

SITE DEVELOPMENT PLAN

THE WEXLEY AT 100

BUILDABLE BULK PARCELS A, C & D 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SDP-18-029

Parking	907 spaces
Apartment Req. Parking (2.3/unit)(394 units)	766 spaces
Apartment Parking Provided (includes 36 garage spaces)	84 spaces
Clubhouse Required Spaces - Total:	3 spaces
Office - 906 sf at 3.1/1000 sf	66 spaces
Clubhouse Assembly Area - 6586 sf T 10sp/1000sf	15 spaces
Pool - Capacity 145 persons @ 1sp/10 persons	1.97 space/unit*
Parking Ratio - overall	1.73 space/unit*
Parking Ratio - excluding Clubhouse areas	16 spaces
Accessible spaces required	16 spaces
Accessible Spaces Provided	16 spaces

* FOR MORE INFORMATION SEE GENERAL NOTE # 28

Lot/Parcel Number	Facility Name & Number	Stormwater Management Information	Public	Private	HOA Maintains	Misc.
Parcel A	MB-6 (M-6)	ESD (Quality)	x	yes		
Parcel A	MB-7 (M-6)	ESD (Quality)	x	yes		
Parcel A	MB-8 (M-6)	ESD (Quality)	x	yes		
Parcel A	MB-9 (M-6)	ESD (Quality)	x	yes		
Parcel A	MB-10 (M-6)	ESD (Quality)	x	yes		
Parcel A	MB-11 (M-6)	ESD (Quality)	x	yes		
Parcel D	MB-2 (M-6)	ESD (Quality)	x	yes		
Parcel D	SGW-1 (M-2)*	ESD (Quality)	x	yes	(Designed: F-17-022)	
Parcel A	UCSVM-2	Quantity	x	yes		

Drainage Area	Existing Condition	Proposed	Routed
10-yr Q	100-yr Q	10-yr Q	100-yr Q
58.7	134.5	46.24	118.5
West - Back	6.16	18.66	7.08
Totals	64.86	153.16	63.32

PHASING SCHEDULE

PHASE	IMPROVEMENTS	YR AFTER APPROVAL
1	259 APARTMENT UNITS (BUDGS 4-9)	0-2
2	135 APARTMENT UNITS (BUDGS 1-3)	0-2

ALL ALLOCATIONS HAVE BEEN GRANTED FOR THIS DEVELOPMENT (PARCELS A, C & D). ALL CONSTRUCTION SHALL BE COMPLETED UNDER THIS SDP.

NO.	NORTH	EAST
1	N 860048.0984	E 1373280.3676
2	N 860059.6293	E 1373239.0463
3	N 860562.2814	E 1372698.6992
4	N 861087.7470	E 1372413.8807
5	N 861109.8542	E 1372525.5536
6	N 861227.7219	E 1372516.7290
7	N 861508.8713	E 1372804.8674
8	N 861149.0278	E 1372697.5204
9	N 861146.4783	E 1373207.2691
10	N 861120.0567	E 1373133.6669
11	N 861120.0567	E 1373445.7067
12	N 861051.2535	E 1373550.7334
13	N 860976.2463	E 1373548.5168
14	N 860890.0117	E 1373610.9333
15	N 861027.3461	E 1373624.0930
16	N 861020.5762	E 1373882.6344
17	N 860956.8646	E 1373980.4880
18	N 860791.8950	E 1373998.2893
19	N 860646.9756	E 1374072.1762
20	N 860660.1412	E 1374125.7601
21	N 860290.7090	E 1374221.0182

LEGEND
SOILS CLASSIFICATION
SOILS DELINEATION
EXISTING CONTOURS
LIMIT OF WETLANDS
EXISTING WOODS LINE
FLOODPLAIN
LIMIT OF HOWARD COUNTY 100-YEAR FLOODPLAIN
15% TO 25% SLOPES
25% AND GREATER SLOPES
STEEP SLOPES 25% AND GREATER SUSTAINED >10' ELEVATION

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
Raymond M. Rossman 8/14/2018
 COUNTY HEALTH OFFICER
 HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Chubman 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Keith DeLoach 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT

Valeria Jofia 8-24-18
 DIRECTOR

MAP SYMBOL	SOIL GROUP	SOIL TYPE	SOIL K _w
ChB	B	CHILLUM LOAM, 2 TO 5 PERCENT SLOPES**	0.37
ChC	B	CHILLUM-RUSSETT LOAMS 5 TO 10 PERCENT SLOPES**	0.37
CdD	C	CROOM AND EVERSBORO SOILS, 10 TO 15 PERCENT SLOPES**	0.28
Fs	D	FALLSINGOY SAND LOAM, 0 TO 2 PERCENT SLOPES	0.02
RuB	B	RUSSETT AND BELTSVILLE SOILS, 2 TO 5 PERCENT SLOPES**	0.37
ScB	B	SASSAFRAS LOAM, 2 TO 5 PERCENT SLOPES**	0.37
ScC	B	SASSAFRAS AND CROOM SOILS, 5 TO 10 PERCENT SLOPES**	0.37

* INDICATES HYDRIC SOILS
 ** HIGHLY ERODIBLE, K_w>0.35, AND/OR 15% OR GREATER SLOPES
 TAKEN FROM THE NRCS WEB SOIL SURVEY, AUGUST 2013, MAP 18.

NEAR BLD	ADDRESS
1	6007 OTTERBEIN LN.
2	6005 OTTERBEIN LN.
6	6045 OTTERBEIN LN.
9	6065 OTTERBEIN LN.

NO.	DATE	REVISION
1	9/17/18	REVISE TO ADD GARAGE ADDRESSES

SITE DATA TABULATION

1) TOTAL PROJECT AREA.....	17.95 AC.±
2) AREA OF 100-YR. FLOODPLAIN.....	0.00 AC.±
3) AREA OF STEEP SLOPES (15% OR GREATER).....	0.00 AC.±
4) AREA OF EXISTING FOREST.....	1.44 AC.±
5) AREA OF ERODIBLE SOILS.....	4.38 AC.±
6) AREA OF WETLANDS (INCLUDING BUFFER).....	0.00 AC.±
7) AREA OF STREAM BUFFER.....	0.00 AC.±
8) NET AREA OF PROJECT.....	17.95 AC.±
9) AREA OF PROPOSED DEVELOPMENT.....	17.95 AC.±
10) MAX. RESIDENTIAL DENSITY PERMITTED (PER F-17-022).....	394 UNITS
11) NUMBER OF UNITS PROPOSED.....	394 UNITS
12) NUMBER OF PARCELS.....	3
13) LIMIT OF DISTURBANCE.....	15.68 AC.±
14) PRESENT ZONING DESIGNATION.....	R-A-15
15) PROPOSED USES FOR THE SITE & STRUCTURES.....	RESIDENTIAL APARTMENTS
16) MINIMUM LOT SIZE.....	N/A
17) OPEN SPACE REQUIRED (FOR R-A-15) (25%).....	6.37 ACRES
18) OPEN SPACE PROVIDED (F-17-022).....	6.63 ACRES
19) RECREATION OPEN SPACE REQUIRED(400SF/UNIT).....	3.82 ACRES
20) AMENITY AREA PROPOSED.....	SEE TABULATION BELOW**
21) TOTAL IMPERVIOUS AREA.....	6.68 AC. ±
22) MODERATE INCOME HOUSING UNITS (MIHU) REQUIRED.....	40 UNITS
23) MAXIMUM BUILDING HEIGHT (R-A-15).....	55 FEET

SHEET INDEX

NO.	DESCRIPTION
1	TITLE SHEET, EXISTING CONDITIONS AND SOILS MAP
2-3	SITE DEVELOPMENT GEOMETRY PLAN
4	SITE DETAILS
5-6	LANDSCAPE AND PARKING PLAN
7	SEDIMENT & EROSION CONTROL PLAN
8	SEDIMENT & EROSION CONTROL AND SCHOOL PATH PLAN
9	SEDIMENT & EROSION CONTROL NOTES AND DETAILS
10-11	STORM DRAIN DRAINAGE AREA MAP
12-15	STORM DRAIN PROFILES
16	STORM DRAIN PROFILES AND UGSWM DIMENSIONS
17-18	STORMWATER MANAGEMENT DETAILS
19	SOIL BORINGS AND STORMWATER CONSTRUCTION SPECIFICATIONS
20	UNDERGROUND STORMWATER MANAGEMENT DETAILS
21-22	ACCESSIBLE ROUTE AND AMENITY LOCATION PLANS
23	PRIVATE SEWER PROFILES
24-25	GRADING AND RETAINING WALL PLANS
26-40	RETAINING WALL DETAILS, ELEVATIONS AND SECTIONS
41-44	HANDICAP PARKING AND ACCESS DETAILS
45-47	BUILDING ELEVATIONS

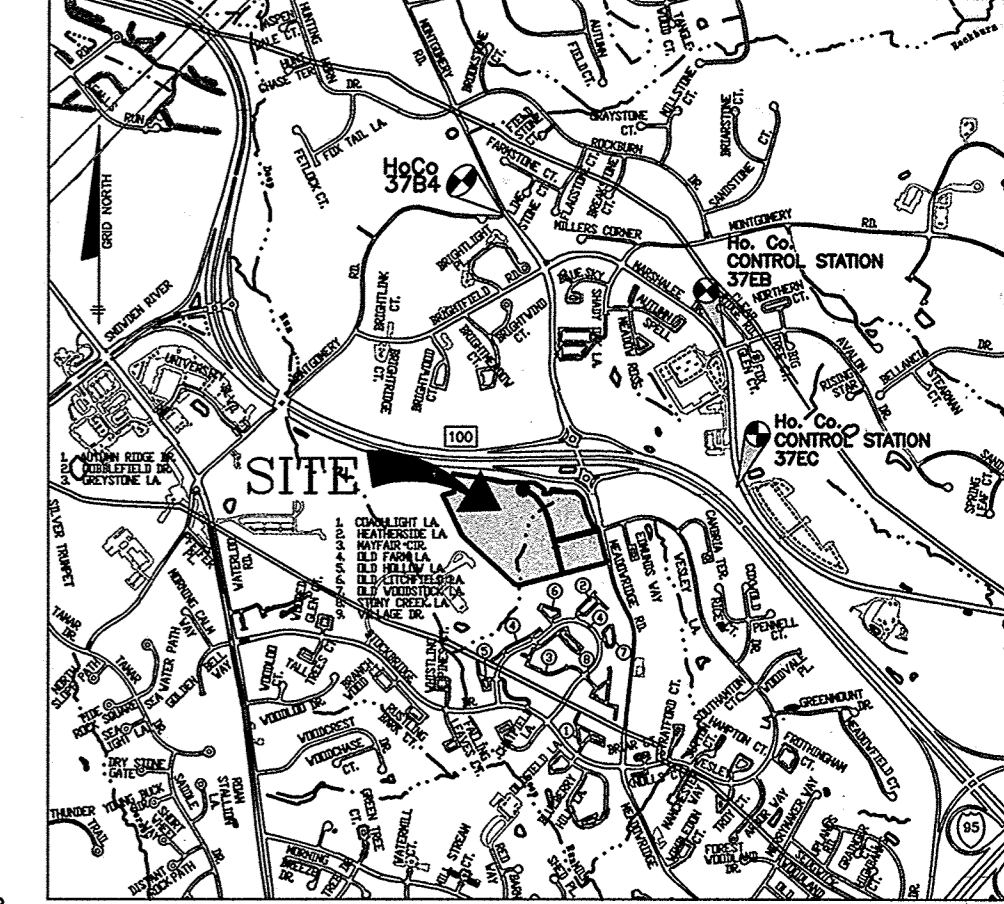
BENCH MARKS

HO. CO. #377C (MAD '83) ELEV. 346.153
 STANDARD DISC ON CONCRETE MONUMENT
 MARSHALLEE RD NEAR LYNWOOD SHOPPING CTR.
 N 561099.8288 E 1375580.4112

HO. CO. #377B (MAD '83) ELEV. 385.309
 STANDARD DISC ON CONCRETE MONUMENT
 MARSHALLEE RD NEAR LYNWOOD SHOPPING CTR.
 N 562552.4951 E 1375430.8059

GENERAL NOTES

- SUBJECT PROPERTY ZONED R-A-15 PER THE 10-6-13 COMPREHENSIVE ZONING PLAN.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUMBING AND MECHANICAL CODES, AS WELL AS ALL PRIVATE WORK. THE WARRANTIES INDICATED WITHIN THE SPECIFICATIONS SHALL BE PROVIDED TO THE OWNER. SEDIMENT AND EROSION CONTROL SHALL BE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND THE APPROVAL PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIMSELF WITH THE SPECIFICATIONS, AND SHALL MAINTAIN A COPY OF EACH SPECIFICATION ON THE SITE DURING ALL PERIODS OF ACTIVE OPERATIONS.
- 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 OCCASION WORK BEING DONE.
- EXISTING TOPOGRAPHY IS TAKEN FROM A FIELD RUN SURVEY PREPARED BY BENCHMARK ENGINEERING, INC. DATED NOVEMBER 2014 AND HOWARD COUNTY 2008 GIS AND ARE 2' INTERVALS.
- THE COORDINATE SYSTEM SHOWN UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NOS. 3768 AND 3767 WERE USED FOR THIS PROJECT.
- ON-SITE WATER IS PUBLIC UNDER CONTRACT NUMBER 14-5045-D, DRAINAGE AREA IS PATAPSCO.
- ON-SITE SEWER IS PRIVATE, AND CONNECTIONS WILL BE MADE TO THE PUBLIC SEWER VIA CONTRACTS 14-4929-D AND 14-4999-D.
- STORMWATER MANAGEMENT FOR THIS DEVELOPMENT WILL BE MICRO-BIORETENTION FACILITIES (M-B). THESE FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE MANAGEMENT ASSOCIATION. THE REQUIRED 10% AND 100% FOREST RESTORATION ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NOS. 3768 AND 3767 WERE USED FOR THIS PROJECT.
- WETLAND DELINEATION WAS PERFORMED BY MCCARTHY & ASSOCIATES, LLC, DATED MARCH, 2007. A JURISDICTIONAL DETERMINATION CONFIRMING THE WETLANDS AND WATERS OF THE US WAS ISSUED BY THE ARMY CORPS OF ENGINEERS DATED JULY 12, 2012. A RELIANCE LETTER DATED JUNE 10, 2017 WAS PREPARED BY MCCARTHY AND ASSOCIATES.
- FOREST STRIP DELINEATION WAS PERFORMED BY WRIGHT ENVIRONMENTAL & LAND SERVICES, LLC, DATED AUGUST 2013 AND DECEMBER 2014 AND UPDATED AUGUST 2015.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED FEBRUARY 2, 2015 AND APPROVED ON MAY 4, 2016. FRONTAGE IMPROVEMENTS IN THE FORM OF PLANE AND CONTOUR LINES ARE WARRANTED, BASED ON THE STUDY. NO TRAFFIC SIGNAL IS WARRANTED PRIOR TO THE ULTIMATE BUILD-OUT OF THE PROJECT.
- THE FOREST STRIP DELINEATION WAS PERFORMED BY WRIGHT ENVIRONMENTAL & LAND SERVICES, LLC, DATED AUGUST 2013 AND DECEMBER 2014 AND UPDATED AUGUST 2015.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
- THERE ARE NO NEW IMPACTS TO STEEP SLOPES OF GREATER THAN 20.00% SF. STEEP SLOPE IMPACTS DURING UTILITY CONSTRUCTION FROM CONTRACT 14-4994-D ON PARCEL 71A WERE APPROXIMATELY 14 SF AND WERE FOR THE PURPOSE OF A SEWER UTILITY EASEMENT AND CONNECTION. THE DISTURBANCES WERE DETERMINED TO BE "ESSENTIAL" BY THE PLANNING DIRECTOR ON MAY 22, 2016.
- STEEP SLOPE IMPACTS DURING UTILITY CONSTRUCTION FROM CONTRACT 14-4994-D ON PARCEL 670 WERE APPROXIMATELY 3691 SF AND WERE FOR THE PURPOSE OF SEWER AND WATER UTILITY EASEMENTS AND CONNECTIONS. THESE DISTURBANCES WERE DETERMINED TO BE "ESSENTIAL" BY THE PLANNING DIRECTOR ON MAY 22, 2016.
- IMPACTS TO WETLANDS, STEAM AND BUFFERS (27,210 SF) FOR THE PROPOSED ENTRANCE ROAD TO ENTER THE WEST SIDE OF THE SITE WERE SUBMITTED 1-11-17 AND THIS REQUEST FOR ESSENTIAL DISTURBANCE WAS APPROVED BY THE PLANNING DIRECTOR UNDER NO. C-14-022.
- TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED IN THE DEVELOPMENT AREA.
- THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY GEOTECHNICAL LABORATORIES, INC. DATED SEPTEMBER 18, 2017.
- THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
- THE FOREST CONSERVATION OBLIGATION FOR THIS SITE WAS MET UNDER F-17-022 BY THE ON-SITE RETENTION OF 7.88 ACRES OF FOREST RETENTION (0.43 ACRES NON-CREDITED AND 7.45 ACRES CREDITED) AND 2.34 ACRES OF AFForestation IN AN OFF-SITE BANK. 1.55 ACRES WAS OBTAINED AT EDGEWOOD FARM PHASE 1, F-06-108 AND 0.99 ACRES WAS OBTAINED AT THE PRESERVE AT CLARKVILLE, F-06-72.
- PREVIOUS DPZ FILES: EOP-14-024, S-14-002, WP-15-083, WP-15-097, P-15-003, F-17-022-S1, L15352 F. 0421 (PARCEL 71A), L 18071 F. 0231 (PARCEL 72A), AND PLATS 24691-24697.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD AT 800 PM ON SEPTEMBER 12, 2013 AT THE ELKRIE VOLUNTEER FIRE DEPARTMENT, BECAUSE OF THE SCOPE EXPANSION. ADDITIONAL MEETINGS WERE HELD AT 8:00 PM ON MAY 6, 2014, NOVEMBER 19, 2014 AND JUNE 28, 2018 AT THE ELKRIE VOLUNTEER FIRE DEPARTMENT.
- THIS SITE IS NOT IN A HISTORIC DISTRICT.
- OPEN SPACE LOTS 1 AND 2 WERE DEDICATED TO HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS UNDER F-17-022.
- TRAFFIC CONTROL DEVICES:
 - THE R1-1 (STOP) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETE.
 - THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-315-2430) PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES.
 - ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 - ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POSTED (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL TUBE SLEEVE (12 GAUGE). THE ANCHOR SHALL NOT EXTEND MORE THAN TWO HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- THE PLANNING DIRECTOR HAS APPROVED WP-15-083 DATED JANUARY 20, 2015 TO WAIVE SECTION 16.1205(a)(7) AND 16.1205(a)(10) WHICH REQUIRES THE RETENTION OF SPECIMEN TREES (30" DBH OR GREATER) THAT ARE NOT CONTAINED WITHIN OTHER PRIORITY FOREST AREAS AS OUTLINED IN SECTION 16.1205(a)(1-10) SUBJECT TO THE FOLLOWING:
 - WAIVER APPROVAL IS LIMITED TO THE REMOVAL OF SPECIMEN TREES #8, #10-13 AND #16-20 AS DEPicted ON THE WATER EXHIBIT. ANY PROPOSAL TO REMOVE ADDITIONAL TREES WILL REQUIRE A NEW WAIVER REQUEST OF AMENDMENT TO THIS WAIVER.
 - AN AMENDED WAIVER EXHIBIT SHALL BE PROVIDED WHICH CONTAINS A SPECIMEN TREE CHART FOR THE ENTIRE SITE LISTING ALL EXISTING SPECIMEN TREES ON-SITE. ALL REFERENCES TO "OFF-SITE" FOR TREES #16-21 SHALL BE REMOVED.
 - AN AMENDED JUSTIFICATION SHALL BE PROVIDED WHICH CORRECTS THE STATUS OF THE ON-SITE AND OFF-SITE TREES.
 - THE AMENDED WAIVER EXHIBIT AND JUSTIFICATION SHALL BE PROVIDED WITHIN 30 DAYS OF WAIVER APPROVAL (ON OR BEFORE FEBRUARY 19, 2015).
 - A MINIMUM OF 20 ADDITIONAL, NATIVE, 2-3" CALIPER TREES SHALL BE PROVIDED ON-SITE AS PART OF THE MITIGATION FOR THE SPECIMEN TREE REMOVAL. THIS MITIGATION WILL BE ADDRESSED WITH THE PROJECT KNOW AS "THE PARK AT LOCUST THICKET". IT WILL BE SHOWN ON THE ASSOCIATED LANDSCAPE PLAN AND SURVEY FOR THESE ADDITIONAL TREES WILL BE REQUIRED AS PART OF THE SITE DEVELOPMENT PLAN APPROVAL OF THE PARK AT LOCUST THICKET.



ADDC MAP 34 GRID 2D
 VICINITY MAP
 SCALE: 1"=200'

28. A PARKING ANALYSIS WAS PREPARED BY THE TRAFFIC GROUP APPROVED JANUARY 22, 2015 AND APPROVED APRIL 8, 2015, MAY 6, 2016 AND APRIL 2018 FOR THE PARKING RATIO BELOW THE REQUIRED 2.3 SPACES PER UNIT. THE PLANNING DIRECTOR APPROVED THE PROPOSED PARKING RATIO (AN OVERALL RATIO OF 1.73 SPACES PER UNIT) ON MAY 22, 2016. THE CONDOMINIUM ASSOCIATION OR MANAGEMENT COMPANY ARE RESPONSIBLE FOR THE REGULATION AND MAINTENANCE OF ON-SITE PARKING AND MUST MAINTAIN THESE ADDRESS ANY PARKING INADEQUACIES.

29. A LETTER OF AUTHORIZATION FROM MDE WAS ISSUED FOR THIS SITE, DATED AUGUST 2, 2017, AUTHORIZING CERTAIN DISTURBANCES TO THE STREAM, FLOODPLAIN OR WETLANDS FOR THE ROAD AND/OR UTILITY CROSSINGS. IN-STREAM WORK MAY NOT BE CONDUCTED FROM MARCH 1ST TO JUNE 15TH INCLUSIVE, ANY YEAR. STREAM, WETLAND AND FLOODPLAIN WORK SHALL BE CONDUCTED IN ACCORDANCE WITH THE LETTER OF AUTHORIZATION, 15-MR-3362/2016/0300.

30. ALL PROPOSED EXTERIOR LIGHTING SHALL BE DIRECTED/REFLECTED AWAY FROM ALL ADJACENT PUBLIC ROADS AND RESIDENTIAL ZONING DISTRICTS IN ACCORDANCE WITH SECTION 134.0.6 OF THE HOWARD COUNTY ZONING REGULATIONS. LIGHT FIXTURES ON A PROPERTY IN THE R-SC DISTRICT SHALL BE LIMITED TO 0.1 FOOT CANDLES. EXCEPT FOR SPOTLIGHTS AND LOW INTENSITY LIGHTS AS DEFINED IN SECTION 134.0.C.2 AND 134.0.C.3, ALL LIGHT FIXTURES SHALL BE FULLY OR PARTIALLY SHIELDED.

31. IN ACCORDANCE WITH SECTION 128.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 18 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.

32. IN ACCORDANCE WITH SECTION 127.0.F.2.C. OF THE ZONING REGULATIONS, AT LEAST 10% OF THE DWELLING UNITS SHALL BE MODERATE INCOME HOUSING UNITS.

33. ANY BOX SHALL BE PLACED ON THE FRONT OF ALL BUILDINGS NOT MORE THAN 6" TO THE RIGHT OF THE MAIN ENTRANCE AT A HEIGHT OF 4'-5". IT SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE SYSTEM).

34. TRASH PICK UP FOR THIS DEVELOPMENT WILL BE PRIVATE.

35. THE REQUIRED INTERIM AND FINAL PLANTINGS ARE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FRONTRIDGE SURETY FOR THE REQUIRED LANDSCAPING MUST BE PART OF THE UPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$72,830 (\$69,300 FOR 231 SHADE TREES; \$1,800 FOR 12 EVERGREEN TREES AND \$1,830 FOR 61 SHRUBS). PERIMETER LANDSCAPING (SCHOLDE LA) WAS FULLY PROVIDED UNDER CONTRACT NUMBER 14-4994-D.

36. USING THE NEIGHBORHOOD PRESERVATION DENSITY EXCHANGE OPTION DESCRIBED IN SECTION 128.0.6 OF THE ZONING REGULATIONS, THE DEVELOPMENT RIGHTS FOR 35 OF THE RESIDENTIAL PRIORITY UNITS HAVE BEEN TRANSFERRED FROM BELMONT MANOR AND HISTORIC PARK, TAX MAP 32, PARCEL 02 VIA SENDING PLAT F-17-022(S1).

37. LANDSCAPE DESIGN APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE THAT ALL NECESSARY PERMITS AND APPLICATIONS ASSOCIATED WITH THIS PLAN SHALL BE OBTAINED FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS SDP WILL BE PROVIDED BY THE HEALTH DEPARTMENT. SUCH FACILITIES INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOODS, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADON.

38. MAXIMUM BUILDING LENGTH ALLOWED BY ZONING FOR R-A-15 IS 120'. THE PLANNING DIRECTOR APPROVED A MAXIMUM BUILDING LENGTH OF 180' FOR THIS PROJECT AUG. 2, 2018. SPECIFIC BUILDING LENGTHS ARE PROVIDED ON THE ELEVATIONS, SHEETS 49-51.

39. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.

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

41. THE 65 DBA NOISE CONTOUR LINE FOR THIS DEVELOPMENT IS A DESIGN ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CHAPTER 10 CONSIDERED TO EXIST LOCATED NEAR THE 65 DBA NOISE CONTOUR LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND NOISE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF INTERIOR AND ENVIRONMENT.

42. A NOISE STUDY FOR THIS PROJECT WAS PREPARED BY MARS GROUP, DATED NOVEMBER 2017. THE DESIGN DESIGN INFORMATION, NOISE MITIGATION, NOISE MITIGATION BUILDINGS #1, 4, 7 AND 9, AND SPECIAL ATTENTION SHALL BE MADE TO THESE STRUCTURES TO LOWER INTERIOR NOISE TO MEET HOWARD COUNTY INTERIOR NOISE CRITERIA.

43. NOISE ABATEMENT CONSTRUCTION SPECIFICATIONS HAVE BEEN PROVIDED BY MARS GROUP, AND MAY BE FOUND ON SHEET 4.

44. TRASH RECYCLING IS PROVIDED FOR RESIDENTS AS A "SINGLE STREAM" PROCESS LOCATED WITHIN THE DUMPSTER STRUCTURES.

45. A DESIGN MANUAL WATER TO THE SETBACK REQUIREMENT BETWEEN THE GEORGIO OF A RETAINING WALL AND A STRUCTURE WAS APPROVED MAY 14, 2018. THE APPROVAL WAS BASED ON THE ADDITION OF AN ADDITIONAL GEORGIO BENEATH THE BUILDING PAD TO PREVENT A FAILURE OF CUT SLOPE BELOW THE BUILDING IF THE WALL MUST BE REMOVED OR REPAIRED.

46. A DESIGN MANUAL WATER TO THE MINIMUM 1.5' OFFSET FOR SWM FACILITIES WAS APPROVED JUNE 5, 2018. THE APPROVAL WAS SUBJECT TO THE MINIMUM DIAMETER OF ANY OFFICE BEING LIMITED TO 1.0" AND THE DETAILS BEING UPDATED TO REFLECT THE DESIGN PROPOSED IN THE WAIVER REQUEST.

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

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. 21443, Expiration Date: 12-21-22

THIS RESIDENTIAL PROJECT IS REQUIRED TO PROVIDE A MINIMUM OF 10% OF THE DWELLING UNITS AS MODERATE INCOME HOUSING UNITS

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. 28776, Expiration Date: 01-01-19.

BENCHMARK ENGINEERING, INC.

8490 BALTIMORE NATIONAL PIKE SUITE 315 • ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BE-CIVILENGINEERING.COM

PERMIT INFORMATION CHART

PROJECT NAME:	SECTION/AREA:	LOT/PARCEL# PARCELS:
PARK AT LOCUST THICKET	N/A	A, C & D
PLAT No. 24691 - 24697	GRID No. 9	ZONE R-A-15
	TAX MAP 37	ELECTION DISTRICT 1ST
		CENSUS TRACT 6011.08

OWNER: LOCUST THICKET INVESTORS LLC
 5836 MEADOWVIEW ROAD
 ELKRIE, MD 21075
 410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
 P.O. BOX 1
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AAM CHECKED: CAM

PROJECT: THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS

LOCATION: ZONED R-A-15 & FOR GRD 9, PARCELS 714 & 724
 TAX MAP 37 PLATS 24691 - 24697
 1ST ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN
 TITLE SHEET, EXISTING CONDITIONS AND SOILS MAP

DATE: JULY 2018 PROJECT NO. 0925

SCALE: AS SHOWN DRAWING 1 OF 47

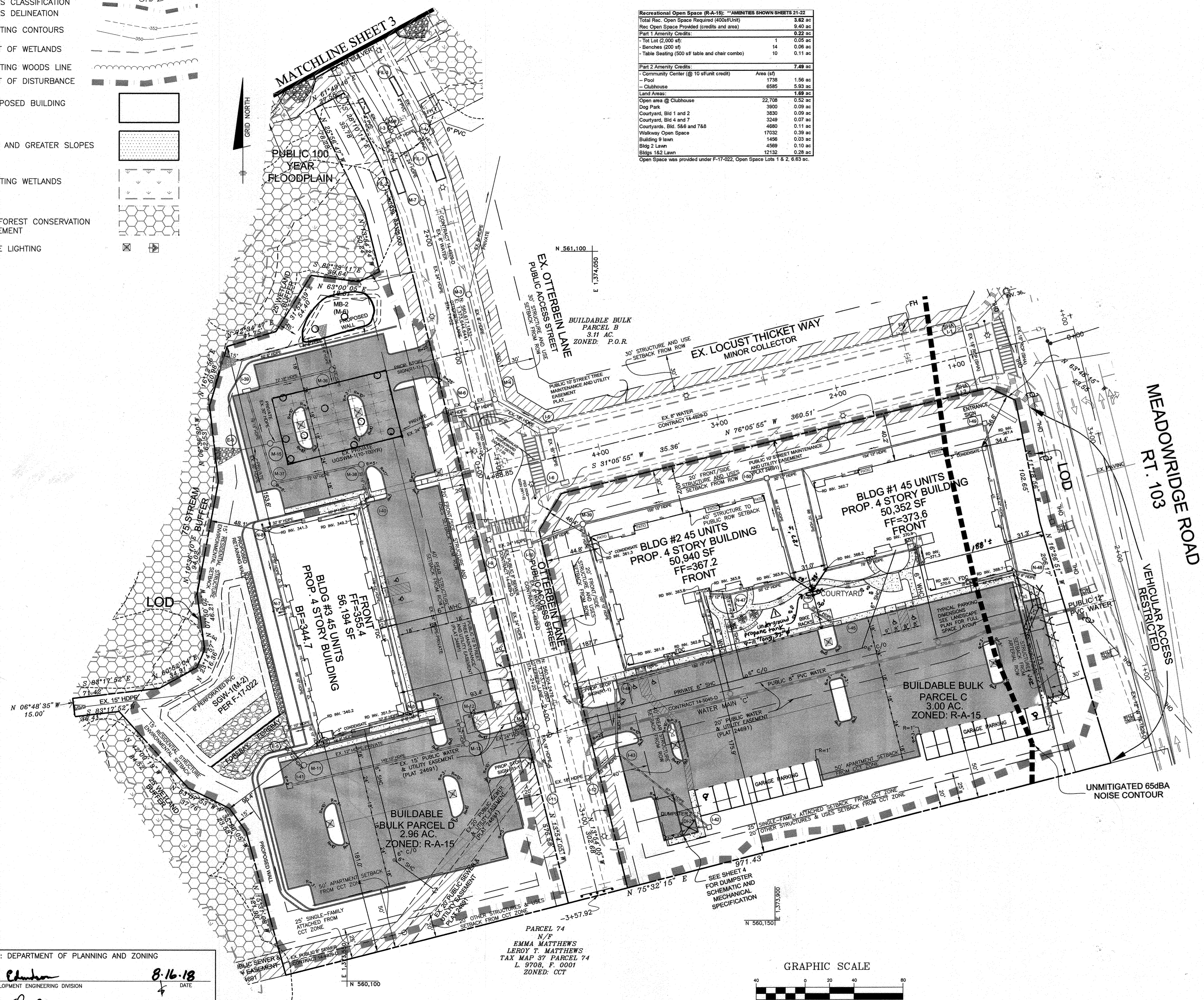
AS-BUILT SDP-18-029

LEGEND

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- LIMIT OF DISTURBANCE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT
- SITE LIGHTING

Recreational Open Space (R-A-15): "AMENITIES SHOWN SHEETS 21-22"	
Total Rec. Open Space Required (600sf/Unit)	3.62 ac
Rec. Open Space Provided (credits and area)	9.40 ac
Part 1 Amenity Credits:	0.22 ac
- Tot Lot (2,000 sf)	0.08 ac
- Benches (200 sf)	14 0.06 ac
- Table Seating (500 sf table and chair combo)	10 0.11 ac
Part 2 Amenity Credits:	7.49 ac
- Community Center (@ 10 sf/unit credit)	Area (sf)
- Pool	1738 1.56 ac
- Clubhouse	6585 5.93 ac
Land Areas:	1.69 ac
Open area @ Clubhouse	22,708 0.52 ac
Dog Park	3900 0.09 ac
Courtyard, Bld 1 and 2	3830 0.09 ac
Courtyard, Bld 4 and 7	3249 0.07 ac
Courtyards, Bld. 5, 6 and 7&8	4680 0.11 ac
Walkway Open Space	17032 0.39 ac
Building 9 lawn	1456 0.03 ac
Bldg 2 Lawn	4589 0.10 ac
Bldgs 1&2 Lawn	12132 0.28 ac

Open Space was provided under F-17-022, Open Space Lots 1 & 2, 6.63 ac.



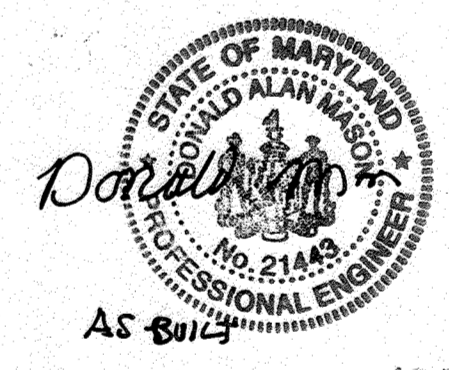
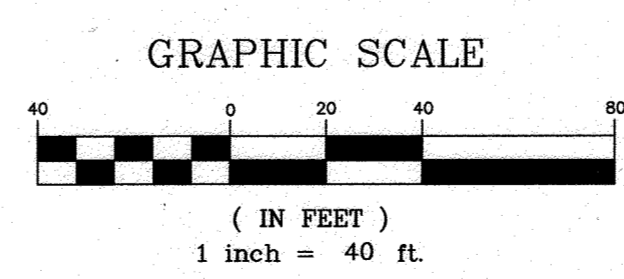
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Johnson 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kurt Seidman 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Valerie Griffin 8-24-18
 DIRECTOR DATE

NOTE: BUILDING SQUARE FOOTAGE IS BASED ON THE ARCHITECTURAL TABULATION SHOWN ON SHEET 49.



Professional Certification. I hereby certify that these documents were prepared by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21443 Expiration Date: 12-21-22

AS-BUILT CERTIFICATION

I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E. Date: 2/12/21

NO.	DATE	REVISION
4-28-21		Add underground propane tank (9'-11" Long, 37" φ)

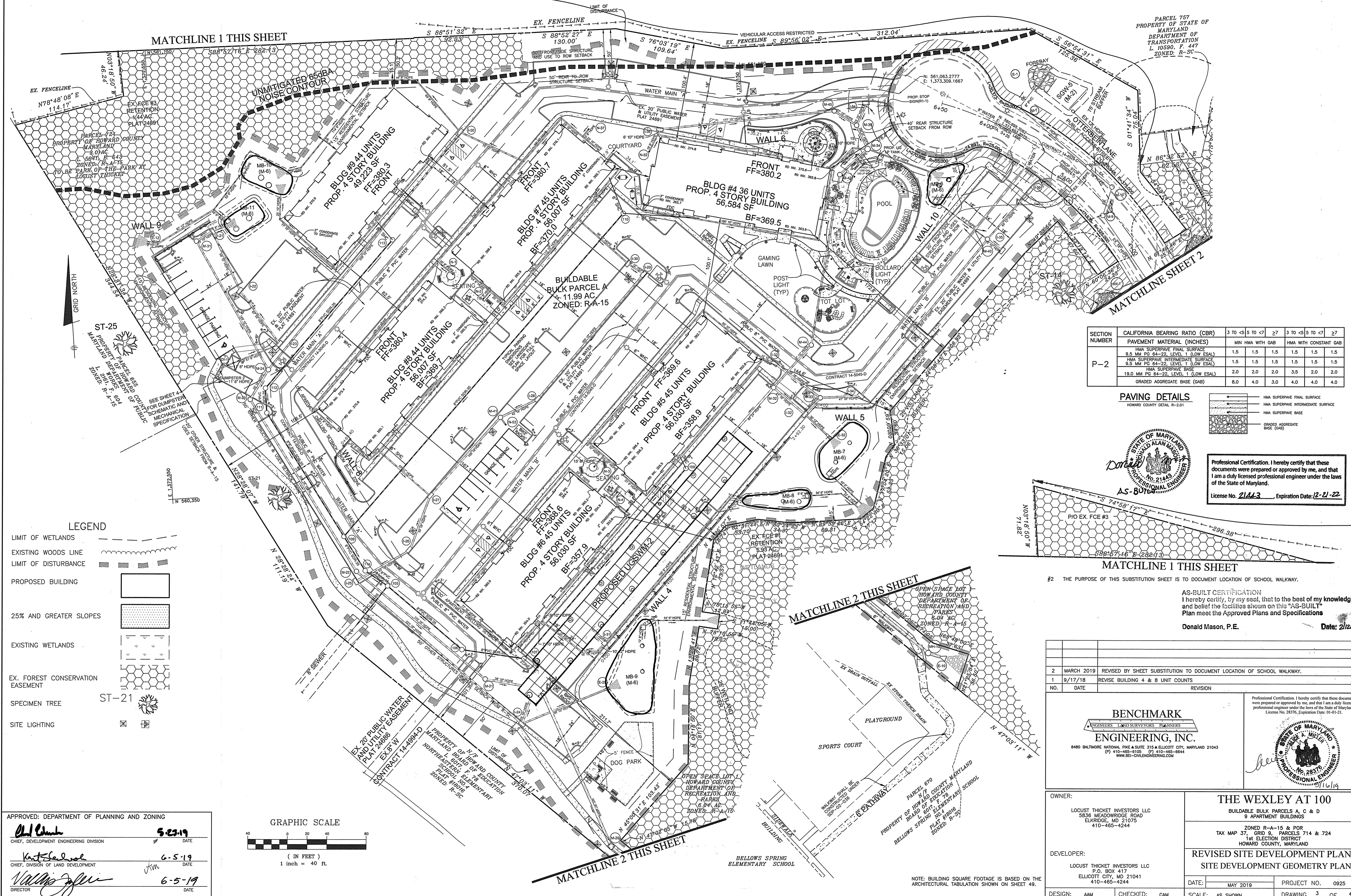
<p>BENCHMARK ENGINEERING, INC. 5830 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6102 (F) 410-465-8644 WWW.BEI-CIVILENGINEERING.COM</p>		<p>Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.</p> <p>License No. 28376, Expiration Date: 01-01-19.</p>
---	--	---

OWNER:	LOCUST THICKET INVESTORS LLC 5830 MEADOWRIDGE ROAD ELKRIE, MD 21075 410-465-4244
DEVELOPER:	LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244
DESIGN:	AAM
CHECKED:	CAM
SCALE:	AS SHOWN

<p>THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS</p>	
<p>ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>	
<p>SITE DEVELOPMENT PLAN SITE DEVELOPMENT GEOMETRY PLAN</p>	
DATE:	JULY 2018
PROJECT NO.	0925
DRAWING	2 OF 47

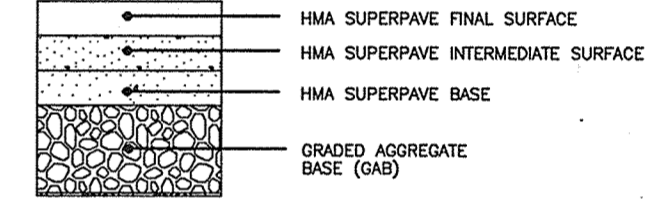
MATCHLINE 1 THIS SHEET

PARCEL 757
PROPERTY OF STATE OF
MARYLAND
DEPARTMENT OF
TRANSPORTATION
L. 10590, F. 447
ZONED: R-SC



SECTION NUMBER	CALIFORNIA BEARING RATIO (CBR)	3 TO <5		5 TO <7		≥7	
		MIN	HMA WITH GAB	MIN	HMA WITH CONSTANT GAB	MIN	HMA WITH CONSTANT GAB
P-2	HMA SUPERPAVE FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	1.5
	9.5 MM PG 64-22, LEVEL 1 (LOW ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
	HMA SUPERPAVE INTERMEDIATE SURFACE	1.5	1.5	1.5	1.5	1.5	1.5
	8.5 MM PG 64-22, LEVEL 1 (LOW ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
	HMA SUPERPAVE BASE	2.0	2.0	2.0	3.5	2.0	2.0
	19.0 MM PG 64-22, LEVEL 1 (LOW ESAL)	2.0	2.0	3.0	3.5	2.0	2.0
	GRADED AGGREGATE BASE (GAB)	8.0	4.0	4.0	4.0	4.0	4.0

PAVING DETAILS



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. 21443 Expiration Date: 12-21-22

LEGEND

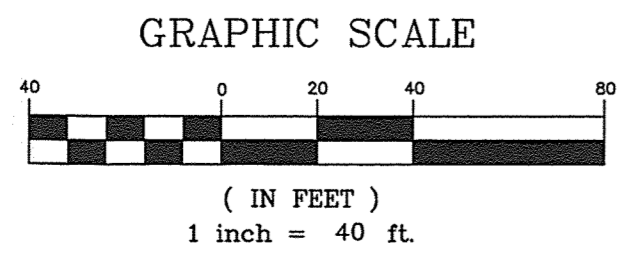
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- LIMIT OF DISTURBANCE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT
- SPECIMEN TREE
- SITE LIGHTING

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Clark 5-23-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kurt Caldwell 6-5-19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Valerie Miller 6-5-19
DIRECTOR DATE



MATCHLINE 1 THIS SHEET

#2 THE PURPOSE OF THIS SUBSTITUTION SHEET IS TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
Donald Mason, P.E. Date: 2/21/21

NO.	DATE	REVISION
2	MARCH 2019	REVISED BY SHEET SUBSTITUTION TO DOCUMENT LOCATION OF SCHOOL WALKWAY.
1	9/17/18	REVISE BUILDING 4 & 8 UNIT COUNTS

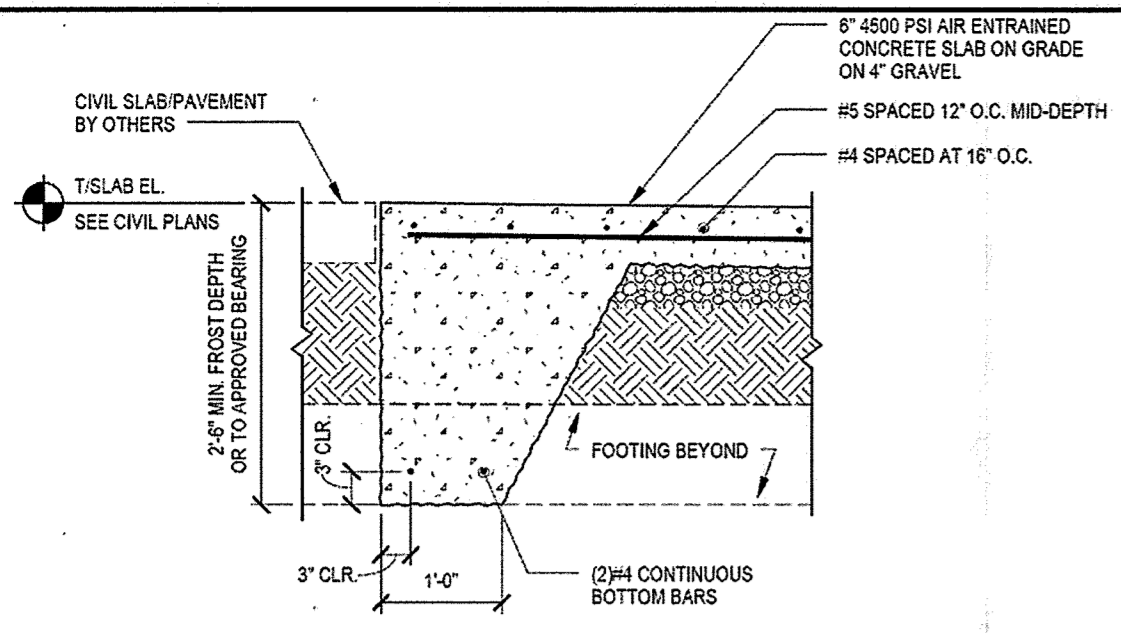
BENCHMARK ENGINEERING, INC.
ENGINEERS LAND SURVEYORS PLANNERS
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BE-ONLINEENGINEERING.COM

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. 28376, Expiration Date: 01-01-21.

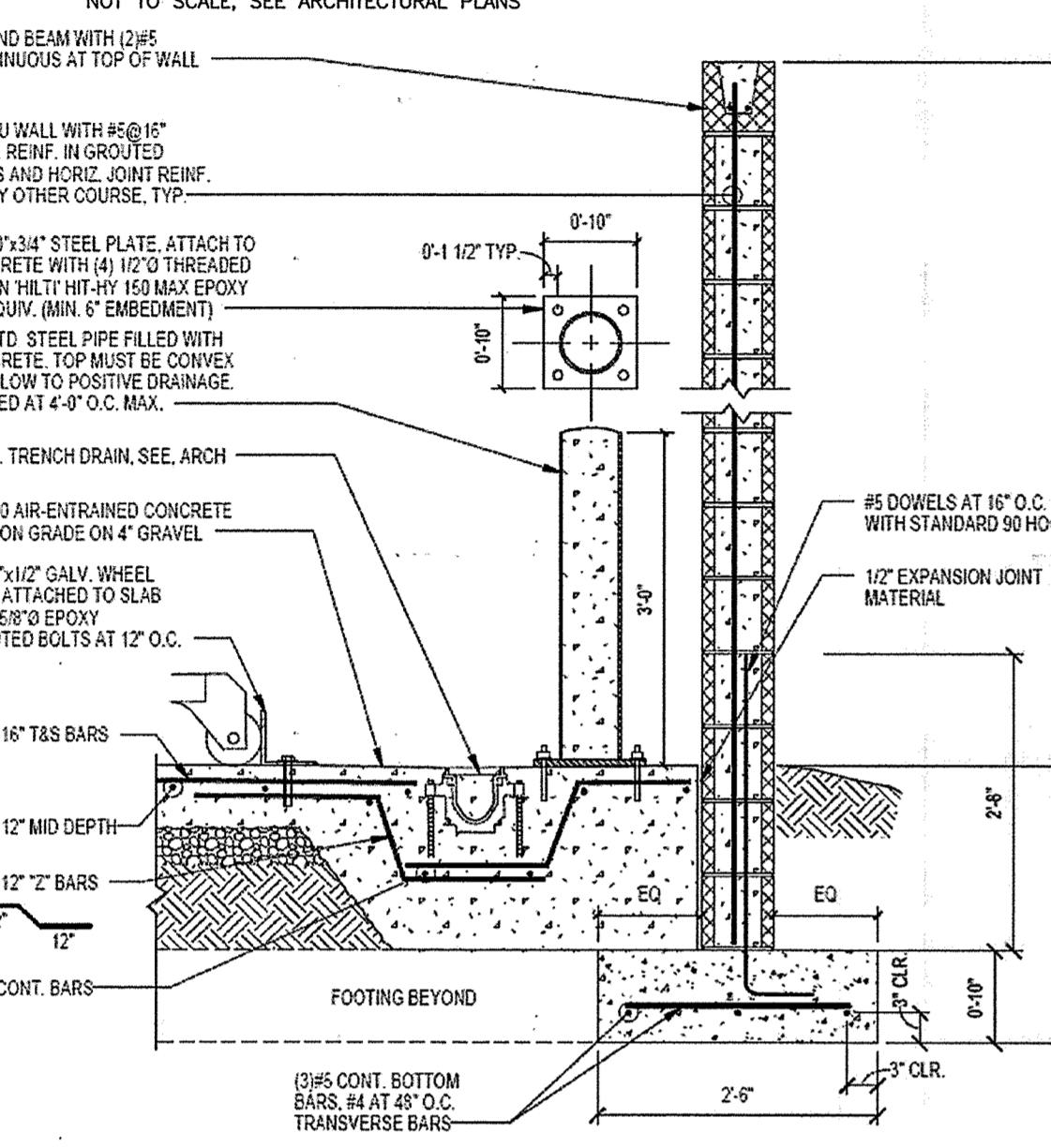
Be

OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWCROFT ROAD ELKRIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244	REVISED SITE DEVELOPMENT PLAN SITE DEVELOPMENT GEOMETRY PLAN
DESIGN: AAM	CHECKED: CAM
DATE: MAY 2019	PROJECT NO. 0925
SCALE: AS SHOWN	DRAWING 3 OF 47

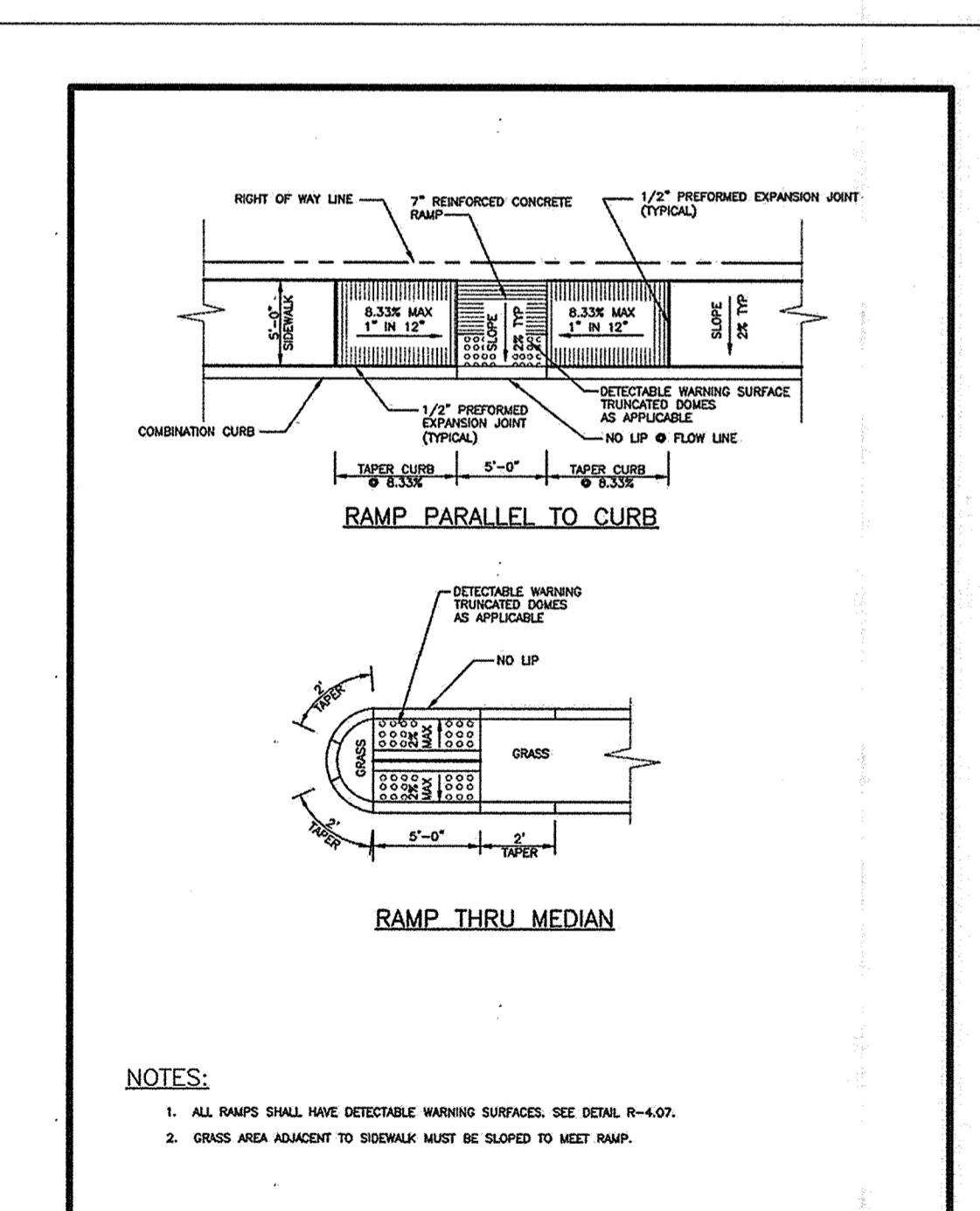
NOTE: BUILDING SQUARE FOOTAGE IS BASED ON THE ARCHITECTURAL TABULATION SHOWN ON SHEET #9.



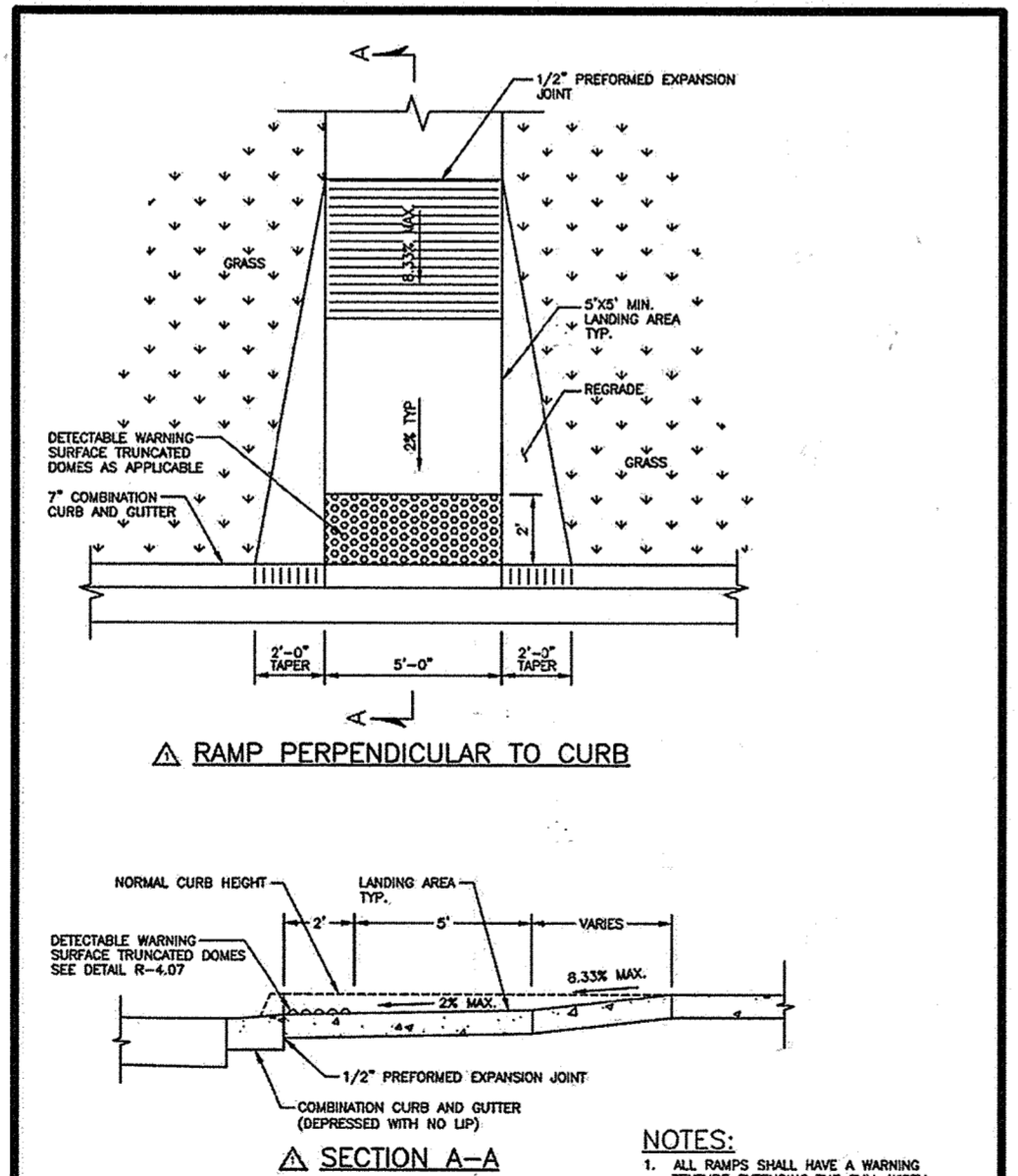
1 TRASH ENCLOSURE ENTRY SLAB
S3.2



2 CMU WALLS AT TRASH ENCLOSURE
S3.2



Howard County, Maryland Department of Public Works Approved: <i>[Signature]</i> Chief, Bureau of Engineering	SIDEWALK RAMP Layout & Grading Parallel to Curb & Thru Median	Detail R-4.06
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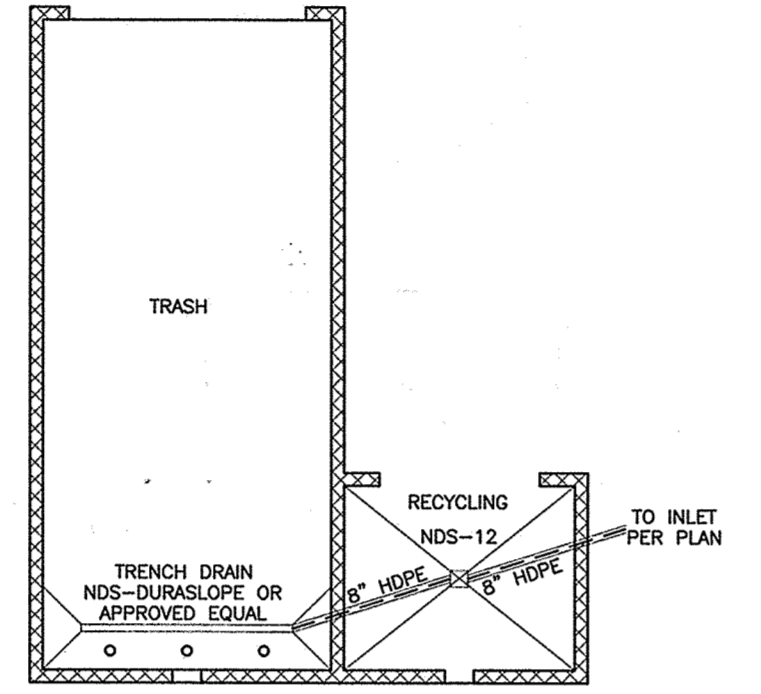
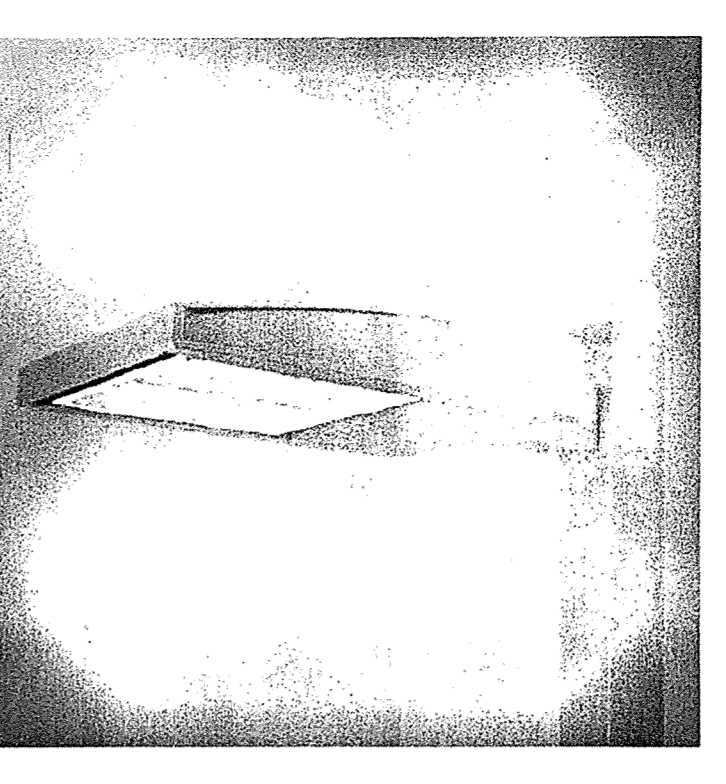
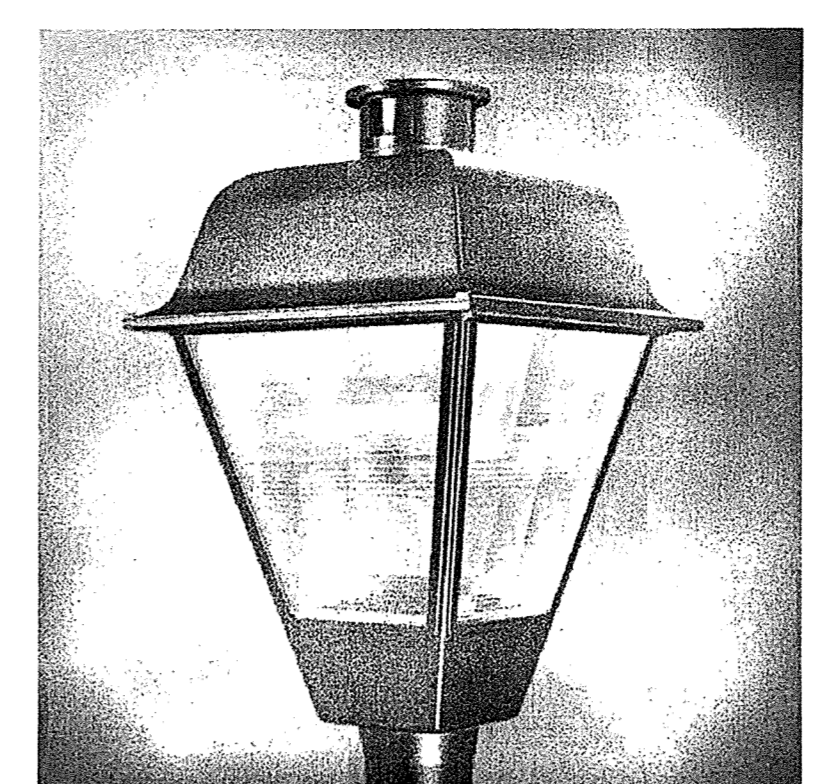
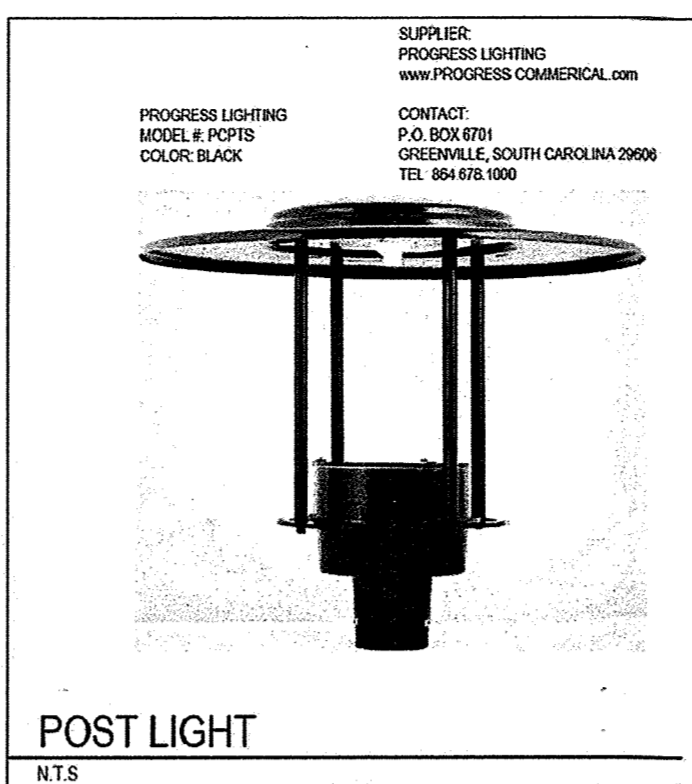
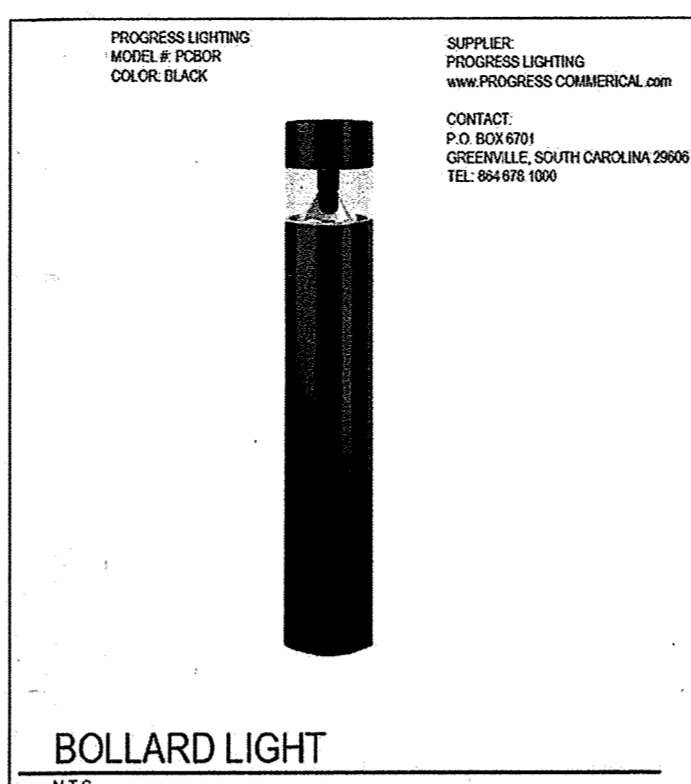
Howard County, Maryland Department of Public Works Approved: <i>[Signature]</i> Chief, Bureau of Engineering	SIDEWALK RAMP Layout & Grading Perpendicular to Curb	Detail R-4.05
---	--	------------------

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 8-16-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 8-23-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 8-24-18
DIRECTOR DATE



RESERVED PARKING
VAN ACCESSIBLE
NO PARKING IN ACCESS AISLE
\$350 FINE

THIS SIGN TO BE AT ALL ACCESSIBLE PARKING SPACES

THESE SIGNS TO BE PLACED AT VAN PARKING SPACES

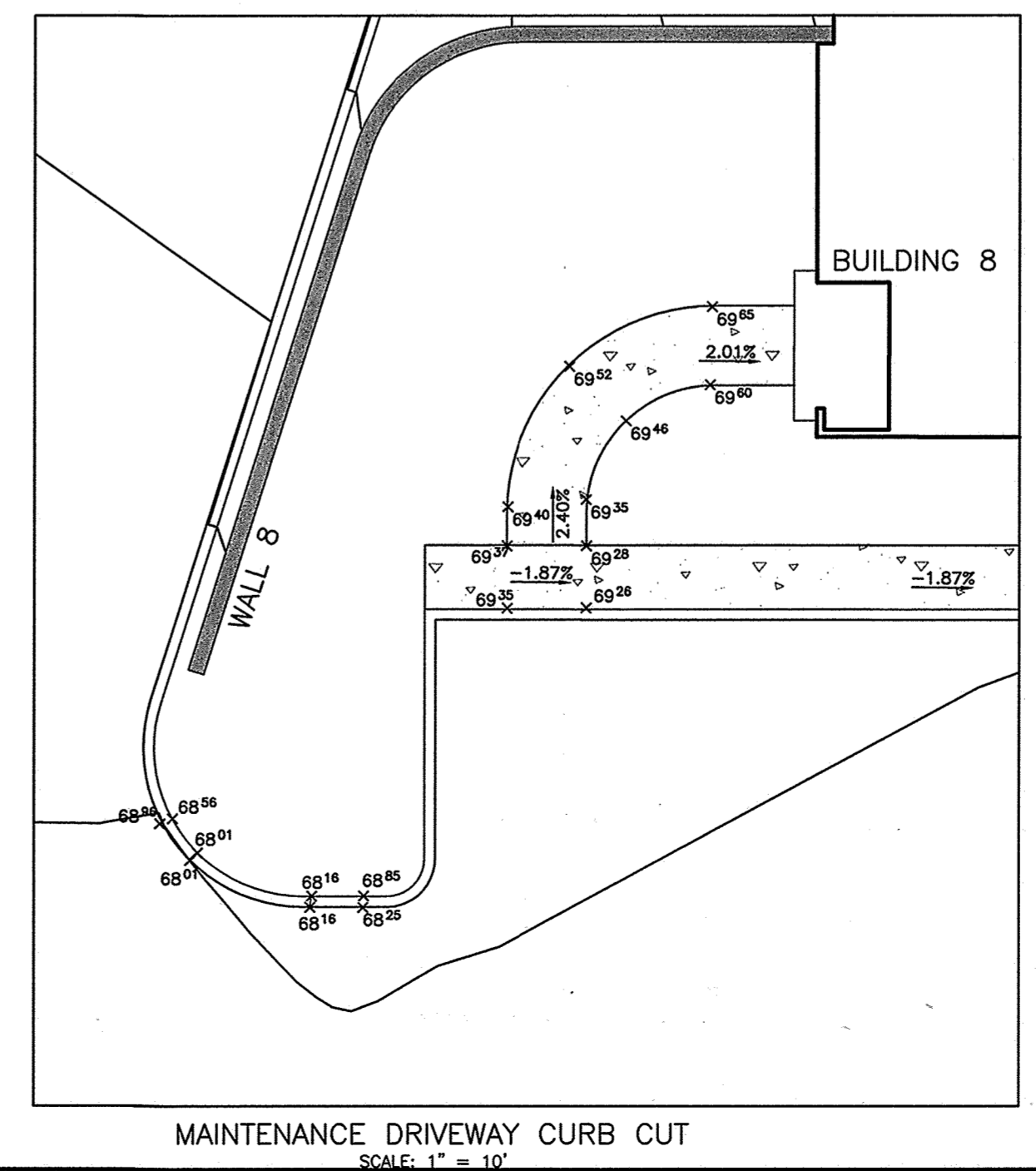
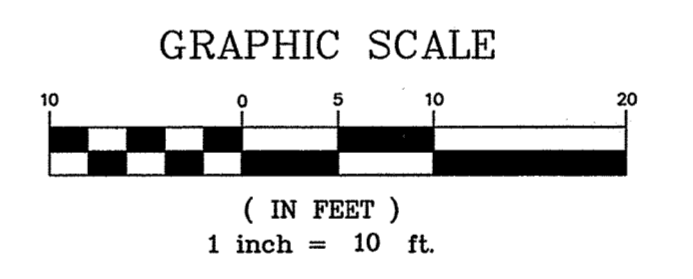
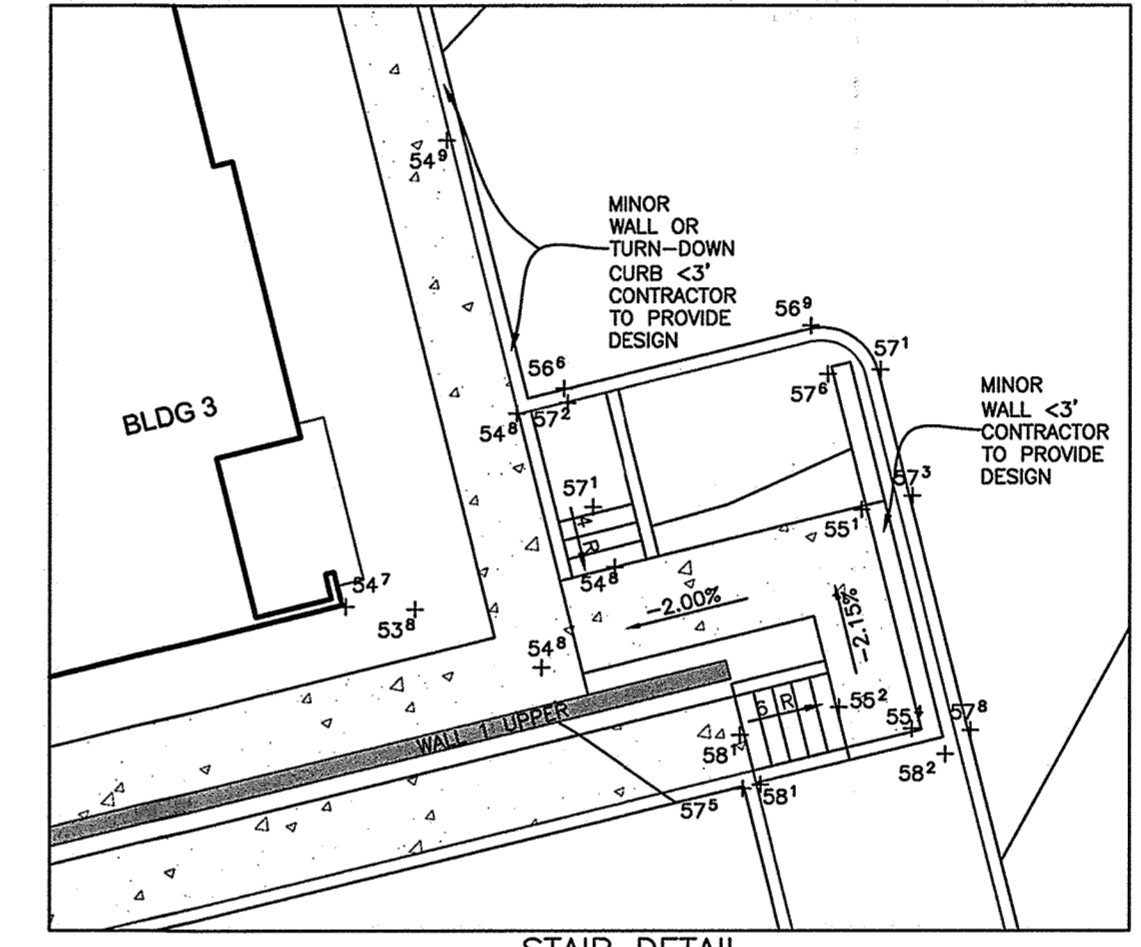
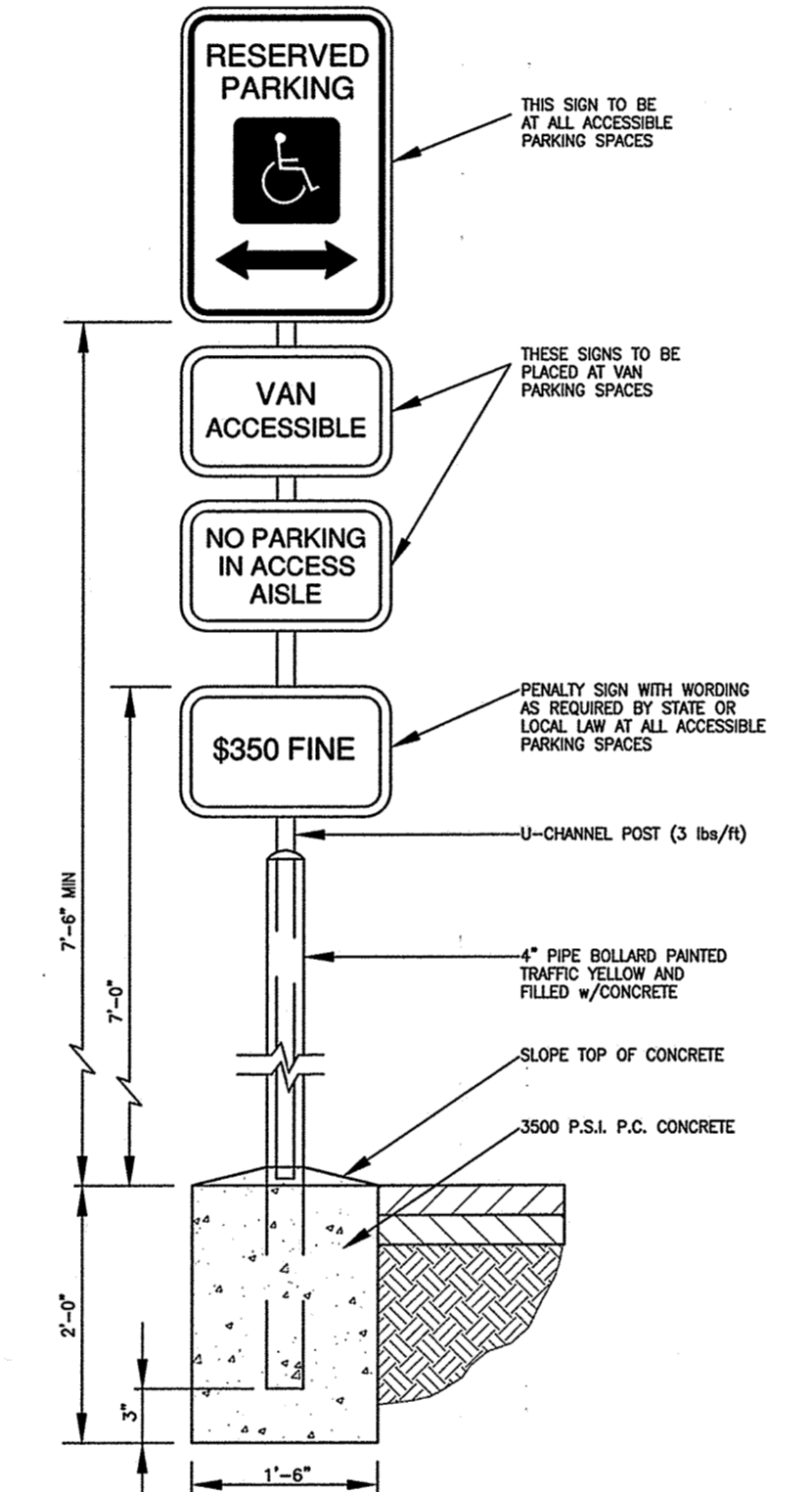
PENALTY SIGN WITH WORKING AS REQUIRED BY STATE OR LOCAL LAW AT ALL ACCESSIBLE PARKING SPACES

LI-CHANNEL POST (3 Bay/7)

4" PIPE BOLLARD PAINTED TRAFFIC YELLOW AND FILLED W/CONCRETE

SLOPE TOP OF CONCRETE

3500 P.S.I. P.C. CONCRETE



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

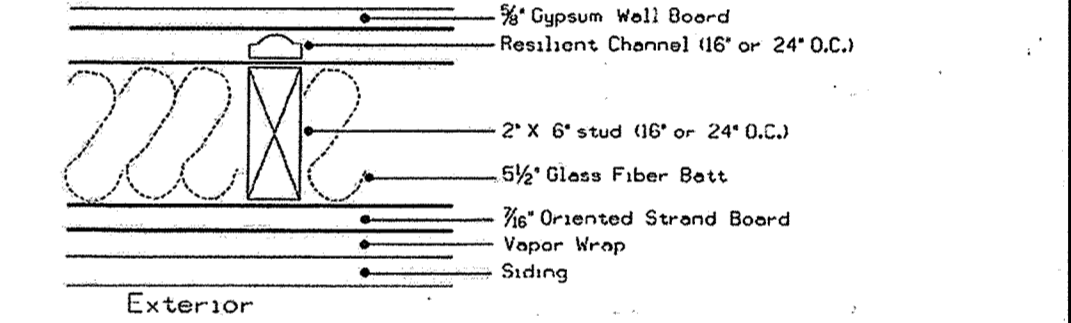


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21443, Expiration Date: 12-21-22

LIGHTING SCHEDULE		
SYMBOL	DESCRIPTION	LOCATION
☒	(36) TRR TRADITIONAIRE LED 16" FIBERGLASS POLE PARKING LOT LIGHTING	560360.9360 1374078.3200 560378.3420 1373943.4970 560294.0520 1373818.2904 560228.9390 1373536.0440 560253.7160 1373636.3040 560327.2674 1373673.3603 560417.3860 1373651.5850 560517.8061 1373624.7410 560567.2640 1373558.8290 560556.6620 1373511.8100 560928.8241 1373433.1959 560894.5377 1373317.2386 560816.0380 1373310.4470 560805.7120 1373225.9980 560766.6230 1373196.8690 560704.0670 1373163.1707 560654.8860 1373089.7050 560557.2530 1373020.1038 560484.5140 1372926.1680 560893.1110 1373024.2820 560823.5680 1372956.5820 560747.5880 1372877.6010 560663.3680 1372799.7000 561074.7164 1373162.0969 561105.5210 1373094.5810 561111.5174 1373020.0685 561080.8880 1372873.5230 560951.8697 1372839.4049 560900.8560 1372626.0100 560841.9404 1372659.9339 560783.2190 1372636.3360 560666.6870 1372694.2330 560566.7510 1372739.5910 560499.4684 1372832.0618 560444.6870 1372878.6170 560324.5311 1372957.3598 560388.6828 1372950.5738
☒	(1) GALLEON LED LUMINAIRE 16" FIBERGLASS POLE DOG PARK LIGHTING	
●	(16) BOLLARD LIGHTS AMENITY LIGHTING	AS SHOWN
☐	POST LIGHTS AMENITY LIGHTING	AS SHOWN

NOTES:
1. PARKING LOT LIGHTS AND DOG PARK LIGHT ARE TO BE INSTALLED BY, AND LEASED FROM BGE.

Howard County Noise Abatement Criteria limits the interior noise level of impacted residential units to 45 dBA or less. MARS Group Inc. identified the minimum composite (wall plus windows and doors) noise reduction requirement to dampen down the maximum levels produced by the adjacent highway traffic. Building requirements of the exterior walls fronting the highways for the minimum noise level reduction is shown in Figure 1.



If the exterior windows and doors together comprise 20% or less of the total exterior wall area, the windows and glass doors shall have a laboratory sound transmission class rating of at least STC-34. If the exterior windows and doors together comprise between 20% and 40% of the total exterior wall area, the windows and glass doors shall have a laboratory sound transmission class rating of at least STC-35.

If the exterior windows and doors together comprise 20% or less of the total exterior wall area, the doors shall have a laboratory sound transmission class rating of at least STC-31. If the exterior windows and doors together comprise between 20% and 40% of the total exterior wall area, the windows shall have a laboratory sound transmission class rating of at least STC-34.

To achieve actual door acoustical STC rating, the seals around the head, jamb, and sill must be complete, uninterrupted and air tight through the service life of the door. For uninterrupted seal, gasketing must be installed on the same side of the door frame.

NOISE ABATEMENT NOTES
FROM MARS GROUP REPORT, DATED NOV. 19, 2017

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. 28376, Expiration Date: 01-01-19.

BENCHMARK
ENGINEERS, LAND SURVEYORS, PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 3154 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

7-17-18

OWNER:
LOCUST THICKET INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELKRDGE, MD 21075
410-465-4244

DEVELOPER:
LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELLCOTT CITY, MD 21041
410-465-4244

DESIGN: AMM CHECKED: CAM SCALE: AS SHOWN DRAWING 4 OF 47

THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D
9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714 & 724
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN
SITE DETAILS

DATE: JULY 2018 PROJECT NO. 0925

LANDSCAPING NOTES

1. THE PROPOSED LANDSCAPING SHALL BE PROVIDED BY THE PLANTINGS AS SHOWN ON THESE PLANS.
2. THE DEVELOPER SHALL BE RESPONSIBLE FOR ALL INTERNAL PLANTINGS; THE PRESERVATION OF THE EXISTING PERIMETER VEGETATION AND FOR THE PERIMETER PLANTINGS AS SHOWN ON THESE PLANS. BONDING FOR THE PROPOSED PLANTINGS IS THE OBLIGATION OF THE DEVELOPER AS PART OF THE DEVELOPER'S AGREEMENT.
3. TREES MUST BE A MINIMUM OF FOUR (4) FEET FROM THE CURB OR SIDEWALK AND MUST BE A MINIMUM OF FIVE (5) FEET FROM ANY STORM DRAIN.
4. A MINIMUM DISTANCE OF TWENTY (20) FEET MUST BE MAINTAINED BETWEEN ANY TREES LOCATED ALONG THE CURB LINE AND FROM STREET LIGHTS.
5. TREE MUST BE PLANTED A MINIMUM OF FIVE (5) FEET FROM AN OPEN SPACE ACCESS STRIP AND TEN(10) FEET FROM A DRIVEWAY.
6. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
7. ALL LANDSCAPING PLANT TYPES SHOWN ON THESE PLANS ARE RECOMMENDATIONS AND MAY BE SUBSTITUTED WITH APPROVED EQUIVALENTS FROM THE HOWARD COUNTY LANDSCAPE MANUAL.
8. NO TREES SHALL BE PLACED WITHIN 10' BEHIND A RETAINING WALL OR WITHIN A RELATED MAINTENANCE EASEMENT, WHICHEVER IS GREATER.
9. SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.
10. THE REQUIRED INTERNAL AND PARKING PLANTINGS ARE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$72,830.00 (\$69,300 FOR 231 SHADE TREES; \$1,800 FOR 12 EVERGREEN TREES AND \$1,830 FOR 61 SHRUBS). PERIMETER LANDSCAPING (SCHEDULE A) WAS FULLY PROVIDED UNDER F-17-022.
11. AT THE TIME OF PLANT INSTALLATION, ALL SHRUBS AND TREES LISTED AND APPROVED ON THE FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENT IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATIONS OF THE REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO THE APPLICABLE PLANS AND CERTIFICATES.
12. THE OWNERS, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIAL AND BERMS, FENCES AND WALLS. ALL PLANT MATERIAL SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.

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 OF 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.

LOCUST THICKET INVESTORS, LLC
 DEVELOPER: *[Signature]* DATE: 7/23/18

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
NUMBER OF (SURFACE) PARKING SPACES	730
NUMBER OF LANDSCAPE ISLANDS REQUIRED	72
NUMBER OF SHADE TREES REQUIRED	74
NUMBER OF SHADE TREES PROVIDED	74
STREET PARKING SCREENING* 2'x2' @1:4	61
NUMBER OF SHRUBS PROVIDED**	71

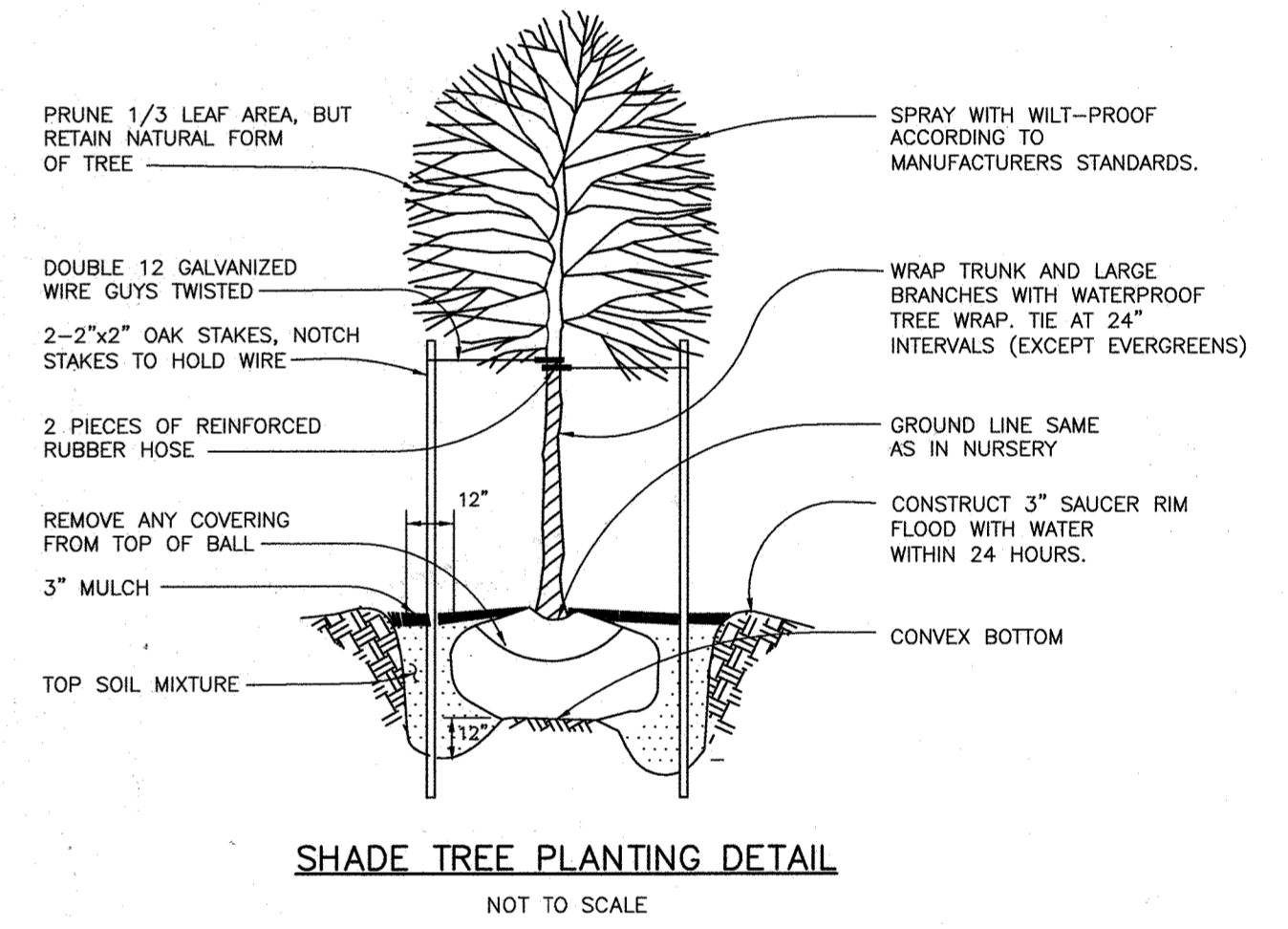
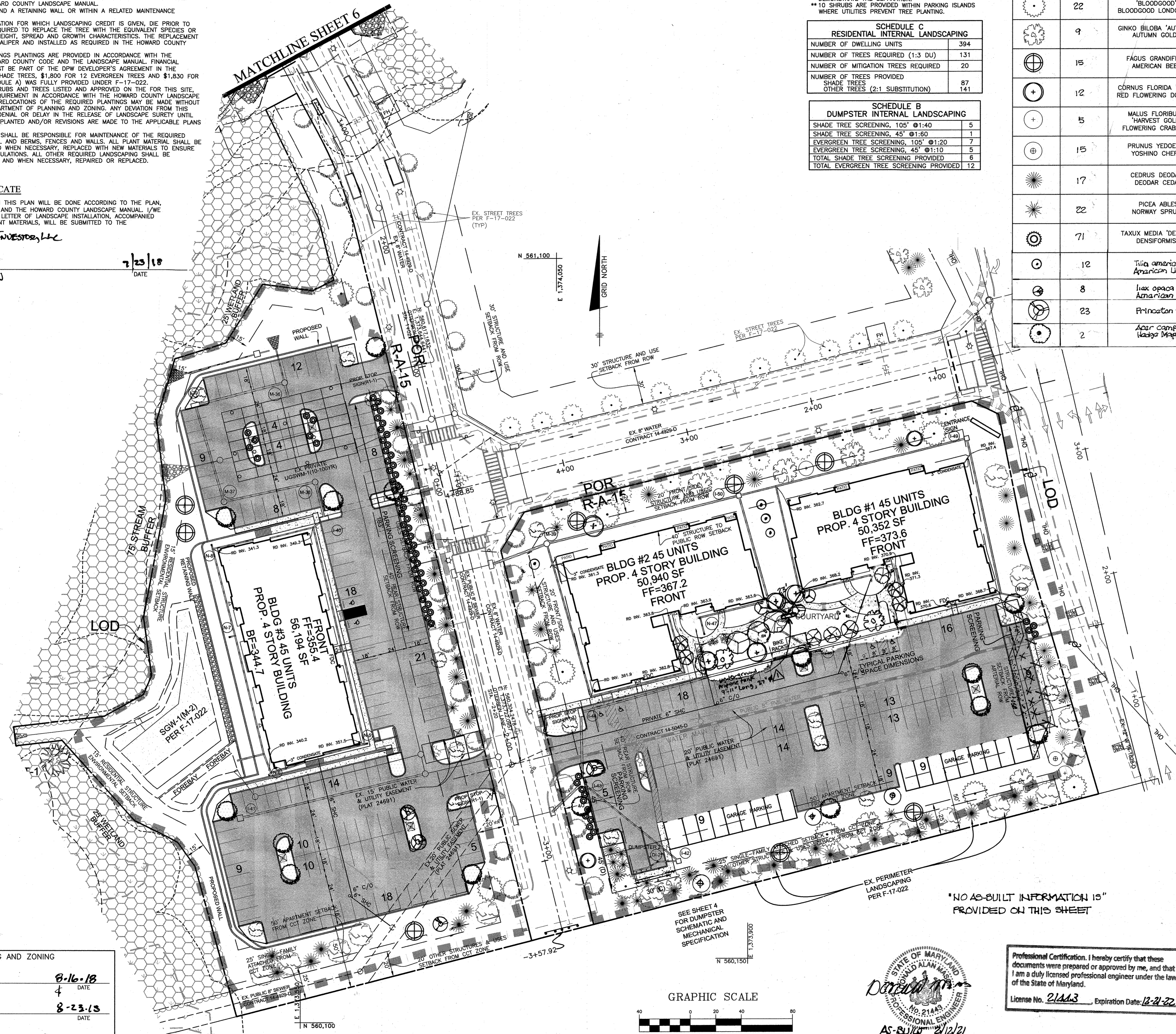
* REMAINING PARKING ALONG STREET IS GRADE SEPARATED (3' OR GREATER) AND SCREENING IS NOT REQUIRED. SPOT ELEVATIONS ARE PROVIDED IN PLAN VIEW TO DEMONSTRATE THE SEPARATION.
 ** 10 SHRUBS ARE PROVIDED WITHIN PARKING ISLANDS WHERE UTILITIES PREVENT TREE PLANTING.

SCHEDULE C RESIDENTIAL INTERNAL LANDSCAPING	
NUMBER OF DWELLING UNITS	394
NUMBER OF TREES REQUIRED (1:3 DU)	131
NUMBER OF MITIGATION TREES REQUIRED	20
NUMBER OF TREES PROVIDED	87
SHADE TREES (2:1 SUBSTITUTION)	141

SCHEDULE B DUMPSTER INTERNAL LANDSCAPING	
SHADE TREE SCREENING, 105' @1:40	5
SHADE TREE SCREENING, 45' @1:60	1
EVERGREEN TREE SCREENING, 105' @1:20	7
EVERGREEN TREE SCREENING, 45' @1:10	5
TOTAL SHADE TREE SCREENING PROVIDED	6
TOTAL EVERGREEN TREE SCREENING PROVIDED	12

SITE DEVELOPMENT PLAN LANDSCAPE PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
	51	Acer rubrum RED MAPLE	2 1/2" - 3" CAL
	17	QUERCUS ROBUR 'FASCIGATA' COLUMNAR ENGLISH OAK	2 1/2" - 3" CAL
	22	PLANTANUS X ACERFOLIA 'BLOODGOOD' BLOODGOOD LONDON PLANE	2 1/2" - 3" CAL
	9	GINKGO BILOBA 'AUTUMN GOLD' AUTUMN GOLD GINKGO	2 1/2" - 3" CAL
	15	FAGUS GRANDIFLORA AMERICAN BEECH	8' TO 10' HT.
	12	CORNUS FLORIDA 'RUBRA' RED FLOWERING DOGWOOD	8' TO 10' HT.
	5	MALUS FLORIBUNDA 'HARVEST GOLD' FLOWERING CRABAPPLE	1 1/2" - 2" CAL
	15	PRUNUS YEDOENSIS YOSHINO CHERRY	1 1/2" - 2" CAL
	17	CEDRUS DEODARA DEODAR CEDAR	6' TO 8' HT.
	22	PICEA ABLES NORWAY SPRUCE	6' TO 8' HT.
	71	TAXUS MEDIA 'DENSIFORMIS' DENSIFORMIS 'YEW	2 1/2" - 3" HT.
	12	Tilia americana American Linden	
	8	Ilex opaca American Holly	
	23	Princeton Elm	
	2	Acer campestre Hedge Maple	

SITE DEVELOPMENT PLAN LANDSCAPE PLANTING LIST			
SYMBOL	QUANTITY	NAME	REMARKS
	3	BETULA NIGRA 'HERITAGE' HERITAGE RIVER BIRCH	10" - 12" HT.
	4	Acer rubrum RED MAPLE	3" CAL
	3	QUERCUS COCCINEA SCARLET OAK	3" CAL
	6	ULMUS PARVIFOLIA LACEBARK ELM	3" CAL
	3	ZELKOVA SERRATA 'GREEN VASE' GREEN VASE ZELKOVA	3" CAL
	6	THUJA PLUCATA 'GREEN GIANT' GREEN GIANT ARBORVITAE	10' HT.
	8	AMELANCHIER CANADENSIS SHADBLOW SERVICEBERRY MULTITRUNK	6' HT.
	12	CERCIS CANADENSIS EASTERN REDBUD	8' HT.
	4	CORNUS KOUSA KOUSA DOGWOOD	8' HT.
	13	LAGERSTROEMIA X 'MUSKOGEE' LAVENDER GRAPE MYRTLE MULTI-TRUNK	10' HT.
	8	LAGERSTROEMIA X 'NATCHEZ' GRAPE MYRTLE	10' HT.
	10	PRUNUS X YEDOENSIS 'AKEBONO' FLOWERING CHERRY	10' HT.
	8	QUERCUS ROBUR X ALBA 'CRIMSON SPIRE' CRIMSON SPIRE OAK	3' HT.



NO.	DATE	REVISION
11-30-21		UPDATE LANDSCAPING PER AS-BUILT PROVIDED BY LANDSCAPE PROVIDER
4-28-21		Add underground propane tank (9-11 long, 37" dia)

BENCHMARK ENGINEERING, INC.
 5836 MEADOWBROOK PLAINES
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BEI-ONLINEENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

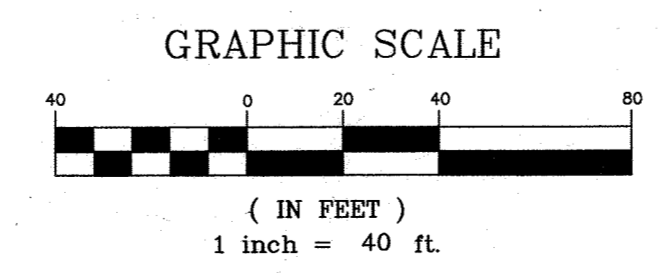
[Signature]
 PROFESSIONAL ENGINEER
 7-17-18

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 8-24-18
 DIRECTOR



STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 ALAN W. ...
 AS-BUILT 7/21/21

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. 21443, Expiration Date: 12-21-22

OWNER: LOCUST THICKET INVESTORS LLC
 5836 MEADOWBROOK PLAINES
 ELKBRIDGE, MD 21075
 410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS

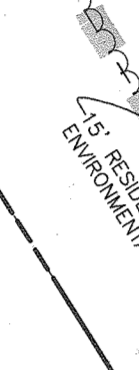
ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN
 LANDSCAPE AND PARKING PLAN**

DATE: JULY 2018 PROJECT NO. 0925
 DESIGN: AAM CHECKED: CAM SCALE: AS SHOWN DRAWING 5 OF 47



EX. FCE #3
RETENTION
1.44 AC.
PLAT 24691



ST-25

SEE SHEET
FOR DUMPSTER
AND SCHEMATIC
MECHANICAL
SPECIFICATION
USE OTHER SPECIFIC FROM P. 1-15

E 1,372,590
N 560,350

EXISTING PERIMETER
LANDSCAPING PER F-17-022

#2 THE PURPOSE OF THIS SUBSTITUTION SHEET IS TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

3	11-30-21	UPDATE LANDSCAPING PER AS-BUILT PROVIDED BY LANDSCAPE PROVIDER.
2	MAY 2019	REVISED BY SHEET SUBSTITUTION TO DOCUMENT LOCATION OF SCHOOL WALKWAY.
1	9/17/18	REVISE BUILDING 4 & 8 UNIT COUNT
NO.	DATE	REVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6109 (F) 410-465-6544
WWW.BE-CIVILENGINEERING.COM

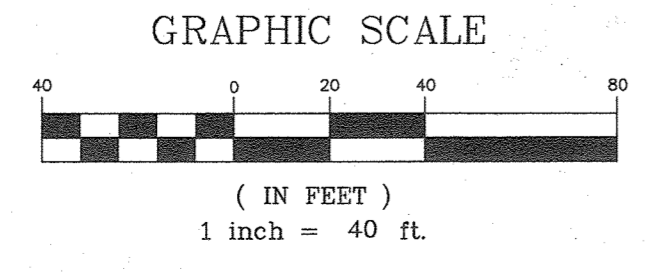
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 28376, Expiration Date: 01-01-21

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 5-23-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 6-5-19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6-5-19
DIRECTOR DATE



Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21443, Expiration Date: 12-21-22

OWNER:
LOCUST THicket INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELKRIDGE, MD 21075
410-465-4244

DEVELOPER:
LOCUST THicket INVESTORS LLC
P.O. BOX 417
ELLCOTT CITY, MD 21041
410-465-4244

DESIGN: AAM CHECKED: CAM

DATE: JULY 2018 PROJECT NO. 0925
SCALE: AS SHOWN DRAWING 6 OF 47

THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D
9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714 & 724
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

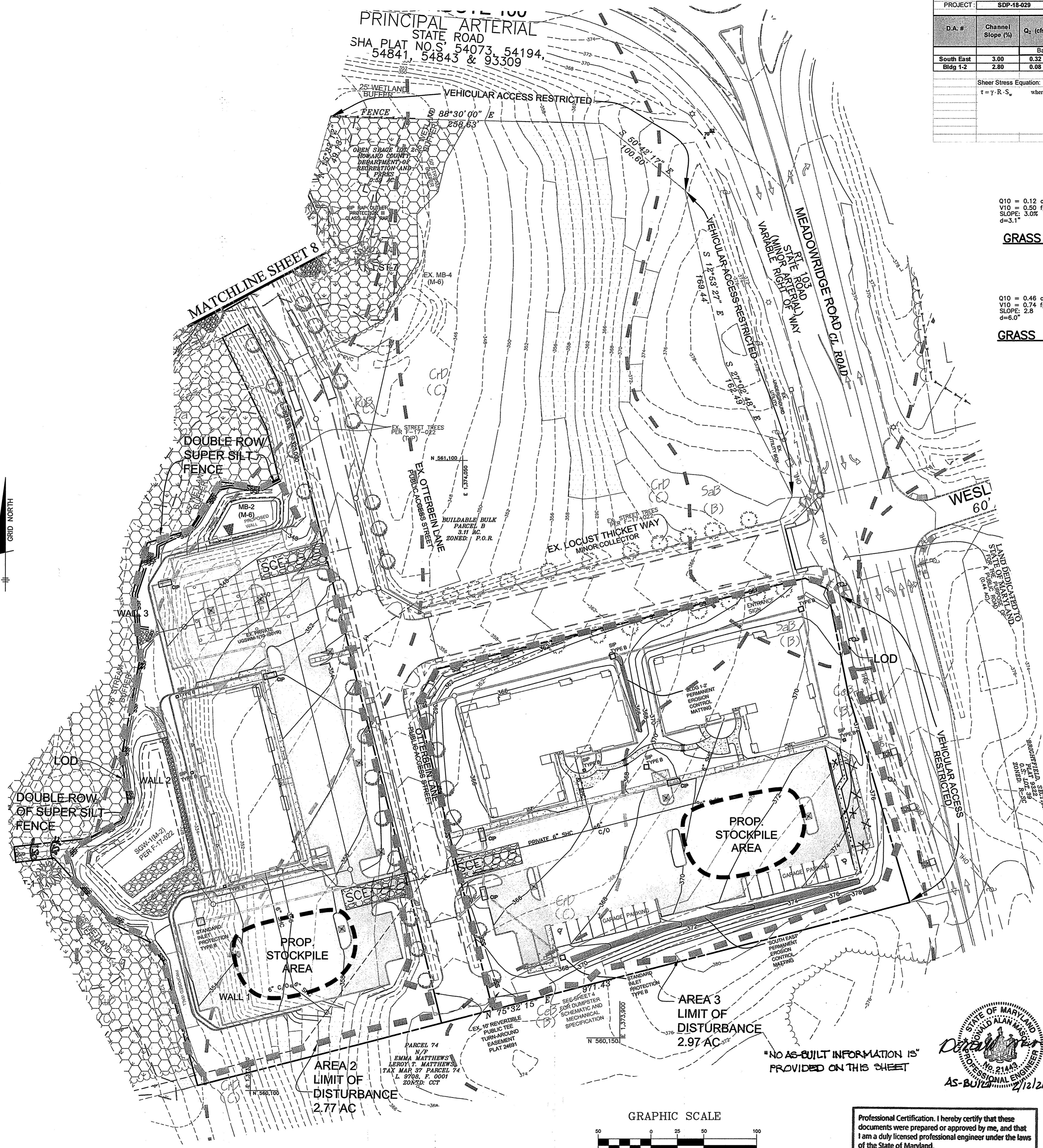
REVISED SITE DEVELOPMENT PLAN
LANDSCAPE AND PARKING PLAN

SDP-18-029

"NO AS-BUILT INFORMATION"
IS PROVIDED ON THIS SHEET

LEGEND

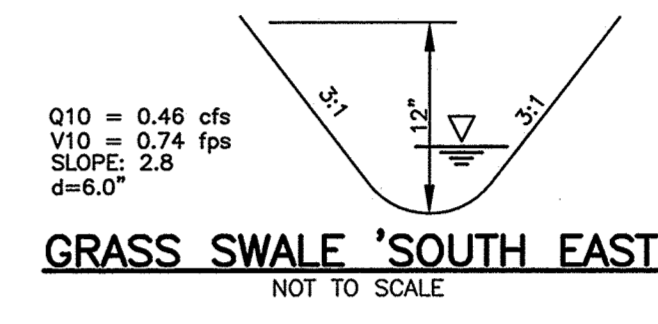
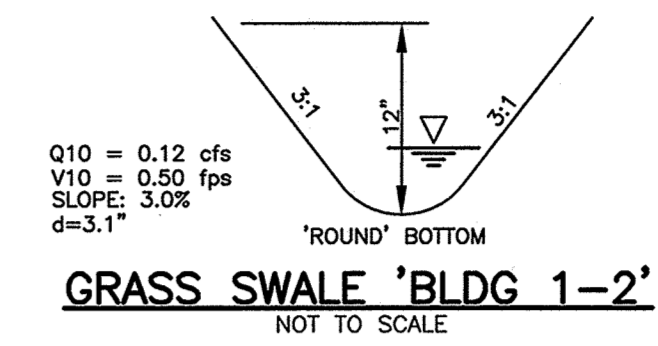
- SOILS CLASSIFICATION Ch.B2
- SOILS DELINEATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT
- SPECIMEN TREE ST-21
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- INLET PROTECTION IP
- EROSION CONTROL MATTING



SWALE COMPUTATIONS														
PROJECT: SDP-18-029		DATE: 4/24/2018		DESIGN BY: iam										
D.A. #	Channel Slope (%)	Q ₂ (cfs)	V ₂ (cfs)	R (ft)	Sw (ft)	Shear Stress	2-yr Matting Requirement	Q ₂ (cfs)	V ₂ (cfs)	R (ft)	Sw (ft)	Shear Stress	10-yr Matting Requirement	Final Matting Proposed
		Bare Earth												
South East	3.00	0.32	2.7	0.103	0.030	0.19	Temporary	0.46	0.74	0.294	0.03	0.55	None	Permanent
Bldg 1-2	2.80	0.08	1.57	0.059	0.028	0.10	None	0.12	0.50	0.163	0.03	0.28	None	Permanent

Shear Stress Equation: $\tau = \gamma \cdot R \cdot S_w$ where: τ = shear stress (lb/ft²), γ = weight density of water (62.4 lb/ft³), R = average water depth (hydraulic radius) (ft), S_w = water surface slope (ft/ft)

Note: The swale computation were prepared for sediment control matting determination. A 'bare earth' Manning's coefficient for the 2-year storm was used.



