

SITE DEVELOPMENT PLAN

E.G.U. SUBDIVISION - SECTION 2 ~ AREA 2 ~ LOT 22

7080 AND 7084 MINSTREL WAY HOWARD COUNTY, MARYLAND

GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED NEW TOWN - EMPLOYMENT CENTER INDUSTRIAL (NT-EC INDUSTRIAL) PER HOWARD COUNTY COMPREHENSIVE ZONING MAP EFFECTIVE DATE OCTOBER 6, 2013. NT-EC INDUSTRIAL IS IN ACCORDANCE WITH FDP-55.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED OUTSIDE OF THE LIMIT OF DISTURBANCE.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THE PLANTINGS PROVIDED HAVE MET AND/OR EXCEEDED THE PLANTING REQUIREMENTS FOR ALL AREAS ON THE SITE EXCEPT FOR THE EASTERN PERIMETER OF THE SITE INDICATED ON THE PLAN AS SHOWN ON THE LANDSCAPE PLANS AS AREA 7-7. ITEMS OF CONCERN IN THIS AREA INCLUDE OVERHEAD UTILITIES, AN UNDERGROUND GAS LINE, A TELEPHONE LINE, A SANITATION LINE AND IT IS LOCATED WITHIN A PUBLIC EASEMENT. DUE TO THESE MANDATORY EASEMENTS AND AS PER THE REQUEST OF THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING, PLANTING WAS LIMITED IN THIS AREA AND MRA SUBMITTED A LANDSCAPE ALTERNATIVE COMPLIANCE LETTER FOR APPROVAL OF THIS AREA. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$38,970 FOR 45 SHADE TREES (\$300/TREE), 29 FLOWERING/EVERGREEN TREES (\$150/TREE), AND 704 SHRUBS (\$30/SHRUB).
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 (OR 811) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES:
 - THE RT-1 STOP SIGN AND THE STREET NAME SIGN ASSEMBLY FOR THE DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
 - THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410.313.2430) PRIOR TO THE INSTALLATION OF ANY TRAFFIC CONTROL DEVICES.
 - ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
 - ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2 INCH GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2 INCH GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3 FEET LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO PERFORATION HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED, ALL SPOT GRADES ARE FLOW LINE AT BOTTOM FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS A COMBINATION OF SURVEY FIELD RUN TOPO PREPARED BY MORRIS AND RITCHE ASSOCIATES, INC. DATED 12/28/2011 AND HOWARD COUNTY GIS TOPO (CIRCA 2006) FOR AREAS OUTSIDE OF THE PROPERTY LINE.
- THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM (HORIZ. NAD 83, VERT. NAVD 88). HOWARD COUNTY MONUMENT NO.'S 42BM2 AND 42BMT8 WERE USED FOR THIS PROJECT.
- PROPOSED WATER MAIN WITHIN R/W IS PUBLIC, EXTENDING TO EXISTING MAIN WITHIN SNOWDEN RIVER PARKWAY. WATER IS SERVED THROUGH AN EXISTING PUBLIC WATER MAIN (C-315-W&S) LOCATED IN SNOWDEN RIVER PKWY.
- ALL PROPOSED SEWER IS 8" OR 8", WITH THE 8" CONNECTING TO AN EX. 10" SEWER. PROPOSED 8" SEWER IS SERVED THROUGH AN EXISTING PUBLIC SEWER MAIN (C-315-W&S) LOCATED IN SNOWDEN RIVER PKWY.
- THIS PROJECT UTILIZES ENVIRONMENTAL SITE DESIGN FOR ALL SWM PRACTICES. ALL SWM DEVICES WILL BE PRIVATELY OWNED AND MAINTAINED. FACILITY #1 AND #3 ARE MICRO-BIOTENTION FACILITIES (M-6). FACILITY #2 IS A BIOTENTION FACILITY (F-6).
- EXISTING UTILITIES ARE BASED UPON FIELD RUN SURVEY PERFORMED BY MORRIS AND RITCHE ASSOCIATES, INC. DATED (01/17/2012), HOWARD COUNTY GIS DATA, AND APPROVED CONSTRUCTION DRAWINGS.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED 10/18/2017 AND WAS APPROVED ON 01/09/2018. A REVISED TRAFFIC LETTER WAS PREPARED BY THE TRAFFIC GROUP ON 02/25/2020 AND WAS APPROVED ON 04/23/2020.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY JOHN D. HYNES & ASSOC. INC. DATED (09/13/2012)
- BOUNDARY INFORMATION IS BASED ON A FIELD RUN BOUNDARY SURVEY PERFORMED BY MORRIS AND RITCHE ASSOCIATES, INC. DATED DECEMBER, 2011 MDR PLAT NO. 14470 RECORDED (10/16/2000).
- ANY DAMAGE TO EXISTING UTILITIES, PAVEMENT, OR CURB AND GUTTER DUE TO CONSTRUCTION ACTIVITY OUTSIDE THE LIMITS OF DISTURBANCE IS TO BE REPLACED BY THE CONTRACTOR AT HIS OWN EXPENSE.
- WHERE NECESSARY, THE CONTRACTOR SHALL TEST PIT ALL EXISTING UTILITIES AT LEAST FIVE (5) DAYS PRIOR TO STARTING ANY WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY PROPERTY MONUMENTS, MARKERS, SIGNS, LIGHTS, OR ANY OTHER EXISTING SITE FEATURES DISTURBED DURING CONSTRUCTION.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED JOINTLY BY M.D.E., W.M.A., N.R.C.S., AND MARYLAND ASSOCIATION OF SOIL CONSERVATION DISTRICTS.
- THE PROPOSED ROYAL FARMS STORE WILL NOT BE SPRINKLED. THE PROPOSED CANTON CAR WASH BUILDING WILL BE SPRINKLED.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II (2006), SECTION 5.5.A. AND AS MODIFIED BY GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993). A MINIMUM SPACING OF 20 FEET SHALL BE MAINTAINED BETWEEN ANY STREETLIGHT AND ANY TREE.
- PER HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SECTION 16.1202.(b)(1)(v), A FOREST CONSERVATION PLAN IS NOT REQUIRED. REFER TO F-01-51, GENERAL NOTE 15.
- THIS PROJECT IS IN COMPLIANCE WITH ALL SETBACK, HEIGHT, AND COVERAGE REQUIREMENTS IN ACCORDANCE WITH FDP-55.
- A DISCHARGE PERMIT AND REVIEW FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) WILL BE REQUIRED FOR THE CAR WASH RECLAMATION SYSTEM.
- HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT.
- MONITORING WELLS AND REVIEW BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT WILL BE REQUIRED FOR FUEL STORAGE TANKS.
- MINSTREL WAY OFF-SITE IMPROVEMENTS MUST BE COMPLETED BEFORE THE ROYAL FARMS DEVELOPMENT CAN BE OPENED.
- REFER TO CAPITAL PROJECT J-4222 FOR CAPITAL ROAD IMPROVEMENTS ALONG SNOWDEN RIVER PARKWAY.
- THE SITE UTILIZES THE EXISTING ENTRANCE CONSTRUCTED PER SDP-72-78 AND PROVIDES THE BEST SCENARIO FOR SITE ENTRANCE SEPARATION AND STACKING ALONG MINSTREL WAY.
- THE APPROVAL OF THE SITE DEVELOPMENT PLAN IS CONTINGENT ON THE RECORDING OF SUBDIVISION PLAT F-14-018.
- THE ARCHITECTURAL REVIEW COMMITTEE C/O THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION ISSUED APPROVAL ON APRIL 13, 2018.
- THE HOWARD COUNTY PLANNING BOARD APPROVED THE SITE DEVELOPMENT PLAN ON MARCH 17, 2019.

STORMWATER MANGEMENT INFORMATION

LOT/PARCEL NUMBER	FACILITY NAME AND NUMBER	PRACTICE TYPE (QUANTITY)	PUBLIC	PRIVATE	HOA MAINTAINS	MISC
22/0375	MICRO-BIOTENTION FACILITY #1	M-6 (676 CF)	NO	YES	NO	-
22/0375	BIOTENTION FACILITY #2	F-6 (2,716 CF)	NO	YES	NO	-
22/0375	MICRO-BIOTENTION FACILITY #3	M-6 (1,218 CF)	NO	YES	NO	-

NOTE: THE LDD FOR PERMITS DATED 04/22/2020 OF 3,950 SF IS EXEMPT FROM PROVIDING STORMWATER MANAGEMENT ANY ADDITIONAL IMPROVEMENTS WHERE THE CUMULATIVE LDD EXCEEDS 5,000 SF SHALL ADDRESS STORMWATER MANAGEMENT FROM THE INCREASE.

NOTE
THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

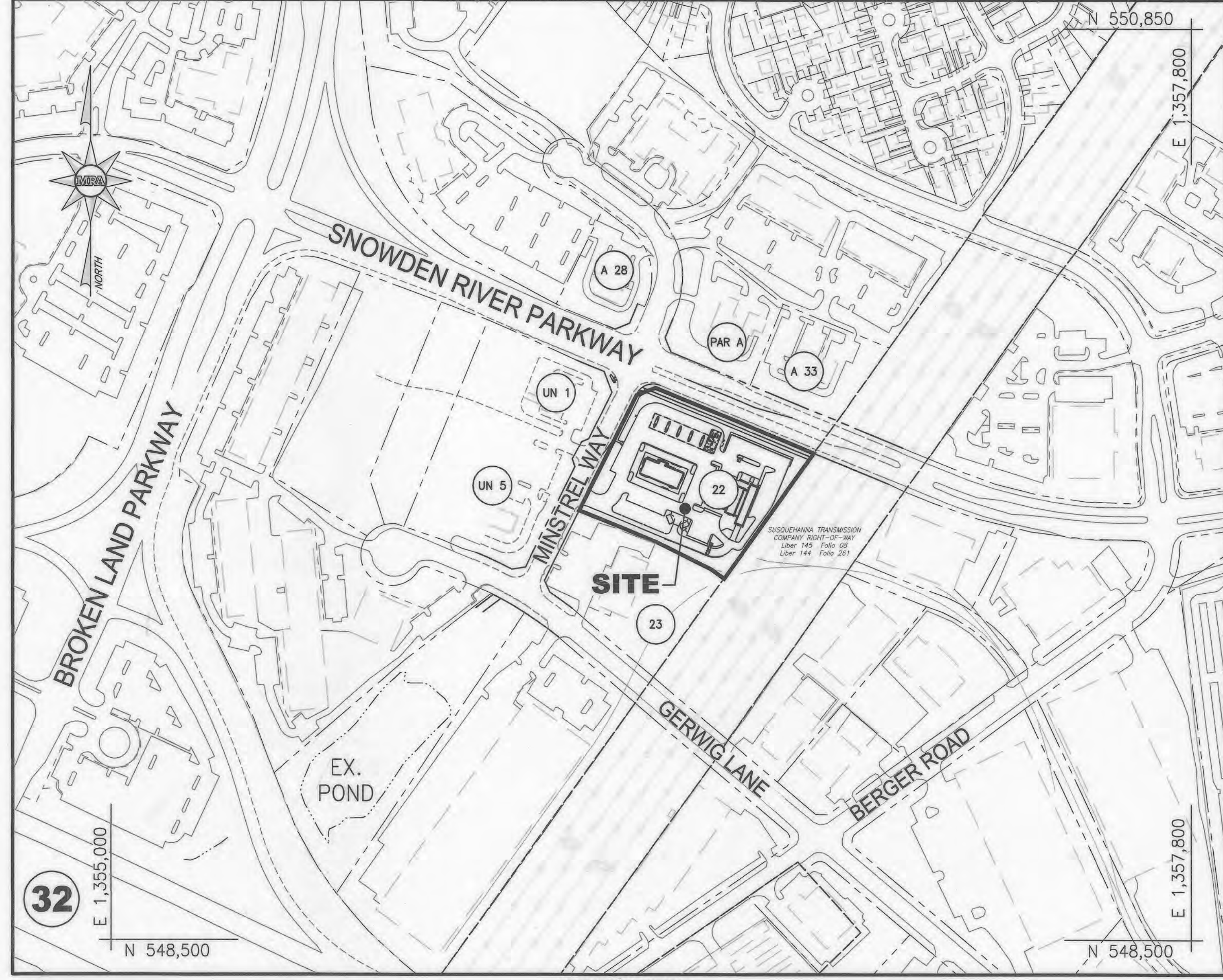
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 9-25-19
 DATE

APPROVED: PLANNING BOARD HOWARD COUNTY
 Chief, Division of Land Development
 10-09-19
 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWER
 9/25/2019
 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWER
 9/25/2019
 DATE

HOWARD SCD SIGNATURE BLOCK
 THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 9/10/19
 DATE



ADDRESS CHART

TAX MAP NO.	PARCEL	LOT	ZONE	STREET ADDRESS	OWNER
16-082341	0375	22	NT - NEW TOWN	7084 MINSTREL WAY	TWO FARMS INC
16-082341	0375	22	NT - NEW TOWN	7080 MINSTREL WAY	BUILDING OWNED BY CANTON CARWASH
16-082368	0375	23	NT - NEW TOWN	9640 GERWIG LANE	TWINKIES LLC
16-218286	0529	UN 1	NT - NEW TOWN	7085 MINSTREL WAY	CHEVY CHASE BANK FSB C/O CAPITAL ONE NATIONAL ASSN
16-218324	0529	UN 5	NT - NEW TOWN	7045 MINSTREL WAY	BRE POLYGON PROPERTY OWNER LLC
16-200840	0410	A 33	NT - NEW TOWN	7102 E MINSTREL WAY	TACO BELL OF BALTIMORE INC
16-200832	0410	PAR A	NT - NEW TOWN	7100 E MINSTREL WAY	NOVA OIL LLC
16-183598	0410	A 28	NT - NEW TOWN	7125 W MINSTREL WAY	KENTUCKY FRIED CHICKEN OF CALIFORNIA INC

PERMIT INFORMATION CHART

SUBDIVISION NAME	ADDRESS	PARCEL				
EGU SUB, RSB 6A & 9A	7084 MINSTREL WAY	375				
PLAT #	LIBER / FOLIO	GRID	ZONING	TAX MAP NO.	ELECT. DIST.	CENSUS TRACT
25100-25109	14229 / 59	9	NT	42	6	6067.03

HOWARD SCD SIGNATURE BLOCK
 THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 9/10/19
 DATE

LOCATION PLAN 1"=200'

SHEET INDEX

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2. EXISTING CONDITIONS AND DEMOLITION PLAN	22. LANDSCAPE DETAILS
3. SITE PLAN	23. ROYAL FARMS STORE 186 FRONT ELEVATION/RIGHT SIDE
4. SITE GRADING PLAN	24. ROYAL FARMS STORE 186 REAR ELEVATION/LEFT SIDE
5. SITE UTILITY PLAN AND STRUCTURE SCHEDULES	25. ROYAL FARMS STORE 186 FUEL CANOPY AND FUEL SIGN ELEVATIONS
6. STORM DRAIN PROFILES AND DA MAP	26. ROYAL FARMS STORE 186 SIGNS AND DUMPSTER ELEVATIONS
7. WATER AND SANITARY SEWER PROFILES	27. CANTON CAR WASH BUILDING ELEVATIONS
8. SITE DETAILS	28. CANTON CAR WASH BUILDING ELEVATIONS
9. SITE DETAILS	29. CANTON CAR WASH DETAILING SHELTER & VAC ELEVATIONS
10. EROSION & SEDIMENT CONTROL PLAN EXISTING CONDITIONS	30. CANTON CAR WASH VACUUMS, PAY SHELTER & DUMPSTER ELEVATIONS
11. EROSION & SEDIMENT CONTROL PLAN PROPOSED CONDITIONS	31. CANTON CAR WASH SIGN ELEVATIONS
12. EROSION & SEDIMENT CONTROL PLAN DRAINAGE AREA MAPS	32. RETAINING WALL PLAN & ELEVATION
13. EROSION & SEDIMENT CONTROL DETAILS	33. RETAINING WALL SECTIONS & DETAILS
14. EROSION & SEDIMENT CONTROL NOTES	34. MAINTENANCE OF TRAFFIC DETAILS AND ROAD DETAILS
15. STORMWATER MANAGEMENT DRAINAGE AREA MAPS	35. MINSTREL WAY AND SNOWDEN RIVER PARKWAY ROAD PLAN
16. STORMWATER MANAGEMENT NOTES	36. MINSTREL WAY AND SNOWDEN RIVER PARKWAY ROAD PROFILES
17. STORMWATER MANAGEMENT PLAN	37. MINSTREL WAY ROADWAY CROSS SECTIONS
18. STORMWATER MANAGEMENT PROFILES	38. SNOWDEN RIVER PARKWAY ROADWAY CROSS SECTIONS
19. GEOTECHNICAL BORINGS	39. TRAFFIC SIGNAL PLAN - 1
20. GEOTECHNICAL BORINGS	40. TRAFFIC SIGNAL PLAN - 2

ASBUILT 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 ASBUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS. I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 1/13/2024.

Michael Conley 3-1-23
 SIGNATURE DATE

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1981) VERTICAL NAVD 88

LEGEND

---	EX. ADJACENT PROPERTY LINE
---	EX. PROPERTY LINE
---	EX. RIGHT OF WAY
---	EX. EDGE OF PAVEMENT
---	EX. CURB AND GUTTER
---	EX. CONCRETE WALK
---	EX. OVER HEAD UTILITIES
---	EX. UTILITY POLE
---	EX. BUILDING/STRUCTURE
---	PROP. CONCRETE WALK
---	PROP. CURB & GUTTER
---	PROP. BUILDING/STRUCTURE

VICINITY MAP

1"=2,000'

BM #42BM2
 *N 550188.45 E 1356399.56
 NAVD 88 ELEV. = 103.983

BM #42BMT8
 *N 549576.24 E 1357309.56
 NAVD 88 ELEV. = 104.831

DESCRIPTION: BOX IN CONC. WALK LOCATED ON WESTERN SIDE OF MINSTREL WAY BY KFC RESTAURANT

DESCRIPTION: 3/4 REBAR/ALUM CAP LOCATED APPROX 300' N OF BERGER ROAD ON SOUTH SIDE OF SNOWDEN RIVER PKWY

COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE No. 21006237 MAP No. 33, GRID C6

SITE ANALYSIS DATA CHART

1. TOTAL PROJECT AREA	160,711 SF / 3.689 ACRES
2. AREA OF PLANNED SUBDIVISION	168,098 SF / 3.81 ACRES
3. LIMIT OF DISTURBANCE	178,596 SF / 4.10 ACRES
4. PRESENT ZONING	NT ZONE - EMPLOYMENT CENTER LAND USE-INDUSTRIAL LAND USE AREAS
5. PROPOSED USE	GASOLINE SERVICE STATION, CAR WASH, CONVENIENCE STORE AND CARRY OUT RESTAURANT
6. PROPOSED FLOOR SPACE	ROYAL FARMS STORE = 2,079 SF CONVENIENCE STORE = 2,092 SF CARRY OUT RESTAURANT = 478 SF RESTROOM/REGISTER = 478 SF
7. MAX. NUMBER OF EMPLOYEES	ROYAL FARMS = 6 (PER SHIFT) CANTON CAR WASH = 15 (PER SHIFT)
8. PARKING (PER FDP-55)	REQUIRED PROVIDED CANTON CAR WASH (1SPACE/EMPLOYEE) 15 17 CANTON CAR WASH (1 SPACE/VAC SPACE) 23 23 ROYAL FARMS (5 SPACES/1000 SF) 24 105 TOTAL 62 105

**ADDITIONAL PARKING IS PROVIDED PER ROYAL FARMS DESIGN GUIDELINES.

REQUIRED	PROVIDED
15	25

STACKING (CANTON CAR WASH)
 (PER HOWARD COUNTY DESIGN MANUAL)

PROPOSED	MAXIMUM
0.36 AC.	1.84 AC.
(9.75%)	(50%)

9. LOT COVERAGE (BUILDING COVERAGE PER FDP-55)

10. DPZ FILE REFERENCES
 F69-26; SDP-71-70; F01-51; FDP-55 (16/118); F-14-018; ECP-13-002; SDP-14-013; WP-14-080; WP-15-058; WP-15-058 (RECONSTRUCTED); WP-16-017; WP-18-047; WP-19-104 PUBLIC (24-4478-0, C-315-W&S)

11. SANITARY SEWER / WATER SERVICE

12. EX. STEEP SLOPES >15 0.02 AC.

13. EX. IMPERVIOUS AREA (WITHIN LOD) 3.25 AC.

14. EX. GREEN OPEN AREA 0.85 AC.

15. PROP. IMPERVIOUS AREA (WITHIN LOD) 2.71 AC.

16. THERE ARE NO 100-YEAR FLOODPLAIN, NON-TIDAL WETLANDS, 25-FOOT WETLANDS BUFFER, STREAMS, OR STREAMBANK BUFFERS ON THE SUBJECT SITE PROPERTY.

17. THERE ARE NO CSX EASEMENTS ON THE SUBJECT PROPERTY.

18. PERCENT OF SITE LANDSCAPED
 REQUIRED = 3.81 ACRES X 20% = 0.76 ACRES
 PROVIDED = 0.80 ACRES

MINIMUM LOT AREA 40,000 SF
 ROYAL FARMS FLOOR AREA 4,849 SF
 CANTON CAR WASH FLOOR AREA 8,688 SF
 PARKING AREA 19,842 SF
 LOADING AREA 1,560 SF
 STACKING AREA 6,228 SF
 TOTAL MINIMUM LOT AREA 80,943 SF
 EXISTING LOT AREA 166,098 SF

PROFESSIONAL CERTIFICATION

I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2024.

AS-BUILT
ESC 1 OF 6

MORRIS & RITCHE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
 TOWSON, MARYLAND 21286
 (410) 821-1690
 FAX: (410) 821-1748
 MRA@GTA.COM

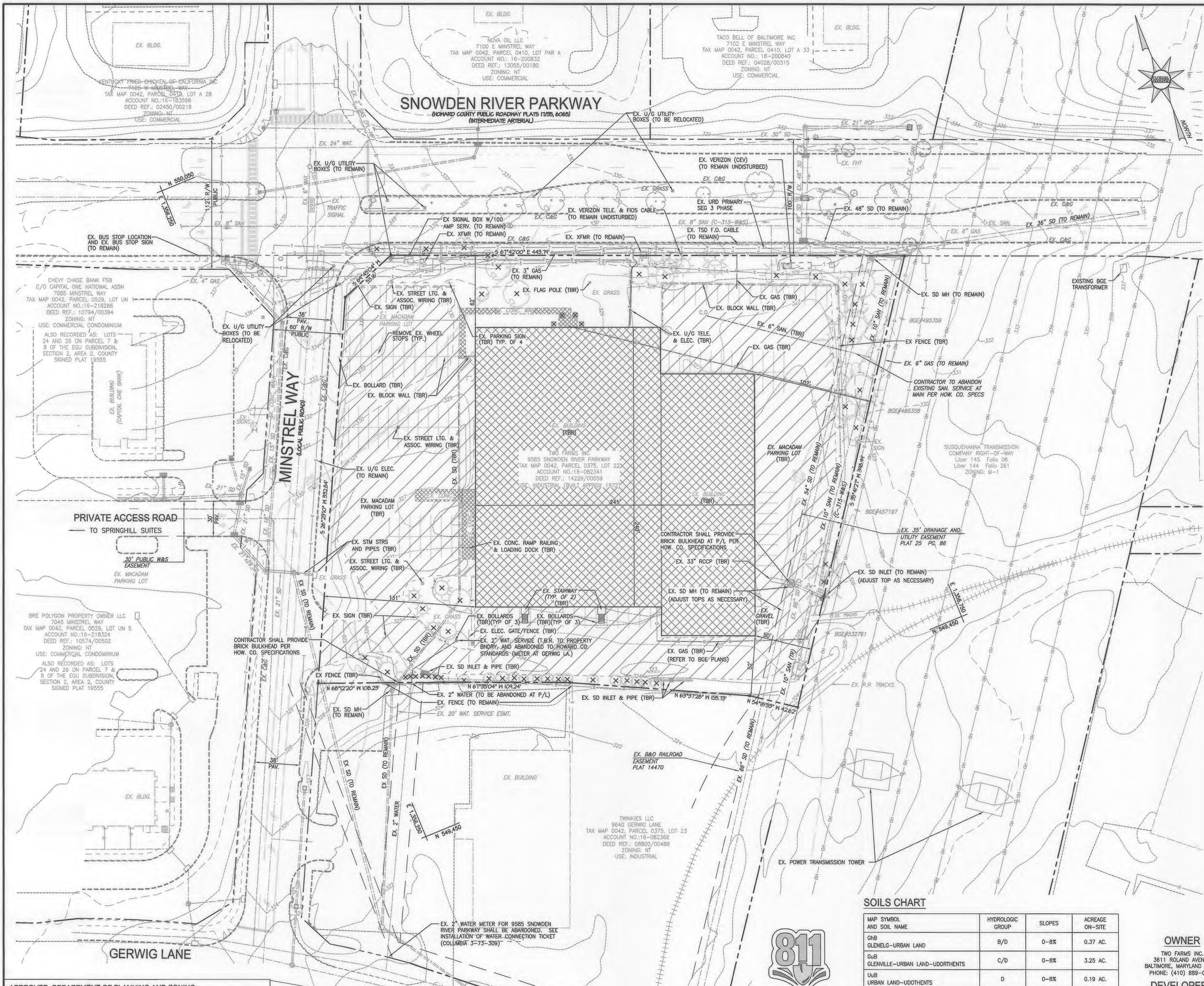
SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH

COVER SHEET

LIBER 14229 FOLIO 00559 PLAT NO. 14470
 ZONED NT - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.
04/22/2020	REVISE PROPOSED FLOOR SPACE FOR CARWASH BUILDINGS REVISE GENERAL NOTES #15, ADD STORMWATER MANAGEMENT NOTES, REMOVE MRA COPYRIGHT NOTE	17297
01/13/2024	AS-BUILT	17297

DATE: 06/26/2019
 DRAWN BY: TMS
 DESIGN BY: TMS
 REVIEW BY: MGC
 SHEET: 01 OF 40



SITE DEMOLITION NOTES

- CONTRACTOR SHALL REFER TO THE "REPORT OF LIMITED SUBSURFACE EXPLORATION AND ENVIRONMENTAL CONSULTING SERVICES", DATED JANUARY 18, 2012, "SURVEY REPORT FOR ASBESTOS-CONTAINING BUILDING MATERIALS AT COMMERCIAL BUILDING STRUCTURE LOCATED AT 9585 SNOWDEN RIVER PARKWAY COLUMBIA, MARYLAND", DATED JANUARY 26, 2012, "REPORT OF PHASE 1 ENVIRONMENTAL SITE ASSESSMENT SERVICES", DATED JANUARY 10, 2012, PREPARED BY JOHN D. HYNES & ASSOCIATES, INC. FOR BID AND CONSTRUCTION PURPOSES. ALL RECOMMENDATIONS MADE IN THE REPORT SHALL BE CONSIDERED PART OF THE PROJECT'S SCOPE OF WORK.
- THE CONTRACTOR SHALL SECURE ALL REQUIRED PERMITS AND APPLICABLE REGULATIONS FOR HIS DEMOLITION AND DISPOSAL OF ANY DEMOLITION MATERIAL TO BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL POST BONDS AND PAY PERMIT FEES AS REQUIRED TO ALL INVOLVED AGENCIES.
- PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES, THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES TO VERIFY THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL "MISS UTILITY" AT 1-800-357-7777 (OR 811), 72 HOURS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL STABILIZE THE SITE AND KEEP EROSION CONTROL MEASURES IN PLACE UNTIL THE COMPLETION OF WORK OR DEEMED NECESSARY BY HOWARD COUNTY INSPECTION. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS AND FOR INSTALLATION OF ANY NEW EROSION AND SEDIMENTATION CONTROLS AS PER THE EROSION AND SEDIMENTATION CONTROL PLAN, AT THAT TIME.
- THE CONTRACTOR SHALL PREPARE ALL MANIFEST DOCUMENTS AS REQUIRED PRIOR TO COMMENCEMENT OF DEMOLITION.
- ALL BUILDINGS, INCLUDING FOUNDATION WALLS, FLOOR SLABS, AND FOOTINGS INDICATED ON THIS PLAN ARE TO BE REMOVED FROM SITE. THE CONTRACTOR SHALL SECURE ANY PERMITS, PAY ALL FEES AND PERFORM CLEARING AND GRUBBING AND DEBRIS REMOVAL PRIOR TO COMMENCEMENT OF GRADING OPERATIONS.
- REMOVAL AND DISPOSAL OF ANY SIDEWALKS, FENCES, STAIRS, WALLS, BENCHES AND RUBBISH BEING REMOVED FROM THE SITE AREA IN AN APPROVED LANDFILL. THE CONTRACTOR IS RESPONSIBLE TO SECURE ALL NECESSARY PERMITS FOR DISPOSAL OF CONSTRUCTION MATERIALS.
- BACKFILL DEPRESSIONS, FOUNDATION HOLES AND REMOVED DRIVEWAY AREAS WITH APPROVED SOIL MATERIAL AND COMPACT, FERTILIZE, SEED AND MULCH DISTURBED AREAS NOT SUBJECT TO FURTHER SITE CONSTRUCTION. EMPLOY WATERING EQUIPMENT FOR DUST CONTROL.
- IF ASBESTOS OR HAZARDOUS MATERIAL ARE FOUND ON SITE, THEY MUST BE REMOVED BY A LICENSED HAZARDOUS MATERIAL CONTRACTOR.
- A COPY OF THE "EROSION AND SEDIMENT CONTROL PLAN" SHALL BE ON-SITE THROUGHOUT THE ENTIRE DEMOLITION AND CONSTRUCTION PHASES. THE CONTRACTOR SHALL CONTACT HOWARD CO. SCD BY CALLING (410) 313-0850 ONE (1) WEEK PRIOR TO THE START OF ANY DEMOLITION AND/OR CLEARING AND GRUBBING ACTIVITIES.
- UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE, LOCATED FROM FIELD SURVEYS OR UTILITY COMPANY RECORDS. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITY LINES BEFORE THE START OF DEMOLITION.
- THE CONTRACTOR MUST SUBMIT DISCONNECT NOTIFICATION TO HOWARD CO. PUBLIC WORKS AND ALL ASSOCIATED UTILITY COMPANIES RELATING TO THIS SITE AT LEAST THREE (3) WEEKS PRIOR TO BEGINNING DEMOLITION.
- EXISTING WATER SERVICES SHALL BE DISCONNECTED AND CAPPED AT THE MAIN IN ACCORDANCE WITH THE REQUIREMENTS OF HOWARD COUNTY. COORDINATE WITH UTILITY DEPT. 48 HOURS PRIOR TO START OF WATER SERVICE CONNECTIONS. ALL SERVICES ARE TO BE DISCONNECTED AT THE MAIN.
- EXISTING SEWER LATERALS SHALL BE PLUGGED WITH NON-SHRINK GROUT AT CURBLINE. REMOVE EXISTING ON-SITE SEWER SERVICE LATERALS. CONTACT HOWARD CO. UTILITY DEPT. SEWER DEPT. 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION AND/OR DISCONNECTIONS OR AS DESIGNATED ON PLANS.
- DOMESTIC GAS SERVICES SHALL BE CAPPED AND SERVICE LINES PURGED OF RESIDUAL GAS IN ACCORDANCE WITH BALTIMORE GAS AND ELECTRIC COMPANY. WORK TO BE COORDINATED AND PAID FOR BY THE CONTRACTOR. REMOVE EXISTING SERVICE PIPING ON SITE.
- THE CONTRACTOR SHALL CUT AND PLUG, OR ARRANGE FOR THE APPROPRIATE UTILITY COMPANY TO CUT AND PLUG ALL SERVICE PIPING AT THE STREET LINE OR MAIN. AS REQUIRED BY LOCAL UTILITY COMPANY AND/OR BALTIMORE COUNTY, ALL SERVICES MAY NOT BE SHOWN ON THIS PLAN. THE CONTRACTOR SHALL INVESTIGATE THE SITE PRIOR TO BIDDING TO DETERMINE THE EXTENT OF SERVICE PIPING TO BE REMOVED, CUT, OR PLUGGED.
- THE CONTRACTOR SHALL PROTECT ALL IRON PINS, MONUMENTS, AND PROPERTY CORNERS THAT WILL NOT BE REMOVED AND SHALL BE RESET BY A LICENSED LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
- OSHA REGULATIONS MAKE IT UNLAWFUL TO OPERATE CRANES, BOOMS, HOISTS, ETC. WITHIN TEN (10) FEET OF ANY ELECTRIC LINE UNDER (50KV). IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO POWER LINES (50KV), CONTACT THE POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR SECURING ALL PERMITS FOR DEMOLITION FROM HOWARD COUNTY AND MUST FURNISH THE REQUIRED MATERIAL AND PAY ALL FEES.
- PRIOR TO DEMOLITION, THE APPLICANT MUST PROVIDE CERTIFICATION, BY A PERSON LICENSED AS A PESTICIDE APPLICATOR BY THE MARYLAND STATE DEPARTMENT OF AGRICULTURE, THAT ALL AREAS OF THE BUILDING, STRUCTURE, AND LOT ARE FREE OF RODENT INFESTATION.
- DEMOLITION OF EXISTING PAVEMENT, SIDEWALK, SITE FEATURES, AND UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY CAN ONLY OCCUR ONCE HOWARD COUNTY PERMITS HAVE BEEN ISSUED.
- ALL EXISTING UTILITIES ALONG MINNSTREL WAY AND SNOWDEN RIVER PARKWAY INCLUDING GAS, ELECTRIC, CABLE, FIBER OPTIC CABLE, TELEPHONE, AND ALL ASSOCIATED EQUIPMENT AND APPURTENANCES TO REMAIN UNDISTURBED AND OPERATIONAL THROUGHOUT DEMOLITION ACTIVITIES. ANY COSTS ASSOCIATED WITH DAMAGE TO EXISTING UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
- CONTRACTOR SHALL REFER TO BGE DESIGN DRAWINGS FOR ABANDONMENT, RELOCATION, AND/OR REMOVAL OF EXISTING GAS AND ELECTRIC SERVICES.
- CONTRACTOR SHALL ONLY REMOVE EXISTING CURB WITHIN MINNSTREL WAY WHEN ACTIVELY CONSTRUCTING PROPOSED ROAD IMPROVEMENTS.
- THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT WHICH IS VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

LEGEND

- LIMIT OF DISTURBANCE
- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. RIGHT OF WAY LINE
- EX. BUILDING
- EX. EDGE OF CONCRETE
- EX. CURB
- EX. FENCE
- EX. WOODS LINE
- PROP. WOODS LINE
- SOILS DIVIDE
- EX. SANITARY SEWER
- EX. STORM DRAIN
- EX. WATER
- EX. UNDERGROUND CABLE
- EX. UNDERGROUND TELEPHONE
- EX. UNDERGROUND ELECTRIC
- EX. OVERHEAD LINE
- EX. LIGHT POLE
- EX. UTILITY POLE
- EX. GAS
- EX. UTILITY TO BE RAZED
- EX. CURB TO BE RAZED
- EX. TREE OR SHRUB TO BE REMOVED
- (TBR) TO BE REMOVED
- (TR) TO REMAIN
- SAW CUT
- EX. PAVING TO BE REMOVED *
- EX. STRUCTURE TO BE REMOVED *
- EX. CONCRETE TO BE REMOVED *
- * REFER TO GEOTECHNICAL REPORT FOR EX. PAVEMENT AND CONCRETE SECTIONS.

PROFESSIONAL CERTIFICATION

I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2026-1022.

MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
 TOWSON, MARYLAND 21286
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 FAX: (410) 821-1748
 MRA@GTA.COM
 Copyright 2019 Morris & Ritchie Associates, Inc.

SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH

EXISTING CONDITIONS AND DEMOLITION PLAN

LIBER 14229 FOLIO 00059 PLAT NO. 14470
 ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.
01/13/2022	NO ASB014T	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY: THS
		DESIGN BY: THS
		REVIEW BY: MGC
		SHEET: 02 OF 40

SOILS CHART

MAP SYMBOL AND SOIL NAME	HYDROLOGIC GROUP	SLOPES	ACREAGE ON-SITE
G8B GLENELG-URBAN LAND	B/D	0-8%	0.37 AC.
G8B GLENVILLE-URBAN LAND-UDORTHERENTS	C/D	0-8%	3.25 AC.
U8B URBAN LAND-UDORTHERENTS	D	0-8%	0.19 AC.

OWNER

TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

DEVELOPERS

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 3611 ROLAND AVENUE
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 ATTN: JACK WHISTED
 PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9-25-19

[Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-08-19

[Signature]
 DIRECTOR
 DATE: 10-15-19

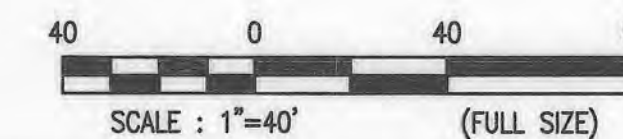
APPROVED
 PLANNING BOARD HOWARD COUNTY

DATE: 3/17/19

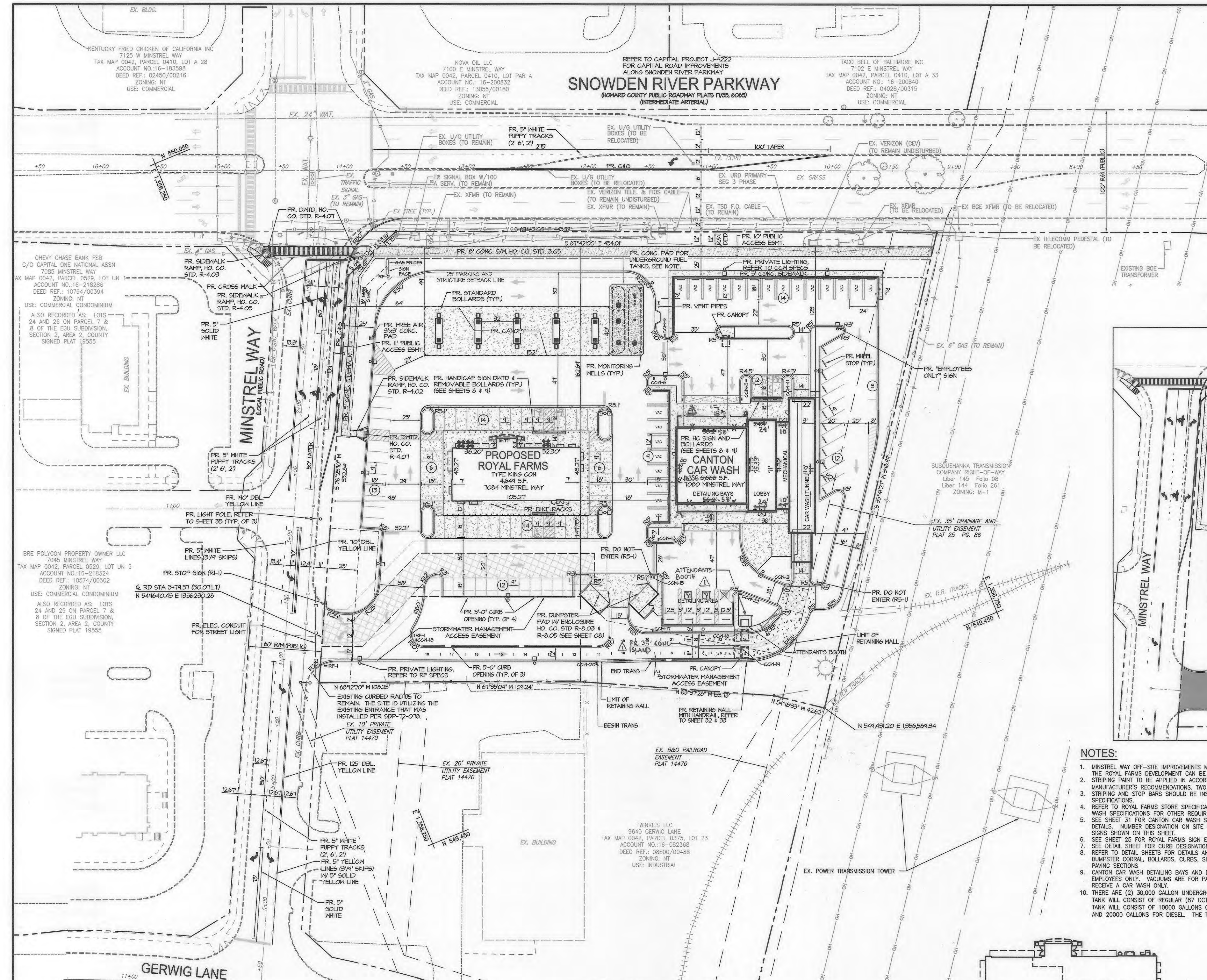
PLAN
 SCALE 1"=40'

811
 Know what's below.
 Call before you dig.
 PROTECT YOURSELF, ONE THREE HOURS WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTINANT.



DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1981) VERTICAL NAVD 88



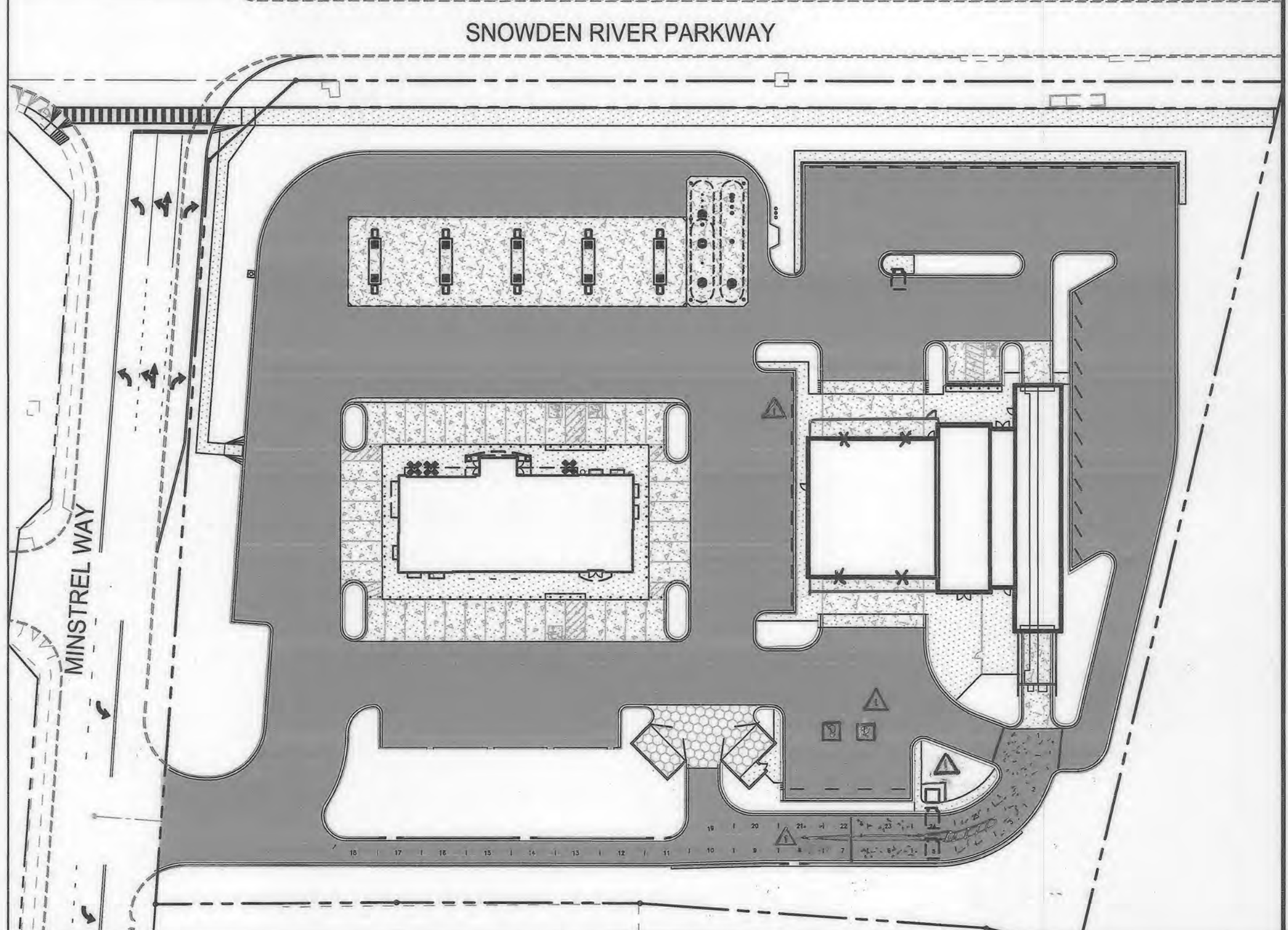
SITE PLAN LEGEND

EXISTING	PROPOSED
EX. EDGE OF PAVEMENT LIMIT OF DISTURBANCE
EX. CURB AND GUTTER	PR. COLLECTOR CURB & GUTTER (REFER TO SHEET 9 FOR DTL.)
EX. CONCRETE WALK	PR. SPILL CURB & GUTTER (REFER TO SHEET 9 FOR DTL.)
EX. C/L ROAD	PR. BUILDING
EX. ADJACENT PRERTY LINE	PR. CANOPY
EX. PRERTY LINE	PR. CONCRETE WALK
EX. RIGHT OF WAY	PR. STORMWATER MANAGEMENT EASEMENT
EX. UTILITY EASEMENT	PR. DRAINAGE & UTILITY EASEMENT
EX. LIGHT POLE	PR. PUBLIC ACCESS EASEMENT
EX. UTILITY HANDBOX/PEDESTAL	PR. EASEMENT
EX. UTILITY POLE	PR. TRAFFIC FLOW ARROWS
EX. SIGN	PR. STRIPING
EX. BOLLARD	PR. STOP BAR
EX. EVERGREEN TREE	PR. SIGN FOR CANTON CAR WASH
EX. DECIDUOUS TREE	PR. SIGN FOR ROYAL FARMS

PR. PAVEMENT SECTION LEGEND

REFER TO SHEET 8 FOR PAVING SECTIONS

ASPHALT PAVING SECTION	DUMPSTER PAD #8 CONCRETE PAVING SECTION
TYPICAL 6" CONCRETE PAVING SECTION	CONCRETE 5" SIDEWALK



- ### NOTES:
- MINSTREL WAY OFF-SITE IMPROVEMENTS MUST BE COMPLETED BEFORE THE ROYAL FARMS DEVELOPMENT CAN BE OPENED.
 - STRIPING PAINT TO BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. TWO COATS REQ'D.
 - STRIPING AND STOP BARS SHOULD BE INSTALLED PER M.U.T.C.D SPECIFICATIONS.
 - REFER TO ROYAL FARMS STORE SPECIFICATIONS AND CANTON CAR WASH SPECIFICATIONS FOR OTHER REQUIREMENTS.
 - SEE SHEET 31 FOR CANTON CAR WASH SIGN ELEVATIONS SPECS AND DETAILS. NUMBER DESIGNATION ON SITE PLAN CORRESPONDS WITH SIGNS SHOWN ON THIS SHEET.
 - SEE SHEET 25 FOR ROYAL FARMS SIGN ELEVATIONS.
 - SEE DETAIL SHEET FOR CURB DESIGNATIONS
 - REFER TO DETAIL SHEETS FOR DETAILS AND SPECIFICATIONS FOR DUMPSTER CORRAL, BOLLARDS, CURBS, SIDEWALKS, PARKING AREAS, PAVING SECTIONS
 - CANTON CAR WASH DETAILING BAYS AND DETAIL AREA ARE FOR EMPLOYEES ONLY. VACUUMS ARE FOR PAYING CUSTOMERS WHO RECEIVE A CAR WASH ONLY.
 - THERE ARE (2) 30,000 GALLON UNDERGROUND FUEL TANKS. ONE TANK WILL CONSIST OF REGULAR (87 OCTANE) GAS AND THE OTHER TANK WILL CONSIST OF 10000 GALLONS OF SUPER (93 OCTANE) GAS AND 20000 GALLONS FOR DIESEL. THE TANKS HAVE 4 COVER.

PAVEMENT DESIGNATION PLAN

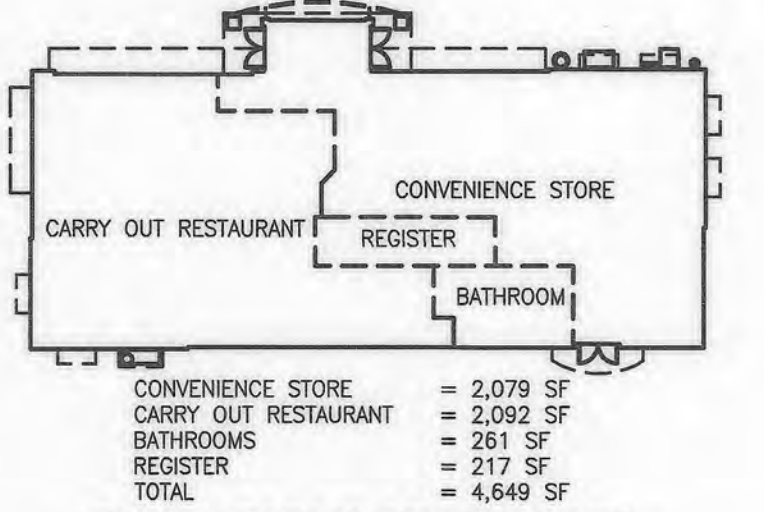
SCALE: 1"=50'

NOTE:
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MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
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(410) 821-1690
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MRA@GTA.COM
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DATE	REVISIONS	JOB NO.
04/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, REVISE BUILDING DIMENSIONS.	17297
	ADD CONCRETE MEDIAN, UPDATE ADA VAC SPACE, ADD CONCRETE AT	AS SHOWN
	CARWASH INGRESS, ATTENDANT BOOTH, REMOVE MRA COPYRIGHT INFO.	06/26/2019
01/13/2022	AS SHOWN	THIS
		THIS
		MGC
		03 OF 40



ROYAL FARMS STORE INSET

CONVENIENCE STORE	= 2,079 SF
CARRY OUT RESTAURANT	= 2,092 SF
BATHROOMS	= 261 SF
REGISTER	= 217 SF
TOTAL	= 4,649 SF

SCALE: 1" = 30'
SCALE: 1"=40' (FULL SIZE)

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 9.25.19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 10.08.19
CHIEF, DIVISION OF LAND DEVELOPMENT

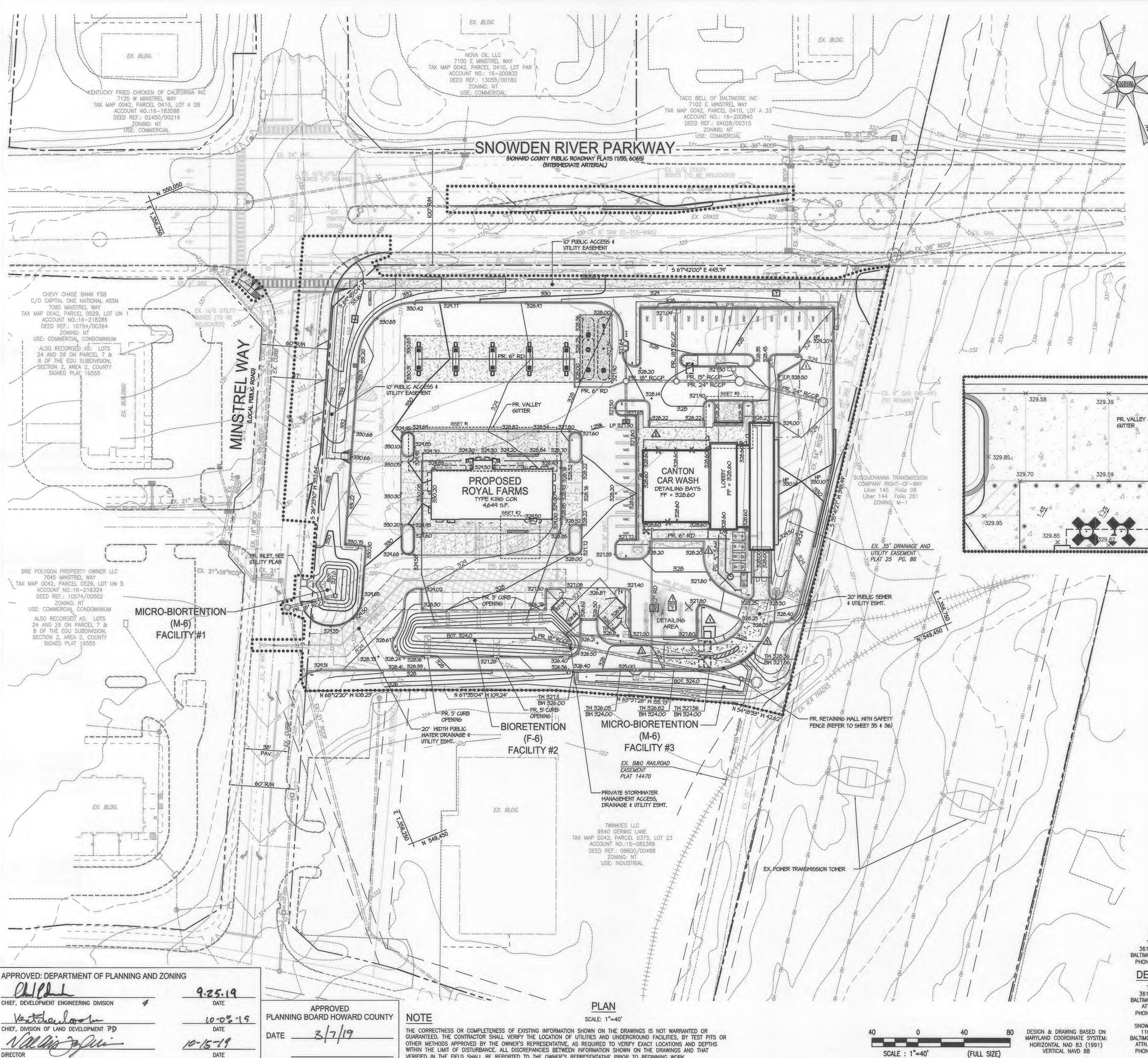
[Signature] 10-15-19
DIRECTOR

APPROVED
PLANNING BOARD HOWARD COUNTY

DATE 3/7/19

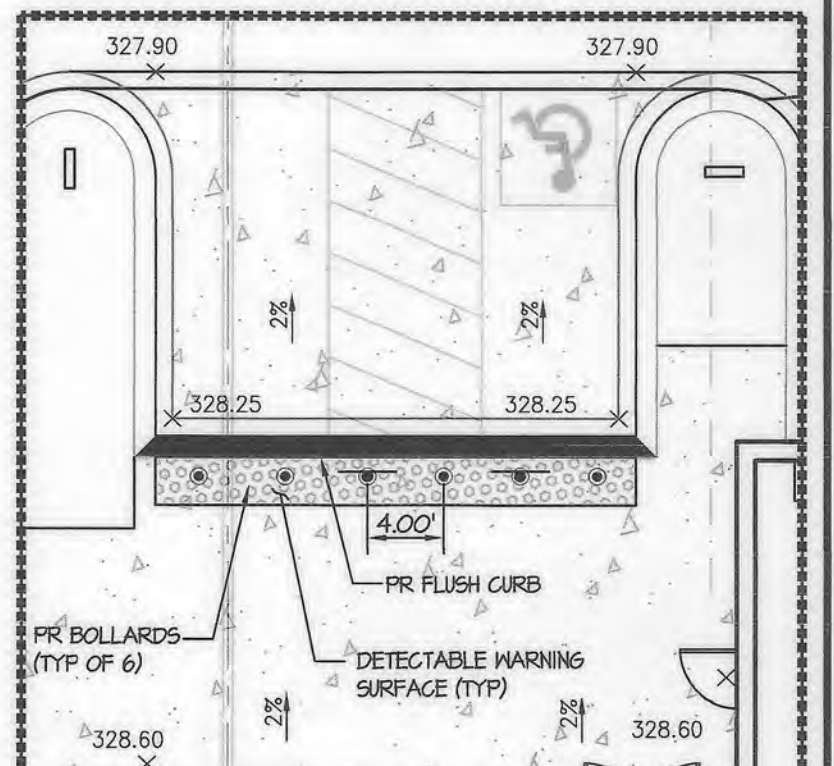
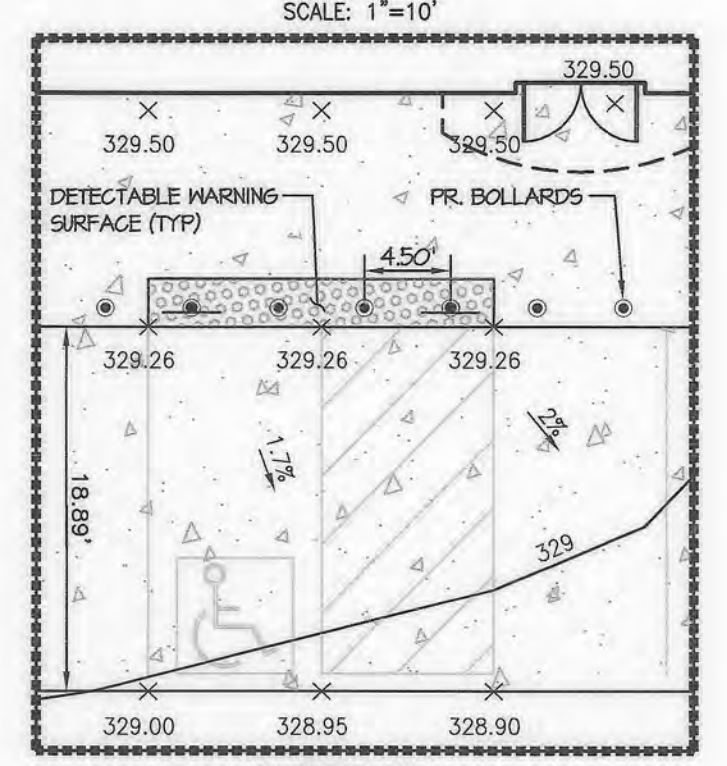
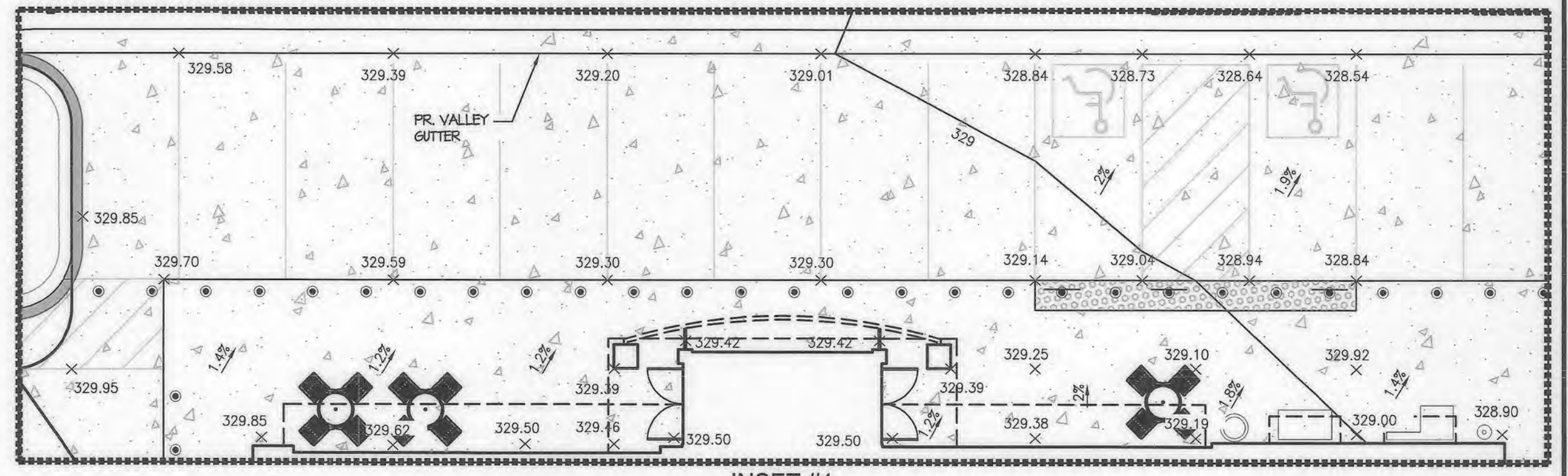
CONCRETE NOTE
THE CONTRACTOR SHALL VERIFY CONCRETE FORM PLACEMENT TO ASSURE COMPLIANCE WITH CURRENT LOCAL AND STATE ADA AS WELL AS BUILDING CODES. ADA INSPECTION SHALL BE REQUIRED PRIOR TO POURING CONCRETE. THE CONTRACTOR ACCEPTS RESPONSIBILITY FOR MEETING ALL APPLICABLE HANDICAP SLOPE AND DISTANCE REQUIREMENTS AS WELL AS OTHER REQUIREMENTS AS STATED IN THE APPLICABLE CODES.

ANY DISCREPANCIES FOUND SHOULD BE BROUGHT TO THE SITE ENGINEER'S ATTENTION BEFORE ANY CONCRETE IS PLACED.



LEGEND

EXISTING	PROPOSED
.....	PR. EASEMENT
--- 328 ---	PR. SWM ESMT AREA
--- 330 ---	PR. UTILITY ESMT AREA
EX. SPOT SHOT	PR. PUBLIC ACCESS ESMT
EX. EDGE OF PAVEMENT	PR. 1 FT. CONTOUR
EX. CURB AND GUTTER	PR. 2 FT. CONTOUR
EX. CONCRETE WALK	PR. 10 FT. CONTOUR
EX. C/L ROAD	PR. SPOT SHOT
EX. ADJACENT PRERTY LINE	PR. STD. SLOPE C&G
EX. PRERTY LINE	PR. REVERSE SLOPE C&G
EX. RIGHT OF WAY	PR. BUILDING
EX. UTILITY EASEMENT	PR. CONCRETE WALK
EX. WATER LINE	PR. WATER / SERVICE
EX. SANITARY LINE	PR. SEWER / SERVICE
EX. STORM DRAIN LINE	PR. STORM DRAIN
EX. FIBER OPTIC CABLE	EX. EVERGREEN TREE
EX. URD PRIMARY SEC 3 PHASE	EX. DECIDUOUS TREE
EX. VERIZON LINE	
EX. GAS	
EX. ELECTRIC	
EX. OVER HEAD UTILITIES	
EX. LIGHT POLE	
EX. U/G UTILITY HANDBOX	
EX. UTILITY POLE	
EX. SIGN	
EX. BOLLARD	
EX. VEGETATION/TREE LINE	
EX. BUILDING/STRUCTURE	



PROFESSIONAL CERTIFICATION

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MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
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 MRA@GTA.COM

SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH

SITE GRADING PLAN

LIBER 14229 FOLIO 00069 PLAT NO. 14470
 ZONED NT - TAX MAP 42 - GRID 9 - PARCEL 376 - LOT 22
 TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.
09/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN, UPDATE ADA VAC. SPACE, ADD CONCRETE AT CARWASH INGRESS, ATTENDANT BOOTH, GAS, SANITARY SERVICE, ROOF DRAIN CONNECTIONS, ADD CONCRETE AT CARWASH EGRESS, REMOVE MRA COPYRIGHT INFO.	17297
01/13/2022	NO ASBOLUT	AS SHOWN

DATE: 06/26/2019
 DRAWN BY: THIS
 DESIGN BY: THIS
 REVIEW BY: MGC
 SHEET: 04 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chipp 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Verthelsson 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT PD

Valdivia 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY

DATE: 3/7/19

NOTE

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OWNER

TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

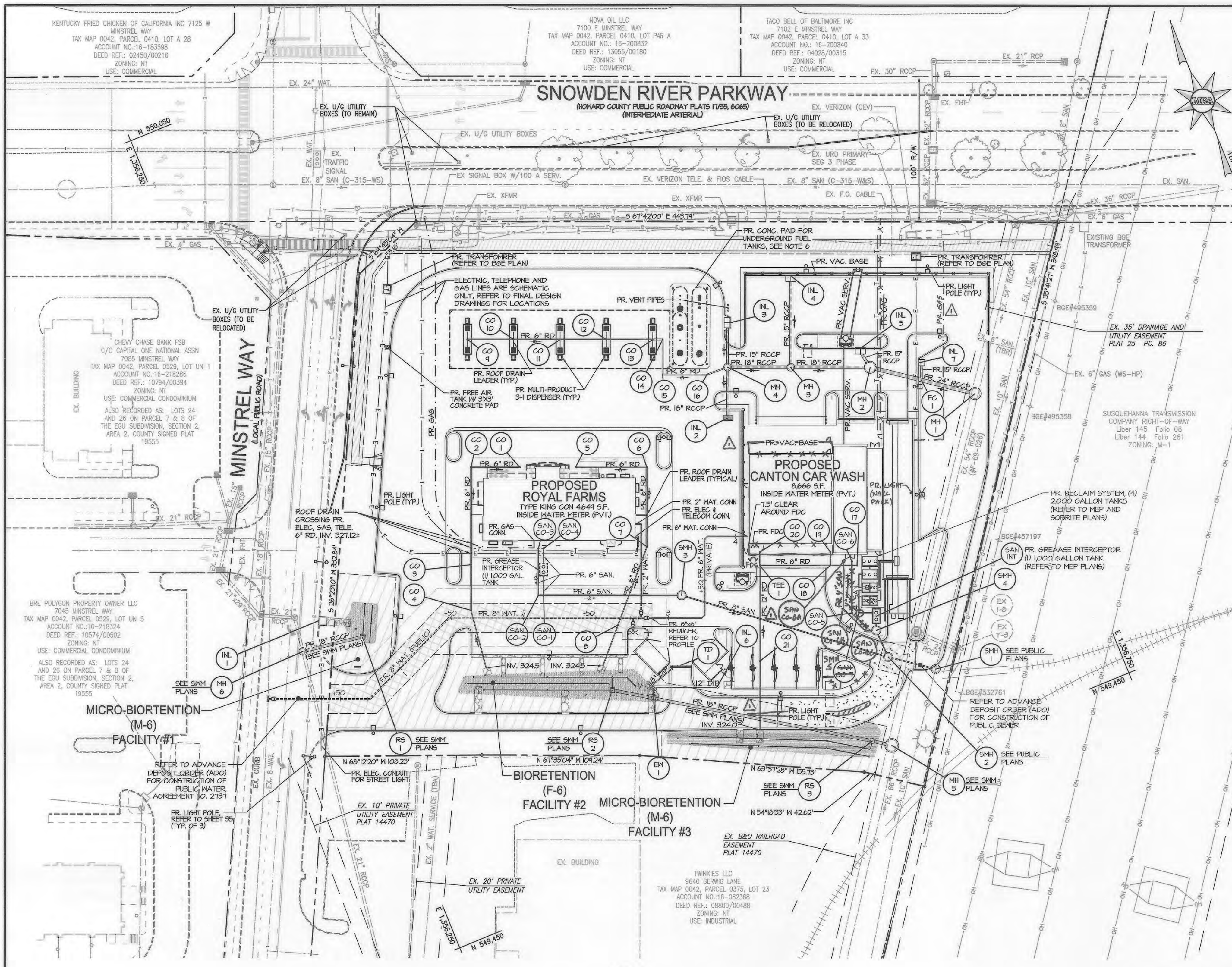
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 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

DESIGN & DRAWING BASED ON
 HORIZONTAL NAD 83 (1991)
 VERTICAL NAVD 88

SCALE: 1"=40' (FULL SIZE)



PLAN
SCALE: 1"=40'

No.	TYPE	SIZE	INV. OUT	TOP EL.	COORDINATE	REMARKS
CO-1	CLEAN OUT	6"	327.55	329.50	N 549,740.09 E 1,356,413.78	SCHEDULE 40 PVC
CO-2	CLEAN OUT	6"	327.38	329.90	N 549,750.94 E 1,356,382.45	SCHEDULE 40 PVC
CO-3	CLEAN OUT	6"	327.00	329.60	N 549,690.81 E 1,356,356.97	SCHEDULE 40 PVC
CO-4	CLEAN OUT	6"	326.56	329.36	N 549,661.82 E 1,356,345.08	SCHEDULE 40 PVC
CO-5	CLEAN OUT	6"	326.57	329.34	N 549,725.54 E 1,356,449.24	SCHEDULE 40 PVC
CO-6	CLEAN OUT	6"	325.98	328.71	N 549,706.81 E 1,356,494.91	SCHEDULE 40 PVC
CO-7	CLEAN OUT	6"	325.41	328.85	N 549,656.29 E 1,356,474.19	SCHEDULE 40 PVC
CO-8	CLEAN OUT	6"	325.07	327.65	N 549,613.91 E 1,356,443.16	SCHEDULE 40 PVC
CO-9	CLEAN OUT	6"	328.15	330.40	N 549,835.22 E 1,356,413.55	SCHEDULE 40 PVC
CO-10	CLEAN OUT	6"	327.67	329.93	N 549,823.07 E 1,356,443.16	SCHEDULE 40 PVC
CO-11	CLEAN OUT	6"	327.19	329.02	N 549,810.93 E 1,356,472.78	SCHEDULE 40 PVC
CO-12	CLEAN OUT	6"	326.71	329.02	N 549,758.79 E 1,356,502.37	SCHEDULE 40 PVC
CO-13	CLEAN OUT	6"	326.23	328.38	N 549,786.65 E 1,356,531.98	SCHEDULE 40 PVC
CO-14	CLEAN OUT	6"	326.08	328.28	N 549,783.99 E 1,356,538.45	SCHEDULE 40 PVC
CO-15	CLEAN OUT	6"	325.72	328.08	N 549,757.02 E 1,356,529.30	SCHEDULE 40 PVC
CO-16	CLEAN OUT	6"	325.25	327.83	N 549,716.67 E 1,356,557.71	SCHEDULE 40 PVC

No.	TYPE	SIZE	INV. OUT	TOP EL.	COORDINATE	REMARKS
CO-17	CLEAN OUT	6"	325.00	328.50	N 549,589.37 E 1,356,603.93	SCHEDULE 40 PVC
CO-18	CLEAN OUT	6"	324.32	328.40	N 549,596.36 E 1,356,586.89	SCHEDULE 40 PVC
CO-19	CLEAN OUT	6"	324.42	328.55	N 549,604.74 E 1,356,596.36	SCHEDULE 40 PVC
CO-20	CLEAN OUT	6"	324.90	328.55	N 549,604.74 E 1,356,596.36	SCHEDULE 40 PVC
CO-21	CLEAN OUT	6"	324.36	327.40	N 549,553.90 E 1,356,516.84	SCHEDULE 40 PVC
TEE-1	STD. TEE	12"x6"	324.83	328.40	N 549,614.91 E 1,356,541.98	SCHEDULE 40 PVC

NO.	TYPE	Q (c.f.s.)	INV. OUT	TOP ELEV. *	COORDINATE	DETAIL REFERENCE
INL-1	COS OPENING	1.55	328.63	329.87	N 549,695.17 E 1,356,245.06	SHA STD. 374.68
INL-2	DOUBLE WR INLET PRECAST	4.77	322.59	327.30	N 549,717.07 E 1,356,559.65	HOWARD COUNTY DETAIL D-4.35
INL-3	DOUBLE WR INLET PRECAST	1.61	322.71	327.64	N 549,777.04 E 1,356,585.61	HOWARD COUNTY DETAIL D-4.35
INL-4	DOUBLE WR INLET PRECAST	1.68	323.44	327.09	N 549,755.75 E 1,356,639.05	HOWARD COUNTY DETAIL D-4.35
INL-5	DOUBLE WR INLET PRECAST	1.35	321.96	327.30	N 549,725.54 E 1,356,662.71	HOWARD COUNTY DETAIL D-4.35
INL-6	24" STD. DRAIN BASIN	3.31	324.46	326.80	N 549,548.78 E 1,356,492.84	NYLOPLAST W/ DOME GRATE
INL-7	SINGLE WR INLET PRECAST	2.43	320.20	328.50	N 549,702.23 E 1,356,603.93	HOWARD COUNTY DETAIL D-4.37
TD-1	TRENCH DRAIN	1.86	324.35	VARES	N 549,571.50 E 1,356,484.82	ACO KLASSIKDRAW KS100

NO.	TYPE	SIZE	INV. OUT	TOP ELEV.	COORDINATE	DETAIL REFERENCE	
MH-1	PRECAST MANHOLE	7' LD.	54"	316.68	328.90	N 549,867.94 E 1,356,724.16	MD SHA STD. MD-384.07
MH-2	PRECAST MANHOLE	7' LD.	24"	320.22	327.60	N 549,711.97 E 1,356,664.06	HOWARD COUNTY DETAILS G-5.11, G-5.12
MH-3	PRECAST MANHOLE	4' LD.	18"	321.27	327.90	N 549,732.81 E 1,356,613.24	HOWARD COUNTY DETAILS G-5.11, G-5.12
MH-4	PRECAST MANHOLE	4' LD.	18"	321.95	327.60	N 549,732.81 E 1,356,588.86	HOWARD COUNTY DETAILS G-5.11, G-5.12
MH-5	PRECAST MANHOLE	8' LD.	66"	313.81	325.00	N 549,485.80 E 1,356,479.13	MD SHA STD. MD-384.09
MH-6	PRECAST MANHOLE	4' LD.	21"	323.40	329.82	N 549,679.86 E 1,356,724.16	HOWARD COUNTY DETAILS G-5.11, G-5.12
FC-1	FIELD CONNECTION	-	24"	319.70	-	N 549,890.50 E 1,356,693.36	HOWARD COUNTY DETAIL D-9.03
EW-1	TYPE ENDWALL	-	324.11	-	N 549,556.34 E 1,356,441.43	HOWARD COUNTY DETAIL D-5.21	

WATER AND SEWER NOTES

- PRIVATE WATER AND SEWER SHALL CONNECT TO PUBLIC WATER AND SEWER THAT IS BEING INSTALLED UNDER THE ADVANCED DEPOSIT ORDER (ADO).
 - PUBLIC WATER FROM WAT STA 0+00 TO 3+04.56, THE FIRE HYDRANT AND SANITARY SEWER FROM SMH-1 TO SMH-2 SHALL BE CONSTRUCTED UNDER THE ADVANCE DEPOSIT ORDER (ADO).
- REFERENCE NOTES**
- REFER TO AUTOCAD DRAWINGS FOR VACUUM PLANS, DETAILS AND SPECIFICATIONS.
 - REFER TO DJ ARCHITECTURE AND SOBRITE DRAWINGS FOR RECLAIM TANK DETAILS AND SPECIFICATIONS.
 - REFER TO DJ ARCHITECTURE DRAWINGS FOR MECHANICAL, ELECTRICAL AND PLUMBING PLANS, DETAILS AND SPECIFICATIONS.
 - REFER TO BELANGER CAR WASH DRAWINGS FOR TUNNEL PLANS, DETAILS AND SPECIFICATIONS.
 - REFER TO DJ ARCHITECTURE DRAWINGS FOR ARCHITECTURAL AND STRUCTURAL PLANS, DETAILS AND SPECIFICATIONS.
 - THERE ARE (2) 30,000 GALLON UNDERGROUND FUEL TANKS. ONE TANK WILL CONSIST OF REGULAR (87 OCTANE) GAS AND THE OTHER TANK WILL CONSIST OF 10000 GALLONS OF SUPER (93 OCTANE) GAS AND 20000 GALLONS FOR DIESEL. THE TANKS HAVE 4' COVER.

PROFESSIONAL CERTIFICATION

I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36291, EXPIRATION DATE: 01/13/2022.



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRA@GTA.COM
Copyright 2019 Morris & Ritchie Associates, Inc.

SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH

SITE UTILITY PLAN AND STRUCTURE SCHEDULES

DATE	REVISIONS	JOB NO.
04/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MHPAD, ADD CONCRETE AT CARWASH INGRESS, UPDATE GAS, SANITARY SERVICE, ROOF DRAIN CONNECTIONS, UPDATE STORM DRAIN CLEAN OUT SCHEDULE, UPDATE SANITARY MANHOLE & CLEAN OUT SCHEDULE, UPDATE LIGHT (WALL DRCA), UPDATE ATTENDANT BOOTH, REMOVE MEA COVERING INFORMATION.	17297
01/13/2022	NO ABSOLUT	17297

LIBER 14228 FOLIO 00058 PLAT NO. 14470
ZONED NT - TAX MAP 42 - GRID 3 - PARCEL 375 - LOT 22
TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN
DATE: 06/26/2019
DRAWN BY: THIS
DESIGN BY: THIS
REVIEW BY: MGC
SHEET: 05 OF 40

NO.	COORDINATE	DETAIL REFERENCE
SMH-5	N 549,558.62 E 1,356,512.76	HOWARD COUNTY DETAILS G-5.11, G-5.12, G-5.21
SAN CO-6A	N 549,515.61 E 1,356,515.72	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-6B	N 549,545.70 E 1,356,581.67	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-6C	N 549,546.10 E 1,356,591.89	HOWARD COUNTY DETAILS S-2.22/2.23

NO.	COORDINATE	DETAIL REFERENCE
SMH-3	N 549,616.23 E 1,356,483.78	HOWARD COUNTY DETAILS G-5.11, G-5.12, G-5.51
SMH-4	N 549,543.07 E 1,356,599.26	HOWARD COUNTY DETAILS G-5.11, G-5.12, G-5.51
SAN CO-1	N 549,652.45 E 1,356,395.47	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-2	N 549,653.77 E 1,356,392.26	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-3	N 549,683.48 E 1,356,404.45	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-4	N 549,682.04 E 1,356,407.89	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-5	N 549,500.54 E 1,356,588.29	HOWARD COUNTY DETAILS S-2.22/2.23
SAN CO-6	N 549,593.23 E 1,356,601.70	HOWARD COUNTY DETAILS S-2.22/2.23

TYPE	SIZE	TOTAL LENGTH
RD	6"	650' 150'
RD	12"	110'
RCCP	15"	121'
RCCP	16"	136'
RCCP	24"	75'
DIP	12"	45'
DIP	8"	20'

TYPE	SIZE	TOTAL LENGTH
PVC	4"	30' 126'
PVC	6"	210' 150'
PVC	8"	180'

TYPE	SIZE	TOTAL LENGTH
COPPER	2"	60'
DIP	6"	190'
DIP	8"	290'

NOTE
THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

David Edman 9.25.19
DATE

Kent Sealwood 10.08.19
DATE

Will Disgaglia 10.16.19
DATE

APPROVED PLANNING BOARD HOWARD COUNTY

DATE 3/7/19

APPROVED FOR PUBLIC WATER AND PUBLIC SEWER

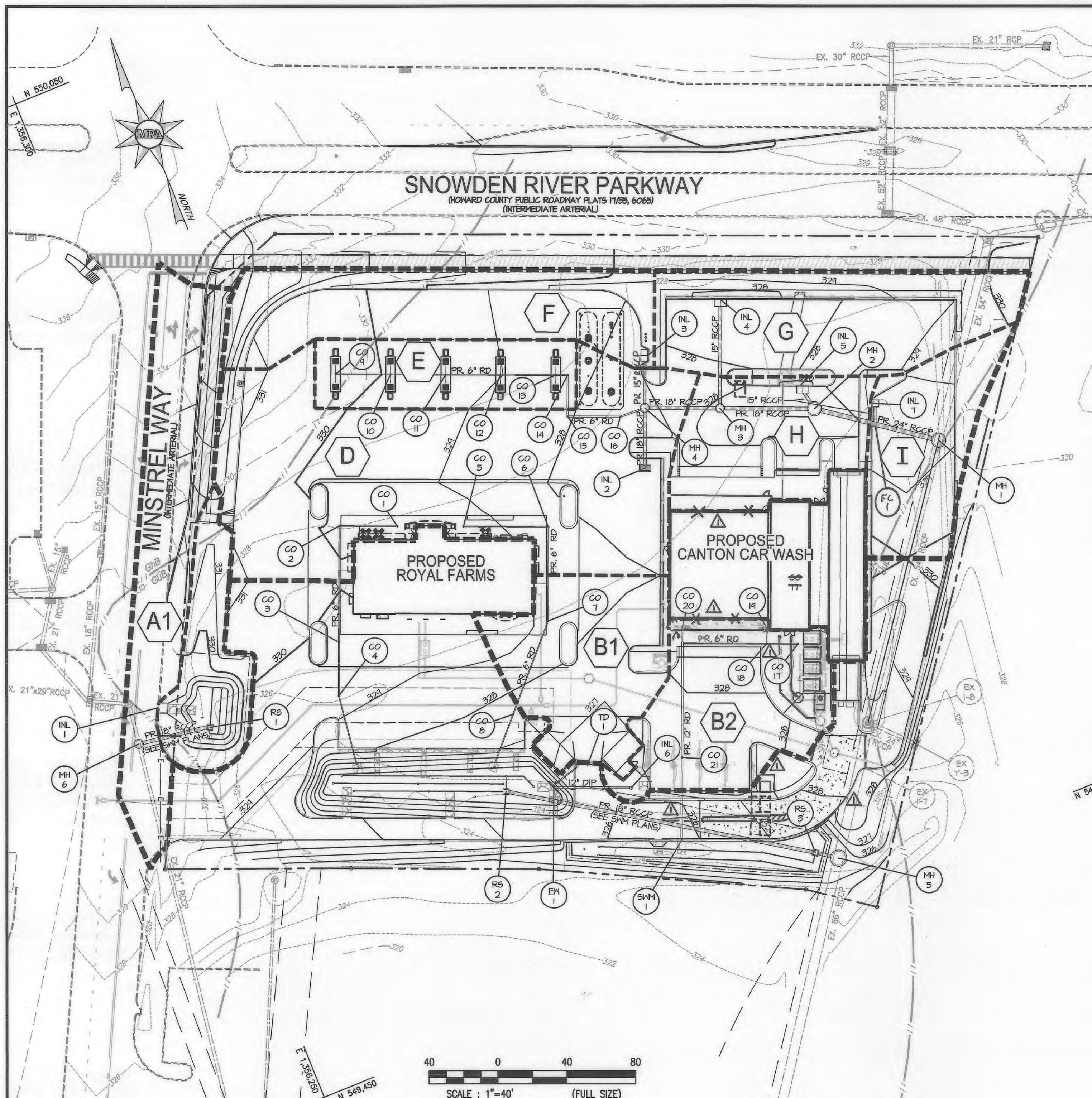
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT



DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1991) VERTICAL NAVD 88

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

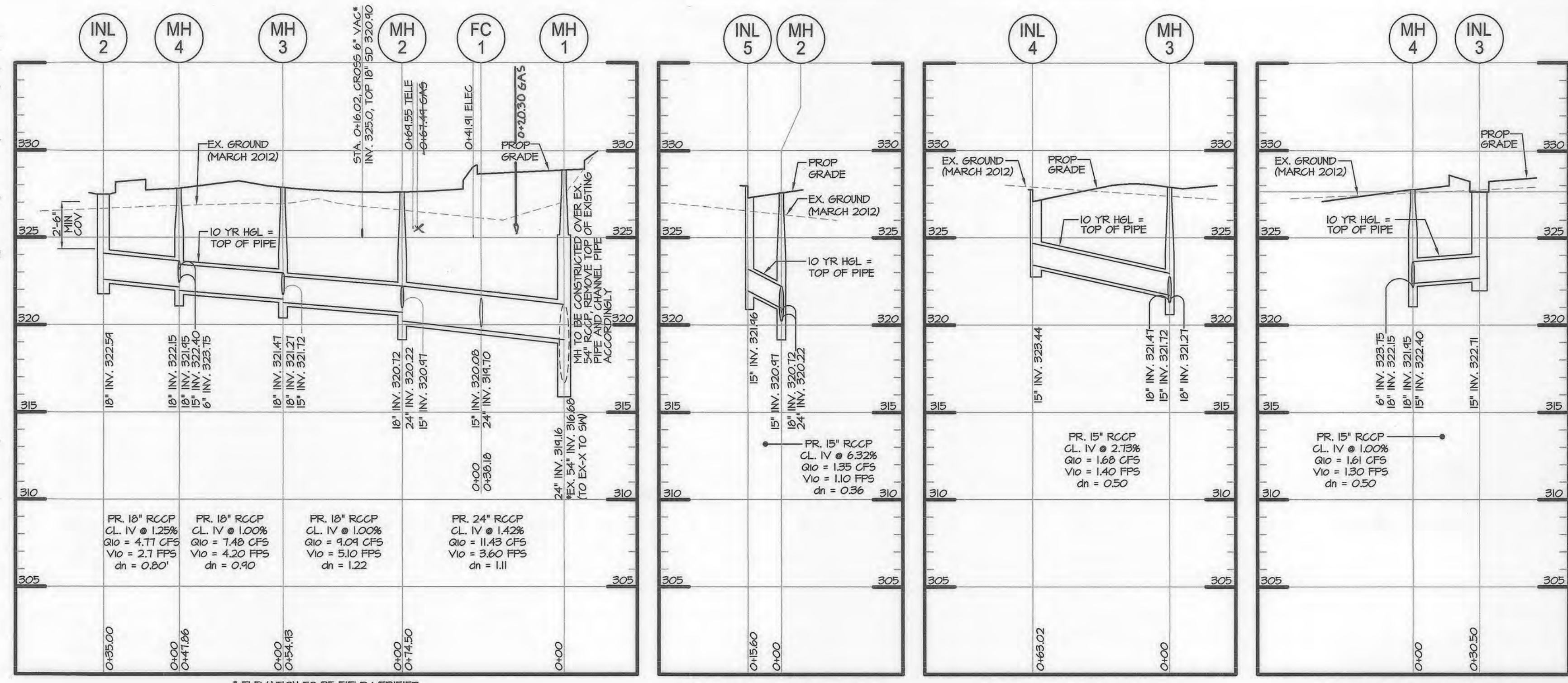
DEVELOPERS
SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 980-8573



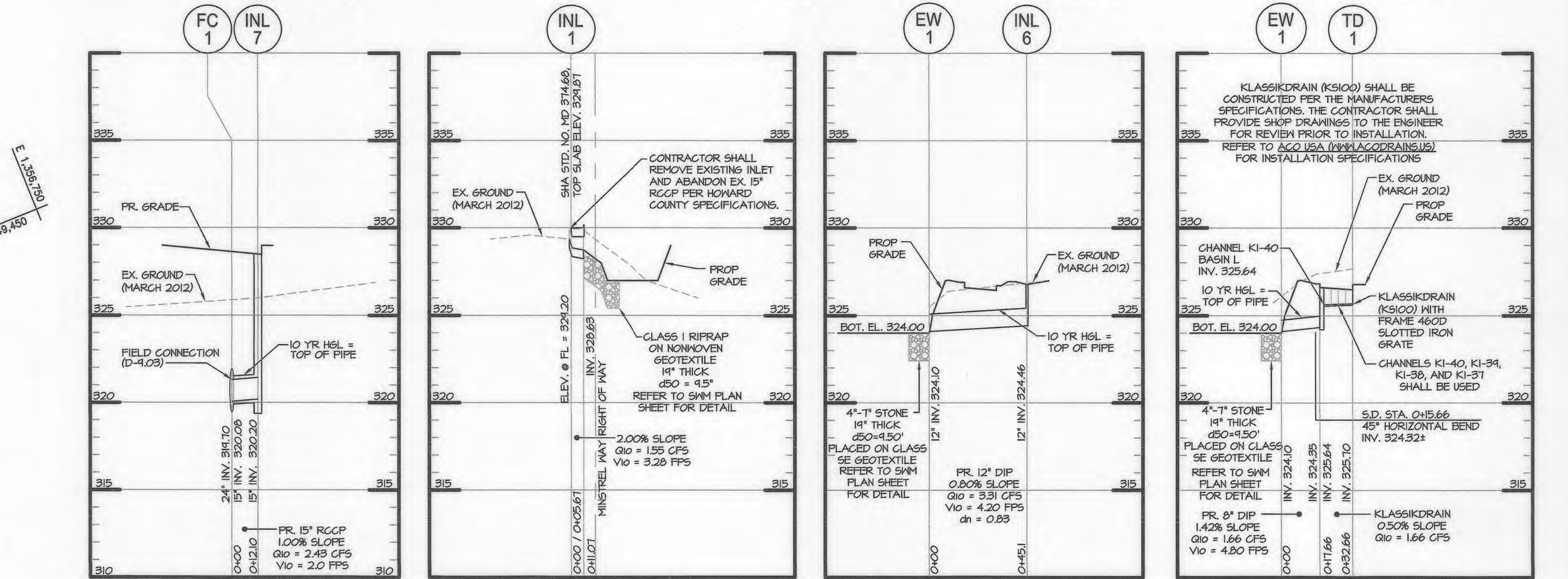
STORM DRAIN DRAINAGE AREA MAP
SCALE: 1"=40' (FULL SIZE)
1"=40'

DRAINAGE AREA TABULATION					
DRAINAGE AREA	AREA SF	ACRE	IMP AREA SF	% IMP	C-FACTOR
A1	11,325	0.26	9620	84.9%	0.87
B1	9,147	0.21	8,714	95.3%	0.83
B2	9,583	0.22	8,754	91.3%	0.88
D	26,571	0.61	24,911	93.8%	0.92
E	6,080	0.14	6,080	100%	0.95
F	11,325	0.26	7,443	65.7%	0.73
G	11,781	0.27	7,811	66.4%	0.73
H	7,849	0.18	6,950	88.6%	0.89
I	6,970	0.16	5,273	75.7%	0.80
B2	9,157	0.21	8,038	87.8%	0.88
H	7,302	0.17	6,412	87.8%	0.90

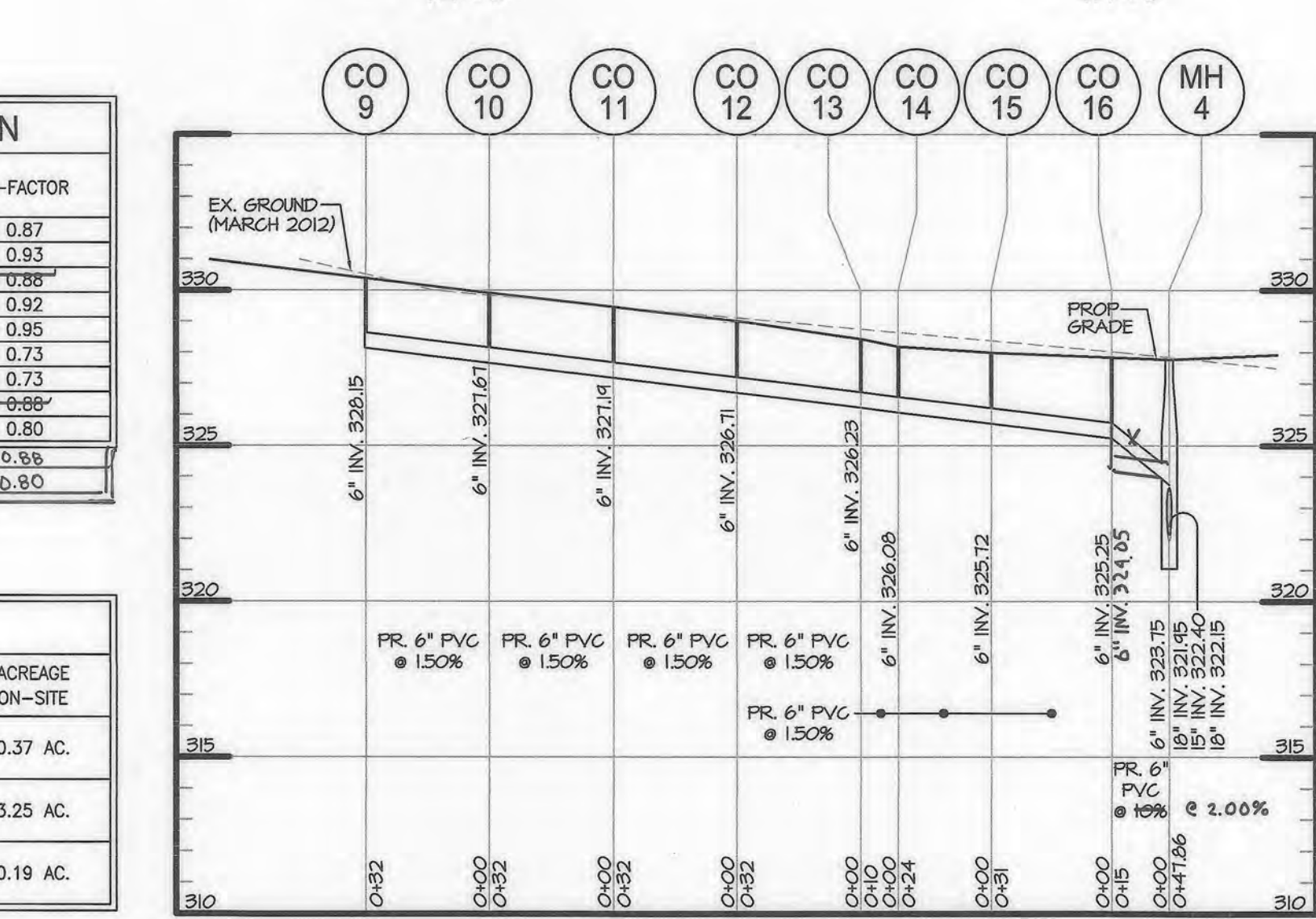
SOILS CHART			
MAP SYMBOL AND SOIL NAME	HYDROLOGIC GROUP	SLOPES	ACREAGE ON-SITE
G1B GLENLEIGH-URBAN LAND	B/D	0-8%	0.37 AC.
G1B GLENLEIGH-URBAN LAND-UDORMENTS	C/D	0-8%	3.25 AC.
U1B URBAN LAND-UDORMENTS	D	0-8%	0.19 AC.



STORM DRAIN PROFILE
SCALE: H. 1" = 40' V. 1" = 5'



STORM DRAIN PROFILE
SCALE: H. 1" = 40' V. 1" = 5'



ROOF DRAIN PROFILE
SCALE: H. 1" = 40' V. 1" = 5'

PROFESSIONAL CERTIFICATION
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ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOYPPA ROAD, SUITE 505
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FAX: (410) 821-1748
MRA@GMAIL.COM

ENGINEER
MICHAEL G. COUGHLIN
STATE OF MARYLAND
LICENSED PROFESSIONAL ENGINEER
NO. 38291

DATE	REVISIONS	JOB NO.
04/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIUM, ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, GAS, SANITARY	17297
06/26/2019	SERVICE, UPDATE DRAINAGE AREAS AND DRAINAGE AREA TABULATION CHART, REMOVE WRA CONTRACT INFO.	THIS
01/13/2022	NO AS-BUILT	THIS

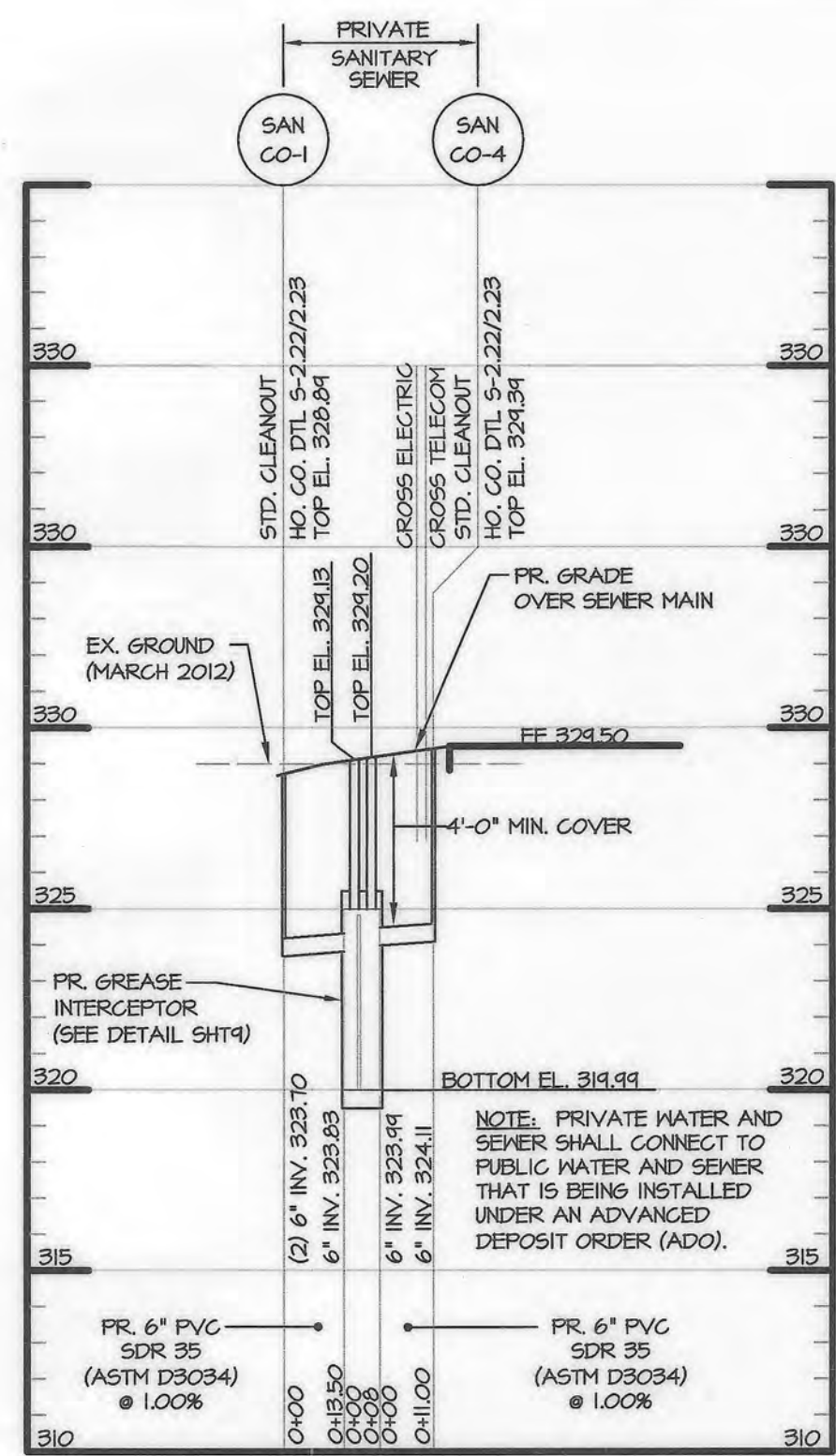
APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 9-25-19
DATE: 10-08-19
DATE: 10-15-19

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE: 3/7/19

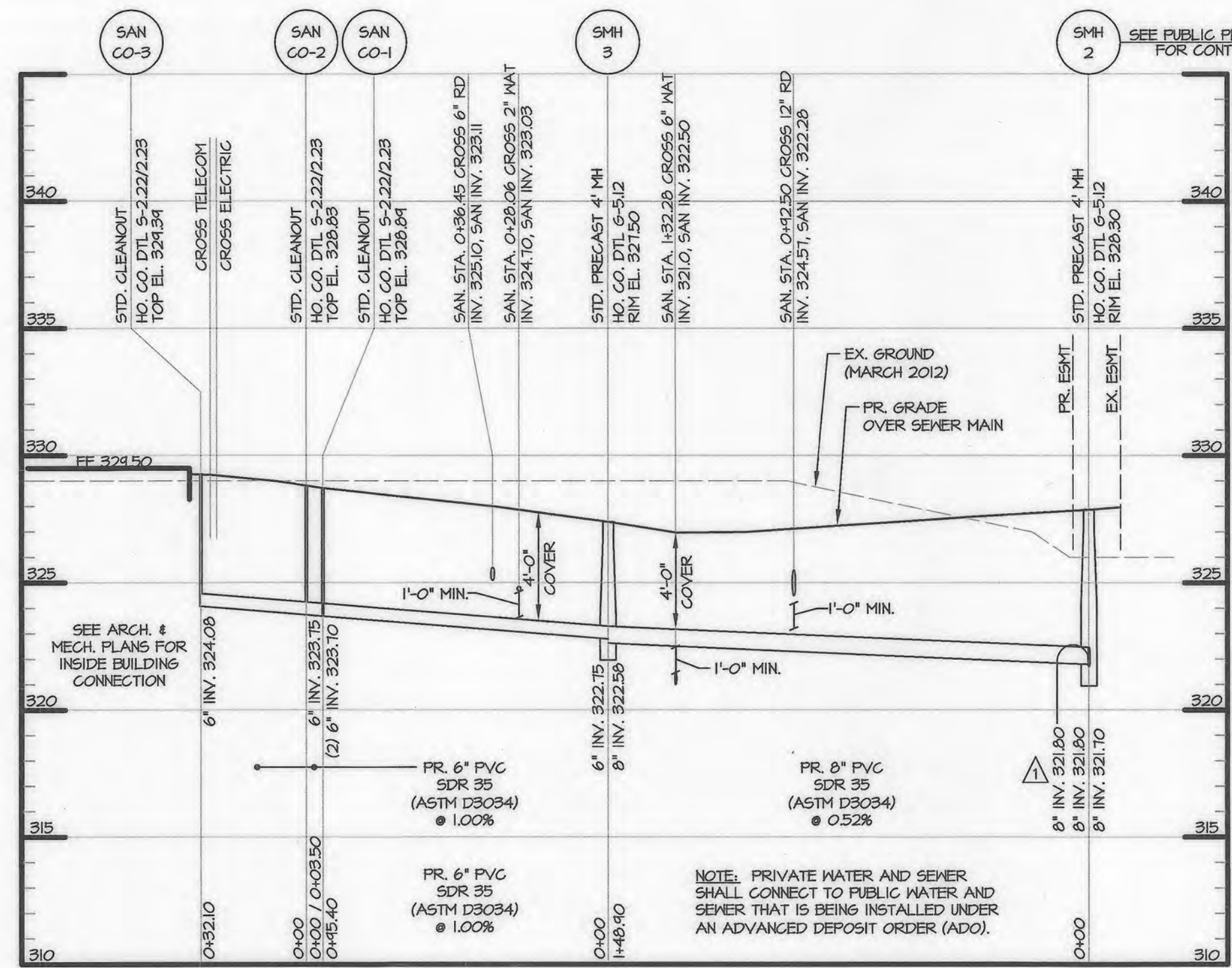
OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 889-0200

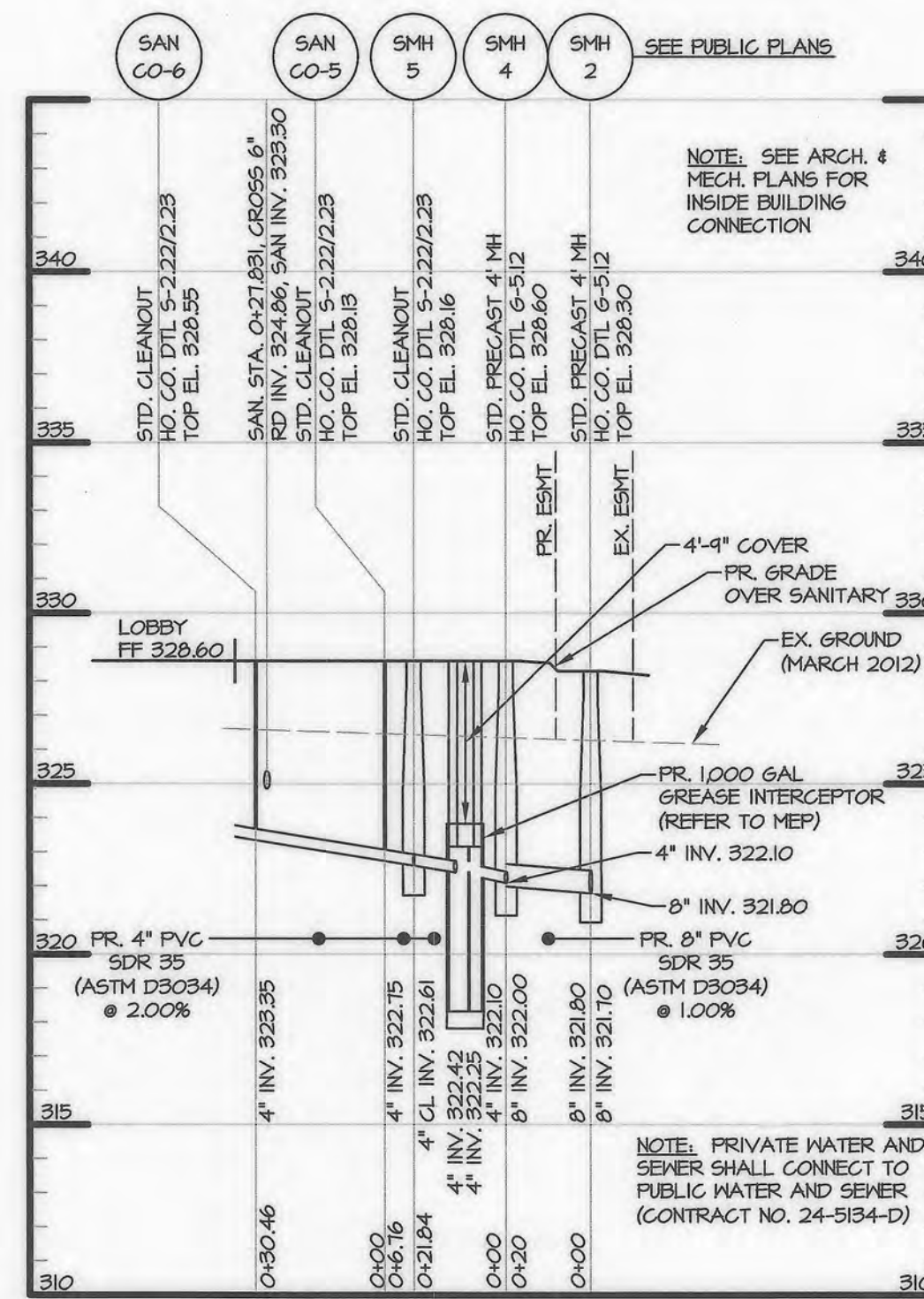
SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 950-8575



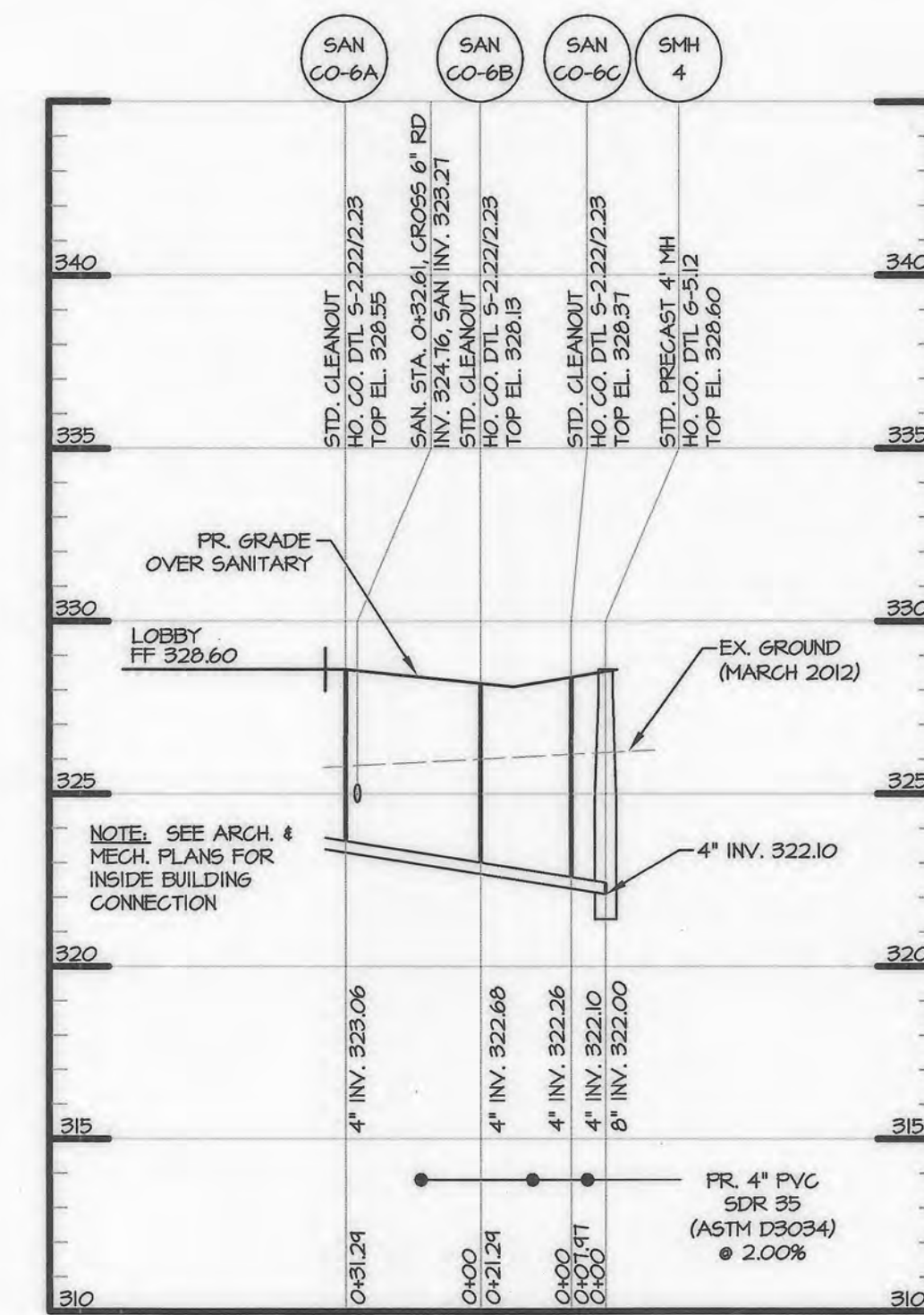
PRIVATE 6" SANITARY SEWER PROFILE
SCALE: H: 1" = 4'
V: 1" = 5'



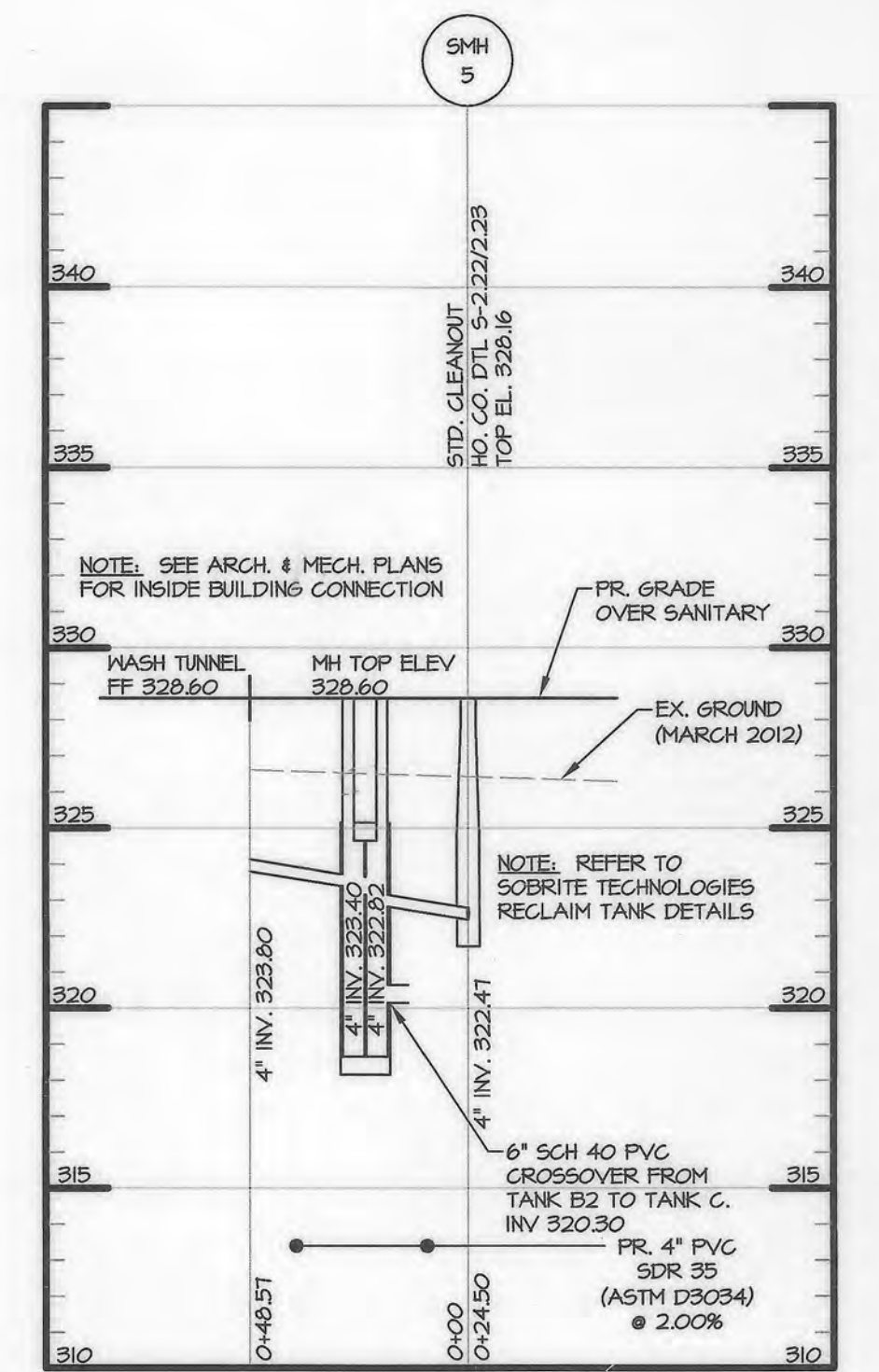
PRIVATE 8" & 6" SANITARY SEWER PROFILE
SCALE: H: 1" = 4'
V: 1" = 5'



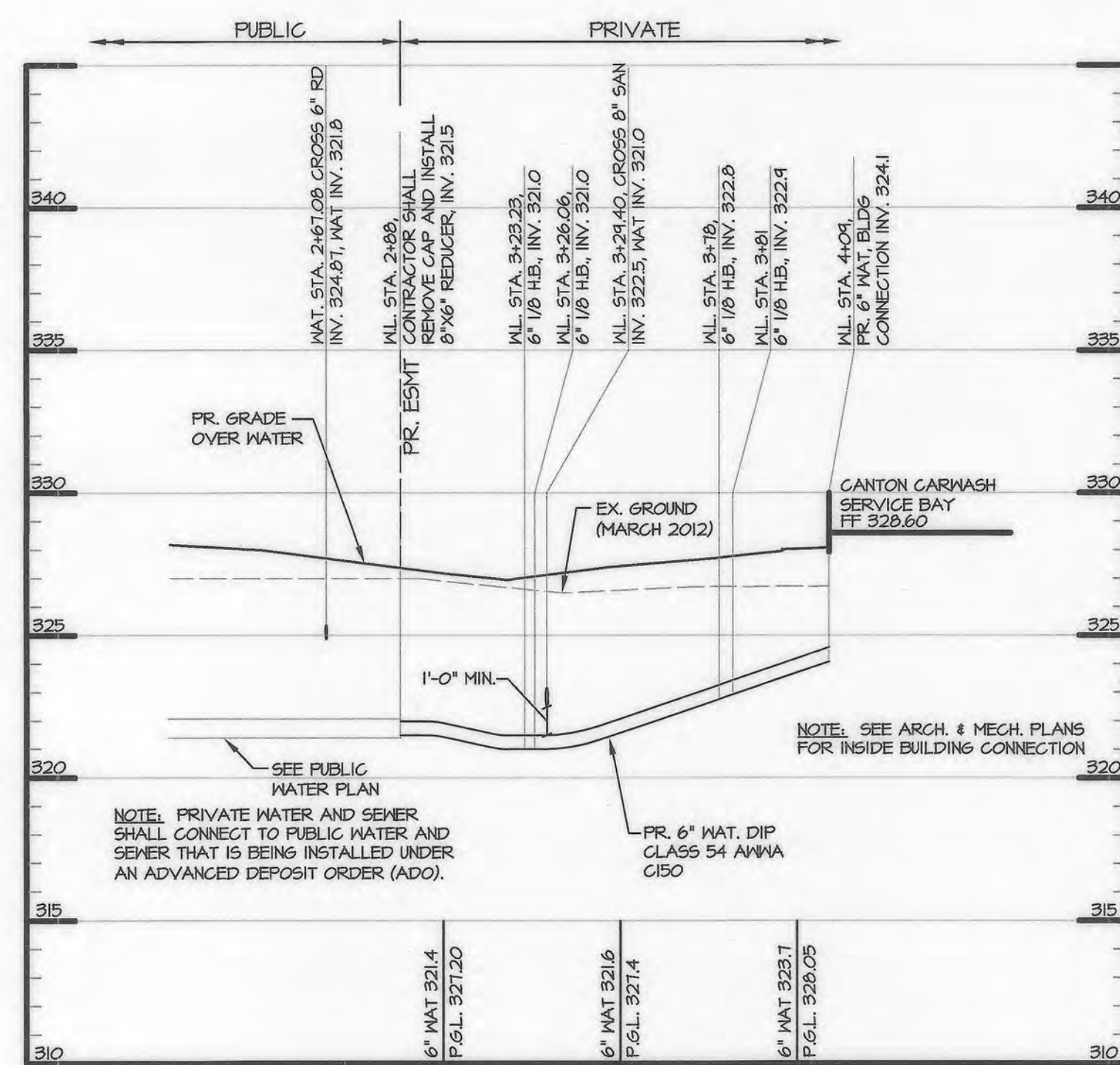
PRIVATE 4" & 8" SANITARY PROFILE
SCALE: H: 1" = 4'
V: 1" = 5'



PRIVATE 4" SANITARY PROFILE
SCALE: H: 1" = 4'
V: 1" = 5'



RECLAIM TANKS TO GREASE INTERCEPTOR PROFILE
SCALE: H: 1" = 4'
V: 1" = 5'



PRIVATE 6" WATER PROFILE
SCALE: H: 1" = 4'
V: 1" = 5'

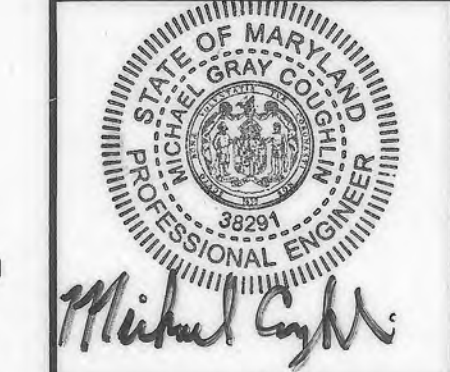
- SUMMARY OF ALTERNATIVE COMPLIANCE APPLICATIONS APPROVED BY THE PLANNING DIRECTOR FOR RELIEF OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS
- WP-14-080 APPROVED FEBRUARY 11, 2014 FOR RELIEF TO SECTION 16.119(F)(1) TO INCLUDE VEHICULAR ACCESS TO SNOWDEN RIVER PARKWAY SUBJECT TO:
 - APPROVAL IS CONTINGENT ON COMPLETION BY THE PETITIONER OF THE SUBMISSION OF SITE DEVELOPMENT PLAN SDP-14-013, SRC AGENCY REVIEW OF THE PLAN, AND APPROVAL BY THE HOWARD COUNTY PLANNING BOARD.
 - PETITIONER SHALL ADD GENERAL NOTES TO F-14-018 AND SDP-14-013 REFERENCING THIS PETITION, SECTIONS, AND CONDITIONS.
 - WP-15-058 APPROVED NOVEMBER 18, 2014 FOR RELIEF TO SECTION 16.156(G)(2) TO REACTIVATE THE SITE DEVELOPMENT PLAN, ALLOW SUBMISSION OF ADDITIONAL INFORMATION AND EXTEND THE DEADLINE TO JANUARY 7, 2015.
 - WP-15-058 (RECONSIDERATION) APPROVED DECEMBER 15, 2014 TO ADD SECTIONS 16.144(P) AND 16.144(Q) TO EXTEND THE DEADLINES TO PREPARE AND EXECUTE THE DEED FOR DEDICATION OF THE PUBLIC ROAD RIGHT-OF-WAY TO JUNE 14, 2015 AND SUBMISSION OF THE PLAT ORIGINALS (FINAL PLAN F-14-018) TO AUGUST 13, 2015.
 - WP-18-017 APPROVED SEPTEMBER 7, 2017 FOR RELIEF OF SECTION 16.156(G)(2) TO ALLOW SUBMITTAL OF ADDITIONAL INFORMATION AND EXTEND THE SUBMISSION DEADLINE TO DECEMBER 25, 2017.
 - WP-18-047 APPROVED OCTOBER 26, 2017 FOR RELIEF OF SECTION 16.156(G) TO ALLOW SUBMITTAL OF ADDITIONAL INFORMATION AND EXTEND THE SUBMISSION DEADLINE TO DECEMBER 25, 2017.
 - WP-19-104 APPROVED ON JUNE 7, 2019 FOR RELIEF OF SECTIONS 16.144(P) AND 16.144(Q) TO RE-ACTIVATE F-14-018 AND EXTEND THE DEADLINES TO PREPARE AND EXECUTE DEEDS TO AUGUST 9, 2019 AND SUBMIT THE FINAL PLAT ORIGINALS TO SEPTEMBER 9, 2019.

PROFESSIONAL CERTIFICATION
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THIS IS A REPLACEMENT SHEET



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRAGTA.COM



SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
WATER AND SANITARY SEWER
PROFILES

DATE	REVISIONS	JOB NO.:
04/22/2020	UPDATE SANITARY PROFILES, AND GREASE INTERCEPTOR PROFILE, REMOVE MRA COPYRIGHT INFORMATION.	17297
01/13/2022	NO ASBUILT	SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY: THIS
		DESIGN BY: THIS
		REVIEW BY: THIS
		SHEET: 07 OF 40

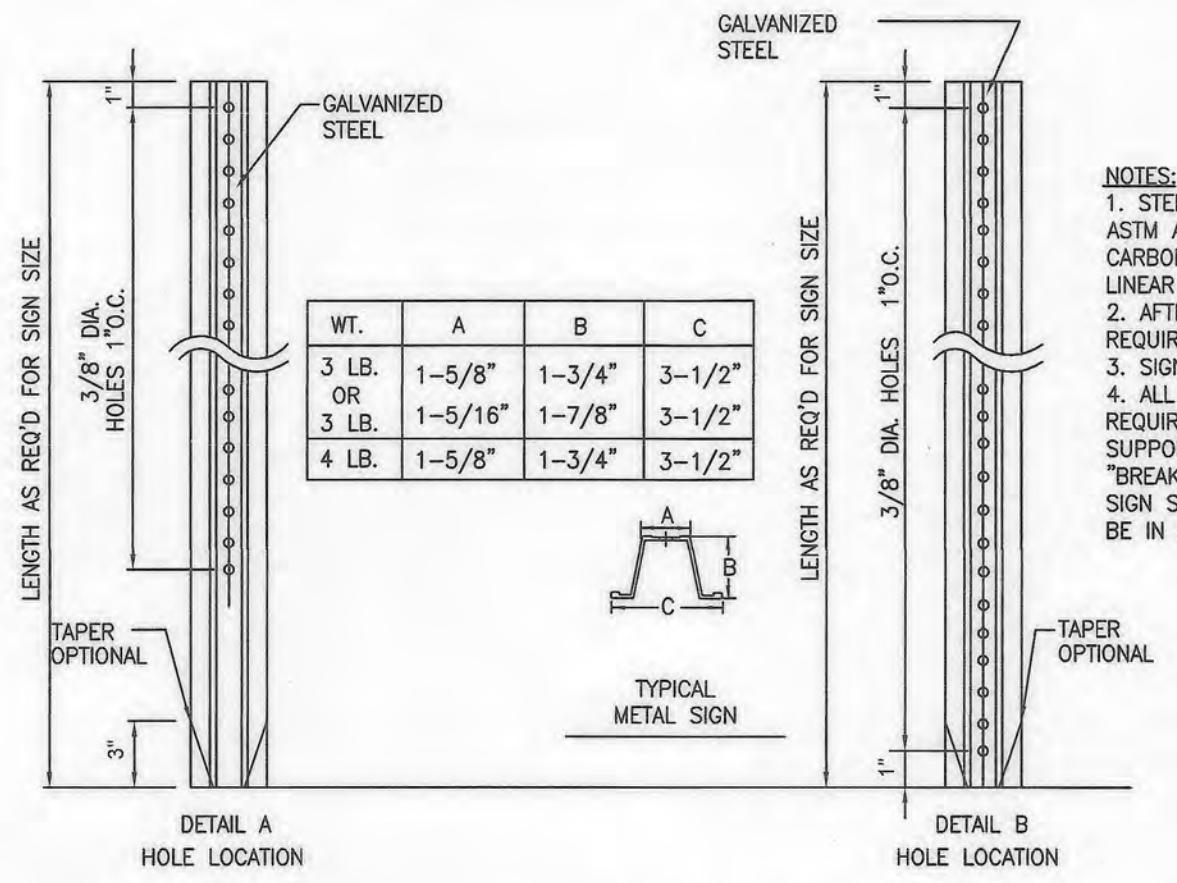
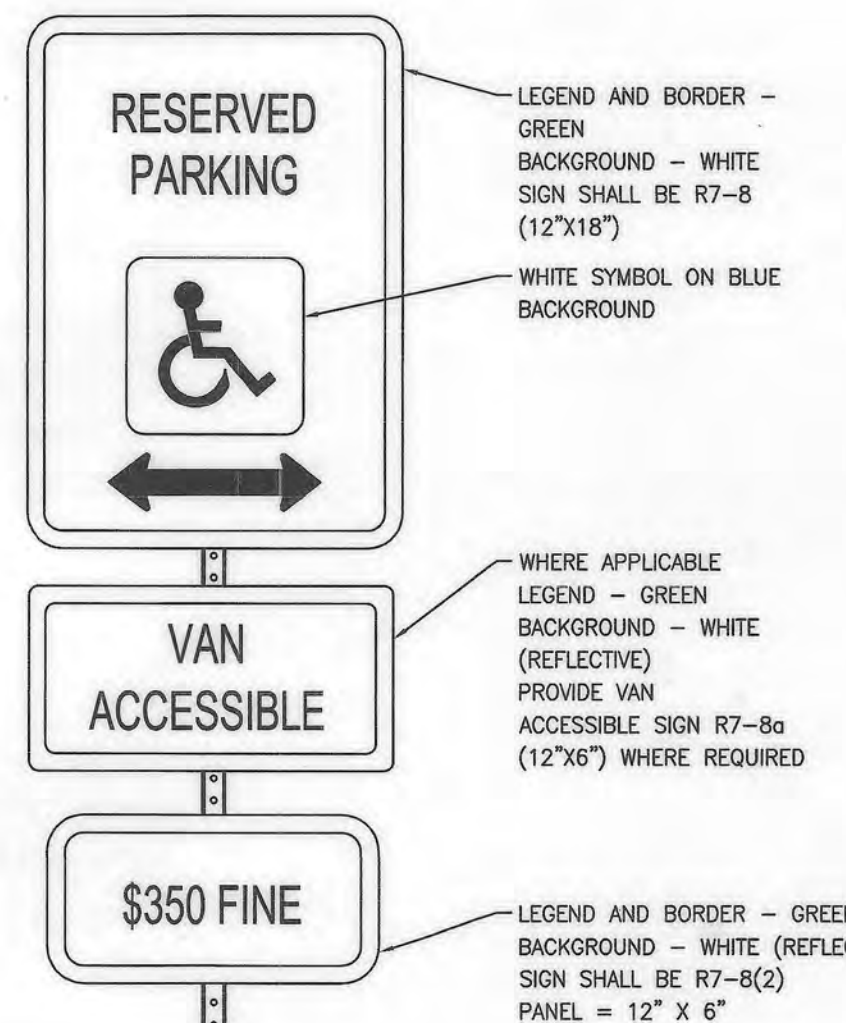
APPROVED: DEPARTMENT OF PLANNING AND ZONING
6.17.20
6/22/2020
6/24/2020

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE

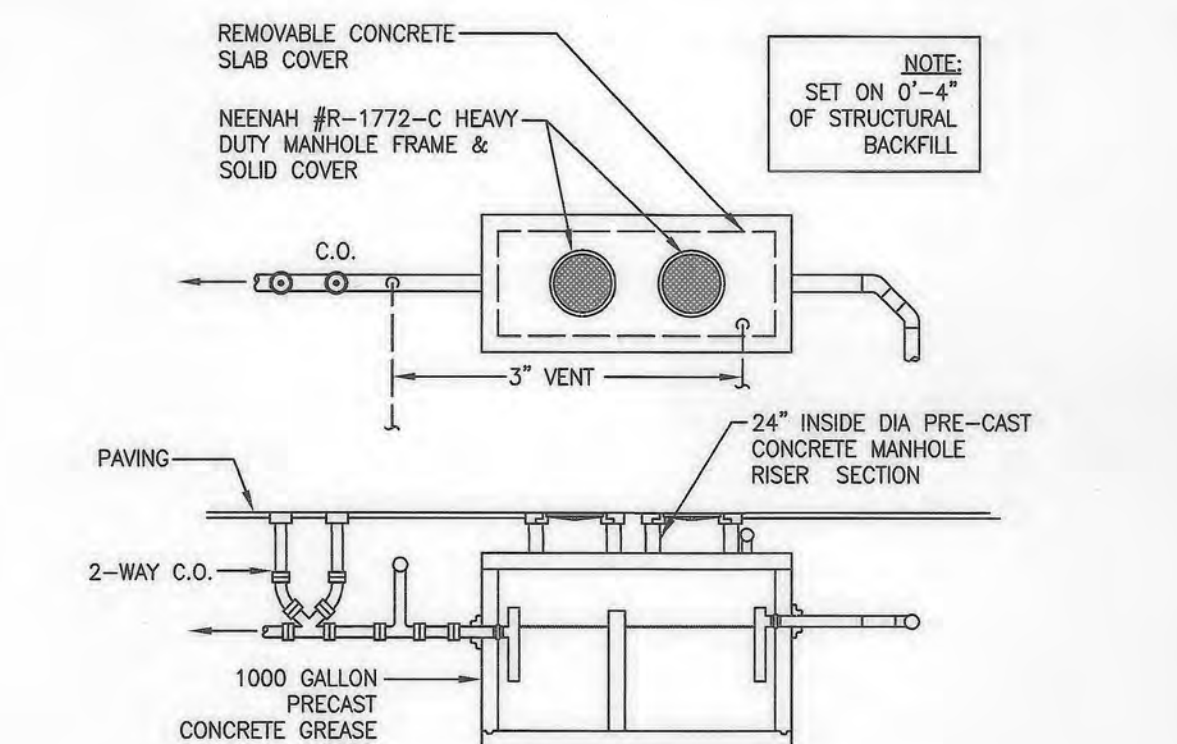
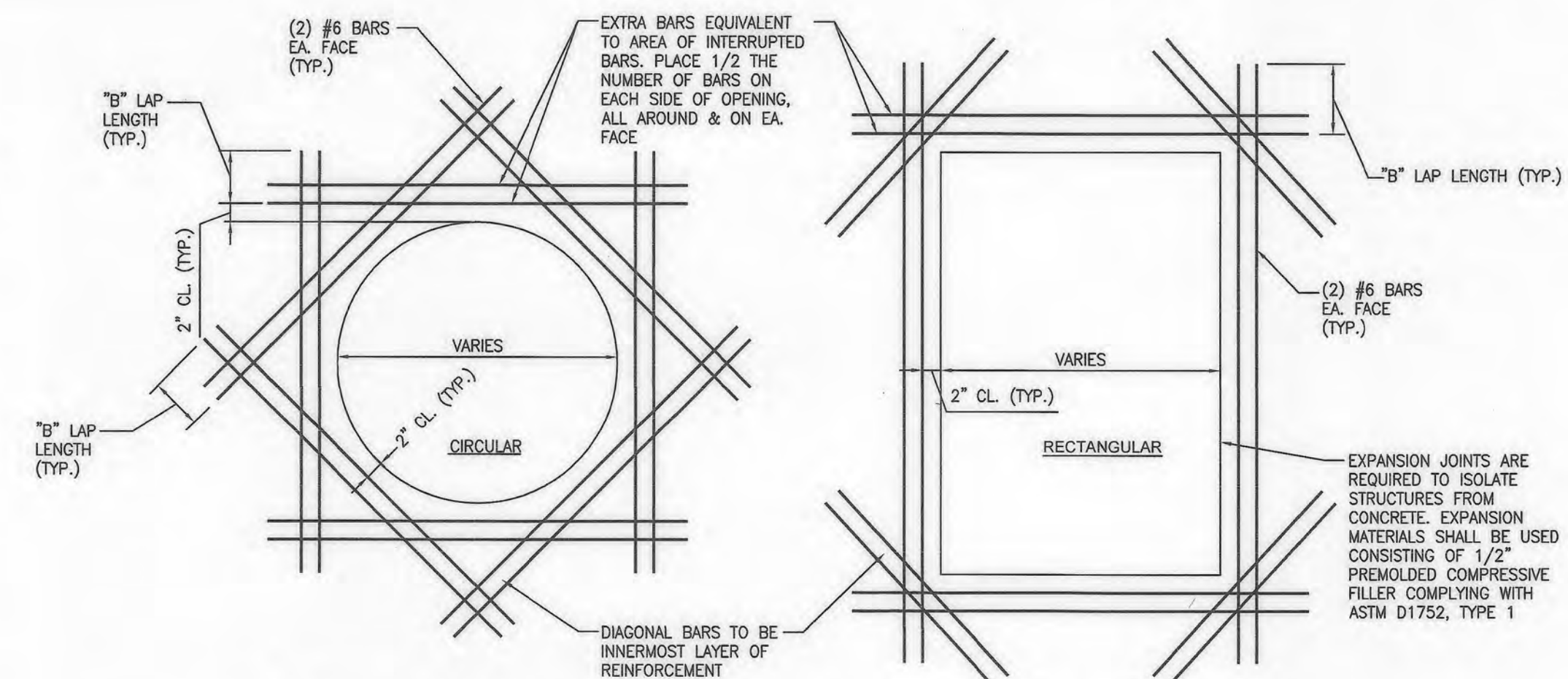
OWNER
TWO FARMS INC.
3811 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3811 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHITED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573

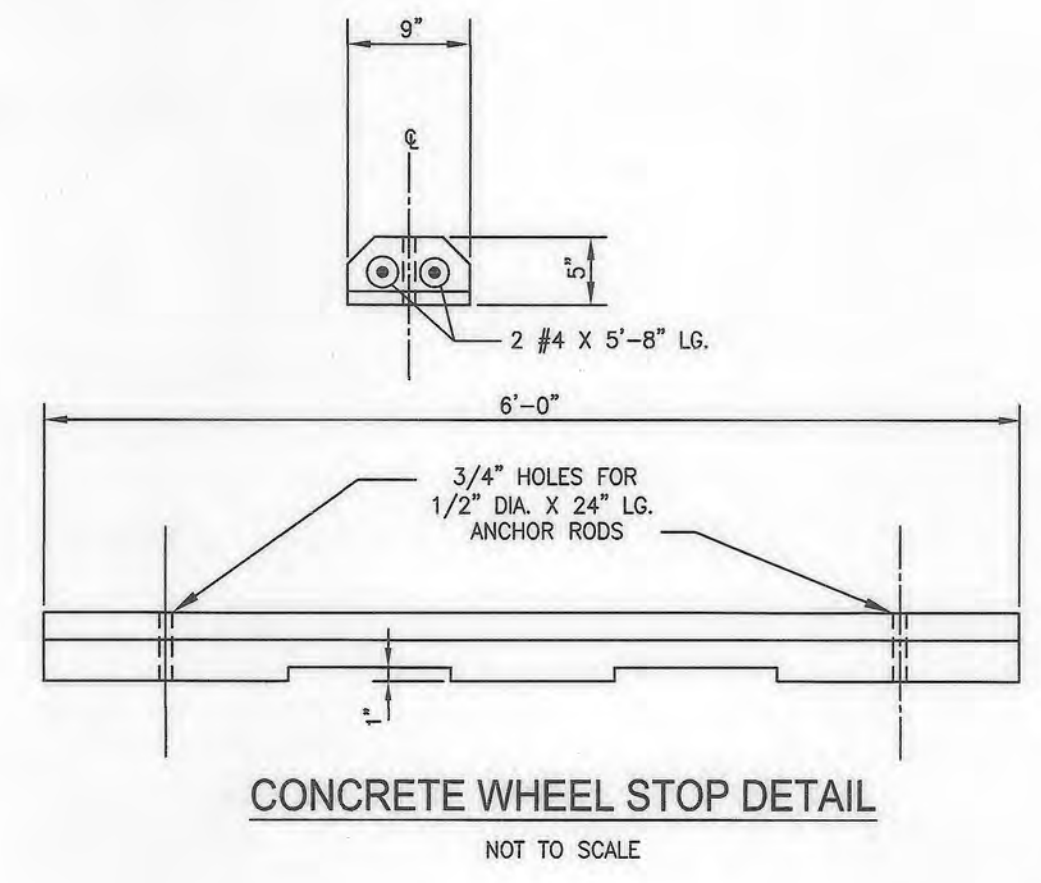
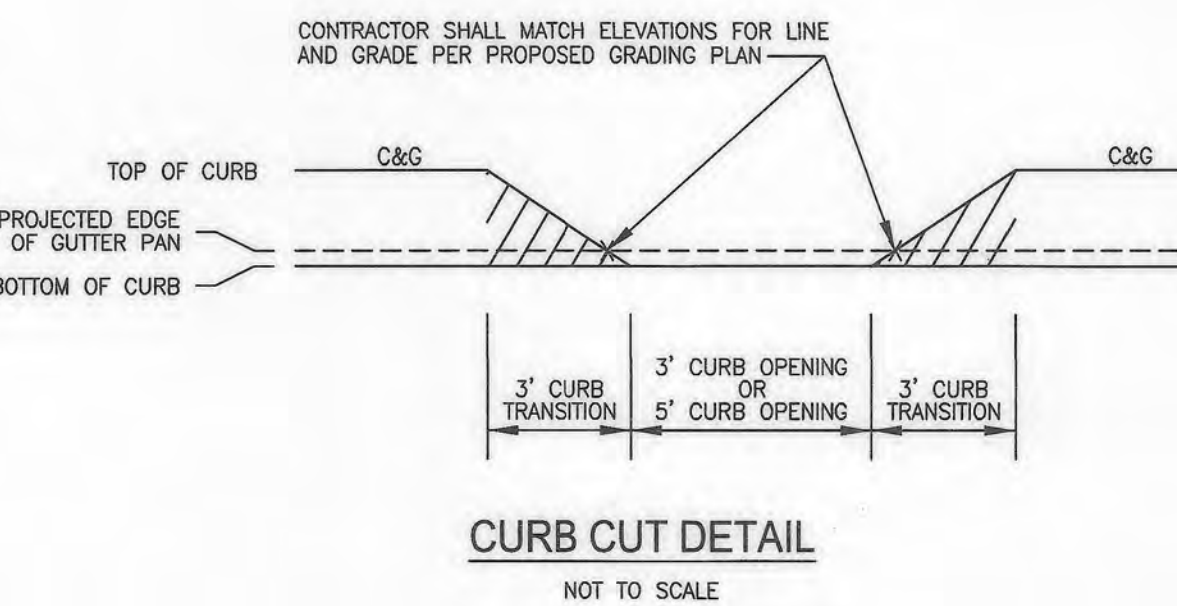


NOTES:
 1. STEEL FOR POSTS SHALL CONFORM TO THE MECHANICAL REQUIREMENTS OF ASTM A 499-81 GRADE 60 AND TO THE CHEMICAL REQUIREMENTS OF ASTM A-76 CARBON STEEL TEE RAIL HAVING NOMINAL WEIGHT OF 3 LB. OR GREATER PER LINEAR FOOT.
 2. AFTER FABRICATION ALL STEEL POSTS SHALL BE GALVANIZED TO MEET THE REQUIREMENTS OF ASTM A-123.
 3. SIGN MOUNTING HEIGHT TO BE PER MUTCD REQUIREMENTS.
 4. ALL SIGN POSTS SHALL HAVE "BREAK AWAY" FEATURES THAT MEET ASHTO REQUIREMENTS CONTAINED IN "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS". THE "BREAK AWAY" FEATURES SHALL BE STRUCTURALLY ADEQUATE TO CARRY THE SIGN SHOWN ON THE PLANS AT 60 MPH WIND LOADINGS. INSTALLATIONS SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

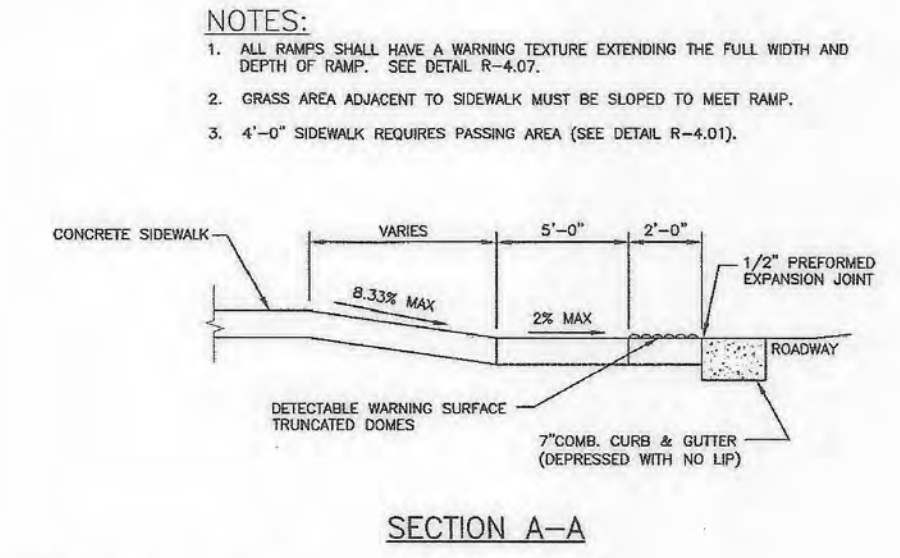
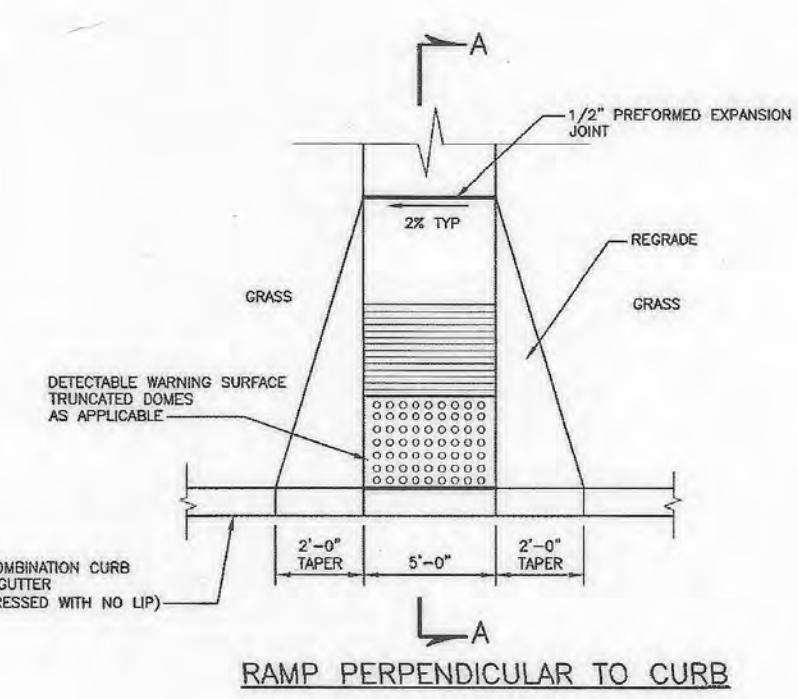


NOTE:
 1. SIGNS SHALL MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
 2. SIGNS ATTACHED WITH ACORN NUT TYPE FASTENERS.

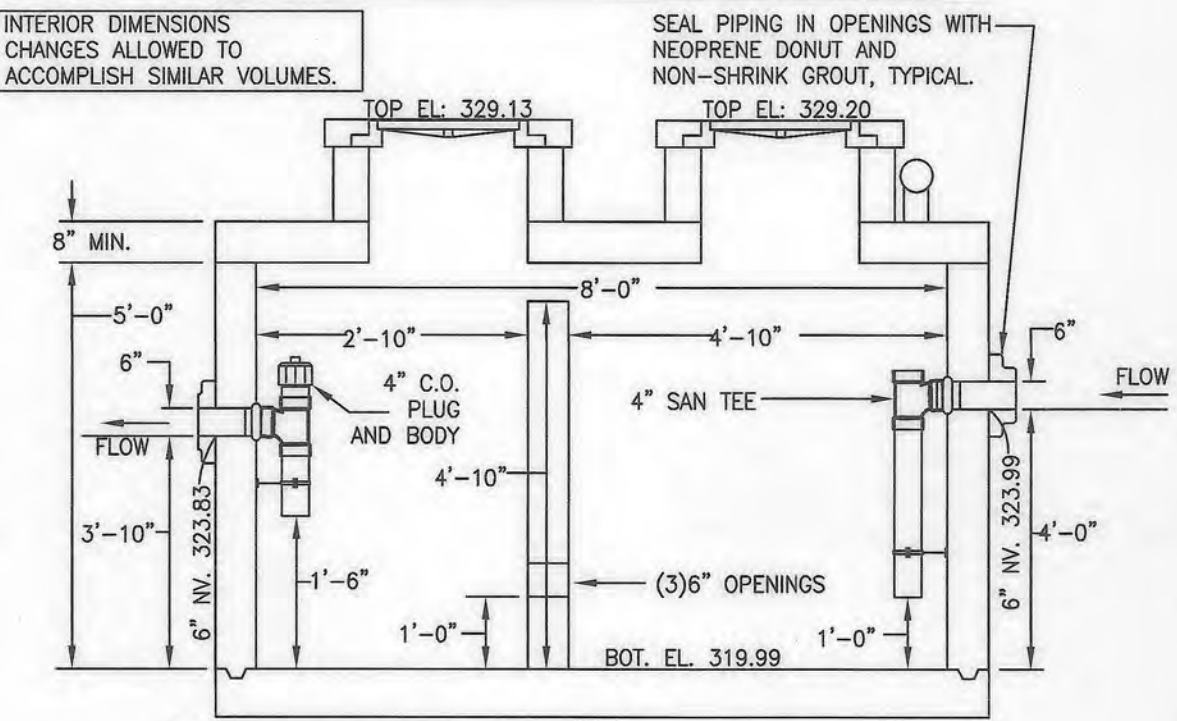
HANDICAP PARKING SIGN DETAIL
 AS SHOWN



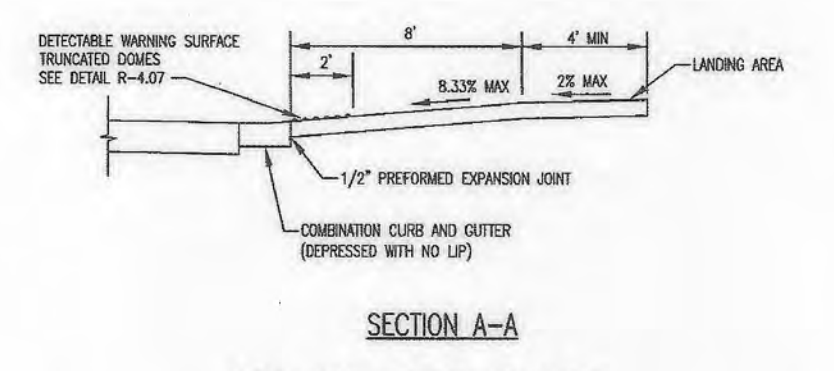
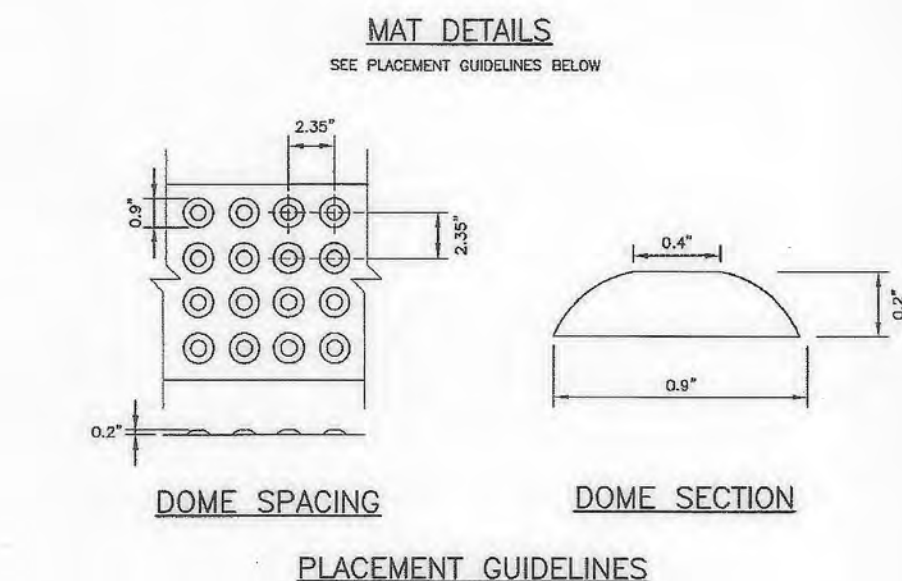
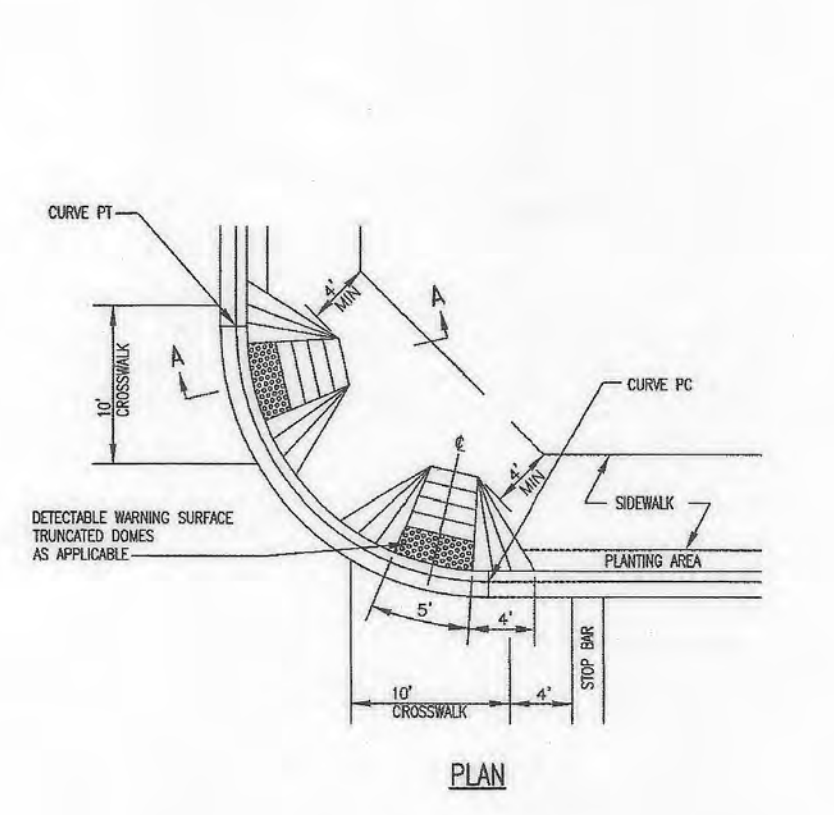
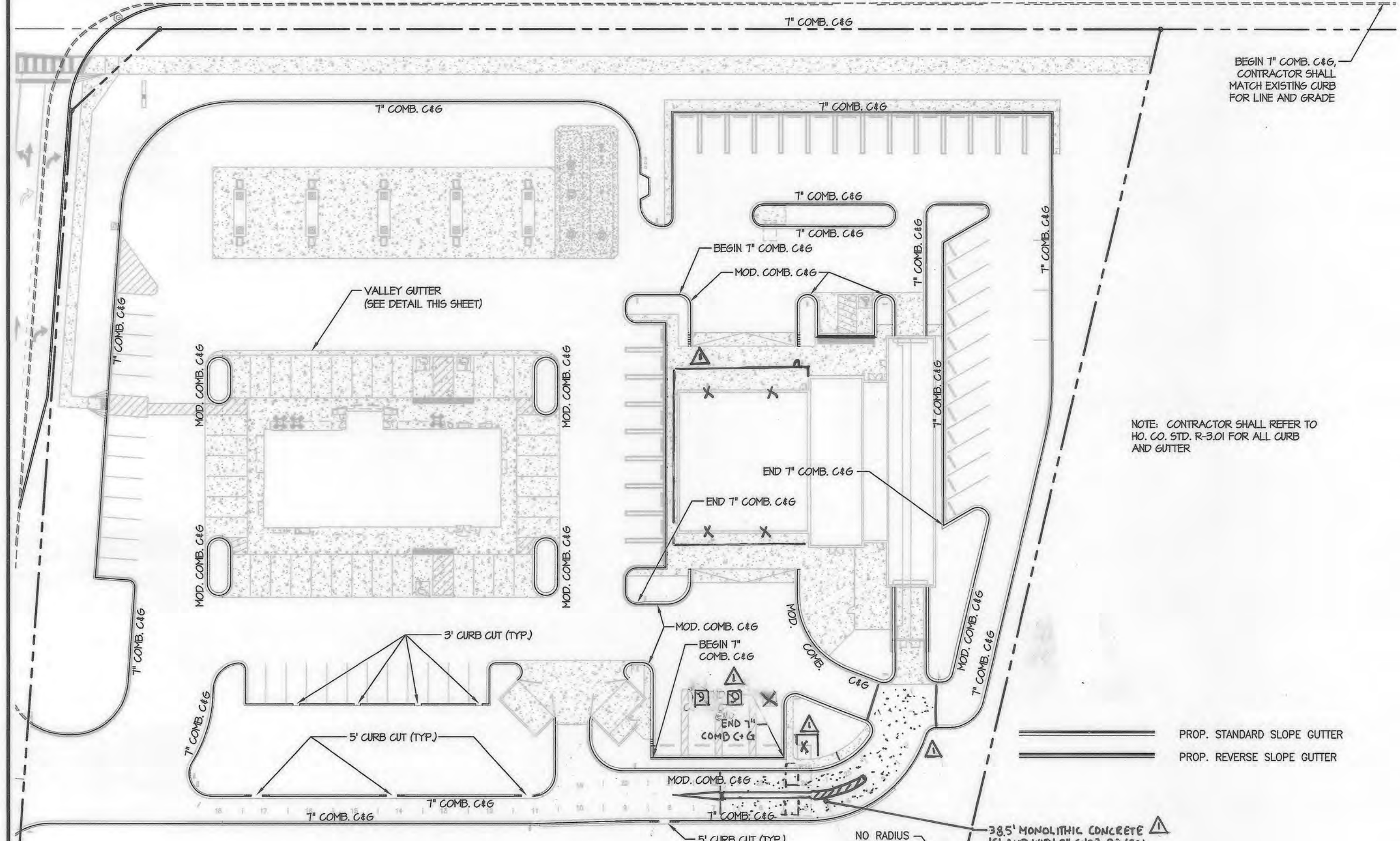
TYPICAL OPENING REINFORCING DETAILS FOR CONCRETE PARKING AREAS



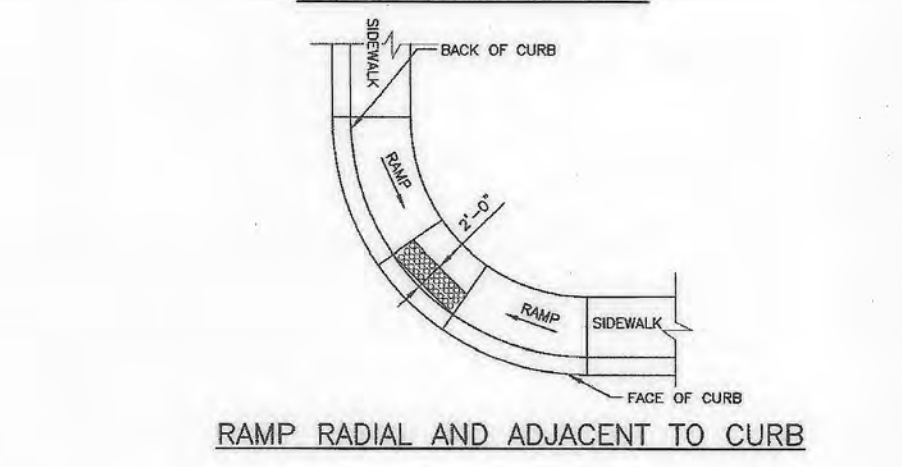
HO. CO. STD. R-4.05 SIDEWALK RAMP LAYOUT & GRADING PERPENDICULAR TO CURB AS SHOWN



ROYAL FARMS STORE GREASE INTERCEPTOR DETAIL

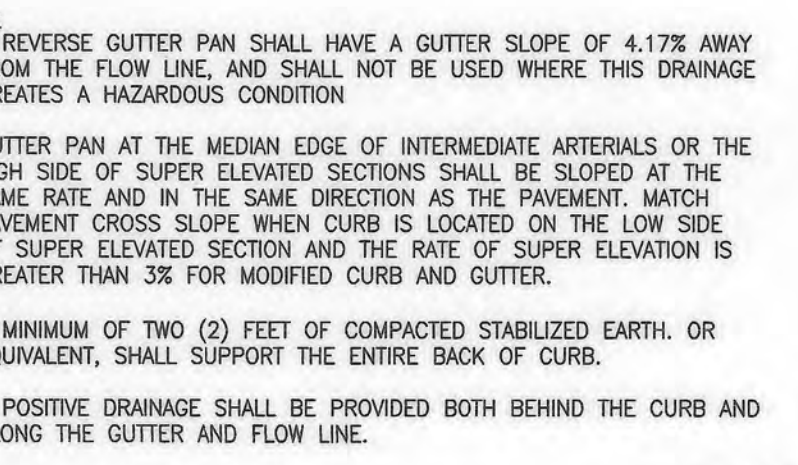
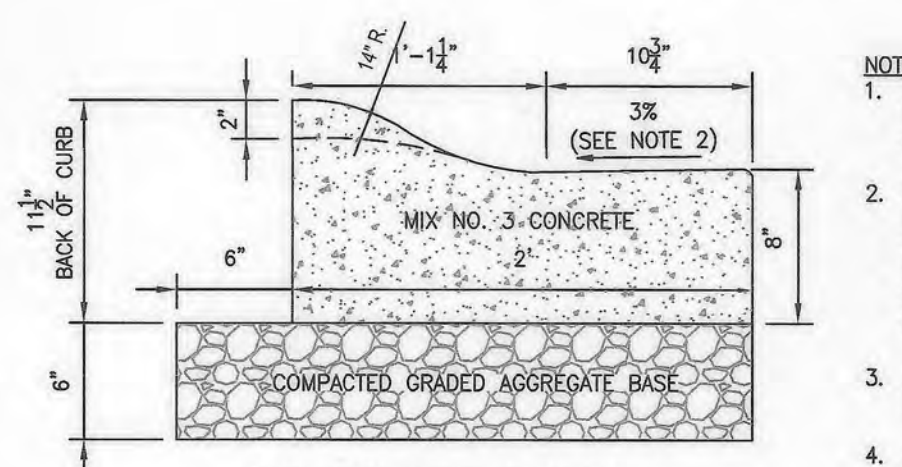


HO. CO. STD. R-4.05 SIDEWALK RAMP LAYOUT & GRADING PERPENDICULAR TO CURB AS SHOWN



HO. CO. STD. R-4.07 SIDEWALK RAMP DETECTABLE WARNING SURFACE TRUNCATED DOMES AS SHOWN

NOTES:
 1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 TO 8 INCHES FROM THE FACE OF THE CURB.
 2. FOR SLOPED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF THE CURB ARE NO LESS THAN 0.5" AND NO MORE 3.0" FROM THE BACK OF THE CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.



