

SHEET INDEX			
NO	DESCRIPTION	NO	DESCRIPTION
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- GENERAL NOTES**
- THE SUBJECT PROPERTY IS ZONED NT PER THE 02-02-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS DATED 7/28/06.
 - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
 - ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - EXISTING LAND USE: EMPLOYMENT CENTER/COMMERCIAL (PARCELS A, E, PART OF F, G, M, P, R, S, T, U), APARTMENT USE (PARCELS J, K, L AND PART OF F) AND OPEN SPACE CREDITED (PARCELS Q & V).
 - SOILS FROM SOURCE: NATURAL RESOURCES CONSERVATION SERVICE SOIL DATA MART & WEB SOIL SURVEY.
 - STREAMS AND WETLANDS ARE BASED ON FIELD OBSERVATIONS BY DMW AND CONFIRMED BY ON-SITE MEETING WITH US ARMY CORP. OF ENGINEERS ON DEC. 13, 2002. STREAMS AND WETLANDS WERE RE-CERTIFIED ON SEPTEMBER 24, 2012 BY BRAY HILL, LLC.
 - THE EXISTING TOPOGRAPHY IS TAKEN FROM AVAILABLE HOWARD COUNTY RECORDS AND FIELD RUN AS-BUILT SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY SHANBERGER & LANE DATED AUGUST 15, 2008. BOUNDARY SURVEY FOR THIS PROJECT WAS PREPARED BY PHRA, A PENNOM COMPANY, DATED MAY 2012.
 - MINIMUM BUILDING SETBACK RESTRICTIONS FROM PROPERTY LINES AND THE PUBLIC RIGHTS-OF-WAY LINES TO BE IN ACCORDANCE WITH THE FINAL DEVELOPMENT PLAN FDP-240-A-II CRITERIA AS APPROVED BY THE PLANNING BOARD ON DECEMBER 13, 2012 AND RECORDED ON PLAT NUMBERS 22263-64.
 - PUBLIC WATER AND PUBLIC SEWER WILL BE UTILIZED. CONT 24-4209-D AND 24-4284-D.
 - STORMWATER MANAGEMENT FOR THIS SITE HAS BEEN PROVIDED BY PRIVATELY OWNED AND MAINTAINED FACILITIES. WATER QUALITY VOLUME AND CHANNEL PROTECTION IS PROVIDED IN TWO NET POND AND ONE MICROPOOL EXTENDED DETENTION POND. RE MANAGEMENT WAS ADDRESSED AT THE TIME OF ULTIMATE SITE DEVELOPMENT OF THE INDIVIDUAL PARCELS. NO STORMWATER MANAGEMENT IS PROVIDED FOR RESIDENTIAL USE PARCELS ALONG OLD WATERLOO ROAD. SEE SDP-04-163.
 - THERE ARE NO EXISTING STRUCTURES ON PARCEL F.
 - THIS SUBDIVISION IS EXEMPT FROM THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.120(b)(1)(iv). THIS PROJECT QUALIFIED FOR THIS EXEMPTION BECAUSE THE PARCEL IS PART OF A PLANNED UNIT DEVELOPMENT WHICH RECEIVED PRELIMINARY DEVELOPMENT PLAN APPROVAL BEFORE DECEMBER 31, 1992.
 - STEEP SLOPES GREATER THAN 25% THAT ARE CONTIGUOUS FOR 10 VERTICAL FEET IN ELEVATION ARE PRESENT ON THIS SITE AND HAVE BEEN SHOWN. THE SLOPES ARE NOT NATURAL SLOPES BUT WERE CREATED BY THE MASS GRADING COMPLETED UNDER SDP-04-163.
 - SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S: S-03-05, FDP-240, PB 360, WP-04-113, 24-4209-D, WP-04-135, SDP-04-163, F-05-058, FDP-240-A-I, ZB-1095M, WP-13-032.
 - STREAM BUFFERS WITHIN THE RESIDENTIAL LAND USE ARE SHOWN AS 75'.
 - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, AND 100 YEAR FLOODPLAIN.
 - THIS PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
 - THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLATE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NO'S 37GB AND 37GC WERE USED FOR THE PROJECT.
 - NO TRAFFIC STUDY IS REQUIRED FOR THIS AMENDMENT AS THE DEVELOPMENT PROPOSED IS LESS INTENSE THAN THAT ORIGINALLY APPROVED. THE PROPOSED ENTRANCE OF THIS DEVELOPMENT AT MARIE CURIE DRIVE IS A PRIVATE INTERSECTION AND IS THE RESPONSIBILITY OF THE OWNERS OF THE PROPERTIES USING THIS INTERSECTION. IN ACCORDANCE WITH THE DEVELOPER'S TRAFFIC STUDY SIGNIFICANT QUEUING IS NOT EXPECTED TO OCCUR. FURTHER, ANY QUEUING THAT OCCURS WOULD BE CONTAINED ON-SITE AND NOT IMPACT THE PUBLIC ROAD SYSTEM.
 - APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
 - THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
 - CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
 - PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
 - NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
 - ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T99.
 - ALL LIGHTING IS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$114,000.00 FOR 196 SHADE TREES, 102 ORNAMENTAL TREES, 131 EVERGREEN TREES AND 675 SHRUBS.
 - BASED ON AVAILABLE COUNTY MAPS AND RECORDS, THERE ARE NO HISTORIC STRUCTURES OR KNOWN CEMETERIES LOCATED ON THE SUBJECT PROPERTY.

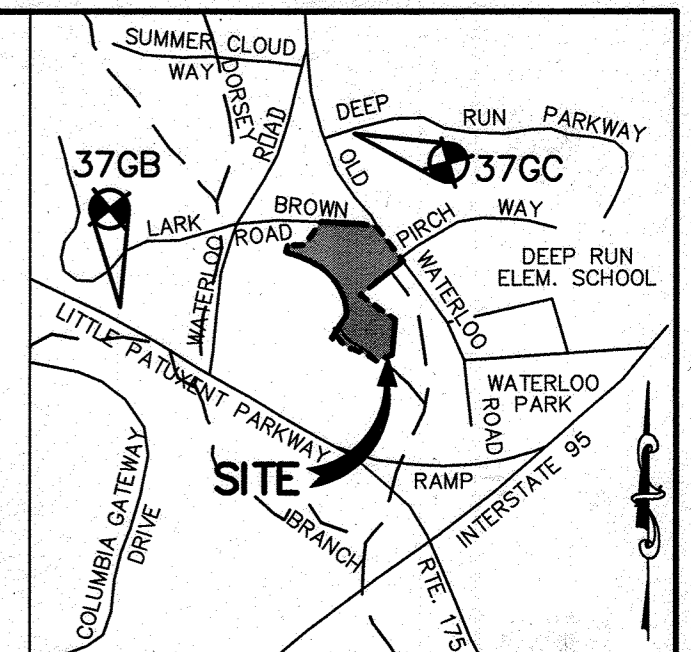
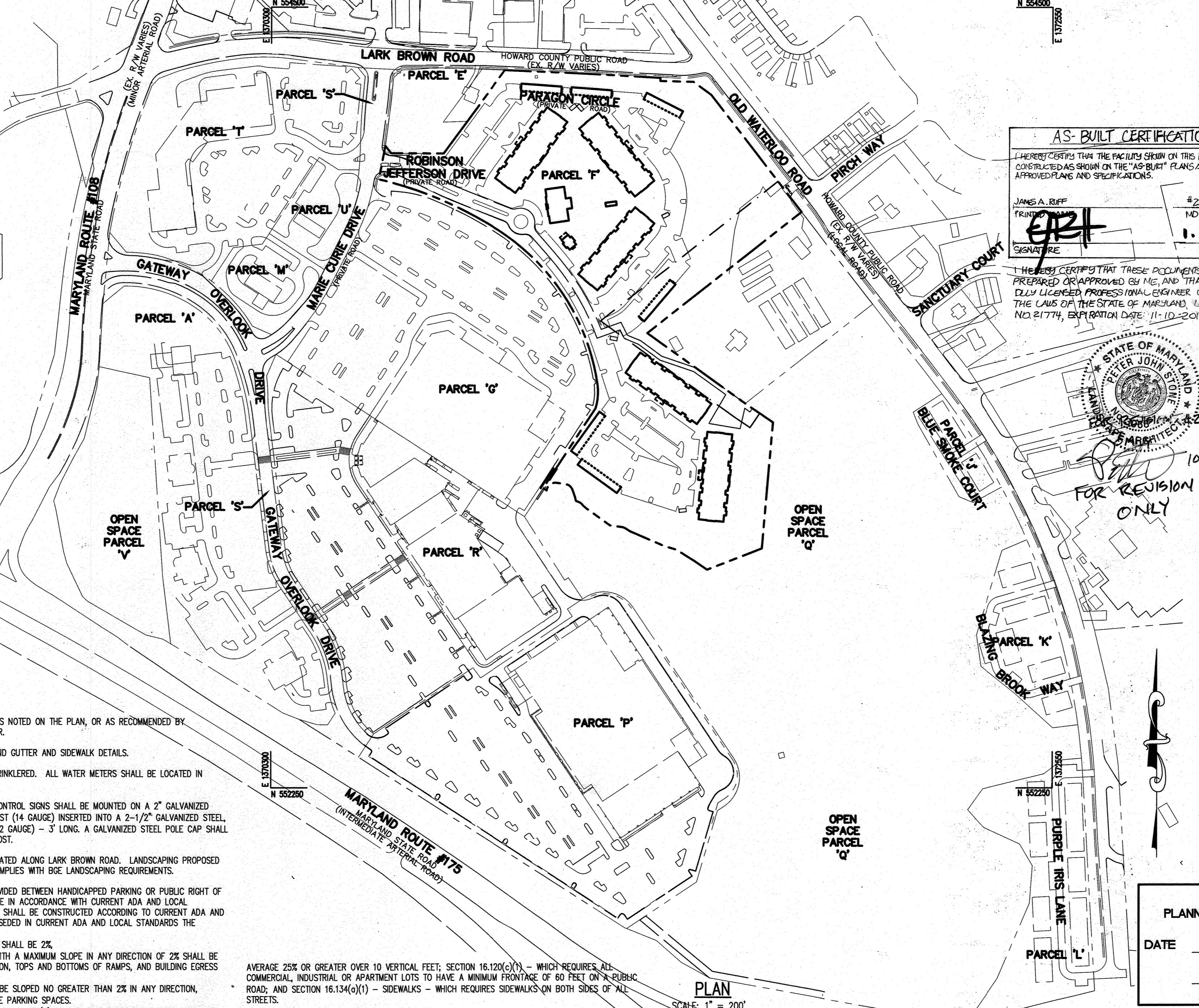
SITE DEVELOPMENT PLAN

PARAGON AT GATEWAY OVERLOOK

BENSON EAST - PARCEL F

6TH ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



SITE DATA ANALYSIS:

AREA OF SITE:	18.68 ACRES (813,771 SF)
LIMIT OF DISTURBANCE:	14.31 ACRES (623,426 SF)
PRESENT ZONING:	NEW TOWN (NT): APARTMENTS
EXISTING USES:	UNIMPROVED
PROPOSED USES:	320 APARTMENTS
FLOOR AREA OF PROPOSED BUILDINGS:	APARTMENT BUILDING A: 77,028 SF APARTMENT BUILDING B: 77,028 SF APARTMENT BUILDING C: 77,028 SF APARTMENT BUILDING D: 77,028 SF APARTMENT BUILDING E: 77,028 SF CLUBHOUSE BUILDING F: 5,061 SF ADVENTURE CENTER BUILDING G: 992 SF GREENHOUSE BUILDING H: 528 SF GARAGE BUILDING A: 2,438 SF GARAGE BUILDING B: 2,438 SF GARAGE BUILDING C: 2,438 SF GARAGE BUILDING D: 2,916 SF GARAGE BUILDING E: 2,916 SF TOTAL: 408,571 SF
PROPOSED BUILDING LOT COVERAGE:	119,716 SF/813,771 SF X 100% = 14.71%
PROPOSED BUILDING HEIGHT:	5'0"
PARKING TABULATION PARCEL F:	597 SPACES* (1.5 SPACES PER APARTMENT = 320 X 1.5 = 480 SPACES 0.3 SPACES PER APARTMENT FOR OVERFLOW/MSOR PARKING = 320 X 0.3 = 96 SPACES POOL 1 SP/10 PERSONS PERMITTED IN POOL 2,946 SF POOL X 1 PERSON/12 SF = 246 PEOPLE PERMITTED IN POOL 206 PEOPLE X 1 SP/10 PEOPLE = 21 SPACES)
TOTAL REQUIRED PARKING PARCEL F:	605 SPACES (INCLUDING 14 HC SPACES AND 64 GARAGE SPACES)
APPLICABLE DPZ FILE REFERENCES:	S-03-05, FDP-240, PB 360, WP-04-113, 24-4209-D, WP-04-135, SDP-04-163, F-05-058, FDP-240-A-I, ZB-1095M, WP-13-032

AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

JAMES A. REEF
REGISTERED PROFESSIONAL ENGINEER
NO. 21774
DATE: 1-29-15

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21774, EXPIRATION DATE: 11-10-2015.

STATE OF MARYLAND
JAMES A. REEF
REGISTERED PROFESSIONAL ENGINEER
NO. 21774
DATE: 10/26/13

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

3/27/13 DATE

3/27/13 DATE

4/02/13 DATE

5/2/13 DATE

MISS UTILITY

AT LEAST 48 HOURS PRIOR TO EXCAVATION

1-800-257-7777

APPROVED

PLANNING BOARD OF HOWARD COUNTY

DATE: 12/16/12

AVERAGE 25% OR GREATER OVER 10 VERTICAL FEET; SECTION 16.120(c)(1) - WHICH REQUIRES ALL COMMERCIAL, INDUSTRIAL OR APARTMENT LOTS TO HAVE A MINIMUM FRONTAGE OF 60 FEET ON A PUBLIC ROAD; AND SECTION 16.134(a)(1) - SIDEWALKS - WHICH REQUIRES SIDEWALKS ON BOTH SIDES OF ALL STREETS.

- APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- COMPLIANCE WITH ALL SUBDIVISION REVIEW COMMITTEE COMMENTS FOR SDP-13-002.
 - COMPLIANCE WITH THE COMMENTS FROM THE TRANSPORTATION PLANNING SECTION DATED SEPTEMBER 13, 2012.
 - ON ALL FUTURE SUBDIVISION PLANS AND SITE DEVELOPMENT PLANS, PROVIDE A BRIEF DESCRIPTION OF WAIVER PETITION, WP-13-032, AS A GENERAL NOTE TO INCLUDE REQUESTS, SECTIONS OF THE REGULATIONS, ACTION AND DATE.
 - THE PRIVATE ROAD SYSTEM WITHIN THIS DEVELOPMENT SHALL BE DESIGNED, APPROVED AND CONSTRUCTED IN ACCORDANCE WITH THE DESIGN MANUAL REQUIREMENTS PER DEPARTMENT OF PUBLIC WORKS, DEVELOPMENT ENGINEERING DIVISION AND THE DEPARTMENT OF FIRE AND RESCUE SERVICES.
 - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE 25' WETLANDS BUFFER AND THE 75' STREAM BUFFER.
 - THE LOD SHALL BE PULLED AWAY FROM THE WETLANDS AND STREAMBANK BUFFERS TO PROVIDE A MINIMUM OF 10 FEET OF AREA OUTSIDE OF THE BUFFERS FOR REQUIRED SEDIMENT AND EROSION CONTROL MEASURES PER SECTION 16.116(b)(1)(ii) OF THE REGULATIONS.
 - ADVISORY: CONTACT COSTCO TO COORDINATE 1 OR 2 PEDESTRIAN ACCESS PATHWAY CONNECTIONS TO COSTCO IF THEY ARE AGREEABLE.
 - A DESIGN MANUAL WAIVER HAS BEEN APPROVED FOR THE PROJECT ON OCTOBER 19, 2012 REQUESTING A WAIVER TO APPENDIX A OF DESIGN MANUAL VOLUME III, TO REDUCE THE MINIMUM PAVEMENT WIDTH FROM 26' TO 24', SUBJECT TO THE FOLLOWING:
 - THE JUSTIFICATION GIVEN IN THE REQUEST;
 - ON STREET PARKING HAS BEEN PROVIDED BY INDENTED PARKING OUT OF THE TRAVEL LANE;
 - ENCOURAGE THE DUMPSTER PADS TO BE ROTATED TO ALLOW THE TRASH TRUCK TO BACK OUT PAD. PLEASE KEEP IN MIND THAT THE TRUCKS ARE 30' W/O THE LIFTING FORKS.

ADDRESS CHART			
LOT/PARCEL #	STREET ADDRESS	LOT/PARCEL #	STREET ADDRESS
LOT F - APT. BLDG A	7810 PARAGON CIRCLE	LOT F - GARAGE B	7817 PARAGON CIRCLE
LOT F - APT. BLDG B	7820 PARAGON CIRCLE	LOT F - GARAGE C	7825 PARAGON CIRCLE
LOT F - APT. BLDG C	7830 PARAGON CIRCLE	LOT F - GARAGE D	7835 PARAGON CIRCLE
LOT F - APT. BLDG D	8171 ROBINSON JEFFERSON DRIVE	LOT F - GARAGE E	8182 ROBINSON JEFFERSON DRIVE
LOT F - APT. BLDG E	8181 ROBINSON JEFFERSON DRIVE	LOT F - GARAGE F	8184 ROBINSON JEFFERSON DRIVE
LOT F - BLDG F POOLHOUSE/CLUBHOUSE	8151 ROBINSON JEFFERSON DRIVE		
LOT F - BLDG G ADVENTURE CTR	8159 ROBINSON JEFFERSON DRIVE		
LOT F - BLDG H GREENHOUSE	8153 ROBINSON JEFFERSON DRIVE		
LOT F - GARAGE A	7815 PARAGON CIRCLE		

SUBDIVISION NAME BENSON EAST	SECTION/AREA N/A	LOT/PARCEL NO. F
PLAT NO. OR L/F 22263-64	GRID # 20	ZONING NT
TAX MAP NO. 37	ELECT. DIST. 6	CENSUS TRACT 6067.03

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

3/27/13 DATE

3/27/13 DATE

4/02/13 DATE

5/2/13 DATE

APPROVED : DEPARTMENT OF PLANNING AND ZONING

10/26/13 2 ADD EN CHARGING SPACES
7/16/13 1 ADJUST PARKING TABULATIONS

DATE NO.	REVISION

OWNER: COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F

AREA TAX MAP 37 GRD 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE SHEET

DESIGNED BY: PJS

DRAWN BY: ALC

PROJECT NO: CCPL1201

DATE: MARCH 8, 2013

SCALE: 1" = 200'

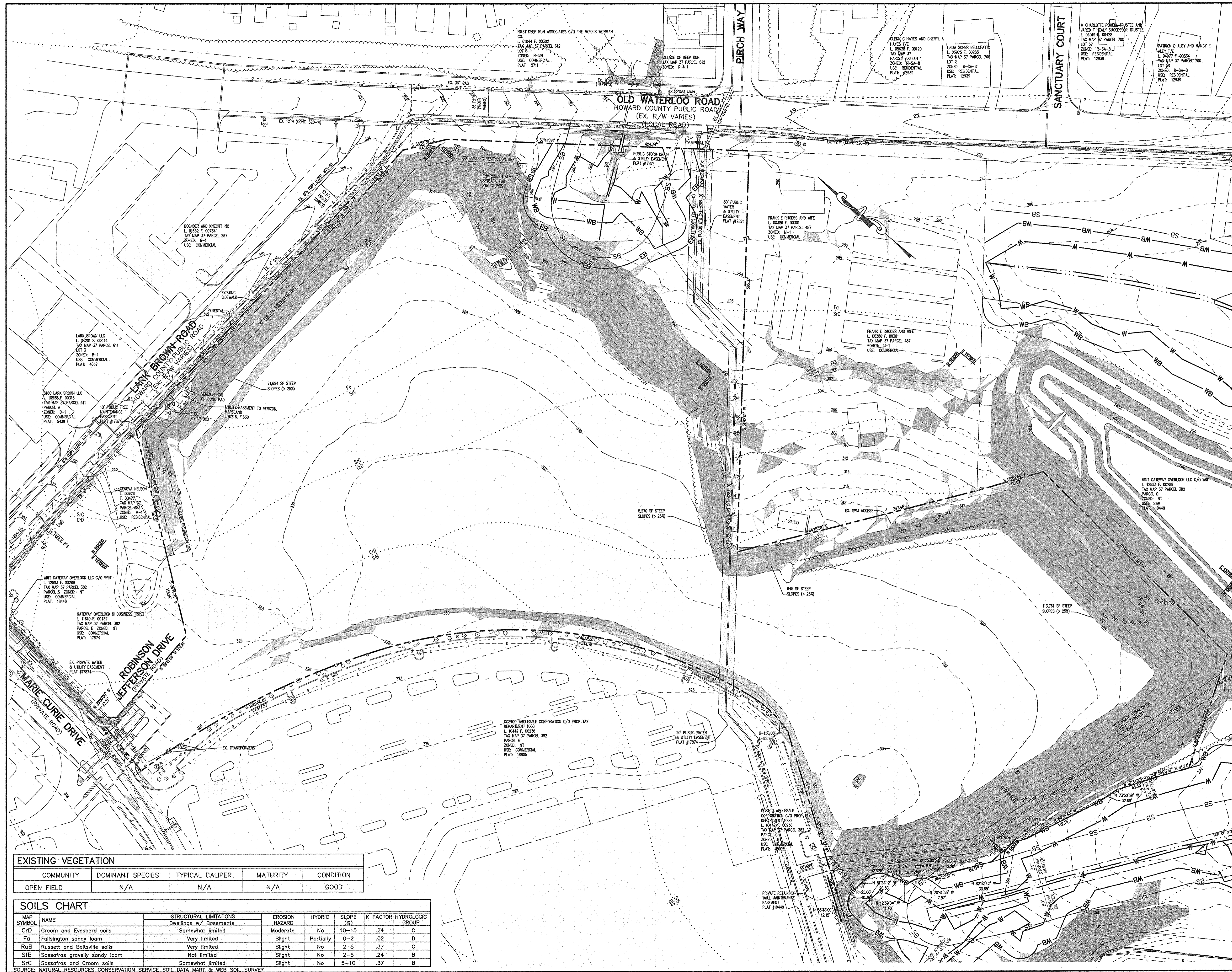
DRAWING NO. 1 OF 26

BY: [Signature]

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21774, EXPIRATION DATE: 11-10-2015.

AS-BUILT

AS-BUILT DATE: 09/12/14



LEGEND

- PROPERTY LINE
- EX. UTILITY POLE AND OVERHEAD ELECTRIC
- EX. FIRE HYDRANT
- EX. WATER LINE
- EX. SANITARY SEWER LINE
- EX. STORM DRAIN
- EX. GAS LINE
- EX. ELECTRIC LINE
- EX. SOILS
- EX. CONTOURS
- EX. STRUCTURE
- EX. CURB AND GUTTER
- EX. UTILITY EASEMENT
- EX. TREELINE
- EX. STREAM AND STREAM BUFFER
- EX. WETLAND AND WETLAND BUFFER
- EX. SLOPES 15-25%
- EX. SLOPES > 25%
- EB 15' ENVIRONMENTAL SETBACK

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

John P. ... 3/27/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

... 4/02/13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

... 4/2/13
 DIRECTOR DATE

OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F
 AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE EXISTING CONDITIONS PLAN AND SOILS MAP

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-8900 • Fax: 410-997-9282

DESIGNED BY : PJS
 DRAWN BY : ALC
 PROJECT NO : CCPL1201
 DATE : MARCH 8, 2013
 SCALE : 1" = 60'
 DRAWING NO. 2 OF 26

EXISTING VEGETATION

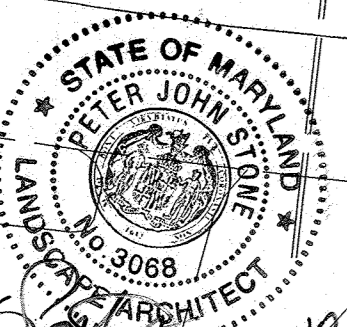
COMMUNITY	DOMINANT SPECIES	TYPICAL CALIPER	MATURITY	CONDITION
OPEN FIELD	N/A	N/A	N/A	GOOD

SOILS CHART

MAP SYMBOL	NAME	STRUCTURAL LIMITATIONS Dwellings w/ Basements	EROSION HAZARD	HYDRIC	SLOPE (%)	K FACTOR	HYDROLOGIC GROUP
CrD	Croom and Evesboro soils	Somewhat limited	Moderate	No	10-15	.24	C
Fa	Fallingston sandy loam	Very limited	Slight	Partially	0-2	.02	D
RuB	Russett and Beltsville soils	Very limited	Slight	No	2-5	.37	C
SfB	Sassafras gravelly sandy loam	Not limited	Slight	No	2-5	.24	B
ScC	Sassafras and Croom soils	Somewhat limited	Slight	No	5-10	.37	B

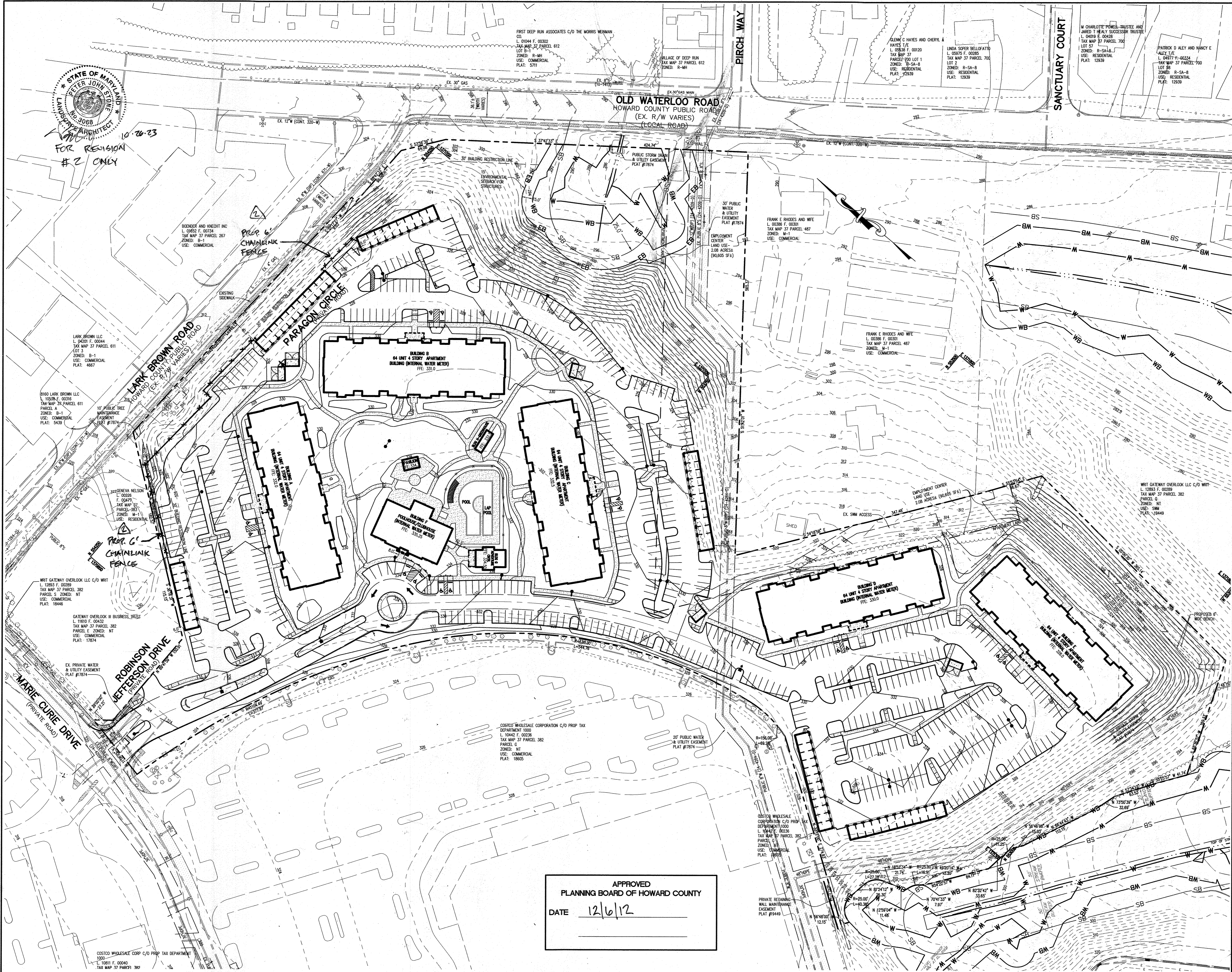
SOURCE: NATURAL RESOURCES CONSERVATION SERVICE SOIL DATA MART & WEB SOIL SURVEY

T:\PROJECTS\CCPL1201-Gateway Overlook Parcel F\DESIGN\CCPL1201-02.dwg



FOR REVISION #2 ONLY

LEGEND	
---	PROPERTY LINE
—○—○—	EX. UTILITY POLE AND OVERHEAD ELECTRIC
—○—	EX. FIRE HYDRANT
—○—	EX. WATER LINE
—○—	EX. SANITARY SEWER LINE
—○—	EX. STORM DRAIN
—○—	EX. GAS LINE
—○—	EX. ELECTRIC LINE
—○—	EX. 2' CONTOUR
—○—	EX. 10' CONTOUR
□	EX. STRUCTURE
—	EX. CURB AND GUTTER
—	EX. UTILITY EASEMENT
—	EX. TREELINE
—	EX. STREAM
SB	EX. 75' STREAM BUFFER
W	EX. WETLAND
WB	EX. WETLAND BUFFER
□	PROPOSED BUILDING
○	PROPOSED LIGHT POLE
—	PROPOSED CURB & GUTTER
—	PROPOSED 2' CONTOUR
—	PROPOSED 10' CONTOUR
—	PROPOSED CENTERLINE OF ROAD
▨	PROPOSED CONCRETE SIDEWALK
▨	PROPOSED CONCRETE DUMPSTER PAD
EB	15' ENVIRONMENTAL SETBACK FOR STRUCTURES



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
B. W. Ryan for *Maura Roseman* 8/8/2013
 COUNTY HEALTH OFFICER DATE
 HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING
John W. ... 7/26/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
... 8/12/13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
... 8/12/13
 DIRECTOR DATE

10/24/12 2 ADD FENCE
 7/16/13 1 ADJUST BUILDING ENTRANCES, POOL AREA, AND GARAGES
 DATE NO. REVISION

OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
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 OWINGS MILLS, MD 21117
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PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F
 AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE
 OVERALL REVISED SITE DEVELOPMENT PLAN

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 PARRISON Company 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-9900 Fax: 410-997-9282

SEAL

 DESIGNED BY: PJS
 DRAWN BY: ALC
 PROJECT NO: CCPL1201
 DATE: MARCH 8, 2013
 SCALE: 1" = 60'
 DRAWING NO. 3 OF 26

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 12/6/12

STATE OF MARYLAND
 JAMES J. HENNING
 ARCHITECT
 10/26/13
 FOR REVISION
 # 4 ONLY

BOENDER AND KNECHT INC
 L. 01652 F. 00734
 TAX MAP 37 PARCEL 267
 ZONED: B-1
 USE: COMMERCIAL

LARK BROWN LLC
 L. 04201 F. 00044
 TAX MAP 37 PARCEL 611
 LOT 3
 ZONED: B-1
 USE: COMMERCIAL
 PLAT: 4667

8160 LARK BROWN LLC
 L. 10538 F. 00316
 TAX MAP 37 PARCEL 611
 PARCEL A
 ZONED: B-1
 USE: COMMERCIAL
 PLAT: 5439

10' PUBLIC TREE
 MAINTENANCE
 EASEMENT
 PLAT #17874

320 PUBLIC SEWER
 AND UTILITY ESMT
 PLAT 22263-64
 322 GENEVA NELSON
 L. 00928
 TAX MAP 37
 PARCEL 383
 ZONED: M-1
 USE: RESIDENTIAL

WRIT GATEWAY OVERLOOK LLC C/O WRIT
 L. 12893 F. 00289
 TAX MAP 37 PARCEL 382
 PARCEL S ZONED: NT
 USE: COMMERCIAL
 PLAT: 18446

GATEWAY OVERLOOK III BUSINESS TRUST
 L. 11610 F. 00432
 TAX MAP 37 PARCEL 382
 PARCEL E ZONED: NT
 USE: COMMERCIAL
 PLAT: 17874

WRIT GATEWAY OVERLOOK LLC
 C/O WRIT
 L. 12893 F. 00289
 TAX MAP 37 PARCEL 382
 PARCEL T ZONED: NT
 USE: COMMERCIAL
 PLAT: 18446

EX. PRIVATE WATER
 & UTILITY EASEMENT
 PLAT #17874

COSTCO WHOLESALE CORPORATION C/O PROP TAX
 DEPARTMENT 1000
 L. 10442 F. 00236
 TAX MAP 37 PARCEL 382
 PARCEL G
 ZONED: NT
 USE: COMMERCIAL
 PLAT: 18605

20' PUBLIC WATER
 & UTILITY EASEMENT
 PLAT #17874

NOTES:
 1. ALL CURB RADII ARE 5' UNLESS SPECIFIED.
 2. SEE LEGEND ON SHEET 5.
 3. HEALTH DEPARTMENT APPROVAL OF THIS PLAN DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR THE POOL WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT.

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 12/6/12

PURPOSE STATEMENT OF REVISED SITE DEVELOPMENT PLAN:
 THIS REDLINE REVISION HAS BEEN PREPARED TO SHOW MODIFICATIONS TO THE BUILDING ARCHITECTURE FOR THIS PROJECT.

10/26/13 4 ADD EX CHAINLINK STATIONS + FENCE
 10/22/13 3 UPDATE APARTMENT, CLUBHOUSE AND ADVENTURE CENTER FOOTPRINTS

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

HOWARD COUNTY OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, DEVELOPMENT ENGINEERING DIVISION 11.4.13 DATE

Chief, DIVISION OF LAND DEVELOPMENT 11.22.13 DATE

DIRECTOR 11/25/13 DATE

8/19/13 2 ADJUST LOD AROUND SEWER

7/16/13 1 ADJUST BUILDING ENTRANCES, POOL AREA, AND GARAGES

OWNER COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

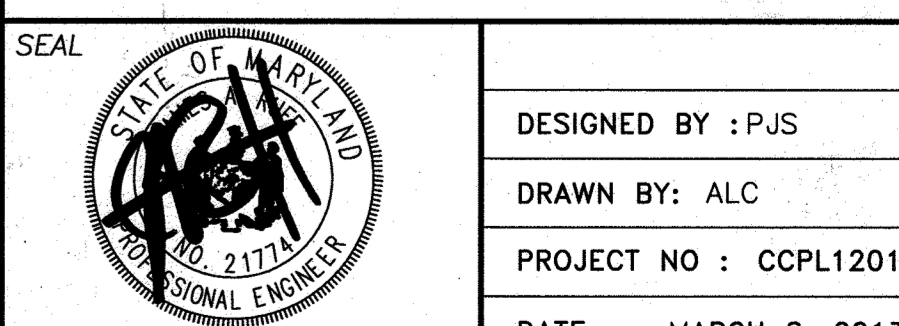
TITLE REVISED SITE DEVELOPMENT PLAN

Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects

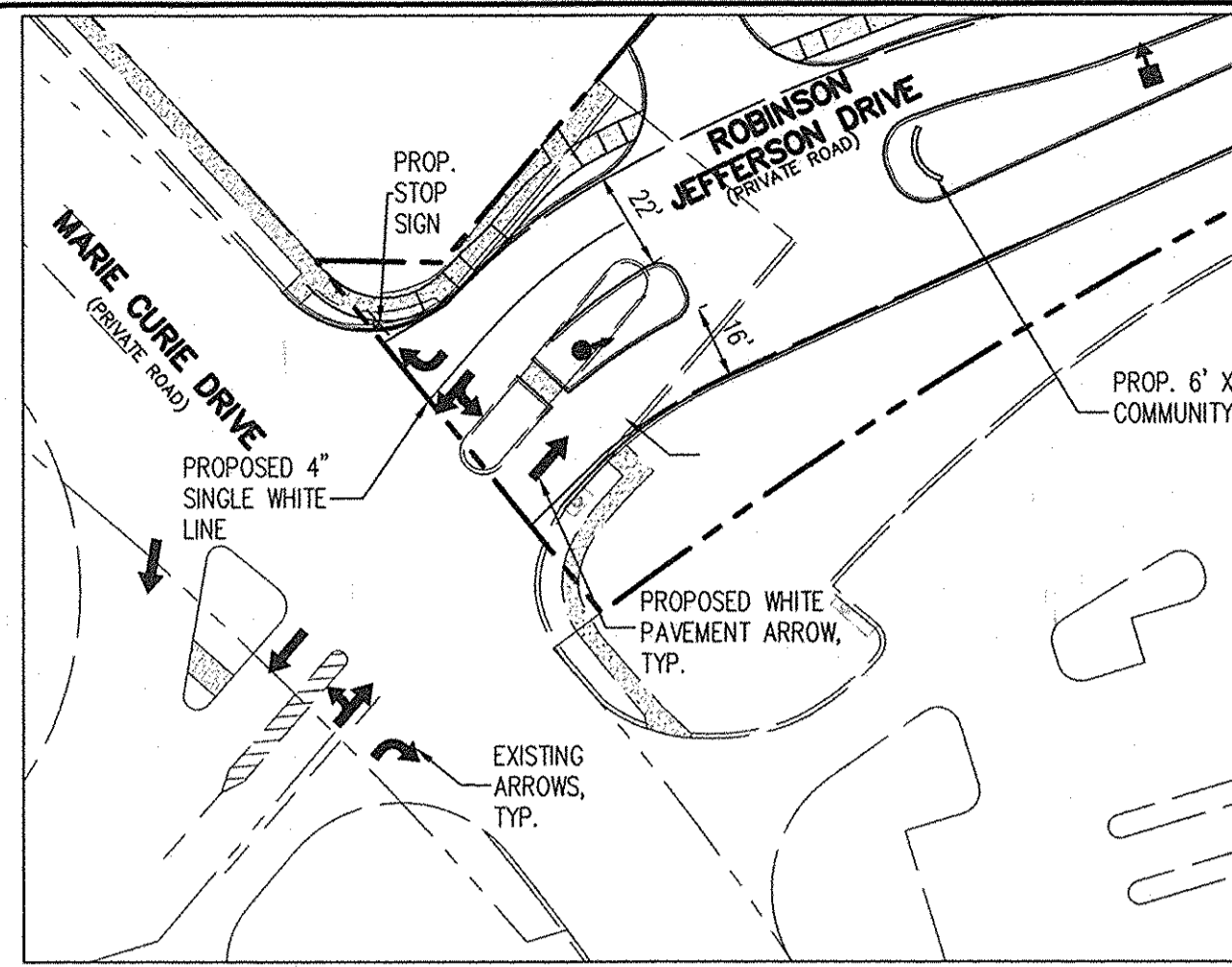
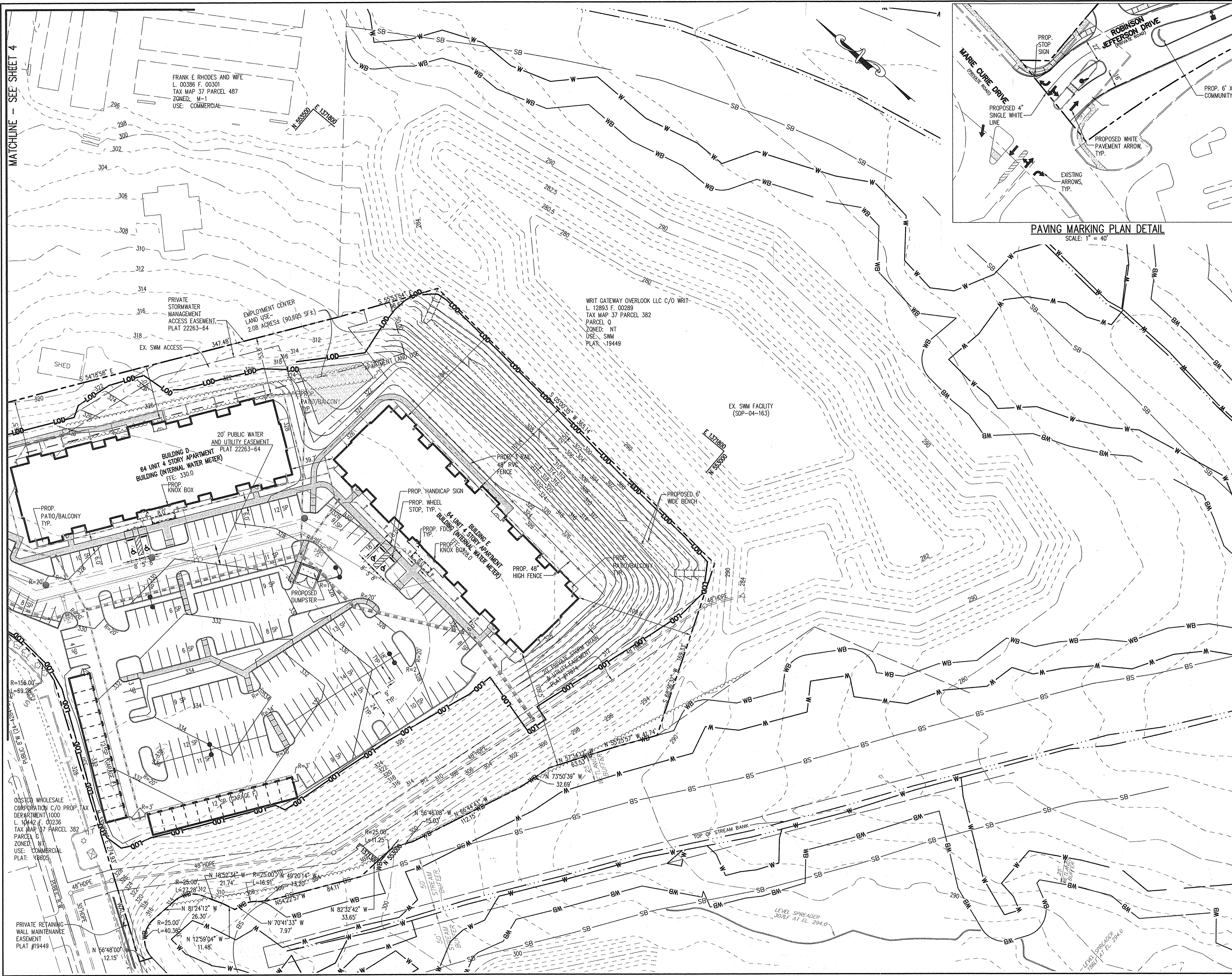
818 Centre Park Drive, Suite 200, Columbia, MD 21045
 Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
 DRAWN BY: ALC
 PROJECT NO.: CCPL1201
 DATE: MARCH 8, 2013
 SCALE: 1" = 40'
 DRAWING NO. 4 OF 26

BY: 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. 21774, EXPIRATION DATE: 11-10-2015



SDP-13-002



PAVING MARKING PLAN DETAIL
SCALE: 1" = 40'

- LEGEND**
- PROPOSED BUILDING
 - PROPOSED CONCRETE SIDEWALK
 - PROPOSED CONCRETE DUMPSTER PAD
 - PROPOSED CURB & GUTTER
 - PROPOSED 2' CONTOUR
 - PROPOSED 10' CONTOUR
 - PROPOSED CENTERLINE OF ROAD
 - PROPOSED LIGHT POLE
 - PROPOSED LIMIT OF DISTURBANCE
 - PROPOSED STORM DRAIN
 - PROPOSED FIRE HYDRANT
 - PROPOSED WATER
 - PROPOSED SEWER
 - PROPOSED UTILITY EASEMENT
 - PROPOSED HANDICAP ACCESSIBLE ROUTE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
William A. Brown 11/22/13
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Church 11-4-13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Neil S. Jones 11-22-13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Mark J. Wyle 11/25/13
DIRECTOR DATE

10/22/13	2	UPDATE APARTMENT, CLUBHOUSE AND ADVENTURE CENTER FOOTPRINTS
7/16/13	1	ADJUST BUILDING ENTRANCES, POOL AREA, AND GARAGES

DATE NO. REVISION
OWNER COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK**
BENSON EAST - PARCEL F
AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE **REVISED SITE DEVELOPMENT PLAN**

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
A Pennoni Company 8818 Centre Park Drive, Suite 200, Columbia, MD 21045
Tel: 410-997-8900 Fax: 410-997-9282

SEAL

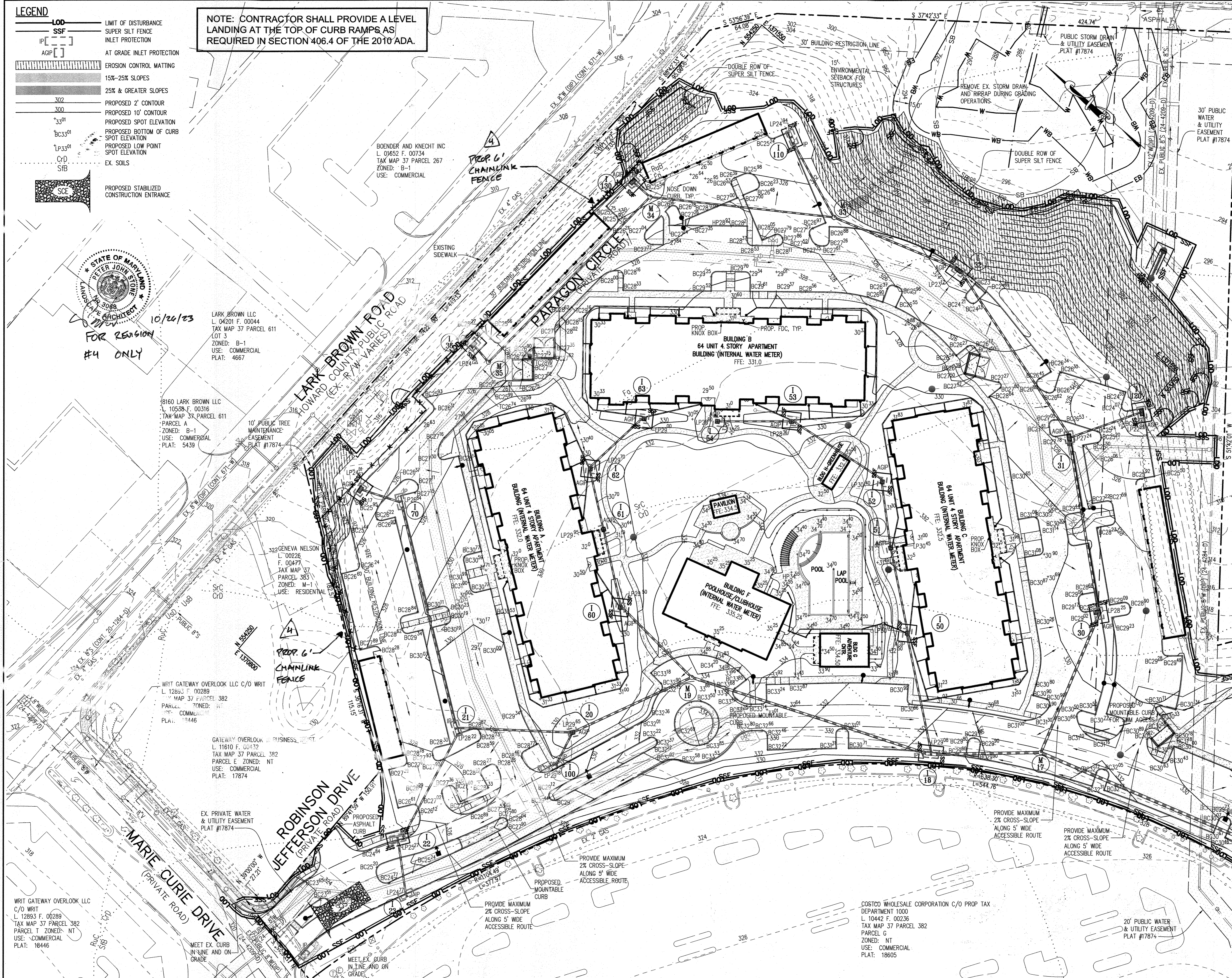
DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO.: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO. 5 OF 26

BY: *William A. Brown*
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. 21774, EXPIRES 11-15-2017

LEGEND

LOD	LIMIT OF DISTURBANCE
SSF	SUPER SILT FENCE
IP []	INLET PROTECTION
AGIP []	AT GRADE INLET PROTECTION
[Hatched]	EROSION CONTROL MATTING
[Hatched]	15%-25% SLOPES
[Hatched]	25% & GREATER SLOPES
302	PROPOSED 2' CONTOUR
300	PROPOSED 10' CONTOUR
*33.01	PROPOSED SPOT ELEVATION
BC33.01	PROPOSED BOTTOM OF CURB SPOT ELEVATION
LP33.01	PROPOSED LOW POINT SPOT ELEVATION
CrD	EX. SOILS
SFB	EX. SOILS
[Hatched]	PROPOSED STABILIZED CONSTRUCTION ENTRANCE

NOTE: CONTRACTOR SHALL PROVIDE A LEVEL LANDING AT THE TOP OF CURB RAMPS AS REQUIRED IN SECTION 406.4 OF THE 2010 ADA.



APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE: 12/6/12

10/22/13 3 ADJUST BUILDING FOOTPRINTS AND GRADING

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Jonathan C. Mayers 11/22/13
 COUNTY HEALTH OFFICER DATE
 HOWARD COUNTY HEALTH DEPARTMENT

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 A. Ruff 10/21/13
 SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."
Jonathan C. Mayers 10/17/13
 SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Jonathan C. Mayers 10/29/13
 HOWARD SCD DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Elmore 11-4-13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Mark J. Leach 11-22-13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Mark J. Leach 11/25/13
 DIRECTOR DATE

8/19/13 2 ADJUST LOD AROUND SEWER
 7/16/13 1 ADJUST BUILDING ENTRANCES, POOL AREA, AND GARAGES

DATE NO. REVISION

OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
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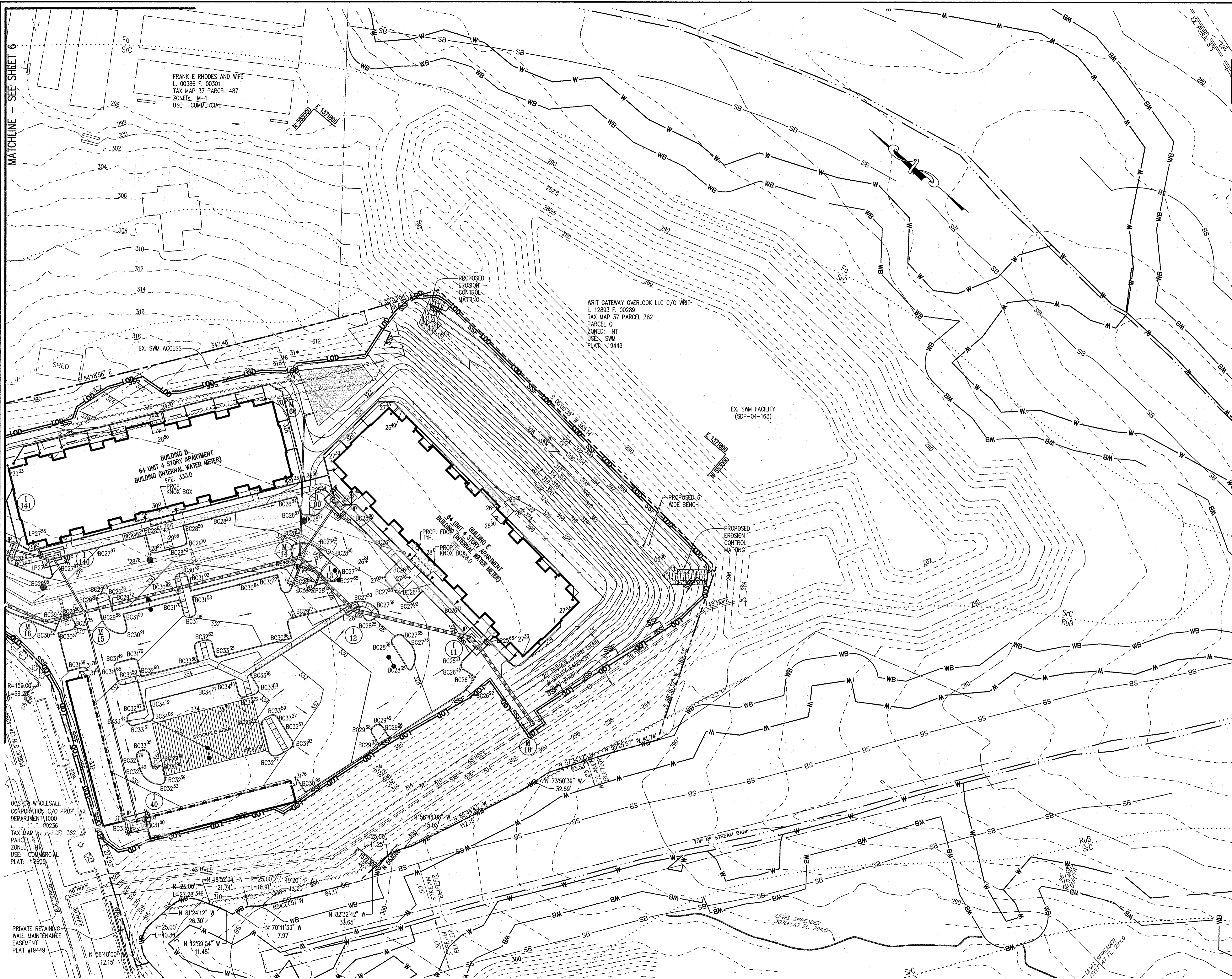
PROJECT PARAGON AT GATEWAY OVERLOOK
 BENSON EAST - PARCEL F

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE GRADING AND SEDIMENT CONTROL PLAN

PARA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 A Parsons Company 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS/JSN
DRAWN BY: ALC/JSN
PROJECT NO.: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO.: 6 OF 26



NOTE:
1. SEE LEGEND ON SHEET 6.

NOTE: CONTRACTOR SHALL PROVIDE A LEVEL LANDING AT THE TOP OF CURB RAMPS AS REQUIRED IN SECTION 406.4 OF THE 2010 ADA.

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE 12/6/12

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."

[Signature] 10/21/13
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE
James A. Ruff

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

[Signature] 10/17/13
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE
Jonathan C. Mayers

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 10/29/13
HOWARD SCD DATE
John R. Ruff

APPROVED : DEPARTMENT OF PLANNING AND ZONING

[Signature] 11-4-13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Paul J. Edwards

[Signature] 11-22-13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Karl J. Edwards

[Signature] 11/25/13
DIRECTOR DATE
David J. Edwards

10/22/13 2	ADJUST BUILDING FOOTPRINTS AND GRADING
7/16/13 1	ADJUST BUILDING ENTRANCES, POOL AREA, AND GARAGES
DATE NO.	REVISION

OWNER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F**

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE **GRADING AND SEDIMENT CONTROL PLAN**

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
A Pennon Company 8818 Centre Park Drive, Suite 200, Columbia, MD 21045
Tel: 410-997-9900 Fax: 410-997-9282

SEAL *[Professional Engineer Seal]*

DESIGNED BY : PJS
DRAWN BY : ALC
PROJECT NO : CCPL1201
DATE : MARCH 8, 2013
SCALE : 1" = 40'
DRAWING NO. 7 OF 26

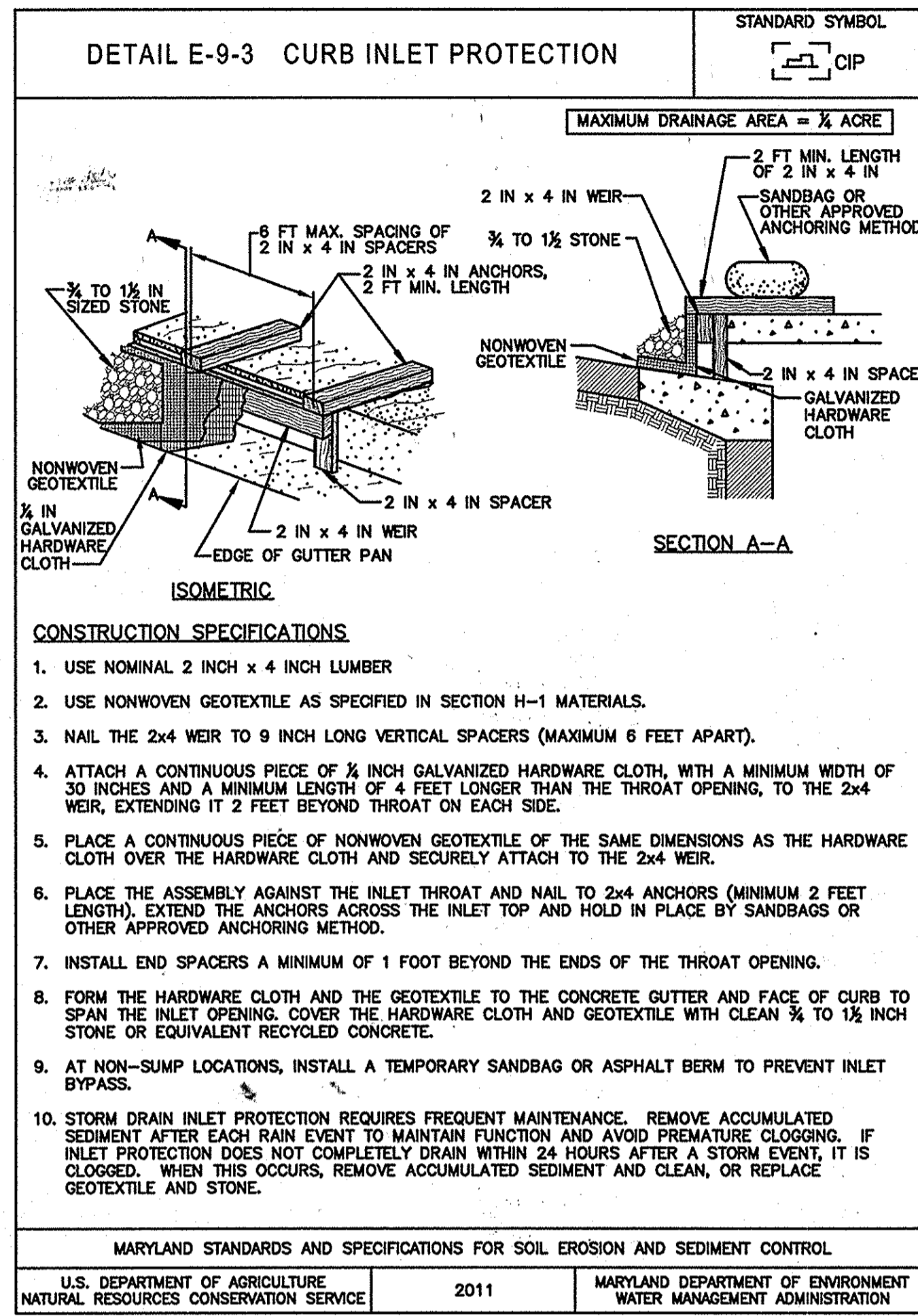
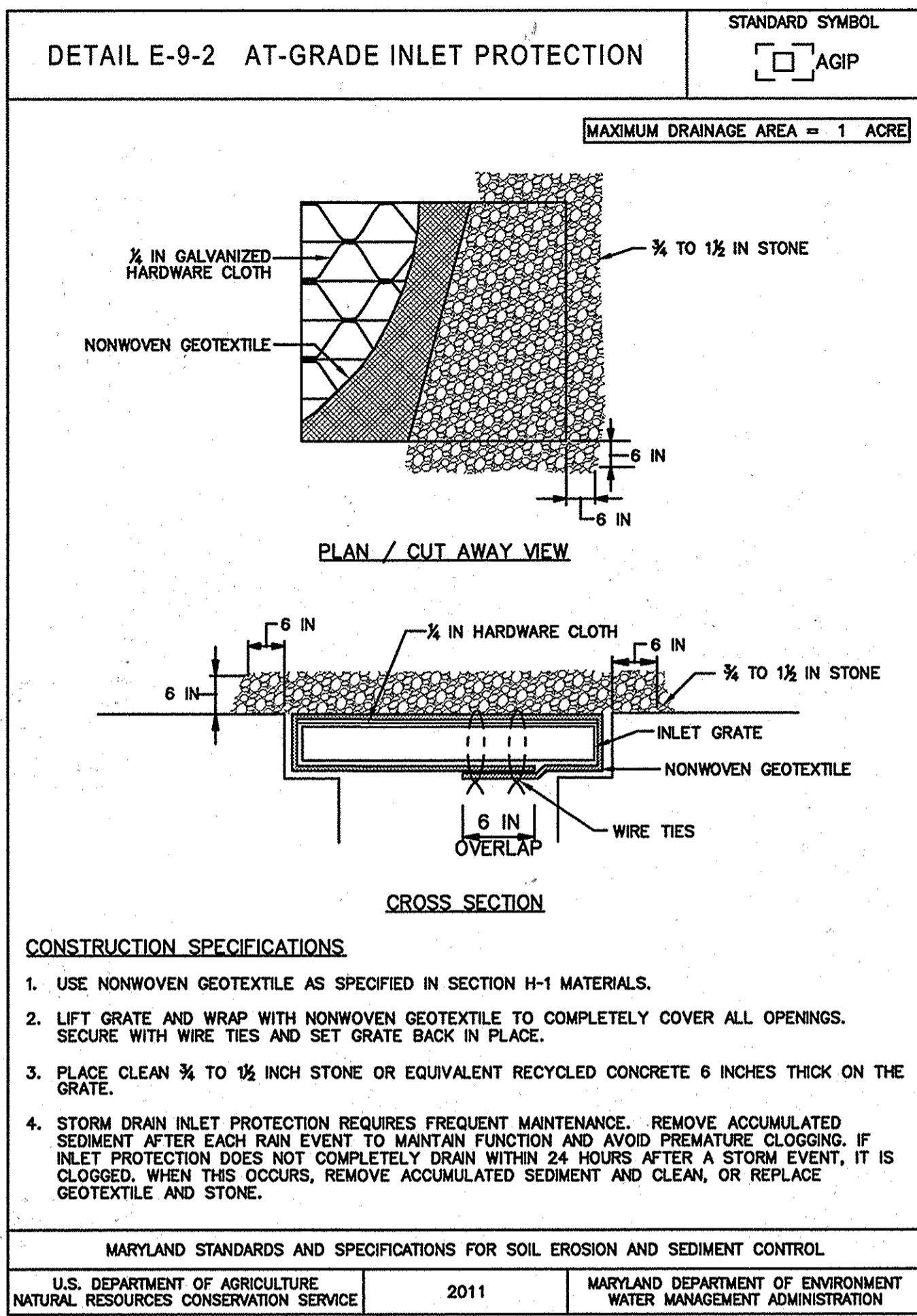
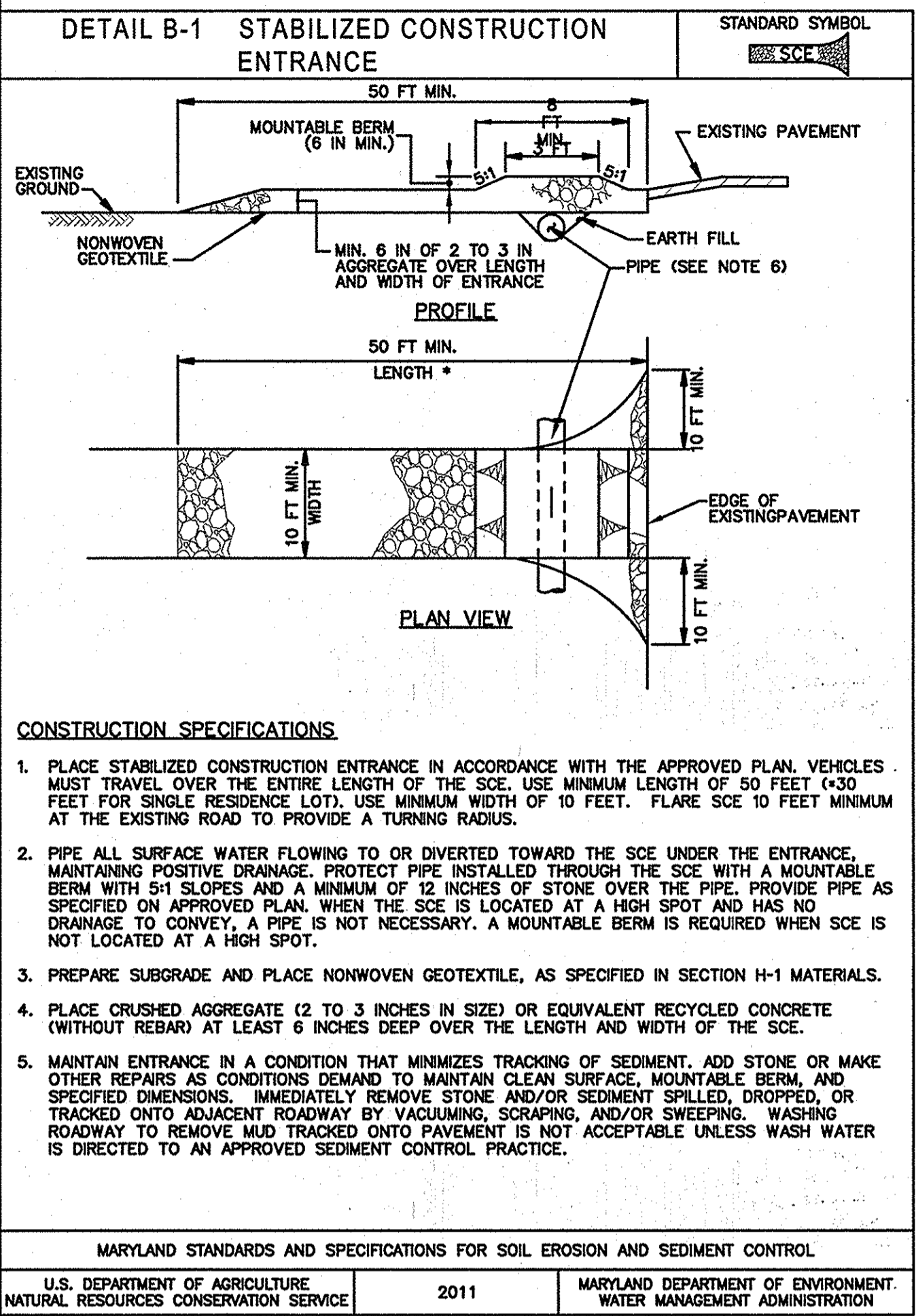
MATCHLINE - SEE SHEET 6

OSBORNE WHOLESALE CORPORATION C/O PROP. TAX DEPARTMENT 1000 00236 TAX MAP 37 PARCEL 382 ZONED: M-1 USE: COMMERCIAL PLAT: 19449

PRIVATE RETAINING WALL MAINTENANCE EASEMENT PLAT #19449

WRIT GATEWAY OVERLOOK LLC C/O WRIT L 12893 F. 00289 TAX MAP 37 PARCEL 382 PARCEL Q ZONED: NT USE: SWM PLAT: 19449

EX. SWM FACILITY (SDP-04-163)



H-5 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

DEFINITION
CONTROLLING THE SUSPENSION OF DUST PARTICLES FROM CONSTRUCTION ACTIVITIES.

EMERGENCY
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES TO REDUCE ON AND OFF-SITE DAMAGE INCLUDING HEALTH AND TRAFFIC HAZARDS.

CONDITIONS WHERE PRACTICE APPLIES
AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS

- MULCHES: SEE SECTION B-4-2 SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS; SECTION B-4-3 SEEDING AND MULCHING; AND SECTION B-4-4 TEMPORARY STABILIZATION. MULCH MUST BE ANCHORED TO PREVENT BLOWING.
- VEGETATIVE COVER: SEE SECTION B-4-4 TEMPORARY STABILIZATION.
- TILLAGE: TILL TO ROUGHEN SURFACE AND BRING CLOSS TO THE SURFACE. 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 THAT MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION: SPRINKLE SITE WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED. THE SITE MUST NOT BE IRRIGATED TO THE POINT THAT RUNOFF OCCURS.
- BARRIERS: SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.
- CHEMICAL TREATMENT: USE OF CHEMICAL TREATMENT REQUIRES APPROVAL BY THE APPROPRIATE PLAN REVIEW AUTHORITY.

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

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE: 12/6/12

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."

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE: 3-8-13
JAMES A. RUFF, PE

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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE: 3-8-13
JONATHAN MAYERS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

John R. Robertson DATE: 3/9/2013
HOWARD SCD

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 3/27/13
V. O. ... DATE: 4/02/13
DIRECTOR DATE: 4/6/13

DATE NO. REVISION

OWNER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
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OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT: PARAGON AT GATEWAY OVERLOOK - PARCEL F
BENSON EAST - PARCEL F

AREA: TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
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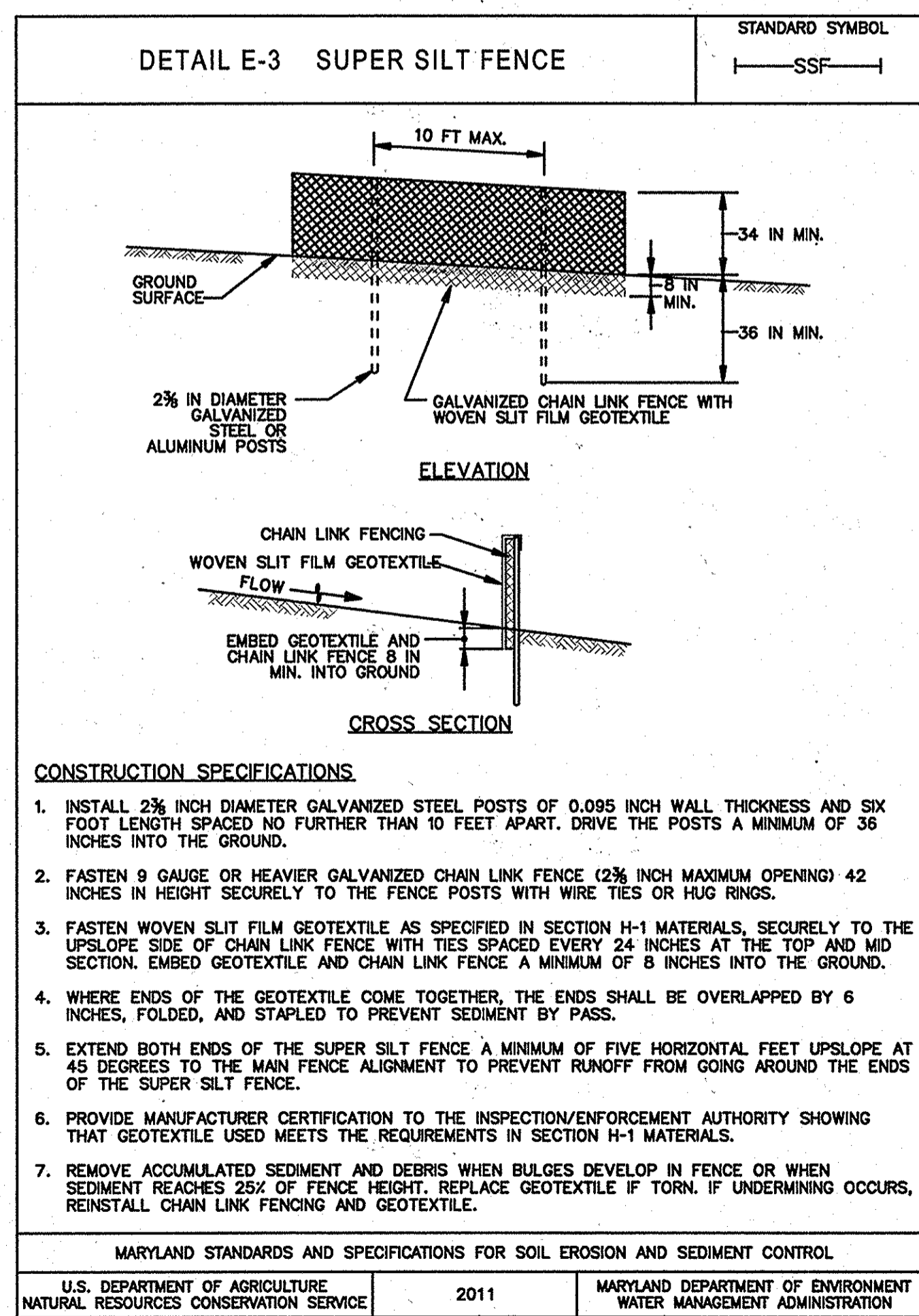
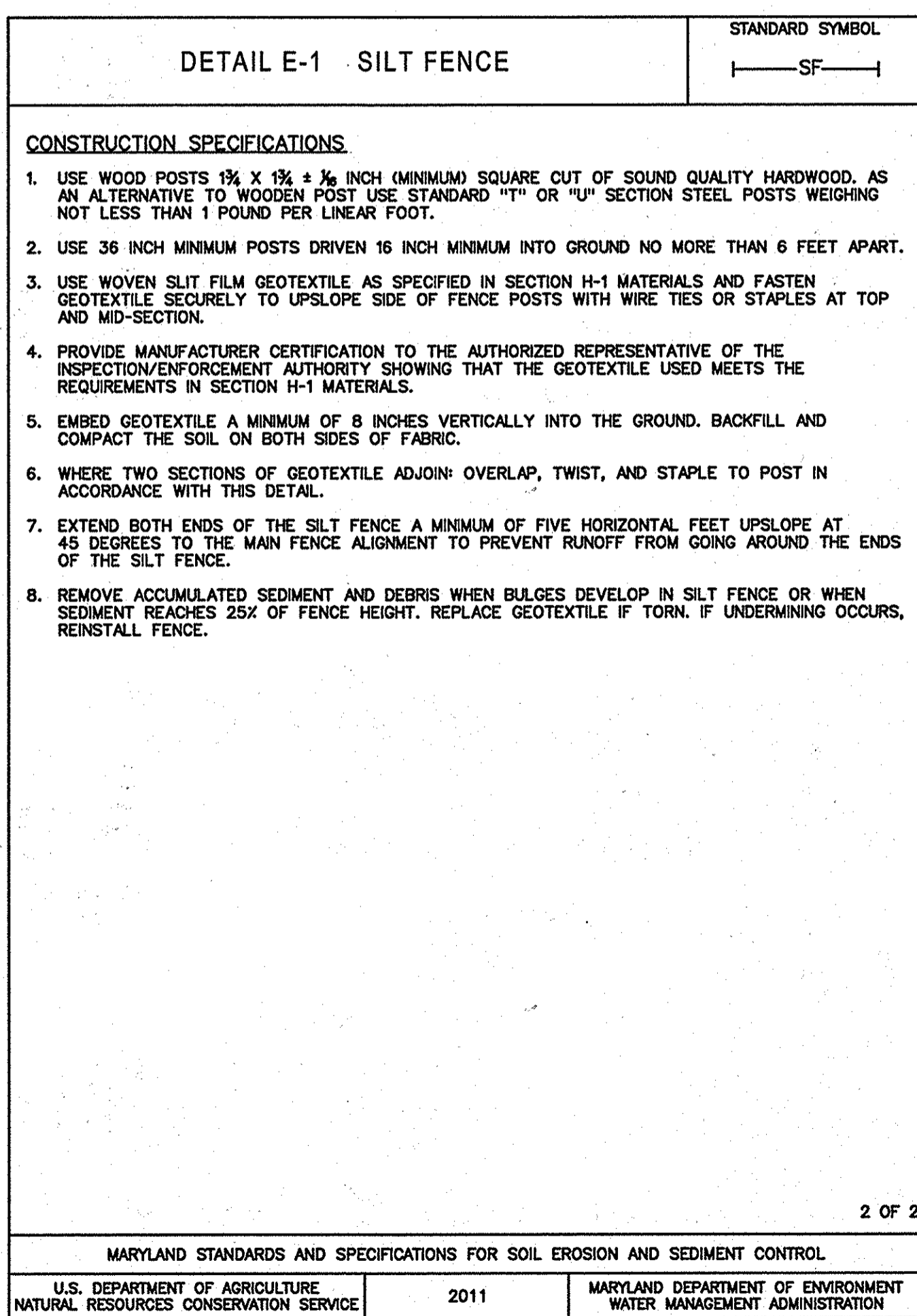
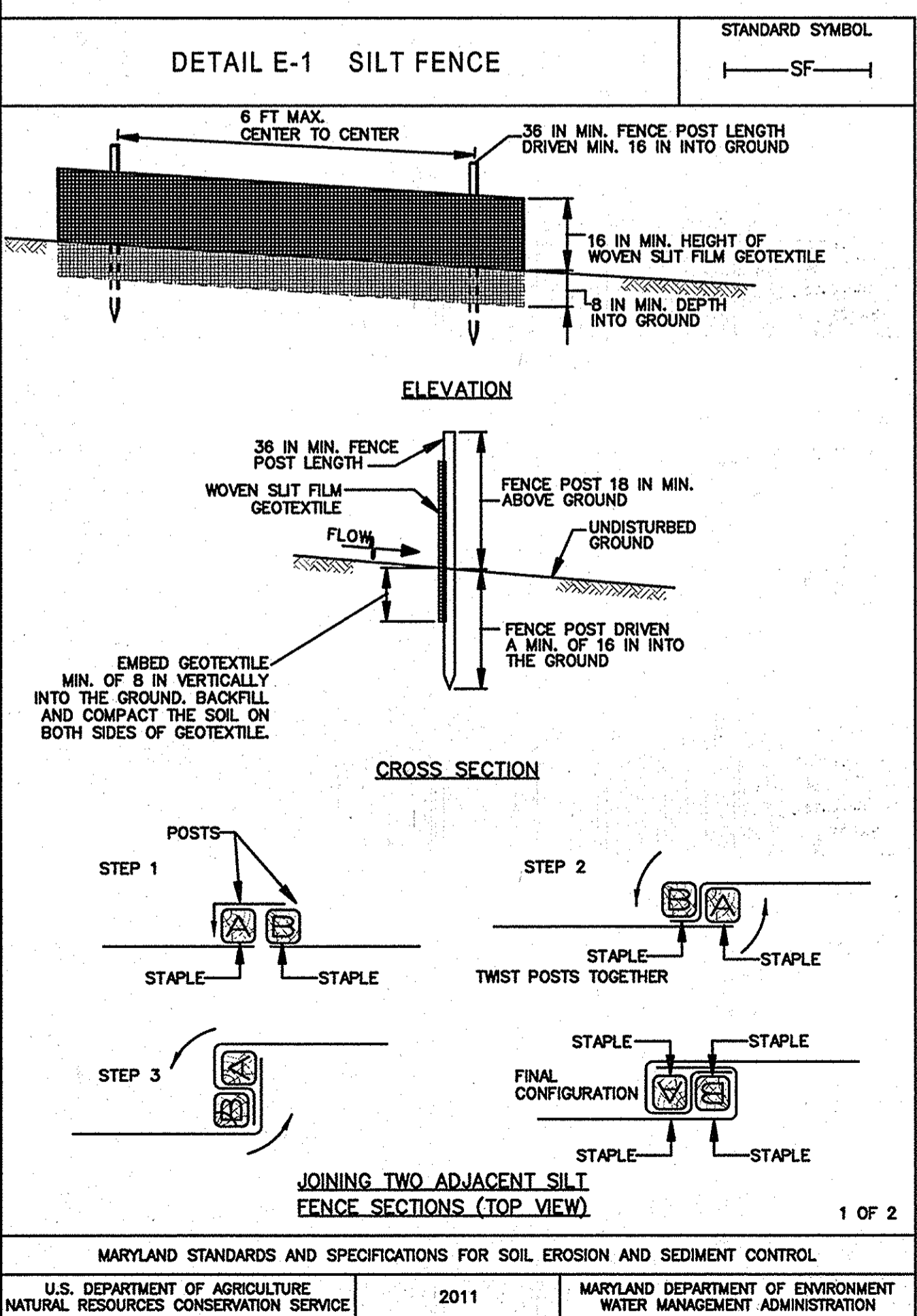
TITLE: SEDIMENT CONTROL NOTES AND DETAILS

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8700 Fax: 410-997-9262

DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: NOT TO SCALE
DRAWING NO. 8 OF 26

SEAL: PROFESSIONAL ENGINEER, STATE OF MARYLAND, NO. 21774, EXPIRES 11-10-2013

By: 3-8-13
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A LEGALLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21774, EXPIRES 11-10-2013



STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREIN.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. G). TEMPORARY STABILIZATION WITH MULCH SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHED OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
TOTAL AREA OF SITE: 18.68 ACRES
AREA DISTURBED: 14.27 ACRES
AREA TO BE ROOFED OR PAVED: 13.29 ACRES
AREA TO BE VEGETATIVELY STABILIZED: 5.39 ACRES
TOTAL CUT: 14,600 CU. YARDS
TOTAL FILL: 25,300 CU. YARDS
OFFSITE WASTE AREA LOCATION TO HAVE ACTIVE GRADING PERMIT
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 3/27/13
V. O. ... DATE: 4/02/13
DIRECTOR DATE: 4/6/13

DATE NO. REVISION

OWNER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
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OWINGS MILLS, MD 21117
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PROJECT: PARAGON AT GATEWAY OVERLOOK - PARCEL F
BENSON EAST - PARCEL F

AREA: TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE: SEDIMENT CONTROL NOTES AND DETAILS

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
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By: 3-8-13
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B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

- CRITERIA**
- A. SOIL PREPARATION**
- TEMPORARY STABILIZATION
 - SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENEED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - PERMANENT STABILIZATION
 - A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH BETWEEN 6.0 AND 7.0.
 - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
 - GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENEED TO A DEPTH OF 3 TO 5 INCHES.
 - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRAGILE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

- B. TOPSOILING**
- TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS 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.
 - TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED 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-NRCS.
 - TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
 - THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
 - 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.
 - THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
 - THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
 - AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
 - TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
 - TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2 INCHES IN DIAMETER.
 - TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERBERA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, TRIFOLIUM, OR OTHERS AS SPECIFIED.
 - 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.
 - TOPSOIL APPLICATION
 - EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
 - UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SOILING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
 - TOPSOIL MUST NOT BE PLACED IF 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.

- C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)**
- SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
 - FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.

- LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
- LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
- WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

DEFINITION
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

PURPOSE
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES
TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

- CRITERIA**
- A. SEEDING**
- SPECIFICATIONS
 - ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
 - MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.
 - INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
 - SOD OR SEED MUST NOT 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.
 - APPLICATION
 - DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
 - INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDER AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
 - DRILL OR CULTPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
 - CULTPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.
 - APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
 - HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
 - IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.
 - LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
 - MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
 - WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

- B. MULCHING**
- MULCH MATERIALS (IN ORDER OF PREFERENCE)
 - STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
 - WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
 - WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.
 - WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
 - WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
 - WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
 - WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.
 - APPLICATION
 - APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
 - WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
 - WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

- 3. ANCHORING**
- PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:
 - A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
 - WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
 - SYNTHETIC BINDERS SUCH AS ACRYLIC OLR (AGRO-TACK), DCA-70, PETROSET, TERRA TACK II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.
 - LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

- CRITERIA**
- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
 - FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
 - WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

TEMPORARY SEEDING SUMMARY

Hardiness Zone (from Figure B.3):					Fertilizer Rate (10-20-20)	Lime Rate
Seed Mixture (from Table B.1):						
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
	ANNUAL RYEGRASS	40	MAR 1 TO MAY 15; AUG 1 TO OCT 15	0.5	436 lb/ac (10 lb/1000 sq ft)	2 tons/ac (90 lb/1000 sq ft)
	BARLEY	96	MAR 1 TO MAY 15; AUG 1 TO OCT 15	1.0		
	OATS	72	MAR 1 TO MAY 15; AUG 1 TO OCT 15	1.0		
	PEARL MILLET	20	MAY 16 TO JUL 31	0.5		

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION
TO STABILIZE DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

- CRITERIA**
- A. SEED MIXTURES**
- GENERAL USE
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANKS, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342 - CRITICAL AREA PLANTING.
 - FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
 - FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 1/2 POUNDS PER 100 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
 - TURFGRASS MIXTURES
 - AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
 - SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
 - KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
 - TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES: CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE.

c. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES

WESTERN MD.: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A) CENTRAL

MD.: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B)

SOUTHERN MD.: EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)

d. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.

e. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEAR SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR ON ADVERSE SITES.

PERMANENT SEEDING SUMMARY

Hardiness Zone (from Figure B.3):			Fertilizer Rate (10-20-20)			Lime Rate	
Seed Mixture (from Table B.3):							
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P205	K2O
8	TALL FESCUE	100	MAR 1-MAY 15; AUG 1-OCT 15	1/4-1/2 in			
9	TALL FESCUE KENTUCKY BLUEGRASS PERENNIAL RYEGRASS	60 20 20	MAR 1-MAY 15; AUG 1-OCT 15	1/4-1/2 in	45 pounds per acre (1.0 lb/1000 sq ft)	90 lb/ac (2.0 lb/1000 sq ft)	90 lb/ac (2.0 lb/1000 sq ft)
11	CROWNED RIG FESCUE CREWING FESCUE KENTUCKY BLUEGRASS	30 30 20	MAR 1-MAY 15; AUG 1-OCT 15	1/4-1/2 in			2 tons/ac (90 lb/1000 sq ft)

- B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).**
- GENERAL SPECIFICATIONS
 - CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
 - SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF 3A INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN EDGES WILL NOT BE ACCEPTABLE.
 - STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
 - SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
 - SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
 - SOD INSTALLATION
 - DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
 - LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO IT AND TIGHTLY INTERLOCKED AGAINST EACH OTHER. STAGGER MATERIAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOID WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
 - WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
 - WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.
 - SOD MAINTENANCE
 - IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
 - AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
 - DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT AND ALL REQUIRED PERMITS. SCHEDULE AND ATTEND THE PRECONSTRUCTION MEETING. (1 DAY)
- INSTALL STABILIZED CONSTRUCTION ENTRANCE AT END OF EXISTING PAVEMENT OFF OF MARIE CURRIE DRIVE. INSTALL SUPER SILT FENCE AROUND SCE. INSTALL CURB INLET PROTECTION ON EXISTING INLET. (1 DAY)
- INSTALL PERIMETER SUPER SILT FENCE. (1 WEEK)
- AT THE INSPECTOR'S OPTION THE GABION WALL BETWEEN THE FOREBAY AND THE POND MAY BE COVERED WITH FILTER FABRIC TO PREVENT SEDIMENT FROM ENTERING THE POND. THIS FABRIC SHALL BE REMOVED BY THE CONTRACTOR AFTER THE SITE HAS BEEN STABILIZED AND WITH THE INSPECTOR'S APPROVAL. (1 DAY)
- BEGIN MASS GRADING OPERATIONS. (3 MONTHS)
- AS MASS GRADING PROGRESSES, BEGIN INSTALLATION OF UTILITIES. AS STORM DRAIN IS CONSTRUCTED, INSTALL INLET PROTECTION AROUND STORM DRAIN INLETS. WRAP THESE INLETS IN SUPER SILT FENCE: 1-11, 1-18, 1-22, 1-30, 1-32, 1-40, 1-50, 1-52, 1-53, 1-60, 1-62, 1-63, 1-71, 1-90, 1-110, 1-120, 1-130, 1-136 AND 1-140. TEMPORARILY BLOCK 12" OPENING FROM M-14 TO RECHARGE TRENCH. (3 MONTHS)
- INSTALL RECHARGE TRENCH (2 WEEKS)
- AS SLOPE AREAS ARE BROUGHT TO FINAL GRADE, IMMEDIATELY STABILIZE. ALL SLOPES EQUAL TO OR EXCEEDING 3:1 SLOPES SHALL BE STABILIZED WITH EROSION CONTROL MATTING. (1 WEEK)
- AS GRADING PROGRESSES, BEGIN CONSTRUCTION OF PARKING LOTS AND BUILDINGS. ANY AREAS WHERE FINAL GRADING HAS BEEN COMPLETED AND BUILDING AND PARKING LOT CONSTRUCTION WILL BE DELAYED SHALL BE TEMPORARILY STABILIZED. (18 MONTHS)
- INSTALL LANDSCAPING AND COMPLETE VEGETATIVE STABILIZATION. (1 WEEK)
- CLEAN ANY SEDIMENT AND DEBRIS THAT HAS BEEN INTRODUCED INTO THE EXISTING SWM POND AS A RESULT OF THE CONSTRUCTION. (1 WEEK)
- WITH PERMISSION OF COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. UNBLOCK 12" OPENING IN MH 14 SO WATER CAN ENTER RECHARGE TRENCH. (2 DAYS)

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:

A) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND

B) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE 12/6/12

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."

