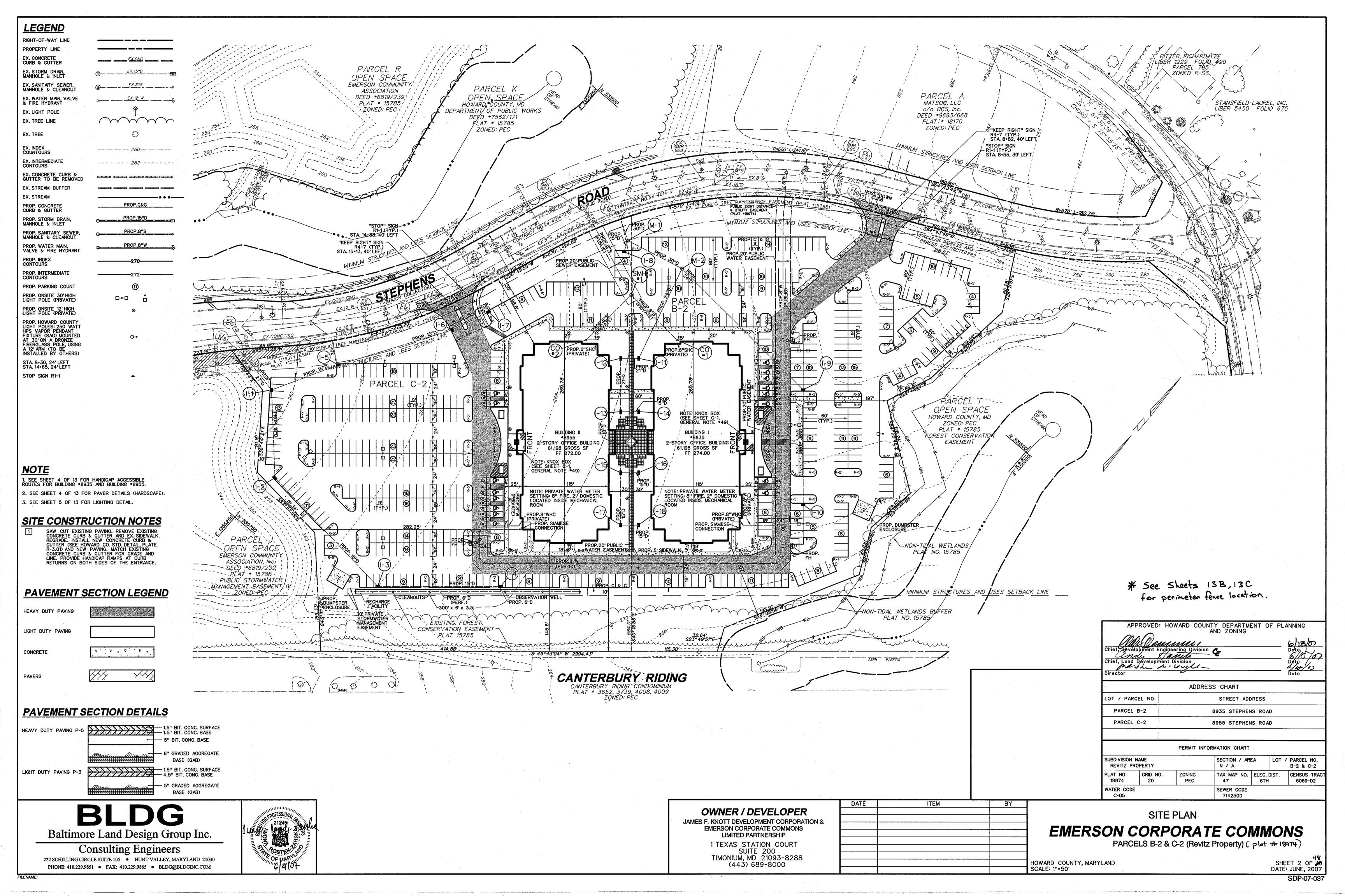
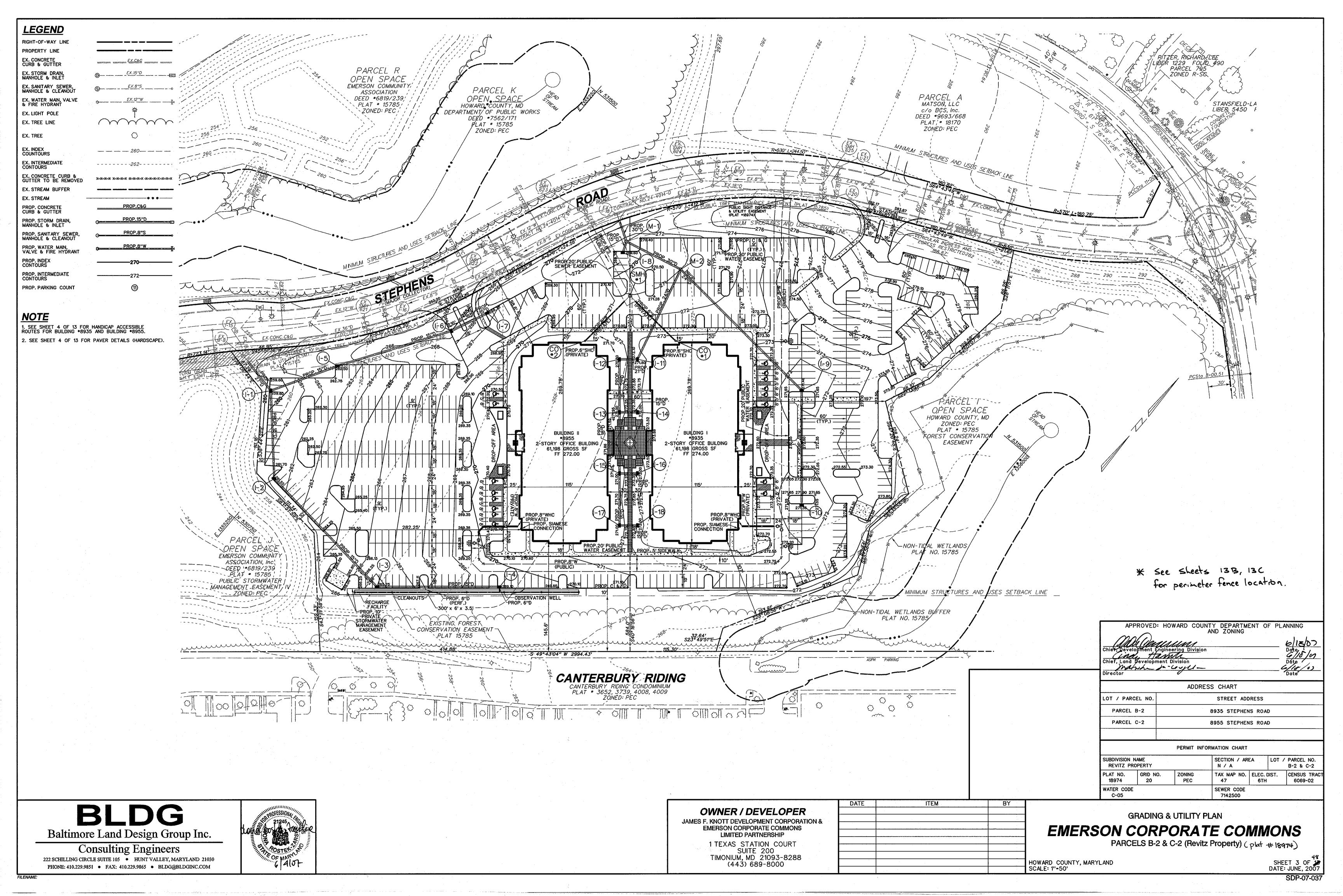
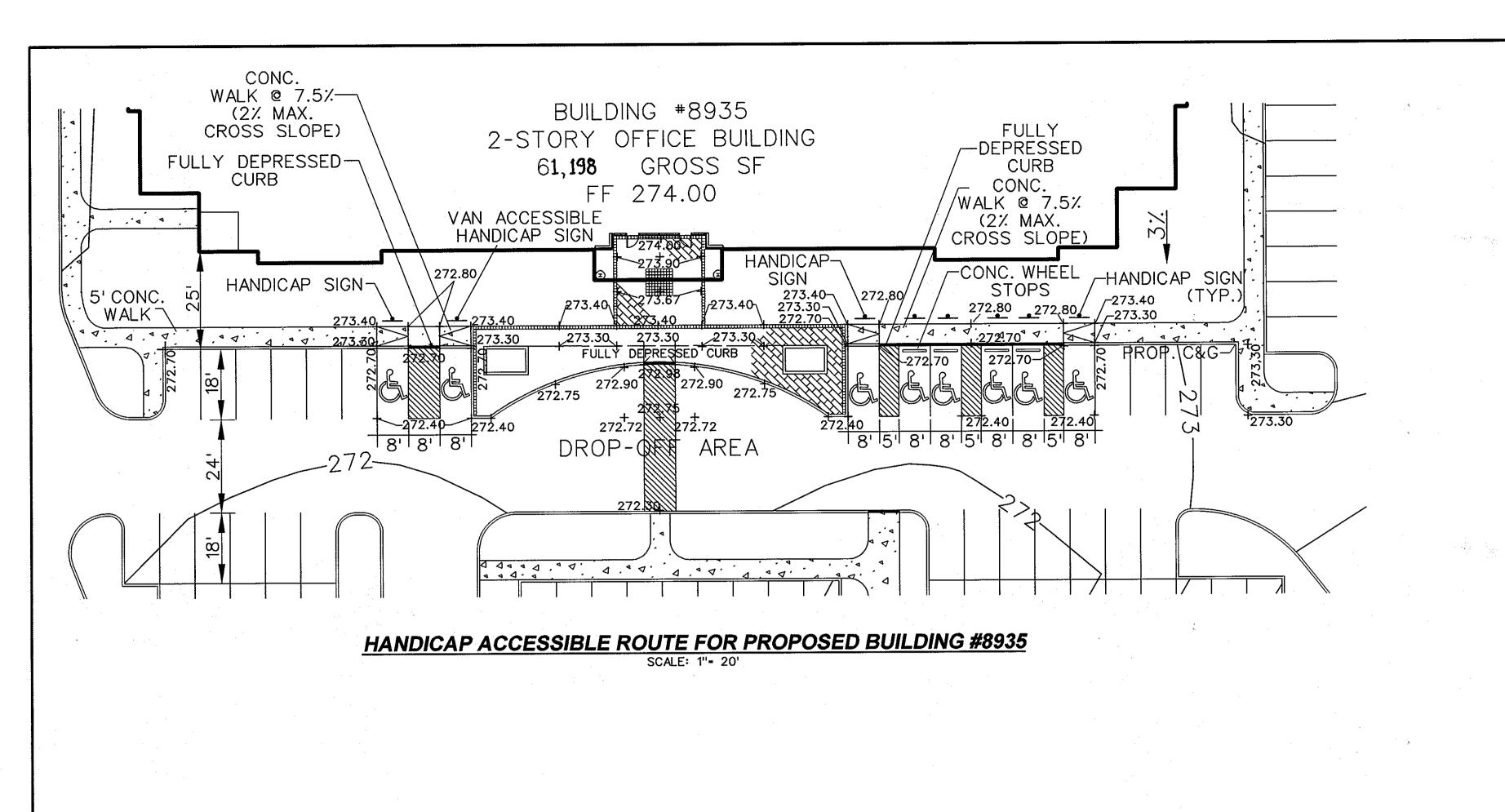
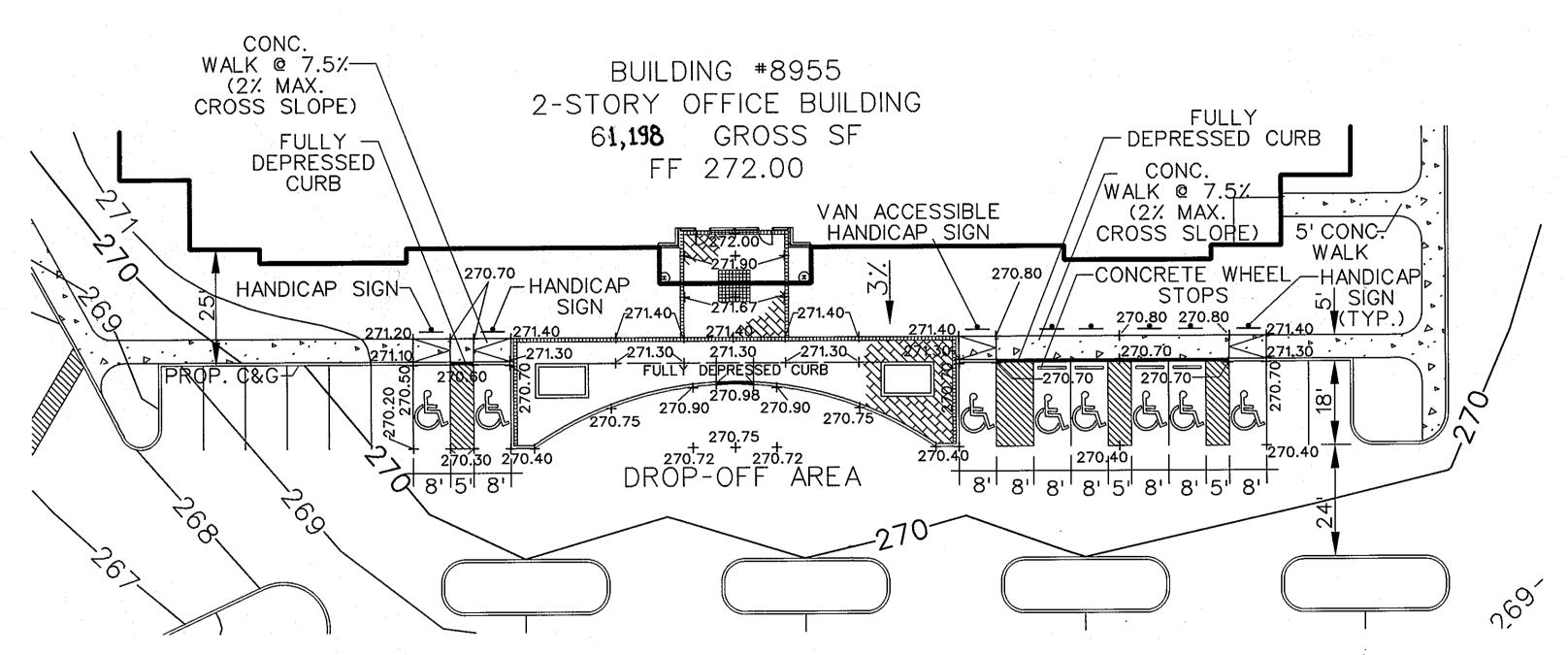
GENERAL NOTES SITE DEVELOPMENT PLAN . ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE OR AS SPECIFIED. FITHE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE, AND 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, ANY DAMAGE CAUSED BY THE CONTRACTOR TO EXISTING PUBLIC RIGHT-OF-WAY, EXISTING PAVING, EXISTING CURB & GUTTER, EXISTING UTILITIES, ETC. SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE. EMERSON CORPORATE COMMONS 5. EXISTING PUBLIC WATER AND PUBLIC SEWER PROVIDED BY CONTRACT NUMBER 24-4418-D. PARCEL S (Revitz Property) 3. THE SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING ANALYSIS FOR THIS PROJECT WAS MADE ON AUGUST 29, 2006 BY HERBST/BENSON & ASSOCIATES. 7. ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED AND VERIFIED IN ACCORDANCE WITH ASHTO T-180, OR AS SPECIFIED BY GEOTECHNICAL ENGINEER. HOWARD COUNTY, MARYLAND 10. UNLESS OTHERWISE NOTED, DIMENSIONS FROM CURB ARE MEASURED FROM FACE. 1. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS. 12. The contractor shall coordinate the location of all water, sewer, and drain house connections with the mechanical drawings. 3. THE CONTRACTOR SHALL MAINTAIN 2.0 FEET MINIMUM PROTECTIVE COVER OVER ALL UTILITIES DURING CONSTRUCTION 15. ALL SLOPES 2:1 MIN. 16. PAVING MARKINGS TO BE "TRAFFIC WHITE". 17. CONTRACTOR SHALL MAINTAIN A MINIMUM 2 FOOT BENCH BEHIND CURB AND GUTTER IN FILL AREAS. 3. ALL FIRE LINE PIPING SHALL MEET THE REQUIREMENTS OF THE NFPA PIPE SHALL BE UL LISTED, FM APPROVED AND MEET THE AWWA STANDARDS FOR FIRE PROTECTION USE. FITTINGS SHALL HAVE PRESSURE CLASS RATINGS COMPATIBLE WITH THE PIPE USED. 9. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 3.5 FEET OF COVER OVER THE PRIVATE WATER MAIN SHOWN HEREON UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE 20. THE CONTRACTOR SHALL INSPECT THE SITE TO DETERMINE IF ANY TREES, PAVING OR STRUCTURES ARE TO BE REMOVED, PRIOR TO PLACING A BID ON THOSE ITEMS. THE CONTRACTOR SHALL CLEAR THE CONSTRUCTION AREA OF ALL EXISTING TREES, PAVING, STRUCTURES, ETC., UNLESS NOTED ON PLAN. FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN. 23. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. BALTIMORE AVE. **VICINITY MAP** HOWARD COUNTY MONUMENT NOS. 47DA, 47E4 AND 47G2 WERE USED FOR THIS PROJECT. 28. ALL EXTERIOR LIGHTING SHALL COMPLY WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS. 29. LIGHT TRESSPASS ONTO ADJACENT RESIDENTIAL PROPERTIES SHALL BE LIMITED TO 0.5 FOOT CANDLES PER SECTION 134D OF THE HOWARD COUNTY ZONING REGULATIONS. BENCHMARK 30. THE TRAFFIC STUDY WAS PREFORMED BY STREET TRAFFIC STUDIES, LTD DATED SEPTEMBER 28, 2006 31. NOISE STUDY IS NOT REQUIRED FOR THIS INDUSTRIAL ZONED PROPERTY COORDINATES IN MARYLAND NAD83(91) (HORIZONTAL) AND NGVD29 (VERTICAL) DATUMS. 47DA NORTHING: 163191.9104 33. CONTRACTOR TO VERIFY THE SIZE, LOCATION AND ELEVATION OF ALL WATER, SEWER AND STORM DRAIN CONNECTIONS AT THE BUILDING WITH THE MECHANICAL CONTRACTOR BEFORE BEGINNING CONSTRUCTION OF SERVICE CONNECTIONS TO SERVE THE BUILDING. 47E4 NORTHING: 163326.2295 EASTING: 413136.2550 ELEVATION: 338.909 ft. 55. STORMWATER MANAGEMENT RECHARGE REQUIREMENTS FOR THIS PROJECT WILL BE MET VIA A PRIVATE PERIMETER STORMWATER MANAGEMENT FACILITY. STORMWATER 47G2 NORTHING: 162440.1212 20 for Change 36. HANDICAP PARKING DETAILS SHALL BE IN ACCORDANCE WITH " MD BUILDING CODE FOR THE HANDICAPPED" SECTION 5.01-7.05. 37. ANY DAMAGE TO COUNTY OWNED RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE 38. ALL SIDEWALKS SHALL BE CROSS SLOPED AT 1/4 INCH PER FOOT. 39. ALL MATERIALS AND CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV. SHEET INDEX 40. ALL ON SITE DRIVEWAYS AND PARKING AREAS TO BE PRIVATELY MAINTAINED. 41. ALL PROPOSED HC RAMPS SHALL BE IN ACCORDANCE WITH CURRENT ADA STANDARDS. SHEET TITLE C-1 COVER SHEET 43. ELECTRIC, GAS, CABLE, TELEPHONE AND LIGHTING LINES DESIGNED BY OTHERS. C-3 GRADING & UTILITY PLAN 45. OPEN SPACE REQUIREMENTS FOR THIS SUBDIVISION WERE ADDRESSED WITH THE FINAL PLANS, F-02-111. OPEN SPACE REQUIRED (25% OF GROSS ACREAGE, 97.529 AC x 0.25) - 24.560 AC. OPEN SPACE PROVIDED (41% OF GROSS ACREAGE, 97.529 AC) - 40.173 AC. C-4 SITE DETAILS I ARE NO SLOPES 15-24.9%, SLOPES 25% OR GREATER, WETLANDS, WETLAND BUFFERS, STREAMS, STREAM BUFFERS AND 100-YR FLOODPLAI PARCEL J OPEN SPACE EMERSON COMMUNITY ASSOCIATION, Inc. DEED *6819/239 PLAT * 15785 PUBLIC STORMWATEK MANAGEMENT EASEMENT C-5 SITE DETAILS II 47. THIS SDP IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL NO. 45-2003 AND THE "COMP LITE" ZONING AMENDMENTS EFFECTIVE 07/28/06. 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. C-6 STORM DRAIN DRAINAGE AREA MAP 48. ALL SIGNAGE MUST COMPLY WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, MILLENIUM EDITION AND ALL APPLICABLE HANDICAP REGULATIONS STORM DRAIN PROFILES C-8 | EROSION AND SEDIMENT CONTROL PLAN Index. C-9 EROSION AND SEDIMENT CONTROL DETAILS EROSION AND SEDIMENT CONTROL NOTES SITE DATA (PARCEL **CANTERBURY RIDING** SOILS MAP & STORMWATER MANAGEMENT PLAN - RECHARGE ONL 1. PARCEL: S (10.1074C. LANDSCAPE PLAN 2. PLAT REFERENCE: 20664 C-13 PAVEMENT MARKING PLAN 3. DEED REFERENCES: **PROPOSED LAYOUT** 4. TAX ACCOUNT NUMBER: APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 5. PRESENT ZONING: PEC 320 6. APPLICABLE DPZ FILE REFERENCES: F-02-111, F-06-174, SP-01-12, SDP-75-055, SDP-74-029, SDP-77-008, F09-092 6)3(0) 8. PROPOSED USE: OFFICE BUILDING (122,3965.F.) NOTE: PROPOSED BUILDING IS 2 STORY (30,599 SF/FLOOR INCLUDES SECOND FLOOR BUMP OUTS). **300** = PROPOSED 9. EXISTING WATER: PUBLIC ADDRESS CHART 10. EXISTING SEWER: PUBLIC STREET ADDRESS LOT / PARCEL NO. 11.WATER AND SEWER CONTRACT NUMBER: 24-4418-D EXIST. GRD 💳 II. AREA TABULATION: 8935 AND 8955 STEPHENS ROAD PARCEL S -PROP. GRADE 1. AREA: 440,237 S.F. OR 10.107 AC) _F.F. 274.00 2. TOTAL DISTURBED AREA: 393,046 S.F. OR 9.02AC PROP. GRADE-EXIST. GRD-3. TOTAL IMPERVIOUS AREA: 280,714 5.F. OR 6.45 Ac -63.8% 4. BUILDING COVERAGE TO SITE: 27.8% OR 2.81 AC 260 - PERMIT INFORMATION CHART III.OPEN SPACE DATA: SEE GENERAL NOTE +45 SUBDIVISION NAME SECTION / AREA LOT / PARCEL NO. REVITZ PROPERTY OFFICE - 172,3965.F. @ 3.3 P.S./1000 S.F. = 404 P.S. ZONING PEC TAX MAP NO. ELEC. DIST. CENSUS TRAC 2. PARKING PROVIDED: #31 TOTAL INCLUDES: 422 STANDARD SPACES @ 9' x 18' 5 STANDARD HANDICAP SPACES @ 24' x 18' TWO SIDE BY SIDE VAN ACCESSIBLE HANDICAP SPACES @ 24' x 18' TWO SIDE BY SIDE 20664 240 = WATER CODE SECTION A-A THROUGH SITE 7142500 (SWM AS-BUILT) 11/20/08 STORMWATER MANAGEMENT OWNER / DEVELOPER **COVER SHEET** AS-BUILT FOR RECHARGE FACILITY BLDG JAMES F. KNOTT DEVELOPMENT CORPORATION & 5/15/09 REMOVED LOTLINE & PUBLIC BLOG **EMERSON CORPORATE COMMONS EMERSON CORPORATE COMMONS** Baltimore Land Design Group Inc. SEWER ESM'T LIMITED PARTNERSHIP (Revitz Property) (PLAT # 20664) 1 TEXAS STATION COURT **Consulting Engineers** SUITE 200 TIMONIUM, MD 21093-8288 222 SCHILLING CIRCLE SUITE 105 • HUNT VALLEY, MARYLAND 21030 SHEET 1 OF 18 DATE: JUNE, 2007 HOWARD COUNTY, MARYLAND SCALE: AS SHOWN (443) 689-8000 PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM SDP-07-037

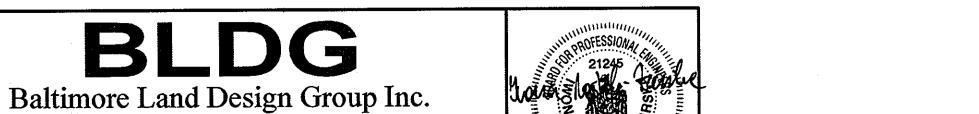






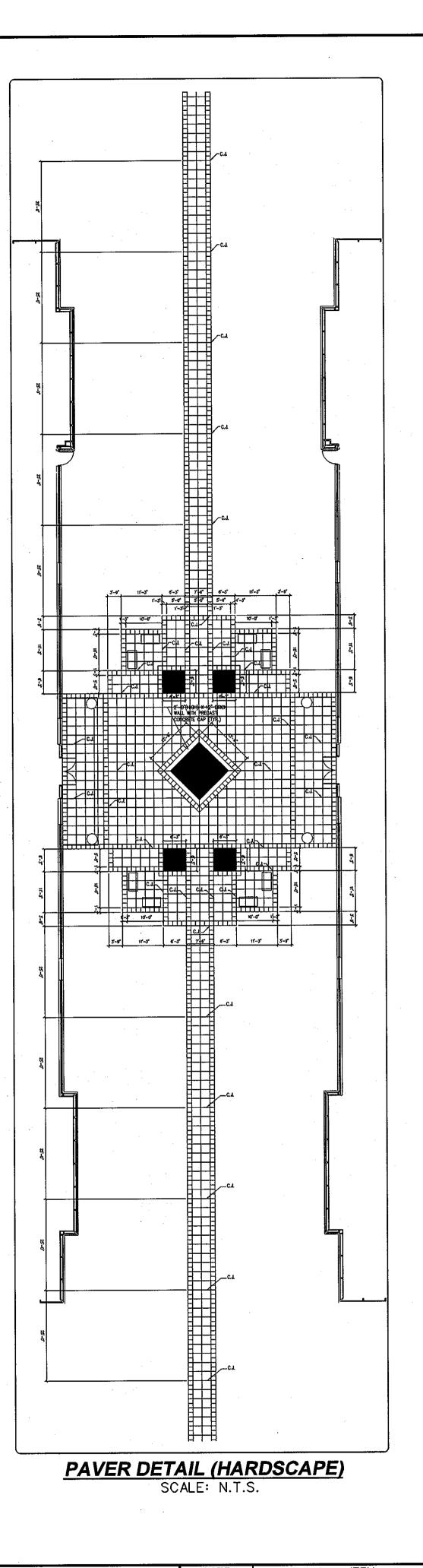


HANDICAP ACCESSIBLE ROUTE FOR PROPOSED BUILDING #8955
SCALE: 1"- 20"



