQ.FT.  
TOTAL = 5400 SQ.FT.
- MAXIMUM NUMBER OF EMPLOYEES: 6
- PARKING:  
a. REQUIRED:  
FAST FOOD RESTAURANT  
3400 / 14 SPACES PER 1,000 SQ.FT. = 48 SPACES  
CARRY OUT  
500 X 6 SPACES PER 1,000 SQ.FT. = 3 SPACES  
CONVENIENCE STORE  
1500 X 2 SPACES PER 1,000 SQ.FT. = 3 SPACES  
GASOLINE STATION X 3 SPACE = 3 SPACES  
TOTAL = 57 SPACES  
b. PROVIDED:  
61 SPACES (INCLUDING 3 HANDICAPPED SPACES)
- OPEN SPACE REQUIRED = 15,923 SQ.FT. (20%)  
PROVIDED = 21,827 SQ.FT. (27.4%)
- BUILDING COVERAGE:  
a. CONVENIENCE STORE : 1,500 SQ.FT  
b. CARRY OUT : 500 SQ.FT.  
c. FAST FOOD : 3,400 SQ.FT.  
d. CANOPY : 4,772 SQ.FT.  
TOTAL COVERAGE : 10,172 SQ.FT. OR 12.75% COVERAGE

# EXXON



**7311 WASHINGTON BLVD.  
ELKRIDGE, MARYLAND 21227  
RAS# 2-0311**



**LOCATION MAP**

SCALE: 1" = 1000'

HOWARD COUNTY ADC MAP  
PAGE NUMBER 17  
GRID NUMBER B12

**BENCHMARK INFORMATION**

- STATION 371A - ALUMINUM DISC SET ON 3/2" REBAR, FLUSH WITH GROUND, 247' FROM CENTERLINE OF ENTRANCE TO MEADOWRIDGE MEMORIAL PARK, ELEVATION 195.013 FT.
- STATION 4 3132 - STANDARD DISC ON CONCRETE MONUMENT IN MEDIAN OF RT.1 ACROSS FROM "EPES", ELEVATION 208.956 FT.

**ZONING HISTORY**

- CASE #229-C - 12/16/57 - SPECIAL EXCEPTION FOR JUNKYARD. DENIED BUT REVERSED ON APPEAL.
- CASE #519 - 1969 - PETITION TO CHANGE FROM M-1 AND M-2 ZONE TO T-2 (MOBILE HOME) ZONE. CANCELLED IN 1971.
- CASE #BA 96-45 F&V- FFR. 4. 1997-SPECIAL EXCEPTION FOR A GASOLINE SERVICE STATION WITH A CONVENIENCE STORE, CARRY-OUT AND FAST FOOD RESTAURANT AND A VARIANCE TO REDUCE THE REQUIRED 30 FOOT SETBACK FROM A PUBLIC R-O-W TO 15 FEET.

**SHEET INDEX**

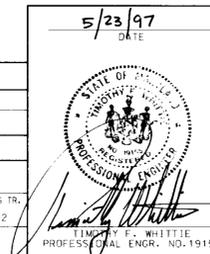
| SHEET NUMBER | DRAWING TITLE                                  |
|--------------|--|
| 1            | COVER SHEET                                    |
| 2            | EXISTING CONDITIONS AND DEMOLITION PLAN        |
| 3            | SITE LAYOUT PLAN                               |
| 4            | SITE GRADING PLAN                              |
| 5            | SITE DETAILS                                   |
| 6            | SITE UTILITY AND PIPING PLAN                   |
| 7            | STORM DRAIN PROFILES                           |
| 8            | STORMWATER MANAGEMENT DETAILS                  |
| 9            | STORMCEPTOR NOTES AND DETAILS                  |
| 10           | DRAINAGE AREA MAPS                             |
| 11           | SEDIMENT AND EROSION CONTROL PLAN              |
| 12           | SEDIMENT AND EROSION CONTROL NOTES AND DETAILS |
| 13           | LANDSCAPE PLAN                                 |
| 14           | BUILDING AND SIGNAGE PLAN                      |

|  |  |                       |
|--|--|-----------------------|
| DATE:  | NUMBER:  | REVISION DESCRIPTION: |
| APPROVED: DEPARTMENT OF PLANNING AND ZONING  |  |                       |
| <i>[Signature]</i>   |  | 6/23/97               |
| CHIEF-DEVELOPMENT ENGINEERING DIVISION   |  | DATE                  |
| <i>[Signature]</i>   |  | 7/2/97                |
| CHIEF-DIVISION OF LAND DEVELOPMENT   |  | DATE                  |
| <i>[Signature]</i>   |  | 7/3/97                |
| APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS<br>HOWARD COUNTY HEALTH DEPARTMENT. |  |                       |
| <i>[Signature]</i>   |  | 6/30/97               |
| COUNTY HEALTH DEPARTMENT   |  | DATE                  |
| OWNER/<br>DEVELOPER  | <b>EXXON CORPORATION</b>   |                       |
|  | 6301 IVY LANE<br>SUITE 700<br>GREENBELT, MARYLAND 20770<br>ATTN: MR. ROBERT CASERTA<br>PHONE: (301) 513-7511 |                       |
| RAS #  | 2-0311   |                       |

|   |                              |                |          |
|---|------------------------------|----------------|----------|
| <b>FREDERICK WARD ASSOCIATES INC.</b>                 |                              |                |          |
| ENGINEERS   | ARCHITECTS                   | SURVEYORS      |          |
| 5 SOUTH MAIN STREET                                   | BEL AIR, MARYLAND 21034      | (410) 879 2090 |          |
| FWA JOB NUMBER 06017                                  | FWA DRAWING FILE NAME, TITLE |                |          |
| BAKER & SHPAK PROPERTIES                              |                              |                |          |
| PLAT 12550, F-97-01                                   |                              |                |          |
| TAX MAP 43, GRID 5, PARCEL A                          |                              |                |          |
| 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND        |                              |                |          |
| CENSUS TRACT 6012, WATER CODE B01, SEWER CODE 2320000 |                              |                |          |
| TITLE   |                              |                |          |
| COVER SHEET   |                              |                |          |
| FOR AN EXXON STATION                                  |                              |                |          |
| 7311 WASHINGTON BLVD.                                 |                              |                |          |
| ELKRIDGE, MARYLAND 21227                              |                              |                |          |
| DESIGN BY:  | YNO                          | SCALE:         | AS SHOWN |
| AS SHOWN  |                              | RAS#           | 2-0311   |
| DRAWN BY:   | YNO                          | DATE:          | 05/15/97 |
| CHECKED BY:   | HBM                          | APPROVED:      |          |
|   |                              |                | 01 OF 14 |

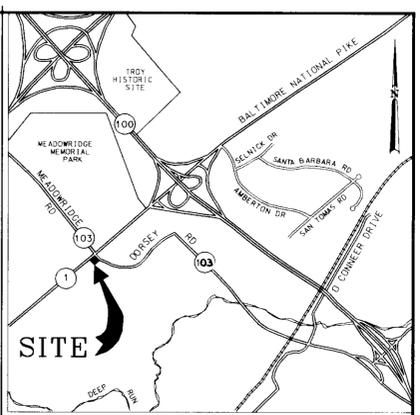
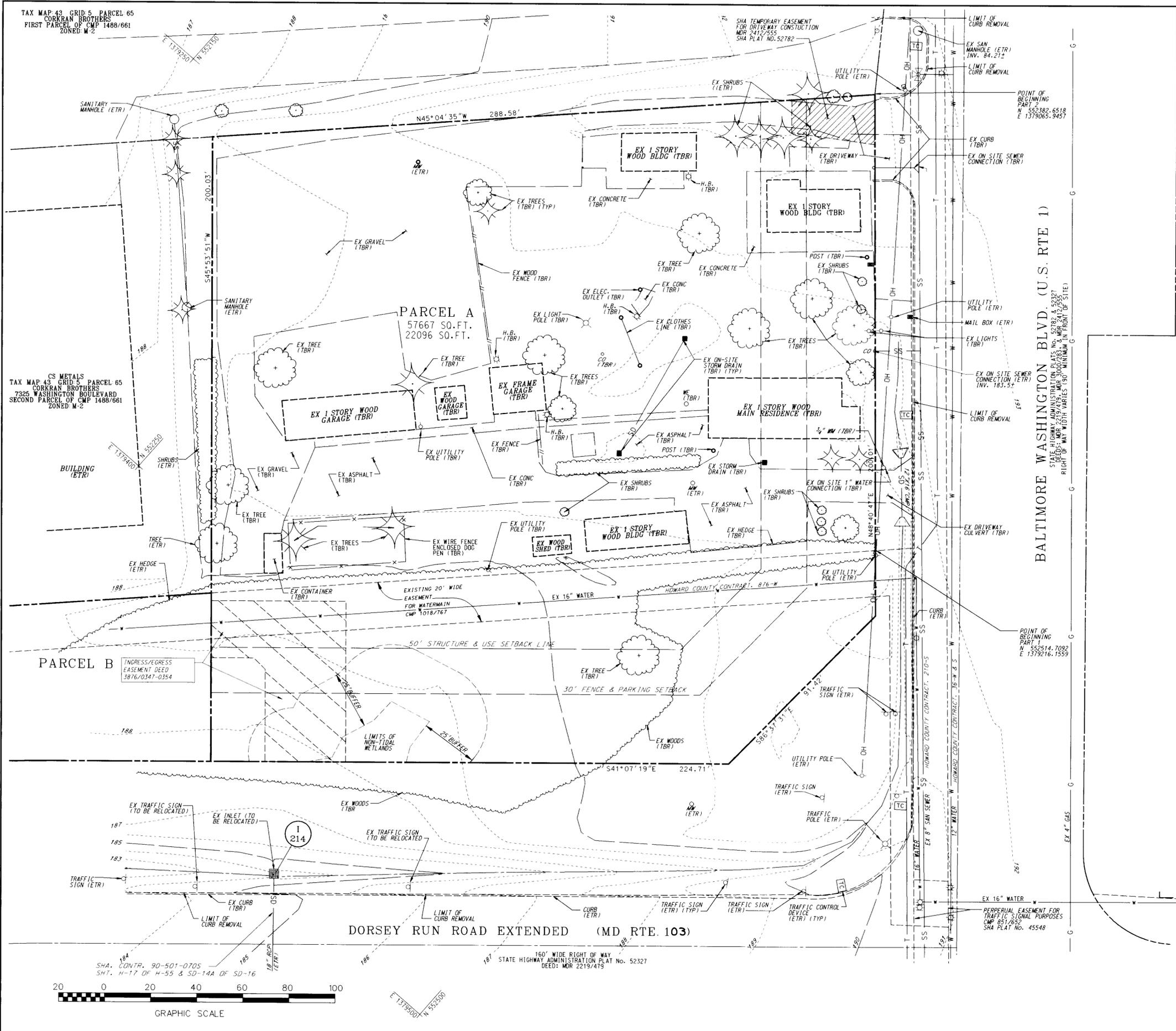
SDP# 97-73

| ADDRESS CHART            |                       |
|--------------------------|-----------------------|
| PARCEL                   | STREET ADDRESS        |
| A                        | 7311 WASHINGTON BLVD. |
| PERMIT INFORMATION CHART |                       |
| SUBDIVISION NAME         | SECT./AREA            |
| BAKER & SHPAK PROPERTY   | N/A                   |
| PARCEL NO.               | A                     |
| PLAT NO.                 | BLOCK NO.             |
| 12550                    | 5                     |
| ZONE                     | TAX/ZONE              |
| M-2                      | 43                    |
| ELECT. DIST.             | CENSUS TR.            |
| 1                        | 6012                  |
| WATER CODE               | SEWER CODE            |
| B01                      | 2320000               |



TAX MAP 43 GRID 5 PARCEL 65  
CORKRAN BROTHERS  
FIRST PARCEL OF CMP 1488/661  
ZONED M-2

CS METALS  
TAX MAP 43 GRID 5 PARCEL 65  
CORKRAN BROTHERS  
7325 WASHINGTON BOULEVARD  
SECOND PARCEL OF CMP 1488/661  
ZONED M-2



VICINITY MAP  
SCALE: 1" = 2000'

GENERAL NOTES

1. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE AND VERIFY EXISTING SITE CONDITIONS TO HIS SATISFACTION.
2. CONTRACTOR TO MEET WITH EXCON FIELD ENGINEER ON JOB SITE TO IDENTIFY EQUIPMENT, SIGN, AND ITEMS TO BE REMOVED OR RETAINED PRIOR TO THE START OF DEMOLITION.
3. CONTRACTOR SHALL TRANSPORT EQUIPMENT, AS DESIGNATED BY EXCON FIELD ENGINEER, TO A LOCAL EXCON INVENTORY AREA.
4. CONTRACTOR MUST ADHERE TO ALL SAFETY REGULATIONS GIVEN BY O.S.H.A., EXCON AND HOWARD COUNTY.
5. ALL DEMOLISHED MATERIAL TO BE REMOVED TO AN APPROVED LOCATION.
6. EXISTING 1" WATER CONNECTION SHALL BE ABANDONED PER STATE AND LOCAL REGULATIONS.
7. ANY UTILITIES DAMAGED DURING DEMOLITION AND CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED IN KIND BY THE CONTRACTOR AT HIS OWN EXPENSE. UTILITY REMOVAL AND/OR RELOCATION SHALL BE IN ACCORDANCE WITH REQUIREMENTS FROM THE RELEVANT UTILITY COMPANY.
8. TOPOGRAPHY, BOUNDARY, AND LOCATION OF ALL EXISTING FEATURES ARE BASED ON A SURVEY PREPARED BY FREDERICK WARD ASSOCIATES, INC. DATED 05-14-96.
9. THE EXISTING SEWER LATERAL AND ONE ON-SITE SEWER CONNECTION SHALL BE MAINTAINED. ONE ON-SITE SEWER CONNECTION SHALL BE ABANDONED.
10. EXISTING UTILITY TDPS SHALL BE ADJUSTED PER PROPOSED GRADES, IF APPLICABLE.
11. EXISTING WELL TO BE ABANDONED PRIOR TO OBTAINING DEMOLITION PERMIT, PER STATE AND HOWARD COUNTY HEALTH DEPARTMENT SPECIFICATIONS.
12. EXISTING SEPTIC SYSTEMS HAVE BEEN REPORTEDLY PREVIOUSLY ABANDONED. ADDITIONAL ABANDONMENTS, IF NEEDED, TO BE PERFORMED PER STATE AND HOWARD COUNTY HEALTH DEPARTMENT REGULATIONS.
13. EXISTING MONITORING WELLS TO BE MAINTAINED. ABANDONMENTS, IF NEEDED, TO BE APPROVED BY MARYLAND DEPARTMENT OF ENVIRONMENT, OIL CONTROL PROGRAM (410)651-3366.

LEGEND

- ↓ GUY WIRE
- SIGN
- POWER POLE
- LIGHT POLE
- ⊗ FIRE HYDRANT
- ⊗ MONITOR WELL
- ⊗ WATER VALVE
- ⊗ TRAFFIC CONTROL DEVICE
- ⊗ SANITARY CLEAN OUT
- ⊗ WELL
- ⊗ MAILBOX
- ⊗ DECIDUOUS TREE
- ⊗ EVERGREEN TREE
- (ETR) EXISTING TO REMAIN
- (TBR) TO BE REMOVED

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

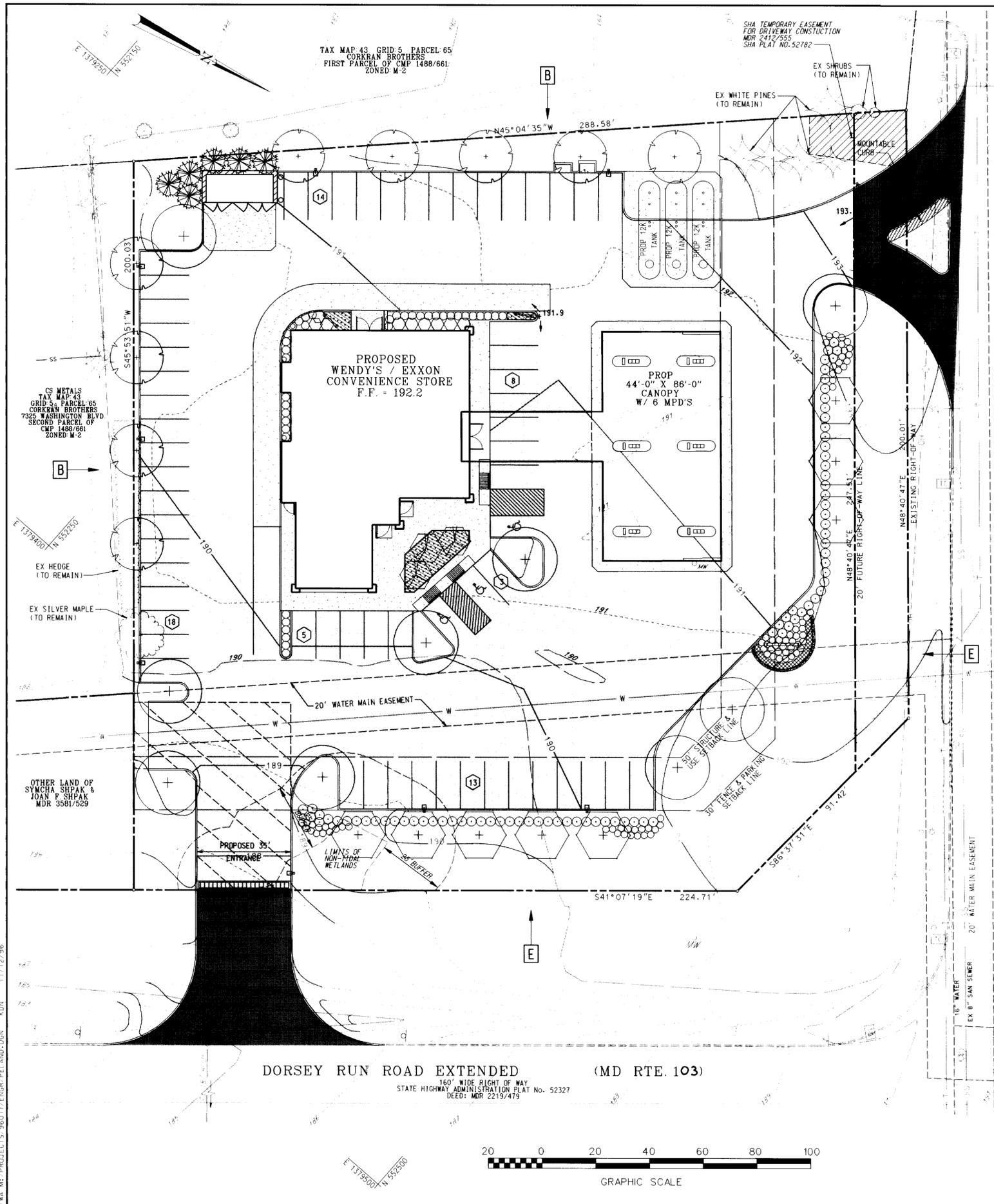
BEFORE BEGINNING CONSTRUCTION  
CONTACT  
**"MISS UTILITY"**  
AT  
**1-800-257-7777**  
AT LEAST 48 HOURS  
PRIOR TO EXCAVATION