ENGINEER'S CERTIFICATE
 I HEREBY 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] 7-17-18
 ENGINEER DATE

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 7/23/18
 DEVELOPER DATE

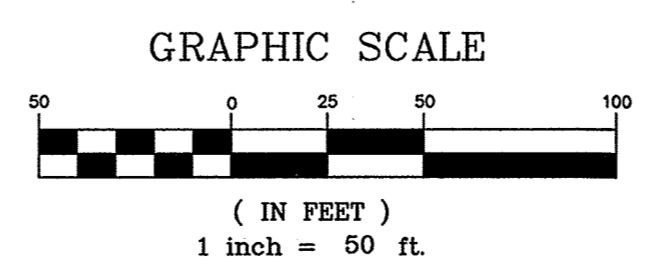
REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 8/8/18
 HOWARD SCD DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 8-24-18
 DIRECTOR DATE

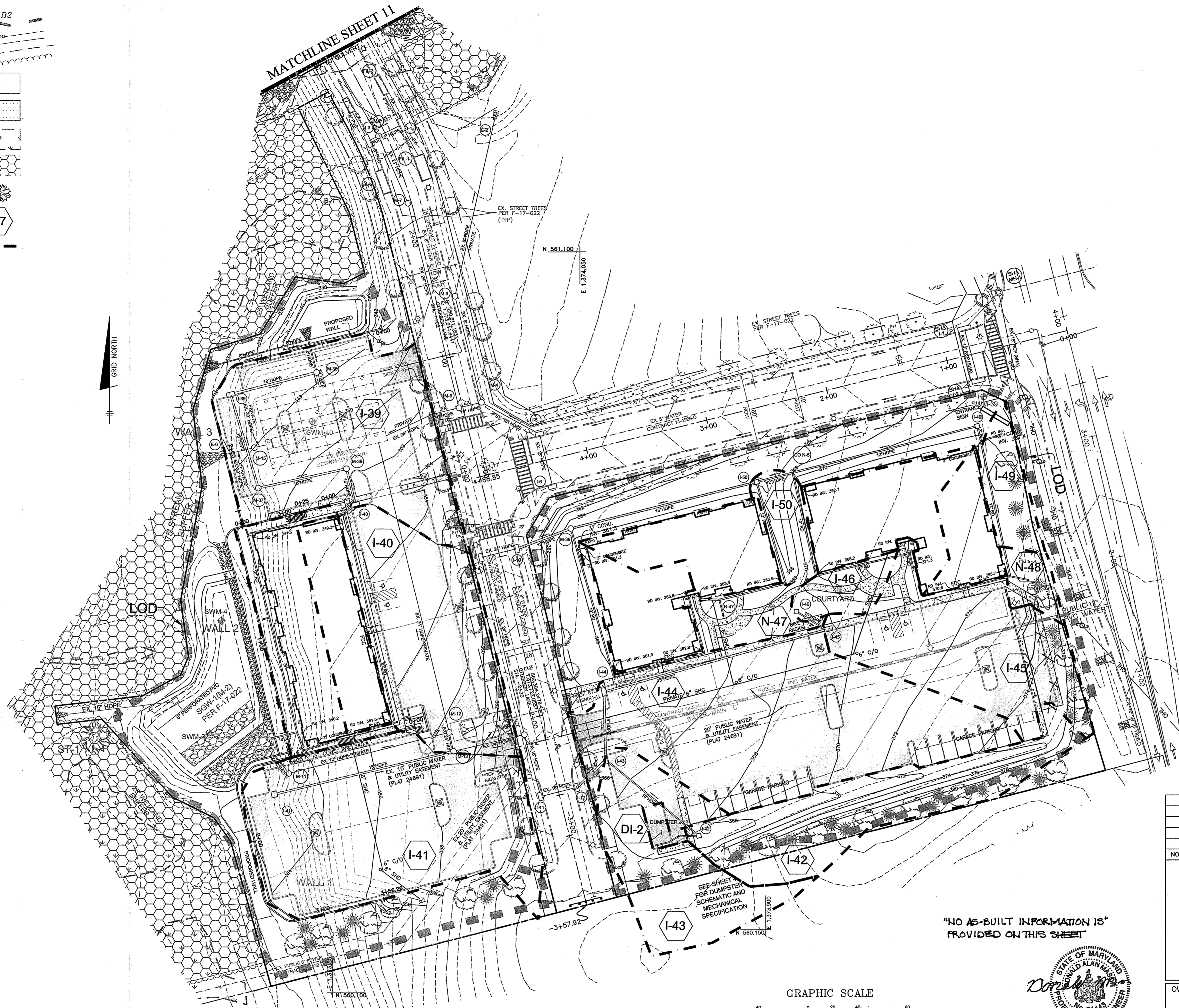


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 21443 Expiration Date: 12-31-22

NO. DATE REVISION	
<p>BENCHMARK ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE SUITE 315 A ELLICOTT CITY, MARYLAND 21043 (P) 410-485-6105 (F) 410-485-6844 WWW.BE-ENGINEERING.COM</p>	
<p>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. 28376, Expiration Date: 01-01-19.</p>	
OWNER:	<p>THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS</p>
DEVELOPER:	<p>LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244</p>
DESIGN:	<p>ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p>
CHECKED:	<p>SITE DEVELOPMENT PLAN SEDIMENT & EROSION CONTROL PLAN</p>
DATE:	<p>DATE: JULY 2018 PROJECT NO. 0925</p>
SCALE:	<p>SCALE: AS SHOWN DRAWING 7 OF 47</p>

LEGEND

- SOILS CLASSIFICATION Ch.B2
- SOILS DELINEATION ---
- EXISTING CONTOURS - - - -
- LIMIT OF WETLANDS - - - -
- EXISTING WOODS LINE ~~~~~
- PROPOSED BUILDING []
- 25% AND GREATER SLOPES []
- EXISTING WETLANDS []
- EX. FOREST CONSERVATION EASEMENT []
- SPECIMEN TREE ST-21
- DRAINAGE AREA DESIGNATION I-27
- DRAINAGE AREA []



AREA AND "C" FACTOR TABULATION

PROJECT: LOCUST THICKET DATE: 11/14/2017 JOB # 0925

PHASE	INLET #	ZONING	SUBAREA (B)	AREA (Ac)	"C" FACTOR <25 (C)	% IMPERVIOUS (P)
	I-20	R-A-15		0.44	0.64	69
	I-21	R-A-15		0.14	0.80	92
	I-22	R-A-15		0.19	0.75	85
	I-23	R-A-15		0.33	0.78	86
	I-24	R-A-15		0.35	0.77	85
	I-25	R-A-15		0.31	0.77	85
	I-26	R-A-15		0.19	0.71	75
	I-27	R-A-15		0.66	0.63	64
	I-28	R-A-15		0.37	0.71	76
	I-29	R-A-15		0.17	0.66	68
	I-30	R-A-15		0.09	0.77	84
	I-31	R-A-15		0.45	0.73	79
	I-32	R-A-15		0.54	0.61	62
	I-33	R-A-15		0.41	0.60	59
	I-34	R-A-15		0.16	0.69	71
	I-35	R-A-15		0.24	0.60	57
	I-36	R-A-15		0.40	0.60	59
	I-37	R-A-15		0.01	0.21	0
	I-39	R-A-15		0.54	0.70	73
	I-40	R-A-15		0.42	0.69	72
	I-41	R-A-15		0.62	0.73	77
	I-42	R-A-15		0.33	0.21	0
	I-43	R-A-15		0.30	0.39	26
	I-44	R-A-15		0.87	0.67	73
	I-45	R-A-15		0.39	0.72	77
	I-46	R-A-15		0.06	0.64	65
	I-47	R-A-15		0.09	0.39	25
	I-48	R-A-15		0.04	0.21	0
	I-49	R-A-15		0.08	0.21	0
	I-50	R-A-15		0.07	0.26	10
	N-51	R-A-15		0.08	0.38	30
	N-52	R-A-15		0.02	0.16	0
	N-53	R-A-15		0.04	0.16	0
	I-54	R-A-15		0.12	0.66	68
	I-56	R-A-15		0.13	0.81	90

AREA AND "C" FACTOR TABULATION

PROJECT: LOCUST THICKET DATE: 4/18/2018 JOB # 0925

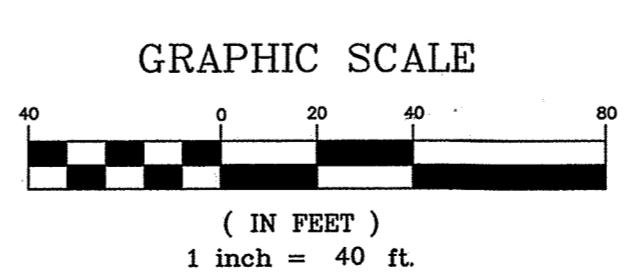
PHASE	INLET #	ZONING	SUBAREA (B)	AREA (Ac)	"C" FACTOR <25 (C)	% IMPERVIOUS (P)
	B-1F	R-A-15		0.20	0.86	100
	B-1B	R-A-15		0.09	0.86	100
	B-2F	R-A-15		0.14	0.86	100
	B-2B	R-A-15		0.16	0.86	100
	B-3	R-A-15		0.37	0.86	100
	B-4F	R-A-15		0.13	0.86	100
	B-4B	R-A-15		0.16	0.86	100
	B-5	R-A-15		0.29	0.86	100
	B-6	R-A-15		0.29	0.86	100
	B-7	R-A-15		0.13	0.86	100
	B-7B	R-A-15		0.16	0.86	100
	B-8F	R-A-15		0.11	0.86	100
	B-8B	R-A-15		0.17	0.86	100
	B-9F	R-A-15		0.15	0.86	100
	B-9B	R-A-15		0.14	0.86	100
	DI-1	R-A-15		0.02	0.87	100
	DI-2	R-A-15		0.02	0.87	100

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Chamberlain 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kent St. Oswald 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Nalini J. J. J. 8-24-18
 DIRECTOR DATE

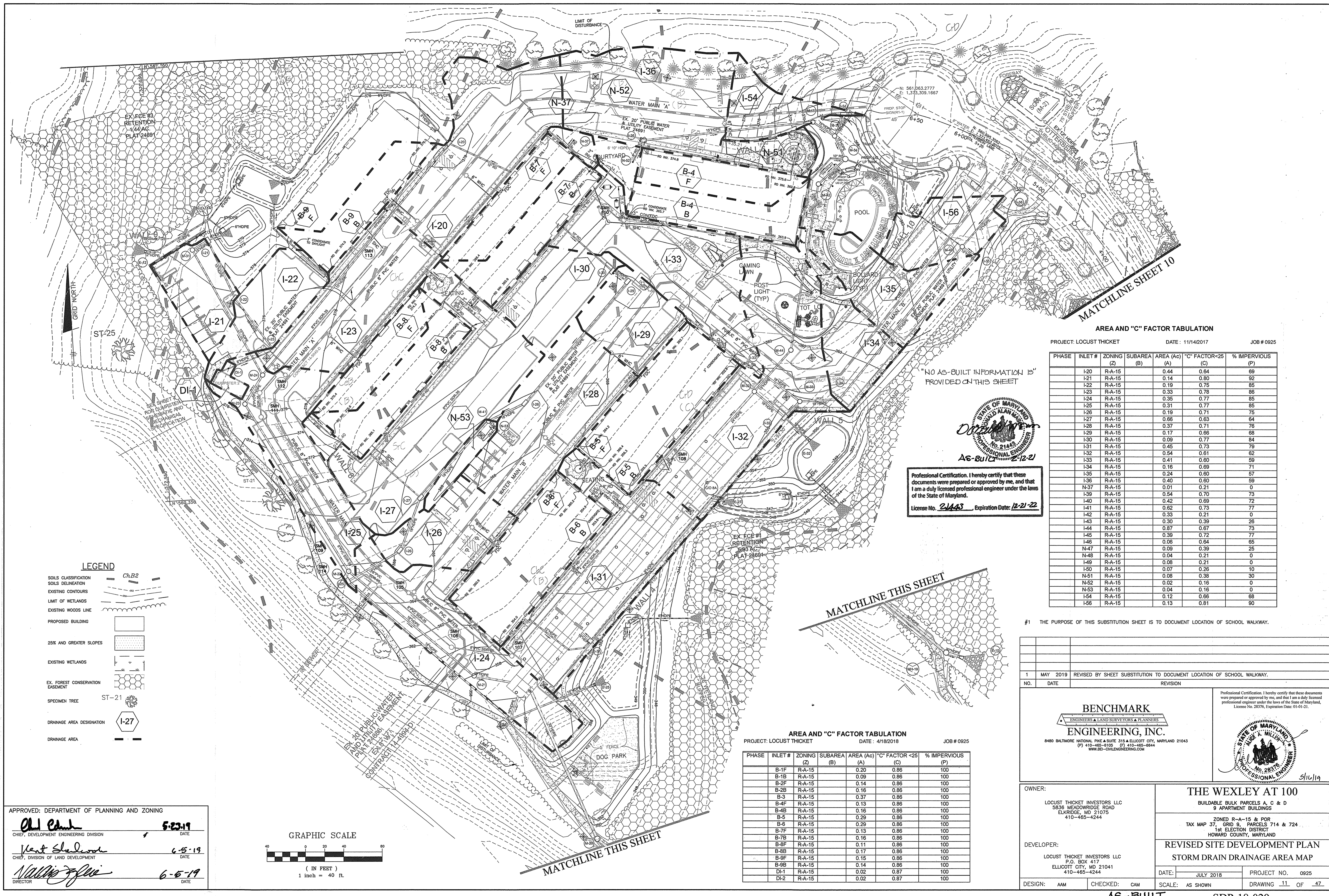


"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21443, Expiration Date: 12-21-22

<p>NO. DATE REVISION</p>	
<p>BENCHMARK ENGINEERING, INC. ENGINEERS & LAND SURVEYORS & PLANNERS 8480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM</p>	
<p>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. 28316, Expiration Date: 01-01-19.</p>	
<p>OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWBRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244</p>	<p>THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS</p>
<p>DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244</p>	<p>ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND</p> <p>SITE DEVELOPMENT PLAN STORM DRAIN DRAINAGE AREA MAP</p>
<p>DESIGN: AAM CHECKED: CAM SCALE: AS SHOWN</p>	<p>DATE: JULY 2018 PROJECT NO. 0925 DRAWING 10 OF 47</p>



LEGEND

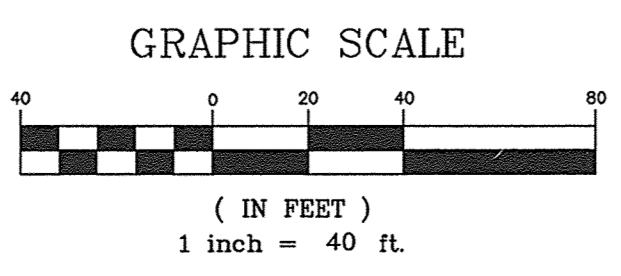
SOILS CLASSIFICATION	Ch.B2
SOILS DELINEATION	
EXISTING CONTOURS	
LIMIT OF WETLANDS	
EXISTING WOODS LINE	
PROPOSED BUILDING	
25% AND GREATER SLOPES	
EXISTING WETLANDS	
EX. FOREST CONSERVATION EASEMENT	
SPECIMEN TREE	ST-21
DRAINAGE AREA DESIGNATION	I-27
DRAINAGE AREA	

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Clark 5-23-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Walt Shadron 6-5-19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Nadine Flynn 6-5-19
 DIRECTOR DATE



AREA AND "C" FACTOR TABULATION
 PROJECT: LOCUST THICKET DATE: 11/14/2017 JOB # 0925

PHASE	INLET #	ZONING (Z)	SUBAREA (B)	AREA (A) (Ac)	"C" FACTOR <25 (C)	% IMPERVIOUS (P)
I-20		R-A-15		0.44	0.64	69
I-21		R-A-15		0.14	0.80	92
I-22		R-A-15		0.19	0.75	85
I-23		R-A-15		0.33	0.78	86
I-24		R-A-15		0.35	0.77	85
I-25		R-A-15		0.31	0.77	85
I-26		R-A-15		0.19	0.71	75
I-27		R-A-15		0.66	0.63	64
I-28		R-A-15		0.37	0.71	76
I-29		R-A-15		0.17	0.66	68
I-30		R-A-15		0.09	0.77	84
I-31		R-A-15		0.45	0.73	79
I-32		R-A-15		0.54	0.61	62
I-33		R-A-15		0.41	0.60	59
I-34		R-A-15		0.16	0.69	71
I-35		R-A-15		0.24	0.60	57
I-36		R-A-15		0.40	0.60	59
N-37		R-A-15		0.01	0.21	0
I-39		R-A-15		0.54	0.70	73
I-40		R-A-15		0.42	0.69	72
I-41		R-A-15		0.62	0.73	77
I-42		R-A-15		0.33	0.21	0
I-43		R-A-15		0.30	0.39	26
I-44		R-A-15		0.57	0.57	73
I-45		R-A-15		0.39	0.72	77
I-46		R-A-15		0.06	0.64	65
N-47		R-A-15		0.09	0.39	25
N-48		R-A-15		0.04	0.21	0
I-49		R-A-15		0.08	0.21	0
I-50		R-A-15		0.07	0.26	10
N-51		R-A-15		0.08	0.38	30
N-52		R-A-15		0.02	0.16	0
N-53		R-A-15		0.04	0.16	0
I-54		R-A-15		0.12	0.66	68
I-56		R-A-15		0.13	0.81	90

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21443, Expiration Date: 12-21-22

AREA AND "C" FACTOR TABULATION
 PROJECT: LOCUST THICKET DATE: 4/18/2018 JOB # 0925

PHASE	INLET #	ZONING (Z)	SUBAREA (B)	AREA (A) (Ac)	"C" FACTOR <25 (C)	% IMPERVIOUS (P)
B-1F		R-A-15		0.20	0.86	100
B-1B		R-A-15		0.09	0.86	100
B-2F		R-A-15		0.14	0.86	100
B-2B		R-A-15		0.16	0.86	100
B-3		R-A-15		0.37	0.86	100
B-4F		R-A-15		0.13	0.86	100
B-4B		R-A-15		0.16	0.86	100
B-5		R-A-15		0.29	0.86	100
B-6		R-A-15		0.29	0.86	100
B-7F		R-A-15		0.13	0.86	100
B-7B		R-A-15		0.16	0.86	100
B-8F		R-A-15		0.11	0.86	100
B-8B		R-A-15		0.17	0.86	100
B-9F		R-A-15		0.15	0.86	100
B-9B		R-A-15		0.14	0.86	100
DI-1		R-A-15		0.02	0.87	100
DI-2		R-A-15		0.02	0.87	100

#1 THE PURPOSE OF THIS SUBSTITUTION SHEET IS TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

NO.	DATE	REVISION
1	MAY 2019	REVISED BY SHEET SUBSTITUTION TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-8100 (F) 410-465-6644
 WWW.BE-ONLINEENGINEERING.COM

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. 28376, Expiration Date: 01-01-21.

OWNER:
 LOCUST THICKET INVESTORS LLC
 5636 MEADOWBRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

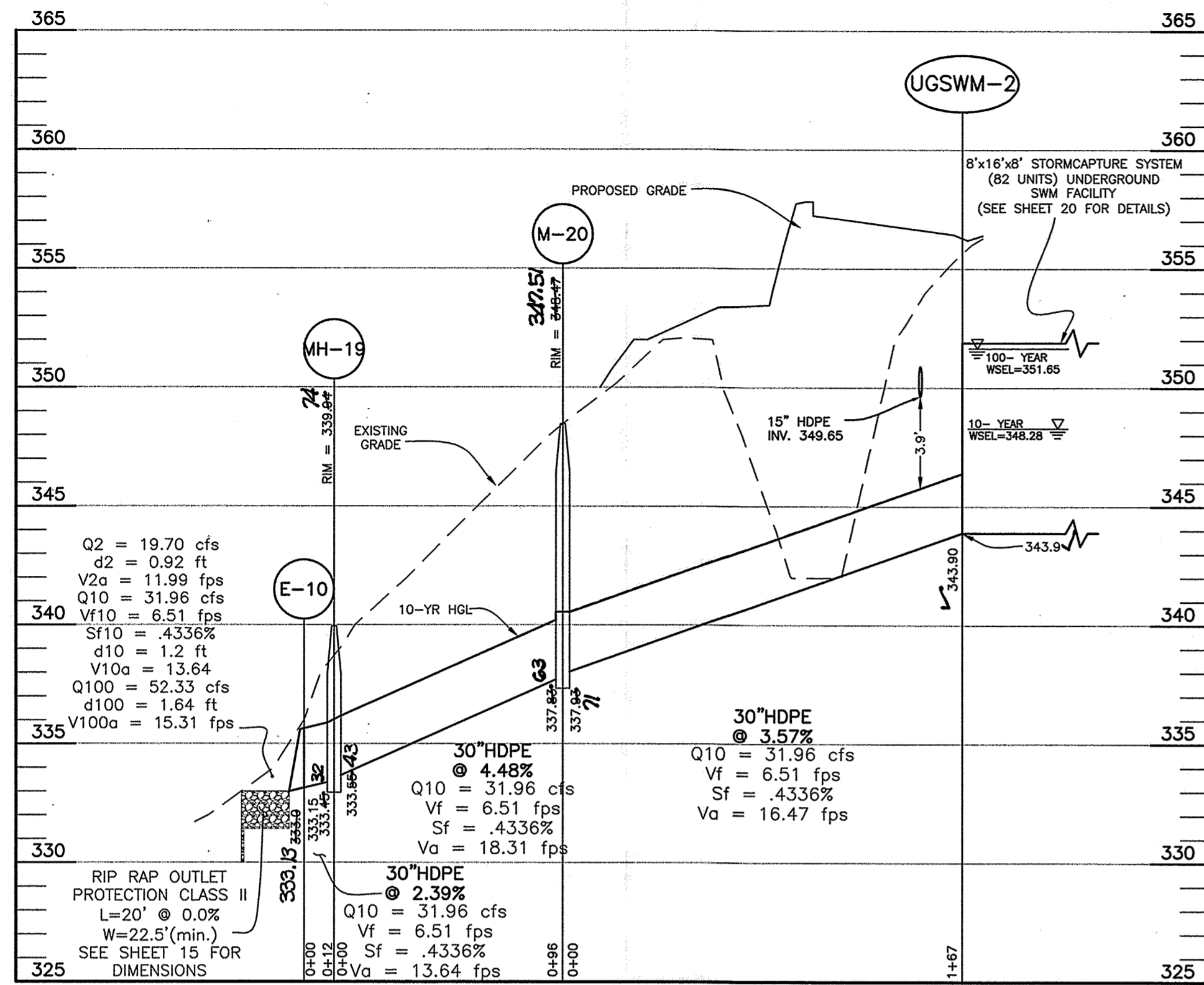
DEVELOPER:
 LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AAM CHECKED: CAM

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS
 ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

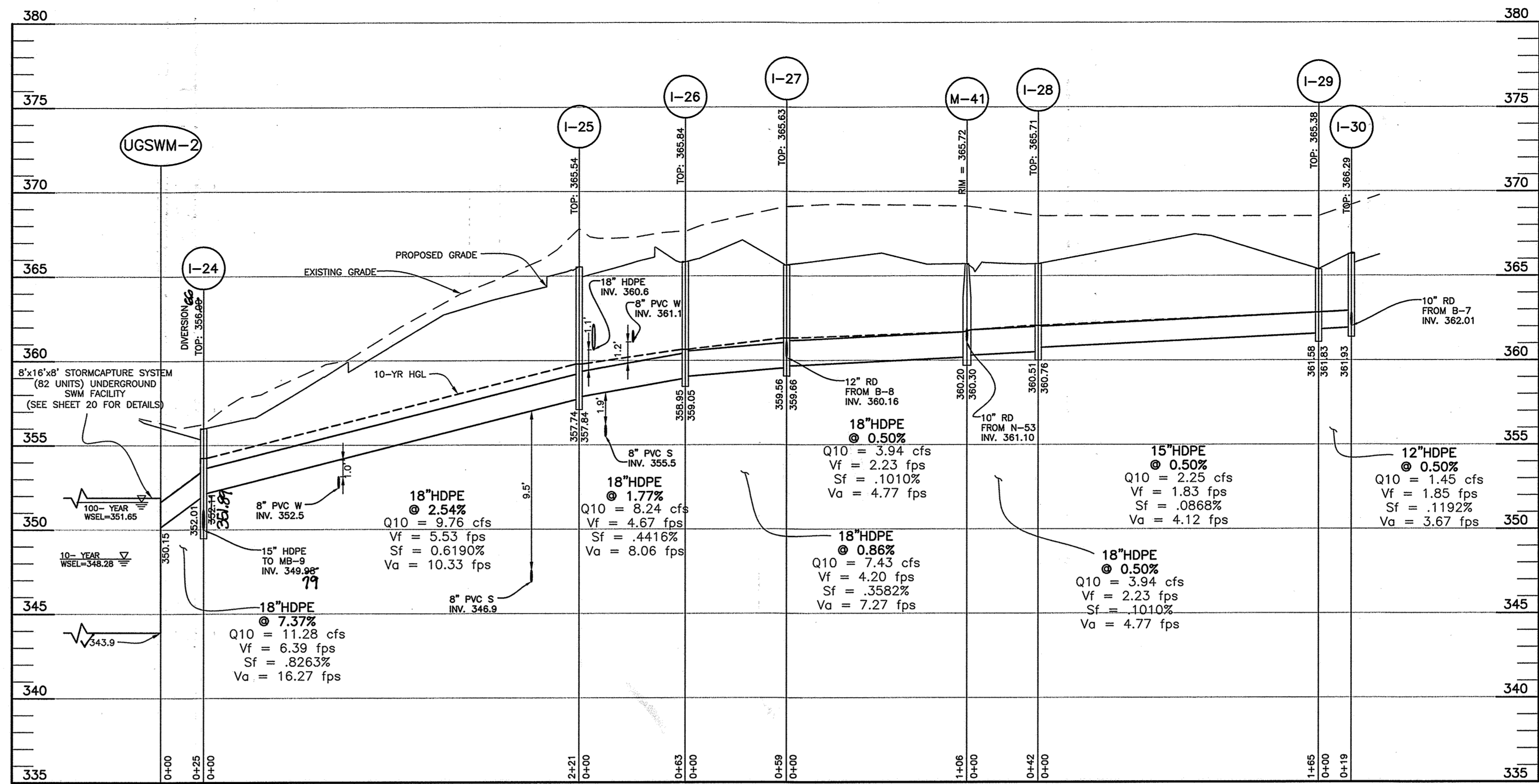
REVISED SITE DEVELOPMENT PLAN
STORM DRAIN DRAINAGE AREA MAP

DATE: JULY 2018 PROJECT NO. 0925
 SCALE: AS SHOWN DRAWING 11 OF 47



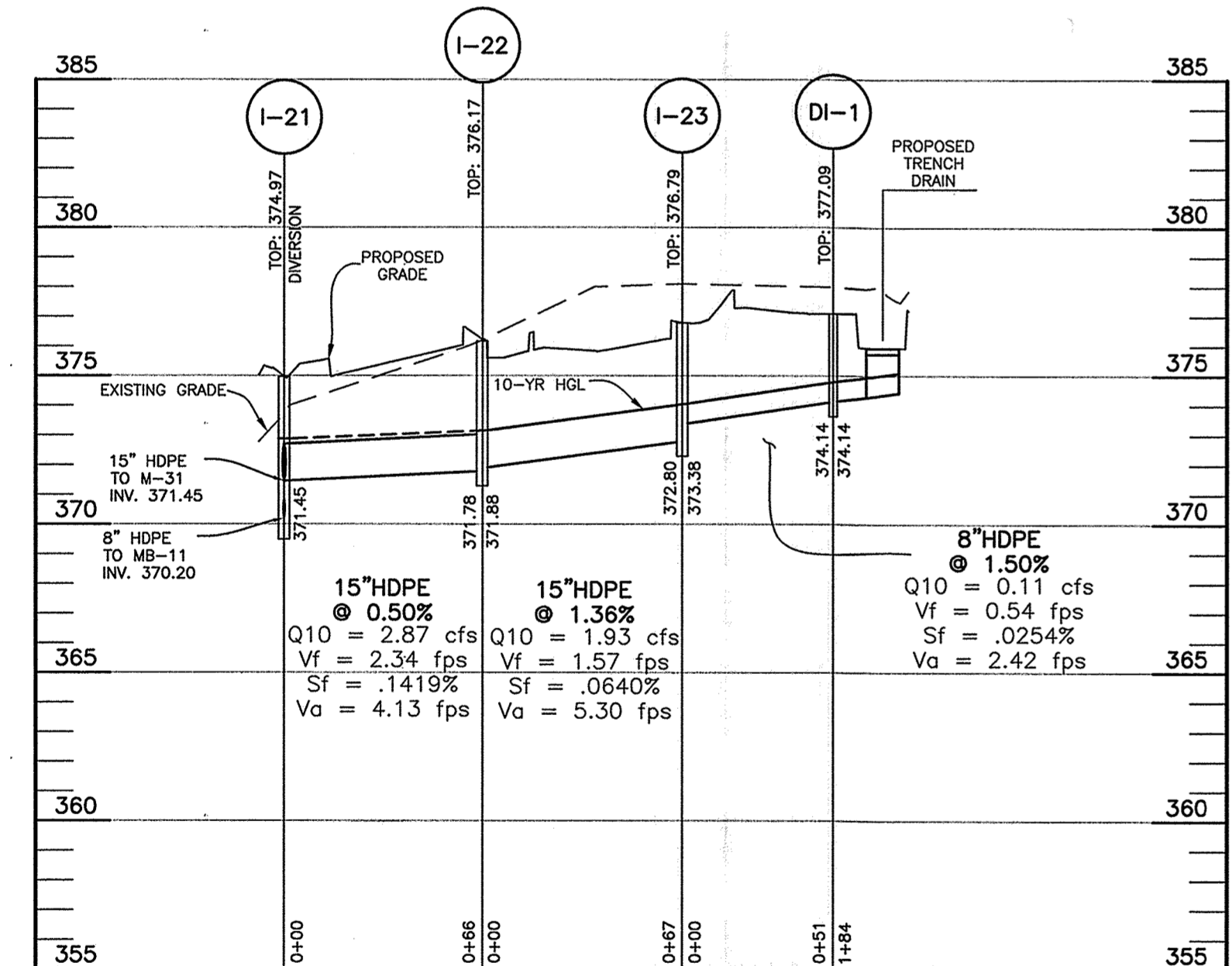
PRIVATE STORM DRAIN PROFILE
UGSWM-2 TO E-10

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



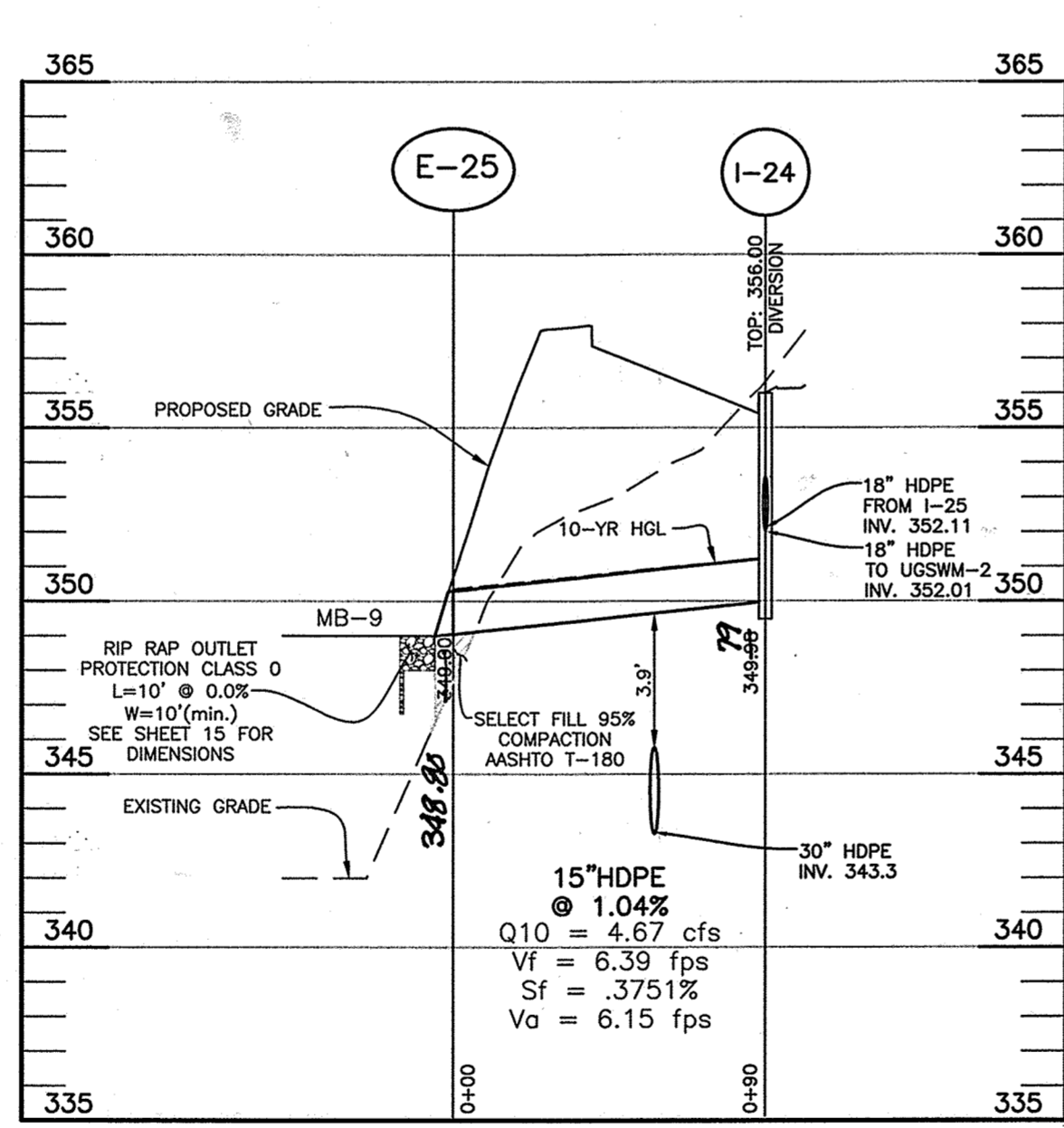
PRIVATE STORM DRAIN PROFILE
I-30 TO UGSWM-2

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



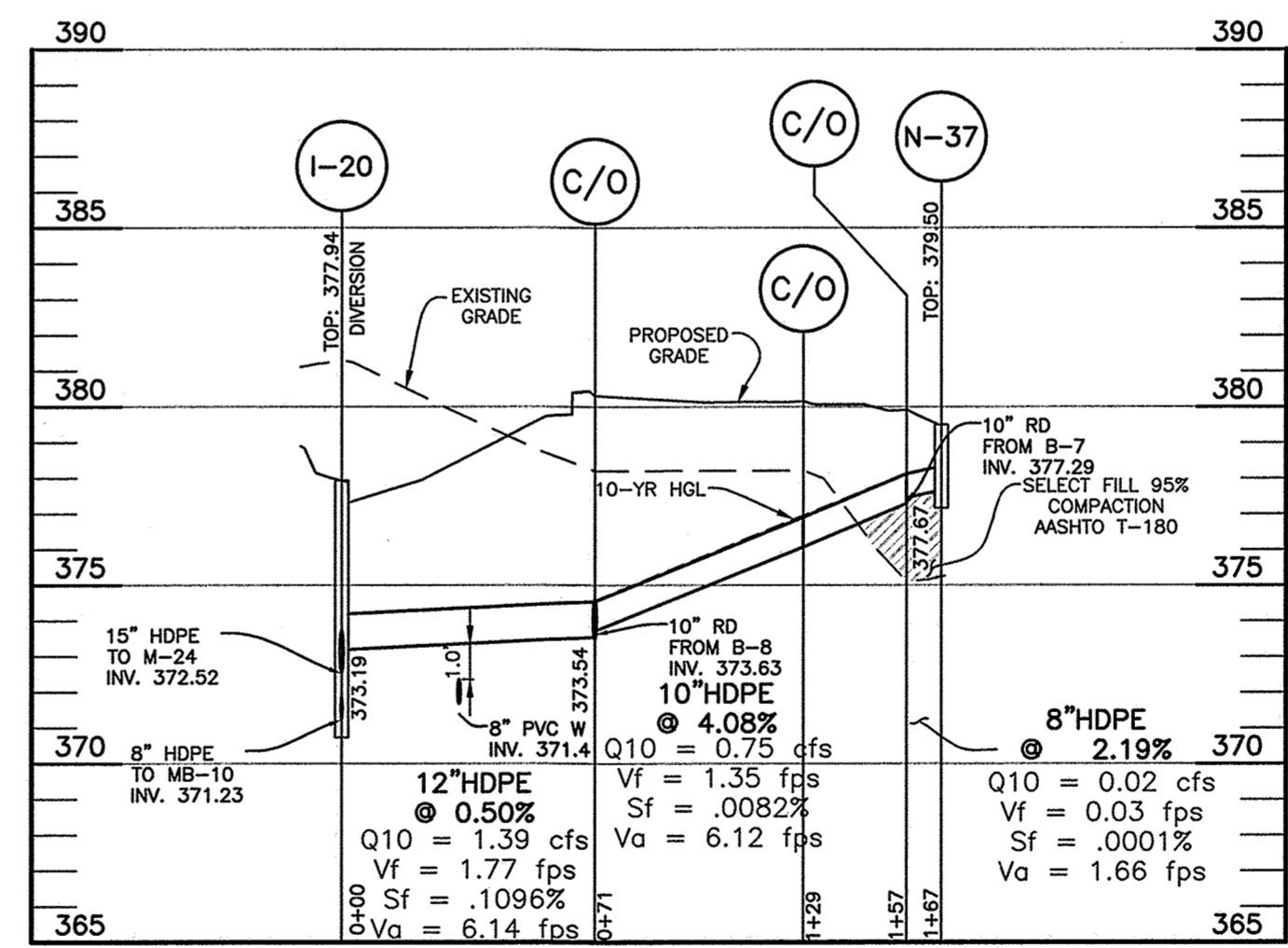
PRIVATE STORM DRAIN PROFILE
DI-1 TO I-21

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



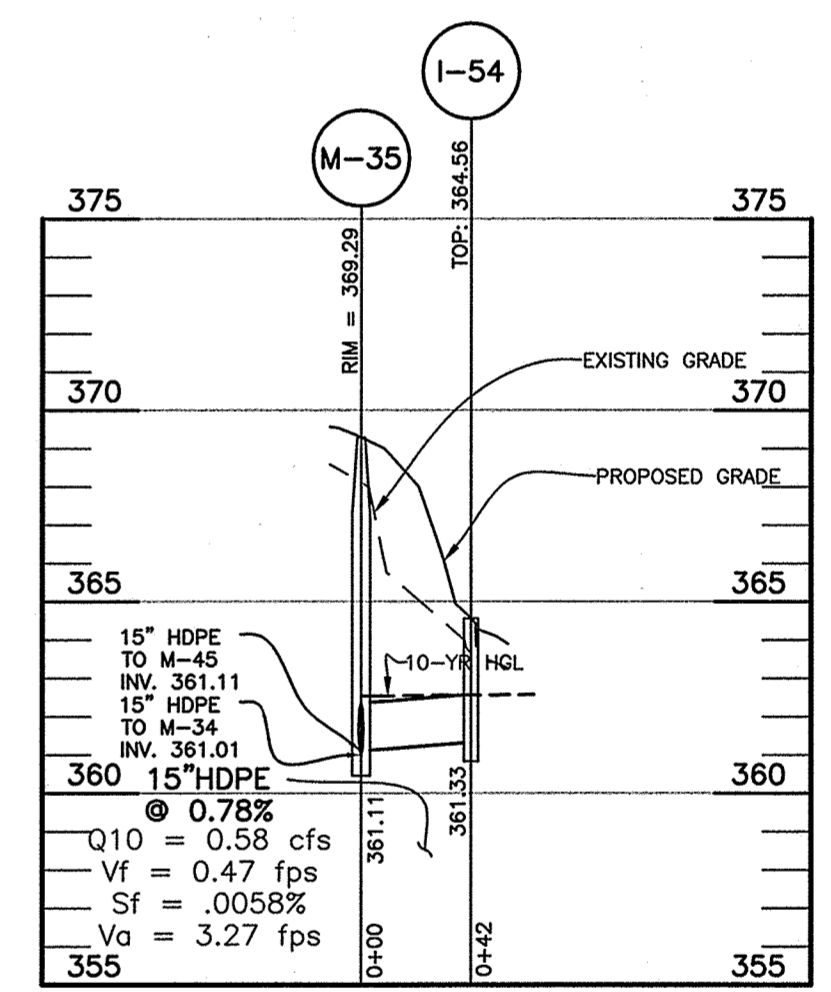
PRIVATE STORM DRAIN PROFILE
I-24 TO E-25

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



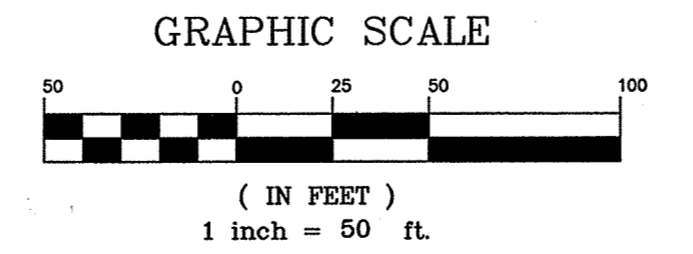
PRIVATE STORM DRAIN PROFILE
N-37 TO I-20

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



PRIVATE STORM DRAIN PROFILE
I-54 TO M-35

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



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21443, Expiration Date: 12-21-22



AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
Donald Mason, P.E. Date: 2-12-21

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Development Engineering Division: 8-16-18
Chief, Division of Land Development: 8-23-18
Director: 8-24-18

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
ENGINEERS LAND SURVEYORS PLANNERS
6480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

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. 28376, Expiration Date: 01-01-19

THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D
9 APARTMENT BUILDINGS
ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714 & 724
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

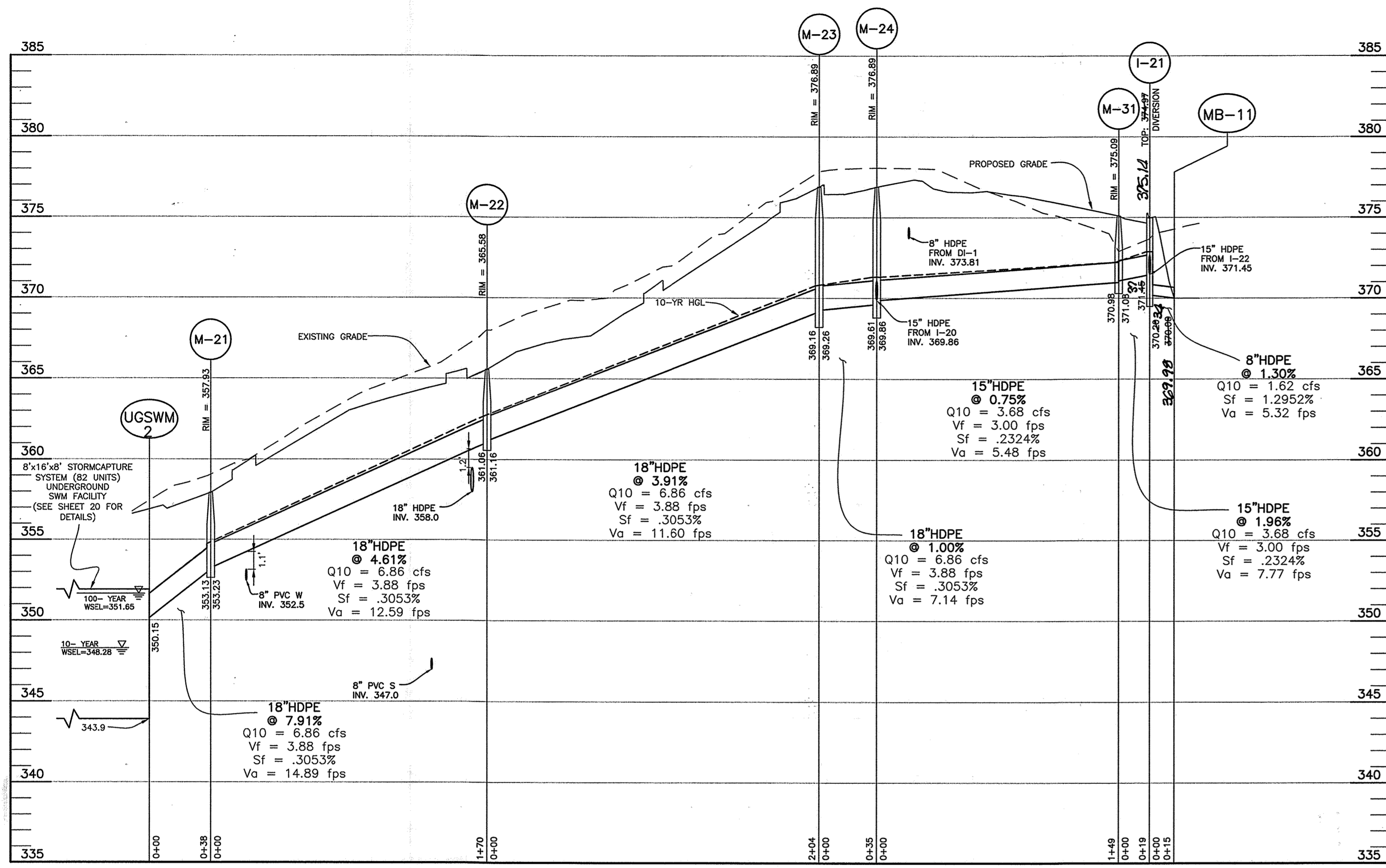
**SITE DEVELOPMENT PLAN
STORM DRAIN PROFILES**

OWNER: LOCUST THICKET INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELK RIDGE, MD 21075
410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELICOTT CITY, MD 21041
410-465-4244

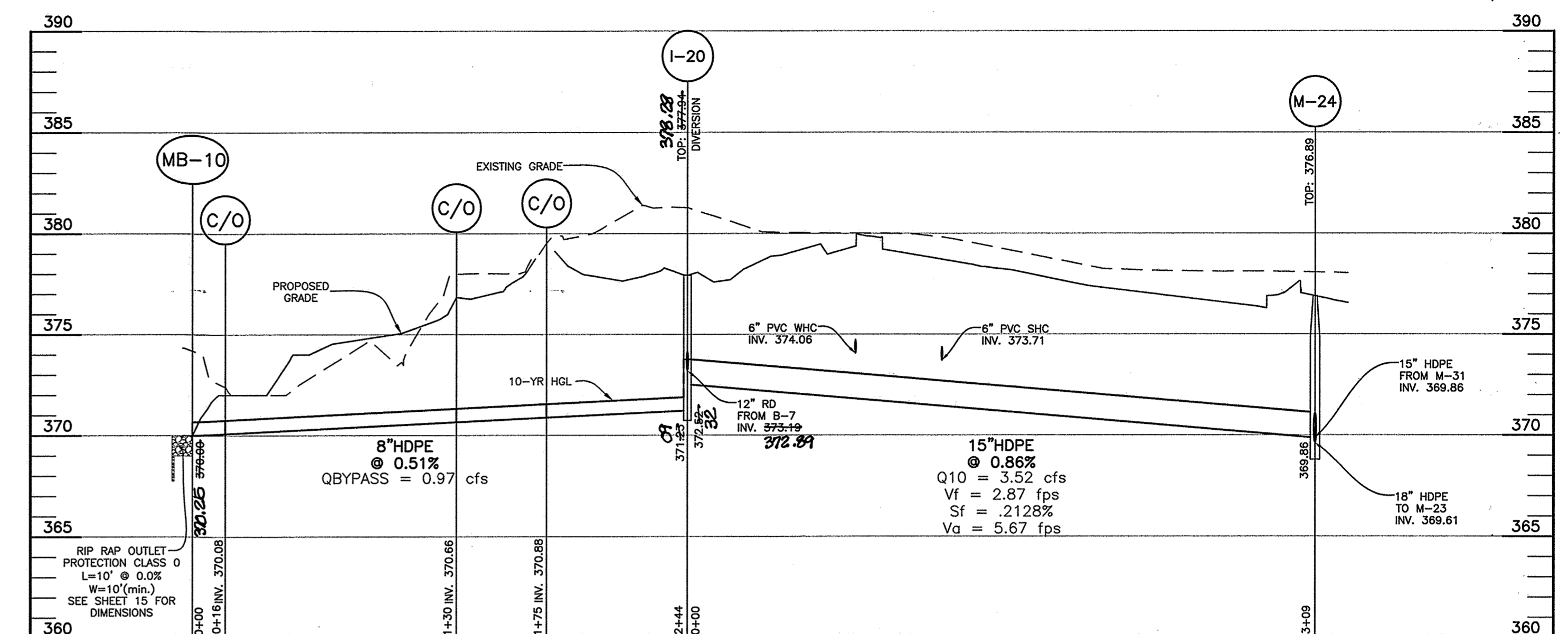
DATE: JULY 2018 PROJECT NO.: 0925
SCALE: AS SHOWN DRAWING 12 OF 47

DESIGN: AMM CHECKED: CAM



PRIVATE STORM DRAIN PROFILE
I-21 TO UGSWM-2 & I-21 TO MB-11

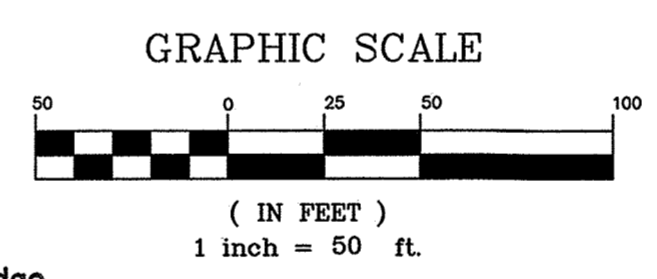
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



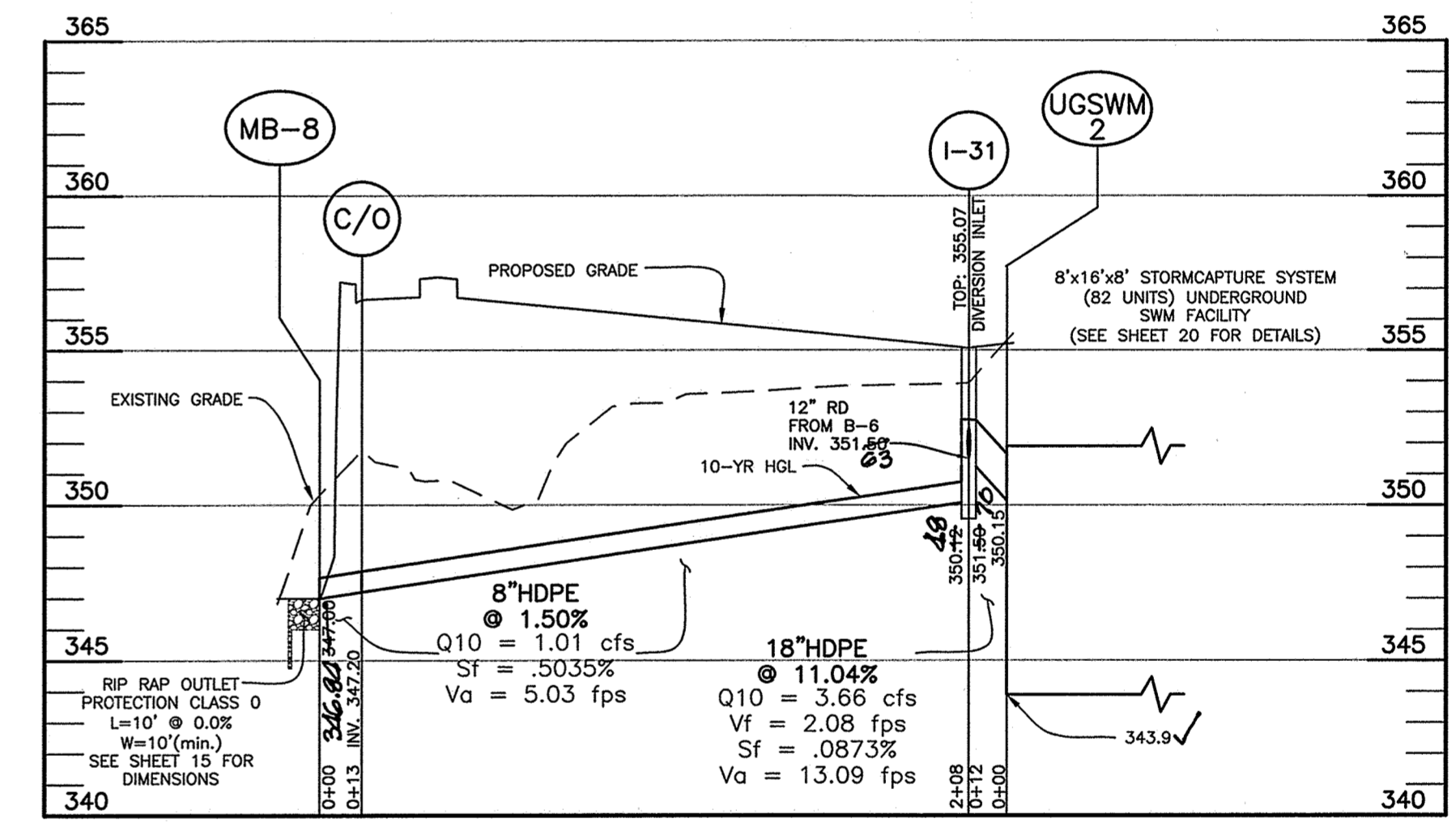
PRIVATE STORM DRAIN PROFILE
MB-10 TO M-24

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

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21443 Expiration Date: 12-21-22

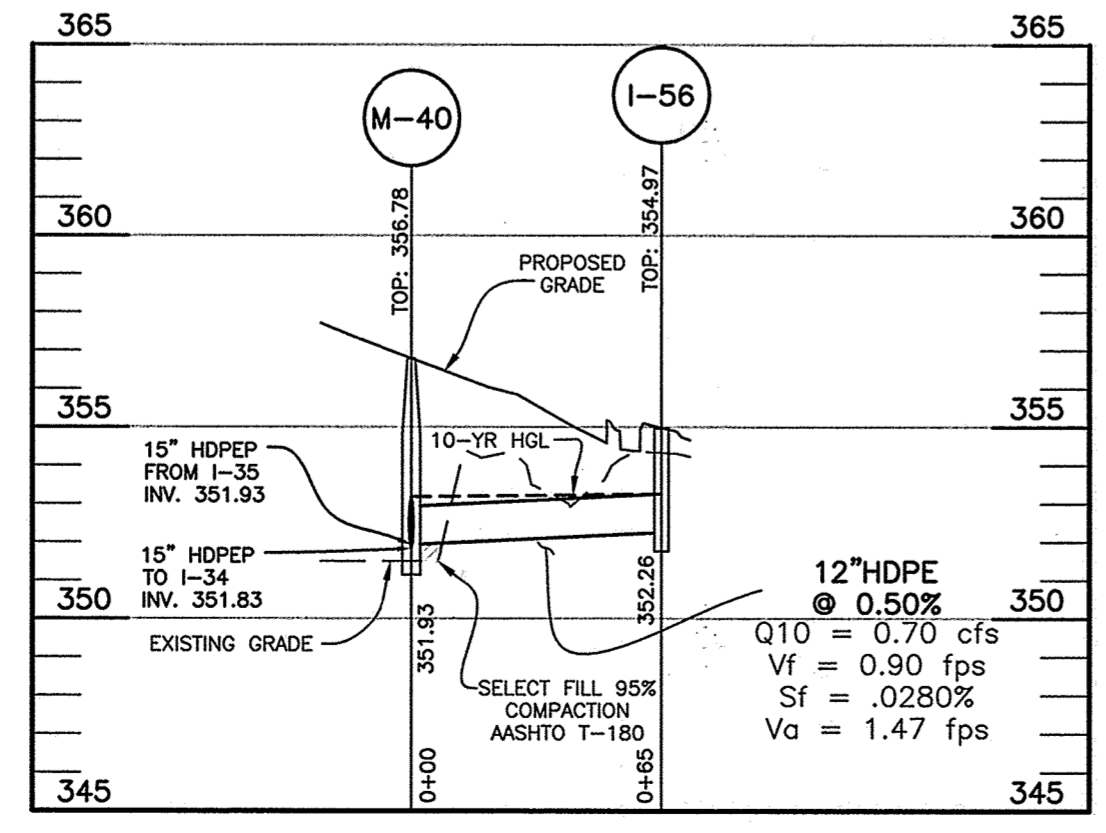


AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications.
Donald Mason, P.E. Date: 2-12-22



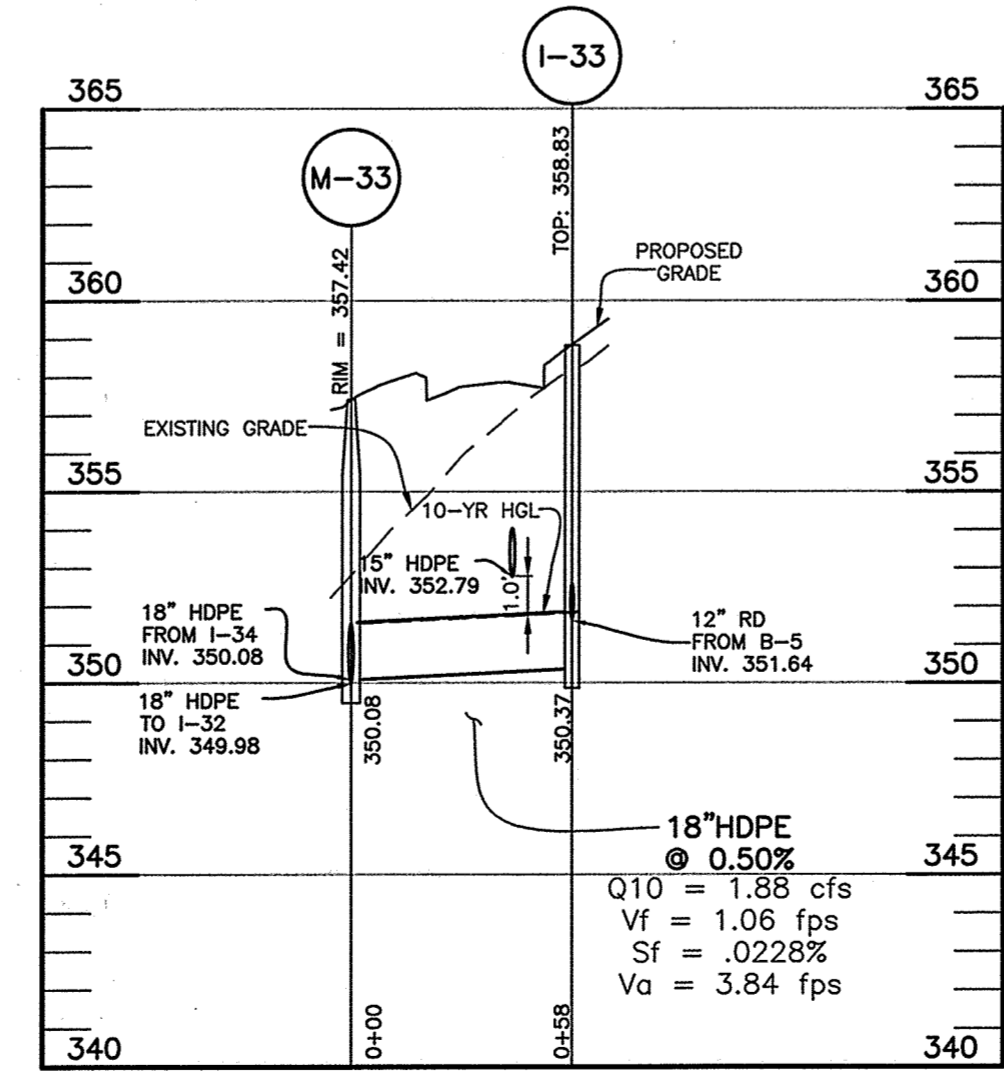
PRIVATE STORM DRAIN PROFILE
I-31 TO MB-8 - I-31 TO UGSWM-2

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



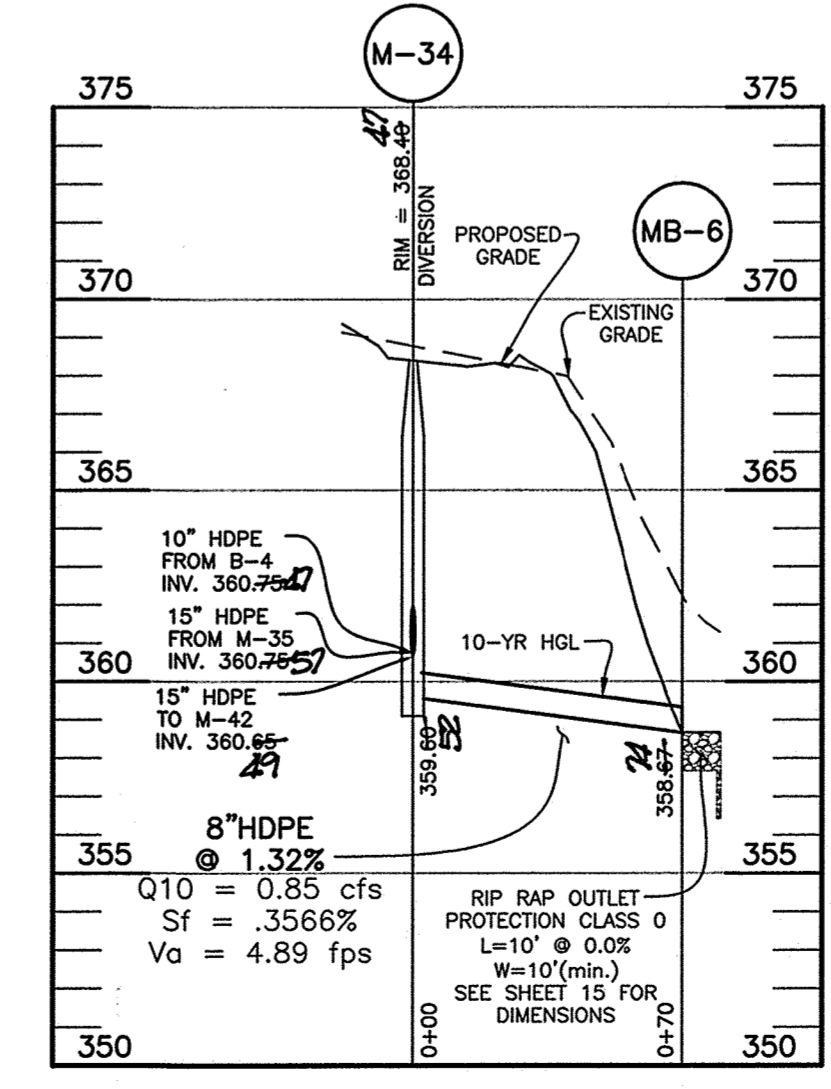
PRIVATE STORM DRAIN PROFILE
I-56 TO M-40

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



PRIVATE STORM DRAIN PROFILE
I-33 TO M-33

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



PRIVATE STORM DRAIN PROFILE
M-34 TO MB-6

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

APPROVED: DEPARTMENT OF PLANNING AND ZONING
8-16-18
8-23-18
8-24-18

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE A SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-0105 (F) 410-465-8644
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THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D
9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714 & 724
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

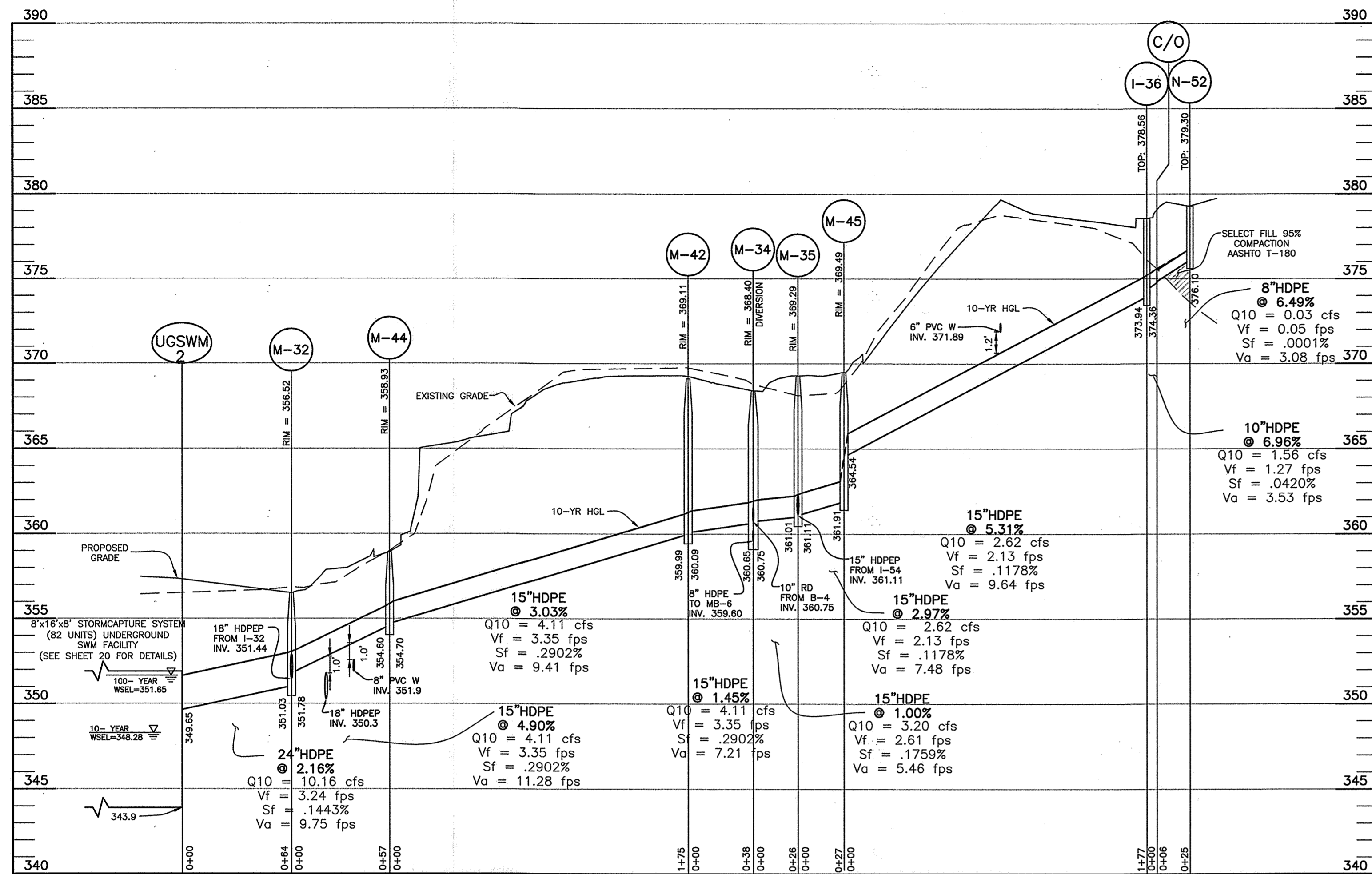
SITE DEVELOPMENT PLAN
STORM DRAIN PROFILES

OWNER: LOCUST THICKET INVESTORS LLC
5836 MEADOWBRIDGE ROAD
ELK RIDGE, MD 21075
410-465-4244

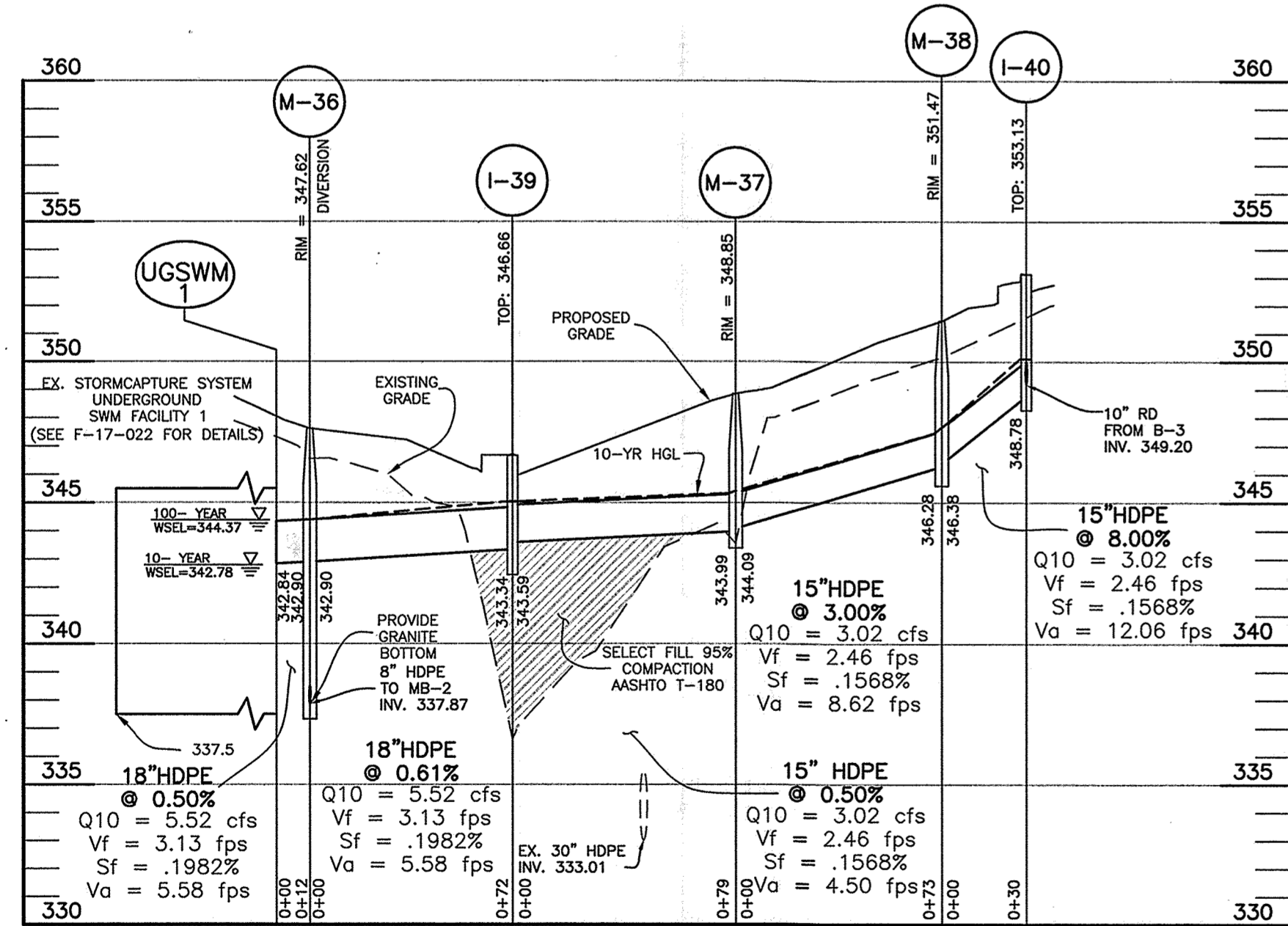
DEVELOPER: LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELICOTT CITY, MD 21041
410-465-4244

DATE: JULY 2018 PROJECT NO. 0925

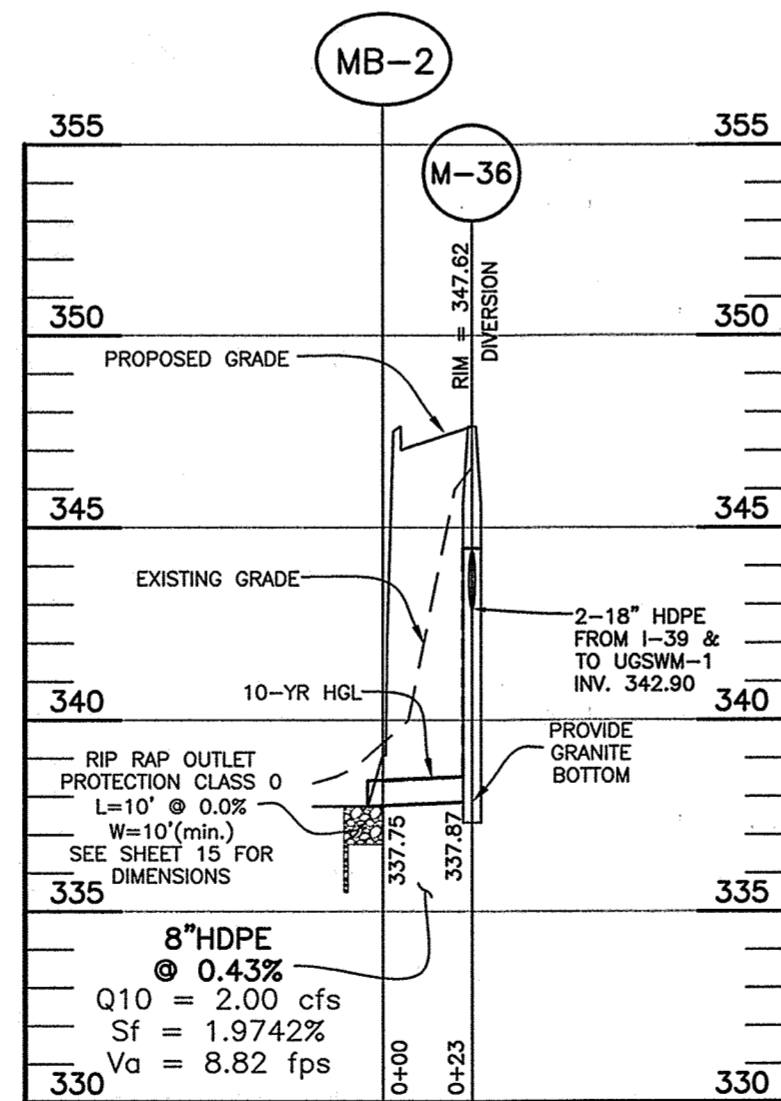
DESIGN: AM CHECKED: CAM SCALE: AS SHOWN DRAWING 13 OF 47



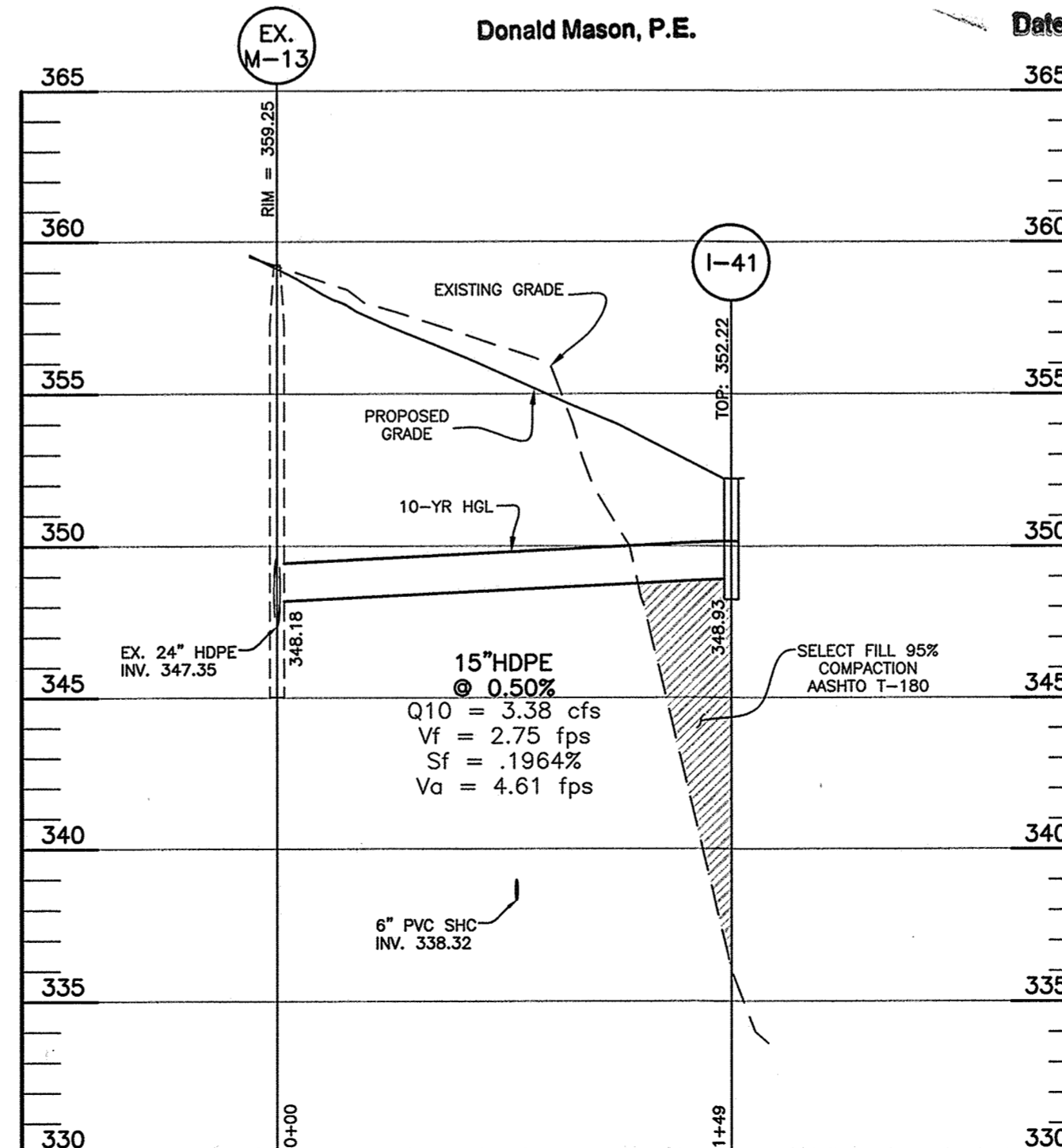
PRIVATE STORM DRAIN PROFILE
N-52 to UGSWM-2
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



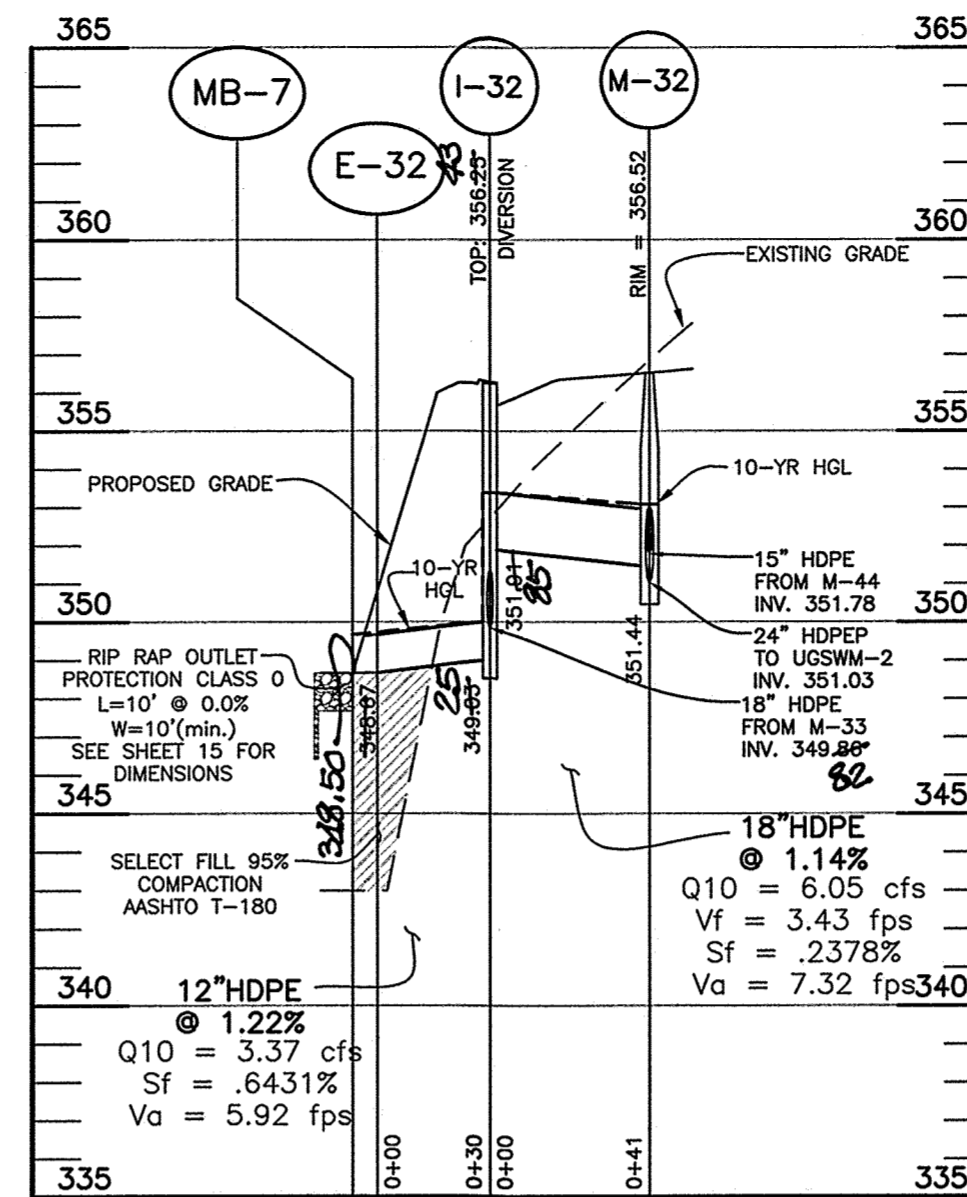
PRIVATE STORM DRAIN PROFILE
I-40 to UGSWM-1
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



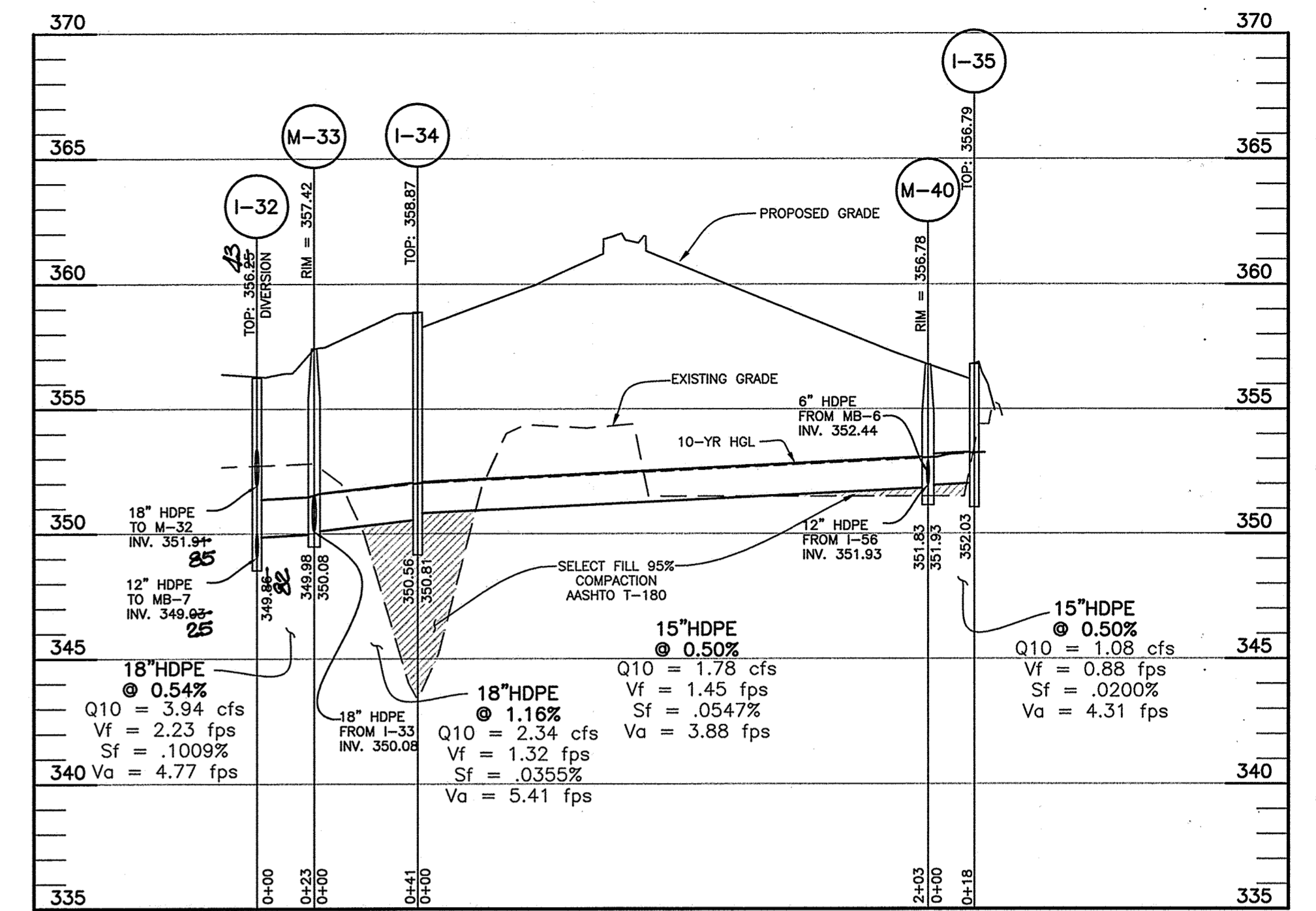
PRIVATE STORM DRAIN PROFILE
M-56 to MB-2
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



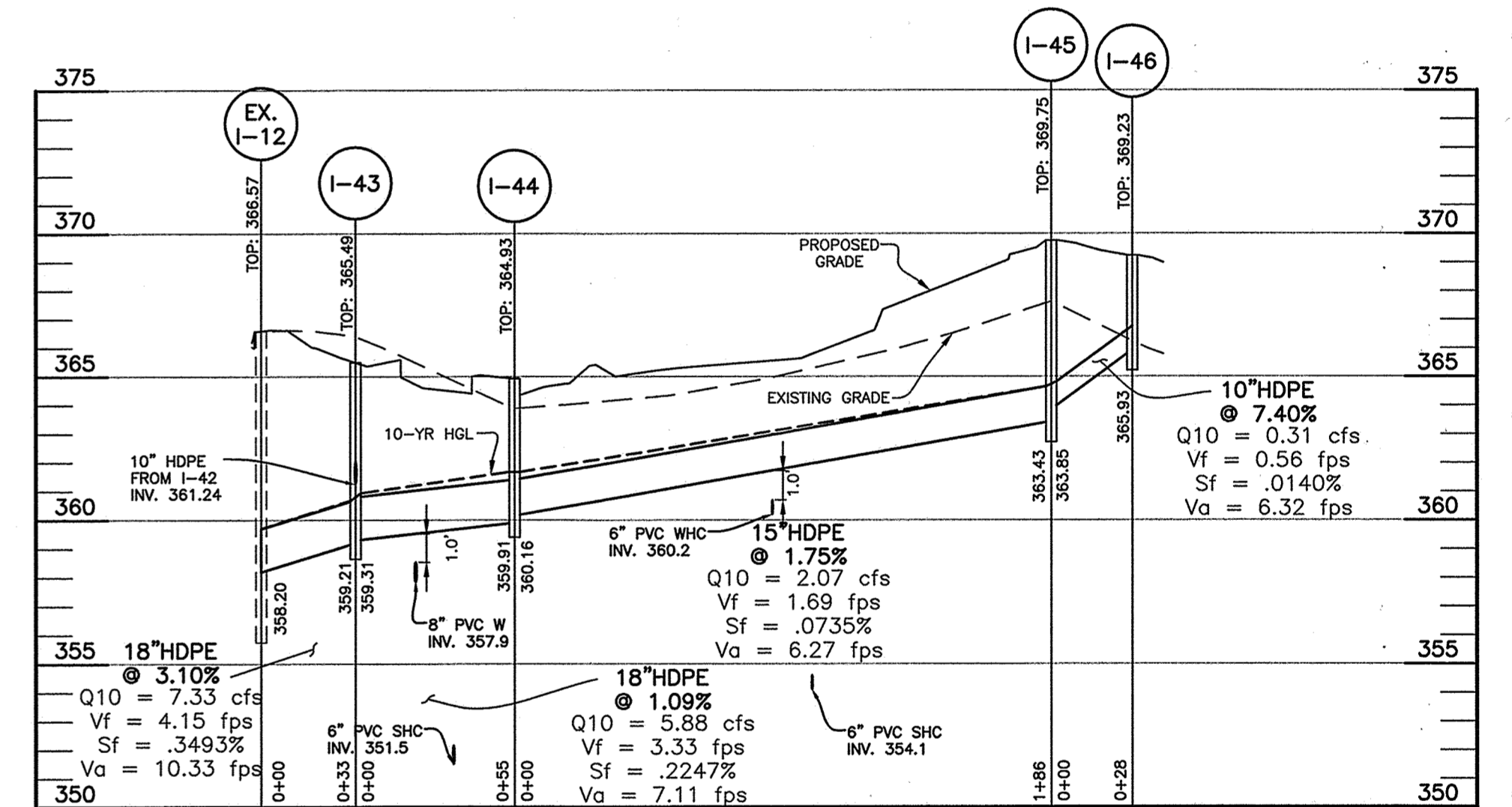
PRIVATE STORM DRAIN PROFILE
I-41 to EX. M-13
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



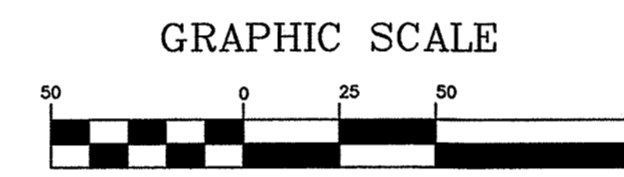
PRIVATE STORM DRAIN PROFILE
I-32 to M-32 AND I-32 to MB-7
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PRIVATE STORM DRAIN PROFILE
I-35 to I-32
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



PRIVATE STORM DRAIN PROFILE
I-46 to EX. I-12
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21443, Expiration Date: 12-21-22



AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
Donald Mason, P.E. Date: 2-12-21

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CIVILENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWBRIDGE ROAD ELKRIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 at ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244	SITE DEVELOPMENT PLAN STORM DRAIN PROFILES
DESIGN: AAM	DATE: JULY 2018
CHECKED: CAM	PROJECT NO.: 0925
SCALE: AS SHOWN	DRAWING: 14 OF 47

APPROVED: DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 8-11-18

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 8-23-18

 DIRECTOR
 DATE: 8-24-18

INLET STRUCTURE TABLE									
NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	OWNER	REMARKS	
I-20	A-5	N561051.1744, E1372864.9469	373.19(12)	371.23(8) 372.52(15)	377.94	HO. CO. D-4.02	PRIVATE	DIVERSION INLET	
I-21	A-5	N560966.9604, E1372805.3348	371.45(15)	370.20(8) 371.45(15)	374.97	HO. CO. D-4.02	PRIVATE	DIVERSION INLET	
I-22	A-5	N560904.7937, E1372832.4479	371.88(15)	371.78(15)	376.17	HO. CO. D-4.02	PRIVATE		
I-23	A-5	N560848.8075, E1372869.1895	373.38(8)	372.80(15)	376.79	HO. CO. D-4.02	PRIVATE		
I-24	A-5	N560452.6235, E1372890.2163	352.11(18)	349.86(15) 352.01(18)	356.00	HO. CO. D-4.02	PRIVATE	DIVERSION INLET	
I-25	A-5	N560806.3591, E1372731.7228	357.84(18)	357.74(18)	365.54	HO. CO. D-4.02	PRIVATE		
I-26	A-5	N560832.6422, E1372787.1779	359.05(18)	358.95(18)	365.84	HO. CO. D-4.02	PRIVATE		
I-27	A-5	N560688.7279, E1372809.2364	359.66(18) 360.16(12)	359.56(18)	365.63	HO. CO. D-4.02	PRIVATE		
I-28	A-5	N560776.7005, E1372926.6394	360.76(15)	360.51(18)	365.71	HO. CO. D-4.02	PRIVATE		
I-29	A-5	N560895.7188, E1373041.2711	361.83(12)	361.58(15)	365.38	HO. CO. D-4.02	PRIVATE		
I-30	A-5	N560910.1846, E1373023.3611	362.01(10)	361.93(12)	366.29	HO. CO. D-4.02	PRIVATE		
I-31	S-COMBINATION	N560526.9926, E1372977.5343	351.50(12)	350.12(8) 351.50(18)	355.07	HO. CO. D-4.28	PRIVATE	DIVERSION INLET	
I-32	A-5	N560746.9423, E1373192.7884	349.86(18)	349.03(12) 351.91(18)	356.25	HO. CO. D-4.02	PRIVATE	DIVERSION INLET	
I-33	A-5	N560800.1072, E1373168.1577	351.64(12)	350.37(18)	358.83	HO. CO. D-4.02	PRIVATE		
I-34	A-5	N560757.6144, E1373257.9878	350.81(15)	350.56(18)	358.87	HO. CO. D-4.02	PRIVATE		
I-35	A-5	N560899.6679, E1373402.3180	352.03(15)	352.03(15)	356.79	HO. CO. D-4.02	PRIVATE		
I-36	A-5	N561044.0802, E1373086.0751	374.36(10)	373.94(15)	378.56	HO. CO. D-4.02	PRIVATE		
I-39	A-5	N560852.7877, E1373468.1188	343.60(15)	343.35(18)	346.66	HO. CO. D-4.02	PRIVATE		
I-40	A-5	N560493.4548, E1373569.0904	349.20(10)	348.78(15)	353.13	HO. CO. D-4.02	PRIVATE		
I-41	Y	N1373502.8255, E560260.2507	348.93(15)	348.93(15)	352.22	HO. CO. D-4.24	PRIVATE		
I-42	YARD	N560226.3890, E1373945.9385	364.02(8)	363.86(10)	366.80	HO. CO. D-4.12	PRIVATE		
I-43	A-5	N560288.5470, E1373772.3752	359.21(18)	359.21(18)	365.49	HO. CO. D-4.02	PRIVATE		
I-44	A-5	N560343.6866, E1373771.1376	360.16(15)	359.91(18)	364.93	HO. CO. D-4.02	PRIVATE		
I-45	A-5	N560391.8522, E1373951.1776	363.85(10)	363.43(15)	369.75	HO. CO. D-4.02	PRIVATE		
I-46	YARD	N560407.8243, E1373924.9190	365.93(10)	365.93(10)	369.23	HO. CO. D-4.12	PRIVATE		
I-49	YARD	N1374071.0444, E560558.1771	367.22(12)	367.12(12)	370.22	HO. CO. D-4.12	PRIVATE		
I-50	YARD	N560513.2009, E1373892.8563	360.80(12) 360.80(12)	360.55(15)	363.79	HO. CO. D-4.12	PRIVATE		
I-54	A-5	N561057.2254, E1373283.728	351.33(15)	351.33(15)	364.56	HO. CO. D-4.02	PRIVATE		
I-56	A-5	N560958.1914, E1373434.0195	352.26(12)	352.26(12)	354.97	HO. CO. D-4.02	PRIVATE		
E-10	30" END SECTION	N560233.5077, E1373065.3215			333.00	HO. CO. D-5.51	PRIVATE	HDPE END SECTION	
E-12	12" END SECTION	N560960.6929, E1372540.2171			364.63		PRIVATE	HDPE END SECTION	
E-25	15" END SECTION	N560481.8369, E1372979.7715			349.00		PRIVATE	HDPE END SECTION	
E-32	12" END SECTION	N560719.8573, E1373218.7769			348.67		PRIVATE	HDPE END SECTION	

PLASTIC INLET STRUCTURE TABLE							
NUMBER	TYPE	LOCATION	TOP ELEV.	STD. DETAIL	OWNER	REMARKS	
N-1	NDS-12	N560909.2702, E1372847.2928	379.11	NDS-12*	PRVATE		
N-2	NDS-12	N560882.6241, E1372876.5483	368.86	NDS-12*	PRVATE		
N-3	NDS-12	N560706.0295, E1372977.9777	367.58	NDS-12*	PRVATE		
N-4	NDS-12	N560678.6120, E1372999.4864	357.62	NDS-12*	PRVATE		
N-5	NDS-12	N560319.0236, E1373602.1893	352.91	NDS-12*	PRVATE		
N-6	NDS-12	N560294.2860, E1373525.4467	344.21	NDS-12*	PRVATE		
N-7	NDS-12	N560402.3633, E1373494.4593	344.18	NDS-12*	PRVATE		
N-8	NDS-12	N560474.7087, E1373480.2377	344.19	NDS-12*	PRVATE		
N-37	NDS-12	N561046.9745, E1372993.3798	379.50	NDS-12*	PRVATE		
N-47	NDS-12	N560404.6111, E1373865.9741	365.98	NDS-12*	PRVATE		
N-48	NDS-12	N560433.2874, E1374112.2512	372.03	NDS-12*	PRVATE		
N-51	NDS-12	N560225.9190, E1373226.4866	379.20	NDS-12*	PRVATE		
N-52	NDS-12	N561020.4063, E1373053.2742	379.30	NDS-12*	PRVATE		
DI-1	NDS-12	N560833.8052, E1372819.9110	377.09	NDS-12*	PRVATE	STEEL GRATE	
DI-2	NDS-12	N560225.9190, E1373226.4866	367.55	NDS-12*	PRVATE	STEEL GRATE	
DT-1	NDS-DURA SLOPE	N560852.4605, E1373806.4701	376.53	NDS**	PRVATE		
DT-2	NDS-DURA SLOPE	N560219.9306, E1373916.3351	366.93	NDS**	PRVATE		

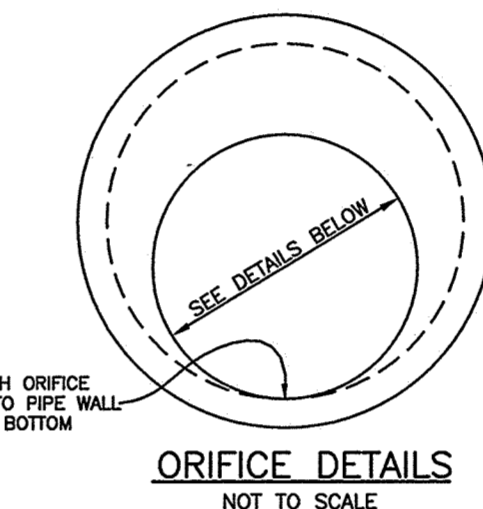
* YARD INLETS (N-x) SHALL BE NDS, PART #1200, FITTED WITH OUTLET PART #1889 AND GRATE PART #1215, OR SIMILAR PRODUCT WITH MINIMUM COMBINED FLOW CAPACITY OF 200 GPM.
 N-INLET INVERTS MAY BE ADJUSTED AS NECESSARY. ROOF AND AREA DRAIN PIPE SLOPES SHALL BE A MINIMUM OF 0.5%
 ** PART NOS. DS-092, DS-093, DS-094 WITH CAST IRON GRATES OR APPROVED EQUAL.

- STRUCTURE LOCATION FOR MANHOLES IS AT THE CENTER OF THE MANHOLE.
- STRUCTURE LOCATION FOR A-INLETS IS AT THE CENTER OF STRUCTURE, FACE OF CURB.
- STRUCTURE LOCATION FOR YARD AND PLASTIC INLETS IS CENTER OF STRUCTURE.
- STRUCTURE LOCATION AND ELEVATION FOR END SECTIONS IS CENTER OF STRUCTURE TOE.