Consulting Engineers 222 SCHILLING CIRCLE SUITE 105 • HUNT VALLEY, MARYLAND 21030 PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM





APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 0/13/07 Date Date Date ADDRESS CHART STREET ADDRESS LOT / PARCEL NO. PARCEL B-2 8935 STEPHENS ROAD PARCEL C-2 8955 STEPHENS ROAD PERMIT INFORMATION CHART SUBDIVISION NAME

REVITZ PROPERTY N / A B-2 & C-2 CENSUS TRAC ZONING PEC TAX MAP NO. ELEC. DIST. PLAT NO. GRID NO. 18974 20 WATER CODE SEWER CODE 7142500

OWNER / DEVELOPER JAMES F. KNOTT DEVELOPMENT CORPORATION & EMERSON CORPORATE COMMONS LIMITED PARTNERSHIP

1 TEXAS STATION COURT SUITE 200 TIMONIUM, MD 21093-8288 (443) 689-8000

ITEM DATE

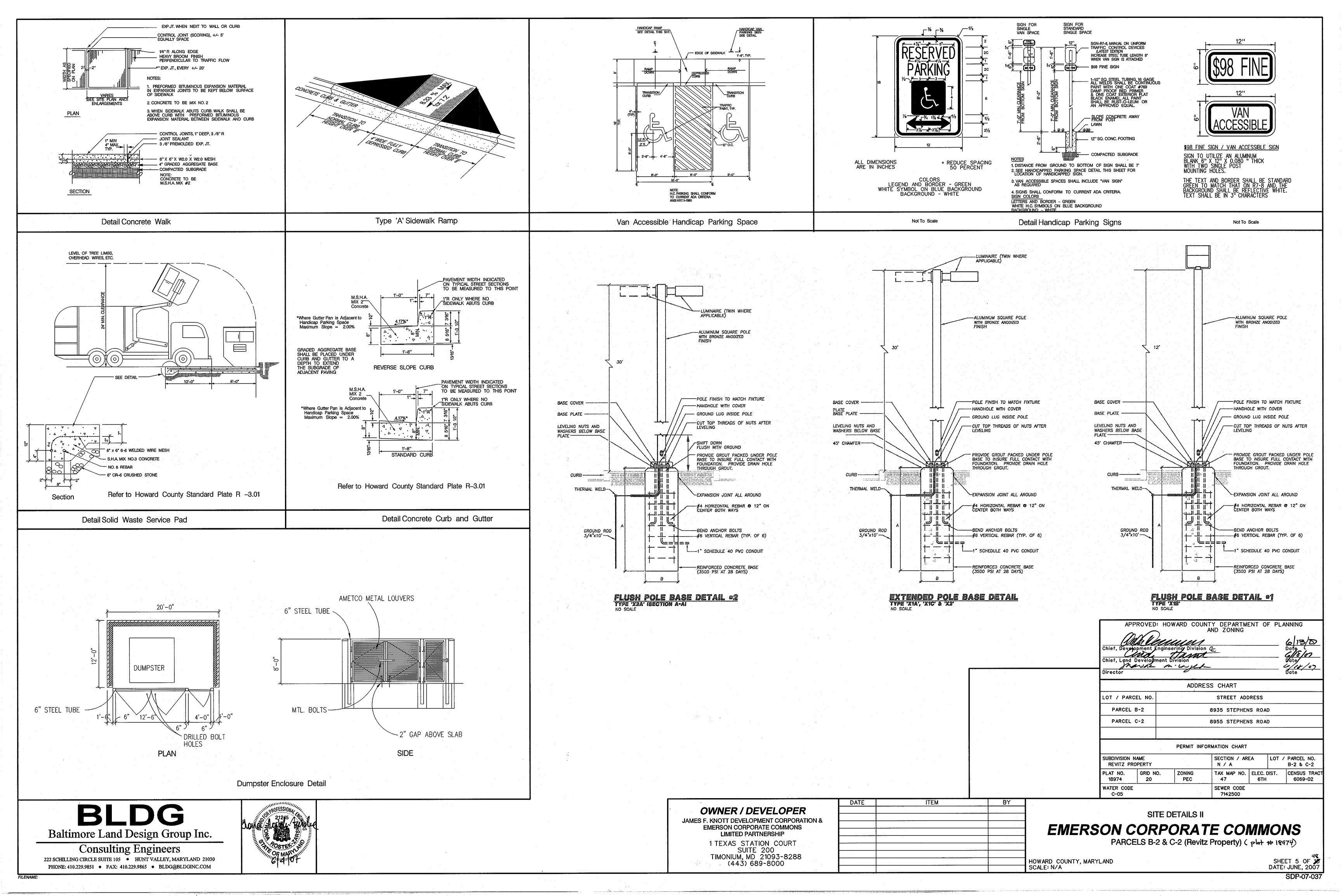
SITE DETAILS I

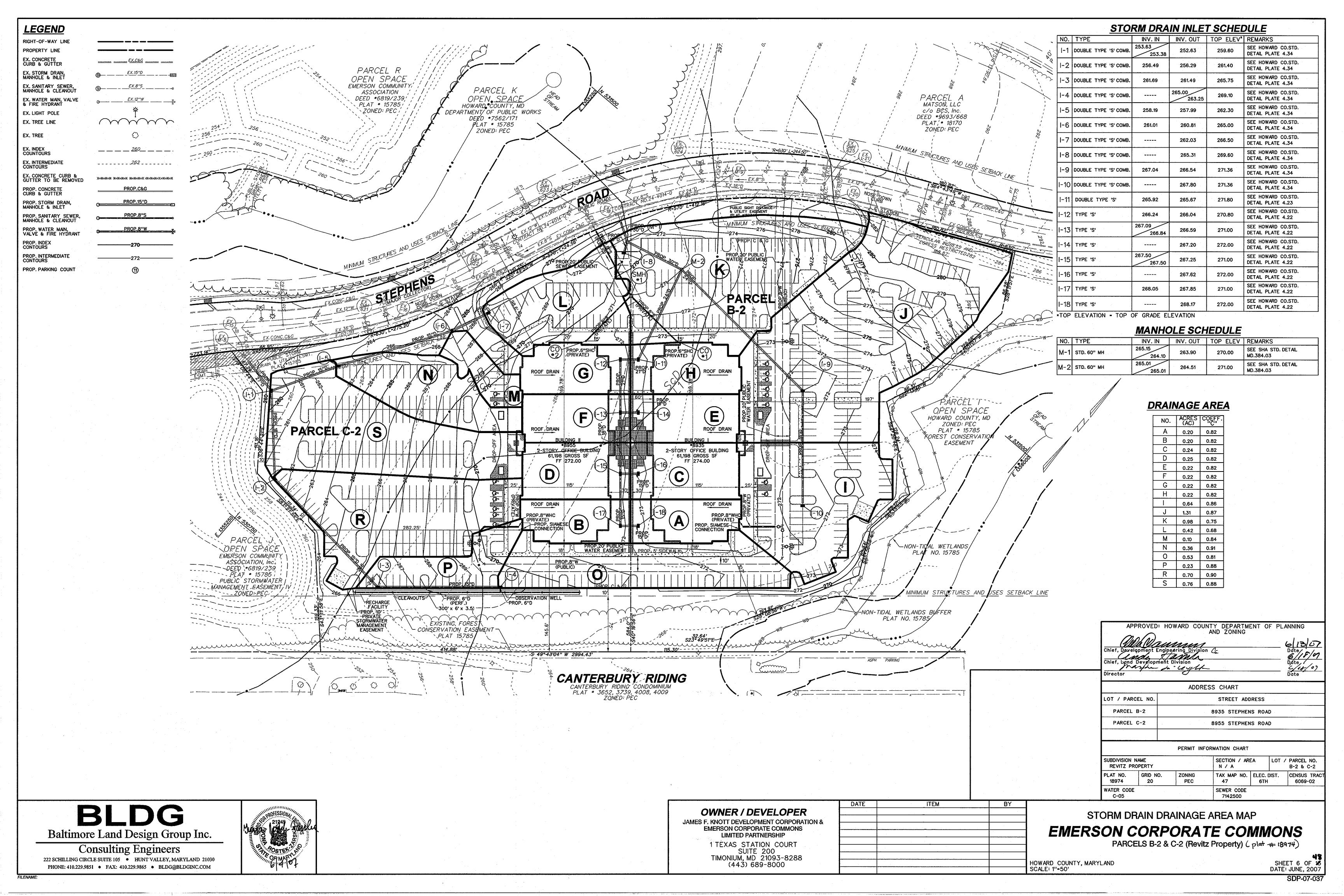
EMERSON CORPORATE COMMONS

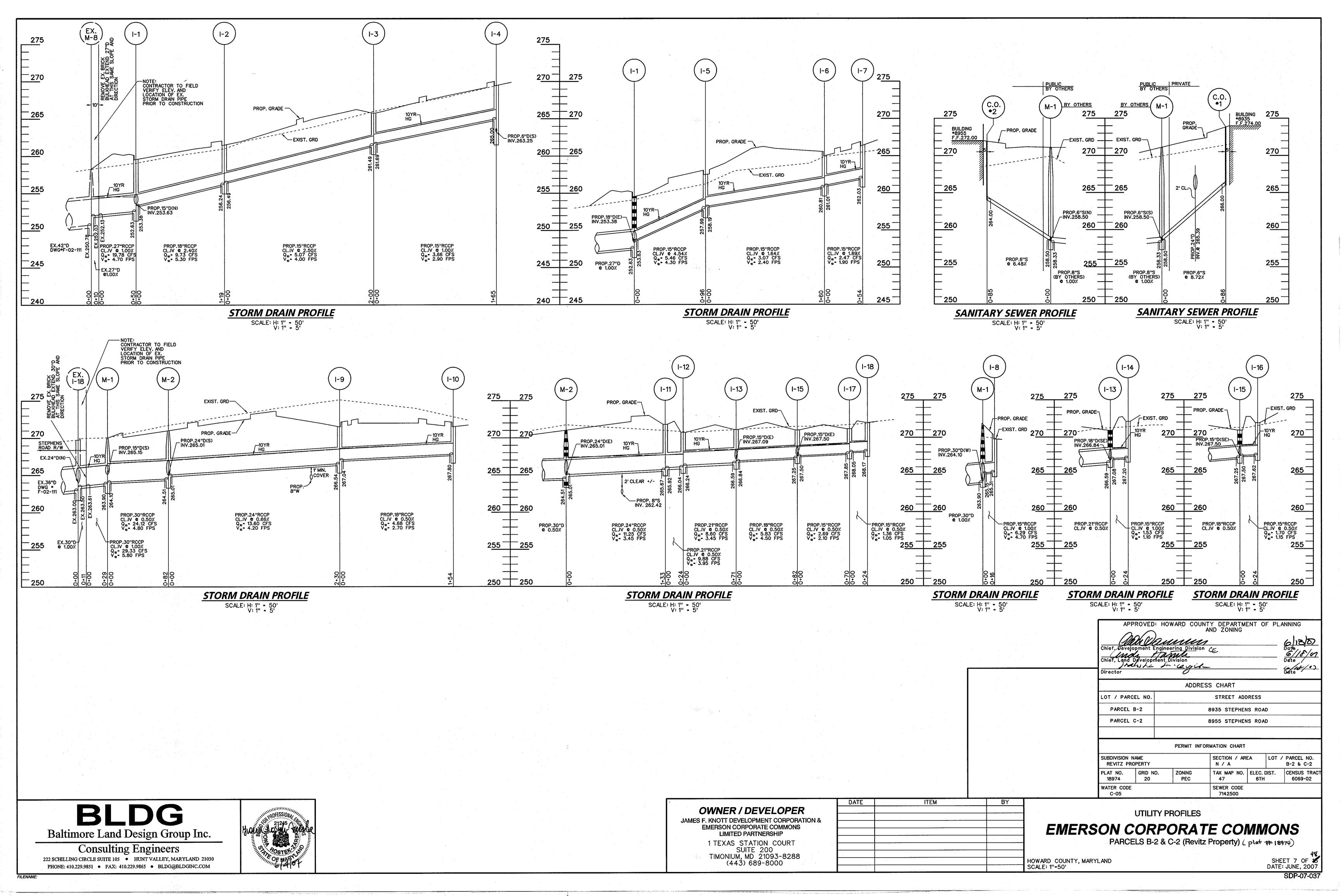
PARCELS B-2 & C-2 (Revitz Property) (plat # 18974)

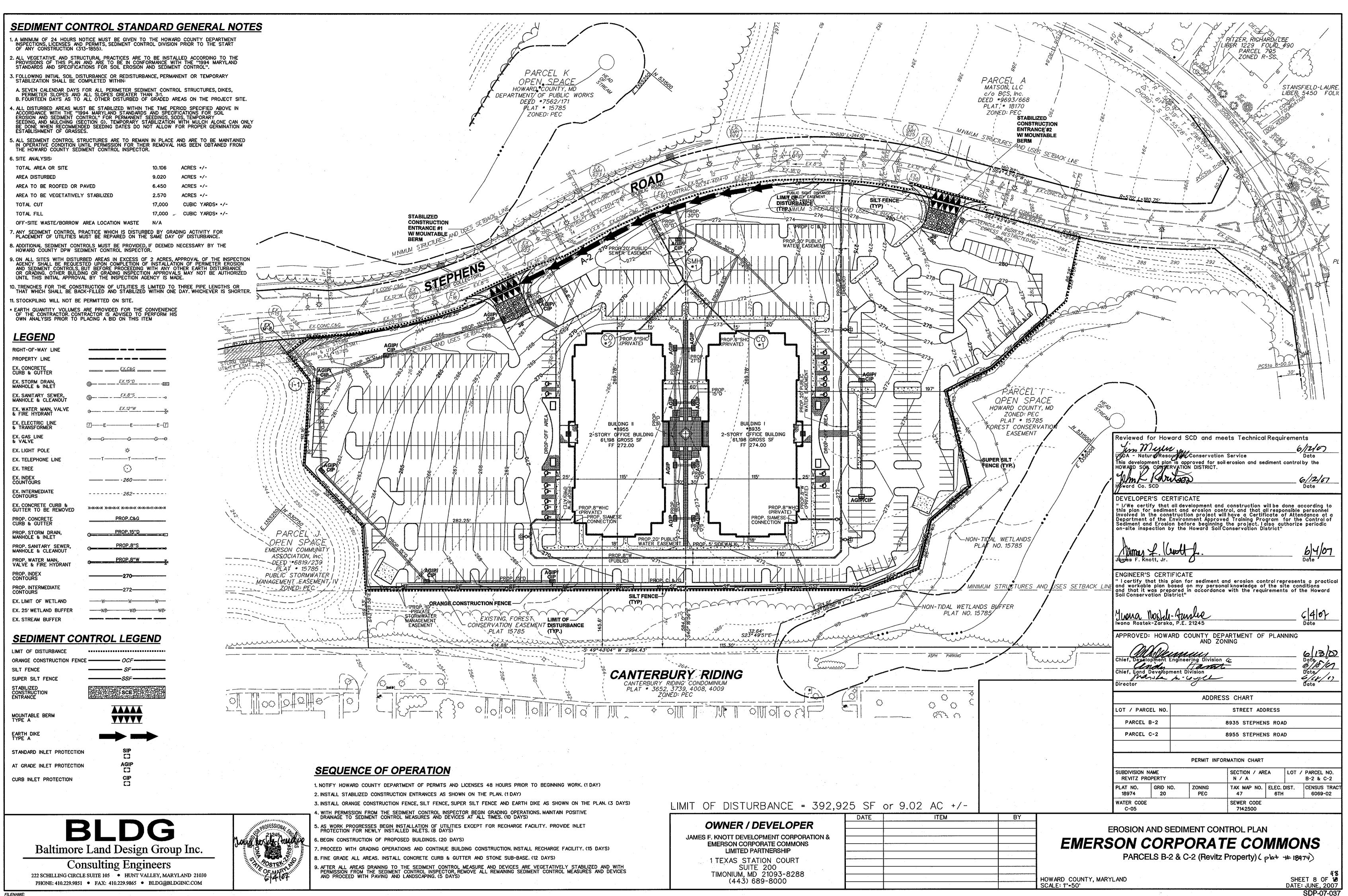
HOWARD COUNTY, MARYLAND SCALE: 1"-20'

SHEET 4 OF 18 DATE: JUNE, 2007

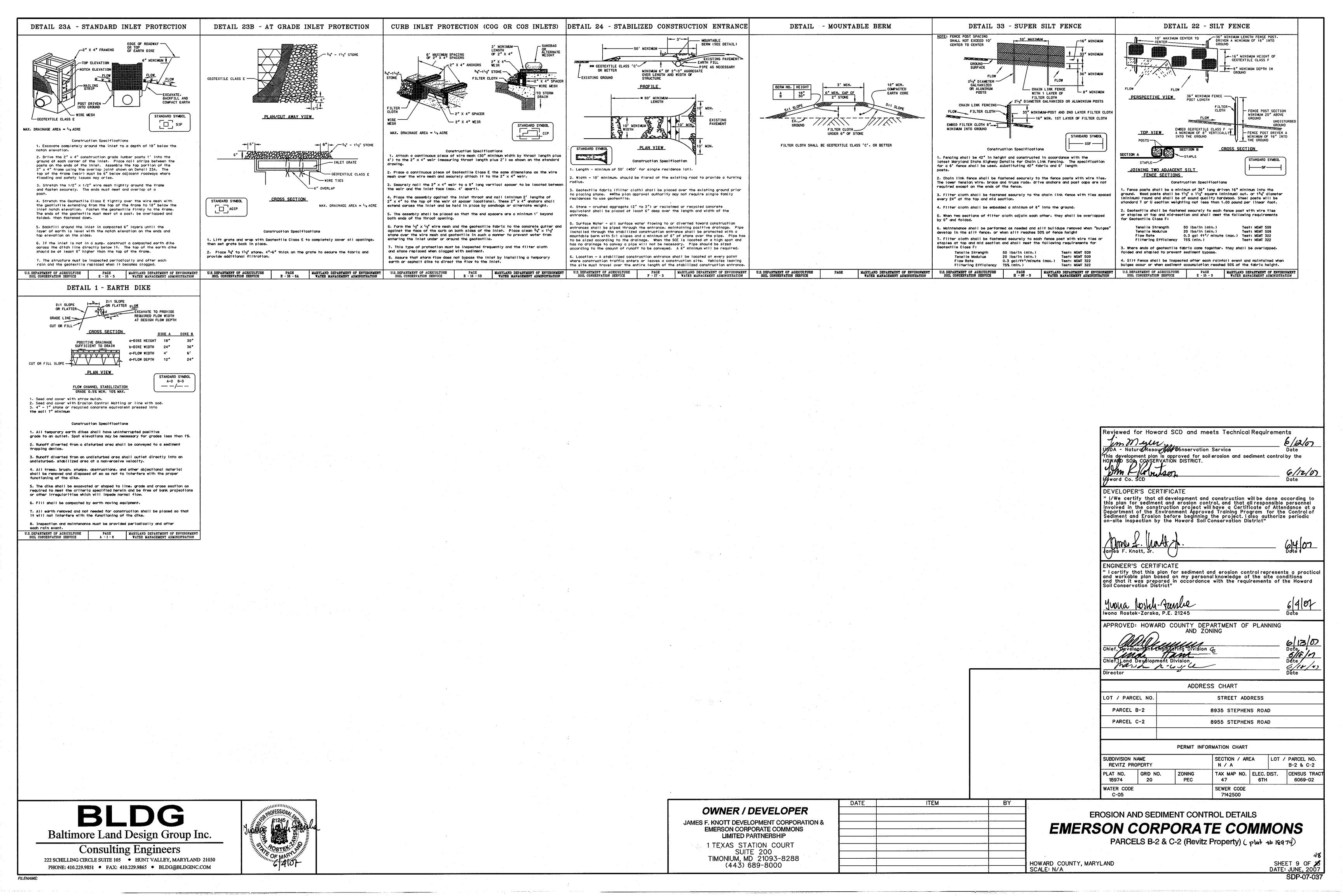








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21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.

C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSED OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAT 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

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

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

I. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIAL LARGER THAN 1½" IN DIAMETER.

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH A S BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

I. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

1. ON SITE MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:
A. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 ANBD 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
C. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
D. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL. II. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

. TOPSOIL APPLICATION

- WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
 GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ABOUT 4'- 8" HIGHER IN ELEVATION.
 TOPSOIL SHALL BE UNIFORMLY DISTRIBUTES IN A 4" 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARIES IN THE SURFACE RESULTING FORM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISED BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED, BELOW:

- I. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

 A. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATED FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISTION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.

 B. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.

 C. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.

II. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB./1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE. REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB. *1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

PERMANENT / TEMPORARY SEEDING NOTES

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:

1. PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 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.)

2. ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ. FT.) AND 1000 LBS. PER ACRE 10-10-10 FERTILIZER (23 LBS./1000 SQ. FT.) BEFORE SEEDING. HARROW OR 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 (1.4 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. (3) - SEED WITH 60 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW

MULCHING - APPLY 11/2 TO 2 TONS PER ACRE (70 - 90 LBS./1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING, ANCHOR MULCH IMMEDIATELY AFTER APPLICATIONS 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

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED. SOIL AMENDMENTS - APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1000 SQ. FT.) SEEDING - FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 THRU OCTOBER 15, SEED WITH 21/2 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 11/2 TO 2 TONS PER ACRE (70 - 90 LBS./1000 SQ. FT.) OF UNROTTED WEED FREE SMALL GRAIN 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

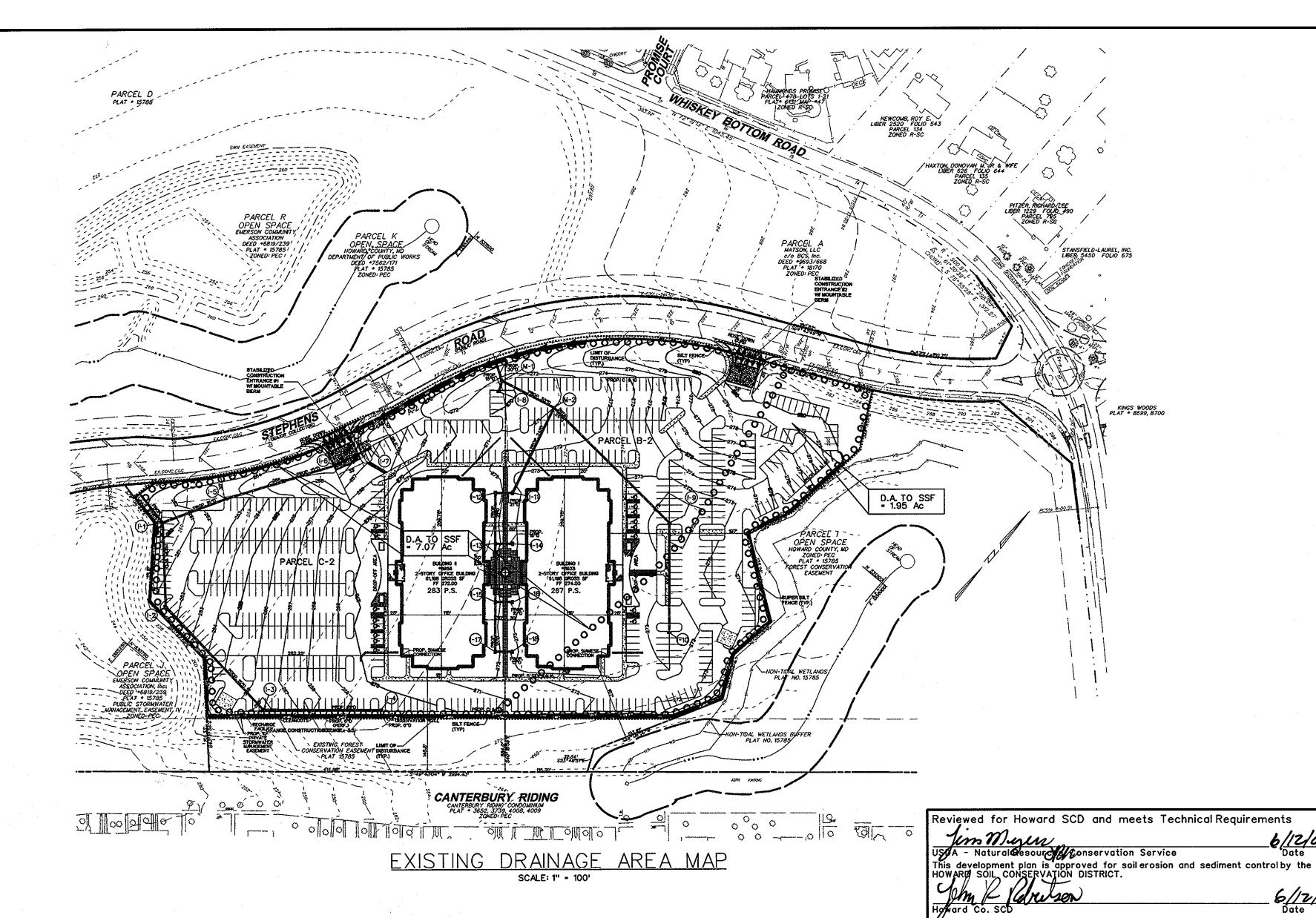
REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

DUST CONTROL SPECIFICATIONS

- 1. MULCHES SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- 2. VEGETATIVE COVER SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER. 3. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, SPRING-TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE
- WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE
- SITE BE IRRIGATED TO THE POINT THE RUNOFF BEGINS TO FLOW. 5. BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES
- THEIR HEIGHT ARE AFFECTIVE IN CONTROLLING SOIL BLOWING. 6. CALCIUM CHLORIDE - APPLY AT A RATE THAT WILL KEEP SURFACE MOIST. MAY NEED

PERMANENT METHODS:

- 1. PERMANENT VEGETATION SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE
- 2. TOPSOILING COVERING WITH LESS EROSIVE SOIL MATERIALS. SEE STANDARDS FOR
- TOPSOILING. 3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL



"I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District" NGINEER'S CERTIFICATE " I 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 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING 6 13 0 0/18/07 Date ADDRESS CHART OT / PARCEL NO STREET ADDRESS PARCEL B-2 8935 STEPHENS ROAD PARCEL C-2 8955 STEPHENS ROAD

OWNER / DEVELOPER JAMES F. KNOTT DEVELOPMENT CORPORATION & **EMERSON CORPORATE COMMONS** LIMITED PARTNERSHIP

1 TEXAS STATION COURT SUITE 200 TIMONIUM, MD 21093-8288 (443) 689-8000

DATE ITEM BY

EROSION AND SEDIMENT CONTROL NOTES

GRID NO.

