### GENERAL NOTES

- 1. 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.
- 2. 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
- 3. 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.
- 4. 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.
- 5. 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.
- 6. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 5 WORKING DAYS PRIOR TO BEGINNING WORK:

C&P TELEPHONE CO. HOWARD COUNTY BUREAU OF UTILITIES AT&T CABLE LOCATION DIVISION

NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION AT LEAST 48 HOURS PRIOR TO START (313-1855) HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410) 313-1880

APPROVED 12/20/1976

- 7. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS, UNLESS STATED OTHERWISE.
- 8. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- 9. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- 10. THE PURPOSE OF THIS SITE DEVELOPMENT PLAN IS TO CONSTRUCT A GASOLINE STATION, CONVENIENCE STORE, AND CAR WASH.
- 11. THE STORMWATER MANAGEMENT FOR THIS PARCEL WAS CONSTRUCTED UNDER PROJECT F-82-96. (FOR QUANTITY MANAGEMENT ONLY.)
- 12. THE STORMWATER QUALITY MANAGEMENT AND WATER QUALITY STRUCTURE WILL BE PRIVATELY OWNED AND MAINTAINED.
- 13. SECTION 404 OF THE MD DEPARTMENT OF NATURAL RESOURCES DOES NOT APPLY NOR ARE ANY WETLANDS PERMITS REQUIRED FOR THIS PROJECT.
- 14. 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.
- 15. ALL DETERGENT USED IN THE CAR WASH FACILITY SHALL BE "PHOSPHATE FREE" AS PER HOWARD COUNTY REGULATIONS.
- 16. PUBLIC WATER AND SEWER WILL BE UTILIZED. A 1"WATER METER SHALL BE LOCATED WITHIN THE CONVENIENCE STORE AND WILL MEET ALL HOWARD COUNTY STANDARDS. ON SITE WATER AND SEWER SHALL BE PRIVATE.
- 17. PLAN FILE REFERENCES: SDP-76-45C, SDP-82-74C. BOARD OF APPEALS - PB CASE #92 ON 2-4-76 RESOLUTION PASSED 3-10-76 TO ALLOW OPERATION OF GASOLINE SERVICE STATION ON NEW TOWN LAND.
- 18. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY
- 19. ALL SITE LIGHTING MUST BE DIRECTED AWAY FROM THE ADJACENT PUBLIC RIGHT OF WAY AND THE VICINITAL RESIDENTIAL PROPERTIES.
- 20. REVISED TRAFFIC STUDY INCORPORATING PROPOSED SERVICE STATION COMPLETED BY WELLS AND ASSOCIATES, INC. DATED JULY 20, 1992
- 21. WETLANDS STUDY COMPLETED ON MAY 16, 1991 BY EXPLORATION RESEARCH, INC. AT WHICH TIME IT WAS DETERMINED THAT NO (ZERO) NON-TIDAL WETLANDS OCCUR WITHIN THE BOUNDARIES OF THIS SITE.

### SITE ANALYSIS

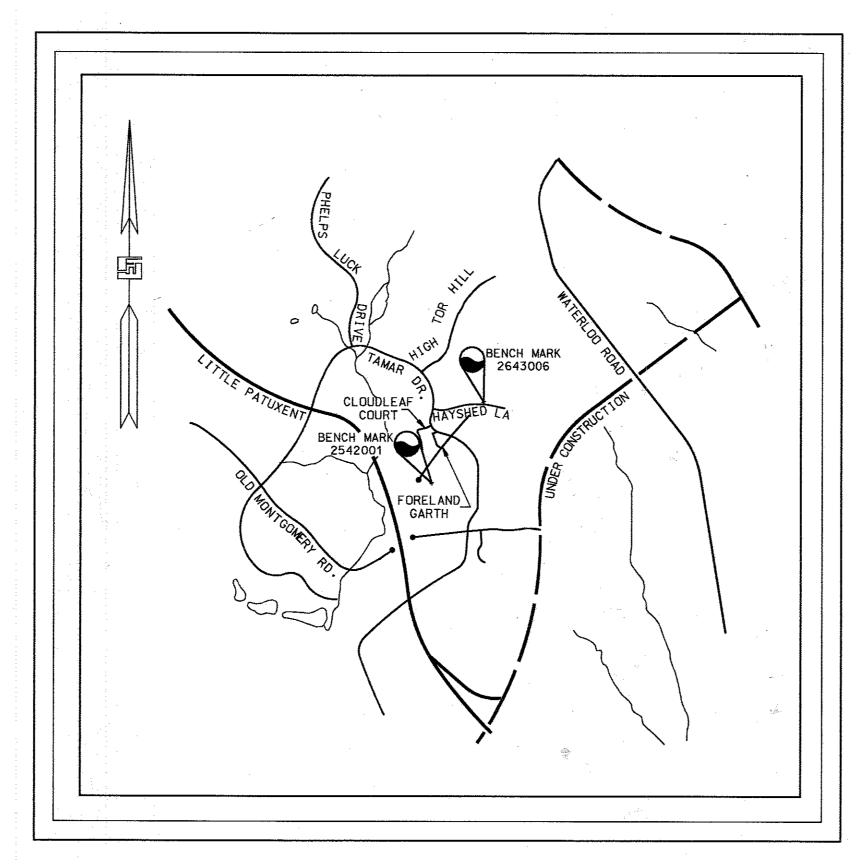
- 1. AREA OF PARCEL: 1.407 ACRES, 61,291 SQ.FT.
- 2. ZONING: NEW TOWN EMPLOYMENT CENTER COMMERCIAL a. BOARD OF COUNTY COMM. B.C.C. CASE 412 RESOLUTION APPROVED 08/10/1986
  - b. AMENDED Z.B. CASE 507 RESOLUTION

e. AMENDED Z.B. CASE 693 RESOLUTION

- APPROVED 11/04/1968 c. AMENDED Z.B. CASE 606 RESOLUTION APPROVED 11/22/1972 APPROVED 01/07/1974 d. AMENDED Z.B. CASE 644 RESOLUTION
- 3. EXISTING USE: GASOLINE SERVICE STATION (TO CONTINUE) PROPOSED ADDITIONAL USES: CONVENIENCE STORE AND CARWASH
- 4. FLOOR SPACE: a. CONVENIENCE STORE:
- GROSS AREA: 1.431 SQ.FT. RETAIL AREA: 880 SQ.FT. STORAGE AREA: 551 SQ.FT.
- b. CAR WASH: GROSS AREA: 756 SQ.FT.
- 5. MAXIMUM NUMBER OF EMPLOYEES: TWO (2)
- 6. PARKING:
  - a. REQUIRED: 5 SPACES PER 1.000 SQ FT RETAIL AREA = 1090 SQ.FT. x 5/1.000 = 6 SPACES 4 PARKING SPACES FOR GASOLINE SERVICE STATION WITH CAR WASH TOTAL = 10 SPACES
  - b. PROVIDED: 11 SPACES (INCLUDING 1 HANDICAPPED SPACE)
- 7. OPEN SPACE (LANDSCAPING)
  - a. REQUIRED 20% FOR ENTIRE SITE: 0.28 AC± OR 12,197 SQ.FT. b. PROVIDED 43% FOR ENTIRE SITE: 0.61 AC± OR 26,490 SQ.FT.
- 8. BUILDING COVERAGE: d. CONVENIENCE STORE: 1,431 SQ.FT
  - b. CAR WASH: 871 SQ.FT.
- c. CANOPY: 3,448.75 SQ.FT. d. CANOPY OVERHANG ON CONVENIENCE STORE : 59.07 SQ.FT. (DEDUCT) TOTAL COVERAGE: 5691.68 SQ.FT. (9.29 % COVERAGE)
- 9. CAR WASH STACKING: a. REQUIRED: 15 SPACES b. PROVIDED: 15 SPACES



# 6000 FORELAND GARTH COLUMBIA, MARYLAND RAS# 2-7226



SCALE: 1"=1000"

HOWARD COUNTY ADC MAP PAGE NUMBER 15

#### BENCHMARK INFORMATION

- BEARINGS, DISTANCES, AND COORDINATES AS SHOWN HEREON ARE BASED ON PLAT OF SECTION 1, AREA 5, VILLAGE OF LONG REACH, "COLUMBIA", RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND IN PLAT BOOK NO. 21, FOLIO 82, AND ON THE MARYLAND STATE SYSTEM OF PLANE COORDINATES, AS REFERENCED FROM HOWARD COUNTY SURVEY CONTROL STATIONS: 2542001: NORTH 499,539.293 EAST 852,111.258 2643006: NORTH 500,984.483 EAST 853,503.747
- ELEVATIONS AS SHOWN HEREON ARE BASED ON HOWARD COUNTY SURVEY CONTROL STATION NO. 2542001, WHICH IS A CONCRETE MONUMENT LOCATED ALONG B.G.&E. TRANSMISSION LINE, APPROXIMATELY 1,060 FEET SOUTHWEST OF DOBBIN ROAD. ELEVATION = 426.971 FEET

|                                       |        |  |                                 | 1                                   | 3-25-96  | OR USE OF PROPANE TANK FOR FOR CARN   | JASH HEAT, ER                         |
|---------------------------------------|--------|--|---------------------------------|-------------------------------------|--|---|---------------------------------------|
|                                       | SULLL  | INDEV                                      |                                 | DATE:                               | NUMBER   | REVISION DESCRIP  | TION                                  |
| e.                                    | SHEET  | INDEX                                      |                                 |                                     |  | IT OF PLANNING AND ZONING   | 1 1 011                               |
| SHEET                                 | NUMBER | DRAWING TITLE                              |                                 | CH TEF-DE                           | MA MENT E  | MULLUS NGINEERING DIVISION MK   | 11/1/0A                               |
|                                       | 1      | COVER SHEET                                |                                 | CHIPF-DIV                           | JUMN<br>VISION & LA                                      | NO DEVELOPMENT & RESEARCH   | <u>.</u>                              |
|                                       | 2      | EXISTING SITE AND DEMOLI                   | ITION PLAN                      | DIRECTOR<br>APPROVED                | FOR PUBL   | C WATER AND PUBLIC SEWERAGE   | 11/6<br>DA<br>SYSTEMS                 |
|                                       | 3      | SITE LAYOUT PLAN                           |                                 |                                     | HOWARD CO  | <u> </u>  |                                       |
|                                       | 4      | SITE GRADING PLAN                          |                                 | for                                 | COUNTY HEAL  | THE OFFICER DA  | <i>195</i><br>TE                      |
|                                       | 5      | SITE UTILITY AND PIPING                    | PLAN                            | BY THE E<br>"I SERTI<br>REPRESEN    |  | S PLAN FOR EROSION AND SEDI<br>CAL AND WORKABLE PLAN BASED  | MENT CON                              |
|                                       | 6      | SEDIMENT & EROSION CONTR                   | ROL PLAN                        | PREPARED<br>SOIL CON                | IN ACCORDA   | S PLAN FOR EROSION AND SEDICAL AND WORKABLE PLAN BASED THE SITE CONDITIONS, AND THINCE WITH THE REQUIREMENTS DISTRICT."   | F THE HC                              |
|                                       | 7.     | SEDIMENT AND EROSION CON                   | ITROL NOTES & DETAILS           |                                     | SIGNATURE (  | F ENGINEER DAT  | TE                                    |
|                                       | 8      | STORM DRAIN, STORMWATER                    | MANAGEMENT & SANITARY           | 1 .                                 | EVELOPER:  | ALL DEVELOPEMENT AND CONSTR   | UCTION V                              |
|                                       |        | SEWER PROFILES                             |                                 | PERSONNE A CERTIF ENVIRONM SEDIMENT | ACCURDING   L INVOLVED ICATE OF AT ENT APPROVE AND FROST | ALL DEVELOPMENT AND CONSTR<br>O THIS PLAN, AND THAT ANY R<br>IN THE CONSTRUCTION PROJECT<br>TENDANCE AT A DEPARTMENT OF<br>D TRAINING PROGRAM FOR THE<br>N BEFORE BEGINNING THE PROJ<br>DDIC ON-SITE INSPECTION BY<br>ISTRICT." | ESPONSIE<br>WILL HA<br>THE<br>CONTROL |
|                                       | 9      | STORMWATER MANAGEMENT /                    | STORMCEPTOR DETAILS             | ALSO AUT<br>SOIL CON                | HERIZE PERI<br>SERVATION (                               | ODIC ON-SITE INSPECTION BY  | THE HOWA                              |
|                                       | 10     | STORMWATER MANAGEMENT DE                   | TAILS                           |                                     |  |   |                                       |
|                                       | 11     | BUILDING PLAN                              |                                 |                                     |  | DEVELOPER DATES TECHNICAL R   |                                       |
|                                       | 12     | SIGNAGE DETAIL SHEET                       |                                 |                                     |  |   |                                       |
| 2                                     | 13     | SITE DETAILS                               |                                 | Tala                                | SOIL CONSE   | ATTOM SERVICE DAT   | 7/95                                  |
|                                       | 14     | LANDSCAPE PLAN                             | PLANNING BOARD APPROVAL         | THIS DEV<br>SEDIMENT                | ELOPMENT PL<br>CONTROL BY                                | AN IS AS APPROVED FOR SOIL<br>THE HOWARD SOIL CONSERVATION  | EROSION<br>ON DISTR                   |
|                                       | 15     | LANDSCAPE DETAILS                          |                                 | John                                | RE   | 10/3<br>S.C.D.  | 7/95                                  |
|                                       | 16     | DRAINAGE AREA MAPS                         | A THENE CARTES                  | OWNER THE                           | HOWARD   | RESEARCH AND DEVE<br>CORPORATION  | LOPME                                 |
|                                       |        | FOR REVISION #3 ONCY STU INCORPORATED      | PLANNING BOARD of HOWARD COUNTY |                                     | COL  | THE ROUSE BUILDING<br>LITTLE PATUXENT PARKW<br>UMBIA, MARYLAND 21044<br>IBER 1535 / FOLIO 193   | AY                                    |
|                                       |        | GEORGE 3                                   | DATE 9/13/95                    | DEVELOPER                           | EXO  | 6301 IVY LANE   | S.A.                                  |
| · · · · · · · · · · · · · · · · · · · |        | N 32033                                    |                                 |                                     | EA,  | SUITE 700<br>NBELT, MARYLAND 20770<br>TN: MR. MIKE SPECHT<br>IONE: (301)-513-7511   |                                       |
|                                       |        | "Professional Cartification ONAL ENGLISHED |                                 |                                     | - FDESE  |   |                                       |

"Professional Certification. Please centify that these documents were prepared or approved by me and that I am a duly licensed professional engineer under the laws of the

State of Maryland, License No. 32033, Expiration Date 6-20-09." SDP-95-117

ADDRESS CHART PARCEL STREET ADDRESS 6000 FORELAND GARTH SUBDIVISION NAME LOT/PARCEL NO. SECT./AREA PLAT NO. BLOCK NO. ZONE AX/ZONE-| ELECT. DIST. | CENSUS 1 NEW TOWN COMMERCIAL 12 WATER CODE SEWER CODE 5335100 G08

4-18-17 RENISE FUEL TANKS, FUEL DISPENSERS, 4 ASSOCIATED PEPENS (SHTO 1, 3, 4, 5, 6, 14,10) 3-25-96 REVISED SHEET 3 TO NOTE PLANNING BOARD APPROV REVISION DESCRIPTION PPROVED: DEPARTMENT OF PLANNING AND ZONING ON & LAND BEVELOPMENT & RESEARCH 'I SERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL
SEPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS
PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD
SOIL CONSERVATION DISTRICT." DATE SIGNATURE OF ENGINEER Y THE DEVELOPER: "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN. AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHERIZE PERIODIC ON—SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT." SIGNATURE OF DEVELOPER VIEWED FOR HOWARD S.C.D. & MEETS TECHNICAL REQUIREMENTS.

