

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS ANY STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY 1-800-257-7777
 - VERIZON 410-754-6281
 - HOWARD COUNTY DEPARTMENT OF UTILITIES 410-754-6281
 - AT&T CABLE LOCATION DIVISION 393-3553
 - B.G.&E. CO. CONTRACTOR SERVICES 850-4620
 - B.G.&E. CO. UNDERGROUND DAMAGE CONTROL 787-4620
 - STATE HIGHWAY ADMINISTRATION 531-5533
- SITE ANALYSIS:
 - AREA OF PARCEL: 19.81 AC.
 - PRESENT ZONING: M-2
 - PROPOSED USE: WAREHOUSE & FLEX SPACE
 - BUILDING AREA: 162,933 SF
 - BUILDING COVERAGE ON SITE: 3.74 AC. OR 18.88% OF GROSS AREA
 - PAVED PARKING/DRIVE ISLES: 3.71 AC. OR 24.82% OF GROSS AREA
 - DISTURBED AREA: 16.11 AC.
 - CUT: 18,216 CY FILL: 77,234 CY
- PROJECT BACKGROUND:
 - LOCATION: JESSUP, MD.; TAX MAP 43, GRID 22, TM PARCEL 109
 - ZONING: M-2
 - SUBDIVISION: JESSUP PARK, PARCELS A & B
 - SECTION/AREA: N/A
 - DPZ REFERENCES: PLAT 10826, PLAT 10778, F-92-104, CAP. PROJ. #J-4148-C, PLAT 21047-20
- 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 START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3,500 P.S.I.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOIL TEST PRIOR TO CONSTRUCTION.
- ALL STORM DRAIN PIPE SHALL BE IN ACCORDANCE WITH THE CURRENT HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AN AERIAL TOPOGRAPHIC SURVEY PREPARED BY POTOMAC AERIAL SURVEYS DATED JANUARY 2008. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- ALL PAVING SHALL BE MINIMUM HOWARD COUNTY STANDARD DETAIL P-4, UNLESS OTHERWISE NOTED. (SEE DETAIL SHEET 3). THE GEOTECHNICAL ENGINEER TO CONFIRM PAVING SECTION PRIOR TO CONSTRUCTION.
- ALL CURB AND GUTTER TO BE HOWARD COUNTY STANDARD CONCRETE DETAIL 3.01 UNLESS OTHERWISE SPECIFIED. (SEE DETAIL SHEET 3)
- CONTRACTOR RESPONSIBLE TO CONSTRUCT ALL HANDICAP PARKING AND HANDICAP ACCESS IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
- WHERE DRAINAGE FLOWS AWAY FROM CURB, CONTRACTOR TO REVERSE THE GUTTER PAN.
- ALL ELEVATIONS ARE TO FLOWLINE/BOTTOM OF CURB UNLESS OTHERWISE NOTED.
- ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- PUBLIC WATER AVAILABLE ALONG OLD JESSUP ROAD (12" WATER) CONTRACT #792-W.
- PUBLIC SEWER AVAILABLE ALONG OLD JESSUP ROAD (8" SEWER) CONTRACT #612-S.
- STORMWATER MANAGEMENT SHALL BE PROVIDED BY MICROPOOL EXTENDED DETENTION SYSTEM (P-1) FOR QUANTITY ATTENUATION. WATER QUALITY SHALL BE PROVIDED THROUGH A PRETREATMENT AREA WITHIN THE CURB RETENTION POND. GROUNDWATER RECHARGE SHALL BE PROVIDED IN AN UNDERGROUND GRAVEL TRENCH. THE PROPOSED STORMWATER MANAGEMENT STRUCTURES WILL BE PRIVATELY OWNED AND MAINTAINED.
- BUILDINGS TO HAVE INSIDE WATER METER SETTINGS.
- ALL EXTERIOR LIGHTING SHALL CONFORM TO ZONING REGULATIONS, SECTION 134. (SEE DETAIL, SHEET 2)
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH ADDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LAMING TO CONSTRUCT ALL HANDICAP PARKING AND HANDICAP ACCESS IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS.
- ANY EXISTING TREES DAMAGED OR DESTROYED DURING CONSTRUCTION THAT ARE NOT WITHIN THE LIMITS OF DISTURBANCE, WILL BE REPLACED BY THE CONTRACTOR.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED WITH THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$35,460.00 FOR THE REQUIRED 90 SHADE TREES, 43 EVERGREEN TREES, AND 67 SHRUBS.
- TRAFFIC STUDY PREPARED BY THE TRAFFIC GROUP, DATED JULY 9, 2008.
- GEOTECHNICAL REPORT PREPARED BY HILLES-CARNES ENGINEERING ASSOCIATES, INC.; DATED APRIL 21, 2008.
- THE SUBJECT PROPERTY IS ZONED M-2 PER THE 2-2-04 COMPREHENSIVE ZONING PLAN.
- WETLANDS DELINEATED BY MCGHEE & ASSOCIATES, INC. IN CONJUNCTION WITH THE ARMY CORP OF ENGINEERS, DATED AUGUST 9, 2008.
- THIS PLAN IS SUBJECT TO MDE APPLICATION TRACKING NUMBER 200565252/05-NT-0275 APPROVED AUGUST 10, 2007.
- THE 100 YEAR FLOODPLAIN SHOWN HEREON IS AS APPROVED UNDER F-92-104 AND RECORDED ON PLAT 10826.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING, DUMPING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS OR BUFFER ZONES, FOREST CONSERVATION EASEMENTS AND 100 YEAR FLOODPLAIN EXCEPT AS APPROVED BY THE DPZ.
- DEBRIS IS TO BE KEPT OUT OF ALL STORMWATER MANAGEMENT FACILITIES DURING AND AFTER CONSTRUCTION.
- THE FOREST CONSERVATION OBLIGATIONS HAS BEEN MET BY PROVIDING 0.97 ACRES OF FOREST RETENTION IN TWO ONSITE FOREST CONSERVATION EASEMENTS AND BY A FEE-IN-LIEU FOR PAYMENT OF \$217,908.90 MADE TO HO. CO. FOREST CONSERVATION FUND FOR THE OUTSTANDING 6.67 AC OF REFORESTATION (\$29,545.20 SF X 0.75 = \$217,908.90).
- THIS PLAN IS SUBJECT TO WP-09-87, APPROVED ON MARCH 19, 2009 TO WAIVE SECTION 16.116(A)(1) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO ALLOW GRADING WITHIN APPROVAL IS SUBJECT TO THE FOLLOWING CONDITION:
 - A. IDENTIFY THE MDE PERMIT IN A DETAILED NOTE ON SHEET 1 OF SDP-09-021, AND ANY RELATED NEW PLAT(S). (SEE NOTE 34).
- A KNOX BOX IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING. IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE TO A MINIMUM OF 4'-0" IN HEIGHT AND NO MORE THAN 6' LATERALLY FROM THE DOOR. ITS LOCATION IS SHOWN ON THESE PLANS. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE ALARM SYSTEM).
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED SQUARE TUBE POST (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- LANDSCAPING NOT PERMITTED WITHIN 7'-1/2" OF EACH SIDE OF THE FIRE DEPARTMENT CONNECTION. PROVIDE A CLEAR UNOBSTRUCTED ACCESS PATH TO THE FIRE DEPARTMENT CONNECTION. NFP-1 13.1.4
- SIGNAGE SHALL BE PROVIDED ON THE BUILDING IDENTIFYING THE BUILDING ADDRESS, AND EACH SUITE SEPARATED BY LETTER.
- THERE ARE NO STEEP SLOPES GREATER THAN 20.000 SF OF CONTIGUOUS AREA LOCATED ON THIS PROPERTY.
- REFERENCE HOWARD COUNTY CAPITAL PROJECT #J-4148-C FOR CONSTRUCTION OF EXISTING 48" STORMDRAIN.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (2008), SECTION 5.5.4
- A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
- HOWARD COUNTY MONUMENTS #48AA AND #43HA WERE USED FOR THIS PROJECT.
- SEWER CONTRACT 14-4597-D FROM SMH-3 TO SMH-5, FROM EX SMH 8324 TO SMH-1 AND TO SMH-2, AND AN 8" STUB FROM SMH-5 TO SERVE FUTURE SMH-6 SHALL BE COMPLETED AS PART OF THIS SDP.
- THIS PLAN IS SUBJECT TO MDE APPLICATION TRACKING NUMBER 200961509 AND DAM SAFETY FILE NUMBER 09-PO-0031. ALL CONDITIONS OF THE PERMIT SHALL BE COMPLIED WITH.
- REFERENCE WP-13-108 APPROVED FEBRUARY 12, 2013 TO WAIVE SECTION 16.166(A)(1) AND 16.166(A)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AS THEY PERTAIN TO SDP-09-021 ALLOW BUILDING PERMIT APPLICATION DEADLINES TO BE EXTENDED WHILE MAINTAINING THE PLANS AS ACTIVE APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - 1) THE RETENTIONER SHALL APPLY TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS FOR BUILDING PERMITS TO INMEDIATE CONSTRUCTION AUTHORIZED BY SDP-09-021 ON OR BEFORE DECEMBER 16, 2013.
 - 2) THE RETENTIONER SHALL APPLY TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS FOR BUILDING PERMITS FOR ALL CONSTRUCTION AUTHORIZED BY SDP-09-021 ON OR BEFORE DECEMBER 19, 2013.
- A FE OF 1.0" IS REQUIRED TO MEET THE WATER QUALITY REQUIREMENTS FOR THE REVISION #6 TRAILER PARKING ADDITION. THE ESD VOLUME IS ACCOMMODATED THROUGH THE USE OF ONE (1) GRAVEL RECHARGE TRENCH.

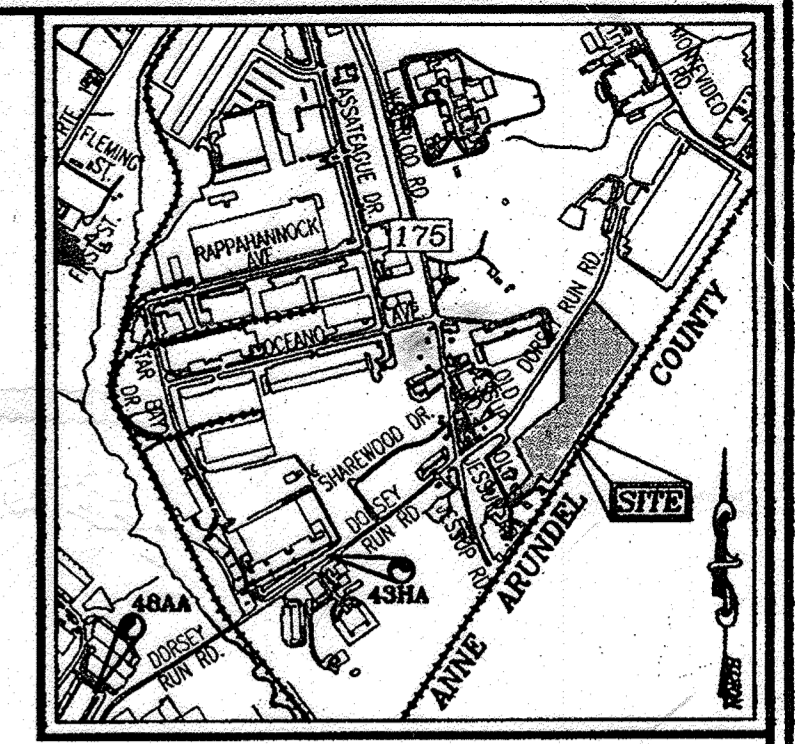
JESSUP PARK PARCEL B WAREHOUSE & FLEX SPACE SITE DEVELOPMENT PLAN

LEGEND

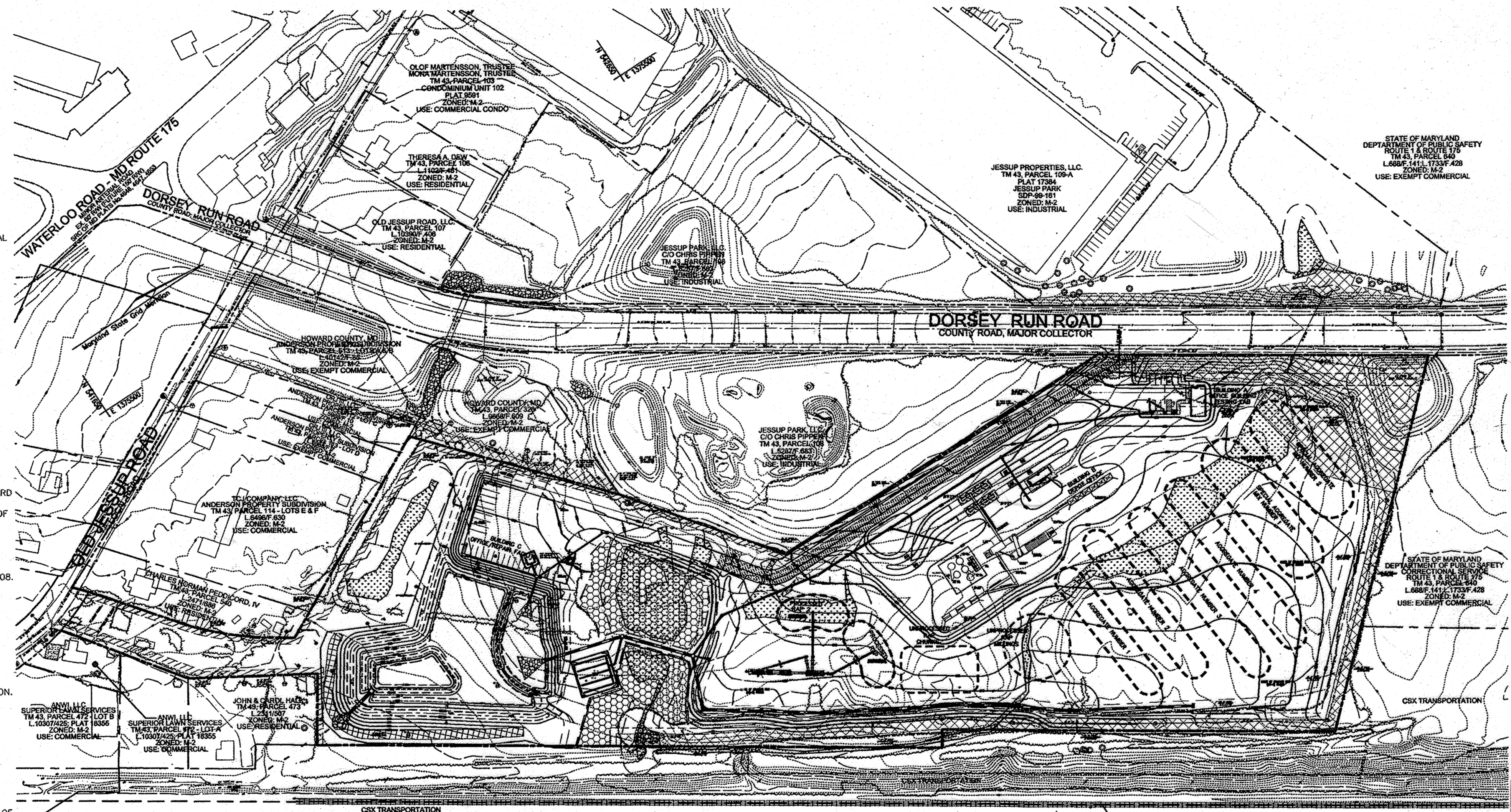
- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- DIRECTION OF FLOW
- EXISTING TREES TO REMAIN
- LIGHT POLES
- SOIL TYPE
- CONCRETE

BENCHMARKS

- HOWARD COUNTY BENCHMARK 48AA
N 539,314.900 E 1,371,539.251 ELEV.: 240.78'
- HOWARD COUNTY BENCHMARK 43HA
N 540,761.716 E 1,373,837.365 ELEV.: 224.89'



VICINITY MAP
SCALE: 1"=2000'
ADC MAP: 20 K4



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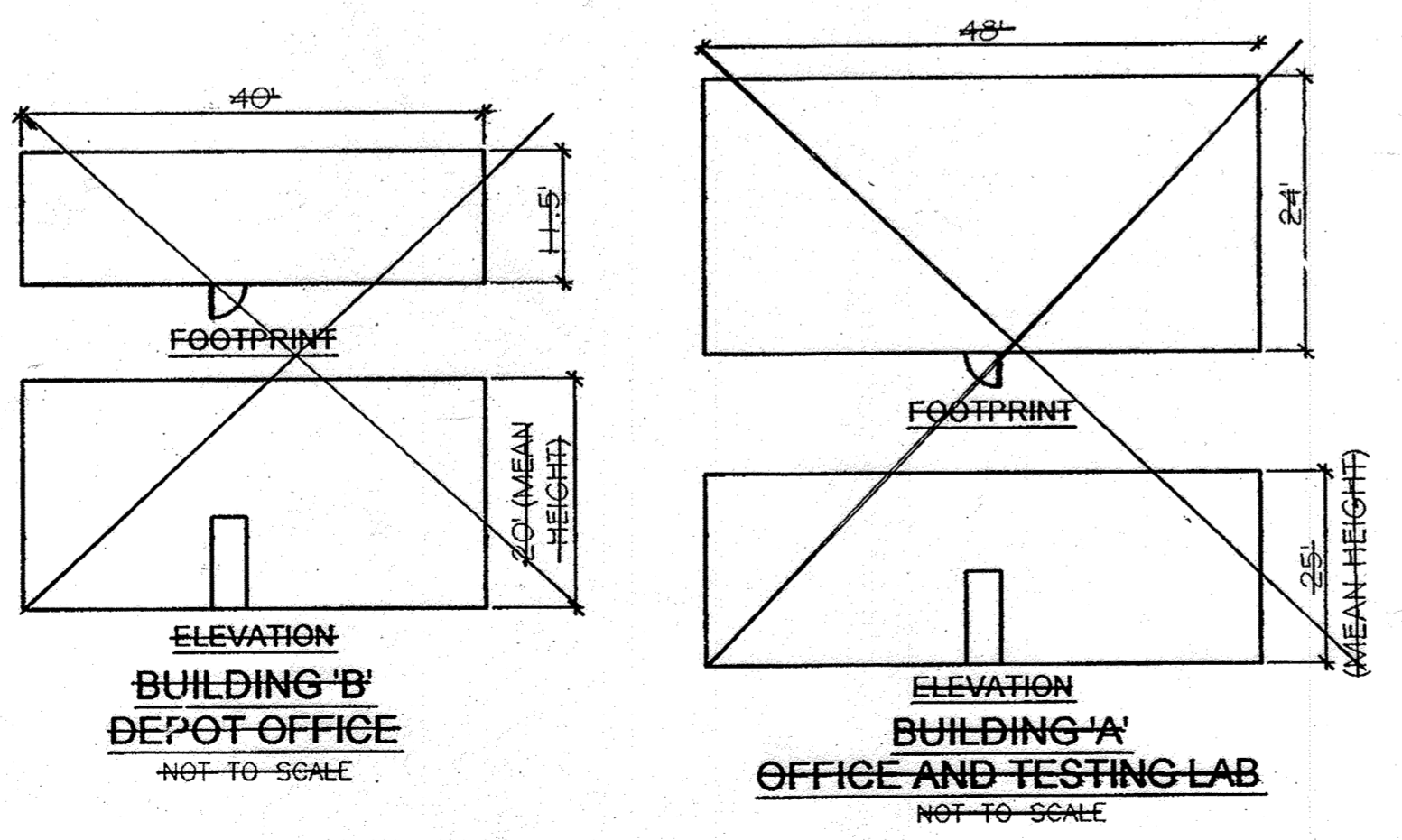
NO AS-BUILT INFORMATION ON THIS SHEET

DEVELOPER
ROGEE DEVELOPMENT COMPANY, LLC
225 WEST WASHINGTON, SUITE 1550
CHICAGO, IL 60606
C/O PHILIP ADAMS
312-257-2881

OWNER
DRE DEVELOPMENT, LLC
801 GLEND AVENUE
DES MOINES, IA 50312
C/O DAVID BEAVES
319-240-3241

OWNER/DEVELOPER
WILLIAM T. WHEELER, TRUSTEE
850 E. CLUDE ROAD, SUITE A
ROCKVILLE, MD 20858
301-252-7444

LOCATION MAP
SCALE: 1"=200'



FOR BUILDING ELEVATIONS, SEE SHEET 6.

PARKING TABULATION

BUILDING A (WAREHOUSE) 155,000 SF
@ .05 SPACE/1000SF

TOTAL SPACES REQUIRED: 78 SPACES
TOTAL SPACES PROVIDED: 78 SPACES*
*INCLUDES 8 HANDICAP SPACES

FOOTPRINT AND ELEVATION OF ASPHALT PLANT AND RAP PROCESSOR LOCATED ON SHEET 7.

PLANS APPROVED BY: *[Signature]*
DATE: 3/29/15
DAM SAFETY DIVISION
WATER MANAGEMENT ADMINISTRATION
MARYLAND DEPARTMENT OF THE ENVIRONMENT
AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.

Signature: _____
PE NO. 16193
Date: 10/22/17

ADDRESS CHART

LOT/PARCEL#	STREET ADDRESS
PARCEL B	7801 DORSEY RUN ROAD (BUILDING 'A')

PERMIT INFORMATION CHART

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER			
JESSUP PARK	N/A	B / 109			
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
210KT 872100	22	M-2	43	1ST	6012.02
DEED REF:					
1765/265					

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 5/4/10
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 5/11/10
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 5/12/10
DIRECTOR DATE

REVISED SITE DEVELOPMENT PLAN

COVER SHEET

JESSUP PARK
WAREHOUSE & FLEX SPACE
PLAT 10826 PARCEL 109
HOWARD COUNTY, MARYLAND

TAX MAP 43, GRID 22
1ST ELECTION DISTRICT

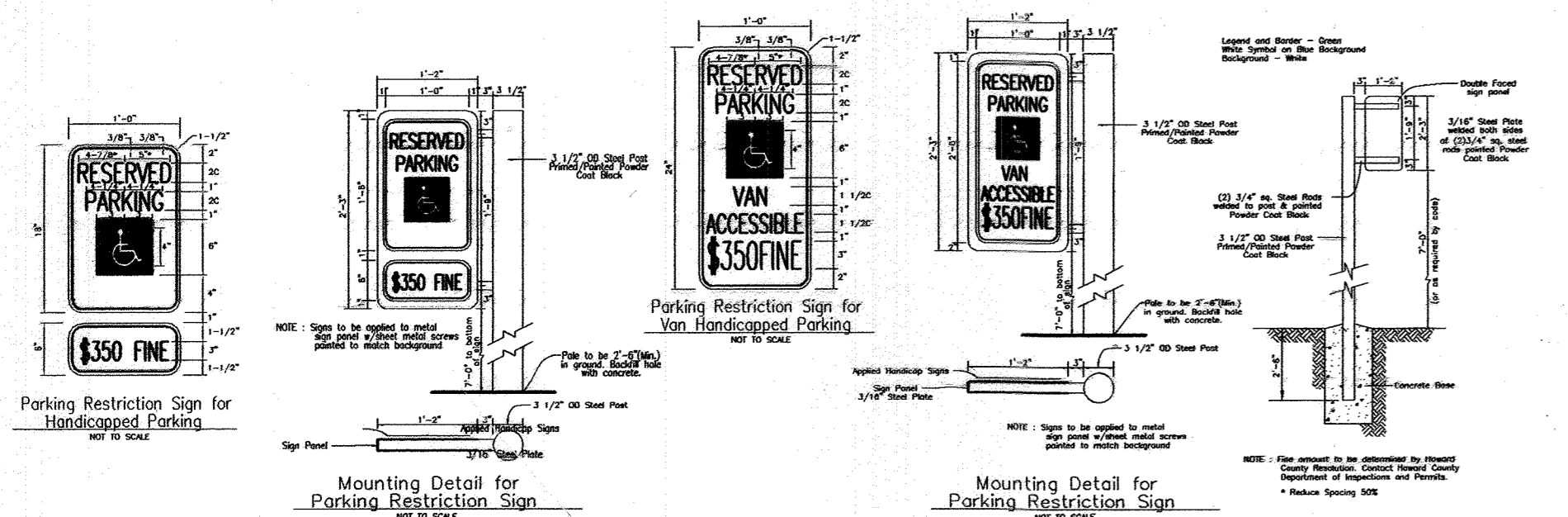
ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

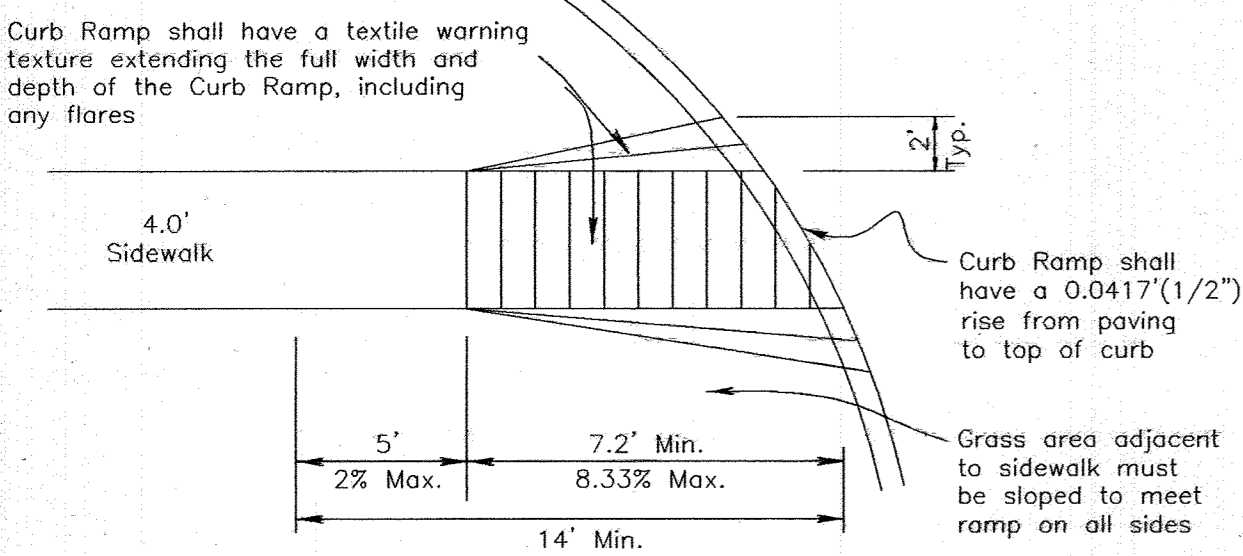
DESIGN BY: JR
DRAWN BY: JR/TM/DZ
CHECKED BY: RHV
DATE: MARCH, 2010
SCALE: AS SHOWN
W.O. NO.: 04-56

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. 16193, EXPIRATION DATE: 09-27-2014.

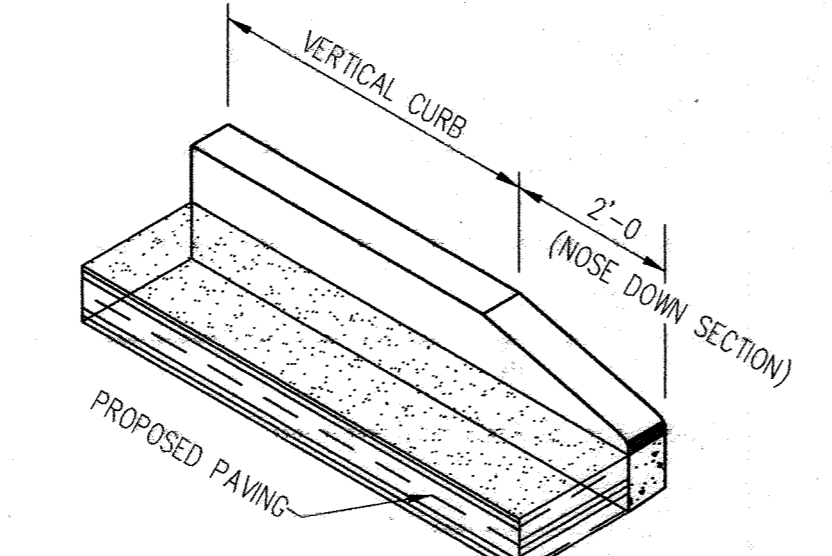
1 SHEET OF 24



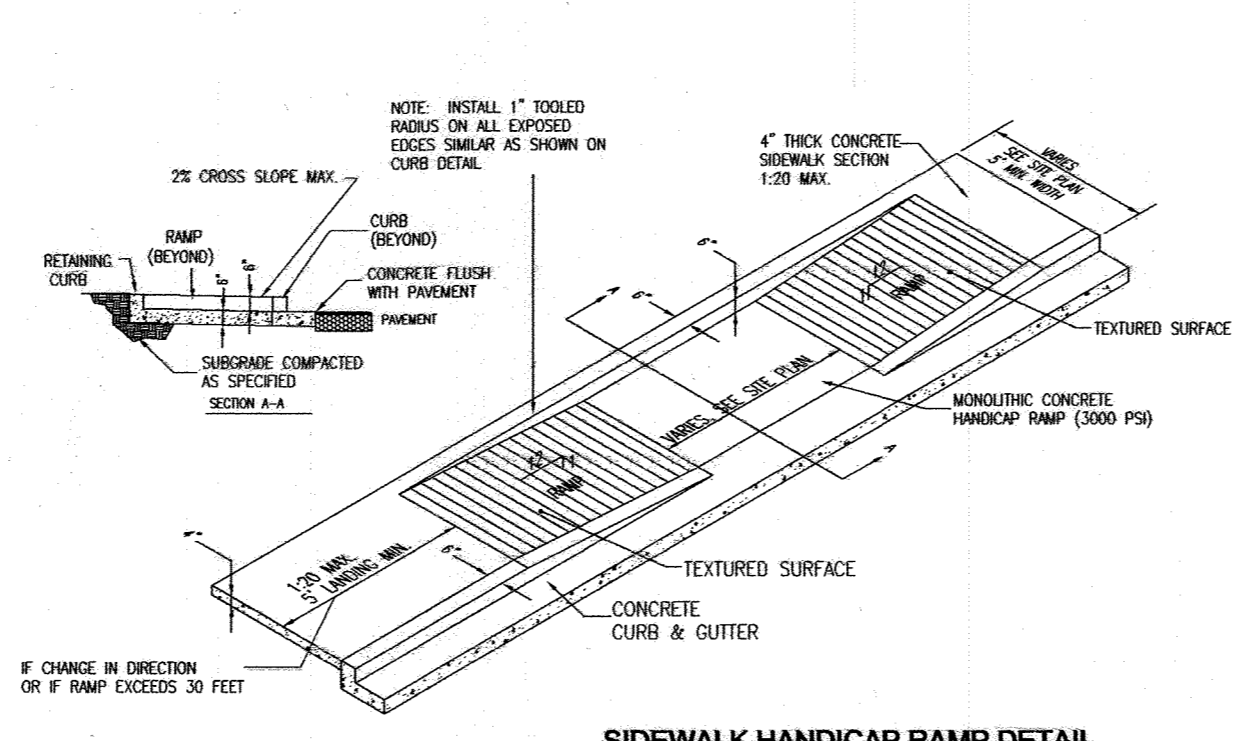
HANDICAP PARKING SIGNS
(NOT TO SCALE)



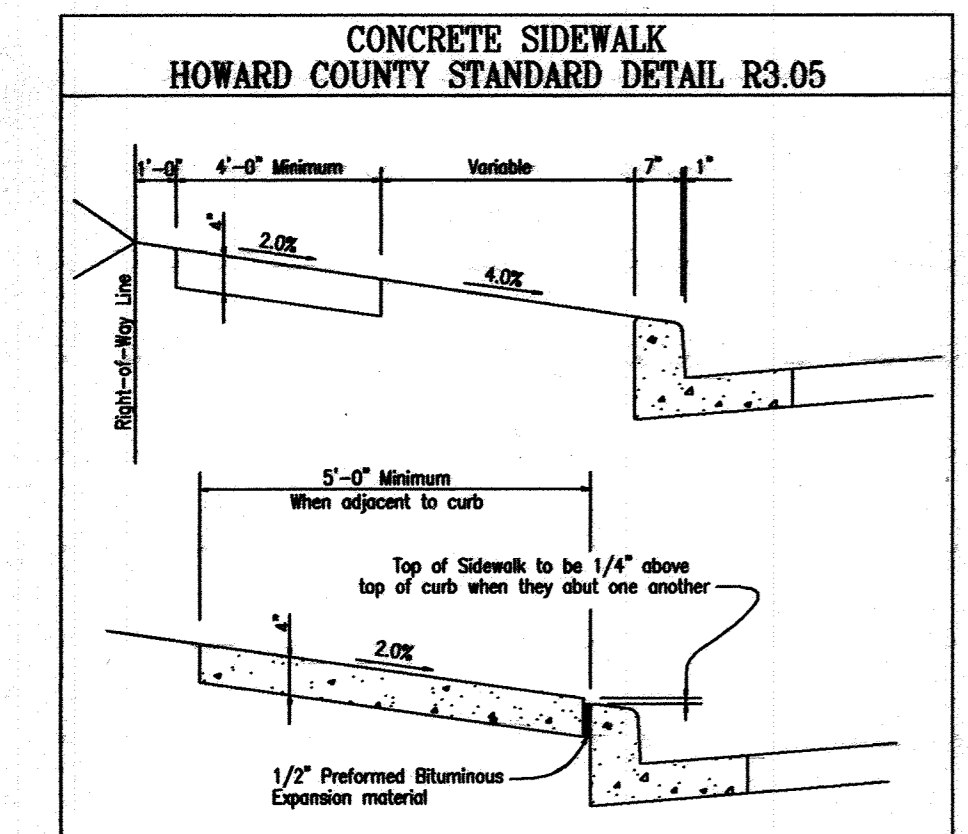
HANDICAP RAMP
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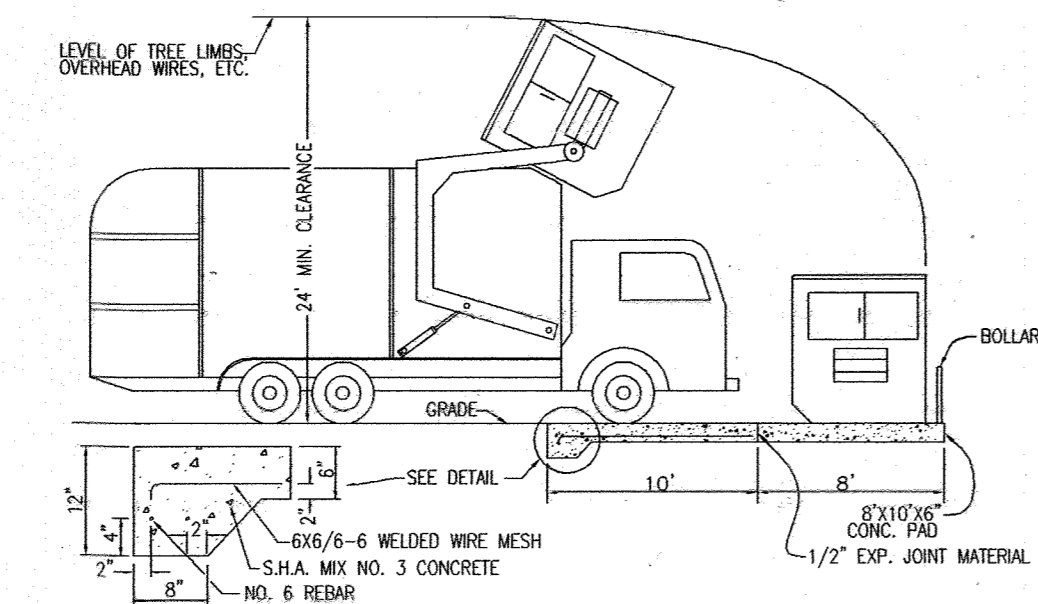
CONCRETE CURB - NOSE DOWN
NOT TO SCALE



