

U.S. ARMY CORPS OF ENGINEERS BALTIMORE DISTRICT REAL PROPERTY SERVICES FIELD OFFICE

# EMERSON - CAMPUS VCP SITE DEVELOPMENT PLAN

## HOWARD COUNTY, MARYLAND

### GENERAL NOTES

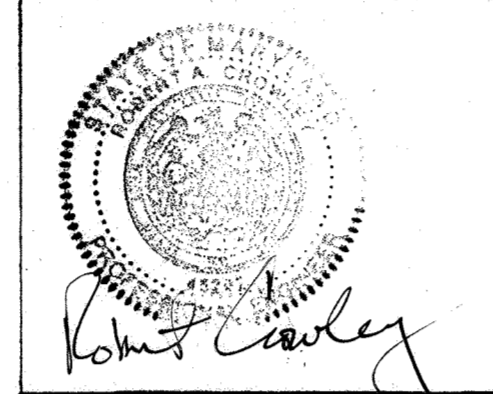
- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection Division at (410) 313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- All traffic control devices and their locations shall be in accordance with the latest edition of the "Maryland Manual on Uniform Traffic Control Devices" (MDMUTCD).
- All sign posts used for traffic control signs installed in the County Right of Way shall be mounted on a 2" galvanized steel, perforated (Quick Punch), square tube post (14 gauge) inserted into a 2.5" galvanized steel, perforated, square tube sleeve (12 gauge)-3' long. The anchor shall not extend more than two Quick Punch 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.
- The existing topography is taken from as-built drawings with two-foot contour intervals from Daft McCune Walker, Inc. and verified by a field survey by Daft McCune Walker, Inc. completed on June 22, 2015.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 47GM3 and 47EM3 were used for this project.
- Water is public. Sewer is public.
- Stormwater management is provided in accordance with the 2000 Maryland Stormwater Design Manual (revised May 2009) and Chapter 5 of the Howard County Design Manual. This project meets the criteria outlined in the MDE guidelines.
- Existing utilities shown within Sterling Drive are based on Water Drawings, Contract No. 24-4698-D.
- There is no floodplain on this site. The floodplain study for this site was prepared by Daft-McCune-Walker, Inc. dated June 12, 2001, and was approved in September 2001.
- There are no streams, wetlands, their buffers, floodplain, or steep slopes (25% or greater) within the limits of disturbance of this project.
- Based on conversations with Howard County Department of Public Works, because this project will not increase traffic to the site, no APFO study or Sight Distance Analysis Speed Study is required.
- The Geotechnical report for this project was prepared by Johnson, Mirmiran, & Thompson, dated May 29, 2015. The subject property is zoned PEC in accordance with 10/6/13 comprehensive zoning plan.
- There are no existing structures within the limits of disturbance.
- No grading, removal of vegetative cover or trees, paving, and new structures shall be permitted within the required wetlands, streams, their buffers, forest conservation easement areas, and 100-year floodplain.
- Forest conservation for parcels H, G-1, D-1, F-1, AND E-1 was previously addressed under F-02-111.
- Required landscaping was previously addressed under F-02-111.
- Future VCC and VCIF will require redline revision to SDP-16-005 prior to issuance of any building permit for these structures.

### SITE ANALYSIS DATA CHART

- GENERAL SITE DATA
  - PRESENT ZONING: PEC
  - APPLICABLE DPZ FILE REFERENCES: ECP-15-086 PLAT #23732-23734, F-02-111, F-07-055, F-08-093, F-08-207, F-11-019, F-11-052, F-11-094, SP-02-012, SDP-07-109, SDP-10-096, SDP-11-025, SDP-12-010, F-16-041
  - ADDRESS OF AFFECTED PROPERTIES:
    - PARCEL D-1: 9070 STERLING DRIVE, LAUREL, MD 20723
    - PARCEL E-1: 9090 STERLING DRIVE, LAUREL, MD 20723
    - PARCEL F-1: 9055 STERLING DRIVE, LAUREL, MD 20723
    - PARCEL G-1: 9025 STERLING DRIVE, LAUREL, MD 20723
    - PARCEL H: 9005 STERLING DRIVE, LAUREL, MD 20723
    - PARCEL N: STEPHENS ROAD, LAUREL, MD 20723
    - PARCEL O: STEPHENS ROAD, LAUREL, MD 20723
    - PARCEL Q: STEPHENS ROAD, LAUREL, MD 20723
  - PROPOSED USE: VEHICLE CHECK POINT SECURITY GATE
  - PROPOSED WATER: PUBLIC
  - PROPOSED SEWER: PUBLIC
  - AREA OF STEEP SLOPES (15% OR GREATER) WITHIN LOD: 0.25 ACRES
  - AREA OF FLOODPLAIN WITHIN LOD: 0.00 ACRES
  - AREA OF WETLANDS AND WETLAND BUFFERS WITHIN LOD: 0.00 ACRES
  - AREA OF STREAMS AND STREAM BUFFERS WITHIN LOD: 0.00 ACRES
  - AREA OF FOREST WITHIN LOD: 0.00 ACRES
- AREA TABULATION
  - TOTAL PROJECT AREA: 41.96 ACRES (TOTAL AREA OF ALL PARCELS LISTED)
  - AREA OF PLAN SUBMISSION: 2.20 ACRES (PARCEL H)
  - LIMIT OF DISTURBED AREA: 4.12 ACRES
  - TOTAL IMPERVIOUS AREA: 2.66 ACRES
  - BUILDING COVERAGE OF SITE: 0.12 ACRES AND 5.5% OF SITE AREA.
  - FUTURE VCC BUILDING (OFFICE SPACE) 4000 SF
  - FUTURE VCIF (VEHICLE PROCESSING SPACE) 4227 SF 270

NOTE: THE FUTURE VCIF BUILDING IS NOT REQUIRED TO BE PARKED BECAUSE IT IS ONLY FOR VEHICLE PROCESSING.
- PARKING SPACE DATA
  - NUMBER OF PARKING SPACES REQUIRED BY ZONING REGULATIONS AND CRITERIA: 4,000 SF OFFICE @ 3:34000 = 14 SPACES
  - TOTAL NUMBER OF PARKING SPACES PROVIDED ON-SITE: 46 SPACES
  - TOTAL INCLUDES: 1 49-STANDARD SPACES, 2 HANDICAP SPACES. TOTAL SPACES = 45

REVISED PLANS INCLUDE NEW SITE LAYOUT

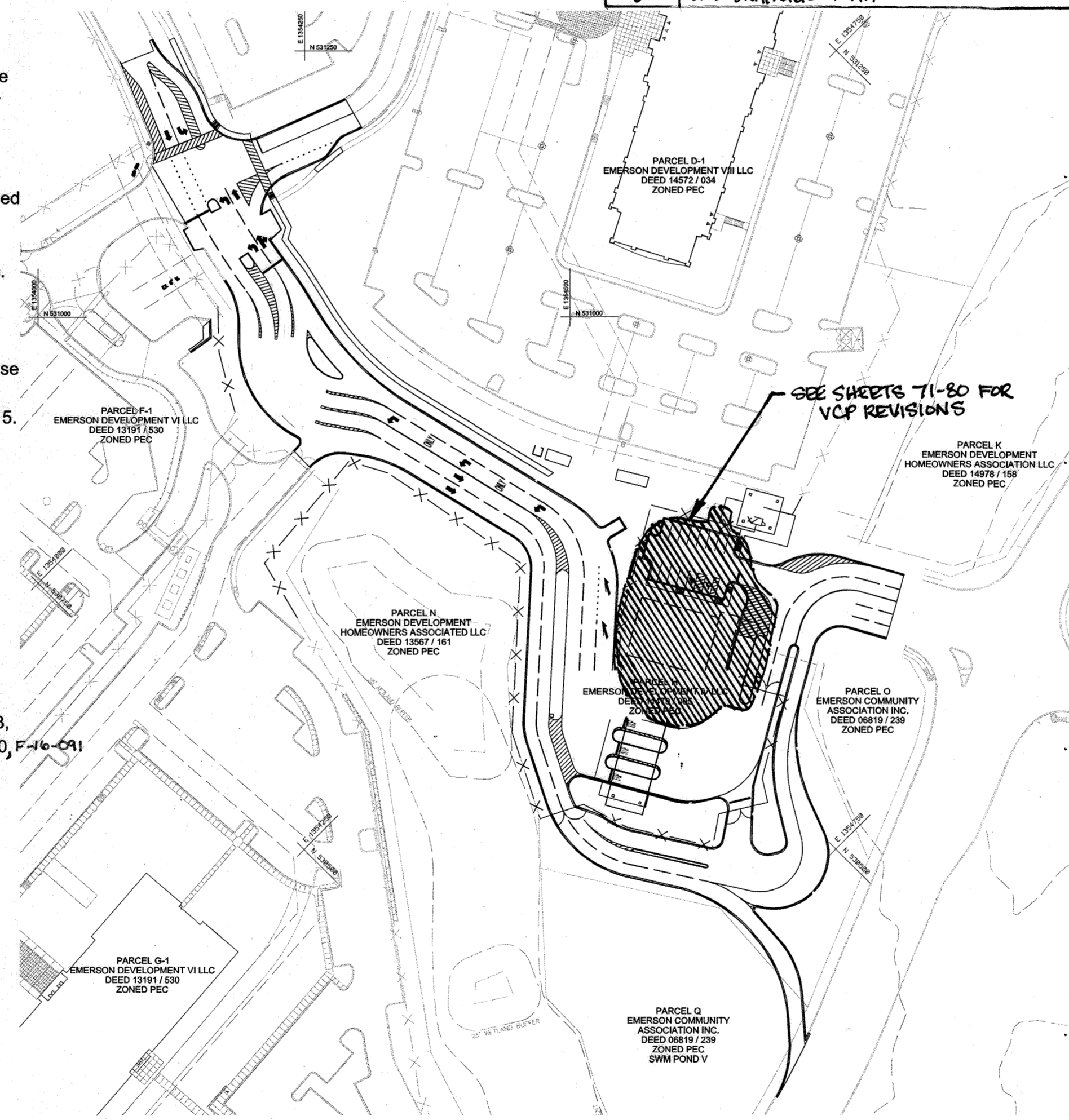


ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

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. 45292, Expiration Date: 05/21/2016

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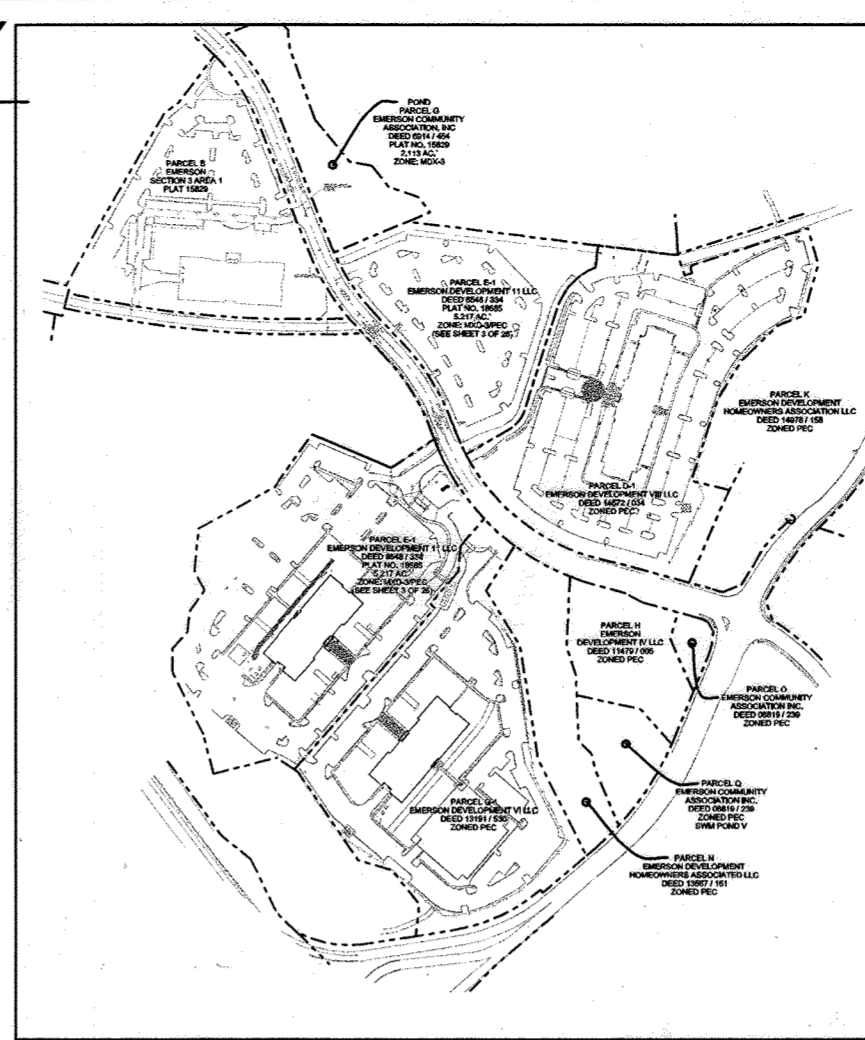
SITE PLAN SCALE 1"=100'



AS BUILT CERTIFICATION FOR PSHM NOTE: THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET. ROBERT DEWLEY 45292 02/03/2017



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TAX MAP

SCALE 1"=500'

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70	ENLARGED MICROBIORETENTION FACILITIES

\* SEE SHEET INDEX CONTINUATION ABOVE



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. 45292 EXPIRATION DATE: 05/21/2016

HOWARD COUNTY GEODETIC COORDINATES

BENCH MARK ID: 47GM3	BENCH MARK ID: 47EM3
NORTHING: 531620.07	NORTHING: 532973.07
EASTING: 1352684.71	EASTING: 1356218.71
ELEVATION: 91.734	ELEVATION: 84.447

ADDRESS CHART

PARCEL NUMBER	STREET ADDRESS
PARCEL H	9005 STERLING DRIVE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division	5-6-16
Chief, Division of Land Development	5-16-16
Director	5-16-16

04/24/16 1 REVISED SITE LAYOUT TO ADD VISITOR'S CENTER INSPECTION FACILITY

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REVIZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE		
COVER SHEET		
DES. BY	SCALE	PROJ. No.
M. WERDER	AS SHOWN	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	
R. CROWLEY		1 OF 80

SDP-16-005

CIVIL ABBREVIATIONS

AGIP	AT GRADE INLET PROTECTION	MAT	MATERIAL
APPROX	APPROXIMATE	MAX	MAXIMUM
AVG	AVERAGE	MBR	MICRO-BIORETENTION FACILITY
ASPH	ASPHALT	MD	MARYLAND
BB	BAFFLE BOARD	MDSHA	MARYLAND STATE HIGHWAY ADMINISTRATION
BOD	BOTTOM OF DUCT BANK	MH	MANHOLE
BOT	BOTTOM	MIN	MINIMUM
BLRD	BOLLARD	MISC	MISCELLANEOUS
BLDG	BUILDING	MM	MILLIMETER
BM	BENCHMARK	MPO	METROPOLITAN PLANNING ORGANIZATION
BMP	BEST MANAGEMENT PRACTICE	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
BRG	BEARING	N	NORTH
BW	BOTTOM OF WALL	NIC	NOT IN CONTRACT
CB	CATCH BASIN	NO	NUMBER
C&G	CURB AND GUTTER	NTS	NOT TO SCALE
CF	CUBIC FEET	OC	ON CENTER
CHWR	CHILLED WATER RETURN	OD	OUTSIDE DIAMETER
CHWS	CHILLED WATER SUPPLY	OHE	OVERHEAD ELECTRIC
CI	CURB INLET	OP	OUTLET PROTECTION
CIP	CURB INLET PROTECTION	PE	POLYETHYLENE PIPE
CJ	CONSTRUCTION JOINT	PP	POWER POLE
CL C/L	CENTERLINE	POB	POINT OF BEGINNING
CO	CLEANOUT	PL	POINT OF CONNECTION
CONC	CONCRETE	PL	PROPERTY LINE
CONN	CONNECTION	PS	PARKING SPACE
CONST	CONSTRUCTION	PSI	POUNDS PER SQUARE INCH
CONT	CONTINUE, CONTINUATION	PVC	POLYVINYL CHLORIDE PIPE
COR	CONTRACTING OFFICER REPRESENTATIVE	PVMT	PAVEMENT
CP	CAMERA POLE	QTY	QUANTITY
CTR	CENTER	R	RADIUS
DA	DRAINAGE AREA	RCA	RESOURCE CONSERVATION AREA
DC	DEPRESSED CURB	RCP	REINFORCED CONCRETE PIPE
DEG	DEGREE	REF	REFERENCE
DEMO	DEMOLITION	REINF	REINFORCEMENT
DET	DETAIL	REQ'D	REQUIRED
DF	DIVERSION FENCE	RPS	REMOVABLE PUMPING STATION
DHCW	DOMESTIC HOT AND COLD WATER	S	SOUTH
DI	DRAINAGE INLET	SAN	SANITARY SEWER
DIA	DIAMETER	SB	STRAW BALES
DIM	DIMENSION	SCE	STABILIZED CONSTRUCTION ENTRANCE
DIP	DUCTILE IRON PIPE	SCHED	SCHEDULE
DWG	DRAWING	SF	SILT FENCE
E	EAST	STD	STANDARD
EA	EACH	STMH	STORM DRAIN MANHOLE
ED	EARTH DIKE	TC	TOP OF CURB
EJ	EXPANSION JOINT	TD	TRENCH DRAIN
EL/ELEV	ELEVATION	TELCO	TELECOMMUNICATIONS
EMH	ELECTRIC MANHOLE	TMH	TELECOMMUNICATIONS MANHOLE
EP	EDGE OF PAVEMENT	TW	TOP OF WALL
EQ	EQUAL	TYP	TYPICAL
EW	EACH WAY	UD	UNDERDRAIN
EX/EXIST	EXISTING	UFGS	UNITED FACILITIES GUIDE SPECIFICATIONS
EXP	EXPANSION	UG	UNDERGROUND
FDC	FIRE DEPARTMENT CONNECTION	UTIL	UTILITY
FES	FLARED END SECTION	VERT	VERTICAL
FFE	FINISHED FLOOR ELEVATION	VB	VERTICAL BEND
FH	FIRE HYDRANT	VCC	VISITOR CONTROL CENTER
FIN	FINISH	VCIF	VISITOR CONTROL INSPECTION FACILITY
FOC	FACE OF CURB	VCP	VEHICLE CONTROL POINT
FOR	FUEL OIL RETURN	W	WEST/WATER
FOS	FUEL OIL SUPPLY	W	WITH
FRP	FIBERGLASS REINFORCED PIPE	WM	WATER METER
FT	FOOT, FEET	WMA	WATER MANAGEMENT ADMINISTRATION
FTG	FOOTING	W/O	WITHOUT
G	GAS	WT	WEIGHT
GA	GRADED AGGREGATE	WV	WATER VALVE
GAB	GRADED AGGREGATE BASE	WWF	WELDED WIRE FABRIC
GAL	GALLON		
GALV	GALVANIZED		
GMH	GAS MANHOLE		
GV	GATE VALVE		
GFE	GOVERNMENT FURNISHED EQUIPMENT		
GFCI	GOVERNMENT FURNISHED CONTRACTOR INSTALLED		
HH	HANDHOLE		
HB	HORIZONTAL BEND		
HGT	HEIGHT		
HORIZ	HORIZONTAL		
HR	HOUR		
ID	INSIDE DIAMETER; IDENTIFICATION		
IN	INCH		
INV	INVERT		
IP	INLET PROTECTION		
IPS	IRON PIPE SET		
JT	JOINT		
K12	KINETIC CRASH RATING		
L	LENGTH		
LF	LINEAR FEET		
LP	LIGHT POLE		

CIVIL LEGEND & SYMBOLS

EXISTING SYMBOL	REMOVAL SYMBOL	PROPOSED SYMBOL	DESCRIPTION
---	---	---	PROPERTY LINE/EASEMENT
---	---	---	ASPHALT PAVEMENT
---	---	---	CONCRETE PAVEMENT
---	---	---	CONCRETE CURB AND GUTTER
---	---	---	CONCRETE CURB
---	---	---	PAVEMENT STRIPING
---	---	---	MILL AND OVERLAY
---	---	---	BUILDING
---	---	---	CANOPY
---	---	---	TREE
---	---	---	DECORATIVE FENCE (K-RATED)
---	---	---	DECORATIVE FENCE (NON-RATED)
---	---	---	PACKAGED SALLYPORT AND PEDESTRIAN TURNSTILE
---	---	---	K12 RATED BARRIER ARM
---	---	---	VEHICULAR BARRIER SWING ARM
---	---	---	DOUBLE SWING GATE
---	---	---	GRABNET
---	---	---	SIGN
---	---	---	NON-RATED BOLLARD
---	---	---	K12-RATED BOLLARD
---	---	---	REMOVABLE K4-RATED BOLLARD
---	---	---	MAJOR CONTOUR
---	---	---	MINOR CONTOUR
---	---	---	SPOT ELEVATION
---	---	---	STORM PIPE
---	---	---	STORM MANHOLE
---	---	---	CURB INLET
---	---	---	GRATE INLET
---	---	---	YARD INLET
---	---	---	SANITARY SEWER PIPE
---	---	---	SANITARY SEWER MANHOLE
---	---	---	WATER LINE
---	---	---	FIRE HYDRANT
---	---	---	WATER VALVE
---	---	---	SIAMESE CONNECTION
---	---	---	LIGHT POLE
---	---	---	GAS LINE
---	---	---	ELECTRICAL LINE
---	---	---	SIWALK RAMP
---	---	---	TREELINE

OWNER'S / DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT, COMPLIANCE INSPECTORS.

4/8/16  
DATE

*James F. Kneth, Jr.*  
OWNER/DEVELOPER SIGNATURE

N/A  
CARD NO.

James F. Kneth, Jr.  
PRINTED NAME AND TITLE

EROSION AND SEDIMENT CONTROL LEGEND & SYMBOLS

SYMBOL	DESCRIPTION
---	LIMITS OF DISTURBANCE
SSF	SUPER SILT FENCE
DF	SUPER SILT FENCE
AGIP	AT-GRADE INLET PROTECTION
CIP	CURB INLET PROTECTION
SCE	STABILIZED CONSTRUCTION ENTRANCE
A-2	EARTH DIKE
BB	BAFFLE BOARD
RPS	REMOVABLE PUMPING STATION
RRP	RIPRAP INFLOW PROTECTION

AS BUILT INFORMATION FOR RSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
4/2/17

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Approved: *John P. Blitzer*  
Howard SCD  
4/18/16

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. 45292 EXPIRATION DATE: 05/21/2016.  
*Robert Crowley*

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Robert Crowley*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
5-6-16  
DATE  
*Robert Crowley*  
CHIEF, DIVISION OF LAND DEVELOPMENT  
5-11-16  
DATE  
*Robert Crowley*  
DIRECTOR  
5-10-16  
DATE

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

JACOBS  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000  
SUBDIVISION NAME: EMERSON/REVITZ PROPERTY  
TAX MAP: 47  
LOT/PARCEL #: PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q

PLAT # 2016-2074  
DEED: 11479/005  
WATER CODE: 6TH  
SEWER CODE: 20

TITLE: CIVIL LEGEND AND ABBREVIATIONS  
DES. BY: M. WERDER  
SCALE: NTS  
PROJ. No.:  
DRN. BY: M. WERDER  
DATE: 04/04/2016  
2 OF 80  
CHK BY: R. CROWLEY  
APPROVED:

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

SURVEY NOTES

- 1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS...
A. PRIOR TO THE START OF EARTH DISTURBANCE...
B. UPON COMPLETION OF THE INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS...
C. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF ANOTHER GRADING UNIT...
D. PRIOR TO THE REMOVAL OR MODIFICATION OF SEDIMENT CONTROL PRACTICES...
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL...
3. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION IS REQUIRED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED AREAS ON THE PROJECT SITE EXCEPT FOR THOSE AREAS UNDER ACTIVE GRADING...
4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR TOP SOIL (SEC. B-4-2), PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES IF THE GROUND IS FROZEN, INCREMENTAL STABILIZATION (SEC. B-4-1) SPECIFICATIONS SHALL BE ENFORCED IN AREAS WITH >15' OF CUT AND/OR FILL. STOCKPILES (SEC. B-4-8) IN EXCESS OF 20 FT. MUST BE BENCHED WITH STABLE OUTLET, ALL CONCENTRATED FLOW, STEEP SLOPE, AND HIGHLY ERODIBLE AREAS SHALL RECEIVE SOIL STABILIZATION MATTING (SEC. B-4-6).
5. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE CID.
6. SITE ANALYSIS:
TOTAL AREA OF SITE 2.00 ACRES
AREA DISTURBED 4.67 ACRES
AREA TO BE ROOFED OR PAVED 1.23 ACRES
AREA TO BE VEGETATIVELY STABILIZED 2.89 ACRES
TOTAL CUT 2850 CU. YDS.
TOTAL FILL 1100 CU. YDS.
OFF-SITE WASTE/BORROW LOCATION TO BE DETERMINED BY THE CONTRACTOR
7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
8. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE CID. THE SITE AND ALL CONTROLS SHALL BE INSPECTED BY THE CONTRACTOR WEEKLY, AND THE NEXT DAY AFTER EACH RAIN EVENT. A WRITTEN REPORT BY THE CONTRACTOR, MADE AVAILABLE UPON REQUEST, IS PART OF EVERY INSPECTION AND SHOULD INCLUDE:
-INSPECTION DATE
-INSPECTION TYPE (ROUTINE, PRE-STORM EVENT, DURING RAIN EVENT)
-NAME AND TITLE OF INSPECTOR
-WEATHER INFORMATION (CURRENT CONDITIONS AS WELL AS TIME AND AMOUNT OF LAST RECORDED PRECIPITATION)
-BRIEF DESCRIPTION OF PROJECT'S STATUS (E.G., PERCENT COMPLETE) AND/OR CURRENT ACTIVITIES
-EVIDENCE OF SEDIMENT DISCHARGES
-IDENTIFICATION OF PLAN DEFICIENCIES
-IDENTIFICATION OF SEDIMENT CONTROLS THAT REQUIRE MAINTENANCE
-IDENTIFICATION OF MISSING OR IMPROPERLY INSTALLED SEDIMENT CONTROLS
-COMPLIANCE STATUS REGARDING THE SEQUENCE OF CONSTRUCTION AND STABILIZATION REQUIREMENTS
-PHOTOGRAPHS
-MONITORING/SAMPLING
-MAINTENANCE AND/OR CORRECTIVE ACTION PERFORMED
-OTHER INSPECTION ITEMS AS REQUIRED BY THE GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES (NPDES, MDE)
9. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN AND SHALL BE BACK-FILLED AND STABILIZED BY EACH WORKDAY, WHICHEVER IS SHORTER.
10. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE HSCD PRIOR TO PROCEEDING WITH CONSTRUCTION. MINOR REVISIONS MAY ALLOWED BY THE CID PER THE LIST OF HSCD-APPROVED FIELD CHANGES.
11. DISTURBANCE SHALL NOT OCCUR OUTSIDE THE L.O.D. A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC. PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE CID, UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE CID, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.
12. WASH WATER FROM ANY EQUIPMENT, VEHICLES, WHEELS, PAVEMENT, AND OTHER SOURCES MUST BE TREATED IN A SEDIMENT BASIN OR OTHER APPROVED WASHOUT STRUCTURE.
13. TOPSOIL SHALL BE STOCKPILED AND PRESERVED ON-SITE FOR REDISTRIBUTION ONTO FINAL GRADE.
14. ALL SILT FENCE AND SUPER SILT FENCE SHALL BE PLACED ON-THE-CONTOUR, AND BE IMBRICATED AT 25" MINIMUM INTERVALS, WITH LOWER ENDS CURLED UPHILL BY 2" IN ELEVATION.
15. STREAM CHANNELS MUST NOT BE DISTURBED DURING THE FOLLOWING RESTRICTED TIME PERIODS (INCLUSIVE):
-USE I AND II MARCH 1 - JUNE 15
-USE III AND IIII OCTOBER 1 - APRIL 30
-USE IV MARCH 1 - MAY 31
16. A COPY OF THIS PLAN, THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND ASSOCIATED PERMITS SHALL BE ON-SITE AND AVAILABLE WHEN THE SITE IS ACTIVE.

- 1. BOUNDARY INFORMATION BASED ON AS-BUILT DRAWINGS FROM DAFT MCCUNE WALKER INC.
2. TOPOGRAPHIC INFORMATION BASED ON AS-BUILT DRAWINGS FROM DAFT MCCUNE WALKER INC.
3. HORIZONTAL DATUM BASED ON MCS-NAD83.
4. VERTICAL DATUM BASED ON NAVD88.
5. NOTIFY THE CONTRACTING OFFICER'S REPRESENTATIVE (COR) IMMEDIATELY IF CONDITIONS DIFFER FROM WHAT IS SHOWN ON PLANS.

SITE UTILITY NOTES

- 1. DIG TEST PITS AT ALL UTILITY TIE IN LOCATIONS AND EXISTING UTILITY CROSSINGS, TO VERIFY EXISTING INVERT INFORMATION, PIPE SIZES AND MATERIALS. IF FINDINGS DIFFER FROM WHAT IS SHOWN ON PLANS, NOTIFY THE CONTRACTING OFFICER REPRESENTATIVE IMMEDIATELY, PRIOR TO COMMENCING ANY CONSTRUCTION.
2. PROVIDE 45" VERTICAL BENDS TO ROUTE WATERLINES BENEATH OTHER UTILITIES WHERE THERE IS A CONFLICT, AS REQUIRED, MINIMUM 12" VERTICAL SEPARATION REQUIRED BETWEEN UTILITIES.
3. REROUTE AND RELOCATE ANY EXISTING UTILITY IMPACTED FROM CONSTRUCTION, AS NECESSARY TO MAINTAIN PROPER COVER AND SERVICE OF EXISTING UTILITIES AFTER FINAL GRADING.
4. CONTRACTOR SHALL PATCH AND REPAIR PAVEMENT, CURBS AND GUTTERS, AND PAVEMENT MARKINGS THAT ARE DAMAGED OR REMOVED AS A RESULT OF UTILITY INSTALLATION.
5. TAPPING INTO EXISTING MANHOLES FOR A PIPE 10" OR LESS SHALL BE DONE BY CORING.
6. LINE CONNECTION TO THE MANHOLE MAY BE MADE WITH AN APPROVED FLEXIBLE SLEEVE OR A SHORT LENGTH OF PIPE WITH A JOINT WITHIN 2' OF THE INSIDE FACE OF THE MANHOLE.
7. INSTALLATION OF NEW SANITARY SEWER LINE SHALL COMMENCE AT THE DOWNSTREAM END AND BE CONSTRUCTED UPSTREAM.
8. PROVIDE A MINIMUM OF 48 INCHES COVER OVER ALL SANITARY SEWER MAINS IN PAVED AREAS AND MINIMUM OF 36 INCHES OF COVER OVER ALL SANITARY SEWER MAINS IN NON-PAVED AREAS.
9. SANITARY SEWER LINES AND WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 10 FEET OF HORIZONTAL SEPARATION. THE WATER MAIN SHALL BE INSTALLED A MINIMUM OF 12 INCHES ABOVE THE SEWER LINE AND IN A SEPARATE TRENCH, WHERE NEITHER OF THESE SEPARATIONS CAN BE PROVIDED AND/OR THE WATER MAIN NEEDS TO CROSS UNDER THE SEWER LINE, THE SEWER LINE SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET ON BOTH SIDES OF THE WATER LINE.

SITE REMOVAL NOTES

- 1. LIMITS AND ITEMS SHOWN FOR REMOVAL ARE BASED ON BEST AVAILABLE RECORD MAPPING. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY ITEMS NOT SHOWN WITHIN THE LIMITS OF CONSTRUCTION AS NECESSARY TO COMPLETE THE REQUIRED WORK. ITEMS REQUIRING REMOVAL DURING CONSTRUCTION SHALL BE REPLACED TO MEET AND/OR EXCEED THEIR ORIGINAL EXISTING CONDITION.
2. COORDINATE LIMITS OF REMOVAL WITH SITE LAYOUT, SITE GRADING AND DRAINAGE, AND SITE UTILITY PLANS.
3. PROVIDE A CLEAN, STRAIGHT SAW CUT THROUGH THE FULL DEPTH OF PAVEMENT AT THE LIMITS OF CONCRETE AND ASPHALT PAVEMENT REMOVAL.
4. ALL UTILITIES SHALL REMAIN IN SERVICE AT ALL TIMES DURING CONSTRUCTION. UTILITIES MARKED AS TO BE REMOVED OR ABANDONED IN PLACE ARE TO REMAIN IN SERVICE UNTIL NEW UTILITIES ARE INSTALLED. CONTRACTOR SHALL NOTIFY AND SCHEDULE ANY INTENDED UTILITY INTERRUPTIONS WITH THE CONTRACTING OFFICER.
5. DISPOSE OF ALL DEBRIS AND CONSTRUCTION MATERIAL IN AN APPROVED OFF-SITE WASTE DISPOSAL FACILITY.
6. THE CONTRACTOR SHALL EXCAVATE ALL TRENCHES TO INDICATED GRADIENTS, LINES, DEPTHS, AND ELEVATIONS. THE CONTRACTOR SHALL TAKE EXTRA CARE WHILE EXCAVATING TRENCHES AROUND EXISTING UTILITIES AND SHALL ENSURE PROTECTION OF ALL UTILITIES THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL HAND EXCAVATE AS NECESSARY TO AVOID ANY POTENTIAL DAMAGE. CONTRACTOR SHALL ALSO UTILIZE TRENCH BOXES AND SHEETING/SHORING AS NECESSARY TO PROTECT EXISTING SITE FEATURES AND UTILITIES.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS BUREAU OF ENGINEERING GENERAL UTILITY NOTES

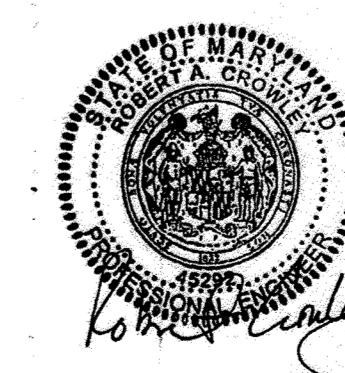
- PART 1
1. APPROXIMATE LOCATIONS OF EXISTING MAINS ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING MAINS AND SERVICES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED SHALL BE REPAIRED IMMEDIATELY TO THE SATISFACTION OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
2. TOPOGRAPHIC FIELD SURVEYS WERE PERFORMED ON (DATE) BY (ENGINEERING / SURVEY FIRM).
3. HORIZONTAL AND VERTICAL SURVEY CONTROLS:
THE COORDINATES SHOWN ON THE DRAWINGS ARE BASED ON MARYLAND STATE REFERENCE SYSTEM NAD 83/91 AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 47HE, NO. 47HF, AND NO. 47H2. ALL VERTICAL CONTROLS ARE BASED ON NAVD 88. VERTICAL CONTROLS PROVIDED ON THE DRAWINGS ARE (ENGINEERING / SURVEY FIRM SHALL PROVIDE DESCRIPTION OF VERTICAL CONTROL POINTS, I.E., IRON BARS, CROSS CUTS ON CONCRETE STRUCTURES).
4. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
5. CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'-0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE OWNER HAS CONTACTED THE UTILITY COMPANIES AND HAS MADE ARRANGEMENTS FOR BRACING OF POLES AS SHOWN ON THE DRAWINGS. IN THE EVENT THE CONTRACTOR'S WORK REQUIRES THE BRACING OF ADDITIONAL POLES OR DAMAGES SHALL BE DEDUCTED FROM MONIES OWED TO THE CONTRACTOR. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
6. FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
7. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL [ ] AT THE LOCATIONS OF THE TEST PITS. A NOTE OR NO NOTES CONTAINING THE RESULTS OF THE TEST PIT OR PITS IS INCLUDED ON THE DRAWINGS. EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
8. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
AT&T .....1-800-252-1133
BGE (CONSTRUCTION SERVICES) .....410-637-8713
BGE (EMERGENCY) .....410-685-0123
BUREAU OF UTILITIES .....410-313-4900
COLONIAL PIPELINE CO. ....410-795-1390
MISS UTILITY .....1-800-257-7777
STATE HIGHWAY ADMINISTRATION .....410-531-5533
VERIZON .....1-800-743-0033
9. TREES AND SHRUBS ARE TO BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT. TREES AND SHRUBS LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
10. THE CONTRACTOR SHALL REMOVE TREES, STUMPS, AND ROOTS ALONG THE LINE OF EXCAVATION. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONSTRUCTION OF THE MAIN.
11. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF HIGHWAYS, HOWARD COUNTY, AT (410) 313-7450 AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER/SEWER MAINS OR HOUSE CONNECTIONS. THE APPROVAL OF THESE DRAWINGS WILL CONSTITUTE COMPLIANCE WITH DPW REQUIREMENTS PER SECTION 18.114a OF THE HOWARD COUNTY CODE.

GENERAL NOTES

- 1. PRIOR TO ANY LAND DISTURBING ACTIVITIES, CONTACT "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO START OF WORK.
2. ENSURE THAT POSITIVE DRAINAGE IS MAINTAINED AWAY FROM ALL BUILDINGS.
3. ALL DIMENSIONS SHOWN ARE TO FACE OF CURB OR EDGE OF PAVEMENT, UNLESS NOTED OTHERWISE. UNLESS OTHERWISE REQUIRED BY APPLICABLE PERMIT OR AGENCY, OR UNLESS OTHERWISE SPECIFIED IN THE CONSTRUCTION DOCUMENTS, CONTRACTOR SHALL RESTORE DISTURBED AREAS OR DAMAGED APPURTENANCES TO MEET OR EXCEED EXISTING CONDITIONS.
4. CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN FOR STERLING DRIVE TO THE COR THAT IS IN ACCORDANCE WITH SECTION 104 OF THE SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS AND THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY FIELD CONDITIONS PRIOR TO CONSTRUCTION AND TO NOTIFY THE CONTRACTING OFFICER IF FIELD CONDITIONS DIFFER.
6. ALL CONSTRUCTION SHALL CONFORM TO THE PROJECT SPECIFICATIONS, CURRENT MARYLAND SHA ROAD AND BRIDGE STANDARDS, AND USACE STANDARDS. DEVIATION FROM THESE STANDARDS AND SPECIFICATIONS SHALL FIRST BE APPROVED BY THE CONTRACTING OFFICER.
7. THERE ARE NO KNOWN WETLANDS WITHIN THE LIMITS OF DISTURBANCE. IN THE EVENT WETLAND AREAS ARE IMPACTED DURING CONSTRUCTION, PROPER MITIGATION SHALL BE PROVIDED IN ACCORDANCE WITH NAVFAC AND MD DE REQUIREMENTS.
8. EXISTING UTILITIES SHOWN ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR REPAIRING ANY DAMAGES WHICH OCCUR BY FAILURE TO LOCATE OR PROTECT THESE UTILITIES. IF DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN HEREIN, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER AND TAKE THE NECESSARY STEPS TO PROTECT THE UTILITY AND ENSURE THE CONTINUANCE OF SERVICE.
9. CONTRACTOR SHALL CONTACT MISS UTILITY AT 1-800-522-7001 AND COORDINATE WITH COR FOR LOCATING ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO ACQUIRE THE SERVICES OF A UTILITY LOCATING COMPANY TO PHYSICALLY LOCATE THE VERTICAL AND HORIZONTAL DEPTH, TYPE, AND MATERIAL OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF UNDERGROUND WORK. EXISTING UTILITIES NOT SHOWN IN THESE DRAWINGS MAY EXIST.
10. NO DISTURBANCE SHALL TAKE PLACE OUTSIDE THE LIMITS OF DISTURBANCE.
11. GRADES SHOWN DENOTE TOP OF FINISHED GRADE UNLESS OTHERWISE STATED ON TYPICAL SECTIONS OR PLANS.
12. CONTRACTOR SHALL KEEP THE CURRENT VERSION OF THE MARYLAND SHA ROAD AND BRIDGE STANDARDS, SPECIFICATIONS, AND MARYLAND EROSION AND SEDIMENT CONTROL HANDBOOK ON-SITE AT ALL TIMES DURING CONSTRUCTION FOR REFERENCE TO SECTIONS INDICATED IN THESE PLANS.
13. CONTRACTOR SHALL REPAIR ANY DAMAGE AS RESULT OF CONSTRUCTION TO THE CONTRACTING OFFICER'S SATISFACTION AND AT NO COST TO THE GOVERNMENT.

AS BUILT INFORMATION FOR PSWM:
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.
ROBERT CROWLEY
45292
2/8/17

PROFESSIONAL CERTIFICATION
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. 45292 EXPIRATION DATE: 05/21/2016.

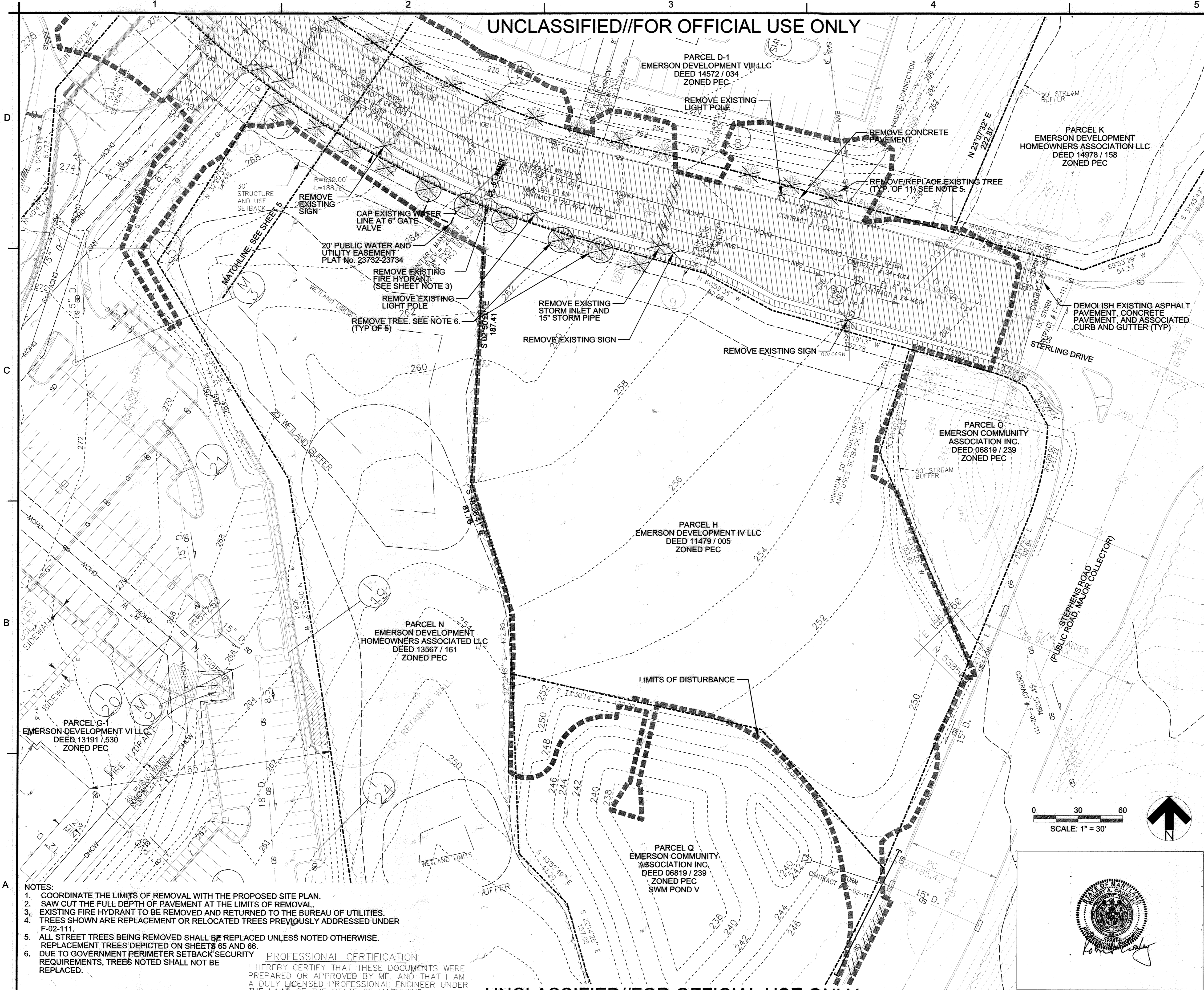


THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved: [Signature]
HOWARD SOIL CONSERVATION DISTRICT
4/19/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 5-16-16
CHIEF, DIVISION OF LAND DEVELOPMENT
[Signature] 5-16-16
DIRECTOR

Table with columns: DATE, No., REVISION DESCRIPTION. Includes Emerson Campus Vehicle Check Point Security Gate Parcel H information.

Table with columns: DES. BY, SCALE, PROJ. No., DRN. BY, DATE, CHK. BY, APPROVED. Includes project details like 3 OF 80 and SDP-16-005.



- NOTES:
- COORDINATE THE LIMITS OF REMOVAL WITH THE PROPOSED SITE PLAN.
  - SAW CUT THE FULL DEPTH OF PAVEMENT AT THE LIMITS OF REMOVAL.
  - EXISTING FIRE HYDRANT TO BE REMOVED AND RETURNED TO THE BUREAU OF UTILITIES.
  - TREES SHOWN ARE REPLACEMENT OR RELOCATED TREES PREVIOUSLY ADDRESSED UNDER F-02-111.
  - ALL STREET TREES BEING REMOVED SHALL BE REPLACED UNLESS NOTED OTHERWISE. REPLACEMENT TREES DEPICTED ON SHEETS 65 AND 66.
  - DUE TO GOVERNMENT PERIMETER SETBACK SECURITY REQUIREMENTS, TREES NOTED SHALL NOT BE REPLACED.

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. 45292 EXPIRATION DATE: 05/21/2016.

AS BUILT CERTIFICATION FOR RSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/3/17  
 ROBERT CROWLEY  
 46292

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-10-16 DATE

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		



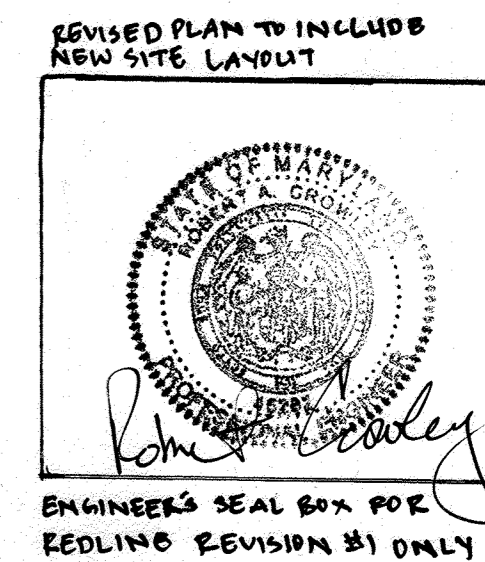
SUBDIVISION NAME: TAX MAP		LOT/PARCEL #
EMERSON/RENTZ PROPERTY 47		LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE		
EXISTING CONDITIONS AND SITE DEMOLITION PLAN		
DES. BY M. WERDER	SCALE 1:30	PROJ. No.
DRN. BY M. WERDER	DATE 04/04/2016	<b>4 OF 80</b>
CHK. BY R. CROWLEY	APPROVED	

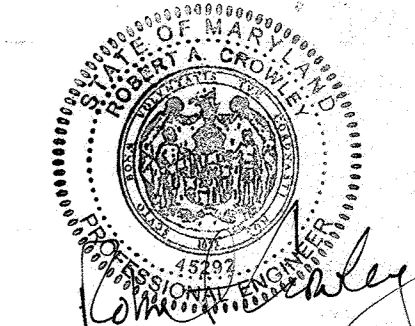
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UNCLASSIFIED//FOR OFFICIAL USE ONLY



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. 45292 Expiration Date: 05/21/2020



AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/19

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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Development Engineering Division 5-6-16  
Chief, Division of Land Development 5-4-16  
Director 5-16-16

Table with 3 columns: DATE, No., REVISION DESCRIPTION

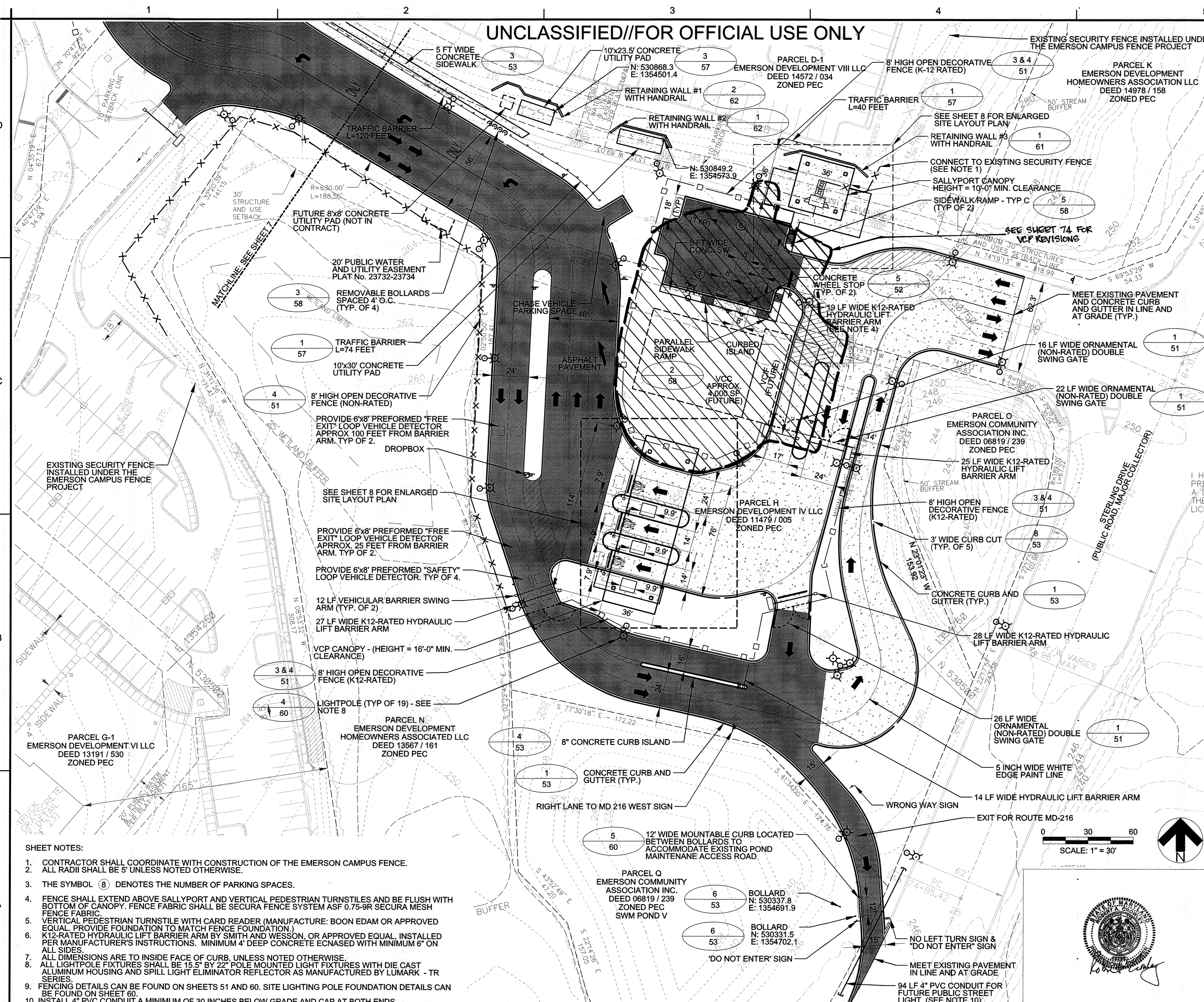
EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

JACOBS  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(713) 218-1000

Table with 3 columns: SUBDIVISION NAME, TAX MAP, LOT/PARCEL #

Table with 3 columns: DES. BY, SCALE, PROJ. No.

SDP-16-005



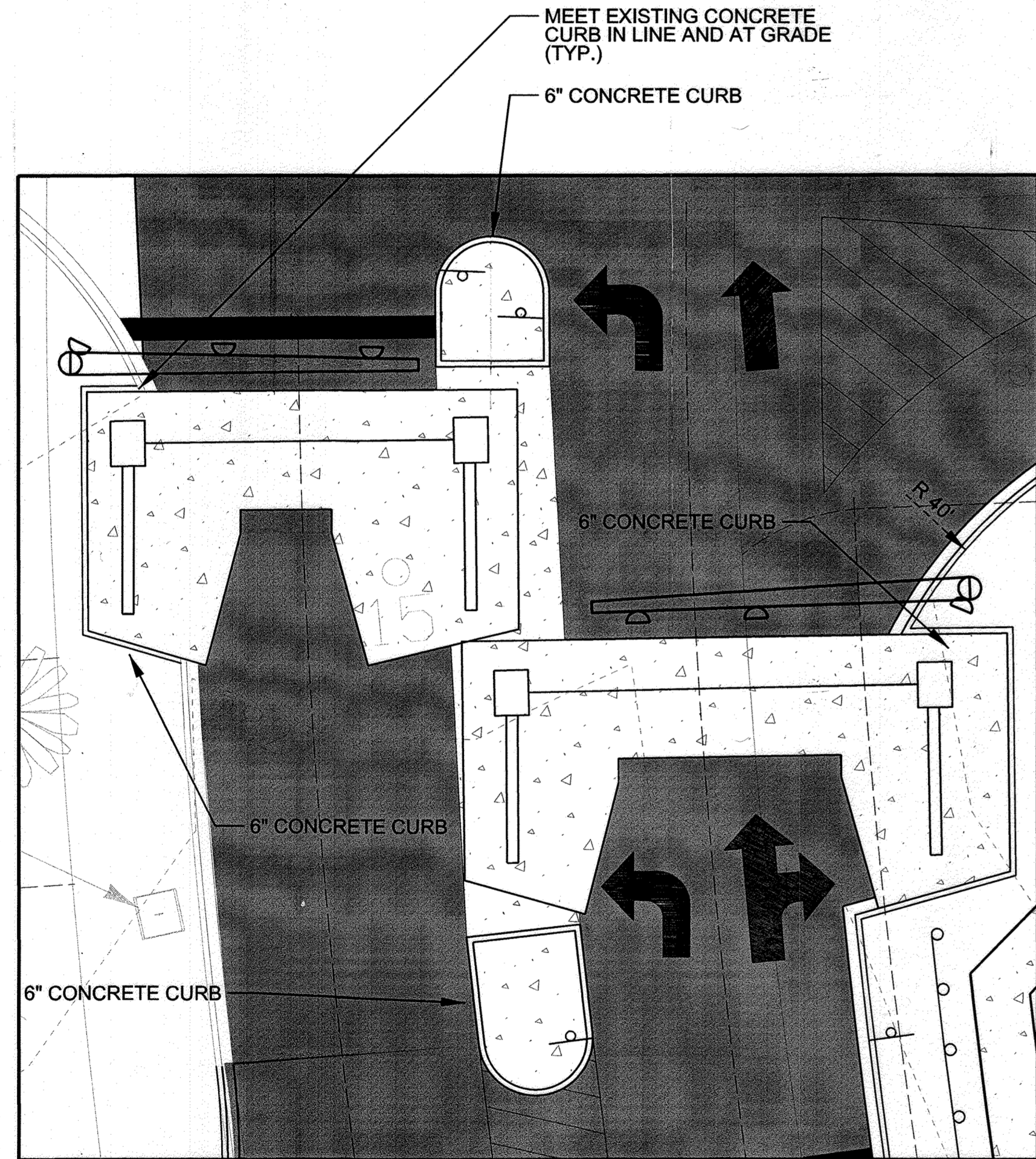
- SHEET NOTES:
1. CONTRACTOR SHALL COORDINATE WITH CONSTRUCTION OF THE EMERSON CAMPUS FENCE.
2. ALL RADII SHALL BE 5' UNLESS NOTED OTHERWISE.
3. THE SYMBOL (8) DENOTES THE NUMBER OF PARKING SPACES.
4. FENCE SHALL EXTEND ABOVE SALLYPORT AND VERTICAL PEDESTRIAN TURNSTILES AND BE FLUSH WITH BOTTOM OF CANOPY.
5. VERTICAL PEDESTRIAN TURNSTILE WITH CARD READER (MANUFACTURE: BOON EDAM OR APPROVED EQUAL. PROVIDE FOUNDATION TO MATCH FENCE FOUNDATION.)
6. K12-RATED HYDRAULIC LIFT BARRIER ARM BY SMITH AND WESSON, OR APPROVED EQUAL, INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
7. ALL DIMENSIONS ARE TO INSIDE FACE OF CURB, UNLESS NOTED OTHERWISE.
8. ALL LIGHTPOLE FIXTURES SHALL BE 15.5" BY 22" POLE MOUNTED LIGHT FIXTURES WITH DIE CAST ALUMINUM HOUSING AND SPILL LIGHT ELIMINATOR REFLECTOR AS MANUFACTURED BY LUMARK - TR SERIES.
9. FENCING DETAILS CAN BE FOUND ON SHEETS 51 AND 60. SITE LIGHTING POLE FOUNDATION DETAILS CAN BE FOUND ON SHEET 60.
10. INSTALL 4" PVC CONDUIT A MINIMUM OF 30 INCHES BELOW GRADE AND CAP AT BOTH ENDS.
11. VCC AND ASSOCIATED PAVEMENT IS TO BE BUILT.
12. REFER TO SHEET 74 FOR THE REVISED LAYOUT AND SHEETS 15-17 FOR ELEVATION INFORMATION.

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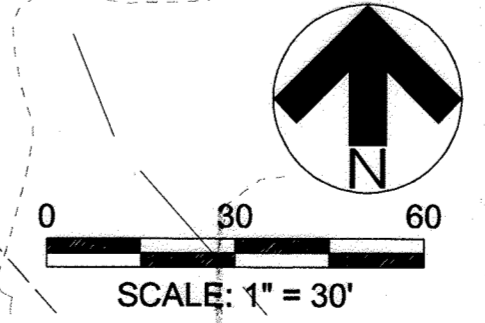
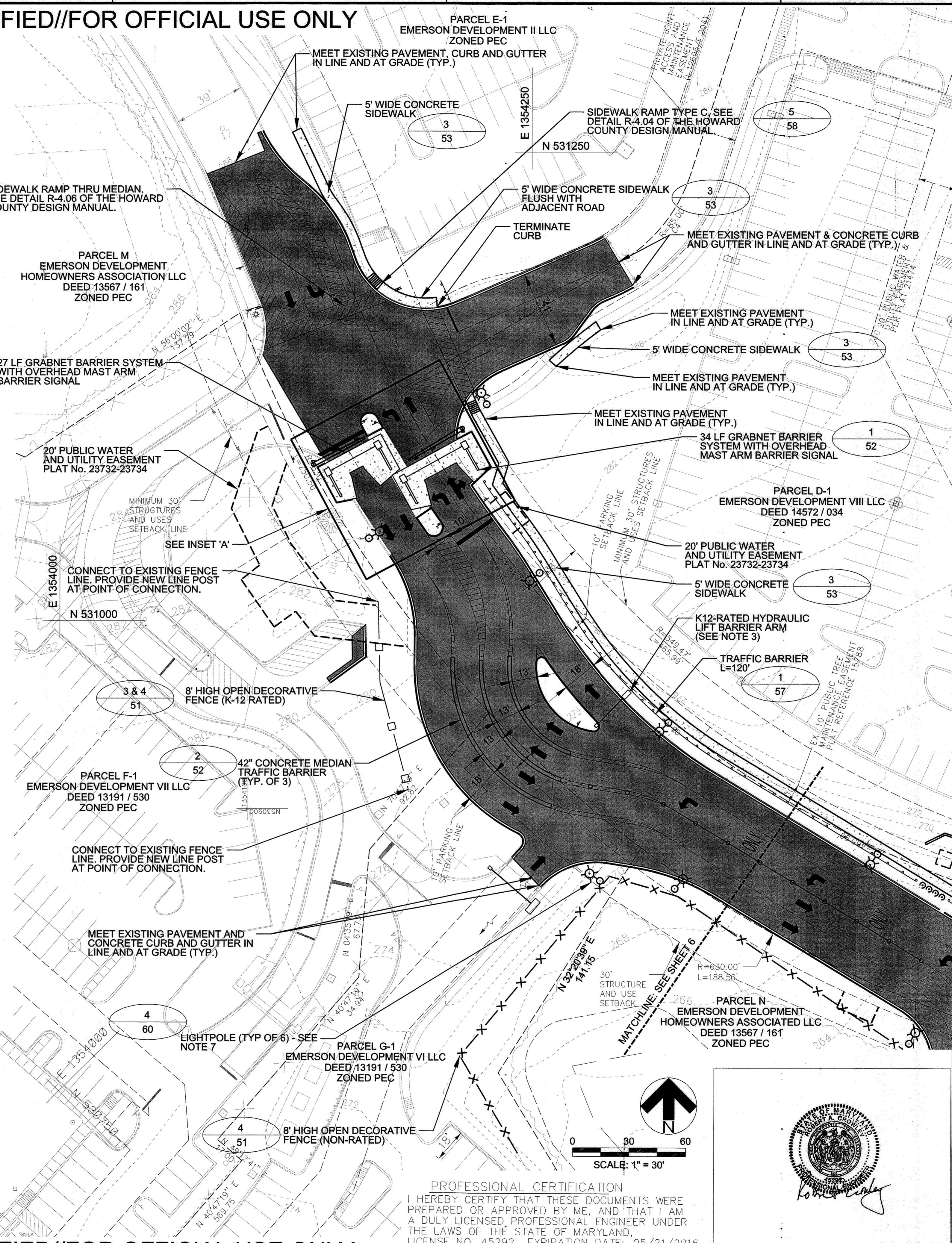
SHEET NOTES:

1. CONTRACTOR SHALL COORDINATE WITH CONSTRUCTION OF THE EMERSON CAMPUS FENCE.
2. ALL RADII SHALL BE 5' UNLESS NOTED OTHERWISE.
3. K12-RATED LIFT BARRIER ARM BY SMITH AND WESSON, OR APPROVED EQUAL, INSTALLED PER MANUFACTURER'S INSTRUCTIONS. MINIMUM 4" DEEP CONCRETE ENCASED WITH MINIMUM 6" ON ALL SIDES.
4. NOT USED.
5. ALL DIMENSIONS AND ROADWAY COORDINATE LOCATIONS ARE TO INSIDE FACE OF CURB UNLESS NOTED OTHERWISE.
6. ALL PROPOSED FENCE SHALL BE DECORATIVE (K12 RATED) AS SHOWN IN DETAILS 3 AND 4 ON SHEET 20, UNLESS NOTED OTHERWISE.
7. ALL LIGHTPOLE FIXTURES SHALL BE 15.5" BY 22" POLE MOUNTED LIGHT FIXTURES WITH DIE CAST ALUMINUM HOUSING AND SPILL LIGHT ELIMINATOR REFLECTOR AS MANUFACTURED BY LUMARK - TR SERIES.
8. FENCING DETAILS CAN BE FOUND ON SHEETS 51 AND 60. SITE LIGHTING POLE FOUNDATION DETAILS CAN BE FOUND ON SHEET 60.



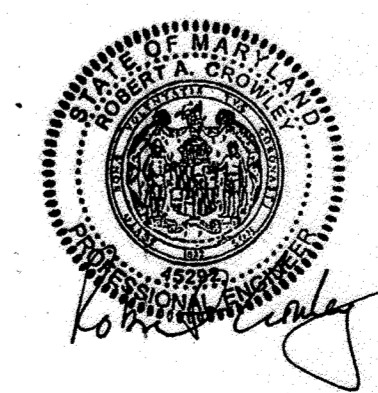
INSET 'A'

SCALE: 1" = 10'



SCALE: 1" = 30'

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. 45292 EXPIRATION DATE: 05/21/2016



AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/13/19

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Paul White</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>Vicki Schuler</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-16-16 DATE
<i>Valerie Joffe</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
------	-----	----------------------

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

<b>JACOBS</b> 1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

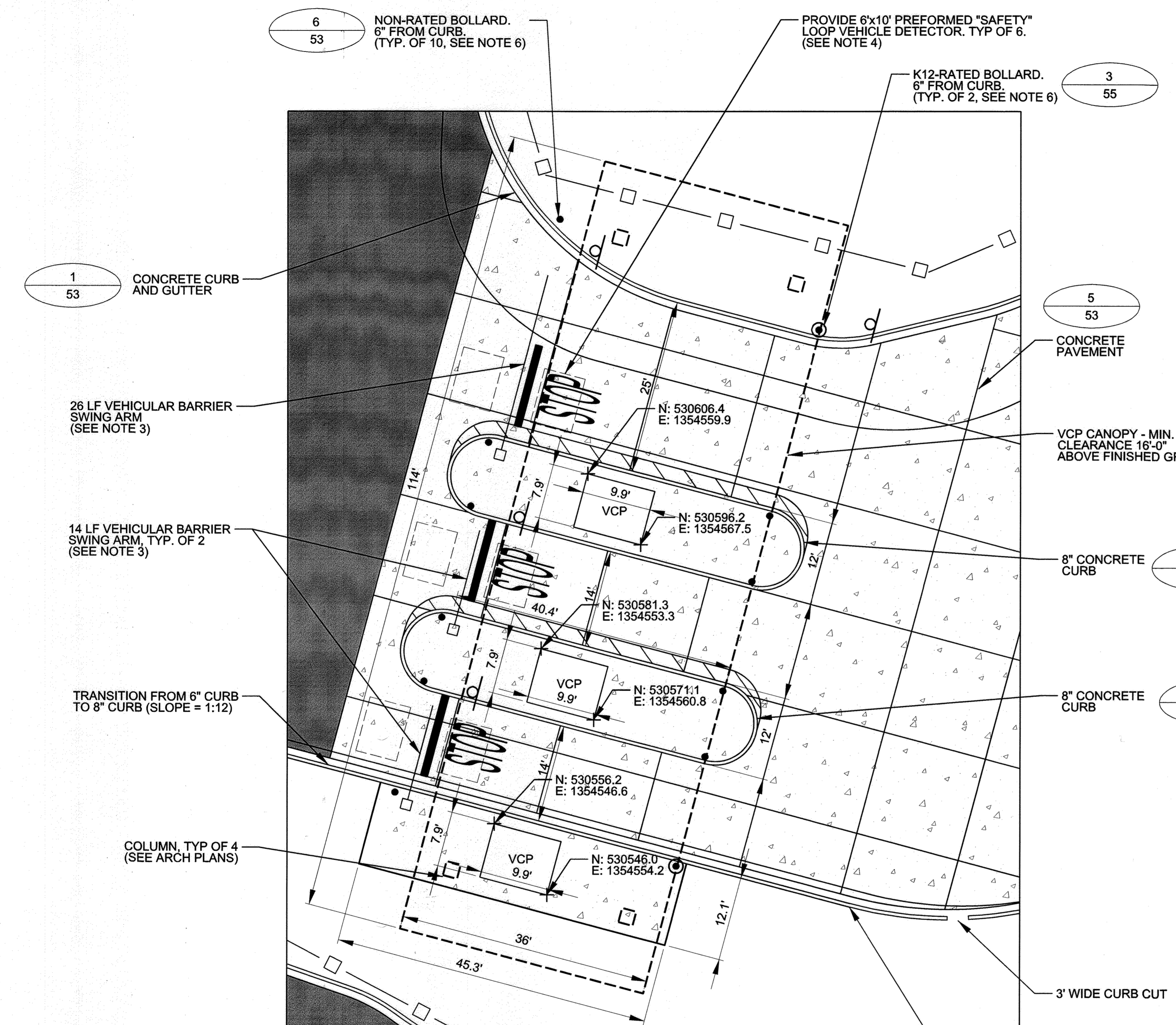
TITLE <b>SITE DEVELOPMENT PLAN</b>		
DES. BY M. WERDER	SCALE 1:30	PROJ. No.
DRN. BY M. WERDER	DATE 04/04/2016	7 OF 80
CHK BY R. CROWLEY	APPROVED	

SDP-16-005

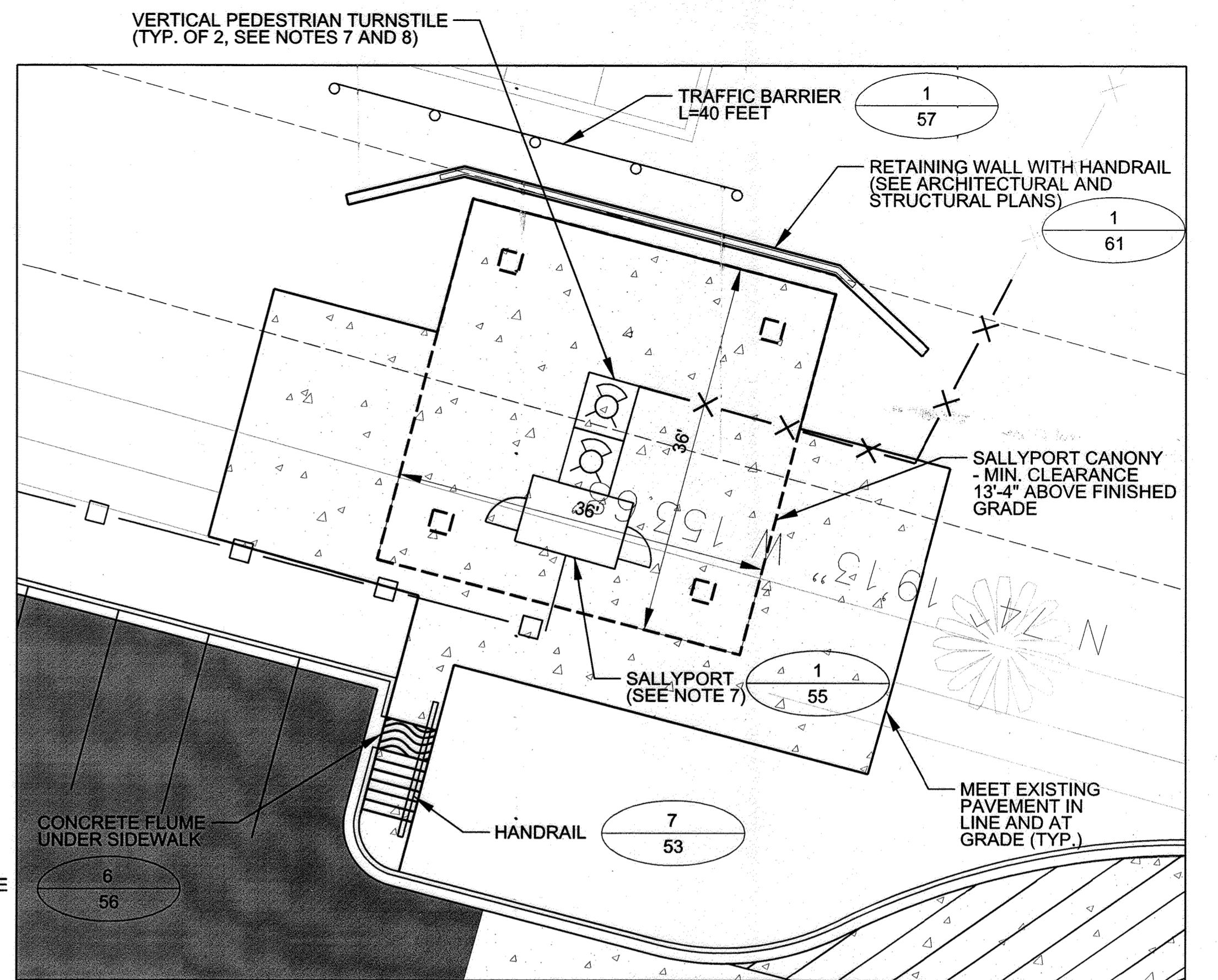
UNCLASSIFIED//FOR OFFICIAL USE ONLY

1 2 3 4 5

D  
C  
B  
A



**1 ENLARGED VCP SITE PLAN**  
SCALE: 1" = 10'  
(REFER TO SHEET 6 FOR LOCATION OF VCP CANOPY ON THE SITE.)

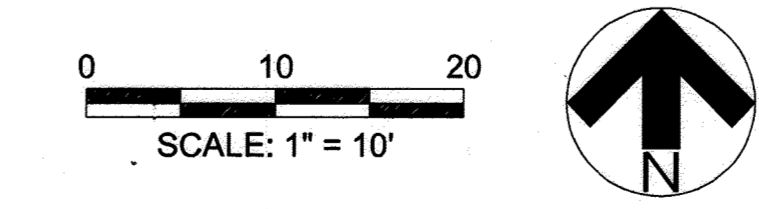


**2 ENLARGED SALLYPORT SITE PLAN**  
SCALE: 1" = 10'  
(REFER TO SHEET 6 FOR LOCATION OF SALLYPORT CANOPY ON THE SITE.)

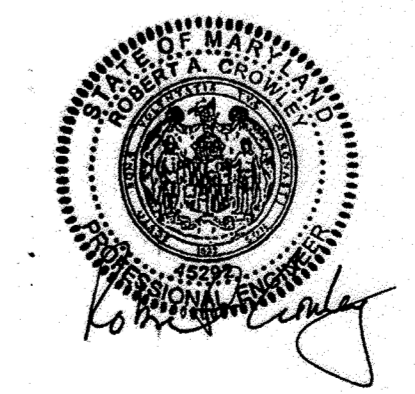
**SHEET NOTES:**

- ALL RADII SHALL BE 5' UNLESS NOTED OTHERWISE.
- ALL DIMENSIONS ARE TO INSIDE FACE OF CURB, UNLESS NOTED OTHERWISE.
- VEHICULAR BARRIER SWING ARM, MANUFACTURER: HY SECURITY STRONG ARM OR APPROVED EQUAL.
- INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTION.
- BASIS OF DESIGN: MARSH PRODUCTS MODEL 610 LOOP VEHICLE DETECTOR AND MODEL 865 PREFORMED LOOP. CONTRACTOR MAY SUBMIT AN ALTERNATE PRODUCT TO COR AS AN APPROVED EQUAL FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS AND THE FOLLOWING:  
PREFORMED LOOP SHALL BE INSTALLED NO GREATER THAN 2" BELOW SURFACE OF CONCRETE PAVEMENT. LEAD-IN WIRES FROM THE DETECTOR TO THE BEGINNING OF THE LOOP SHALL BE TWISTED A MINIMUM OF FIVE TIMES PER 100 LF. CONTRACTOR SHALL CUT BACK ALL CONCRETE REINFORCEMENT 2' FROM THE OUTER PERIMETER OF THE LOOP. CONNECTIONS TO THE DETECTOR, THE LOOP AND THE EXTENSION CABLE SHALL BE SOLDERED.  
LOOP VEHICLE DETECTOR SHALL BE SET TO ALLOW ADEQUATE DEPARTURE (4 SECONDS) DELAY FOR THE VEHICLE BARRIER ARM TO PREVENT VEHICLES BEING UNDER THE ARM AS IT GOES DOWN. THE CONTRACTOR SHALL COORDINATE WITH MPO SECURITY FOR DURATION OF DELAY.
- "SAFETY" LOOP SHALL PREVENT BARRIER ARM FROM LOWERING WHEN VEHICLE IS DETECTED.
- CENTER OF BOLLARDS SHALL BE 18 INCHES FROM FACE OF CURB.
- FENCE SHALL EXTEND ABOVE SALLYPORT AND VERTICAL PEDESTRIAN TURNSTILES AND BE FLUSH WITH BOTTOM OF CANOPY. FENCE FABRIC SHALL BE SECURA FENCE SYSTEM ASF 0.75-9R SECURA MESH FENCE FABRIC.
- VERTICAL PEDESTRIAN TURNSTILE WITH CARD READER (MANUFACTURER: BOON EDAM OR APPROVED EQUAL. PROVIDE FOUNDATION TO MATCH FENCE FOUNDATION.)

