Site Development Plan for Columbia Gateway, Parcel T-18 Proposed Two-Story Office Buildings A, B & C SDP 06-083 Eastridge at Columbia Gateway Howard County, Maryland

General Notes

1. ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY, THE HOWARD COUNTY PLUMBING CODE, PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE OR AS SPECIFIED.

2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE BASED SOLELY ON AVAILABLE RECORDS. CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES THAT MAY BE IMPACTED BY THE WORK. MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

3. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.

4. THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

5. 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 ANY DAMAGE CAUSED BY THE CONTRACTOR TO EXISTING PUBLIC RIGHT-OF-WAY, EXISTING PAVING, EXISTING CURB AND GUTTER, EXISTING UTILITIES, ETC. SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.

6. THE EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY WITH MAXIMUM OF 2' CONTOUR INTERVALS PREPARED BY DuVal & ASSOCIATES, P.A. DATED NOV. 2005. TOPO COMBINED WITH PLANS OF RECORD.

7. ONSITE WATER IS PUBLIC PER CONTRACT 24-4362-D.

8. SEWER ONSITE IS PRIVATE AND CONNECTS TO PUBLIC SEWER BUILT UNDER CONTRACT 24-1629-D. DRAINAGE AREA IS LITTLE PATUXENT.

9. THE SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING ANALYSIS FOR THIS PROJECT WAS MADE BY HILLIS CARNES ASSOCIATES.

10. ALL FILL AREAS SHALL BE COMPACTED AS DETERMINED AND VERIFIED IN ACCORDANCE WITH GEOTECHNICAL ENGINEER.

11. QUANTITATIV AND QUALITATIVE STORMWATER MANAGEMENT IS PROVIDED IN A REGIONAL POND SYSTEM LOCATED ON ADJACENT PARCEL T-10 (DPW FILE F 00-132).

12. THERE ARE NO WETLANDS ON THIS SITE.

13. THERE ARE NO FLOODPLAINS ON THIS SITE.

14. OPERATING EXISTING VALVES, SWITCHES, SERVICES OR START UP OF NEW SERVICES SHALL BE COORDINATED WITH THE OWNERS REPRESENTATIVE. THE BUILDINGS WILL BE PROVIDED WITH A SPRINKLER SYSTEM.

15. TRENCH COMPACTION FOR STORM DRAINS WITHIN THE ROAD OR STREET RIGHT OF WAY LIMITS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL IV, STD. NO. G-2.01.

16. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.

17. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS.

18. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WATER, SEWER, AND ROOF DRAIN CONNECTIONS WITH THE MECHANICAL DRAWINGS.

19. EXISTING UTILITIES ARE BASED ON A COMBINATION OF PLANS OF RECORD AND FIELD RUN DATA.

20. THE CONTRACTOR SHALL MAINTAIN 2.0 FEET MINIMUM PROTECTIVE COVER OVER ALL UTILITIES DURING CONSTRUCTION.

21. THERE ARE NO KNOWN CEMETARIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER, UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPER WILL BE SUBJECT TO SECTION 16.1305 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.

22. ALL FILL SLOPES, EXCEPT THOSE ASSOCIATED WITH LANDSCAPE BERMING, SHALL BE MONITORED DURING PLACEMENT BY THE PROJECT GEOTECHNICAL ENGINEER

23. PAVING MARKINGS TO BE "TRAFFIC WHITE"

24. CONTRACTOR SHALL MAINTAIN A MINIMUM 2 FOOT BENCH BEHIND CURB AND GUTTER IN FILL AREAS.

25. 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 WITH THE PIPE USED.

26. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 4 FEET OF COVER OVER THE PRIVATE WATER MAIN SHOWN HEREON UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE ALL CRIMPS OR VERTICAL BENDS NECESSARY TO MAINTAIN CLEARANCES WITH OTHER UTILITIES.

27. 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.

28. THE SUBJECT PROPERTY IS ZONED M-1 - EMPLOYMENT CENTER INDUSTRIAL PER COMPREHENSIVE ZONING PLAN DATED 2-2-04

29. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.

30. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPERS AGREEMENT IN THE AMOUNT OF $ 22,650.00 FOR 58 SHADE TREES, 20 EVERGREEN TREES & 75 SHRUBS.

31. THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY VIRTUE OF SECTION 16.1202(b)(1)(v) WHICH PROVIDES THAT A PLANNED BUSINESS PARK OF AT LEAST 75 ACRES IN SIZE WHICH HAS RECEIVED PRELIMINARY PLAN APPROVAL PRIOR TO 12/31/92 IS EXEMPT.

32. 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.

33. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM NAD 27. HOWARD COUNTY MONUMENT NOS. 2243002 & 2243003 WERE USED FOR THIS PROJECT.

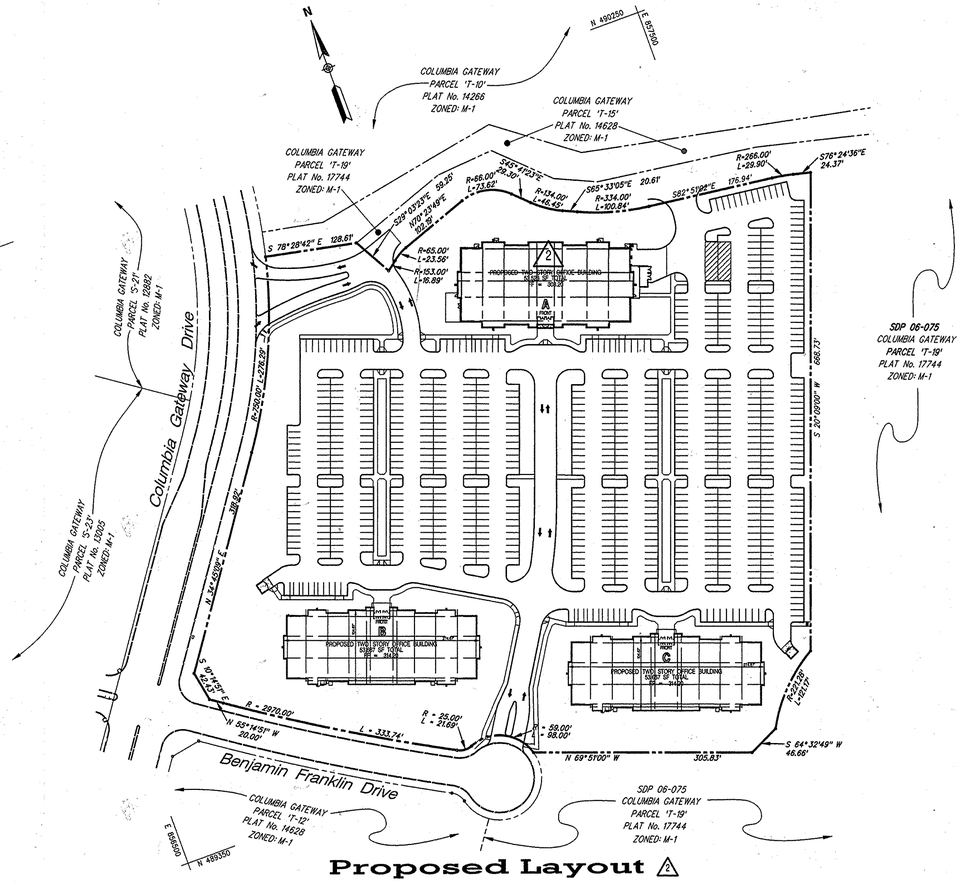
34. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, INC. DATED DECEMBER 14, 2005.

35. ALL EXTERIOR LIGHTING SHALL COMPLY WITH SECTION 134, ZONING REGULATIONS. SEE SHEET 4 FOR DETAILS.

36. SIGNAGE TO BE PROVIDED AT THE STREET IDENTIFYING THE BUILDING ADDRESSES.

37. A RECIPROCAL EASEMENT FOR INGRESS, EGRESS AND MAINTENANCE REGARDING THE USE-IN-COMMON DRIVEWAY LOCATED AT THE NORTHWEST CORNER OF PARCEL T-18 AND EXTENDING INTO PARCEL T-19 HAS BEEN RECORDED AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND, DECEMBER 15, 2005, LIBER 9707 FOLIO 368.

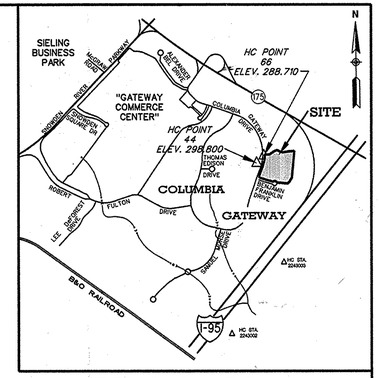
38. A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS TO BE PLACED ON THE FRONT OF EACH BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF 4-5' IN HEIGHT AND NO MORE THAN 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE ALARM SYSTEM).



Proposed Layout 2

Scale 1" = 100'

HORIZONTAL AND VERTICAL CONTROLS ARE BASED ON NAD 27 MARYLAND COORDINATE SYSTEM & NAD 29, RESPECTIVELY AS PROJECTED FROM HOWARD COUNTY GEODETIC CONTROL STATIONS 2243002 AND 2243003



Vicinity Map

Scale 1" = 2000'

Site Analysis Data Chart 2

1. GENERAL SITE DATA
CURRENT PLAT REFERENCE 18339
PRESENT ZONING M-1
APPLICABLE DPZ FILE REFERENCES: P 86-22, S 84-44, S 85-28, F 85-63, F 87-125, F 99-81, F 99-91, F 00-132, F 06-51 & WP 00-98. F 06-205 WP 10-92, WP 12-148 2
PROPOSED USE: THREE 2-STORY OFFICE BUILDINGS TOTALING 160,857 SF 4
NO. OF OCCUPANTS 483 ESTIMATED
PROPOSED WATER: PUBLIC
PROPOSED SEWER: PUBLIC
WATER AND SEWER CONTRACT NUMBER 24-4362-D
TAX ACCOUNT NUMBER 06-563112

2. AREA TABULATION
TOTAL PROJECT AREA: 13.3737 ACRES
AREA OF THIS PLAN SUBMISSION: 13.3737 ACRES
TOTAL DISTURBED AREA: 13.74 ACRES
FLOOR AREA RATIO: ..... 160,857 SF (ULT.) GROSS FLOOR AREA / 13.3737 ACRES = 0.276 2
BUILDING COVERAGE TO SITE ..... 80,389 SF (ULT.) GROUND FLOOR AREA (1.84 acres) / 13.3737 ACRES = 13.8% of gross area 2
OPEN AREA PROVIDED ..... (4.46 acres) / 13.3737 ACRES = 33% of site area
(AREA OF SITE MINUS BUILDING, DRIVEWAYS, PARKING LOTS)

3. OPEN SPACE DATA: N /A

4. PARKING SPACE DATA
PARKING REQUIRED:
3.3 SPACES PER 1,000 SF OF GROSS FLOOR AREA (160,857 SF) = 531 SPACES 2
PARKING PROVIDED: = 707 SPACES 2
TOTAL INCLUDES:
578 STANDARD SPACES @ 9' X 18' 2
107 COMPACT SPACES @ 8.5' X 18' (15% OF TOTAL SPACES AVAILABLE) 2
14 STANDARD HANDICAP SPACES @ 21' X 18' TWO SIDE BY SIDE
8 VAN ACCESSIBLE HANDICAP SPACES @ 24' X 18' TWO SIDE BY SIDE

4 02/02/16 PROPOSED REDLINE RIVISION NO. 24 4
- ADDED CONCRETE GENERATOR PAD AND ASSOCIATED CONDUITS.
- ADDED CONCRETE PAVERS FOR SIDEWALK
- ADDED SHEET 14

4

PROFESSIONAL CERTIFICATION:

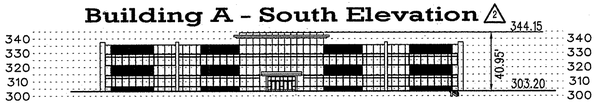
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017."

DATE: 02/02/2016 SIGNATURE: [signature]
MD. REGISTRATION NO: 28334 PRINTED NAME: JOHANN DOEMS, P.E.

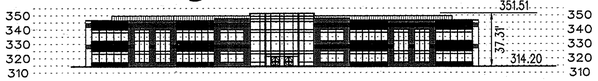
"Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 16848, Expiration Date: 09-19-12."

2 AUGUST 7, 2012
PROPOSED RED-LINE REVISON NO.2
REVISIONS TO THIS SHEET (FULL SHEET SUBSTITUTION)
REVISE FOOTPRINT BUILDING 'A' ON "PROPOSED LAYOUT"
REVISE SOUTH ELEVATION BUILDING 'A' "BUILDING HEIGHT PROFILES"
REVISE GENERAL DATA-AREA TABULATION-PARKING DATA "SITE ANALYSIS CHART"

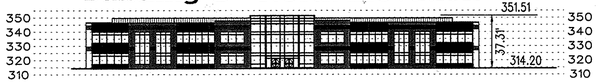
Building A - South Elevation 2



Building B - North Elevation



Building C - North Elevation



Building Height Profiles 2

Scale 1" = 50' Horz. & Vert.

SHEET INDEX	
SHEET	TITLE
1	COVER SHEET
2	SITE DEVELOPMENT PLAN SHEET 1
3	SITE DEVELOPMENT PLAN SHEET 2
4	SITE DETAILS
5	SITE DETAILS SHEET 2
6	STORM WATER DRAINAGE AREA MAP & STORM DRAIN DETAILS
7	WATER & SEWER PROFILES
8	STORM DRAIN PROFILES
9	STORM DRAIN PROFILES SHEET 2
10	SEDIMENT & EROSION CONTROL PLAN SHEET 1
11	SEDIMENT & EROSION CONTROL PLAN SHEET 2
12	SEDIMENT CONTROL DRAINAGE AREA MAP & DETAILS
13	FINAL LANDSCAPE PLAN & DETAILS
14	SITE PLAN - REVISION # 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 8/22/12
Chief, Division of Land Development — Date 8/06/12
Director — Date 8/6/12

ADDRESS CHART	
Building	Street Address
A	6821 Benjamin Franklin Drive
B	6811 Benjamin Franklin Drive
C	6831 Benjamin Franklin Drive

PERMIT INFORMATION CHART

Subdivision Name: Columbia Gateway			Section /Area: NA		Parcel No. T-18 Tax Parcel 671
Plat: 18339	Grid #: 2	Zoning: M-1	Tax Map No.: 43	Election District: 6th	Census Tract: 6067.03
Water Code: E 06			Sewer Code: 3380000		

Revised 2
Cover Sheet
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland — Sheet 1 of 14
Scale: As Shown — August 2, 2006 — SDP 06-083

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7904
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

MATCH LINE SEE SHEET 3 of 13

THE CONSTRUCTION OF THE 850' SF TERRACE IS EXEMPT FROM STORMWATER MANAGEMENT. ANY FUTURE CONSTRUCTION TOTALING OVER 5,000 SF SHALL COMPLY W/CURRENT SWM CRITERIA

REDLINE REVISION NO. 1 BY MATIS WARFIELD, INC. MARCH 26, 2007 REVISE FOOTPRINT OF BUILDINGS B+C

4 REVISION #4 02/02/16

3 REVISION #3 - 8/6/15

3 REDLINE REVISION #3 BY HUNAN & ROHDE REVISIONS TO THIS SHEET ADDED OUTDOOR TERRACE TO REAR OF BLDG. 'C' & LANDSCAPING

ENGINEER'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 Soil Conservation District"

James E. Matis, P.E. MD 18848 — Date: 8-2-06

DEVELOPER'S CERTIFICATE

" 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"

For AAK Eastridge, LLC by J. Michael Abrams, Managing Member — Date: 8-2-06

Legend

Existing Contours	352
Proposed Grades	370
Proposed Grades (By Others)	320
Existing Water	
Proposed Private Water	
Proposed Public Water	
Existing Sanitary	
Proposed Private Sanitary	
Existing Storm Drain	
Proposed Private Storm Drain	
Existing Curb and Gutter	
Proposed Conc. Curb & Gutter	
Proposed Concrete Paving	
Handicap Parking Space	(H)
Main Entranceway	FRONT

PROFESSIONAL CERTIFICATION:

"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017."

DATE: 2/2/16 SIGNATURE:

MD. REGISTRATION NO: 28334 PRINTED NAME: JOHANN DOBAK, P.E.

4 REDLINE REVISION NO. 4 - REVISED TOTAL NO. OF SHEETS TO 14

Matis Warfield consulting engineers

10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

Notes:
1. All curb radii are 4 feet unless otherwise noted.
2. For limits of types of paving, Conc. Curb & Gutter, Conc. Walk & Handicap Ramp see Sheets 4 & 5.