20

SUBDIVISION NAME

18974

WATER CODE

REVITZ PROPERTY

DEVELOPER'S CERTIFICATE

EMERSON CORPORATE COMMONS

PEC

PARCELS B-2 & C-2 (Revitz Property) (Plat # 18974)

PERMIT INFORMATION CHART

SECTION / AREA

7142500

TAX MAP NO. ELEC. DIST.

6TH

HOWARD COUNTY, MARYLAND SCALE: AS SHOWN

SHEET 10 OF 26 DATE: JUNE, 2007 SDP-07-037

LOT / PARCEL NO.

B-2 & C-2 CENSUS TRACT

6069-02

6/12/07 Date

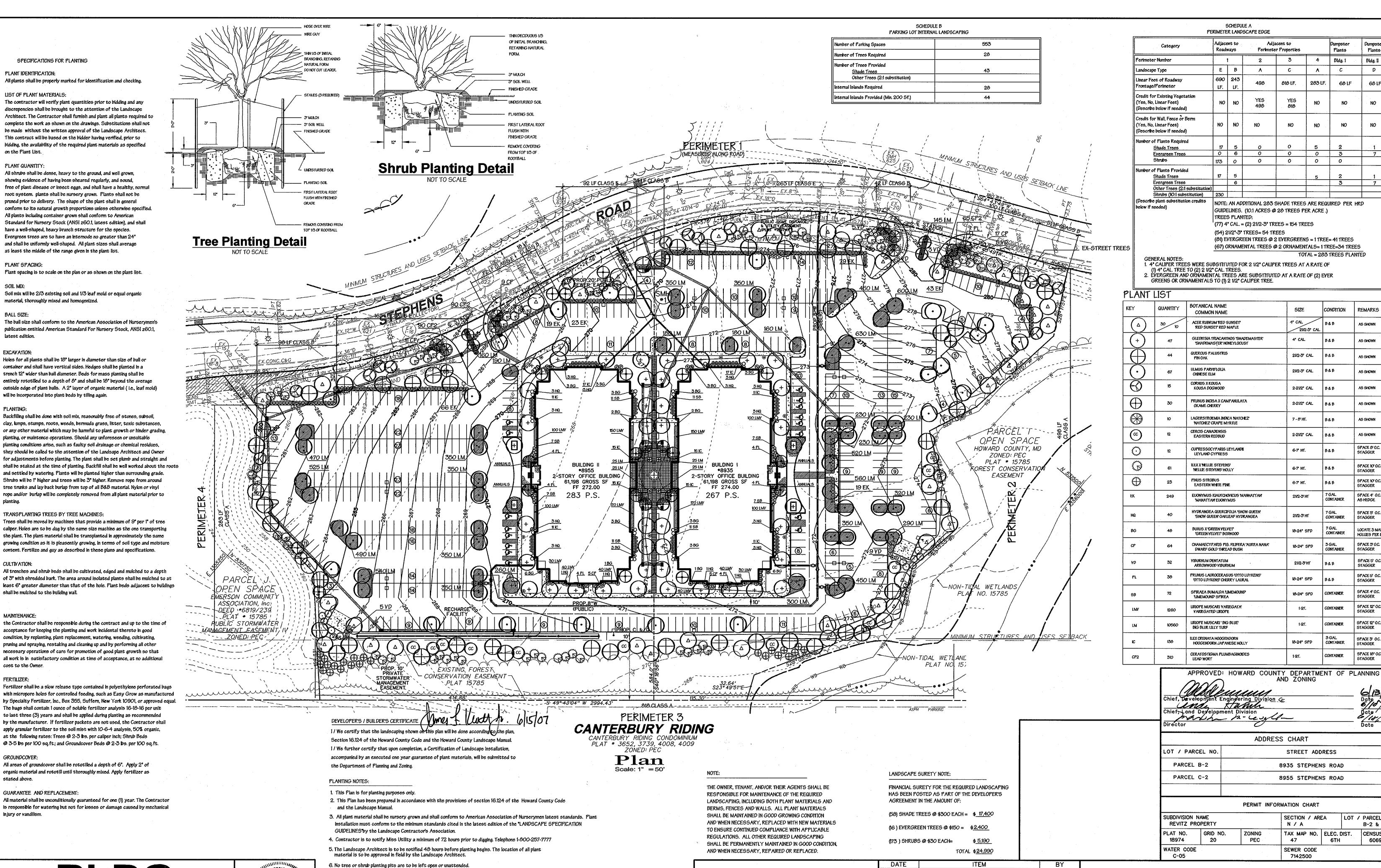
Baltimore Land Design Group Inc.

Consulting Engineers



222 SCHILLING CIRCLE SUITE 105 • HUNT VALLEY, MARYLAND 21030

PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM



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Department of Planning and zoning.

7. Shrubs are to be grouped into mulched beds. Beds are to be edged and the grass is to be killed or removed prior to mulching. 3. Sod is to be: Kentucky blue/tall fescue mlx

9. "Install tree protection fencing along the Limits of Disturbance (LOD) of the existing woods. All site grading, planting bed preparation and tree and shrub planting must be done outside of the drip

line of existing trees to be preserved in order to maintain and protect the root system." *At the time of installment, all shrubs and other plantings herewith listed and approved for this site, shall be of the proper height requirements in accordance with the Howard County Landscaping Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval form the

OWNER / DEVELOPER 2-05-06 Revised per Howard Co. Comments 01-04-07 Revised per Howard Co. Comments JAMES F. KNOTT DEVELOPMENT CORPORATION & **EMERSON CORPORATE COMMONS**

LIMITED PARTNERSHIP

1 TEXAS STATION COURT

SUITE 200

TIMONIUM, MD 21093-8288

(443) 689-8000

LANDSCAPE PLAN

EMERSON CORPORATE COMMONS

PARCELS B-2 & C-2 (Revitz Property) (plat # 18974)

HOWARD COUNTY, MARYLAND SCALE: 1"=50"

SHEET 12 OF 18 DATE: JUNE, 2007

SDP-07-037

LOT / PARCEL NO.

B-2 & C-2

CENSUS TRAC

6069-02

Dumpster

Bldg. II

68 LF

Bldg. 1

68 LF

NO

283 LF.

NO

0

TOTAL = 283 TREES PLANTED

REMARKS

AS SHOWN

SPACE 4' O.C.

LOCATE 3 MALE

SPACE 5" O.C.

SPACE 5" O.C.

SPACE 4' O.C.

SPACE 12" O.C.

SPACE 12" O.C.

SPACE 3' O.C.

SPACE 16" O.C.

CONTAINER

3 GAL CONTAINER

CONTAINER

Perimeter Properties

YES 498

818 LF.

818

NO

0

SIZE

4" CAL _

4" CAL

21/2-3" CAL

21/2-3" CAL

2-21/2" CAL

2-21/2" CAL

7 - 8' HT.

2-21/2" CAL

6-7' HT.

6-7 HT.

67 HT.

21/2-3' HT

21/2-3" HT

18-24" SPD

21/2-3"HT

18-24" SPD

18-24" SPD

18-24" SPD

AND ZONING

STREET ADDRESS

8935 STEPHENS ROAD

8955 STEPHENS ROAD

SECTION / AREA

TAX MAP NO. | ELEC. DIST.

N / A

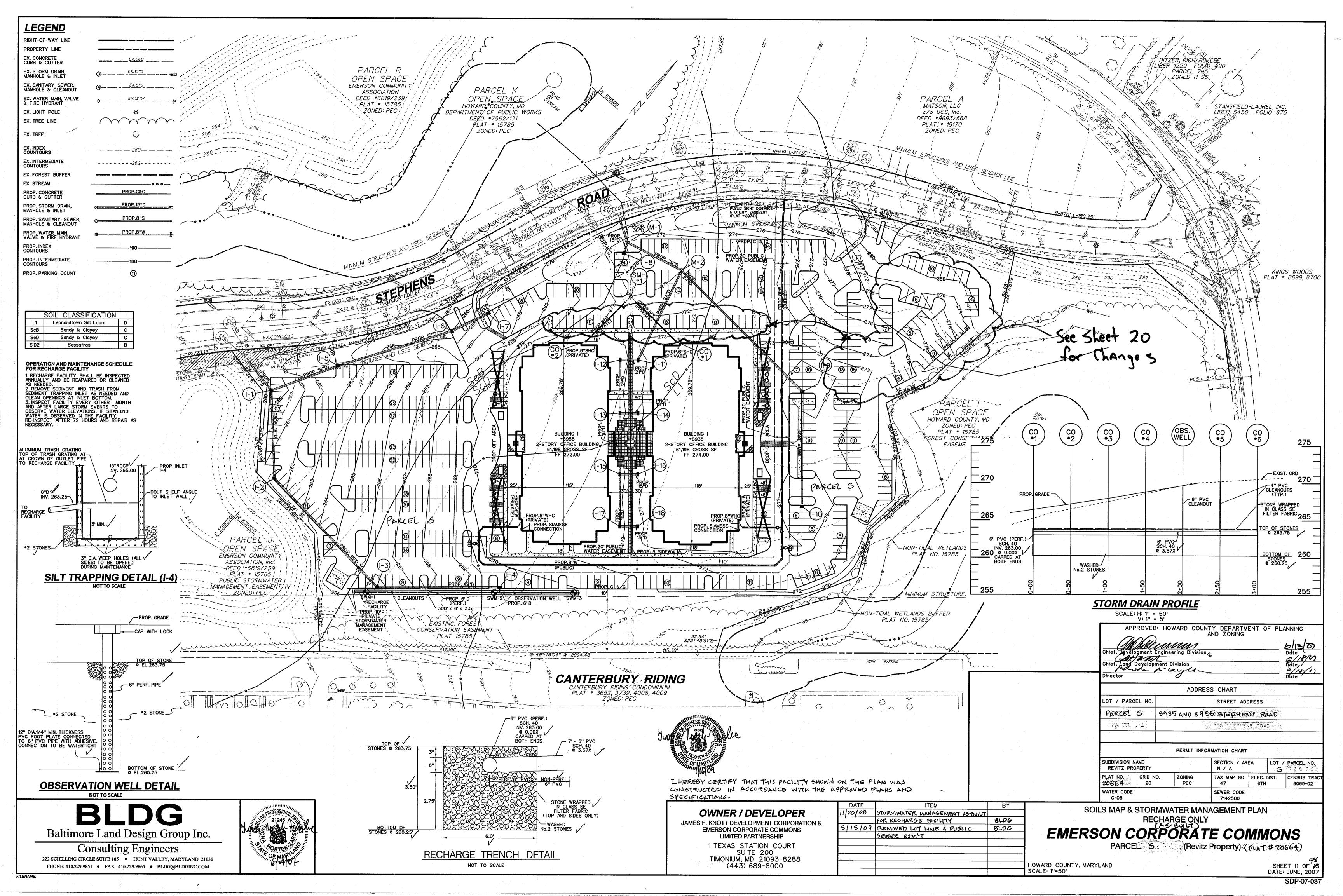
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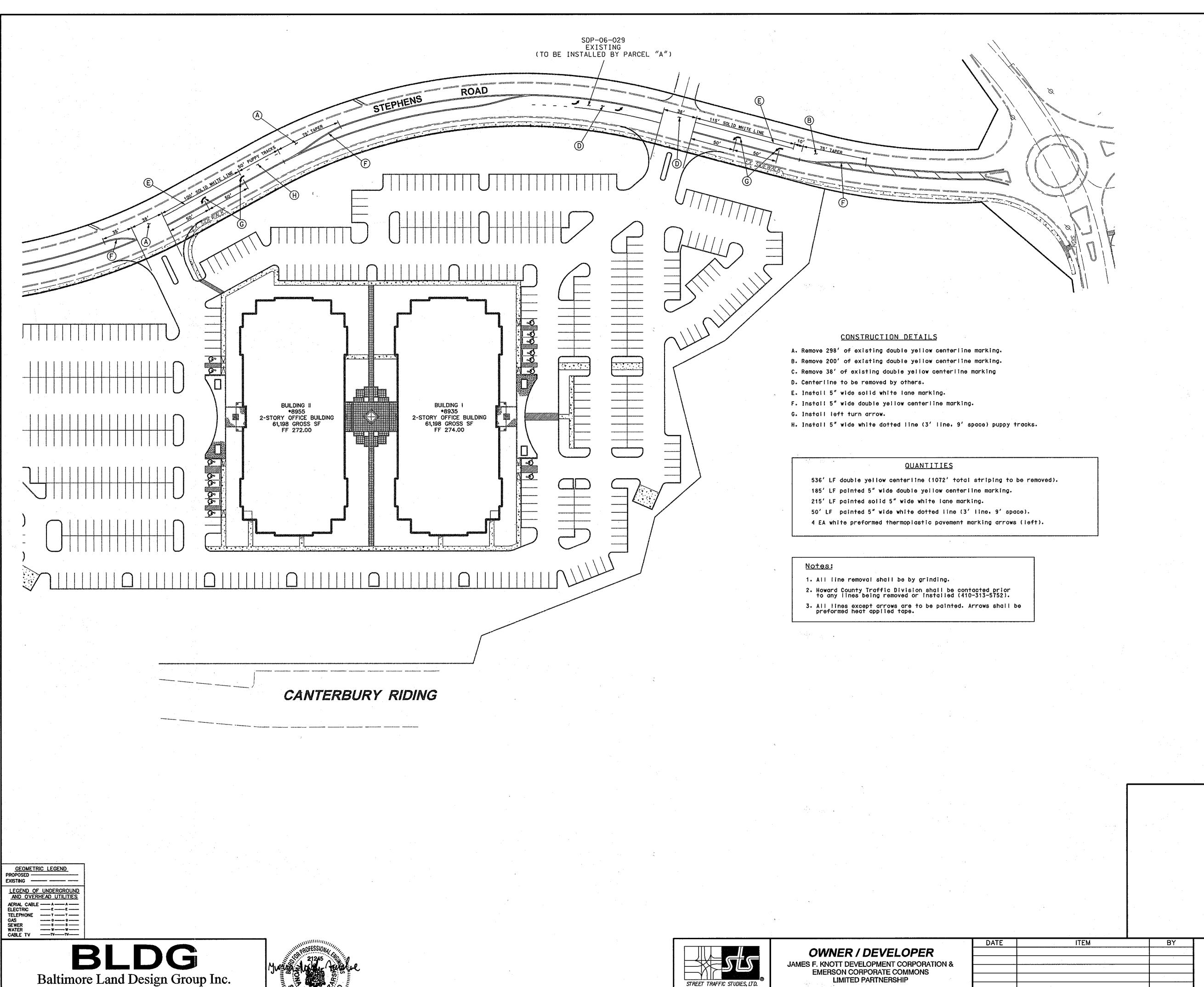
SEWER CODE

7142500

ADDRESS CHART

21/2-3° CA





Consulting Engineers

222 SCHILLING CIRCLE SUITE 105 • HUNT VALLEY, MARYLAND 21030

PHONE: 410.229.9851 • FAX: 410.229.9865 • BLDG@BLDGINC.COM

1 TEXAS STATION COURT

Ph (410) 590-5500 Fax (410) 590-6637

SUITE 200 TIMONIUM, MD 21093-8288 (443) 689-8000

EMERSON CORPORATE COMMONS

PAVEMENT MARKING PLAN

ZONING PEC

LOT / PARCEL NO.

PARCEL B-2

PARCEL C-2

SUBDIVISION NAME

PLAT NO.

18974

WATER CODE C-05

REVITZ PROPERTY

GRID NO.

20

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

ADDRESS CHART

PERMIT INFORMATION CHART

N / A

47

SEWER CODE 7142500

STREET ADDRESS

8935 STEPHENS ROAD

8955 STEPHENS ROAD

TAX MAP NO. ELEC. DIST.

PARCELS B-2 & C-2 (Revitz Property) (plat-# 18974)

HOWARD COUNTY, MARYLAND SCALE: 1"-50"

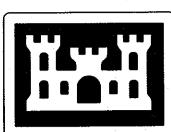
SHEET 13 OF 16 DATE: JUNE, 2007 SDP-07-037

LOT / PARCEL NO.

B-2 & C-2

CENSUS TRACT

Dote | 18/10 | Dote | D



U.S. ARMY CORPS
OF ENGINEERS
BALTIMORE DISTRICT
REAL PROPERTY SERVICES FIELD OFFICE

PERIMETER SECURITY AND CONNECTOR BUILDING

8955 STEPHENS ROAD LAUREL, MD

FINAL - REVISED SITE DEVELOPMENT PLAN 06-30-2009



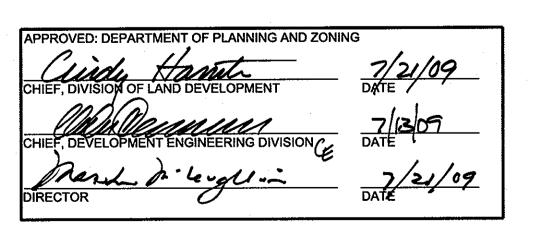
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FY: 2009

PROJECT: PTN19646

LEASE AGREEMENT NO.: DACA31-5-2008-0588

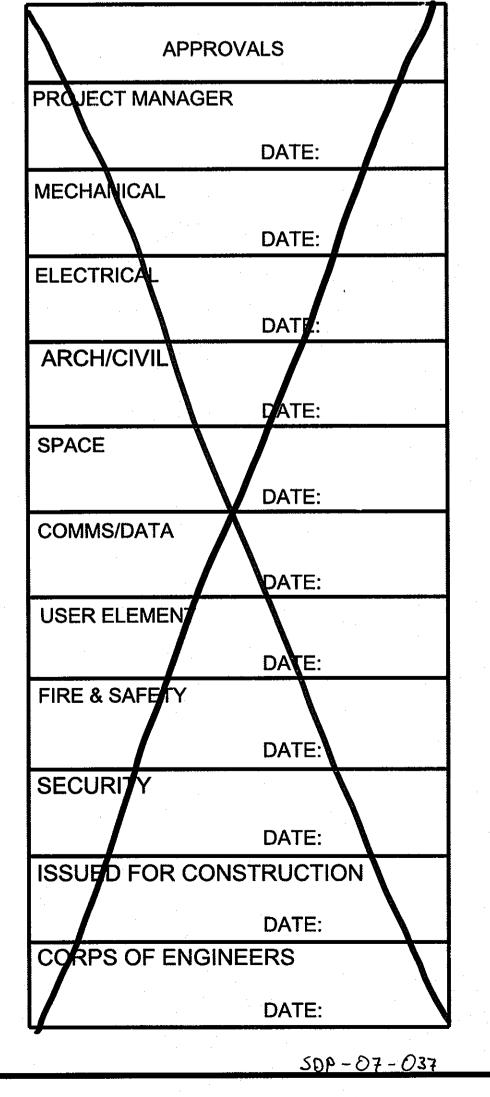
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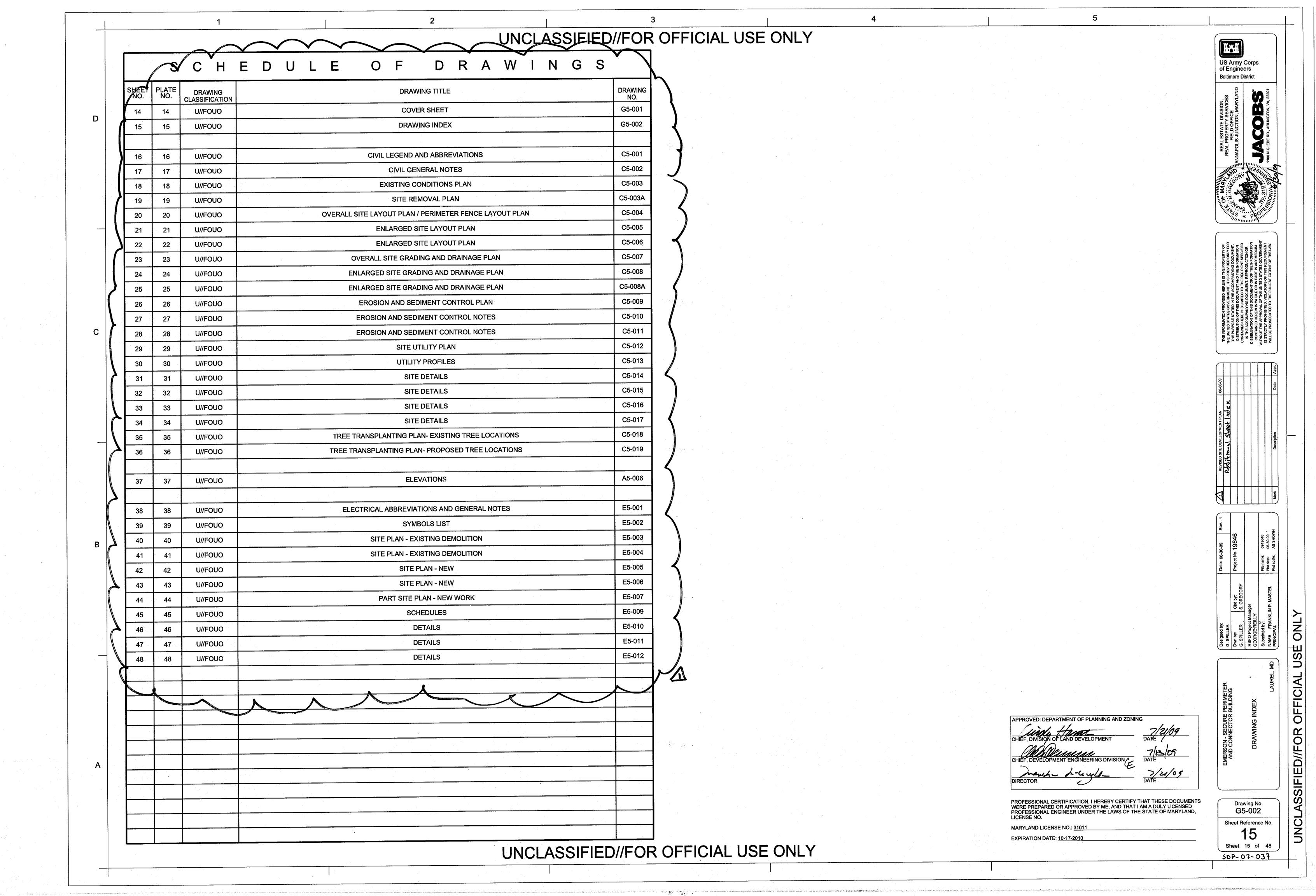


PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO.

MARYLAND LICENSE NO.: 31011

EXPIRATION DATE: 10-17-2010





File Pio Piot

Sheet Reference No

509-07-037

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15. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A FOUNDATION THAT EXISTS OR IS UNDER CONSTRUCTION. NO STRUCTURE MAY BE CONSTRUCTED WITHIN 20 FEET OF AN ACTIVE SEDIMENT TRAP OR BASIN.

DEEMED NECESSARY.

TRAPS AND BASINS SHALL HAVE STABLE INFLOW POINTS.

TRAPS THEMSELVES ARE BEING PUMPED OUT.

DISTURBED FOR MORE THAN ONE DAY.

ENGINEER OR WMA INSPECTOR:

NDITION AT ALL TIMES.

6. THE WMA INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SAFETY OR SEDIMENT CONTROL MEASURES. IF

17. ALL TRAP DEPTH DIMENSIONS ARE RELATIVE TO THE OUTLET ELEVATION. ALL TRAPS MUST HAVE A STABLE OUTFALL. ALL

18. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL

EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING PERMANENT SEEDING, MULCHING, SODDING, AND GROUND COVERS.

19. SEDIMENT SHALL BE REMOVED AND THE TRAP OR BASIN RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE QUARTER OF THE TOTAL DEPTH OF THE TRAP OR BASIN. TOTAL DEPTH SHALL BE MEASURED FROM THE TRAP OR BASIN BOTTOM TO THE CREST OF THE OUTLET.