PROFESSIONAL CERTIFICATION
 I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2026.



MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
 TOWSON, MARYLAND 21286
 (410) 821-1690
 FAX: (410) 821-1748
 MRA@GTA.COM

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

APPROVED: PLANNING BOARD HOWARD COUNTY
 DATE: 3/7/19

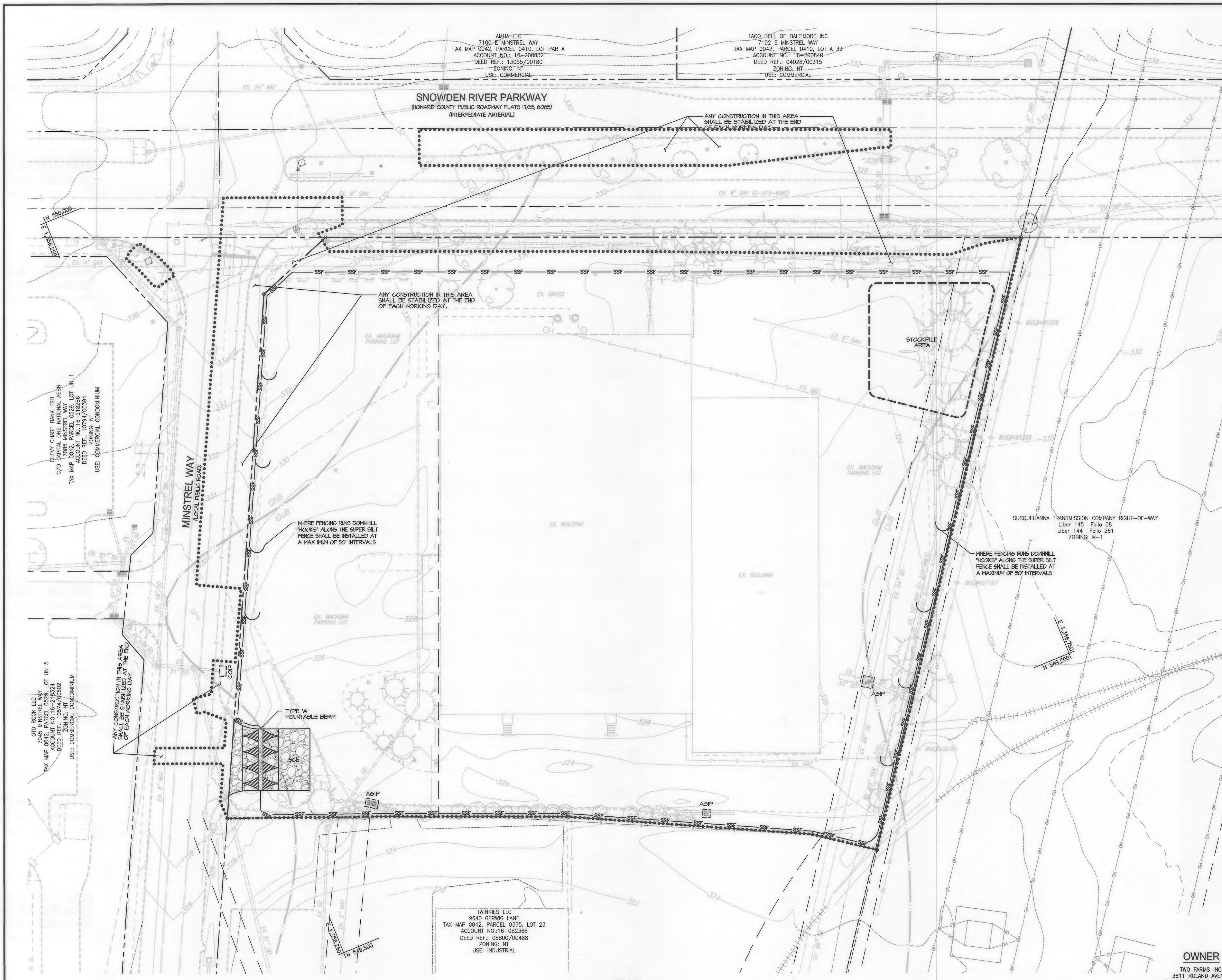
OWNER
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHISTED
 PHONE: (410) 889-0200

DEVELOPERS
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573



SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH

DATE	REVISIONS	JOB NO.	SCALE
04/12/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN, UPDATE ADA VAC SPACE, ADD CONCRETE AT CARWASH INGRESS, ATTENDANT BOOTH.	17297	AS SHOWN
01/13/2022	REMOVE MRA COPYRIGHT INFORMATION		06/26/2019
			DRAWN BY: THIS
			DESIGN BY: THIS
			REVIEW BY: MGC
			SHEET: 09 OF 40



LEGEND

.....	LIMIT OF DISTURBANCE
---	EX. 2 FOOT CONTOURS
---	EX. 10 FOOT CONTOURS
---	EX. EDGE OF PAVEMENT
---	EX. CURB AND GUTTER
---	EX. CONCRETE WALK
---	EX. ADJACENT PROPERTY LINE
---	EX. PROPERTY LINE
---	EX. RIGHT OF WAY
---	EX. UTILITY EASEMENT
---	EX. WATER LINE
---	EX. SANITARY LINE
---	EX. STORM DRAIN LINE
---	EX. FIBER OPTIC CABLE
---	EX. URD PRIMARY SEG 3 PHASE
---	EX. VERIZON LINE
---	EX. GAS
---	EX. ELECTRIC
---	EX. OVER HEAD UTILITIES
---	EX. LIGHT POLE
---	EX. U/G UTILITY HANDBOX
---	EX. UTILITY POLE
---	EX. VEGETATION/TREE LINE
---	INLET PROTECTION
---	SUPER SILT FENCE
---	STABILIZED CONSTRUCTION ENTRANCE

PROFESSIONAL CERTIFICATION
I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2028: 2.022.

ESC 2 OF 6

MRA
MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRA@GTA.COM
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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
EROSION & SEDIMENT CONTROL PLAN
EXISTING CONDITIONS
LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
01/13/2021	NO AS BUILT	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY: THS
		DESIGN BY: THS
		REVIEW BY: MGC
		SHEET: 10 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
9-25-19
10-08-19
10-15-19

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE 8/17/19
HOWARD SCD SIGNATURE BLOCK
DATE 9/11/19

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

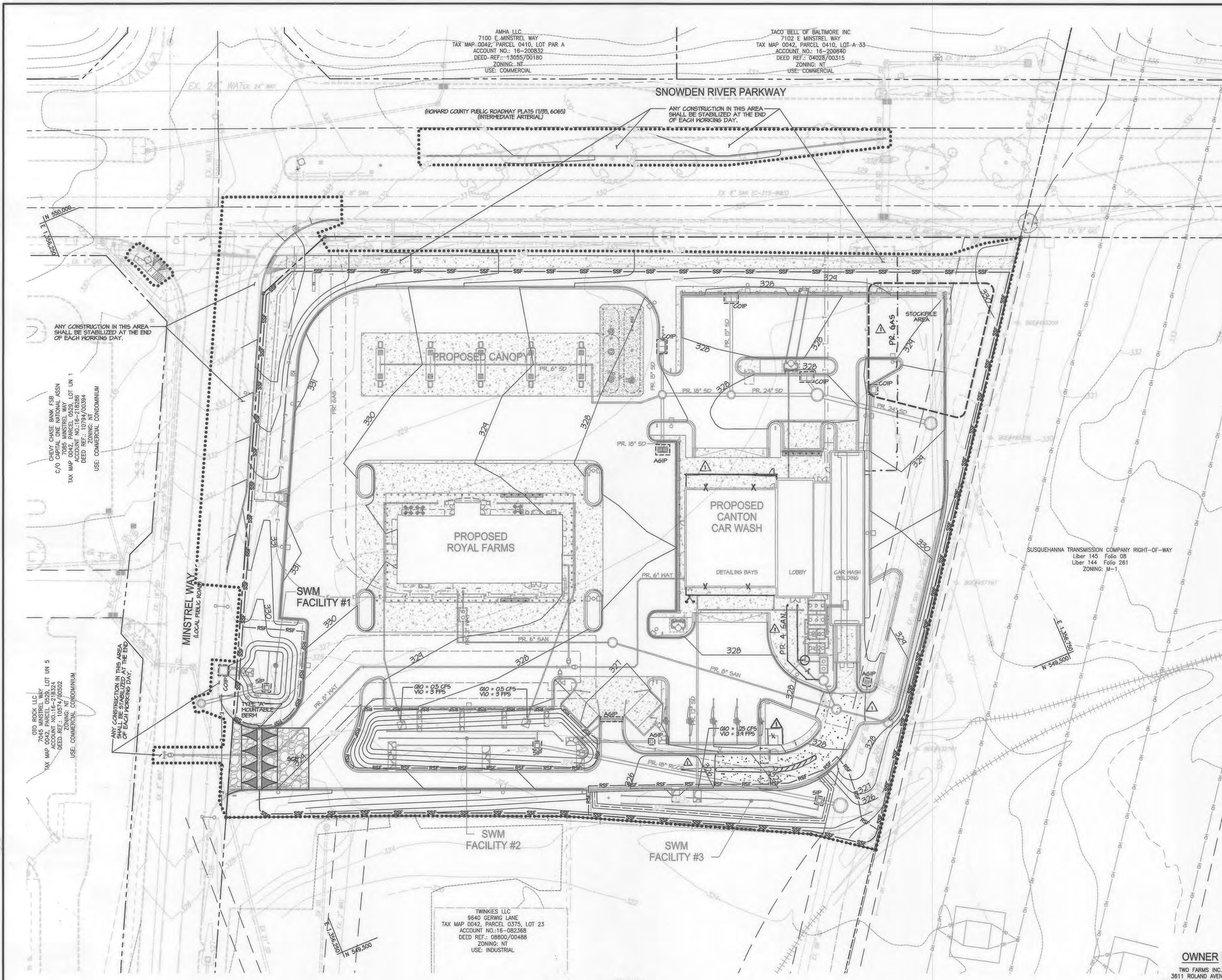


DESIGN & DRAWING BASED ON
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

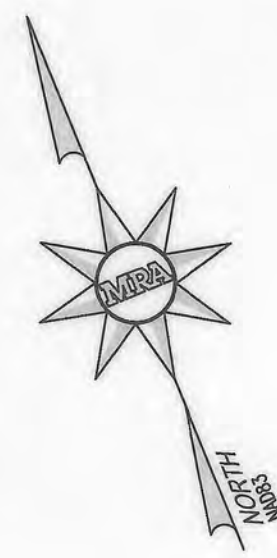
DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-6573



LEGEND

.....	LIMIT OF DISTURBANCE
---	EX. 2 FOOT CONTOURS
---	EX. 10 FOOT CONTOURS
---	EX. EDGE OF PAVEMENT
---	EX. CURB AND GUTTER
---	EX. CONCRETE WALK
---	EX. ADJACENT PROPERTY LINE
---	EX. PROPERTY LINE
---	EX. RIGHT OF WAY
---	EX. UTILITY EASEMENT
---	EX. WATER LINE
---	EX. SANITARY LINE
---	EX. STORM DRAIN LINE
---	EX. FIBER OPTIC CABLE
---	EX. URD PRIMARY SEG 3 PHASE
---	EX. VERIZON LINE
---	EX. GAS
---	EX. ELECTRIC
---	EX. OVER HEAD UTILITIES
---	EX. LIGHT POLE
---	EX. U/G UTILITY HANDBOX
---	EX. UTILITY POLE
---	EX. VEGETATION/TREE LINE
---	PR. 1 FT. CONTOUR
---	PR. 2 FT. CONTOUR
---	PR. 10 FT. CONTOUR
---	PR. CURB & GUTTER
---	PR. CONCRETE WALK
---	PR. WATER / SERVICE
---	PR. SEWER / SERVICE
---	PR. STORM DRAIN
---	INLET PROTECTION
---	REINFORCED SILT FENCE
---	SUPER SILT FENCE
---	STABILIZED CONSTRUCTION ENTRANCE



APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 9.25.19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

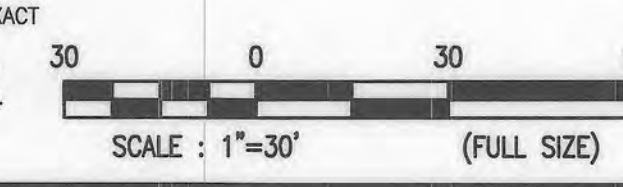
[Signature] 10.08.19
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 10.15.19
 DIRECTOR DATE

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 3/7/19

HOWARD SCD SIGNATURE BLOCK
[Signature] 9/10/19
 HOWARD SOIL CONSERVATION DISTRICT DATE

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DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1991) VERTICAL NAVD 88

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 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

DEVELOPERS
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 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHISTED
 PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

PROFESSIONAL CERTIFICATION
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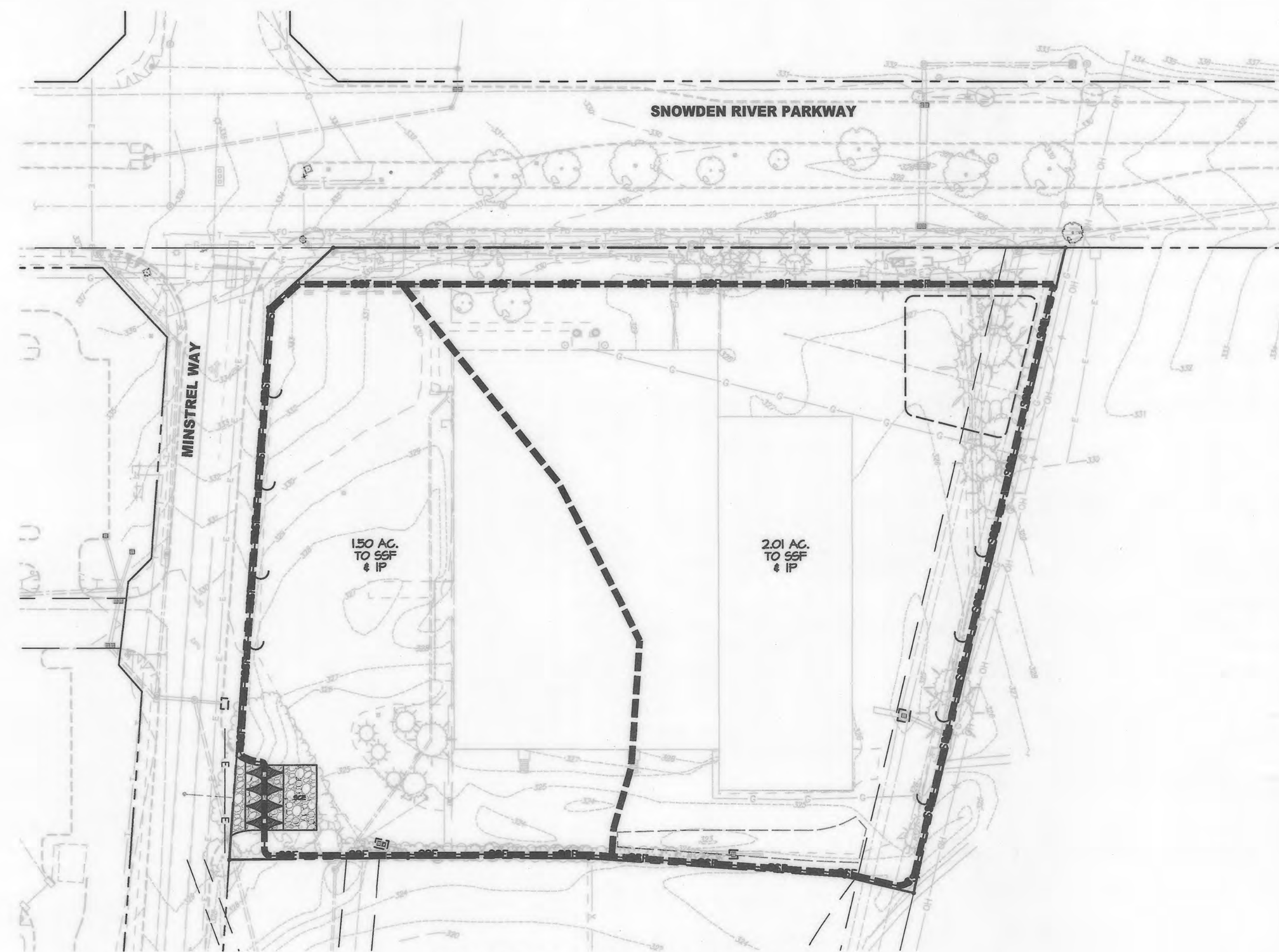
ESC 3 OF 6

MRA
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 MRA@TA.COM
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STATE OF MARYLAND
PROFESSIONAL ENGINEER
[Signature]

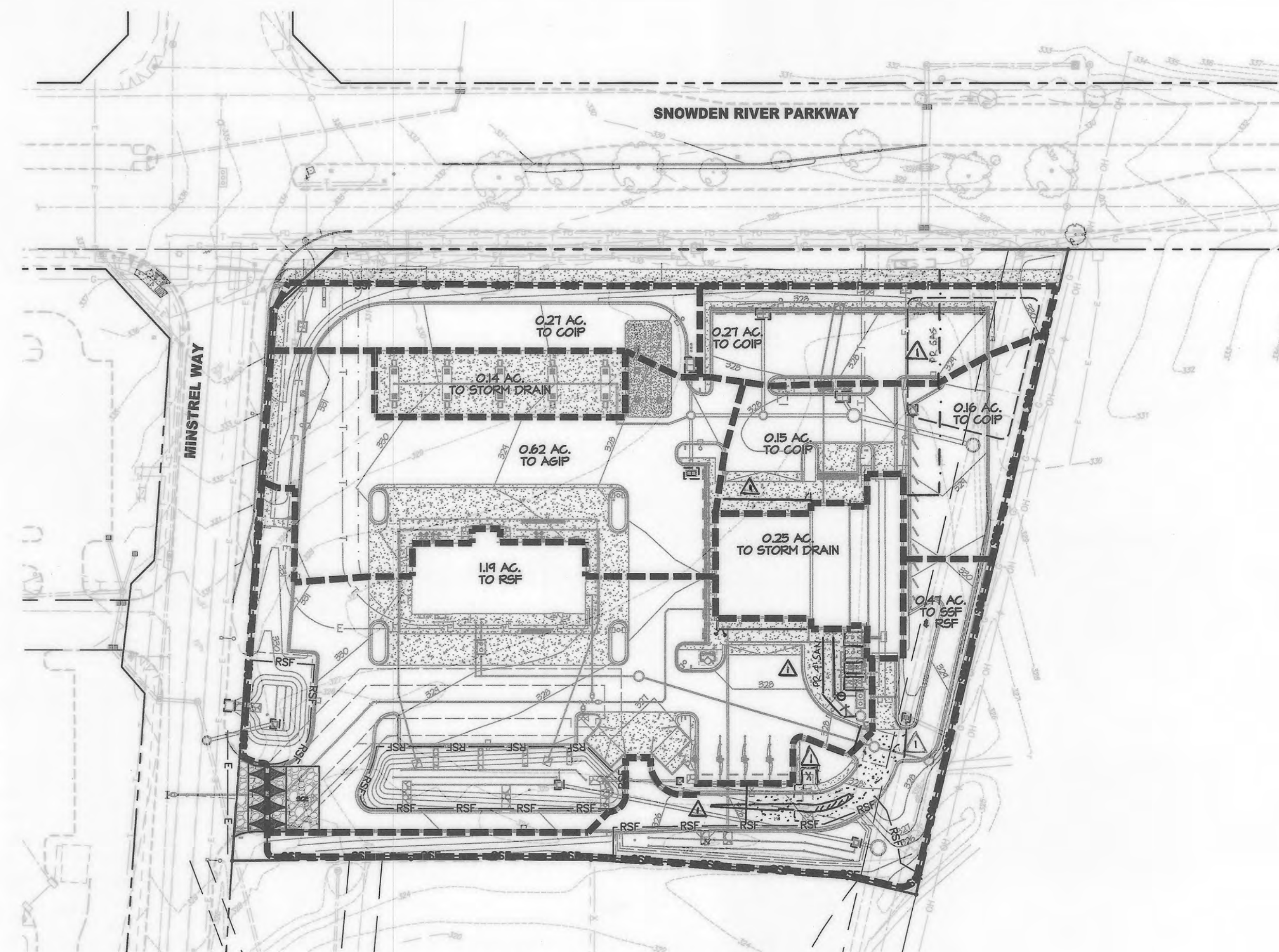
SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
EROSION & SEDIMENT CONTROL PLAN
PROPOSED CONDITIONS
 LIBER 14229 FOLIO 02059 PLAT NO. 14470
 ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.	17297
04/21/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN, UPDATE ADA VAC SPACE, ADD CONCRETE AT CARWASH INGRESS, ATTENDANT BOOTH, GAS, SANITARY SERVICE, ROOF DRAIN CONNECTIONS, REMOVE M&R COPYRIGHT INFO.	SCALE:	AS SHOWN
01/13/2022	NO AS BUILT	DATE:	06/26/2019
		DRAWN BY:	THIS
		DESIGN BY:	THIS
		REVIEW BY:	MGC
		SHEET:	11 OF 40



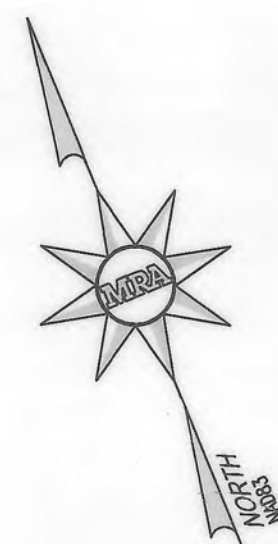
EXISTING CONDITIONS DRAINAGE AREA MAP

SCALE: 1" = 60'



PROPOSED CONDITIONS DRAINAGE AREA MAP

SCALE: 1" = 60'



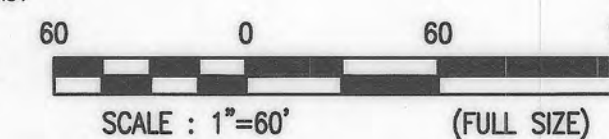
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Chumbley
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9-25-19
Kent Shee-Lison
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-08-19
William Joffe
 DIRECTOR
 DATE: 10-15-19

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE: 3/7/19

HOWARD SCD SIGNATURE BLOCK
 THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Blanton
 HOWARD SOIL CONSERVATION DISTRICT
 DATE: 9/11/19

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DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1991) VERTICAL NAVD 88

OWNER
 TWO FARMS INC.
 3811 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHITED
 PHONE: (410) 889-0200
 DEVELOPERS
 TWO FARMS INC.
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 BALTIMORE, MARYLAND 21224
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 PHONE: (410) 960-8573

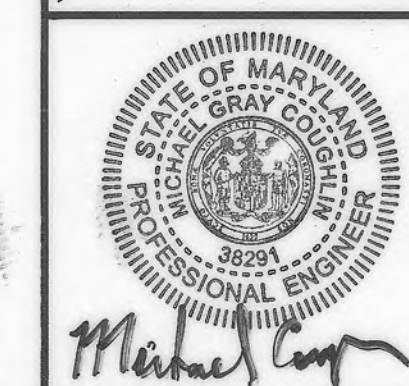
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ESC 4 OF 6

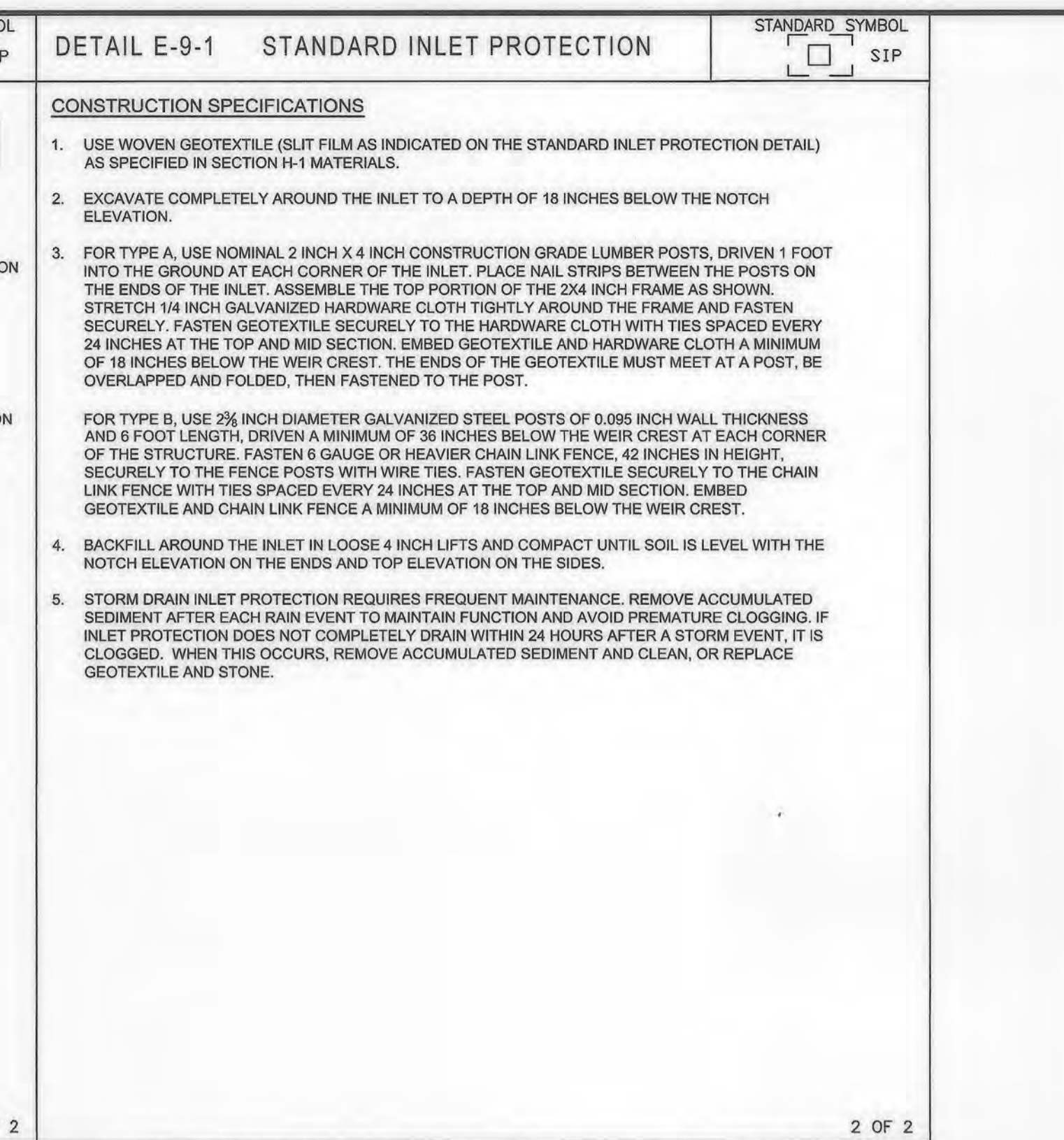
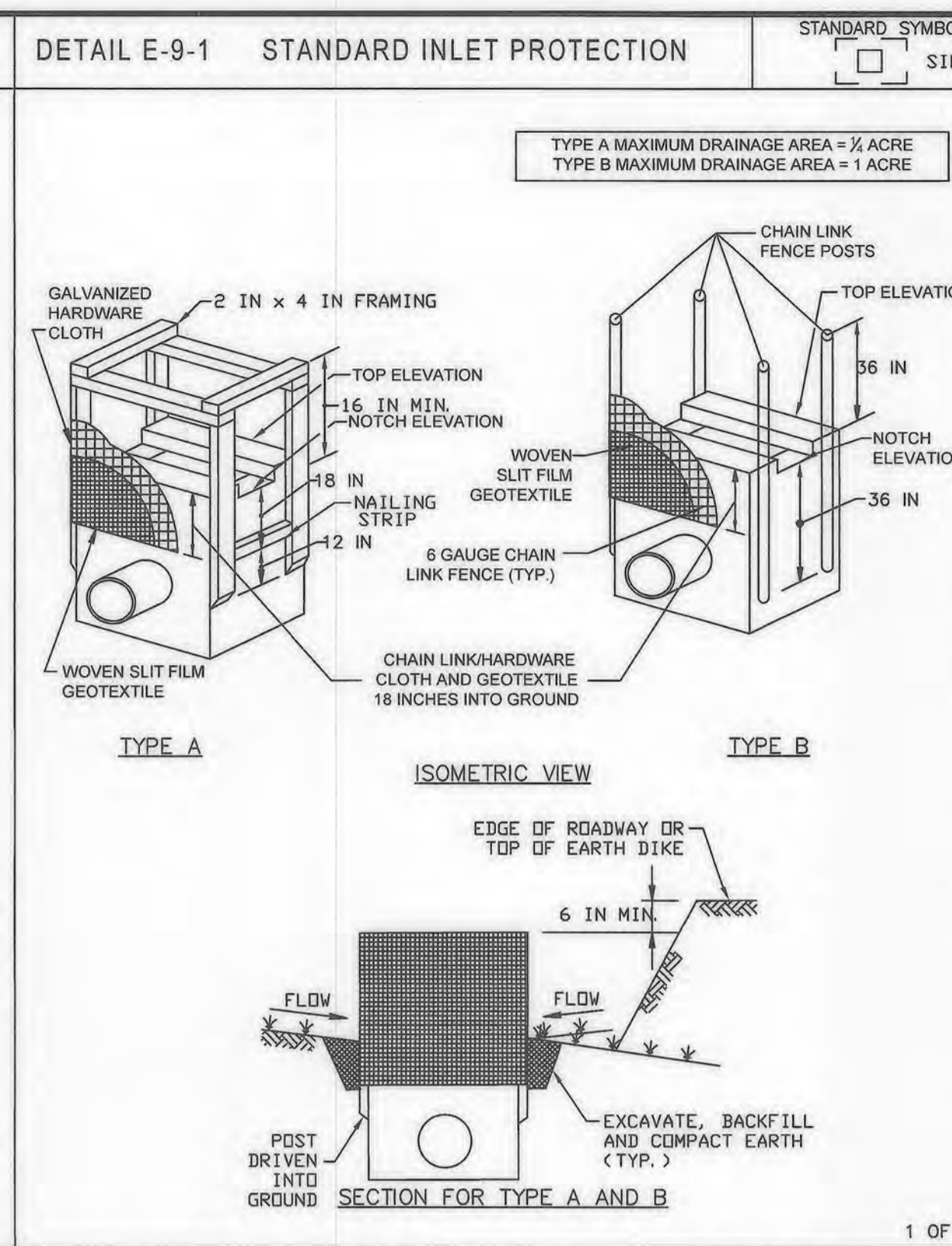
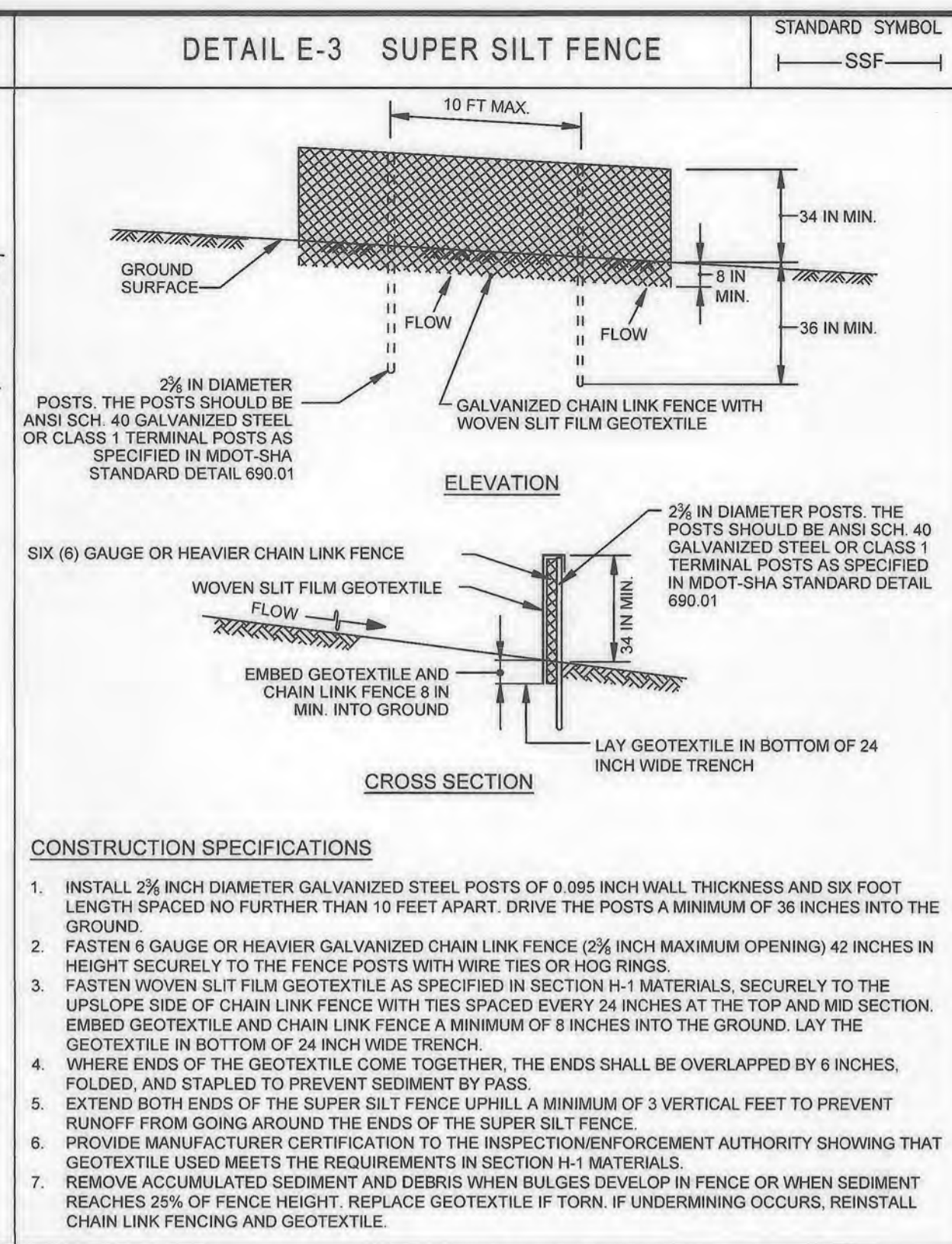
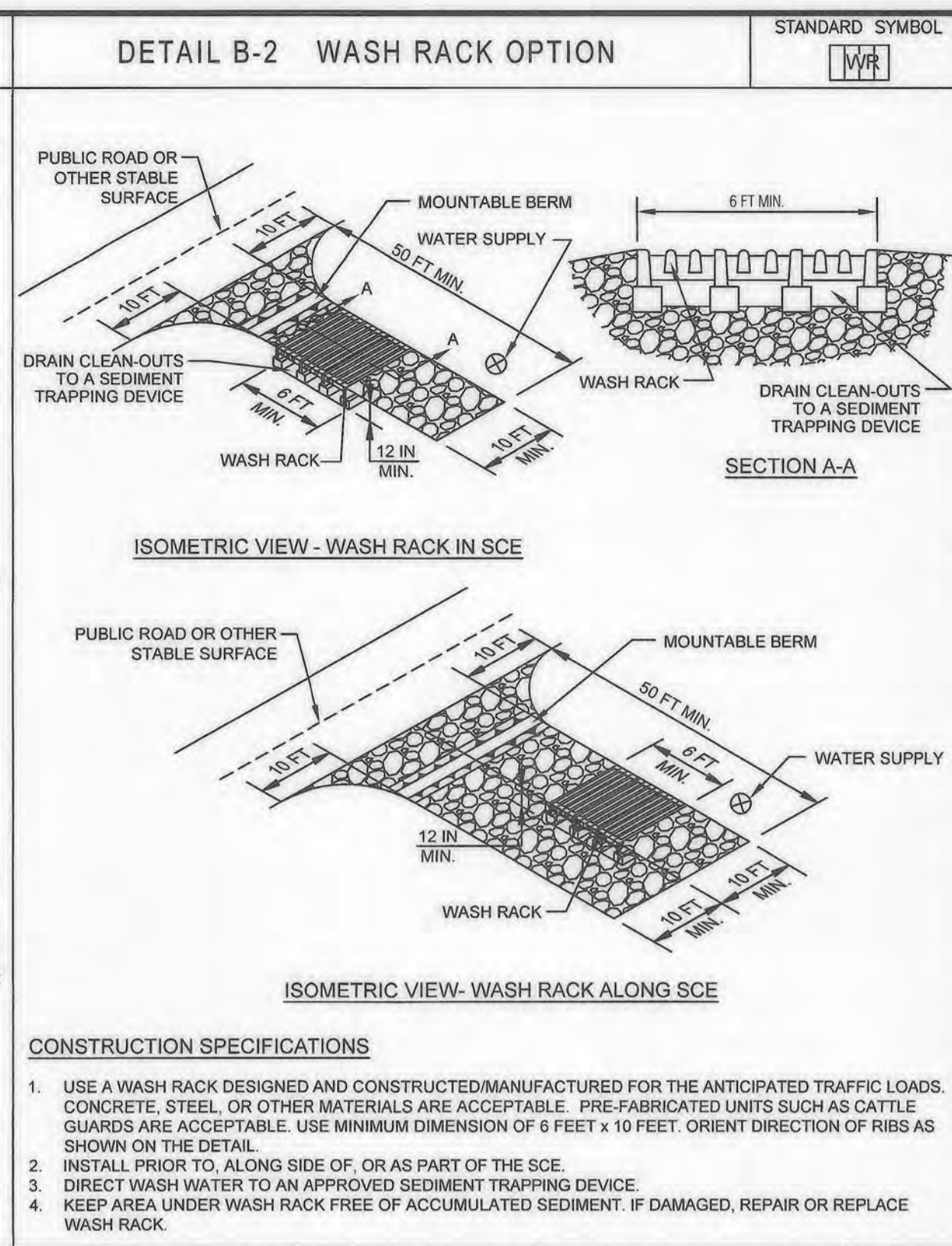
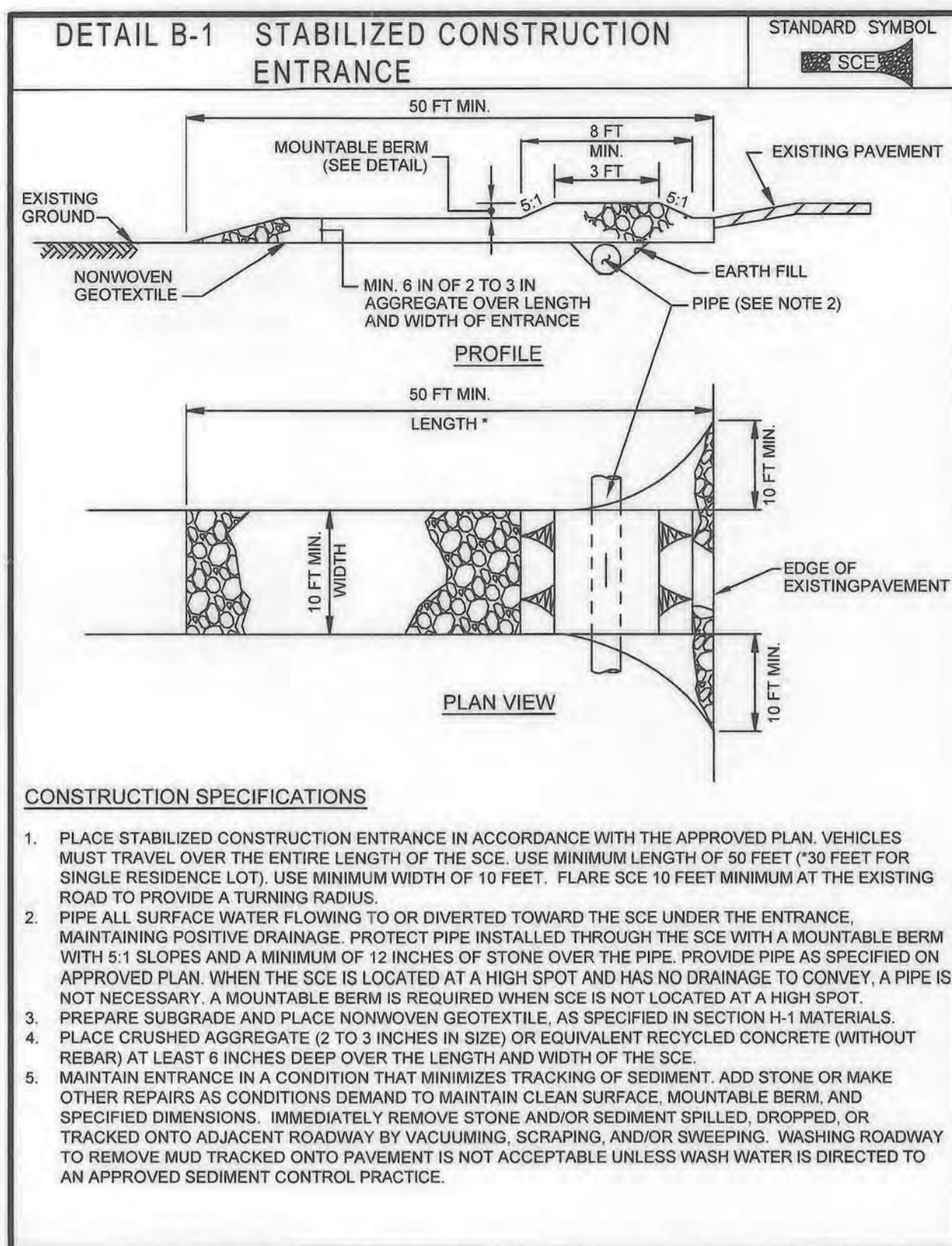


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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
EROSION & SEDIMENT CONTROL PLAN
DRAINAGE AREA MAPS
 LIBER 14228 FOLIO 00059 PLAT NO. 14470
 ZONED M1 - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22
 TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
04/12/2020	REVISE FLDOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN, ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, GAS, SANITARY	17297
01/13/2022	SERVICE ROOF DRAIN CONNECTIONS, REMOVE MRA COPYRIGHT INFORMATION	SCALE: AS SHOWN DATE: 06/26/2019
	NO AS-BUILT	DRAWN BY: THS DESIGN BY: THS REVIEW BY: MGC SHEET: 12 OF 40



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
--	------	---

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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

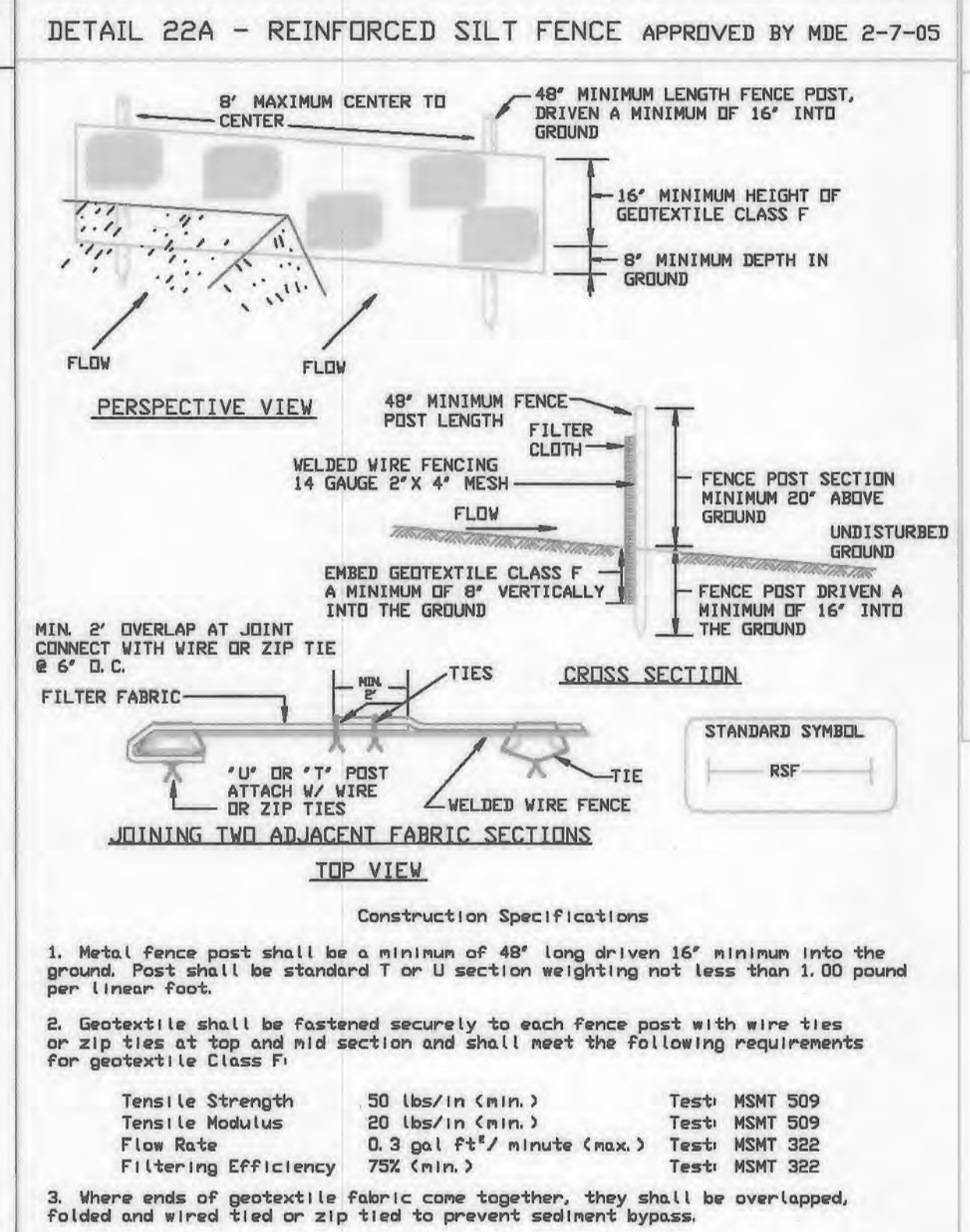
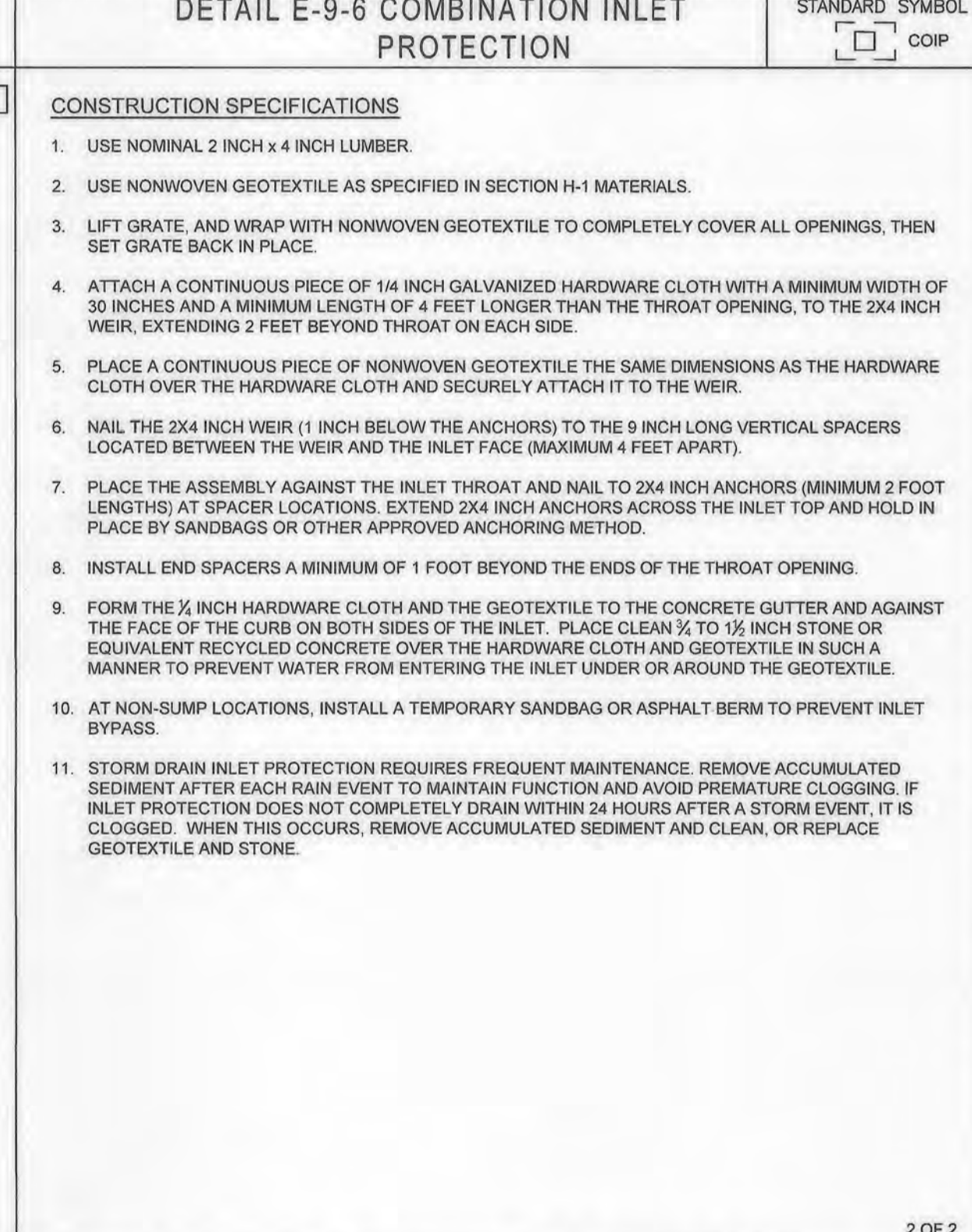
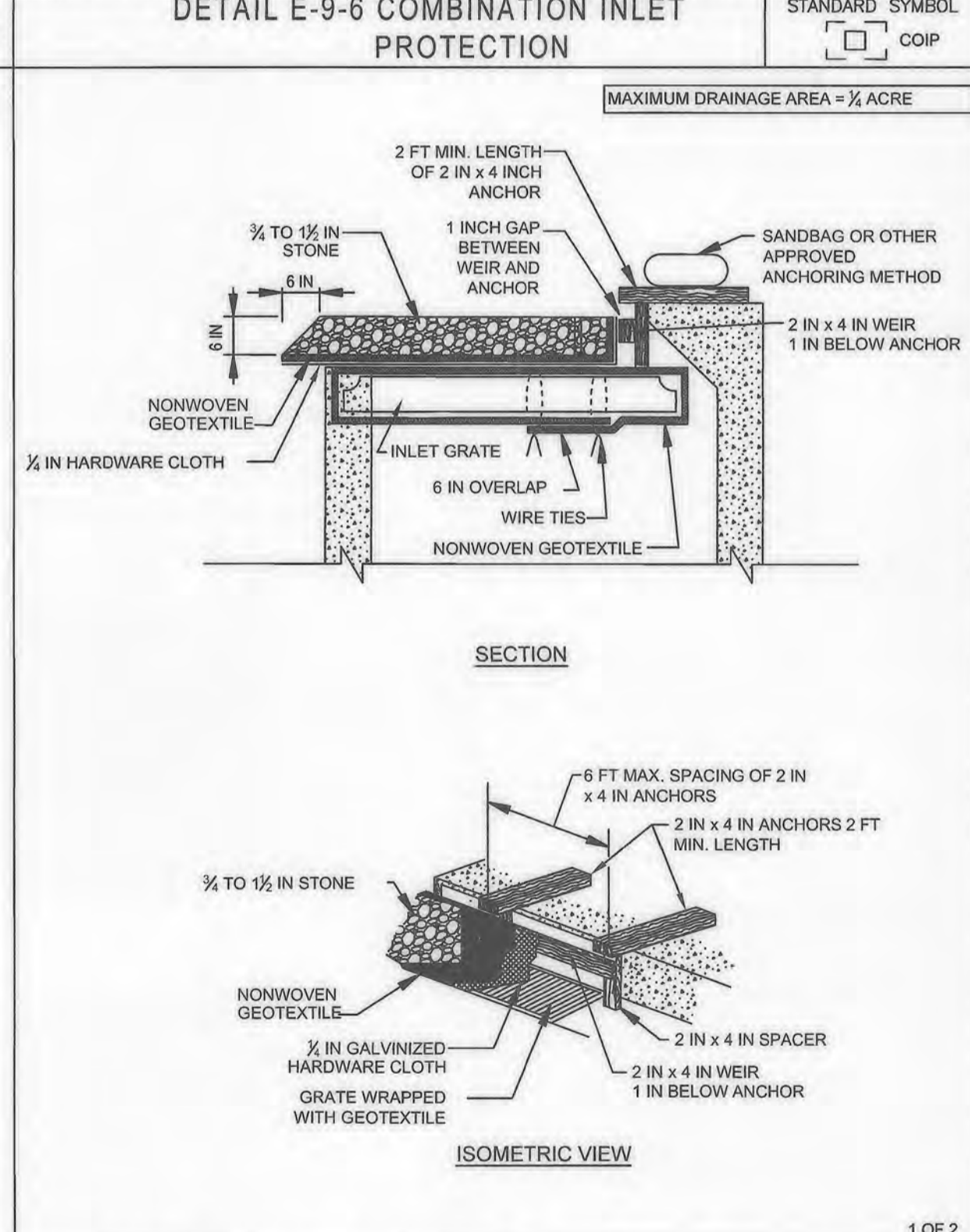
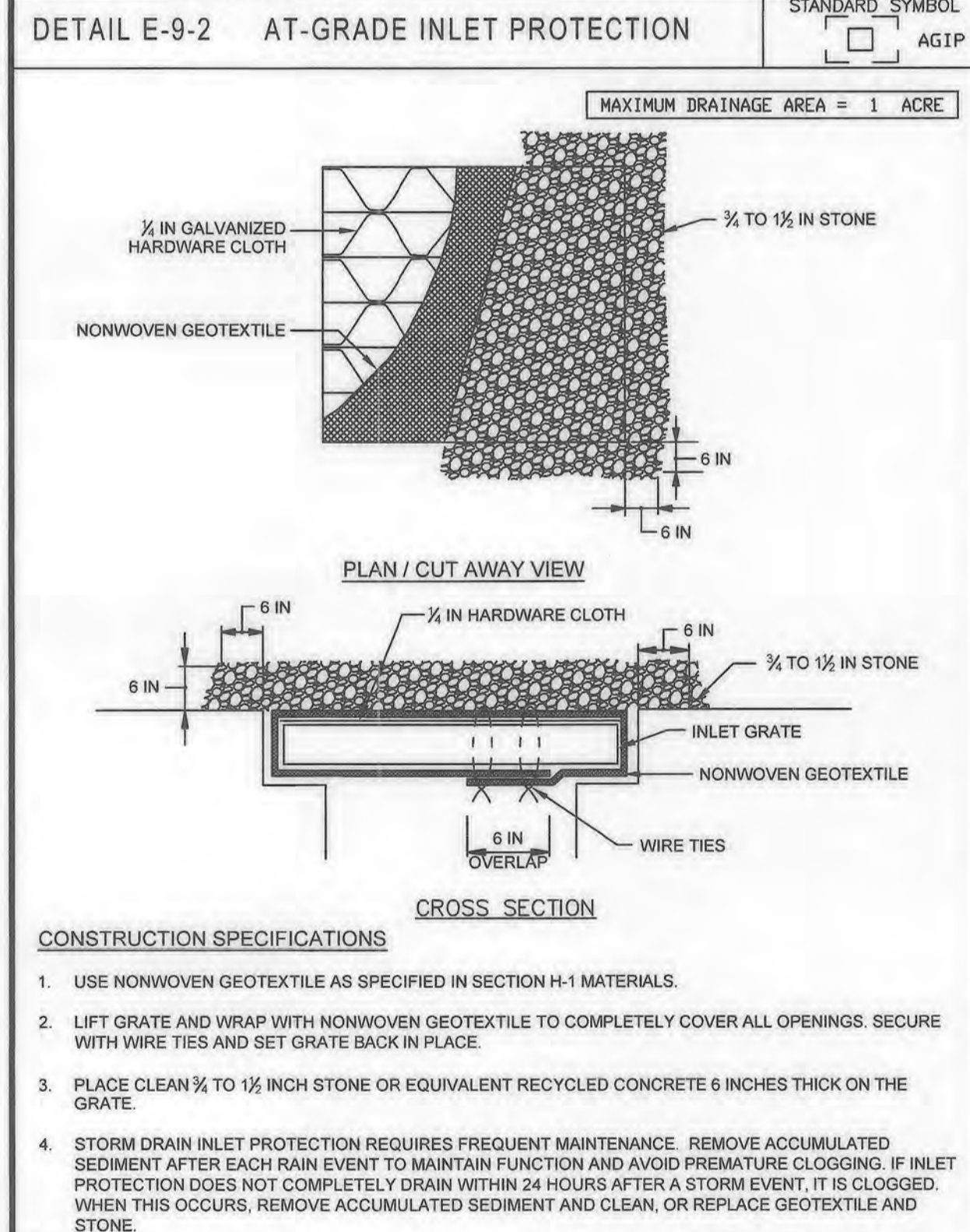
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
--	------	---



SILT FENCE

Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John R. Polunsky 9/25/19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Walt Sheehy 10-08-19
CHIEF, DIVISION OF LAND DEVELOPMENT

Nadine J. Miller 10-15-19
DIRECTOR

APPROVED PLANNING BOARD HOWARD COUNTY

DATE: 3/7/19

HOWARD SCD SIGNATURE BLOCK

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

John R. Polunsky 9/25/19
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John R. Polunsky 9/25/19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

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ESC 5 OF 6

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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH

EROSION & SEDIMENT CONTROL DETAILS

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

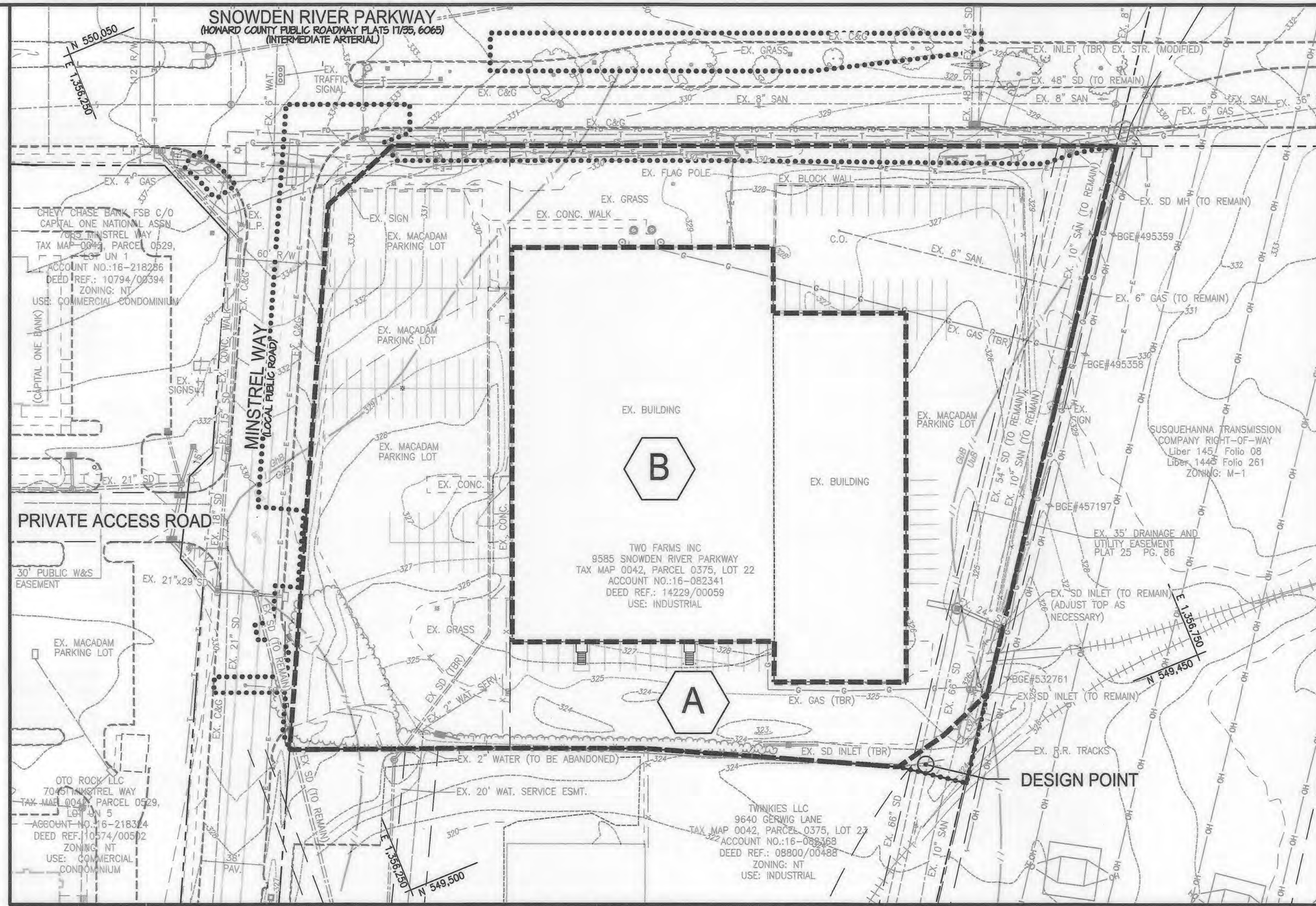
DATE	REVISIONS	JOB NO.:
01/13/2022	No ASB0107	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY: THS
		DESIGN BY: THS
		REVIEW BY: MGC
		SHEET: 13 OF 40

OWNER: TWO FARMS INC., 3611 ROLAND AVENUE, BALTIMORE, MARYLAND 21211, PHONE: (410) 899-0200

DEVELOPERS: TWO FARMS INC., 3611 ROLAND AVENUE, BALTIMORE, MARYLAND 21211, ATTN: JACK WHISTED, PHONE: (410) 899-0200

SNOWDEN CAR WASH, LLC, 1101 PONCA STREET, BALTIMORE, MARYLAND 21224, ATTN: MR. CHRIS ROVERA, PHONE: (410) 860-8573

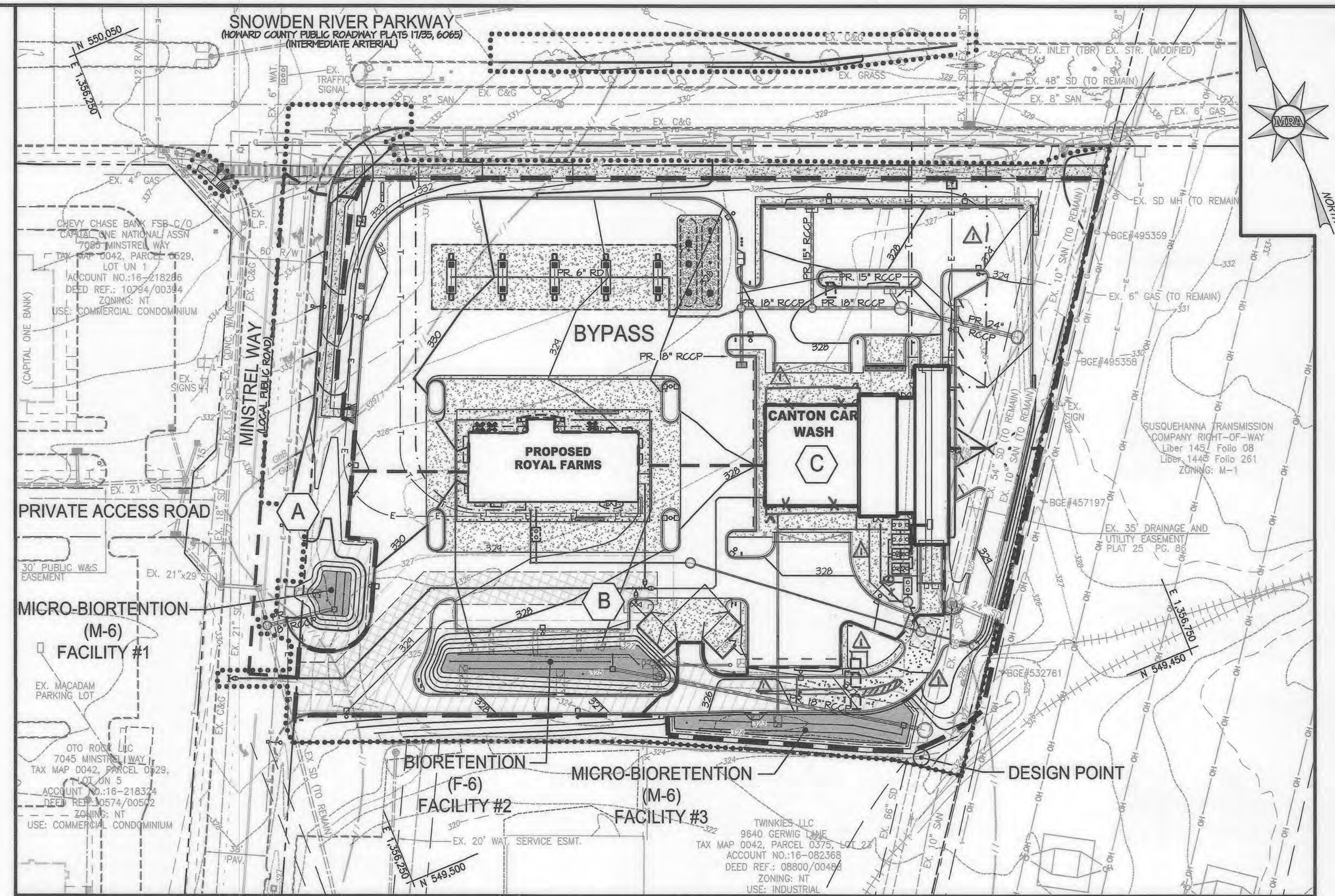
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1991) VERTICAL NAVD 88



EXISTING SWM DRAINAGE AREA MAP
SCALE: 1"=50'

EXISTING DRAINAGE AREA & 'C' FACTOR TABULATION

AREA	ACREAGE	RCN	% IMP	IMP AREA	TC	SITE RUNOFF (CFS)(TR-55)	ZONING
A	2.50 AC.	92	66%	1.65 AC.	0.10	10YR = 15.21	NT
B	1.30 AC.	98	100%	1.30 AC.	0.10	10YR = 8.46	NT



PROPOSED SWM DRAINAGE AREA MAP
SCALE: 1"=50'

PROPOSED AREA & 'C' FACTOR TABULATION

AREA	ACREAGE	RCN	% IMP	IMP AREA	TC	SITE RUNOFF (CFS)(TR-55)	ZONING
*A	0.35 AC.	90	54%	0.19 AC.	0.10	10YR = 2.06	NT
*B	1.12 AC.	94	79%	0.89 AC.	0.10	10YR = 7.02	NT
*C	0.58 AC.	92	68%	0.40 AC.	0.10	10YR = 3.54	NT
BYPASS	1.84 AC.	95	82%	1.34 AC.	0.10	10YR = 10.39	NT

*DENOTES DRAINAGE AREA FOR ESD FACILITY

LEGEND

- PROPOSED DRAINAGE DIVIDE
- EXISTING DRAINAGE DIVIDE
- ESD DRAINAGE AREA
- SOILS DIVIDE
- DRAINAGE AREA LABEL

SOILS CHART

MAP SYMBOL AND SOIL NAME	HYDROLOGIC GROUP	SLOPES	ACREAGE ON-SITE
GbB GLENELG-URBAN LAND	B/D	0-8%	0.37 AC.
Gub GLENVILLE-URBAN LAND-UDORTMENTS	C/D	0-8%	3.25 AC.
Uub URBAN LAND-UDORTMENTS	D	0-8%	0.19 AC.

HYDROLOGY/HYDRAULIC SUMMARY #

MICRO-BIORETENTION (M-6) FACILITY #1	WATER SURFACE ELEVATION	AREA OF FILTER REQUIRED	AREA OF FILTER PROVIDED	TOTAL STORAGE VOLUME REQUIRED	TOTAL STORAGE VOLUME PROVIDED
	ft.	s.f.	s.f.	c.f.	c.f.
ESD VOLUME (ESD)	328.00	305	527	513	676
ESD VOLUME - AS-BUILT	327.41	500	787	0.0155	0.0155
RECHARGE VOLUME (REV)	N/A	N/A	45	105	0.0024
RECHARGE VOLUME - AS-BUILT			100	0.0023	
10-YEAR STORM	328.21				
10-YEAR STORM (ASBUILT)	327.167				

** WATER QUALITY (WQ) IS SATISFIED WITH FULL STORAGE OF ESD VOLUME.

MARYLAND-378 FACILITY:	NO
STRUCTURE CLASSIFICATION:	A
WATERSHED NAME:	PATUXENT RIVER AREA WATERSHED
STRUCTURE TYPE:	MICRO-BIORETENTION (M-6)
STORAGE HEIGHT PRODUCT (AC-FT.):	0.0155 (ESD) 0.0155
DRAINAGE AREA TO FACILITY (AC.):	0.35
RCN TO FACILITY:	90
HEIGHT TO EMERGENCY SPILLWAY CREST (FT.):	N/A
MAXIMUM HEIGHT OF FILL (FT.):	3.5'
PERMANENT POOL, WATER SURFACE AREA (AC.):	328.00 (ESD) 327.41
BYPASS SPILLWAY (WEIR) RATE, AT DESIGN STORM (10 YR):	1.7 CFS (10 YEAR) 1.3 CFS
EMERGENCY SPILLWAY CAPACITY, AT DESIGN STORM:	N/A
LEVEL OF MANAGEMENT REQUIRED:	ESD, RECHARGE, CPV
LEVEL OF MANAGEMENT PROVIDED:	ESD, RECHARGE, CPV
FREEBOARD REQUIRED (FT.):	N/A
FREEBOARD PROVIDED (FT.):	1.0' (10 YEAR) 2.3'

HYDROLOGY/HYDRAULIC SUMMARY *

BIORETENTION (F-6) FACILITY #2	WATER SURFACE ELEVATION	AREA OF FILTER REQUIRED	AREA OF FILTER PROVIDED	TOTAL STORAGE VOLUME REQUIRED	TOTAL STORAGE VOLUME PROVIDED
	ft.	s.f.	s.f.	c.f.	c.f.
ESD VOLUME (ESD)	325.00	2209	2276	2120	2716
ESD VOLUME - AS-BUILT	324.37	1846	1906	0.0624	0.0624
RECHARGE VOLUME (REV)	N/A	N/A	257	455	0.0104
RECHARGE VOLUME - AS-BUILT			370	0.0085	
10-YEAR STORM	325.47				
10-YEAR STORM (ASBUILT)	324.81				

** WATER QUALITY (WQ) IS SATISFIED WITH FULL STORAGE OF ESD VOLUME.

MARYLAND-378 FACILITY:	NO
STRUCTURE CLASSIFICATION:	A
WATERSHED NAME:	PATUXENT RIVER AREA WATERSHED
STRUCTURE TYPE:	BIORETENTION (F-6)
STORAGE HEIGHT PRODUCT (AC-FT.):	0.0624 (ESD) 0.0624
DRAINAGE AREA TO FACILITY (AC.):	1.12
RCN TO FACILITY:	94
HEIGHT TO EMERGENCY SPILLWAY CREST (FT.):	N/A
MAXIMUM HEIGHT OF FILL (FT.):	3.5'
PERMANENT POOL, WATER SURFACE AREA (AC.):	325.00 (ESD) 324.37
BYPASS SPILLWAY (WEIR) RATE, AT DESIGN STORM (10 YR):	6.5 CFS (10 YEAR) 6.7 CFS
EMERGENCY SPILLWAY CAPACITY, AT DESIGN STORM:	N/A
LEVEL OF MANAGEMENT REQUIRED:	ESD, RECHARGE, CPV
LEVEL OF MANAGEMENT PROVIDED:	ESD, RECHARGE, CPV
FREEBOARD REQUIRED (FT.):	N/A
FREEBOARD PROVIDED (FT.):	0.93' (10 YEAR) 1.6'

*Redevelopment

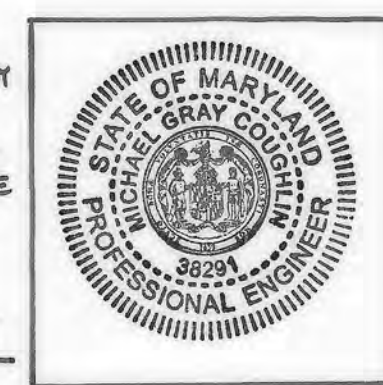
HYDROLOGY/HYDRAULIC SUMMARY #

MICRO-BIORETENTION (M-6) FACILITY #3	WATER SURFACE ELEVATION	AREA OF FILTER REQUIRED	AREA OF FILTER PROVIDED	TOTAL STORAGE VOLUME REQUIRED	TOTAL STORAGE VOLUME PROVIDED
	ft.	s.f.	s.f.	c.f.	c.f.
ESD VOLUME (ESD)	324.55	505	2053	1050	1218
ESD VOLUME - AS-BUILT	324.50	1126	1251	0.0297	0.0297
RECHARGE VOLUME (REV)	N/A	N/A	122	411	0.0094
RECHARGE VOLUME - AS-BUILT			125	0.0093	
10-YEAR STORM	324.85				
10-YEAR STORM (ASBUILT)	324.30				

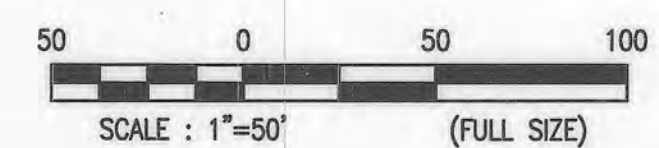
** WATER QUALITY (WQ) IS SATISFIED WITH FULL STORAGE OF ESD VOLUME.

MARYLAND-378 FACILITY:	NO
STRUCTURE CLASSIFICATION:	A
WATERSHED NAME:	PATUXENT RIVER AREA WATERSHED
STRUCTURE TYPE:	MICRO-BIORETENTION (M-6)
STORAGE HEIGHT PRODUCT (AC-FT.):	0.0297 (ESD) 0.0297
DRAINAGE AREA TO FACILITY (AC.):	0.58
RCN TO FACILITY:	92
HEIGHT TO EMERGENCY SPILLWAY CREST (FT.):	N/A
MAXIMUM HEIGHT OF FILL (FT.):	1.0'
PERMANENT POOL, WATER SURFACE AREA (AC.):	324.55 (ESD) 324.50
BYPASS SPILLWAY (WEIR) RATE, AT DESIGN STORM (10 YR):	3.1 CFS (10 YEAR)
EMERGENCY SPILLWAY CAPACITY, AT DESIGN STORM:	N/A
LEVEL OF MANAGEMENT REQUIRED:	ESD, RECHARGE, CPV
LEVEL OF MANAGEMENT PROVIDED:	ESD, RECHARGE, CPV
FREEBOARD REQUIRED (FT.):	N/A
FREEBOARD PROVIDED (FT.):	0.15' (10 YEAR) 0.20'

ASBUILT 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 ASBUILT PLAN IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS. I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36291, EXPIRATION DATE: 1/13/2024.