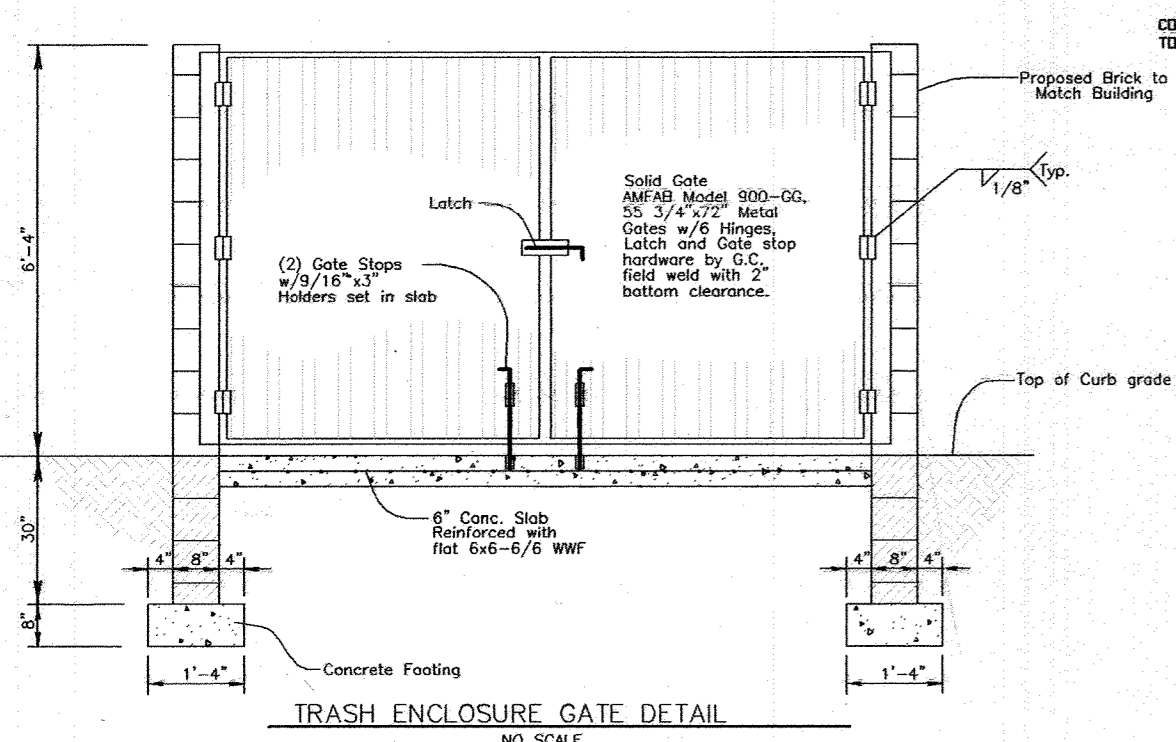
SIDEWALK HANDICAP RAMP DETAIL
NOT TO SCALE



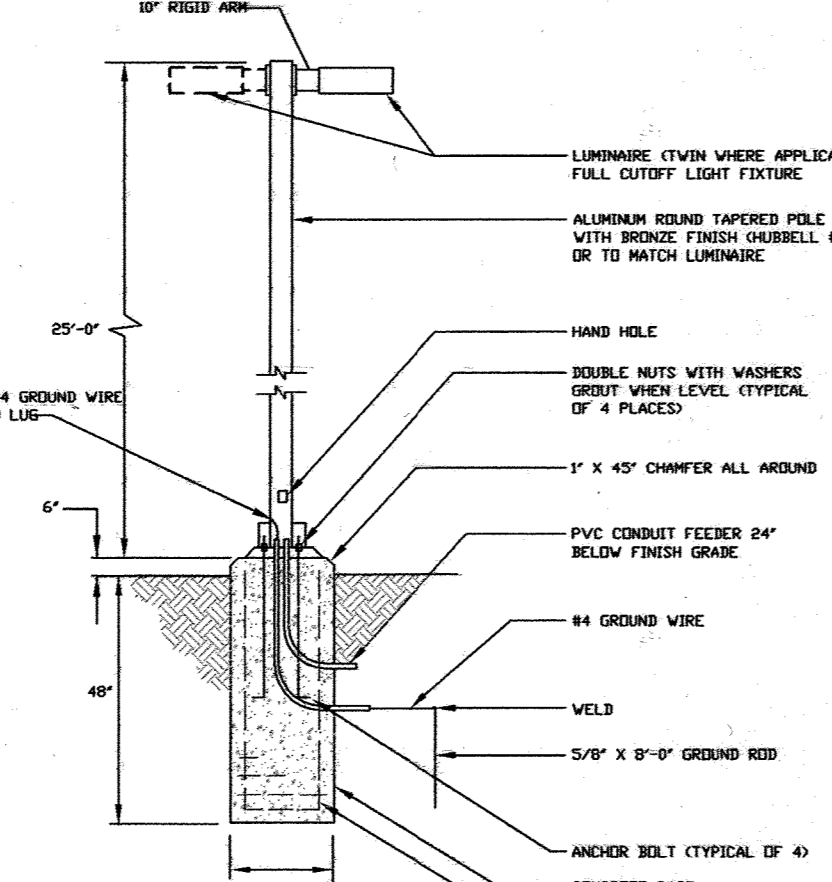
CONCRETE SIDEWALK HOWARD COUNTY STANDARD DETAIL R3.05



SOLID WASTE SERVICE PAD
HOWARD COUNTY STD. R 8.03
NOT TO SCALE

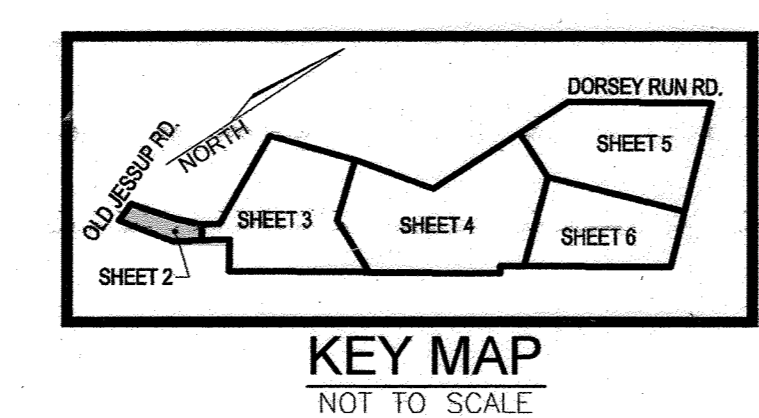


TRASH ENCLOSURE GATE DETAIL
NO SCALE

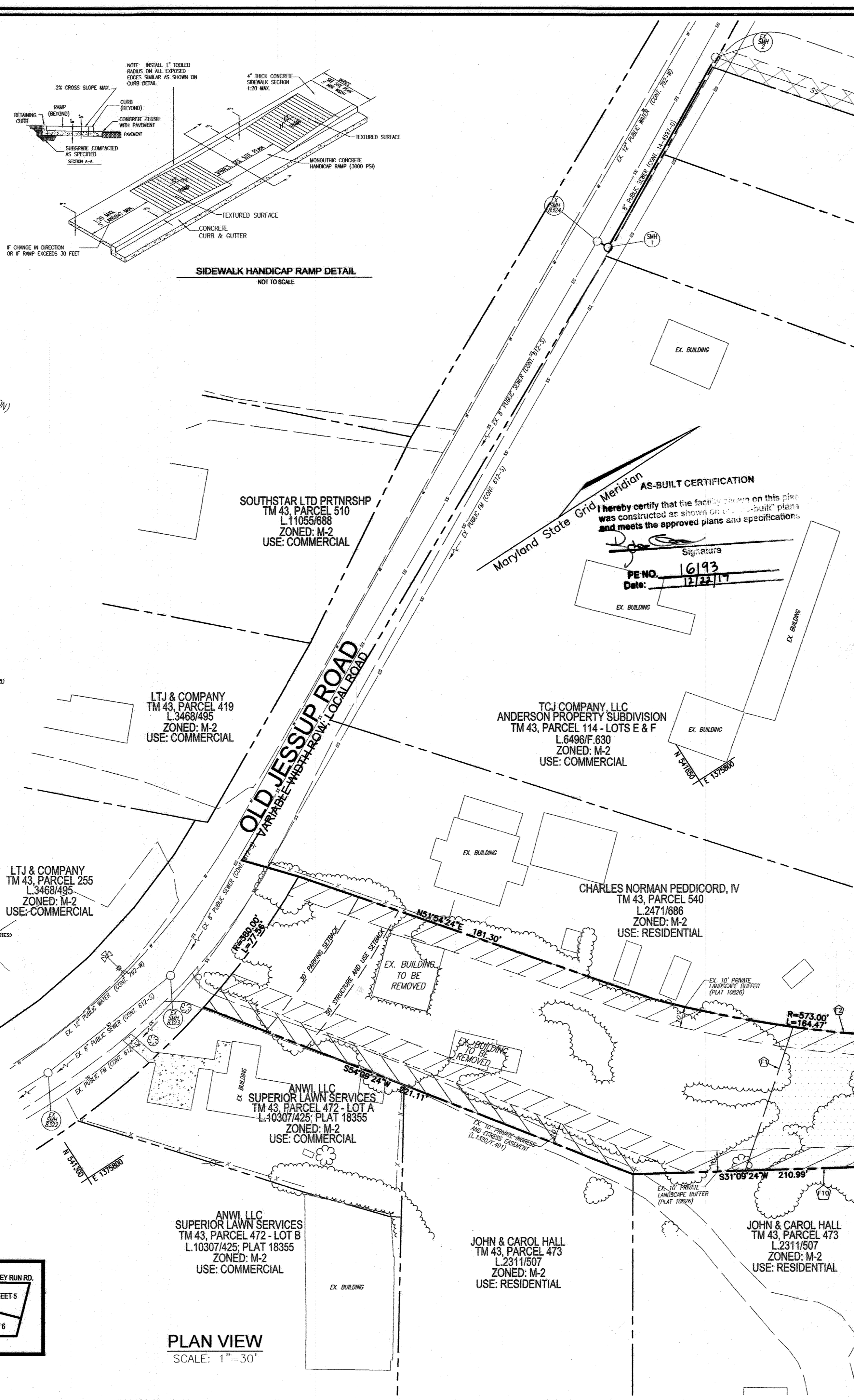


POLE BASE DETAIL
(NOT TO SCALE)

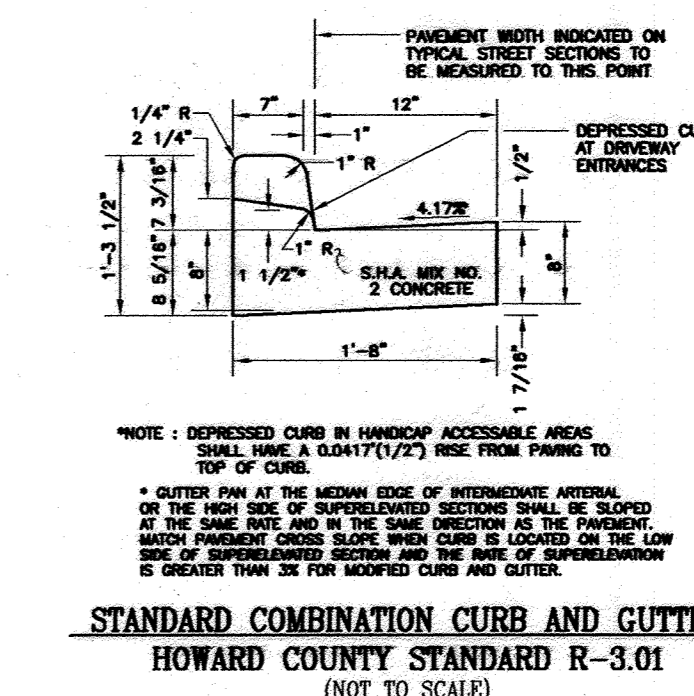
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 5/14/10
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 5/14/10
 DIRECTOR



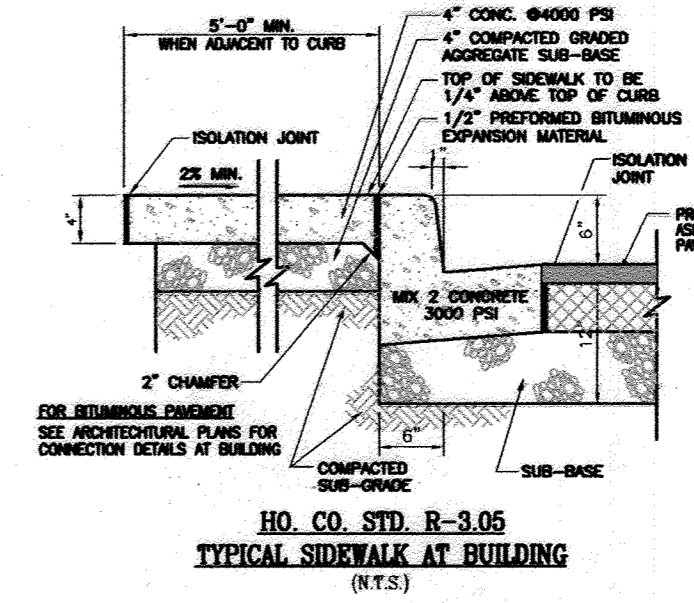
KEY MAP
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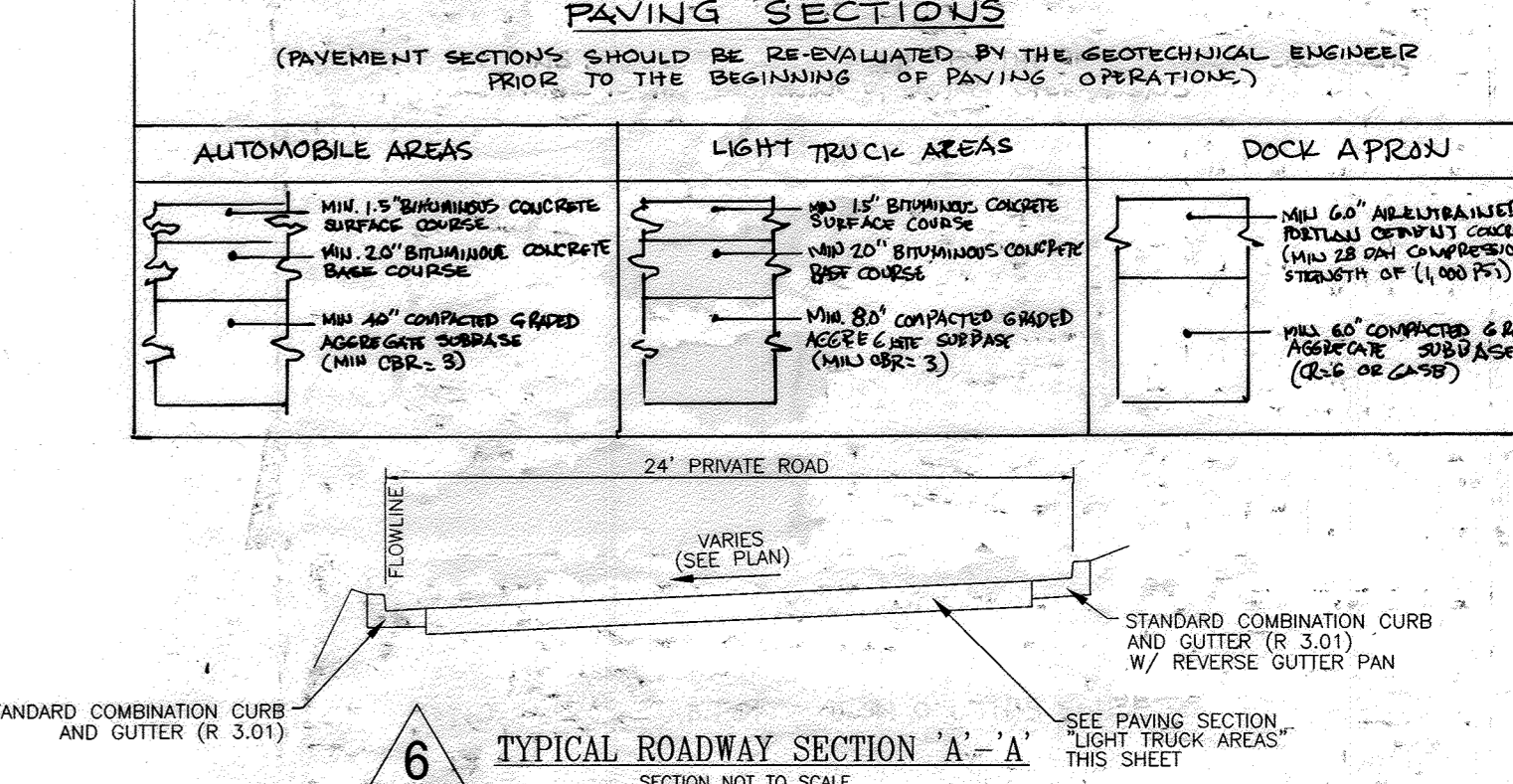
PLAN VIEW
SCALE: 1"=30'



STANDARD COMBINATION CURB AND GUTTER
HOWARD COUNTY STANDARD R-3.01
(NOT TO SCALE)



HO. CO. STD. R-3.05 TYPICAL SIDEWALK AT BUILDING
(N.T.S.)



PAVING SECTIONS
(PAVEMENT SECTIONS SHOULD BE RE-EVALUATED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE BEGINNING OF PAVING OPERATIONS.)



TYPICAL ROADWAY SECTION 'A-A'
SECTION NOT TO SCALE

NO AS-BUILT INFORMATION ON THIS SHEET

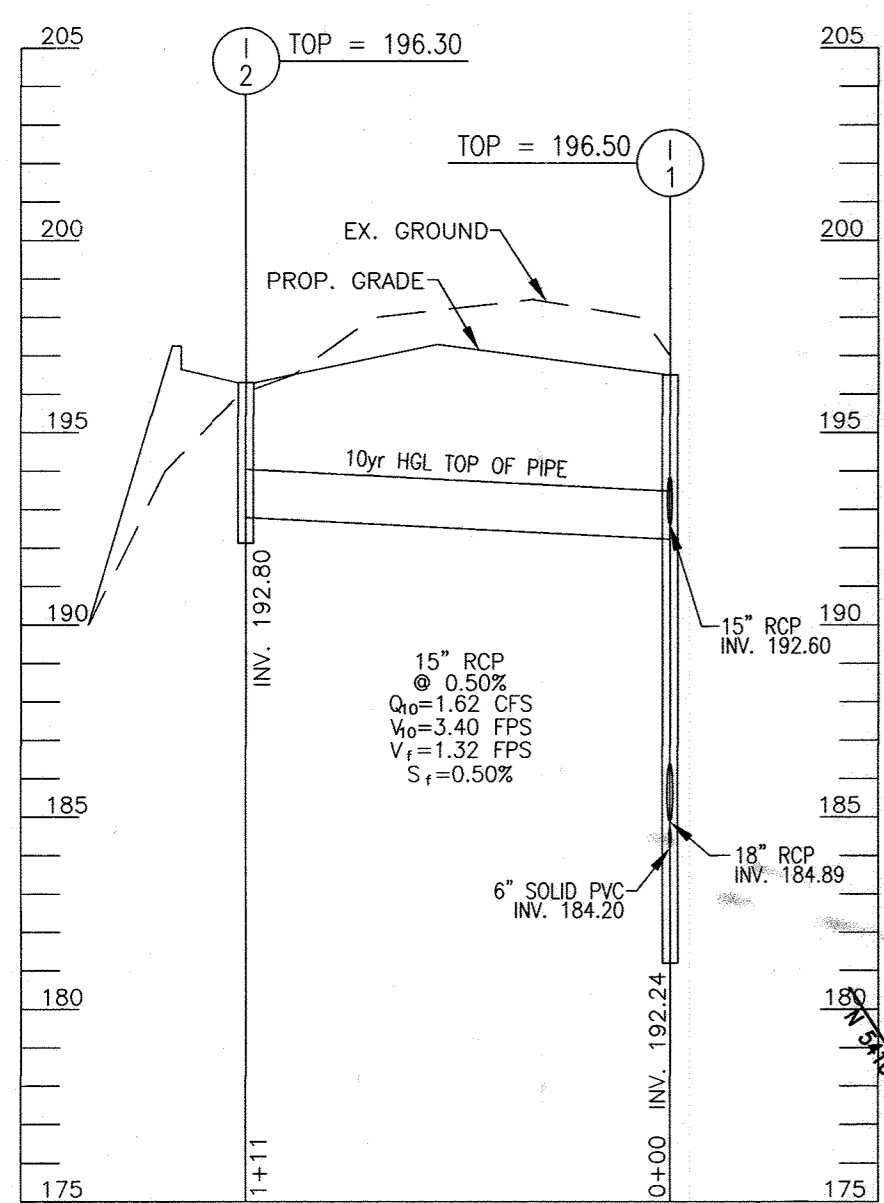
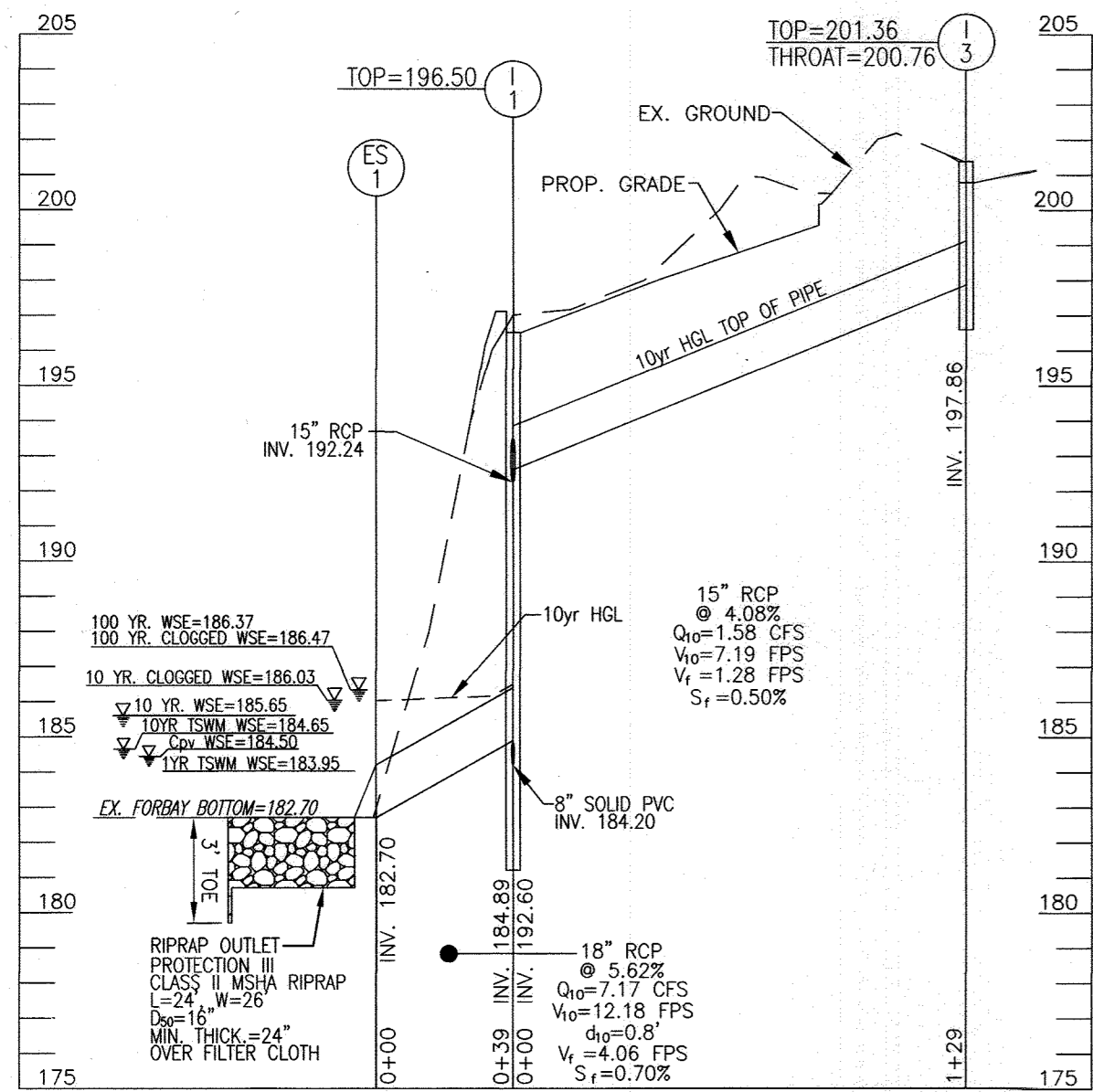
OWNER/DEVELOPER
 WILLIAM T. WHEELER, TRUSTEE
 850 E. GUDE ROAD, SUITE A
 ROCKVILLE, MD 20850
 301-252-7444

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELICOTT CITY, MD 21043
 TEL: 410.461.7666 FAX: 410.461.8961

DESIGN BY: JR
 DRAWN BY: JR/TM/DZ
 CHECKED BY: RHW
 DATE: MARCH, 2010
 SCALE: AS SHOWN
 W.O. NO.: 04-56

PROFESSIONAL CERTIFICATE
 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. 16193, EXPIRATION DATE: 09-27-2014.

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STORM DRAIN PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

STORM DRAIN PROFILE
SCALE: HORIZONTAL - 1"=50'
VERTICAL - 1"=5'

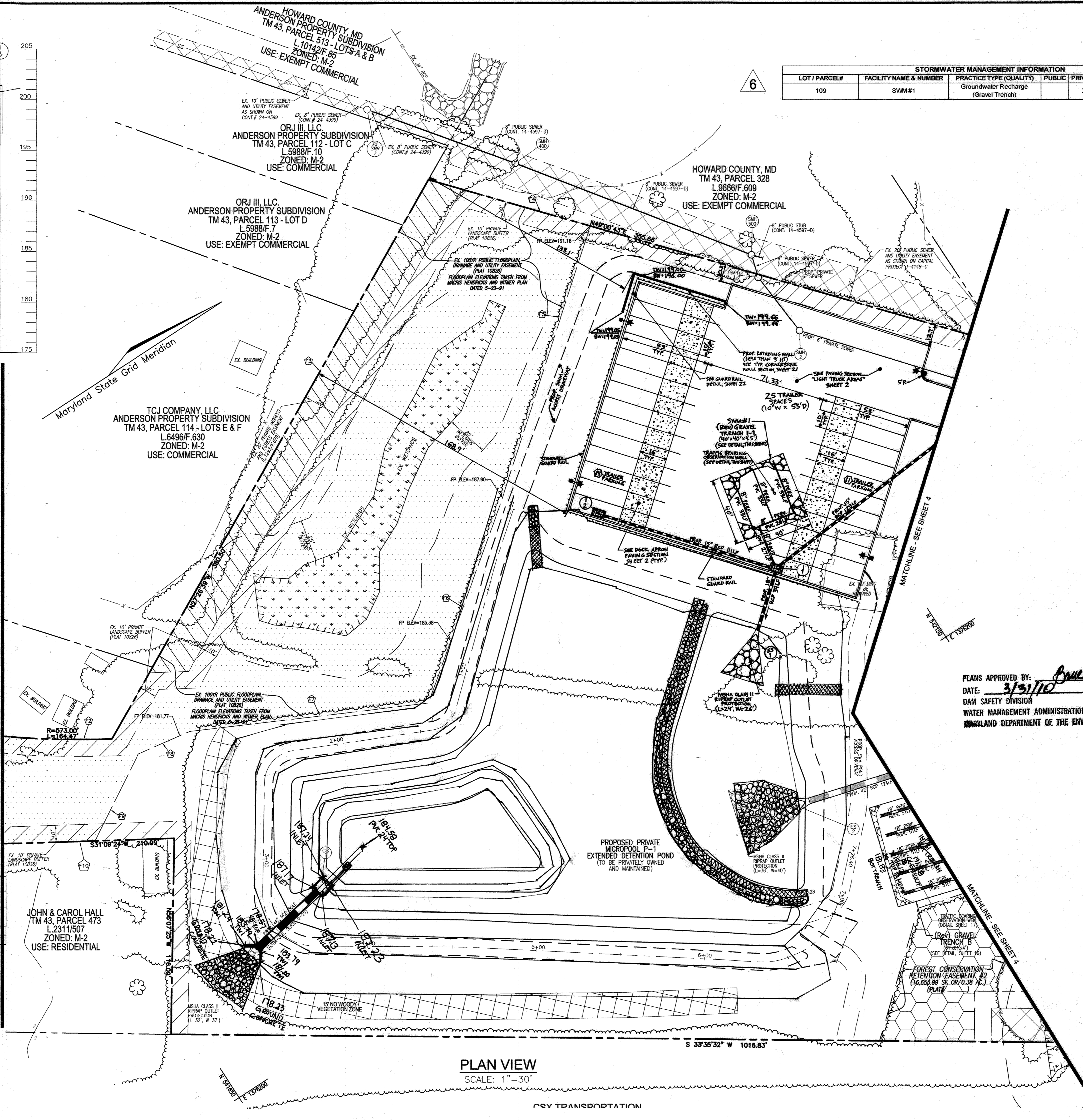
SIZE	TYPE	CLASS	LENGTH
15"	RCP	CLASS IV	240 LF
18"	RCP	CLASS IV	39 LF
8"	PERF. PVC (SWM)		125 LF
8"	SOLID PVC (SWM)		27 LF
4"	PERF. PVC (SWM)		5 LF
4"	SOLID PVC (SWM)		13 LF

NO.	TYPE	LOCATION	TOP ELEV.	INV. IN	INV. OUT	REMARK
1-1	DBL PRECAST WR INLET	N. 542088.08, E. 1376110.33	196.50	182.92	184.89	D-4.31
1-2	DBL PRECAST WR INLET	N. 542017.25, E. 1376025.46	196.30	-	192.80	D-4.31
1-3	PRECAST TYPE A-10	N. 542217.76, E. 1376098.18	200.76	-	197.86	D-4.03
ES-1	18" CONC. END SECTION	N. 542058.26, E. 1376135.24	184.20	182.70	-	D-5.51

NOTE: 1. TOP ELEVATIONS ARE TO CENTER TOP OF GRATE FOR DOUBLE WR INLETS AND BOTTOM OF CURB OR THROAT FOR A-10 INLETS.
2. FOR TOP SLAB SLOPES SEE GRADING PLAN.

NOTE: FOR EX. 100YR. FLOODPLAIN BEARINGS AND DISTANCES, SEE CHART ON SHEET 8.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

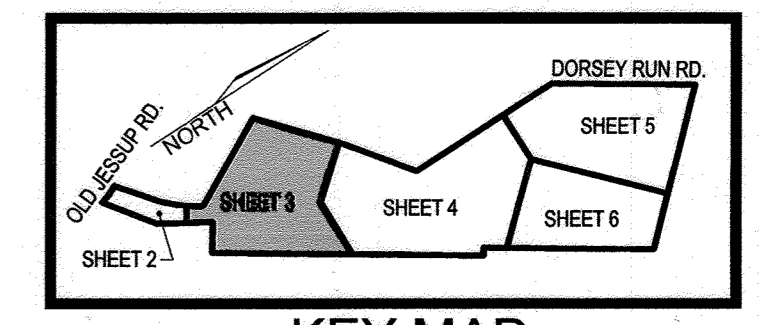


PLAN VIEW
SCALE: 1"=30'

LOT / PARCEL#	FACILITY NAME & NUMBER	PRACTICE TYPE (QUALITY)	PUBLIC	PRIVATE	MAINTENANCE BY	NOTES
109		Groundwater Recharge (Gravel Trench)		X	Owner	

- LEGEND:**
- EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING LIGHT POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREELINE (FIELD LOCATED)
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - PROPOSED SIDEWALK
 - EX. PUBLIC 100 YR. FLOODPLAIN

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY BY MY SEAL THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
 ROBERT HARRIS VOGEL
 P.E. NO. 16193
 DATE: 12/22/17



KEY MAP
NOT TO SCALE

PLANS APPROVED BY: [Signature]
 DATE: 3/13/10
 DAM SAFETY DIVISION
 WATER MANAGEMENT ADMINISTRATION
 HOWARD COUNTY DEPARTMENT OF THE ENVIRONMENT

OWNER
 ORR DEVELOPMENT, LLC
 801 GRAND AVENUE
 DES MOINES, IA 50392
 C/O DAVID GRAVES
 515-248-4241

DEVELOPER
 RIDGE DEVELOPMENT COMPANY, LLC
 225 WEST WASHINGTON, SUITE 1550
 CHICAGO, IL 60606
 C/O PHILLIP ADAMSKI
 312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, REVISE LIGHT POLE LOCATIONS	03-04-15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL, CHANGE OWNER INFO	07-09-14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-12-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN
SITE LAYOUT PLAN
 JESSUP PARK
 WAREHOUSE & FLEX SPACE
 TAX MAP 43, GRID 22
 1ST ELECTION DISTRICT
 PARCEL 109
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8966

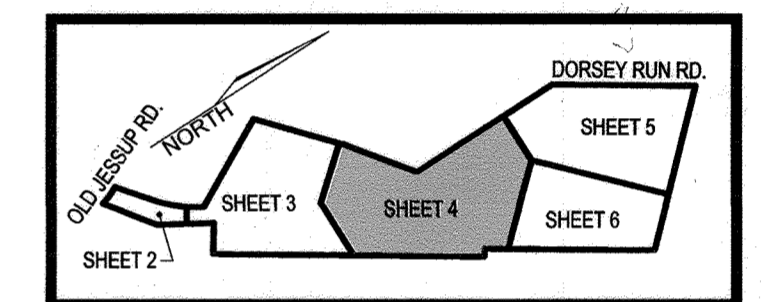
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 09-27-2018.

DESIGN BY: RHV/DZE
 DRAWN BY: DZE/KG
 CHECKED BY: RHV
 DATE: MARCH 2015
 SCALE: AS SHOWN
 W.O. NO.: 04-56

3 SHEET OF 24

LEGEND:

	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREELINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	PROPOSED SIDEWALK
	EX. PUBLIC 100 YR. FLOODPLAIN



AS-BUILT CERTIFICATION
I HEREBY CERTIFY BY MY SEAL, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Robert H. Vogel
ROBERT HARRIS VOGEL
P.E. NO. 16193

12/22/17
DATE

OWNER
DRR DEVELOPMENT, LLC.
801 GRAND AVENUE
DES MOINES, IA 50392
C/O DAVID GRAVES
515-248-4241

DEVELOPER
RIDGE DEVELOPMENT COMPANY, LLC.
225 WEST WASHINGTON, SUITE 1550
CHICAGO, IL 60606
C/O PHILLIP ADAMSKI
312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISION TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, REVISE LIGHTPOLE LOCATIONS	03-04-16
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL, CHANGE OWNER INFO	07-09-14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-12-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN

SITE LAYOUT PLAN

**JESSUP PARK
WAREHOUSE & FLEX SPACE**

TAX MAP 43, GRID 22
1ST ELECTION DISTRICT

PARCEL 109
HOWARD COUNTY, MARYLAND

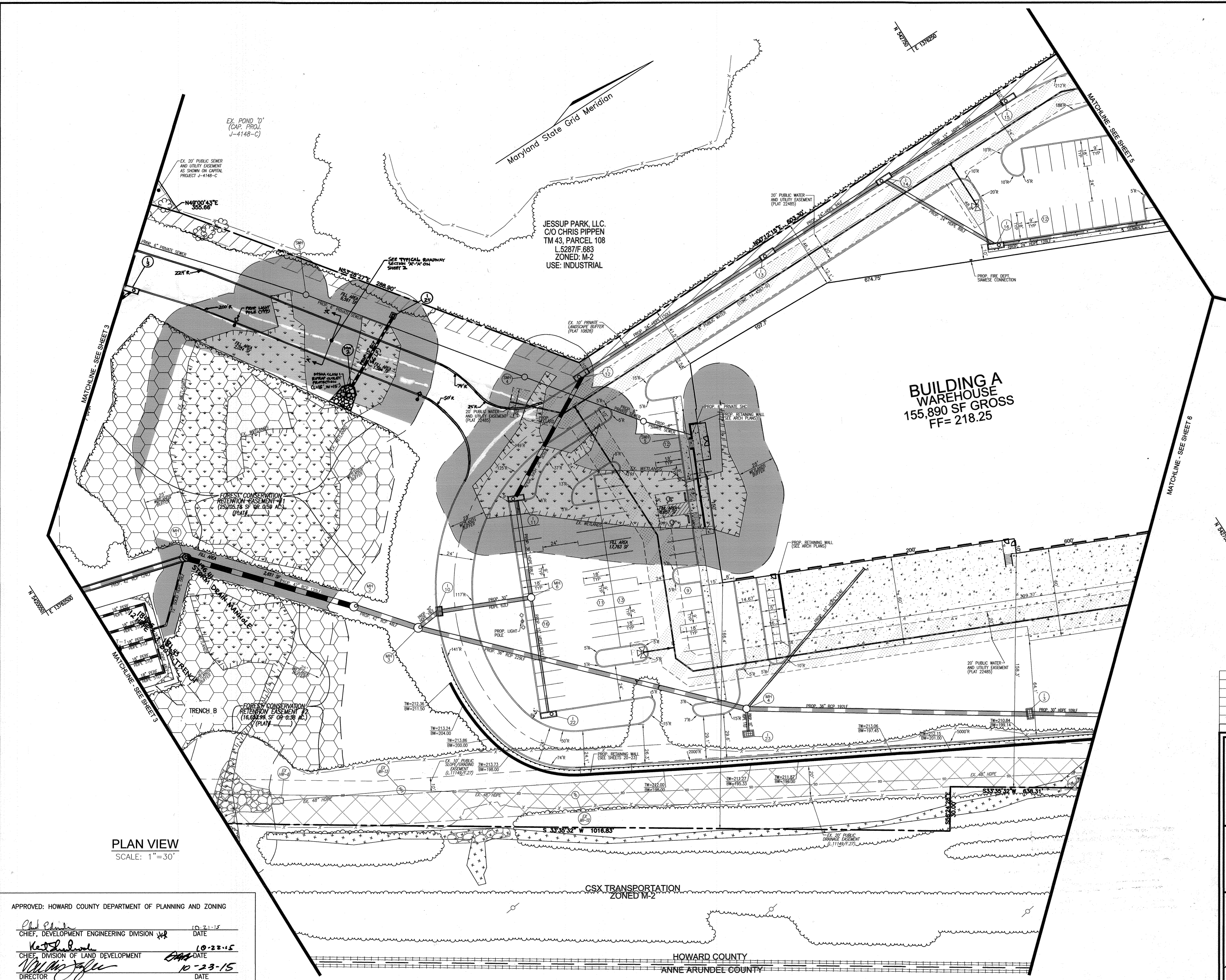
**ROBERT H. VOGEL
ENGINEERING, INC.**
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

STATE OF MARYLAND
ROBERT HARRIS VOGEL
No. 16193
PROFESSIONAL ENGINEER

DESIGN BY: RHV/DZE
DRAWN BY: DZE/KG
CHECKED BY: RHV
DATE: MARCH 2015
SCALE: AS SHOWN
W.O. NO.: 04-56

PROFESSIONAL CERTIFICATE
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. 16193, EXPIRATION DATE 08-27-2018.