20. SEDIMENT REMOVED FROM TRAPS (AND BASINS) SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN, WETLAND OR TREE-SAVE AREA. WHEN PUMPING SEDIMENT LADEN WATER, THE DISCHARGE MUST BE DIRECTED TO A SEDIMENT TRAPPING DEVICE PRIOR TO RELEASE FROM THE SITE. A SUMP PIT MAY BE USED IF SEDIMENT

21. ALL WATER REMOVED FROM EXCAVATED AREAS SHALL BE PASSED THROUGH A WMA APPROVED DEWATERING PRACTICE OR PUMPED TO A SEDIMENT TRAP OR BASIN PRIOR TO DISCHARGE TO A FUNCTIONAL STORM DRAIN SYSTEM OR TO STABLE

A. CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK,
B. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE HIGH SIDE OF THE TRENCH.
C. TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED, AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCH SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY, UNLESS;
D. TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN

23. WHERE DEEMED APPROPRIATE BY THE ENGINEER OR INSPECTOR, SEDIMENT BASINS AND TRAPS MAY NEED TO BE SURROUNDED WITH AN APPROVED SAFETY FENCE. THE FENCE MUST CONFORM TO LOCAL ORDINANCES AND REGULATIONS. THE DEVELOPER OR OWNER SHALL CHECK WITH LOCAL BUILDING OFFICIALS ON APPLICABLE SAFETY REQUIREMENTS. WHERE SAFETY FENCE IS DEEMED APPROPRIATE AND LOCAL ORDINANCES DO NOT SPECIFY FENCING SIZES AND TYPES, THE FOLLOWING SHALL BE USED AS A MINIMUM STANDARD: THE SAFETY FENCE MUST BE MADE OF WELDED WIRE AND AT LEAST 42 INCHES IN HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN 2 INCHES IN WIDTH AND 4 INCHES IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED AND IN GOOD

22. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY

SURVEY NOTES

- 1. BOUNDARY INFORMATION BASED ON SURVEY BY DAFT, MCCUNE & WALKER PLAT 15785
- 2. TOPOGRAPHIC INFORMATION BASED ON FIELD SURVEY BY SURVEY SERVICES OF MARYLAND, LLC AND RECORD MAPPING PROVIDED
- 5. NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR) IMMEDIATELY IF CONDITIONS DIFFER FROM WHAT IS SHOWN ON PLANS.

SITE REMOVAL NOTES

- I. LIMITS AND ITEMS SHOWN FOR REMOVAL ARE BASED ON BEST AVAILABLE RECORD MAPPING. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY ITEMS NOT SHOWN WITHIN THE LIMITS OF CONSTRUCTION AS NECESSARY TO COMPLETE THE REQUIRED WORK.
- 2. ANY UTILITIES SHOWN TO BE REMOVED SHALL BE FIELD VERIFIED BY THE CONTRACTOR. CONTRACTOR SHALL NOTIFY AND SCHEDULE ANY INTENDED UTILITY INTERRUPTIONS WITH THE CONTRACTING OFFICER REPRESENTATIVE PRIOR TO WORK
- 3. COORDINATE ANY UTILITY REMOVAL WITH THE SITE UTILITY PLANS.
- 4. MAINTAIN EXISTING SERVICES DESIGNATED TO BE REMOVED IN OPERATION UNTIL TEMPORARY SERVICES HAVE BEEN INSTALLED AND ARE OPERATIONAL.
- 5. COORDINATE WITH SITE LAYOUT, SITE GRADING PLAN AND SITE UTILITY PLAN FOR LIMITS OF REMOVAL

SEQUENCE OF CONSTRUCTION

- 1. HOLD PRE-CONSTRUCTION MEETING.
- 2. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL DEVICES.
- 3. INSTALL PERIMETER SECURITY CONTROL DEVICES
- 4. INSTALL COMBINED WATER LINE AND REMOVE PORTION OF EXISTING WATER LINE, AS SHOWN ON PLANS.
- 5. REMOVE EXISTING STORM SEWERS AND CATCH BASINS AS SHOWN ON PLANS.
- 6. INSTALL STORM SEWER LINES, MANHOLES, AND CATCH BASINS.
- 7. INSTALL INLET PROTECTION ON NEW CATCH BASINS.
- REMOVE EXISTING ROADWAY, CURB, AND SIDEWALK AS INDICATED.
- 9. GRADE SITE AS INDICATED.
- 10. CONSTRUCT NEW ROADWAY, CURB, GUARD HOUSE (GFE), AND CONNECTOR BUILDING.
- 11. RESTRIPE PARKING AREA AS INDICATED.
- 12. STABILIZE SITE AND JUPON MDE APPROVAL, REMOVE EROSION AND SEDIMENT CONTROL DEVICES

APPROVED: DEPARTMENT OF PLANNING AND ZONING CHIEF, DIVISION OF LAND DEVELOPMENT MURIUMAN EVELOPMENT ENGINEERING DIVISION CERTIFY THAT THESE DOCUMENTS

PROFESSIONAL CERTIFICATION. I HEREBY WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY L'CENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND,

MARYLAND LICENSE NO.: 31011 EXPIRATION DATE: <u>10-17-2010</u>

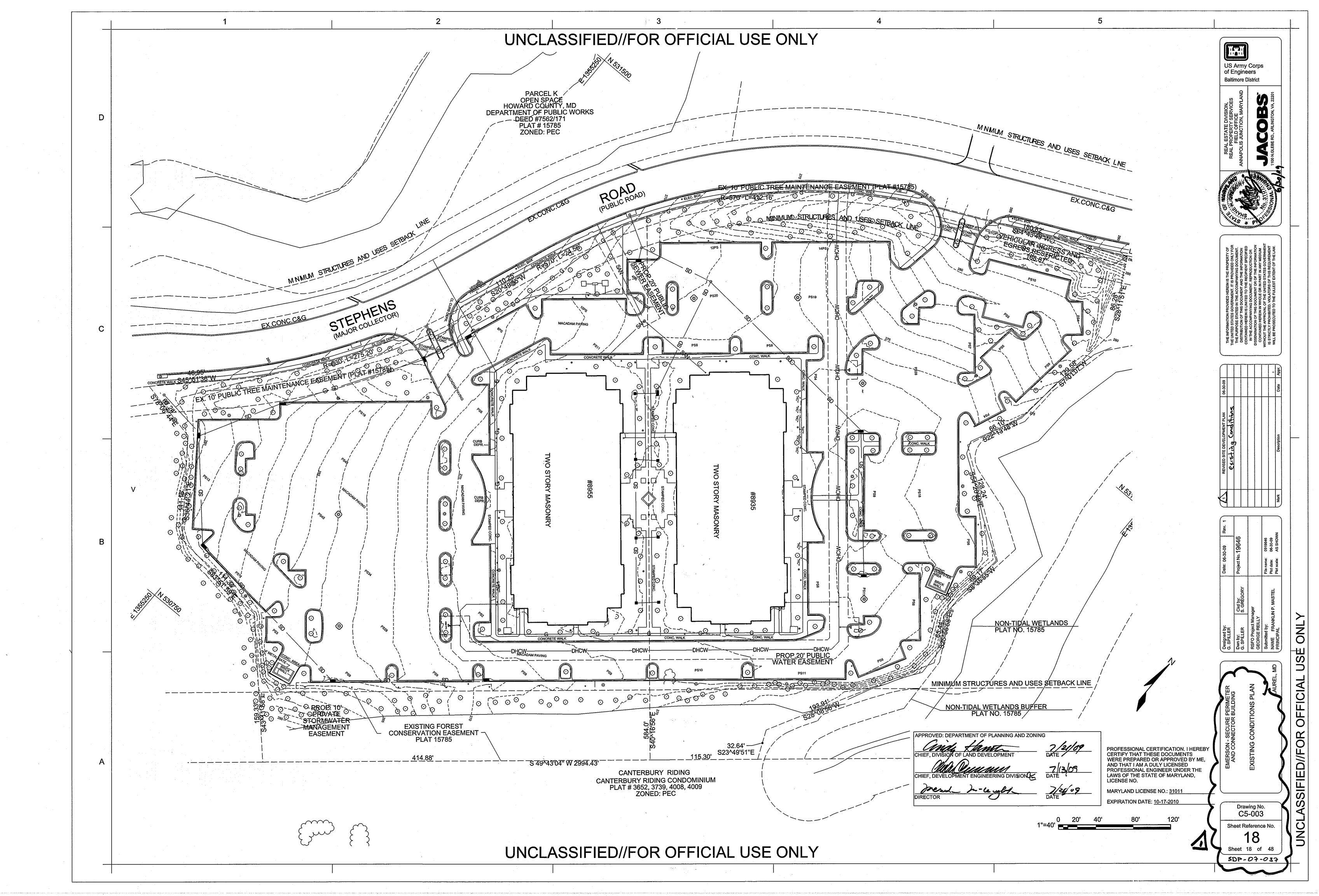
US Army Corps of Engineers **Baltimore District**

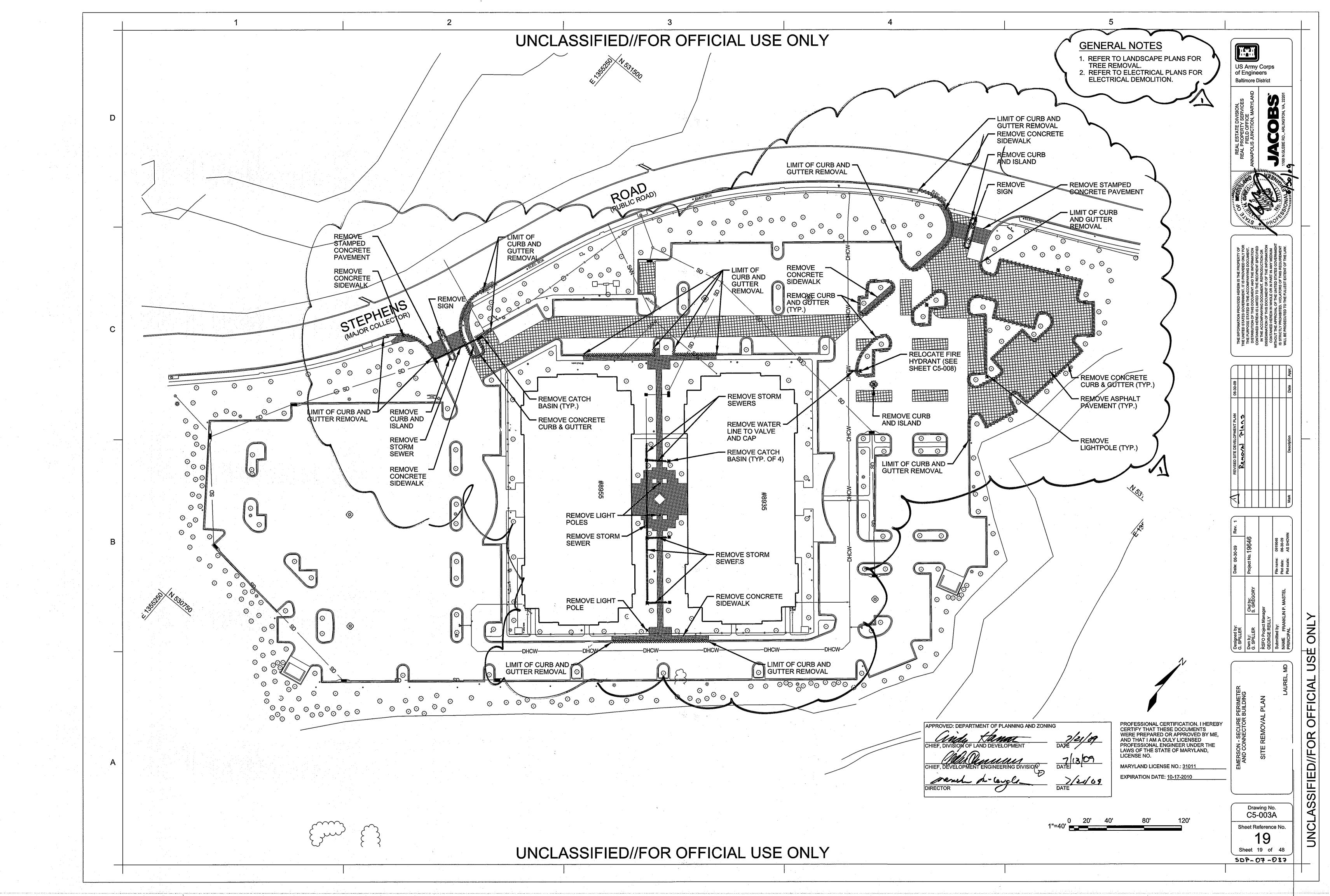


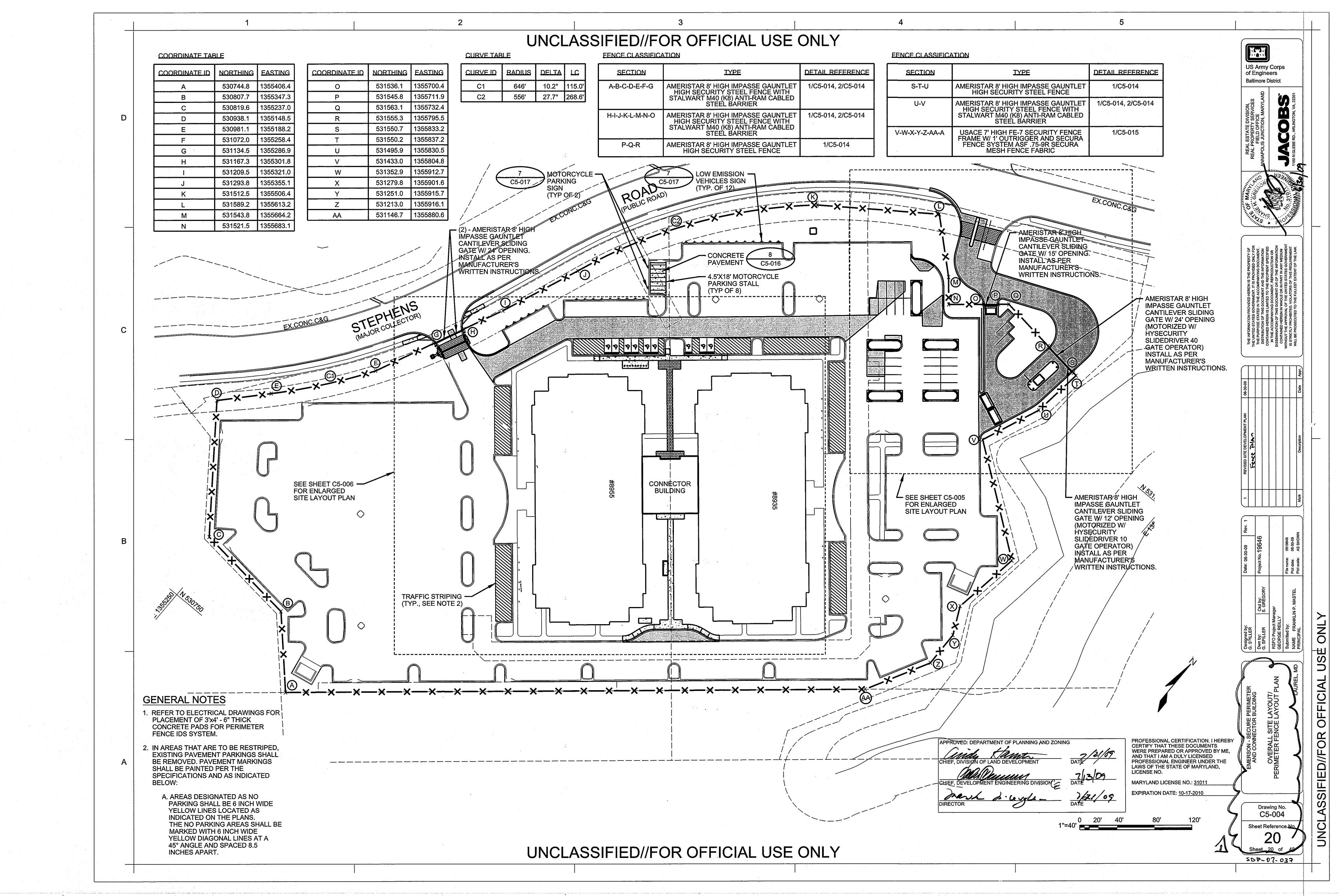
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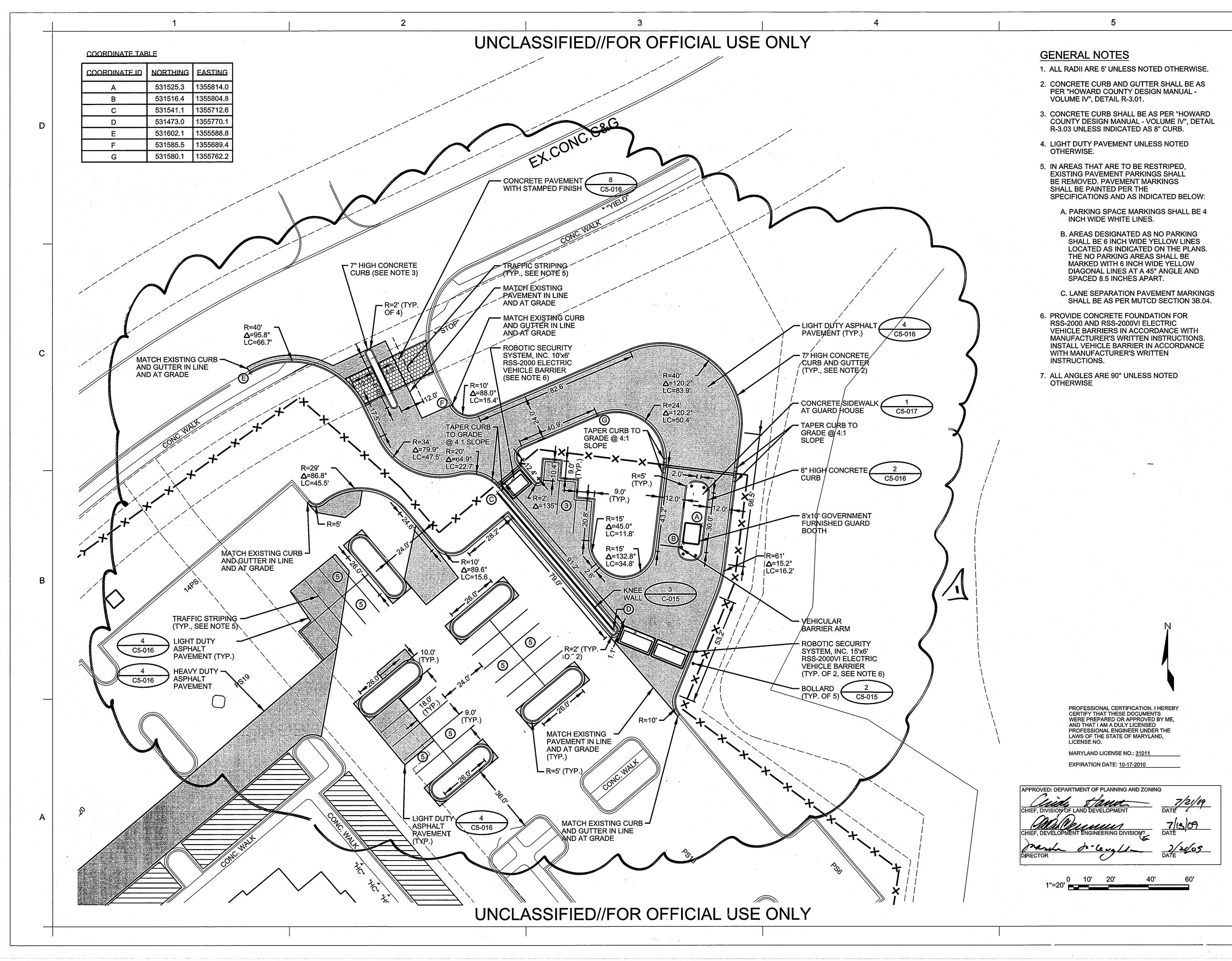
Sheet 17 of 48 SDP-07-037

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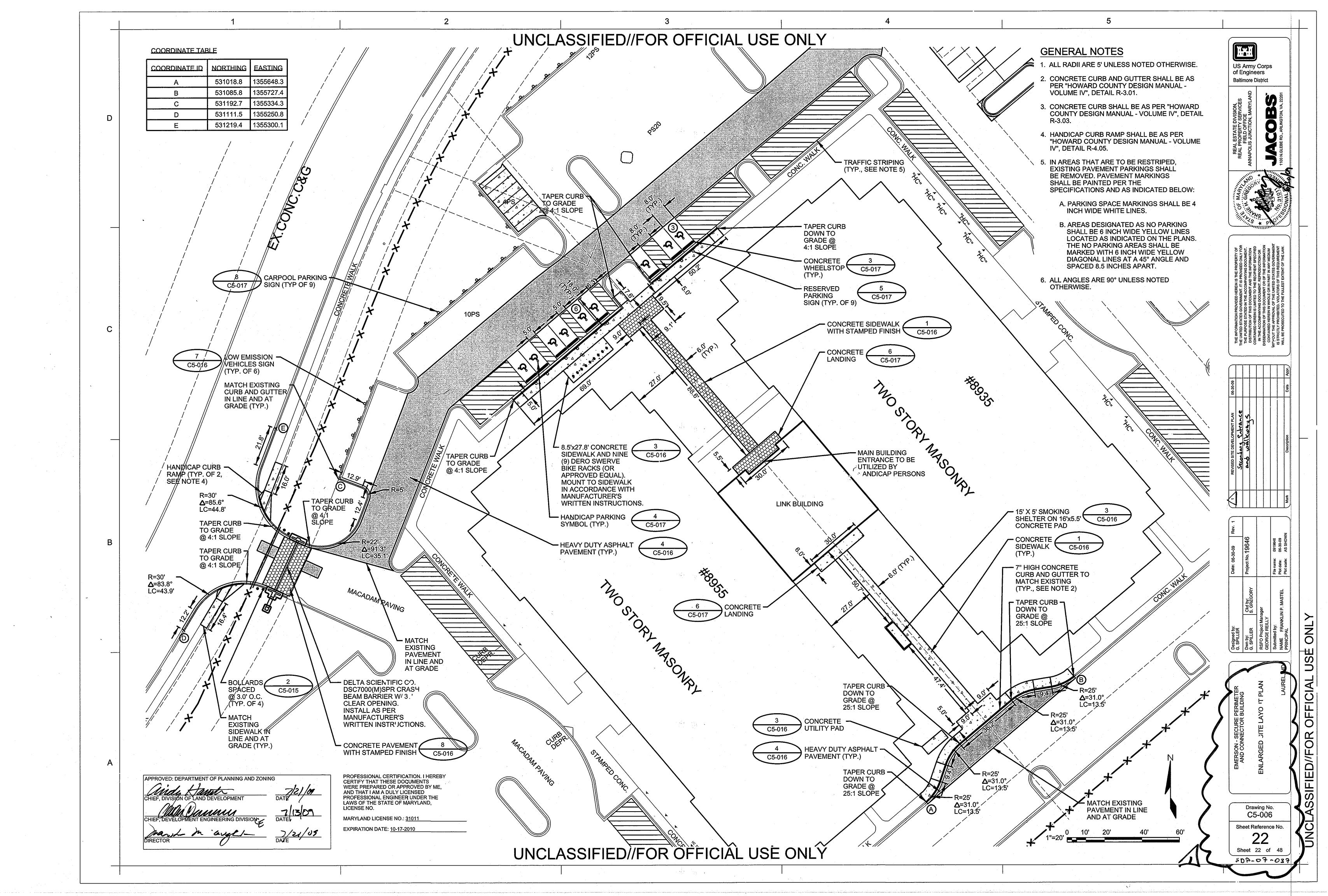
of Engineers **Baltimore District**