ROOF DRAIN PIPE SCHEDULE				
PIPE SIZE	LENGTH	TYPE	OWNERSHIP	
8"	1288'±	HDPE	PRIVATE	
10"	3385'±	HDPE	PRIVATE	

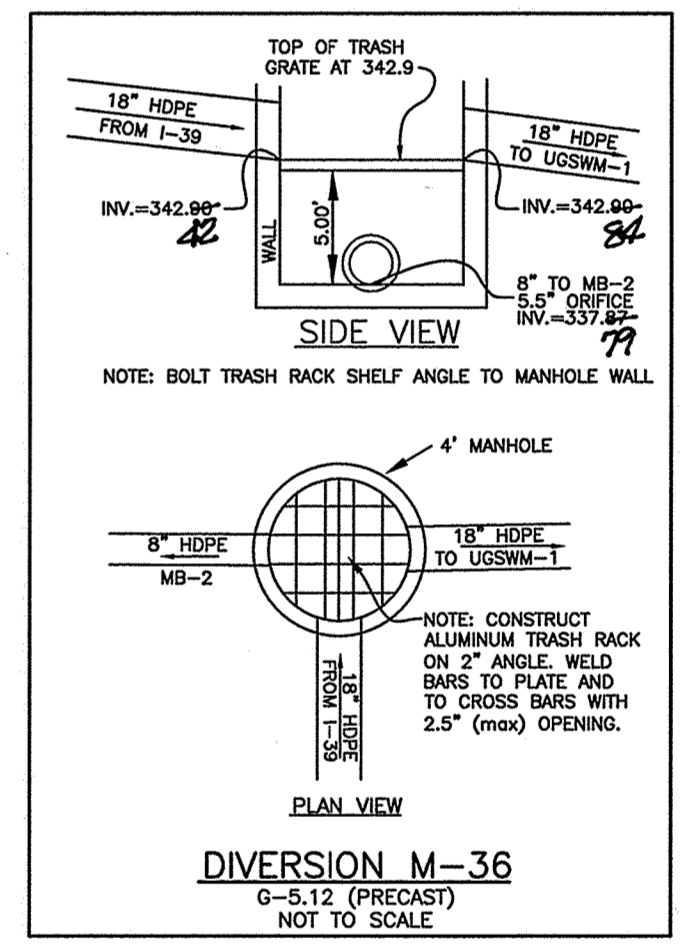
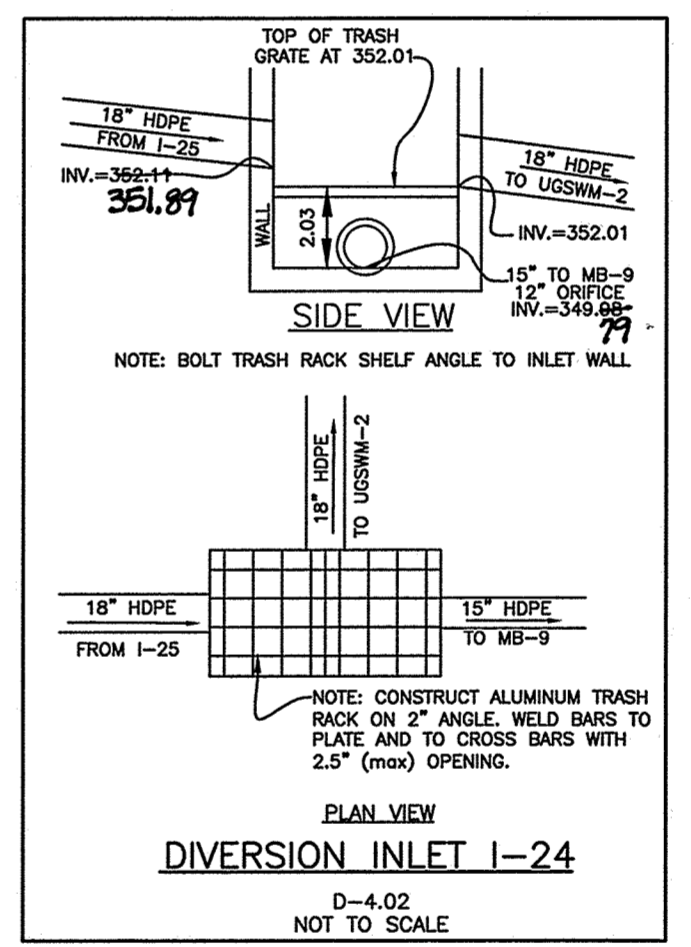
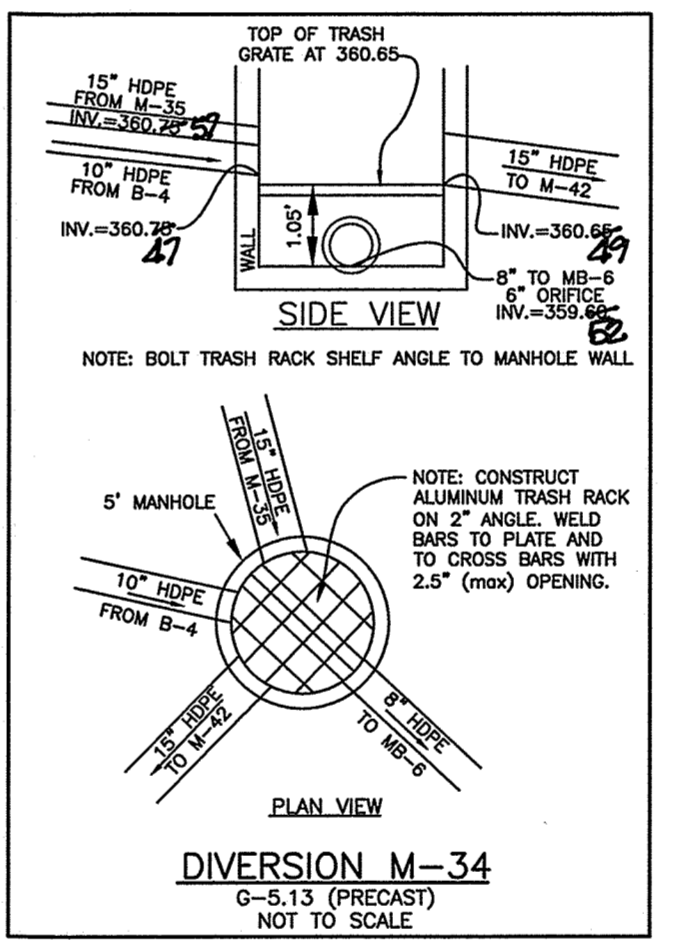
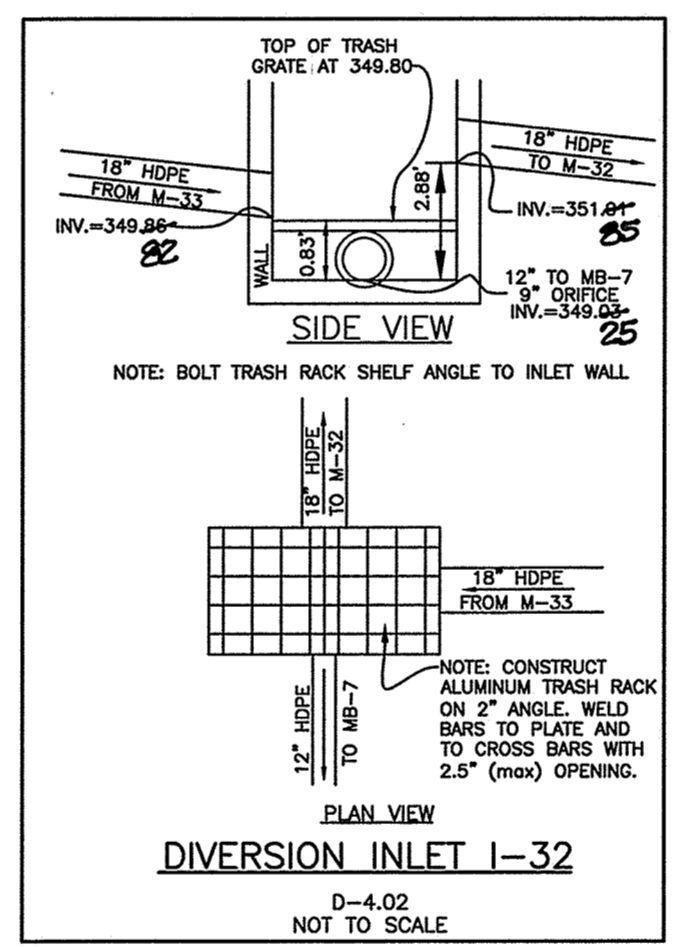
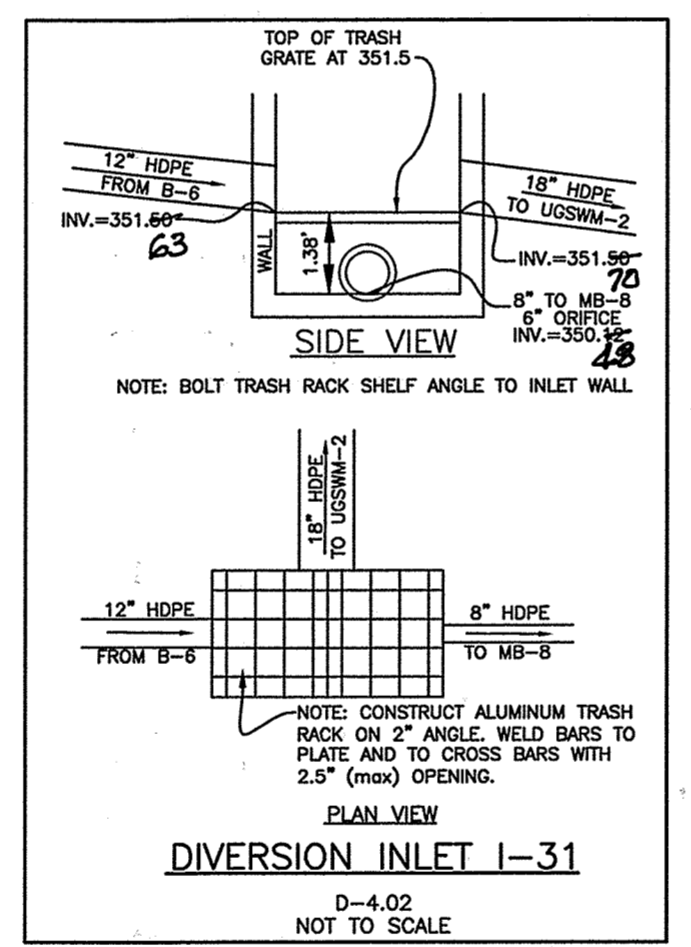
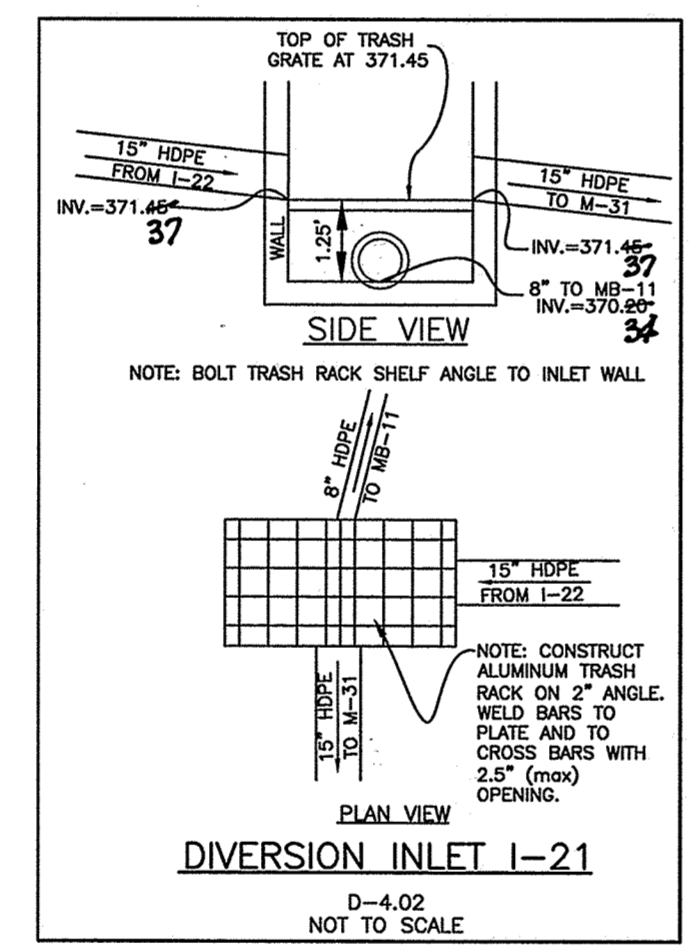
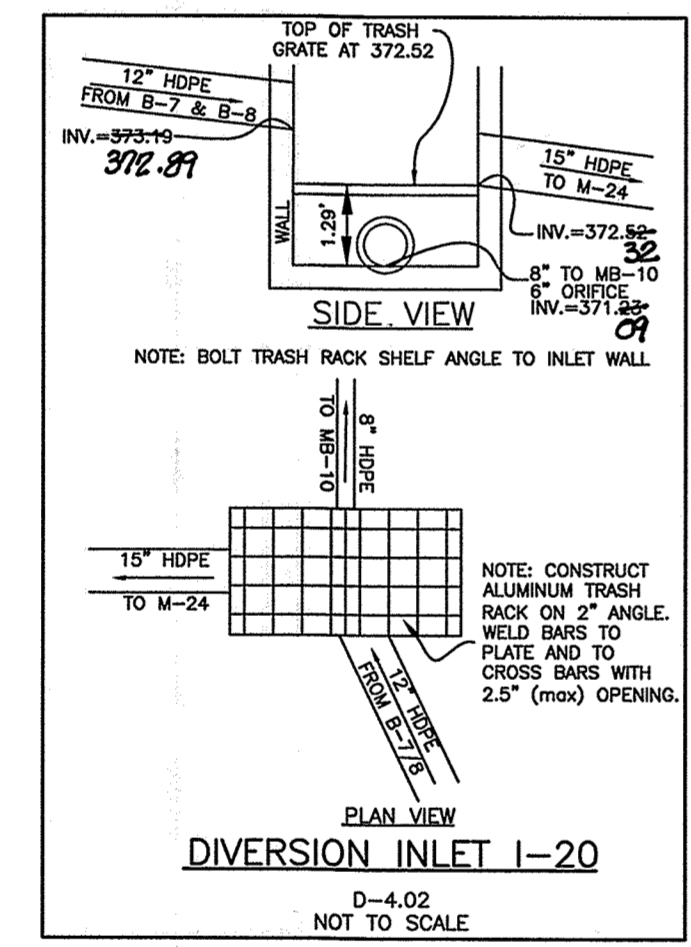
STORM DRAIN PIPE SCHEDULE				
PIPE SIZE	LENGTH	TYPE	OWNERSHIP	
12"	807'±	HDPE	PRIVATE	
15"	2289'±	HDPE	PRIVATE	
18"	1356'±	HDPE	PRIVATE	
24"	64'±	HDPE	PRIVATE	
30"	275'±	HDPE	PRIVATE	

MANHOLE STRUCTURE TABLE										
NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	OWNER	REMARKS		
M-19	60" MH	N560255.9242, E1373041.3419	333.55(30)	333.45(30)	339.94	HO. CO. G-5.13	PRIVATE			
M-20	60" MH	N560321.2985, E1372971.4294	337.93(30)	337.83(30)	348.47	HO. CO. G-5.13	PRIVATE			
M-21	48" MH	N560498.6359, E1372854.4742	353.23(18)	353.13(18)	357.93	HO. CO. G-5.12	PRIVATE			
M-22	48" MH	N560615.6707, E1372731.1488	361.16(18)	361.06(18)	365.58	HO. CO. G-5.12	PRIVATE			
M-23	48" MH	N560795.8113, E1372634.5457	369.26(18)	369.16(18)	376.89	HO. CO. G-5.12	PRIVATE			
M-24	48" MH	N560824.8707, E1372854.6869	369.86(15) 369.86(15)	369.61(18)	376.89	HO. CO. G-5.12	PRIVATE			
M-31	48" MH	N560958.8721, E1372590.1246	371.08(15)	370.98(15)	375.09	HO. CO. G-5.12	PRIVATE			
M-32	48" MH	N560774.4239, E1373164.1951	351.04(18)	351.03(24)	356.52	HO. CO. G-5.12	PRIVATE			
M-33	48" MH	N560761.3683, E1373210.6939	351.78(15) 350.08(18)	349.98(18)	357.42	HO. CO. G-5.12	PRIVATE			
M-34	60" MH	N561009.5370, E1373273.9676	360.75(15) 360.75(10)	360.65(15) 359.60(8)	368.40	HO. CO. G-5.13	PRIVATE	DIVERSION MH		
M-35	48" MH	N561034.0516, E1373264.4795	361.11(15) 361.11(15)	361.01(15)	369.29	HO. CO. G-5.12	PRIVATE			
M-36	48" MH	N560802.4871, E1373537.2792	342.90(18) 337.87(8)	347.62	HO. CO. G-5.12	PRIVATE		DIVERSION MH WITH GRANITE BOTTOM		
M-37	48" MH	N560508.6402, E1373498.8606	344.09(15)	343.99(15)	348.85	HO. CO. G-5.12	PRIVATE			
M-38	48" MH	N560524.3980, E1373561.3545	346.38(15)	346.28(15)	351.47	HO. CO. G-5.12	PRIVATE			
M-39	48" MH	N560475.8547, E1373742.5305	358.21(15) 358.62(10)	357.96(18)	364.71	HO. CO. G-5.12	PRIVATE			
M-40	48" MH	N560910.6640, E1373389.6879	351.93(15) 351.83(12)	351.83(15)	356.78	HO. CO. G-5.12	PRIVATE			
M-41	48" MH	N560761.8842, E1372886.3326	360.30(18) 361.10(10)	360.20(18)	365.72	HO. CO. G-5.12	PRIVATE			
M-42	48" MH	N560985.3670, E1373244.2874	360.09(15)	359.99(15)	369.11	HO. CO. G-5.12	PRIVATE			
M-44	48" MH	N560814.9885, E1373204.9069	354.70(15)	354.60(15)	358.93	HO. CO. G-5.12	PRIVATE			
M-45	48" MH	N560050.0122, E1373242.7770	364.54(15)	361.91(15)	369.49	HO. CO. G-5.12	PRIVATE			

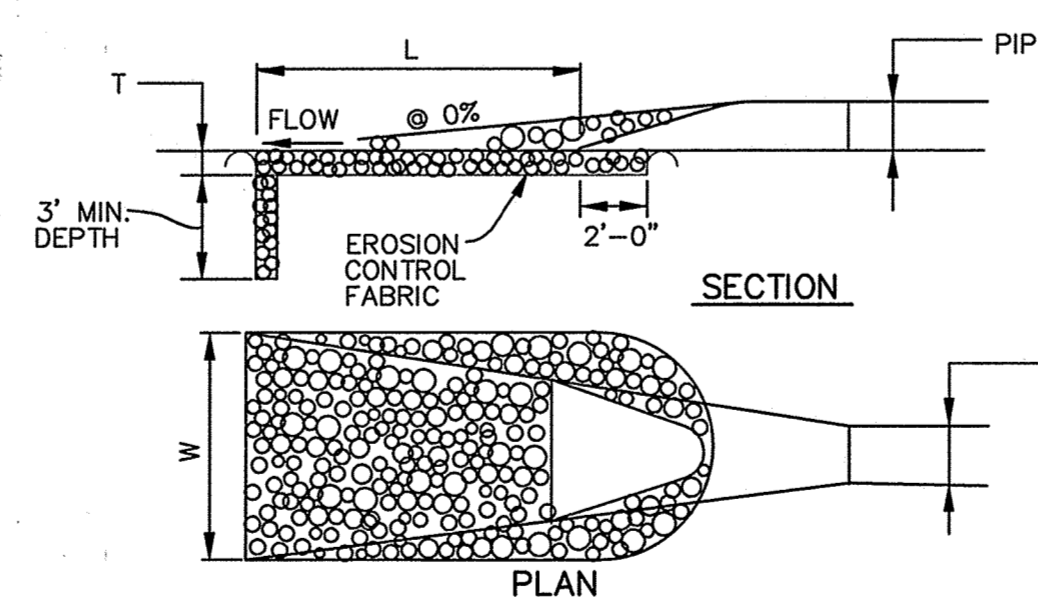


R-TANK AND DIVERSION ORIFICE DETAIL

- NOTES:
 1. BEFORE INSTALLATION INTO INTERIOR DIVERSION STRUCTURE, CAP OUTFALL PIPE.
 2. DRILL CUT ORIFICE IN CAP AT PIPE INVERT.
 3. INSTALL PIPE WITH ORIFICE AT STRUCTURE OUTFALL INVERT.



DIVERSION STRUCTURE DETAILS

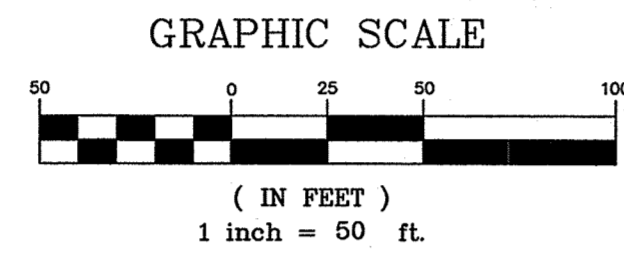
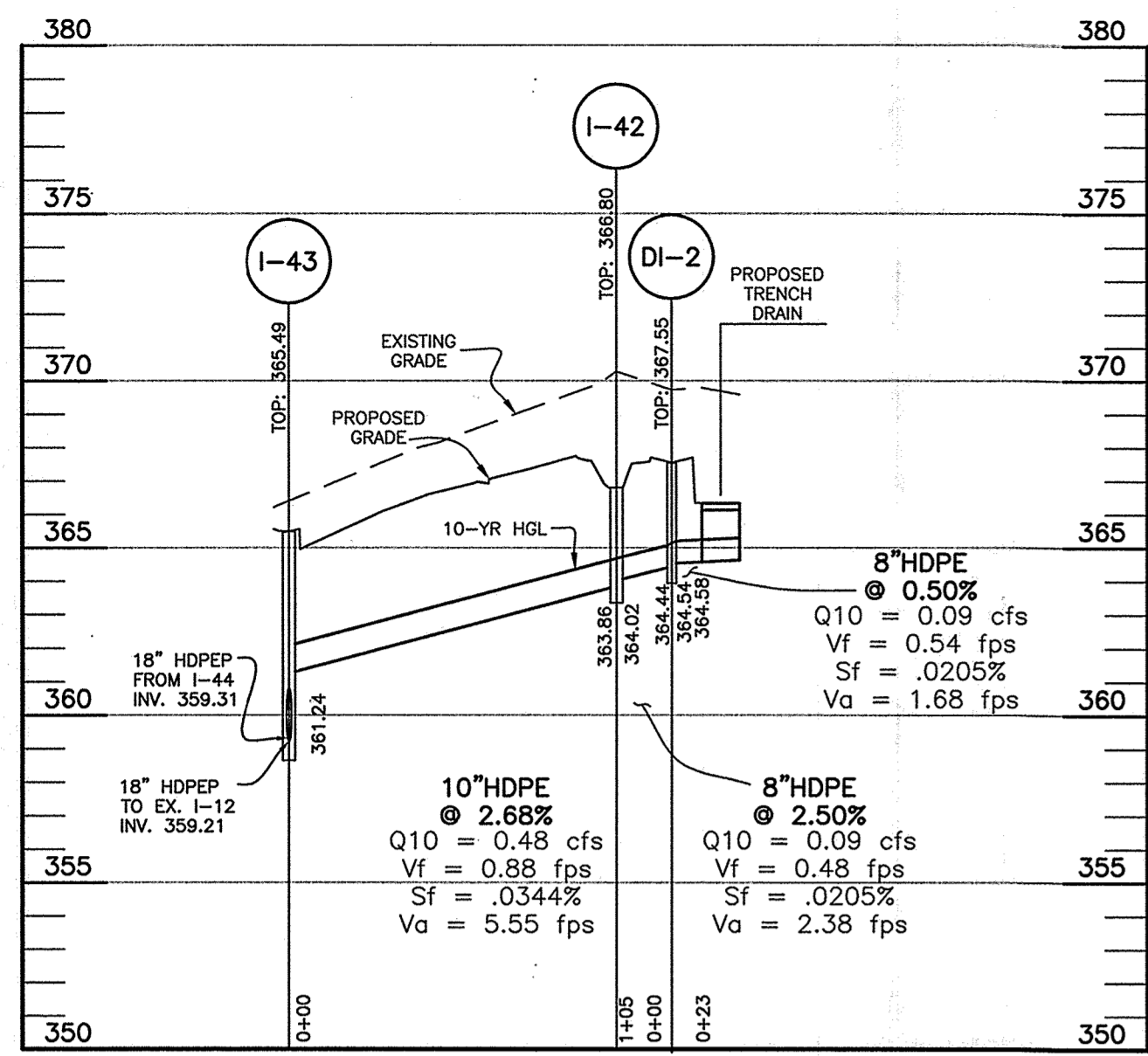


- CONSTRUCTION SPECIFICATIONS
- THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
 - THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER.
 - GEOTEXTILE CLASS C28 OR BETTER SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE PREPARED BY PLACING ANOTHER PIECE OF GEOTEXTILE FABRIC OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE FABRIC. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF GEOTEXTILE FABRIC SHALL BE A MINIMUM OF ONE FOOT.
 - STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR THE RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES. RIP-RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE FABRIC. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.
 - THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.

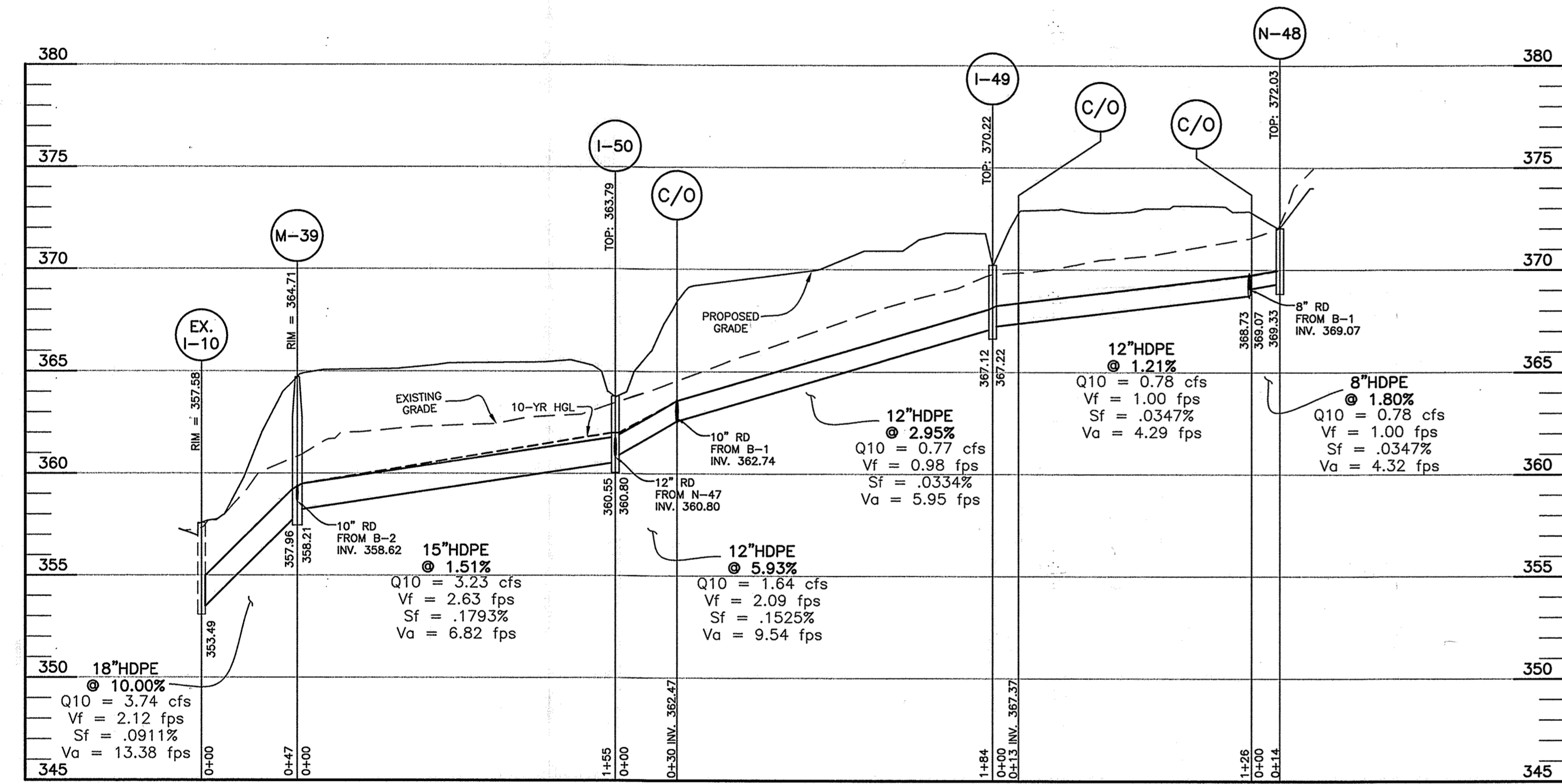
STRUCTURE	D-50	LENGTH (L)	WIDTH (W)	THICKNESS (T)	SHA CLASS
MB-2	6.0"	10'	10'	12"	0
MB-6	6.0"	10'	10'	12"	0
MB-7	6.0"	10'	10'	12"	0
MB-8	6.0"	10'	10'	12"	0
MB-9	6.0"	10'	10'	12"	0
MB-10, 11	6.0"	10'	10'	12"	0
E-10	9.5"	18'	20'	19"	II

OUTLET PROTECTION DETAIL

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8-16-18
 [Signature] 8-23-18
 [Signature] 8-24-18

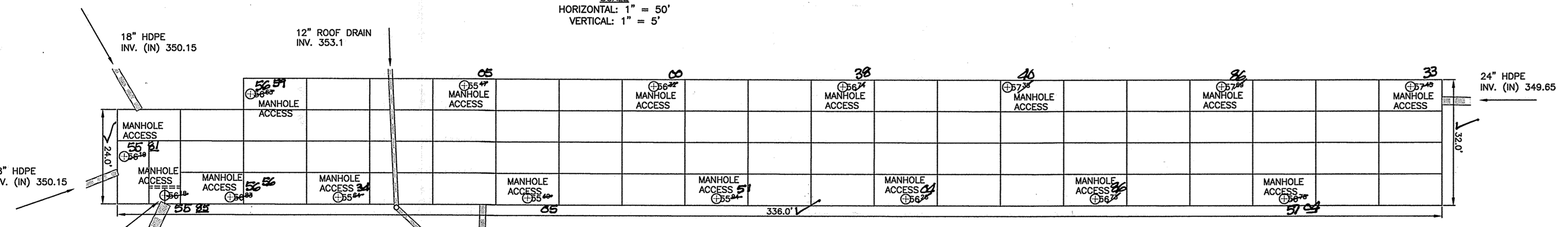


PRIVATE STORM DRAIN PROFILE
DI-2 TO I-43



PRIVATE STORM DRAIN PROFILE
N-48 TO EX I-10

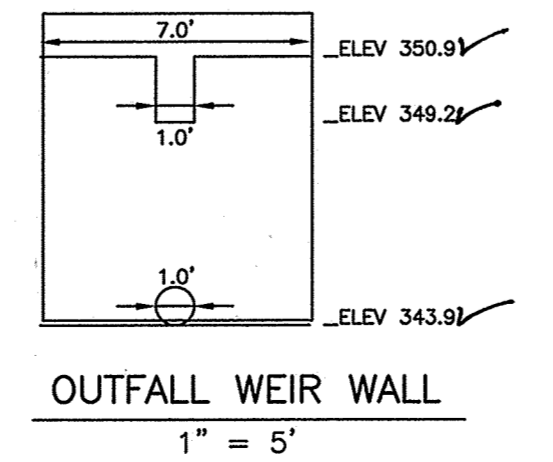
SCALE
HORIZONTAL: 1" = 50'
VERTICAL: 1" = 5'



UGSWM-2 GEOMETRY LAYOUT
1" = 20'

UNDERGROUND STORMWATER MANAGEMENT FACILITY NOTES:

1. ALL PIPE CONNECTIONS SHALL BE WATERPROOF/GASKETED.
2. CONTRACTOR SHALL ENSURE THAT DEBRIS SHALL BE KEPT FROM ENTERING THE SYSTEM DURING THE SITE CONSTRUCTION PERIOD. OWNER SHALL KEEP THE FACILITY FREE OF DEBRIS AFTER COMPLETION, BY INSPECTION AND TRASH REMOVAL IF NECESSARY.
3. POST CONSTRUCTION, THE OWNER SHALL ENSURE THAT TRASH AND DEBRIS DOES NOT ENTER THE FACILITY.
4. RISERS SHALL BE 36" DIAMETER AND ACCESS COVERS SHALL HAVE 30" VENTED COVERS.
5. A TRASH RACK SHALL BE PROVIDED FOR THE "LOW FLOW" 12" PIPE. THE TRASH RACK SHALL BE 2' HIGH AND 3' WIDE, AND SHALL BE GALVANIZED AND PAINTED BATTLESHIP GRAY.
6. OUTFALL CONTROL STRUCTURE SHALL BE COMPOSED OF THE SAME MATERIAL AS THE ATTENUATION FACILITY.
7. UNDERGROUND DETENTION STRUCTURES SHALL INCLUDE LINERS FOR IMPERMEABILITY.



OUTFALL WEIR WALL
1" = 5'

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 8-24-18
 DIRECTOR

BORING LOG **GEOLAB, INC.**
 Date: 8/18/2017
 Client: Security Development
 Project: Park at Locust Thicket
 Present: 117-010
 Location: See Boring Location Plan
 Type of logs: Hollow-stem Auger
 Date: 8/24/2017
 Complete: 8/24/2017
 Loger: John D. Hyman & Associates

Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)	Sample Depth (Feet)	Remarks
370.51	0.0	Forest litter with root matter and organic soil	1 2 3	Boring dry during drilling and at completion.
370.00	0.5	Brown silty fine SAND with little gravel, moist, very loose (SL)	2 5	
368.00	2.5	Orange tan to tan medium to coarse SAND with some gravel and some to little silt, moist, medium dense to dense (SM)	7 9 13	8.2
365.00	5.5	Brown fine to medium SAND with little silt, saturated, loose (SM)	16 19 22	6.0
362.50	8.0	Reddish-brown clayey fine to medium SAND, moist, medium dense (SC)	5 10 15	9.0
360.00	10.5	End of Boring	10.5	15.1

BORING LOG **GEOLAB, INC.**
 Date: 8/18/2017
 Client: Security Development
 Project: Park at Locust Thicket
 Present: 117-010
 Location: See Boring Location Plan
 Type of logs: Hollow-stem Auger
 Date: 8/24/2017
 Complete: 8/24/2017
 Loger: John D. Hyman & Associates

Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)	Sample Depth (Feet)	Remarks
349.3	0.0	Forest litter with root matter and organic soil	2 3 4	Groundwater was encountered at a depth of 7.0 feet.
347.4	0.5	Dark brown clayey SILT with little fine sand and trace gravel, moist, medium stiff (ML)	3 5 8	
345.4	2.5	Orange brown clayey fine SAND with gravel, moist, medium dense (SC)	3 5 8	4.5
343.3	4.5	Brown fine to medium SAND with little silt, saturated, loose (SM)	2 3 3	7.5
341.3	6.5	Light tan fine to medium SAND with little silt, moist, loose (SM)	3 4 4	9.0
339.4	8.5	Tan silty fine to medium SAND, wet, medium dense (SM)	7 9 12	13.5
337.4	10.5	End of Boring	10.5	

BORING LOG **GEOLAB, INC.**
 Date: 8/18/2017
 Client: Security Development
 Project: Park at Locust Thicket
 Present: 117-010
 Location: See Boring Location Plan
 Type of logs: Hollow-stem Auger
 Date: 8/24/2017
 Complete: 8/24/2017
 Loger: John D. Hyman & Associates

Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)	Sample Depth (Feet)	Remarks
341.3	0.0	Forest litter with root matter and organic soil	2 4 6	Boring dry during drilling and at completion.
340.1	1.0	Grey fine to medium SAND with some gravel and little silt, moist, loose to medium dense (SM)	7 7 9	
338.0	3.0	Orange brown clayey fine SAND with gravel, moist, medium dense (SC)	3 4 4	4.5
335.6	5.3	Light tan fine to medium SAND with little silt, moist, loose (SM)	3 4 4	7.5
333.7	7.3	Orange brown clayey fine SAND with gravel, moist, medium dense (SC)	2 3 5	10.5
331.7	9.3	Off-white fine to medium SAND, moist, loose (SM)	2 3 2	14.0
329.7	11.3	End of Boring	11.3	9.7

BORING LOG **GEOLAB, INC.**
 Date: 8/18/2017
 Client: Security Development
 Project: Park at Locust Thicket
 Present: 117-010
 Location: See Boring Location Plan
 Type of logs: Hollow-stem Auger
 Date: 8/24/2017
 Complete: 8/24/2017
 Loger: John D. Hyman & Associates

Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)	Sample Depth (Feet)	Remarks
347.2	0.0	Forest litter with root matter and organic soil	2 2 4	Groundwater was encountered at a depth of 14.0 feet.
345.1	0.5	Dark brown to tan fine sandy SILT with some gravel, moist, soft (ML)	3 5 5	
343.1	2.5	Orange tan fine SAND with some silt, moist, medium dense (SM)	4 5 6	3.1
339.2	6.0	Orange tan fine to medium SAND with little silt, wet to saturated, loose (SM)	3 4 6	10.5
334.2	11.0	Off-white silty CLAY with some gravel, moist, very soft (CL)	2 2 3	14.0
332.2	13.0	Off-white silty CLAY with some gravel, moist, very soft (CL)	2 2 3	15.5
326.1	20.5	End of Boring	20.5	

BORING LOG **GEOLAB, INC.**
 Date: 8/18/2017
 Client: Security Development
 Project: Park at Locust Thicket
 Present: 117-010
 Location: See Boring Location Plan
 Type of logs: Hollow-stem Auger
 Date: 8/24/2017
 Complete: 8/24/2017
 Loger: John D. Hyman & Associates

Elevation	Depth	DESCRIPTION OF MATERIALS (Classification)	Sample Depth (Feet)	Remarks
344.2	0.0	Forest litter with root matter and organic soil	5 6 8	Groundwater was encountered at a depth of 30.0 feet.
341.1	1.5	Dark brown gravelly silty fine SAND, damp, medium dense (SM)	2 3 5	
339.9	3.0	Orange brown silty fine to medium SAND, moist, loose (SM)	3 4 4	6.0
337.9	5.0	Orange brown silty fine to medium SAND, moist, loose (SM)	3 4 4	7.5
335.9	7.0	Orange brown silty fine to medium SAND, moist, loose (SM)	5 7 9	10.5
333.9	9.0	Off-white fine SAND with little silt, damp, medium dense (SM)	4 4 5	14.0
331.9	11.0	Off-white fine SAND with little silt, damp, medium dense (SM)	4 5 6	15.5
329.9	13.0	Orange tan fine to medium SAND with some silt, moist to wet, medium dense (SM)	5 6 7	19.0
327.9	15.0	Orange tan fine to medium SAND with some silt, moist to wet, medium dense (SM)	5 7 9	20.5
325.9	17.0	Light tan fine to medium SAND with some silt, saturated, loose (SM)	2 3 4	24.2
323.9	19.0	Light tan fine to medium SAND with some silt, saturated, loose (SM)	2 3 4	35.5
321.9	21.0	Off-white to tan fine sandy SILT, trace mica saturated, stiff (ML)	7 9 12	39.0
319.4	23.5	End of Boring	23.5	

NO. DATE REVISION

BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS, INC.
 8480 BALTIMORE NATIONAL PIKE SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (7) 410-465-6100 (7) 410-465-6844
 WWW.BE-CIVILENGINEERING.COM

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. 21443, Expiration Date: 12-31-22

AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
 Donald Mason, P.E. Date: 2/12/21

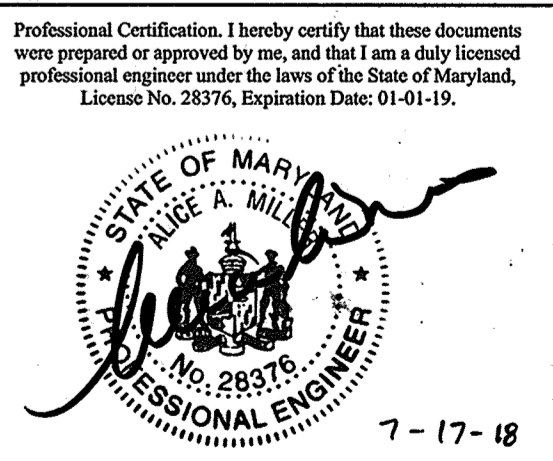
THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS
 ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN STORM DRAIN PROFILES AND UGSWM DETAILS

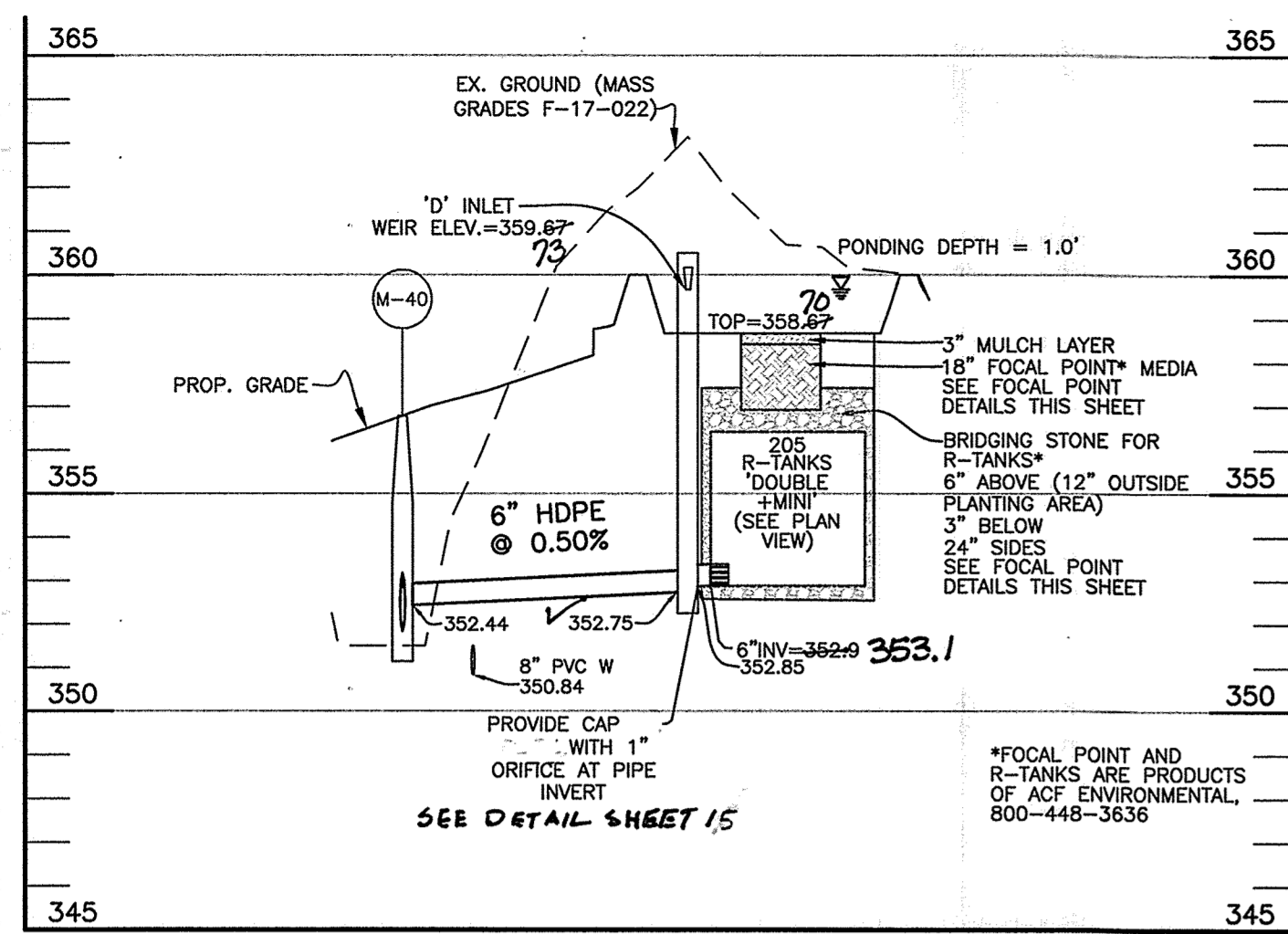
OWNER: LOCUST THICKET INVESTORS LLC
 5836 MEADOWBRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DATE: JULY 2018 PROJECT NO. 0925
 DESIGN: AAM CHECKED: CAM SCALE: AS SHOWN DRAWING 16 OF 47

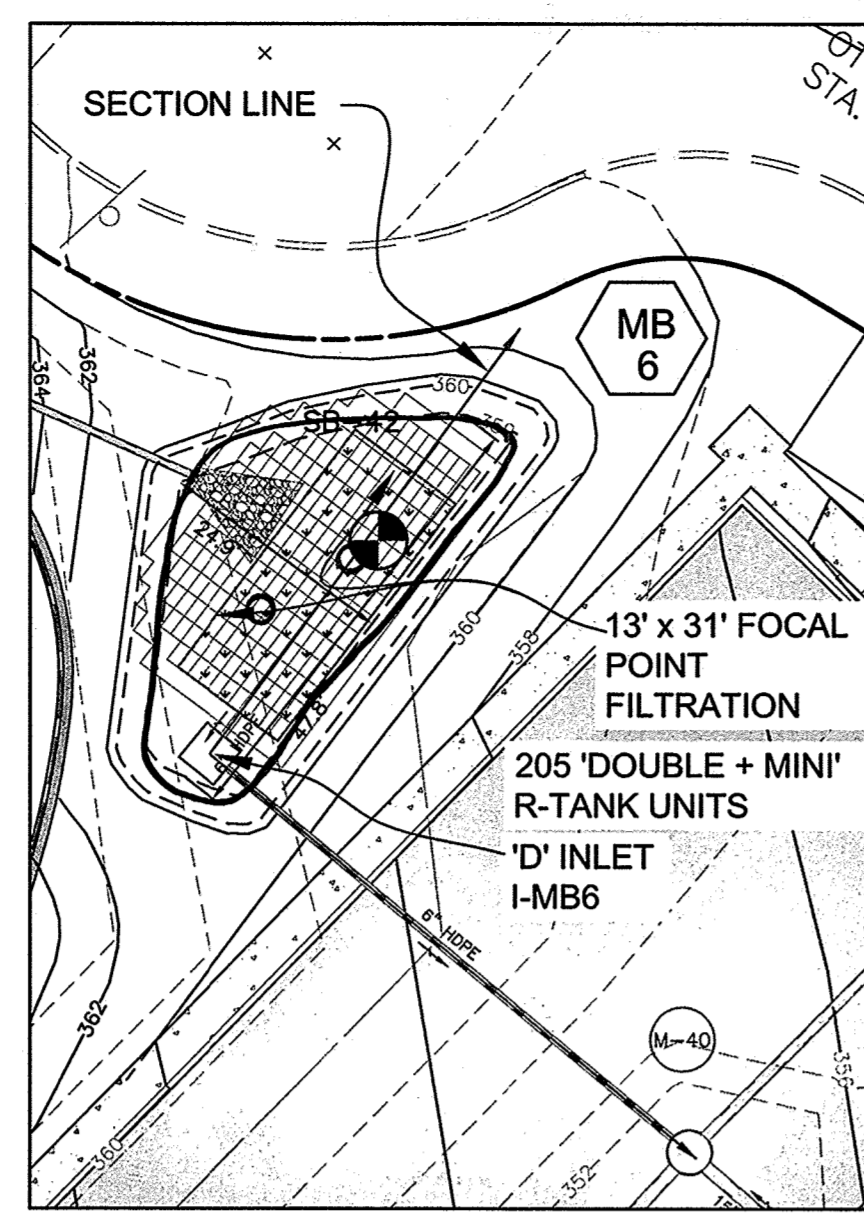


7-17-18



PRIVATE STORMWATER MANAGEMENT SECTION VIEW MB-6

SCALE HORIZONTAL: 1" = 40' VERTICAL: 1" = 4'



MB-6 DIMENSIONS SCALE: 1" = 20'

Storage Computation:

	Elevation	Area	Average Area	Contour Interval	Incremental Volume	Total Volume
1.05 Ac.						
Total Drainage Area:		45921 s.f.				
Impervious Area:		26242 s.f.				
Impervious:		358.67	827	1026.5	1.00	1026.5
Rv =		0.564				
ESDV =		4103.0 c.f.				1027
25% Req'd Wq Storage =		1026 c.f.				
Req. Focal Point Area:		397 sf				
Provided Focal Point Area:		403 sf - media storage:	362.7 cf			
Remaining Pe Storage =		2714 cf (in R-tanks, below filter area)				
Actual R-tank storage:		2717 cf (See following sheets for R-Tank and stone storage computations)				
R-tanks - 205 Double+mini						

PLANTING LEGEND

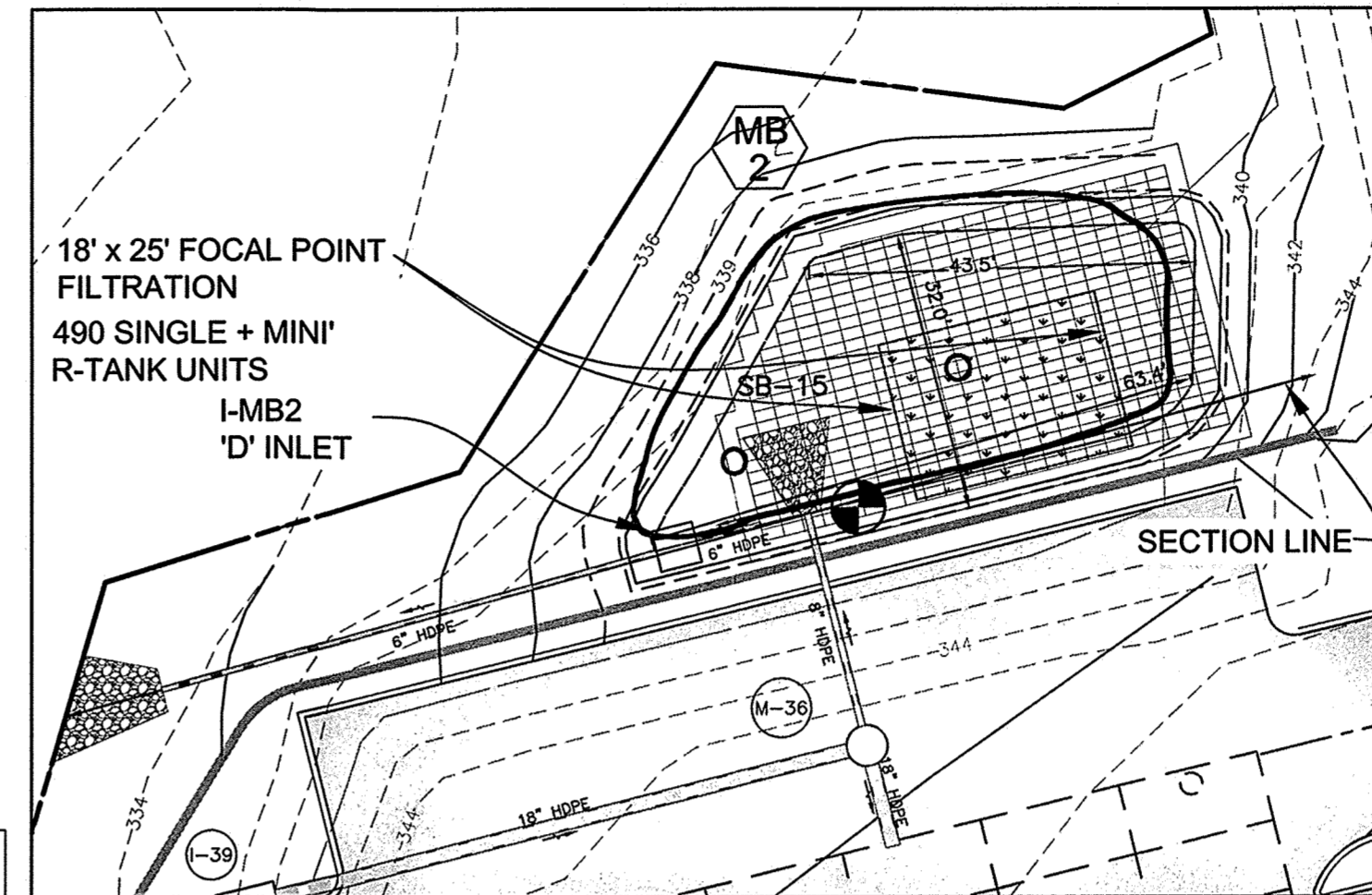
SYMBOL	NAME
⑦	ASTER LAEVIS BLUE BIRD ASTER
⑧	EUPATORIUM FISTULOSUM JOE PYE WEED
⑩	PANICUM VIRGATUM SWITCHGRASS
③	ARONIA ARBUTIFOLIA RED CHOKEBERRY

PLANT LIST IS FOR FOCAL POINT PLANTING MEDIA. THE REMAINING PONDING AREA SHALL BE STABILIZED WITH PERMANENT GRASS.

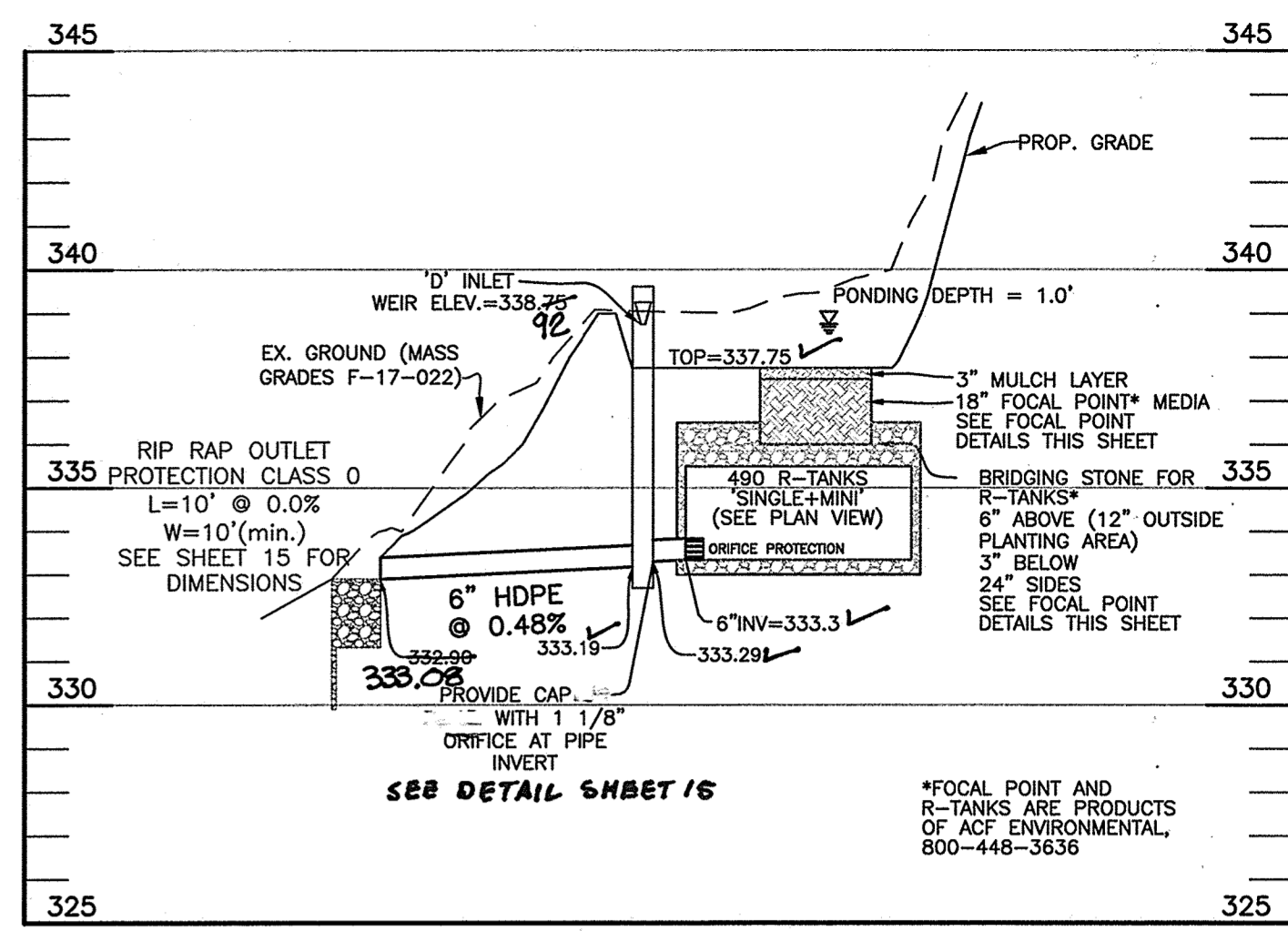
PLANTING DETAIL FOR MB-6 FOCAL POINT (M-6) MICRO-BIORETENTION NOT TO SCALE

Storage Computation:

	Elevation	Area	Average Area	Contour Interval	Incremental Volume	Total Volume
1.18 Ac.						
Total Drainage Area:		51292 s.f.				
Impervious Area:		39483 s.f.				
Impervious:		337.75	1389	1636.5	1.00	1636.5
Rv =		0.743				
ESDV =		6032.4 c.f.				1637
25% Req'd Wq Storage =		1508 c.f.				
Req. Focal Point Area:		443 sf				
Provided Focal Point Area:		450 sf - media storage:	405 cf			
Remaining Pe Storage =		3991 cf (in R-tanks, below filter area)				
Actual R-tank storage:		4005 cf (See following sheets for R-Tank and stone storage computations)				
R-tanks - 490 single+mini						



MB-2 DIMENSIONS SCALE: 1" = 20'



PRIVATE STORMWATER MANAGEMENT SECTION VIEW MB-2

SCALE HORIZONTAL: 1" = 40' VERTICAL: 1" = 4'

PLANTING LEGEND

SYMBOL	NAME
⑦	ASTER LAEVIS BLUE BIRD ASTER
⑧	EUPATORIUM FISTULOSUM JOE PYE WEED
⑩	PANICUM VIRGATUM SWITCHGRASS
③	ARONIA ARBUTIFOLIA RED CHOKEBERRY

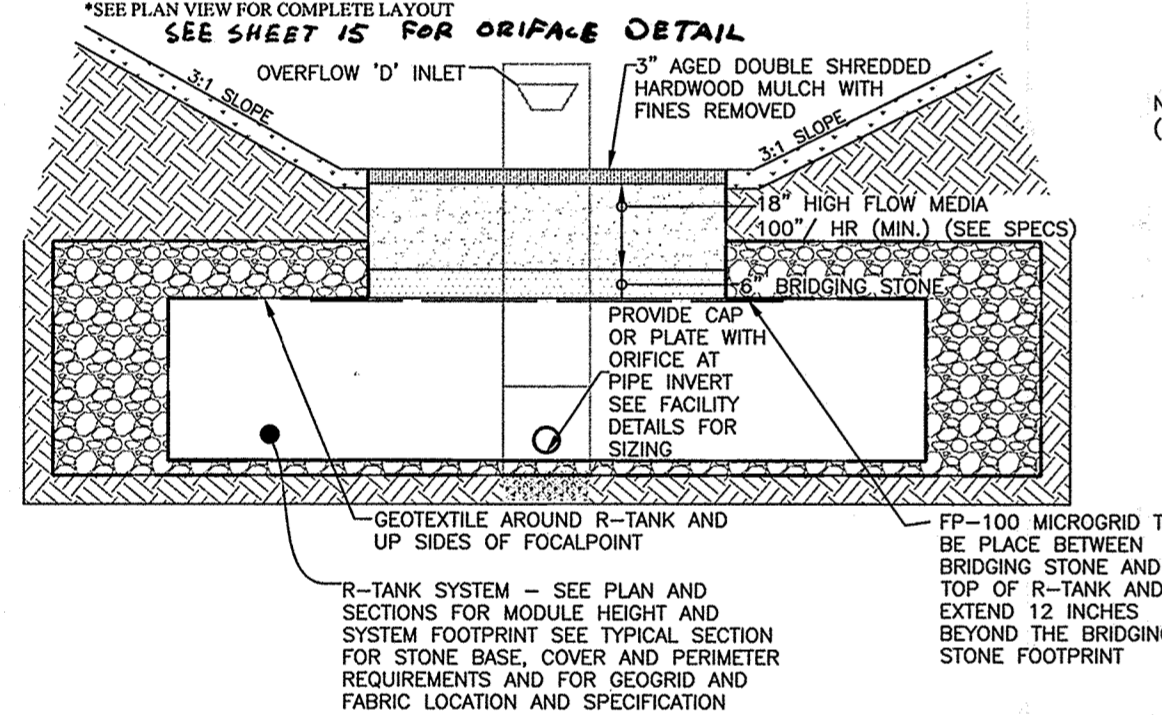
PLANT LIST IS FOR FOCAL POINT PLANTING MEDIA. THE REMAINING PONDING AREA SHALL BE STABILIZED WITH PERMANENT GRASS.

PLANTING DETAIL FOR MB-2 FOCAL POINT (M-6) MICRO-BIORETENTION NOT TO SCALE

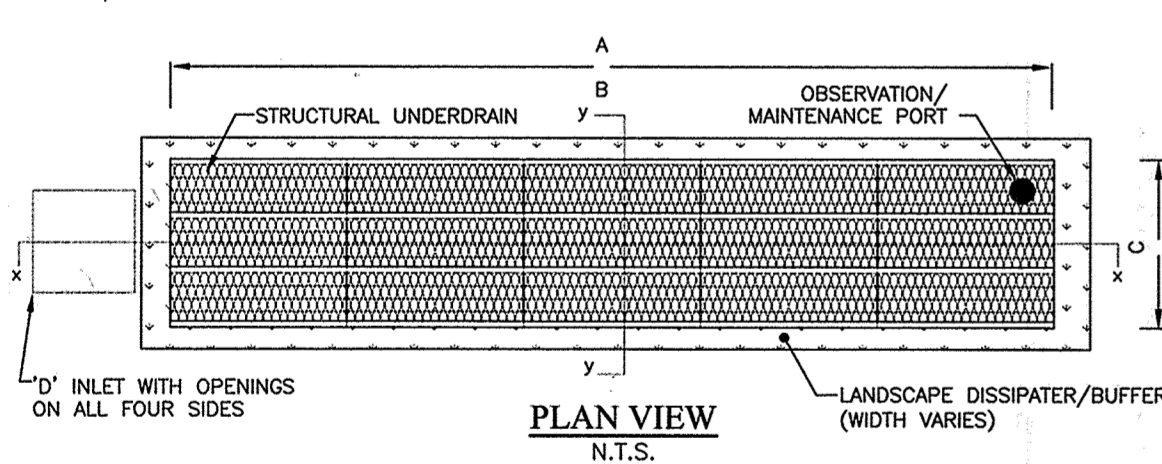
NOTE: A DESIGN MANUAL WAIVER TO THE MINIMUM 1.5" ORIFICE FOR SWM FACILITIES WAS APPROVED JUNE 5, 2018. THE APPROVAL WAS SUBJECT TO THE MINIMUM DIAMETER OF ANY ORIFICE BEING LIMITED TO 1.0" AND THE DETAILS BEING UPDATED TO REFLECT THE DESIGN PROPOSED IN THE WAIVER REQUEST.

FOCALPOINT WITH EXPANDED R-TANK KEY DIMENSIONAL DATA

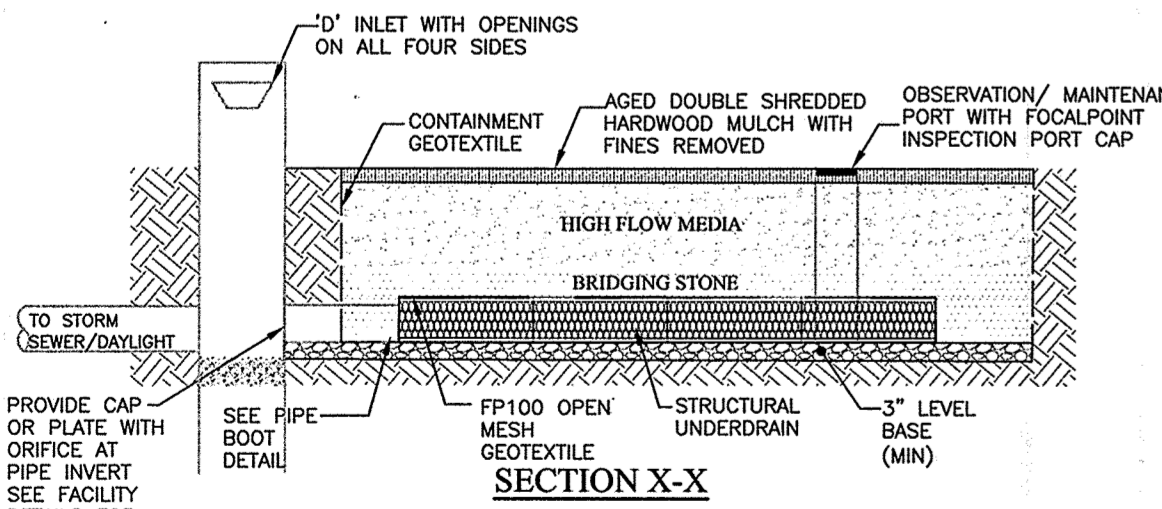
FACILITY ID	MB-2	MB-6	MB-7	MB-8	MB-9	MB-10	MB-11
FOCALPOINT LENGTH	18'	13'	19'	12'	19'	22.5'	21'
FOCALPOINT WIDTH	25'	31'	45'	26'	53'	23'	14'
OVERFLOW RIM ELEV.	338.75	359.67	349.67	348.00	350.00	371.00	371.00
TOP OF MULCH ELEV.	337.75	358.67	348.67	347.00	349.00	370.00	370.00
TOP OF MEDIA ELEV.	337.50	358.42	348.42	346.75	348.75	369.75	369.75
TOP OF BRIDGING STONE ELEV.	336.00	356.92	346.92	345.25	347.25	368.25	368.25
TOP OF R-TANK ELEV.	335.50	356.42	346.42	344.75	346.75	367.75	367.75
BOTTOM R-TANK ELEV.	333.34	352.88	340.84	341.21	341.17	365.59	365.59
STONE BASE ELEV.	333.01	352.55	340.51	340.88	340.84	365.26	365.26
R-TANK FOOTPRINT (DISTANCES)	34.2 X 58.0'	25.0' X 39.2'	21.0' X 33.3'	17.1' X 58.0'	23.7' X 74.4'	34.2 X 60.3'	30.3' X 41.9'
ORIFICE SIZE:	1.18"	1"	1"	1"	1.14"	1"	1"



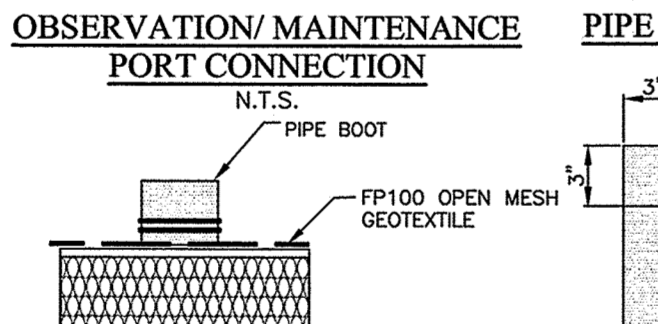
OBSERVATION/ MAINTENANCE PORT N.T.S.



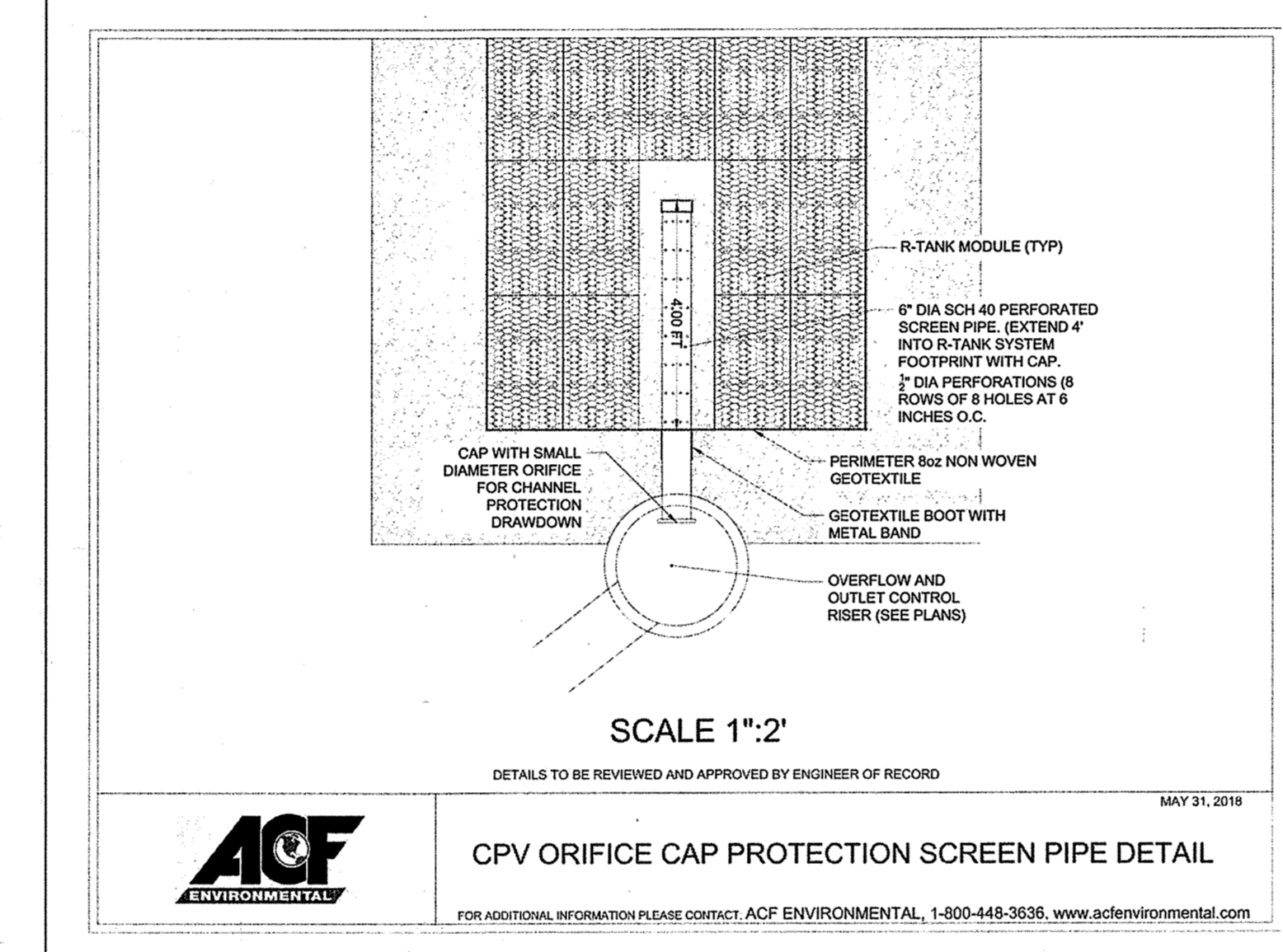
PLAN VIEW N.T.S.



FOCAL POINT - MICRO-BIORETENTION DETAIL N.T.S.



OUTLET/ INLET PIPE CONNECTION N.T.S.



SCALE 1"=2'

CPV ORIFICE CAP PROTECTION SCREEN PIPE DETAIL

PLANTING LEGEND

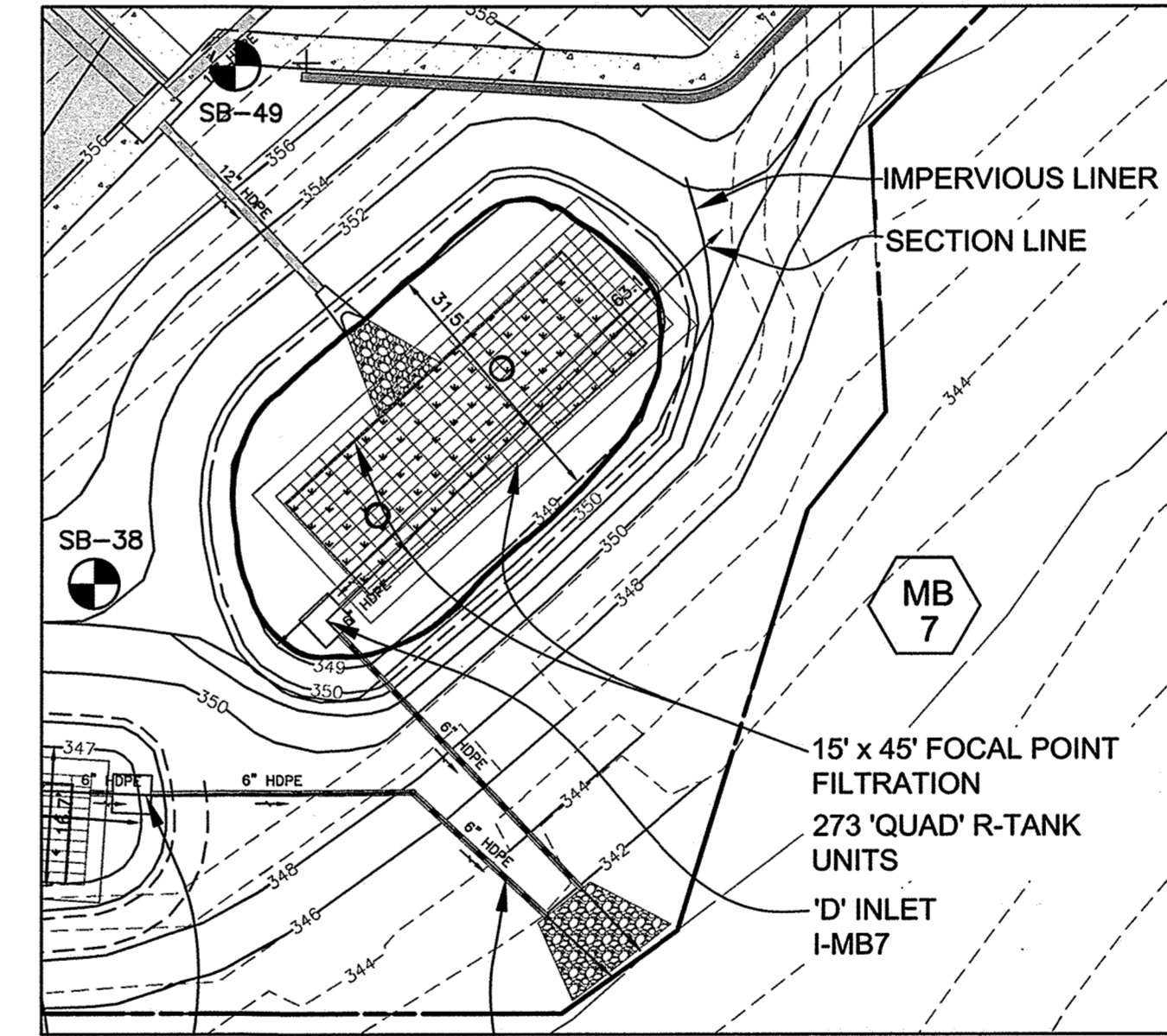
SYMBOL	NAME
⑩	ASTER LAEVIS BLUE BIRD ASTER
⑧	EUPATORIUM FISTULOSUM JOE PYE WEED
⑩	PANICUM VIRGATUM SWITCHGRASS
③	ARONIA ARBUTIFOLIA RED CHOKEBERRY

PLANT LIST IS FOR FOCAL POINT PLANTING MEDIA. THE REMAINING PONDING AREA SHALL BE STABILIZED WITH PERMANENT GRASS.

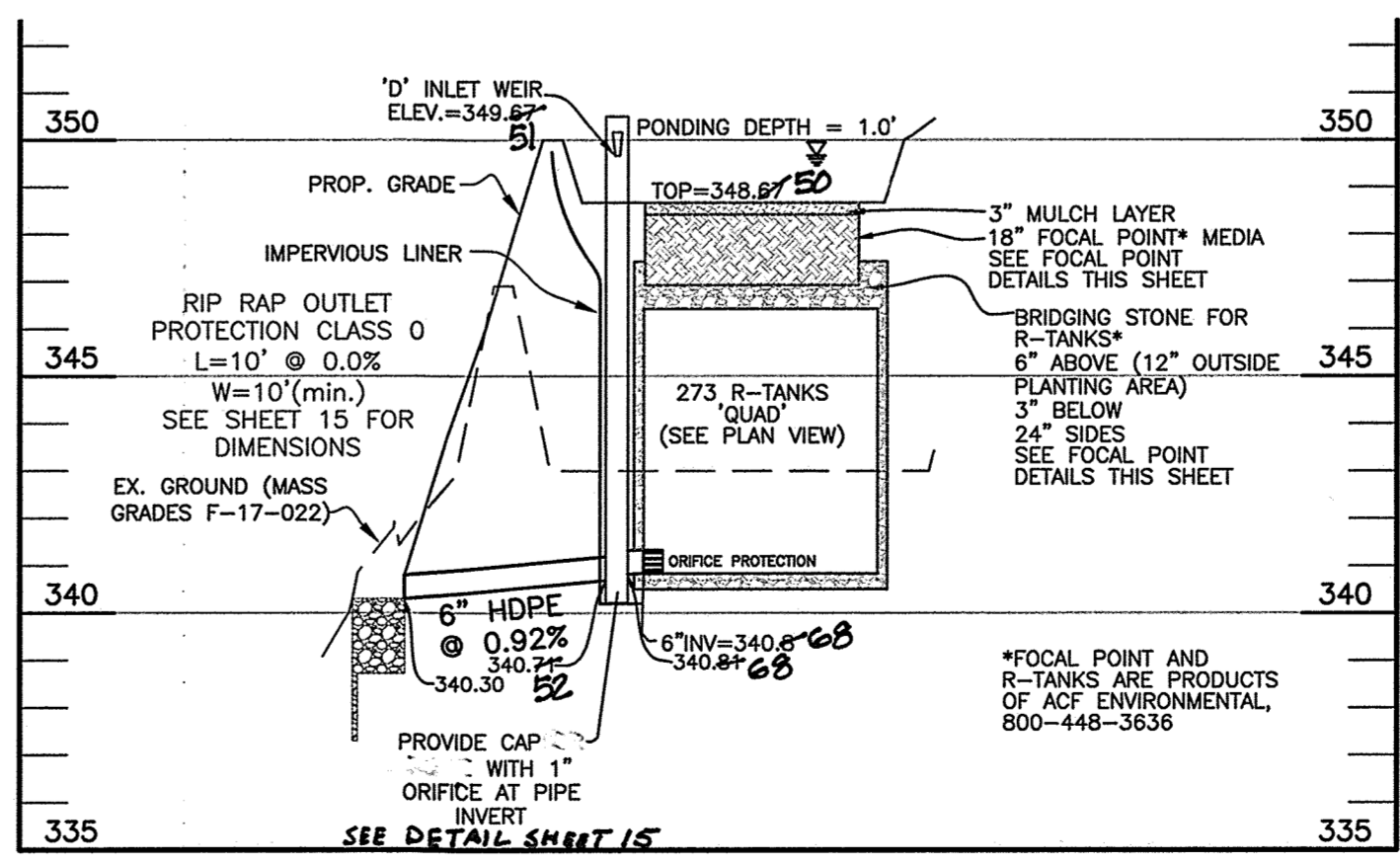
PLANTING DETAIL FOR MB-7 FOCAL POINT (M-6) MICRO-BIORETENTION NOT TO SCALE

Storage Computation:

	Elevation	Area	Average Area	Contour Interval	Incremental Volume	Total Volume
1.78 Ac.						
Total Drainage Area:		77530 s.f.				
Impervious Area:		50458 s.f.				
Impervious:		659	348.67	1768	1.00	1768
Rv =		0.636				
ESDV =		7804.0 c.f.				2027
25% Req'd Wq Storage =		1951 c.f.				
Req. Focal Point Area:		670 sf				
Provided Focal Point Area:		675 sf - media storage:	607.5 cf			
Remaining Pe Storage =		5170 cf (in R-tanks, below filter area)				
Actual R-tank storage:		5370 cf (See following sheets for R-Tank and stone storage computations)				
R-tanks - 273 Quad						



MB-7 DIMENSIONS SCALE: 1" = 20'



PRIVATE STORMWATER MANAGEMENT SECTION VIEW MB-7

SCALE HORIZONTAL: 1" = 40' VERTICAL: 1" = 4'

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21A43, Expiration Date: 12-21-22

AS-BUILT CERTIFICATION

I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E. Date: 2-12-21

- STORMWATER MANAGEMENT PLANTING DATA
- PLANTINGS WITHIN THE PONDING AREA OF THE FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
 - PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE MICRO-BIORETENTION FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
 - AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE FACILITY NEAR O.B. PIPE AND UNDERDRAIN.
- OPERATION AND MAINTENANCE SCHEDULE FOR BIORETENTION (M-6)
- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASHOUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A-4.1 AND 2.
 - THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
 - THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
 - THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

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. 28376, Expiration Date: 01-01-19.

BENCHMARK ENGINEERING, INC.

8460 BALTIMORE NATIONAL PIKE & SUITE 315 • BELLGATE CITY, MARYLAND 21043
(P) 410-685-8109 (F) 410-685-8644
WWW.BE-CVLENGINEERING.COM

OWNER: LOCUST THicket INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELK RIDGE, MD 21075
410-465-4244

DEVELOPER: LOCUST THicket INVESTORS LLC
P.O. BOX 417
ELLCOTT CITY, MD 21041
410-465-4244

DESIGN: AMM CHECKED: CAM

DATE: JULY 2018 PROJECT NO. 0925

DATE: AS SHOWN DRAWING 17 OF 47

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 8-16-18
Chief, Division of Land Development 8-23-18
Director 8-24-18

CONSTRUCTION SPECIFICATIONS

B.C Specifications for Micro-Bioretenion, Rain Gardens, Landscape Infiltration & Infiltration Berms

1. Material Specifications: The allowable materials to be used in these practices are detailed in Table B.4.1.

2. Filtering Media or Planting Soil: The soil shall be a uniform mix, free of stones, slumps, roots or other similar objects larger than two inches. No other materials or substances shall be mixed or dumped within the micro-bioretenion practice that may be harmful to plant growth...

3. Compaction: It is very important to minimize compaction of both the base of bioretention practices and the required backfill. When possible, use excavation hoses to remove original soil. If practices are excavated using a loader, the contractor should use wide track or marsh track equipment...

4. Miscellaneous: These practices may not be constructed until all contributing drainage area has been stabilized.

SPECIFICATION HIGH PERFORMANCE MODULAR BIOFILTRATION SYSTEM (HPMBS)

Material, Performance, and Installation Specification

I. Summary: The following general specifications describe the components and installation requirements for a volume based High Performance Modular Biofiltration System (HPMBS) that utilizes physical, chemical and biological mechanisms of a soil, plant and microbe complex to remove pollutants typically found in urban storm water runoff.

A. Plant Component: 1. Manufacturer shall provide a regionalized list of acceptable plants. 2. Plants, as specified in the approved drawings/manufacture's plant list, shall be installed at the time the HPMBS is commissioned for use.

B. Biofilter Component: 1. This component employs a high performance cross-section in which each element is highly dependent on the others to meet the performance specification for the complete system. It is important that this entire cross-section be provided as a complete system, and installed as such.

C. Separation Mesh: 1. Separation Mesh shall be composed of high tenacity monofilament polypropylene yarns that are woven together to produce an open mesh geotextile which shall be inert to biological degradation and resistant to naturally encountered chemicals, alkalis and acids.

D. Authorized Value Added Reseller: ACF Environmental (800) 448-3836 www.acfenvironmental.com

E. Execution: 1. Base of excavation shall be smooth, level and free of lumps or debris, and compacted unless infiltration of storm water into subgrade is desired.

F. Bridging Stone: 1. Bridging Stone shall be 3/8" pea gravel, or other diameter sized to prevent migration of filter media, as specified by manufacturer.

G. Delivery, Storage and Handling: 1. Protect all materials from damage during delivery and store UV sensitive materials under tarp to protect from sunlight including all plastics, when time from delivery to installation exceeds one week.

H. Submittals: 1. Manufacturer shall submit a letter of certification that the complete system meets or exceeds all technical and packaging requirements.

I. Design Computations: 1. The HPMBS must be sized using a volume based sizing criteria and demonstrate, using a SCS stormwater modeling software/spreadsheets calculator that the required water quality volume (defined by the Engineer of Record) passes through the HPMBS prior to activation of the overflow device set no higher than (6) inches above the top elevation of the HPMBS (typically defined as top of mulch).

J. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

K. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

L. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

M. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

N. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

O. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

P. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

Q. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

R. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

S. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

T. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

U. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

V. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

W. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

X. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

Y. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

Z. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

AA. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

AB. Project Conditions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

AC. Cold Weather: 1. Do not use frozen materials or materials mixed or coated with ice or frost.

AD. Substitutions: 1. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 10.1 through 10.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 11.1 through 11.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 12.1 through 12.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 13.1 through 13.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 14.1 through 14.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 15.1 through 15.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 16.1 through 16.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 17.1 through 17.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 18.1 through 18.5.

BORING LOG GEOLAB, INC.

Table with columns: Elevation, Depth, Description of Materials, Sample Number, Moisture Content, Specific Gravity, and Remarks. Includes data for borings 19.1 through 19.5.

MATERIALS & SPECIFICATIONS FOR ESD PRACTICES

Table with columns: MATERIAL, SPECIFICATION, SIZE, and NOTES. Lists materials like PLANTINGS, PLANTING SOIL, ORGANIC CONTENT, MULCH, GEOTEXTILE, UNDERDRAIN GRAVEL, etc.

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

REVISION

Table with columns: NO., DATE, and REVISION. Includes a section for BENCHMARK ENGINEERING, INC. with contact information and a professional certification stamp.

AS-BUILT SDP-18-029

GENERAL NOTES:
 THE STORMCAPTURE SYSTEM BY OLDCASTLE STORMWATER SOLUTIONS IS PART OF THE STORMWATER MANAGEMENT SYSTEM FOR THE RESPECTIVE SITE, AS PREPARED BY THE PROJECT DESIGN ENGINEER. IT IS THE RESPONSIBILITY OF THE DESIGN ENGINEER TO DETERMINE DESIGN FLOW RATES, PRE-TREATMENT AND POST-TREATMENT REQUIREMENTS, STORAGE VOLUME, AND ENSURE THE FINAL DESIGN MEETS ALL CONVEYANCE AND STORAGE REQUIREMENTS. SYSTEM DESIGN AND TYPE, SOIL ANALYSIS, LOADING REQUIREMENTS, COVER HEIGHT AND MODULE SIZE DETERMINE THE FOUNDATION TYPE AND REQUIREMENTS AS STATED HEREIN. ANY VARIATIONS FOUND DURING CONSTRUCTION FROM THE SITE AND SYSTEM ANALYSIS MUST BE REPORTED TO THE PROJECT DESIGN ENGINEER. THE PROJECT DESIGN ENGINEER IS RESPONSIBLE FOR OBTAINING A GEOTECHNICAL ENGINEERING REPORT VERIFYING THE BEARING CAPACITY STATED IN DESIGN NOTES.

DESIGN NOTES:
 1. DESIGN LOADINGS:
 A. ASHTO HS20-44 W/ IMPACT
 B. 370' DEPTH OF COVER = 6" - 6" (120 PCF ASSUMED), LEICHER FILL AVAILABLE UP TO 10'
 C. ASSUMED WATER TABLE = BELOW BOTTOM OF PRECAST
 D. DRY LATERAL EARTH PRESSURE (EPP) = 45 PCF
 E. LATERAL LIVE LOAD SURCHARGE = 80 PSF (APPLIED TO 8' BELOW GRADE)
 F. NO LATERAL SURCHARGE FROM ADJACENT STRUCTURES
 G. CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 6,000 PSI
 H. STEEL REINFORCEMENT: REBAR, ASTM A-615 OR A-706, GRADE 60
 I. CEMENT: ASTM C-150 SPECIFICATION
 2. STORMCAPTURE MODULE TYPE = DETENTION
 3. REQUIRED NATIVE ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSF
 4. REQUIRED BASE LAYER DEPTH = NOT APPLICABLE
 5. REQUIRED NATIVE ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSF
 6. REFERENCE STANDARDS:
 A. ASTM C 890
 B. ASTM C 891
 C. ASTM C 913
 7. ANY DESIGN CONSTRAINT DIFFERENT FROM ABOVE REQUIRES CUSTOM STRUCTURAL DESIGN AND MAY REQUIRE THICKER SUBGRADE AND REVISED PRICING.

INSTALLATION NOTES:
 STORMCAPTURE MODULES ARE TO BE INSTALLED IN ACCORDANCE WITH ASTM C891. INSTALLATION OF UNDERGROUND PRECAST UTILITY STRUCTURES, PROJECT PLAN AND SPECIFICATIONS MUST BE FOLLOWED ALONG WITH ANY APPLICABLE REGULATIONS.
 1. PLAN LINE, GRADE AND ELEVATIONS MUST BE FOLLOWED.
 A. WHERE SPECIFIED, AN 8 OZ. NONWOVEN GEOTEXTILE FABRIC MUST BE USED AS A SEPARATION LAYER AROUND THE STORMCAPTURE SYSTEM.
 B. WHERE SPECIFIED, A CONTAINMENT MEMBRANE LINER WITH THE FOLLOWING REQUIREMENTS MUST BE USED: MIN. THICKNESS = 40 MILS, MIN. TENSILE STRENGTH = 600 LBS PER INCH (ASTM D6951), MIN. MULLER BURSTING STRENGTH = 1,000 PSI (ASTM D3786), AND MIN. MANUFACTURER'S WARRANTY OF 20 YEARS. WHERE THE MEMBRANE IS USED, AN 8 OZ. NONWOVEN GEOTEXTILE MUST BE PLACED ON BOTH THE INSIDE AND OUTSIDE OF THE ACTUAL CONTAINMENT MEMBRANE TO PREVENT PUNCTURES.
 2. PENETRATIONS IN THE CONTAINMENT MEMBRANE MAY ONLY BE MADE WITH SMOOTH WALL PIPES. MAKE PENETRATIONS BEFORE MAKING PENETRATIONS FOR ANY INLETS.
 3. SUBGRADE MATERIALS, IF SPECIFIED, SHALL BE CLEAN, DURABLE CRUSHED AGGREGATE COMPACTED AS DIRECTED BY THE ENGINEER. OLDCASTLE RECOMMENDS SIZE 5, 56, OR 57 (PER ASTM C33).
 4. DESIGNATED EMBEDDED LIFTERS MUST BE USED. USE PROPER RIGGINGS TO ASSURE ALL LIFTERS ARE EQUALLY ENGAGED WITH A MINIMUM 60 DEGREE ANGLE ON SLINGS AS NOTED AND IN ACCORDANCE WITH OLDCASTLE LIFTING PROCEDURES.
 5. MODULES MUST BE PLACED AS CLOSE TOGETHER AS POSSIBLE, AND GAPS SHALL NOT BE GREATER THAN 3/4". ALL EXTERIOR SYSTEM JOINTS SHALL BE COVERED WITH A MIN. 8" JOINT WRAP ON SIDES AND TOP (CS-102 CONSOLE OR EQUIVALENT) IN A CLAMHELL DESIGN. INSTALL ONE ROW CS-102 CONSOLE (OR EQUIVALENT) BETWEEN PRECAST PIECES.
 6. AUTHORIZATION SHALL BE GIVEN BY THE PROJECT ENGINEER OR DESIGNATED PERSON PRIOR TO PLACEMENT ON BACKFILL FOR THE SYSTEM. CARE MUST BE TAKEN DURING PLACEMENT OF BACKFILL NOT TO DISPLACE MODULES OR JOINT WRAP. BACKFILL SHALL BE COMPACTED TO 90% STANDARD PROCTOR DENSITY OR AS SPECIFIED, AND SHALL NOT BE COMPACTED WITHIN 8" OF MODULE.
 7. CONSTRUCTION EQUIPMENT EXCEEDING DESIGN LOADINGS SHALL NOT BE ALLOWED ON STRUCTURE.
 8. TERNALECTS TO BE KNOCKED OUT AT SPECIFIED LOCATIONS IN FIELD BY OTHERS. SEE SITE LAYOUT FOR LOCATIONS.

INLETS AND RISERS:
 ALL PIPE INLETS SHALL EXTEND INSIDE MODULE A MINIMUM OF 4". PLACE A NON-SHRINK, NON-METALLIC GROUT, MIN. 3,000 PSI IN ANNUAL SPACE TO ELIMINATE ALL VOIDS.

REVISIONS

REVISION	DATE	SHEETS	DESCRIPTION OF REVISION

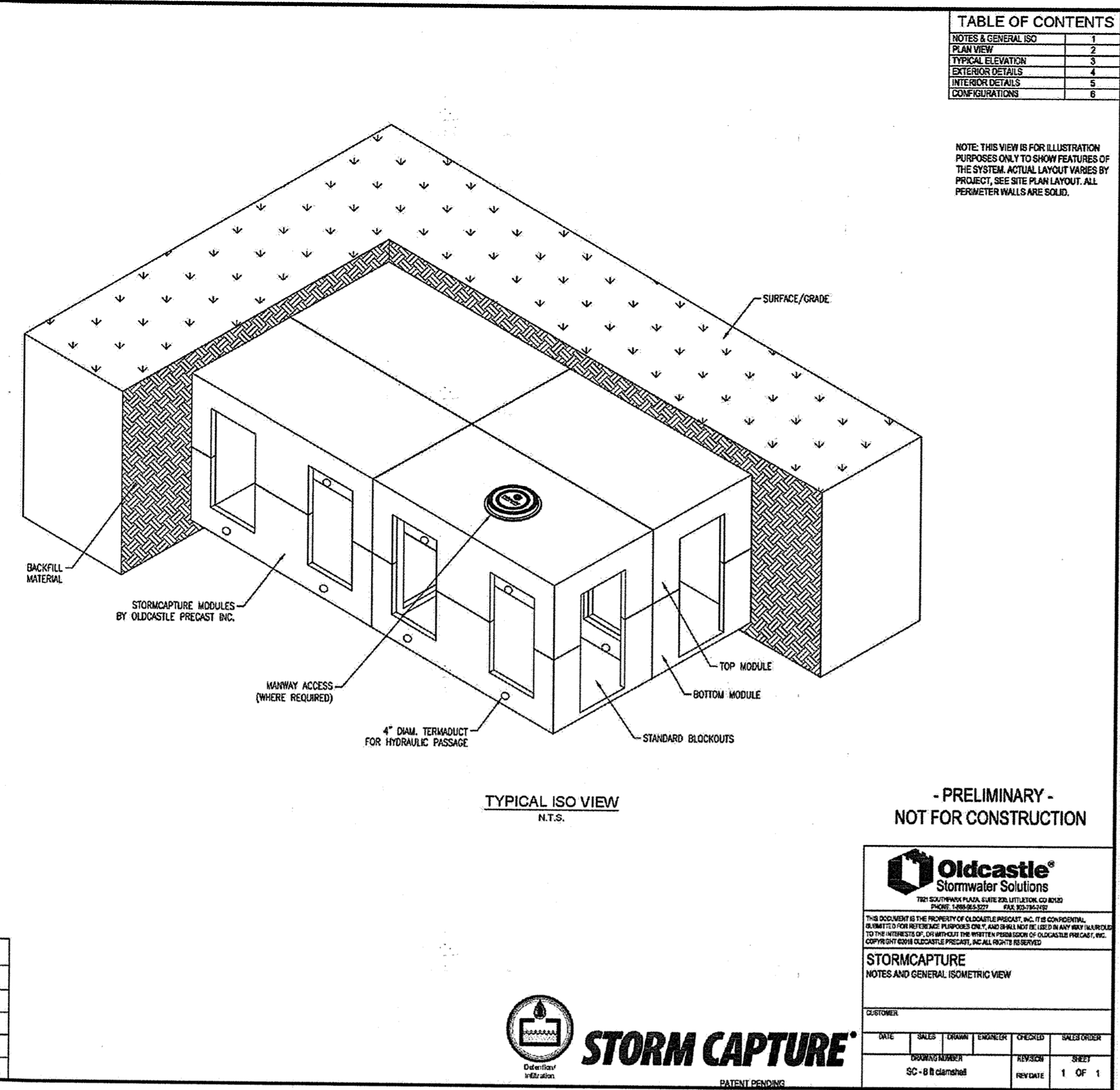
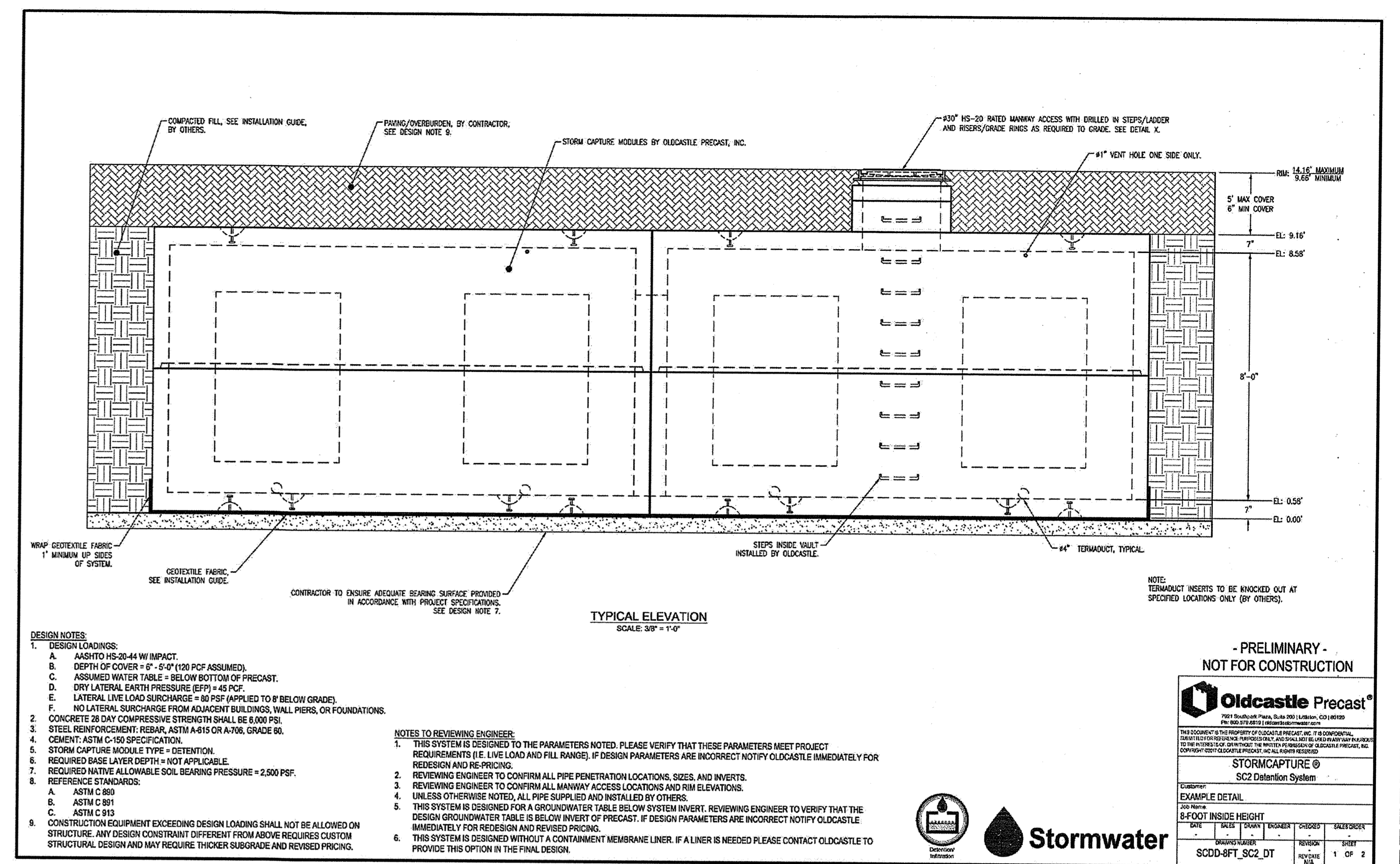


TABLE OF CONTENTS

NOTES & GENERAL INFO	1
PLAN VIEW	2
TYPICAL ELEVATION	3
EXTERIOR DETAILS	4
INTERIOR DETAILS	5
CONFIGURATIONS	6

NOTE THIS VIEW IS FOR ILLUSTRATION PURPOSES ONLY TO IDENTIFY THE SYSTEM. ACTUAL LAYOUT VARIES BY PROJECT. SEE PLAN LAYOUT FOR ALL PERIMETER WALLS AND SLAB.



DESIGN NOTES:
 1. DESIGN LOADINGS:
 A. ASHTO HS-20-44 W/ IMPACT
 B. DEPTH OF COVER = 6" - 6" (120 PCF ASSUMED)
 C. ASSUMED WATER TABLE = BELOW BOTTOM OF PRECAST
 D. DRY LATERAL EARTH PRESSURE (EPP) = 45 PCF
 E. LATERAL LIVE LOAD SURCHARGE = 80 PSF (APPLIED TO 8' BELOW GRADE)
 F. NO LATERAL SURCHARGE FROM ADJACENT BUILDINGS, WALL PERS, OR FOUNDATIONS
 G. CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 6,000 PSI
 H. STEEL REINFORCEMENT: REBAR, ASTM A-615 OR A-706, GRADE 60
 I. CEMENT: ASTM C-150 SPECIFICATION
 2. STORMCAPTURE MODULE TYPE = DETENTION
 3. REQUIRED NATIVE ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSF
 4. REQUIRED BASE LAYER DEPTH = NOT APPLICABLE
 5. REFERENCE STANDARDS:
 A. ASTM C 890
 B. ASTM C 891
 C. ASTM C 913
 6. CONSTRUCTION EQUIPMENT EXCEEDING DESIGN LOADING SHALL NOT BE ALLOWED ON STRUCTURE. ANY DESIGN CONSTRAINT DIFFERENT FROM ABOVE REQUIRES CUSTOM STRUCTURAL DESIGN AND MAY REQUIRE THICKER SUBGRADE AND REVISED PRICING.

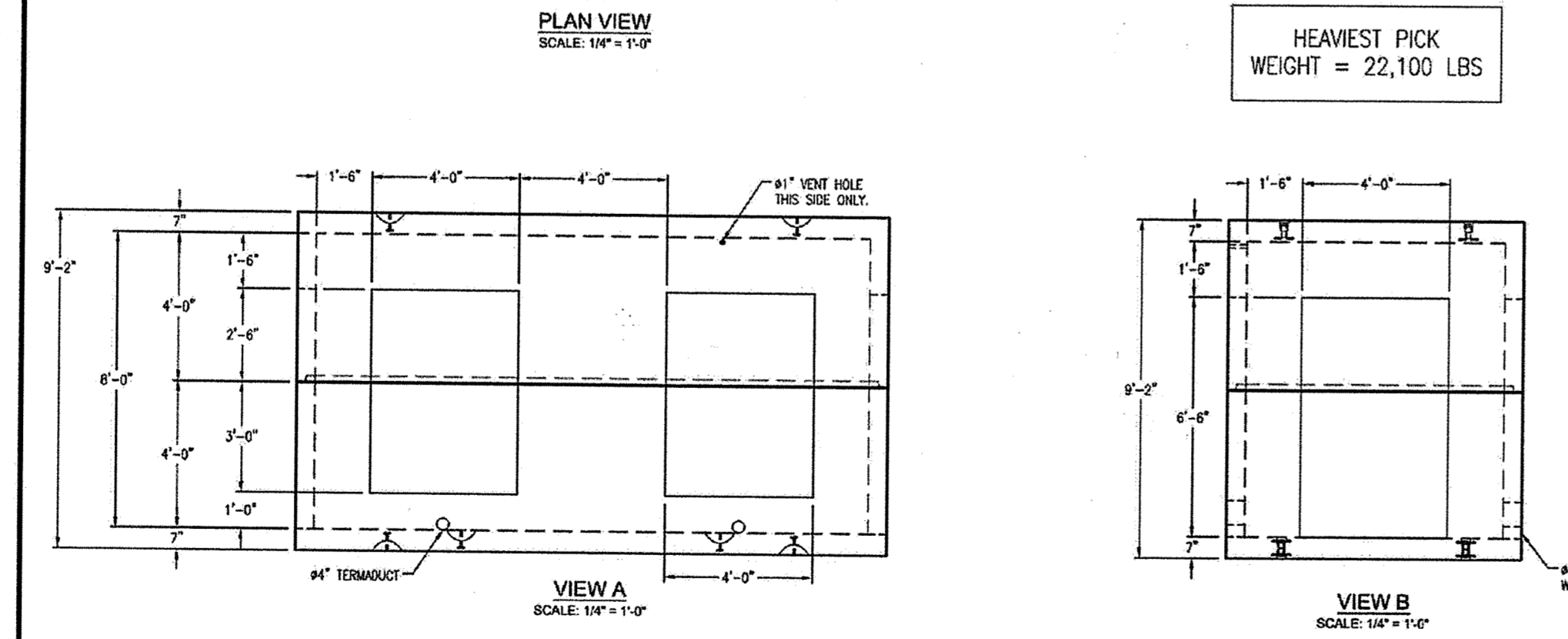
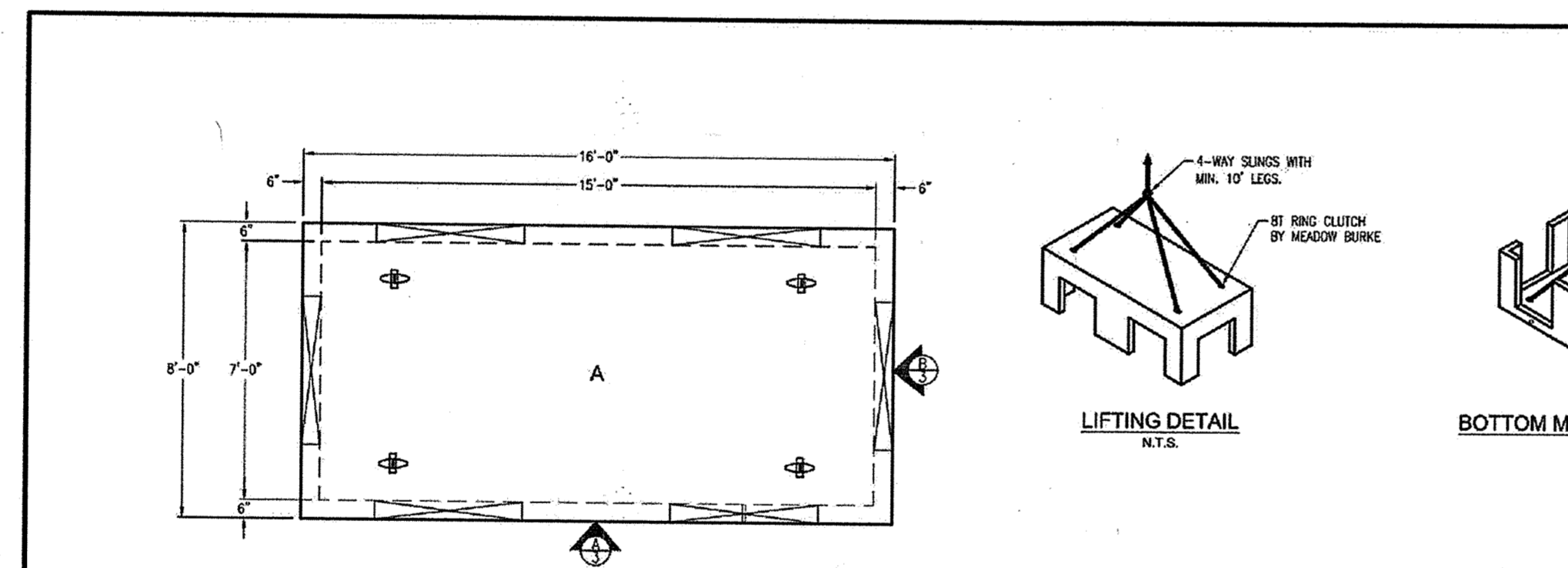
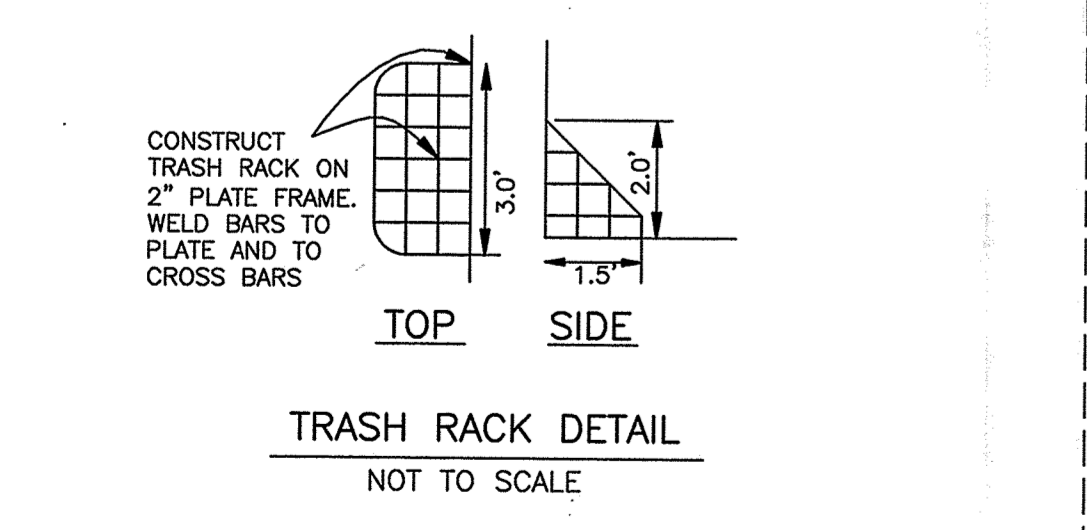
NOTES TO REVIEWING ENGINEER:
 1. THIS SYSTEM IS DESIGNED TO THE PARAMETERS NOTED. PLEASE VERIFY THAT THESE PARAMETERS MEET PROJECT REQUIREMENTS (I.E. LIVE LOAD AND FILL RANGE). IF DESIGN PARAMETERS ARE INCORRECT NOTIFY OLDCASTLE IMMEDIATELY FOR REVISION AND RE-PRICING.
 2. REVIEWING ENGINEER TO CONFIRM ALL PIPE PENETRATION LOCATIONS, SIZES, AND INVERTS.
 3. REVIEWING ENGINEER TO CONFIRM ALL MANWAY ACCESS LOCATIONS AND RIM ELEVATIONS.
 4. UNLESS OTHERWISE NOTED, ALL PIPE SUPPLIED AND INSTALLED BY OTHERS.
 5. THIS SYSTEM IS DESIGNED FOR A GROUNDWATER TABLE BELOW SYSTEM INVERT. REVIEWING ENGINEER TO VERIFY THAT THE DESIGN GROUNDWATER TABLE IS BELOW INVERT OF PRECAST. IF DESIGN PARAMETERS ARE INCORRECT NOTIFY OLDCASTLE IMMEDIATELY FOR REDESIGN AND REVISED PRICING.
 6. THIS SYSTEM IS DESIGNED WITHOUT A CONTAINMENT MEMBRANE LINER. IF A LINER IS NEEDED PLEASE CONTACT OLDCASTLE TO PROVIDE THIS OPTION IN THE FINAL DESIGN.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER MANAGEMENT FACILITY UGSM-1

- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY IS PRIVATELY OWNED AND IT SHALL BE THE RESPONSIBILITY OF THE OWNER TO PERIODICALLY INSPECT AND CLEAN THE FACILITY TO MAINTAIN ITS OPERATION AND FUNCTION.
- THE UNDERGROUND STORMWATER MANAGEMENT FACILITY SHALL BE INSPECTED SEMI-MONTHLY FOR TRASH ACCUMULATIONS, AND SUCH TRASH SHALL BE REMOVED. AT A MINIMUM, BI-ANNUAL INSPECTIONS SHALL BE PERFORMED TO VERIFY STRUCTURAL COMPONENTS AND OUTFALL FUNCTION, AND ADDITIONAL INSPECTION SHALL BE PERFORMED AFTER ESPECIALLY SEVERE STORM EVENTS.
- WHEN SEDIMENT ACCUMULATION OF MORE THAN 6" IS OBSERVED IN THE INFLOW AREA OR 2" IN THE REMAINING STORAGE AREA, OR ANY DEBRIS THAT MIGHT OBSTRUCT THE OUTFALL IS OBSERVED, THE FACILITY SHALL BE CLEANED.
- THE FACILITY SHALL BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES NOTIFYING THEM OF THE SPILL AND CLEANUP OPERATION.
- THE SEDIMENT AND DEBRIS SHALL BE REMOVED FROM THE UNDERGROUND STORMWATER MANAGEMENT FACILITY BY VACUUM TRUCK OR OTHER MANUAL MEANS. THE OWNER SHALL FOLLOW PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIAL AND LIQUID.
- THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX (6) MONTHS. IF OBSTRUCTIONS ARE FOUND, THE OWNER SHALL HAVE THEM REMOVED AND DISPOSED OF PROPERLY.
- OUTFALL PROTECTION SHALL BE REPAIRED AT ANY TIME WHEN EROSION IS OBSERVED AT THE OUTFALL.
- ANY CHIPPING, CRACKING OR DELAMINATION OF THE CONCRETE STRUCTURE SHOULD BE REPAIRED WITH GUIDANCE FROM THE MANUFACTURER, OLDCASTLE STORMWATER SOLUTIONS 800-579-8819.

