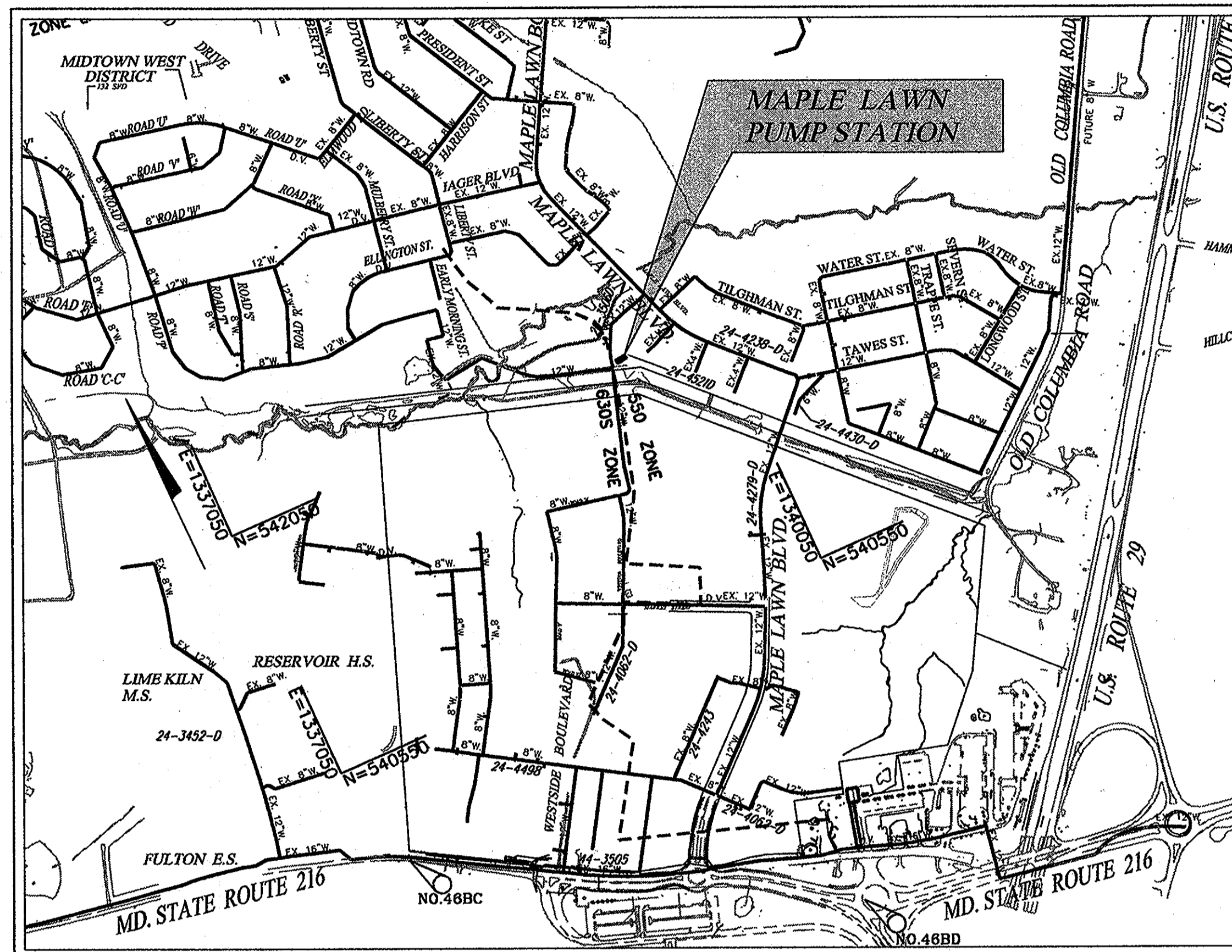


**SITE DEVELOPMENT PLAN NOTES**

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK TO BE DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY KCI DATED FEBRUARY 2008.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 46BC AND 46BD WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC, AS DEFINED IN CONTRACT NO. 24-4521-D, PRESSURE ZONES 550/630S.
- SEWER IS PUBLIC AS DEFINED IN CONTRACT NO. 24-4521-D, DRAINAGE AREA: HAMMOND BRANCH.
- STORMWATER MANAGEMENT SHALL NOT BE REQUIRED AS THE DISTURBANCE IS LESS THAN 5,000 SF.
- EXISTING UTILITIES ARE BASED ON CONTRACT NO. 24-4521-D.
- THE FLOODPLAIN STUDY FOR THIS PROJECT IS RECORDED UNDER PRELIMINARY PLAN: P-03-01 AND FINAL PLAN SUBMISSION: F-08-72.
- THERE ARE NO WETLANDS ON THIS SITE.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL WITH 8 SHADE TREES, 15 EVERGREEN TREES, AND 43 SHRUBS PROVIDED ON THE APPROVED LANDSCAPE PLAN. FINANCIAL SURETY IS NOT REQUIRED FOR THIS PROJECT BECAUSE THIS IS A COUNTY CAPITAL PROJECT. THE TYPE AND QUANTITY OF TREES HAS BEEN APPROVED BY THE DEVELOPER FOR THE MAPLE LAWN COMMUNITY.
- THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS, DEVELOPMENT OR CONSTRUCTION ON THIS PROPERTY MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION, OR BUILDING/GRADING PERMIT APPLICATIONS. THE DEVELOPER SHALL APPLY FOR BUILDING PERMITS FOR PUMP STATION BUILDING AS SHOWN ON THIS SITE DEVELOPMENT PLAN WITHIN ONE YEAR OF SIGNATURE APPROVAL OF THIS PLAN.
- THERE ARE NO BURIAL GROUNDS OR CEMETERY SITES LOCATED ON THE SUBJECT PROPERTY.
- THERE ARE NO HISTORIC STRUCTURES LOCATED ON THE SUBJECT PROPERTY.
- THE SUBJECT PROPERTY IS ZONED MXD-3 PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND PER ZB CASE NO. 995M APPROVED ON 02/08/01 AND ZB CASE NO. 1039M APPROVED ON 03/20/06.
- ALL EXTERIOR LIGHT FIXTURES SHALL BE ORIENTED TO DIRECT LIGHT INWARDS AND DOWNWARDS ON-SITE AWAY FROM ALL ADJOINING RESIDENTIAL PROPERTIES AND PUBLIC ROADS AND SHALL BE IN COMPLIANCE WITH THE LIGHT TRESPASS LIMIT OF 0.5 FOOT CANDLES ONTO ANY OTHER ADJOINING PROPERTY ZONED OR USED FOR RESIDENTIAL PURPOSES IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- THE FOREST CONSERVATION REQUIREMENTS FOR THIS SITE WERE PREVIOUSLY ADDRESSED UNDER F-08-72.
- FOR SUGGESTED SEQUENCE OF CONSTRUCTION, SEE DRAWING SD-6.
- THE FOLLOWING DPZ FILES ARE APPLICABLE FOR THIS PROJECT: S-01-17, S-06-16, ZB-995M, ZB-1039M, PB-353, PB-378, P-03-01, P-07-02, AND F-08-72.
- THE MINIMUM BUILDING SETBACKS FROM PROPERTY LINES AND PUBLIC ROADS FOR OPEN SPACE LAND USES ARE IN ACCORDANCE WITH THE APPROVED MLF DEVELOPMENT CRITERIA PER S-06-16.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE RECORDED FOREST CONSERVATION EASEMENTS, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED AND AS PERMITTED BY THE MLF DEVELOPER WITHIN FCE #23 WHERE AFFORESTATION PLANTING HAS NOT BEEN COMPLETED BY THE DEVELOPER.
- THE 75' CONFLICT TREE EASEMENT SHOWN ON THESE PLANS GRANTS PEPCO THE RIGHT TO ENTER THE EASEMENT FOR THE PURPOSE OF CUTTING DOWN, TRIMMING, REMOVING AND/OR KEEPING CUT ALL TREES WHICH MAY INTERFERE WITH ANY TOWERS, POLES, STRUCTURES, WIRES, CABLES, CONDUITS OR OTHER IMPROVEMENTS WITHIN THE PEPCO RIGHT OF WAY, AS PER LIBER 2305, FOLIO 33, LIBER 2133 FOLIO 603 AND LIBER 2352, FOLIO 575.

**MAPLE LAWN PUMP STATION  
HOWARD COUNTY, MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
CAPITAL PROJECT No. W8280  
CONTRACT NO. 44-4516**



**VICINITY MAP**  
SCALE: 1" = 600'

TYPE OF BUILDING: PUMPING STATION  
NUMBER OF PARCELS: N/A  
DRAINAGE AREA: HAMMOND BRANCH  
PRESSURE ZONE: 550/630S

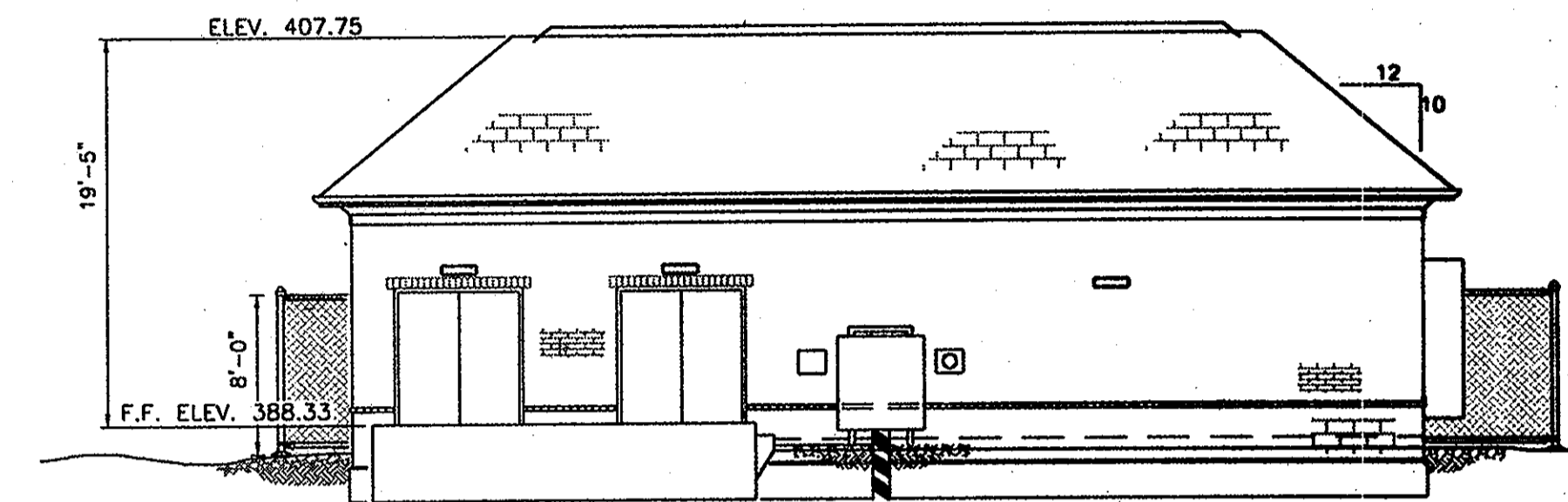
NO. OF WHC: 0  
NO. OF SHC: 0  
ADC MAP 5052, F6

| SITE ANALYSIS DATA CHART         |                                   |
|----------------------------------|-----------------------------------|
| PROJECT AREA                     | 0.47 ACRES                        |
| LIMIT OF DISTURBANCE (LOD)       | 22946 SF (.527 ACRES)             |
| PRESENT ZONING DESIGNATION       | MXD-3                             |
| PROPOSED PURPOSE                 | COUNTY WATER BOOSTER PUMP STATION |
| PUMP STATION/GENERATOR FOOTPRINT | 1037 SF                           |
| ON SITE PARKING                  | TWO (2) SPACES                    |

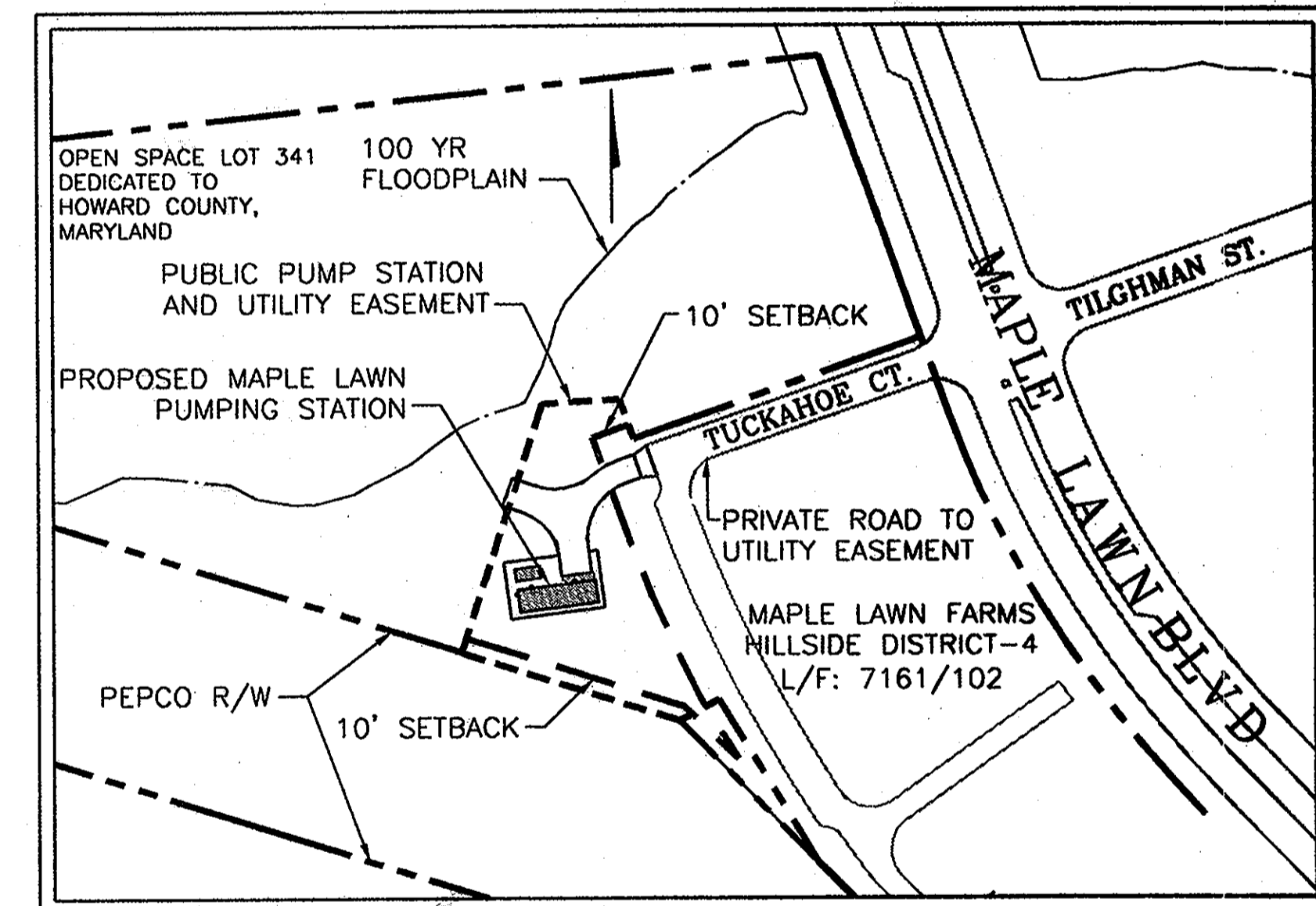
| ADDRESS CHART    |                     |
|------------------|---------------------|
| LOT/PARCEL #     | STREET ADDRESS      |
| PARCEL #341 SITE | 7816 TUCKAHOE COURT |

| PERMIT INFORMATION CHART |           |                           |             |                               |              |
|--------------------------|-----------|---------------------------|-------------|-------------------------------|--------------|
| SUBDIVISION NAME         |           | SECTION/AREA              |             | LOT/PARCEL NO.                |              |
| MAPLE LAWN FARMS         |           | HILLSIDE AREA DISTRICT -4 |             | OPEN SPACE LOT 341 PARCEL 205 |              |
| PLAT Nos.                | GRID Nos. | ZONING                    | TAX MAP NO. | ELEC. DISTRICT                | CENSUS TRACT |
| 20398 & 20399            | 21 & 22.  | MXD-3                     | 41          | 5                             | 6051.02      |