4 SHEET OF 24



PLAN VIEW
SCALE: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chad E. ...
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10-21-15

Neil ...
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10-23-15

William ...
DIRECTOR
DATE: 10-23-15

HOWARD COUNTY
ANNE ARUNDEL COUNTY

- LEGEND:**
- EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREELINE (FIELD LOCATED)
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - PROPOSED SIDEWALK
 - EX. PUBLIC 100 YR. FLOODPLAIN

JESSUP PROPERTIES, LLC.
 TM 43, PARCEL 109-A
 PLAT 17384
 JESSUP PARK
 SDP-99-161
 ZONED: M-2
 USE: INDUSTRIAL

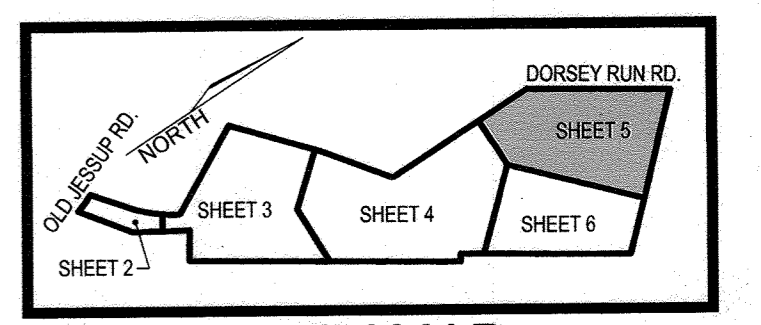
STATE OF MARYLAND
 DEPARTMENT OF PUBLIC SAFETY
 ROUTE 1 & ROUTE 175
 TM 43, PARCEL 640
 L.688/F.141/L.1733/F.428
 ZONED: M-2
 USE: EXEMPT COMMERCIAL

DORSEY RUN ROAD
 80' RIGHT-OF-WAY
 COUNTY ROAD; MAJOR COLLECTOR

JESSUP PARK, LLC.
 C/O CHRIS PIPPEN
 TM 43, PARCEL 108
 L.5287/F.683
 ZONED: M-2
 USE: INDUSTRIAL

STATE OF MARYLAND
 DEPARTMENT OF PUBLIC SAFETY
 CORRECTIONAL SERVICE
 ROUTE 1 & ROUTE 175
 TM 43, PARCEL 640
 L.688/F.141/L.1733/F.428
 ZONED: M-2
 USE: EXEMPT COMMERCIAL

**BUILDING A
 WAREHOUSE**
 155,890 SF GROSS
 FF= 218.25



KEY MAP
 NOT TO SCALE

OWNER
 DRR DEVELOPMENT, LLC.
 801 GRAND AVENUE
 DES MOINES, IA 50392
 C/O DAVID GRAVES
 515-248-4241

DEVELOPER
 RIDGE DEVELOPMENT COMPANY, LLC.
 225 WEST WASHINGTON, SUITE 1550
 CHICAGO, IL 60606
 C/O PHILIP ADAMSKI
 312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	07-09-22
5	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT	03/04/15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL, CHANGE OWNER INFO	07/09/14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN

SITE LAYOUT PLAN

JESSUP PARK
 WAREHOUSE & FLEX SPACE
 PLAT 10826

TAX MAP 43, GRID 22
 1ST ELECTION DISTRICT

PARCEL 109
 HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
 ENGINEERING, INC.**
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

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. 16193, EXPIRATION DATE: 09-27-2014.

DESIGN BY: RHV/DZE
 DRAWN BY: DZE/JER
 CHECKED BY: RHV
 DATE: JULY 2014
 SCALE: AS SHOWN
 W.O. NO.: 04-56

5 SHEET OF 24

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.

Signature: _____
 PE NO. 16193
 Date: 7/22/17

No. AS-BUILT INFORMATION ON THIS SHEET

PLAN VIEW
 SCALE: 1"=30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
 DATE: 10-3-14

Chief, Division of Land Development
 DATE: 10-07-14

Director
 DATE: 10/2/14

AS-BUILT OCTOBER 4, 2017

Maryland State Grid Meridian

**BUILDING A
WAREHOUSE**
155,890 SF GROSS
FF = 218.25

**BUILDING B
FLEX SPACE**
10,400 SF
FF = 199.50

FOOTPRINT
NOT TO SCALE

FRONT ELEVATION
NOT TO SCALE

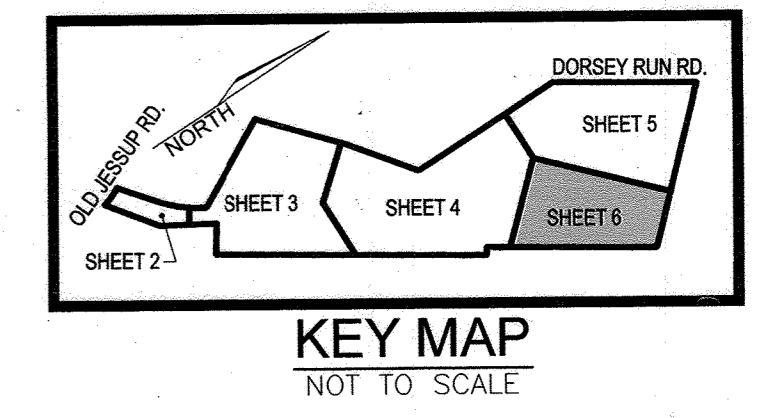
REAR ELEVATION
NOT TO SCALE

~~BUILDING B
MEAN HEIGHT = 28' 6"~~

LEGEND:

	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	PROPOSED SIDEWALK
	EX. PUBLIC 100 YR. FLOODPLAIN

STATE OF MARYLAND
DEPARTMENT OF PUBLIC SAFETY
CORRECTIONAL SERVICE
ROUTE 1 & ROUTE 175
TM 43, PARCEL 640
L.688/F.141-L.1733/F.428
ZONED: M-2
USE: EXEMPT COMMERCIAL



OWNER
DRR DEVELOPMENT, LLC.
801 GRAND AVENUE
DES MOINES, IA 50392
C/O DAVID GRAVES
515-248-4241

DEVELOPER
RIDGE DEVELOPMENT COMPANY, LLC.
225 WEST WASHINGTON, SUITE 1550
CHICAGO, IL 60606
C/O PHILIP ADAMSKI
312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGE	09-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, RAISE LIGHT BLENDS	03-04-15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL, CHANGE OWNER INFO	07/09/14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FROM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN
**SITE LAYOUT PLAN;
BUILDING ELEVATIONS**

JESSUP PARK
WAREHOUSE & FLEX SPACE
TAX MAP 43, GRID 22
1ST ELECTION DISTRICT
PLAT 10826
PARCEL 109
HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERING, INC.**
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELIGOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/DZE
DRAWN BY: DZE/JER
CHECKED BY: RHW
DATE: JULY 2014
SCALE: AS SHOWN
W.O. NO.: 04-56

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. 16193, EXPIRATION DATE 09-27-2014.

6 SHEET OF 24

PLAN VIEW
SCALE: 1"=30'

BUILDING A ELEVATION
MEAN HEIGHT = 32'-8"

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.

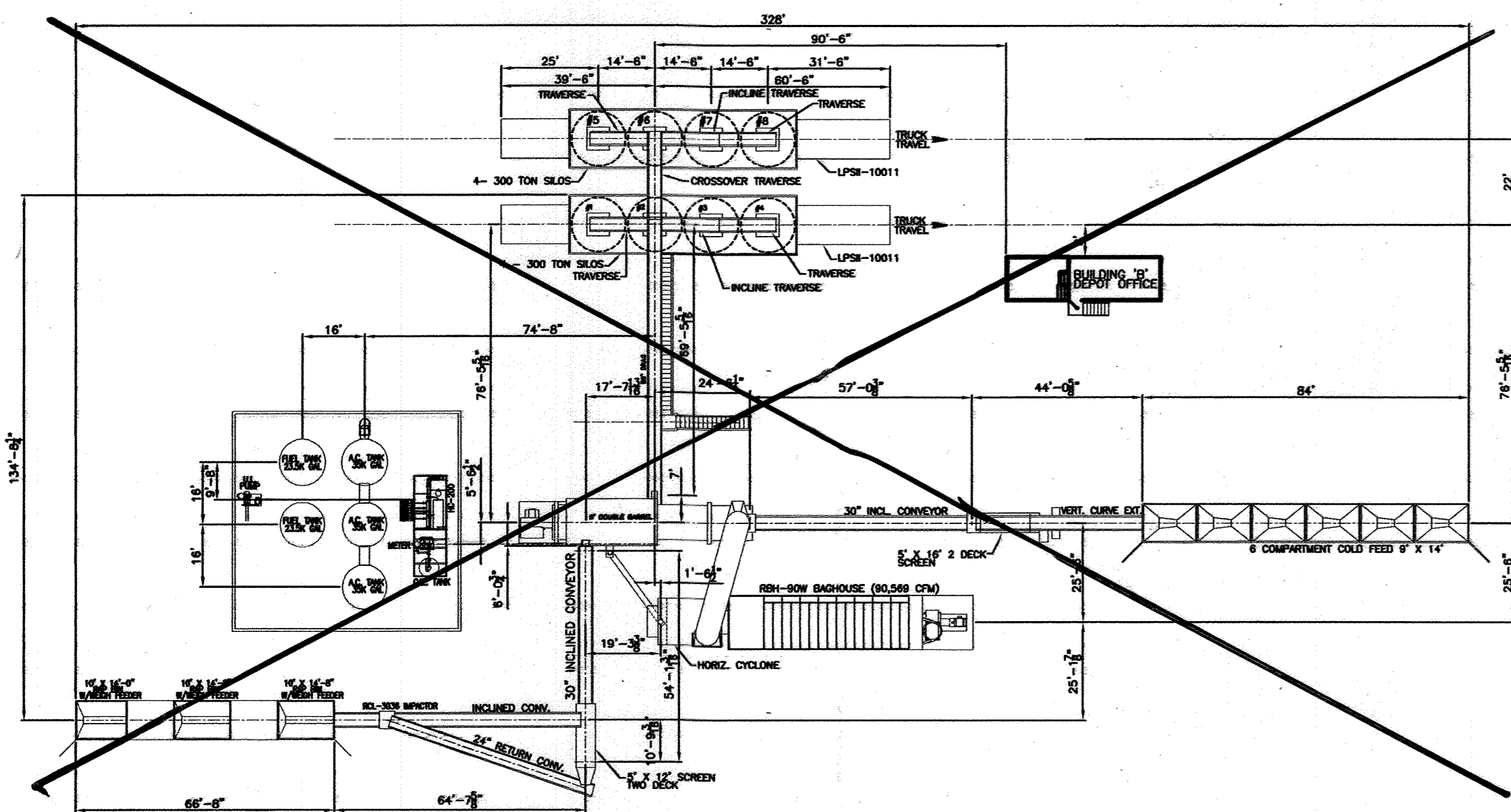
Signature: [Signature]
PE NO. 16193
Date: 10/24/17

NO AS-BUILT INFORMATION ON THIS SHEET

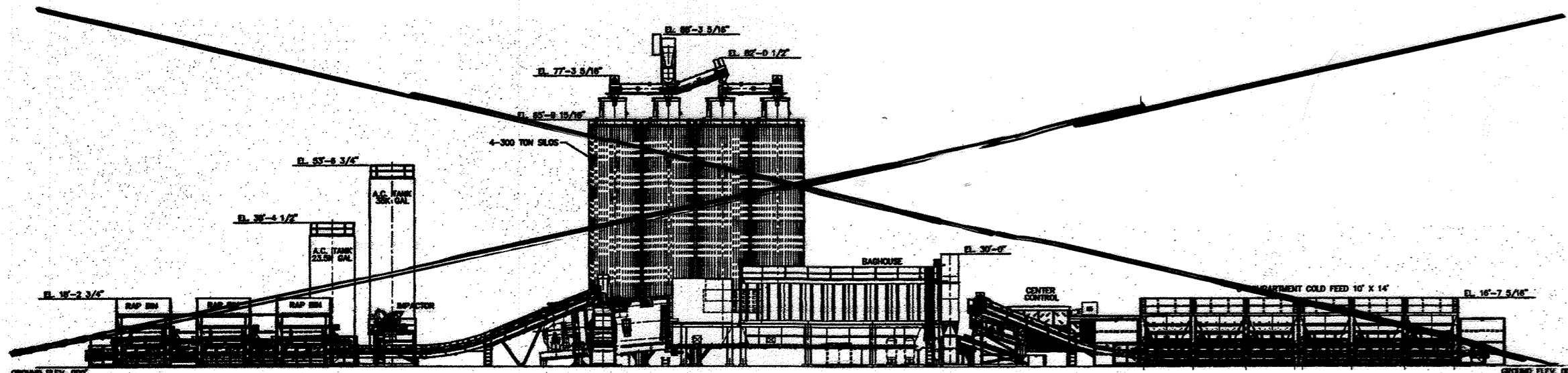
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: [Signature] 10-3-14
Chief, Division of Land Development: [Signature] 10-07-14
Director: [Signature] 10/14/17

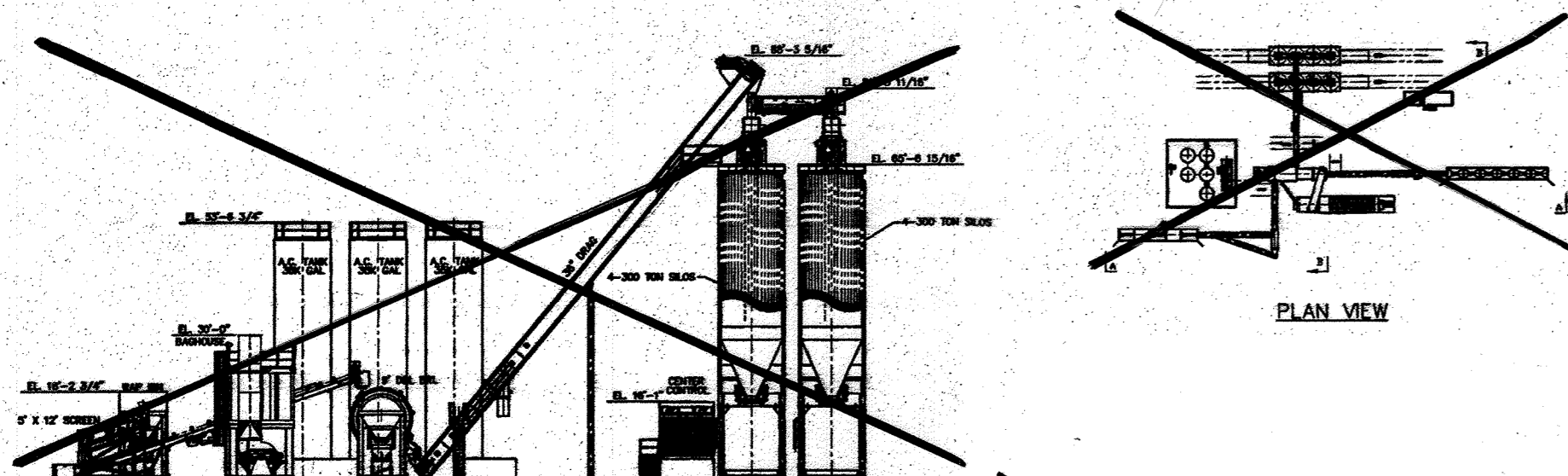
AS-BUILT OCTOBER 4, 2017



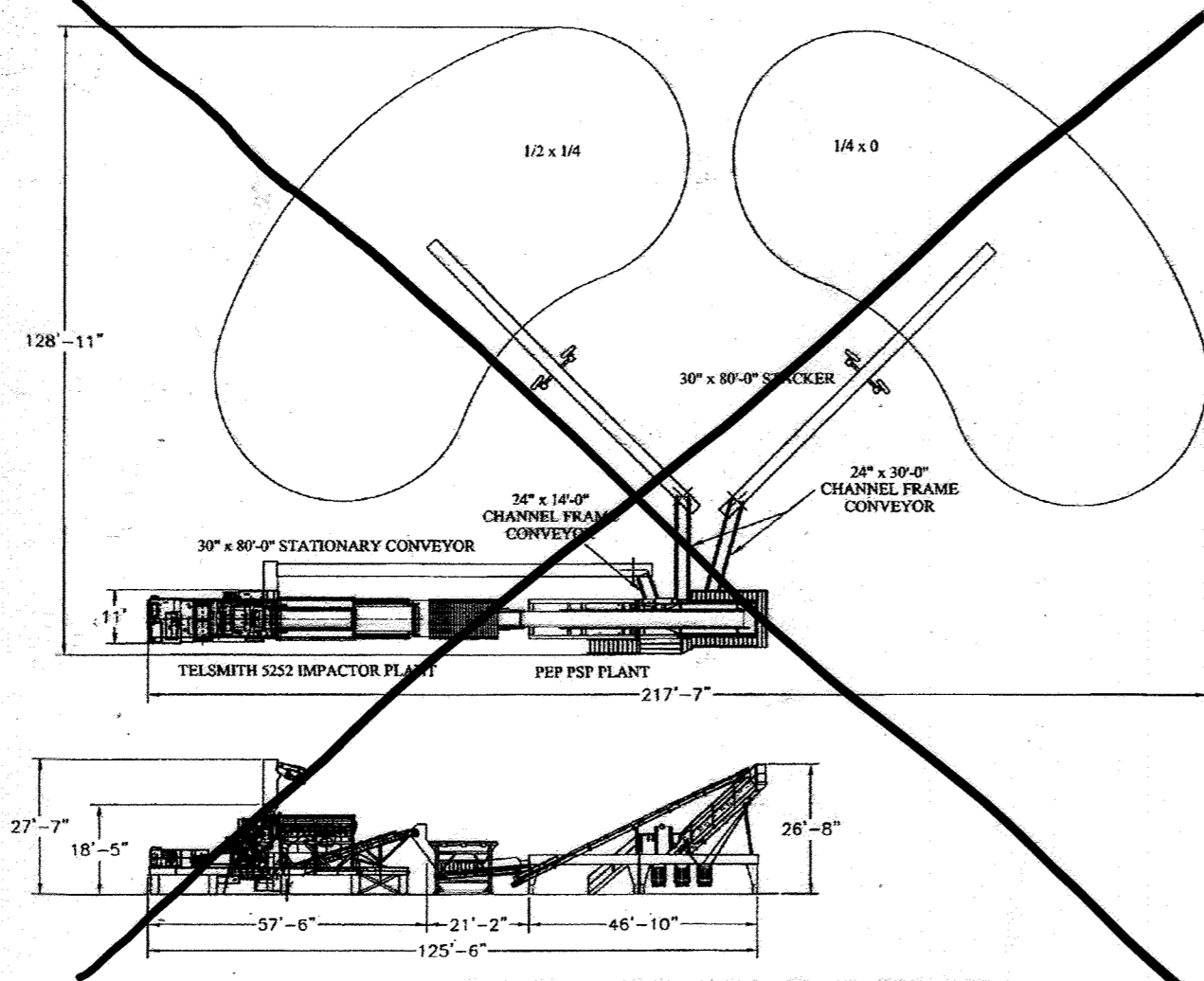
ASPHALT PLANT LAYOUT
NOT TO SCALE



ASPHALT PLANT ELEVATION
NOT TO SCALE



PLAN VIEW



RAP PROCESSOR DETAIL
NOT TO SCALE

NOTE: FOR EX. 100YR. FLOODPLAIN BEARINGS AND DISTANCES, SEE CHART ON SHEET 8.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 5/14/10

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 5/11/10

 DIRECTOR
 DATE: 5/12/10

BY THE DEVELOPER:

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

SIGNATURE OF DEVELOPER
 DATE: 3/28/10

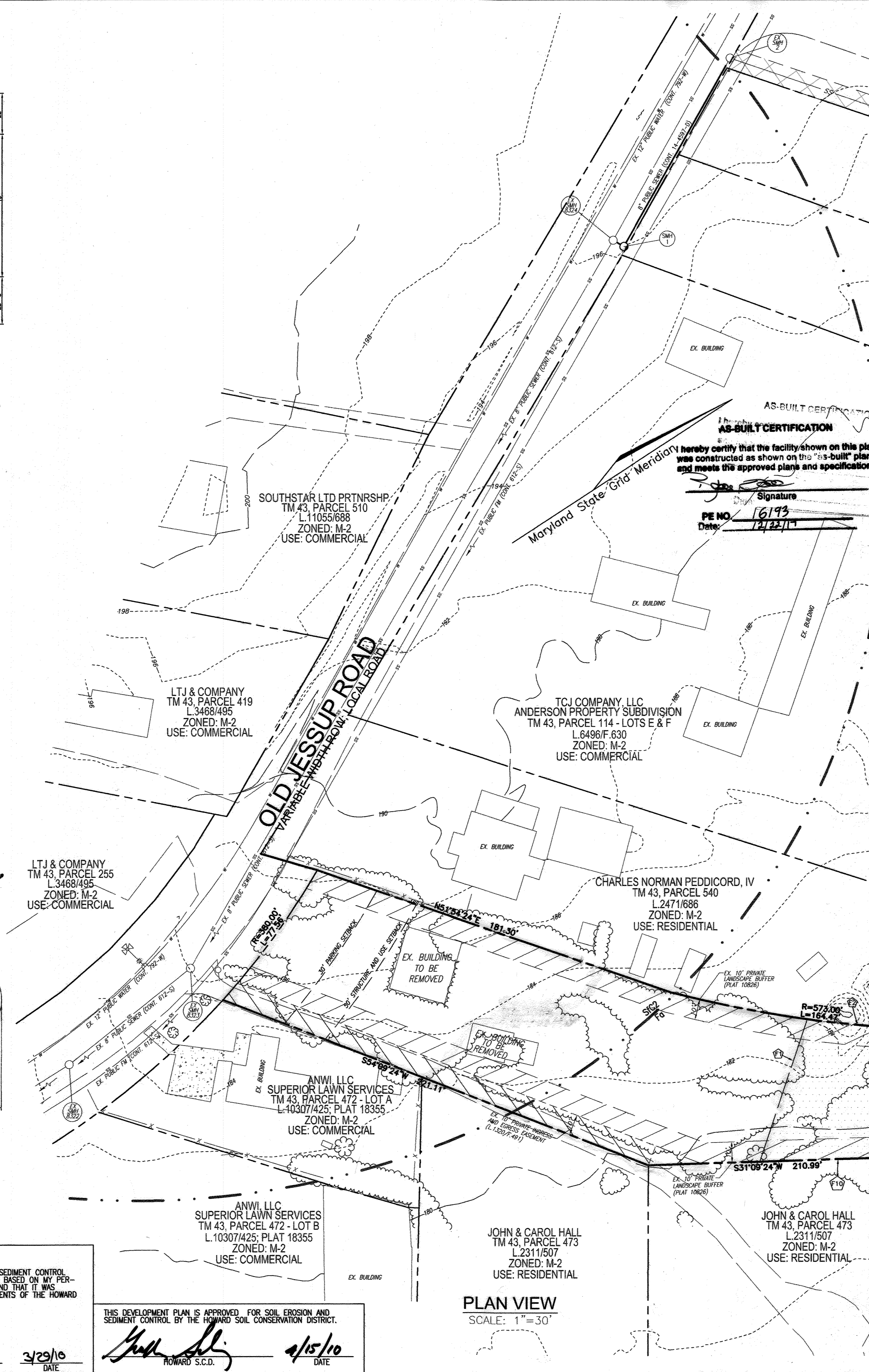
BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF ENGINEER
 DATE: 3/29/10

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

HOWARD S.C.D.
 DATE: 4/15/10

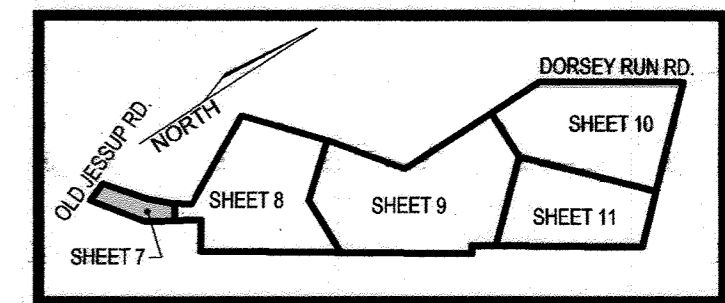


PLAN VIEW
SCALE: 1"=30'

AS-BUILT CERTIFICATION
I hereby certify that the facility shown on this plan was constructed as shown on this "AS-BUILT" plan and meets the approved plans and specifications.

Signature: [Signature]
 PE NO: 16193
 Date: 12/22/11

- LEGEND:**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING SPOT ELEVATION
 - EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREE LINE (FIELD LOCATED)
 - PROP. TREE LINE
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - PROPOSED SIDEWALK
 - EX. PUBLIC 100 YR. FLOODPLAIN
 - M1B2
 - M1D3
 - SF
 - SSF
 - LOD
 - LOD
 - CIP
 - ACIP
 - TEMP SWALE
 - EARTHWORK
 - STABILIZED CONSTRUCTION ENTRANCE
 - EROSION CONTROL MATTING



KEY MAP
NOT TO SCALE

NO AS-BUILT INFORMATION ON THIS SHEET

OWNER/DEVELOPER
WILLIAM T. WHEELER, TRUSTEE
850 E. GUDE ROAD, SUITE A
ROCKVILLE, MD 20850
301-252-7444

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW SLOVED TRAILER PAD AND ASSOCIATED SITE CHANGES	09-29-11
5	REVISE PLAN TO REMOVE PROPOSED CURBING	12-9-11
1	CHANGE THE ORIGINAL DESIGN FROM NORMAL PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

MATCHLINE - SEE SHEET 8

REVISED SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND EROSION CONTROL PLAN
JESSUP PARK
WAREHOUSE & FLEX SPACE
TAX MAP 43, GRID 22
1ST ELECTION DISTRICT
PLAT 10826
PARCEL 109
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELLICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: JR
 DRAWN BY: JR/TM/DZ
 CHECKED BY: RHV
 DATE: MARCH, 2010
 SCALE: AS SHOWN
 W.O. NO.: 04-56

PROFESSIONAL CERTIFICATE
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. 10113, EXPIRATION DATE: 09-27-2014.

7 SHEET OF 24

AS-BUILT OCTOBER 4, 2017

SDP-09-021

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT. (1 DAY)
 - DEVELOPER/CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR PRIOR TO ANY LAND DISTURBANCE. (1 DAY)
 - NOTIFY HOWARD COUNTY BUREAU OF ENGINEERING, CONSTRUCTION INSPECTION DIVISION (410-313-1880) AT LEAST 24 HRS BEFORE STARTING WORK. (1 DAY)
 - STAKEOUT LIMITS OF DISTURBANCE. (1 DAY)
 - INSTALL STABILIZED CONSTRUCTION ENTRANCE WITH MOUNTABLE BERM. (1 DAY)
 - CLEAR AND GRUB FOR THE INSTALLATION OF ALL PERIMETER CONTROLS. (2 DAYS)
 - INSTALL PERIMETER CONTROLS INCLUDING EARTH DIKES (A-2), TEMPORARY STONE OUTLET STRUCTURE, AND SUPER SILT FENCE. INSTALL STORM DRAIN FROM 1-24 TO HW-2 TO SERVE AS A CLEANWATER BYPASS. (10 DAYS)
 - BEGIN SITE GRADING AND RETAINING WALL CONSTRUCTION. INSTALL STORM DRAIN AND GRAVEL RECHARGE TRENCH. CONTRACTOR TO TEMPORARILY BLOCK INLET TO RECHARGE TRENCH UNTIL CONTRIBUTING DRAINAGE AREA IS STABILIZED. (1 MONTH)
 - AFTER ROAD AND PARKING LOT ARE BROUGHT TO PROPOSED GRADE, AND WITH THE INSPECTOR'S APPROVAL, BEGIN INSTALLATION OF ROAD BASE PAVING AND CURB. COMPLETE STORM DRAIN INSTALLATION. FINE GRADE AS REQUIRED TO DIRECT RUNOFF TO INLETS AND PROVIDE INLET PROTECTION ON ALL PROPOSED INLETS AS SHOWN. PROVIDE SILT FENCE ON PAVEMENT IN FRONT OF THE INLET OPENING FOR 1-1 AS SHOWN ON PLAN. (3 WEEKS)
 - WITH INSPECTOR'S APPROVAL, FINE GRADE AND STABILIZE ALL AREAS OF THE LOD, INCLUDING ANY EXPOSED EARTH AREAS OUTSIDE THE LOD, WITH PERMANENT SEEDING MIXTURE AND STRAW AND MULCH. INSTALL PERMANENT SOIL STABILIZATION MATTING ON THE SOUTHERN SIDE OF THE PROPOSED ROAD AS SHOWN ON PLAN. REMOVE ALL TRASH, JUNK AND DEBRIS FROM THE LIMIT OF DISTURBANCE. (1 WEEK)
 - REMOVE SEDIMENT CONTROLS AFTER RECEIVING APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR. (1 DAY)
 - AFTER PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR AND UPON COMPLETION OF THE PARKING AREA FLUSH STORM DRAIN SYSTEM. (1 DAY)

- LEGEND:**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING SPOT ELEVATION
 - EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREE LINE (FIELD LOCATED)
 - PROP. TREE LINE
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - PROPOSED SIDEWALK
 - EX. PUBLIC 100 YR. FLOODPLAIN
 - SOILS BOUNDARY
 - SILT FENCE
 - SUPER SILT FENCE
 - LIMIT OF DISTURBANCE
 - CIP CURB INLET PROTECTION
 - AGIP AT GRADE INLET PROTECTION
 - TEMP SWALE
 - EARTHDIKE
 - STABILIZED CONSTRUCTION ENTRANCE
 - EROSION CONTROL MATTING

- NOTES:**
- DURING GRADING AND AFTER EACH RAINFALL, CONTRACTOR WILL INSPECT AND PROVIDE NECESSARY MAINTENANCE TO THE SEDIMENT CONTROL MEASURES ON THIS PLAN.
 - FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
 - SEVEN (7) CALENDAR DAYS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
 - ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
 - SEE SHEETS 20 AND 24 FOR THE CURRENT HSCD STANDARD NOTES AND THE CURRENT DETAILS AND SPECIFICATIONS FROM THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION & SEDIMENT CONTROL.

AS-BUILT CERTIFICATION

I HEREBY CERTIFY BY MY SEAL THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN, MEET THE APPROVED PLANS AND SPECIFICATIONS

Robert H. Vogel
 P.E. NO. 16193
 DATE: 2/22/17

FOR TEMP. SEDIMENT BASIN GRADING, SEE INSET ON SHEET 12

PLANS APPROVED BY: *Bruce W. H.*
 DATE: 3/31/16
 DAM SAFETY DIVISION
 WATER MANAGEMENT ADMINISTRATION
 MARYLAND DEPARTMENT OF THE ENVIRONMENT

OWNER
 DRR DEVELOPMENT, LLC.
 801 GRAND AVENUE
 DES MOINES, IA 50392
 C/O DAVID GRAVES
 615-248-4241

DEVELOPER
 RIDGE DEVELOPMENT COMPANY, LLC.
 225 WEST WASHINGTON, SUITE 1550
 CHICAGO, IL 60606
 C/O PHILLIP ADAMSKI
 312-257-2881

FLOODPLAIN CHART

LINE	BEARING	DISTANCE
F-1	N38°30'33"W	72.59'
F-2	RAD=573.00	L=97.12'
F-3	N27°26'56"W	380.50'
F-4	N49°00'26"E	100.00'
F-5	N39°05'04"W	172.46'
F-6	N37°03'41"W	125.77'
F-7	N26°17'48"E	142.41'
F-8	N09°31'08"E	33.52'
F-9	N30°32'39"W	57.49'
F-10	S31°09'07"W	110.00'

SEDIMENT BASIN

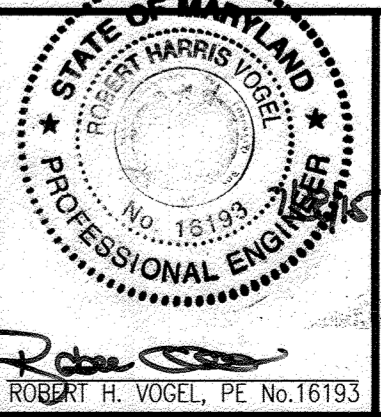
PROPOSED D.A.	= 13.8 AC.
EXISTING D.A.	= 2.20 AC.
STORAGE REQUIRED (SEDIMENT)	= 49,680 CF
STORAGE PROVIDED (SEDIMENT)	= 116,405 CF
TOP DAM	= 187.20
WEIR CREST EL.	= 184.70
BOTTOM EL.	= 179.50
CLEANOUT REQUIRED	= 12,420 CF
CLEANOUT PROVIDED	= 12,420 CF
C/O EL.	= 181.51
SIDE SLOPES	= 1:1
EX. GROUND AT C/O DAM	= 179.70
WET VOLUME REQUIRED	= 24,840 CF
WET VOLUME PROVIDED	= 27,857 CF
WET STORAGE ZONE	= 179.50 - 182.50
TOP DAM	= 182.50
DRY VOLUME REQUIRED	= 24,840 CF
DRY STORAGE PROVIDED	= 28,748 CF
DRY STORAGE ZONE	= 182.50 - 184.70
DRY STORAGE EL.	= 184.70
SOIL SLOPES	= 1:1
10 YR WSEL	= 185.20
Q ₁ Temp	= 7.13 CFS
Q ₂ Temp	= 16.18 CFS
Q ₃ Temp	= 8.09 CFS
Q ₄ Temp	= 0.50 CFS
BARREL DAM	= 48"
RISER RACK	= 6.67 SQUARE CORN. METAL

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT; REVISE LIGHTPOLE LOCATIONS	03-04-15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL; CHANGE OWNER INFO	07-09-14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-12-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND EROSION CONTROL PLAN

JESSUP PARK
 WAREHOUSE & FLEX SPACE
 PLAT 10826 PARCEL 109
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET ELLICOTT CITY, MD 21043 TEL: 410.461.7966 FAX: 410.461.8966



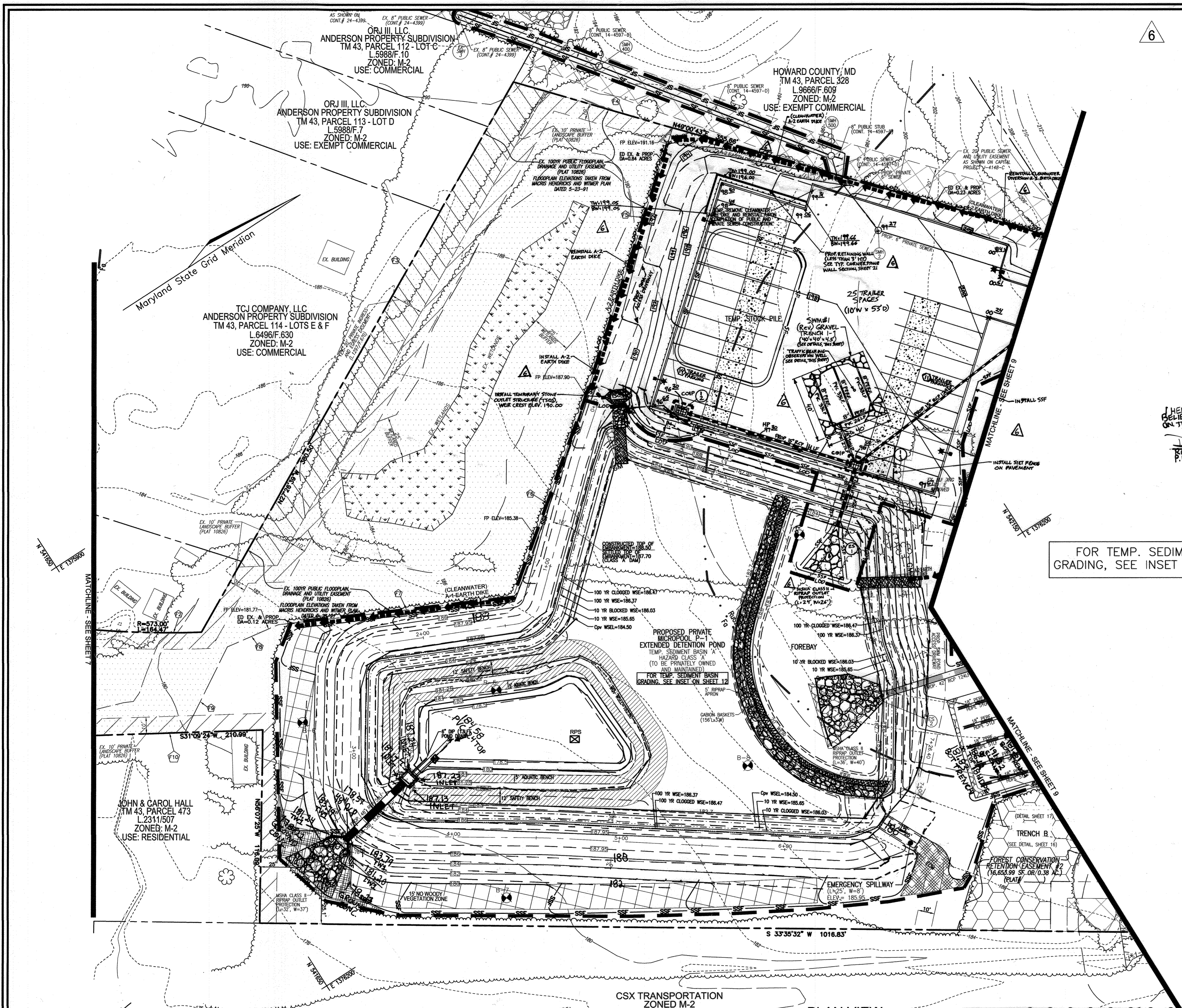
PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/DZE
 DRAWN BY: DZE/KC
 CHECKED BY: RHW
 DATE: MARCH 2015
 SCALE: AS SHOWN
 W.O. NO.: 04-56

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A QUALIFIED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE 09-27-2016.