FWA JOB NUMBER 93288

MSM

VILLAGE OF LONG REACH SECTION 1 AREA 5 TAX MAP 36 PARCEL C 6th. ELECTION DISTRICT HOWARD COUNTY. MARYLAND

DATE:

FOR AN EXXON STATION AT PARCEL C **COVER SHEET** ÉSIGN BY: JBG SCALE: AS SHOWN PROJECT NO.:

THE HOWARD RESEARCH AND DEVELOPMENT

FREDERICK WARD ASSOCIATES INC

(410)879-2090

DRAWING NUMBER

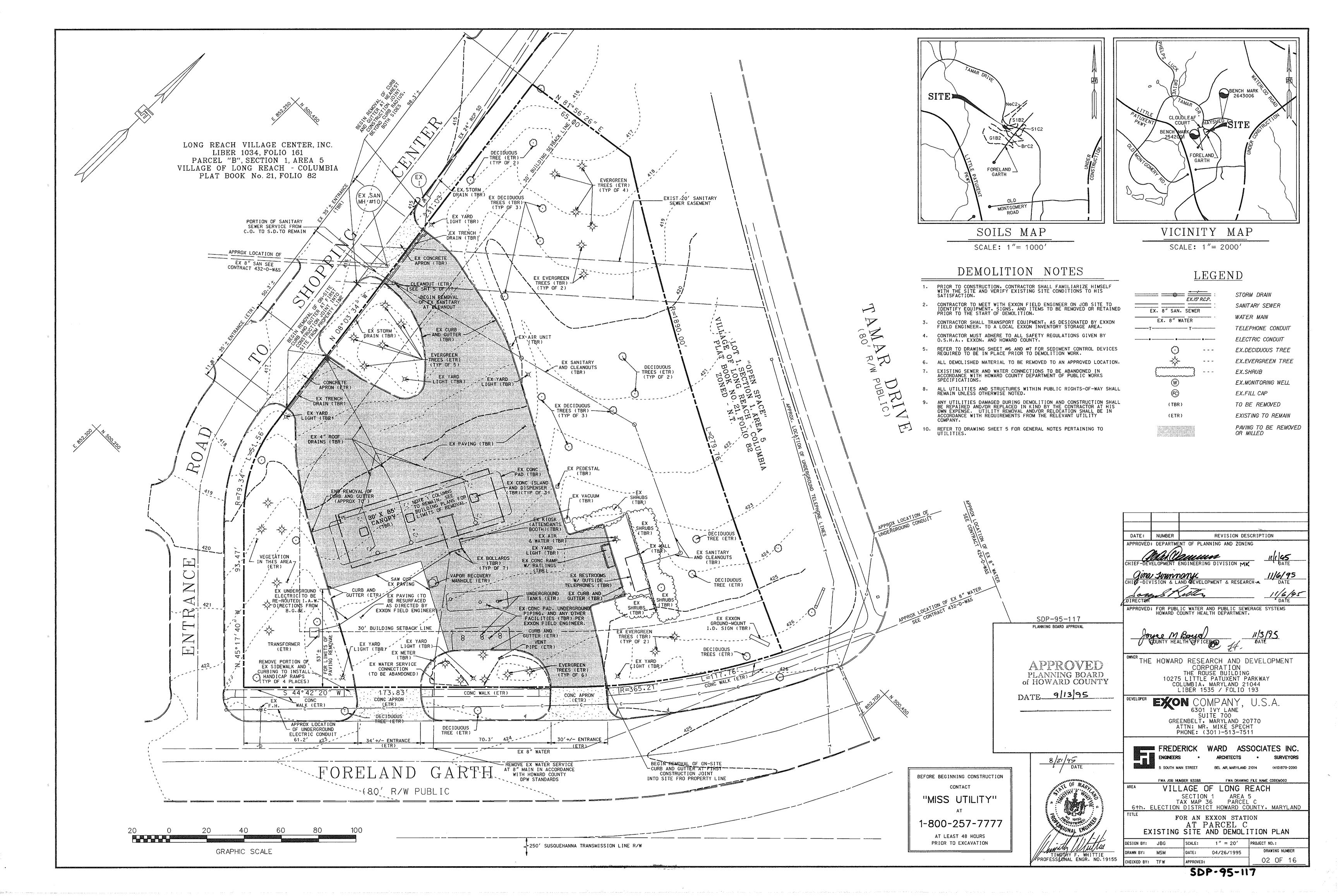
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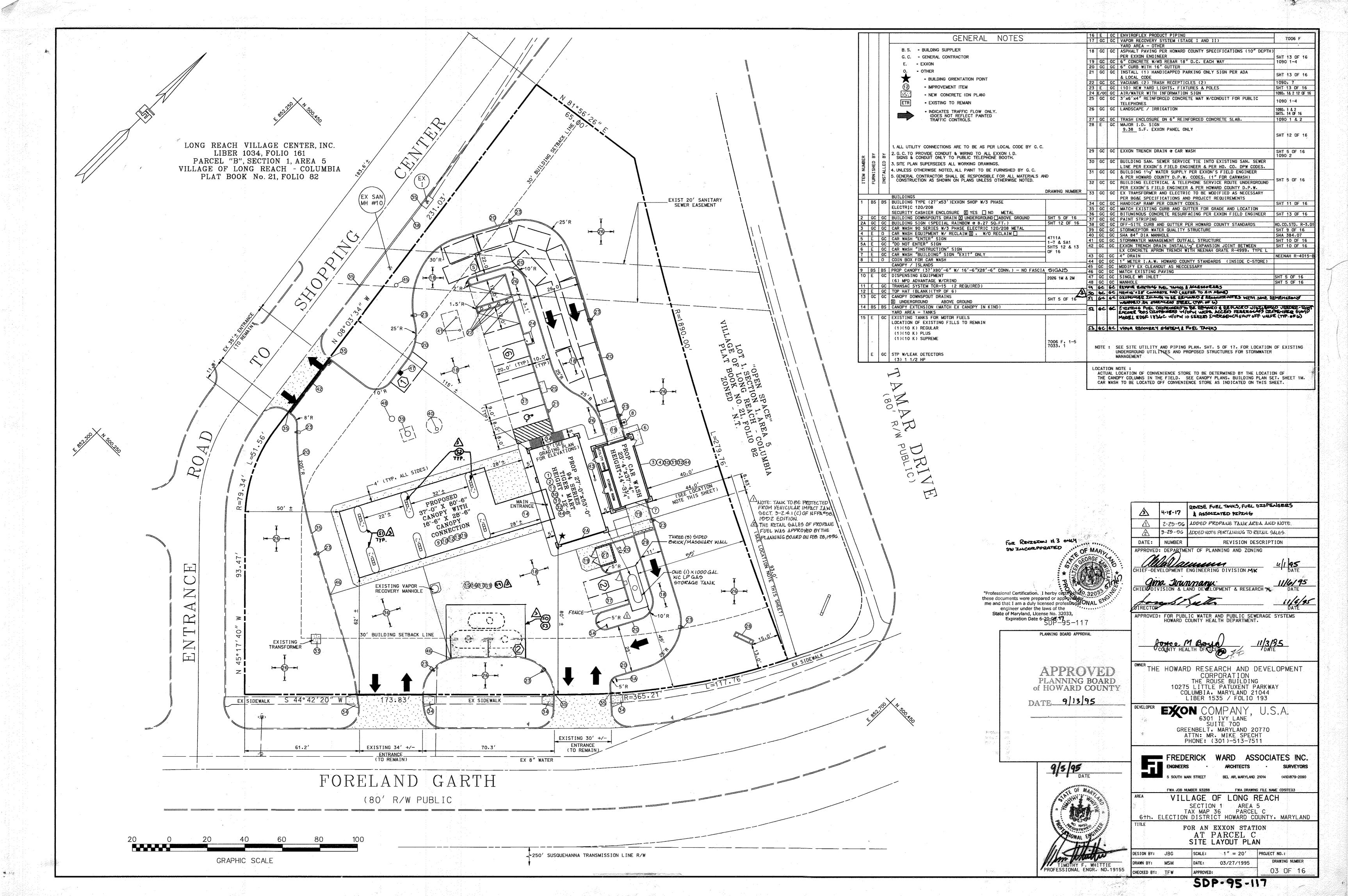
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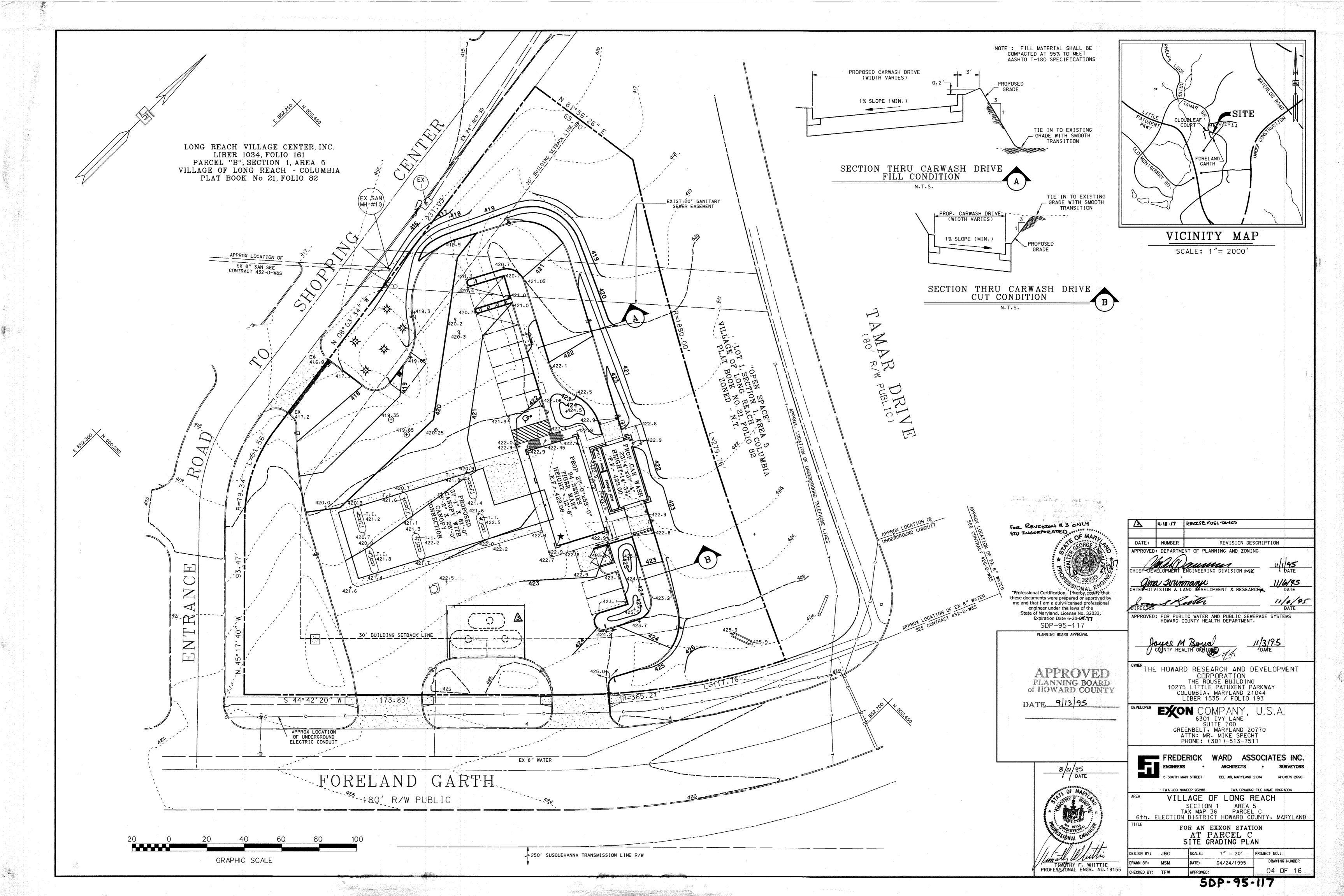
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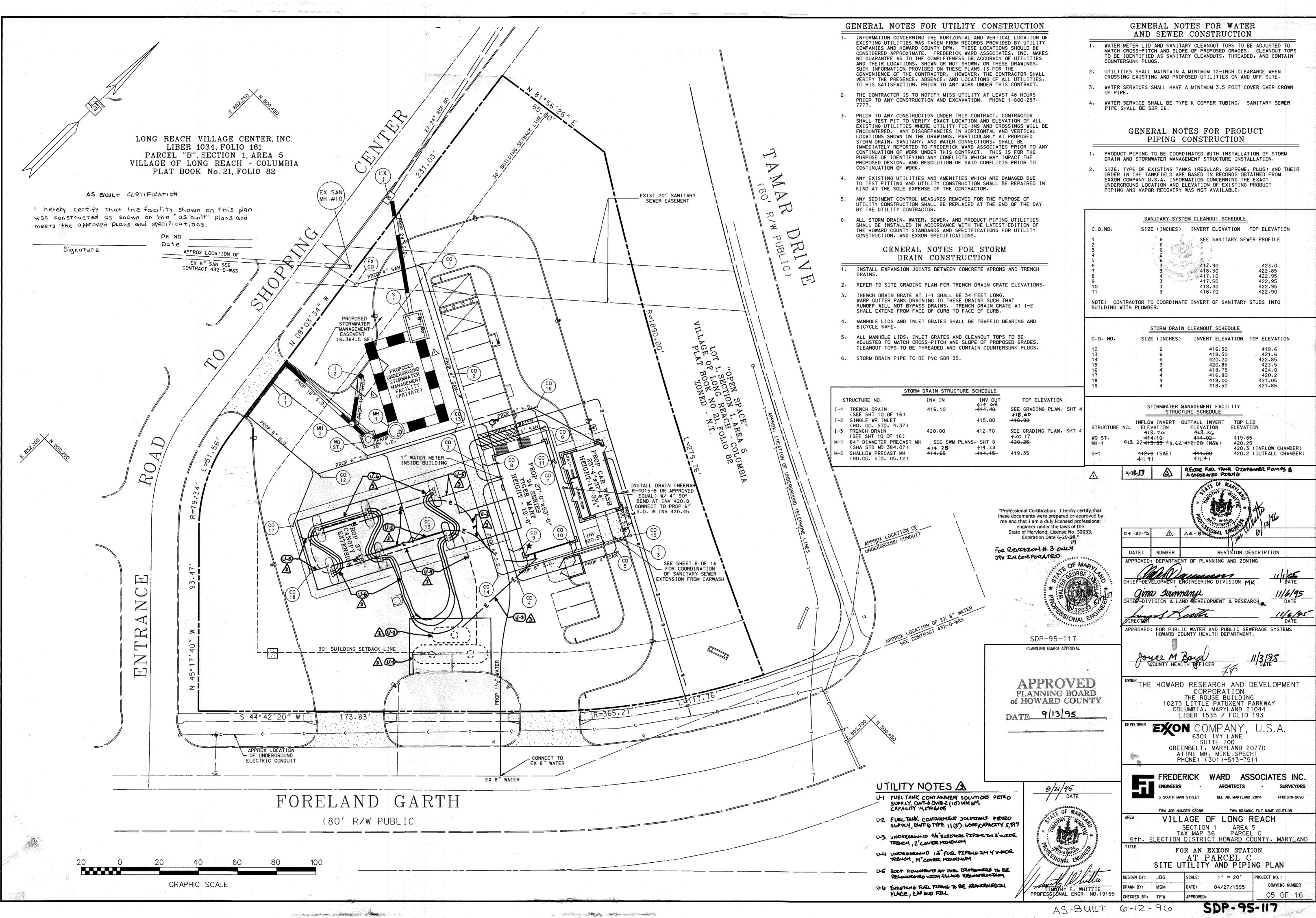
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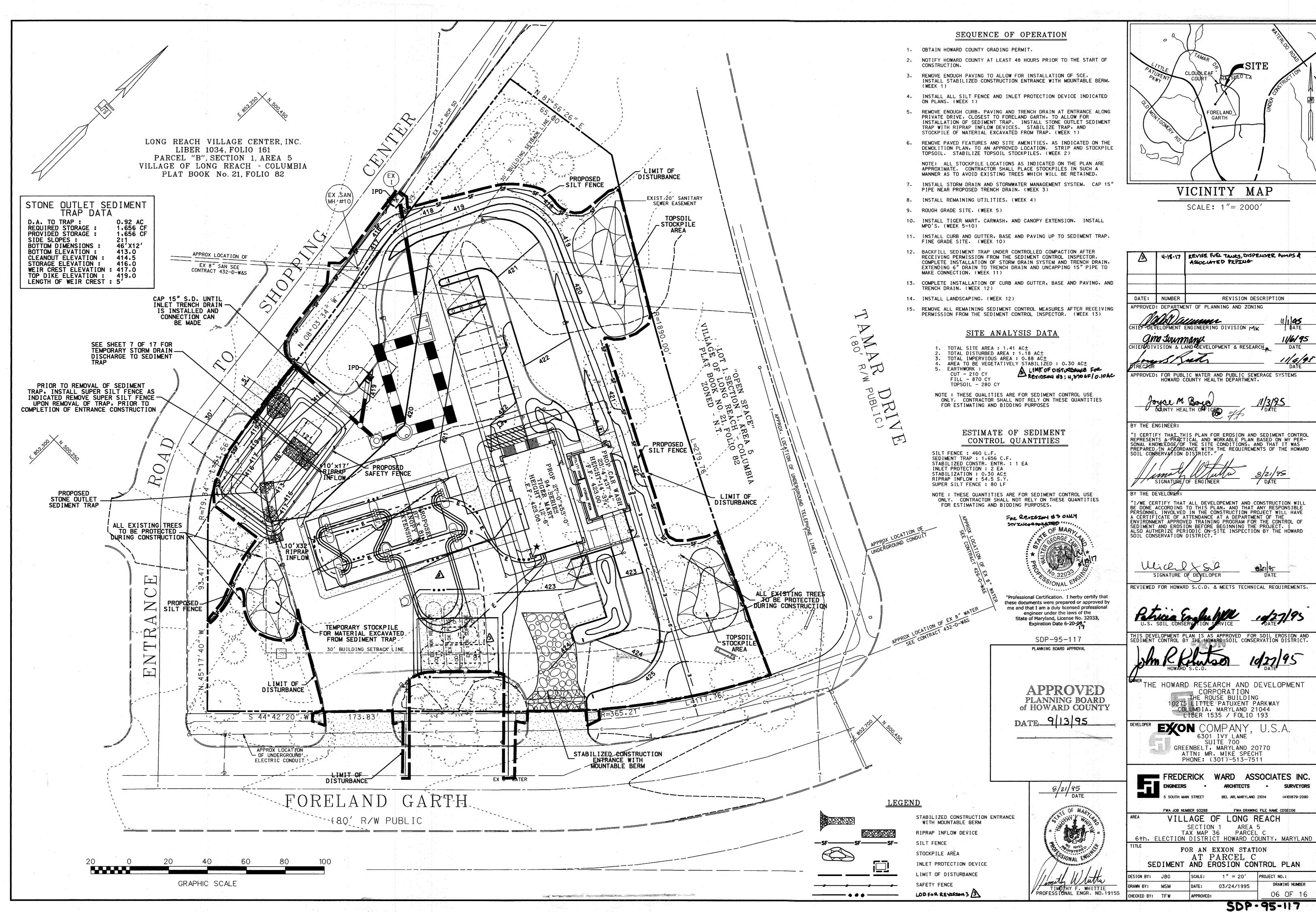
RAWN BY: TIMOTHY F. WHITTIE PROFESSIONAL ENGR. NO.19155 CHECKED BY: TFW