APPROVED: *[Signature]* 6/30/97  
DATE  
OWNER/DEVELOPER: **EXON CORPORATION**  
6501 IVY LANE  
SUITE 700  
GREENBELT, MARYLAND 20770  
ATTN: MR. ROBERT CASERTA  
PHONE: (301)-513-7511  
RAS #2-0311

**FREDERICK WARD ASSOCIATES INC.**  
ENGINEERS ARCHITECTS SURVEYORS  
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)789-2090  
FVA JOB NUMBER: 96017 FVA DRAWING FILE NAME: 9262M  
BAKER & SHPAK PROPERTIES  
PLAT 12550, E-97-01  
TAX MAP 43, GRID 5, PARCEL A  
1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
CENSUS TRACT 6012, WATER CODE B01, SEWER CODE 2320000  
TITLE: **EXISTING CONDITIONS AND DEMOLITION PLAN**  
FOR AN EXCON STATION  
**7311 WASHINGTON BLVD.**  
**ELKRIE, MARYLAND 21227**  
DESIGN BY: YNQ SCALE: AS SHOWN RAS# 2-0311  
DRAWN BY: YNQ DATE: 03/15/97 DRAWING NUMBER  
CHECKED BY: RBM APPROVED: DATE: 02 OF 14



FVA #1 PROJECTS/96017/ENGR/P/D/MD/DCN KDN 03-20-96



### LANDSCAPE PLANTINGS

| SYMBOL | QUANTITY | BOTANICAL/COMMON NAME   | SIZE                           | REMARKS                    |
|--------|----------|---|--------------------------------|----------------------------|
| +      | 9        | ZELKOVA SERRATA<br>VILLAGE GREEN<br>JAPANESE ZELKOVA                              | 2'-2 1/2" CAL.<br>12'-14" HT.  | B & B FULL<br>AS SHOWN     |
| ○      | 9        | KOELREUTERIA PANICULATA<br>GOLDENRAIN TREE  | 2'-2 1/2" CAL.<br>8'-10" HT.   | B & B FULL<br>10' O.C.     |
| ⊗      | 6        | PINUS STROBUS<br>EASTERN WHITE PINE   | 5'-6" HT.                      | B & B FULL<br>10' O.C.     |
| ⊕      | 3        | MAGNOLIA X SOULANGIANA<br>SAUCER MAGNOLIA   | 8'-10" HT.                     | B & B HEAVY<br>12' O.C.    |
| ⊕      | 8        | PRUNUS X YEDDENSIS<br>YOSHINO CHERRY  | 6'-8" HT.<br>1 3/4" - 2" CAL.  | B & B FULL<br>20' O.C.     |
| ○      | 78       | EUONYMUS ALATA<br>DWARF WINGED EUONYMUS   | 3'-4" HT.<br>3-4 CANES         | B & B HEAVY<br>3 1/2' O.C. |
| ⊕      | 9        | CORNUS SERICEA<br>'SANGUINEA'<br>BLDGOTWIG DOGWOOD                                | 3'-4" HT.                      | B & B HEAVY<br>4' O.C.     |
| ○      | 116      | JUNIPERUS CHINENSIS<br>'SARGENTII'<br>SARGENT JUNIPER                             | 15"-18" HT.<br>2'-2 1/2" SPRD. | B & B FULL<br>2 1/2' O.C.  |
| ■      | * 150    | LIRIOPE MUSCARI<br>'BIG BLUE'<br>BIG BLUE LILYTURF                                | 2 QT.                          | CONT.<br>10" O.C.          |
| ■      | 100      | PETUNIA X HYBRIDA<br>'SUPER CASCADE WHITE & WHITE'<br>RED & WHITE CASCADE PETUNIA | 4" POT                         | CONT.<br>8" O.C.           |
| ■      | * 150    | HEMEROCALLIS<br>'STELLA DE ORO'<br>STELLA DE ORO DAYLILY                          | 2 QT.                          | CONT.<br>10" O.C.          |
| ■      | 60 L.F.  | 9" TO 12" WIDE BORDER<br>2" SMOOTH RIVER ROCK                                     |                                |                            |

\* GROUND COVER AND DAYLILIES TO BE INTERPLANTED

### SCHEDULE A PERIMETER LANDSCAPE EDGE

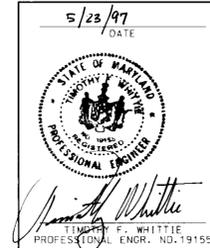
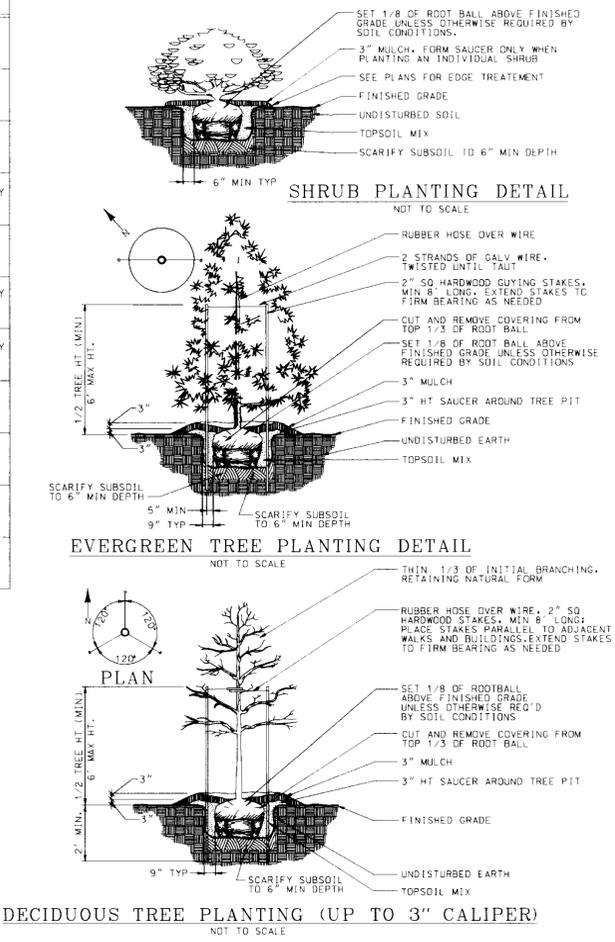
| CATEGORY   | ADJACENT TO ROADWAY | ADJACENT TO PERIMETER PROPERTIES |
|--|---------------------|----------------------------------|
| LANDSCAPE TYPE   | E                   | B                                |
| LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER  | 493.64 LF           | 488.61 LF                        |
| CREDIT FOR EXISTING VEGETATION (YES, NO, L LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | NO                  | * YES 50 LF                      |
| CREDIT FOR WALL, FENCE OR BERM (YES, NO, L LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | NO                  | NO                               |
| NUMBER OF PLANTS REQUIRED  |                     |                                  |
| SHADE TREES  | 13                  | 9                                |
| EVERGREEN TREES  | 0                   | 11                               |
| SHRUBS   | 124                 | 0                                |
| NUMBER OF PLANTS PROVIDED  |                     |                                  |
| SHADE TREES  | 5                   | 9                                |
| EVERGREEN TREES  | 0                   | 6                                |
| OTHER TREES (2:1 SUBSTITUTION)   | 6                   | 5                                |
| SHRUBS (10:1 SUBSTITUTION)   | 203                 | 0                                |

\* EXISTING WHITE PINES AT THE WEST CORNER TO BE RETAINED

### SCHEDULE B PARKING LOT INTERNAL LANDSCAPING

|                                |    |
|--------------------------------|----|
| NUMBER OF PARKING SPACES       | 61 |
| NUMBER OF TREES REQUIRED       | 4  |
| NUMBER OF TREES PROVIDED       | 4  |
| SHADE TREES                    | 0  |
| OTHER TREES (2:1 SUBSTITUTION) | 0  |

- ### 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 SOODED.
  - OBTAIN APPROVAL FROM ARCHITECT'S OR OWNER'S REPRESENTATIVE BEFORE MAKING ANY SUBSTITUTIONS OR CHANGES.
  - ALL PLANT BEDS SHALL BE CONTAINED WITH A SPADED 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 HAS BEEN POSTED AS PART OF THE OPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$4,300.00.



| DATE    | NUMBER | REVISION DESCRIPTION |
|---------|--------|----------------------|
| 6/23/97 |        | DATE                 |
| 7/2/97  |        | DATE                 |
| 7/3/97  |        | DATE                 |

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 APPROVED: PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT.

OWNER/DEVELOPER: **EXXON CORPORATION**  
 6301 IVY LANE, SUITE 700, GREENBELT, MARYLAND 20770  
 ATTN: MR. ROBERT CASERTA, PHONE: (301) 513-7511

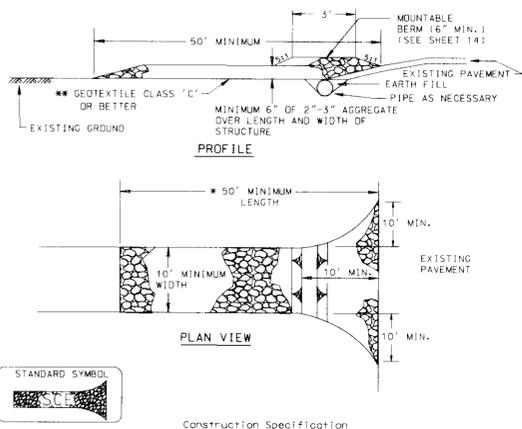
ARCHITECTS: **FREDERICK WARD ASSOCIATES INC.**  
 5 SOUTH MAN STREET, BEL AIR, MARYLAND 21034 (410) 879-2090  
 FWA JOB NUMBER: 9607 FWA DRAWING FILE NAME:

TITLE: **LANDSCAPE PLAN FOR AN EXXON STATION**  
 7311 WASHINGTON BLVD., ELKRIE, MARYLAND 21227

DESIGN BY: YNG SCALE: AS SHOWN RAS# 2-0311  
 DRAWN BY: YNG DATE: 03/15/97 DRAWING NUMBER: 13 OF 14  
 CHECKED BY: RBM APPROVED:

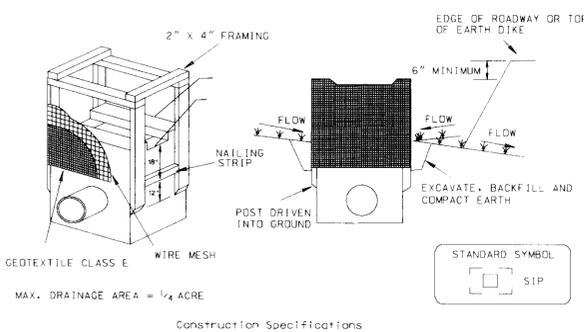
SDP-97-73

STABILIZED CONSTRUCTION ENTRANCE



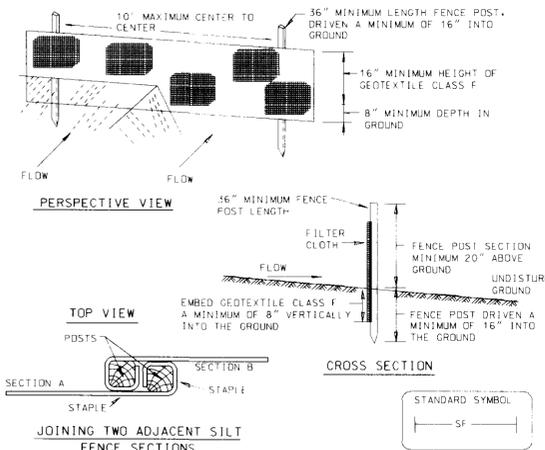
- Construction Specification
- Length - minimum of 50' (±30' for single residence lot).
  - Width - 10' minimum, should be flared at the existing road to provide a turning radius.
  - Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single-family residences to use geotextile.
  - Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
  - Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a round-toe berm with 5" slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a sign spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
  - Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

DETAIL 23A - STANDARD INLET PROTECTION



- Construction Specifications
- Excavate completely around the inlet to a depth of 18" below the notch elevation.
  - Drive the 2" x 4" construction grade lumber posts 1" into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on Detail 23A. The top of the frame (wire) must be 6" below adjacent roadways where flooding and safety issues may arise.
  - Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.
  - Stretch the Geotextile Class E tightly over the wire mesh with the geotextile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.
  - Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.
  - If the inlet is not in a sump, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.
  - The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

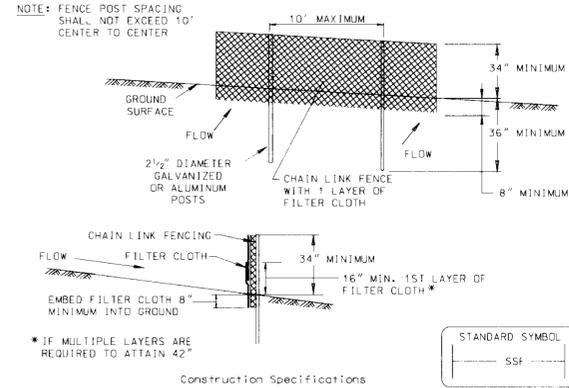
DETAIL 22 - SILT FENCE



- Construction Specifications
- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum cut) or 1 1/2" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot.
  - Geotextile shall be fastened securely to each fence post with wire ties or staples. The geotextile shall meet the following requirements for Geotextile Class F:
 

|                      |  |                |
|----------------------|--|----------------|
| Tensile Strength     | 50 lbs/in (min.)                       | Test: MSMT 509 |
| Tensile Modulus      | 20 lbs/in (min.)                       | Test: MSMT 509 |
| Flow Rate            | 0.3 gal/ft <sup>2</sup> /minute (max.) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min.)                             | Test: MSMT 322 |
  - Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent fabric from being pulled together.
  - Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.
- U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICES      MARYLAND DEPARTMENT OF ENVIRONMENT AND WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



- Construction Specifications
- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
  - Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
  - Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
  - Filter cloth shall be embedded a minimum of 8" into the ground.
  - When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
  - Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
  - Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
 

|                      |  |                |
|----------------------|--|----------------|
| Tensile Strength     | 50 lbs/in (min.)                       | Test: MSMT 509 |
| Tensile Modulus      | 20 lbs/in (min.)                       | Test: MSMT 509 |
| Flow Rate            | 0.3 gal/ft <sup>2</sup> /minute (max.) | Test: MSMT 322 |
| Filtering Efficiency | 75% (min.)                             | Test: MSMT 322 |

STANDARD 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 GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
  - INDIVIDUAL PIECES OF SOD SHALL BE CUT TO THE SUPPLIERS' LENGTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS SHALL BE 5 PERCENT. BROKEN PADS AND TORN OR UNLIVEN ENDS WILL NOT BE ACCEPTABLE.
  - SOD SHALL NOT BE HARVESTED, DELIVERED 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, GRADE STAKES, AND OTHER OBJECTS THAT WOULD INTERFERE WITH PLANTING, FERTILIZING OR MAINTENANCE OPERATIONS.
  - WHERE THE SOIL IS ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 2 TONS/ACRE OR 100 POUNDS PER 1000 SQUARE FEET. IN ALL SOILS, 1000 POUNDS PER ACRE 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 TAMPING AND PEGGING OR OTHER APPROVED METHODS.
  - AS SODDING IS COMPLETED IN ANY ONE SECTION, THE ENTIRE AREA SHALL BE ROLLED OR TAMPED TO INSURE SOLID CONTACT OF ROOTS WITH THE SOIL SURFACE. SOD SHALL BE WATERED IMMEDIATELY AFTER ROLLING OR TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. THE OPERATIONS OF LAYING, TAMPING 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 MOISTEN MOST 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 INITIAL 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.

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).
- SOILS AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 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, OR USE SOD.

MULCHING: APPLY 1/2 TO 2 TONS PER ACRE (70-90 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. ON SLOPES 8 FEET OR HIGHER, USE 348 GALS PER ACRE (8 GALS./1000 SQ.FT.) FOR ANCHORING.