8 SHEET OF 24

AS-BUILT OCTOBER 4, 2017 SDP-09-021



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John C. Roberts
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 10-22-15

William J. Jones
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-23-15

BY THE DEVELOPER:

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

Phillip Adamski
 SIGNATURE OF DEVELOPER
 DATE: 9-18-15

BY THE ENGINEER:

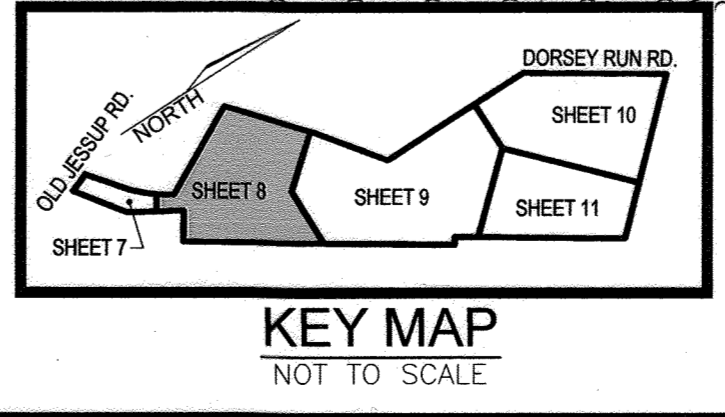
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRINCIPAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

John C. Roberts
 SIGNATURE OF ENGINEER
 DATE: 10/15/15

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

John C. Roberts
 HOWARD S.C.D.
 DATE: 10/15/15

PLAN VIEW
 SCALE: 1"=30'



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATION.
 ROBERT H. VOGEL
 P.E. NO. 16193
 DATE 12/22/17

- LEGEND:**
- EXISTING CONTOUR
 - PROPOSED CONTOUR
 - PROPOSED SPOT ELEVATION
 - EXISTING SPOT ELEVATION
 - EXISTING CURB AND GUTTER
 - PROPOSED CURB AND GUTTER
 - EXISTING UTILITY POLE
 - EXISTING LIGHT POLE
 - EXISTING MAILBOX
 - EXISTING SIGN
 - EXISTING SANITARY MANHOLE
 - EXISTING SANITARY LINE
 - EXISTING CLEANOUT
 - EXISTING FIRE HYDRANT
 - EXISTING WATER LINE
 - PROPOSED STORM DRAIN
 - PROPOSED STORM DRAIN INLET
 - EXISTING TREES (FIELD LOCATED)
 - EXISTING TREELINE (FIELD LOCATED)
 - PROP. TREELINE
 - EXISTING FENCE
 - PROPERTY LINE
 - RIGHT-OF-WAY LINE
 - PROPOSED SIDEWALK
 - EX. PUBLIC 100 YR. FLOODPLAIN
 - M1B2 SOILS BOUNDARY
 - M1D3
 - SF SILT FENCE
 - SSF SUPER SILT FENCE
 - LOD LIMIT OF DISTURBANCE
 - CIP CURB INLET PROTECTION
 - AGIP AT GRADE INLET PROTECTION
 - TEMP SWALE
 - EARTHDIKE
 - STABILIZED CONSTRUCTION ENTRANCE
 - EROSION CONTROL MATING

NOTE: UPON COMPLETION OF INSTALLATION OF I-24, THE UPSTREAM AREA IS TO BE IMMEDIATELY STABILIZED WITH SOD.

OWNER
 DRP DEVELOPMENT, LLC
 801 GRAND AVENUE
 DES MOINES, IA 50392
 C/O DAVID GRAVES
 515-248-4241

DEVELOPER
 RIDGE DEVELOPMENT COMPANY, LLC
 225 WEST WASHINGTON, SUITE 1550
 CHICAGO, IL 60608
 C/O PHILLIP ADAMSKI
 312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, REVISE LIGHTPOLE LOCATIONS	03-04-15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL; CHANGE OWNER INFO	07-09-14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-12-14
1	CHANGE THE ORIGINAL DESIGN FROM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

**REVISED SITE DEVELOPMENT PLAN
 SITE GRADING, SEDIMENT
 AND EROSION CONTROL PLAN**

**JESSUP PARK
 WAREHOUSE & FLEX SPACE**

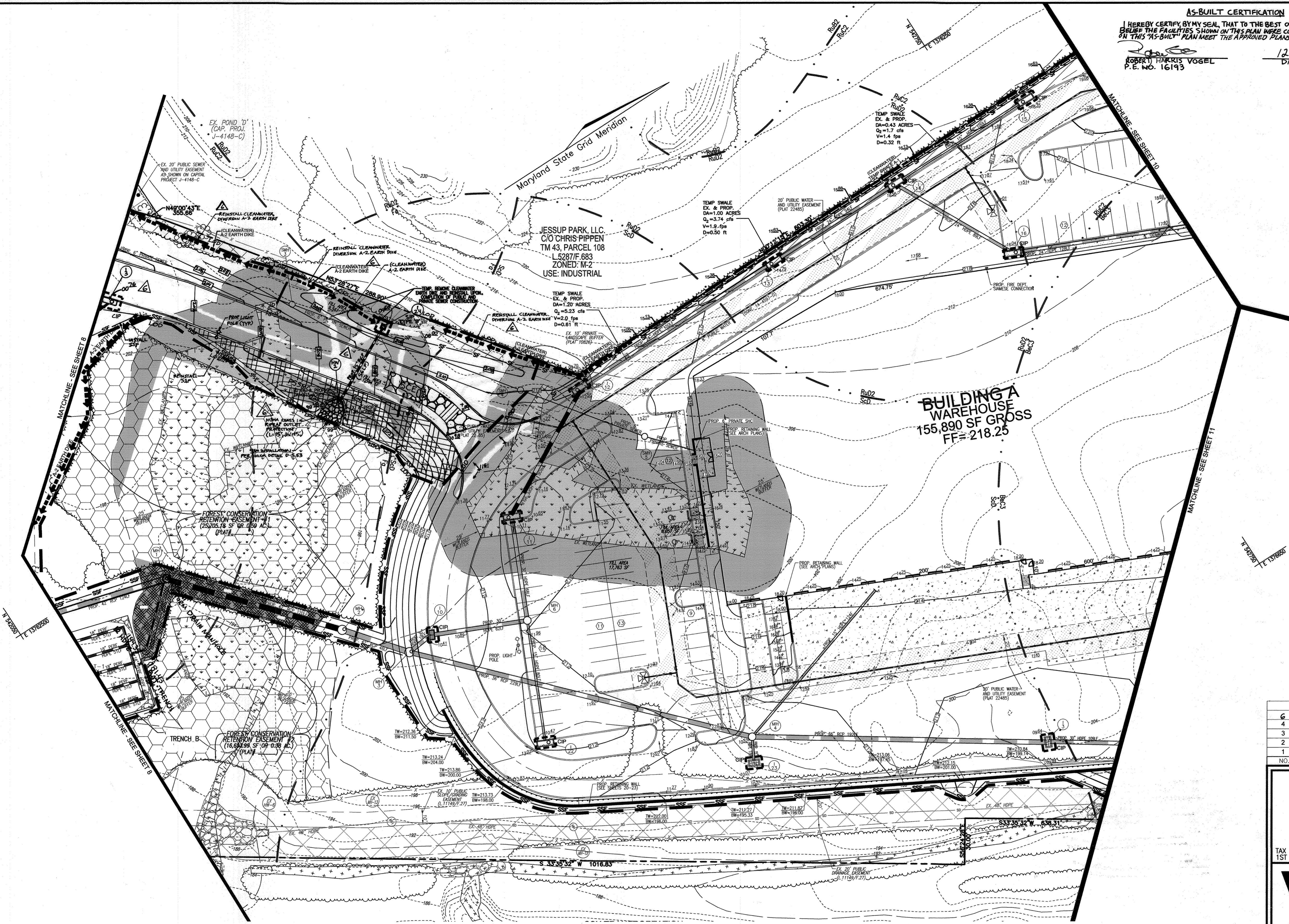
TAX MAP 43, GRID 22 1ST ELECTION DISTRICT PLAT 10826 PARCEL 109 HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
 ENGINEERS • SURVEYORS • PLANNERS**
 8407 MAIN STREET TEL: 410.461.7666
 ELLICOTT CITY, MD 21043 FAX: 410.461.8981

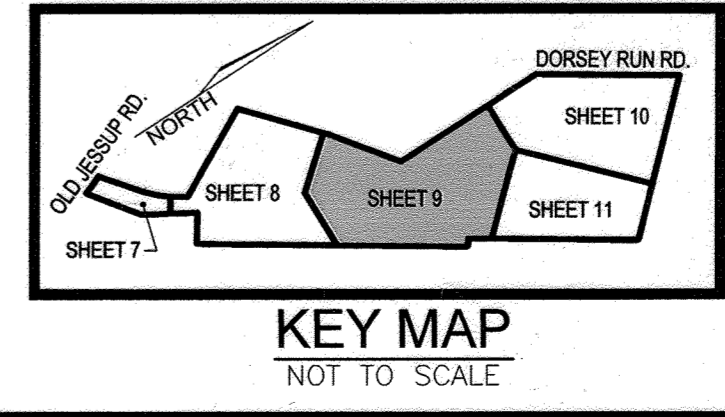
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 08-27-2018.

DESIGN BY: RHW/DZE
 DRAWN BY: DZE/KG
 CHECKED BY: RHW
 DATE: MARCH 2015
 SCALE: AS SHOWN
 W.O. NO.: 04-56

9 SHEET OF 24



PLAN VIEW
 SCALE: 1"=30'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 10-21-15
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 10-22-15
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 10-23-15
 DIRECTOR DATE

BY THE DEVELOPER:

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

[Signature] 9-18-15
 SIGNATURE OF DEVELOPER DATE

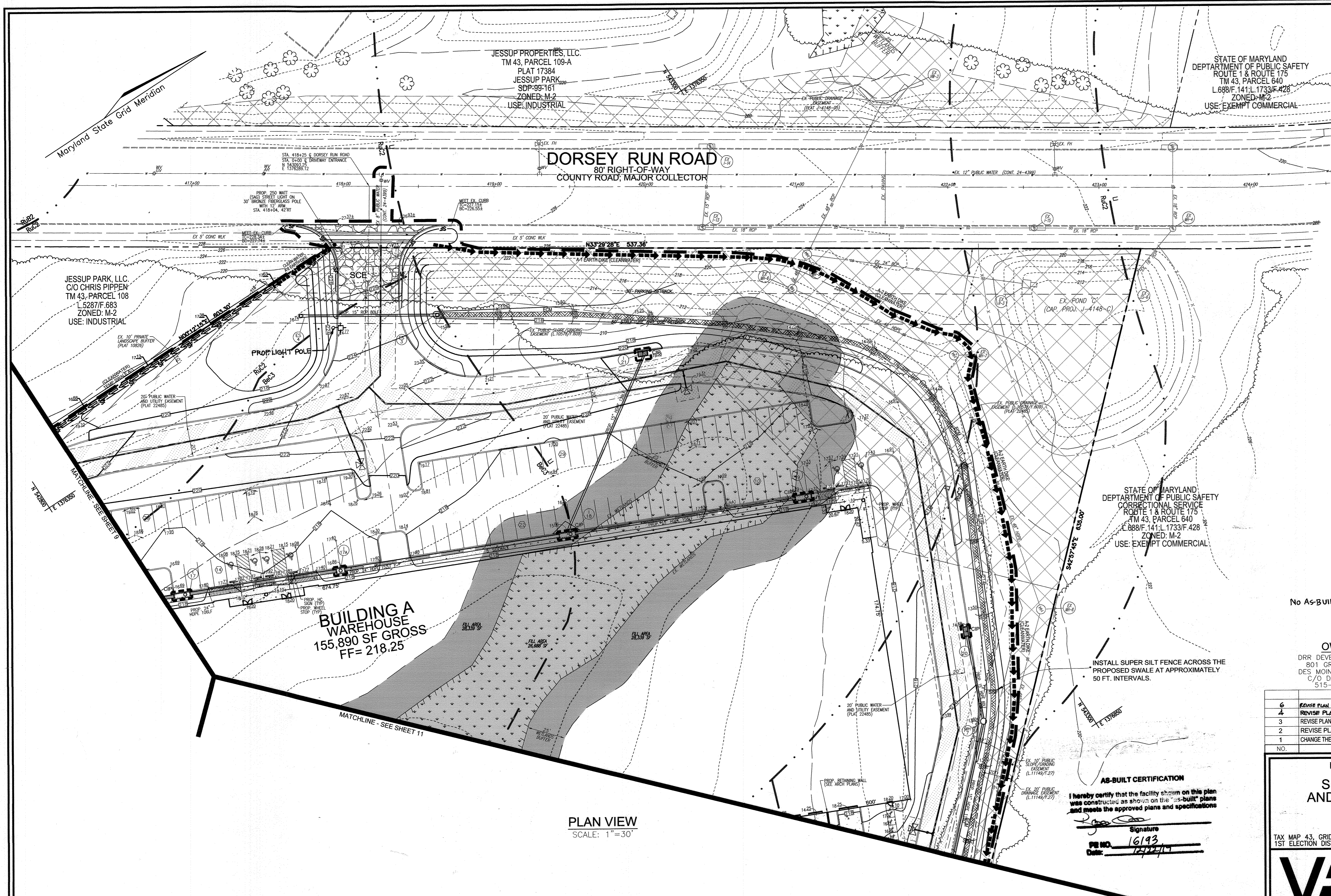
BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT 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] 7/22/15
 SIGNATURE OF ENGINEER DATE

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

[Signature] 10/15/15
 HOWARD S.C.D. DATE



LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREELINE (FIELD LOCATED)
	PROP. TREELINE
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	PROPOSED SIDEWALK
	EX. PUBLIC 100 YR. FLOODPLAIN
	SOILS BOUNDARY M1B2
	SOILS BOUNDARY M1D3
	SILT FENCE SF
	SUPER SILT FENCE SSF
	LIMIT OF DISTURBANCE LOD
	CURB INLET PROTECTION CIP
	AT GRADE INLET PROTECTION AGIP
	TEMP SWALE
	EARTHDIKE
	STABILIZED CONSTRUCTION ENTRANCE
	EROSION CONTROL MATTING

STATE OF MARYLAND
DEPARTMENT OF PUBLIC SAFETY
ROUTE 1 & ROUTE 175
TM 43, PARCEL 640
L.688/F.141.L.1733/F.428
ZONED: M-2
USE: EXEMPT COMMERCIAL

JESSUP PROPERTIES, LLC.
TM 43, PARCEL 109-A
PLAT 17384
JESSUP PARK
SDP-99-161
ZONED: M-2
USE: INDUSTRIAL

Maryland State Grid Meridian

DORSEY RUN ROAD
80' RIGHT-OF-WAY
COUNTY ROAD, MAJOR COLLECTOR

JESSUP PARK, LLC.
C/O CHRIS PIPPEN
TM 43, PARCEL 108
L.5287/F.683
ZONED: M-2
USE: INDUSTRIAL

PROP LIGHT POLE

BUILDING A
WAREHOUSE
155,890 SF GROSS
FF= 218.25

STATE OF MARYLAND
DEPARTMENT OF PUBLIC SAFETY
CORRECTIONAL SERVICE
ROUTE 1 & ROUTE 175
TM 43, PARCEL 640
L.888/F.141.L.1733/F.428
ZONED: M-2
USE: EXEMPT COMMERCIAL

INSTALL SUPER SILT FENCE ACROSS THE
PROPOSED SWALE AT APPROXIMATELY
50 FT. INTERVALS.

No AS-BUILT INFORMATION ON THIS SHEET

OWNER
DRR DEVELOPMENT, LLC.
801 GRAND AVENUE
DES MOINES, IA 50392
C/O DAVID GRAVES
515-248-4241

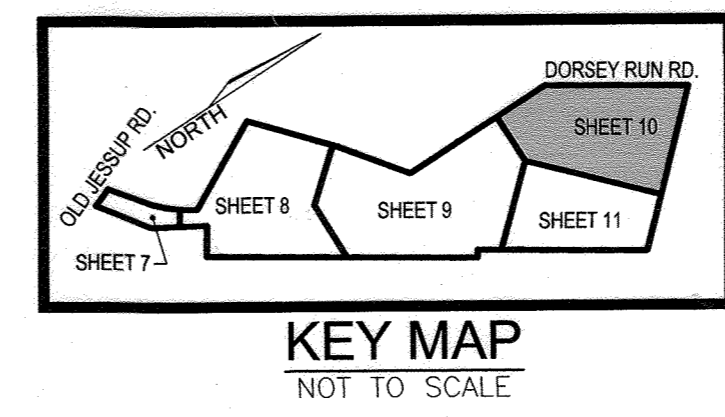
DEVELOPER
RIDGE DEVELOPMENT COMPANY, LLC.
225 WEST WASHINGTON, SUITE 1550
CHICAGO, IL 60606
C/O PHILLIP ADAMSKI
312-257-2881

6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, REVISE LIGHT POLE LOC.	03/04/15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL; CHANGE OWNER INFO	07/09/14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13
NO.	REVISION	DATE

AS-BUILT CERTIFICATION
I hereby certify that the facility shown on this plan
was constructed as shown on the "as-built" plans
and meets the approved plans and specifications

Signature: _____
PE NO. 16193
Date: 10/04/17

PLAN VIEW
SCALE: 1"=30'



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division
10-3-14

Chief, Division of Land Development
10-07-14

Director
10/4/14

BY THE DEVELOPER:

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

Signature of Developer: _____
DATE: 7/31/14

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer: _____
DATE: 9/23/14

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

Signature: _____
DATE: 9/30/14
HOWARD S.C.D.

REVISED SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND EROSION CONTROL PLAN

JESSUP PARK
WAREHOUSE & FLEX SPACE

TAX MAP 43, GRID 22
1ST ELECTION DISTRICT

PLAT 10826
PARCEL 109
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELIGOTT CITY, MD 21043
TEL: 410-461-7666
FAX: 410-461-8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHV/DZE
DRAWN BY: DZE/JER
CHECKED BY: RHV
DATE: JULY 2014
SCALE: AS SHOWN
W.O. NO.: 04-56

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. 16193, EXPIRATION DATE 09-27-2018.

10 SHEET OF 24

LEGEND:

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	EXISTING CURB AND GUTTER
	PROPOSED CURB AND GUTTER
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING SANITARY MANHOLE
	EXISTING SANITARY LINE
	EXISTING CLEANOUT
	EXISTING FIRE HYDRANT
	EXISTING WATER LINE
	PROPOSED STORM DRAIN
	PROPOSED STORM DRAIN INLET
	EXISTING TREES (FIELD LOCATED)
	EXISTING TREE LINE (FIELD LOCATED)
	PROP. TREE LINE
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	PROPOSED SIDEWALK
	EX. PUBLIC 100 YR. FLOODPLAIN
	M1B2 SOILS BOUNDARY
	M1D3 SOILS BOUNDARY
	SF SILT FENCE
	SSS SUPER SILT FENCE
	LIMIT OF DISTURBANCE
	CIP CURB INLET PROTECTION
	AGIP AT GRADE INLET PROTECTION
	TEMP SWALE
	EARTHDIKE
	STABILIZED CONSTRUCTION ENTRANCE
	EROSION CONTROL MATTING

Maryland State Grid Meridian

**BUILDING A
WAREHOUSE**
155,890 SF GROSS
FF= 218.25

STATE OF MARYLAND
DEPARTMENT OF PUBLIC SAFETY
CORRECTIONAL SERVICE
ROUTE 1 & ROUTE 175
TM 43, PARCEL 640
L.688/F.141.L.1733/F.428
ZONED: M-2
USE: EXEMPT COMMERCIAL

CSX TRANSPORTATION
ZONED M-2

HOWARD COUNTY

PLAN VIEW
SCALE: 1"=30'

AS-BUILT CERTIFICATION
I hereby certify that the facility shown on this plan was constructed in accordance with the approved plans and meets the approved plans and specifications.

Signature: _____
PE NO. 16193
Date: 10/22/17

NO AS-BUILT INFORMATION ON THIS SHEET

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	07-09-22
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, REVISE LIGHT POLE LOC.	03/04/15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL, CHANGE OWNER INFO	07/09/14
2	REVISE PLAN FOR BUILDING DRAIN AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FROM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

OWNER: DRR DEVELOPMENT, LLC, 801 GRAND AVENUE, DES MOINES, IA 50392, C/O DAVID GRAVES, 515-248-4241

DEVELOPER: RIDGE DEVELOPMENT COMPANY, LLC, 225 WEST WASHINGTON, SUITE 1550, CHICAGO, IL 60606, C/O PHILLIP ADAMSKI, 312-257-2881

REVISED SITE DEVELOPMENT PLAN
SITE GRADING, SEDIMENT AND EROSION CONTROL PLAN

JESSUP PARK
WAREHOUSE & FLEX SPACE

TAX MAP 43, GRID 22, 1ST ELECTION DISTRICT, PARCEL 109, HOWARD COUNTY, MARYLAND, PLAT 10826

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET, ELICOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8961

DESIGN BY: RHW/DZE
DRAWN BY: DZE/JER
CHECKED BY: RHW
DATE: JULY 2014
SCALE: AS SHOWN
W.O. NO.: 04-56

PROFESSIONAL CERTIFICATE
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. 16193, EXPIRATION DATE: 09-27-2014.

11 SHEET OF 24

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: 10-3-14
Chief, Division of Land Development: 10-07-14
Director: 10/2/14

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

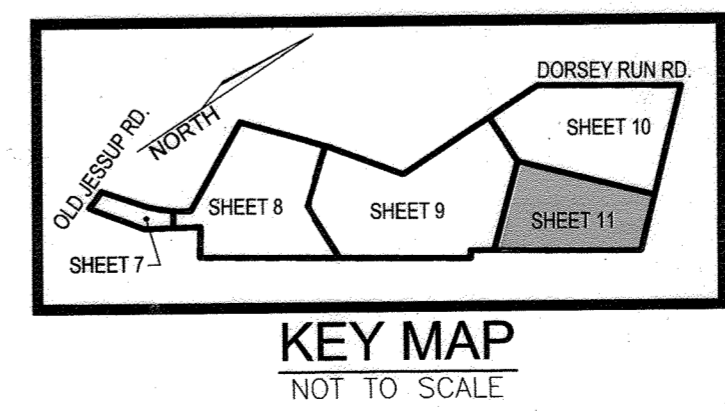
Signature: _____ DATE: 7/31/14

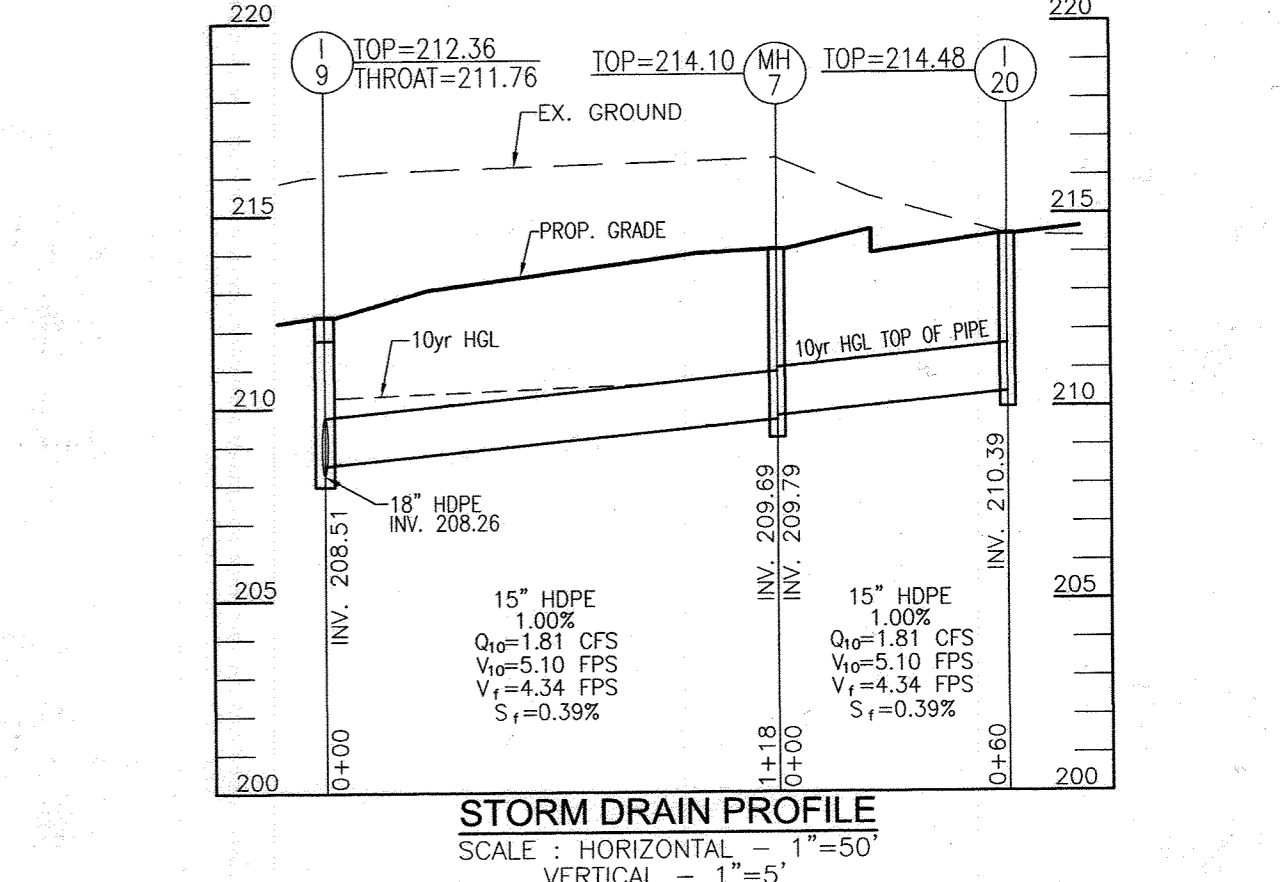
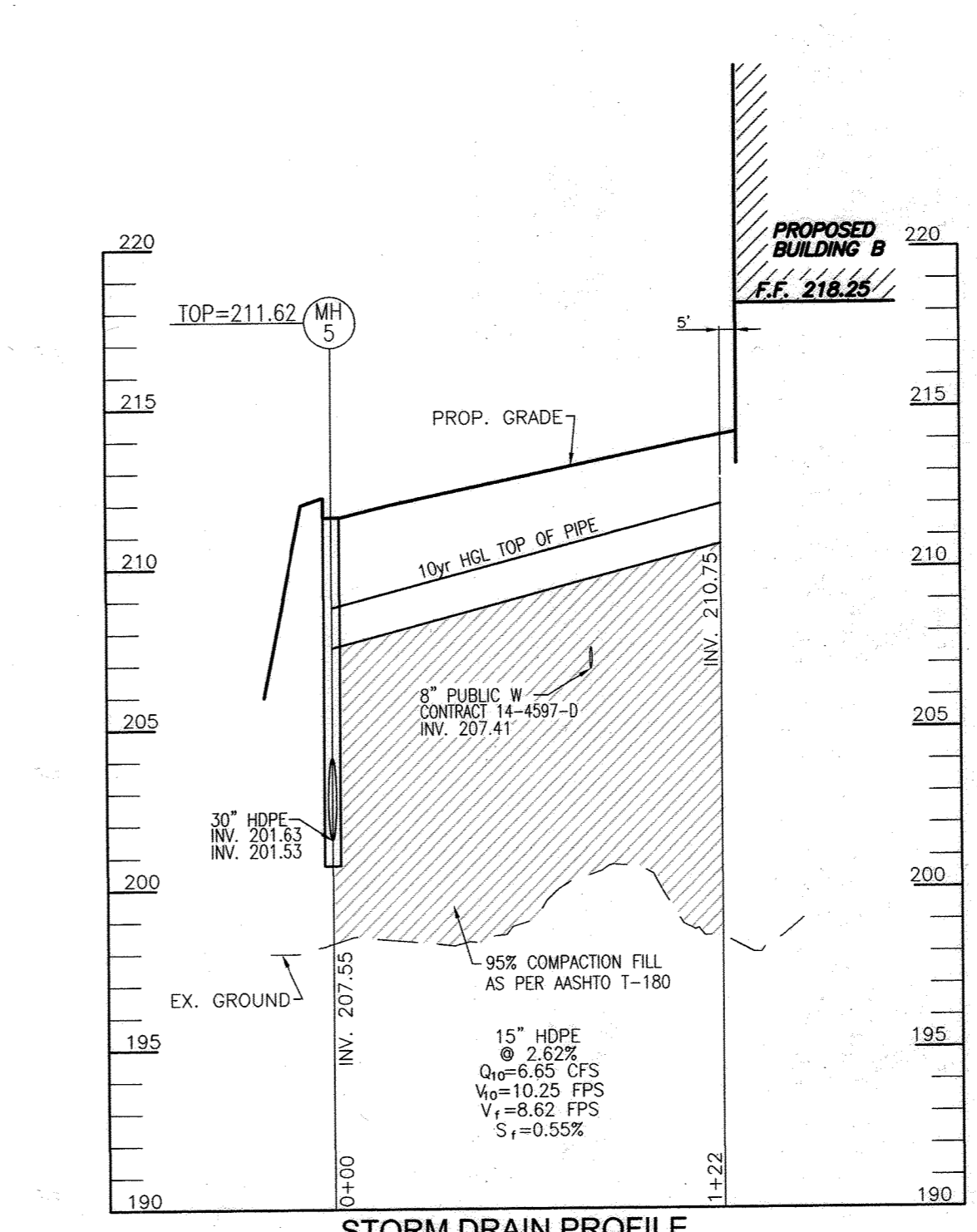
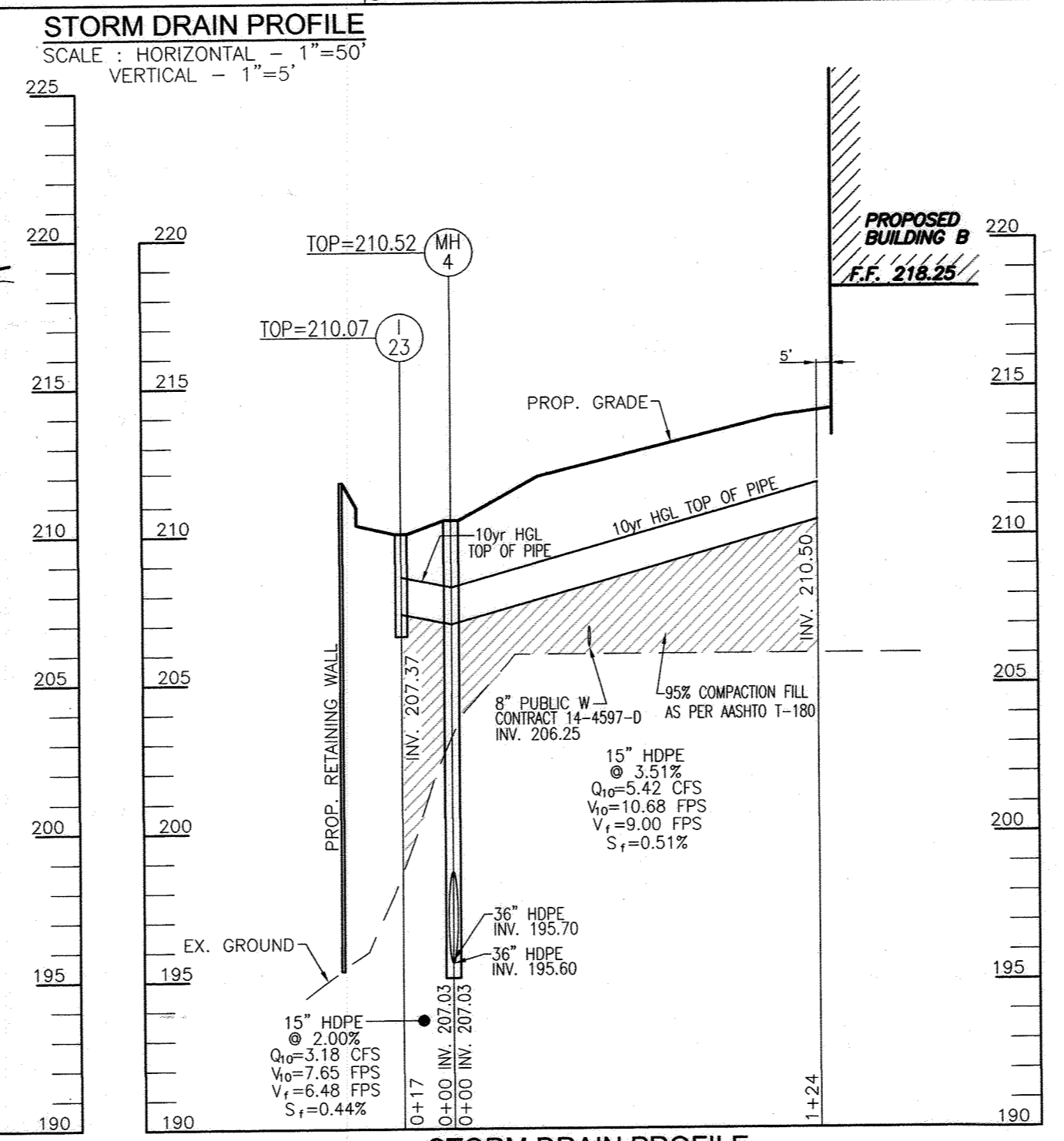
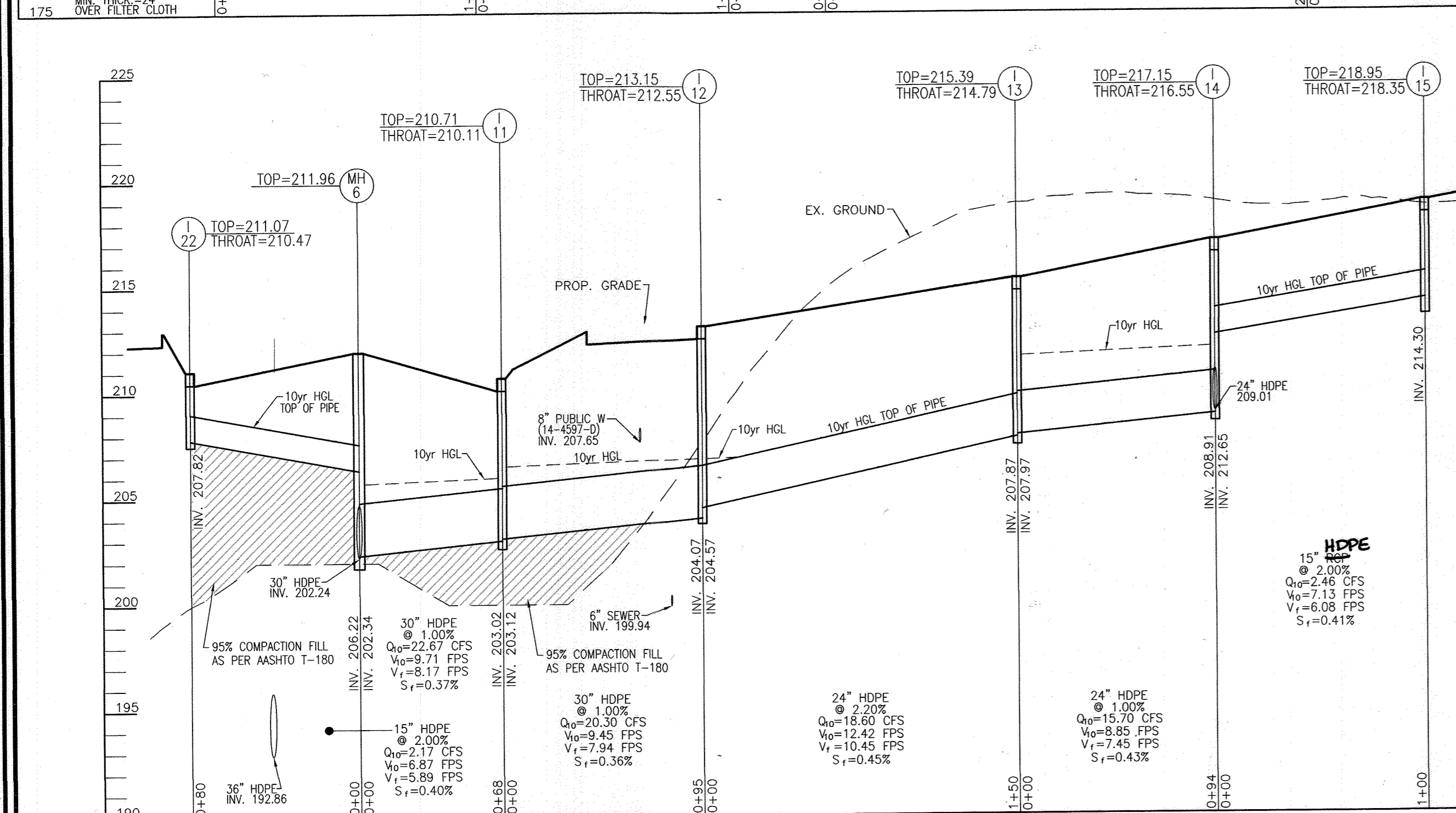
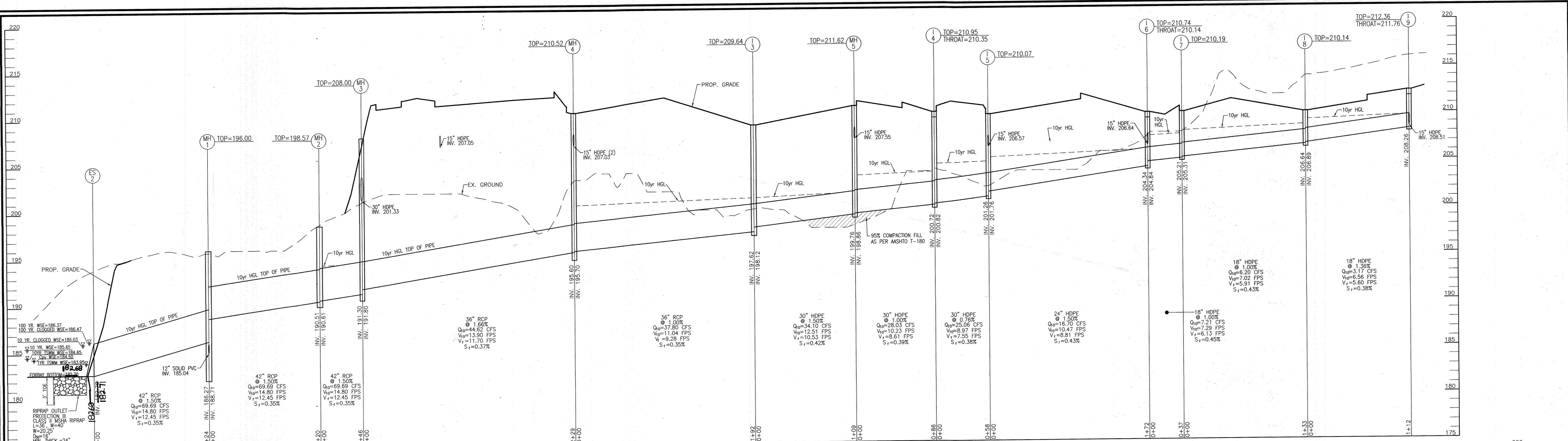
BY THE ENGINEER:
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: _____ DATE: 9/25/14

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

Signature: _____ DATE: 9/30/14
HOWARD S.C.D.