**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. 45292 EXPIRATION DATE: 05/21/2016.



AS BUILT CERTIFICATION FOR RSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/2/17

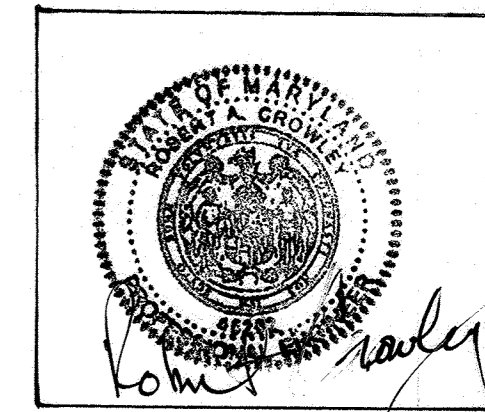


APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE
DATE	No. REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>	
PARCEL H	
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000	
<b>JACOBS</b>	
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000	
SUBDIVISION NAME	TAX MAP #
EMERSON / REVIZ PROPERTY	47
LOT/PARCEL #	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #	ZONE
15786	PEC
DEED	ELEC. DISTRICT
11479 / 005	6TH
WATER CODE	SEWER CODE
TITLE	
ENLARGED SITE LAYOUT PLAN	
DES. BY	SCALE
M. WERDER	1:10
DRN. BY	DATE
M. WERDER	04/04/2016
CHK. BY	APPROVED
R. CROWLEY	
PROJ. No.	8 OF 80
SDP-16-005	



UNCLASSIFIED//FOR OFFICIAL USE ONLY

REVISED PLAN TO INCLUDE NEW SITE LAYOUT



ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 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. 45292, Expiration Date: 05/21/2020



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. 45292 EXPIRATION DATE: 05/21/2016.

AS BUILT CERTIFICATION FOR PSWM: NOTE: THERE IS NO AS BUILT INFORMATION ON THIS SHEET. ROBERT CROWLEY 45292 2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Chief, Development Engineering Division: S.L. 16 DATE. Chief, Division of Land Development: S.M. 16 DATE. Director: S.M. 16 DATE. REVISION: 01/24/19, 1. REVISED SITE LAYOUT TO ADD VISITOR CENTER INSPECTION FACILITY.

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE PARCEL H. OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC. ONE TEXAS STATION, SUITE 200. TIMONIUM, MARYLAND 21093. (443) 689-8000.



Table with columns: SUBDIVISION NAME, TAX MAP, LOT/PARCEL #. Values: EMERSON/REMIT PROPERTY, 47, LOT 165/PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q.

Table with columns: DEED, WATER CODE, TITLE. Values: 11479 / 005, 6TH, ROADWAY COORDINATE CONTROL PLAN.

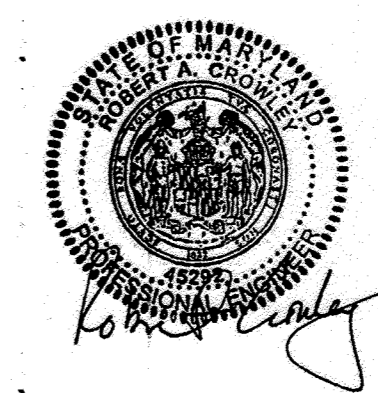
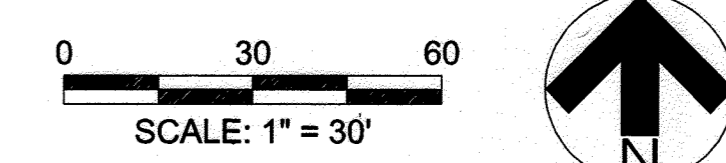
ROADWAY COORDINATE CONTROL PLAN

Table with columns: DES. BY, DRN. BY, CHK. BY, SCALE, DATE, APPROVED, PROJ. No. Values: M. WERDER, M. WERDER, R. CROWLEY, 1:30, 04/04/2016, [Signature], 9 OF 80.

ROADWAY LAYOUT COORDINATE TABLE. Table with columns: COORDINATE ID, NORTHING, EASTING, ELEVATION. Lists coordinates for 53 points along the roadway.

- SHEET NOTES: 1. ALL DIMENSIONS AND ROADWAY COORDINATE LOCATIONS ARE TO INSIDE FACE OF CURB... 2. UNLESS NOTED OTHERWISE COORDINATES PROVIDED ARE TO FACE OF CURB... 3. ALL RADII ARE 5 FT UNLESS NOTED OTHERWISE... 4. SEE AND ASSOCIATED PLANS... 5. REFER TO SHEET 74 FOR THE EXISTING LAYOUT AND SHEETS 75-77 FOR SUBMITTAL INFORMATION.

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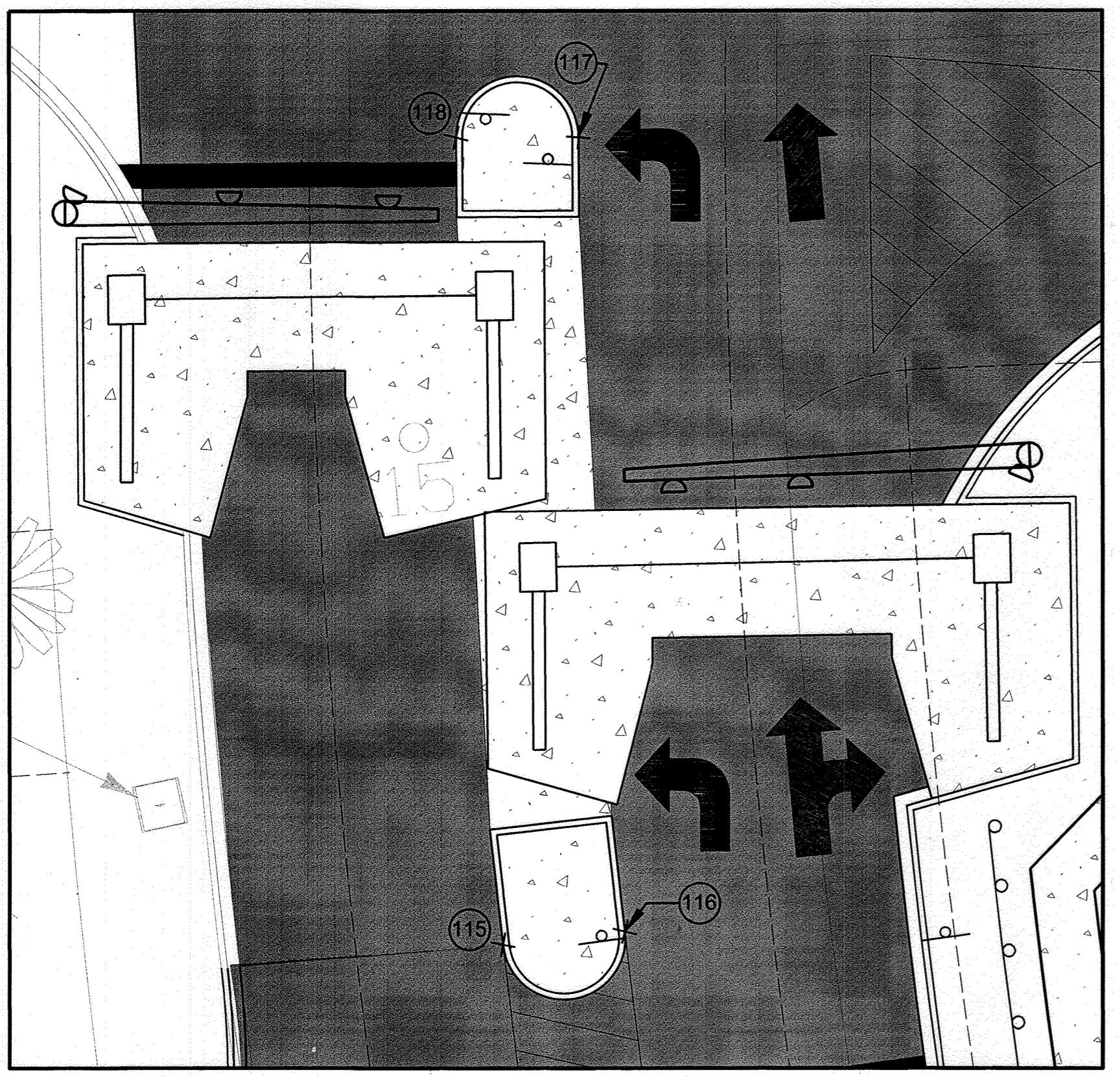


UNCLASSIFIED//FOR OFFICIAL USE ONLY

SHEET NOTES:  
 1. ALL RADII SHALL BE 5' UNLESS NOTED OTHERWISE.  
 2. ALL DIMENSIONS AND ROADWAY COORDINATE LOCATIONS ARE TO INSIDE FACE OF CURB UNLESS NOTED OTHERWISE.

ROADWAY COORDINATE TABLE

COORDINATE ID	NORTHING	EASTING	ELEVATION
100	530853.4	1354348.1	267.73
101	NOT USED		
102	530869.3	1354395.1	270.41
103	530871.5	1354291.2	271.40
104	530858.7	1354255.0	274.73
105	530874.2	1354240.0	275.22
106	530879.5	1354244.7	274.77
107	530887.3	1354243.2	275.10
108	530922.3	1354204.0	276.60
109	530984.1	1354188.3	279.00
110	530967.3	1354143.5	280.70
111	530941.7	1354282.8	273.03
112	530946.0	1354285.0	273.35
113	530979.7	1354257.3	275.73
114	530978.4	1354252.8	276.00
115	531047.1	1354193.9	281.10
116	531052.8	1354202.2	281.17
117	531108.5	1354168.3	283.81
118	531103.8	1354159.5	283.75
119	531160.1	1354148.8	285.54
120	531162.9	1354155.8	285.57
121	531171.3	1354152.5	285.85
122	531168.4	1354145.4	285.82
123	531195.7	1354142.7	286.39
124	531201.4	1354132.2	286.75
125	531222.6	1354124.3	287.14
126	531222.3	1354116.5	287.24
127	531238.1	1354105.1	287.71
128	531227.2	1354110.4	287.42
129	531237.3	1354102.7	287.71
130	531261.3	1354107.2	288.03
131	531236.8	1354126.0	287.36
132	531231.9	1354131.8	287.19
133	531199.5	1354153.9	286.31
134	531192.9	1354156.2	286.17
135	531170.0	1354110.0	285.94
136	531201.5	1354281.2	287.86
137	531205.0	1354286.1	288.00
138	531178.3	1354300.8	287.22
139	531173.2	1354293.7	286.89
140	531170.5	1354287.7	286.73
141	531165.6	1354281.7	286.48
142	531152.7	1354272.3	285.89
143	531147.8	1354266.2	285.65
144	531133.3	1354233.5	284.60
145	NOT USED		
146	531046.7	1354236.1	278.88
147	531027.8	1354249.0	277.49
148	531001.1	1354265.4	275.89
149	530918.6	1354348.5	269.50



AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/3/17  
 ROBERT CROWLEY 45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DIRECTOR  
 DATE: 5-6-16

CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 5-16-16

DIRECTOR  
 DATE: 5-16-16

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**

OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

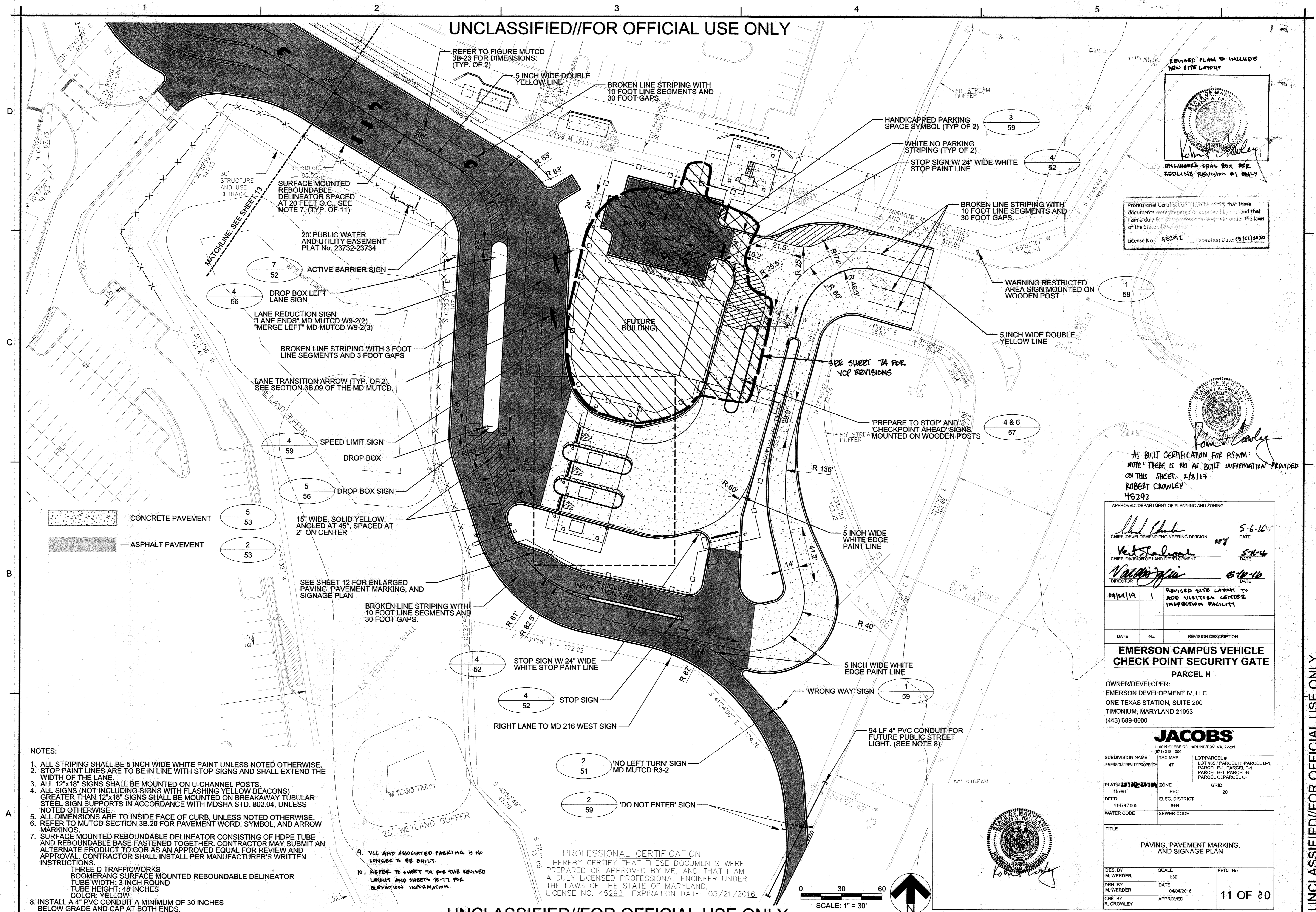
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REVITZ PROPERTY	47	LOT 155 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE  
 ROADWAY COORDINATE CONTROL PLAN

DES. BY M. WERDER	SCALE 1:30	PROJ. No.
DRN. BY M. WERDER	DATE 04/04/2016	10 OF 80
CHK. BY R. CROWLEY	APPROVED	

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. 45292 EXPIRATION DATE: 05/21/2016.

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- NOTES:
- ALL STRIPING SHALL BE 5 INCH WIDE WHITE PAINT UNLESS NOTED OTHERWISE. STOP PAINT LINES ARE TO BE IN LINE WITH STOP SIGNS AND SHALL EXTEND THE WIDTH OF THE LANE.
  - ALL 12"x18" SIGNS SHALL BE MOUNTED ON U-CHANNEL POSTS.
  - ALL SIGNS (NOT INCLUDING SIGNS WITH FLASHING YELLOW BEACONS) GREATER THAN 12"x18" SIGNS SHALL BE MOUNTED ON BREAKAWAY TUBULAR STEEL SIGN SUPPORTS IN ACCORDANCE WITH MSHA STD. 802.04, UNLESS NOTED OTHERWISE.
  - ALL DIMENSIONS ARE TO INSIDE FACE OF CURB, UNLESS NOTED OTHERWISE.
  - REFER TO MUTCD SECTION 3B.20 FOR PAVEMENT WORD, SYMBOL, AND ARROW MARKINGS.
  - SURFACE MOUNTED REBOUNDABLE DELINEATOR CONSISTING OF HDPE TUBE AND REBOUNDABLE BASE FASTENED TOGETHER. CONTRACTOR MAY SUBMIT AN ALTERNATE PRODUCT TO COR AS AN APPROVED EQUAL FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.  
THREE D TRAFFICWORKS  
BOOMERANG SURFACE MOUNTED REBOUNDABLE DELINEATOR  
TUBE WIDTH: 3 INCH ROUND  
TUBE HEIGHT: 48 INCHES  
COLOR: YELLOW
  - INSTALL A 4" PVC CONDUIT A MINIMUM OF 30 INCHES BELOW GRADE AND CAP AT BOTH ENDS.

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. 45292 EXPIRATION DATE: 05/21/2016.

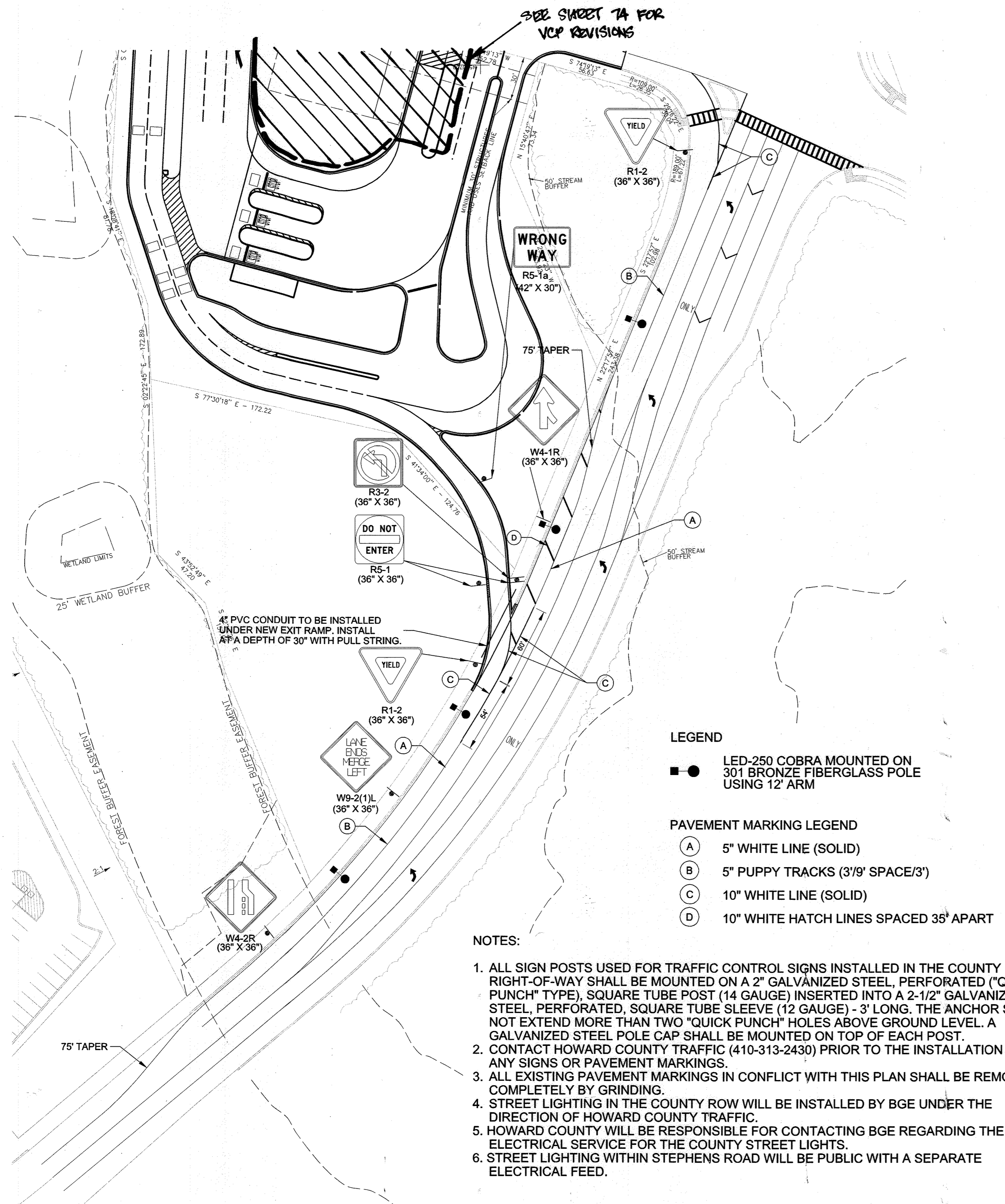
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 45292 Expiration Date: 05/21/2020

AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/3/17  
 ROBERT CROWLEY  
 45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>[Signature]</i>	CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i>	CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i>	DIRECTOR	6-10-16 DATE
04/24/19	1	REVISED SITE LAYOUT TO ADD VISITORS CENTER INSPECTION FACILITY
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REVIT PROPERTY	47	LOT 195/PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
PAVING, PAVEMENT MARKING, AND SIGNAGE PLAN		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	
R. CROWLEY	<i>[Signature]</i>	
		11 OF 80

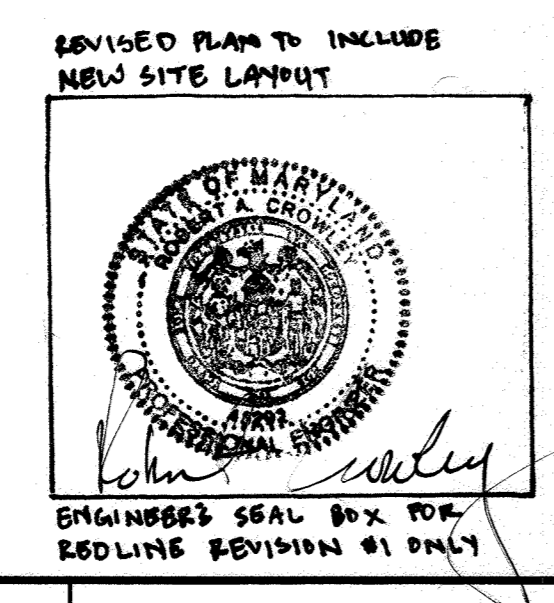
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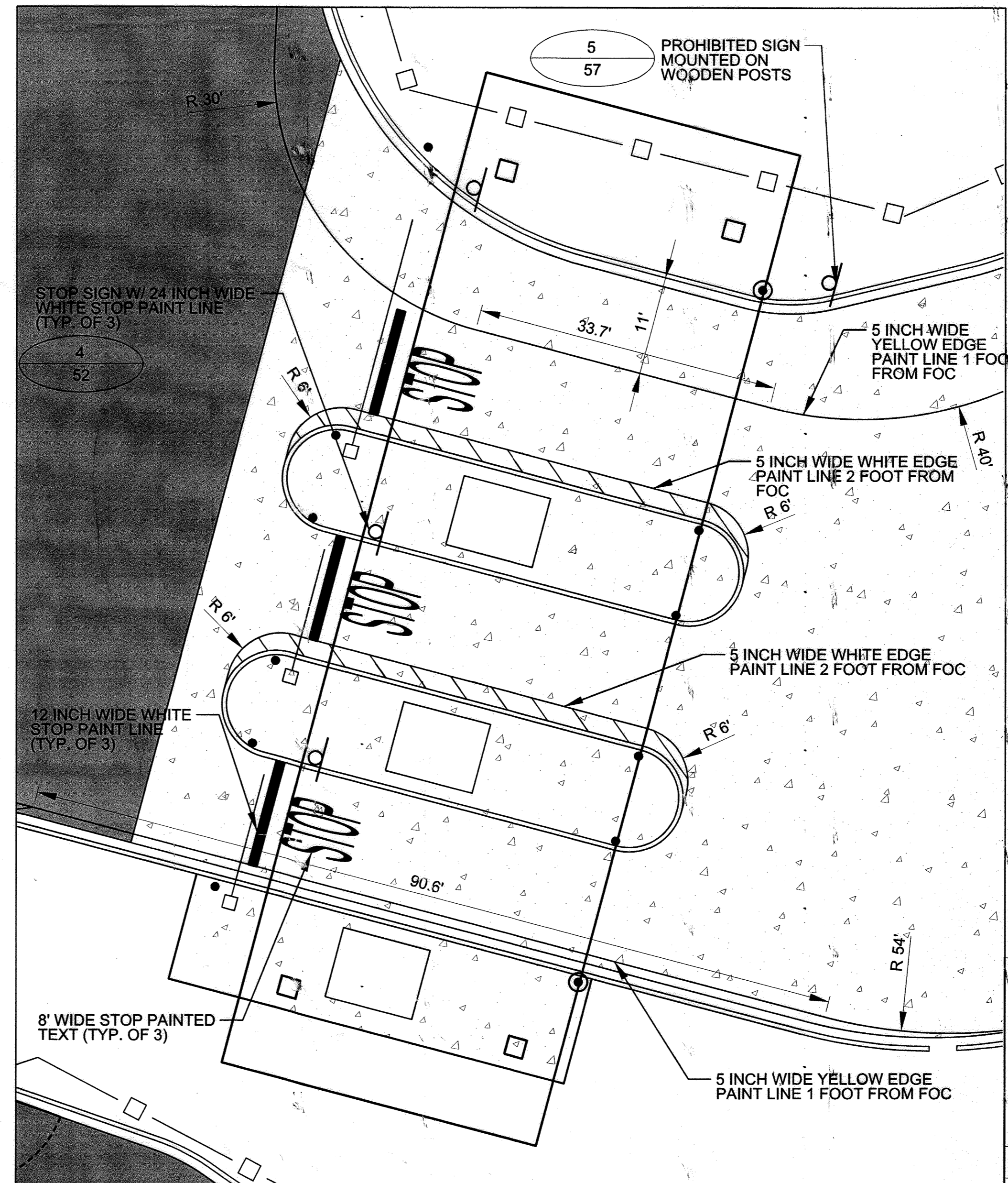


- NOTES:**
1. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH" TYPE), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
  2. CONTACT HOWARD COUNTY TRAFFIC (410-313-2430) PRIOR TO THE INSTALLATION OF ANY SIGNS OR PAVEMENT MARKINGS.
  3. ALL EXISTING PAVEMENT MARKINGS IN CONFLICT WITH THIS PLAN SHALL BE REMOVED COMPLETELY BY GRINDING.
  4. STREET LIGHTING IN THE COUNTY ROW WILL BE INSTALLED BY BGE UNDER THE DIRECTION OF HOWARD COUNTY TRAFFIC.
  5. HOWARD COUNTY WILL BE RESPONSIBLE FOR CONTACTING BGE REGARDING THE ELECTRICAL SERVICE FOR THE COUNTY STREET LIGHTS.
  6. STREET LIGHTING WITHIN STEPHENS ROAD WILL BE PUBLIC WITH A SEPARATE ELECTRICAL FEED.

**1 STEPHENS ROAD SIGNAGE, PAVEMENT MARKING AND STREET LIGHTING PLAN**  
SCALE: 1"=20'



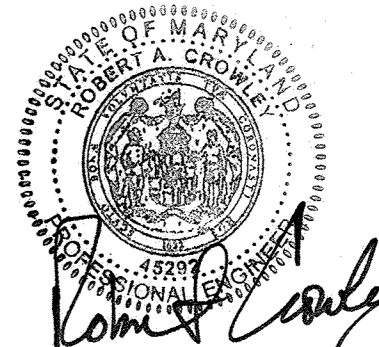
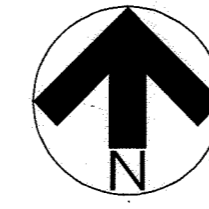
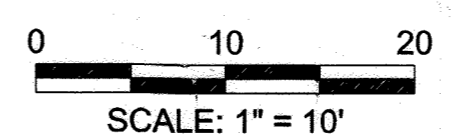
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
License No. 45292 Expiration Date: 05/21/2016



**2 VCP ENLARGED PAVING, PAVEMENT MARKING & SIGNAGE PLAN**  
SCALE: 1"=10'

- NOTES:**
1. ALL STRIPING SHALL BE 5 INCH WIDE WHITE PAINT UNLESS NOTED OTHERWISE.
  2. STOP PAINT LINES ARE TO BE IN LINE WITH STOP SIGNS AND SHALL EXTEND THE WIDTH OF THE LANE.
  3. ALL 12"x18" SIGNS SHALL BE MOUNTED ON U-CHANNEL POSTS.
  4. ALL SIGNS (NOT INCLUDING SIGNS WITH FLASHING YELLOW BEACONS) GREATER THAN 12"x18" SIGNS SHALL BE MOUNTED ON BREAKAWAY TUBULAR STEEL SIGN SUPPORTS IN ACCORDANCE WITH MDSHA STD. 802.04.
  5. ALL DIMENSIONS ARE TO INSIDE FACE OF CURB UNLESS NOTED OTHERWISE.
  6. "STOP" TEXT IN ACCORDANCE WITH SECTION 3B.20, FIGURE 3B-23 OF THE MARYLAND MUTCD.

**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. 45292, EXPIRATION DATE: 05/21/2016.



AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/8/17  
ROBERT CROWLEY  
45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>Robert Crowley</i>	5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Robert Crowley</i>	5-16-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Robert Crowley</i>	5-16-16
DIRECTOR	DATE

09/21/19 1 REVISED SITE LAYOUT TO ADD VIBRATES CENTER INSPECTION FACILITY

DATE	No.	REVISION DESCRIPTION
		<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>
		PARCEL H
		OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000

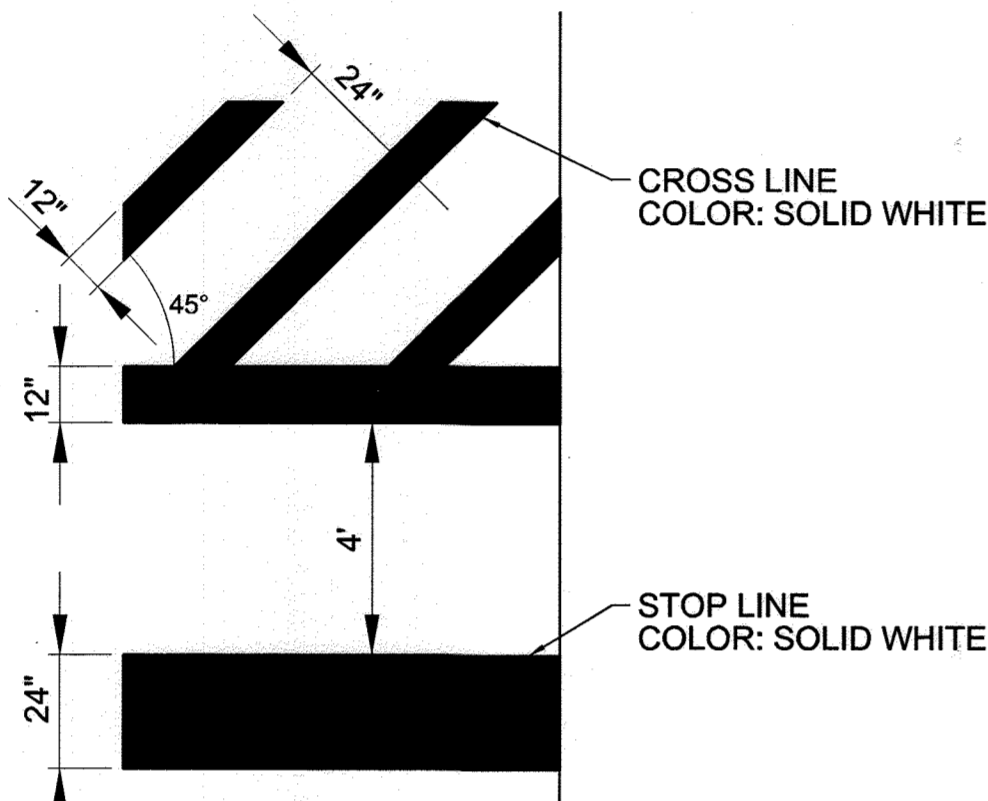
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON / REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED # 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE <b>ENLARGED PAVING, PAVEMENT MARKING, AND SIGNAGE PLAN</b>		
DES. BY M. WERDER	SCALE 1:10	PROJ. No. 12 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

SDP-16-005

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NOTES:

- ALL STRIPING UNLESS OTHERWISE NOTED SHALL BE 4" THICK, WHITE, ANGLED AT 45°, AND SPACED AT 3' ON CENTER.
- STOP PAINT LINES ARE TO BE IN LINE WITH STOP SIGNS AND SHALL EXTEND THE WIDTH OF THE LANE.
- ALL 12"x18" SIGNS SHALL BE MOUNTED ON U-CHANNEL POSTS.
- ALL SIGNS (NOT INCLUDING SIGNS WITH FLASHING YELLOW BEACONS) GREATER THAN 12"x18" SIGNS SHALL BE MOUNTED ON BREAKAWAY TUBULAR STEEL SIGN SUPPORTS IN ACCORDANCE WITH MSHA STD. 802.04, UNLESS NOTED OTHERWISE.
- NOT USED.
- ALL DIMENSIONS ARE TO INSIDE FACE OF CURB UNLESS NOTED OTHERWISE.
- REFER TO MUTCD SECTION 3B.20 FOR PAVEMENT WORD, SYMBOL, AND ARROW MARKINGS.
- SURFACE MOUNTED REBOUNDABLE DELINEATOR CONSISTING OF HDPE TUBE AND REBOUNDABLE BASE FASTENED TOGETHER. CONTRACTOR MAY SUBMIT AN ALTERNATE PRODUCT TO COR AS AN APPROVED EQUAL FOR REVIEW AND APPROVAL. CONTRACTOR SHALL INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS.  
THREE D TRAFFICWORKS  
BOOMERANG SURFACE MOUNTED REBOUNDABLE DELINEATOR  
TUBE WIDTH: 3 INCH ROUND  
TUBE HEIGHT: 48 INCHES  
COLOR: YELLOW
- BARRIER SIGNAL SHALL HAVE ONE (1) SIGNAL PER LANE, CENTERED ABOVE TRAVEL LANE. MOUNTED OVERHEAD ON MAST ARM. BARRIER SIGNALS SHALL BE THREE (3)-PHASE 12 INCH SIGNALS. THE THREE (3) PHASES SHALL BE RED-YELLOW-GREEN WITH A RESTING PHASE ON GREEN.

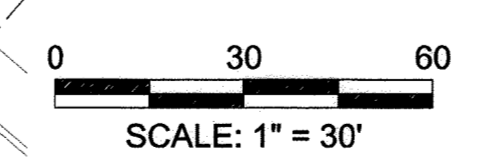
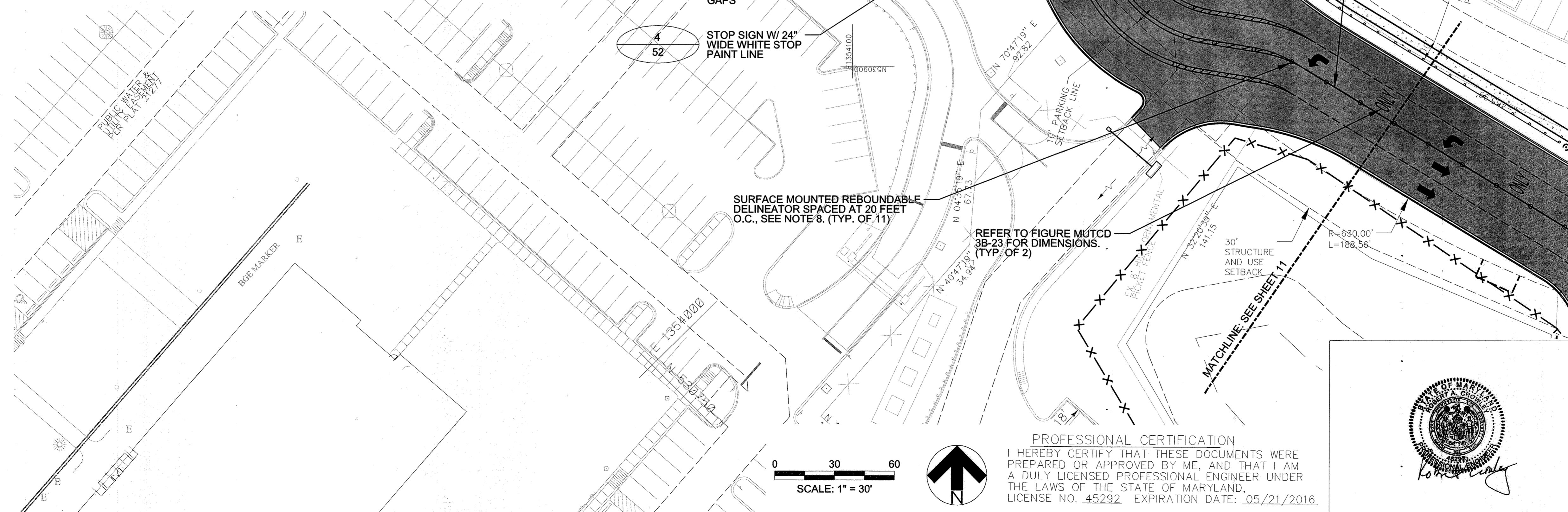


1 CROSSWALK AND STOP LINE DETAIL  
SCALE: NONE

PAVEMENT LEGEND:

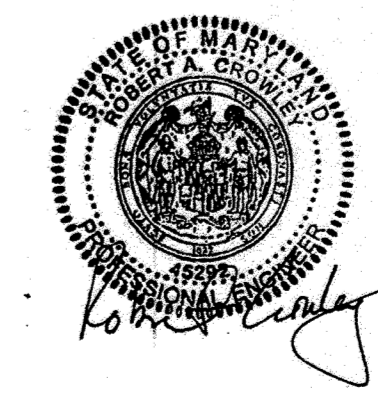
- CONCRETE PAVEMENT
- ASPHALT PAVEMENT

- 5 53
- 2 53



SCALE: 1" = 30'

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. 45292, EXPIRATION DATE: 05/21/2016.




AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/3/17  
ROBERT CROWLEY  
45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>[Signature]</i>	5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>[Signature]</i>	5-11-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>[Signature]</i>	5-16-16
DIRECTOR	DATE


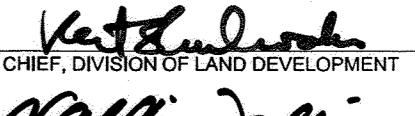
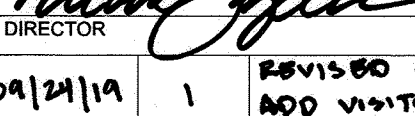
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
PAVING, PAVEMENT MARKING, AND SIGNAGE PLAN		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	13 OF 80
R. CROWLEY		

UNCLASSIFIED//FOR OFFICIAL USE ONLY

REVISED PLAN TO INCLUDE NEW SITE LAYOUT  
  
ENGINEER'S SEAL BOX FOR ROLLING REVISION #1 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. 45292 Expiration Date: 05/21/2016

AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT CERTIFICATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/8/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 5-6-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
 5-16-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
 5-16-16  
DIRECTOR DATE

DATE	No.	REVISION DESCRIPTION
04/21/17	1	REVISED SITE LAYOUT TO ADD WHITE CENTER INSPECTION FACILITY

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000  
SUBDIVISION NAME: EMERSON/REVITZ PROPERTY  
TAX MAP: 47  
LOT/PARCEL #: LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q

PLAT #	ZONE	GRID
23-12-2114	PEC	20

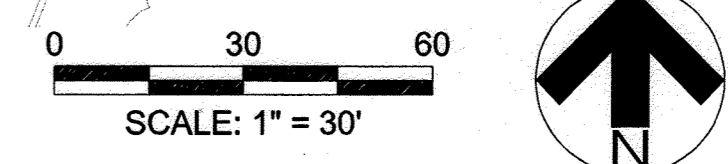
DEED	ELEC. DISTRICT	6TH
11479 / 005	ELEC. DISTRICT	6TH

WATER CODE	SEWER CODE

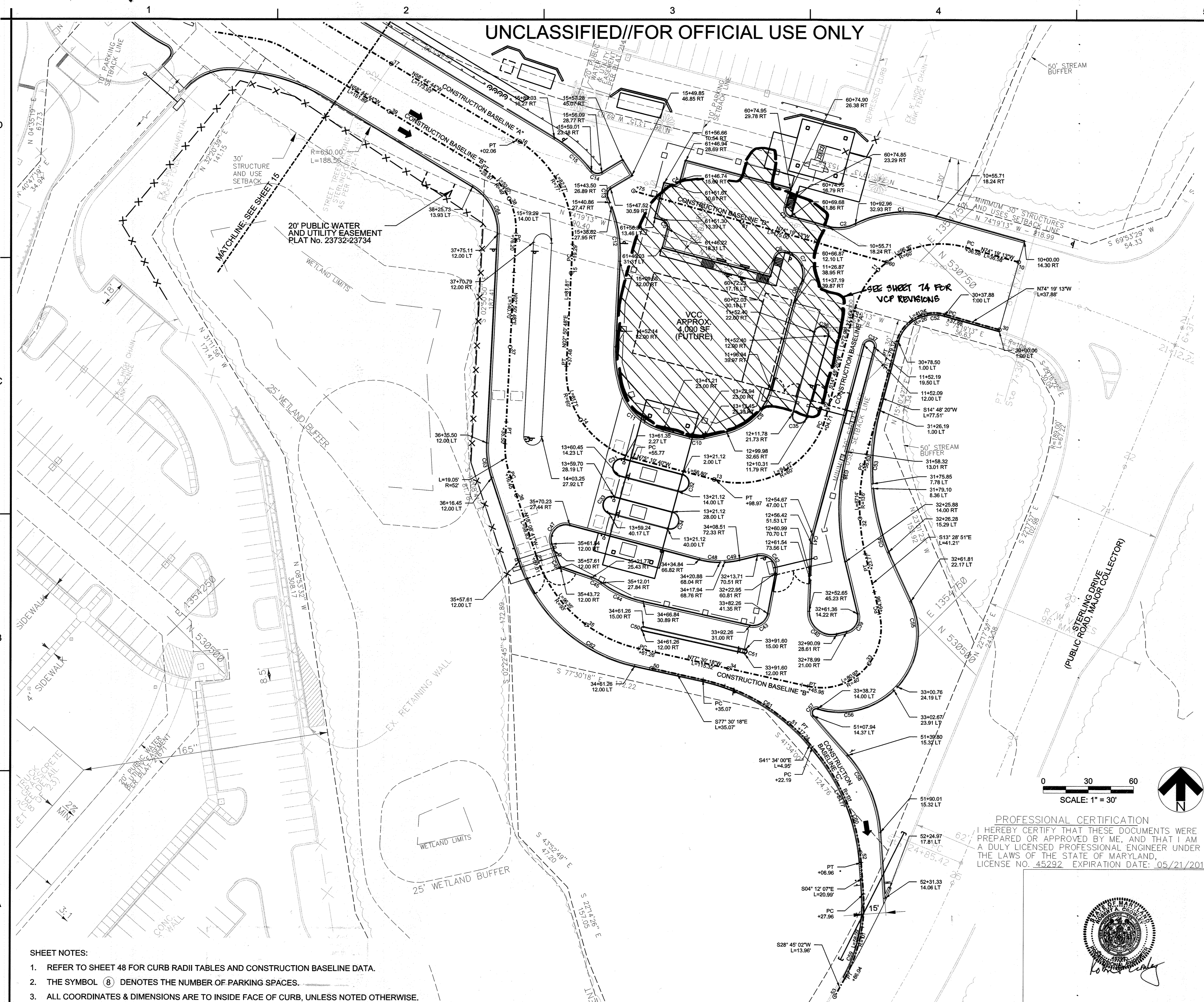
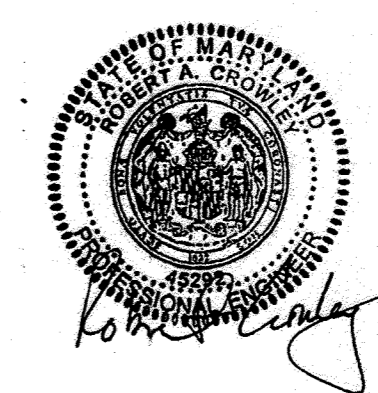
TITLE	DES. BY	SCALE	PROJ. No.
ROADWAY ALIGNMENT PLAN	M. WERDER	1:30	
	DRN. BY	DATE	
	M. WERDER	04/04/2016	14 OF 80
	CHK. BY	APPROVED	
	R. CROWLEY		

- SHEET NOTES:
- REFER TO SHEET 48 FOR CURB RADII TABLES AND CONSTRUCTION BASELINE DATA.
  - THE SYMBOL (8) DENOTES THE NUMBER OF PARKING SPACES.
  - ALL COORDINATES & DIMENSIONS ARE TO INSIDE FACE OF CURB, UNLESS NOTED OTHERWISE.
  - REFER TO SHEET 74 FOR THE REVISED LAYOUT AND SHEETS 75-77 FOR ELEVATION INFORMATION.

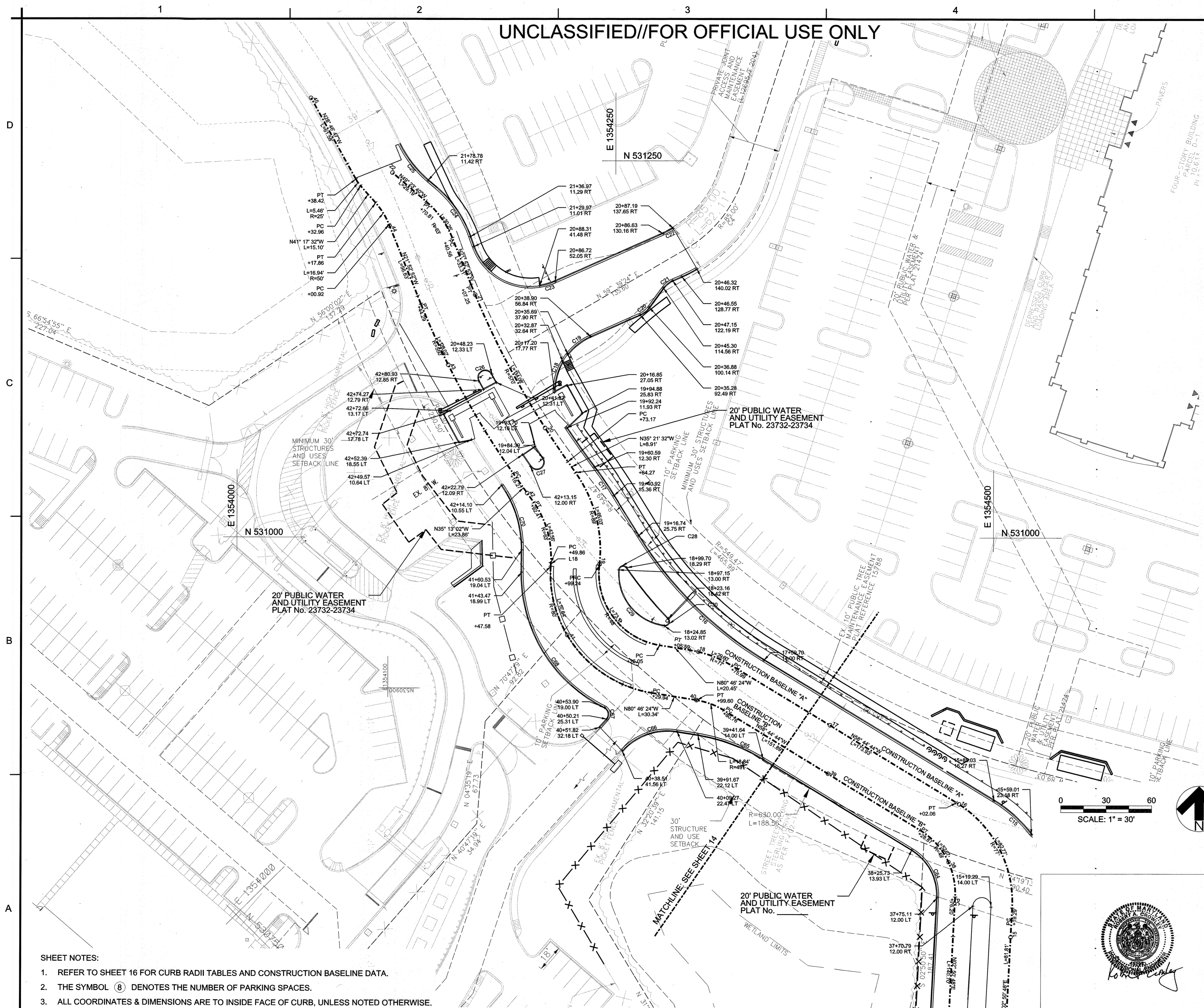
UNCLASSIFIED//FOR OFFICIAL USE ONLY



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. 45292 EXPIRATION DATE: 05/21/2016



UNCLASSIFIED//FOR OFFICIAL USE ONLY



AS BUILT CERTIFICATION FOR PSWMA:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/3/17  
ROBERT CROWLEY  
45292  
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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b> PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		

<b>JACOBS</b> 1100 N GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q

PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE <b>ROADWAY ALIGNMENT PLAN</b>		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	15 OF 80
R. CROWLEY		

- SHEET NOTES:
- REFER TO SHEET 16 FOR CURB RADII TABLES AND CONSTRUCTION BASELINE DATA.
  - THE SYMBOL (8) DENOTES THE NUMBER OF PARKING SPACES.
  - ALL COORDINATES & DIMENSIONS ARE TO INSIDE FACE OF CURB, UNLESS NOTED OTHERWISE.

UNCLASSIFIED//FOR OFFICIAL USE ONLY

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CONSTRUCTION BASELINE DATA

CONSTRUCTION BASELINE "A"			
STATION	TANGENT/CURVE DATA	NORTHING	EASTING
10+00.00	L = 36.58'	N74° 19' 12.55"W	530743.7809 1354809.8107
10+36.58	R = 60.00' L = 95.16'	D = 090°52'27.36" T = 60.92'	530753.6671 1354774.5918
10+36.58	R = 60.00' L = 95.16'	D = 090°52'27.36" T = 60.92'	530753.6671 1354774.5918
11+31.74	L = 72.96'	S14° 48' 20.09"W	530711.2323 1354700.3682
12+04.71	R = 60.00' L = 94.27'	D = 090°01'00.40" T = 60.02'	530640.6921 1354681.7233
12+04.71	R = 60.00' L = 94.27'	D = 090°01'00.40" T = 60.02'	530640.6921 1354681.7233
12+98.97	L = 56.80'	N75° 10' 39.51"W	530598.0211 1354608.3660
13+55.77	R = 60.00' L = 81.71'	D = 078°01'27.48" T = 48.61'	530612.5518 1354553.4564
13+55.77	R = 60.00' L = 81.71'	D = 078°01'27.48" T = 48.61'	530612.5518 1354553.4564
14+37.48	L = 81.81'	N02° 50' 47.97"E	530673.5350 1354508.8798
15+19.29	R = 77.00' L = 82.77'	D = 061°35'31.81" T = 45.89'	530755.2418 1354512.9427
15+19.29	R = 77.00' L = 82.77'	D = 061°35'31.81" T = 45.89'	530755.2418 1354512.9427
16+02.06	L = 173.93'	N58° 44' 43.84"W	530824.8909 1354475.9884
17+75.99	R = 77.00' L = 29.60'	D = 022°01'39.90" T = 14.99'	530915.1319 1354327.3020
18+05.59	L = 20.45'	N80° 46' 23.74"W	530925.3106 1354299.6977
18+26.05	R = 48.00' L = 73.19'	D = 087°22'00.74" T = 45.84'	530928.5904 1354279.5073
18+26.05	R = 48.00' L = 73.19'	D = 087°22'00.74" T = 45.84'	530928.5904 1354279.5073
18+99.24	R = 89.00' L = 65.03'	D = 041°51'50.79" T = 34.04'	530981.4810 1354239.5212
18+99.24	R = 89.00' L = 65.03'	D = 041°51'50.79" T = 34.04'	530981.4810 1354239.5212
19+64.27	L = 8.91'	N35° 21' 31.60"W	531043.0683 1354223.6777
19+73.17	R = 570.00' L = 134.08'	D = 013°28'38.64" T = 67.35'	531050.3321 1354218.5235
19+73.17	R = 570.00' L = 134.08'	D = 013°28'38.64" T = 67.35'	531050.3321 1354218.5235
21+07.25	L = 33.31'	N21° 52' 52.96"W	531167.7569 1354154.4480
21+40.56	R = 63.00' L = 30.25'	D = 027°30'46.68" T = 15.42'	531198.6646 1354142.0348
21+40.56	R = 63.00' L = 30.25'	D = 027°30'46.68" T = 15.42'	531198.6646 1354142.0348
21+70.81	L = 29.19'	N49° 23' 39.64"W	531223.0155 1354124.5770
22+00.00			531242.0122 1354102.4176

CONSTRUCTION BASELINE "C"			
STATION	TANGENT/CURVE DATA	NORTHING	EASTING
50+00.00	L = 35.07'	S77° 30' 18.02"E	530472.3098 1354565.9828
50+35.07	R = 131.00' L = 82.17'	D = 035°56'17.66" T = 42.49'	530464.7219 1354600.2235
51+17.24	L = 4.95'	S41° 34' 00.36"E	530423.7422 1354669.8931
51+22.19	R = 131.03' L = 84.77'	D = 037°03'56.93" T = 43.93'	530420.0364 1354673.1793
51+22.19	R = 131.03' L = 84.77'	D = 037°03'56.93" T = 43.93'	530420.0364 1354673.1793
52+06.96	L = 20.99'	S04° 12' 07.44"E	530343.3783 1354705.7667
52+27.96	R = 101.00' L = 58.09'	D = 032°57'09.04" T = 29.87'	530322.4401 1354707.3050
52+27.96	R = 101.00' L = 58.09'	D = 032°57'09.04" T = 29.87'	530322.4401 1354707.3050
52+86.04	L = 13.96'	S28° 45' 01.60"W	530266.4588 1354695.1256
53+00.00			530254.2225 1354688.4124

CONSTRUCTION BASELINE "B"			
STATION	TANGENT/CURVE DATA	NORTHING	EASTING
30+00.00	L = 37.88'	N74° 19' 12.55"W	530698.5308 1354797.1093
30+37.88	R = 26.00' L = 41.24'	D = 090°52'27.36" T = 26.40'	530708.7690 1354760.6364
30+37.88	R = 26.00' L = 41.24'	D = 090°52'27.36" T = 26.40'	530708.7690 1354760.6364
30+79.12	L = 77.51'	S14° 48' 20.09"W	530690.3806 1354728.4728
31+56.63	R = 136.00' L = 67.14'	D = 028°17'10.65" T = 34.27'	530615.4451 1354708.6662
31+56.63	R = 136.00' L = 67.14'	D = 028°17'10.65" T = 34.27'	530615.4451 1354708.6662
32+23.77	L = 41.21'	S13° 28' 50.56"E	530548.9876 1354707.8978
32+64.98	R = 40.00' L = 80.97'	D = 115°58'32.55" T = 63.98'	530508.9140 1354717.5044
32+64.98	R = 40.00' L = 80.97'	D = 115°58'32.55" T = 63.98'	530508.9140 1354717.5044
33+45.95	L = 115.32'	N77° 30' 18.02"W	530460.5367 1354669.9523
34+61.26	R = 93.00' L = 96.35'	D = 059°21'37.31" T = 53.00'	530485.4856 1354557.3682
34+61.26	R = 93.00' L = 96.35'	D = 059°21'37.31" T = 53.00'	530485.4856 1354557.3682
35+57.61	L = 58.83'	N18° 08' 40.70"W	530547.3212 1354489.1138
36+16.45	R = 52.00' L = 19.05'	D = 020°59'28.67" T = 9.63'	530603.2286 1354470.7922
36+35.50	L = 140.70'	N02° 50' 47.97"E	530622.0047 1354468.2706
37+76.20	R = 49.00' L = 52.67'	D = 061°35'31.81" T = 29.21'	530762.5310 1354475.2582
37+76.20	R = 49.00' L = 52.67'	D = 061°35'31.81" T = 29.21'	530762.5310 1354475.2582
38+28.87	L = 151.89'	N58° 44' 43.84"W	530806.8532 1354451.7418
39+80.76	R = 49.00' L = 18.84'	D = 022°01'39.90" T = 9.54'	530885.6620 1354321.8918
39+99.60	L = 30.34'	N80° 46' 23.74"W	530892.1394 1354304.3254
40+29.94	R = 80.00' L = 117.64'	D = 084°15'08.07" T = 72.35'	530897.0044 1354274.3764
40+29.94	R = 80.00' L = 117.64'	D = 084°15'08.07" T = 72.35'	530897.0044 1354274.3764
41+47.58	L = 2.28'	N03° 28' 44.33"E	530980.8239 1354207.3512
41+49.86	R = 63.00' L = 42.55'	D = 038°41'46.40" T = 22.12'	530983.0968 1354207.4894
41+49.86	R = 63.00' L = 42.55'	D = 038°41'46.40" T = 22.12'	530983.0968 1354207.4894
41+92.41	L = 23.86'	N35° 13' 02.07"W	531023.2505 1354196.0747
42+16.27	R = 550.00' L = 128.02'	D = 013°20'09.59" T = 64.30'	531042.7463 1354182.3132
42+16.27	R = 550.00' L = 128.02'	D = 013°20'09.59" T = 64.30'	531042.7463 1354182.3132
43+44.29	L = 56.63'	N21° 52' 52.48"W	531154.9431 1354121.2704
44+00.92	R = 50.00' L = 16.94'	D = 019°24'40.02" T = 8.55'	531207.4917 1354100.1659
44+17.86	L = 15.10'	N41° 17' 32.49"W	531221.8525 1354091.3356
44+32.96	R = 25.00' L = 5.46'	D = 012°30'45.31" T = 2.74'	531233.1976 1354081.3714
44+38.42	L = 61.58'	N28° 46' 47.18"W	531237.6591 1354078.2433
45+00.00			531291.6364 1354048.5938

CONSTRUCTION BASELINE "D"			
STATION	TANGENT/CURVE DATA	NORTHING	EASTING
60+00.00			530743.6050 1354721.9861
61+75.00	L = 175.00'	N74° 19' 12.55"W	530790.9008 1354553.4984

CURB LINE RADII DATA

CURB TABLE			
CURB #	LENGTH	RADIUS	DELTA
C1	55.27	75.00	042.22
C2	18.04	25.00	041.35
C3	7.85	5.00	090.00
C4	7.85	5.00	090.00
C5	7.85	5.00	090.00
C6	8.29	5.00	095.04
C7	26.30	15.00	100.45
C8	13.54	75.00	010.35
C9	42.99	40.00	061.57
C10	9.88	20.00	028.30
C11	42.97	40.00	061.55
C12	36.80	91.00	023.17
C13	7.28	5.00	083.38
C14	7.28	5.00	083.46
C15	33.42	91.00	021.04
C16	118.11	250.00	027.07
C17	22.90	250.00	005.25
C18	46.60	40.00	066.76
C19	46.60	40.00	066.76
C20	7.85	15.00	030.00
C21	7.85	15.00	030.00
C22	7.77	69.00	006.45
C23	65.63	40.00	094.00
C24	39.65	75.00	030.29
C25	31.07	75.00	023.73
C26	7.80	5.00	089.44
C27	15.71	5.00	180.00
C28	7.40	3.00	141.24
C29	53.04	35.00	086.83
C30	7.40	3.00	141.24
C31	18.85	6.00	180.00
C32	9.42	6.00	090.00
C33	18.86	6.00	180.13
C34	18.85	6.00	180.00
C35	15.71	5.00	180.00
C36	15.71	5.00	180.00
C37	11.85	3.75	181.01
C38	74.05	150.00	028.29
C39	15.74	10.00	090.17
C40	27.63	15.00	105.56

CURB TABLE			
CURB #	LENGTH	RADIUS	DELTA
C41	5.55	25.00	012.73
C42	19.89	10.00	113.98
C43	16.06	10.00	091.99
C44	30.97	75.00	023.66
C45	7.39	25.00	016.94
C46	12.10	81.00	008.56
C47	21.46	10.00	122.97
C48	14.05	55.00	014.64
C49	10.09	55.00	010.51
C50	3.14	1.00	180.00
C51	3.14	1.00	180.00
C52	39.65	25.00	090.87
C53	49.39	150.00	018.86
C54	50.97	150.00	019.47
C55	61.06	51.92	067.38
C56	54.57	51.92	060.22
C57	7.74	3.00	147.84
C58	56.74	87.00	037.36
C59	57.51	100.00	032.95
C60	84.78	130.00	037.36
C61	81.54	130.00	035.94
C62	108.78	105.00	059.36
C63	23.45	64.00	020.99
C64	37.65	35.00	061.64
C65	46.13	120.00	022.03
C66	40.01	40.00	057.31
C67	9.21	5.00	105.53
C68	53.19	99.00	030.78
C70	45.93	75.00	035.08

AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT ~~INFORMATION~~  
PROVIDED ON THIS SHEET. 2/3/17  
ROBERT CROWLEY  
45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 5-6-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
*[Signature]* 5-11-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
*[Signature]* 5-10-16  
DIRECTOR DATE

DATE: \_\_\_\_\_ No. \_\_\_\_\_ REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**

PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

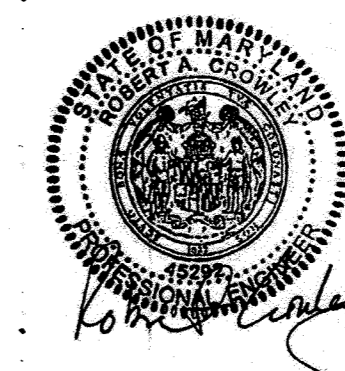
SUBDIVISION NAME EMERSON / REWITZ PROPERTY	TAX MAP # 47	LOT/PARCEL # LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

TITLE

ROADWAY ALIGNMENT SCHEDULE

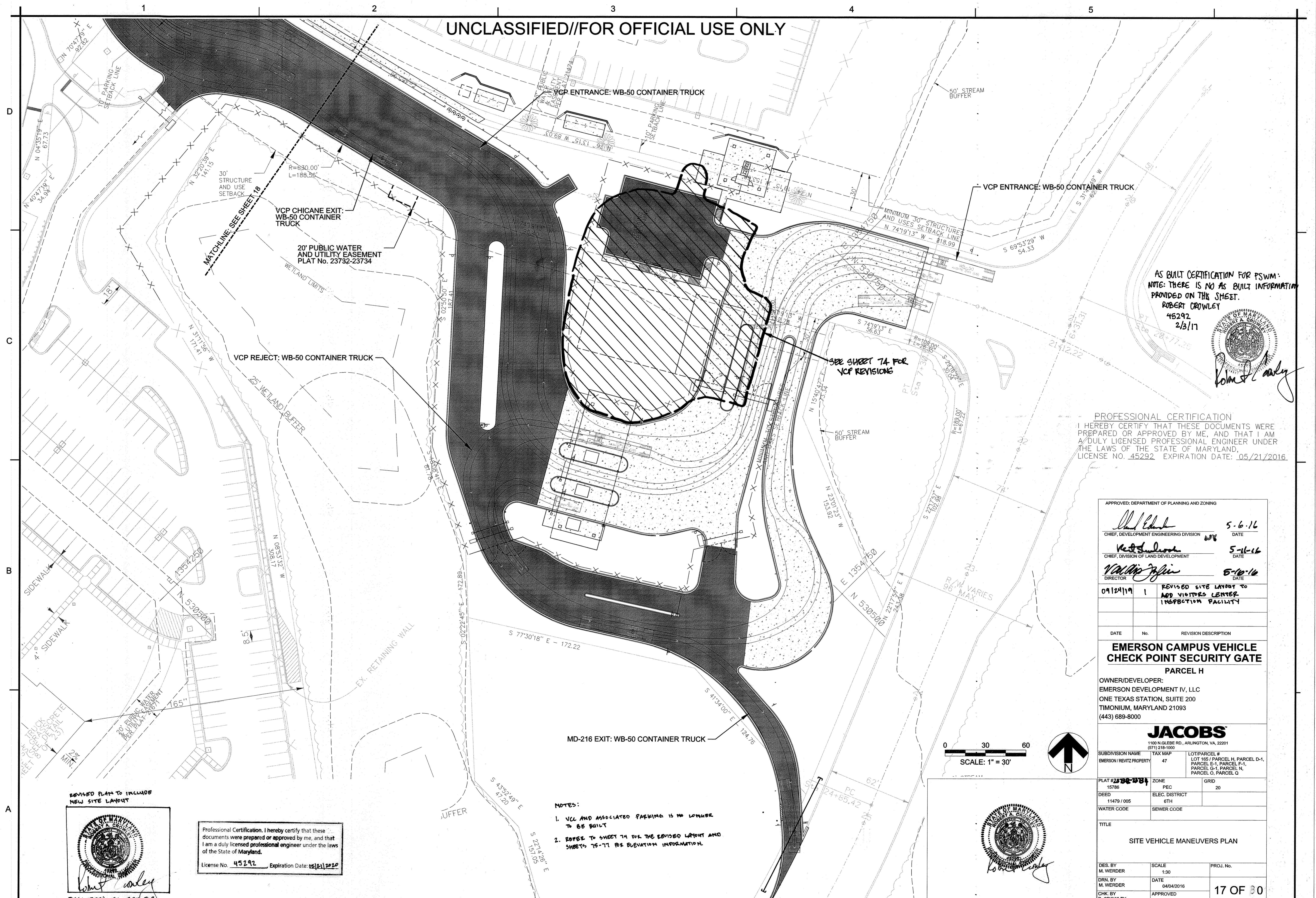
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 16 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

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. 45292, EXPIRATION DATE: 05/21/2016.

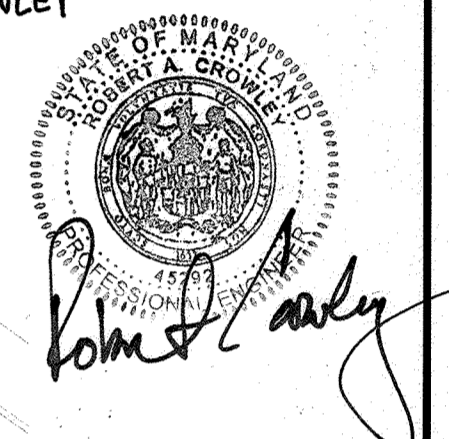




UNCLASSIFIED//FOR OFFICIAL USE ONLY

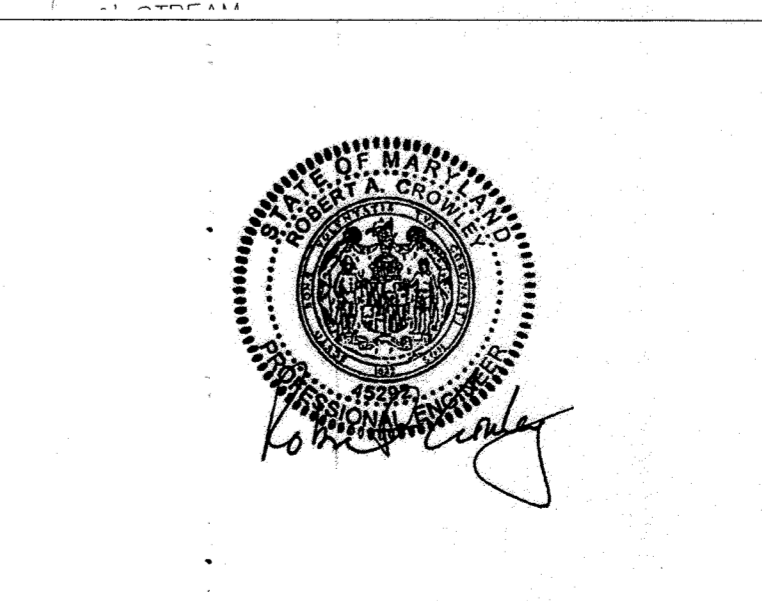
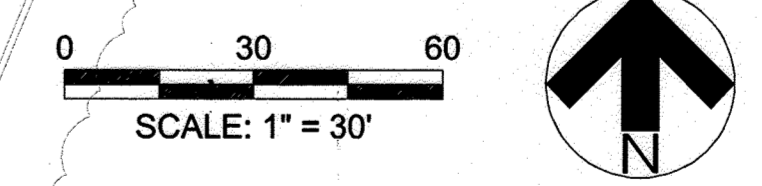


AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION  
 PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

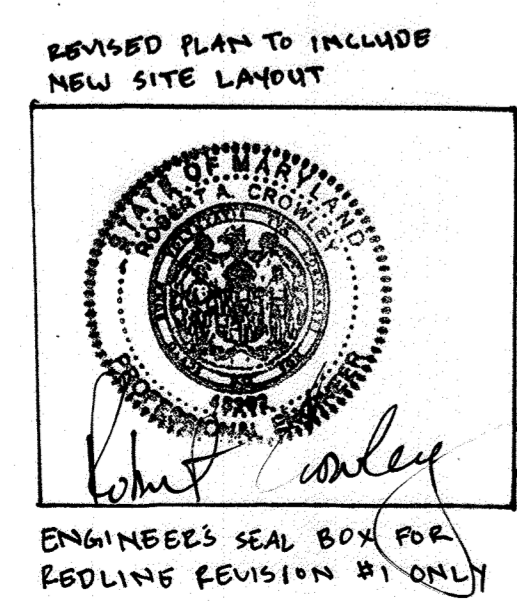


PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE  
 PREPARED OR APPROVED BY ME, AND THAT I AM  
 A DULY LICENSED PROFESSIONAL ENGINEER UNDER  
 THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>[Signature]</i>	CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i>	CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i>	DIRECTOR	5-10-16 DATE
0912419	1	REVISED SITE LAYOUT TO ADD VICTORIES CENTER INSPECTION FACILITY
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b> 1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/REVITZ PROPERTY	TAX MAP 47	LOTT/PARCEL # LOT 185/ PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE <b>SITE VEHICLE MANEUVERS PLAN</b>		
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 17 OF 30
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

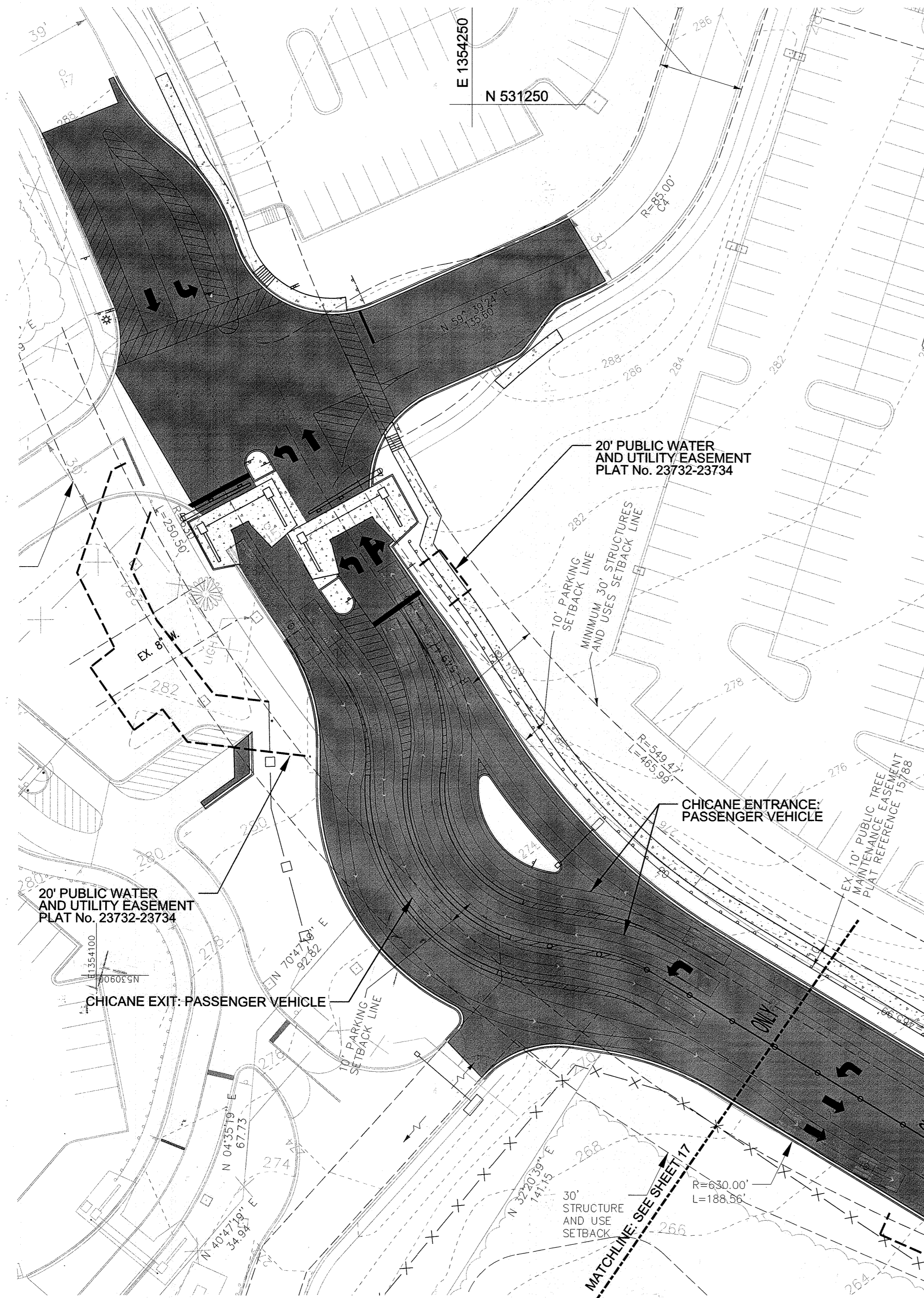


- NOTES:
- VCL AND ASSOCIATED PARKING IS NO LONGER TO BE BUILT
  - REFER TO SHEET 74 FOR THE REVISED LAYOUT AND SHEETS 75-77 FOR ELEVATION INFORMATION.