[Signature] **3-8-13**
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

[Signature] **3-8-13**
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] **3/9/2013**
SIGNATURE OF HOWARD SCD DATE

APPROVED : DEPARTMENT OF PLANNING AND ZONING

[Signature] **2/27/13**
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] **4/10/13**
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] **2/2/10**
DIRECTOR DATE

DATE	NO.	REVISION

OWNER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

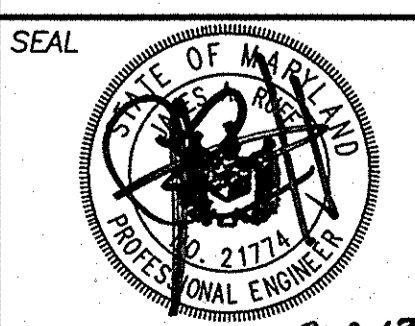
PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F

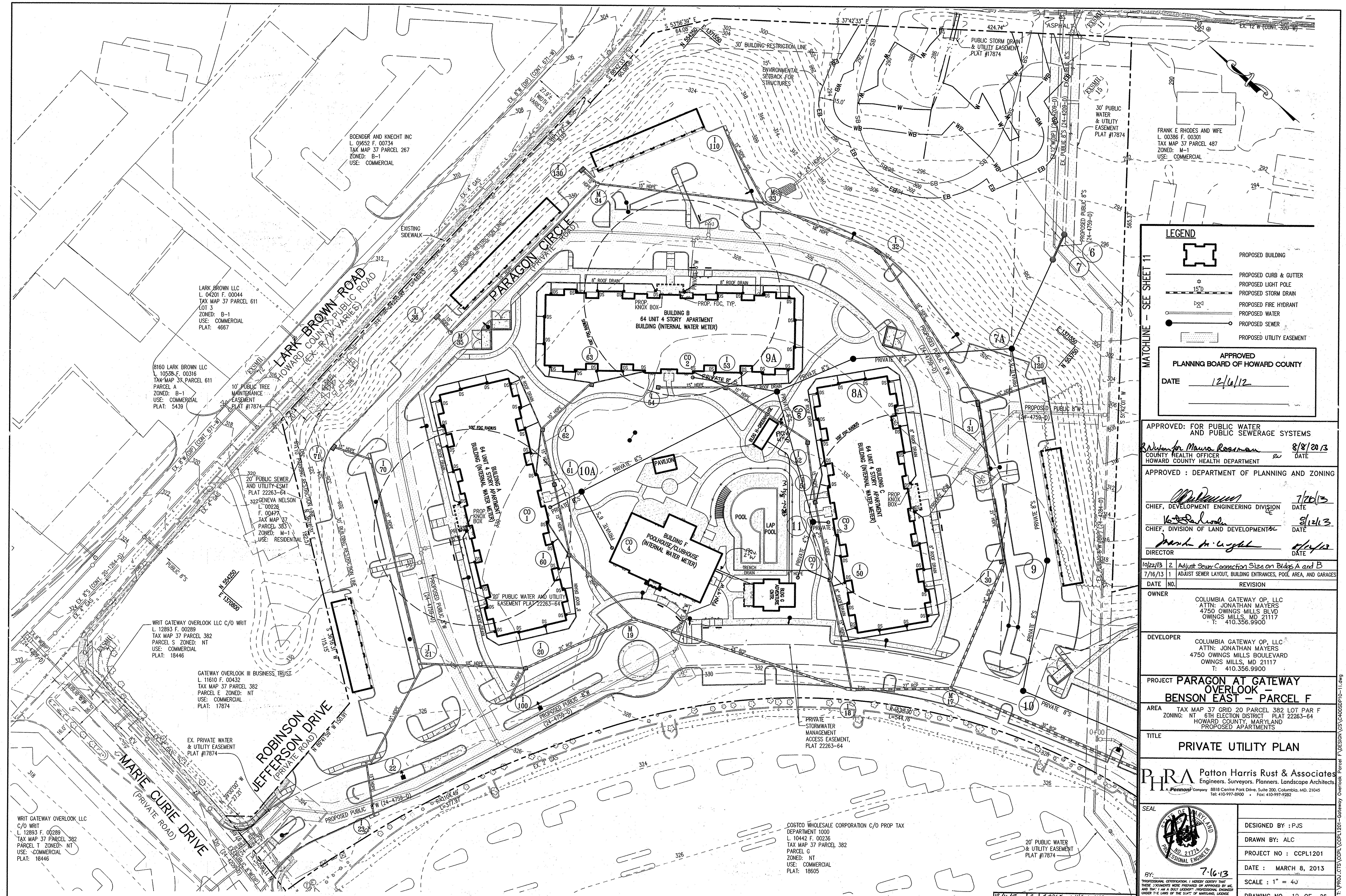
AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE
SEDIMENT CONTROL NOTES AND DETAILS

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY : PJS
DRAWN BY : ALC
PROJECT NO : CCPL1201
DATE : MARCH 8, 2013
SCALE : NOT TO SCALE
DRAWING NO. 9 OF 26





LEGEND

- PROPOSED BUILDING
- PROPOSED CURB & GUTTER
- PROPOSED LIGHT POLE
- PROPOSED STORM DRAIN
- PROPOSED FIRE HYDRANT
- PROPOSED WATER
- PROPOSED SEWER
- PROPOSED UTILITY EASEMENT

APPROVED
PLANNING BOARD OF HOWARD COUNTY
 DATE 12/6/12

MATCHLINE - SEE SHEET 11

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS	
<i>Water & Mauro Roisman</i> COUNTY HEALTH OFFICER HOWARD COUNTY HEALTH DEPARTMENT	8/8/2013 DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	7/20/13 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	9/12/13 DATE
<i>[Signature]</i> DIRECTOR	11/14/13 DATE
10/22/13 2	Adjust Sewer Connection Size on Bldgs A and B
7/16/13 1	ADJUST SEWER LAYOUT, BUILDING ENTRANCES, POOL AREA, AND GARAGES
DATE NO.	REVISION

OWNER	COLUMBIA GATEWAY OP, LLC ATTN: JONATHAN MAYERS 4750 OWINGS MILLS BLVD OWINGS MILLS, MD 21117 T: 410.356.9900
DEVELOPER	COLUMBIA GATEWAY OP, LLC ATTN: JONATHAN MAYERS 4750 OWINGS MILLS BOULEVARD OWINGS MILLS, MD 21117 T: 410.356.9900

PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F	
AREA	TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING	NT 6TH ELECTION DISTRICT PLAT 22263-64 HOWARD COUNTY, MARYLAND PROPOSED APARTMENTS
TITLE	PRIVATE UTILITY PLAN

P.H.R.A. Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 A Parsons Company 8818 Centre Park Drive, Suite 300, Columbia, MD, 21045
 Tel: 410-997-8900 • Fax: 410-997-9282

SEAL

BY: *[Signature]* 7-16-13
PROFESSIONAL CERTIFICATION / I HEREBY CERTIFY THAT THESE DRAWINGS 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. 21774, EXPIRATION DATE 11-10-2017

DESIGNED BY: PJS
 DRAWN BY: ALC
 PROJECT NO: COPL1201
 DATE: MARCH 8, 2013
 SCALE: 1" = 40'
 DRAWING NO. 10 OF 26

BOENDER AND KNECHT INC
 L. 09652 F. 00734
 TAX MAP 37 PARCEL 267
 ZONED: B-1
 USE: COMMERCIAL

LARK BROWN LLC
 L. 04201 F. 00044
 TAX MAP 37 PARCEL 611
 LOT 3
 ZONED: B-1
 USE: COMMERCIAL
 PLAT: 4667

18160 LARK BROWN LLC
 L. 10528 F. 00316
 TAX MAP 37 PARCEL 611
 PARCEL A
 ZONED: B-1
 USE: COMMERCIAL
 PLAT: 5439

320 PUBLIC SEWER AND UTILITY ESMT
 PLAT 22263-64
 322 GENIEVA NELSON
 L. 00226 F. 00477
 TAX MAP 37 PARCEL 383
 ZONED: M-1
 USE: RESIDENTIAL

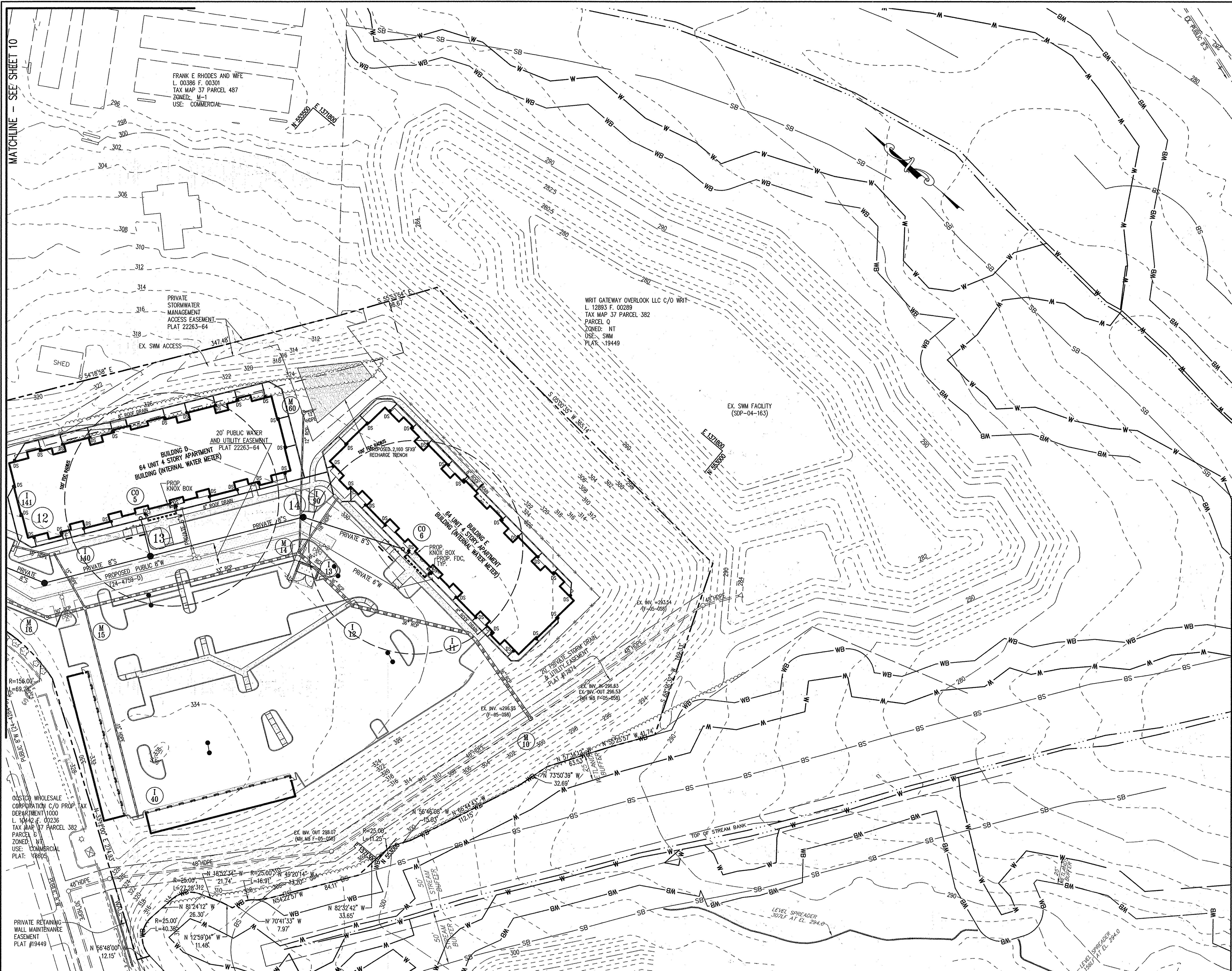
WRIT GATEWAY OVERLOOK LLC C/O WRIT
 L. 12893 F. 00289
 TAX MAP 37 PARCEL 382
 PARCEL S ZONED: NT
 USE: COMMERCIAL
 PLAT: 18446

GATEWAY OVERLOOK III BUSINESS TRUST
 L. 11610 F. 00432
 TAX MAP 37 PARCEL 382
 PARCEL E ZONED: NT
 USE: COMMERCIAL
 PLAT: 17874

WRIT GATEWAY OVERLOOK LLC
 C/O WRIT
 L. 12893 F. 00289
 TAX MAP 37 PARCEL 382
 PARCEL T ZONED: NT
 USE: COMMERCIAL
 PLAT: 18446

COSTCO WHOLESALE CORPORATION C/O PROP TAX
 DEPARTMENT 1000
 L. 10442 F. 00236
 TAX MAP 37 PARCEL 382
 PARCEL G
 ZONED: NT
 USE: COMMERCIAL
 PLAT: 18605

20' PUBLIC WATER & UTILITY EASEMENT
 PLAT #17874



LEGEND

- PROPOSED BUILDING
- PROPOSED CURB & GUTTER
- PROPOSED LIGHT POLE
- PROPOSED STORM DRAIN
- PROPOSED FIRE HYDRANT
- PROPOSED WATER
- PROPOSED SEWER
- PROPOSED UTILITY EASEMENT

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE 12/6/12

MATCHLINE - SEE SHEET 10

FRANK E RHODES AND WIFE
 L. 00386 F. 00301
 TAX MAP 37 PARCEL 487
 ZONED: M-1
 USE: COMMERCIAL

PRIVATE STORMWATER
 MANAGEMENT
 ACCESS EASEMENT
 PLAT 22263-64

WRIT GATEWAY OVERLOOK LLC C/O WRIT
 L. 12893 F. 00289
 TAX MAP 37 PARCEL 382
 PARCEL Q
 ZONED: NT
 USE: SWM
 PLAT: 19449

EX. SWM FACILITY
 (SDP-04-163)

20' PUBLIC WATER
 AND UTILITY EASEMENT
 PLAT 22263-64
 64 UNIT 4 STORY APARTMENT
 BUILDING (INTERNAL WATER METER)

64 UNIT 4 STORY APARTMENT
 BUILDING (INTERNAL WATER METER)

APPROVED : DEPARTMENT OF PLANNING AND ZONING	
CHIEF, DEVELOPMENT ENGINEERING DIVISION <i>[Signature]</i>	7/26/13 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT <i>[Signature]</i>	8/12/13 DATE
DIRECTOR <i>[Signature]</i>	8/14/13 DATE

7/16/13	1	ADJUST BUILDING ENTRANCES, POOL AREA, AND GARAGES
DATE NO.		REVISION

OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

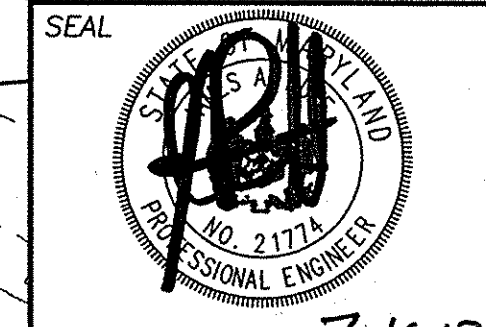
DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT PARAGON AT GATEWAY
 OVERLOOK -
BENSON EAST - PARCEL F

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE
 PRIVATE UTILITY PLAN

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects.
 Pennoni Company 8818 Centre Park Drive, Suite 200, Columbia, MD 21045
 Tel: 410-997-8900 Fax: 410-997-9282

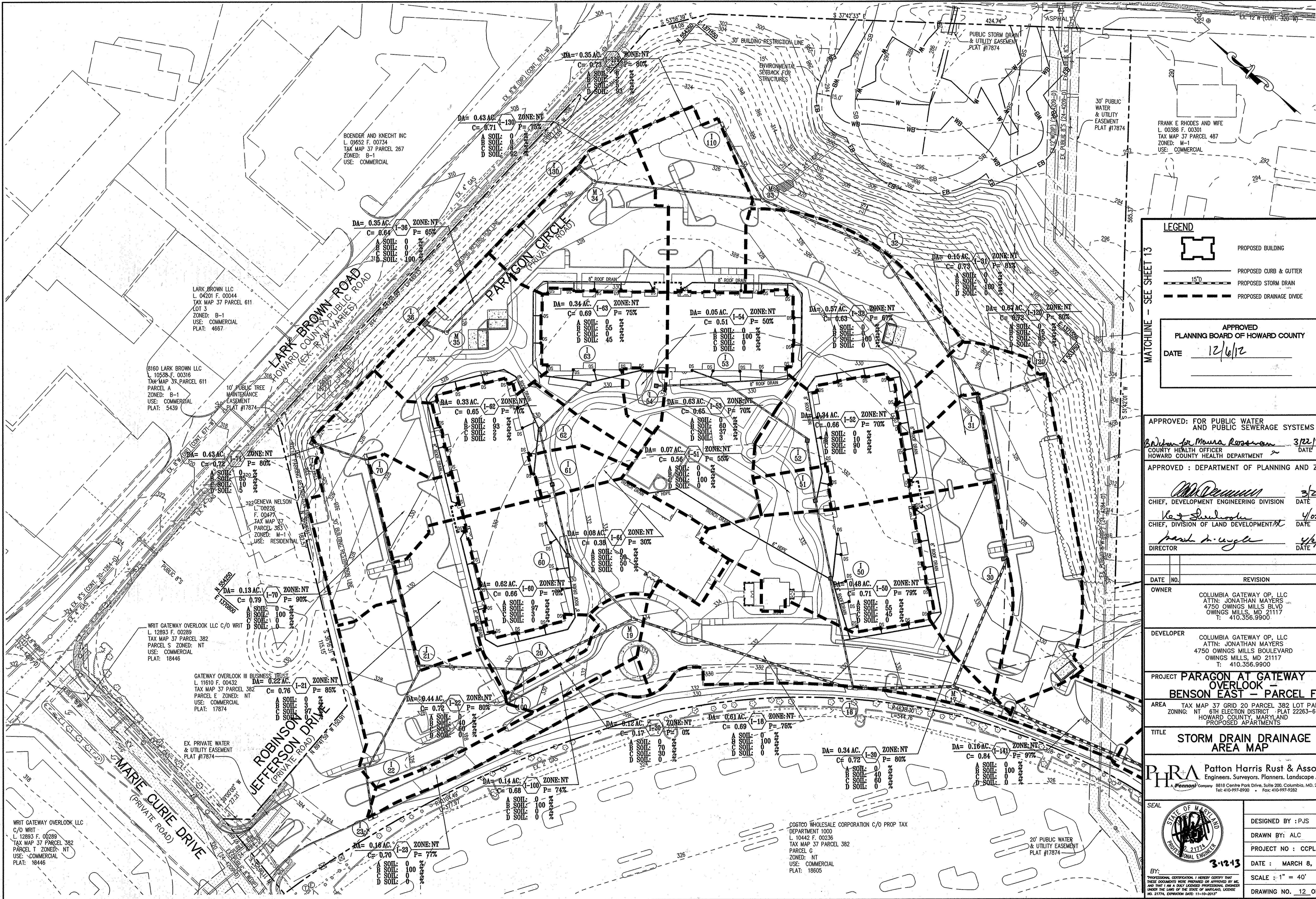


DESIGNED BY : PJS
 DRAWN BY : ALC
 PROJECT NO : CCPL1201
 DATE : MARCH 8, 2013
 SCALE : 1" = 40'
 DRAWING NO. 11 OF 26

BY: *[Signature]* 7-16-13
 PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT
 THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME,
 AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER
 UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE
 NO. 21774, EXPIRATION DATE: 11-01-2017

OSTOR WHOLESALE
 CORPORATION C/O PROP
 DEPARTMENT 1000
 L. 10442 F. 00236
 TAX MAP 37 PARCEL 382
 PARCEL G
 ZONED: M-1
 USE: COMMERCIAL
 PLAT: 19804

PRIVATE RETAINING
 WALL MAINTENANCE
 EASEMENT
 PLAT #19449



UNBID

LEGEND

- PROPOSED BUILDING
- PROPOSED CURB & GUTTER
- PROPOSED STORM DRAIN
- PROPOSED DRAINAGE DIVIDE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE: 12/6/12

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Jonathan Mayers 3/22/13
COUNTY HEALTH OFFICER DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John Demmon 3/27/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Neil S. DeLorenzo 4/02/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul S. Ugle 4/16/12
DIRECTOR DATE

DATE NO. REVISION

OWNER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK**
BENSON EAST - PARCEL F

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

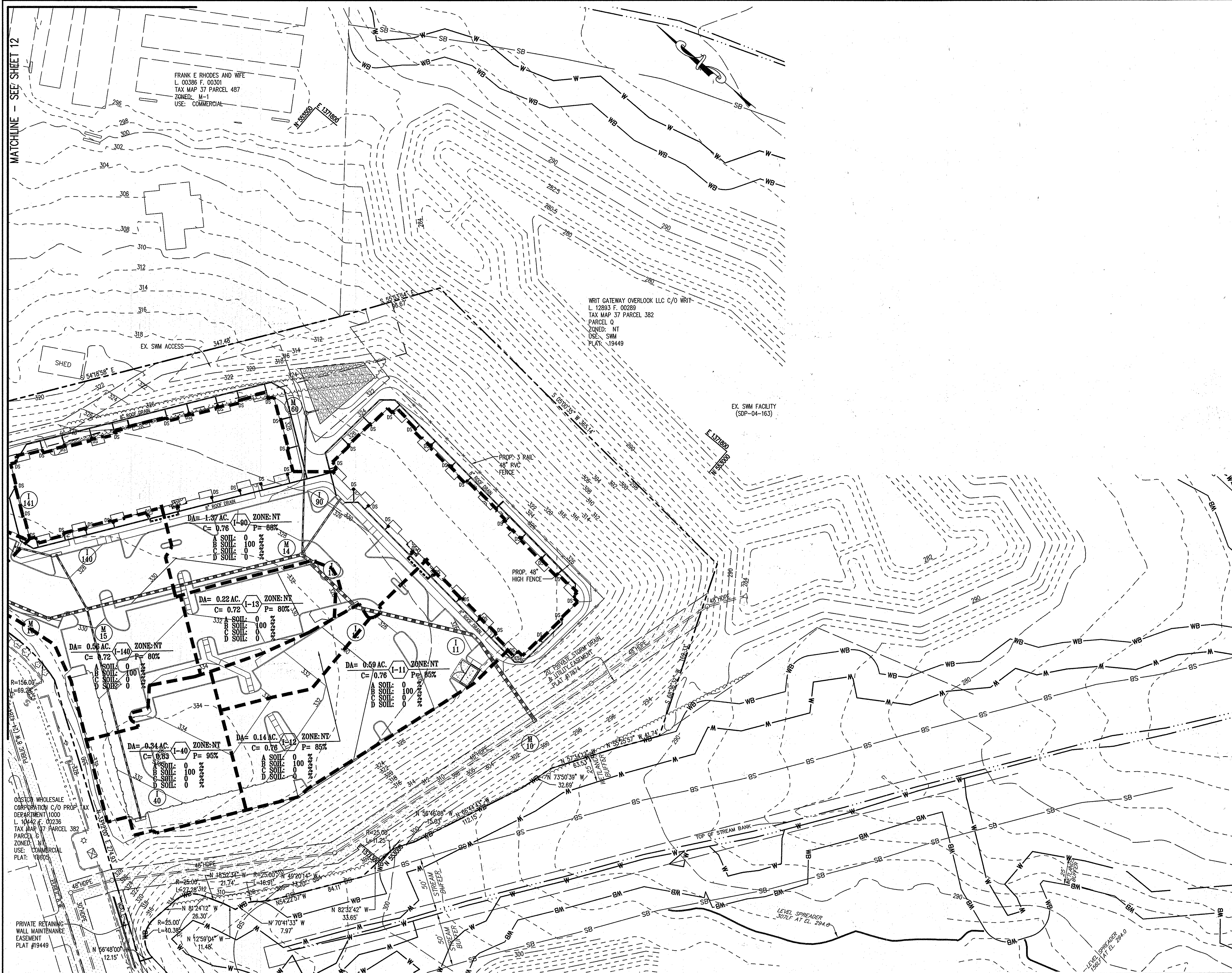
TITLE **STORM DRAIN DRAINAGE AREA MAP**

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9232

DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO. 12 OF 26

SEAL: 3-12-13

BY: *Jonathan Mayers*
PROFESSIONAL CERTIFICATION, I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21714, EXPIRES DATE 11-10-2015



LEGEND

- PROPOSED BUILDING
- PROPOSED CURB & GUTTER
- PROPOSED STORM DRAIN
- PROPOSED DRAINAGE DIVIDE

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

Jonathan Mayers 3/21/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Jonathan Mayers 4/02/12
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Jonathan Mayers 4/2/12
DIRECTOR DATE

DATE	NO.	REVISION

OWNER
COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER
COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F**

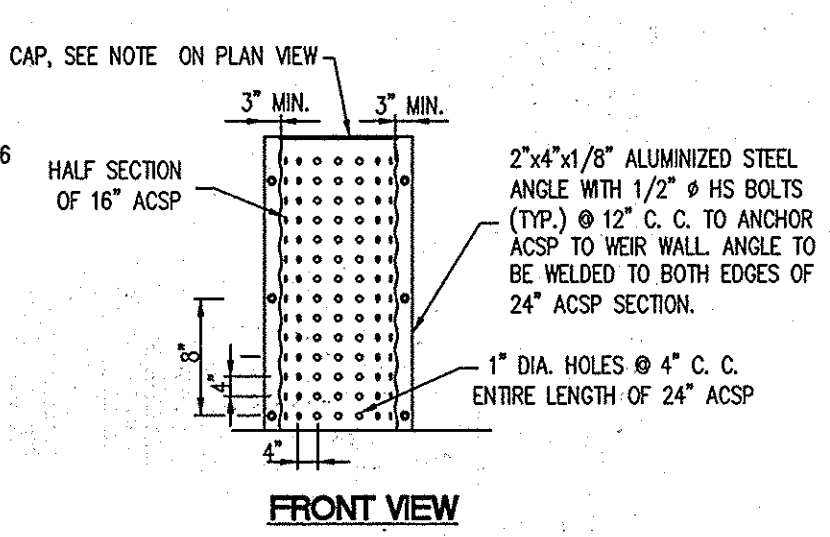
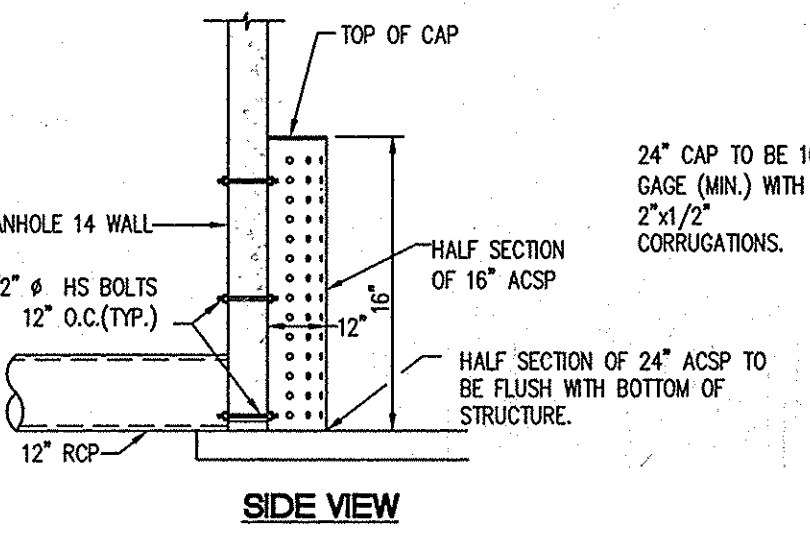
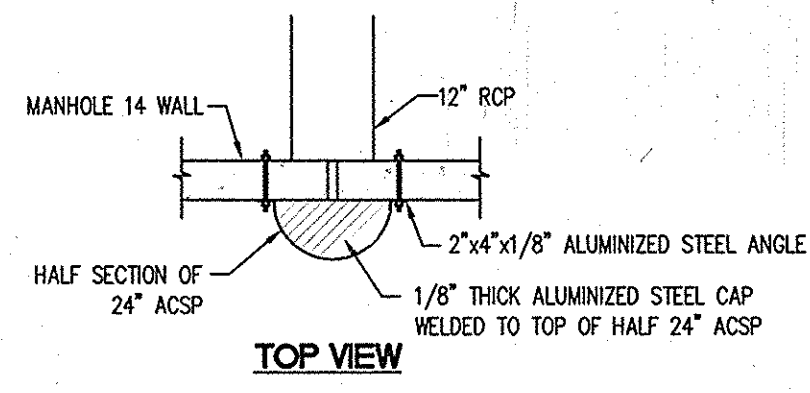
AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE **STORM DRAIN DRAINAGE AREA MAP**

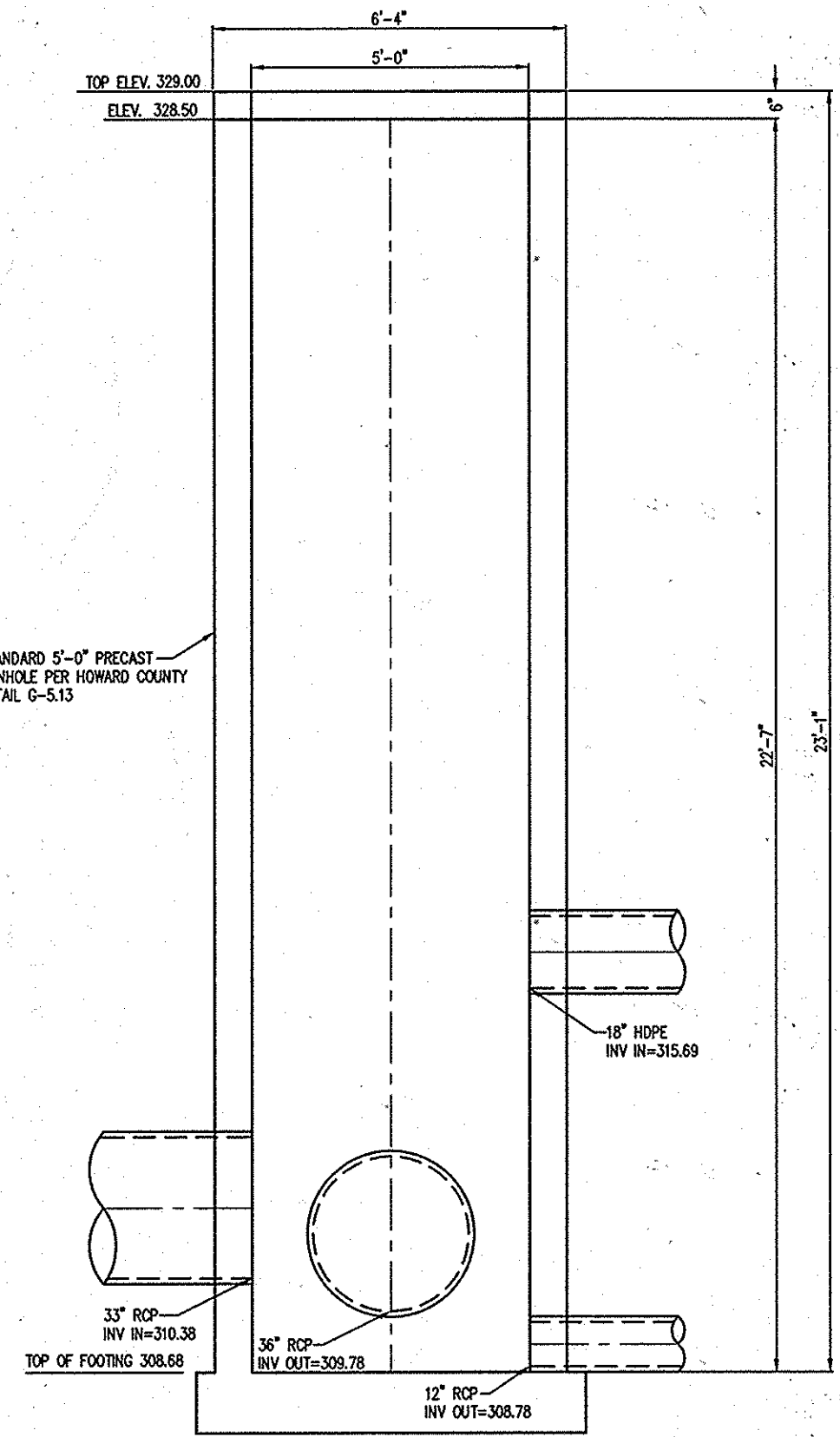
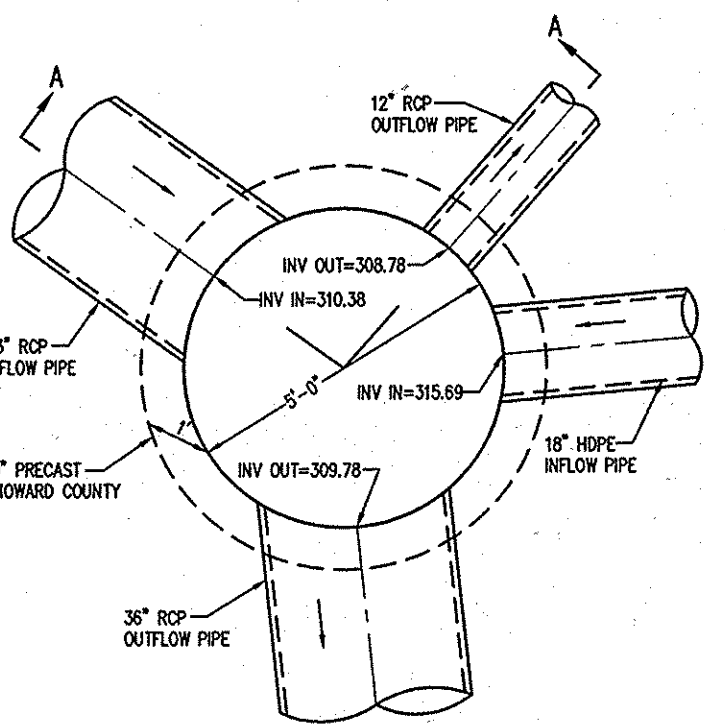
PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
A Pennon Company 8815 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