OWNER
DRR DEVELOPMENT, LLC.
801 GRAND AVENUE
DES MOINES, IA 50392
C/O DAVID GRAVES
515-248-4241

DEVELOPER
RIDGE DEVELOPMENT COMPANY, LLC.
225 WEST WASHINGTON, SUITE 1550
CHICAGO, IL 60606
C/O PHILLIP ADAMSKI
312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL; CHANGE OWNER INFO	07/09/14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN

UTILITY PROFILES

JESSUP PARK WAREHOUSE & FLEX SPACE

TAX MAP 43, GRID 22
1ST ELECTION DISTRICT

PARCEL 109
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL, INC.
ENGINEERS • SURVEYORS • PLANNERS

8407 MAIN STREET
ELLSWORTH CITY, MD 21043

TEL: 410.461.7666
FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/DZE
DRAWN BY: DZE/HER
CHECKED BY: RHW
DATE: JULY 2014
SCALE: AS SHOWN
W.O. NO.: 04-56

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. 16193, EXPIRATION DATE: 06-27-2014.

14 SHEET OF 24

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Carl Edwards
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10-3-14

Vestel Deane
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10-07-14

Mark K. Cayle
DIRECTOR
DATE: 10/14

AS-BUILT CERTIFICATION

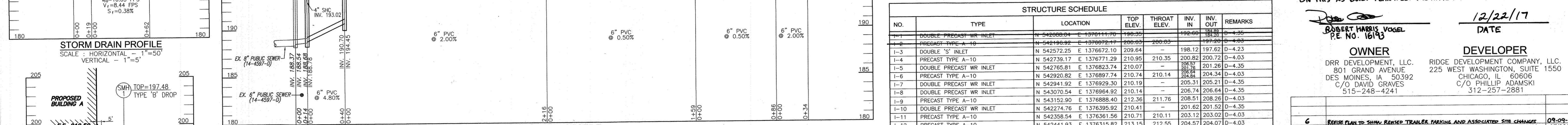
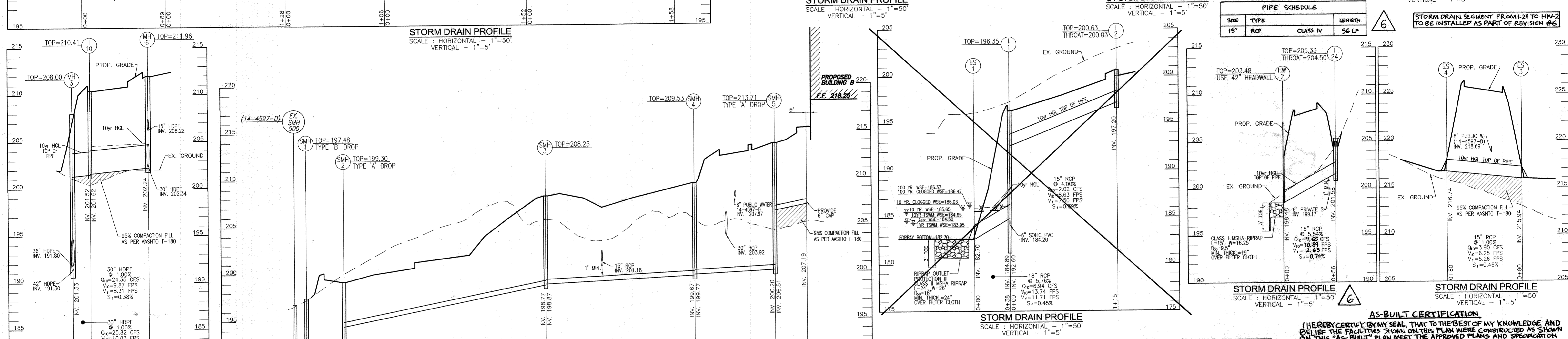
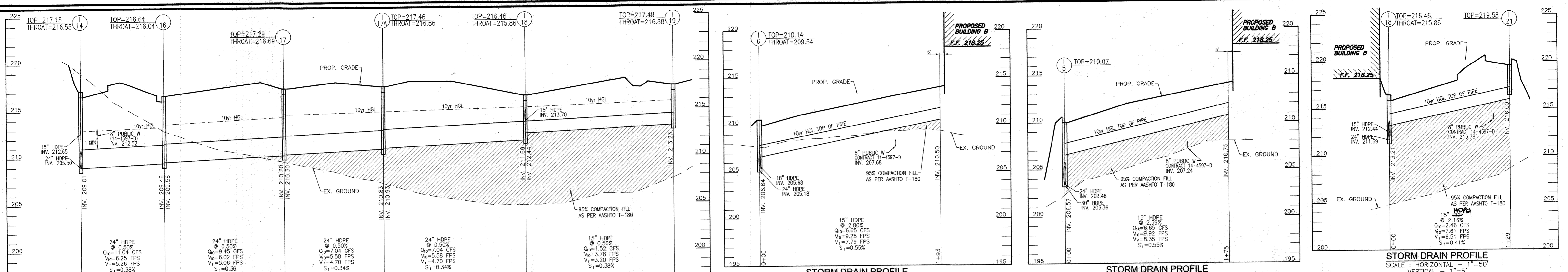
I HEREBY CERTIFY, BY MY SEAL, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATION.

Robert Harris Vogel
ROBERT HARRIS VOGEL
P.E. NO. 16193

12/22/17
DATE

PIPE SCHEDULE

SIZE	TYPE	LENGTH
4"	PVC (SEWER)	24 LF
6"	PVC (SEWER)	533 LF
15"	RCP (CLASS IV)	251 LF
18"	RCP (CLASS IV)	38 LF
36"	RCP (CLASS IV)	421 LF
42"	RCP (CLASS IV)	290 LF
15"	HDPE	1276 LF
18"	HDPE	170 LF
24"	HDPE	891 LF
30"	HDPE	497 LF
48"	RCP RCP (CLASS C-25, ASTM-361)	50 LF
6"	PERF. PVC (SWM)	39 LF
18"	PERF. PVC (SWM)	303 LF
6"	SOLID PVC (SWM)	22 LF
12"	SOLID PVC (SWM)	58 LF
6"	C-900 PVC PIPE (WHC)	60 LF
8"	C-900 PVC PIPE (WHC)	31 LF



NO.	TYPE	LOCATION	TOP ELEV.	THROAT ELEV.	INV. IN.	INV. OUT.	REMARKS
I-1	DOUBLE PRECAST WR INLET	N 542600.04 E 1376111.70	196.35	196.35	192.68	188.20	D-4.35
I-2	PRECAST TYPE A-10	N 542186.92 E 1376072.17	206.63	200.03	197.20	197.20	D-4.68
I-3	DOUBLE 'S' INLET	N 542572.25 E 1376672.10	209.64	-	198.12	197.62	D-4.23
I-4	PRECAST TYPE A-10	N 542739.17 E 1376771.29	210.95	210.35	200.82	200.72	D-4.03
I-5	DOUBLE PRECAST WR INLET	N 542765.81 E 1376823.74	210.07	-	205.77	201.25	D-4.35
I-6	PRECAST TYPE A-10	N 542920.82 E 1376897.74	210.74	210.14	204.84	204.34	D-4.35
I-7	DOUBLE PRECAST WR INLET	N 542941.92 E 1376929.30	210.19	-	205.31	205.21	D-4.35
I-8	DOUBLE PRECAST WR INLET	N 543070.54 E 1376964.92	210.14	-	206.74	206.64	D-4.35
I-9	PRECAST TYPE A-10	N 543152.90 E 1376888.40	212.36	211.76	208.51	208.26	D-4.03
I-10	DOUBLE PRECAST WR INLET	N 542274.76 E 1376395.92	210.41	-	201.62	201.52	D-4.35
I-11	PRECAST TYPE A-10	N 542358.54 E 1376351.56	210.71	210.11	203.12	203.02	D-4.03
I-12	PRECAST TYPE A-10	N 542441.93 E 1376315.82	213.15	212.55	204.57	204.07	D-4.03
I-13	PRECAST TYPE A-10	N 542591.92 E 1376316.35	215.39	214.79	207.97	207.87	D-4.03
I-14	PRECAST TYPE A-10	N 542685.91 E 1376316.69	217.15	216.55	208.91	208.91	D-4.03
I-15	PRECAST TYPE A-10	N 542785.93 E 1376317.17	218.95	218.35	-	214.30	D-4.03
I-16	PRECAST TYPE A-10	N 542726.52 E 1376392.10	216.64	216.04	209.56	209.46	D-4.03
I-17	PRECAST TYPE A-10	N 542842.53 E 1376444.80	217.29	216.69	210.30	210.20	D-4.03
I-18	PRECAST TYPE A-10	N 542939.04 E 1376488.64	217.46	216.86	210.93	210.83	D-4.03
I-19	PRECAST TYPE A-10	N 543073.35 E 1376551.48	217.46	216.86	210.93	210.83	D-4.03
I-20	DOUBLE PRECAST WR INLET	N 543262.76 E 1376762.39	214.48	-	210.39	210.29	D-4.03
I-21	DOUBLE PRECAST WR INLET	N 543183.43 E 1376481.49	219.58	-	216.00	215.90	D-4.35
I-22	DOUBLE PRECAST WR INLET	N 542298.98 E 1376492.67	211.07	210.47	-	207.82	D-4.03
I-23	DOUBLE 'S' INLET	N 542404.72 E 1376579.41	210.07	-	207.63	207.53	D-4.23
I-24	TYPE 'D' INLET	N 542356.42 E 1376210.96	205.33	204.50	-	202.58	D-4.10
MH-1	72" DIAM PRECAST MANHOLE	N 542148.53 E 1376270.76	196.00	-	188.71	188.21	MD-384.05
MH-2	72" DIAM PRECAST MANHOLE	N 542227.03 E 1376361.15	198.57	-	190.61	190.51	MD-384.05
MH-3	72" DIAM PRECAST MANHOLE	N 542255.90 E 1376397.13	208.00	-	191.80	191.30	MD-384.05
MH-4	5' PRECAST MANHOLE	N 542412.82 E 1376564.58	210.52	-	199.66	199.60	G-5.13
MH-5	5' PRECAST MANHOLE	N 542662.05 E 1376733.12	211.62	-	199.88	199.78	G-5.13
MH-6	5' PRECAST MANHOLE	N 542331.27 E 1376421.59	211.96	-	202.84	202.74	G-5.12
MH-7	4' PRECAST MANHOLE	N 543238.55 E 1376907.70	214.10	-	209.79	209.69	G-5.12
ES-1	15" CONCRETE END SECTION	N 542029.23 E 1376237.15	186.20	-	182.55	182.20	D-5.51
ES-2	42" CONCRETE END SECTION	N 543079.75 E 1376381.98	217.19	-	215.94	215.94	D-5.51
ES-3	15" CONCRETE END SECTION	N 543012.86 E 1376338.55	217.99	-	216.74	216.74	D-5.51
ES-4	15" CONCRETE END SECTION	N 543036.30 E 1376235.67	203.48	-	198.48	198.48	D-5.51
HW-1	48" TYPE 'A' HEADWALL	N 541706.71 E 1376132.41	184.10	-	178.60	178.60	D-5.11
HW-2	42" TYPE 'A' HEADWALL	N 542306.30 E 1376235.67	203.48	-	198.48	198.48	D-5.11
CS-1	CONTROL STRUCTURE	N 541759.09 E 1376121.97	182.10	181.10	177.10	177.10	D-5.11
SMH-1	4' PRECAST MANHOLE (TYPE 'B' DROP)	N 542172.48 E 1375960.41	197.48	-	188.25	188.60	G-5.12
SMH-2	4' PRECAST MANHOLE (TYPE 'A' DROP)	N 542175.83 E 1376000.27	199.44	-	194.45	190.70	G-5.12
SMH-3	4' PRECAST MANHOLE	N 542314.57 E 1376166.36	208.25	-	198.87	198.77	G-5.12
SMH-4	4' PRECAST MANHOLE	N 542408.89 E 1376293.94	209.53	-	199.77	199.67	G-5.12
SMH-5	4' PRECAST MANHOLE	N 542460.01 E 1376363.09	213.71	-	206.51	200.20	G-5.12

SIZE	PIPE	CLASS	LENGTH
15"	RCP	CLASS IV	56 LF

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY BY MY SEAL THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
 ROBERT HARRIS VOGEL
 P.E. NO. 16193
 DATE: 12/22/17

OWNER: DRR DEVELOPMENT, LLC
 801 GRAND AVENUE
 DES MOINES, IA 50392
 C/O DAVID GRAVES
 515-248-4241

DEVELOPER: RIDGE DEVELOPMENT COMPANY, LLC
 225 WEST WASHINGTON, SUITE 1550
 CHICAGO, IL 60606
 C/O THOMAS ADAMSKI
 312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED 2TH CHANGE	09-09-17
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL CHANGE OWNER INFO	07/05/14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN
 UTILITY PROFILES
 JESSUP PARK
 WAREHOUSE & FLEX SPACE
 PLAT 10826

TAX MAP 43, GRID 22
 1ST ELECTION DISTRICT

PARCEL 109
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 8407 MAIN STREET
 ELLICOTT CITY, MD 21043
 TEL: 410.461.7666
 FAX: 410.461.8961

PROFESSIONAL CERTIFICATE
 DESIGN BY: RHV/DZE
 DRAWN BY: DZE/JER
 CHECKED BY: RHV
 DATE: JULY 2014
 SCALE: AS SHOWN
 W.O. NO.: 04-56

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. 16193, EXPIRATION DATE: 09-27-2014.

15 SHEET OF 24

MARYLAND 378
STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and toe breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #20 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber lined or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble, yet not be so wet that water can be squeezed out.

When required by the reviewing agency the minimum required density shall not be less than 95% of maximum dry density with a moisture content within +/-2% of the optimum. Each layer of fill shall be compacted as necessary, to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi, 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be over (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent flooding the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

- Materials - (Polymer Coated steel pipe) - Steel pipes with polymeric coating shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands or flanges.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges. Aluminum Pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. Coupling, bands, anti-seep collars, and sections, etc., must be composed of the same material and coatings as the pipe. Metals must be insulated from dissimilar materials using use of rubber or plastic insulating materials at least 24 mils in thickness.

3. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight. All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be re-rolled an adequate number of corrugations to accommodate the bandwidth. The following type connections are acceptable for pipes less than 24 inches diameter: flanges on both ends of the pipe with a circular 3/8 inch closed cell neoprene gasket; Pre-Punched to the flange bolt circle sandwich between adjacent flanges; a 12 inch wide standard top pipe band with 12 inch wide by 3/8 inch thick circular neoprene gasket; and a 12-inch wide huggler type band with ring gaskets having a minimum diameter of 1/2 inch greater than the corrugation depth. Pipes 24 inches in diameter and larger shall be connected by a 24 inch long annular corrugated band using a minimum of 4 (four) rods and lugs, 2 on each connecting pipe end. A 24-inch wide by 3/8-inch thick closed cell circular neoprene gasket will be installed with 12 inches on the end of each pipe. Flanged joints with 3/8 inch closed cell gaskets the full width of the flange is also acceptable.

Helicly corrugated pipe shall have either continuously welded seams or have lock seams with internal caulking or a neoprene bead.

- Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compaction to provide adequate support.
- Backfilling shall conform to "Structure Backfill."
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

- Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM C-301.
- Bedding - Reinforced concrete pipe conduits shall be laid in a concrete bedding/cradle for their entire length. This bedding/cradle shall consist of high strength concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimum thickness of 6 inches. Where a concrete cradle is not needed for structural reasons, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.
- Laying Pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire length, the pipe shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 4 feet from the riser.
- Backfilling shall conform to "Structure Backfill."
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Plastic Pipe - The following criteria shall apply for plastic pipe:

- Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" - 10" inch pipe shall meet the requirements of AASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of AASHTO M294 Type S.
- Joints and connections to anti-seep collars shall be completely watertight.
- Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compaction to provide adequate support.
- Backfilling shall conform to "Structure Backfill."
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Drainage Diaphragms - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

Concrete
Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

Rock Riprap
Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction Materials, Section 311.

Geotextile shall be placed under all riprap and shall meet requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 921.09, Class C.

Care of Water during Construction
All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for the removal of water from various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water sumps from which the water shall be pumped.

Stabilization
All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Natural Resource Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control
Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures.

DEWATERING STRATEGY

Dewatering refers to the act of removing and discharging water from excavated areas on construction sites or from sediment traps or basins on construction sites. Standards and specifications for dewatering practices follow:

These standards apply to removal and discharge of water from any excavated area or sediment trap or basin at any construction site. Given the unique conditions of any particular construction site, any or all of the practices may apply. Regardless of the applicability of the practices listed herein, operators are required to use acceptable procedures for maintenance and dewatering. In all cases, every effort shall be made to eliminate sediment pollution associated with dewatering.

Designers shall specify the preferred procedures for dewatering on plans. In particular, designers should identify procedures for dewatering sediment traps and basins prior to elimination of the last sediment control facility on the site or prior to conversion of sediment control facilities to stormwater management facilities. Recommended procedures shall be consistent with these standards. Approval site conditions may require innovative dewatering designs. Dewatering measures not referenced in this standard may be used with the consent of the approval authority.

Dewatering of Excavated Areas

- Designers shall specify on plans, and in sequences of construction included on plans, practices for dewatering of excavated areas. Plan reviewers shall check to see that procedures for dewatering are included on plans.
- In all cases, water removed from excavated areas shall be discharged such that it shall pass through a sediment control device prior to entering receiving waters. Sediment control devices include sediment traps and basins, in addition to the practices in this section.

Approved Practices for Dewatering of Excavated Areas

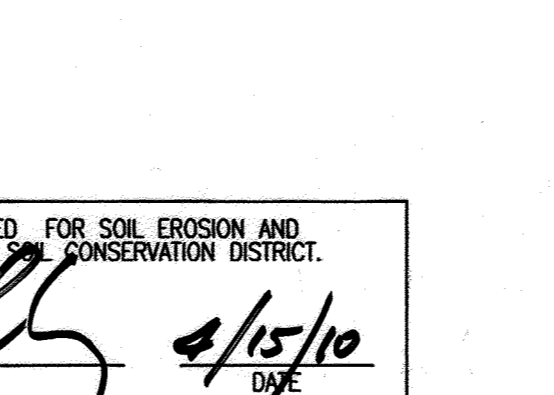
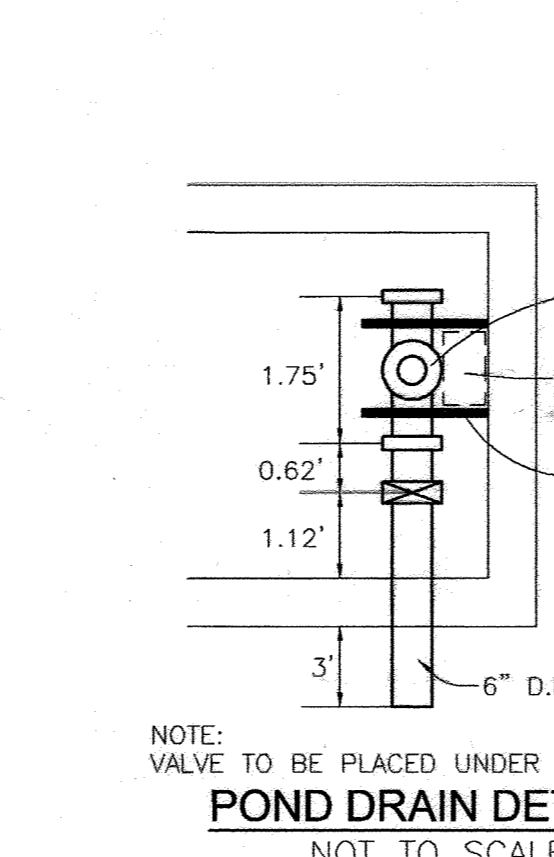
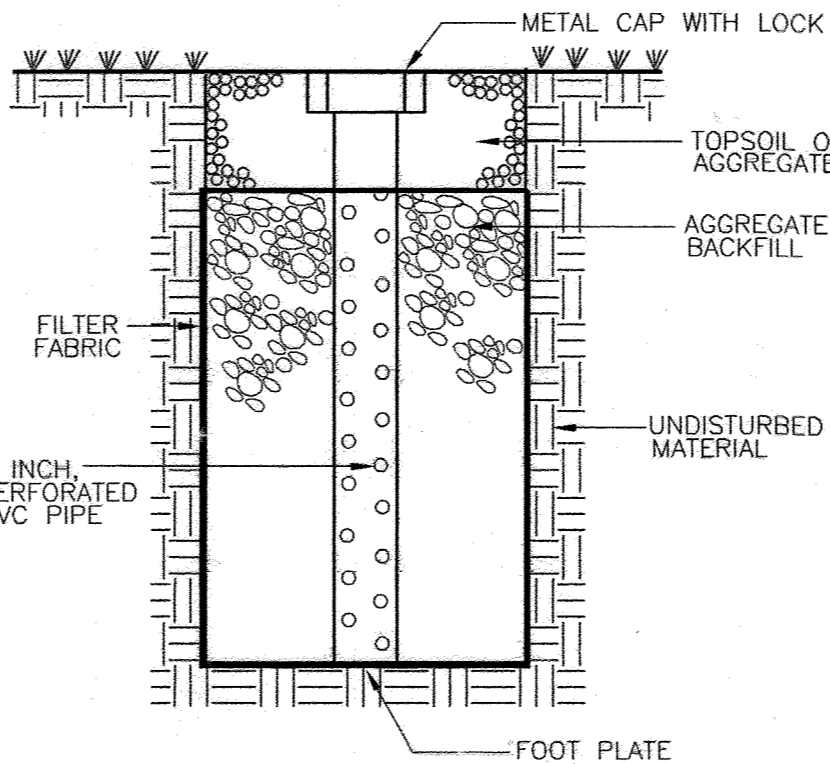
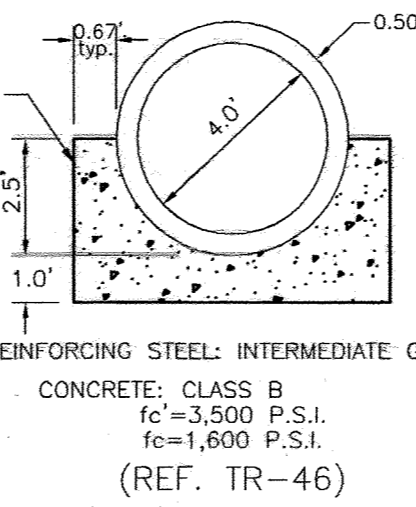
- Pumping of water to an existing sediment basin or trap in which the entire volume of water from the area to be dewatered can be contained without discharge to receiving waters.
- Pumping of water to an existing sediment basin or trap such that the entire volume of water from the area to be dewatered can be managed without exceeding the design outflow from the sediment control structure.
- Removable Pumping Station? Standards and specifications for Removable Pumping Station are on Detail 20A.
- Use of a Sump Pit: Standards and specifications for a sump pit are on Detail 20B.
- Sediment Trap: Standards and specifications for a sump pit are on Detail 21.

Dewatering of Sediment Traps and Basins

Designers shall specify on plans, and in sequences of construction included on plans, the practices for dewatering of traps and basins. Plan reviewers shall check to see that procedures for dewatering to be used are included on plans. In all cases, water removed from traps and basins shall be discharged so that it passes through a sediment control device prior to entering receiving waters.

Approved Practices for Dewatering of Traps and Basins

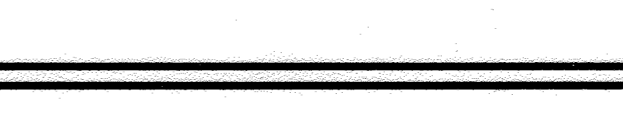
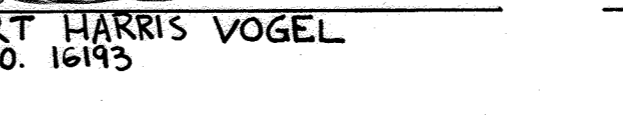
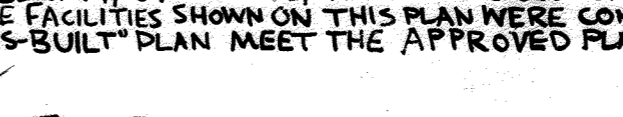
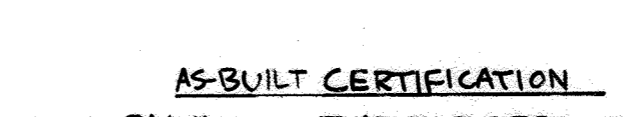
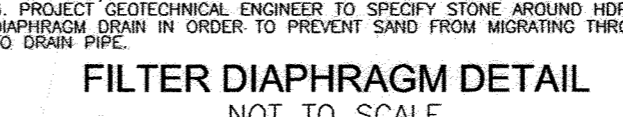
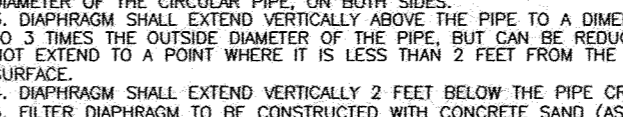
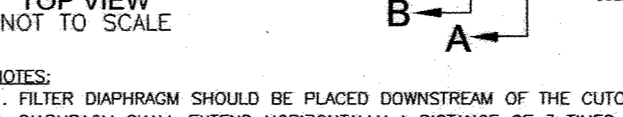
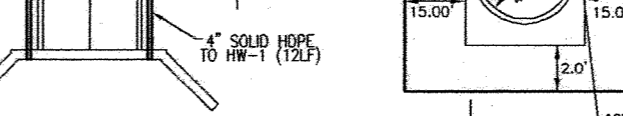
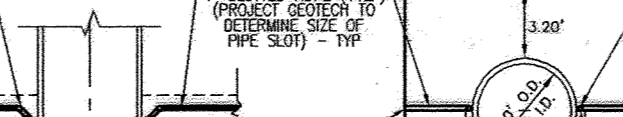
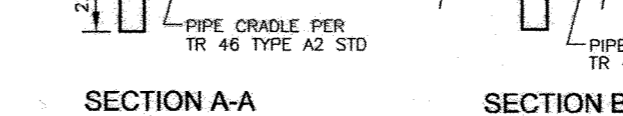
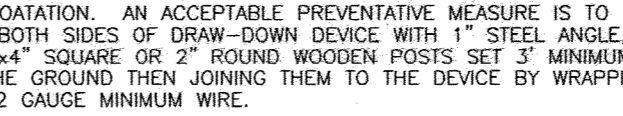
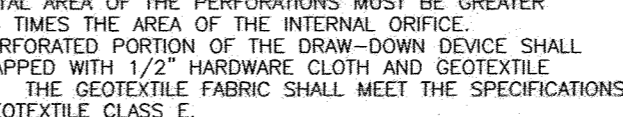
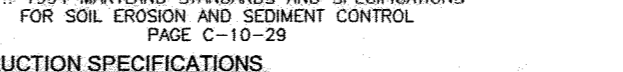
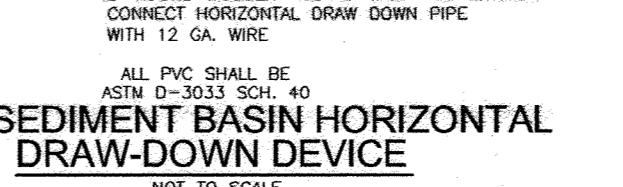
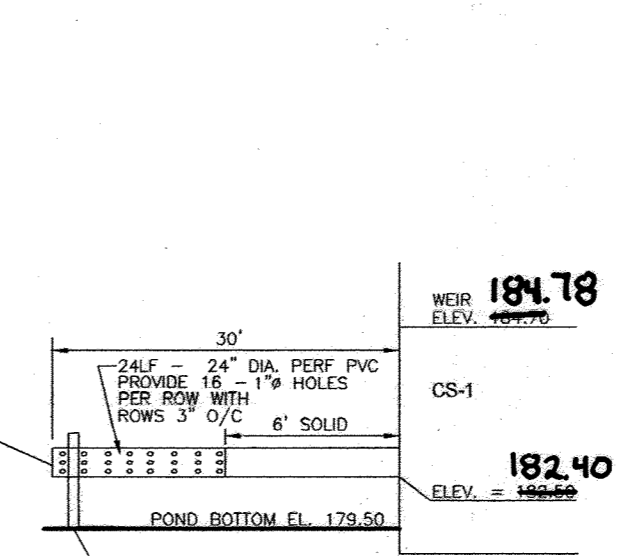
- Removable pumping station.
- Use of a Sump Pit.
- Use of a floating suction hose to pump the cleaner water from the top of the pond. As the cleaner water is pumped the suction hose will lower and eventually enclose sediment laden water. When this happens the pumping operation will cease. Provisions shall be made to filter water.



SUMMARY TABLE AREA

AREA	REQUIREMENT	VOLUME REQUIREMENT W/O CREDITS	CREDITS	VOLUME REQUIREMENT AFTER CREDITS	NOTES
16.47 AC					
1	WATER QUALITY VOLUME WQV	48726 CF	-	48726 CF	MICROPOOL EXTENDED DETENTION (P-1) 50% IN MICROPOOL
2	RECHARGE VOLUME REV	6817 CF	-	6817 CF	GRAVEL RECHARGE TRENCHES
3	CHANNEL PROTECTION VOLUME CPV	1.70 AC-FT	N/A	1.91 AC-FT*	MICROPOOL EXTENDED DETENTION (P-1)
4	OVERHEAD FLOOD PROTECTION, D10P	REQUIRED	N/A	PROVIDED 3.2231 AC-FT*	
5	EXTREME FLOOD VOLUME, D10QP	REQUIRED	N/A	PROVIDED 4.0420 AC-FT*	

16.47 AC SITE AREA TO BE TREATED FOR WQV/Rev
19.27 AC TOTAL DRAINAGE AREA FOR Cpv, Op & Qf
* EXCLUDING VOLUME BELOW ELEVATION 182.50



OPERATION AND MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT EXTENDED DETENTION FACILITY

STORMWATER MANAGEMENT FACILITY ROUTINE MAINTENANCE

- FACILITY WILL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IF IT IS FUNCTIONING PROPERLY.
- TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOVED A MINIMUM OF TWO (2) TIMES A YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER.
- OTHER SIDE SLOPES AND MAINTENANCE AREAS SHOULD BE MOVED AS NEEDED.
- DEBRIS AND LITTER NEXT TO THE OUTLET STRUCTURE SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
- VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS RIPRAP OUTLET AREAS SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- NON-ROUTINE MAINTENANCE
- STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON DETECTION OF ANY DAMAGE. THE COMPONENTS SHOULD BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
- SEDIMENT SHOULD BE REMOVED WHEN ITS ACCUMULATION SIGNIFICANTLY REDUCES THE DESIGN STORAGE, INTERFERES WITH THE FUNCTION OF THE RISER, WHEN DEEMED NECESSARY FOR ACTIVE REASONS, OR WHEN DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED STORMWATER INFILTRATION TRENCHES

POND BOTTOM SOIL CONDITIONS

If broken rock fragments are encountered at finished pond bottom, under cut a minimum of 12" below basin grade and to a horizontal distance of at least 18" beyond each edge of the broken rock and backfill with fine-grained ML or CL soils compacted to a firm condition. This procedure should be performed under the supervision of the project Geotechnical Engineer.