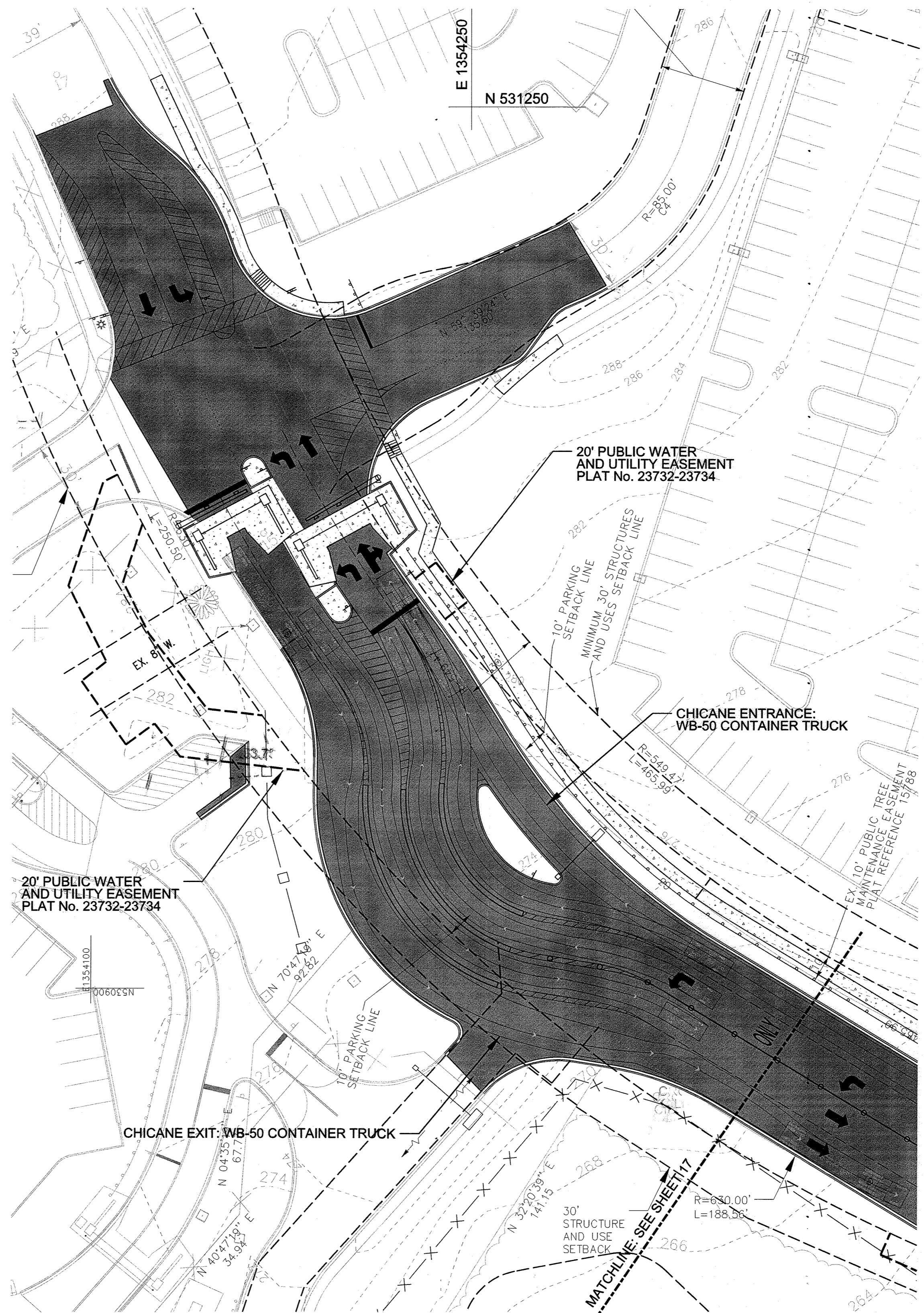


Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.  
 License No. 45292 Expiration Date: 05/21/2016

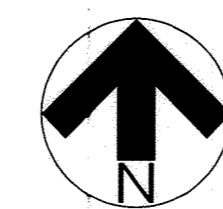
UNCLASSIFIED//FOR OFFICIAL USE ONLY



PASSENGER VEHICLE

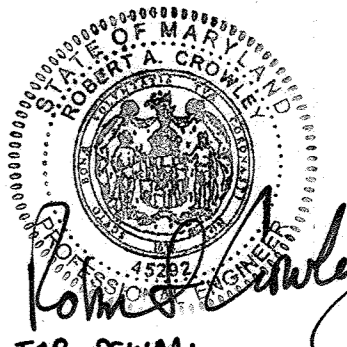


WB-50 CONTAINER TRUCK



SCALE: 1" = 30'

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. 45292 EXPIRATION DATE: 05/21/2016.



AS BUILT CERTIFICATION FOR RSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Michael E. ...</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>Kathleen ...</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>Nancy ...</i> DIRECTOR	5-16-16 DATE

DATE No. REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (871) 218-1000

SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/RENTZ PROPERTY	47	LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL H, PARCEL O, PARCEL Q

PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE

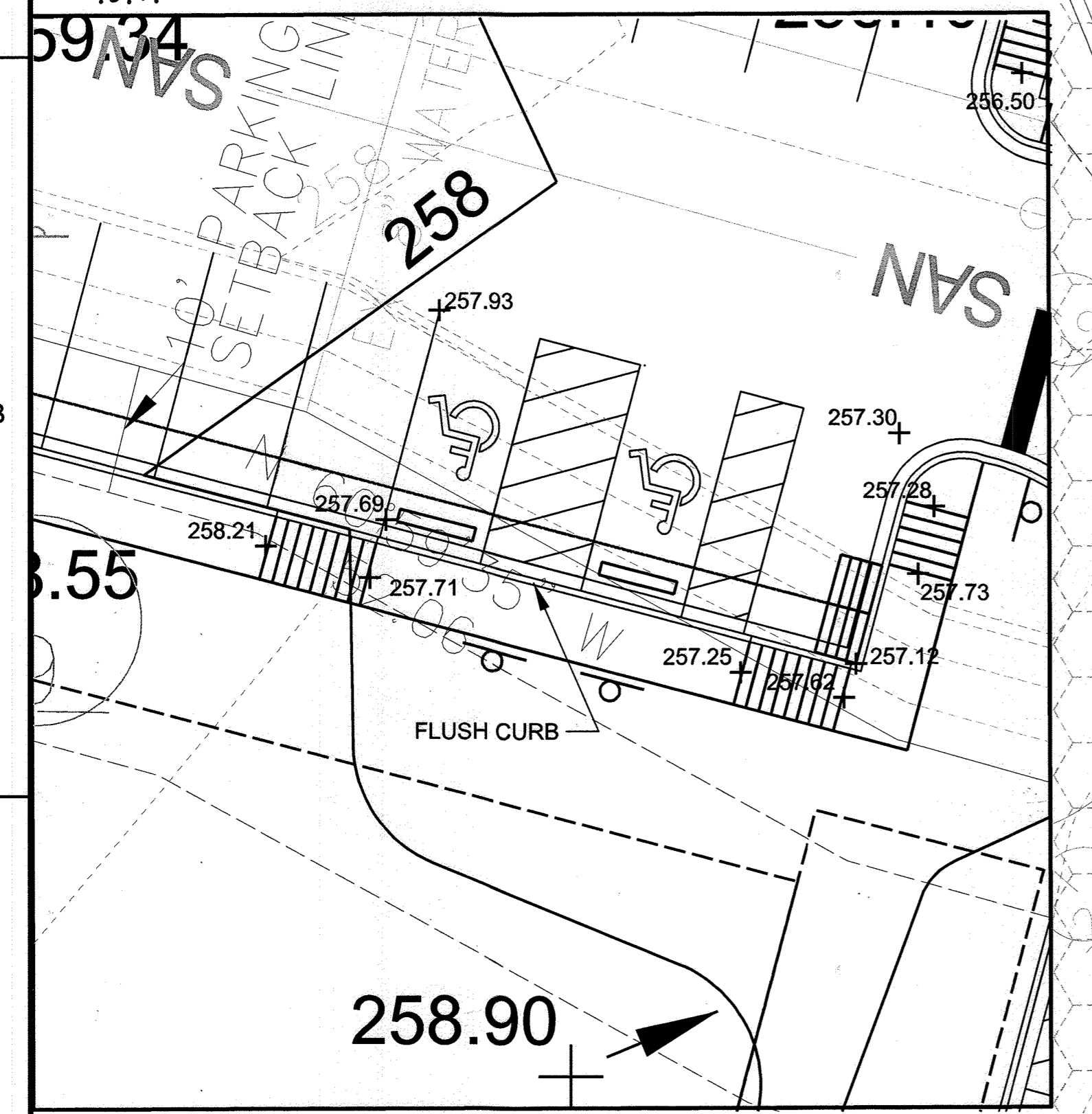
**SITE VEHICLE MANEUVERS PLAN**

DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	
R. CROWLEY		18 OF 80

UNCLASSIFIED//FOR OFFICIAL USE ONLY

STORM STRUCTURE SCHEDULE					AS BUILT
ID	DETAIL	RIM A <sub>6</sub>	INVERT IN	AB	INVERT OUT A <sub>6</sub>
DI 1	2/ SHEET 54	253.00 251.91	240.00-234.11 248.33 (6" U/D)	258.93	259.60
DI 2	4/ SHEET 54	252.00 251.91	240.00 (S) 240.00 243.83 (E) 242.91	248.28	251.93
DI 2A	4/ SHEET 54	246.00 (E)	243.83 (E) 242.91	248.00	248.00
DI 3	4/ SHEET 54	249.00 (E)	244.33 (E) 243.41	244.28	243.41
DI 4	4/ SHEET 54	257.00 256.10	252.33 (E) 248.00 252.33 (E) 248.00	252.28	251.25
DI 5	5/ SHEET 54	256.00 255.51	249.74 (N) 244.33 249.54 (W) 244.00	248.34	248.34
DI 5A	6/ SHEET 58	258.00 (E)	254.10 250.00	251.00	250.50
DI 5B	6/ SHEET 58	258.10 (E)	254.10 250.00	251.00	250.50
DI 6	4/ SHEET 54	250.00 (E)	254.33 (E) 248.00	251.40	251.12
DI 7	4/ SHEET 54	261.00 (E)	256.33 (E) 248.00	254.33	254.14
DI 8	4/ SHEET 54	256.50 254.40	250.00 (E) 248.00 250.00 (E) 248.00	248.00	249.00
DI 9	1/ SHEET 54	263.00 (E)	258.00 254.00	255.00	255.42
DI 15	4/ SHEET 54	252.00 (E)	247.33 (E) 248.00	247.24	247.12
DI 16	1/ SHEET 54	254.70 (E)	251.16 251.25	251.06	251.05
DI 16A	1/ SHEET 54	254.60 (E)	251.14 252.00	251.04	251.05
DI 17	1/ SHEET 54	258.00 (E)	251.80 251.83	251.70	251.91
DI 18	1/ SHEET 54	257.10 (E)	253.80 254.00	252.91	253.31
DI 19	1/ SHEET 54	263.00 (E)	254.00 254.00	253.00	253.00
DI 20	1/ SHEET 54	252.00 (E)	248.16 248.00	248.06	249.17
DI 21	1/ SHEET 54	249.50 249.30	245.48 (W) 245.40 245.18 (E) 245.30	245.08	245.24
DI 22	1/ SHEET 54	247.75 (E)	245.00 245.00	246.42	246.46
ST MH 1	2/ SHEET 54	252.00 (E)	238.00 (N) 238.51 245.00 (W) 244.83	238.39	238.42
ST MH 2	2/ SHEET 54	254.25 254.30	241.87 (N) 241.89 246.00 (E) 241.42	240.97	239.44
ST MH 3	2/ SHEET 54	257.00 (E)	244.00 (W) 245.00 252.07 (E) 248.00	244.45	244.14
ST MH 4	2/ SHEET 54	253.00 (E)	245.49 245.24	245.24	245.21
ST MH 5	2/ SHEET 54	259.50 260.40	253.23 (W) 253.02 250.04 (S) 250.81	250.84	250.70
ST MH 6	2/ SHEET 54	255.20 (E)	247.18 247.20	247.06	247.06
ST MH 7	2/ SHEET 54	261.50 (E)	264.34 264.02	264.24	263.12
ST MH 9	2/ SHEET 54	255.00 (E)	251.32 (E) 249.41 251.52 (N) 251.51	251.42	251.26
ST MH 10	2/ SHEET 54	259.00 (E)	252.08 262.00	251.98	251.11
TD 1	7/ SHEET 55	254.00 (E)	254.00 (E)	251.78	NO ACCESS
TD 2	7/ SHEET 55	254.00 (E)	254.00 (E)	251.56	NO ACCESS
TD 3	7/ SHEET 55	254.00 (E)	254.00 (E)	251.48	NO ACCESS
FES 1	6/ SHEET 55	---	---	254.00	254.13
FES 2	6/ SHEET 55	---	---	254.00	251.03
FES 3	6/ SHEET 55	---	---	245.00	245.02

AS BUILT CERTIFICATION FOR RSWM:  
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.  
ROBERT CROWLEY  
46292  
2/3/17



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. 45292 Expiration Date: 05/21/2016

REVISOR PLAN TO INCLUDE NEW SITE LAYOUT, GRADING AND DRAINAGE  
SCALE: 1" = 30'

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DEVELOPMENT ENGINEERING DIVISION 5-6-16  
CHIEF, DIVISION OF LAND DEVELOPMENT 5-11-16  
DIRECTOR 5-10-16  
DATE 04/24/17  
REVISED SITE LAYOUT TO ADD VISITORS CENTER INSPECTION FACILITY

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(703) 218-1000

SUBDIVISION NAME: EMERSON/RENTZ PROPERTY  
TAX MAP: 47  
LOT/PARCEL #: LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q

PLAT # 15786-0134 ZONE: PEC GRID: 20  
DEED: 11479 / 005 ELEC. DISTRICT: 6TH  
WATER CODE: SEWER CODE:

TITLE: STORMWATER MANAGEMENT SITE GRADING & DRAINAGE PLAN

DES. BY: M. WERDER SCALE: 1:30 PROJ. No.  
DRN. BY: M. WERDER DATE: 04/04/2016  
CHK. BY: R. CROWLEY APPROVED: 19 OF 80

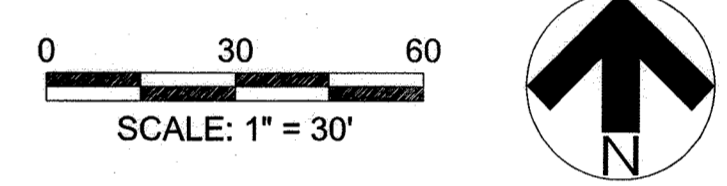
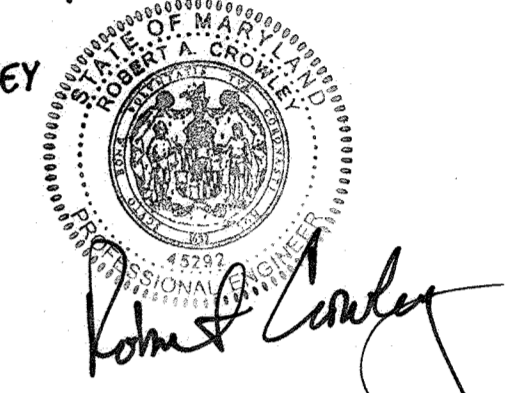
UNCLASSIFIED//FOR OFFICIAL USE ONLY

UNCLASSIFIED//FOR OFFICIAL USE ONLY

STORM STRUCTURE SCHEDULE AS-BUILT				
ID	DETAIL	RIM AB	INVERT IN AB	INVERT OUT AB
DI 10	1/SHEET 54	283.00	283.01 (6)	262.56 (7)
DI 11	7/SHEET 59	274.50 (6)	265.85 (4)	265.25 (5)
DI 12	7/SHEET 59	274.00	266.25	266.45
DI 13	7/SHEET 59	273.25 (1)	266.65 (1A, 2)	266.85 (3)
DI 14	1/SHEET 54	288.75	288.75	274.52
DI 23	1/SHEET 54	283.75 (4)	280.08 (5)	279.90 (4) (EX. 18" RCP)
ST MH 8	2/SHEET 54	284.00-	274.00(N) 274.00(NNE) 274.00(W)	273.90-
ST MH 11	2/SHEET 54	285.00 285.10	281.99 (1A) (EX. 18" RCP)	281.30 (4)

- NOTES:
- SPOT ELEVATIONS ALONG CURB LINE AREA AT BASE OF CURB.
  - PROVIDE DRAIN AND PIPE CONNECTION AT BOTTOM OF GRABNET PIT.

AS BUILT CERTIFICATION FOR PSWM:  
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.  
ROBERT CROWLEY  
45292  
2/3/17



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. 45292, EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>[Signature]</i>	DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION	5/6/16
<i>[Signature]</i>	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	5/11/16
<i>[Signature]</i>	DATE
DIRECTOR	5/10/16

DATE	No.	REVISION DESCRIPTION

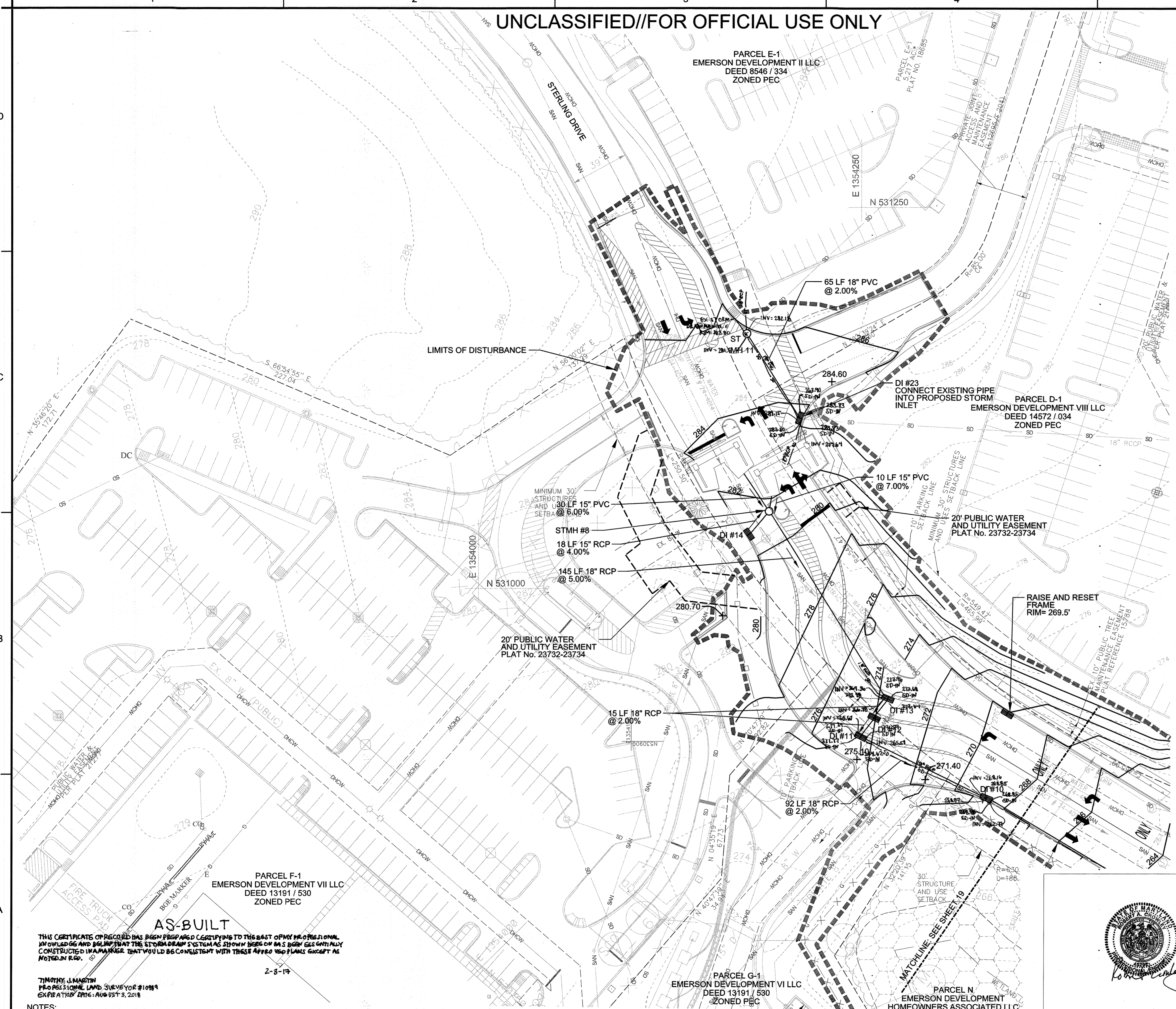
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000



SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE		
STORMWATER MANAGEMENT SITE GRADING & DRAINAGE PLAN		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	
R. CROWLEY		20 OF 80

SDP-16-005



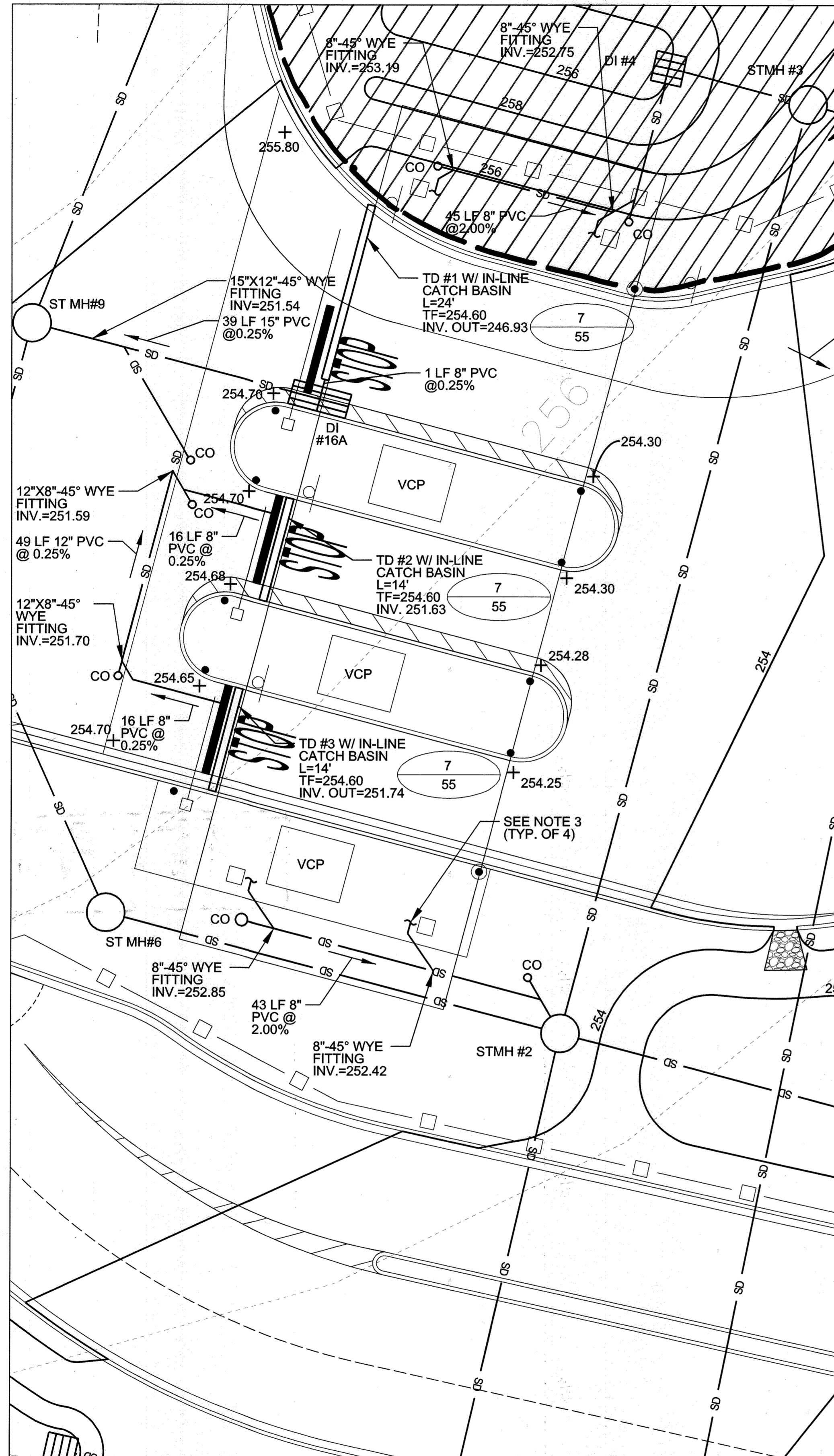
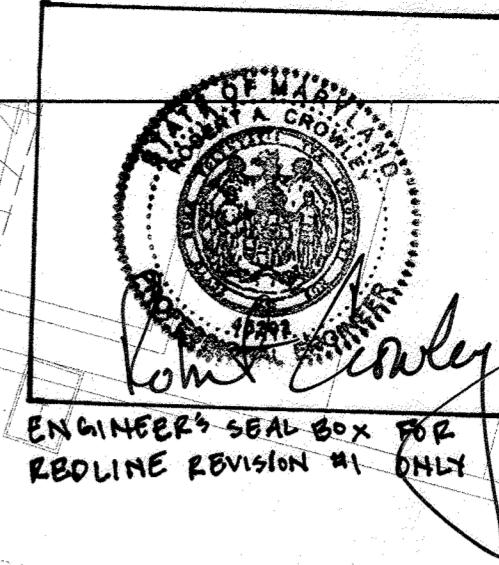
AS-BUILT  
THIS CERTIFICATE OF RECORD HAS BEEN PREPARED CERTIFYING TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE STORM DRAIN SYSTEM AS SHOWN HEREON HAS BEEN ACCURATELY CONSTRUCTED IN ACCORDANCE WITH THESE APPROVED PLANS EXCEPT AS NOTED IN R.C.P.  
TIMOTHY J. MARTIN  
PROFESSIONAL LAND SURVEYOR #10889  
EXPIRATION DATE: AUGUST 3, 2018  
2-8-17

UNCLASSIFIED//FOR OFFICIAL USE ONLY

REVISED PLAN TO INCLUDE NEW SITE LAYOUT, GRADING, AND DRAINAGE

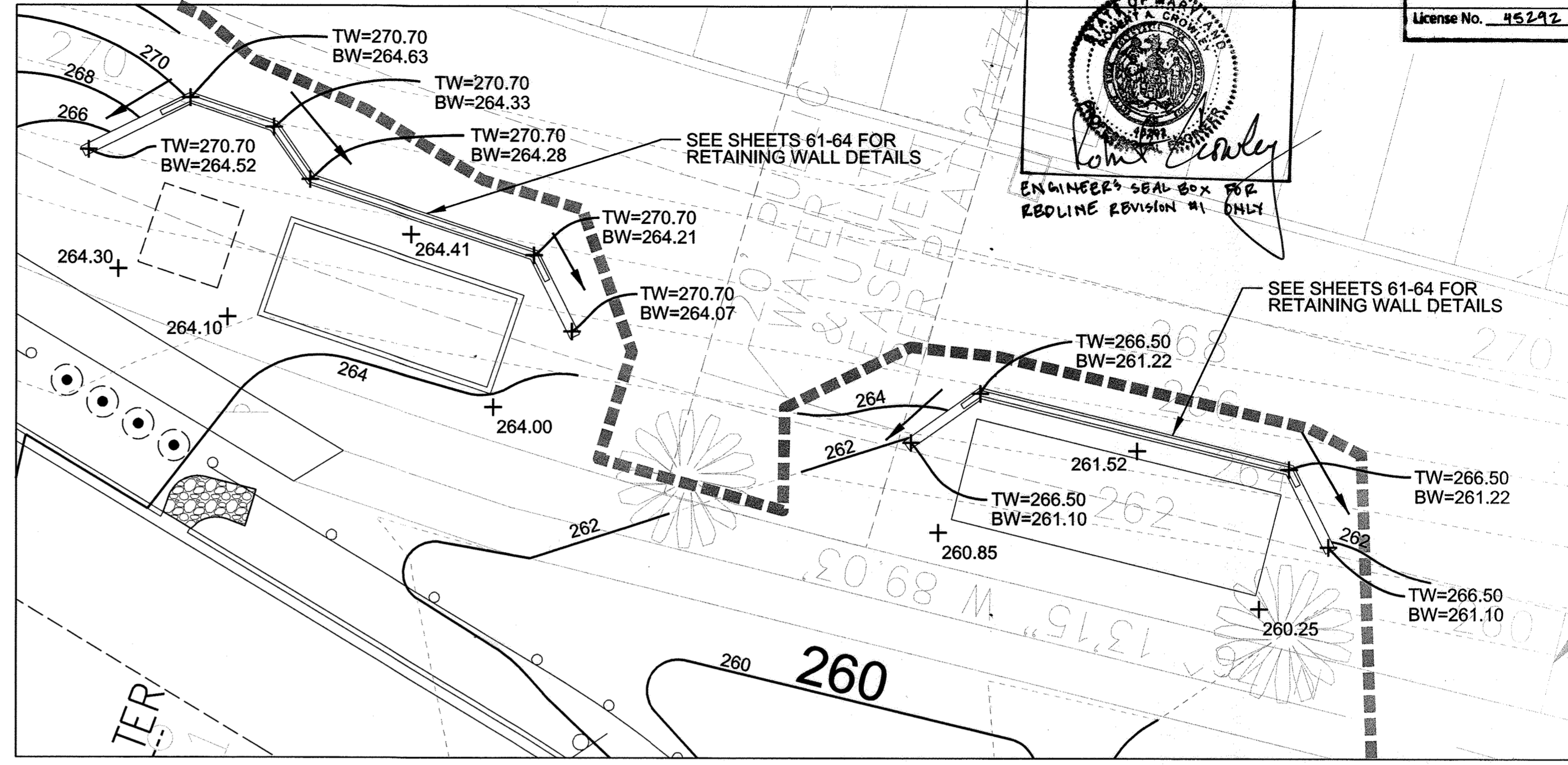
Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

License No. 45292 Expiration Date: 05/21/2022

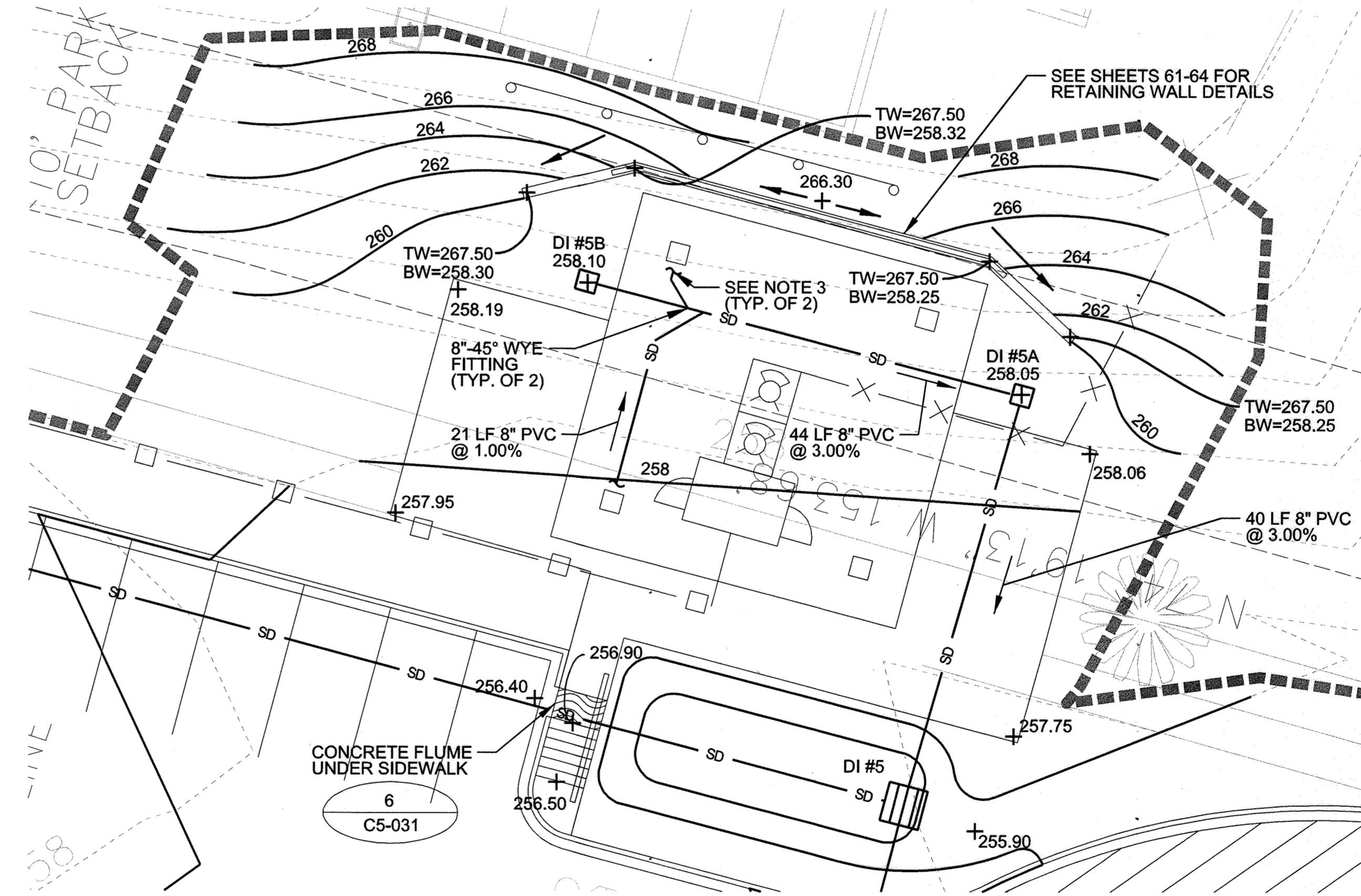


1 ENLARGED VCP GRADING PLAN  
SCALE: 1"=10'

- SHEET NOTES:
1. MAXIMUM SLOPE OF FINISHED GRADE AT VCP SHALL BE 1.00%.
  2. ALL HORIZONTAL PIPES BENDS SHALL BE 45° UNLESS NOTED OTHERWISE.
  3. CONNECT TO ROOF DRAIN AT PEDESTRIAN CANOPY COLUMNS. INVERT IS 14 INCHES BELOW GRADE. SEE ARCHITECTURAL PLANS.
  4. CONNECT TO ROOF DRAIN AT VCP CANOPY COLUMNS. INVERT IS 18 INCHES BELOW GRADE. SEE ARCHITECTURAL PLANS.
  5. SEE SHEET 9 FOR STORM STRUCTURE SCHEDULE.

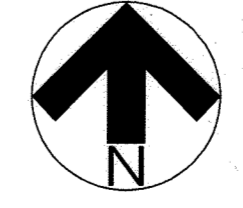
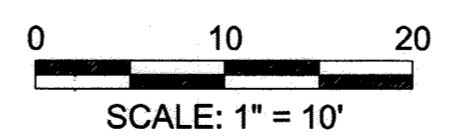


3 ENLARGED EQUIPMENT PADS GRADING PLAN  
SCALE: 1"=10'



2 ENLARGED PEDESTRIAN ENTRANCE GRADING PLAN  
SCALE: 1"=10'

PROFESSIONAL CERTIFICATION  
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LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016



AS BUILT CERTIFICATION FOR PS/WM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] CHIEF, DEVELOPMENT ENGINEERING DIVISION 5-6-16 DATE  
 [Signature] CHIEF, DIVISION OF LAND DEVELOPMENT 5-11-16 DATE  
 [Signature] DIRECTOR 6-16-16 DATE

DATE	No.	REVISION DESCRIPTION
01/21/19	1	REVISED SITE LAYOUT TO ADD VEHICLE CHECK POINT INSPECTION FACILITY

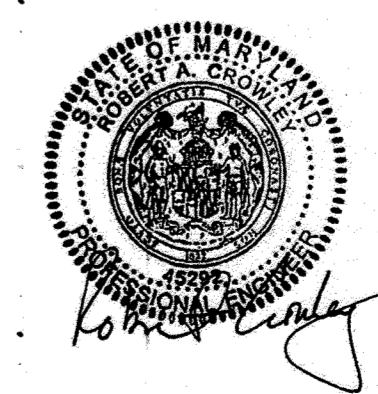
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

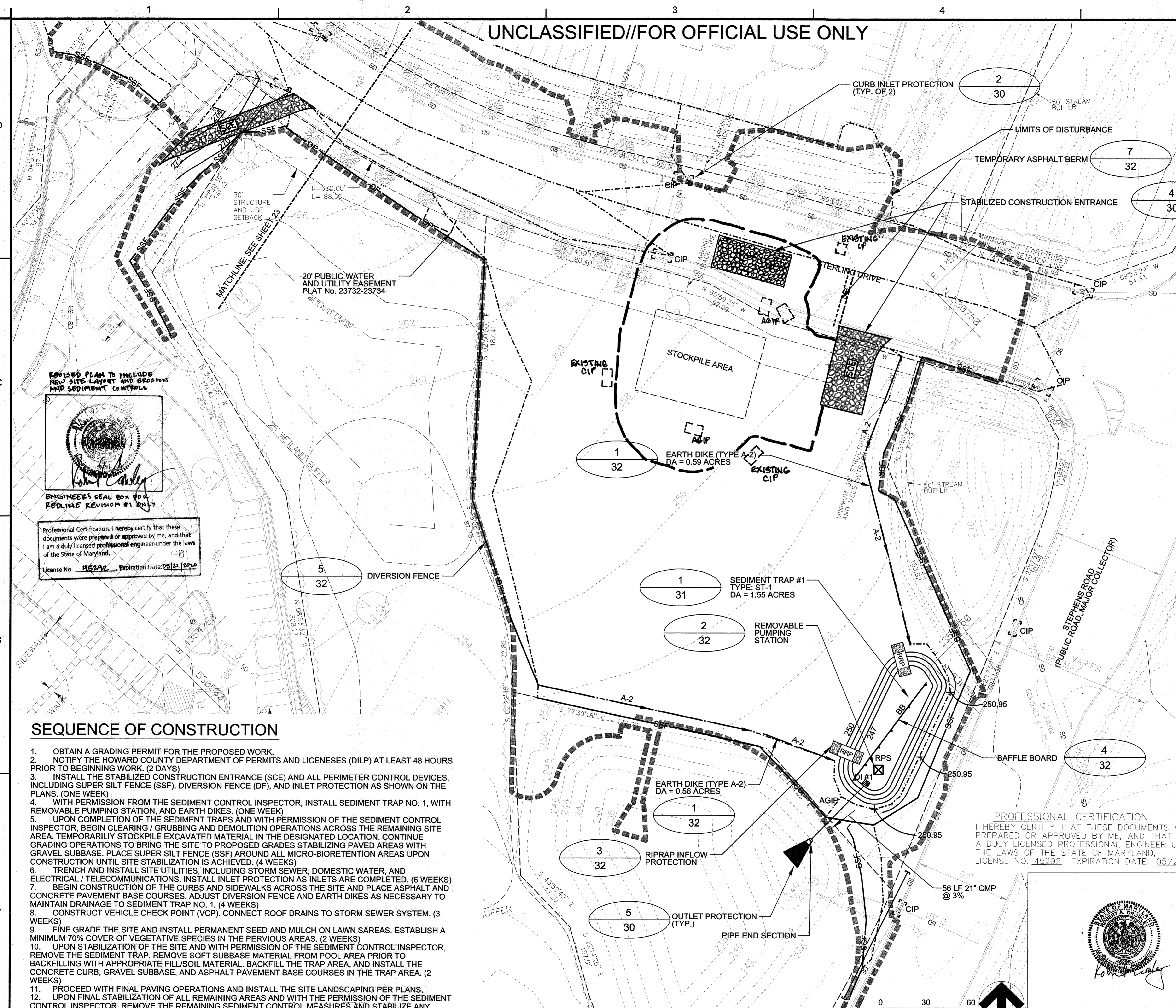
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q

TITLE  
**STORMWATER MANAGEMENT ENLARGED SITE GRADING AND DRAINAGE PLAN**

DRAWN BY	SCALE	PROJ. No.
M. WERDER	1:10	
DATE		
04/04/2016		
CHECKED BY	APPROVED	21 OF 80
R. CROWLEY		



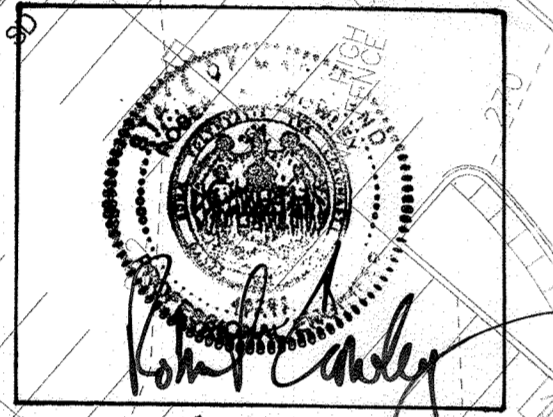
STORM STRUCTURE SCHEDULE				
ID	DETAIL	RIM	INVERT IN	INVERT OUT
DI 1	1 / SHEET 23	251.50	240.75 (E)	240.65
DI 2	4 / SHEET 23	249.00	-	241.41



**SEQUENCE OF CONSTRUCTION**

- OBTAIN A GRADING PERMIT FOR THE PROPOSED WORK.
- NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES (DILP) AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. (2 DAYS)
- INSTALL THE STABILIZED CONSTRUCTION ENTRANCE (SCE) AND ALL PERIMETER CONTROL DEVICES, INCLUDING SUPER SILT FENCE (SSF), DIVERSION FENCE (DF), AND INLET PROTECTION AS SHOWN ON THE PLANS. (ONE WEEK)
- WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, INSTALL SEDIMENT TRAP NO. 1, WITH REMOVABLE PUMPING STATION, AND EARTH DIKES. (ONE WEEK)
- UPON COMPLETION OF THE SEDIMENT TRAPS AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, BEGIN CLEARING / GRUBBING AND DEMOLITION OPERATIONS ACROSS THE REMAINING SITE AREA. TEMPORARILY STOCKPILE EXCAVATED MATERIAL IN THE DESIGNATED LOCATION. CONTINUE GRADING OPERATIONS TO BRING THE SITE TO PROPOSED GRADES STABILIZING PAVED AREAS WITH GRAVEL SUBBASE. PLACE SUPER SILT FENCE (SSF) AROUND ALL MICRO-BIORETENTION AREAS UPON CONSTRUCTION UNTIL SITE STABILIZATION IS ACHIEVED. (4 WEEKS)
- TRENCH AND INSTALL SITE UTILITIES, INCLUDING STORM SEWER, DOMESTIC WATER, AND ELECTRICAL / TELECOMMUNICATIONS. INSTALL INLET PROTECTION AS INLETS ARE COMPLETED. (6 WEEKS)
- BEGIN CONSTRUCTION OF THE CURBS AND SIDEWALKS ACROSS THE SITE AND PLACE ASPHALT AND CONCRETE PAVEMENT BASE COURSES. ADJUST DIVERSION FENCE AND EARTH DIKES AS NECESSARY TO MAINTAIN DRAINAGE TO SEDIMENT TRAP NO. 1. (4 WEEKS)
- CONSTRUCT VEHICLE CHECK POINT (VCP). CONNECT ROOF DRAINS TO STORM SEWER SYSTEM. (3 WEEKS)
- FINE GRADE THE SITE AND INSTALL PERMANENT SEED AND MULCH ON LAWN SAREAS. ESTABLISH A MINIMUM 70% COVER OF VEGETATIVE SPECIES IN THE PVIOUS AREAS. (2 WEEKS)
- UPON STABILIZATION OF THE SITE AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE THE SEDIMENT TRAP. REMOVE SOFT SUBBASE MATERIAL FROM POOL AREA PRIOR TO BACKFILLING WITH APPROPRIATE FILL/SOIL MATERIAL. BACKFILL THE TRAP AREA, AND INSTALL THE CONCRETE CURB, GRAVEL SUBBASE, AND ASPHALT PAVEMENT BASE COURSES IN THE TRAP AREA. (2 WEEKS)
- PROCEED WITH FINAL PAVING OPERATIONS AND INSTALL THE SITE LANDSCAPING PER PLANS.
- UPON FINAL STABILIZATION OF ALL REMAINING AREAS AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE THE REMAINING SEDIMENT CONTROL MEASURES AND STABILIZE ANY AREAS DISTURBED BY DOING SO.

REVISED PLAN TO INCLUDE NEW SITE LAYOUT AND BESTMAN AND SEDIMENT CONTROLS



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. 45292, Expiration Date: 05/21/2016



AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

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

Signature of Developer: *James F. Knott Jr.* 4/8/15  
 Signature of Engineer: *Robert Crowley* 4/8/15  
 Signature of Inspector: *John R. Hester* 4/19/16

DATE	No.	REVISION DESCRIPTION
04/14/14	1	REVISED SITE LAYOUT TO ADD VISITOR'S CENTER INSPECTION FACILITY

DATE	No.	REVISION DESCRIPTION
5-6-16	1	DATE
5-11-16	1	DATE
5-16-16	1	DATE

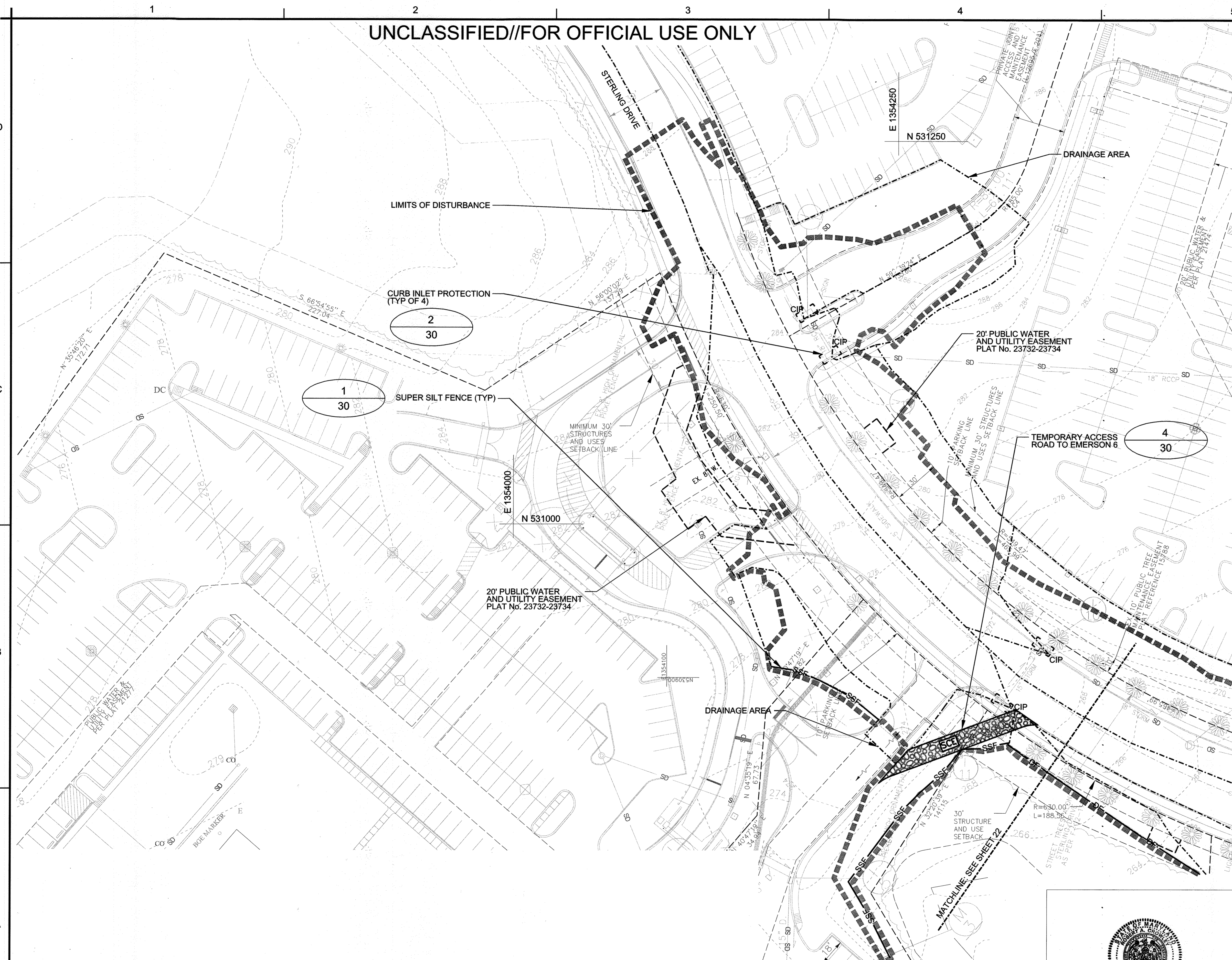
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TONIUMION, MARYLAND 21093  
 (443) 689-8000


<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA 22201		
SUBDIVISION NAME	TAX MAP #	LOT/PARCEL #
EMERSON / REINTZ PROPERTY	47	LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE		
EROSION AND SEDIMENT CONTROL PLAN PHASE 1		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	22 OF 60
CHK. BY	APPROVED	
R. CROWLEY		

UNCLASSIFIED//FOR OFFICIAL USE ONLY

D  
C  
B  
A



  
**AS BUILT CERTIFICATION FOR PSWM:**  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

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

*James L. Owens* 4/8/16  
 SIGNATURE OF DEVELOPER  
 PRINT NAME BELOW SIGNATURE  
 James L. Owens, Jr.  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT I WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Robert Crowley* 4/8/16  
 SIGNATURE OF ENGINEER  
 PRINT NAME BELOW SIGNATURE  
 Robert Crowley  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Peltzer* 4/19/16  
 HOWARD SOIL CONSERVATION DISTRICT  
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*John Peltzer* 5-6-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

*Neil S. Anderson* 5-16-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE

*Natalie J. Zippin* 5-16-16  
 DIRECTOR  
 DATE

DATE	No.	REVISION DESCRIPTION

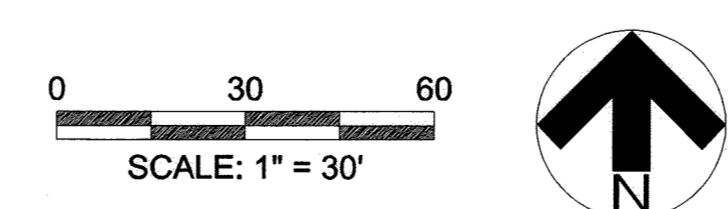
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

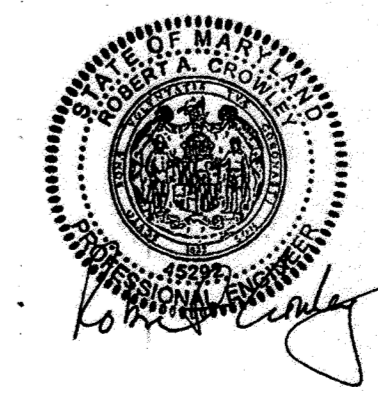
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/RENTZ PROPERTY	47	LOT 180 (PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q)
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

**EROSION AND SEDIMENT CONTROL PLAN PHASE 1**

DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	23 OF 80
R. CROWLEY		

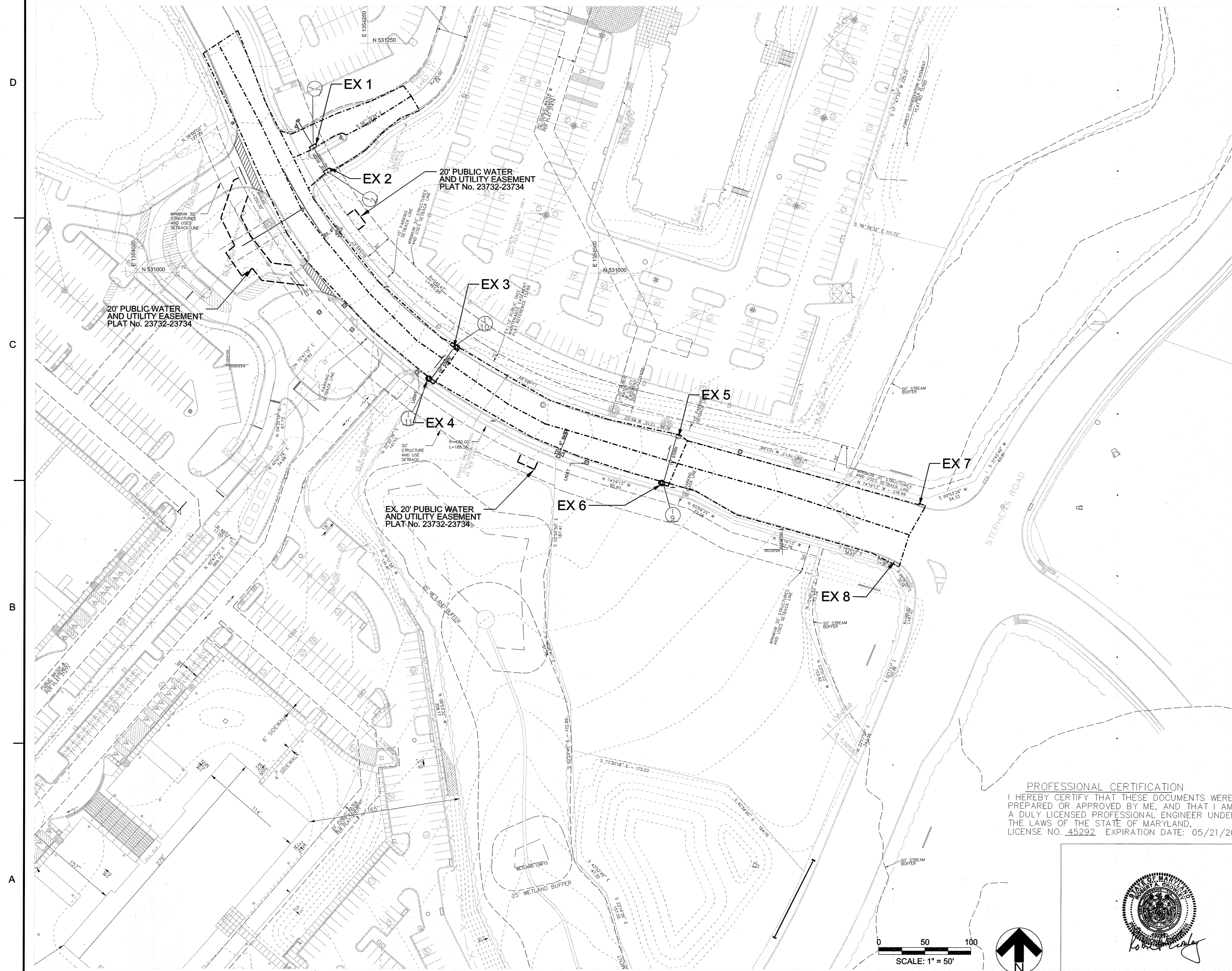


PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016



UNCLASSIFIED//FOR OFFICIAL USE ONLY

DRAINAGE ID	AREA (AC)
EX 1	0.069
EX 2	0.081
EX 3	0.176
EX 4	0.249
EX 5	0.157
EX 6	0.133
EX 7	0.176
EX 8	0.197



AS BUILT CERTIFICATION FOR ISWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/8/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	6-10-16 DATE

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

SUBDIVISION NAME EMERSON/RENTZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE 	SEWER CODE 	

TITLE EXISTING DRAINAGE MAP		
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 
DRN. BY M. WERDER	DATE 04/04/2016	24 OF 80
CHK. BY R. CROWLEY	APPROVED	

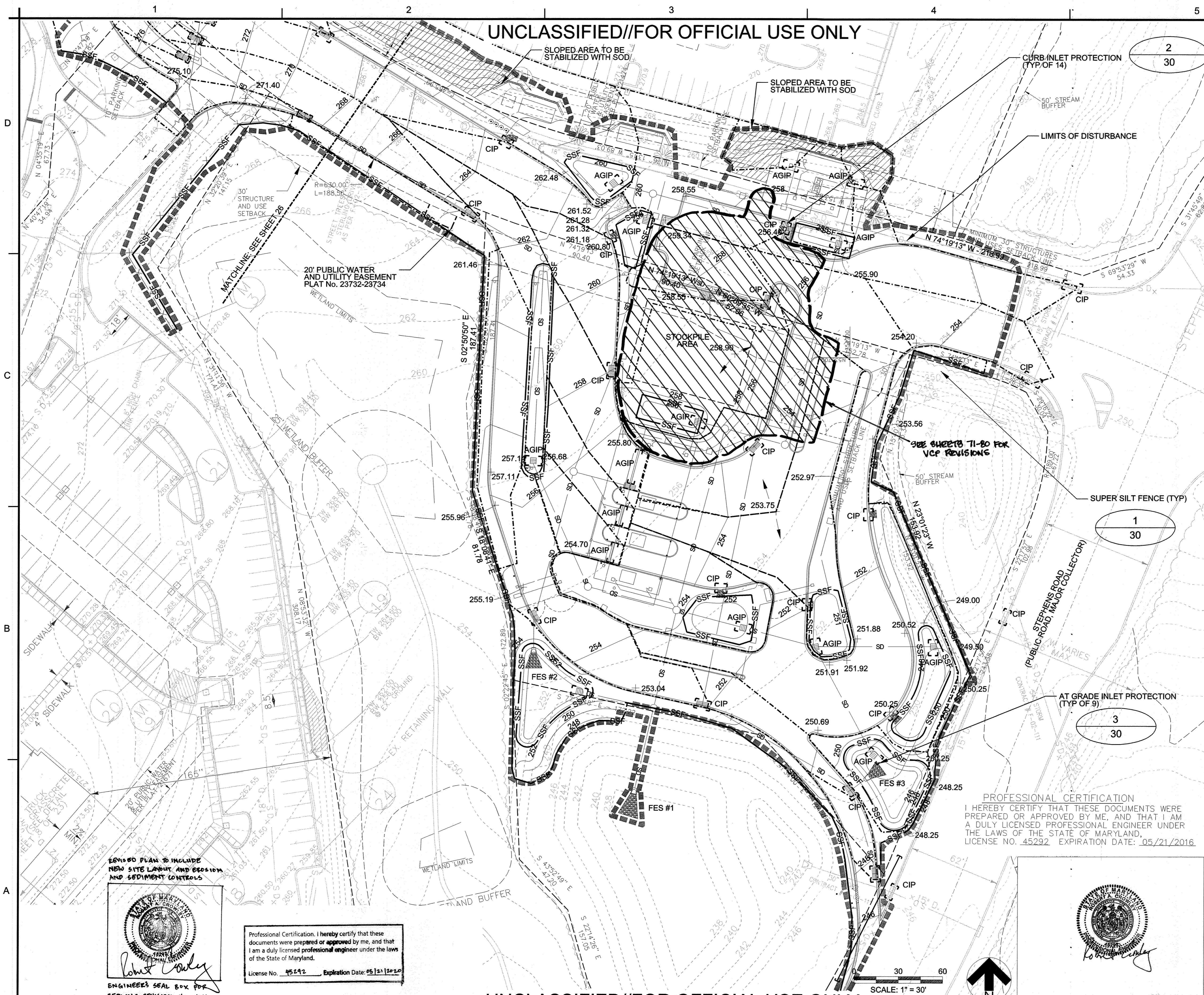
PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016



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AS BUILT CERTIFICATION FOR ESWM  
NOTE: THERE IS NO AS BUILT INFORMATION  
PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

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

*Robert Crowley* 4/8/16  
SIGNATURE OF DEVELOPER  
DATE

*Robert Crowley* 4/16/16  
SIGNATURE OF ENGINEER  
DATE

*John R. Peltier* 4/19/16  
HOWARD SOIL CONSERVATION DISTRICT  
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>John R. Peltier</i>	5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Valdis J. J. J.</i>	5-16-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Valdis J. J. J.</i>	5-16-16
DIRECTOR	DATE

09/24/14 1 REVISED SITE LAYOUT TO  
ADD VISIBILITY CENTER  
INSPECTION FACILITY

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE  
CHECK POINT SECURITY GATE**  
PARCEL H

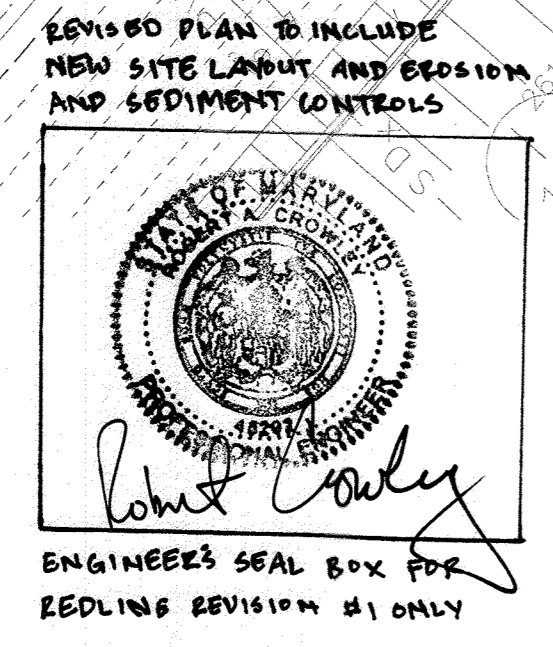
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME	TAX MAP #	LOT/PARCEL #
EMERSON/RENTZ PROPERTY	47	LOT 169 (PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q)

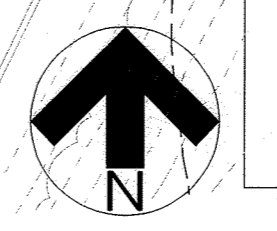
PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE		
EROSION AND SEDIMENT CONTROL PLAN PHASE 2		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	25 OF 80
R. CROWLEY		



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. 45292 Expiration Date: 05/21/2020

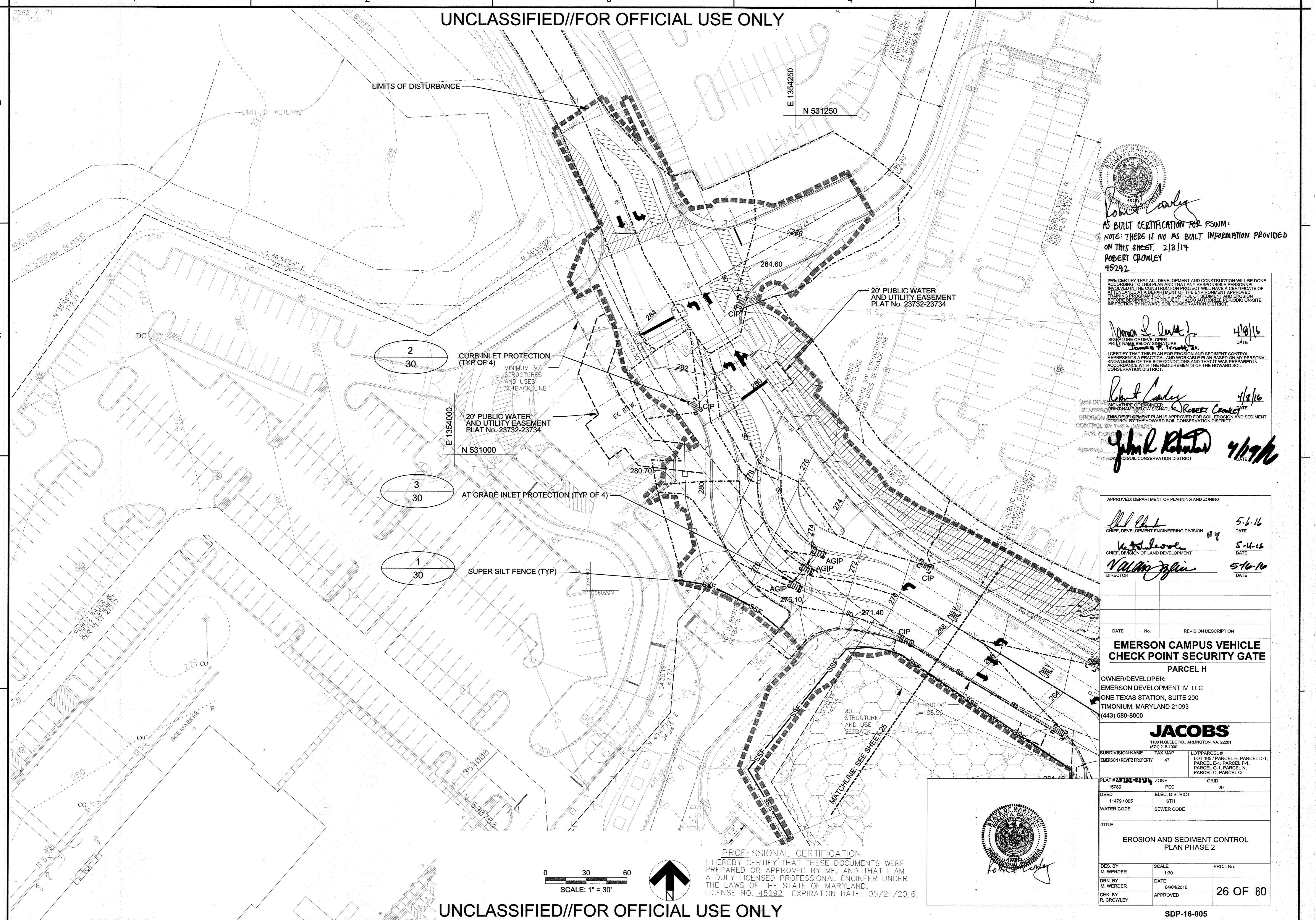
PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2020



SCALE: 1" = 30'

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SDP-16-005



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*Robert Crowley*  
 AS BUILT CERTIFICATION FOR PSNM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED  
 ON THIS SHEET. 2/3/17  
 ROBERT CROWLEY  
 45292

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

*Thomas L. Lusk Jr.* 4/8/16  
 SIGNATURE OF DEVELOPER  
 PRINT NAME BELOW SIGNATURE  
 Thomas L. Lusk Jr.  
 DATE

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

*Robert Crowley* 4/8/16  
 SIGNATURE OF ENGINEER  
 PRINT NAME BELOW SIGNATURE  
 Robert Crowley  
 DATE

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

*John R. Kuntz* 4/19/16  
 APPROVED  
 HOWARD SOIL CONSERVATION DISTRICT  
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*Neil Chitt* 5-6-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE  
*V. Toland* 5-11-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE  
*Valerie Zylins* 5-16-16  
 DIRECTOR  
 DATE

DATE No. REVISION DESCRIPTION  
**EMERSON CAMPUS VEHICLE  
 CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

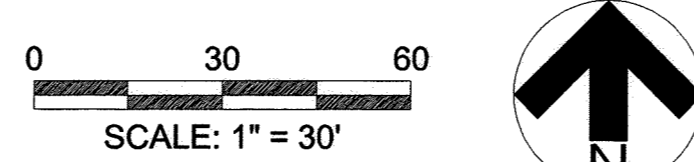
**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (871) 218-1000

SUBDIVISION NAME TAX MAP LOT/PARCEL #  
 EMERSON / REVITZ PROPERTY 47 107165 / PARCEL H, PARCEL D-1,  
 PARCEL E-1, PARCEL F-1,  
 PARCEL G-1, PARCEL N,  
 PARCEL O, PARCEL Q

PLAT # 23732-23734 ZONE GRID  
 15786 PEC 20  
 DEED 11479 / 005 ELEC. DISTRICT  
 6TH  
 WATER CODE SEWER CODE

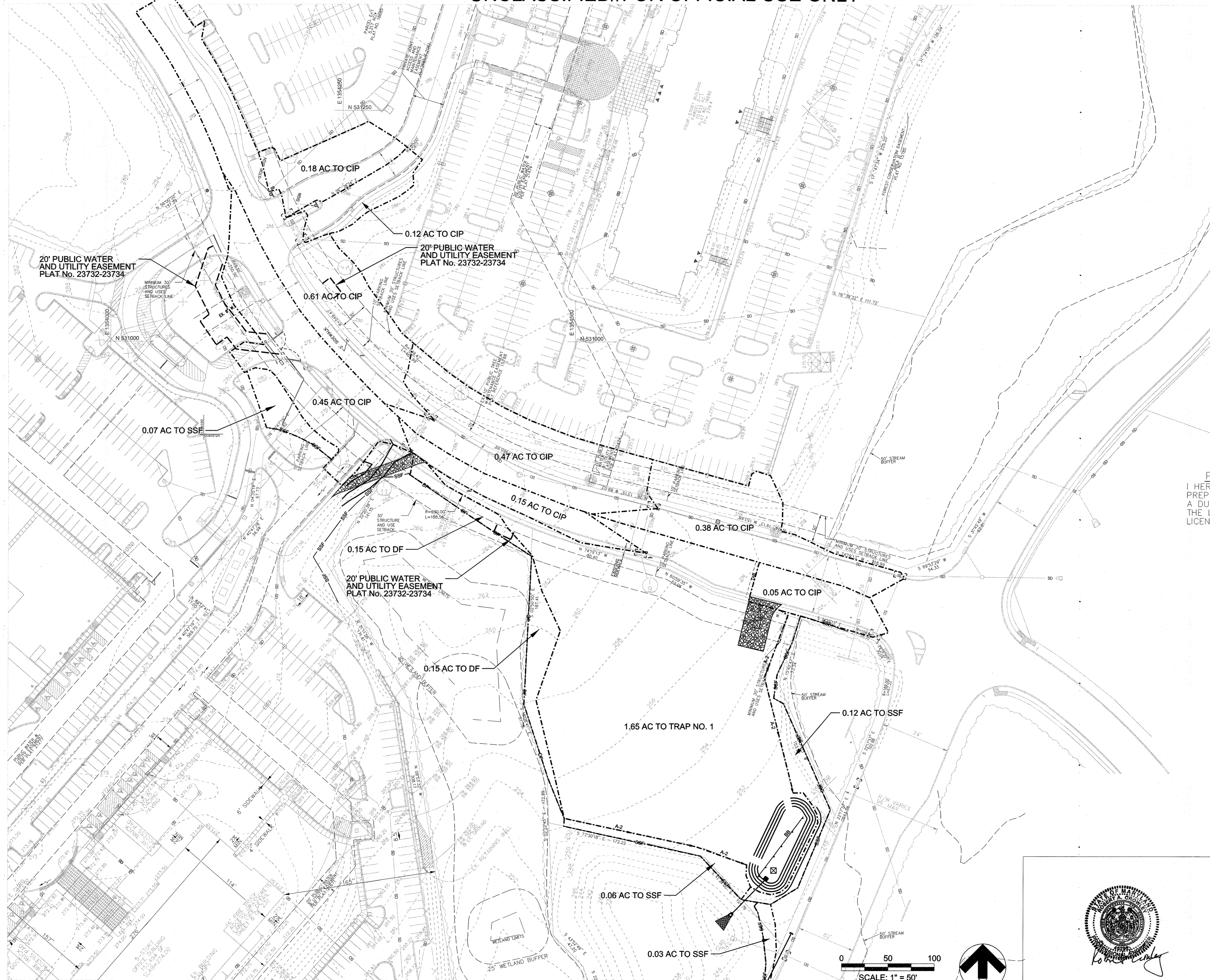
TITLE  
**EROSION AND SEDIMENT CONTROL  
 PLAN PHASE 2**

DES. BY M. WERDER SCALE 1:30 PROJ. No.  
 DRN. BY M. WERDER DATE 04/04/2016 26 OF 80  
 CHK. BY R. CROWLEY APPROVED



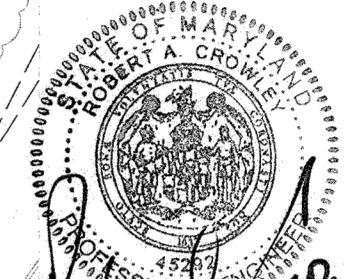
PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE  
 PREPARED OR APPROVED BY ME, AND THAT I AM  
 A DULY LICENSED PROFESSIONAL ENGINEER UNDER  
 THE LAWS OF THE STATE OF MARYLAND,  
 LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016

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

APPROVED: \_\_\_\_\_  
HOWARD SCD



*Robert Crowley*  
AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

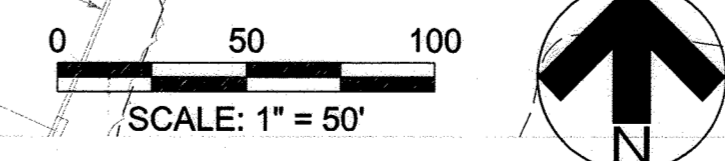
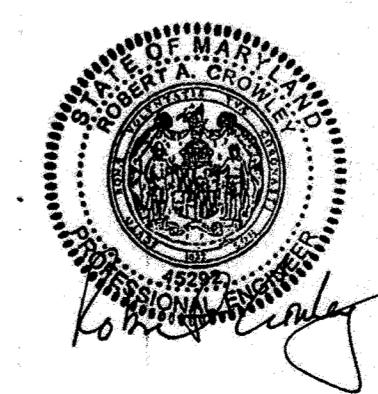
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT

*John L. White*  
Approved: \_\_\_\_\_  
HOWARD SCD  
7/19/16

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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>John L. White</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>Valerie L. ...</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>Val ...</i> DIRECTOR	5-10-16 DATE

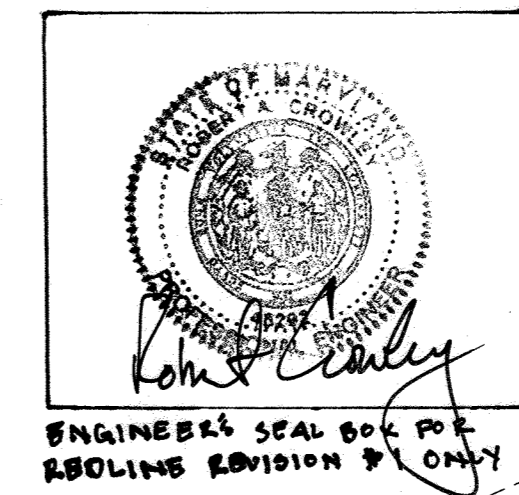
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (871) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
EXISTING CONDITIONS DRAINAGE AREA MAP EROSION AND SEDIMENT CONTROL		
DES. BY M. WEBER	SCALE 1:30	PROJ. No. 27 OF 80
DRN. BY M. WEBER	DATE 04/04/2016	
CHK BY R. CROWLEY	APPROVED	



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UNCLASSIFIED//FOR OFFICIAL USE ONLY

REVISED PLAN TO INCLUDE  
NEW SITE LAYOUT AND DESIGN  
AND SEDIMENT CONTROLS



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. 45292, Expiration Date: 05/21/2022

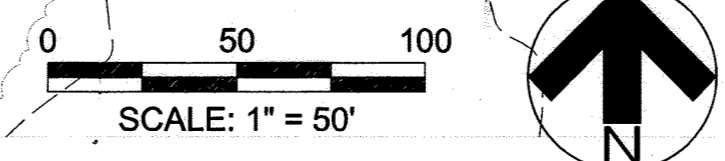
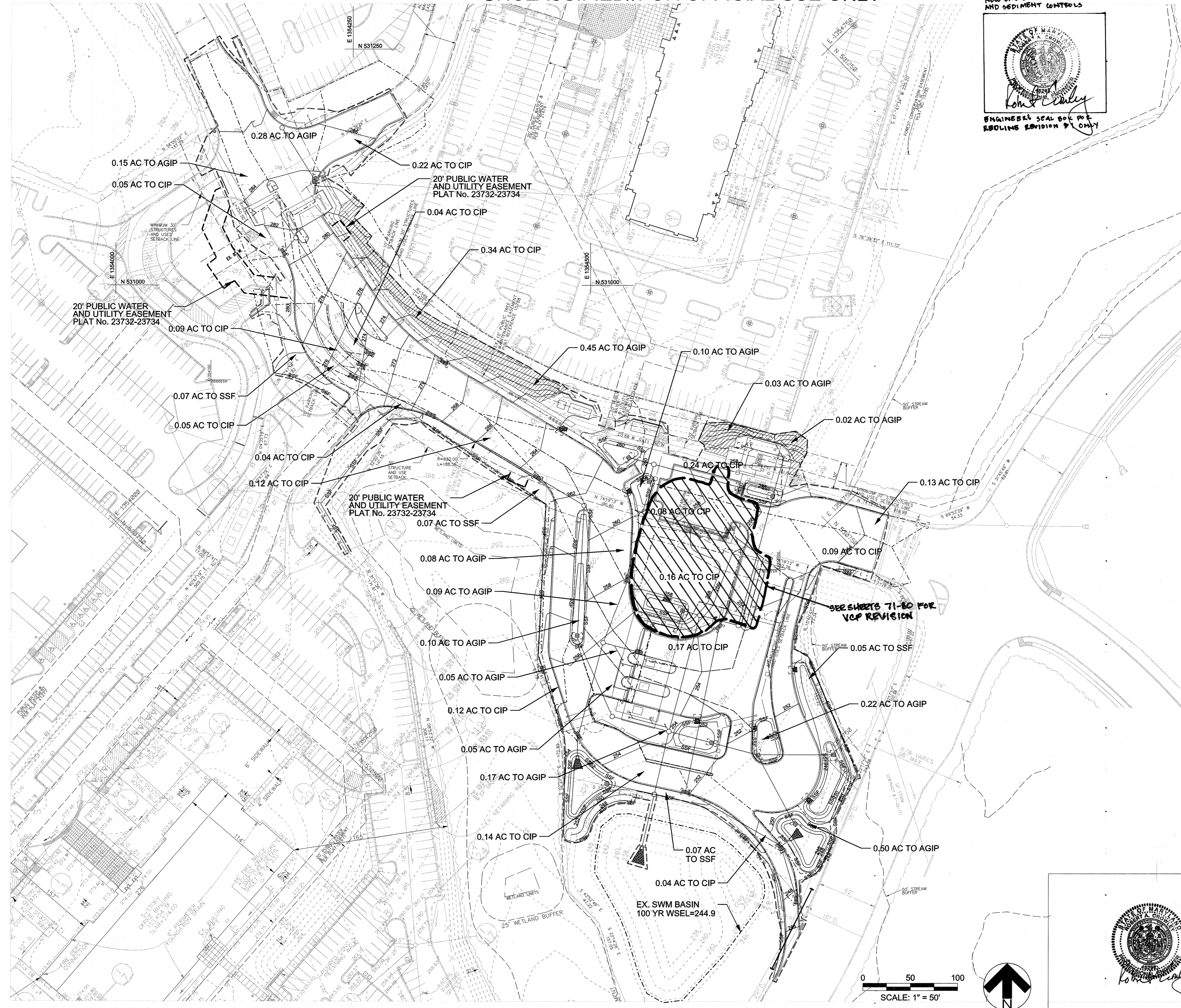
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Approved: *John Keltner*  
Howard SCD 4/14/16



AS BUILT CERTIFICATION FOR BSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>David Clark</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE	
<i>William J. Joffe</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-6-16 DATE	
<i>William J. Joffe</i> DIRECTOR	5-16-16 DATE	
04/24/19	1	
REVISED SITE LAYOUT TO ADD VISITOR CENTER INSPECTION FACILITY		
DATE	No.	
REVISION DESCRIPTION		
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b> 1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # PARCEL E-1, PARCEL H, PARCEL D-1, PARCEL G-1, PARCEL F-1, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE <b>PROPOSED CONDITIONS DRAINAGE AREA MAP EROSION AND SEDIMENT CONTROL</b>		
DES. BY M. WEBBER	SCALE 1:30	PROJ. No. 28 OF 30
DRN. BY M. WEBBER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	



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B-4 STANDARDS AND SPECIFICATIONS

FOR

VEGETATIVE STABILIZATION

Definition

Using vegetation as cover to protect exposed soil from erosion.