Michael Goughlin 3-1-23
SIGNATURE DATE



DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1991) VERTICAL NAVD 88

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573



DATE	REVISIONS	JOB NO.
09/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN	17297
01/13/2022	ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, GAS, SANITARY SERVICE, ROOF DRAIN CONNECTIONS, REMOVE MRA COPYRIGHT INFORMATION.	AS SHOWN
		DATE: 06/26/2019
		DRAWN BY: THS
		DESIGN BY: THS
		REVIEW BY: MCC
		SHEET: 15 OF 40

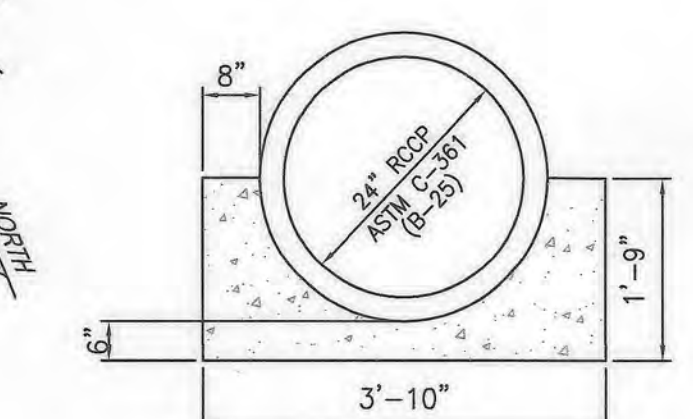
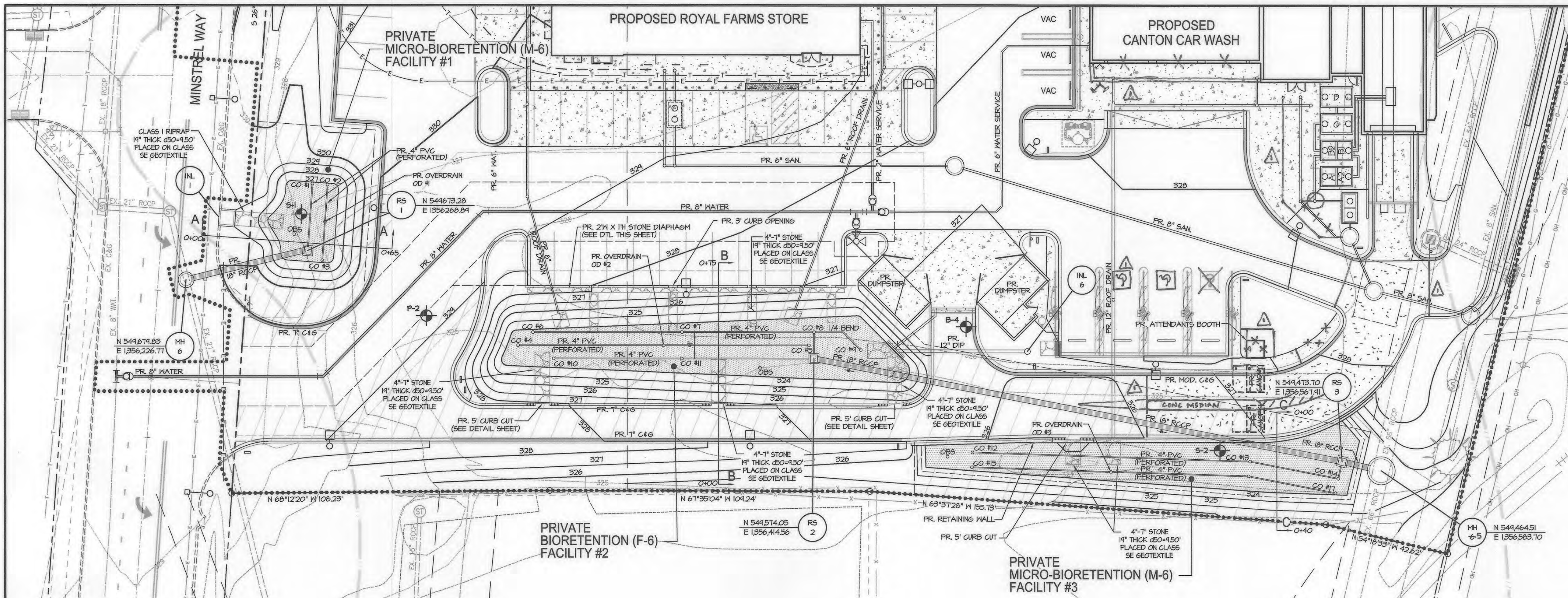
MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRAGTA.COM

SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
STORMWATER MANAGEMENT
DRAINAGE AREA MAPS
LIBER 14229 FOLIO 00059 PLAT NO. 14170
ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

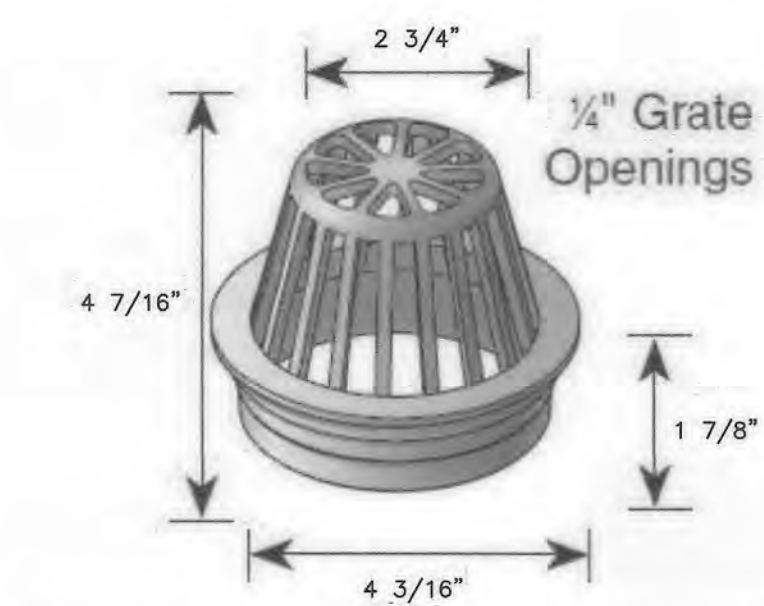
APPROVED: DEPARTMENT OF PLANNING AND ZONING

9-25-19
10-08-19
10-15-19
DATE DATE DATE

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE 3/7/19



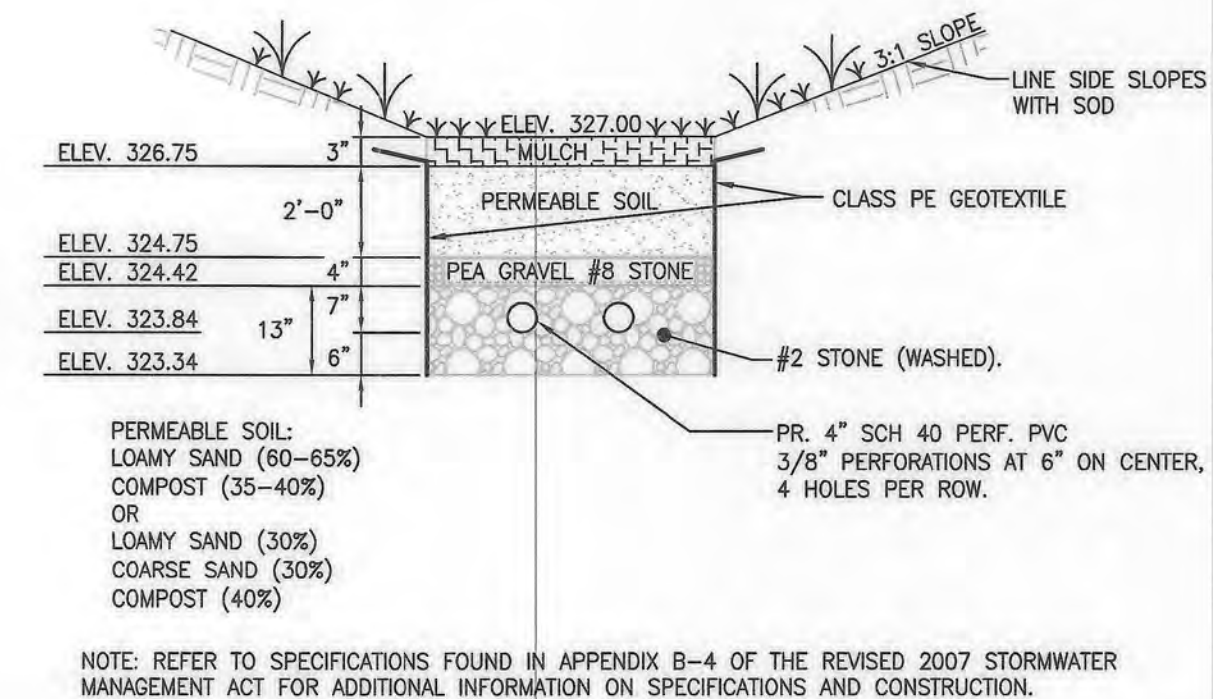
NOTES:
 1. CRADLE TO BE CONTINUOUS ALONG PIPE.
 2. CONCRETE FOR CRADLE TO BE MIX NO. 3.
CONCRETE CRADLE DETAIL
 NOT TO SCALE



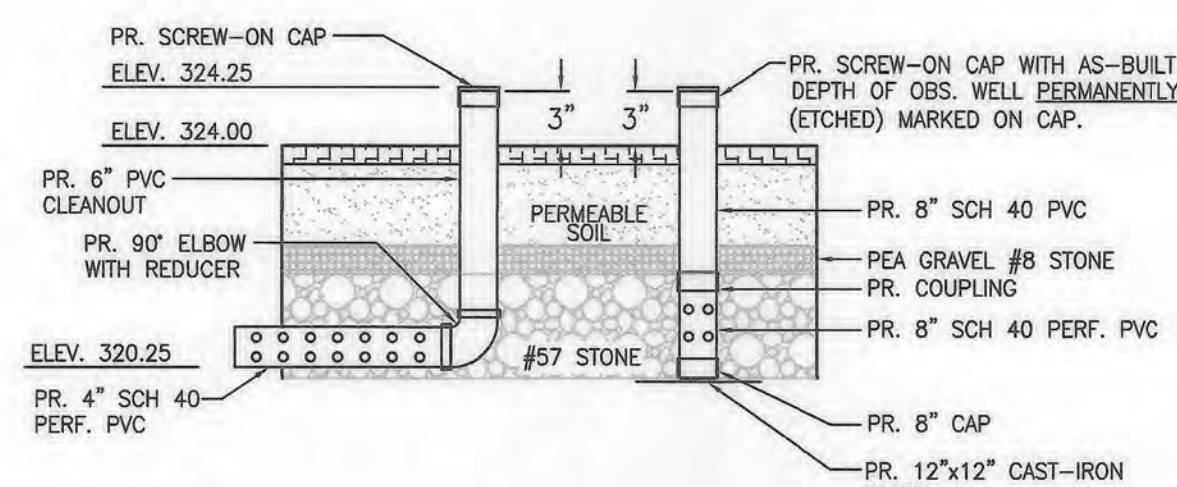
OVERDRAIN NDS ATRIUM GRATE
 NDS PART NO. 78 (PRODUCT CATALOG 2016/2017)
 FLAT TOP STRUCTURAL FOAM POLYOLEFIN ATRIUM GRATE WITH UV INHIBITOR
 OPEN SURFACE AREA 17.00 SQUARE INCHES
 52.01 GPM

PLAN
 SCALE: 1" = 20'

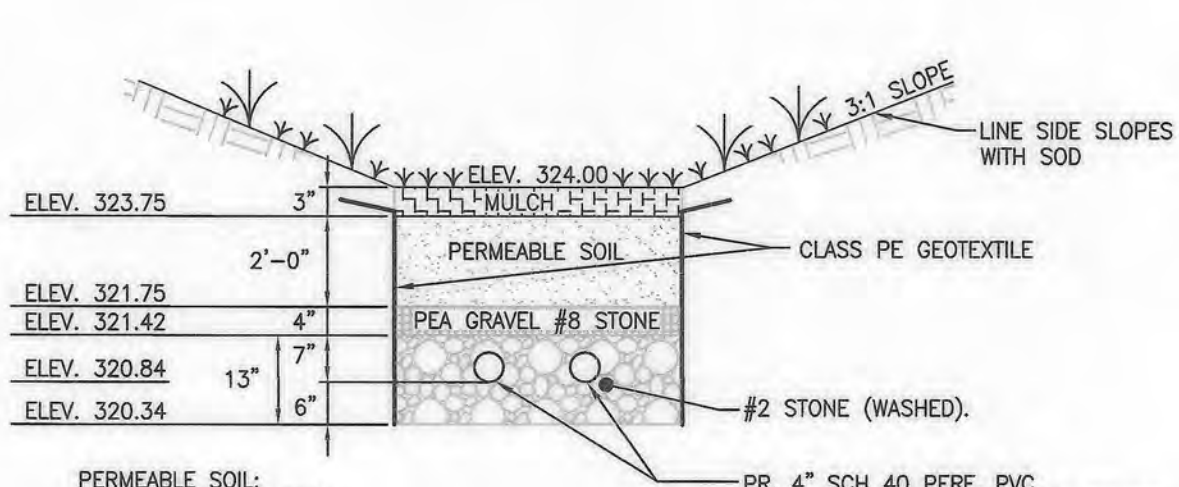
MAINTENANCE RESPONSIBILITY
 THE STORMWATER MANAGEMENT FACILITIES SHOWN ON THESE PLANS ARE PRIVATE AND SHALL BE MAINTAINED BY THE OWNER.



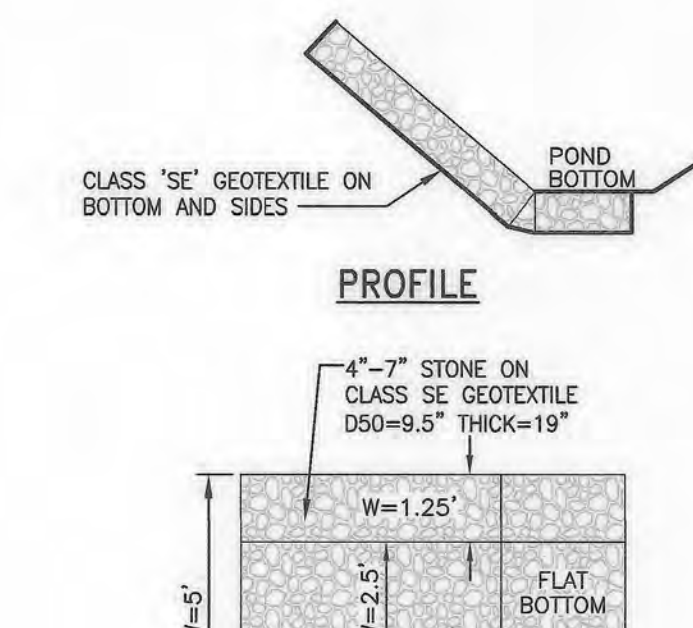
MICRO - BIORETENTION FACILITY #1 FILTER MEDIA SECTION
 NOT TO SCALE



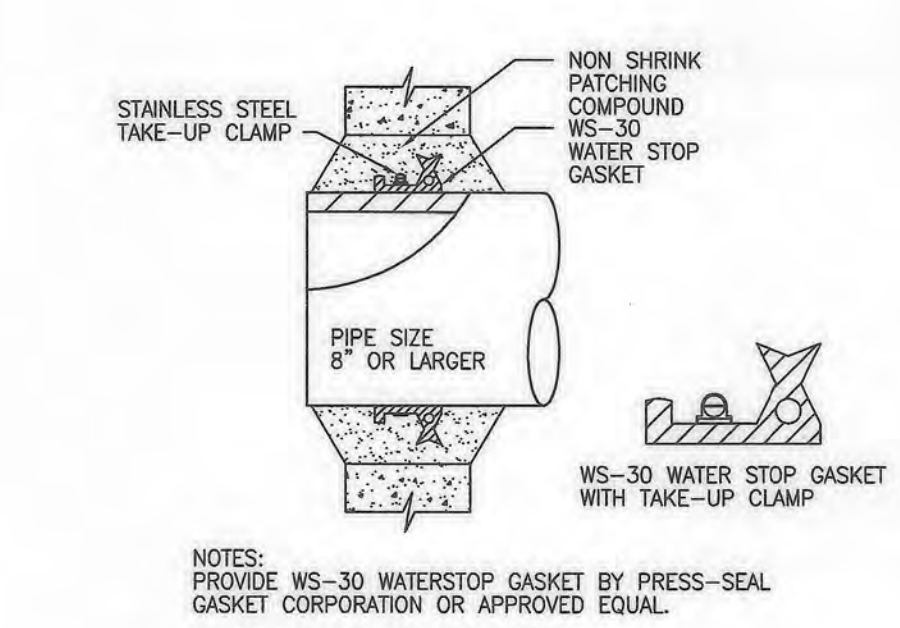
BIORETENTION FACILITY #2 CLEANOUT & OBSERVATION WELL DETAIL
 NOT TO SCALE



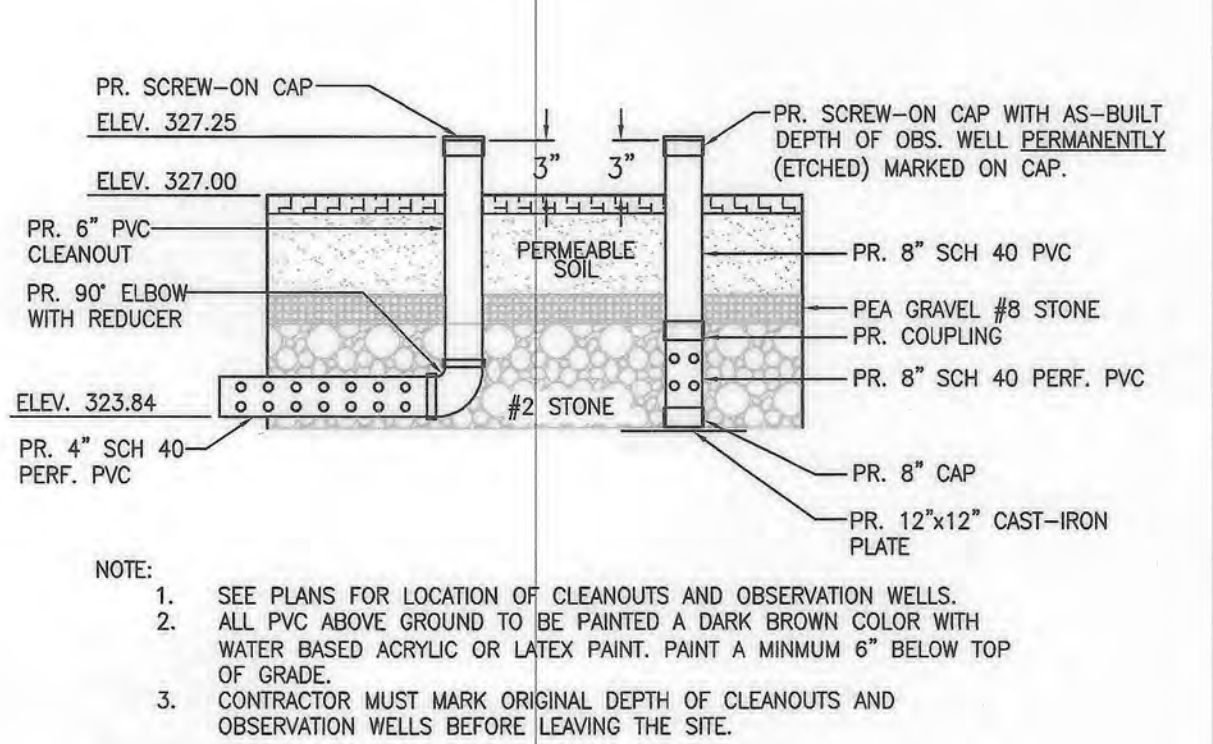
MICRO - BIORETENTION FACILITY #3 FILTER MEDIA SECTION
 NOT TO SCALE



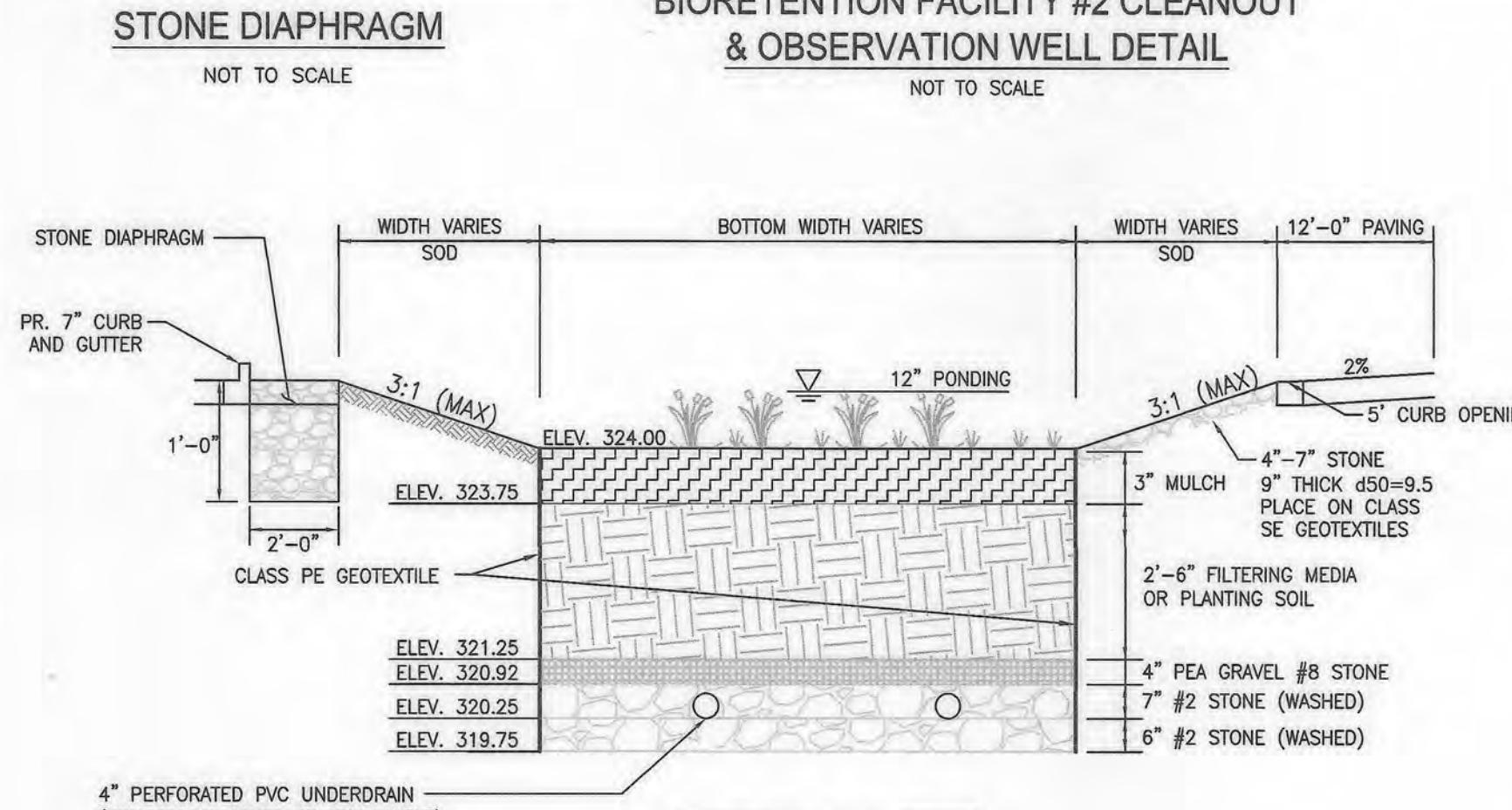
PROFILE
PLAN VIEW
RIP RAP INFLOW DETAIL
 NOT TO SCALE



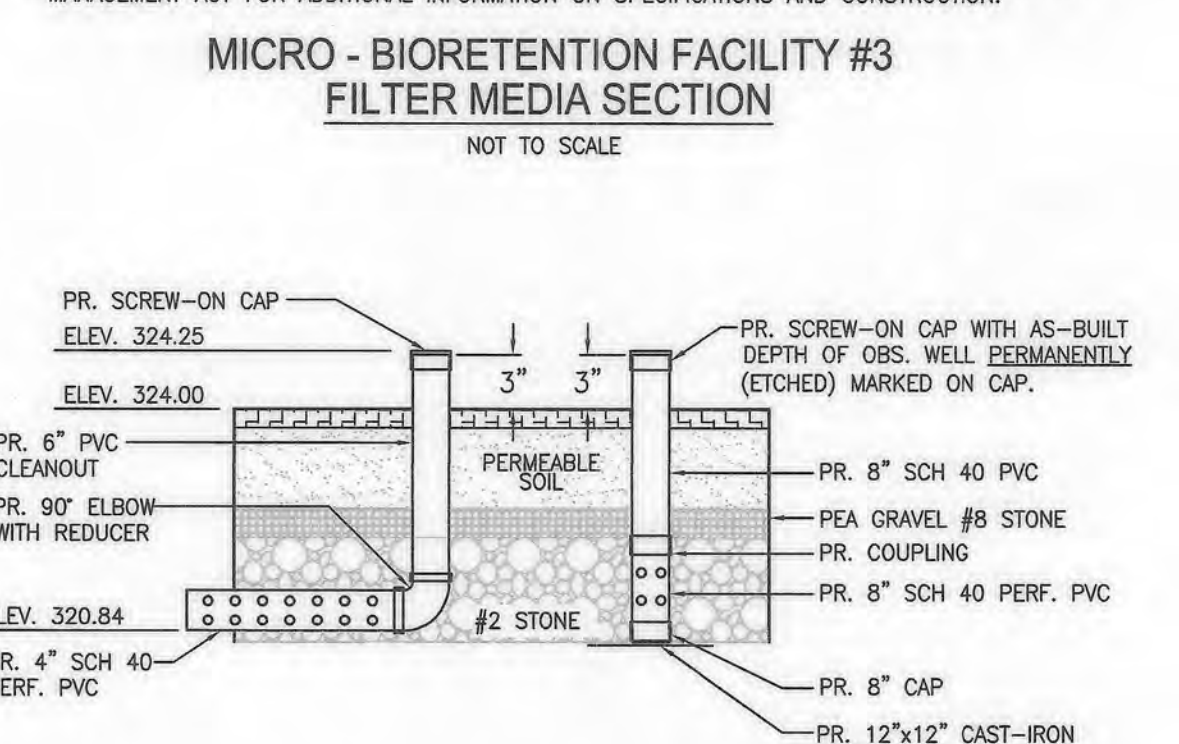
WATERSTOP DETAIL
 NOT TO SCALE



MICRO-BIORETENTION FACILITY #1 CLEANOUT & OBSERVATION WELL DETAIL
 NOT TO SCALE



BIORETENTION FACILITY #2 TYPICAL SECTION
 NOT TO SCALE



MICRO-BIORETENTION FACILITY #3 CLEANOUT & OBSERVATION WELL DETAIL
 NOT TO SCALE

ASBUILT 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. I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36291, EXPIRATION DATE: 1/13/2024.

Michael Goughlin 3-1-23
 SIGNATURE DATE

OWNER
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

DEVELOPERS
 SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

PROFESSIONAL CERTIFICATION
 I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36291, EXPIRATION DATE: 01/13/2024.

MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
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 TOWSON, MARYLAND 21286
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 MRAGTA.COM

SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH

STORM WATER MANAGEMENT PLAN

DATE	REVISIONS	JOB NO.	17297
01/22/2020	REUSE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN, ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, SIGNIFY	SCALE:	AS SHOWN
	REMOVE PEA COPYRIGHT INFORMATION	DATE:	06/26/2019
01/13/2022	AS-BUILT	DRAWN BY:	THIS
		DESIGN BY:	THIS
		REVIEW BY:	MGC
		SHEET:	17 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING

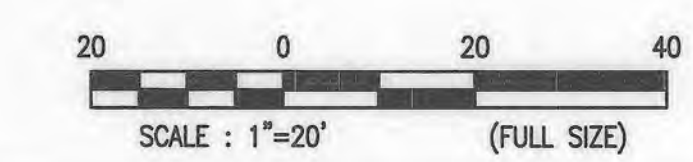
Chad... 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Karl... 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT

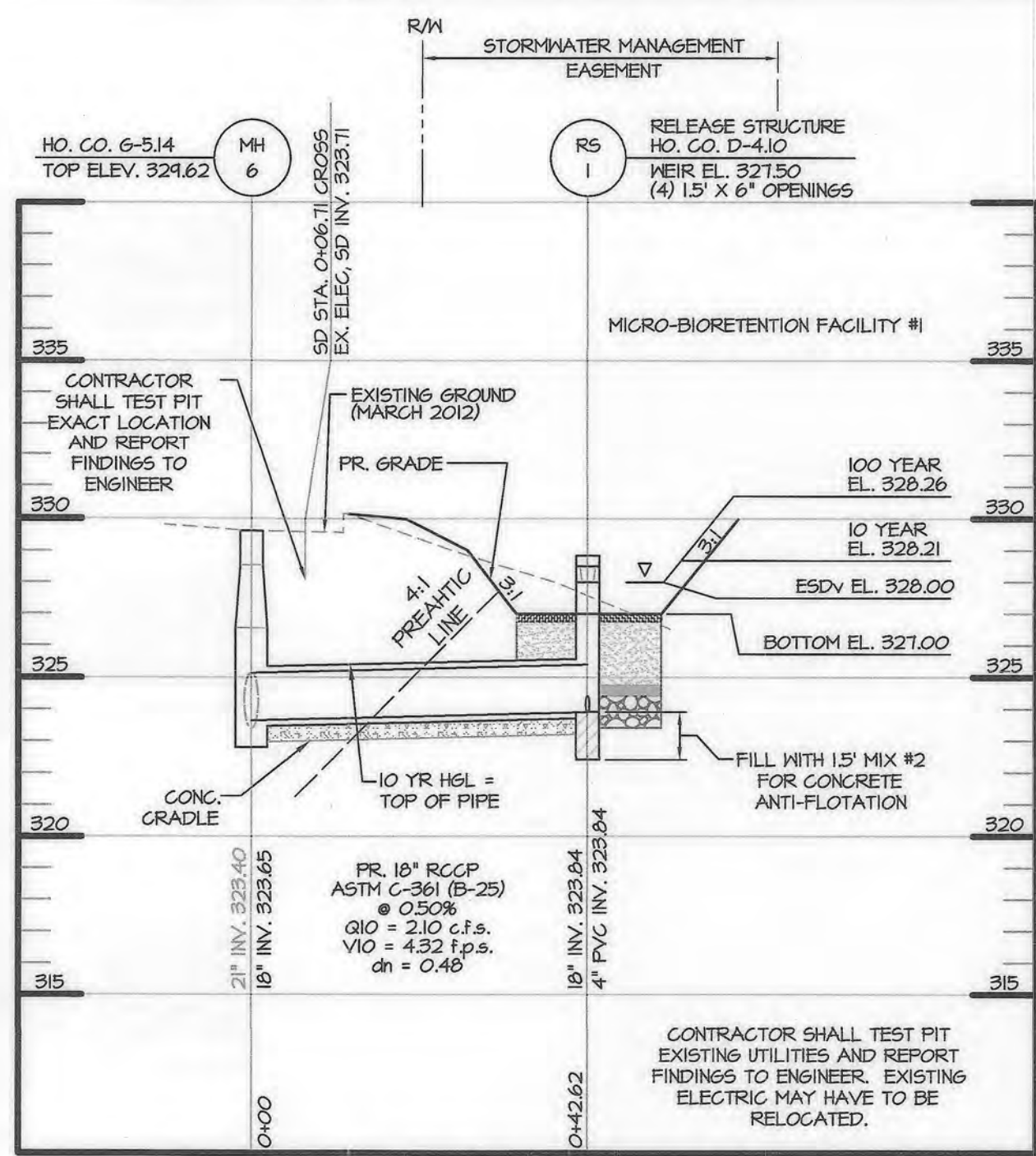
Naldis... 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY

DATE 3/7/19

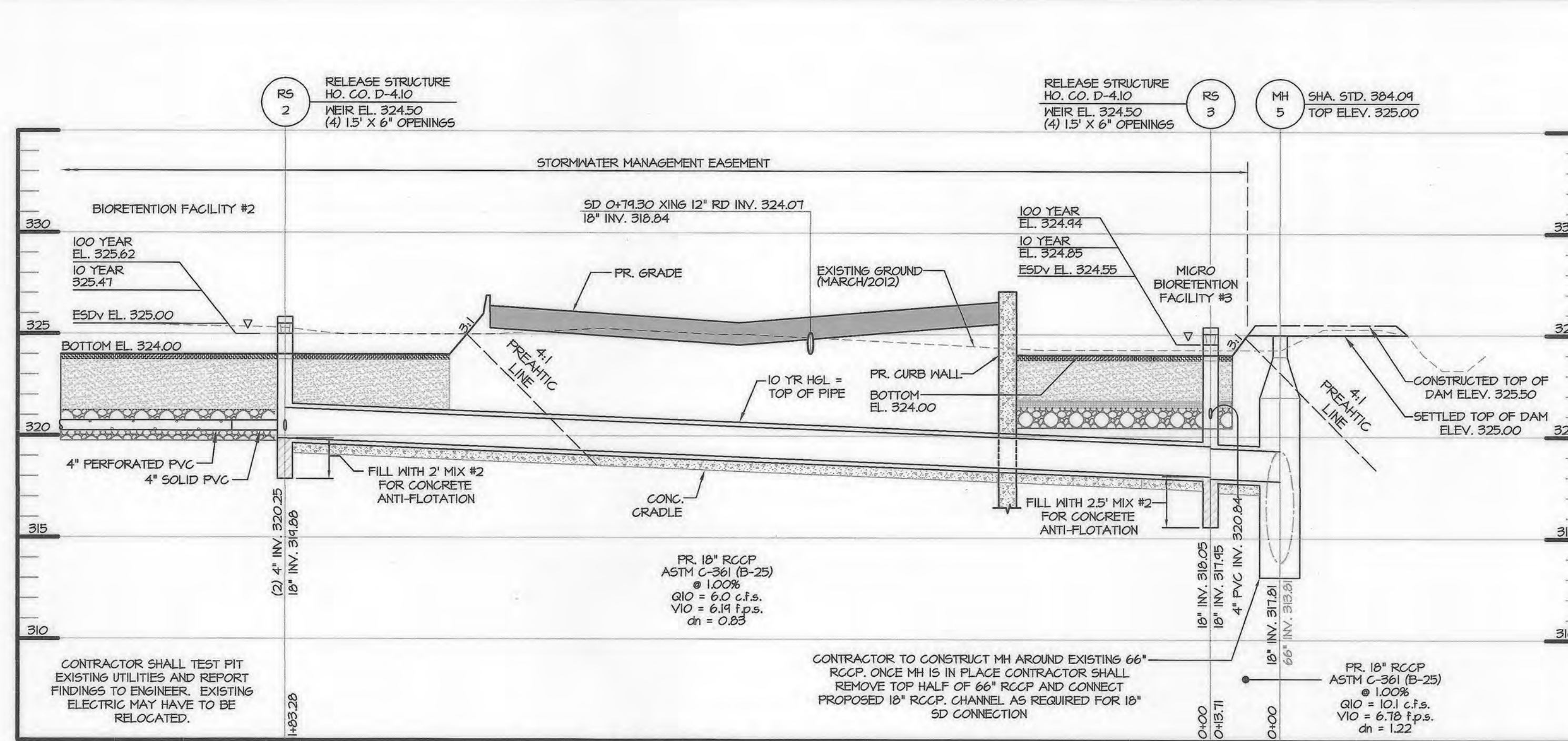


SCALE: 1" = 20'
 (FULL SIZE)



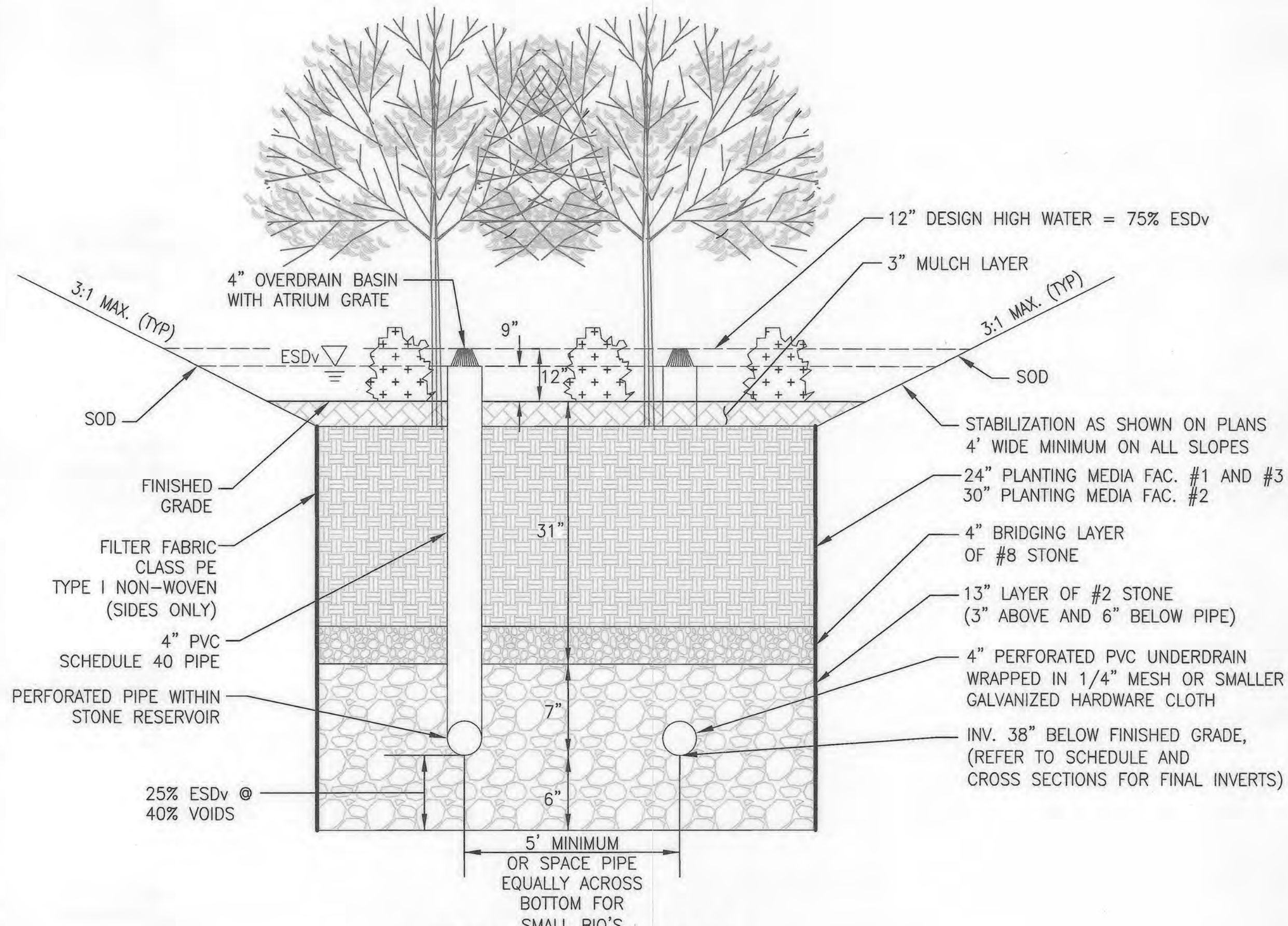
FACILITY No. 1 PRINCIPAL SPILLWAY PROFILE

SCALE: H: 1" = 20'
V: 1" = 5'



FACILITY No. 2 and No. 3 PRINCIPAL SPILLWAY PROFILE

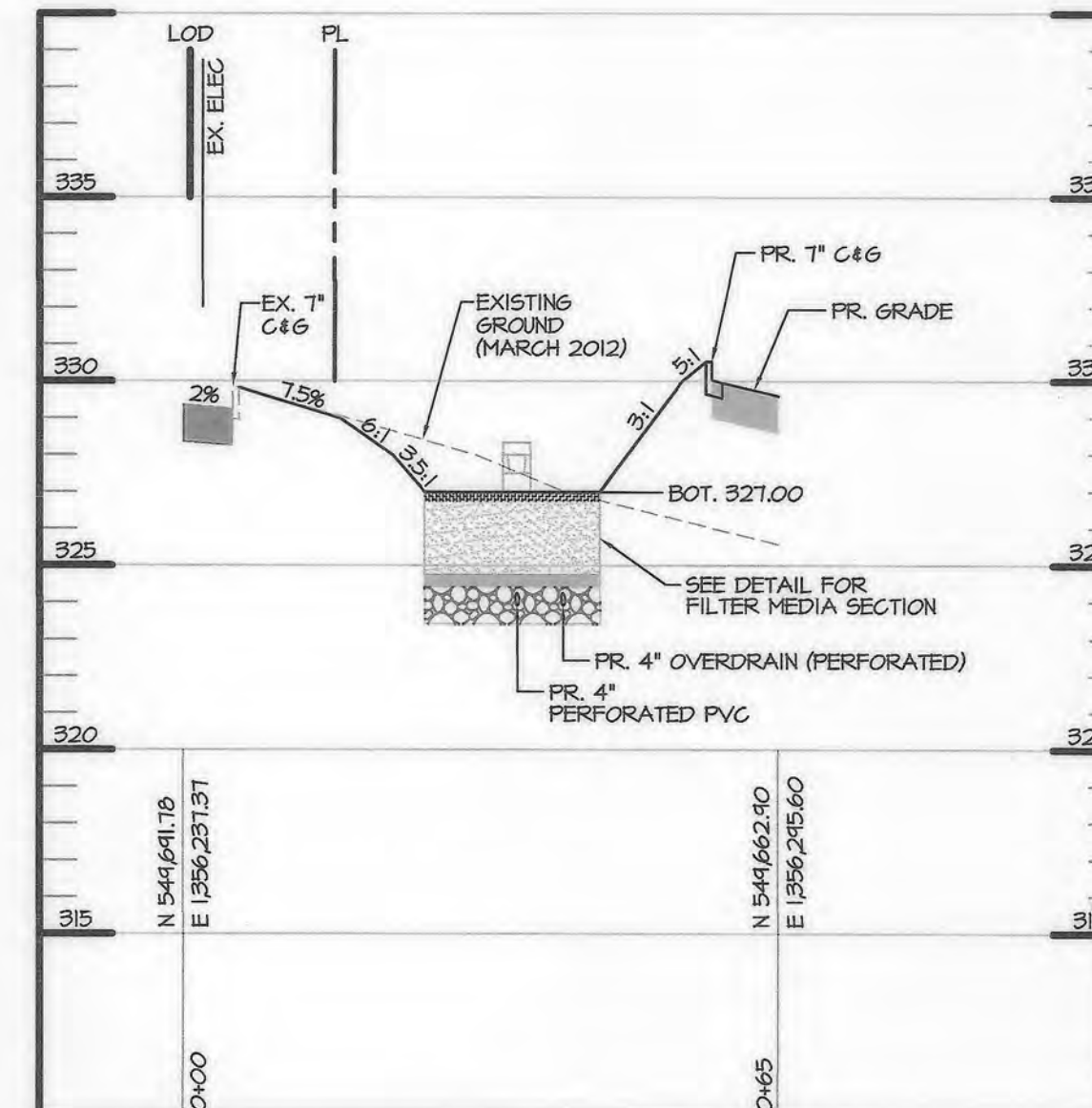
SCALE: H: 1" = 20'
V: 1" = 5'



TYPICAL SECTION

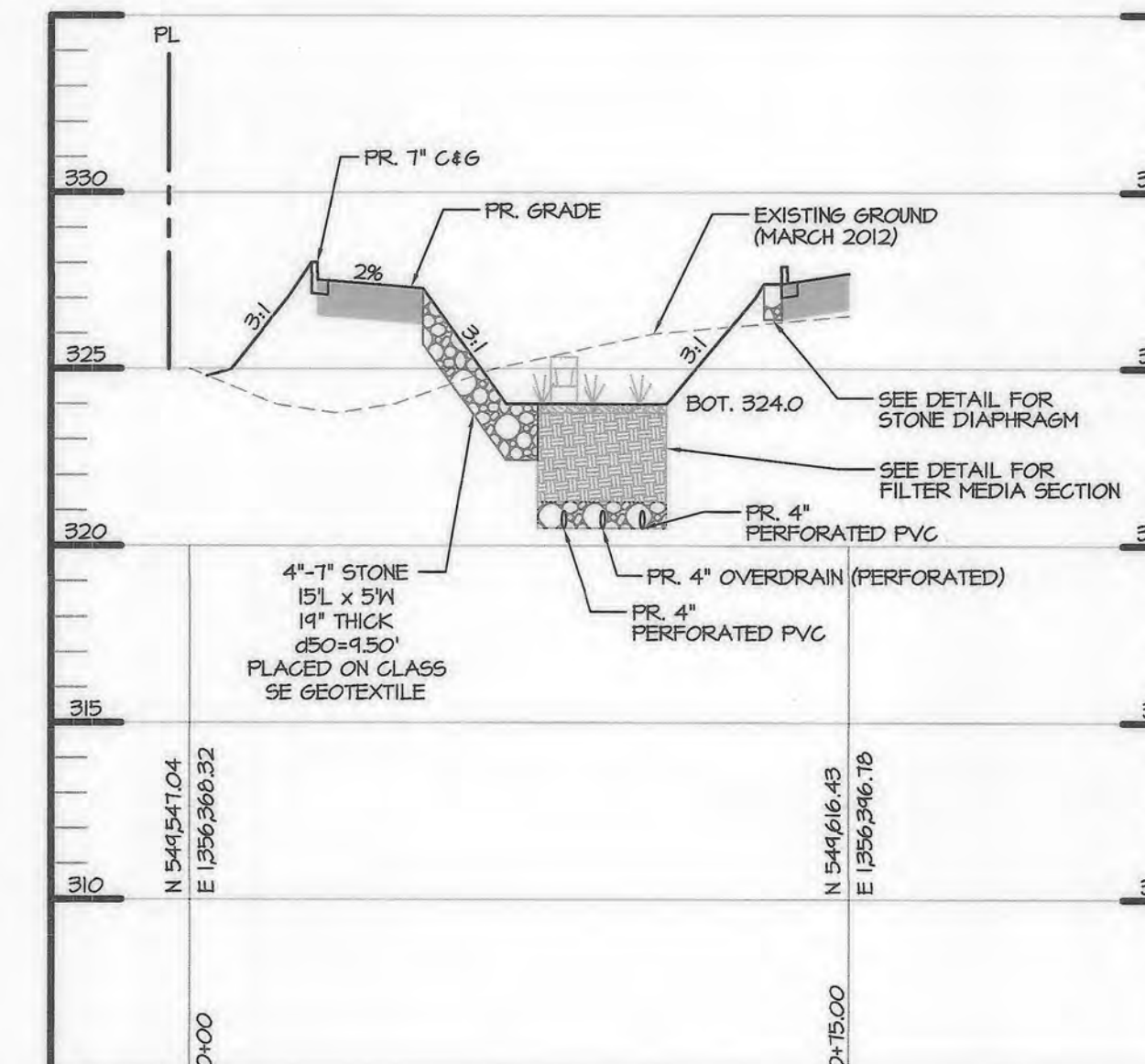
FACILITY OVERDRAIN AND UNDERDRAIN SECTION

MDE CLASSIFICATION M-6
(24" DEPTH)
NOT TO SCALE



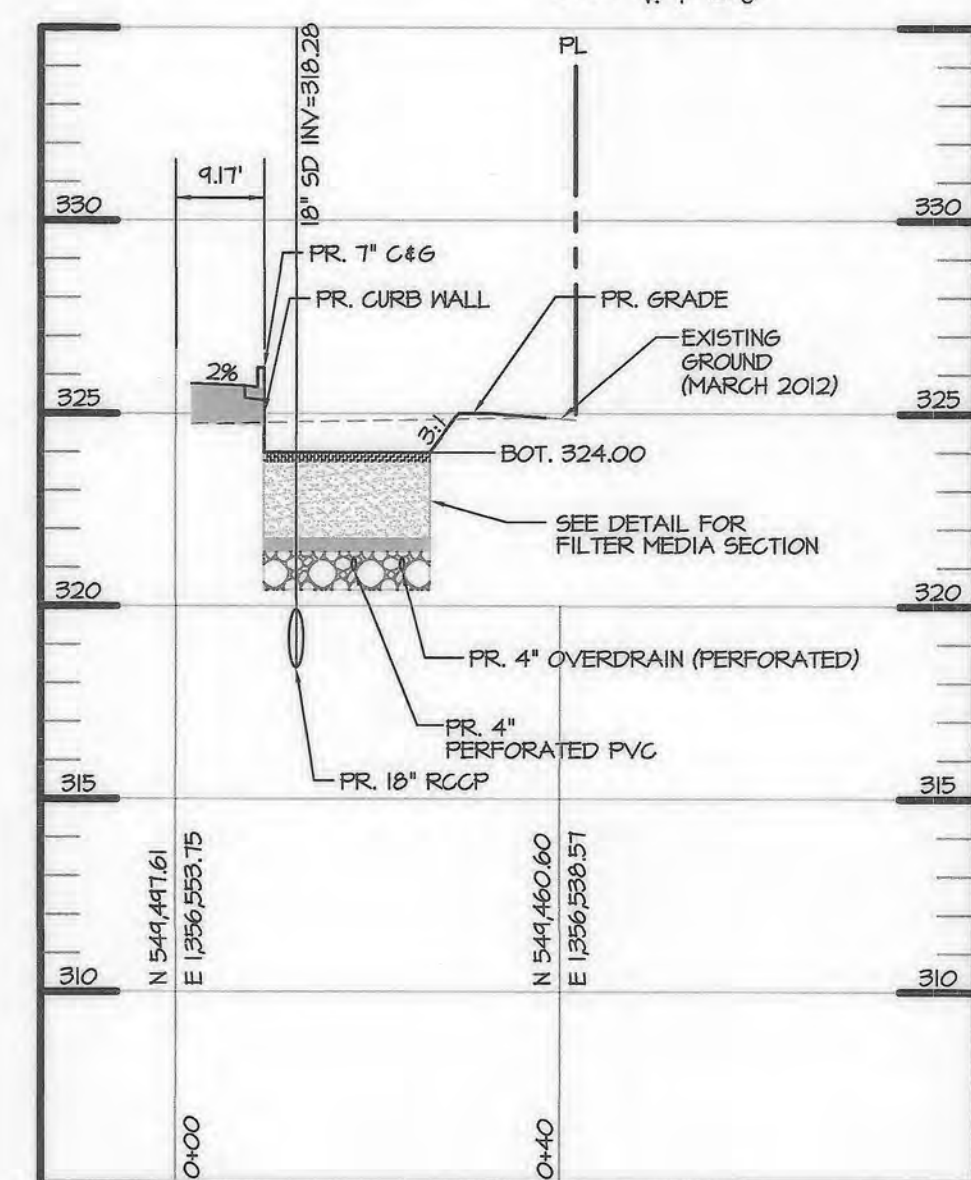
STORMWATER MANAGEMENT FACILITY #1
CROSS SECTION A-A

SCALE: H: 1" = 20'
V: 1" = 5'



STORMWATER MANAGEMENT FACILITY #2
CROSS SECTION B-B

SCALE: H: 1" = 20'
V: 1" = 5'



STORMWATER MANAGEMENT FACILITY #3
CROSS SECTION C-C

SCALE: H: 1" = 20'
V: 1" = 5'

STORMDRAIN CLEANOUT / OBS. WELL SCHEDULE					
No.	NORTHING	EASTING	TOP ELEV.	INVERT	SIZE
FACILITY #1					
CO #1	549693.69	1356279.01	327.25	323.84	6"
CO #1 AS-BUILT	549693.66	1356277.11	326.50	323.76	6"
CO #2	549691.39	1356283.64	327.25	323.84	6"
CO #2 AS-BUILT	549691.01	1356281.95	326.67	N/A	6"
CO #3	549668.29	1356272.18	327.25	323.84	6"
CO #3 AS-BUILT	549669.41	1356272.33	326.92	323.82	6"
OD #1	549679.84	1356277.91	327.25	323.84	6"
OD #1 AS-BUILT	549680.26	1356277.67	326.58	N/A	6"
OBS	549680.14	1356266.68	327.25	323.84	8"
OBS AS-BUILT	549680.12	1356265.99	326.89	N/A	8"
FACILITY #2					
CO #4	549616.44	1356323.05	324.25	320.25	6"
CO #4 AS-BUILT	549614.77	1356325.18	324.25	320.12	6"
CO #5	549578.88	1356414.64	324.25	320.25	6"
CO #5 AS-BUILT	549579.13	1356415.15	324.07	320.27	6"
CO #6	549618.66	1356329.36	324.25	320.25	6"
CO #6 AS-BUILT	549617.50	1356330.24	324.31	320.25	6"
CO #7	549599.41	1356376.32	324.25	320.25	6"
CO #7 AS-BUILT	549599.06	1356376.84	324.24	320.07	6"
CO #8	549582.33	1356417.95	324.25	320.25	6"
CO #8 AS-BUILT	549583.07	1356419.23	324.11	320.15	6"
CO #9	549570.71	1356430.48	324.25	320.25	6"
CO #9 AS-BUILT	549572.07	1356435.44	324.24	320.24	6"
CO #10	549607.73	1356332.44	324.25	320.25	6"
CO #10 AS-BUILT	549608.79	1356333.61	324.01	320.26	6"
CO #11	549591.12	1356372.92	324.25	320.25	6"
CO #11 AS-BUILT	549590.62	1356373.80	324.15	320.28	6"
OD #2	549597.66	1356368.84	324.25	320.25	6"
OD #2 AS-BUILT	549597.66	1356371.56	324.00	320.00	6"
OBS	549578.11	1356396.37	324.25	320.25	8"
OBS AS-BUILT	549579.41	1356397.61	324.31	N/A	8"
FACILITY #3					
CO #12	549524.21	1356452.50	324.25	320.84	6"
CO #12 AS-BUILT	549524.93	1356450.79	324.62	320.90	6"
CO #13	549485.56	1356338.97	324.25	320.84	6"
CO #13 AS-BUILT	549524.93	1356450.79	324.62	320.90	6"
CO #14	549468.00	1356563.90	324.25	320.84	6"
CO #14 AS-BUILT	549465.51	1356539.69	324.08	320.92	6"
CO #15	549519.65	1356450.46	324.25	320.84	6"
CO #15 AS-BUILT	549521.02	1356449.09	324.52	320.86	6"
CO #16	549480.99	1356536.93	324.25	320.84	6"
CO #16 AS-BUILT	549481.56	1356537.53	324.09	320.97	6"
CO #17	549464.67	1356561.76	324.25	320.84	6"
CO #17 AS-BUILT	549464.59	1356561.97	324.26	320.92	6"
OD #3	549500.32	1356493.70	324.25	320.84	4"
OD #3 AS-BUILT	549498.69	1356497.69	324.39	320.79	4"
OBS	549526.08	1356444.14	324.25	320.84	8"
OBS AS-BUILT	549527.09	1356443.45	324.79	N/A	8"

MANHOLE SCHEDULE					
NO.	TYPE	SIZE	INV. OUT	TOP ELEV.	REMARKS
M-4	PRECAST MANHOLE	8' I.D.	*66" 313.92	325.00	MD SHA STD. NO. MD-384.09

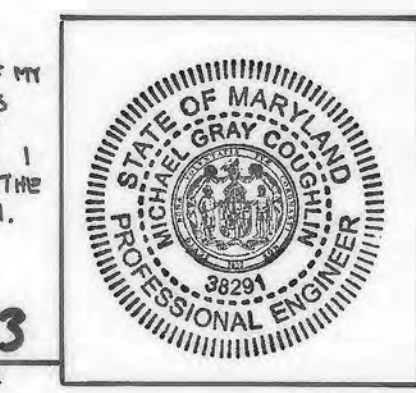
*CONTRACTOR SHALL TEST PIT EXISTING 66" STORM DRAIN AND VERIFY ELEVATIONS PRIOR TO CONSTRUCTION

STRUCTURE SCHEDULE					
NO.	TYPE	Q (c.f.s.)	INV. OUT	TOP ELEV.**	REMARKS
RS-1	TYPE 'D' INLET	1.7	323.84	328.83	HOWARD COUNTY DETAIL D-4.10
RS-2	TYPE 'D' INLET	6.5	319.88	325.83	HOWARD COUNTY DETAIL D-4.10
RS-3	TYPE 'D' INLET	3.1	317.95	325.38	HOWARD COUNTY DETAIL D-4.10

**TOP ELEVATION FOR INLETS = TOP OF 4' SLAB ELEVATION

ASBUILT 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 ASBUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS. I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 1/13/2022.

Michael Goughlin 3-1-23
SIGNATURE DATE



OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573

PROFESSIONAL CERTIFICATION
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AS-BUILT

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRA@GTA.COM
Copyright 2019 Morris & Ritchie Associates, Inc.

SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
STORMWATER MANAGEMENT PROFILES

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22
TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
01/13/2022	AS-BUILT	17297

SCALE:	AS SHOWN
DATE:	06/26/2019
DRAWN BY:	THS
DESIGN BY:	THS
REVIEW BY:	MGC
SHEET:	18 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Plank 9-25-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Kurt Sledzinski 10-08-19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Nathan Joplin 10-15-19
DIRECTOR DATE

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE 3/7/19

HYNES & ASSOCIATES		LOG OF BORING B-1 (Page 1 of 1)	
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211		Project No.: J04-1010135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 20.5 feet
Royal Farms Store Facilities:2010-2011 Store No. 186, Snowden River Parkway			
Depth in Feet	DESCRIPTION	GRAPHIC USCS	Remarks
0	Brown, wet, medium dense, fine to coarse SAND, with some silt, trace clay	SM	Scale 1" = 4.5 feet
1			Approximately 4 inches of asphalt and 10 inches of stone were encountered at the ground surface.
3	Gray, wet, medium stiff, silty CLAY, with little fine to coarse sand	CL	Groundwater was encountered at 14 feet during augering operations.
4			Boring caved in at 15 feet.
5	Brown, wet, very stiff, clayey SILT, with some fine to coarse sand, little fine gravel	ML	Laboratory Test Results Sample No. 2 From 3 to 4.5 feet
7			Atterberg Limits Liquid Limit = 38 Plasticity Index = 14 Natural Moisture = 22.4 %
8	Brown, wet to saturated, medium dense, fine to coarse SAND, with some silt, trace clay	ML	
10			
15			
17	Brown, saturated, very stiff, clayey SILT, with trace fine to coarse SAND	ML	
21			Boring was terminated at 20.5 feet.

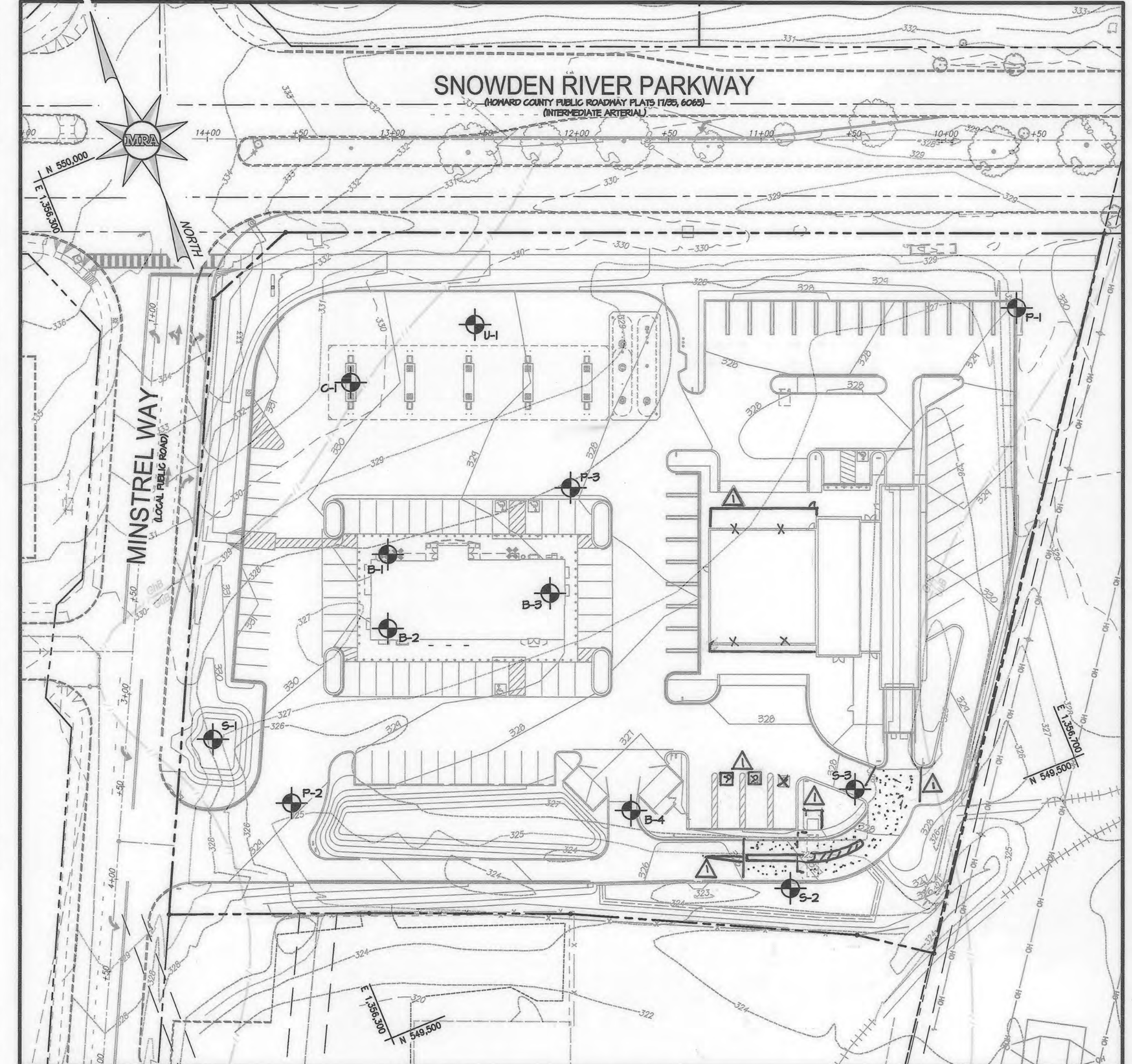
HYNES & ASSOCIATES		LOG OF BORING B-3 (Page 1 of 1)	
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211		Project No.: J04-1010135-28 Date Completed: August 15, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: Hand Auger Total Depth: 20 feet
Royal Farms Store Facilities:2010-2011 Store No. 186, Snowden River Parkway			
Depth in Feet	DESCRIPTION	GRAPHIC USCS	Remarks
0	Brown, wet, fine to coarse SAND, with some silt, trace clay	SM	Scale 1" = 4.5 feet
1			Approximately 8 inches of concrete was encountered at the ground surface.
2	Brown, wet, clayey SILT, with little fine to coarse sand	ML	
3			Groundwater was encountered at 15 feet during augering operations.
4			
5	Brown, wet, fine to coarse SAND, with some silt, trace fine gravel, trace clay	SM	
6			
7			
8	Brown, wet, clayey SILT, with little fine to coarse sand	ML	
10			
11			
13	Light brown and brown, wet, clayey SILT, with some fine to coarse sand	ML	
15			
16	Brown, saturated, fine to coarse SAND, with some silt, trace fine gravel, trace clay	SM	
17			
18	Orangish-brown, saturated, silty CLAY	CL-ML	
20			Boring was terminated at 20 feet.

HYNES & ASSOCIATES		LOG OF BORING C-1 (Page 1 of 1)	
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211		Project No.: J04-1010135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 15.5 feet
Royal Farms Store Facilities:2010-2011 Store No. 186, Snowden River Parkway			
Depth in Feet	DESCRIPTION	GRAPHIC USCS	Remarks
0	Brown, wet, very stiff, clayey SILT, with little fine to coarse sand	ML	Scale 1" = 4.5 feet
1			Approximately 3 inches of asphalt and 8 inches of stone were encountered at the ground surface.
3	Brown and light brown, wet, stiff, silty CLAY, with trace fine to medium sand	CL-ML	Groundwater was encountered at 14 feet during augering operations.
4			Laboratory Test Results Sample No. 3 From 6 to 7.5 feet Natural Moisture = 24.3 %
5	Brown, wet, stiff, clayey SILT, with some fine to coarse sand	ML	
6			
7	Brown, wet, very stiff, silty CLAY, with little fine to coarse sand	ML	
8			
9			
10			
11			
12	Orangish-brown, wet to saturated, medium dense, fine to coarse SAND, with little silt, little clay	SM	
13			
15			Boring was terminated at 15.5 feet.

HYNES & ASSOCIATES		LOG OF BORING B-2 (Page 1 of 1)	
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211		Project No.: J04-1010135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 20.5 feet
Royal Farms Store Facilities:2010-2011 Store No. 186, Snowden River Parkway			
Depth in Feet	DESCRIPTION	GRAPHIC USCS	Remarks
0	Brown, wet, very stiff, clayey SILT, with little fine to coarse sand	ML	Scale 1" = 4.5 feet
1			Approximately 1 inch of asphalt and 1 inch of stone were encountered at the ground surface.
3	Gray, wet, medium stiff, silty CLAY, with little fine to coarse sand	CL	Groundwater was encountered at 14 feet during augering operations.
4			Boring caved in at 15 feet.
5	Brown and light brown, wet, very stiff, clayey SILT, with little fine to medium sand	ML	Laboratory Test Results Sample No. 2 From 3 to 4.5 feet
7			Atterberg Limits Liquid Limit = 34 Plasticity Index = 14 Natural Moisture = 23.1 %
8	Dark gray, wet to saturated, medium stiff to hard, clayey SILT, with some fine to coarse sand	ML	
10			
15			
17			
18	Brown, saturated, very stiff, clayey SILT, with some fine to coarse sand	ML	
20			Boring was terminated at 20.5 feet.

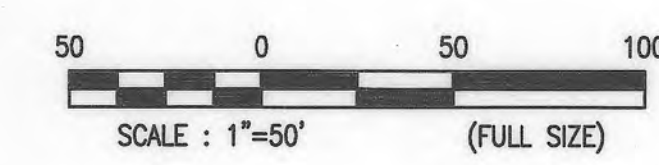
HYNES & ASSOCIATES		LOG OF BORING B-4 (Page 1 of 1)	
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211		Project No.: J04-1010135-28 Date Completed: August 15, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 20.5 feet
Royal Farms Store Facilities:2010-2011 Store No. 186, Snowden River Parkway			
Depth in Feet	DESCRIPTION	GRAPHIC USCS	Remarks
0	Brown, wet, very stiff to stiff, clayey SILT, with some fine to coarse sand	ML	Scale 1" = 4.5 feet
1			Approximately 8 inches of asphalt and 12 inches of stone were encountered at the ground surface.
2			Groundwater was encountered at 14 feet during augering operations.
3			Boring caved in at 14.5 feet.
4	Brown, wet, medium stiff, clayey SILT, with little fine to coarse sand	ML	
6			
7			
8			
10			
13	Brown, wet to saturated, very stiff, clayey SILT, with little fine to coarse sand	ML	
14			
17	Brown, saturated, very stiff, clayey SILT, with some fine to coarse sand	ML	
20			Boring was terminated at 20.5 feet.

HYNES & ASSOCIATES		LOG OF BORING P-1 (Page 1 of 1)	
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211		Project No.: J04-1010135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: Hand Auger Total Depth: 10 feet
Royal Farms Store Facilities:2010-2011 Store No. 186, Snowden River Parkway			
Depth in Feet	DESCRIPTION	GRAPHIC USCS	Remarks
0	Brown, wet, SILT, with trace clay, trace fine to medium sand	ML	Scale 1" = 4.5 feet
1			Approximately 2 inches of asphalt and 3 inches of stone were encountered at the ground surface.
2	Brown, wet, clayey SILT, with trace fine to medium SAND, trace fine gravel	ML	Groundwater was not encountered during augering operations.
3			Laboratory Test Results Sample No. 1 From 0 to 2 feet Natural Moisture = 13.7 %
4	Brown, wet, clayey SILT, with trace fine to medium sand	ML	
7	Brown and Light brown, wet, clayey SILT, with trace fine to medium sand	ML	
10			Boring was terminated at 10 feet.



SOIL BORING LOCATION PLAN

SCALE: 1" = 50'



PROFESSIONAL CERTIFICATION
I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2022.



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRA@GTA.COM
Copyright 2019 Morris & Ritchie Associates, Inc.

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573

SITE DEVELOPMENT PLAN E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22 ROYAL FARMS STORE #186 & CANTON CAR WASH		GEO-TECHNICAL BORINGS	
DATE	REVISIONS	JOB NO.:	17297
04/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING AND CONCRETE MEMBRAN.	SCALE:	AS SHOWN
	ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, ADA WALK.	DATE:	06/26/2019
	PARKING SPACES. REMOVE MEA COPYRIGHT INFORMATION.	DRAWN BY:	THS
01/18/2022	NO ASBUILT	DESIGN BY:	THS
		REVIEW BY:	MGC
		SHEET:	19 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 9-25-19

CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-08-19

DIRECTOR
 DATE: 10-15-19

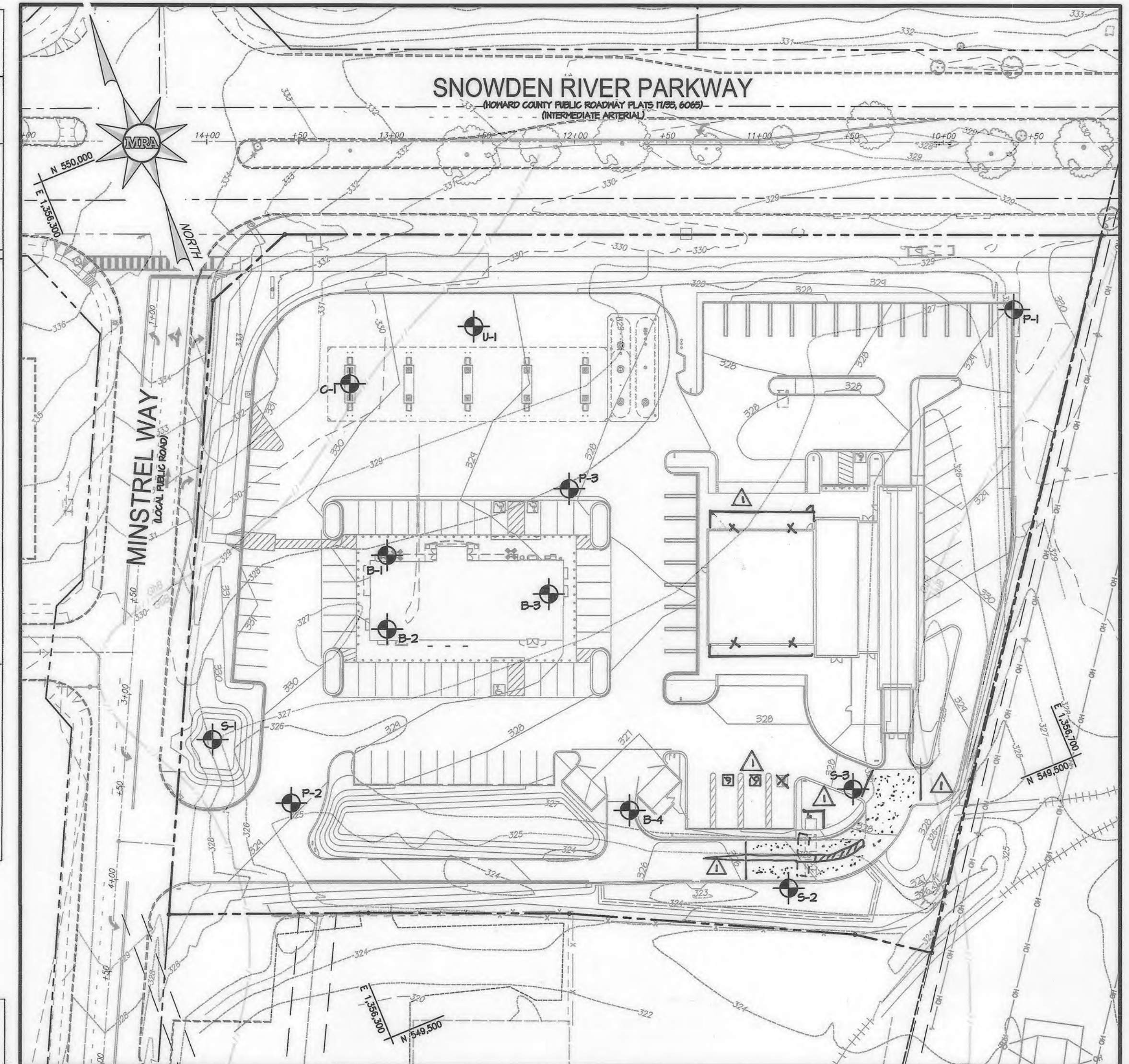
APPROVED
PLANNING BOARD HOWARD COUNTY
DATE: 3/7/19

DESIGN & DRAWING BASED ON
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

HYNES & ASSOCIATES		LOG OF BORING P-2 (Page 1 of 1)			
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211 Royal Farms Store Facilities: 2010-2011 Store No. 186, Snowden River Parkway		Project No.: JDH-10/10/135-28 Date Completed: August 15, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: Hand Auger Total Depth: 10 feet		
Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample	REMARKS
0	Brown, wet, clayey SILT, with some fine to coarse sand		ML	1	Scale 1" = 4.5 feet Approximately 9 inches of asphalt and 9 inches of stone were encountered at the ground surface. Groundwater was not encountered during augering operations.
5	Brown, wet, fine to coarse SAND, with some silt, trace clay		SM	3	
6	Brown, wet, clayey SILT, with little fine to medium sand		ML	4	
8	Light brown and Brown, wet, clayey SILT, with little fine to coarse sand		ML	5	
10	Boring was terminated at 10 feet.				

HYNES & ASSOCIATES		LOG OF BORING S-1 (Page 1 of 1)				
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211 Royal Farms Store Facilities: 2010-2011 Store No. 186, Snowden River Parkway		Project No.: JDH-10/10/135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 20.5 feet			
Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample	Blows Per 6 Inches	REMARKS
0	Brown, wet, stiff to medium stiff, clayey SILT, with some fine to coarse sand (Silt loam)		ML	1	7-7.6	Scale 1" = 4.5 feet Approximately 4 inches of asphalt and 10 inches of stone were encountered at the ground surface.
2			ML	2	4-4.4	Groundwater was encountered at 14 feet during augering operations.
5	Brown, wet, medium stiff, clayey SILT, with little fine to medium sand (Silt loam)		ML	3	4-5.5	Boring caved in at 15 feet. Laboratory Test Results Sample No. 3 From 0 to 7.5 feet Natural Moisture = 19.9%
8	Dark brown, wet to saturated, stiff, clayey SILT, with some fine to coarse sand (Silt loam)		ML	4	6-7.6	
10			ML	5	4-5.8	
18	Brown, saturated, very stiff, clayey SILT, with some fine to coarse SAND (Silt loam)		ML	6	10-10.10	
21	Boring was terminated at 20.5 feet.					

HYNES & ASSOCIATES		LOG OF BORING S-3 (Page 1 of 1)				
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211 Royal Farms Store Facilities: 2010-2011 Store No. 186, Snowden River Parkway		Project No.: JDH-10/10/135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 20.5 feet			
Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample	Blows Per 6 Inches	REMARKS
0	Brown, wet, very stiff to medium stiff, clayey SILT, with some fine to coarse sand (Silt loam)		ML	1	9-9-12	Scale 1" = 4.5 feet Approximately 12 inches of stone were encountered at the ground surface.
2			ML	2	5-5.6	Groundwater was encountered at 14 feet during augering operations.
6	Brown, wet, loose, fine to coarse SAND, with some silt, trace clay (Sandy loam)		SM	3	4-4.3	
8	Brown, wet to saturated, medium stiff to stiff, clayey SILT, with some fine to coarse sand (Silt loam)		ML	4	2-3.4	
10			ML	5	4-3.4	
21	Boring was terminated at 20.5 feet.					



SOIL BORING LOCATION PLAN
SCALE: 1" = 50'
50 0 50 100
SCALE: 1" = 50' (FULL SIZE)

HYNES & ASSOCIATES		LOG OF BORING P-3 (Page 1 of 1)			
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211 Royal Farms Store Facilities: 2010-2011 Store No. 186, Snowden River Parkway		Project No.: JDH-10/10/135-28 Date Completed: August 15, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: Hand Auger Total Depth: 10 feet		
Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample	REMARKS
0	Brown, wet, clayey SILT, with little fine to medium sand (M)		ML	1	Scale 1" = 4.5 feet Approximately 7 inches of concrete was encountered at the ground surface. Groundwater was not encountered during augering operations.
5	Brown, wet, fine to coarse SAND, with some silt, trace clay (M)		ML	3	Laboratory Test Results Sample No. 1 From 0 to 2.5 feet Natural Moisture = 12.1%
8	Dark brown, wet, clayey SILT, with little fine to coarse sand, little organic silt, trace wood (poor fill)		ML	5	
10	Boring was terminated at 10 feet.				

HYNES & ASSOCIATES		LOG OF BORING S-2 (Page 1 of 1)				
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211 Royal Farms Store Facilities: 2010-2011 Store No. 186, Snowden River Parkway		Project No.: JDH-10/10/135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 20.5 feet			
Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample	Blows Per 6 Inches	REMARKS
0	Brown to dark brown, wet, very stiff, clayey SILT, with some fine to coarse sand (Silt loam)		ML	1	7-7.0	Scale 1" = 4.5 feet Approximately 3 inches of asphalt and 10 inches of stone were encountered at the ground surface.
2			ML	2	8-9.7	Groundwater was encountered at 12 feet during augering operations.
5	Dark brown, wet, medium stiff, clayey SILT, with little fine to coarse sand (Silt loam)		ML	3	3-5.5	Boring caved in at 14 feet.
8	Gray, wet, stiff, clayey SILT, with little fine to coarse sand (Silt loam)		ML	4	4-5.0	
12	Brown, saturated, very stiff, clayey SILT, with some fine to coarse sand (Silt loam)		ML	5	6-8-10	
17	Brown, saturated, very stiff, clayey SILT, with some fine to coarse SAND (Silt loam)		ML	6	8-8-9	
21	Boring was terminated at 20.5 feet.					

HYNES & ASSOCIATES		LOG OF BORING U-1 (Page 1 of 1)				
Royal Farms 3611 Roland Avenue Baltimore, Maryland 21211 Royal Farms Store Facilities: 2010-2011 Store No. 186, Snowden River Parkway		Project No.: JDH-10/10/135-28 Date Completed: August 16, 2012 Logged By: P. Mauser	Drilled By: B. Anderson Drilling Method: HSA (Mobile B-47 HD) Total Depth: 25.5 feet			
Depth in Feet	DESCRIPTION	GRAPHIC	USCS	Sample	Blows Per 6 Inches	REMARKS
0	Brown, wet, very stiff, clayey SILT, with some fine to coarse sand		ML	1	6-4-8.8	Scale 1" = 4.5 feet Approximately 8 inches of organic bearing soil was encountered at the ground surface.
2	Brown, wet, stiff to medium stiff, silty CLAY, with little fine to coarse sand		CL	2	5-6.6	Groundwater was encountered at 16 feet during augering operations.
4	Brown and gray, silty CLAY, with little fine to coarse sand (mottled)		CL-ML	3	4-4.5	At completion, water was at 17.5 feet; boring caved in at 17.5 feet. Laboratory Test Results Sample No. 4 From 9 to 10.5 feet Natural Moisture = 32.5%
8	Brown, wet, medium stiff, clayey SILT, with some fine to coarse sand		ML	4	4-4.4	
15	Orange-brown, wet to saturated, medium dense, fine GRAVEL, with some fine to coarse sand, little silt		GM	5	4-7.9	
17	Gray, saturated, dense, fine to coarse SAND, with some silt, trace clay		SM	6	17-19-26	
23	Orange-brown, saturated, dense, fine to coarse SAND, with little silt, trace fine gravel		SM	7	18-20-21	
25	Boring was terminated at 25.5 feet.					

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 3/2/19

OWNER
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200
 DEVELOPERS
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHISTED
 PHONE: (410) 889-0200
 SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

PROFESSIONAL CERTIFICATION
 I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2026. 2021.

MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
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 MRAGTA.COM
 Copyright 2019 Morris & Ritchie Associates, Inc.

SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH

GEO-TECHNICAL BORINGS

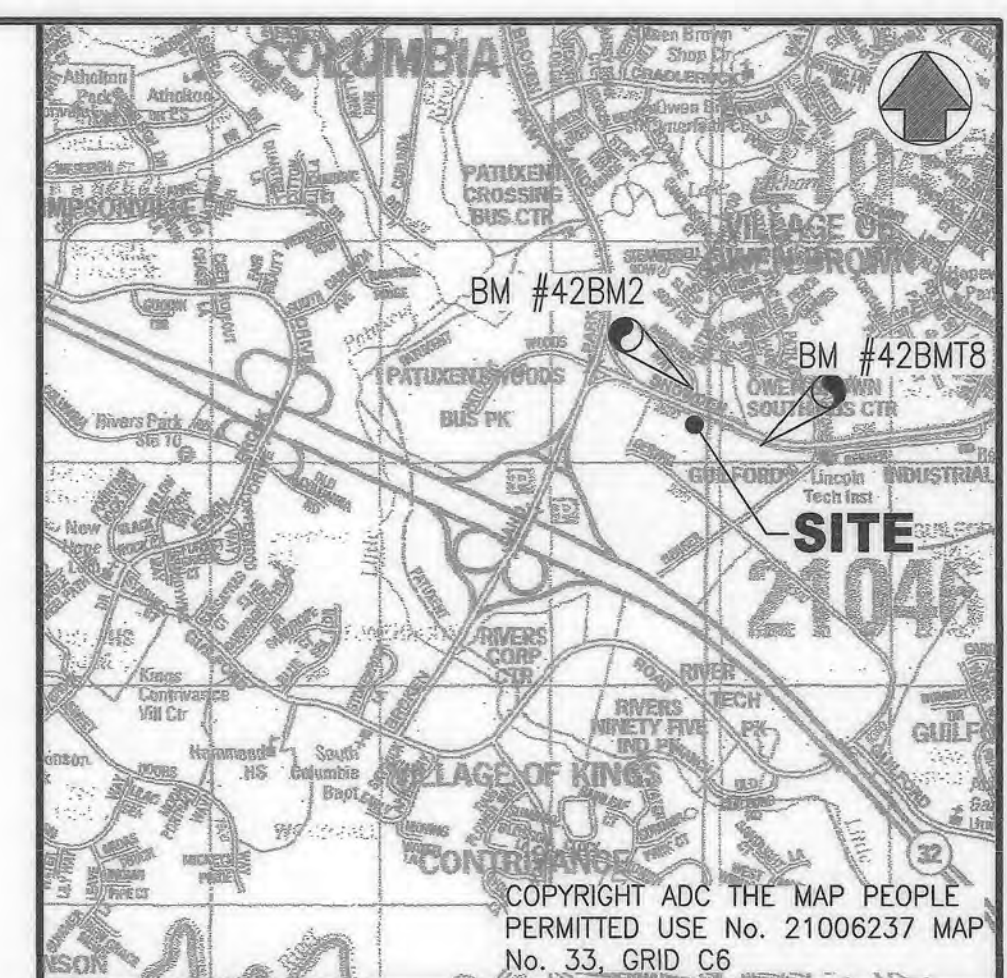
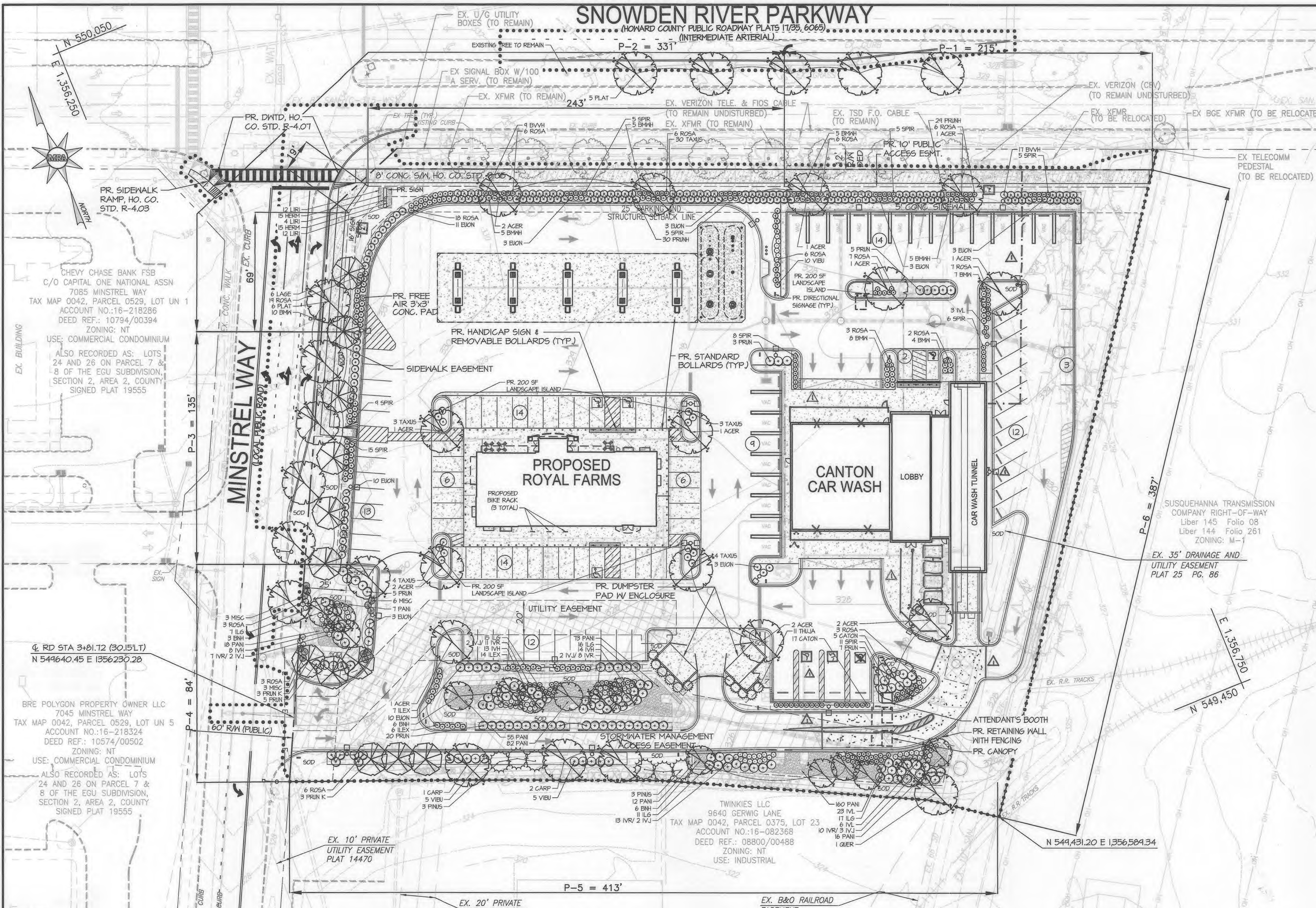
LIBER 14229 FOLI0 00055 PLAT NO. 14470
 ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
04/22/2010	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIAN,	17297
	ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, ADA VNL	SCALE: AS SHOWN
	PARKING SPACES, REMOVE MRA COPYRIGHT INFORMATION.	DATE: 06/26/2019
01/13/2022	NO AS BUILT	DRAWN BY: THS
		DESIGN BY: THS
		REVIEW BY: MGC
		SHEET: 20 OF 40

DESIGN & DRAWING BASED ON
 HORIZONTAL NAD 83 (1981)
 VERTICAL NAVD 88

SNOWDEN RIVER PARKWAY

(HOWARD COUNTY PUBLIC ROADWAY PLATS 17/25, 6/065)
(INTERMEDIATE ARTERIAL)



VICINITY MAP
1"=2,000'

PLANTING SCHEDULE

Key	Botanical Name	Common Name	Qty.	Size/Comments	Spacing
MAJOR DECIDUOUS TREE					
ACER	<i>Acer rubrum</i> 'October Glory'	October Glory Red Maple	15	24"-3" Caliper	As Shown
BNH	<i>Betula nigra</i> 'Heritage'	Heritage River Birch	15	10"-12" HT.	As Shown
CARP	<i>Carpinus betulus</i> 'Fastigata'	Fastigiate Hornbeam	3	24"-3" Caliper	As Shown
PLAT	<i>Platanus x acerifolia</i> 'Bloodgood'	Bloodgood London Plane	11	3" Caliper	As Shown
QUER	<i>Quercus phellos</i>	Willow Oak	1	24"-3" Caliper	As Shown
MINOR FLOWERING TREES					
FRUN K	<i>Prunus serrulata</i> 'Kwanzan'	Kwanzan Cherry	6	1 1/2"-2" Caliper	As Shown
LAGE	<i>Lagerstromia indica</i>	Crape Myrtle	6	6'-8" HT.	As Shown
EVERGREEN TREES					
THUJA	<i>Thuja occidentalis</i> 'Art Boe' (North Pole)	Art Boe (North Pole) Arborvitae	11	6' HT.	As Shown
PNUS	<i>Pinus strobus</i> 'Fastigata'	Fastigiate White Pine	6	6' HT.	As Shown
SHRUBS					
ILEX	<i>Ilex glabra</i> 'Compacta'	Ilexberry	21	30"-36" HT.	As Shown
BNH	<i>Buxus microphylla</i> 'koreana	Wintergreen Boxwood	24	24"-30" HT.	As Shown
CATON	<i>Colonaster dameri</i> 'Coral Beauty'	Coral Beauty Colonaster	22	18"-24" Spread	As Shown
ROSA	<i>Rosa 'Radrizza'</i> PP#11836	Knock-out Rose	101	30"-36" HT.	As Shown
SPIR	<i>Spiraea x bumalda</i> 'Anthony Waterer'	Japanese Spiraea	64	30"-36" HT.	As Shown
ELON	<i>Evonymus alaticolor</i> 'Marhattan'	Evonymus	44	30"-36" HT.	As Shown
PRUN	<i>Prunus laurocerasus</i> 'Otto Luyken'	Otto Luyken Cherry Laurel	45	24"-30" HT.	As Shown
VIBU	<i>Viburnum carlesii</i> 'Compactum'	Compact Koreanspice Viburnum	20	30"-36" HT.	As Shown
ILEX	<i>Ilex glabra</i>	Ilexberry	66	30"-36" HT.	As Shown
IVL	<i>Itea virginica</i> 'Little Henry'	Virginia Sweetspire	32	24"-30" HT.	As Shown
IVH	<i>Itea virginica</i> 'Henry's Garnet'	Virginia Sweetspire	35	30"-36" HT.	As Shown
IVR	<i>Ilex verticillata</i> 'Red Sprite'	Red Sprite Winterberry	44	24"-30" HT.	As Shown
IVJ	<i>Ilex verticillata</i> 'Lim Dandy'	Jim Dandy Winterberry	11	24"-30" HT.	As Shown
TAXUS	<i>Taxus x media</i> 'Densiformis'	Yew	44	30"-36" HT.	As Shown
BNH	<i>Buxus microphylla</i> 'koreana	Wintergreen Boxwood	20	30"-36" HT.	As Shown
PRUN	<i>Prunus laurocerasus</i> 'Otto Luyken'	Otto Luyken Cherry Laurel	54	30"-36" HT.	As Shown
BVNH	<i>Buxus sempervirens</i> 'Vardar Valley'	Boxwood	26	30"-36" HT.	As Shown
GRASSES AND PERENNIALS					
MISC	<i>Miscanthus sin.</i> 'Morning Light'	Morning Light Maiden Grass	12	1 Gal. Cont.	36" Staggered
LIRI	<i>Liriope muscari</i> 'Big Blue'	Lily Turfgrass	28	4" Cont.	12" On Center
PANI	<i>Panicum virgatum</i> 'Cheyenne Sky'	Cheyenne Sky Blue Switchgrass	423	1 Gal. Cont.	24" On Center
HERM	<i>Hemerocallis</i> 'Happy Returns'	Happy Returns Daylily	30	1 Gal. Cont.	15" On Center

LANDSCAPE PLAN

PLAN SCALE: 1" = 30'

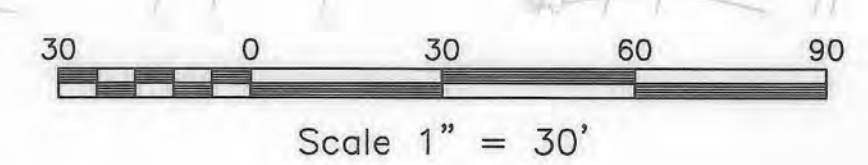
DEVELOPER'S/ OWNER'S LANDSCAPE CERTIFICATE

DEVELOPER'S/OWNER'S LANDSCAPE 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 LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.
Royal Farms John M. Kay Pres.
DEVELOPER'S/ OWNER'S NAME

APPROVED: DEPARTMENT OF PLANNING AND ZONING
9-25-19
10-08-19
10-15-19
DATE DATE DATE
APPROVED PLANNING BOARD HOWARD COUNTY
DATE 3/1/19

LANDSCAPE PLAN LEGEND

- EXISTING
 - EX. EDGE OF PAVEMENT
 - EX. CURB AND GUTTER
 - EX. CONCRETE WALK
 - EX. C/L ROAD
 - EX. ADJACENT PROPERTY LINE
 - EX. PROPERTY LINE
 - EX. RIGHT OF WAY
 - EX. UTILITY EASEMENT
 - EX. LIGHT POLE
 - EX. UTILITY HANDBOX/PEDESTAL
 - EX. UTILITY POLE
 - EX. SIGN
 - EX. BOLLARD
 - EX. EVERGREEN TREE
 - EX. DECIDUOUS TREE
 - EX. TREE TO BE REMOVED
- PROPOSED
 - LIMIT OF DISTURBANCE
 - PR. COLLECTOR CURB & GUTTER
 - PR. SPILL CURB & GUTTER
 - PR. BUILDING
 - PR. CANOPY
 - PR. CONCRETE WALK
 - PR. STORMWATER MANAGEMENT EASEMENT
 - PR. DRAINAGE & UTILITY EASEMENT
 - PR. PUBLIC ACCESS EASEMENT
 - PR. EASEMENT
 - PR. TRAFFIC FLOW ARROWS
 - PR. STRIPING
 - PR. STOP BAR
 - PR. SIGN
- PROPOSED LANDSCAPE LEGEND
 - PROPOSED TREE N.I.C. - TREES TO BE INSTALLED BY HOWARD COUNTY
 - PROPOSED MAJOR DECIDUOUS SHADE TREE
 - PROPOSED MINOR DECIDUOUS TREE
 - PROPOSED EVERGREEN TREE
 - PROPOSED SHRUBS
 - PROPOSED GROUNDCOVER
 - PROPOSED GROUNDCOVER AREA



NOTE:
THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM: HORIZONTAL NAD 83 (1981) VERTICAL NAVD 88

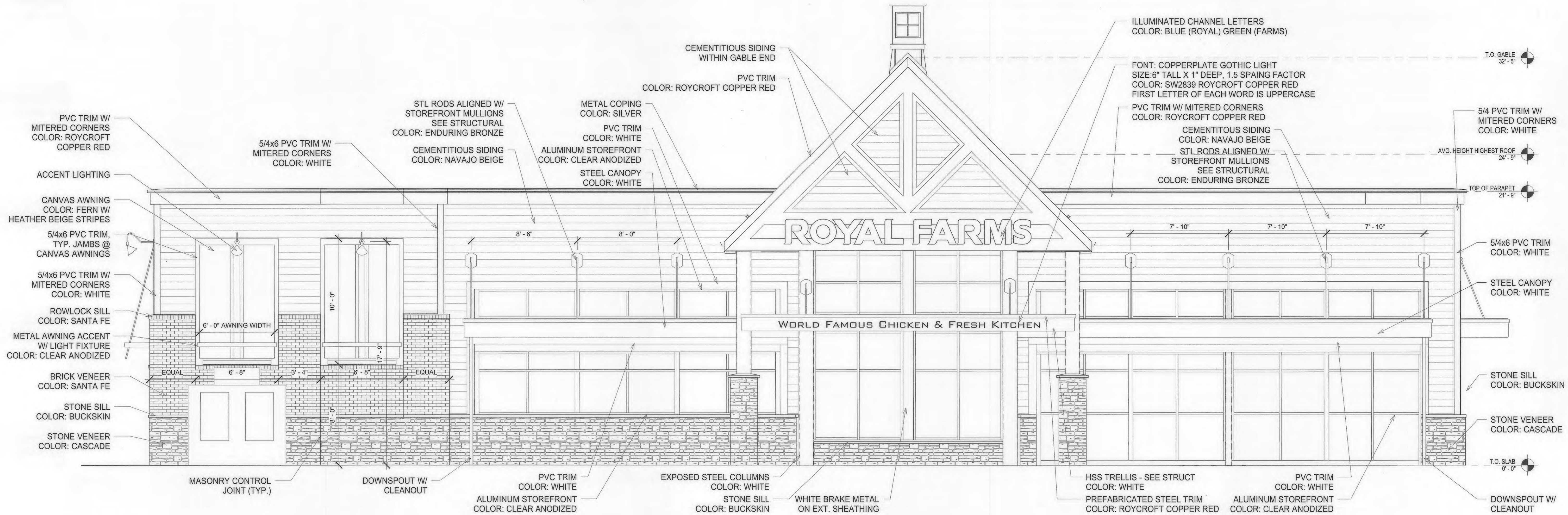
PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO. 3787, EXPIRATION DATE: 06/30/2020

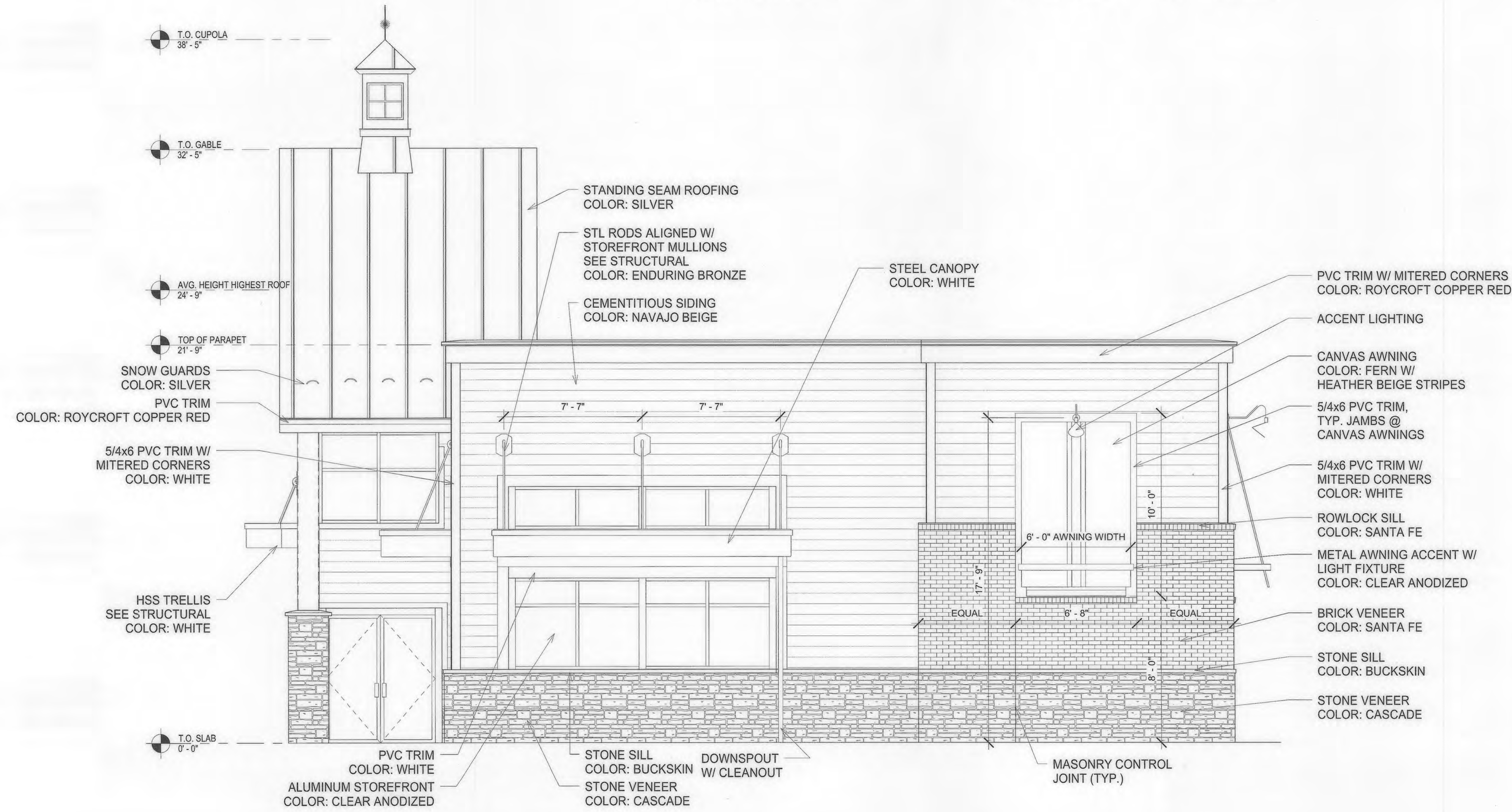


MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
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FAX: (410) 821-1748
MRA@GTA.COM
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DATE	REVISIONS	JOB NO.:
09/22/2020	REVISE FLOOR AREA FOR CARWASH BUILDING, ADD CONCRETE MEDIA, ADD CONCRETE AT CARWASH INGRESS, UPDATE ATTENDANT BOOTH, SANITARY SERVICE, ROOF DRAIN CONNECTIONS, UPDATE ADA VAC PARKING SPACES, UPDATE LIGHT WALL PACK, REMOVE MRA COPYRIGHT FROM TITLE BLOCK	17297
01/18/2022	NO ASBUIOT	SCALE: AS SHOWN DATE: 06/26/2019 DRAWN BY: NCR DESIGN BY: NCR REVIEW BY: THS SHEET: 21 OF 40



1 FRONT ELEVATION
SCALE = 1/4" = 1'-0"



ARCHITECT
RATCLIFFE ARCHITECTS
10404 STEVENSON ROAD
STEVENSON, MARYLAND 21153
ATTN: PETER RATCLIFFE
PHONE: (410) 484-7010

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE 3/7/19

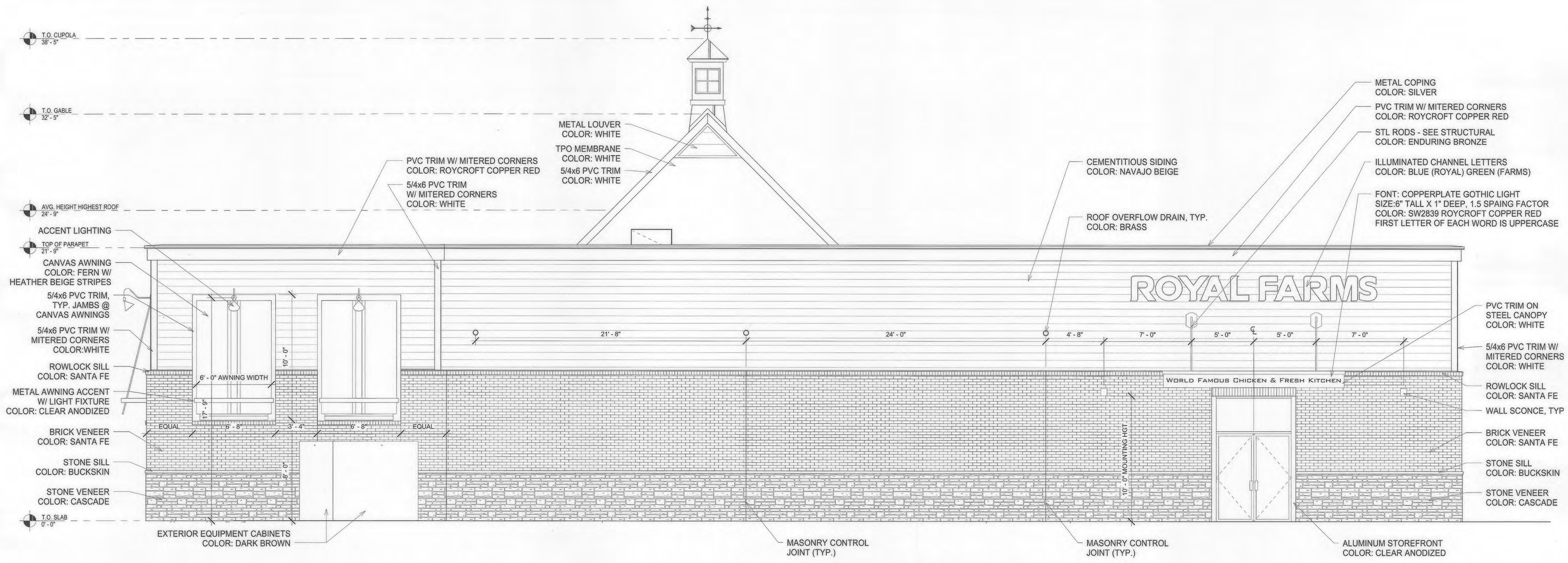
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Anderson 9-25-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
Kent Sedgewick 10-08-19
CHIEF, DIVISION OF LAND DEVELOPMENT & D.D. DATE
Valerie Joffe 10-15-19
DIRECTOR DATE

MRA
MORRIS & RITCHIE ASSOCIATES, INC.
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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
ROYAL FARMS STORE #186
BUILDING ELEVATIONS

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
01/13/2022	NO ASBURY	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY:
		DESIGN BY:
		REVIEW BY:
		SHEET: 23 OF 40



1 REAR ELEVATION
SCALE = 1/4" = 1'-0"

NOTE:
1. SETBACK TO BE INCREASED BY 4'-9" PER FDP-55-A, AS AVERAGE HEIGHT OF HIGHEST ROOF (24'-9") IS HIGHER THAN 20'-0"

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE 3/7/19

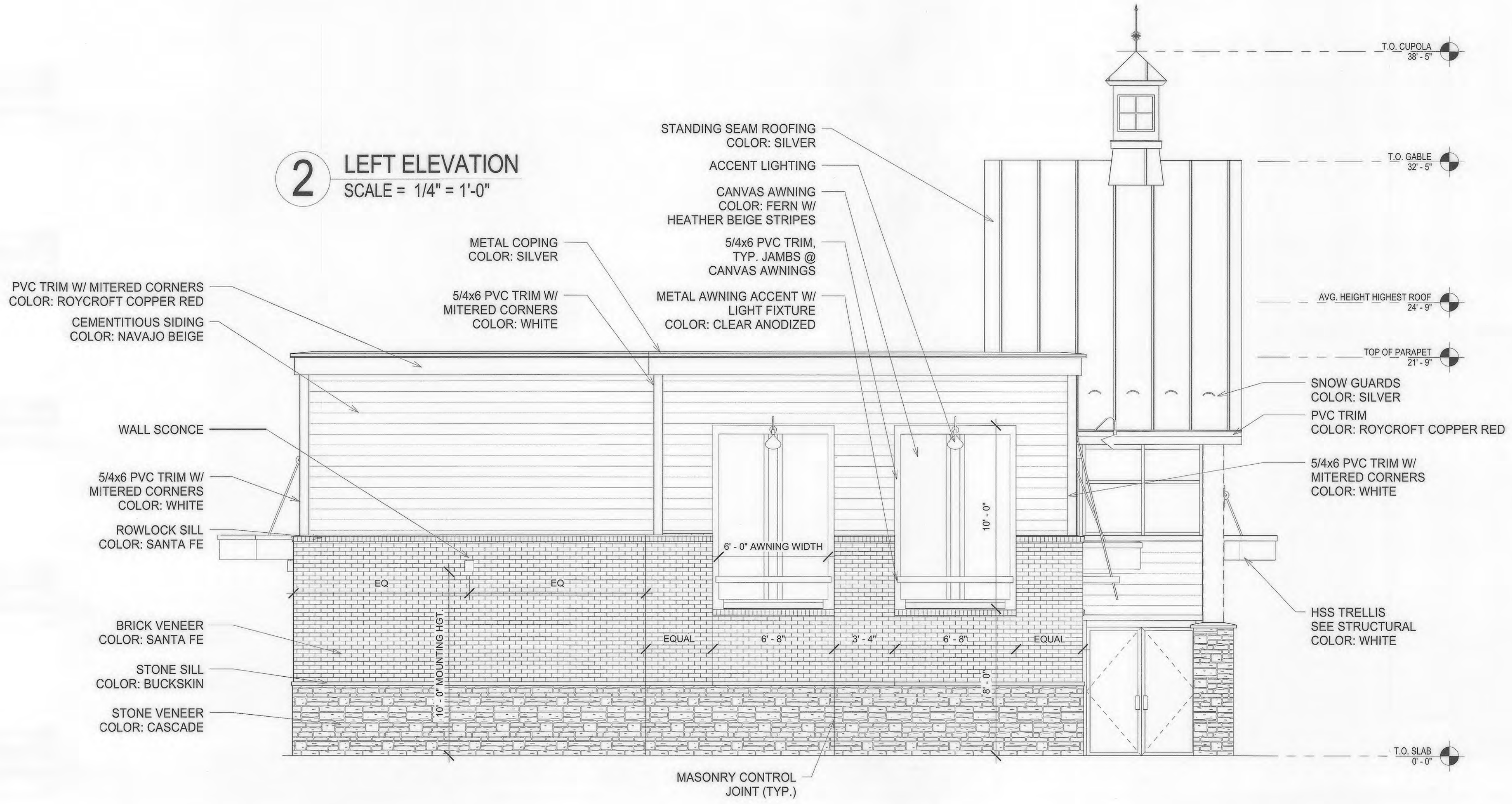
APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 9/25/19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
[Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT DD DATE
[Signature] 10-15-19
 DIRECTOR DATE

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SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH
 ROYAL FARMS STORE #186
 BUILDING ELEVATIONS

DATE	REVISIONS	JOB NO.:
01/13/2022	DO ASBUILT	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY:
		DESIGN BY:
		REVIEW BY:
		SHEET: 24 OF 40

2 LEFT ELEVATION
SCALE = 1/4" = 1'-0"



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SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

GENERAL NOTES

DIMENSIONS
DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE GENERALLY OBTAINED FROM THE ARCHITECT AND ARE INCLUDED AS INFORMATION COMPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. GENERALLY, ARCHITECTURAL DIMENSIONS WILL GOVERN OVER STRUCTURAL DIMENSIONS. LAYOUT OF BUILDING FOUNDATIONS OR OTHER ITEMS MUST BE MADE USING THE DIMENSIONS SHOWN ON THE ARCHITECTURAL DRAWINGS ONLY.

FOUNDATIONS
BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 3'-0" MINIMUM BELOW FINISHED GRADE. A BEARING CAPACITY OF 2,000 PSF FOR FOOTING DESIGN, AND AN EQUIVALENT FLUID PRESSURE OF 50 PCF FOR RETAINING WALL DESIGN, HAS BEEN ASSUMED. IF SOIL OF THIS CAPACITY IS NOT ENCOUNTERED AT ELEVATIONS INDICATED ON PLAN, FOOTINGS SHALL BE INCREASED IN SIZE OR LOWERED AS DIRECTED BY THE STRUCTURAL ENGINEER. ELEVATIONS INDICATED ON PLAN ARE TO TOP OF FOOTINGS, ADJUST AS REQUIRED TO MEET MASONRY COURSE LINES. ALL FOOTINGS SHALL BE STEPPED AS REQUIRED TO PASS UNDER MECHANICAL PIPING. PROVIDE PIPE SLEEVES OF APPROPRIATE SIZE AND MATERIAL FOR ALL PIPES PASSING THROUGH FOUNDATION WALLS. THE PLACING OF COMPACTED FILL MATERIAL AND EQUIPMENT USED FOR COMPACTION SHALL BE SUPERVISED AND APPROVED BY A GEOTECHNICAL ENGINEER. ALL FILL SHALL BE PLACED IN 6" LIFTS AND COMPACTED TO 95% MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT, AS DETERMINED BY ASTM D 698.

CAST IN PLACE CONCRETE AND REINFORCING

- BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14)
- SPECIFICATIONS FOR STRUCTURAL CONCRETE (ACI 301)
- DETAILS AND DETAILING OF CONCRETE REINFORCEMENT (ACI 315)
- MANUAL OF STANDARD PRACTICE (CSI)
- ACI DETAILING MANUAL (ACI SP-66)
- STANDARD SPECIFICATIONS FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIAL (ACI 117)
- CHEMICAL ADMIXTURES FOR CONCRETE (ACI 212.3)
- HOT WEATHER CONCRETING (ACI 305)
- COLD WEATHER CONCRETING (ACI 306)
- STANDARD SPECIFICATIONS FOR CURING CONCRETE (ACI 308.1)
- GUIDE TO FORMWORK FOR CONCRETE (ACI 347)

CONCRETE SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH (F_c) AS FOLLOWS:
1. PYLON FOUNDATION = 3,000 PSI, MAXIMUM W/C = 0.55

CONCRETE MATERIALS

REINFORCING - ASTM A 615, GRADE 60 DEFORMED WELDED WIRE FABRIC - ASTM A 185
SPlice LAPS FOR ALL REINFORCING SHALL BE CLASS B SPlice.
CEMENT - ASTM C 150, TYPE I OR III
FLY ASH - ASTM C 618, IF USED MAXIMUM 10% BY WEIGHT
GROUND GRANULATED BLAST FURNACE SLAG - ASTM C 489, MAXIMUM 10% BY WEIGHT
AGGREGATES - ASTM C 33 ACI 304, ACI 211J
COARSE AGGREGATE - SIZE #67
EXTERIOR CONCRETE SHALL BE AIR ENTRAINED 4%-6%.
ALL CONCRETE, EXCEPT CONCRETE USED FOR FOUNDATIONS, SHALL CONTAIN WATER REDUCING ADMIXTURE.
CONTRACTOR SHALL SUBMIT DESIGN MIX FOR ALL CLASSES OF CONCRETE PRIOR TO PLACING ANY CONCRETE.

MASONRY
WORK SHALL COMPLY WITH ACI 530.1/ASCE 6 "SPECIFICATIONS FOR MASONRY STRUCTURES"
CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90.
CONCRETE MASONRY UNITS SHALL HAVE MINIMUM COMPRESSIVE STRENGTH OF 1,900 PSI AND A MINIMUM PRISM STRENGTH OF F_m = 1,500 PSI.
BRICK UNITS SHALL CONFORM TO ASTM SPECIFICATION C 216.
MORTAR SHALL CONFORM TO ASTM C 270, TYPE S.
ALL MORTAR JOINTS IN MASONRY WALLS (HORIZONTAL AND VERTICAL) SHALL BE FILLED 100% WITH MORTAR.
REINFORCED MASONRY WALLS SHALL HAVE CELLS FILLED SOLID WITH FEA GRAVEL CONCRETE IN FOUR COURSE MAXIMUM LIFTS. PROVIDE HOLES IN BOTTOM PORTION OF EACH LIFT OF WALL TO INSURE WALL IS FILLED SOLID. SPlice LAPS FOR MASONRY REINFORCEMENT SHALL BE 48 BAR DIAMETERS, UNLESS NOTED.

STRUCTURAL STEEL
FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO AISC SPECIFICATIONS AND AISC D11
WIDE FLANGE SHAPED, ASTM A992 (F_y = 50 KSI)
TUBE STEEL, ASTM A 500, GRADE B (F_y = 46 KSI)
PLATE, BARS, ANGLE, CHANNEL, ASTM A36 (F_y = 36 KSI)
STRUCTURAL BOLTS, ASTM A325, NUTS, ASTM A563, WASHERS, ASTM F436
WELDING ELECTRODES: E70XX
HIGH STRENGTH BOLTS: ASTM A 325
ANCHOR BOLTS: ASTM A 307
BASE PLATE AND BEARING PLATE GROUT, ASTM C1107, NON-METALLIC, NON-SHRINK.
GALVANIZING OF STRUCTURAL STEEL: ASTM A 123 AND ASTM A153 FOR HARDWARE (SURFACE PREPARATION PER SSPC, SP-6)
SHOP COAT ALL STRUCTURAL STEEL WITH APPROVED PRIMER, UNLESS NOTED.
BEAM CONNECTIONS SHALL BE DESIGNED TO SUPPORT 50% BEAM WEB SHEAR CAPACITY PER AISC, UNLESS NOTED.

SHOP DRAWINGS
SHOP DRAWINGS SHALL BE SUBMITTED FOR ARCHITECT/ENGINEERS REVIEW FOR THE FOLLOWING ITEMS:

- CONCRETE REINFORCING STEEL
- STRUCTURAL STEEL

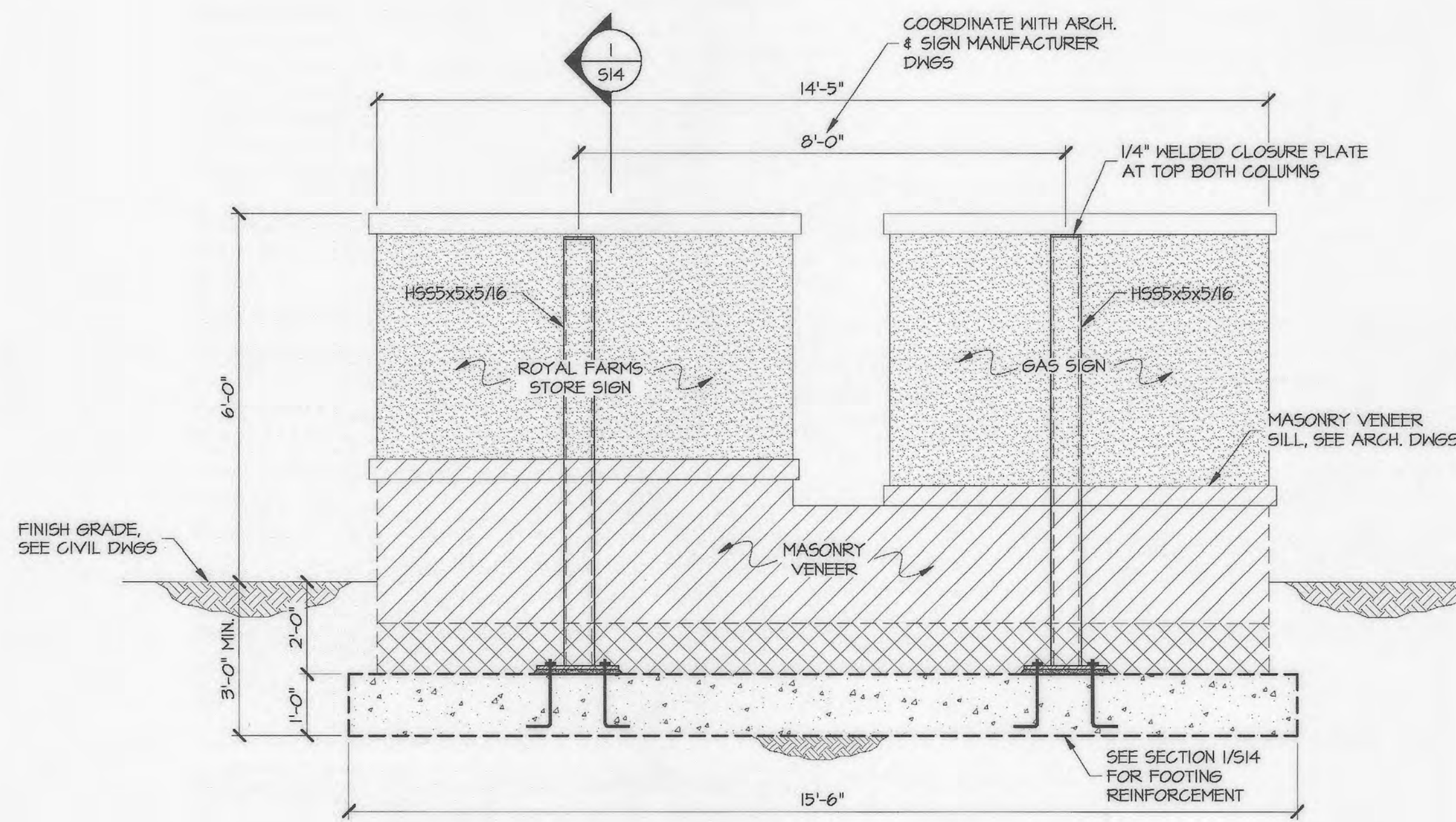
THE CONTRACTOR SHALL REVIEW AND VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON THESE DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ARCHITECT. ANY WORK FABRICATED OR INSTALLED INCORRECTLY DUE TO THE CONTRACTOR'S LACK OF VERIFICATION SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

INSPECTION
AN INDEPENDENT INSPECTION AGENCY, SHALL BE RETAINED AND PAID FOR BY THE OWNER TO INSPECT/MONITOR/TEST THE ITEMS LISTED BELOW. INSPECTION AGENCY SHALL COMPLY AND PERFORM INSPECTION IN ACCORDANCE WITH THE REQUIREMENTS OF IBC "CHAPTER 17, STRUCTURAL TESTS AND SPECIAL INSPECTION."

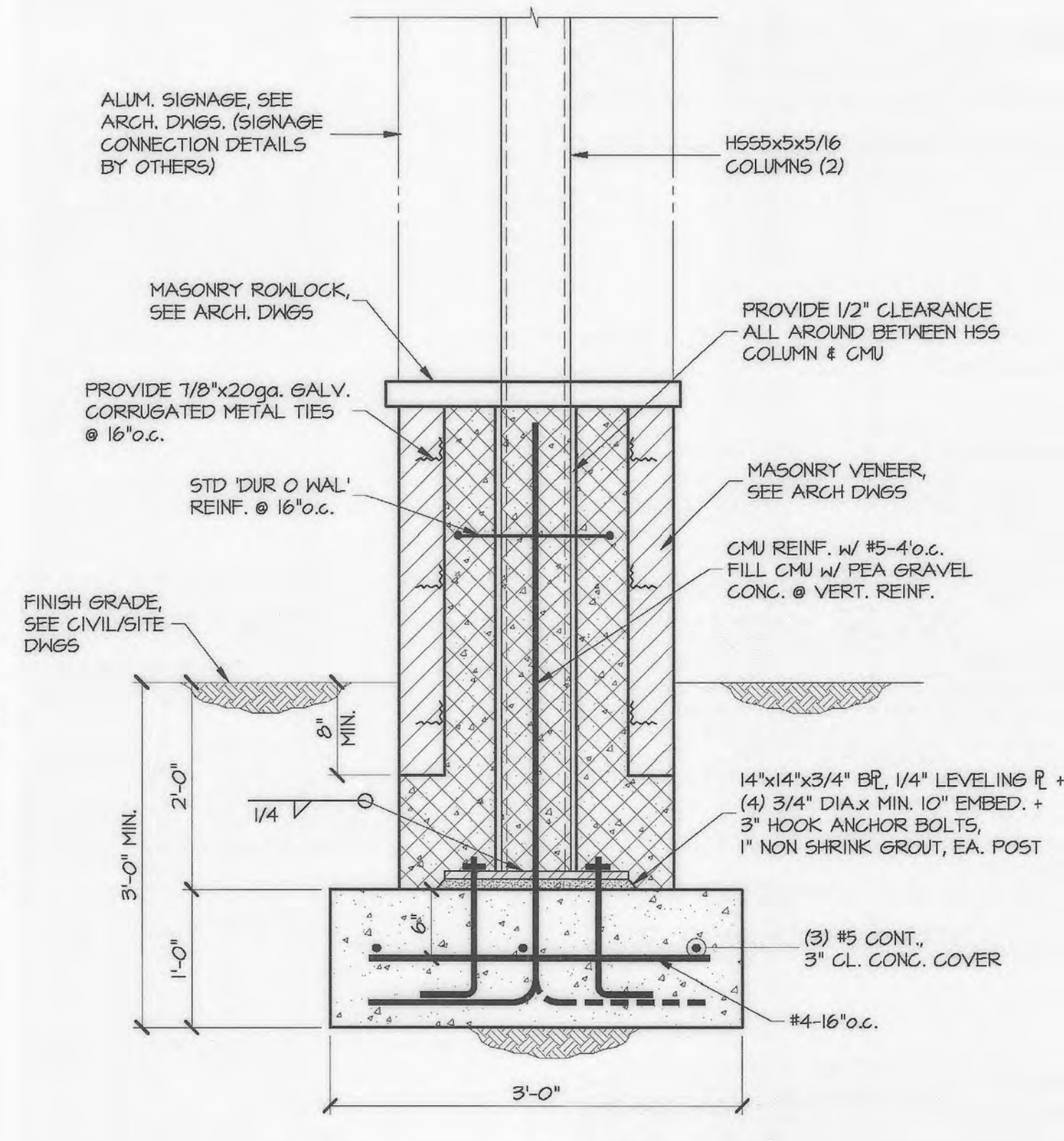
- EARTHWORK OPERATIONS INCLUDING VERIFICATION OF SOIL BEARING CAPACITY
- CAST IN PLACE CONCRETE
- STRUCTURAL STEEL

LIVE LOADS
THIS SIGNAGE HAS BEEN DESIGNED FOR THE FOLLOWING SUPERIMPOSED LOADS GOVERNING CODES:
MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES (ASCE 7-10)
WIND LOADS:
BASIC WIND SPEED (3 SECOND GUST) = 115 MPH
MAXIMUM COMPONENTS & CLADDING WIND PRESSURE = 26 PSF
EXPOSURE = B
WIND IMPORTANCE FACTOR = 1.0
EARTHQUAKE DESIGN DATA:
SEISMIC OCCUPANCY CATEGORY II
ASSUMED SITE CLASS D
SPECTRAL RESPONSE ACCELERATION, S_s = 0.16g
S₁ = 0.051g
S_{0.1} = 0.171
S_{0.01} = 0.082
SPECTRAL RESPONSE COEFFICIENT, S_{d1} = 1.0
SEISMIC IMPORTANCE FACTOR = 1.0

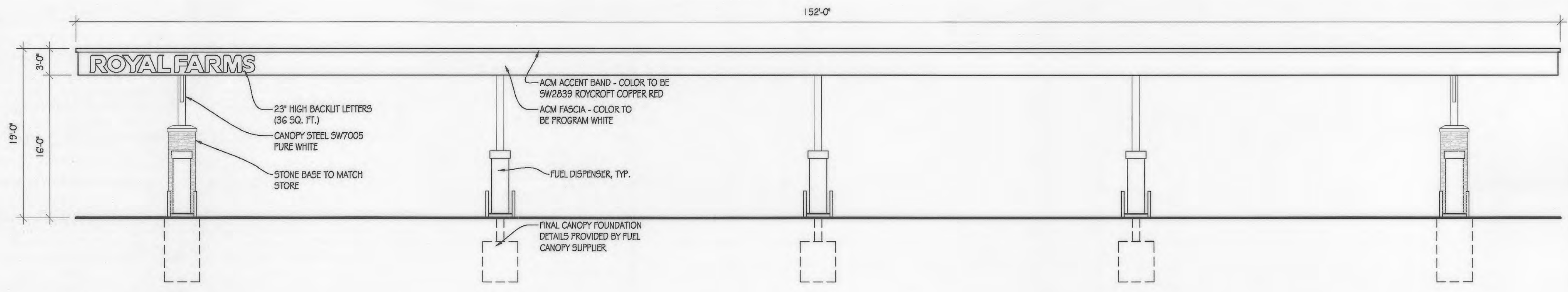
NOTES:
1. COORDINATE WITH SIGN SHOP DRAWINGS AND SIGN MANUFACTURER FOR ACCURATE DIMENSION OF SIGN CABINETS, CENTER TO CENTER OF COLUMN DIMENSIONS, TOP OF COLUMN ELEVATION, FINISHES, ETC.
2. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS SUCH AS MASONRY BASE WIDTH, LENGTH, HEIGHT AND OTHER ARCHITECTURAL DIMENSIONS AND DETAILS.



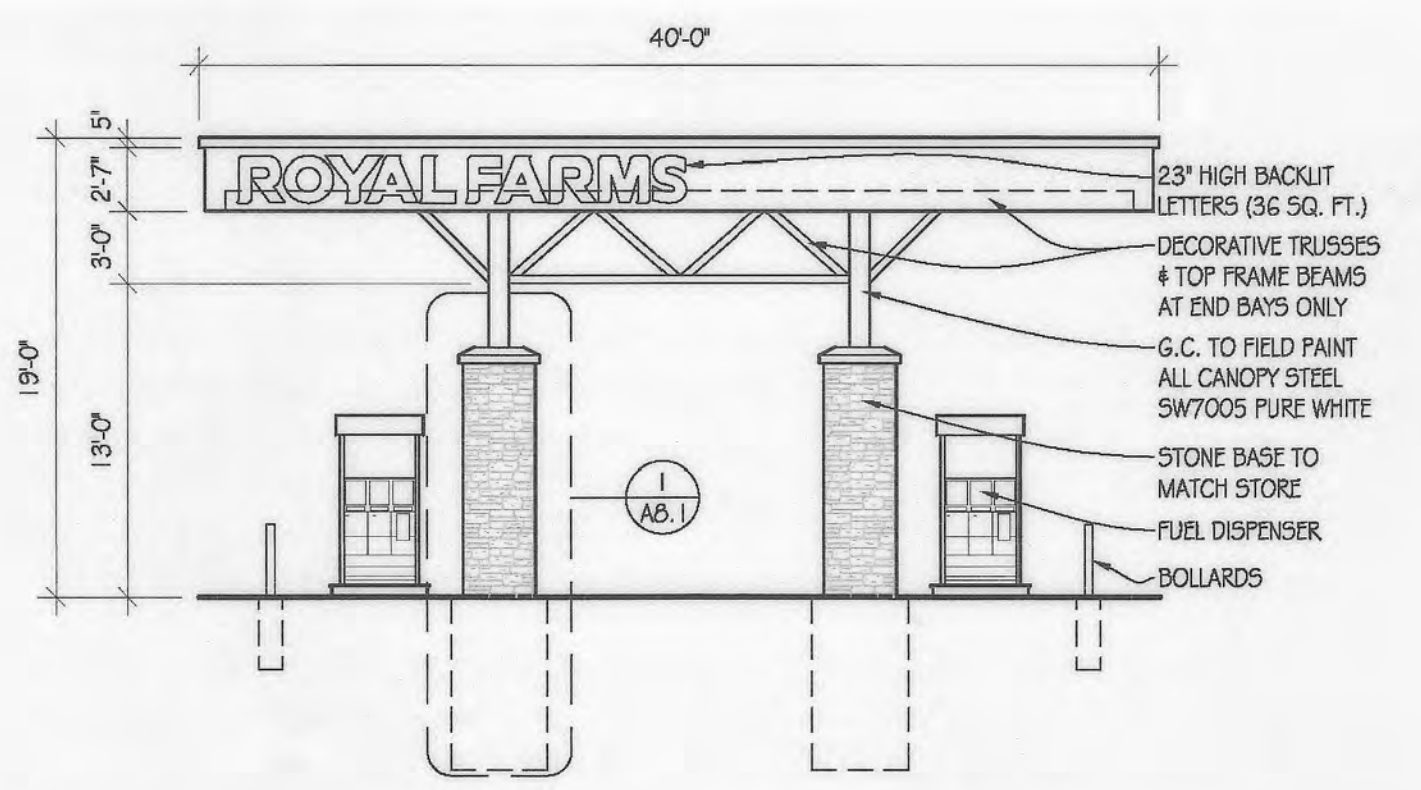
MONUMENT SIGN
SIGN ELEVATION
1/2" = 1'-0"



SECTION
1" = 1'-0"



1 FUEL CANOPY FRONT ELEVATION
SCALE = N.T.S.



2 FUEL CANOPY SIDE ELEVATION
SCALE = N.T.S.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 3/2/19

MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
 TOWSON, MARYLAND 21286
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 FAX: (410) 821-1748
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SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH
 ROYAL FARMS STORE #186
 FUEL CANOPY AND FUEL SIGN ELEVATIONS

ARCHITECT
 RATCLIFFE ARCHITECTS
 10404 STEVENSON ROAD
 STEVENSON, MARYLAND 21153
 ATTN: PETER RATCLIFFE
 PHONE: (410) 484-7010

OWNER
 TWO FARMS INC.
 3811 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

DEVELOPERS
 TWO FARMS INC.
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 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHITED
 PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

LIBER 14229 FOLIO 00058 PLAT NO. 14470
 ZONED N1 ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
01/13/2022	No ASBOLUT	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY:
		DESIGN BY:
		REVIEW BY:
		SHEET: 25 OF 40

DC CONNECTION
 The Direct-Connection
 Mahoney Environmental
 1819 Sloan Avenue
 Joppa, MD 21091
 815.730.2080
 815.730.2087 fax
 Toll Free
 800.892.5392

Outdoor DC72
Direct-Connection
Recycler System
 Simply flip a switch and the oil automatically travels from the fryer to the outdoor holding tank. Each tank features a remote light and alarm to indicate when the tank is full.

The Outdoor Direct-Connection® Recycler™ components form an integrated system ideal for those restaurants unable to sacrifice valuable interior floor space. A holding tank is placed outdoors and attached to an exterior wall. Similar to our Indoor Direct-Connection® Recycler™ System, these systems are designed to be connected directly to your fryers filter machine by a pipeline.

For additional interior space savings, our DC 720E 82" Outdoor Recycler will allow you to place your Bulk CO2 tank together with the oil holding tank in the same enclosure outside your building. Service trucks pump the waste oil from the holding tank by connecting to a secure port on the outside of the tank.

KEY BENEFITS

SAFETY

- Eliminates burns associated with handling hot waste fryer oil.
- Reduce employee slips and falls from greasy floors.
- Fewer customer accidents from slippery pavement.

SAVINGS

- Proven labor savings.
- Increased recycling value of waste shortening commodity.
- Reduced workers comp claims from burns, slips and falls.
- Fewer power washings needed for garbage area.

SANITARY

- Eliminates smell and mess from old grease container.

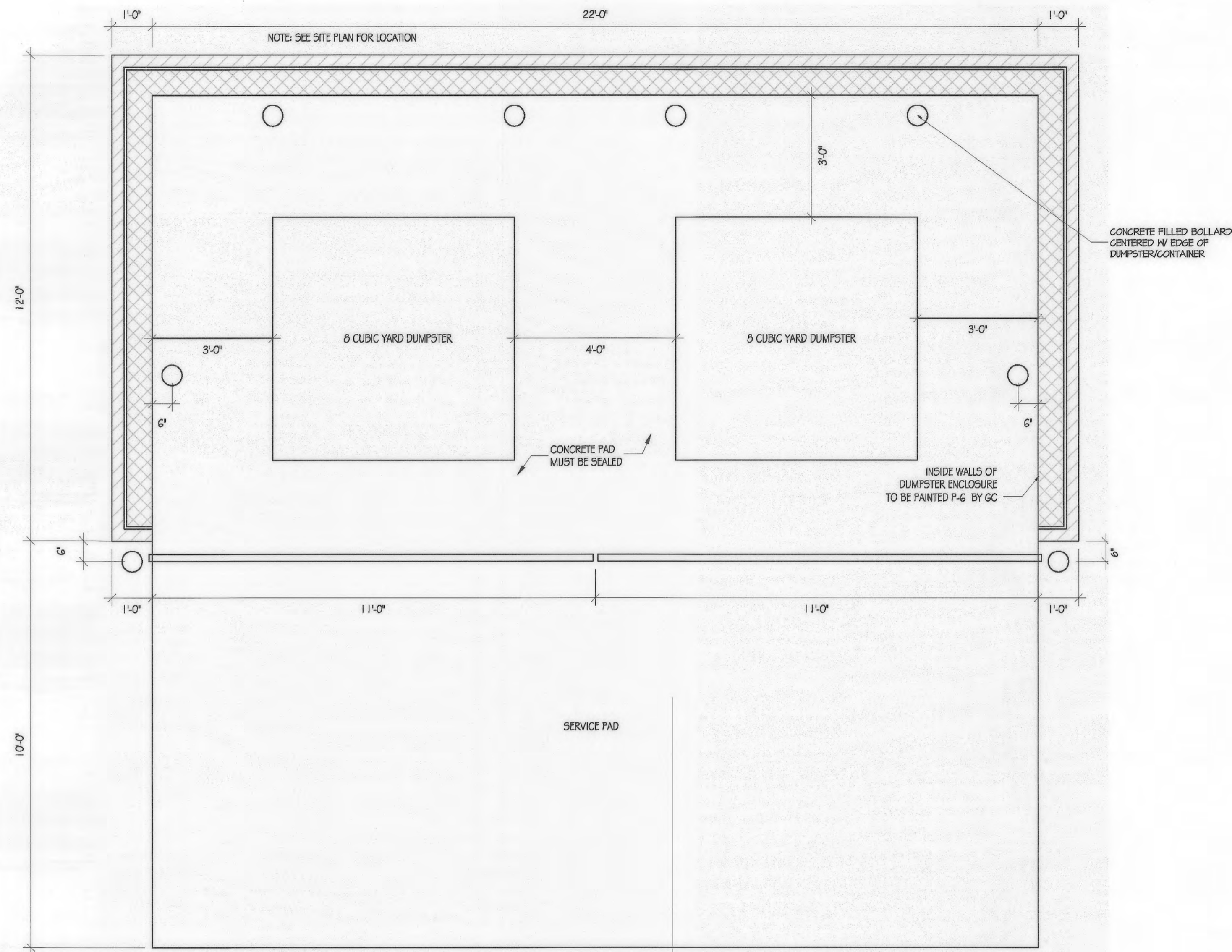
SECURITY

- Employees do not exit building to dispose of waste fryer oil.

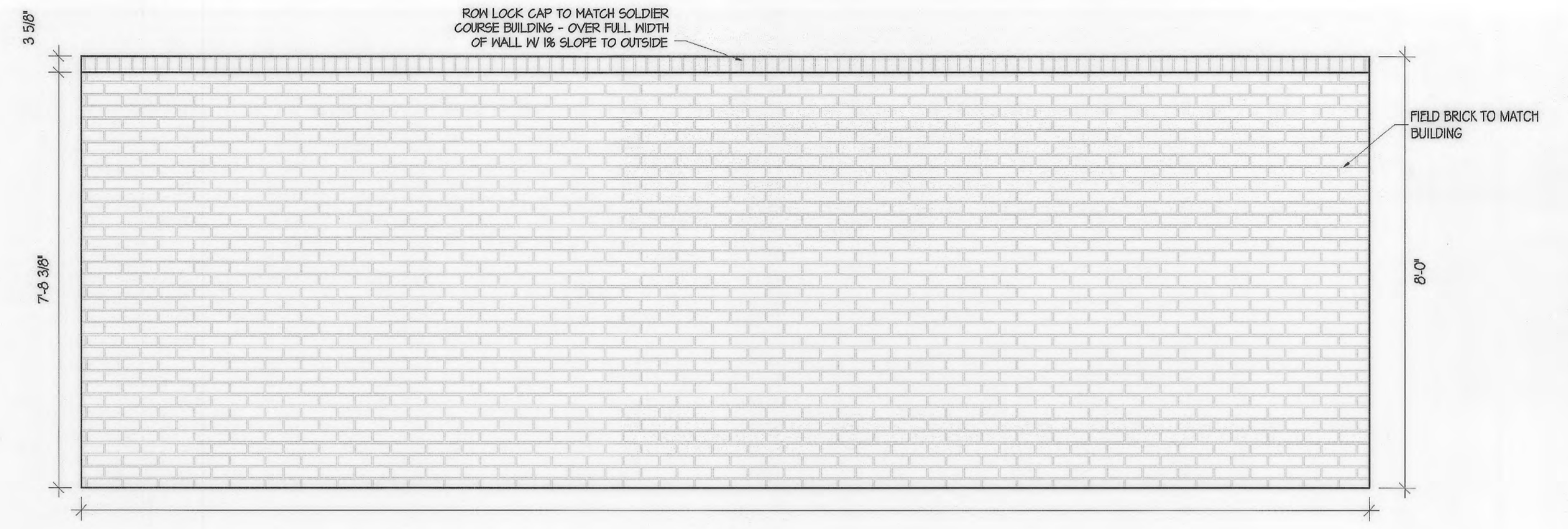
DC 720E SPECIFICATIONS

Dimensions
 76" H X 62" W X 33" D
 Tank Colors
 Beige (shown) & Brown
 Custom Available
 Capacity
 210 gallons / 1635 lbs
 Warranty
 1 year parts and Labor
 3 years on Patented Heater
 Site Requirements
 Dedicated non-GFI 110v 20 amp circuit in weather proof box 72" above center of concrete pad. Concrete pad of 4" recommended thickness; 84"x36"

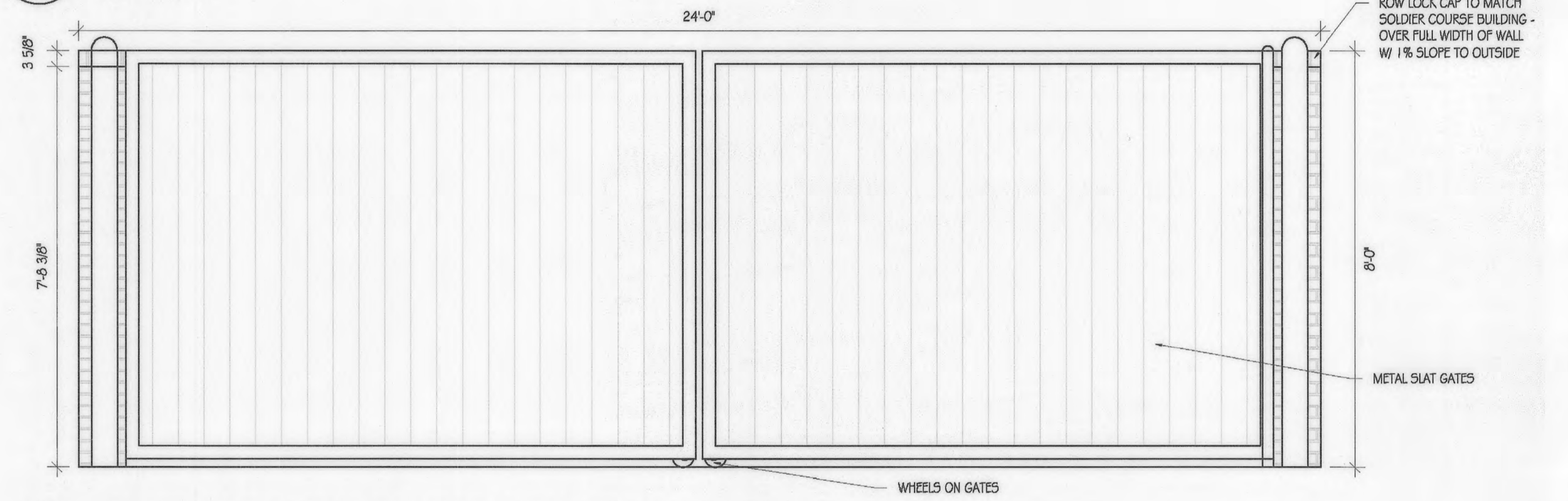
Detailed Drawings available on request for New Construction & Existing Locations



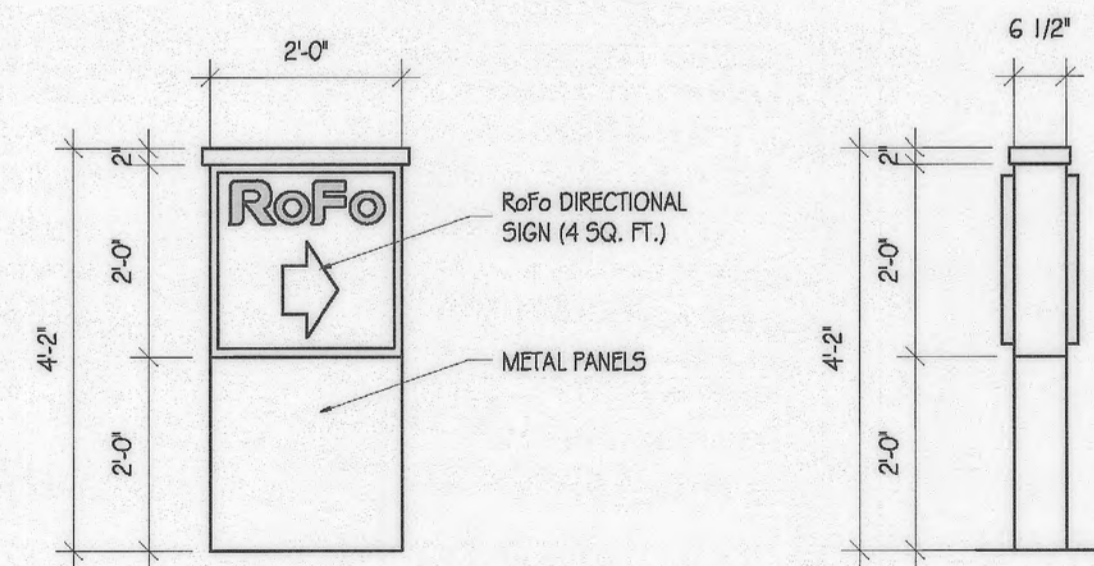
3 DUMPSTER ENCLOSURE - PLAN
1/2" = 1'-0"



4 DUMPSTER ENCLOSURE - REAR ELEVATION
1/2" = 1'-0"



5 DUMPSTER ENCLOSURE - FRONT ELEVATION
1/2" = 1'-0"



1 ENTRY/EXIT SIGNAGE
1/2" = 1'-0"



2 FUEL SIGN ELEVATION
1/2" = 1'-0"

APPROVED: DEPARTMENT OF PLANNING AND ZONING		APPROVED PLANNING BOARD HOWARD COUNTY	
<i>Chad Chatham</i>	9-25-19	DATE	3/7/19
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE	
<i>Kurt Schuchman</i>	10-08-19	DATE	
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE	
<i>Valerie J. J. J.</i>	10-15-19	DATE	
DIRECTOR		DATE	

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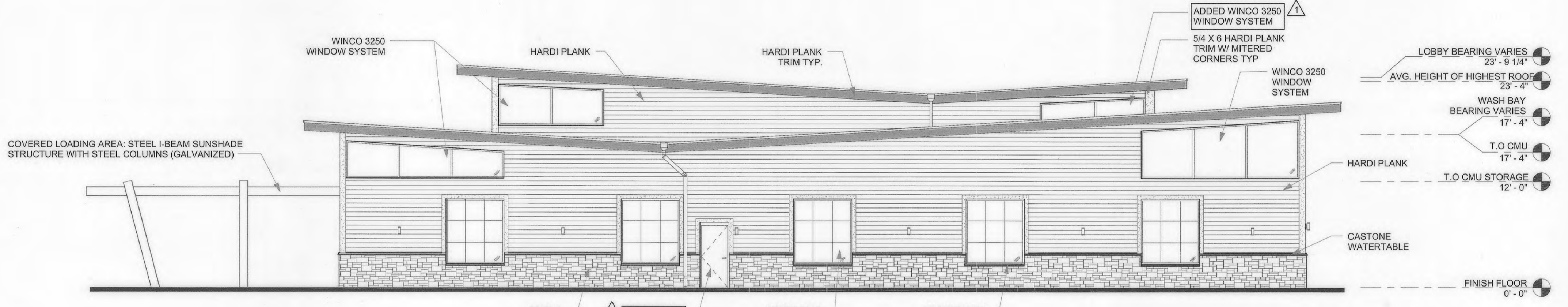
SITE DEVELOPMENT PLAN E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22 ROYAL FARMS STORE #186 & CANTON CAR WASH ROYAL FARMS STORE #186 SIGNS AND DUMPSTER ELEVATIONS		LIBER 14228 FOLIO 00059 PLAT NO. 14470 ZONED NI - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22 TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND	
DATE	REVISIONS	JOB NO.:	17297
01/13/2022	No As BUILT	SCALE:	AS SHOWN
		DATE:	06/26/2019
		DRAWN BY:	
		DESIGN BY:	
		REVIEW BY:	
		SHEET:	26 OF 40

LEGEND

	BRICK - CUSHWA "SANTA FE HANDMADE"
	STONE - ELDORADO STONE, "RUSTIC LEDGE" CASCADE
	HARDI PLANK - TRIM "CEDAR MILL" - ARCTIC WHITE
	HARDI PLANK - TRIM "CEDAR MILL" - ROYCROFT COPPER RED
	HARDI PLANK - TRIM "CEDAR MILL" - NAVAJO BEIGE
	ALUMINUM STOREFRONT WINCO 3250 - CLEAR ANODIZED
	CASTONE WATERTABLE - BUCKSKIN



1 SOUTH ELEVATION
1/8" = 1'-0"
NOTE:
1. SETBACK TO BE INCREASED BY 4'-0" PER FD-35-A AS AVERAGE HEIGHT OF HIGHEST ROOF (24'-0") IS HIGHER THAN 25'-0"

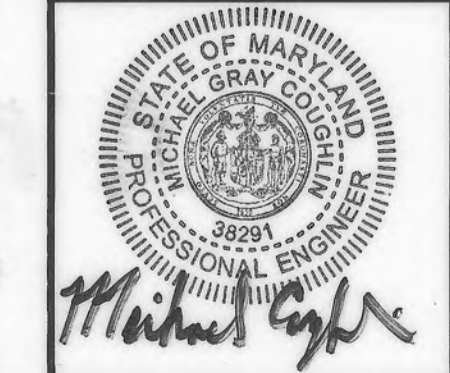


2 EAST ELEVATION
1/8" = 1'-0"
NOTE:
1. SETBACK TO BE INCREASED BY 4'-0" PER FD-35-A AS AVERAGE HEIGHT OF HIGHEST ROOF (24'-0") IS HIGHER THAN 25'-0"

PROFESSIONAL CERTIFICATION
I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2022.

THIS IS A REPLACEMENT SHEET

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
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MRAGTA.COM



SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
BUILDING ELEVATIONS

LIBER 14228 FOLIO 00059 PLAT NO. 14470
ZONED N1 - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22
TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

ARCHITECT
FREDERICK WARD ASSOCIATES, INC.
PO BOX 727
BEL AIR, MD 21014
PHONE: (410) 879-2090

OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JUCK WHISTED
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JUCK WHISTED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Shel Clark
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6.17.20

Chris Rivera
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 6/24/2020

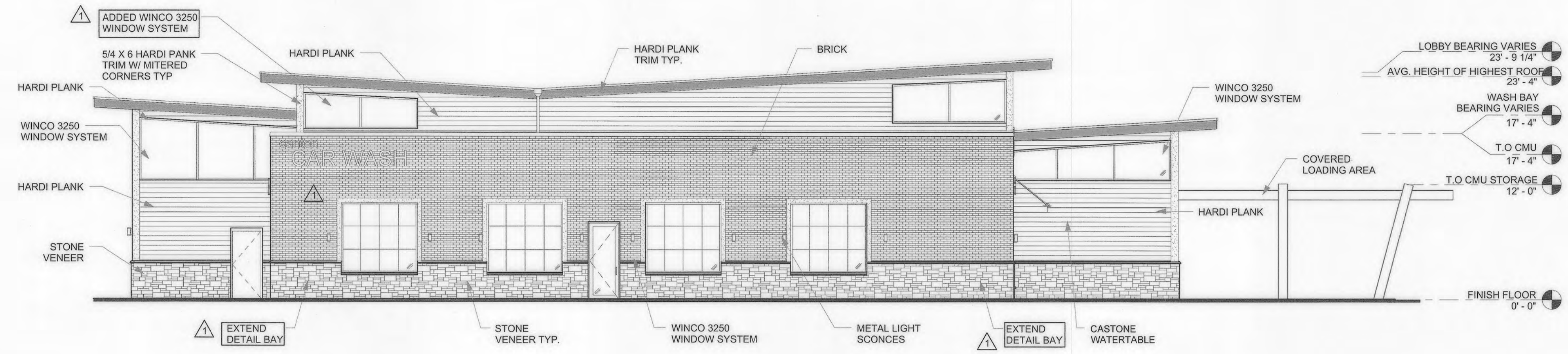
Chris Rivera
DIRECTOR
DATE: 6/24/2020

APPROVED
PLANNING BOARD HOWARD COUNTY

DATE: _____

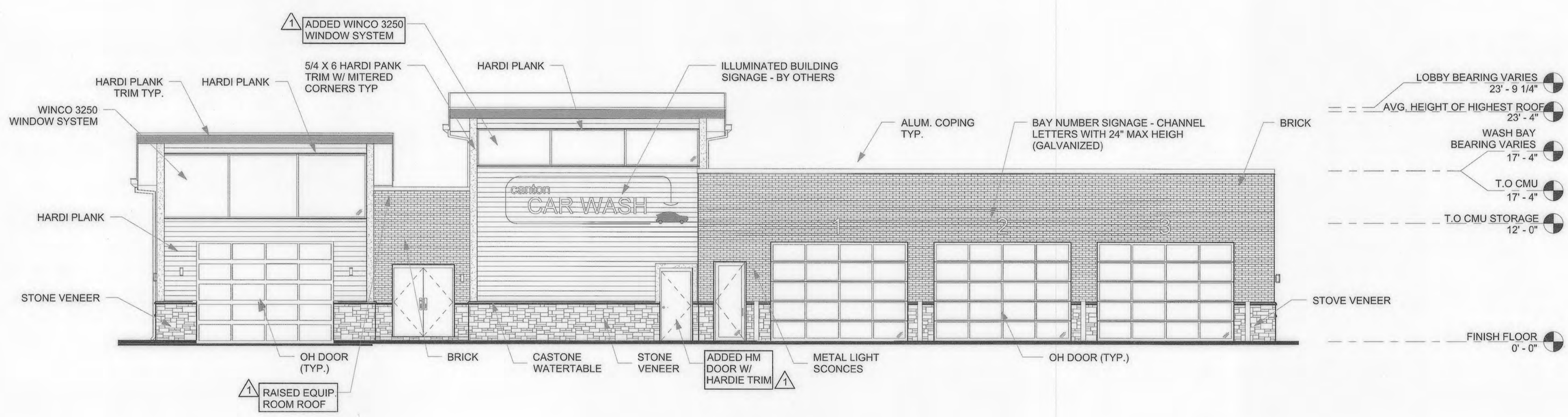
DATE	REVISIONS	JOB NO.	17297
04/22/2020	ADDED 3 DOORS AND WINDOW SYSTEMS, RAISED MECHANICAL ROOM ROOF.	SCALE:	AS SHOWN
01/13/2022	REMOVE MRA COPYRIGHT INFORMATION.	DATE:	06/26/2019
	NO ASBUILT	DRAWN BY:	
		DESIGN BY:	
		REVIEW BY:	
		SHEET:	27 OF 40

LEGEND	
	BRICK - CUSHWA "SANTA FE HANDMADE"
	STONE - ELDORADO STONE, "RUSTIC LEDGE" CASCADE
	HARDI PLANK - TRIM "CEDAR MILL" - ARCTIC WHITE
	HARDI PLANK - TRIM "CEDAR MILL" - ROYCROFT COPPER RED
	HARDI PLANK - TRIM "CEDAR MILL" - NAVAJO BEIGE
	ALUMINUM STOREFRONT WINCO 3250 - CLEAR ANODIZED
	CASTONE WATERTABLE - BUCKSKIN



1 WEST ELEVATION
1/8" = 1'-0"

NOTE:
1. SETBACK TO BE INCREASED BY 4'-0" PER FOP-55A.
AN AVERAGE HEIGHT OF HIGHEST ROOF (24'-9") IS HIGHER THAN 20'-0"



2 NORTH ELEVATION
1/8" = 1'-0"

NOTE:
1. SETBACK TO BE INCREASED BY 4'-0" PER FOP-55A.
AN AVERAGE HEIGHT OF HIGHEST ROOF (24'-9") IS HIGHER THAN 20'-0"

PROFESSIONAL CERTIFICATION
I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2022.