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATORS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

- THE MONITORING WELLS AND STRUCTURES SHALL BE INSPECTED ON A QUARTERLY BASIS AND AFTER EVERY LARGE STORM EVENT.
- WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS SHALL BE RECORDED OVER A PERIOD OF SEVERAL DAYS TO INSURE TRENCH DRAINAGE.
- A LOGBOOK SHALL BE MAINTAINED TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN THE XXX HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOGBOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED, THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

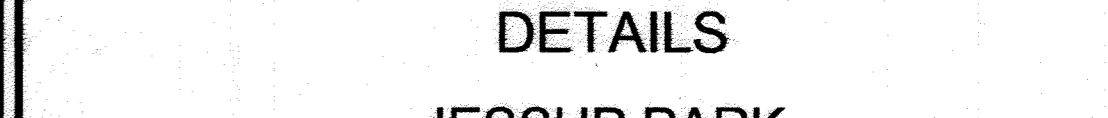
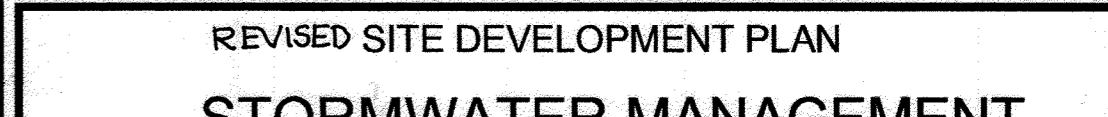
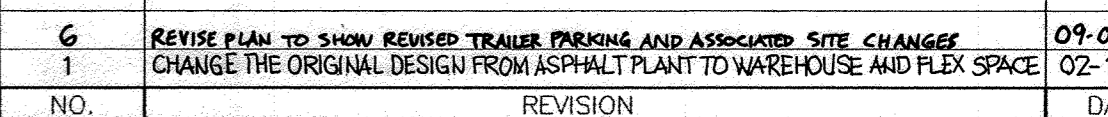
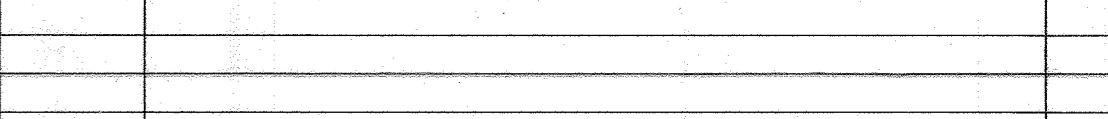
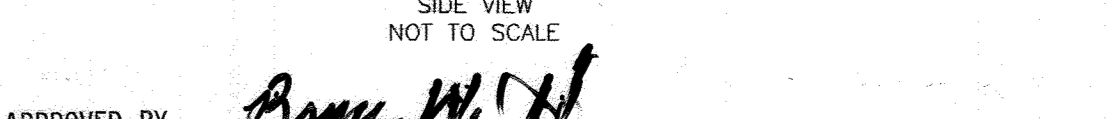
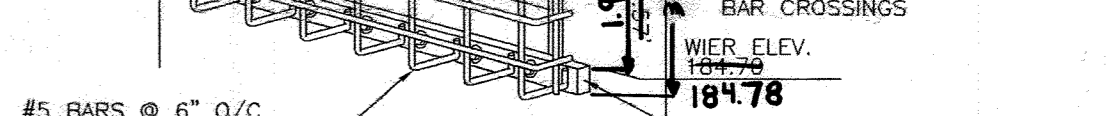
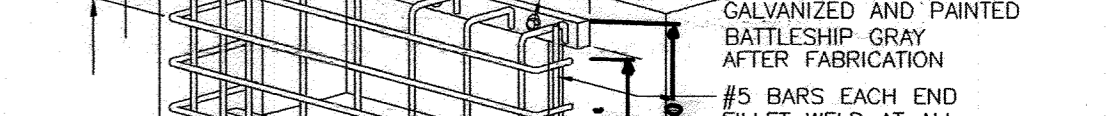
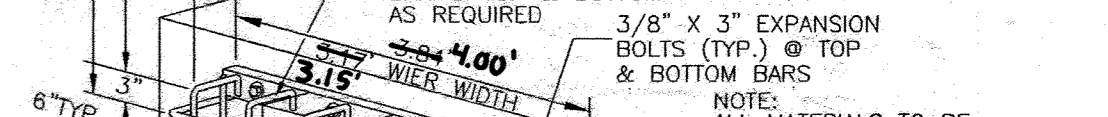
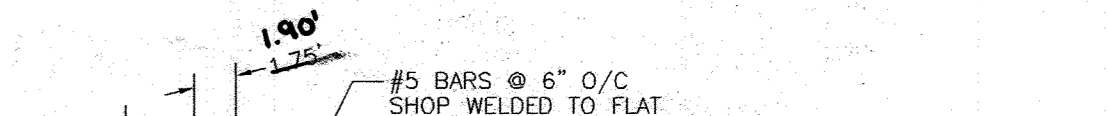
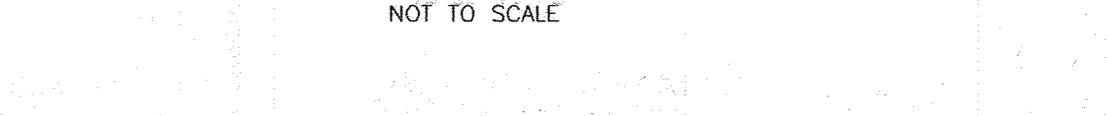
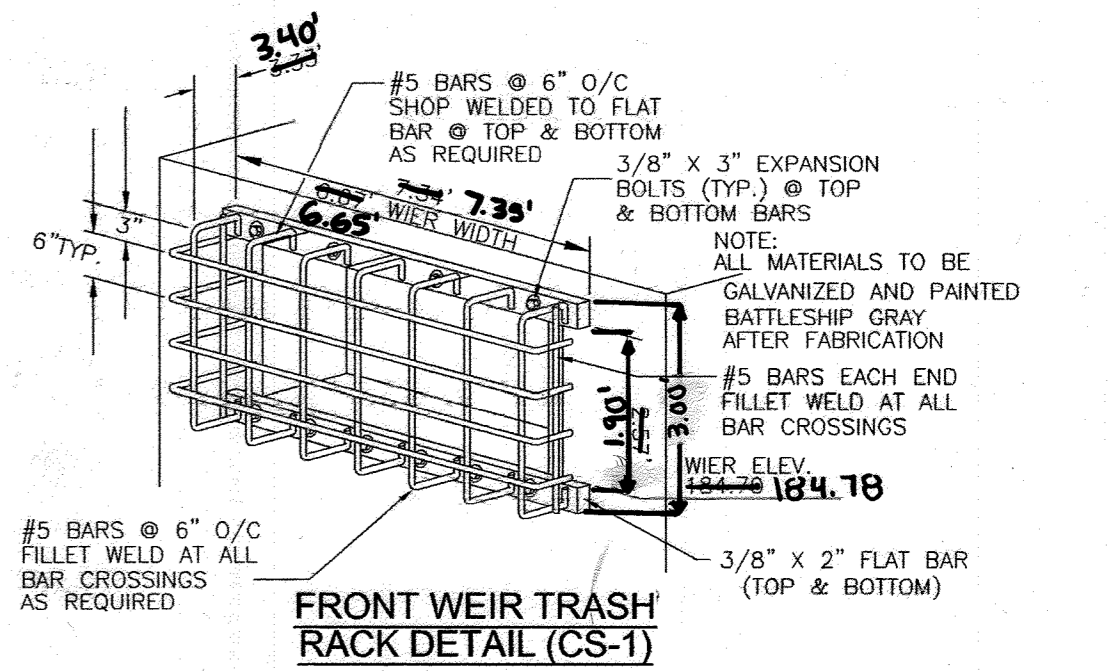
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 5/14/10
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 5/11/10
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 5/12/10
 DIRECTOR DATE

BY THE DEVELOPER:
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT 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] 3/29/10
 SIGNATURE OF DEVELOPER DATE

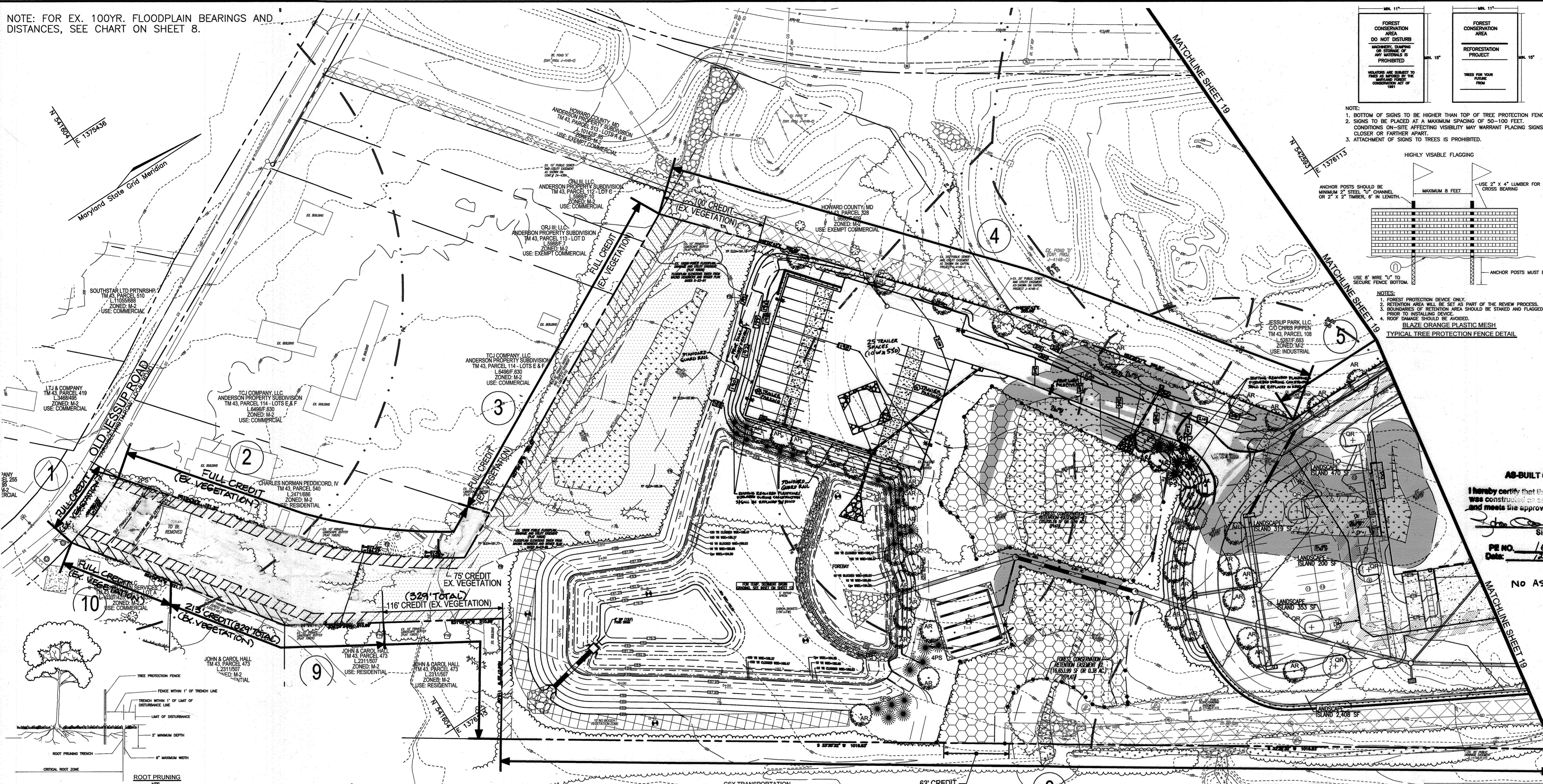
BY THE ENGINEER:
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 4/15/10
 SIGNATURE OF ENGINEER DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 4/15/10
 HOWARD S.C.D. DATE

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY BY MY SEAL THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS
 [Signature] 12/22/17
 ROBERT HARRIS VOGEL
 P.E. NO. 16193 DATE



NOTE: FOR EX. 100YR. FLOODPLAIN BEARINGS AND DISTANCES, SEE CHART ON SHEET 8.



LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING MAILBOX
- EXISTING SIGN
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY LINE
- EXISTING CLEANOUT
- EXISTING FIRE HYDRANT
- EXISTING WATER LINE
- EXISTING FENCE
- EXISTING TREES (FIELD LOCATED)
- PROPOSED TREELINE (FIELD LOCATED)
- PROP. TREELINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- PROPOSED SIDEWALK
- PROPOSED LIGHT POLE
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- LANDSCAPE PERIMETER
- FOREST CONSERVATION SIGN

AS-BUILT CERTIFICATE
I hereby certify that the facility shown on this plan was constructed in accordance with the approved plans and meets the approved plans and specifications.

Signature: _____
PE NO. 16193
Date: 12/23/17

NO AS-BUILT INFORMATION ON THIS SHEET

FOREST CONSERVATION EASEMENT TABLE

TOTAL RETENTION:	6.50 AC.
TOTAL REFORESTATION:	3.89 AC.
TOTAL FOREST CONSERVATION EASEMENT:	9.19 AC.

- SEQUENCE OF CONSTRUCTION-FOREST CONSERVATION**
1. PRECONSTRUCTION MEETING WITH CONTRACTOR AND OTHER RESPONSIBLE PARTIES TO REVIEW PROTECTION MEASURES TO BE UTILIZED AND TO POINT OUT EXISTING TREES TO BE SAVED.
 2. STAKE OUT LIMITS OF DISTURBANCE AND TREE PROTECTION FENCING LOCATIONS.
 3. INSTALL TREE PROTECTION FENCING TO BE INSPECTED BY THE PROJECT ENGINEER OR THE PROJECT ECOSYSTEM AND HOWARD COUNTY PLANNING AND ZONING.
 4. PROCEED WITH TREE REMOVAL AND SITE IMPROVEMENTS AS PER APPROVED SEDIMENT CONTROL PLAN - TO BE INSPECTED BY HOWARD COUNTY PLANNING AND ZONING.
 5. TEMPORARY TREE PROTECTION DEVICES SHALL BE REMOVED AFTER ALL FINISHED GRADING AND UTILITY CONSTRUCTION IS COMPLETE AND WITH APPROVAL FROM THE HOWARD COUNTY OFFICE OF PLANNING AND ZONING.

- FOREST RETENTION AREAS AND NOTES**
1. FORESTED STREAM AND WETLAND BUFFERS ARE RETAINED.
 2. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON THIS SITE.
 3. FORESTED AREAS ADJACENT TO FLOODPLAINS AND STREAM BUFFERS ARE RETAINED.
 4. CHANGES IN GRADING AND RUNOFF WITHIN CONSTRUCTION/INSTALLATION AREAS WILL NOT ADVERSELY AFFECT THE SOILS WITHIN THE FOREST RETENTION AREA. SEDIMENT CONTROL MEASURES WILL REDIRECT CONCENTRATED FLOW RUNOFF TO STORMWATER MANAGEMENT FACILITIES, RETAIN SEDIMENT WITHIN THE CONSTRUCTION SITE, AND/OR REDIRECT CLEAN WATER AWAY FROM CONSTRUCTION AREAS.
 5. FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE, DPZ AND THE FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION HAS BEEN FULFILLED BY THE RETENTION OF EXISTING FOREST IN THE AMOUNT OF 0.97 AC., AND FEE-IN-LIEU \$217,908.90.
 6. THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

PLAN VIEW
SCALE: 1"=50'

- FOREST PROTECTION NOTES**
- PRE-CONSTRUCTION ACTIVITIES**
1. FOR RETENTION AREAS, INSTALL BLAZE ORANGE FENCE AND RETENTION SIGNS BEFORE CONSTRUCTION BEGINS.
 2. FENCING SHALL BE MAINTAINED IN GOOD CONDITION AND PROMPTLY REPAIRED OR RESTORED AS THE SITUATION WARRANTS.
 3. A QUALIFIED TREE CARE EXPERT SHALL DETERMINE IF ROOT PRUNING IS REQUIRED ALONG THE LIMIT OF DISTURBANCE. ROOT PRUNE TREES AS REQUIRED. WATER ANY ROOT-PRUNED TREES IMMEDIATELY AFTER ROOT-PRUNING AND MONITOR FOR SIGNS OF STRESS DURING CONSTRUCTION.
- CONSTRUCTION PHASE**
1. NO DISTURBANCE OR DUMPING IS ALLOWED INSIDE THE TREE RETENTION AREA.
 2. NO EQUIPMENT SHALL BE OPERATED INSIDE THE TREE RETENTION AREA INCLUDING TREE CANOPIES.
 3. IN THE EVENT OF DROUGHT, THE PROTECTED TREES SHALL BE MONITORED FOR SIGNS OF STRESS AND WATERED AS NEEDED.
- POST-CONSTRUCTION ACTIVITIES**
1. AT THE DIRECTION OF A QUALIFIED TREE CARE EXPERT, DAMAGES TO RETAINED TREES SHALL BE REPAIRED BY THE CONTRACTOR.
 2. FENCE REMOVAL AND STABILIZATION SHALL BE AS PER THE SEDIMENT AND EROSION CONTROL PLAN.
 3. DO NOT REMOVE SIGNS.
- COST ESTIMATE:** (For bonding purposes only)
(RETENTION - (0.97 AC.) 42,253.20 SF x .20 = \$8,450.67)
THE OBLIGATION HAS BEEN FULFILLED BY FEE-IN-LIEU FOR THE (6.67 AC.) 290,645.20 SF x 0.75 = \$217,908.90 HAS BEEN PAID TO THE FOREST CONSERVATION FUND.
SURETY NOTE
FINANCIAL SURETY IN THE AMOUNT OF \$8,450.67 WILL BE POSTED WITH THE FC DEVELOPERS AGREEMENT.

FOREST CONSERVATION WORKSHEET

A. TOTAL TRACT AREA	19.81 AC
B. DEDUCTIONS	1.14 AC
C. NET TRACT AREA	18.67 AC
D. AFFOREST THRESHOLD	15% X D = 2.80 AC
E. CONSERVATION THRESHOLD	15% X D = 2.80 AC
F. EXISTING FOREST COVER	14.83 AC
G. AREA OF FOREST ABOVE CONSERVATION THRESHOLD	12.03 AC
H. BREAK EVEN POINT (1.43)	5.21 AC
I. FOREST CLEARING PERMITTED WITHOUT MITIGATION	9.62 AC
J. TOTAL AREA OF FOREST TO BE CLEARED	13.86 AC
K. TOTAL AREA OF FOREST TO BE RETAINED (IN RETENTION EASEMENTS)	0.97 AC
L. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD	3.01 AC
M. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD	6.88 AC
N. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD	0.00 AC
O. TOTAL REFORESTATION REQUIRED	6.87 AC
P. TOTAL AFFORESTATION REQUIRED	6.00 AC
Q. TOTAL PLANTING REQUIREMENT	6.87 AC

THE FOREST CONSERVATION OBLIGATIONS HAVE BEEN MET BY PROVIDING 0.97 ACRES OF RETENTION IN TWO ONSITE FOREST CONSERVATION EASEMENTS AND BY A FEE-IN-LIEU PAYMENT OF \$217,908.90 MADE TO THE HO. CO. FOREST CONSERVATION FUND FOR THE OUTSTANDING ADDITIONAL 6.67 AC. OF REFORESTATION (6.67AC. = 290,645.20 SF. x 0.75 = \$217,908.90).

J.C. OGLE
DNR QUALIFIED PROFESSIONAL

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 10-23-15

CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10-23-15

DIRECTOR
DATE: 10-23-15

DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE (1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

SIGNATURE OF DEVELOPER
DATE: 9-18-15

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
5	REVISE PLAN TO REMOVE PROPOSED CLEARING	12-9-15
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT; REVISE LIGHTPOLE LOCATIONS	03-04-15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL; CHANGE OWNER INFO	07-09-14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-12-14
1	CHANGE THE ORIGINAL DESIGN FORM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

REVISED SITE DEVELOPMENT PLAN
LANDSCAPE & FOREST CONSERVATION PLAN

JESSUP PARK
WAREHOUSE & FLEX SPACE

TAX MAP 43, GRID 22
1ST ELECTION DISTRICT

PLAT 10826

PARCEL 109
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS

8407 MAIN STREET
ELlicott CITY, MD 21043

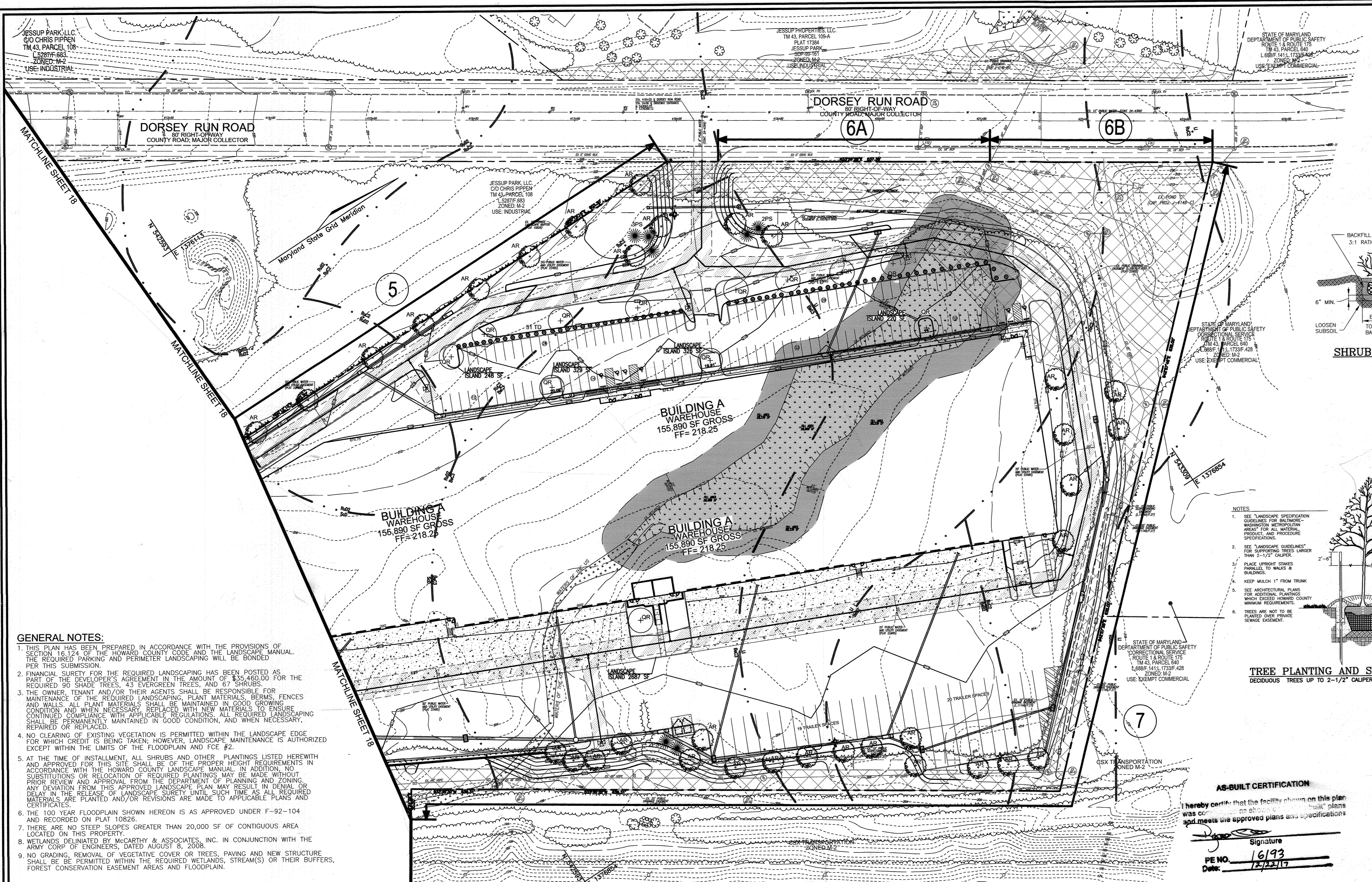
TEL: 410.461.7666
FAX: 410.461.8961

PROFESSIONAL CERTIFICATE

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. 16193, EXPIRATION DATE 09-27-2018.

DESIGN BY: RHW/DZE
DRAWN BY: DZE/KG
CHECKED BY: RHW
DATE: MARCH 2015
SCALE: AS SHOWN
W.O. NO.: 04-56

18 SHEET OF 24



PLAN VIEW
SCALE: 1"=50'

- GENERAL NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE REQUIRED PARKING AND PERIMETER LANDSCAPING WILL BE BONDED PER THIS SUBMISSION.
 - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$35,460.00 FOR THE REQUIRED 90 SHADE TREES, 43 EVERGREEN TREES, AND 67 SHRUBS.
 - THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
 - NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED EXCEPT WITHIN THE LIMITS OF THE FLOODPLAIN AND FOE #2.
 - AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS LISTED HERewith AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF 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 APPLICABLE PLANS AND CERTIFICATES.
 - THE 100 YEAR FLOODPLAIN SHOWN HEREON IS AS APPROVED UNDER F-92-104 AND RECORDED ON PLAT 10826.
 - THERE ARE NO STEEP SLOPES GREATER THAN 20,000 SF OF CONTIGUOUS AREA LOCATED ON THIS PROPERTY.
 - WETLANDS DELINEATED BY MCCARTHY & ASSOCIATES, INC. IN CONJUNCTION WITH THE ARMY CORP OF ENGINEERS, DATED AUGUST 8, 2008.
 - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURE SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND FLOODPLAIN.

- LANDSCAPE SCHEDULE NOTE:**
- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT AN SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HRD PLANTING SPECIFICATIONS.
 - CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
 - FINAL LOCATION OF PLANT MATERIAL MAY VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
 - CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

**SCHEDULE B
PARKING LOT INTERNAL LANDSCAPING**

Number of parking spaces	199
Number of islands and trees required	10
Number of islands and trees provided	10
Islands and Shade Trees	10
Other Trees (2:1 Substitution)	-

LANDSCAPE SCHEDULE

KEY	QUAN.	BOTANICAL NAME	SIZE	CAT
AR	102	ACER RUBRUM OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.	B & B
PS	68	EASTERN WHITE PINE	6'-8" HT.	B & B
TD	67	TAXUS MEDIA 'DENSIFORMIS' DENSIFORMIS YEW	2 1/2" -3" HT.	B & B
QR	17	QUERCUS PHellos WILLOW OAK	2 1/2" -3" CAL.	B & B

**SCHEDULE D - POND
STORMWATER MANAGEMENT AREA LANDSCAPING**

Linear feet of perimeter	991
Number of trees required	20
Shade Trees (1:50)	25
Evergreen Trees (1:40)	25
Credit for existing vegetation	NO
Credit for other landscaping	NO
Number of trees provided	20
Shade Trees	25
Evergreen Trees	25

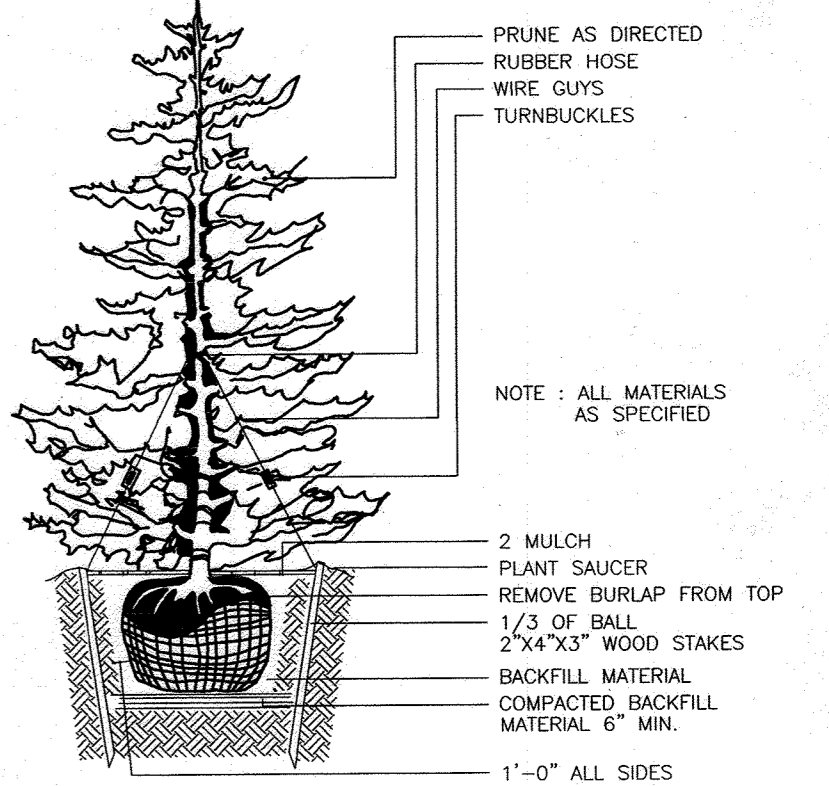
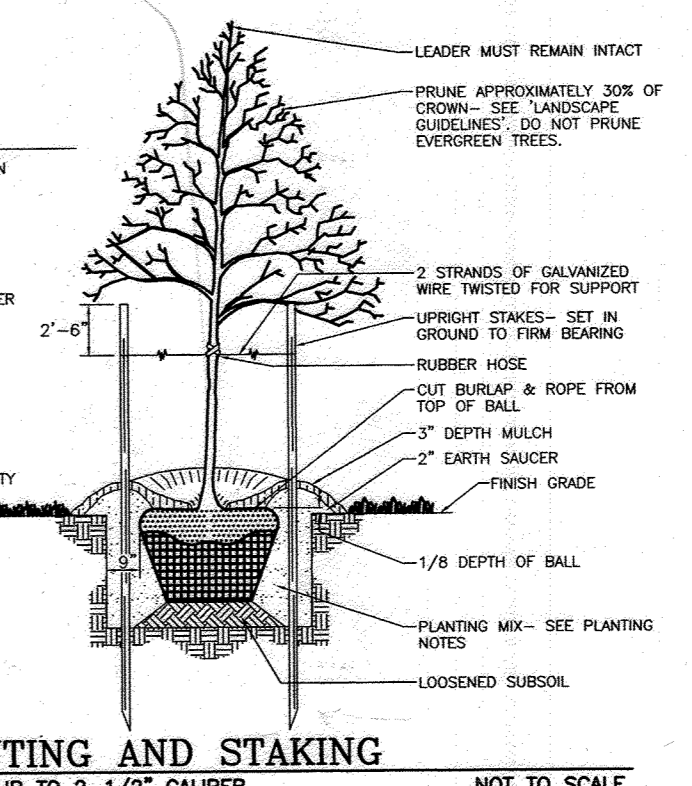
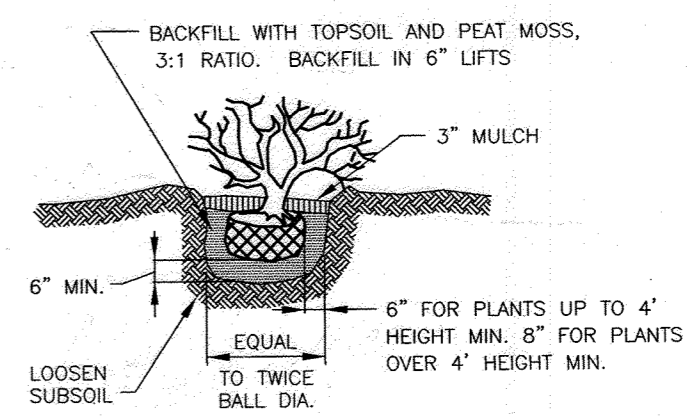
**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO PERIMETER AND ROADWAYS												ADJACENT TO DUMPSTER	TOTAL
	1	2	3	4	5	6A	6B	7	8	9	10	11		
Perimeter/Frontage Designation	78'	395'	332'	645'	603'	288'	219'	1,303'	1,017'	445'	103'	-	-	
Linear Feet of Roadway Frontage/Perimeter	78'	395'	332'	645'	603'	288'	219'	1,303'	1,017'	445'	103'	35'	44'	
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	YES 102LF	YES 395LF	YES 332LF	YES 100LF	No	No	No	No	YES 63LF	YES 329LF	YES 102LF	No	No	
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	No	No	No	No	No	No	No	No	No	No	No	No	No	
Number of Plants Required	1:50 1:40	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:50 1:20	1:40 1:20	1:40 1:20	
Number of Plants Provided	0	0	0	0	0	0	0	0	0	0	0	1	1	
Evergreen Trees	0	0	0	0	0	0	0	0	0	0	0	2	2	
Other Trees (2:1 Substitution)	0	0	0	0	0	0	0	0	0	0	0	2	2	
Shrubs (10:1 Substitution)	0	0	0	0	0	0	0	0	0	0	0	2	2	
Describe Plant Substitution Credits Below if needed	-	-	-	-	-	-	-	-	-	-	-	-	-	

* 2 SHADE TREES AND 3 EVERGREEN TREES FROM PERIMETER 6B HAVE BEEN PLANTED IN PERIMETER 5.
** SHADE TREES FROM PERIMETER 8 HAVE BEEN ALONG THE INTERNAL DRIVEWAY ON THE SOUTHWEST OF BUILDING A.
*** PERIMETER 9 SHADE TREES AND EVERGREENS HAVE BEEN PLANTED ALONG THE INTERNAL DRIVEWAY ON THE SOUTHWEST OF BUILDING A.

LEGEND:

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- EXISTING UTILITY POLE
- PROPOSED UTILITY POLE
- EXISTING LIGHT POLE
- PROPOSED LIGHT POLE
- EXISTING MAILBOX
- PROPOSED MAILBOX
- EXISTING SIGN
- PROPOSED SIGN
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE
- EXISTING SANITARY LINE
- PROPOSED SANITARY LINE
- EXISTING CLEANOUT
- PROPOSED CLEANOUT
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- EXISTING WATER LINE
- PROPOSED WATER LINE
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING TREES (FIELD LOCATED)
- PROPOSED TREES (FIELD LOCATED)
- EXISTING TREELINE
- PROPOSED TREELINE
- PROF. TREELINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- SOILS BOUNDARY
- PROPOSED STORM DRAIN
- PROPOSED STORM DRAIN INLET
- PROPOSED SIDEWALK
- PROPOSED LIGHT POLE
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUBS
- LANDSCAPE PERIMETER
- FOREST CONSERVATION SIGN



AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on approved plans and meets the approved plans and specifications.

Signature: _____
PE NO. 16193
Date: 10/04/17

OWNER
DRR DEVELOPMENT, LLC.
801 GRAND AVENUE
DES MOINES, IA 50392
C/O DAVID GRAVES
515-248-4241

DEVELOPER
RIDGE DEVELOPMENT COMPANY, LLC.
225 WEST WASHINGTON, SUITE 1550
CHICAGO, IL 60606
C/O PHILLIP ADAMSKI
312-257-2881

NO.	REVISION	DATE
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGE	09-09-22
5	REVISE PLANS TO REMOVE PROPOSED CLEARING	12-9-15
4	REVISE PLAN TO OUTLINE FUTURE DEVELOPMENT, REVISE LIGHT POLE LOC.	02/04/15
3	REVISE PLAN TO RAISE STORM DRAIN PROFILES AND MATERIAL, CHANGE OWNER INFO	07/09/14
2	REVISE PLAN FOR BUILDING AND PARKING MODIFICATIONS	05-27-14
1	CHANGE THE ORIGINAL DESIGN FROM ASPHALT PLANT TO WAREHOUSE AND FLEX SPACE	02-14-13

**REVISED SITE DEVELOPMENT PLAN
LANDSCAPE & FOREST
CONSERVATION PLAN**

JESSUP PARK
WAREHOUSE & FLEX SPACE
PLAT 10826

TAX MAP 43, GRID 22
1ST ELECTION DISTRICT

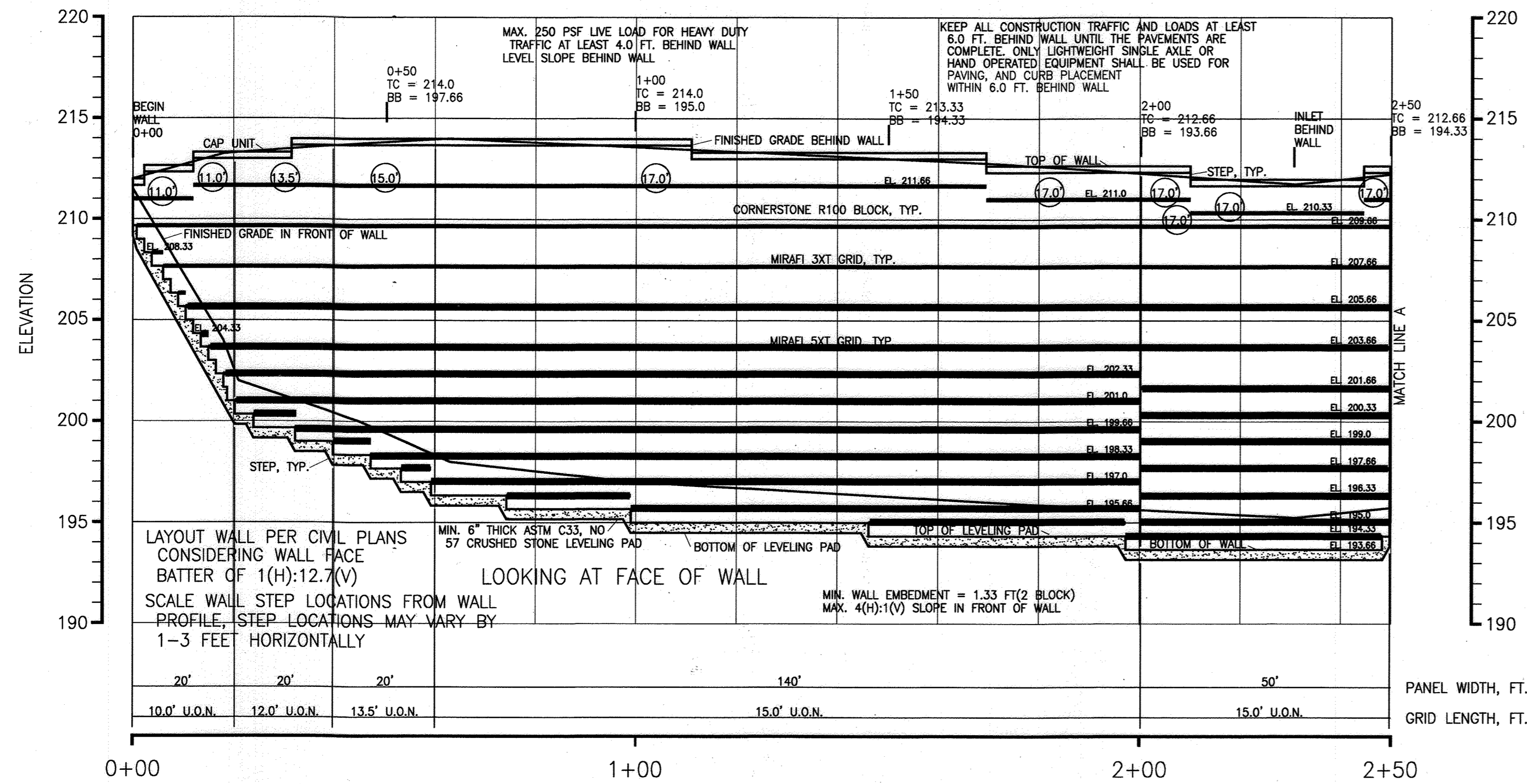
PARCEL 109
HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL ENGINEERING, INC.
ENGINEERS • SURVEYORS • PLANNERS
8407 MAIN STREET
ELUGOTT CITY, MD 21043
TEL: 410.461.7666
FAX: 410.461.8999

DESIGN BY: RHW/DZE
DRAWN BY: DZE/JER
CHECKED BY: RHW
DATE: JULY 2014
SCALE: AS SHOWN
W.O. NO.: 04-56

PROFESSIONAL CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193
EXPIRATION DATE: 09-27-2014