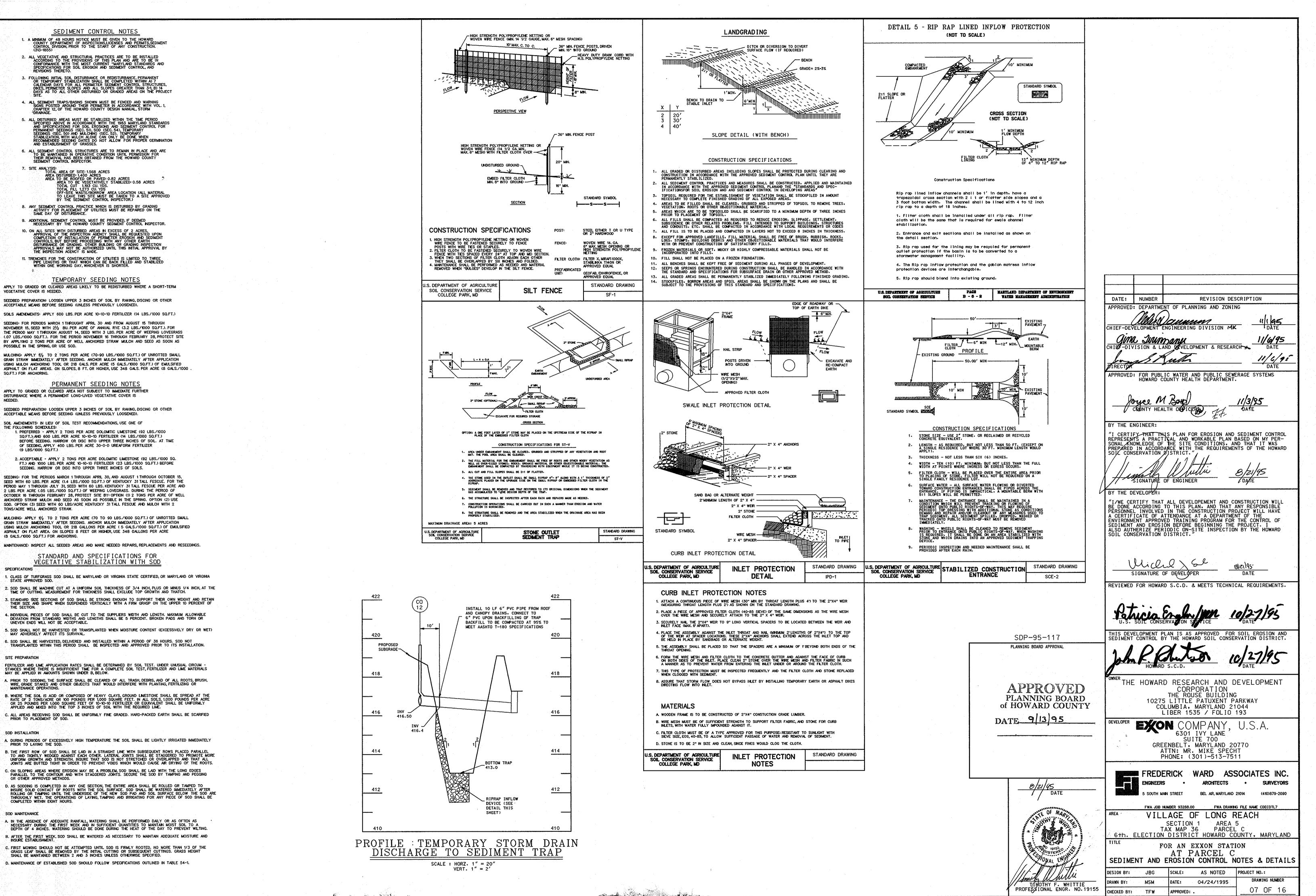




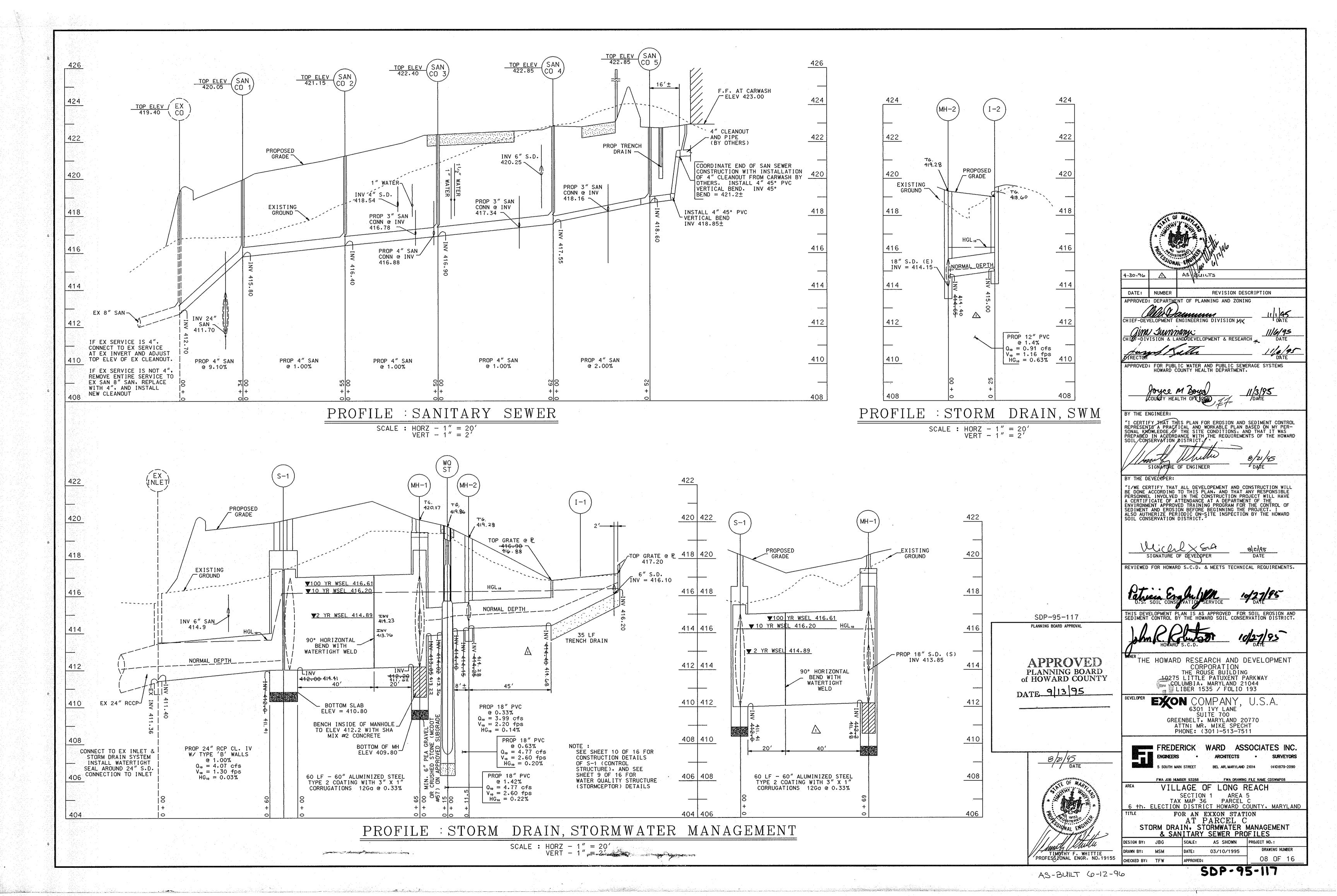


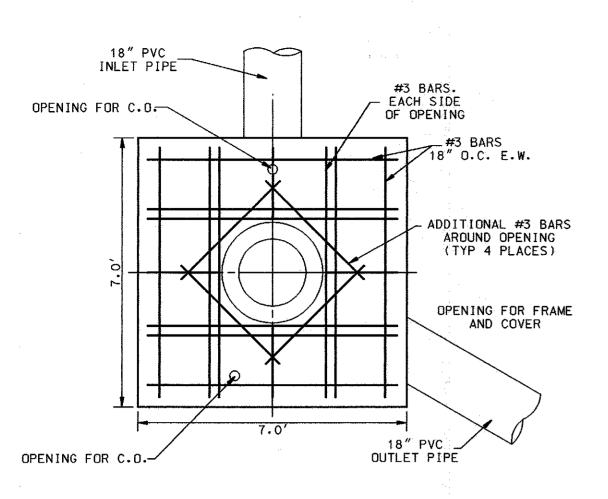




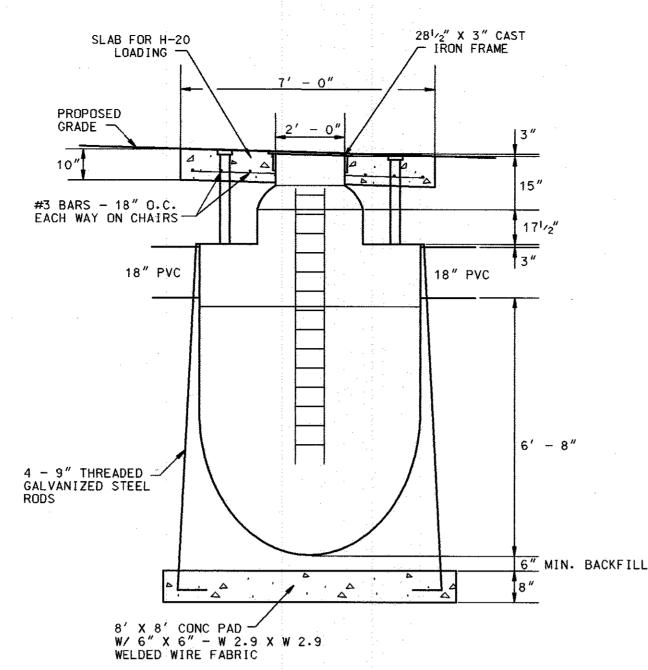


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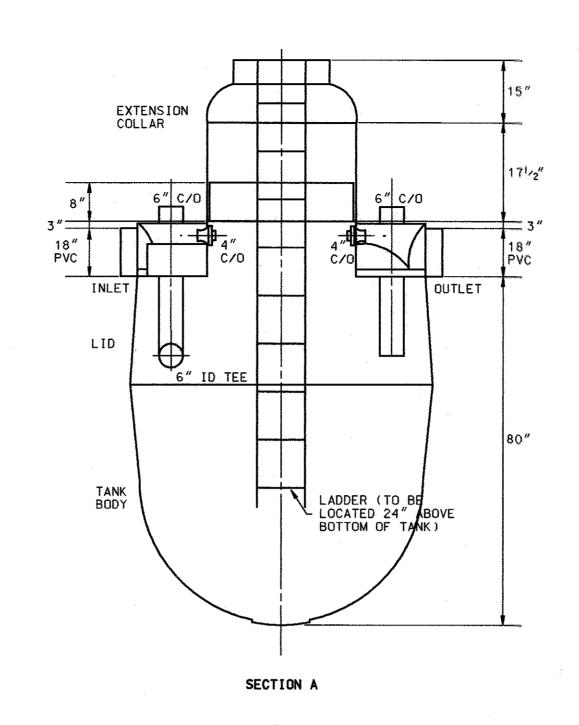
STORMCEPTOR TOP SLAB FOR H-20 LOADING NOT TO SCALE

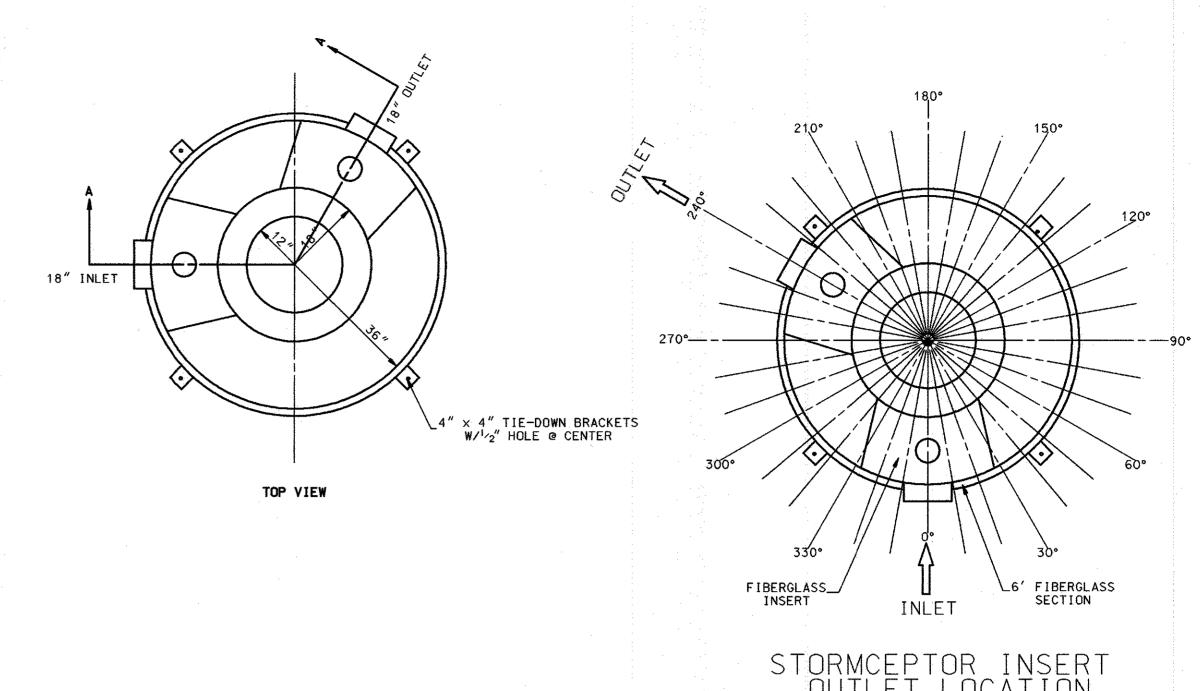


STORMCEPTOR PROFILE

NOTE : CONTRACTOR SHALL VERIFY THE DIMENSIONS ON THESE DETAILS TO HIS SATISFACTION PRIOR TO ORDERING THE STORMCEPTOR UNIT AND ALL COMPONENTS.

NOT TO SCALE





STORMCEPTOR STA 1000 NOT TO SCALE

#### INSTALLATION INSTRUCTIONS

- EXCAVATE TO A DEPTH OF 6" BELOW THE ELEVATION OF THE STRUCTURE. PREPARE A COMPACTED MATERIAL BED IN THE BOTTOM OF THE EXCAVATION 6" DEEP. ENSURE COMPACTION TO 95% MODIFIED PROCTOR.
- PLACE UNIT IN EXCAVATION AT CORRECT ELEVATION AND CORRECT INLET/OUTLET DRAINS AFTER THE STRUCTURE IS LEVEL. FILL TANK ONE-THIRD WITH WATER.
- BACKFILL WITH MATERIAL IN LAYERS NOT EXCEEDING 8" THICK, COMPACTING CAREFULLY TO 95% MODIFIED PROCTOR. CONTINUE TO FILL UNIT WITH WATER AS BACKFILLING PROGRESSES
- INSTALL EXTENSION COLLAR/COVER ASSEMBLY OVER NECK OF UNIT. LEVEL THE COVER PLATE
- AND MEASURE THE DISTANCE FROM THE PLATE TO THE FINISHED GRADE. REMOVE EXTENSION AND CUT TO CORRECT LENGTH IF REQUIRED.
- REPLACE EXTENSION, LEVEL AND SQUARE, AND SEAL TO UNIT BY ONE OF THE FOLLOWING: WRAP OUTSIDE OF JOINT WITH FIBERGLASS IN ACCORDANCE WITH THE INSTRUCTIONS PROVIDED WITH A FIBERGLASSING KIT. NOTE THAT THIS METHOD APPLIES ONLY WHERE UNIT HAS BEEN SPECIFIED AND SUPPLIED WITH A FIBERGLASSING KIT. DRILL FOUR EQUALLY SPACED HOLES AROUND THE COLLAR SO THAT THE EXTENSION AND THE NECK OF THE UNIT ARE BOTH DRILLED. USE POP RIVETS, OR PLATED THREADED FASTENERS TO JOINT, THEN FILL JOINT FROM THE INSIDE WITH A SILICONE BASED CAULK. WHERE A FLEXIBLE JOINT MUST BE PROVIDED TO PREVENT LOAD TRANSFER. THE JOINT
  - SHOULD BE FILLED FROM THE INSIDE WITH A SILICONE BASED CAULK. THE INSIDE SURFACE OF THE EXTENSION COLLAR WHERE IT OVERLAPS THE NECK OF THE UNIT MUST BE ROUGH SANDED, AND CARE MUST BE TAKEN THAT THE EXTENSION DOES NOT REST ON THE RIBS
- 9. COMPLETE BACKFILLING TO FINISH ELEVATION AND POUR FLOOR. IF THE UNIT IS OUTDOORS A SMALL CONCRETE PAD IS REQUIRED TO STABILIZE THE LID. 10. IF THERE IS NO FLOOR ABOVE THE UNIT, A CONCRETE PAD MUST BE POURED ABOVE THE UNIT
- TO PREVENT FLOTATION. ALTERNATIVELY, A CONCRETE PAD MAY BE PLACED BELOW THE UNIT STRAPPED AND OR THREADED ROD USED TO HOLD THE UNIT IN PLACE. PLEASE SEE INSTALLATION INSTRUCTIONS. 11. ACCEPTABLE MATERIALS USED IN INSTALLATION ARE AS FOLLOWS: CLEAN NATURALLY-ROUNDED AGGREGATE WITH PARTICLE SIZE NOT LESS THAN 1/8"
- OR MORE THAN 3/4" IN DIAMETER WASHED STONE OR GRAVEL CRUSHINGS WITH ANGULAR PARTICLE SIZE NOT LESS THAN 1/8" OR MORE THAN 1/2" ARE ACCEPTABLE AS AN ALTERNATE MATERIAL WASHED SAND OR OTHER MATERIALS ACCEPTABLE TO THE INSPECTOR

#### GENERAL NOTES

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

#### STORM DRAIN CONSTRUCTION NOTES

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

#### STORMWATER MANAGEMENT AND WATER QUALITY MAINTENANCE NOTES

- INSPECT THE STORMCEPTOR ON A MONTHLY BASIS AND NOTE SEDIMENT AND DIL ACCUMULATIONS. MORE FREQUENT INSPECTIONS ARE APPROPRIATE WHERE OIL SPILLS OCCUR REGULARLY.
- 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 DIL 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

- THE PIPES AND STRUCTURAL PARTS SHALL BE CLEANED AND REPAIRED AS
- 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, SOD, AND/OR MULCH COVERAGE UPON LANDSCAPINGS.
- 7. REMOVE DEBRIS ON TOP OF INLET GRATES AFTER EVERY RAINFALL.
- 8. AT INTERVALS NOT EXCEEDING 1 YEAR OR AS NEEDED, REMOVE ALL GREASE AND OILS, SILTS AND AGGREGATES, AND DEBRIS FROM ALL INLET AND
- 9. THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS
  - ALL LIQUID MATERIAL IN THE SEPARATOR INLET SHALL BE PUMPED INTO A SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.
  - THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED
- SANITARY LANDFILL. THE GO" CMP, OUTFALL STRUCTURE AND MANHOLE #1, SHALL BE INSPECTED TWICE A YEAR (MARCH AND SEPTEMBER) AND COMPONENTS CLEANED OUT ACCORDINGLY. ANY STRUCTURAL DEFICIENCIES SHOULD BE NOTED AND IMMEDIATELY REPAIRED IN KIND.