Plan
Scale 1" = 30'

Reviewed for Howard SCD and meets Technical Requirements
USDA - Natural Resources Conservation Service — Date 8/14/06

Howard SCD — Date 8/14/06

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT
Howard SCD — Date 8/14/06

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Development Engineering Division MK — Date 8/17/06
Chief, Division of Land Development BB — Date 8/28/06
Director — Date 8/28/06

Site Development Plan
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006
Sheet 2 of ~~13~~ 14
SDP 06-083

MATCH LINE SEE SHEET 2 of 13

Legend

Existing Contours	352
Proposed Grades	370
Proposed Grades (By Others)	320
Existing Water	
Proposed Private Water	
Proposed Public Water	
Existing Sanitary	
Proposed Private Sanitary	
Existing Storm Drain	
Proposed Private Storm Drain	
Existing Curb and Gutter	
Proposed Conc. Curb & Gutter	
Proposed Concrete Paving	
Handicap Parking Space	(H)
Main Entranceway	FRONT

ENGINEER'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 Soil Conservation District"

James E. Matis, P.E. MD 18848 — 8-7-12 / 8-2-06 Date

DEVELOPER'S CERTIFICATE

" 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"

For AAK Eastridge, LLC by J. Michael Abrams, Managing Member — 8-7-12 / 8-2-06 Date

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

Plan
Scale 1" = 30'

E 857000
N 489600

REDLINE
REVISION NO. 4
. REVISED TOTAL # OF SHEETS TO 14

(4)
PROFESSIONAL CERTIFICATION:
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017."
DATE: 02/02/16 SIGNATURE:
MD, REGISTRATION NO: 28334 PRINTED NAME: JOHANN DOBAD, P.E.

"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. 18848, Expiration Date: 09-19-12."
AUGUST 7, 2012

(2) REDLINE REVISION NO. 2 (BY MATIS WARFIELD, INC.)
REVISIONS THIS SHEET (FULL SHEET SUBSTITUTION)
REVISE FOOTPRINT OF BUILDING 'A'
ADD SERVICE AREA EAST SIDE BUILDING 'A'
ADD CONNECTION TO PRIVATE COMMON ACCESS ROAD
ADD GREASE INTERCEPTOR TO BUILDING 'A'
ADD GENERATOR PAD AND ENCLOSURE NW CORNER BLDG. 'A'
REVISE STORM DRAIN AND PRIVATE WATER ALIGNMENT BLDG 'A'

N 489550
E 857600

REDLINE REVISION NO. 1
BY MATIS WARFIELD, INC.
MARCH 26, 2007
REVISE FOOTPRINT OF BUILDING A

Notes:
1. All curb radii are 4 feet unless otherwise noted.
2. For limits of types of paving, Conc. Curb & Gutter, Conc. Walk & Handicap Ramp see Sheets 4 & 5.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 8/29/12
Chief, Division of Land Development — Date 9/06/12
Director — Date 9/6/12

Reviewed for Howard SCD and meets Technical Requirements

USDA - Natural Resources Conservation Service — Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT

Howard SCD — Date

Revised (2)
Site Development Plan
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006
Sheet 3 of ~~13~~ 14
SDP 06-083

$150 FINE SIGN / VAN ACCESSIBLE SIGN
SIGN TO UTILIZE AN ALUMINUM BLANK 6" X 12" X 0.080" THICK WITH TWO SINGLE POST MOUNTING HOLES.

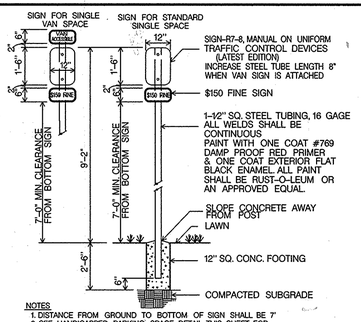
THE TEXT AND BORDER SHALL BE STANDARD GREEN TO MATCH THAT ON R7-8 AND, THE BACKGROUND SHALL BE REFLECTIVE WHITE. TEXT SHALL BE IN 3" CHARACTERS

ALL DIMENSIONS ARE IN INCHES * REDUCE SPACING 50 PERCENT

COLORS
LEGEND AND BORDER - GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND - WHITE

Detail Handicap Parking Sign

Not To Scale



SIGN-R7-8, MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION) INCREASE STEEL TUBE LENGTH 8" WHEN VAN SIGN IS ATTACHED

$150 FINE SIGN

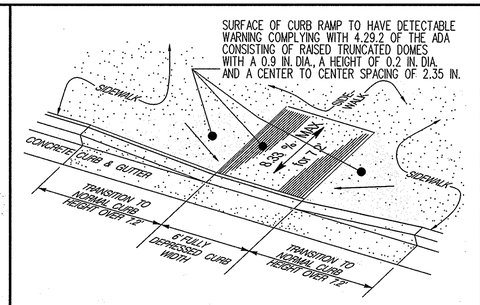
1-1/2" SQ. STEEL TUBING, 16 GAGE ALL WELDS SHALL BE CONTINUOUS PAINT WITH ONE COAT #769 DAMP PROOF RED PRIMER & ONE COAT EXTERIOR FLAT BLACK ENAMEL. ALL PAINT SHALL BE RUST-O-LEUM OR AN APPROVED EQUAL.

NOTES
1. DISTANCE FROM GROUND TO BOTTOM OF SIGN SHALL BE 7'
2. SEE HANDICAPPED PARKING SPACE DETAIL THIS SHEET FOR LOCATION OF HANDICAPPED SIGN.
3. VAN ACCESSIBLE SPACES SHALL INCLUDE "VAN SIGN" AS REQUIRED
4. SIGNS SHALL CONFORM TO CURRENT ADA CRITERIA.

SIGN COLORS
LETTERS AND BORDER - GREEN
WHITE H.C. SYMBOLS ON BLUE BACKGROUND
BACKGROUND - WHITE

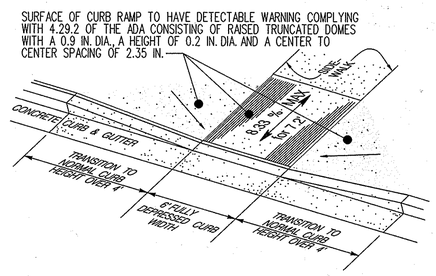
Detail Handicap Parking Sign & Post

Not To Scale



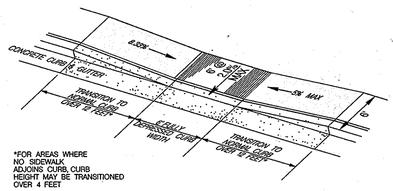
Type 'A' Ramp

Not To Scale



Type 'B' Ramp

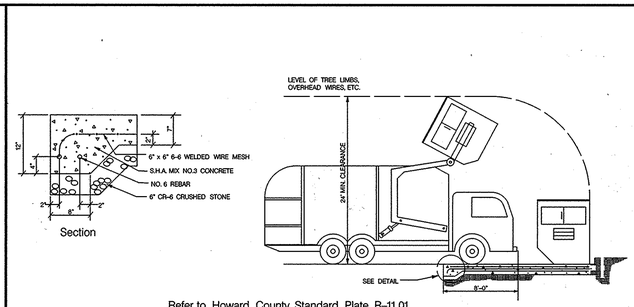
Not To Scale



*FOR AREAS WHERE NO SIDEWALK ADJOINS CURB, CURB HEIGHT MAY BE TRANSITIONED OVER 4 FEET

Type 'C' Curb Depression

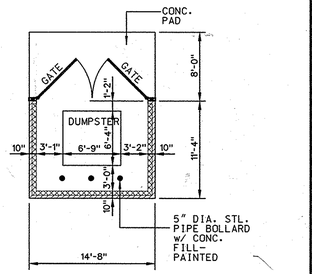
Not To Scale



Refer to Howard County Standard Plate R-11.01

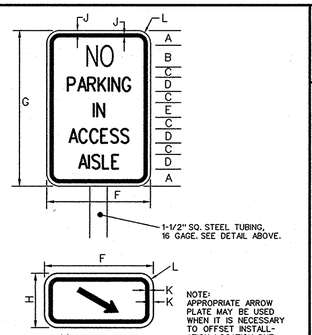
Detail Solid Waste Service Pad

Not To Scale



Detail Dumpster Enclosure

Not To Scale



NOTE: APPROPRIATE ARROW PLATE MAY BE USED WHEN IT IS NECESSARY TO OFFSET INSTALLATION LOCATION DUE TO ACCESS RAMP.

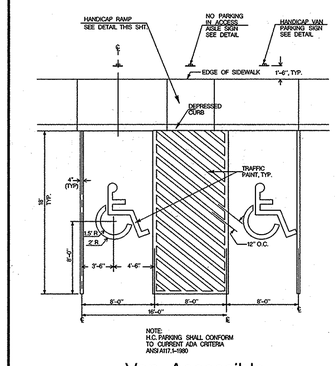
SIGN SIZE	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
STANDARD	1¾	2½	1	2	C	1½	12	18	6	⅜	¼	½

REFERENCES
MUTCD SECTION - 2B-35
MUTCD SUPPLEMENT - 2B-31

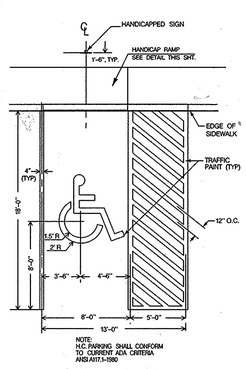
COLORS
LEGEND - RED
BACKGROUND - WHITE

No Parking in Access Aisle Sign

Not To Scale



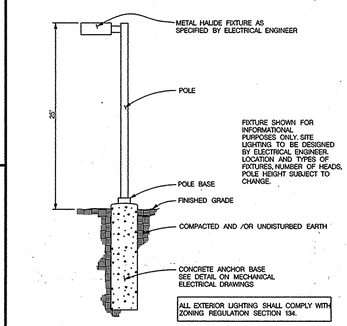
Van Accessible



Standard

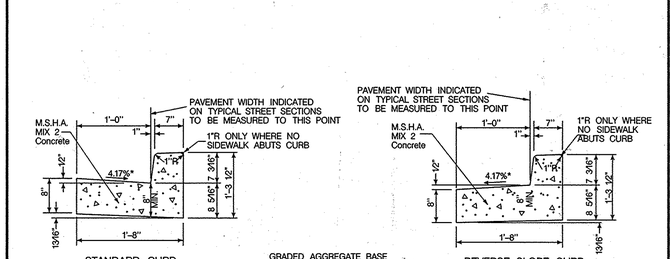
Detail Handicap Parking Spaces

Not To Scale



Detail Parking Area Lighting

Not To Scale



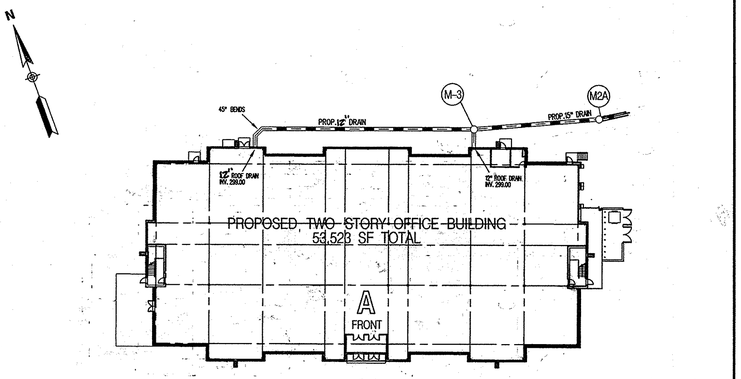
GRADED AGGREGATE BASE SHALL BE PLACED UNDER CURB AND GUTTER TO A DEPTH TO EXTEND THE SUBGRADE OF ADJACENT PAVING

*Where Gutter Pan is Adjacent to Handicap Parking Space Maximum Slope = 2.00%

Refer to Howard County Standard Plate R-3.01

Detail Concrete Curb and Gutter

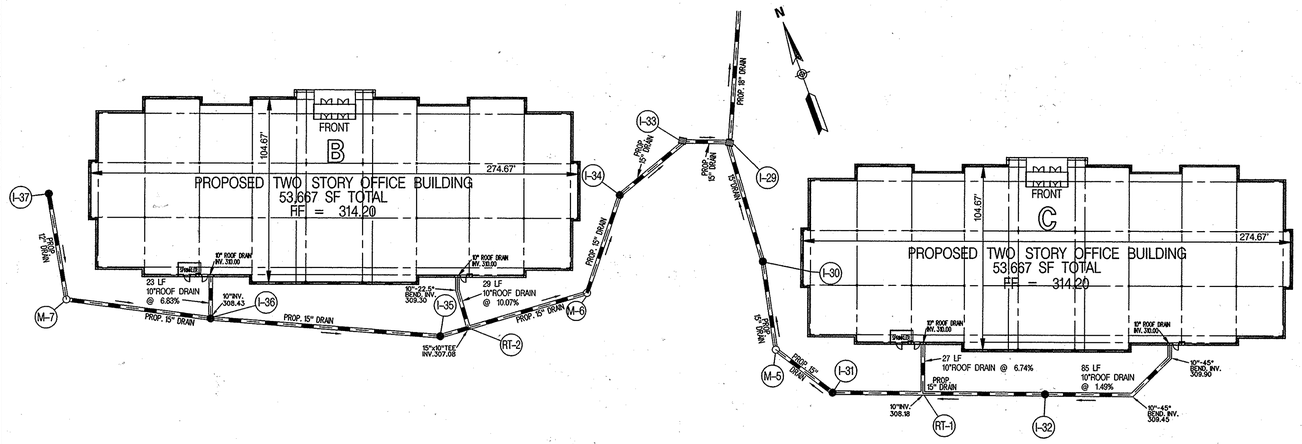
Not To Scale



NOTES:
1. ALL ROOF DRAINAGE TO BE CORRUGATED POLYETHYLENE PIPE.

Roof Drainage Detail Building A

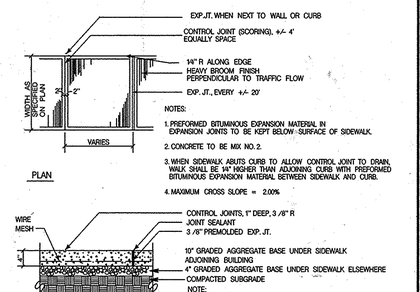
Scale: 1" = 40'



NOTES:
1. ALL ROOF DRAINAGE TO BE CORRUGATED POLYETHYLENE PIPE.

Roof Drainage Detail Buildings B & C

Scale: 1" = 40'



NOTES:
1. PREFORMED BITUMINOUS EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT BELOW SURFACE OF SIDEWALK.
2. CONCRETE TO BE MIX NO. 2.
3. WHEN SIDEWALK ABUTS CURB TO ALLOW CONTROL JOINT TO DRAIN, WALK SHALL BE ¼" HIGHER THAN ADJOINING CURB WITH PREFORMED BITUMINOUS EXPANSION MATERIAL BETWEEN SIDEWALK AND CURB.
4. MAXIMUM CROSS SLOPE = 2.00%

NOTE: CONCRETE TO BE MIX #2

Detail Concrete Walk (On-Site Only)

Not To Scale

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 8/7/06

Chief, Division of Land Development — Date 8/28/06

Director — Date 8/28/06

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7904
facsimile 410-683-1795
www.matiswarfield.com

Developer / Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

PROFESSIONAL CERTIFICATION:
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 26834, EXPIRATION DATE APRIL 1, 2017."

DATE: 02/02/2016
MD, REGESTRATION NO: 26834
SIGNATURE:
PRINTED NAME: JOHANN DOBAK, P.E.

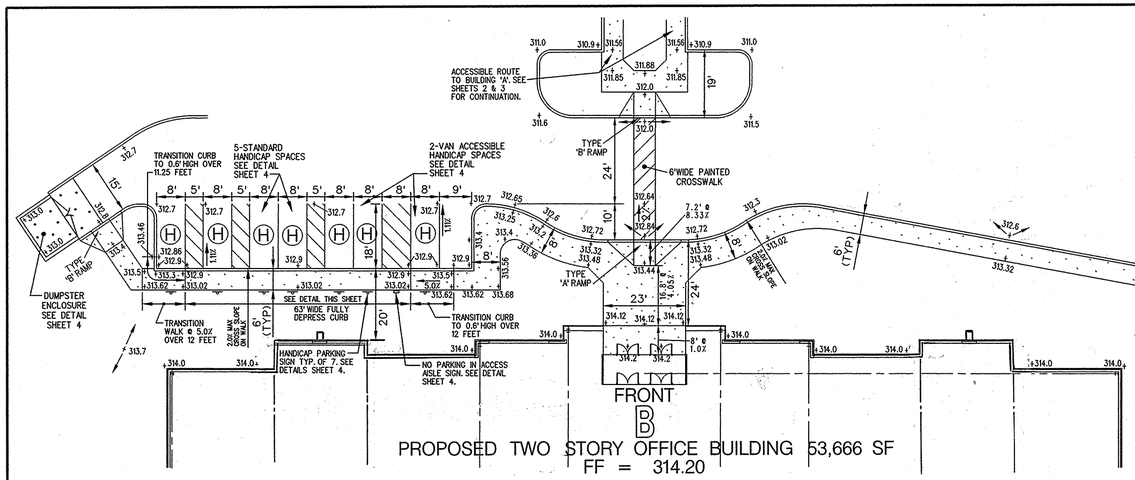
⚠4 REDLINE REVISION #4
REVISED TOTAL # OF SHEETS TO 14

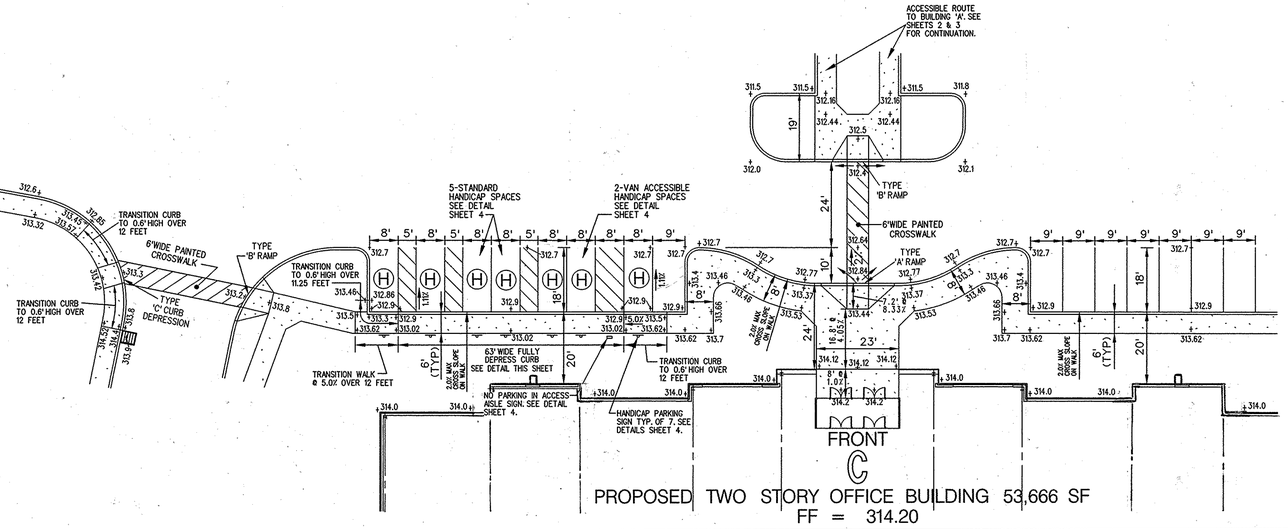
2-2-16

⚠3 8-7-12
PROPOSED RED-LINE REVISON NO.2 REVISIONS TO THIS SHEET ROOF DRAINAGE DETAIL DETAIL BLDG. A
"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. 18848, Expiration Date: 09-19-12."