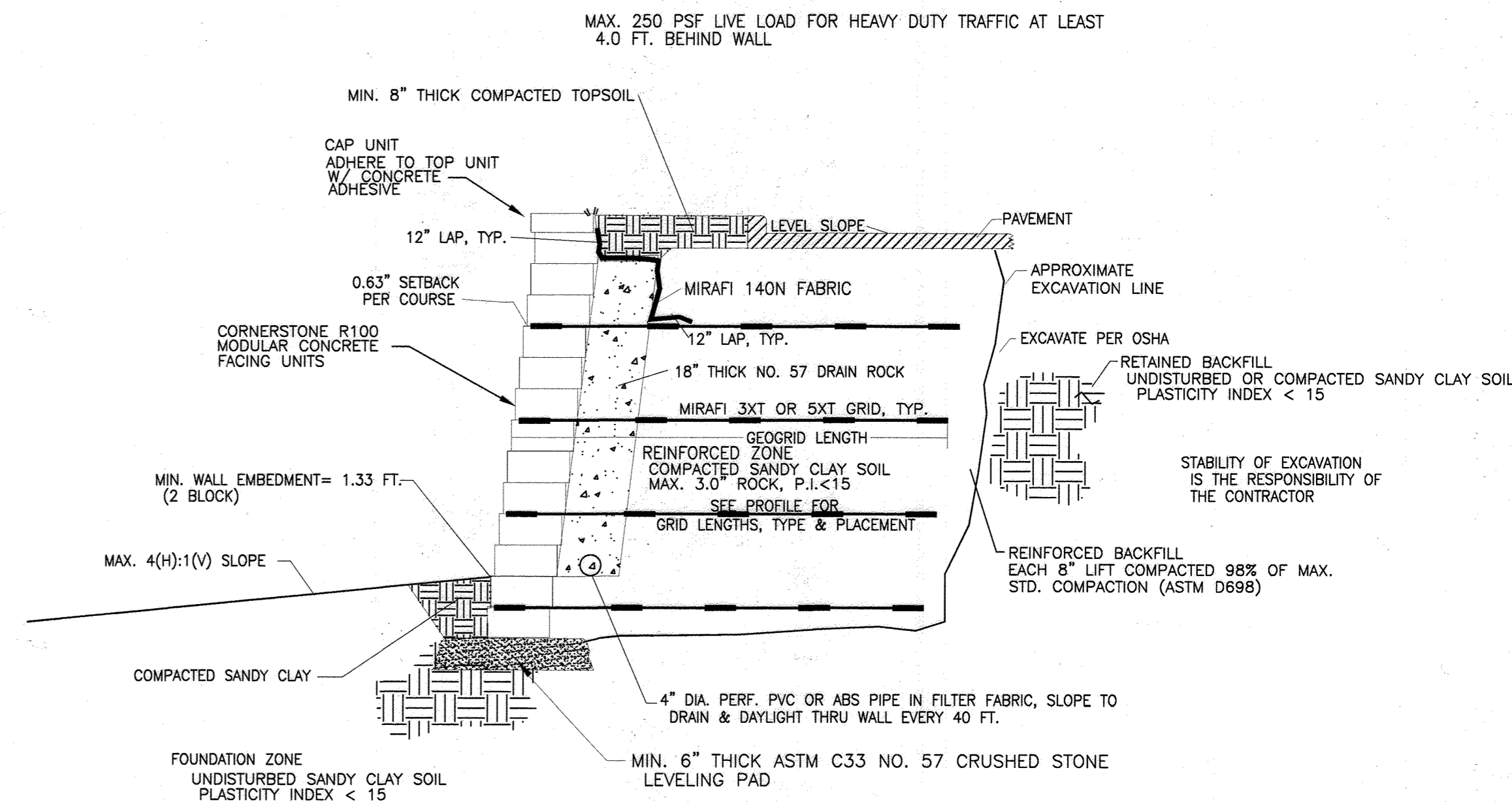
19 SHEET OF 24



KEY
 (X) GRID LENGTH IN FT. FOR THIS LAYER ONLY
 MIRAFI 3XT GRID, TYP.
 MIRAFI 5XT GRID, TYP.
 U.O.N. - UNLESS OTHERWISE NOTED ON PROFILE IN CIRCLE ON GRID LAYER
 TC - TOP OF CAP ELEVATION FOR BLOCK WALL
 BB - BOTTOM OF BLOCK ELEVATION FOR BLOCK WALL

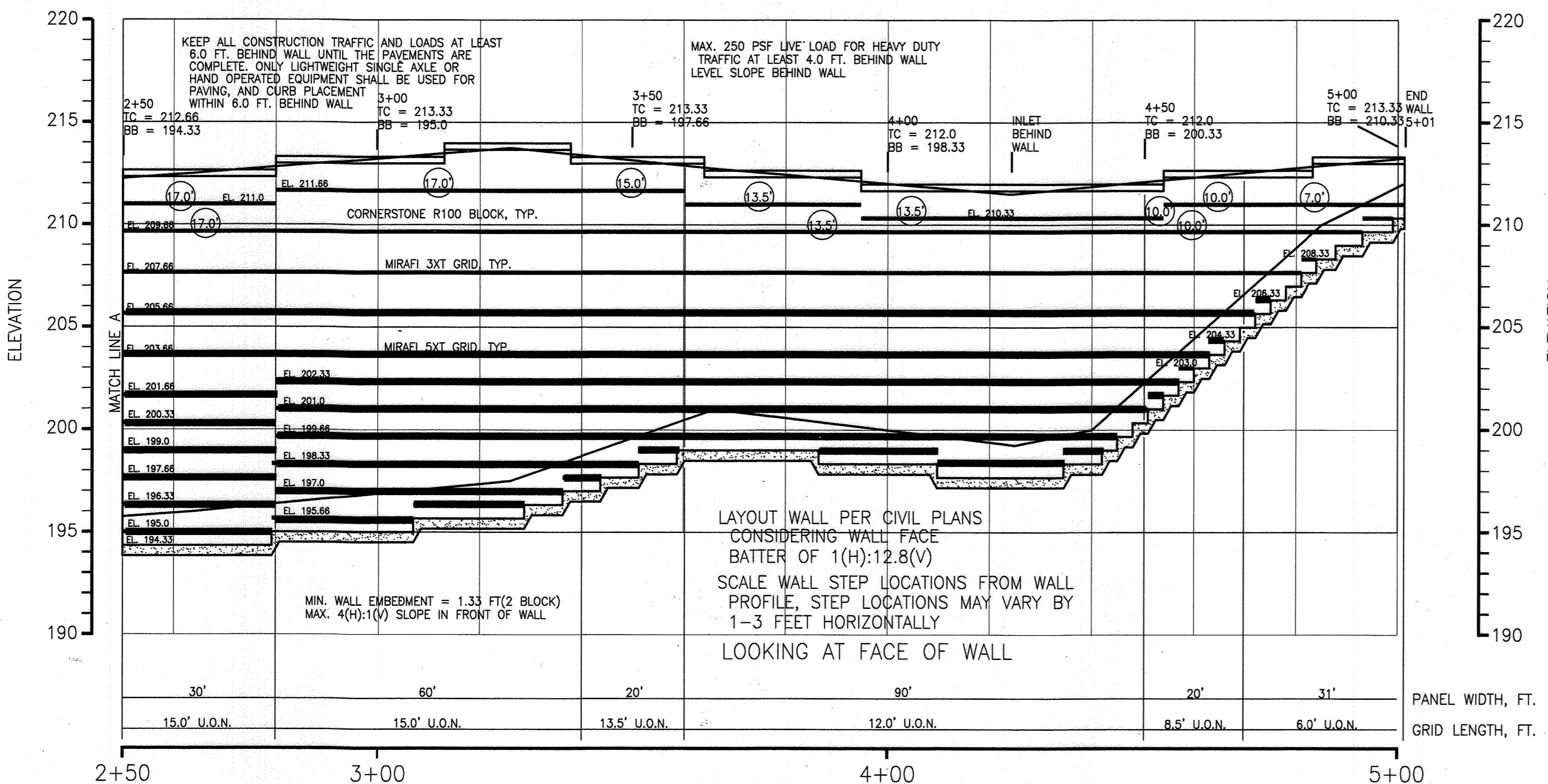
WALL 1 PROFILE

SCALE: HORIZ. 1" = 20'
 VERT. 1" = 5'



TYPICAL CORNERSTONE REINFORCED WALL SECTION

SCALE: NONE



KEY
 (X) GRID LENGTH IN FT. FOR THIS LAYER ONLY
 MIRAFI 3XT GRID, TYP.
 MIRAFI 5XT GRID, TYP.
 U.O.N. - UNLESS OTHERWISE NOTED ON PROFILE IN CIRCLE ON GRID LAYER
 TC - TOP OF CAP ELEVATION FOR BLOCK WALL
 BB - BOTTOM OF BLOCK ELEVATION FOR BLOCK WALL

WALL 1 PROFILE, CONT'D

SCALE: HORIZ. 1" = 20'
 VERT. 1" = 5'

APPENDIX B.2. CONSTRUCTION SPECIFICATIONS FOR INFILTRATION PRACTICES
B.2.A INFILTRATION TRENCH GENERAL NOTES AND SPECIFICATIONS

- AN INFILTRATION TRENCH MAY NOT RECEIVE RUN-OFF UNTIL THE ENTIRE CONTRIBUTING DRAINAGE AREA TO THE INFILTRATION TRENCH HAS RECEIVED FINAL STABILIZATION.
- HEAVY EQUIPMENT AND TRAFFIC SHALL BE RESTRICTED FROM TRAVELING OVER THE PROPOSED LOCATION OF THE INFILTRATION TRENCH TO MINIMIZE COMPACTION OF THE SOIL.
- EXCAVATE THE INFILTRATION TRENCH TO THE DESIGN DIMENSIONS. EXCAVATED MATERIALS SHALL BE PLACED AWAY FROM THE TRENCH SIDES TO ENHANCE TRENCH WALL STABILITY. LARGE TREE ROOTS MUST BE TRIMMED FLUSH WITH THE TRENCH SIDES IN ORDER TO PREVENT FABRIC PUNCTURING OR TEARING OF THE FILTER FABRIC DURING SUBSEQUENT INSTALLATION PROCEDURES. THE SIDE WALLS OF THE TRENCH SHALL BE ROUGHENED WHERE SHEARED AND SCALED BY HEAVY EQUIPMENT.
- A CLASS "C" GEOTEXTILE OR BETTER (SEE SECTION 24.0, MATERIAL SPECIFICATIONS, 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, IDE, 1994) SHALL INTERFACE BETWEEN THE TRENCH SIDE WALLS AND BETWEEN THE STONE RESERVOIR AND GRAVEL FILTER LAYERS. A PARTIAL LIST OF NON-WOODEN FILTER FABRICS THAT MEET THE CLASS "C" CRITERIA FOLLOWS. ANY ALTERNATIVE FILTER FABRIC MUST BE APPROVED BY THE PLAN APPROVAL AUTHORITY.
 AMOCO 4552 CARTRIDGE FX-80S
 GEOLON N70 MIRAFI 180-N WESTTEC N07
- THE WIDTH OF THE GEOTEXTILE MUST INCLUDE SUFFICIENT MATERIAL TO CONFORM TO TRENCH PERIMETER IRREGULARITIES AND FOR A 6-INCH MINIMUM TOP OVERLAP. THE FILTER FABRIC SHALL BE TUCKED UNDER THE SAND LAYER ON THE BOTTOM OF THE INFILTRATION TRENCH FOR A DISTANCE OF 6 TO 12 INCHES. STONES OR OTHER ANCHORING OBJECTS SHOULD BE PLACED ON THE FABRIC AT THE EDGE OF THE TRENCH TO KEEP THE TRENCH OPEN DURING WINDY PERIODS. WHEN OVERLAPS ARE REQUIRED BETWEEN ROLLS, THE UPWIND ROLL SHOULD LAP A MINIMUM OF 2 FEET OVER THE DOWNWIND ROLL IN ORDER TO PROVIDE A SHINGLED EFFECT.
- IF A 6 INCH SAND FILTER LAYER IS PLACED ON THE BOTTOM OF THE INFILTRATION TRENCH, THE SAND FOR THE INFILTRATION TRENCH SHALL BE WASHED AND MEET AASHTO-M-43, SIZE NO. 9 OR NO. 10. ANY ALTERNATIVE SAND GRADATION MUST BE APPROVED BY THE PLAN APPROVAL AUTHORITY.
- THE STONE AGGREGATE SHOULD BE PLACED IN A MAXIMUM LOOSE LIFT THICKNESS OF 12 INCHES. THE GRAVEL (ROUNDED "BANK RUN" GRAVEL IS PREFERRED) FOR THE INFILTRATION TRENCH SHALL BE WASHED AND MEET ONE OF THE FOLLOWING AASHTO-M-43, SIZE NO. 2 OR NO. 3. FOLLOWING THE STONE AGGREGATE PLACEMENT, THE FILTER FABRIC SHALL BE FOLDED OVER THE STONE AGGREGATE TO FORM A 6-INCH MINIMUM LONGITUDINAL LAP. THE DESIRED FILL SOIL OR STONE AGGREGATE SHALL BE PLACED OVER THE LAP AT SUFFICIENT INTERVALS TO MAINTAIN THE LAP DURING SUBSEQUENT BACKFILLING.
- CARE SHALL BE EXERCISED TO PREVENT NATURAL OR FILL SOILS FROM INTERMIXING WITH THE STONE AGGREGATE. ALL CONTAMINATED STONE AGGREGATE SHALL BE REMOVED AND REPLACED WITH UNCONTAMINATED STONE AGGREGATE.
- VOIDS MAY OCCUR BETWEEN THE FABRIC AND THE EXCAVATION SIDES SHALL BE AVOIDED. REMOVING BOULDERS OR OTHER OBSTACLES FROM THE TRENCH WALLS IS ONE SOURCE OF SUCH VOIDS. THEREFORE, NATURAL SOILS SHOULD BE PLACED IN THESE VOIDS AT THE MOST CONVENIENT TIME DURING CONSTRUCTION TO ENSURE FABRIC CONFORMITY TO THE EXCAVATION SIDES.
- VERTICALLY EXCAVATED WALLS MAY BE DIFFICULT TO MAINTAIN IN AREAS WHERE SOIL MOISTURE IS HIGH OR WHERE SOFT COHESIVE OR COHESIONLESS SOILS ARE DOMINANT. THESE CONDITIONS MAY REQUIRE LAYING BACK OF THE SIDE SLOPE TO MAINTAIN STABILITY.
- PVC DISTRIBUTION PIPES SHALL BE SCHEDULE 40 AND MEET ASTM-D-1785. ALL FITTINGS SHALL MEET ASTM-D-7788. PERFORATIONS SHALL BE 3/8 INCH IN DIAMETER. A PERFORATED PIPE SHALL BE PROVIDED ONLY WITHIN THE INFILTRATION TRENCH AND SHALL TERMINATE 1 FOOT SHORT OF THE INFILTRATION TRENCH WALL. THE END OF THE PVC PIPE SHALL BE CAPPED. NOTE: PVC PIPE WITH A WALL THICKNESS CLASSIFICATION OF SDR-35 MEETING ASTM-3034 IS AN ACCEPTABLE SUBSTITUTE FOR THE SCHEDULE 40 PIPE.
- THE OBSERVATION WELL IS TO CONSIST OF 6-INCH DIAMETER PERFORATED PVC SCHEDULE 40 PIPE (M 278 OR F758, TYPE PS 28) WITH A SCREW TOP TRAFFIC BEARING LID AND IS TO BE LOCATED NEAR THE LONGITUDINAL CENTER OF THE INFILTRATION TRENCH. THE PIPE SHALL HAVE A PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING THE CAP. THE SCREW TOP LID SHALL BE A CLEANOUT WITH A LOCKING MECHANISM OR SPECIAL BOLT TO DISCOURAGE VANDALISM. THE DEPTH TO THE INVERT SHALL BE MARKED ON THE LID. THE PIPE SHALL BE PLACED VERTICALLY WITHIN THE GRAVEL PORTION OF THE INFILTRATION TRENCH AND A CAP PROVIDED AT THE BOTTOM OF THE PIPE. THE BOTTOM OF THE CAP SHALL REST ON THE INFILTRATION TRENCH BOTTOM.
- CORRUGATED METAL DISTRIBUTION PIPES SHALL CONFORM TO AASHTO-M-36, AND SHALL BE ALUMINIZED IN ACCORDANCE WITH AASHTO-M-274. ALUMINIZED PIPE CONTACT WITH CONCRETE SHALL BE COATED WITH AN INERT COMPOUND CAPABLE OF PREVENTING THE GALVANIC EFFECT OF THE ALUMINUM ON THE CONCRETE. PERFORATED DISTRIBUTION PIPES SHALL CONFORM TO AASHTO-M-36, CLASS 2 AND SHALL BE PROVIDED ONLY WITHIN THE INFILTRATION TRENCH AND SHALL TERMINATE 1 FOOT SHORT OF THE INFILTRATION TRENCH WALL. AN ALUMINIZED METAL PLATE SHALL BE WELDED TO THE END OF THE PIPE.
- IF A DISTRIBUTION STRUCTURE WITH A WET WELL IS USED, A 4-INCH DRAIN PIPE SHALL BE PROVIDED AT OPPOSITE ENDS OF THE INFILTRATION TRENCH DISTRIBUTION STRUCTURE. TWO (2) CUBIC FEET OF POROUS BACKFILL MEETING AASHTO-M-43, SIZE NO. 57 SHALL BE PROVIDED AT EACH DRAIN.
- IF A DISTRIBUTION STRUCTURE IS USED, THE MANHOLE COVER SHALL BE BOLTED TO THE FRAME.

OWNER/DEVELOPER
 WILLIAM T. WHEELER, TRUSTEE
 850 E. GIDE ROAD, SUITE A
 ROCKVILLE, MD 20850
 301-252-7444

NO.	REVISION	DATE
1	Change original design from an asphalt plant into a warehouse and flex space	02/14/13
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22

REVISED RETAINING WALL PLANS

JESSUP PARK
 WAREHOUSE & FLEX SPACE
 TAX MAP 43, GRID 22 PLAT 10826 PARCEL 109
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCOTT MILLER CONSULTING ENGINEER
 P.O. BOX 94529
 NORTH LITTLE ROCK, AR 72190

501-374-3546 segwalls@gmail.com

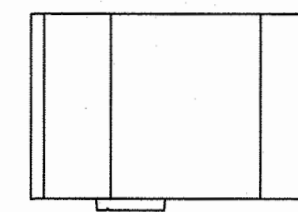
PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18803 EXPIRATION 12/31/2014

DESIGN BY: SAM
 DRAWN BY: CMM
 CHECKED BY: SAM
 DATE: MARCH 2013
 SCALE: SEE DRAWING
 W.O. NO.: 21 SHEET OF 24

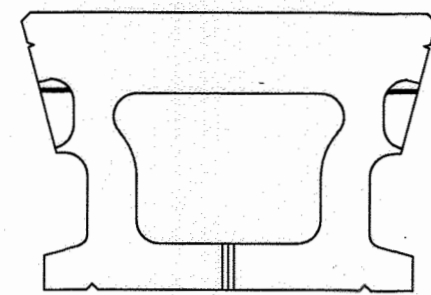
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

7/3/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 7/28/13
 CHIEF, DIVISION OF LAND DEVELOPMENT
 7/16/13
 DIRECTOR

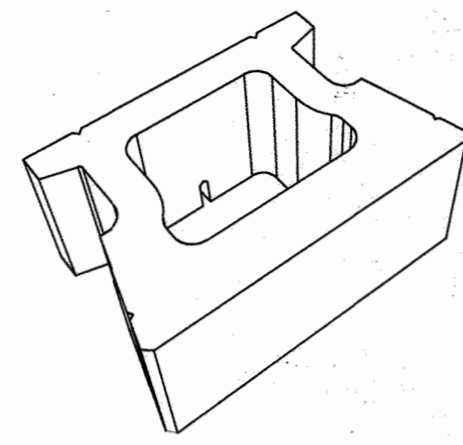
AS-BUILT CERTIFICATION
 I hereby certify that the construction on this plan was completed in accordance with the approved plans and specifications.
 Signature: [Signature]
 PE NO. 16193
 Date: 12/22/17
 NO AS-BUILT INFORMATION ON THIS SHEET



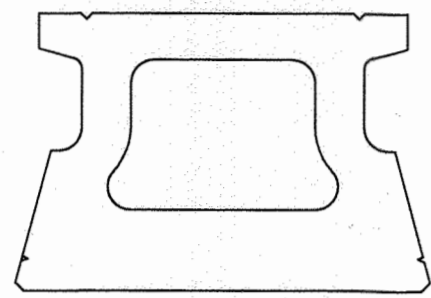
Side View



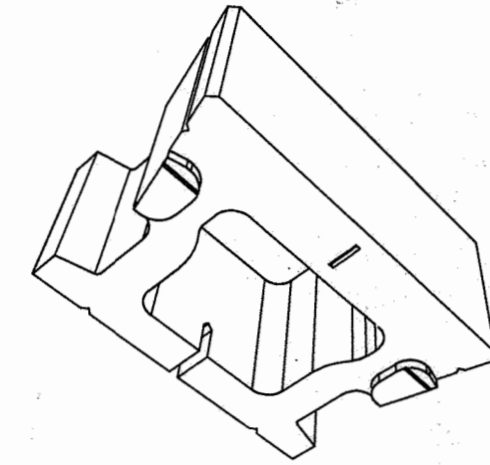
Bottom View



Isometric Top View



Top View



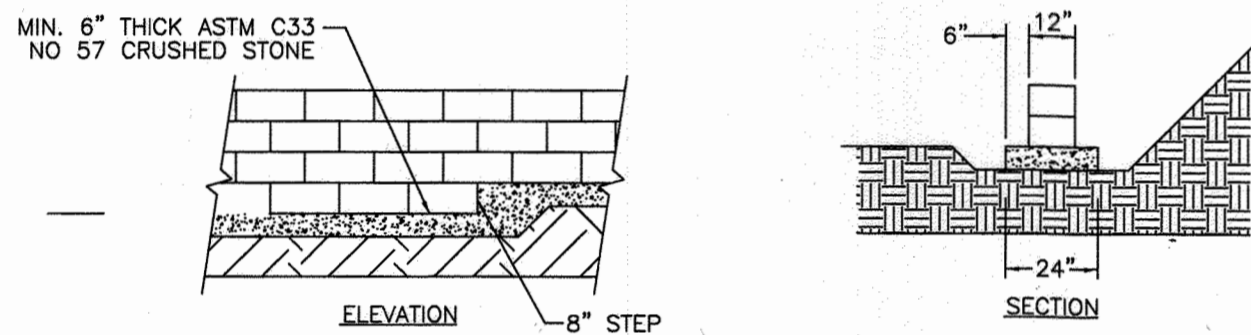
Isometric Bottom View

Dimensions

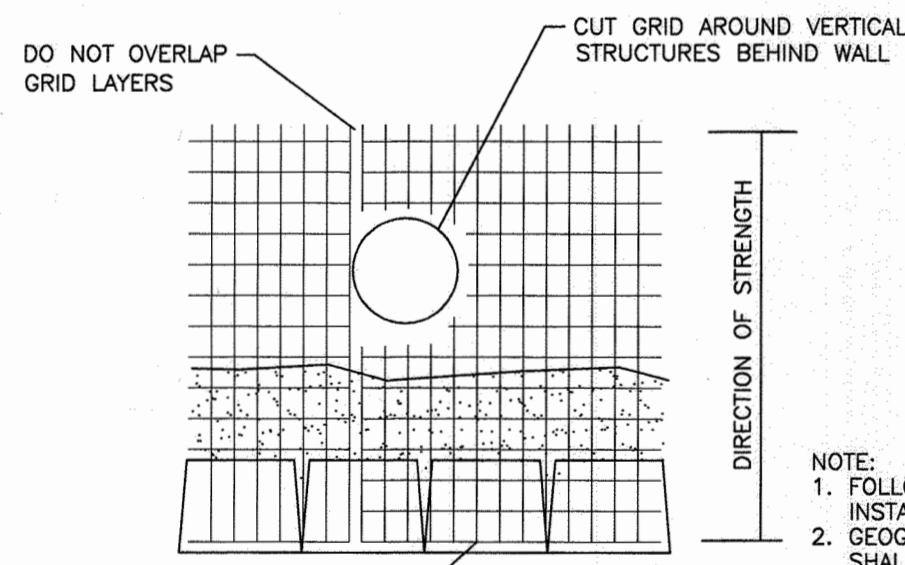
Face Width 18" 457mm
 Back Width 16" 406mm
 Depth 12" 305mm
 Height 8" 203mm
 Face Area 1 ft
 Setback 4.5" 114mm
 Weight 75lbs 34Kg

CORNERSTONE BLOCK

SCALE: NONE



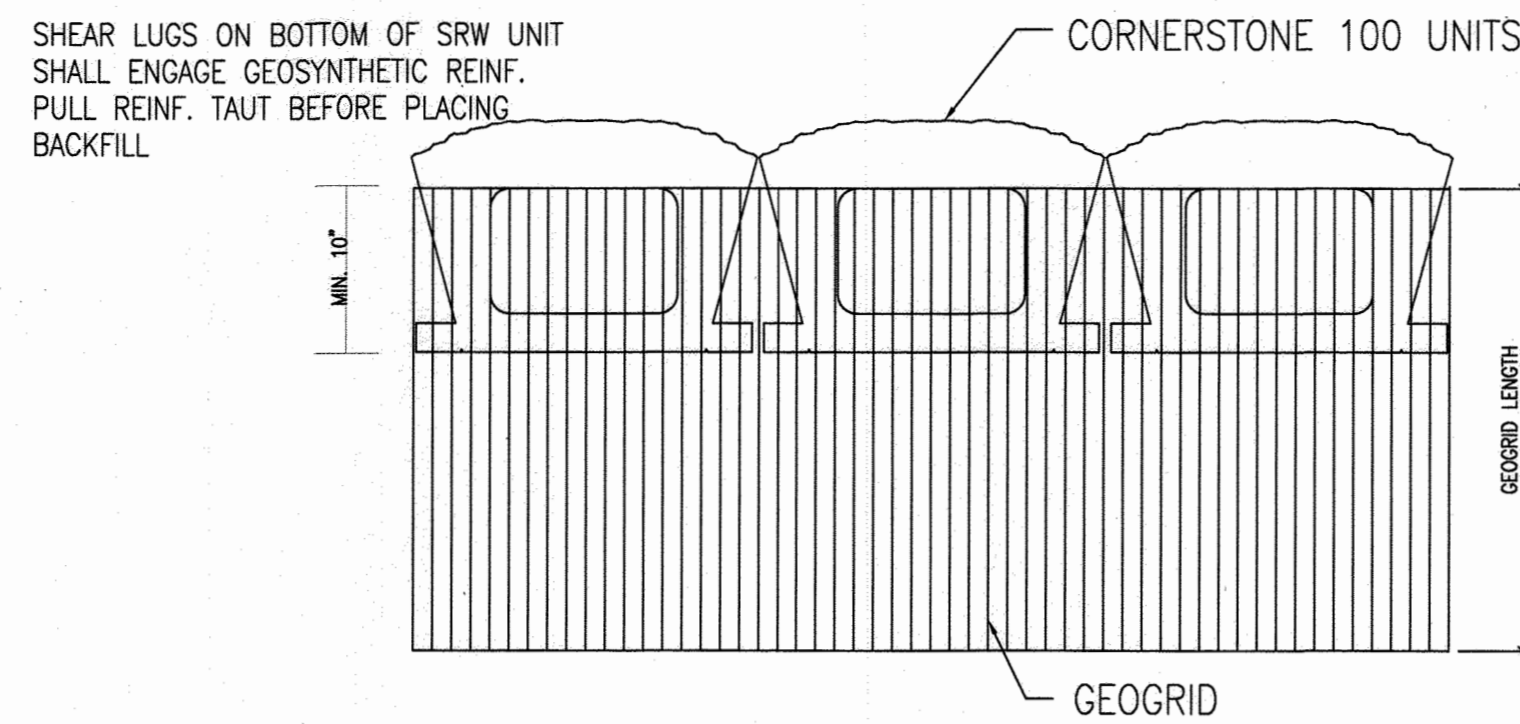
LEVELING PAD DETAIL
SCALE: NONE



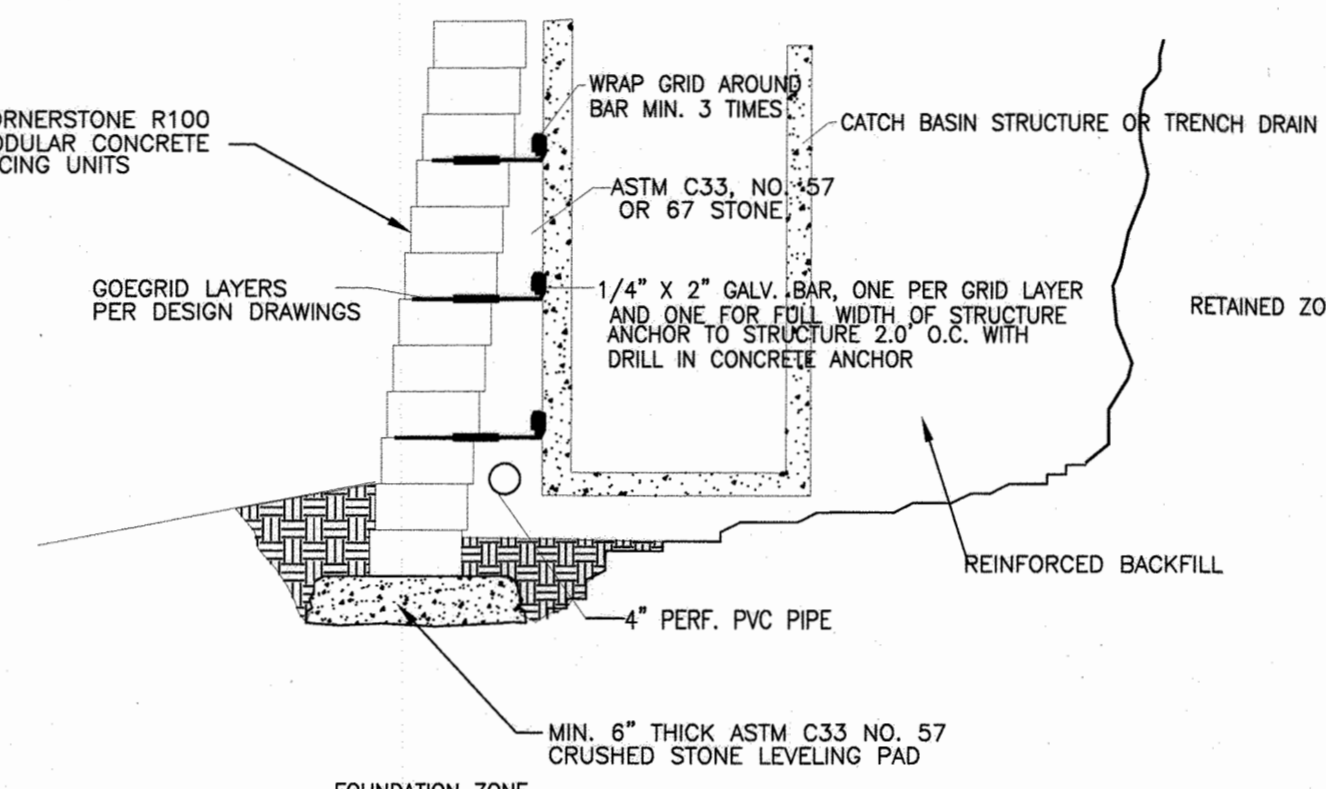
GEOGRID AT STRUCTURES BEHIND WALL
SCALE: NONE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

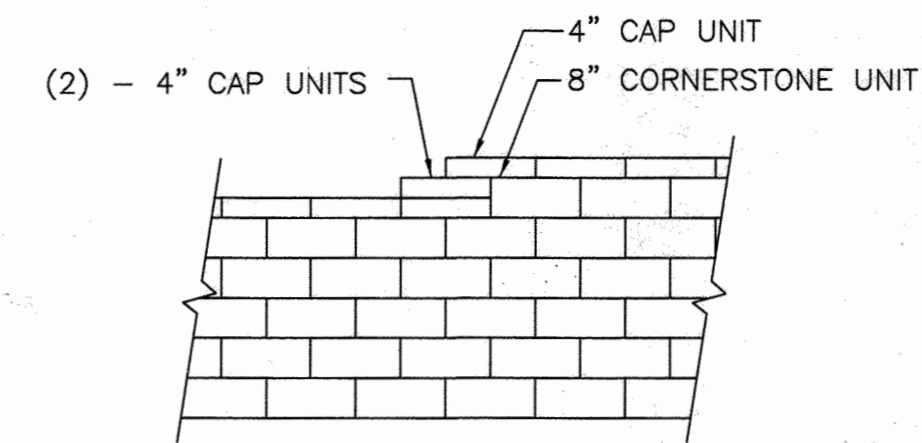
[Signature] 7/3/13
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
[Signature] 7/22/13
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
[Signature] 7/11/13
 DIRECTOR DATE



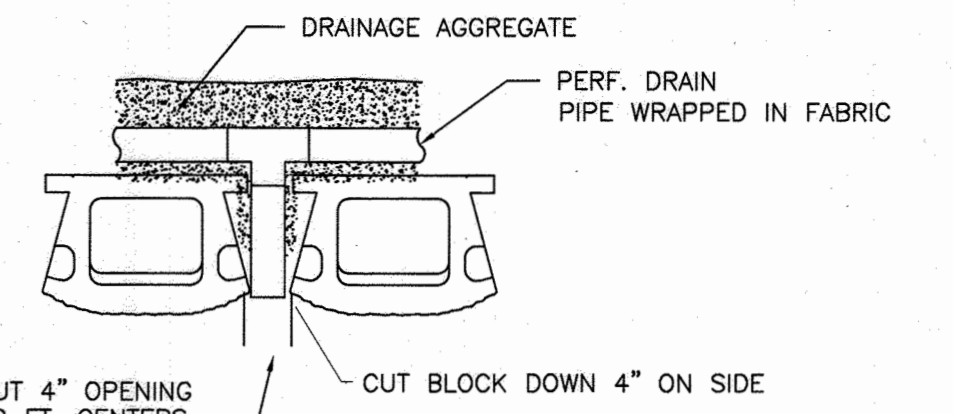
GEOSYNETHIC INSTALLATION DETAIL
SCALE: NONE



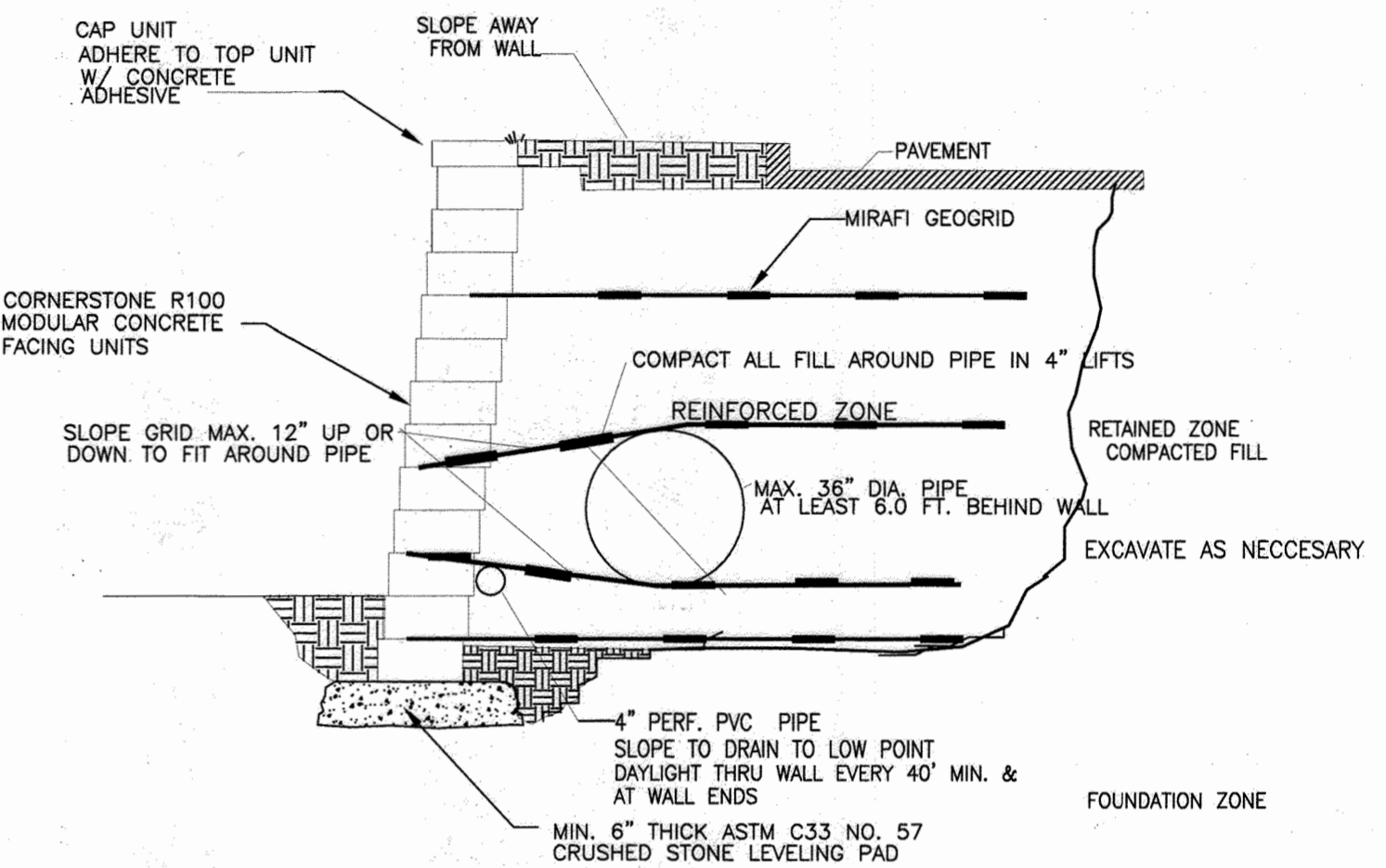
TYPICAL SECTION AT INLET OR CATCH BASIN
SCALE: NONE