THIS IS A REPLACEMENT SHEET

ARCHITECT
FREDERICK WARD ASSOCIATES, INC.
PO BOX 727
BEL AIR, MD 21014
PHONE: (410) 879-2090

OWNER
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DEVELOPERS
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BALTIMORE, MARYLAND 21211
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRAGTA.COM

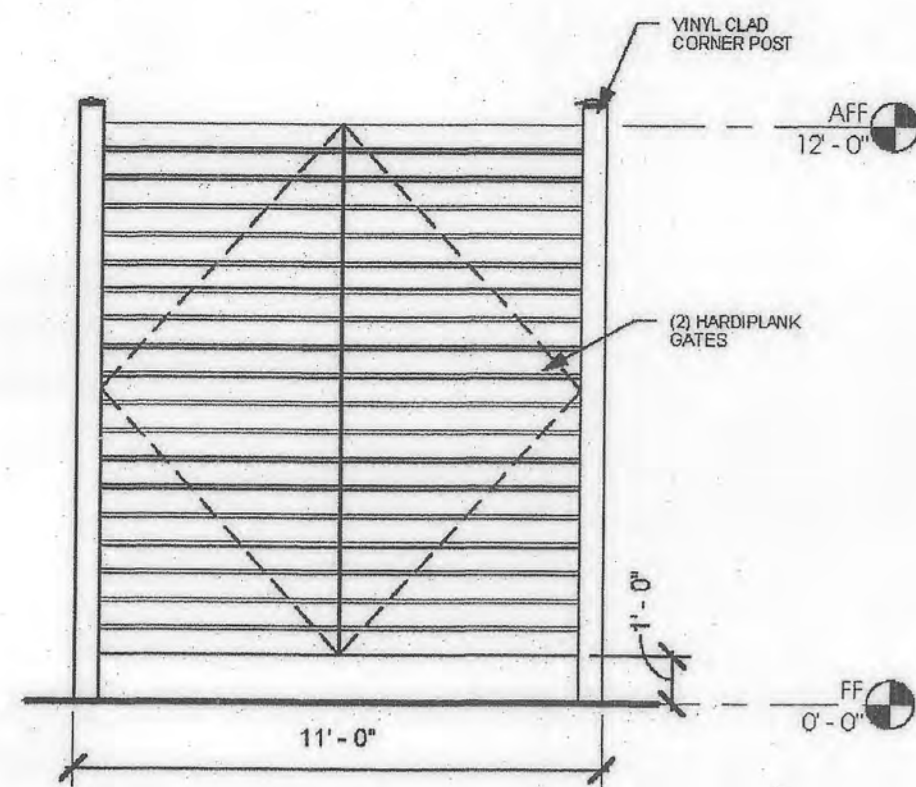
SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
CANTON CARWASH BUILDING ELEVATIONS

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22
TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

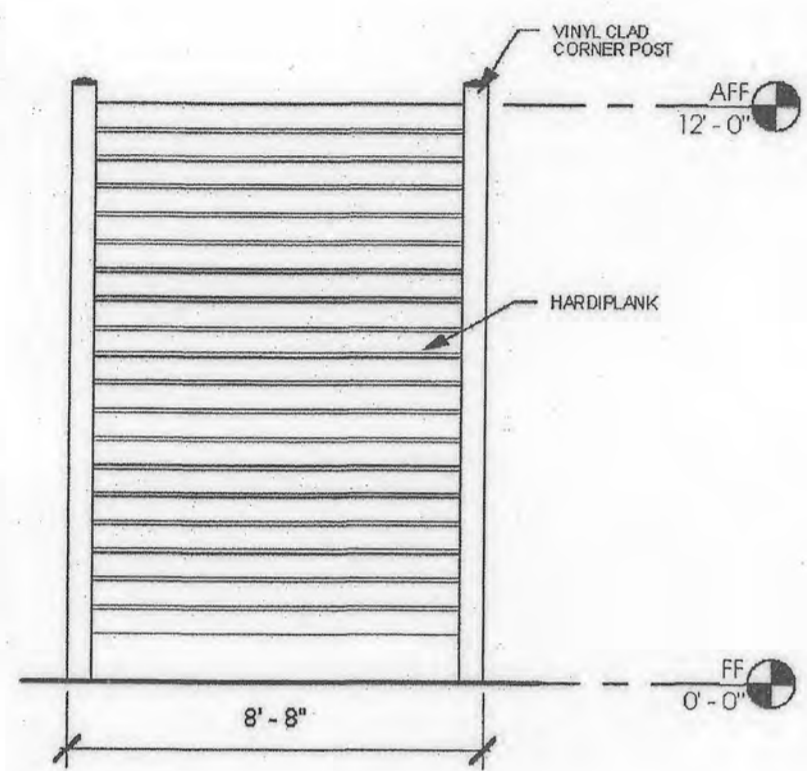
DATE	REVISIONS	JOB NO.	17297
04/22/2020	ADDED 1 DOOR AND WINDOW SYSTEM, REVISED WINDOWS, RAISED EQUIPMENT ROOM ROOF, EXTENDED DETAIL BAY, ADDED CAR WASH SIGN TO SIDE OF CARWASH BUILDING, REMOVE MRA COPYRIGHT INFORMATION.	SCALE:	AS SHOWN
06/26/2019		DATE:	06/26/2019
01/13/2022	NO ASBUILT	DRAWN BY:	
		DESIGN BY:	
		REVIEW BY:	
		SHEET:	28 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 6.17.20
CHIEF, DIVISION OF LAND DEVELOPMENT
Director
DIRECTOR
DATE: 6/24/2020

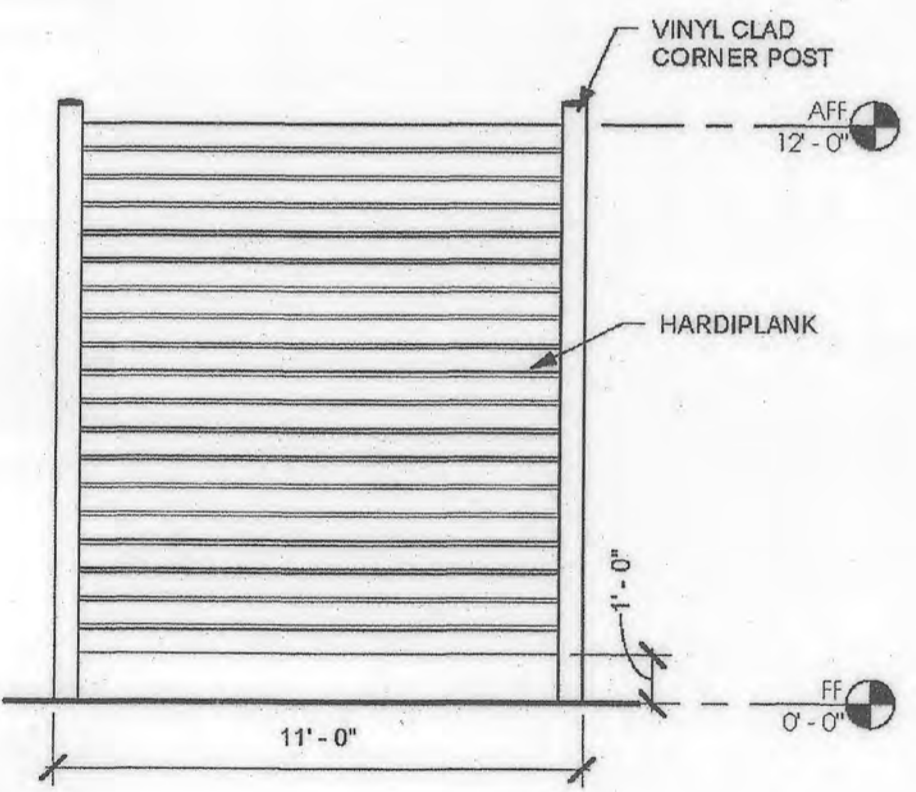
APPROVED
PLANNING BOARD HOWARD COUNTY
DATE: _____



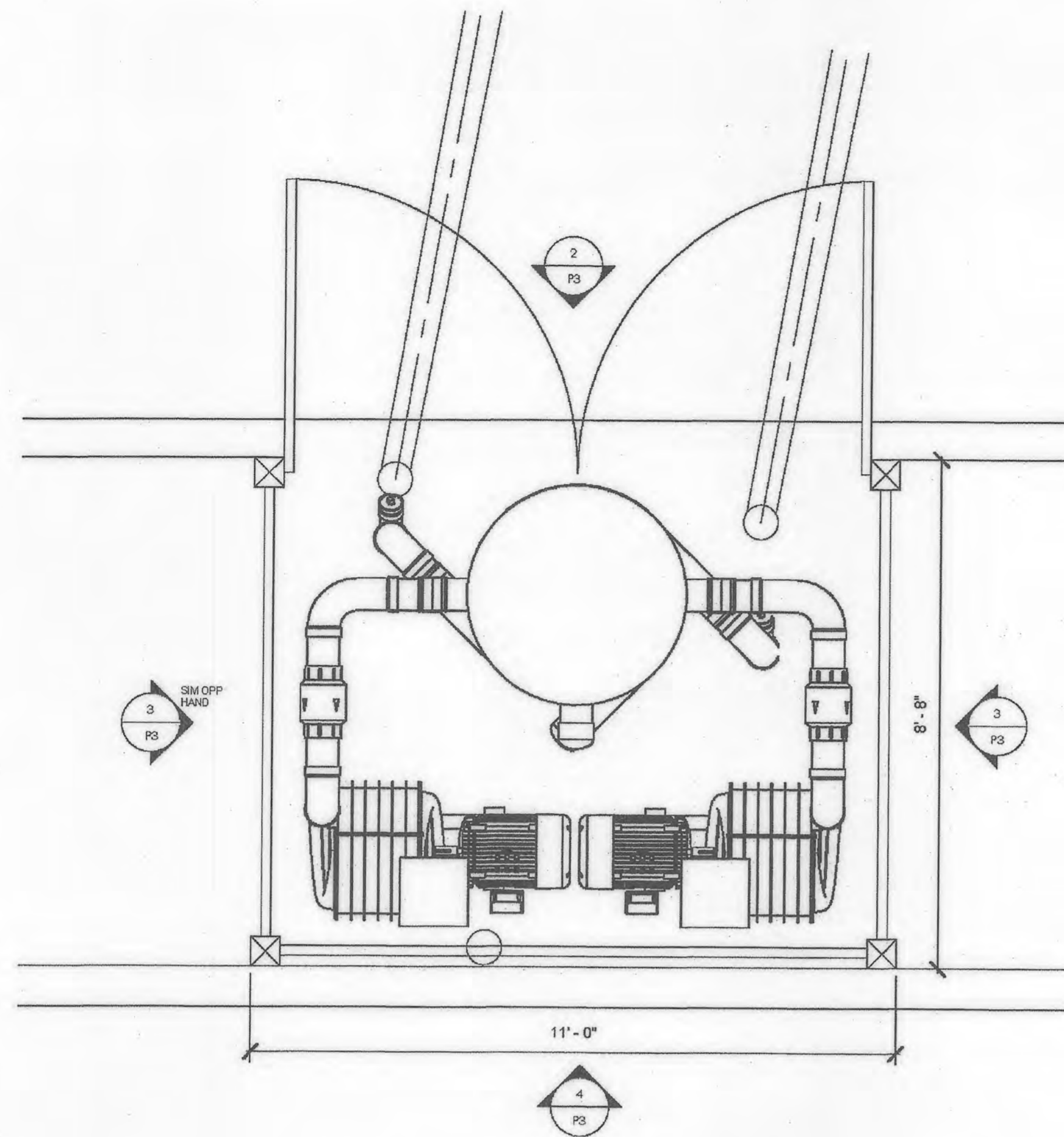
2 VACUUM EQUIP 1 GATE ELEV
P3 1/4" = 1'-0"



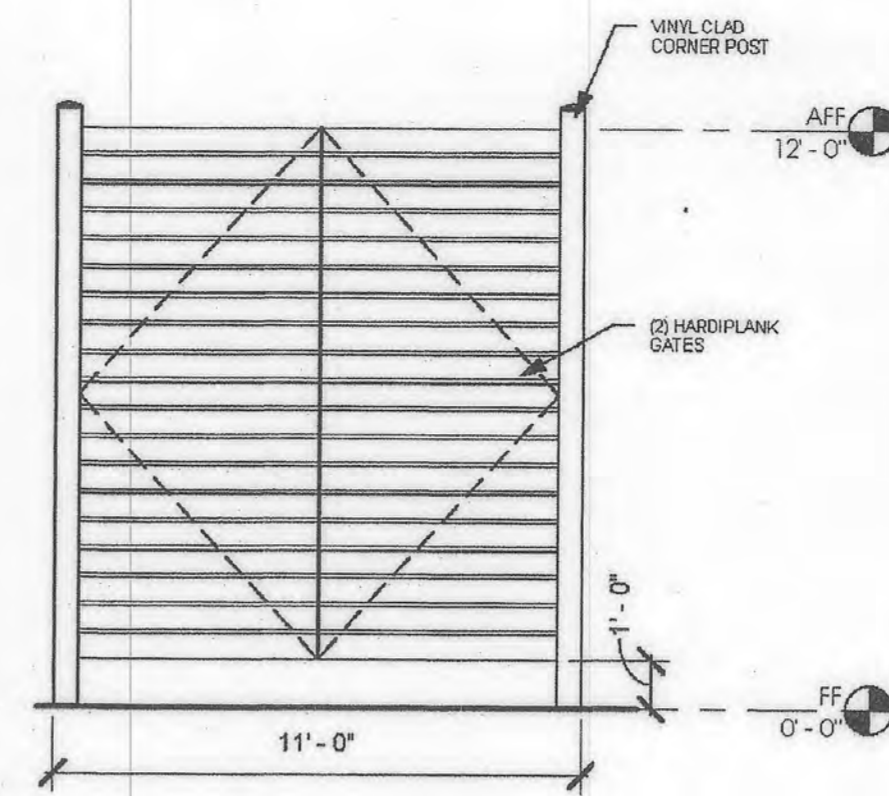
3 VACUUM EQUIP 1 TYP SIDE ELEV
P3 1/4" = 1'-0"



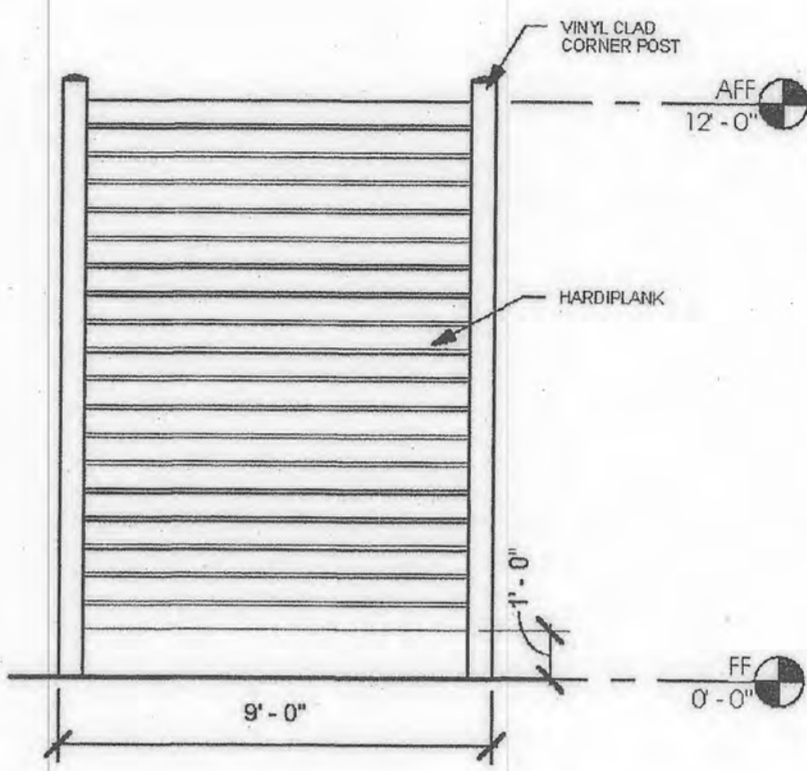
4 VACUUM EQUIP 1 TYP FRONT ELEV
P3 1/4" = 1'-0"



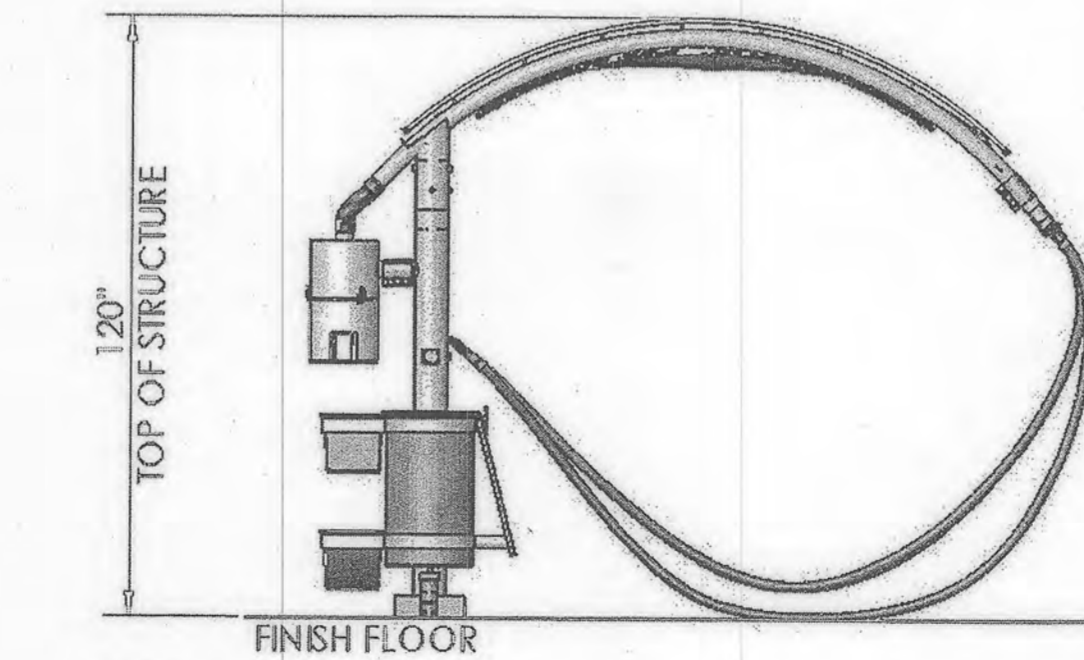
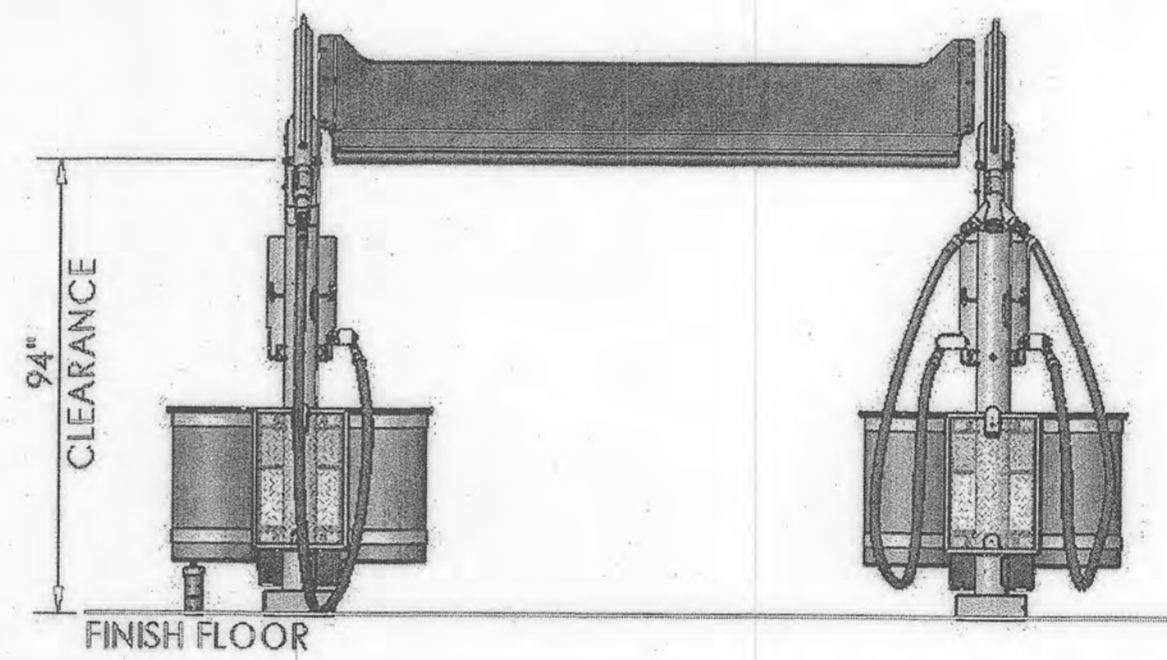
1 VACUUM EQUIPMENT 1 PLAN
P3 1/2" = 1'-0"



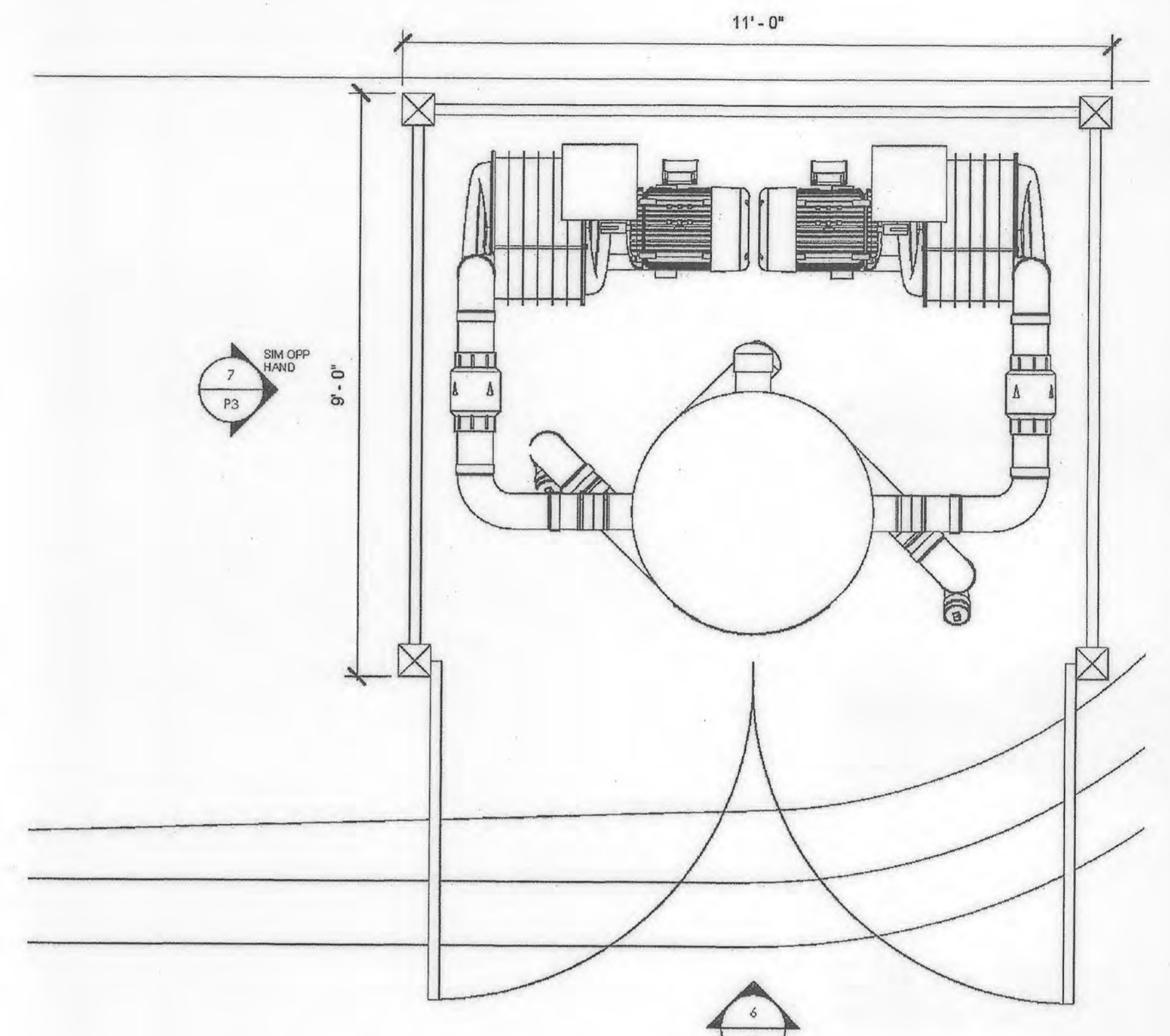
6 VACUUM EQUIP 2 GATE ELEV
P3 1/4" = 1'-0"



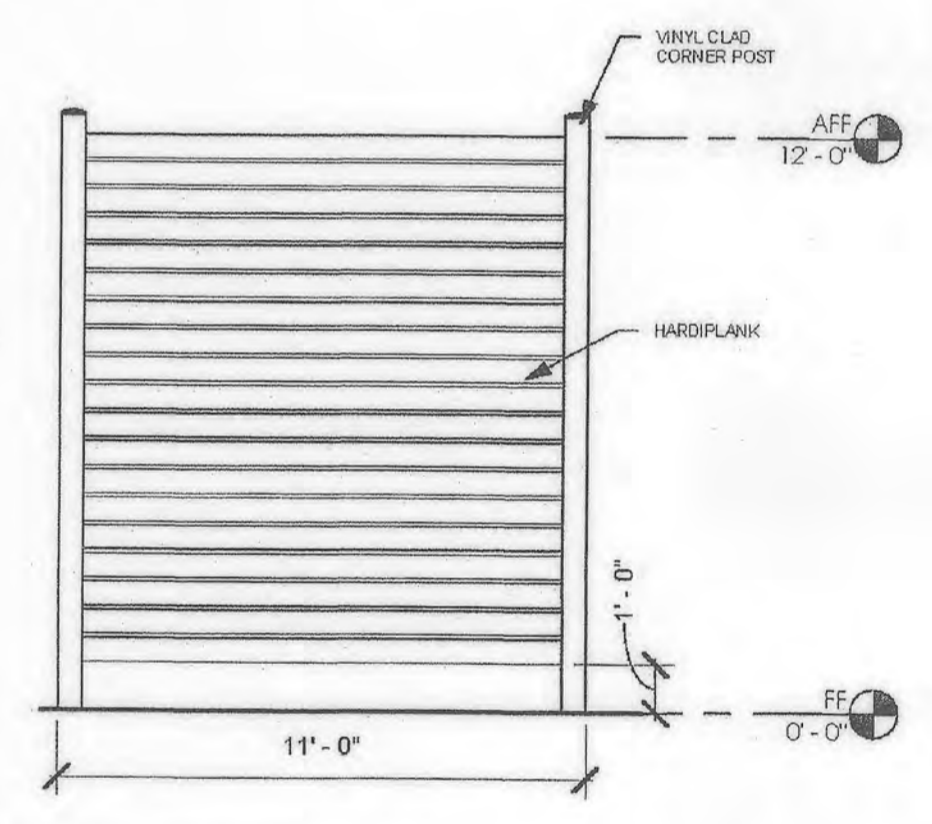
7 VACUUM EQUIP 2 TYP SIDE ELEV
P3 1/4" = 1'-0"



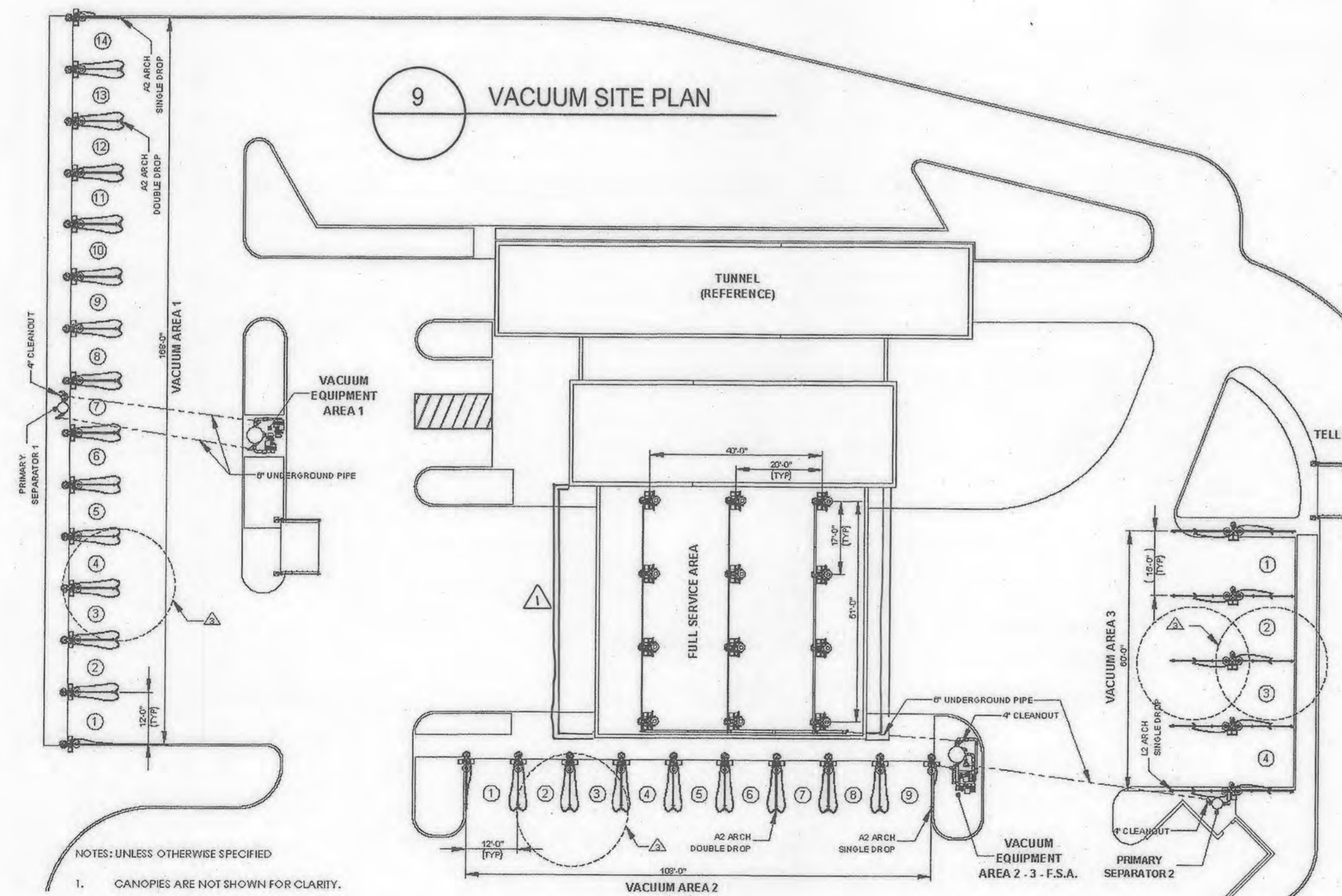
10 SELF SERVE AND DETAIL AREA VACUUM ELEVATION



5 VACUUM EQUIPMENT 2
P3 1/2" = 1'-0"



8 VACUUM EQUIP 2 TYP FRONT ELEV
P3 1/4" = 1'-0"



9 VACUUM SITE PLAN

NOTES: UNLESS OTHERWISE SPECIFIED
1. CANOPIES ARE NOT SHOWN FOR CLARITY.

ARCHITECT
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DEVELOPERS
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MORRIS & RITCHIE ASSOCIATES, INC.
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MRAGTA.COM
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STATE OF MARYLAND
PROFESSIONAL ENGINEER
Michael Lybki

SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
CANTON CARWASH
DETAILING SHELTER AND VAC ELEVATIONS

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
04/22/2010	REVERSE FLOOR AREA FOR CARWASH BUILDING, REMOVE MRA COPY-RIGHT INFO.	17297
01/13/2022	NO AS-BUILT	SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY:
		DESIGN BY:
		REVIEW BY:
		SHEET: 29 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING

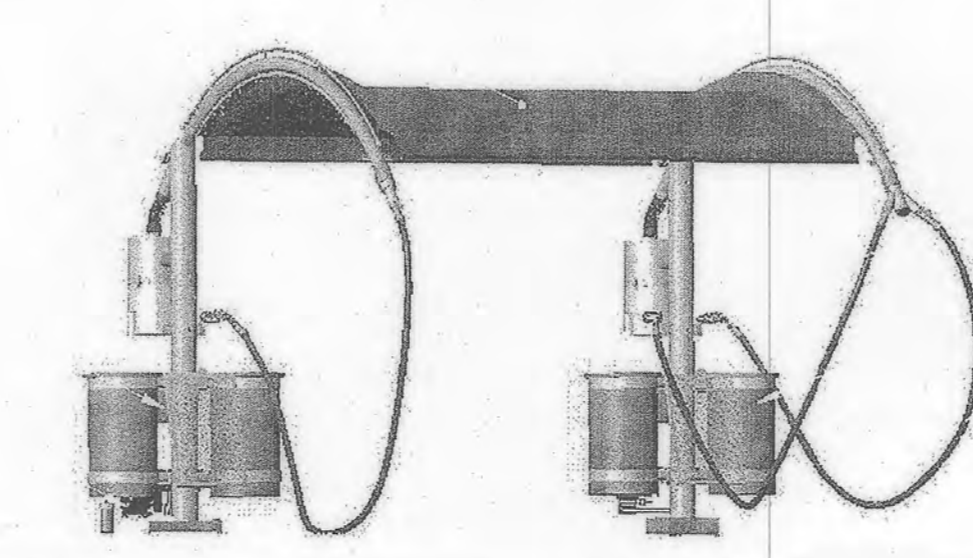
Chad Plank 9-25-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

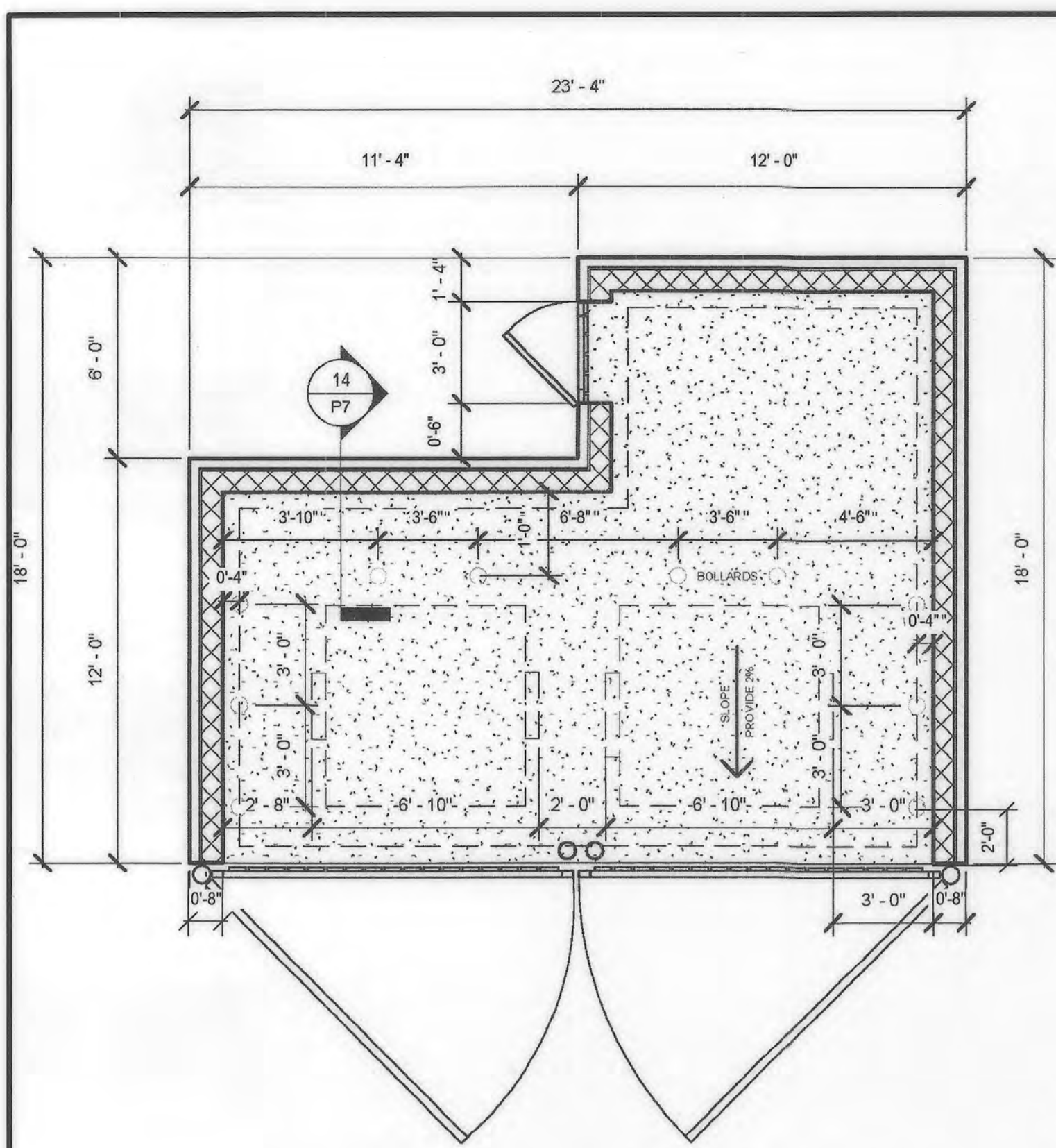
Kate S. D. ... 10-08-19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

N. ... 10-15-19
DIRECTOR DATE

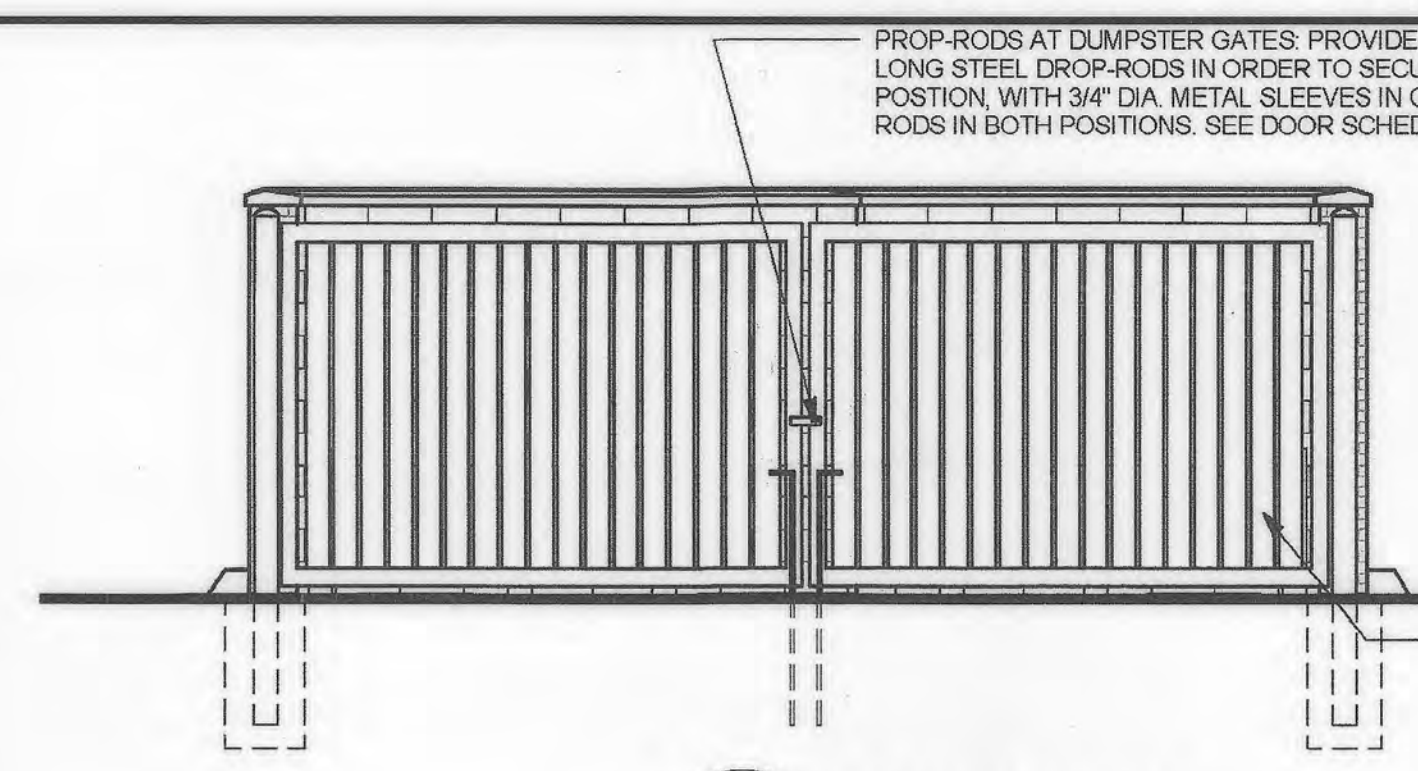
APPROVED
PLANNING BOARD HOWARD COUNTY

DATE 2/7/19

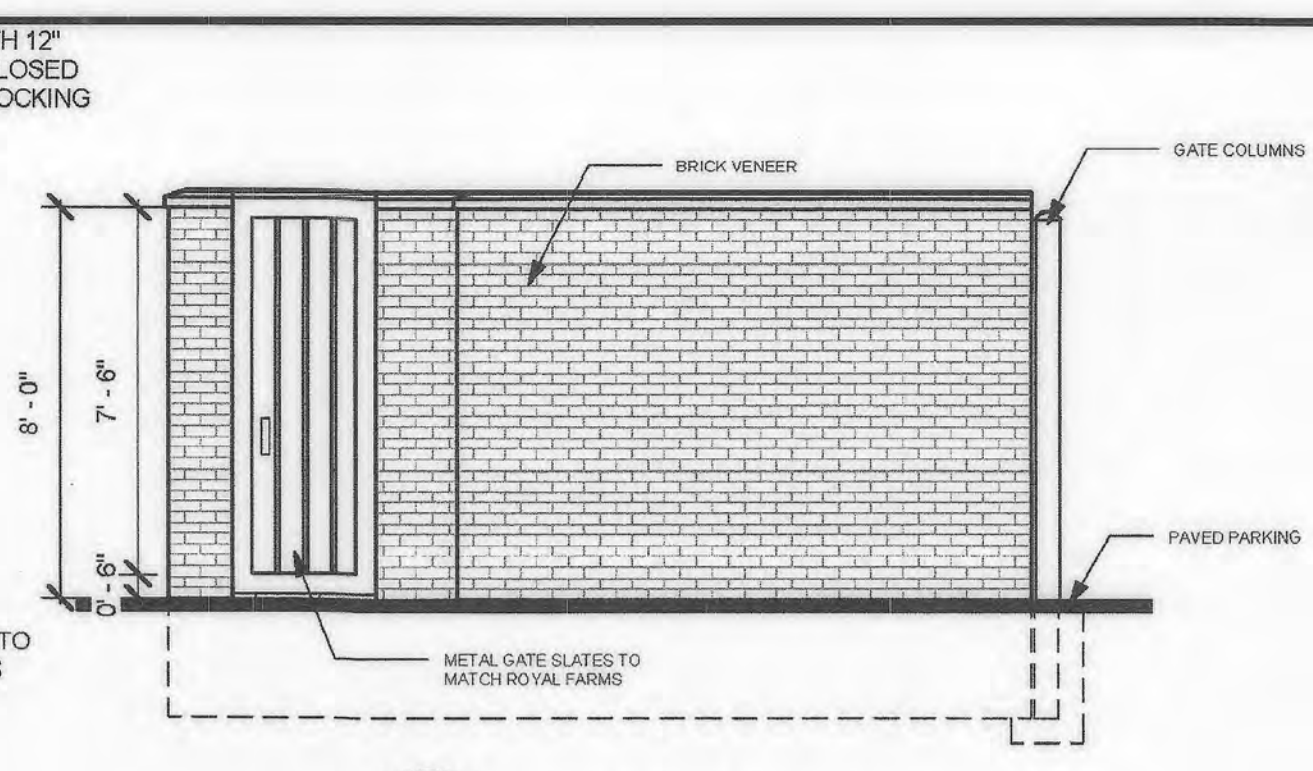
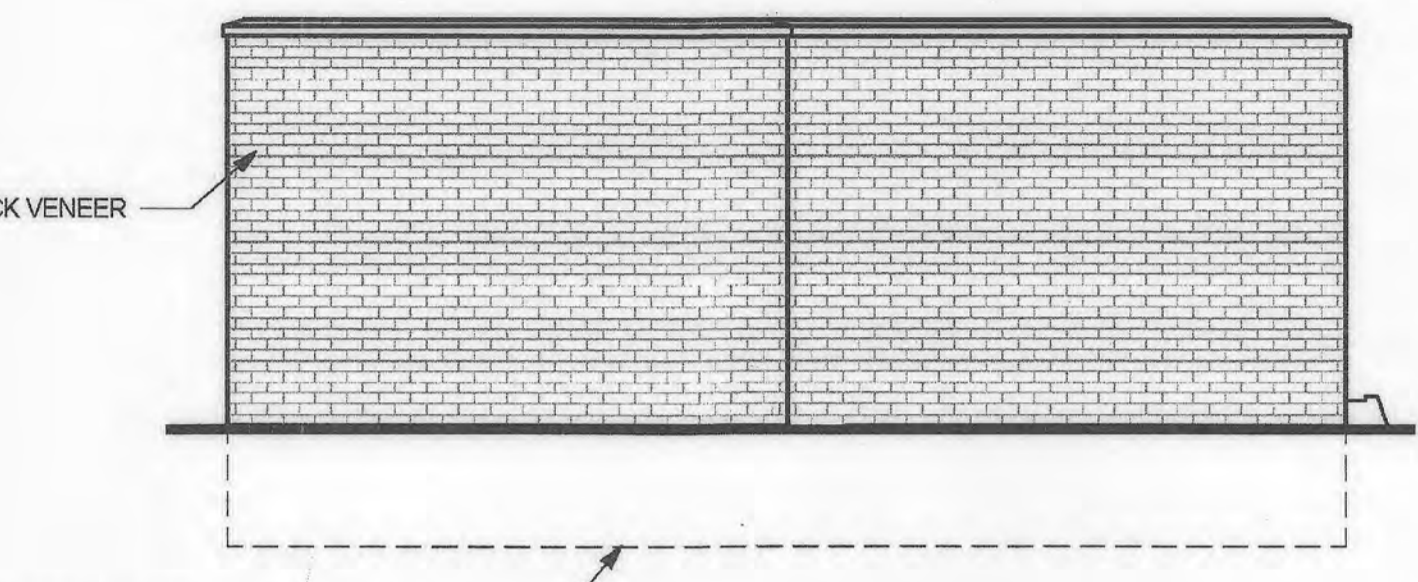




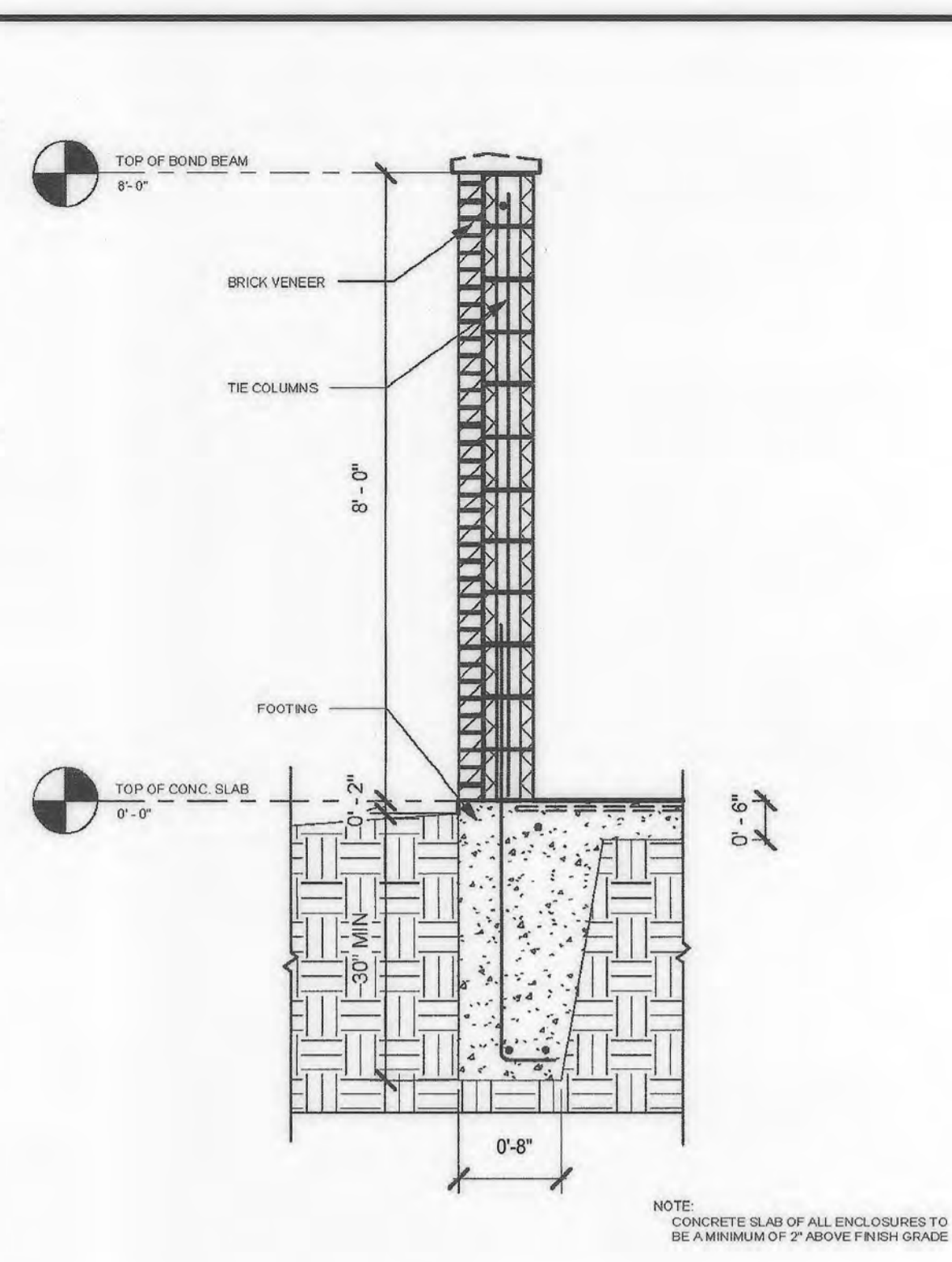
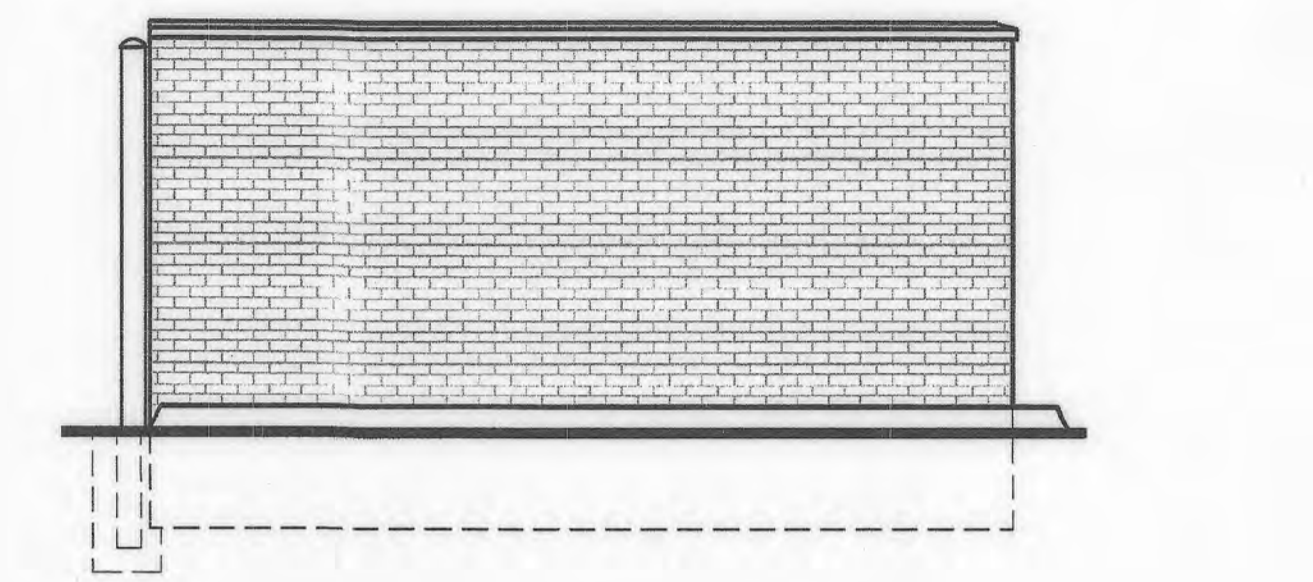
7 DUMPSTER ENCLOSURE PLAN
1/4" = 1'-0"



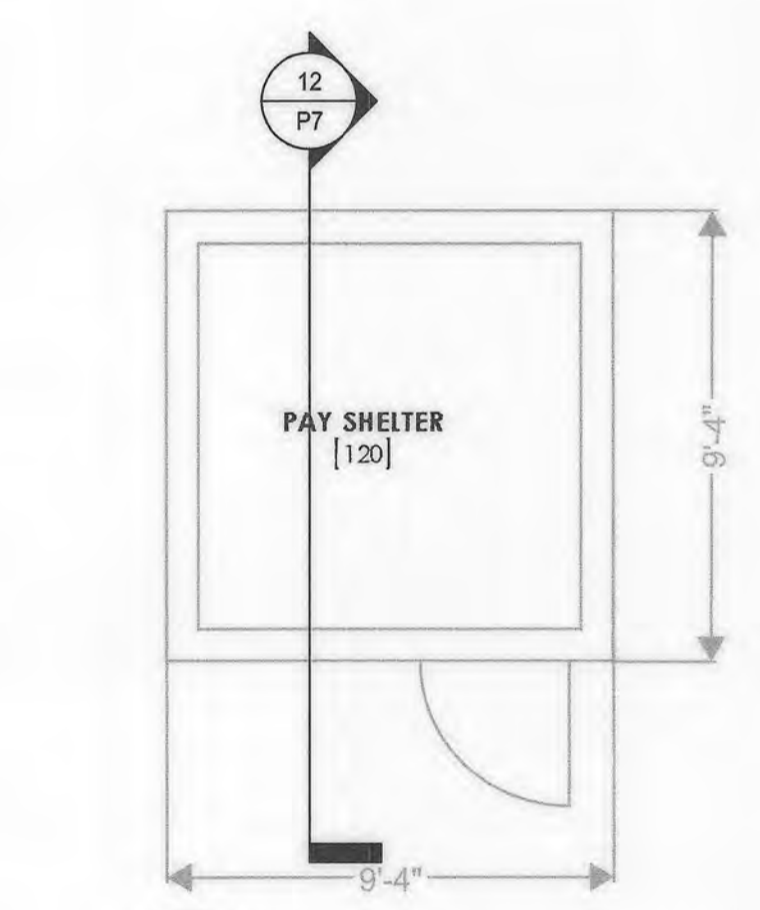
10 SOUTH DUMPSTER
1/4" = 1'-0"



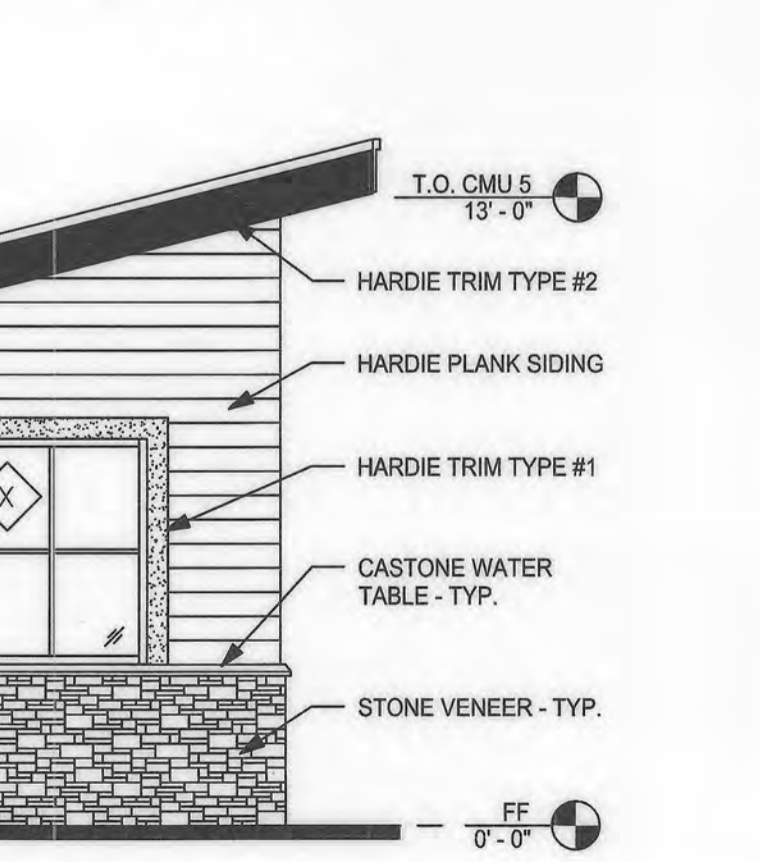
8 WEST DUMPSTER
1/4" = 1'-0"



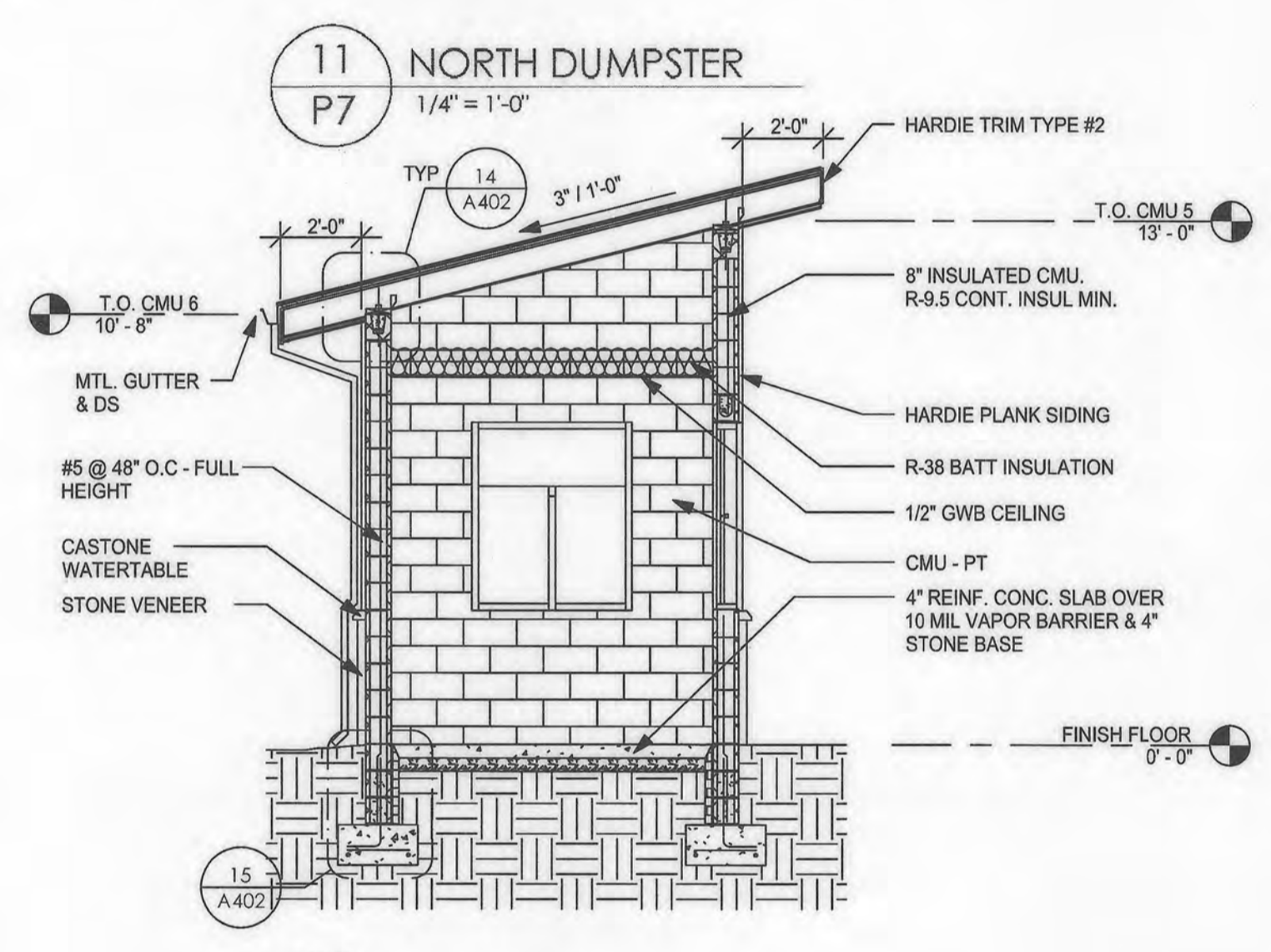
14 DUMPSTER SECTION
1/2" = 1'-0"



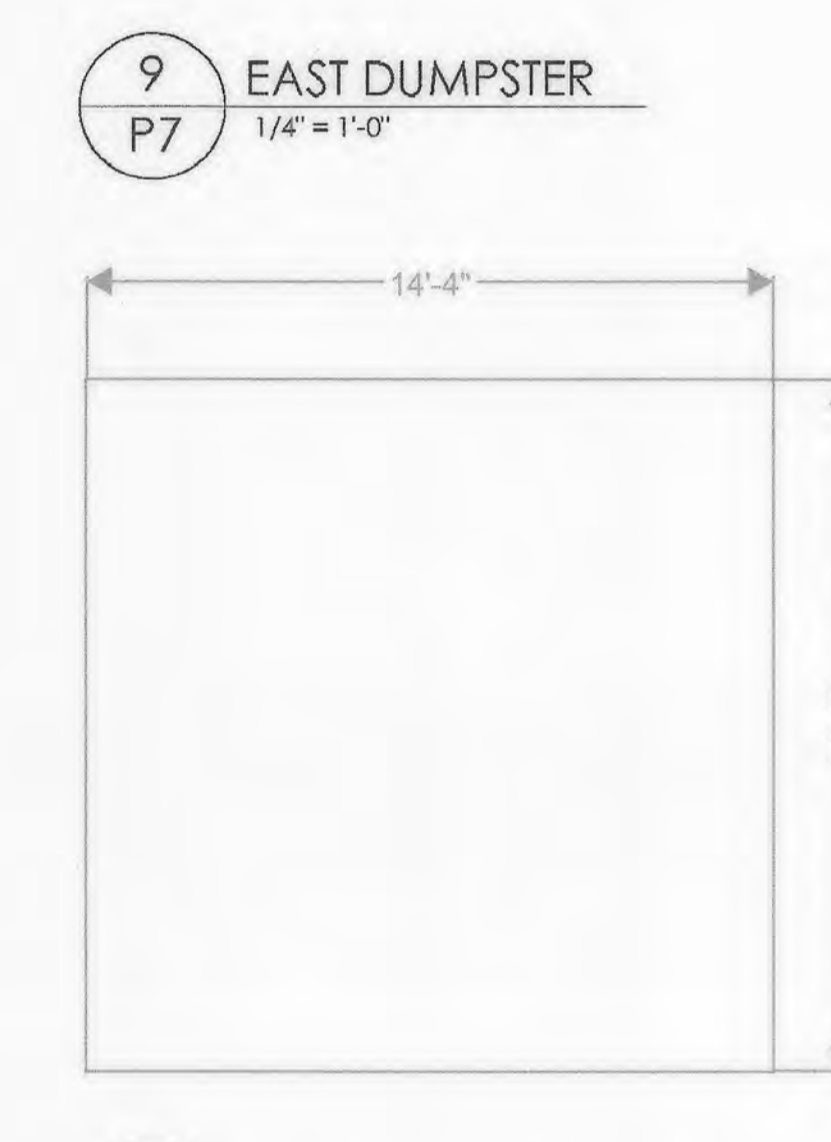
12 PAY SHELTER SECTION
1/4" = 1'-0"



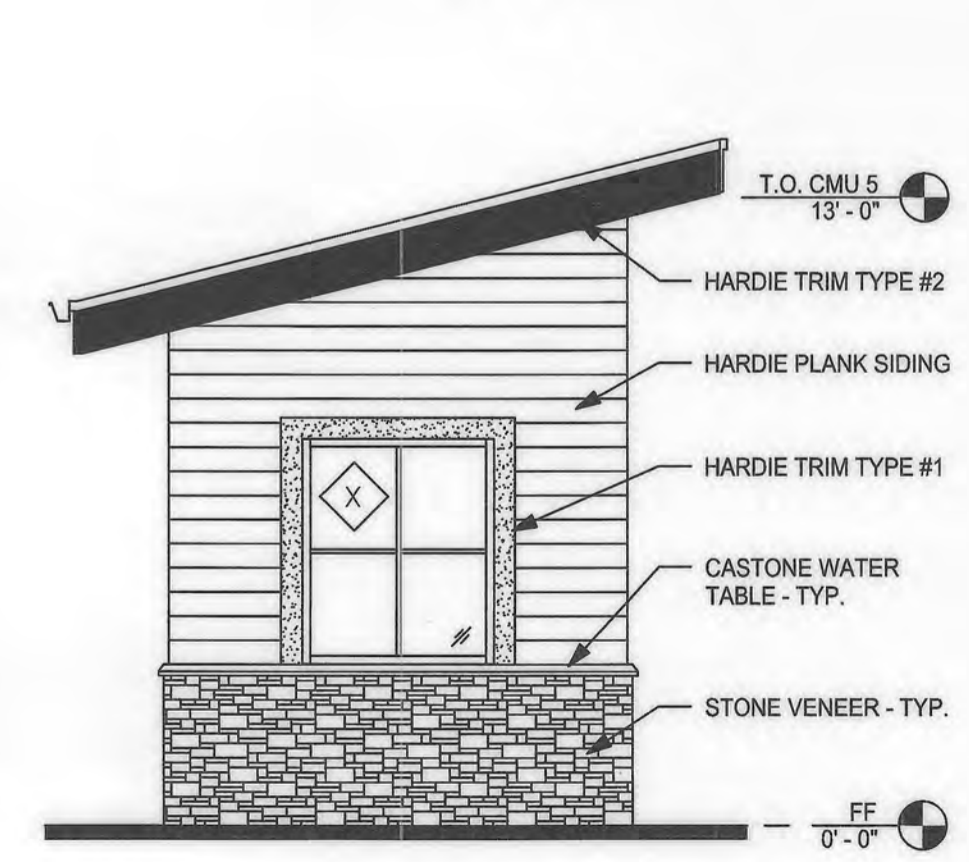
1 PAY SHELTER PLAN
1/4" = 1'-0"



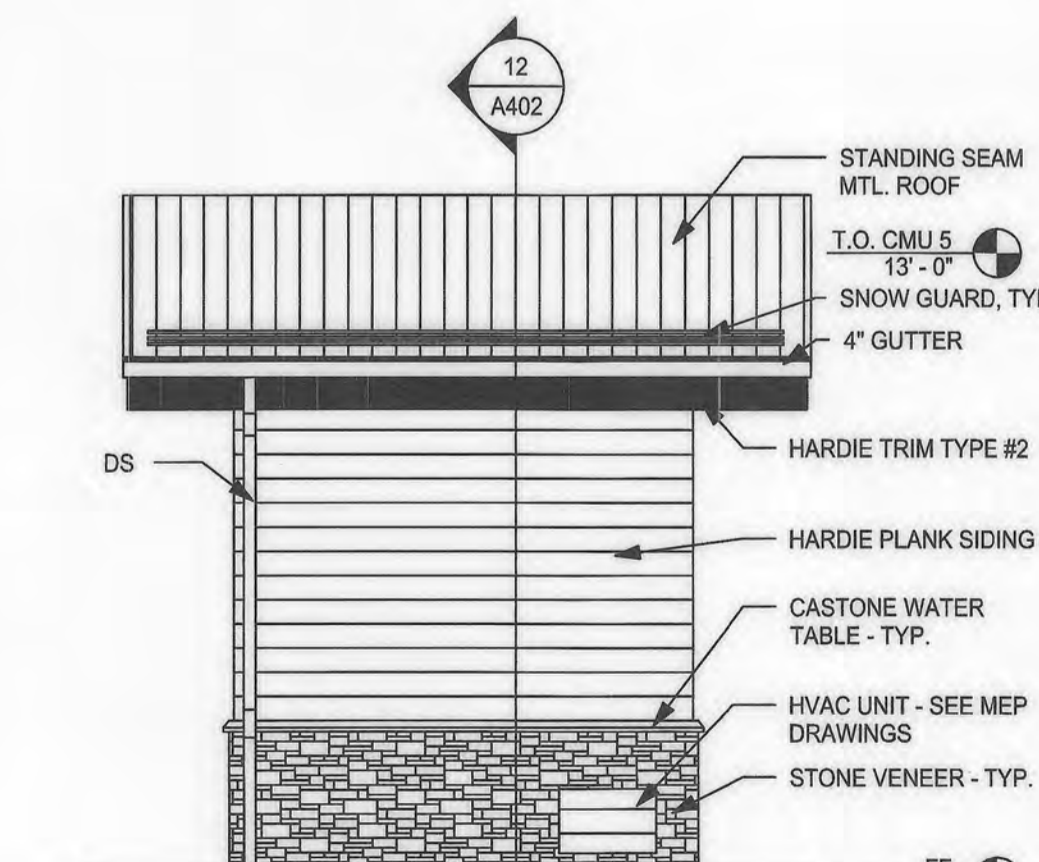
11 NORTH DUMPSTER
1/4" = 1'-0"



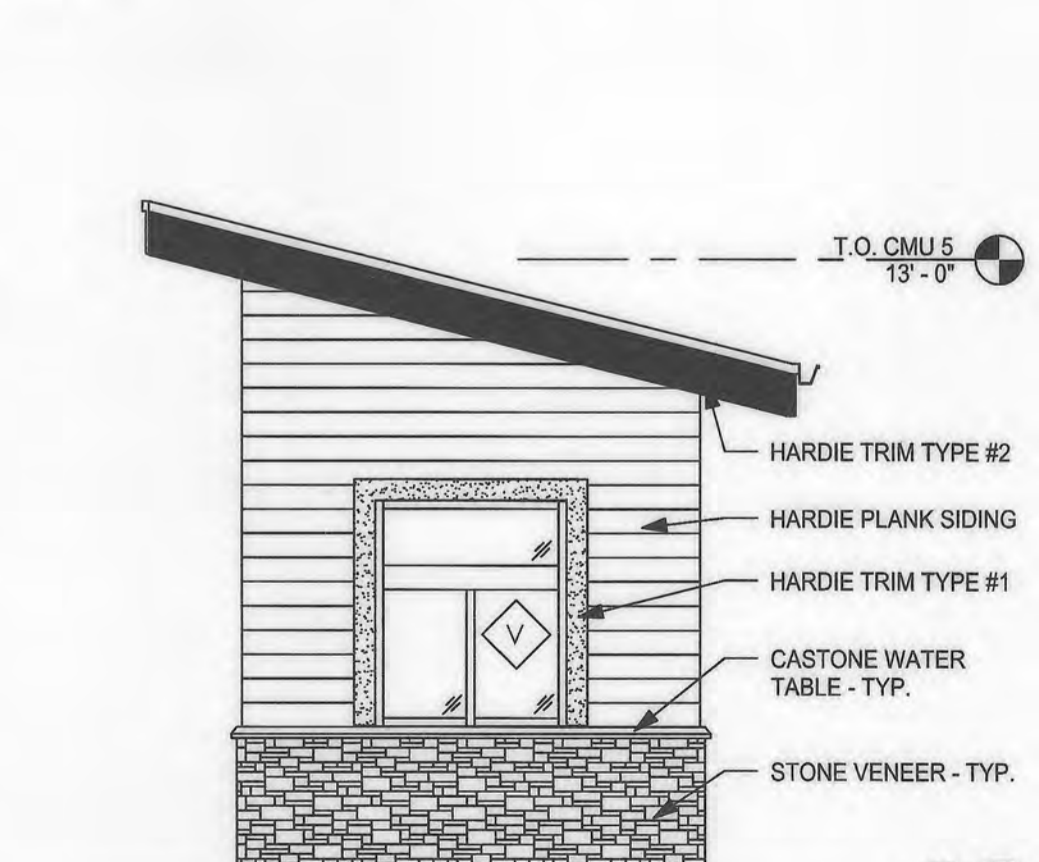
9 EAST DUMPSTER
1/4" = 1'-0"



3 NORTH ELEV. PAY SHELTER
1/4" = 1'-0"



4 EAST ELEV. PAY SHELTER
1/4" = 1'-0"



2 SOUTH ELEV. PAY SHELTER
1/4" = 1'-0"



5 WEST ELEV. PAY SHELTER
1/4" = 1'-0"

6 PAY SHELTER ROOF PLAN
1/4" = 1'-0"

PROP-RODS AT DUMPSTER GATES. PROVIDE EACH OF THE GATES WITH 12" LONG STEEL DROP-RODS IN ORDER TO SECURE GATES IN OPEN OR CLOSED POSITION. WITH 3/4" DIA. METAL SLEEVES IN CONCRETE PAVING FOR LOCKING RODS IN BOTH POSITIONS. SEE DOOR SCHEDULE FOR GATE SPECS.

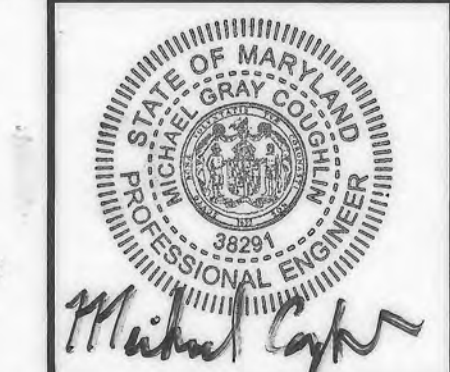
NOTE: CONCRETE SLAB OF ALL ENCLOSURES TO BE A MINIMUM OF 2" ABOVE FINISH GRADE

PROFESSIONAL CERTIFICATION
I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2022.

THIS IS A REPLACEMENT SHEET



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
MRAGTA.COM



SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
CANTON CARWASH
VACUUMS, PAY SHELTER & DUMPSTER ELEVATIONS

DATE	REVISIONS	JOB NO.:	SCALE:
04/22/2020	REVISE PAY SHELTER AND DUMPSTER CORRAL TO MATCH ARCHITECTURAL PLAN.	17297	AS SHOWN
	UPDATE PAY SHELTER ELEVATIONS AND SECTION, REMOVE MRA COPYRIGHT		DATE: 06/26/2019
	STATEMENT FROM TITLEBLOCK, UPDATE DUMPSTER ENCLOSURE DIMENSIONS.		DRAWN BY:
01/13/2022	NO AS BUILT		DESIGN BY:
			REVIEW BY:
			SHEET: 30 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING

 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 6-17-20

 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 6/24/2020

 DIRECTOR
 DATE: 6/24/2020

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE: _____

LEGEND
 BRICK - CUSH-WA "SANTA FE HANDMADE"
 HARDI PLANK - "CEDAR MILL" ARCTIC-WHITE
 STONE - ELDORADO STONE, "RUSTIC LEDGE" CASCADE
 HORIZONTAL GALVANIZED METAL PANEL - CENTRA MICROLINE EXTRUSION "LIGHT SEA WOLF" #9510

ARCHITECT
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DEVELOPERS
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ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573



All Customers (17)
 size: 18" W x 48" H x 2.25" D
 type: Not lit
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



Express Lane (20)
 size: 18" W x 48" H x 2.25" D
 type: Not lit
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



Pay Station (16, 19)
 size: 48" W x 96" H, 32 sq/ft
 type: Lit
 construction: Aluminum structure with high impact plastic faces Sign has back support giving it extra rigidity.
 mounting: Heavy mounting plate size varies depending on design, it ranges from 34" - 42" long x 10" D or single post mount w/ 11 3/4" x 11 3/4" x 750" foot plate. Please see details sheet A
 link: www.tsscws.com/index.php/menus/led-illuminated-die-cut-menu.html
 Design F
 Please do the one that does NOT have the 10" of clearance and is mounted flush.



Customers Are Responsible For (21)
 size: 24" W x 48" H
 type: Not lit, Frame powder coated in light gray.
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: pedestal mount with a 32" ground clearance, Please see details sheet C
 link: <http://www.tsscws.com/index.php/tunnel-instructional-confirmation-signs/slim-instructional-fixture.html>



Car in Neutral, Feet Off Pedals, Hands Off Wheel (14)
 size: 24" W x 48" H
 type: Not lit, Frame powder coated in light gray.
 construction: Baked enamel aluminum and St. St. hardware, with a high impact plastic face.
 mounting: pedestal mount with a 32" ground clearance, Please see details sheet C
 link: <http://www.tsscws.com/index.php/tunnel-instructional-confirmation-signs/slim-instructional-fixture.html>



Please stay in vehicle. Pull Forward to green light. (7, 8 & 9)
 size: 28" W x 44" H
 type: Not lit
 construction: 1-1/8" size of the standoff from Metomic Corporation, material - 6mm pvc
 mounting: Please see details sheet D
 link: none
 On the wall, on driver side.



Car Wash (6, 15 & 18)
 size: Body is 18" W x 48" H x 2.25" D. (Circle is 24" H x 24" W, 4 sq/ft)
 type: Not lit
 construction: Baked enamel aluminum fixture and St. St. hardware.
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



Express Detailing Center (22)
 size: 18" W x 48" H x 2.25" D
 type: Not lit
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



Exit (3, 1)
 size: 18" W x 48" H x 2.25" D
 type: Not lit
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



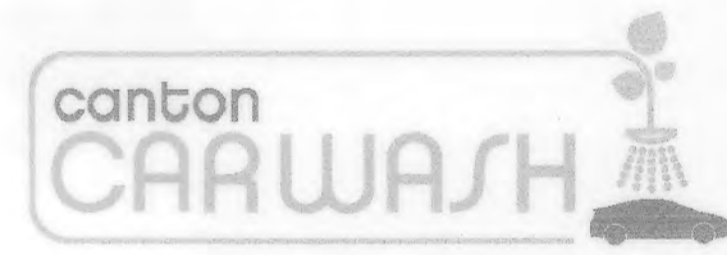
Full Service (5)
 size: 18" W x 48" H x 2.25" D
 type: Not lit
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



Free Vacuums (2)
 size: 18" W x 48" H x 2.25" D
 type: Not lit
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: Heavy foot plate 14" W x 8" D x 1/2" thick, 3/8" x 5" Galvanized Wedge Anchor is recommended, Standard 5" Mesh reinforced concrete pad is an adequate surface to anchor to. Please see details sheet B
 link: www.tsscws.com/index.php/exterior-fixtures/non-illuminated-entrance-exit-fixture.html
 Design B



Wait Go Light (4)
 size: 18" W x 18" H x 4" D
 type: Lit, Frame powder coated in light gray.
 construction: Baked enamel aluminum body and St. St. hardware with a high impact plastic face
 mounting: pedestal mount with a 36" ground clearance.
 link: www.tsscws.com/index.php/traffic-fixtures/slim-2-section-fixture-with-led-strobes.html



Canton Car Wash - side (10, 11)
 size: roughly 181" W x 59.4" H, 75 sq/ft
 type: Lit
 construction: The letters and logo will be fabricated from computer cut .040 aluminum backs with 5" deep aluminum returns. The return color will be as selected from manufacturers' standards. The faces will be 3/16" white translucent acrylic and will have pressure sensitive translucent vinyl overlays in standard colors to match your logo colors as close as possible. The acrylic faces will be secured to the returns with 1" trim cap in a color to be selected from manufacturers' standards. The letters and logos will be internally illuminated with white LEDs as required. All secondary wiring and power supplies will be located behind the wall.
 link: none

Canton Car Wash - Front (12, 13)
 size: roughly 136" W x 44.59" H, 42.5 sq/ft
 type: Lit
 construction: The letters and logo will be fabricated from computer cut .040 aluminum backs with 5" deep aluminum returns. The return color will be as selected from manufacturers' standards. The faces will be 3/16" white translucent acrylic and will have pressure sensitive translucent vinyl overlays in standard colors to match your logo colors as close as possible. The acrylic faces will be secured to the returns with 1" trim cap in a color to be selected from manufacturers' standards. The letters and logos will be internally illuminated with white LEDs as required. All secondary wiring and power supplies will be located behind the wall.
 link: none



Vacuums For Car Wash Patrons Only (23, 24)
 Applied to each vacuum
 size: 8" W x 8" H
 type: Lit
 construction: .08" thick aluminum, non-reflective
 mounting: mounted to vacuum arches

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 3/7/19

SIGN MANUFACTURER

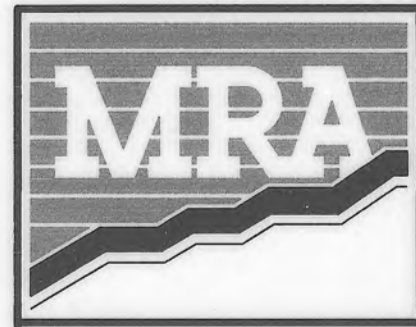
BELSINGER SIGN WORKS, INC.
 1300 BAYARD STREET
 BALTIMORE, MD, 21230
 PHONE: (410) 837-2700

OWNER

TWO FARMS INC.
 3811 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHITED
 PHONE: (410) 889-0200

DEVELOPERS

TWO FARMS INC.
 3811 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

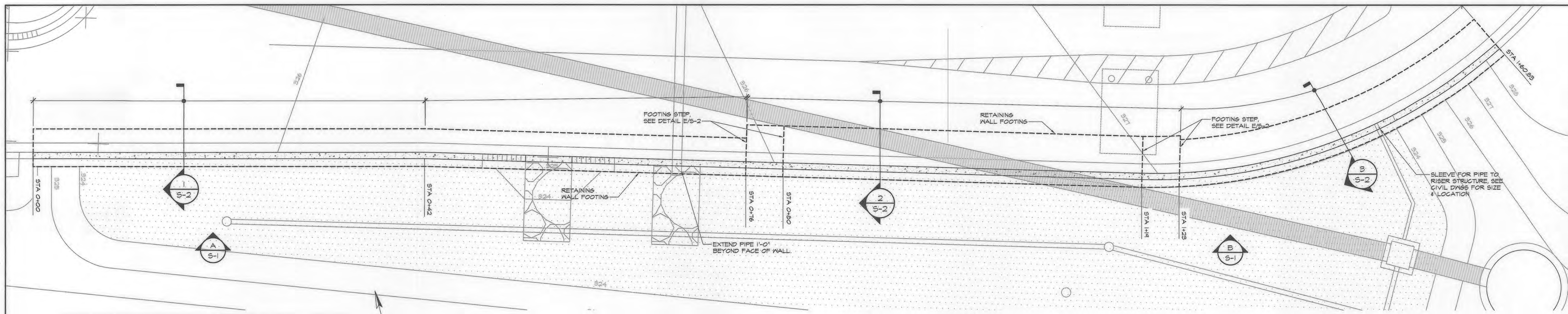


MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
 TOWSON, MARYLAND 21286
 (410) 821-1690
 FAX: (410) 821-1748
 MRA.GTA.COM
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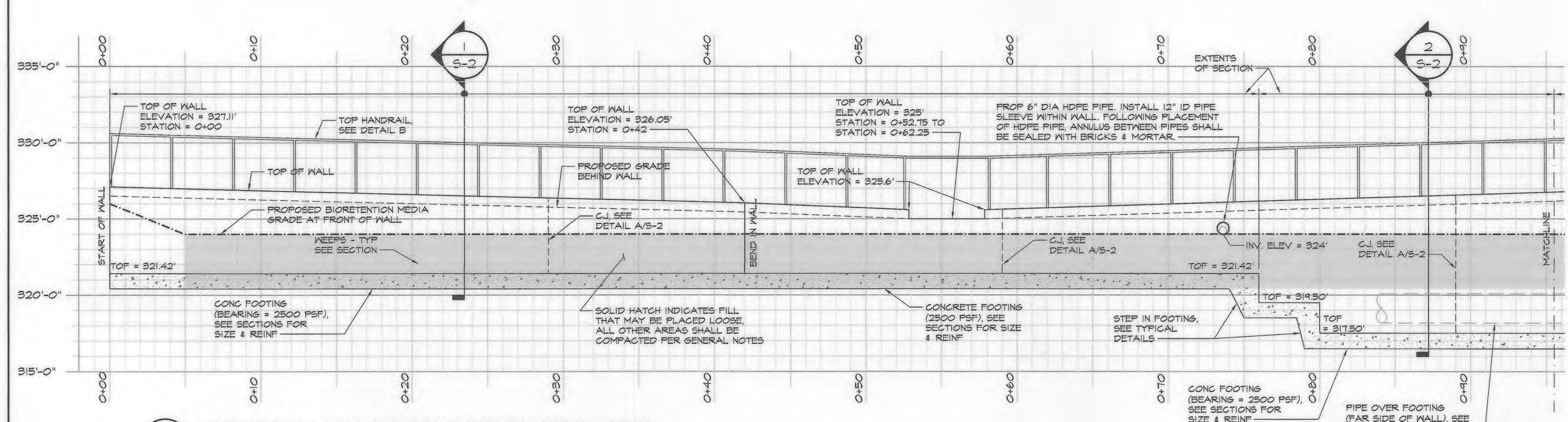


SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH
 CANTON CARWASH
 SIGN ELEVATIONS
 LIBER 14229 FOLIO 00059 PLAT NO. 14470
 ZONED NI ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

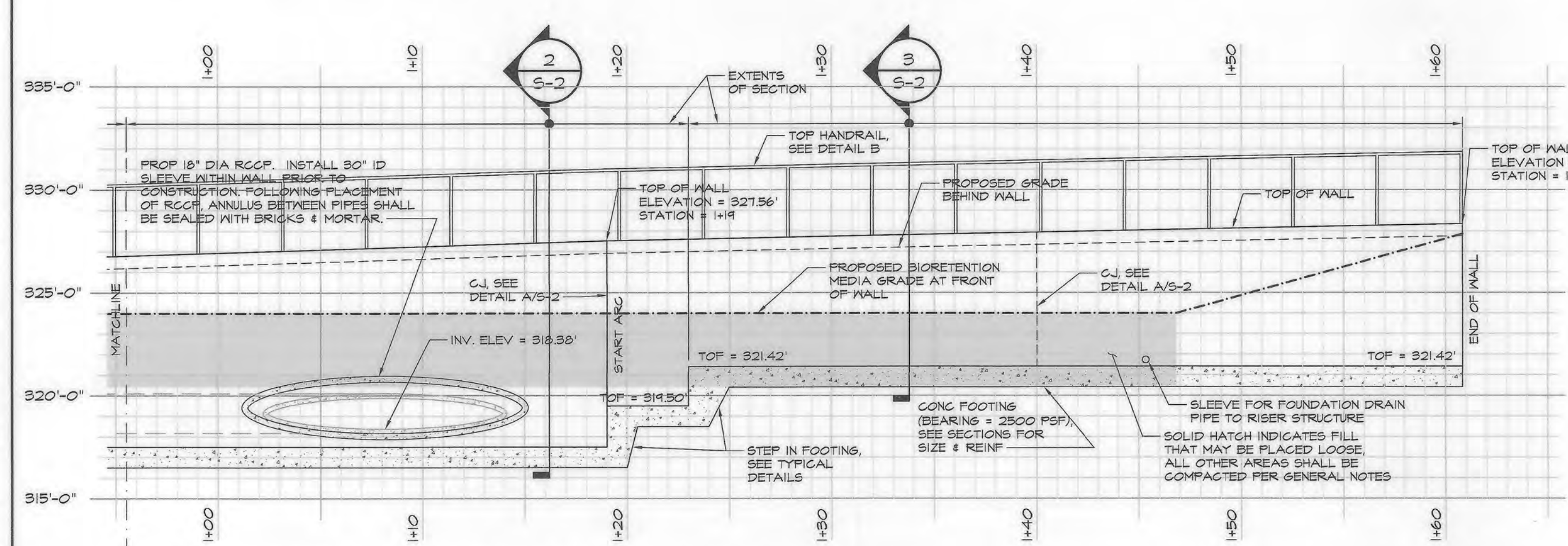
DATE	REVISIONS	JOB NO.
01/13/2022	No ASBUILT	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY:
		DESIGN BY:
		REVIEW BY:
		SHEET: 31 OF 40



MICRO-BIORETENTION RETAINING WALL PLAN
SCALE: 3/16" = 1'-0"



A RETAINING WALL PROFILE (DEVELOPED VIEW)
SCALE: 1" = 5'-0"



B RETAINING WALL PROFILE (DEVELOPED VIEW)
SCALE: 1" = 5'-0"

STRUCTURAL NOTES

- BUILDING CODES**
- A. ALL CONSTRUCTION SHALL CONFORM WITH:
 - THE INTERNATIONAL BUILDING CODE (IBC-2018) AND ALL APPLICABLE SUPPLEMENTS.
 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE-10).
 - B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH THE GOVERNING LOCAL BUILDING CODE.
- MISCELLANEOUS**
- A. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.
 - B. THE CONTRACTOR SHALL REVIEW THE CIVIL DRAWINGS FOR LOCATION AND DIMENSION OF INSERTS, OPENINGS, SLEEVES, AND OTHER PROJECT REQUIREMENTS WHICH IMPACT THE STRUCTURAL COMPONENTS. THE STRUCTURAL CONSTRUCTION DRAWINGS DO NOT SHOW ALL OPENINGS REQUIRED. ADDITIONAL OPENINGS, BLOCKOUTS AND SLEEVES MAY BE REQUIRED BY OTHER DISCIPLINES AND SHALL BE CONSTRUCTED USING THE TYPICAL DETAILS AND/OR CRITERIA INDICATED BY THE STRUCTURAL DRAWINGS. OPENINGS REQUIRED BUT NOT SHOWN ON THE STRUCTURAL DRAWINGS MUST BE APPROVED BY THE STRUCTURAL ENGINEER.
 - C. IN CASES OF CONFLICT BETWEEN THE DRAWINGS AND/OR SPECIFICATIONS AND OTHER DISCIPLINES OR EXISTING CONDITIONS, CONTRACTOR SHALL NOTIFY THE DESIGN PROFESSIONALS AND OBTAIN CLARIFICATION PRIOR TO BIDDING AND PROCEEDING WITH WORK.
 - D. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL.
 - E. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.
 - F. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
 - G. APPLY DETAILS, SECTIONS AND NOTES ON THE DRAWINGS WHERE CONDITIONS ARE SIMILAR TO THOSE INDICATED BY DETAIL, DETAIL TITLE OR NOTE.
 - H. ASSUME EQUAL SPACINGS BETWEEN ESTABLISHED DIMENSIONS, IF NOT INDICATED ON DRAWINGS.
 - I. THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTION LOADS DO NOT EXCEED THE CAPACITY OF THE STRUCTURE AT THE TIME THE LOAD IS APPLIED.
 - J. PROVIDE SHORING AND PROTECTION FOR EXCAVATION BANKS AS NECESSARY TO PREVENT CAVING AND COMPLY WITH ALL APPLICABLE OSHA RULES AND REGULATIONS.
 - K. THE OWNER SHALL HIRE AN INDEPENDENT TESTING AGENCY TO PROVIDE ALL REQUIRED TESTS AND INSPECTIONS. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE ALL TESTS AND INSPECTIONS WITH THE INDEPENDENT INSPECTION AGENCY. THE FOLLOWING STRUCTURAL ITEMS REQUIRE THIRD-PARTY TESTING/INSPECTIONS:
 - CONCRETE CONSTRUCTION (IBC SECTION 1705.8)
 - SOILS/GEOTECHNICAL TESTING (IBC SECTION 1705.8)
- RETAINING WALLS**
- A. FOOTINGS FOR ALL RETAINING WALLS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2500 PSF. THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE FIELD VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER AND APPROVED PRIOR TO PLACING FOOTINGS. SHOULD THE ACTUAL SOIL BEARING PRESSURE BE LESS THAN 2500 PSF, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
 - B. RETAINING WALLS HAVE BEEN DESIGNED WITH FILL MATERIAL HAVING THE FOLLOWING CHARACTERISTICS:

γ	=	120 PCF
φ	=	34 DEGREES
c	=	0.92
COHESION	=	0'

 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THE FILL MATERIAL MEETS THESE CHARACTERISTICS.
 - C. FILL MATERIALS ON BOTH SIDE OF THE WALL SHALL BE COMPACTED AS REQUIRED TO ACHIEVE THE AFORESAID CHARACTERISTICS.
 - D. THE RETAINING WALL HAS BEEN DESIGNED FOR 250 PSF SURCHARGE PRESSURES ON THE HIGH SIDE OF THE RETAINING WALL.
 - E. RETAINING WALLS HAVE BEEN DESIGNED FOR THE SLIDING AND OVERTURNING FACTORS OF SAFETY EQUAL TO 2.0 EACH.
 - F. CONSTRUCTION OF ALL RETAINING WALLS SHALL BE PERFORMED UNDER THE SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER AND A CERTIFIED SOILS TECHNICIAN PER HOWARD COUNTY REQUIREMENTS. ALL REPORTS SHALL BE PROVIDED TO HOWARD COUNTY INSPECTOR.
 - G. ALL RETAINING WALLS SHALL BE BRACED AND SHORED AS REQUIRED DURING BACKFILLING.
- CAST-IN-PLACE CONCRETE**
- A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)", AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)".
 - B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:
 - RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETES (ACI 308).
 - RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETES (ACI 306).
 - RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (ACI 347).
 - STANDARD SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS (ACI 117).
 - CHEMICAL ADMIXTURES FOR CONCRETE (ACI 212.3).
 - STANDARD SPECIFICATION FOR CURING CONCRETE (ACI 308.1).
 - C. ALL CONCRETE EXPOSED TO PUBLIC VIEW SHALL CONFORM TO THE REQUIREMENTS FOR ARCHITECTURAL CONCRETE CONTAINED IN ACI 301.
 - D. ALL CONCRETE UNLESS NOTED OTHERWISE SHALL BE NORMAL WEIGHT STONE AGGREGATE CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 3500PSI. WATER TO CEMENT RATIO OF 0.45, AND SLUMP OF 4 INCHES. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 5% ± 1%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1", AND MAXIMUM SLUMP SHALL BE 4". ALL CONCRETE EXCEPT FOOTINGS SHALL CONTAIN A WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM ASTM C33.
 - E. ALL CONCRETE MIX DESIGNS, INCLUDING CEMENT CONTENT, WATER CEMENT RATIO, FINE AND COARSE AGGREGATE CONTENT AND ALL ADMIXTURES, SHALL BE REVIEWED BY ENGINEER PRIOR TO PLACING FIRST CONCRETE.
 - F. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY THE TESTING AGENCY. THE CONTRACTOR SHALL NOTIFY THE TESTING AGENCY 48 HOURS PRIOR TO THE PLACING OF ANY CONCRETE. TESTING SHALL BE IN ACCORDANCE WITH ASTM C172. OBTAIN ONE COMPRESSIVE SAMPLE FOR EACH 2475 CU YARDS OF EACH CONCRETE MIX EXCEEDING 8 CU YARDS, BUT LESS THAN 28 CU YARDS, PLUS ONE SET FOR EACH ADDITIONAL 50 CU YARDS OR FRACTION THEREOF. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN THREE COMPRESSIVE-STRENGTH TESTS FOR EACH CONCRETE MIX, TESTING SHALL BE CONDUCTED FROM AT LEAST THREE RANDOMLY SELECTED BATCHES.
 - G. GROUND BLAST FURNACE SLAGS MAY BE USED TO REPLACE UP TO 20 PERCENT OF THE PORTLAND CEMENT IN A CONCRETE MIX, AND FLY ASH OR POZZOLAN MAY BE USED TO REPLACE UP TO 25 PERCENT OF PORTLAND CEMENT, SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND SHALL CONFORM TO ASTM C484.
 - H. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A615 GRADE 60 (F_y = 60 KSI).
 - I. LAP ALL REINFORCING BARS A MINIMUM OF 48 BAR DIAMETERS, UNLESS OTHERWISE INDICATED.
 - J. ALL REINFORCING SHALL BE DETAIL, FABRICATED AND PLACED IN ACCORDANCE WITH THE CRSI "MANUAL OF STANDARD PRACTICE", ACI 318' DETAILS AND DETAILS OF CONCRETE REINFORCEMENT", ACI 308 '86 "DETAILS MANUAL".
 - K. DOVELS SHALL MATCH SIZE AND SPACING OF MAIN REINFORCEMENT, UNLESS NOTED OTHERWISE.
 - L. WHERE A 40°, 180° OR 180° HOOK IS GRAPHICALLY INDICATED, PROVIDE CORRESPONDING ACI STANDARD HOOKS, UNLESS NOTED OTHERWISE.
 - M. MINIMUM COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED.