Purpose

To promote the establishment of vegetation on exposed soil.

Conditions Where Practice Applies

On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization, and permanent stabilization.

Effects on Water Quality and Quantity

Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas.

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.

Adequate Vegetative Establishment

Inspired seeded areas for vegetative establishment and make necessary repairs, replacements, and reseeds within the planting season.

- 1. Adequate vegetative stabilization requires 95 percent groundcover.
2. If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.
3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
4. Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

B.9

B-4.3 STANDARDS AND SPECIFICATIONS

FOR

SEEDING AND MULCHING

Definition

The application of seed and mulch to establish vegetative cover.

Purpose

To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

- A. Seeding
1. Specifications
a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of seed and seeding rate.
b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the ground thaws.
c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less effective.
d. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
2. Application
a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.

B.15

B-4.2 STANDARDS AND SPECIFICATIONS

FOR

SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

Definition

The process of preparing the soils to sustain adequate vegetative stabilization.

Purpose

To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies

Where vegetative stabilization is to be established.

Criteria

- A. Soil Preparation
1. Temporary Stabilization
a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
b. Apply fertilizer and lime as prescribed on the plans.
c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
2. Permanent Stabilization
a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
i. Soil pH between 6.0 and 7.0.
ii. Soluble salts less than 500 parts per million (ppm).
iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.
iv. Soil contains 1.5 percent minimum organic matter by weight.
v. Soil contains sufficient pore space to permit adequate root penetration.
b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches.

B.12

B. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

- i. Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4-inch of soil covering. Seedbed must be firm after planting.
ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorous), 200 pounds per acre; K2O (potassium), 200 pounds per acre.
ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
iii. Mix seed and fertilizer on site and seed immediately and without interruption.
iv. When hydroseeding do not incorporate seed into the soil.

B.16

B. Mulching

1. Mulch Materials (in order of preference)

- a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note: Use only sterile straw mulch in areas where one species of grass is desired.
b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
iv. WCFM material must not contain elements or compounds at concentration levels that will be phytotoxic.
v. WCFM must conform to the following physical requirements: Fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

B.16

- d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

B. Topsoiling

- 1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
c. The original soil to be vegetated contains material toxic to plant growth.
d. The soil is so acidic that treatment with limestone is not feasible.
4. Areas having slopes steeper than 2:1 require special consideration and design.
5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter.
b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
6. Topsoil Application
a. Erosion and sediment control practices must be maintained when applying topsoil.
b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading.

B.13

2. Application

- a. Apply mulch to all seeded areas immediately after seeding.
b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.
c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
3. Anchoring
a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:
i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.
ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroseed, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited.
iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

B.17

and seedbed preparation.
C. Soil Amendments (Fertilizer and Lime Specifications)

- 1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Mature may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4.8 STANDARDS AND SPECIFICATIONS

FOR

STOCKPILE AREA

Definition

A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

Purpose

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies

Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

Criteria

- 1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
3. Runoff from the stockpile area must drain to a suitable sediment control practice.
4. Access the stockpile area from the upgrade side.
5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4.1 Incremental Stabilization and Standard B-4.4 Temporary Stabilization.
8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

Maintenance

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

B.4.8



AS BUILT INFORMATION CERTIFICATION FOR PSWM
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.
ROBERT CROWLEY

45292
2/13/17

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

Signature of Developer: James W. ... 4/8/16
Signature of Engineer: Robert Crowley 4/8/16

Signature of Engineer: Robert Crowley 4/8/16

Signature of Director: John R. ... 4/19/16

APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION 5-6-16
CHIEF, DIVISION OF LAND DEVELOPMENT 5-11-16
DIRECTOR 5-16-16

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE
PARCEL H
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC
ONE TEXAS STATION, SUITE 200
TIMONIUM, MARYLAND 21093
(443) 689-8000

JACOBS
1100 N. GLEBE RD., ARLINGTON, VA, 22201
(871) 218-1000

SUBDIVISION NAME: EMERSON/RENTZ PROPERTY
TAX MAP: 47
LOT/PARCEL: LOT 105/PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q

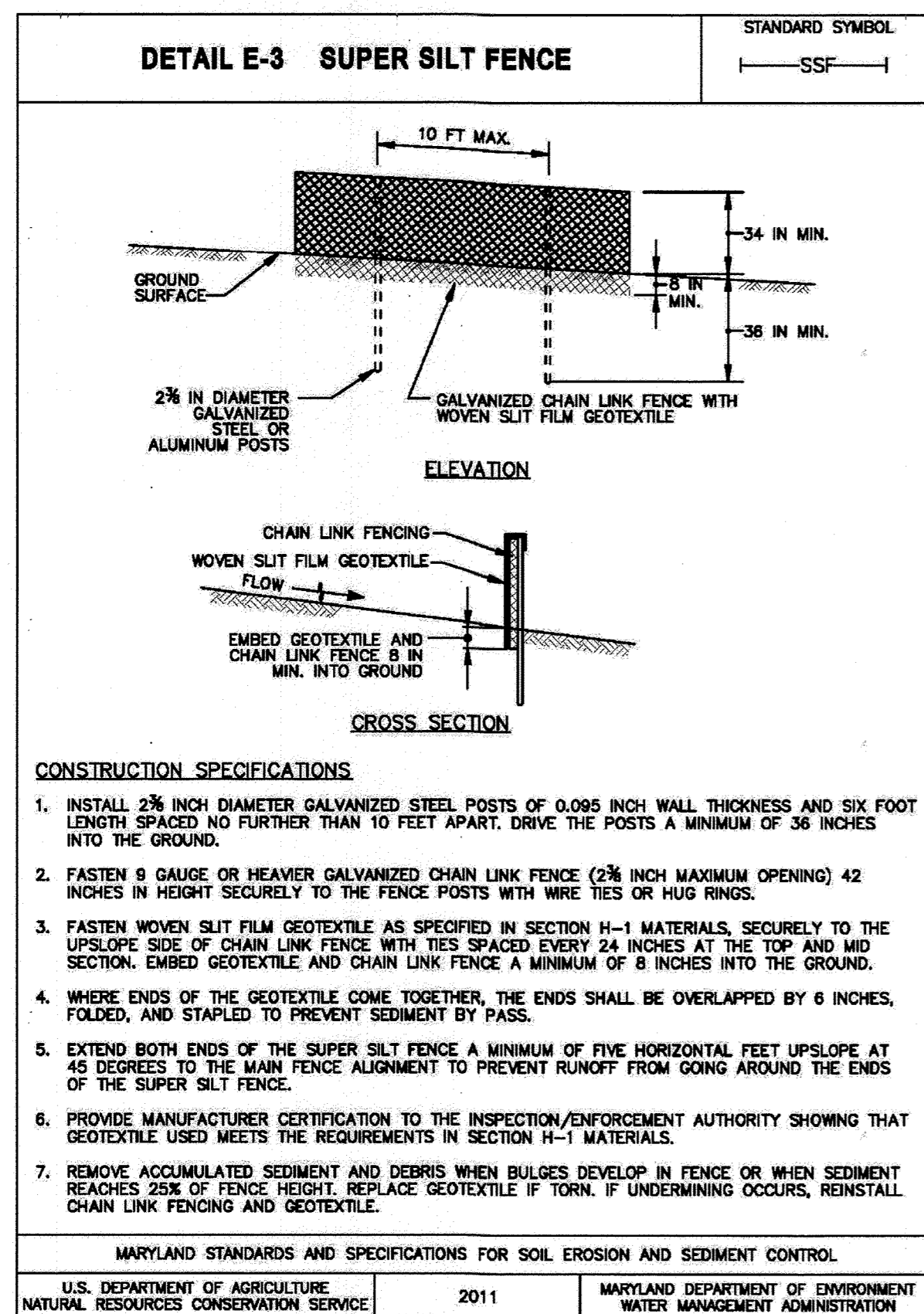
TITLE: EROSION AND SEDIMENT CONTROL NOTES

DES. BY: M. WERDER
SCALE: NTS
PROJ. No.: 29 OF 80
DRN. BY: M. WERDER
DATE: 04/04/2016
CHK. BY: R. CROWLEY
APPROVED

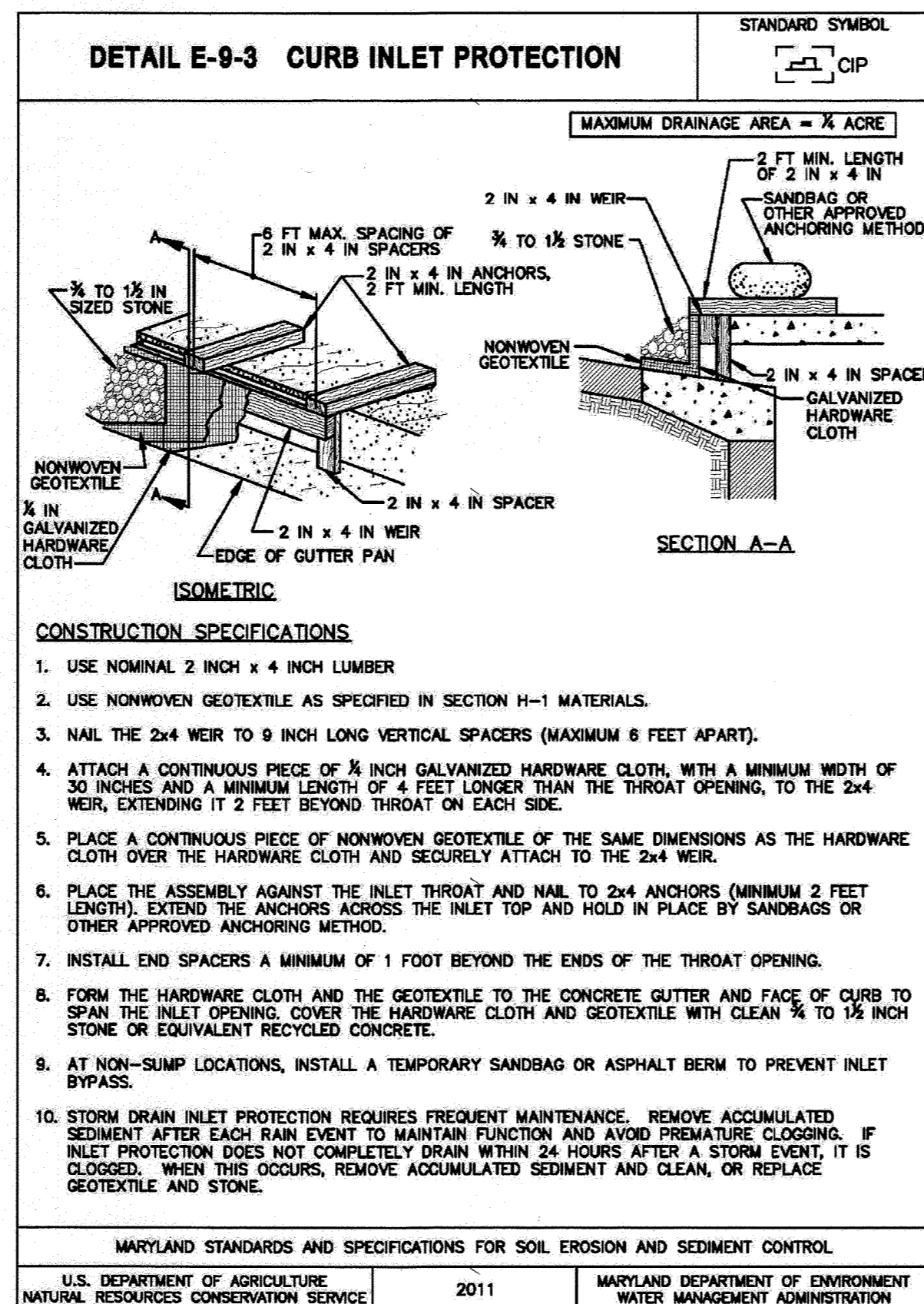
SDP-16-005

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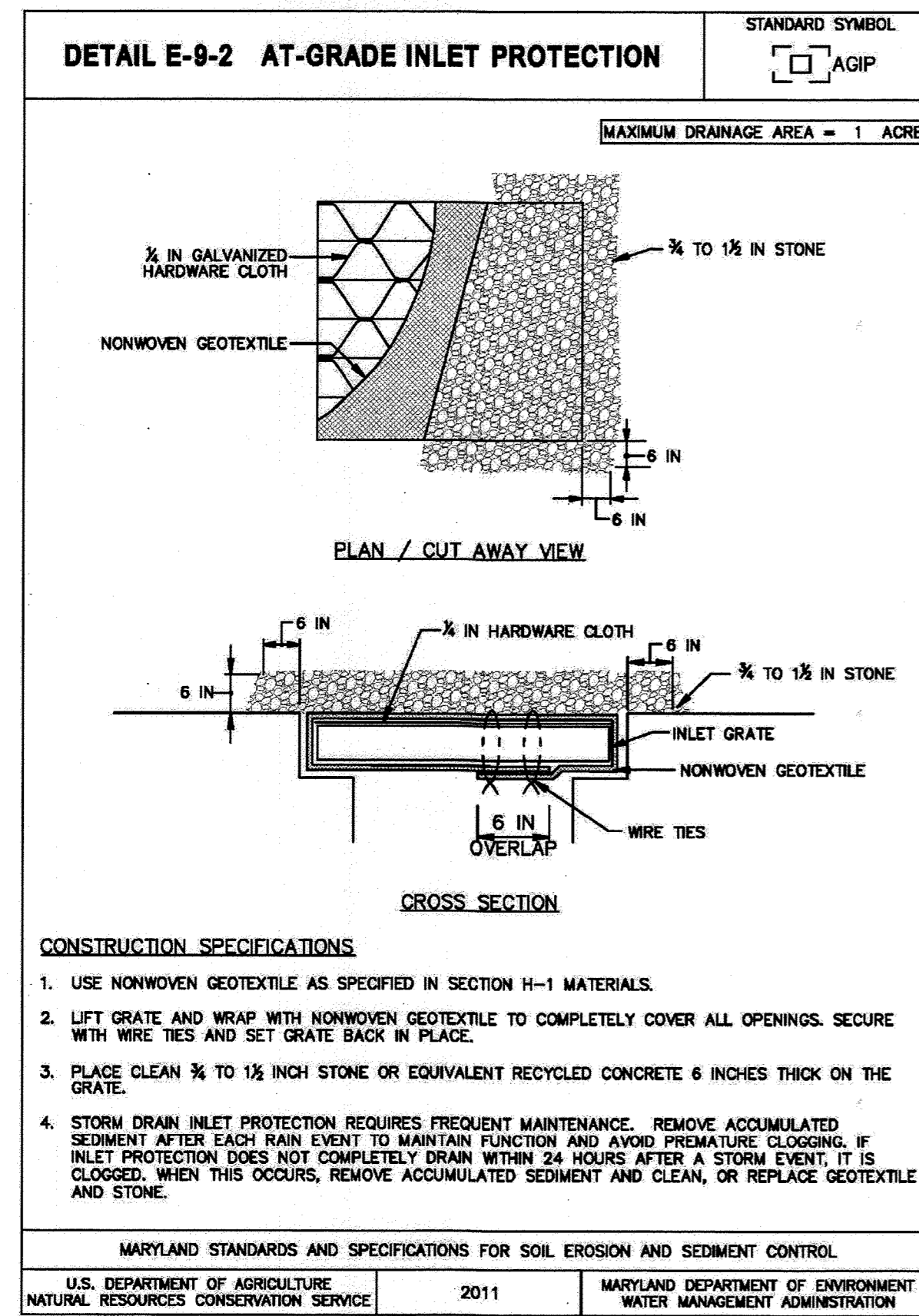
- 1. SEEDING AND STABILIZATION IS TO BE PROVIDED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 MARYLAND STANDARD SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE STRINGENT.



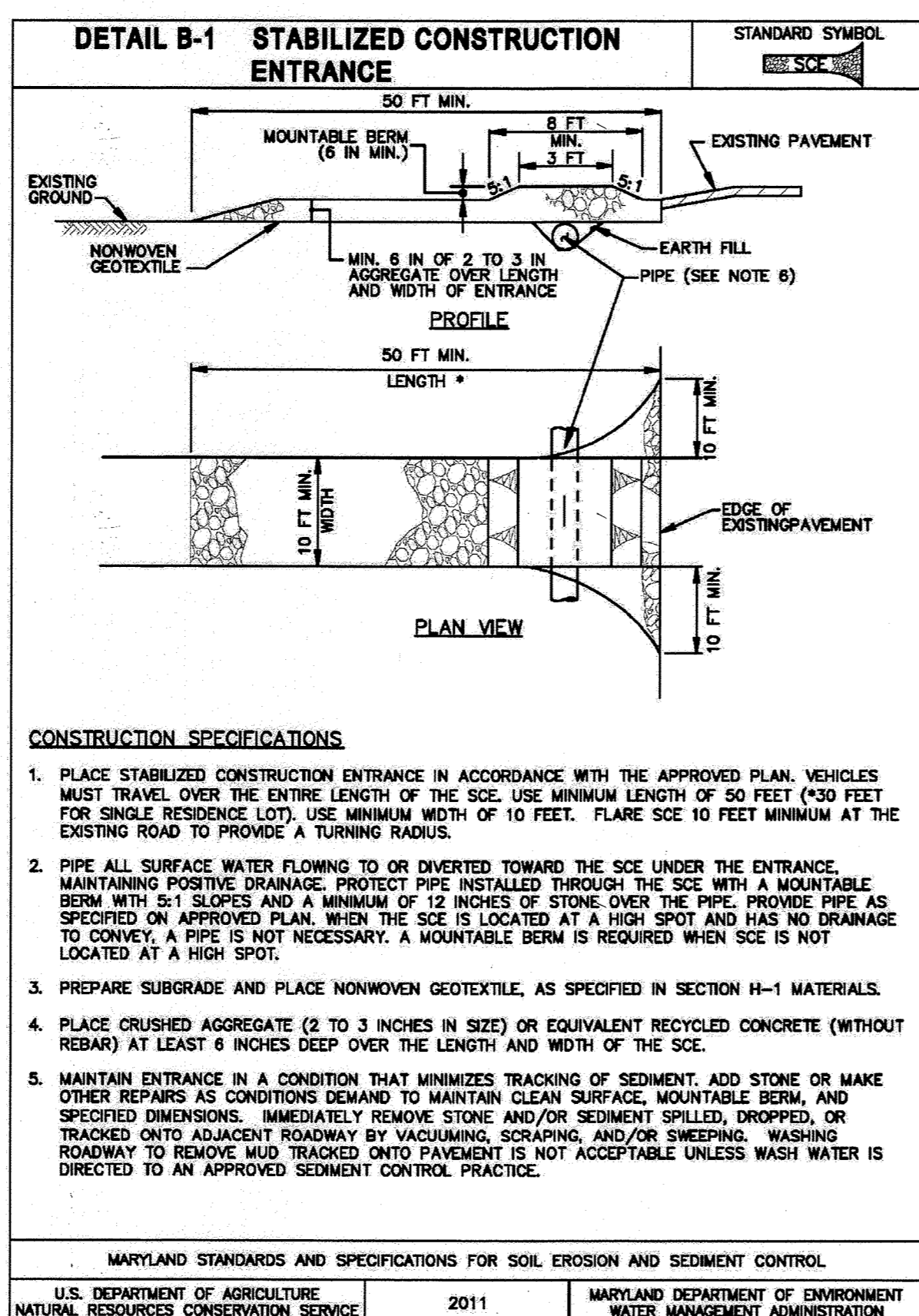
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SCALE: NONE



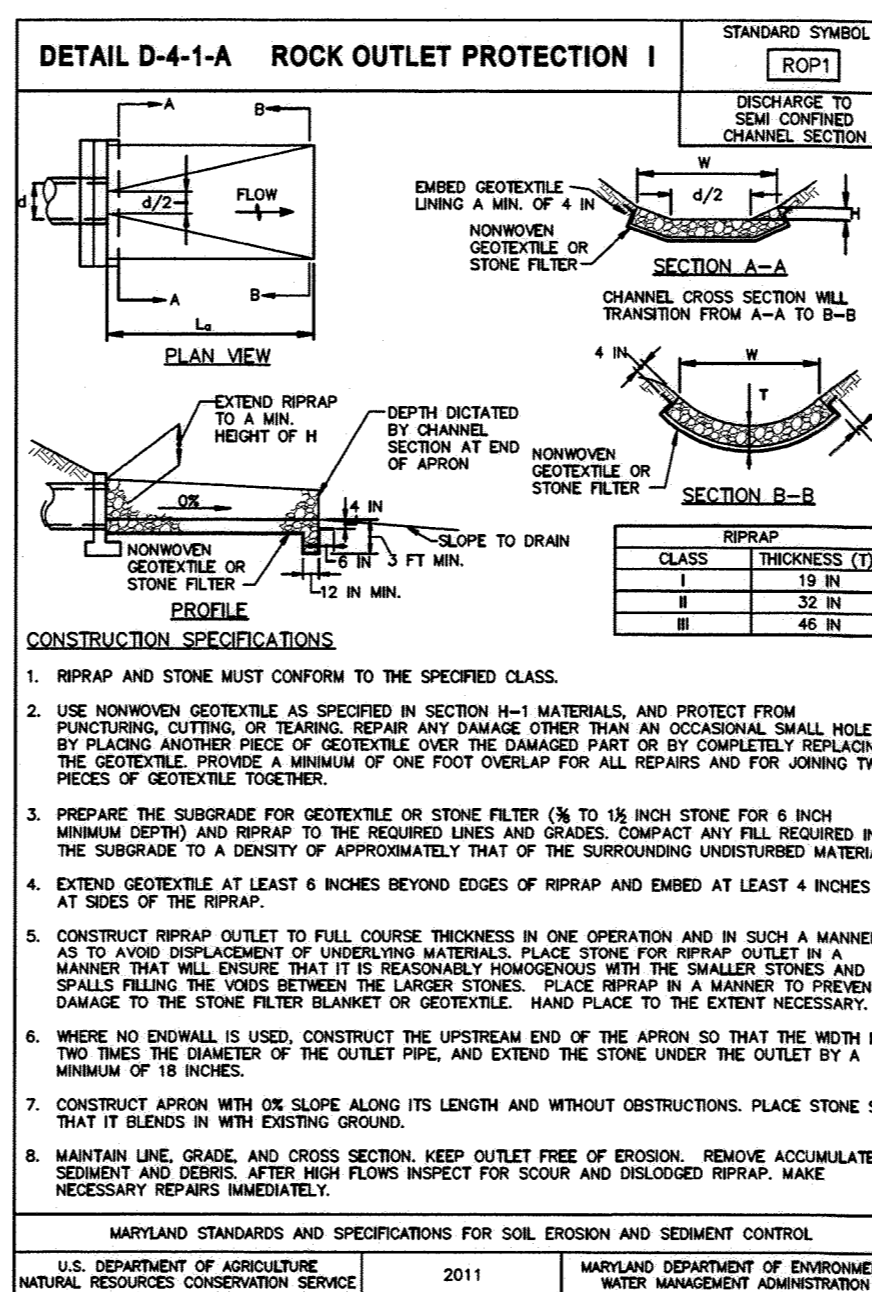
2 CURB INLET PROTECTION  
SCALE: NONE



3 AT GRADE INLET PROTECTION  
SCALE: NONE



4 CONSTRUCTION ENTRANCE  
SCALE: NONE



5 OUTLET PROTECTION  
SCALE: NONE

SECTION II - TEMPORARY SEEDING  
VEGETATION - ANNUAL GRASS OR GRAIN USED TO PROVIDE COVER ON DISTURBED AREAS FOR UP TO 12 MONTHS. FOR LONGER DURATION OF VEGETATIVE COVER, PERMANENT SEEDING IS REQUIRED.

A. SEED MIXTURES - TEMPORARY SEEDING

TEMPORARY SEEDING SUMMARY

SEED MIXTURE (HARDINESS ZONE 7a) FROM TABLE 26					FERTILIZER RATE (10-10-10)	LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
	ANNUAL RYEGRASS	50 LBS/AC	3/1 - 4/30 8/15 - 11/1	1/4 - 1/2 INCHES	600 LB/AC (15 LB/1000 SF)	2 TON/AC (100 LB/1000 SF)
	WEeping LOVEGRASS	4 LBS/AC	5/1-8/14	1/4 - 1/2 INCHES		
	MILLET	50 LBS/AC	5/1-8/14	1/2 INCHES		

SECTION III: PERMANENT SEEDING  
SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOD OF ONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE.

A. SEED MIXTURES - PERMANENT SEEDING

I. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREAFORM FERTILIZER (46-0-0) AT 3-1/2 LBS/1000 SQ. FT. (150 LBS/AC), IN ADDITION TO THE ABOVE SOIL AMENDMENTS SHOWN IN THE TABLE BELOW, TO BE PERFORMED AT THE TIME OF SEEDING.

PERMANENT SEEDING SUMMARY

SEED MIXTURE (HARDINESS ZONE 7a) FROM TABLE 25)					FERTILIZER RATE (10-20-20)			LIME RATE
NO.	SPECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS	N	P2O5	K2O	
3	TALL FESCUE (75%) PERENNIAL RYEGRASS (10%) KENTUCKY BLUEGRASS (5%)	125 15 10	3/1-5/15 8/15-10/15	1/4" TO 1/2"	90 LB/AC (2 LB/ 1000 SF)	175 LB/AC (4 LB/ 1000 SF)	175 LB/AC (4 LB/ 1000 SF)	2 TON/AC (100 LB/ 1000 SF)
7	TALL FESCUE (83%) WEeping LOVEGRASS (2%) PLUS SERECIA LESPEDEZA (15%)	110 3 20	3/1-5/15 5/16-8/14 8/15-10/15	1/4" TO 1/2"				

ROCK OUTLET PROTECTION

STRUCTURE ID	TYPE	CLASS	LENGTH	WIDTH	THICKNESS	MIN HEIGHT OF RIPRAP
FES #1	ROP II	CLASS I	14 FT	16.52 FT	19 IN	1.0 FT
FES #2	ROP II	CLASS I	10 FT	11.5 FT	19 IN	1.0 FT
FES #3	ROP II	CLASS I	10 FT	11.5 FT	19 IN	1.0 FT
FES - ST	ROP II	CLASS I	14 FT	15.75 FT	19 IN	1.0 FT
MBR #1	ROP I	CLASS I	5 FT	8 FT	19 IN	1.0 FT
MBR #2	ROP I	CLASS I	2 FT	5 FT	19 IN	1.0 FT
MBR #3	ROP I	CLASS I	2 FT	5 FT	19 IN	1.0 FT
MBR #4	ROP I	CLASS I	2 FT	5 FT	19 IN	1.0 FT
MBR #5	ROP I	CLASS I	2 FT	5 FT	19 IN	1.0 FT

AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
46292  
2/3/17  
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. 45292 EXPIRATION DATE: 05/21/2016

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

Signature: Robert Crowley  
Date: 4/8/16  
Signature: John R. Hunter  
Date: 4/19/16  
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Signature: [Name]  
Date: 5-6-16  
Signature: [Name]  
Date: 5-11-16  
Signature: [Name]  
Date: 6-16-16

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
PARCEL H  
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

JACOBS  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(771) 218-1000

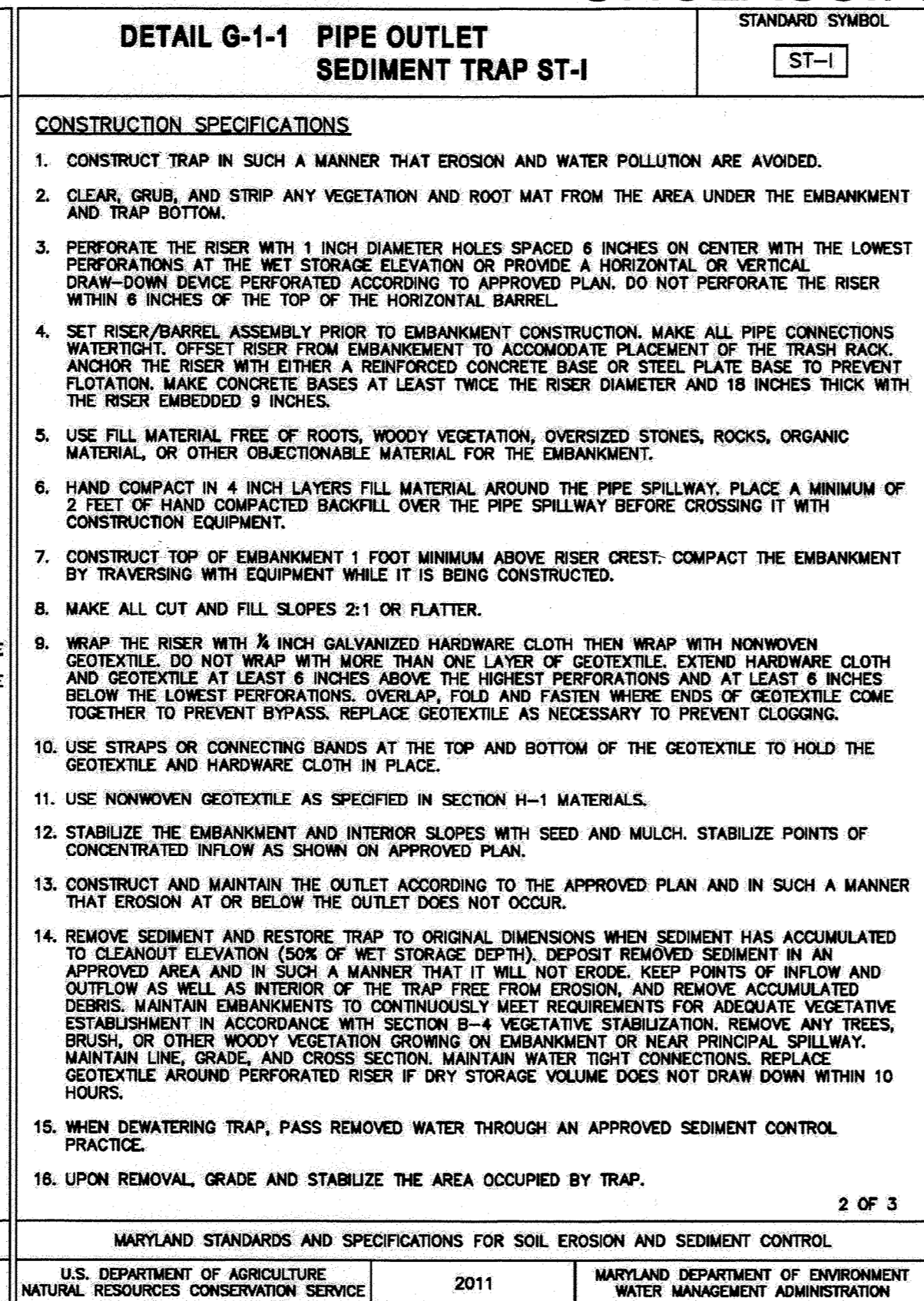
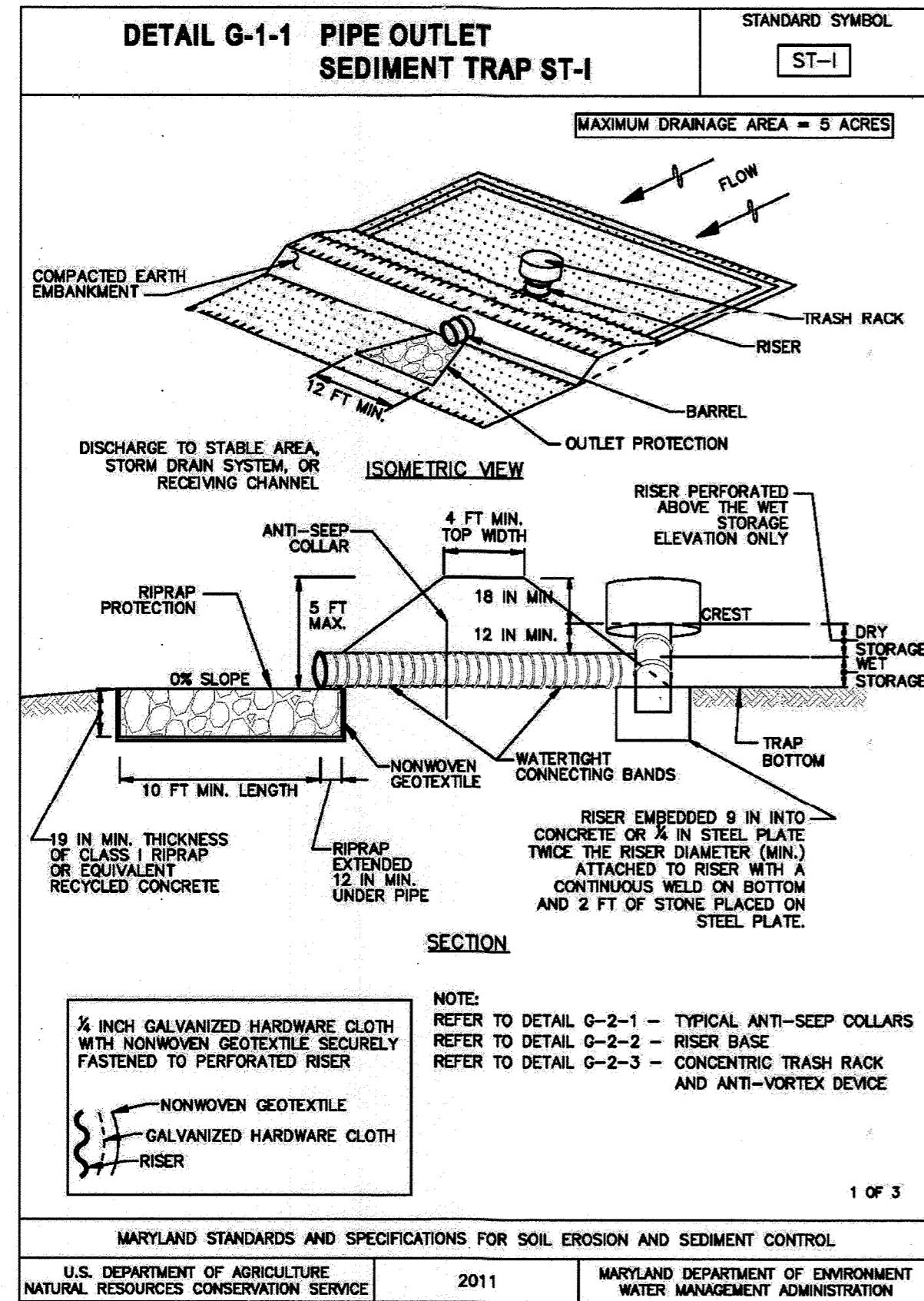
SUBDIVISION NAME: EMERSON/REVIZ PROPERTY  
TAX MAP # 47  
LOT/PARCEL # LOT 166 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q

PLAT # 2013-0173  
ZONE: PEC  
GRID: 20  
DEED: 11479 / 005  
ELEC. DISTRICT: 6TH  
WATER CODE: SEWER CODE

TITLE: EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

DES. BY: M. WERDER  
SCALE: NTS  
PROJ. No.: 30 OF 80  
DRN. BY: M. WERDER  
DATE: 04/04/2016  
CHK. BY: R. CROWLEY  
APPROVED:

UNCLASSIFIED//FOR OFFICIAL USE ONLY

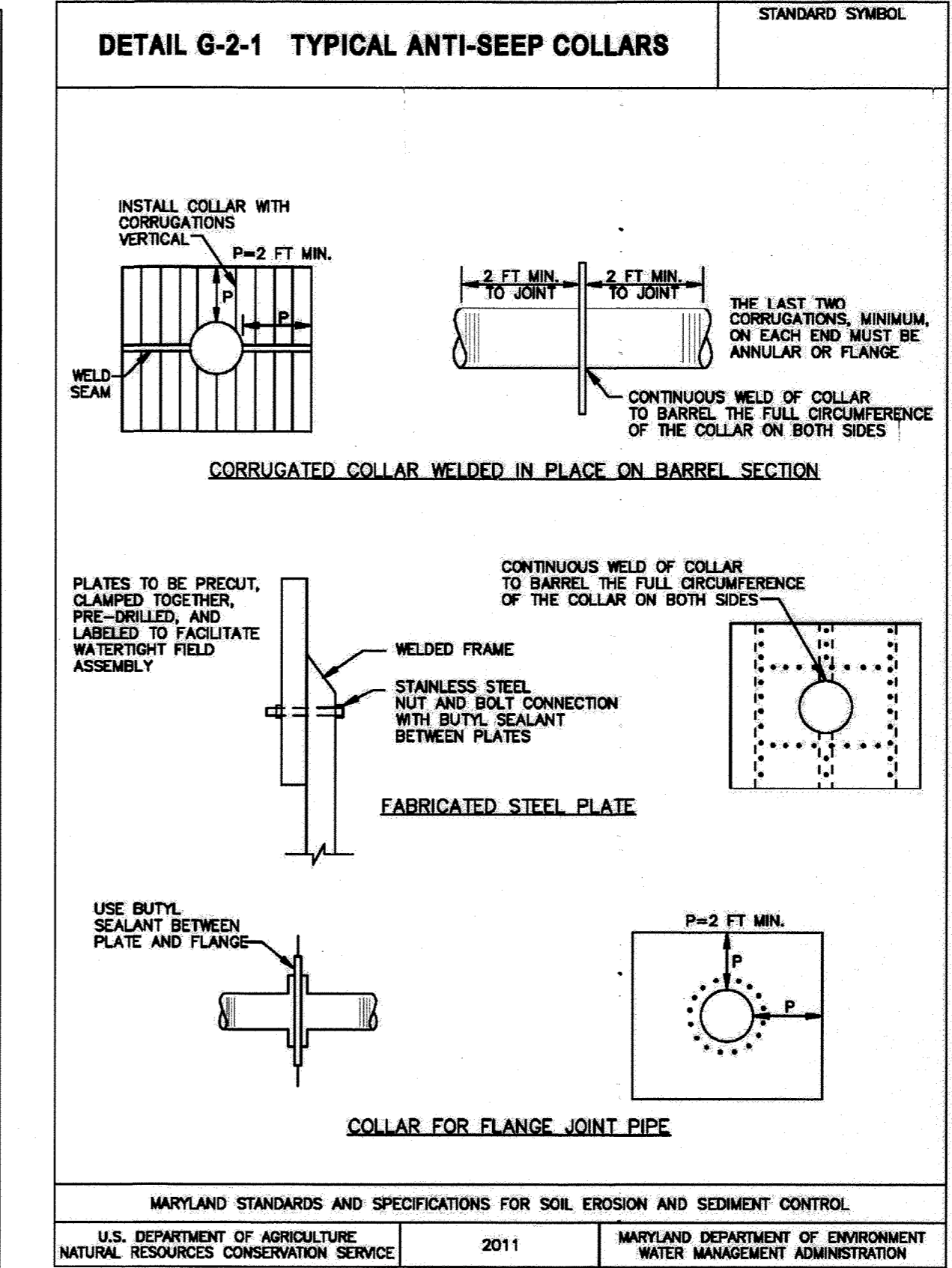


**DETAIL G-1-1 PIPE OUTLET SEDIMENT TRAP ST-1**  
STANDARD SYMBOL: ST-1

PIPE OUTLET SEDIMENT TRAP ST-1, TRAP NO. #1

DRAINAGE AREA - INITIAL	1.65	ACRES
DRAINAGE AREA - INTERIM	1.65	ACRES
DRAINAGE AREA - FINAL	1.65	ACRES
TOTAL STORAGE REQUIRED	5,940	CF
TOTAL STORAGE PROVIDED	6,325	CF
WET STORAGE REQUIRED	2,970	CF
WET STORAGE PROVIDED	3,032	CF
DRY STORAGE REQUIRED	2,970	CF
DRY STORAGE PROVIDED	3,293	CF
TRAP BOTTOM ELEVATION	247.00	FT
TRAP BOTTOM DIMENSIONS	26 X 82	FT X FT
RISER CREST (DRY STORAGE) ELEVATION	249.45	FT
OUTLET (WET STORAGE) ELEVATION	248.20	FT
CLEANOUT ELEVATION	247.60	FT
TOP OF EMBANKMENT ELEVATION	250.95	FT
SIDE SLOPE	3:1	H:V RATIO
EMBANKMENT TOP WIDTH	14.0	FT
PRINCIPAL SPILLWAY MATERIAL (BARREL, RISER, ANTI-SEEP COLLAR)	CORRUGATED METAL	
RISER DIAMETER	27	IN
BARREL DIAMETER	21	IN
TRASH RACK DIAMETER	42	IN
TRASH RACK HEIGHT	21	IN
ANTI-SEEP COLLAR DIMENSIONS	4'-0" X 4'-0"	FT
OUTLET PROTECTION - LENGTH	14	FT
OUTLET PROTECTION - WIDTH	15.75	FT
OUTLET PROTECTION - DEPTH	19	IN

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



AS BUILT CERTIFICATION FOR PSWMM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

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. 45292 EXPIRATION DATE: 05/21/2016.

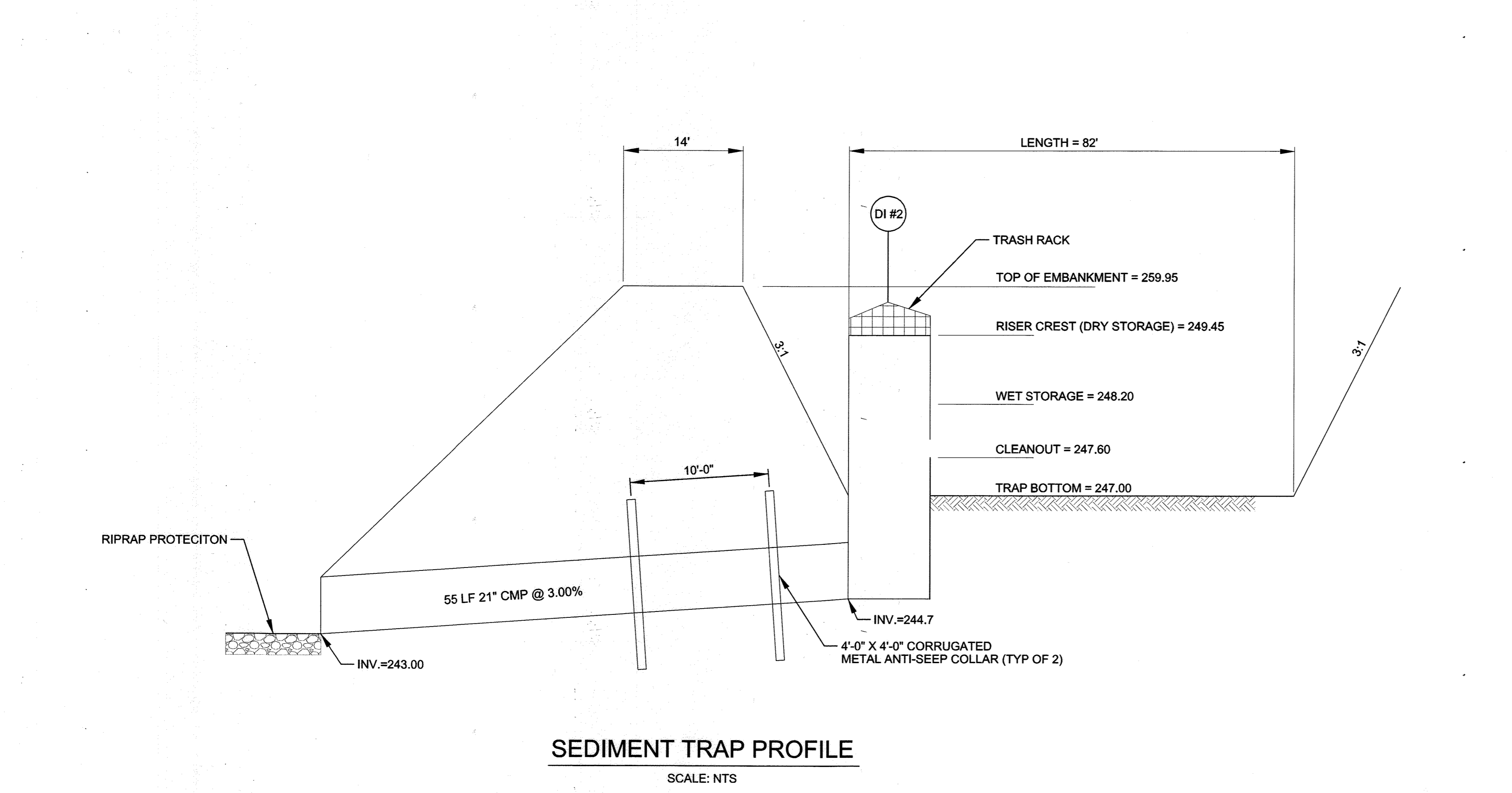
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE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

*James F. Knott, Jr.* 4/8/16  
SIGNATURE OF DEVELOPER  
PRINT NAME BELOW SIGNATURE  
DATE

*Robert Crowley* 4/8/16  
SIGNATURE OF ENGINEER  
PRINT NAME BELOW SIGNATURE  
DATE

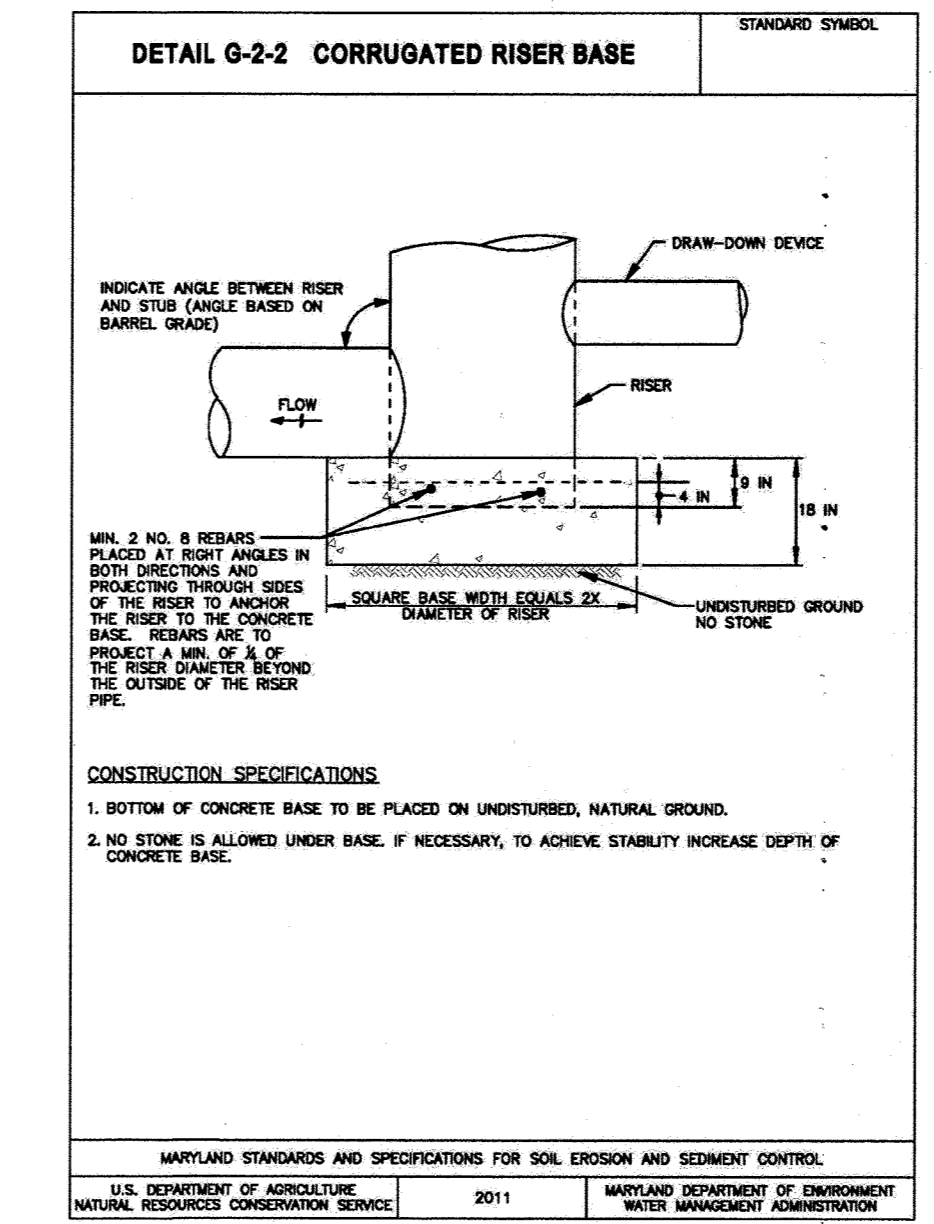
*Yuh-Ren Pao* 4/19/16  
HOWARD SOIL CONSERVATION DISTRICT  
DATE

2 ANTI-SEEP COLLAR  
SCALE: NONE



1 PIPE OUTLET SEDIMENT TRAP  
SCALE: NONE

3 RISER BASE  
SCALE: NONE



APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Uth Elshah* 5-6-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE

*Victor Shalash* 5-4-16  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE

*Valentino J. J. J.* 5-16-16  
DIRECTOR  
DATE

DATE No. REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(703) 218-1000

SUBDIVISION NAME: EMERSON/REVITZ PROPERTY TAX MAP: 47 LOT/PARCEL # PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q

PLAT # 25136-0194 ZONE: PEC GRID: 20

DEED: 11479 / 005 ELEC. DISTRICT: 6TH

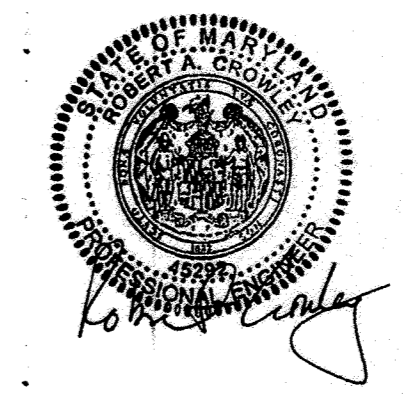
WATER CODE: SEWER CODE:

TITLE: EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

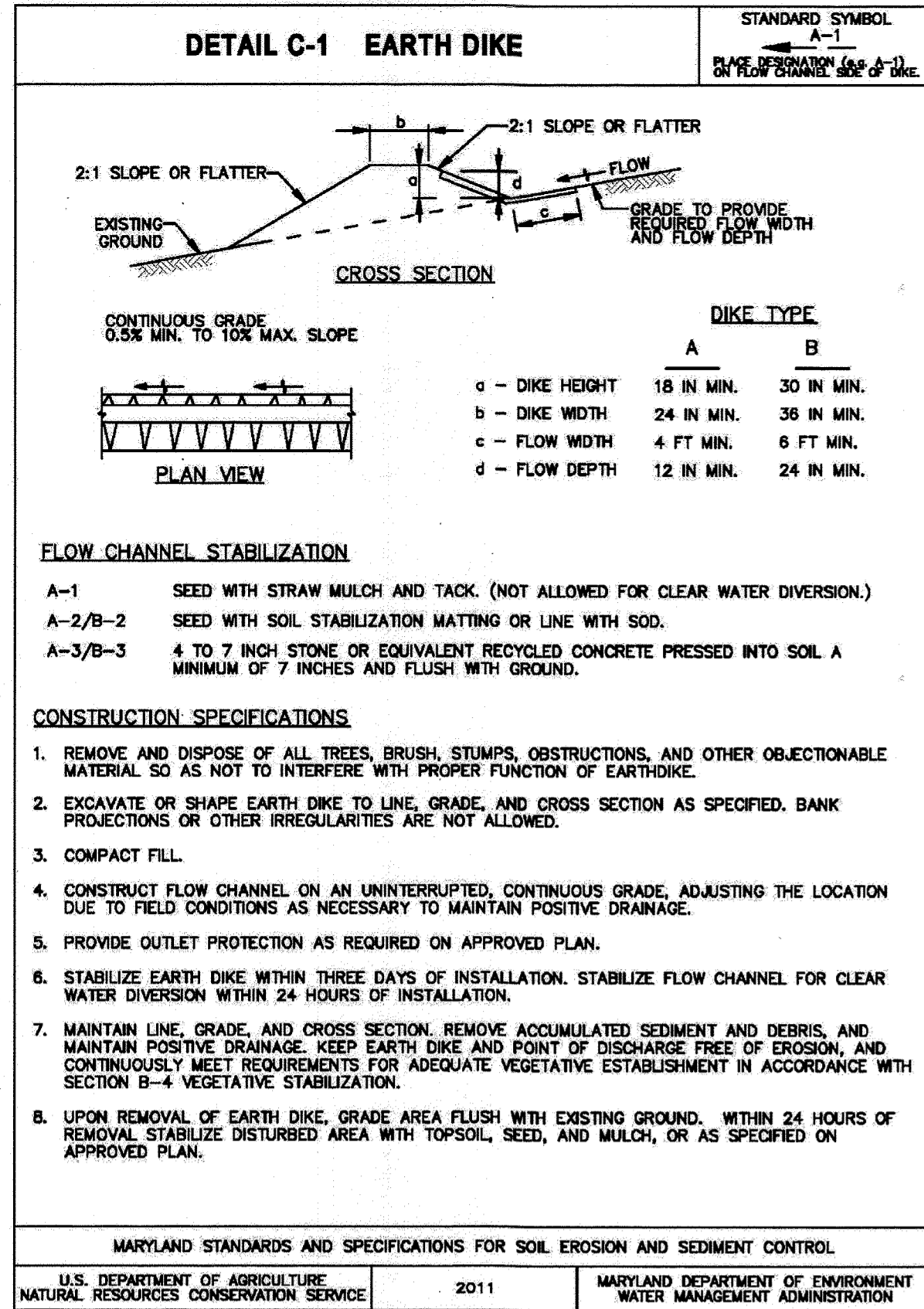
DES. BY: M. WERDER SCALE: NTS PROJ. No. 31 OF 80

DRN. BY: M. WERDER DATE: 04/04/2016

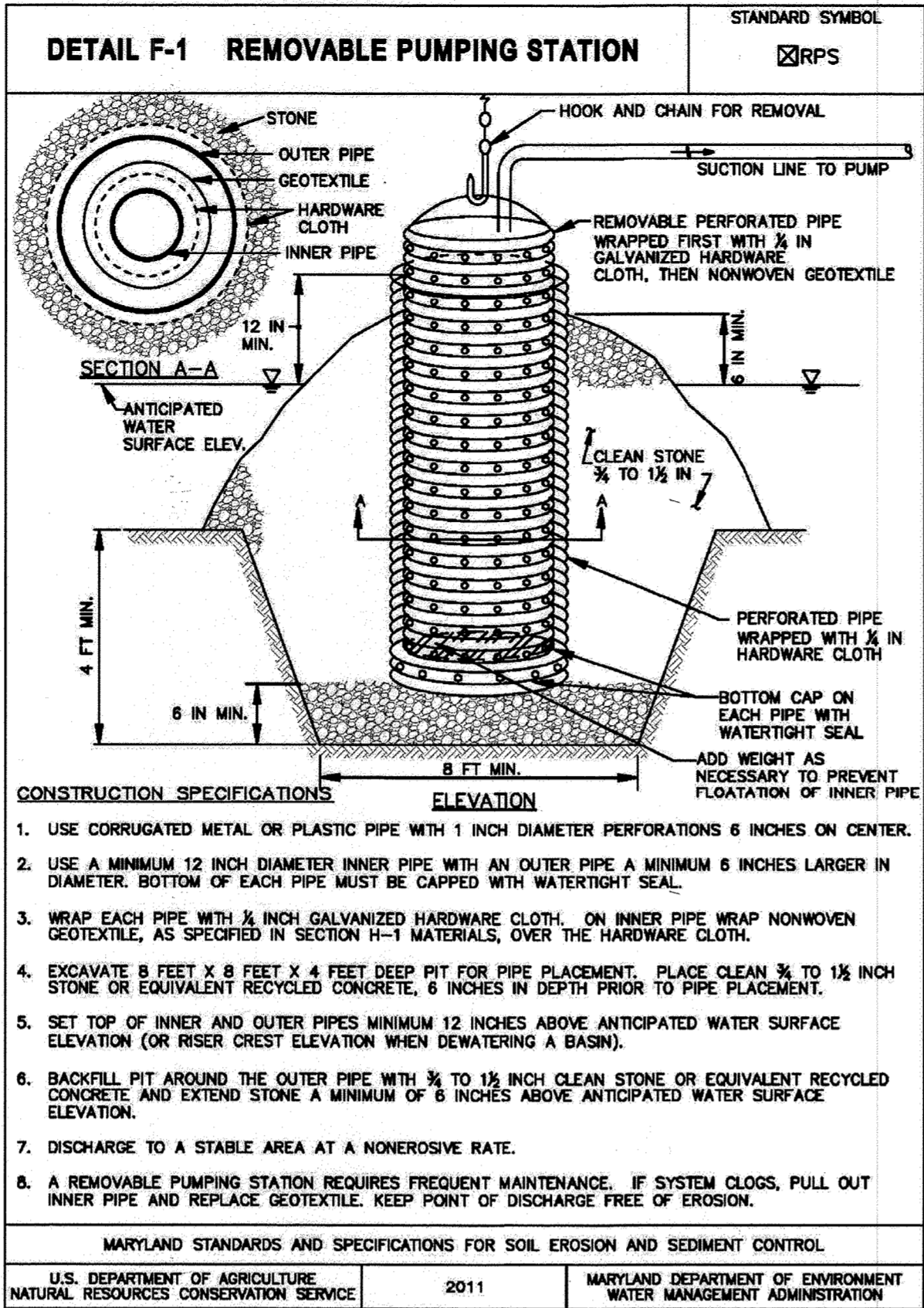
CHK. BY: R. CROWLEY APPROVED:



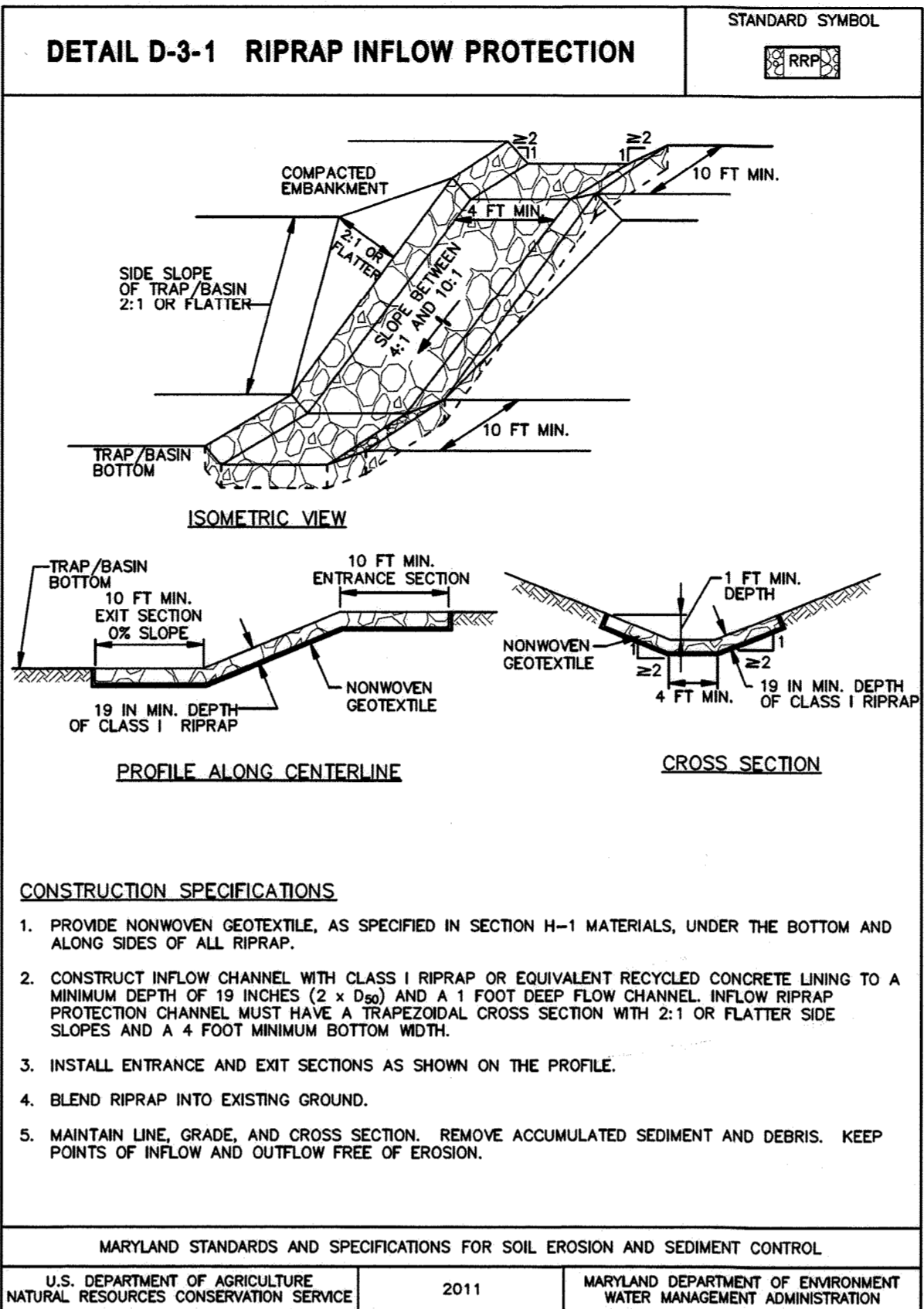
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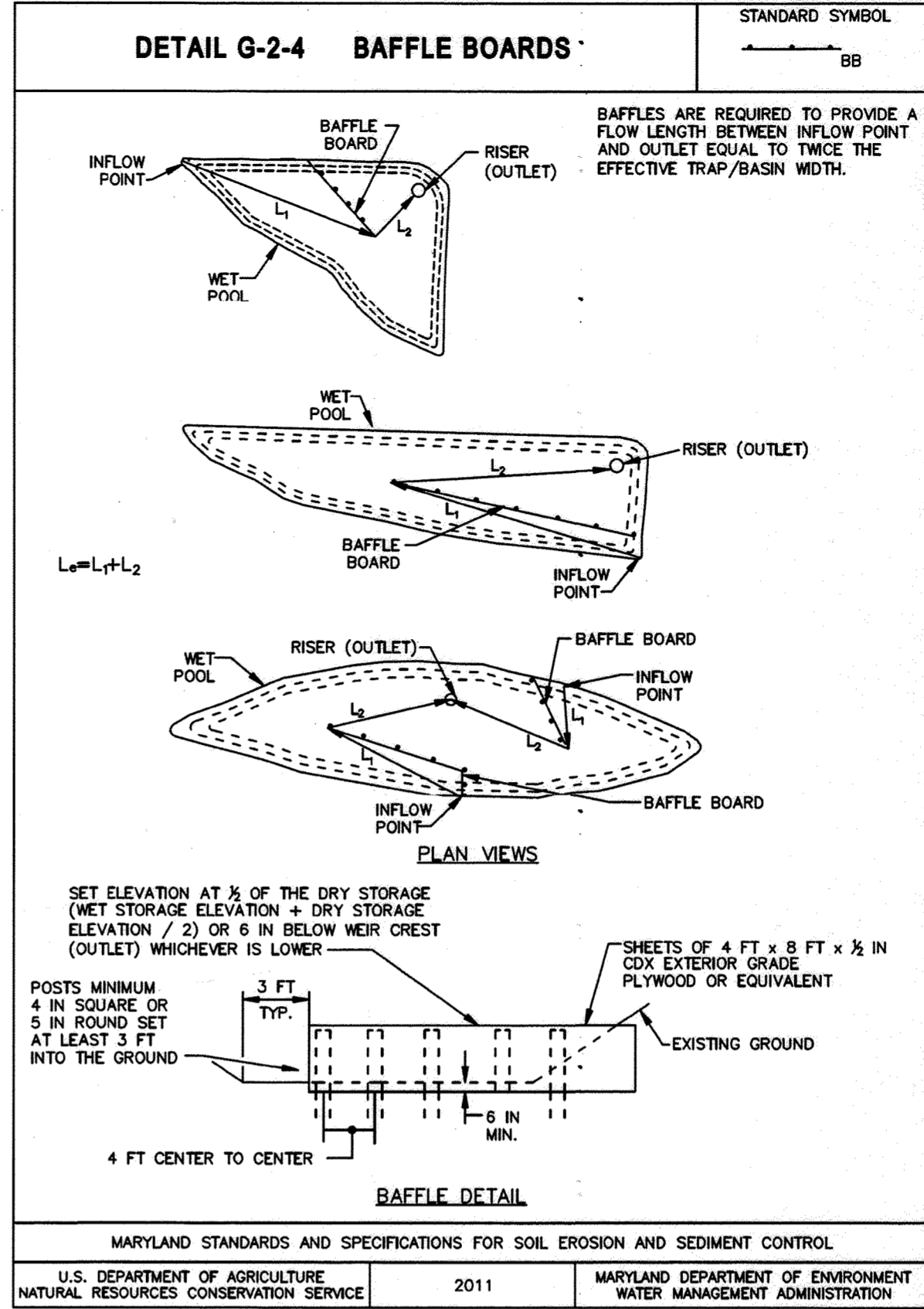
1 EARTH DIKE SCALE: NONE



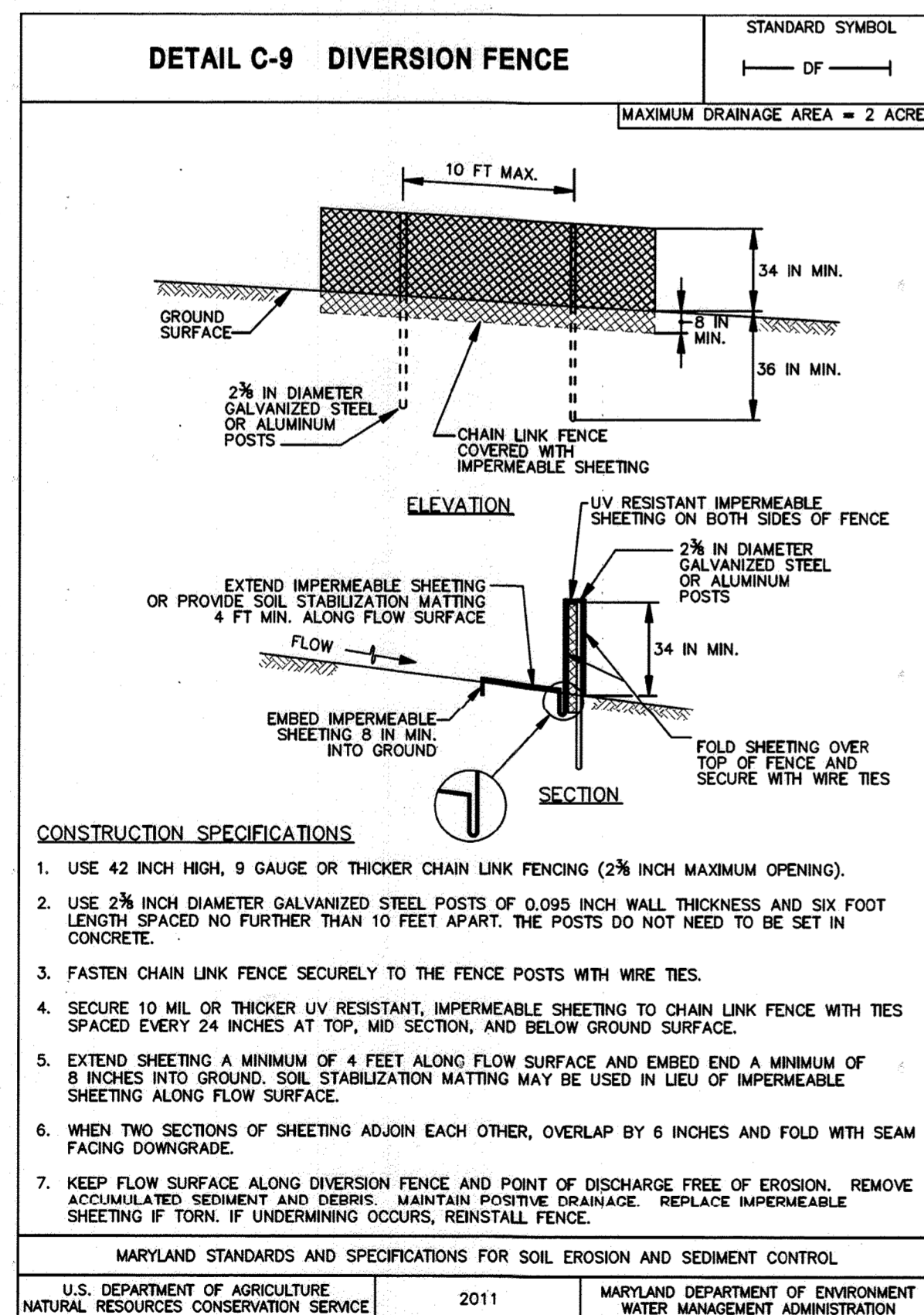
2 REMOVABLE PUMPING STATION SCALE: NONE



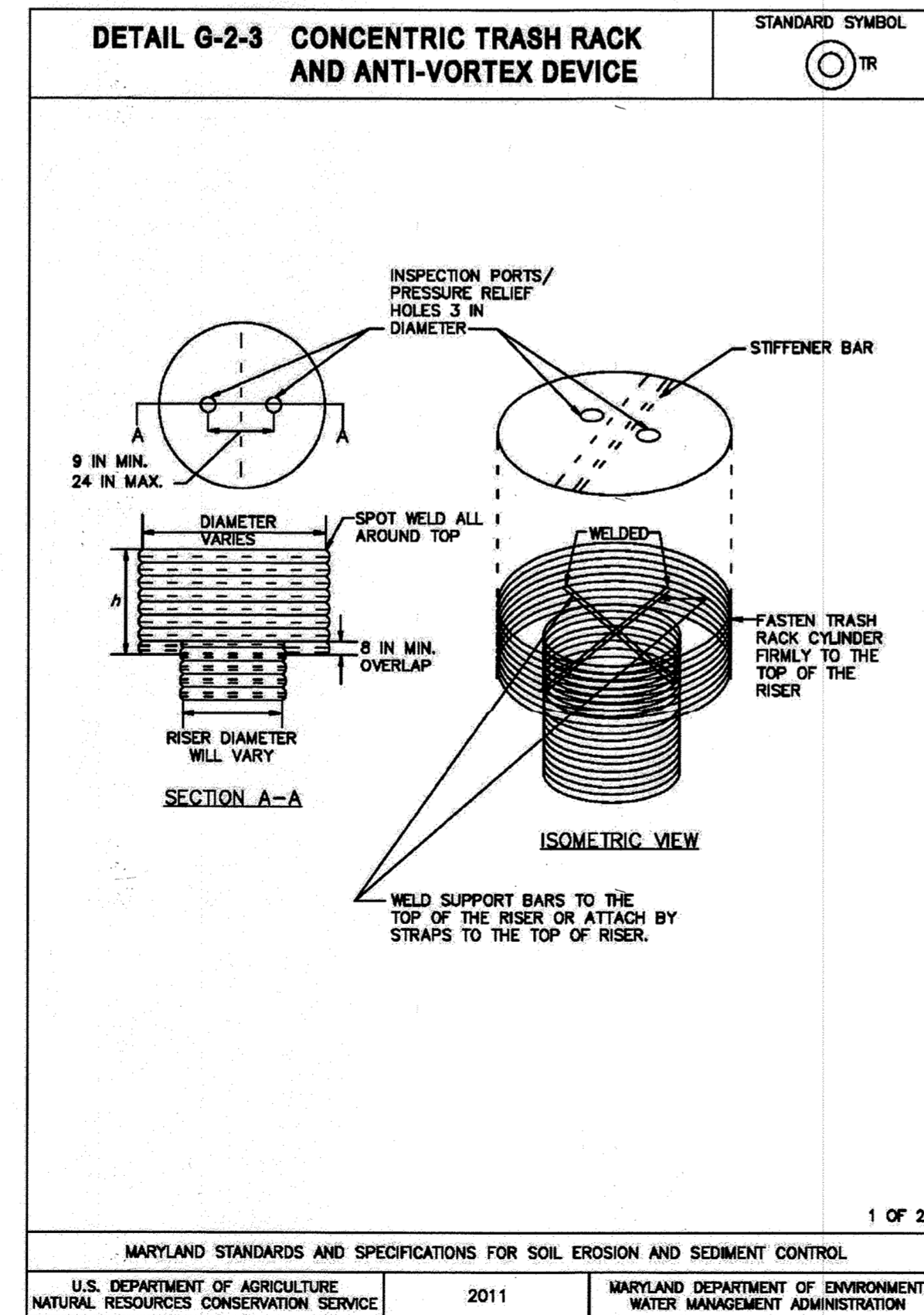
3 RIPRAP INFLOW PROTECTION SCALE: NONE



4 BAFFLE BOARD SCALE: NONE



5 DIVERSION FENCE SCALE: NONE



6 TRASH RACK SCALE: NONE

**DETAIL G-2-3 CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE**

STANDARD SYMBOL: TR

RISER DIAM. (IN)	TRASH RACK CYLINDER			MINIMUM SIZE SUPPORT BAR	MINIMUM TOP	
	DIAM. (IN)	THICKNESS (GAUGE)	h (IN)		THICKNESS (GAUGE)	STIFFENER
12	18	16	14	#6 REBAR	16	N/A
15	21	16	15	#6 REBAR	16	N/A
18	27	16	16	#6 REBAR	16	N/A
21	30	16	19	#6 REBAR	16	N/A
24	36	16	21	#6 REBAR	14	N/A
27	42	16	21	#6 REBAR	14	N/A
36	54	14	25	#6 REBAR	12	N/A
42	60	14	27	#6 REBAR	12	N/A
48	72	12	29	1 1/2 IN PIPE OR 1 1/2 x 1 1/2 x 1/4 ANGLE	10	N/A
54	78	12	33	1 1/2 IN PIPE OR 1 1/2 x 1 1/2 x 1/4 ANGLE	10	N/A
60	90	12	37	1 1/2 IN PIPE OR 1 1/2 x 1 1/2 x 1/4 ANGLE	8	N/A
66	96	10	41	2 IN PIPE OR 2 x 2 x 1/4 ANGLE	8	2 x 2 x 1/4 ANGLE
72	102	10	44	2 IN PIPE OR 2 x 2 x 1/4 ANGLE	8	2 1/2 x 2 1/2 x 1/4 ANGLE
78	114	10	47	2 1/2 IN PIPE OR 2 x 2 x 1/4 ANGLE	8	2 1/2 x 2 1/2 x 1/4 ANGLE
84	120	10	50	2 1/2 IN PIPE OR 2 1/2 x 2 1/2 x 1/4 ANGLE	8	2 1/2 x 2 1/2 x 1/4 ANGLE

**NOTE:** THE ABOVE TRASH RACK AND ANTI-VORTEX DEVICE INFORMATION IS FOR CORRUGATED METAL PIPE ONLY. CONCRETE RISERS MUST MEET THE REQUIREMENTS OF MD 378.