#### REQUIRED PROCEDURES AND INSPECTIONS FOR INGROUND WQ FACILITY

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

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

#### CONSTRUCTION SPECIFICATIONS

I. Geo-textile or Filter Fabric

Acceptable Geo-textiles

Spartan Tech

Amoco Mirafi Polyfelt

140-N, 180-N TS500, TS700 ST-45, ST-80 4.5NP. 8NP

SD, ND-8

Supac Terratex

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

45/45, 45/57

### II. Site Preparation

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

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

#### III. Earth Fill

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

#### IV. Structure Backfill

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

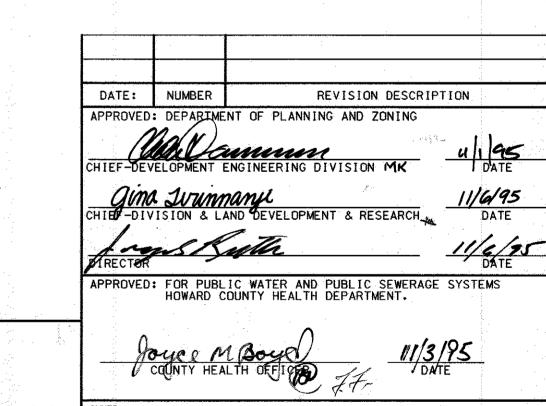
#### V. Concrete

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

- VI. Reinforced Concrete Culvert Pipe (RCCP)
- RCCP shall conform to SHA Specification Section 908.03. Rubber gaskets for pipe joints shall conform to SHA Specification Section 908.14.01.
- VII. Rock Riprap

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

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



NOT TO SCALE

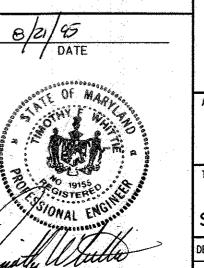
APPROVED PLANNING BOARD of HOWARD COUNTY

CHECKED BY: TFW

THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION THE ROUSE BUILDING 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044 LIBER 1535 / FOLIO 193

6301 IVY LANE

SUITE 700 GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511



PROFESSIONAL ENGR. NO. 19155

1 CHE 1

SDP-95-117

PLANNING BOARD APPROVAL

WARD ASSOCIATES INC. ■ FREDERICK SURVEYORS

FWA DRAWING FILE NAME COSTORM FWA JOB NUMBER 93288 VILLAGE OF LONG REACH SECTION 1 AREA 5

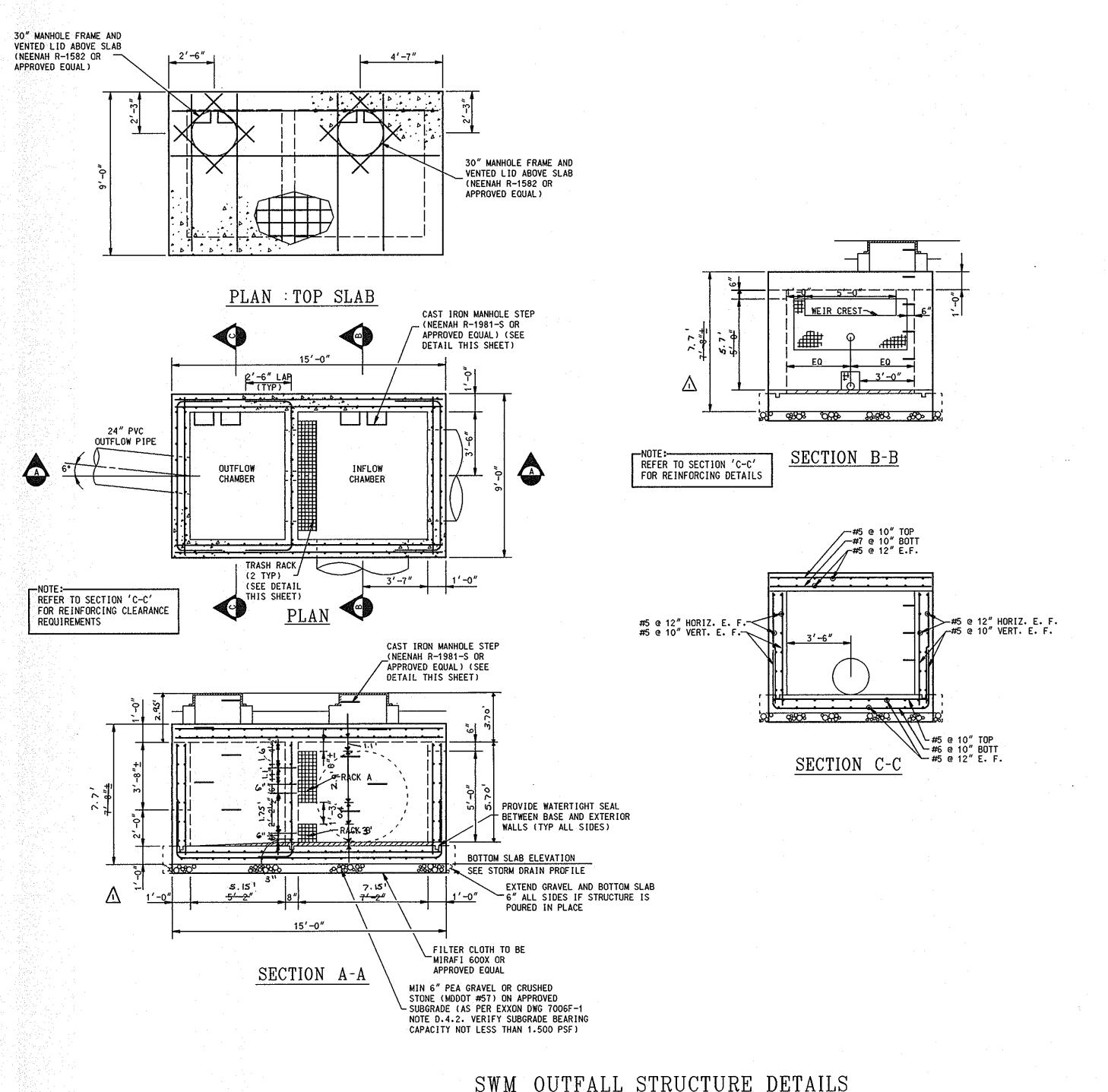
TAX MAP 36 PARCEL C 6th. ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR AN EXXON STATION AT PARCEL C STORMWATER MANAGEMENT/STORMCEPTOR DETAILS

SCALE:

DRAWING NUMBER 04/17/1995 09 OF 16

SDP-95-117

1" = 20' PROJECT NO.:



CAST IRON MANHOLE STEP

APPROVED EQUAL) STEPS TO

BE EMBEDDED MIN. 3" IN

NOTE: FIRST STEP DOWN

TO BE PLACED 6"

FROM MANHOLE RISER TOP

(NEENAH R-1981-S OR

WALL. (TYP)

MANHOLE STEP DETAIL

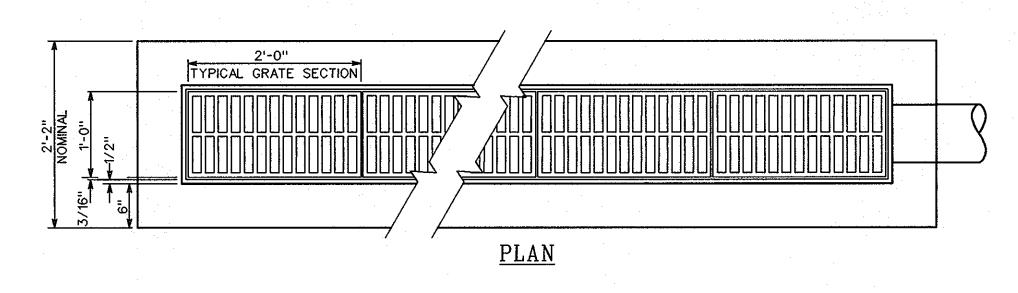
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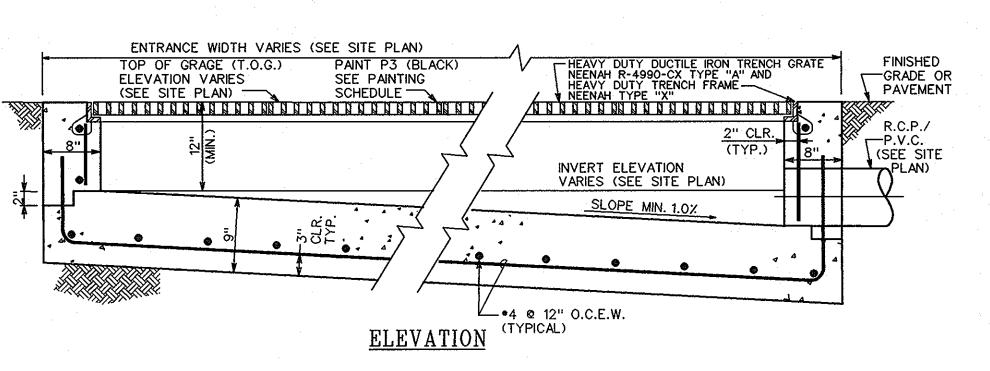


ADDITIONAL REINFORCING BARS ARE NOT

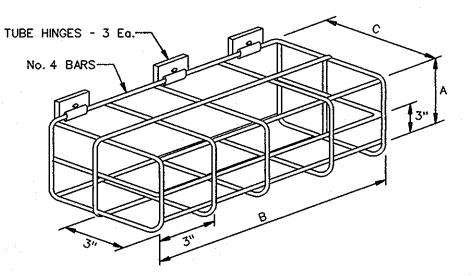
REQUIRED WHEN PENETRATION DIMENSIONS

ARE LESS THAN BAR SPACING.





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



TRASH RACK

TRASH RACK TO BE HOT-DIPPED GALVANIZED

| DYCA | DIMENSIONS |         |         |  |
|------|------------|---------|---------|--|
| RACK | A          | В       | C       |  |
| A    | 2' - 9"    | 6' - 0" | 1' - 0" |  |
| В    | 1' - 0"    | 1' - 0" | 1' - 0" |  |

- STRENGTH fc' = 3.500 psi.
- 4. CONTRACTOR SHALL PRE-CAST STRUCTUREE IN WHOLE OR IN PART, SUBJECT TO THE PRIOR APPROVAL OF PRE-CAST SHOP DRAWING SUBMITTED TO HOWARD COUNTY BUREAU OF ENGINEERING PRIOR TO MANUFACTURING.
- 5. SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMENENTLY STABILIZED.

SDP-95-117 PLANNING BOARD APPROVAL

NOTE :

USE NEENAH R-4999 TYPE L GRATE AT I-1

6-15-96

NUMBER

BY THE ENGINEER:

BY THE DEVELOPER:

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Mu Hammen

FODIVISION & LAND PEVELOPMENT & RESEARCH

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

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

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

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

SIGNATURE OF ENGINEER

FLOW

NEENAH TYPE L GRATE DETAIL

NOT TO SCALE

REVISION DESCRIPTION

8/21/45

DATE

APPROVED PLANNING BOARD of HOWARD COUNTY

9/13/95

TIMOTHY F. WHITTIE PROFESSIONAL ENGR. NO.19155

FREDERICK WARD ASSOCIATES INC. (410)879-2090

THE HOWARD RESEARCH AND DEVELOPMENT

CORPORATION
THE ROUSE BUILDING
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
LIBER 1535 / FOLIO 193

EXON COMPANY, U.S.A.

6301 IVY LANE SUITE 700

GREENBELT, MARYLAND 20770 ATTN: MR. MIKE SPECHT PHONE: (301)-513-7511

FWA DRAWING FILE NAME COSWINDTL VILLAGE OF LONG REACH SECTION 1 AREA 5
TAX MAP 36 PARCEL C
6 th. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