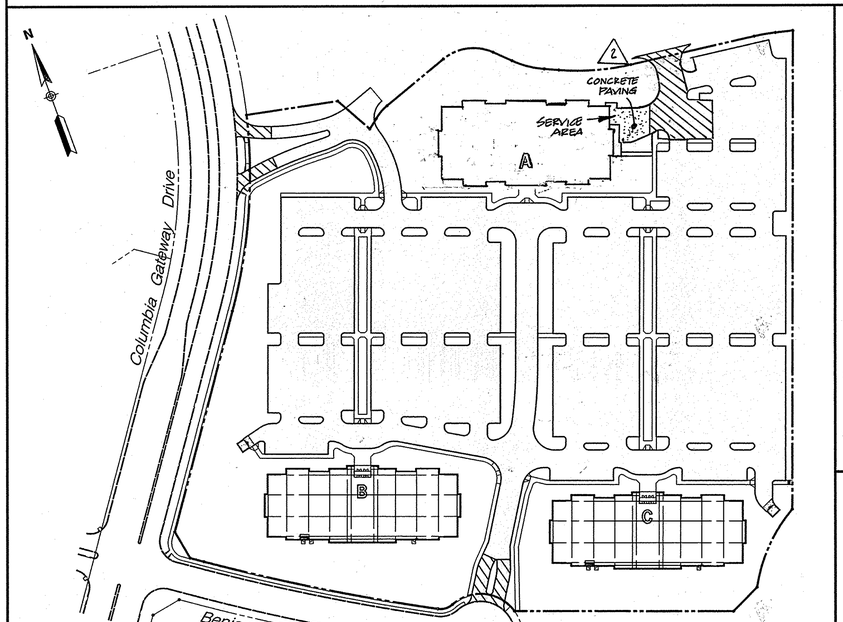
Site Details
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006
Sheet 4 of 14
SDP 06-083



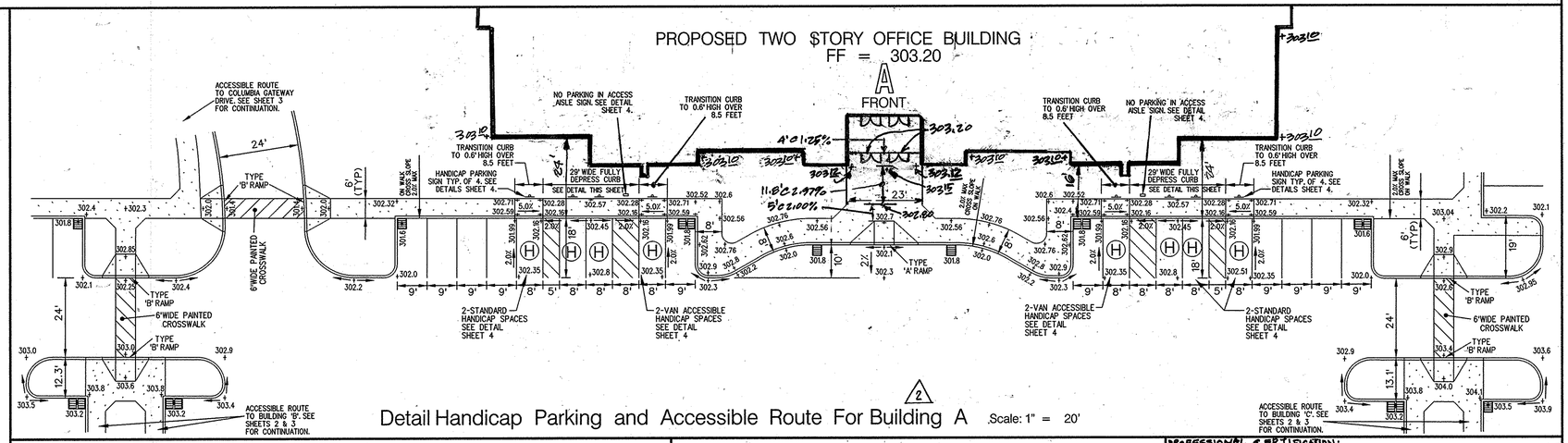


Detail Handicap Parking and Accessible Route For Building B & C Scale: 1" = 20'

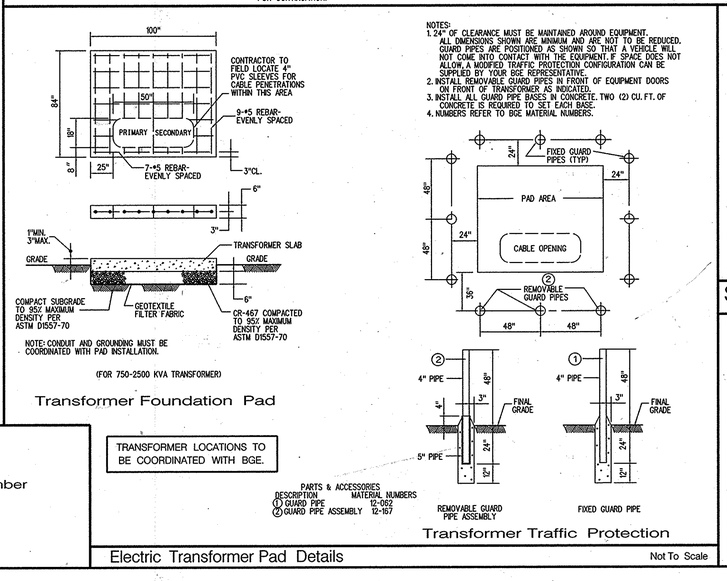


*SEE GEOTECHNICAL REPORT DATED MARCH 29,2006 AND PREPARED BY HILLIS CARNES ASSOCIATES "HEAVY DUTY ASPHALT PAVING" (PAGE 11)

Detail Paving Sections and Areas 2 Scale: 1" = 100'

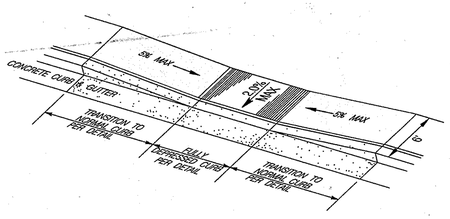


2 Detail Handicap Parking and Accessible Route For Building A Scale: 1" = 20'



TRANSFORMER LOCATIONS TO BE COORDINATED WITH BGE.

Electric Transformer Pad Details Not To Scale



Sidewalk Contiguous with Handicap Parking Not To Scale

"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. 18848, Expiration Date: 09-19-12."

2 PROPOSED RED-LINE REVISON NO.2 8-7-12

REVISIONS TO THIS SHEET
REVISE FOOTPRINT BUILDING A -ACCESSIBLE ROUTE DETAIL
REVISE PAVING LIMITS AND ADD CONCRETE PAVING DETAIL

PROFESSIONAL CERTIFICATION:
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSED NO. 26534, EXPIRATION DATE APRIL 1, 2017."
DATE: 05/02/16
MD. REGISTRATION NO. 26534 PRINTED NAME: JOHANN DeBAY, P.E.
SIGNATURE:

REDLINE REVISION # 4
REVISED TOTAL NUMBER OF SHEETS TO 14

REDLINE REVISION NO.1
BY MATIS WARFIELD, INC.
MARCH 26 2007
REVISE BUILDING FOOTPRINT
ACCESSIBLE ROUTE DETAIL

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

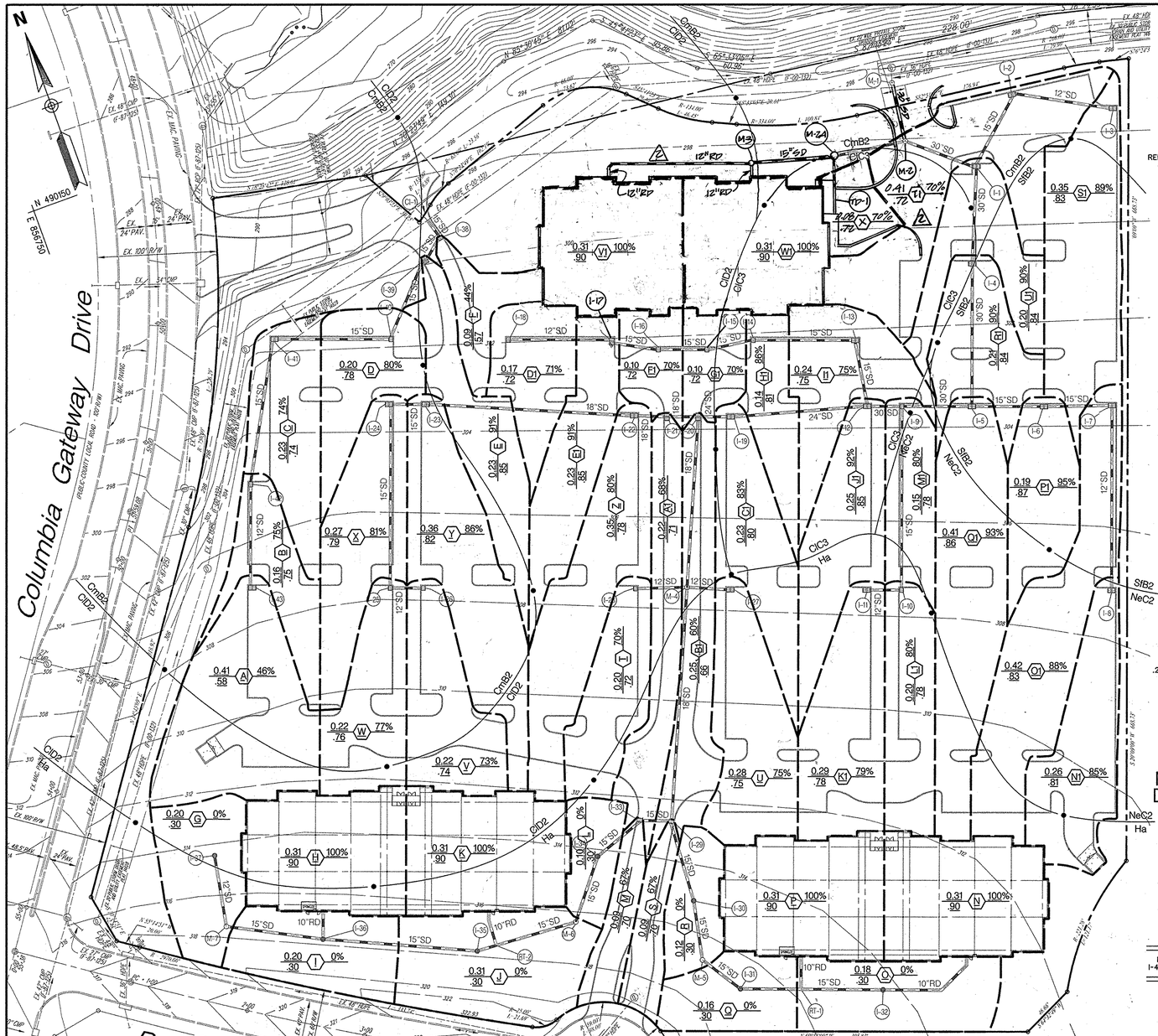
Chief, Development Engineering Division MK — Date 8/7/06
Chief, Division of Land Development BB — Date 5/28/06
Director — Date

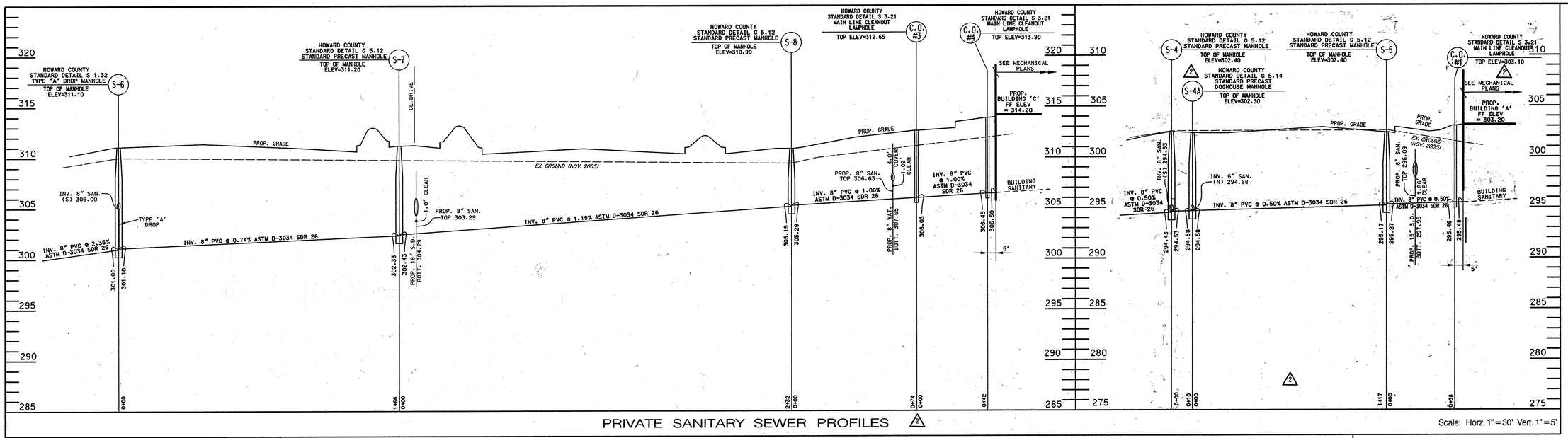
Site Details
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006
Sheet 5 of 14
SDP 06-083

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

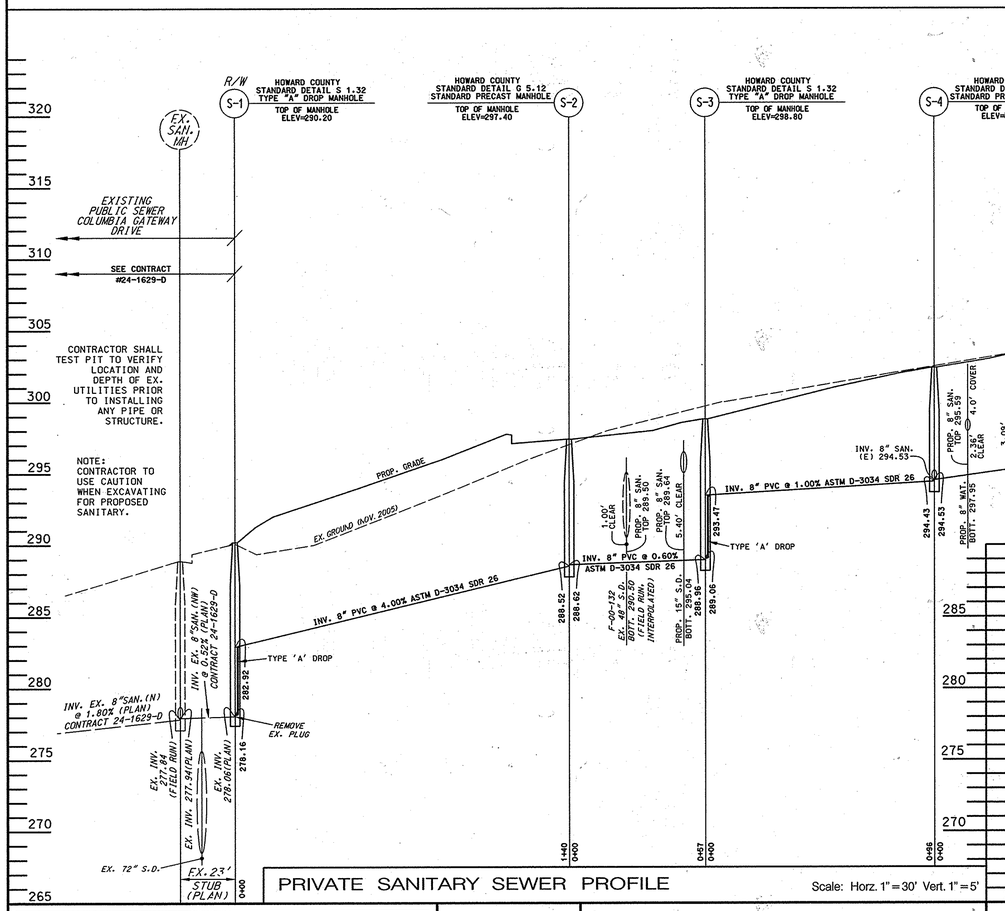
Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709


N
N 490150
E 856750
Columbia Gateway Drive
Benjamin Franklin Drive
(PUBLIC/COUNTY LOCAL ROAD - 100' R/W)
(PUBLIC COUNTY ROAD - 50' R/W)
PLAT No. 14638
F-00-132
EX. 48" TOP
EX. 24" PAVING
EX. 100' R/W
EX. 24" WMP
EX. 12" WMP
EX. 8" WMP
EX. 6" WMP
EX. 8" SAN MH
EX. 48" MH
EX. 48" HDPE
EX. 12" HDPE
EX. 18" HDPE
EX. 24" HDPE
EX. 30" HDPE
EX. 36" HDPE
EX. 42" HDPE
EX. 48" HDPE
EX. 54" HDPE
EX. 60" HDPE
EX. 66" HDPE
EX. 72" HDPE
EX. 78" HDPE
EX. 84" HDPE
EX.