SEAL

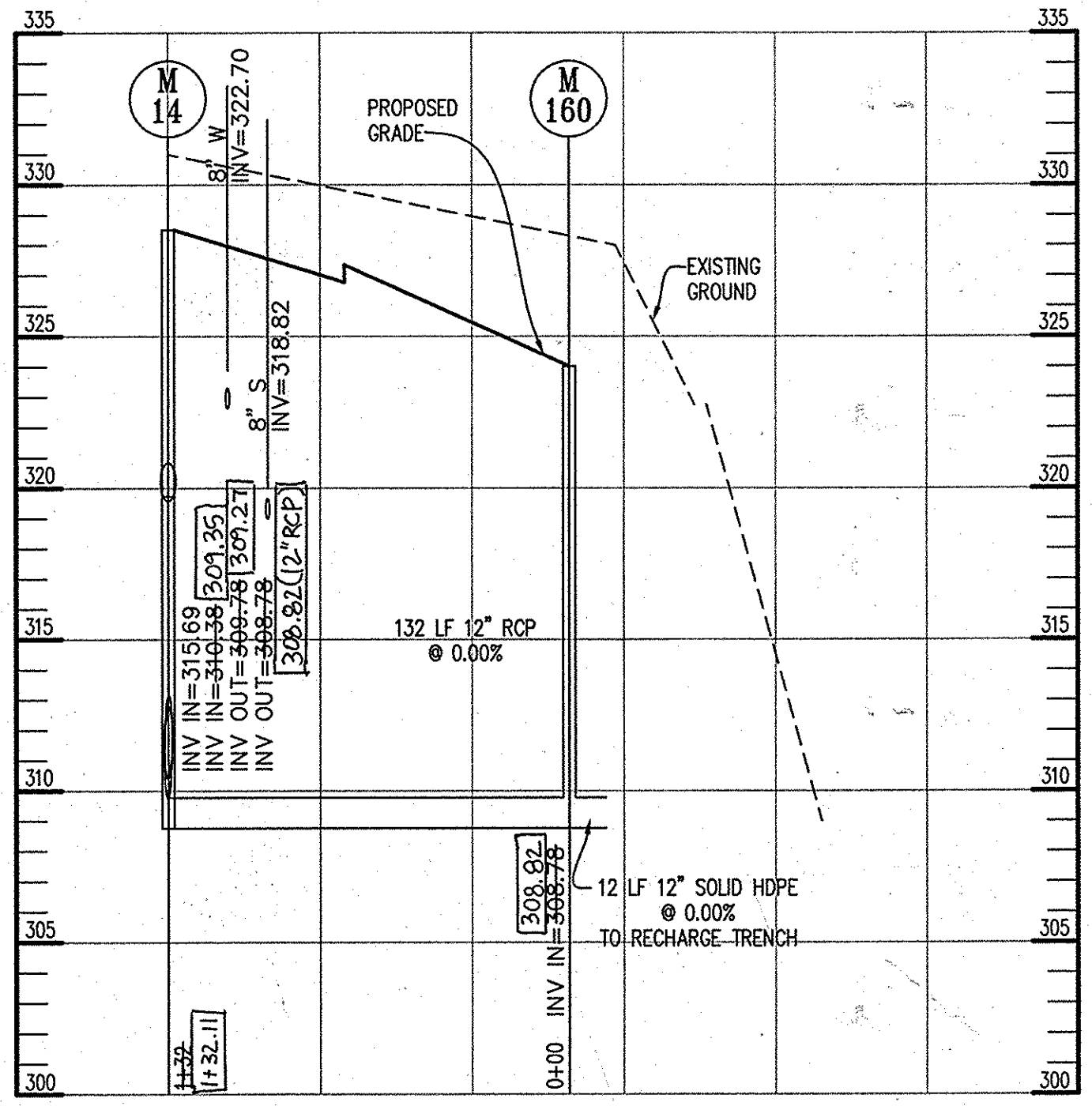
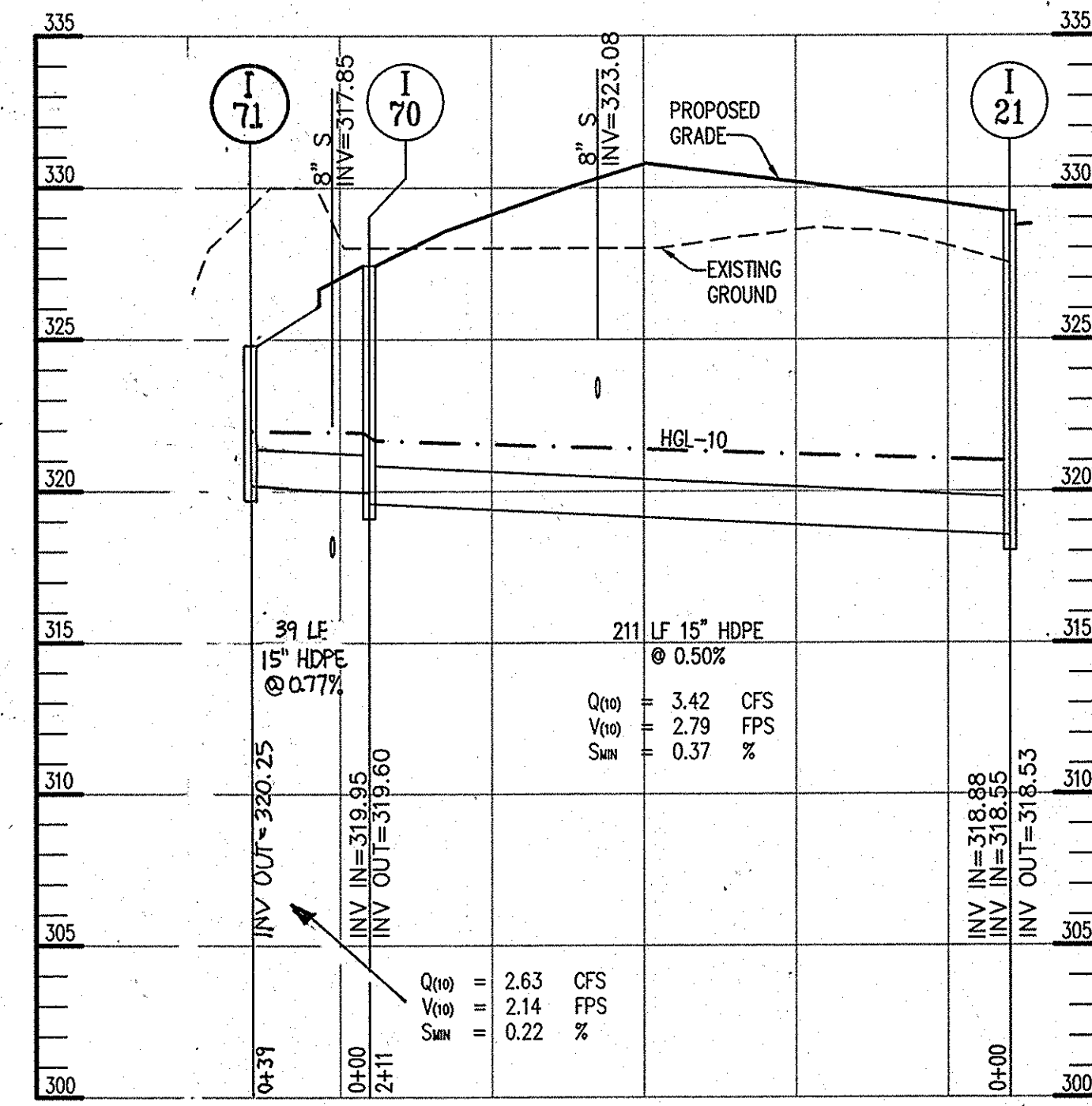
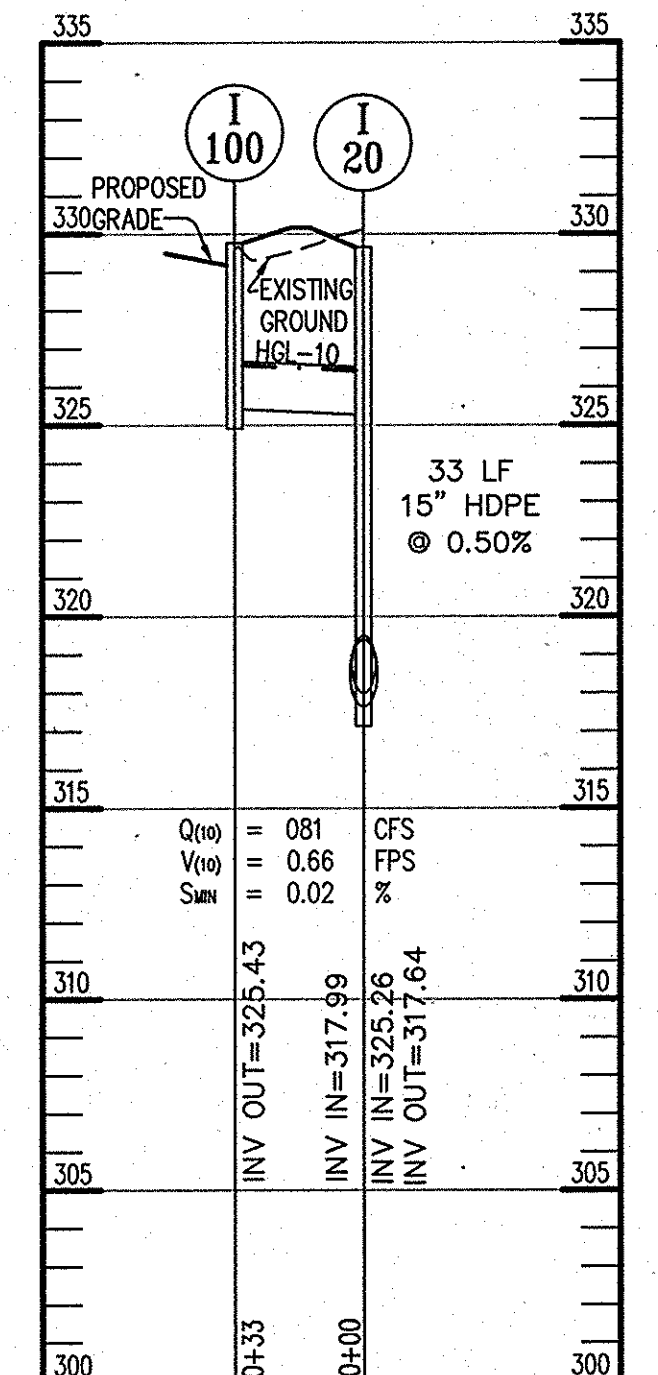
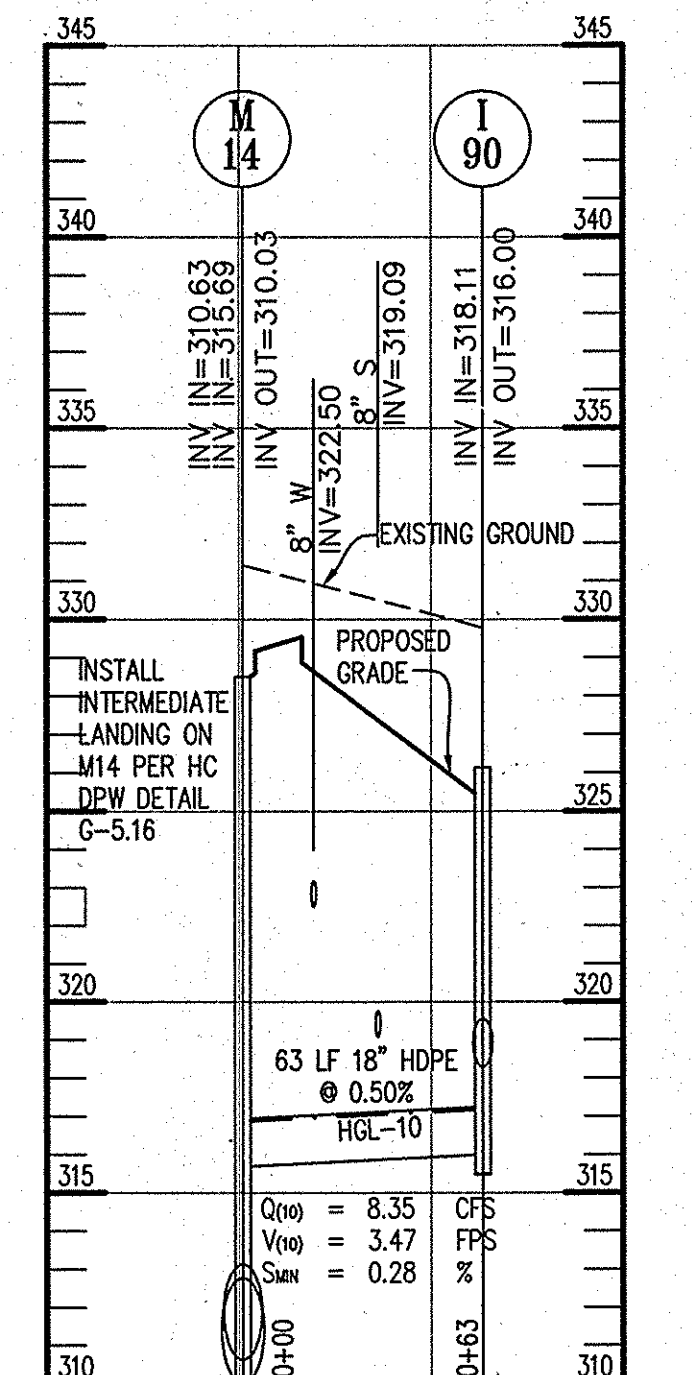
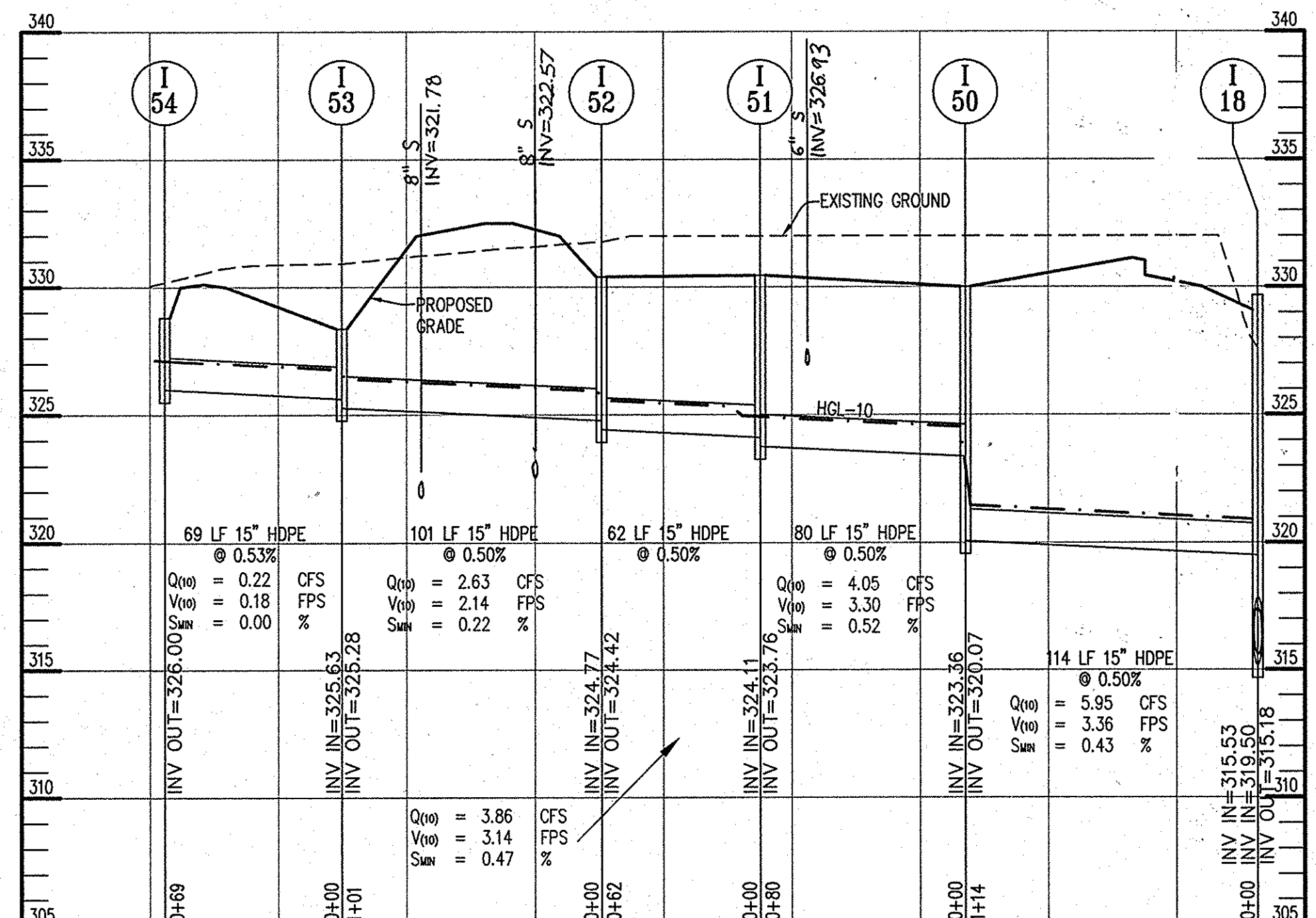
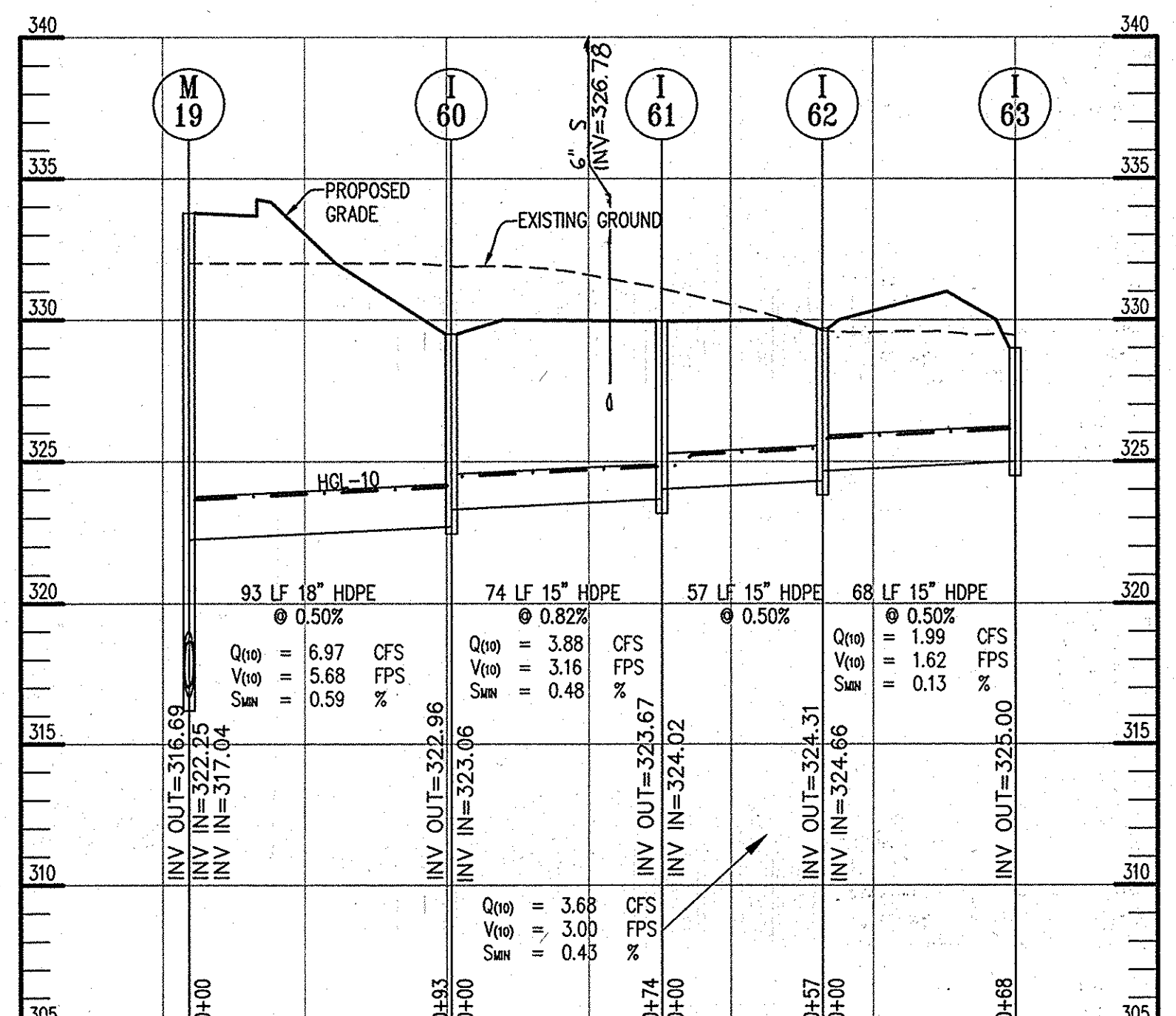
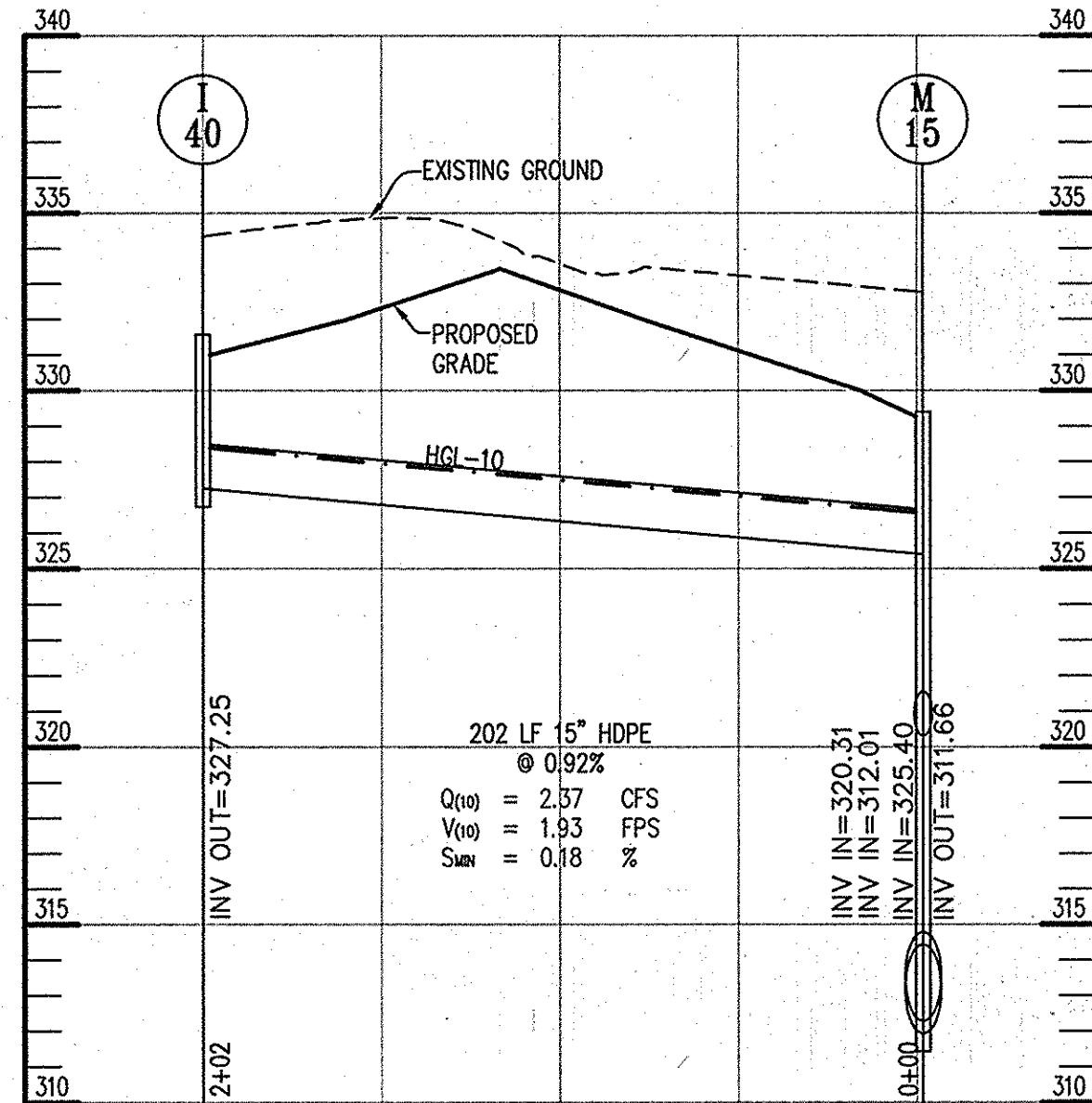
DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: C0PL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO. 13 OF 26



1 ACSP TRASH RACK
NOT TO SCALE



2 MANHOLE M-14
SCALE: 1"=3'



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

JAMES A. RUFF #21774
PRINTED NAME MD PE. No.
DATE 1-29-15
SIGNATURE

AS-BUILT
AS-BUILT DATE: 07/12/14

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION 3/2/13
DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 4/02/13
DATE

DIRECTOR 4/2/12
DATE

7/16/13 1 ADJUST PROFILES
DATE NO. REVISION

OWNER
COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER
COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

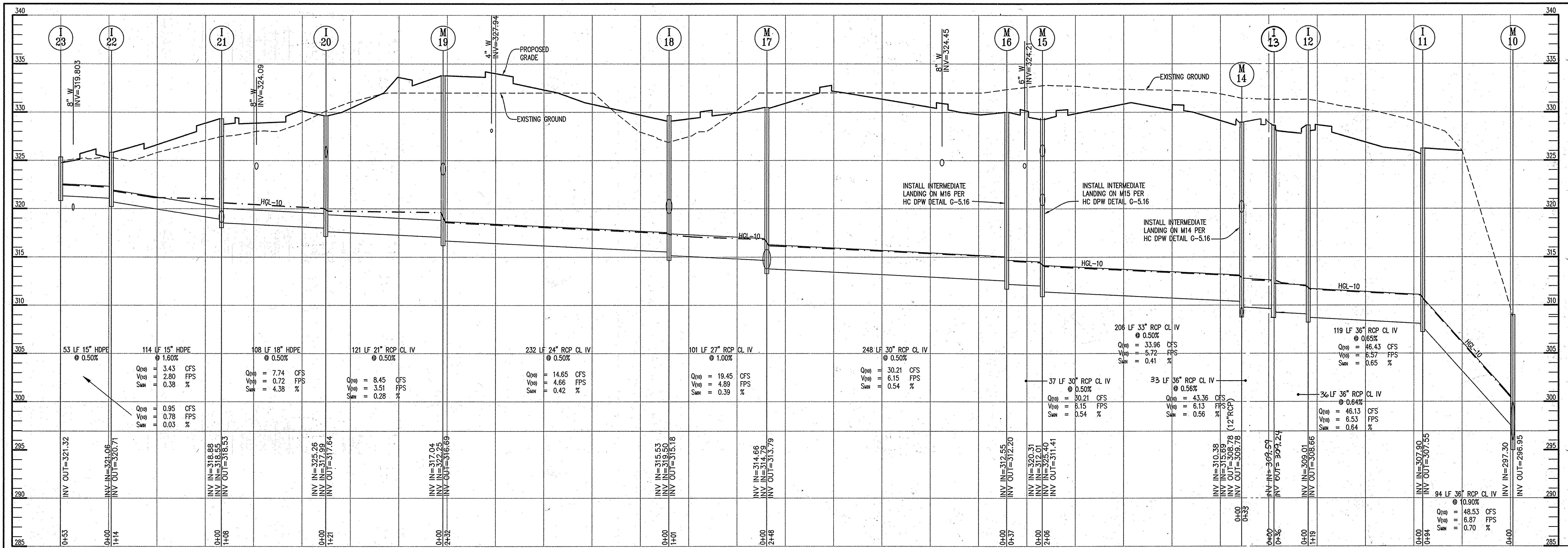
PROJECT PARAGON AT GATEWAY OVERLOOK BENSON EAST - PARCEL F

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

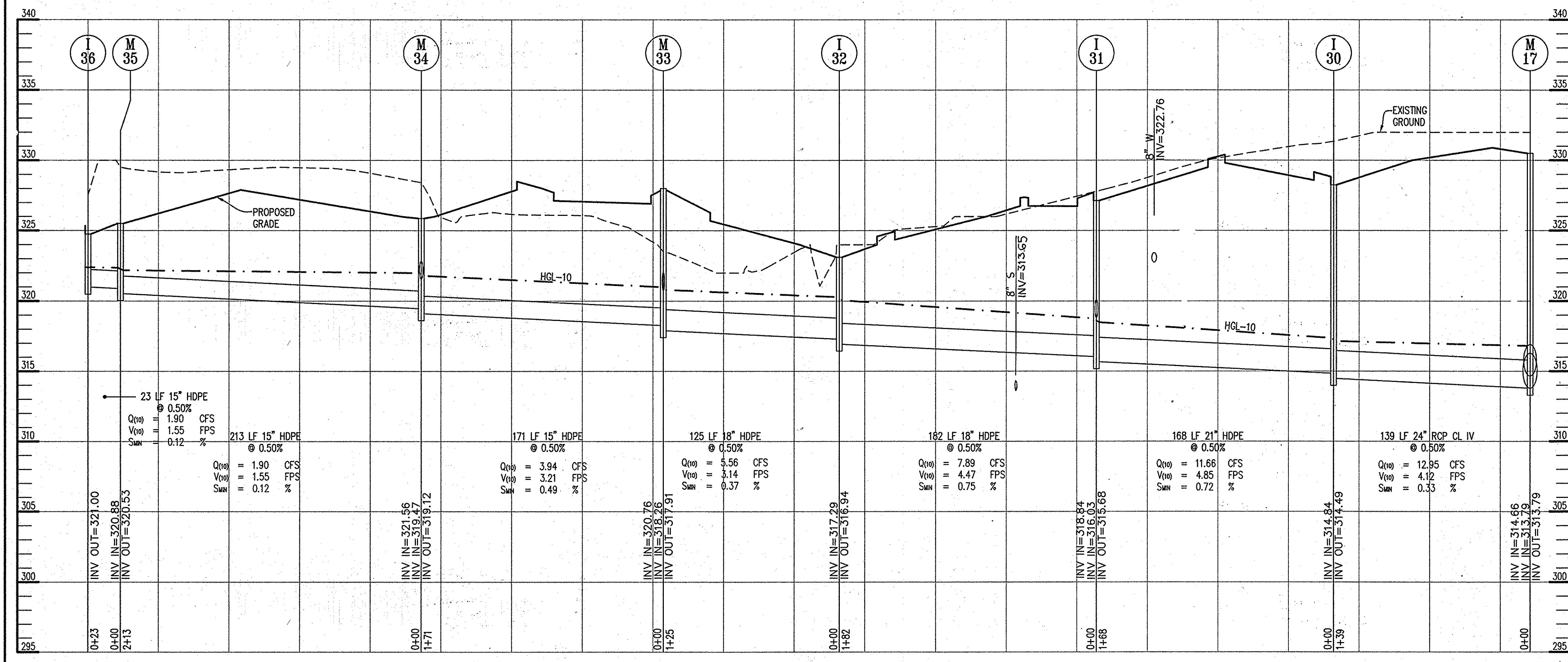
TITLE
STORM DRAIN PROFILES

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
DRAWN BY: JSN
PROJECT NO.: CCPL1201
DATE: MARCH 8, 2013
SCALE: AS SHOWN
DRAWING NO. 14 OF 26



STORM DRAIN PROFILE
 SCALE: HOR: 1"=50'
 VERT: 1"=5'



STORM DRAIN PROFILE
 SCALE: HOR: 1"=50'
 VERT: 1"=5'

APPROVED : DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 3/27/13
 CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 4/2/13
 DIRECTOR: *[Signature]* DATE: 4/2/13

7/16/13 | ADJUST PROFILES

DATE	NO.	REVISION

OWNER: COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT: PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F

AREA: TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

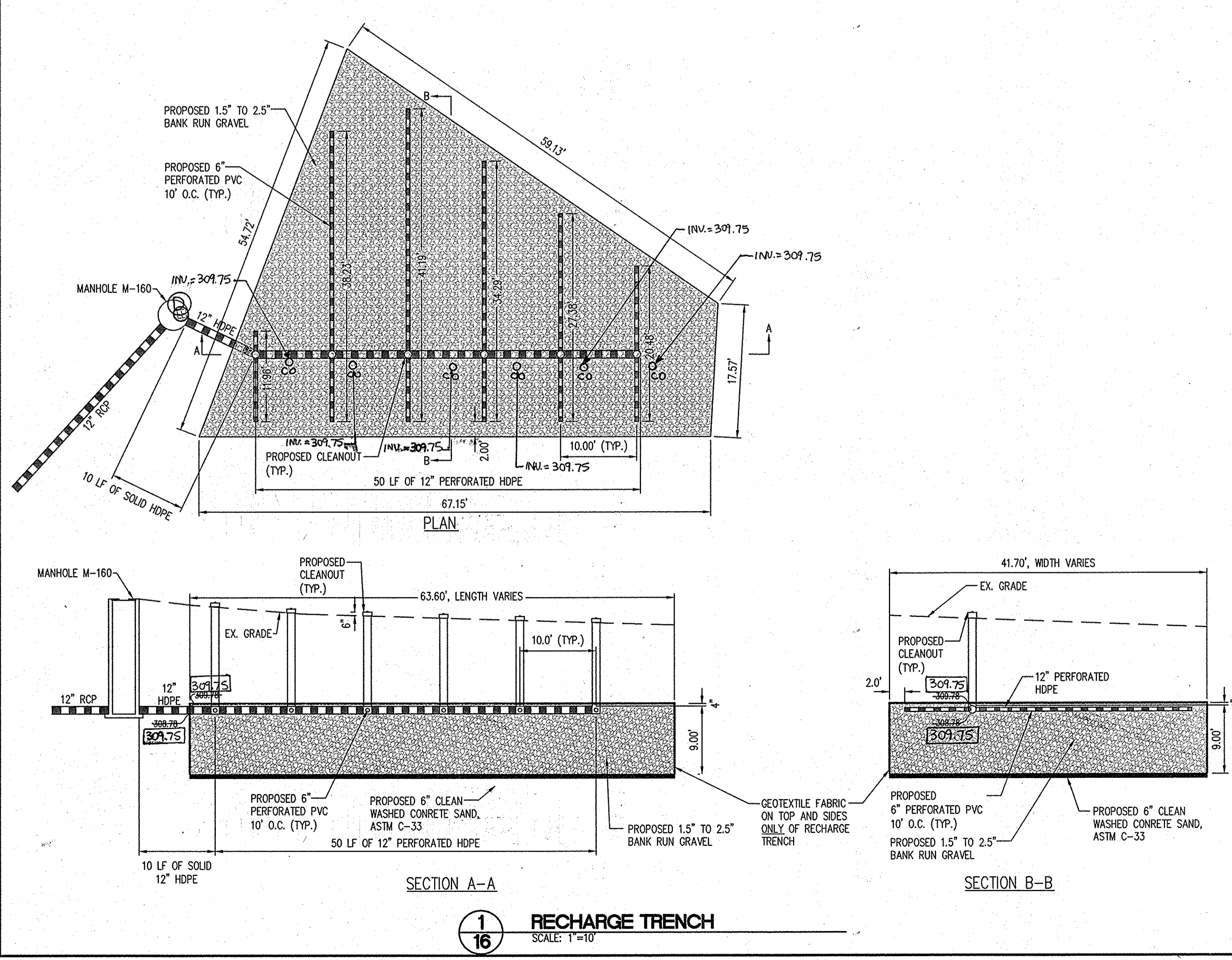
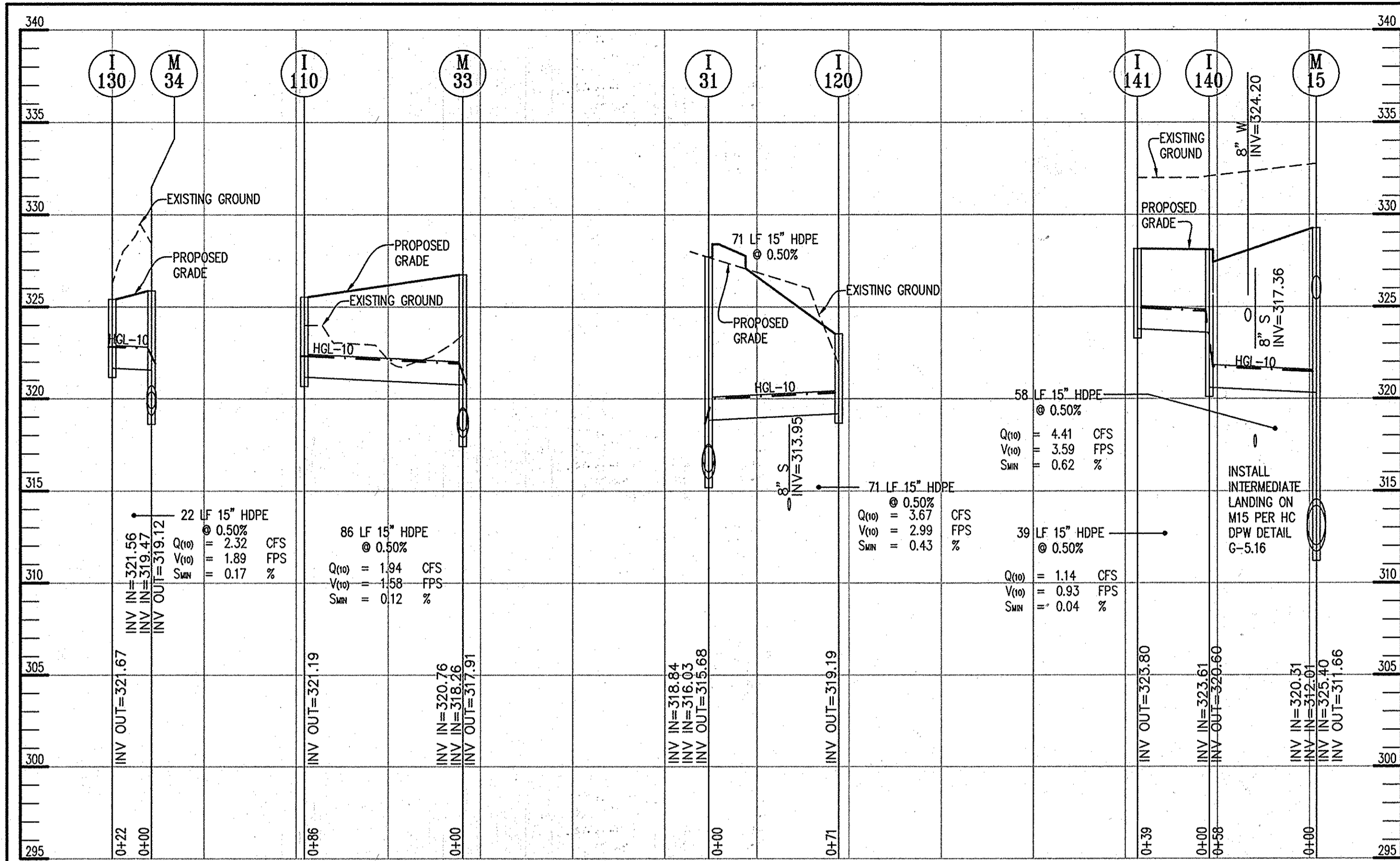
TITLE: STORM DRAIN PROFILES

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects.
 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-8700 Fax: 410-997-9282

SEAL: [Professional Engineer Seal]

DESIGNED BY: PJS
 DRAWN BY: JSN
 PROJECT NO: CCPL1201
 DATE: MARCH 8, 2013
 SCALE: AS SHOWN
 DRAWING NO. 15 OF 26

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 12/16/12



STORM DRAIN STRUCTURE SCHEDULE							
NUMBER	TYPE	LOCATION		TOP ELEVATION	PIPE INVERTS		REMARKS HOWARD COUNTY DPW STANDARD DETAILS
		NORTHING	EASTING		INV. IN	INV. OUT	
I-11	MSHA 5" CIRCULAR COG INLET, WITH 60" MH BASE	N 553,066.7549	E 1,371,541.7457	328.26	308.40	308.05	MD 374.62 MD 374.55 G-5.13, D-3.91
I-12	TYPE "A-5" INLET	N 553,172.4632	E 1,371,466.3420	328.66	309.01	308.66	D-4.01
I-13	TYPE "A-5" INLET	N 553,207.6057	E 1,371,449.7072	328.56	309.59	309.24	D-4.01
I-18	MSHA 5" CIRCULAR COG INLET, WITH 48" MH BASE	N 553,698.6621	E 1,371,137.6027	329.68	318.50 315.53	315.18	MD 374.62 MD 374.55 G-5.12, D-3.91
I-20	TYPE "S" INLET	N 553,963.8640	E 1,370,938.5579	329.65	325.26 317.99	317.64	D-4.22
I-21	TYPE "A-5" INLET	N 554,047.7410	E 1,370,873.7611	328.82	318.88 318.55	318.53	D-4.01
I-22	TYPE "A-5" INLET	N 554,023.4704	E 1,370,759.4772	325.87	321.06	320.71	D-4.01
I-23	TYPE "A-5" INLET	N 553,986.0023	E 1,370,726.0946	325.67	-	321.32	D-4.01
I-30	TYPE "W-R" INLET WITH 48" MH BASE	N 553,662.4837	E 1,371,335.2363	328.85	314.84	314.49	D-4.35
I-31	TYPE "W-R" INLET	N 553,787.9871	E 1,371,441.4286	327.73	318.84 316.03	315.68	D-4.37
I-32	TYPE "W-R" INLET	N 553,965.6794	E 1,371,493.8554	323.72	317.29	316.94	D-4.37
I-36	TYPE "W-R" INLET	N 554,264.2565	E 1,371,153.4628	325.33	-	321.00	D-4.37
I-40	TYPE "A-5" INLET	N 553,198.8927	E 1,371,187.5557	331.60	-	327.25	D-4.01
I-50	TYPE "S" INLET	N 553,786.3317	E 1,371,207.4255	330.00	323.36	320.07	D-4.22
I-51	TYPE "S" INLET	N 553,848.6806	E 1,371,257.8244	330.45	324.11	323.76	D-4.22
I-52	TYPE "S" INLET	N 553,893.9519	E 1,371,299.3630	330.40	324.77	324.42	D-4.22
I-53	TYPE "S" INLET	N 553,993.5769	E 1,371,289.3824	328.36	325.63	325.28	D-4.22
I-54	TYPE "S" INLET	N 554,046.1617	E 1,371,244.0158	328.80	-	326.00	D-4.22
I-60	TYPE "S" INLET	N 554,004.5147	E 1,371,055.1474	329.50	323.06	322.96	D-4.22
I-61	TYPE "S" INLET	N 554,062.5335	E 1,371,100.2248	329.95	324.02	323.67	D-4.22
I-62	TYPE "S" INLET	N 554,107.9369	E 1,371,135.1733	329.75	324.66	324.31	D-4.22
I-63	TYPE "S" INLET	N 554,099.5577	E 1,371,202.4077	329.00	-	325.00	D-4.22
I-70	TYPE "A-5" INLET	N 554,221.8210	E 1,371,000.9884	327.44	319.95	319.60	D-4.01
I-71	TYPE "W-R" INLET	N 554,258.4876	E 1,370,704.4036	325.39	-	320.25	D-4.37
I-90	TYPE "A-5" INLET	N 553,247.2246	E 1,371,532.7073	326.14	318.11	316.00	D-4.01
I-100	TYPE "A-5" INLET	N 553,953.6812	E 1,370,905.3007	329.78	-	325.43	D-4.01
I-110	TYPE "A-5" INLET	N 554,163.5373	E 1,371,487.1089	325.54	-	321.19	D-4.01
I-120	TYPE "W-R" INLET	N 553,751.4465	E 1,371,502.4053	323.54	-	319.19	D-4.37
I-130	TYPE "W-R" INLET	N 554,248.6445	E 1,371,363.1536	326.02	-	321.67	D-4.37
I-140	TYPE "A-5" INLET	N 553,415.3163	E 1,371,324.5904	328.10	323.61	320.60	D-4.01
I-141	TYPE "A-5" INLET	N 553,451.6973	E 1,371,306.0141	328.15	-	323.80	D-4.01
M-10	6" PRECAST MANHOLE	N 552,976.1340	E 1,371,492.7647	308.72	297.30	296.95	DOGHOUSE G-5.13/G-5.14 MODIFIED FOR 48" HDPE
M-14	5" PRECAST MANHOLE	N 553,241.7475	E 1,371,471.9936	329.66 328.64	310.38 315.69	308.78 309.78	G-5.13
M-15	5" PRECAST MANHOLE	N 553,361.9310	E 1,371,304.6405	329.40	325.40 320.31 312.01	311.66	G-5.13
M-16	5" PRECAST MANHOLE	N 553,383.5305	E 1,371,274.7303	330.00	312.55	312.20	G-5.13
M-17	5" PRECAST MANHOLE	N 553,621.0766	E 1,371,202.3826	330.40	314.66 314.66	313.79	G-5.13
M-19	4" PRECAST MANHOLE	N 553,912.4316	E 1,371,048.2332	333.70	322.25 317.04	316.69	G-5.12
M-33	4" PRECAST MANHOLE	N 554,084.7821	E 1,371,457.4328	328.00	320.76 318.26	317.91	G-5.12
M-34	4" PRECAST MANHOLE	N 554,227.3512	E 1,371,362.4429	325.80	321.56 319.47	319.12	G-5.12
M-35	4" PRECAST MANHOLE	N 554,243.1716	E 1,371,150.0440	325.60	320.88	320.53	G-5.12
M-160	4" PRECAST MANHOLE	N 553,323.3066	E 1,371,575.9583	324.02 327.04	308.78	308.78	G-5.12

- NOTES:**
- ALL STRUCTURES ARE HOWARD COUNTY STANDARDS UNLESS NOTED OTHERWISE. CONTRACTOR MAY USE PRECAST STRUCTURE WHERE AVAILABLE TO MEET THE STANDARD STRUCTURE SPECIFIED.
 - STATIONS ARE GIVEN TO CENTER OF STRUCTURE AT FACE OF CURB FOR CURB INLETS AND TO CENTER OF STRUCTURE FOR ALL OTHER STRUCTURES.
 - ELEVATIONS ARE GIVEN TO TOP OF CURB FOR CURB INLETS, TOP OF GRATE FOR GRATE INLETS AND TOP OF LID FOR MANHOLES.
 - PIPE LENGTHS ARE GIVEN TO THE CENTER OF THE STRUCTURE. CONTRACTOR SHALL ADJUST LENGTH TO OBTAIN ACTUAL PIPE LENGTHS.
 - FOR STRUCTURES M-14, M-15 AND M-16, DETAIL G-5.16 SHALL BE USED TO PROVIDE INTERMEDIATE LANDINGS IN MANHOLES.

STORM DRAIN PIPE SCHEDULE		
SIZE	TYPE	LINEAR FOOTAGE
6"	HDPE	132
6"	PERFORATED PVC	174
8"	PVC (ROOF DRAIN @ BLDG.)	3,930
12"	RCP	132
12"	SOLID HDPE	12
12"	PERFORATED HDPE	50
15"	HDPE	1,966
18"	HDPE	571
21"	HDPE	168
21"	RCP CL IV	121
24"	RCP CL IV	371
27"	RCP CL IV	101
30"	RCP CL IV	285
33"	RCP CL IV	206
36"	RCP CL IV	282

APPROVED : DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *[Signature]* DATE: 3/27/13

CHIEF, DIVISION OF LAND DEVELOPMENT: *[Signature]* DATE: 4/2/13

DIRECTOR: *[Signature]* DATE: 4/4/13

7/16/13 | ADJUST SCHEDULES

DATE NO. REVISION

OWNER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT: PARAGON AT GATEWAY OVERLOOK - PARCEL F

AREA: TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE: STORM DRAIN PROFILES

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects.
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
DRAWN BY: JSN
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: AS SHOWN
DRAWING NO. 16 OF 26

AS-BUILT CERTIFICATION

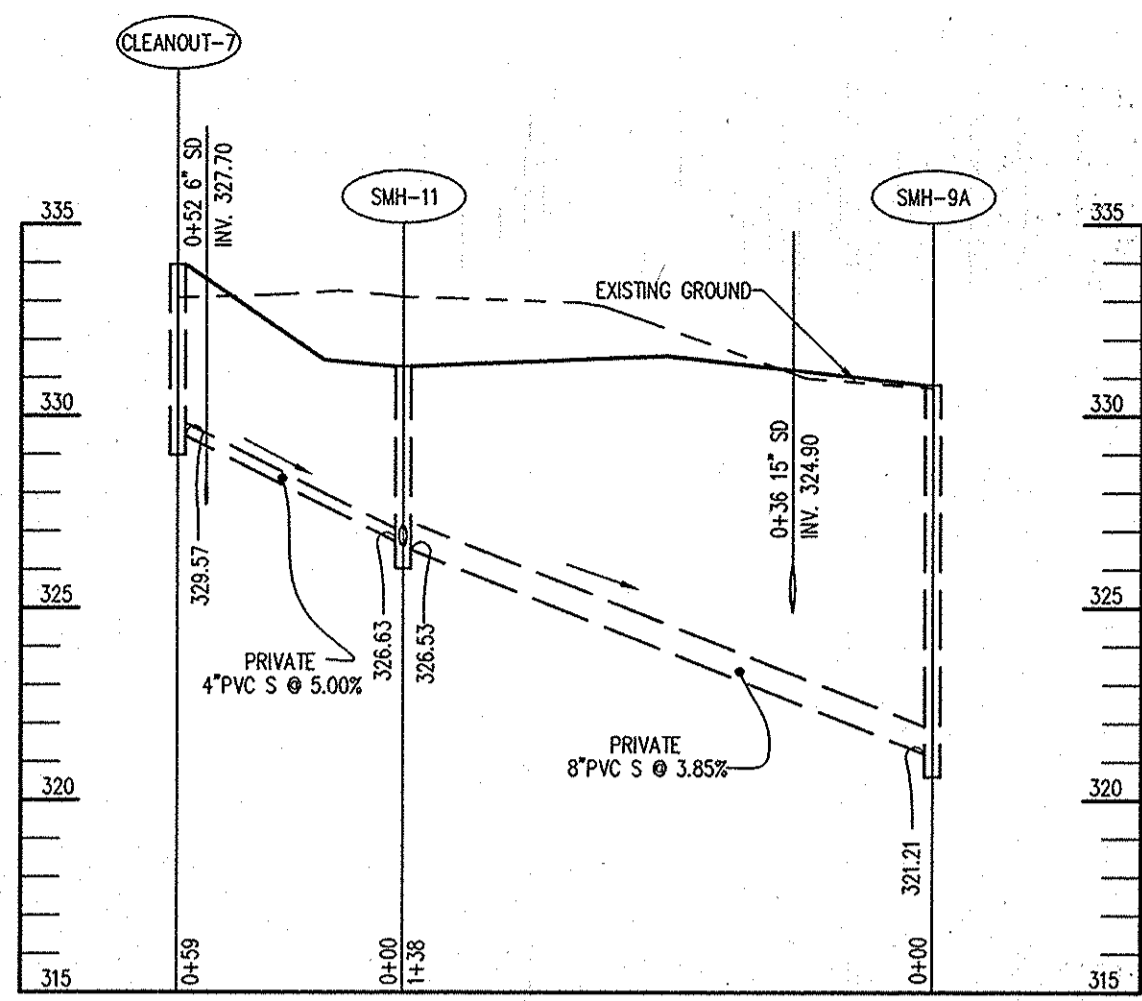
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED ACCORDING TO THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

JAMES A. RUFF # 21774
FRONTIER ENGINEERING & SURVEYING, INC.
DATE: 1-27-15

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. 21774, EXPIRATION DATE: 11-10-2015.