UNDERGROUND STORMWATER MANAGEMENT FACILITY NOTES:

- ALL PIPE CONNECTIONS SHALL BE WATERPROOF/GASKETED.
- CONTRACTOR SHALL ENSURE THAT DEBRIS SHALL BE KEPT FROM ENTERING THE SYSTEM DURING THE SITE CONSTRUCTION PERIOD. OWNER SHALL KEEP THE FACILITY FREE OF DEBRIS AFTER COMPLETION, BY INSPECTION AND TRASH REMOVAL IF NECESSARY.
- POST CONSTRUCTION, THE OWNER SHALL ENSURE THAT TRASH AND DEBRIS DOES NOT ENTER THE FACILITY.
- RISERS SHALL BE 36" DIAMETER AND ACCESS COVERS SHALL HAVE 30" VENTED COVERS.
- A TRASH RACK SHALL BE PROVIDED FOR THE 'LOW FLOW' 12" PIPE. THE TRASH RACK SHALL BE 2' HIGH AND 3' WIDE, AND SHALL BE GALVANIZED AND PAINTED BATTLESHIP GRAY.



- PRELIMINARY - NOT FOR CONSTRUCTION

Oldcastle Precast

STORMCAPTURE
SC2 Detention System

DATE	SALES	DESIGN	CHECKED	DATE
02-08-2018				1 OF 2

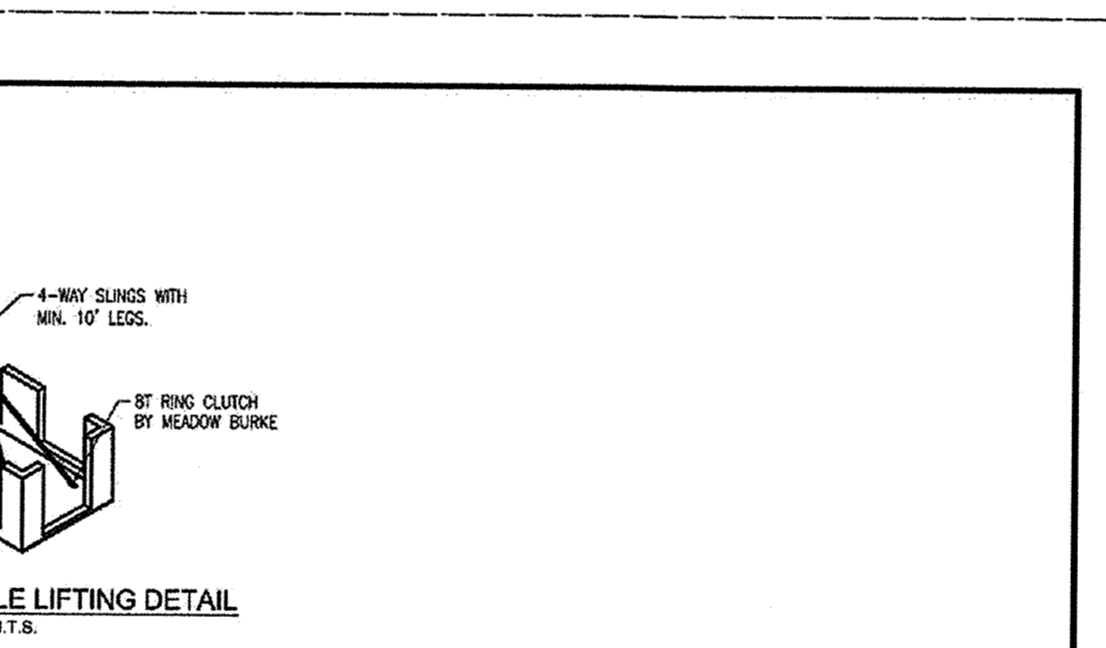
Stormwater

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Coleman 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Ke O'Leary 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. J. J. 8-24-18
 DIRECTOR DATE



- PRELIMINARY - NOT FOR CONSTRUCTION

Oldcastle Precast

STORMCAPTURE
SC2 Detention System

DATE	SALES	DESIGN	CHECKED	DATE
02-08-2018				1 OF 2

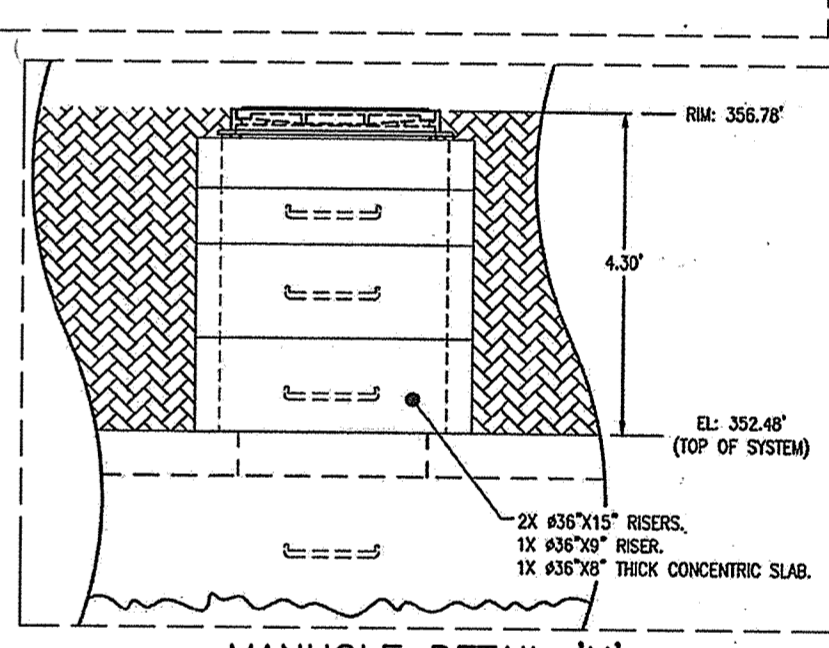
Stormwater

PROJECT SPECIFIC DIMENSIONS FOR UGSM-2 ARE PROVIDED ON SHEET 16.

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

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. 21443, Expiration Date: 12-21-22

STATE OF MARYLAND
PROFESSIONAL ENGINEER
 No. 21443
 AS-60162-2012-21



SPECIFIC DETAILS FOR EACH LOCATION TO BE PROVIDED ON SHOP DRAWINGS

BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-8105 (F) 410-465-8644
 WWW.BEI-ONLINEENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

STATE OF MARYLAND
PROFESSIONAL ENGINEER
 No. 28376
 AS-60162-2012-21

OWNER:
 LOCUST THicket INVESTORS LLC
 5836 MEADOWRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

DEVELOPER:
 LOCUST THicket INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

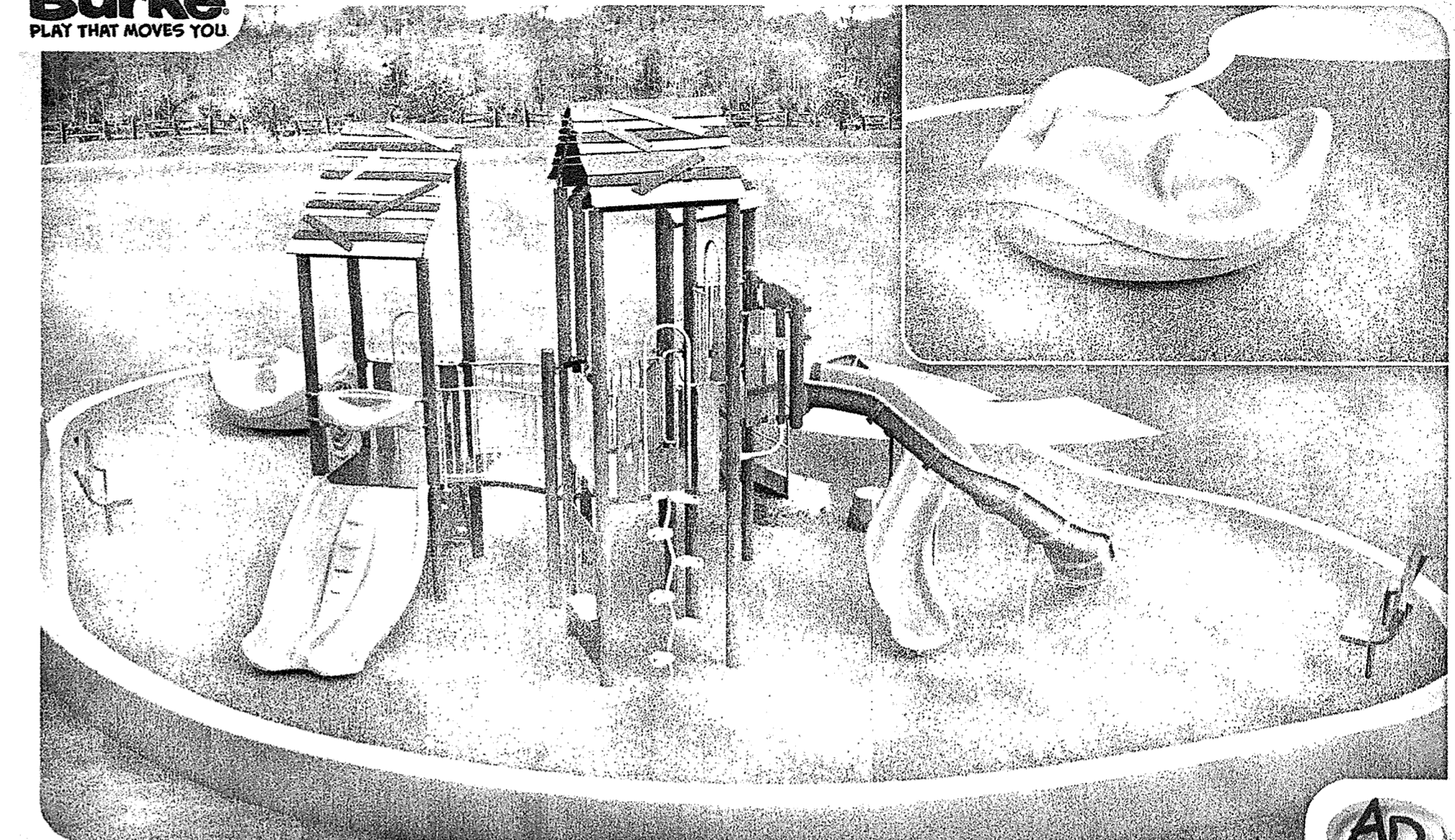
THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS
 ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

SITE DEVELOPMENT PLAN UNDERGROUND STORMWATER STORAGE DETAILS

DATE: JULY 2018 PROJECT NO. 0925
 SCALE: AS SHOWN DRAWING 20 OF 47

*BEI SIGNATURE/SEAL IS FOR CONFIRMATION THAT THE STORMCAPTURE DESIGN MEETS THE VOLUME REQUIREMENTS FOR THE STORMWATER MANAGEMENT. CONTRACTOR SHALL OBTAIN SEALED SHOP DRAWINGS FROM OLDCASTLE BEFORE CONSTRUCTION COMMENCES.

AS-BUILT SDP-18-029



PROPOSAL: 133-109210-2

LOCUST THICKET APARTMENTS

PLAY STRUCTURE
NOT TO SCALE

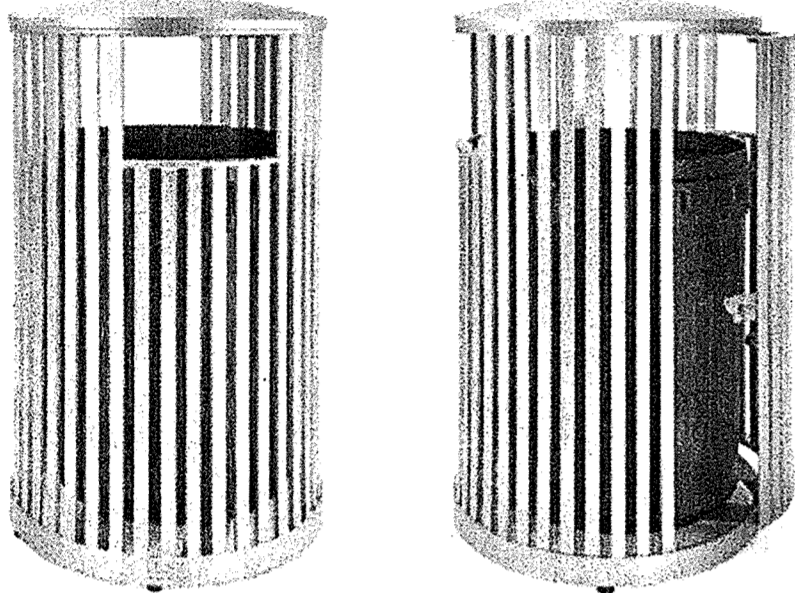


LEGEND

- SOILS CLASSIFICATION *Ch.B2*
- SOILS DELINEATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT
- SPECIMEN TREE ST-21
- RECREATIONAL OPEN SPACE

VICTOR STANLEY, INC.
MODEL: SD-42
IRONITES SERIES
FINISH: TITANIUM

SUPPLIER:
VICTOR STANLEY, INC.
P.O. DRAWER 530
DUNKIRK, MD 20754
TEL: 800.368.2573
WEB: WWW.VICTORSTANLEY.COM



TRASH RECEPTACLE

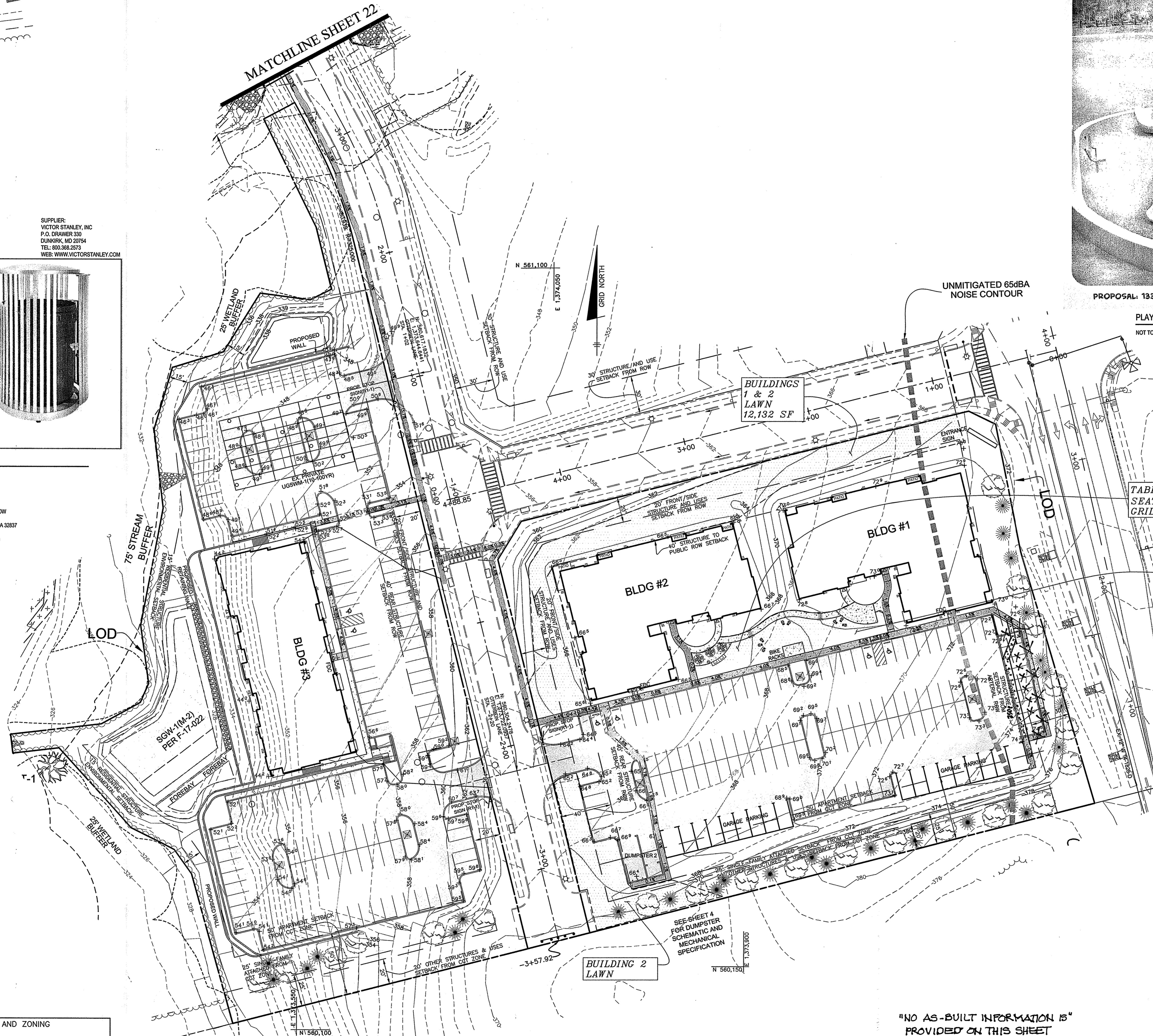
NOT TO SCALE

DOGSPOT
MODEL: #1003-L
ALUMINUM DOG-POT PET STATION
COLOR: FOREST GREEN
INSTALL SUPPORT POST
W/ 8" DIA. CONCRETE
FOOTER. BAG DISPENSER
TO BE 18"-45" ABOVE
FINISH GRADE

SUPPLIER:
DOGSPOT
2100 PRINCIPAL ROW
SUITE 406
ORLANDO, FLORIDA 32837
TEL: 800.364.7891
WWW.DOGSPOT.COM



PET WASTE STATION
NOT TO SCALE



UNMITIGATED 65dB
NOISE CONTOUR

BUILDINGS
1 & 2
LAWN
12,132 SF

TABLES W/
SEATING (3)
GRILL AREA

COURTYARD,
BLD. 1 & 2
3830 SF

NOTES:

1. ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% CROSS SLOPE IN ALL DIRECTIONS.
2. ALL HANDICAP PARKING ACCESS RAMPS SHALL BE HOWARD COUNTY R-4.05 OR R-4.06. MAXIMUM RAMP SLOPES SHALL BE IN ACCORDANCE WITH DETAIL. RAMPS SPECIFICALLY DETAILED ON SHEETS 41-44 SHOULD FOLLOW PLAN DETAILS.
3. ALL SIDEWALK RAMPS SHALL INCLUDE DETECTABLE WARNING MATS, PER HOWARD COUNTY R-4.07.
4. ALL CURB AND GUTTER SHALL BE HOWARD COUNTY R-3.01, 7" COMBINATION CURB.
5. FOR PARALLEL RAMPS DETAILED ON PLAN, SLOPE CURB TO MATCH RAMP SLOPE WITHIN THE "RAMP TRANSITION" TO CENTER LANDING.
6. THIS PLAN DEMONSTRATES GENERAL SLOPES FOR ACCESSIBLE ROUTES. FOR MORE DETAIL, SEE SHEETS 41-44.
7. ACCESSIBLE ROUTES SHALL MEET THE FOLLOWING PARAMETERS:
 - 7.1. GAPS ALONG AN ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2" LEVEL CHANGES ALONG AN ACCESSIBLE ROUTE. 1/2" MAXIMUM VERTICAL RISE. 1/2"-1/2" MAXIMUM WITH A 1:2 BEVEL, AND GREATER THAN 1/2" MUST BE RAMPED.
 - 7.2. RUNNING SLOPES SHALL NOT EXCEED 5%.
 - 7.3. CROSS SLOPES SHALL NOT EXCEED 2%.
 - 7.4. RAMPS WITH SLOPES BETWEEN 5% AND 8.33% REQUIRE HANDRAILS COMPLYING WITH ADA ON BOTH SIDES OF THE RAMP. NOTE: RAMPS LESS THAN 6' IN LENGTH DO NOT REQUIRE HANDRAILS.
 - 7.5. RAMPS SHALL NOT EXCEED 8.33%.
 - 7.6. INTERSECTING SIDEWALKS SHALL BE 2% MAXIMUM IN ANY DIRECTION.
 - 7.7. ACCESSIBLE PARKING AND ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

NOTES:

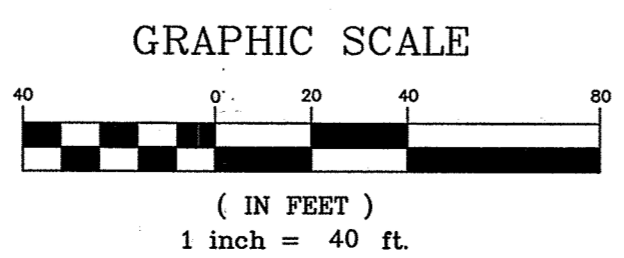
1. INDOOR STORAGE IS AVAILABLE WITHIN EACH BUILDING.
2. BIKE PARKING CAN BE FOUND IN FRONT OF BUILDINGS 1 AND 2, BEHIND BUILDING 4, BESIDE GARAGE UNITS IN FRONT OF BUILDING 6, AND NEAR THE PARKING AT THE DOG PARK.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Ch. Chubb 8-14-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Keith Shelton 8-23-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. ... 8-24-18
DIRECTOR DATE



"NO AS-BUILT INFORMATION IS
PROVIDED ON THIS SHEET"



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. 21423 Expiration Date: 12-21-22

NO.	DATE	REVISION

BENCHMARK
ENGINEERS LAND SURVEYORS PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL Pkwy & SUITE 315 A ELlicOTT CITY, MARYLAND 21043
(P) 410-465-8105 (F) 410-465-6844
WWW.BCI-ENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

Alan W. ...
PROFESSIONAL ENGINEER
NO. 28376
EXPIRES 1-1-19

OWNER:
LOCUST THICKET INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELKRIE, MD 21075
410-465-4244

DEVELOPER:
LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELlicOTT CITY, MD 21041
410-465-4244

DESIGN: AM CHECKED: CAM SCALE: AS SHOWN

THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D
9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714 & 724
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

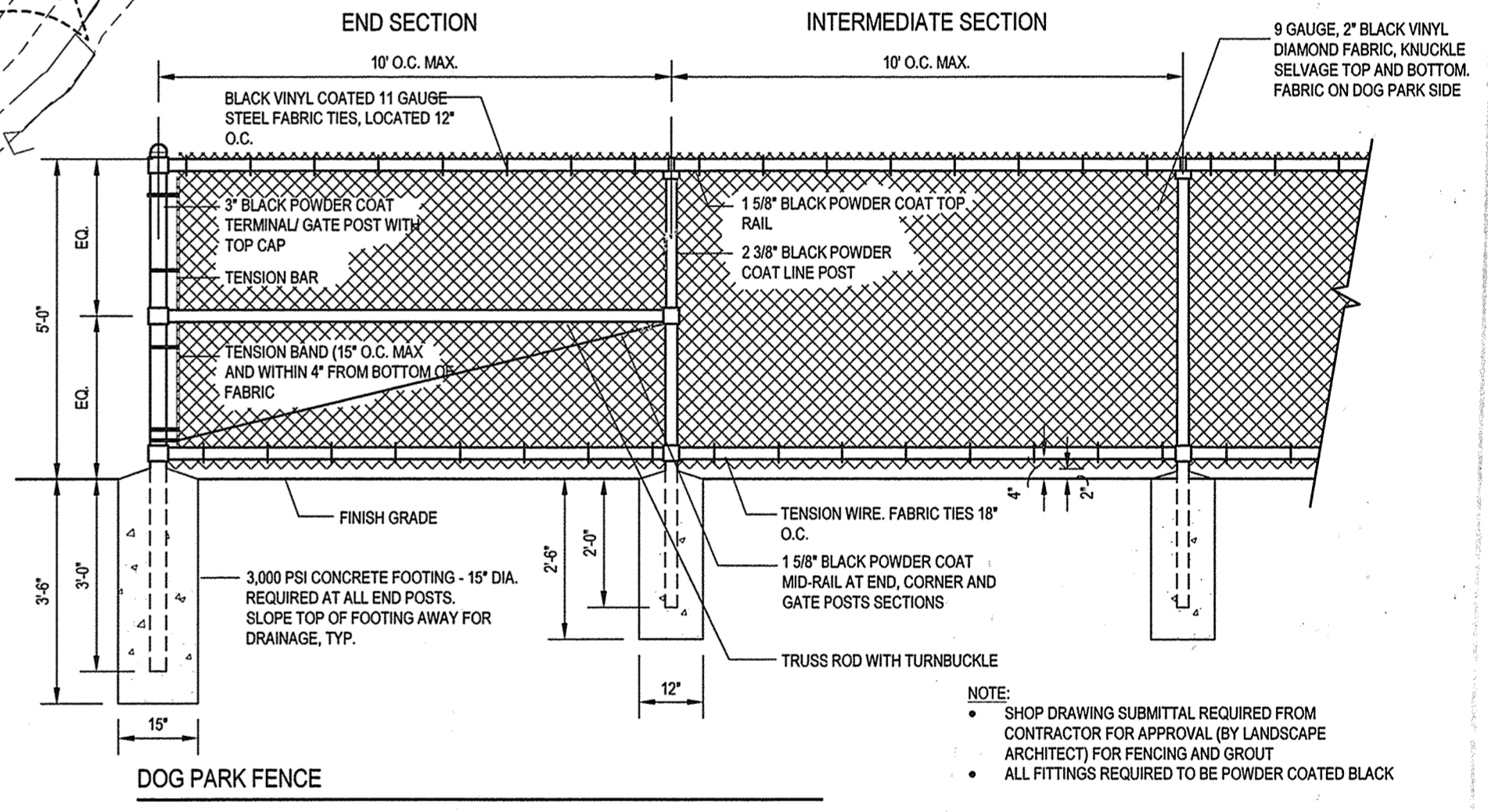
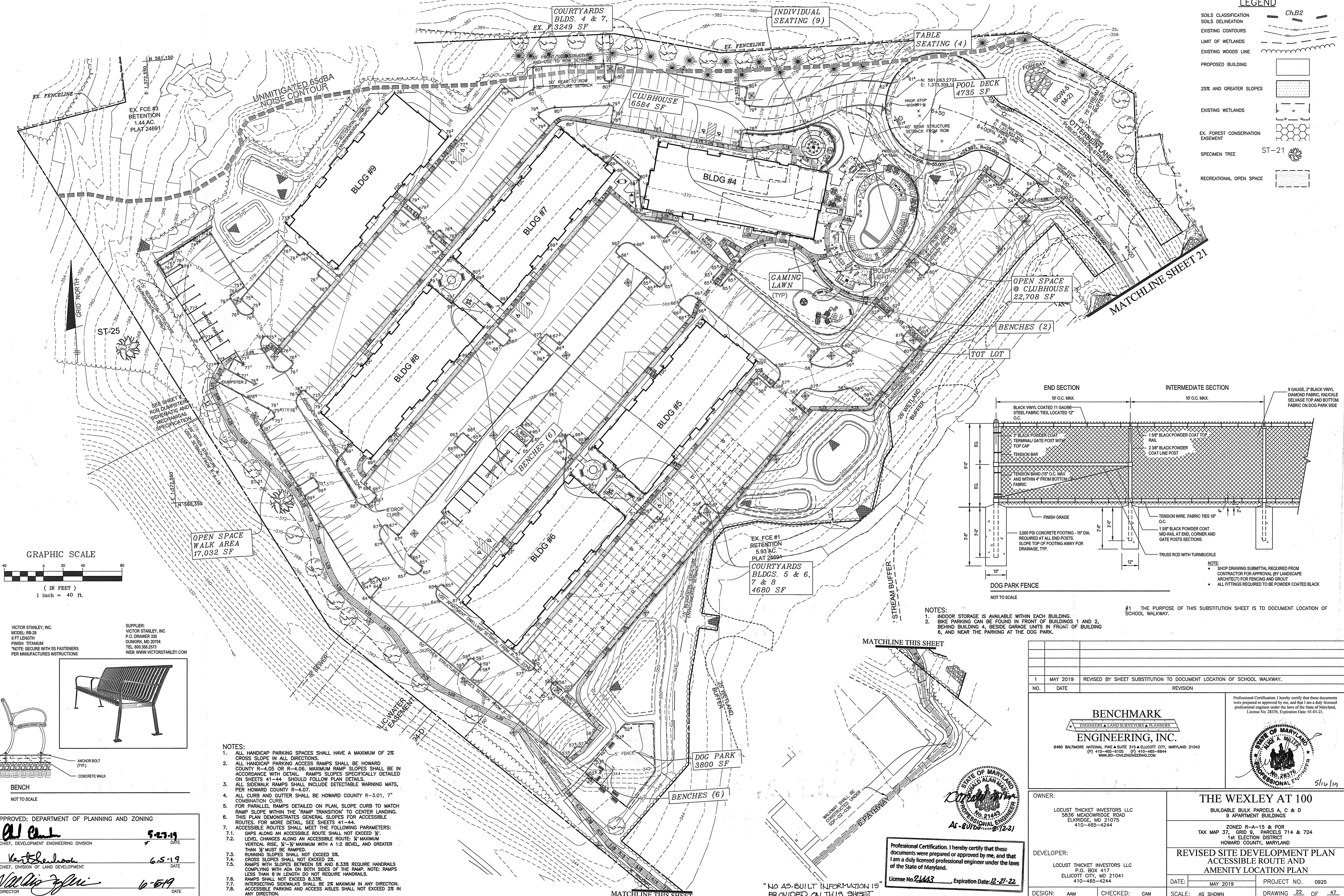
**SITE DEVELOPMENT PLAN
ACCESSIBLE ROUTE AND
AMENITY LOCATION PLAN**

DATE: JULY 2018 PROJECT NO. 0925
DRAWING 21 OF 47

AS-BUILT SDP-18-029

LEGEND

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT
- SPECIMEN TREE
- RECREATIONAL OPEN SPACE



NOTES:
 1. INDOOR STORAGE IS AVAILABLE WITHIN EACH BUILDING.
 2. BIKE PARKING CAN BE FOUND IN FRONT OF BUILDINGS 1 AND 2, BEHIND BUILDING 4, BESIDE GARAGE UNITS IN FRONT OF BUILDING 6, AND NEAR THE PARKING AT THE DOG PARK.
 #1 THE PURPOSE OF THIS SUBSTITUTION SHEET IS TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

NO.	DATE	REVISION
1	MAY 2019	REVISED BY SHEET SUBSTITUTION TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-9100 (F) 410-465-8844
 WWW.BE-ONLINE.COM

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. 28376, Expiration Date: 01-01-21.

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 No. 21143
 Ac-Built 12-21-22

OWNER:
 LOCUST THICKET INVESTORS LLC
 5836 MEADOWSIDE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

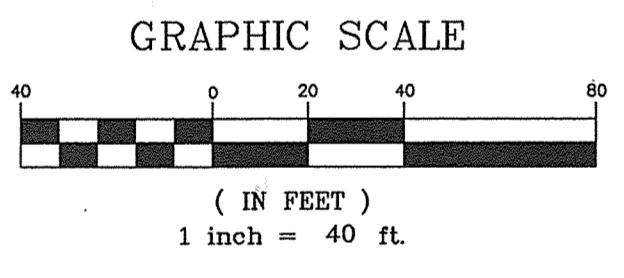
DEVELOPER:
 LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AAM **CHECKED:** CAM

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS
 ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

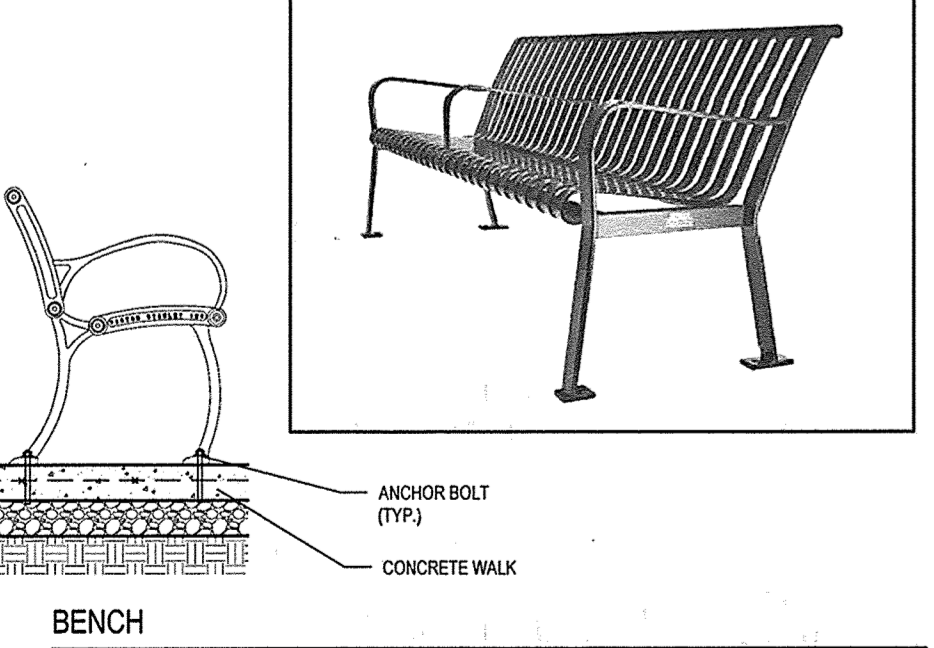
REVISED SITE DEVELOPMENT PLAN ACCESSIBLE ROUTE AND AMENITY LOCATION PLAN

DATE: MAY 2019 PROJECT NO. 0925
 SCALE: AS SHOWN DRAWING 22 OF 47



VICTOR STANLEY, INC.
 MODEL: RS-28
 6 FT LENGTH
 FINISH: TITANIUM
 *NOTE: SECURE WITH SS FASTENERS PER MANUFACTURER'S INSTRUCTIONS

SUPPLIER:
 VICTOR STANLEY, INC.
 P.O. DRAWER 330
 DUNKIRK, MD 20754
 TEL: 800.358.2273
 WEB: WWW.VICTORSTANLEY.COM



- NOTES:**
- ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% CROSS SLOPE IN ALL DIRECTIONS.
 - ALL HANDICAP PARKING ACCESS RAMPS SHALL BE HOWARD COUNTY R-4.05 OR R-4.06. MAXIMUM RAMP SLOPES SHALL BE IN ACCORDANCE WITH DETAIL. RAMP SLOPES SPECIFICALLY DETAILED ON SHEETS 41-44 SHOULD FOLLOW PLAN DETAILS.
 - ALL SIDEWALK RAMPS SHALL INCLUDE DETECTABLE WARNING MATS, PER HOWARD COUNTY R-4.07.
 - ALL CURB AND GUTTER SHALL BE HOWARD COUNTY R-3.01, 7" COMBINATION CURBS.
 - FOR PARALLEL RAMPS DETAILED ON PLAN, SLOPE CURB TO MATCH RAMP SLOPE WITHIN THE "RAMP TRANSITION" TO CENTER LANDING. THIS PLAN DEMONSTRATES GENERAL SLOPES FOR ACCESSIBLE ROUTES. FOR MORE DETAIL, SEE SHEETS 41-44.
 - ACCESSIBLE ROUTES SHALL MEET THE FOLLOWING PARAMETERS:
 7.1. LEVEL CHANGES ALONG AN ACCESSIBLE ROUTE: 1/4" MAXIMUM VERTICAL RISE, 1/4" MAXIMUM WITH A 1:2 BEVEL, AND GREATER THAN 1/4" MUST BE RAMPED.
 7.2. RUNNING SLOPES SHALL NOT EXCEED 5%.
 7.3. CROSS SLOPES SHALL NOT EXCEED 2%.
 7.4. RAMPS WITH SLOPES BETWEEN 5% AND 8.33% REQUIRE HANDRAILS COMPLYING WITH ADA ON BOTH SIDES OF THE RAMP. NOTE: RAMPS LESS THAN 6' IN LENGTH DO NOT REQUIRE HANDRAILS.
 7.5. RAMPS SHALL NOT EXCEED 8.33%.
 7.6. INTERSECTING SIDEWALKS SHALL BE 2% MAXIMUM IN ANY DIRECTION.
 7.7. ACCESSIBLE PARKING AND ACCESS ANGLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

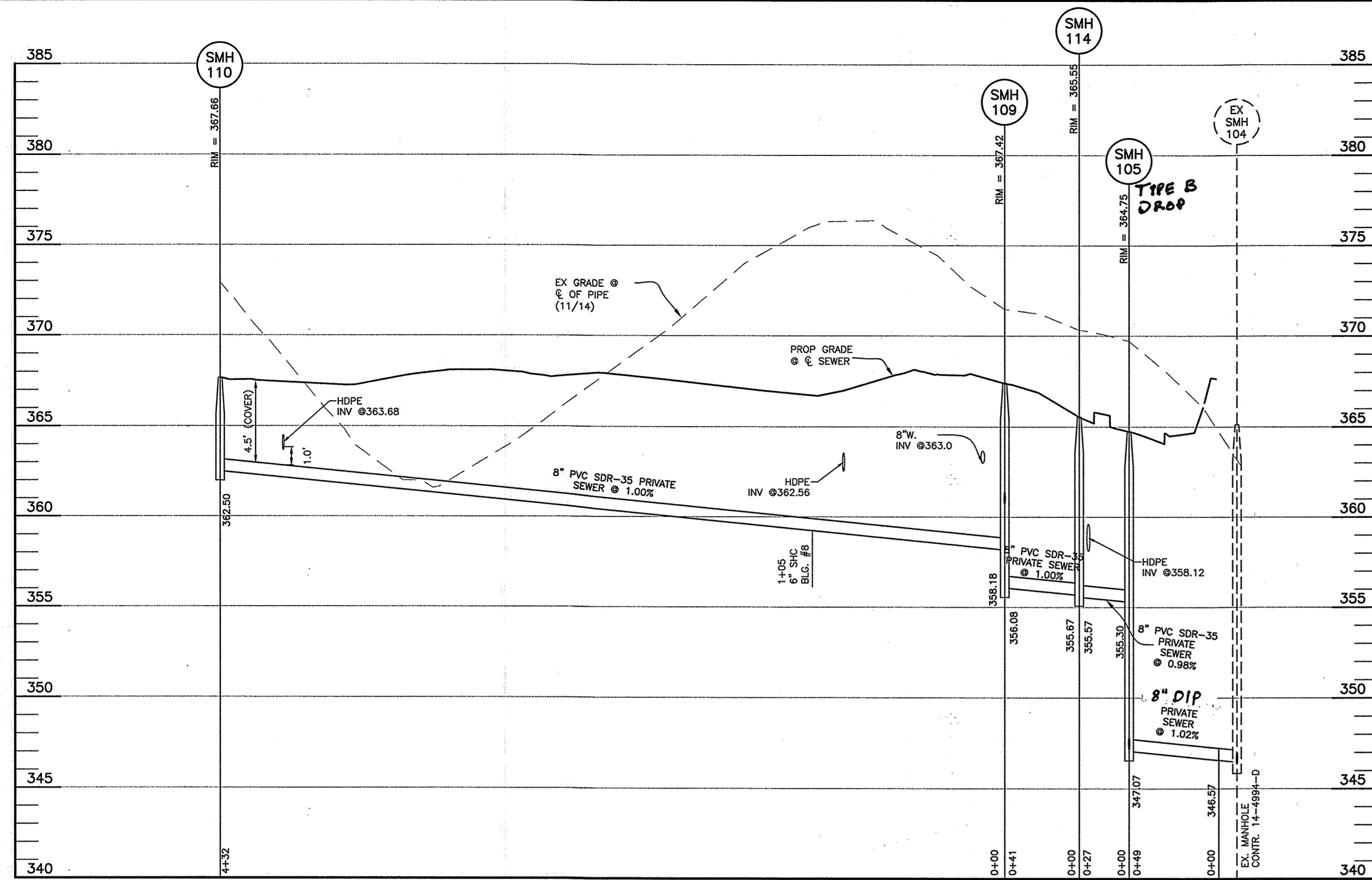
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Al Chubb 5-27-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

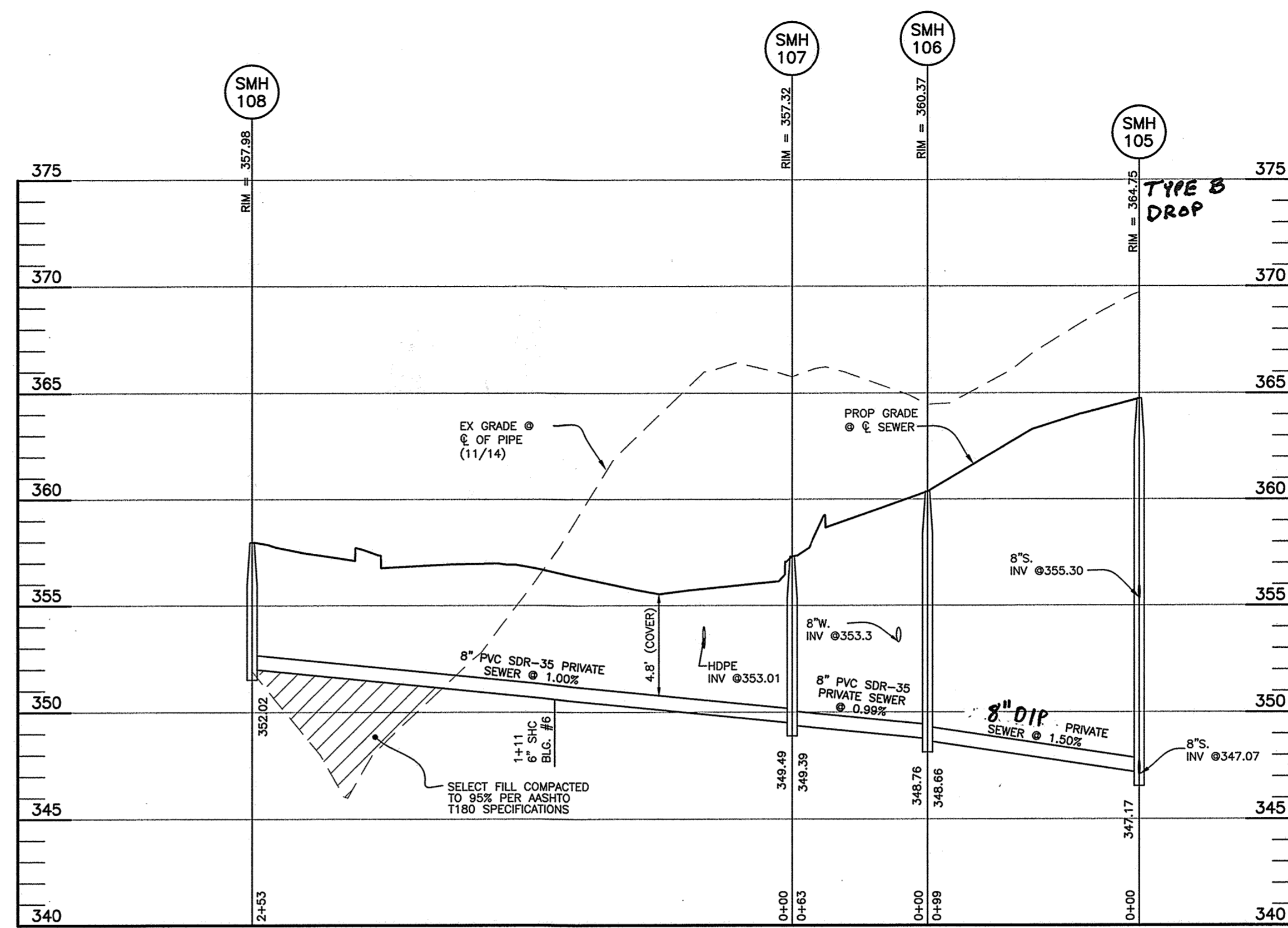
Karl Johnson 6-5-19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Nancy Zyllic 6-5-19
 DIRECTOR DATE

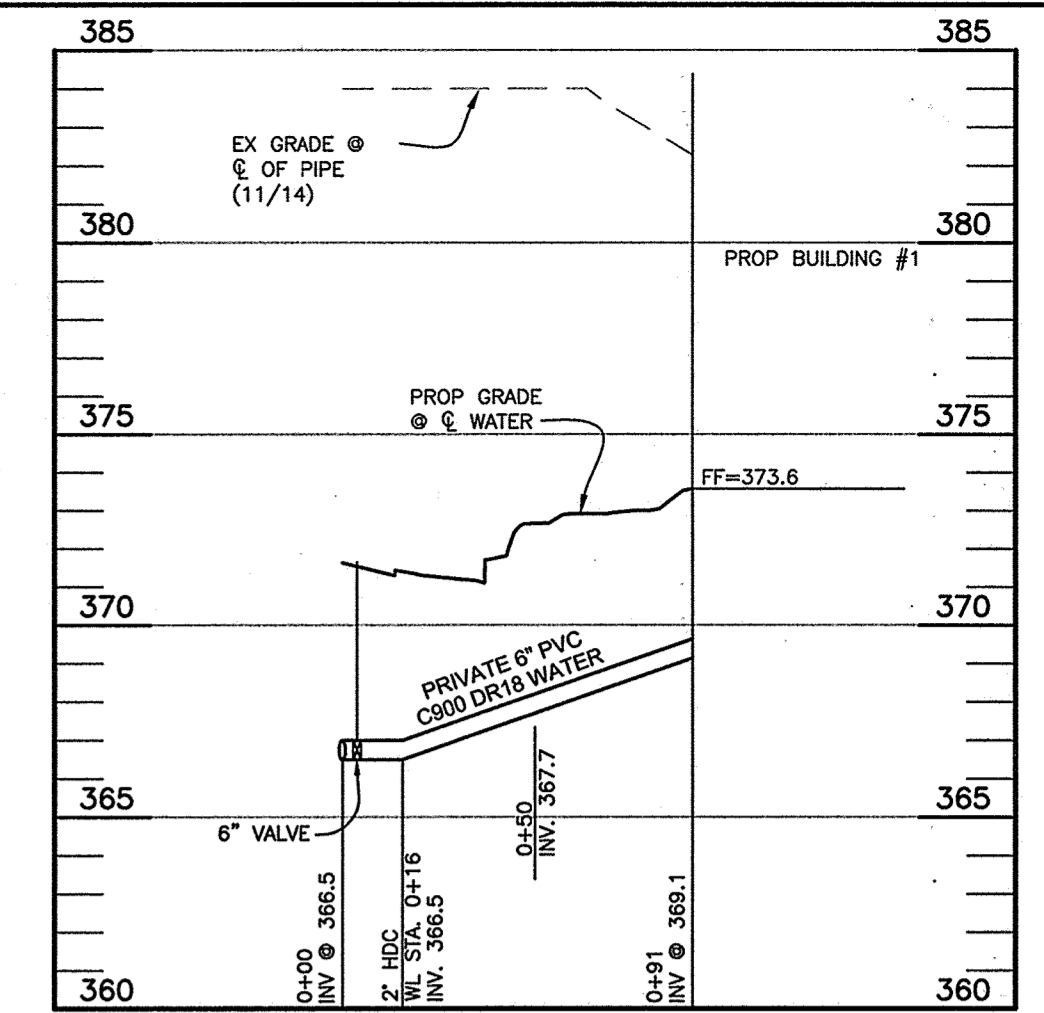
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



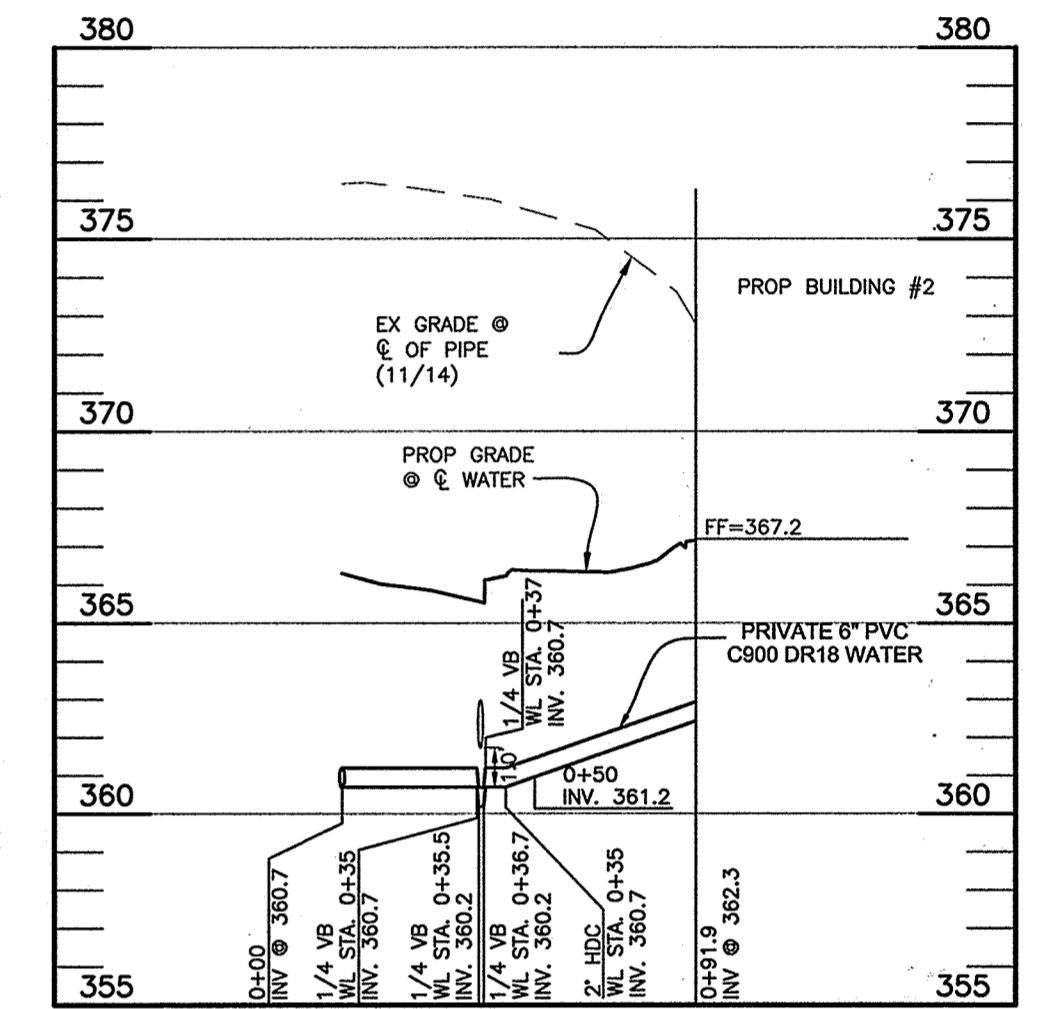
SMH 105 TO SMH 110
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



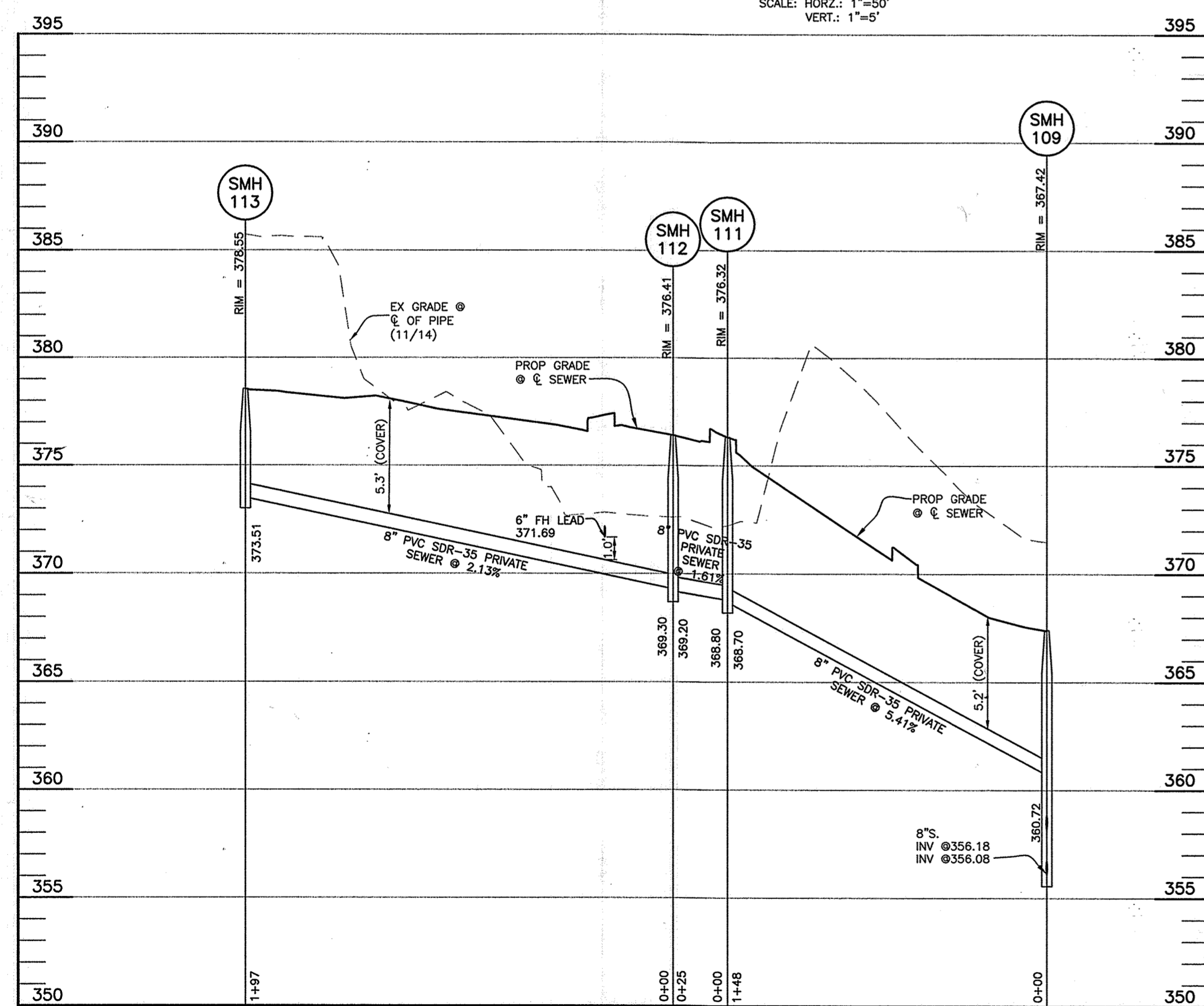
SMH 105 TO SMH 108
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



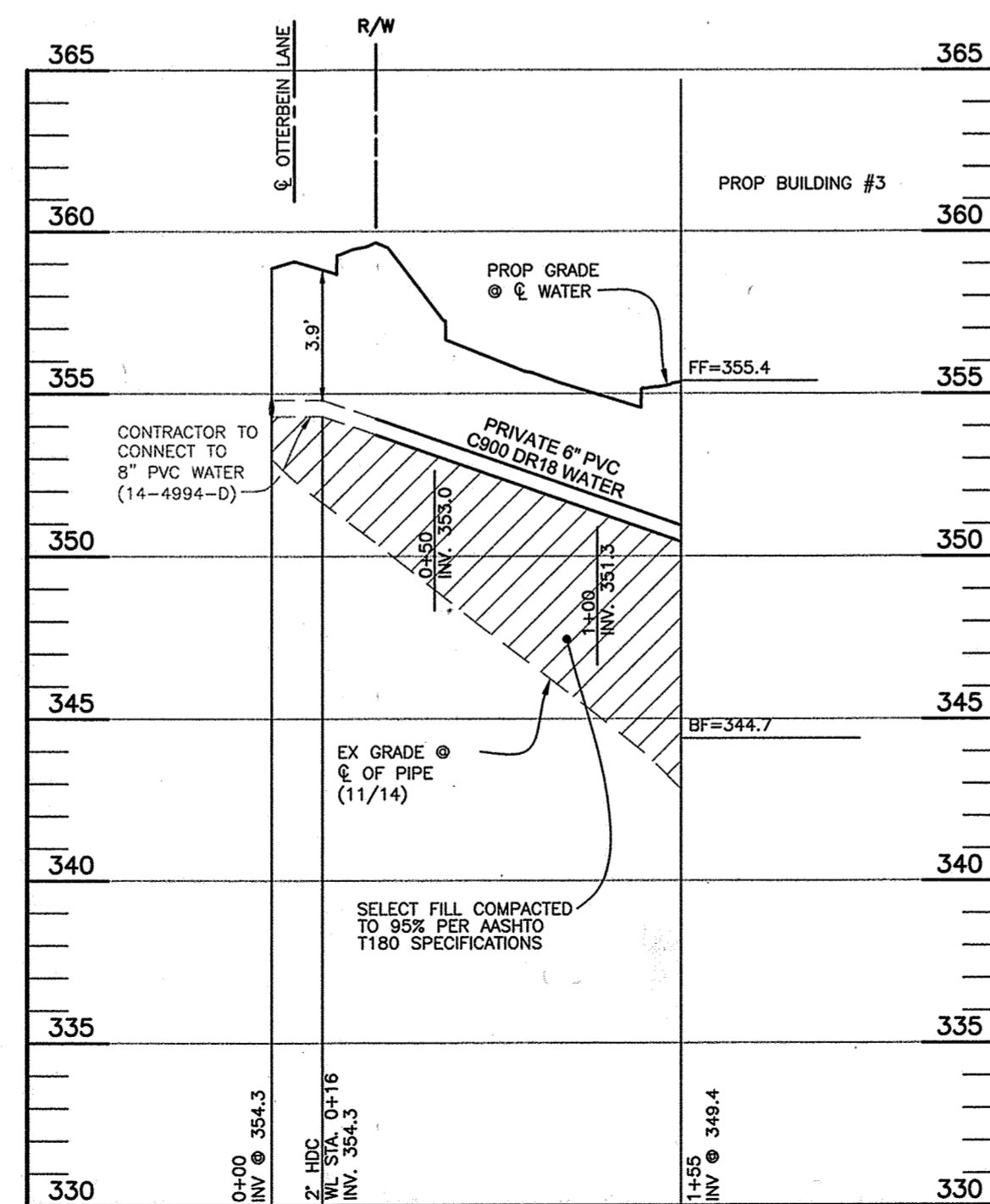
WHC BUILDING 1
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



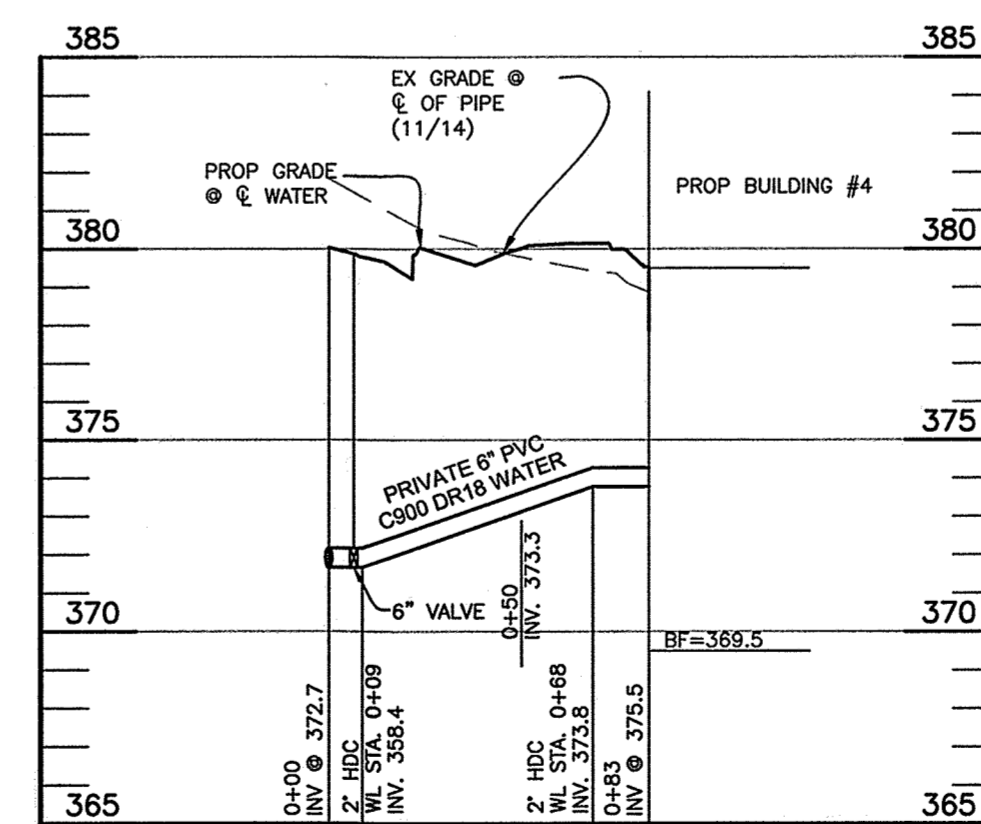
WHC BUILDING 2
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



SMH 109 TO SMH 113
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



WHC BUILDING 3
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'



WHC BUILDING 4
SCALE: HORIZ.: 1"=50'
VERT.: 1"=5'

SHC TABLE		
BLDG NO.	INVERT AT ESM7/MAIN/MH	MCE
1	351.0	360.0
2	351.0	357.5
3	336.0	342.7
4	362.5	369.0
5	352.1	357.3
6	350.6	355.7
7	362.5	369.2
8	359.2	365.5
9	373.5	379.2

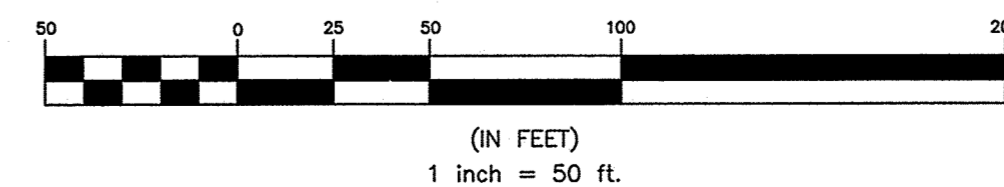
STRUCTURE TABLE									
NUMBER	TYPE	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	STD. DETAIL	OWNER	REMARKS	
105	48" MH	560598.8942 1372761.7697	347.17(8")	347.07(8")	364.62	G-5.12	PRIVATE	TYPE B DROP	
106	48" MH	560529.8858 1372832.7993	348.76(8")	348.66(8")	360.36	G-5.12	PRIVATE		
107	48" MH	560516.7736 1372894.9206	349.49(8")	349.39(8")	357.2	G-5.12	PRIVATE		
108	48" MH	560698.3748 1373070.5942	352.02(8")	351.96	357.96	G-5.12	PRIVATE		
109	48" MH	560651.6593 1372720.5214	358.18(8")	358.08(8")	367.37	G-5.12	PRIVATE		
110	48" MH	560959.8802 1373023.1404	362.50(8")	362.40	367.66	G-5.12	PRIVATE		
111	48" MH	560781.4703 1372650.3902	370.18(8")	370.08(8")	375.96	G-5.12	PRIVATE		
112	48" MH	560806.5224 1372650.6213	370.56(8")	370.46(8")	376.43	G-5.12	PRIVATE		
113	48" MH	560947.9080 1372788.3622	373.51(8")	373.41	378.76	G-5.12	PRIVATE		
114	48" MH	560815.6463 1372740.0428	355.67(8")	355.57(8")	365.55	G-5.12	PRIVATE		

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Edwards 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
Veronica L. Smith 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT
N. M. J. Smith 8-24-18
 DIRECTOR



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. 21443, Expiration Date: 12-21-22

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



NO.	DATE	REVISION
1	9/17/18	REVISE SEWER MATERIAL SMH 104, 105, 106

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. 28376, [Signature], 01-01-19.

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 3154 ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-8644
 WWW.BE-ENGNR.COM

7-17-10

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN
 PRIVATE SEWER AND WHC PROFILES**

OWNER: LOCUST THICKET INVESTORS LLC
 5836 MEADOWBRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AM CHECKED: CAM
 SCALE: AS SHOWN PROJECT NO. 0925
 DRAWING 23 OF 47

LEGEND

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- LIMIT OF DISTURBANCE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION FARMFMT
- PROPOSED WALL GEOGRID

SCHEDULE OF WALLS THIS SHEET

- WALL 1 UPPER
- WALL 1 LOWER
- WALL 2 UPPER
- WALL 2 LOWER
- WALL 3
- WALL 3G**

**WALL 3G IS A GRAVITY WALL; ELEVATION AND DETAIL ON SHEET 27

WALL 2 FENCE: 0+00 - 1+90.4

WALL 2 UPPER LOWER

WALL 2 TW: 44.3
BW: 37.5
W2L TW: 37.3
W2L BW: 27.5
STA: 1+00 = W2L STA 1+07.6

WALL 2 TW: 44.3
BW: 37.5
W2L TW: 37.3
W2L BW: 27.5
STA: 1+50 = W2L STA 1+57.6

WALL 1 TW: 54.0
BW: 44.3
STA: 1+00

WALL 1 TW: 53.3
BW: 44.4
W1L TW: 44.0
W1L BW: 30.7
STA: 2+00 = W1L STA: 1+03.91

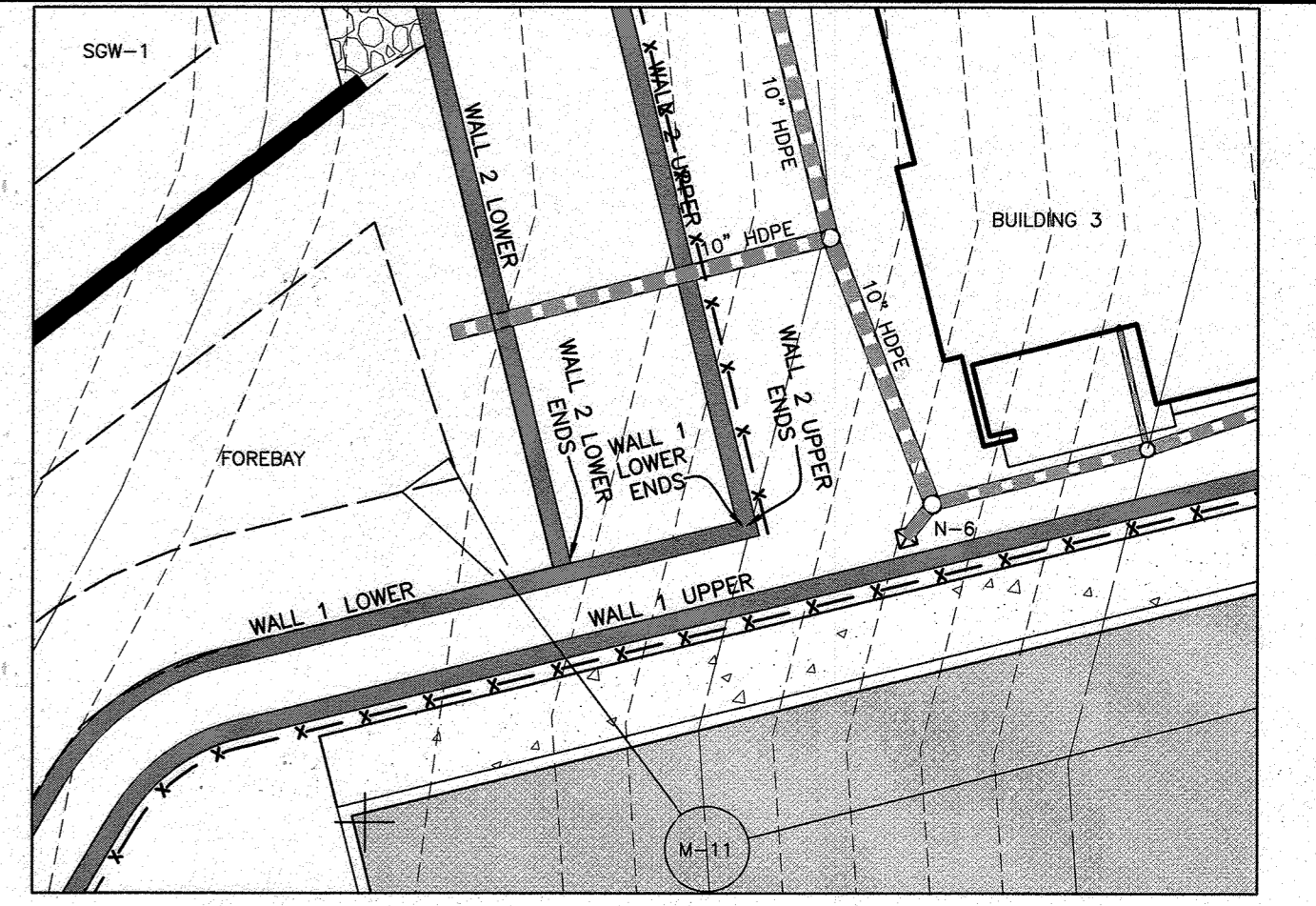
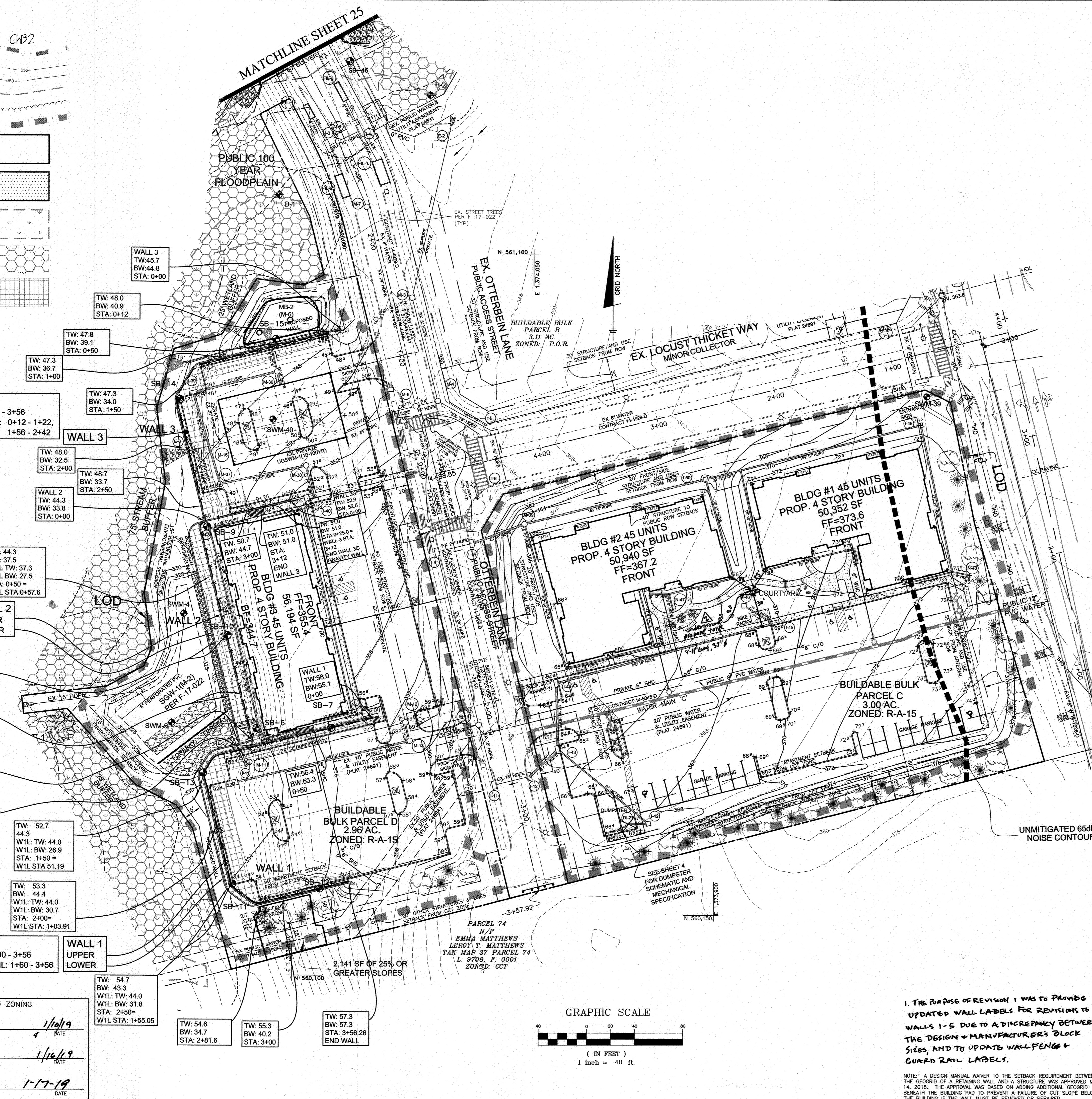
WALL 1 FENCE: 0+00 - 3+56
GUARD RAIL: 1+60 - 3+56

APPROVED: DEPARTMENT OF PLANNING AND ZONING

1/10/19 DATE

1/16/19 DATE

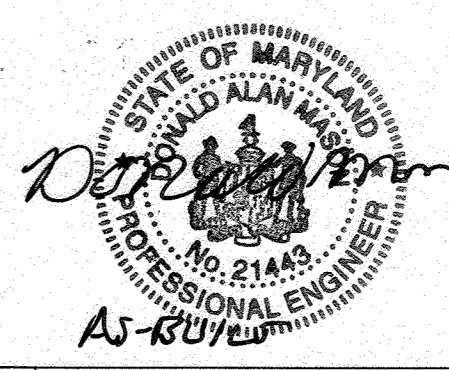
1-17-19 DATE



WALL JUNCTION DETAIL
SCALE: 1" = 10'

GRAPHIC SCALE
1 inch = 10 ft

AS-BUILT CERTIFICATION
I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications
Donald Mason, P.E. Date: 2-12-21



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. 21443 Expiration Date: 12-21-22

NO.	DATE	REVISION
4-28-21	11/18	Add underground Propane Tank (9'-11" Long, 37" dia)
1	11/18	REVISED BY SHEET SUB TO CORRECT WALL LABELS FOR REISED WALLS FENCES + GUARD RAIL

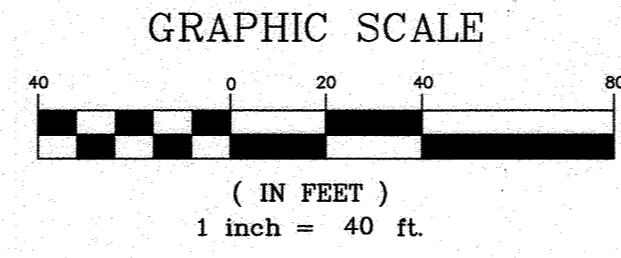
BENCHMARK ENGINEERING, INC.
ENGINEERS & LAND SURVEYORS & PLANNERS
8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6444
WWW.BC-ENGINEERING.COM

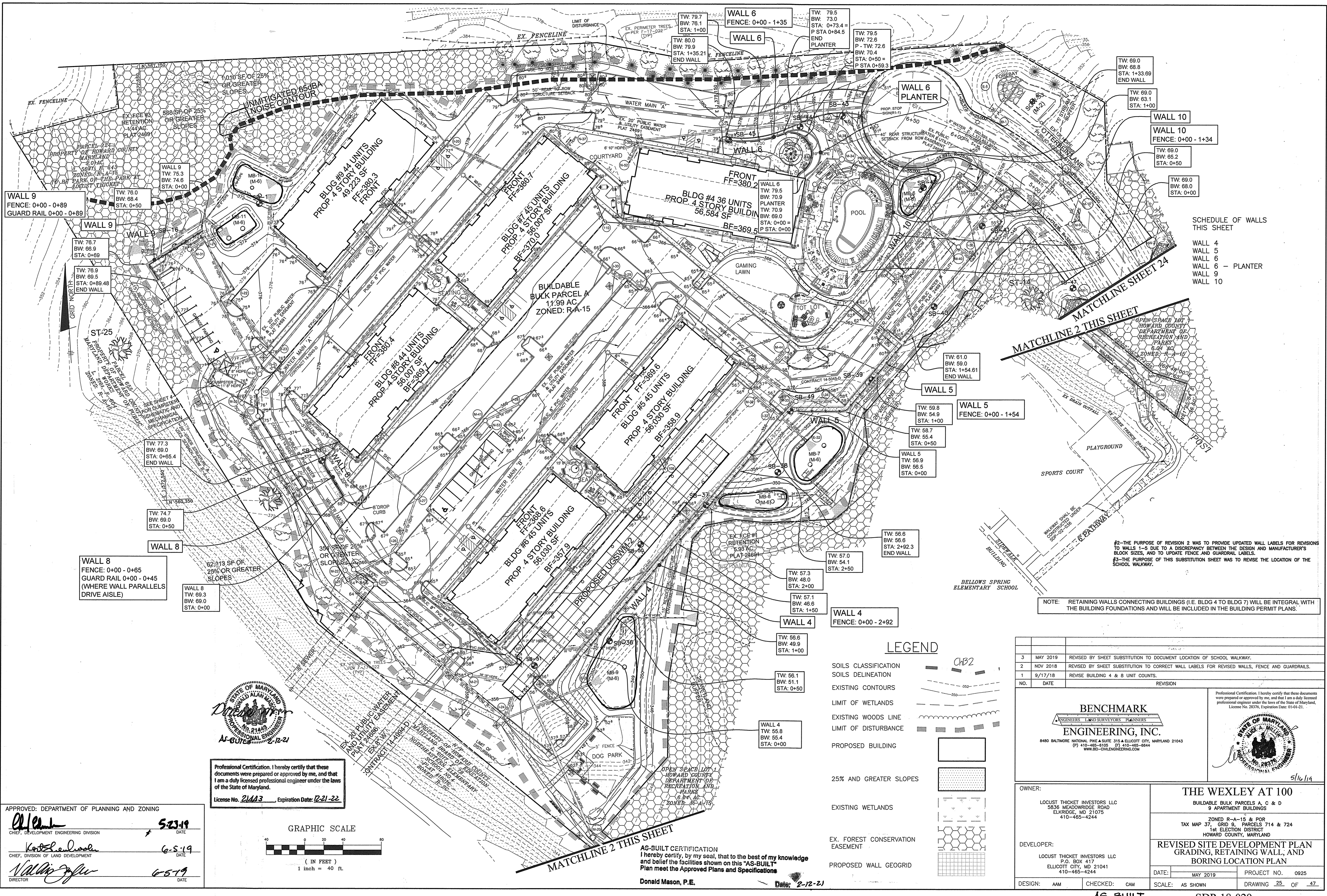
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 28376 Expiration Date: 01-01-19

OWNER: LOCUST THicket INVESTORS LLC 5835 MEADOWSIDE ROAD ELK RIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS
DEVELOPER: LOCUST THicket INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244	ZONED R-A-15 & POR GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DESIGN: AAM	REVISIED SITE DEVELOPMENT PLAN GRADING, RETAINING WALL, AND BORING LOCATION PLAN
CHECKED: CAM	DATE: JULY 2018 PROJECT NO. 0925 DECEMBER 2018
SCALE: AS SHOWN	DRAWING NO. 24 OF 47

1. THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL LABELS FOR REVISIONS TO WALLS 1-5 DUE TO A DISCREPANCY BETWEEN THE DESIGN + MANUFACTURER'S BLOCK SIZES, AND TO UPDATE WALL FENCE + GUARD RAIL LABELS.

NOTE: A DESIGN MANUAL WAIVER TO THE SETBACK REQUIREMENT BETWEEN THE GEORGID OF A RETAINING WALL AND A STRUCTURE WAS APPROVED MAY 14, 2018. THE APPROVAL WAS BASED ON ADDING ADDITIONAL GEORGID BENEATH THE BUILDING PAD TO PREVENT A FAILURE OF CUT SLOPE BELOW THE BUILDING IF THE WALL MUST BE REMOVED OR REPAIRED.





- SCHEDULE OF WALLS THIS SHEET
- WALL 4
 - WALL 5
 - WALL 6
 - WALL 6 - PLANTER
 - WALL 9
 - WALL 10

#2- THE PURPOSE OF REVISION 2 WAS TO PROVIDE UPDATED WALL LABELS FOR REVISIONS TO WALLS 1-5 DUE TO A DISCREPANCY BETWEEN THE DESIGN AND MANUFACTURER'S BLOCK SIZES, AND TO UPDATE FENCE AND GUARDRAIL LABELS.
 #3- THE PURPOSE OF THIS SUBSTITUTION SHEET WAS TO REVISE THE LOCATION OF THE SCHOOL WALKWAY.

NOTE: RETAINING WALLS CONNECTING BUILDINGS (I.E. BLDG 4 TO BLDG 7) WILL BE INTEGRAL WITH THE BUILDING FOUNDATIONS AND WILL BE INCLUDED IN THE BUILDING PERMIT PLANS.

LEGEND

- SOILS CLASSIFICATION
- SOILS DELINEATION
- EXISTING CONTOURS
- LIMIT OF WETLANDS
- EXISTING WOODS LINE
- LIMIT OF DISTURBANCE
- PROPOSED BUILDING
- 25% AND GREATER SLOPES
- EXISTING WETLANDS
- EX. FOREST CONSERVATION EASEMENT
- PROPOSED WALL GEOGRID

NO.	DATE	REVISION
3	MAY 2019	REVISED BY SHEET SUBSTITUTION TO DOCUMENT LOCATION OF SCHOOL WALKWAY.
2	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT WALL LABELS FOR REVISED WALLS, FENCE AND GUARDRAILS.
1	9/17/18	REVISE BUILDING 4 & 8 UNIT COUNTS.

BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-0105 (F) 410-465-6644
 WWW.BE-ENGINEERING.COM

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. 28376, Expiration Date: 01-01-21.

OWNER: LOCUST THICKET INVESTORS LLC
 5836 MEADOWRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AAM **CHECKED:** CAM

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

**REVISED SITE DEVELOPMENT PLAN
 GRADING, RETAINING WALL, AND
 BORING LOCATION PLAN**

DATE: MAY 2019 PROJECT NO. 0925
 SCALE: AS SHOWN DRAWING 25 OF 47

APPROVED: DEPARTMENT OF PLANNING AND ZONING

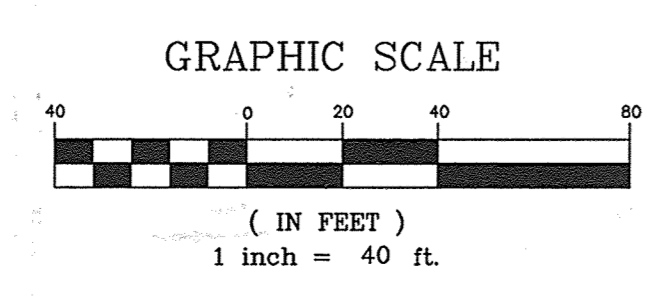
[Signature] 5-23-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 6-5-19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6-5-19
 DIRECTOR DATE



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 21443 Expiration Date: 12-21



AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that to the best of my knowledge and belief the facilities shown on this "AS-BUILT" Plan meet the Approved Plans and Specifications

Donald Mason, P.E. Date: 2-12-21

General Notes

Soil Notes

Soil loading considered in this design and calculations are based on the following parameters:

Table with columns: Internal Friction Angle, Cohesion, Unit WT, Soil Type. Rows include Infill Soil, Retained Soil, and Foundation Soil.

Construction Notes

- 1. Actual soil parameters must meet or exceed these listed conditions to be used in wall construction. In general, granular soils (friction angle greater than or equal to 32 degrees) are recommended as infill soil.

Surface Drainage Notes

- 1. Rainfall and other water sources such as irrigation activities can be defined as surface water. The retaining wall design shall take into consideration the management of this water.

Specification Guidelines: Allan Block Modular Retaining Wall Systems

The following specifications provide Allan Block Corporation's typical requirements and recommendations. At the engineer of record's discretion these specifications may be revised to accommodate site specific design requirements.

SECTION 1: ALLAN BLOCK MODULAR RETAINING WALL SYSTEMS

PART 1: GENERAL

- 1.1 Scope: Work includes furnishing and installing modular concrete block retaining wall units to the lines and grades designated on the construction drawings and as specified herein.

PART 2: MATERIALS

- 2.1 Modular Wall Units: A. Wall units shall be Allan Block Retaining Wall units as produced by a licensed manufacturer.

2.2 Wall Rock

- A. Material must be well-graded compactable aggregate, 0.25 in. to 1.5 in., (6 mm - 38 mm) with no more than 10% passing the #200 sieve (ASTM D422).

PART 3: WALL CONSTRUCTION

3.1 Excavation

- A. Contractor shall excavate to the lines and grades shown on the construction drawings. Contractor shall use caution not to over-excavate beyond the lines shown, or to disturb elevations beyond those shown.

3.2 Foundation Soil Preparation

- A. Foundation soil shall be defined as any soils located beneath a wall.

3.3 Base

- A. The base material shall be the same as the Wall Rock material (Section 2.2) or a low permeable granular material.

3.4 Unit Installation

- A. Install units in accordance with the manufacturer's instructions and recommendations for the specific concrete retaining wall unit, and as specified herein.

3.5 Additional Construction Notes

- A. When one wall branches into two terraced walls, it is important to note that the soil behind the lower wall is also the foundation soil beneath the upper wall.

Specification Guidelines: Geogrid Reinforcement Systems

The following specifications provide Allan Block Corporation's typical requirements and recommendations. At the engineer of record's discretion these specifications may be revised to accommodate site specific design requirements.

SECTION 2

PART 1: GENERAL

- 1.1 Scope: Work includes furnishing and installing geogrid reinforcement, wall block, and backfill to the lines and grades designated on the construction drawings and as specified herein.

PART 2: MATERIALS

- 2.1 Definitions: A. Geogrid products shall be of high density polyethylene or polyester yarns encapsulated in a protective coating specifically fabricated for use as a soil reinforcement material.

2.2 Products

Geogrid shall be the type as shown on the drawings having the property requirements as described within the manufacturer's specifications.

2.3 Acceptable Manufacturers

- A manufacturer's product shall be approved by the wall design engineer.

PART 3: WALL CONSTRUCTION

3.1 Foundation Soil Preparation

- A. Foundation soil shall be excavated to the lines and grades as shown on the construction drawings, or as directed by the on-site soils engineer.

3.2 Wall Construction

- Wall construction shall be as specified under Section 1, Part 3, Wall Construction.

3.3 Geogrid Installation

- A. Install Allan Block wall to designated height of first geogrid layer. Backfill and compact the wall rock and infill soil in layers not to exceed 8 in. (200 mm) lifts behind wall to depth equal to designed grid length before grid is installed.

3.4 Fill Placement

- A. Infill soil shall be placed in lifts and compacted as specified under Section 1, Part 3.4, Unit Installation.

3.5 Special Considerations

- A. Geogrid can be interrupted by periodic penetration of a column, pier or footing structure.

Specification Guidelines: Water Management

The following specifications provide Allan Block Corporation's typical requirements and recommendations. At the engineer of record's discretion these specifications may be revised to accommodate site specific design requirements.

SECTION 3

PART 1: GENERAL DRAINAGE

1.1 Surface Drainage

- Rainfall or other water sources such as irrigation activities collected by the ground surface atop the retaining wall can be defined as surface water. Retaining wall design shall take into consideration the management of this water.

1.2 Grading

- The grading and re-contouring of land in order to prepare it for site development is grading. Site grading shall be designed to route water around the walls.

1.3 Drainage System

- The internal drainage systems of the retaining wall can be described as the means of eliminating the buildup of incidental water which infiltrates the soils behind the wall.

1.4 Toe Drain

- A toe drain pipe should be located at the back of the wall rock behind the wall as close to the bottom of the wall as allowed while still maintaining a positive gradient for drainage to daylight, or a storm water management system.

1.5 Heel Drain

- The purpose of the heel drain is to pick up any water that migrates from behind the retaining wall structure at the cut and route the water away from the reinforced mass during the construction process and for incidental water for the life of the structure.

1.6 Ground Water

- Ground water can be defined as water that occurs within the soil. It may be present because of surface infiltration or water table fluctuation. Ground water movement must not be allowed to come in contact with the retaining wall.

1.7 Concentrated Water Sources

- All collection devices such as roof downspouts, storm sewers, and curb gutters are concentrated water sources. They must be designed to accommodate maximum flow rates and vent outside of the wall area.

1.8 Water Application

- Retaining walls constructed in conditions that allow standing or moving water to come in contact with the wall face are considered water applications. These walls require specific design and construction steps to ensure performance.

Table 1: Embankment Protection Fabric Specifications

Table with columns: Mechanical Property, Determination Method. Rows include Tensile Strength, Puncture Strength, etc.

- D. For walls having moving water or wave action, natural or manufactured rip-rap in front of the wall to protect the toe of the wall from scour effects is recommended.

NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

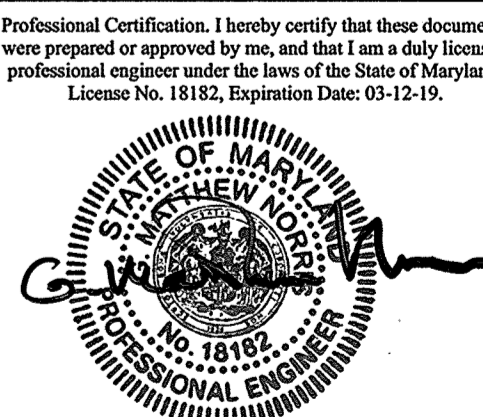
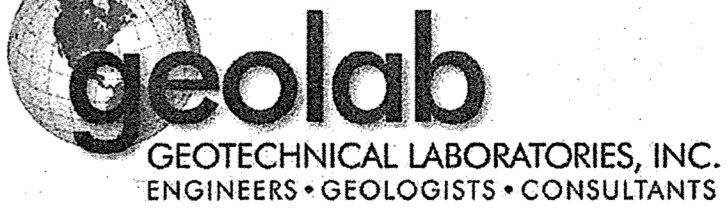
APPROVED: DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for Karl Schneider and Niall O'Connell.

"NO AS-BUILT INFORMATION IS" SHOWN ON THIS SHEET



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.

Owner: LOCUST THICKET INVESTORS LLC. Developer: LOCUST THICKET INVESTORS LLC. Project No. 0925. Drawing No. SDP-18-029.

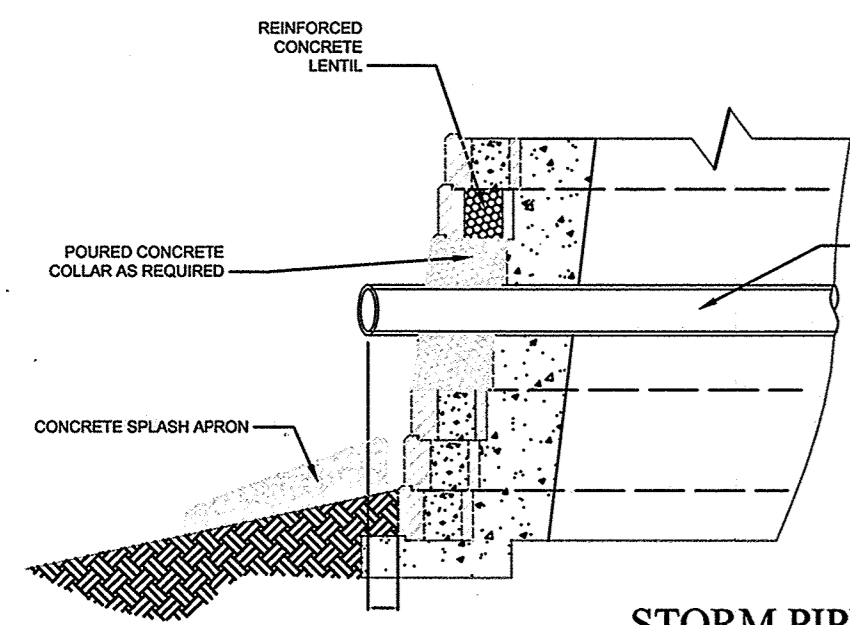


THE WEXLEY AT 100. BUILDABLE BULK PARCELS A, C & D, PARCEL 670. ZONED R-A-15 & POR. SITE DEVELOPMENT PLAN RETAINING WALL SPECIFICATIONS.

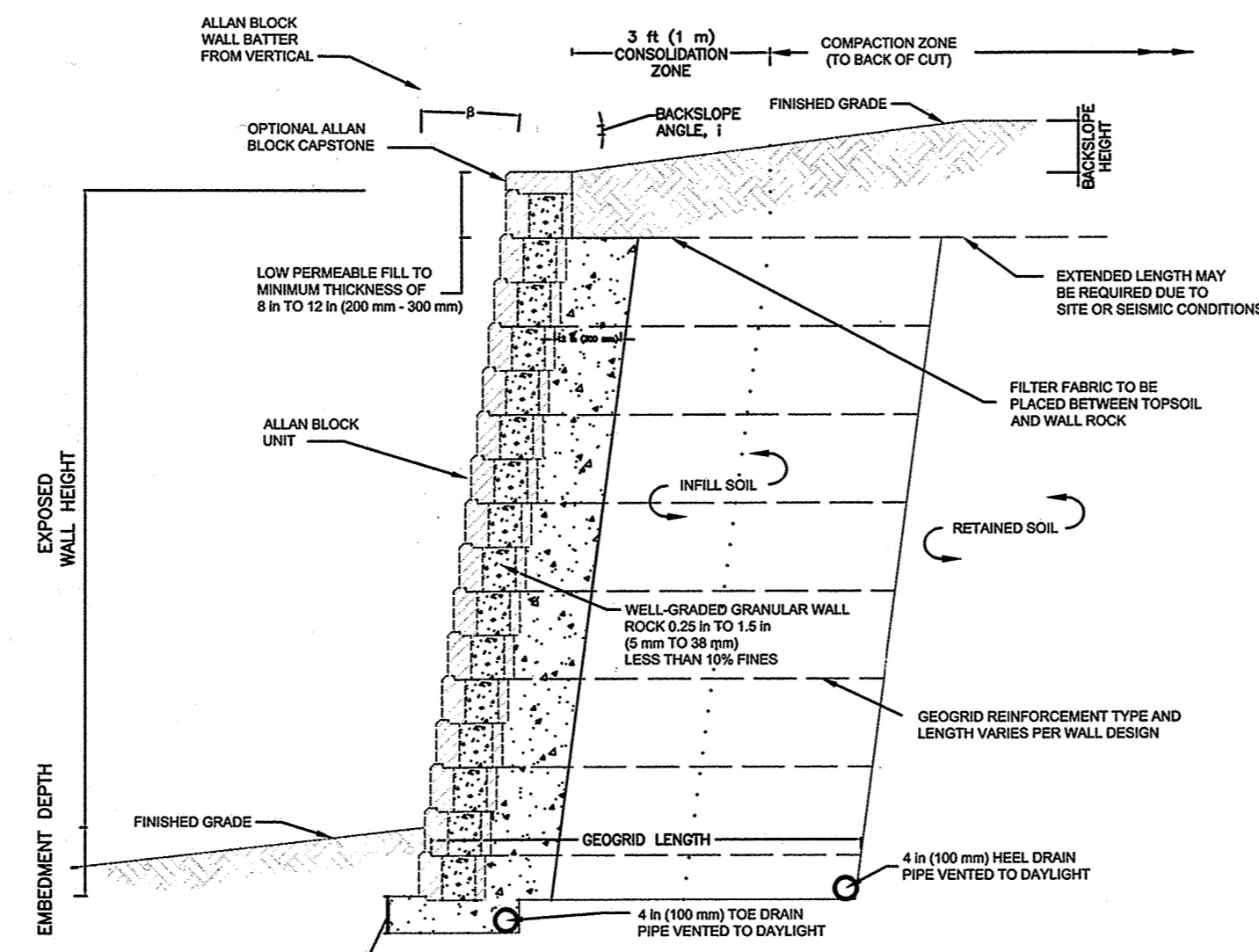
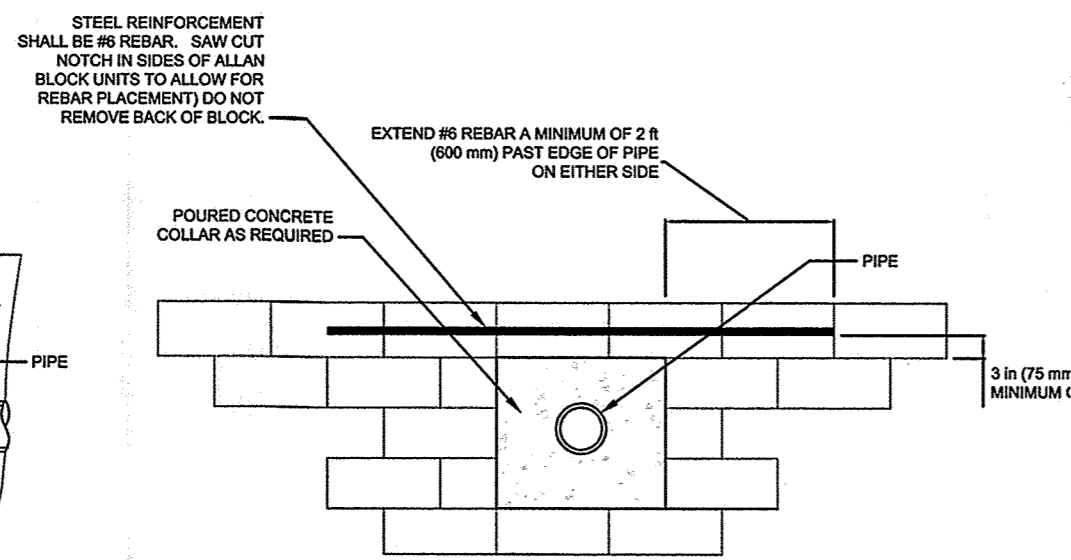
HOWARD COUNTY NOTES:

- NO TREES SHALL BE PLANTED WITHIN 10 FEET OF THE TOP OF THE RETAINING WALL.
- RETAINING WALLS SHALL ONLY BE CONSTRUCTED UNDER THE OBSERVATION OF A REGISTERED PROFESSIONAL ENGINEER AND A (NICET, WACEL, OR EQUIVALENT) CERTIFIED SOILS TECHNICIAN.
- THE REQUIRED BEARING PRESSURE BENEATH THE WALL SYSTEM SHALL BE VERIFIED IN THE FIELD BY A CERTIFIED SOILS TECHNICIAN. TESTING DOCUMENTATION MUST BE PROVIDED TO THE HOWARD COUNTY INSPECTOR PRIOR TO THE START OF CONSTRUCTION. THE REQUIRED BEARING TEST SHALL BE THE DYNAMIC CONE PENETROMETER TEST ASTM STP-399.
- THE SUITABILITY OF FILL MATERIAL SHALL BE CONFIRMED BY THE ON-SITE SOILS TECHNICIAN. EACH 8" LIFT MUST BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR DENSITY AND THE TESTING REPORT SHALL BE MADE AVAILABLE TO THE HOWARD COUNTY INSPECTOR UPON COMPLETION OF CONSTRUCTION.
- WALLS SHALL NOT BE CONSTRUCTED ON UNCERTIFIED FILL MATERIALS.
- WALLS SHALL NOT BE CONSTRUCTED WITHIN A HOWARD COUNTY RIGHT-OF-WAY OR EASEMENT.
- FOR "CRITICAL" WALLS, ONE SOIL BORING IS REQUIRED FOR 100' ALONG THE LENGTH OF THE WALL. COPIES OF THE BORING REPORT SHALL BE PROVIDED TO THE HOWARD COUNTY INSPECTOR UPON COMPLETION OF CONSTRUCTION.

* REFER TO DESIGN DETAILS: ALLAN BLOCK TYPICAL REINFORCED WALL APPLICATION FOR ALL OTHER NOTES, DETAILS AND SPECIFICATIONS.