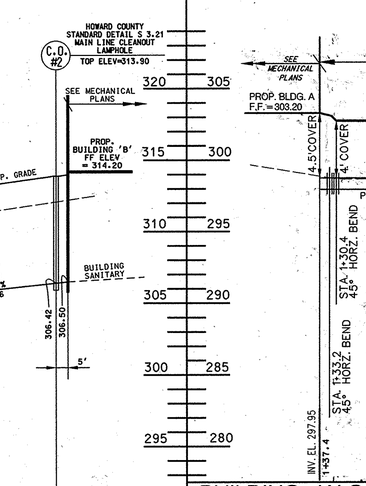
PRIVATE SANITARY SEWER PROFILES

Scale: Horz. 1"=30' Vert. 1"=5'



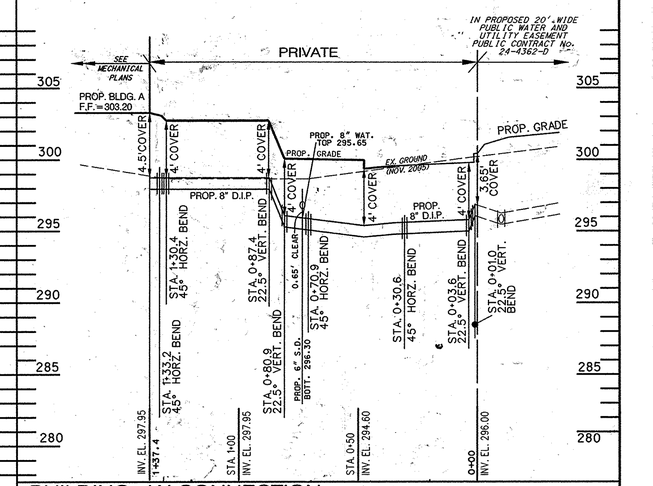
PRIVATE SANITARY SEWER PROFILE

Scale: Horz. 1"=30' Vert. 1"=5'



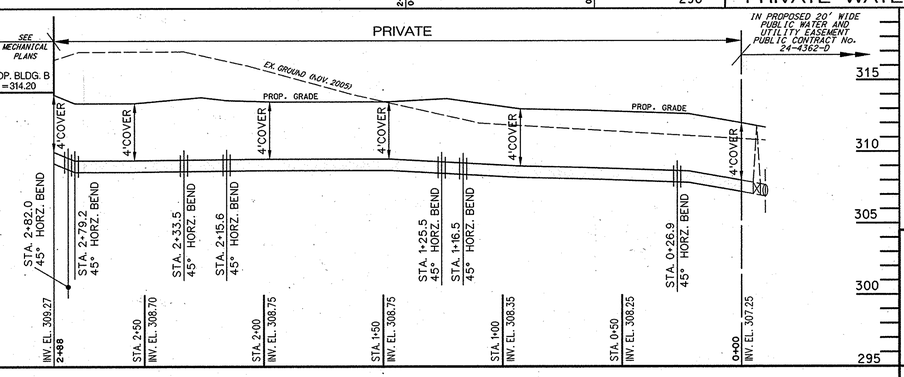
BUILDING 'B' CONNECTION PRIVATE WATER PROFILE

Scale: Horz. 1"=30' Vert. 1"=5'



BUILDING 'A' CONNECTION PRIVATE WATER PROFILE

Scale: Horz. 1"=30' Vert. 1"=5'



BUILDING 'B' CONNECTION PRIVATE WATER PROFILE

Scale: Horz. 1"=30' Vert. 1"=5'

"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. 18848, Expiration Date: 09-19-12."

2 PROPOSED RED-LINE REVISON NO.2 8-7-12
REVISIONS TO THIS SHEET
REVISE PRIVATE WATER PROFILE -BUILDING A CONNECTION
ADD SANITARY SEWER MANHOLE S-4A. REVISE LOCATION OF C.O.#1-PRIVATE SANITARY SEWER PROFILE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 8/17/06
Chief, Division of Land Development — Date 8/28/06
Director — Date 8/29/06

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1795
www.matiswarfield.com

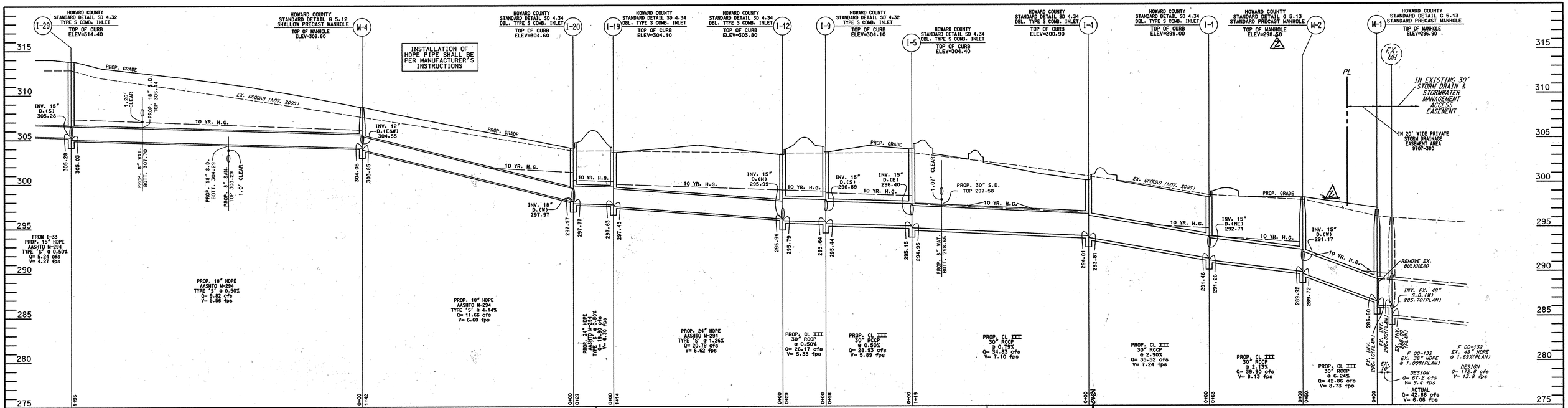
Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

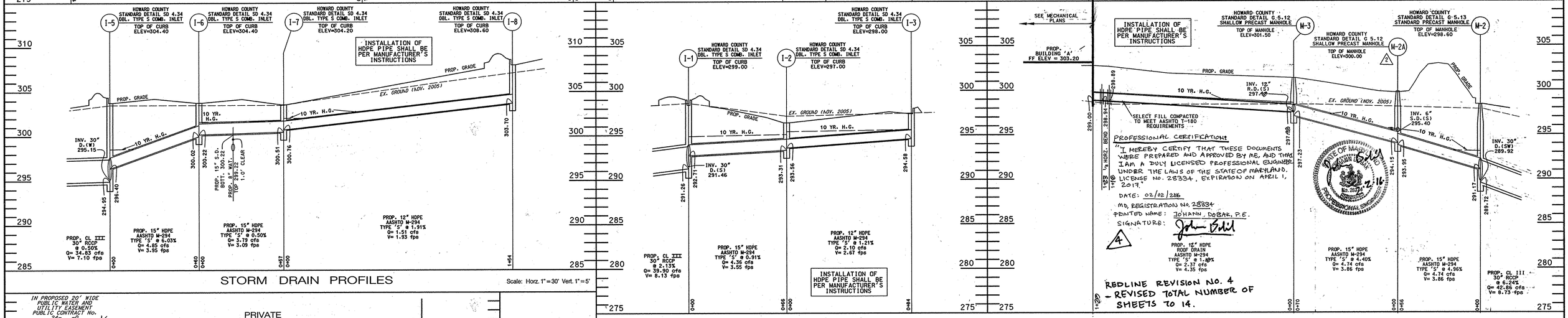
PROFESSIONAL CERTIFICATION:
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017."
DATE: 02/02/2016 SIGNATURE:
MD. REGISTRATION NO. 28334 PRINTED NAME: JOHANN DOBAK, P.E.

REDLINE REVISION #4
REVISED TOTAL NUMBER OF SHEETS TO 14.

Private Water & Sewer Profiles
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006
Sheet 7 of 25 14
SDP 06-083



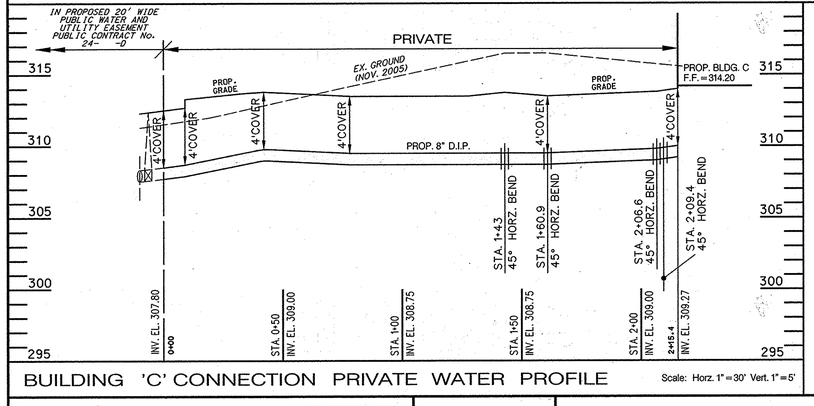


STORM DRAIN PROFILES

Scale: Horz. 1" = 30' Vert. 1" = 5'

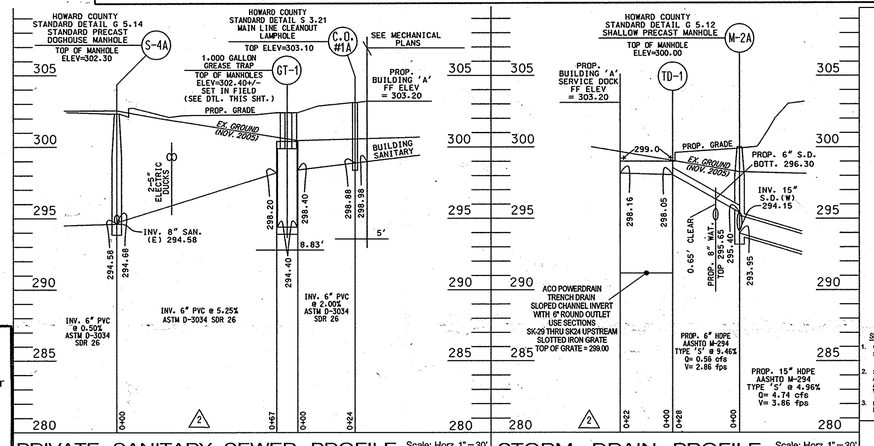
STORM DRAIN PROFILES 2

Scale: Horz. 1" = 30' Vert. 1" = 5'



BUILDING 'C' CONNECTION PRIVATE WATER PROFILE

Scale: Horz. 1" = 30' Vert. 1" = 5'

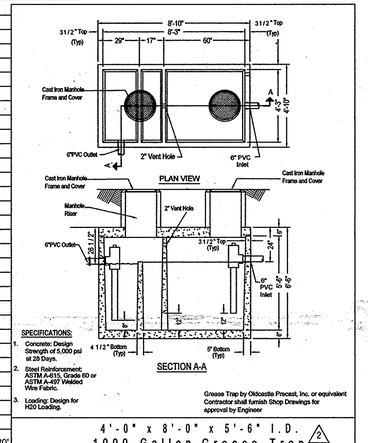


PRIVATE SANITARY SEWER PROFILE

Scale: Horz. 1" = 30' Vert. 1" = 5'

STORM DRAIN PROFILE

Scale: Horz. 1" = 30' Vert. 1" = 5'



"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. 18848, Expiration Date: 09-19-12."

2 PROPOSED RED-LINE REVISON NO.2 8-7-12
REVISIONS TO THIS SHEET
REVISE STORM DRAIN PROFILE – M-2 UPSTREAM TO BUILDING A
ADDED MANHOLE M-2A ADD STORM DRAIN PROFILE FOR SERVICE AREA.
ADDED PRIVATE SANITARY SEWER PROFILE S-4A TO C.O.#1A
ADDED GREASE TRAP DETAIL.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division MK — Date 8/2/06
Chief, Division of Land Development — Date 8/25/06
Director — Date 8/28/06

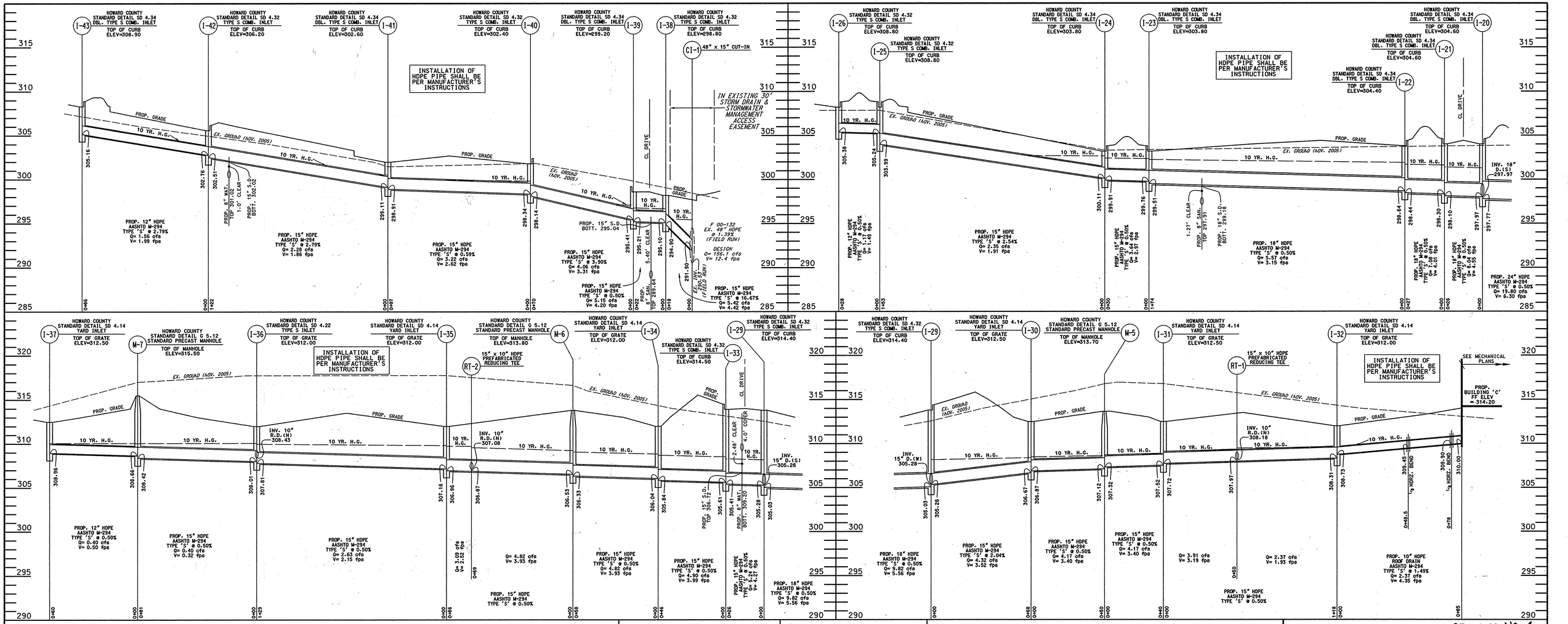
Private Water & Storm Drain Profiles
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

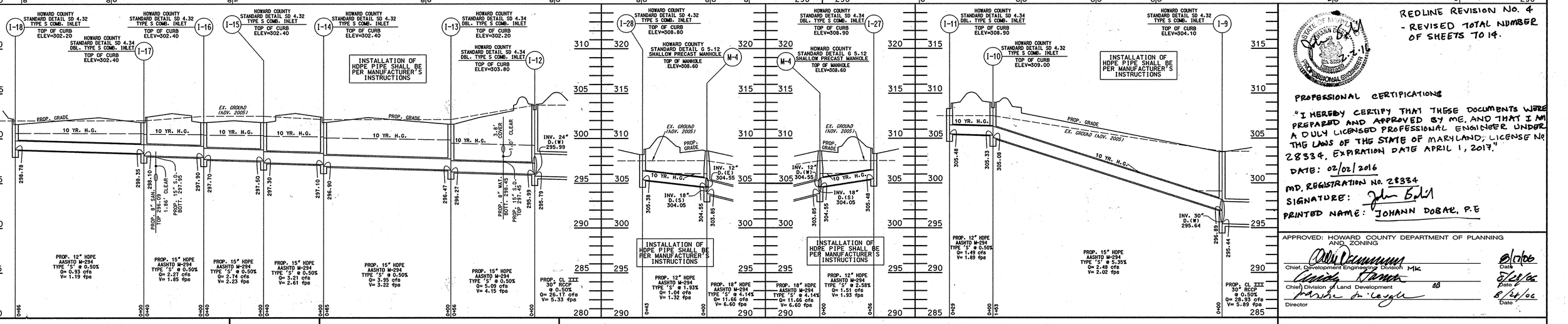
Howard County, Maryland
Scale: As Shown
August 2, 2006

Sheet 8 of 14
SDP 06-083

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709





REDLINE REVISION NO. 4
- REVISED TOTAL NUMBER OF SHEETS TO 14.