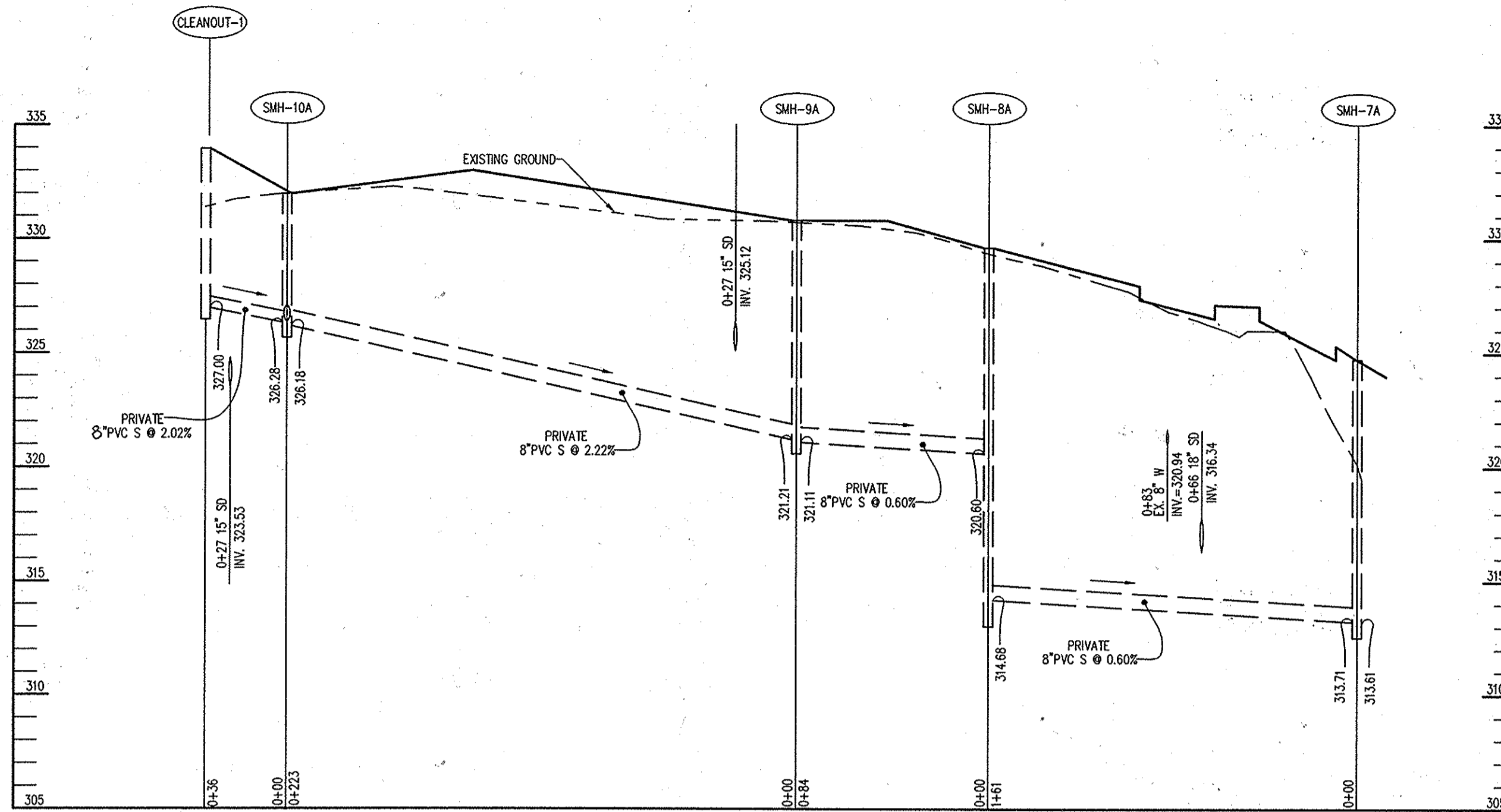
AS-BUILT
AS-BUILT DATE: 09/12/14

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 12/6/12



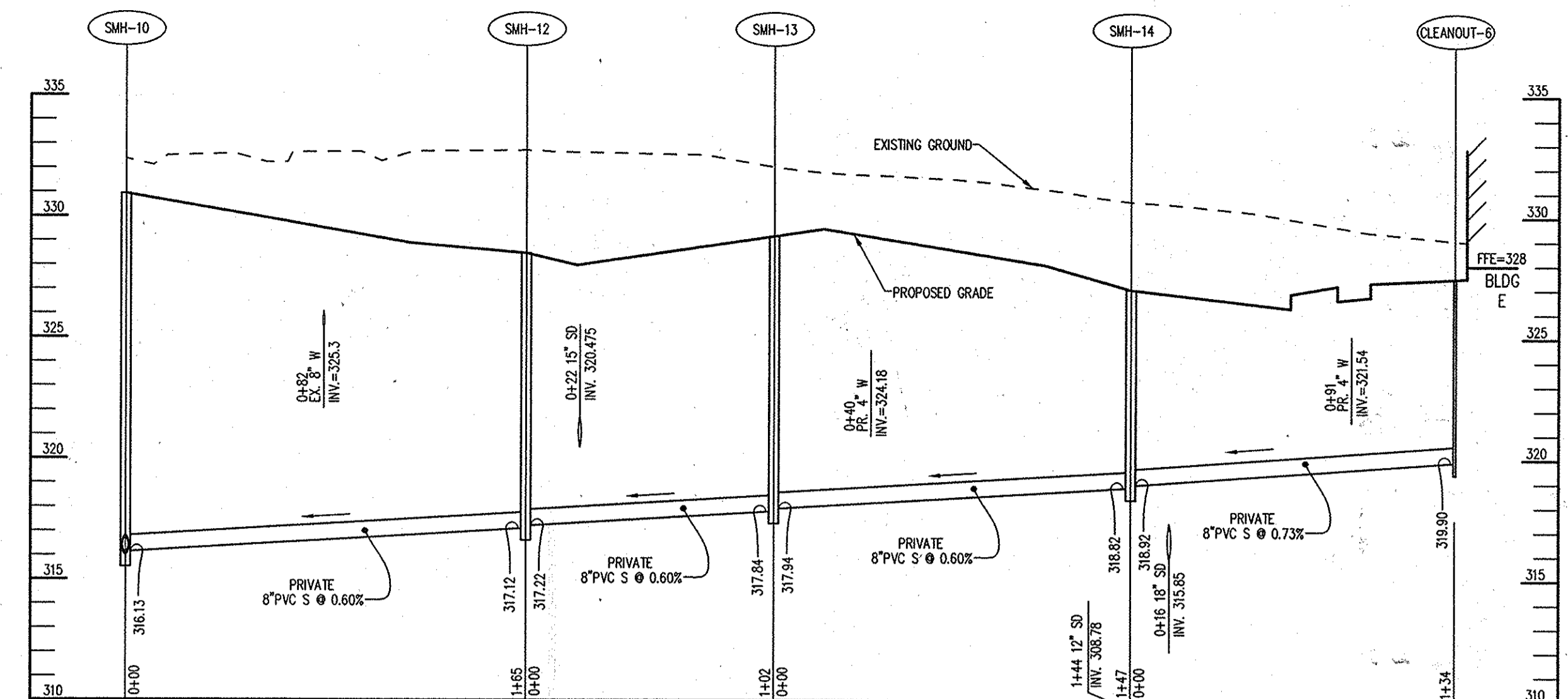
SEWER PROFILE #2 (PRIVATE)

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



SEWER PROFILE #1

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



SEWER PROFILE #4 (PRIVATE)

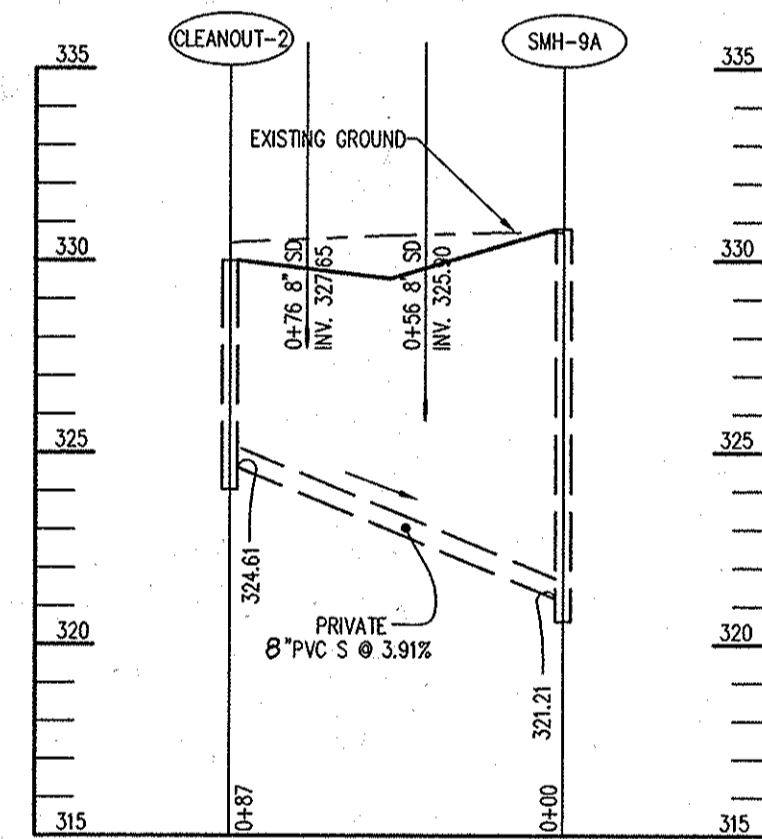
SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

STRUCTURE SCHEDULE FOR PRIVATE SEWER

NUMBER	TYPE	LOCATION		TOP ELEVATION	PIPE INVERTS		REMARKS
		NORTHING	EASTING		INV. IN	INV. OUT	
SMH-4	PRECAST MANHOLE	N 554147.5003	E 1371352.7478	329.31	322.00	321.90	G-5.12
SMH-5	PRECAST MANHOLE	N 554170.0045	E 1370943.1248	328.32	322.82	322.72	G-5.12
SMH-7	PRECAST MANHOLE	N 553824.6608	E 1371602.4945	298.80	290.58	290.48	G-5.12
SMH-7A	PRECAST MANHOLE	N 553797.6336	E 1371506.2789	324.74	313.71	313.61	G-5.12
SMH-9	PRECAST MANHOLE	N 553630.6826	E 1371365.0000	327.25	315.22	315.12	G-5.12
SMH-10	PRECAST MANHOLE	N 553563.3309	E 1371248.1238	330.94	316.13	316.03	G-5.12
SMH-11	PRECAST MANHOLE	N 553837.3378	E 1371241.2320	331.30	326.63	326.53	G-5.12
SMH-12	PRECAST MANHOLE	N 553405.9547	E 1371298.1962	328.48	317.22	317.12	G-5.12
SMH-13	PRECAST MANHOLE	N 553346.3483	E 1371381.1969	329.19	317.94	317.84	G-5.12
SMH-14	PRECAST MANHOLE	N 553260.4825	E 1371500.7634	327.00	318.92	318.82	G-5.12
CO-1	CLEANOUT	N 554050.8301	E 1371079.9006	331.12	-	327.00	S-2.22
CO-2	CLEANOUT	N 554025.9081	E 1371274.4519	330.00	-	324.61	S-2.22
CO-3	CLEANOUT	N 553825.3301	E 1371250.8298	332.15	-	327.40	S-2.22
CO-4	CLEANOUT	N 553976.1385	E 1371089.0082	334.22	-	329.72	S-2.22
CO-5	CLEANOUT	N 553376.0423	E 1371402.5214	329.33	-	322.44	S-2.22
CO-6	CLEANOUT	N 553169.7934	E 1371537.5626	327.3	-	319.90	S-2.22
CO-7	CLEANOUT	N 553812.5337	E 1371188.0090	333.95	-	329.57	S-2.22
SMH-8A	PRECAST MANHOLE	N 553913.8232	E 1371394.1870	329.63	320.60	314.68	G-5.12
SMH-9A	PRECAST MANHOLE	N 553951.2690	E 1371318.7769	330.81	321.21	321.11	G-5.12
SMH-10A	PRECAST MANHOLE	N 554038.8491	E 1371112.6160	331.97	326.28	326.18	G-5.12

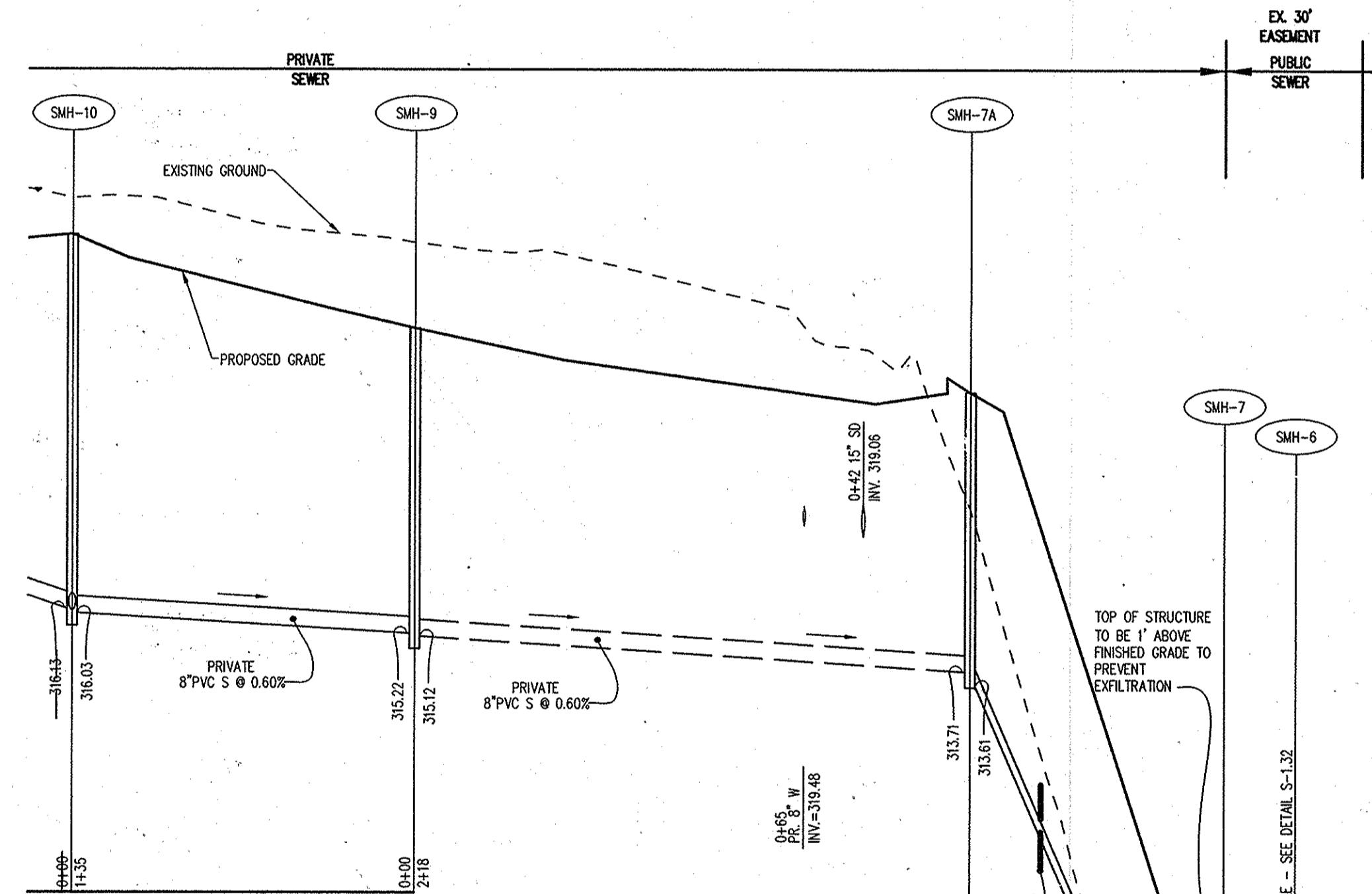
WATER AND SEWER PIPE SCHEDULE

SIZE	TYPE	LINEAR FOOTAGE	6" SEWER	PVC SDR 35	81
4" WHC	DIP	430			
8" SEWER	PVC SDR 35	1,801			
8" SEWER	DIP - CL 54	103	4" SEWER	PVC SDR 35	59



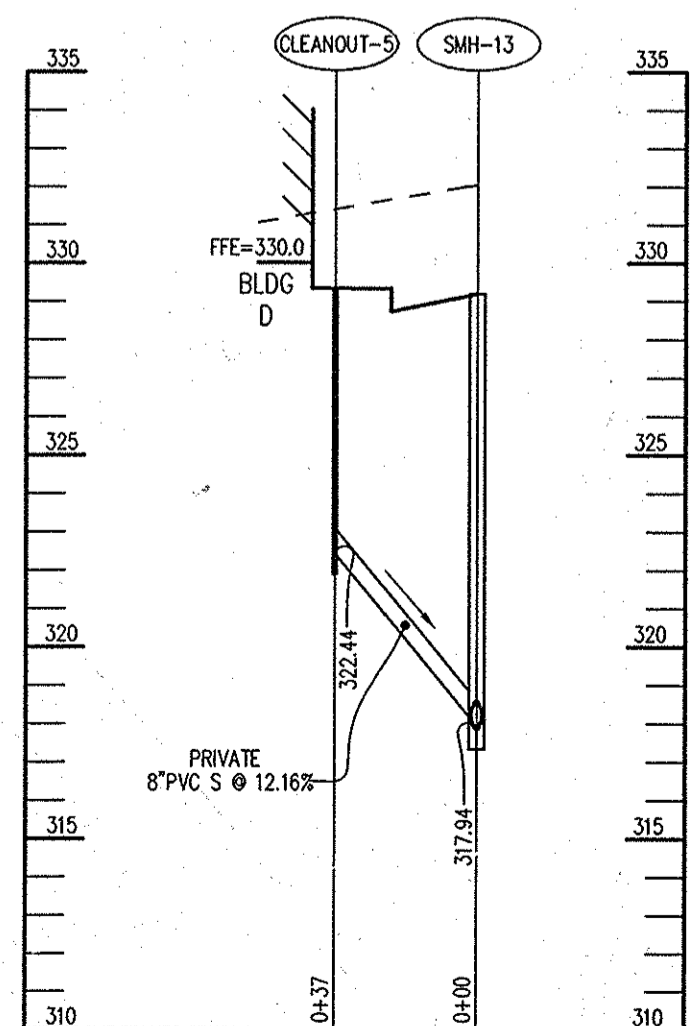
SEWER PROFILE #5 (PRIVATE)

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



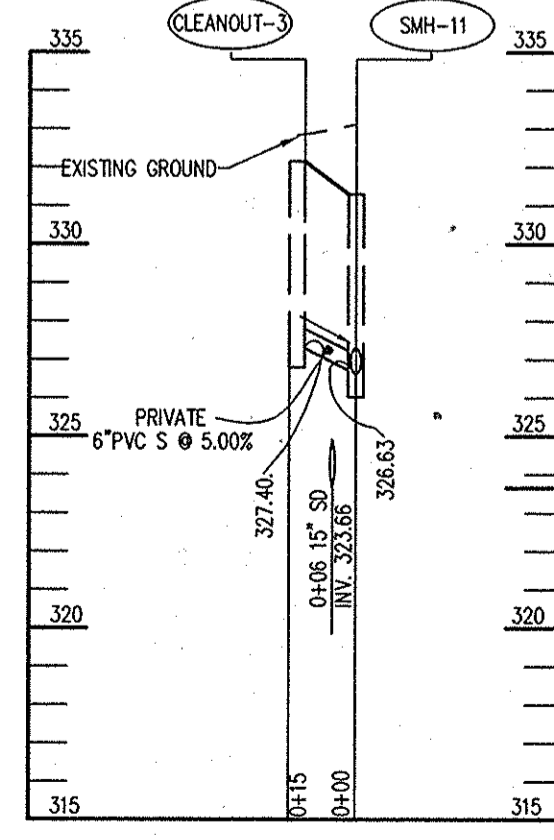
SEWER PROFILE #3

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



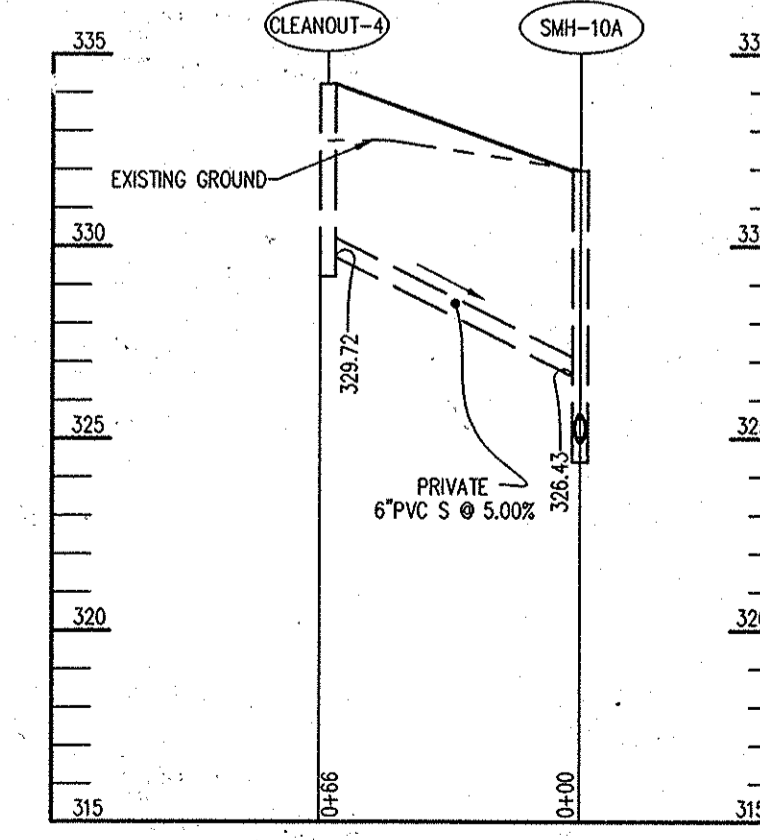
SEWER PROFILE #6 (PRIVATE)

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



SEWER PROFILE #7 (PRIVATE)

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'



SEWER PROFILE #8 (PRIVATE)

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

NOTES

- 1) ALL STRUCTURES ARE HOWARD COUNTY STANDARDS UNLESS NOTED OTHERWISE. CONTRACTOR MAY USE PRECAST STRUCTURE WHERE AVAILABLE TO MEET THE STANDARD STRUCTURE SPECIFIED.
- 2) LOCATIONS ARE GIVEN TO CENTER OF STRUCTURE FOR ALL STRUCTURES.
- 3) ELEVATIONS ARE GIVEN TO TOP OF LID FOR MANHOLES. CONTRACTOR SHALL ADJUST LID ELEVATIONS IN THE FIELD TO MATCH EXISTING PAVING ELEVATIONS.
- 4) PIPE LENGTHS ARE GIVEN TO THE CENTER OF THE STRUCTURE. CONTRACTOR SHALL ADJUST LENGTH TO OBTAIN ACTUAL PIPE LENGTHS.

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 7/26/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 8/12/13
DIRECTOR DATE 8/14/13

10/22/13 2 ADJUST SEWER PROFILES AND SEWER SCHEDULE
7/16/13 1 ADJUST SEWER PROFILES AND SEWER AND WATER SCHEDULES

OWNER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
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OWINGS MILLS, MD 21117
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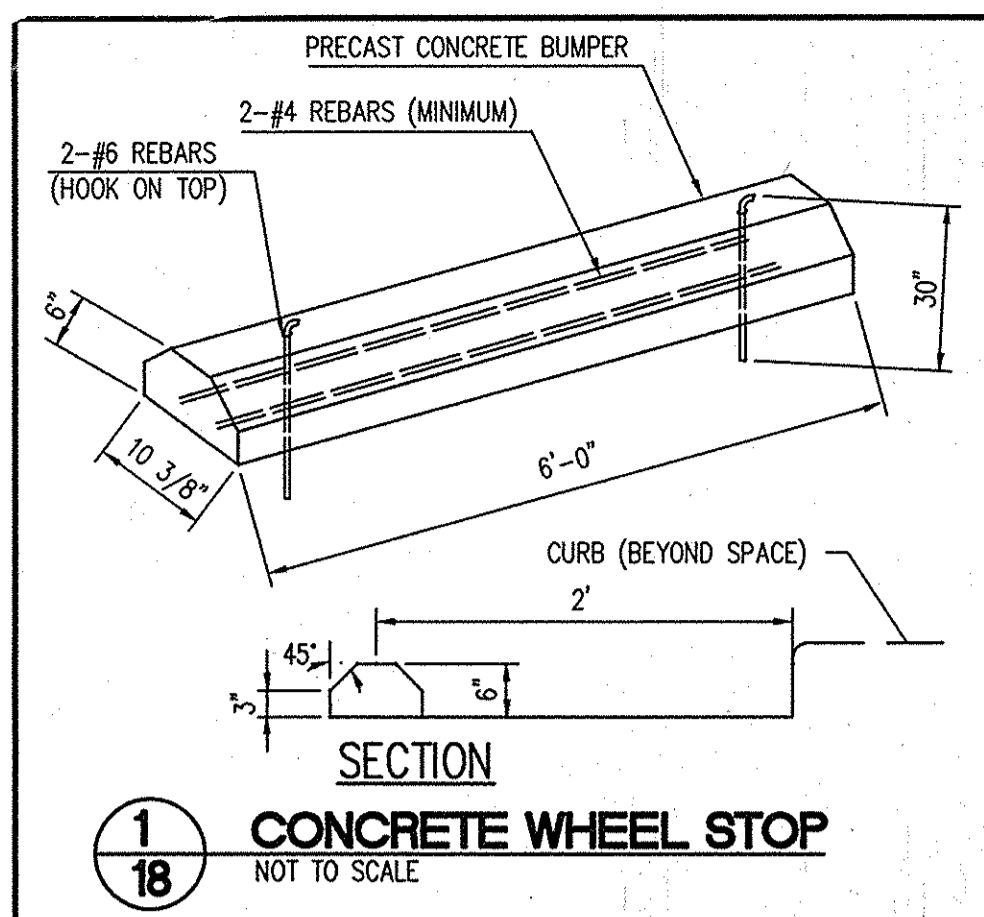
PROJECT PARAGON AT GATEWAY
OVERLOOK -
BENSON EAST - PARCEL F
AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE
SEWER PROFILES

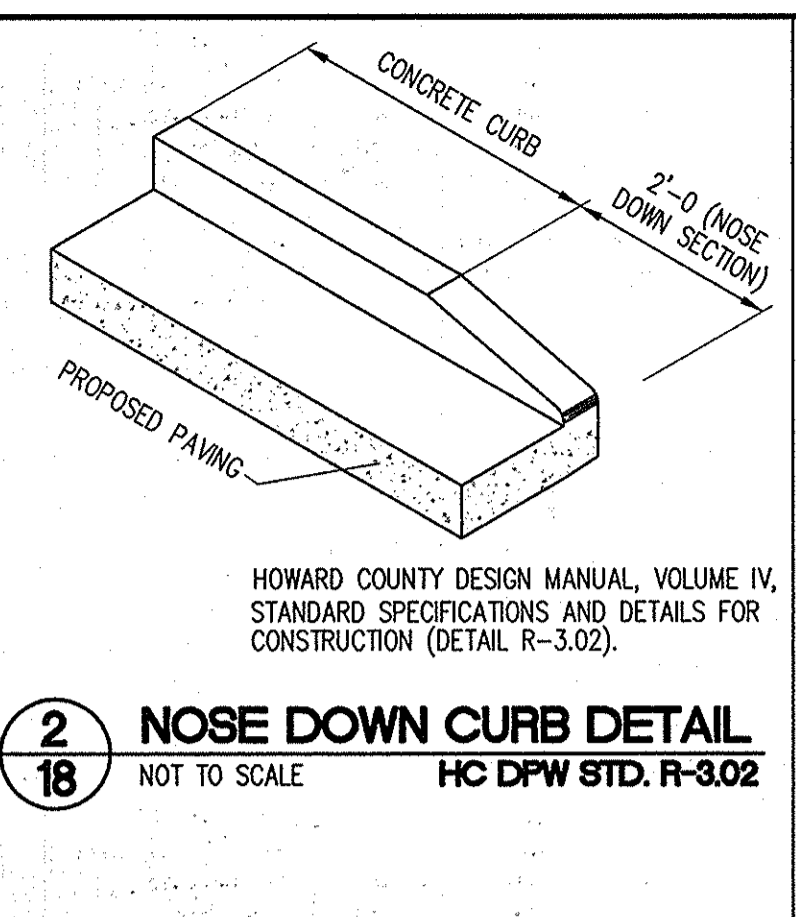
PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8018 Centre Park Drive, Suite 200, Columbia, MD 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY : PJS
DRAWN BY: ALC
PROJECT NO : CCPL1201
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SCALE : AS SHOWN
DRAWING NO. 17 OF 26

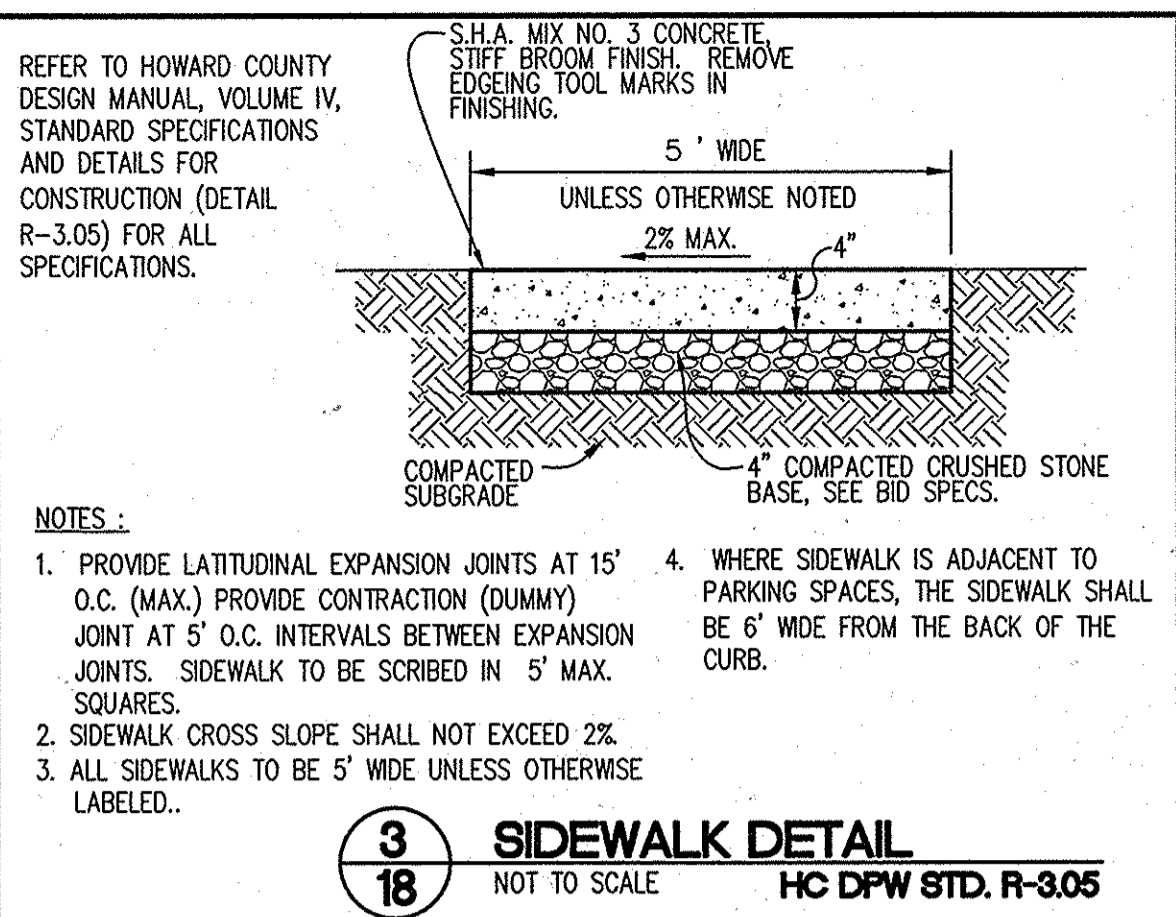
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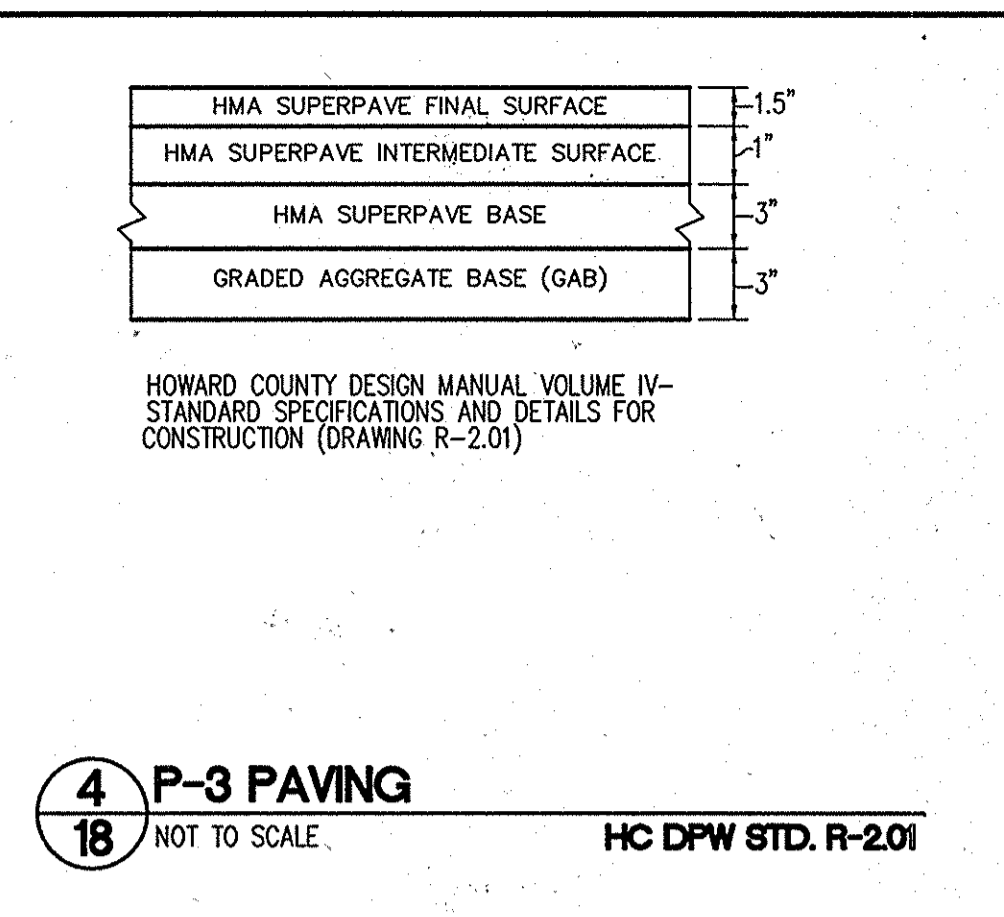
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18 CONCRETE WHEEL STOP
NOT TO SCALE



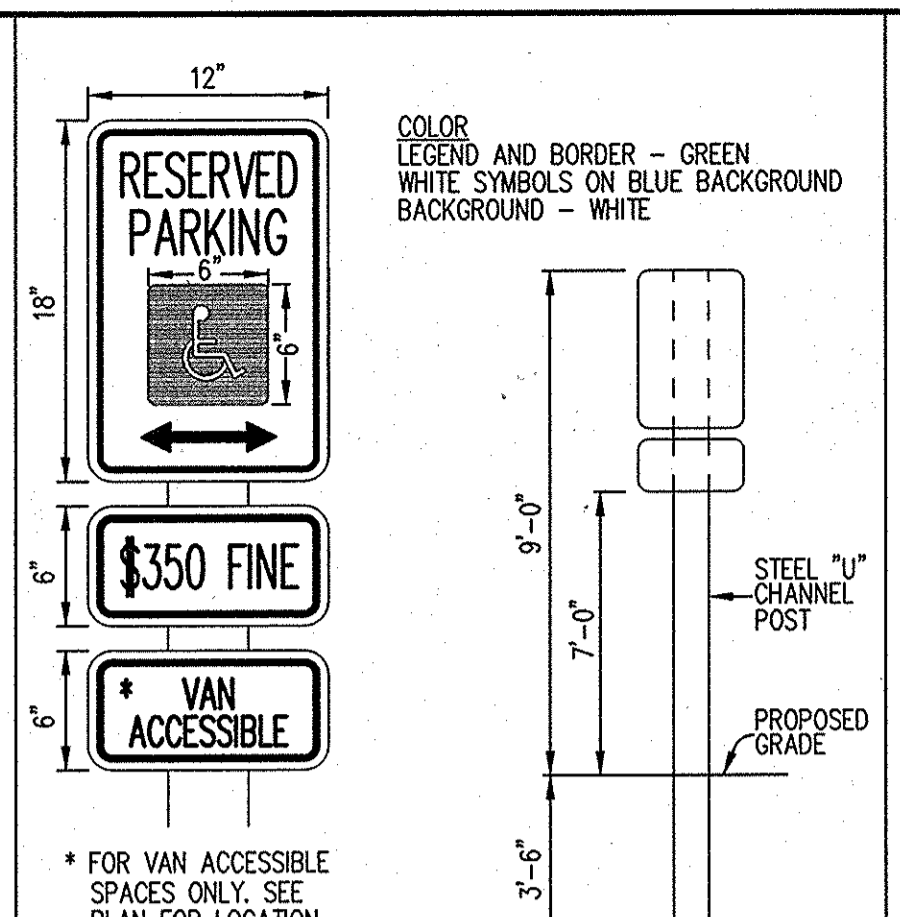
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18 NOSE DOWN CURB DETAIL
NOT TO SCALE
HC DPW STD. R-302



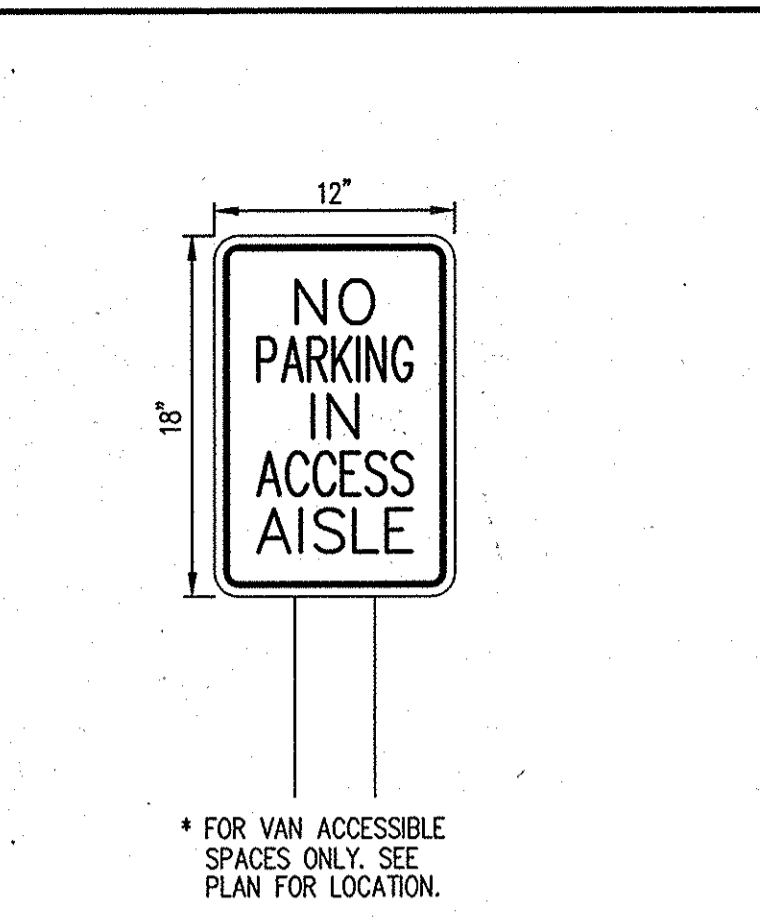
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18 SIDEWALK DETAIL
NOT TO SCALE
HC DPW STD. R-305



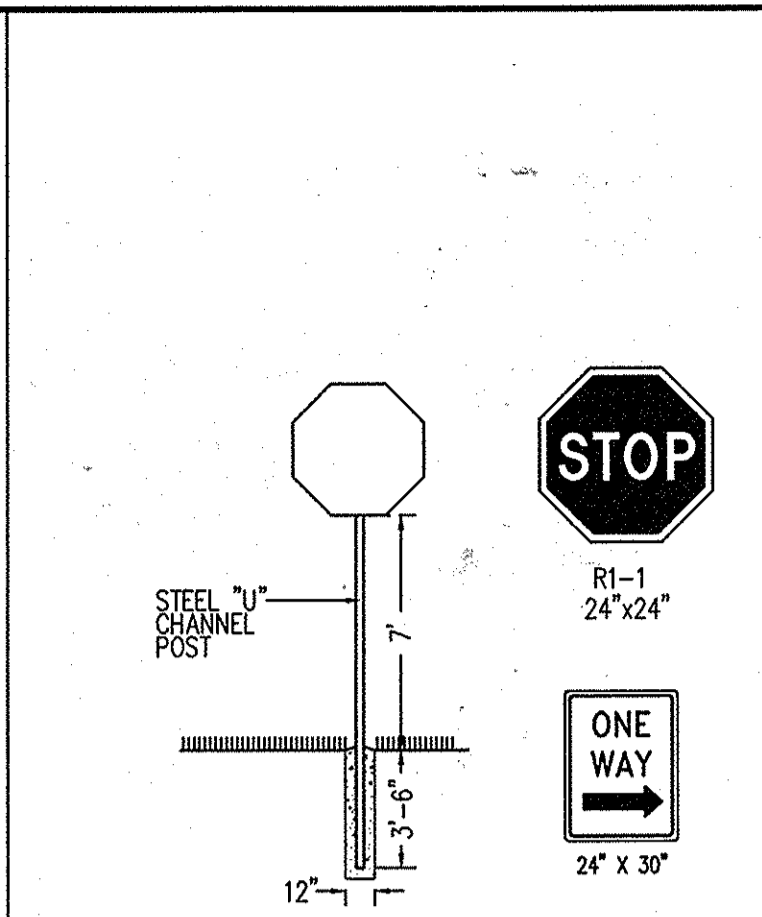
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18 P-3 PAVING
NOT TO SCALE
HC DPW STD. R-201