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

7 TEMPORARY ASPHALT BERM SCALE: NONE

AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
46292  
4/3/17

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. 45292 EXPIRATION DATE: 05/21/2016.

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

James E. Inghy, Jr. 4/10/16  
SIGNATURE OF DEVELOPER  
DATE

Robert Crowley 4/8/16  
SIGNATURE OF ENGINEER  
DATE

John R. Carter 4/11/16  
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 5-6-16  
DATE

Chief, Division of Land Development 5-11-16  
DATE

Director 5-10-16  
DATE

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**

PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**

1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME: EMERSON / REVITZ PROPERTY  
TAX MAP: 47  
LOT/PARCEL #: LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G, PARCEL O

FLAT #: 15786  
ZONE: PEC  
GRID: 20

DEED: 11479 / 005  
ELEC. DISTRICT: 6TH

WATER CODE: SEWER CODE

TITLE: EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

DES. BY: M. WERDER  
SCALE: NTS  
PROJ. No.: 32 OF 80

DRN. BY: M. WERDER  
DATE: 04/04/2016

CHK. BY: R. CROWLEY  
APPROVED:

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LEGEND

SOILS CLASSIFICATION				
SYMBOL	SOIL TYPE	SLOPE	HYDRAULIC GROUP	HYDRIC SOILS
Fa	Fallsington sandy loam	2%	B/D	YES
SaB	Sassafras loam	2-5%	B	NO
SaC	Sassafras loam	5-10%	B	NO
SfB	Sassafras gravelly sand	2-5%	B	NO
SrC	Sassafras and Croom	5-10%	B	NO
WoB	Woodstown sandy loam	2-5%	C	YES

- FOREST CONSERVATION EASEMENT
- WETLAND DELINEATION
- 25 FOOT WETLAND BUFFER / SITE EASEMENTS
- EXISTING TREE
- EXISTING CHAIN LINK FENCE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING STORM PIPE
- EXISTING SANITARY SEWER PIPE
- EXISTING WATER LINE
- SUPER SILT FENCE
- CURB / AT-GRADE INLET PROTECTION
- CHAIN LINK FENCE
- STORM PIPE
- STORM MANHOLE
- CURB INLET
- GRATE INLET
- SANITARY SEWER PIPE
- SANITARY SEWER MANHOLE
- WATER LINE
- FIRE HYDRANT
- SWM FACILITY DRAINAGE DIVIDES
- LIMITS OF DISTURBANCE
- EXISTING TREE LINE
- DRAINAGE AREA LABEL
- SOIL LIMITS

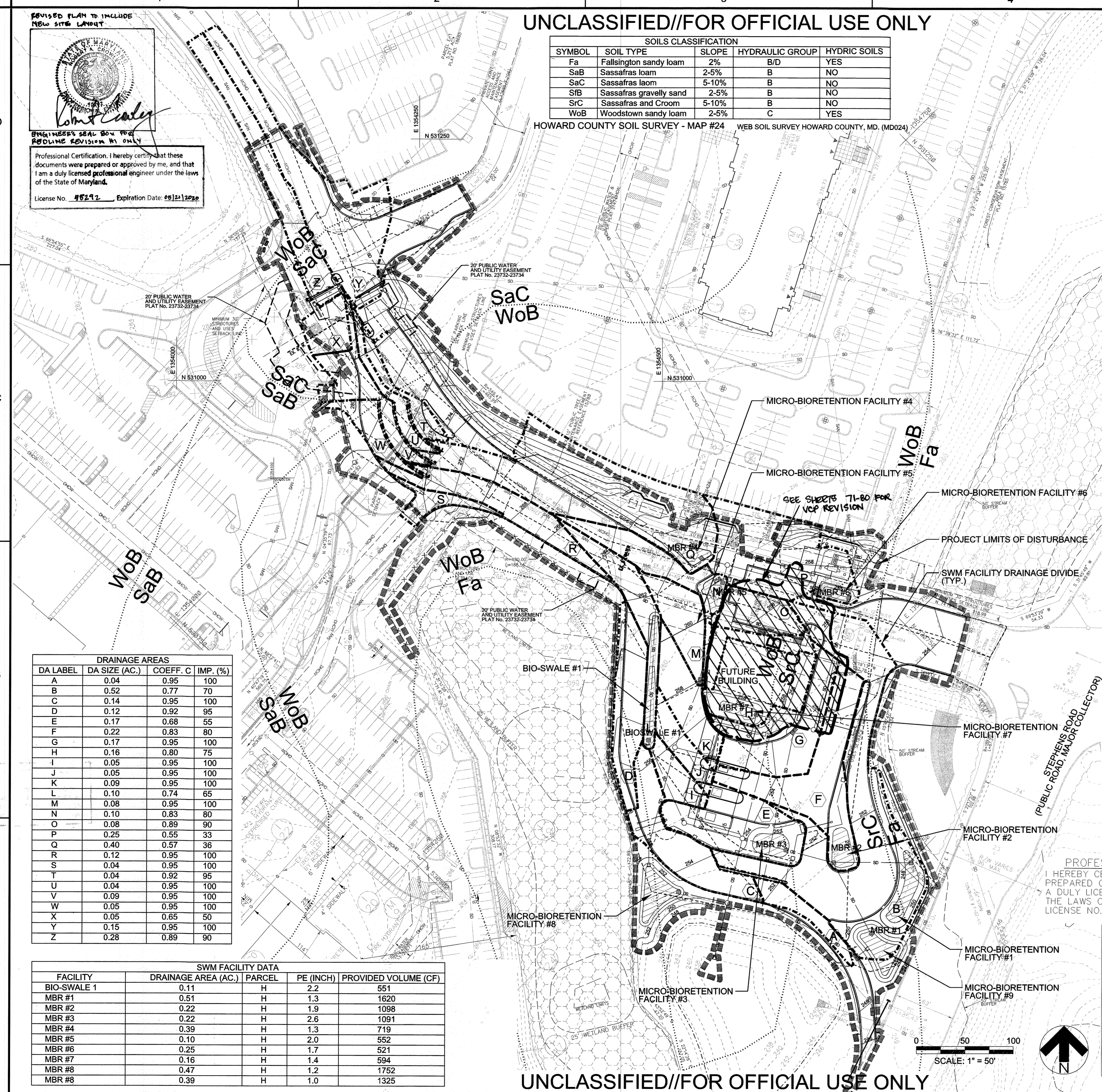
REVISED PLAN TO INCLUDE NEW SITE LAYOUT

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. 45292 Expiration Date: 05/21/2016

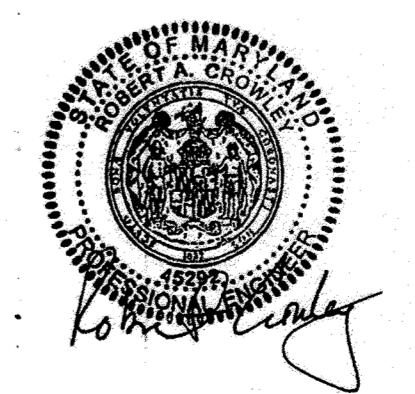
DRAINAGE AREAS			
DA LABEL	DA SIZE (AC.)	COEFF. C	IMP. (%)
A	0.04	0.95	100
B	0.52	0.77	70
C	0.14	0.95	100
D	0.12	0.92	95
E	0.17	0.68	55
F	0.22	0.83	80
G	0.17	0.95	100
H	0.16	0.80	75
I	0.05	0.95	100
J	0.05	0.95	100
K	0.09	0.95	100
L	0.10	0.74	65
M	0.08	0.95	100
N	0.10	0.83	80
O	0.08	0.89	90
P	0.25	0.55	33
Q	0.40	0.57	36
R	0.12	0.95	100
S	0.04	0.95	100
T	0.04	0.92	95
U	0.04	0.95	100
V	0.09	0.95	100
W	0.05	0.95	100
X	0.05	0.65	50
Y	0.15	0.95	100
Z	0.28	0.89	90

SWM FACILITY DATA				
FACILITY	DRAINAGE AREA (AC.)	PARCEL	PE (INCH)	PROVIDED VOLUME (CF)
BIO-SWALE 1	0.11	H	2.2	551
MBR #1	0.51	H	1.3	1620
MBR #2	0.22	H	1.9	1098
MBR #3	0.22	H	2.6	1091
MBR #4	0.39	H	1.3	719
MBR #5	0.10	H	2.0	552
MBR #6	0.25	H	1.7	521
MBR #7	0.16	H	1.4	594
MBR #8	0.47	H	1.2	1752
MBR #8	0.39	H	1.0	1325



AS BUILT CERTIFICATION FOR RSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

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. 45292 EXPIRATION DATE: 05/21/2016



APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Robert Crowley*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION 05/16/16 DATE

*Robert Crowley*  
CHIEF, DIVISION OF LAND DEVELOPMENT 05/16/16 DATE

*Robert Crowley*  
DIRECTOR 05/16/16 DATE

DATE	No.	REVISION DESCRIPTION
04/24/17	1	REVISED SITE LAYOUT TO ADD VISITOR CENTER AND SUBSTATION FACILITY

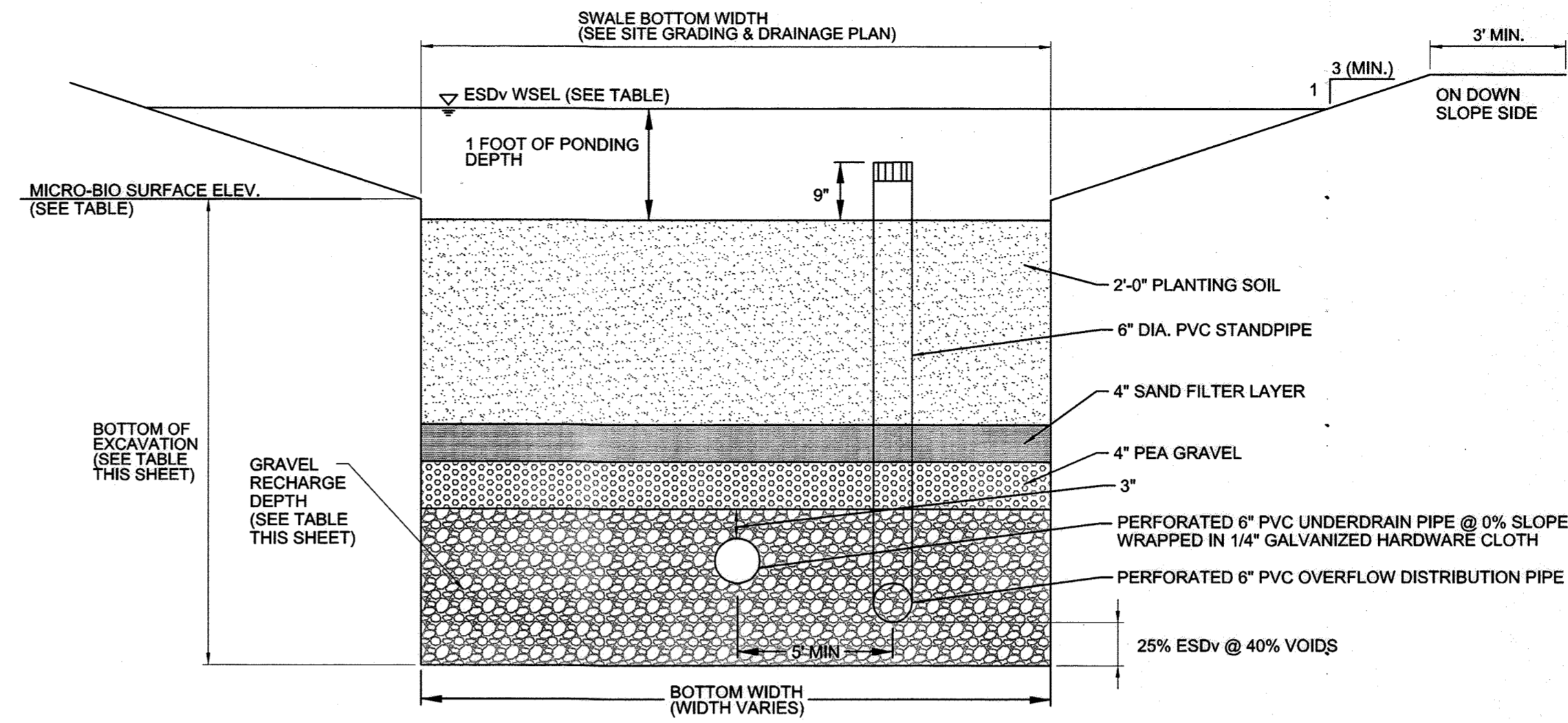
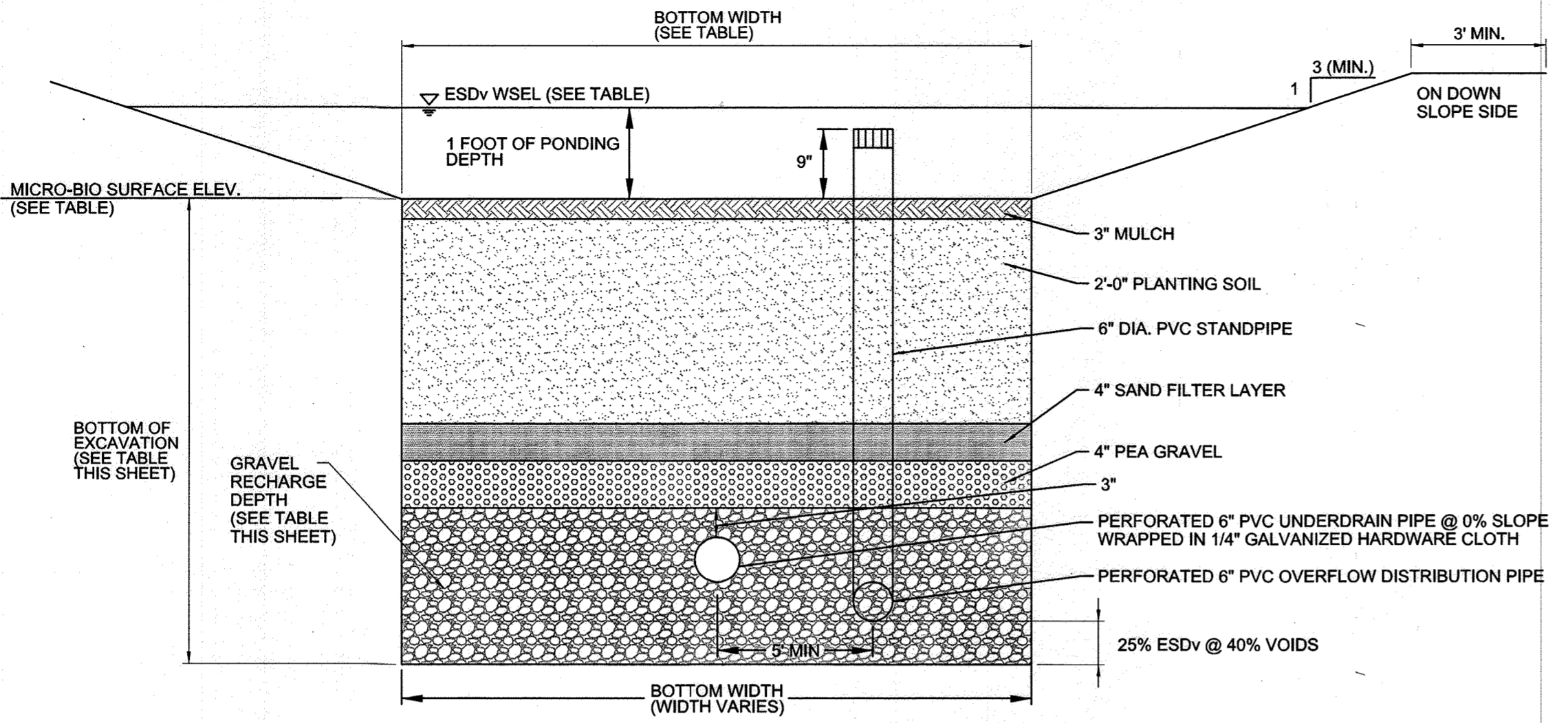
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

JACOBS			
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000			
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #	
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q	
PLAT #	ZONE	GRID	
15786	PEC	20	
DEED	ELEC. DISTRICT		
11479 / 005	6TH		
WATER CODE	SEWER CODE		

TITLE		
STORMWATER MANAGEMENT STORM DRAIN DRAINAGE AREA & SOILS MAP		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:50	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK BY	APPROVED	33 OF 80
R. CROWLEY		

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**TABLE B.4.1 SWM MATERIAL SPECIFICATIONS**

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	REFER TO LANDSCAPING PLANS	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2' DEEP)	SAND (55-85% BY WEIGHT) SILT (0-20%) CLAY (1-8%) PH 5.7-7.1 ORGANICS 1.5% MIN.	N/A	USE MDSA BIORETENTION SOIL MIX SPECIFICATION
ORGANIC CONTENT (PLANTING SOIL)	MIN. 10% BY DRY WEIGHT (ASTM D 2974)	N/A	
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAGM	PEA GRAVEL: ASTM-D-448	NO.8 OR NO.9 (1/8" TO 3/8")	
CURTAIN DRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NON-WOVEN
GRAVEL UNDERDRAINS AND INFILTRATION BERMS	AASHTO M-43	NO.57 OR NO.6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F-758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR 35	SLOTTED OR PERFORATED PIPE; 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPES SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
POURED-IN-PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3 F <sub>c</sub> =3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED; 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND. DESIGN TO INCLUDE MEETING ACI CODE 350.8R99; VERTICAL LOADING (H-10 OR H-20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO M-6 OR ASTM C-33	0.02" - 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

NOTE: THIS MATERIALS TABLE IS FOR MICRO-BIORETENTION AND BIO-SWALES

**MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6) AND BIO-SWALE (M-8)**

- The Owner shall maintain the plant material, mulch layer and soil layer annually. Maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland Stormwater Design Manual Volume II, Table A.4.1 and 2
- The Owner shall perform a plant in the spring and in the fall of each year. During the inspection, the Owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, treat diseased trees and shrubs, and replace all deficient stakes and wires.
- The Owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years. The previous mulch layer shall be removed before the new layer is applied.
- The Owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

	MBR #1		MBR #2		MBR #3		MBR #4		MBR #5		MBR #6		MBR #7		MBR #8		MBR #9	
	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT	DESIGN	*AS-BUILT
FILTER BED AREA (SQ FT)	4840.913	4163.65	738.40.5	730.40.5	745.20.5	480.12.5	447.14.5	352.14.5	320.8.0	214.9.5	370.32.5	1183.32.5	1100.32.5	809.18.7	750.18.7	1100.32.5	809.18.7	750.18.7
LENGTH	15'	15'	18.5'	18.5'	38.5'	36.0'	36.0'	34.0'	38.5'	36.0'	38.5'	36.3'	36.3'	43.3'	43.3'	43.3'	43.3'	43.3'
WIDTH	15'	15'	18.5'	18.5'	38.5'	36.0'	36.0'	34.0'	38.5'	36.0'	38.5'	36.3'	36.3'	43.3'	43.3'	43.3'	43.3'	43.3'
FILTER BED SURFACE ELEVATION	248.00'	248.00'	251.00'	251.00'	252.00'	260.00'	260.00'	256.00'	254.00'	256.00'	256.00'	251.00'	251.00'	244.00'	244.00'	244.00'	244.00'	244.00'
FILTER UNDERDRAIN PIPE: SIZE	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"	6"
ELEVATION	244.33'	244.33'	247.33'	247.33'	248.33'	256.33'	256.33'	254.33'	250.33'	251.33'	252.33'	247.33'	247.33'	240.33'	240.33'	240.33'	240.33'	240.33'
GRAVEL THICKNESS (RECHARGE DEPTH)	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"	3" MIN.	3"
BOTTOM OF EXCAVATION	242.76'	242.76'	245.92'	245.92'	246.92'	254.84'	254.84'	252.84'	248.84'	249.84'	250.84'	245.84'	245.84'	238.84'	238.84'	238.84'	238.84'	238.84'
INLET RIM ELEVATION	249.00'	249.00'	252.00'	252.00'	253.00'	261.00'	261.00'	259.00'	255.00'	256.00'	257.00'	252.00'	252.00'	245.00'	245.00'	245.00'	245.00'	245.00'
STONE RESERVOIR (25% ESDv)	13"	13"	11"	11"	11"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"	12"

DATE AS-BUILT ACCEPTED BY MDE: \_\_\_\_\_

**1 (M-6) MICRO-BIORETENTION FACILITY CROSS-SECTION**  
SCALE: NONE

**BIO-SWALE #1**

	DESIGN	*AS-BUILT
FILTER BED AREA (SQ FT)	681	1430
LENGTH	130'	130'
WIDTH	11'	11'
SURFACE ELEVATION AT INLET	256.75'	245.00'
GRAVEL THICKNESS (RECHARGE DEPTH)	3" MIN.	3"
BOTTOM OF EXCAVATION	252.34'	251.00'
INLET RIM ELEVATION	257.75'	256.5'
STONE RESERVOIR (25% ESDv)	6"	6"

DATE AS-BUILT ACCEPTED BY MDE: \_\_\_\_\_

**2 (M-8) BIO-SWALE CROSS-SECTION**  
SCALE: NONE

**AS-BUILT CERTIFICATION**

I hereby certify that the stormwater management facilities (both BMPs and ESD practices) shown on the plans have been constructed in accordance with the plans approved by the Maryland Department of the Environment, except as noted in red on the "AS-BUILT" drawings.

Name: \_\_\_\_\_ Signature: \_\_\_\_\_

Maryland Registration Number (PE or LS): \_\_\_\_\_ Date: \_\_\_\_\_

MDE No. \_\_\_\_\_

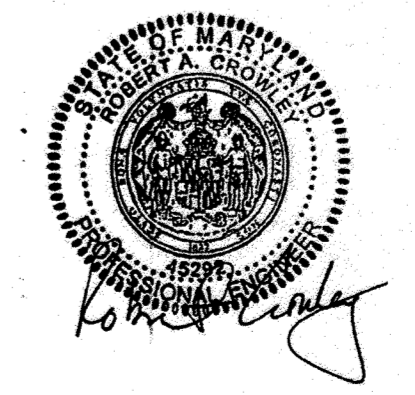
Facilities being certified (list each individually using facility ID number and/or description):

- \_\_\_\_ (M-6) MBR #1
- \_\_\_\_ (M-6) MBR #2
- \_\_\_\_ (M-6) MBR #3
- \_\_\_\_ (M-6) MBR #4
- \_\_\_\_ (M-6) MBR #5
- \_\_\_\_ (M-6) MBR #6
- \_\_\_\_ (M-6) MBR #7
- \_\_\_\_ (M-8) BIO-SWALE #1

Attach additional form(s) if necessary.

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction.

**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. 45292 EXPIRATION DATE: 05/21/2016



AS BUILT CERTIFICATION FOR PSWM: I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.



AS-BUILT CERTIFICATION FOR PSWM  
~~NOTE: THERE IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.~~  
ROBERT CROWLEY  
45292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING

\_\_\_\_\_  
CHIEF, DEVELOPMENT ENGINEERING DIVISION 088 DATE 5-6-16

\_\_\_\_\_  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE 5-4-16

\_\_\_\_\_  
DIRECTOR DATE 5-16-16

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(713) 218-1000

SUBDIVISION NAME: TAX MAP: LOT/PARCEL #  
EMERSON/RENTZ PROPERTY: 47 LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q

PLAT # 2013-2394 ZONE: GRID:  
15786 PEC 20

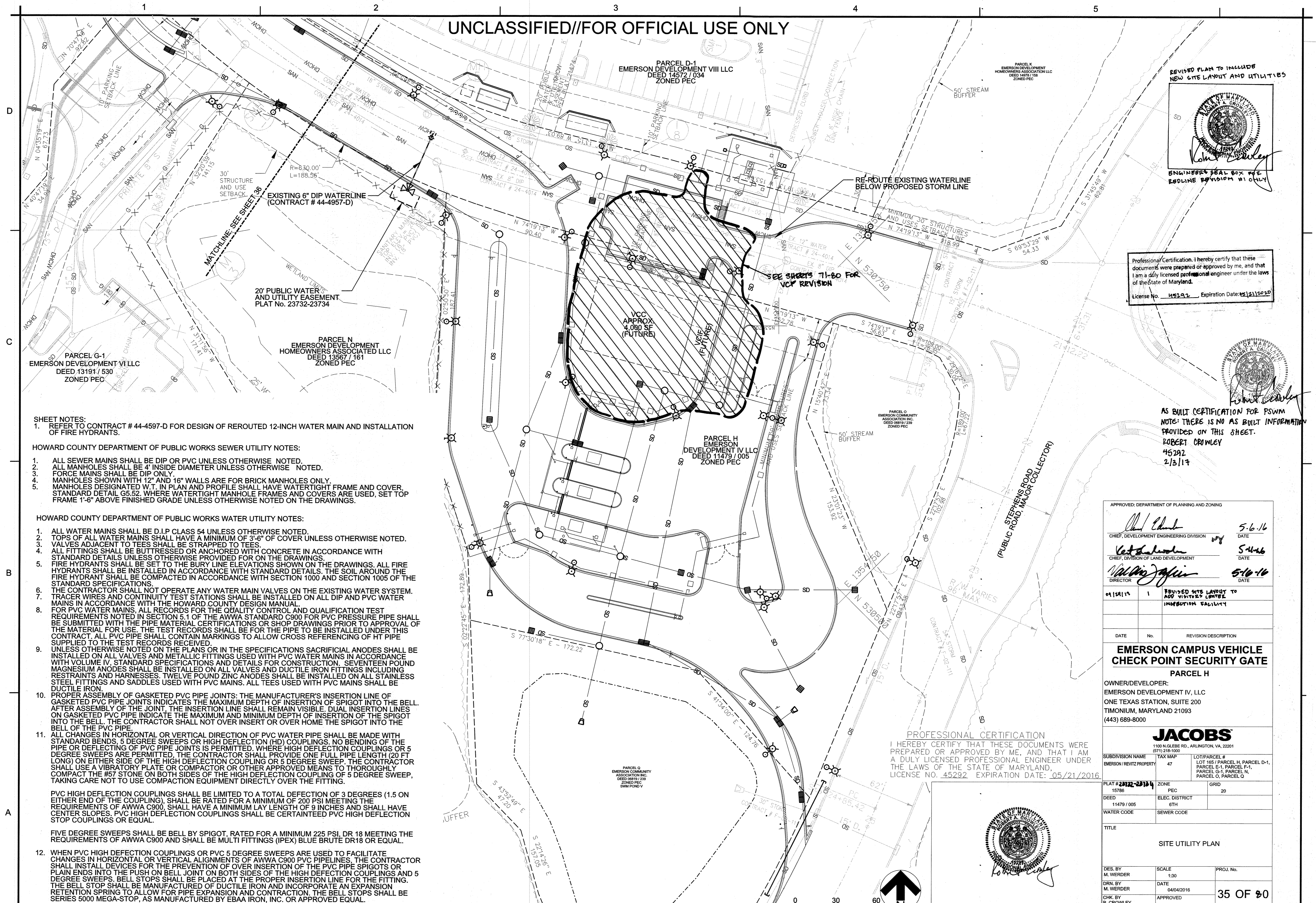
DEED: 11479 / 005 ELEC. DISTRICT: 6TH  
WATER CODE: SEWER CODE:

TITLE:  
STORMWATER MANAGEMENT DETAILS

DES. BY: M. WERDER SCALE: NTS PROJ. No.  
DRN. BY: M. WERDER DATE: 04/04/2016  
CHK. BY: R. CROWLEY APPROVED: 34 OF 80

SDP-16-005

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SHEET NOTES:  
1. REFER TO CONTRACT # 44-4597-D FOR DESIGN OF REROUTED 12-INCH WATER MAIN AND INSTALLATION OF FIRE HYDRANTS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEWER UTILITY NOTES:

1. ALL SEWER MAINS SHALL BE DIP OR PVC UNLESS OTHERWISE NOTED.
2. ALL MANHOLES SHALL BE 4' INSIDE DIAMETER UNLESS OTHERWISE NOTED.
3. FORCE MAINS SHALL BE DIP ONLY.
4. MANHOLES SHOWN WITH 12" AND 18" WALLS ARE FOR BRICK MANHOLES ONLY. MANHOLES DESIGNATED W.T. IN PLAN AND PROFILE SHALL HAVE WATERTIGHT FRAME AND COVER. STANDARD DETAIL 65.52. WHERE WATERTIGHT MANHOLE FRAMES AND COVERS ARE USED, SET TOP FRAME 1'-6" ABOVE FINISHED GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 5.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WATER UTILITY NOTES:

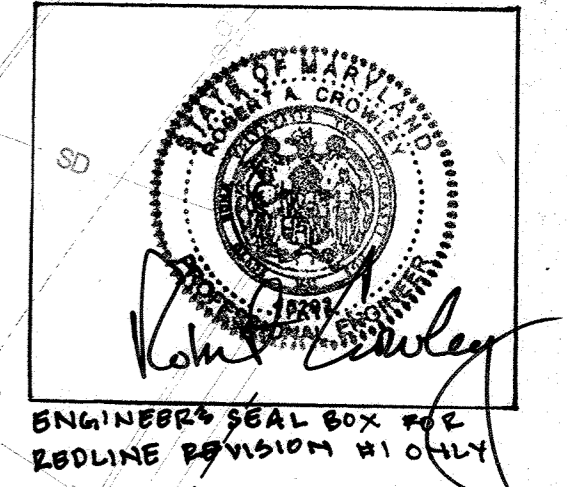
1. ALL WATER MAINS SHALL BE D.I.P CLASS 64 UNLESS OTHERWISE NOTED.
2. TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-8" OF COVER UNLESS OTHERWISE NOTED.
3. VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
4. ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
5. FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
6. THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM. TRACER WIRES AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
7. FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATES OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF HT PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
8. UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION. SEVENTEEN POUND MAGNESIUM ANODES SHALL BE INSTALLED ON ALL VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. TWELVE POUND ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC MAINS. ALL TEES USED WITH PVC MAINS SHALL BE DUCTILE IRON.
9. PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS: THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE INSERTION LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. THE CONTRACTOR SHALL NOT OVER INSERT OR OVER HOME THE SPIGOT INTO THE BELL OF THE PVC PIPE.
10. ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH STANDARD BENDS, 5 DEGREE SWEEPS OR HIGH DEFLECTION (HD) COUPLINGS. NO BENDING OF THE PIPE OR DEFLECTING OF PVC PIPE JOINTS IS PERMITTED, WHERE HIGH DEFLECTION COUPLINGS OR 5 DEGREE SWEEPS ARE PERMITTED, THE CONTRACTOR SHALL PROVIDE ONE FULL PIPE LENGTH (20 FT LONG) ON EITHER SIDE OF THE HIGH DEFLECTION COUPLING OR 5 DEGREE SWEEP. THE CONTRACTOR SHALL USE A VIBRATORY PLATE OR COMPACTOR OR OTHER APPROVED MEANS TO THOROUGHLY COMPACT THE #57 STONE ON BOTH SIDES OF THE HIGH DEFLECTION COUPLING OF 5 DEGREE SWEEP, TAKING CARE NOT TO USE COMPACTION EQUIPMENT DIRECTLY OVER THE FITTING.
11. PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL DEFLECTION OF 3 DEGREES (1.5 ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM OF 200 PSI MEETING THE REQUIREMENTS OF AWWA C900. SHALL HAVE A MINIMUM LAY LENGTH OF 9 INCHES AND SHALL HAVE CENTER SLOPES. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTEEED PVC HIGH DEFLECTION STOP COUPLINGS OR EQUAL.
12. FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR 18 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DR18 OR EQUAL.
13. WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5 DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWWA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSTALL DEVICES FOR THE PREVENTION OF OVER INSERTION OF THE PVC PIPE SPIGOTS OR PLAIN ENDS TO THE BUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 5 DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL.

PVC HIGH DEFLECTION COUPLINGS SHALL BE LIMITED TO A TOTAL DEFLECTION OF 3 DEGREES (1.5 ON EITHER END OF THE COUPLING). SHALL BE RATED FOR A MINIMUM OF 200 PSI MEETING THE REQUIREMENTS OF AWWA C900. SHALL HAVE A MINIMUM LAY LENGTH OF 9 INCHES AND SHALL HAVE CENTER SLOPES. PVC HIGH DEFLECTION COUPLINGS SHALL BE CERTAINTEEED PVC HIGH DEFLECTION STOP COUPLINGS OR EQUAL.

FIVE DEGREE SWEEPS SHALL BE BELL BY SPIGOT, RATED FOR A MINIMUM 225 PSI, DR 18 MEETING THE REQUIREMENTS OF AWWA C900 AND SHALL BE MULTI FITTINGS (PEX) BLUE BRUTE DR18 OR EQUAL.

WHEN PVC HIGH DEFLECTION COUPLINGS OR PVC 5 DEGREE SWEEPS ARE USED TO FACILITATE CHANGES IN HORIZONTAL OR VERTICAL ALIGNMENTS OF AWWA C900 PVC PIPELINES, THE CONTRACTOR SHALL INSTALL DEVICES FOR THE PREVENTION OF OVER INSERTION OF THE PVC PIPE SPIGOTS OR PLAIN ENDS TO THE BUSH ON BELL JOINT ON BOTH SIDES OF THE HIGH DEFLECTION COUPLINGS AND 5 DEGREE SWEEPS. BELL STOPS SHALL BE PLACED AT THE PROPER INSERTION LINE FOR THE FITTING. THE BELL STOP SHALL BE MANUFACTURED OF DUCTILE IRON AND INCORPORATE AN EXPANSION RETENTION SPRING TO ALLOW FOR PIPE EXPANSION AND CONTRACTION. THE BELL STOPS SHALL BE SERIES 5000 MEGA-STOP, AS MANUFACTURED BY EBAA IRON, INC. OR APPROVED EQUAL.

REVISED PLAN TO INCLUDE NEW SITE LAYOUT AND UTILITIES



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. 45292, Expiration Date: 05/21/2016



AS BUILT CERTIFICATION FOR PSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Chad Clark</i>	5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Vet. [Signature]</i>	5-4-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>Valerie Joffe</i>	5-16-16
DIRECTOR	DATE

01/21/17	1	REVISED SITE LAYOUT TO ADD VISITED LOT FOR INSPECTION FACILITY
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DATE	No.	REVISION DESCRIPTION
------	-----	----------------------

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

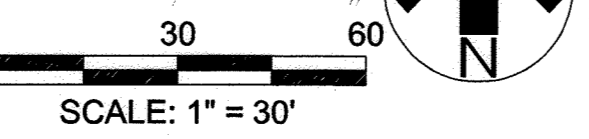
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REVITZ PROPERTY	47	LOT 165/ PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 2112-2314	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE  
 SITE UTILITY PLAN

DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	35 OF 80
CHK. BY	APPROVED	
R. CROWLEY		

SDP-16-005

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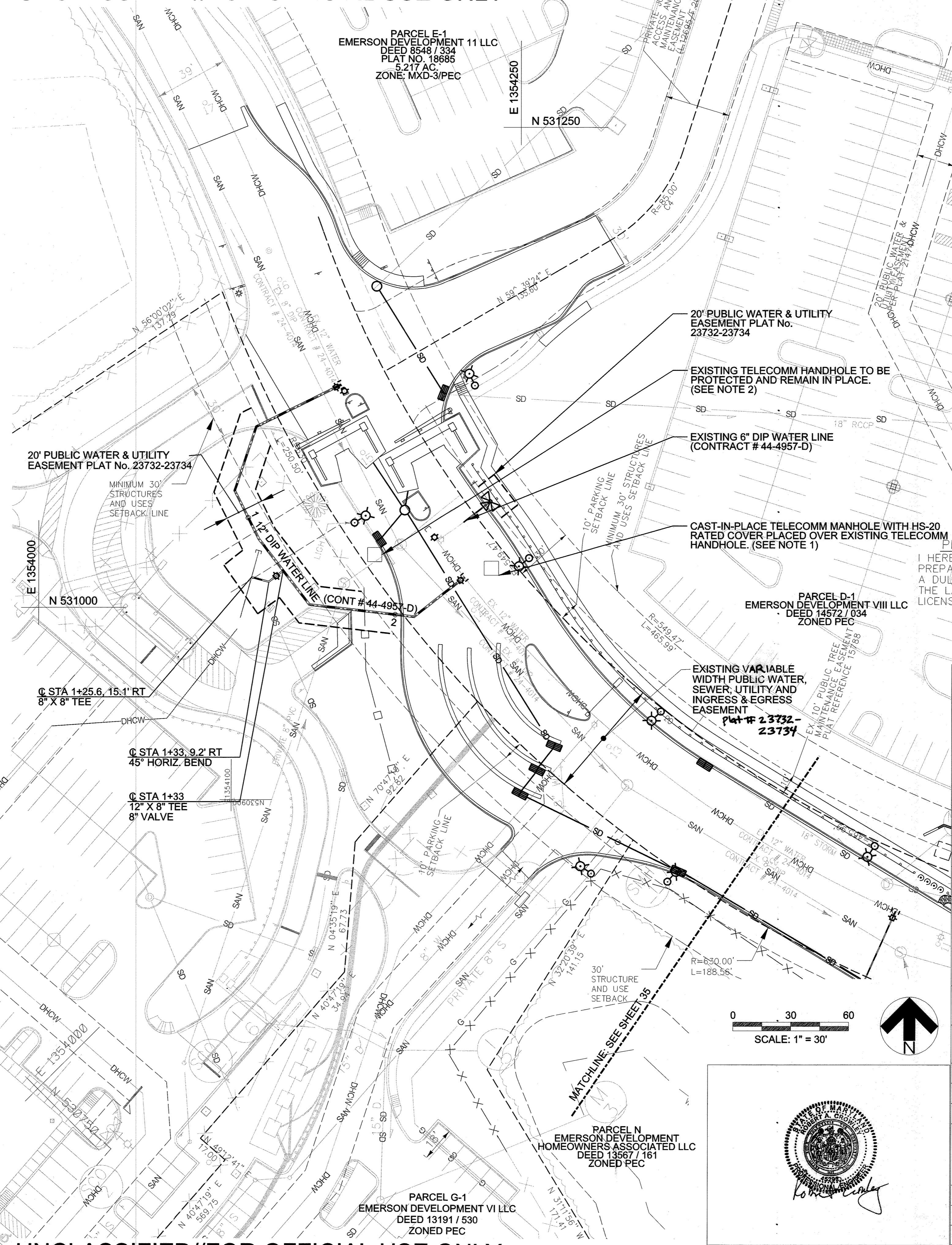
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NOTES:

- STRUCTURE SHALL BE CONCRETE CAST-IN-PLACE MEETING THE FOLLOWING REQUIREMENTS AT A MINIMUM:
  - CONCRETE SHALL BE 5000 PSI @ 28 DAYS.
  - REINFORCEMENT SHALL BE TWO WAYS AND HAVE 2 INCHES OF COVER.
  - REINFORCEMENT SHALL BE ASTM A615 GRADE 60 REBAR WITH WELDED WIRE FABRIC IN ACCORDANCE WITH ASTM A185 GRADE 65.
  - PROVIDE MINIMUM WALL THICKNESS OF 6 INCHES.
  - COVER SHALL BE HS-20 RATED.
  - CONTRACTOR TO SUBMIT STRUCTURAL DESIGN SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MARYLAND.
- IF NECESSARY, PROVIDE CAST-IN-PLACE MANHOLE WITH HS20 LOADING FRAME AND GRATE PLACED OVER EXISTING TELECOMM HANDHOLE. SEE NOTE 1 FOR STRUCTURE REQUIREMENTS.
- REFER TO CONTRACT # 44-4597-D FOR DESIGN OF REROUTED 12-INCH WATER MAIN AND INSTALLATION OF FIRE HYDRANTS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WATER UTILITY NOTES:

- ALL WATER MAINS SHALL BE D.I.P CLASS 54 UNLESS OTHERWISE NOTED.
  - TOPS OF ALL WATER MAINS SHALL HAVE A MINIMUM OF 3'-6" OF COVER UNLESS OTHERWISE NOTED.
  - VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
  - ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
  - FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE DRAWINGS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 1000 AND SECTION 1005 OF THE STANDARD SPECIFICATIONS.
  - THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
  - TRACER WIRES AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL DIP AND PVC WATER MAINS IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL.
  - FOR PVC WATER MAINS, ALL RECORDS FOR THE QUALITY CONTROL AND QUALIFICATION TEST REQUIREMENTS NOTED IN SECTION 5.1 OF THE AWWA STANDARD C900 FOR PVC PRESSURE PIPE SHALL BE SUBMITTED WITH THE PIPE MATERIAL CERTIFICATIONS OR SHOP DRAWINGS PRIOR TO APPROVAL OF THE MATERIAL FOR USE. THE TEST RECORDS SHALL BE FOR THE PIPE TO BE INSTALLED UNDER THIS CONTRACT. ALL PVC PIPE SHALL CONTAIN MARKINGS TO ALLOW CROSS REFERENCING OF HT PIPE SUPPLIED TO THE TEST RECORDS RECEIVED.
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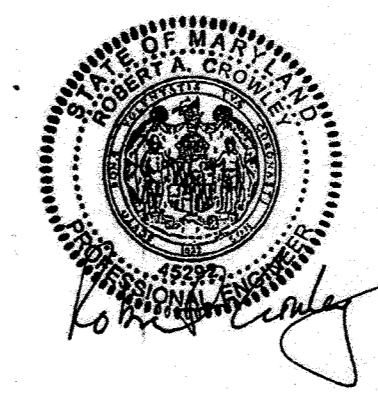
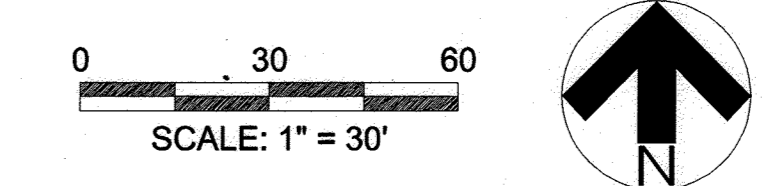
AS BUILT CERTIFICATION FOR PSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CRAWLEY  
 45292  
 2/3/17  
 PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.  
 LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-4-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE

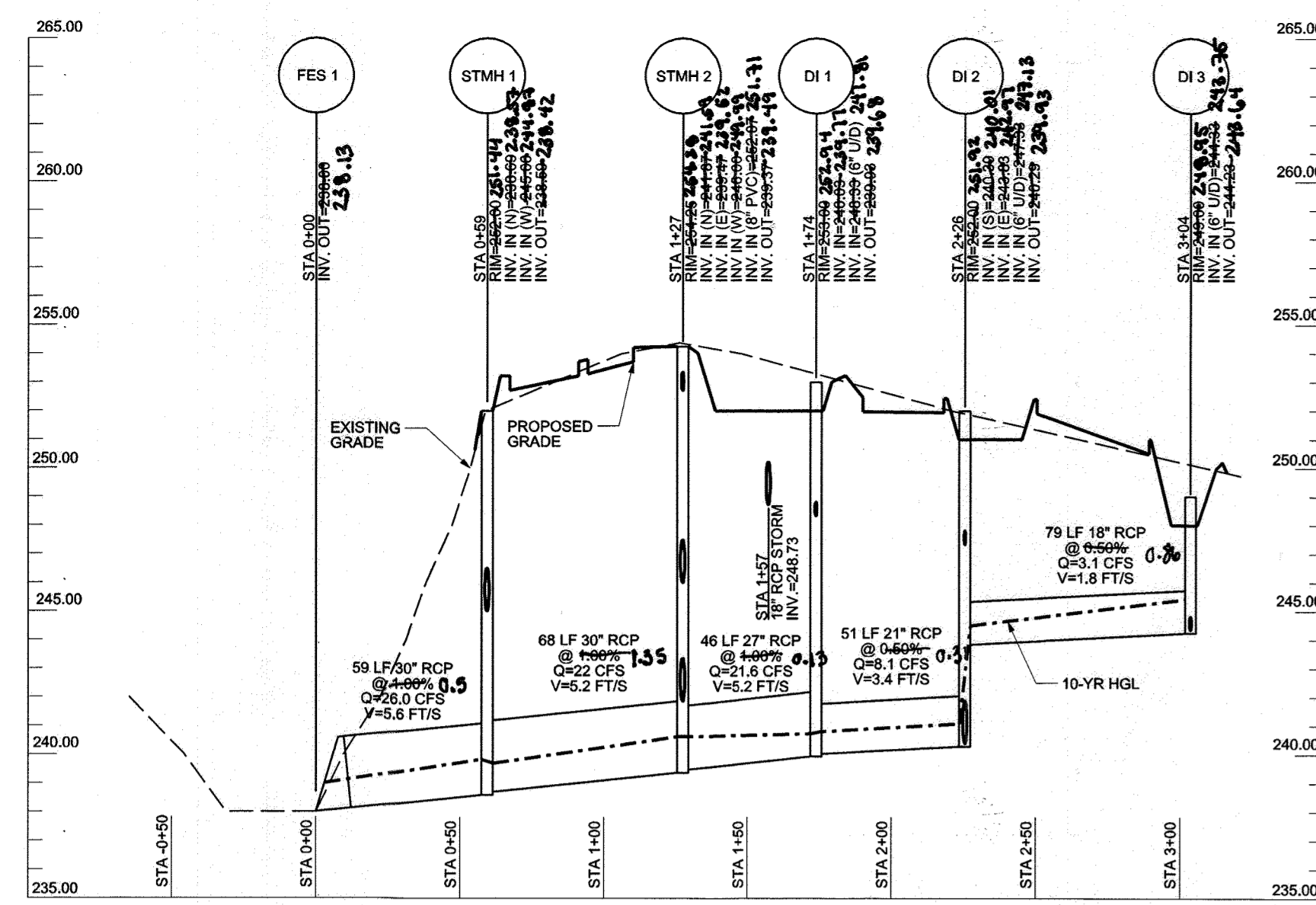
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		

<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/RENTZ PROPERTY	47	PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

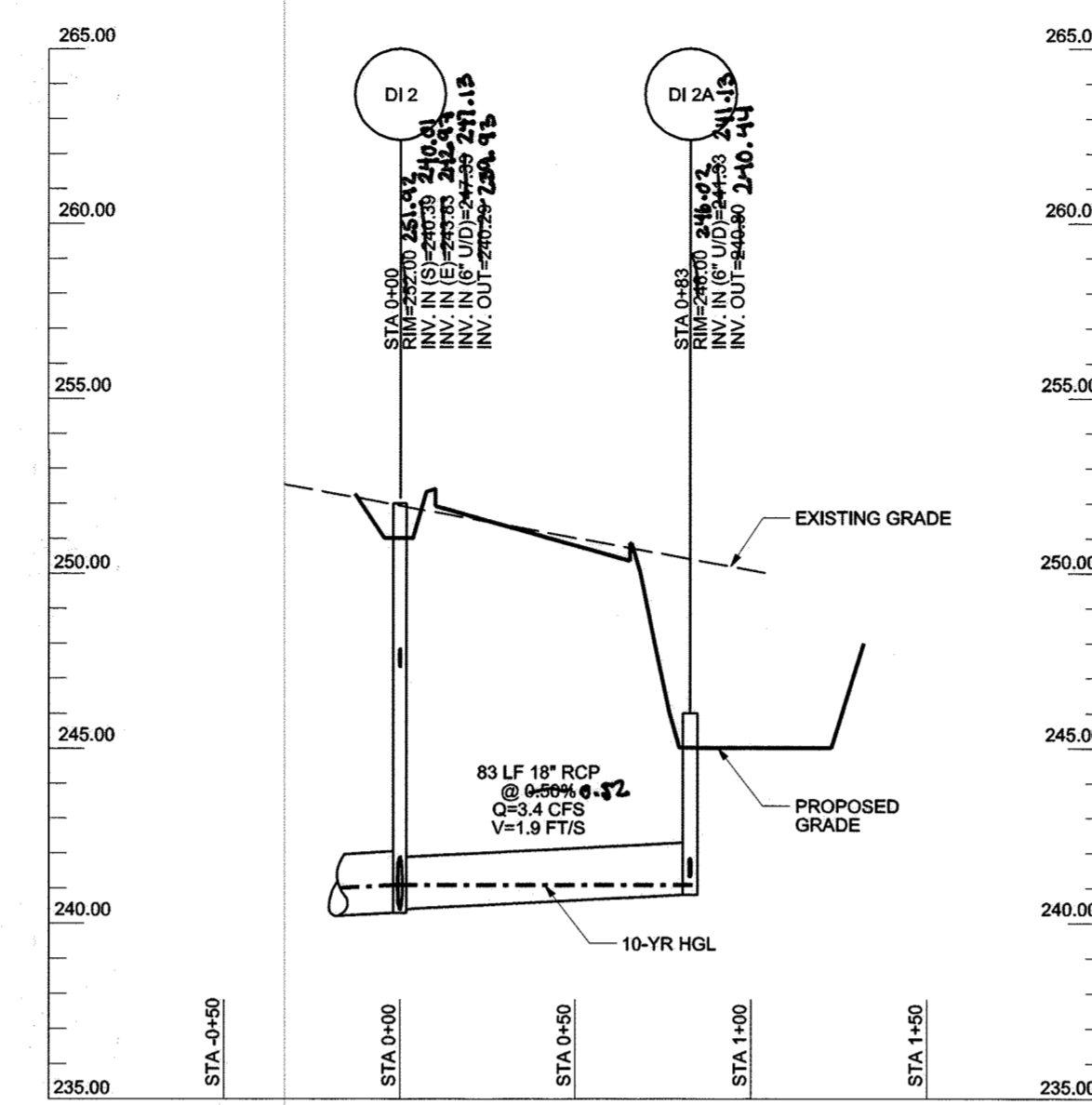
TITLE		
SITE UTILITY PLAN		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK BY	APPROVED	36 OF 80
R. CROWLEY	<i>[Signature]</i>	



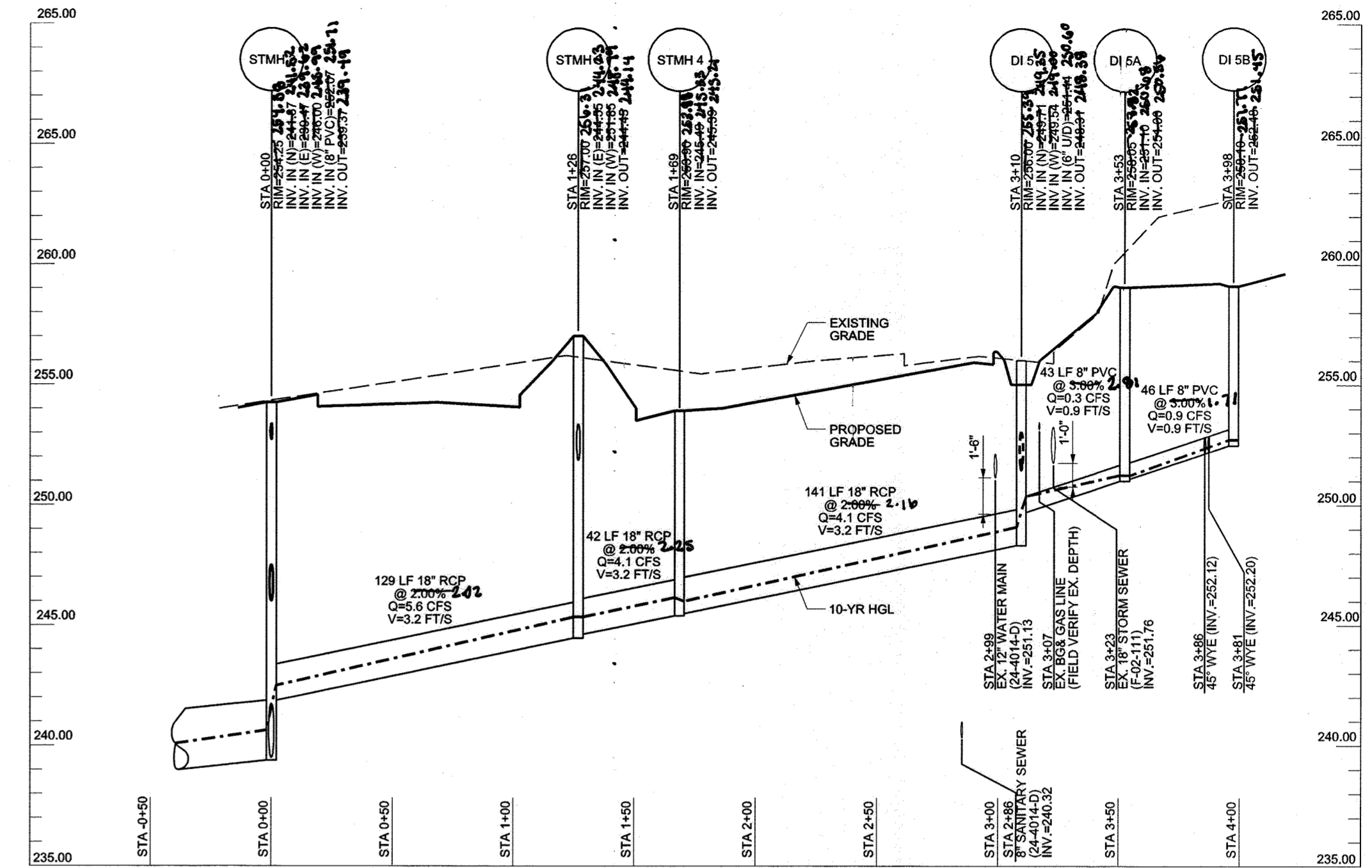
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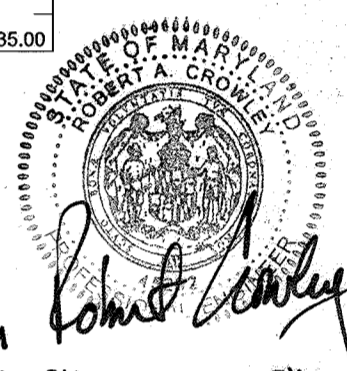
**1 STORM PROFILE: FES 1 - DI 3**  
 SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'



**2 STORM PROFILE: DI 2 - DI 2A**  
 SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'



**3 STORM PROFILE: STMH 2 - DI 5B**  
 SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'

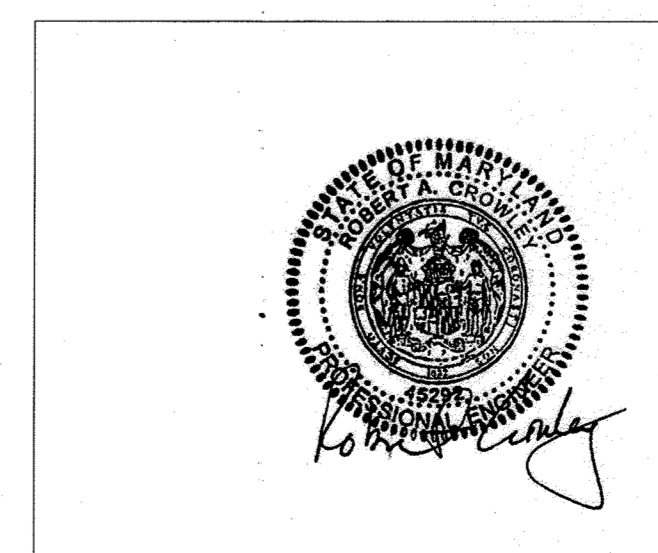


AS BUILT CERTIFICATION FOR RSWM  
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA SUFFICIENTLY STABILIZED TO PREVENT CLOSING OF THE UNDERGROUND SWM FACILITY.  
 ROBERT CROWLEY  
 45292  
 2/3/19

**AS-BUILT**  
 THIS CERTIFICATE OF RECORD HAS BEEN PREPARED CERTIFYING TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE STORM DRAIN SYSTEM AS SHOWN HEREON HAS BEEN ESSENTIALLY CONSTRUCTED IN A MANNER THAT WOULD BE CONSISTENT WITH THESE APPROVED PLANS EXCEPT AS NOTED IN R&P.

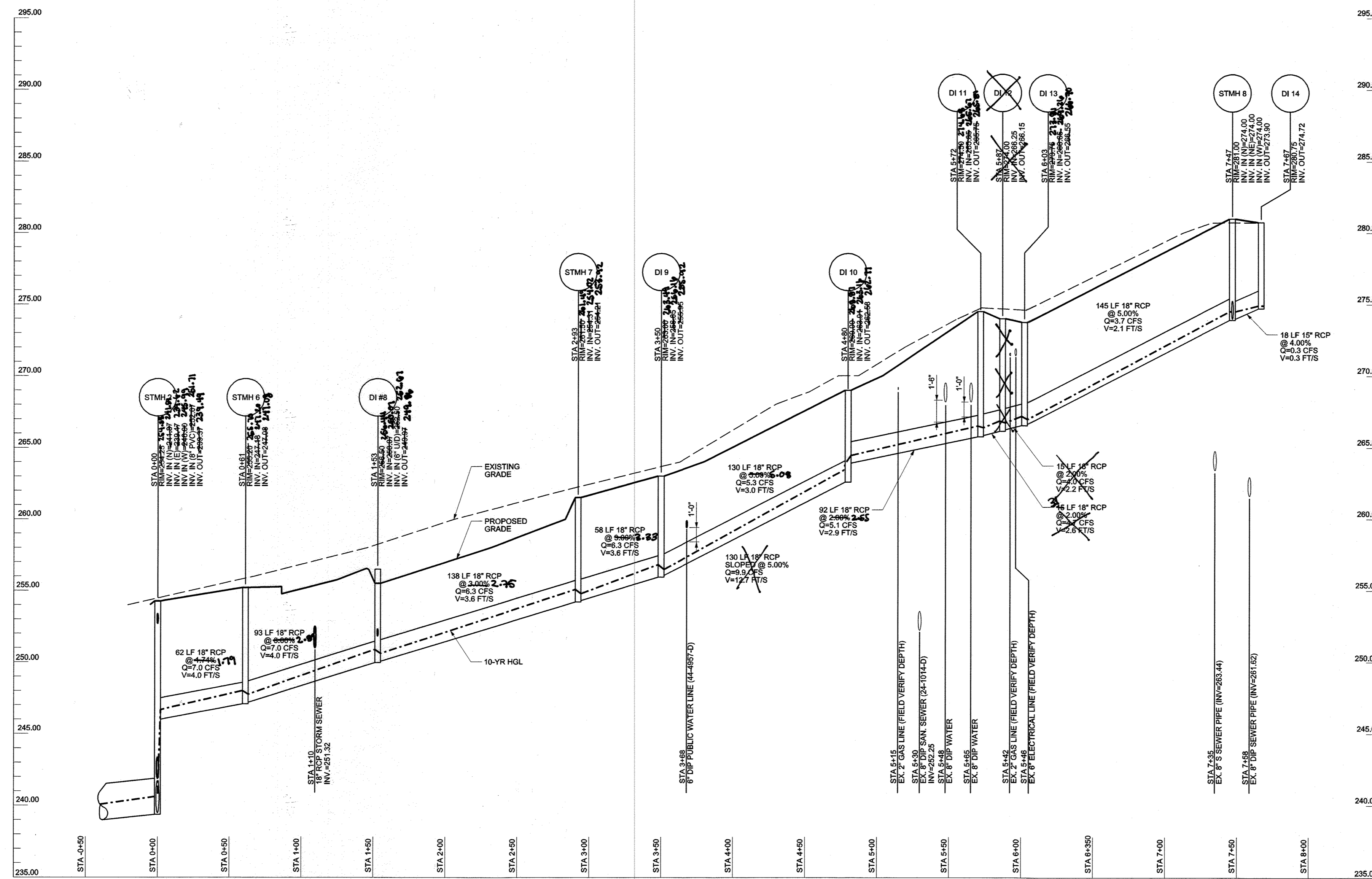
TIMOTHY J. MARTIN  
 PROFESSIONAL LAND SURVEYOR #10189  
 EXPIRATION DATE: AUGUST 3, 2018

**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. 45292 EXPIRATION DATE: 05/21/2016

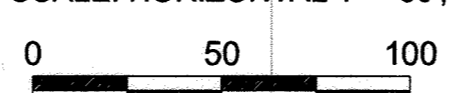


APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: 5-6-16  
 Chief, Division of Land Development: 5-16-16  
 Director: 5-16-16

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 2013-0174	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
UTILITY PROFILES		
DES. BY	SCALE	PROJ. No.
M. WERDER	AS SHOWN	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	
R. CROWLEY		37 OF 80



1 STORM PROFILE: STMH 2 - DI 14  
SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'



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

AS-BUILT

THIS CERTIFICATE OF RECORD HAS BEEN PREPARED CERTIFYING TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE STORM DRAIN SYSTEM AS SHOWN HEREON HAS BEEN ESSENTIALLY CONSTRUCTED IN A MANNER THAT WOULD BE CONSISTENT WITH THOSE APPROVED PLANS EXCEPT AS NOTED IN PAR.