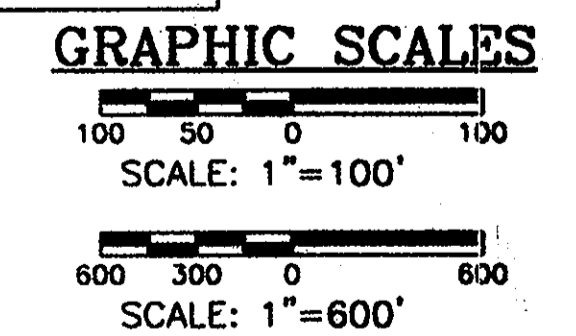
| INDEX OF SHEETS |  |
|-----------------|--|
| SHEET NO        | SHEET TITLE                                    |
| SD-1            | SITE DEVELOPMENT PLAN TITLE SHEET              |
| SD-2            | STAKE OUT PLAN - LEGEND AND SYMBOLS            |
| SD-3            | SITE DEVELOPMENT PLAN                          |
| SD-4            | LANDSCAPE PLANS AND DETAILS                    |
| SD-5            | PROFILES - ACCESS ROAD AND SITE DETAILS        |
| SD-6            | SEDIMENT AND EROSION CONTROL NOTES AND DETAILS |



**PUMP STATION ELEVATION**  
NOT TO SCALE



**SITE MAP**  
SCALE: 1" = 100'



**APPROVED  
PLANNING BOARD OF  
HOWARD COUNTY**

DATE 9/17/09  
PB CASE No. K5

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: [Signature] DATE: 10-16-09  
 Chief, Division of Land Development: [Signature] DATE: 10/16/09  
 Director: [Signature] DATE: 10/16/09

**HORIZONTAL & VERTICAL CONTROL**

HORIZONTAL AND VERTICAL CONTROL IS BASED ON MARYLAND NAD 83/91 (HORIZONTAL) AND NAVD '88 (VERTICAL) DATUM. HOWARD COUNTY GEODETIC SURVEY CONTROL NUMBERS

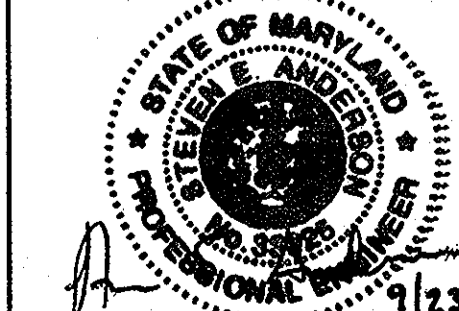
NO. 46BC N 539925.13 E 1337205.77 ELEV. 472.16  
 NO. 46BD N 538656.76 E 1339461.55 ELEV. 431.17  
 OWNER: DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 9250 BENDIX ROAD  
 COLUMBIA, MARYLAND  
 PHONE: (410)313-4400

ADJACENT WATER & SEWER FACILITY CONTRACTS:  
 YR. 1996 20-3506 WESTERN SCHOOL COMPLEX INTERCEPTOR SEWER  
 YR. 2003 24-4105D MAPLE LAWN FARMS MIDTOWN DISTRICT-AREA 1  
 YR. 2008 24-4430D MAPLE LAWN FARMS, HILLSIDE DISTRICT-AREA 4  
 YR. 2008 24-4238D MAPLE LAWN FARMS, HILLSIDE DISTRICT-AREA 4  
 YR. 2008 24-4521D MAPLE LAWN FARMS, WESTSIDE DISTRICT-AREA 1

PROFESSIONAL CERTIFICATION. I hereby certify 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. 33925, Expiration Date 01/15/11.

DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 Director of Public Works: [Signature] DATE: 9/28/09  
 Chief, Bureau of Utilities: [Signature] DATE: 9/28/09  
 Chief, Utility Design Division: [Signature] DATE: 9/28/09

ENGINEERS  
 PLANNERS  
 SCIENTISTS  
 CONSTRUCTION MANAGERS  
**KCI**  
 936 RINGBROOK ROAD  
 SUITE 200  
 SHARPSVILLE, MD 21152  
 PHONE: (410) 316-7800  
 FAX: (410) 316-7935  
 www.kci.com



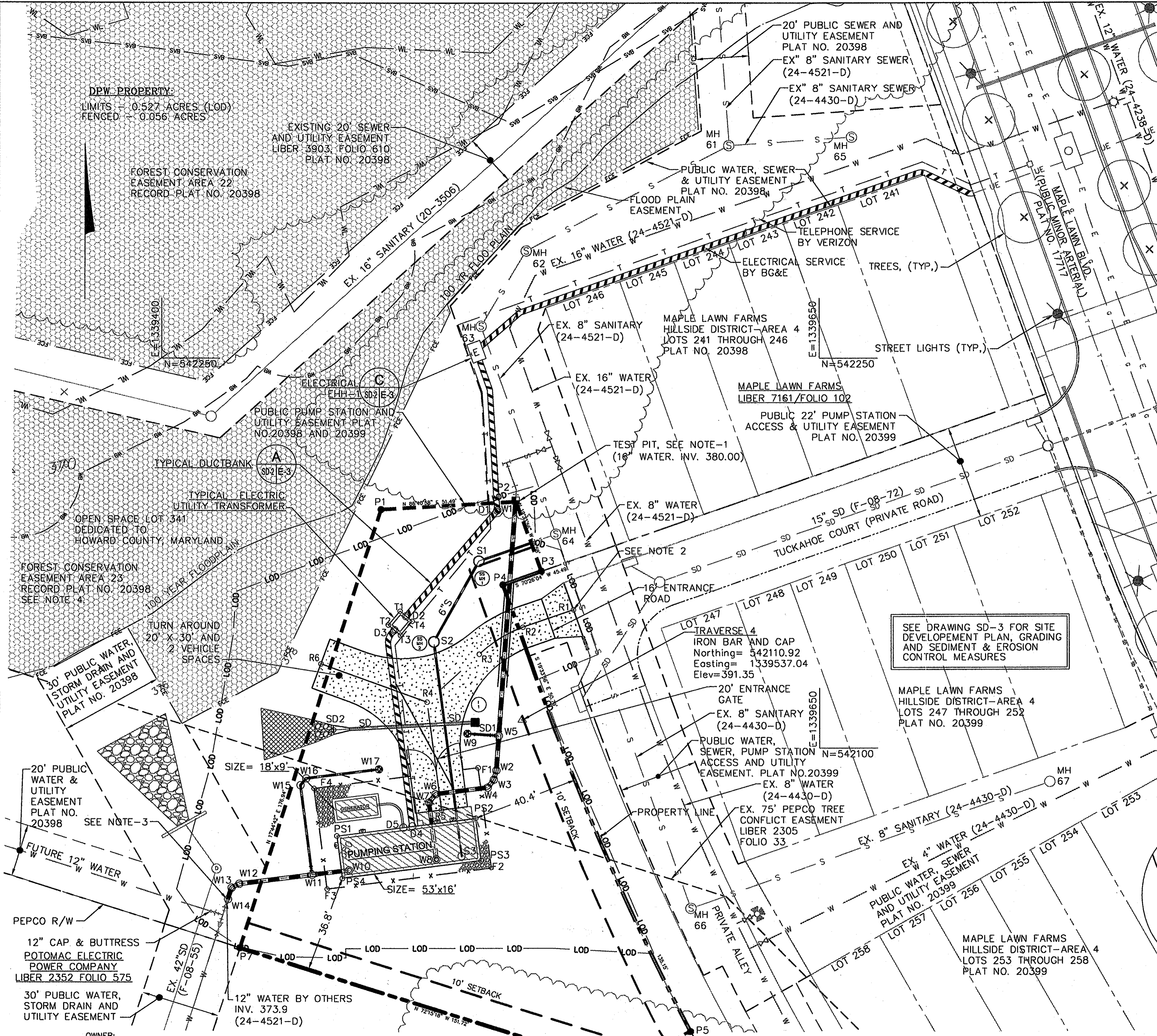
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| DRN: LFN   |     |          |      |                    |         |
| CHK: JRK   |     |          |      |                    |         |
| DATE: 8/09 |     |          |      |                    |         |
| BY         | NO. | REVISION | DATE | 600' SCALE MAP NO. | 41      |
|            |     |          |      | BLOCK NO.          | 21 & 22 |

**SITE DEVELOPMENT PLAN  
TITLE SHEET**

MAPLE LAWN FARMS, HILLSIDE DISTRICT, AREA 4 OPEN SPACE LOT 341  
 TAX MAP 41, SECTION/AREA 0.47 AC, PARCEL NO. 205,  
 ZONING MXD-3, GRID 21&22, LIBER 11930, FOLIO 193  
**MAPLE LAWN PUMP STATION**  
 CAPITAL PROJECT No. W8280  
 CONTRACT No. 44-4516  
 ELECTION DISTRICT NO.5 HOWARD COUNTY, MARYLAND  
 SD-1  
 1 OF 6  
 SCALE AS SHOWN  
 SHEET  
 2 OF 21

**SITE STAKE-OUT COORDINATES**

| POINT | DESCRIPTION         | NORTH     | EAST       |
|-------|---------------------|-----------|------------|
| P1    | PROPERTY CORNER     | 542191.94 | 1339483.37 |
| P2    | PROPERTY CORNER     | 542194.92 | 1339534.78 |
| P3    | PROPERTY CORNER     | 542167.99 | 1339544.35 |
| P4    | PROPERTY CORNER     | 542162.80 | 1339529.76 |
| P5    | PROPERTY CORNER     | 541991.14 | 1339600.76 |
| P6    | PROPERTY CORNER     | 541977.17 | 1339573.95 |
| P7    | PROPERTY CORNER     | 542023.41 | 1339429.45 |
| F1    | FENCE CORNER        | 542092.44 | 1339520.16 |
| F2    | FENCE CORNER        | 542053.99 | 1339525.15 |
| F3    | FENCE CORNER        | 542045.96 | 1339462.66 |
| F4    | FENCE CORNER        | 542084.48 | 1339457.71 |
| PS1   | FOUNDATION CORNER   | 542066.26 | 1339466.37 |
| PS2   | FOUNDATION CORNER   | 542073.00 | 1339519.27 |
| PS3   | FOUNDATION CORNER   | 542056.80 | 1339521.34 |
| PS4   | FOUNDATION CORNER   | 542050.06 | 1339468.43 |
| R1    | ACCESS ROAD C/L     | 542153.13 | 1339556.54 |
| R2    | ACCESS ROAD C/L(PC) | 542146.49 | 1339537.34 |
| R3    | ACCESS ROAD C/L(PT) | 542136.23 | 1339520.72 |
| R4    | ACCESS ROAD C/L     | 542117.79 | 1339500.84 |
| R5    | ACCESS ROAD C/L     | 542076.17 | 1339506.20 |
| R6    | TURNAROUND C/L      | 542132.51 | 1339460.47 |
| W1    | 16" WATER STA.1+57  | 542194.91 | 1339534.59 |
| W2    | 16" 11 1/4" H.B.    | 542091.41 | 1339527.13 |
| W3    | 16" 22 1/2" H.B.    | 542087.86 | 1339526.17 |
| W4    | 16" 45" H.B.        | 542084.84 | 1339523.84 |
| W5    | 16" X 8" TEE        | 542104.81 | 1339528.09 |
| W6    | 16" 45" H.B.        | 542082.31 | 1339504.00 |
| W7    | 16" 45" H.B.        | 542079.04 | 1339501.46 |
| W8    | 16" WATER STA. 0+00 | 542057.31 | 1339504.23 |
| W9    | 550 ZONE F.H.       | 542105.58 | 1339516.13 |
| W10   | 16" WATER STA. 0+50 | 542053.18 | 1339471.11 |
| W11   | 16" X 8" TEE        | 542051.43 | 1339456.91 |
| W12   | 16" 22 1/2" H.B.    | 542047.99 | 1339429.23 |
| W13   | 16" 45" H.B.        | 542046.48 | 1339426.31 |
| W14   | 16" WATER STA. 0+00 | 542042.06 | 1339424.90 |
| W15   | 8" 45" H.B.         | 542085.72 | 1339452.56 |
| W16   | 8" 45" H.B.         | 542088.32 | 1339454.76 |
| W17   | 630 ZONE F.H.       | 542091.86 | 1339482.43 |
| S1    | SMH 1               | 542171.92 | 1339520.60 |
| S2    | SMH 2               | 542140.96 | 1339503.45 |
| S3    | 6" CLEANOUT/VENT    | 542058.54 | 1339513.88 |
| SD1   | RCP INLET           | 542109.93 | 1339519.12 |
| SD2   | 15" RCP DISCHARGE   | 542107.05 | 1339465.20 |
| D1    | DUCT BANK           | 542191.56 | 1339527.56 |
| D2    | DUCT BANK           | 542150.78 | 1339492.92 |
| D3    | DUCT BANK           | 542145.39 | 1339488.45 |
| D4    | DUCT BANK           | 542069.92 | 1339495.07 |
| D5    | DUCT BANK           | 542069.48 | 1339491.70 |
| T1    | TRANSFORMER PAD     | 542152.72 | 1339490.63 |
| T2    | TRANSFORMER PAD     | 542147.34 | 1339486.16 |
| T3    | TRANSFORMER PAD     | 542143.45 | 1339490.73 |
| T4    | TRANSFORMER PAD     | 542148.83 | 1339495.20 |

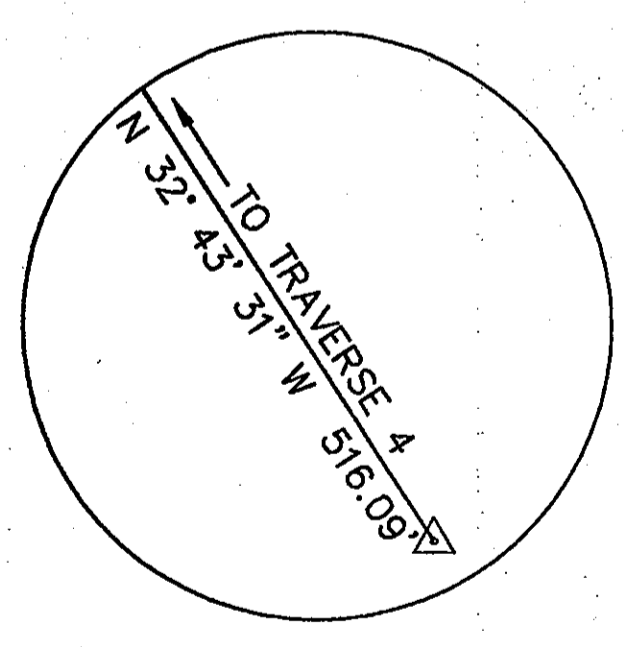
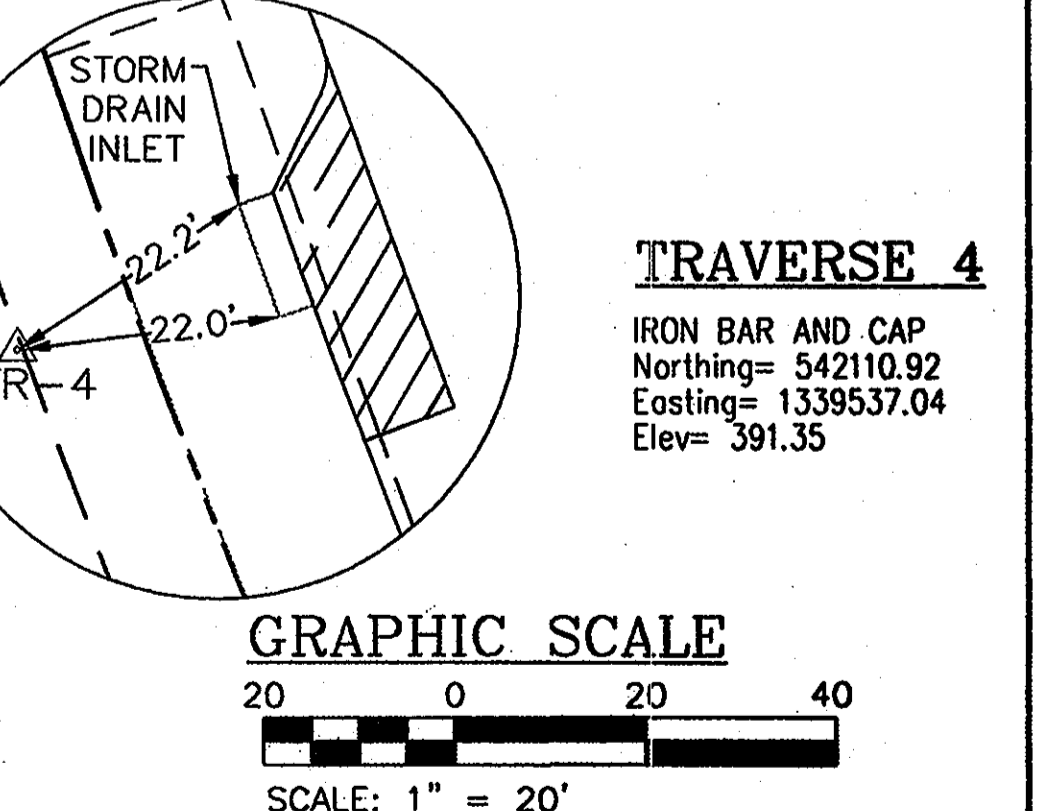


- NOTES:**
- TEST PIT EXISTING 16" WATER MAIN CONNECTIONS.
  - PUMPING STATION ACCESS ENTRANCE ROAD STORM WATER MANAGEMENT QUANTITIES AND MEASURES ARE DETAILED AND APPROVED AS PART OF THE MAPLE LAWN FARMS HILLSIDE DISTRICT AREA 1 DEVELOPMENT.
  - REMOVE EXISTING D.I.P. AND FITTINGS BACK TO 16" GATE VALVE.
  - THE PROPOSED LOD DISTURBANCES LOCATED WITHIN THE F.C.E. MUST BE COMPLETED PRIOR TO THE AFFORESTATION PLANTING AND THE INITIATION BY DPZ OF THE 2 YEAR POST CONSTRUCTION AND MANAGEMENT PERIOD FOR FINAL PLAN, F-08-72.