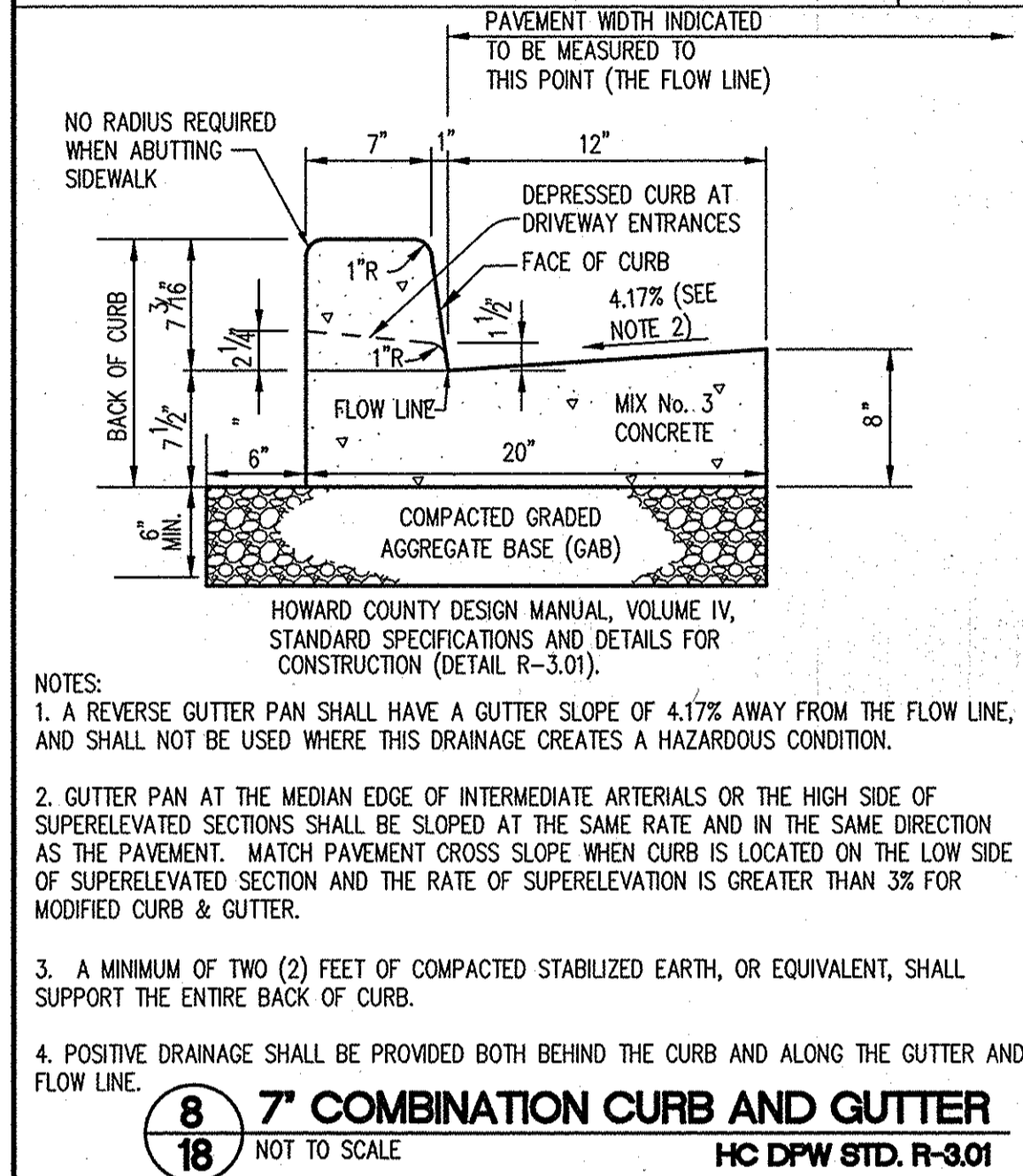
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18 HANDICAP SIGN DETAIL
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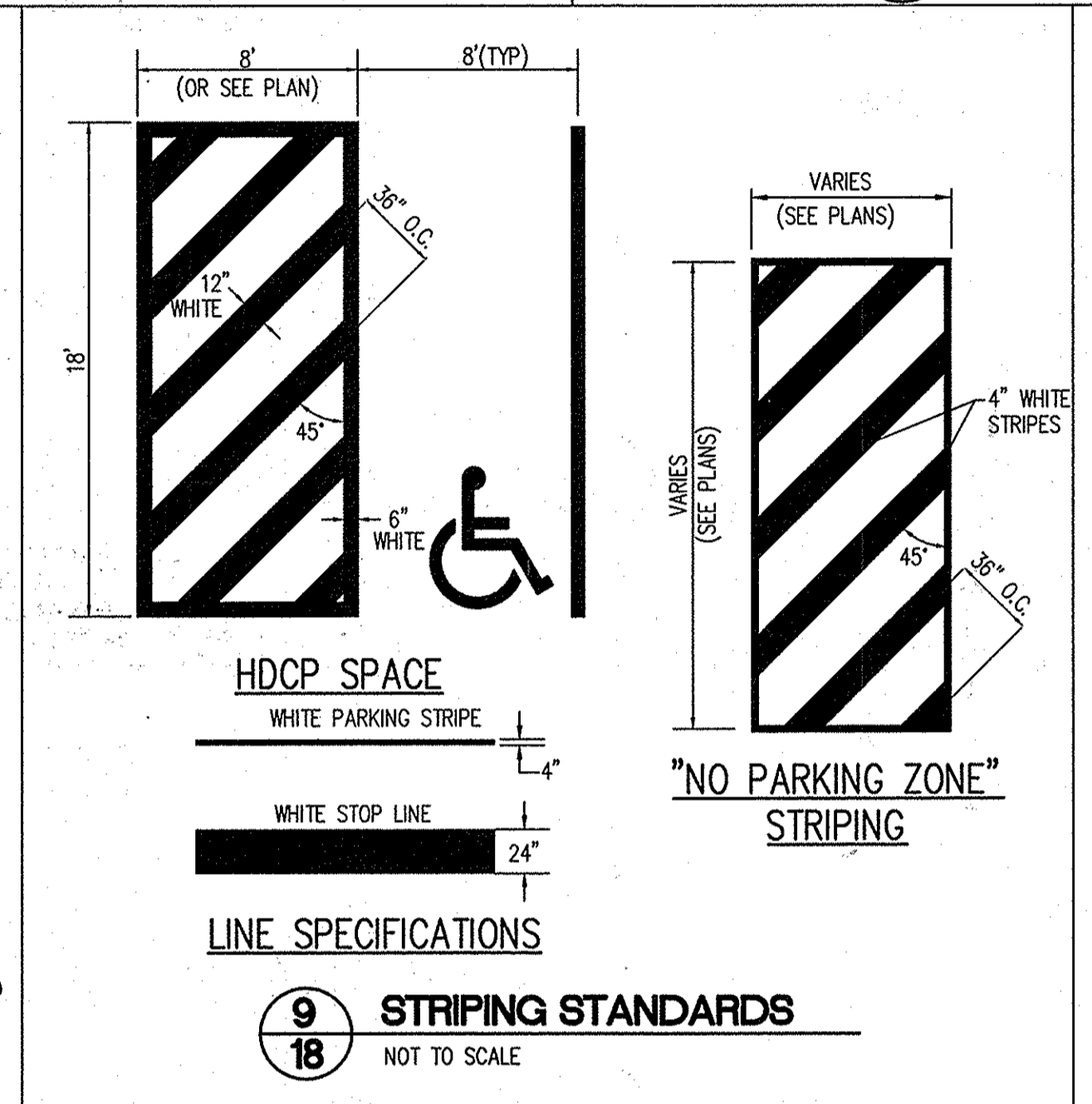
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18 ACCESS AISLE SIGN
NOT TO SCALE



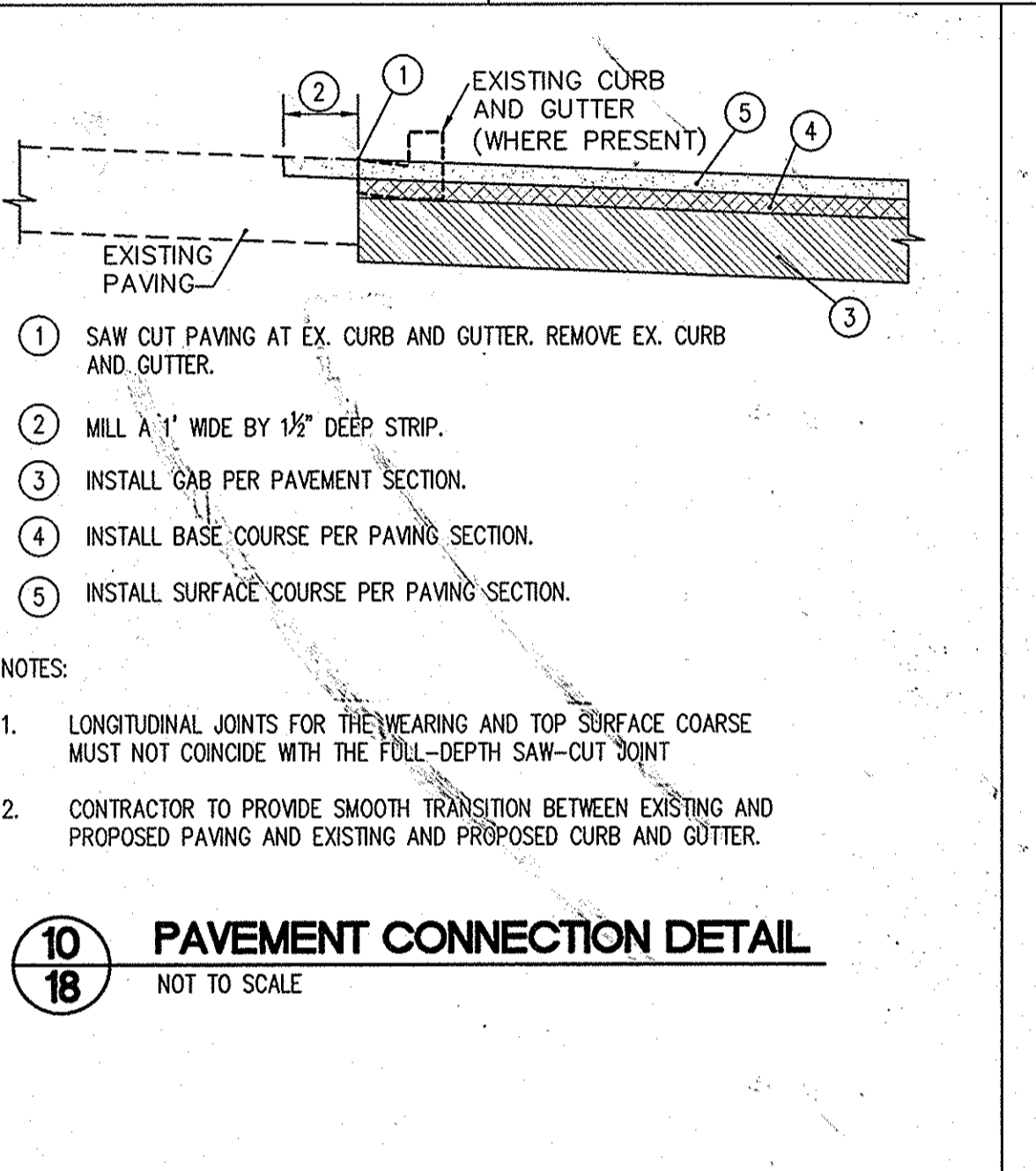
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18 SIGN DETAILS
NOT TO SCALE



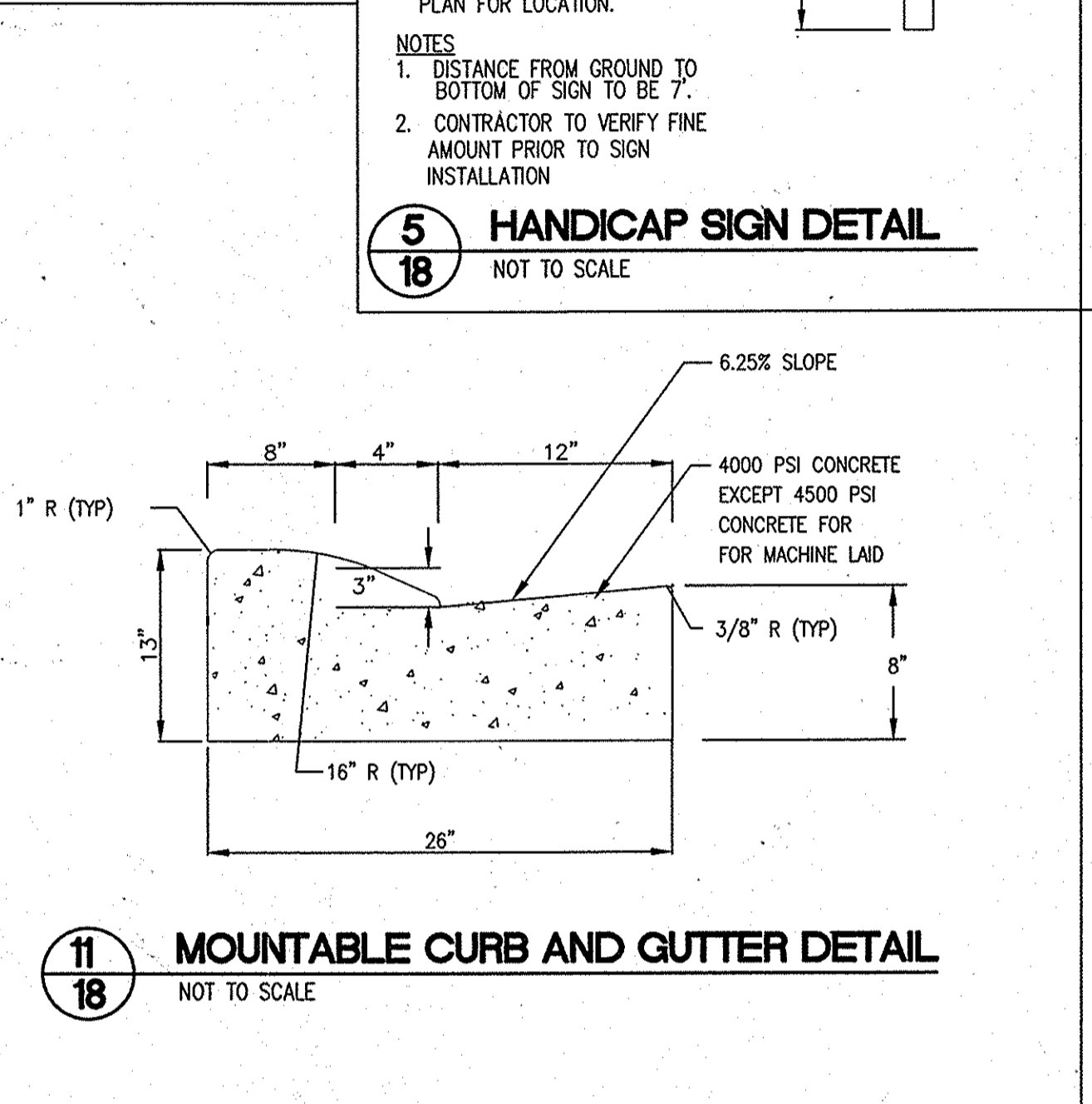
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18 7' COMBINATION CURB AND GUTTER
NOT TO SCALE
HC DPW STD. R-301



9
18 STRIPING STANDARDS
NOT TO SCALE

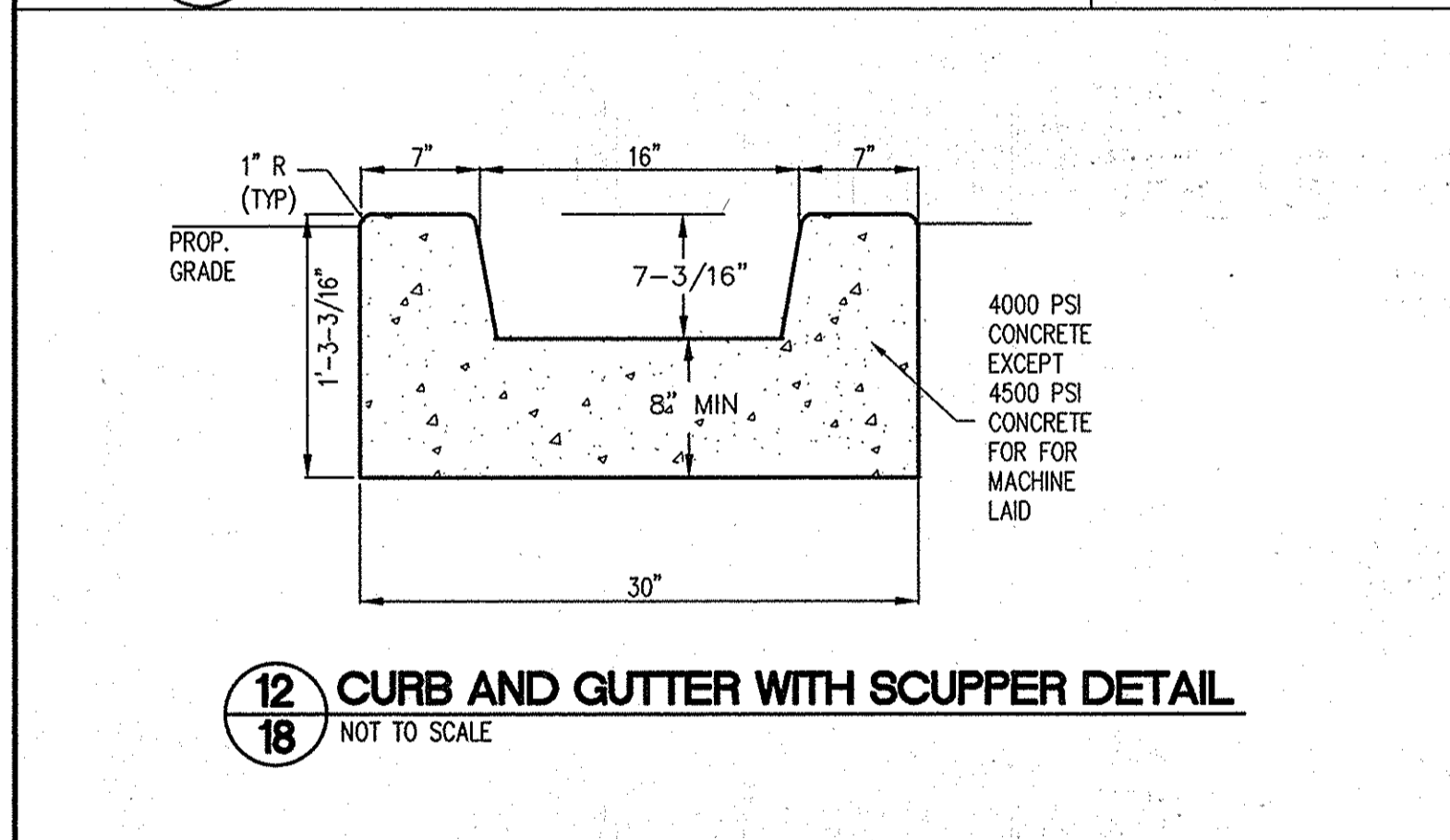


10
18 PAVEMENT CONNECTION DETAIL
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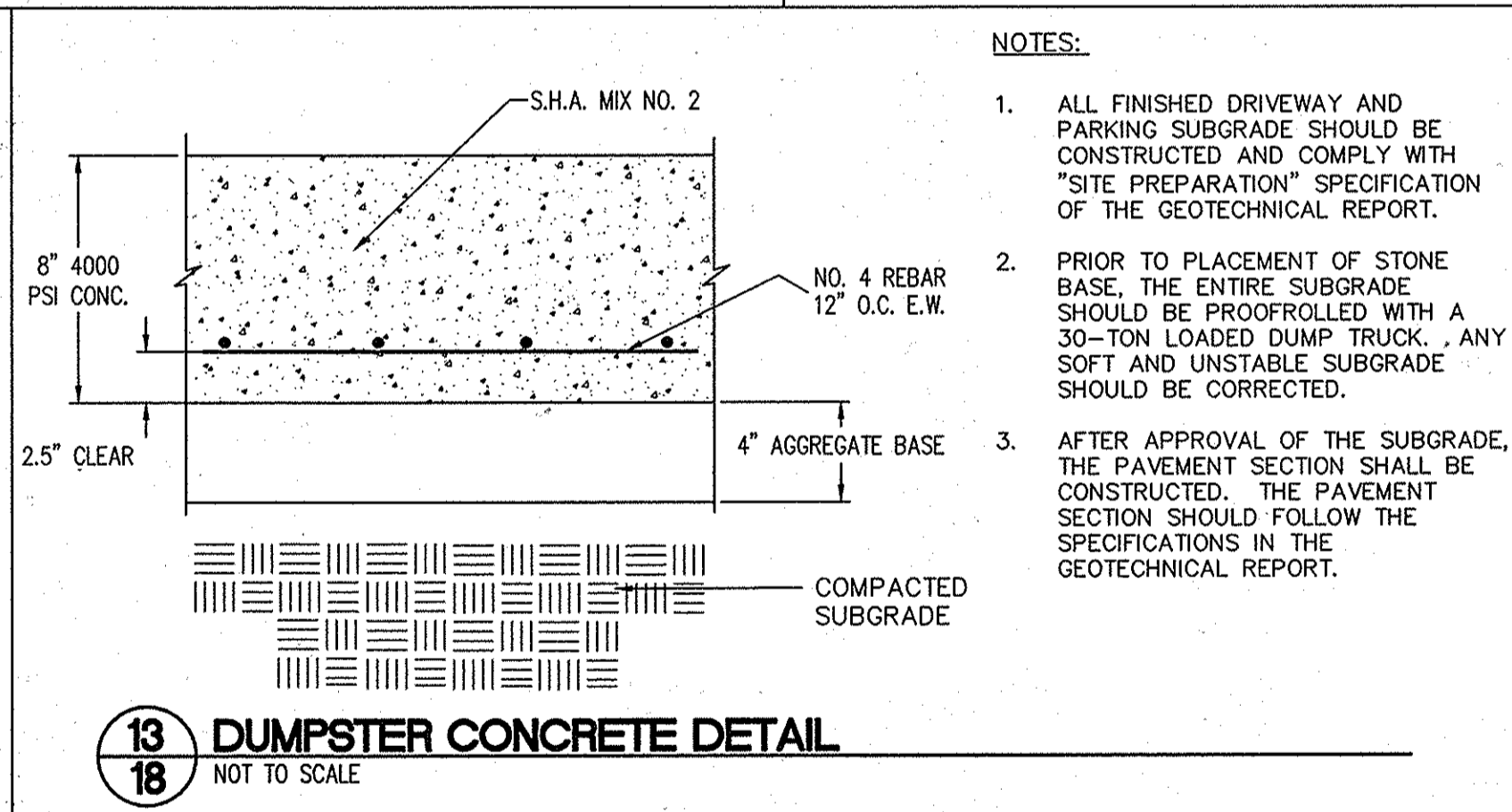


11
18 MOUNTABLE CURB AND GUTTER DETAIL
NOT TO SCALE

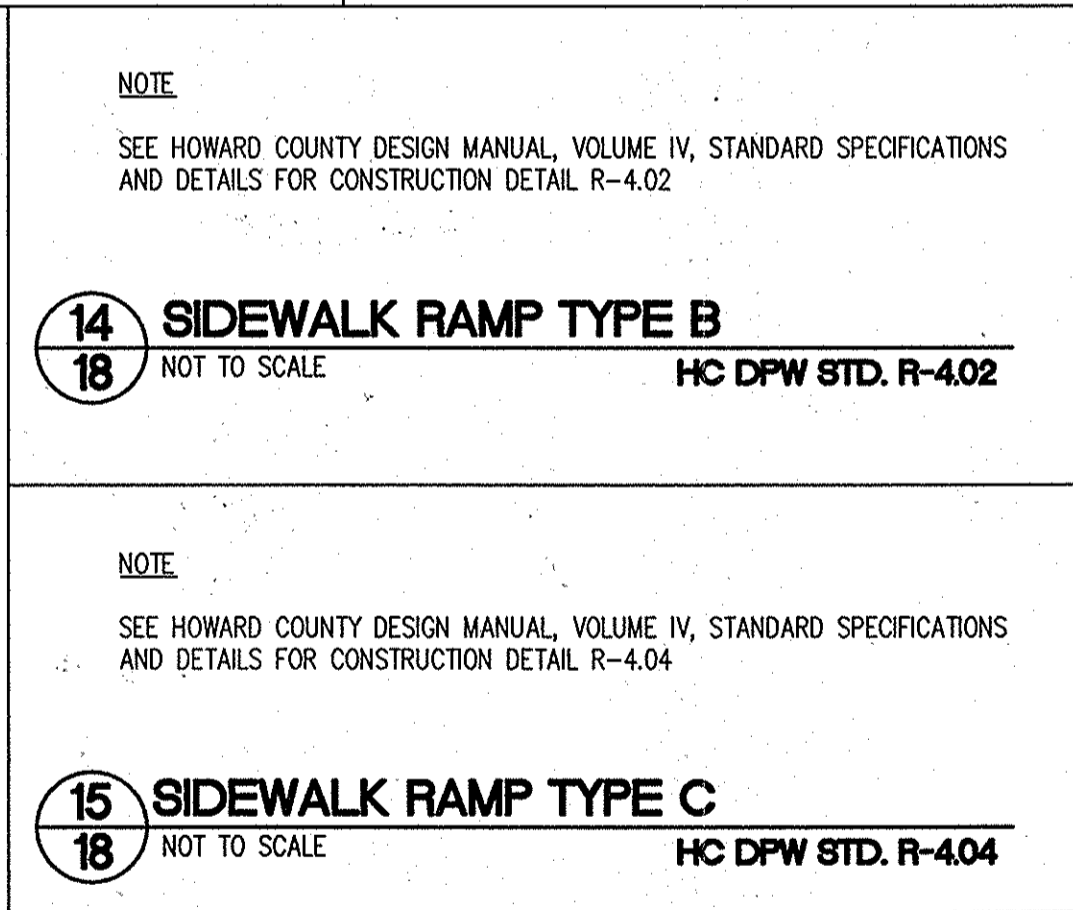
APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE: 12/6/12



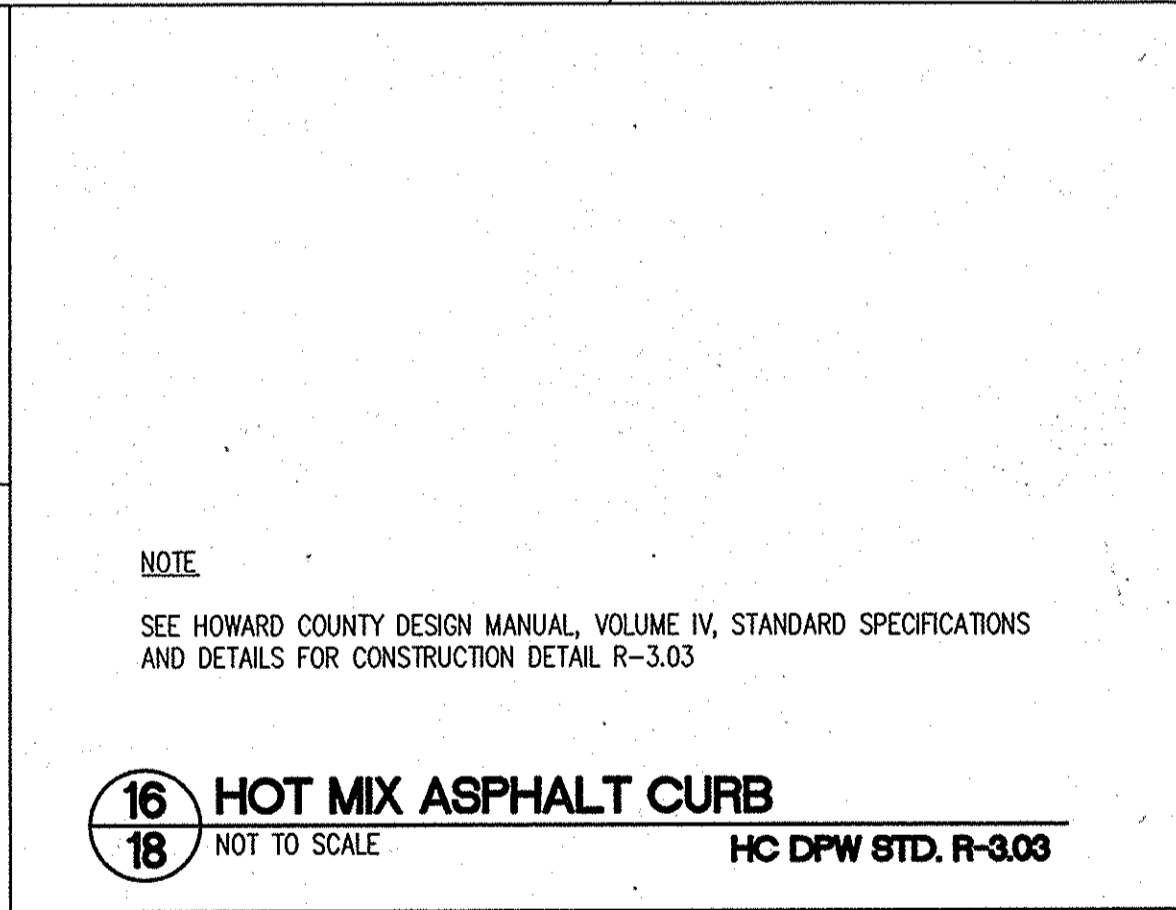
12
18 CURB AND GUTTER WITH SCUPPER DETAIL
NOT TO SCALE



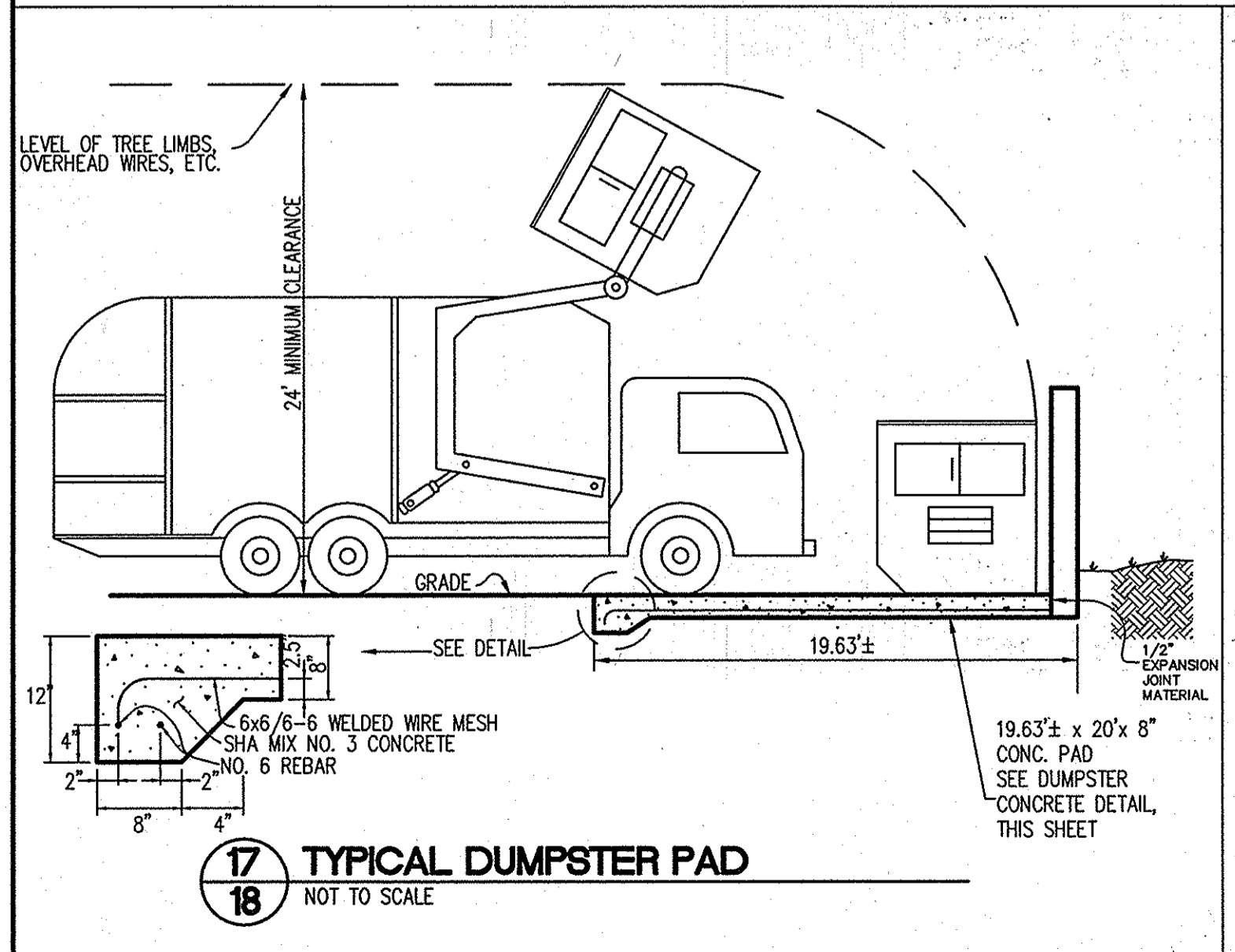
13
18 DUMPSTER CONCRETE DETAIL
NOT TO SCALE



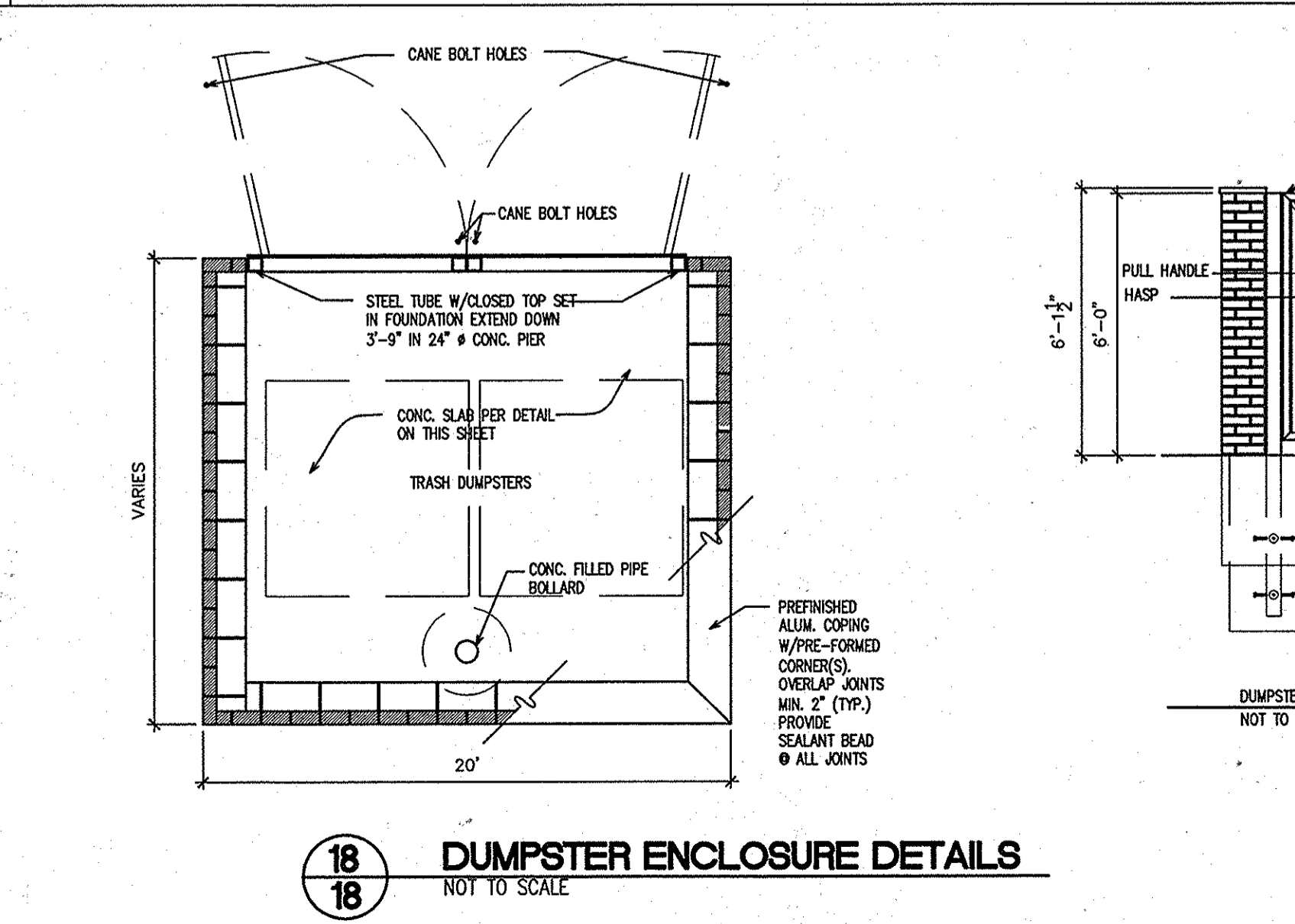
14
18 SIDEWALK RAMP TYPE B
NOT TO SCALE
HC DPW STD. R-402



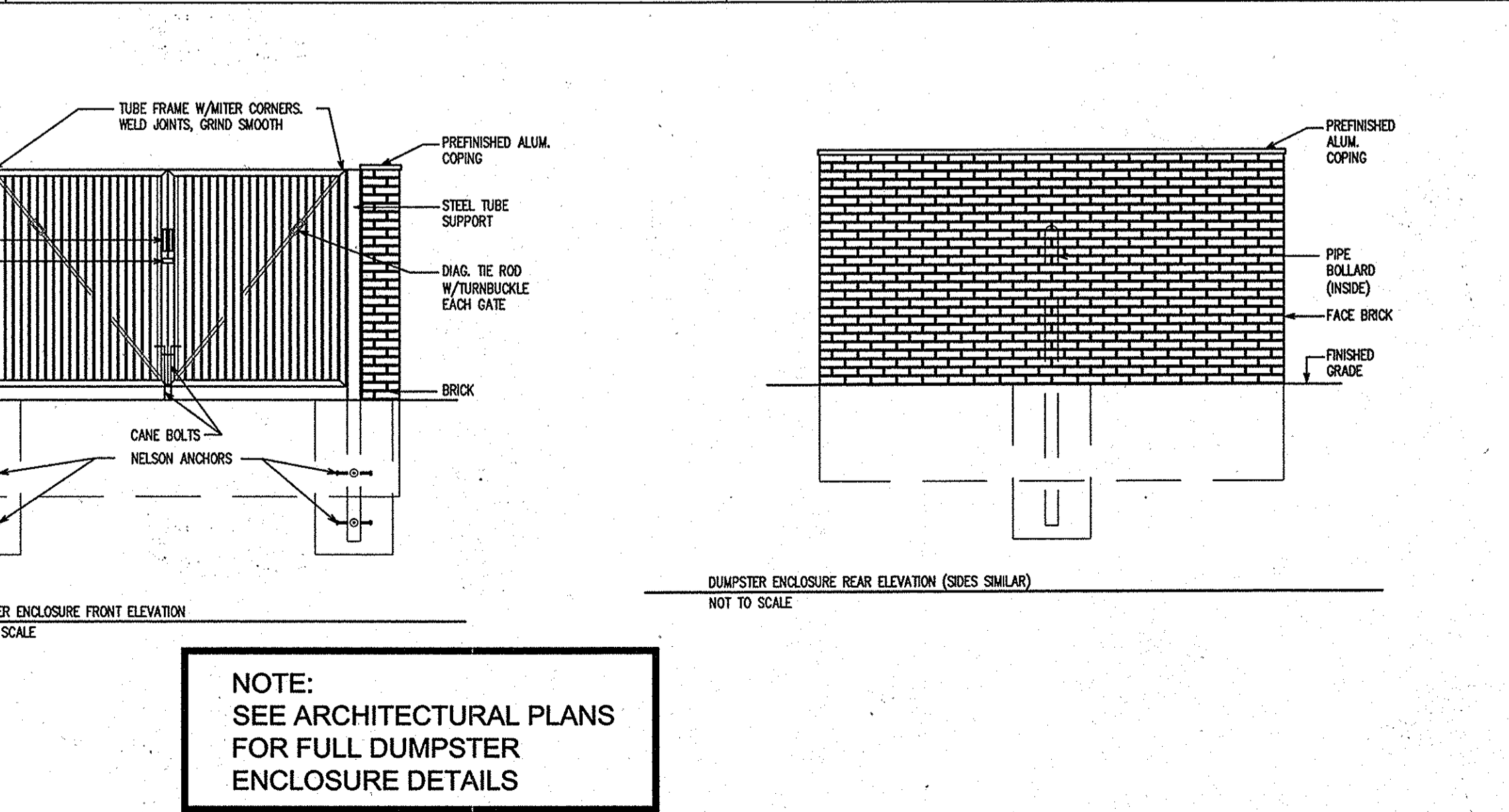
16
18 HOT MIX ASPHALT CURB
NOT TO SCALE
HC DPW STD. R-303



17
18 TYPICAL DUMPSTER PAD
NOT TO SCALE



18
18 DUMPSTER ENCLOSURE DETAILS
NOT TO SCALE



15
18 SIDEWALK RAMP TYPE C
NOT TO SCALE
HC DPW STD. R-404

NOTE:
SEE ARCHITECTURAL PLANS
FOR FULL DUMPSTER
ENCLOSURE DETAILS

APPROVED : DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION: 3/27/13
CHIEF, DIVISION OF LAND DEVELOPMENT: 4/02/13
DIRECTOR: 4/6/13

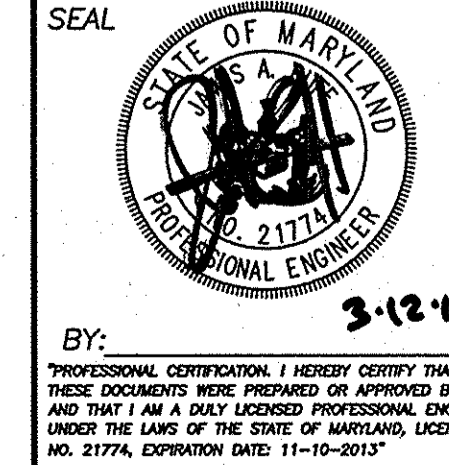
OWNER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