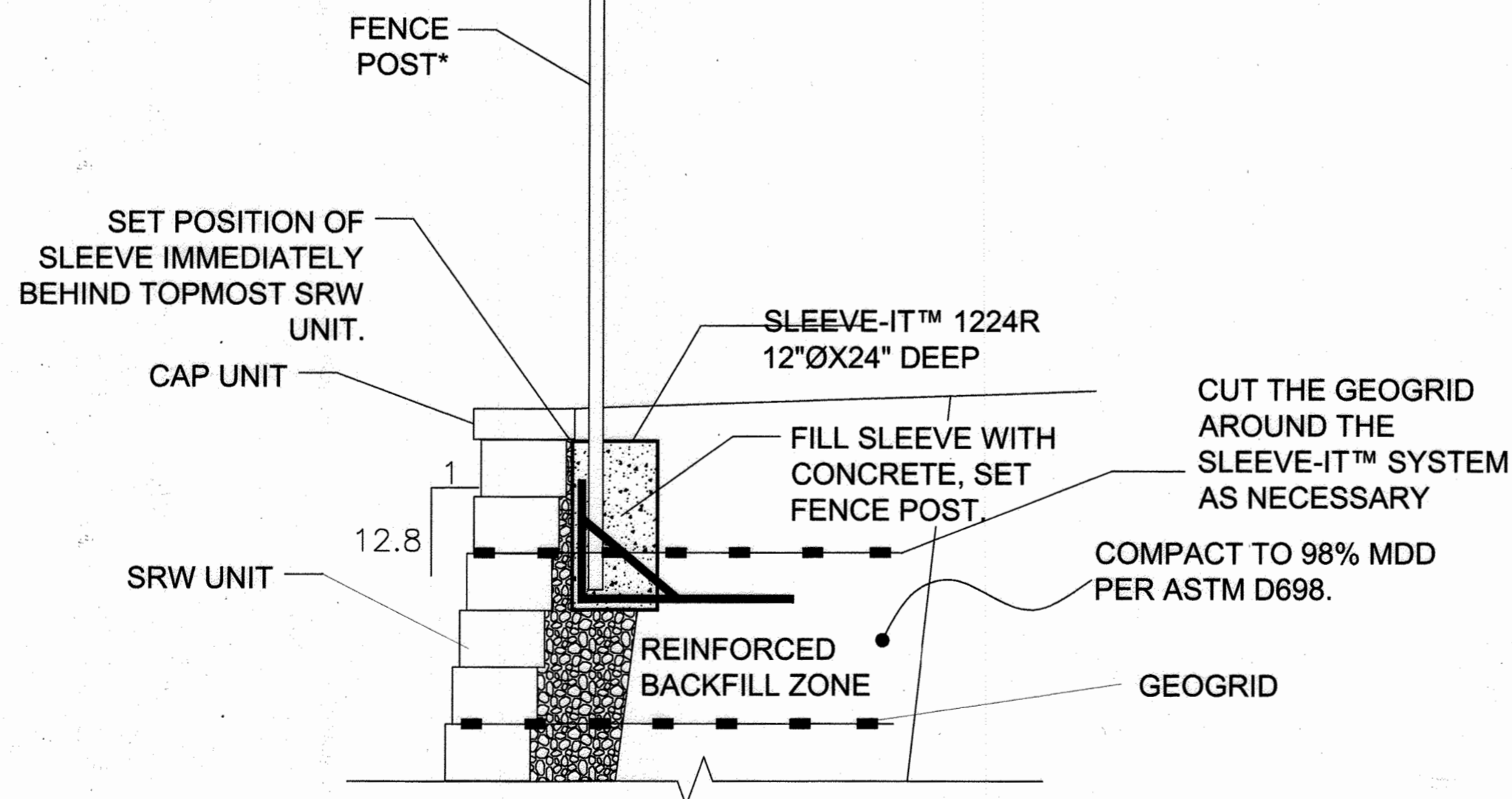
TOP OF WALL STEPS
SCALE: NONE



DRAIN DETAIL
SCALE: NONE

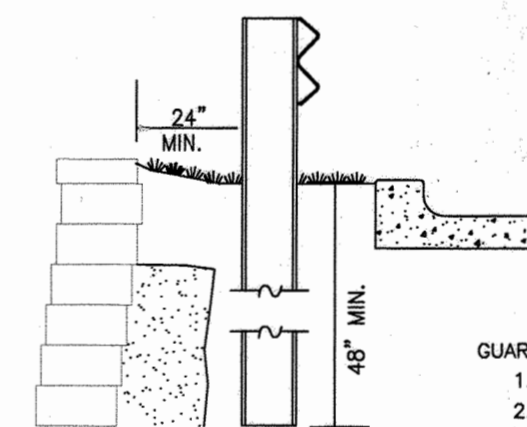


TYPICAL SECTION - PIPE IN REINFORCED WALL
SCALE: NONE



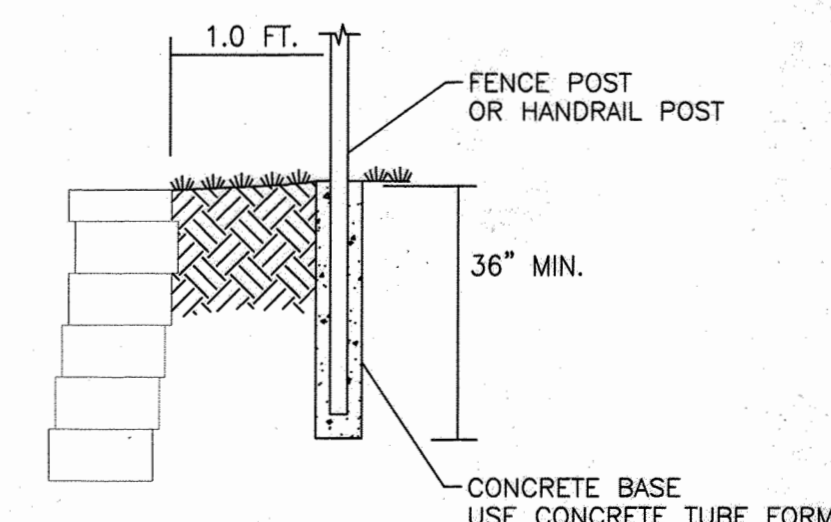
SLEEVE-IT FENCE POST ALTERNATE DETAIL
SCALE: NONE

*FENCING SYSTEMS APPROVED FOR USE WITH SLEEVE-IT™ 1224R ARE LIMITED TO THE FOLLOWING HEIGHTS: CHAIN LINK - UP TO 8-FT, PRIVACY - UP TO 6-FT (WOODEN, PVC, METAL). POST SIZE 4"x4" MAX.



GUARD RAIL DETAIL
TYPICAL GUARD RAIL
SCALE: NONE

GUARD RAIL NOTES:
 1. POST SHOULD BE DRIVEN NOT AUGERED
 2. INSTALL H-PILE OR WOOD POST AS PER MANUFACTURER'S RECOMMENDATIONS.
 3. DRIVING OF POST MAY PIERCE UPPER LAYER OF GEOSYNETHIC AS PER ENGINEER'S DESIGN.



POST & FENCE DETAIL
TYPICAL HANDRAIL AND/OR RAIL POST
SCALE: NONE

NO AS-BUILT INFORMATION ON THIS SHEET

AS-BUILT CERTIFICATION
 I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.
[Signature]
 DATE: 10/11/17

OWNER/DEVELOPER
 WILLIAM T. WHEELER, TRUSTEE
 850 E. GUDE ROAD, SUITE A
 ROCKVILLE, MD 20850
 301-252-7444

1	Change original design from an asphalt plant into a warehouse and flex space	02/14/13
6	REVISE PLAN TO SHOW REVISED TRAILER PARKING AND ASSOCIATED SITE CHANGES	09-09-22
NO.	REVISION	DATE

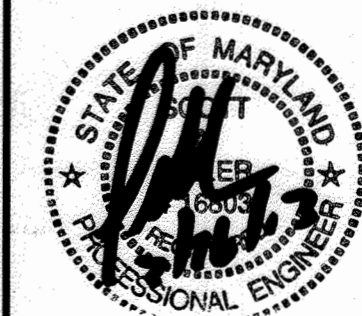
REVISED RETAINING WALL PLANS

JESSUP PARK
 WAREHOUSE & FLEX SPACE
 PLAT 10826
 TAX MAP 43, GRID 22
 1ST ELECTION DISTRICT
 PARCEL 109
 HOWARD COUNTY, MARYLAND

SCOTT MILLER CONSULTING ENGINEER
 P.O. BOX 94529
 NORTH LITTLE ROCK, AR 72190

501-374-3546

segwalls@gmail.com



DESIGN BY: SAM
 DRAWN BY: CMM
 CHECKED BY: SAM
 DATE: MARCH 2013
 SCALE: NONE
 W.O. NO.:

PROFESSIONAL CERTIFICATE
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 18803
 EXPIRATION DATE: 02-02-2014

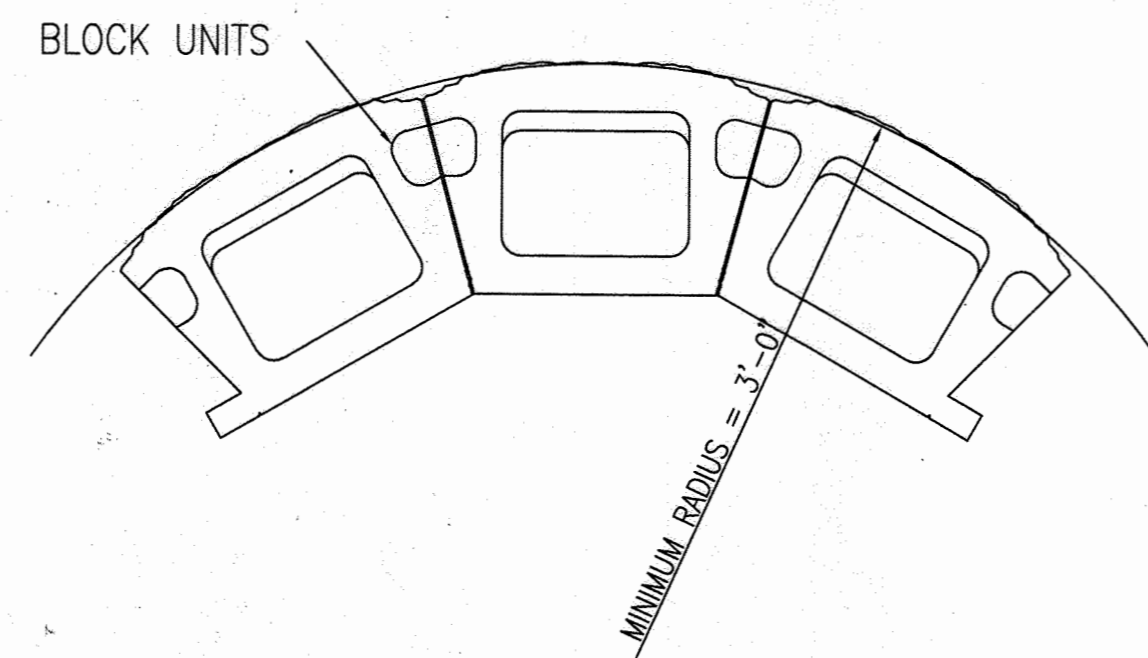
22 SHEET OF 24

AS-BUILT OCTOBER 4, 2017

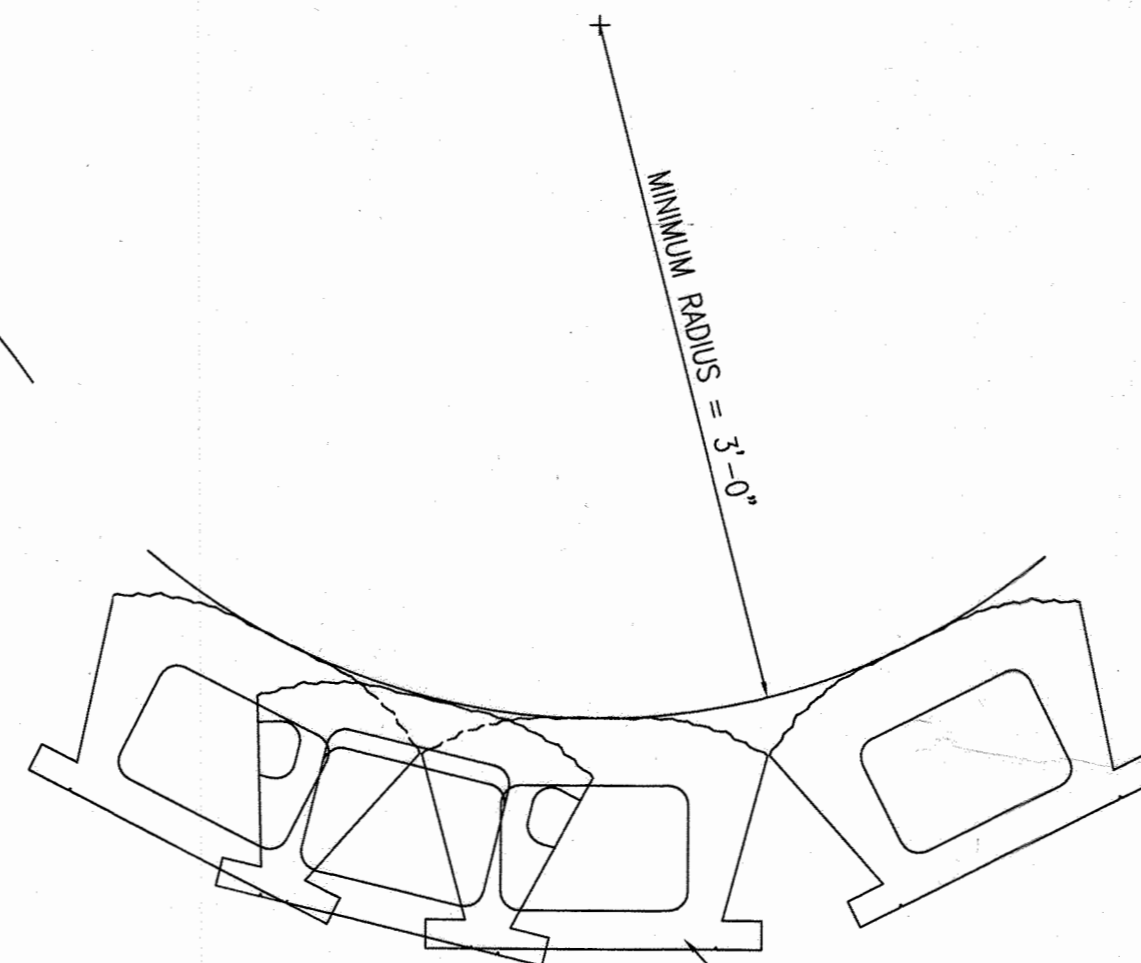
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NOTES:

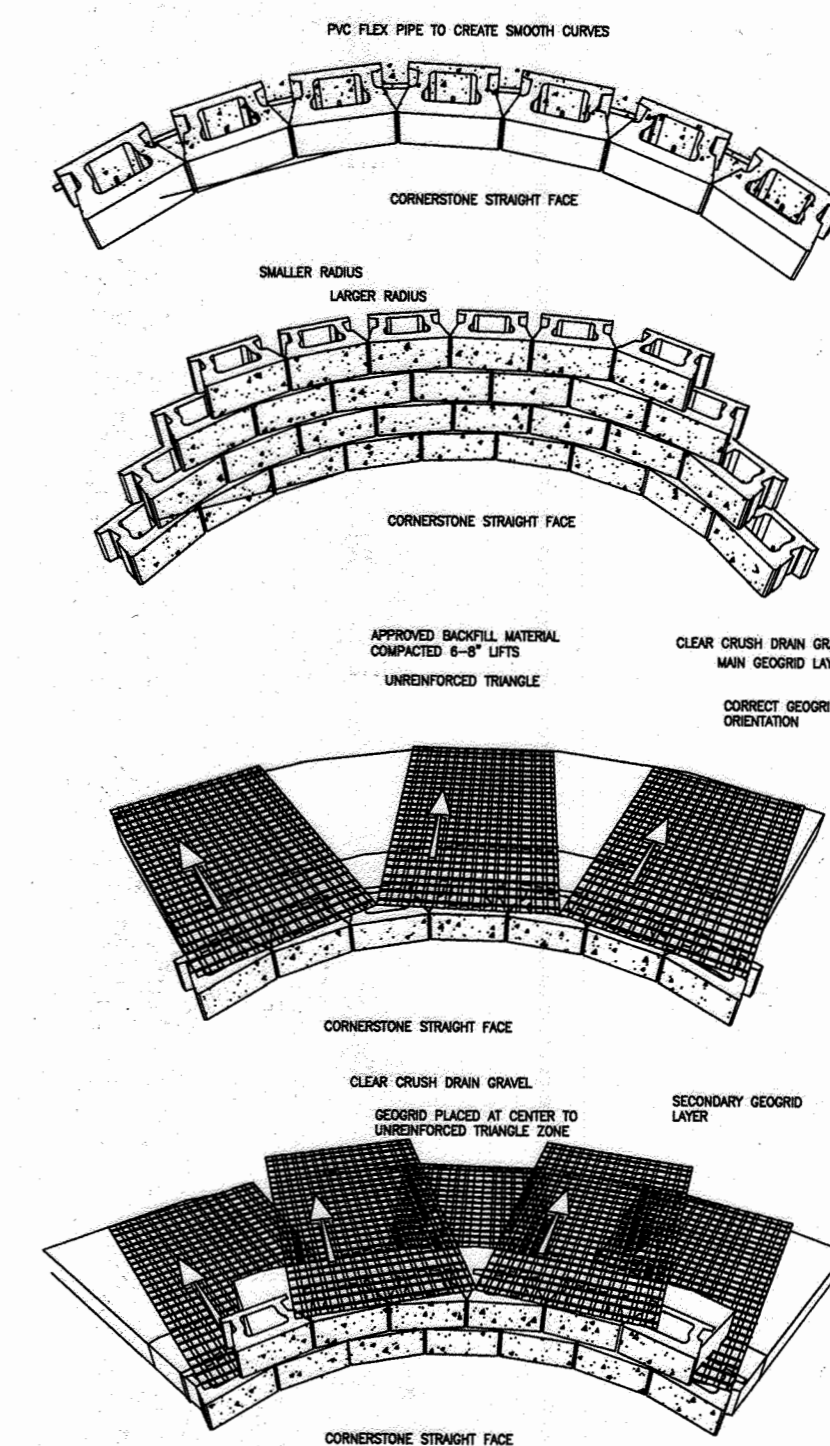
1. REINFORCED ZONE- COMPACTED SANDY CLAY SOIL WITH MAXIMUM 3.0-INCH ROCK SIZE WITH A PLASTICITY INDEX LESS THAN 15 WITH AN EFFECTIVE FRICTION ANGLE = 28 DEGREES, MOIST UNIT WEIGHT= 125 PCF, COHESION = 0 PSF.
2. LEVELING PAD- MINIMUM 6" THICK COMPACTED ASTM C33, NO 57 CRUSHED STONE.
3. FOUNDATION ZONE- UNDISTURBED SANDY CLAY SOIL WITH A PLASTICITY INDEX LESS THAN 15 WITH AN EFFECTIVE FRICTION ANGLE = 28 DEGREES, MOIST UNIT WEIGHT= 125 PCF, COHESION = 0 PSF, COHESION = 100 PSF USED IN GLOBAL STABILITY ANALYSIS, ONLY.
4. RETAINED ZONE- UNDISTURBED IR COMPACTED SANDY CLAY SOIL WITH A PLASTICITY INDEX LESS THAN 15 WITH AN EFFECTIVE FRICTION ANGLE = 28 DEGREES, MOIST UNIT WEIGHT = 125 PCF, COHESION = 0 PSF.
5. MINIMUM WALL EMBEDMENT VARIES- 1.33 FT. (2 BLOCK COURSE)
6. A GEOTECHNICAL REPORT WAS NOT PROVIDED FOR THE PROJECT AND THE SOIL PROPERTIES USED WERE ASSUMED FOR THE SITE. THE SOIL PROPERTIES MUST BE VERIFIED BY THE TESTING AGENCY OF RECORD AND THE WALL DESIGNER NOTIFIED OF SOILS DIFFERENT THAN THOSE NOTED HEREIN.
7. WALL BATTER WILL BE 0.83 INCH PER BLOCK COURSE.
8. THESE PLANS ARE BASED THE SITE GRADING PLAN E-MAILED TO THE WALL DESIGNER FROM ROBERT H. VOGEL ENGINEERING, INC. ON JUNE 26, 2012. THE TOP AND BOTTOM OF WALL ELEVATIONS AND SLOPES IN THE VICINITY OF THE WALL MUST BE VERIFIED BY THE WALL INSTALLER BEFORE BEGINNING WALL CONSTRUCTION. THE WALL DESIGNER MUST REVIEW ANY CHANGES TO THE WALL DIMENSIONS OR SLOPES AROUND THE WALLS.
9. THE WALL DESIGNER ASSUMES NO LIABILITY FOR INFORMATION PROVIDED BY OTHERS OR NOT VERIFIED.
10. ALL FILL MUST BE PLACED IN MAXIMUM 8.0 INCH THICK LIFTS AND COMPACTED TO A MINIMUM OF 98% STANDARD COMPACTION (ASTM D 698). THE COMPACTION OF EACH LIFT MUST BE VERIFIED BY THE TESTING AGENCY OF RECORD WITH AT LEAST ONE TEST PER 2500 SQ. FT. OF FILL PLACED PER LIFT, PER DAY WITH AT LEAST 20% OF THE TEST CONDUCTED WITHIN 3.0 FT. OF THE BACK OF THE BLOCK.
11. MAXIMUM WALL BEARING PRESSURE = 3000 PSF
12. THE LONG-TERM STATIC GROUNDWATER LEVEL IS ASSUMED TO BE WELL BELOW THE BASE OF THE WALL (GREATER THAN 6.0 FT.)
13. ALL QUANTITIES DO NOT INCLUDE ANY WASTE OR OVERLAP REQUIRED AND ARE BASED ON IN-PLACE COMPACTED VOLUMES. THE INSTALLER MUST VERIFY ALL QUANTITIES.
14. WALL HEIGHTS SHOWN MUST NOT BE EXCEEDED WITHOUT THE CONSULTATION AND APPROVAL OF THE WALL DESIGNER.
15. ALL FACIA BLOCK MUST BE CORNERSTONE R100 SERIES UNITS.
16. ALL REINFORCING GEOGRID MUST BE MIRAFI 3XT OR MIRAFI 5XT GEOGRID AS SHOWN ON THE WALL PROFILES AND DRAWINGS.
17. ALL UTILITIES BEHIND, IN FRONT AND UNDER THE WALL SHOULD BE INSTALLED BEFORE COMMENCING WALL CONSTRUCTION TO LIMIT DISTURBANCE AND DAMAGE TO THE GRID AND UNDERMINING OF THE WALL. THE COMPACTION OF ALL UTILITY BACKFILL UNDER THE BLOCK AND GRID ZONES MUST BE VERIFIED TO BE AT LEAST 95% STANDARD COMPACTION (ASTM D698).
18. MAXIMUM SLOPE BEHIND AND IN FRONT OF THE WALL ARE SHOWN ON THE WALL PROFILE AND SHALL NOT BE EXCEEDED WITHOUT THE CONSULTATION AND APPROVAL OF THE WALL DESIGNER.
19. CARE MUST BE TAKEN WHEN INSTALLING ANY UTILITIES, STRUCTURES OR LANDSCAPING BEHIND THE WALLS SO AS NOT TO DAMAGE THE GEOGRID OR WALL FACE. ANY DAMAGED GEOGRID OR WALL FACE DISTORTION MUST BE REPLACED.
20. ALL ROOF DRAINS AND SURFACE WATER MUST BE ROUTED AROUND OR PIPED THROUGH THE WALL FACE. NO SURFACE WATER SHALL BE ALLOWED TO FLOW OVER THE WALL FACE DURING OR AFTER WALL CONSTRUCTION.
21. ANY SPRINGS, SEEPS OR OTHER WATER SOURCES NOTED IN THE WALL EXCAVATION MUST BE IMMEDIATELY REPORTED TO THE WALL DESIGNER FOR REMEDIAL ACTION.
22. MAX. 250 PSF LIVE LOAD FOR HEAVY DUTY TRAFFIC AT LEAST 4.0 FT. BEHIND WALL.
23. ALL FILTER FABRIC MUST BE MIRAFI 140N NON-WOVEN FABRIC OR APPROVED EQUIVALENT.



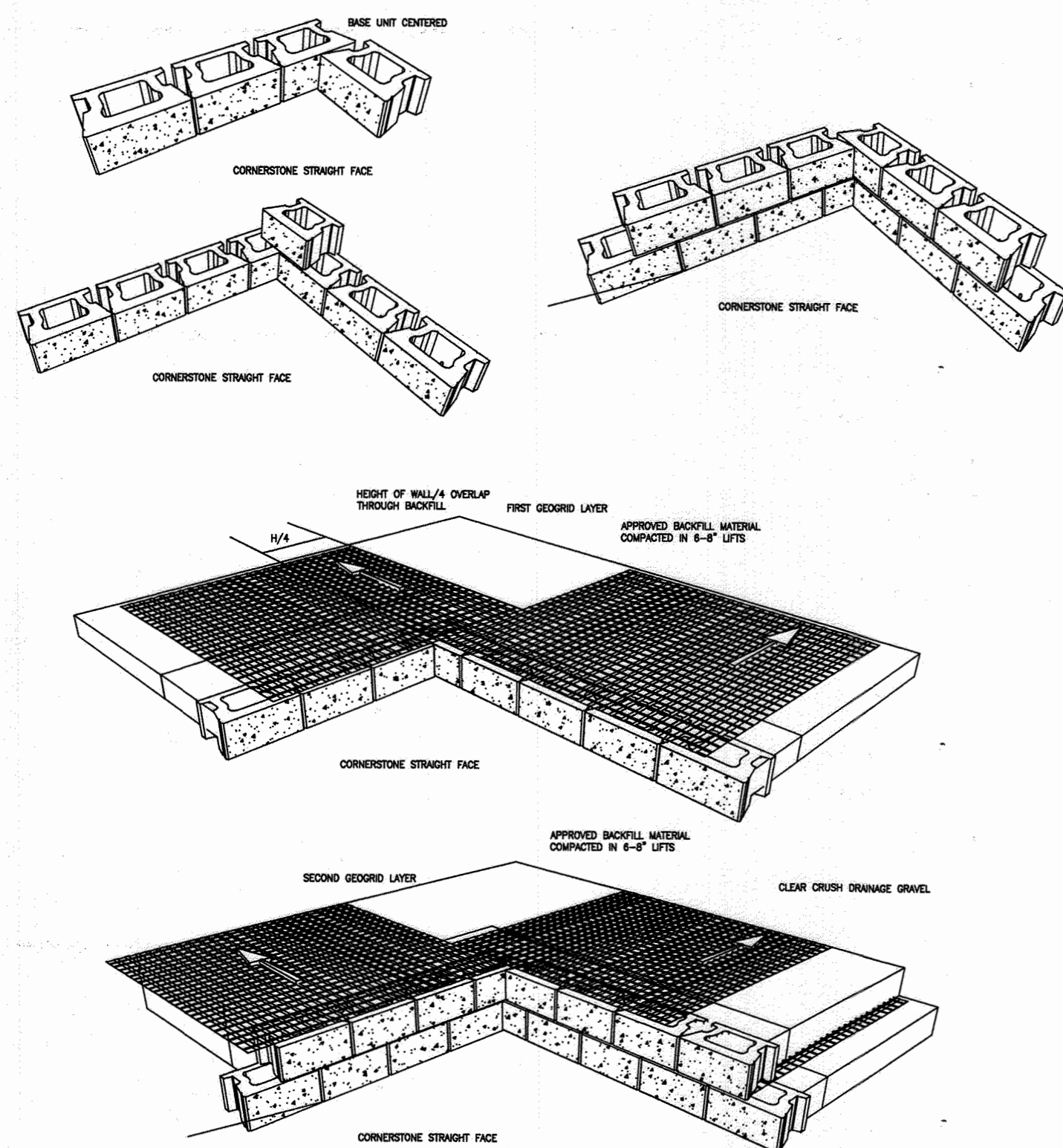
MINIMUM OUTSIDE RADIUS
SCALE: NONE



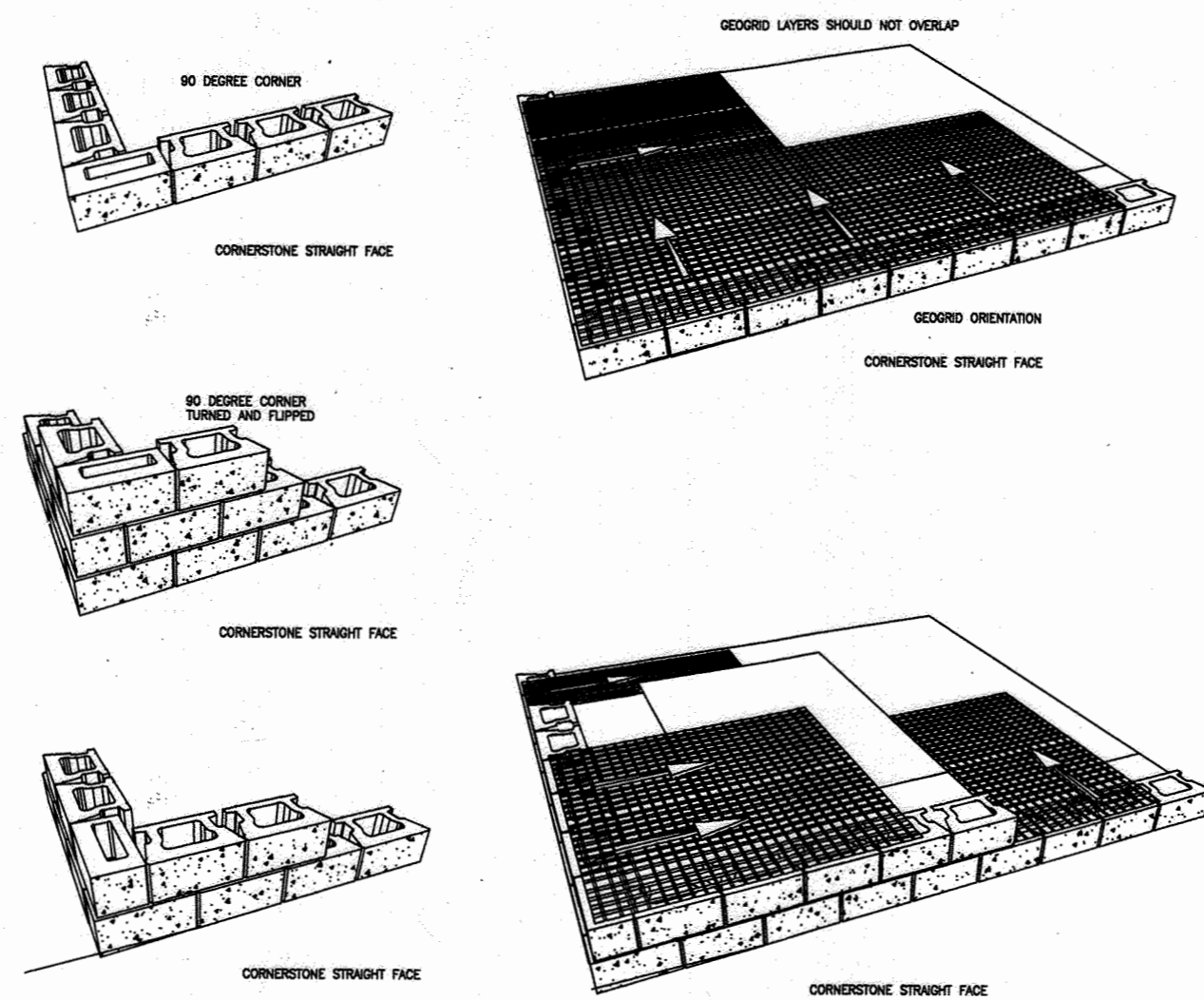
MINIMUM INSIDE RADIUS
SCALE: NONE



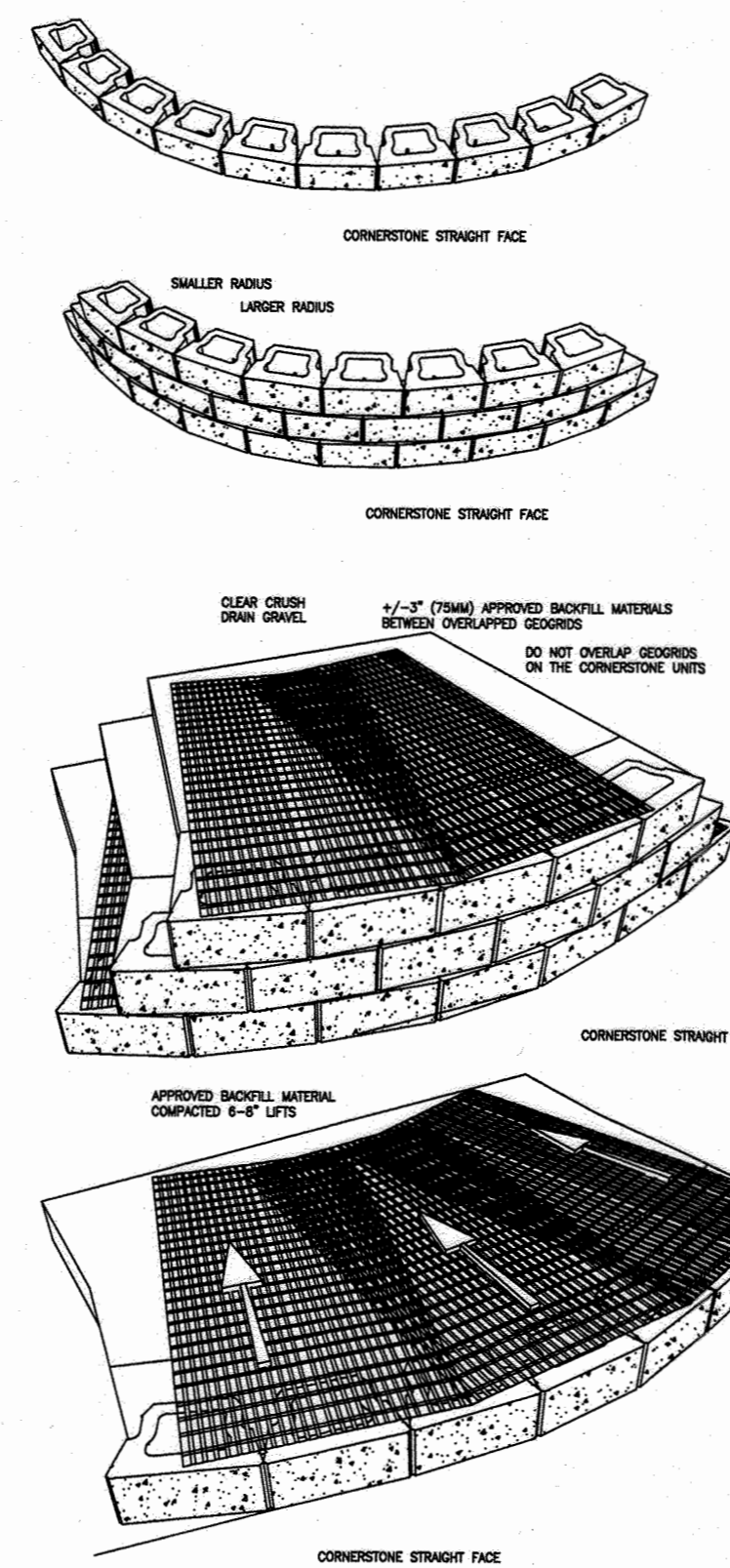
INSIDE RADIUS DETAIL
SCALE: NONE



MINIMUM OUTSIDE RADIUS
SCALE: NONE



MINIMUM INSIDE RADIUS
SCALE: NONE



OUTSIDE RADIUS DETAIL
SCALE: NONE

OWNER/DEVELOPER
WILLIAM T. WHEELER, TRUSTEE
850 E. GUDE ROAD, SUITE A
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JESSUP PARK WAREHOUSE & FLEX SPACE
TAX MAP 43, GRID 22, 1ST ELECTION DISTRICT
PLAT 10826
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HOWARD COUNTY, MARYLAND

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P.O. BOX 94529
NORTH LITTLE ROCK, AR 72190

501-374-3546

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DESIGN BY: SAM
DRAWN BY: CMM
CHECKED BY: SAM
DATE: MARCH 2013
SCALE: NONE
W.O. NO.:

PROFESSIONAL CERTIFICATE
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. 15003 EXPIRATION DATE: 02-02-2014

23 SHEET OF 24

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
[Signature] 7/3/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 7/02/13
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 7/14/13
DIRECTOR

AS-BUILT CERTIFICATION

I hereby certify that the facility shown on this plan was constructed as shown on the "as-built" plans and meets the approved plans and specifications.

[Signature]
Signature
16193
12/2/13

No AS-BUILT INFORMATION ON THIS SHEET