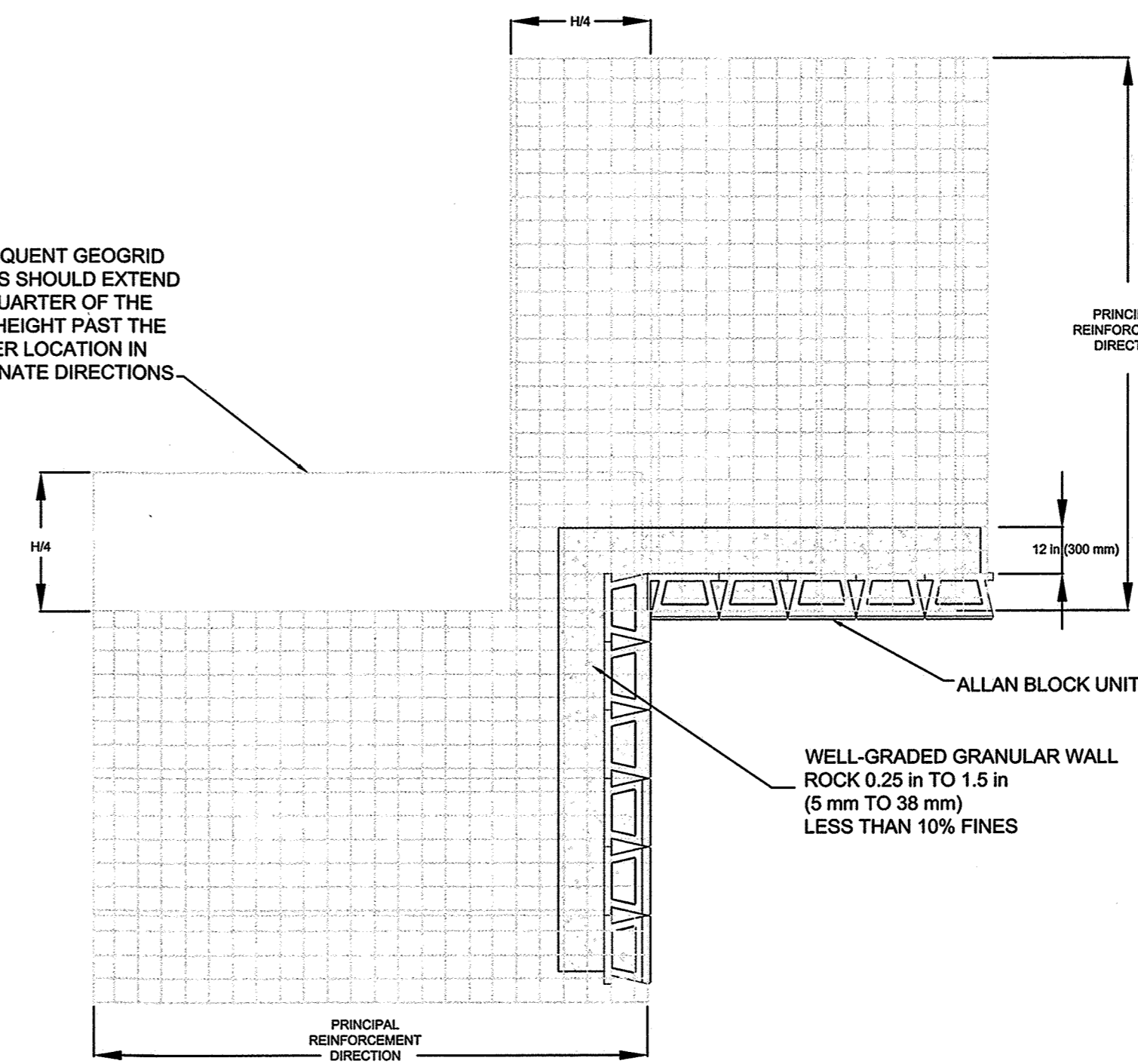


STORM PIPE WALL SECTION
Not to Scale

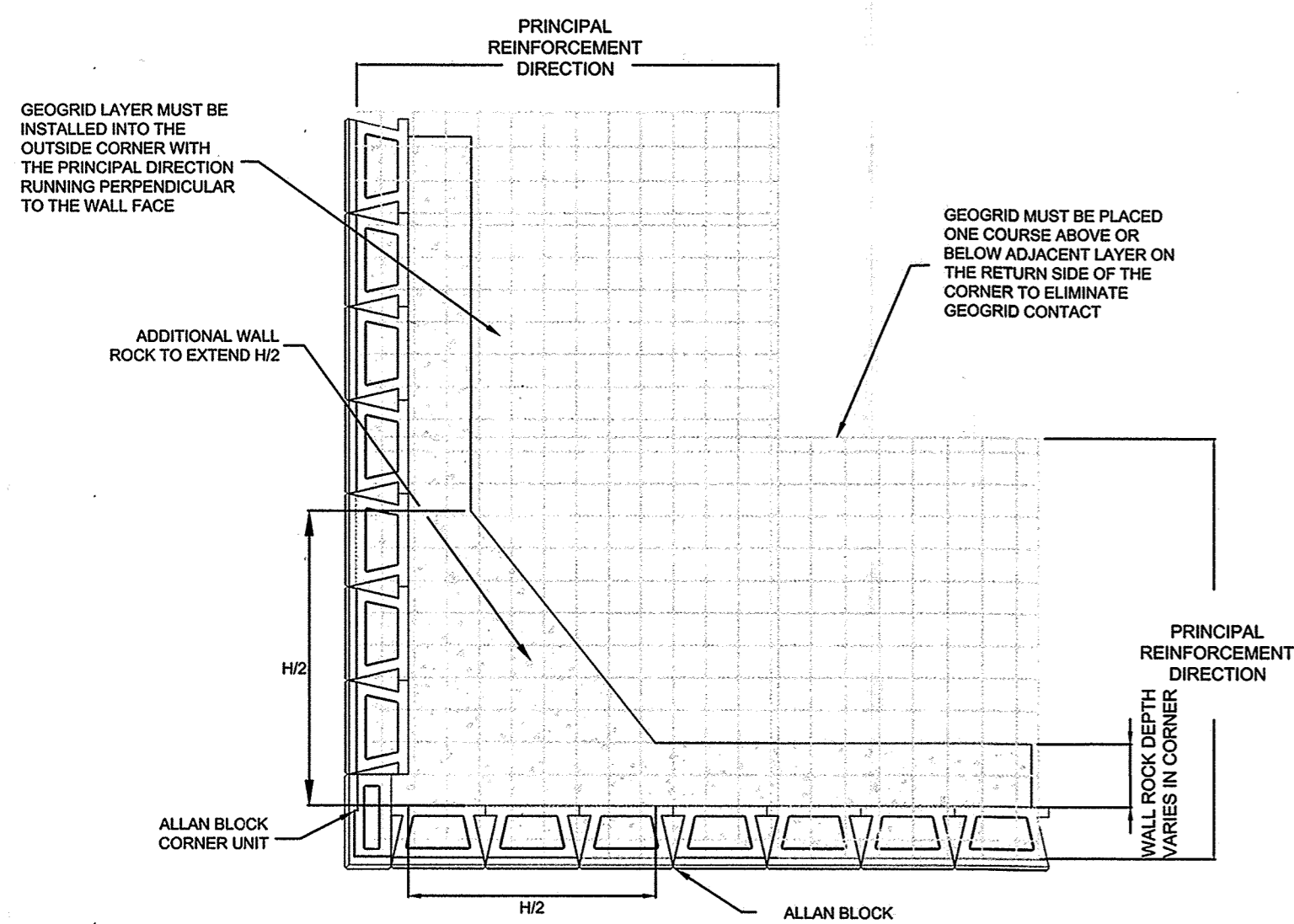


TYPICAL REINFORCED WALL SECTION
Not to Scale

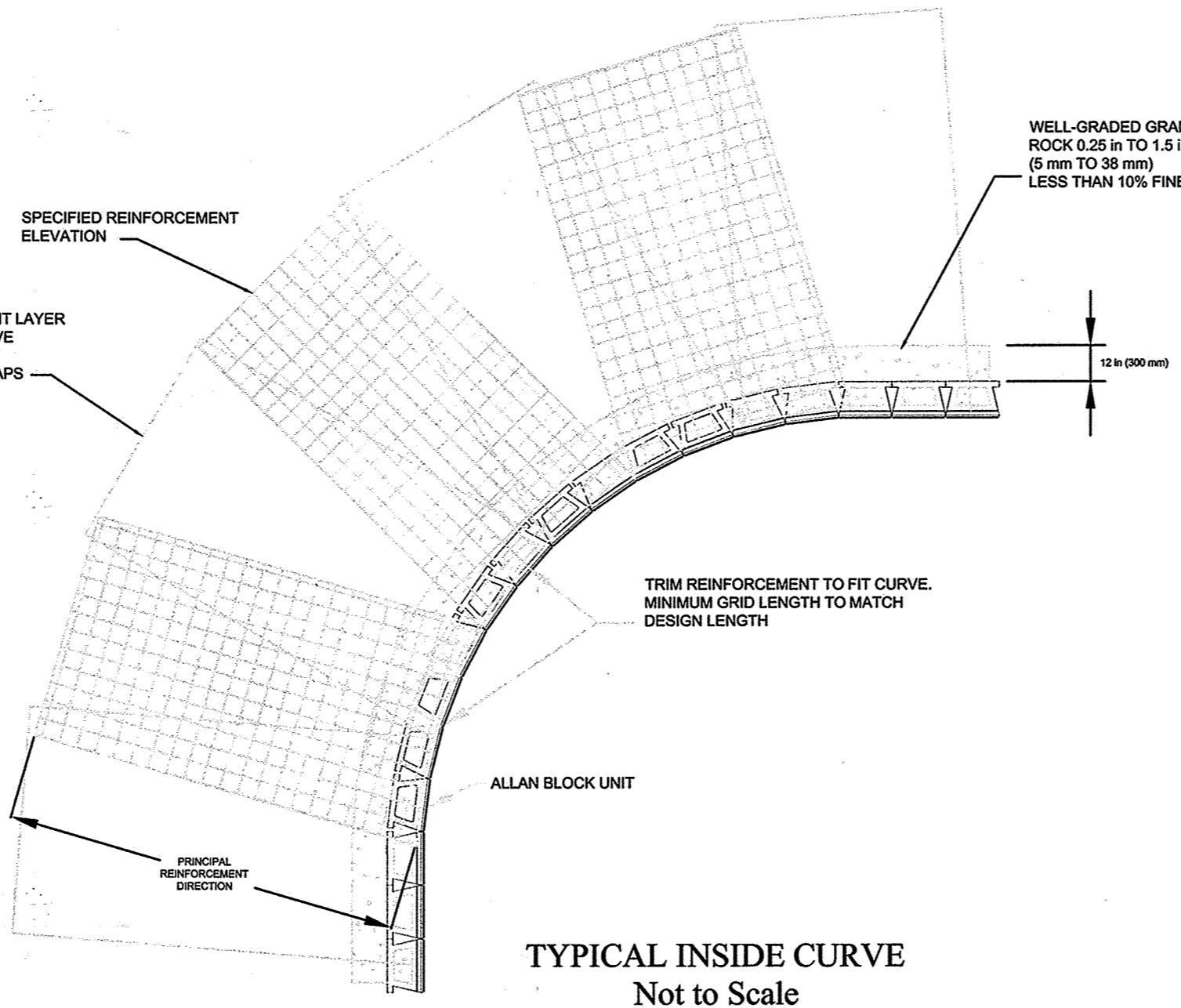
SUBSEQUENT GEOGRID LAYERS SHOULD EXTEND ONE QUARTER OF THE WALL HEIGHT PAST THE CORNER LOCATION IN ALTERNATE DIRECTIONS



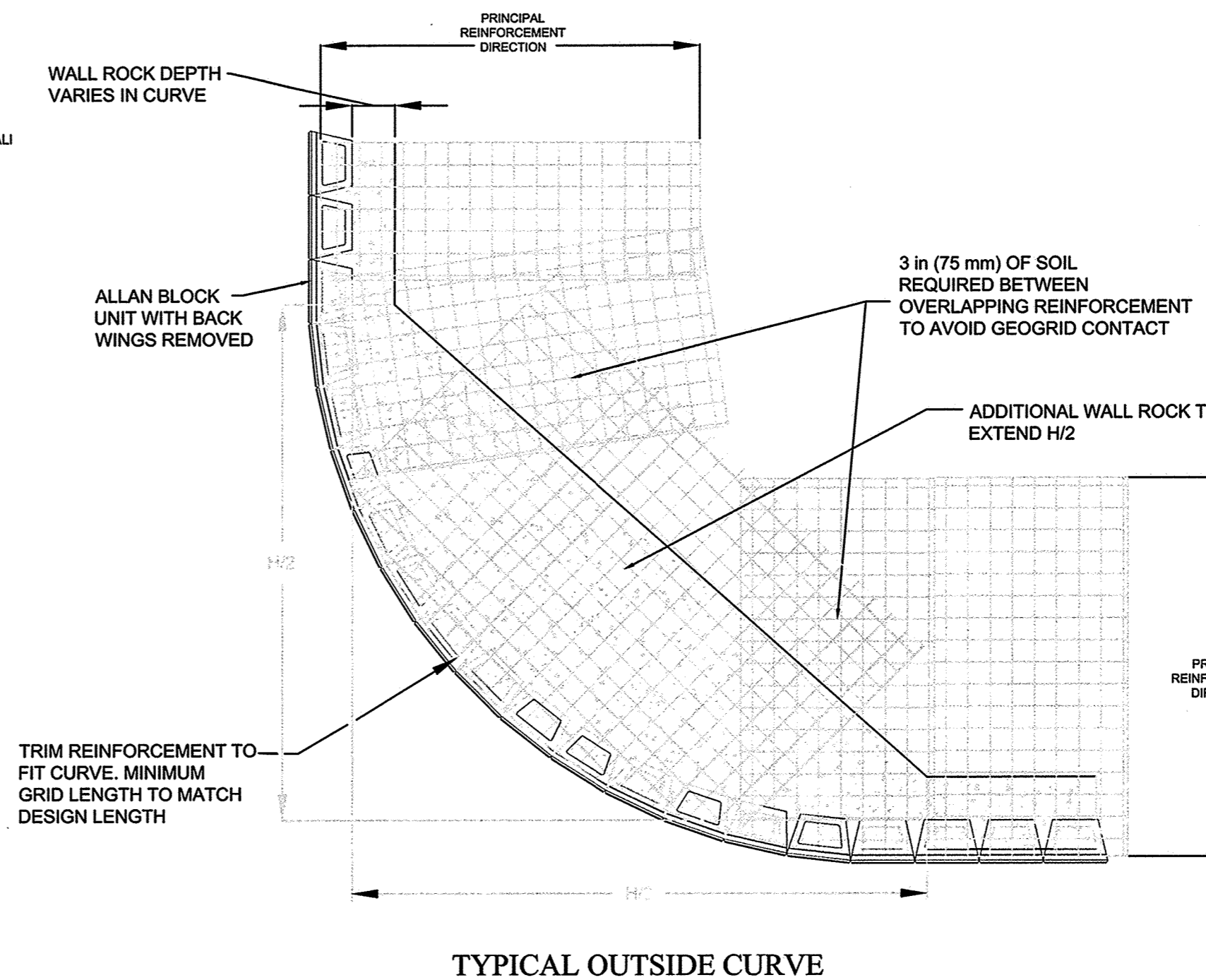
TYPICAL INSIDE CORNER



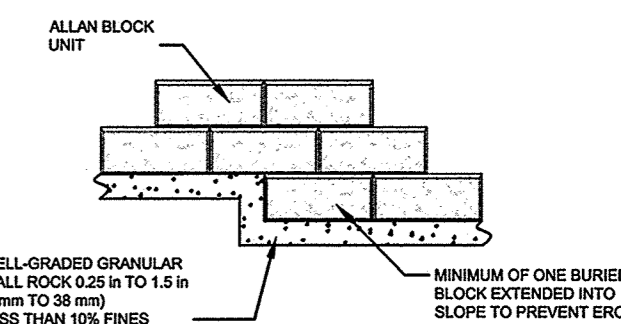
TYPICAL OUTSIDE CORNER
Not to Scale



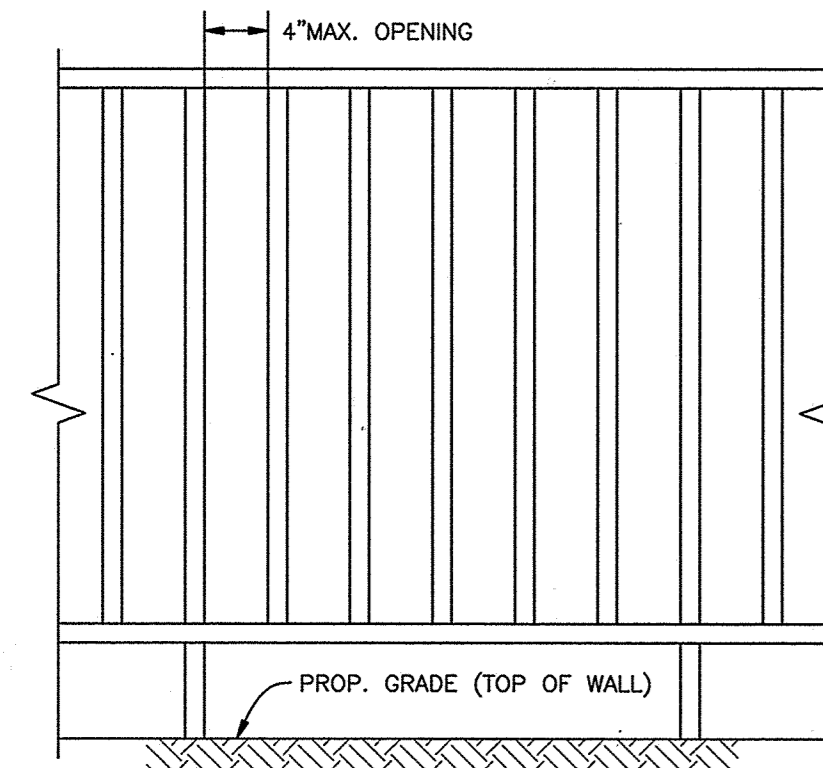
TYPICAL INSIDE CURVE
Not to Scale



TYPICAL OUTSIDE CURVE



STEP-UP AT BASE COURSE
Not to Scale



SECTION 1021.0 GUARDS

1021.1 General: Where required by the provisions of Sections 406.5, 408.3.2, 1005.5, 1014.7, 1016.5 and 1825.5, guards shall be designed and constructed in accordance with the requirements of this section and Section 1615.B. A guardrail system is a system of building components located near the open sides of elevated walking surfaces for the purpose of minimizing the possibility of an accidental fall from the walking surface to the lower level.

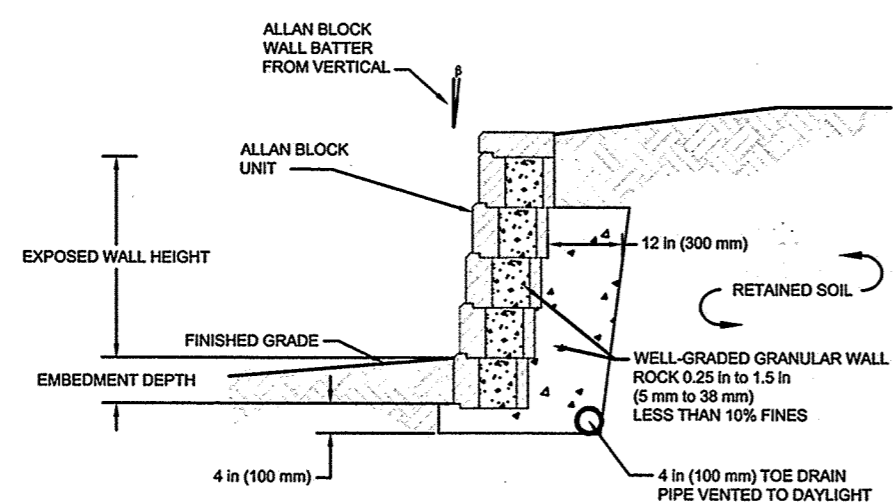
1021.2 Height: The guards shall be at least 42 inches (1067 mm) in height measured vertically above the leading edge of the tread or adjacent walking surface.

Exceptions

- In other than occupancies in Use Group E, guards shall not be less than 34 inches (864 mm) in height above the leading edge of the tread along stairs which are not more than 20 feet (6096 mm) in height or which reverse direction at an intermediate landing with 12 inches (305 mm) or less measured horizontally between successive flights.
- Guards along open-sided floor areas, mezzanines and landings in occupancies in Use Group R-3 shall not be less than 36 inches (914 mm) in height.

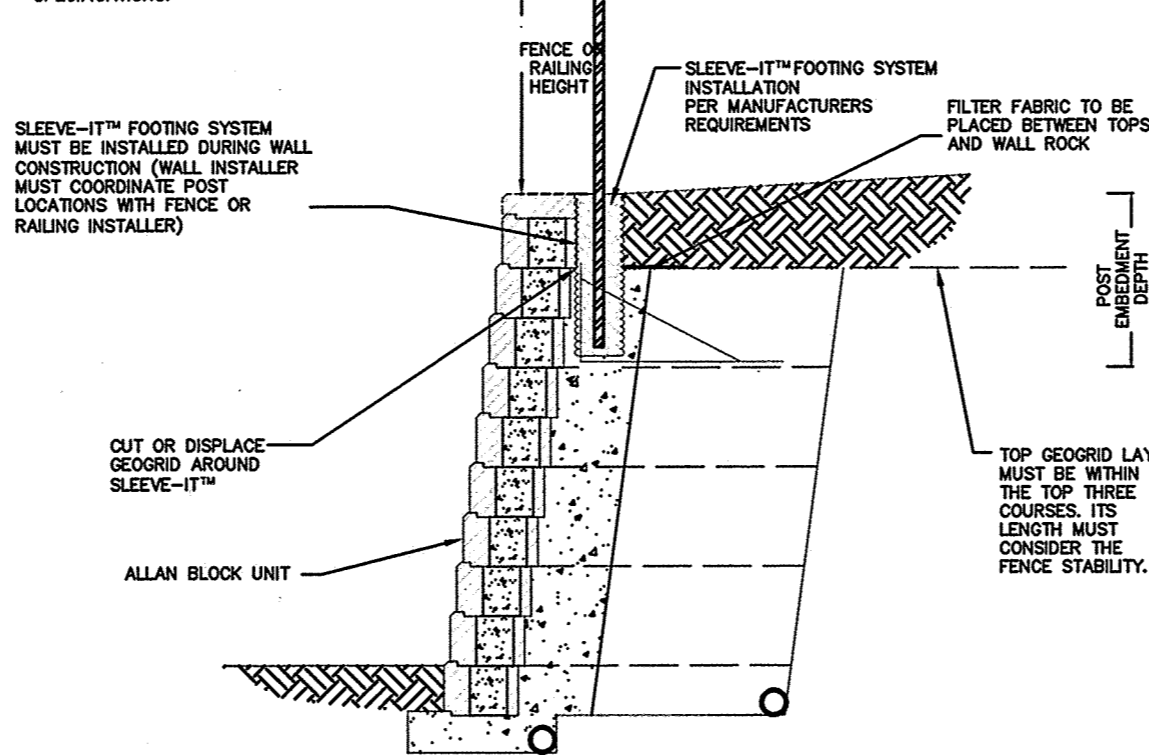
1021.3 Opening limitations: In occupancies in Use Groups A, B, E, H-4, I, 1, I-2, M and R, and in public garages and open material such that a sphere with a diameter of 4 inches (102 mm) cannot pass through any opening. Guards shall not have an ornamental pattern that would provide a ladder effect.

TYPICAL SAFETY FENCE
NOT TO SCALE



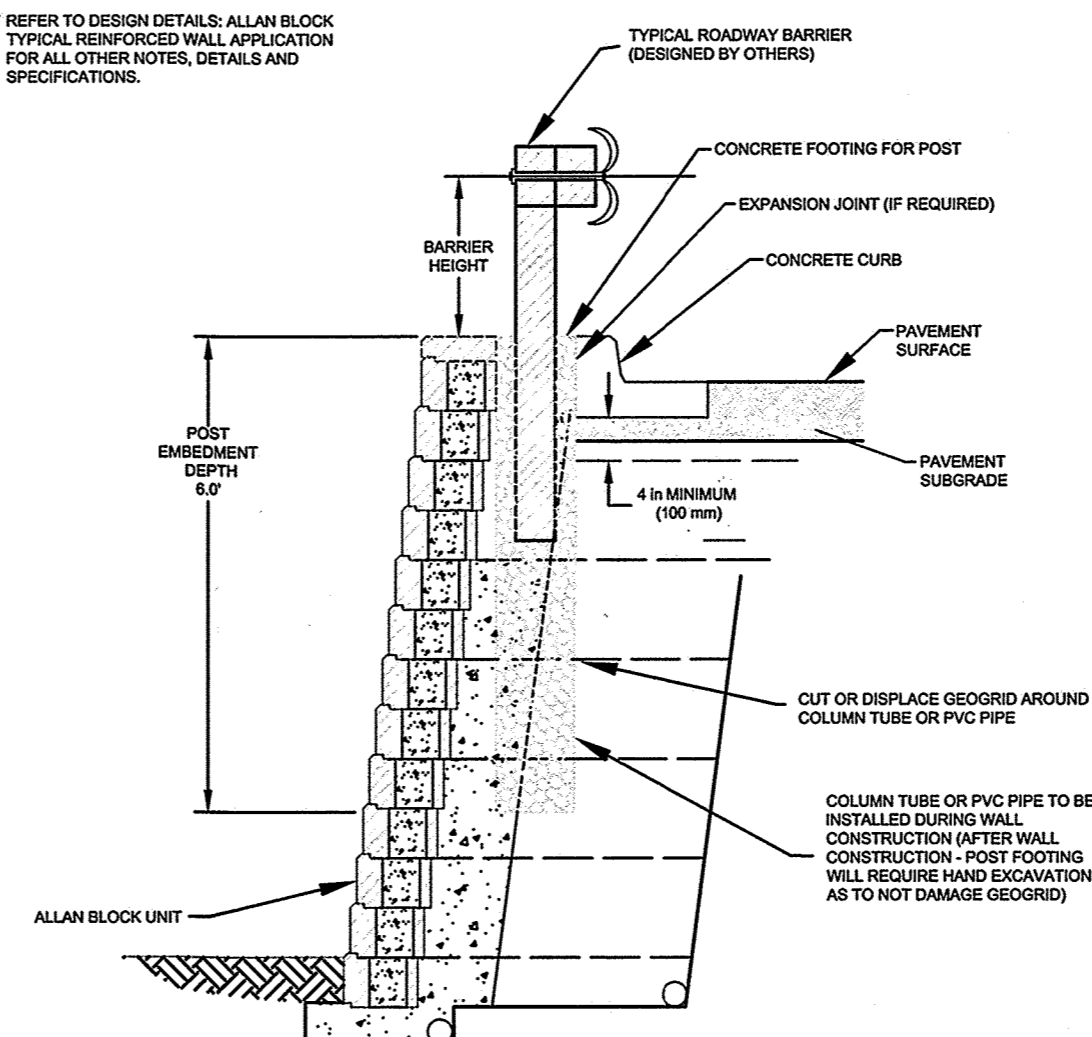
TYPICAL GRAVITY WALL
Not to Scale

* REFER TO DESIGN DETAILS: ALLAN BLOCK TYPICAL REINFORCED WALL APPLICATION FOR ALL OTHER NOTES, DETAILS AND SPECIFICATIONS.



ALT. FENCE FOOTING WITH SLEEVE-IT
Not to Scale

* REFER TO DESIGN DETAILS: ALLAN BLOCK TYPICAL REINFORCED WALL APPLICATION FOR ALL OTHER NOTES, DETAILS AND SPECIFICATIONS.



IMPACT ROADWAY/PARKING GUARDRAIL
Not to Scale

"NO AS-BUILT INFORMATION IS SHOWN ON THIS SHEET"

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. 21283, Expiration Date: 12-21-22

Professional Engineer
STATE OF MARYLAND
No. 21283
12-21-22

NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT GUARD RAIL DETAIL.

 GEOTECHNICAL LABORATORIES, INC. ENGINEERS • GEOLOGISTS • CONSULTANTS	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. 18182, Expiration Date: 03-12-19.
---	---

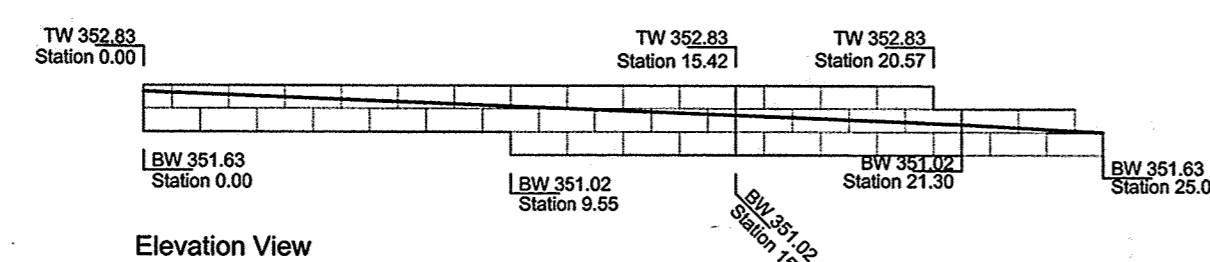
OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWBRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244	ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
Revised SITE DEVELOPMENT PLAN RETAINING WALL TYPICAL DETAILS	
DESIGN: AAM CHECKED: CAM	DATE: JULY 2018 DECEMBER 2018 PROJECT NO. 0925 SCALE: AS SHOWN DRAWING 27 OF 47

APPROVED: DEPARTMENT OF PLANNING AND ZONING

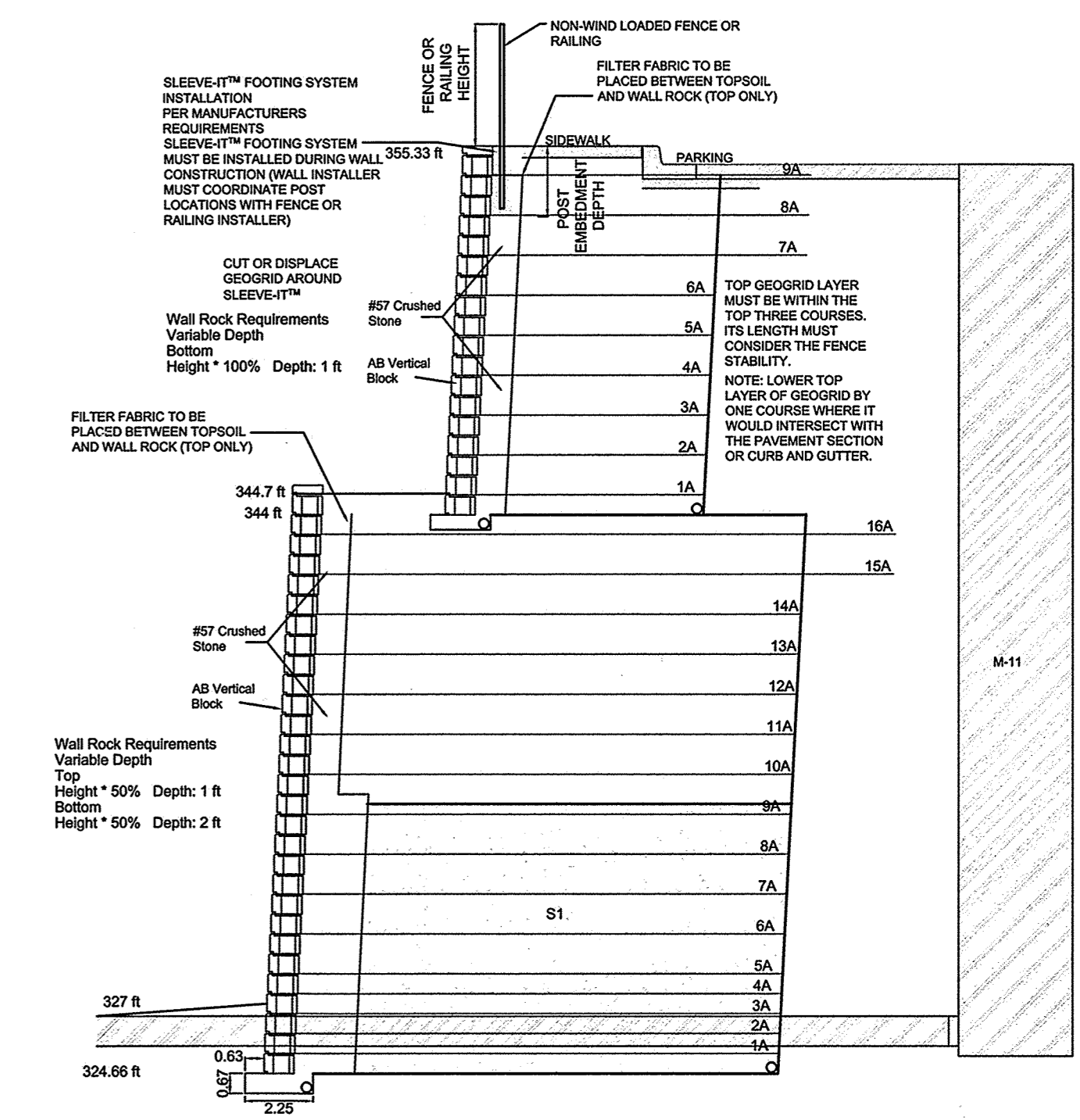
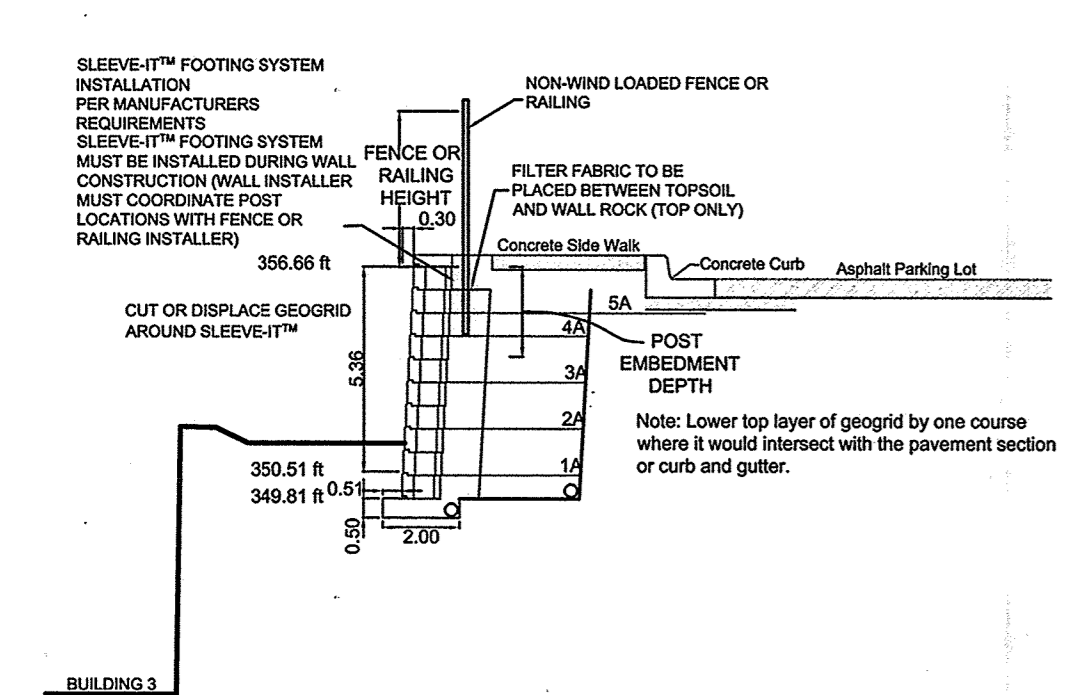
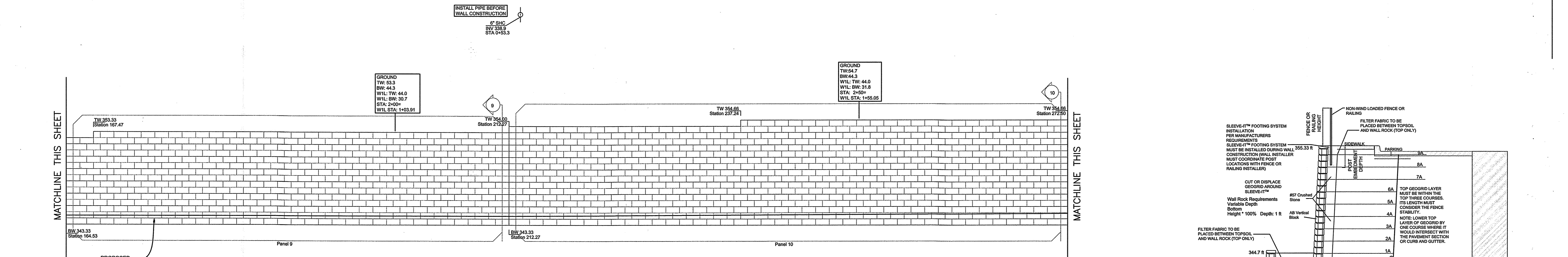
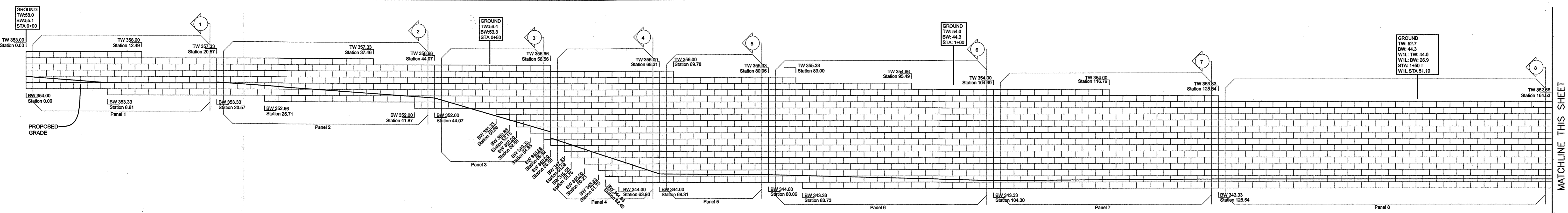
CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 1/16/19

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 1/16/19

DIRECTOR
 DATE: 1-17-19

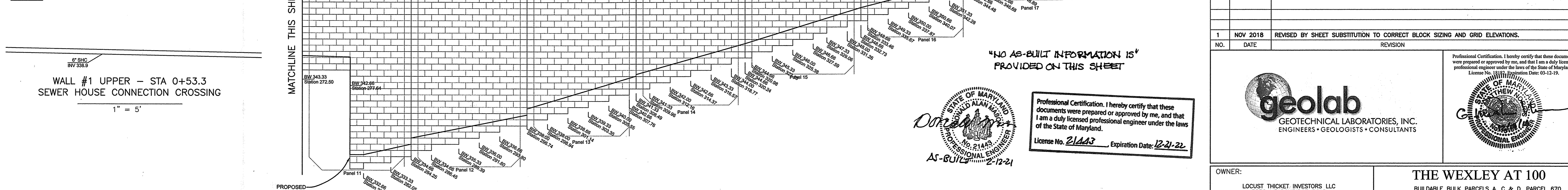


WALL #3 G - ELEVATION VIEW
1" = 5'



WALL #1 STA 1+13.6
CROSS SECTION THROUGH STORM DRAIN
1" = 5'

1 THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.
NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.



WALL #1 UPPER - ELEVATION VIEW
1" = 5'

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

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. 21443 Expiration Date: 12-21-22

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. 21443 Expiration Date: 03-12-19.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 1/16/19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

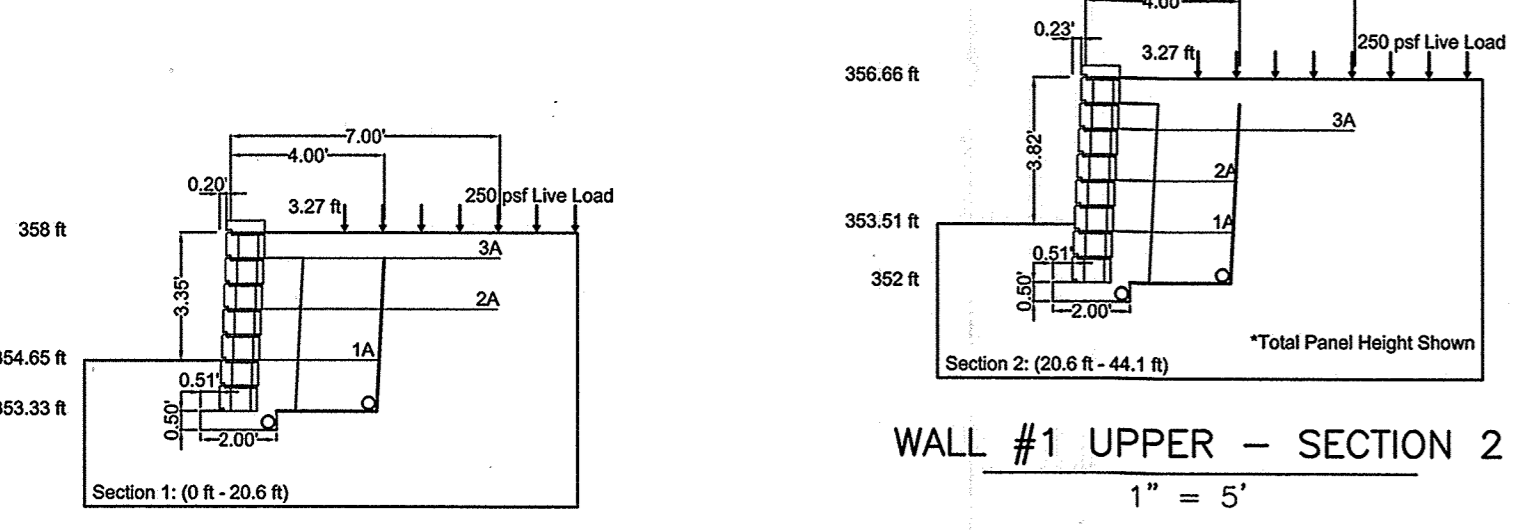
[Signature] 1/10/19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 1-17-19
DIRECTOR DATE

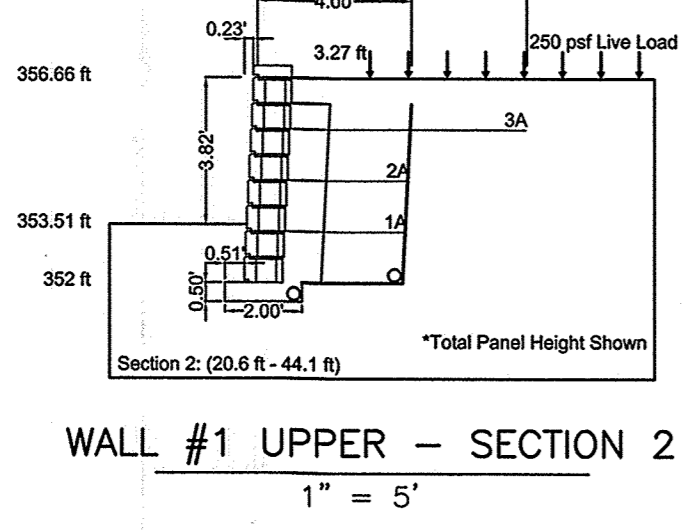
NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.

OWNER: LOCUST THICKET INVESTORS LLC 5636 MEADOWBRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244	ZONED R-A-15 & POR GRID 9, PARCELS 714, 724 & 670 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DESIGN: AM	CHECKED: CAM
DATE: JULY 2018 DECEMBER 2018	PROJECT NO. 0925
SCALE: AS SHOWN	DRAWING 28 OF 47

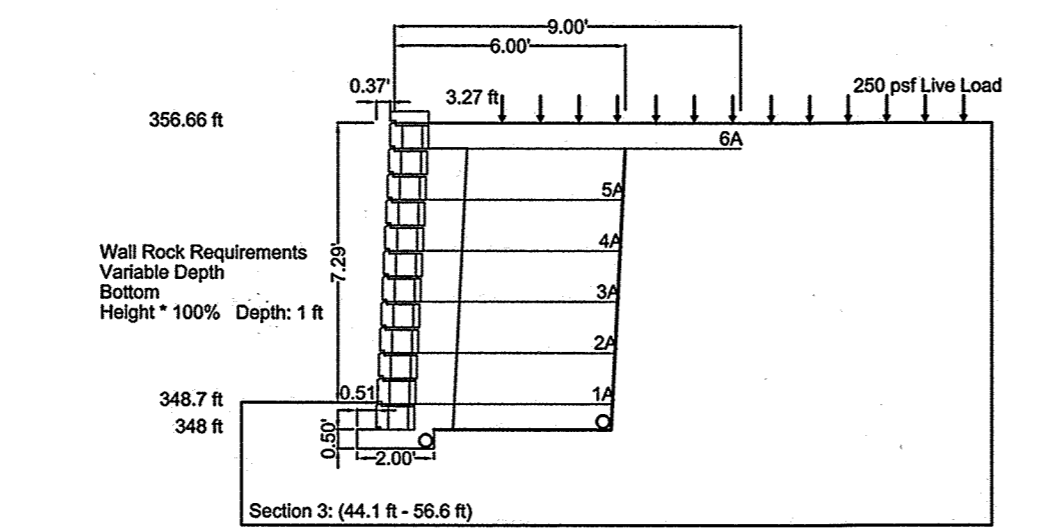
A - Miragrid 2XT
 B - Miragrid 3XT
 C - Miragrid 7XT



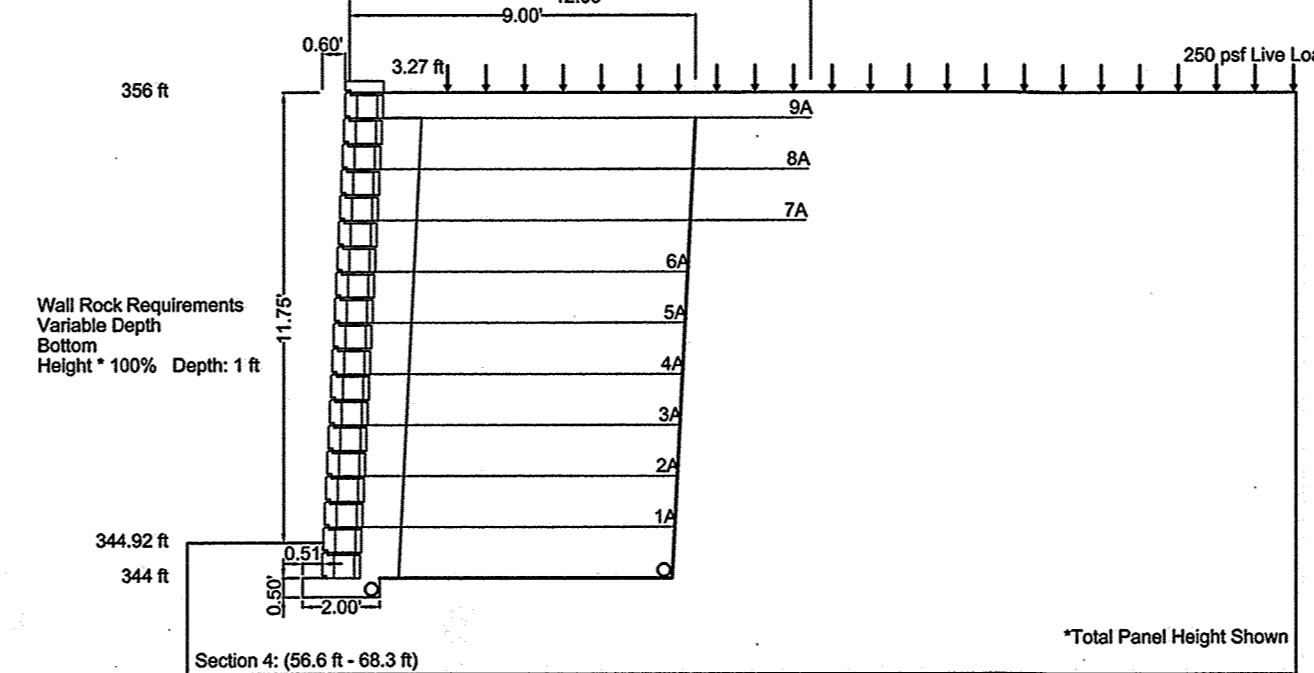
WALL #1 UPPER - SECTION 1
1" = 5'



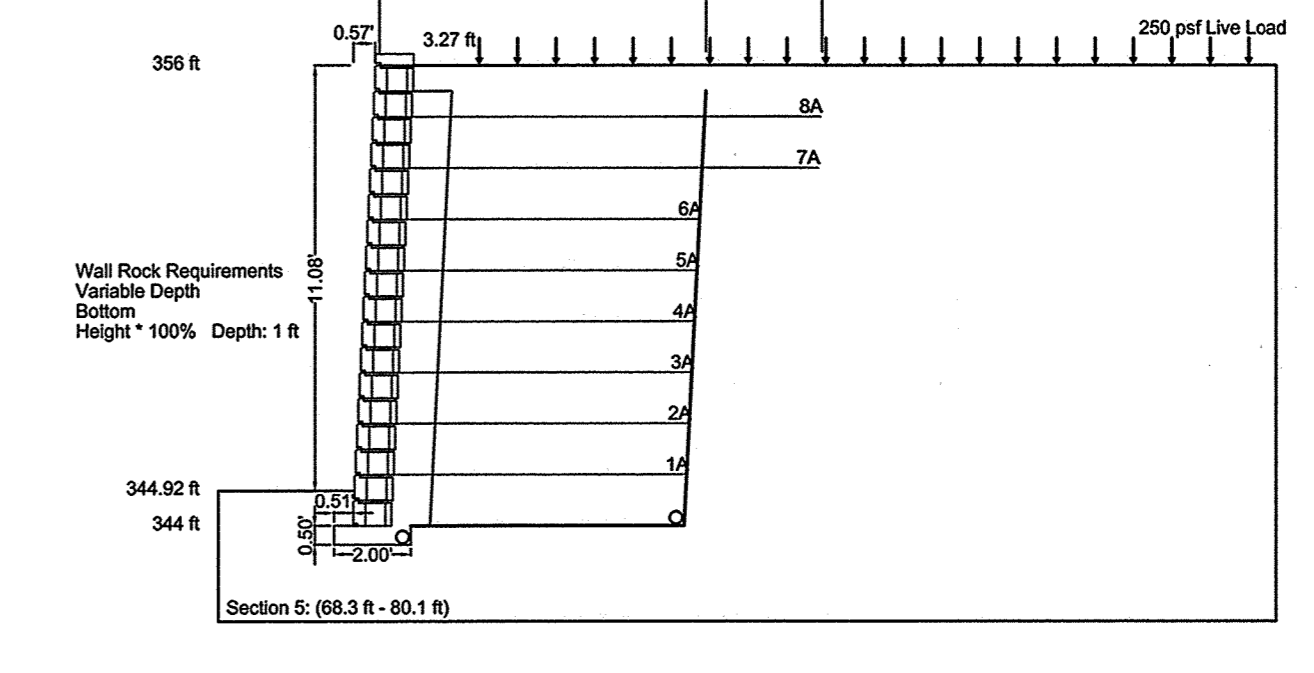
WALL #1 UPPER - SECTION 2
1" = 5'



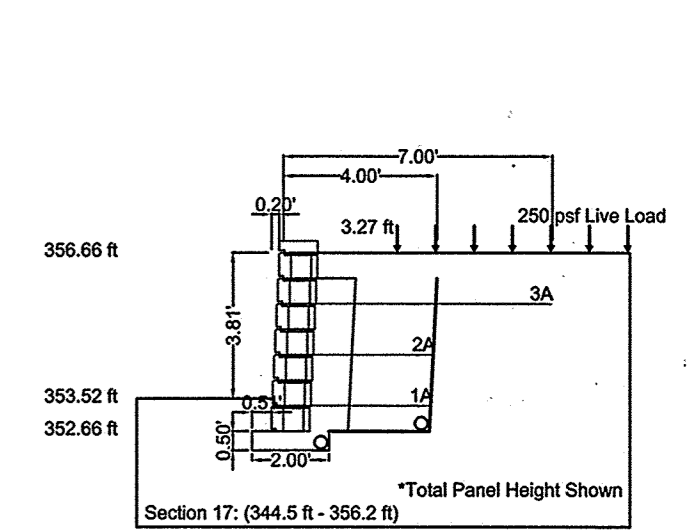
WALL #1 UPPER - SECTION 3
1" = 5'



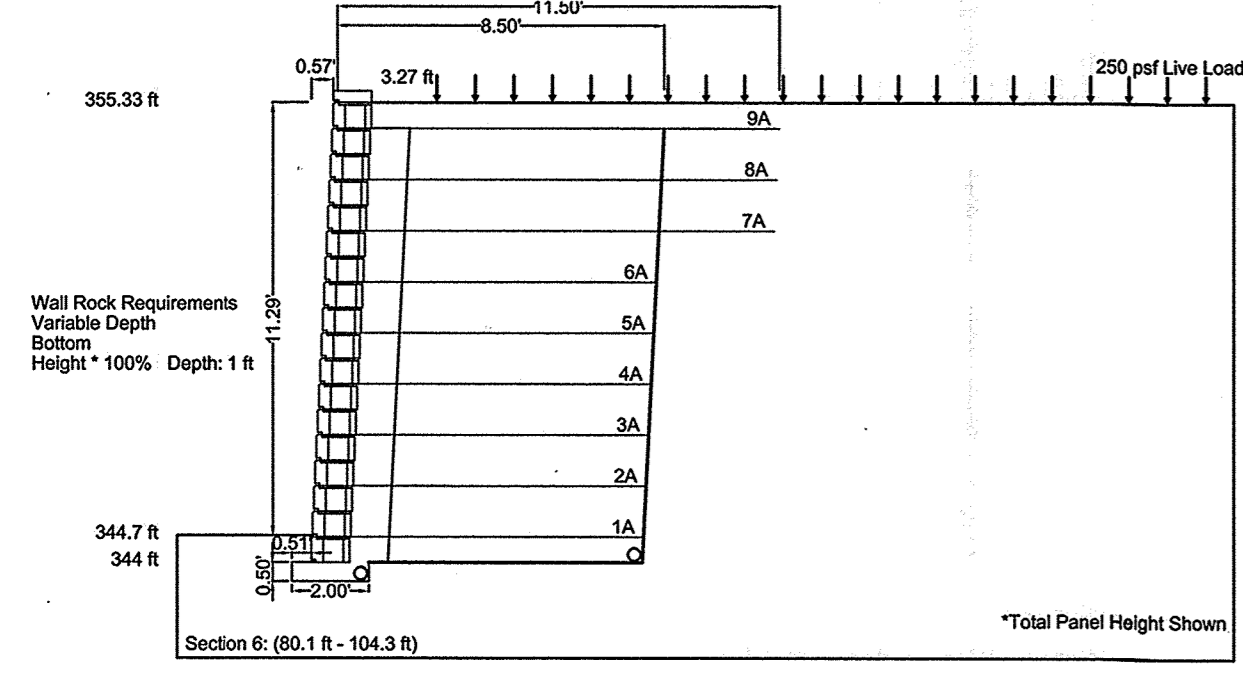
WALL #1 UPPER - SECTION 4
1" = 5'



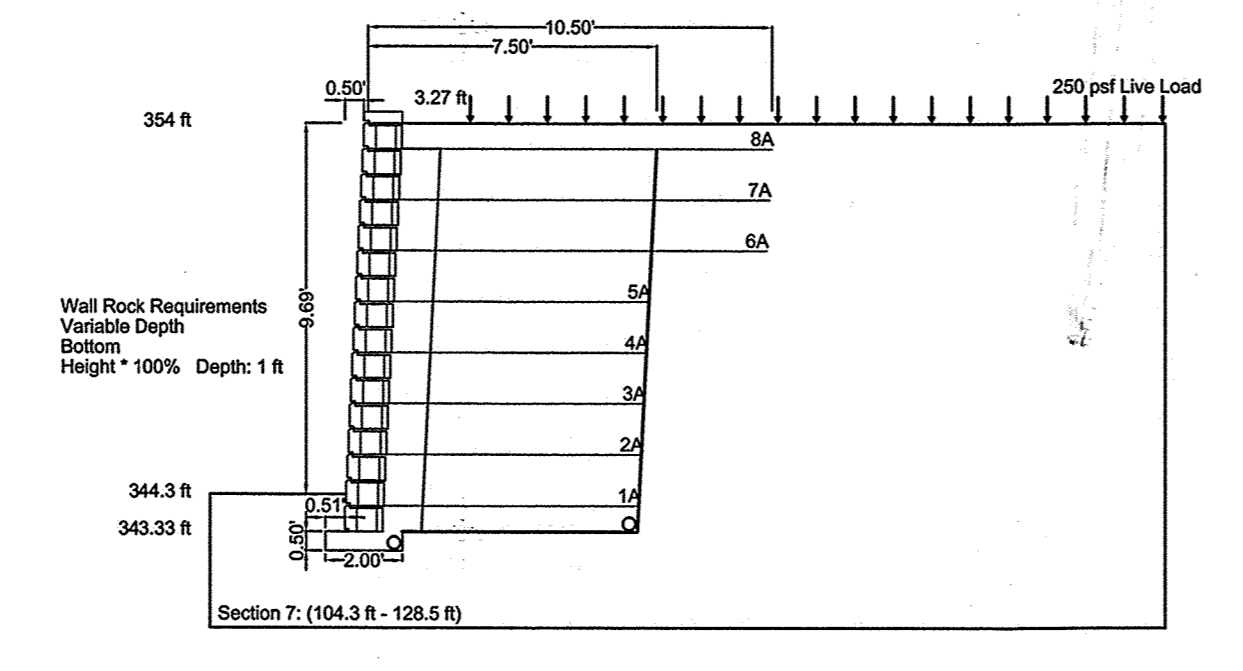
WALL #1 UPPER - SECTION 5
1" = 5'



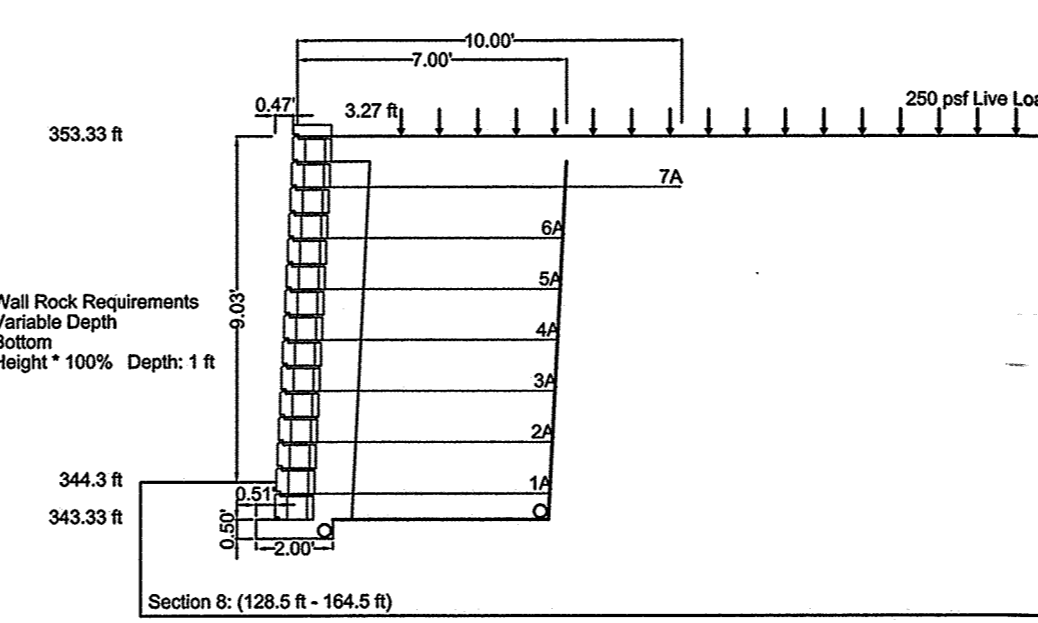
WALL #1 UPPER - SECTION 17
1" = 5'



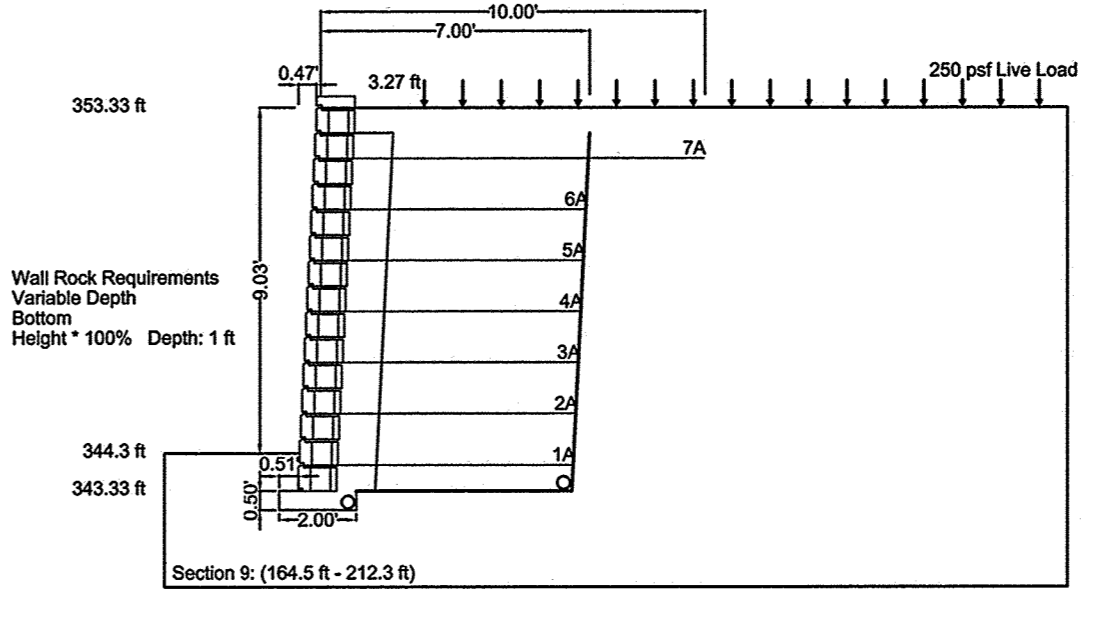
WALL #1 UPPER - SECTION 6
1" = 5'



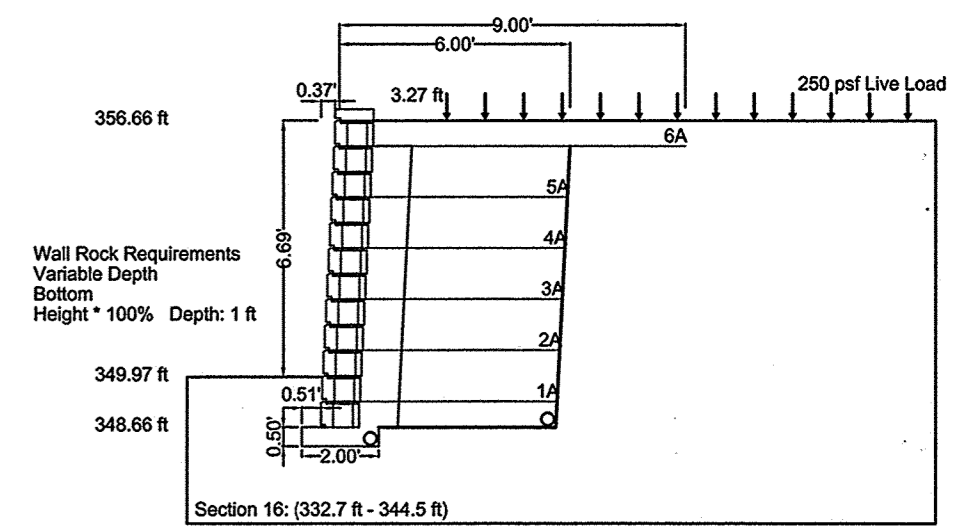
WALL #1 UPPER - SECTION 7
1" = 5'



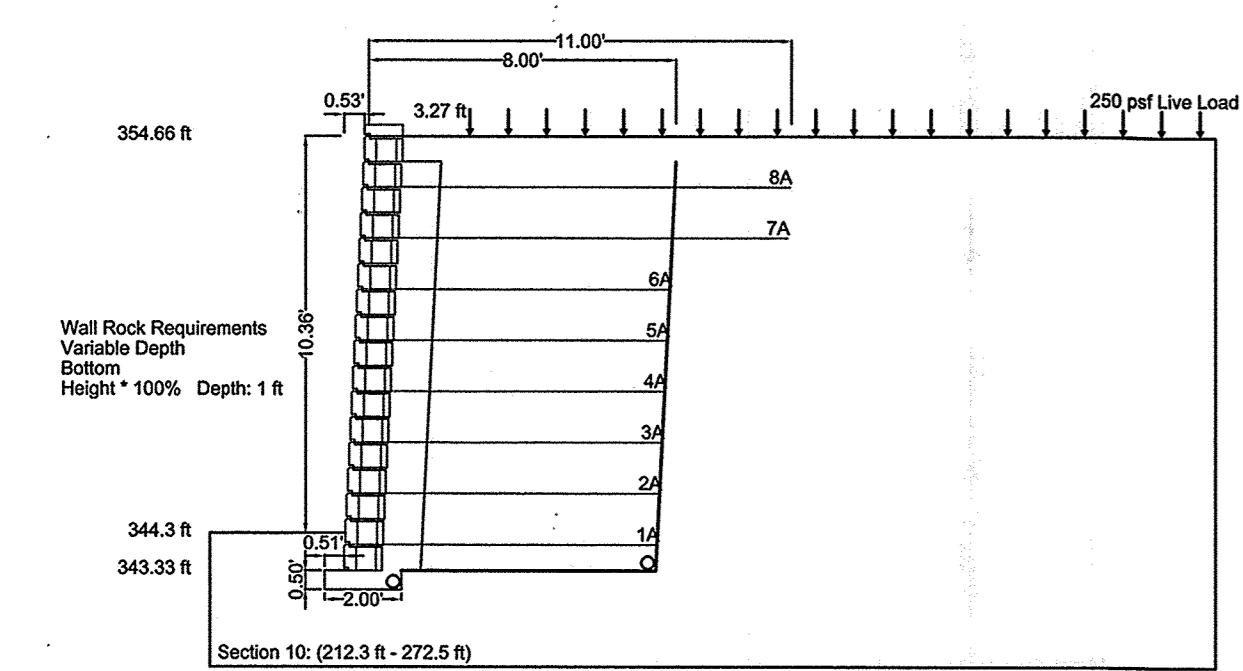
WALL #1 UPPER - SECTION 8
1" = 5'



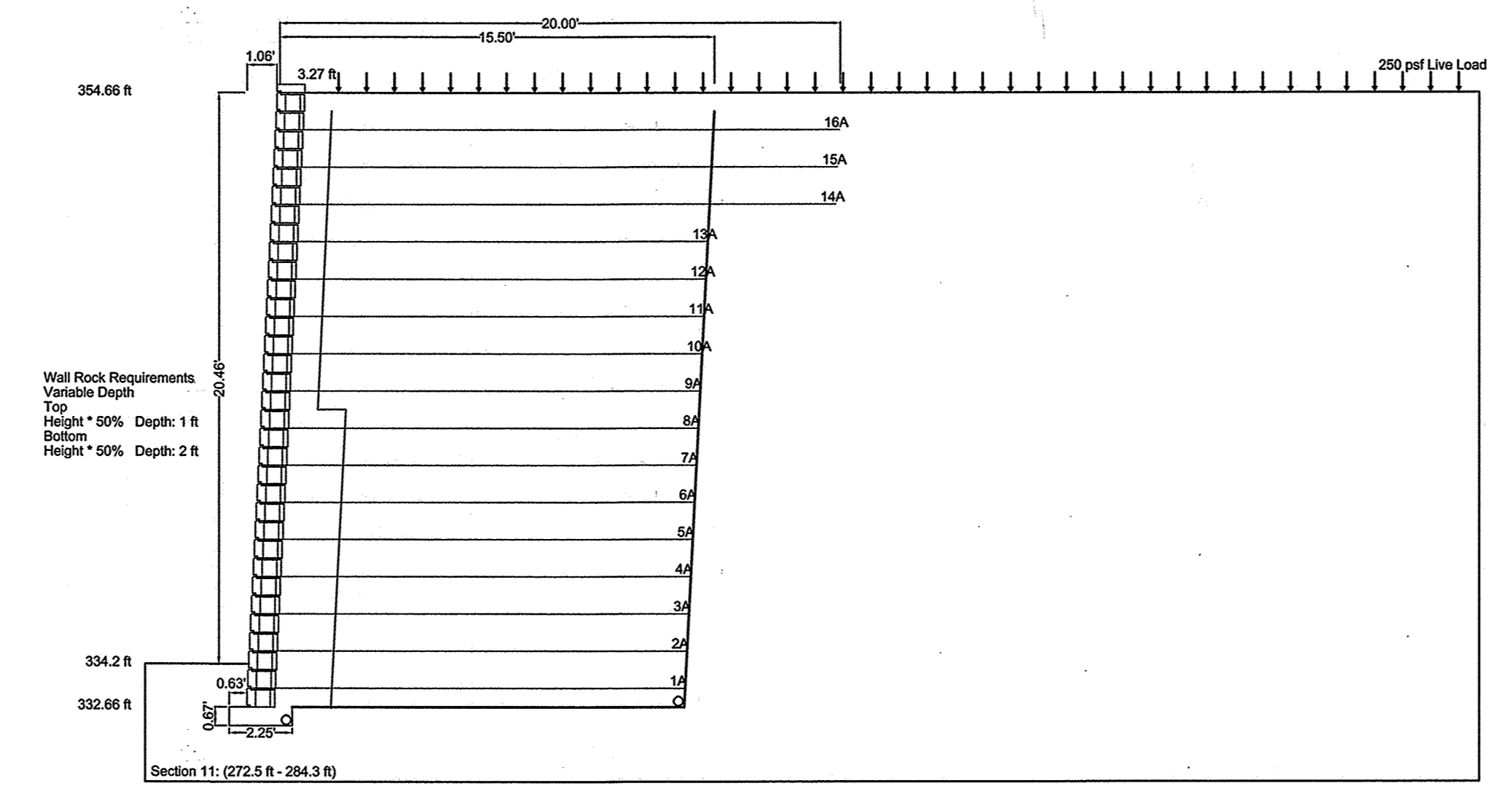
WALL #1 UPPER - SECTION 9
1" = 5'



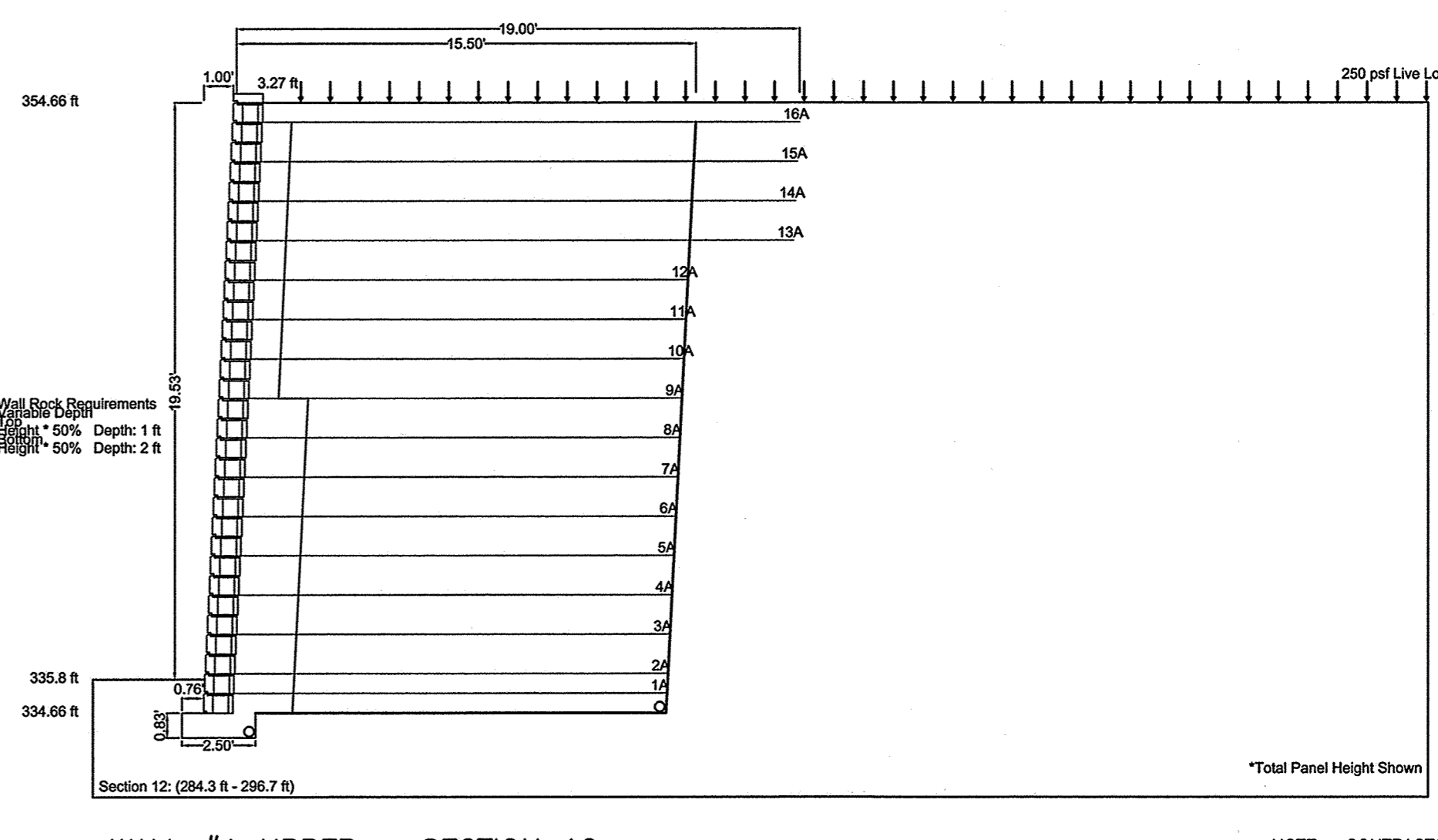
WALL #1 UPPER - SECTION 16
1" = 5'



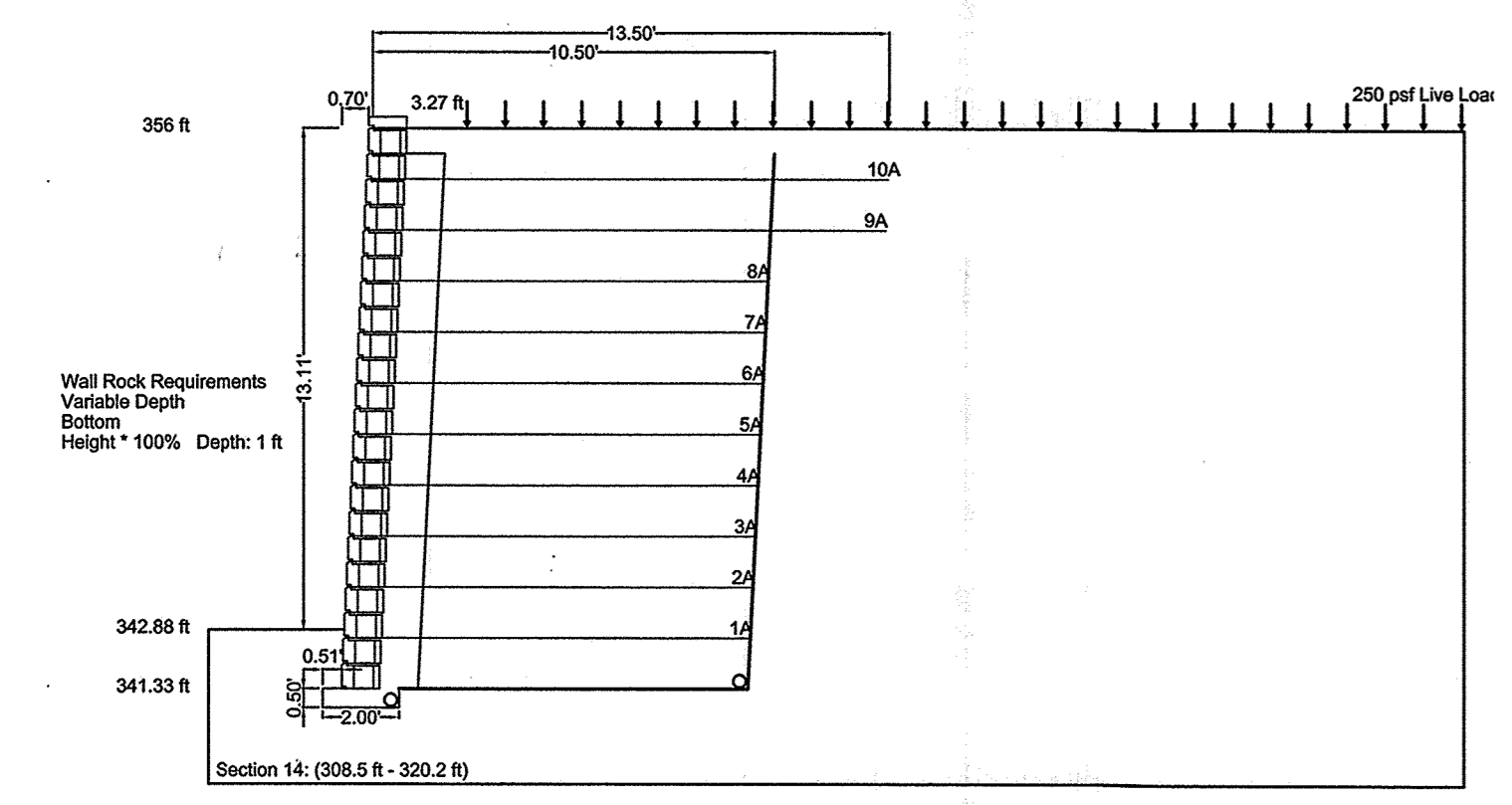
WALL #1 UPPER - SECTION 10
1" = 5'



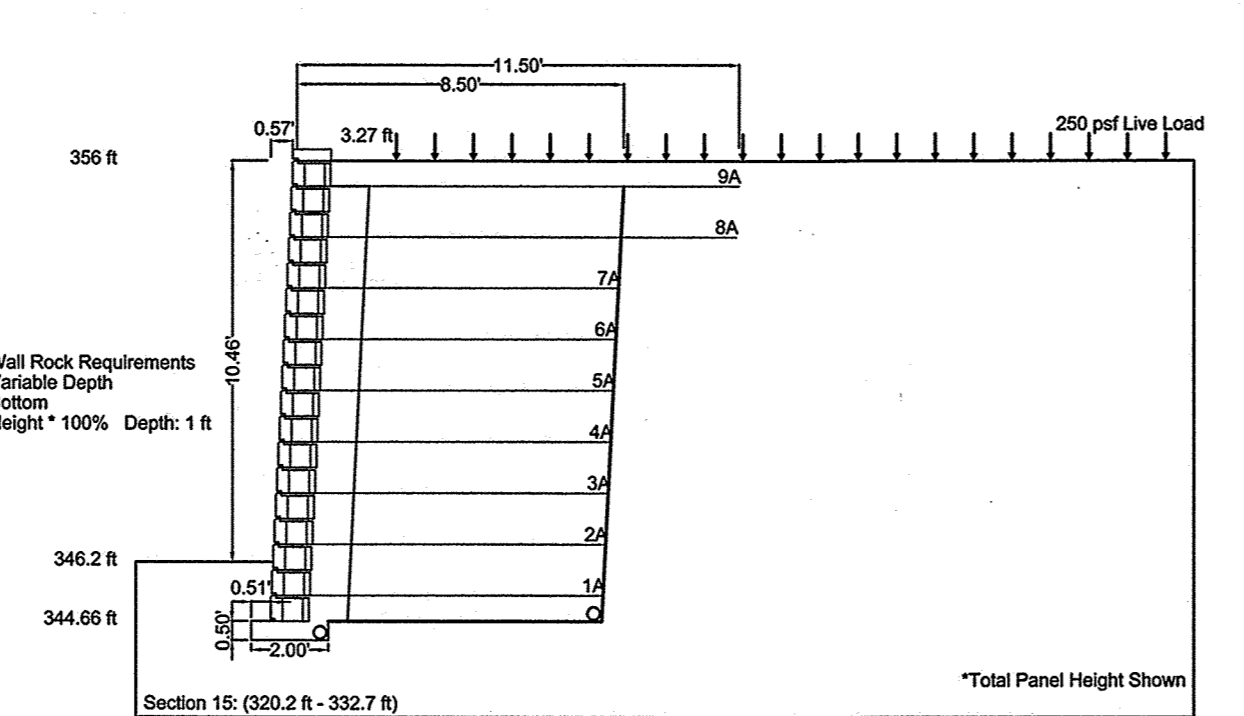
WALL #1 UPPER - SECTION 11
1" = 5'



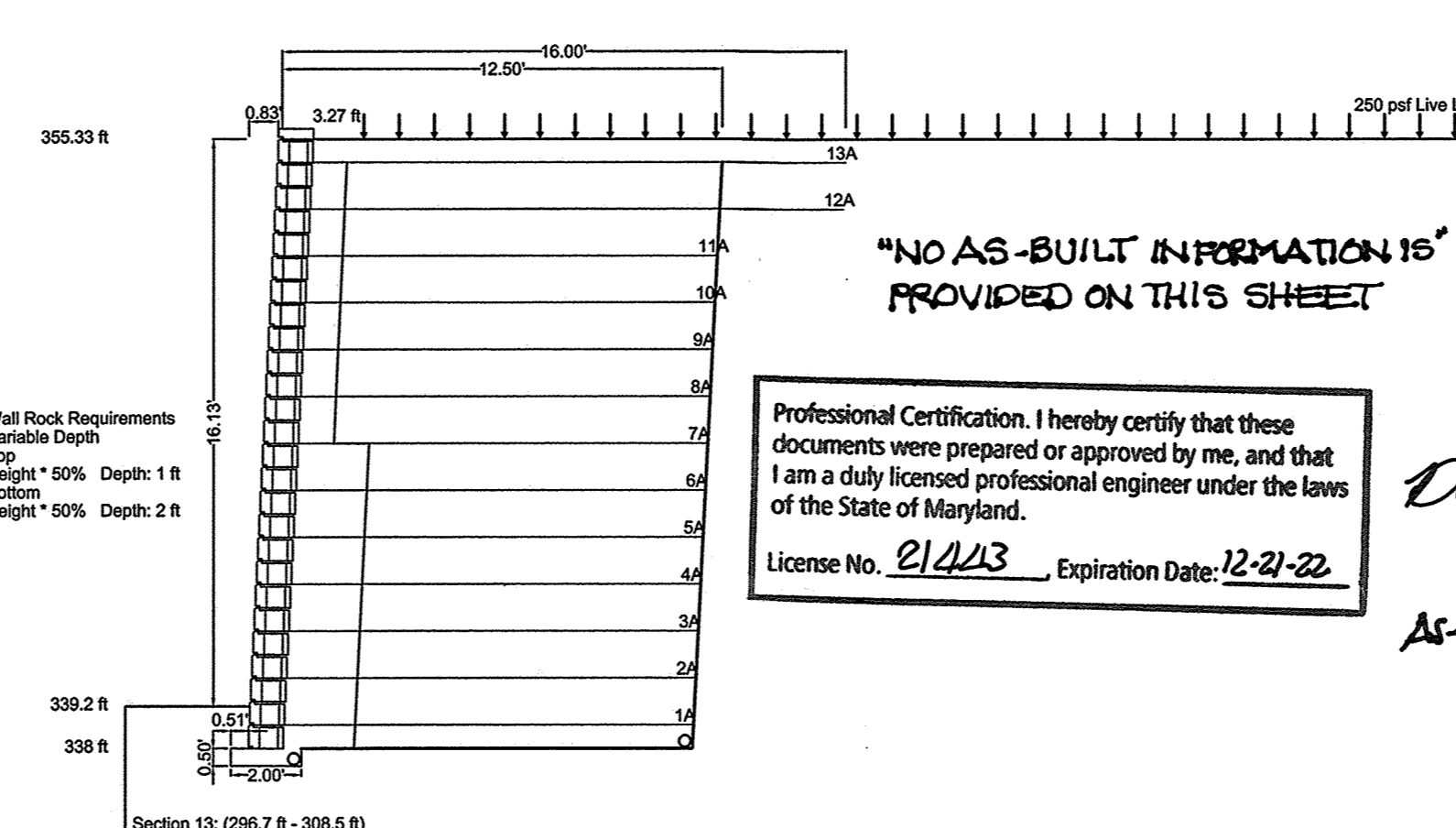
WALL #1 UPPER - SECTION 12
1" = 5'



WALL #1 UPPER - SECTION 14
1" = 5'

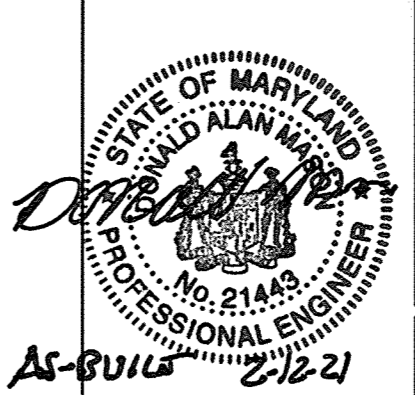


WALL #1 UPPER - SECTION 15
1" = 5'



WALL #1 UPPER - SECTION 13
1" = 5'

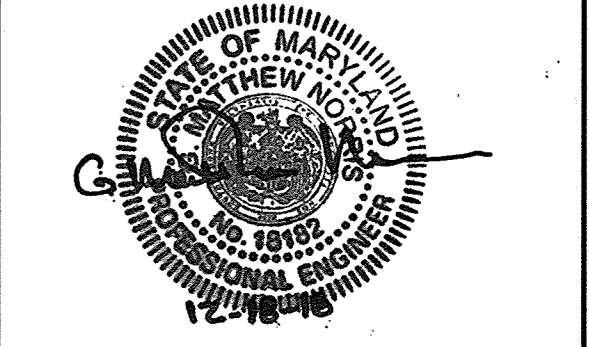
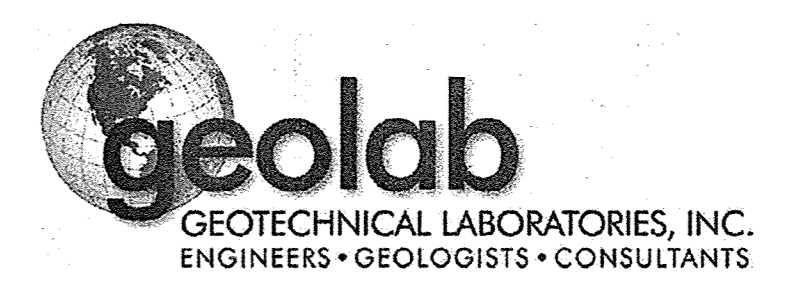
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"
 Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 21243, Expiration Date: 12-21-22



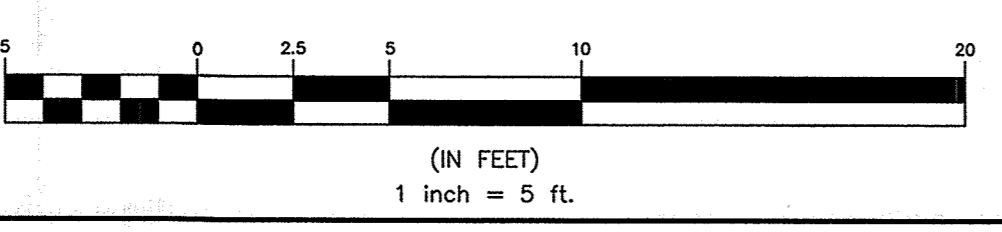
1 THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.
 NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.

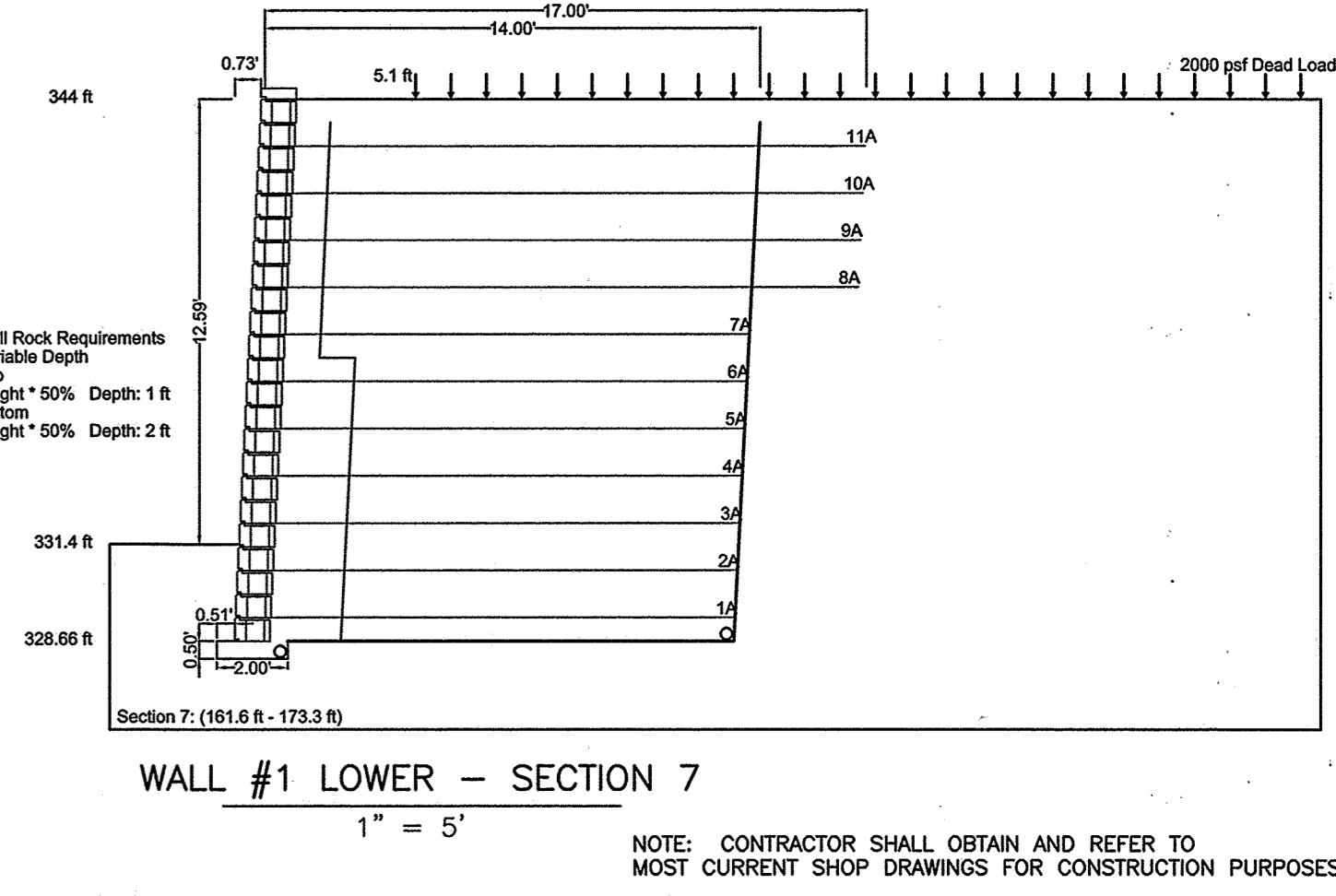
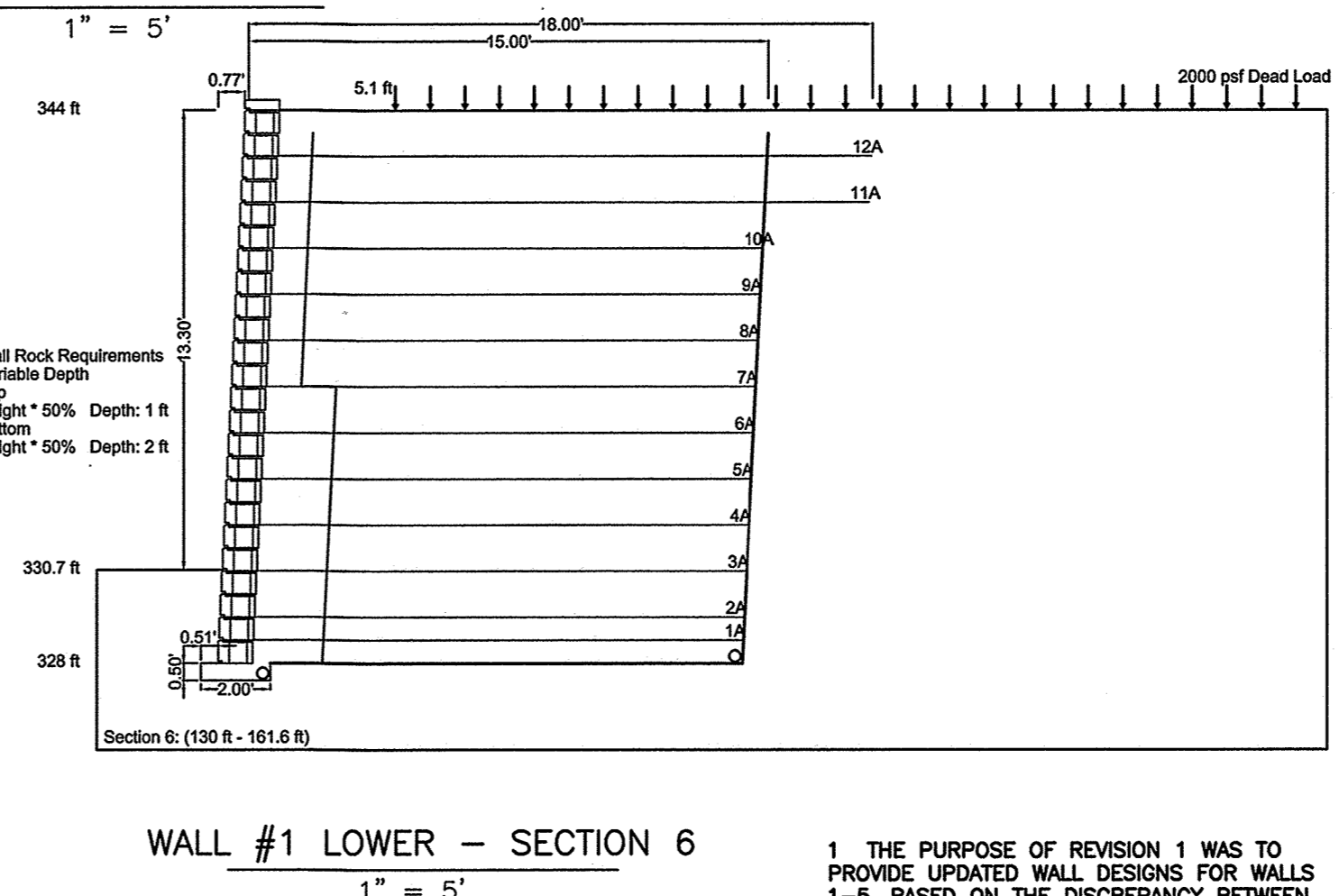
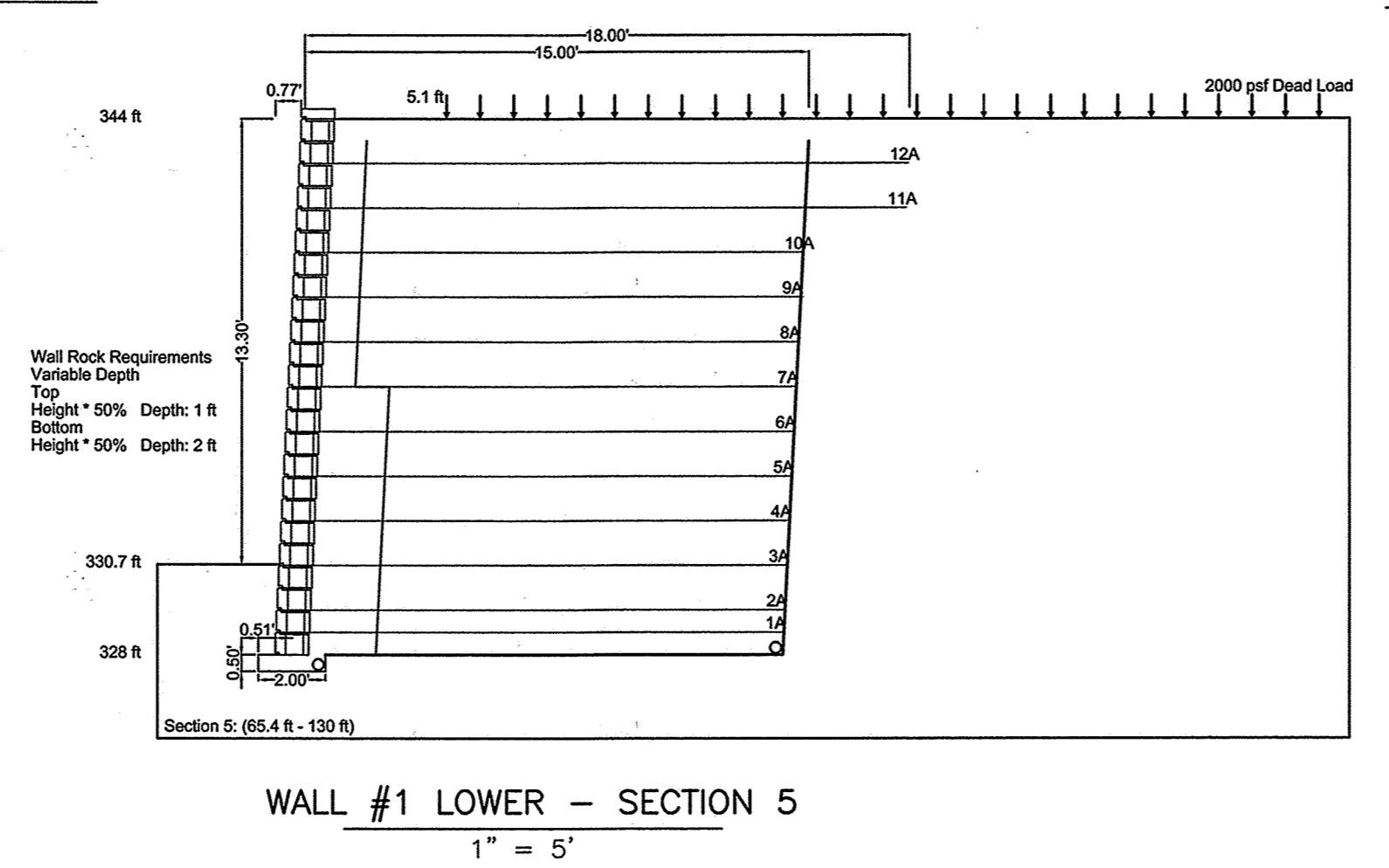
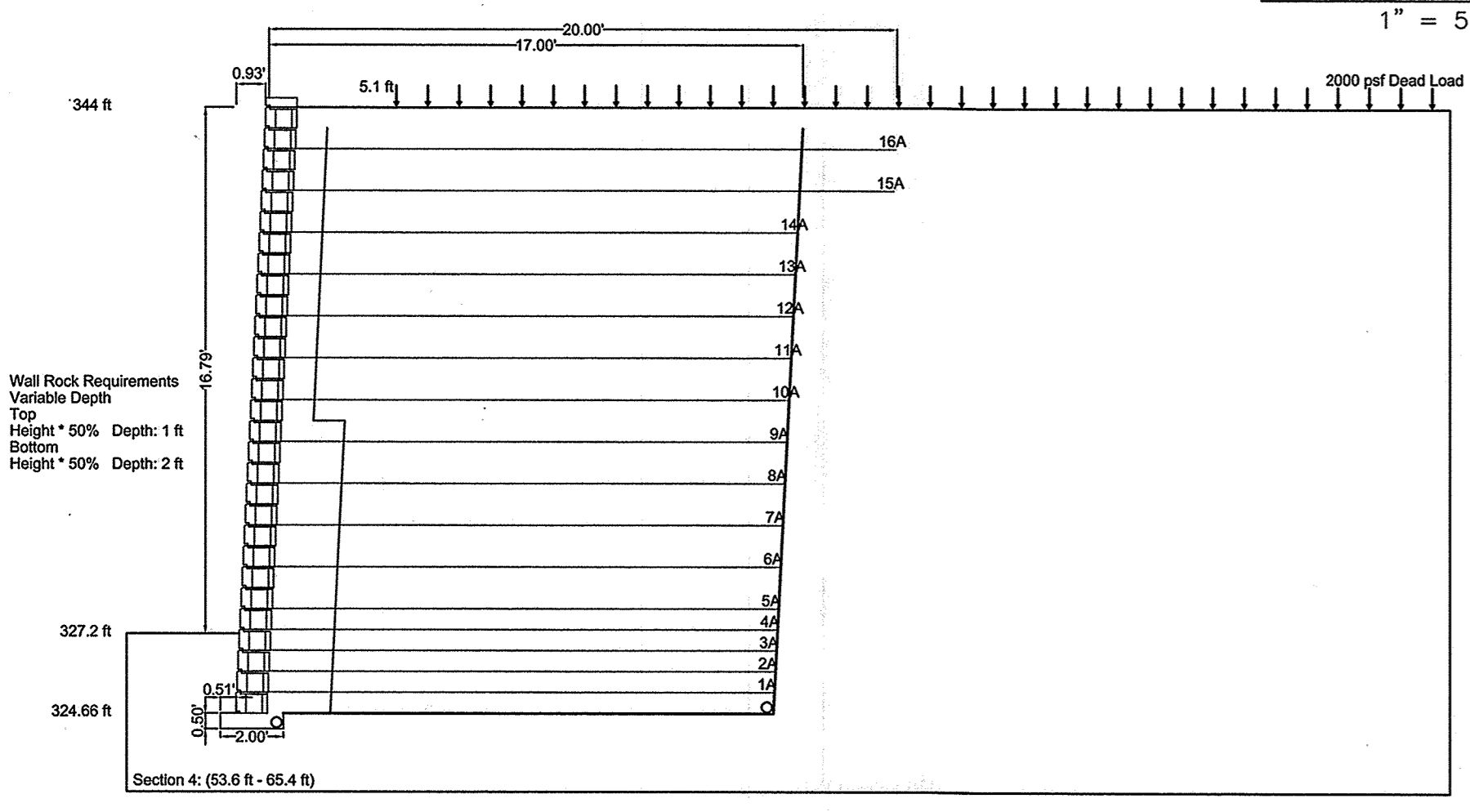
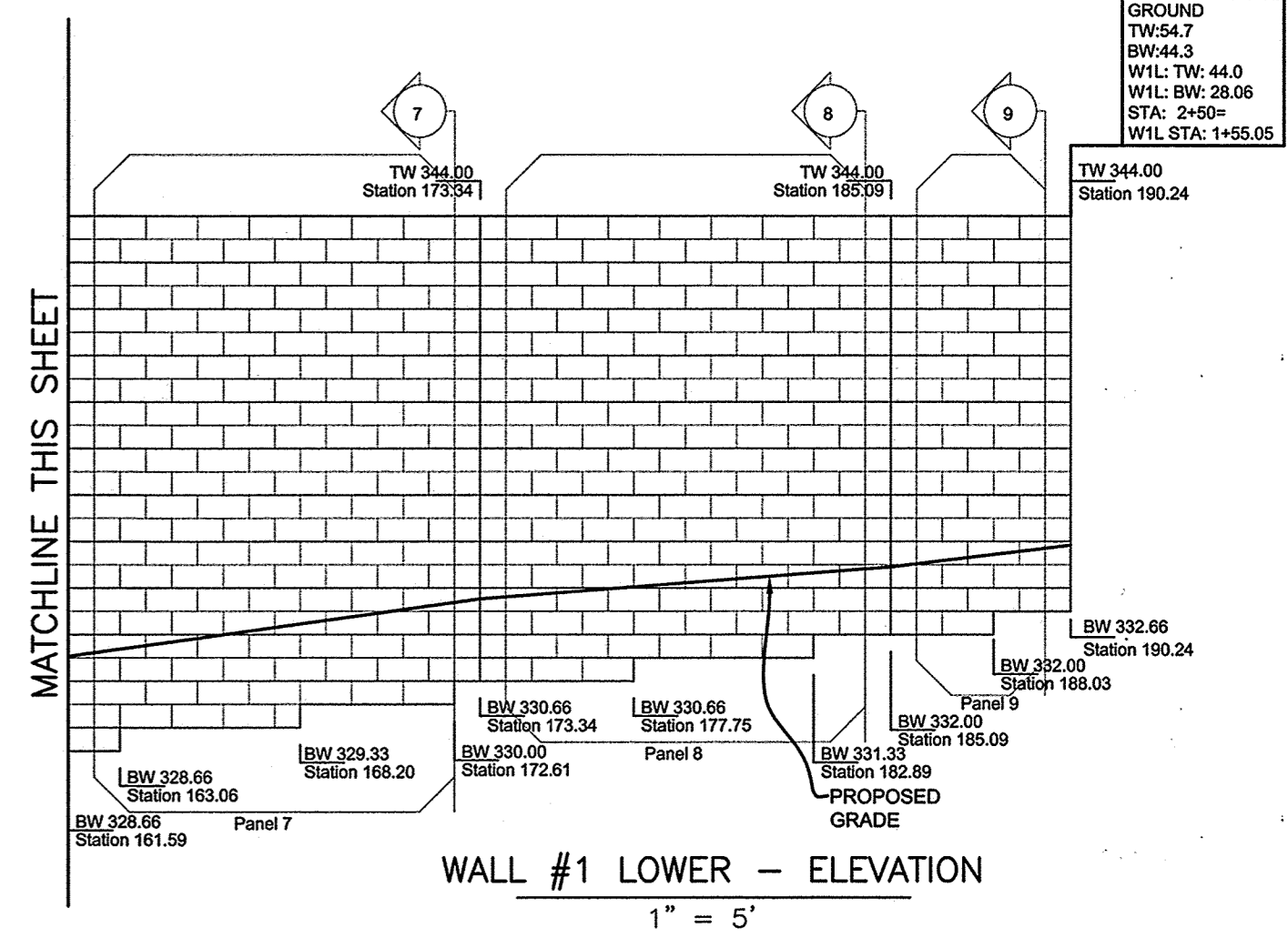
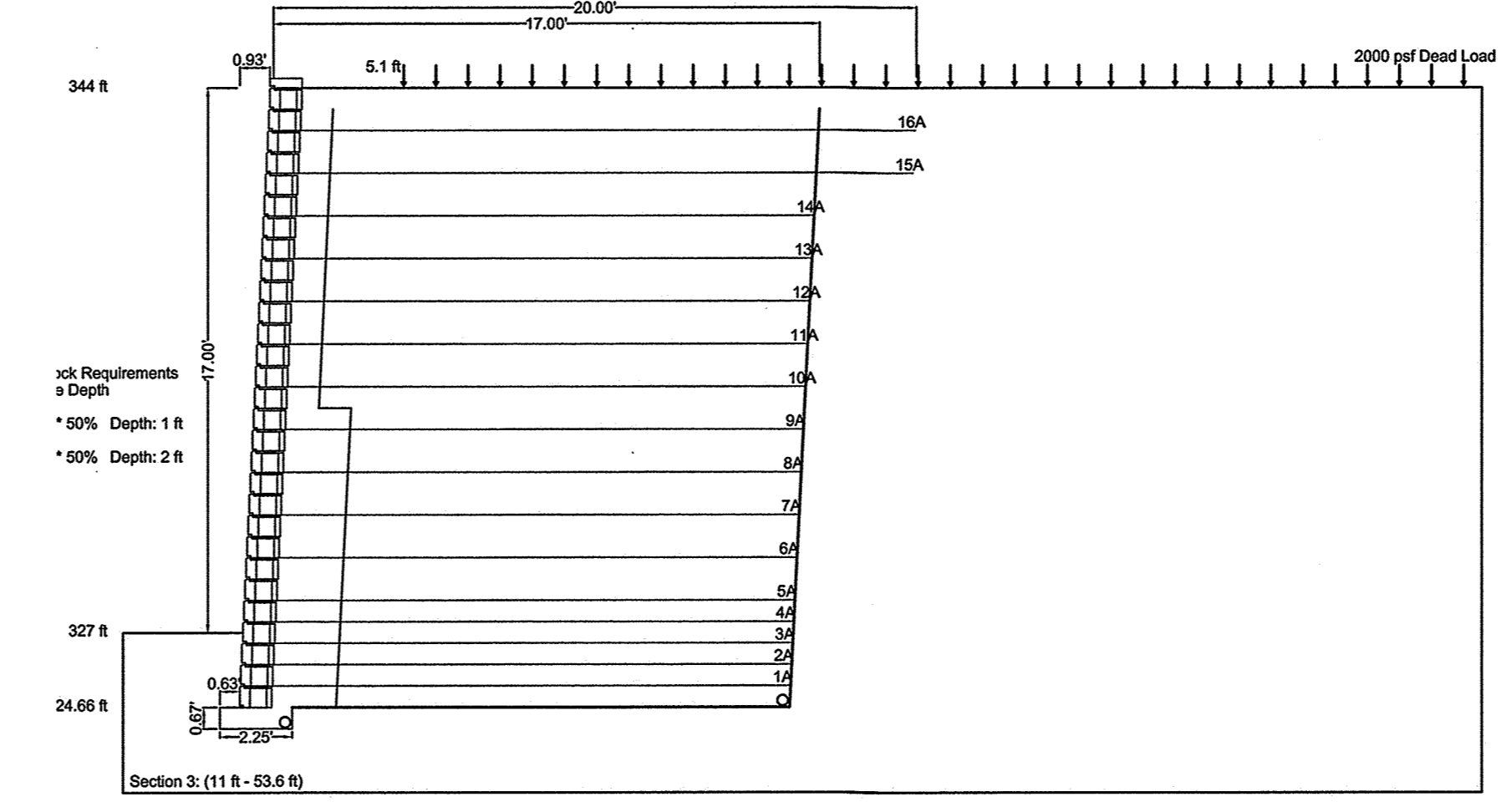
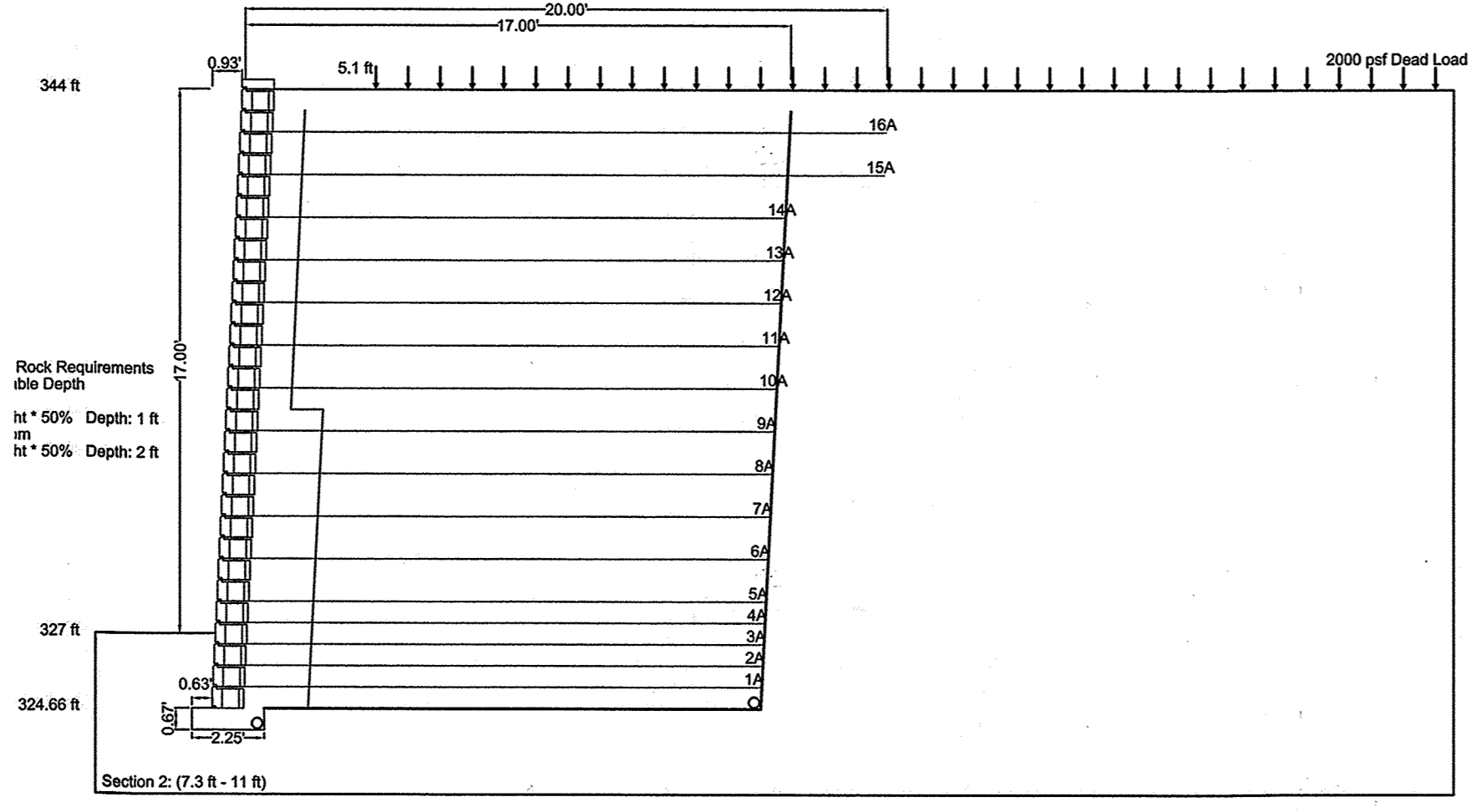
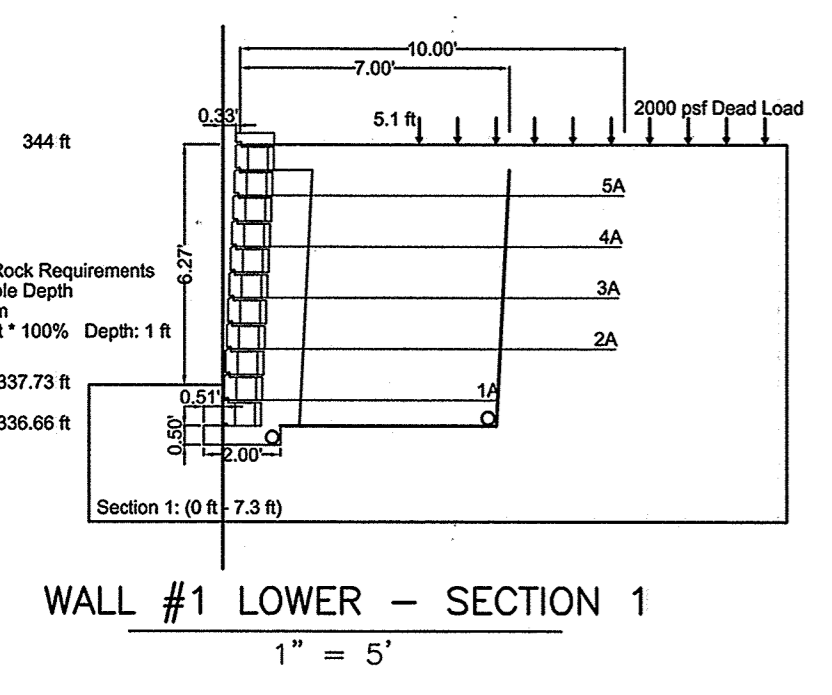
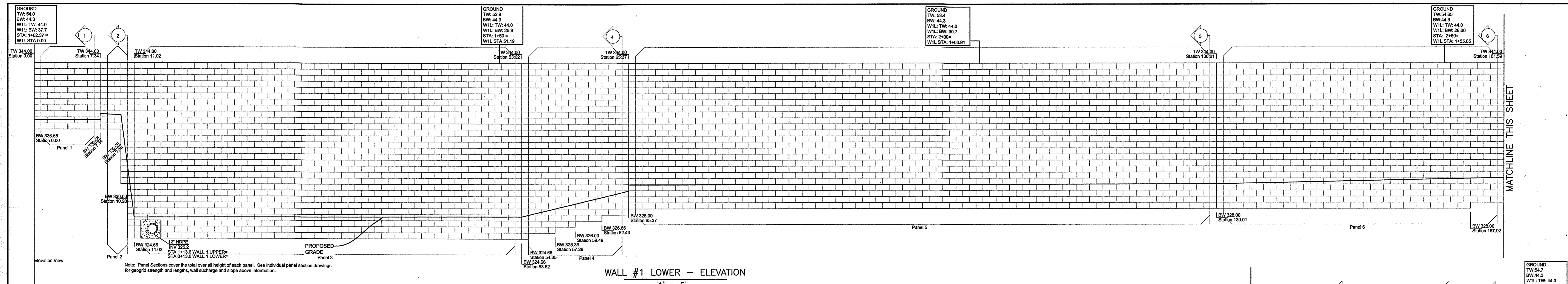
Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 18182, Expiration Date: 03-12-19.