PROFESSIONAL CERTIFICATIONS

"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017."

DATE: 02/02/2016

MD. REGISTRATION NO. 28334

SIGNATURE:

PRINTED NAME: JOHANN DOBAL, P.E

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 8/14/06

Chief, Division of Land Development — Date 8/14/06

Director — Date 8/14/06

STORM DRAIN PROFILES

Scale: Horz. 1"=30' Vert. 1"=5'

Private Storm Drain Profiles
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

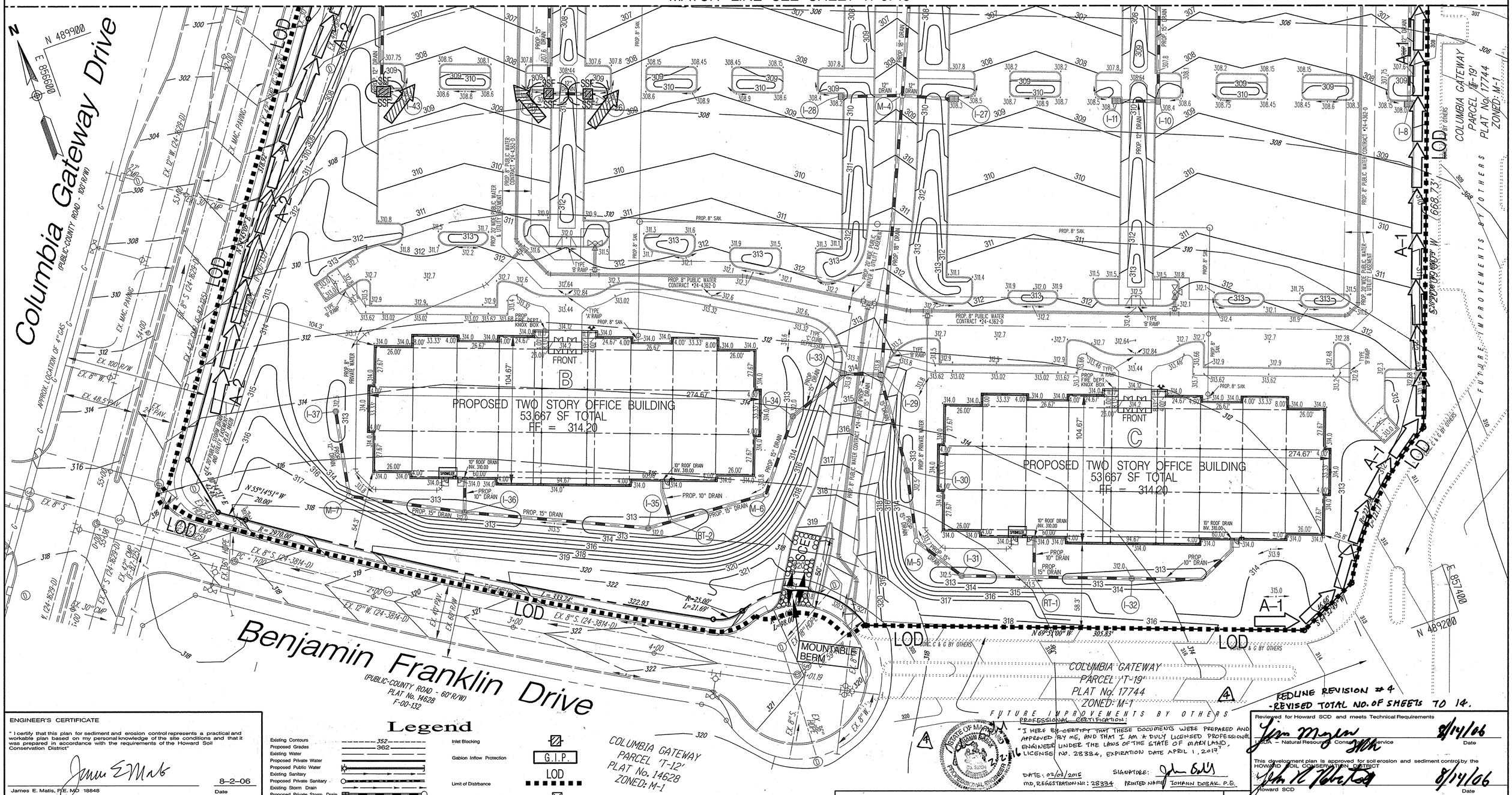
Howard County, Maryland
Scale: As Shown
August 2, 2006

Sheet 9 of 14
SDP 06-083

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

MATCH LINE SEE SHEET 11 of 13



REDLINE REVISION #4
-REVISED TOTAL NO. OF SHEETS TO 14.

ENGINEER'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 Soil Conservation District"

James E. Matis, P.E. MD 18848 — 8-2-06 Date

DEVELOPER'S CERTIFICATE

" 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"

For AAK Eastridge, LLC by J. Michael Abrams, Managing Member — 8-2-06 Date

Legend

Existing Contours 352
Proposed Grades 362
Existing Water
Proposed Private Water
Proposed Public Water
Existing Sanitary
Proposed Private Sanitary
Existing Storm Drain
Proposed Private Storm Drain
Existing Curb and Gutter
Proposed Conc. Curb & Gutter
Proposed Light Fixture
Proposed Concrete Paving
Handicap Parking Space (H)
Proposed Elevation at flow line of Earth Dike 365.0

Inlet Blocking
Gabion Inflow Protection G.I.P.
Limit of Distrbance LOD
Removable Pumping Station
Silt Fence SF
Super Silt Fence SSF
Earth Dike
Interim Earth Dike
Stabilized Construction Entrance SCE

Plan
Scale 1" = 30'

SEDIMENT CONTROL SEQUENCE OF OPERATIONS	EST. DAYS
1. Obtain grading permit.	
2. With the approval of the Sediment Control Inspector install all sediment & erosion control measures including stone construction entrance, Traps 1 & 2 (with all appurtenances), earth dikes & silt fence.	20
3. With the approval of the Sediment Control Inspector begin site grading, building foundations and utility installation. Adjust Earth Dike north of Building A as fill is placed	
4. Install 20" storm drain system beginning at Trap No. 2, 79' downstream of I-4 at invert 291.52 and install drainage system upstream through I-37. 18" drain extending from I-22 up to I-23 may be installed but 18" pipe shall be bulkheaded at I-23. As inlets and storm drain which drain to Trap No. 2 become operational, leave those inlets unprotected to convey sediment to Trap No. 2. Storm drainage systems within the drainage area of Trap No. 1 may be built but drain shall not be placed into operation. Provide inlet blocking and wrap Super Silt Fence around inlets I-23, I-24, I-25, I-26, I-38, I-39, I-40, I-41, I-42 and I-43 to prevent sediment from entering those inlets. Install section of interim earth dike, at those inlets as shown, immediately following inlet installation to further prevent sediment from entering inlets. Install sanitary sewer and water lines except where sanitary sewer conflicts with Trap No. 1.	100
5. Flush storm drain system draining to Trap No. 2 periodically and following rainfall events to insure system remains functional and unclogged.	
6. Complete building foundation, slab and all possible grading and utility work. Stabilize disturbed areas in accordance with stabilization specifications.	30
7. Install curb and gutter and place stone subbase in all areas to receive paving except in sediment trap areas, and areas that will interrupt flow to Trap No. 1 between inlets I-40 and I-41. Permanently stabilize areas to remain grass in accordance with stabilization specifications.	45
8. During dry weather only and with the approval of the Sediment Control Inspector flush storm drain system downstream through Trap 2. Dewater & remove Trap No. 1 and Trap No. 2. Remove bulkhead in I-23 to the west and complete storm drain connection. Complete remaining portions of storm drain system downstream. Install remaining portion of sanitary sewer. Install remaining curb and gutter and place stone subbase in these areas. Stabilize any areas to remain grass.	10
9. Proceed with paving operations.	15
10. With the approval of the Sediment Control Inspector remove remaining sediment control devices and stabilize those areas disturbed by this process.	3

FUTURE IMPROVEMENTS BY OTHERS

PROFESSIONAL CERTIFICATION:

"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2007."

DATE: 02/02/2006 SIGNATURE: John Dobak
MD. REGISTRATION NO.: 28334 PRINTED NAME: JOHANN DOBAK, P.E.

Reviewed for Howard SCD and meets Technical Requirements

USDA – Natural Resources Conservation Service — 8/14/06 Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT

Howard SCD — 8/14/06 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — 8/17/06 Date
Chief, Division of Land Development — 8/28/06 Date
Director — 8/30/06 Date

Sediment and Erosion Control Plan
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland — Sheet 10 of 14
Scale: As Shown — August 2, 2006 — SDP 06-083

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

DISCHARGE FROM TRAP NO. 2 TO EXISTING REGIONAL STORM WATER MANAGEMENT FACILITY – 600 FEET NORTHEASTERLY

WHEN INSTALLING STORM DRAIN FROM M-1 UPSTREAM TO M-2, EXCAVATE ONLY THAT PORTION OF TRENCH WHICH CAN BE BACKFILLED AND STABILIZED IN ONE WORKING DAY. PLACE SPOIL ON UPHILL SIDE OF TRENCH.

WITHIN 24 HOURS FOLLOWING A 1 YEAR STORM EVENT (1" +/- RAINFALL) OR GREATER, THE SEDIMENT TRAP SHALL BE DEWATERED THROUGH THE USE OF THE REMOVABLE PUMPING STATION. ANY WATER SHALL BE DISCHARGED ON THE STONE APRON TO PREVENT SCOURING

WITHIN 24 HOURS FOLLOWING A 1 YEAR STORM EVENT (1" +/- RAINFALL) OR GREATER, THE SEDIMENT TRAP SHALL BE DEWATERED THROUGH THE USE OF THE REMOVABLE PUMPING STATION. ANY WATER SHALL BE DISCHARGED ON THE STONE APRON TO PREVENT SCOURING

GRADED CONDITIONS FLOW FROM TRAP TO EXISTING GRASS SWALE = 21.74 CFS (1-YR) SWALE WIDTH = 12' SLOPE IN SIDE SLOPES 3:1 VELOCITY 3 FPS

REMOVE UNSUITABLE MATERIAL PRIOR TO BACKFILLING TRAP

ADJUST EARTH DIKE AS FIELD IS PLACED

DEVELOPER TO PROVIDE I-40 TO EXTEND PROPOSED 15" AS PART OF THAT SDP APPROVAL

PROPOSED TWO STORY OFFICE BUILDING
53,667 SF TOTAL
FF = 303.20

TRAP NO.1
BAFFLE
BOTTOM TRAP = 287.0

TRAP NO.2
BAFFLE
RPS
BOTTOM TRAP = 291.5

TEMPORARY STOCKPILE AREA

TEMPORARY STOCKPILE AREA

DAYLIGHT 30" STORM DRAIN (79' DOWNSTREAM OF I-4) IN TRAP @ INV. 293.52

COLUMBIA GATEWAY
PARCEL T-19
PLAT No. 17744
ZONED: M-1

COLUMBIA GATEWAY
PARCEL T-15
PLAT No. 14628
ZONED M-1

COLUMBIA GATEWAY
PARCEL S-21
PLAT No. 12882
ZONED M-1

COLUMBIA GATEWAY
PARCEL T-19
PLAT No. 17744
ZONED: M-1

FUTURE IMPROVEMENTS BY OTHERS

Columbia Gateway Drive
(PUBLIC-COUNTY LOCAL ROAD - 100' R/W)

MATCH LINE SEE SHEET 10 of 13

Plan
Scale 1" = 30'

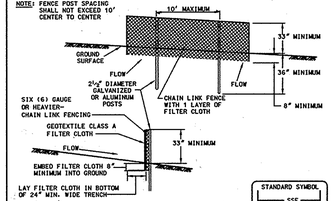
Legend

Existing Contours 352
Proposed Grades 362
Existing Water
Proposed Private Water
Proposed Public Water
Existing Sanitary
Proposed Private Sanitary
Existing Storm Drain
Proposed Private Storm Drain
Existing Curb and Gutter
Proposed Conc. Curb & Gutter
Proposed Light Fixture
Proposed Concrete Paving
Handicap Parking Space (H)
Proposed Elevation at flow line of Earth Dike 365.0
Inlet Blocking
Gabion Inflow Protection G.I.P.
Limit of Distrbance LOD
Removable Pumping Station
Silt Fence SF
Super Silt Fence SSF
Earth Dike
Interim Earth Dike
Stabilized Construction Entrance SCE

E 856950 N 489750

DETAIL 33 - SUPER SILT FENCE

NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER



Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway (SHA) Details for Chain Link Fencing. The SHA specifications for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
2. The posts do not need to be set in concrete.
3. 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.
4. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
5. Filter cloth be embedded a minimum of 8" into the ground.
6. When two sections of geotextile fabric adjoin each other, they shall be overlapped by 6" and folded.
7. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of the fence height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE — MD-378-D-3 MODIFIED

TRAP NUMBER		1	2
TYPE		SOST ST II	SROST ST IV
EXISTING DRAINAGE AREA AC.		4.45	8.50
INTERIM DRAINAGE AREA AC.		4.05(a)	8.90(a)
PROPOSED DRAINAGE AREA AC.		3.50	9.45
STORAGE REQUIRED C.F. 3,600 C.F./ACRE	WET	8,010	17,010
	DRY	8,010	17,010
	TOTAL	16,020	34,020
STORAGE PROVIDED C.F.	WET	8,125	21,210
	DRY	10,355	20,375
	TOTAL	18,480	41,585
WEIR CREST ELEV.		291.0	297.5
BOTTOM ELEV.		287.0	291.5
TOP EMBANKMENT ELEV.		292.0	298.5
LIMIT WET STORAGE / ELEV.		289.0	295.0
CLEANOUT ELEV. = 1/2 WET STORAGE DEPTH		288.0	293.25
SIDE SLOPES		2 : 1	2 : 1
WET STORAGE ZONE ELEV.		287.0 – 289.0	291.5 – 295.0
DRY STORAGE ZONE ELEV.		289.0 – 291.0	295.0 – 297.5
BOTTOM DIMENSION		75' x 47' irregular	110' x 46' irregular
EXIST. GROUND ELEV. AT OUTLET		289.5	296.5
OUTLET WIDTH		20'	40'

(a) If proposed inlets clog

REDLINE REVISION #4
- REVISED TOTAL NO. OF SHEETS TO 14.

PROFESSIONAL CERTIFICATION:
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2019."

DATE: 02/02/2006
MD. REGISTRATION NO.: 28334
SIGNATURE:
PRINTED NAME: JOHANN DOBAL, P.E.

4

ENGINEER'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 Soil Conservation District"

James E. Matis, P.E. MD 18848 — 8-2-06 Date

DEVELOPER'S CERTIFICATE

"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"

For AAK Eastridge, LLC by J. Michael Abrams, Managing Member — 8-2-06 Date

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1795
www.matiswarfield.com

STATE OF MARYLAND — JAMES EDWARD MATIS — NO. 18848 — REGISTERED PROFESSIONAL ENGINEER

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

Reviewed for Howard SCD and meets Technical Requirements
USDA – Natural Resources Conservation Service — 8/14/06 Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT
Howard SCD — 8/14/06 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division MK — 8/17/06 Date
Chief, Division of Land Development BB — 8/25/06 Date
Director — 8/30/06 Date

Sediment and Erosion Control Plan
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006

Sheet 11 of 14
SDP 06-083

Topsoil Specifications

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

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

I. 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 purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 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 mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slags, coarse fragments, gravel sticks, roots, trash, and other materials larger 1 1/2 inch in diameter.

ii. Topsoil must be free of plants or plant parts such as 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.

III. 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:

i. On soil 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 and 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 contents 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.

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slop Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4 9/32 - 8 9/32 higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4 9/32 - 8 9/32 layer and lightly compacted to a minimum thickness of 4 9/32. Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.

iv. Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

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 1½ 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 PER ACRE (8 GAL/1000 SQ. FT.) FOR ANCHORING.

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

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 THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 15 THRU OCTOBER 15, SEED WITH 2½ 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 1½ 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 (8 GAL./1000 SQ. FT.) FOR ANCHORING.