FOR AN EXXON STATION AT PARCEL C STORMWATER MANAGEMENT DETAILS

DESIGN BY: JBG AS SHOWN 03/10/1995 10 OF 16

SDP-95-117

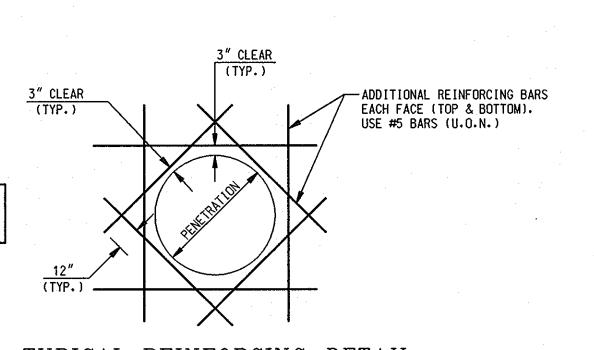


ISOMETRIC

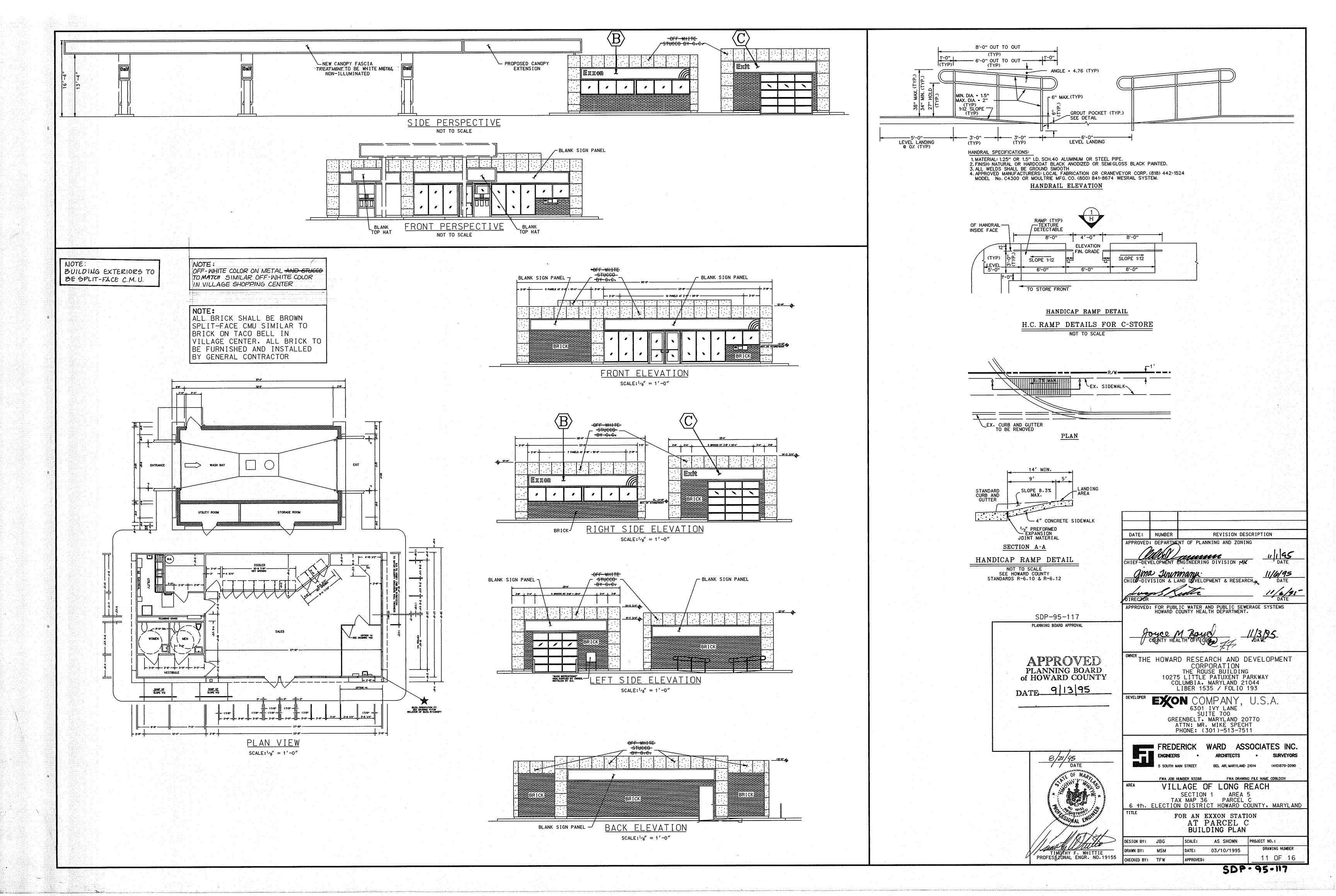
NOT TO SCALE

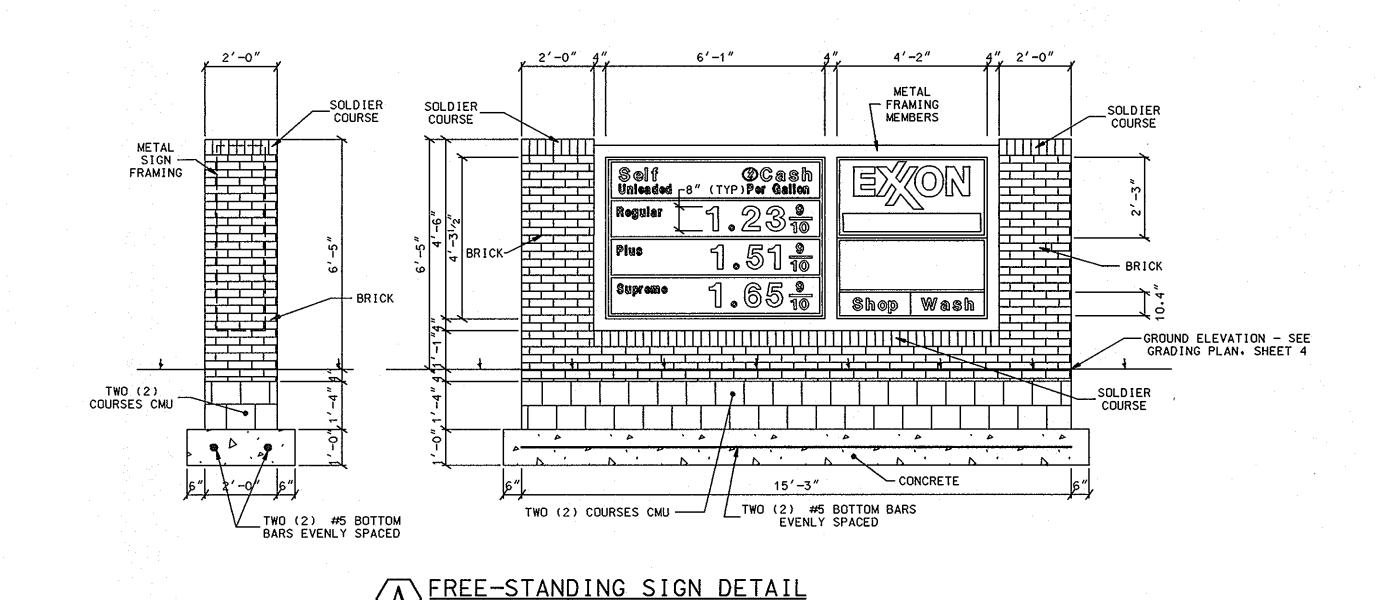
- 1. ALL STRUCTURES DETAILED ON THIS SHEET SHALL BE CAPABLE OF SUPPORTING AASHTO HS-20 LOADING, AND SHALL BE CONSTRUCTED IN FULL ACCORDANCE WITH ACI 318, LATEST EDITION.
- 2. CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE
- 3. ALL REINFORCING SHALL CONFORM TO ASTM A-615 GRADE 60.

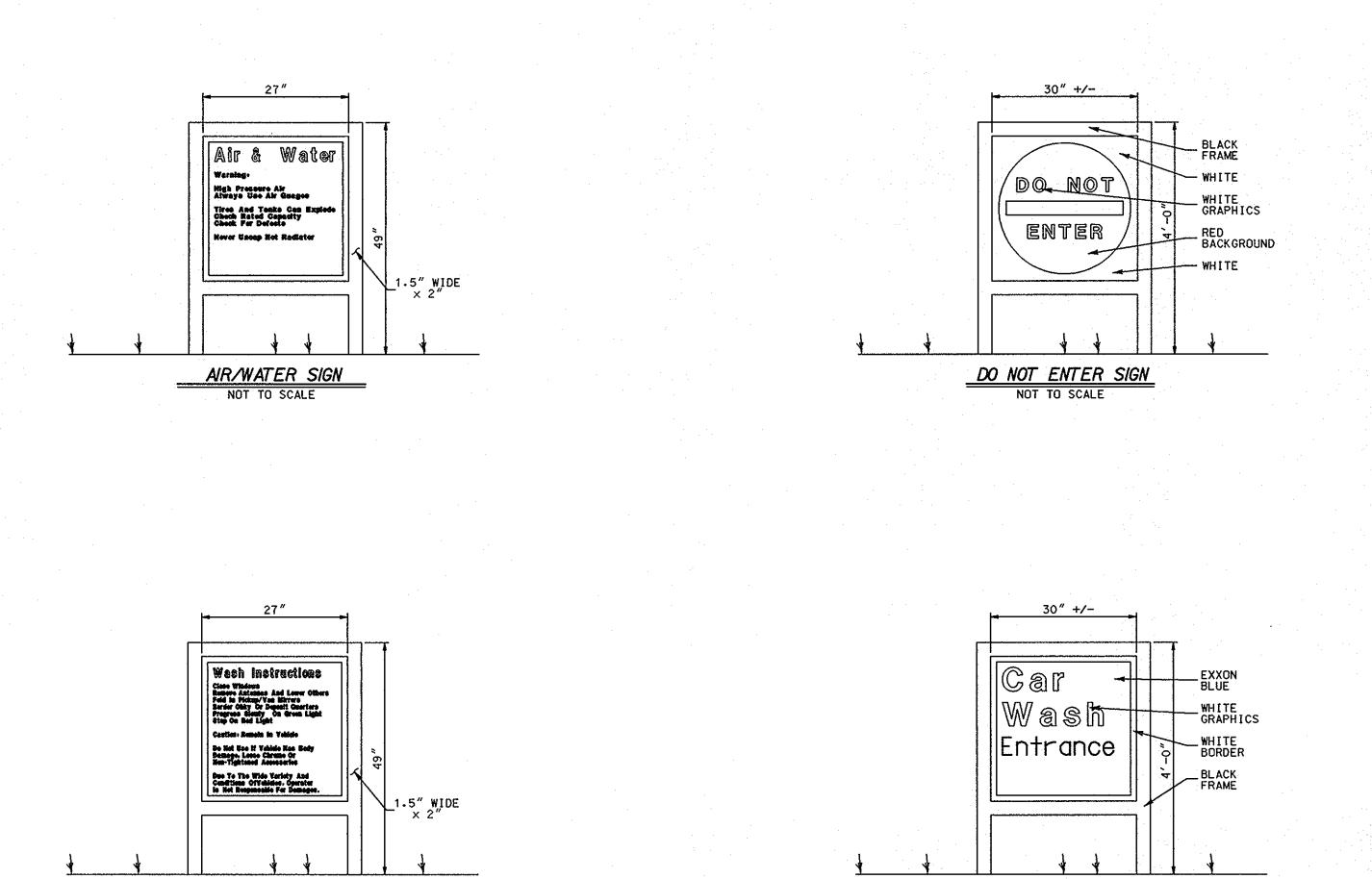
- 6. ALL OPENINGS TO THE STRUCTURE SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.

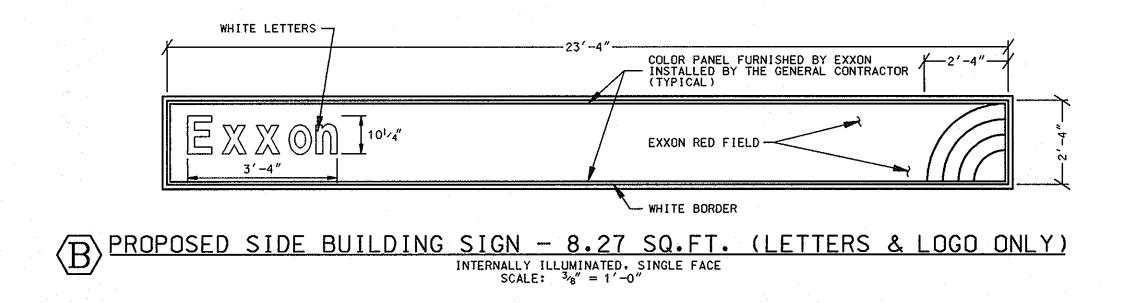


TYPICAL REINFORCING DETAIL © WALL & SLAB PENETRATION SCALE: 1/4" = 1'-0"

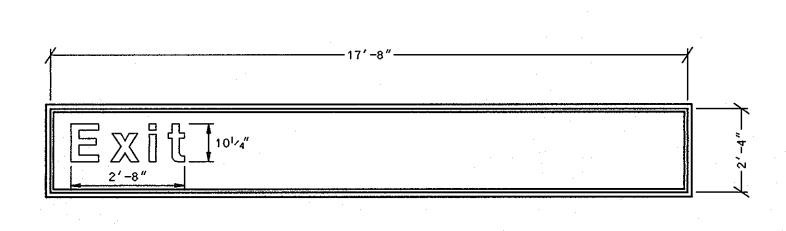








INTERNALLY ILLUMINATED. SINGLE FACE SCALE:  $\frac{3}{8}$ " = 1'-0"



PROPOSED WASH SIGN - 2.28 SQ.FT. (LETTERS ONLY)

INTERNALLY ILLUMINATED, SINGLE FACE

SCALE: 3/8" = 1'-0"

## SIGNAGE CALCULATIONS

PERMITTED PER HOWARD COUNTY CODE AND APPROVED BY HRD ON A CASE-BY-CASE

1. FREESTANDING SIGN

A. PERMITTED:

HEIGHT = 1 FT PER EACH 2 FT SIGN IS SETBACK FROM R/W, 26' MAX

= 13 SQ FT (32 SQ FT ALLOWED FOR PRICE NOT INCLUDED IN CALCS)

WASH INSTRUCTION SIGN

= 13/2 X 1 = 6'6" A = 1 SQ FT FOR EACH FT SIGN IS SETBACK FROM R/W

B. PROPOSED:

HEIGHT = 6'5" AREA = 9.38 SQ FT (EXXON PANEL ONLY)

2. BUILDING SIGNS

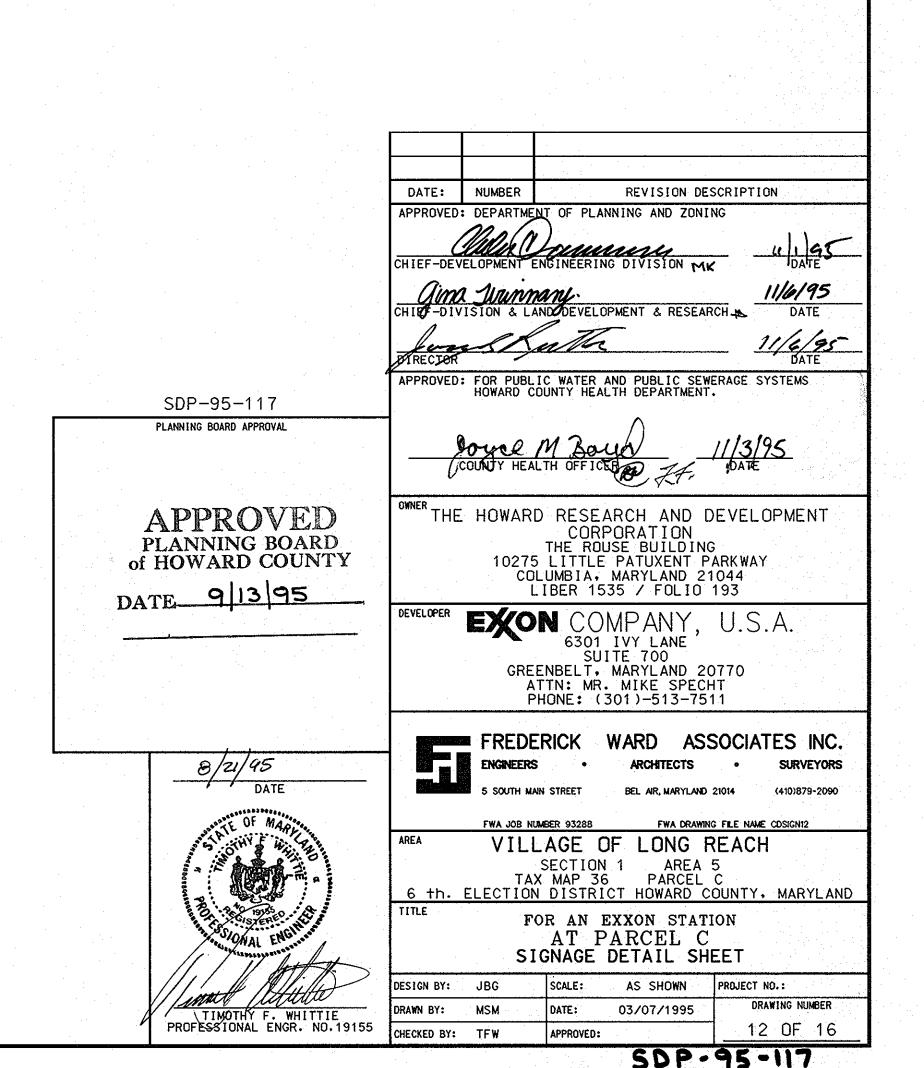
A. PERMITTED:

REA = 2 SQ FT FOR EACH LF OF BUILDING FRONTAGE PLUS
1 SQ FT FOR EACH ADDITIONAL LF OF BUILDING FRONTAGE

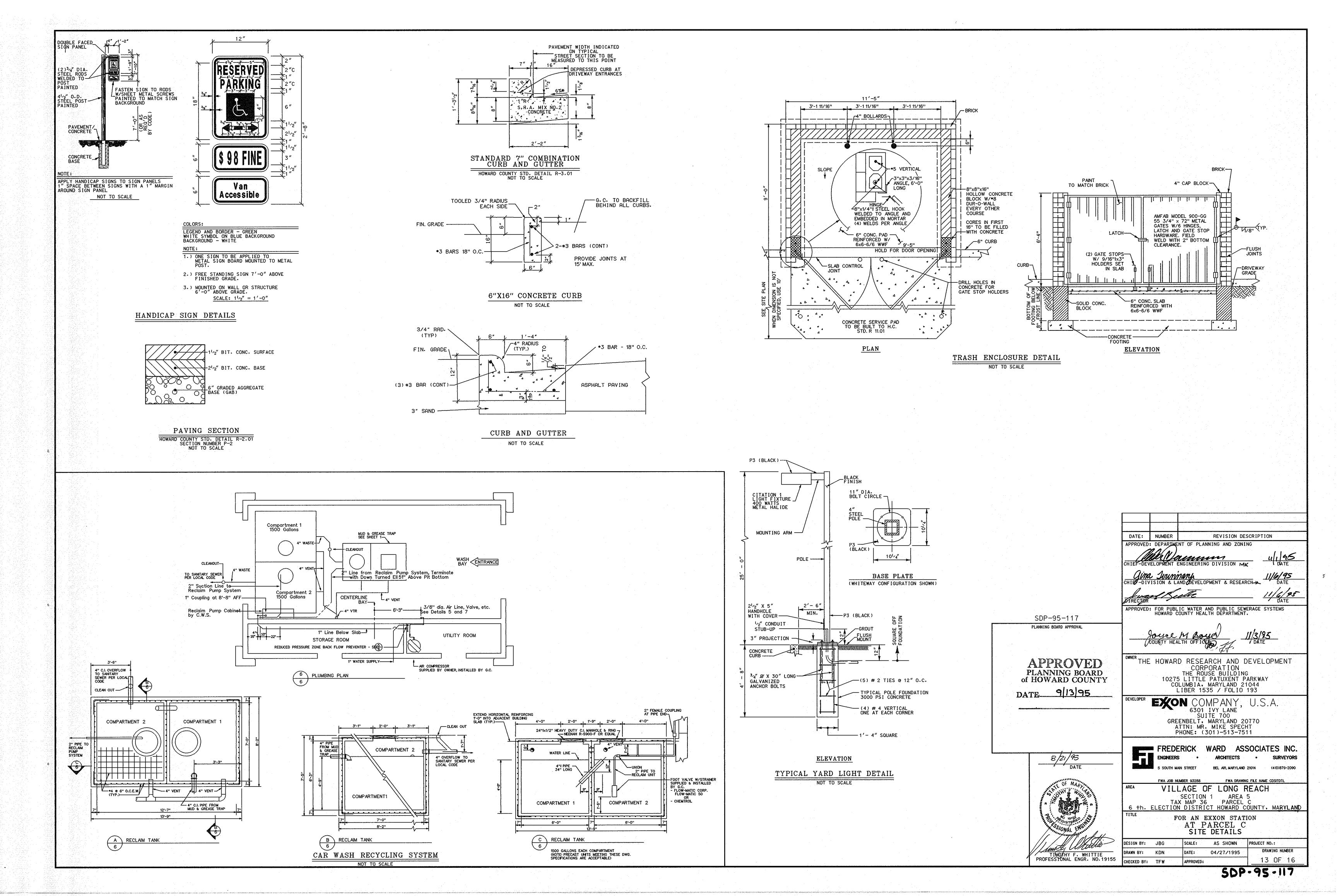
FOR MULTIPLE FRONTAGE = 55 LF X 2 SQ FT + 51 LF X 1 SQ FT = 161 SQ FT

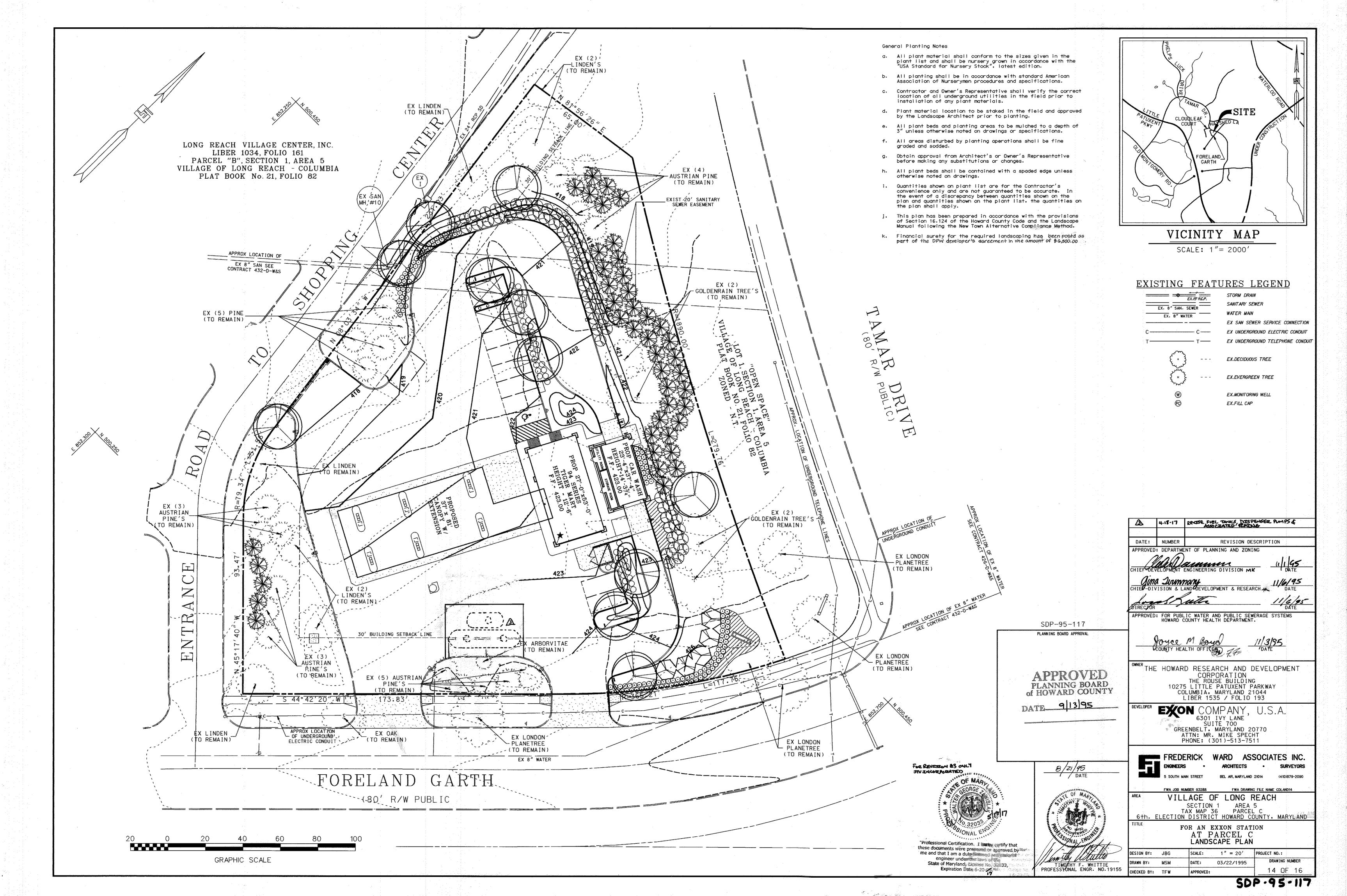
B. PROPOSED:

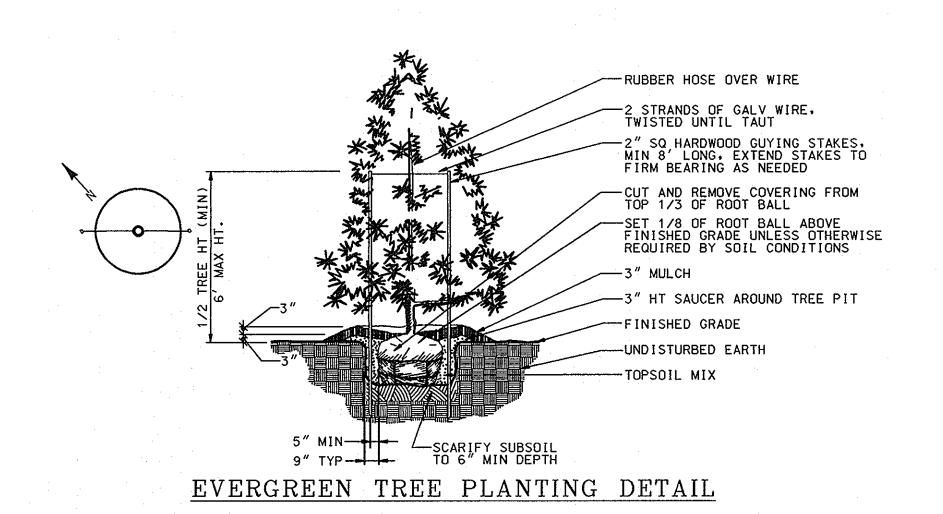
AREA = 10.55 SQ FT

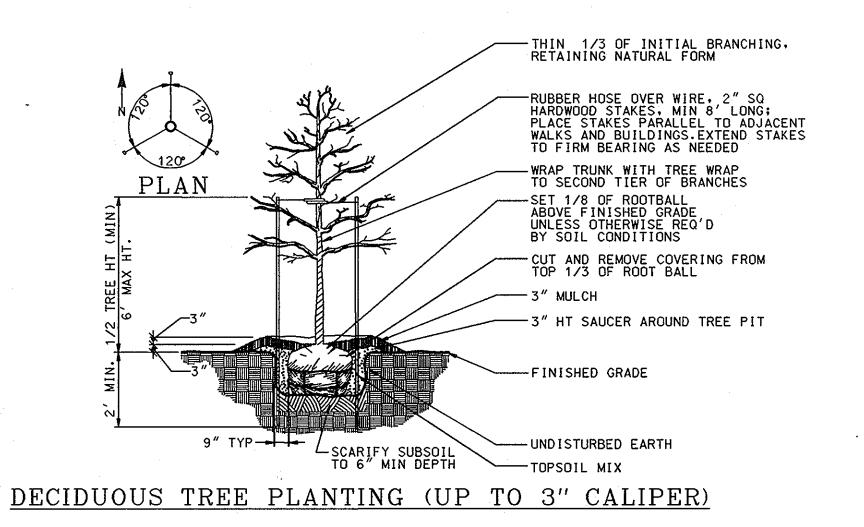


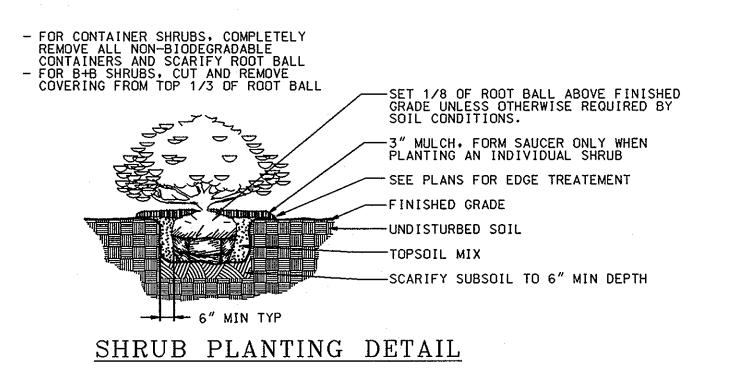
CAR WASH ENTRANCE SIGN







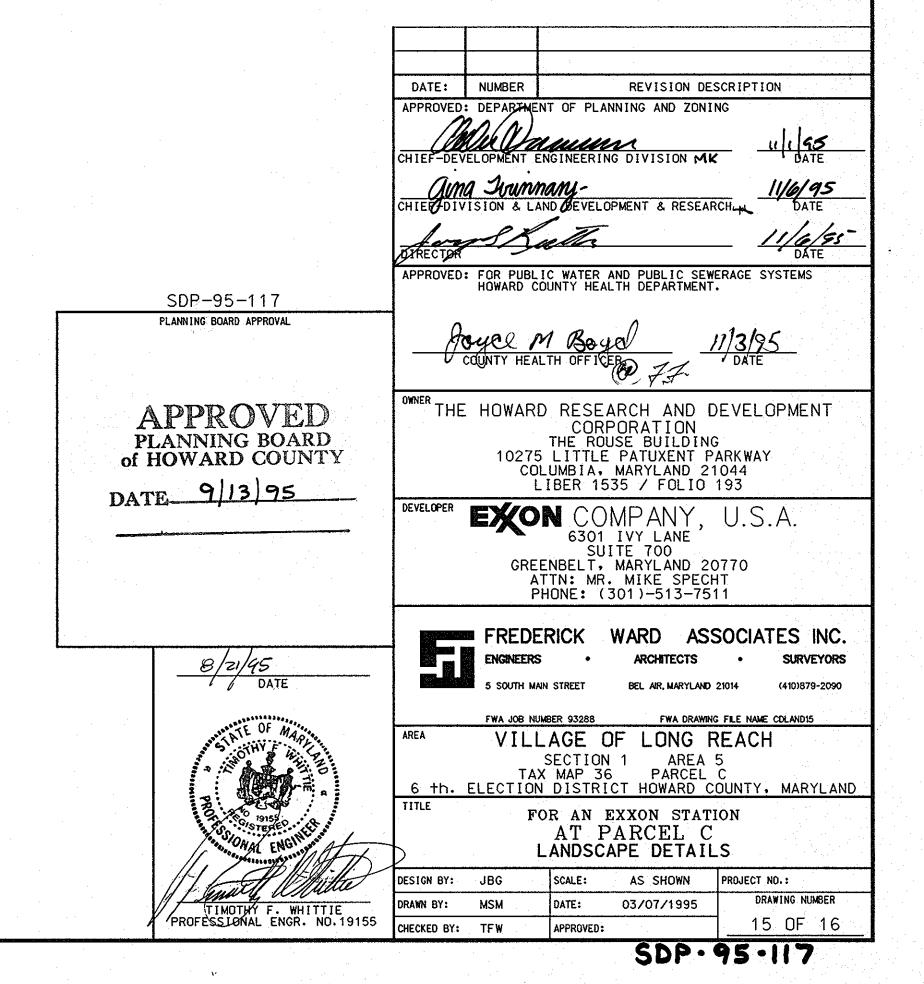


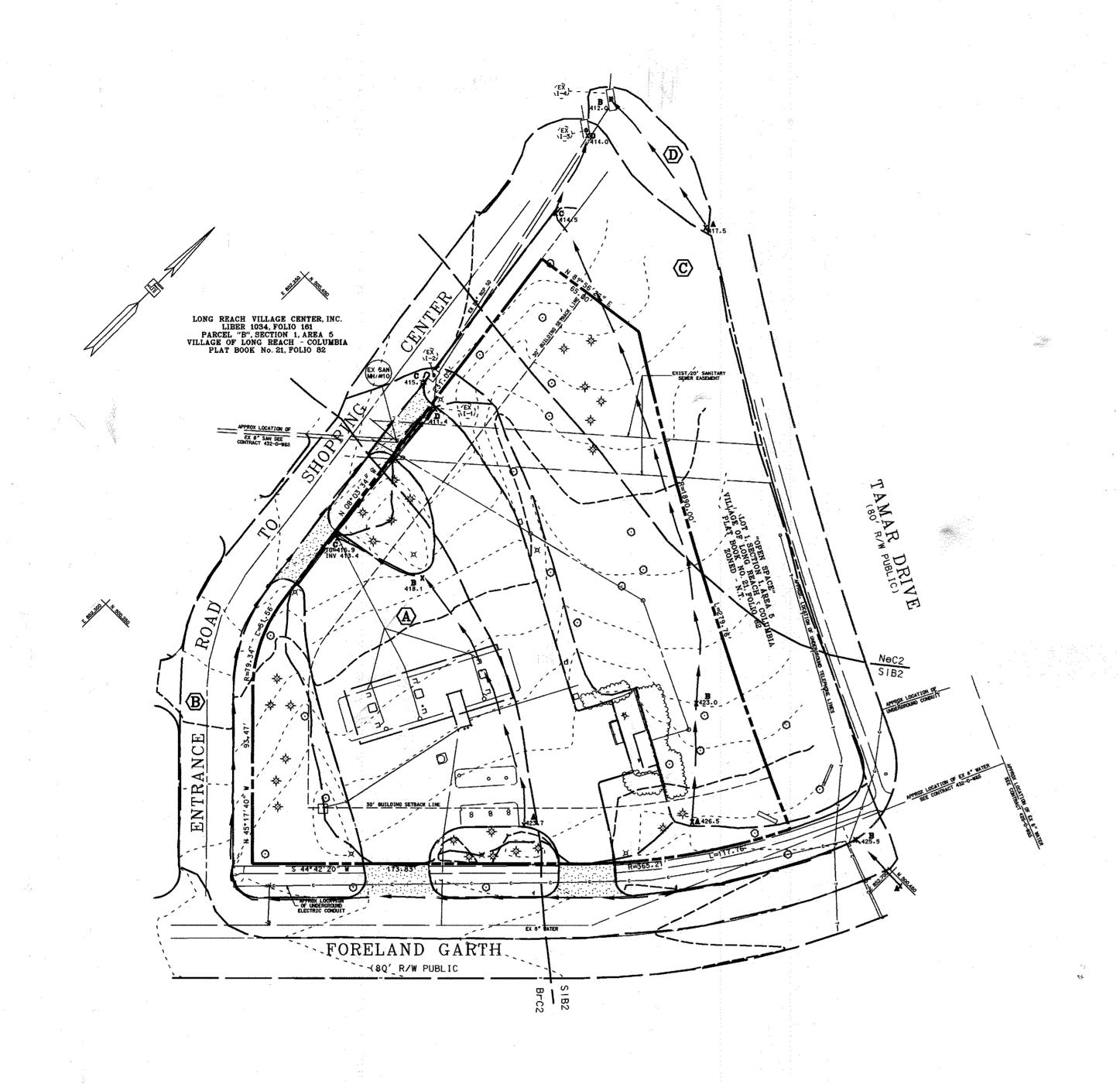


|          | LANDSCAPE PLANTINGS |          |  |   |  |  |  |
|----------|---------------------|----------|--|---|--|--|--|
|          | SYMBOL              | QUANTITY | BOTANICAL/COMMON NAME  | SIZE  | REMARKS                                  |  |  |
|          |                     | 11       | TILIA CORDAȚA<br>'GREENSPIRE'<br>GREENSPIRE LITTLELEAF LINDEN                                  | 3" - 3½" CAL<br>14' - 16' HT                              | B & B<br>FULL<br>25′ O•C •               |  |  |
|          |                     | 43       | PINUS STROBUS<br>EASTERM WHITE PINE  | ଟ' ~ ୫′ HT  | B & B<br>FULL<br>10' D.C.                |  |  |
| 14<br>14 |                     | 5        | CRATAEGUS VIRIDIS<br>'WINTER KING'<br>WINTER KING HAWTHORNE                                    | 2" - 2 <sup>1</sup> / <sub>2</sub> " CAL<br>10' - 12' HT  | B & B<br>FULL                            |  |  |
|          | $\Theta$            | 58       | HYDRANGEA QUERCIFOLIA<br>'SNOW QUEEN'<br>SNOW QUEEN OAKLEAF HYDRANGEA                          | 2 <sup>1</sup> /2' - 3' SPD<br>2 <sup>1</sup> /2' - 3' HT | B & B<br>FULL<br>6' O.C.                 |  |  |
|          | 0                   | 47       | PRUNUS LAUROCERASUS<br>'OTTO LUYKEN'<br>OTTO LUYKEN CHERRY LAUREL                              | 24" - 30" HT<br>30" - 36" SP                              | B & B<br>FULL<br>3.5' O.C.               |  |  |
|          | $\odot$             | 137      | BERBERIS THUNBERGII<br>VAR. ATROPURPUREA<br>'CRIMSON PYGMY'<br>CRIMSON PYGMY JAPANESE BARBERRY | 18" - 24" SP<br>15" - 18" HT                              | CONT.<br>FULL<br>2.5 0.C.                |  |  |
|          |                     | 1400     | PACHYSANDRA TERMINALIS<br>JAPANESE PACHYSANDRA   | 1YR.<br>21⁄4″ PP.   | CONT.<br>FULL<br>10" O.C.                |  |  |
|          |                     | 325      | SALVIA SPLENDENS<br>RED SALVIA   | 1 QT.   | CONT.<br>15" O.C.                        |  |  |
|          |                     | 325      | TULIPA<br>'RED EMPEROR'<br>RED EMPEROR TULIP   | 12 CM<br>AND UP   | TOP SIZE<br>QUALITY<br>BULBS<br>15" O.C. |  |  |

|   | HEDULE A<br>LANDSCAPE        | EDGE  |  |  |  |
|---|------------------------------|---|--|--|--|
| CATEGORY  | ADJACENT TO<br>ROADWAYS      | ADJACENT TO<br>PERIMETER PROPERTIES               |  |  |  |
| LANDSCAPE TYPE  | E                            | D   |  |  |  |
| LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER   | 574.18                       | 344.76  |  |  |  |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)  | YES - 5 DEC.<br>12 EVERGREEN | YES — 5 DEC.<br>4 EVERGREEN                       |  |  |  |
| CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)   | YES - BERM<br>69             | NO  |  |  |  |
| NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS  | 1:40 = 10<br><br>1:4 = 144   | 1:60 = 6<br>1:10 = 34<br>                         |  |  |  |
| NUMBER OF PLANTS PROVIDED  SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION) (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)                      | 5*                           | 4 + 5 EX CREDIT = 9** 38 + 4 EX CREDIT = 42 5 135 |  |  |  |