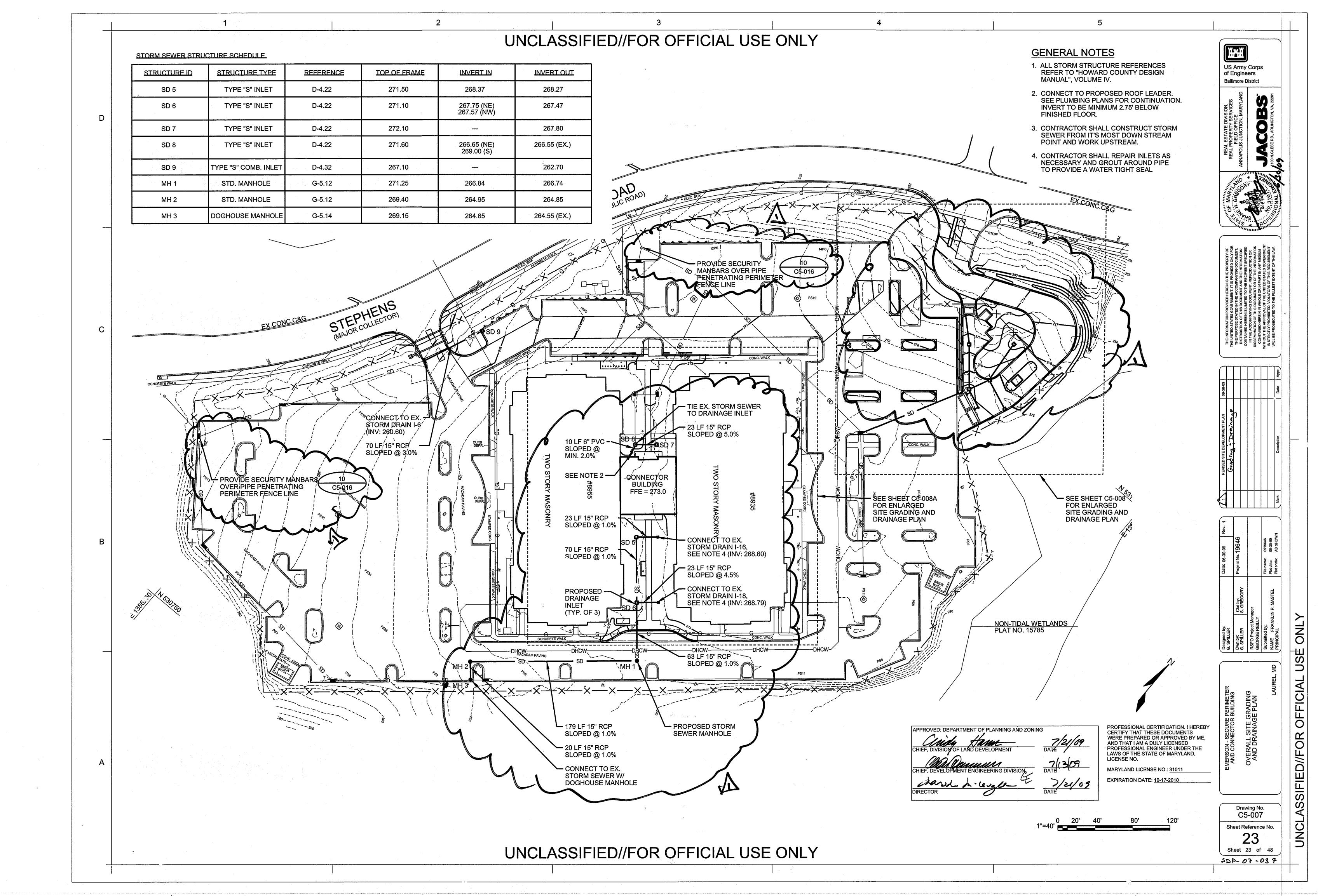
US Army Corps

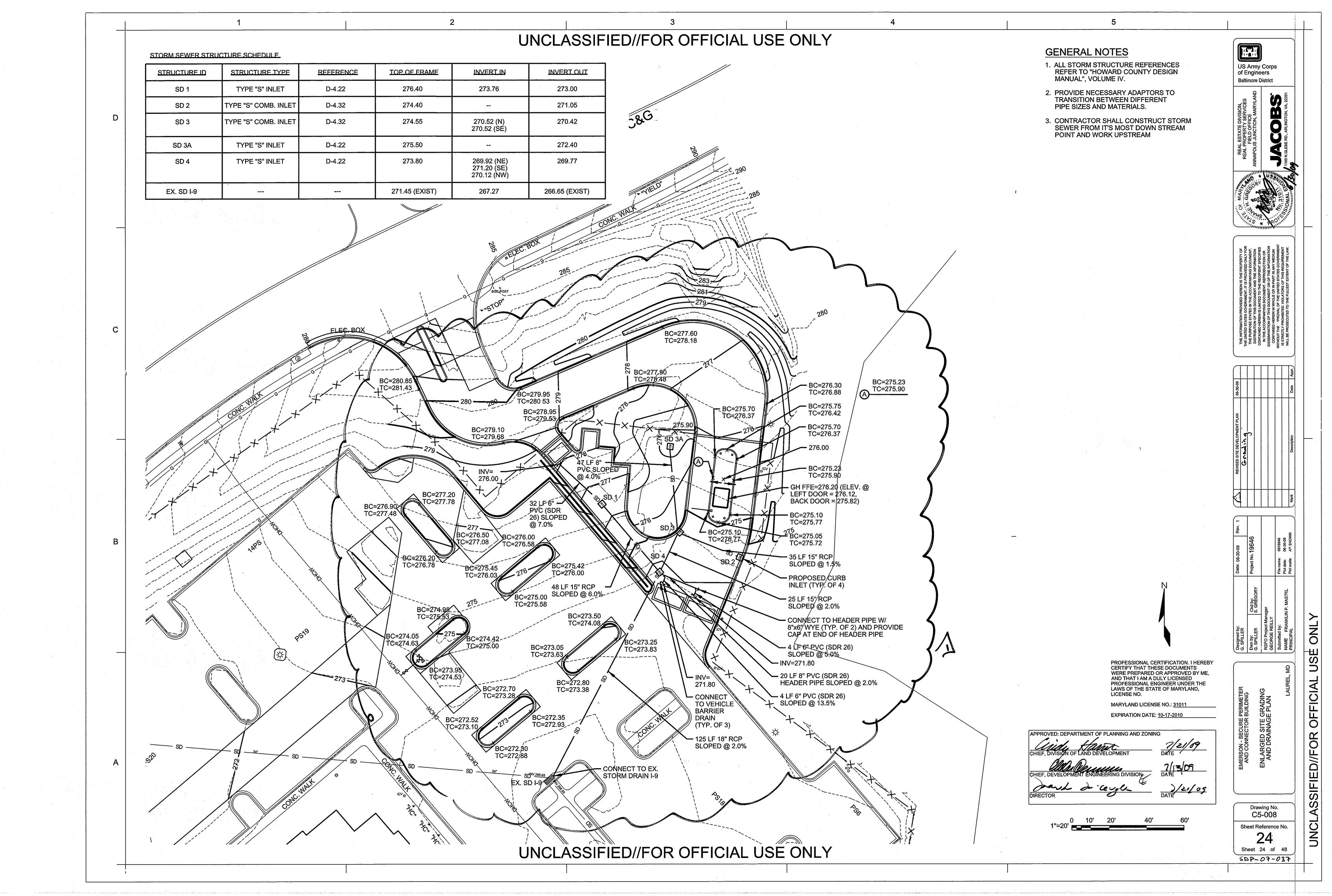


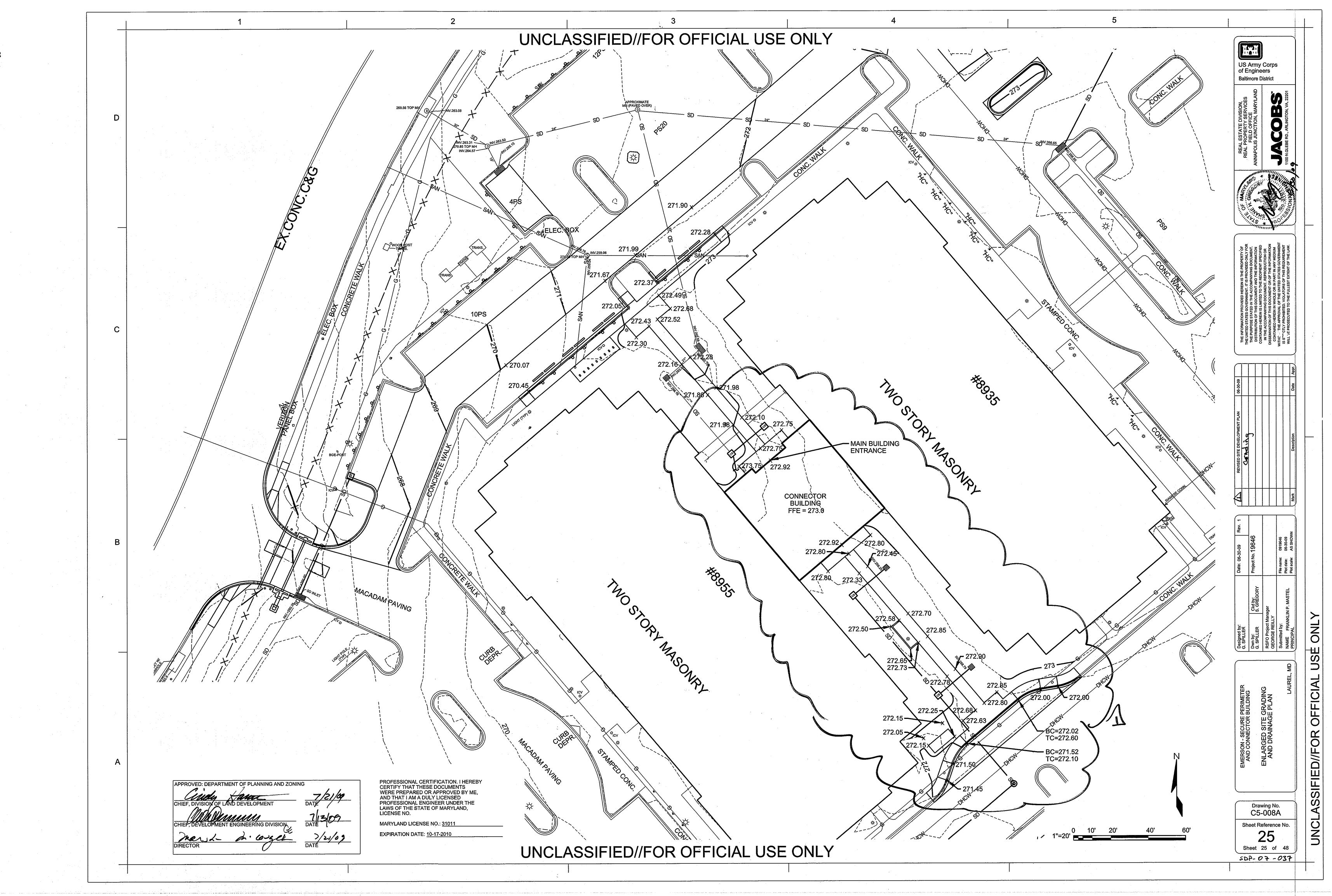
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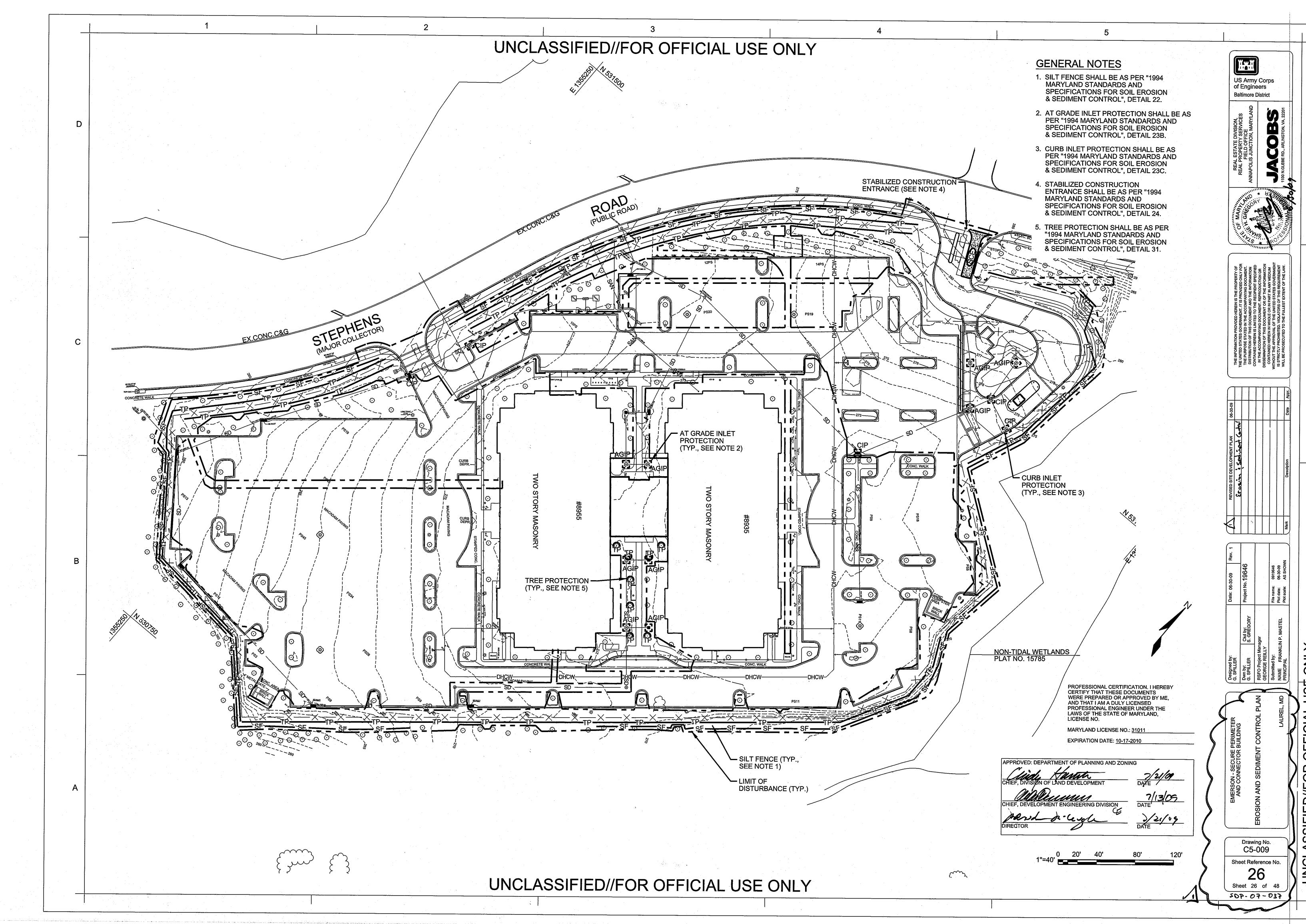
Sheet 21 of 48 SDP-07-037











VEGETATIVE STABILIZATON

DEFINITION:

USING VEGETATION AS COVER FOR BARREN SOIL TO PROTECT IT FROM FORCES THAT CAUSE EROSION.

PURPOSE:

VEGETATIVE STABILIZATION SPECIFICATIONS ARE USED TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO EROSE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENT LOADS AND RUNOFF TO DOWNSTREAM AREAS, AND IMPROVING WILDLIFE HABITAT AND VISUAL RESOURCES.

CONDITIONS WHERE PRACTICE APPLIES:

THIS PRACTICE SHALL BE USED ON DENUDED AREAS AS SPECIFIED ON THE PLANS AND MAY BE USED ON HIGHLY ERODIBLE OR CRITICALLY ERODING AREAS. THIS SPECIFICATION IS DIVIDED INTO TEMPORARY SEEDING, TO QUICKLY ESTABLISH VEGETATIVE COVER FOR SHORT DURACTION (UP TO ONE YEAR), AND PERMANENT SEEDING, FOR LONG TERM VEGETATIVE COVER. EXAMPLES OF APPLICABLE AREAS FOR TEMPORARY SEEDING ARE TEMPORARY SOIL STOCKPILES, CLEARED AREAS BEING LEFT IDLE BETWEEN CONSTRUCTION PHASES, EARTH DIKES, ETC. AND FOR PERMANENT SEEDING ARE LAWNS, DAMS, CUT AND FILL SLOPES AND OTHER AREAS AT FINAL GRADE, FORMER STOCKPILE AND STAGING AREAS, ETC.

EFFECTS ON WATER QUALITY AND QUANTITY:

PLANTING VEGETATION IN DISTURBED AREAS WILL HAVE AN EFFECT ON THE WATER BUDGET, ESPECIALLY ON VOLUMES AND RATES OF RUNOFF, INFILTRATION, EVAPORATION, TRANSPIRATION, PERCOLATION, AND GROUNDWATER RECHARGE. VEGETATION, OVER TIME, WILL INCREASE ORGANIC MATTER CONTENT AND IMPROVE THE WATER HOLDING CAPACITY OF THE SOIL AND SUBSEQUENT PLANT GROWTH.

VEGETATION WILL HELP REDUCE THE MOVEMENT OF SEDIMENT, NUTRIENTS, AND OTHER CHEMICALS CARRIED BY RUNOFF TO RECEIVING WATERS. PLANTS WILL ALSO HELP ROTECT GROUNDWATER SUPPLIES BY ASSIMILATING THOSE SUBSTANCES PRESENT WITHIN THE ROOT ZONE.

SEDIMENT CONTROL DEVICES MUST REMAIN IN PLACE DURING GRADING, SEEDBED PREPARATION, SEEDING, MULCHING AND VEGETATIVE ESTABLISHMENT TO PREVENT LARGE QUANTITIES OF SEDIMENT AND ASSOCIATED CHEMICALS AND TNTRIENTS FROM WASHING INTO SURFACE WATERS.

SECTION I - VEGETATIVE STABILIATION METHODS AND MATERIALS

A. SITE PREPARATION

- INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES (EITHER TEMPORARY OR PERMANENT) SUCH AS DIVERSIONS, GRADE STABILIZATION STUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASINS.
- PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR TEMPORARY SEEDING.
- SCHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREA OVER 5 ACRES

SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

- SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLIATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BER PERFORMED BY THE UNIVERSITY OF MARYLAND OR A RECOGNIZED COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSIS.
- FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS SHALL ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTEE OF THE PRODUCER.
- LIME MATERIALS SHALL BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUED) WHICH CONTAINS AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT AT LEAST 50% WILL PASS THROUGH A #100 MESH SIEVE AND 98 - 100% WILL PASS THROUGH A #20 MESH SIEVE.
- INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

SEEDBED PREPARATION

TEMPORARY SEEDING

- SEEDBED PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3" TO 5" BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED IT SHOULD NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPED AREAS (GREATER THAN 3:1) SHOULD BE TRACKED LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLED TO THE CONTOUR OF THE SLOPE.
- APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
- INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

PERMAENT SEEDING

- a. MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT:
 - SOIL pH SHALL BE BETWEEN 6.0 AND 7.0
 - SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM).
 - THE SOIL SHALL CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL (> 30% SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AND EXCEPTION IS IF LOVEGRASS OR SERECIA LESPEDEZA IS TO BE PLANTED, THEN A SANDY SOIL (, 30% SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT. SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - IF THESE CONDITIONS CONNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH SECTION 21 STANDARD AND SPECIFICATION FOR TOPSOIL.
- AREAS PREVIOUSLY GRADED IN CONFORMANCE WITH THE DRAWINGS SHALL BE MAINTAINED IN A TRUE AND EVEN GRADE. THEN CARIFIED OR OTHEWISE LOOSTENED TO A DEPTH OF 3 - 5" TO PERMIT BODING OF THE TOPSOIL TO THE SURFACE AREA AND TO CREATED HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN A SLOPE.
- APPLY SOIL AMENDMENTS AS PER SOIL TEST OR AS INCLUDED ON THE PLANS.
- MIX SOIL AMENDMENTS INTO THE TOP 3 -5" OF TOPSOIL BY DISKING OR OTHER SUITABLE MEANS. LAWN AREAS SHOULD BE RAKED TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION, LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE. STEEP SLOPES (STEEPER THAN 3:1) SHOULD BE TRACKED BY A DOZER LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 3" OF SOIL SHOULD BE LOOSE AND FRIABLE. SEEDBED LOOSENING MAY NOT BE NECESSARY ON NEWLY DISTURBED AREAS.

D. SEED SPECIFICATIONS

ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED SHALL BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED SHALL HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON THIS JOB.

NOTE: SEE TAGS SHALL BE MADE AVAILABLE TO THE INSPECTOR TO VERIFY TYPE AND RATE OF SEED USED.

INOCULANT - THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES SHALL BE A PURE CULTURE OF NITROGEN-FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS SHALL NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANT AS DIRECTED ON PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75-80° F. CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

METHODS OF SEEDING

- HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER), BROADCAST OR DROP SEEDER, OR A CULTIPACKER SEEDER.
 - IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES AMOUNTS WILL NOT EXCEED THE FOLLOWING:NITROGEN; MAXIMUM OF 100 LBS. PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOURS): 200 LBS/AC; K20 (POTASSIUM): 200 LBS/AC.
 - LIME USE ONLY GROUND AGRICULTURAL LIMESTONE. (UP TO 3 TONS PER ACRES MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
 - SEED AND FERTILIZER SHALL BE MIXED ON SITE AND SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.
- DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
 - SEED SPREAD DRY SHALL BE INCORPORATED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON THE TEMPORARY OR PERMANENT SEEDING SUMMARIES OR TABLES 25 OR 26. THE SEEDED AREA SHALL THEN BE ROLLED WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
 - WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
- DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
- CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.
- WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

MULCH SPECIFICATION (IN ORDER OF PREFERENCE)

- STRAW SHALL CONSIST OF THOROUGHLY THRESHED WHEAT, RYE OR OAT STRAW, REASONABLY BRIGHT IN COLOR, AND SHALL NOT BE MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY AND SHALL BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW.
- WOOD CELLULOSE FIBER MULCH (WCFM)
 - WCFM SHALL CONSIST OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS
 - WCFM SHALL BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.
 - c. WCFM, INCLUDING DYE, SHALL CONTAIN NO GERMINATION OF GROWTH INHIBITING FACTORS
 - WCFM MATERIALS SHALL BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL SHALL FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND SHALL COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
 - WCFM MATERIAL SHALL CONTAIN NO ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE
- WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH TO APPROXIMATELY 10 MM., DIAMETER APPROXIMATELY 1 MM., pH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6% MAXIMUM AND WATER HOLDING CAPACITY OF 90% MINIMUM.

NOTE: ONLY STERILE STRAW MULCH SHOULD BE USED IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.

MULCHING SEEDED AREAS - MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

- IF GRADING IS COMPLETED OUTSIDE OF THE SEEDING SEASON, MULCH ALONG SHALL BE APPLIED AS PRESCRIBED IN THIS SECTION AND MAINTAINED UNTIL THE SEEDING SEASON RETURNS AND SEEDING CAN BE PERFORMED IN ACCORDANCE WITH THESE SPECIFICATIONS.
- WHEN STRAW MULCH IS USED, IT SHALL BE SPREAD OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS/ACRE. MULCH SHALL BE APPLIED TO A UNIFORM LOOSE DEPTH OF BETWEEN 1" AND 2". MULCH APPLIED SHALL ACHIEVE A UNIFORM DISTRBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. IF A MULCH ANCHORING TOOL IS TO BE USED. THE RATE SHOULD BE INCREASED TO 2.5 TONS/ACRE.
- WOOD CELLULOSE FIBER USED AS A MULCH SHALL BE APPLIED AT A NET DRY WEIGHT OF 1,500 LBS. PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LBS. OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
- SECURING STRAW MULCH (MULCH ANCHORING): MUCLH ANCHORING SHALL BE PERFORMED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON SIZE OF AREA AND EROSION HAZARD:
 - A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF TWO (2) INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD BE USED ON THE CONTOUR IF POSSIBLE.
 - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS/ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER AND THE MIXTURE SHALL CONTAIN A MAXIMU OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - APPLICATION OF LIQUID BINDERS SHOULD BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS FO BANKS. THE REMAINDER OF AREA SHOULD BE APPEAR UNIFORM AFTER BINDER APPLICATION. SYNTHETIC BINDERS - SUCH AS ACRYLIC DLR (AGRO-TRACK), DCS-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH.
- LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4' TO 15' FEET WIDE AND 300 TO 3,000 FEET LONG.

HAH **US Army Corps** of Engineers **Baltimore District**

PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. MARYLAND LICENSE NO.: 31011

CERTIFY THAT THESE DOCUMENTS

AND THAT I AM A DULY LICENSED

PROFESSIONAL CERTIFICATION. I HEREBY

WERE PREPARED OR APPROVED BY ME.

EXPIRATION DATE: 10-17-2010

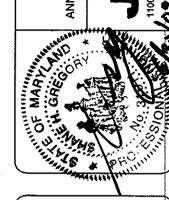
APPROVED: DEPARTMENT OF PLANNING AND ZONING

726/65 DATE

C5-010 Sheet Reference No.

Sheet 27 of 48 SDP - 07 -037

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60-30-90					Date Appr
REVISED SITE DEVELOPMENT PLAN	Erosian and Sediment	Control Notes			Description
					Mark

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.

Drawing No. C5-011

SDP-07-037

SECTION II - TEMPORARY SEEDING

VEGETATION - ANNUAL GRASS OR GRAIN USED TO PROVIDE COVER ON DISTURBED AREAS FOR UP TO 12 MONTHS. FOR LONGER DURATION OF VEGETATIVE COVER, PERMANENT SEEDING IS REQUIRED.

A. SEED MIXTURES - TEMPORARY SEEDING

TEMPORARY SEEDING SUMMARY

	SEED MIXT FRO	FERTILIZER	LIME				
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	RATE (10-10-10)	RATE	
	ANNUAL RYEGRASS	50 LBS/AC	3/1 - 4/30 8/15 - 11/1	1/4 - 1/2 INCHES	:		
	WEEPING LOVEGRASS	4 LBS/AC	5/1 - 8/14	1/4 - 1/2 INCHES	600 LB/AC (15 LB/1000 SF)	2 TON/AC (100 LB/1000 SF)	
	MILLET	50 LBS/AC	5/1-8/14	1/2 INCHES			

SECTION III: PERMANENT SEEDING

SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOR OF ONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE.