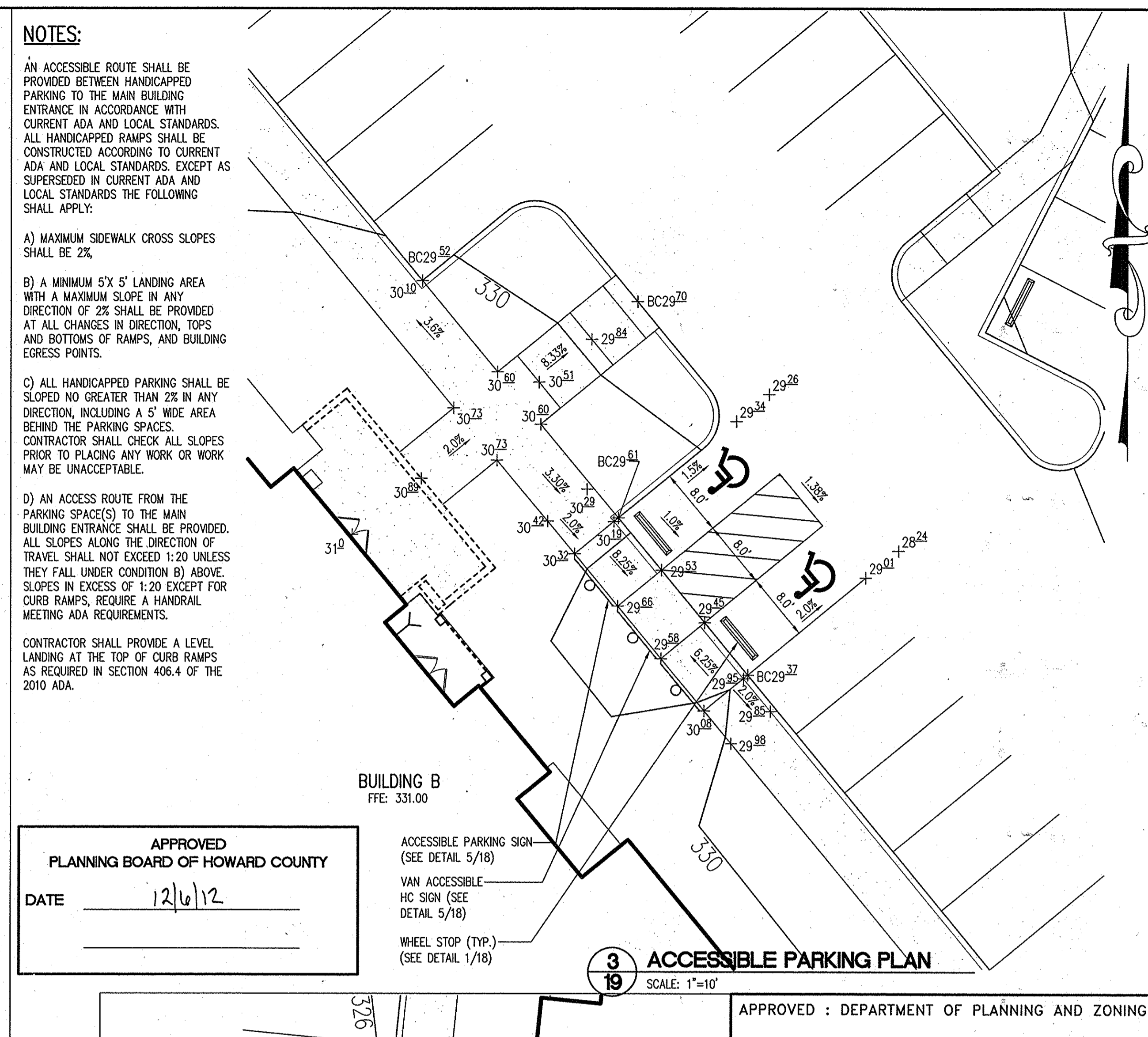
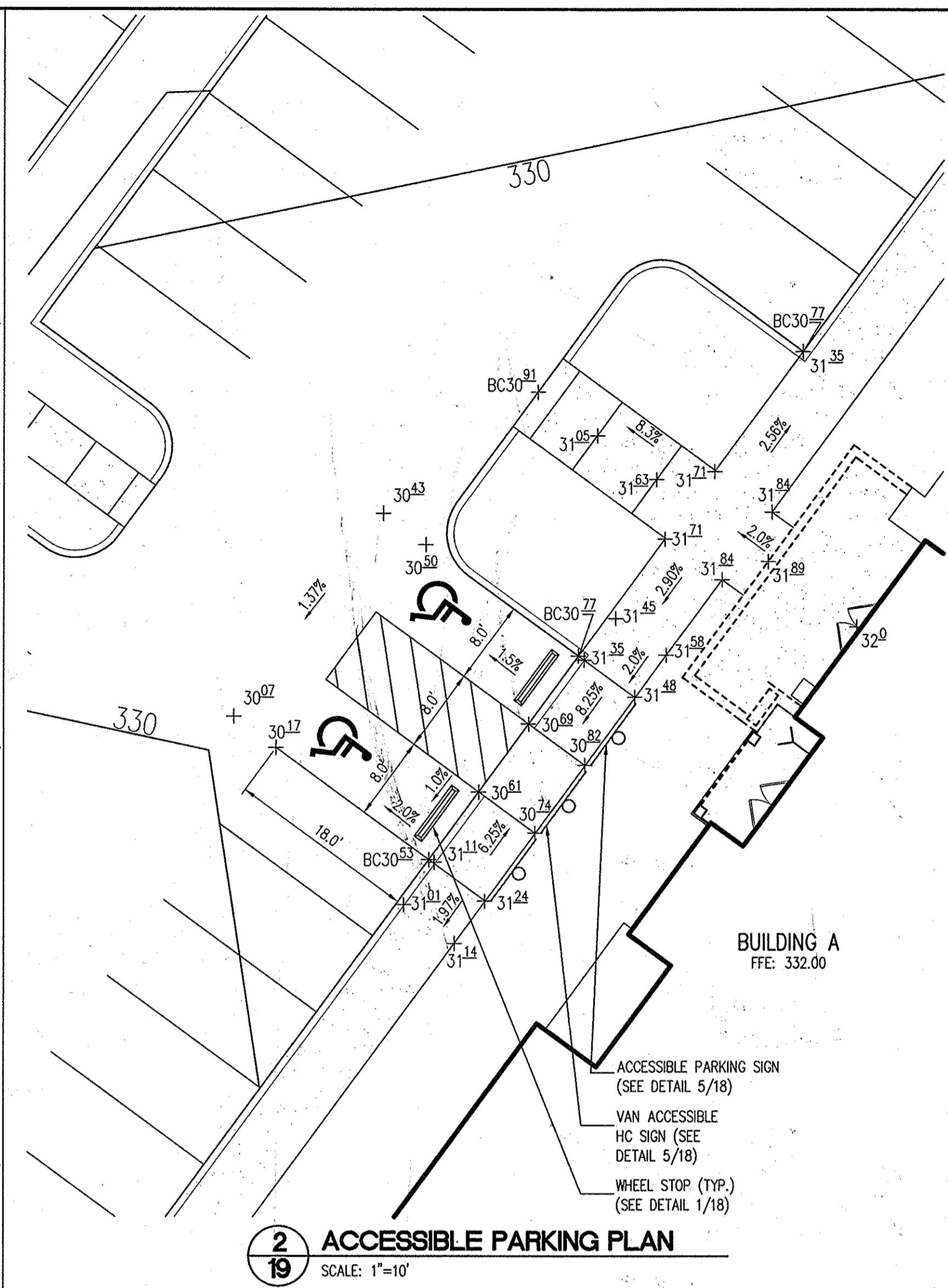
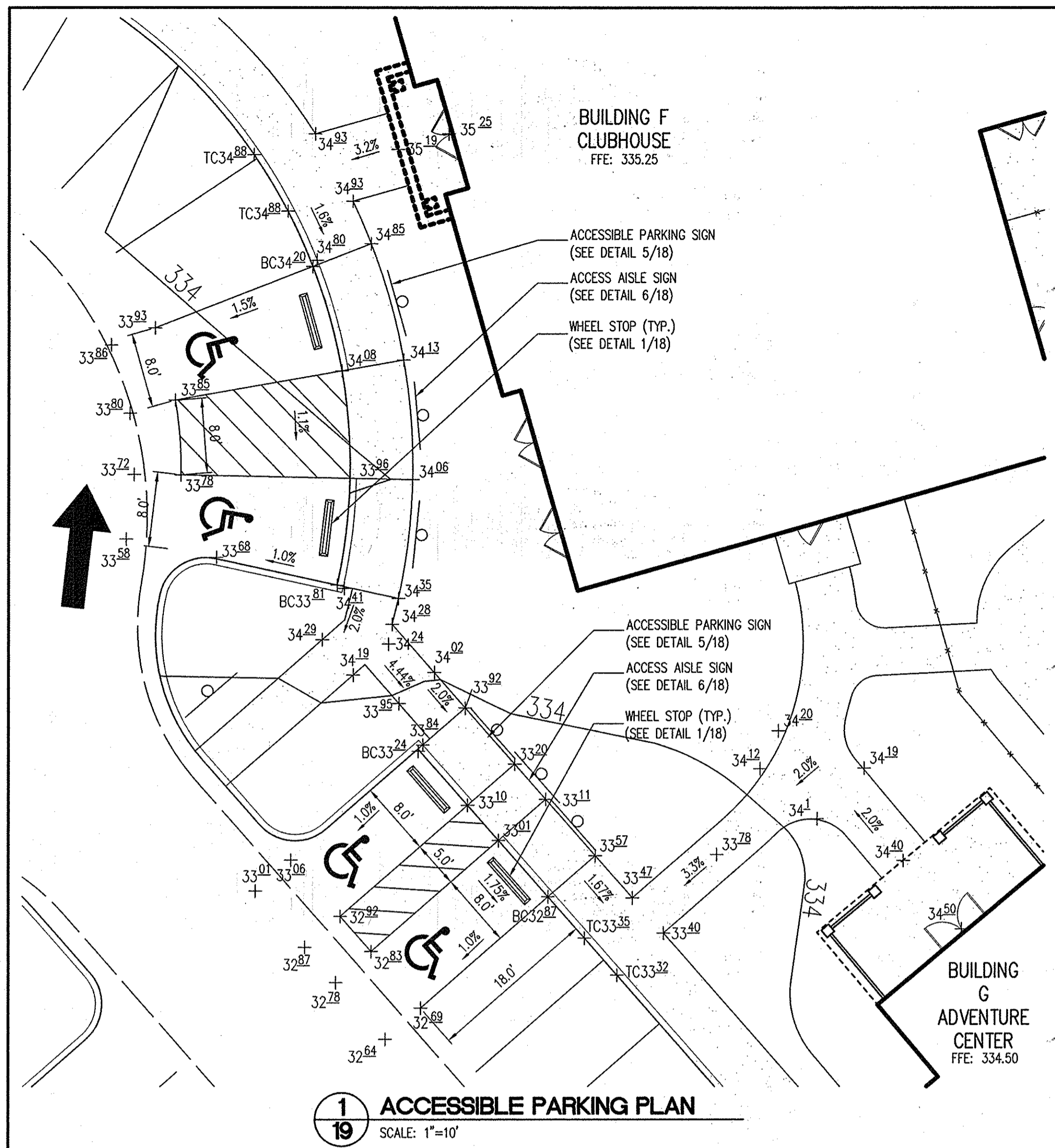
DEVELOPER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT: PARAGON AT GATEWAY
OVERLOOK -
BENSON EAST - PARCEL F

AREA: TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE: SITE DETAILS
Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 • Fax: 410-997-9282
DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: NOT TO SCALE
DRAWING NO. 18 OF 26



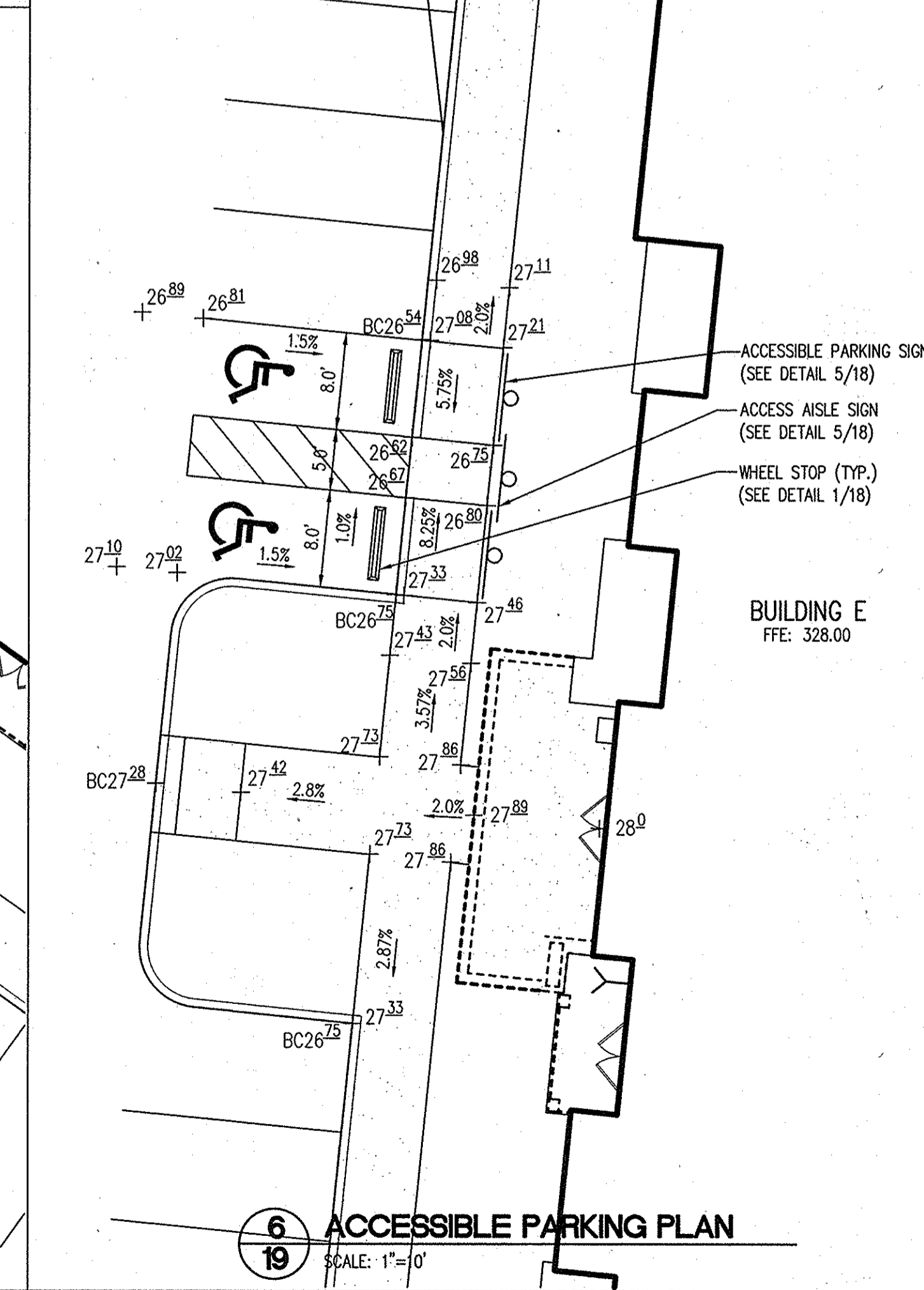
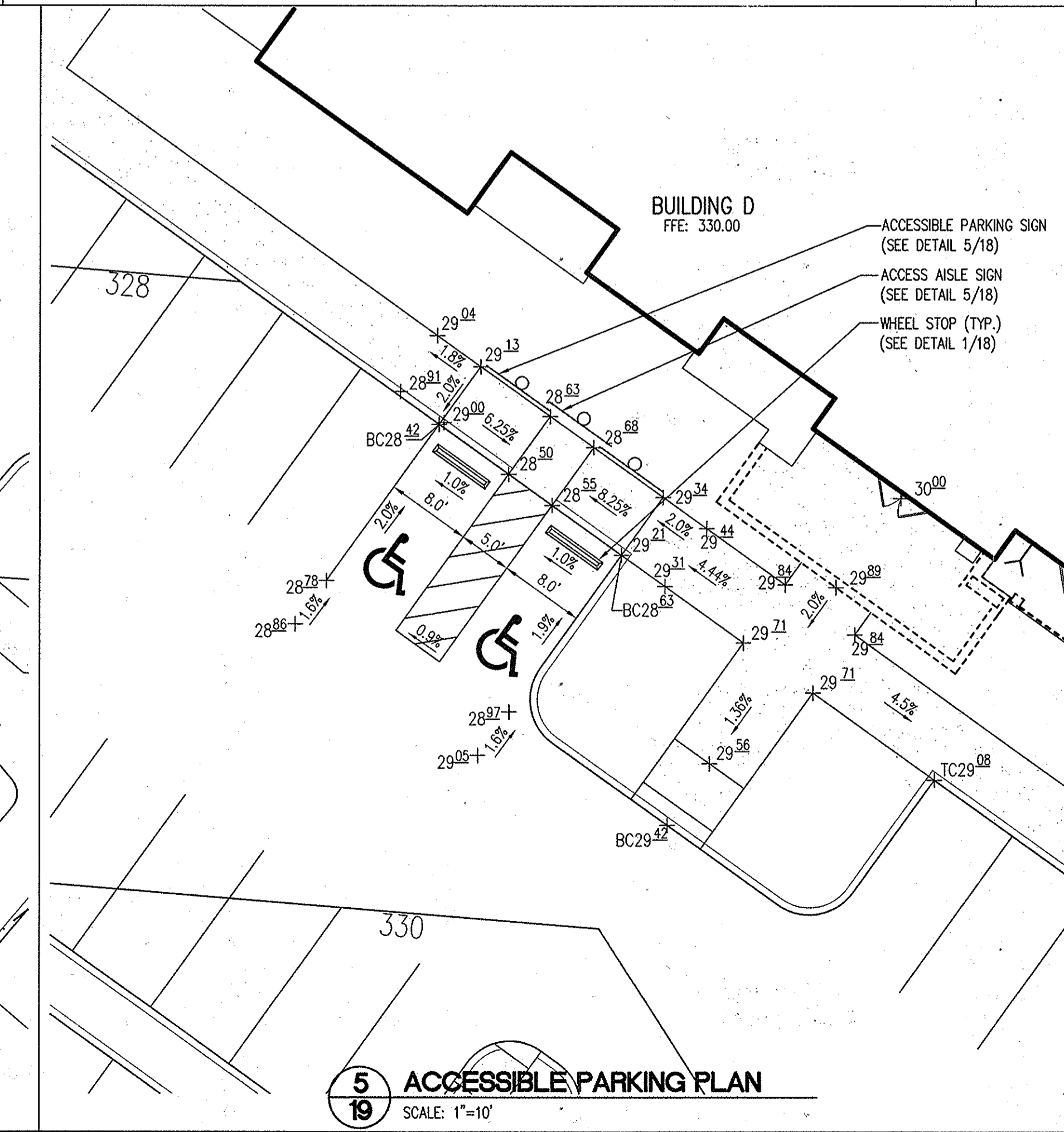
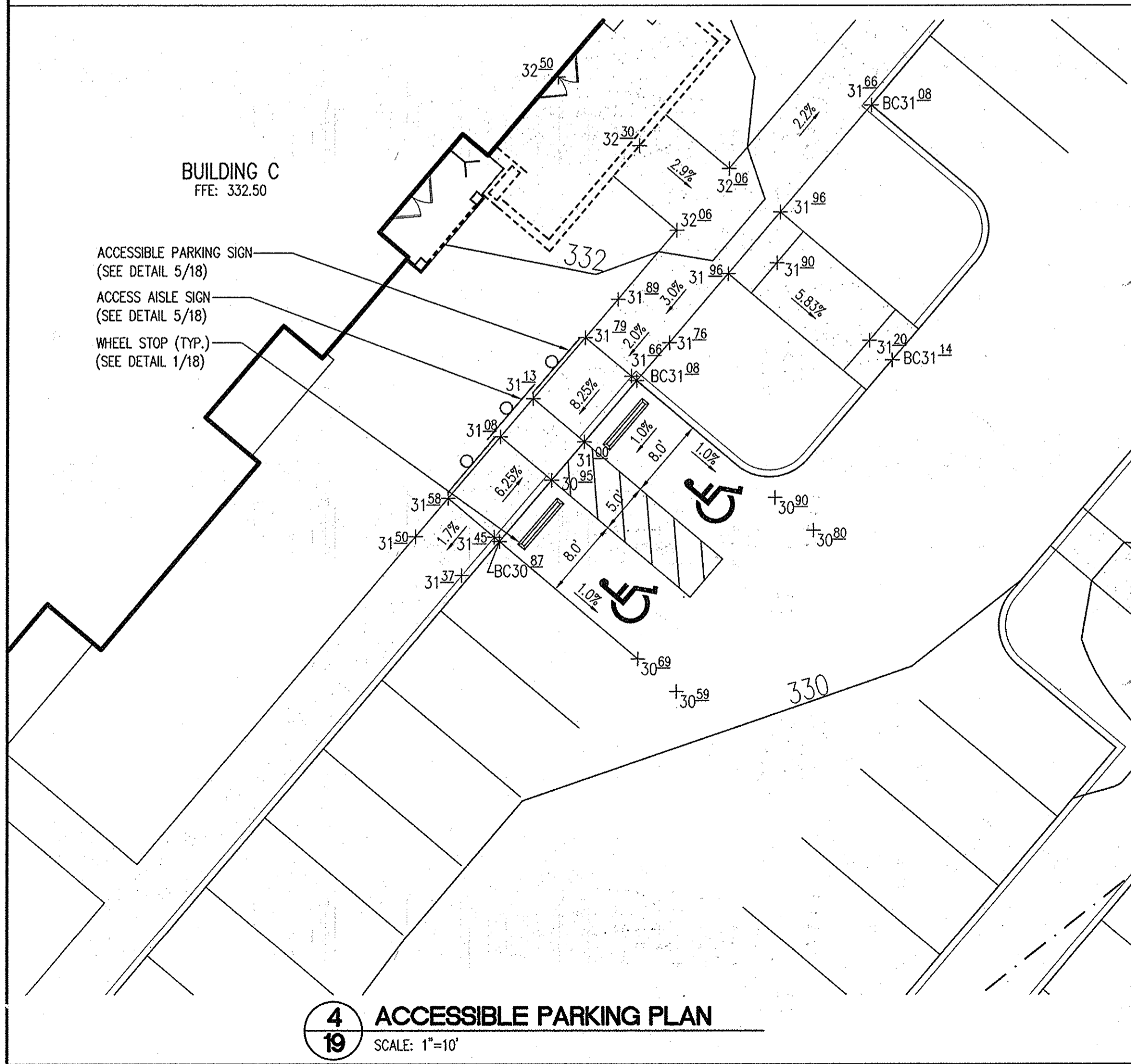


NOTES:

AN ACCESSIBLE ROUTE SHALL BE PROVIDED BETWEEN HANDICAPPED PARKING TO THE MAIN BUILDING ENTRANCE IN ACCORDANCE WITH CURRENT ADA AND LOCAL STANDARDS. ALL HANDICAPPED RAMPS SHALL BE CONSTRUCTED ACCORDING TO CURRENT ADA AND LOCAL STANDARDS, EXCEPT AS SUPERSEDED IN CURRENT ADA AND LOCAL STANDARDS THE FOLLOWING SHALL APPLY:

- A) MAXIMUM SIDEWALK CROSS SLOPES SHALL BE 2%.
 - B) A MINIMUM 5' X 5' LANDING AREA WITH A MAXIMUM SLOPE IN ANY DIRECTION OF 2% SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION, TOPS AND BOTTOMS OF RAMPS, AND BUILDING EGRESS POINTS.
 - C) ALL HANDICAPPED PARKING SHALL BE SLOPED NO GREATER THAN 2% IN ANY DIRECTION, INCLUDING A 5' WIDE AREA BEHIND THE PARKING SPACES. CONTRACTOR SHALL CHECK ALL SLOPES PRIOR TO PLACING ANY WORK OR WORK MAY BE UNACCEPTABLE.
 - D) AN ACCESS ROUTE FROM THE PARKING SPACE(S) TO THE MAIN BUILDING ENTRANCE SHALL BE PROVIDED. ALL SLOPES ALONG THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:20 UNLESS THEY FALL UNDER CONDITION B) ABOVE. SLOPES IN EXCESS OF 1:20 EXCEPT FOR CURB RAMPS, REQUIRE A HANDRAIL MEETING ADA REQUIREMENTS.
- CONTRACTOR SHALL PROVIDE A LEVEL LANDING AT THE TOP OF CURB RAMPS AS REQUIRED IN SECTION 406.4 OF THE 2010 ADA.

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/16/12



APPROVED : DEPARTMENT OF PLANNING AND ZONING

John P. ... 7/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kevin ... 8/12/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

David ... 8/12/13
DIRECTOR DATE

7/16/13	1	ADJUST BUILDING ENTRANCES
DATE	NO.	REVISION

OWNER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT: PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F

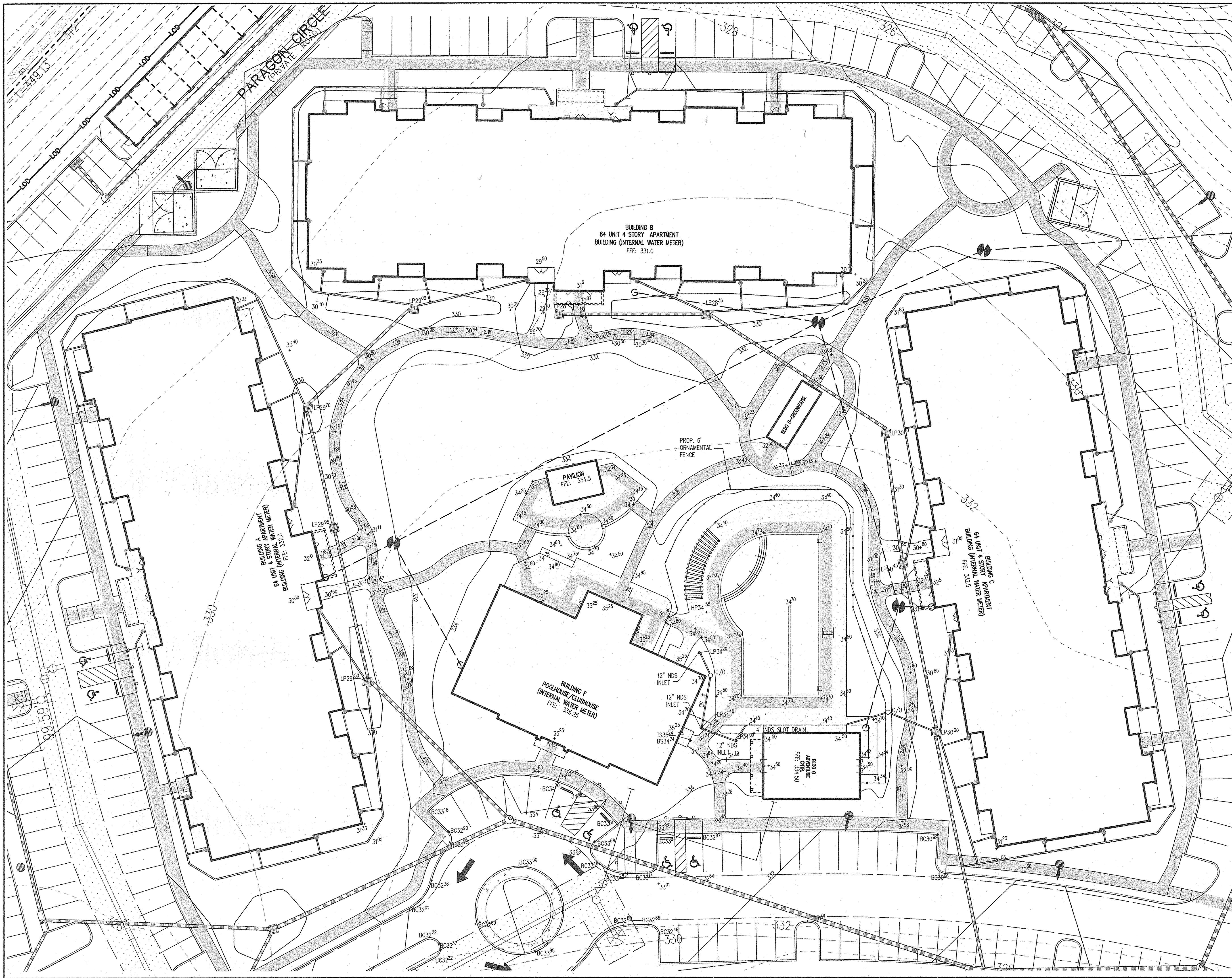
AREA: TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE: SITE DETAILS

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

SEAL: [Professional Engineer Seal]

DESIGNED BY: JSN
DRAWN BY: JSN
PROJECT NO.: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1"=10'
DRAWING NO. 19 OF 26



- LEGEND**
- PROPOSED BUILDING
 - PROPOSED LIGHT POLE
 - PROPOSED CURB & GUTTER
 - PROPOSED 2' CONTOUR
 - PROPOSED 10' CONTOUR
 - PROPOSED SPOT ELEVATION
 - PROPOSED CONCRETE SIDEWALK
 - PROPOSED CONCRETE DUMPSTER PAD
 - PROPOSED HANDICAP ACCESSIBLE ROUTE

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 12/6/12

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Walter M. Rossman 11/22/13
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Church 11-4-13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Neil Schulman 11-22-13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Manish K. Gupta 11/25/13
 DIRECTOR DATE

10/22/13	2	ADJUST BUILDING FOOTPRINTS AND FLIPPED BUILDING A
7/16/13	1	ADJUST POOL AREA
DATE	NO.	REVISION

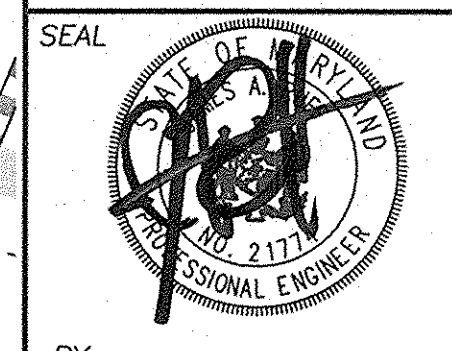
OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F**
 AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE
AMENITY AREA DETAIL PLAN

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 8818 Centine Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-9900 Fax: 410-997-9922



DESIGNED BY : PJS
 DRAWN BY: ALC
 PROJECT NO : CCPL1201
 DATE : MARCH 8, 2013
 SCALE : 1" = 20'
 DRAWING NO. 20 OF 26

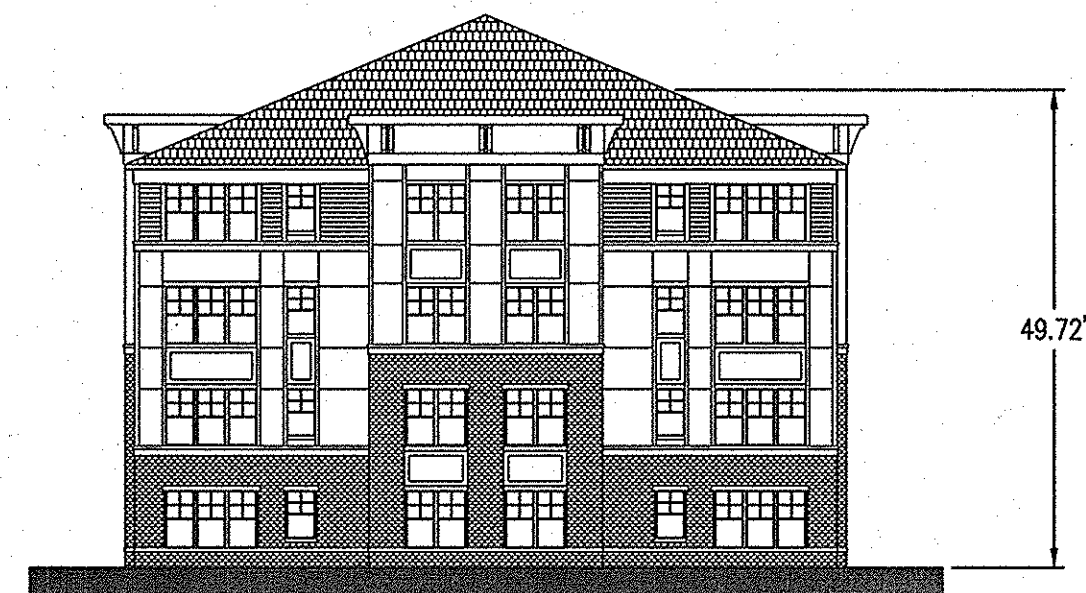
BY:
PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21774, EXPIRATION DATE: 11-10-2013



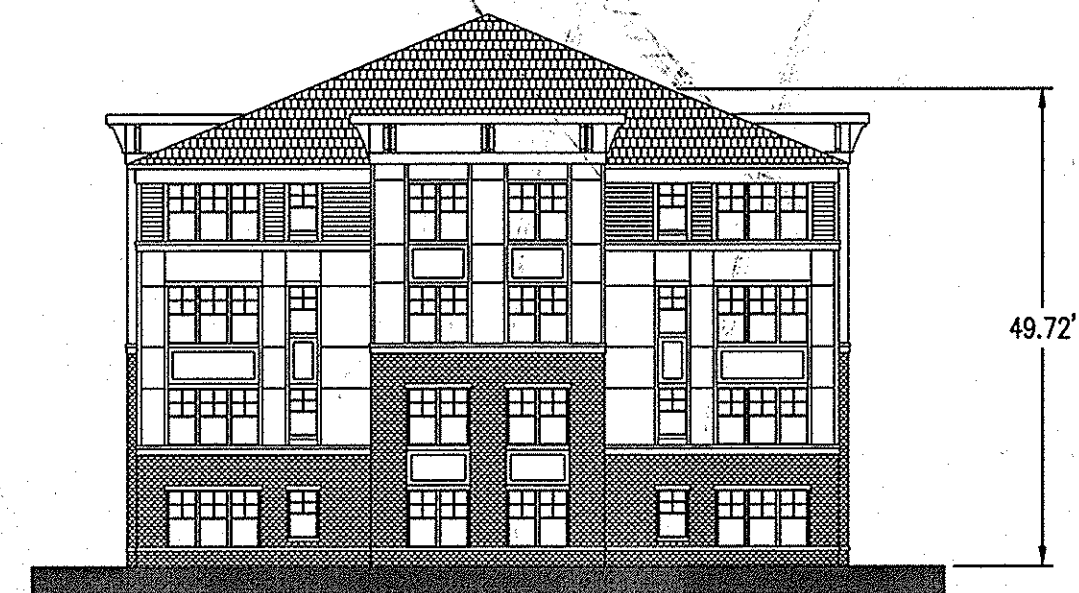
TYPICAL 4 STORY APARTMENT BUILDING ELEVATION - FRONT
SCALE: 1"=20'



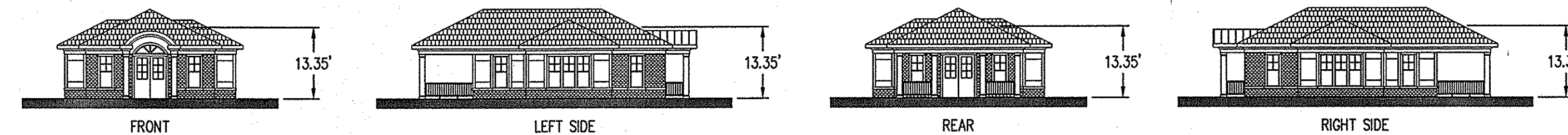
TYPICAL 4 STORY APARTMENT BUILDING ELEVATION - REAR
SCALE: 1"=20'



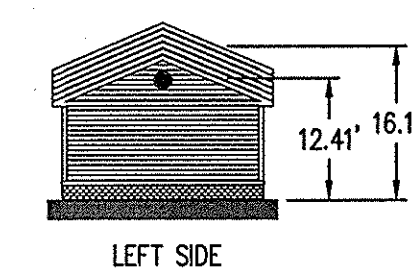
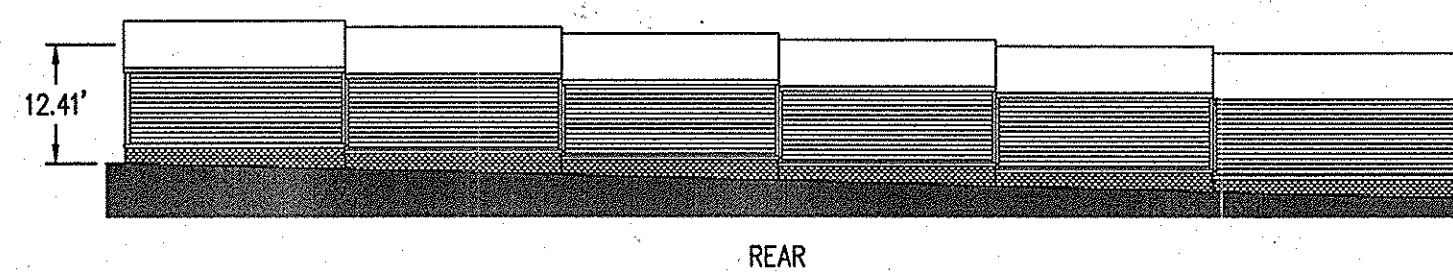
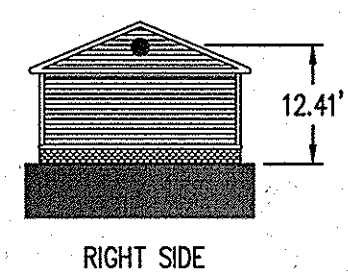
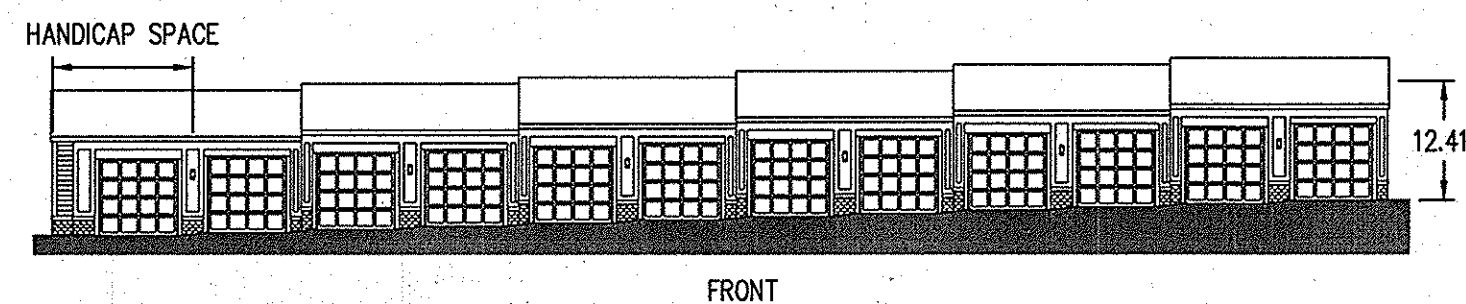
TYPICAL 4 STORY APARTMENT ELEVATION - RIGHT SIDE
SCALE: 1"=20'



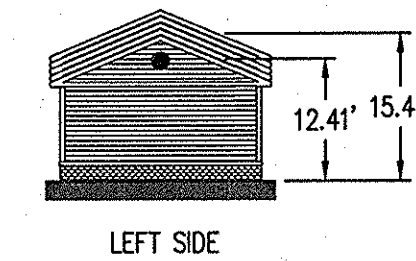
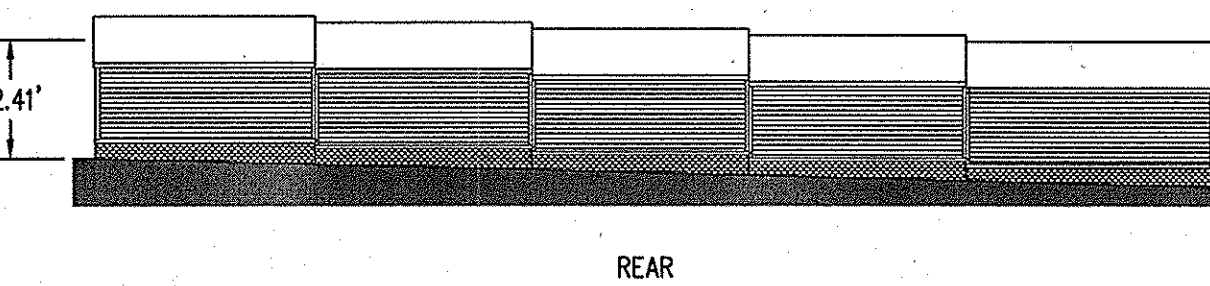
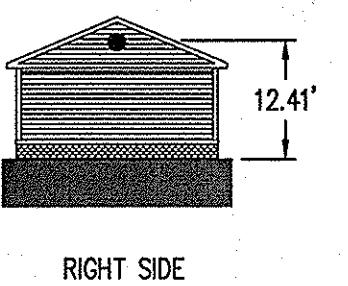
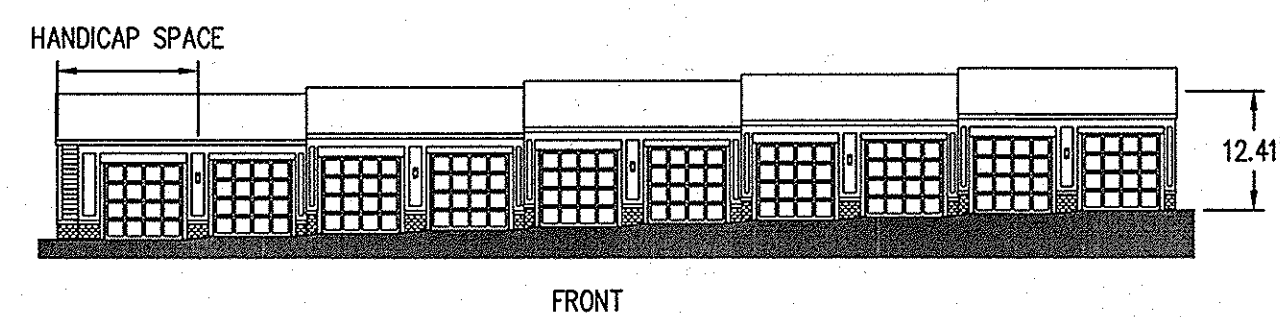
TYPICAL 4 STORY APARTMENT ELEVATION - LEFT SIDE
SCALE: 1"=20'



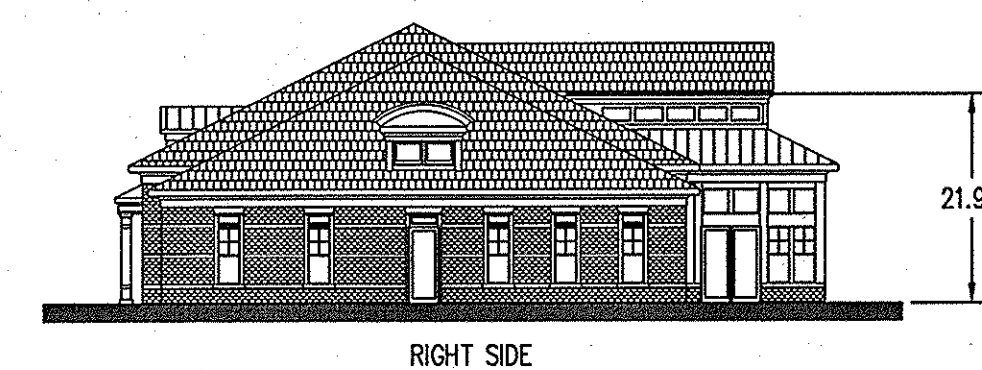
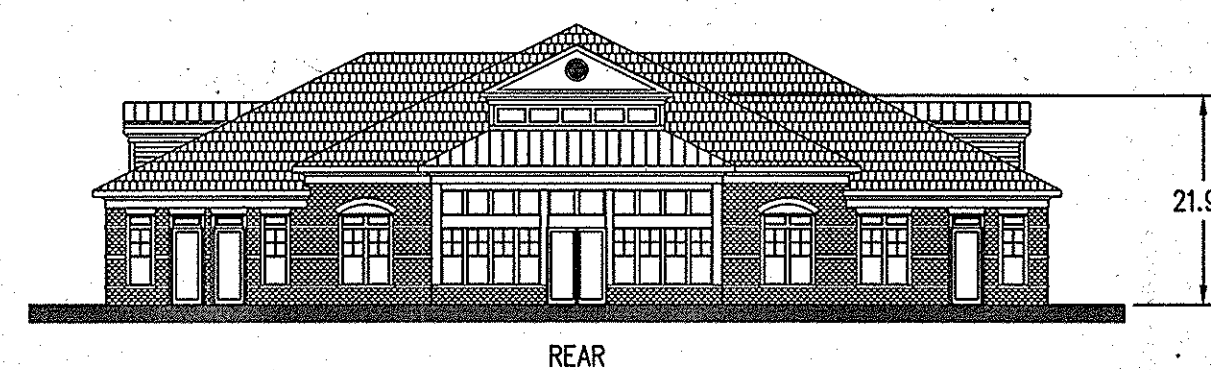
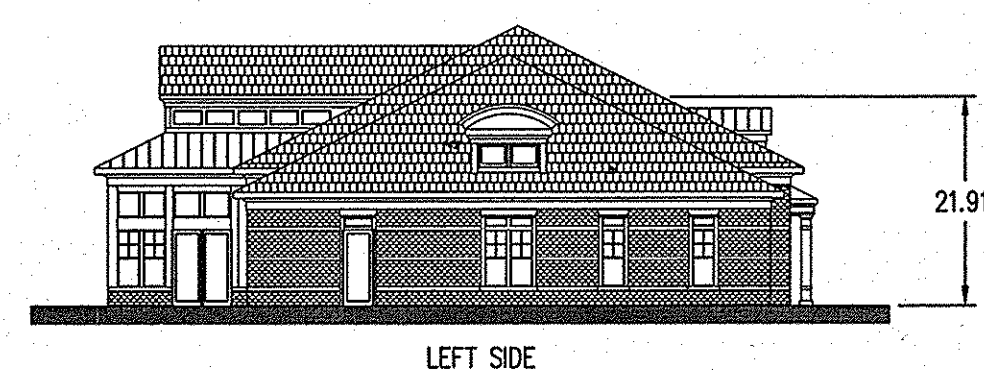
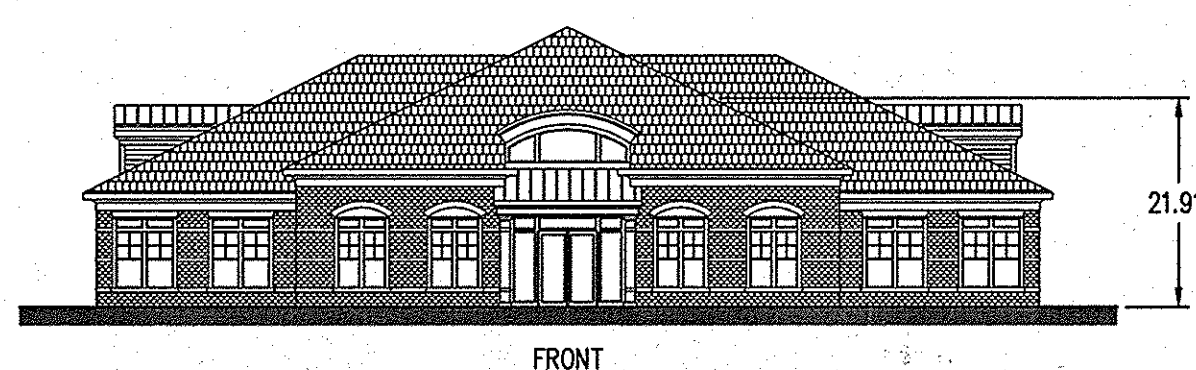
ADVENTURE CENTER ELEVATIONS
SCALE: 1"=20'



10 CAR GARAGE ELEVATIONS
SCALE: 1"=20'



12 CAR GARAGE ELEVATIONS
SCALE: 1"=20'



CLUBHOUSE ELEVATIONS
SCALE: 1"=20'

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING
Jonathan Mayers 3/27/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Jonathan Mayers 4/02/13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Jonathan Mayers 4/04/13
 DIRECTOR DATE

DATE NO. REVISION


OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

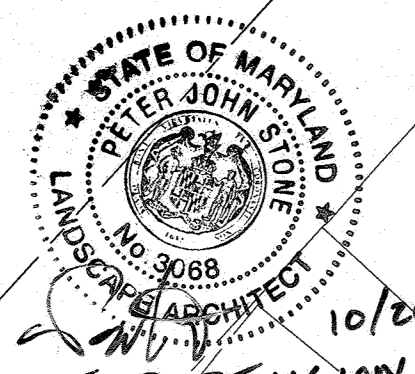
DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT PARAGON AT GATEWAY
 OVERLOOK -
 BENSON EAST - PARCEL F
 AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE
 ARCHITECTURAL ELEVATIONS