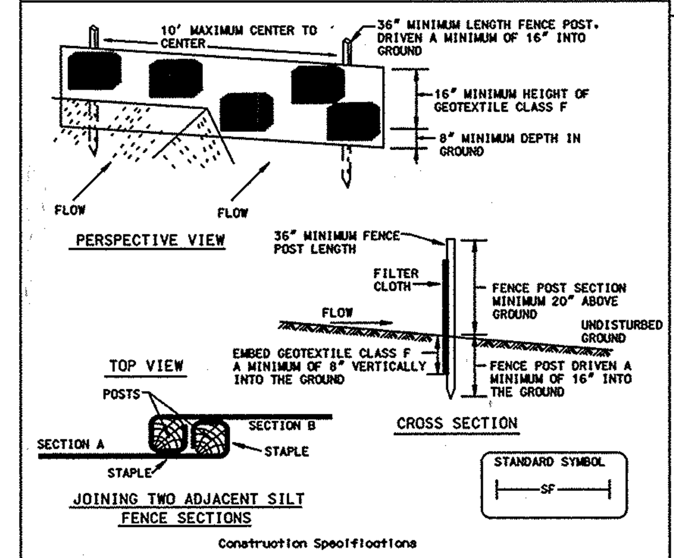
REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR ADDITIONAL RATES AND METHODS NOT COVERED.

Dust Control Specifications

TEMPORARY METHODS:
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 DESIRED EFFECT.
4. IRRIGATION - THIS IS GENERALLY DONE AS AN AN EMERGENCY TREATMENT. SITE IS SPRINKLED 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 RETREATMENT.

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.

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1½" x 1½" square (minimum) cut, or 1¾" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

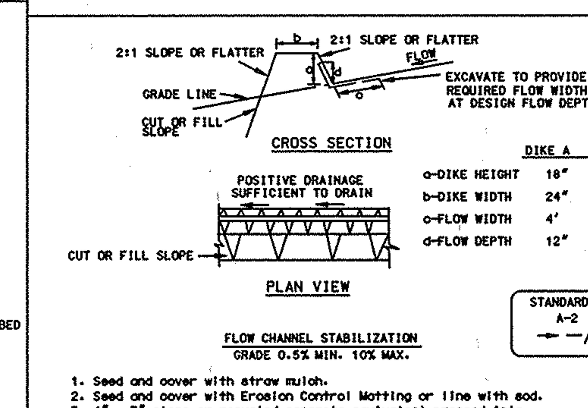
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.

3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.

4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.

5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

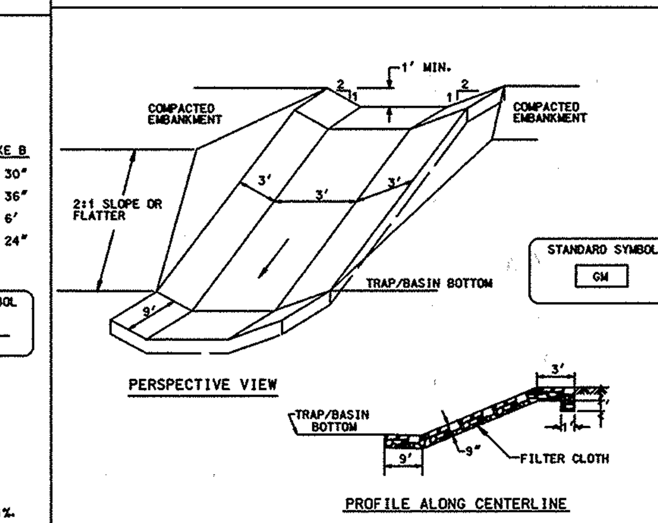
6. Fill shall be compacted by earth moving equipment.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 6 - GABION INFLOW PROTECTION



Construction Specifications

1. Gabion inflow protection shall be constructed of 9' x 3' x 9" gabion baskets forming a trapezoidal cross section 1' deep, with 2:1 side slopes, and a 3' bottom width.

2. Geotextile Class C shall be installed under all gabion baskets.

3. The stone used to fill the gabion baskets shall be 4" - 7".

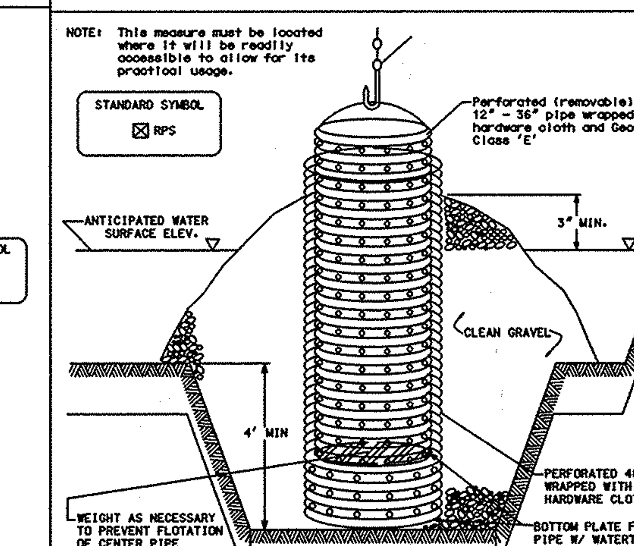
4. Gabions shall be installed in accordance with manufacturers recommendations.

5. Gabion Inflow Protection shall be used where concentrated flow is present on slopes steeper than 4:1.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 7 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 20A - REMOVABLE PUMPING STATION

NOTE: This measure must be located where it will be readily accessible to allow for its practical usage.



Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with ½" hardware cloth to prevent backfill material from entering the perforations.

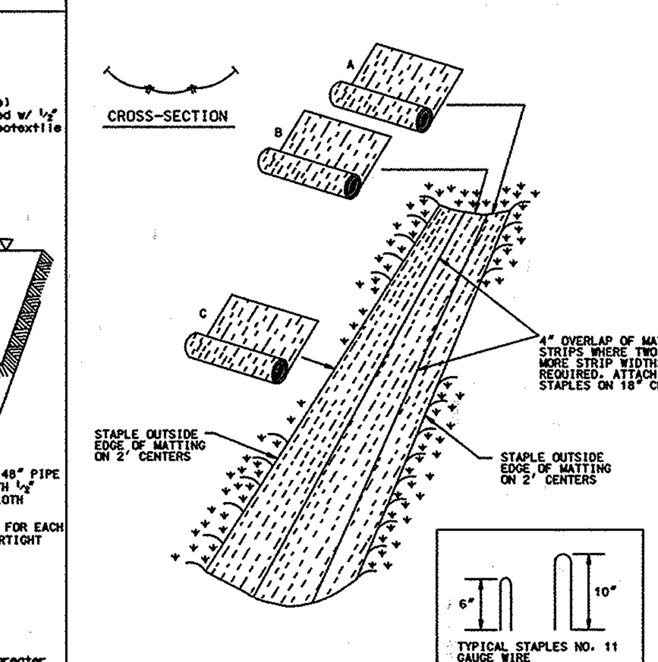
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.

3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be ½" X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with ½" hardware cloth first, then wrapped again with Geotextile Class E.

4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	MODIFIED	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Construction Specifications

1. 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".

2. Staple the 4" overlap in the channel center using an 18" spacing between staples.

3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.

4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.

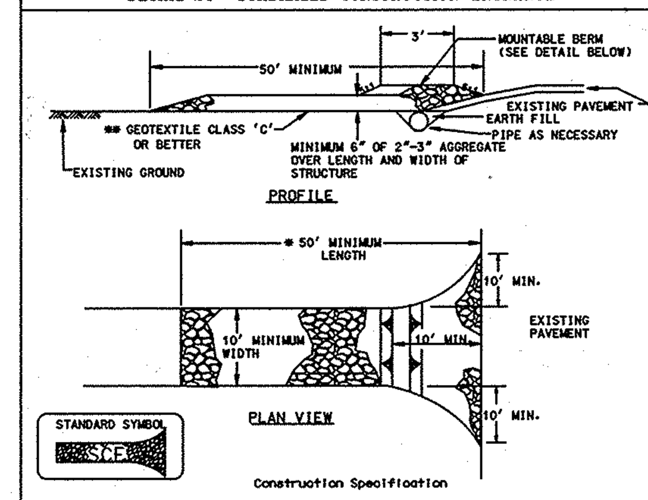
5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.

6. 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. 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.

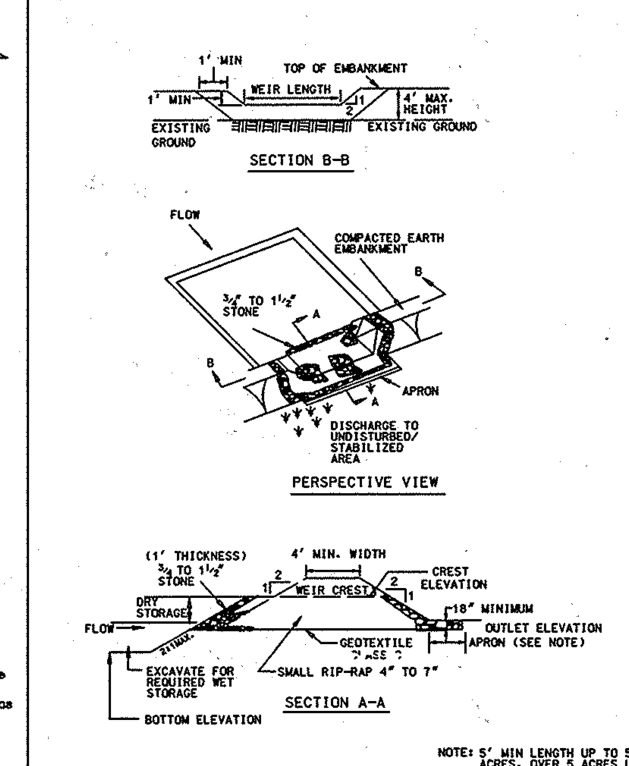
4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. 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.

6. 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.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 10A - STONE RIP-RAP OUTLET SEDIMENT TRAP - ST IV



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 16	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STONE RIP-RAP OUTLET SEDIMENT TRAP - ST IV

Constuction Specifications

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.

2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.

3. All cut and fill slopes shall be 2:1 or flatter.

4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.

5. Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 9).

6. Geotextile Class C shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.

7. 4" - 7" stone shall be used to construct the weir and 4" - 12" or Class I rip-rap shall be used to construct the outlet channel.

8. Outlet - An outlet shall include a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge point shall be provided as necessary.

9. Outlet channel must have positive drainage from the trap.

10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ of the wet storage depth of the trap (900 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

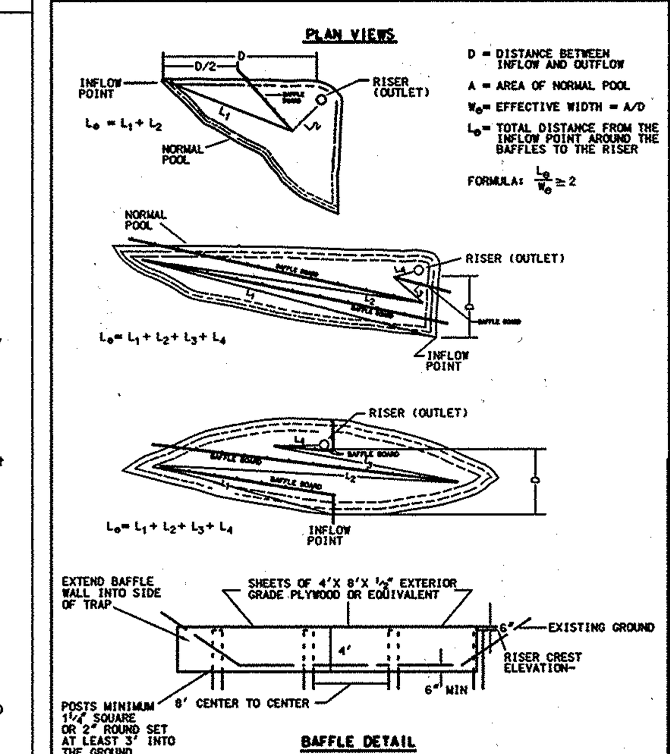
11. The structure shall be inspected periodically after each rain and repaired as needed.

12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.

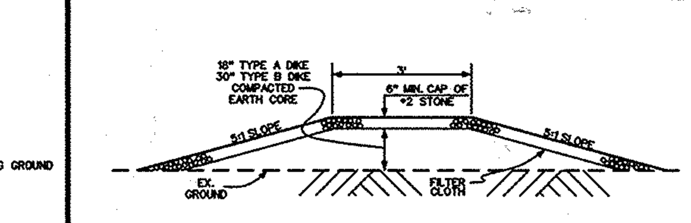
13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 16A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

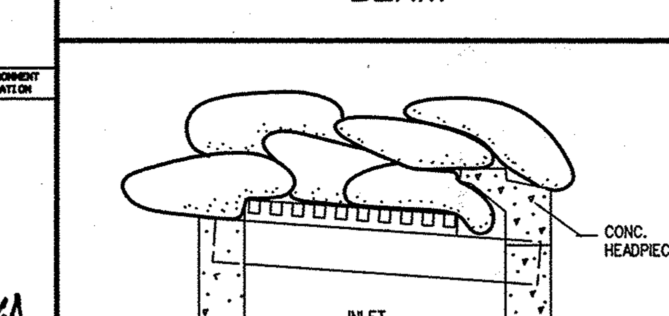
DETAIL 18 - SEDIMENT BASIN BAFFLES



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	C - 10 - 28	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



MOUNTABLE BERM



SANDBAGS TO BLOCK INLET GRATE AND THROAT OPENING (COMBINATION INLETS)
PLACE FILTER CLOTH DIRECTLY OVER INLET GRATE AND EXTEND OVER THROAT OPENING OF HEADPIECE

INLET BLOCKING DETAIL

REDLINE REVISION #4
- REVISED TOTAL NUMBER OF SHEETS TO 14. (4)

Sediment Control Standard General Notes

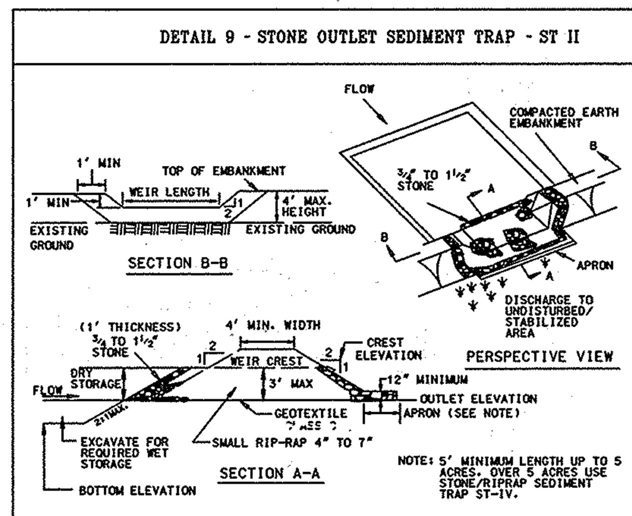
1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
   A. SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
   B. FOURTEEN DAYS AS TO ALL OTHER DISTURBED OF GRADED AREAS ON THE PROJECT SITE.
4. 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 MANUAL," STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS, SODS, TEMPORARY SEEDING, AND MULCHING (SECTION G). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. 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.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	13.37+/-	ACRES
AREA DISTURBED	13.74+/-	ACRES
AREA TO BE ROOFED OR PAVED	8.97+/-	ACRES
AREA TO BE VEGETATIVELY STABILIZED	4.77+/-	ACRES
TOTAL CUT*	9,780+/-	CUBIC YARDS
TOTAL FILL* (INCLUDES 10% COMPACTION)	10,390+/-	CUBIC YARDS
OFF-SITE WASTE/BORROW AREA LOCATION *	N/A	

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
10. 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.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE DAY. WHICHEVER IS SHORTER.

** PROVIDED FOR INFORMATIONAL PURPOSES ONLY. GRADING CONTRACTOR MUST PERFORM HIS OWN ANALYSIS PRIOR TO PLACING A BID ON EARTHWORK*

DETAIL 9 - STONE OUTLET SEDIMENT TRAP - ST II



Construction Specifications

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.

2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.

3. All cut and fill slopes shall be 2:1 or flatter.

4. The stone used in the outlet shall be small rip-rap 4" to 7" in size with a 1' thick layer of ¾" to 1½" washed aggregate placed on the upstream face of the outlet. Stone facing shall be as necessary to prevent clogging. Geotextile Class C may be substituted for the stone facing by placing it on the inside face of the stone outlet.

5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to one half of the wet storage depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 10	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STONE OUTLET SEDIMENT TRAP - ST II

6. The structure shall be inspected periodically and after each rain and repairs made as needed.

7. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentration inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.

8. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

9. Refer to Section D for specifications concerning trap dewatering.

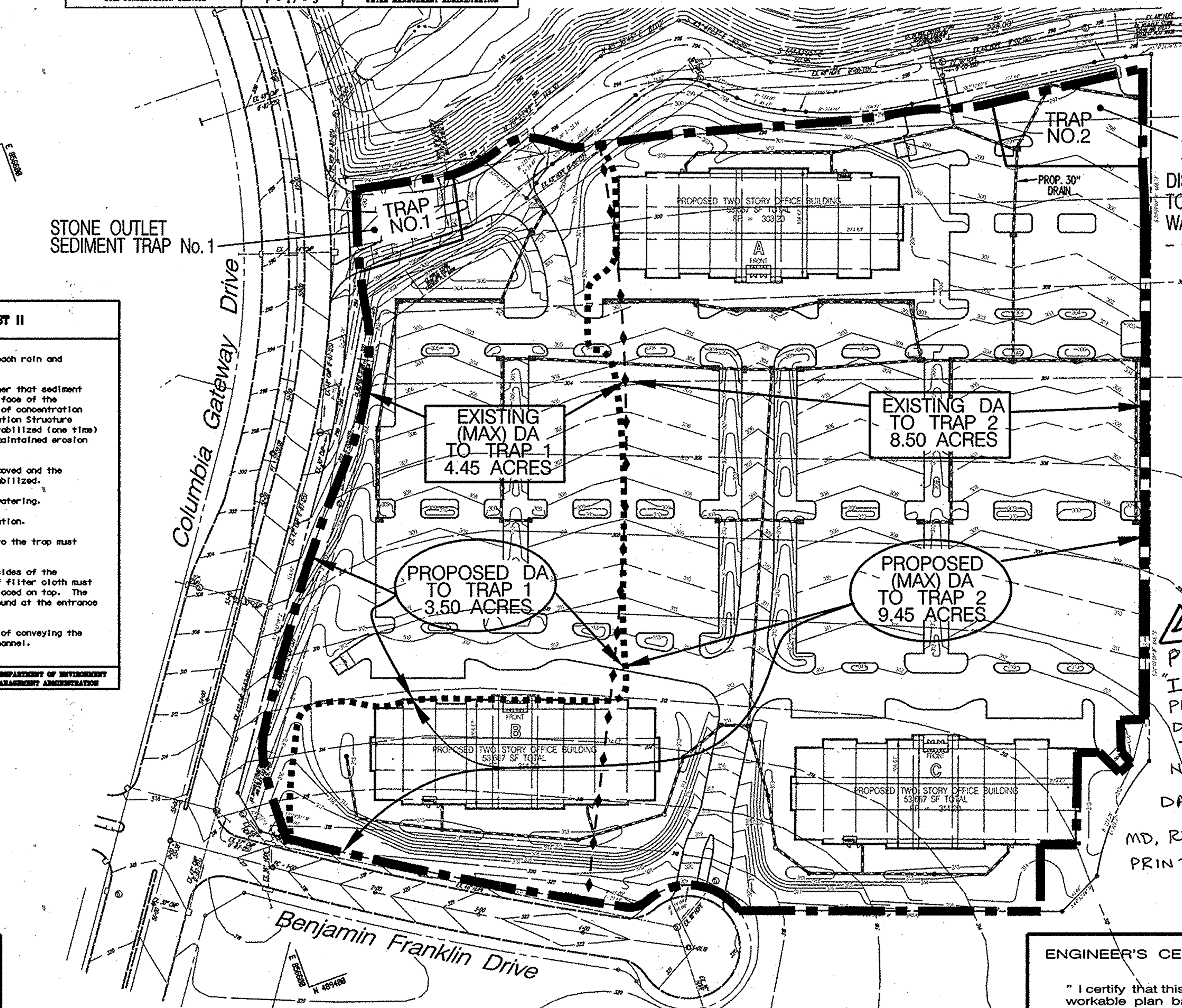
10. Minimum trap depth shall be measured from the weir elevation.

11. The elevation of the top of any dike directing water into the trap must equal or exceed the elevation of the trap embankment.

12. Geotextile Class C shall be placed over the bottom and sides of the outlet channel prior to the placement of stone. Sections of filter cloth must overlap at least 1' with the section nearest the entrance placed on top. The filter cloth shall be embedded at least 6" into existing ground at the entrance of the outlet channel.

13. Outlet - An outlet shall be provided, including a means of conveying the discharge in an erosion free manner to an existing stable channel.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 10A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



STONE/RIP RAP OUTLET SEDIMENT TRAP No. 2
DISCHARGE FROM TRAP NO. 2 TO EXISTING REGIONAL STORM WATER MANAGEMENT FACILITY - 600 FEET NORTHEASTERLY

N 489758
E 859888

OUTER DRAINAGE AREA BOUNDARY

EXISTING DRAINAGE AREA DIVIDE

PROPOSED DRAINAGE AREA DIVIDE

(4) PROFESSIONAL CERTIFICATION:
"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND LICENSE NO. 28334 EXPIRATION DATE APRIL 1, 2017."
DATE: 02/02/2016 SIGNATURE: [signature]
MD, REGISTRATION NO.: 28334
PRINTED NAME: JOHANN DOBAK, P.E.

Sediment Trap Drainage Area Map

Scale 1" = 100'

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-7004
facsimile 410-683-1798
www.matiswarfield.com

STATE OF MARYLAND — JAMES EDWARD MATIS — NO. 18848 — REGISTERED PROFESSIONAL ENGINEER

Developer / Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

ENGINEER'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 Soil Conservation District"

James E. Matis, P.E. MD 18848 — Date 8-2-06

DEVELOPER'S CERTIFICATE

" 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"

For AAK Eastridge LLC by J. Michael Abrams, Managing Member — Date 8-2-06

Reviewed for Howard SCD and meets Technical Requirements

USDA - Natural Resources Conservation Service — Date 8/14/06

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT

Howard SCD — Date 8/14/06

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

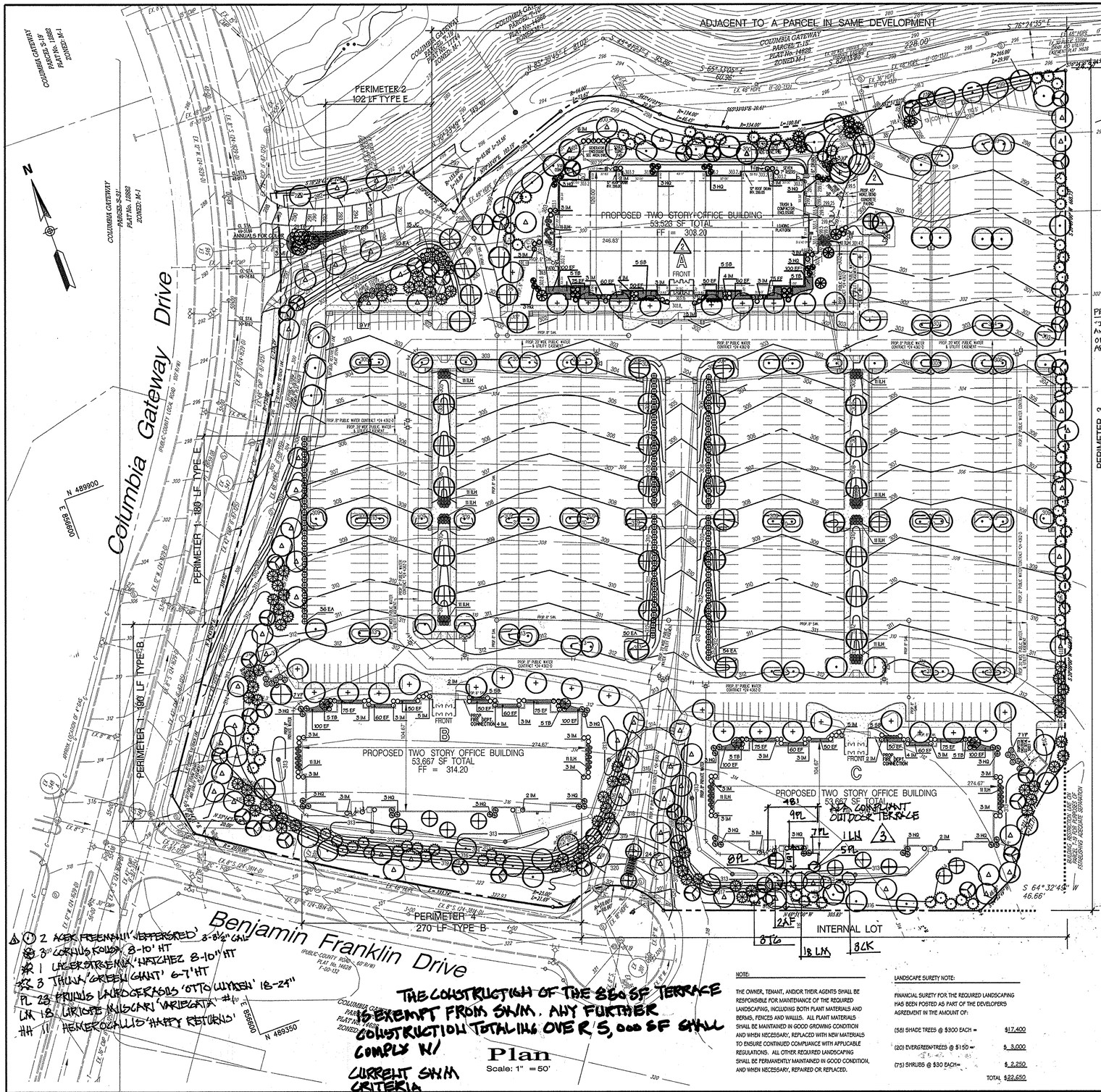
Chief, Development Engineering Division MK — Date 8/17/06

Chief, Division of Land Development BB — Date 8/28/06

Director — Date 8/28/06

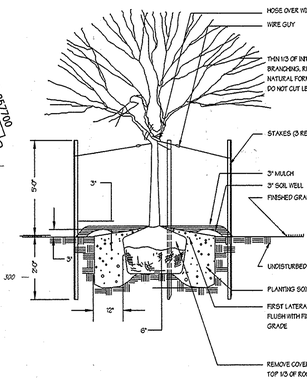
Sediment & Erosion Control Drainage Area Map and Details
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

Howard County, Maryland
Scale: As Shown
August 2, 2006
Sheet 12 of ~~13~~ 14
SDP 06-083



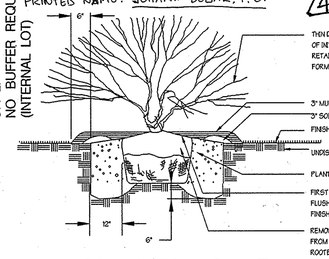
Tree Planting Detail

NOT TO SCALE



Shrub Planting Detail

NOT TO SCALE



SPECIFICATIONS FOR PLANTING

PLANT IDENTIFICATION:
All plants shall be properly marked for identification and checking.

LIST OF PLANT MATERIALS:
The contractor will verify plant quantities prior to bidding and any discrepancies shall be brought to the attention of the Landscape Architect. The Contractor shall furnish and plant all plants required to complete the work as shown on the drawings. Substitutions shall not be made without the written approval of the Landscape Architect. This contract will be based on the bidder having verified, prior to bidding, the availability of the required plant materials as specified on the Plant List.

PLANT QUANTITY:
All shrubs shall be dense, heavy to the ground, and well grown, showing evidence of having been sheared regularly, and have firm, healthy, vigorous root systems. Plants shall be nursery grown. Plants shall not be pruned prior to delivery. The shape of the plant shall in general conform to its natural growth proportions unless otherwise specified. All plants including container grown shall conform to American Standard for Nursery Stock (ANSI z60.1, latest edition), and shall have a well-shaped, heavy branch structure for the species. Evergreen trees are to have an internode no greater than 24" and shall be uniformly well-shaped. All plant sizes shall average at least the middle of the range given in the plant list.

PLANT SPACING:
Plant spacing is to scale on the plan or as shown on the plant list.

SOIL MIX:
Soil mix will be 2/3 existing soil and 1/3 leaf mold or equal organic material, thoroughly mixed and homogenized.

BALL SIZE:
The ball size shall conform to the American Association of Nurserymen's publication entitled American Standard For Nursery Stock, ANSI z60.1, latest edition.

EXCAVATION:
Holes for all plants shall be 18" larger in diameter than size of ball or container and shall have vertical sides. Hedges shall be planted in a trench 12" wider than ball diameter. Beds for mass planting shall be entirely excavated to a depth of 8" and shall be 18" beyond the average outside edge of plant balls. A 2" layer of organic material (i.e., leaf mold) will be incorporated into plant beds by tilling again.

PLANTING:
Backfilling shall be done with soil mix, reasonably free of stones, subsoil, clay, lumps, stumps, roots, weeds, hermful grass, litter, toxic substances, or any other material which may be harmful to plant growth or hinder grading, planting, or maintance operations. Should any unforeseen or unsuitable planting conditions arise, such as faulty soil drainage or chemical residues, they should be called to the attention of the Landscape Architect and Owner for adjustments before planting. The plant shall be set plumb and straight and shall be staked at the time of planting. Backfill shall be well rammed about the roots and settled by watering. Plants will be planted higher than surrounding grade. Shrubs will be 1" higher and trees will be 3" higher. Remove rope from around tree trunks and lay back burlap from top of all B&B material. Nylon or vinyl rope and/or burlap will be completely removed from all plant material prior to planting.

TRANSPLANTING TREES BY TREE MACHINES:
Trees shall be moved by machines that provide a minimum of 9" per 1' of tree caliper. Holes are to be dug by the same size machine as the one transporting the plant. The plant material shall be transplanted in approximately the same growing condition as it is pleasantly growing, in terms of soil type and moisture content. Fertilize and guy as described in these plans and specifications.

CULTIVATION:
All trenches and shrub beds shall be cultivated, edged and mulched to a depth of 3" with shredded bark. The area around isolated plants shall be mulched to at least 6' greater diameter than that of the hole. Plant beds adjacent to buildings shall be mulched to the building wall.

MAINTENANCE:
The Contractor shall be responsible during the contract and up to the time of acceptance for keeping the planting and work incidental thereto in good condition, by replanting, plant replacements, watering, weeding, cultivating, pruning and spraying, reinstalling and cleaning up and by performing all other necessary operations of care for promotion of good plant growth so that all work is in satisfactory condition at time of acceptance, at no additional cost to the Owner.

FERTILIZER:
Fertilizer shall be a slow release type contained in polyethylene perforated bags with micropore holes for controlled feeding, such as Easy Grow as manufactured by Specialty Fertilizer, Inc., Box 205, Sutton, New York 10501, or approved equal. The bags shall contain 1 ounce of soluble fertilizer analysis 10-8-10 per unit to last three (3) years and shall be applied during planting as recommended by the manufacturer. If fertilizer packets are not used, the Contractor shall apply granular fertilizer to the soil mixt with 10-6-4 analysis, 50% organic at the following rates: Trees @ 2-3 lbs. per caliper inch; Shrub Beds @ 3-5 lbs per 100 sq.ft.; and Groundcover Beds @ 2-3 lbs. per 100 sq.ft.

GROUNDCOVER:
All areas of groundcover shall be rototilled a depth of 6". Apply 2" of organic material and rototill until thoroughly mixed. Apply fertilizer as stated above.

GUARANTEE AND REPLACEMENT:
All material shall be unconditionally guaranteed for one (1) year. The Contractor is responsible for watering but not for losses or damage caused by mechanical injury or vandlism.

PLANT LIST

KEY	QUANTITY	BOTANICAL NAME / COMMON NAME	SIZE	CONDITION	REMARKS
△	63	ACER SACCHARUM 'GREEN MOUNTAIN' / GREEN MOUNTAIN SUGAR MAPLE	4" CAL.	B & B	AS SHOWN
+	37	GLEDITSIA TRIACANTHOS 'SHADEMASTER' / 'SHADEMASTER' HONEYLOCUST	2½-3" CAL.	B & B	AS SHOWN
·	84	QUERCUS PALUSTRIS / PIN OAK	2½-3" CAL.	B & B	AS SHOWN
⊕	39	ULMUS PARVIFOLIA / CHINESE ELM	2½-3" CAL.	B & B	AS SHOWN
⊛	9	LAGERSTROEMIA INDICA 'NATCHEZ' / 'NATCHEZ' CRAPEMYRTLE	7 - 8' HT.	B & B	AS SHOWN
⊘ MI	44	MALUS 'INDIAN SUMMER' / 'INDIAN SUMMER' CRABAPPLE	2-2½" CAL.	B & B	AS SHOWN
⊕	14	PRUNUS INCISA X CAMPANULATA / OKAME CHERRY	2-2½" CAL.	B & B	AS SHOWN
❋	76	PICEA ABIES / NORWAY SPRUCE	6-7' HT.	B & B	SPACE 10' O.C. STAGGER
○	70	PINUS STROBUS / EASTERN WHITE PINE	6-7' HT.	B & B	SPACE 10' O.C. STAGGER
EA	149	EUONYMUS ALATUS COMPACTA / DWARF WINGED EUONYMUS	24-30" SPD	B & B	SPACE 4' O.C. STAGGER
HQ	54	HYDRANGEA QUERCIFOLIA 'SNOW QUEEN' / 'SNOW QUEEN' OAKLEAF HYDRANGEA	2½-3' HT	5 GAL. CONTAINER	SPACE 5' O.C. STAGGER
IM	104 'BLUE MAID' 15 'BLUE PRINCE'	ILEX MESSERVEAE 'BLUE MAID' & 'BLUE PRINCE' / 'BLUE MAID' & 'BLUE PRINCE' HOLLY	24-30" SPD	3 GAL. CONTAINER	LOCATE 4 MALE HOLLIES PER BLDG.
SB	95	SPIRAEA X BUMALDA 'GOLDFLAME' / 'GOLDFLAME' SPIREA	18-24" SPD	3 GAL. CONTAINER	SPACE 3' O.C. STAGGER
TB	51	TAXUS BACCATA REPANDENS / ENGLISH SPREADING YEW	18-24" SPD	B & B	SPACE 4' O.C. STAGGER
VP	26	VIBURNUM PLICATUM TOMENTOSUM 'SHASTA' / 'SHASTA' VIBURNUM	2½-3' HT	B & B	SPACE 5' O.C. STAGGER
ILH	154	ITEA VIRGINICA 'LITTLE HENRY' / 'LITTLE HENRY' SWEETSPIRE	18-24" SPD	CONTAINER	SPACE 3' O.C. STAGGER
JC	15	JUNIPERUS CHINENSIS 'SARGENTII' / SARGENT'S JUNIPER	18-24" SPD	CONTAINER	SPACE 3' O.C. STAGGER

PLANTING NOTES:

1. This Plan is for planting purposes only.
2. This Plan has been prepared in accordance with the provisions of section 16.124 of the Howard County Code and the Landscape Manual.
3. All plant material shall be nursery grown and shall conform to American Association of Nurserymen latest standards. Plant installation must conform to the minimum standards cited in the latest edition of the "LANDSCAPE SPECIFICATION GUIDELINES" by the Landscape Contractor's Association.
4. Contractor is to notify Miss Utility a minimum of 72 hours prior to digging. Telephone 1-800-257-7777.
5. The Landscape Architect is to be notified 48 hours before planting begins. The location of all plant material is to be approved in field by the Landscape Architect.
6. No tree or shrub planting pits are to be left open or unattended.
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 REDLINE REVISION #3 BY HUMAN & ROHDE REVISIONS TO THIS SHT. ADDED OUTDOOR TERRACE TO REAR OF BLDG. 'C' & LANDSCAPE

DEVELOPER'S / BUILDER'S 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 Howard County Landscape Manual.
I / We further certify that upon completion, a Certification of Landscape installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

PROFESSIONAL CERTIFICATION: NOT TO SCALE

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017.