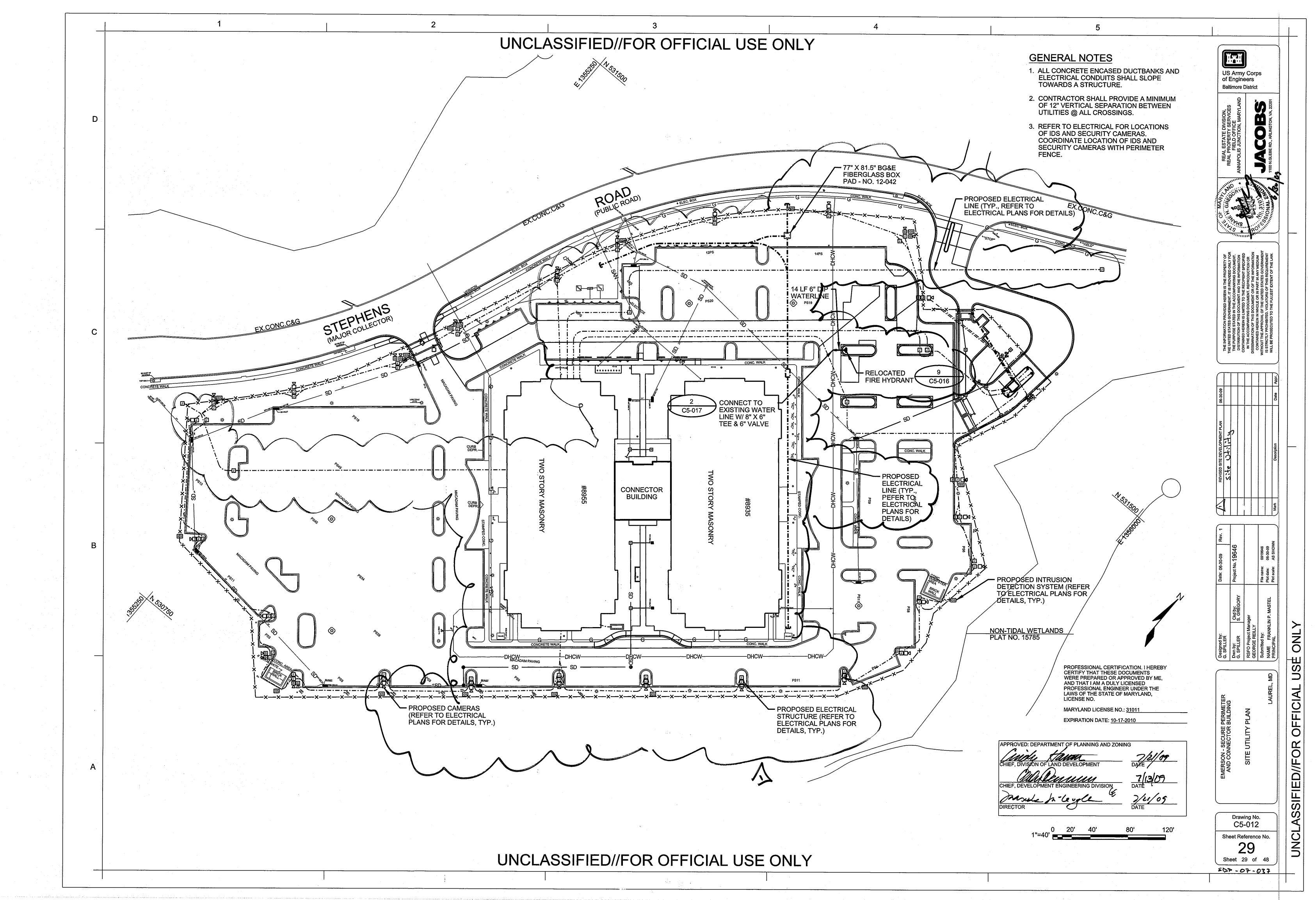
A. SEED MIXTURES - PERMANENT SEEDING

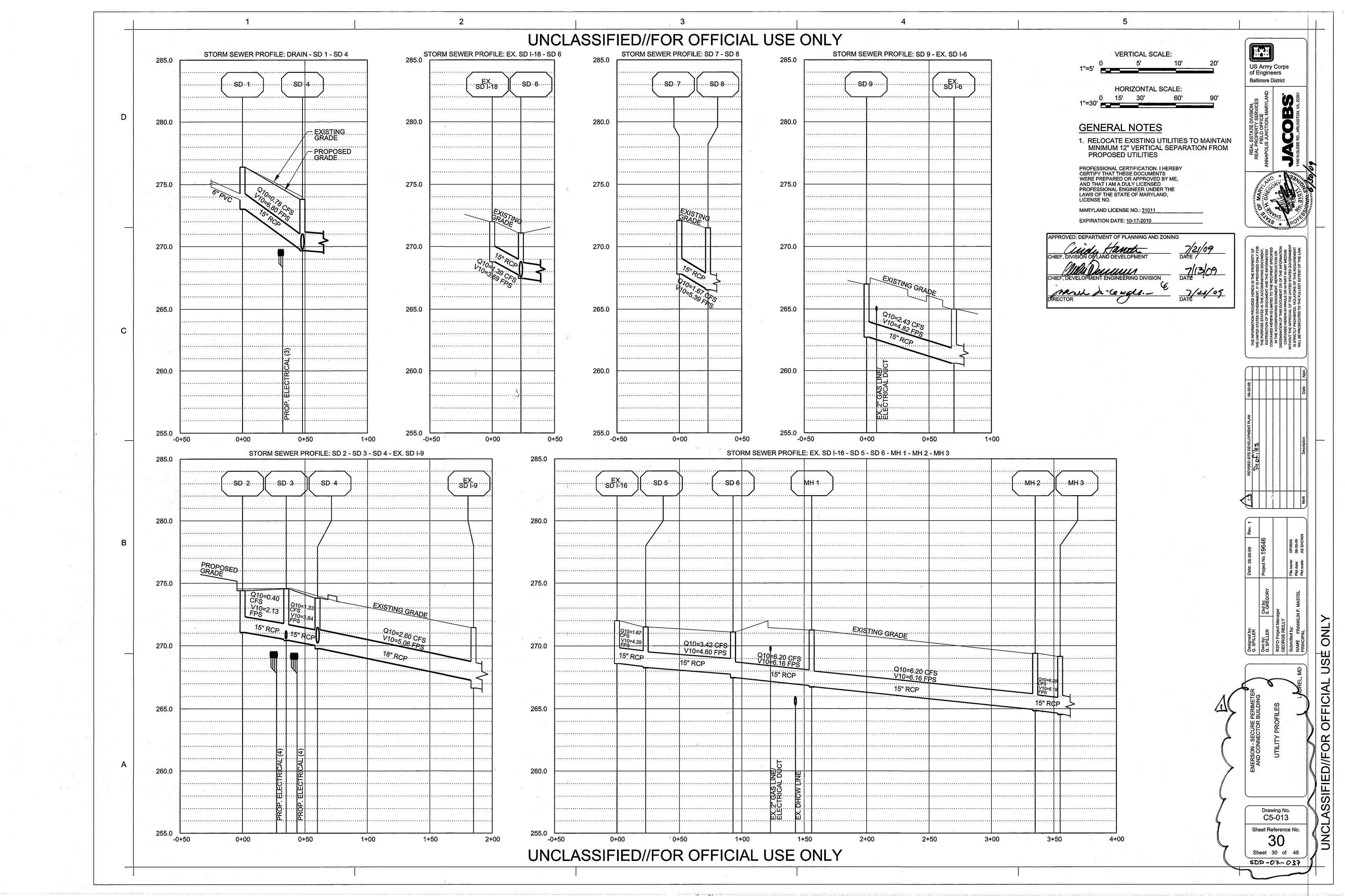
FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREAFORM FERTILIZER (46-0-0) AT 3 1/2 LBS/1000 SQ. FT. (150 LBS/AC), IN ADDITION TO THE ABOVE SOIL AMENDMENTS SHOWN IN THE TABLE BELOW, TO BE PERFORMED AT THE TIME OF SEEDING.

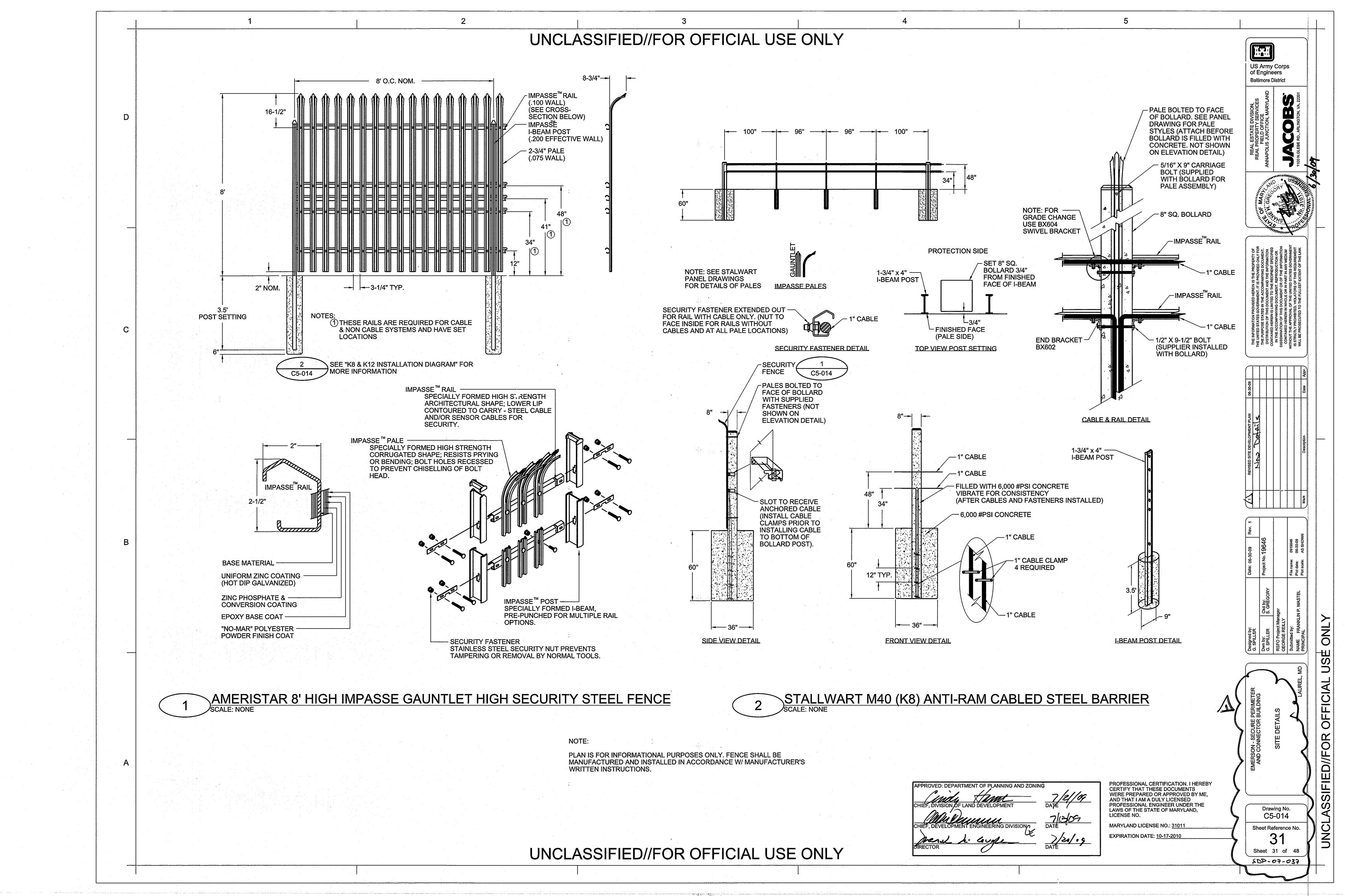
PERMANENT SEEDING SUMMARY

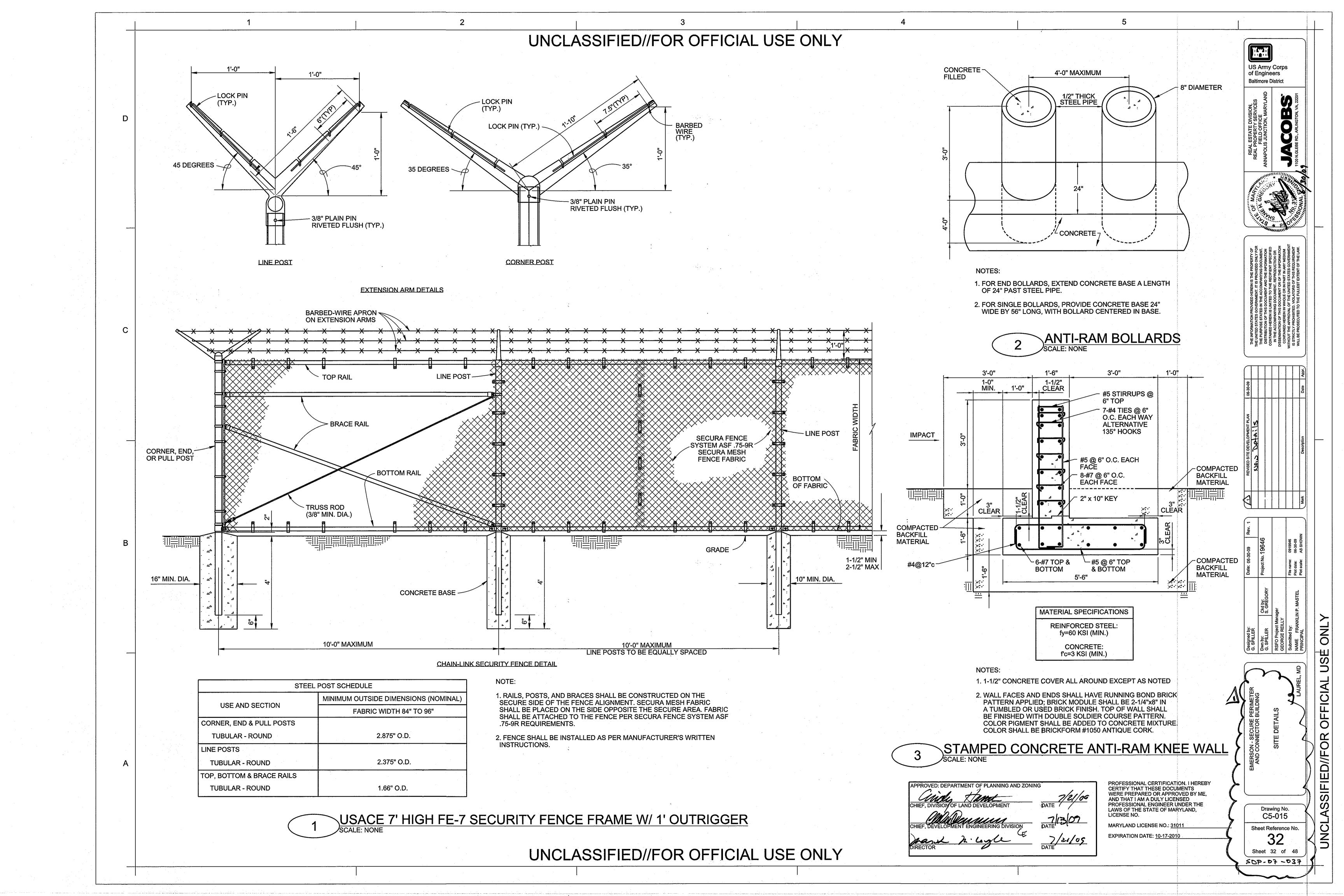
SEED MIXTURE (HARDINESS ZONE 7a) (FROM TABLE 25)					FERTILIZER RATE (10-20-20)			LIME RATE	
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P2O5	K20	RATE	
	TALL FESCUE	125	3/1-5/15	1/4"					
3	PERENNIAL RYEGRASS (10%)	15	8/15-10/15	TO 1/2"	90 LB/AC	175 LB/AC	175 LB/AC	2 TON/AC	
	KENTUCKY BLUEGRASS (5%)	10			(2 LB/ 1000 SF)	(4 LB/ 1000 SF)	(4 LB/ 1000 SF)	(100 LB/ 1000 SF)	
	TALL FESCUE (83%)	110	3/1-5/15	1/4"					
7	WEEPING LOVEGRASS (2%) PLUS	3	5/16-8/14	TO 1/2"					
	SERECIA LESPEDEZA (15%)	20	8/15-10/15			:	. '		

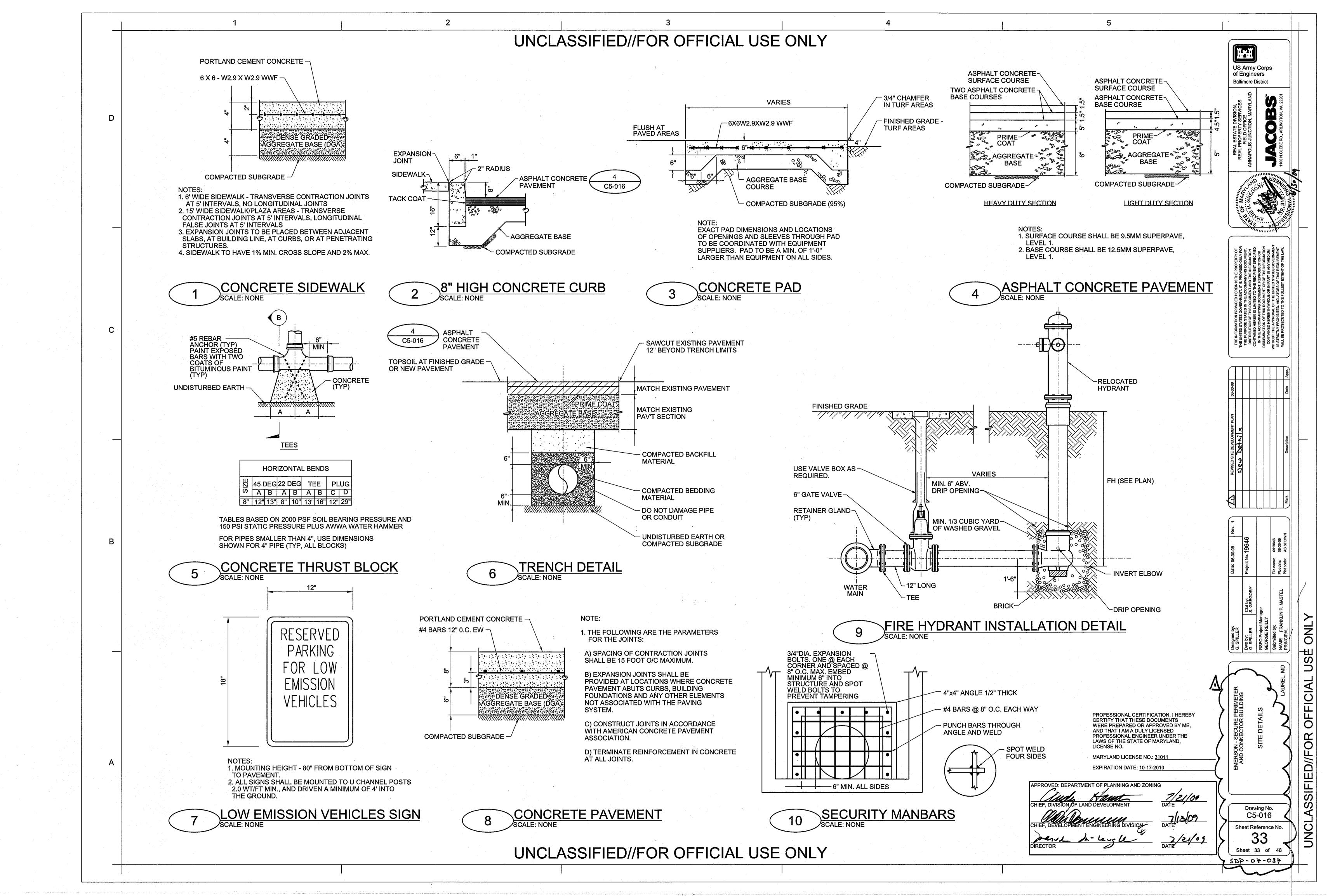
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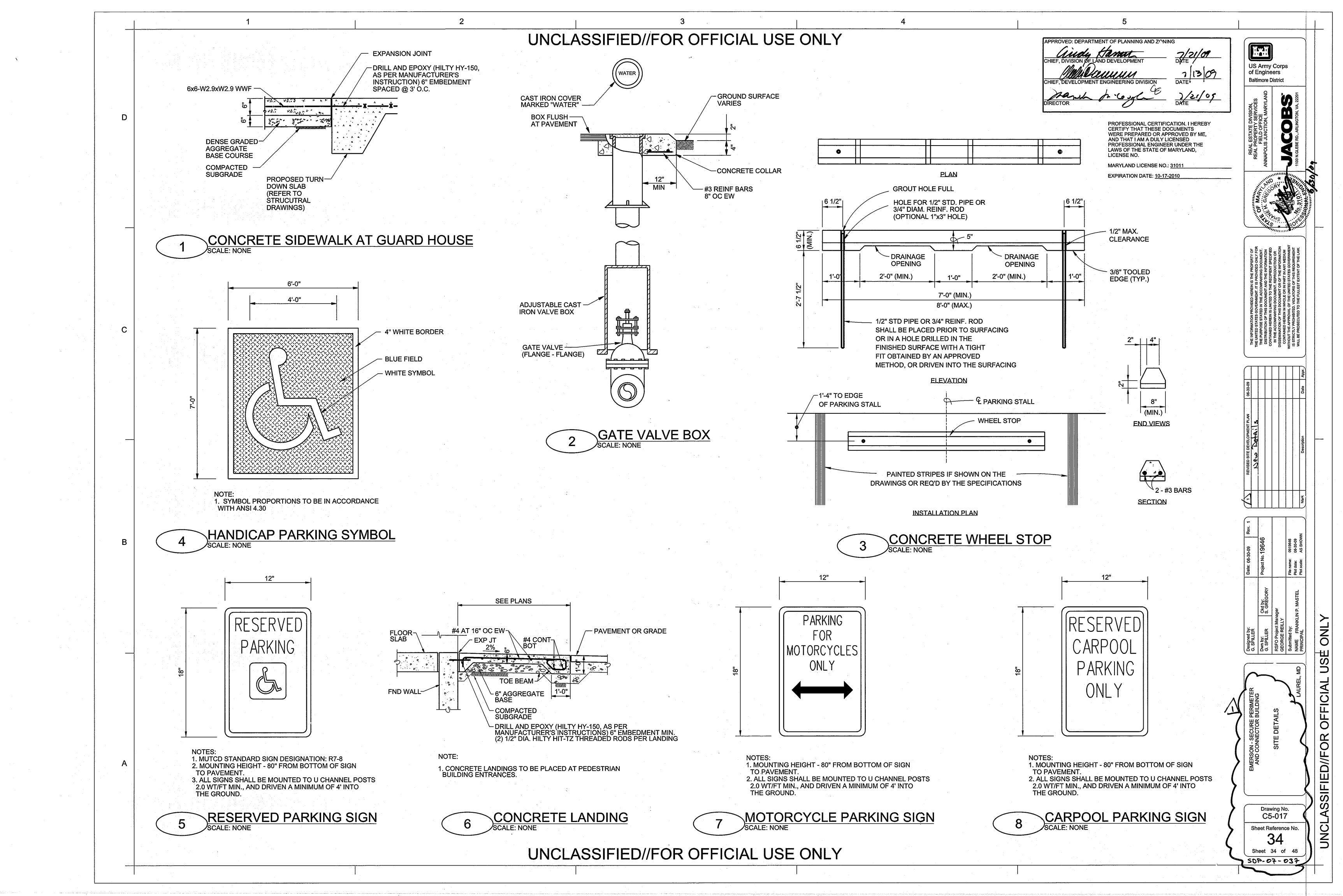