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 (14 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 (19 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 (23 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 1 THROUGH OCTOBER 15, SEED WITH 60 LBS. PER ACRE (14 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 (.05 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 60 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 AREA. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GALS./1000 SQ.FT.) FOR ANCHORING.
- MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES, AND PERMITS, SEDIMENT CONTROL DIVISION, PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G.) TEMPORARY STABILIZATION WITH MULCH ALONG SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1. 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 17 OF HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G.) TEMPORARY STABILIZATION WITH MULCH ALONG SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

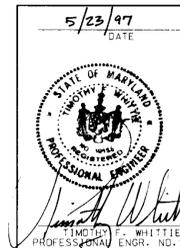
|                                    |                    |
|------------------------------------|--------------------|
| TOTAL AREA OF SITE                 | - 1.83 ACRES       |
| AREA DISTURBED                     | - 1.87 ACRES±      |
| AREA TO BE ROOFED OR PAVED         | - 0.75 ACRES±      |
| AREA TO BE VEGETATIVELY STABILIZED | - 0.50 ACRES±      |
| TOTAL CUT                          | - 1490 CUBIC YARDS |
| TOTAL FILL                         | - 1490 CUBIC YARDS |
| OFF-SITE WASTE/BORROW LOCATION     | - TO BE DETERMINED |

- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED 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 PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE FEET DEPTH OR THEREABOUTS. TRENCHES SHALL BE BACK FILLED AND STABILIZED WITH ONE WORKING DAY, WHICHEVER IS SHORTER.

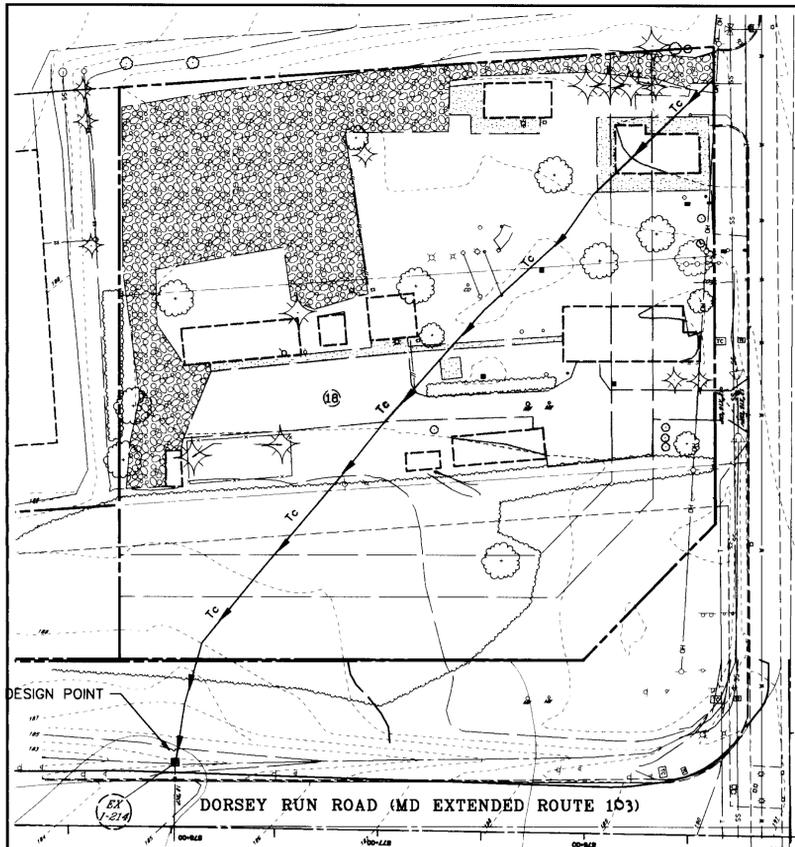
TOPSOIL CONSTRUCTION AND MATERIAL SPECIFICATIONS

- 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-SSC IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
- 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, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, 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" IN DIAMETER.
  - TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
  - WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE 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 CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
  - 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 DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
    - GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
  - TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" - 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SOODING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
  - TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETERMINED TO PROPER GRADING AND SEEDBED PREPARATION.
  - 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 CONTROLS STANDARDS IN THEIR ENTIRETY.

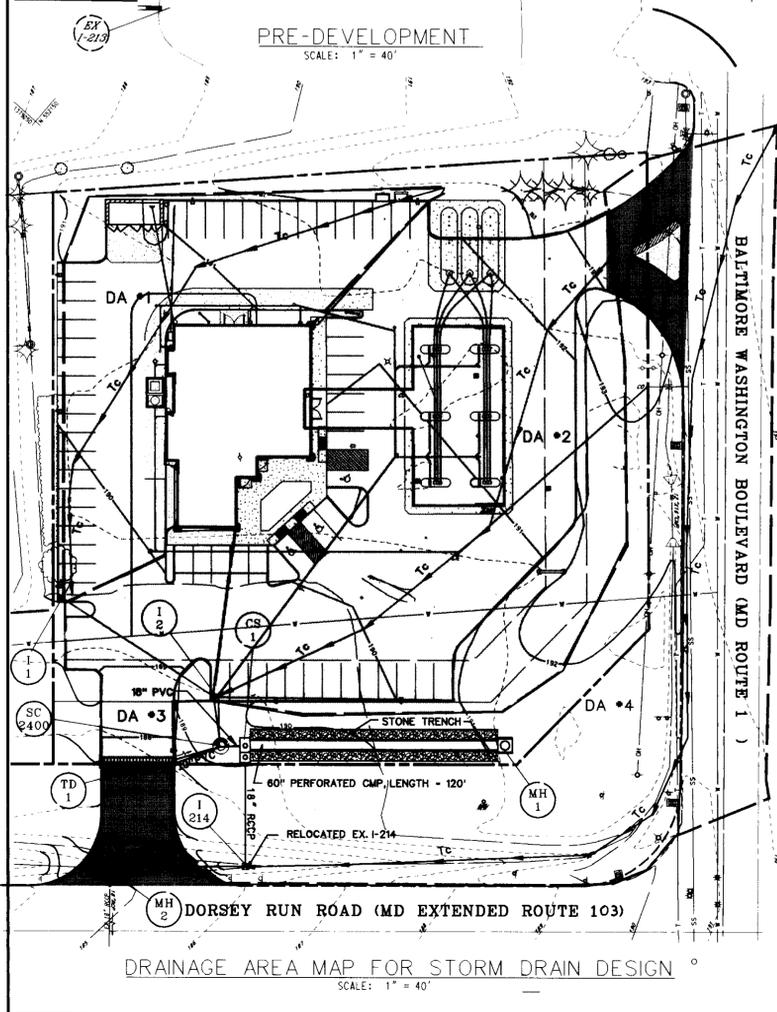
|  |  |                          |
|--|--|--------------------------|
| DATE:  | NUMBER:  | REVISION DESCRIPTION:    |
| APPROVED: DEPARTMENT OF PLANNING AND ZONING  |  |                          |
| <i>John P. ...</i>   |  | 6/23/97                  |
| CHIEF-DEVELOPMENT ENGINEERING DIVISION   |  | DATE                     |
| <i>...</i>   |  | 7/2/97                   |
| CHIEF-DIVISION OF LAND DEVELOPMENT   |  | DATE                     |
| <i>...</i>   |  | 7/3/97                   |
| DIRECTOR   |  | DATE                     |
| APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS   |  |                          |
| HOWARD COUNTY HEALTH DEPARTMENT  |  |                          |
| <i>...</i>   |  | 6/30/97                  |
| COUNTY HEALTH OFFICER  |  | DATE                     |
| BY THE ENGINEER:   |  |                          |
| <i>...</i>   |  | 5/23/97                  |
| SIGNATURE OF ENGINEER  |  | DATE                     |
| BY THE DEVELOPER:  |  |                          |
| <i>...</i>   |  | 5/23/97                  |
| SIGNATURE OF DEVELOPER   |  | DATE                     |
| REVIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.   |  |                          |
| <i>...</i>   |  | 6/19/97                  |
| 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. |  |                          |
| <i>...</i>   |  | 6/19/97                  |
| HOWARD S.C.D.  |  | DATE                     |
| OWNER/DEVELOPER  | <b>EXXON CORPORATION</b>                                 |                          |
|  | 6301 IVY LANE  |                          |
|  | SUITE 700  |                          |
|  | GREENBELT, MARYLAND 20770                                |                          |
|  | ATTN: MR. ROBERT CASERTA                                 |                          |
|  | PHONE: (301)-513-7511                                    |                          |
|  | <b>FREDERICK WARD ASSOCIATES INC.</b>                    |                          |
|  | ENGINEERS ARCHITECTS SURVEYORS                           |                          |
|  | 9 SOUTH MAIN STREET BEL. AR. MARYLAND 21014 410/879-2290 |                          |
|  | FWA JOB NUMBER: 96017 FWA DRAWING FILE NAME: PSESD01.DGN |                          |
|  | BAKER & SHAPK PROPERTIES                                 |                          |
|  | PLAT 12550, F-97-01                                      |                          |
|  | TAX MAP 43, GRID 5, PARCEL A                             |                          |
|  | 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND           |                          |
|  | CENSUS TRACT 8022 WATER CODE 801 SEWER CODE 2320000      |                          |
| TITLE  | SEDIMENT AND EROSION CONTROL NOTES AND DETAILS           |                          |
|  | FOR AN EXXON STATION AT                                  |                          |
|  | 7311 WASHINGTON BLVD.                                    |                          |
|  | ELKRIDGE, MARYLAND                                       |                          |
| DESIGN BY:   | RFM  | SCALE: AS NOTED          |
| DRAWN BY:  | KDN  | DATE: 01/08/97           |
| CHECKED BY:  | TFW  | APPROVED: ...            |
|  |  | DRAWING NUMBER: 12 OF 14 |



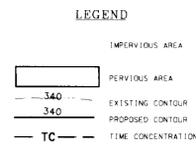




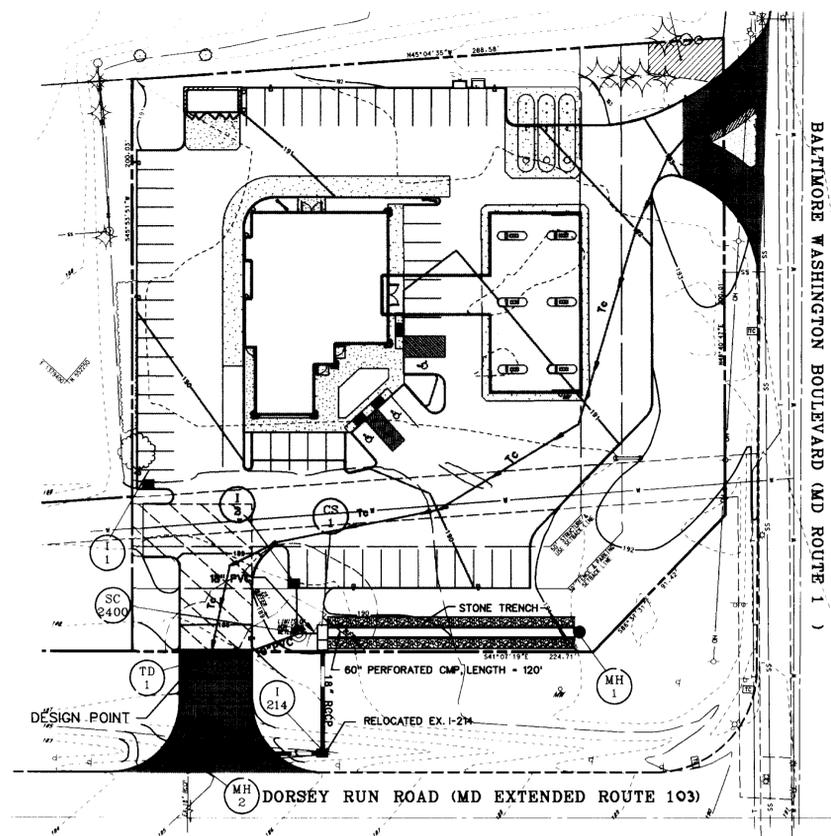
PRE-DEVELOPMENT  
SCALE: 1" = 40'



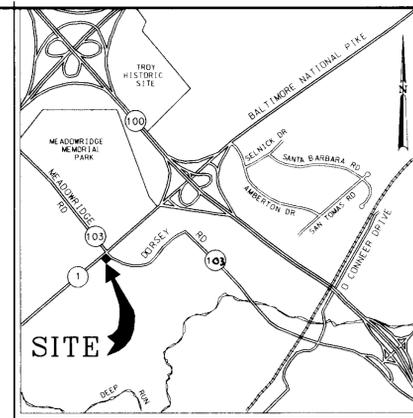
DRAINAGE AREA MAP FOR STORM DRAIN DESIGN  
SCALE: 1" = 40'



SOIL GROUP  
Beltsville 'C'



POST-DEVELOPMENT  
SCALE: 1" = 40'



VICINITY MAP  
SCALE: 1" = 2000'

RUN OFF COEFFICIENT COMPS

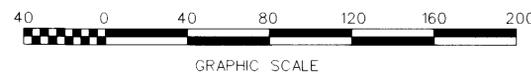
| DRAINAGE AREA | PERVIOUS  |               | IMPERVIOUS |               | TOTAL RUN OFF COEFFICIENT | SUB-TOTAL AREA (AC) |
|---------------|-----------|---------------|------------|---------------|---------------------------|---------------------|
|               | AREA (AC) | RUN OFF COEF. | AREA (AC)  | RUN OFF COEF. |                           |                     |
| DA#1          | 0.0307    | 0.19          | 0.33       | 0.86          | 0.802                     | 0.356               |
| DA#2          | 0.1959    | 0.19          | 0.82       | 0.86          | 0.73                      | 1.02                |
| DA#4          | 0.00      | 0.19          | 0.1369     | 0.86          | 0.86                      | 0.1369              |
| DA#4          | 0.3749    | 0.19          | 0.6207     | 0.86          | 0.602                     | 0.9956              |

|                  | DRAINAGE AREA (Ac) |        | CN    | TC (HR) | PEAK DISCHARGE (CFS) |          |          |           |
|------------------|--------------------|--------|-------|---------|----------------------|----------|----------|-----------|
|                  | GRASS              | PAVING |       |         | 2 YEARS              | 10 YEARS | 25 YEARS | 100 YEARS |
| PRE-DEVELOPMENT  | 1.17               | 0.65   | 81.00 | 0.23    | 3.30                 | 6.84     | 7.81     | 10.91     |
| POST-DEVELOPMENT | 1.29               | 0.56   | 91.00 | 0.1     | 5.74                 | 9.93     | 11.03    | 14.51     |
| AFTER STORAGE    | 1.29               | 0.56   | 91.00 | 0.1     | 3.22                 | 6.78     | N/A      | N/A       |

STORM DRAIN COMPS

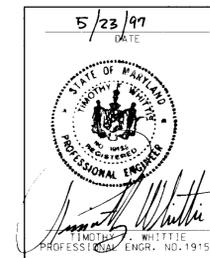
| Structure |      | Contributing Area |              |              | 10 Year Runoff |      |      |                    | Pipe                       |       |          |      |                   |            |              |                |                   |                 |                   |         |
|-----------|------|-------------------|--------------|--------------|----------------|------|------|--------------------|----------------------------|-------|----------|------|-------------------|------------|--------------|----------------|-------------------|-----------------|-------------------|---------|
| From      | To   | C Area (*)        | A Area Acres | Runoff Coef. | CA             | ΣA   | ΣCA  | tc Time Conc. Min. | if Rainfall intens. in./hr | Q cfs | Size in. | Type | n Manning's Coef. | So Slope % | L Length Ft. | Vo Vel. ft/sec | Time in Pipe Min. | Capac. Full cfs | Remarks           |         |
| I-1       | I-2  | 1                 | 0.35         | 0.80         | 0.28           | 0.35 | 0.28 | 10.9               | 5.72                       | 1.60  | 15       | PVC  | 0.01              | 0.98       | 84.0         | 3.60           | 0.41              | 6.00            | ON SITE           |         |
| I-2       | SC24 | 2                 | 1.02         | 0.73         | 0.74           | 1.37 | 1.02 | 5                  | 7.00                       | 7.14  | 18       | PVC  | 0.01              | 1.20       | 17.0         | 6.80           | 0.04              | 15.0            | ON SITE           |         |
| TD-1      | SC24 | 3                 | 0.13         | 0.86         | 0.11           | 0.13 | 0.11 | 5.00               | 7.00                       | 0.78  | 10       | PVC  | 0.01              | 1.5        | 20.0         | 1.50           | 0.15              | -               | ON SITE           |         |
| SC24      | CS-1 | -                 | -            | -            | -              | -    | -    | 1.13               | 5.15                       | 6.91  | 7.87     | 18   | PVC               | 0.01       | 2.00         | 5.00           | 8.50              | 0.01            | 15.0              | ON SITE |
| CS-1      | I214 | -                 | -            | -            | -              | -    | -    | -                  | -                          | 6.78  | 18       | RCCP | 0.01              | 0.59       | 51.0         | 5.00           | 0.17              | 10.0            | FROM SWM FACILITY |         |
| I214      | MH-2 | 4                 | 0.99         | 0.60         | 0.54           | -    | 0.60 | 6.71               | 6.61                       | 10.7  | 18       | RCCP | 0.01              | 0.78       | 64.0         | 6.80           | 0.13              | 15.0            | OFF-SITE Q=3.80   |         |