| COMMENTS: ** ADDITIONAL PLANTS PROVIDED AS REPLACEMENT FOR 4 PINES REMOVED ALONG WEST PROPERTY LINE.  *** ADDITIONAL PLANT MATERIAL PROVIDED AS REPLACEMENT FOR EXISTING VEGETATION REMOVED |                              |   |  |  |  |
| ALONG NORTH PROPERTY LINE.  |                              |   |  |  |  |

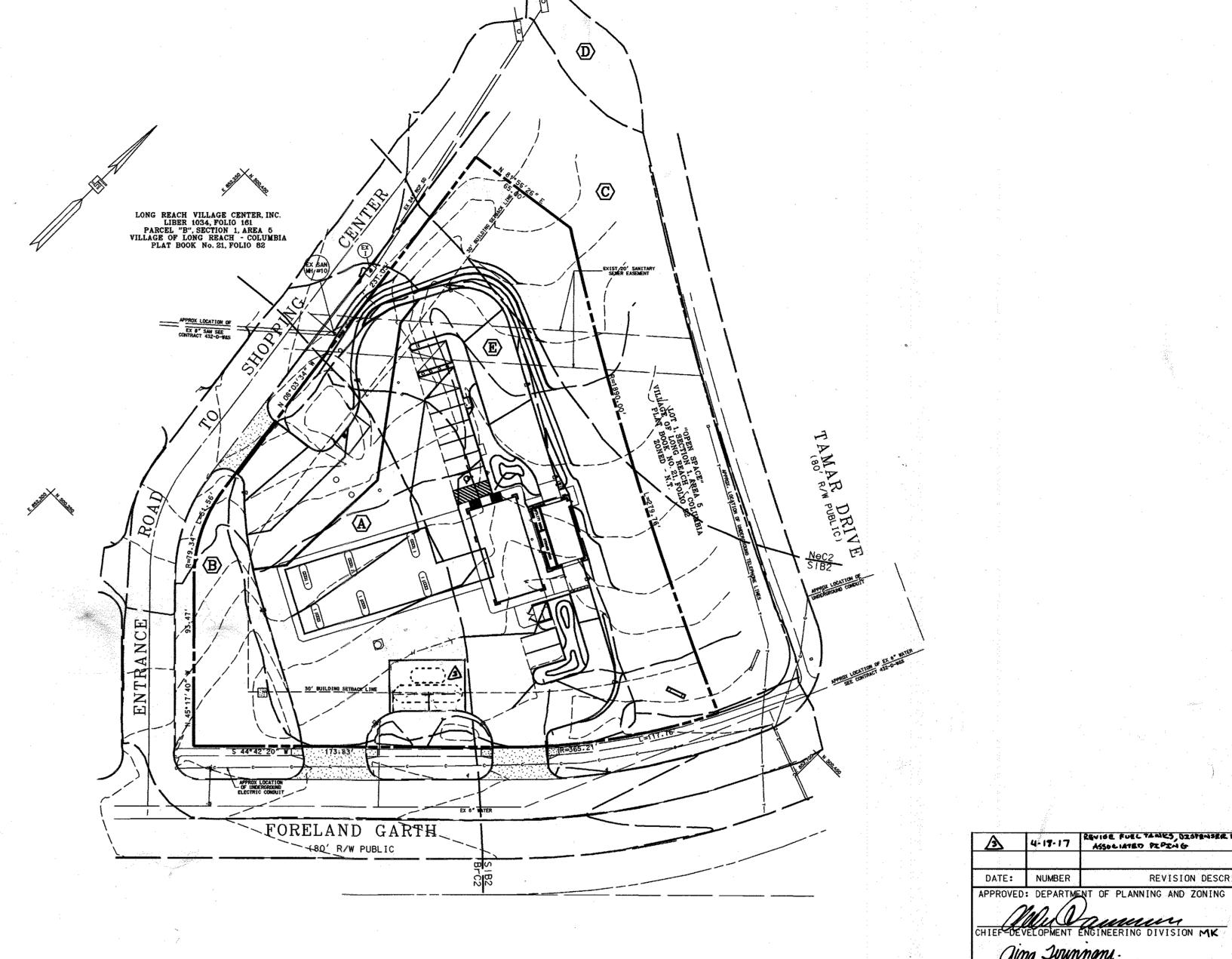
| SCHEDULE<br>PARKING LOT INTERNAL                                    | · · · · · · · · · · · · · · · · · · · |
|---|---------------------------------------|
| NUMBER OF PARKING SPACES  | (10 SPACES)                           |
| NUMBER OF TREES REQUIRED  | 1                                     |
| NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION) | 2                                     |







|                  | William Control of the Control of th |                       |                      | , sail 10 10 10 10 10 10 10 10 10 10 10 10 10 |
|------------------|--|-----------------------|----------------------|---|
| DRAINAGE<br>AREA | DRAINAGE<br>AREA, AC.  | PERCENT<br>IMPERVIOUS | C-RATIONAL<br>METHOD | RCN<br>(TR-55)                                |
| Α                | 0.75   | 77.3                  | 0.70                 | 91  |
| В                | 0.74   | 64.9                  | 0.62                 | 88  |
| С                | 1.09   | 10.1                  | 0.23                 | 65  |
| D                | 0.05   | 0.0                   | 0.16                 | 61  |



### PROPOSED DRAINAGE AREA MAP

FOR REVISION #3 ONLY

| DRAINAGE<br>AREA | DRAINAGE<br>AREA, AC. | PERCENT<br>IMPERVIOUS | C-RATIONAL<br>METHOD | RCN<br>(TR-55) |
|------------------|-----------------------|-----------------------|----------------------|----------------|
| Α                | 0.74                  | 77.3                  | 0.77                 | 94             |
| В                | 0.73                  | 65.7                  | 0.63                 | 88             |
| C                | 0.93                  | 11.8                  | 0.24                 | 65             |
| D                | 0.05                  | 0.0                   | 0.16                 | 61             |
| E                | 0.18                  | 77.3                  | 0.74                 | 94             |
|                  |                       |                       |                      |                |

SDP-95-117 PLANNING BOARD APPROVAL

APPROVED
PLANNING BOARD
of HOWARD COUNTY

THE HOWARD RESEARCH AND DEVELOPMENT

CORPORATION

THE ROUSE BUILDING

10275 LITTLE PATUXENT PARKWAY

COLUMBIA, MARYLAND 21044

LIBER 1535 / FOLIO 193 EXON COMPANY, U.S.A.

6301 IVY LANE
SUITE 700

GREENBELT, MARYLAND 20770
ATTN: MR. MIKE SPECHT
PHONE: (301)-513-7511

4-17-17 REVISE FUEL TANKS, DESPENSER FUMPS &

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

REVISION DESCRIPTION

NUMBER

CHECKED BY: TFW

"Professional Certification. I herey the these documents were prepared of peroved by me and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 32033, Expiration Date 6-20-36."

8/21/95 DATE

TIMOTHY F. WHITTIE
PROFESSIONAL ENGR. NO. 19155

VILLAGE OF LONG REACH SECTION 1 AREA 5
TAX MAP 36 PARCEL C
6th. ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR AN EXXON STATION
AT PARCEL C
DRAINAGE AREA MAPS

1" = 20' 03/17/1995

16 OF 16

GRAPHIC SCALE