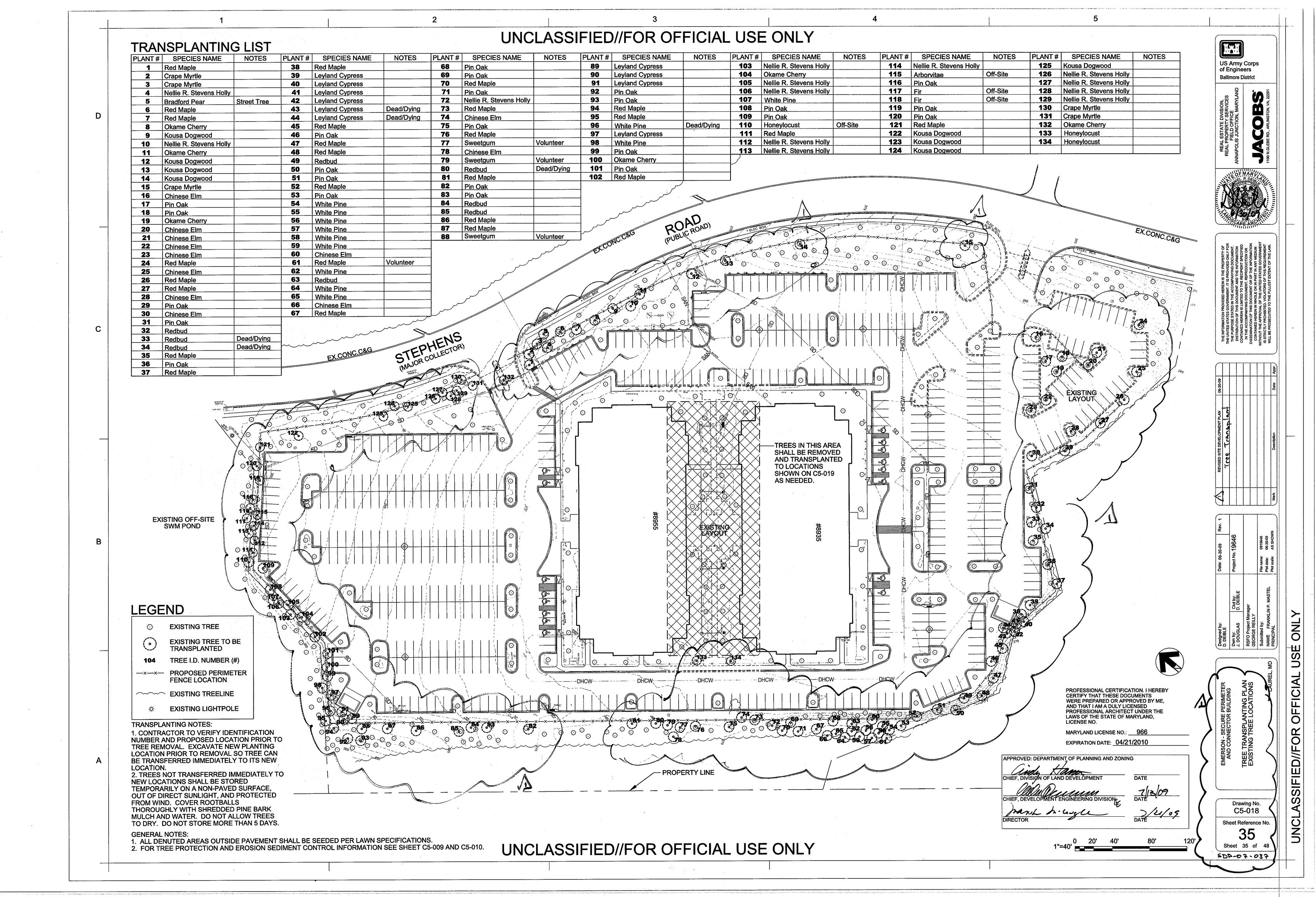


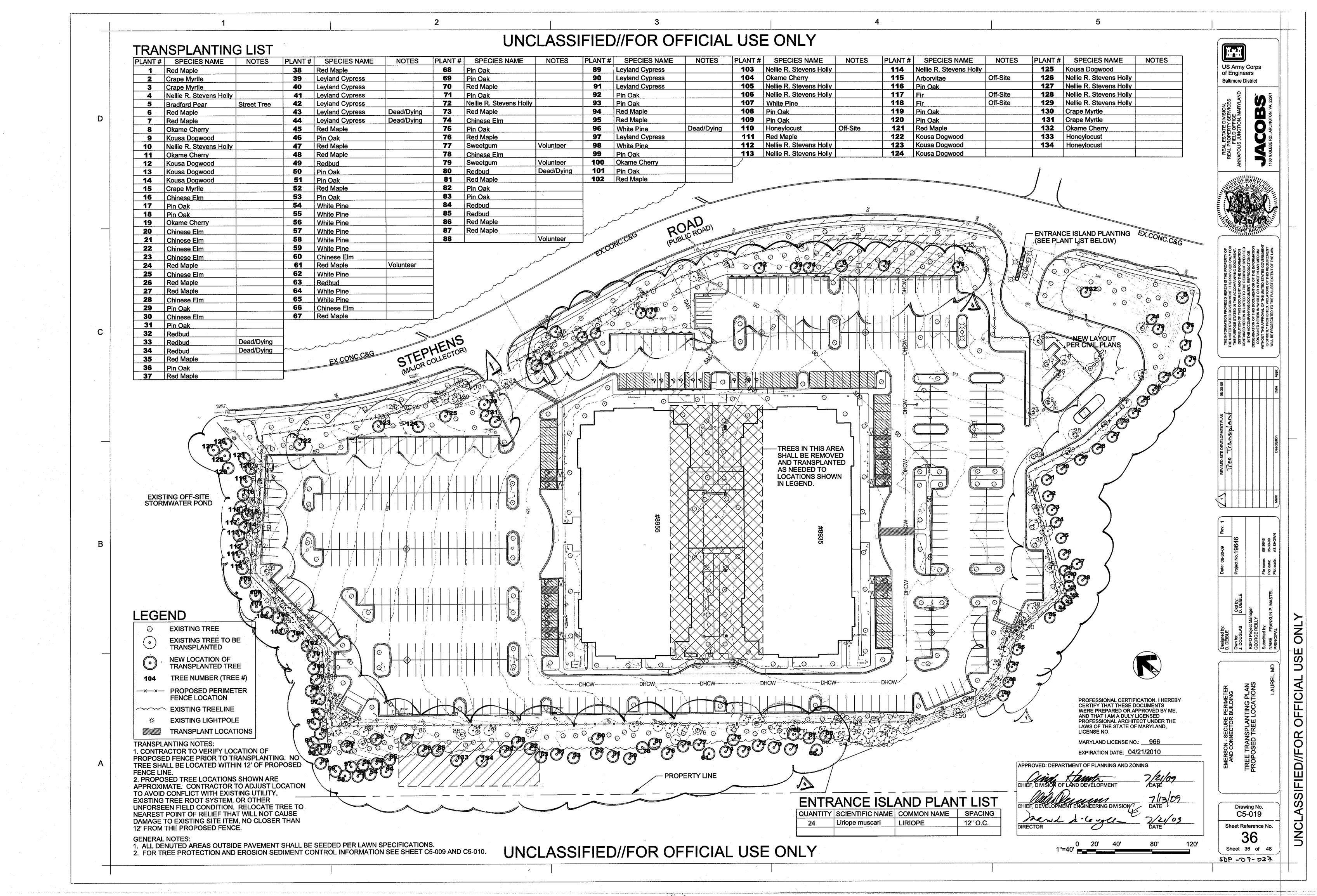


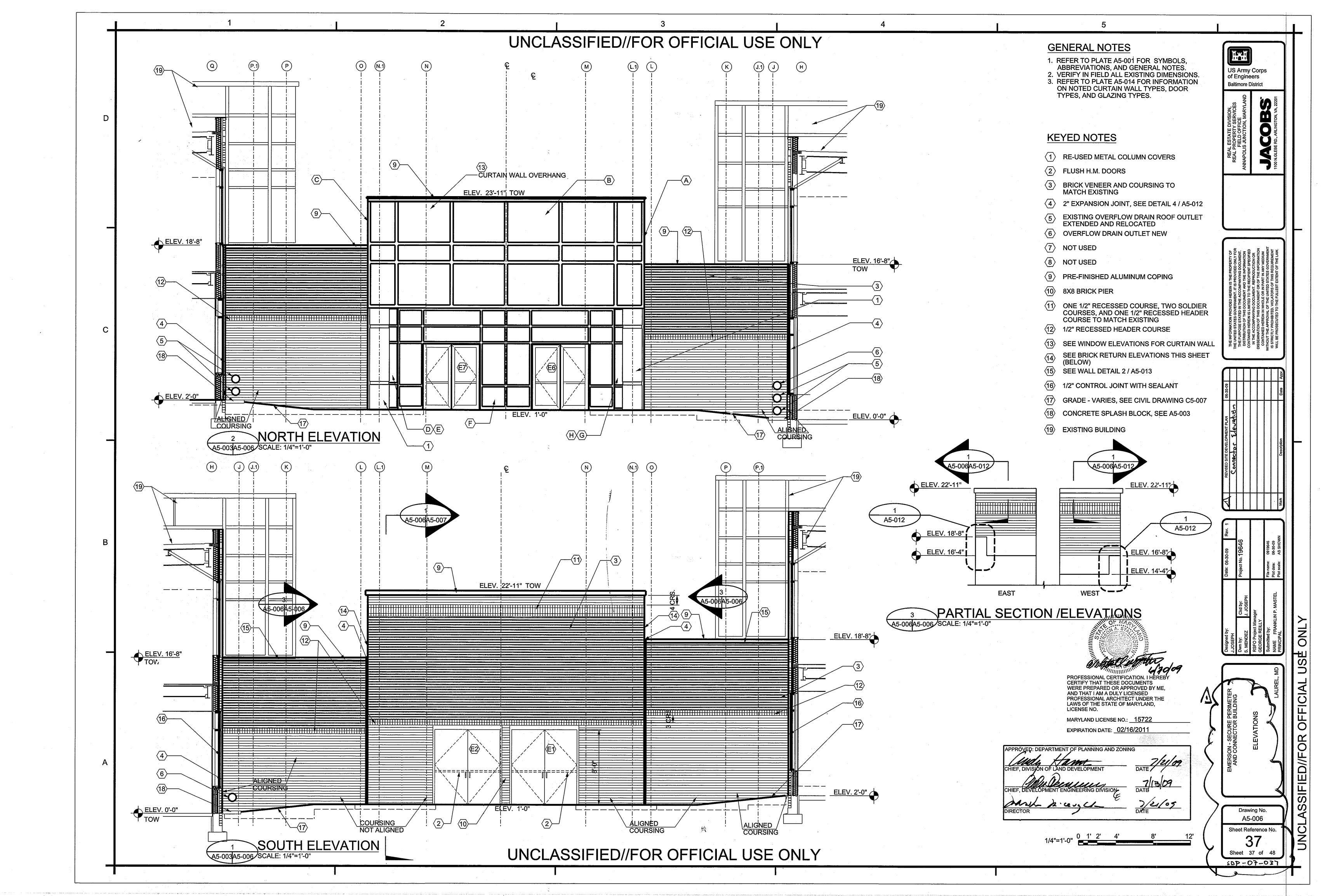












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ELECTRICAL ABBREVIATIONS GENERAL NOTES

KILOAMPERES

KVA KILOVOLT AMPERES

KILOVOLT

KWH KILOWATT HOUR

LIGHTING

MINIMUM

MOUNTING

N, NEUT NEUTRAL

NUMBER

OVHD OVERHEAD

POLE

PHASE

POSITIVE

QUANTITY

RECEPTACLE

RMS ROOT MEAN SQUARE

SINGLE POLE

START-STOP

STANDARD

TIME DELAY

TELEVISION

SUPPRESSOR

VOLT, VOLTAGE

VOLT AMPERE

VOLTMETER

WATTMETER **WEATHERPROOF**

SWITCH

SWBD SWITCHBOARD

TELE TELEPHONE

TERM TERMINAL

TYP TYPICAL

W

Y-D

WATT

XFMR TRANSFORMER

WYE-DELTA

IMPEDANCE

RECT RECTIFIER

SET

SW

TD

MAIN LUGS ONLY

NORMALLY CLOSED

NOT IN CONTRACT

NORMALLY OPEN

NON-REVERSING

PUBLIC ADDRESS

POWER FACTOR

POLYVINYL CHLORIDE

RIGID GALVANIZED STEEL

SYSTEM CONTROL PANEL

SHIELDED TWISTED PAIR

TELEPHONE TERMINAL

TVSS TRANSIENT VOLTAGE SURGE

UNLESS OTHERWISE NOTED

VARIABLE FREQUENCY DRIVE

UNINTERRUPTIBLE POWER SUPPLY

NFSS NON FUSED SAFETY SWITCH

MAX MAXIMUM

LOW VOLTAGE

KW KILOWATT

ΚV

LTG

MEQ

MIN

MTG

NR

PH

POS

KCMIL THOUSAND CIRCULAR MILLS

KVAR KILOVOLT AMPERES-REACTIVE

LIGHT EMITTING DIODE

LOCKED ROTOR AMPERE

MOTOR CONTROL CENTER

MOTOR CIRCUIT PROTECTOR

MAIN DISTRIBUTION TERMINAL

NATIONAL ELECTRICAL CODE

ON CENTER, OVERCURRENT

PRIVATE BRANCH EXCHANGE

POWER DISTRIBUTION UNIT

PABX PRIVATE AUTOMATIC BRANCH EXCHANGE

PCMS POWER CONTROL MONITORING SYSTEM

RADIO FREQUENCY INTERFERENCE

TERMINAL BOX OR TERMINAL BOARD

MAIN CIRCUIT BREAKER

MECHANICAL EQUIPMENT

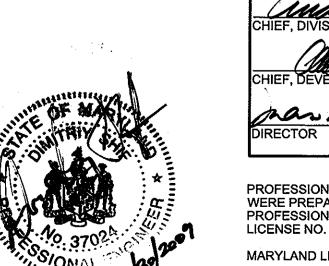
1.	PERFORM WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC®) AND OTHER BUILDING CODES AS INTERPRETED BY THE AUTHORITY HAVING JURISDICTION.

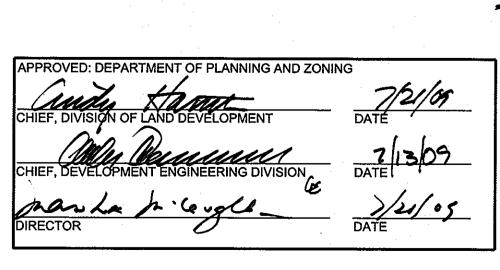
- FIELD VERIFY DIMENSIONS AND ELEVATIONS IN THE AREA OF WORK PRIOR TO THE START OF WORK.
- MODIFICATIONS TO THESE DOCUMENTS DUE TO UNFORESEEN FIELD CONDITIONS MUST BE APPROVED BY THE COR AND INDICATED ON THE AS-BUILT DRAWINGS.
- THE CONTRACTOR ASSUMES RESPONSIBILITY FOR MAKING DESIGN MODIFICATIONS TO AFFECTED TRADES WHEN PROVIDING EQUIPMENT OTHER THAN THE SPECIFIED OR APPROVED EQUAL EQUIPMENT. MODIFICATIONS AND SUBSTITUTIONS MUST BE SEALED BY THE CONTRACTOR'S LICENSED PROFESSIONAL AND APPROVED BY THE COR. INDICATE MODIFICATIONS TO EACH TRADE ON THE AS-BUILT DRAWINGS.
- PROVIDE NEW EQUIPMENT LISTED AND LABELED FOR ITS INTENDED USE UNLESS INSTRUCTED OTHERWISE.
- SEAL PENETRATIONS OF FIRE RATED CONSTRUCTION WITH U.L. APPROVED FIRE STOPPING MATERIAL TO RESTORE THE ORIGINAL FIRE RESISTANCE RATING OF THE PENETRATED CONSTRUCTION.
- WHERE PROVIDED, EQUIPMENT MODEL NUMBERS INDICATE THE BASIS OF DESIGN EQUIPMENT. PRODUCTS FROM APPROVED EQUAL MANUFACTURERS ARE ACCEPTABLE.
- PROPERLY SAFEGUARD EXISTING TO REMAIN EQUIPMENT, DEVICES, WIRING, CONDUIT, AND RELATED ITEMS FROM DAMAGE OR SERVICE INTERRUPTION. IF DEEMED NECESSARY TO RELOCATE COMPONENTS, TEMPORARILY OR OTHERWISE, ACQUIRE APPROVAL FROM THE COR PRIOR TO SUCH ACTION.
- SECURE AND PAY FOR PERMITS AND INSPECTIONS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
- THESE DOCUMENTS CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. THE TERM "PROVIDE" MEANS "FURNISH AND INSTALL COMPLETE AND READY FOR USE."COORDINATE EXACT LOCATIONS OF DEVICES WITH EQUIPMENT VENDORS PRIOR TO INSTALLATION.
- PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR FOR EACH CIRCUIT
- 12. PROVIDE NYLON PULL STRING IN EMPTY CONDUITS.
- 13. LABEL JUNCTION BOXES WITH PANEL DESIGNATION AND CIFCUIT NUMBER.
- PRIOR TO FINAL ACCEPTANCE; CLEAN DEVICES, DEVICES PLATES. CABINETS, LUMINAIRES, AND OTHER EQUIPMENT PROVIDED UNDER THIS CONTRACT; ENSURE THAT PANEL DIRECTORIES ARE REVISED AND/OR COMPLETED AND IN PLACE; AND THAT MARKING AND IDENTIFICATION OF COMPONENTS IS COMPLETE.
- REPAIR OR REPLACE, AS DIRECTED BY THE COR AND AT NO ADDITIONAL COST TO THE GOVERNMENT, ITEMS DAMAGED DURING THE COURSE OF
- REPLACE AND RETEST DEFECTIVE WIRING, DEVICES, AND EQUIPMENT THAT IS ENCOUNTERED DURING THE COURSE OF TESTING TO THE SATISFACTION OF THE COR.
- MOUNTING HEIGHTS ARE MEASURED FROM FINISHED FLOOR UNLESS NOTED OTHERWISE.
- CONDUIT ROUTING SHOWN IS DIAGRAMMATICAL ONLY, AND DOES NOT ILLUSTRATE EXACT CONDUIT WITH FIELD CONDITIONS, TRENCHING. PRACTICAL PULLING TENSION AND CODES CONSIDERED.
- ALL CONDUITS SHOWN TO BE BELOW GRADE SHALL BE DIRECT BURIFD UNLESS OTHERWISE INDICATED. SEE DETAIL 3 ON SHEET E5-010 FOR ADDITIONAL INFORMATION

H.H. **US Army Corps** of Engineers **Baltimore District**

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(17)	REVISED SITE DEVELOPMENT PLAN	06-30-09	
	Site electrical Notes		
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Mark	Description	afec	400





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,

MARYLAND LICENSE NO .: 4 23 2911 **EXPIRATION DATE:**

Drawing No. E5-001 Sheet Reference No.

Sheet 38 of 48

SDP-07-037

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INTERCOMMUNICATION IDS INTRUSION DETECTION SYSTEM

A. AMP

AF

AFC

AFF

AFG

AHU

ANN

ΑO

AWG

BC

BKR

COND

CONN

CONT

CCTV

CKT

CONV

COR

CPU

CR

CS

CT

CU

DC

DEM

DGP

DI

DIA

DM.

DO

DPDT

DPST

EC

ELEV

EMT

ENCL

EHT

EPO

EWC

<E>

EXIST

FACP

FC

FDR

FLA

FUT

FV

FLUOR

G, GRD, GND

HOA

HT

HV

ΗZ

HVAC

DISC

COMM

CO

CB

AMPERE

ALTERNATING CURRENT

ABOVE FINISHED FLOOR

ABOVE FINISHED GRADE

AIR HANDLING UNIT

ANNUNCIATOR POINT

AMERICAN WIRE GAUGE

ANNUNCIATOR

AMPERE TRIP

BARE COPPER

CONDUCTOR

CONNECTION

CONTINUOUS

CONDUIT ONLY

COMMUNICATION

CONTROL RELAY

CONTROL SWITCH

DIRECT CURRENT

CONVENIENCE

CIRCUIT BREAKER

CLOSED CIRCUIT TELEVISION

CENTRAL PROCESSING UNIT

DIRECT DIGITAL CONTROL PANEL

DOUBLE POLE DOUBLE THROW

DOUBLE POLE SINGLE THROW

ELECTRICAL METALLIC TUBING

FIRE ALARM ANNUNCIATOR PANEL

GOVERNMENT FURNISHED EQUIPMENT

FIRE ALARM CONTROL PANEL

CURRENT TRANSFORMER

DATA GATHERING PANEL

CONTRACTING OFFICERS REPRESENTATIVE

BREAKER

CONDUIT

CIRCUIT

COPPER

DEMAND

DIAMETER

DPNL, DP DISTRIBUTION PANEL

DRY TYPE

ELEVATOR

EXISTING

FEEDER

FUTURE

GROUND

HAZARDOUS

HORSEPOWER

HIGH VOLTAGE

CONDITIONING

HANDHOLE

HEIGHT

HERTZ

FOOTCANDLE

FLUORESCENT

FULL VOLTAGE

FULL LOAD AMPERES

GFI/GFCI GROUND FAULT INTERRUPTER

HAND-OFF-AUTOMATIC

HIGH POWER FACTOR

HIGH PRESSURE SODIUM

HEATING, VENTILATING AND AIR

EQ,EQUIP EQUIPMENT

ENCLOSURE

DIGITAL INPUT

DISCONNECT

DEMAND METER

DIGITAL OUTPUT

EMPTY CONDUIT

ELECTRIC HEATING COIL

ELECTRIC HEAT TRACE

EXISTING TO REMAIN

EMERGENCY POWER OFF

ELECTRIC WATER COOLER

ANALOG OUTPUT

ABOVE FINISHED COUNTER

AMPERES INTERRUPTING CAPACITY

AMPERE FRAME

ILLUMINATING ENGINEERING SOCIETY ISOLATED GROUND INCAND INCANDESCENT JB, J

JUNCTION BOX

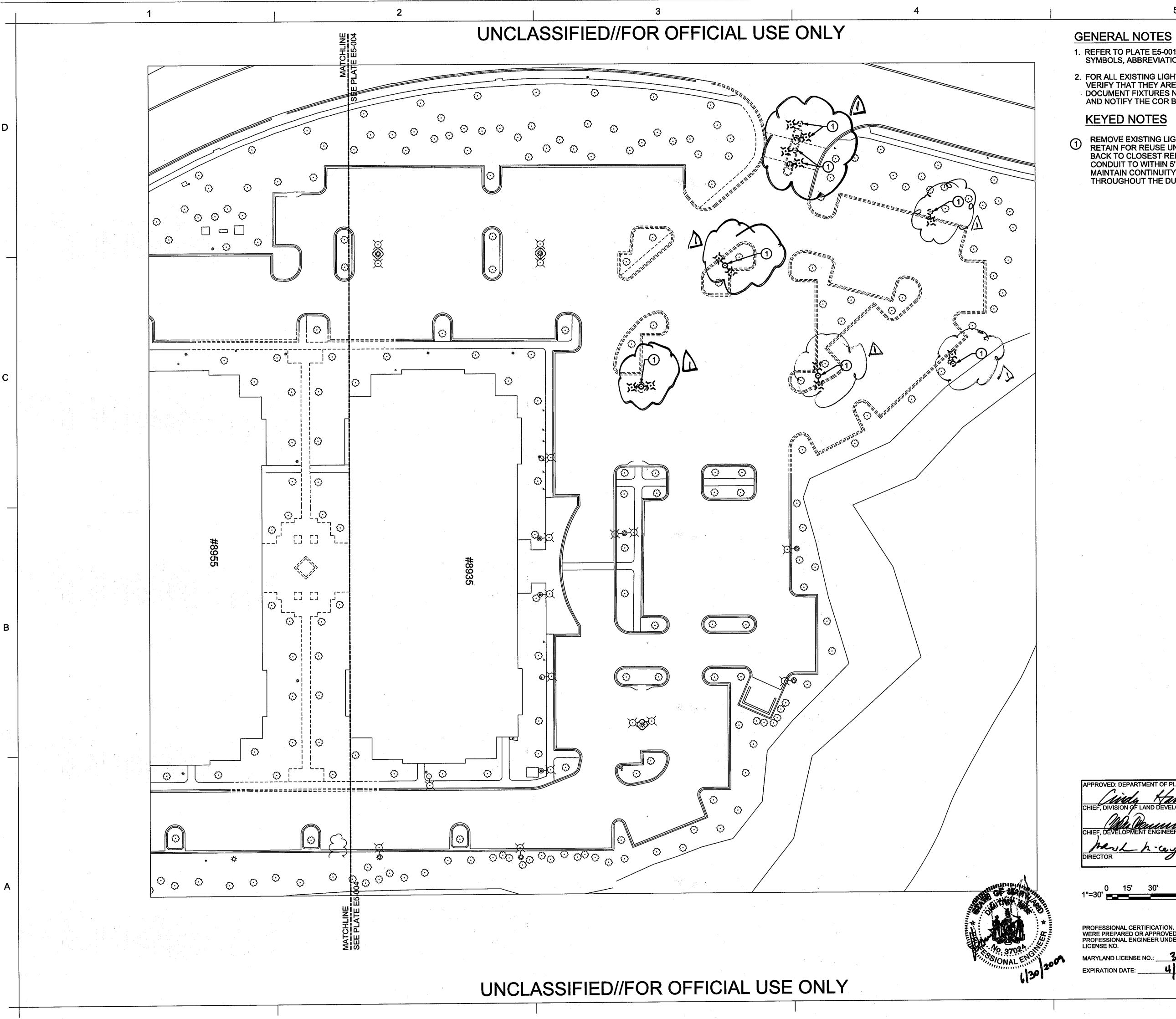
MISCELLANEOUS PHASE

WYE

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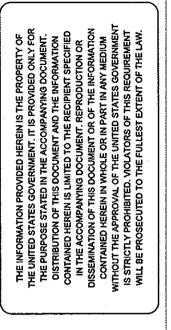
- 1. REFER TO PLATE E5-001 AND E5-002 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.
- 2. FOR ALL EXISTING LIGHTING FIXTURES TO REMAIN VERIFY THAT THEY ARE IN OPERATING CONDITION. DOCUMENT FIXTURES NOT IN OPERATING CONDITION AND NOTIFY THE COR BEFORE START OF WORK.

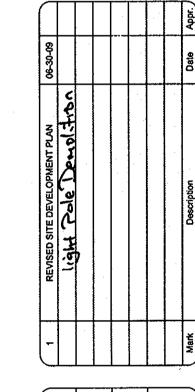
KEYED NOTES

REMOVE EXISTING LIGHTING FIXTURE AND POLE AND RETAIN FOR REUSE UNDER NEW WORK. REMOVE WIRE BACK TO CLOSEST REMAINING FIXTURE. REMOVE CONDUIT TO WITHIN 5' OF CLOSEST REMAINING FIXTURE.
MAINTAIN CONTINUITY OF SITE LIGHTING CIRCUITS
THROUGHOUT THE DURATION OF THE WORK.