- THE RUNOFF Q=6.78 IS AFTER STORMWATER MANAGEMENT FACILITY (SEE TR-20 ON APPENDIX C)
- THE RUNOFF Q = 3.80 (OFF-SITE) + 6.78 (SWM FACILITY) = 10.70 CFS



|  |  |                       |
|--|--|-----------------------|
| DATE:                                  | NUMBER:                                      | REVISION DESCRIPTION: |
| APPROVED:                              | DEPARTMENT OF PLANNING AND ZONING            |                       |
| <i>Walter</i>                          | DATE:  | 4/23/97               |
| CHIEF DEVELOPMENT ENGINEERING DIVISION |  |                       |
| <i>Cindy Hamilton</i>                  | DATE:  | 7/2/97                |
| CHIEF DIVISION OF LAND DEVELOPMENT     |  |                       |
| <i>Joseph S. Smith</i>                 | DATE:  | 7/3/97                |
| APPROVED:                              | FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS |                       |
|  | HOWARD COUNTY HEALTH DEPARTMENT.             |                       |
| <i>Joseph M. Boyd</i>                  | DATE:  | 6/30/97               |
| COUNTY HEALTH OFFICER                  |  |                       |
| OWNER/DEVELOPER:                       | <b>EXXON CORPORATION</b>                     |                       |
|  | 6301 IVY LANE                                |                       |
|  | SUITE 700                                    |                       |
|  | GREENBELT, MARYLAND 20770                    |                       |
|  | ATTN: MR. ROBERT CASERTA                     |                       |
|  | PHONE: (301) 513-7511                        |                       |
| RAS #2-0311                            |  |                       |

|   |                         |                |           |
|---|-------------------------|----------------|-----------|
| <b>FREDERICK WARD ASSOCIATES INC.</b>                 | ENGINEERS               | ARCHITECTS     | SURVEYORS |
| 5 SOUTH MAIN STREET                                   | BEL AIR, MARYLAND 21014 | (410) 879-2090 |           |
| FWA JOB NUMBER: 99017                                 | FWA DRAWING FILE NAME:  | PROJW01        |           |
| BAKER & SHPK PROPERTIES                               |                         |                |           |
| PLAT 12550, F-97-01                                   |                         |                |           |
| TAX MAP 43, GRID 5, PARCEL A                          |                         |                |           |
| 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND        |                         |                |           |
| CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2320000 |                         |                |           |
| TITLE: DRAINAGE AREA MAP                              |                         |                |           |
| FOR AN EXXON STATION                                  |                         |                |           |
| 7311 WASHINGTON BLVD.                                 |                         |                |           |
| ELKRIDGE, MARYLAND 21227                              |                         |                |           |
| DESIGN BY: YNQ  | SCALE: AS SHOWN         | RAS# 2-0311    |           |
| DRAWN BY: YNQ   | DATE: 03/15/97          | DRAWING NUMBER |           |
| CHECKED BY: REM                                       | APPROVED:               |                | 10 OF 14  |



### Stormceptor® GASKET INSTALLATION INSTRUCTIONS

**GUIDELINES FOR ASSEMBLING PROFILE GASKETS ON A SINGLE STEP Stormceptor® JOINT**

- The Stormceptor® section should be handled with care to avoid any chipping of the bell or spigot.
- Carefully clean all dirt and debris from the spigot, including the step seating area of the gasket. Clean the inside area of the bell.
- Place the profile gasket in the step of the "dry" spigot. Verify that the pointed end of the gasket is directed towards the shoulders of the spigot. (See Figure 1)
- Insert a smooth, round rod, such as a screwdriver, between the gasket and the spigot. Be careful not to cut or lacerate the gasket. Equalize the gasket stretch by running the rod around the entire circumference several times.
- Apply joint lubricate to the inner surface of the bell including the leading edge. Lubricate the spigot and gasket.
- Align the Stormceptor® sections (spigot with the bell). Verify that the gasket touches the lead-in taper around the entire circumference.
- Gently push the joint home. Note that every section will not home exactly the same. (See Figure 2)

If jointing problems arise, do not force the Stormceptor® sections together (cracking may occur). Contact CSR Hydro Conduit immediately.

### Hydro Conduit STORMCEPTOR DISK TYPE FIBERGLASS INSERT DETAIL

DR. BY: EPDM  
CK. BY: RCH  
DATE: 1-16-97  
SCALE: 3/8" = 1'-0"  
DWG.# CA-0225-01

**GENERAL NOTES:**

- CSR HYDRO CONDUIT RECOMMENDS THE USE OF FLEXIBLE PIPE CONNECTORS AT THE INLET PIPE AND OUTLET PIPE WHERE APPLICABLE.
- STORMCEPTOR FRAME AND COVER TO BE POSITIONED OVER OUTLET DROP PIPE.
- INSERT TO BE INSTALLED WITH SIX 1/2" DROP-IN ANCHORS AND BOLTS.
- INSERT TO BE SEALED AROUND CIRCUMFERENCE WITH CHEMREX 948.

| UNIT     | A (in.) | B0 (in.) | C (in.) |
|----------|---------|----------|---------|
| STC 900  | 16      | 6        | 16      |
| STC 1200 | 16      | 6        | 16      |
| STC 1800 | 16      | 6        | 16      |
| STC 2400 | 44      | 8        | 44      |
| STC 3600 | 44      | 8        | 44      |
| STC 4800 | 44      | 10       | 44      |
| STC 6000 | 44      | 10       | 44      |
| STC 7200 | 44      | 12       | 44      |

### Hydro Conduit PRECAST CONCRETE STORMCEPTOR

DR. BY: EPDM  
CK. BY: RCH  
DATE: 12-17-96  
SCALE: 1/4" = 1'-0"  
DWG.# CA-0225-05

**GENERAL NOTES:**

- STORMCEPTOR SECTIONS SHALL CONFORM TO ASTM C 478. PROFILE GASKETED JOINTS CONFORMING TO ASTM C 443.
- MANHOLE STEPS PROVIDED ABOVE INSERT @ 16" O.C. AND SHALL BE COPOLYMER POLYPROPYLENE PLASTIC ENCAPSULATED GR. 60 STEEL.
- MINIMUM CONCRETE STRENGTH f'c = 4000 PSI  
MINIMUM STEEL STRENGTH fy = 60,000 PSI
- REINFORCEMENT DESIGN SHALL MEET ASTM C 478.
- FLEXIBLE PIPE CONNECTORS SHALL MEET ASTM C 923.
- HANDLING:  
A. ALL RISERS SHALL HAVE 2 EA. 1" HOLES FOR LIFTING @ 1/3 WAY DOWN FROM SPIGOT.  
B. ALL 1/2" DIA. BASE SECTIONS, FLATTOPS, AND REDUCERS TO HAVE LIFT HOOKS.
- DESIGNED FOR AASHTO H-20 LOADING.
- FIBERGLASS STORMCEPTOR INSERT REFERENCE DRAWING # CA-0225-01

### GENERAL NOTES

- SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STORMCEPTOR UNTIL THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED. SILT MAY BE ALLOWED TO ENTER STORMCEPTOR IF IT IS BEING USED AS A FINAL SEDIMENT CONTROL FILTERING DEVICE.
- ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
- THE STORMCEPTOR MUST BE PUMPED OUT AND CLEANED AT THE END OF THE CONSTRUCTION OF THE PROJECT.

### NOTES

DRAINAGE AREA TO STORMCEPTOR = 1.85 AC ±  
PROPOSED STORMCEPTOR INLET PIPE = 18" PVC & 10" PVC  
PROPOSED STORMCEPTOR OUTLET PIPE = 18" PVC  
THE FIRST 1/2" OF RUNOFF FROM ALL IMPERVIOUS AREA WILL BE TREATED THROUGH THE STORMCEPTOR  
IMPERVIOUS AREA TO STORMCEPTOR = 1.29 AC  
Op 0.5 = 0.0 x AM x D x FP  
Op 0.5 = (1010) x (1.29/640) x (1.5) (1)  
Op 0.5 = 1.02 cfs x 7.48 gal./cfs x 60 sec./min.  
Op 0.5 = 456.86 gpm

### STORMCEPTOR INSERT OUTLET LOCATION

NOT TO SCALE

### 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 PERVIOUS SURFACES AT ALL TIMES; MAINTAIN GRASS, SOG, 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:  
A. 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.  
B. THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.
- THE 60" ACOMP. OUTFALL STRUCTURE, 18" PIPE SHALL BE INSPECTED BIANNUALLY AT 6-MONTH INTERVALS. ANY DEBRIS SHALL BE REMOVED. STRUCTURAL DEFICIENCIES SHALL BE NOTED AND REPAIRED IMMEDIATELY IN KIND.

### CONTRACTOR INSTALLATION INSTRUCTIONS PRECAST CONCRETE STORMCEPTOR

- Stake-out the location of the stormceptor and excavate hole. Excavate adequate space to connect inlet and outlet pipes to unit. Install a 12" deep (or as required) layer of compacted aggregate subbase at bottom of excavation. Install curb or shoring, as needed.
- Check elevation of unit by measuring its sections from base of the storage chamber (bottom of unit) side to the invert of stormceptor bypass chamber (inlet elevation fiberglass insert). Subtract this distance from design invert elevation to determine top of subbase elevation. Check elevation of installed subbase and adjust as needed.
- Secure inspector approval of subgrade and subbase.
- Install storage chamber. Install screw inserts into base of storage chamber. Attach cables or chains to all 3 lifting lugs on the base slab. Using large equipment or crane lift and place the base section of the storage chamber in the excavated hole on the subbase. Make sure that the base is level. Specific alignment of this part is not required. Install rubber gasket on base unit and coat with lubricating grease (provided in shipment). If not pre-lubricated, install additional storage chamber sections, as required (procedure is same as Step 8).
- (For stormceptor models smaller than STC-2000 skip Step 5 and go to Step 6)
- Install riser section. (Stormceptor models > STC 2000) Check that section is set flush, level and is at the proper elevation. Install rubber gasket on the top of the slab spigot and coat with lubricating grease (provided in shipment).
- Install bypass chamber of stormceptor with factory installed stormceptor insert. Lift bypass section and install, while checking alignment and grade of inlet and outlet drainage pipes. Check to make sure the bypass chamber is set flush, level and is at the proper elevation. The bypass chamber must be oriented such that inlet pipe discharges into the V-shaped fiberglass weirs (inside insert). Install rubber gasket on top of bypass section and coat with lubricating grease. If not pre-lubricated.
- Install inlet and outlet storm drain pipes. Connect inlet and outlet storm drain pipes with flexible boots (when provided) and with non-slip grip when no flexible boots are provided. The invert of the inlet and outlet pipe is to match with the invert of the stormceptor insert. Flexible boot installation procedures: center the pipe in the boot opening. Lubricate the outside of the pipe and/or the inside of the boot if the pipe outside diameter is the same as the inside diameter of the boot. Position the pipe clamp in the groove of the boot with the screw at the top. Tighten the pipe clamp screw to 60 inch pounds. If the pipe is much smaller than the boot, lift the boot such that it contacts the bottom of the pipe while tightening the clamp to ensure even contraction of the rubber. Move the pipe horizontally and/or vertically to bring it to grade.
- Install stormceptor drop pipes according to STC pipe installation procedure on reverse side of these instructions.
- Install riser section. Lift riser section and install, while checking that section is set flush and is at proper elevation and that unit is level. Specific alignment of this part is required (if steps) are included. All steps above outlet inspection part. Note: for shallow installations this section may not be required.
- Install top cap with opening for stormceptor cover. If opening is offset (not centered) the top cap opening should be oriented above the stormceptor outlet inspection part (plug).
- Backfill stormceptor with approved backfill material (no organic or topsoil) is to be used for backfill. Backfill and compact in 8" inch lifts. Backfill should be compacted to local/state/province requirements.
- Install and set grade adjusting rings, as needed.
- Install and set stormceptor frame and cover. Secure M4 frame to top slab to prevent horizontal movement.
- The stormceptor should be pumped out when the sediment control measures are removed (site permanently stabilized), and filled with clean water.
- Final inspection.

### Stormceptor Pipe Installation Procedure

**US Models STC 900, STC 1200, STC 1800**    **US Models STC 2400, STC 3600, STC 4800, STC 6000, STC 7200**

- Drop Pipes to be installed once the riser section containing the insert has been installed on the storage chamber.
- Enter the Storage Chamber and install the Inlet Drop Pipe from underneath the insert. The Inlet Drop Pipe is easily identifiable by the T-section fitting. The Tee is oriented such that it is perpendicular to the direction of flow in the upstream storm sewer. For the smaller models (2000) the Inlet Drop Pipe is connected into the coupling that is provided using the supplied PVC cement. For the larger models (>2000) the Inlet Drop Pipe is connected into a gasketed coupling using the supplied pipe lubricant. Once the Inlet Drop Pipe has been installed, the connection should also be caulked using the supplied (Chemex 948 or Buildup Premium PL) sealant to ensure an oil/water tight connection.
- The large 24" (610 mm) Riser Pipe is inserted into the provided outlet sleeve from above while standing on the insert. A flange is provided on the Outlet Riser Pipe to prevent it from falling into the Storage Chamber. The underside of the flange must be caulked with the provided Chemex 948 sealant to ensure an oil/water tight connection.
- A 6" (150 mm) coupling is provided on the insert for the 6" (150 mm) supplied PVC Vent Pipe. The Vent Pipe should be attached to the coupling using the supplied Chemex 948 sealant to ensure an oil/water tight connection.

### REQUIRED PROCEDURES AND INSPECTIONS FOR INGROUND WATER QUALITY FACILITY

- PRIOR TO THE START OF INSTALLING THE STORMCEPTOR, THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION MUST BE CALLED 48 HOURS IN ADVANCE AT 410-313-1880 (PRE-CONSTRUCTION MEETING).
- THE HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION MUST BE NOTIFIED 410-313-1880 AT EACH OF THE FOLLOWING STAGES:
  - APPROVAL OF SUBGRADE; PREPARE A COMPACTED GRAVEL BED AT THE BOTTOM OF THE EXCAVATION (6" DEEP). ENSURE COMPACTION TO 95% DENSITY.
  - PLACE STORMCEPTOR IN EXCAVATION AT CORRECT ELEVATION AND AT CORRECT ALIGNMENT AND GRADE FOR INLET AND OUTLET STORM DRAINS, LEVEL UNIT. INSTALL BASE AND LOWER TANK, MIDDLE SECTION WITH STORMCEPTOR INSERT, RISER SECTION, TOP SLAB WITH PERSONWAY, LEVELING RINGS AND MANHOLE FRAME AND COVER.
  - BACKFILL STORMCEPTOR WITH SUITABLE NATIVE SDIL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL SHOULD BE TO 95% OF DENSITY.
  - WHEN SITE IS PERMANENTLY STABILIZED AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED AND STABILIZED, THEN THE STORMCEPTOR WILL BE PUMPED OUT AND CLEANED AND PLACED IN STORMWATER MANAGEMENT OPERATION.
  - FINAL INSPECTION.

| MODEL    | MAXIMUM TREATED FLOW RATE gpm | TOTAL CAPACITY GAL. | OIL HOLDING CAPACITY GAL. | SEDIMENT HOLDING CAPACITY (CFY) | DOWN RISER PIPE DIAMETER (IN.) |
|----------|-------------------------------|---------------------|---------------------------|---------------------------------|--------------------------------|
| STC-2400 | 475                           | 2495                | 880                       | 180                             | 8                              |

### Stormceptor® Order Request Form

**Contractor Information**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

**Owner Information**

Name: EXXON CORPORATION  
Address: 7311 WASHINGTON BLVD.  
City: ELKRIDGE, State: MD, Zip Code: 21227  
Designer: FREDERICK WARD ASSOCIATES INC.  
Designer Contact: TIM WHITTIE, Phone: (410)-838-7900, Fax: (410)-893-1243

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"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 2400 <input checked="" type="checkbox"/> | 22" <input type="checkbox"/> 32" <input type="checkbox"/> 44" <input type="checkbox"/> Custom <input type="checkbox"/> | Top Elevation (ft.) _____<br>Inlet Pipe Invert (ft.) _____<br>Outlet Pipe Invert (ft.) _____<br>Pipe Type: _____<br>Pipe Inside Diameter (in.) [10] _____<br>Pipe Outside Diameter (in.) [10] _____ |

Project Name: EXXON @ 7311 WASHINGTON BLVD. RAS# 2-0311  
Approximate time frame until required delivery (weeks): \_\_\_\_\_  
Delivery Address: Street: 7311 WASHINGTON BLVD.  
City: ELKRIDGE, State: MD, Zip Code: 21227  
Designer Company: FREDERICK WARD ASSOCIATES INC.  
Designer Contact: TIM WHITTIE, Phone: (410)-838-7900, Fax: (410)-893-1243

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 Carol Broadus 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

NOTE: A DIMENSIONAL SHOP DRAWING MUST BE SUBMITTED TO AND APPROVED BY HOWARD COUNTY PRIOR TO FABRICATION OF STORMCEPTOR

### Stormceptor® Order Request Form

**Contractor Information**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
State: \_\_\_\_\_  
Zip Code: \_\_\_\_\_  
Contact: \_\_\_\_\_  
Phone: \_\_\_\_\_  
Fax: \_\_\_\_\_

**Owner Information**

Name: EXXON CORPORATION  
Address: 7311 WASHINGTON BLVD.  
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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"/> 1200 <input type="checkbox"/> 1800 <input type="checkbox"/> 2400 <input checked="" type="checkbox"/> | 22" <input type="checkbox"/> 32" <input type="checkbox"/> 44" <input type="checkbox"/> Custom <input type="checkbox"/> | Top Elevation (ft.) _____<br>Inlet Pipe Invert (ft.) _____<br>Outlet Pipe Invert (ft.) _____<br>Pipe Type: _____<br>Pipe Inside Diameter (in.) [10] _____<br>Pipe Outside Diameter (in.) [10] _____ |

Project Name: EXXON @ 7311 WASHINGTON BLVD. RAS# 2-0311  
Approximate time frame until required delivery (weeks): \_\_\_\_\_  
Delivery Address: Street: 7311 WASHINGTON BLVD.  
City: ELKRIDGE, State: MD, Zip Code: 21227  
Designer Company: FREDERICK WARD ASSOCIATES INC.  
Designer Contact: TIM WHITTIE, Phone: (410)-838-7900, Fax: (410)-893-1243

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Attn: Dave Brinser/Bryant Lowery (Phone: 1-800-999-2278)

For credit information/applications contact Carol Broadus 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

*Alvin D...* 4/24/97  
CHIEF-DEVELOPMENT ENGINEERING DIVISION

*Cindy Hamilton* 7/2/97  
CHIEF-DIVISION OF LAND DEVELOPMENT

*James R...* 7/3/97  
DIRECTOR

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

*Joyce M...* 6/30/97  
COUNTY HEALTH OFFICER

OWNER/DEVELOPER: **EXXON CORPORATION**  
6301 IVY LANE  
SUITE 700  
GREENBELT, MARYLAND 20770  
ATTN: MR. ROBERT CASERTA  
PHONE: (301)-513-7511