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature]
 DIRECTOR



OWNER: LOCUST THICKET INVESTORS LLC 5636 MEADOWBRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS ZONED R-A-15 & POR GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244	REVISED SITE DEVELOPMENT PLAN WALL 1 - UPPER WALL
DESIGN: AAM	CHECKED: CAM
DATE: JULY 2018 DECEMBER 2018	PROJECT NO. 0925
SCALE: AS SHOWN	DRAWING 29 OF 47



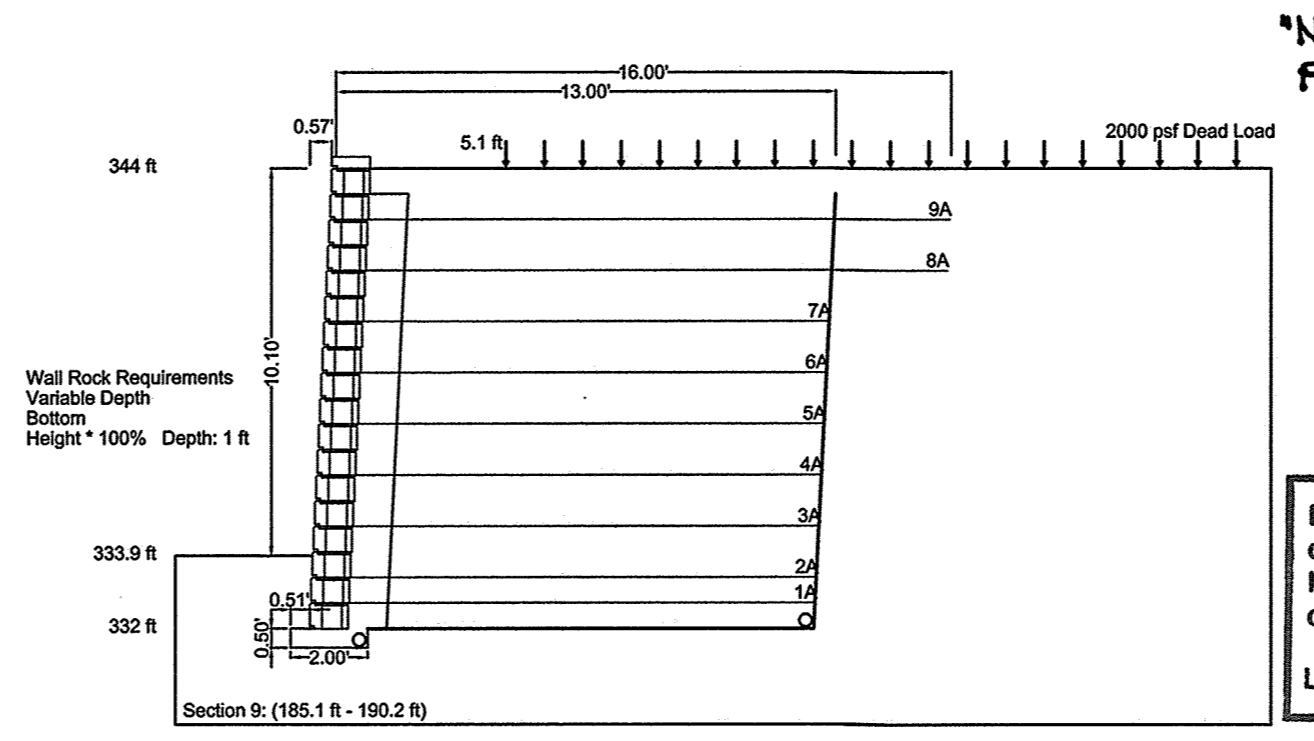
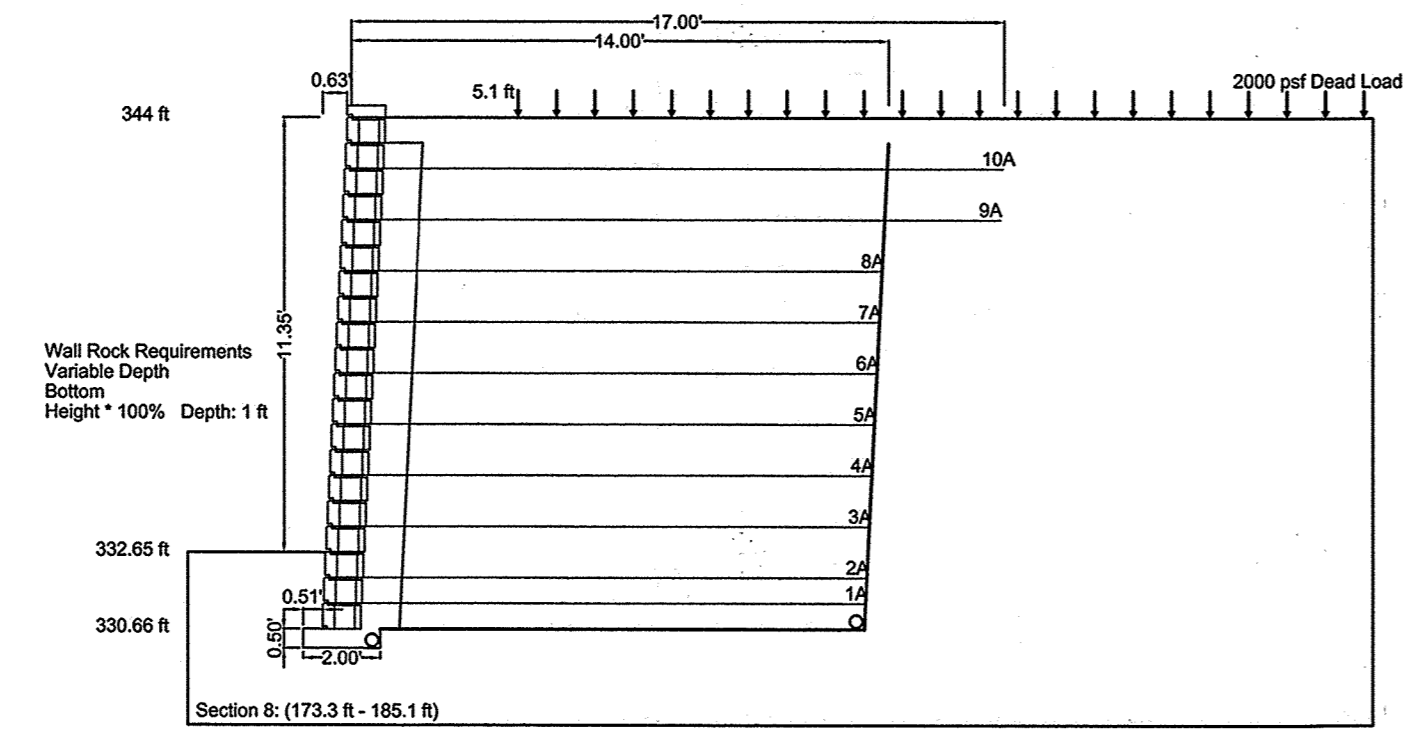
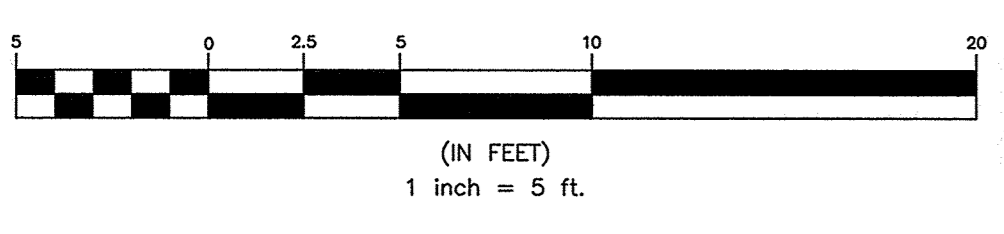
NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

1. THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.

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License No. 21443, Expiration Date: 12-31-22



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 [Signature] 1/16/19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 1/16/19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 1-17-19
 DIRECTOR

NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.

GEOTECHNICAL LABORATORIES, INC.
 ENGINEERS • GEOLOGISTS • CONSULTANTS

OWNER:
 LOCUST THICKET INVESTORS LLC
 5836 MEADOWBRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

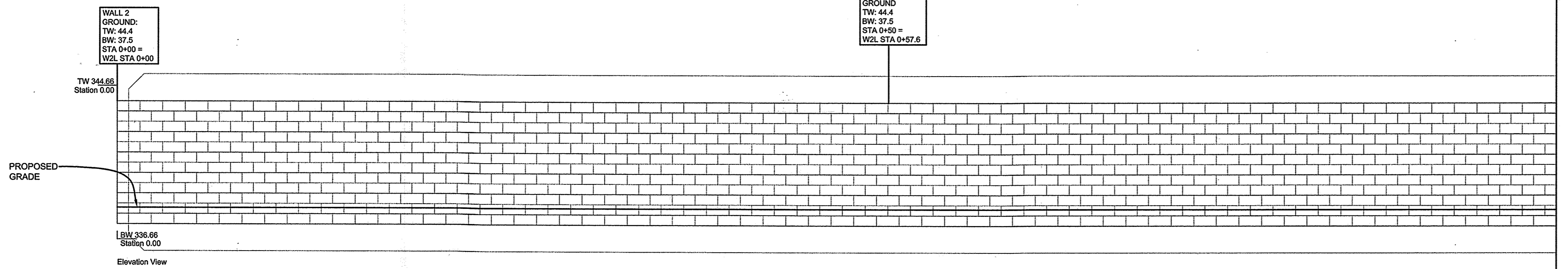
DEVELOPER:
 LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D, PARCEL 670
 9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
 GRID 9, PARCELS 714, 724 & 670
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

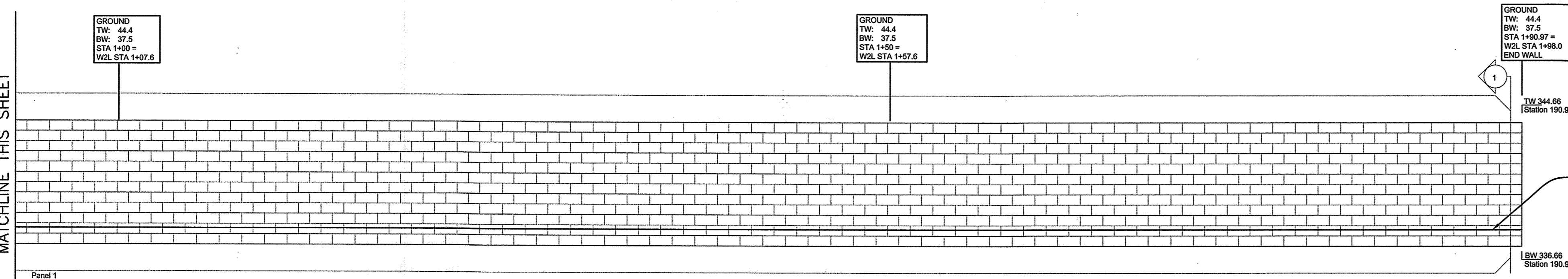
Revised SITE DEVELOPMENT PLAN
 WALL 1 - LOWER WALL

DATE: JULY 2018 / DECEMBER 2018 PROJECT NO: 0925
 DESIGN: AM CHECKED: CAM SCALE: AS SHOWN DRAWING 30 OF 47

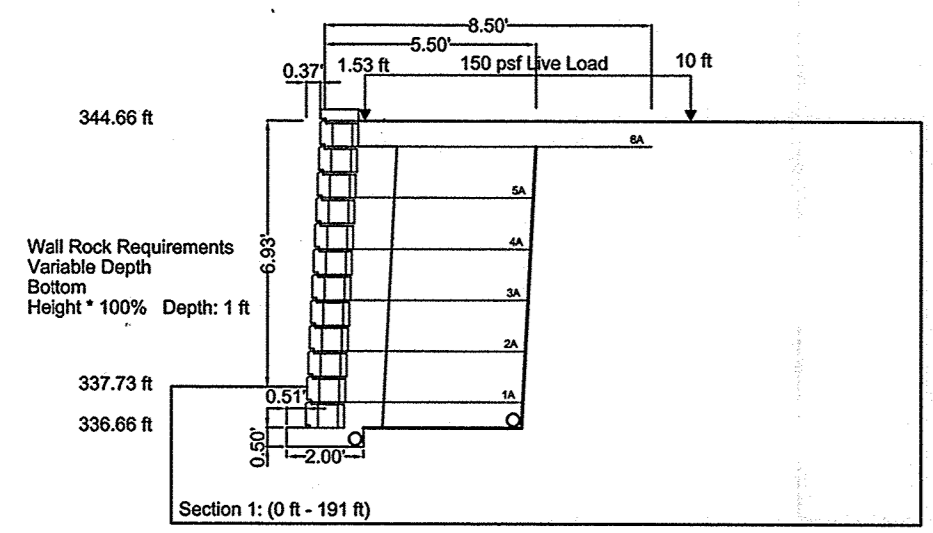


WALL #2 UPPER - ELEVATION AND PANEL VIEW
1" = 5'

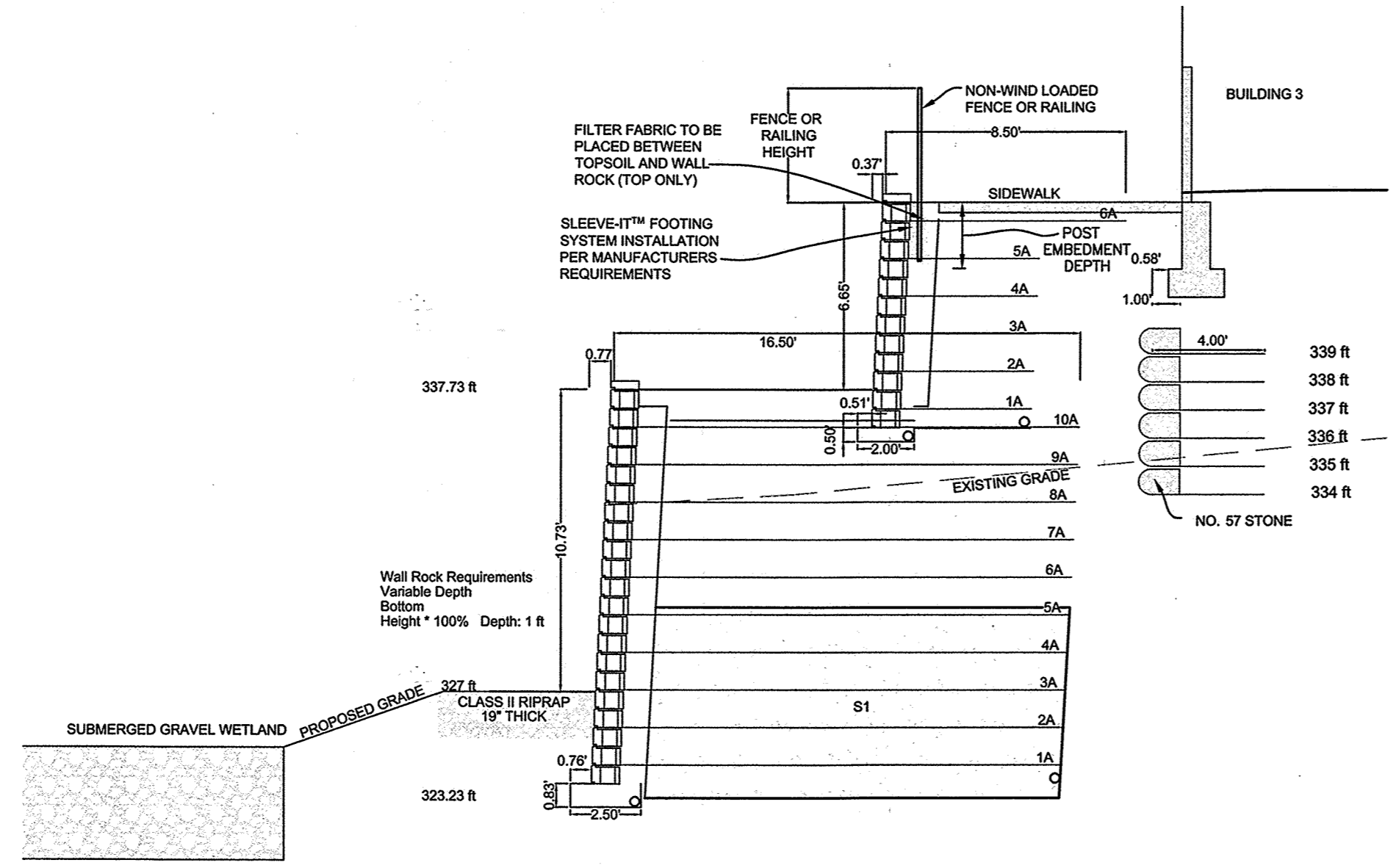
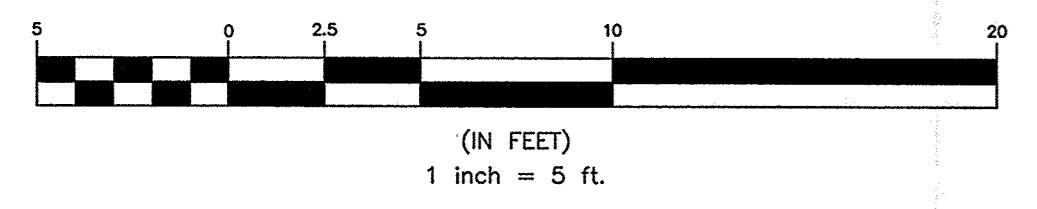
- A - Miragrid 3XT
- B - Miragrid 5XT
- C - Miragrid 7XT



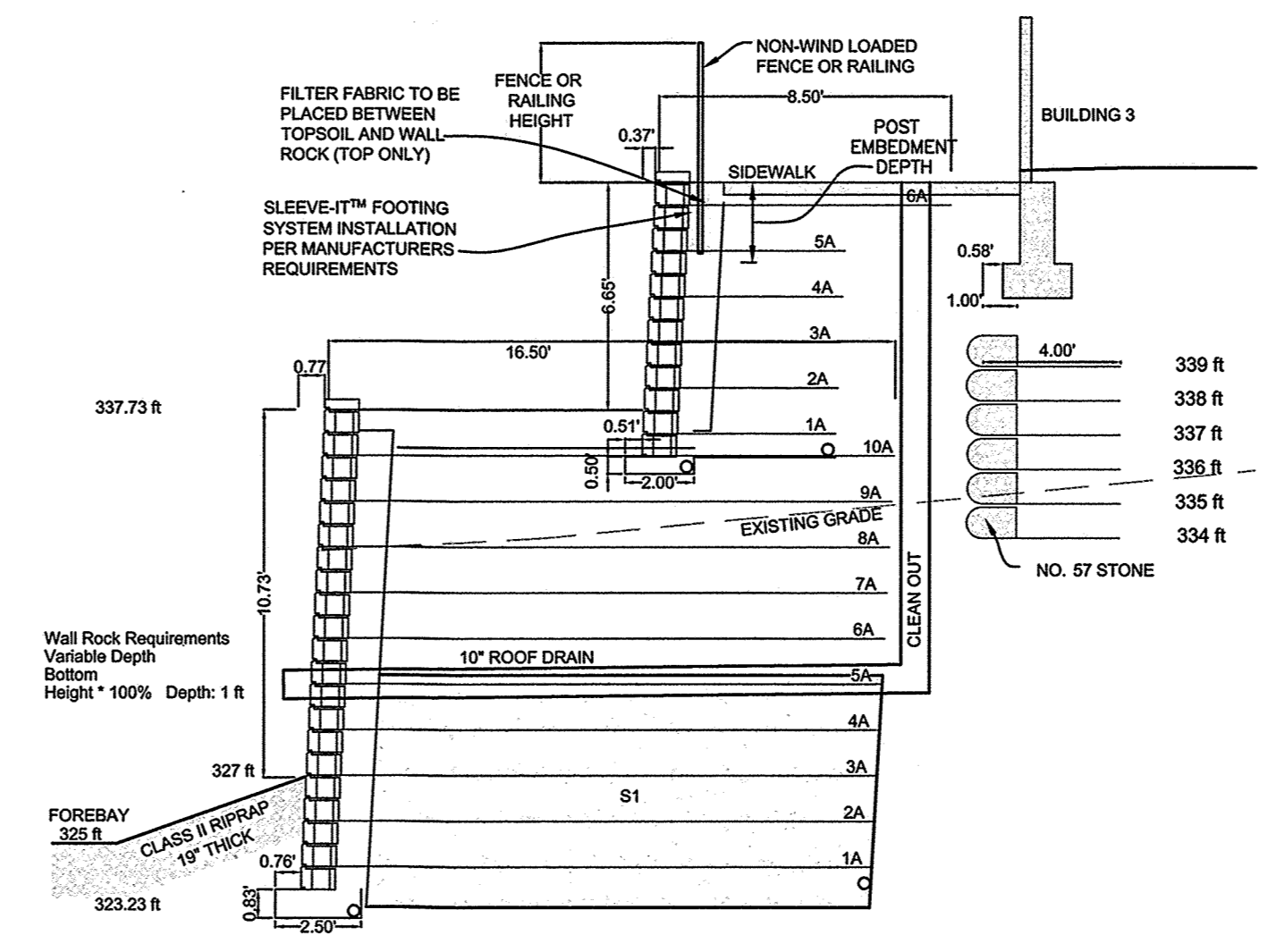
WALL #2 UPPER - ELEVATION AND PANEL VIEW
1" = 5'



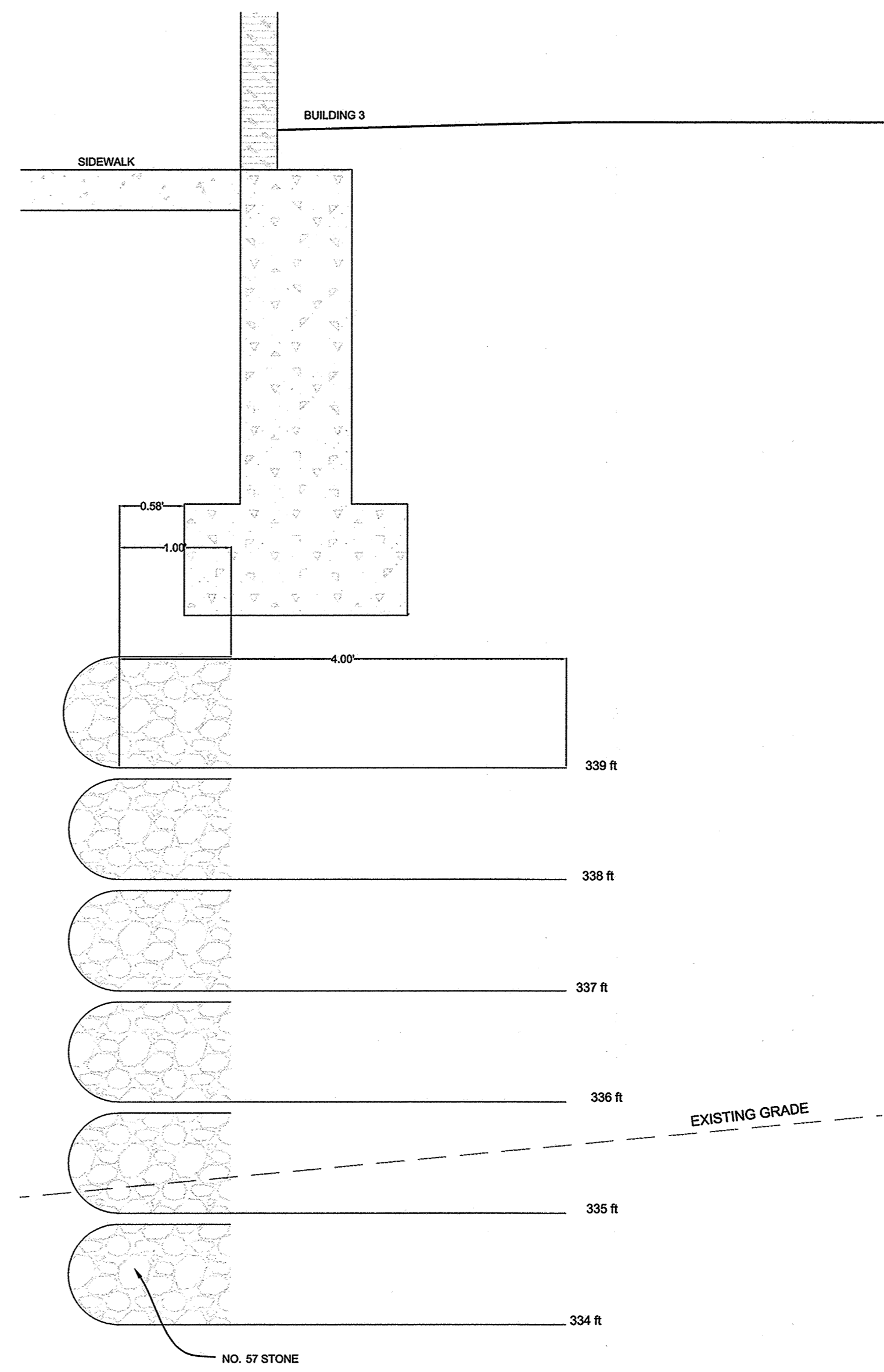
WALL #2 UPPER - SECTION 1
1" = 5'



WALL #2 TYPICAL CROSS SECTION
1" = 5'



WALL #2 ROOF DRAIN CROSS SECTION
STA 1+76.57
1" = 5'



BUILDING 3 FOOTING STABILIZATION
BLOW-UP
1" = 1'

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License No. 21443, Expiration Date: 12-21-22

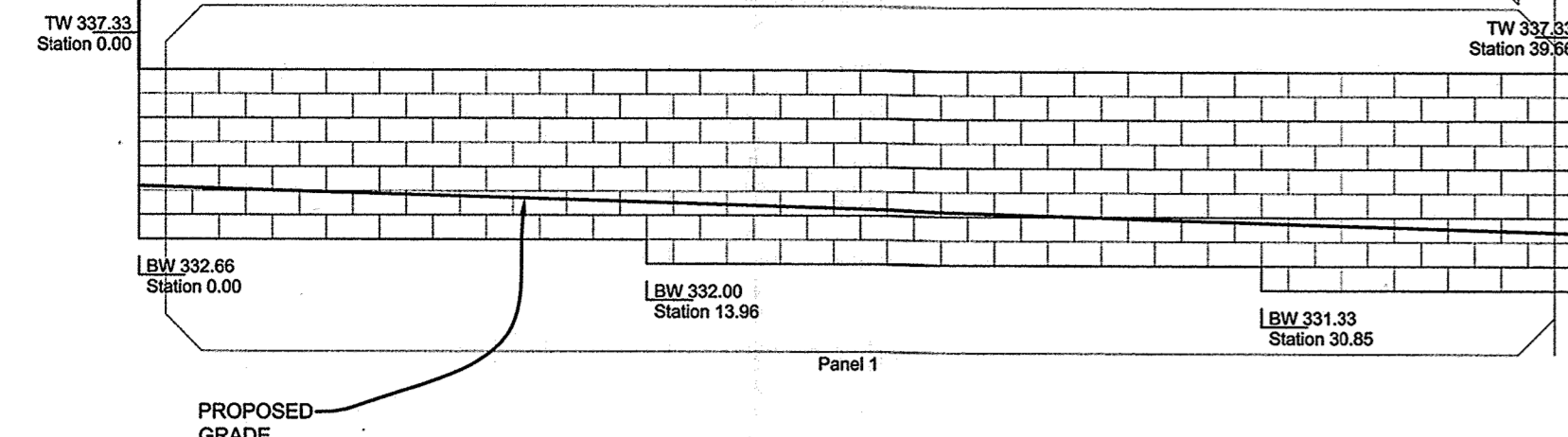
NOTE: A DESIGN MANUAL WAIVER TO THE SETBACK REQUIREMENT BETWEEN THE GEORGD OF A RETAINING WALL AND A STRUCTURE WAS APPROVED MAY 14, 2018. THE APPROVAL WAS BASED ON ADDING ADDITIONAL GEORGD BENEATH THE BUILDING PAD TO PREVENT A FAILURE OF CUT SLOPE BELOW THE BUILDING IF THE WALL MUST BE REMOVED OR REPAIRED.

1 THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.
NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
K. S. Williams, 1/26/19, CHIEF, DIVISION OF LAND DEVELOPMENT
L. J. [Signature], 1/10/19, CHIEF, DEVELOPMENT ENGINEERING DIVISION
W. J. [Signature], 1-17-19, DIRECTOR

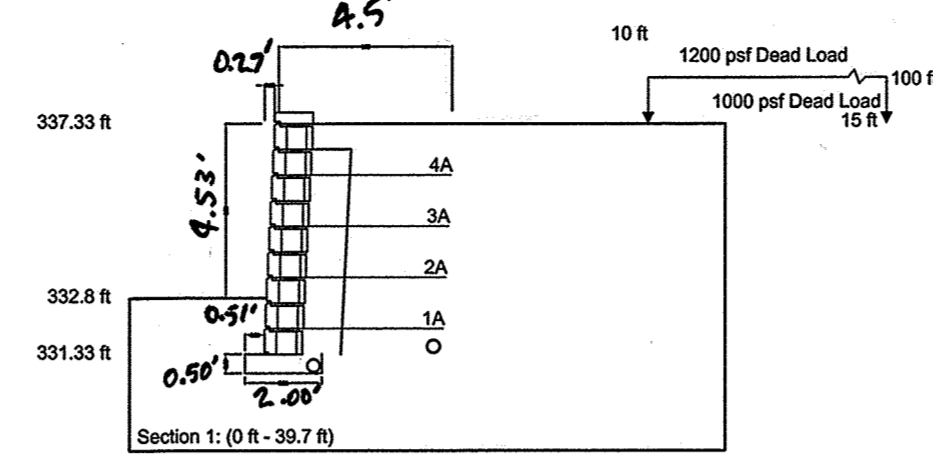
1 NOV 2018 REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.	
NO.	DATE
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 18182, Expiration Date: 03-12-19.	
 GEOTECHNICAL LABORATORIES, INC. ENGINEERS • GEOLOGISTS • CONSULTANTS	
OWNER: LOCUST THICKET INVESTORS LLC 3836 MEADOWRIDGE ROAD ELKCRIDGE, MD 21075 410-465-4244	
THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244	
DESIGN: AAM	CHECKED: CAM
DATE: JULY 2018 / DECEMBER 2018	PROJECT NO. 0925
SCALE: AS SHOWN	DRAWING 31 OF 47

GROUND:
TW: 37.3
BW: 33.8
STA 0+00 =
W2L STA 0+00

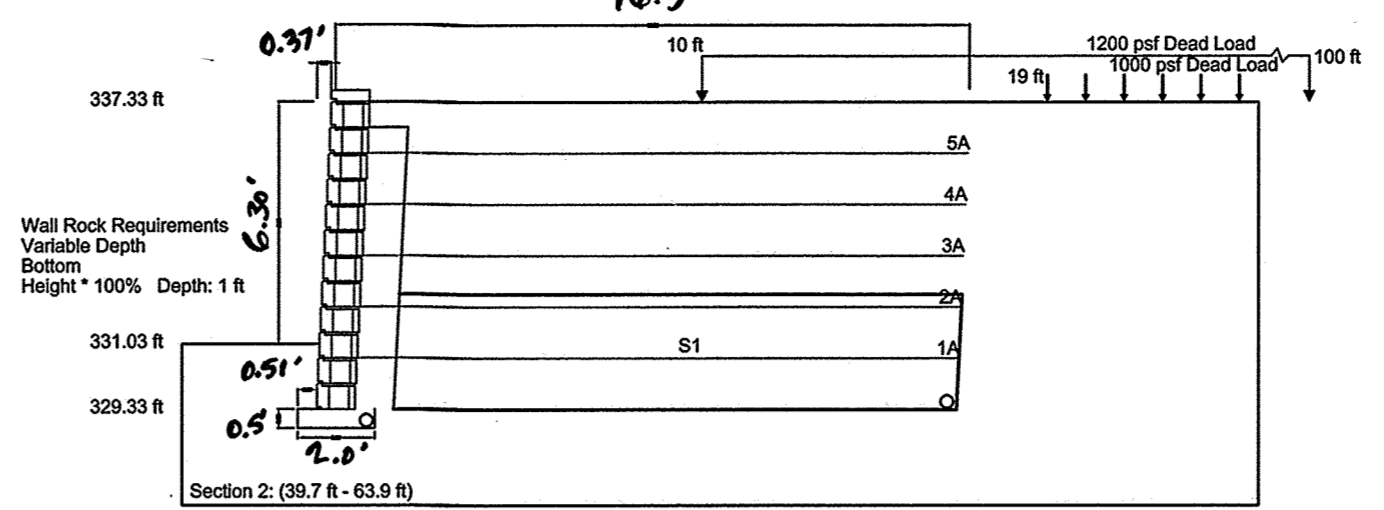


WALL #2 LOWER - ELEVATION VIEW
1" = 5'

A - Miragrid SXT
B - Miragrid FXT
C - Miragrid SXT



WALL #2 LOWER - SECTION 1
1" = 5'



WALL #2 LOWER - SECTION 2
1" = 5'

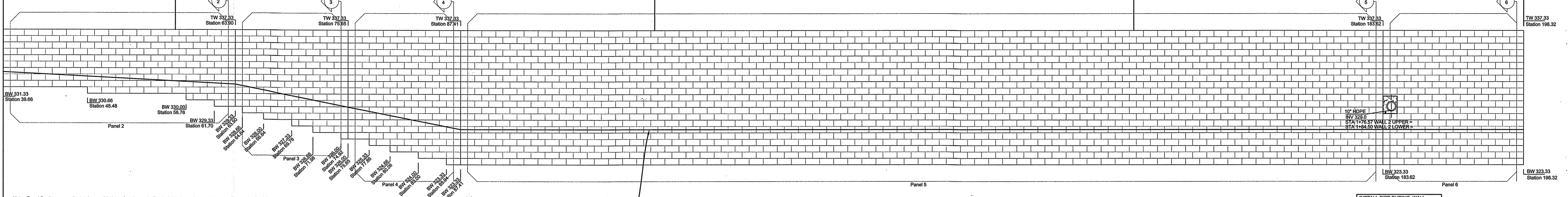
MATCHLINE THIS SHEET

GROUND:
TW: 37.3
BW: 27.5
STA 0+50 =
W2L STA 0+57.6

GROUND:
TW: 37.3
BW: 27.5
STA 1+00 =
W2L STA 1+07.6

GROUND:
TW: 37.3
BW: 27.5
STA 1+40 =
W2L STA 1+57.6

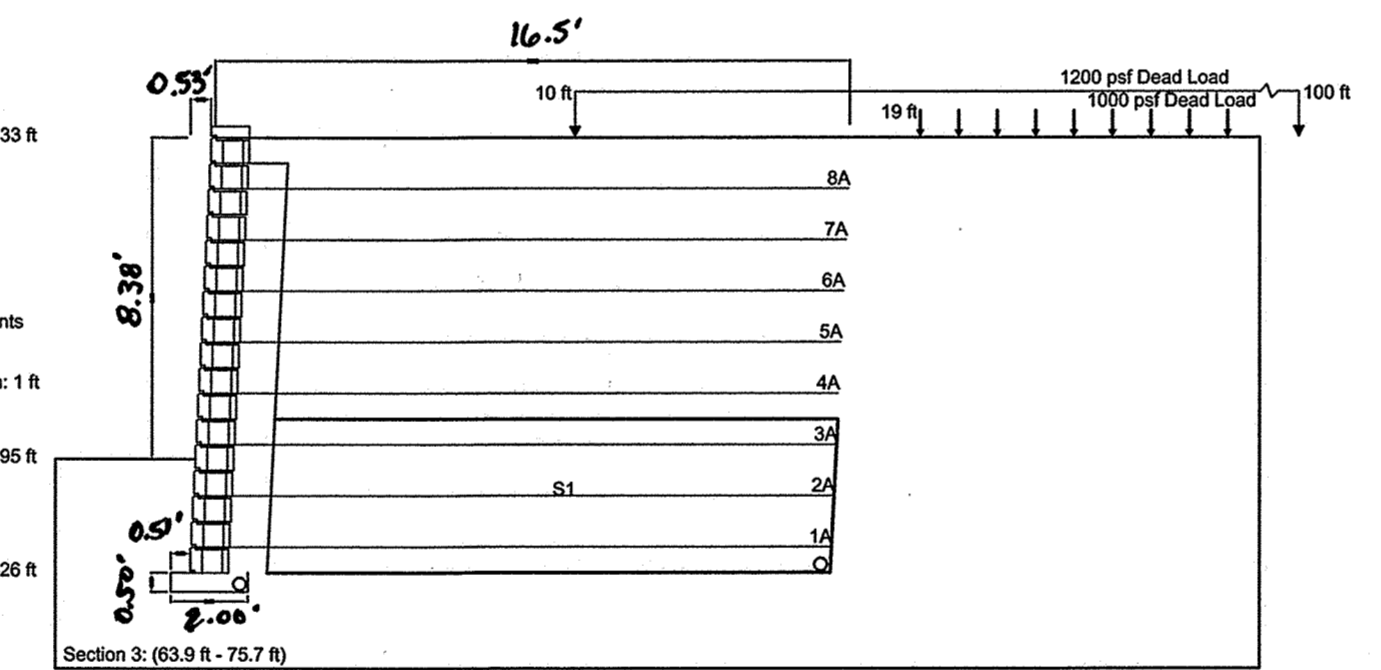
GROUND:
TW: 37.3
BW: 27.5
STA 1+90.57 =
W2L STA 1+98
END WALL



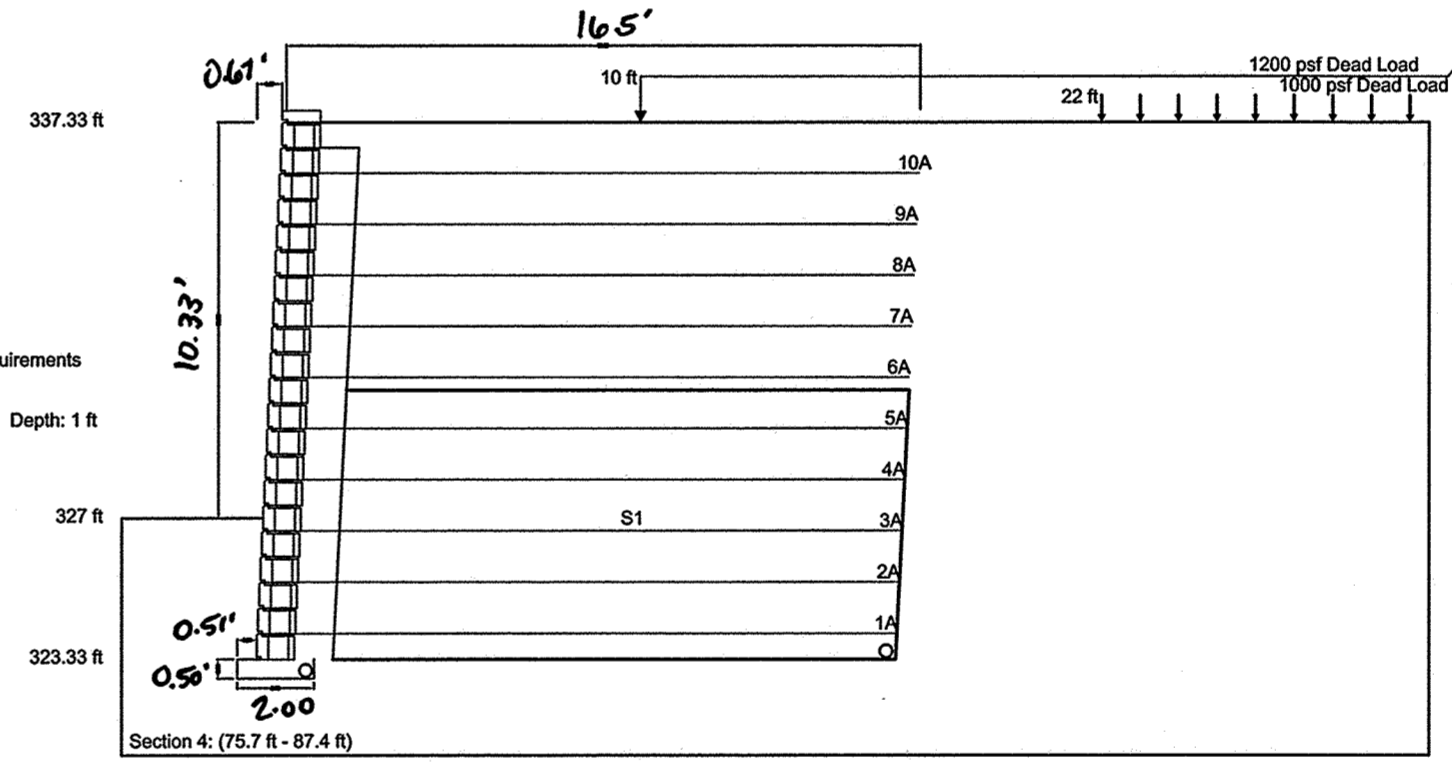
Note: Panel Sections cover the total over all height of each panel. See individual panel section drawings for geogrid strength and lengths, wall surcharge and slope above information.

INSTALL PIPE DURING WALL CONSTRUCTION. PLACE 2000 PSI CONCRETE TO CREATE PIPE COLLAR BETWEEN BLOCK OPENINGS. SEE REINFORCEMENT DETAIL SHEET 22.

WALL #2 LOWER - ELEVATION VIEW
1" = 5'



WALL #2 LOWER - SECTION 3
1" = 5'



WALL #2 LOWER - SECTION 4
1" = 5'

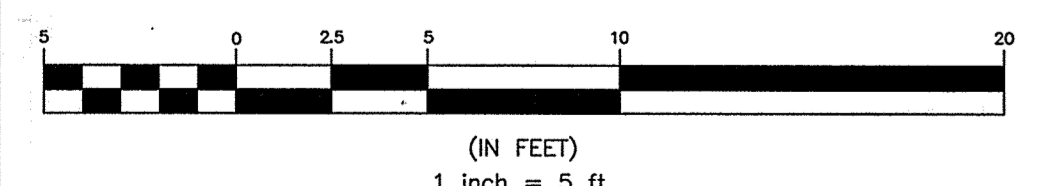
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License No. 212413, Expiration Date: 12-21-22

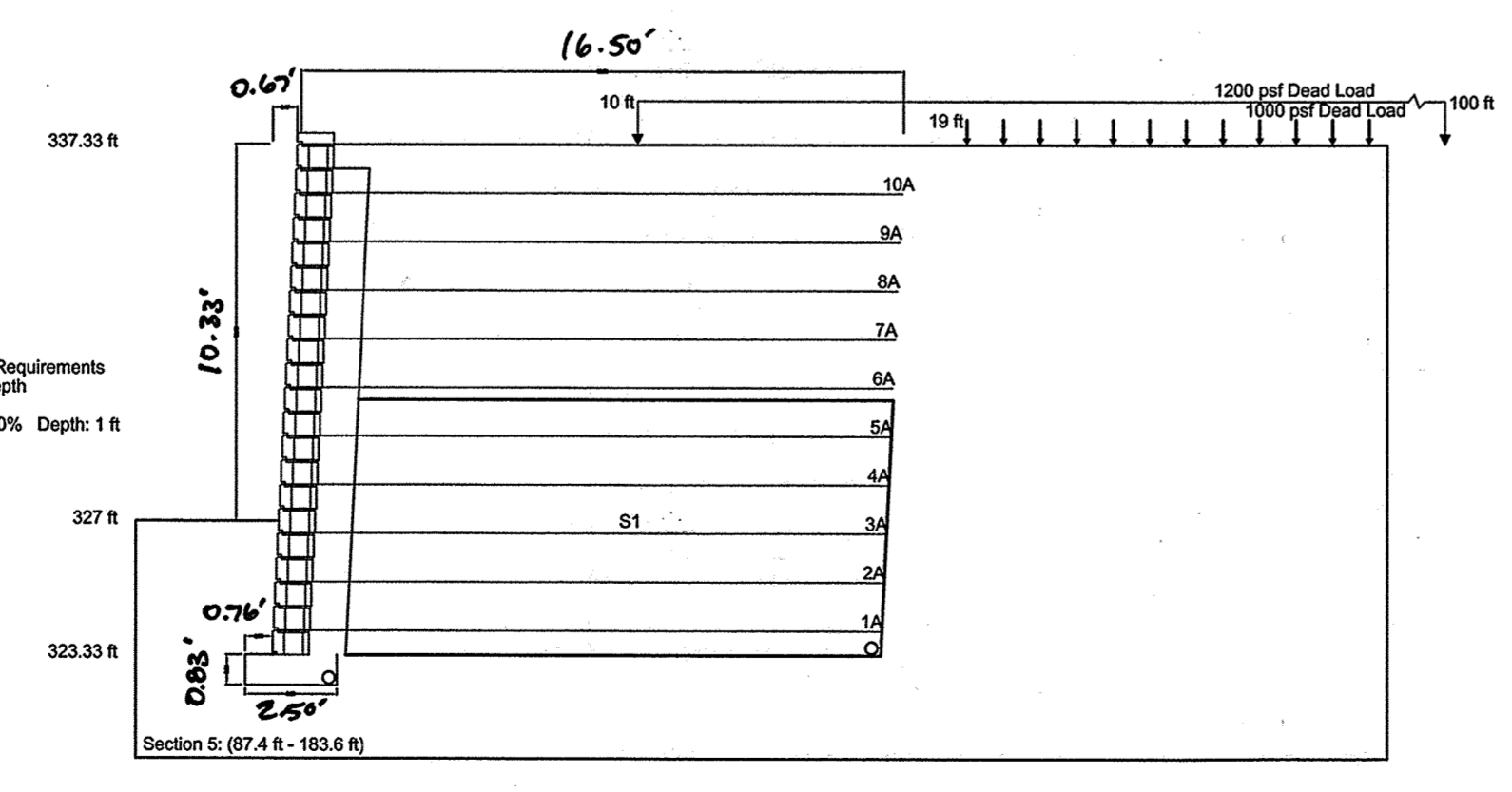


1 THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.

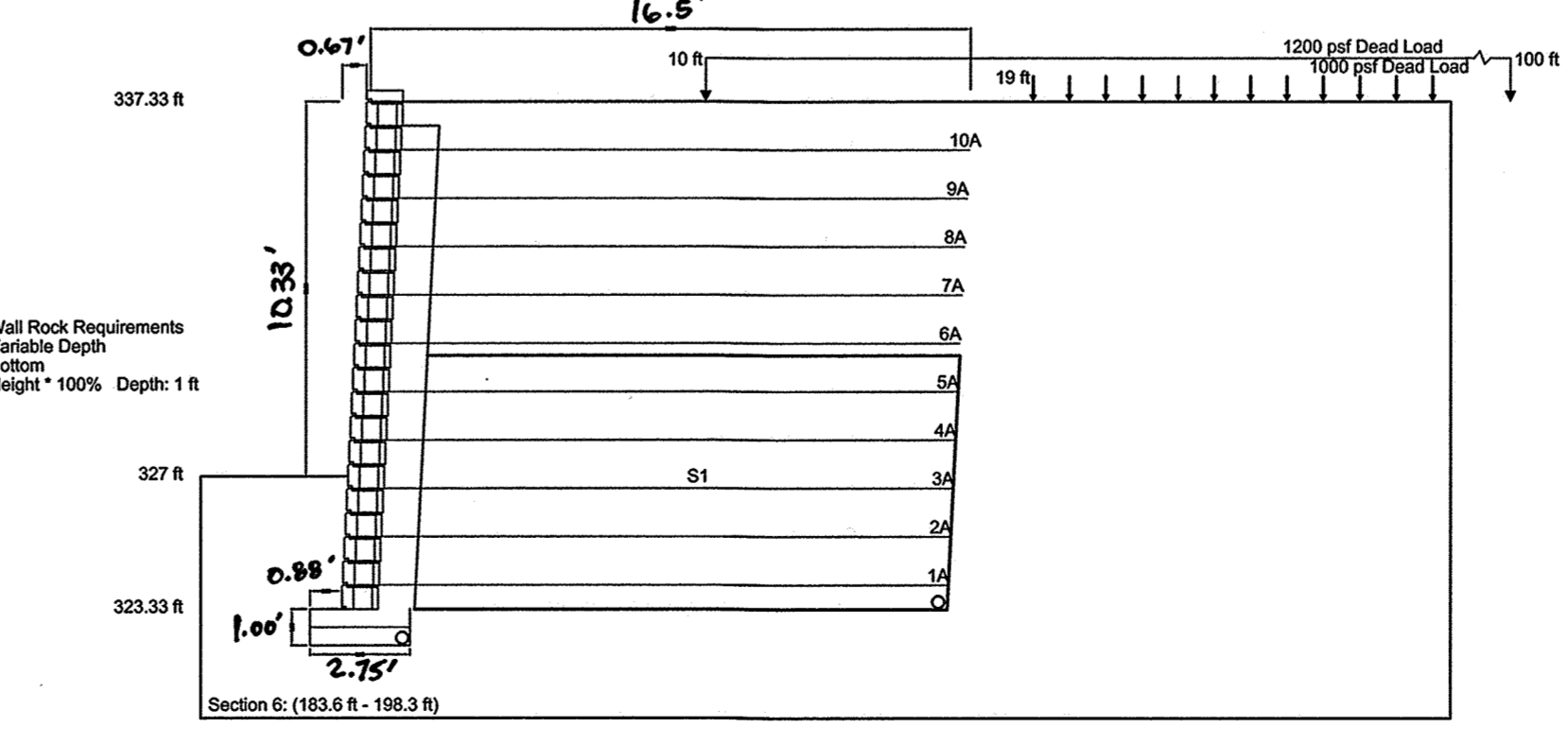
NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 1/16/19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 1/10/19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 1-17-19
 DIRECTOR



WALL #2 LOWER - SECTION 5
1" = 5'



WALL #2 LOWER - SECTION 6
1" = 5'

NO.	DATE	REVISION
2	8/2019	CORRECT SECTION DIMENSION TEXT SIZE.
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.

GEOTECHNICAL LABORATORIES, INC.
ENGINEERS • GEOLOGISTS • CONSULTANTS

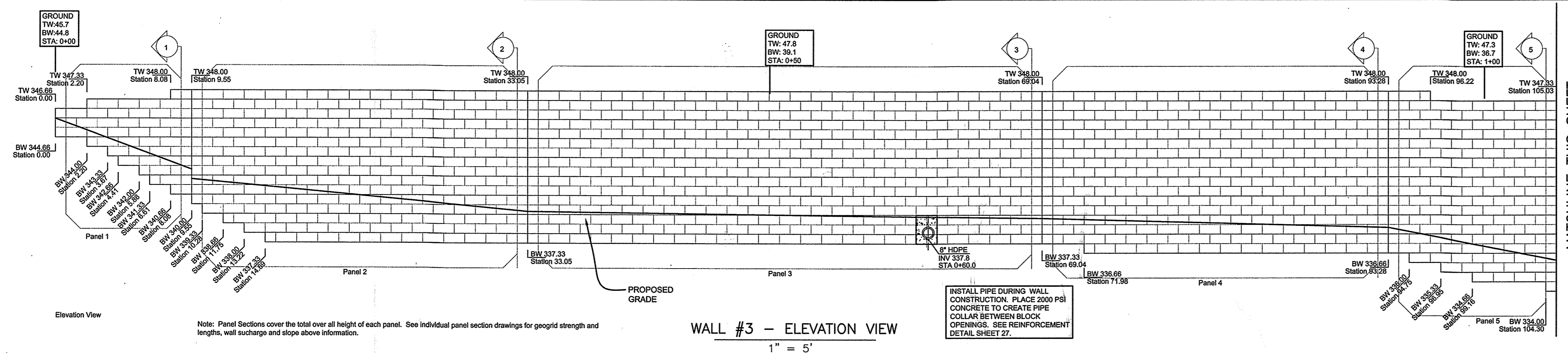
OWNER: LOCUST THICKET INVESTORS LLC
5836 MEADOWBRIDGE ROAD
ELKRIDGE, MD 21075
410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELLCOTT CITY, MD 21041
410-465-4244

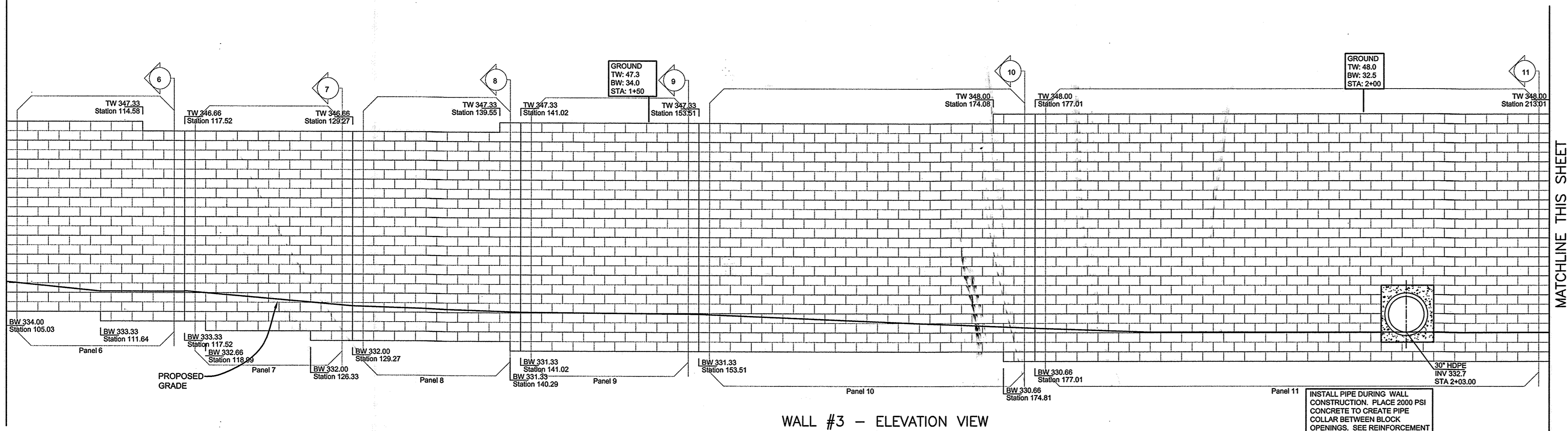
DESIGN: AM CHECKED: CAM SCALE: AS SHOWN

DATE: JULY 2018 / DECEMBER 2018 PROJECT NO. 0925

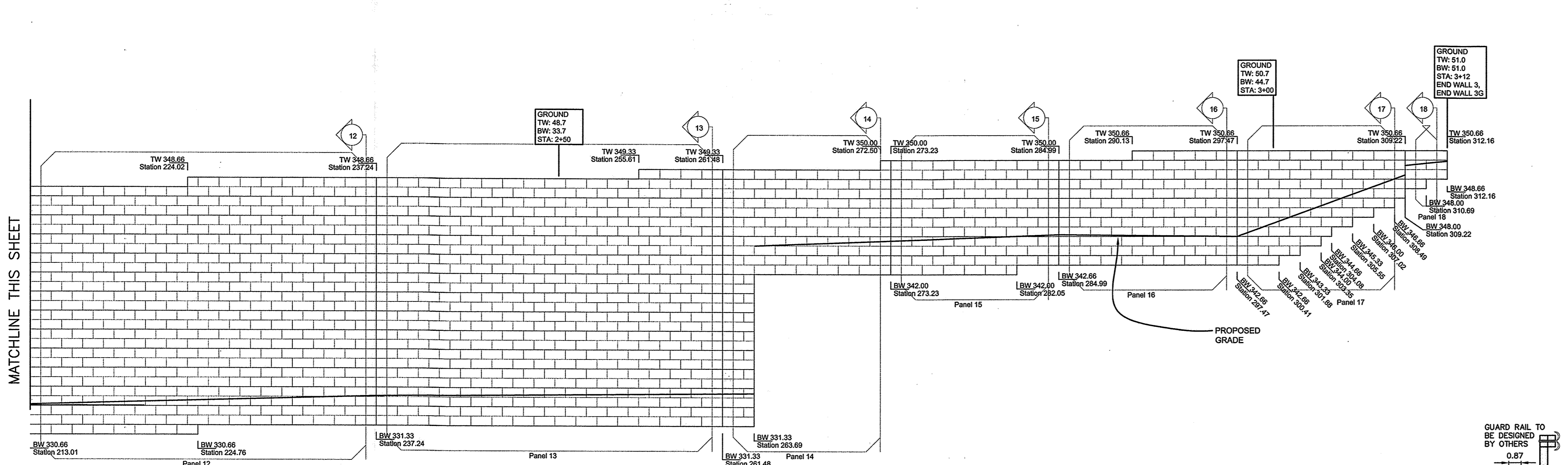
DRAWING 32 OF 47



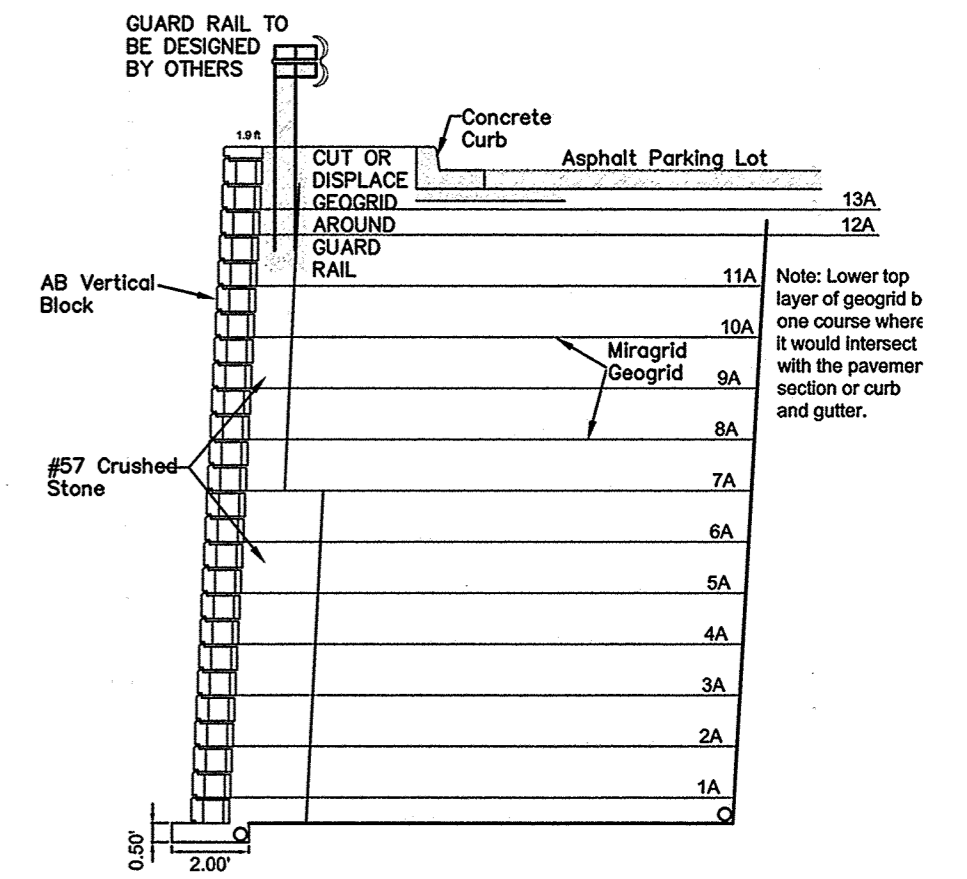
WALL #3 - ELEVATION VIEW
1" = 5'



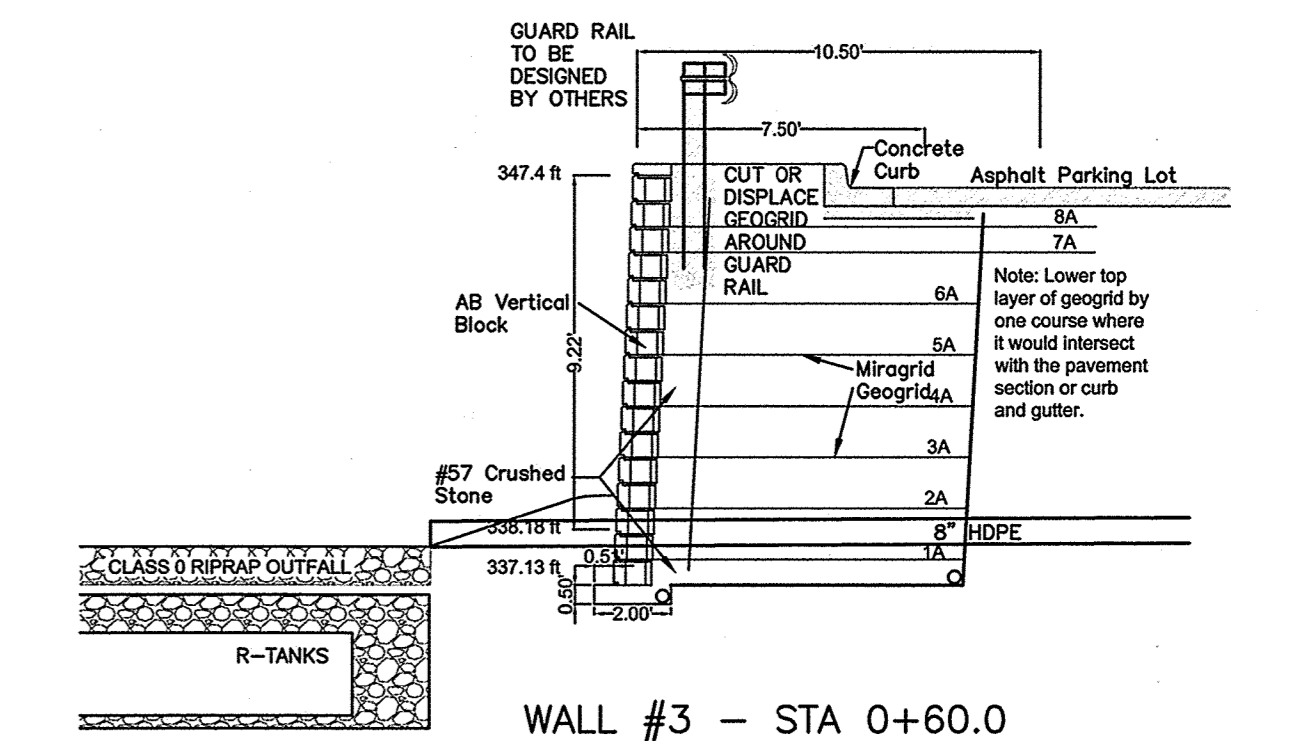
WALL #3 - ELEVATION VIEW
1" = 5'



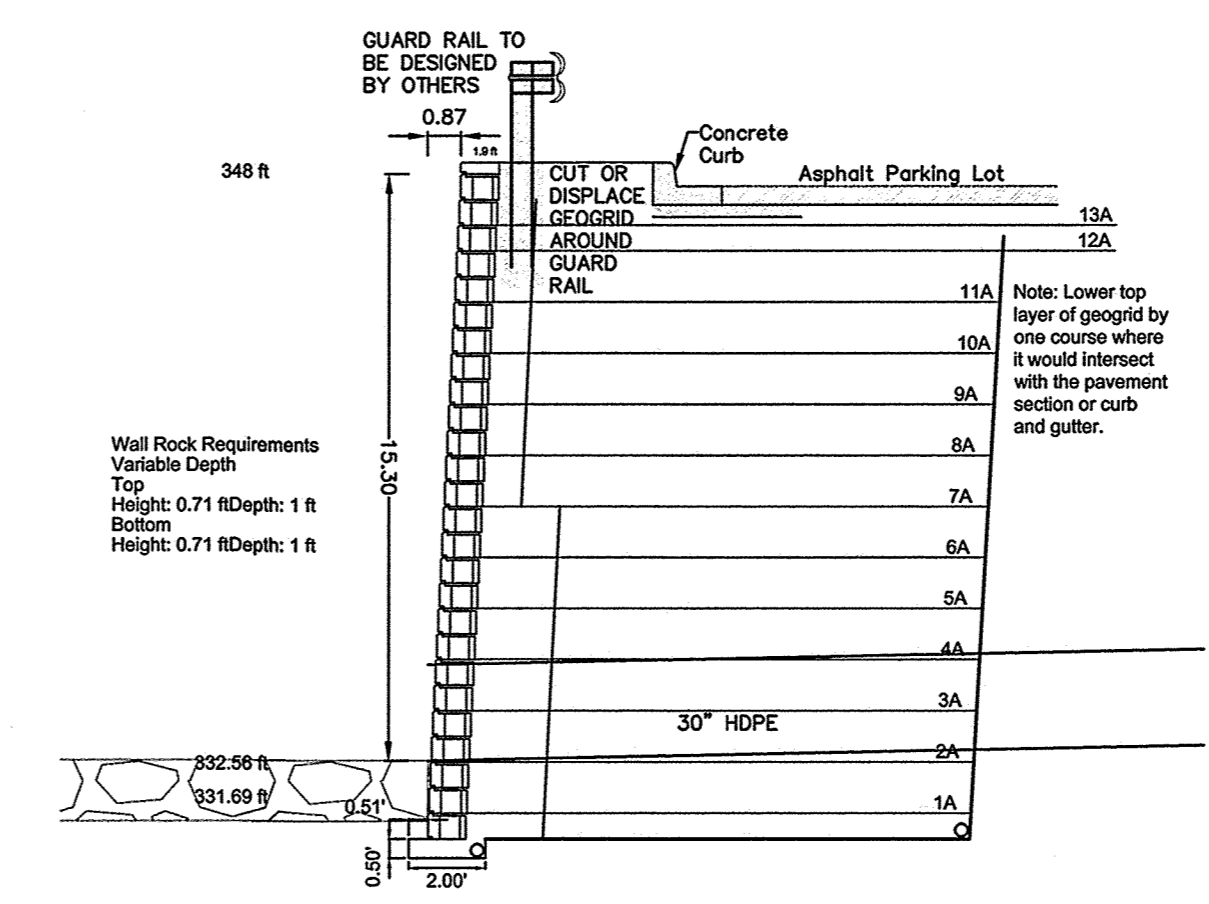
WALL #3 - ELEVATION VIEW
1" = 5'



WALL #3 - TYPICAL CROSS SECTION
1" = 5'



WALL #3 - STA 0+60.0
SD AND MB-2 CROSS SECTION
1" = 5'



WALL #3 - STA 2+03.00
30" OUTFALL CROSS SECTION
1" = 5'

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

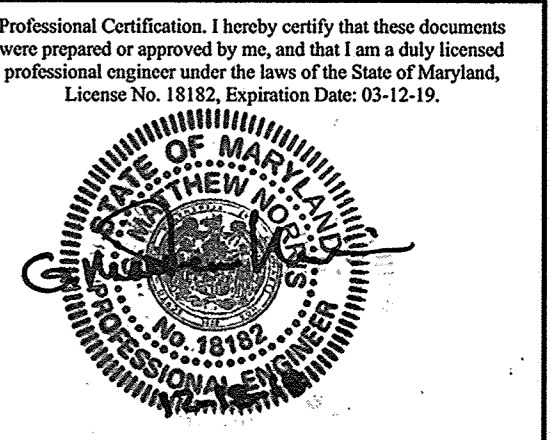
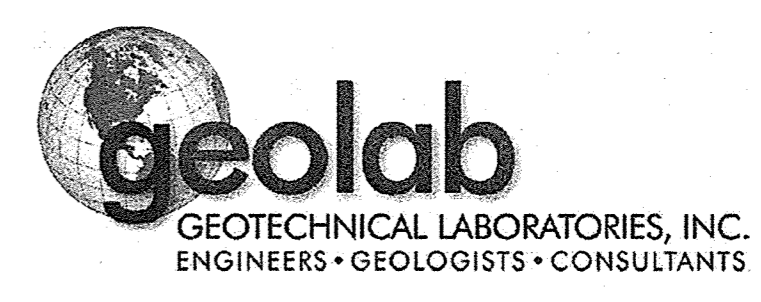


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License No. 21443, Expiration Date: 12-21-22

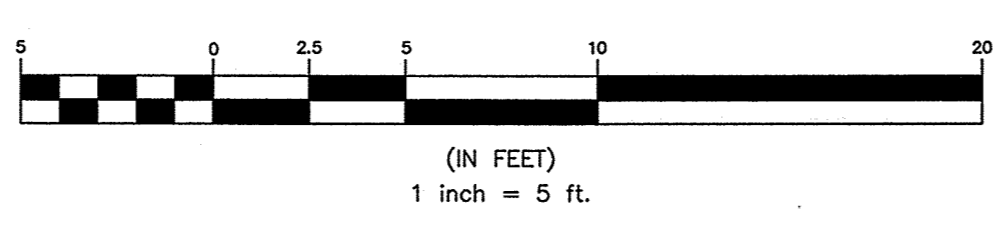
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NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 11/16/19 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 1/10/19 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 1-17-19 DATE
 DIRECTOR



OWNER:
LOCUST THICKET INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELK RIDGE, MD 21075
410-465-4244

DEVELOPER:
LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELLCOTT CITY, MD 21041
410-465-4244

DESIGN: AM CHECKED: CAM

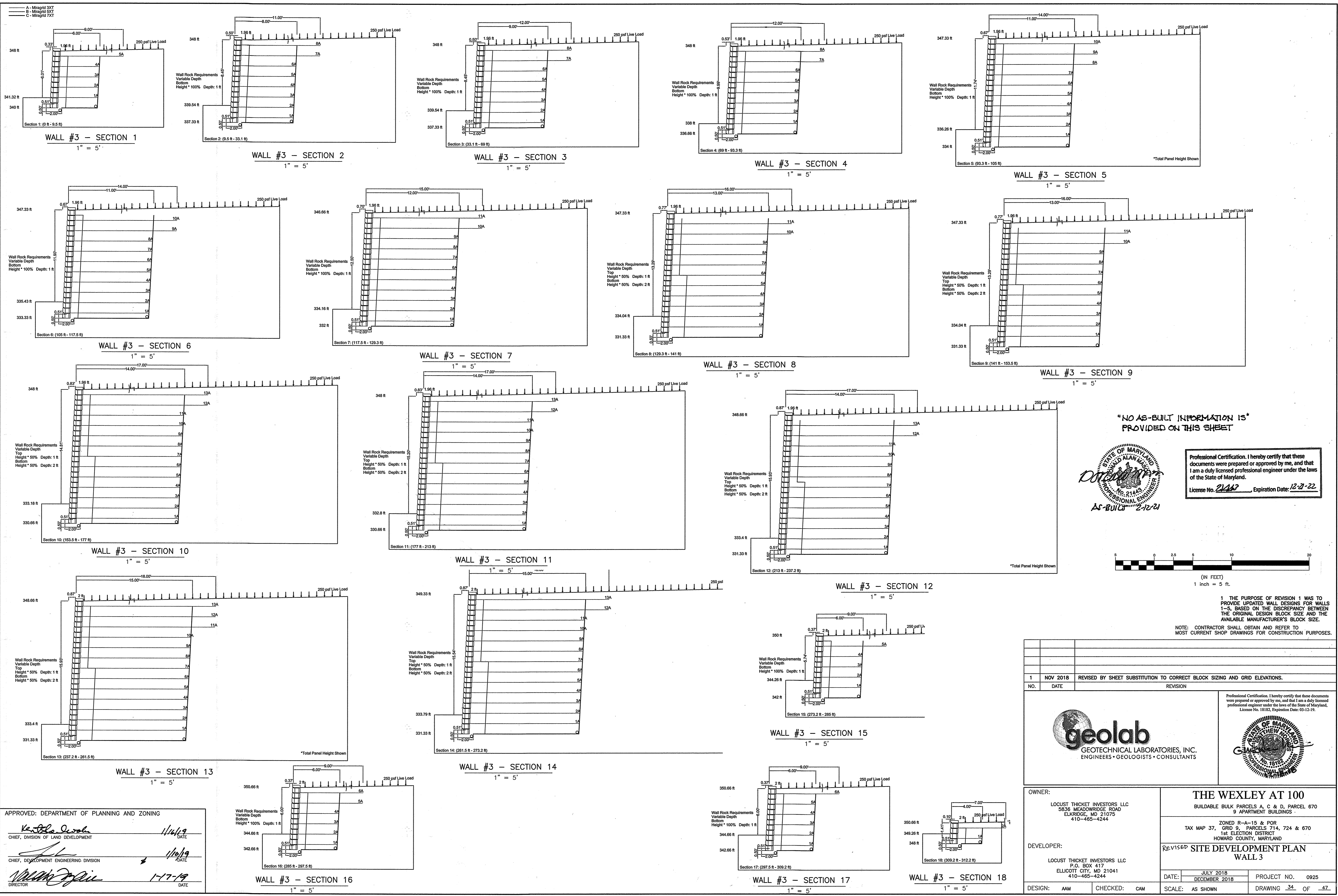
DATE: JULY 2018 PROJECT NO. 0925
DECEMBER 2018

SCALE: AS SHOWN DRAWING 33 OF 47

THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D, PARCEL 670
9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714, 724 & 670
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

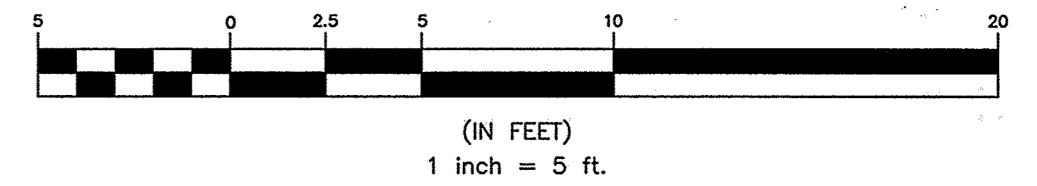
REVISED SITE DEVELOPMENT PLAN
WALL 3



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21448, Expiration Date: 12-21-22



1. THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.
 NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.

GEOTECHNICAL LABORATORIES, INC.
ENGINEERS • GEOLOGISTS • CONSULTANTS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Kent Blalock 1/16/19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 1/16/19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 1-17-19
 DIRECTOR DATE

OWNER:
 LOCUST THICKET INVESTORS LLC
 5636 MEADOWBRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

DEVELOPER:
 LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AMM CHECKED: CAM SCALE: AS SHOWN

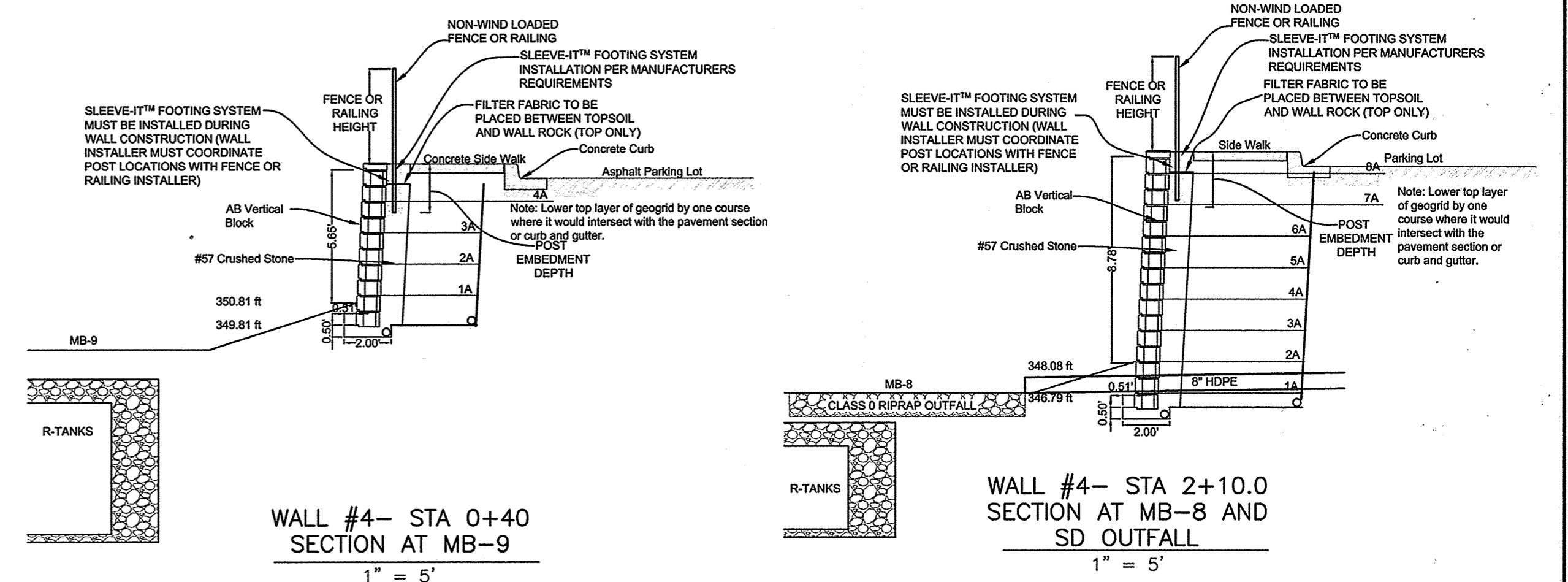
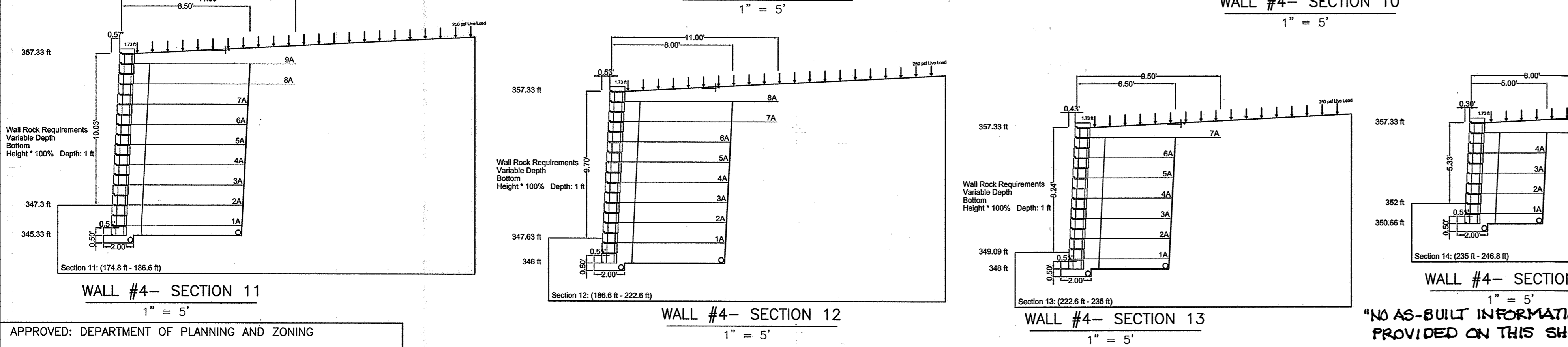
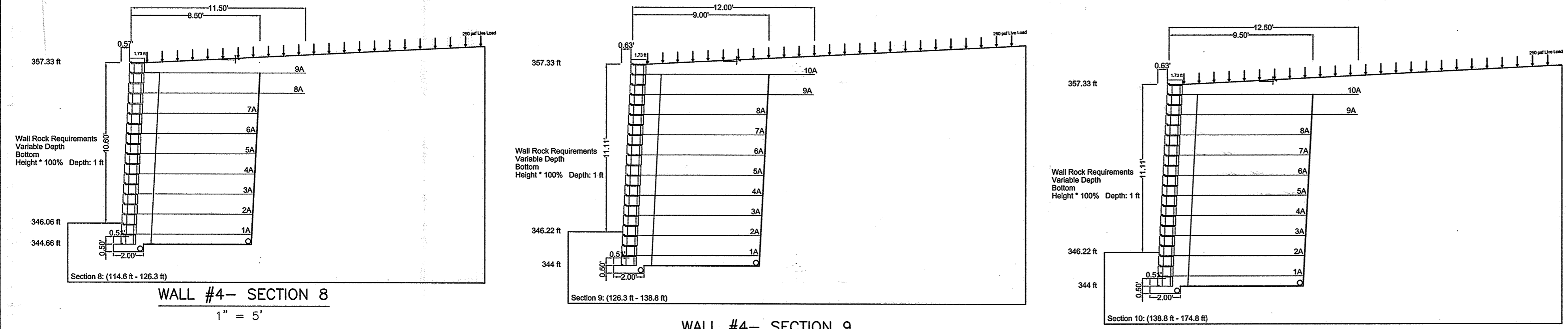
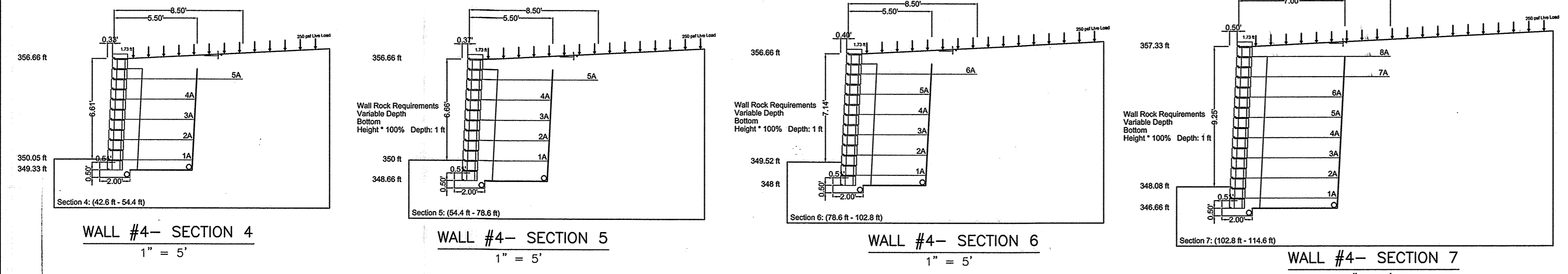
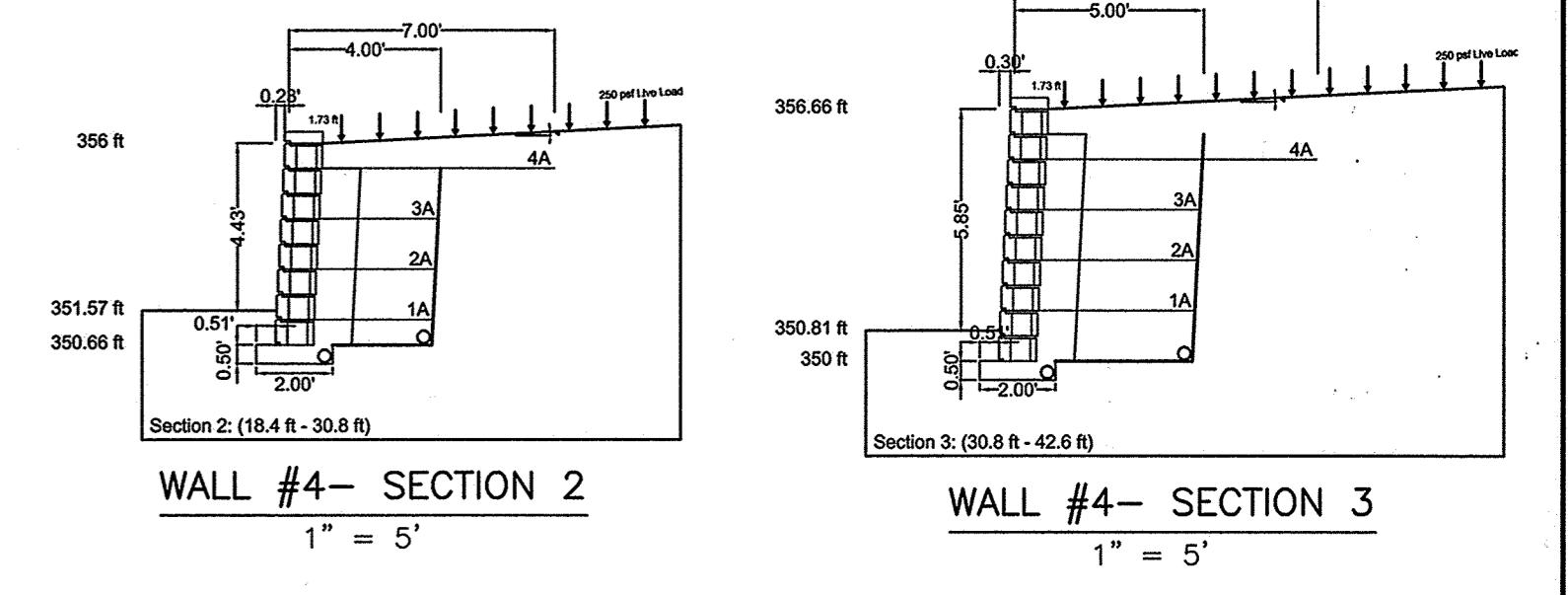
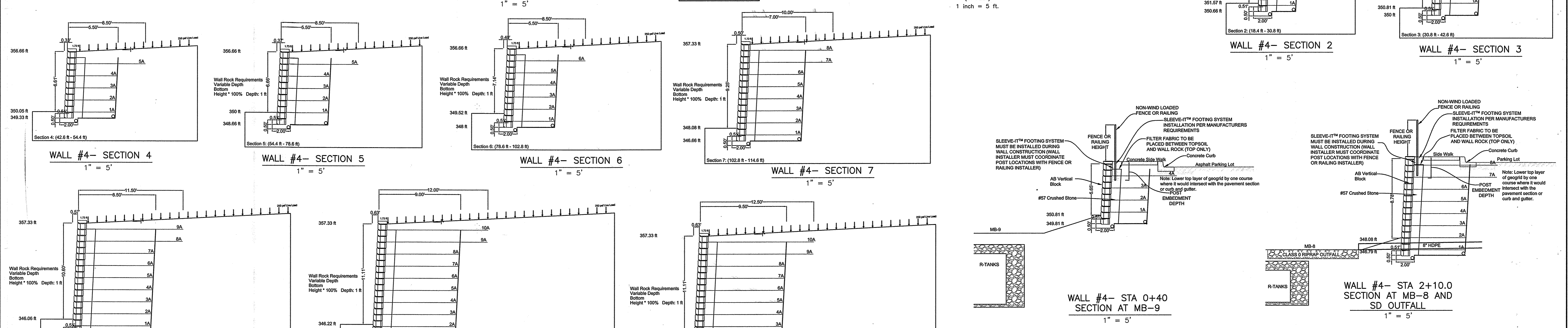
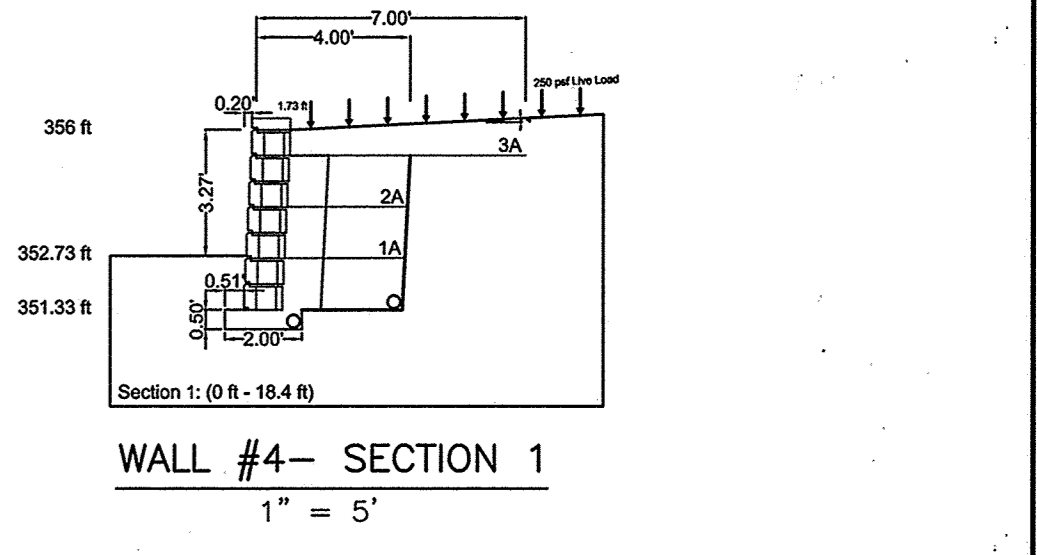
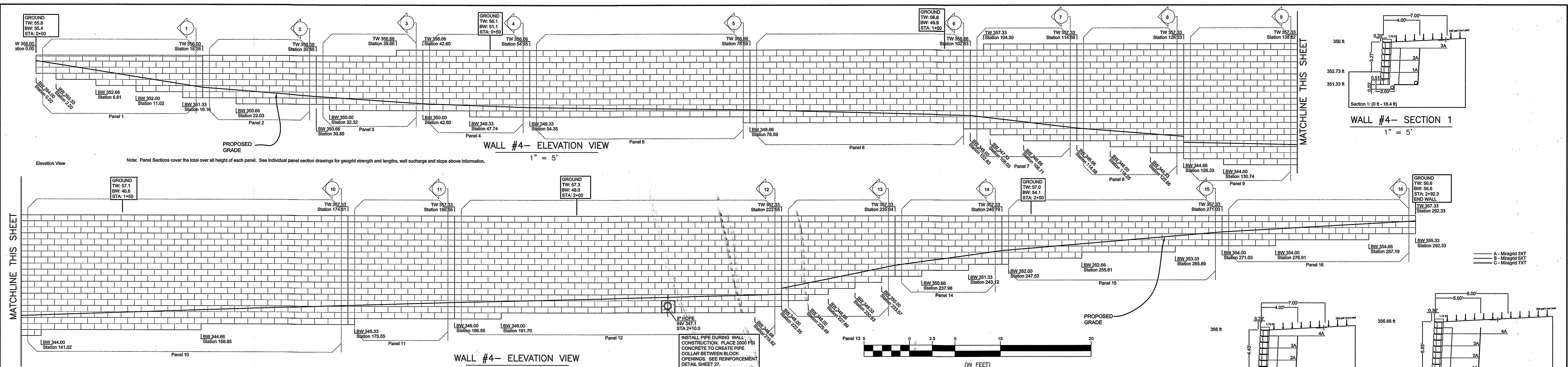
THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D, PARCEL 670
 9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714, 724 & 670
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

REVISED SITE DEVELOPMENT PLAN
 WALL 3

DATE: JULY 2018 PROJECT NO. 0925
 DECEMBER 2018

DRAWING 34 OF 47



1 THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.

NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Kentley Lewis 1/10/19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Valerie Flynn 1-17-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Valerie Flynn 1-17-19
DIRECTOR DATE



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 21443 Expiration Date: 2-28-22

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.

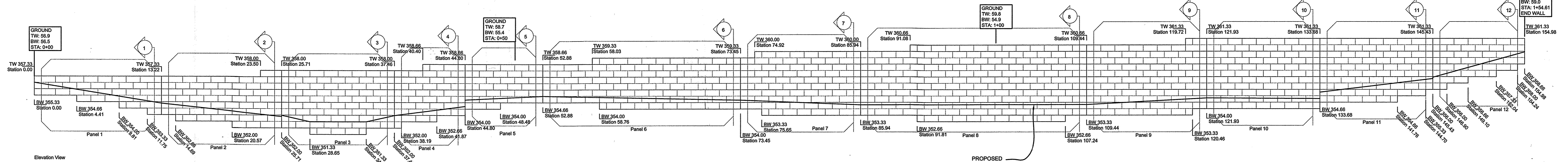
OWNER:	LOCUST THICKET INVESTORS LLC 5636 MEADOWBRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244
DEVELOPER:	LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244
DESIGN:	AM
CHECKED:	CAM

DATE:	JULY 2018 DECEMBER 2018	PROJECT NO.:	0925
SCALE:	AS SHOWN	DRAWING:	35 OF 47

 geolab GEOTECHNICAL LABORATORIES, INC. ENGINEERS • GEOLOGISTS • CONSULTANTS	
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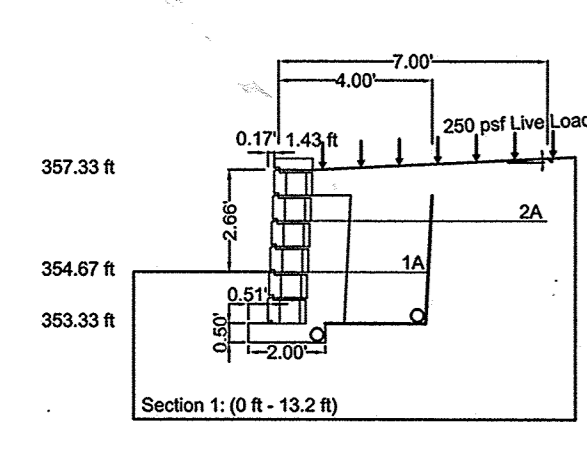
THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND REVISED SITE DEVELOPMENT PLAN WALL #4

A - Miragrid 3XT
B - Miragrid 5XT

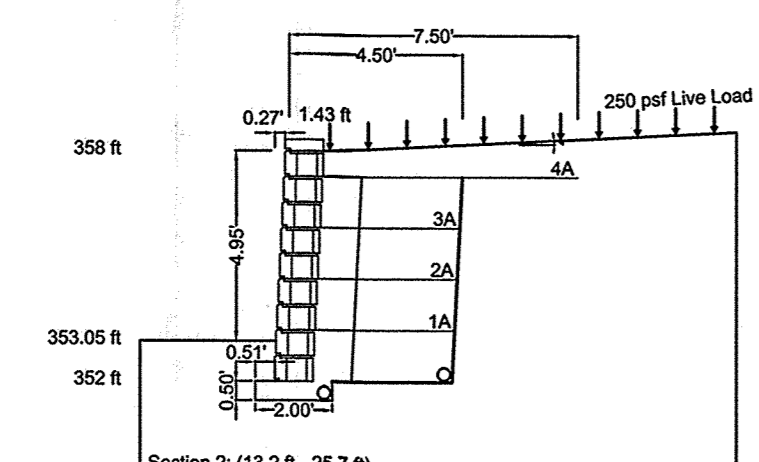


WALL #5 - ELEVATION VIEW
1" = 5'

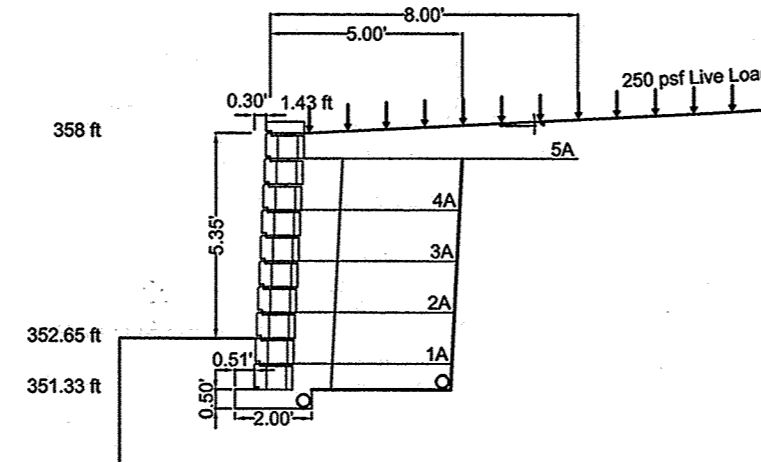
Note: Panel Sections cover the total over all height of each panel. See individual panel section drawings for geogrid strength and lengths, wall surcharge and slope above information.