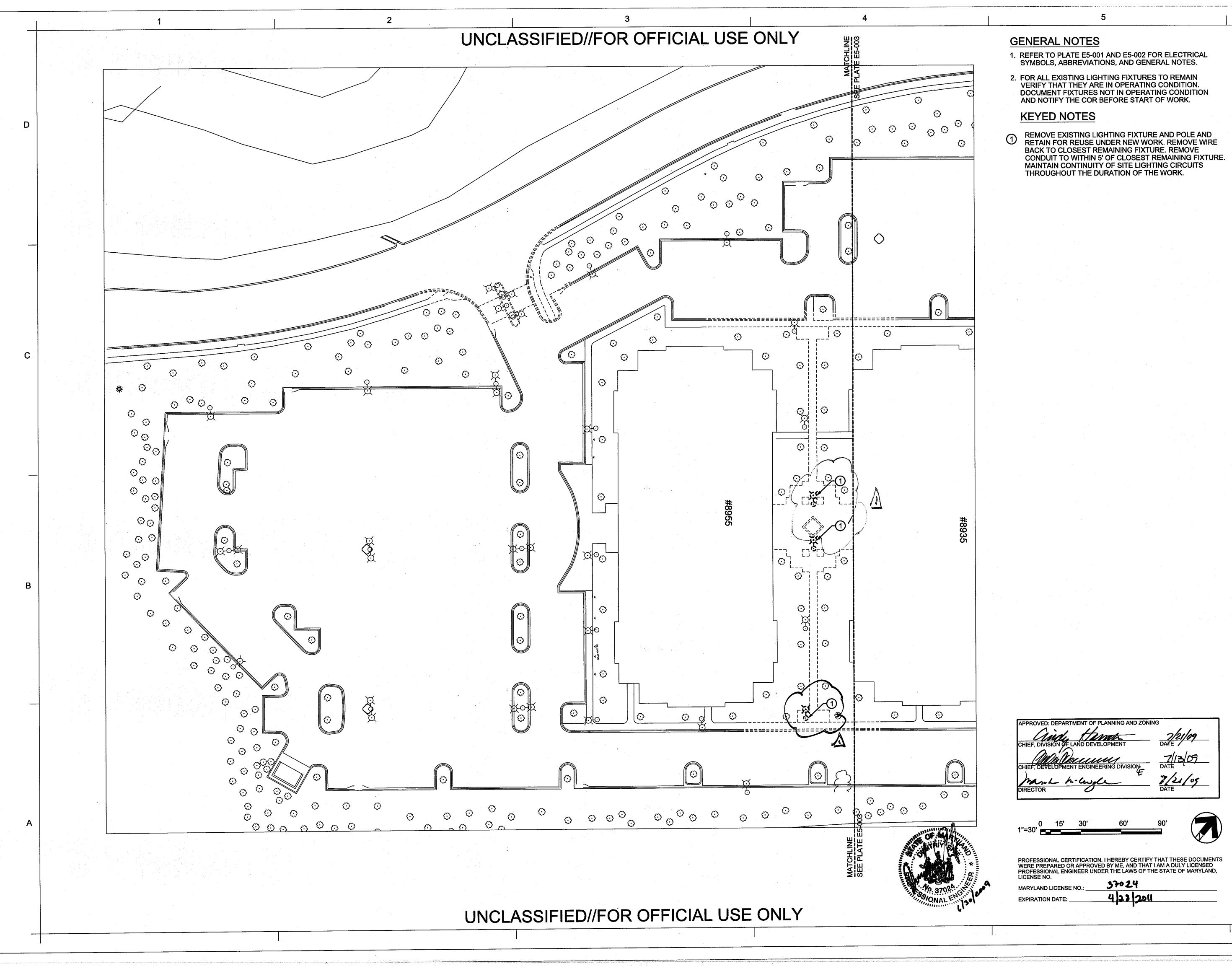




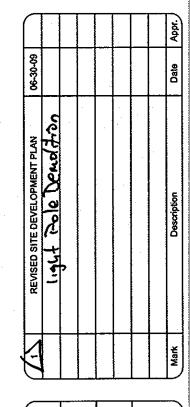


Drawing No. E5-003

SDP-07-037



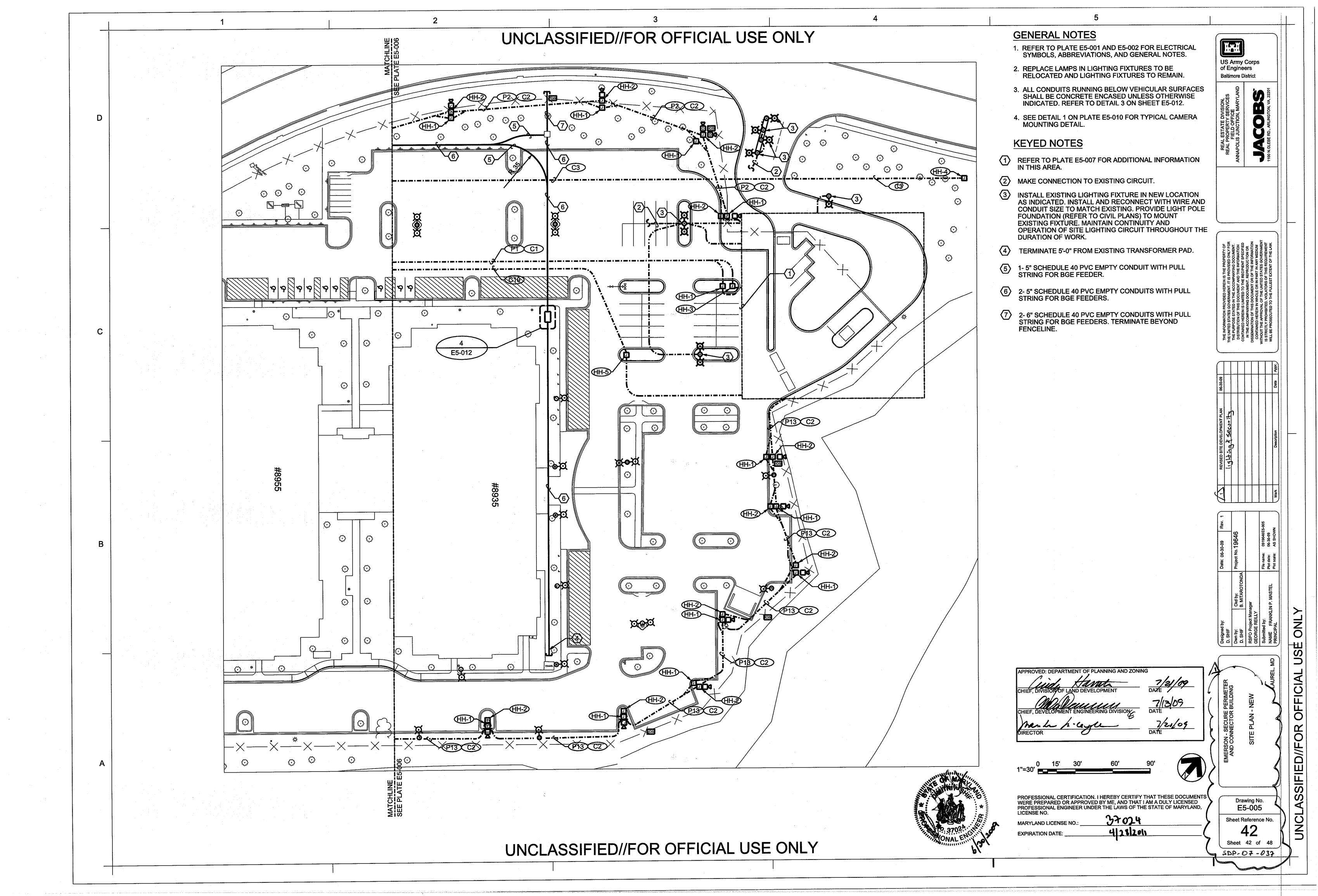
US Army Corps of Engineers **Baltimore District**

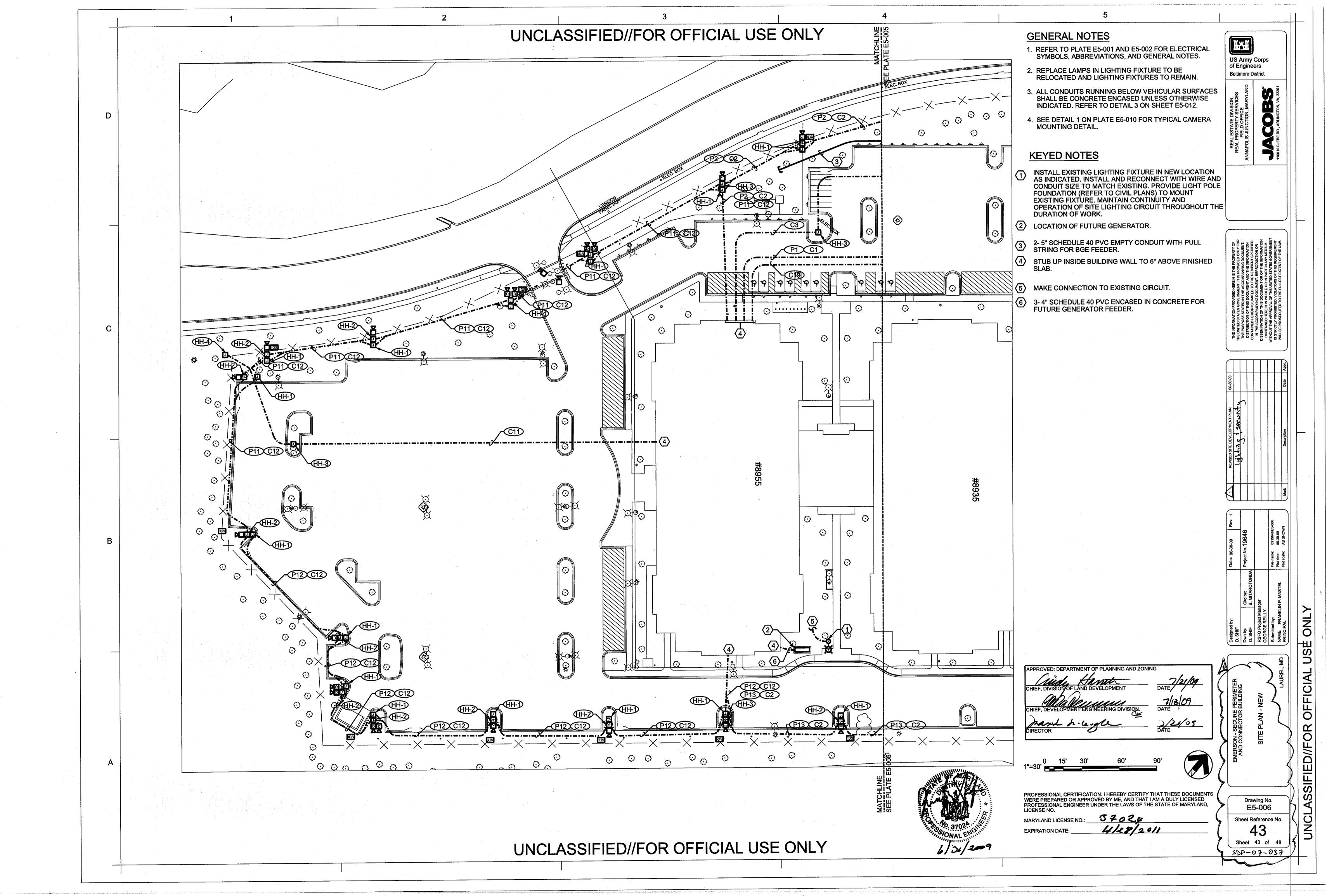


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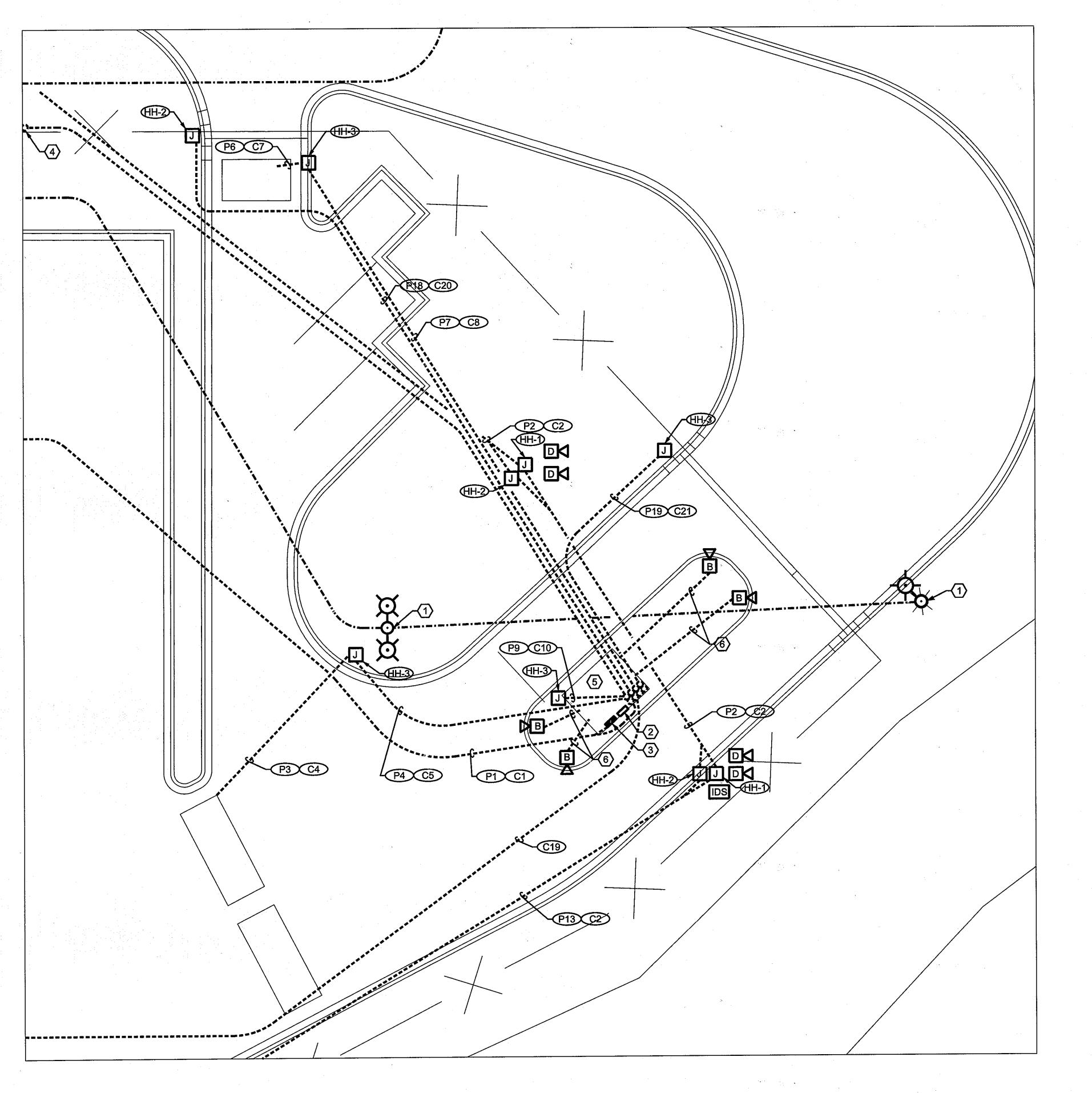
Drawing No. E5-004

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GENERAL NOTES

- 1. REFER TO PLATE E5-001 AND E5-002 FOR ELECTRICAL SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES.
- 2. REPLACE LAMPS IN LIGHTING FIXTURE TO BE RELOCATED AND LIGHTING FIXTURES TO REMAIN.
- 3. ALL CONDUITS RUNNING BELOW VEHICULAR SURFACES SHALL BE CONCRETE ENCASED UNLESS OTHERWISE INDICATED. REFER TO DETAIL 3 ON SHEET E5-012.
- 4. SEE DETAIL 1 ON PLATE E5-010 FOR TYPICAL CAMERA MOUNTING DETAIL.

KEYED NOTES

- (1) INSTALL EXISTING LIGHTING FIXTURE IN NEW LOCATION AS INDICATED. INSTALL AND RECONNECT WITH WIRE AND CONDUIT SIZE TO MATCH EXISTING. PROVIDE LIGHT POLE FOUNDATION (REFER TO CIVIL PLANS) TO MOUNT EXISTING FIXTURE. MAINTAIN CONTINUITY AND OPERATION OF SITE LIGHTING CIRCUIT THROUGHOUT THE DURATION OF WORK.
- CONTROL PANELS SHALL BE INSTALLED IN GUARD HOUSE. PROVIDE 12" W X 6" D X LENGTH AS NECESSARY 2 COMPARMENT WIRE WAY FOR INCOMING CONTROL AND POWER CONDUIT TO BE MOUNTED UNDER COTROL PANEL. COORDINATE WITH GFE PROVIDED GUARD HOUSE. PROVIDE 120V CIRCUIT FROM PANEL N21-GUARDHOUSE.
- REMOVE EXISTING CUTLER HAMMER, 12 POLE, MLO, 208V, 1 PHASE LOADCENTER. PROVIDE NEW NEMA 1 N21-GUARDHOUSE LOADCENTER AS SCHEDULED ON PLATE E5-009.
- PROVIDE (2) 2" C. FROM GUARD HOUSE TO FUTURE TURNSTILE LOCATION AND CAP AT BOTH ENDS. SEE DETAIL 3 ON PLATE E5-011 FOR ADDITIONAL INFORMATION.
- CLEAN AND RELAMP EXISTING LIGHT FIXTURES IN GOVERNMENT FURNISHED GUARDHOUSE.
- 2- 1" CONDUITS, ONE POWER, ONE SIGNAL, STUBBED 6" AFF INTO THE GUARDHOUSE FOR BOLLARD-MOUNTED CAMERAS.



of Engineers **Baltimore District**

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6			 -		Appr.
00-00-90			 		Date
REVISED SITE DEVELOPMENT PLAN	Extrance lighting	And Security			Description
E				·	Mark

Designed by: D. SHIF		Date: 06-30-09	Rev.	<u>.</u>
Dwn by: D. SHIF	Ckd by: B. MITAROTONDA	Project No. 19646	346	
RSFO Project Manager GEORGE REILLY	ıger			
Submitted by: NAME FRANKLII PRINCIPAL	1 by: FRANKLIN P. MASTEL AL	File name: 091 Plot date: 06-3 Plot scale: AS	0919646E5-007 06-30-09 AS SHOWN	2



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5DP-07-037

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LOCAT		710	CESSOR	TLUGS.	INOINE			and the State of the Control of the		208Y/120		3-PHASE,	4-VVIKE + C	·			BUS AMPS: 125		<u> </u>
LOCAT			MOU	NTING:	SURFACE			The Artist of the Control	5 1 1 No. 5 1	100% RAT							MAIN AMPS: 125	МСВ	
	TION: GUARD HOUSE									EQUIPME							AIC: 10000		
	LOAD		JIT BREA	10 11 11 11 12		LOADS (VA)		CK			LOADS (VA		Charles Salary and Charles	JIT BREAK		1 T T	LOAD	DIDTION	
TYPE	DESCRIPTION	FRM.	TRIP	POLE		В	C	NUN	/В.	Α	В	C	FRM.	TRIP	POLE			RIPTION	
	HEATER	100	20	2	1500	1400	13	1	2	1200		11111	100	20	1 1	EQ	MOTORIZED GATI	<u> </u>	
MEQ		-	-			1500		3	4	7.44.4	200	19-10-19-12	100	20	1	EQ	CONTROL PANEL		
REC	RECEPTACLES	100	20	1			1200	5	6	101124		1200	100	20	1	EQ	MOTORIZED GAT	<u> </u>	
:	LIGHTING	100	20	1	1270			7	8				100	20	1	<u> </u>	SPARE		
MEQ	AC	100	20	1		1500		9	10			56,666	100	20	1		SPARE		
EQ	POP-UP BARRIER	100	30	2		PAGE IS A	2500	11	12		ALIA EA		100	20	1		SPARE		
EQ		-	-	-	2500			13	14				100	20	1		SPARE		
EQ.	POP-UP BARRIER	100	30	2	Believe The	2500		15	16	7 7 4 5 6		改善等的	100	20	1		SPARE		
EQ		-	-	-			2500	17	18				100	20	1 1		SPARE		
EQ	POP-UP BARRIER	100	30	2	2500			19	20		G S		100	20	1		SPARE		
EQ		-	-	-	Alexander	2500		21	22				100	20	1		SPARE		
1 1	ACTIVE VEHICLE BARRIER	100	30	1	318.200.20	1200.00	1600	23	24		1674.4		100	20	1		SPARE		
			-6 6 6 d.					1000 (2004) 1000 (2005)											
								80000	100			rowin Brit					- 1		
								22.25				я.							4
		(* 1476 2 2 3 3 3	ner otaria					9-70-XX											
																20 J			
						\$-45-E-18													
3 (2.1)																			
PANEL NO	OTES:	ra, dia " di (si stude jare jare 4 il militaria)			7770	8000	7800			1200	200	1200							
	REMOVE EXISTING LOADCENTER							•		100									;
	AND REPLACE WITH NEW						С	ONNE	CTED	LOAD (kV	/A)					DEMAN	D LOAD (kVA)]
	LOADCENTER				PHASE A	7.7	L&A		0.0	LTG	0.0	HVAC	4.5	L&A			TG 0.0 HVA		
					PHASE B	8.2	DRY		0.0	REC	1.2	EQ	19.2	DRY	<u></u>			Q 14.	
· 					PHASE C	9.0	RGE		0.0	KEQ	0.0	SPARE	3.6	RGE	[0.0 K	EQ 0.0 SPAR	RE 3.	.6

TAG	# SPARE # OF USED CONDUIT CONDUITS CONDUITS SIZE FROM		то	NOTE			
	2	4"	1	4"	MAIN ELEC RM (BLDG 1)	GUARD HOUSE PNL	SECURITY
•••	-	-	1		BLACK RM	GUARD HOUSE PNL	NON-SECURE
?	1	4"	1	4"	SECURITY RM (BLDG 1)	INDIVIDUAL CAMERAS	INDIVIDUAL CAMERAS
,			2	4"	BLACK SWITCH RM	PROPERTY LINE	TEL SERVICE (NOTE 1)
		-	2	3/4"	KEY PAD	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
			2	3/4"	DROP ARM	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
	_		2		SAFETY LOOP	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
	_		2		TRAFFIC LIGHTS	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
	 		2		BARRIER CONTROL	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
5		-	2	2"	QUAZITE J-BOX	CONTROL PANEL	COOR CONTROL WIRING AS PER MANUF.
3			1	2"	CONTROL PANEL	OPERATOR CONTROL	COOR CONTROL WIRING AS PER MANUF.
, 7	 	-	1	3/4"	KEY PAD	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
	<u> </u>		1	3/4"	DROP ARM	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
		-	1	3/4"	SAFETY LOOP	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
		-	1	3/4"	TRAFFIC LIGHTS	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
	<u> </u>	-	1		BARRIER CONTROL	QUAZITE J-BOX	COOR CONTROL WIRING AS PER MANUF.
8		-	2	2"	QUAZITE J-BOX	CONTROL PANEL	COOR CONTROL WIRING AS PER MANUF.
9 .			1	2"	CONTROL PANEL	OPERATOR CONTROL	COOR CONTROL WIRING AS PER MANUF.
10	_		1		ACTIVE VEHICLE BARIER	CONTROL PANEL	COOR CONTROL WIRING AS PER MANUF.
11	<u> </u>		2	4"	COMM CENTER	PROPERTY LINE	TEL SERVICE
12	1	4"	1		SECURITY RM (BLDG 1)	INDIVIDUAL CAMERAS	INDIVIDUAL CAMERAS
13	1	1"	3		DESK	CEILING ABOVE	COMMS AND SECURITY
14	 		1		LANE 1, LANE 2	CEILING ABOVE	CONDUIT SHOULD COME UP AT EACH
15	-	-	1		LANE 1, LANE 2	CEILING ABOVE	CONDUIT SHOULD COME UP AT EACH
16	-		1	1"	LANE 3, LANE 4	CEILING ABOVE	CONDUIT SHOULD COME UP AT EACH
17			<u> </u>	1"	LANE 3, LANE 4	CEILING ABOVE	CONDUIT SHOULD COME UP AT EACH
18	 		1	1"	XRAY MACHINE	CEILING ABOVE	
19	1	4"	1	4"	COMM CENTER	GUARD HOUSE PNL	RED COMMS (NOTE 2)
20	 '		1	2"	MOTORIZED GATE	CONTROL/GRD HOUSE PNL	COOR CONTROL WIRING AS PER MANUF.
<u>20 </u>	- 		1		MOTORIZED GATE	CONTROL/GRD HOUSE PNL	COOR CONTROL WIRING AS PER MANUF.
<u>- 1</u>	ļ —	_	-				

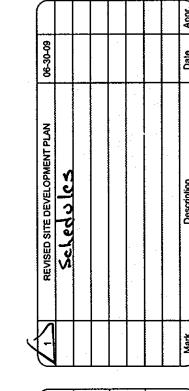
- (# SPARE (EMPTY) CONDUITS 1 1 - -	SPARE CONDUIT SIZE 4" 2" - -	# OF USED CONDUITS 1 1 2 2	SIZE 4" 2" 1-1/4"	CIRCUITS IN EACH USED CONDUIT (1) 3#2/0+#2/0N+#6G (1) 1#8+1#8N+1#8G (1) 2#10+1#10G	VOLTAGE 208 120		FROM MAIN ELEC RM (BLDG 1) SECURITY RM (BLDG 1)	TO GUARD HOUSE PNL INDIVIDUAL CAMERAS
22 23 4 5 5 5 6	1 1	2"	2	2" 1-1/4"	(1) 1#8+1#8N+1#8G	120			
2 3 4 5	-	-	2	1-1/4"	1.2		1	SECURITY RM (BLDG 1)	INDIVIDUAL CAMERAS
3 1 5	-	-	2		(1) 2#10+1#10G	000			HADIAIDONE OF HAIFT A 10
1 5 6	-			2"		208	1	BARRIER	QUAZITE J-BOX
5		-	· · · · · · · · · · · · · · · · · · ·	;	(1) 2#10+1#10G	208	1	QUAZITE J-BOX	CONTROL PANEL
3			2	2"	(1) 2#10+1#10G	208	1	CONTROL PANEL	GUARD HOUSE PNL
			1	1-1/4"	(1) 2#10+1#10G	208	1	BARRIER	QUAZITE J-BOX
	-		1	2"	(1) 2#10+1#10G	208	1	QUAZITE J-BOX	CONTROL PANEL
3			1	2"	(1) 2#10+1#10G	208	1	CONTROL PANEL	GUARD HOUSE PNL
	1	2"	1	2"	(1) 1#10+1#10N+1#10G	120	1	ACTIVE VEHICLE BARRIER	CONTROL PANEL
10		-	1		(1) 1#10+1#10N+1#10G		1	CONTROL PANEL	GUARD HOUSE PNL
11	- 1	2"	1	2"	(3) 1#8+1#8N+1#8G	120	1	SECURITY RM (BLDG 1)	INDIVIDUAL CAMERAS
12	1	2"	1	2"	(3) 1#8+1#8N+1#8G	120	1	SECURITY RM (BLDG 1)	INDIVIDUAL CAMERAS
13	1	2"	1	2"	(3) 1#8+1#8N+1#8G	120	1	SECURITY RM (BLDG 1)	INDIVIDUAL CAMERAS
14	7	1"		-	-	-	. .	DESK	CEILING SPACE
15	' 1	1"		-	-	<u>.</u>	-	LANE 1, LANE 2	CEILING SPACE
16	- i - l	1"			-	-	-	LANE 3, LANE 4	CEILING SPACE
17	1	1"	_	_	 -	-	-	METAL DETECTOR	CEILING SPACE
18			1	2"	(1) 2#12+1#12G	208	1	MOTORIZED GATE	CONTROL/GUARD HOUSE PNL
19			1		(1) 2#12+1#12G	208	1	MOTORIZED GATE	CONTROL/GUARD HOUSE PNL

HAND HOLE SCHEDULE									
TYPE	SIZE	TIER	USE	NOTE					
HH-1	17"X30"X30"	15	POWER						
HH-2	17"X30"X30"	15	сомм						
HH-3	30"X30"X30"	15	COMM						
HH-4	-	-	-	QWEST HAND HOLE					
HH-5	-	-	-	REFER TO DETAIL 1 ON PLATE E5-012					

US Army Corps of Engineers
Baltimore District

REAL ESTATE DIVISION,
REAL PROPERTY SERVICES
FIELD OFFICE
ANNAPOLIS JUNCTION, MARYLAND

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 Designed by:
 Date: 06-30-09
 Rev. 1

 D. SHIF
 Ckd by:
 Project No. 19646

 D. SHIF
 B. MITAROTONDA
 Project No. 19646

 RSFO Project Manager
 GEORGE REILLY

 Submitted by:
 File name: 0919646E5-009

 NAME FRANKLIN P. MASTEL
 Prot scale: AS SHOWN

 PRINCIPAL
 Prot scale: AS SHOWN

RSON - SECURE PERIMETER
ND CONNECTOR BUILDING
SCHEDULES

SDP -07-037 6

DIVISION DATE

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