RAS #2-0311

**FREDERICK WARD ASSOCIATES INC.**  
ENGINEERS ARCHITECTS SURVEYORS  
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410) 879-2090  
FAX JOB NUMBER: 9607 FWA DRAWING FILE NAME: FESWJ.DGN

BAKER & SHPAK PROPERTIES  
PLAT 12550, E-97-01  
TAX MAP 43, GRID 5, PARCEL A  
1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 232000

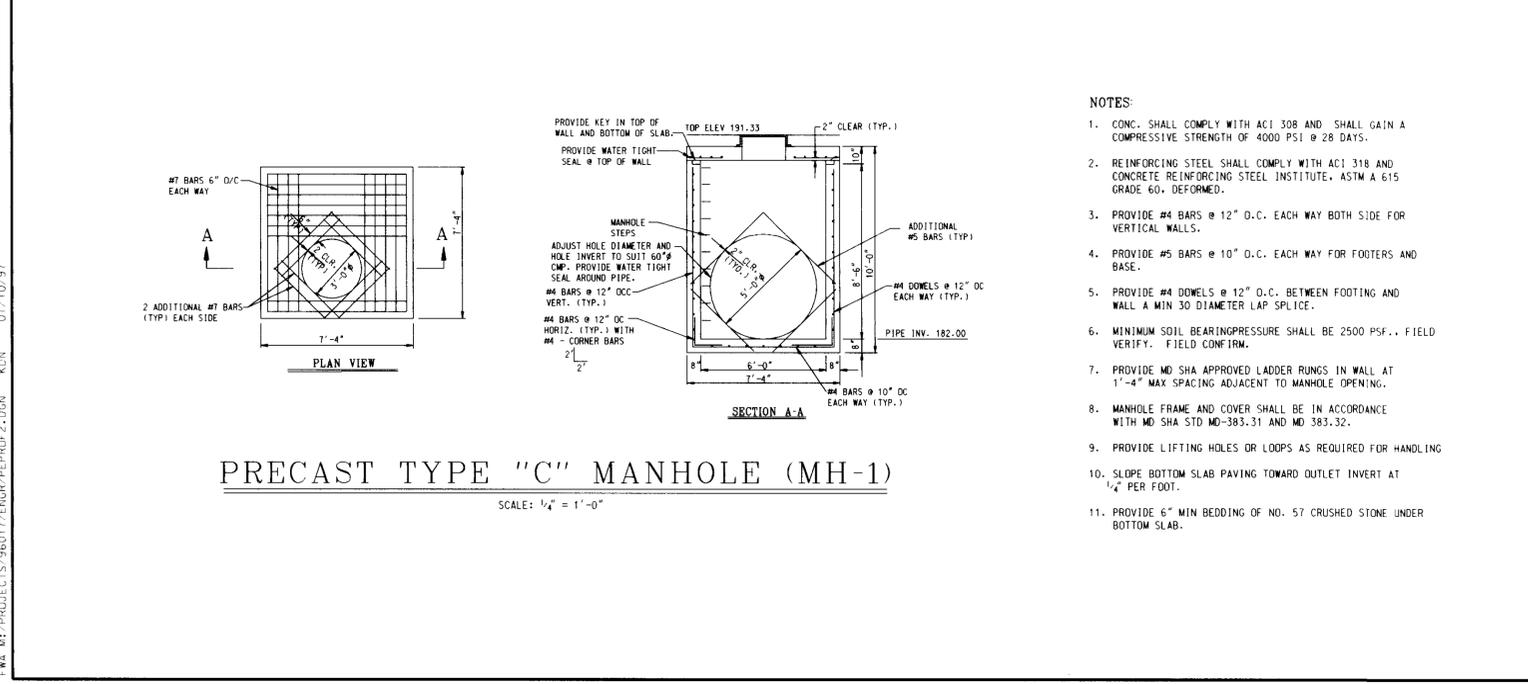
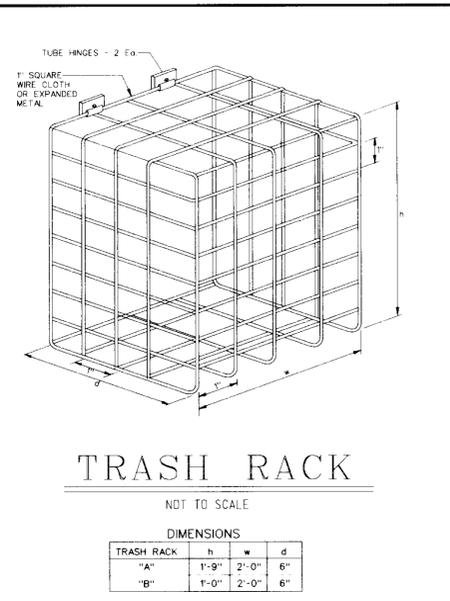
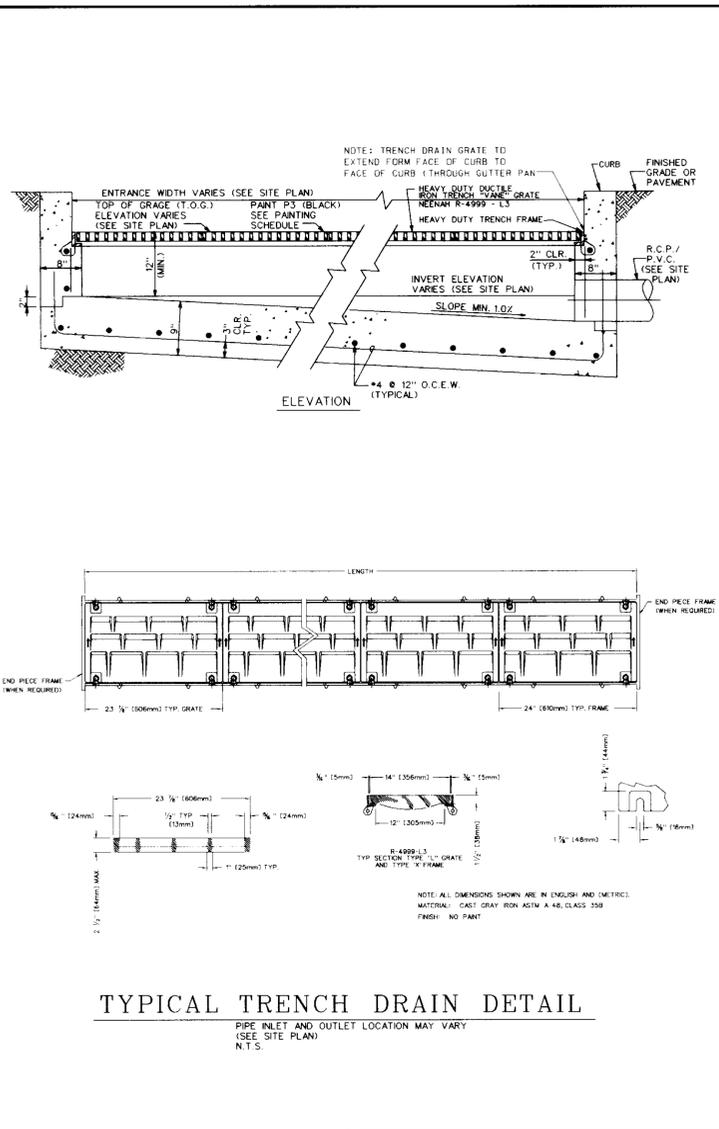
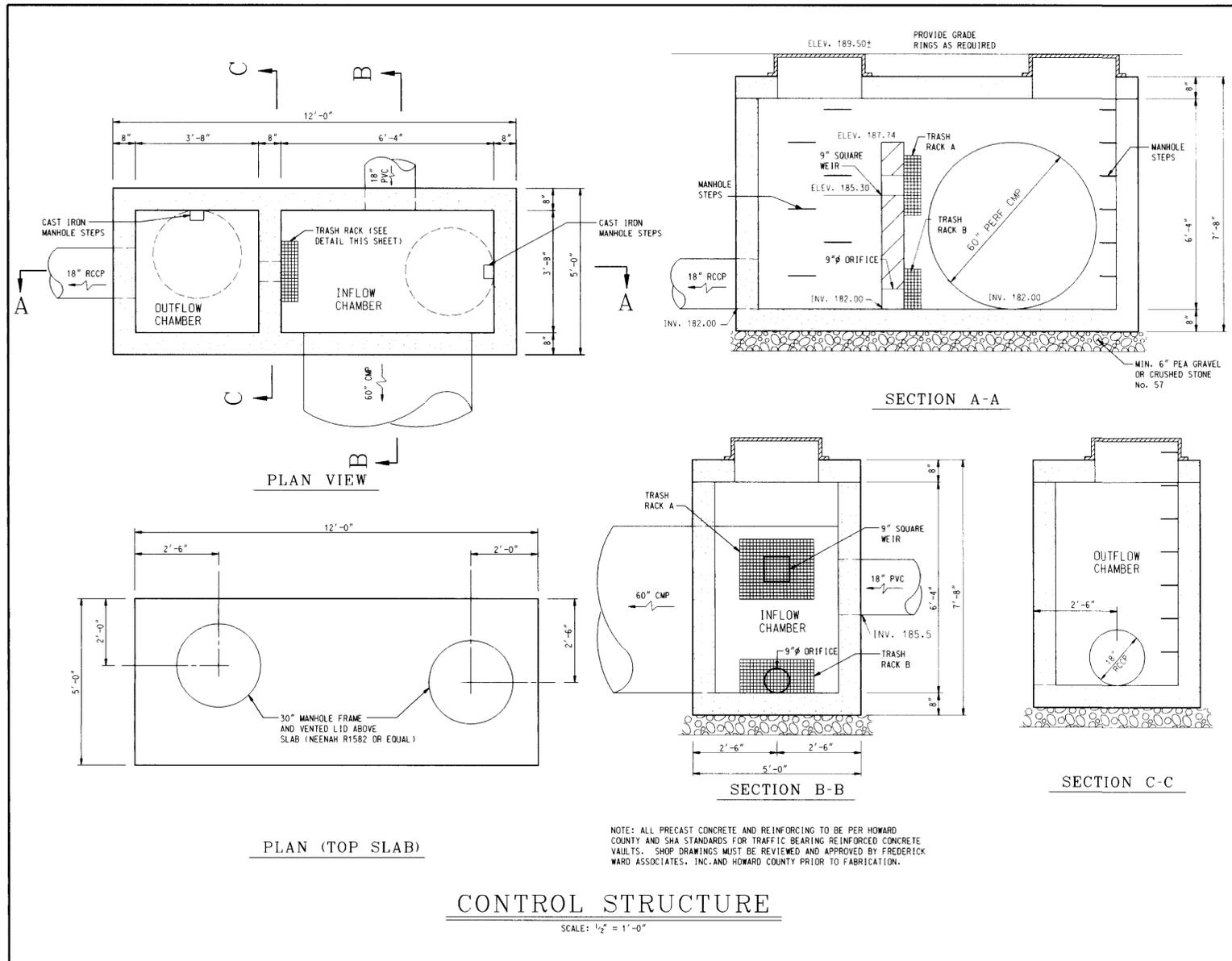
TITLE: **STORMCEPTOR NOTES AND DETAILS**  
FOR AN EXXON STATION  
7311 WASHINGTON BLVD.  
ELKRIDGE, MARYLAND 21227

DESIGN BY: YNO SCALE: AS SHOWN RAS# 2-0311  
DRAWN BY: YNO DATE: 03/15/97 DRAWING NUMBER  
CHECKED BY: RBM APPROVED: DATE: \_\_\_\_\_

5/23/97 DATE

STATE OF MARYLAND  
PROFESSIONAL ENGINEER  
*Tim Whittie*  
PROFESSIONAL ENGR. NO. 19155

SDP-97-73

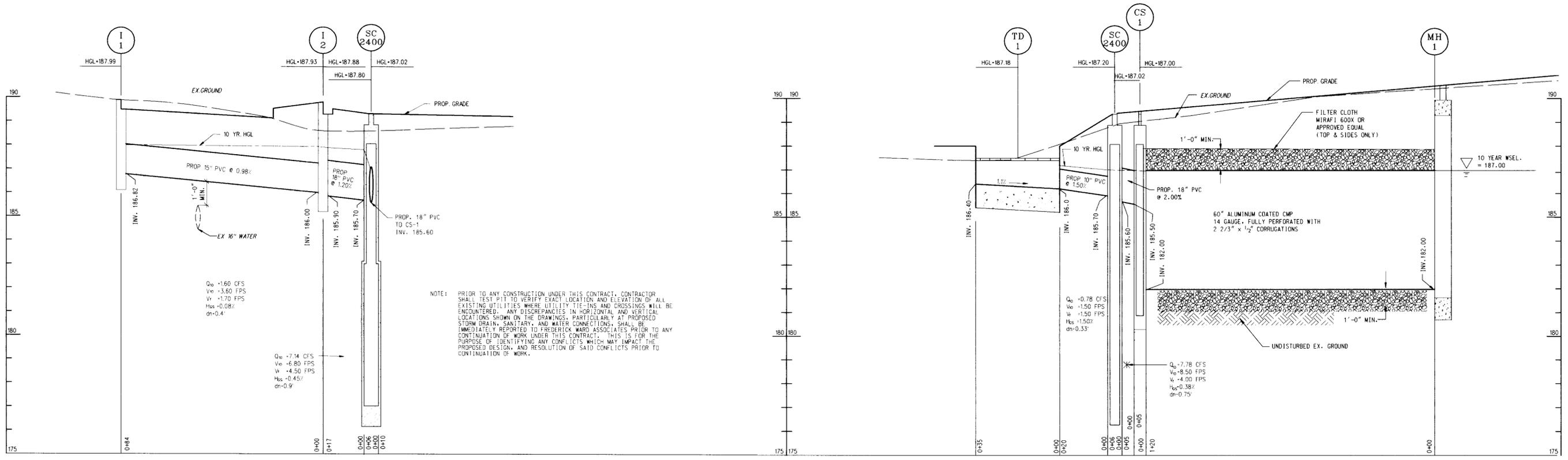


- NOTES:**
- CONC. SHALL COMPLY WITH ACI 308 AND SHALL GAIN A COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS.
  - REINFORCING STEEL SHALL COMPLY WITH ACI 318 AND CONCRETE REINFORCING STEEL INSTITUTE, ASTM A 615 GRADE 60, DEFORMED.
  - PROVIDE #4 BARS @ 12" O.C. EACH WAY BOTH SIDE FOR VERTICAL WALLS.
  - PROVIDE #5 BARS @ 10" O.C. EACH WAY FOR FOOTERS AND BASE.
  - PROVIDE #4 DOWELS @ 12" O.C. BETWEEN FOOTING AND WALL A MIN 30 DIAMETER LAP SPLICE.
  - MINIMUM SOIL BEARINGPRESSURE SHALL BE 2500 PSF., FIELD VERIFY. FIELD CONFIRM.
  - PROVIDE MD SHA APPROVED LADDER RUNGS IN WALL AT 1'-4" MAX SPACING ADJACENT TO MANHOLE OPENING.
  - MANHOLE FRAME AND COVER SHALL BE IN ACCORDANCE WITH MD SHA STD MD-383.31 AND MD 383.32.
  - PROVIDE LIFTING HOLES OR LOOPS AS REQUIRED FOR HANDLING
  - SLOPE BOTTOM SLAB PAVING TOWARD OUTLET INVERT AT 1/4" PER FOOT.
  - PROVIDE 6" MIN BEDDING OF NO. 57 CRUSHED STONE UNDER BOTTOM SLAB.

| DATE:                                     | NUMBER   | REVISION DESCRIPTION |
|---|--|----------------------|
| APPROVED:                                 | DEPARTMENT OF PLANNING AND ZONING  |                      |
| <i>John Danner</i>                        | DATE: 4/23/97  |                      |
| <i>Cathy Hamilton</i>                     | DATE: 7/1/97   |                      |
| <i>Joseph R. Smith</i>                    | DATE: 7/13/97  |                      |
| APPROVED:                                 | FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS   |                      |
| <i>Joseph M. Boyd and se. R. R. H. H.</i> | DATE: 6/30/97  |                      |
| OWNER/DEVELOPER:                          | <b>EXXON CORPORATION</b>   |                      |
| RAS #2-0311                               | 6301 IVY LANE<br>SUITE 700<br>GREENBELT, MARYLAND 20770<br>ATTN: MR. ROBERT CASERTA<br>PHONE: (301)-513-7511   |                      |
| ENGINEERS ARCHITECTS SURVEYORS:           | <b>FREDERICK WARD ASSOCIATES INC.</b>  |                      |
| FWA JOB NUMBER: 96017                     | FWA DRAWING FILE NAME: PEPR02.DGN  |                      |
| AREA:                                     | BAKER & SHPAK PROPERTIES<br>PLAT 12550, F-97-01<br>TAX MAP 43, GRID 5, PARCEL A<br>1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND<br>CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2320000 |                      |
| TITLE:                                    | <b>STORMWATER MANAGEMENT DETAILS</b><br>FOR AN EXXON STATION AT<br>7311 WASHINGTON BLVD.<br>ELKBRIDGE, MARYLAND  |                      |
| DESIGN BY: YNG                            | SCALE: AS NOTED  | PROJECT NO.: 96017   |
| DRAWN BY: YNG                             | DATE: 01/06/97   | DRAWING NUMBER       |
| CHECKED BY: RBM                           | APPROVED:  | OB OF 14             |