- LEGEND:**
- EXISTING SITE FEATURES
  - PROPOSED SITE FEATURES
  - PROPERTY LINE
  - FENCE
  - SILT FENCE
  - LIMITS OF DISTURBANCE
  - TEST PIT
  - PROPOSED PACKAGE PUMP STATION
  - PROPOSED ENTRANCE ROAD
  - FOREST CONSERVATION EASEMENT
  - RIP RAP OUTFALL
  - EROSION CONTROL MATTING

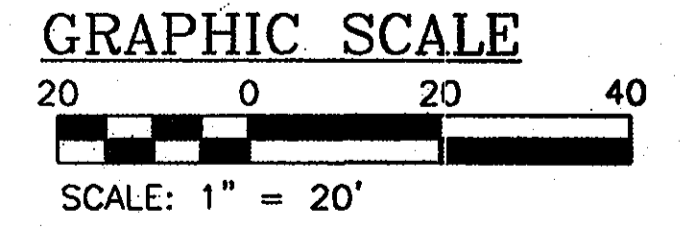
- EXISTING UTILITIES:**
- WATER
  - UNDERGROUND ELECTRIC
  - SANITARY
  - STORM DRAIN
  - TELEPHONE
  - WETLAND
  - WETLAND BUFFER
  - STREAM BUFFER
  - FOREST CONSERVATION EASEMENT
  - MANHOLE
  - GATE VALVE
  - FIRE HYDRANT
  - ELECTRIC MANHOLE
  - STREET LIGHT

- PROPOSED UTILITIES:**
- WATER
  - UNDERGROUND ELECTRIC
  - SEWER
  - STORM DRAIN
  - TELEPHONE
  - GATE VALVE
  - FIRE HYDRANT
  - ELECTRIC HANDHOLE
  - EXTERIOR LIGHT



**TRAVERSE 5**  
 IRON BAR AND CAP  
 Northing= 541676.74  
 Easting= 1339816.04  
 Elev=427.78

**TRAVERSE 4**  
 IRON BAR AND CAP  
 Northing= 542110.92  
 Easting= 1339537.04  
 Elev= 391.35



**APPROVED PLANNING BOARD of HOWARD COUNTY**  
 DATE: 9/17/09  
 RES. CASE NO.: 16

**APPROVED: DEPARTMENT OF PLANNING AND ZONING**  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: 10-16-09  
 CHIEF, DIVISION OF LAND DEVELOPMENT: 10/15/09  
 DIRECTOR: 10/15/09

12" CAP & BUTTRESS  
 POTOMAC ELECTRIC  
 POWER COMPANY  
 LIBER 2352 FOLIO 575

30" PUBLIC WATER,  
 STORM DRAIN AND  
 UTILITY EASEMENT

OWNER:  
 DEPARTMENT OF PUBLIC WORKS  
 HOWARD COUNTY, MARYLAND  
 9250 BENDIX ROAD  
 COLUMBIA, MARYLAND  
 PHONE: (410)313-4400

PROFESSIONAL CERTIFICATION. I hereby certify 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. 33925. Expiration Date 01/15/11.

**DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND**

Director of Public Works: 9/26/09  
 Chief, Bureau of Engineering: 9/28/09  
 Chief, Bureau of Utilities: 9/26/09  
 Chief, Utility Design Division: 9/26/09

**KCI TECHNOLOGIES**  
 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS  
 936 RIMMERSBROOK ROAD  
 SPASS, MD 21152  
 Phone: (410) 316-7800  
 Fax: (410) 316-7935  
 www.kci.com



|                     |         |
|---------------------|---------|
| DES:                | SEA     |
| DRN:                | LFN     |
| CHK:                | JRK     |
| DATE:               | 8/09    |
| BY:                 | NO.     |
| REVISION:           |         |
| DATE:               |         |
| 600' SCALE MAP NO.: | 41      |
| BLOCK NO.:          | 21 & 22 |

**STAKE OUT PLAN - LEGEND AND SYMBOLS**

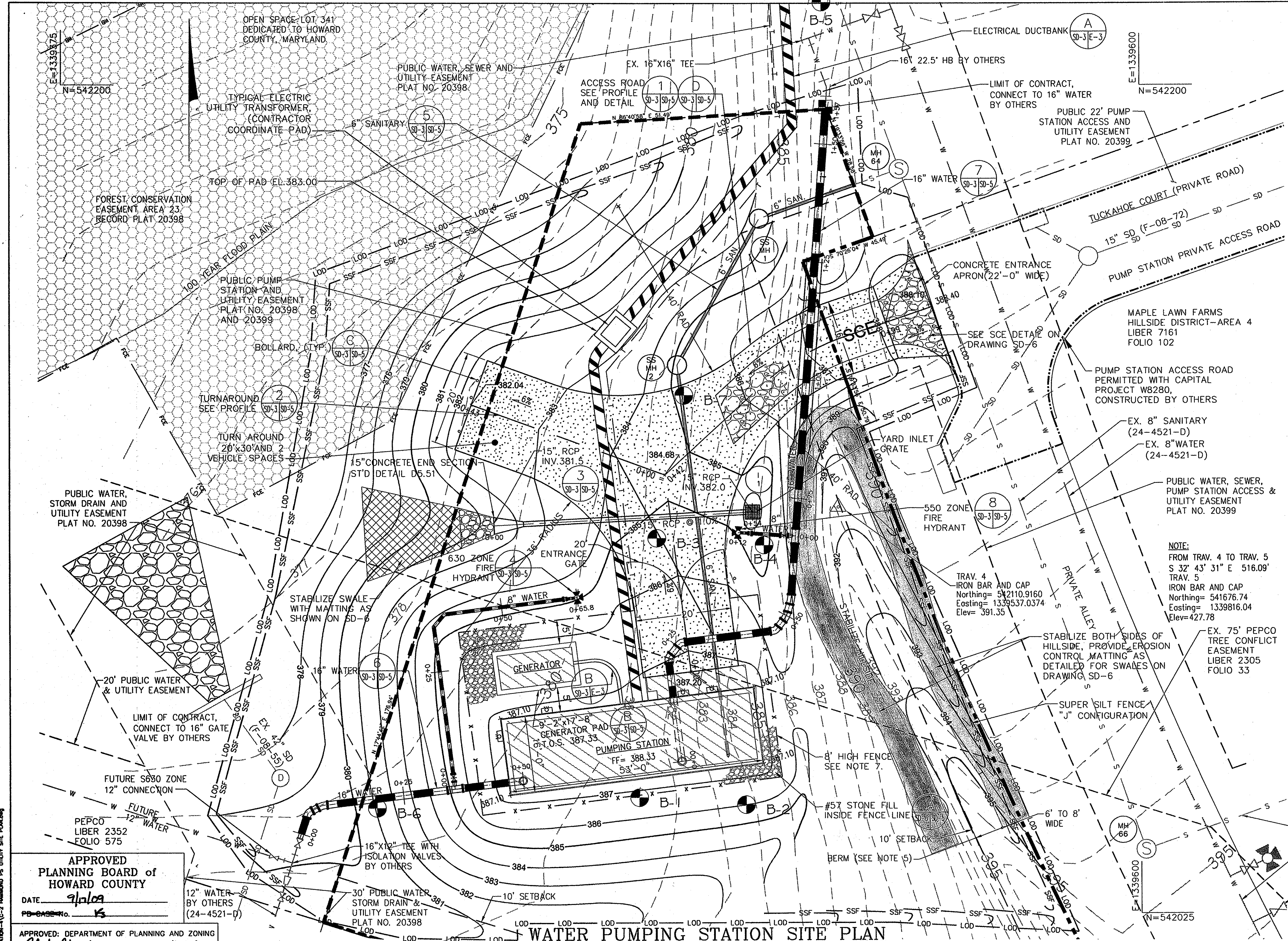
MAPLE LAWN FARMS, HILLSIDE DISTRICT, AREA 4 OPEN SPACE LOT 341  
 TAX MAP 41, SECTION/AREA 0.47 AC, PARCEL NO. 205,  
 ZONING MXD-3, GRID 21&22, LIBER 11930, FOLIO 193

**MAPLE LAWN PUMP STATION**  
 CAPITAL PROJECT No. W8280  
 CONTRACT No. 44-4516

ELECTION DISTRICT NO.5 HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
 SHEET 3 OF 21

08-22-2009 - 1:17 PM  
 M:\2009\07\07\09\MapleLawnPumpStation-AC-1\HAMMOND PS SITE PLAN.dwg



- NOTES:**
1. COMMERCIAL TRUCK 48-FOOT TURNING RADIUS.
  2. SEE SHEET SD-2 FOR SITE LEGEND AND UTILITY SYMBOLS.
  3. TELEPHONE AND ELECTRIC UTILITIES SHALL BE FIELD RUN WITH A MINIMUM OF 24" COVER.
  4. FOR UTILITIES LOCATION SEE STAKEOUT TABLE ON SD-2.
  5. CUT THE EXISTING BERM 36-INCHES, COMPACT 8" LIFTS TO 95% COMPACTION TO PROPOSED GRADES. CONSTRUCT BERM TO WIDTH SHOWN ON DRAWING SD-3, SEE LANDSCAPE DETAILS ON DRAWING SD-4.
  6. NO STOCKPILING ALLOWED ON SITE.
  7. PERIMETER CURB SHALL BE INSTALLED ALONG THE FENCE CENTERLINE CONNECTING POST FOUNDATIONS AS SHOWN ON DETAIL A ON DRAWING SD-5.

| BORING LOCATION TABLE |           |            |
|-----------------------|-----------|------------|
| BORING                | N-COORD.  | E-COORD.   |
| B-1                   | 542049.65 | 1339495.39 |
| B-2                   | 542048.15 | 1339517.68 |
| B-3                   | 542104.42 | 1339499.17 |
| B-4                   | 542102.90 | 1339521.54 |
| B-5                   | 542217.58 | 1339533.72 |
| B-6                   | 542047.44 | 1339440.72 |
| B-7                   | 542134.52 | 1339504.86 |

**ADDITIONAL IMPERVIOUS AREA CALCULATION:**

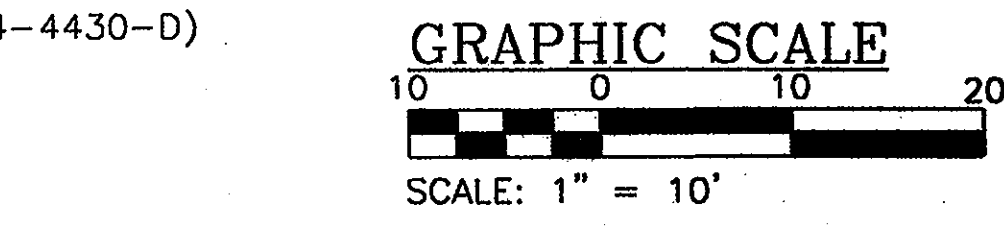
| SITE FEATURES:  | AREA                       |
|-----------------|----------------------------|
| FENCED SITE     | 2444 FT <sup>2</sup>       |
| ACCESS ROAD     | 2417 FT <sup>2</sup>       |
| TRANSFORMER PAD | 42 FT <sup>2</sup>         |
| <b>TOTAL</b>    | <b>4903 FT<sup>2</sup></b> |

**EXCAVATION:**

|              |                                      |
|--------------|--------------------------------------|
| CUT          | 56 YD <sup>3</sup>                   |
| BACKFILL     | 1650 YD <sup>3</sup>                 |
| MASS BALANCE | 1594 YD <sup>3</sup> BORROW REQUIRED |

**15" SD CRITERIA:**

|          |            |
|----------|------------|
| FLOW     | = 0.05 CFS |
| VELOCITY | = >2.0 FPS |
| HGL      | = 382.08   |
| SLOPE    | = 1.0%     |



APPROVED  
PLANNING BOARD of  
HOWARD COUNTY  
DATE: 9/16/09  
PB CASE NO. 15

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE: 10/16/09  
DATE: 10/15/09  
DATE: 10/16/09

OWNER:  
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
9250 BENDIX ROAD  
COLUMBIA, MARYLAND  
PHONE: (410)313-4400

**WATER PUMPING STATION SITE PLAN**

SCALE: 1" = 10'  
PROFESSIONAL CERTIFICATION: I hereby certify 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. 33925, Expiration Date 01/15/11.