TIMOTHY J. MARTIN  
110 CROSSING LANE SUENEVY CR #10989  
EXPIRATION DATE: AUG 15, 2015

2-3-17

AS BUILT CERTIFICATION FOR RSWM:  
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY. 2/3/17  
ROBERT CROWLEY 45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Robert Crowley* 5-6-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*V. Johnson* 5-4-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Valerie J. J. J.* 5-10-16  
DIRECTOR DATE

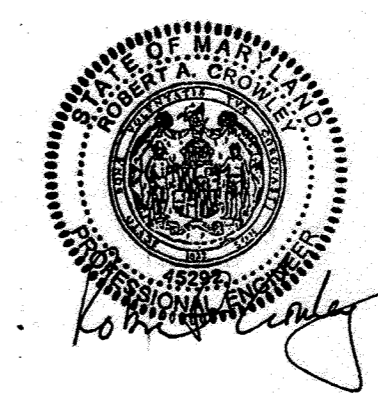
DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

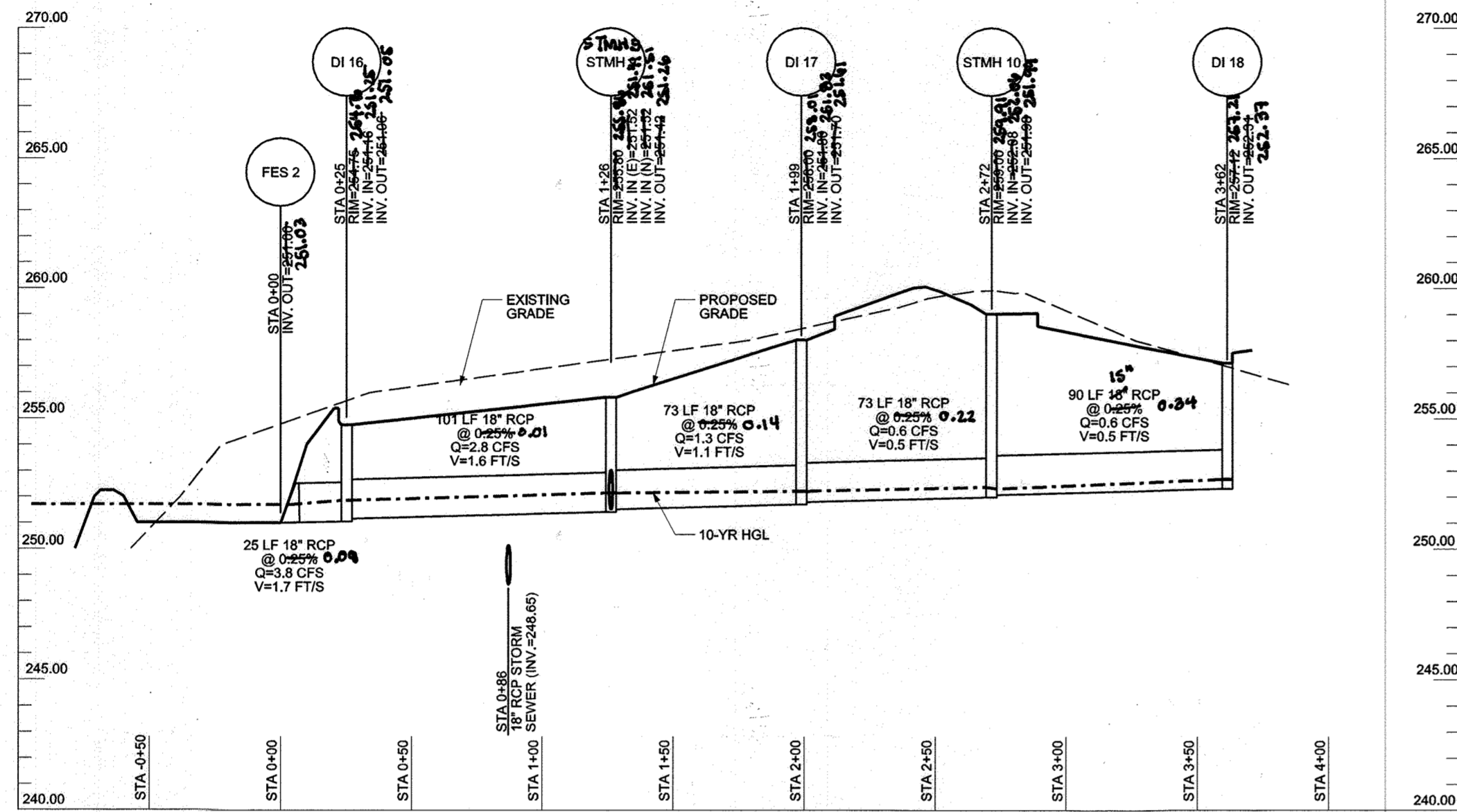
**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME EMERSON/REVIT PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O
PLAT # 2152-3534	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	SEWER CODE
TITLE UTILITY PROFILES		

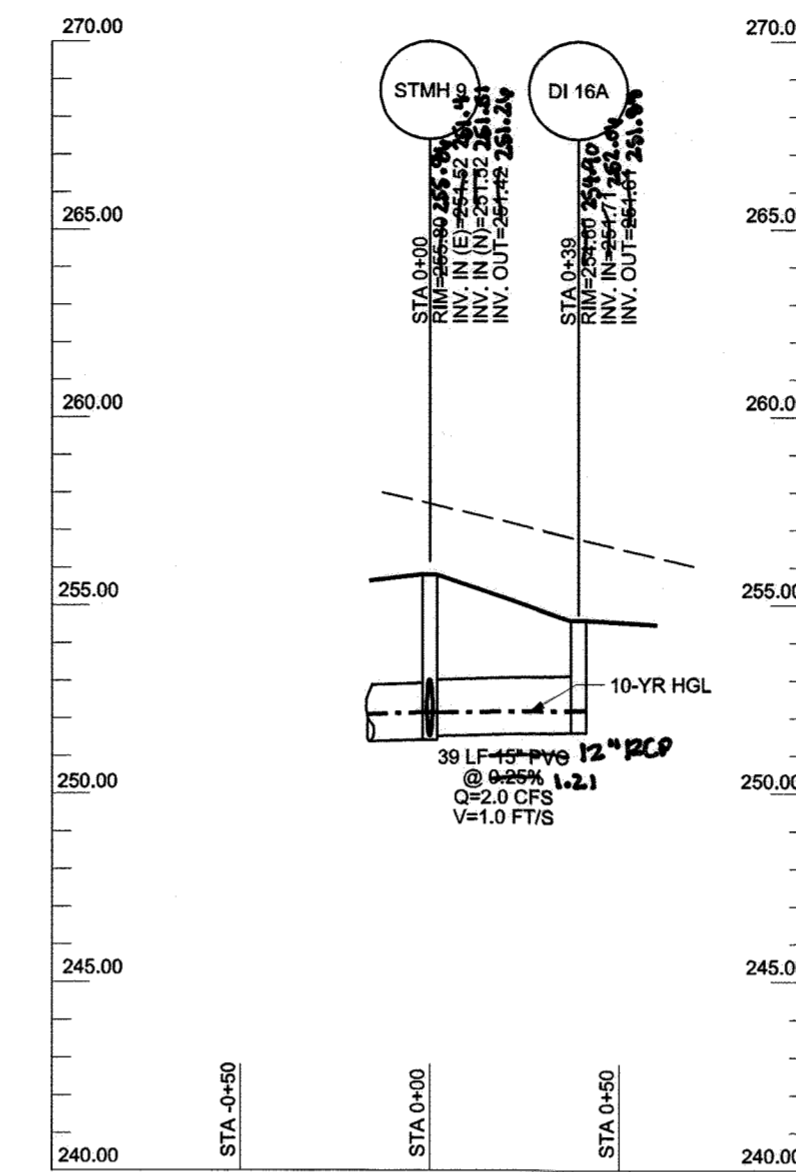
DES. BY M. WERDER	SCALE AS SHOWN	PROJ. No. 38 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK BY R. CROWLEY	APPROVED	



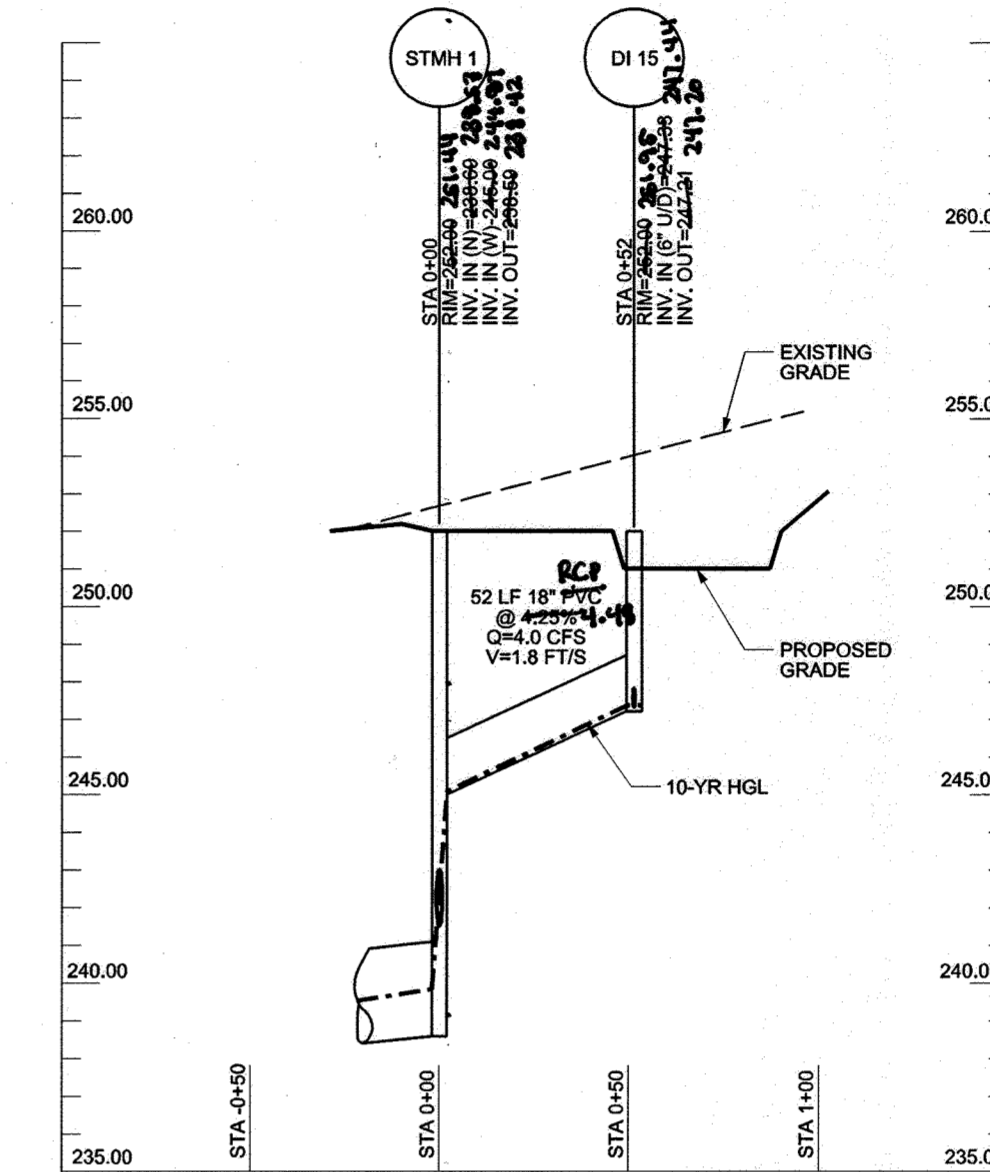
PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016



**1** STORM PROFILE: FES 2 - DI 18  
 SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'  
 0 50 100  
 SCALE:  
 HORIZONTAL: 1" = 50'  
 VERTICAL: 1" = 5'



**2** STORM PROFILE: STMH 9 - DI 16A  
 SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'  
 0 50 100  
 SCALE:  
 HORIZONTAL: 1" = 50'  
 VERTICAL: 1" = 5'



**3** STORM PROFILE: STMH 1 - DI 15  
 SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'  
 0 50 100  
 SCALE:  
 HORIZONTAL: 1" = 50'  
 VERTICAL: 1" = 5'

**AS-BUILT**

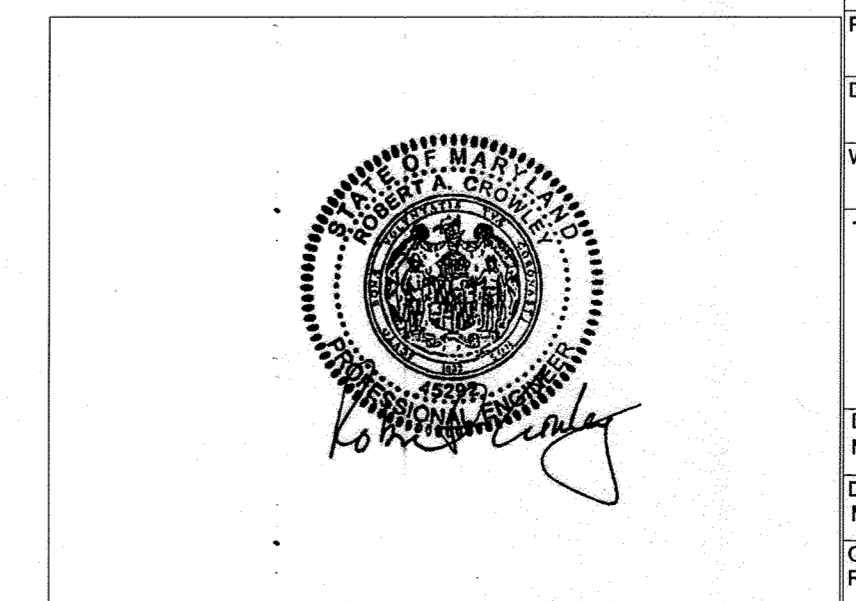
THIS CERTIFICATE OF RECORD HAS BEEN PREPARED CORRECTLY TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE STORM DRAIN SYSTEM AS SHOWN HEREON HAS BEEN ESSENTIALLY CONSTRUCTED IN A MANNER THAT WOULD BE CONSISTENT WITH THOSE APPROVED PLANS EXCEPT AS NOTED BY RWD

TIMOTHY J. MURPHY  
 PROFESSIONAL LAND SURVEYOR #10989  
 EXPIRATION DATE: AUGUST 3, 2018

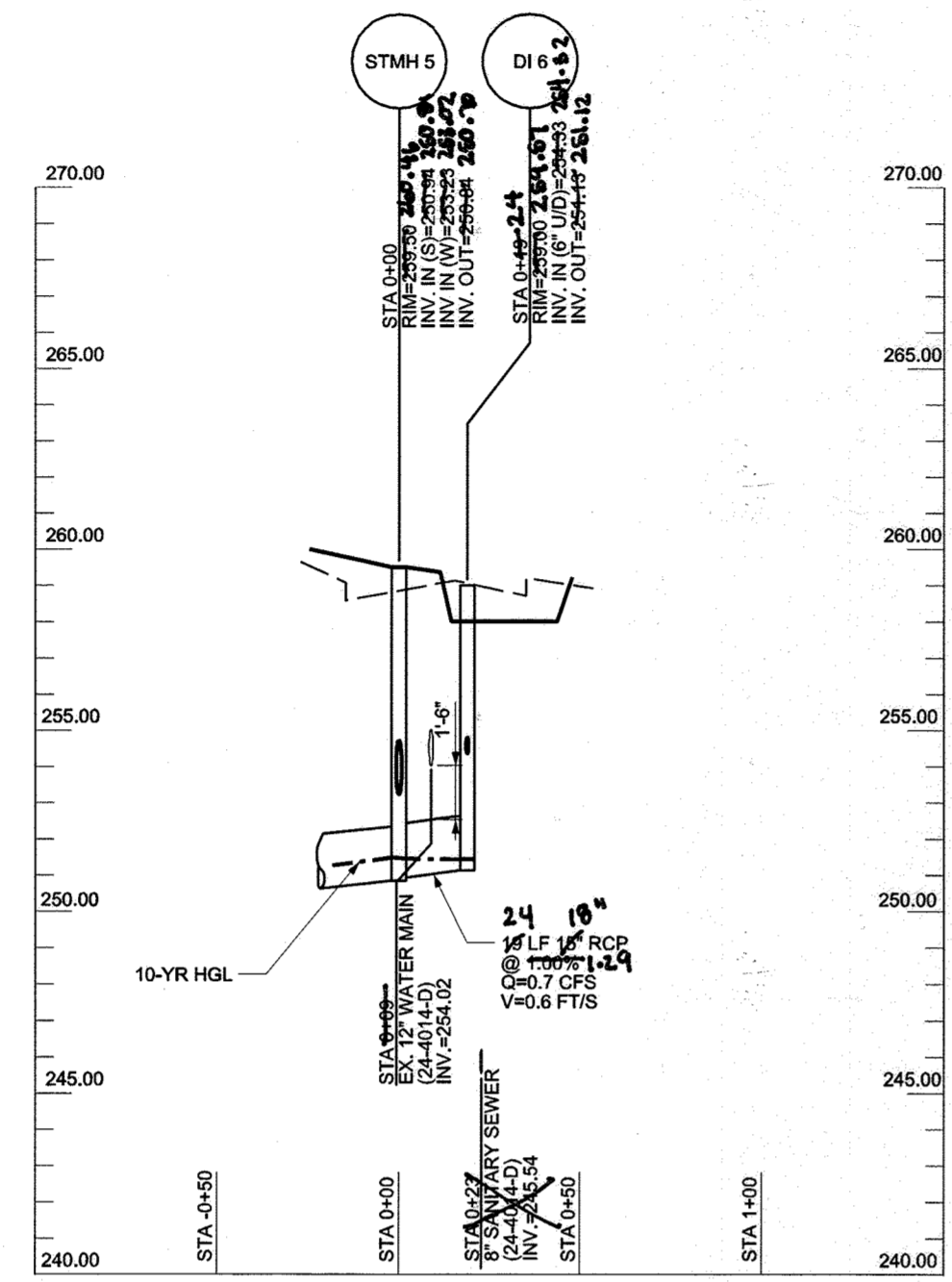
2-3-19

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. 45292 EXPIRATION DATE: 05/21/2016

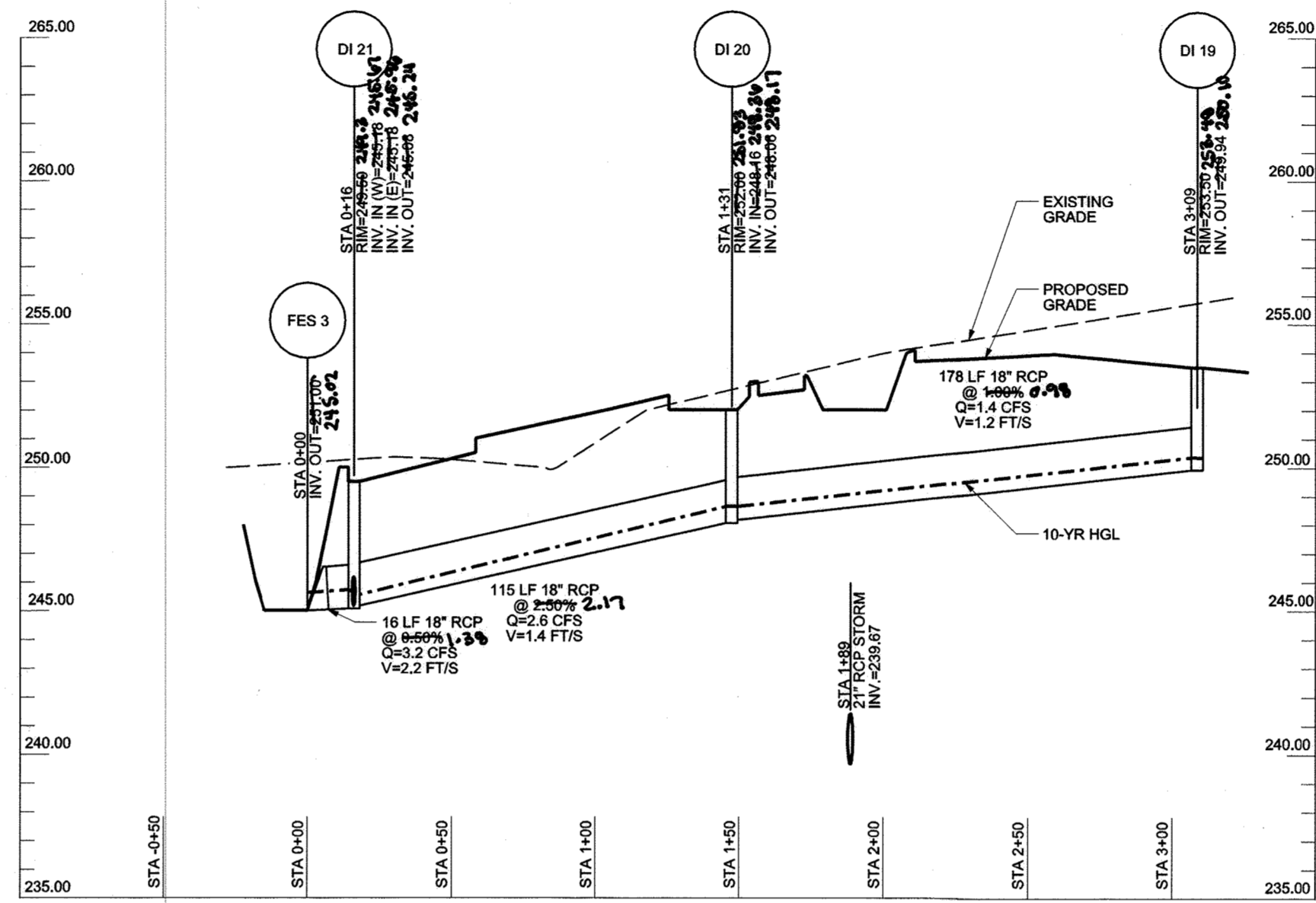
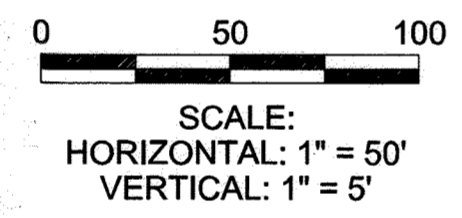
AS BUILT CERTIFICATION FOR PSWM:  
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.  
 ROBERT CROWLEY  
 45292  
 2/3/19



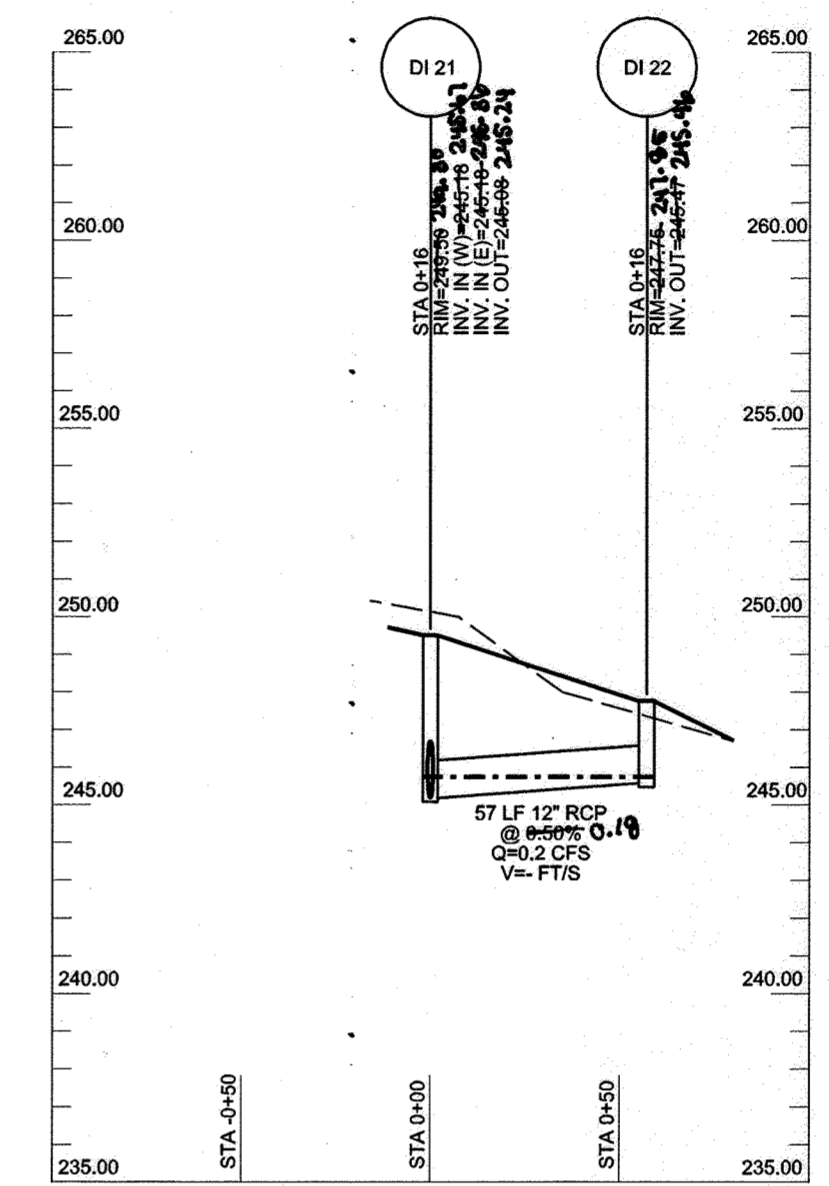
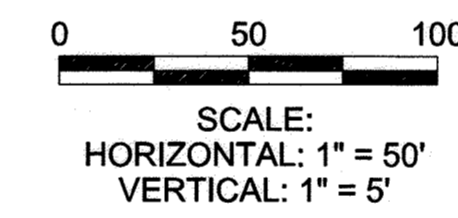
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>Paul E. ...</i>	5-6-16	DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION		
<i>V. ...</i>	5-11-16	DATE
CHIEF, DIVISION OF LAND DEVELOPMENT		
<i>N. ...</i>	5-16-16	DATE
DIRECTOR		
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1103 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23181-15784	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
UTILITY PROFILES		
DES. BY	SCALE	PROJ. No.
M. WERDER	AS SHOWN	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	39 OF 80
R. CROWLEY		



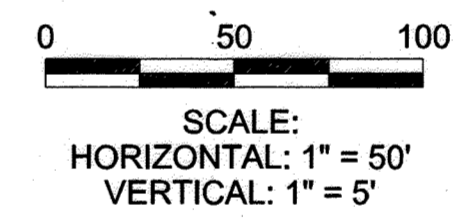
1 STORM PROFILE: STMH 5 - DI 6  
SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'



2 STORM PROFILE: FES 3 - DI 19  
SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'



3 STORM PROFILE: DI 21 - DI 22  
SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'



AS-BUILT

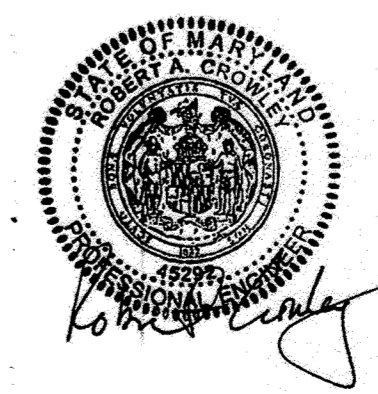
THIS CERTIFICATE OF RECORD HAS BEEN PREPARED CERTIFYING TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE STORM DRAIN SYSTEM AS SHOWN HEREON HAS BEEN OR SEEMINGLY CONSTRUCTED IN A MANNER THAT WOULD BE CONSISTENT WITH THESE APPROVED PLANS EXCEPT AS NOTED IN D&D.

TIMOTHY A. MARTIN  
PROFESSIONAL LAND SURVEYOR #10989  
EXPIRATION DATE: AUGUST 2, 2018

2-3-17

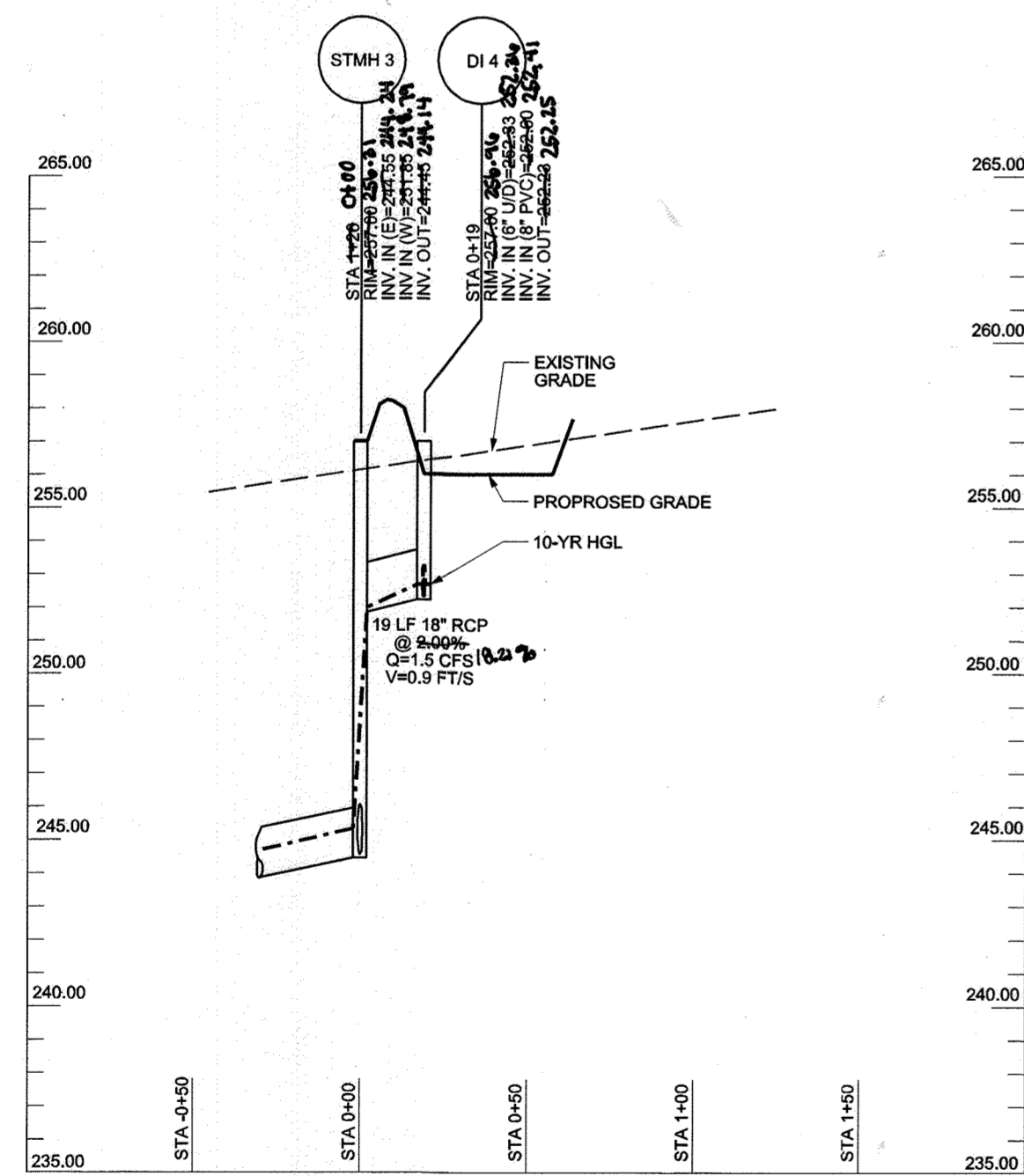
PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016

AS BUILT CERTIFICATION FOR PSWM:  
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE AS BUILT PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTION DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SUMM FACILITY.  
ROBERT CROWLEY  
45292  
2/3/17



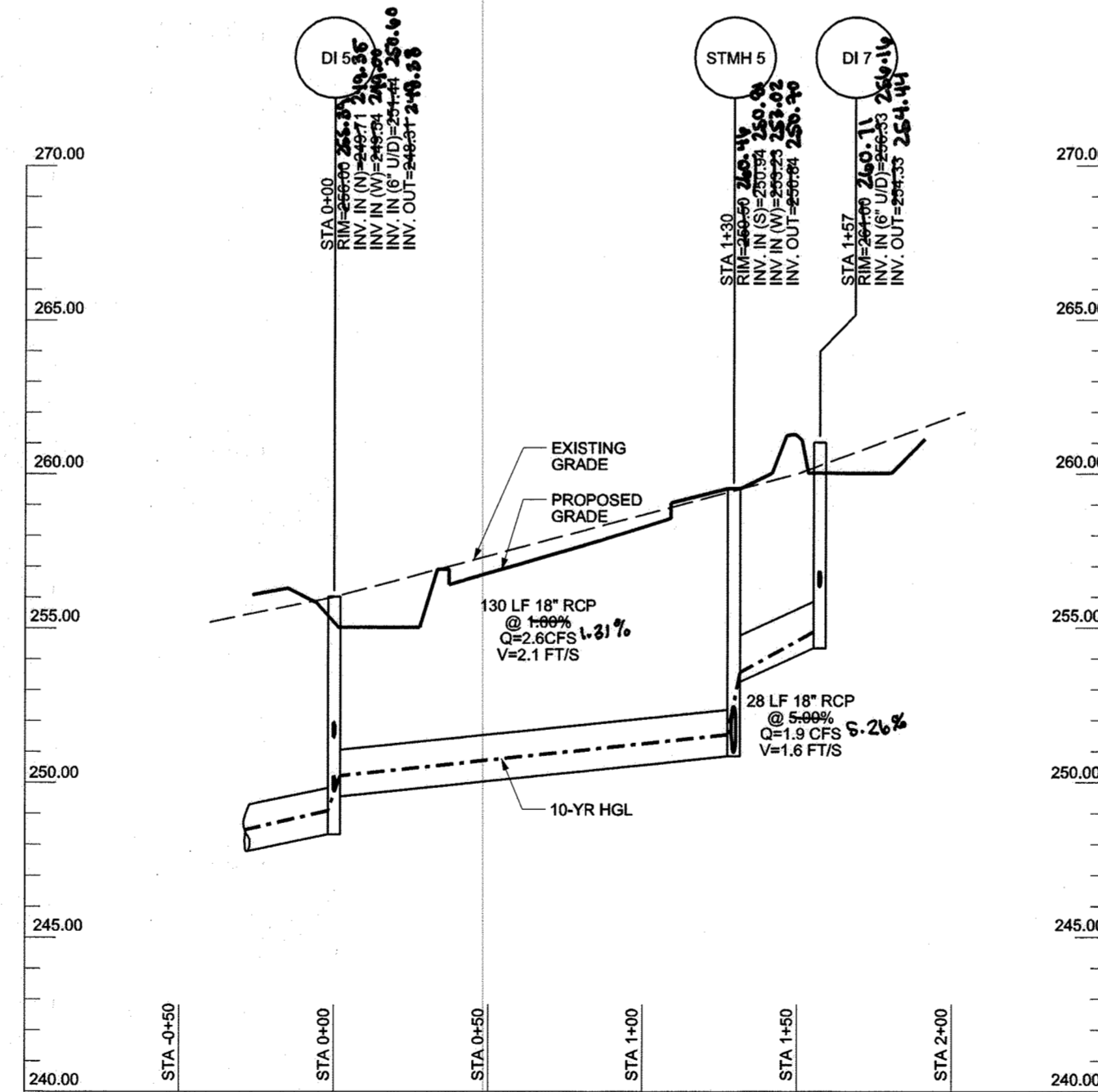
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-10-16 DATE
DATE	No. REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>	
PARCEL H	
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000	
<b>JACOBS</b>	
1100 N. GLEBE RD., ARLINGTON, VA 22201 (571) 218-1000	
SUBDIVISION NAME EMERSON / REVITZ PROPERTY	TAX MAP 47
LOT/PARCEL # PARCEL E-1, PARCEL D-1, PARCEL S-1, PARCEL N, PARCEL O, PARCEL Q	GRID 20
PLAT # 2013-2014	ZONE PEC
DEED 11479 / 005	ELEC. DISTRICT 6TH
WATER CODE	SEWER CODE
TITLE UTILITY PROFILES	
DES. BY M. WERDER	SCALE AS SHOWN
DRN. BY M. WERDER	DATE 04/04/2016
CHK. BY R. CROWLEY	APPROVED
PROJ. No. 40 OF 60	





1 STORM PROFILE: STMH 3 - DI 4  
SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'

0 50 100  
SCALE:  
HORIZONTAL: 1" = 50'  
VERTICAL: 1" = 5'



2 STORM PROFILE: DI 5 - DI 7  
SCALE: HORIZONTAL 1" = 50', VERTICAL 1" = 5'

0 50 100  
SCALE:  
HORIZONTAL: 1" = 50'  
VERTICAL: 1" = 5'

**AS-BUILT**  
THIS CERTIFICATE OF RECORD HAS BEEN PREPARED CERTIFYING TO THE BEST OF MY PROFESSIONAL KNOWLEDGE AND BELIEF THAT THE STORM DRAIN SYSTEM AS SHOWN HEREON HAS BEEN ESSENTIALLY CONSTRUCTED IN A MANNER THAT WOULD BE CONSISTENT WITH THESE APPROVED PLANS EXCEPT AS NOTED IN RED.

TIMOTHY J. MARTIN  
120 FESS LOWN LAND SU AVEY CR #10899  
EXPIRATION DATE: AUGUST 2, 2018

2-3-14

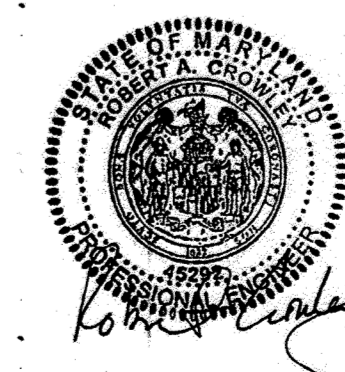
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ROBERT CRANLEY  
45292  
2/3/17



*Robert Cranley*

**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. 45292 EXPIRATION DATE: 05/21/2016



*Robert Cranley*

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>[Signature]</i>		5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION		DATE
<i>[Signature]</i>		5-4-16
CHIEF, DIVISION OF LAND DEVELOPMENT		DATE
<i>[Signature]</i>		5-16-16
DIRECTOR		DATE
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/RENTZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 1501 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE  UTILITY PROFILES		
DES. BY M. WERDER	SCALE AS SHOWN	PROJ. No. 41 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

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UNCLASSIFIED//FOR OFFICIAL USE ONLY  
**EMERSON FACILITY - SEQUENCE OF CONSTRUCTION**

STANDARDS

1. ALL TEMPORARY TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND THE SHA BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES.
2. INSTALL TOP AND SIDE BARRIER WALL MARKERS IN ACCORDANCE WITH SHA STANDARD NOS. 104.01-25 AND 104.01-26.

MAINTENANCE OF TRAFFIC - SPECIAL NOTES FOR FACILITY ACCESS AND WORK HOURS

1. THE CONTRACTOR SHALL MAINTAIN ACCESS TO THE FACILITY AT ALL TIMES DURING ALL HOURS OF CONSTRUCTION, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. AT LEAST ONE LANE IN EACH DIRECTION SHALL BE MAINTAINED INTO THE FACILITY TO ACCOMMODATE A SINGLE UNIT TRUCK DESIGN VEHICLE.

PRE CONSTRUCTION ACTIVITIES

1. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER AND FACILITY SECURITY MANAGER TO SCHEDULE THE START OF WORK ON GOVERNMENT PROPERTY. REFER TO THE SPECIFICATIONS FOR REQUIRED NOTIFICATIONS AND PROCEDURES PRIOR TO STARTING WORK.
2. ALL CONDUIT WORK REQUIRED FOR THE PROPOSED SECURITY IMPROVEMENTS SHALL BE APPROVED BY THE SECURITY MANAGER. WHERE POSSIBLE, CONDUIT WORK SHOULD BE INSTALLED PRIOR TO BEGINNING ACTIVITIES IN PHASE 1.

PHASE 1 - PROPOSED PAVEMENT SOUTH OF STERLING DRIVE & TEMPORARY ACCESS ROAD TO E6

1. INSTALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES.
2. INSTALL TEMPORARY SIGNING, TRAFFIC CONTROL DEVICES, AND TEMPORARY CONCRETE BARRIER.
3. SHIFT TRAVEL LANES TO THE NORTH, AND MAINTAIN TWO LANES OF TRAFFIC ALONG STERLING DRIVE, AS SHOWN.
4. DURING PHASE 1, MAINTAIN THE EXISTING ENTRANCES TO BUILDINGS E6, E7, AND E8.
5. SEE NOTES FOR PHASE 1 PEDESTRIAN - SEQUENCE OF CONSTRUCTION.
6. CONSTRUCT PROPOSED FULL DEPTH PAVEMENT, AS SHOWN.
7. CONSTRUCT / INSTALL PROPOSED CONCRETE ISLAND, SECURITY CONDUIT AND EQUIPMENT, FOUNDATIONS, AND CANOPY.
8. CONSTRUCT THE TEMPORARY ACCESS ROAD FOR BUILDING E6.

PHASE 1 PEDESTRIAN

1. CLOSE THE EXISTING SIDEWALK ALONG THE NORTH SIDE OF STERLING DRIVE.
2. DIRECT ALL PEDESTRIAN TRAFFIC TO USE EXISTING SIDEWALK ALONG THE SOUTH SIDE OF STERLING DRIVE.

PHASE 2 - PROPOSED PAVEMENT SOUTH OF STERLING DRIVE AT BUILDINGS E6 & E7

1. INSTALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES.
2. INSTALL TEMPORARY SIGNING, TRAFFIC CONTROL DEVICES, AND TEMPORARY CONCRETE BARRIER.
3. SHIFT TRAVEL LANES TO THE NORTH, AND MAINTAIN TWO LANES OF TRAFFIC ALONG STERLING DRIVE, AS SHOWN.
4. DURING PHASE 2, MAINTAIN THE EXISTING ENTRANCES TO BUILDINGS E7 AND E8.
5. CONSTRUCTION TRAFFIC SHALL UTILIZE THE TEMPORARY ACCESS ROAD TO BUILDING E6.
6. SEE NOTES FOR PHASE 2 PEDESTRIAN - SEQUENCE OF CONSTRUCTION.
7. CONSTRUCT PROPOSED FULL DEPTH PAVEMENT FOR NEW ENTRANCES TO BUILDINGS E6 AND E7, AS SHOWN.
8. INSTALL THE PROPOSED GRABNET WITHIN THE WORK AREA (EASTBOUND STERLING DRIVE).
9. AS A FINAL ACTIVITY OF PHASE 2, ADJUST THE TIE-IN OF THE TEMPORARY ACCESS ROAD FOR BUILDING E6 AND CONSTRUCT PROPOSED FULL DEPTH PAVEMENT AND CURB AND GUTTER.

PHASE 2 PEDESTRIAN

1. MAINTAIN THE CLOSURE OF THE EXISTING SIDEWALK ALONG THE NORTH SIDE OF STERLING DRIVE SET UP DURING PHASE 1.
2. DIRECT ALL PEDESTRIAN TRAFFIC TO USE EXISTING SIDEWALK ALONG THE SOUTH SIDE OF STERLING DRIVE.

PHASE 3 - PROPOSED MEDIANS ALONG STERLING DRIVE / BUILDING E8 ENTRANCE

1. INSTALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES.
2. INSTALL TEMPORARY SIGNING AND TRAFFIC CONTROL DEVICES.
3. MAINTAIN TWO LANES OF TRAFFIC ALONG NEWLY CONSTRUCTED PAVEMENT ON STERLING DRIVE, AS SHOWN.
4. A TEMPORARY 3-WAY FLAGGER OPERATION MAY BE REQUIRED IF THE REQUIRED WORK ACTIVITIES LIMITS THE AVAILABLE PAVEMENT WIDTH REQUIRED FOR TWO-WAY TRAFFIC AND AS APPROVED BY THE ENGINEER.
5. DURING PHASE 3, MAINTAIN THE EXISTING ENTRANCE TO BUILDING E7.
6. CLOSE THE EXISTING ENTRANCE TO BUILDING E8, AND DIRECT TRAFFIC TO THE BUILDING E5 ENTRANCE.
7. CONSTRUCTION TRAFFIC SHALL UTILIZE THE TEMPORARY ACCESS ROAD TO BUILDING E6.
8. SEE NOTES FOR PHASE 3 PEDESTRIAN - SEQUENCE OF CONSTRUCTION.
9. CONSTRUCT FULL DEPTH PAVEMENT AND MEDIANS ALONG STERLING DRIVE AND AT THE ENTRANCE TO BUILDING E8, AS SHOWN.
10. INSTALL THE PROPOSED GRABNET WITHIN THE WORK AREA (WESTBOUND STERLING DRIVE).
11. CONSTRUCT THE PROPOSED PEDESTRIAN SECURITY AND TURNSTILE AREA ON THE NORTH SIDE OF STERLING DRIVE.

PHASE 3 PEDESTRIAN

1. CLOSE EXISTING SIDEWALK ALONG THE NORTH SIDE OF STERLING DRIVE FROM STEPHENS ROAD TO WEST OF THE BUILDING E8 ENTRANCE.
2. THE CONTRACTOR SHALL PREPARE AND SUBMIT A PLAN FOR APPROVAL TO ADDRESS TEMPORARY PEDESTRIAN ACCESS FOR PHASE 3.

PHASE 4 - STERLING DR. MEDIANS / CONCRETE BARRIER CHICANES / FINAL EQUIPMENT INSTALLATION

1. PHASE 4 WORK SHALL BE PERFORMED DURING THE WEEKEND OR AFTER FACILITY WORK HOURS, UNLESS OTHERWISE APPROVED OR DIRECTED BY THE ENGINEER AND THE SECURITY MANAGER.
2. INSTALL REQUIRED EROSION AND SEDIMENT CONTROL DEVICES.
3. INSTALL TEMPORARY SIGNING AND TRAFFIC CONTROL DEVICES.
4. MAINTAIN TWO LANES OF TRAFFIC ALONG STERLING DRIVE. IF THE REQUIRED WORK ACTIVITIES LIMITS THE AVAILABLE PAVEMENT WIDTH REQUIRED FOR TWO-WAY TRAFFIC, THE CONTRACTOR SHALL EXECUTE A FLAGGER OPERATION TO TEMPORARILY MAINTAIN TRAFFIC.
5. MAINTAIN BUILDINGS E3 AND E5 ACCESS THROUGH THE BUILDING E5 OVERFLOW LOT CONNECTOR.
6. SEE NOTES FOR PHASE 4 PEDESTRIAN - SEQUENCE OF CONSTRUCTION.
7. CONSTRUCT MEDIANS ALONG STERLING DRIVE AT THE ENTRANCES OF BUILDINGS E7 AND E8.
8. INSTALL REMAINING PROPOSED SECURITY GATES AND EQUIPMENT.
9. DEMOLISH THE TEMPORARY ACCESS ROAD AT BUILDING E6.
10. GRIND, PATCH, AND RESURFACE THE PAVEMENT AS SHOWN ON THE PLANS.
11. INSTALL ALL PROPOSED SIGNS, PAVEMENT MARKINGS, LIGHTING, AND LANDSCAPE WITHIN THE PROJECT LIMITS.

PHASE 4 PEDESTRIAN

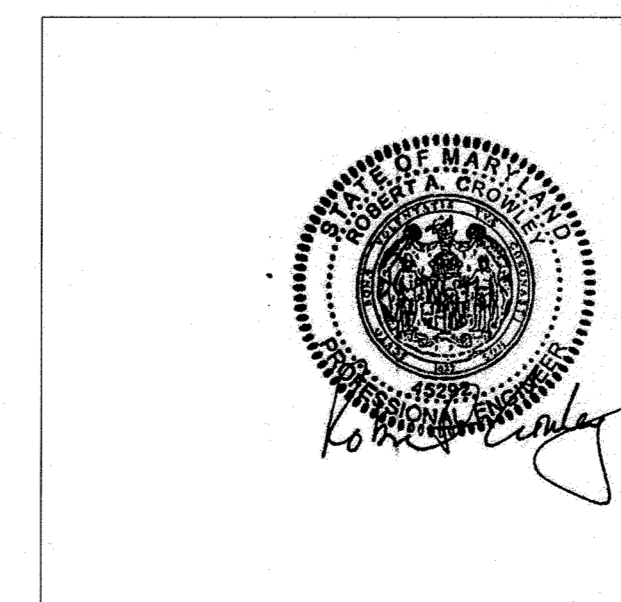
1. PEDESTRIANS SHALL UTILIZE ALL PROPOSED SIDEWALKS AND CROSSWALKS.
2. IF REQUIRED, AND AS APPROVED BY THE ENGINEER, THE CONTRACTOR SHALL DEVELOP A TEMPORARY PEDESTRIAN-MOT PLAN FOR PHASE 4.

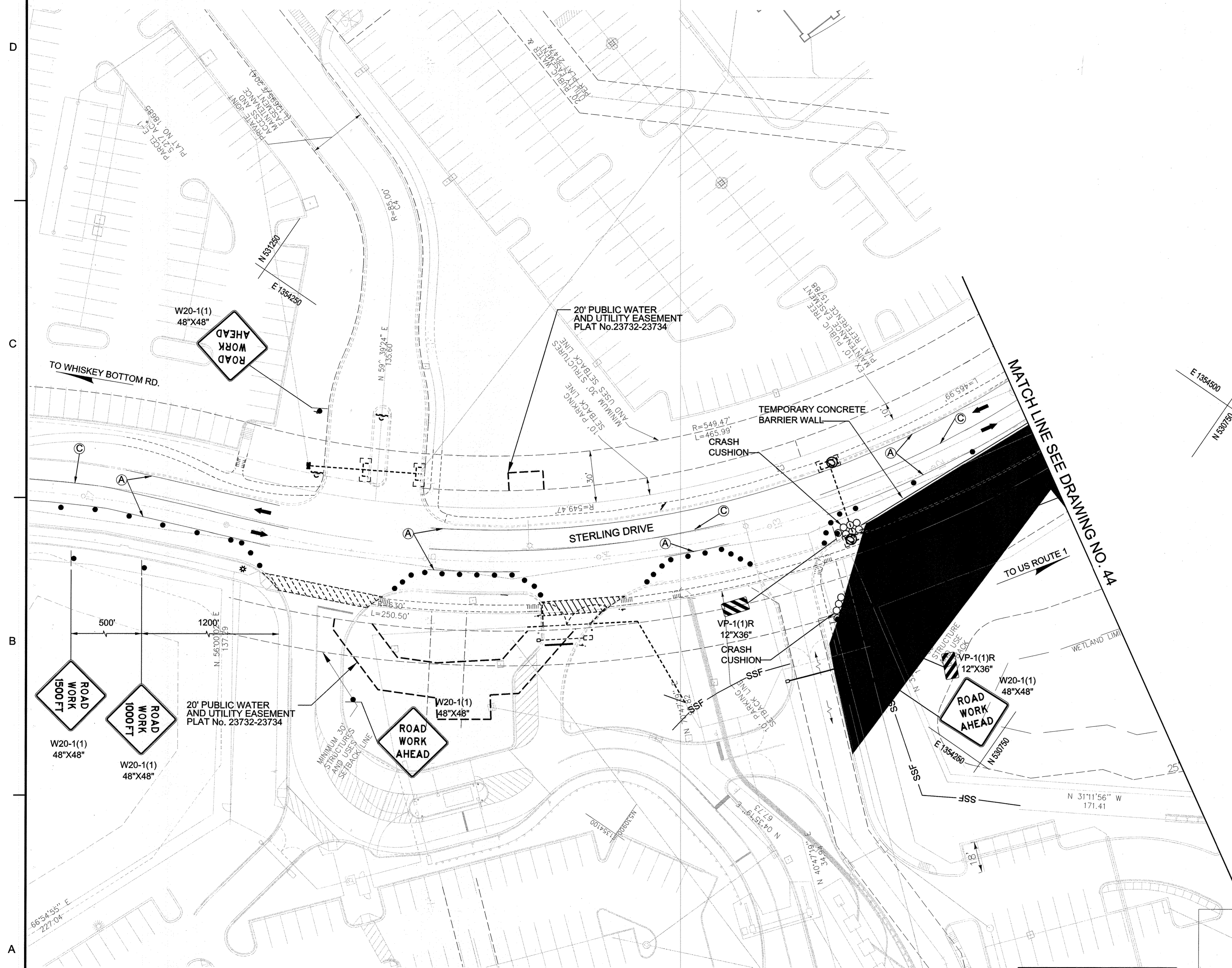


AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET  
 ROBERT CROWLEY  
 45292  
 2/3/17  
 PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
	5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	5-4-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
	5-10-16
DIRECTOR	DATE
DATE	REVISION DESCRIPTION

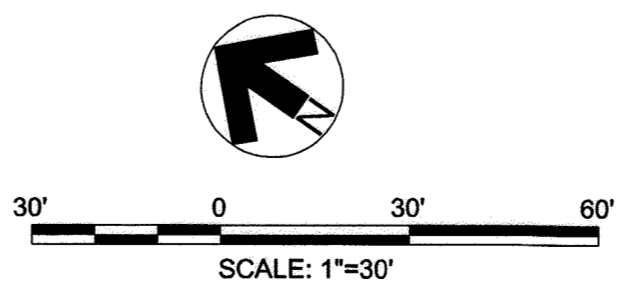
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/REWITZ PROPERTY	TAX MAP # 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE  MAINTENANCE OF TRAFFIC SEQUENCE OF CONSTRUCTION NOTES		
DES. BY M. WERDER	SCALE NTS	PROJ. No. 42 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	



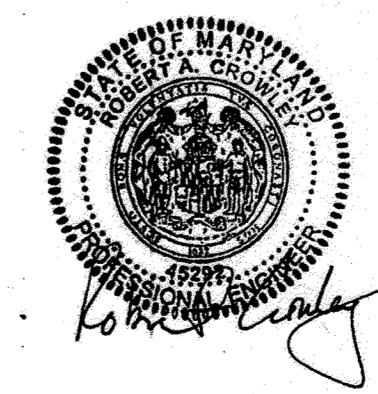


PAVEMENT MARKING LEGEND	
(A)	5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(B)	5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(C)	5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(D)	12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(E)	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 1 - SHEET 1 OF 2



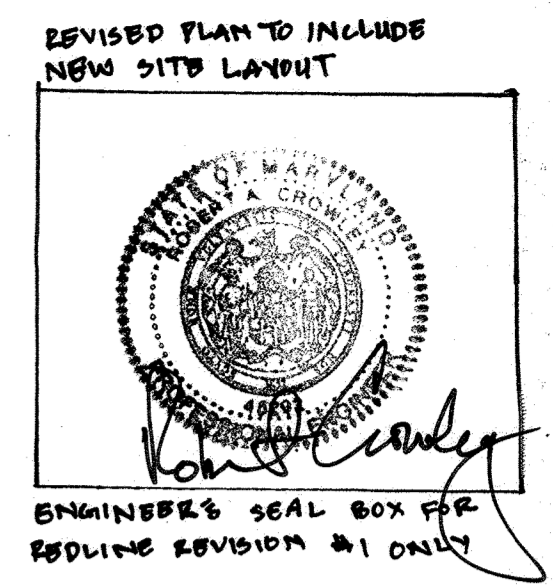
MOT LEGEND	
	WORK ZONE
	PREVIOUS WORK ZONE
	TEMPORARY TRAFFIC SIGN SIGN FACE
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES



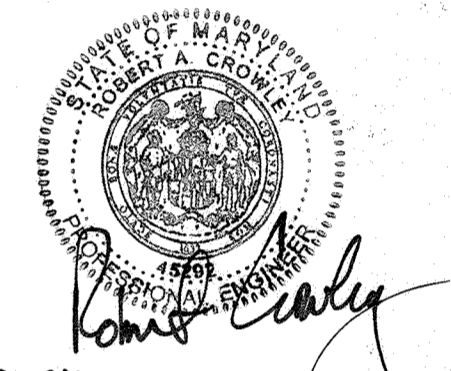
AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CRANNEY 2/3/17  
 45292

PROFESSIONAL CERTIFICATION  
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 LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
	CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16
	CHIEF, DIVISION OF LAND DEVELOPMENT	5-16-16
	DIRECTOR	5-16-16
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (717) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REWITZ PROPERTY	47	LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
TRAFFIC CONTROL PLAN PHASE 1		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	43 OF 80
R. CROWLEY		



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. 45292, Expiration Date: 05/21/2016



AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

APPROVED, DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-10-16 DATE
04/21/17	REVISED SITE LAYOUT TO ADD VISITOR CENTER. INDUCTION #44117

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (871) 218-1000

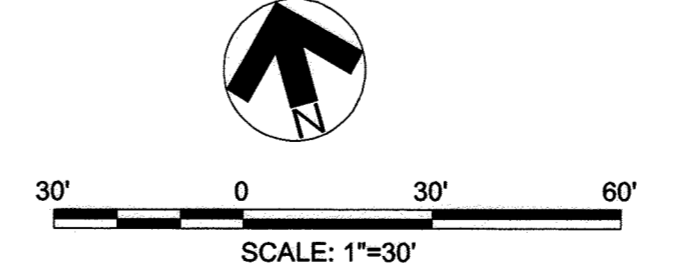
SUBDIVISION NAME EMERSON / REVITZ PROPERTY	TAX MAP 47	LOT / PARCEL # PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL S-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 2012-2133	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

TITLE TRAFFIC CONTROL PLAN PHASE 1		
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 44 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

**PAVEMENT MARKING LEGEND**

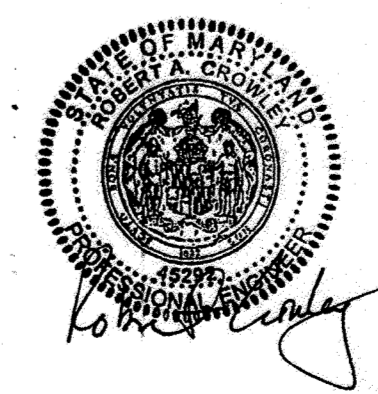
- (A) 5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (B) 5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (C) 5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (D) 12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (E) 24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 1 - SHEET 2 OF 2



**MOT LEGEND**

- WORK ZONE
- PREVIOUS WORK ZONE
- TEMPORARY TRAFFIC SIGN SIGN FACE
- DIRECTION OF TRAFFIC
- CHANNELIZING DEVICES



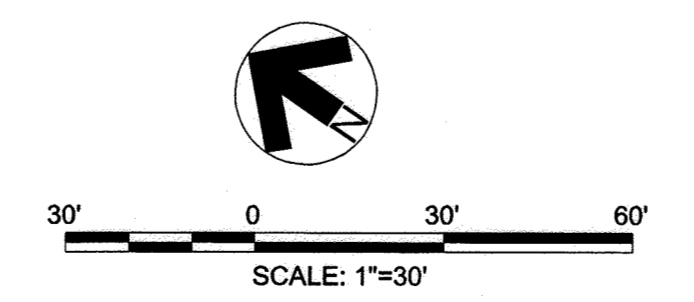
D  
C  
B  
A



**PAVEMENT MARKING LEGEND**

- (A) 5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (B) 5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (C) 5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (D) 12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (E) 24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 2 - SHEET 1 OF 2



**MOT LEGEND**

- WORK ZONE
- PREVIOUS WORK ZONE
- TEMPORARY TRAFFIC SIGN SIGN FACE
- DIRECTION OF TRAFFIC
- CHANNELIZING DEVICES

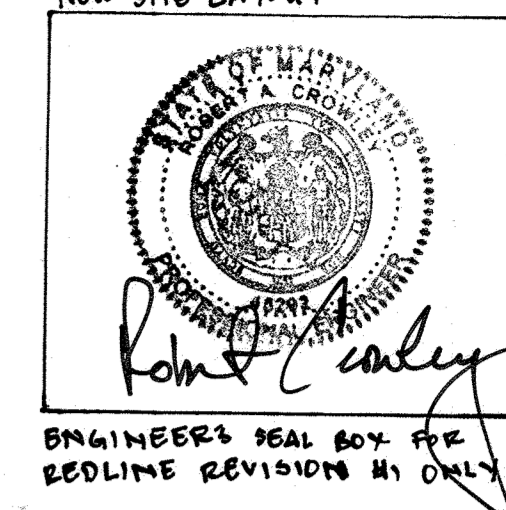


AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING		
	CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
	CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
	DIRECTOR	5-10-16 DATE
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON / RENTZ PROPERTY	TAX MAP 47	LOT / PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE <b>TRAFFIC CONTROL PLAN PHASE 2</b>		
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 86649
DRN. BY M. WERDER	DATE 04/04/2016	
CHK BY R. CROWLEY	APPROVED	45 OF 80
SDP-16-005		

REVISED PLAN TO INCLUDE NEW SITE LAYOUT



ENGINEER'S SEAL ONLY FOR REDLINE REVISIONS 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. 45292, Expiration Date: 05/21/2016



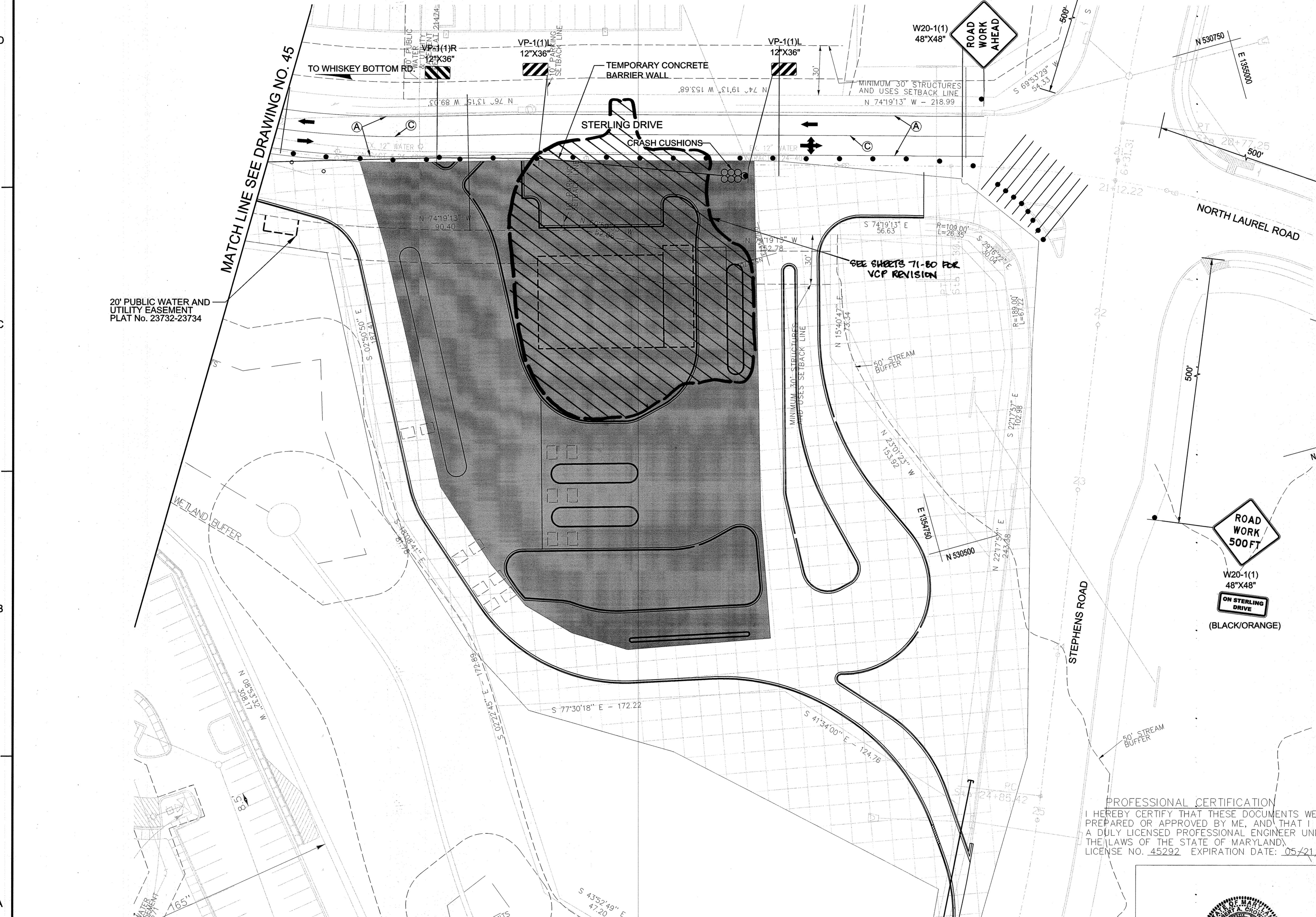
AS BUILT CERTIFICATION FOR PSWM:  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>David Ed...</i>	5-6-16
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Robert Crowley</i>	5-11-16
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
<i>William J...</i>	5-16-16
DIRECTOR	DATE
04/28/17	1541560 SITE LAYOUT TO ADD VISITOR CENTER INSPECTION FACILITY

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		

<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (703) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REITZ PROPERTY	47	LOT 158 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

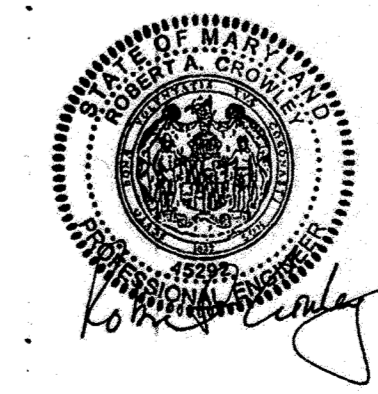
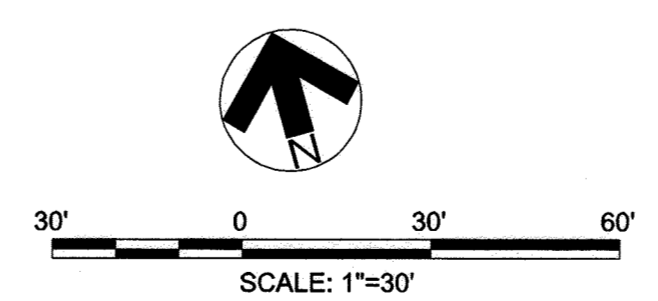
<b>TRAFFIC CONTROL PLAN PHASE 2</b>		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	46 OF 80
R. CROWLEY		



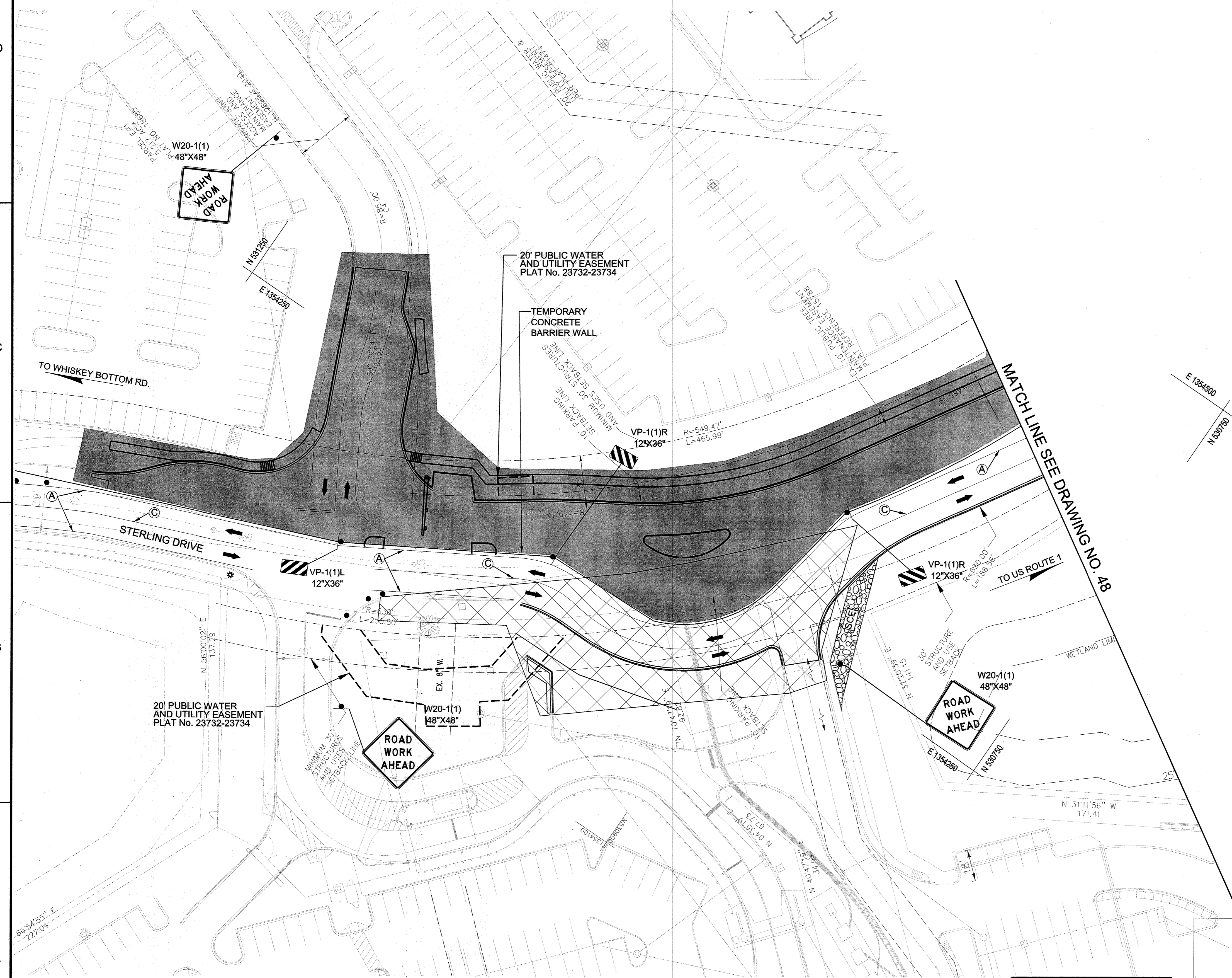
PAVEMENT MARKING LEGEND	
(A)	5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(B)	5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(C)	5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(D)	12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(E)	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 2 - SHEET 2 OF 2

MOT LEGEND	
	WORK ZONE
	PREVIOUS WORK ZONE
	TEMPORARY TRAFFIC SIGN SIGN FACE
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES



D  
C  
B  
A



AS BUILT CERTIFICATION FOR PSMM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET  
 ROBERT CROWLEY  
 45292  
 2/3/17

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. 45292 EXPIRATION DATE: 05/21/2016

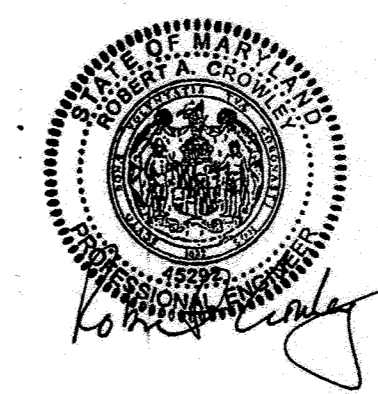
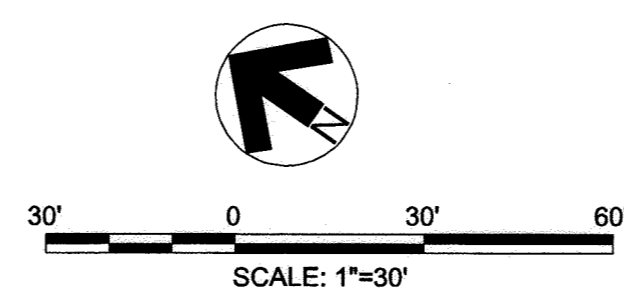
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-4-16 DATE
<i>[Signature]</i> DIRECTOR	5-10-16 DATE

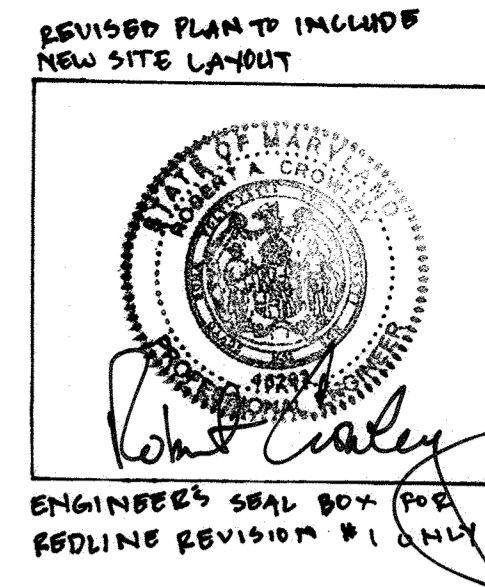
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (871) 218-1000		
SUBDIVISION NAME EMERSON/REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE		
TRAFFIC CONTROL PLAN PHASE 3		
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 47 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

PAVEMENT MARKING LEGEND	
(A)	5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(B)	5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(C)	5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(D)	12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(E)	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

MOT LEGEND	
	WORK ZONE
	PREVIOUS WORK ZONE
	TEMPORARY TRAFFIC SIGN SIGN FACE
	DIRECTION OF TRAFFIC
	CHANNELIZING DEVICES

PHASE 3 - SHEET 1 OF 2





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. 45292, Expiration Date: 05/21/2016



AS BUILT CERTIFICATION FOR PSWIM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292  
 2/3/17

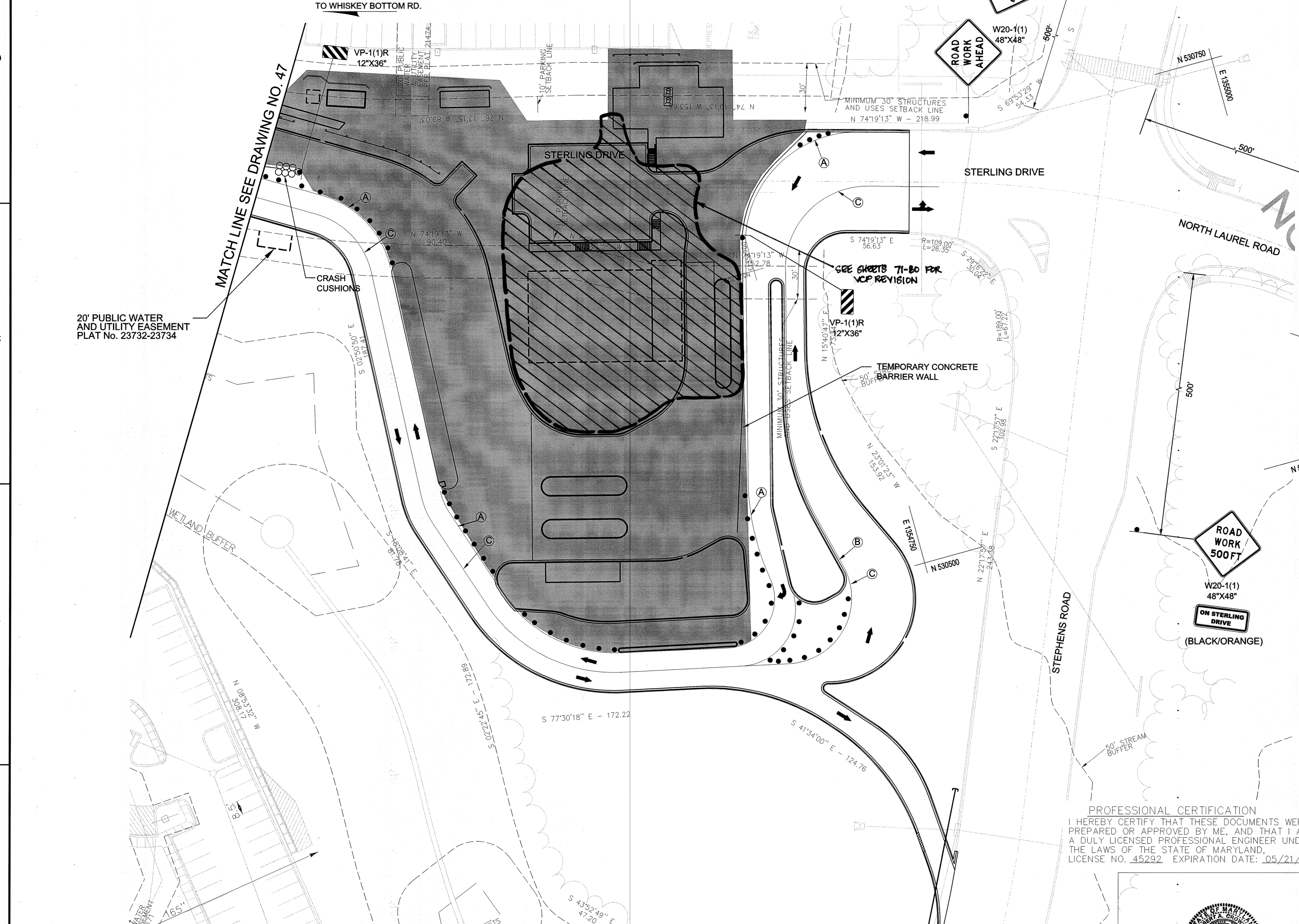
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 Chief, Development Engineering Division: 5-6-16  
 Chief, Division of Land Development: 5-11-16  
 Director: 5-10-16