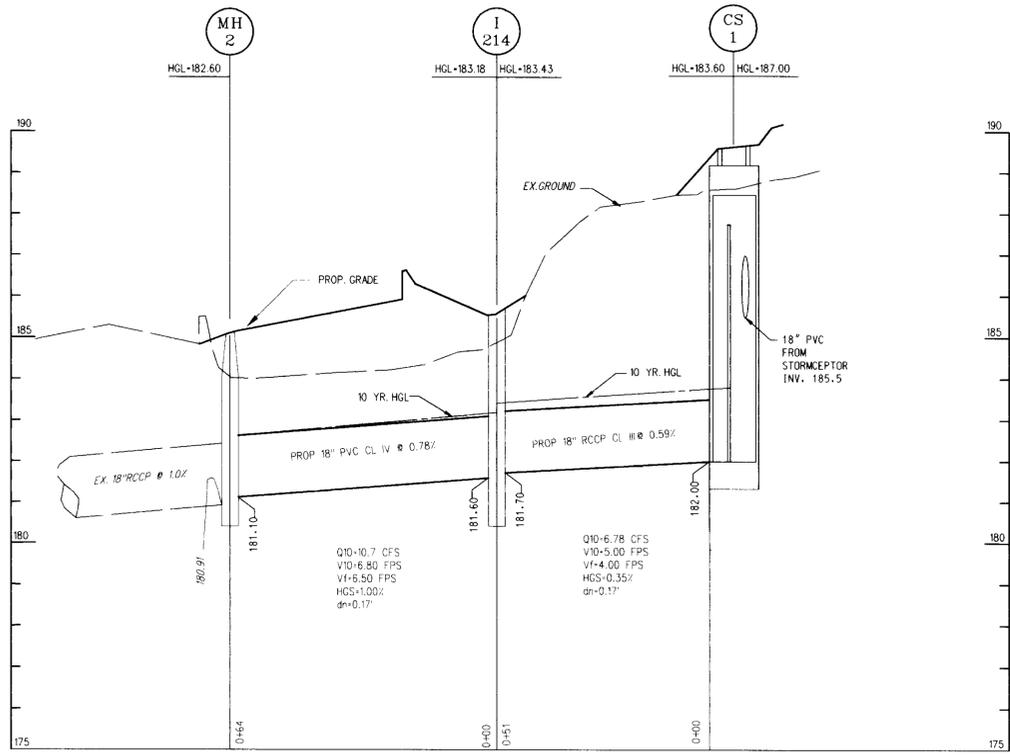
BEFORE BEGINNING CONSTRUCTION CONTACT  
**"MISS UTILITY"**  
AT  
**1-800-257-7777**  
AT LEAST 48 HOURS PRIOR TO EXCAVATION



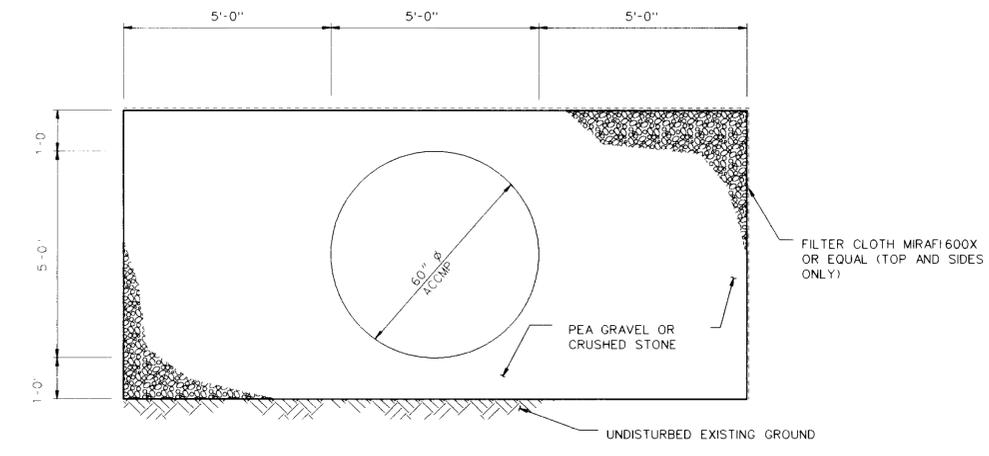


NOTE: PRIOR TO ANY CONSTRUCTION UNDER THIS CONTRACT, CONTRACTOR SHALL TEST PIT TO VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WHERE UTILITY TIE-INS AND CROSSINGS WILL BE ENCOUNTERED. ANY DISCREPANCIES IN HORIZONTAL AND VERTICAL LOCATIONS SHOWN ON THE DRAWINGS, PARTICULARLY AT PROPOSED 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.

**STORM DRAIN PROFILE**  
SCALE: HORIZ. 1" = 20'  
VERT. 1" = 2'



**STORM DRAIN PROFILE**  
SCALE: HORIZ. 1" = 20'  
VERT. 1" = 2'



**CROSS SECTION**  
SCALE: 1/2" = 1'-0"

| DATE    | NUMBER | REVISION DESCRIPTION                                 |
|---------|--------|--|
| 6/23/97 |        | APPROVED: DEPARTMENT OF PLANNING AND ZONING          |
| 7/9/97  |        | APPROVED: CHIEF-DEVELOPMENT ENGINEERING DIVISION     |
| 7/13/97 |        | APPROVED: CHIEF-DIVISION OF PLANNING AND DEVELOPMENT |
| 6/30/97 |        | APPROVED: COUNTY HEALTH OFFICE                       |

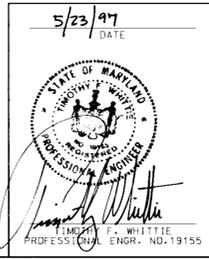
OWNER/DEVELOPER: **EXXON CORPORATION**  
6301 IVY LANE, SUITE 700, GREENBELT, MARYLAND 20770  
ATTN: MR. ROBERT CASERTA, PHONE: (301) 513-7511

ENGINEERS: **FREDERICK WARD ASSOCIATES INC.**  
5 SOUTH MAIN STREET, BEL AIR, MARYLAND 21014, (410) 879-2990

AREA: BAKER & SHPAK PROPERTIES, PLAT 12550, F-97-01, TAX MAP 43, GRID 5, PARCEL A, 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND, CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2330000

TITLE: **STORM DRAIN PROFILES**  
FOR AN EXXON STATION AT  
7311 WASHINGTON BLVD., ELKCRIDGE, MARYLAND

DESIGN BY: YNO, SCALE: AS NOTED, PROJECT NO.: 96017  
DRAWN BY: YNO, DATE: 01/08/97, DRAWING NUMBER:  
CHECKED BY: RBM, APPROVED: 07 OF 14



FVA FILE NO.: 96098/SWP/PROFILES

TAX MAP 43 GRID 5 PARCEL 65  
CORKRAN BROTHERS  
FIRST PARCEL OF CMP 1488/661  
ZONED M-2

CS METALS  
TAX MAP 43  
GRID 5 PARCEL 65  
CORKRAN BROTHERS  
7525 WASHINGTON BLVD.  
SECOND PARCEL OF  
CMP 1488/661  
ZONED M-2

OTHER LAND OF  
SYMOHA SHEPAK &  
JOAN F. SHEPAK  
MDR 3581/529

DORSEY RUN ROAD EXTENDED (MD RTE. 103)

BALTIMORE WASHINGTON BLVD.  
(U.S. RTE 1)

GENERAL NOTES FOR UTILITY CONSTRUCTION

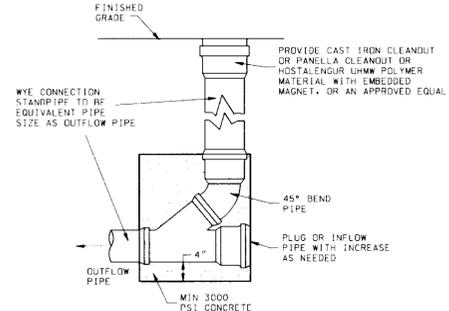
1. INFORMATION CONCERNING THE HORIZONTAL AND VERTICAL LOCATION OF EXISTING UTILITIES WAS TAKEN FROM RECORDS PROVIDED BY UTILITY COMPANIES AND HOWARD COUNTY DWM. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. FREDERICK WARD ASSOCIATES, INC. MAKES NO GUARANTEE AS TO THE COMPLETENESS OR ACCURACY OF UTILITIES 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 LOCATIONS AND ELEVATION 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-
3. PRIOR TO ANY CONSTRUCTION UNDER THIS CONTRACT, CONTRACTOR SHALL TEST PIT TO VERIFY EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES WHERE UTILITY TIES-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 BGE 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.
4. SPRINKLER LINE SHALL BE DUCTILE IRON. 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.
6. WATER METER LOCATED WITHIN BUILDING. METER TO BE OWNED AND MAINTAINED BY HOWARD COUNTY.

GENERAL NOTES FOR STORM DRAIN CONSTRUCTION

1. INSTALL EXPANSION JOINTS BETWEEN CONCRETE APRONS AND TRENCH.
2. REFER TO SITE GRADING PLAN FOR TRENCH DRAIN GRATE ELEVATIONS.
3. TRENCH DRAIN GRATE SHALL BE 35 FEET LONG AND SHALL EXTEND FROM FACE OF CURB TO FACE OF CURB, SUCH THAT RUNOFF WILL NOT BYPASS TRENCH DRAIN.
4. MANHOLE LIDS AND INLET GRATES SHALL BE TRAFFIC BEARING AND
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. ON-SITE STORM DRAIN PIPE TO BE PVC SDR 40.



DETAIL STORM DRAIN AND SANITARY SEWER CLEANOUT (MODIFIED HO. CO. STD. S-2.22)

LEGEND

|                | EXISTING | PROPOSED          |
|----------------|----------|-------------------|
| STORM DRAIN    | SD       | 4" PVC. SHC       |
| SANITARY SEWER | SS       | 4" SPRINKLER LINE |
| WATER LINE     | W        | GAS LINE          |
| GAS LINE       | G        |                   |

STRUCTURE SCHEDULE

| No.   | DESCRIPTION  | INV. IN | INV. OUT | TOP ELEV. |
|-------|--|---------|----------|-----------|
| I-1   | TYPE "C" DOUBLE GRATE INLET                          | -       | 186.82   | 189.5     |
| I-2   | MD-374-70  | 186.0   | 185.9    | 189.3     |
| SC    | STORMCEPTOR 2400                                     | 185.7   | 185.6    | 189.33    |
| CS-1  | CONTROL STRUCTURE (SEE DETAIL SHEET 8 OF 14)         | 185.5   | 182.0    | 189.5     |
| TD-1  | TRENCH DRAIN SEE DETAIL SHT 8 OF 14                  | 186.4   | 186.0    | 187.5     |
| MH-1  | CONCRETE MANHOLE TYPE "C" (SEE DETAIL SHEET 8 OF 14) | 182.0   | 182.0    | 191.33    |
| MH-2  | MANHOLE, MSHA 384.01                                 | 181.1   | 180.9    | 185.3     |
| I-214 | TYPE "K" INLET (REUSE EXISTING)                      | 181.7   | 181.6    | 184.9     |

| DATE | NUMBER | REVISION DESCRIPTION |
|------|--------|----------------------|
|      |        |                      |
|      |        |                      |

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John D. Smith* 4/22/97  
CHIEF-DEVELOPMENT ENGINEERING DIVISION

*Condy Hamilton* 7/2/97  
CHIEF-DIVISION OF LAND DEVELOPMENT

*David Smith* 7/3/97  
DIRECTOR

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

*Joseph M. Boyd* 6/30/97  
COUNTY HEALTH OFFICER

OWNER/DEVELOPER **EXXON CORPORATION**  
6301 IVY LANE  
SUITE 700  
GREENBELT, MARYLAND 20770  
ATTN: MR. ROBERT CASERTA  
PHONE: (301)-513-7511

RAS #2-0311

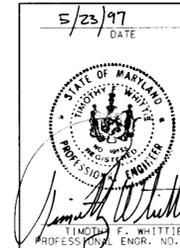
**FREDERICK WARD ASSOCIATES INC.**  
ENGINEERS ARCHITECTS SURVEYORS  
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21034 (410)879-2090

FWA JOB NUMBER 89017 FWA DRAWING FILE NAME: PEUL1

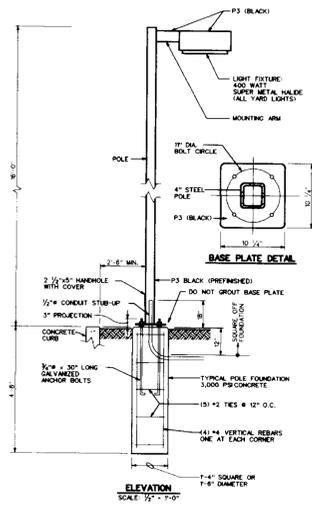
BAKER & SHPAK PROPERTIES  
PLAT 12550, F-97-01  
TAX MAP 43, GRID 5, PARCEL A  
1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2320000

TITLE **SITE UTILITY AND PIPING PLAN**  
FOR AN EXXON STATION  
**7311 WASHINGTON BLVD.  
ELKRIDGE, MARYLAND 21227**

DESIGN BY: YNO SCALE: AS SHOWN RAS# 2-0311  
DRAWN BY: YNO DATE: 03/15/97 DRAWING NUMBER  
CHECKED BY: RBM APPROVED: DATE: 03/15/97 PROFESSIONAL ENGR. NO. 19155



F.W.A. PROJECTS: 86C17/ENGR/PEJIL-DCN 11.12.96



TYPICAL YARD LIGHT DETAIL  
NOT TO SCALE

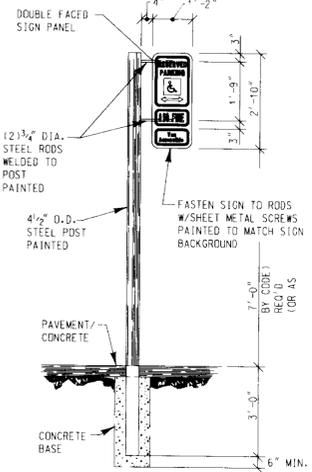
FURNISHED BY OWNER. INSTALLED BY G.C.: LIGHT FIXTURE, MOUNTING ARM, POLE, ANCHOR BOLTS, NUTS, AND WASHERS BY OWNER. ALL OTHER MATERIALS FURNISHED AND INSTALLED BY G.C.

NOTE: LIGHTING TO BE SHIELDED ON TOP AND FOUR SIDES TO PREVENT GLARE ONTO ADJACENT PROPERTIES

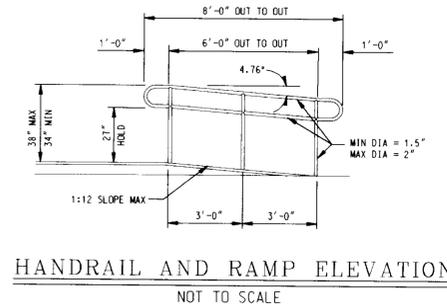


- LEGEND AND BORDER - GREEN  
WHITE SYMBOL ON BLUE BACKGROUND  
BACKGROUND - WHITE  
NOTE:
1. ONE SIGN TO BE APPLIED TO METAL SIGN BOARD MOUNTED TO METAL POST.
  2. FREE STANDING SIGN 7'-0" ABOVE FINISHED GRADE.
  3. MOUNTED ON WALL OR STRUCTURE 6'-0" ABOVE GRADE.

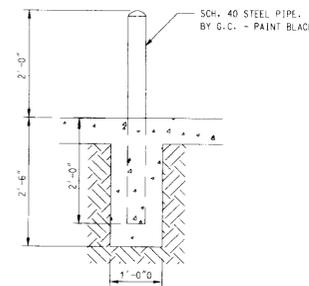
HANDICAP SIGN DETAILS  
NOT TO SCALE



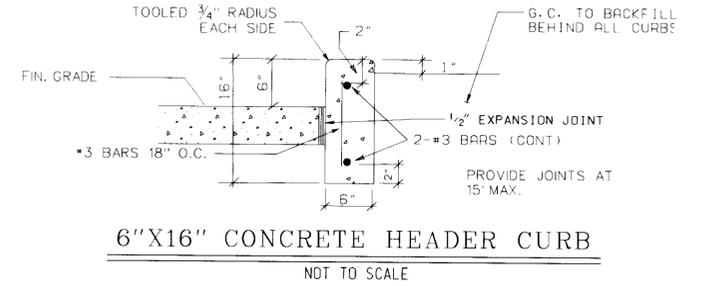
NOTE: APPLY HANDICAP SIGNS TO SIGN PANELS 1" SPACE BETWEEN SIGNS WITH A 1" MARGIN AROUND SIGN PANEL.