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
DATE: 9/23/09  
DATE: 9/23/09  
DATE: 9/23/09

ENGINEERS  
PLANNERS  
SCIENTISTS  
CONSTRUCTION MANAGERS  
KCI TECHNOLOGIES  
936 RIBBROOK ROAD  
SPARKS, MD 21152  
PHONE: (410) 316-7800  
FAX: (410) 316-7935  
www.kci.com



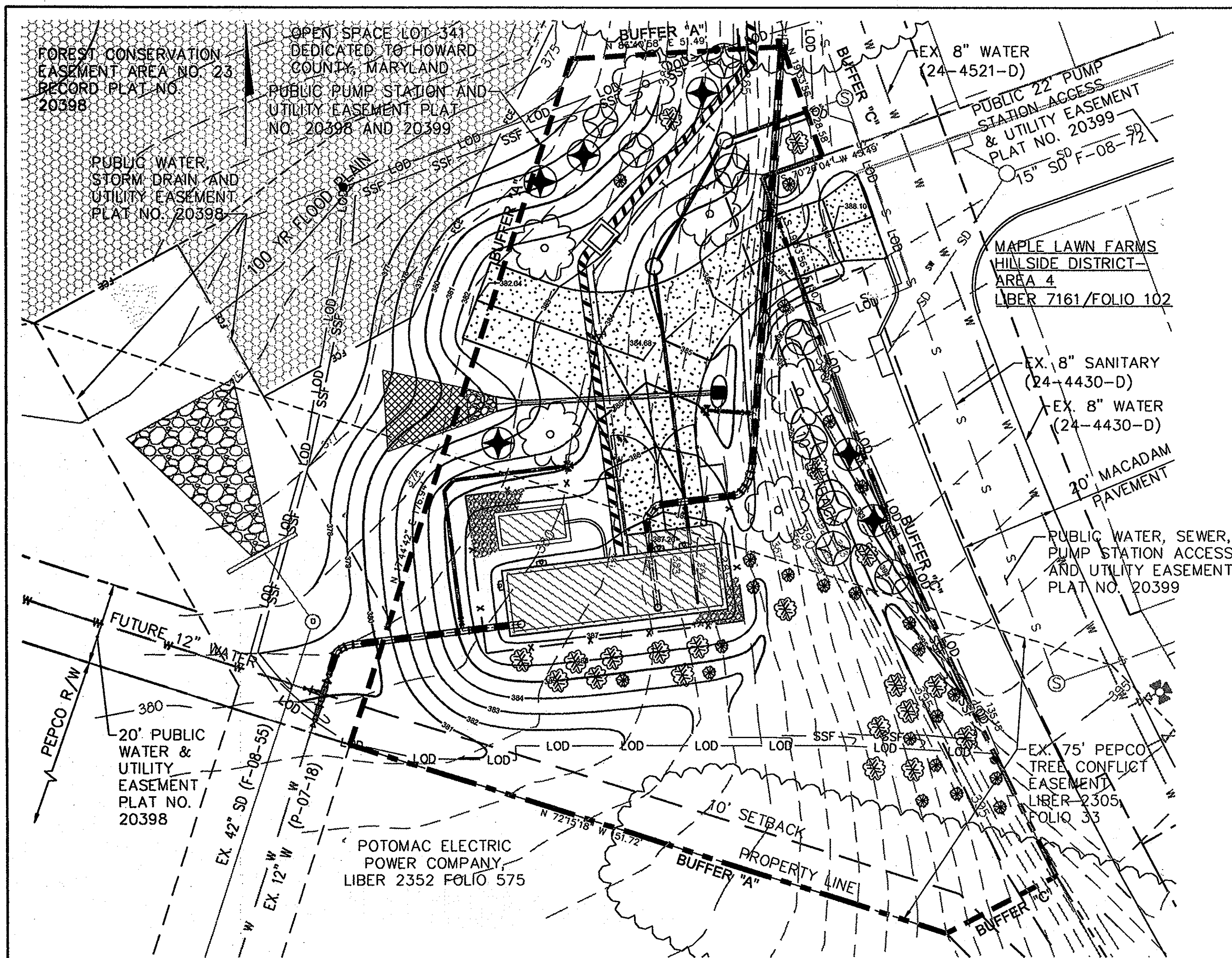
DES: SEA  
DRN: LFN  
CHK: JRK  
DATE: 8/09  
BY NO. REVISION

SITE DEVELOPMENT PLAN  
DATE: 8/09  
DATE: 8/09  
DATE: 8/09

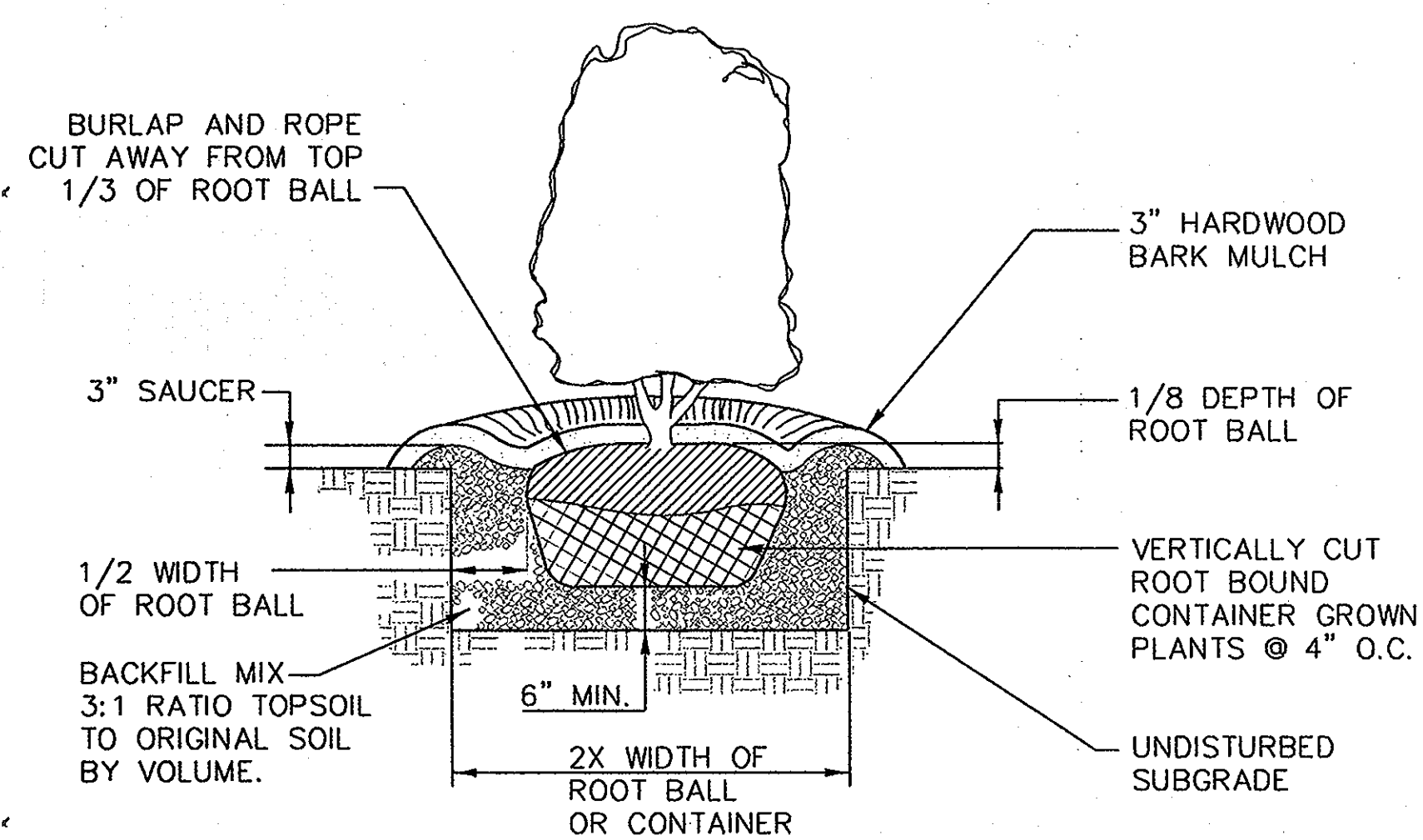
MAPLE LAWN FARMS, HILLSIDE DISTRICT, AREA 4 OPEN SPACE LOT 341  
TAX MAP 41, SECTION/AREA 0.47 AC, PARCEL NO. 205,  
ZONING MXD-3, GRID 21&22, LIBER 11930, FOLIO 193

MAPLE LAWN PUMP STATION  
CAPITAL PROJECT No. W8280  
CONTRACT No. 44-4516  
ELECTION DISTRICT NO.5 HOWARD COUNTY, MARYLAND

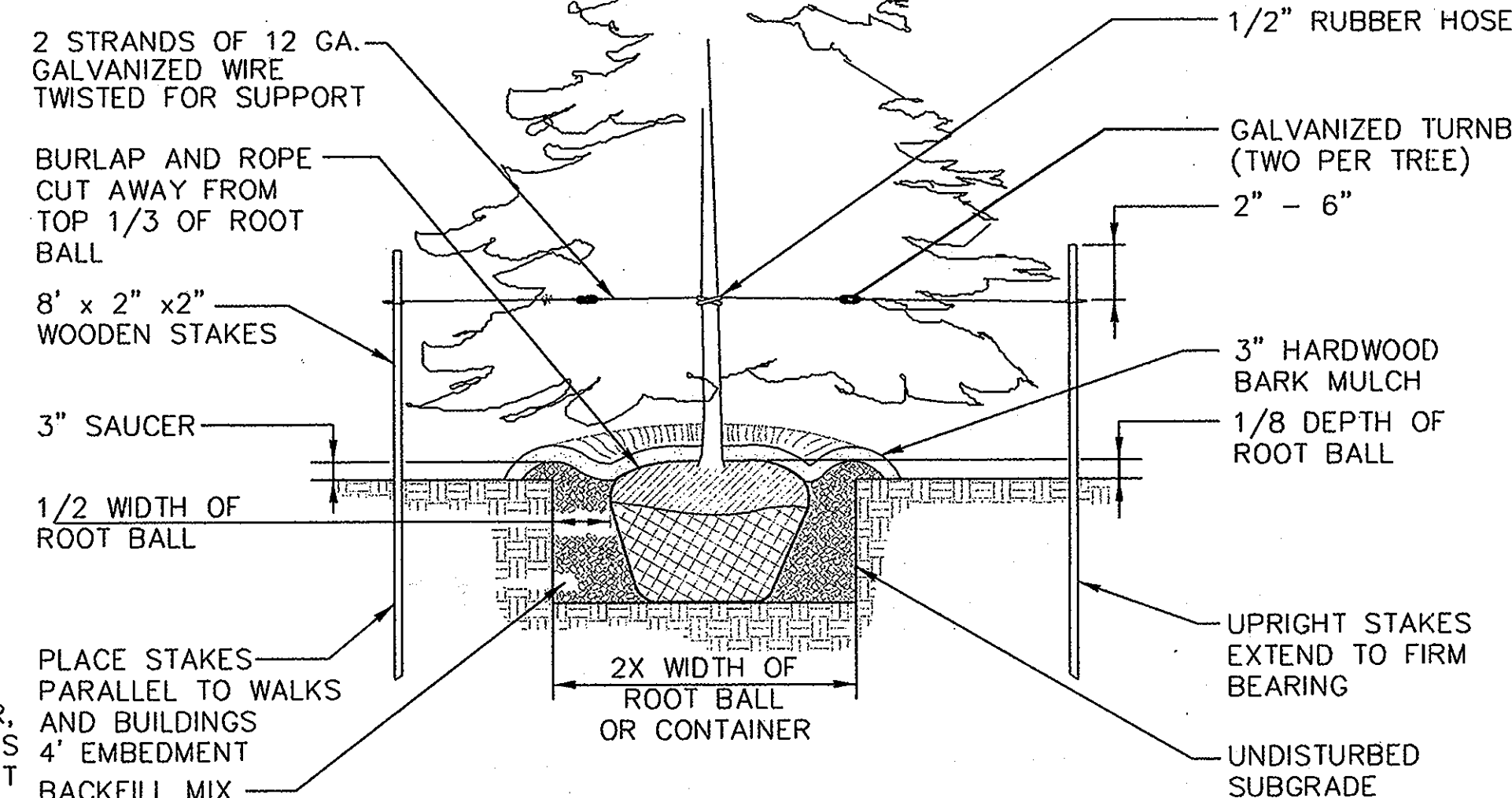
SD-3  
3 of 6  
SCALE AS SHOWN  
SHEET  
4 of 21



**1 LANDSCAPE SITE PLAN**  
SD-4  
SCALE 1"=20'



**B SHRUB PLANTING DETAIL**  
SD-4  
NOT TO SCALE



**A TREE PLANTING DETAIL**  
SD-4  
NOT TO SCALE

**CARE OF PLANTS AFTER CONSTRUCTION:**

IF SOILS ARE NOT WET, THE AREA WILL BE WATERED IMMEDIATELY AFTER PLANTING. THE SOIL SUBSTRATE MUST BE KEPT SATURATED DURING PLANTING AND CONTINUED ACCORDING TO CLIMATIC CONDITIONS AND UNTIL PLANTINGS BECOME FULLY ESTABLISHED AS DETERMINED BY THE PROFESSIONAL LANDSCAPER. ALL PLANTS SHALL BE GUARANTEED FOR A PERIOD OF 1-YEAR AFTER FINAL ACCEPTANCE.

**PLANT LIST**

| SYMBOL                           | QTY. | NAMES (BOTANICAL/SCIENTIFIC)                      | SIZE      | SPACING |
|----------------------------------|------|---|-----------|---------|
| <b>PROPOSED SHADE TREES</b>      |      |   |           |         |
|                                  | AR   | 6 ACER RUBRUM 'AUTUMN FLAME' / AUTUMN FLAME MAPLE | 8'-10' HT | 20'-0"  |
| SUBTOTAL                         |      | 6   |           |         |
| <b>PROPOSED EVERGREEN TREES</b>  |      |   |           |         |
|                                  | PS   | 9 PINUS STROBUS / WHITE PINE                      | 6'-8' HT  | 16'-0"  |
|                                  | PA   | 6 PICEA ABIES / NORWAY SPRUCE                     | 6'-8' HT  | 15'-0"  |
| SUBTOTAL                         |      | 15  |           |         |
| <b>PROPOSED EVERGREEN SHRUBS</b> |      |   |           |         |
|                                  | IO   | 20 ILEX OPACS / AMERICAN HOLLY                    | 4'-6' HT  | 8'-0"   |
|                                  | AC   | 23 AMELANCHIER CANADENSIS / SERVICEBERRY SHRUB    | 3'-4' HT  | 6'-0"   |
| SUBTOTAL                         |      | 43  |           |         |

NOTE: THE PLANTINGS QUANTIFIED FOR THE SITE FRONTAGE "BUFFER-C" HAVE BEEN LOCATED WITHIN A LIMITED REGION OUTSIDE OF THE PEPCO TREE-LINE CONFLICT ZONE SHOWN. ONLY EVERGREEN SHRUBS CAN BE LOCATED WITHIN THE TREE-LINE CONFLICT ZONE. THEREFORE PLANTINGS HAVE BEEN ARRANGED ALONG THE FRONTAGE AND ADJACENT OPEN SPACE PERIMETER TO SUIT AVAILABLE SPACE.

**DEVELOPERS / OWNERS LANDSCAPE CERTIFICATE**

I / WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I / WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S / OWNER'S NAME

**LANDSCAPE NOTES:**

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND THE MAPLE LAWN FARMS LANDSCAPE DESIGN CRITERIA WITH 7 SHADE TREES AND 13 EVERGREEN TREES REQUIRED AND 6 SHADE TREES, 15 EVERGREEN TREES AND 43 SHRUBS ARE BEING PROVIDED. LANDSCAPE SURETY IS NOT REQUIRED FOR THIS COUNTY CAPITAL PROJECT. THE TYPE AND QUANTITY OF PLANTS PROVIDED FOR THIS PROJECT HAS BEEN APPROVED BY THE DEVELOPER FOR THE MAPLE LAWN FARMS DEVELOPMENT.
- THE LANDSCAPE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND UTILITY LOCATIONS SHOWN WITHIN THE PROJECT LIMITS AND SHALL INFORM THE ENGINEER OF ANY DISCREPANCIES OR POTENTIAL PROBLEMS PRIOR TO COMMENCING WORK.
- ALL PLANTING AND MULCHING SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS AND MD SHA BOOK OF STANDARDS, HIGHWAY AND INCIDENTAL STRUCTURES, CATEGORY 7 - LANDSCAPING, AND THE 2000 MARYLAND STORM WATER DESIGN MANUAL, VOLUMES 1 AND 2.
- DO NOT PLANT TREES OR SHRUBS WITHIN 5'-0" OF THE CENTERLINE OF UNDERGROUND UTILITY LINES. DO NOT PLANT TREES WITHIN 10'-0" OF THE CENTERLINE OF OVERHEAD UTILITY LINES OR WATER AND SEWER. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING 'MISS UTILITY' AT 1-800-257-7777 A MINIMUM OF 72 HOURS PRIOR TO PROCEEDING WITH ANY EXCAVATION FOR PLANT MATERIAL INSTALLATION.
- ALL TREES GREATER THAN OR EQUAL TO 6'-0" IN HEIGHT SHALL BE STAKED PER THE PLANTING DETAILS.
- AT THE TIME OF PLANT INSTALLATION, ALL TREES AND SHRUBS LISTED AND APPROVED ON THE LANDSCAPE PLAN, SHALL COMPLY WITH THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THE APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS.
- THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

**PERIMETER LANDSCAPE SCHEDULE**

| CATEGORY   | ADJACENT TO PERIMETER PROPERTIES |     |
|--|----------------------------------|-----|
|  | C                                | A   |
| LANDSCAPE TYPE   | C                                | A   |
| LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER  | 263                              | 383 |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | NO                               | NO  |
| CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED) | NO                               | NO  |
| NUMBER OF PLANTS REQUIRED  | AS SHOWN                         | N/A |
| SHADE TREES  | 7                                | 0   |
| EVERGREEN TREES  | 13                               | 0   |
| SHRUBS   | 0                                | 0   |
| NUMBER OF PLANTS PROVIDED  |                                  |     |
| SHADE TREES  | 6                                | 0   |
| EVERGREEN TREES  | 13                               | 0   |
| EVERGREEN TREES SUBSTITUTED (2:1 SHADE TREE SUBSTITUTION)                        | 2                                | 0   |
| SHRUBS (10:1 SUBSTITUTION)   | 0                                | 0   |

**COMMENTS:**

C - ADJACENT RESIDENTIAL  
A - ADJACENT TO HOWARD COUNTY (PARKS AND RECREATION) OWNED PROPERTY AND PEPCO RIGHT-OF-WAY; THEREFORE NO LANDSCAPE PLANTINGS ARE REQUIRED

APPROVED  
PLANNING BOARD OF  
HOWARD COUNTY  
DATE: 9/17/09  
PREPARED BY: KS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
DATE: 10-16-09  
DATE: 10/15/09  
DATE: 10/20/09

OWNER:  
DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
9250 BENDIX ROAD  
COLUMBIA, MARYLAND  
PHONE: (410)313-4400

PROFESSIONAL CERTIFICATION. I hereby certify 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. 33923, Expiration Date 01/15/11.