FOOTINGS	3 INCHES (BOTTOM & SIDES), 2 INCHES (TOP)
RETAINING WALLS	2 INCHES
 - N. UNLESS NOTED OTHERWISE, TERMINATE BARS AT DISCONTINUOUS ENDS WITH STANDARD HOOKS.
 - O. THE GENERAL CONTRACTOR SHALL SUBMIT PLANS SHOWING ALL PENETRATIONS THROUGH RETAINING WALLS. THE OPENINGS SHALL BE ACCURATELY LOCATED AND DIMENSIONED.
 - P. ALL CAST-IN-PLACE CONCRETE WILL EXPERIENCE DIFFERING VARIATIONS OF CRACKING. ANY ELEMENT EXPOSED TO DIRECT WEATHER AND/OR TEMPERATURE VARIATIONS PRIOR TO THE FINAL CONDITION IS TO BE TREATED AND REGULARLY MAINTAINED TO PREVENT PROPAGATION OF CRACKS AND WATER INFILTRATION. THE CONTRACTOR SHALL DEVELOP A REGULAR MAINTENANCE PROGRAM AND SUBMIT IT TO THE OWNER.
 - Q. ALL CONCRETE CONSTRUCTION SHALL BE INSPECTED IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 9.25.19
CHIEF, DEVELOPMENT ENGINEERING DIVISION

[Signature] 10-08-19
CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 10-15-19
DIRECTOR

APPROVED
PLANNING BOARD HOWARD COUNTY

DATE 3/7/19

MRA

Buildings Group
MORRIS & RITCHE ASSOCIATES, INC.
Architects, Engineers, Planners, Surveyors, and Landscape Architects
1220-C East Joppa Road
Suite 505
Towson, Maryland 21286
410-821-1690
410-821-1748 Fax

E.G.U. SUBDIVISION-SECTION 2~AREA 2~LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH

Retaining Wall



PROFESSIONAL CERTIFICATION
I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of The State of Maryland, License No. 30729, Expiration Date 07/11/2020

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NO.	REVISION	DATE
1	NO APPROV	11/3/22
FILE	DRAWN	ISSUED
17297x04	NAW	04/22/19

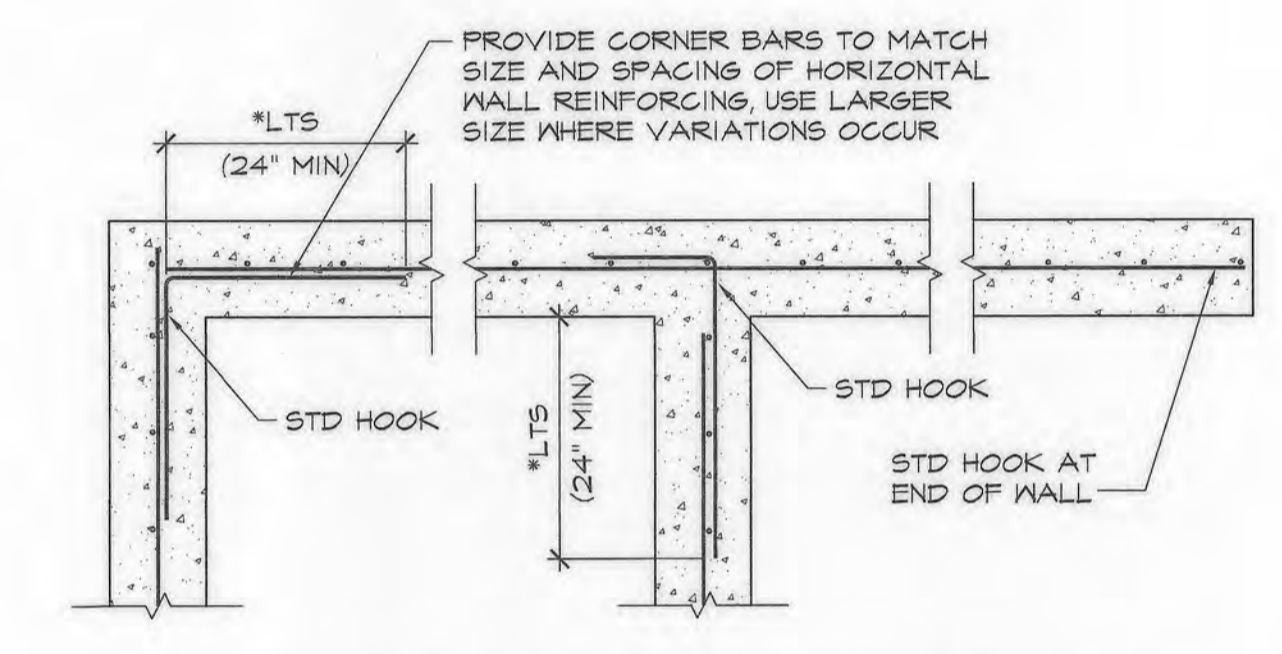
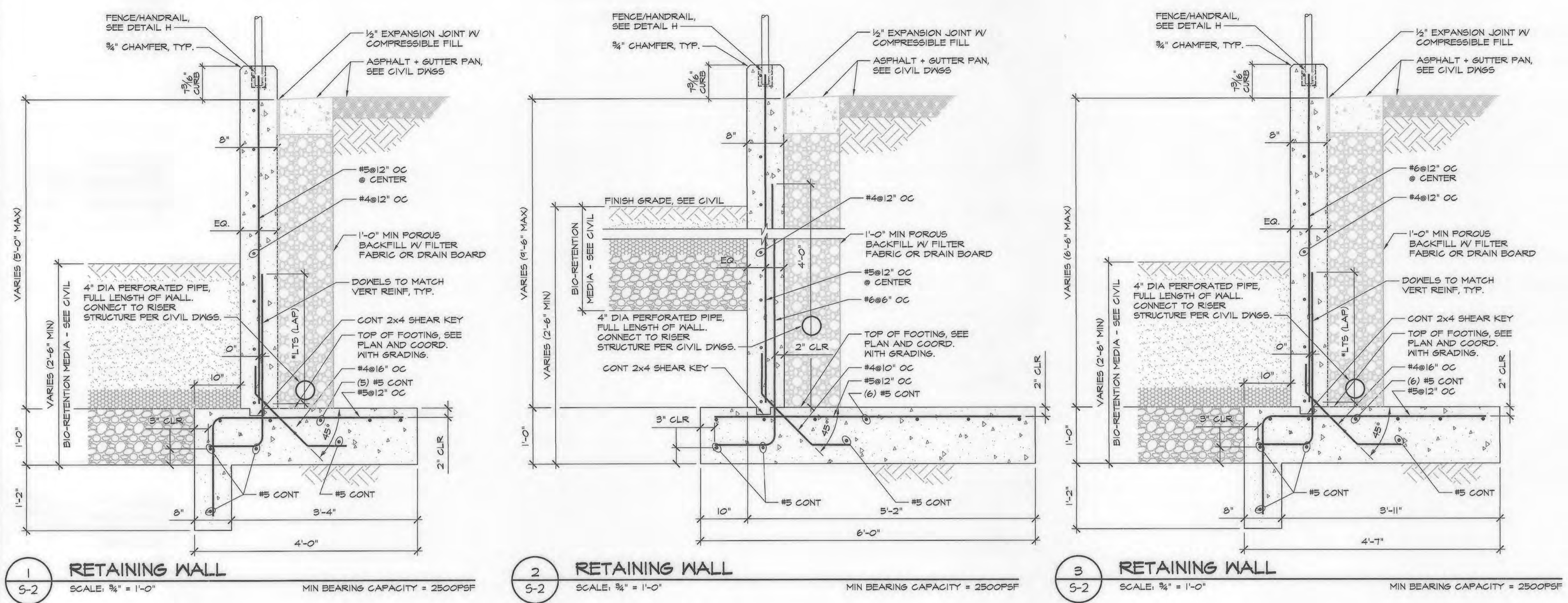
SHEET TITLE
RETAINING WALL PLAN & ELEVATION

SHEET NUMBER 32 OF 40

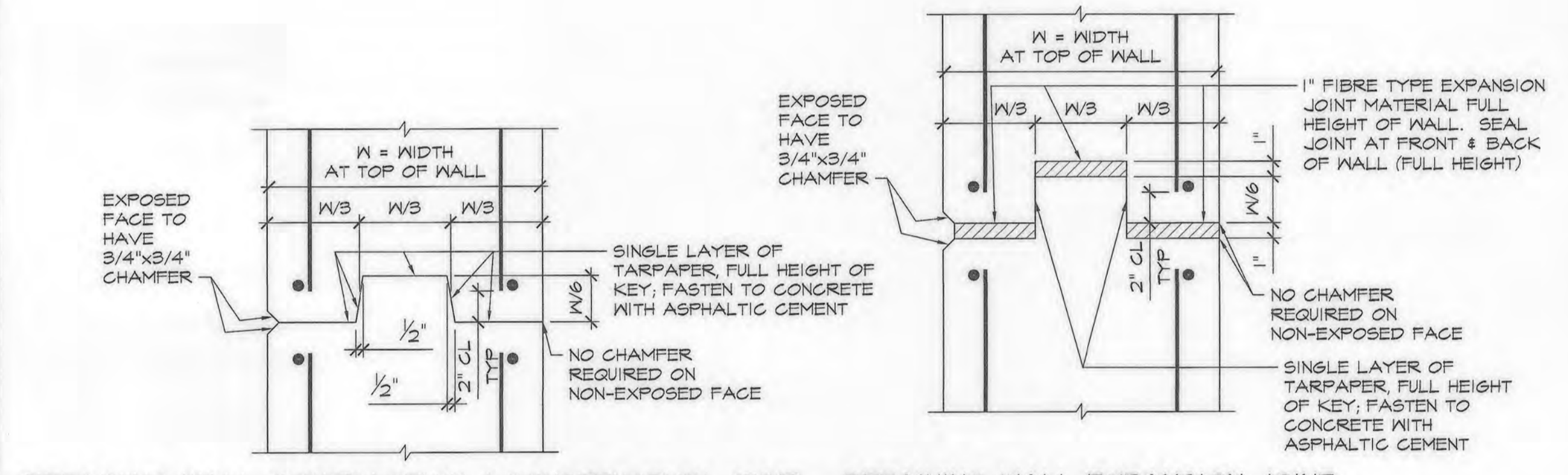
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Construction Documents

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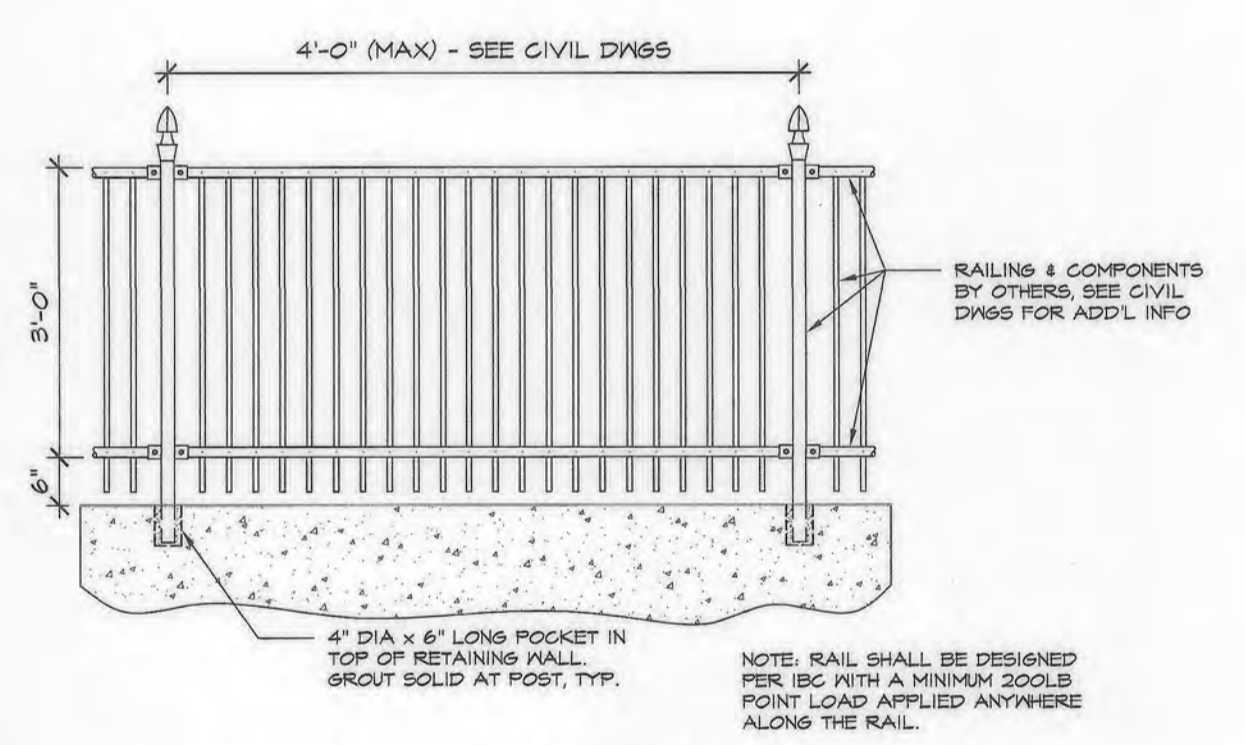
C CONCRETE WALL CORNER REINFORCING
 SCALE: NTS



A RETAINING WALL CONTRACTION / CONSTRUCTION JOINT
B RETAINING WALL EXPANSION JOINT

- NOTES:**
- CONCRETE RETAINING WALLS SHALL HAVE CONTRACTION JOINTS A MAXIMUM OF EVERY 30'-0" AND EXPANSION JOINTS WITH 1" SPONGE TYPE MATERIAL A MAXIMUM OF EVERY 40'-0".
 - STOP KEY 4" BELOW TOP OF WALL.
 - REINFORCING STEEL SHALL NOT PASS THROUGH CONTRACTION OR EXPANSION JOINT.
 - ALL KEYS ARE NOMINAL SIZE.
 - ONLY PLACE CONTRACTION AND EXPANSION JOINTS IN STEMS (NO JOINT IN FOOTINGS).

A RETAINING WALL JOINTS
 SCALE: NTS



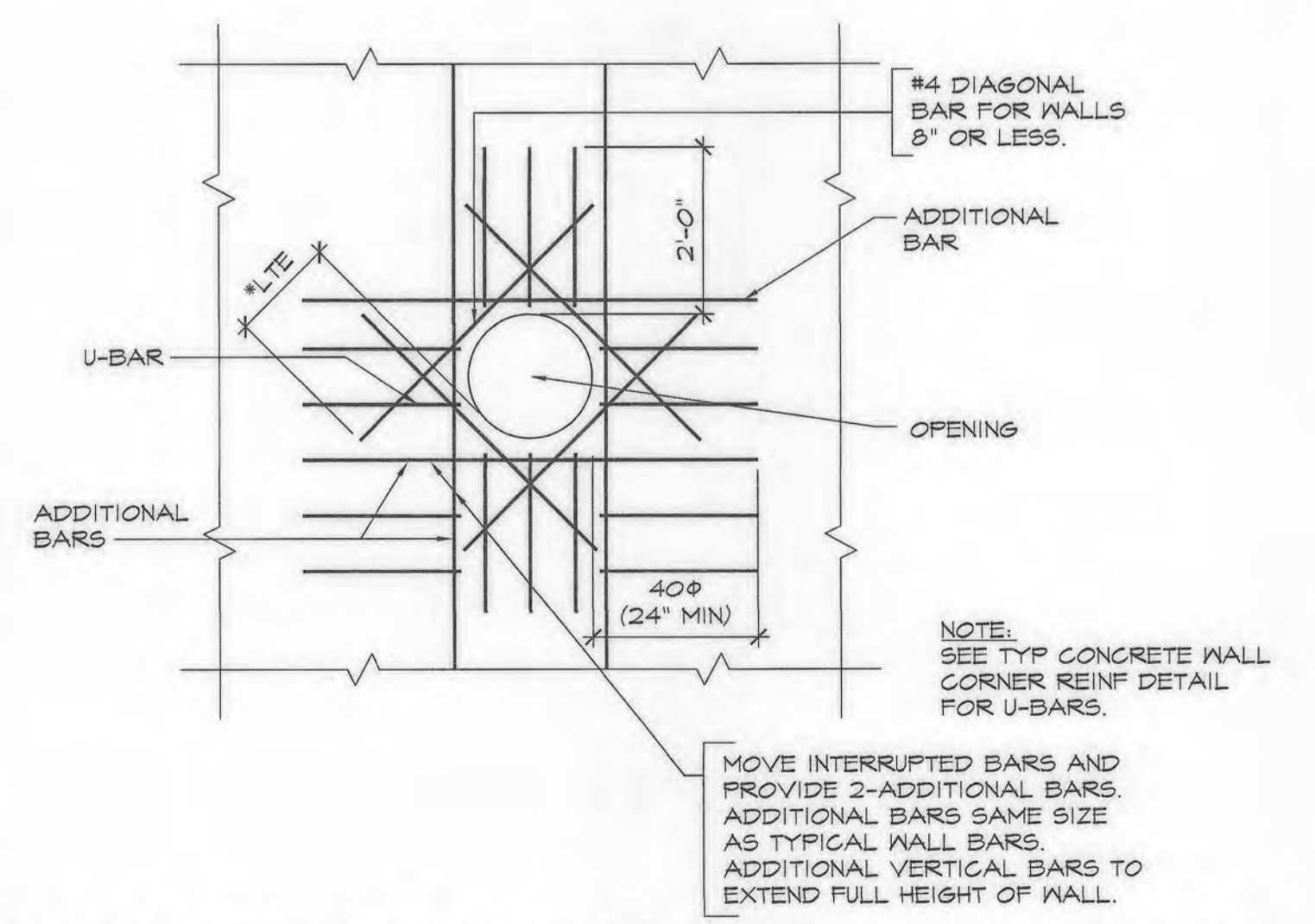
B RETAINING WALL HANDRAIL
 SCALE: NTS

SCHEDULE OF EMBEDMENT + SPLICE LENGTH (INCH)

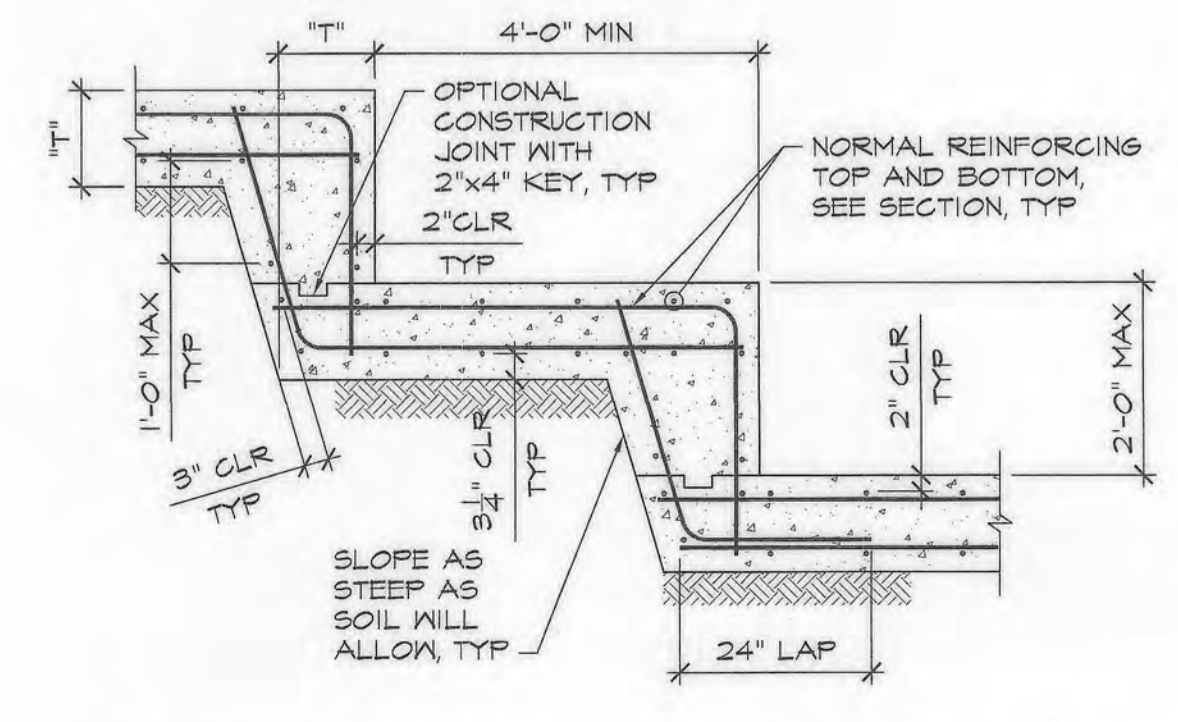
BAR SIZE	COMPRESSION		TENSION (F _c = 3500 psi)							
	EMBEDMENT LENGTH	LAP SPLICE LENGTH	EMBEDMENT LENGTH		LAP SPLICE LENGTH					
			TOP BARS	OTHER BARS	TOP BARS	OTHER BARS				
#4	11	15	26	40	20	30	34	51	26	40
#5	15	14	38	44	25	35	45	64	35	44
#6	16	25	40	54	30	45	51	77	40	54
#7	18	27	55	67	44	67	75	112	55	67
NOTATION USED ON DRAWING	%LCE	%LCS	%LTE		%LTS					

- SCHEDULES OF EMBEDMENT & SPLICE LENGTH NOTES**
- THE SCHEDULES ABOVE INCLUDES SPLICE AND EMBEDMENT LENGTHS WHICH SATISFY THE PROJECT REQUIREMENTS AND THE FOLLOWING CRITERIA:
 F_y = 60,000 psi
 CONCRETE WEIGHT = 150 lb/cu.ft.
 TENSION EMBEDMENT AND LAP SPLICE LENGTHS ARE DIVIDED INTO TWO CATEGORIES WHICH SHALL BE APPLIED AS FOLLOWS:
 CATEGORY I: CLEAR SPACINGS OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 4d, CLEAR COVER NOT LESS THAN 4d, AND BEAM STIRRUPS OR COLUMN TIES THROUGHOUT & NOT LESS THAN THE CODE MINIMUM OR CLEAR SPACINGS OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2d & CLEAR COVER NOT LESS THAN 4d.
 CATEGORY II: BARS NOT COVERED BY CATEGORY I.
 - USE COMPRESSION LAP SPLICE LENGTH (LCS) AT ALL COLUMN SPLICE LOCATIONS NOT SPECIFICALLY DETAILED AND UNLESS INDICATED OTHERWISE ON PLANS OR DETAILS. USE TENSION SPLICE FOR ALL OTHER SPLICES (UNLESS OTHERWISE SHOWN ON DRAWINGS).
 - THE STANDARD LAP SPLICE (0.0025 X F_y X D) IS USED FOR COMPRESSION SPLICES AND THE CLASS 'B' SPLICE IS USED FOR TENSION SPLICES. THE CONTRACTOR MAY SUBMIT LESSER SPLICE LENGTHS FOR REVIEW AND APPROVAL AT THE SAME TIME PROVIDING THE FOLLOWING INFORMATION:
 A. DETAILS PREPARED AND SUBMITTED BY THE CONTRACTOR INDICATING LOCATION AND PROPOSED LAYOUT OF REBAR AND LENGTHS OF SPLICES.
 B. WHERE THE SIZE AND NUMBER OF TIES OR SPIRALS PERMITS THE REDUCTION OF LAP LENGTH, THOSE BARS SHALL BE INDICATED ON THE DETAILS.
 C. WHERE COMPUTED STRESS VALUES PERMIT THE REDUCTION OF LAP LENGTH, COMPUTATIONS SHALL BE SUBMITTED FOR REVIEW.
 D. THE APPLICABLE SECTION OF THE ACI-318 CODE PERMITTING THE LESSER SPLICE LENGTH SHALL BE INDICATED ON THE SUBMITTED MATERIAL.
 - TOP BARS ARE HORIZONTAL BARS PLACED SO THAT MORE THAN 12 INCHES OF CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.
 - WHERE BARS OF DIFFERENT SIZE ARE TO BE SPLICED, THE SPLICE LENGTH FOR ALL BARS SHALL BE THAT REQUIRED FOR THE LARGEST.
 - TENSION EMBEDMENT AND LAP LENGTHS OF INDIVIDUAL BARS WITHIN A BUNDLE SHALL BE THAT FOR THE INDIVIDUAL BAR INCREASED BY 20% FOR 3-BAR BUNDLES AND 33% FOR 4-BAR BUNDLES.

F SCHEDULE OF REINFORCING EMBEDMENT & SPLICE LENGTHS
 SCALE: NTS



D ADD'L BARS AT CIRCULAR OPENINGS IN CONCRETE WALL
 SCALE: NTS



E TYPICAL STEPPED WALL FOOTING
 SCALE: NTS

V:\19. PROJ\17297\17297-17299\17297-186 - Retaining Wall\300 Structural\306 Construction Documents\17297-56.dwg

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 3/7/19



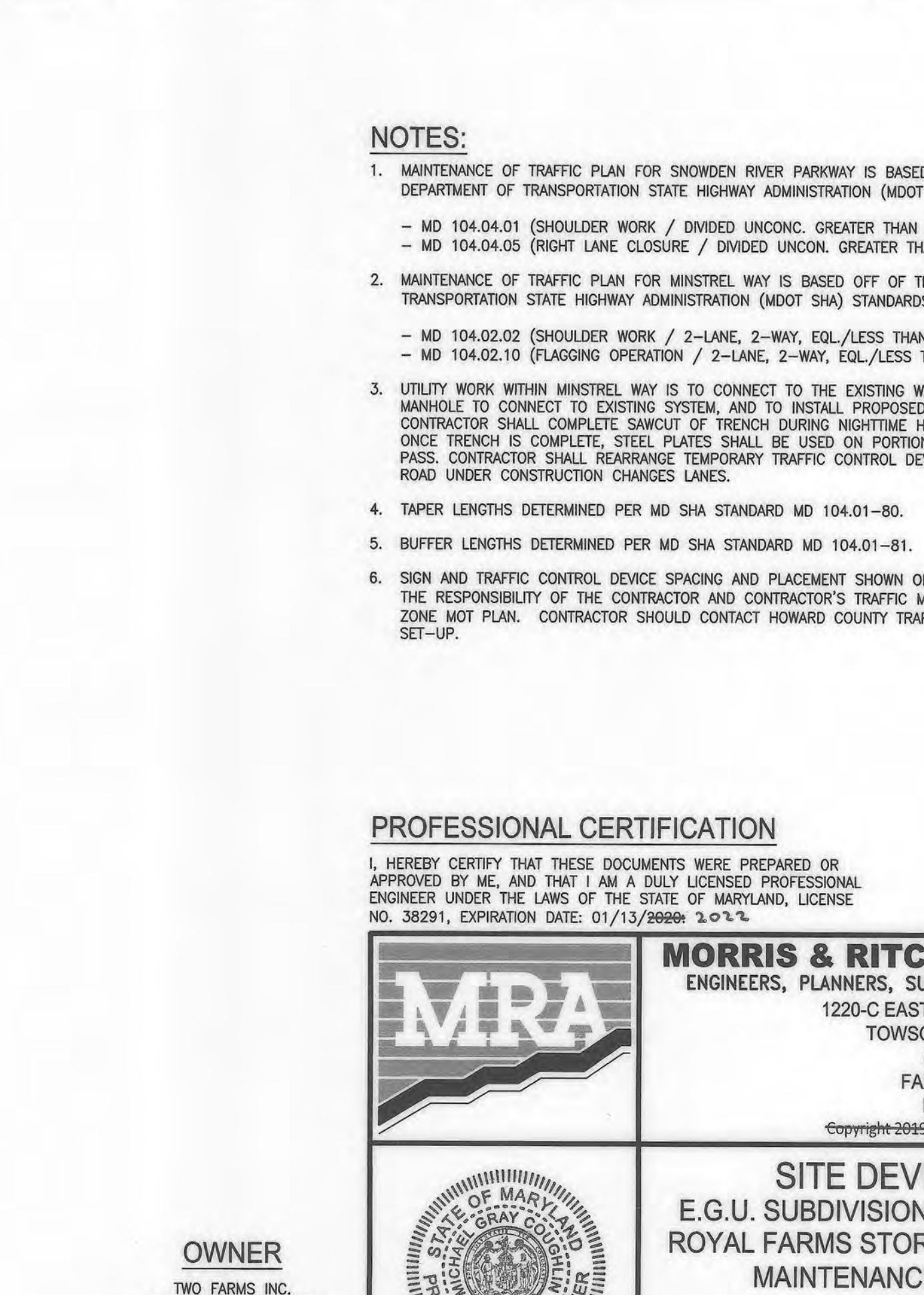
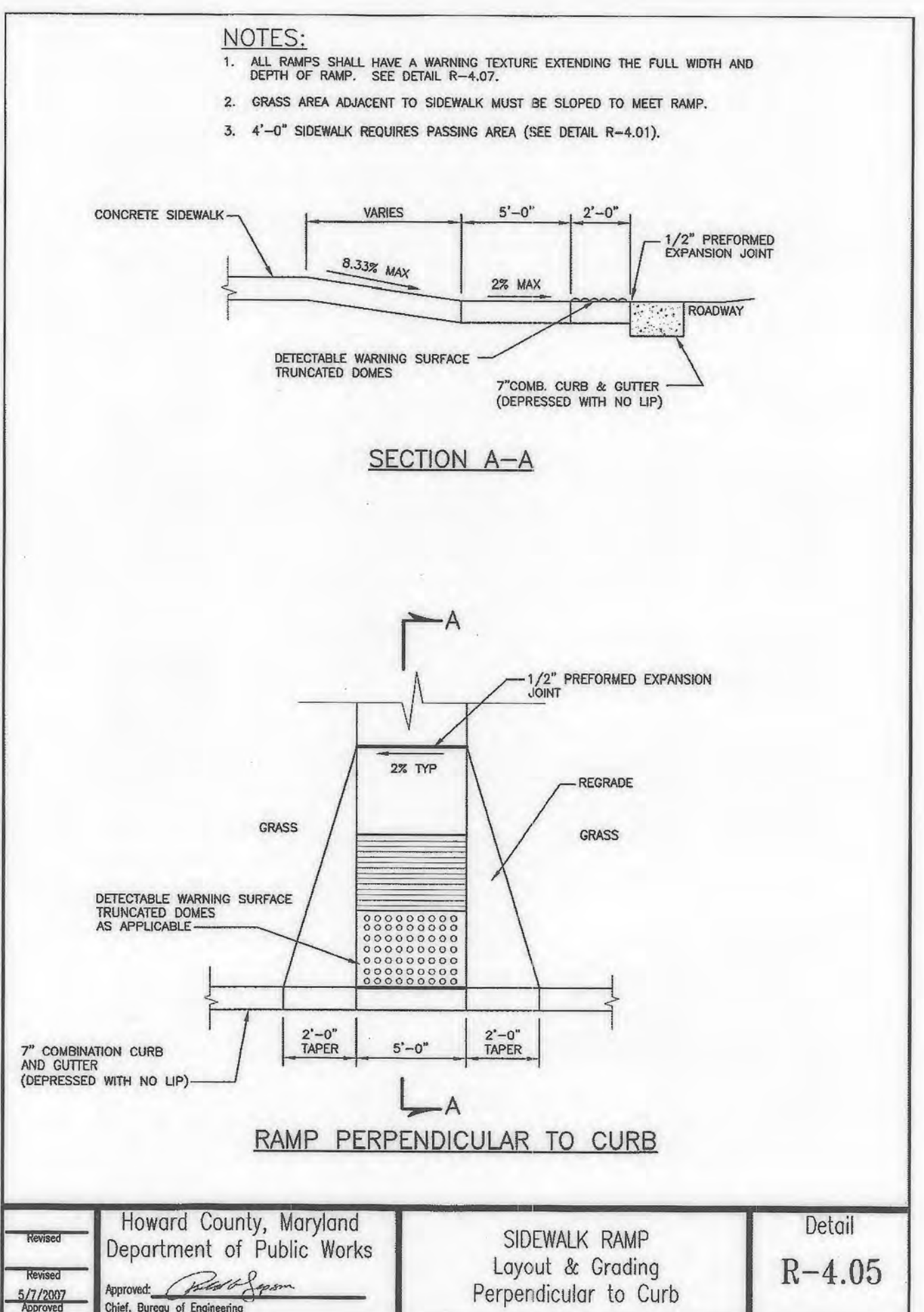
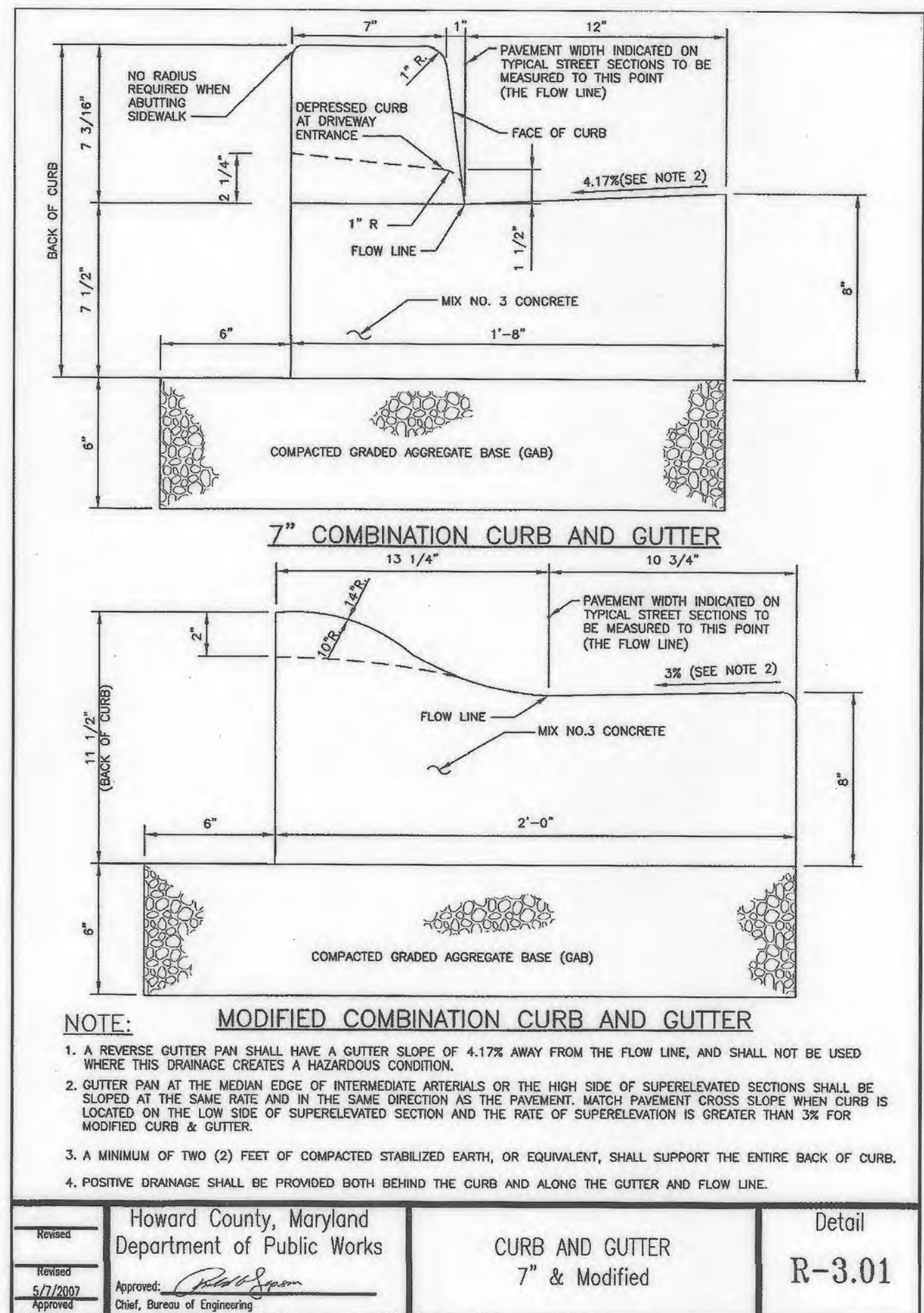
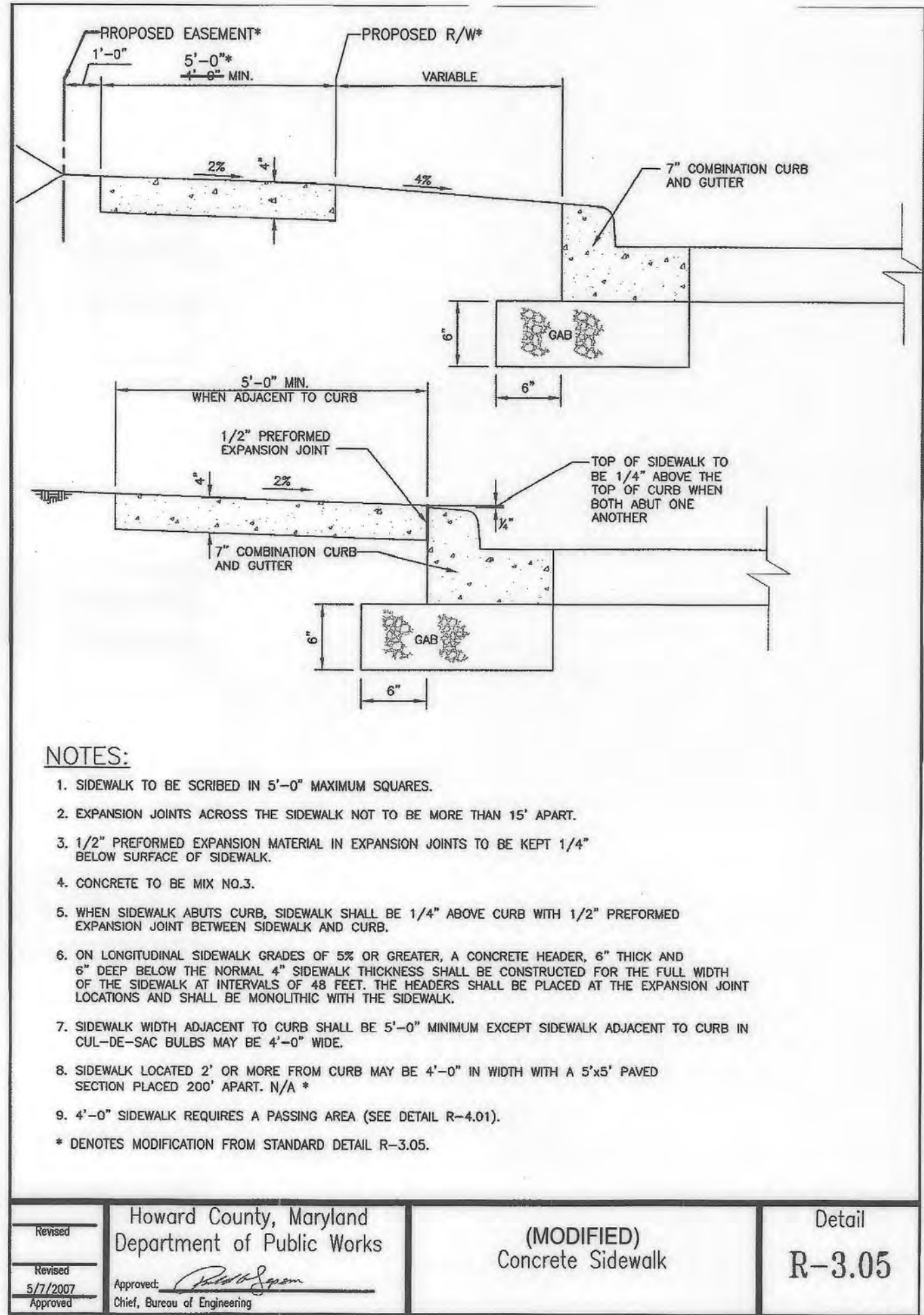
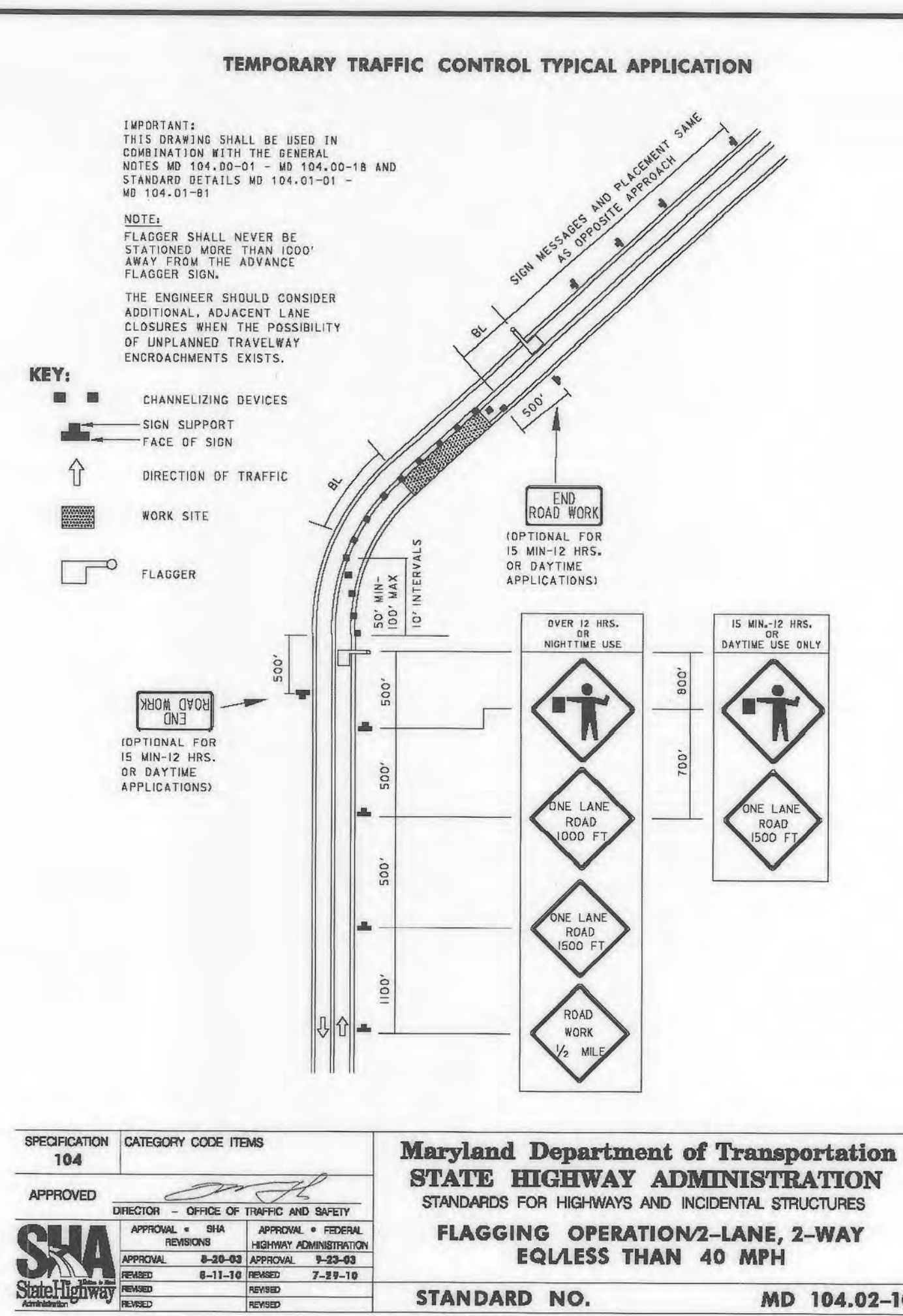
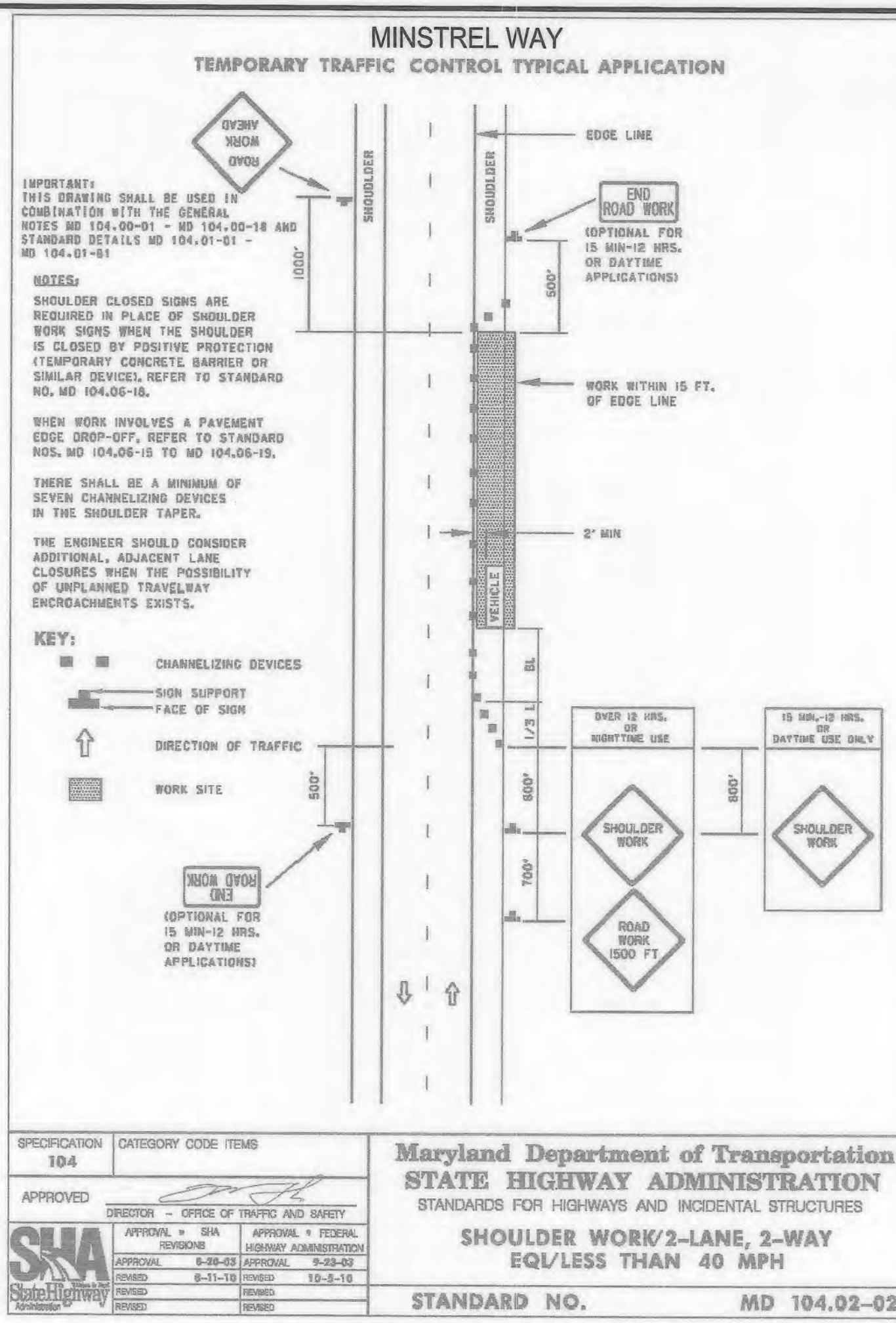
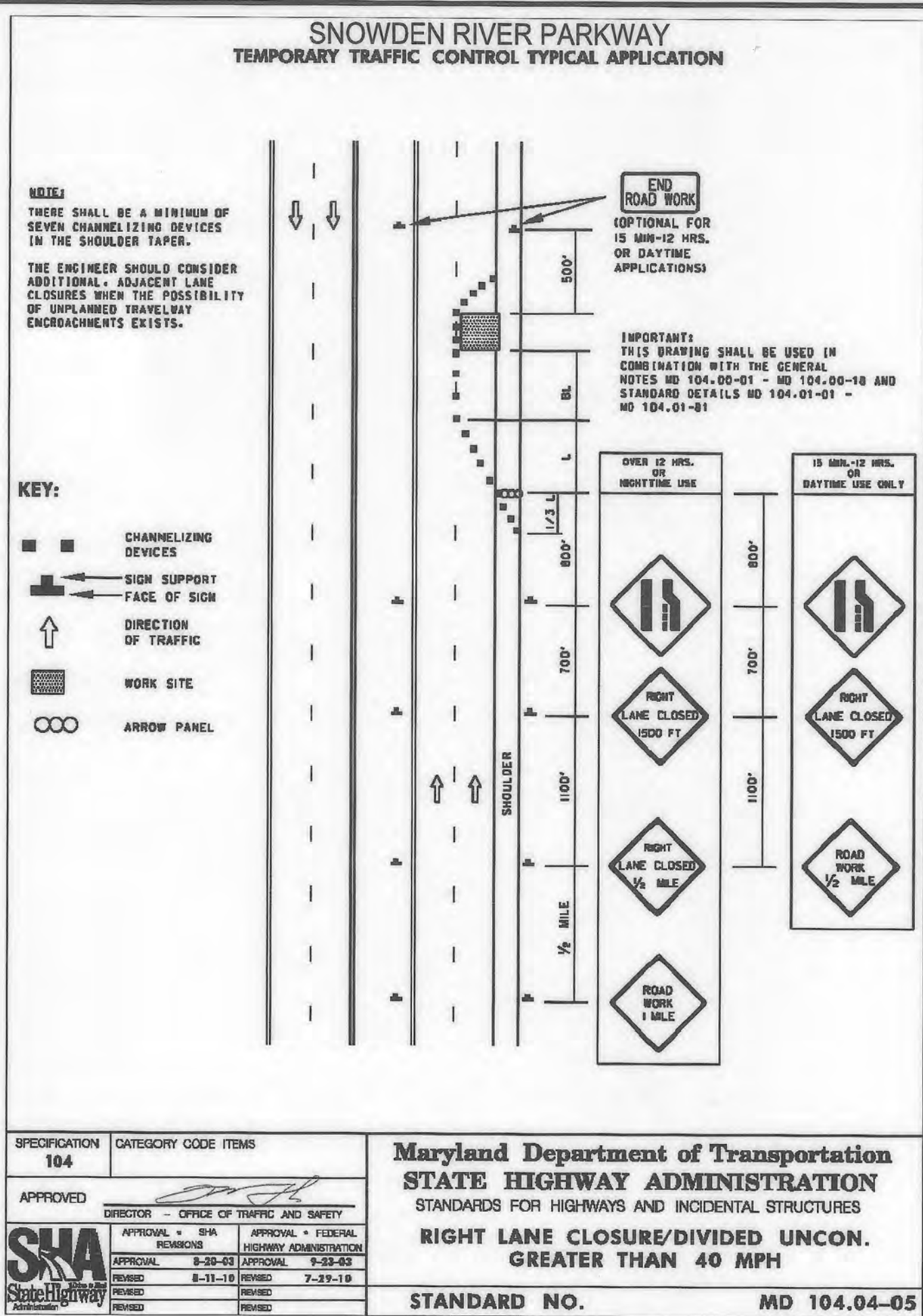
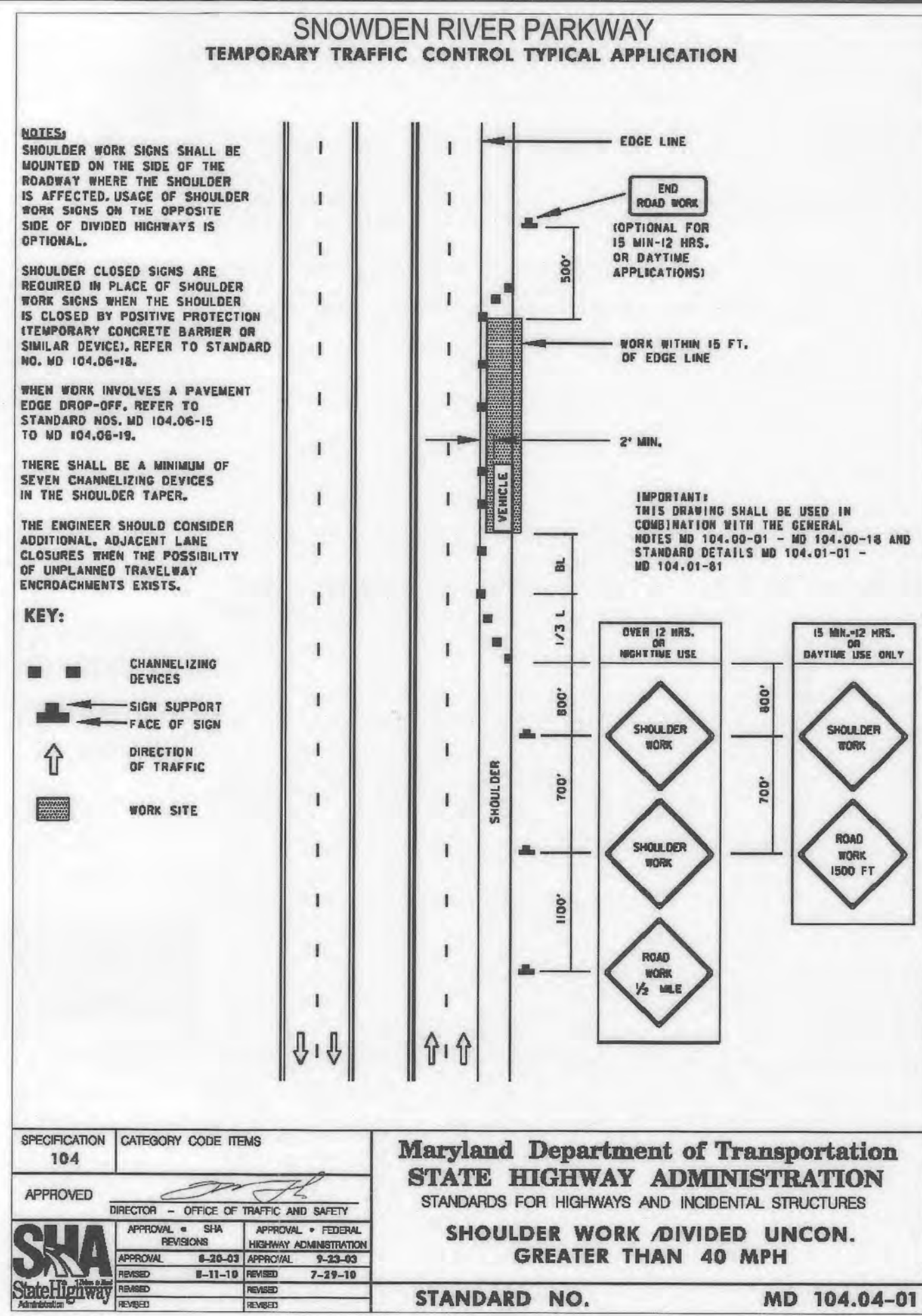
PROFESSIONAL CERTIFICATION
 I hereby certify that these documents were prepared or approved by me, and that I am a duly Licensed Professional Engineer under the laws of the State of Maryland, License No. 38729, Expiration Date: 07/11/2020

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NO.	REVISION	DATE
17297x04	NAW	04/22/19

SECTIONS & DETAILS

SHEET NUMBER 33 OF 40



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9/25/19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: PLANNING BOARD HOWARD COUNTY
 [Signature] 10-03-19
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: [Signature] 10-15-19
 DIRECTOR

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9/25/19
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APPROVED: PLANNING BOARD HOWARD COUNTY
 [Signature] 10-03-19
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 DIRECTOR

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APPROVED: PLANNING BOARD HOWARD COUNTY
 [Signature] 10-03-19
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 DIRECTOR

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9/25/19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

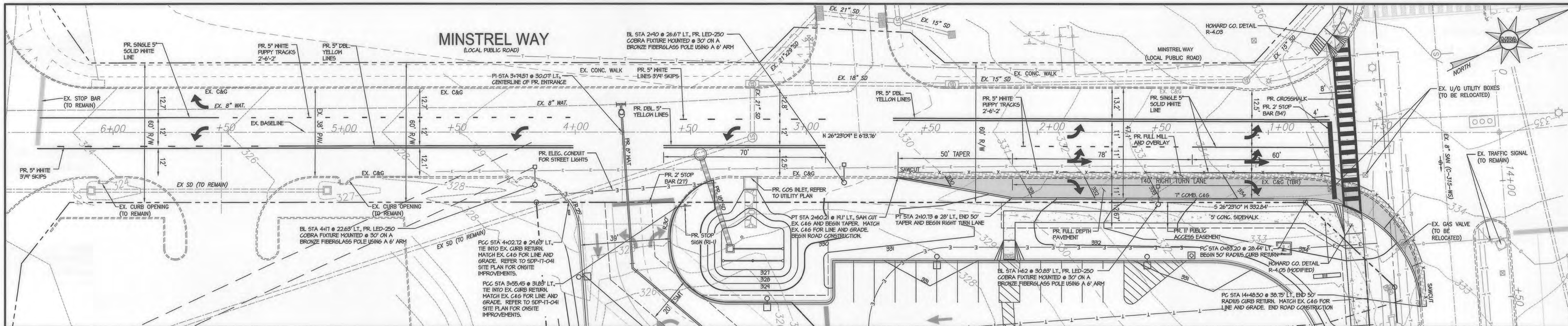
APPROVED: PLANNING BOARD HOWARD COUNTY
 [Signature] 10-03-19
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: [Signature] 10-15-19
 DIRECTOR

OWNER
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

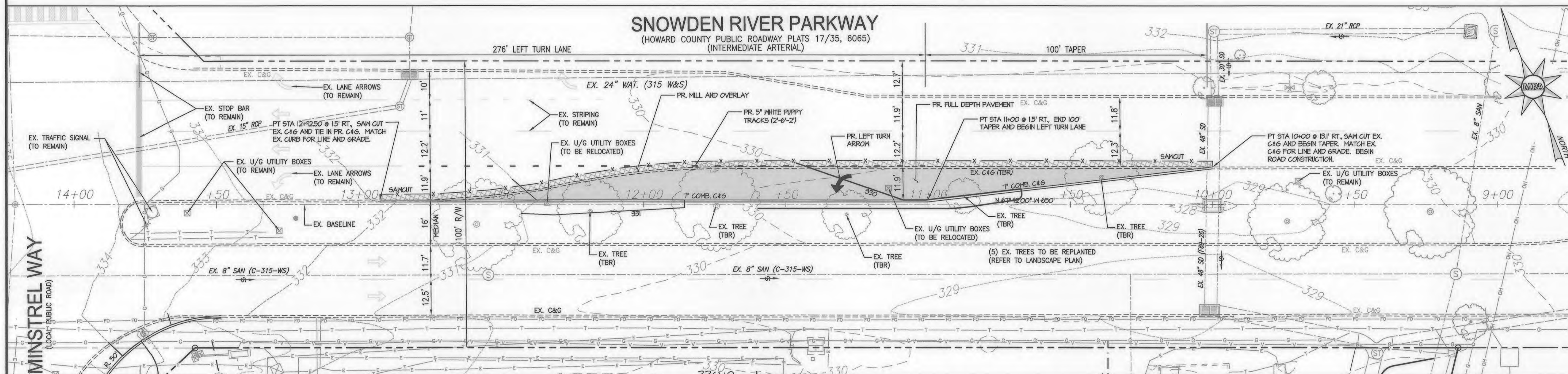
DEVELOPERS
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHISTED
 PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
 1101 FONKA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573



MINSTREL WAY ROAD PLAN

SCALE: 1" = 20'

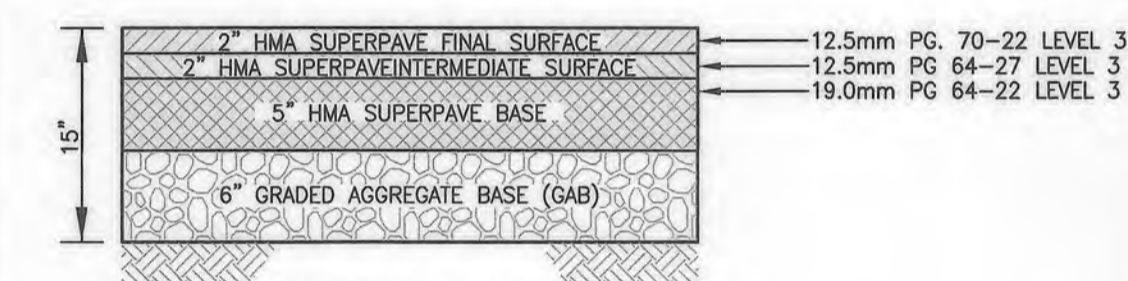


SNOWDEN RIVER PARKWAY

(HOWARD COUNTY PUBLIC ROADWAY PLATS 17/35, 6065)
(INTERMEDIATE ARTERIAL)

SNOWDEN RIVER PARKWAY ROAD PLAN

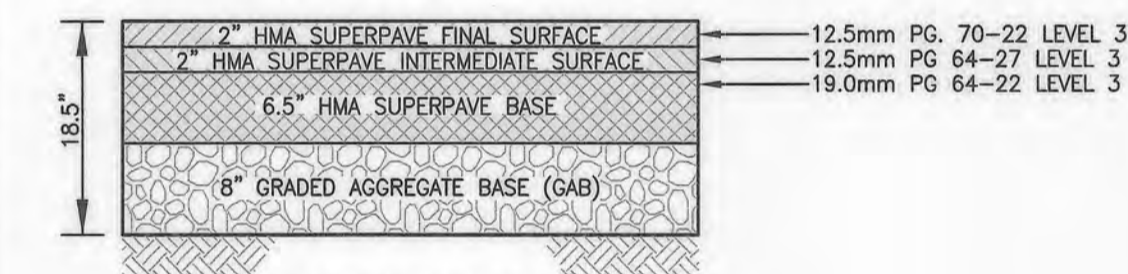
SCALE: 1" = 20'



SUBGRADE MEETING COMPACTION REQUIREMENTS (AS PER SOIL REPORT) AND STABLE AS VERIFIED BY PROOF ROLLING

TYPICAL PAVING SECTION (TYPE P-4)

NOT TO SCALE

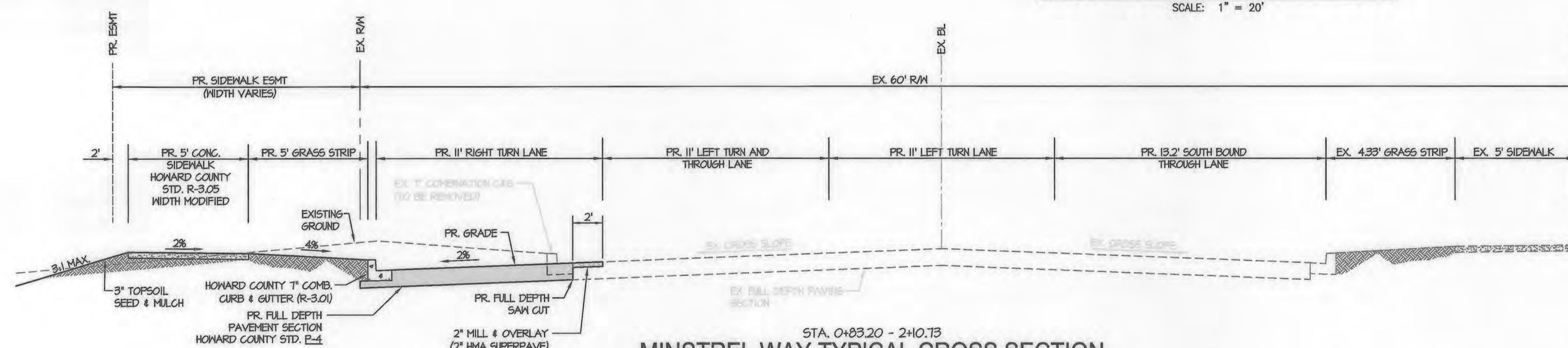
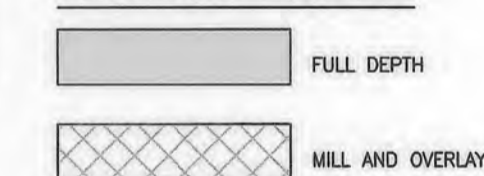


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TYPICAL PAVING SECTION (TYPE P-6)

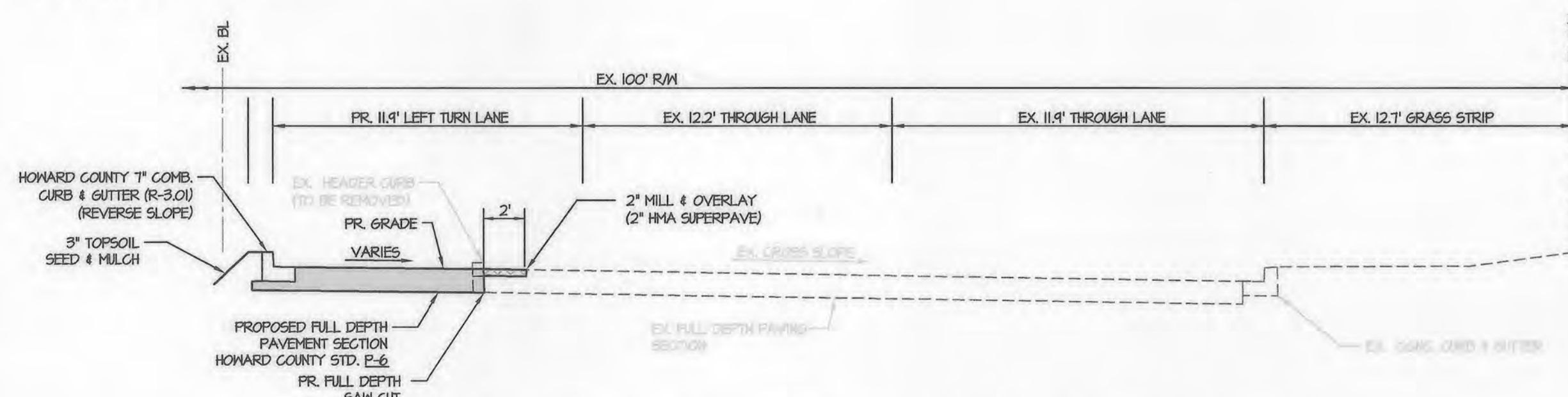
NOT TO SCALE

PAVING LEGEND



MINSTREL WAY TYPICAL CROSS SECTION

NOT TO SCALE



SNOWDEN RIVER PARKWAY TYPICAL CROSS SECTION

NOT TO SCALE

PROFESSIONAL CERTIFICATION

I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38291, EXPIRATION DATE: 01/13/2022.



MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-C EAST JOPPA ROAD, SUITE 505
TOWSON, MARYLAND 21286
(410) 821-1690
FAX: (410) 821-1748
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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
MINSTREL WAY AND SNOWDEN RIVER PARKWAY
ROAD PLAN

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED N1 ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

OWNER

TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 899-0200

DEVELOPERS

TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 899-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-6573

DESIGN & DRAWING BASED ON
MARYLAND COORDINATE SYSTEM:
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

APPROVED: DEPARTMENT OF PLANNING AND ZONING

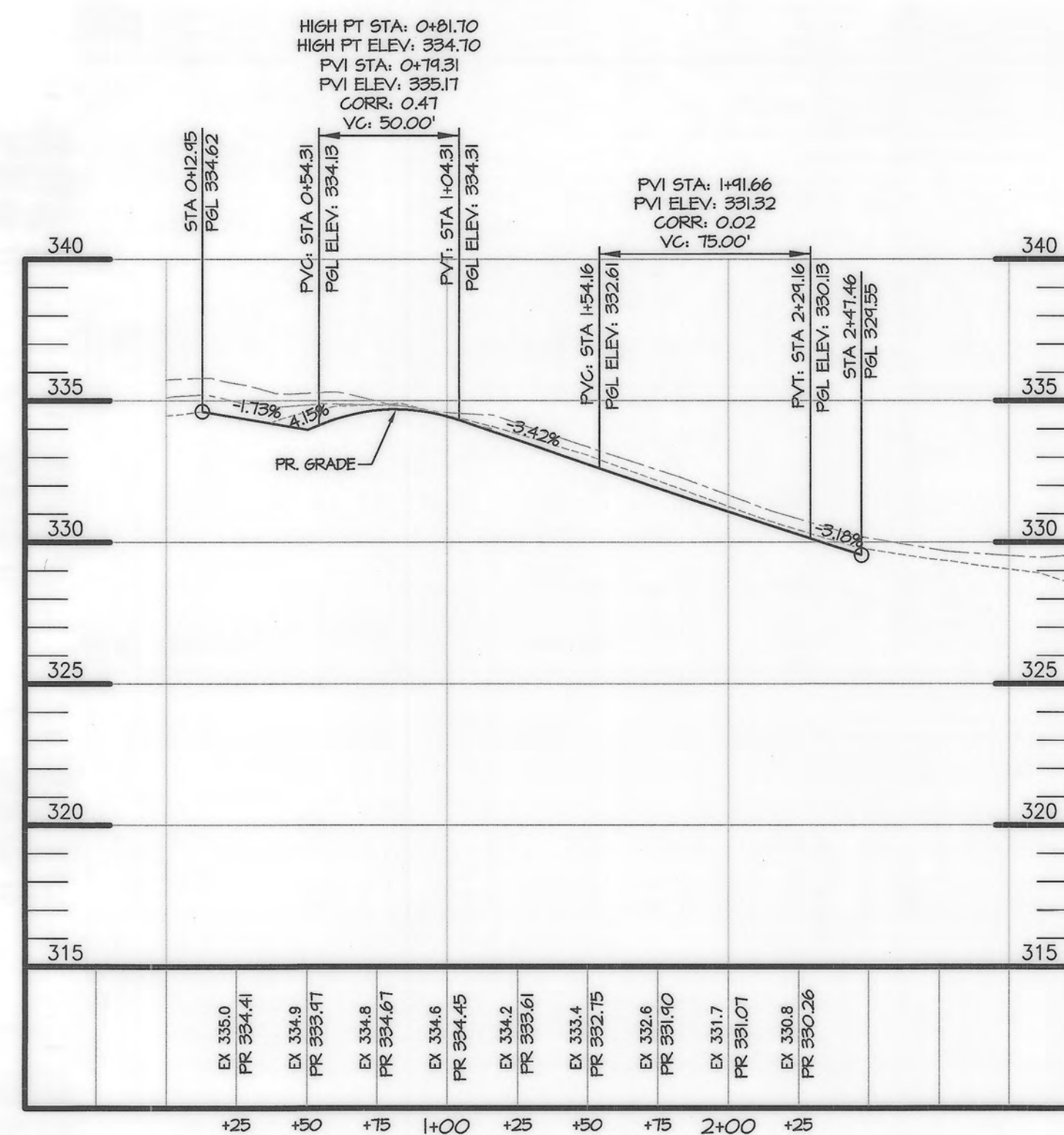
Shad Clark
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 9-25-19

Kurt Lashon
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 10-02-19

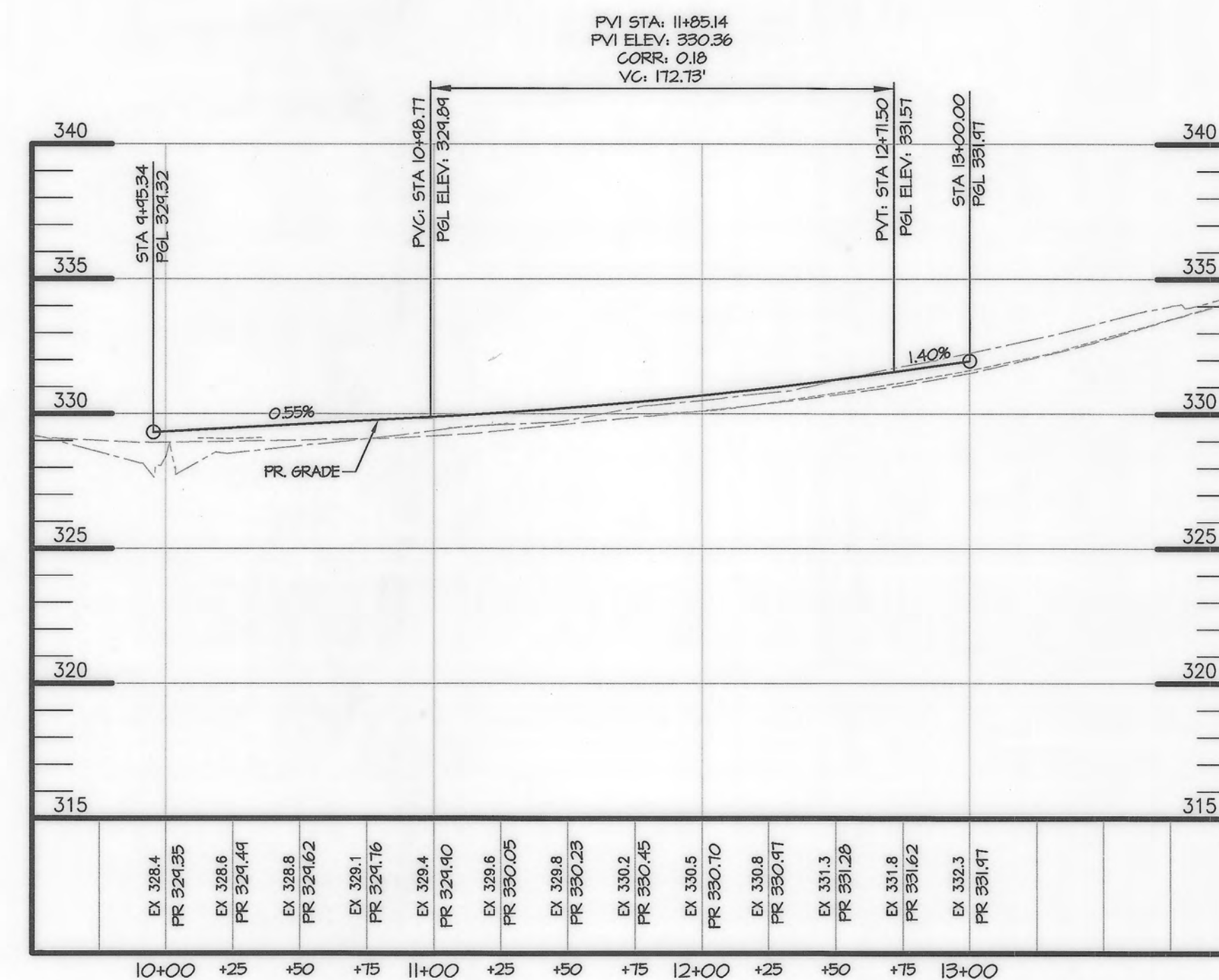
Valdis J. Jelis
DIRECTOR
DATE: 10-15-19

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE: 8/7/19

DATE	REVISIONS	JOB NO.:	17297
01/13/2022	NO P6501LT	SCALE:	AS SHOWN
		DATE:	06/26/2019
		DRAWN BY:	THS
		DESIGN BY:	THS
		REVIEW BY:	MGC
		SHEET:	35 OF 40



MINSTREL WAY PROFILE
SCALE: H: 1"=50'
V: 1"=5'



SNOWDEN RIVER PKWY PROFILE
SCALE: H: 1"=50'
V: 1"=5'

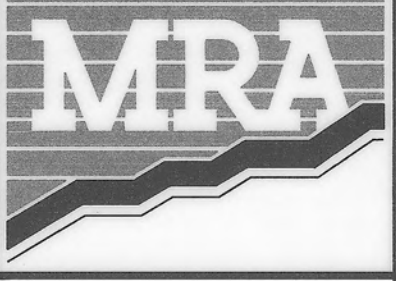
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[Signature] 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 10-15-19
 DIRECTOR

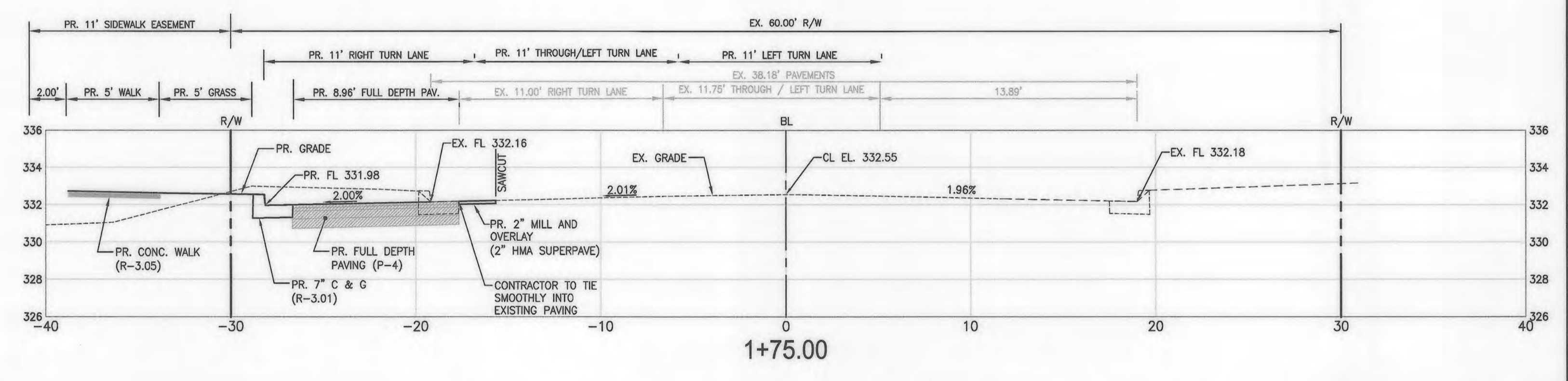
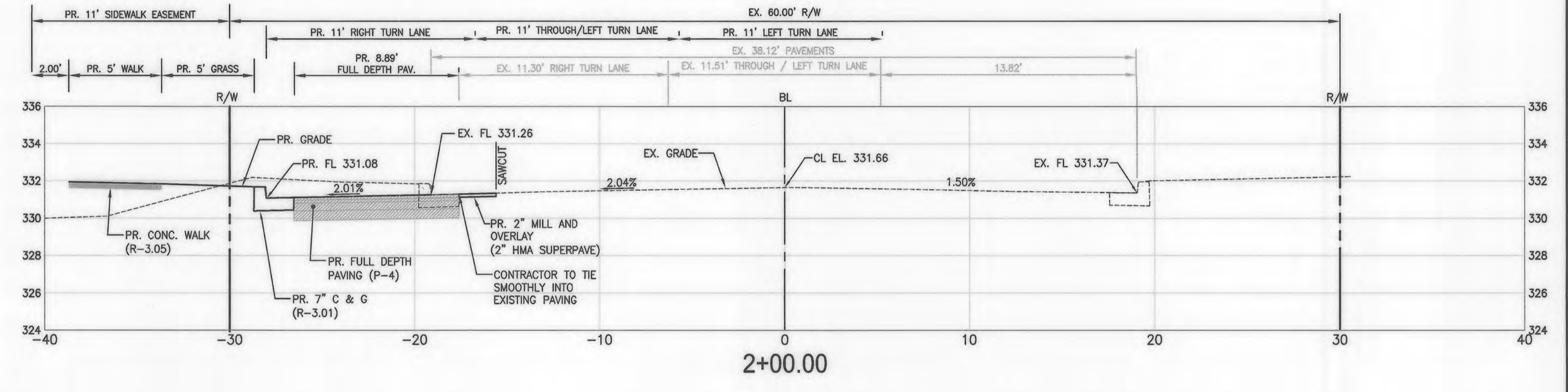
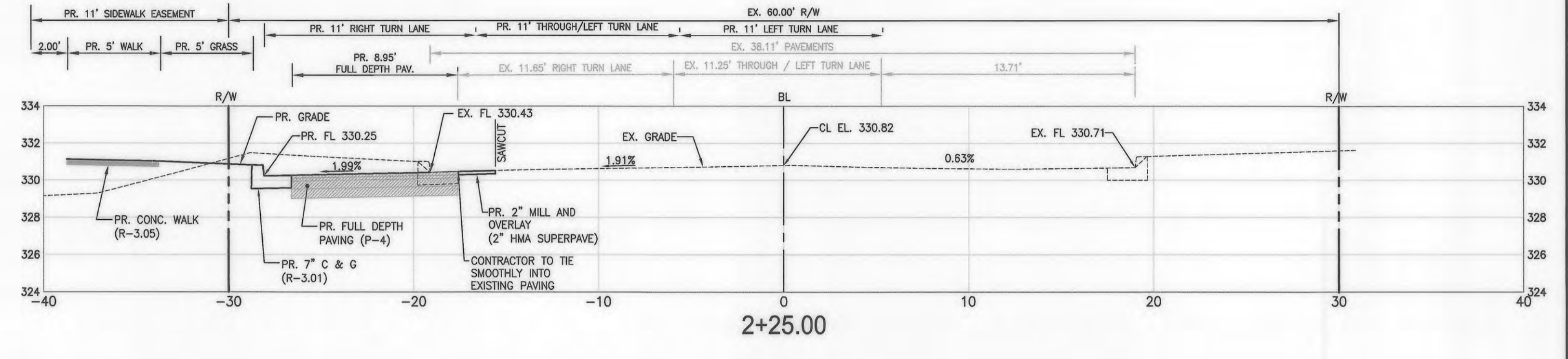
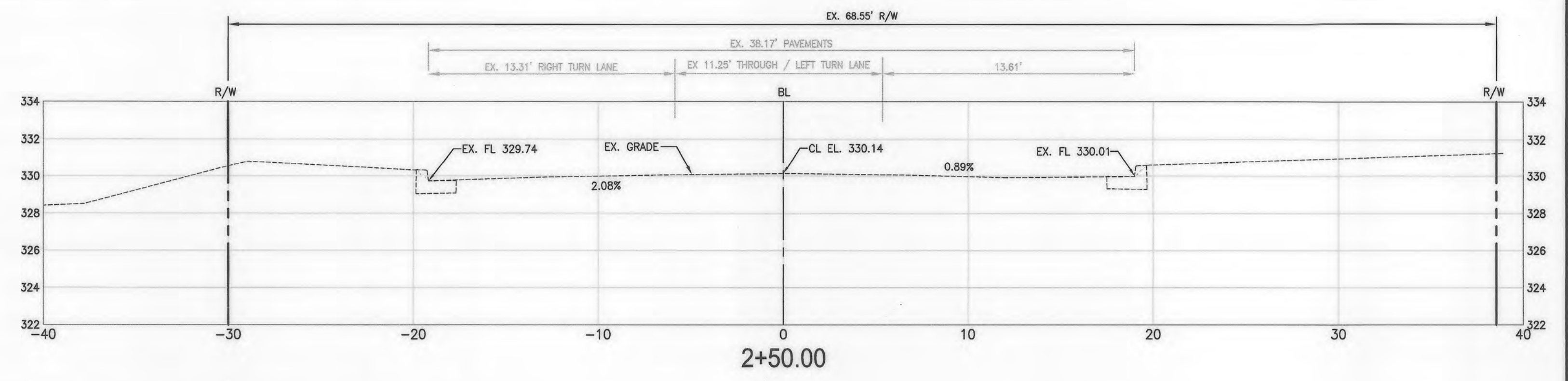
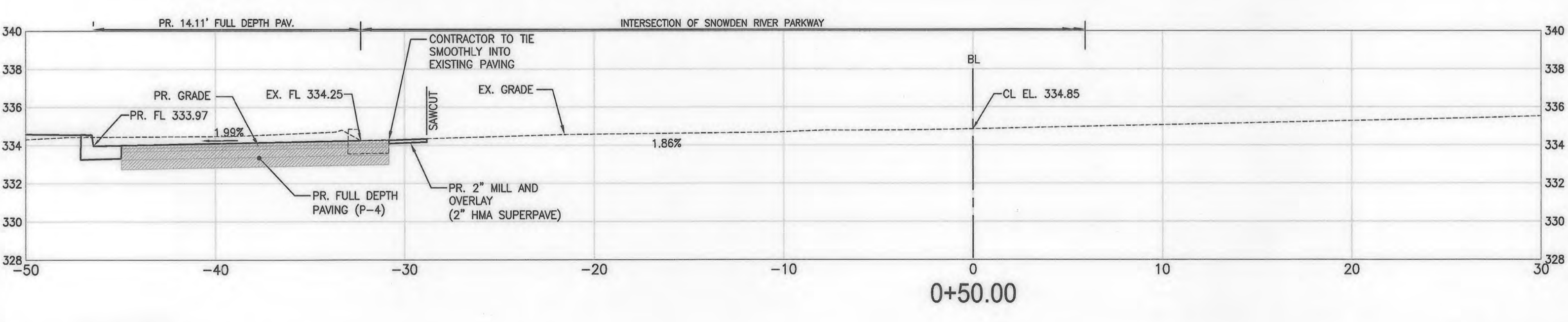
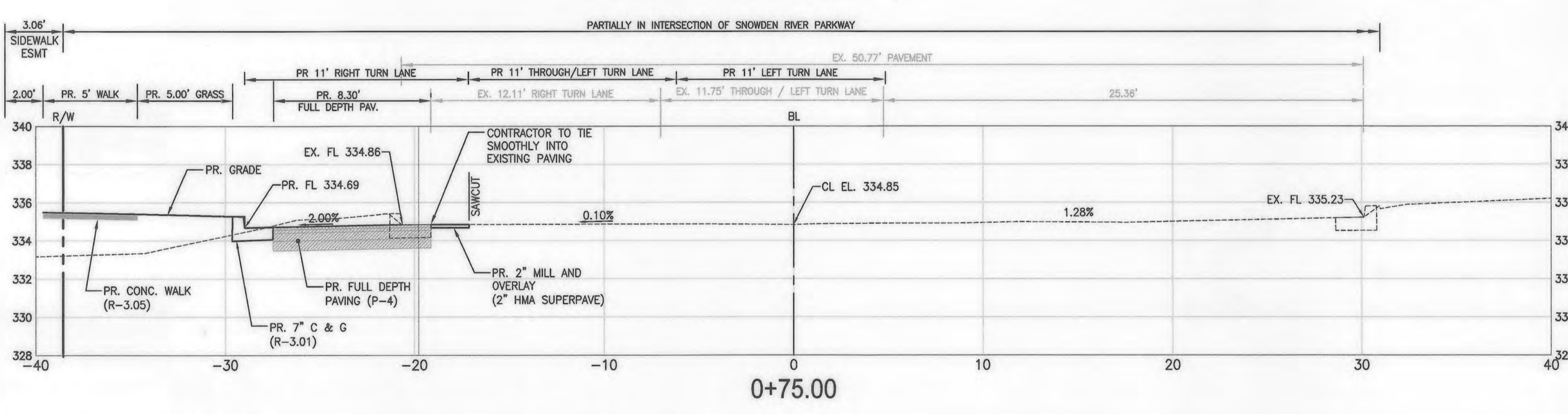
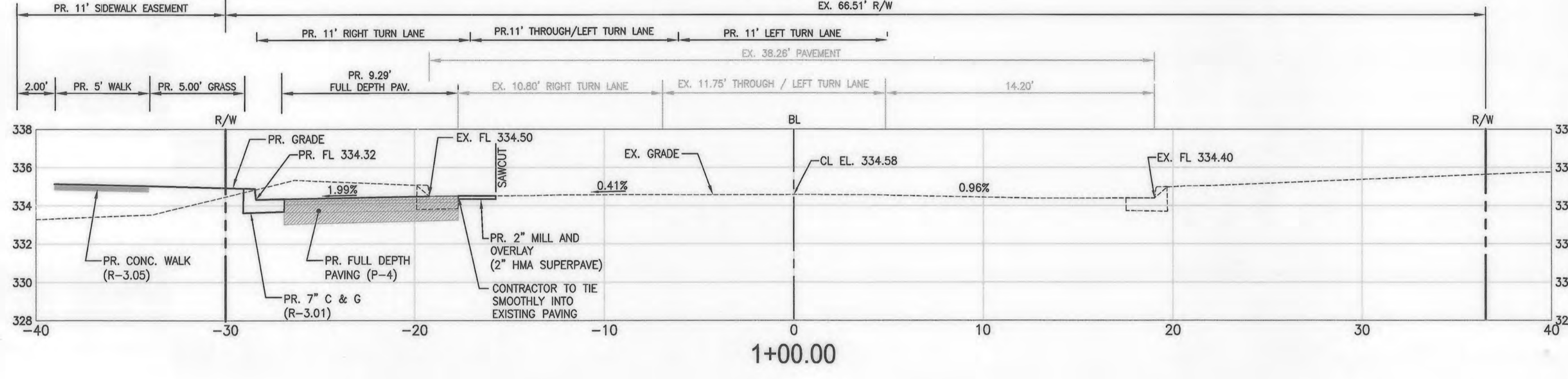
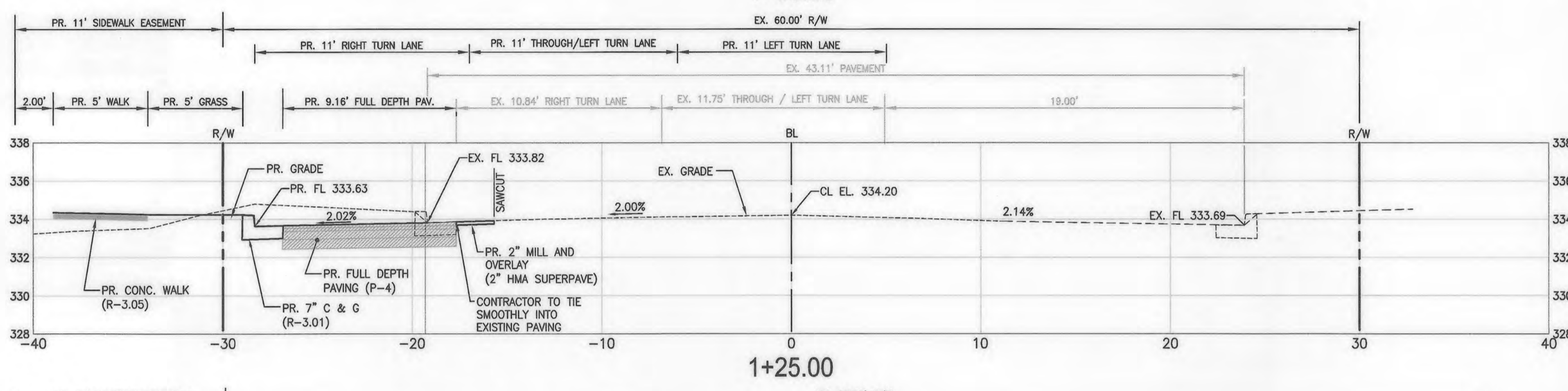
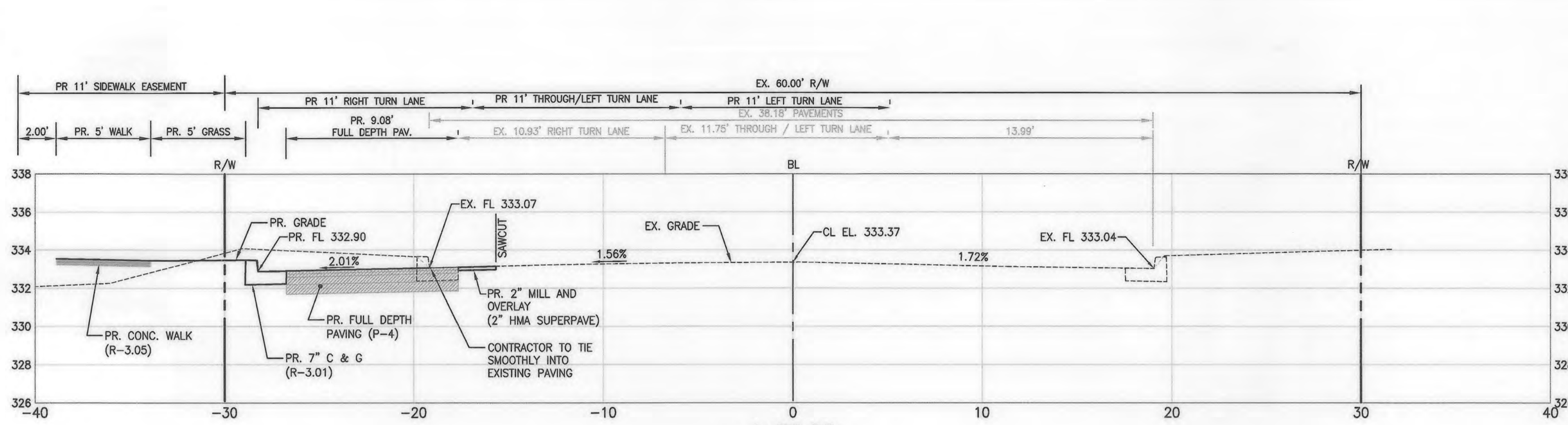
APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 8/7/19

OWNER
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

DEVELOPERS
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHISTED
 PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

 MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 1220-C EAST JOPPA ROAD, SUITE 505 TOWSON, MARYLAND 21286 (410) 821-1690 FAX: (410) 821-1748 MRAGTA.COM <small>Copyright © 2019 Morris & Ritchie Associates, Inc.</small>		SITE DEVELOPMENT PLAN E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22 ROYAL FARMS STORE #186 & CANTON CAR WASH MINSTREL WAY & SNOWDEN RIVER PARKWAY ROAD PROFILES LIBER 14229 FOLIO 00059 PLAT NO. 14470 ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND	
DATE	REVISIONS	JOB NO.:	17297
01/13/2022	NO ASBUILT	SCALE:	AS SHOWN
		DATE:	06/26/2019
		DRAWN BY:	THS
		DESIGN BY:	THS
		REVIEW BY:	MGC
		SHEET:	36 OF 40



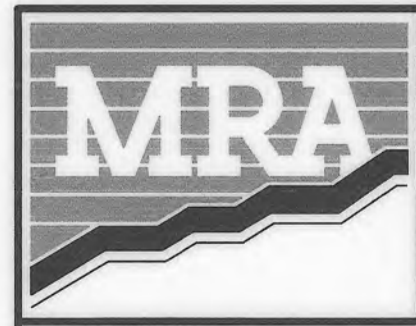
APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 9.25.19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 8/7/19

MINSTREL WAY CROSS SECTIONS
 SCALE: 1" = 5' HORZ.
 1" = 5' VERT.

OWNER
 TWO FARMS INC.
 3811 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
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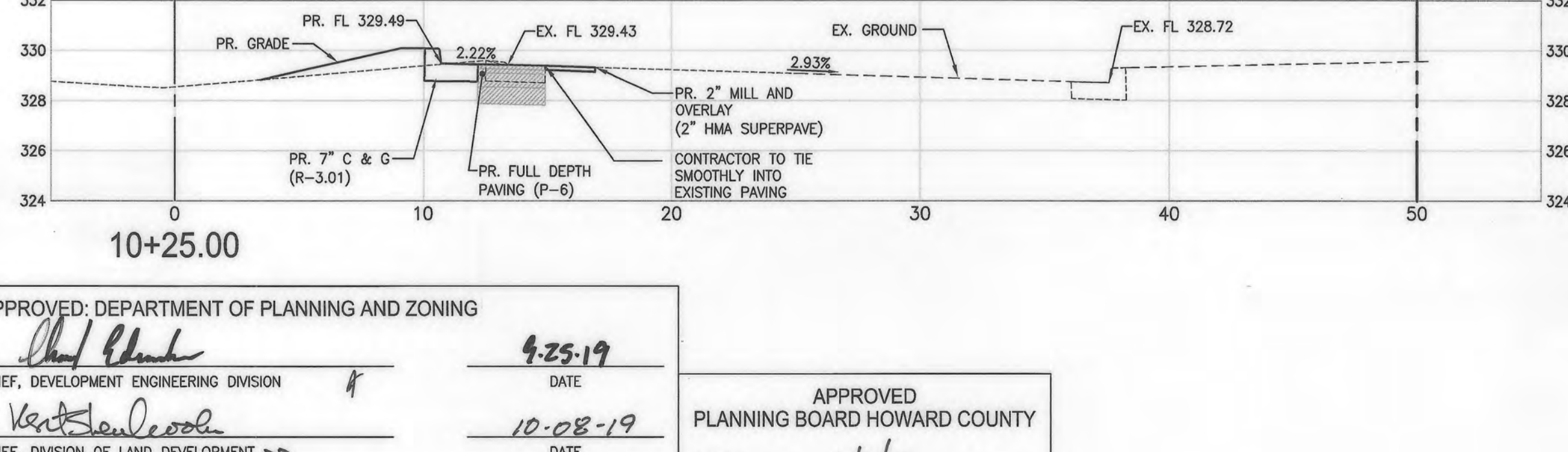
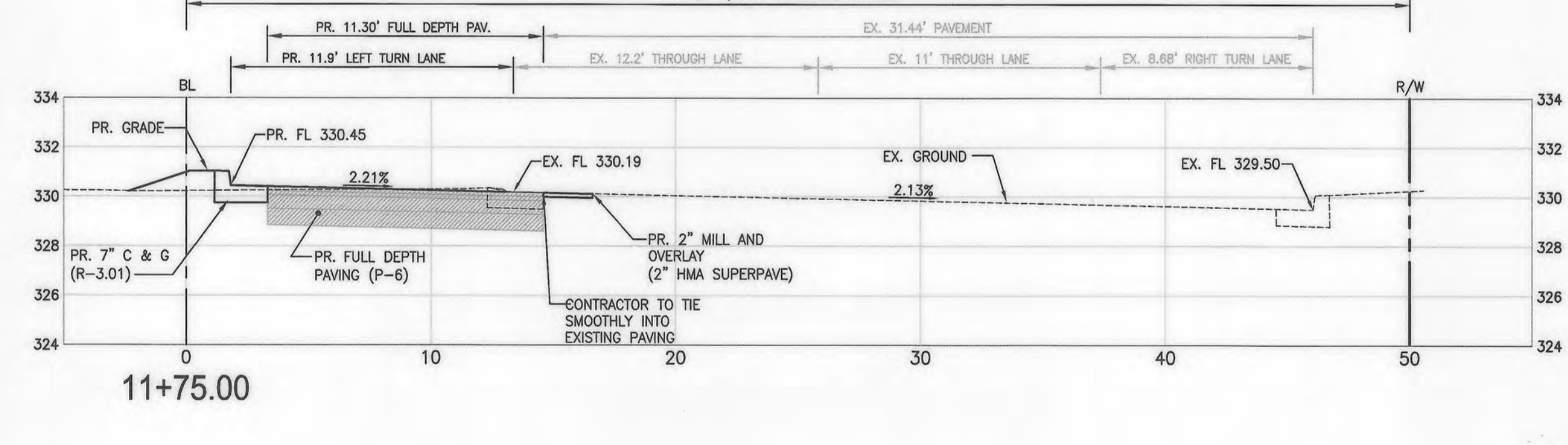
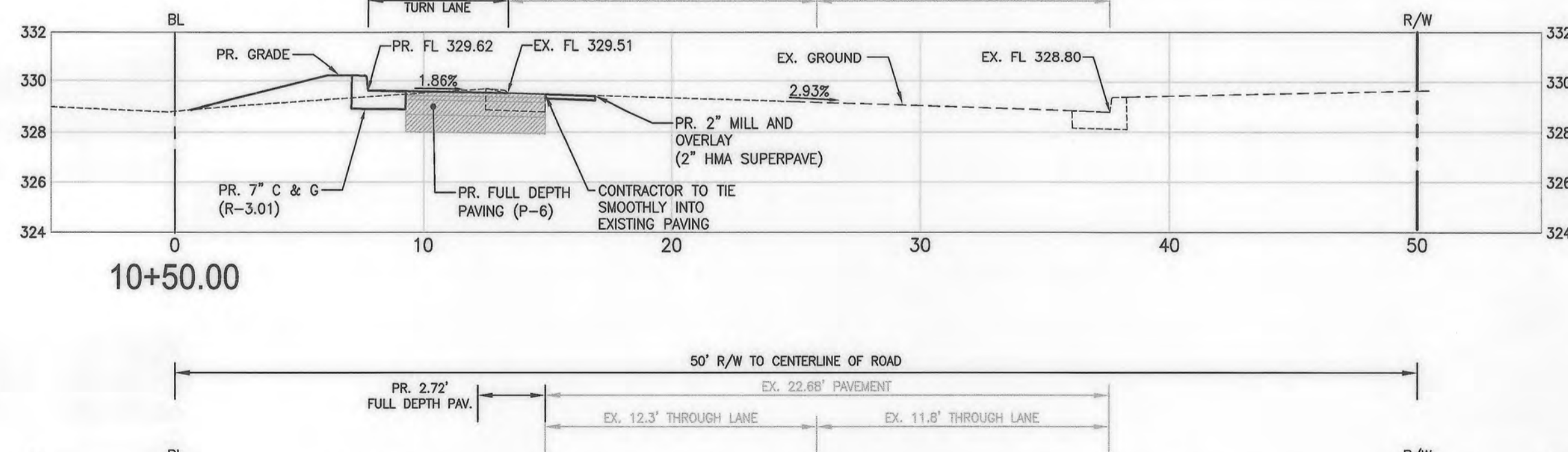
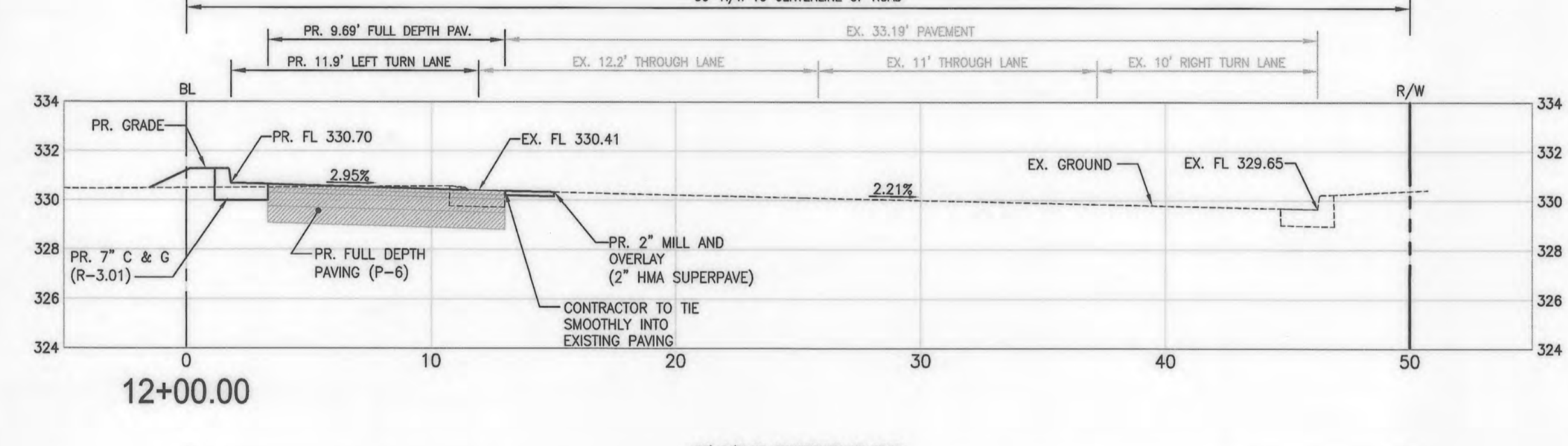
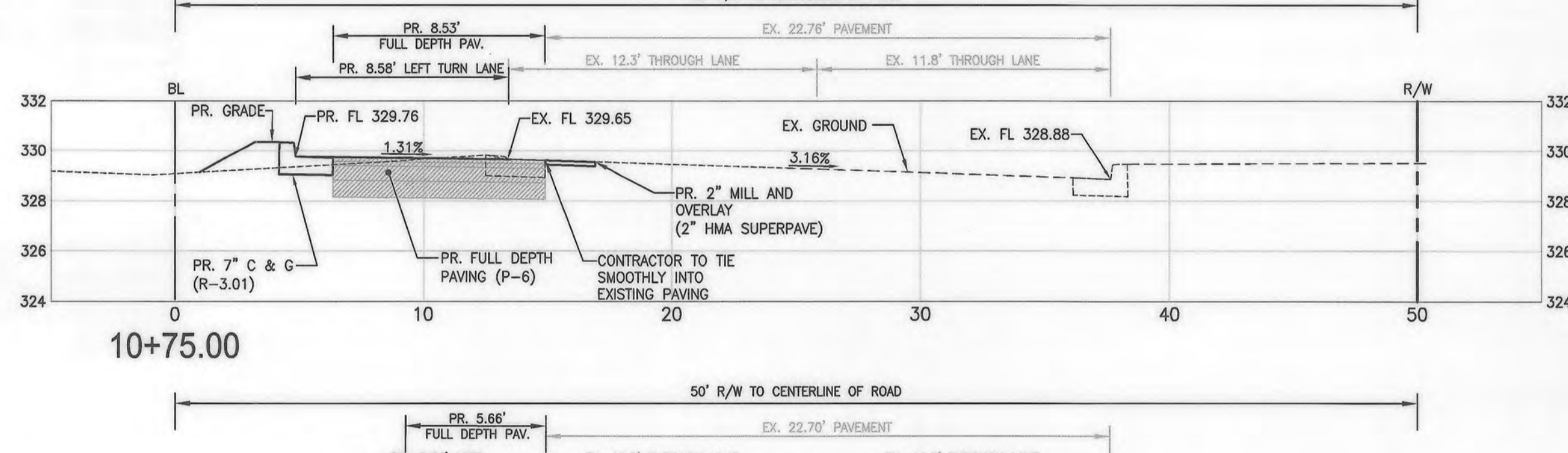
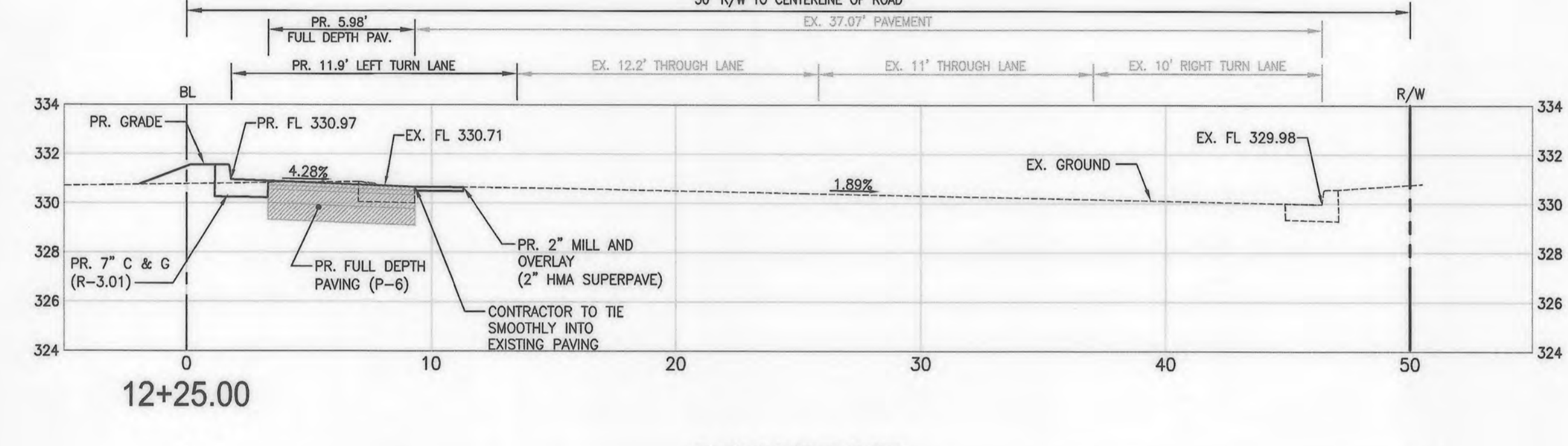
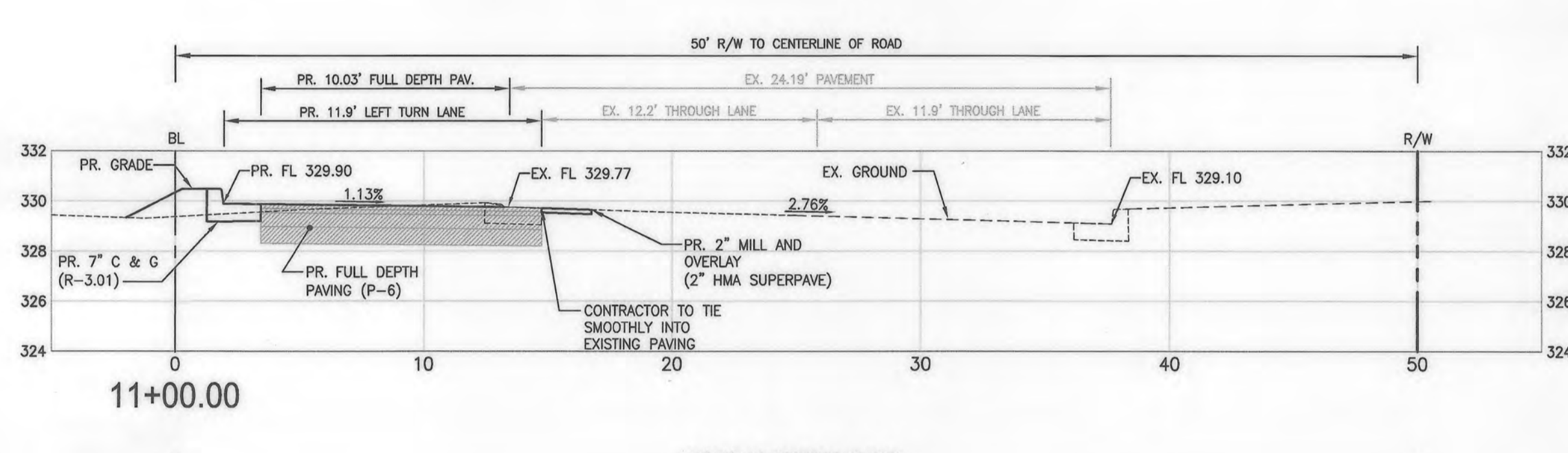
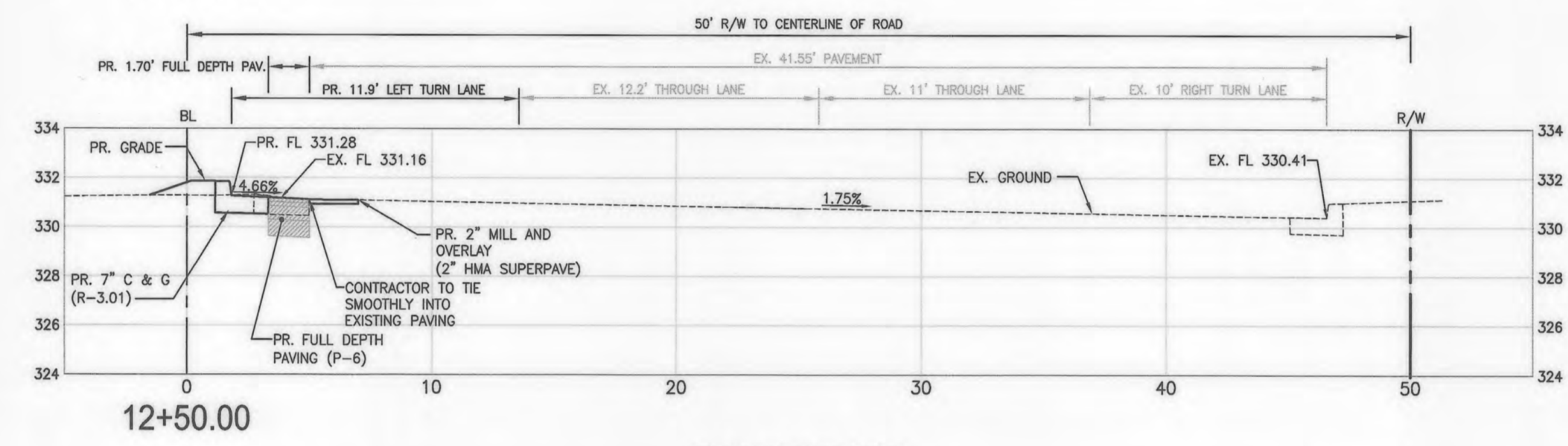
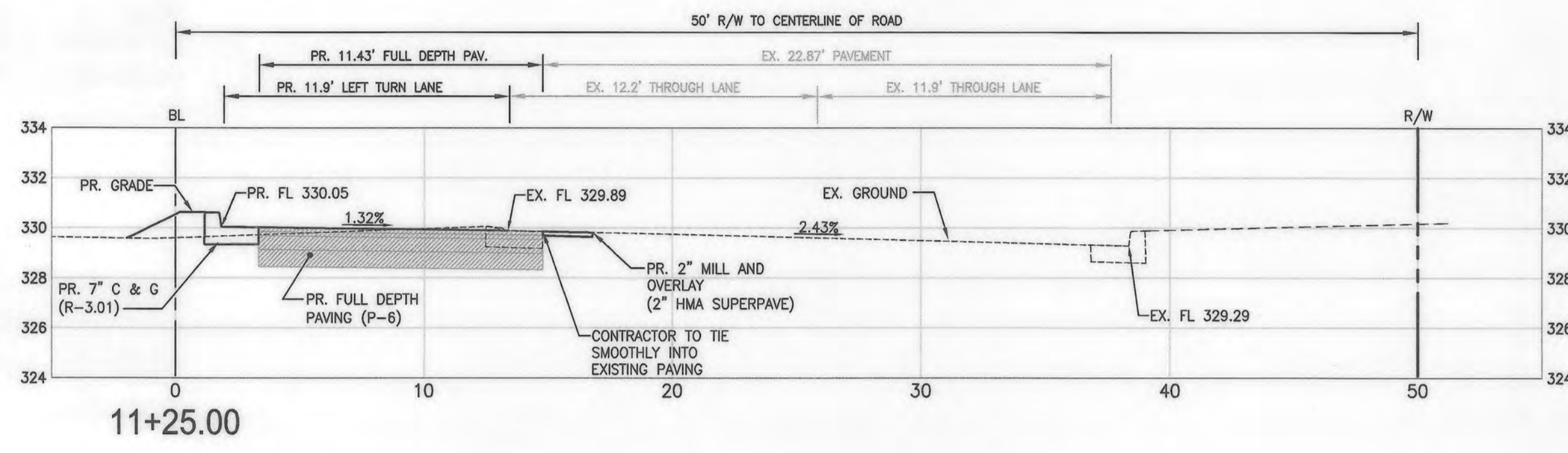
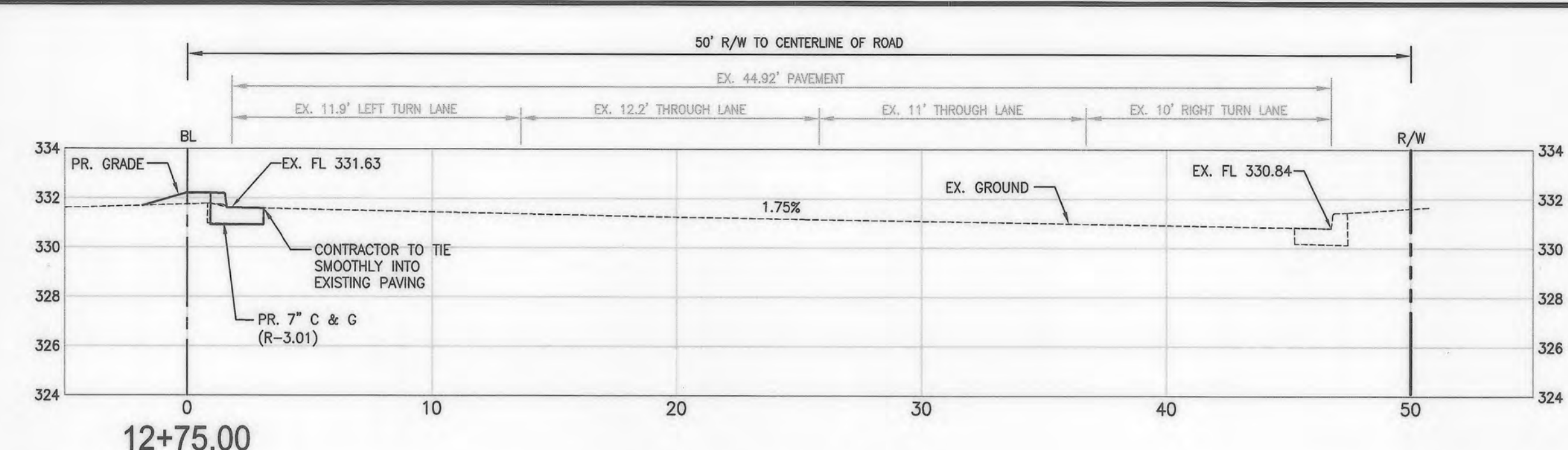
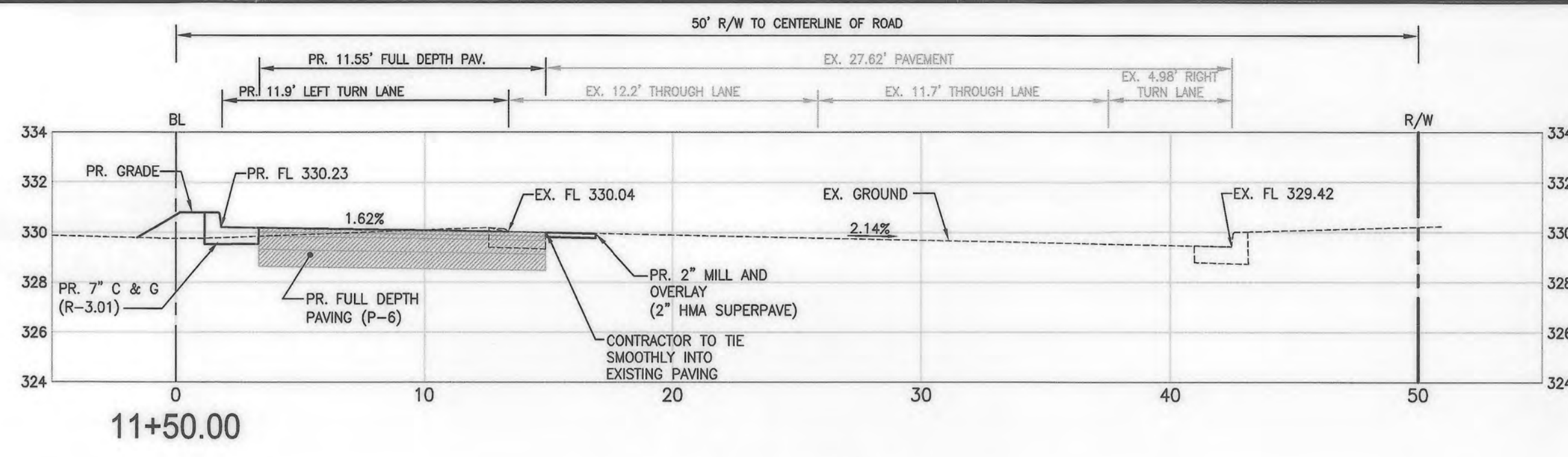
MORRIS & RITCHIE ASSOCIATES, INC.
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 TOWSON, MARYLAND 21286
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SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH
 MINSTREL WAY
 ROADWAY CROSS SECTIONS

LIBER 14229 FOLIO 00059 PLAT NO. 14470
 ZONED N1 - TAX MAP 42 - GRID 9 - PARCEL 375 - LOT 22
 TAX ASSESSMENT DISTRICT 3 - 6TH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.:
01/13/2022	No ASBUILT	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY: TMS
		DESIGN BY: TMS
		REVIEW BY: MGC
		SHEET: 37 OF 40



SNOWDEN RIVER PARKWAY CROSS SECTIONS

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

OWNER
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BALTIMORE, MARYLAND 21211
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ATTN: MR. CHRIS RIVERA
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MRA
MORRIS & RITCHIE ASSOCIATES, INC.
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(410) 821-1690
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MRA@GTA.COM
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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
SNOWDEN RIVER PARKWAY
ROADWAY CROSS SECTIONS

LIBER 14229 FOLIO 00059 PLAT NO. 14470
ZONED NT -- TAX MAP 42 -- GRID 9 -- PARCEL 375 -- LOT 22
TAX ASSESSMENT DISTRICT 3 -- 6TH ELECTION DISTRICT -- HOWARD COUNTY, MARYLAND

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		DRAWN BY: THS
		DESIGN BY: THS
		REVIEW BY: MGC
		SHEET: 38 OF 40

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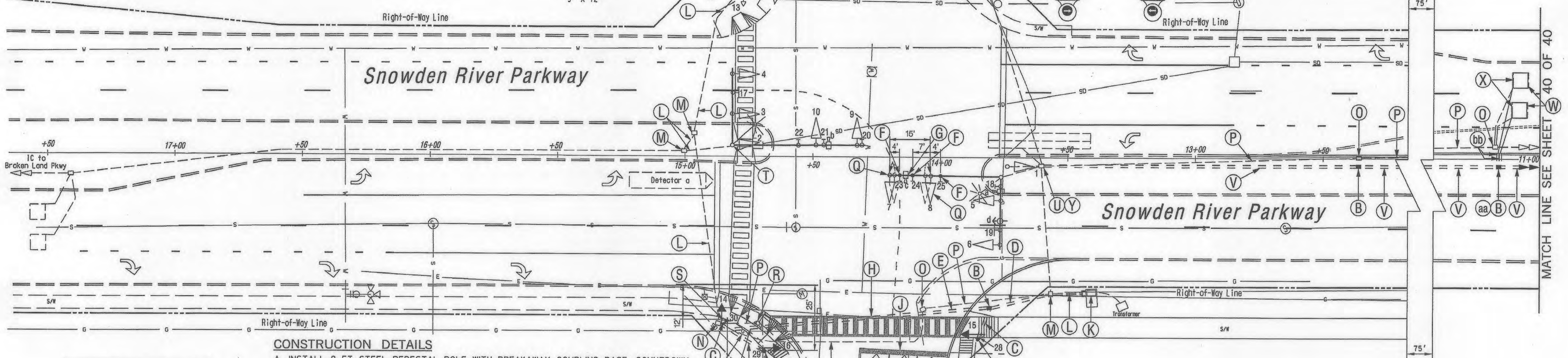
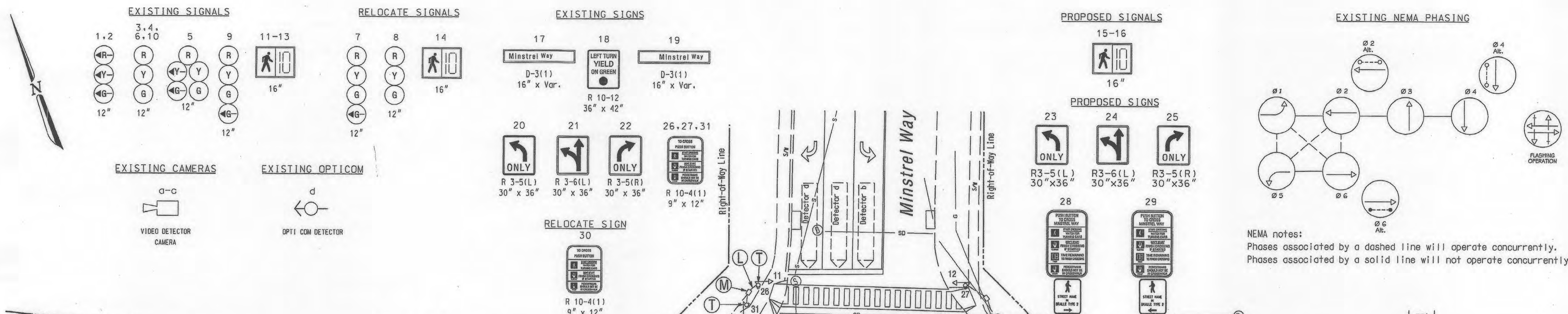
[Signature] 9-25-19
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 10-08-19
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

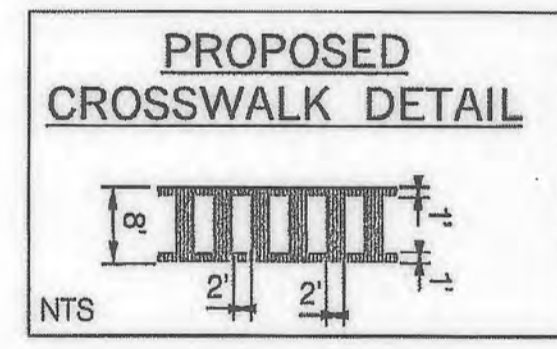
[Signature] 10-15-19
DIRECTOR DATE

APPROVED
PLANNING BOARD HOWARD COUNTY

DATE 8/7/19



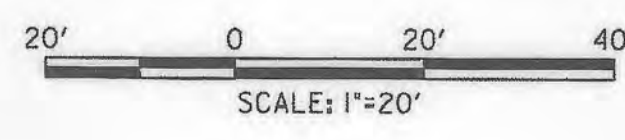
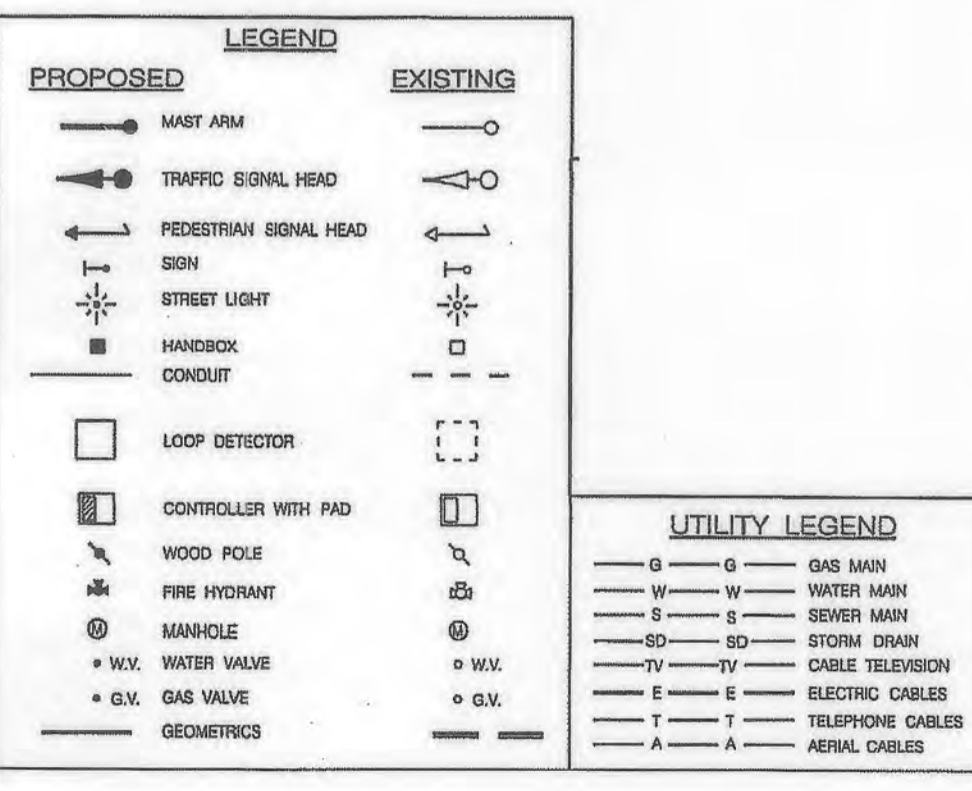
NEMA notes:
 Phases associated by a dashed line will operate concurrently.
 Phases associated by a solid line will not operate concurrently.



CONSTRUCTION DETAILS

- A. INSTALL 8 FT. STEEL PEDESTAL POLE WITH BREAKAWAY COUPLING BASE, COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PEDESTRIAN PUSHBUTTON AND PEDESTRIAN INSTRUCTIONAL SIGN. (NOTE: ONE 2 IN. PVC SCHEDULE 80 CONDUIT BEND).
- B. INSTALL HANDBOX.
- C. INSTALL 2 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- D. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- E. INSTALL 4 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - BORED.
- F. USE EXISTING MAST ARM POLE, INSTALL NEW SIGNS AS SHOWN.
- G. ADJUST EXISTING VIDEO DETECTION CAMERA FOR NEW LANE USE.
- H. INSTALL 12 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR CROSSWALK.
- J. INSTALL 24 IN. HEAT APPLIED, WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE.
- K. USE EXISTING BASE MOUNTED CABINET/CONTROLLER, INSTALL APS 2-WIRE CENTRAL CONTROL UNIT.
- L. USE EXISTING CONDUIT.
- M. USE EXISTING HANDBOX.
- N. USE EXISTING HANDBOX, DISCONNECT AND PULL BACK EXISTING INTERCONNECT AND 2-COND. ALUMINUM SHEILED CABLES FROM THE CONTROLLER/CABINET AND RE-RUN/RECONNECT USING THE NEW CONDUIT.
- O. REMOVE EXISTING HANDBOX.
- P. CAP AND ABANDON EXISTING CONDUIT.
- Q. RELOCATE EXISTING VEHICLE SIGNAL HEAD.
- R. RELOCATE EXISTING PEDESTRIAN POLE AND ALL ATTACHED EQUIPMENT.
- S. INSTALL RELOCATED PEDESTRIAN POLE AND ALL ATTACHED EQUIPMENT ON NEW FOUNDATION.
- T. USE EXISTING TRAFFIC POLE.
- U. USE EXISTING HANDBOX, INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- V. INSTALL 3 IN. PVC SCHEDULE 80 ELECTRICAL CONDUIT - TRENCHED.
- W. INSTALL 6 FT. X 6 FT. QUADRAPOLE LOOP DETECTOR (3 TURNS).
- X. ABANDON EXISTING VEHICLE DETECTION.
- Y. USE EXISTING HANDBOX, DISCONNECT AND PULL BACK EXISTING 2-COND. ALUMINUM SHEILED CABLES FROM LOOP DETECTORS AND RE-RUN/RECONNECT USING THE NEW HANDBOXES AND CONDUIT.
- Z. USE EXISTING HANDBOX, DISCONNECT AND PULL BACK EXISTING INTERCONNECT CABLE FROM THE CONTROLLER/CABINET AT MINSTREL WAY AND RE-RUN/RECONNECT USING NEW HANDBOXES AND CONDUIT.
- aa. USE NEW HANDBOX, SPLICE NEW LOOP WIRE TO EXISTING 2 COND. ALUMINUM SHEILED CABLE.
- bb. INSTALL 1 IN. LIQUID TIGHT FLEXIBLE CONDUIT FOR DETECTOR SLEEVE.

GENERAL NOTES ON SHEET 39 OF 40



PROFESSIONAL CERTIFICATION
 I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 29931, EXPIRATION DATE: 01/08/2022.

MORRIS & RITCHIE ASSOCIATES, INC.
 ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 1220-C EAST JOPPA ROAD, SUITE 505
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 FAX: (410) 821-1748
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SITE DEVELOPMENT PLAN
 E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
 ROYAL FARMS STORE #186 & CANTON CAR WASH
 TRAFFIC SIGNAL PLAN-1

LIBER 14229 FOLIO 00059 PLAT NO. 14470
 ZONED NT ~ TAX MAP 42 ~ GRID 9 ~ PARCEL 375 ~ LOT 22
 TAX ASSESSMENT DISTRICT 3 ~ 6TH ELECTION DISTRICT ~ HOWARD COUNTY, MARYLAND

DATE	REVISIONS	JOB NO.
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		DESIGN BY:
		REVIEW BY:
		SHEET: 39 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-25-19
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 10-08-19
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 10-15-19
 DIRECTOR

APPROVED
 PLANNING BOARD HOWARD COUNTY
 DATE 8/7/19

The Traffic Group
 Suite H
 9000 Franklin Square Dr.
 Baltimore, Maryland
 410-601-6600
 1-800-688-6411
 Fax: 410-601-0601

OWNER
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 PHONE: (410) 889-0200

DEVELOPERS
 TWO FARMS INC.
 3611 ROLAND AVENUE
 BALTIMORE, MARYLAND 21211
 ATTN: JACK WHISTED
 PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
 1101 PONCA STREET
 BALTIMORE, MARYLAND 21224
 ATTN: MR. CHRIS RIVERA
 PHONE: (410) 960-8573

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF SNOWDEN RIVER PARKWAY AT MINSTREL WAY IN HOWARD COUNTY, MARYLAND. SNOWDEN RIVER PARKWAY IS CONSIDERED TO RUN IN A EAST/WEST DIRECTION.

INTERSECTION OPERATION

EXISTING CONTROLLER HOUSED IN A BASE MOUNTED CABINET WITH UPS SHALL BE UTILIZED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A 6 NEMA PHASES FULLY ACTUATED MODE. THERE WILL BE EXCLUSIVE LEFT TURN PHASE FOR THE WESTBOUND MOVEMENT OF SNOWDEN RIVER PARKWAY AND AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR EASTBOUND MOVEMENT OF SNOWDEN RIVER PARKWAY. THE SNOWDEN RIVER PARKWAY THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY WITH AN ACTUATED PEDESTRIAN MOVEMENT ACROSS THE NORTH AND SOUTH LEGS OF THE INTERSECTION. THE MINSTREL WAY MOVEMENTS WILL OPERATE IN A SPLIT PHASE OPERATION WITH AN ACTUATED PEDESTRIAN MOVEMENT ACROSS THE WEST LEG OF THE INTERSECTION.

APS WILL FUNCTION AS FOLLOWS:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON MESSAGE WILL BE "WAIT TO CROSS MINSTREL WAY AT SNOWDEN RIVER PARKWAY. WAIT."
- B. WHEN WALK PHASE BEGINS, THE AUDIBLE SOUND WILL BE A RAPID TICK, WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

EQUIPMENT LIST CONTINUED

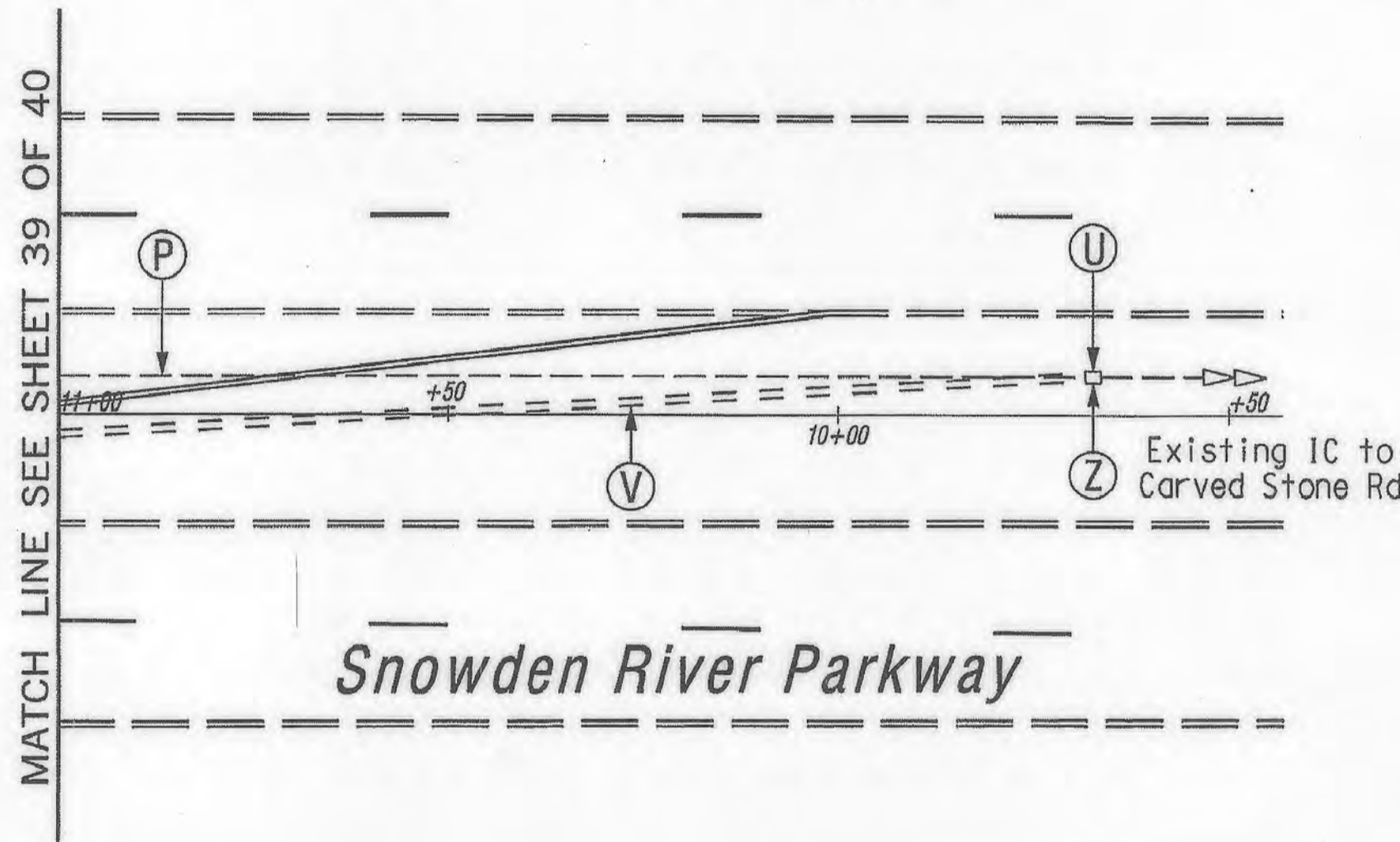
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE TRAFFIC SIGNAL CONTRACTOR.

QUANTITY	UNITS	DESCRIPTION
LUMP SUM	LS	MOT - HWY.
350	LF	VIDEO DETECTION CABLE.
3	CY	TEST PIT EXCAVATION.
1.5	CY	CONCRETE FOUNDATION.
80	LF	SAWCUOT FOR SIGNAL LOOP DETECTOR.
240	LF	LOOP DETECTOR WIRE ENCASED IN FLEXIBLE TUBING.
10	LF	1 IN. LIQUID TIGHT FLEXIBLE CONDUIT FOR DETECTOR SLEEVE.
260	LF	2 IN. CONDUIT PVC SCHED 80 - TRENCHED.
300	LF	3 IN. CONDUIT PVC SCHED 80 - TRENCHED.
60	LF	4 IN. CONDUIT PVC SCHED 80 - TRENCHED.
80	LF	4 IN. CONDUIT PVC SCHED 80 - BORED.
2	EA	GROUND ROD WITH CLAMP.
325	LF	2-CONDUCTOR TRAY CABLE (NO.12 A.W.G.)
1120	LF	2- COND. 14 AWG IMSA 19-1.
860	LF	3- COND. 14 AWG IMSA 19-1.
975	LF	5- COND. 14 AWG IMSA 19-1.
1000	LF	7- COND. 14 AWG IMSA 19-1.
180	LF	1- COND. 6 AWG - SOLID BARE COPPER.
340	LF	12 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - CROSSWALK.
36	LF	24 IN. WHITE THERMOPLASTIC PAVEMENT MARKING - STOP LINE.
2	EA	INSTALL PEDESTAL POLE ANY SIZE WITH BREAKAWAY COUPLING BASE.
2	EA	INSTALL PEDESTRIAN SIGNAL HEAD.
2	EA	INSTALL PEDESTRIAN PUSHBUTTON & SIGN.
3	EA	INSTALL TRAFFIC SIGNAL HANDBOX.
3	EA	INSTALL TRAFFIC SIGN - MAST ARM.
2	EA	RELOCATE EXISTING SIGNAL HEAD - MAST ARM.
1	EA	RELOCATE EXISTING PEDESTRIAN POLE AND ALL ATTACHED EQUIPMENT.
400	LF	RELOCATE EXISTING 2 -COND. ALUMINUM SHIELDED CABLE.
600	LF	RELOCATE EXISTING UNDERGROUND INTERCONNECT CABLE.
LUMP SUM	LS	REMOVE EXISTING SIGNAL EQUIPMENT.
LUMP SUM	LS	RE-ALIGN VIDEO DETECTION CAMERA.

EQUIPMENT LIST

A. EQUIPMENT TO BE FURNISHED BY THE COUNTY, PAID BY THE DEVELOPER.

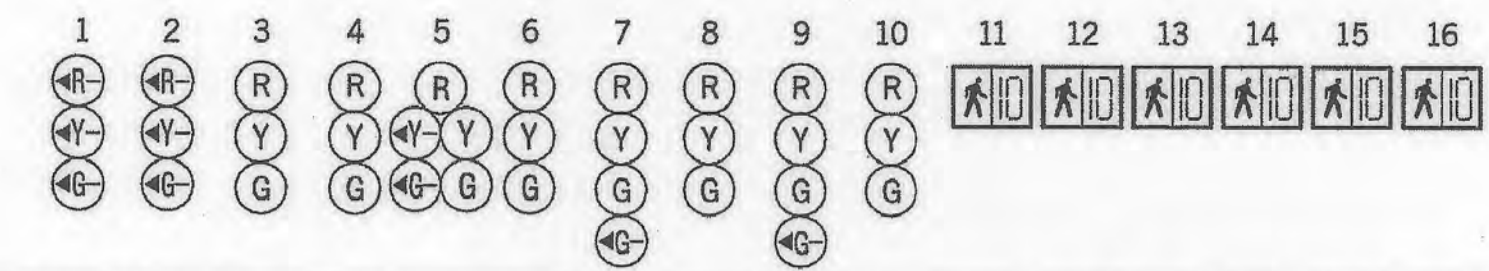
QUANTITY	UNITS	DESCRIPTION
2	EA	16 IN. ONE-WAY, ONE SECTION L.E.D. (COUNTDOWN INDICATIONS) ADJUSTABLE PEDESTRIAN SIGNAL HEAD WITH POST TOP MOUNTING HARDWARE AND CUT-AWAY VISORS.
1	EA	APS 2-WIRE CENTRAL CONTROL UNIT.
2	EA	AUDIBLE PEDESTRIAN PUSHBUTTON ASSEMBLY WITH PUSHBUTTON SIGN.
2	EA	8 FT. ALUMINUM PEDESTAL POLE WITH BREAKAWAY COUPLING BASE.
1	EA	30 IN. X 36 IN. R3-5(R) SIGN WITH MAST ARM MOUNTING HARDWARE.
1	EA	30 IN. X 36 IN. R3-5(L) SIGN WITH MAST ARM MOUNTING HARDWARE.
1	EA	30 IN. X 36 IN. R3-6(L) SIGN WITH MAST ARM MOUNTING HARDWARE.



GENERAL NOTES

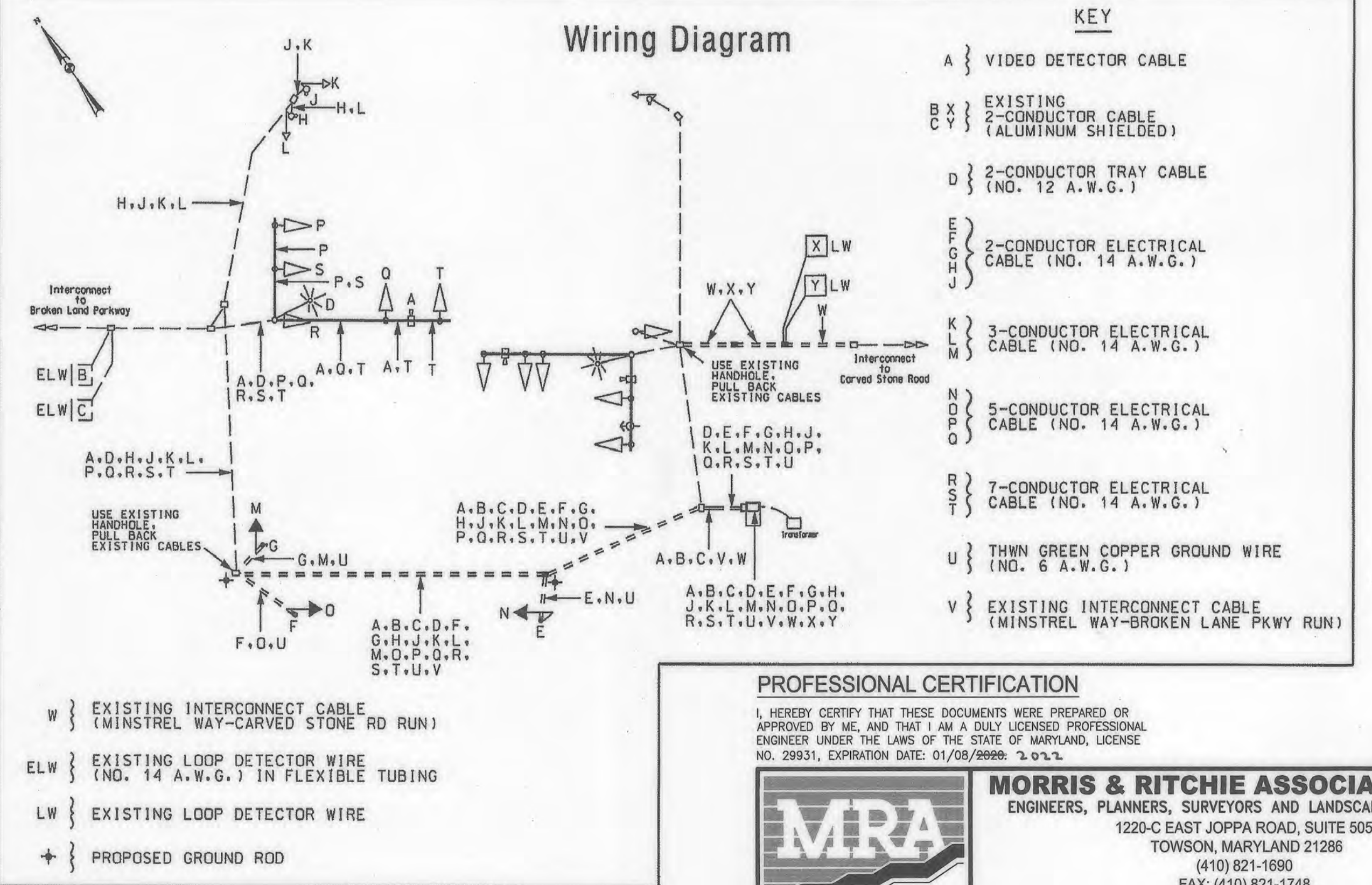
- VIDEO CAMERA LOCATION/ALIGNING SHALL BE COORDINATED WITH THE COUNTY ENGINEER.
- THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS WITH THE COUNTY ENGINEER PRIOR TO INSTALLATION. CONTACT JENN BIDDLE AT (410) 313-5755.
- ALL PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH COUNTY STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINALS AND PROPERLY LABEL EACH CABLE.
- THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITIES PRIOR TO INSTALLING PROPOSED SIGNAL EQUIPMENT. IF ANY UTILITY CONFLICTS SHOULD ARISE THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER.
- ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
- THE CONTRACTOR SHALL COORDINATE WITH THE COUNTY ENGINEER 48 HOURS PRIOR TO INSTALLING FOUNDATIONS.
- CONTRACTOR SHALL CONTACT HOWARD COUNTY'S UNDERGROUND UTILITY PERMIT DIVISION AT 410-313-4207 AT LEAST FIVE BUSINESS DAY PRIOR TO STARTING ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.
- PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR REACHING LESS THAN 18 IN. FROM A 60 IN. X 60 IN. LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
- THE 10 FT. SEPARATION BETWEEN PUSHBUTTONS IS TO BE MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLE.
- PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED.
- THE LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MUTCD SEC. 4E.08; 4E.10; FIG 4E-3; FIG 4E-4 AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.
- ALL UNUSED CABLE SHALL BE REMOVED.

Phase Chart



PHASE 1 AND 5	←G-	←G-	R	R	←GR	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6																
PHASE 1 AND 6	←G-	←G-	G	G	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 CHANGE	←Y-	←Y-	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 5	←R-	←R-	R	R	←YG	G	R	R	R	R	DW	DW	DW	DW	DW	DW
5 CHANGE	←R-	←R-	R	R	←YG	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 2 AND 6	←R-	←R-	G	G	G	G	R	R	R	R	WK	WK	WK	WK	DW	DW
PED CLEARANCE	←R-	←R-	G	G	G	G	R	R	R	R	FLDW	FLDW	FLDW	FLDW	DW	DW
2 AND 6 CHANGE	←R-	←R-	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 3	←R-	←R-	R	R	R	R	←GG	G	R	R	DW	DW	DW	DW	DW	DW
3 CHANGE	←R-	←R-	R	R	R	R	Y	Y	R	R	DW	DW	DW	DW	DW	DW
PHASE 4	←R-	←R-	R	R	R	R	R	←GG	G	DW	DW	DW	DW	DW	DW	DW
4 CHANGE	←R-	←R-	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW
PHASE 4 ALT	←R-	←R-	R	R	R	R	R	←GG	G	DW	DW	DW	DW	WK	WK	DW
PED CLEARANCE	←R-	←R-	R	R	R	R	R	←GG	G	DW	DW	DW	DW	FLDW	FLDW	DW
ALT 4 CHANGE	←R-	←R-	R	R	R	R	R	Y	Y	DW	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/←R-	FL/←R-	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

Wiring Diagram



PROFESSIONAL CERTIFICATION

I, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 29931, EXPIRATION DATE: 01/08/2020. 2022



MORRIS & RITCHIE ASSOCIATES, INC.
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SITE DEVELOPMENT PLAN
E.G.U. SUBDIVISION-SECTION 2-AREA 2-LOT 22
ROYAL FARMS STORE #186 & CANTON CAR WASH
TRAFFIC SIGNAL PLAN-2

DATE	REVISIONS	JOB NO.:
01/13/2022	No AS BUILT	17297
		SCALE: AS SHOWN
		DATE: 06/26/2019
		DRAWN BY:
		DESIGN BY:
		REVIEW BY:
		SHEET: 40 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
9-25-19
10-08-19
10-15-19

APPROVED
PLANNING BOARD HOWARD COUNTY
DATE 8/7/19



OWNER
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
PHONE: (410) 889-0200

DEVELOPERS
TWO FARMS INC.
3611 ROLAND AVENUE
BALTIMORE, MARYLAND 21211
ATTN: JACK WHISTED
PHONE: (410) 889-0200

SNOWDEN CAR WASH, LLC
1101 PONCA STREET
BALTIMORE, MARYLAND 21224
ATTN: MR. CHRIS RIVERA
PHONE: (410) 960-8573