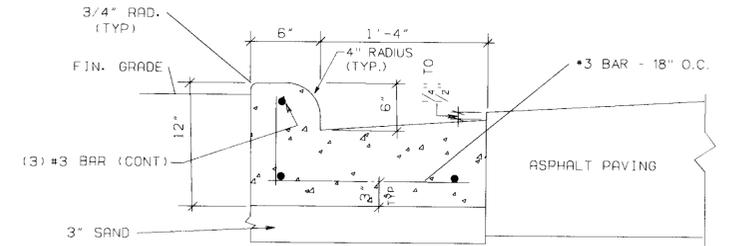
HANDRAIL AND RAMP ELEVATION  
NOT TO SCALE



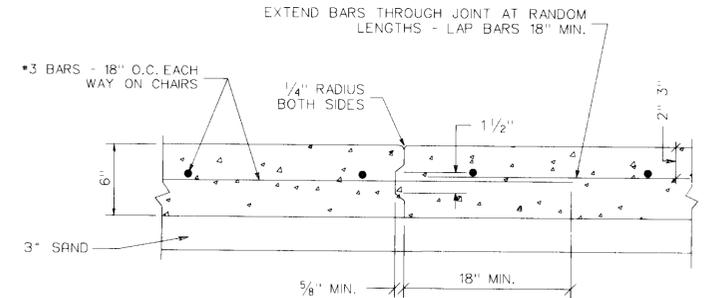
TRAFFIC BOLLARD  
NOT TO SCALE



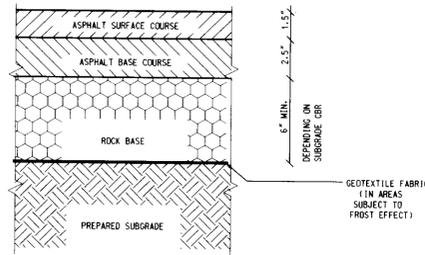
6"X16" CONCRETE HEADER CURB  
NOT TO SCALE



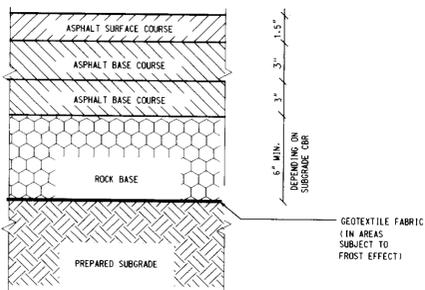
ON-SITE CURB DETAIL  
NOT TO SCALE



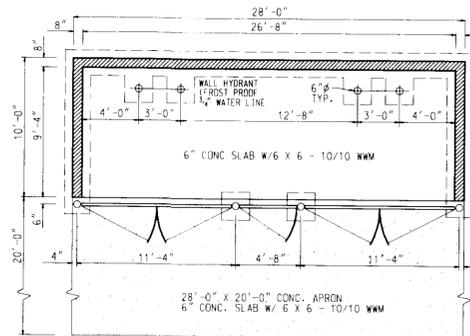
ON-SITE CONCRETE PAVING DETAIL  
NOT TO SCALE



ON SITE PAVING  
P-2 ASPHALT SECTION  
NOT TO SCALE

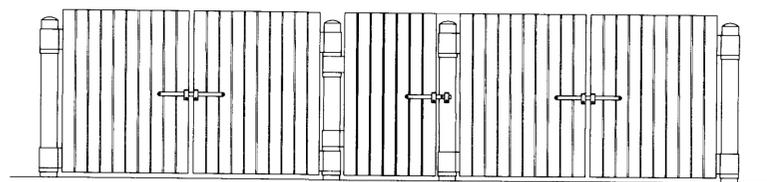


ENTRANCE PAVING  
SHA ASPHALT SECTION  
NOT TO SCALE



TRASH ENCLOSURE PLAN  
NOT TO SCALE

NOTE: SEE ARCHITECTURAL DRAWINGS FOR F.U.I. CONSTRUCTION DETAILS



TRASH ENCLOSURE ELEVATION  
NOT TO SCALE

| DATE | NUMBER | REVISION DESCRIPTION   |
|------|--------|--|
|      |        | APPROVED: DEPARTMENT OF PLANNING AND ZONING                                      |
|      |        | APPROVED: <i>Alfred Daumen</i> 6/20/97<br>CHIEF-DEVELOPMENT ENGINEERING DIVISION |
|      |        | APPROVED: <i>Cathy Hammit</i> 7/8/97<br>CHIEF-DIVISION OF LAND DEVELOPMENT       |
|      |        | APPROVED: <i>James S. Scott</i> 7/8/97<br>DIRECTOR                               |

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

APPROVED: *Joseph M. Boyland* 6/30/97  
COUNTY HEALTH OFFICER

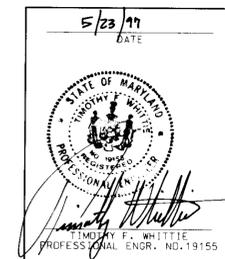
OWNER/DEVELOPER: **EXXON CORPORATION**  
6301 IVY LANE  
SUITE 700  
GREENBELT, MARYLAND 20770  
ATTN: MR. ROBERT CASERTA  
PHONE: (301)-513-7511

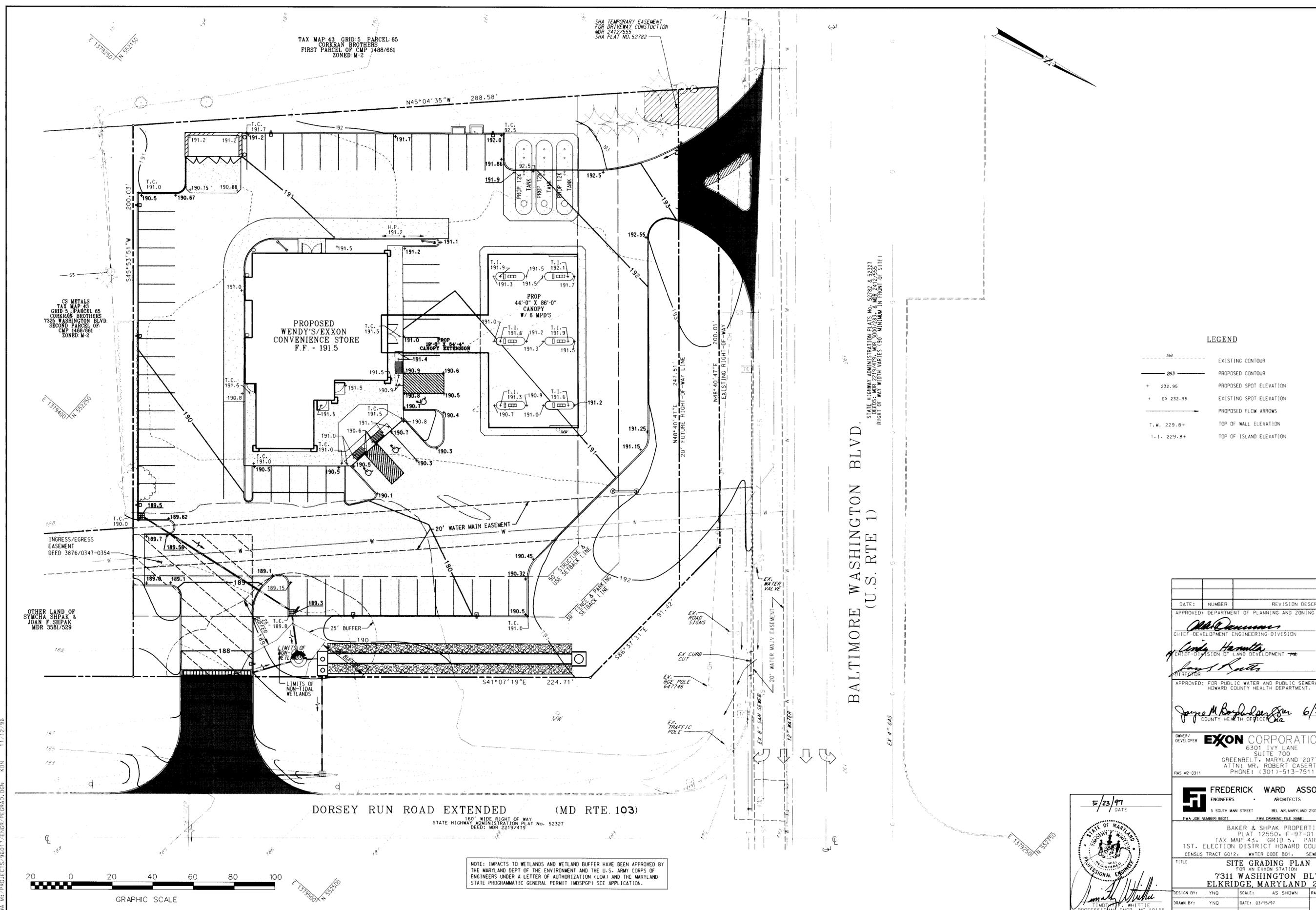
**FREDERICK WARD ASSOCIATES INC.**  
ENGINEERS ARCHITECTS SURVEYORS  
5 SOUTH MAN STREET BEL AIR, MARYLAND 21014 (410)879-2080

AREA: BAKER & SHIPPAK PROPERTIES  
PLAT 12550, F-37-01  
TAX MAP 43, GRID 5, PARCEL A  
1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2320000

TITLE: SITE DETAILS  
FOR AN EXXON STATION AT  
7311 WASHINGTON BLVD.  
ELKRIDGE, MARYLAND

DESIGN BY: YNG SCALE: AS NOTED PROJECT NO.: 96017  
DRAWN BY: YNG DATE: 01/06/97 DRAWING NUMBER  
CHECKED BY: RBM APPROVED: DATE: 05 OF 14





TAX MAP 43, GRID 5, PARCEL 65  
 CORRIAN BROTHERS  
 FIRST PARCEL OF CMP 1488/661  
 ZONED M-2

CS METALS  
 TAX MAP 43, GRID 5, PARCEL 65  
 CORRIAN BROTHERS  
 7325 WASHINGTON BLVD.  
 SECOND PARCEL OF  
 CMP 1488/661  
 ZONED M-2

OTHER LAND OF  
 SYMCHA SHPAK &  
 JOAN F. SHPAK  
 MDR 3581/529

SHA TEMPORARY EASEMENT  
 FOR DRIVEWAY CONSTRUCTION  
 MDR 2412/555  
 SHA PLAT NO. 52782

STATE HIGHWAY ADMINISTRATION PLAT NO. 52327 & 52327  
 DEEDS: MDR 2219/419, MDR 3040/783, MDR 2412/555  
 RIGHT OF WAY WIDTH VARIES (90' MINIMUM IN FRONT OF SITE)

BALTIMORE WASHINGTON BLVD.  
 (U.S. RTE 1)

DORSEY RUN ROAD EXTENDED (MD RTE. 103)

160' WIDE RIGHT OF WAY  
 STATE HIGHWAY ADMINISTRATION PLAT NO. 52327  
 DEED: MDR 2219/419

NOTE: IMPACTS TO WETLANDS AND WETLAND BUFFER HAVE BEEN APPROVED BY THE MARYLAND DEPT. OF THE ENVIRONMENT AND THE U.S. ARMY CORPS OF ENGINEERS UNDER A LETTER OF AUTHORIZATION (LOA) AND THE MARYLAND STATE PROGRAMMATIC GENERAL PERMIT (MDSGP) SEE APPLICATION.

LEGEND

- 261 --- EXISTING CONTOUR
- 263 --- PROPOSED CONTOUR
- + 232.95 PROPOSED SPOT ELEVATION
- + EX 232.95 EXISTING SPOT ELEVATION
- PROPOSED FLOW ARROWS
- T.W. 229.8+ TOP OF WALL ELEVATION
- T.I. 229.8+ TOP OF ISLAND ELEVATION

| DATE    | NUMBER | REVISION DESCRIPTION                        |
|---------|--------|---|
| 6/20/97 |        | APPROVED: DEPARTMENT OF PLANNING AND ZONING |
| 7/2/97  |        | CHIEF-DEVELOPMENT ENGINEERING DIVISION      |
| 7/3/97  |        | CHIEF-DIVISION OF LAND DEVELOPMENT          |
| 7/3/97  |        | DIRECTOR                                    |

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

6/30/97  
 COUNTY HEALTH OFFICE

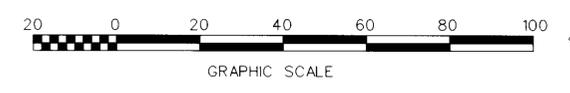
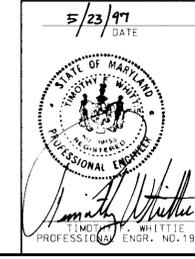
OWNER/DEVELOPER **EXXON CORPORATION**  
 6301 IVY LANE  
 SUITE 700  
 GREENBELT, MARYLAND 20770  
 ATTN: MR. ROBERT CASERTA  
 PHONE: (301)-513-7511

**FREDERICK WARD ASSOCIATES INC.**  
 ENGINEERS ARCHITECTS SURVEYORS  
 5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410)879-2090  
 FWA JOB NUMBER: 8607 FWA DRAWING FILE NAME:

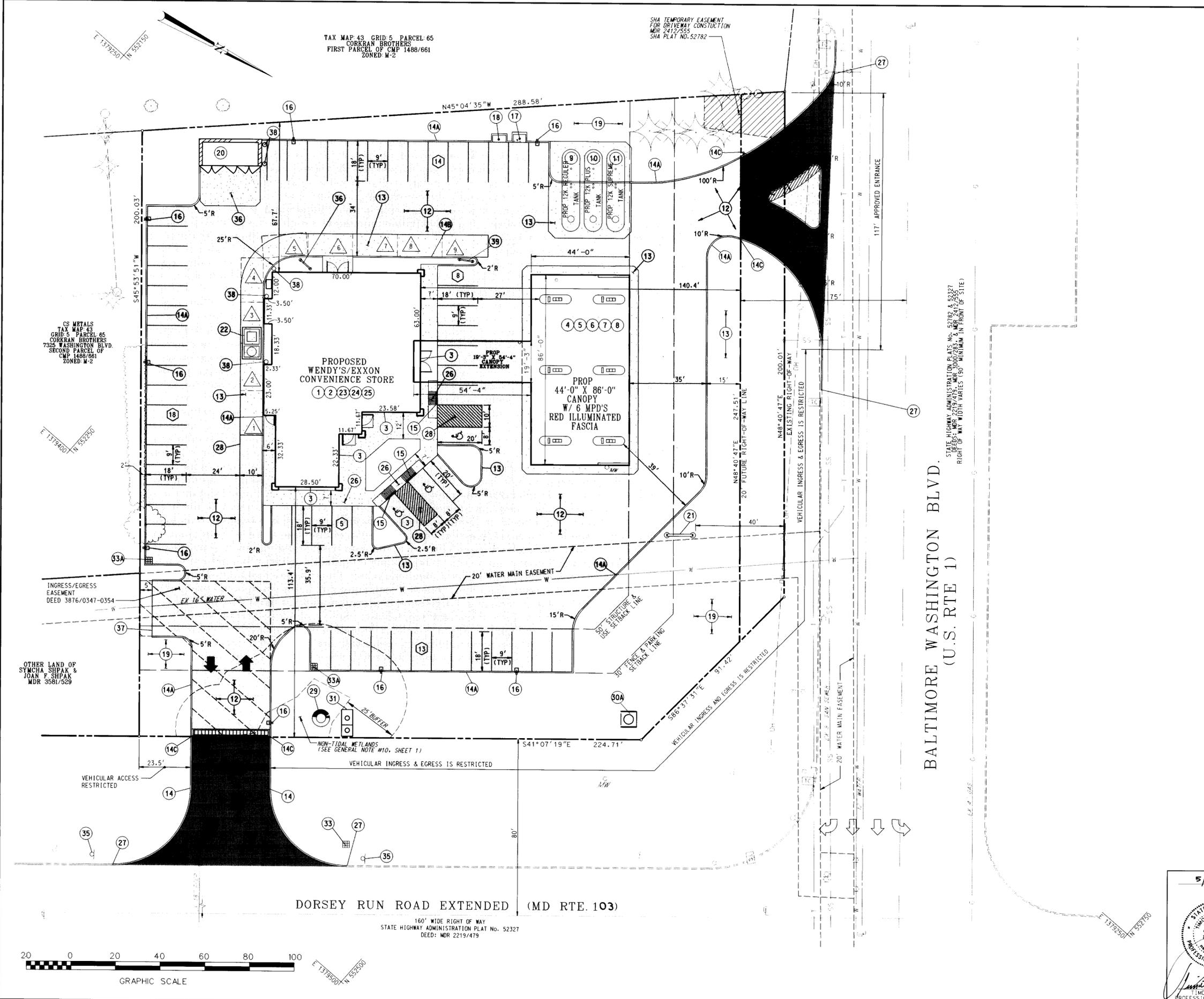
BAKER & SHPAK PROPERTIES  
 PLAT 12550, F-97-01  
 TAX MAP 43, GRID 5, PARCEL A  
 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2320000

TITLE **SITE GRADING PLAN**  
 FOR AN EXXON STATION  
 7311 WASHINGTON BLVD.  
 ELKRIDGE, MARYLAND 21227

DESIGN BY: YNG SCALE: AS SHOWN RAS# 2-0311  
 DRAWN BY: YNG DATE: 03/15/97 DRAWING NUMBER  
 CHECKED BY: RBM APPROVED: 04 OF 14



FWA: W: PROJECTS: 96017: ENGR/PEGRAD.DGN KDN 11/12/96



GENERAL NOTES

- D - DAYCO RESTAURANTS
- G.C. - GENERAL CONTRACTOR
- C.S. - CANOPY SUPPLIER
- E - EXXON
- O - OTHER
- ★ - BUILDING ORIENTATION POINT
- ⊕ - IMPROVEMENT ITEM
- ⊖ - NEW CONCRETE (ON PLAN)
- ⊘ - EXISTING TO REMAIN
- - INDICATES TRAFFIC FLOW ONLY. DOES NOT REFLECT PARKED TRAFFIC CONTROLS.