DES: SEA

DRN: LFN

CHK: JRK

DATE: 8/09

BY: NO.

REVISION

**LANDSCAPE PLANS AND DETAILS**

DATE: 600' SCALE MAP NO. 41

21 & 22

MAPLE LAWN FARMS, HILLSIDE DISTRICT, AREA 4 OPEN SPACE LOT 341  
TAX MAP 41, SECTION/AREA 0.47 AC, PARCEL NO. 205  
ZONING MXD-3, GRID 21&22, LIBER 11930, FOLIO 193

SD-4  
4 OF 6

CAPITAL PROJECT No. W8280  
TRACT No. 44-4516

ELECTION DISTRICT NO.5 HOWARD COUNTY, MARYLAND

5 OF 21

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND

ENGINEERS  
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936 RIDGEWOOD ROAD  
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DES: SEA

DRN: LFN

CHK: JRK

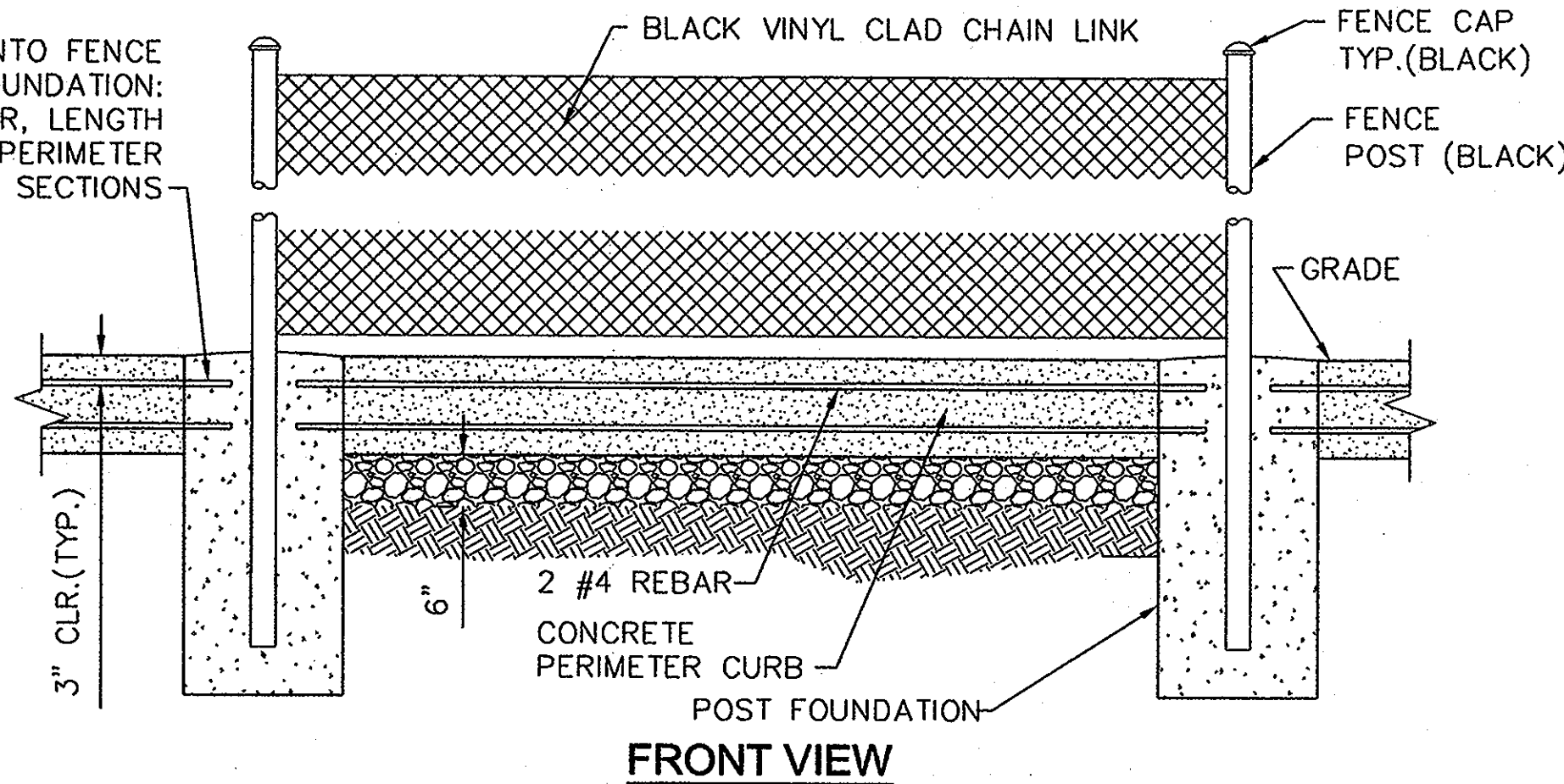
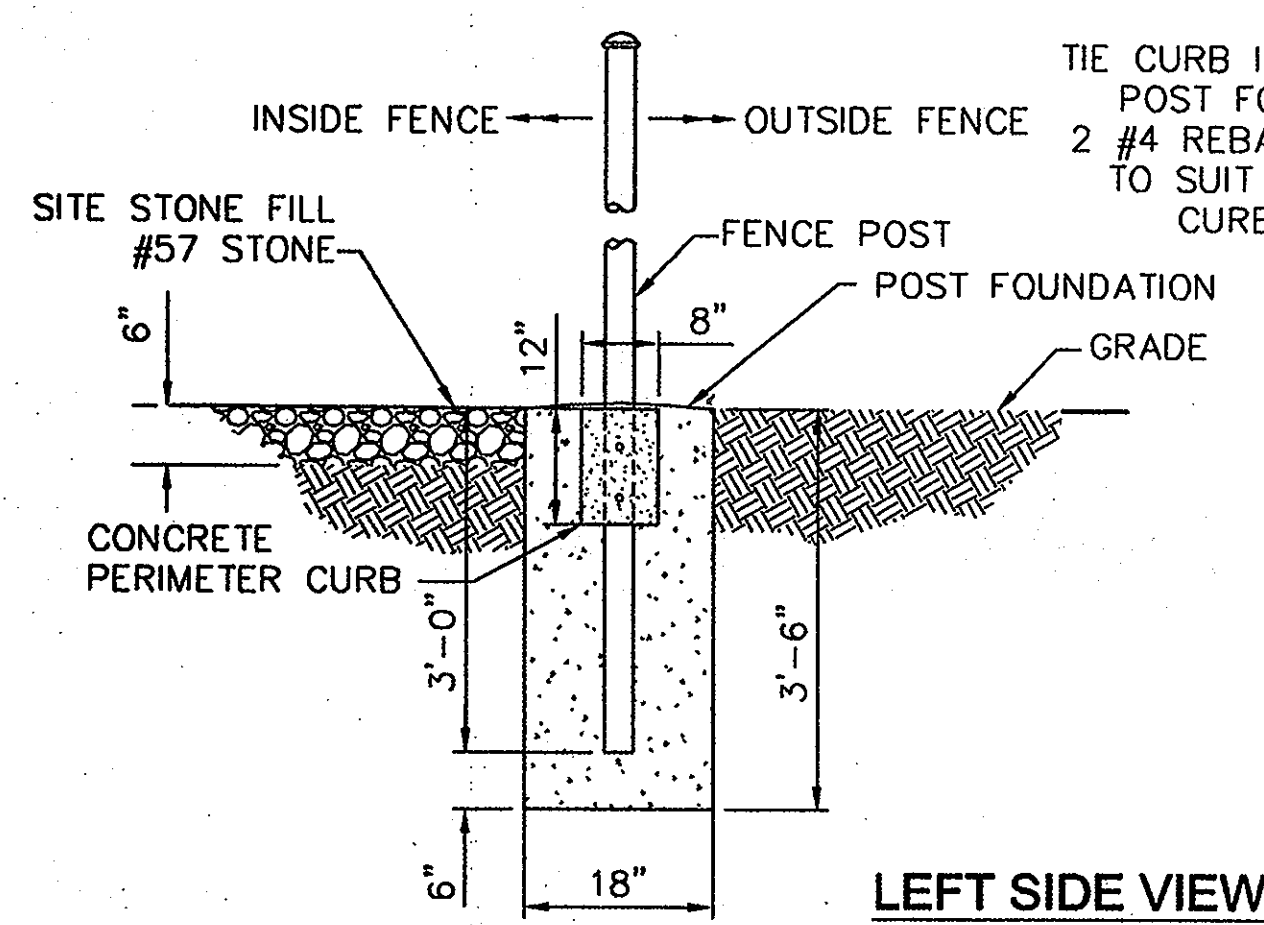
DATE: 8/09

BY: NO.

REVISION

DATE: 600' SCALE MAP NO. 41

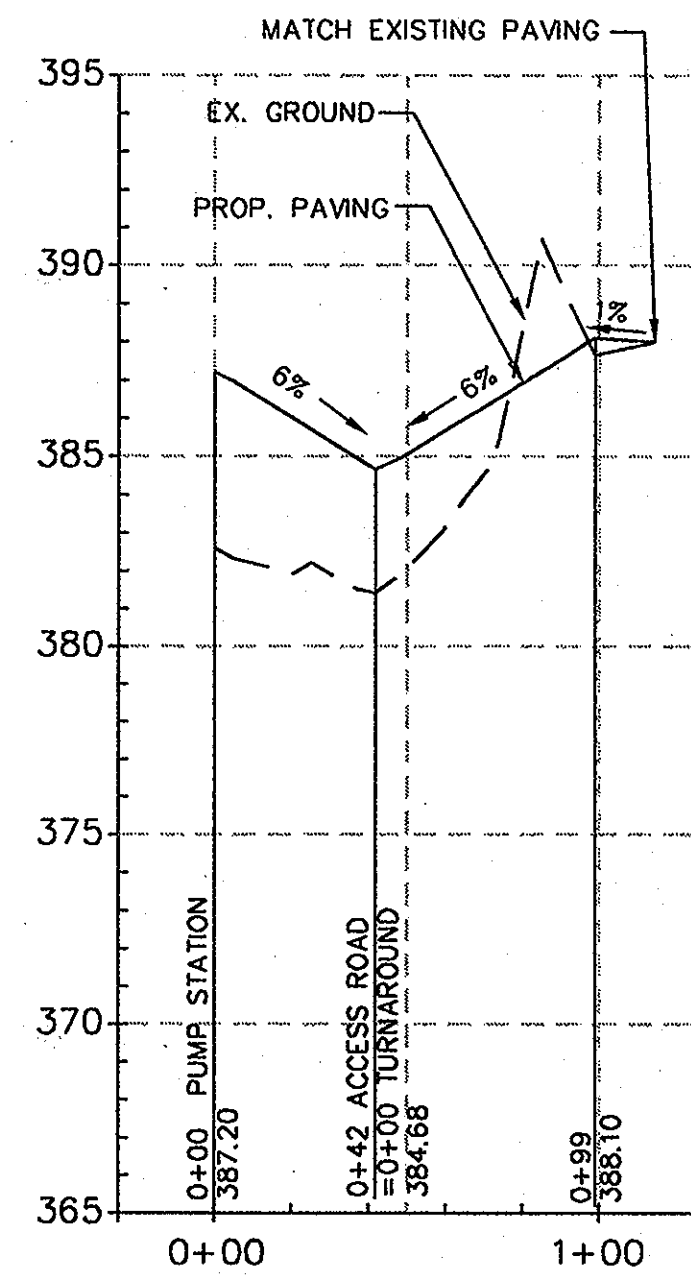
21 & 22



**A FENCE DETAIL**

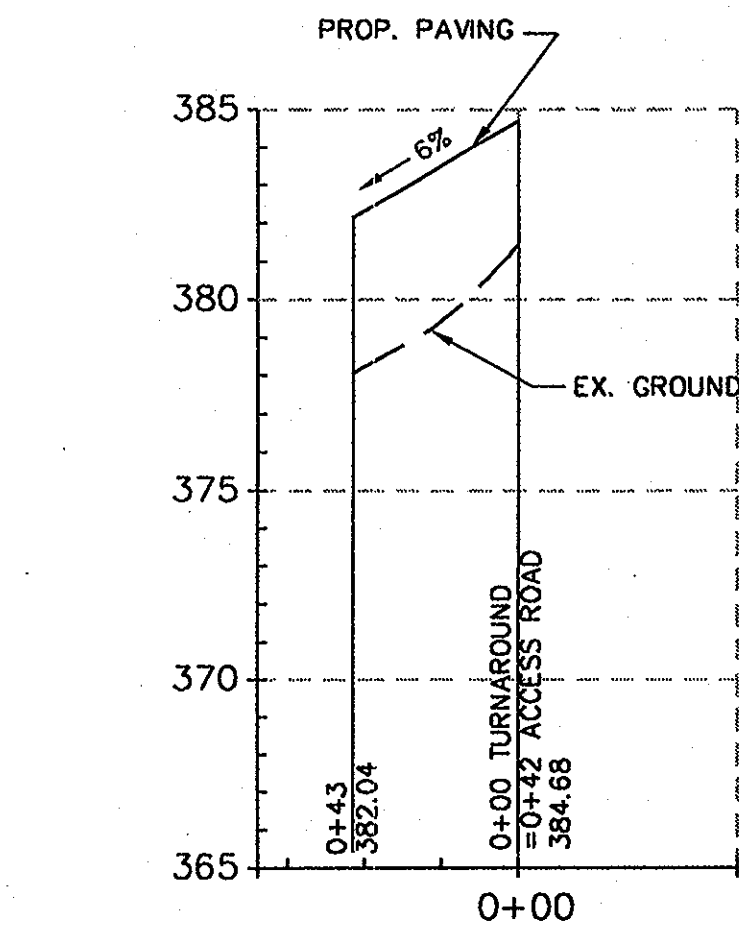
SCALE: NOT TO SCALE

- NOTES:
- FENCE SHALL BE PROVIDED IN ACCORDANCE WITH HOWARD CO. CHAIN LINK FENCE DETAIL G-7.21 FOR 8' HIGH FENCE.
  - PERIMETER CURB SHALL BE PROVIDED TO CONNECT FENCE POST FOUNDATIONS FOR THE ENTIRE SITE AS SHOWN ON SHEET SD-3.
  - FOOTERS FOR LINE POSTS SHALL BE 12" DIA. AND 36" DEEP