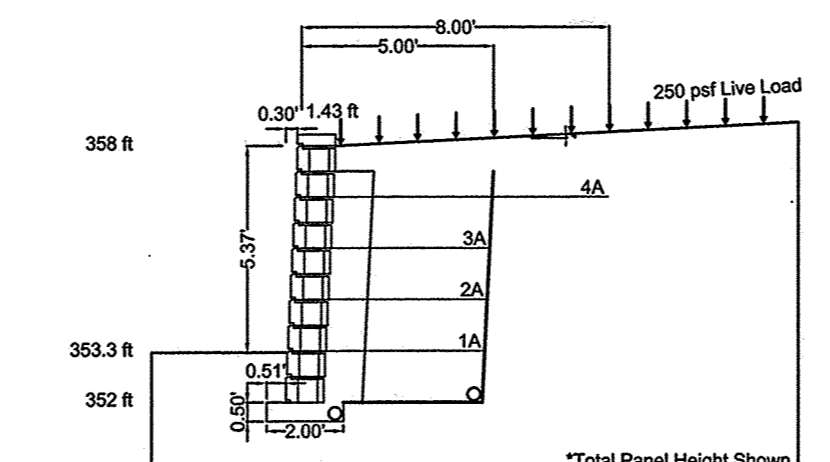
WALL #5 - SECTION 1
1" = 5'



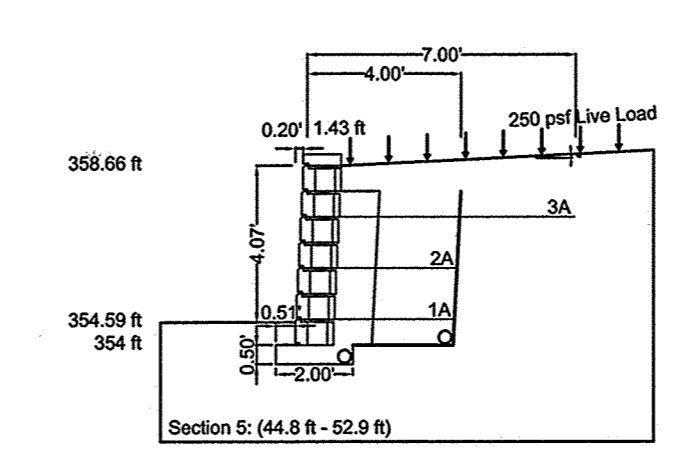
WALL #5 - SECTION 2
1" = 5'



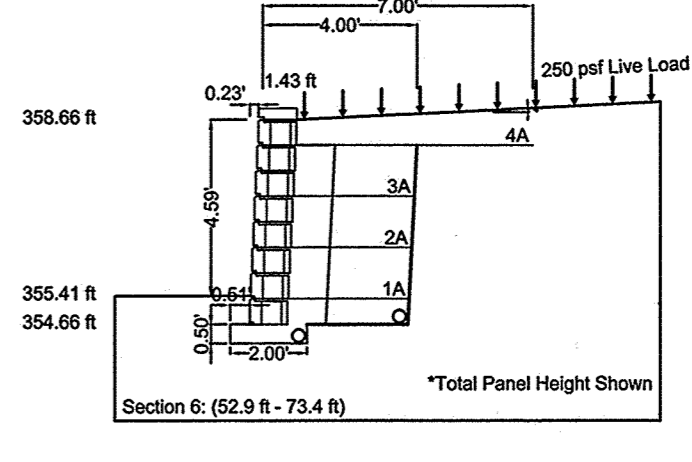
WALL #5 - SECTION 3
1" = 5'



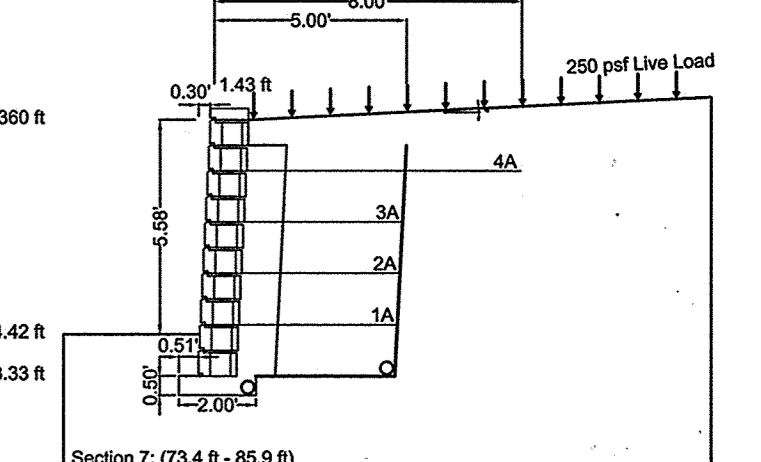
WALL #5 - SECTION 4
1" = 5'



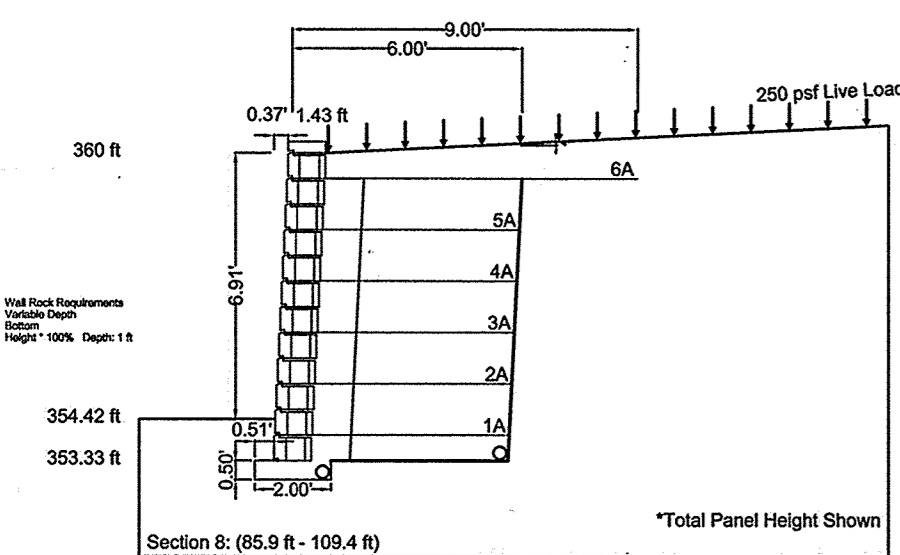
WALL #5 - SECTION 5
1" = 5'



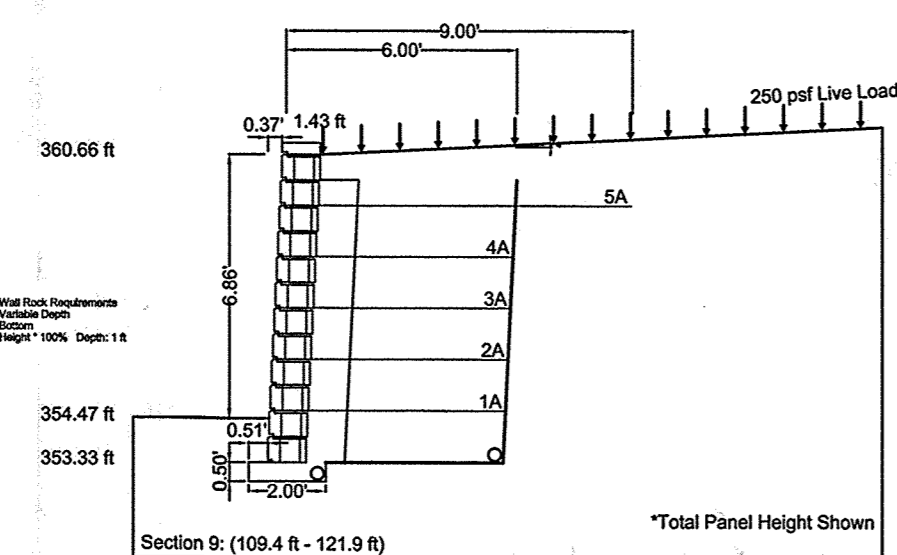
WALL #5 - SECTION 6
1" = 5'



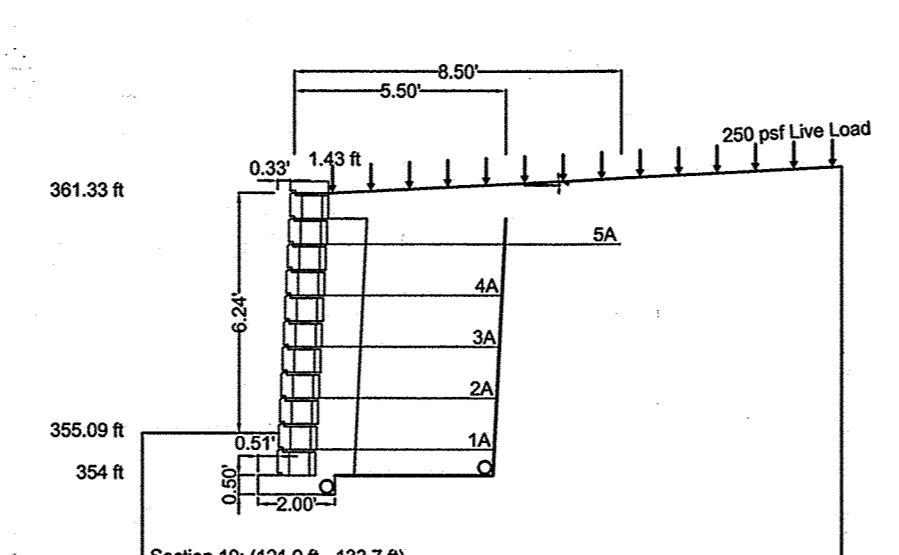
WALL #5 - SECTION 7
1" = 5'



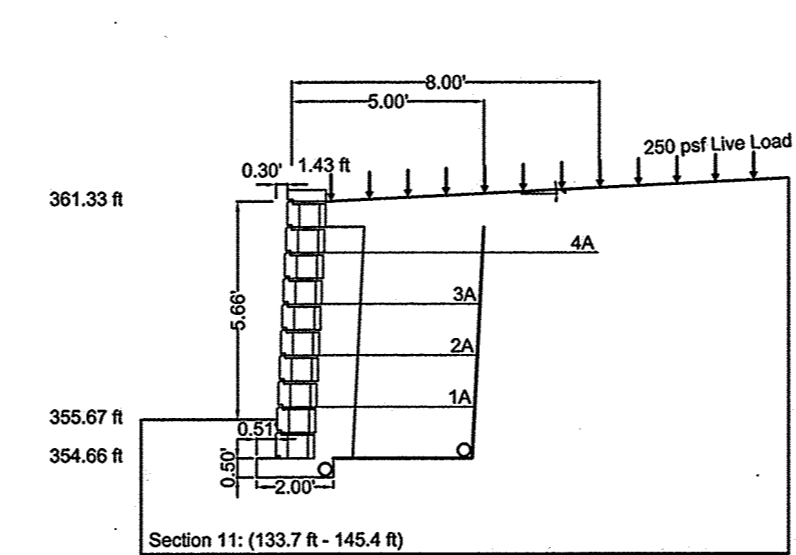
WALL #5 - SECTION 8
1" = 5'



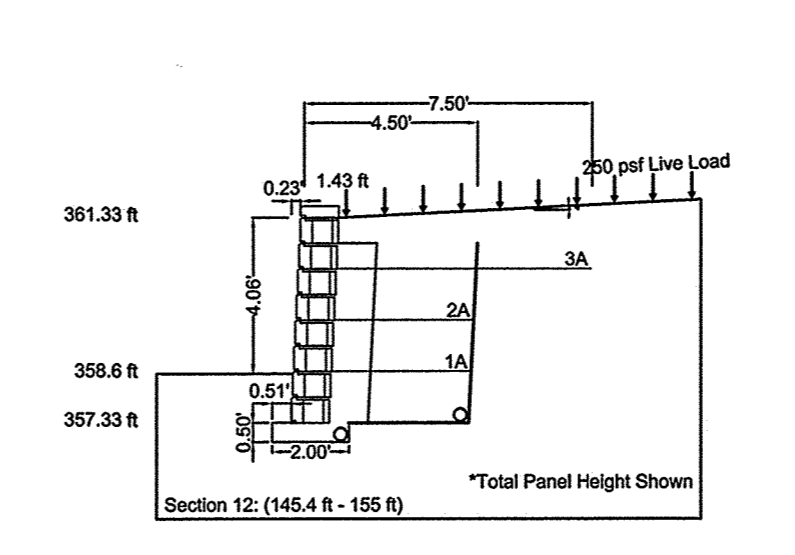
WALL #5 - SECTION 9
1" = 5'



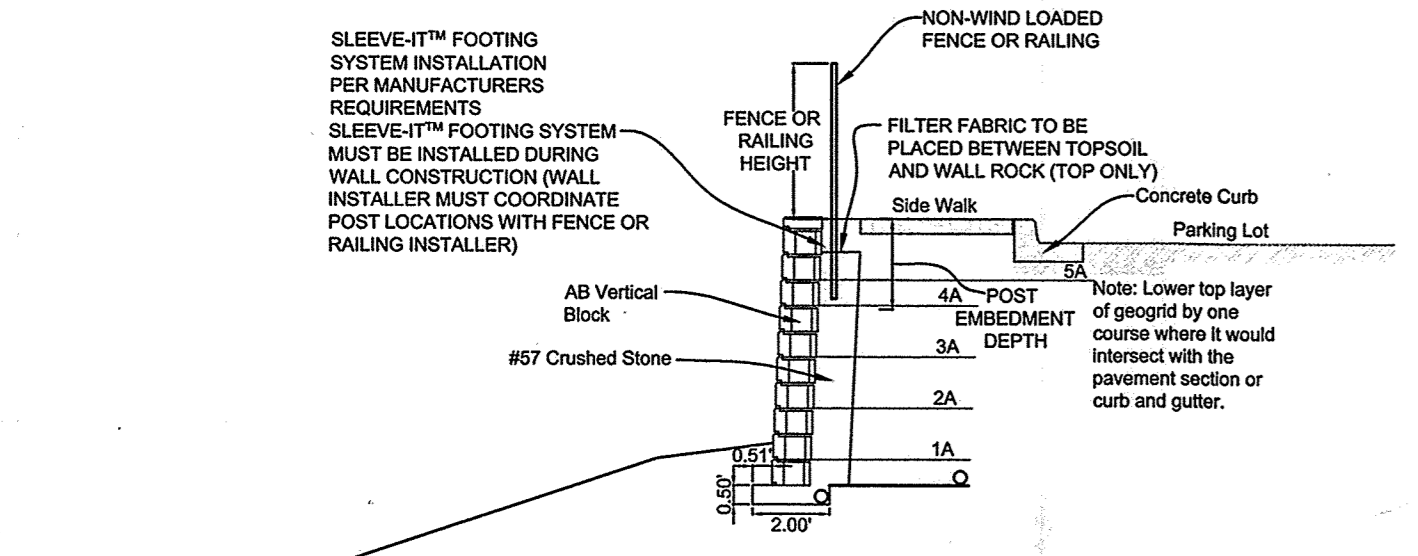
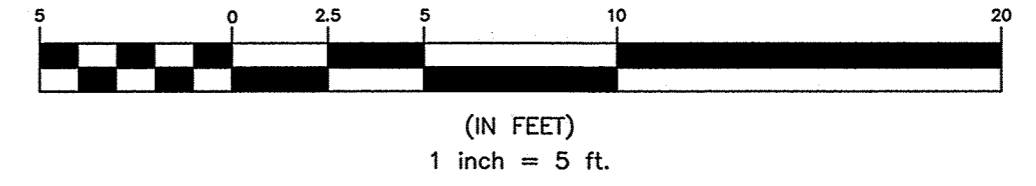
WALL #5 - SECTION 10
1" = 5'



WALL #5 - SECTION 11
1" = 5'



WALL #5 - SECTION 12
1" = 5'



WALL #5 - STA 0+29
SECTION AT MB-7
1" = 5'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Veronica L. ... 1/16/19 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 1/16/19 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Walter J. ... 1-17-19 DATE
DIRECTOR

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

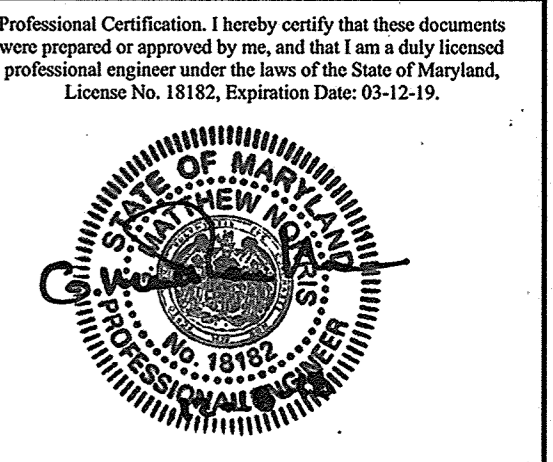
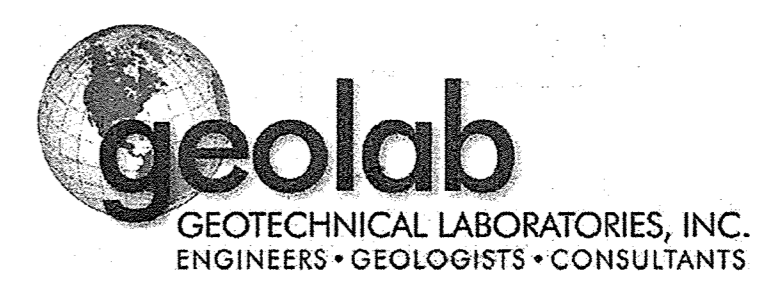


Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21442, Expiration Date: 12-21-22

1 THE PURPOSE OF REVISION 1 WAS TO PROVIDE UPDATED WALL DESIGNS FOR WALLS 1-5, BASED ON THE DISCREPANCY BETWEEN THE ORIGINAL DESIGN BLOCK SIZE AND THE AVAILABLE MANUFACTURER'S BLOCK SIZE.

NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

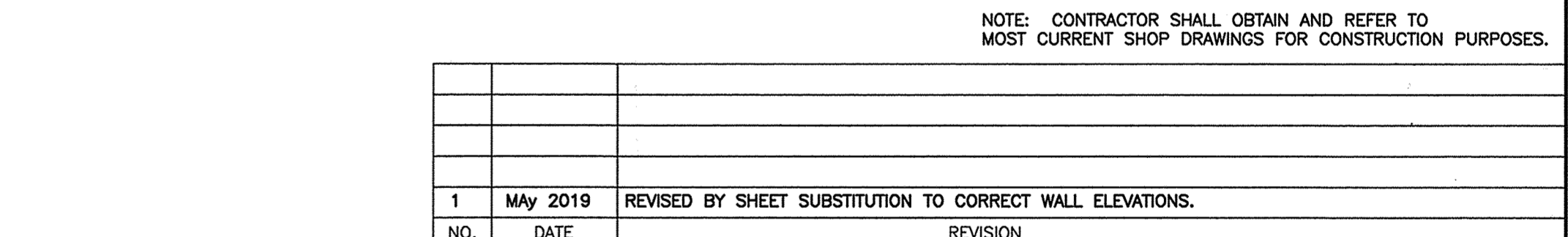
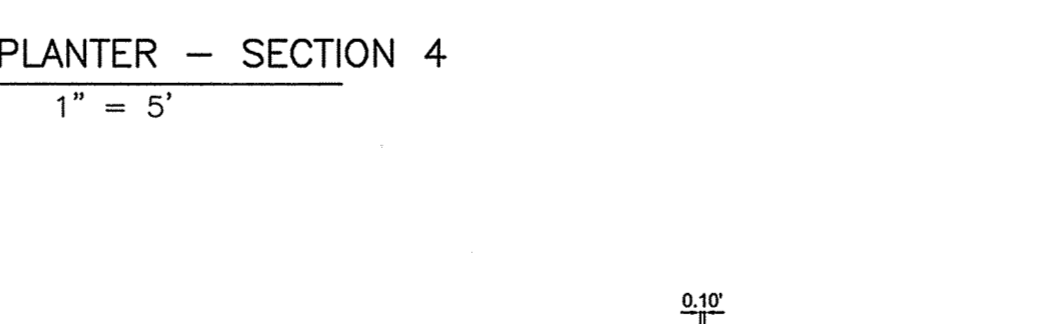
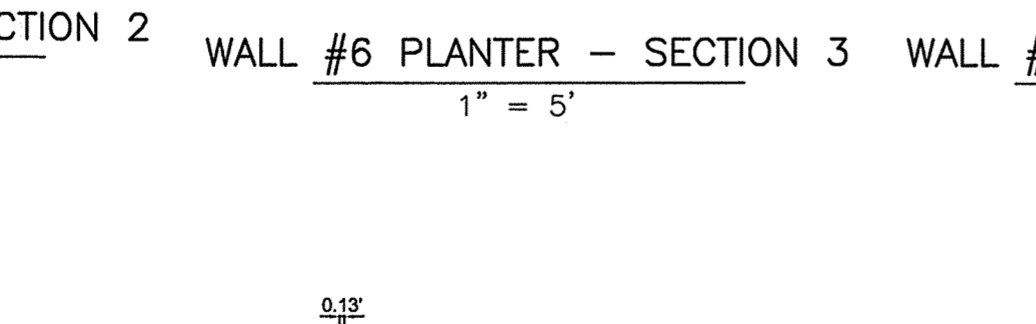
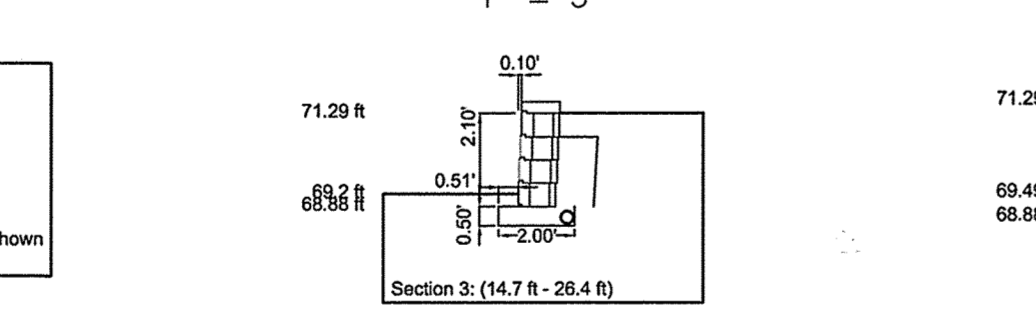
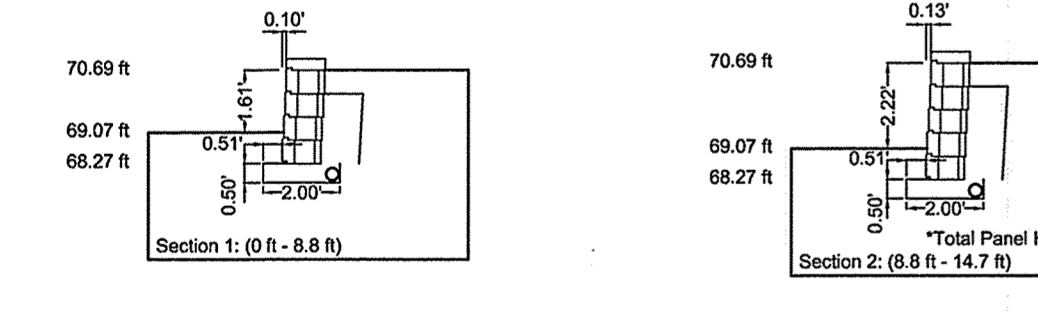
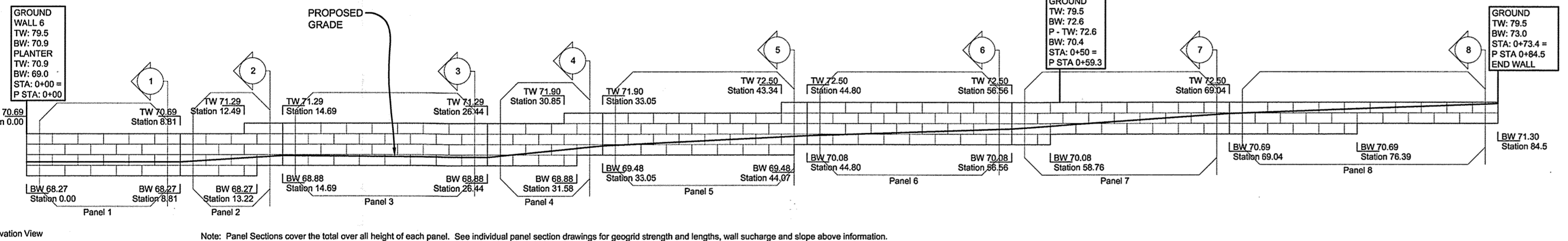
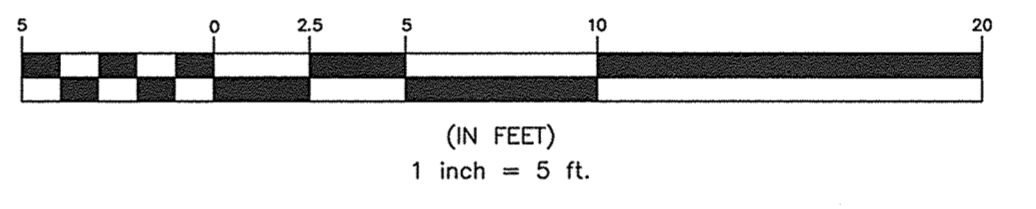
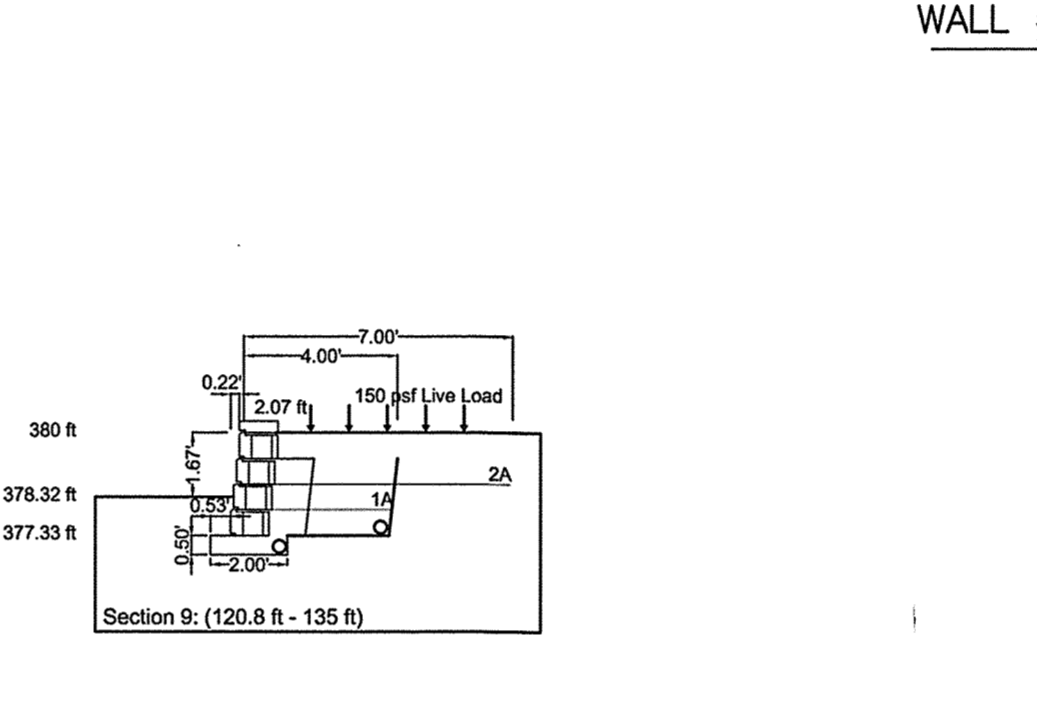
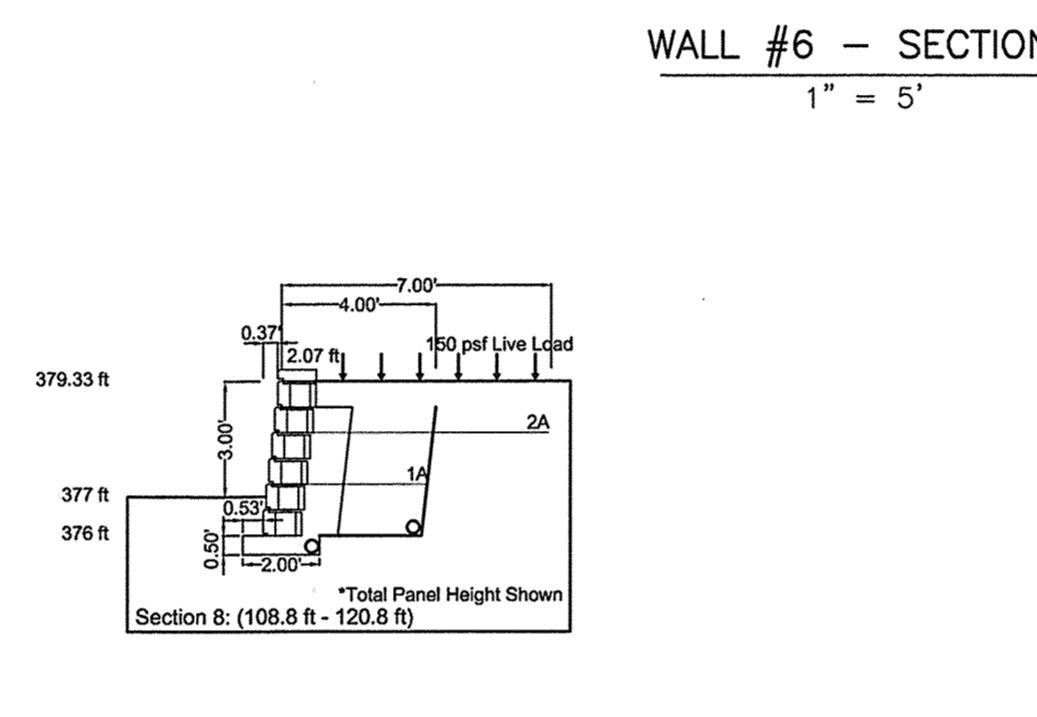
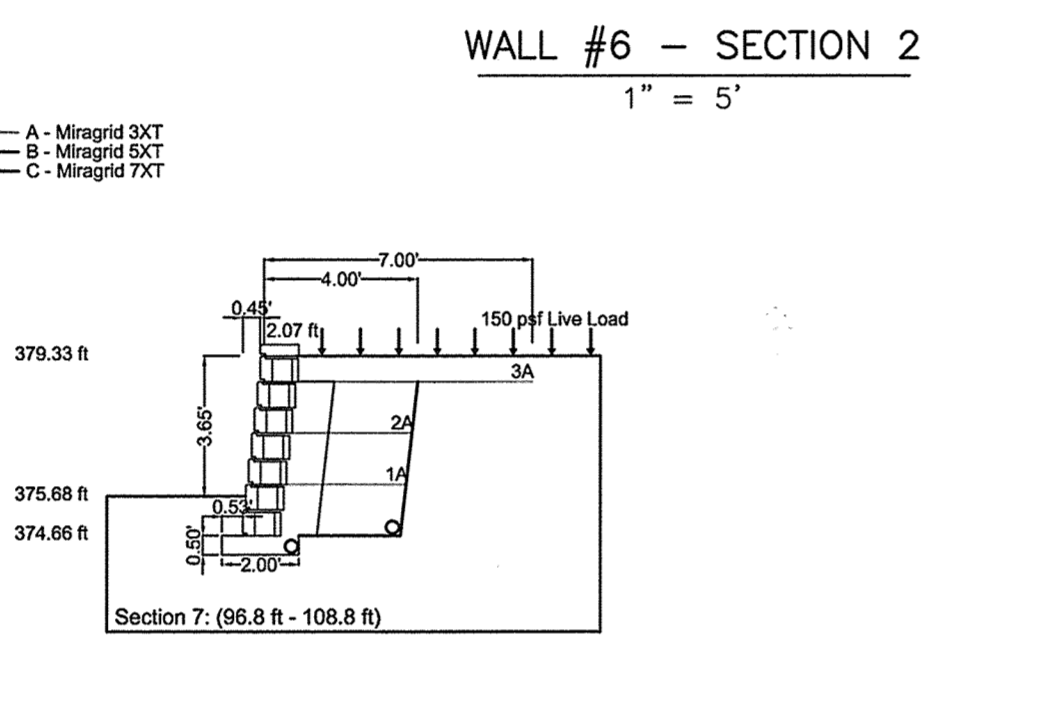
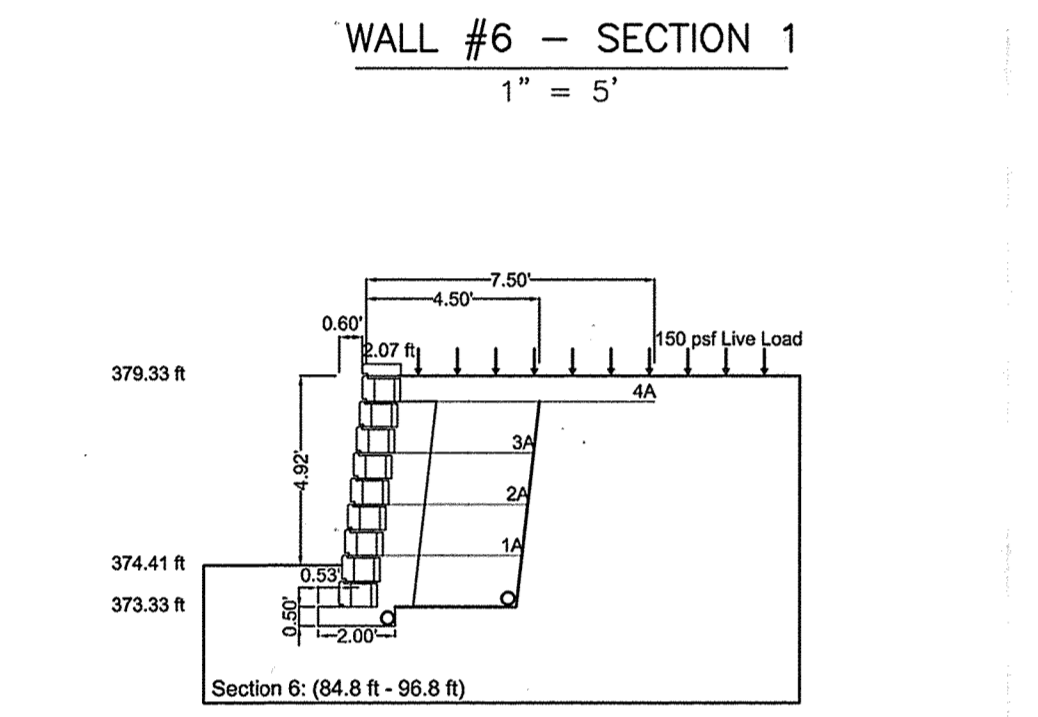
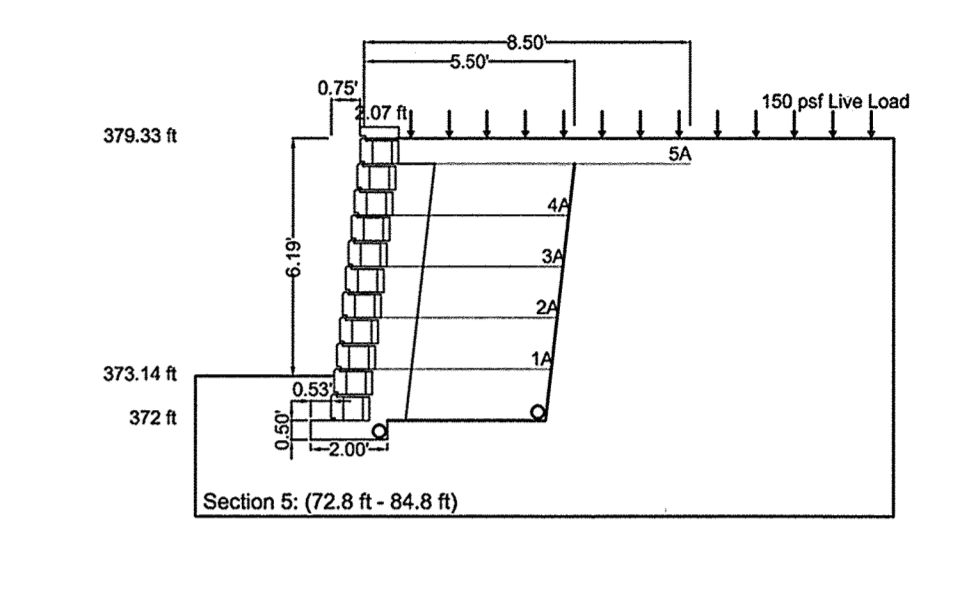
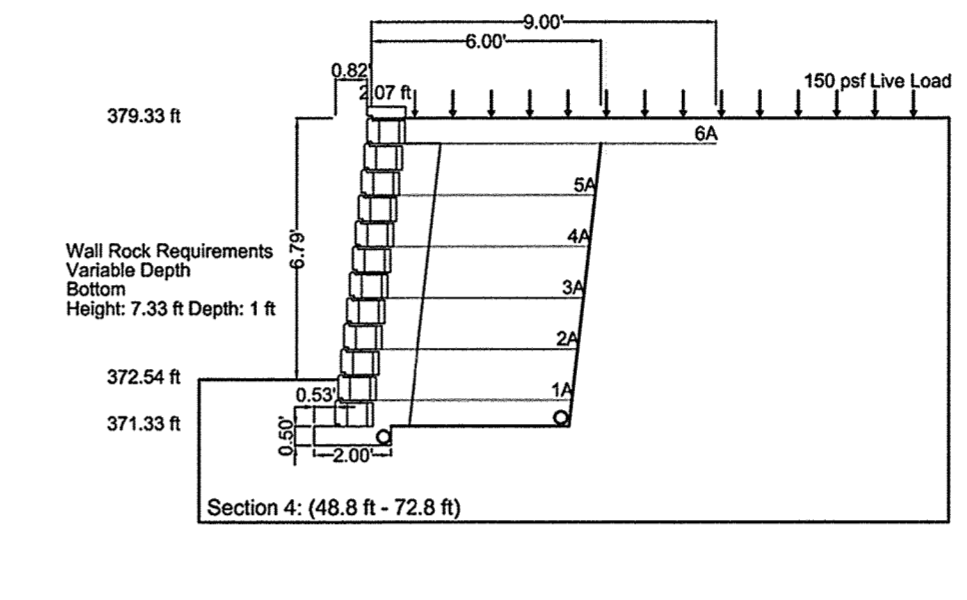
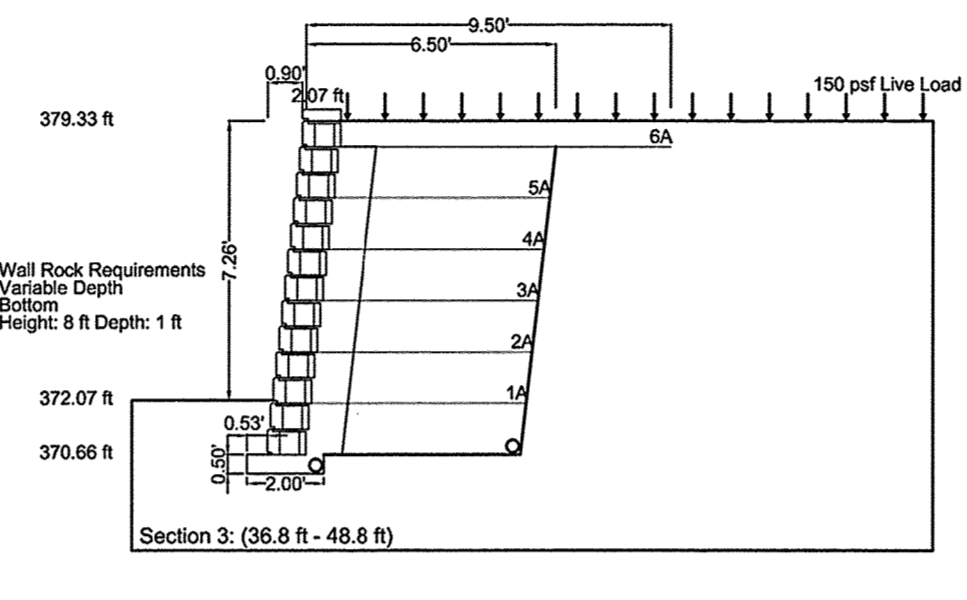
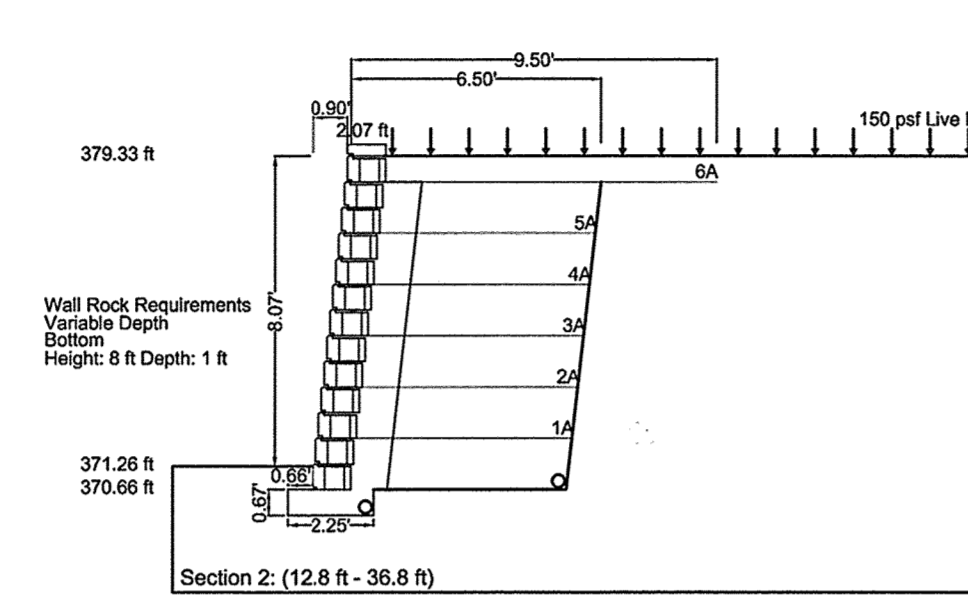
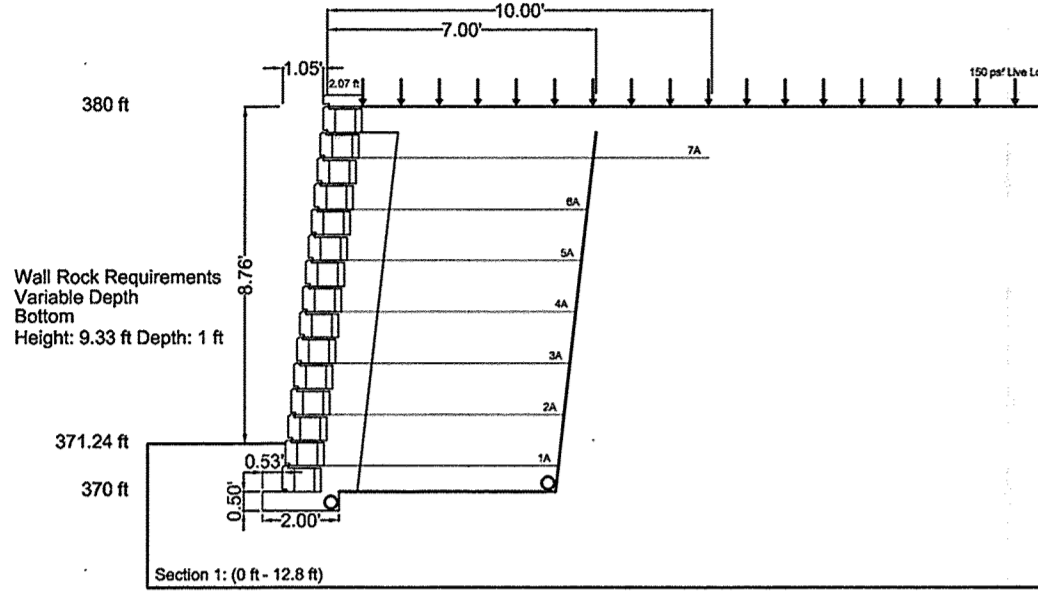
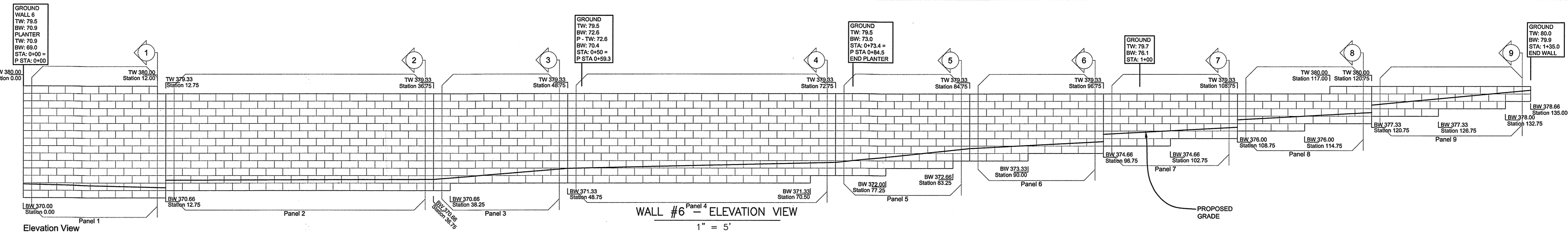
NO.	DATE	REVISION
1	NOV 2018	REVISED BY SHEET SUBSTITUTION TO CORRECT BLOCK SIZING AND GRID ELEVATIONS.



OWNER: LOCUST THICKET INVESTORS LLC 3636 MEADOWBRIDGE ROAD ELKRIE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244	Revised SITE DEVELOPMENT PLAN WALL 5
DESIGN: AAM	CHECKED: CAM
DATE: JULY 2018	PROJECT NO. 0925
SCALE: AS SHOWN	DRAWING 36 OF 47

AS-BUILT

SDP-18-029

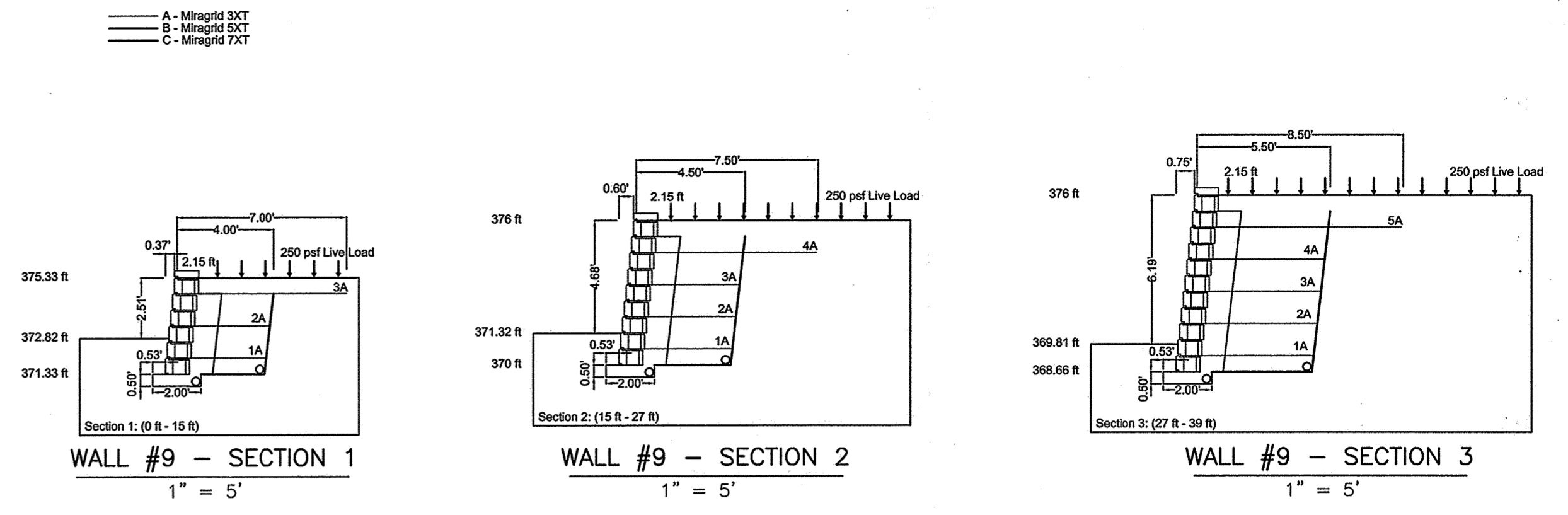
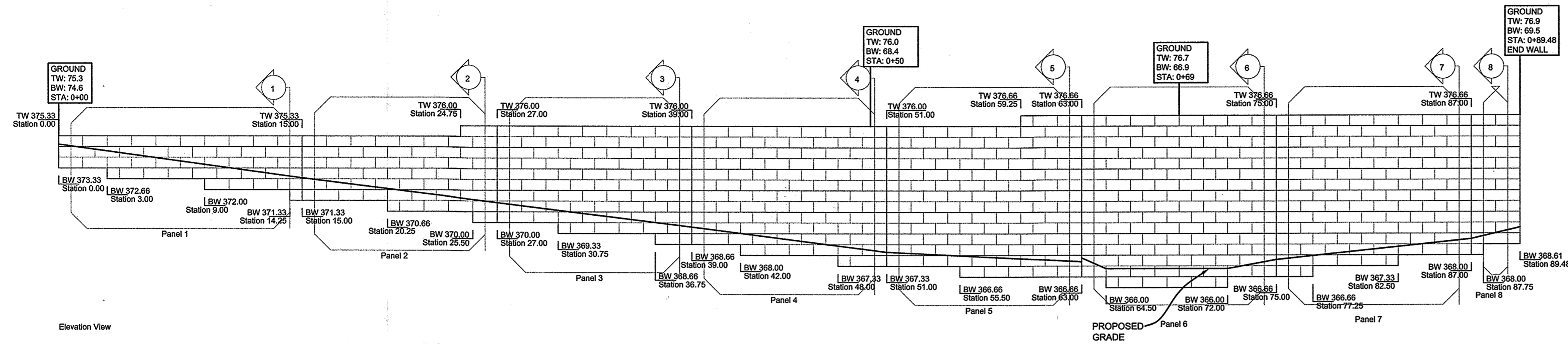


APPROVED: DEPARTMENT OF PLANNING AND ZONING
And Clark 5-23-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
Vahe D. D... 6-5-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
N... 6-5-19
 DIRECTOR

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

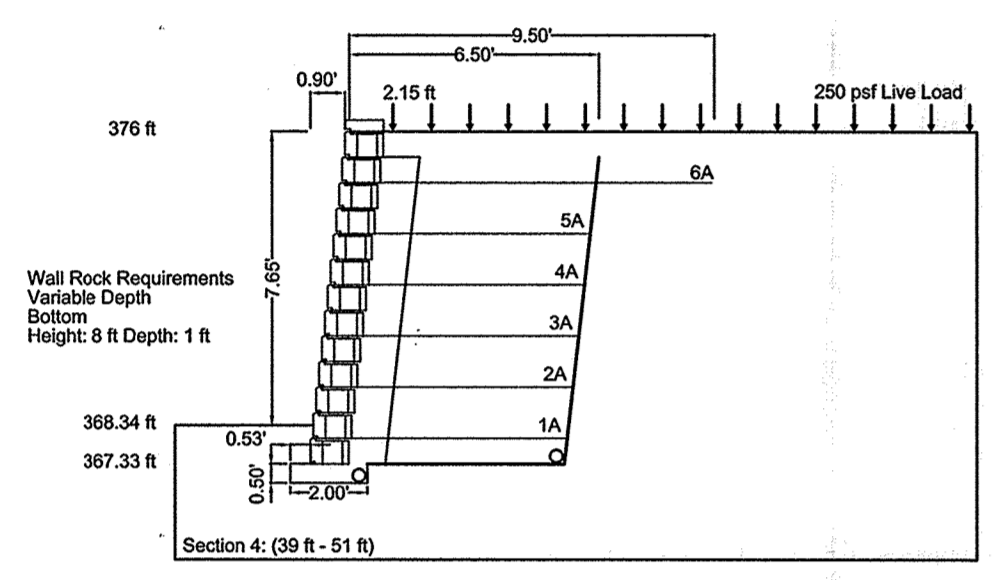
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 21443, Expiration Date: 12-21-22

1	May 2019	REVISED BY SHEET SUBSTITUTION TO CORRECT WALL ELEVATIONS.
NO.	DATE	REVISION
<p>GEOTECHNICAL LABORATORIES, INC. ENGINEERS • GEOLOGISTS • CONSULTANTS</p>		
OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244		THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244		TAX MAP 37, ZONED R-A-15 & FOR GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND SITE DEVELOPMENT PLAN WALL 6
DESIGN:	AAM	CHECKED: CAM
DATE:	MAY 2019	PROJECT NO. 0925
SCALE:	AS SHOWN	DRAWING 37 OF 47

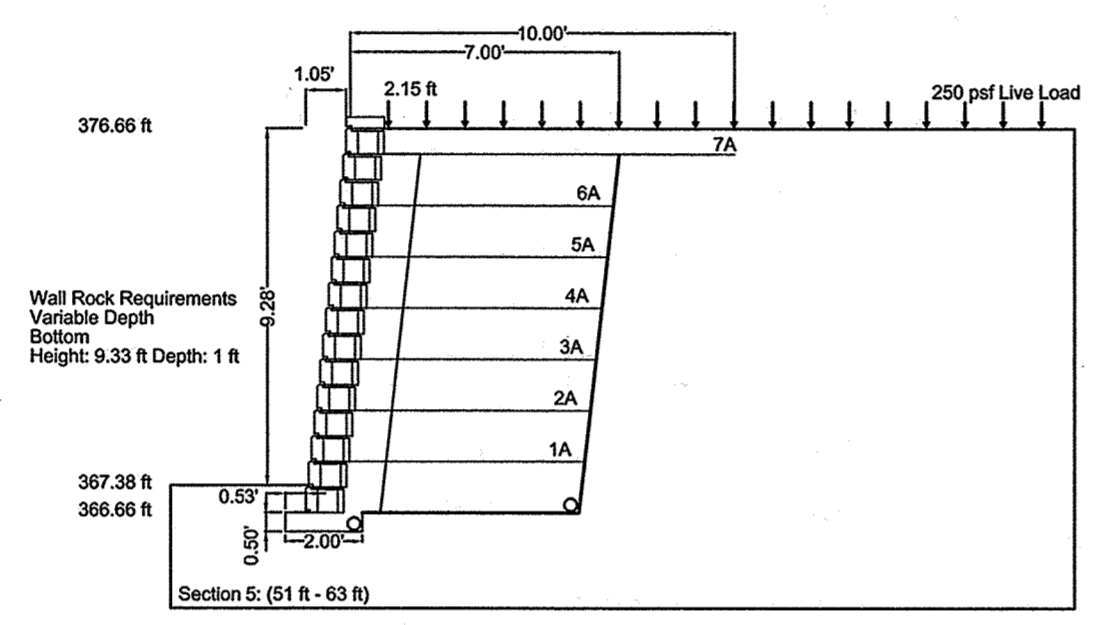


Note: Panel Sections cover the total over all height of each panel. See individual panel section drawings for geogrid strength and lengths, wall surcharge and slope above information.

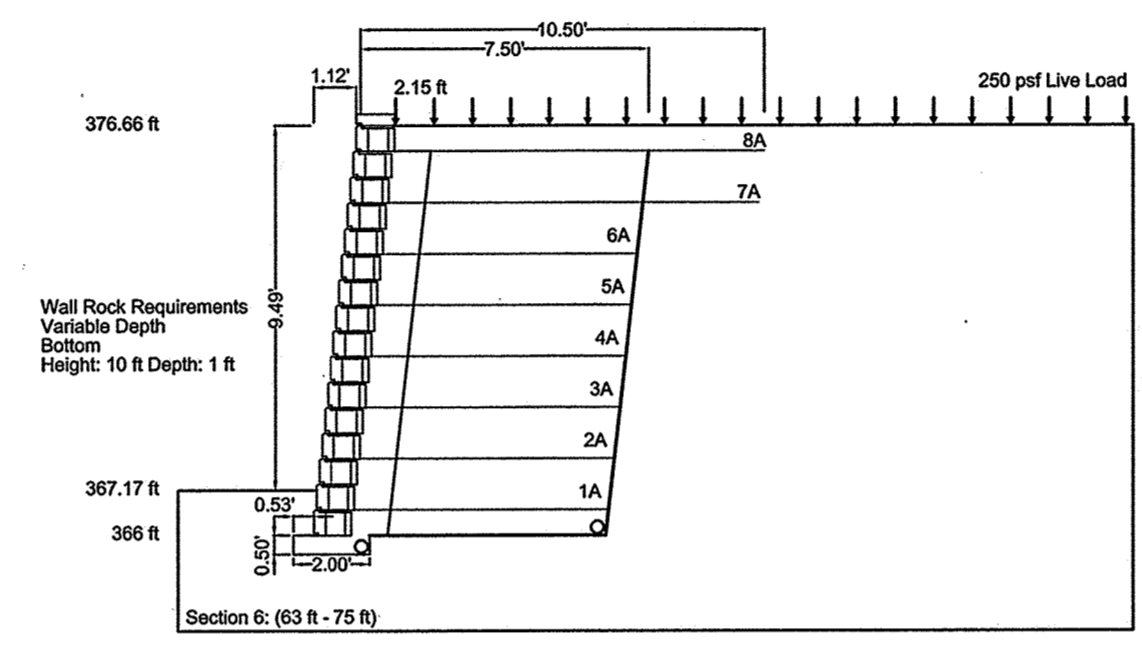
WALL #9 - ELEVATION VIEW
1" = 5'



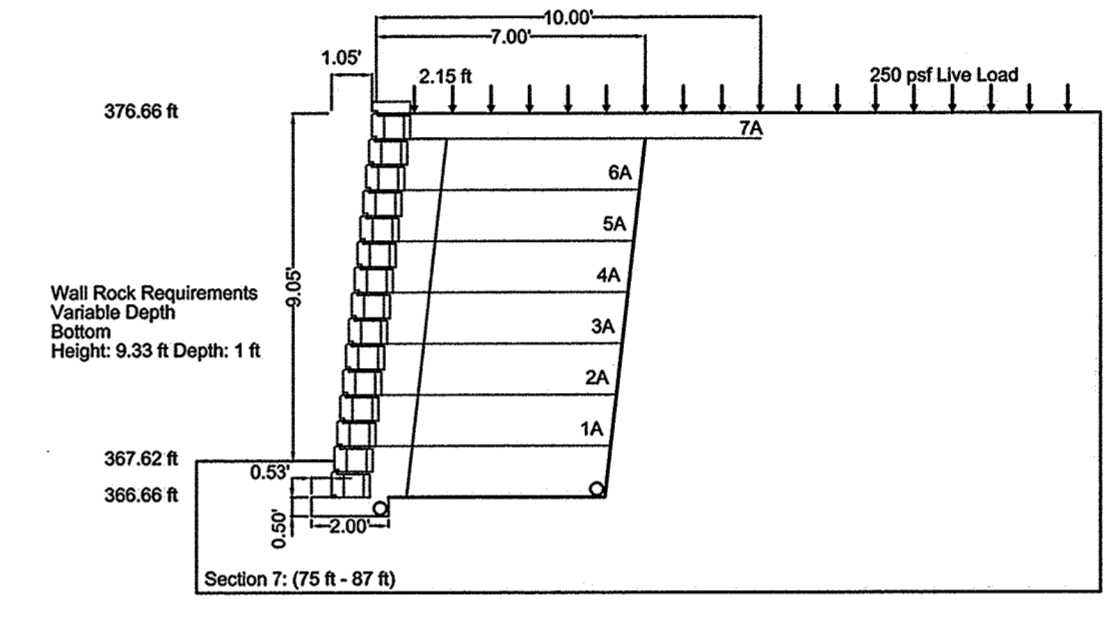
WALL #9 - SECTION 4
1" = 5'



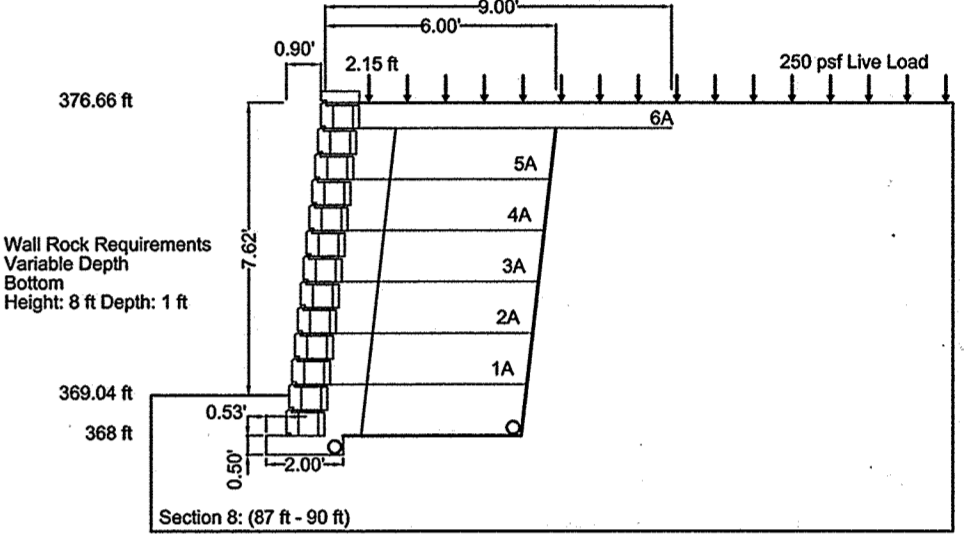
WALL #9 - SECTION 5
1" = 5'



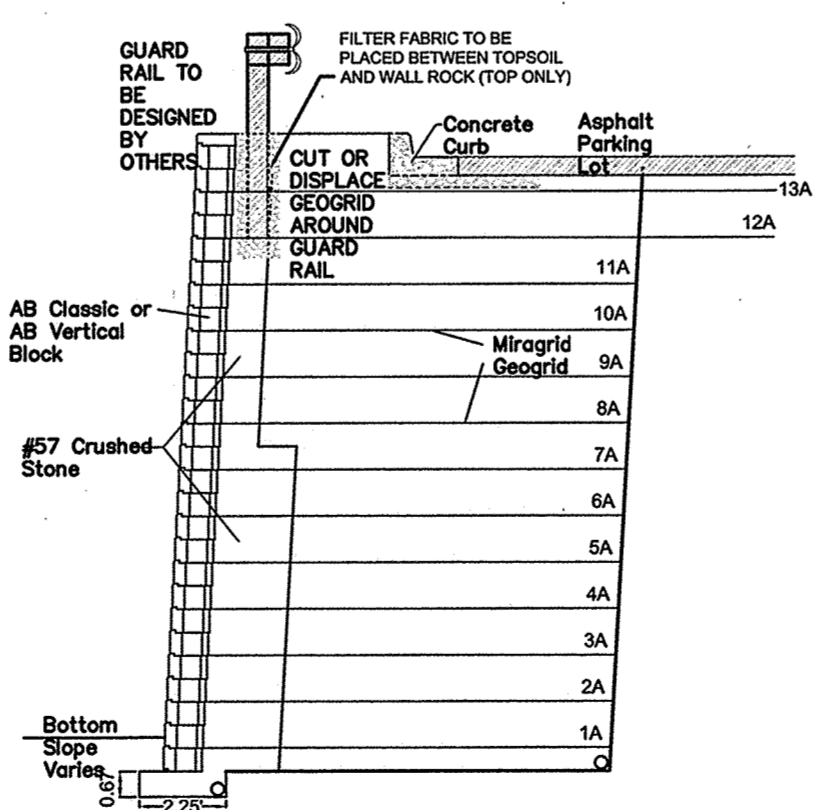
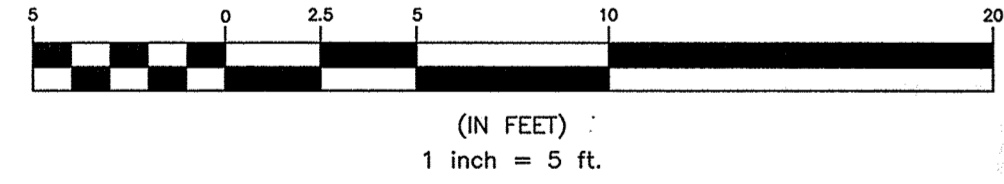
WALL #9 - SECTION 6
1" = 5'



WALL #9 - SECTION 7
1" = 5'



WALL #9 - SECTION 8
1" = 5'



WALL #9 - TYPICAL CROSS SECTION
1" = 5'

NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 8-24-18
 DIRECTOR DATE

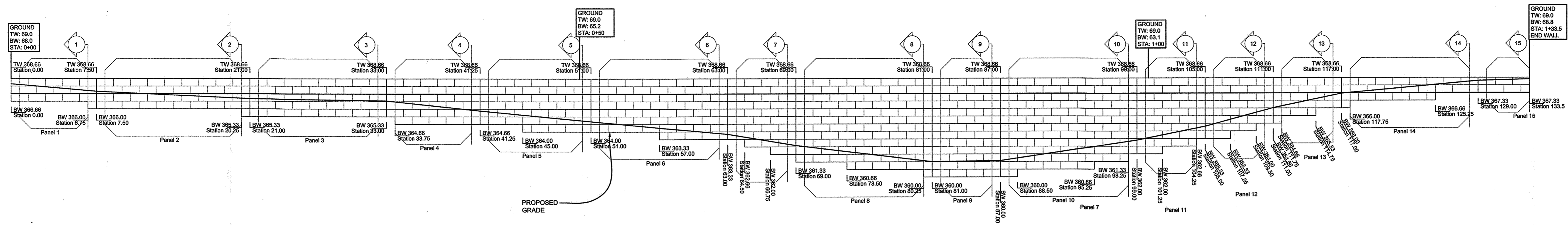
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



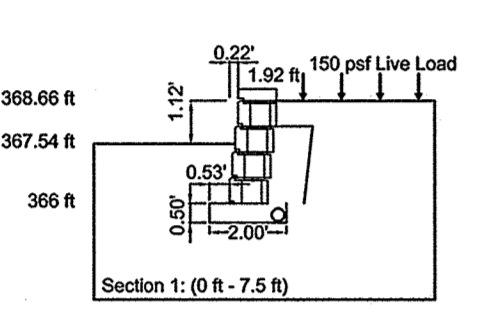
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
 License No. 21443, Expiration Date 2-21-22

NO.	DATE	REVISION

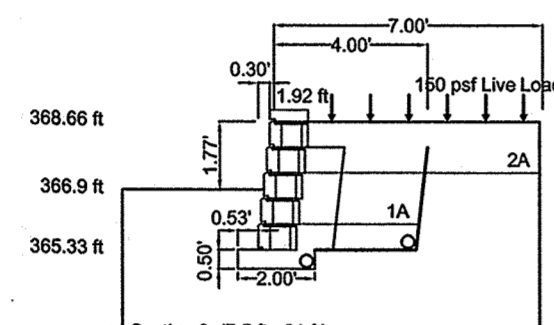
OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWBRIDGE ROAD ELK RIDGE, MD 21075 410-485-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS ZONED R-A-15 & POR GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND SITE DEVELOPMENT PLAN WALL 9
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-485-4244	DATE: JULY 2018 PROJECT NO. 0925
DESIGN: AMM CHECKED: CAM	SCALE: AS SHOWN DRAWING 39 OF 47



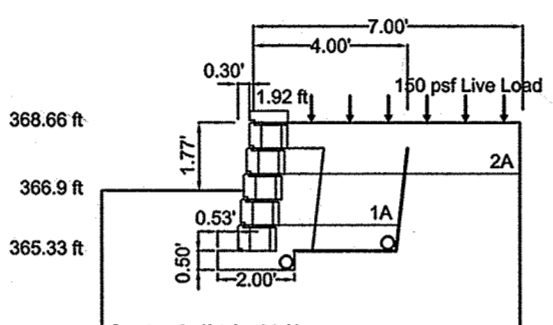
WALL #10 - ELEVATION VIEW
1" = 5'



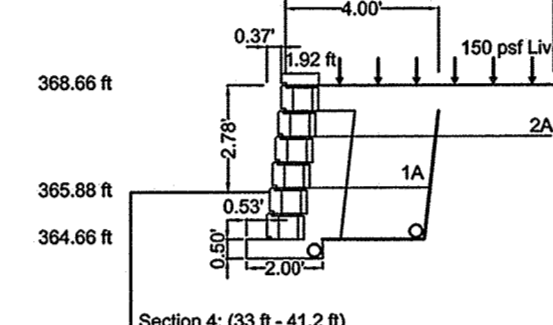
WALL #10 - SECTION 1
1" = 5'



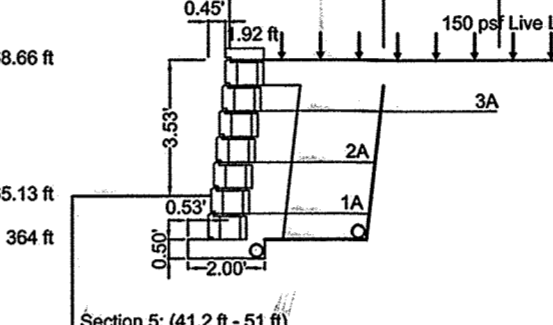
WALL #10 - SECTION 2
1" = 5'



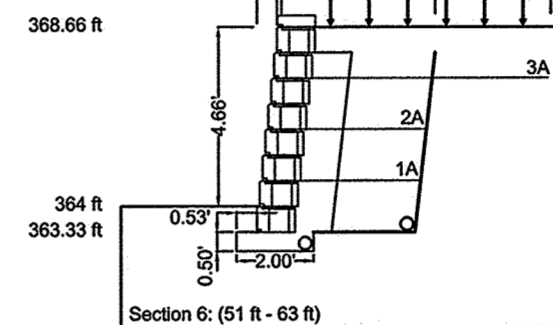
WALL #10 - SECTION 3
1" = 5'



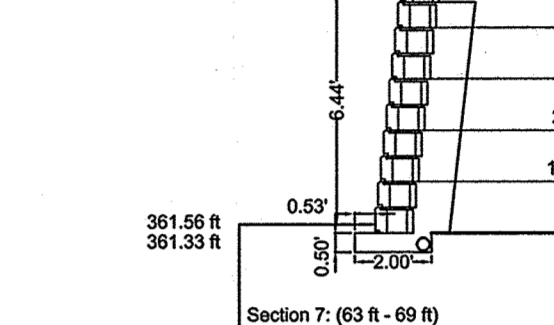
WALL #10 - SECTION 4
1" = 5'



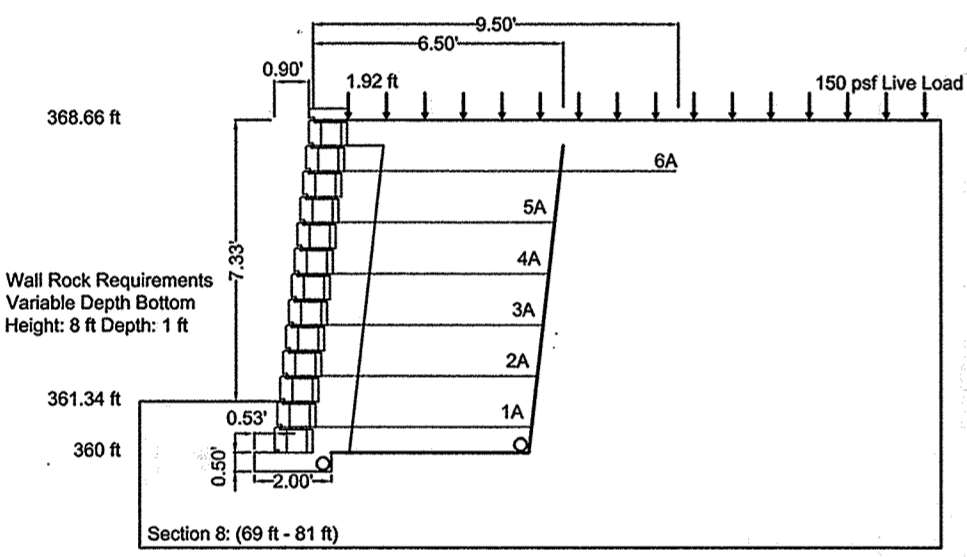
WALL #10 - SECTION 5
1" = 5'



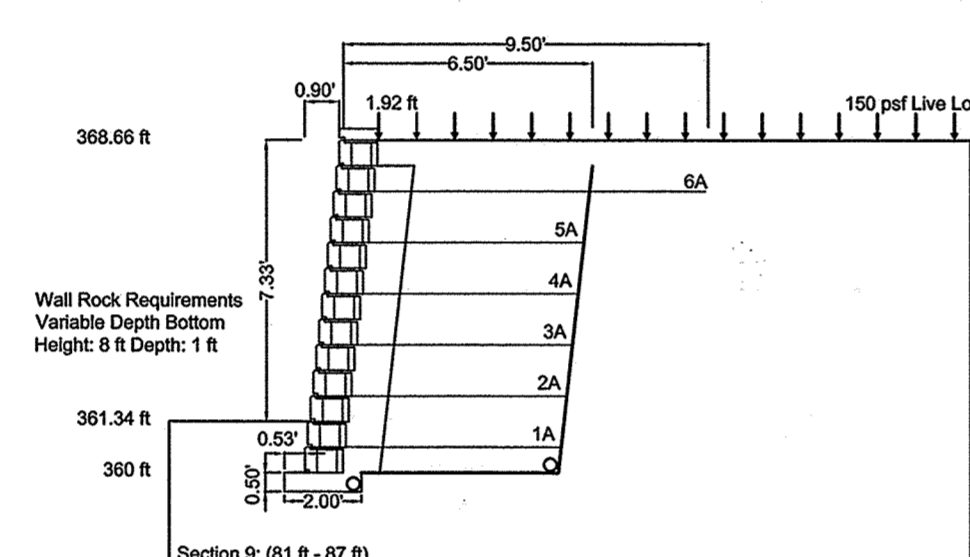
WALL #10 - SECTION 6
1" = 5'



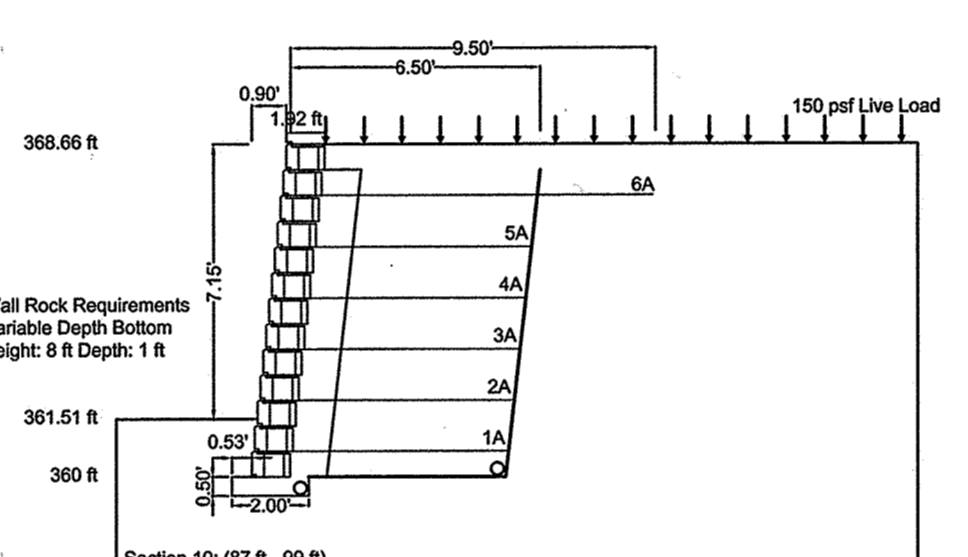
WALL #10 - SECTION 7
1" = 5'



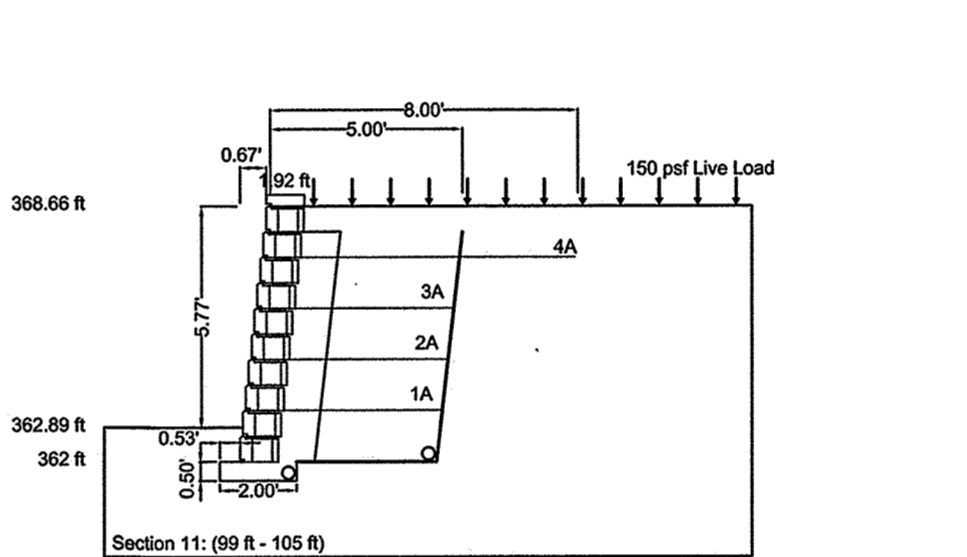
WALL #10 - SECTION 8
1" = 5'



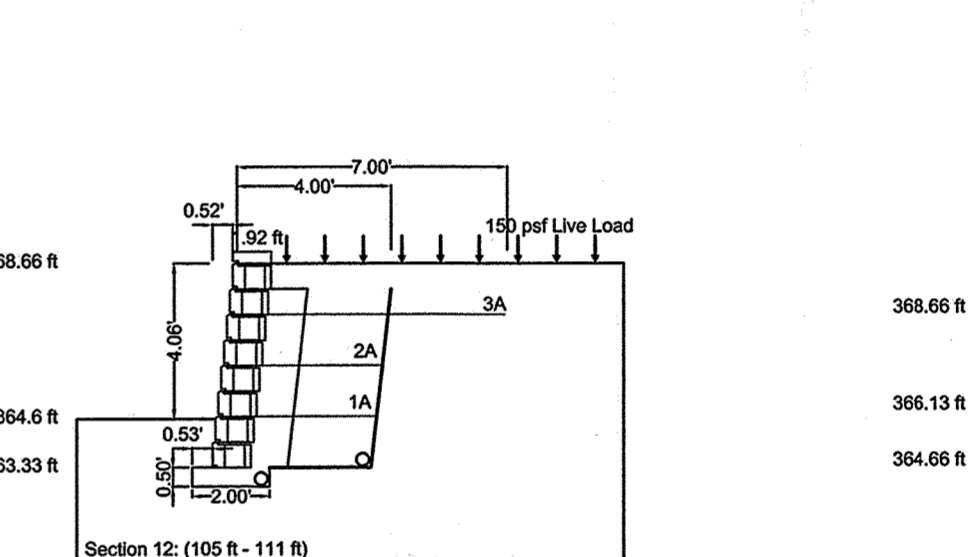
WALL #10 - SECTION 9
1" = 5'



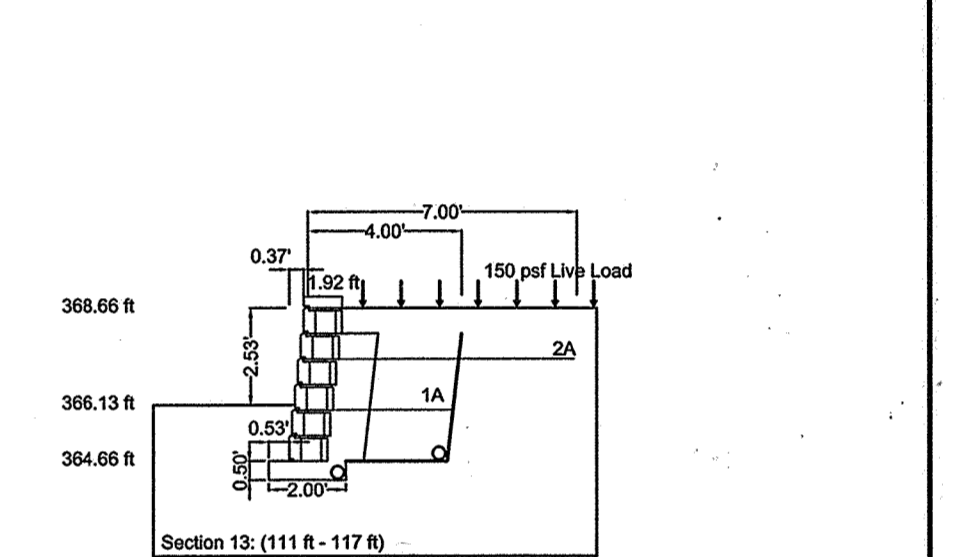
WALL #10 - SECTION 10
1" = 5'



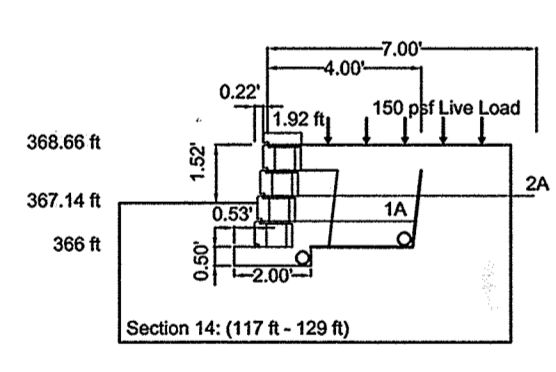
WALL #10 - SECTION 11
1" = 5'



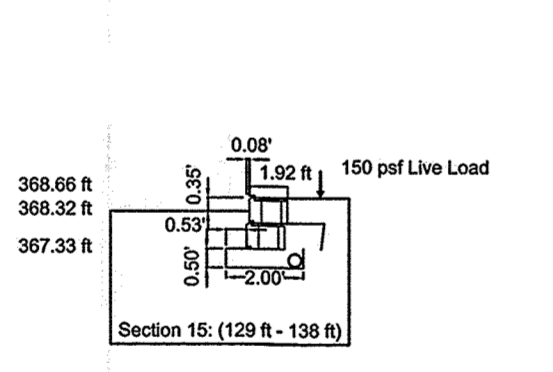
WALL #10 - SECTION 12
1" = 5'



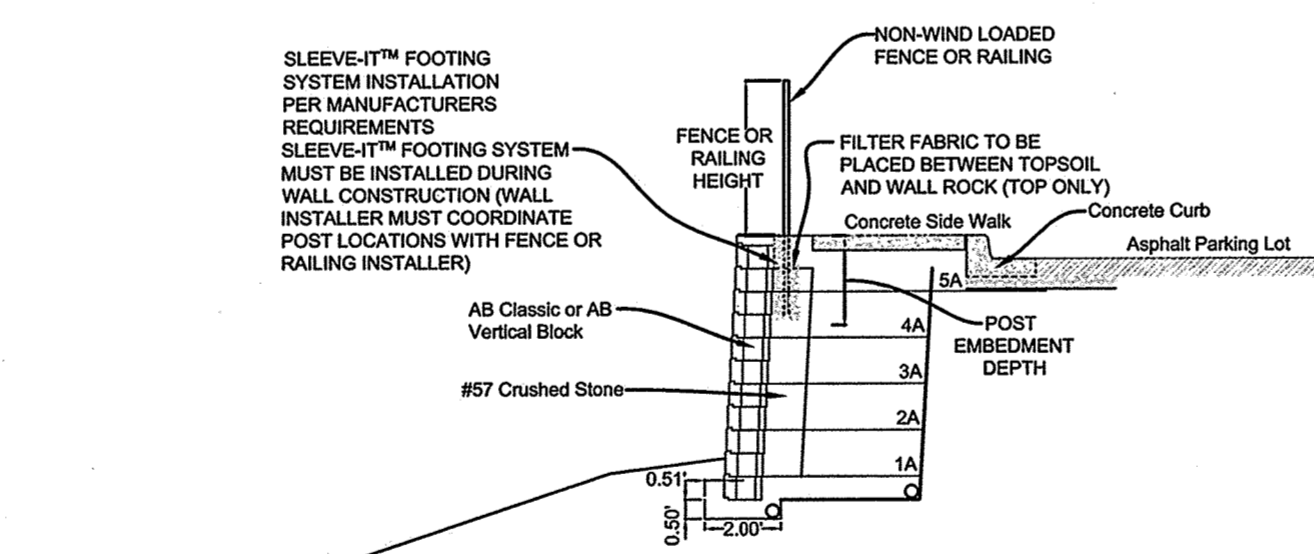
WALL #10 - SECTION 13
1" = 5'



WALL #10 - SECTION 14
1" = 5'



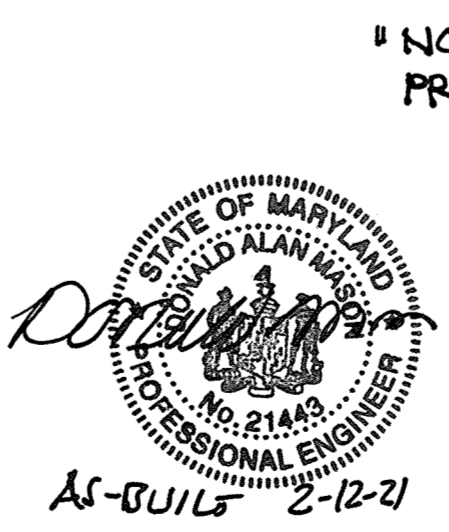
WALL #10 - SECTION 15
1" = 5'



WALL #10 - STA 0+82 SECTION AT MB-6
1" = 5'

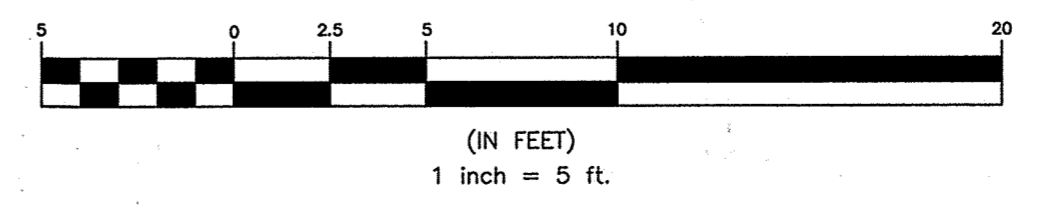
NOTE: CONTRACTOR SHALL OBTAIN AND REFER TO MOST CURRENT SHOP DRAWINGS FOR CONSTRUCTION PURPOSES.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development: *Keith Calwood* 8-23-18
 Chief, Development Engineering Division: *John Clark* 8-16-18
 Director: *William J. Griffin* 8-24-18



"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"

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. 21443, Expiration Date: 12-21-22



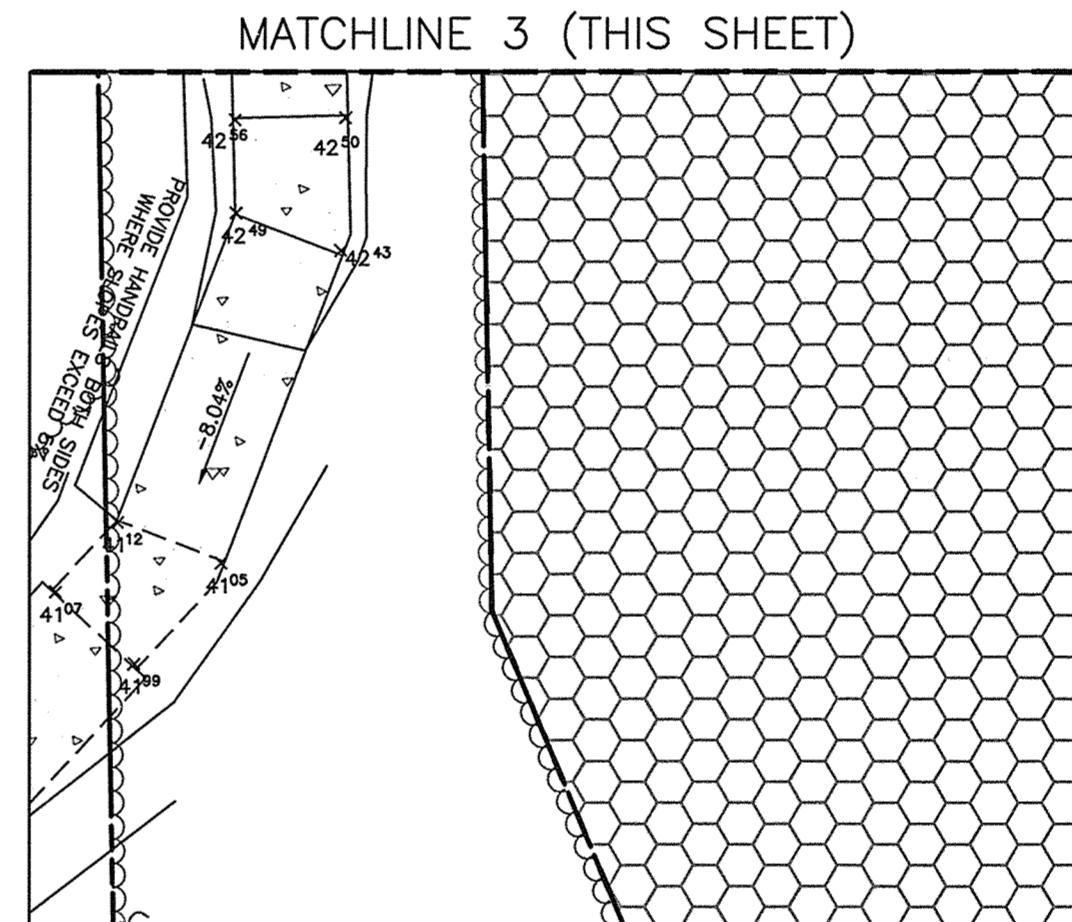
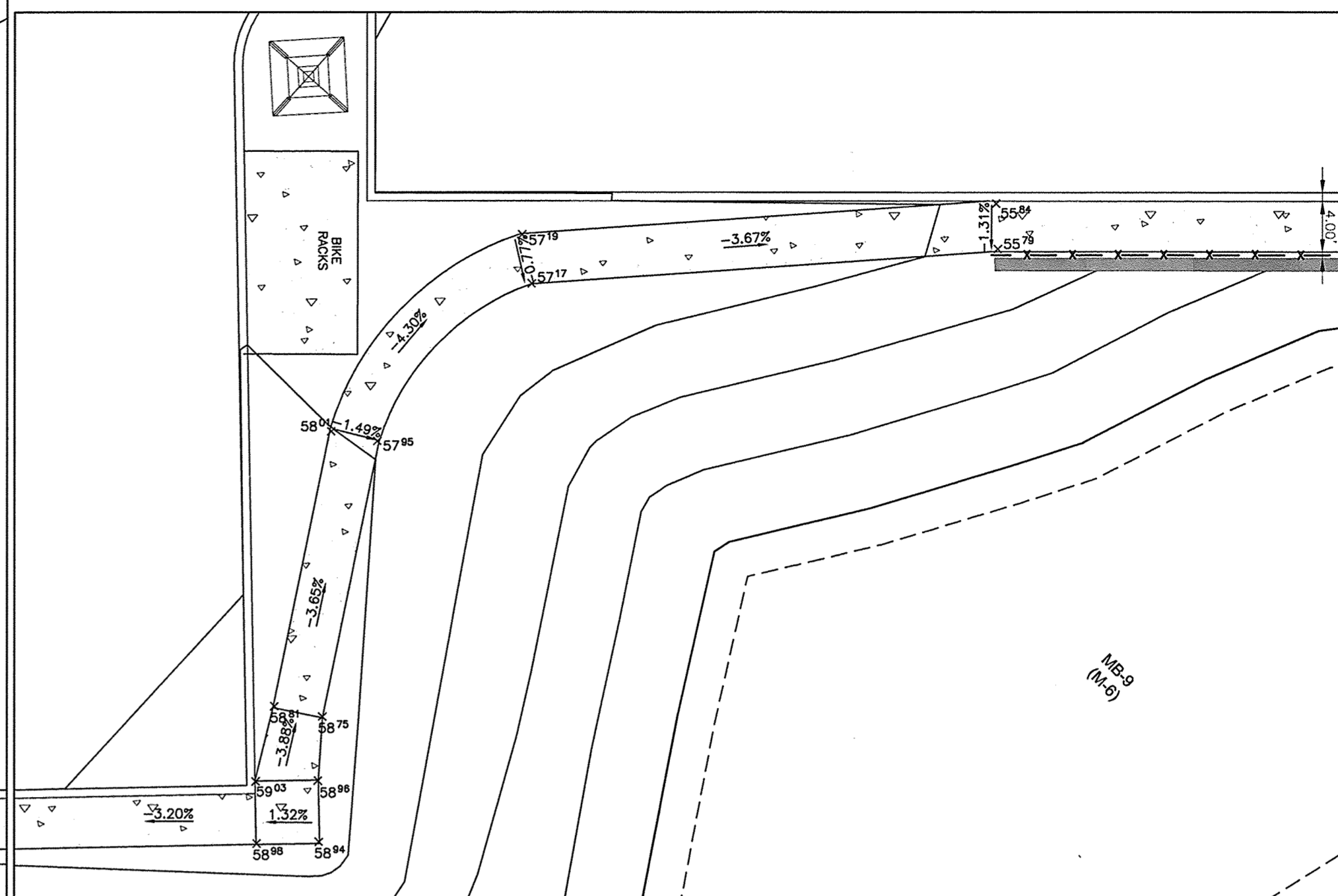
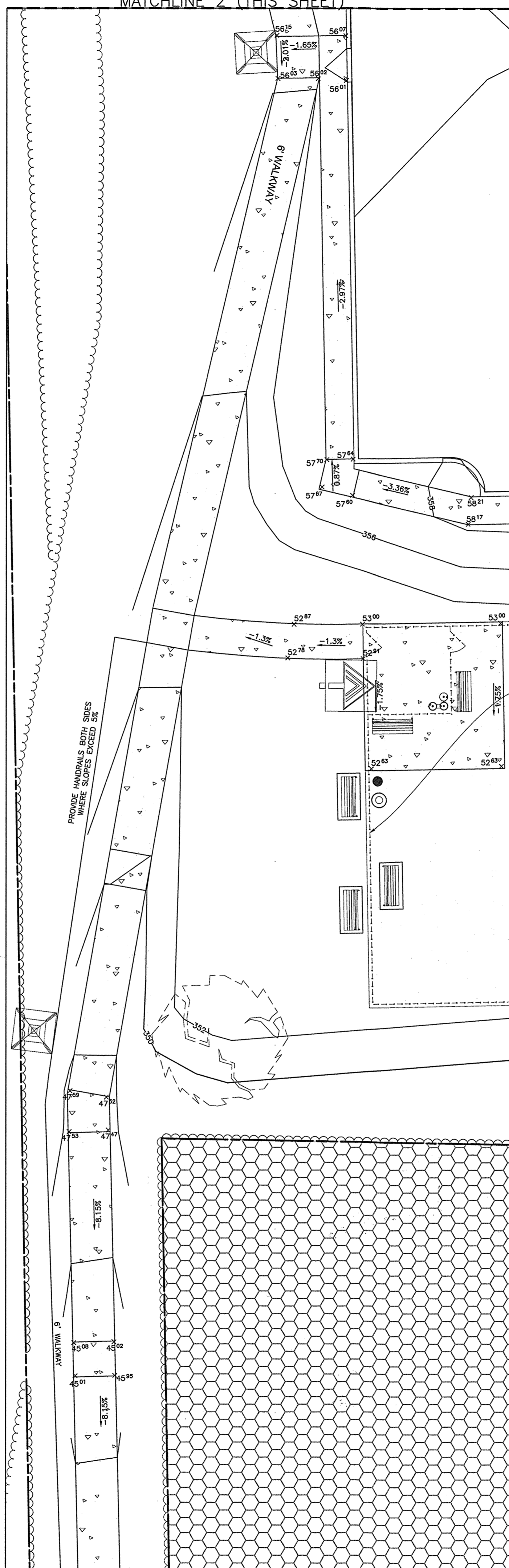
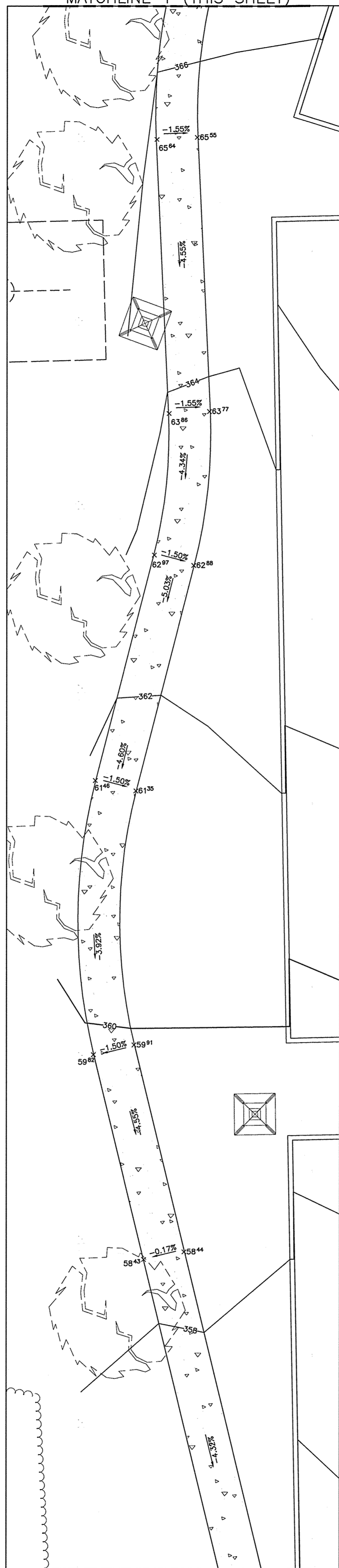
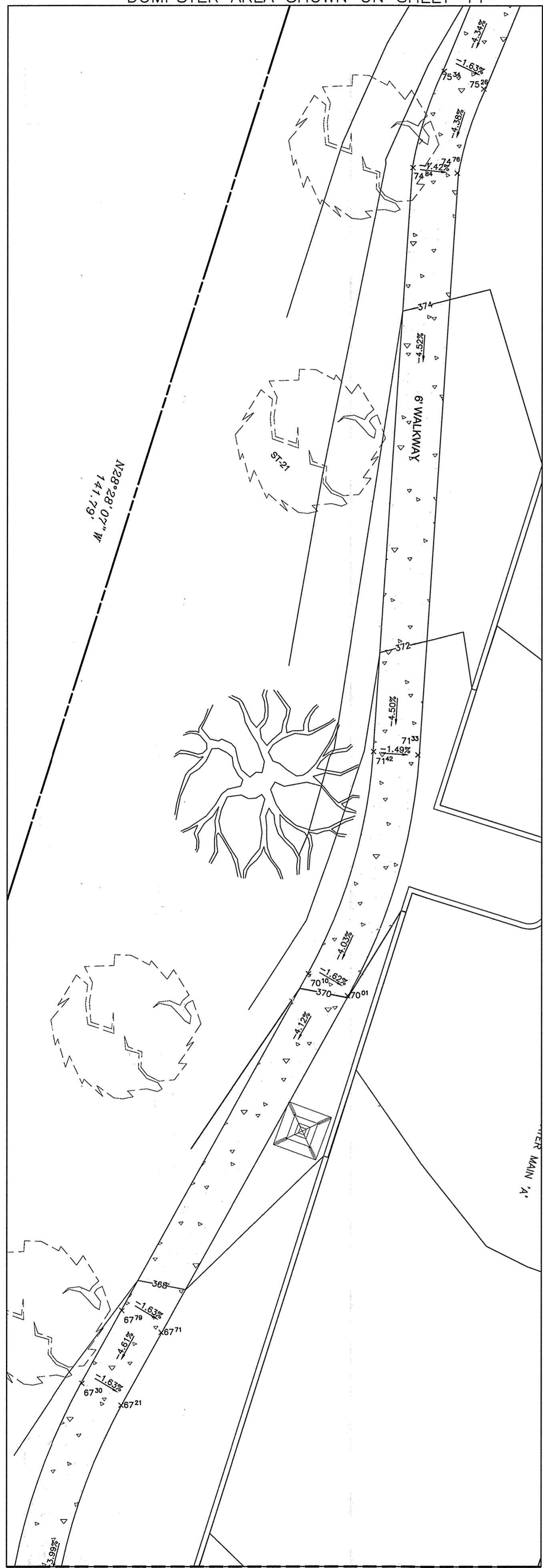
NO.	DATE	REVISION

OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D, PARCEL 670 9 APARTMENT BUILDINGS ZONED R-A-15 & POR GRID 9, PARCELS 714, 724 & 670 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244	SITE DEVELOPMENT PLAN WALL 10
DESIGN: AM CHECKED: CAM	DATE: JULY 2018 PROJECT NO. 0925 SCALE: AS SHOWN DRAWING 40 OF 47

DUMPSTER AREA SHOWN ON SHEET 44

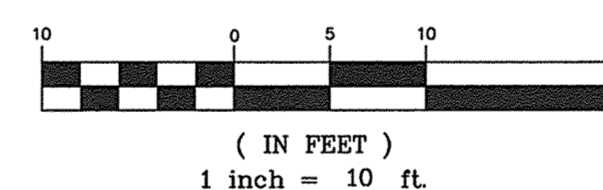
MATCHLINE 1 (THIS SHEET)

MATCHLINE 2 (THIS SHEET)



- NOTES:
1. ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% CROSS SLOPE IN ALL DIRECTIONS.
 2. ALL HANDICAP PARKING ACCESS RAMP SLOPES SHALL BE HOWARD COUNTY R-4.05 OR R-4.06. MAXIMUM RAMP SLOPES SHALL BE IN ACCORDANCE WITH DETAIL. RAMP SLOPES SPECIFICALLY DETAILED ON SHEETS 41-44 SHOULD FOLLOW PLAN DETAILS.
 3. ALL SIDEWALK RAMP SLOPES SHALL INCLUDE DETECTABLE WARNING MATS, PER HOWARD COUNTY R-4.07.
 4. ALL CURB AND GUTTER SHALL BE HOWARD COUNTY R-3.01, 7" COMBINATION CURB.
 5. FOR PARALLEL RAMP SLOPES DETAILED ON PLAN, SLOPE CURB TO MATCH RAMP SLOPE WITHIN THE "RAMP TRANSITION" TO CENTER LANDING.
 6. THIS PLAN DEMONSTRATES GENERAL SLOPES FOR ACCESSIBLE ROUTES. FOR MORE DETAIL, SEE SHEETS 41-44.
 7. ACCESSIBLE ROUTES SHALL MEET THE FOLLOWING PARAMETERS:
 - 7.1. GAPS ALONG AN ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2".
 - 7.2. LEVEL CHANGES ALONG AN ACCESSIBLE ROUTE: 1/2" MAXIMUM VERTICAL RISE, 1/4" MAXIMUM WITH A 1:2 BEVEL, AND GREATER THAN 1/2" MUST BE RAMPED.
 - 7.3. RUNNING SLOPES SHALL NOT EXCEED 5%.
 - 7.4. CROSS SLOPES SHALL NOT EXCEED 2%.
 - 7.5. RAMP SLOPES BETWEEN 5% AND 8.33% REQUIRE HANDRAILS COMPLYING WITH ADA ON BOTH SIDES OF THE RAMP. NOTE: RAMP SLOPES LESS THAN 6" IN LENGTH DO NOT REQUIRE HANDRAILS.
 - 7.6. RAMP SLOPES SHALL NOT EXCEED 8.33%.
 - 7.7. INTERSECTING SIDEWALKS SHALL BE 2% MAXIMUM IN ANY DIRECTION.
 - 7.8. ACCESSIBLE PARKING AND ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

GRAPHIC SCALE



#1 THE PURPOSE OF THIS SUBSTITUTION SHEET IS TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21445 Expiration Date: 12-21-22

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Plank 5-23-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Veronica Lovelace 6-5-19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Natalie J. Jelic 6-5-19
 DIRECTOR DATE

ACCESSIBLE WALKWAY
SCALE: 1" = 10'

MATCHLINE 2 (THIS SHEET)

MATCHLINE 3 (THIS SHEET)

NO.	DATE	REVISION
1	MARCH 2019	REVISED BY SHEET SUBSTITUTION TO DOCUMENT LOCATION OF SCHOOL WALKWAY.

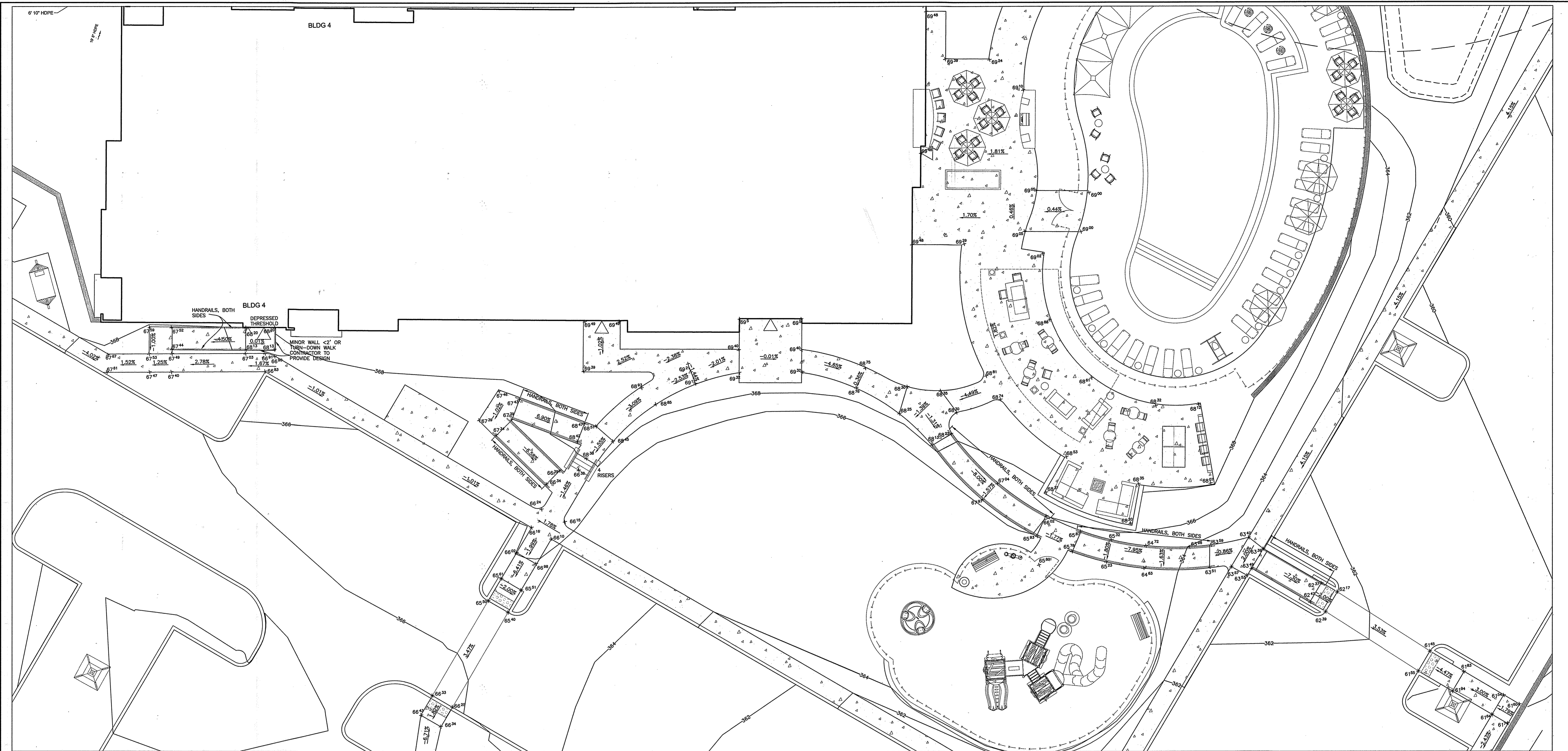
BENCHMARK ENGINEERING, INC.
 ENGINEERS LAND SURVEYORS PLANNERS
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELICOTT CITY, MARYLAND 21043
 (P) 410-465-6106 (F) 410-465-6544 WWW.BEI-CIVILENGINEERING.COM

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. 26376, Expiration Date: 01-01-21.

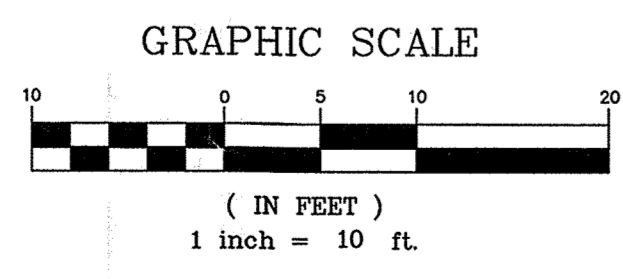
David Alan Miller
 PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 NO. 21445
 5/16/19

OWNER: LOCUST THicket INVESTORS LLC 5836 MEADOWRIDGE ROAD ELKRIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS
DEVELOPER: LOCUST THicket INVESTORS LLC P.O. BOX 417 ELICOTT CITY, MD 21041 410-465-4244	ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DESIGN: AAM	REVISID SITE DEVELOPMENT PLAN HANDICAP PARKING AND ACCESS DETAILS
CHECKED: CAM	DATE: MAY 2019 PROJECT NO. 0925
SCALE: AS SHOWN	DRAWING 41 OF 47

AS-BUILT SDP-18-029



- NOTES:
1. ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% CROSS SLOPE IN ALL DIRECTIONS.
 2. ALL HANDICAP PARKING ACCESS RAMP SHALL BE HOWARD COUNTY R-4.05 OR R-4.06. MAXIMUM RAMP SLOPES SHALL BE IN ACCORDANCE WITH DETAIL. RAMP SLOPES SPECIFICALLY DETAILED ON SHEETS 41-44. SHOULD FOLLOW PLAN DETAILS.
 3. ALL SIDEWALK RAMP SHALL INCLUDE DETECTABLE WARNING MATS, PER HOWARD COUNTY R-4.07.
 4. ALL CURBS AND GUTTER SHALL BE HOWARD COUNTY R-3.01, 7" COMBINATION CURB.
 5. FOR PARALLEL RAMP DETAILED ON PLAN, SLOPE CURB TO MATCH RAMP SLOPE WITHIN THE "RAMP TRANSITION" TO CENTER LANDING.
 6. THIS PLAN DEMONSTRATES GENERAL SLOPES FOR ACCESSIBLE ROUTES. FOR MORE DETAIL, SEE SHEETS 41-44.
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 - 7.4. CROSS SLOPES SHALL NOT EXCEED 2%.
 - 7.5. RAMP WITH SLOPES BETWEEN 5% AND 8.33% REQUIRE HANDRAILS COMPLYING WITH ADA ON BOTH SIDES OF THE RAMP. NOTE: RAMP LESS THAN 6' IN LENGTH DO NOT REQUIRE HANDRAILS.
 - 7.6. RAMP SHALL NOT EXCEED 8.33%.
 - 7.7. INTERSECTING SIDEWALKS SHALL BE 2% MAXIMUM IN ANY DIRECTION.
 - 7.8. ACCESSIBLE PARKING AND ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.