1. ALL UTILITY CONNECTIONS ARE TO BE AS PER LOCAL CODE BY G.C.
2. G.C. TO PROVIDE CONDUIT & WIRING TO ALL EXXON I.D.
3. SIGNS & CONDUIT ONLY TO PUBLIC TELEPHONE BOOTH.
4. SITE PLAN SUPERSEDES ALL WORKING DRAWINGS.
5. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS AND CONSTRUCTION AS SHOWN ON PLANS UNLESS OTHERWISE NOTED.

| ITEM NUMBER | FURNISHED BY | INSTALLED BY | DESCRIPTION  | DRAWING NUMBER     |
|-------------|--------------|--------------|--|--------------------|
| 1           | GC           | GC           | BUILDINGS  | SEE ARCH DWGS      |
| 2           | GC           | GC           | EXXON / WENDY'S BUILDING   | SEE ARCH DWGS      |
| 3           | E/D          | GC           | BUILDING DOWNSPOUTS DRAIN TO UNDERGROUND ABOVE GROUND  | SHT 6 OF 14        |
| 4           | E/D          | GC           | BUILDING SIGNS   | SHT 14 OF 14       |
| 5           | E            | GC           | CANDOPY / ISLANDS  |                    |
| 6           | E            | GC           | PROP CANOPY (44' X 86' W/ 19'-3" X 54'-4" CONN.)   |                    |
| 7           | E            | GC           | DISPENSING EQUIPMENT (6) MFD ADVANTAGE W/GRIND   | MADISON DWGS       |
| 8           | E            | GC           | G-SITE SYSTEM (2 REQUIRED)   |                    |
| 9           | E            | GC           | NO COLUMN SPREADERS (BLANK) TYP OF 6)  |                    |
| 10          | E            | GC           | CANDOPY DOWNSPOUT DRAINS TO UNDERGROUND ABOVE GROUND   | SHT 6 OF 14        |
| 11          | E            | GC           | YARD AREA - TANKS  |                    |
| 12          | E            | GC           | PROPOSED TANKS FOR MOTOR FUELS (1) (12 K) REGULAR (1) (12 K) PLUS (1) (12 K) SUPREME (3) 1 1/2 HP  | 7006 G, 1-5        |
| 13          | E            | GC           | ENVIROFLEX PRODUCT PIPING  | 7006 G             |
| 14          | E            | GC           | VAPOR RECOVERY SYSTEM (STAGE I AND II)   |                    |
| 15          | E            | GC           | YARD AREA - OTHER  |                    |
| 16          | E            | GC           | ON-SITE ASPHALT PAVING   | SHT 5 OF 14        |
| 17          | E            | GC           | ENTRANCE ASPHALT PAVING, SHA STD.  | SHT 5 OF 14        |
| 18          | E            | GC           | 6" CONCRETE W/3 REBAR 18" O.C. EACH WAY  |                    |
| 19          | E            | GC           | SHA TYPE "A" COMBINATION CURB & GUTTER, STD. MD-620-02   | 1090, 1-8          |
| 20          | E            | GC           | 6" REINFORCED CONCRETE CURB W/16" GUTTER   | SHT 5 OF 14        |
| 21          | E            | GC           | 6" HEADER CURB   |                    |
| 22          | E            | GC           | TRANSITION FROM MSHA CURV TO EXXON STANDARD CURB   |                    |
| 23          | E            | GC           | INSTALL HANDICAPPED PARKING ONLY SIGN PER ADA & LOCAL CODE   | SHT 5 OF 14        |
| 24          | E            | GC           | YARD LIGHTS, FIXTURES & POLES  | 1090, SHT. 5 OF 14 |
| 25          | E            | GC           | AIR/WATER WITH INFORMATION SIGN (NO LIGHT)   | 1090               |
| 26          | E            | GC           | 3'x6'x4" REINFORCED CONCRETE MAT W/CONDUIT FOR PUBLIC TELEPHONES (NO LIGHT)  | 1090               |
| 27          | E            | GC           | LANDSCAPE / IRRIGATION   | SHT 13 OF 14       |
| 28          | E            | GC           | TRASH ENCLOSURE ON 6" REINFORCED CONCRETE SLAB.  | SEE ARCH DWGS      |
| 29          | E            | GC           | MAJOR I.D. SIGN 26.83 S.F. "EXXON" I.D. 23.91 S.F. "TIGER MARY" & LOGO 50.54 S.F. "WENDY'S" 18.14 S.F. "ARC 1" 18.41 S.F. "ARC 2" 37.19 S.F. PRICE | SHT 14 OF 14       |
| 30          | E            | GC           | GREASE TRAP  | ARCH DWGS          |
| 31          | E            | GC           | BUILDING SAN. SEWER SERVICE, TIE INTO EXISTING SAN. SEWER LINE PER EXXON'S FIELD ENGINEER & PER HO. CO. DPW CODES.                                 | SHT 6 OF 14        |
| 32          | E            | GC           | BUILDING 4" WATER PER EXXON'S FIELD ENGINEER & PER HOWARD COUNTY D.P.W. CODES.   |                    |
| 33          | E            | GC           | BUILDING ELECTRICAL & TELEPHONE SERVICE ROUTE UNDERGROUND PER EXXON'S FIELD ENGINEER & PER HOWARD COUNTY D.P.W.                                    |                    |
| 34          | E            | GC           | HANDICAP RAMP PER COUNTY CODES.  | SHT 5 OF 14        |
| 35          | E            | GC           | MATCH EXISTING CURB AND GUTTER FOR GRADE AND LOCATION  |                    |
| 36          | E            | GC           | PAINT STRIPING   | SHT 9 OF 14        |
| 37          | E            | GC           | STORMWATER WATER QUALITY STRUCTURE   | SHT 6 OF 14        |
| 38          | E            | GC           | MSHA MANHOLE STD. 384.01   | SHT 6 OF 14        |
| 39          | E            | GC           | PRECAST TYPE "C" MANHOLE   | SHT 8 OF 14        |
| 40          | E            | GC           | STORMWATER MANAGEMENT OUTFALL STRUCTURE  | SHT 6 OF 14        |
| 41          | E            | GC           | TRENCH DRAIN W/REINFORCED 4899 TYPE L GRATE.   | SHT 6 OF 14        |
| 42          | E            | GC           | RELOCATED EXISTING MSHA STD SINGLE X INLET   | SHT 6 OF 14        |
| 43          | E            | GC           | TYPE "S" DOUBLE GRATE INLET  | SHT 6 OF 14        |
| 44          | E            | GC           | MSHA STD. CONCRETE MEDIAN WITH MOUNTABLE CURB  |                    |
| 45          | E            | GC           | RELOCATED TRAFFIC SIGNS  |                    |
| 46          | E            | GC           | WENDY'S MENU BOARD   |                    |
| 47          | E            | GC           | END PAVING AND CURBING   | SHT 5 OF 14        |
| 48          | E            | GC           | TRAFFIC BOLLARD  |                    |
| 49          | E            | GC           | WENDY'S DRIVE-THRU SIGN  |                    |

BALTIMORE WASHINGTON BLVD.  
(U.S. RTE 1)

DORSEY RUN ROAD EXTENDED (MD RTE. 103)

160' WIDE RIGHT OF WAY  
STATE HIGHWAY ADMINISTRATION PLAT NO. 52327  
DEED: MDR 2219/479



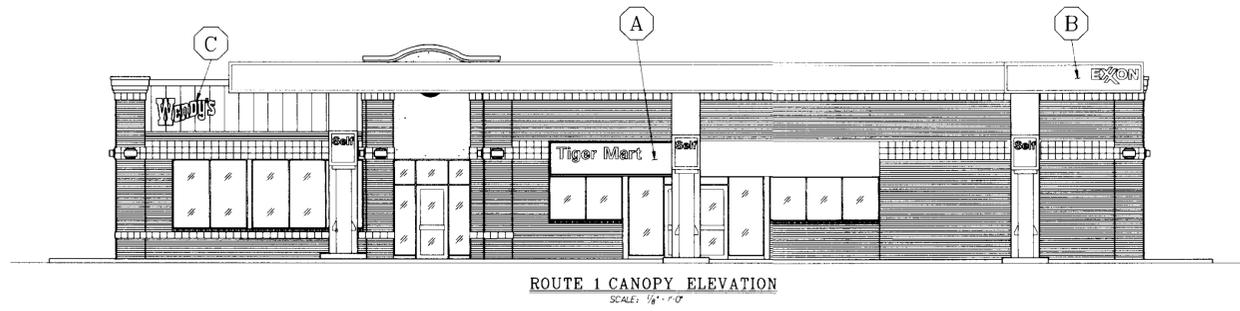
| DATE | NUMBER | REVISION DESCRIPTION  |
|------|--------|---|
|      |        | APPROVED: DEPARTMENT OF PLANNING AND ZONING   |
|      |        | CHIEF-DEVELOPMENT ENGINEERING DIVISION  |
|      |        | CHIEF-DIVISION OF LAND DEVELOPMENT  |
|      |        | APPROVED: FOR PUBLIC WATER AND PUBLIC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

OWNER/DEVELOPER: **EXXON CORPORATION**  
6301 IVY LANE  
SUITE 700  
GREENBELT, MARYLAND 20770  
ATTN: MR. ROBERT CASERTA  
PHONE: (301) 513-7511

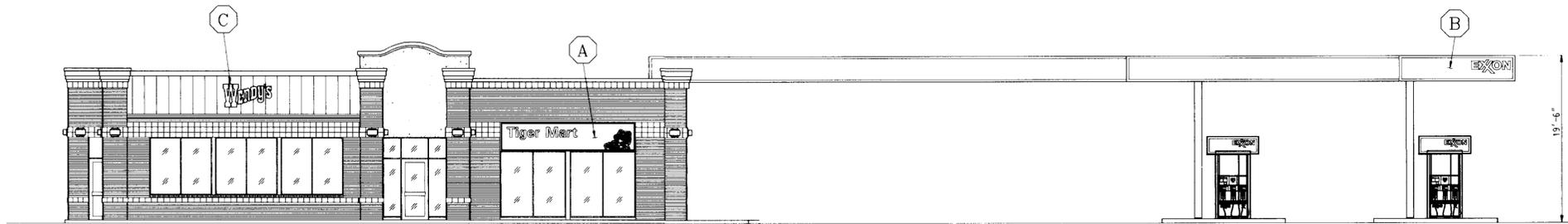
**FREDERICK WARD ASSOCIATES INC.**  
ENGINEERS ARCHITECTS SURVEYORS  
5 SOUTH MAIN STREET BEL AIR, MARYLAND 21014 (410) 879-2090  
F.W.A. JOB NUMBER: 98017 F.W.A. DRAWING FILE NAME: PESITE.DGN

5/23/97  
DATE  
STATE OF MARYLAND  
REGISTERED PROFESSIONAL ENGINEER  
J. M. [Signature]

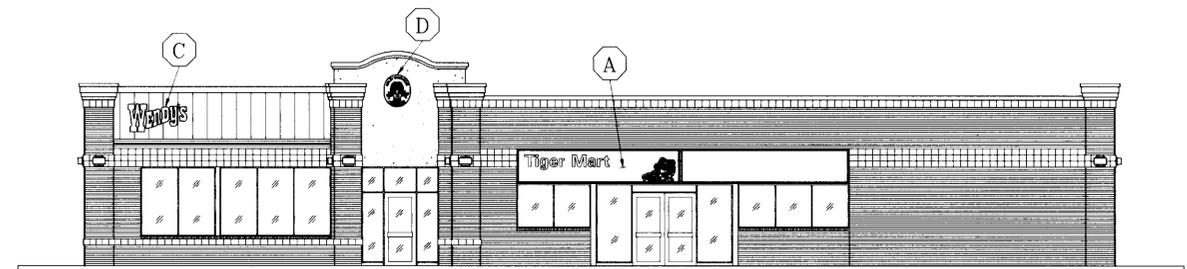
TITLE: **SITE LAYOUT PLAN**  
FOR AN EXXON STATION  
7311 WASHINGTON BLVD.  
ELKRIDGE, MARYLAND 21227  
DESIGN BY: YND SCALE: AS SHOWN RAS# 2-0311  
DRAWN BY: YND DATE: 03/15/97 DRAWING NUMBER  
CHECKED BY: RBM APPROVED: 03 OF 14



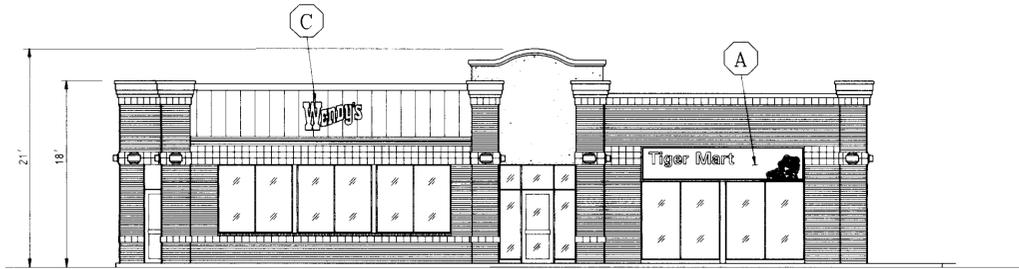
ROUTE 1 CANOPY ELEVATION  
SCALE: 1/8" = 1'-0"



ROUTE 103 CANOPY ELEVATION  
SCALE: 1/8" = 1'-0"



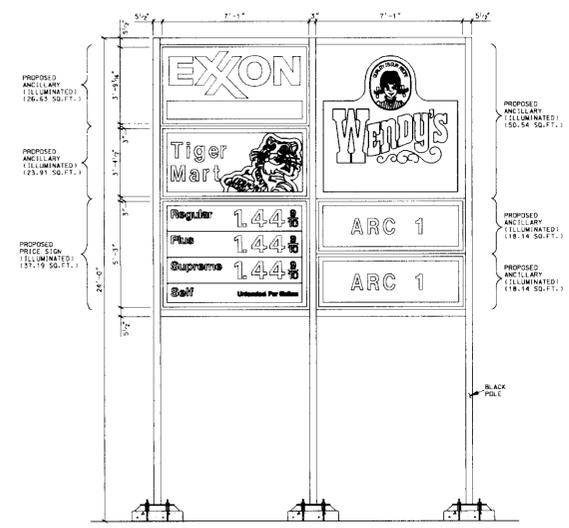
ROUTE 1 - ELEVATION  
SCALE: 1/8" = 1'-0"



ROUTE 103 - ELEVATION  
SCALE: 1/8" = 1'-0"

SIGNAGE CALCULATIONS

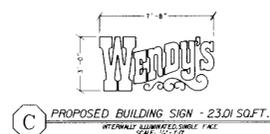
- I. SIGNAGE ALLOWED:
  - A. BUILDING AND CANOPY  
 1) U.S. RTE. 1 FRONTAGE  
 99' X 12' = 198.00 SQ.FT.  
 2) RTE. 103 FRONTAGE  
 70.5' X 11' = 70.50 SQ.FT.
  - B. FREESTANDING SIGNS  
 ONE SQ.FT. PER L.F. SIGN SETBACK FROM RIGHT-OF-WAY  
 1) U.S. RTE. 1  
 40' X 1' = 40.00 SQ.FT.
  - C. FREESTANDING SIGN HEIGHT  
 1 FT. PER 2 L.F. SIGN SETBACK FROM RIGHT-OF-WAY  
 1) U.S. RTE. 1: 40' / 2 = 20.00 FT.
  - D. TOTAL ALLOWABLE SIGNAGE AREA = 268.50 SQ.FT.
- II. SIGNAGE PROPOSED:
  - A. BUILDING AND CANOPY  
 1) U.S. RTE. 1 FRONTAGE  
 "EXXON" CANOPY = 30.41 SQ.FT.  
 "WENDY'S" CANOPY = 23.01 SQ.FT.  
 "WENDY'S" SIGN = 6.50 SQ.FT.  
 "TIGER MART" AND TIGER = 32.66 SQ.FT.  
 TOTAL = 92.58 SQ.FT.
  - 2) RTE. 103 FRONTAGE  
 "EXXON" CANOPY = 30.41 SQ.FT.  
 "WENDY'S" SIGN = 23.01 SQ.FT.  
 "TIGER MART" AND TIGER = 32.66 SQ.FT.  
 TOTAL BUILDING AND CANOPY = 178.66 SQ.FT.
  - B. FREESTANDING SIGN  
 1) U.S. RTE. 1  
 "EXXON" I.D. = 26.63 SQ.FT.  
 "TIGER MART" AND LOGO = 23.91 SQ.FT.  
 "WENDY'S" = 50.54 SQ.FT.  
 "ARC 1" = 18.14 SQ.FT.  
 "ARC 2" = 18.14 SQ.FT.  
 PRICE SIGN (37.19 - 37 SQ.FT. ALLOWED) = 5.19 SQ.FT.\*  
 TOTAL = 137.36 SQ.FT.
  - \* NOT INCLUDED IN TOTAL
  - C. FREESTANDING SIGN HEIGHT  
 U.S. RTE. 1 AND RTE 103 (EA.) = 24.00 FT.
  - D. TOTAL PROPOSED SIGNAGE AREA = 316.02 SQ.FT.



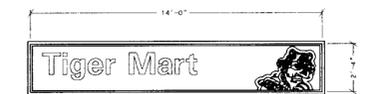
PROPOSED MAJOR I.D. SIGN  
SCALE: 1/4" = 1'-0"



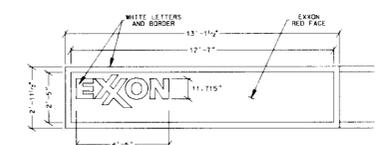
D PROPOSED BUILDING SIGN - 6.5 SQ.FT.  
SCALE: 1/4" = 1'-0"



C PROPOSED BUILDING SIGN - 23.01 SQ.FT.  
SCALE: 1/4" = 1'-0"



A PROPOSED SIDE & FRONT BUILDING SIGN - 3266 SQ.FT.  
SCALE: 1/8" = 1'-0"



B PROPOSED CANOPY FASCIA SIGN - 30.41 SQ.FT.  
SCALE: 1/8" = 1'-0"

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

OWNER/DEVELOPER: **EXXON CORPORATION**  
 6301 IVY LANE, SUITE 700, GREENBELT, MARYLAND 20770  
 ATTN: MR. ROBERT CASERIA, PHONE: (301) 513-7511

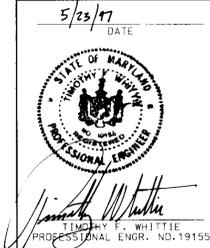
RAS #2-0311

**FREDERICK WARD ASSOCIATES INC.**  
 ENGINEERS ARCHITECTS SURVEYORS  
 5 SOUTH MAIN STREET, BEL AIR, MARYLAND 21034 (410)879-2090  
 FWA JOB NUMBER: 98017 FWA DRAWING FILE NAME: P2310

BAKER & SHPAK PROPERTIES  
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 TAX MAP 43, GRID 5, PARCEL A  
 1ST. ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 CENSUS TRACT 6012, WATER CODE 801, SEWER CODE 2320000

TITLE: **BUILDING AND SIGNAGE PLAN**  
 FOR AN EXXON STATION ON  
**7311 WASHINGTON BLVD. ELK RIDGE, MARYLAND 21227**

DESIGN BY: YNQ SCALE: AS SHOWN RAS# 2-0311  
 DRAWN BY: YNQ DATE: 03/15/97 DRAWING NUMBER  
 CHECKED BY: RBM APPROVED: DATE: 03/15/97 14 OF 14



FWA: PROJECTS/98017/ENGR/P2310/IGN.DGN KDN 01/19/97