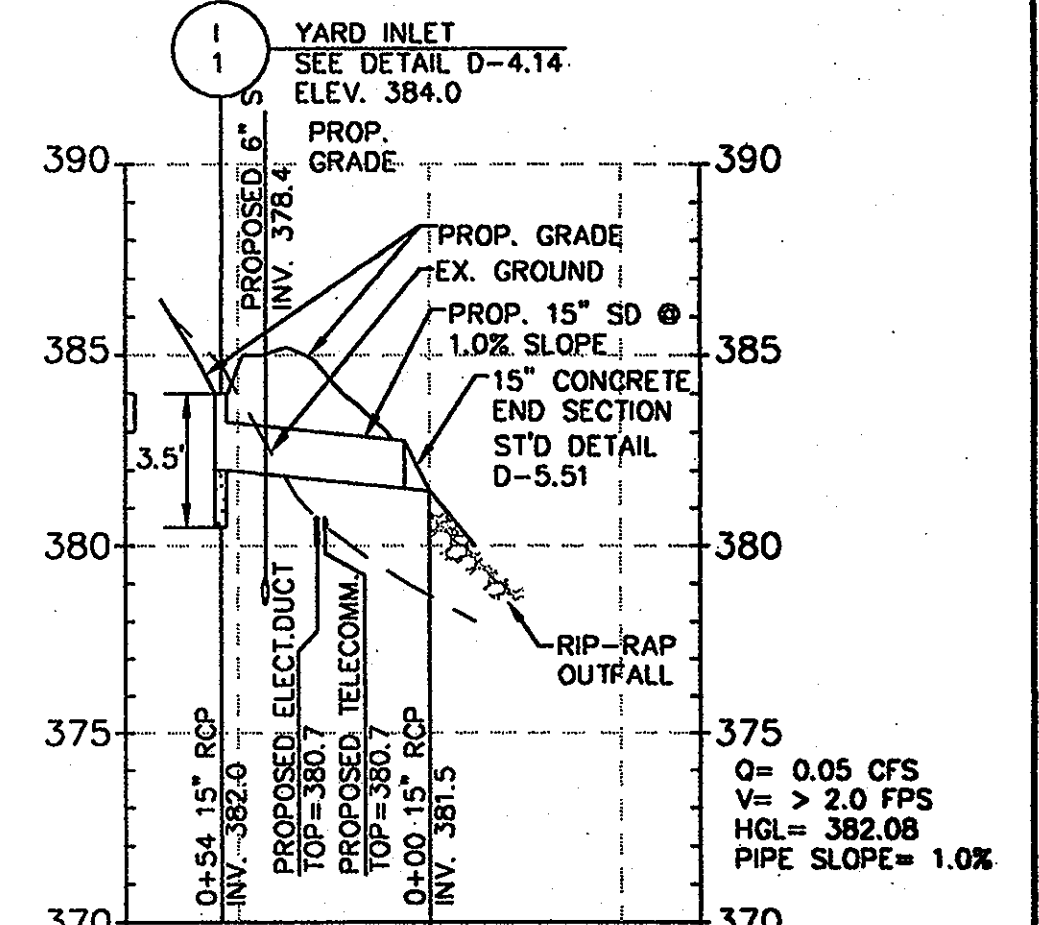
**1 ACCESS ROAD PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'



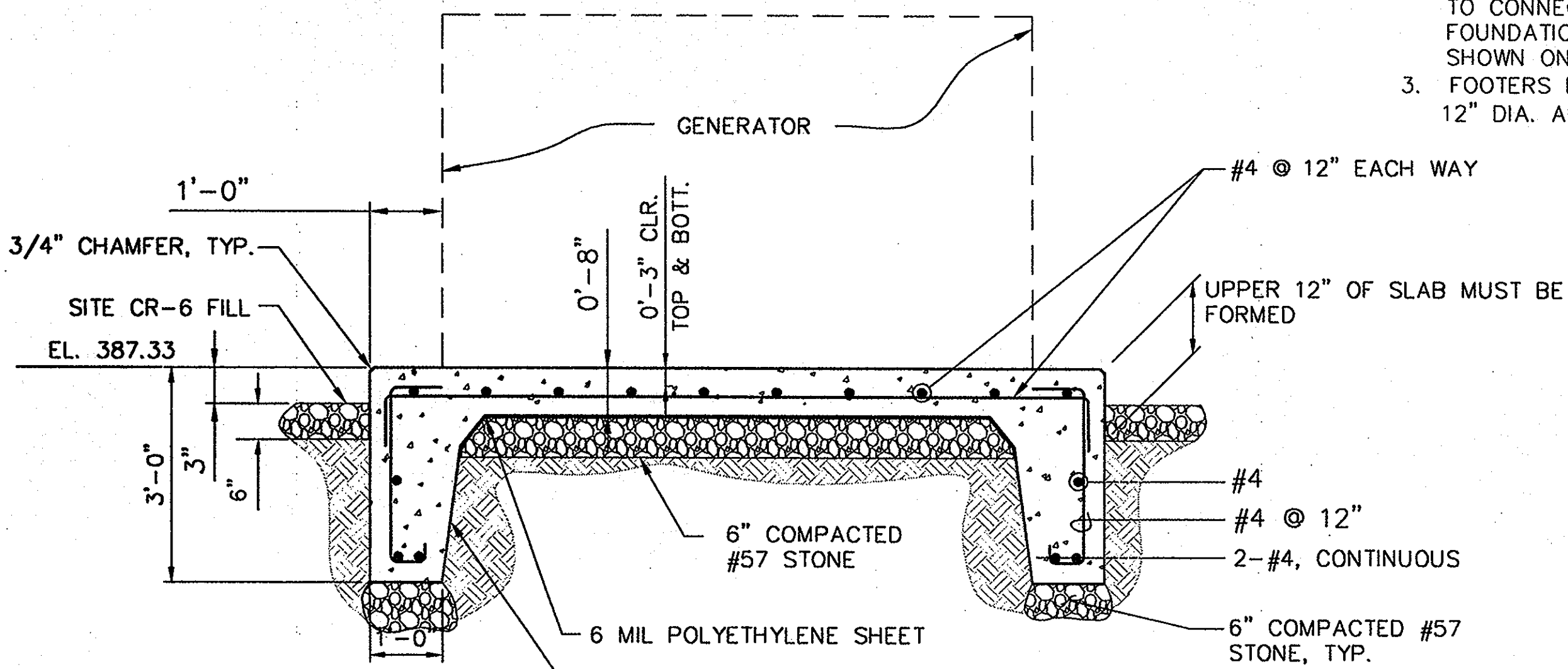
**2 TURNAROUND PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'



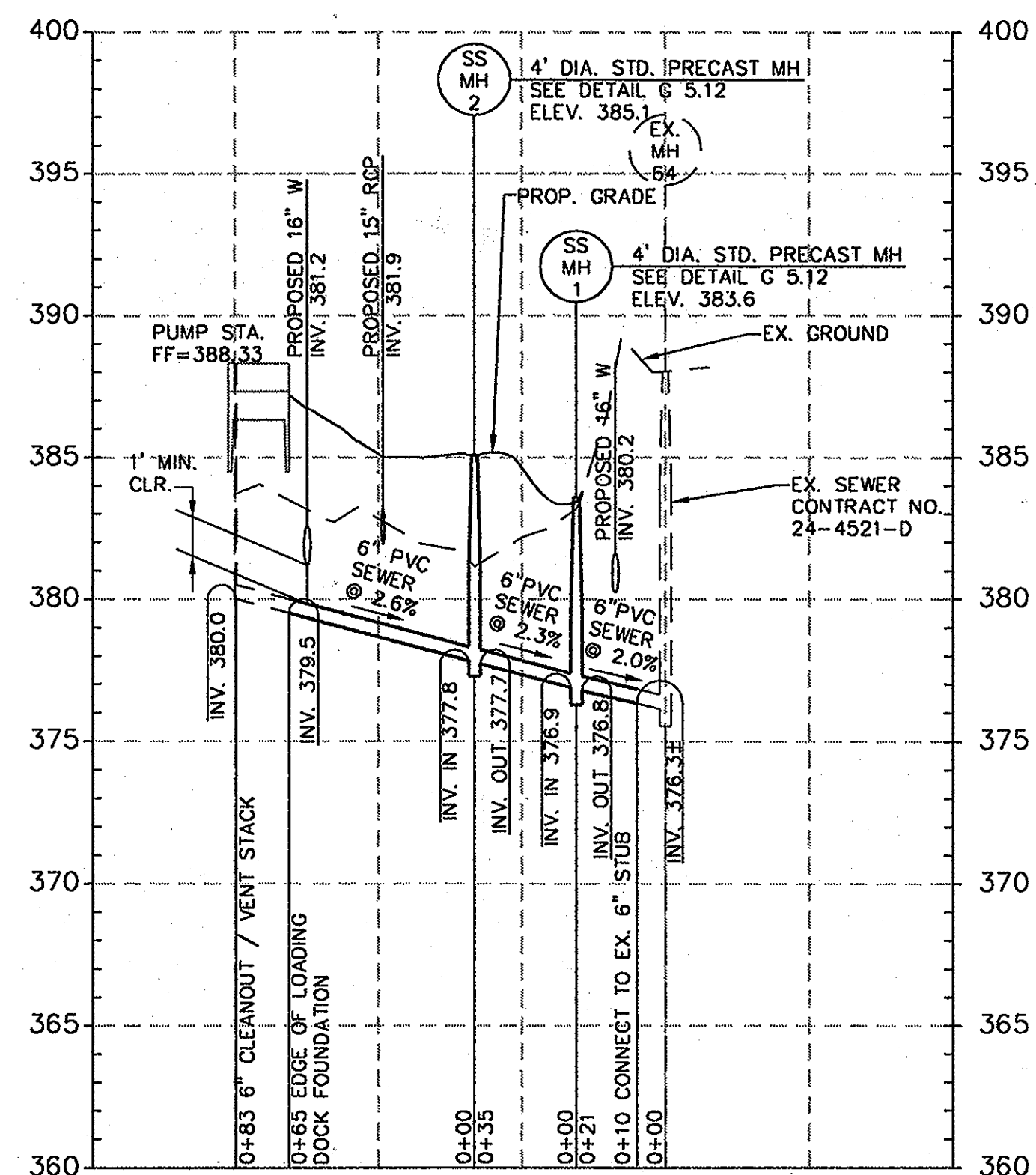
**3 15" RCP PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'



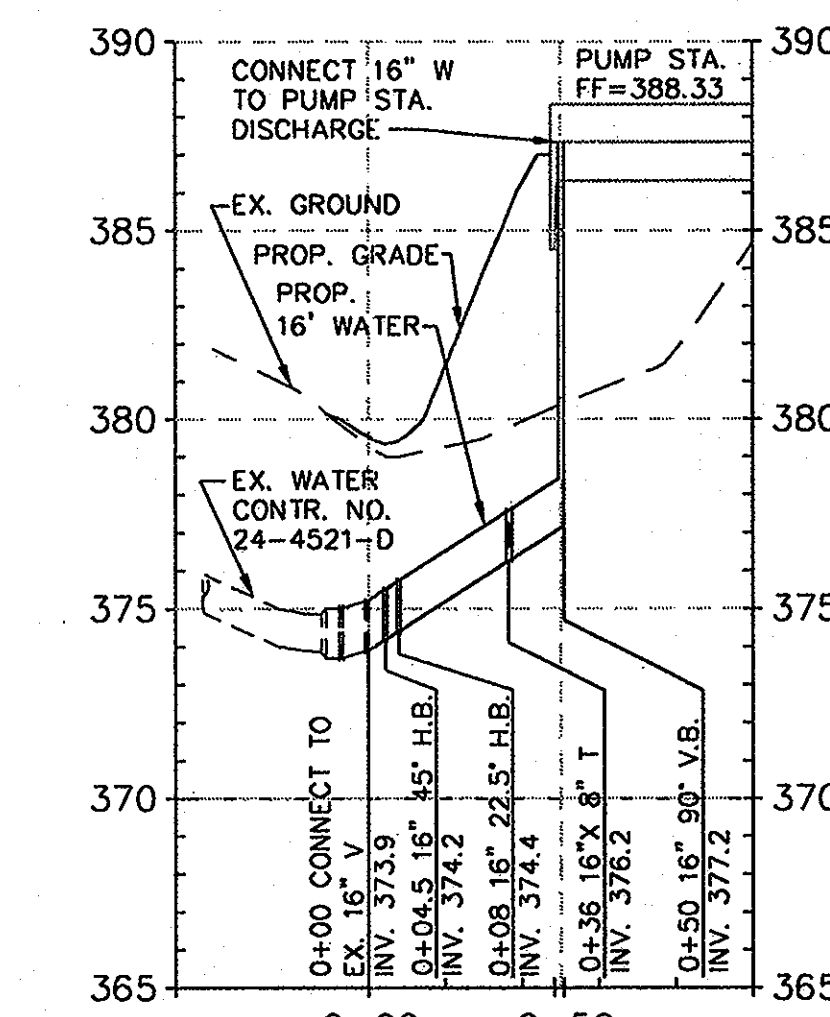
**B GENERATOR PAD DETAIL**

SCALE: NOT TO SCALE



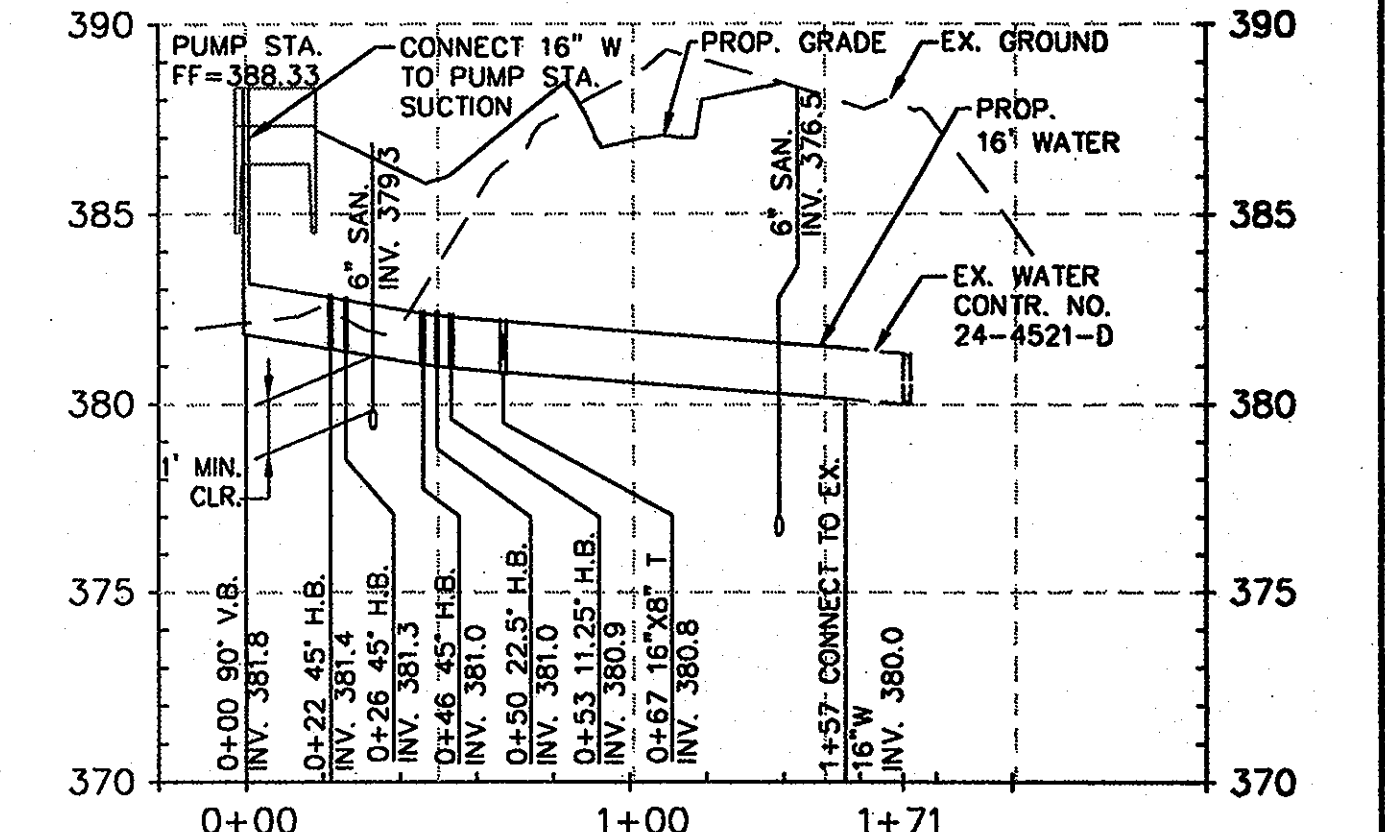
**5 6" SANITARY PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'