DATE	No.	REVISION DESCRIPTION
09/24/19	1	REVISION SITE LAYOUT TO ADD VISITED CENTER INSPECTION FACILITY

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000



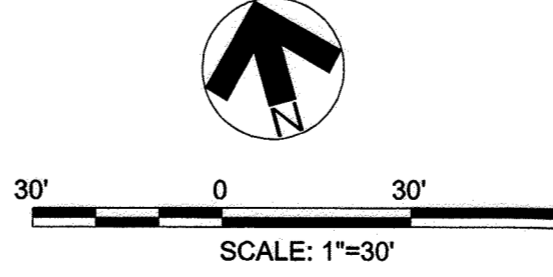
SUBDIVISION NAME: EMERSON/RENTZ PROPERTY		TAX MAP: 47	LOT/PARCEL #
PLAT # 2012-0134		ZONE: PEC	GRID: 20
DEED: 11479 / 005	ELEC. DISTRICT: 6TH	WATER CODE	
TITLE: TRAFFIC CONTROL PLAN PHASE 3		DES. BY: M. WERDER	
SCALE: 1:30		PROJ. No.:	
DATE: 04/04/2016		48 OF 80	
CHK BY: R. CROWLEY		APPROVED:	



**PAVEMENT MARKING LEGEND**

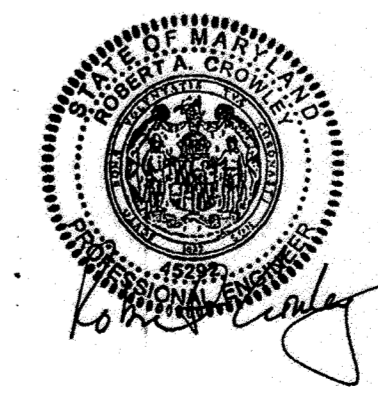
- Ⓐ 5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- Ⓑ 5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- Ⓒ 5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- Ⓓ 12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- Ⓔ 24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 3 - SHEET 2 OF 2

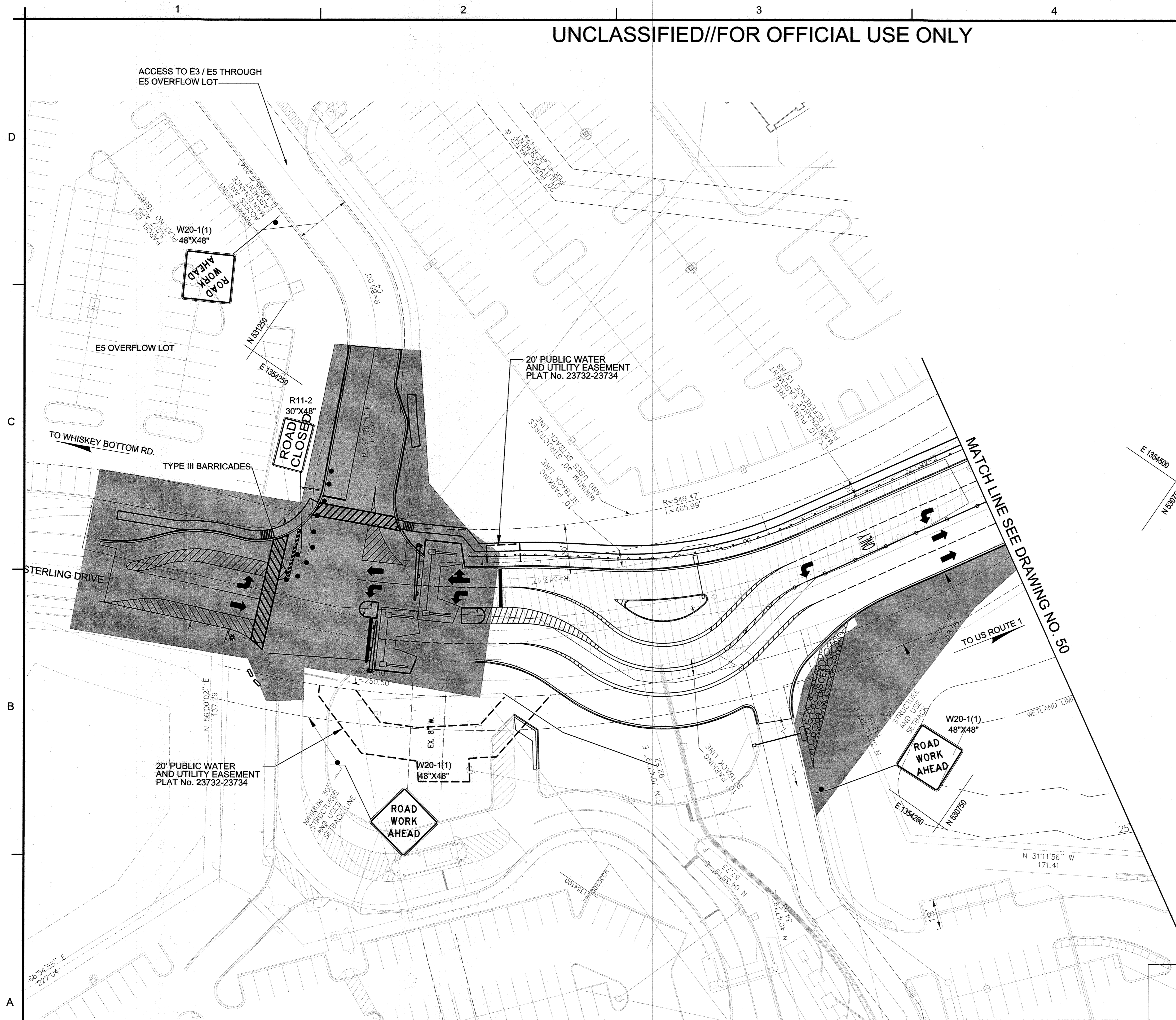


**MOT LEGEND**

- WORK ZONE
- ▨ PREVIOUS WORK ZONE
- ⬇ TEMPORARY TRAFFIC SIGN SIGN FACE
- ➔ DIRECTION OF TRAFFIC
- CHANNELIZING DEVICES



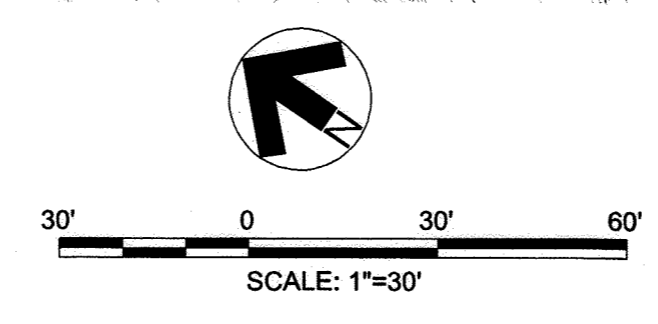




**PAVEMENT MARKING LEGEND**

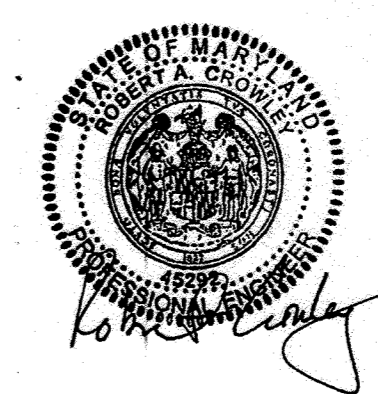
- (A) 5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (B) 5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (C) 5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (D) 12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
- (E) 24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 4 - SHEET 1 OF 2



**MOT LEGEND**

- WORK ZONE
- PREVIOUS WORK ZONE
- TEMPORARY TRAFFIC SIGN SIGN FACE
- DIRECTION OF TRAFFIC
- CHANNELIZING DEVICES



AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CRANLEY 2/2/17  
 45292  
 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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING

<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		

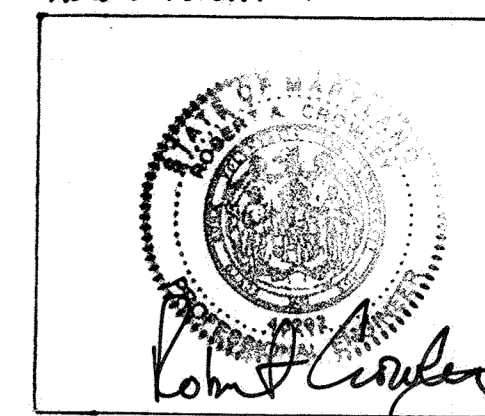
**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (703) 218-1000

SUBDIVISION NAME EMERSON / REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
FLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	WATER CODE SEWER CODE

<b>TRAFFIC CONTROL PLAN PHASE 4</b>		
DES. BY M. WERDER	SCALE 1:30	PROJ. No. 49 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK BY R. CROWLEY	APPROVED	

UNCLASSIFIED//FOR OFFICIAL USE ONLY

REVISED PLAN TO INCLUDE NEW SITE LAYOUT



ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

ROAD WORK 500 FT  
W20-1(1) 48"X48"  
ON STERLING DRIVE (BLACK/ORANGE)

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. 45292, Expiration Date: 05/21/2020



AS BUILT CERTIFICATION FOR PSVM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY 2/3/17  
46292

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 5-6-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 5-11-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 5-16-16  
 DIRECTOR

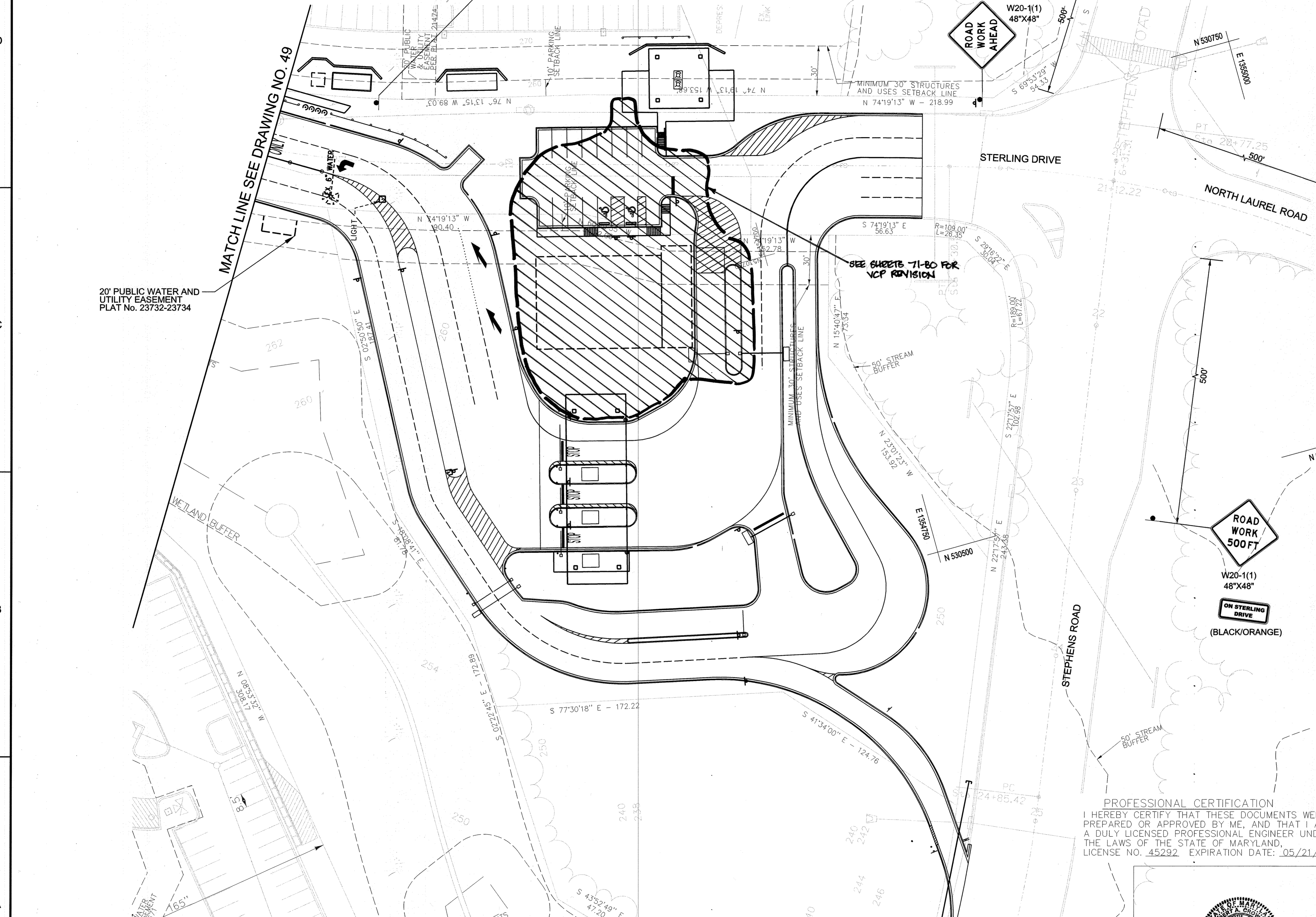
DATE	No.	REVISION DESCRIPTION
09/24/14	1	REVISED SITE LAYOUT TO ADD VISITOR CENTER INSPECTION FACILITY

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (871) 218-1000

SUBDIVISION NAME EMERSON/RENTZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 150 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 23732-23734	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

TITLE TRAFFIC CONTROL PLAN PHASE 4		
DES. BY M. WERDER	SCALE 1:30	PROJ. No.
DRN. BY M. WERDER	DATE 04/04/2016	50 OF 80
CHK. BY R. CROWLEY	APPROVED	



**PAVEMENT MARKING LEGEND**

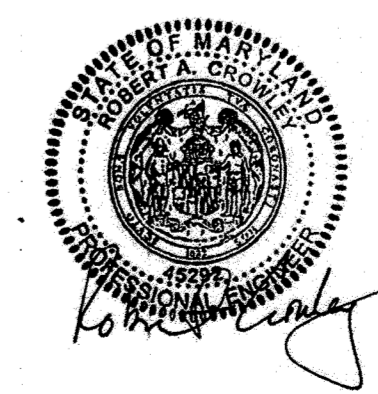
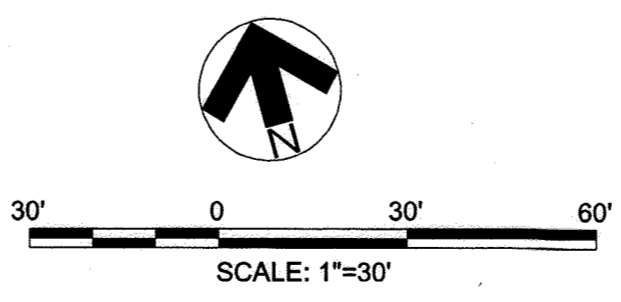
(A)	5 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(B)	5 INCH YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(C)	5 INCH DOUBLE YELLOW NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(D)	12 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID
(E)	24 INCH WHITE NONTOXIC LEAD FREE WATERBORNE PAVEMENT MARKING PAINT - SOLID

PHASE 4 - SHEET 2 OF 2

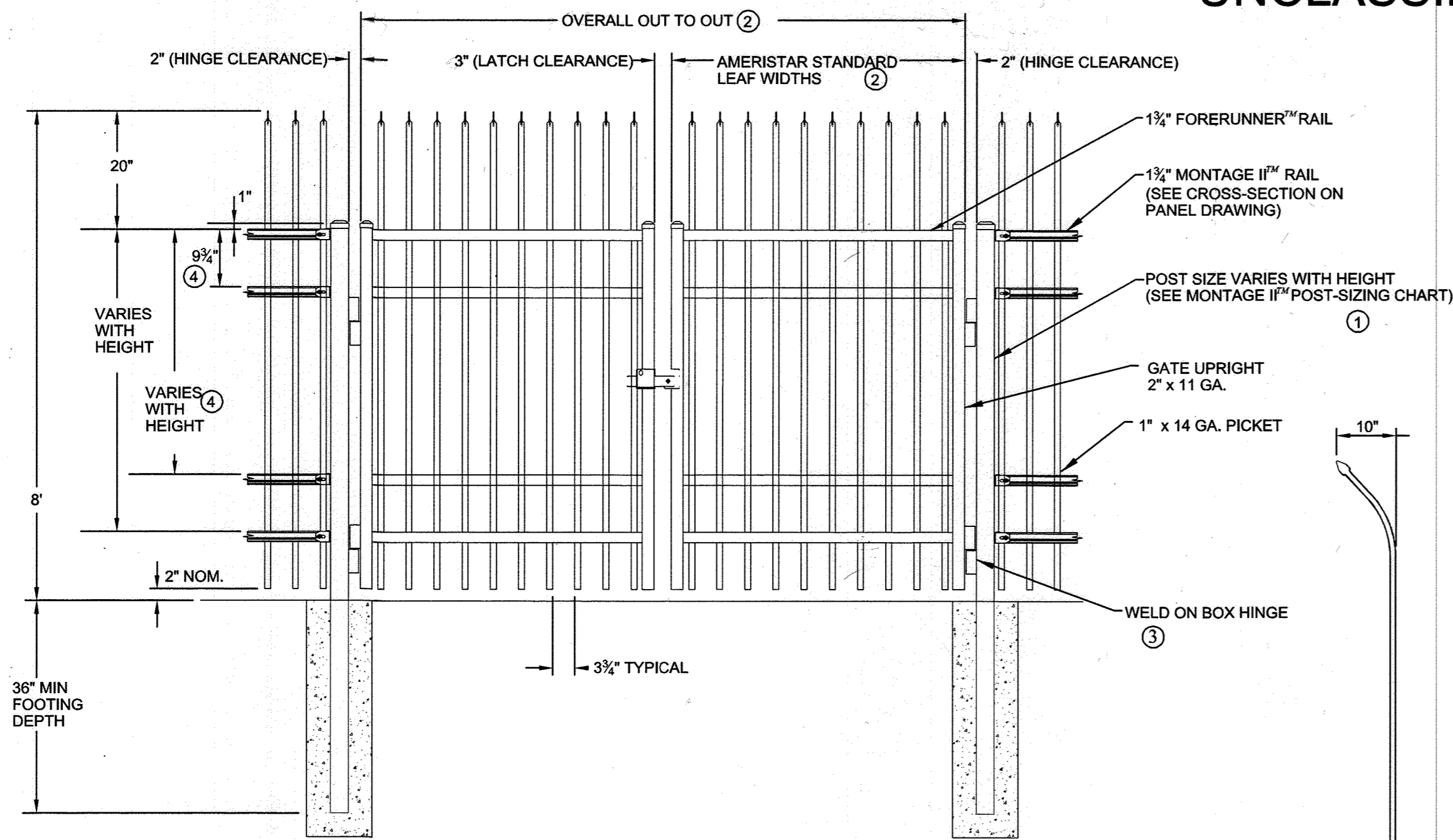
UNCLASSIFIED//FOR OFFICIAL USE ONLY

**MOT LEGEND**

[Symbol]	WORK ZONE
[Symbol]	PREVIOUS WORK ZONE
[Symbol]	TEMPORARY TRAFFIC SIGN SIGN FACE
[Symbol]	DIRECTION OF TRAFFIC
[Symbol]	CHANNELIZING DEVICES



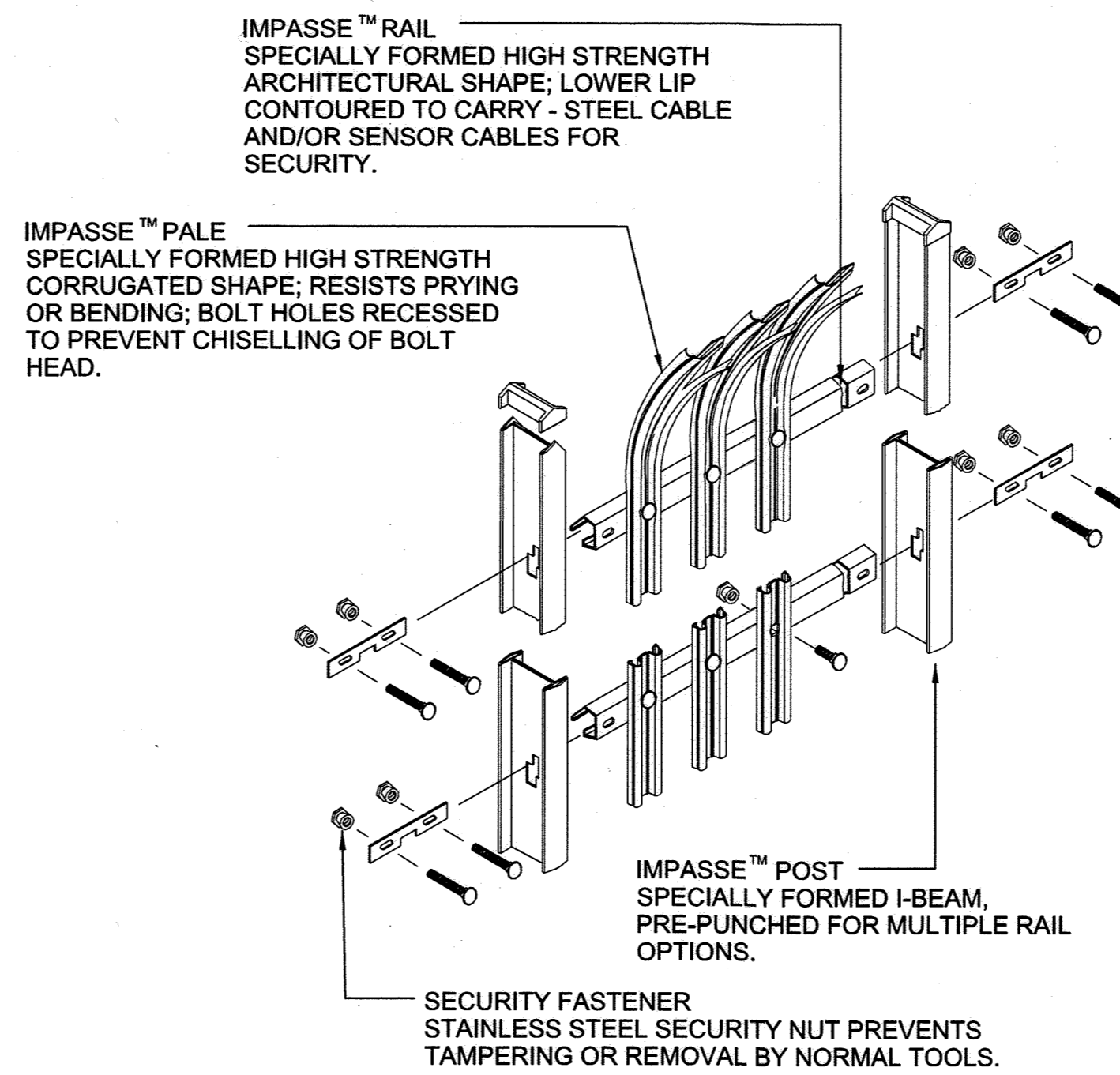
SDP-16-005



NOTES:  
 1.) POST SIZE DEPENDS ON FENCE HEIGHT, WEIGHT AND WIND LOADS. SEE MONTAGE II SPECIFICATIONS FOR POST SIZING CHART.  
 2.) SEE AMERISTAR GATE TABLE FOR STANDARD OUT TO OUTS. CUSTOM GATE OPENINGS AVAILABLE FOR SPECIAL OUT TO OUTLEAF WIDTHS.  
 3.) ADDITIONAL STYLES OF GATE HARDWARE ARE AVAILABLE ON REQUEST. THIS COULD CHANGE THE LATCH AND HINGE CLEARANCE.  
 4.) THIRD AND FOURTH RAIL OPTIONAL.  
 5.) CONTRACTOR SHALL SAND DOWN END OF SCREWS ON HASPS AS NEEDED TO WELD HASP TO GATE.

**1 AMERISTAR MONTAGE II ORNAMENTAL INVINCIBLE DOUBLE SWING GATE**  
 SCALE: NONE

DETAIL IS BASE DESIGN. CONTRACTOR MAY USE EQUIVALENT PRODUCT THAT MEETS PROJECT REQUIREMENTS AND SPECIFICATIONS AND AS APPROVED BY THE COR.

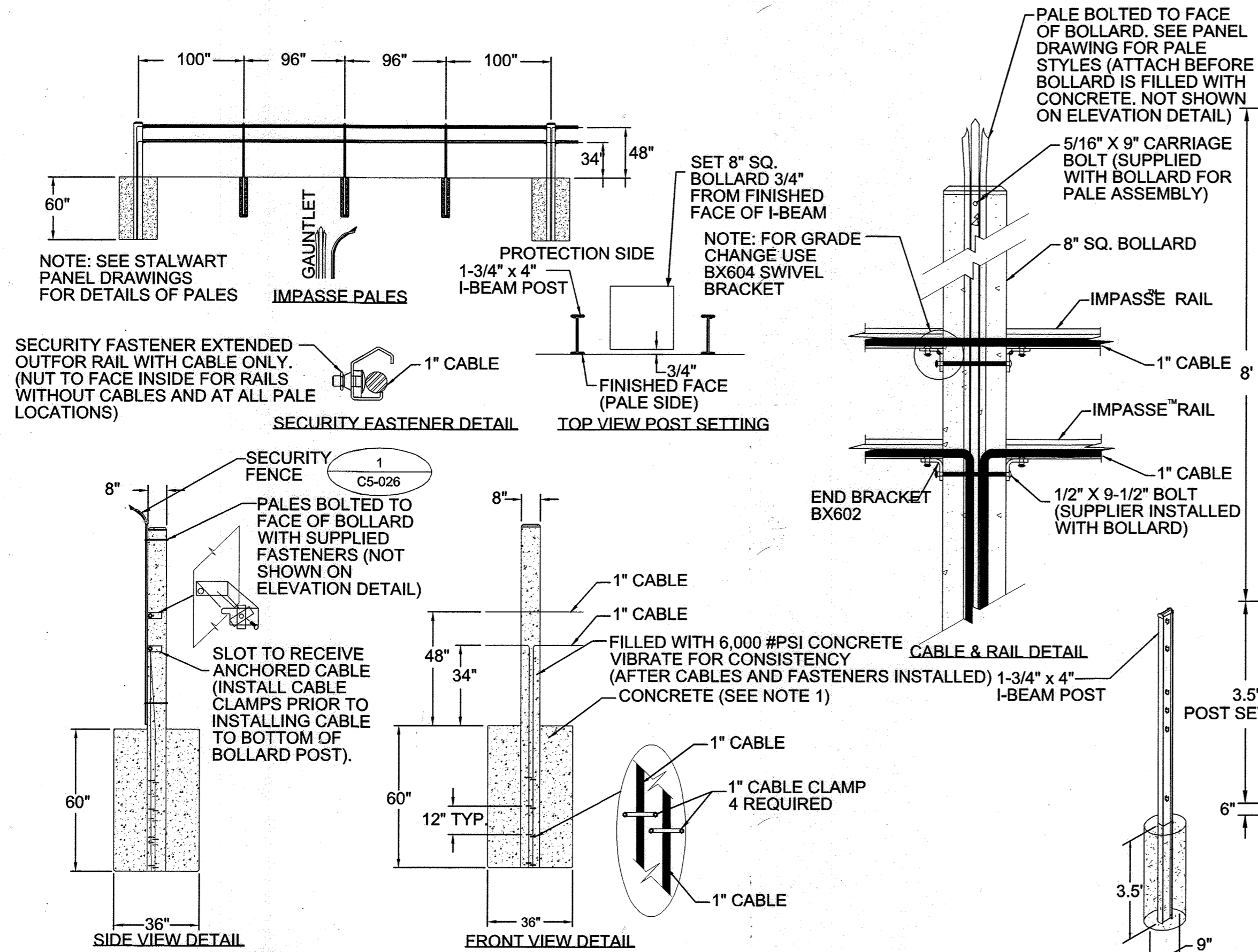


IMPASSE™ PALE  
 SPECIALLY FORMED HIGH STRENGTH CORRUGATED SHAPE; RESISTS PRYING OR BENDING; BOLT HOLES RECESSED TO PREVENT CHISELLING OF BOLT HEAD.

IMPASSE™ RAIL  
 SPECIALLY FORMED HIGH STRENGTH ARCHITECTURAL SHAPE; LOWER LIP CONTOURED TO CARRY - STEEL CABLE AND/OR SENSOR CABLES FOR SECURITY.

IMPASSE™ POST  
 SPECIALLY FORMED I-BEAM, PRE-PUNCHED FOR MULTIPLE RAIL OPTIONS.

SECURITY FASTENER  
 STAINLESS STEEL SECURITY NUT PREVENTS TAMPERING OR REMOVAL BY NORMAL TOOLS.



NOTE: SEE STALWART PANEL DRAWINGS FOR DETAILS OF PALES

SECURITY FASTENER EXTENDED OUTFOR RAIL WITH CABLE ONLY. (NUT TO FACE INSIDE FOR RAILS WITHOUT CABLES AND AT ALL PALE LOCATIONS)

PALES BOLTED TO FACE OF BOLLARD WITH SUPPLIED FASTENERS (NOT SHOWN ON ELEVATION DETAIL)

SLOT TO RECEIVE ANCHORED CABLE (INSTALL CABLE CLAMPS PRIOR TO INSTALLING CABLE TO BOTTOM OF BOLLARD POST).

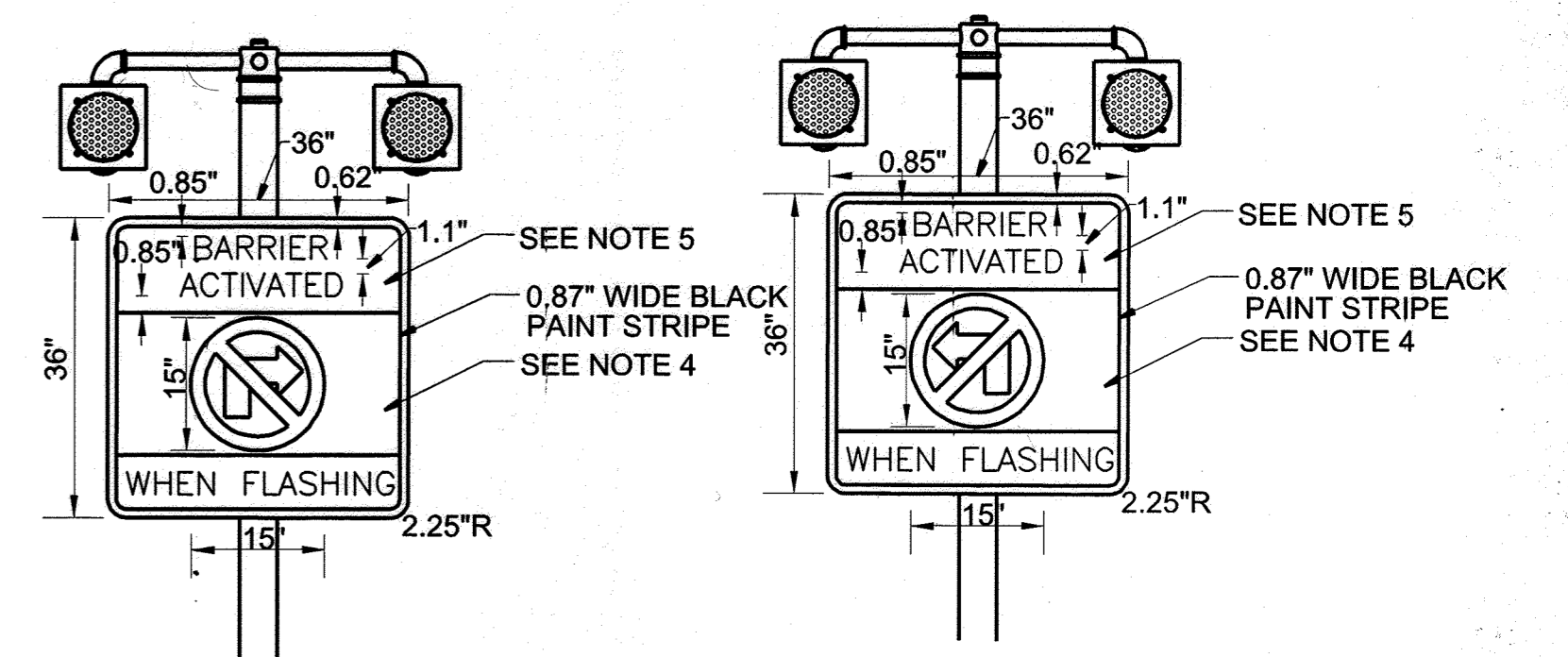
NOTES:  
 1. BACKFILL CONCRETE (MINIMUM 3000 PSI FOR I-BEAM POSTS) INTO THE EXCAVATION AND EXTEND 2 INCHES ABOVE GRADE. END, GATE, CORNER, AND CABLE TERMINATION BOLLARDS SHALL BE BACKFILLED WITH MINIMUM 6000 PSI CONCRETE POURED INTO THE INTERIOR AND AROUND THE EXTERIOR OF THE BOLLARD, USING APPROPRIATE VIBRATORY EQUIPMENT.

**3 STALWART M50 (K12) ANTI-RAM CABLED STEEL BARRIER**  
 SCALE: NONE

DETAIL IS BASE DESIGN. CONTRACTOR MAY USE EQUIVALENT PRODUCT THAT MEETS PROJECT REQUIREMENTS AND SPECIFICATIONS AND AS APPROVED BY THE COR.

**4 AMERISTAR 8' HIGH IMPASSE GAUNTLET HIGH SECURITY STEEL FENCE**  
 SCALE: NONE

DETAIL IS BASE DESIGN. CONTRACTOR MAY USE EQUIVALENT PRODUCT THAT MEETS PROJECT REQUIREMENTS AND SPECIFICATIONS AND AS APPROVED BY THE COR.



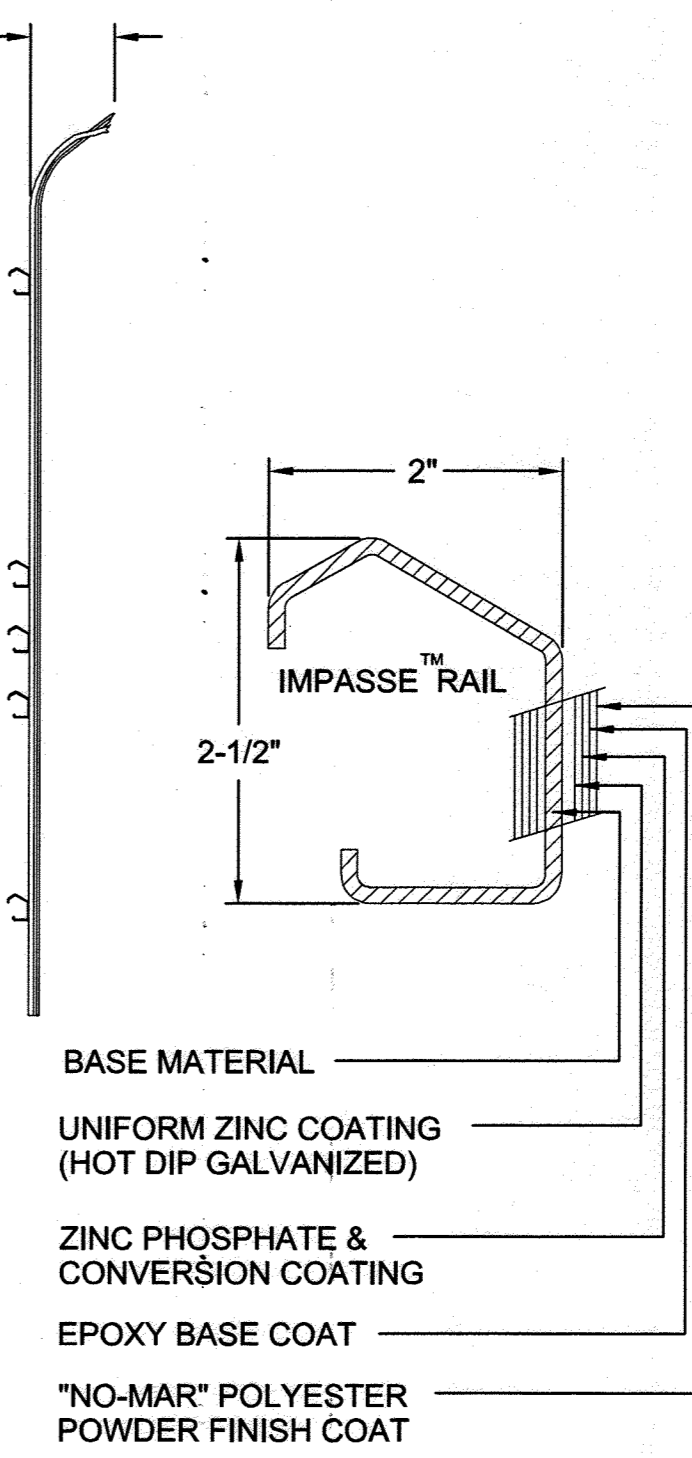
NOTES:  
 1. SIGN SHALL BE IN ACCORDANCE WITH MUTCD REQUIREMENTS.  
 2. MOUNTING HEIGHT - 84\"/>

**2 NO TURN WHEN BARRIER IS ACTIVATED SIGN**  
 SCALE: NONE



AS BUILT CERTIFICATION FOR PSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET  
 ROBERT CRANLEY  
 45292  
 2/3/17

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. 45292 EXPIRATION DATE: 05/21/2016



BASE MATERIAL  
 UNIFORM ZINC COATING (HOT DIP GALVANIZED)  
 ZINC PHOSPHATE & CONVERSION COATING  
 EPOXY BASE COAT  
 "NO-MAR" POLYESTER POWDER FINISH COAT

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-4-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
------	-----	----------------------

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

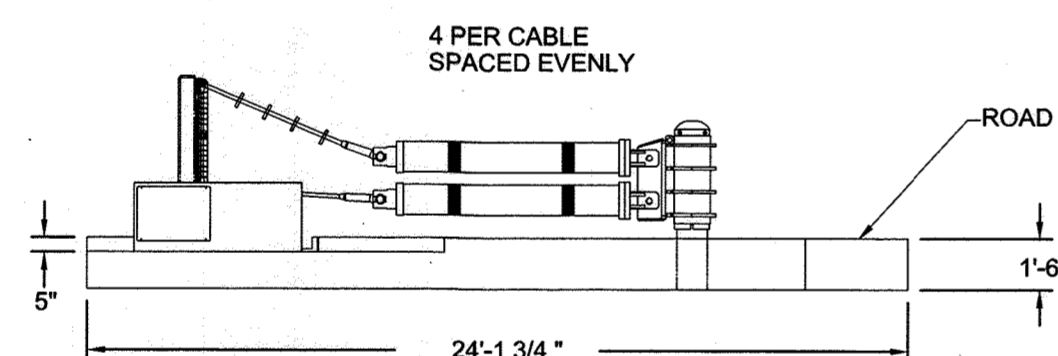
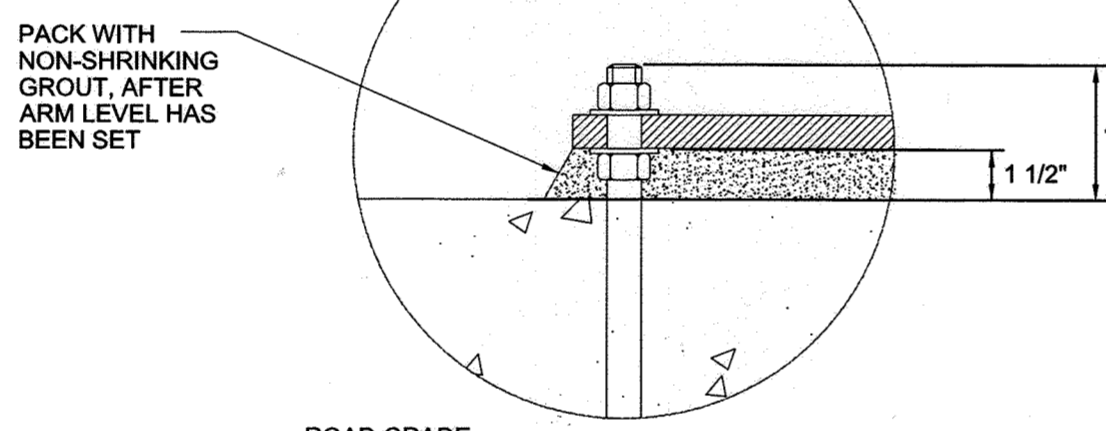
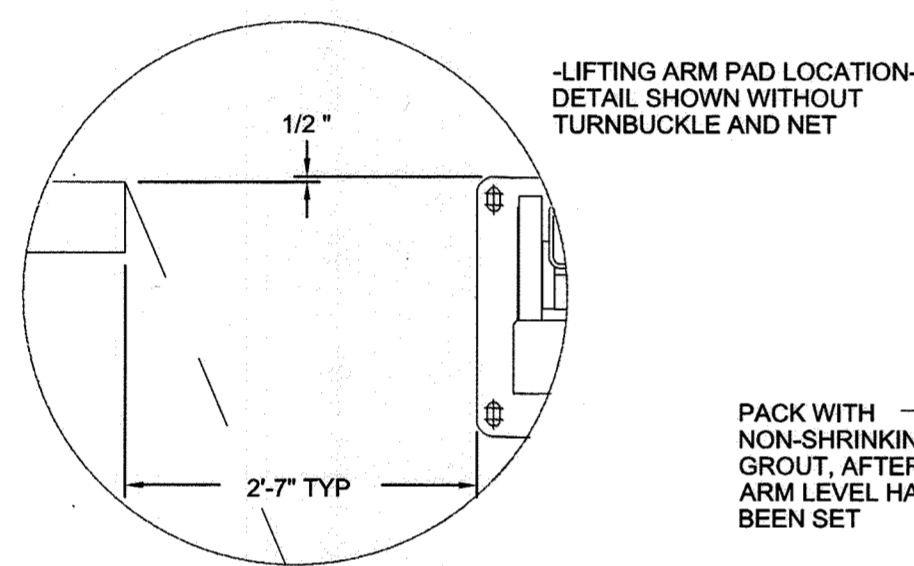
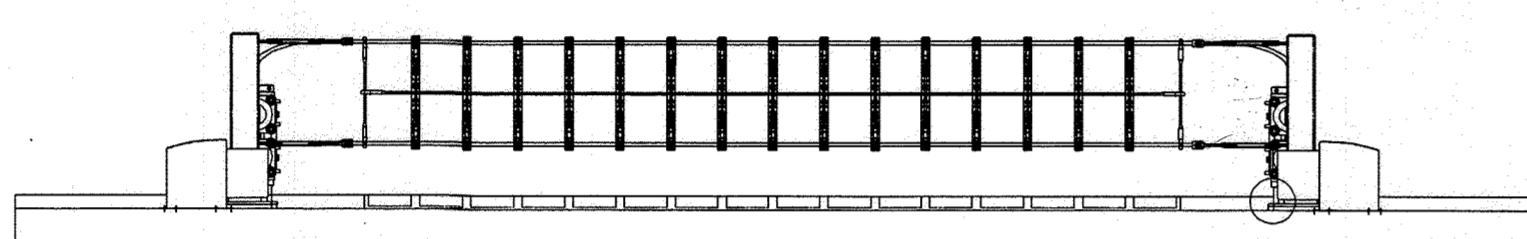
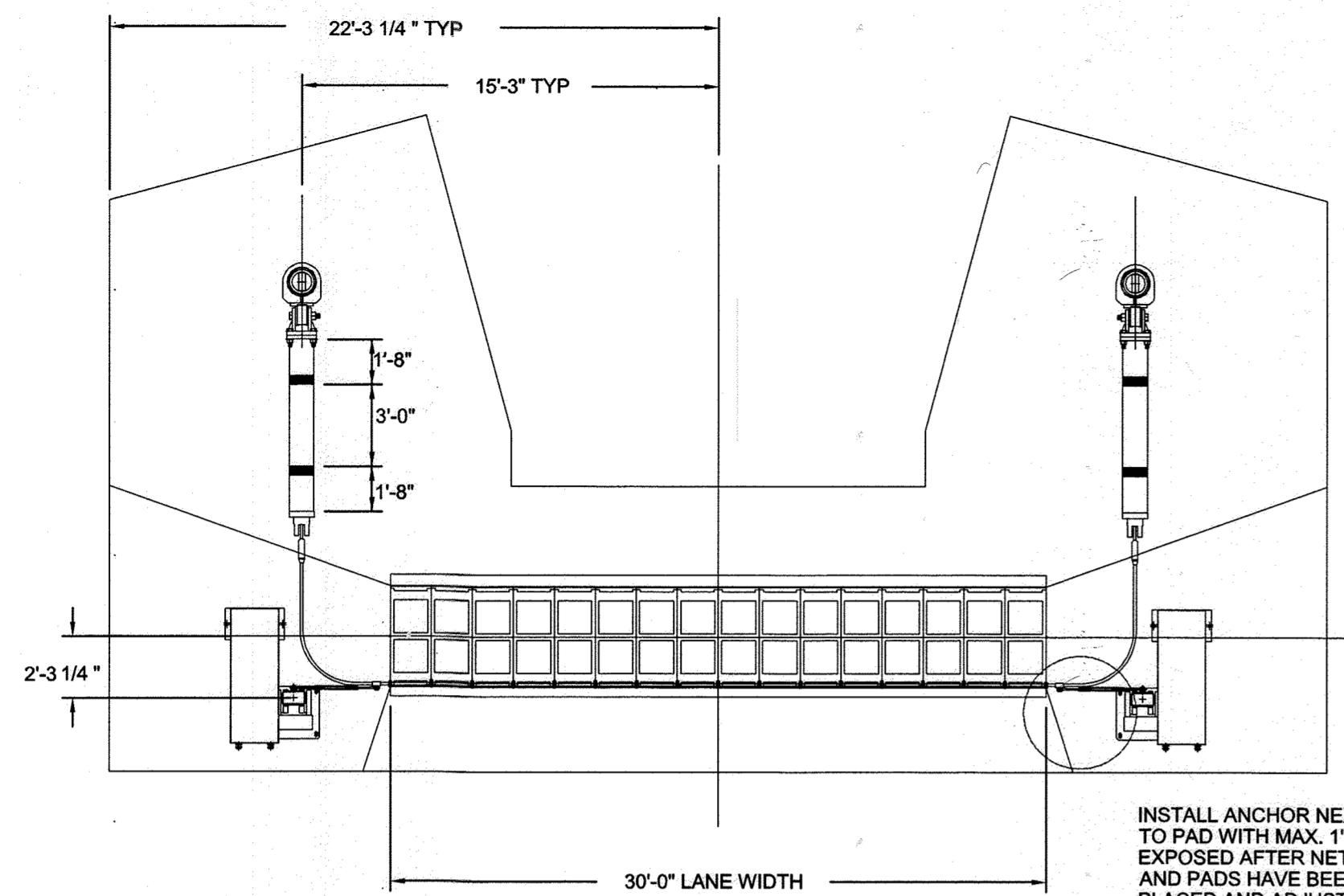
**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (871) 218-1000

SUBDIVISION NAME EMERSON / REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

TITLE

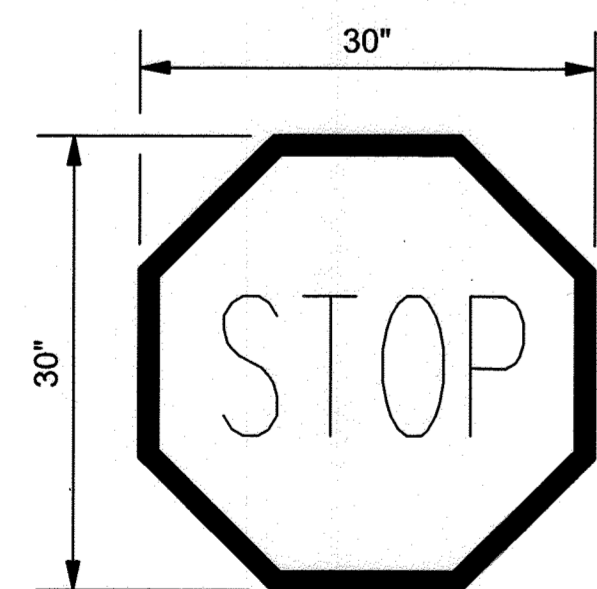
SITE DETAILS

DES. BY M. WERDER	SCALE NTS	PROJ. No. 51 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK BY R. CROWLEY	APPROVED	



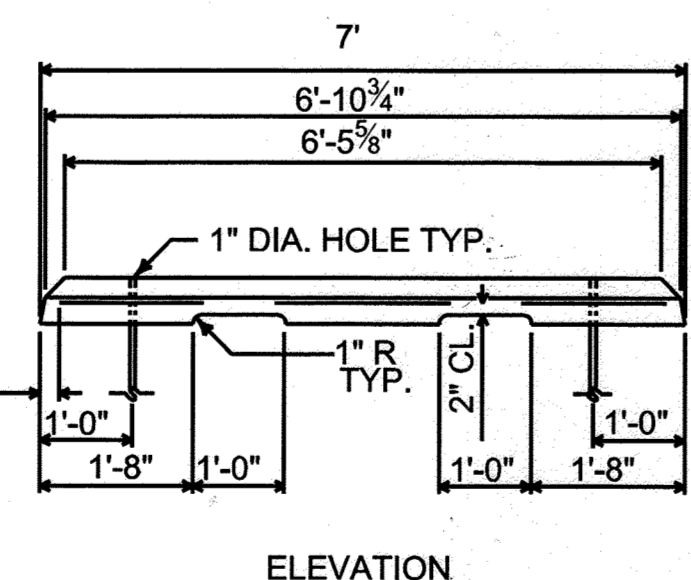
**1 GROUND RETRACTABLE AUTOMOBILE BARRIER (GRAB-300)**  
SCALE: NONE

DETAIL IS BASE DESIGN. CONTRACTOR MAY USE EQUIVALENT PRODUCT THAT MEETS PROJECT REQUIREMENTS AND SPECIFICATIONS AND AS APPROVED BY THE COR.

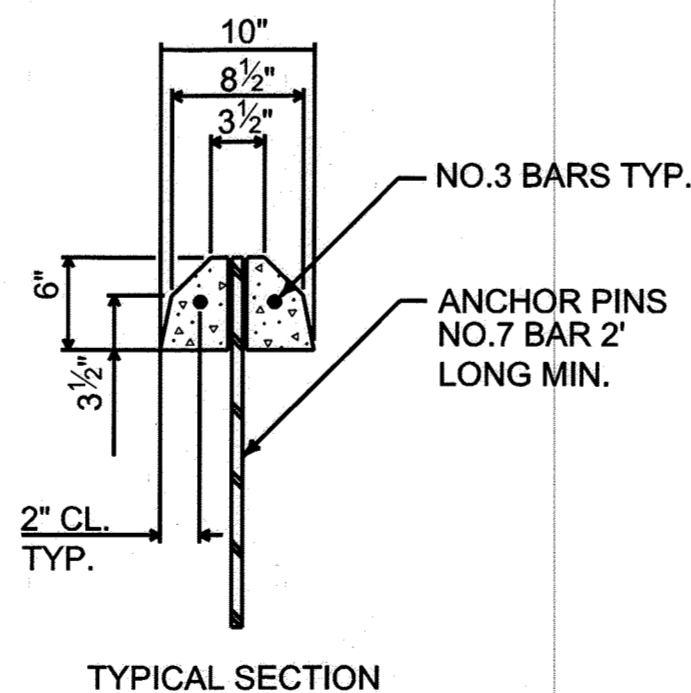


NOTES:  
1. MUTCD STANDARD SIGN DESIGNATION: R1-1  
2. MOUNTING HEIGHT - 84" FROM BOTTOM OF SIGN TO PAVEMENT.  
3. ALL SIGNS SHALL BE MOUNTED ON BREAKAWAY TUBULAR STEEL SIGN SUPPORTS, AND DRIVEN A MINIMUM OF 4' INTO THE GROUND.

**4 STOP SIGN**  
SCALE: NONE

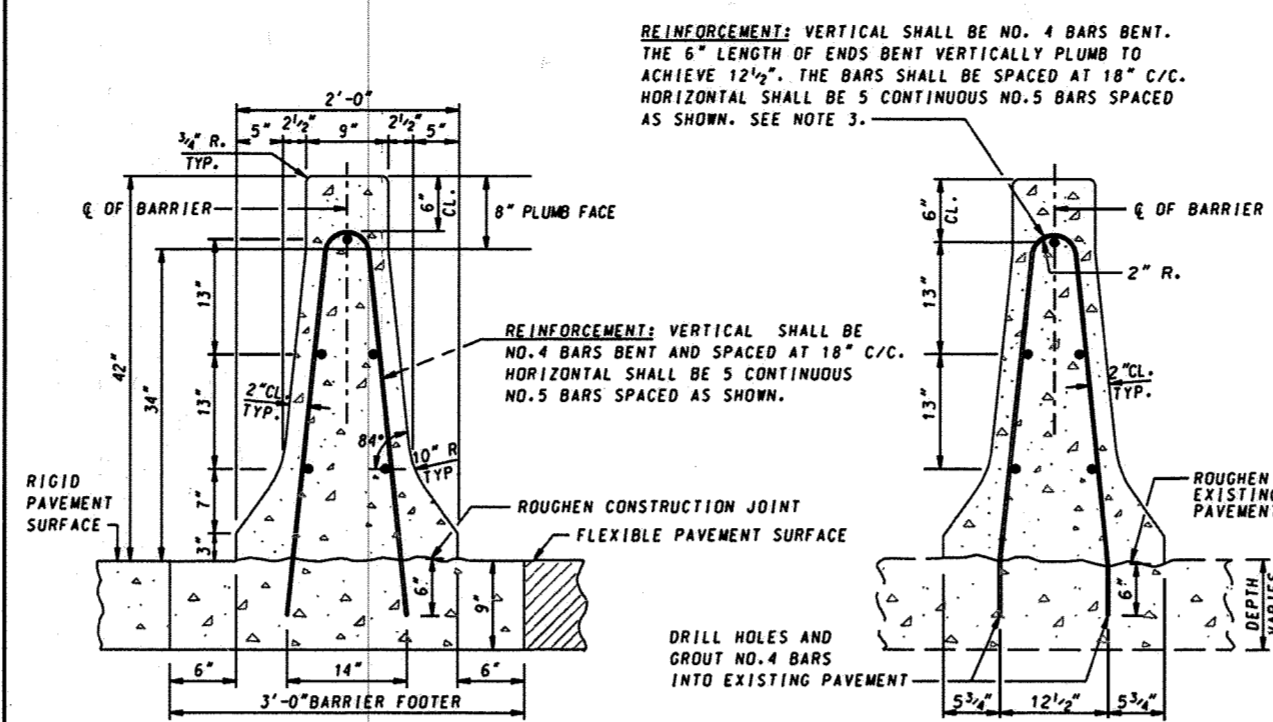


**5 CONCRETE WHEEL STOP**  
SCALE: NONE



NOTES:  
1. SIGN SHALL BE IN ACCORDANCE WITH MUTCD "MODIFIED W3-3A" REQUIREMENTS  
2. MOUNTING HEIGHT - 84" FROM BOTTOM OF SIGN TO PAVEMENT.  
3. INSTALL MUTCD STANDARD 24"x18" BLK/FY W16-13 "WHEN FLASHING" SIGN BELOW BARRIER ACTIVATED SIGN.  
4. 8" FLASHING YELLOW BEACONS ON SUPPORTS IN ACCORDANCE W/ UFGS SPECIFICATION 34 41 26.00 10 ACCESS CONTROL POINT CONTROL SYSTEM SECTION 2.12 "WARNING BEACONS" AND SECTION 2.13 "TRAFFIC SIGNAL SUPPORTS".

**6 BARRIER ACTIVATED SIGN**  
SCALE: NONE



**RIGID PAVING** (HALF SECTION)  
**FLEXIBLE PAVING** (HALF SECTION, SEE NOTE 1)  
**CONSTRUCTION ON EXISTING RIGID PAVEMENT** (BARRIER FOOTER IS REQUIRED FOR EXISTING FLEXIBLE PAVEMENT)

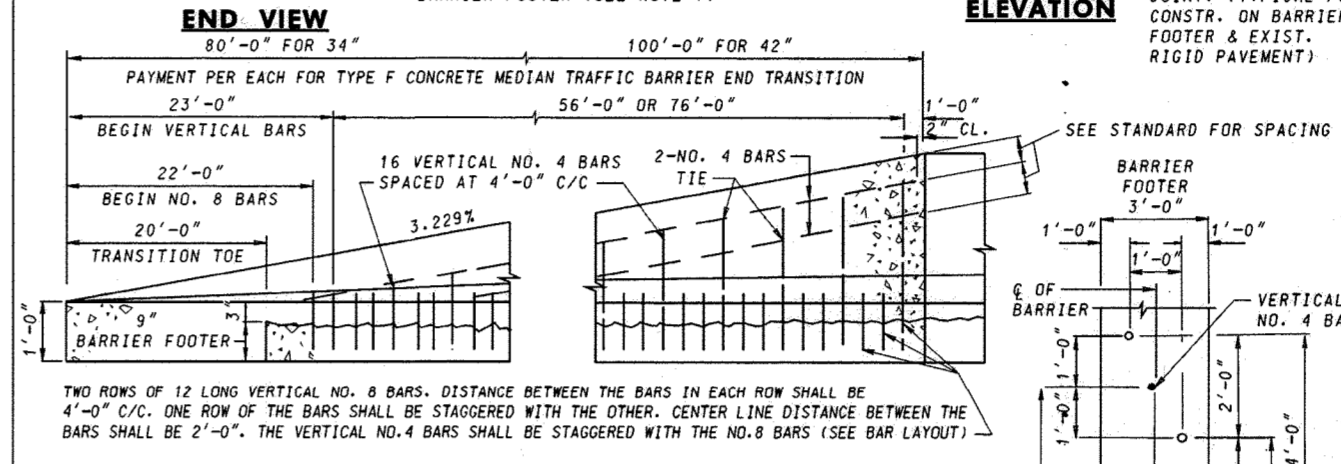
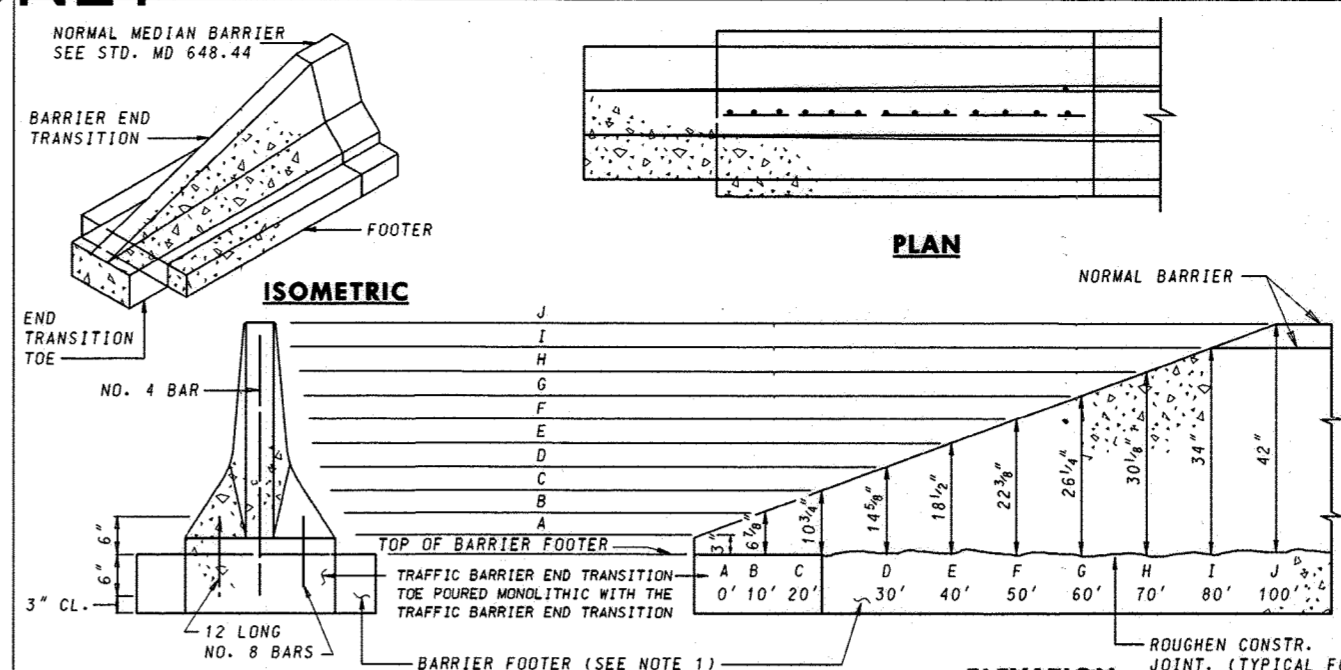
**NOTES**

1. THE BARRIER AND FOOTER SHALL BE CAST SEPARATELY USING THE FIXED FORM OR THE SLIP FORM CONSTRUCTION METHOD USING CONCRETE MIX NO.6 (4500 PSI).
2. THE CONTRACTOR HAS THE OPTION TO CONSTRUCT THE BARRIER FOOTER AND BARRIER AFTER CONSTRUCTION OF THE PAVEMENT. THE FOOTER FORMS, IF USED, SHALL BE REMOVED IF THE BARRIER AND FOOTER ARE CONSTRUCTED BEFORE THE PAVEMENT.
3. WHEN THE BARRIER IS CONSTRUCTED USING THE SLIP FORM METHOD DIAGONAL NO. 4 REINFORCEMENT BARS ARE REQUIRED. SEE STD. NO. 648.44-04.
4. ALL REINFORCEMENT BARS, INCLUDING ENDS, SHALL BE EPOXY COATED. ALL BAR LAPS TO BE 30 BAR DIAMETERS. TIE BARS TOGETHER. ALL REINFORCEMENT BARS SHALL BE ASTM A 615, GRADE 60.
5. SPACING OF CONSTRUCTION JOINTS SHALL BE 20 FEET REGARDLESS OF CONSTRUCTION METHOD.
6. COST OF THE CONCRETE FOOTER, ALL REINFORCEMENT, AND EXCAVATION SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE PER LINEAR FOOT FOR 42 INCH F SHAPE CONCRETE MEDIAN TRAFFIC BARRIER.
7. WHEN THE BARRIER IS CONSTRUCTED ON EXISTING RIGID PAVEMENT THE COST OF ALL REINFORCEMENT, DRILLED HOLES, GROUT, LABOR, TOOLS, EQUIPMENT, ETC., SHALL BE INCIDENTAL TO THE PRICE PER LINEAR FOOT FOR THE ITEM SPECIFIED IN NOTE 6.
8. TOLERANCES IN DIMENSIONS SHOWN SHALL BE WITHIN 1/4".
9. WHEN THE BARRIER IS TO BE CONSTRUCTED ON EXISTING FLEXIBLE PAVEMENT THE PAVEMENT SHALL BE SAW CUT FULL DEPTH. THE WIDTH FOR THE CONCRETE FOOTER SHALL BE AS INDICATED. THE COST FOR ALL SAW CUTS, PAVEMENT REMOVAL, AND ALL INCIDENTALS AND LABOR SHALL BE INCIDENTAL TO THE PRICE PER LINEAR FOOT FOR THE ITEM SPECIFIED IN NOTE 6.

SPECIFICATION	604	CATEGORY CODE ITEMS	
APPROVED	<i>K.G. Miller</i>	DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT	
APPROVAL	3-1-01	APPROVAL	3-28-01
REVISION	2-18-04	REVISION	3-21-04
REVISION		REVISION	

**Maryland Department of Transportation**  
**STATE HIGHWAY ADMINISTRATION**  
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES  
**42 INCH F SHAPE CONCRETE**  
**MEDIAN TRAFFIC BARRIER**  
STANDARD NO. MD 648.44

**2 CONCRETE MEDIAN**  
SCALE: NONE



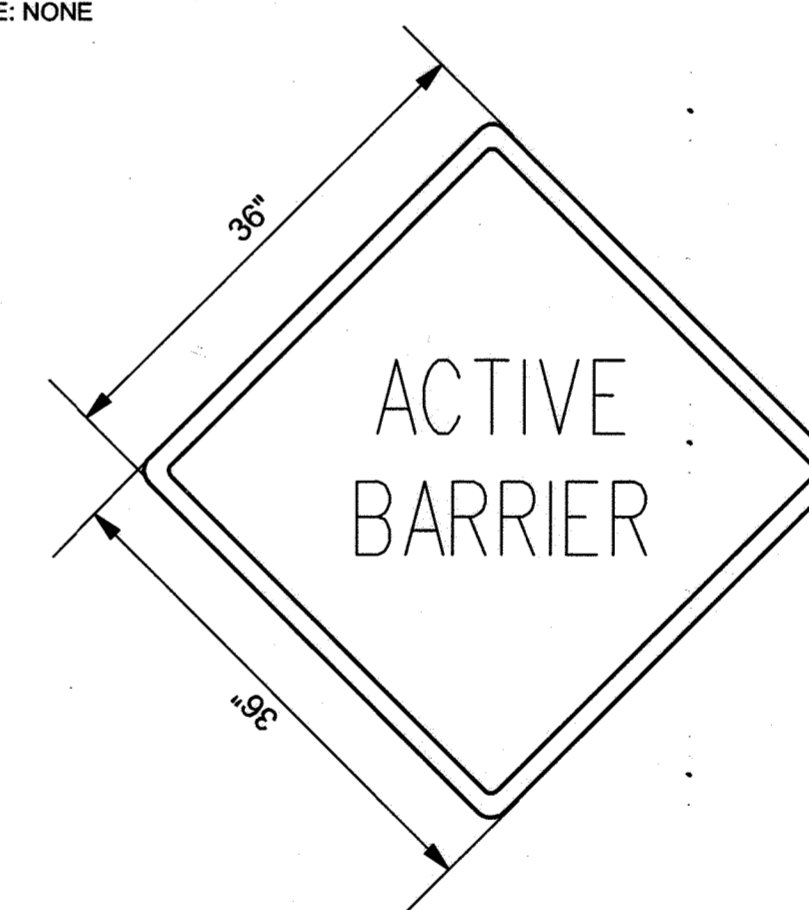
**REINFORCEMENT STEEL DETAILS**

1. THE TRAFFIC BARRIER END TRANSITION SHALL BE CONSTRUCTED USING THE FIXED FORM METHOD. NO FOOTER IS REQUIRED WHEN THE BARRIER IS CONSTRUCTED ON EXISTING RIGID PAVEMENT. BARRIER AND FOOTER SHALL BE CAST SEPARATELY. MONOLITHIC PLACEMENT NOT PERMITTED. SEE STD. NO. 648.44 FOR BARRIER FOOTER DETAILS.
2. THE TRAFFIC BARRIER END TRANSITION AND BARRIER FOOTER SHALL BE CONSTRUCTED USING CONCRETE MIX NO.6 (4500 PSI).
3. ALL REINFORCEMENT BARS, INCLUDING ENDS AND TIES, SHALL BE EPOXY COATED. ALL BAR LAPS TO BE 30 BAR DIAMETERS. TIE BARS TOGETHER.
4. THIS TRAFFIC BARRIER END TRANSITION IS PROHIBITED WHEN THE DESIGN SPEED IS 45 MPH OR GREATER. THE ENGINEER MUST DETERMINE THE TYPE OF END TREATMENT FOR DESIGN SPEEDS OVER 45 MPH.
5. COST OF THE CONCRETE BARRIER (IF REQUIRED) SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE PER EACH FOR THE 34 INCH OR 42 INCH F SHAPE CONCRETE MEDIAN TRAFFIC BARRIER END TRANSITION.
6. WHEN THE BARRIER END TRANSITION IS CONSTRUCTED ON EXISTING RIGID PAVEMENT THE COST OF ROUGHENING THE PAVEMENT SURFACE, EXCAVATION FOR TRANSITION TIE- REINFORCEMENT, DRILLED HOLES, GROUT, LABOR, TOOLS, EQUIPMENT, ETC., SHALL BE INCIDENTAL TO THE CONTRACT UNIT PRICE PER EACH FOR THE ITEM SPECIFIED IN NOTE 5.
7. TOLERANCES IN DIMENSIONS SHOWN SHALL BE WITHIN 1/4".

SPECIFICATION	604	CATEGORY CODE ITEMS	
APPROVED	<i>K.G. Miller</i>	DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT	
APPROVAL	3-1-01	APPROVAL	3-28-01
REVISION	11-08-04	REVISION	10-23-04
REVISION		REVISION	

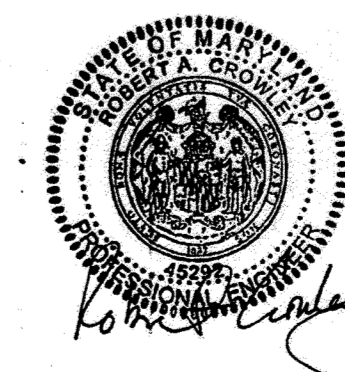
**Maryland Department of Transportation**  
**STATE HIGHWAY ADMINISTRATION**  
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES  
**42 INCH F SHAPE CONCRETE MEDIAN**  
**TRAFFIC BARRIER END TRANSITION**  
STANDARD NO. MD 648.33-04

**3 CONCRETE MEDIAN END TRANSITION**  
SCALE: NONE



NOTES:  
1. SIGN SHALL BE IN ACCORDANCE WITH MUTCD "MODIFIED W3-3A" REQUIREMENTS  
2. MOUNTING HEIGHT - 84" FROM BOTTOM OF SIGN TO PAVEMENT.  
3. ALL SIGNS SHALL BE MOUNTED TO U CHANNEL POSTS 2.0 WT/FT MIN., AND DRIVEN A MINIMUM OF 4' INTO THE GROUND.  
4. INSTALL MUTCD STANDARD 24"x12" BLK/FY W16-9p "AHEAD" SIGN BELOW ACTIVE BARRIER SIGN.