DATE: 02/02/2016 SIGNATURE:
MD. REGESTRATION NO.: 28334
PRINTED NAME: JOHANN DOBAK, P.E.

4 THIN DECIDUOUS 1/3 OF INITIAL BRANCHING, RETAINING NATURAL FORM. 3" MULCH 3" SOIL WELL FINISHED GRADE UNDISTURBED SOIL PLANTING SOIL FIRST LATERAL ROOT FLUSH WITH FINISHED GRADE REMOVE COVERING FROM TOP 1/3 OF ROOTBALL

4 REDLINE REVISION 4 REVISED TOTAL # OF SHEETS TO 14

SCHEDULE A
PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties			Dumpster Planto
Perimeter Number	1	2	3	4	Bldg A Type C 37 LF= 1 Tree 2 Evergreens
Landscape Type	'B' & 'E'	'E'	N/A	'B'	
Linear Feet of Roadway Frontage/Perimeter	190/180 LF.	102'	N/A	270 LF.	Bldg B Type D 37' LF= 1 Tree 4 Evergreens
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	NO	NO	N/A	NO	Bldg C Type C 37 LF= 1 Tree 2 Evergreens
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	NO	102 LF BERM CREDIT FOR 7 SHRUBS	N/A	NO	
Number of Plants Required					
Shade Trees	9	3	N/A	6	3
Evergreen Trees	5			7	8
Shrubs	45	26			
Number of Plants Provided					
Shade Trees	12	3	N/A	8	3
Evergreen Trees	8			16	8
Other Trees (2:1 substitution)					
Shrubs (10:1 substitution)	43	19			
(Describe plant substitution credits below if needed)					

NOTE: STREET TREES BY OTHERS.

NOTE: AN ADDITIONAL 28 SHADE TREES PER ACRE ARE REQUIRED AS PER COLUMBIA GATEWAY DESIGN AND DEVELOPMENT GUIDELINES.
TREES OWED = 13.37 A. x 30= 401 TREES
TREES PROVIDED= 170 MAJOR TREES @ 2½2-3" CAL= 170
63 TREES @ 4" CAL. = (2) 2 1/2-3" CAL. = 126
66 ORNAMENTAL TREES = 33
150 EVERGREEN TREES = 73
TOTAL PROVIDED = 402

SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING - REVISED TOTAL # OF SHEETS TO 14

Number of Parking Spaces	736
Number of Trees Required	37
Number of Trees Provided	
Shade Trees	91
Other Trees (2:1 substitution)	
Internal Islands Required	37
Internal Islands Provided (Min. 200 SF.)	95

NOTE:
THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR 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.

LANDSCAPE SURETY NOTE:
FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPERS AGREEMENT IN THE AMOUNT OF:

(58) SHADE TREES @ $300 EACH =	$17,400
(20) EVERGREEN TREES @ $150 =	$ 3,000
(75) SHRUBS @ $30 EACH =	$ 2,250
TOTAL	$22,650

Developer's/Builder's Certificate:
I/We certify that the landscaping shown on this plan will be done according to the plan, and shall be completed in accordance with this plan per Section 16.124 of the Howard County Code and the Howard County Landscape Manual.
I/We further certify that upon completion, a Certification of Landscape installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Howard County Department of Planning and Zoning.

8-7-12
For: AAK Eastridge, LLC by J. Michael Abrams, Managing Member — 8-02-06 Date

"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. 18848, Expiration Date: 09-19-12."
8-7-12

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division	Date 8/29/12
Chief, Division of Land Development	Date 9/06/12
Director	Date 9/6/12

5 REDLINE REVISION 8/6/15

2 AUGUST 7, 2012
REDLINE REVISION NO.2 (BY MATIS WARFIELD)
REVISIONS TO THIS SHEET
REVISE FOOTPRINT OF BUILDING 'A' AND LOCATIONS OF PLANT MATERIAL ADJOINING BUILDING 'A'
ADD SERVICE AREA EAST SIDE BUILDING 'A' - PLAN VIEW
REVISE QUANTITIES OF IM AND SB -PLANT LIST

Revised 5
Final Landscape Plan
Columbia Gateway, Parcel T-18
Proposed Two-Story Office Buildings A, B & C
Eastridge at Columbia Gateway

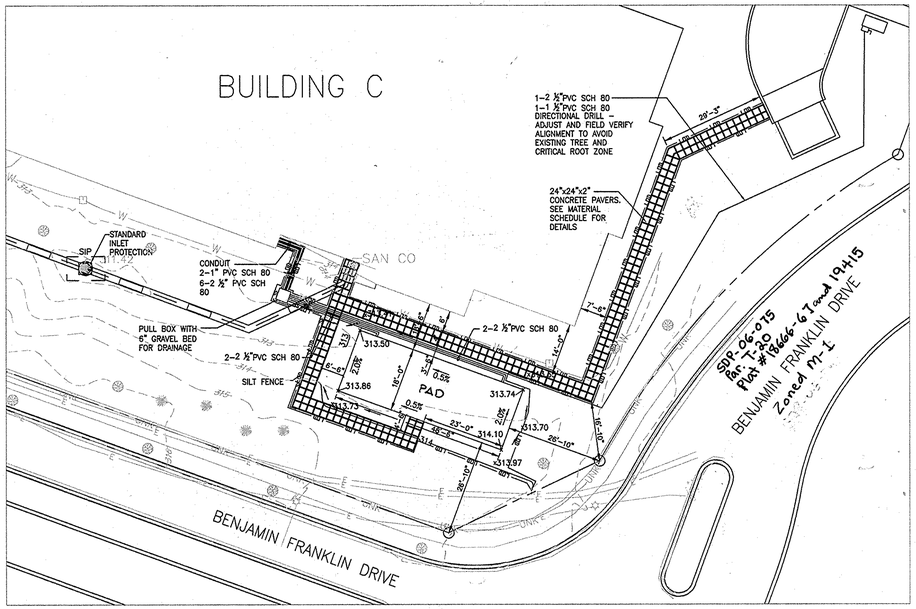
Howard County, Maryland — Sheet 13 of 14
Scale: As Shown — August 2, 2006 — SDP 06-083

Matis Warfield
consulting engineers
10540 york road suite m
hunt valley, maryland 21030
phone 410-683-1704
facsimile 410-683-1798
www.matiswarfield.com

Developer/Owner
AAK Eastridge, LLC.
J. Michael Abrams, Managing Member
Abrams Development Group
5850 Waterloo Road Suite 230
Columbia, Maryland 21045
Phone (410) 461-4340
Fax (410) 461-5709

LANDSCAPE ARCHITECTS
HUMAN & ROHDE, INC.
512 Virginia Avenue
Towson, Maryland 21286
410 825 3885

NOT FOR CONSTRUCTION OR PRICING



PLAN

SCALE: 1"= 20'

20' 0 20' 40'

NOTES:

1. CONTRACTOR TO DESIGNATE EXISTING UTILITIES ON SITE PRIOR TO ANY DIGGING. CONTRACTOR TO PERFORM TEST PIT AT UTILITY CROSSINGS PRIOR TO TRENCHING.
2. CONTRACTOR TO FIELD VERIFY AND ADJUST THE ALIGNMENT OF DIRECTIONAL DRILL CONDUIT TO AVOID EXISTING TREE AND CRITICAL ROOT ZONE.
3. SEE ELECTRICAL DRAWINGS FOR CONDUIT ROUTING AND DETAIL.
4. CONTRACTOR SHALL INSTALL PAVERS DURING 3 DAYS DRY WEATHER FORECAST PER NOAA AND STABILIZE THE DISTURBED AREA.
5. CONTRACTOR SHALL USE LIGHT RUBBER TIRE VEHICLES FOR MINIMUM DISTURBANCE.
6. CONTRACTOR SHALL DISTURB ONLY AREA THAT CAN BE STABILIZED AT THE END OF EACH WORKDAY. NO AREAS SHALL BE LEFT UN-STABILIZED OVERNIGHT UNLESS RUNOFF IS DIRECTED TO AN EROSION AND SEDIMENT CONTROL DEVICE.
7. WHERE NO SCE IS PROVIDED, THE CONTRACTOR SHALL DESIGNATE PIECES OF CONSTRUCTION EQUIPMENT THAT SHALL BE ALLOWED WITHIN THE LIMIT LIMITS OF DISTURBANCE (LOD). THIS EQUIPMENT SHALL BE KEPT WITHIN THE LOD UNTIL THE PROPOSED WORK IS COMPLETE AND SHALL HAVE TREADS/TIRES CLEANED PRIOR TO LEAVING THE LOD. ALL MATERIAL REMOVAL/LOAD OUT SHALL BE LIFTED FROM THE LOD.

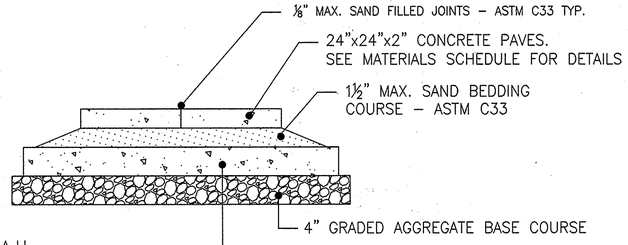
EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL CONTACT OWNER'S REPRESENTATIVE TO ARRANGE THE PRE-CONSTRUCTION CONFERENCE. NO EARTH DISTURBING ACTIVITIES SHALL OCCUR PRIOR TO THIS CONFERENCE TAKING PLACE.

1. CLEAR AND GRUB THOSE AREAS NECESSARY FOR INSTALLATION OF PERIMETER SEDIMENT CONTROLS.
2. CONSTRUCT AND STABILIZE PERIMETER CONTROLS FOR CONTRIBUTING DRAINAGE AREAS. THESE INCLUDE SILT FENCE AND STANDARD INLET PROTECTION.
3. TAKE MEASURES TO ENSURE THAT MUD OR DEBRIS ARE NOT TRACKED ONTO BASE ROADWAYS DURING CONSTRUCTION. ANY MUD OR DEBRIS SHALL BE SWEPT DAILY OR AS NEEDED TO PREVENT DISCHARGE ONTO ADJACENT LAND AND WATER.
4. SAME DAY STABILIZATION REQUIRES FOR UTILITY TRENCH TO INSTALL ELECTRICAL CONDUITS.
5. CONSTRUCT PROPOSED CONCRETE PAD, UTILITIES AND COMPLETE GRADING WORK. REMOVE ALL DEBRIS FROM THE SITE TO AN APPROVED LOCATION. PROVIDE DEWATERING OF EXCAVATIONS AS NEEDED, DISCHARGE DEWATERING EFFLUENT TO A DEWATERING DEVICE.
6. PERMANENTLY STABILIZE ALL DISTURBED AREAS SURROUNDING THE IMPROVEMENTS CONSTRUCTED.
7. UPON FINAL STABILIZATION OF DISTURBED AREAS, THE CONTRACTOR SHALL REQUEST FINAL INSPECTION. UPON APPROVAL BY THE OWNER'S REPRESENTATIVE, THE PERIMETER CONTROLS CAN BE REMOVED AND THOSE AREAS STABILIZED. SWEEP ALL PAVED AREAS.

MATERIAL SCHEDULE:

ITEM	QUALITY	MANUFACTURER	STYLE/ COLOR
CONCRETE PAVER 24"x24"x2"	1008 SF+	HANOVER ARCHITECTURAL PRODUCTS 5000 HANOVER ROAD HANOVER, PA 17331 PH 717 637 0500	PREST PAVERS, NATURAL COLOR TUDOR FINISH SEAL WITH HANOVER NATURAL SEALER



PAVERS DETAIL

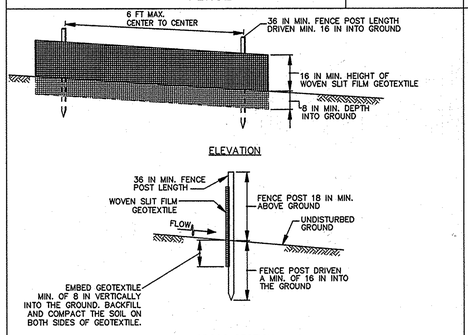
PROFESSIONAL CERTIFICATION:

"I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED AND APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 28334, EXPIRATION DATE APRIL 1, 2017."

DATE: 2.2.16 SIGNATURE:

MD, REGISTRATION NO.: 28334 PRINTED NAME: JOHANN DOBAK, P.E.

DETAIL E-1 SILT FENCE — STANDARD SYMBOL SF



1 OF 2

DETAIL E-1 SILT FENCE — STANDARD SYMBOL SF

CONSTRUCTION SPECIFICATIONS

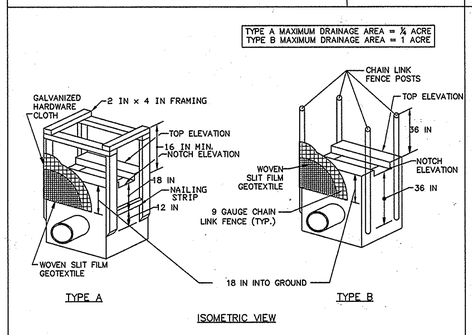
1. USE WOOD POSTS 1⅜ X 1⅜ ± 1/8 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SILT FENCE DETAIL

DETAIL E-9-1 STANDARD INLET PROTECTION — STANDARD SYMBOL SIP



1 OF 2

DETAIL E-9-1 STANDARD INLET PROTECTION — STANDARD SYMBOL SIP

CONSTRUCTION SPECIFICATIONS

1. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
3. FOR TYPE A, USE NOMINAL 2 INCH X 4 INCH CONSTRUCTION GRADE LUMBER POSTS, DRIVEN 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2X4 FRAME AS SHOWN. STRETCH ½ INCH GALVANIZED HARDWARE CLOTH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEIR CREST. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.

   FOR TYPE B, USE 2½ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 9 GAUGE OR HEAVIER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE WEIR CREST.
4. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
5. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARD INLET PROTECTION

REDLINE REVISION NO. 3

ADD CONCRETE PAD FOR GENERATOR AT SOUTH EAST CONNER OF BUILDING C.
THE PROPOSE WORK INCLUDE ADDITION STANDBY GENERATOR, AND ASSOCIATED CONDUIT, TO BACKUP ENTIRE BUILDING INCLUDING PAD, BRICK ENCLOSURE, AND POWER HOOK UP FOR ROLL UP TRAILER.

THE IMPROVEMENTS FOR THIS REVISION ARE UNDER 2,000 SFT SO IT IS EXEMPT FROM PROVIDING STORMWATER MANAGEMENT. ANY FUTURE REVISIONS THAT TOTAL OVER 5,000 SFT WILL BE REQUIRED TO MEET CURRENT STORMWATER MANAGEMENT REQUIREMENTS.

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division — Date 2.16.16

Chief, Division of Land Development — Date 2-23-16

Director — Date 2-23-16

KTA Group Inc
Mechanical, Plumbing, Electrical, & Telecommunications Engineering
2553 Dulles View Drive
Suite 400
Herndon, VA 20171
(703) 713-0300 Phone
(703) 935-7586 Fax
www.KTAGROUP.com

RITTER-NORTON ARCHITECTS
Professional Limited Liability Company
814 King Street, 3rd Floor
Alexandria, Virginia 22314
703.548.4403 t.
703.548.4910 f.
www.ritternorton.com

ALPHA CORPORATION
21351 RIDGETOP CIRCLE
SUITE 200
DULLES, VA. 20166
(703) 450-0800
www.alphacorporation.com

RENOVATIONS TO
SANDY SPRING BANK
GENERATOR PROJECT
COLUMBIA, MARYLAND

Project:

Issueed For:
Owner's Review 10.29.15
90%/LL Review 11.17.15

STATE OF MARYLAND — JOHANN DOBAK — No. 28334 — REGISTERED PROFESSIONAL ENGINEER — 2.2.16

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. 28334, EXP. 04/01/2017

SITE PLAN

~~REV~~ REVISED SHEET Columbia Gateway Parcel T-18

Scale: AS-SHOWN
Drawn: NPT
Checked: TM
Date: 01.06.16

C2.0

Sheet 14 of 14

"Copyright 2007 KTA Group, Inc." KTA Proj. No : S15014.00

SDP-06-083