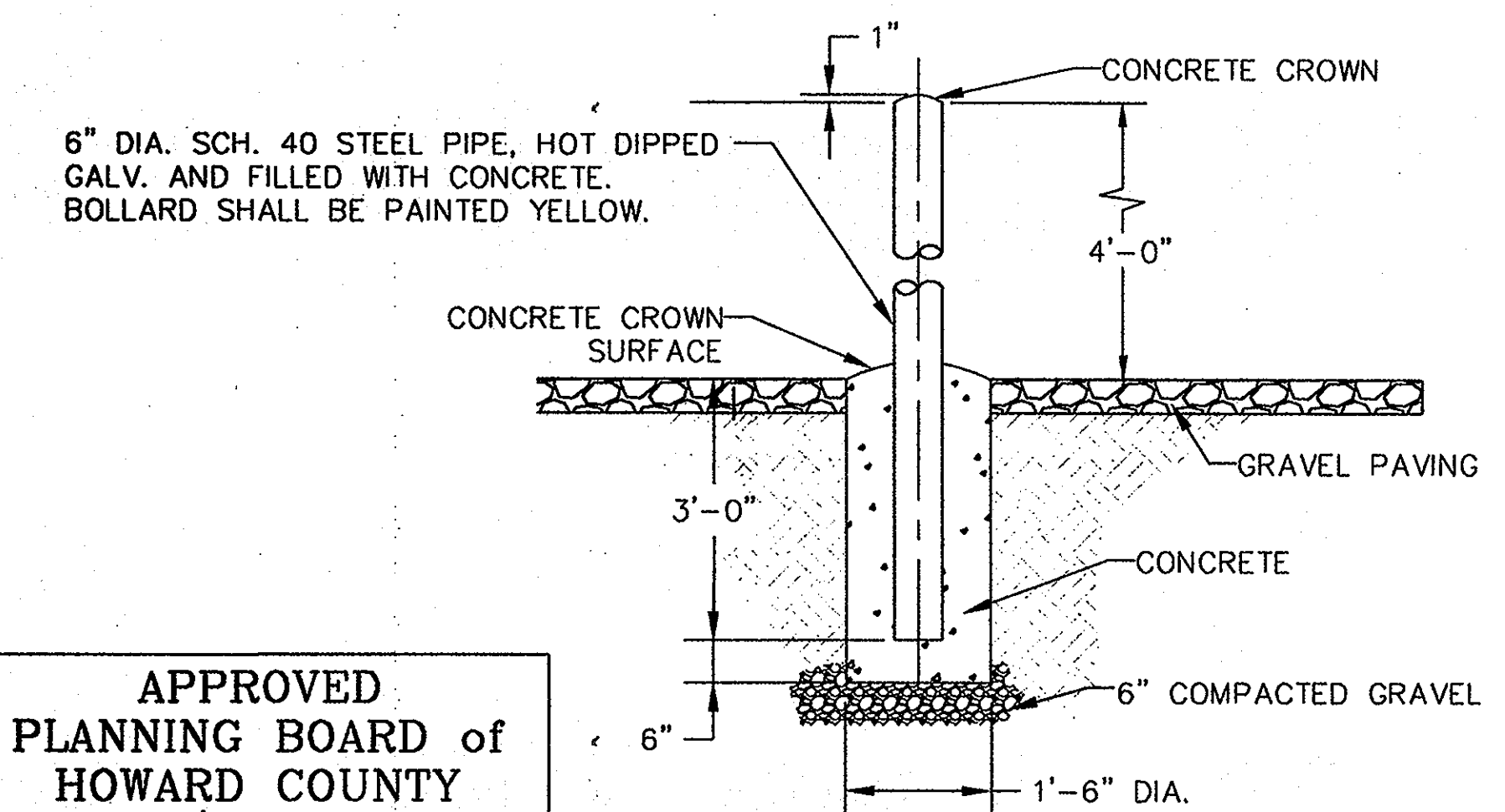
**6 16" (630) DISCHARGE WATER MAIN PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'



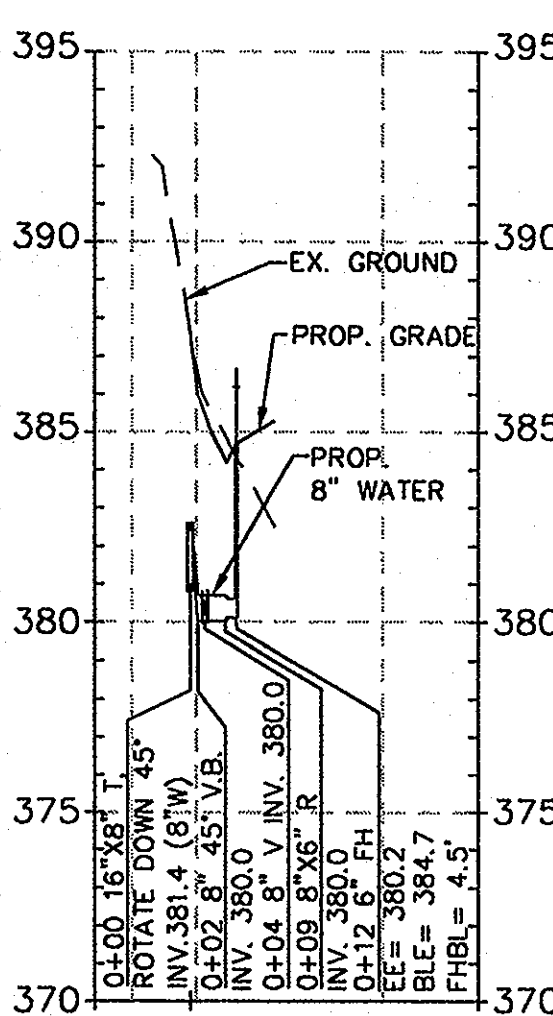
**7 16" (550) SUPPLY WATER MAIN PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'



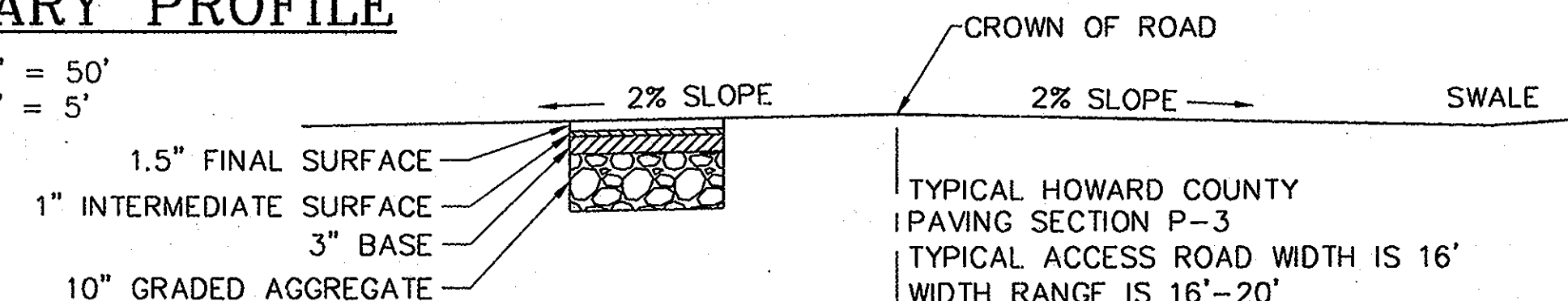
**C BOLLARD POST DETAIL**

SCALE: NOT TO SCALE



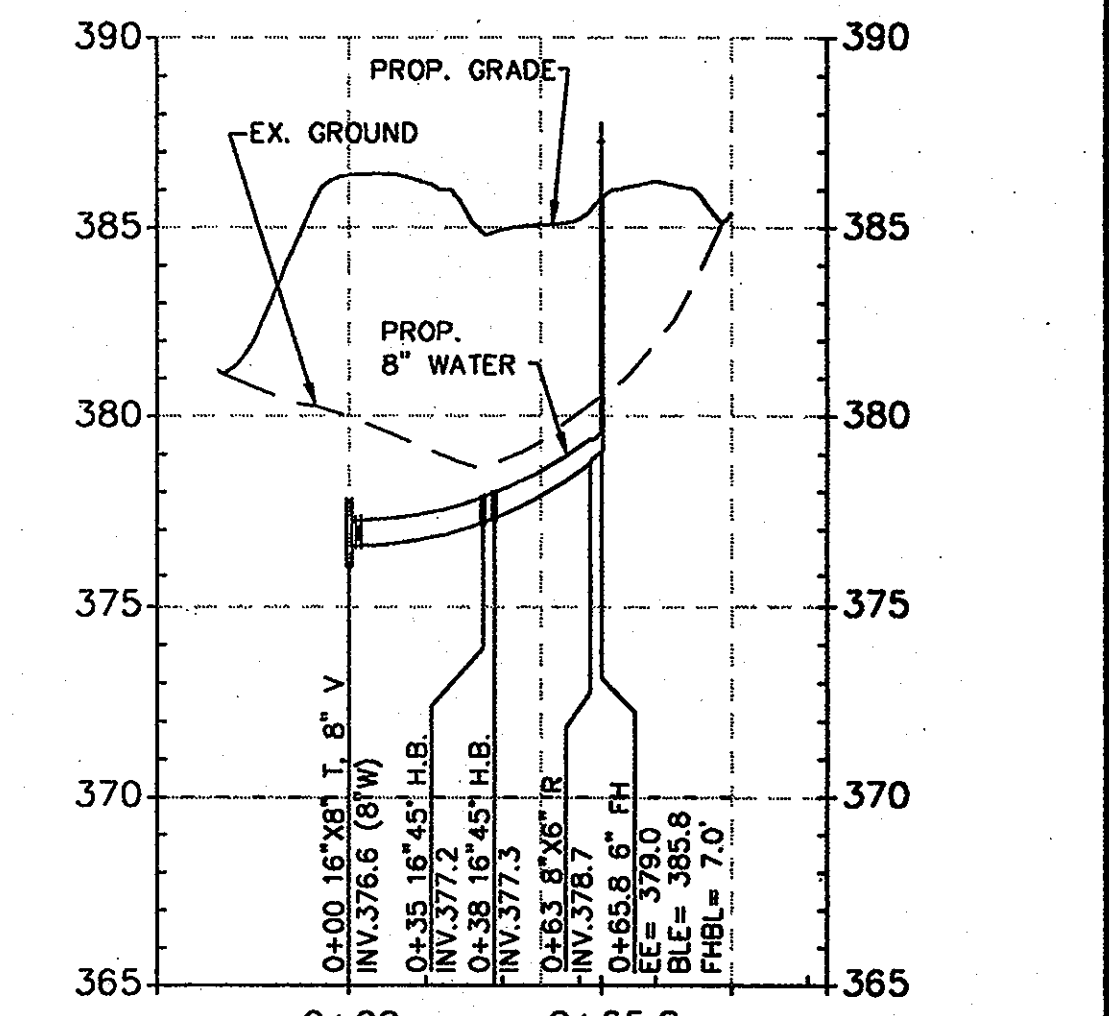
**8 550 ZONE HYDRANT PROFILE**

SCALE: NOT TO SCALE



**D ACCESS ROAD CROSS SECTION**

SCALE: NOT TO SCALE



**4 630 ZONE HYDRANT PROFILE**

SCALE: H: 1" = 50'  
V: 1" = 5'

APPROVED PLANNING BOARD OF HOWARD COUNTY  
DATE: 9/11/09  
DIRECTOR: [Signature]

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
[Signatures and Dates]

OWNER: DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
9250 BENDIX ROAD  
COLUMBIA, MARYLAND  
PHONE: (410) 313-4400

PROFESSIONAL CERTIFICATION. I hereby certify 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. 33925. Expiration Date 01/15/11.

MAPLE LAWN FARMS, HILLSIDE DISTRICT, AREA 4 OPEN SPACE LOT 341  
TAX MAP 41, SECTION/AREA 0.47 AC, PARCEL NO. 205,  
ZONING MXD-3, GRID 21&22, LIBER 11930, FOLIO 193

DEPARTMENT OF PUBLIC WORKS  
HOWARD COUNTY, MARYLAND  
[Signatures and Dates]

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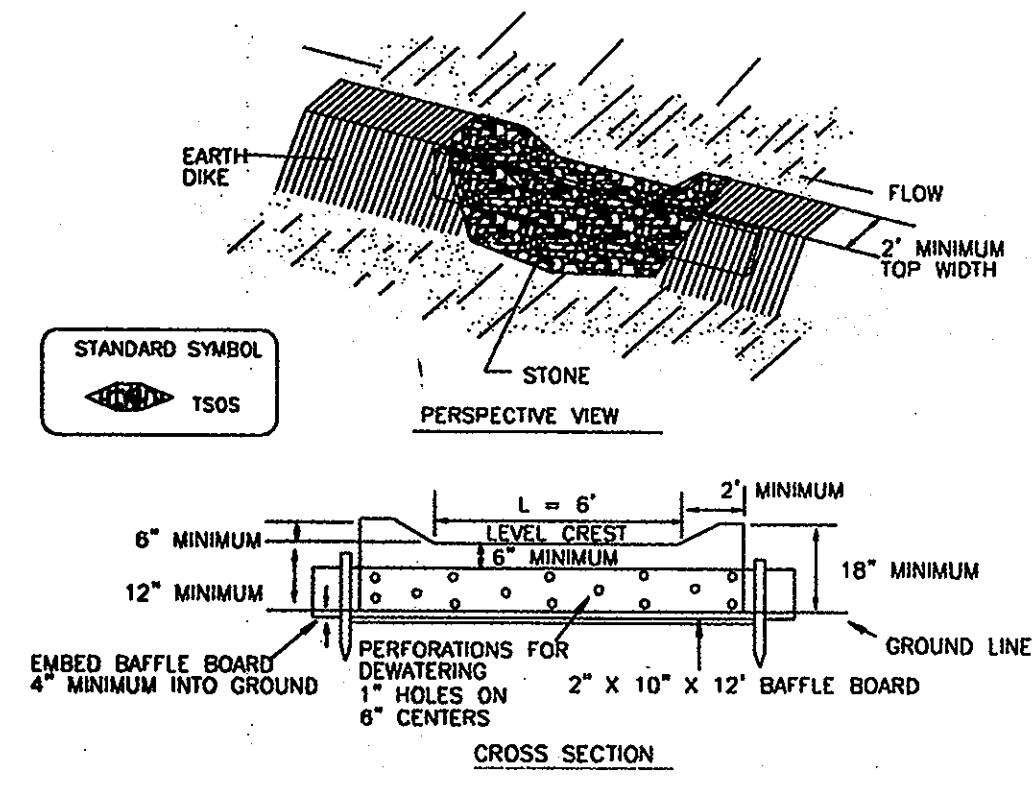
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| DES: SEA   |  |
| DRN: LFN   |  |
| CHK: JRK   |  |
| DATE: 8/09 |  |
| BY: NO.    |  |
| REVISION   |  |
| DATE       |  |

PROFILES - ACCESS ROAD AND SITE DETAILS

MAPLE LAWN PUMP STATION  
CAPITAL PROJECT No. W8280  
CONTRACT No. 44-4516  
ELECTION DISTRICT NO.5 HOWARD COUNTY, MARYLAND

SD-5  
5 OF 6  
SCALE AS SHOWN  
SHEET  
6 OF 21

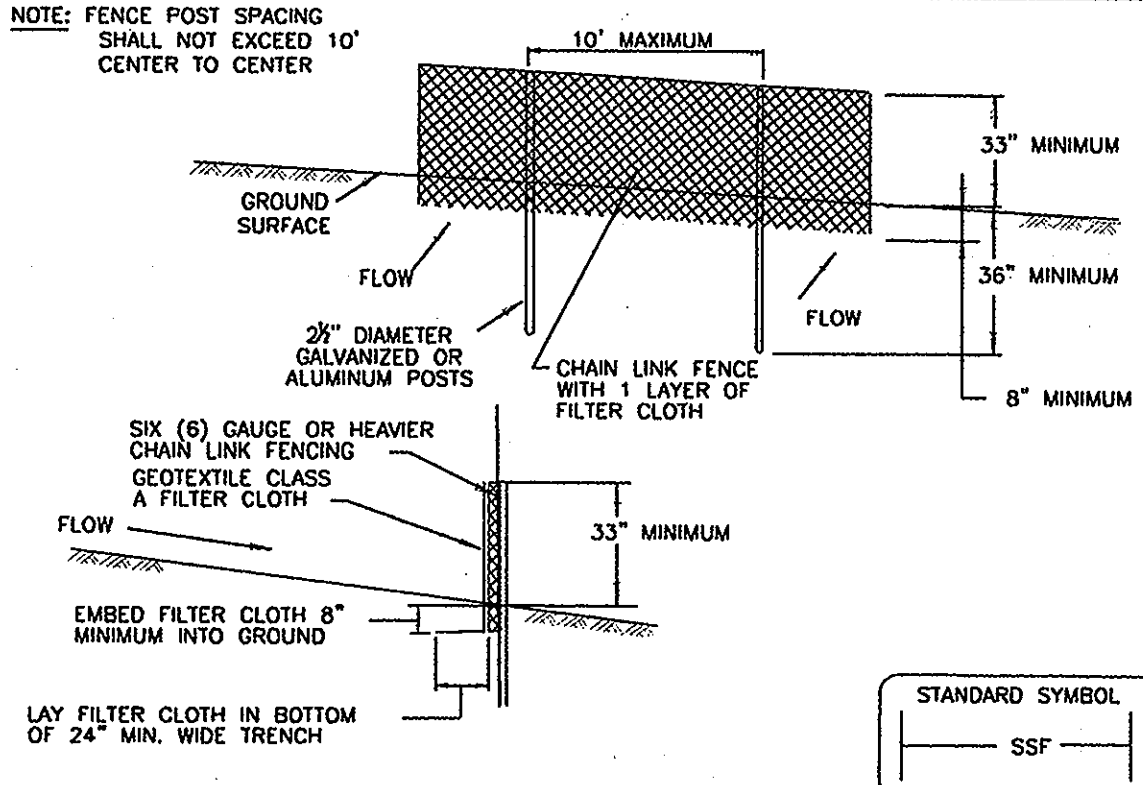
**DETAIL 19 - STONE OUTLET STRUCTURE**



**Construction Specifications**

- Crushed stone shall be used. Gravel may be used if crushed stone is not available. The stone shall be 2"-3" in size.
- The crest of the stone dike shall be at least 6" lower than the lowest elevation of the top of the earth dike and shall be level.
- The stone outlet structure shall be embedded into the soil a minimum of 4".
- The minimum length of the crest of the stone outlet structure shall be 6'.
- The stone outlet structure shall be inspected after each rain. Stone shall be replaced when the structure ceases to function and ponding results.
- The baffle board shall be extended one foot into the dike, staked and embedded 4" into the existing ground.
- The drainage area to this structure shall be less than 1/2 acre.