ACCESSIBLE ROUTE DETAIL
BELOW BUILDING 4 LOWER
"NO AS-BUILT INFORMATION IS"
PROVIDED ON THIS SHEET



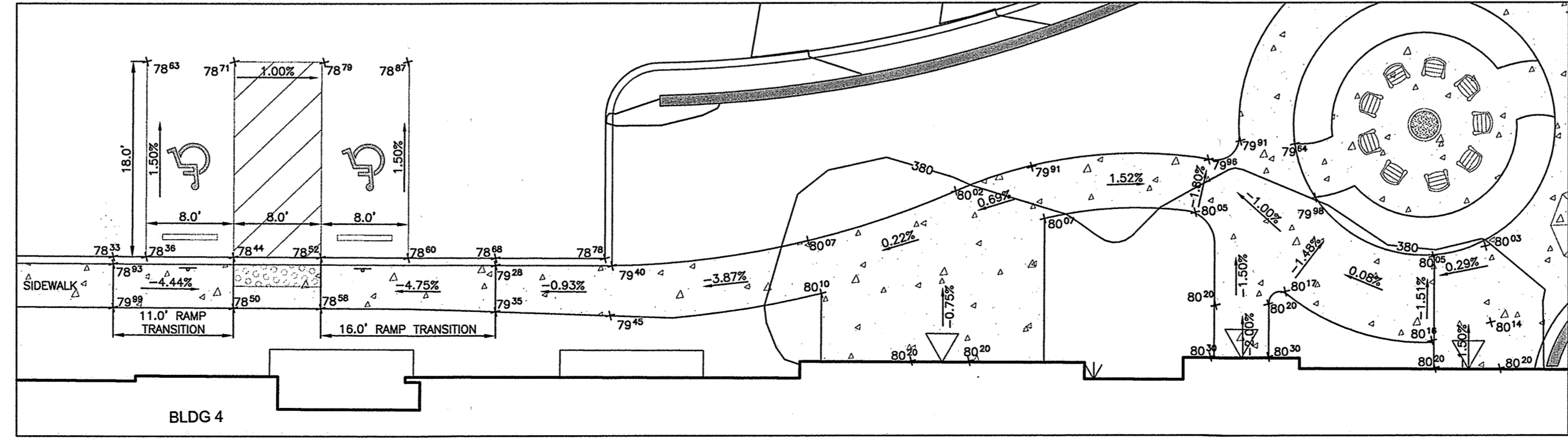
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21143, Expiration Date: 12-21-22

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Paul Chamber 8-16-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kristle Decker 8-23-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Vallia J. J. J. 8-24-18
DIRECTOR DATE



ACCESSIBLE PARKING DETAIL
BUILDING 4 UPPER
SCALE: 1" = 10'

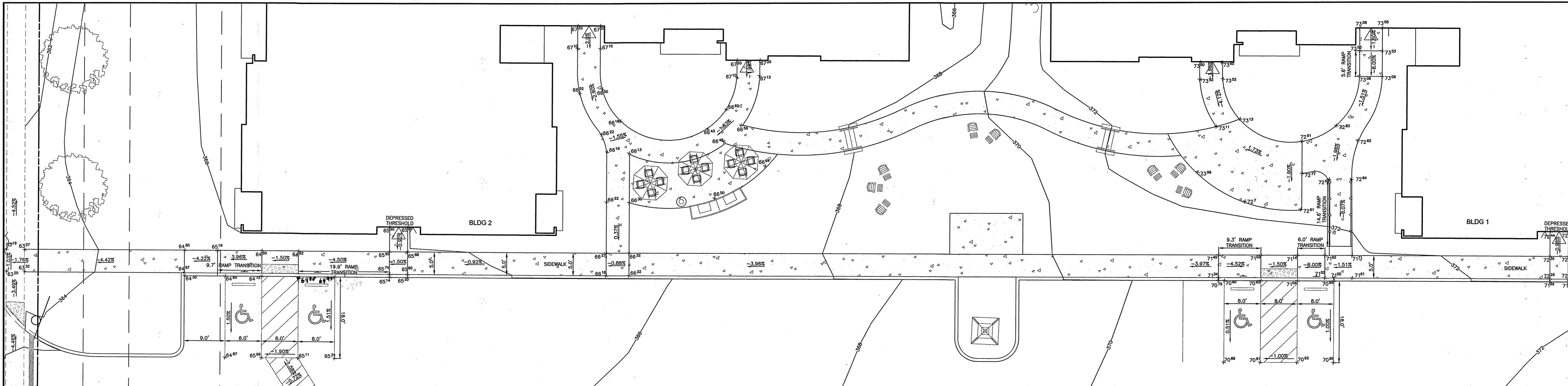
NO.	DATE	REVISION

BENCHMARK
ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE A SUITE 315 & ELLICOTT CITY, MARYLAND 21043
(P) 410-465-0105 (F) 410-465-8644
WWW.BEI-ENGINEERING.COM

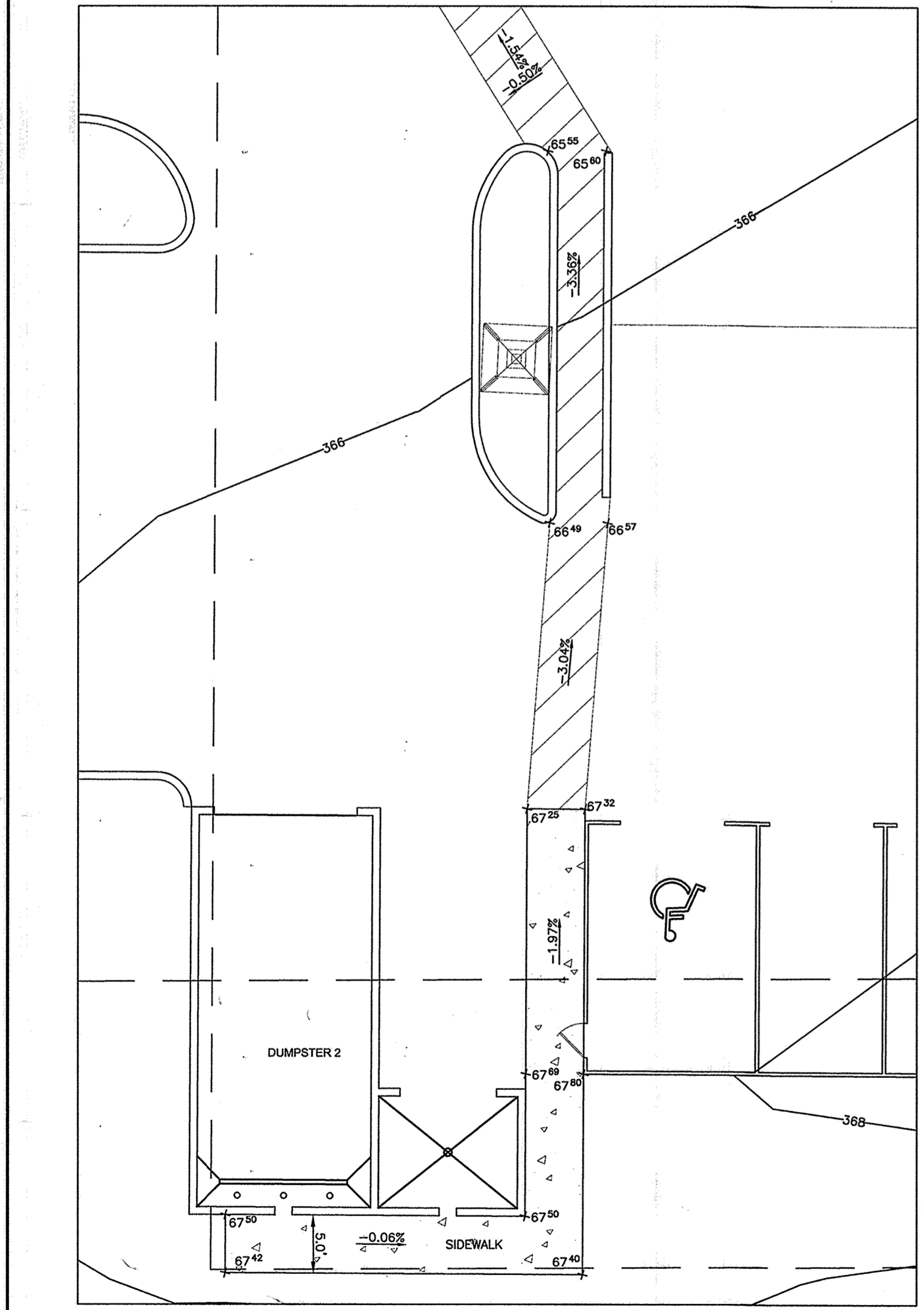
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 28876, Expiration Date: 01-01-19.

OWNER:	THE WEXLEY AT 100	
LOCUST THICKET INVESTORS LLC 5636 MIDDLEDORRIDGE ROAD ELKRIDGE, MD 21075 410-465-4244	BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS	
DEVELOPER:	ZONED R-A-15 & FOR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244	SITE DEVELOPMENT PLAN HANDICAP PARKING AND ACCESS DETAILS	
DESIGN: AAM	CHECKED: CAM	DATE: AS SHOWN
		PROJECT NO.: 0925
		DRAWING NO.: 42 OF 47

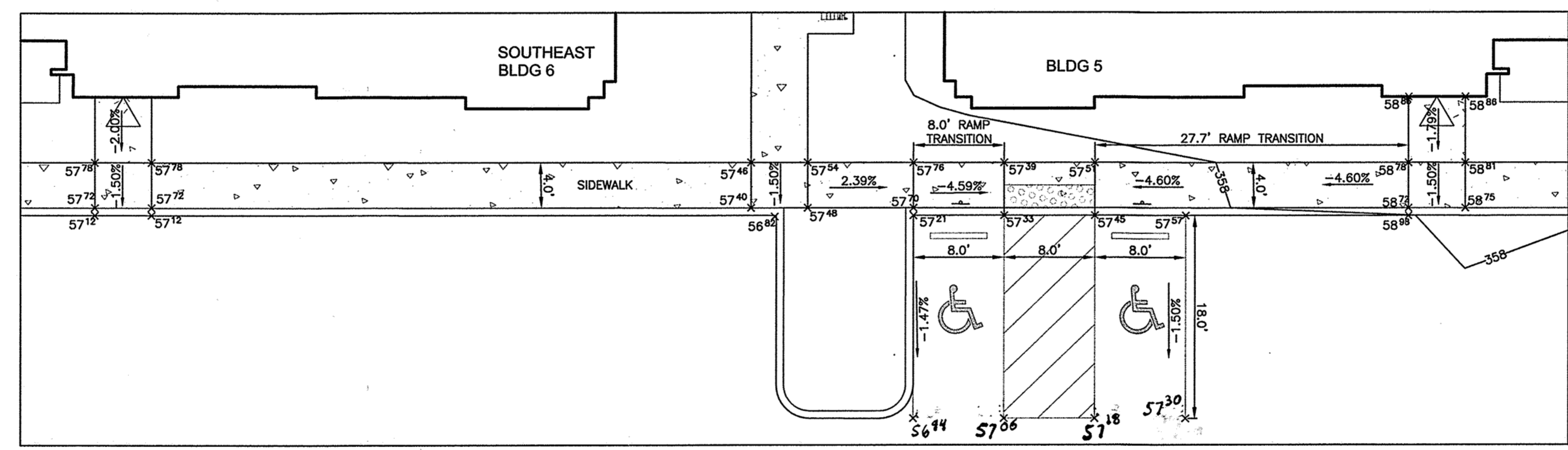


ACCESSIBLE PARKING AND ACCESS DETAIL BUILDING 2
SCALE: 1" = 10'

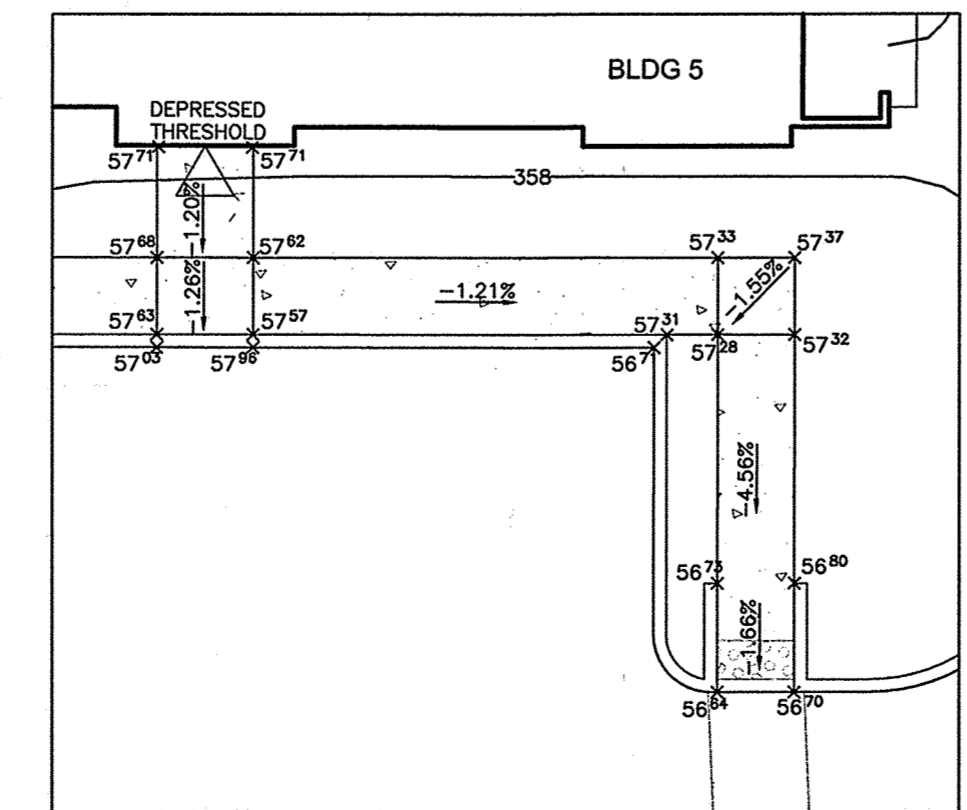
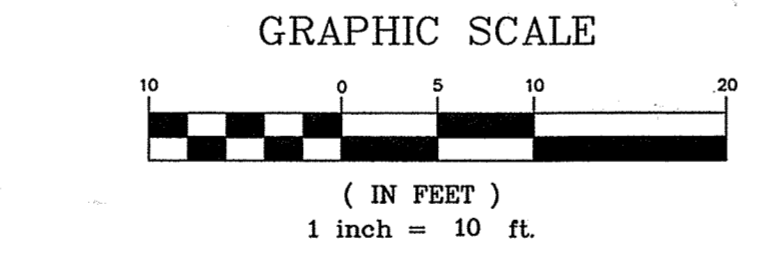
ACCESSIBLE PARKING AND ACCESS DETAIL BUILDING 1
SCALE: 1" = 10'



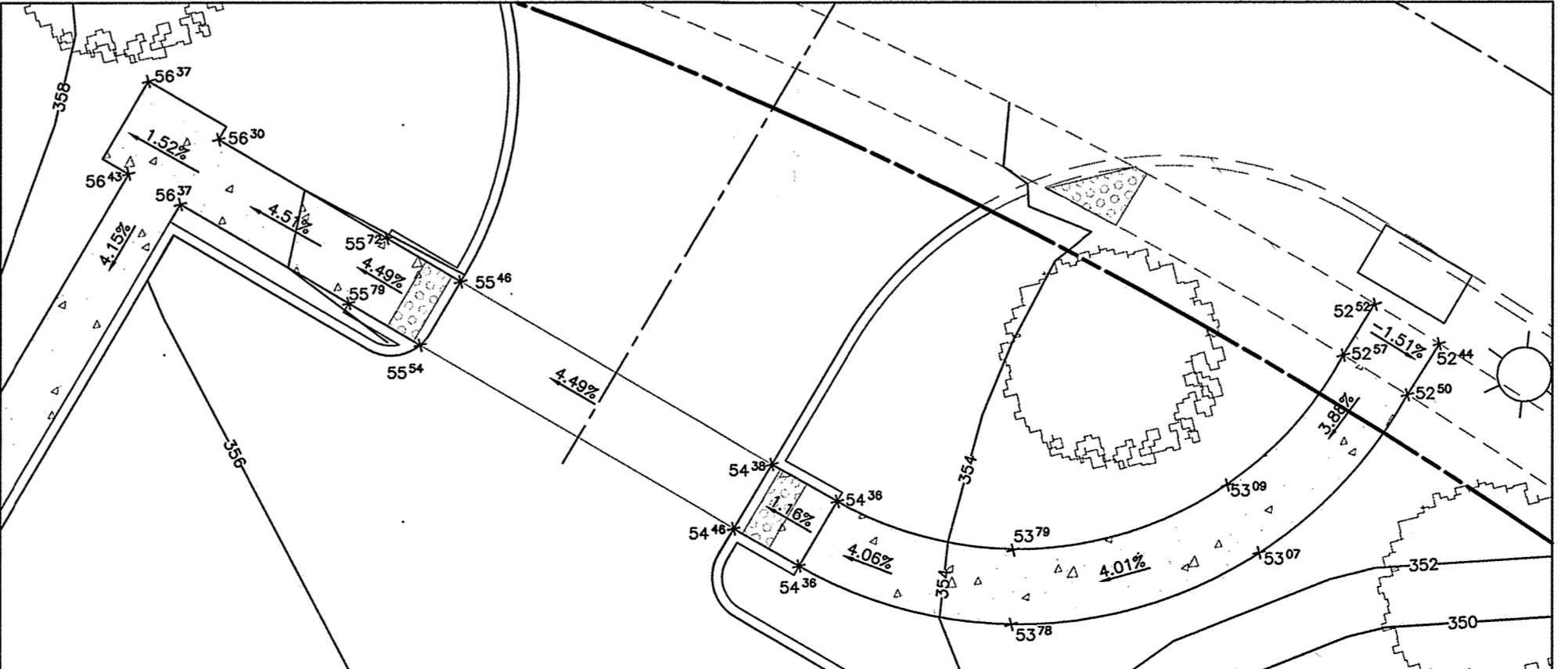
DUMPSTER ACCESS DETAIL BUILDING 2
SCALE: 1" = 10'



ACCESSIBLE PARKING DETAIL BUILDING 5 AND 6
SCALE: 1" = 10'



ACCESSIBLE ROUTE DETAIL BUILDING 5
SCALE: 1" = 10'



ACCESSIBLE ROUTE DETAIL EAST OF BUILDING 4
SCALE: 1" = 10'

- NOTES:
1. ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% CROSS SLOPE IN ALL DIRECTIONS.
 2. ALL HANDICAP PARKING ACCESS RAMPS SHALL BE HOWARD COUNTY R-4.05 OR R-4.06. MAXIMUM RAMP SLOPES SHALL BE IN ACCORDANCE WITH DETAIL. RAMPS SLOPES SPECIFICALLY DETAILED ON SHEETS 41-44 SHOULD FOLLOW PLAN DETAILS.
 3. ALL SIDEWALK RAMPS SHALL INCLUDE DETECTABLE WARNING MATS, PER HOWARD COUNTY R-4.07.
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 5. FOR PARALLEL RAMPS DETAILED ON PLAN, SLOPE CURB TO MATCH RAMP SLOPE WITHIN THE "RAMP TRANSITION" TO CENTER LANDING. THIS PLAN DEMONSTRATES GENERAL SLOPES FOR ACCESSIBLE ROUTES. FOR MORE DETAIL, SEE SHEETS 41-44.
 6. ACCESSIBLE ROUTES SHALL MEET THE FOLLOWING PARAMETERS:
 - 7.1. GAPS ALONG AN ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2" LEVEL CHANGES ALONG AN ACCESSIBLE ROUTE: 1/2" MAXIMUM VERTICAL RISE, 1/2"-1" MAXIMUM WITH A 1:2 BEVEL, AND GREATER THAN 1/2" MUST BE RAMPED.
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 - 7.3. CROSS SLOPES SHALL NOT EXCEED 2%.
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"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21442 Expiration Date: 12-21-22

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
REGISTERED PROFESSIONAL ENGINEERS, LAND SURVEYORS, PLANNERS
8480 BALTIMORE NATIONAL PIKE & SUITE 315 • ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6108 (F) 410-465-8444
WWW.BEI-CIVILENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

OWNER:
LOCUST THICKET INVESTORS LLC
5836 MEADOWRIDGE ROAD
ELKRIEDE, MD 21075
410-465-4244

DEVELOPER:
LOCUST THICKET INVESTORS LLC
P.O. BOX 417
ELLICOTT CITY, MD 21041
410-465-4244

DESIGN: AM **CHECKED:** CAM

THE WEXLEY AT 100
BUILDABLE BULK PARCELS A, C & D
9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
TAX MAP 37, GRID 9, PARCELS 714 & 724
1st ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN
HANDICAP PARKING AND ACCESS DETAILS**

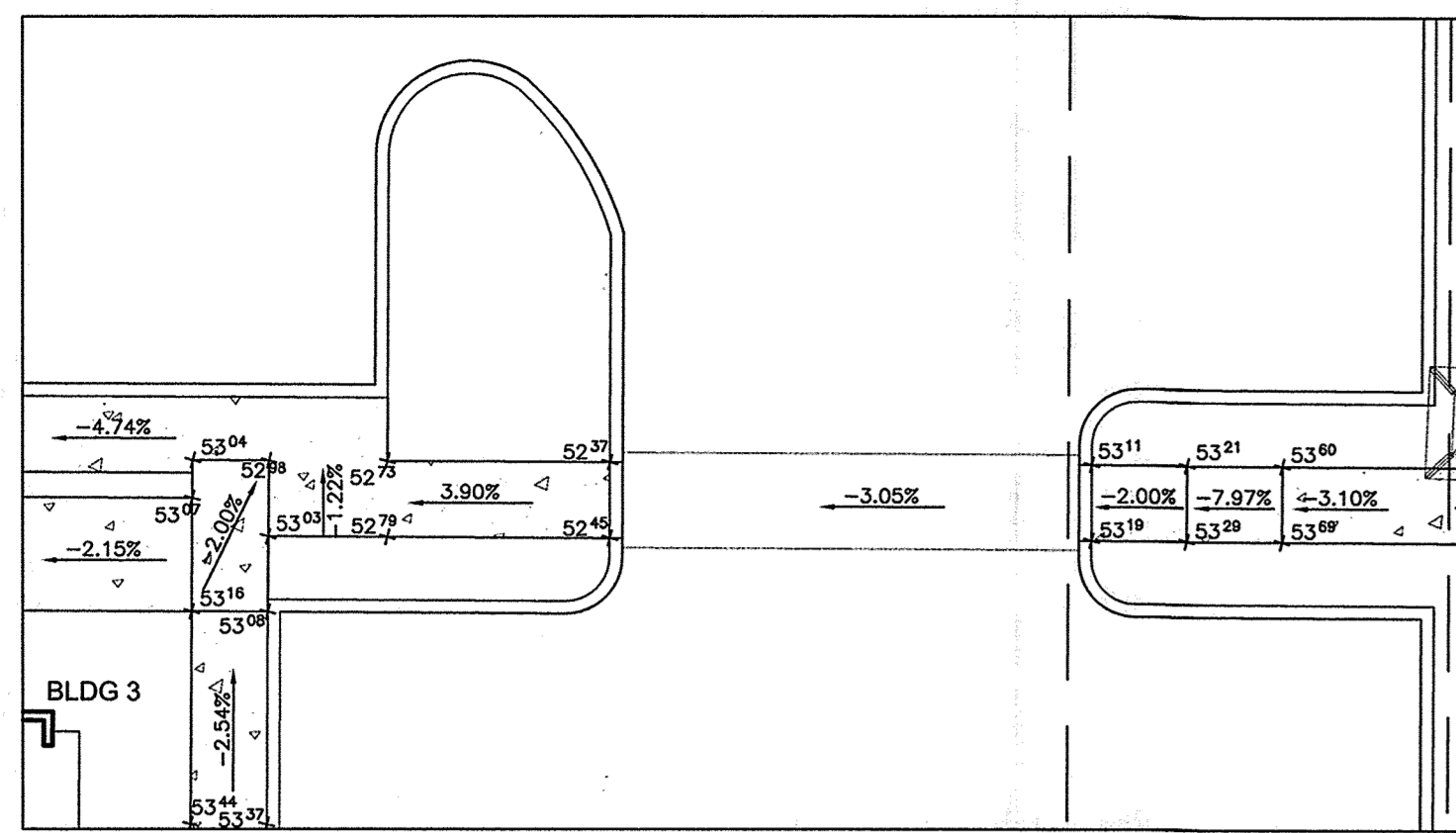
DATE: JULY 2018 PROJECT NO. 0925
SCALE: AS SHOWN DRAWING 43 OF 47

APPROVED: DEPARTMENT OF PLANNING AND ZONING

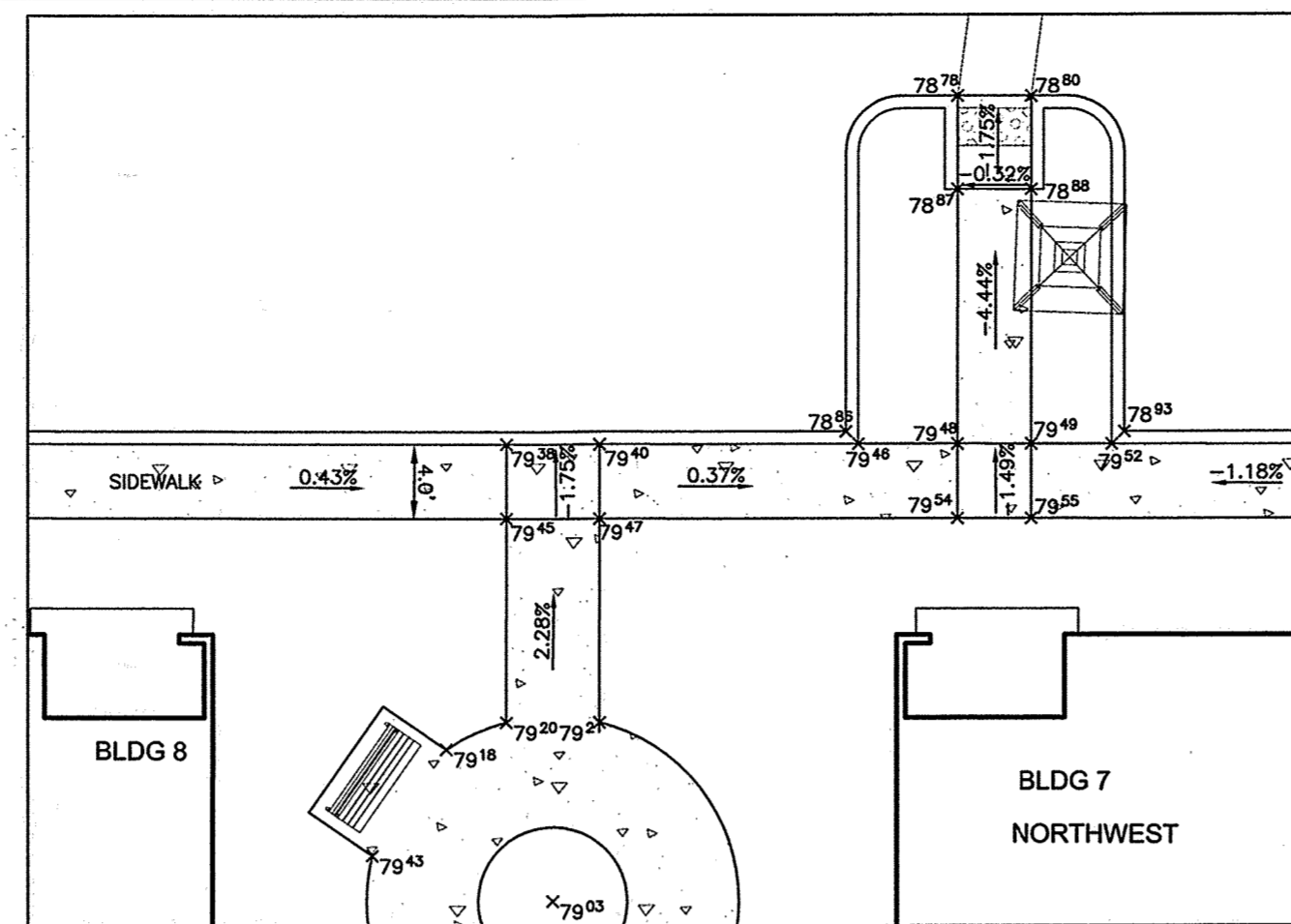
David Clark 8-16-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kurt Seidman 8-23-18
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

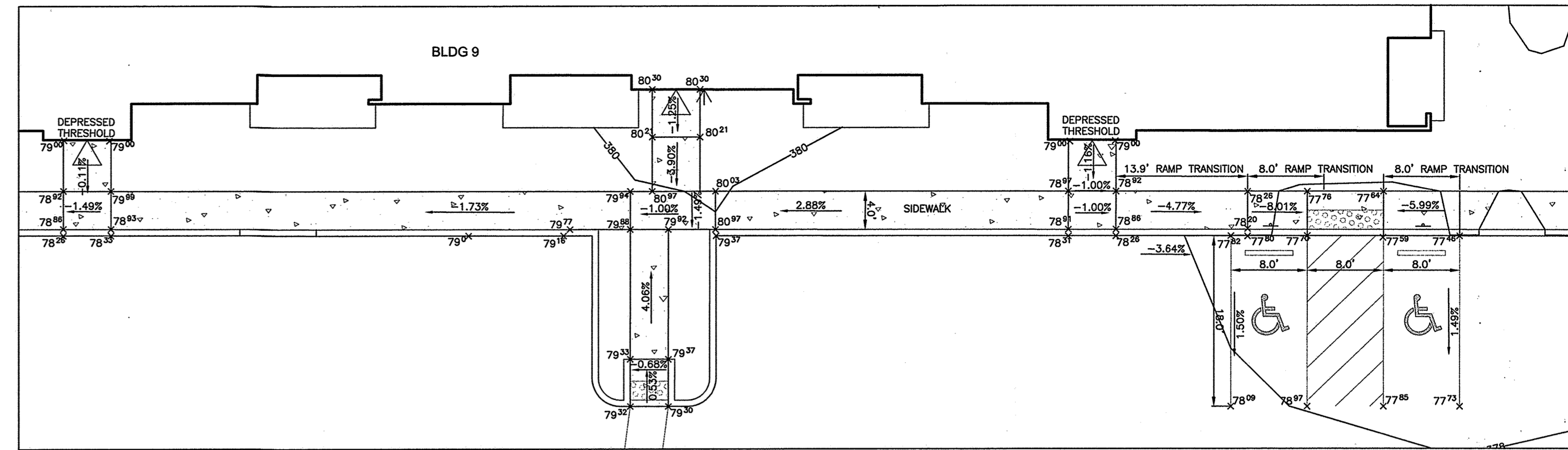
Natalie J. J. J. 8-24-18
DIRECTOR DATE



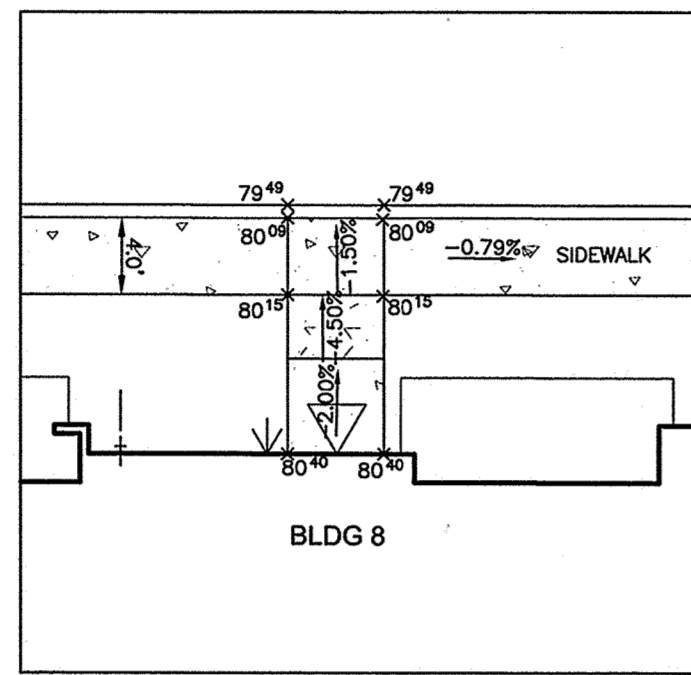
ACCESSIBLE ROUTE DETAIL
BUILDING 3 UPPER, NORTHEAST CORNER
SCALE: 1" = 10'



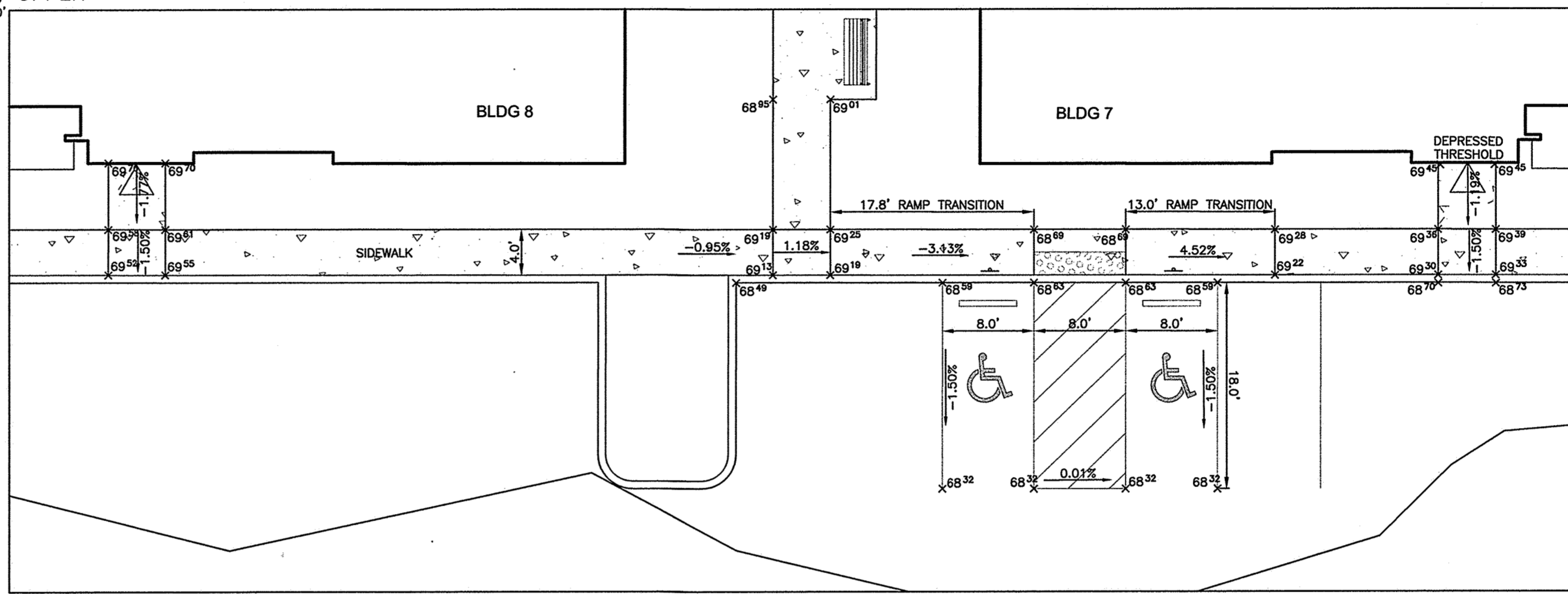
ACCESSIBLE ACCESS DETAIL
BUILDING 7 & 8, UPPER
SCALE: 1" = 10'



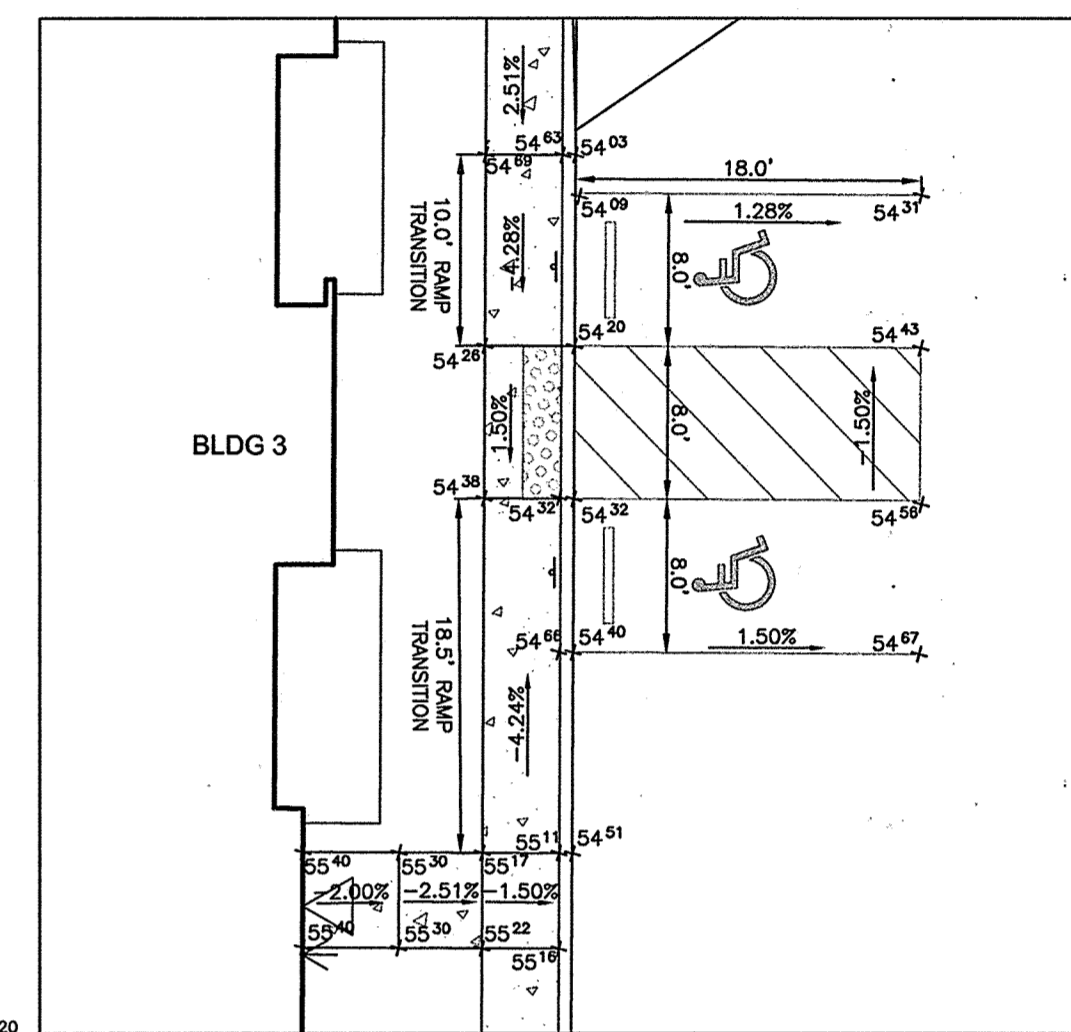
ACCESSIBLE PARKING AND ACCESS DETAIL
BUILDING 9, SOUTHEAST
SCALE: 1" = 10'



ACCESSIBLE ROUTE DETAIL
BUILDING 8 UPPER
SCALE: 1" = 10'



ACCESSIBLE PARKING AND ACCESS DETAIL
BUILDING 7 AND 8 LOWER, SOUTHEAST
SCALE: 1" = 10'

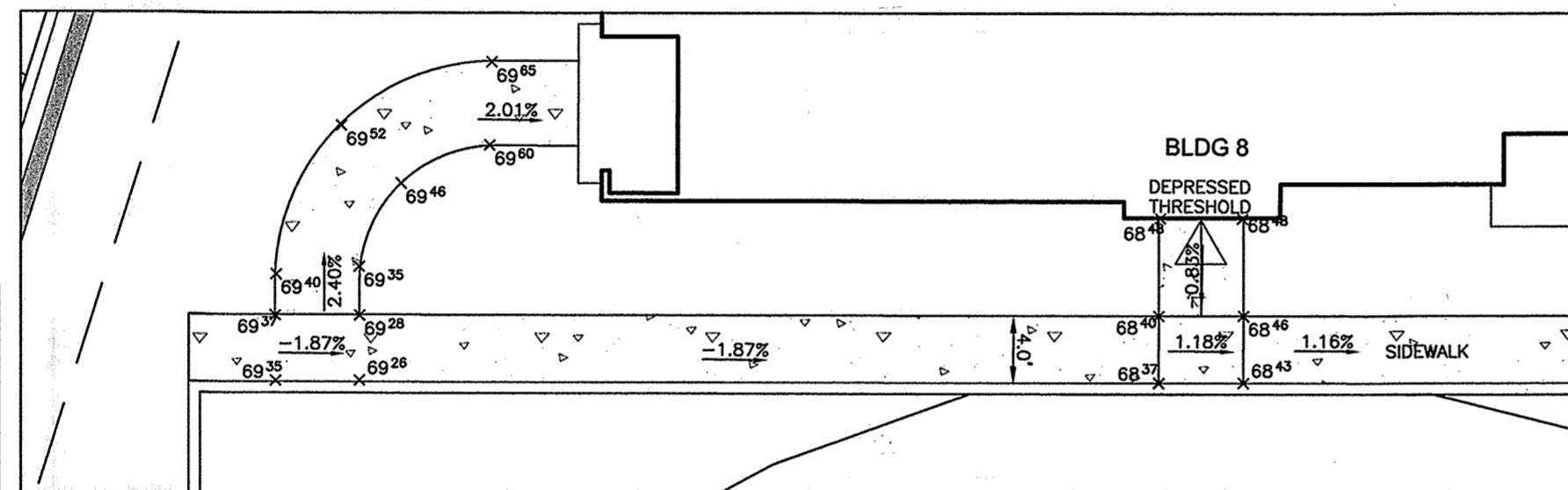


ACCESSIBLE PARKING AND ACCESS DETAIL
BUILDING 3 UPPER
SCALE: 1" = 10'

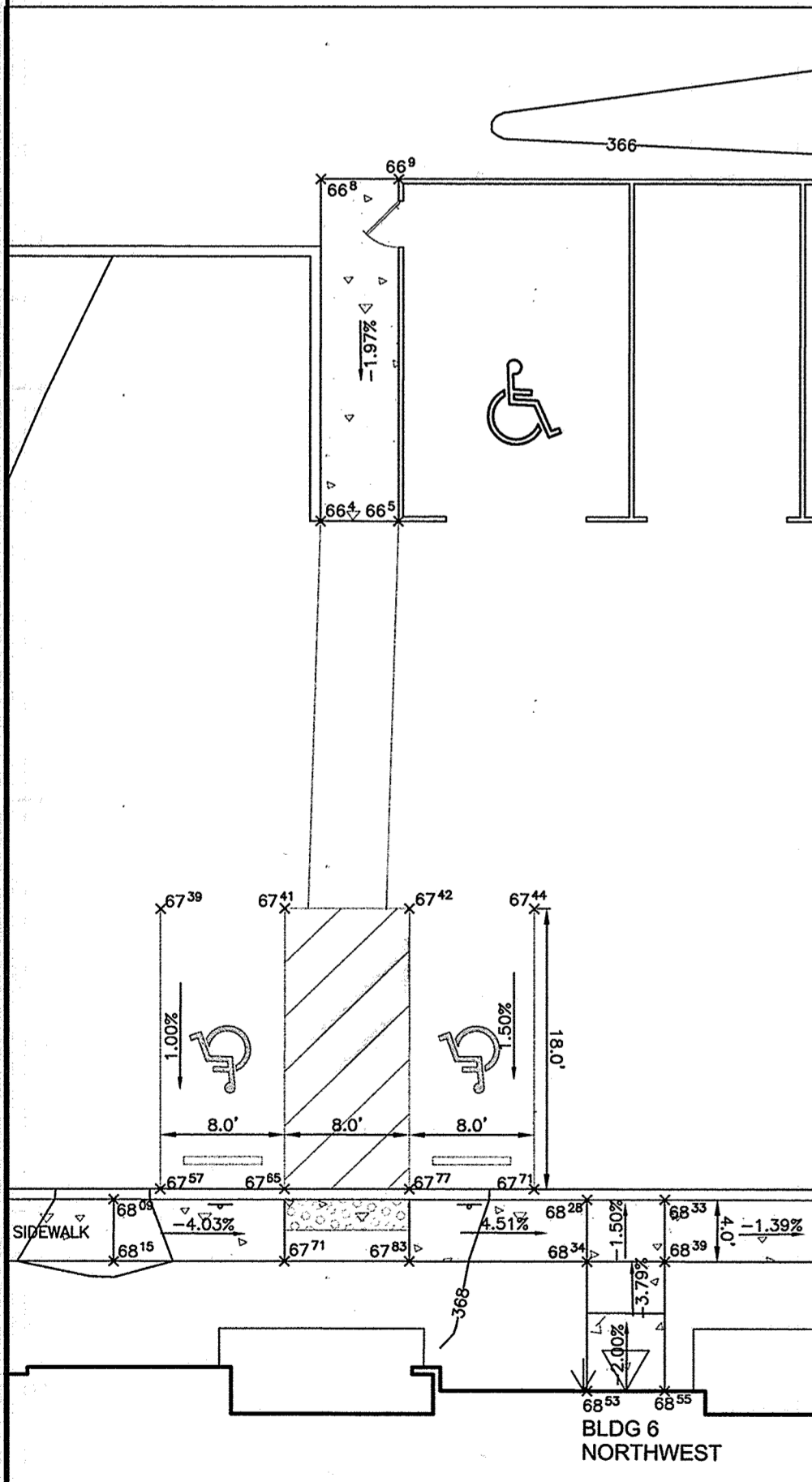
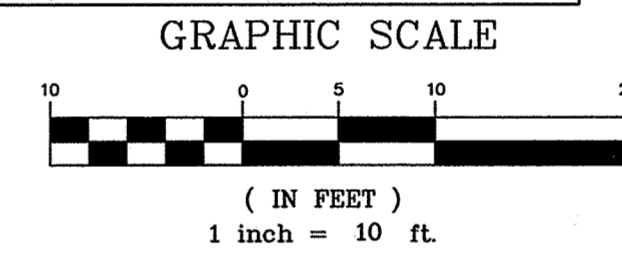
"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



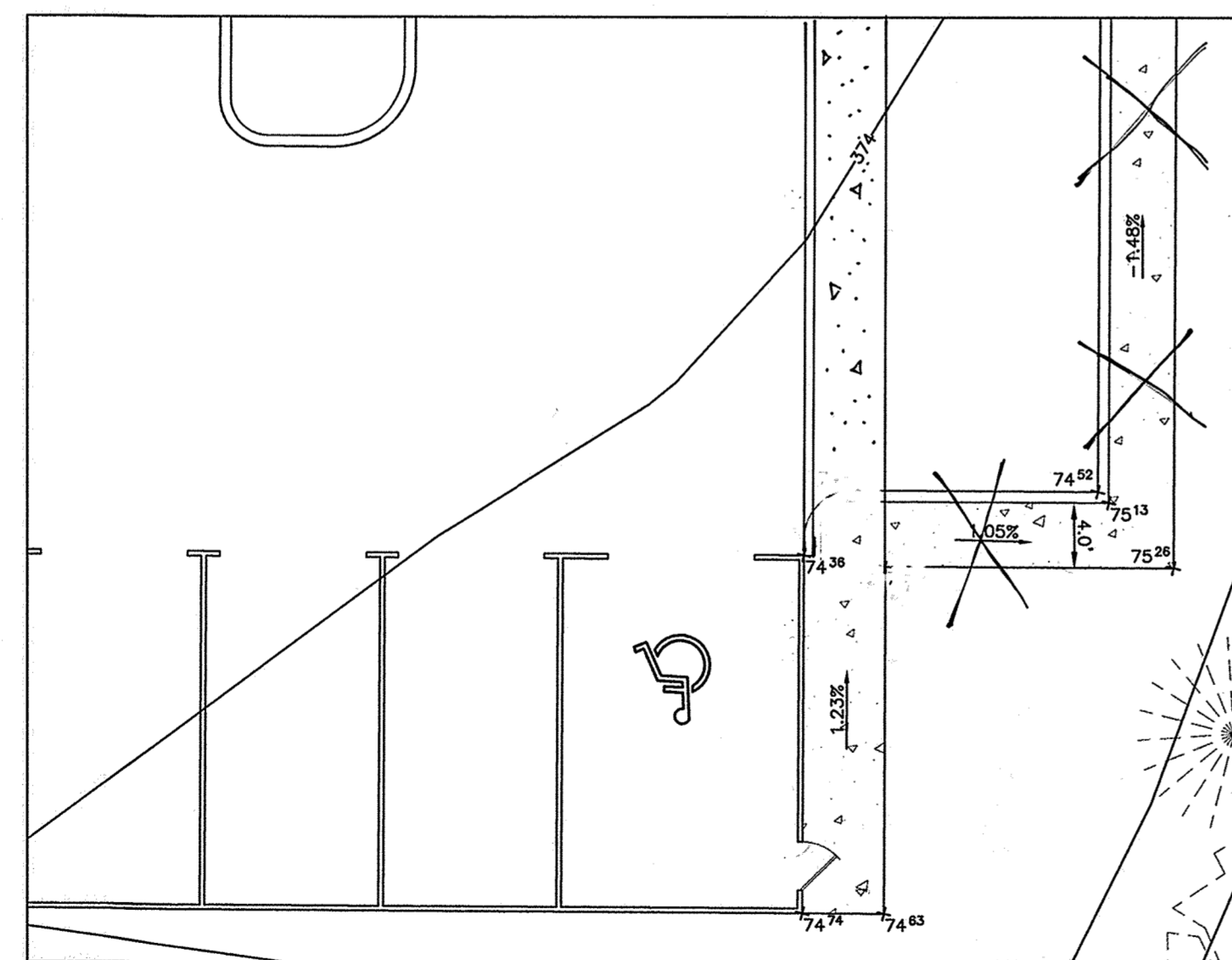
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
License No. 21443, Expiration Date: 12-21-22



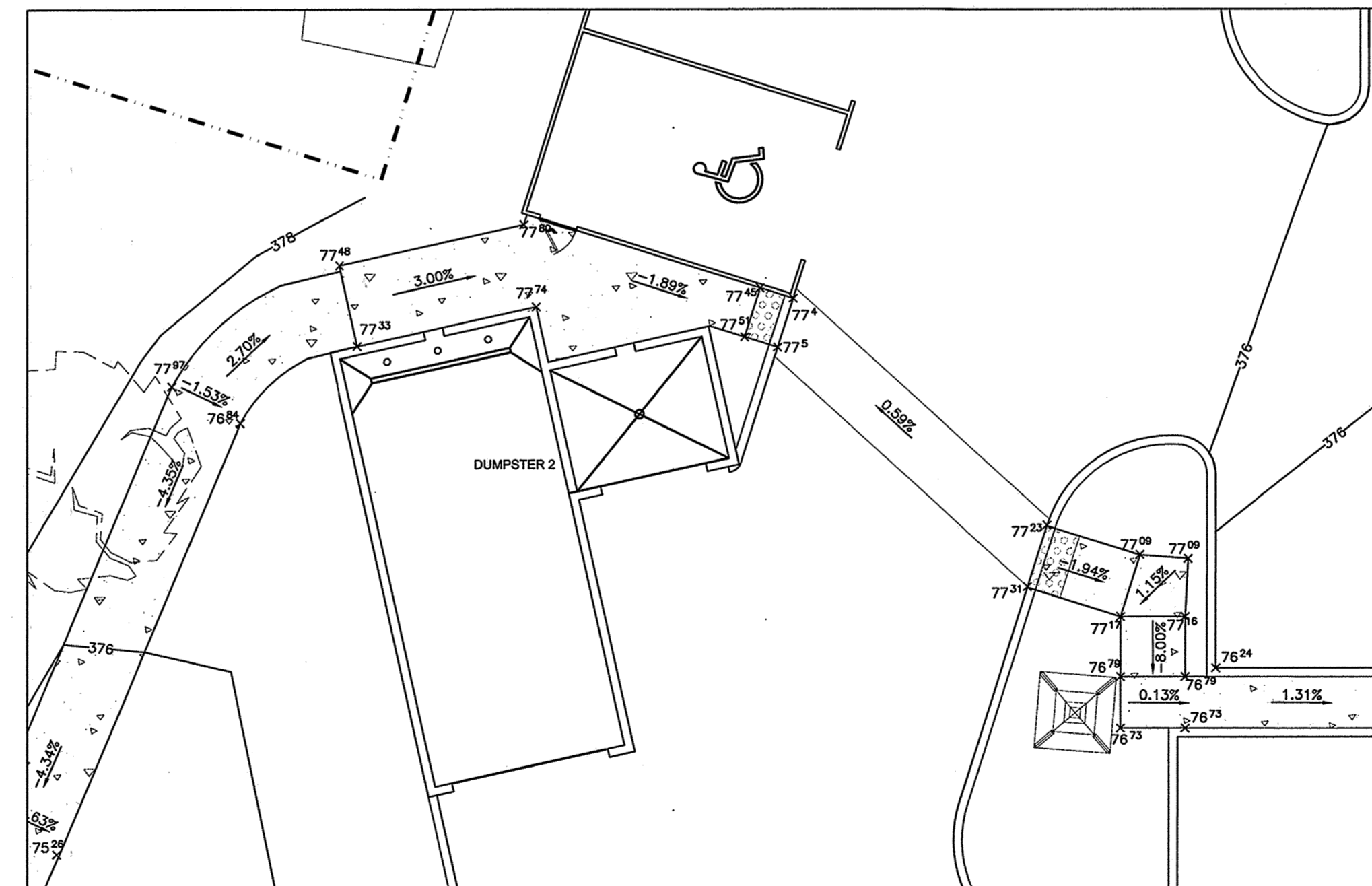
ENTRANCE DETAIL
BUILDING 8 LOWER LEFT AND DOG SPA
SCALE: 1" = 10'



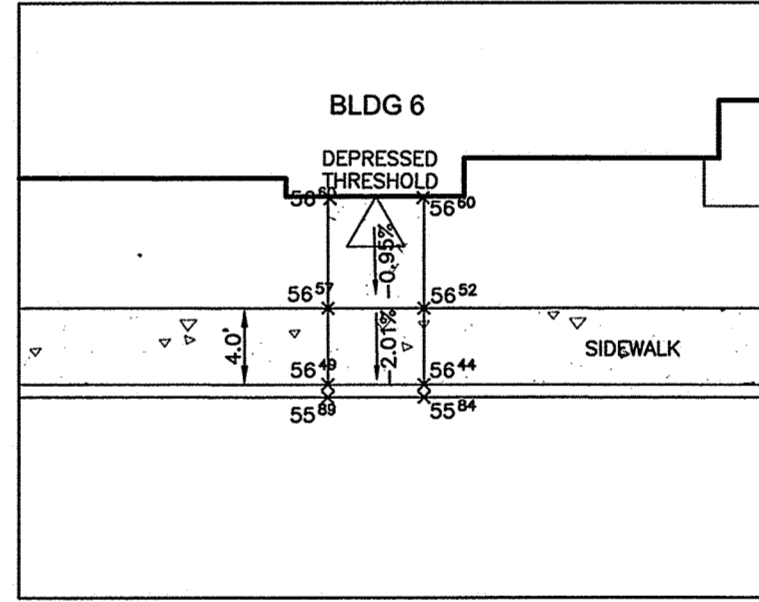
BUILDING 6 UPPER ACCESSIBLE PARKING AND ACCESS DETAIL
SCALE: 1" = 10'



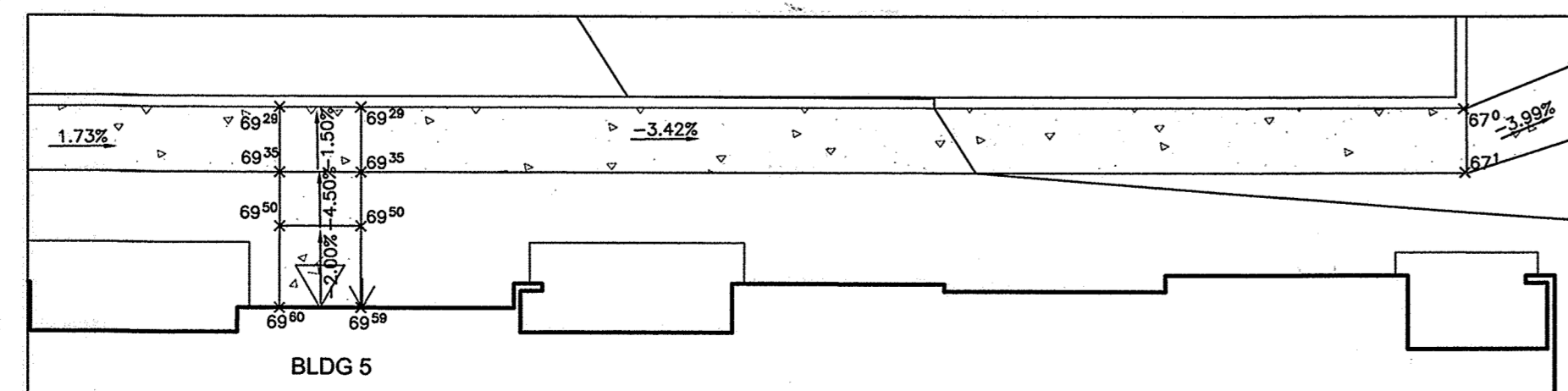
ACCESSIBLE PARKING AND ACCESS DETAIL
GARAGE AT BUILDING 1
SCALE: 1" = 10'



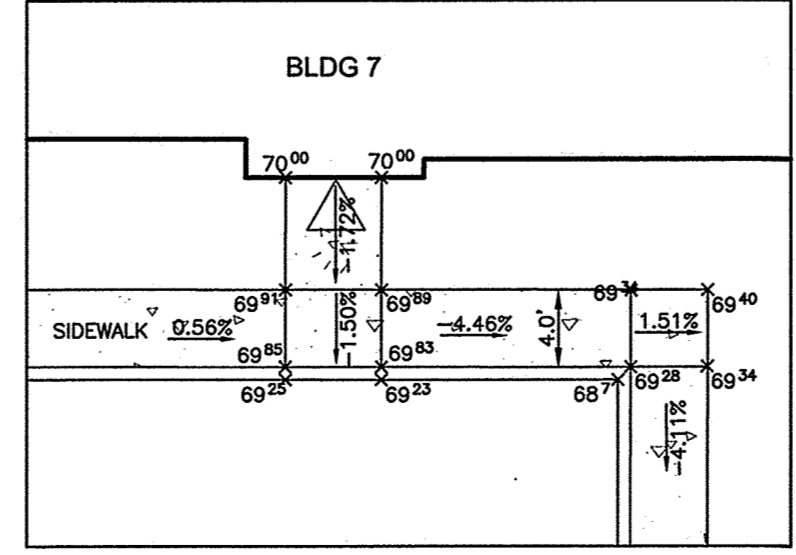
DUMPSTER AND GARAGE ACCESS DETAIL
NEAR BUILDING 9
SCALE: 1" = 10'



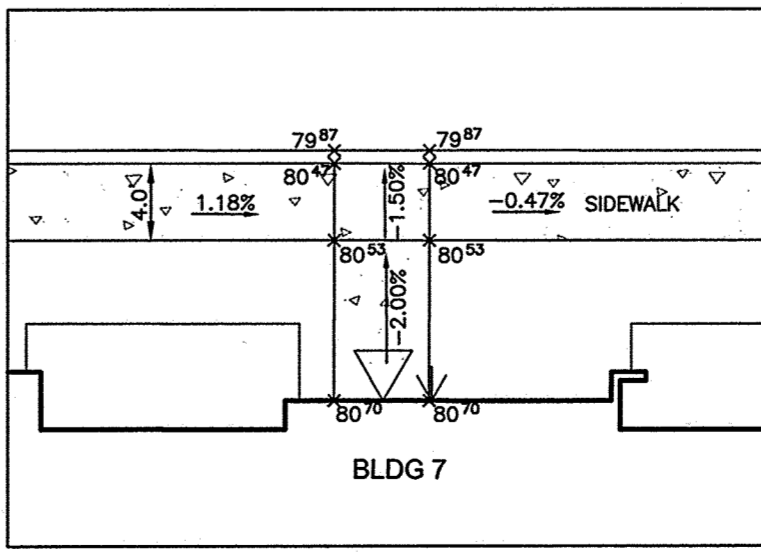
BUILDING 6 LOWER ENTRANCE, SOUTHWEST
SCALE: 1" = 10'



ACCESSIBLE ENTRANCE
BUILDING 5 UPPER
SCALE: 1" = 10'



BUILDING 7 LOWER ENTRANCE SOUTHEAST
SCALE: 1" = 10'



BUILDING 7 UPPER ENTRANCE
SCALE: 1" = 10'

- NOTES:
- ALL HANDICAP PARKING SPACES SHALL HAVE A MAXIMUM OF 2% CROSS SLOPE IN ALL DIRECTIONS.
 - ALL HANDICAP PARKING ACCESS RAMPS SHALL BE HOWARD COUNTY R-4.05 OR R-4.06. MAXIMUM RAMP SLOPES SHALL BE IN ACCORDANCE WITH DETAIL. RAMPS SLOPES SPECIFICALLY DETAILED ON SHEETS 41-44 SHOULD FOLLOW PLAN DETAILS.
 - ALL SIDEWALK RAMPS SHALL INCLUDE DETECTABLE WARNING MATS, PER HOWARD COUNTY R-4.07.
 - ALL CURB AND GUTTER SHALL BE HOWARD COUNTY R-3.01, 7" COMBINATION CURB.
 - FOR PARALLEL RAMPS DETAILED ON PLAN, SLOPE CURB TO MATCH RAMP SLOPE WITHIN THE 'RAMP TRANSITION' TO CENTER LANDING. THIS PLAN DEMONSTRATES GENERAL SLOPES FOR ACCESSIBLE ROUTES. FOR MORE DETAIL, SEE SHEETS 41-44.
 - ACCESSIBLE ROUTES SHALL MEET THE FOLLOWING PARAMETERS:
 - GAPS ALONG AN ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2".
 - LEVEL CHANGES ALONG AN ACCESSIBLE ROUTE: 1/4" MAXIMUM VERTICAL RISE, 1/4" MAXIMUM WITH A 1:2 BEVEL, AND GREATER THAN 1/2" MUST BE RAMPED.
 - RUNNING SLOPES SHALL NOT EXCEED 5%.
 - CROSS SLOPES SHALL NOT EXCEED 2%.
 - RAMPS WITH SLOPES BETWEEN 5% AND 8.33% REQUIRE HANDRAILS COMPLYING WITH ADA ON BOTH SIDES OF THE RAMP. NOTE: RAMPS LESS THAN 6' IN LENGTH DO NOT REQUIRE HANDRAILS.
 - RAMPS SHALL NOT EXCEED 8.33%.
 - INTERSECTING SIDEWALKS SHALL BE 2% MAXIMUM IN ANY DIRECTION.
 - ACCESSIBLE PARKING AND ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] DATE: 8-16-18
 [Signature] DATE: 8-23-18
 [Signature] DATE: 8-24-18

NO.	DATE	REVISION

BENCHMARK ENGINEERING, INC.
 ENGINEERS & LAND SURVEYORS & PLANNERS
 8480 BALTIMORE NATIONAL PIKE A SUITE 315 & ELLICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BC-ENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS

ZONED R-A-15 & POR
 TAX MAP 37, GRID 9, PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

**SITE DEVELOPMENT PLAN
 HANDICAP PARKING AND ACCESS DETAILS**

OWNER: LOCUST THICKET INVESTORS LLC
 5836 MEADOWBRIDGE ROAD
 ELK RIDGE, MD 21075
 410-465-4244

DEVELOPER: LOCUST THICKET INVESTORS LLC
 P.O. BOX 417
 ELLICOTT CITY, MD 21041
 410-465-4244

DESIGN: AAM CHECKED: CAM

DATE: JULY 2018 PROJECT NO.: 0925
 SCALE: AS SHOWN DRAWING 44 OF 47

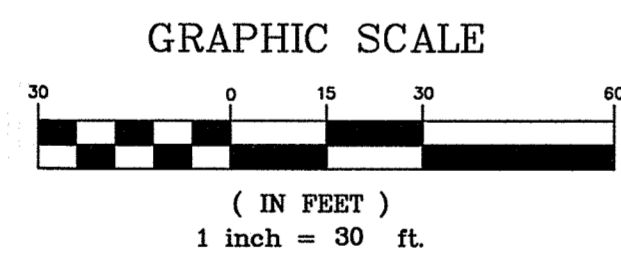
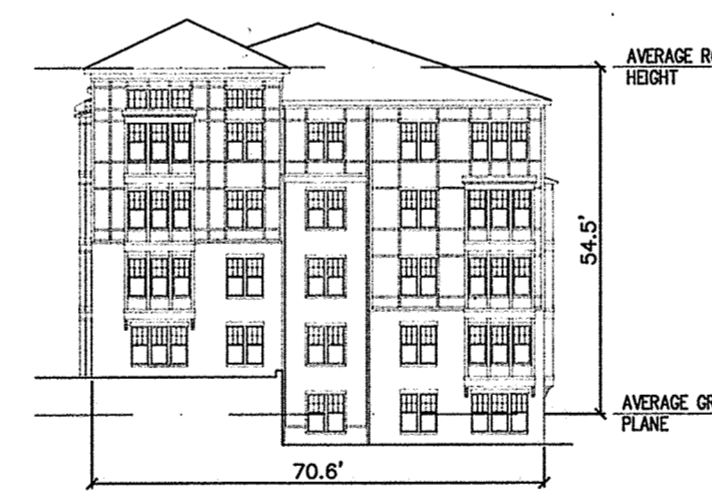
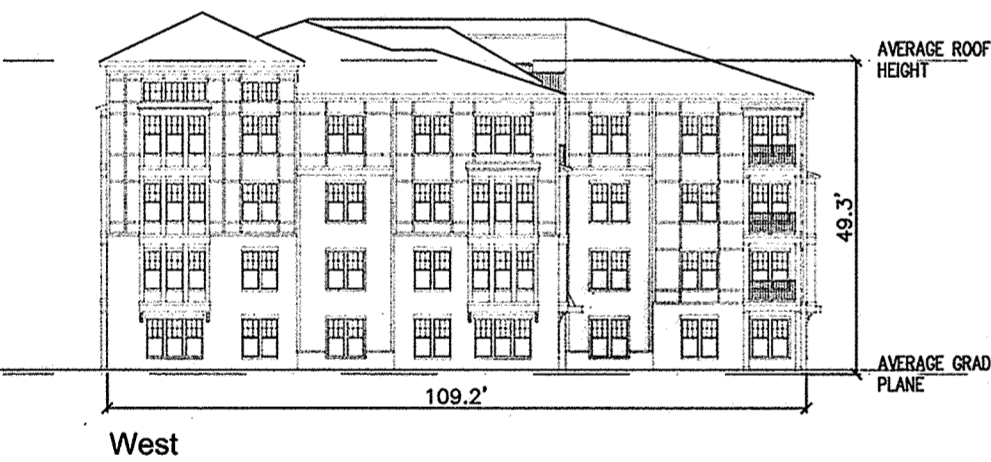
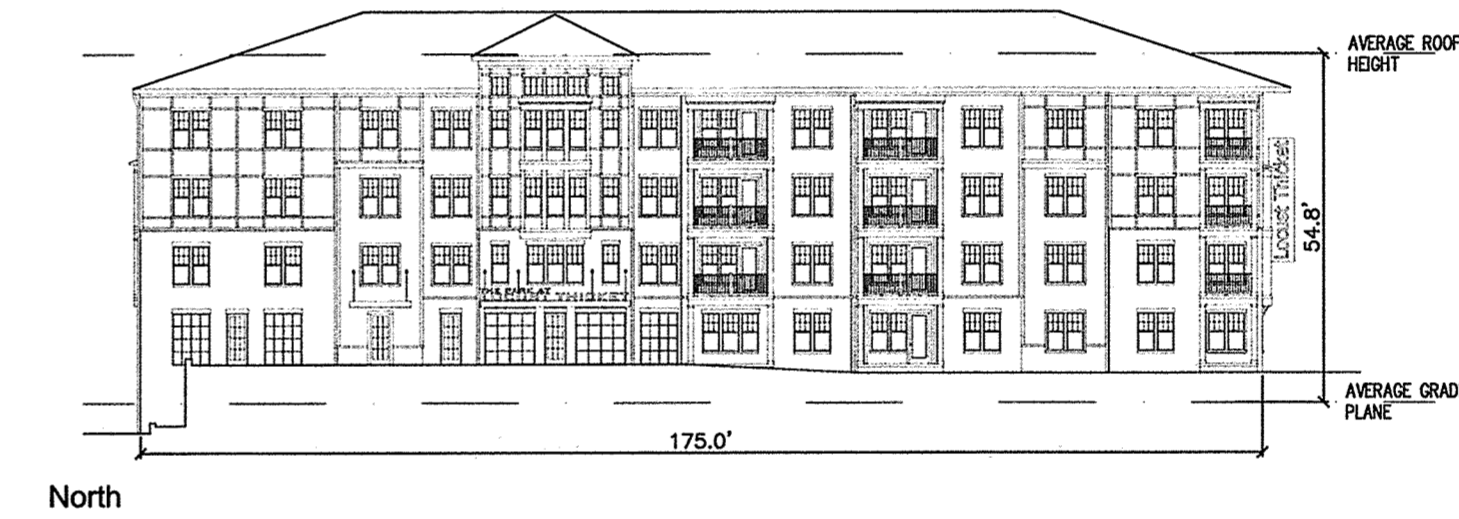
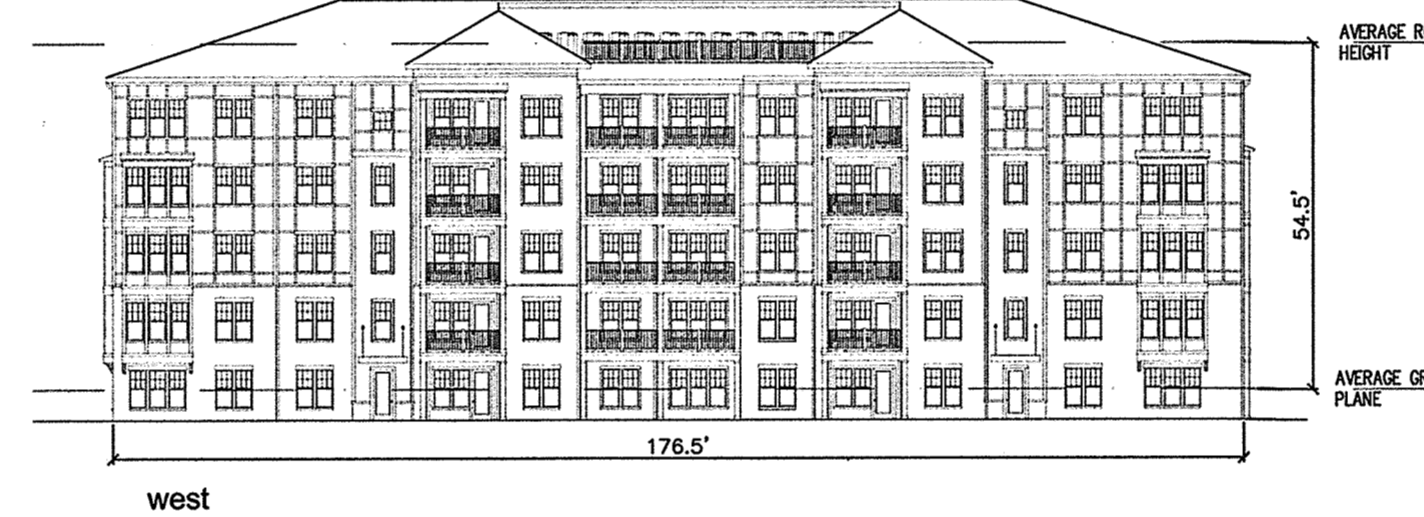
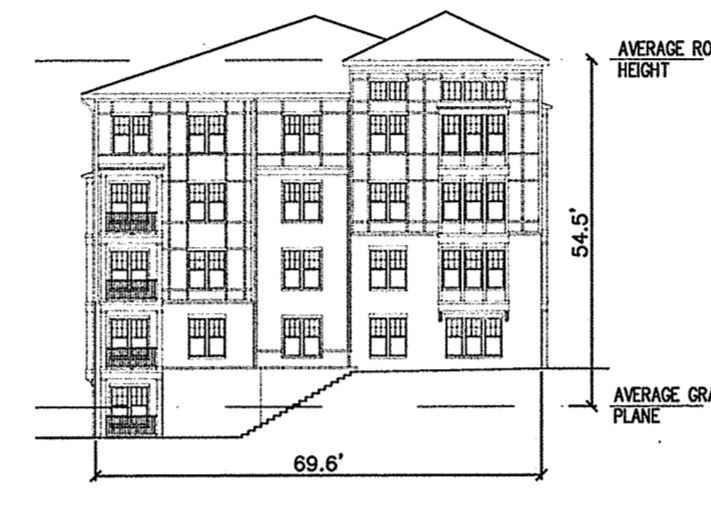
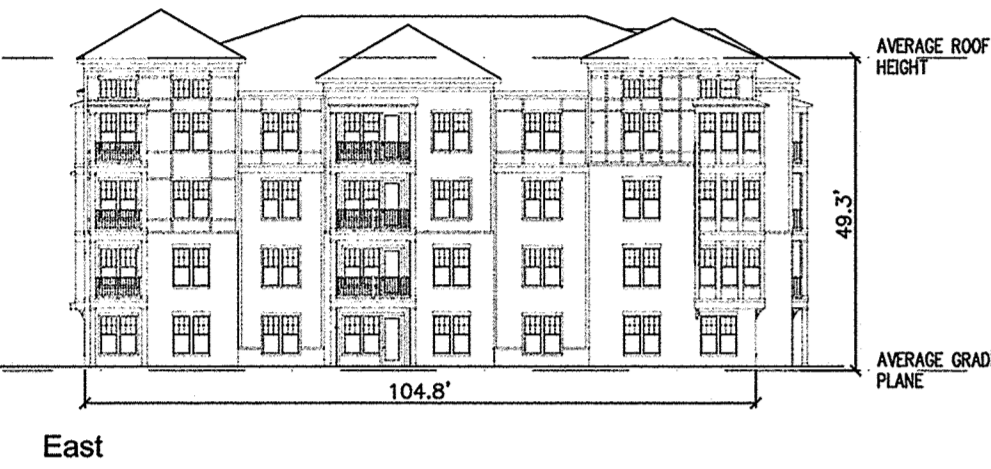
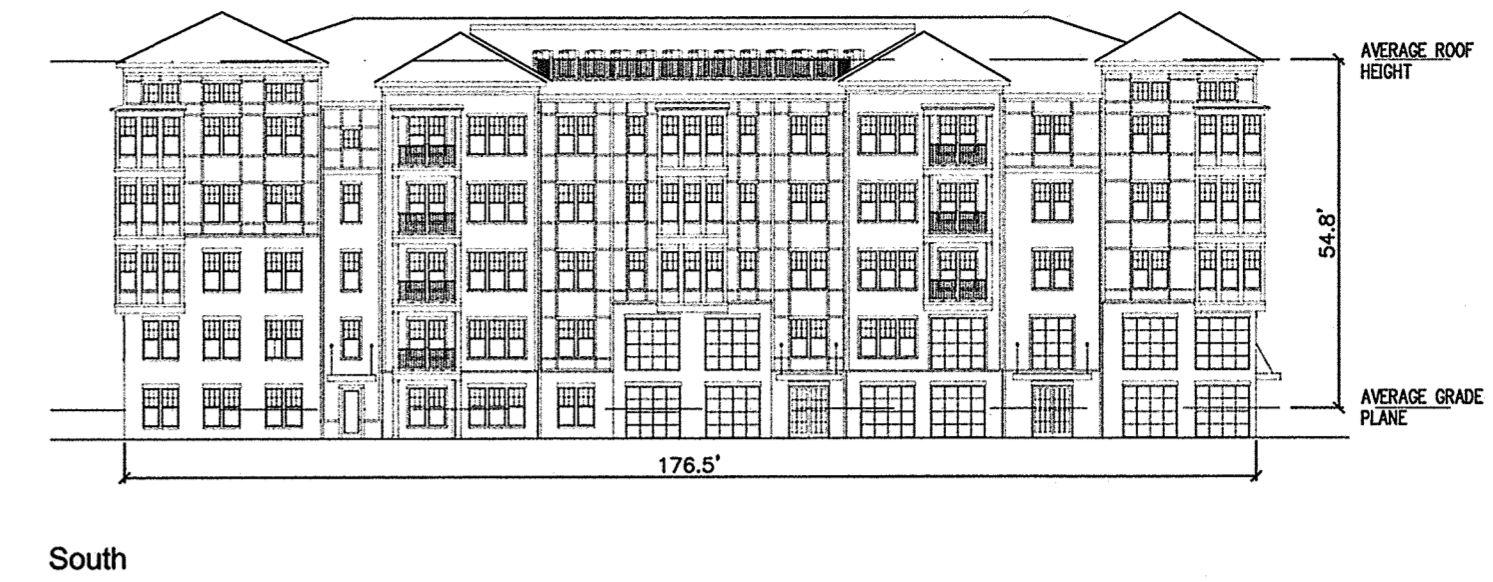
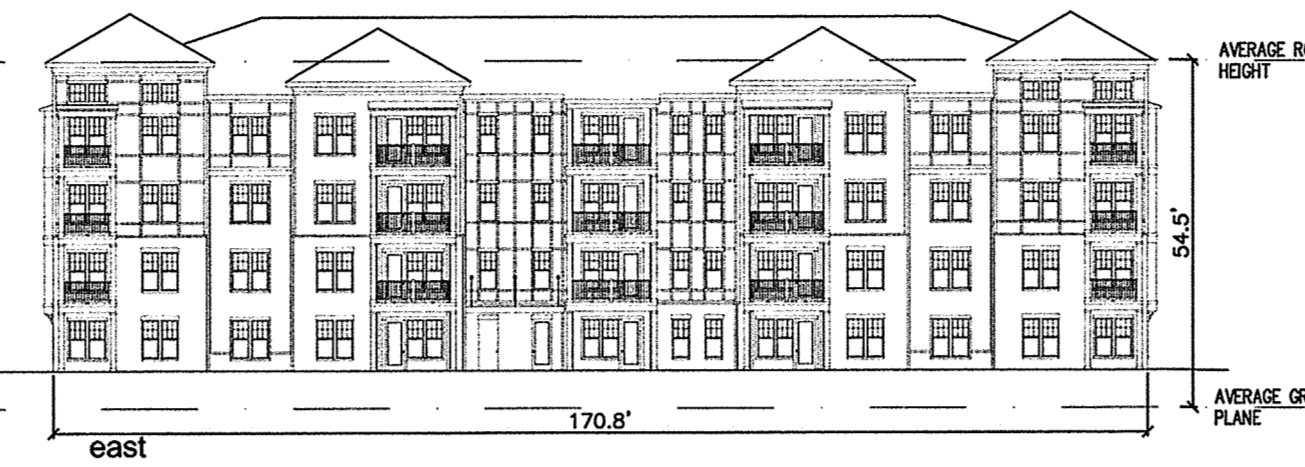
Building 1

Building 2

Building 3

Building 4

NOTE THAT NEITHER THE FRONT NOR REAR FACE OF BUILDING #4 EXCEEDS THE CURRENTLY APPROVED 180' LENGTH, ONLY WHEN MEASURED AS AN OVERALL BUILDING FOOTPRINT IS THE SIZE EXCEEDED. SEE ALSO NOTE #38 ON SHEET 1 FOR MORE INFORMATION



BUILDING ELEVATIONS

BUILDING AREAS

Building Number	1 (A) Residential	2 (A) Residential	3 (B) Residential	4 (C) Mixed Use	5 (B) Residential	6 (B) Residential	7 (B) Residential	8 (D) Residential	9 (E) Residential
Actual Building Area per floor									
• Basement Level	N/A	N/A	7,162	3,006	6,447	6,998	6,998	6,998	N/A
• First Level	12,542	12,704	12,253	4,931	4,916	12,253	12,253	12,220	12,204
• Second Level	12,613	12,755	12,275	12,430	N/A	12,275	12,275	12,268	12,312
• Third Level	12,613	12,755	12,275	12,441	N/A	12,275	12,275	12,268	12,312
• Fourth Level	12,584	12,726	12,229	12,413	N/A	12,229	12,229	12,253	12,305
Actual Building Area Total per Occupancy				45,221	11,363				
Actual Building Area - TOTAL	50,352	50,940	56,194	56,584	56,030	56,030	56,007	56,007	49,223

"NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET"



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. 21443 Expiration Date: 2-21-22

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 8-16-18
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 8-23-18
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 8-24-18
 DIRECTOR

NO. DATE REVISION	
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM	
OWNER:	LOCUST THICKET INVESTORS LLC 5836 MEADOWRIDGE ROAD ELKRIEGE, MD 21075 410-465-4244
DEVELOPER:	LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLICOTT CITY, MD 21041 410-465-4244
DATE:	JULY 2018
PROJECT NO.:	0925
DESIGN:	AAM
CHECKED:	CAM
SCALE:	AS SHOWN
DRAWING:	45 OF 47

THE WEXLEY AT 100
 BUILDABLE BULK PARCELS A, C & D
 9 APARTMENT BUILDINGS
 ZONED R-A-15 & POR
 TAX MAP 37, GRID 9 PARCELS 714 & 724
 1st ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
SITE DEVELOPMENT PLAN
BUILDING ELEVATIONS
 SDP-18-029

BUILDING ELEVATIONS AND DATA WERE PROVIDED BY THE ARCHITECT.

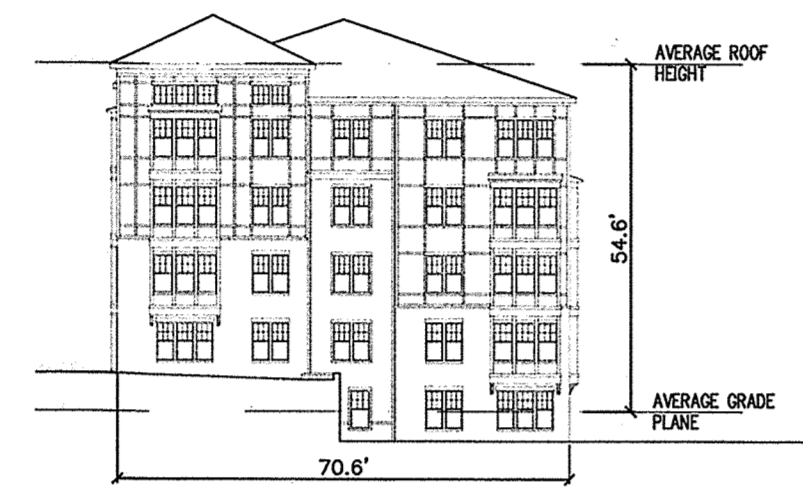
AS-BUILT

SDP-18-029

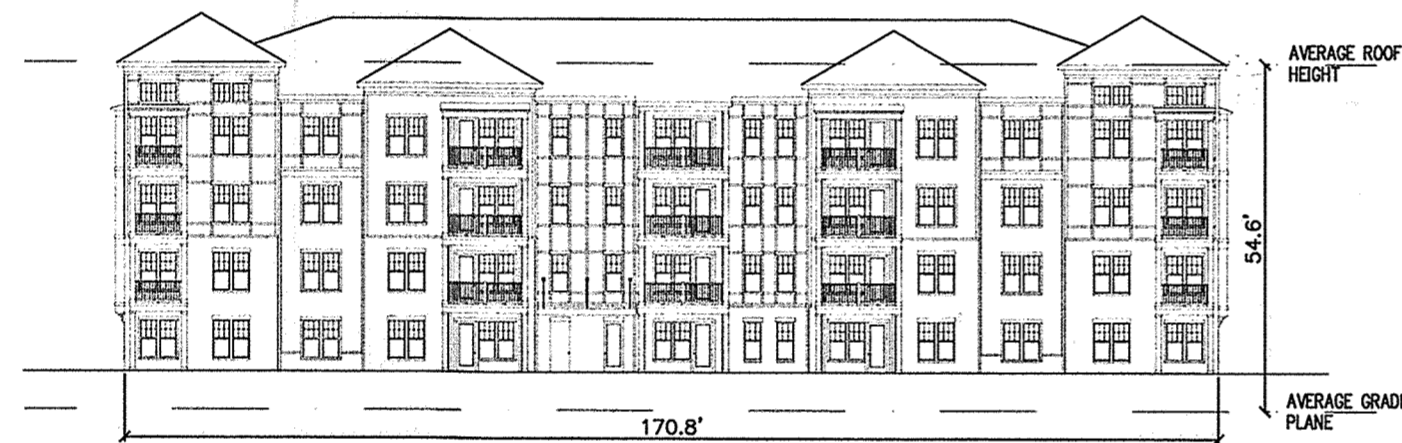
Building 5



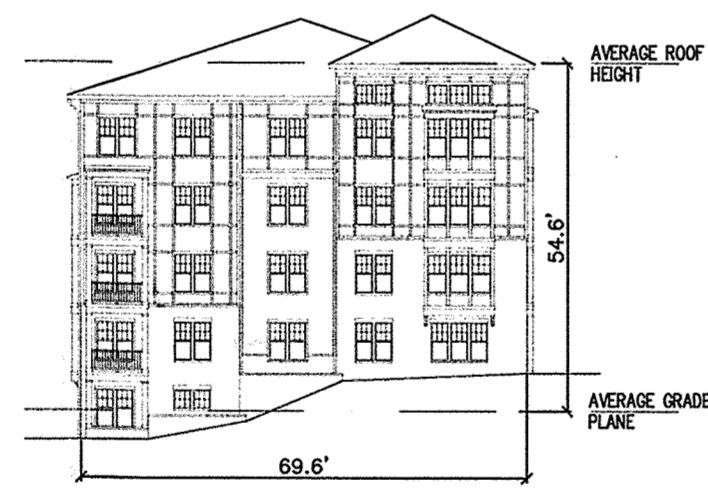
South



West



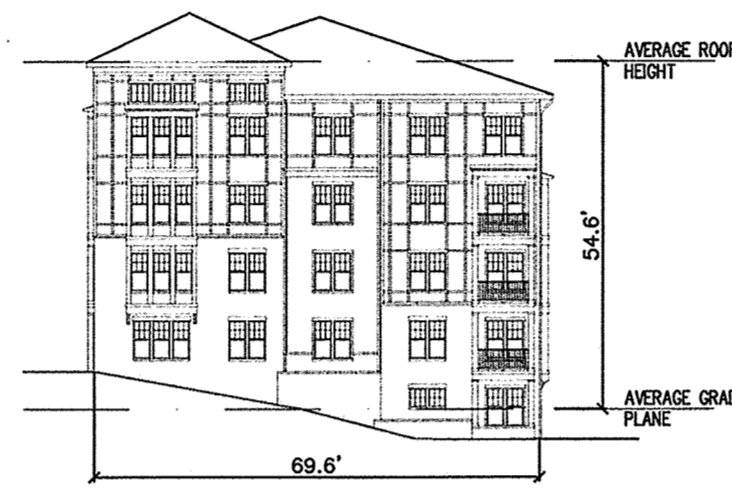
North



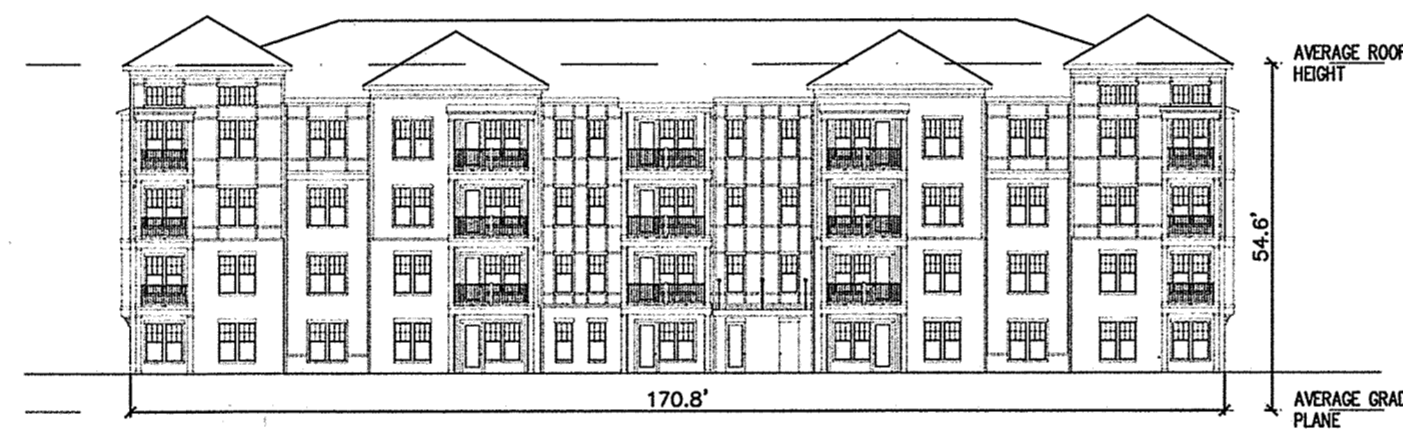
Building 6



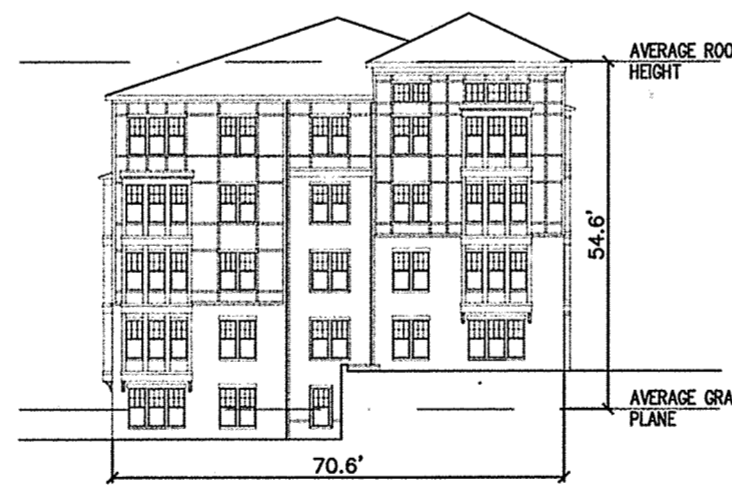
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West



North

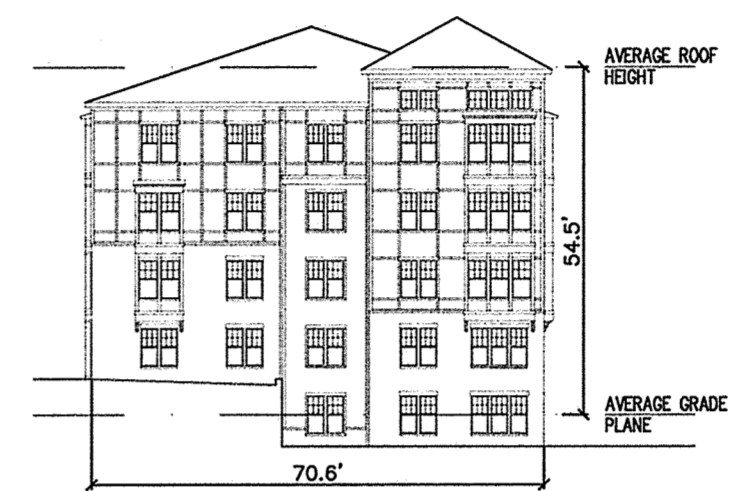


East

Building 7



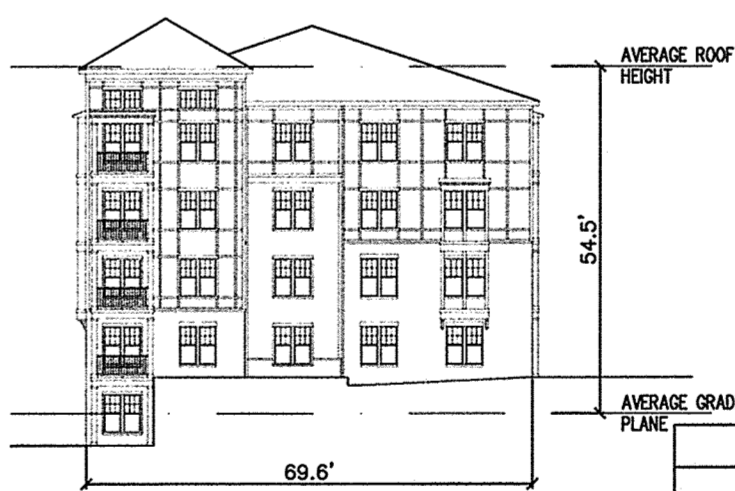
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West

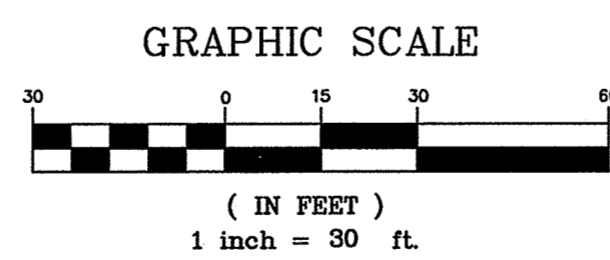


North



East

BUILDING ELEVATIONS



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License No. 21442, Expiration Date: 12-21-22



APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i>	8-16-18
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	8-23-18
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	8-24-18
DIRECTOR	DATE

NO.	DATE	REVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043
(P) 410-465-8100 (F) 410-465-8644
WWW.BE-CIVILENGINEERING.COM

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. 28376, Expiration Date: 01-01-19.

OWNER:	LOCUST THICKET INVESTORS LLC 5836 MEADOWRIDGE ROAD ELKRIDGE, MD 21075 410-465-4244
DEVELOPER:	LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244
DESIGN:	AAM
CHECKED:	CAM
SCALE:	AS SHOWN

THE WEXLEY AT 100	
BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS	
ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
SITE DEVELOPMENT PLAN BUILDING ELEVATIONS	
DATE:	JULY 2018
PROJECT NO.:	0925
DRAWING NO.:	46 OF 47

BUILDING ELEVATIONS AND DATA WERE PROVIDED BY THE ARCHITECT.

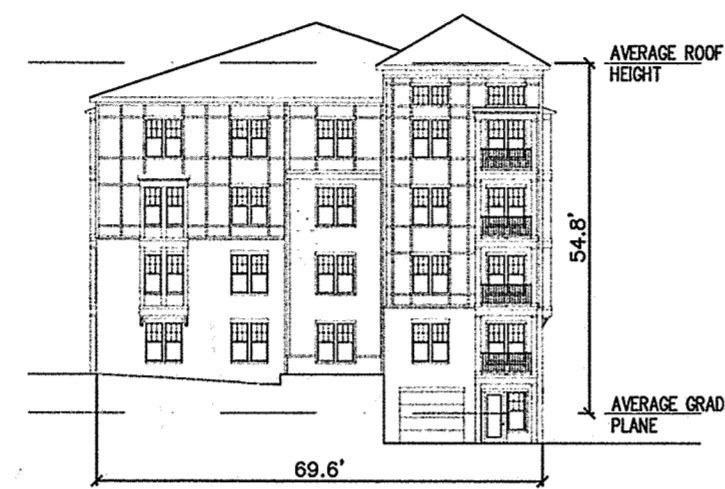
AS-BUILT

SDP-18-029

Building 8



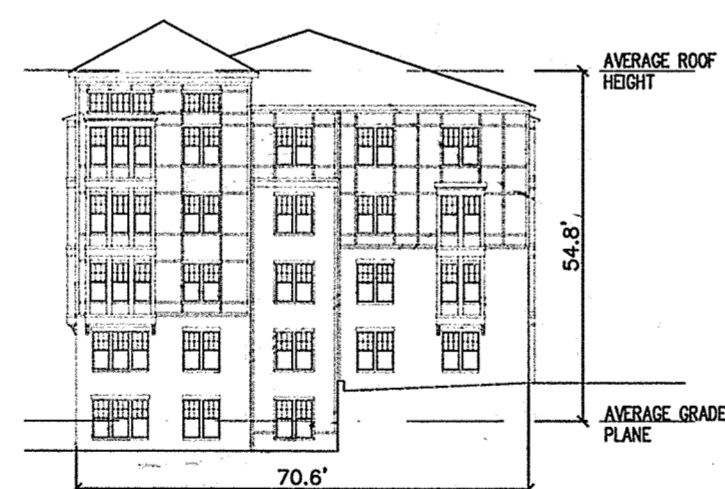
South



West



north

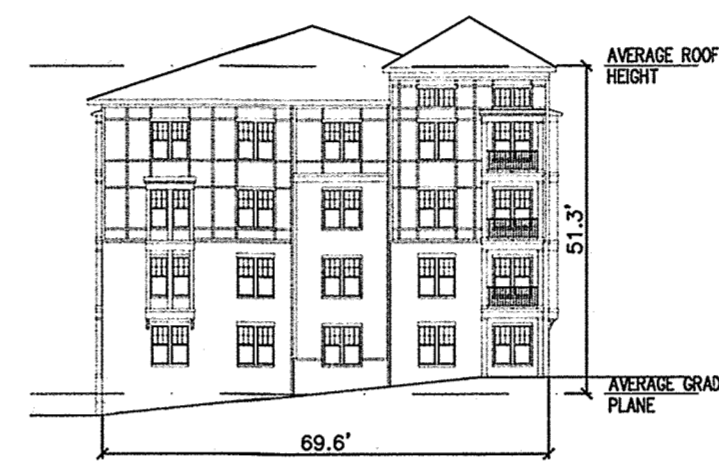


East

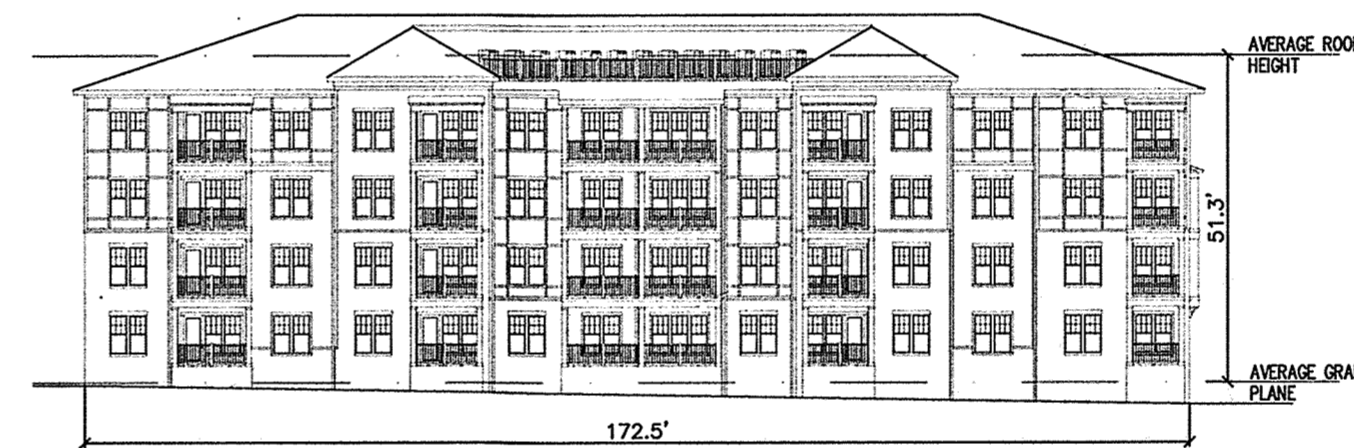
Building 9



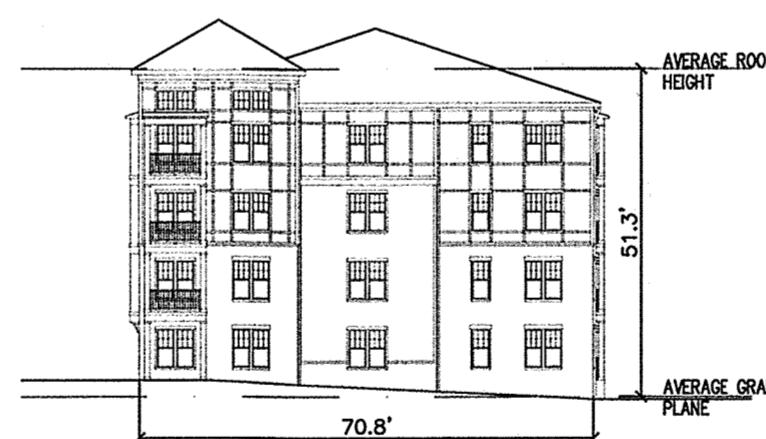
South



West



north



East

Building 3 (Type B)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	170.83	0.66	112.75	
left	70.78	5.3	376.13	
Right	69.58	5.3	368.77	5.88
Rear	176.5	11.4	2,012.10	
Total	487.69	22.66	2,868.76	

Building 4 (Type C)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	175.04	0.66	115.63	
Left-Upper	69.58	0.66	45.92	
Right	69.58	11.4	793.21	6.05
Rear	176.5	11.4	2,012.10	
Total	490.70	24.12	2,966.76	

Building 5 (Type B)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	170.83	0.66	112.75	
Right-Upper	35.75	0.66	23.60	
Right-Lower	34.83	11.4	397.06	5.98
left	69.58	5.3	368.77	
Rear	176.5	11.4	2,012.10	
Total	487.49	29.42	2,914.28	

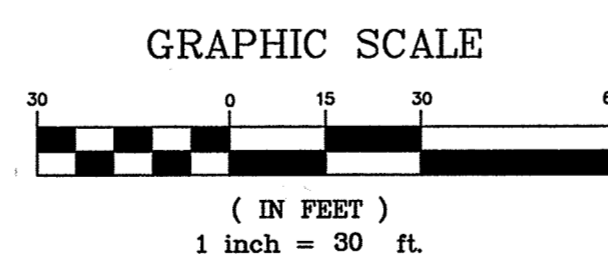
Building 6 (Type B)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	170.83	0.66	112.75	
Left-Upper	35.75	0.66	23.60	
Left-Lower	34.83	11.4	397.06	5.98
Right	69.58	5.3	368.77	
Rear	176.5	11.4	2,012.10	
Total	487.49	29.42	2,914.28	

Building 7 (Type D)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	170.83	0.66	112.75	
Left-Upper	59.13	0.66	39.03	
Left-Lower	10.46	11.4	119.24	
Right-Upper	29.75	0.66	19.84	5.68
Right-Lower	40.83	11.4	465.46	
Rear	176.5	11.4	2,012.10	
Total	487.50	36.18	2,768.21	

Building 8 (Type D)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	170.83	0.66	112.75	
Left-Upper	29.75	0.66	19.84	
Left-Lower	40.83	11.4	465.46	
Right-Upper	44.79	0.66	29.56	5.99
Right-Lower	24.79	11.4	282.61	
Rear	176.5	11.4	2,012.10	
Total	487.49	36.18	2,922.11	

Building 9 (Type E)				
	Linear Ft	Feet Below Finish Floor	Quantity	Average below Finished Floor
Front	176.5	0.66	116.49	
left	69.58	2.85	198.30	
Right	70.83	1.3	92.08	2.61
Rear	176.5	5	882.50	
Total	493.41	9.81	1,289.37	

BUILDING ELEVATIONS



" NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET "

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. 21443, Expiration Date: 12-21-22



NO.	DATE	REVISION

BENCHMARK
ENGINEERS & LAND SURVEYORS & PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE & SUITE 315 A ELLICOTT CITY, MARYLAND 21043
(P) 410-465-8100 (F) 410-465-8644
WWW.BE-CIVILENGINEERING.COM

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Chad Clark</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9-16-18 DATE
<i>Kent Steinhilber</i> CHIEF, DIVISION OF LAND DEVELOPMENT	8-23-18 DATE
<i>William J. J...</i> DIRECTOR	8-24-18 DATE

OWNER: LOCUST THICKET INVESTORS LLC 5836 MEADOWRIDGE ROAD ELK RIDGE, MD 21075 410-465-4244	THE WEXLEY AT 100 BUILDABLE BULK PARCELS A, C & D 9 APARTMENT BUILDINGS ZONED R-A-15 & POR TAX MAP 37, GRID 9, PARCELS 714 & 724 1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DEVELOPER: LOCUST THICKET INVESTORS LLC P.O. BOX 417 ELLCOTT CITY, MD 21041 410-465-4244	SITE DEVELOPMENT PLAN BUILDING ELEVATIONS
DESIGN: AMM	CHECKED: CAM
SCALE: AS SHOWN	PROJECT NO. 0925
DRAWING <u>47</u> OF <u>47</u>	

BUILDING ELEVATIONS AND DATA WERE PROVIDED BY THE ARCHITECT.

AS-BUILT

SDP-18-029