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-8900 Fax: 410-997-9282

SEAL

 DESIGNED BY : JSN
 DRAWN BY : JSN
 PROJECT NO : CCPL1201
 DATE : MARCH 8, 2013
 SCALE : 1" = 20'
 DRAWING NO. 21 OF 26



FOR REVISION #3 ONLY

10/26/13

LARK BROWN LLC
L. 04201 F. 00044
TAX MAP 37 PARCEL 611
LOT 3
ZONED: B-1
USE: COMMERCIAL
PLAT: 4667

8160 LARK BROWN LLC
L. 10538 F. 00316
TAX MAP 37 PARCEL 611
PARCEL A
ZONED: B-1
USE: COMMERCIAL
PLAT: 5439

10' PUBLIC TREE MAINTENANCE EASEMENT PLAT #17874

WRIT GATEWAY OVERLOOK LLC C/O WRIT
L. 12893 F. 00289
TAX MAP 37 PARCEL 382
PARCEL S ZONED: NT
USE: COMMERCIAL
PLAT: 18446

GATEWAY OVERLOOK III BUSINESS TRUST
L. 11610 F. 00432
TAX MAP 37 PARCEL 382
PARCEL E ZONED: NT
USE: COMMERCIAL
PLAT: 17874

WRIT GATEWAY OVERLOOK LLC
C/O WRIT
L. 12893 F. 00289
TAX MAP 37 PARCEL 382
PARCEL T ZONED: NT
USE: COMMERCIAL
PLAT: 18446

COSTCO WHOLESALE CORPORATION C/O PROP TAX
DEPARTMENT 1000
L. 10442 F. 00236
TAX MAP 37 PARCEL 382
PARCEL G
ZONED: NT
USE: COMMERCIAL
PLAT: 18605

20' PUBLIC WATER & UTILITY EASEMENT PLAT #17874

BOENDER AND KNECHT INC
L. 09652 F. 00734
TAX MAP 37 PARCEL 267
ZONED: B-1
USE: COMMERCIAL

PROP. C CHAINLINK FENCE

PROP. C CHAINLINK FENCE

PROP. C CHAINLINK FENCE

ROBINSON JEFFERSON DRIVE (PRIVATE ROAD)

MARIE CURE DRIVE (PRIVATE ROAD)

LARK BROWN ROAD (EX. P.W. VARIES)

PARAGON CIRCLE

BUILDING B
64 UNIT 4 STORY APARTMENT
BUILDING (INTERNAL WATER METER)
FFE: 331.0

BUILDING F
POOLHOUSE/CLUBHOUSE
(INTERNAL WATER METER)
FFE: 330.25

BUILDING C
64 UNIT 4 STORY APARTMENT
BUILDING (INTERNAL WATER METER)
FFE: 323.5

BUILDING D
64 UNIT 4 STORY APARTMENT
BUILDING (INTERNAL WATER METER)
FFE: 323.5

10/26/13 3 ADD FENCE

LEGEND	
	PROPOSED SHADE TREE
	PROPOSED ORNAMENTAL TREE
	PROPOSED EVERGREEN TREE
	PROPOSED SHRUBS
	CREDITED LANDSCAPE ISLAND
	EXISTING STREET TREE PER F-05-058

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

County Health Officer: *Baldwin Moore-Rosen* DATE 11/22/10

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: *Chad Edmund* DATE 11.4.13

Chief, Division of Land Development: *Walt S. Smith* DATE 11-22-13

Director: *Joseph A. Long* DATE 11/25/10

10/22/13 2	UPDATE APARTMENT, CLUBHOUSE AND ADVENTURE CENTER FOOTPRINTS
7/16/13 1	ADJUST LANDSCAPING FOR BLDG ENT, POOL, AND GARAGES
DATE NO.	REVISION

OWNER: COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP. LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F

AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE LANDSCAPE PLAN

Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO. 22 OF 26

10.2.13
By: PETER J. STONE #3068

SDP-13-002



- LEGEND**
- PROPOSED SHADE TREE
 - PROPOSED ORNAMENTAL TREE
 - PROPOSED EVERGREEN TREE
 - PROPOSED SHRUBS
 - CREDITED LANDSCAPE ISLAND

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

<i>Chad Edwards</i>	CHIEF, DEVELOPMENT ENGINEERING DIVISION	11-4-13	DATE
<i>Kurt Schuman</i>	CHIEF, DIVISION OF LAND DEVELOPMENT	11-22-13	DATE
<i>Mark Boyce</i>	DIRECTOR	11-27-13	DATE
10/22/13 2	UPDATE APARTMENT, CLUBHOUSE AND ADVENTURE CENTER FOOTPRINTS		
7/16/13 1	ADJUST LANDSCAPING FOR BLDG ENT, POOL, AND GARAGES		
DATE NO.	REVISION		

OWNER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER
 COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK**
BENSON EAST - PARCEL F
 AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT - PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE
LANDSCAPE PLAN

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 A Pennoni Company 2818 Centre Park Drive, Suite 200, Columbia, MD 21045
 Tel: 410-997-8900 Fax: 410-997-9282

SEAL

 DESIGNED BY : PJS
 DRAWN BY : ALC
 PROJECT NO : CCPL1201
 DATE : MARCH 8, 2013
 SCALE : 1" = 40'
 DRAWING NO. 23 OF 26

MATCHLINE - SEE SHEET 22

BOSTON WHOLESALE CORPORATION C/O PROPR TAX DEPARTMENT 1000 L 10442 E 00236 TAX MAP 37 PARCEL 382 PARCEL G ZONED: NT USE: COMMERCIAL PLAT: 18605

PRIVATE RETAINING WALL MAINTENANCE EASEMENT PLAT #19449

FRANK E. RHODES AND WIFE
 L. 00386 F. 00301
 TAX MAP 37 PARCEL 487
 ZONED: M-1
 USE: COMMERCIAL

WRIT GATEWAY OVERLOOK LLC C/O WRIT
 L. 12893 F. 00289
 TAX MAP 37 PARCEL 382
 PARCEL Q
 ZONED: NT
 USE: SWM
 PLAT: 19449

EX. SWM FACILITY
 (SDP-04-163)

SCHEDULE A - PERIMETER LANDSCAPE EDGE				
PERIMETER	ADJACENT TO PERIMETER PROPERTIES		ADJACENT TO ROADWAYS	
	1	4	2	3
LANDSCAPE TYPE	C	A	E	B
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	183±	913±	608±	425±
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO
CREDIT FOR WALL, FENCE, BERM OR DRIVE AISLE (YES/NO/LINEAR FEET)	NO	NO	NO	NO
LINEAR FEET REMAINING	183'	913'	608'	425'
NUMBER OF PLANTS REQUIRED				
SHADE TREES	5	15	15	9
EVERGREEN TREES	9	0	0	11
SHRUBS	0	0	152	0
NUMBER OF PLANTS PROVIDED				
SHADE TREES	5	15	15	9
EVERGREEN TREES	9	0	0	11
SMALL FLOWERING TREES	0	0	0	0
SHRUBS	0	0	152	0

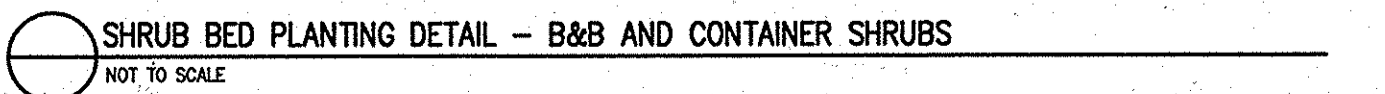
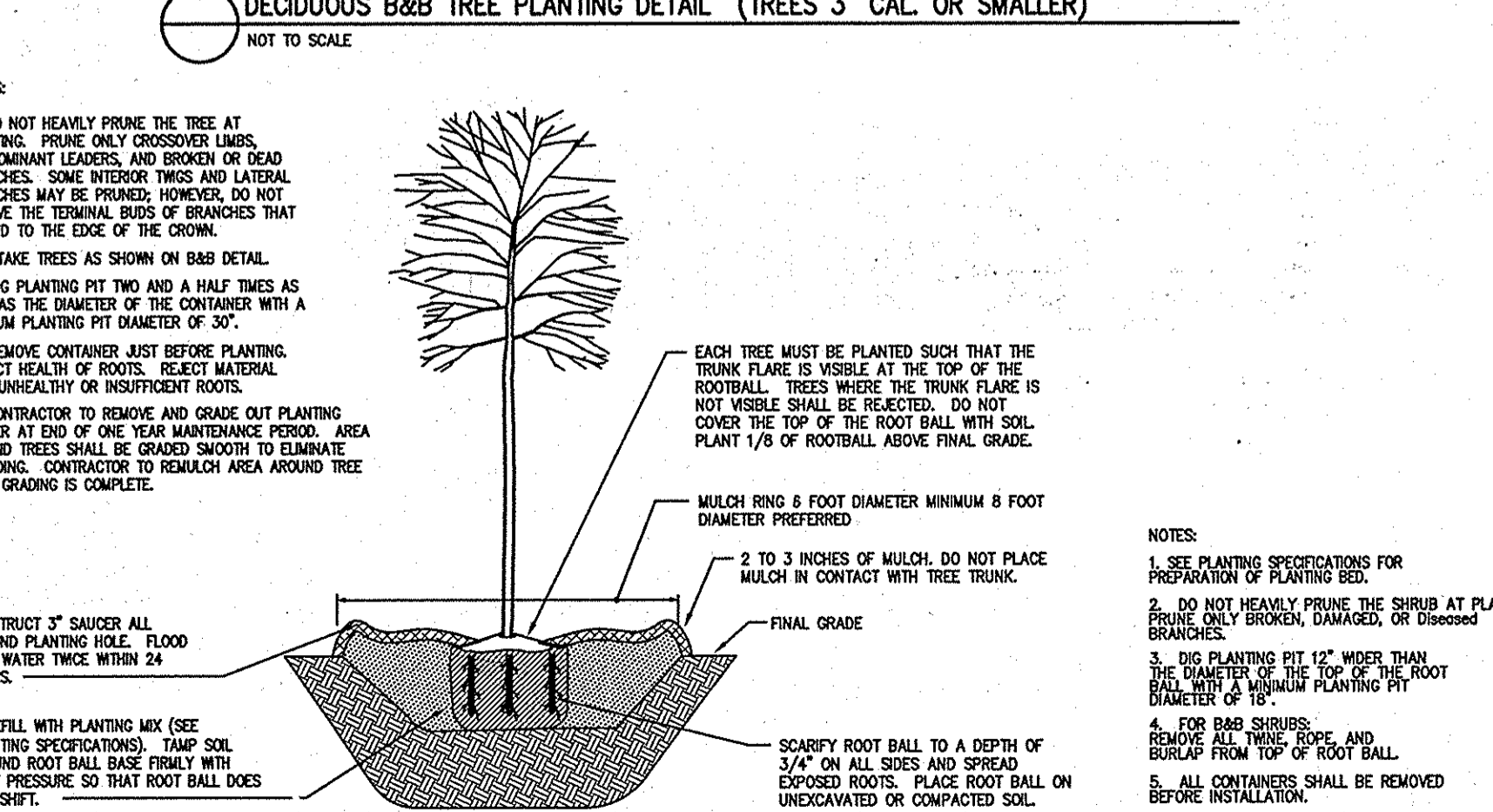
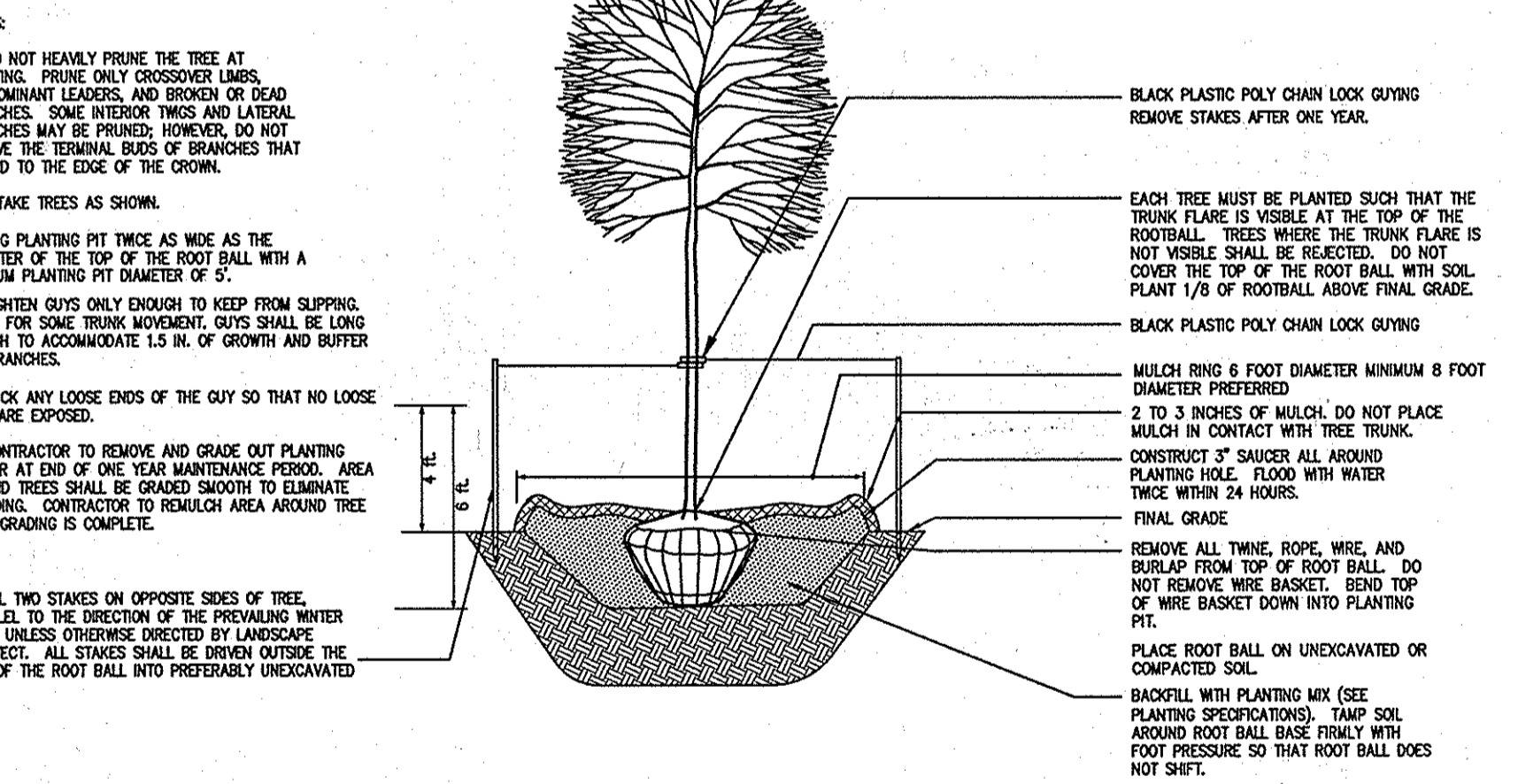
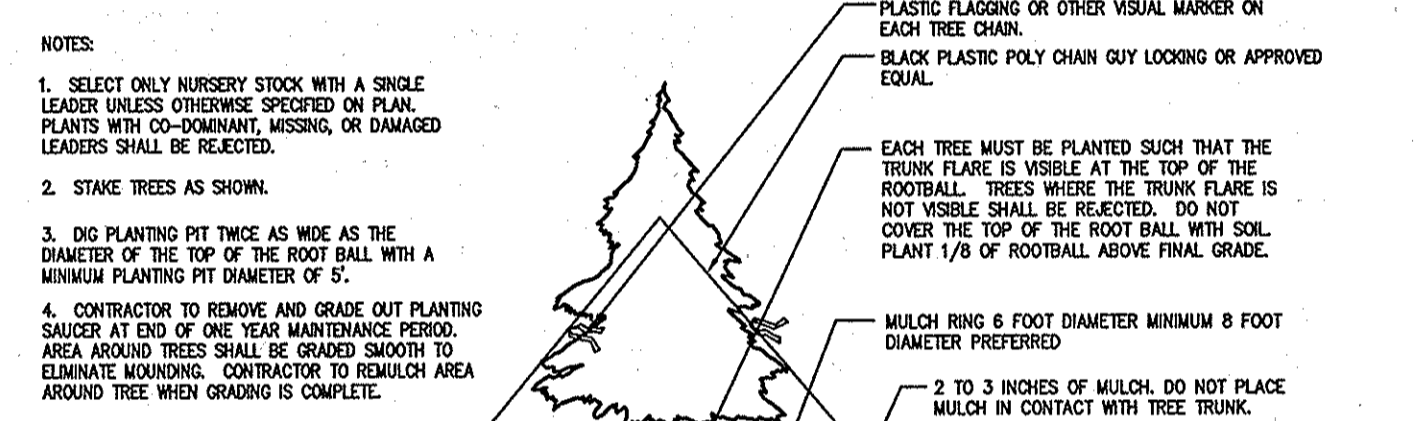
SCHEDULE 'A' NOTES:
 REGULATIONS DO NOT REQUIRE LANDSCAPE EDGES, BUFFERING, OR SCREENING BETWEEN INTERNAL LOTS OR PARCELS WITHIN THE SAME DEVELOPMENT. (PAGE 17 OF THE HO.Co. LANDSCAPE MANUAL)
 EXPANSION TO EXISTING DEVELOPMENT OF LESS THAN 50% SHALL BE REQUIRED TO PROVIDE LANDSCAPING FOR THE ADDITIONAL DEVELOPMENT ONLY. (PAGE 3 OF THE HO.Co. LANDSCAPE MANUAL)

SCHEDULE B - PARKING LOT INTERNAL LANDSCAPING	
PARKING LOT	1
NUMBER OF PARKING SPACES*	542*
NUMBER OF SHADE TREES REQUIRED (1/10 SPACES)	55
NUMBER OF TREES PROVIDED	
SHADE TREES	55
OTHER TREES (2:1 SUBSTITUTION)	0
NUMBER OF ISLANDS PROVIDED	55**

* DOES NOT INCLUDE 64 GARAGE PARKING SPACES
 ** TOTAL ISLANDS PROVIDED IS THE EQUIVALENT OF 55 200 SF ISLANDS AS SHOWN ON SHEETS 22 AND 23

SCHEDULE C - RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING	
NUMBER OF DWELLING UNITS	320
NUMBER OF SHADE TREES REQUIRED (1/1 SFA; 1/3 APTS)	107
NUMBER OF TREES PROVIDED	
SHADE TREES	85
OTHER TREES (2:1 SUBSTITUTION)	44

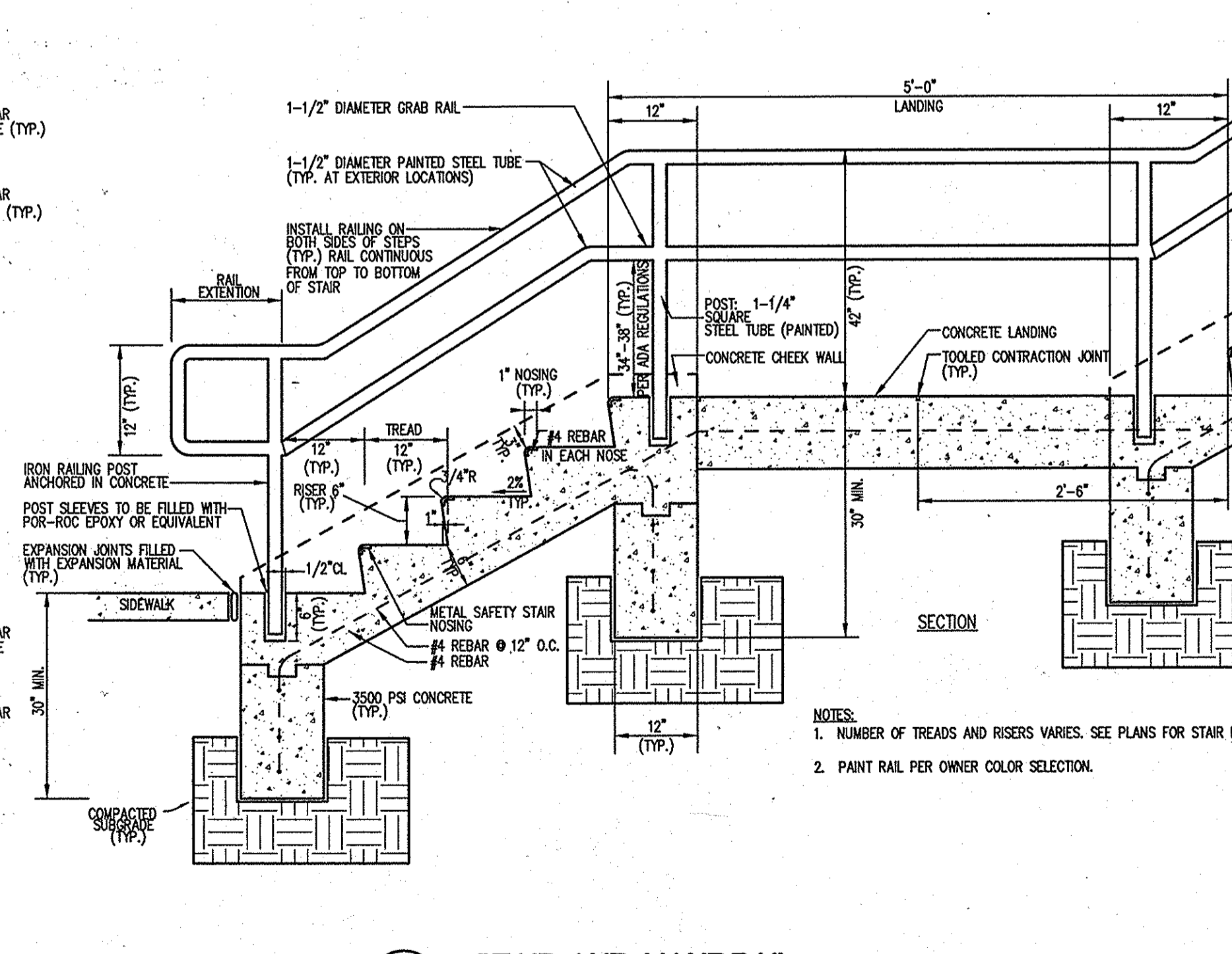
PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
SHADE TREES					
T1	27	ZELKOVA SERRATA 'VILLAGE GREEN'	2.5-3" CAL.	B&B	AS SHOWN
T2	37	QUERCUS PHELLOS WILLOW OAK	2.5-3" CAL.	B&B	AS SHOWN
T3	21	ZELKOVA SERRATA 'VILLAGE GREEN'	2.5-3" CAL.	B&B	AS SHOWN
T4	25	ACER RUBRUM 'OCTOBER GLORY'	2.5-3" CAL.	B&B	AS SHOWN
T5	21	PLATANUS X ACERIFOLIA LONDON PLANE TREE	2.5-3" CAL.	B&B	AS SHOWN
T6	30	ACER RUBRUM 'ARMSTRONG'	2.5-3" CAL.	B&B	AS SHOWN
T7	22	BETULA NIGRA 'HERITAGE'	2.5-3" CAL.	B&B	AS SHOWN
T8	13	KOELREUTERIA PANICULATA GOLDEN RAINTREE	2.5-3" CAL.	B&B	AS SHOWN
EVERGREEN TREES					
E1	55	PINUS STROBUS EASTERN WHITE PINE	6-8' HT.	B&B	AS SHOWN
E2	46	PICEA ABIES NORWAY SPRUCE	6-8' HT.	B&B	AS SHOWN
E3	30	PICEA ABIES NORWAY SPRUCE	6-8' HT.	B&B	AS SHOWN
ORNAMENTAL TREES					
O1	20	SYRINGA RETICULATA 'IVORY SILK'	6-8' HT.	B&B	AS SHOWN
O2	33	LAGERSTROEMIA X 'TUSCARORA'	6-8' HT.	B&B	AS SHOWN
O3	18	CERCIS CANADENSIS EASTERN REDBUD	6-8' HT.	B&B	AS SHOWN
O4	17	AMELANCHIER X 'AUTUMN BRILLIANCE'	6-8' HT.	B&B	AS SHOWN
O5	14	PRUNUS SERULLATA 'KWANZAN'	6-8' HT.	B&B	AS SHOWN
SHRUBS					
S1	246	ILEX X CORNUTA 'BURFORDII NANA'	2.5-3" HT.	CONT.	AS SHOWN
S2	67	ABELIA X GRANDIFLORA GLOSSY ABELIA	2-2.5' HT.	CONT.	AS SHOWN
S3	127	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	3-3.5' HT.	CONT.	AS SHOWN
S4	117	TAXUS MEDIA 'DENSIFORMIS'	2-2.5' HT.	CONT.	AS SHOWN
S5	101	AZALEA 'AUTUMN TWIST'	2-2.5' HT.	CONT.	AS SHOWN
S6	17	ILEX CREMATA 'SOFT TOUCH'	15-18" HT.	CONT.	AS SHOWN



- ### PLANTING SPECIFICATIONS
- Plants, related material, and operations shall meet the detailed description, as given on the plans and as described herein. Where discrepancies exist between Standards & Guidelines referenced within these specifications and the Landscape Manual of the applicable jurisdiction, the latter takes precedence.
 - All plant material, unless otherwise specified, that is not nursery grown, uniformly branched, does not have a vigorous root system, and does not conform to the most recent edition of the American Nursery & Landscape Association (ANLA) Standards will be rejected. Plant material that is not healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements will be rejected. Plant material that is weak or which has been cut back from larger growth to meet specified requirements will be rejected. Trees with forked leaders will be rejected. All B & B plants shall be freshly dug; no heeled-in plants or plants from cold storage will be accepted.
 - Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to the most recent edition of the "Landscape Specification Guidelines by the Landscape Contractors Association of MD, DC, & VA", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects.
 - Contractor shall guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section on the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
 - Contractor shall be responsible for notifying all relevant and appropriate utility companies, utility contractors, and "Miss Utility" a minimum of 48 hours prior to the beginning of any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Major changes will require the approval of the landscape architect. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
 - Protection of existing vegetation to remain shall be accomplished via the temporary installation of 4 foot high snow fence at the drip line, see detail.
 - Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within growing season of completion of site construction. Do not plant Pinus strobus or Xopressocarpis leylandii between November 15 and March 15. Landscape plants are not to be installed before site is graded to final grade.
 - Contractor to regrade, fine grade, sod, hydroseed and straw mulch all areas disturbed by their work.
 - Bid shall be based on actual site conditions. No extra payment shall be made for work arising from actual site conditions differing from those indicated on drawings and specifications.
 - Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence. Where discrepancies on the plan exist between the symbols and the callout leader, the number of symbols take precedence.
 - All shrubs and groundcover areas shall be planted in continuous planting beds, prepared as specified, unless otherwise indicated on plans. (See Specification 13). Beds to be mulched with minimum 2" and maximum 3" of composted, double-shredded hardwood mulch throughout.
 - Positive drainage shall be maintained on planting beds (minimum 2 percent slope).
 - Bed preparation shall be as follows: Till into a minimum depth of 6" 1 yard of Compro or Leafgro per 200 SF of planting bed, and 1 yard of topsoil per 100 SF of bed. Add 3 lbs of standard 5-10-5 fertilizer per cubic yard of planting mix and till. Ericaceous plants (Azaleas, Rhododendrons, etc.): top dress after planting with iron sulfate or comparable product according to package directions. Taxus baccata 'Repandens' (English weeping yew): top dress after planting with 1/4 to 1/2 cup lime each.
 - Planting mix: For trees not in a prepared bed, mix 50% Compro or Leafgro with 50% soil from tree hole to use as backfill, see tree planting detail.
 - Weed & insect control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. For tree planting, apply a pre-emergent on top of soil and root ball before mulching. Caution: For areas to be planted with a ground cover, be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated. Maintain the mulch weed-free for the extent of the warranty period. Under no circumstances is a pesticide containing chlorpyrifos to be used as a means of pest control.
 - Water: All plant material planted shall be watered thoroughly the day of planting. All plant material not yet planted shall be properly protected from drying out until planted. At a minimum, water unplanted plant material daily and as necessary to avoid desiccation.
 - Pruning: Do not heavily prune trees and shrubs at planting. Prune only broken, dead, or diseased branches.
 - All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded, grass seed planted, and covered with straw mulch.

GENERAL GROWTH PROPERTY LANDSCAPING REQUIREMENTS

AREA:	813,771 SF (18.68 ACRES)
TREES REQUIRED:	20 SHADE TREES PER ACRE = 18,688 ACRES X 20 = 373,760 = 374 SHADE TREES REQUIRED
TREES PROPOSED:	196 SHADE TREES = 196 SHADE TREES 102 FLOWERING TREES = 51 SHADE TREES 131 EVERGREEN TREES = 65.5 SHADE TREES 675 SHRUBS = 67.5 SHADE TREES
380 SHADE TREES TOTAL	



- ### GENERAL NOTES:
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$114,000.00.
 196 SHADE TREES @ \$300 = \$58,800.00
 102 ORNAMENTAL TREES @ \$150 = \$15,300.00
 131 EVERGREEN TREES @ \$150 = \$19,650.00
 675 SHRUBS @ \$30 = \$20,250.00
 BONDED LANDSCAPING INCLUDES REQUIRED LANDSCAPING PER THE LANDSCAPE MANUAL.
 - THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
 - CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
 - ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN.
 - ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION.
 - AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS SHALL BE OF THE PROPER HEIGHT AND/OR SPREAD REQUIREMENTS IN ACCORDANCE WITH THIS PLAN AND THE HOWARD COUNTY LANDSCAPE MANUAL.
 - NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY. ANY DEVIATION FROM THIS LANDSCAPE PLAN MAY RESULT IN A REQUIREMENT FOR SUBMITTAL OF AN OFFICIAL "REDLINE REVISION" TO THE SITE DEVELOPMENT PLAN(S) AND/OR DENIAL IN THE RELEASE OF LANDSCAPE SURETY.

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 LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE: *Jonathan Mayers* DATE: 3-8-13

APPROVED
 PLANNING BOARD OF HOWARD COUNTY
 DATE: 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION: *Jonathan Mayers* DATE: 3/2/13

CHIEF, DIVISION OF LAND DEVELOPMENT: *Jonathan Mayers* DATE: 4/2/13

DIRECTOR: *Jonathan Mayers* DATE: 4/2/13

OWNER: COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BLVD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

DEVELOPER: COLUMBIA GATEWAY OP, LLC
 ATTN: JONATHAN MAYERS
 4750 OWINGS MILLS BOULEVARD
 OWINGS MILLS, MD 21117
 T: 410.356.9900

PROJECT: PARAGON AT GATEWAY OVERLOOK - PARCEL F
 BENSON EAST - PARCEL F

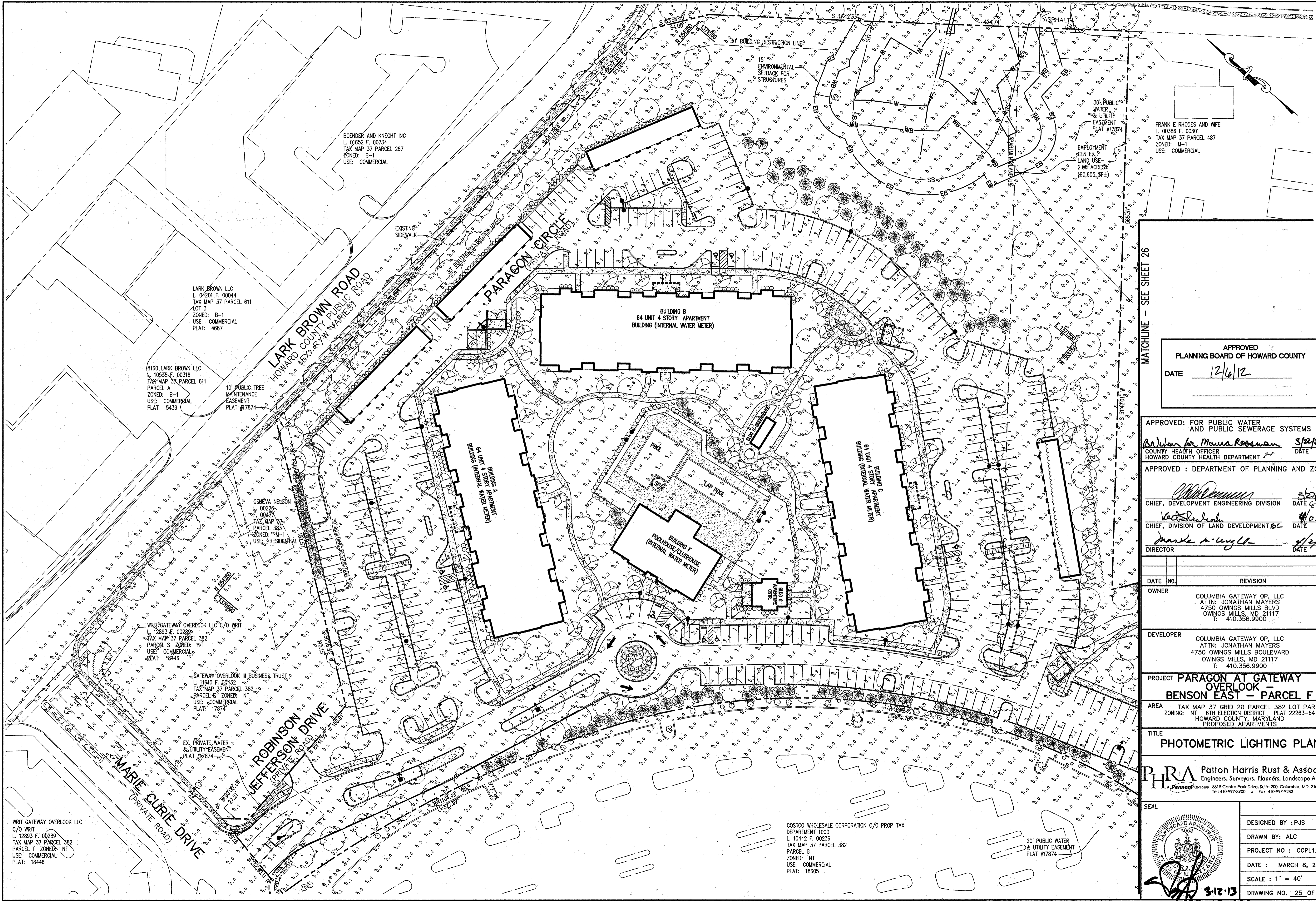
AREA: TAX MAP 37 GRID 20 PARCEL: 382 LOT PAR F
 ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
 HOWARD COUNTY, MARYLAND
 PROPOSED APARTMENTS

TITLE: LANDSCAPE NOTES AND DETAILS

PHRA Patton Harris Rust & Associates
 Engineers, Surveyors, Planners, Landscape Architects
 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
 Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
 DRAWN BY: ALC
 PROJECT NO: C0PL1201
 DATE: MARCH 8, 2013
 SCALE: NOT TO SCALE
 DRAWING NO. 24 OF 26

SEAL: STATE OF MARYLAND
 3068
 PETER J. STONE #3068
 5-8-13



MATCHLINE - SEE SHEET 26

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
B. Wilson for Maura Rossman 3/22/2013
COUNTY HEALTH OFFICER DATE
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John Dennis 3/2/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Vicki Decker 4/10/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Marsha A. Wright 4/2/13
DIRECTOR DATE

DATE	NO.	REVISION

OWNER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BLVD
OWINGS MILLS, MD 21117
T: 410.356.9900

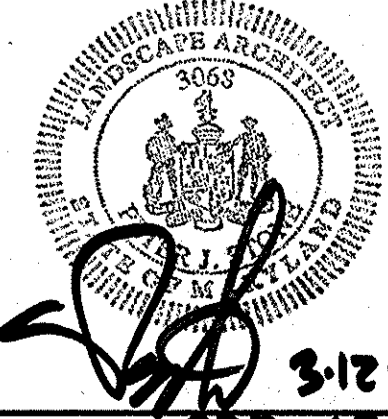
DEVELOPER
COLUMBIA GATEWAY OP, LLC
ATTN: JONATHAN MAYERS
4750 OWINGS MILLS BOULEVARD
OWINGS MILLS, MD 21117
T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F**
AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE
PHOTOMETRIC LIGHTING PLAN

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
A **Permanet** Company 8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO. 25 OF 26



WRIT GATEWAY OVERLOOK LLC
C/O WRIT
L. 12893 F. 00289
TAX MAP 37 PARCEL 382
PARCEL T ZONED: NT
USE: COMMERCIAL
PLAT: 18446

LARK BROWN LLC
L. 04201 F. 00044
TAX MAP 37 PARCEL 611
LOT 3
ZONED: B-1
USE: COMMERCIAL
PLAT: 4667

8160 LARK BROWN LLC
L. 10528 F. 00316
TAX MAP 37 PARCEL 611
PARCEL A
ZONED: B-1
USE: COMMERCIAL
PLAT: 5439

BOENDER AND KNECHT INC
L. 01652 F. 00734
TAX MAP 37 PARCEL 267
ZONED: B-1
USE: COMMERCIAL

WRIT GATEWAY OVERLOOK LLC C/O WRIT
L. 12893 F. 00289
TAX MAP 37 PARCEL 382
PARCEL S ZONED: NT
USE: COMMERCIAL
PLAT: 18446

GATEWAY OVERLOOK III BUSINESS TRUST
L. 11610 F. 00432
TAX MAP 37 PARCEL 382
PARCEL 6 ZONED: NT
USE: COMMERCIAL
PLAT: 17874

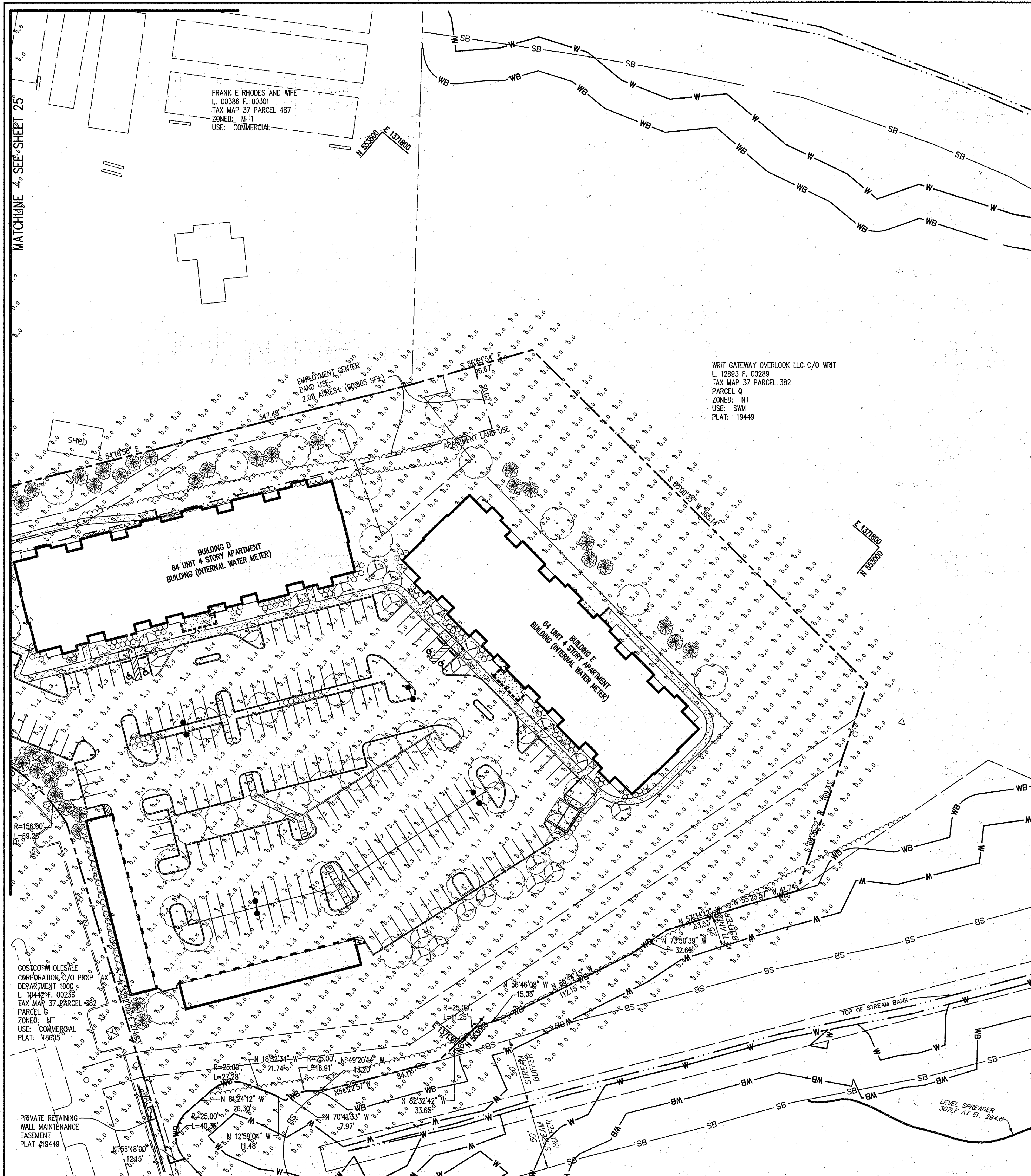
EX. PRIVATE WATER & UTILITY EASEMENT
PLAT #19784

GENEVA NELSON
00226-
F. 00479
TAX MAP 37
PARCEL 363
ZONED: M-1
USE: RESIDENTIAL

COSTCO WHOLESALE CORPORATION C/O PROP TAX
DEPARTMENT 1000
L. 10442 F. 00236
TAX MAP 37 PARCEL 382
PARCEL G
ZONED: NT
USE: COMMERCIAL
PLAT: 18605

20' PUBLIC WATER & UTILITY EASEMENT
PLAT #17874

T:\PROJECTS\CCPL1201-Gateway Overlook Parcel F\DESIGN\CS\CH0509P25-26.dwg



Calculation Summary								
Label	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpLr	PtSpTb
OVERALL PARKING SUMMARY	Fc	0.88	4.2	0.1	8.80	42.00	15	15
POOL AREA	Fc	1.24	4.5	0.2	6.20	22.50		

Luminaire Schedule					
Symbol	Qty	Label	Lumens	LLF	Description
	9	A	23500	0.800	WLS-LX-M-5-250-PSMH-FG-V-PT 20' MOUNTING HEIGHT
	2	B	23500	0.800	WLS-LX-M-5-250-PSMH-FG-V-PT 20' MOUNTING HEIGHT
	11	C	23500	0.800	WLS-LX-M-3-250-PSMH-FG-V-PT 20' MOUNTING HEIGHT
	3	D	23500	0.800	WLS-LX-M-3-250-PSMH-FG-V-PT-IGS 20' MOUNTING HEIGHT

Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. The engineer and/or architect must determine applicability of the layout to existing or future field conditions.

This lighting pattern represents illumination levels calculated from laboratory data taken under controlled conditions utilizing current industry standard lamp ratings in accordance with Illuminating Engineering Society approved methods. Actual performance of any manufacturer's luminaire may vary due to variation in electrical voltage, tolerance in lamps and other variable field conditions.

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE 12/6/12

APPROVED : DEPARTMENT OF PLANNING AND ZONING

[Signature] 3/27/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/22/13
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/16/10
DIRECTOR DATE

DATE	NO.	REVISION

OWNER
COLUMBIA GATEWAY OP, LLC
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DEVELOPER
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T: 410.356.9900

PROJECT **PARAGON AT GATEWAY OVERLOOK - BENSON EAST - PARCEL F**
AREA TAX MAP 37 GRID 20 PARCEL 382 LOT PAR F
ZONING: NT 6TH ELECTION DISTRICT PLAT 22263-64
HOWARD COUNTY, MARYLAND
PROPOSED APARTMENTS

TITLE
PHOTOMETRIC LIGHTING PLAN AND LIGHTING DETAILS

PHRA Patton Harris Rust & Associates
Engineers, Surveyors, Planners, Landscape Architects
8818 Centre Park Drive, Suite 200, Columbia, MD, 21045
Tel: 410-997-8900 Fax: 410-997-9282

DESIGNED BY: PJS
DRAWN BY: ALC
PROJECT NO: CCPL1201
DATE: MARCH 8, 2013
SCALE: 1" = 40'
DRAWING NO. 26 OF 26