**DETAIL 33 - SUPER SILT FENCE**



**Construction Specifications**

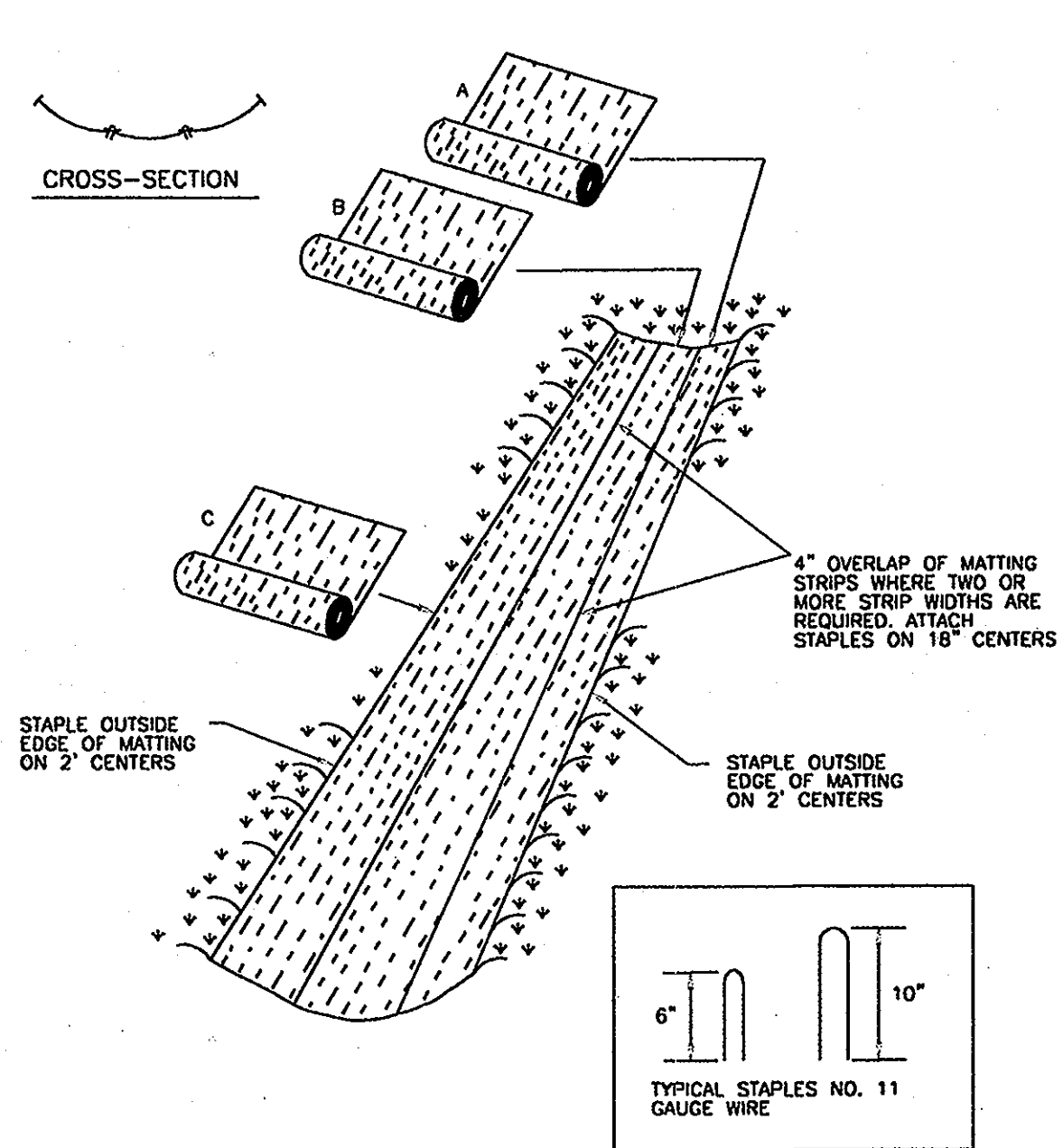
- Fencing shall be 42 inches in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The (SHA) specification for a 6 foot fence shall be used, substituting 42 inch fabric and 6 foot length posts.
- The posts do not need to be set in concrete.
- Chain link fence shall be fastened securely to the fence posts with wire ties or staples. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence. The chain link fencing shall be six (6) gauge or heavier.
- 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 geotextile fabric 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.

**SUPER SILT FENCE**

**Design Criteria**

| Slope    | Slope Steepness | Slope Length (maximum) | Silt Fence Length (maximum) |
|----------|-----------------|------------------------|-----------------------------|
| 0 - 10%  | 0 - 10:1        | Unlimited              | Unlimited                   |
| 10 - 20% | 10:1 - 5:1      | 200 feet               | 1,500 feet                  |
| 20 - 33% | 5:1 - 3:1       | 100 feet               | 1,000 feet                  |
| 33 - 50% | 3:1 - 2:1       | 100 feet               | 500 feet                    |
| 50% +    | 2:1 +           | 50 feet                | 250 feet                    |

**DETAIL 30 - EROSION CONTROL MATTING**



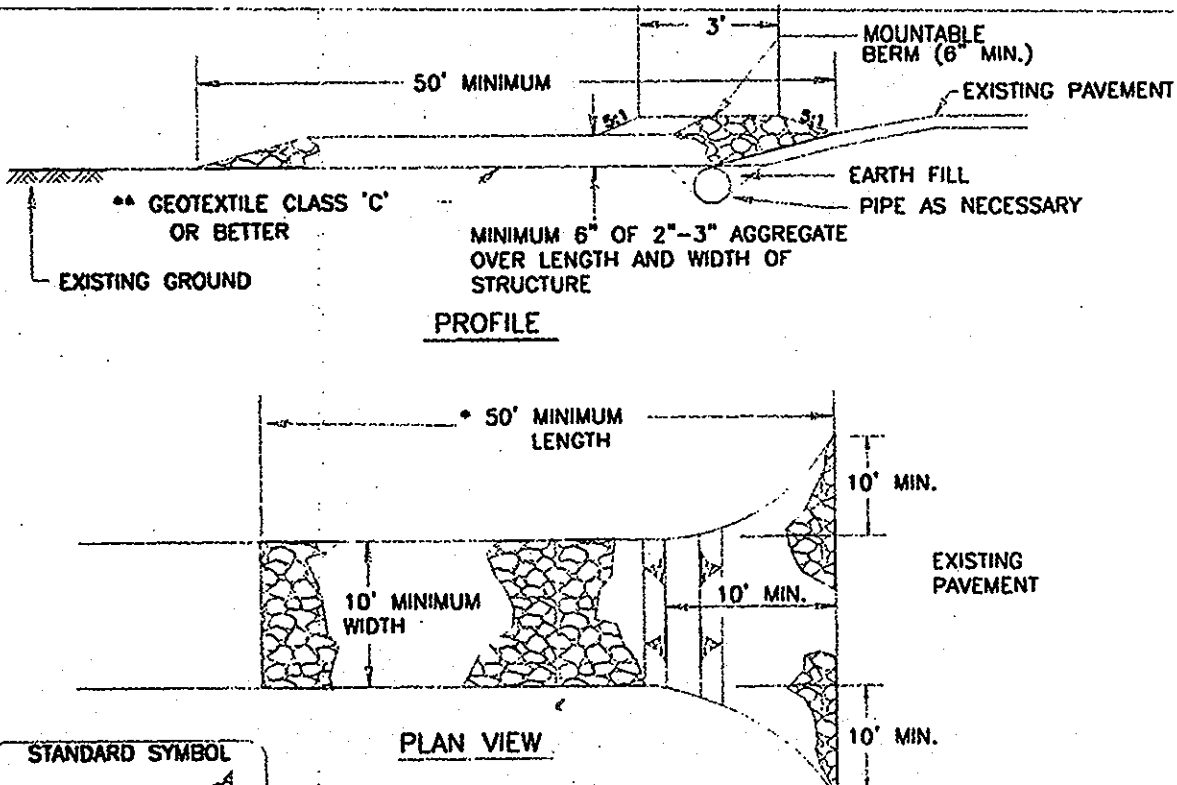
**EROSION CONTROL MATTING**

**CONSTRUCTION SPECIFICATIONS**

- KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
- STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
- BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
- STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP, 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
- WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4". SHIPLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
- THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.

**DETAIL 24 - 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 mountable berm with 5:1 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 high 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.

**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 VEGETIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT "MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER 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 12, OF THE 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 (SEC. G20.0) FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDING AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

|                                    |                       |          |
|------------------------------------|-----------------------|----------|
| TOTAL AREA OF SITE                 | 0.527                 | ACRES    |
| AREA DISTURBED                     | 0.527                 | ACRES    |
| AREA TO BE ROOFED OR PAVED         | 0.112                 | ACRES    |
| AREA TO BE VEGETATIVELY STABILIZED | 0.415                 | ACRES    |
| TOTAL CUT                          | 56                    | CU. YDS. |
| TOTAL FILL                         | 1650                  | CU. YDS. |
| OFFSITE WASTE/BORROW AREA LOCATION | CONTRACTOR COORDINATE |          |
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF THE DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS 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 OR GRADING. 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 (3) PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- CONTRACTOR SHALL PLACE EXCAVATED MATERIALS ON UPHILL SIDE OF TRENCH AND PLACE SILT FENCE ON DOWNHILL SIDE OF TRENCH.

**PERMANENT SEEDING NOTES**

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

**SEEDBED PREPARATION:** LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

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

- PREFERRED** - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT.) AND 500 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT.) BEFORE SEEDING. HARROW OR DISK INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 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 OF DISK INTO UPPER THREE INCHES OF SOIL.

**SEEDING** - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (14 LBS/1000 SQ FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU 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 THRU 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 1-1/2 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 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

**MAINTENANCE** - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

**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 THREE INCHES OF SOIL BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

**SOIL AMENDMENTS:** - APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT.).

**SEEDING** - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT.). FOR THE PERIOD NOVEMBER 16 THRU 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 1-1/2 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 GAL PER ACRE (5 GAL/1000 SQ FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT.) FOR ANCHORING.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**SUGGESTED SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING PERMIT. PROVIDE SECURITY FENCING, (1-DAY).
- PLACE SITE SEDIMENT AND EROSION CONTROL DEVICES, (1-DAY).
- PERFORM SITE STAKE-OUT, (1-DAY).
- MOBILIZATION, (1-DAY).
- OBTAIN TEMPORARY POWER, (1-DAY).
- COORDINATE SITE FILL/GRADING, (90-DAYS).
- COORDINATE SITE STABILIZATION AND GEOTECHNICAL INSPECTION FOR UTILITY ALIGNMENTS AND STRUCTURAL FOUNDATIONS, (1-DAY).
- PROVIDE WATER AND ELECTRICAL SERVICE SITE ALIGNMENTS, (60-DAYS).
- PROVIDE PUMP STATION AND GENERATOR FOUNDATIONS, (60-DAYS).
- PROVIDE SITE ACCESS ROADWAY, (5-DAYS)
- SET PACKAGED PUMP STATION AND GENERATOR, PROVIDE SITE BRICK VENEER AND TRUSS ROOF SYSTEM. MAKE ALL STATION CONNECTIONS, (30-DAYS).
- PROCEED WITH ALL STATION STARTUP AND TESTING ACTIVITIES, (60-DAYS).
- PROVIDE STATION SITE FENCE AND GATE, (2-DAYS).
- PROVIDE FINAL SITE FINISH GRADING, SEEDING, AND LANDSCAPING, (5-DAYS).
- REMOVE ALL SEDIMENT AND EROSION CONTROL DEVICES, (1-DAY).
- DEMOBILIZE, (1-DAY).

THIS DEVELOPMENT PLAN IS APPROVED FOR THE SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS. DATE 10/23/09. APPROVED BY [Signature] HOWARD S.C.D.

**ENGINEER'S CERTIFICATION**  
I/WE CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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. DATE 9/23/09. SIGNATURE OF ENGINEER [Signature] STEVEN E. ANDERSON

**DEVELOPER'S CERTIFICATION**  
I/WE CERTIFY THAT DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. DATE 9/23/09. SIGNATURE OF DEVELOPER [Signature] O. J. PIERCE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS. U.S. NATURAL RESOURCES CONSERVATION SERVICE

APPROVED: DEPARTMENT OF PLANNING AND ZONING 10-16-09  
 APPROVED: DEPARTMENT OF PUBLIC WORKS 9/23/09  
 APPROVED: HOWARD COUNTY PLANNING BOARD OF HOWARD COUNTY 9/23/09  
 DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND  
 DIRECTOR OF PUBLIC WORKS [Signature] 9/23/09  
 CHIEF, BUREAU OF UTILITIES [Signature] 9/23/09

OWNER: DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND 9250 BENDIX ROAD COLUMBIA, MARYLAND PHONE: (410)313-4400  
 PROFESSIONAL CERTIFICATION. I hereby certify 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. 33925, Expiration Date 01/15/11.  
 ENGINEERS PLANNERS SCIENTISTS CONSTRUCTION MANAGERS  
 KCI TECHNOLOGIES 936 RIDGEBROOK ROAD SPARKS, MD 21152 PHONE: (410) 316-7500 FAX: (410) 316-7935 www.kci.com  
 STATE OF MARYLAND PROFESSIONAL ENGINEER [Signature] 9/23/09

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|------------|--------|----------|------|
| DES: SEA   | BY NO. | REVISION | DATE |
| DRN: LFN   |        |          |      |
| CHK: JRK   |        |          |      |
| DATE: 8/09 |        |          |      |

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS  
 MAPLE LAWN FARMS, HILLSIDE DISTRICT, AREA 4 OPEN SPACE LOT 341 TAX MAP 41, SECTION/AREA 0.47 AC, PARCEL NO. 205, ZONING MXD-3, GRID 21&22, LIBER 11930, FOLIO 193  
 MAPLE LAWN PUMP STATION CAPITAL PROJECT No. W8280 CONTRACT No. 44-4516  
 ELECTION DISTRICT NO.5 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN SHEET 7 OF 21  
 600' SCALE MAP NO. 41 BLOCK NO. 21 & 22