**7 ACTIVE BARRIER SIGN**  
SCALE: NONE



AS BUILT CERTIFICATION FOR PSMM: *Robert Crowley*  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17  
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. 45292 EXPIRATION DATE: 05/21/2016

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-4-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE

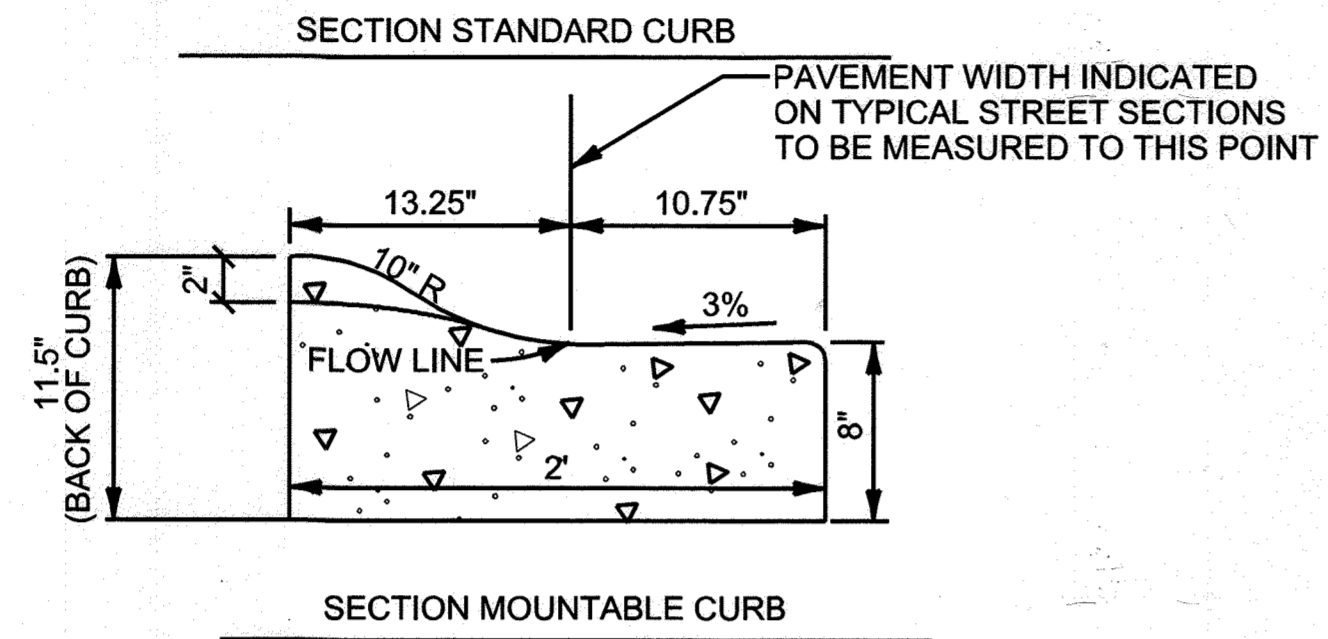
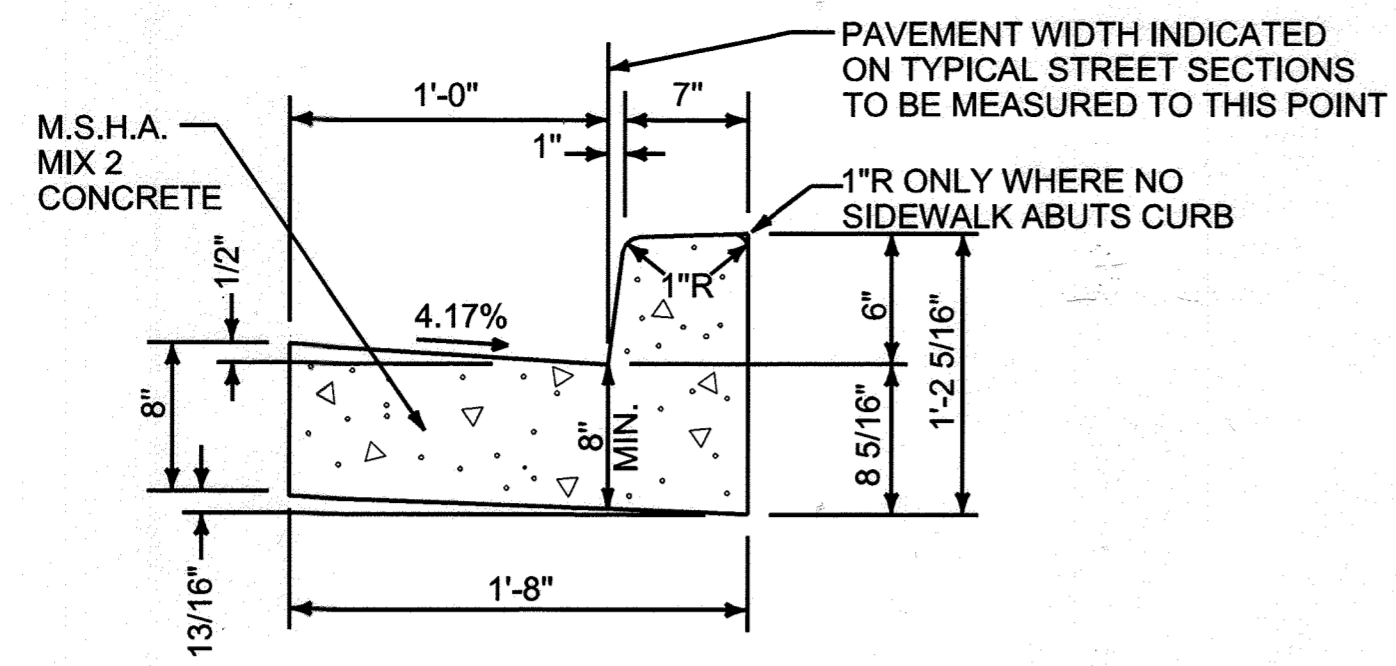
DATE	No.	REVISION DESCRIPTION
------	-----	----------------------

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON VA, 22201  
(571) 218-1000

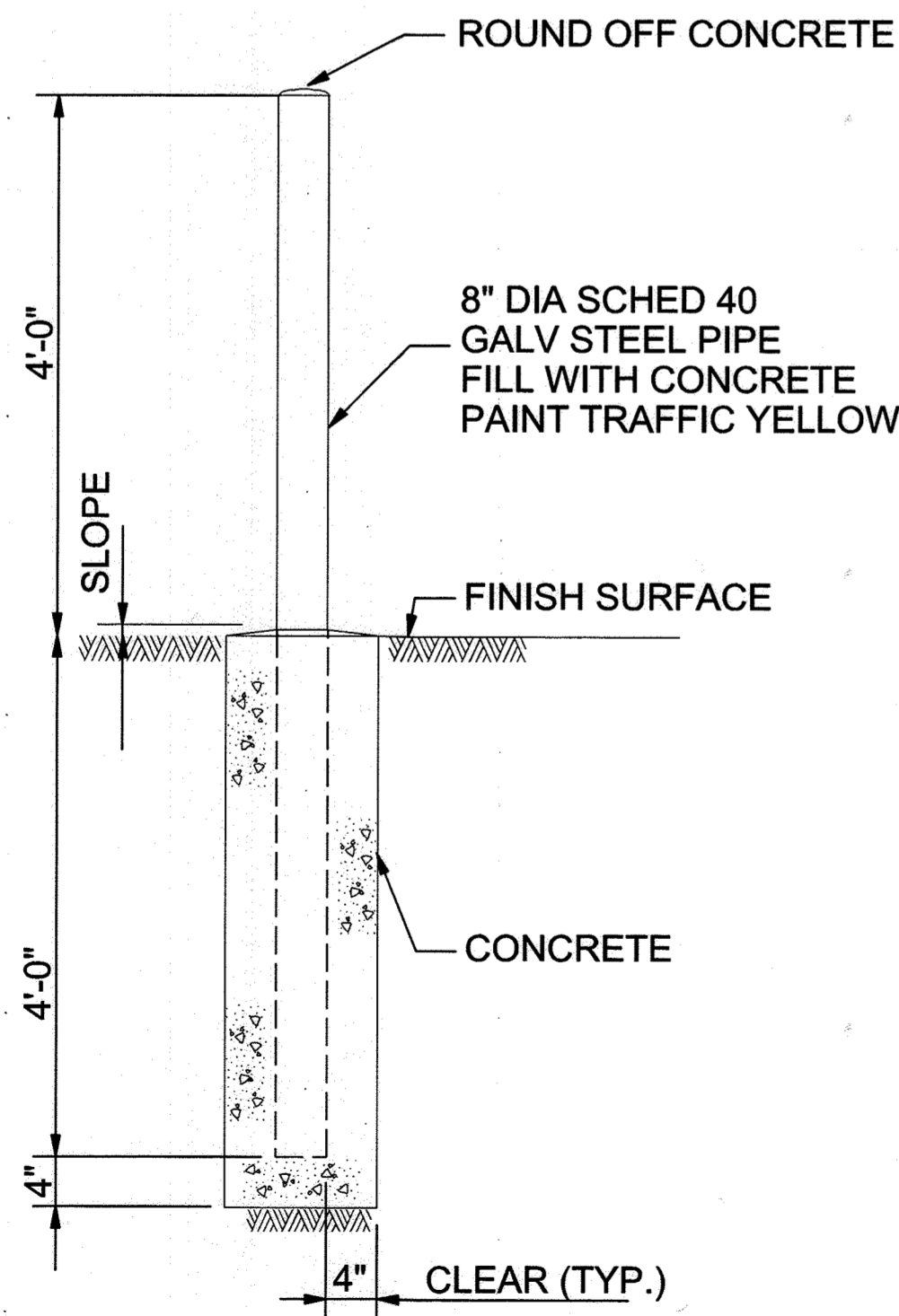
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON/REVTZ PROPERTY	47	LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 2513-2514	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	

TITLE		
SITE DETAILS		
DES. BY	SCALE	PROJ. No.
M. WERDER	NTS	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	52 OF 80
R. CROWLEY		

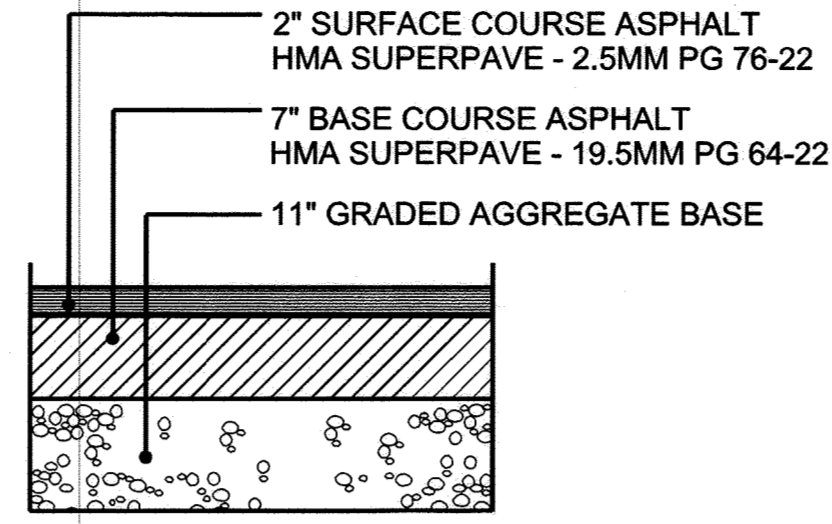


- NOTE:
1. A REVERSE GUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION.
  2. GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPER ELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPER ELEVATED SECTION AND THE RATE OF SUPER ELEVATION IS GREATER THAN 3% FOR MOUNTABLE CURB AND GUTTER.
  3. A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.
  4. POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

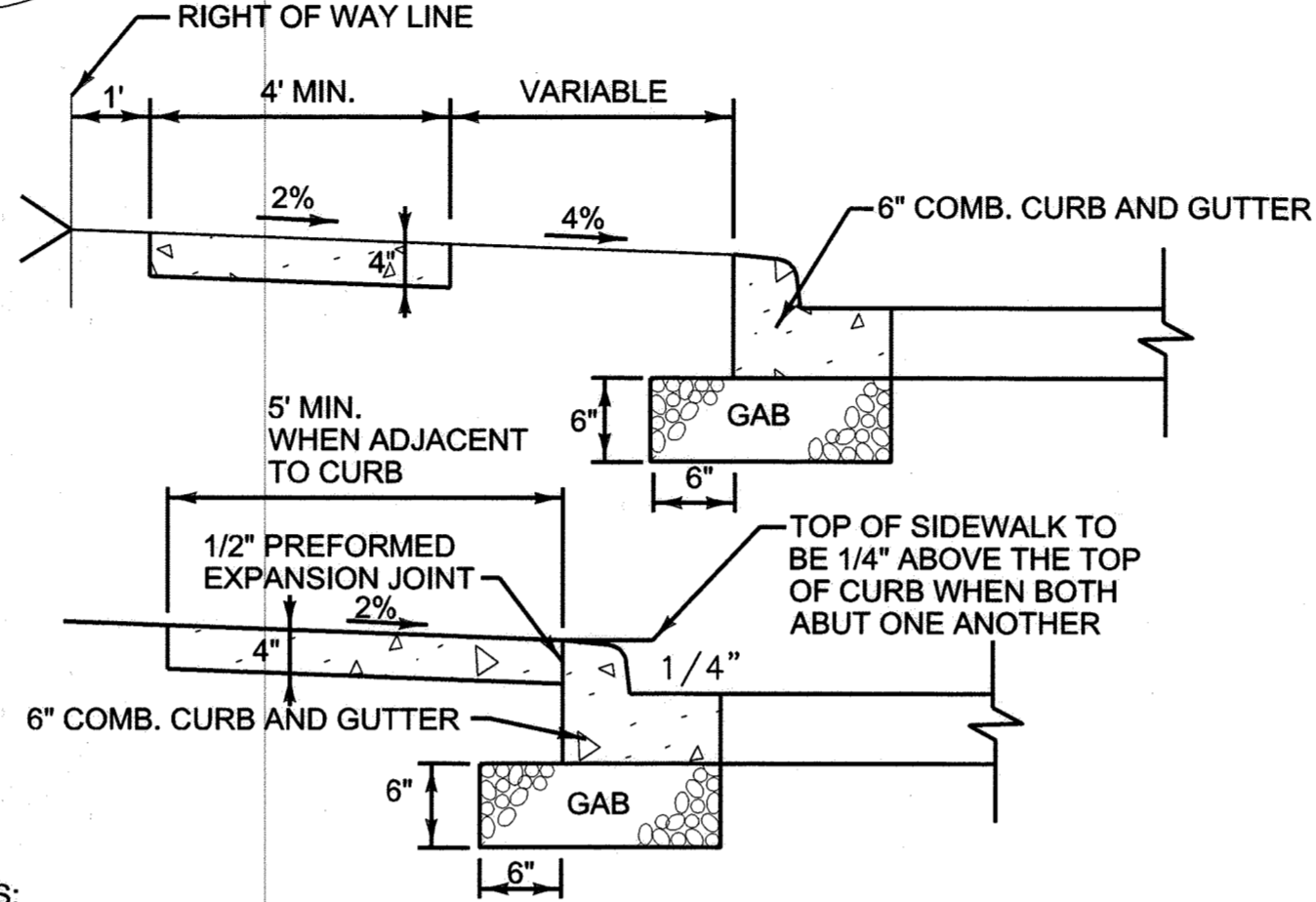
**1 CONCRETE CURB AND GUTTER**  
SCALE: NONE



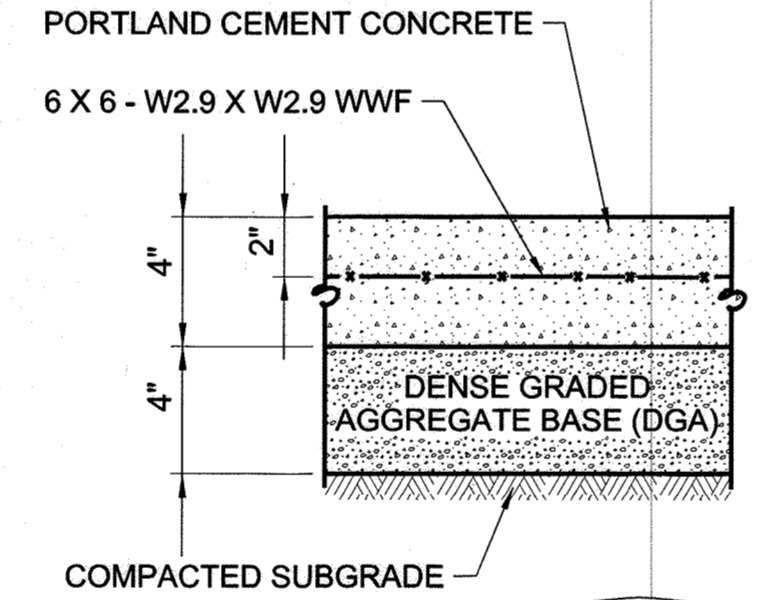
**6 NON-RATED BOLLARD**  
SCALE: NONE



**2 ASPHALT PAVEMENT SECTIONS**  
SCALE: NONE

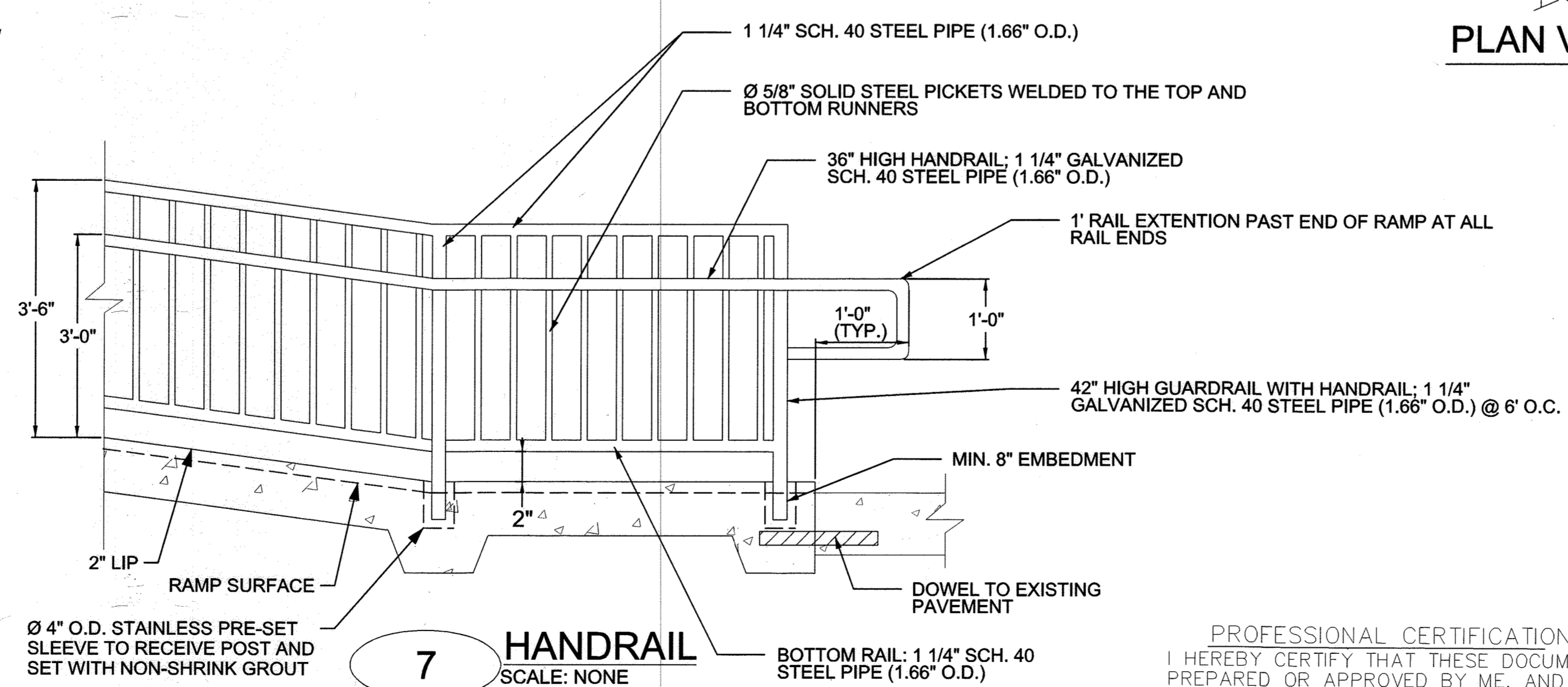


- NOTES:
1. SIDEWALK TO BE SCRIBED IN 5'-0" MAXIMUM SQUARES.
  2. EXPANSION JOINTS ACROSS SIDEWALK NOT TO BE MORE THAN 15' APART.
  3. 1/2" PREFORMED EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.
  4. CONCRETE TO BE MIX NO.3.
  5. WHEN SIDEWALK ABUTS CURB, SIDEWALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PREFORMED EXPANSION JOINT BETWEEN SIDEWALK AND CURB.
  6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 4" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT THE EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.
  7. 4" SIDEWALK REQUIRES A PASSING AREA (SEE HO.CO.STD. DETAIL R-4.01)
  8. SEE SITE PLAN FOR PROPOSED SIDEWALK WIDTHS.

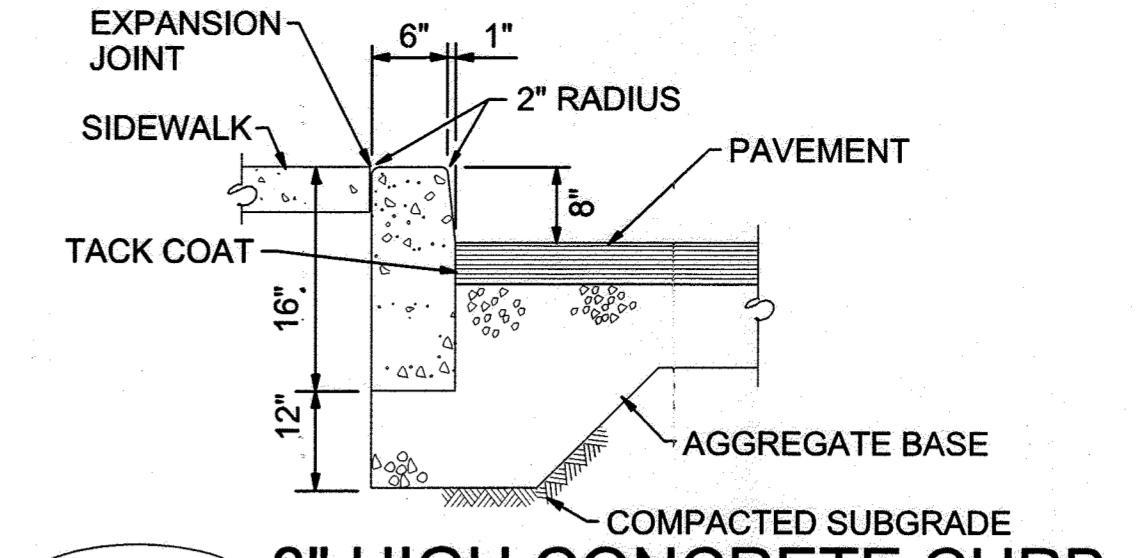


- NOTES:
1. 6' WIDE SIDEWALK - TRANSVERSE FALSE JOINTS AT 5' INTERVALS, NO LONGITUDINAL JOINTS
  2. 15' WIDE SIDEWALK/PLAZA AREAS - TRANSVERSE FALSE JOINTS AT 5' INTERVALS, LONGITUDINAL FALSE JOINTS AT 5' INTERVALS
  3. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, OR AT PENETRATING STRUCTURES.

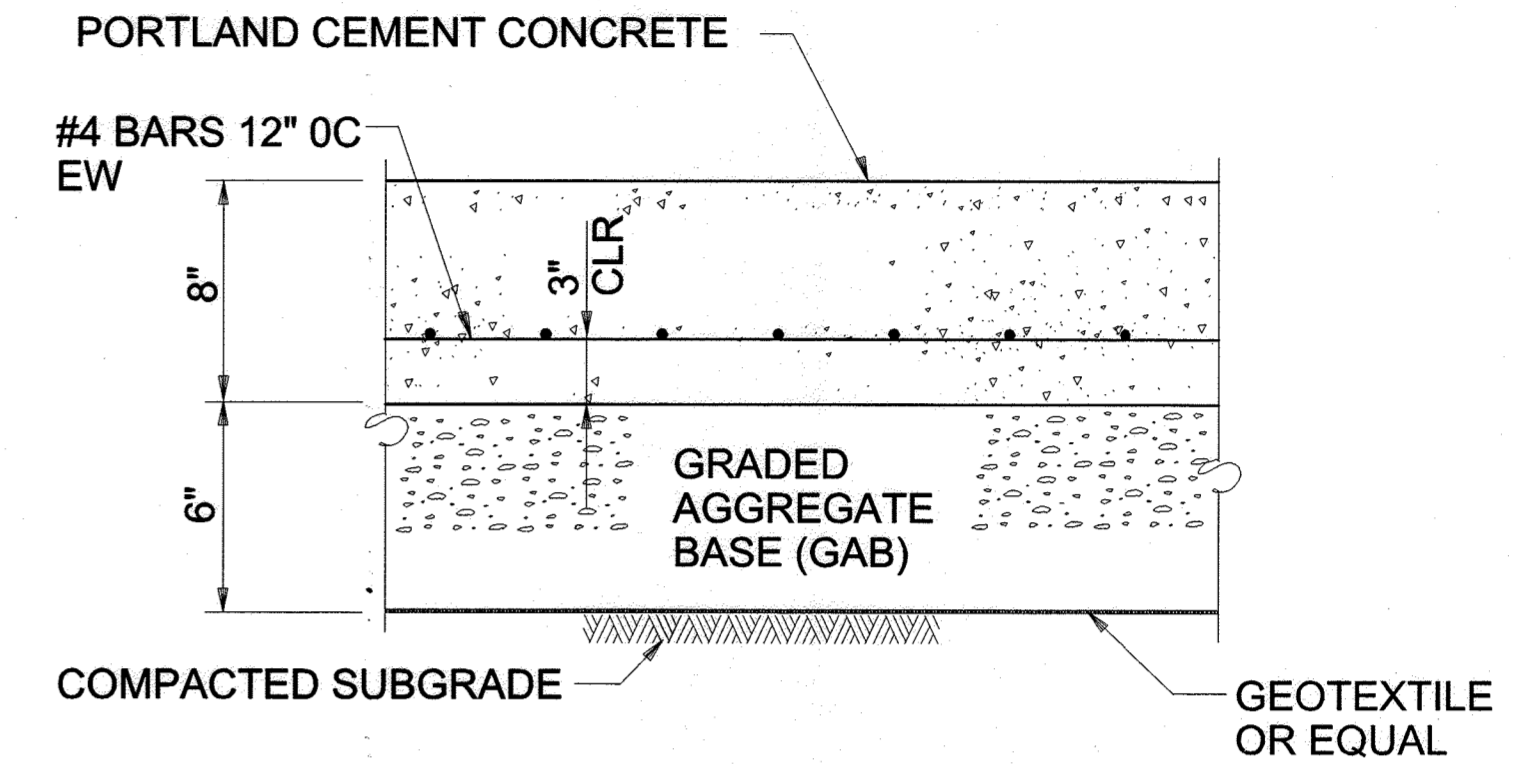
**3 CONCRETE SIDEWALK SECTION**  
SCALE: NONE



**7 HANDRAIL**  
SCALE: NONE

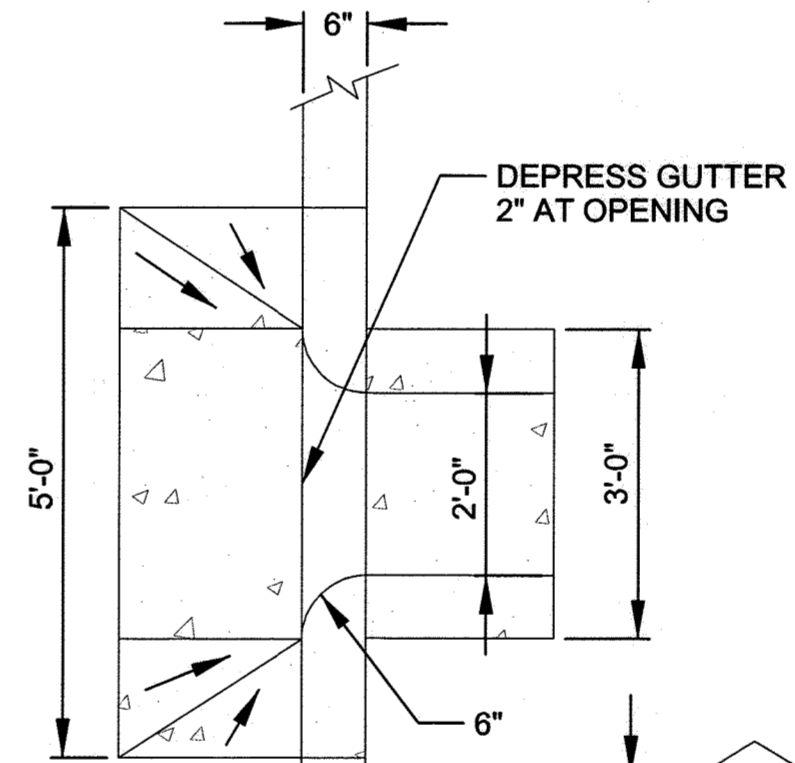


**4 8" HIGH CONCRETE CURB**  
SCALE: NONE

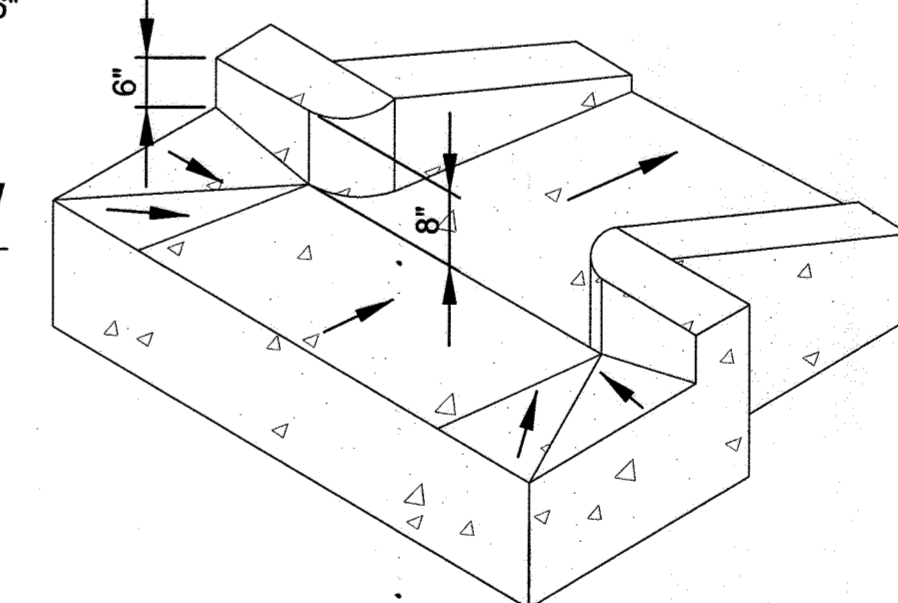


- NOTES:
1. SERVICE YARD/MOTORCYCLE PARKING AREAS - TRANSVERSE FALSE JOINTS AT 15' INTERVALS, LONGITUDINAL FALSE JOINTS AT 15' INTERVALS
  2. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, OR AT PENETRATING STRUCTURES.

**5 CONCRETE PAVEMENT SECTION**  
SCALE: NONE

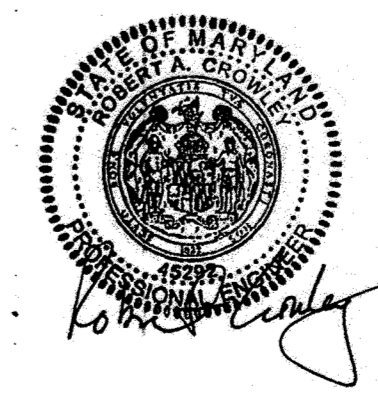


PLAN VIEW

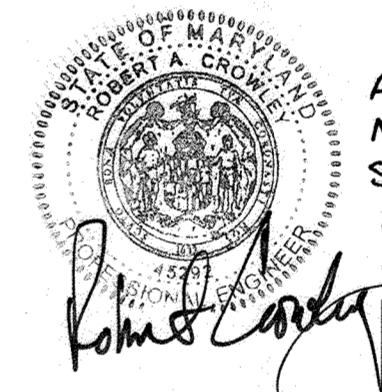


PERSPECTIVE VIEW

**8 CURB CUT**  
SCALE: NONE



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. 45292 EXPIRATION DATE: 05/21/2016



AS BUILT CERTIFICATION FOR RSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY 2/13/17  
45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
Chief, Development Engineering Division: 5-6-16  
Chief, Division of Land Development: 5-16-16  
Director: 5-16-16

DATE	No.	REVISION DESCRIPTION

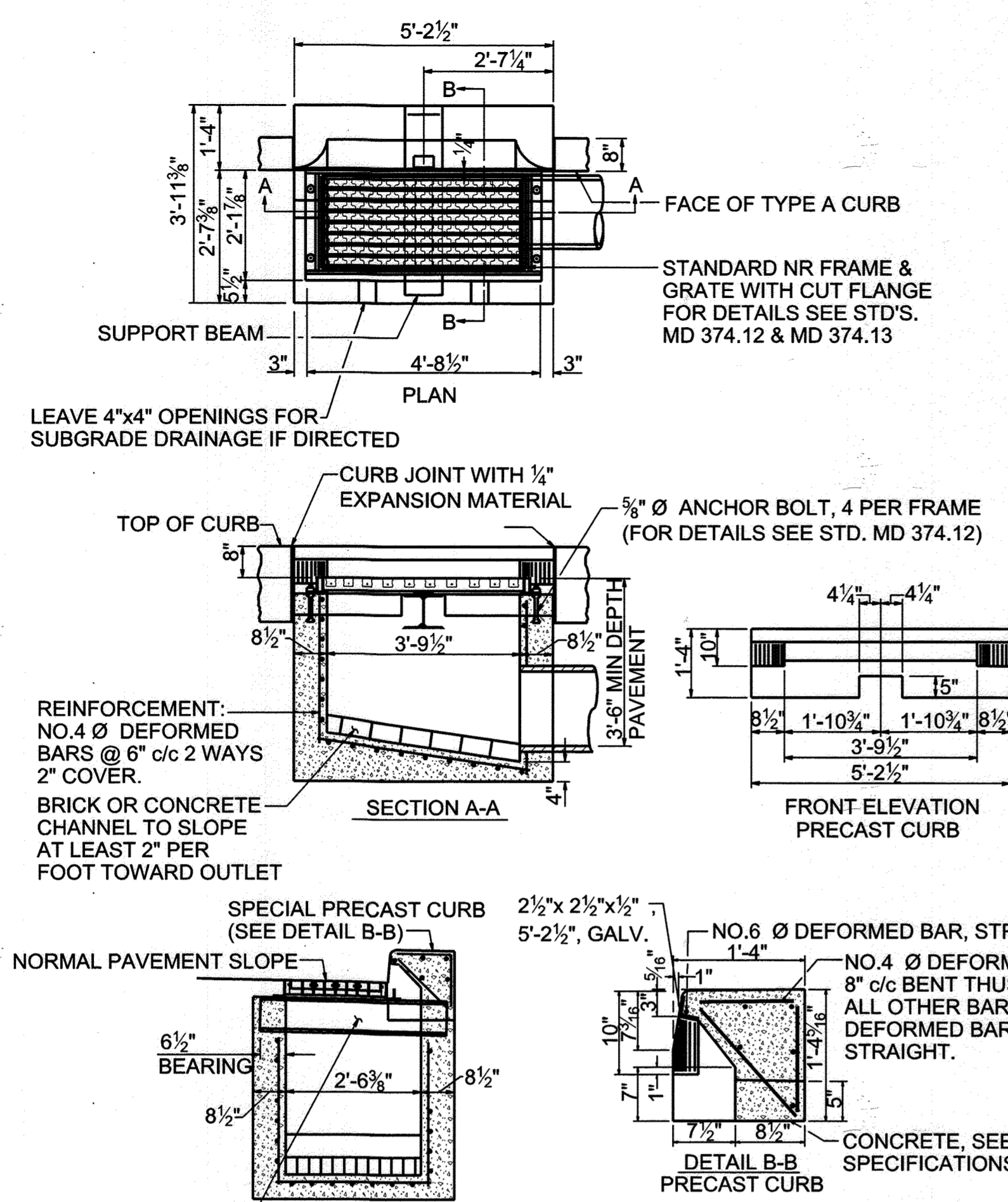
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME: EMERSON / REVITZ PROPERTY	TAX MAP: 47	LOT / PARCEL #
DEED: 11479 / 005	ELEC. DISTRICT: 6TH	LOT / PARCEL #
WATER CODE	SEWER CODE	LOT / PARCEL #

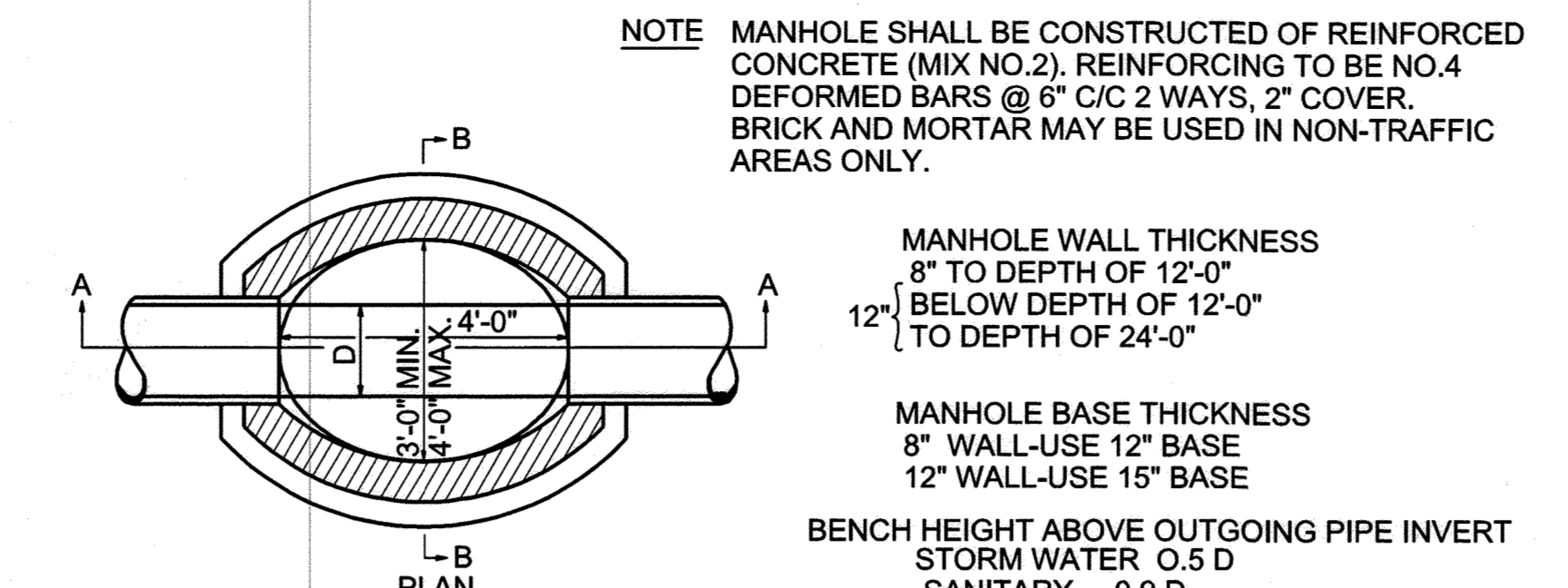
SITE DETAILS

DES. BY: M. WERDER	SCALE: NTS	PROJ. No.:
DRN. BY: M. WERDER	DATE: 04/04/2016	53 OF 80
CHK BY: R. CROWLEY	APPROVED:	

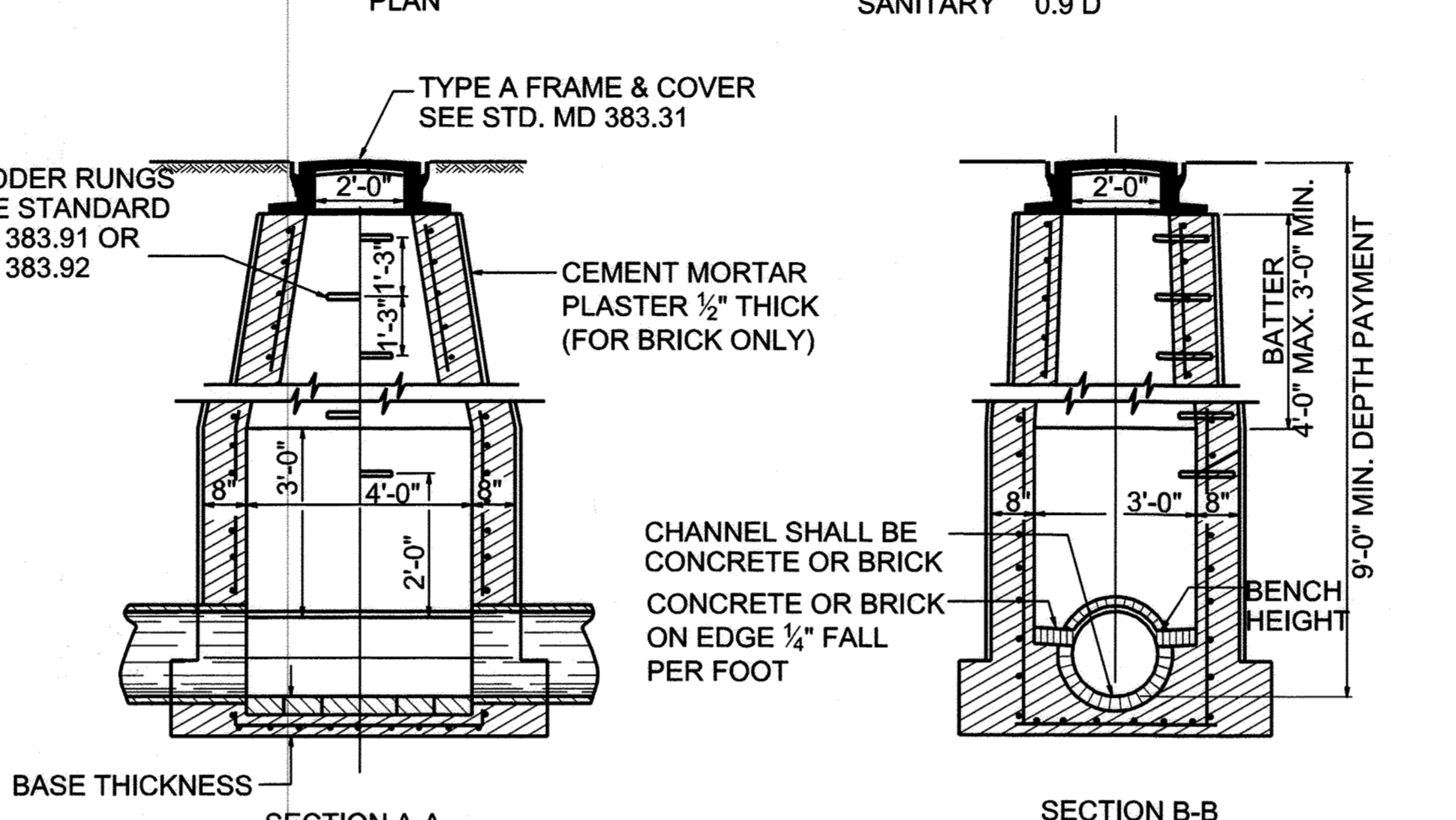


**1 STANDARD CURB INLET**  
SCALE: NONE

NOTES:  
 1. CONCRETE TO BE MIX NO. 6 (4500 PSI) IN ACCORDANCE WITH SECTION 902.10.03 OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.  
 2. REINFORCING-2 LAYERS OF 4x4-W4.0xW4.0 WELDED WIRE FABRIC.  
 3. THREADED PLASTIC INSERTS TO BE PROVIDED FOR HANDLING.  
 4. GRADE AND SLOPE ADJUSTMENTS COMPLETED IN THE FIELD USING CONCRETE MIX NO. 6.  
 5. PIPE OPENINGS TO BE PROVIDED AS REQUIRED, FOR SIZE, LOCATION, AND INVERT ELEVATIONS REFER TO CONSTRUCTION PLANS.  
 6. PLACEMENT OF SUBGRADE DRAINAGE WILL BE AS DIRECTED BY THE ENGINEER OR AS NOTED ON THE CONSTRUCTION PLANS.  
 7. LADDER RUNGS SHALL BE IN ACCORDANCE WITH STANDARD MD 383.91 AND MD 383.92 OR AS DIRECTED BY THE ENGINEER.  
 8. MINIMUM DEPTH PAYMENT PER "EACH" INLET INCLUDES DEPTHS UP TO 3'-6". VERTICAL DEPTH PAYMENT PER LINEAR FOOT FOR DEPTHS IN EXCESS OF 3'-6".



**2 STANDARD MANHOLE**  
SCALE: NONE

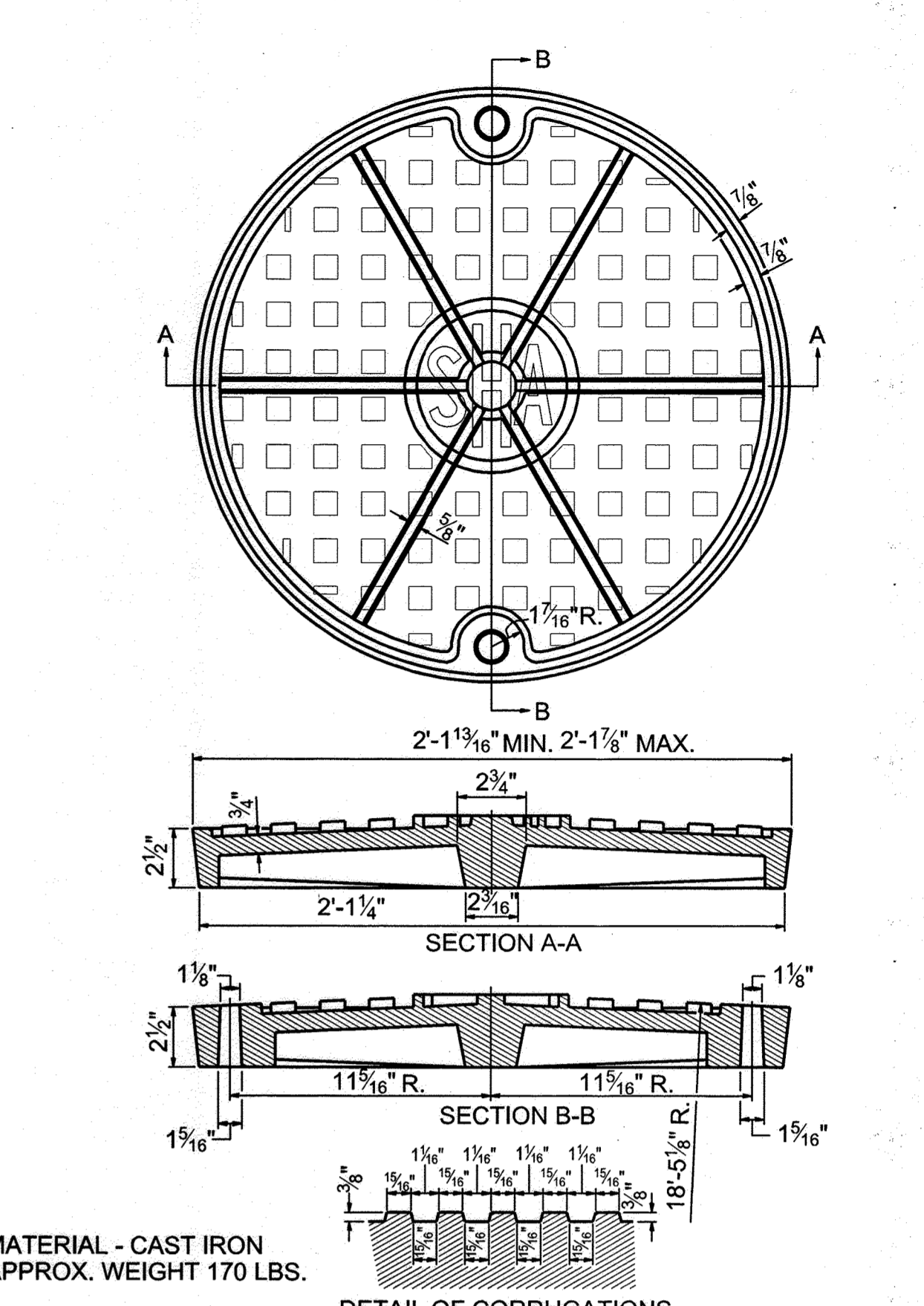


NOTE: MANHOLE SHALL BE CONSTRUCTED OF REINFORCED CONCRETE (MIX NO.2), REINFORCING TO BE NO.4 DEFORMED BARS @ 6\"/>

MANHOLE WALL THICKNESS  
 8\"/>

MANHOLE BASE THICKNESS  
 8\"/>

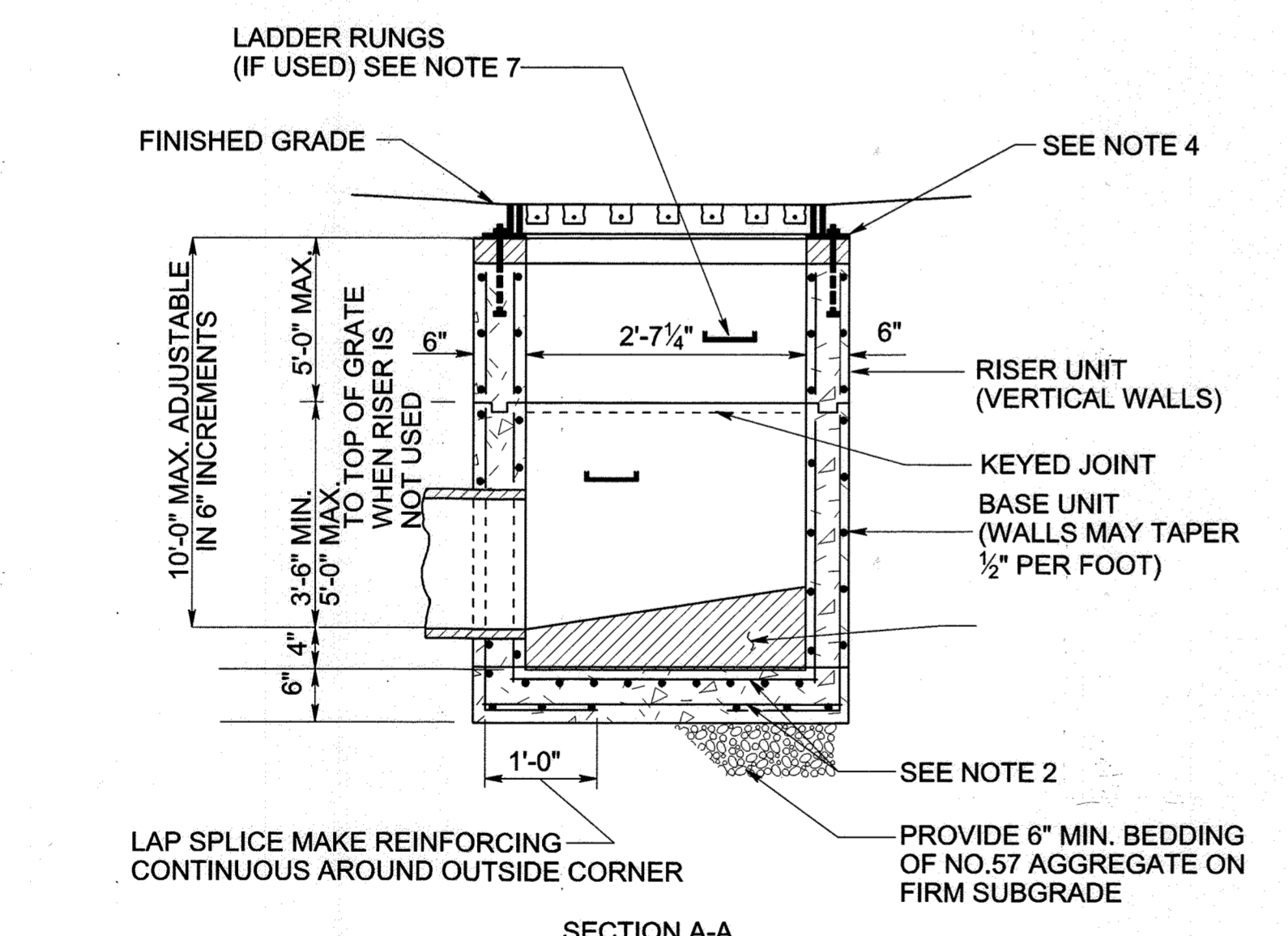
BENCH HEIGHT ABOVE OUTGOING PIPE INVERT  
 STORM WATER 0.5 D  
 SANITARY 0.9 D



**3 STANDARD MANHOLE COVER**  
SCALE: NONE

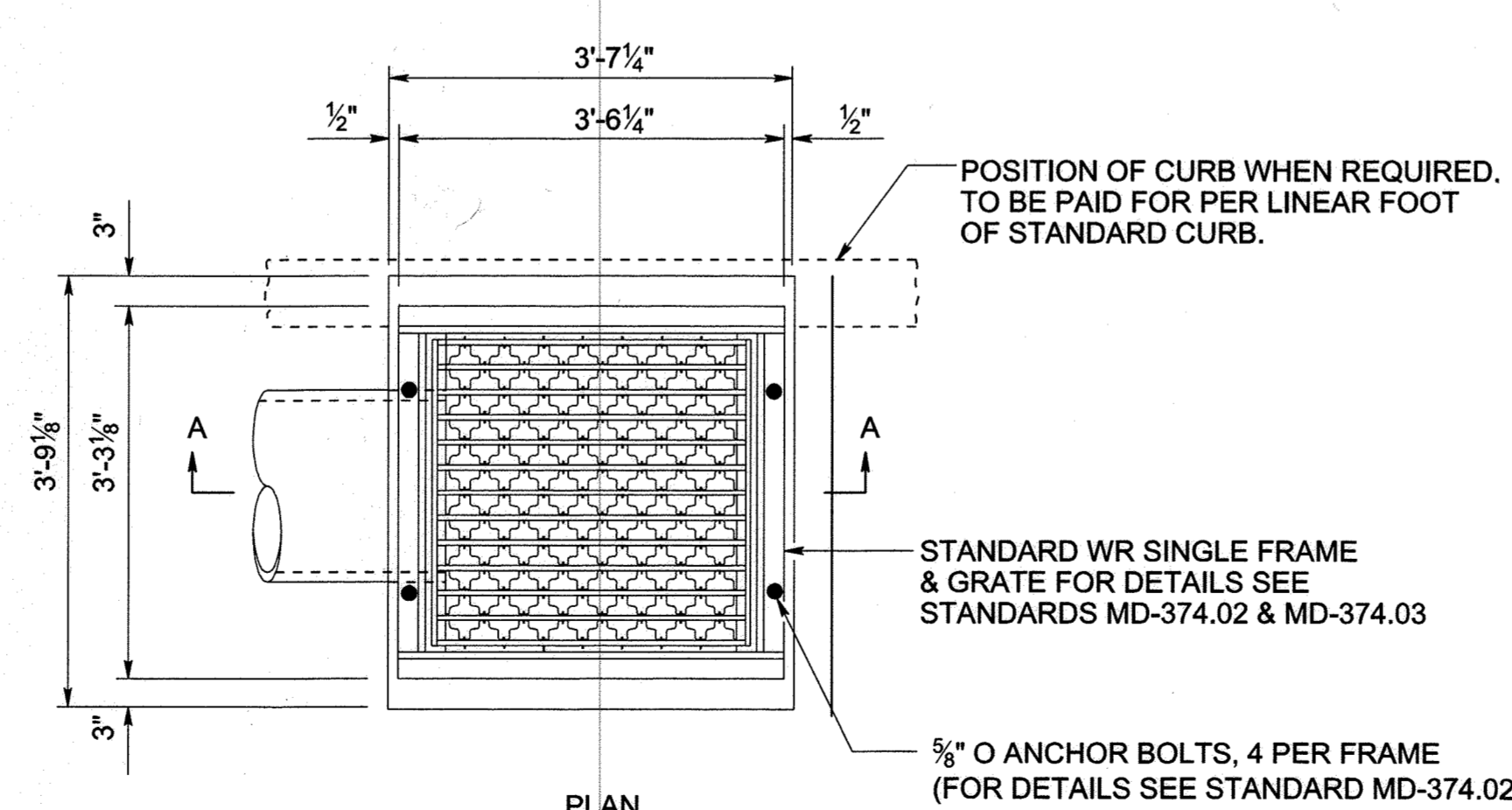
MATERIAL - CAST IRON APPROX. WEIGHT 170 LBS.  
 DETAIL OF CORRUGATIONS

AS BUILT CERTIFICATION FOR PSWM:  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY 2/3/17  
 15292



**4 GRATE INLET**  
SCALE: NONE

NOTES:  
 1. CONCRETE TO BE MIX NO. 6 (4500 PSI) IN ACCORDANCE WITH SECTION 902.10.03 OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.  
 2. REINFORCING-2 LAYERS OF 4x4-W4.0xW4.0 WELDED WIRE FABRIC.  
 3. THREADED PLASTIC INSERTS TO BE PROVIDED FOR HANDLING.  
 4. GRADE AND SLOPE ADJUSTMENTS COMPLETED IN THE FIELD USING CONCRETE MIX NO. 6.  
 5. PIPE OPENINGS TO BE PROVIDED AS REQUIRED, FOR SIZE, LOCATION, AND INVERT ELEVATIONS REFER TO CONSTRUCTION PLANS.  
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 8. MINIMUM DEPTH PAYMENT PER "EACH" INLET INCLUDES DEPTHS UP TO 3'-6". VERTICAL DEPTH PAYMENT PER LINEAR FOOT FOR DEPTHS IN EXCESS OF 3'-6".



**5 TRENCHING DETAIL**  
SCALE: NONE

DIP		
PIPE DIA. "D"	"W"	TRENCH PAYMENT WIDTH
4	12	28
6	11	28
8	10	28
10	9	28
12	8	28
14	8	30
16	8	32
18	8	34
20	8	36
24	12	48

RCP		
PIPE DIA. "D"	"W"	TRENCH PAYMENT WIDTH
4	12	28
6	11	28
8	10	28
10	9	28
12	8	28
14	8	30
16	8	32
18	8	34
20	8	36
24	12	48
27	12	51
30	12	54
33	15	63
36	15	66
42	15	72
48	18	84
54	18	90
60	18	96
66	18	102
72	18	108
78	18	114
84	18	120
90	18	126
96	18	132
102	18	138
108	18	144

ALL DIMENSIONS IN INCHES

**5 TRENCHING DETAIL**  
SCALE: NONE

NOTES:  
 1. THE "W" DIMENSION SHALL BE USED TO CALCULATE MAXIMUM TRENCH PAY WIDTH.  
 2. FOR TRENCHES WHERE TRENCH BOX OR TRENCH SHEETING IS NOT REQUIRED, MEASUREMENT FOR CONTIGUOUS BORROW MATERIALS WILL BE BASED ON THE TRENCH WIDTH SHOWN.  
 3. FOR TRENCHES WHERE TRENCH BOX OR TRENCH SHEETING IS REQUIRED, MEASUREMENT FOR CONTIGUOUS BORROW MATERIALS WILL BE BASED ON THE TRENCH WIDTH SHOWN PLUS 24 INCHES.  
 4. THE MAXIMUM WIDTH OF THE TRENCH EXCAVATED ON-SITE FOR RCP, SHALL NOT EXCEED THE TRENCH PAYMENT WIDTH PLUS 12 INCHES.  
 5. MINIMUM SPACING BETWEEN PARALLEL, CULVERT PIPES SHALL BE TWICE THE "W" DIMENSION.  
 6. SPECIAL DESIGN IS REQUIRED AND SHALL BE SPECIFIED OR DETAILED IN THE CONTRACT DOCUMENTS FOR THE FOLLOWING PIPES:  
 RCP STORM DRAINS LARGER THAN 108 INCHES  
 RCP QUALITY SANITARY SEWERS LARGER THAN 48 INCHES  
 DIP LARGER THAN 24 INCHES  
 STREAM CROSSINGS SEE 5-3.1.1 AND 5-3.1.2  
 Δ7. WATERMAN SHALL BE SPECIAL THICKNESS CLASS 54 DIP MINIMUM.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Robert Crowley*  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 5-6-16 DATE

*Kat Shalinski*  
 CHIEF, DIVISION OF LAND DEVELOPMENT 5-11-16 DATE

*William J. Griffin*  
 DIRECTOR 5-16-16 DATE

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H

OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / RENTZ PROPERTY	47	LOT 156 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q

PLAT # 20152-00134 ZONE GRID  
 15786 PEC 20

DEED	ELEC. DISTRICT
11479 / 005	6TH

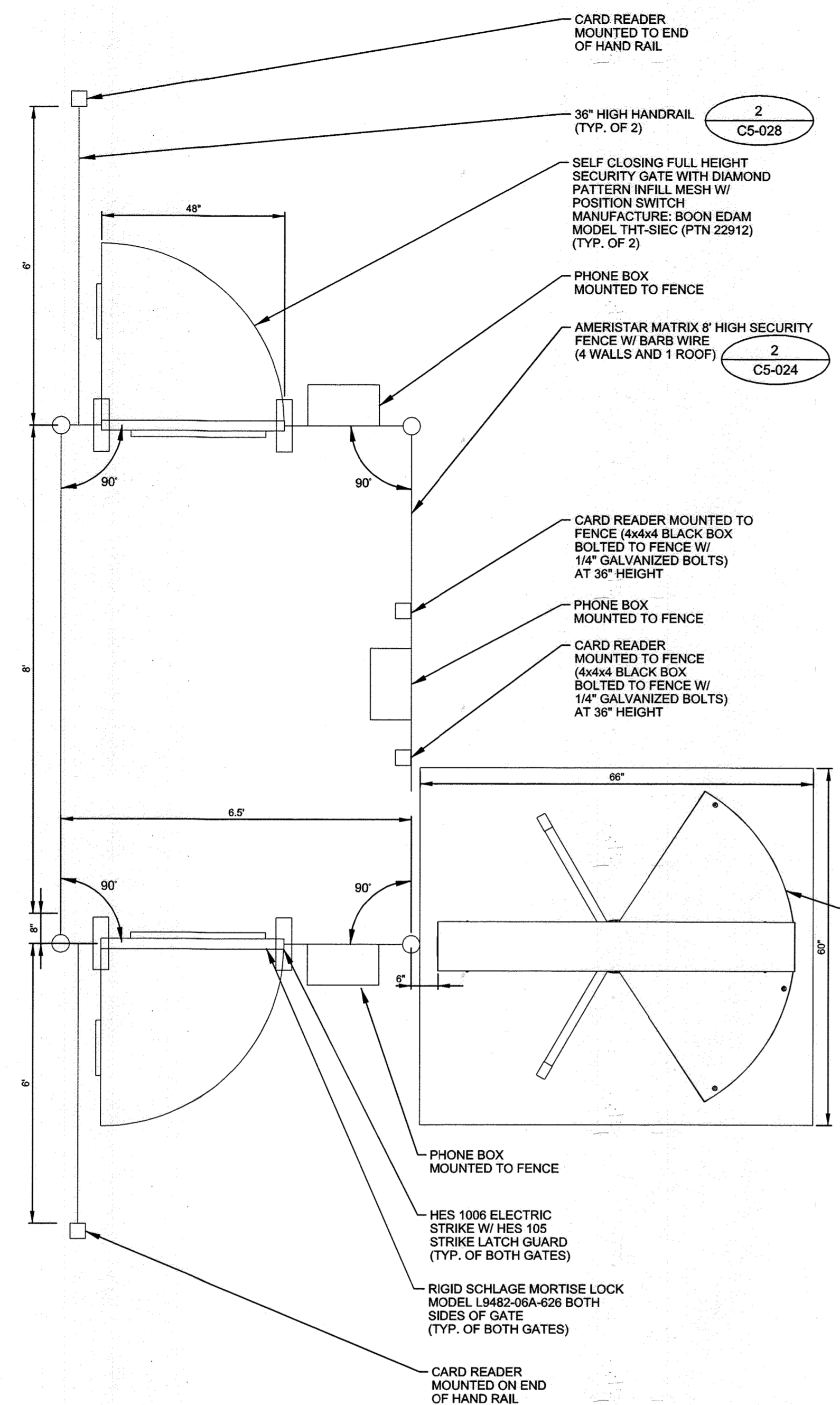
WATER CODE SEWER CODE

TITLE

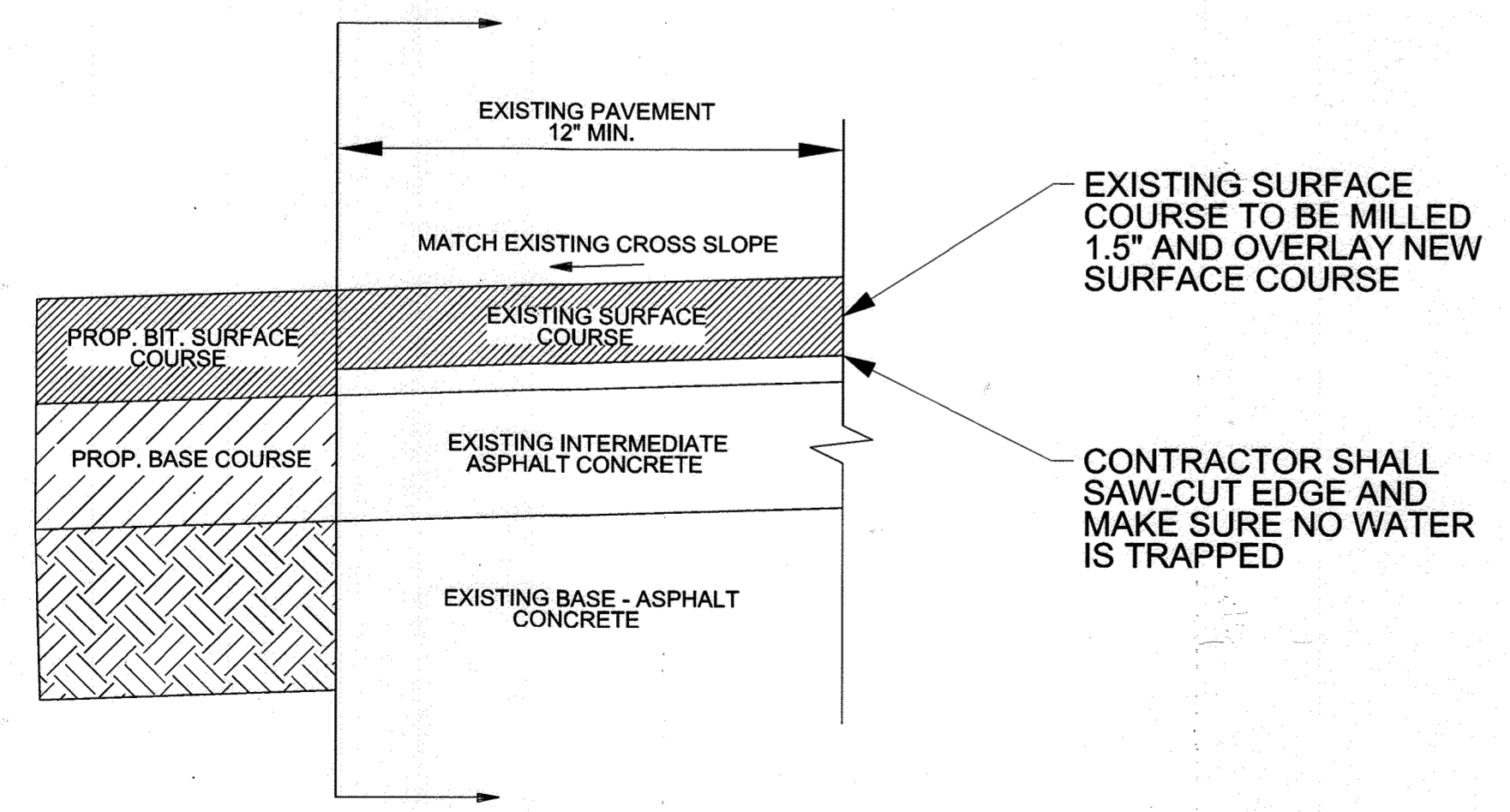
SITE DETAILS

DES. BY	SCALE	PROJ. No.
M. WERDER	NTS	
DRN. BY	DATE	
M. WERDER	04/04/2016	54 OF 80
CHK. BY	APPROVED	
R. CROWLEY		

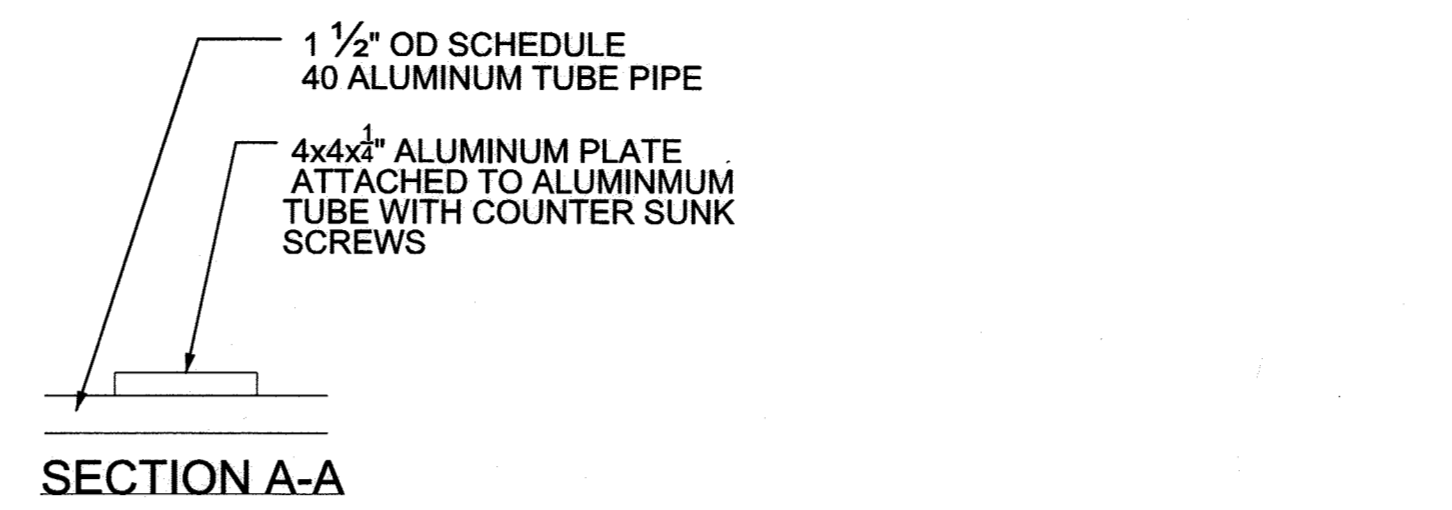
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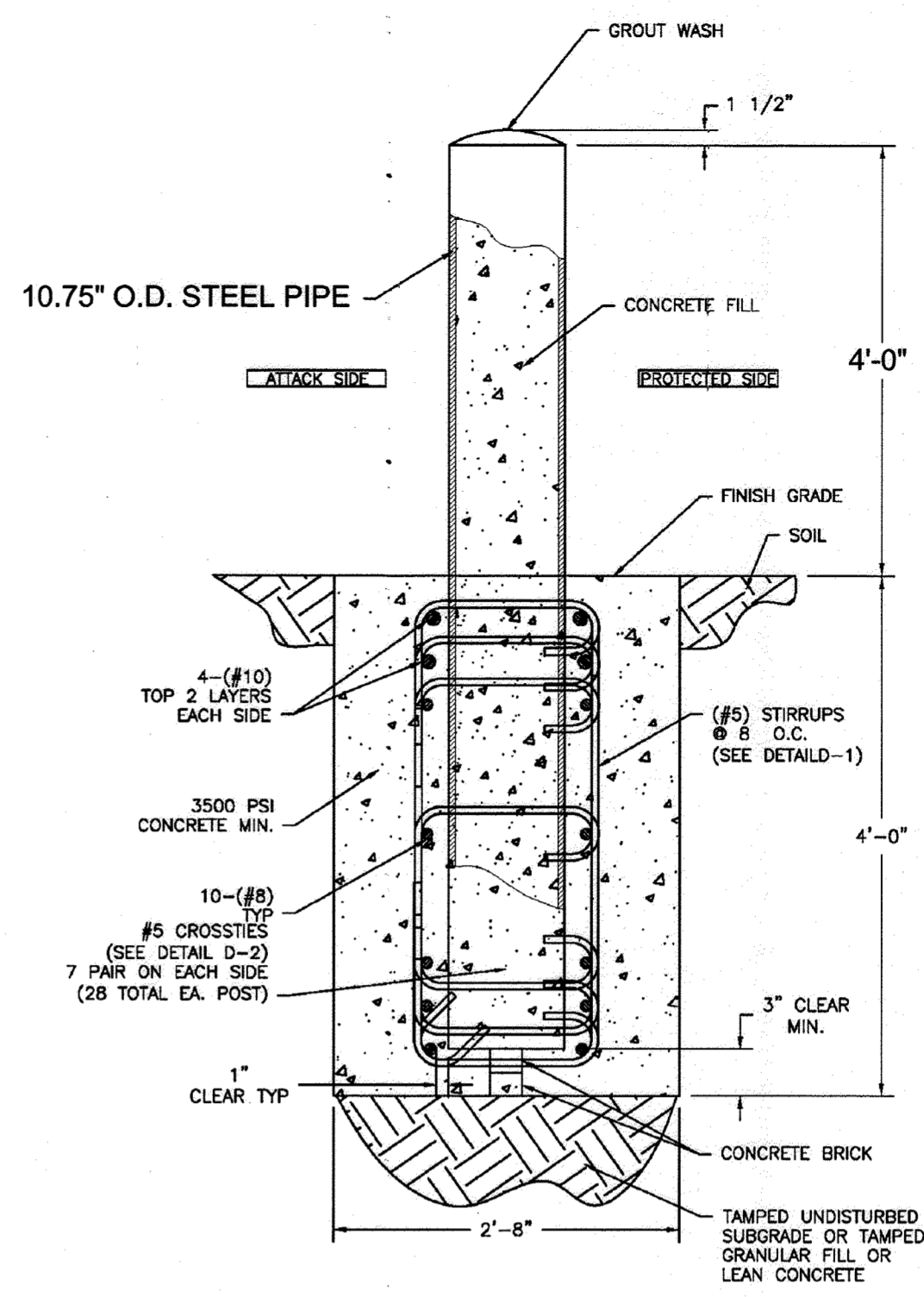
**1 SALLY PORT**  
SCALE: NONE  
DETAIL IS BASE DESIGN. CONTRACTOR MAY USE EQUIVALENT PRODUCT THAT MEETS PROJECT REQUIREMENTS AND SPECIFICATIONS AND AS APPROVED BY THE COR.



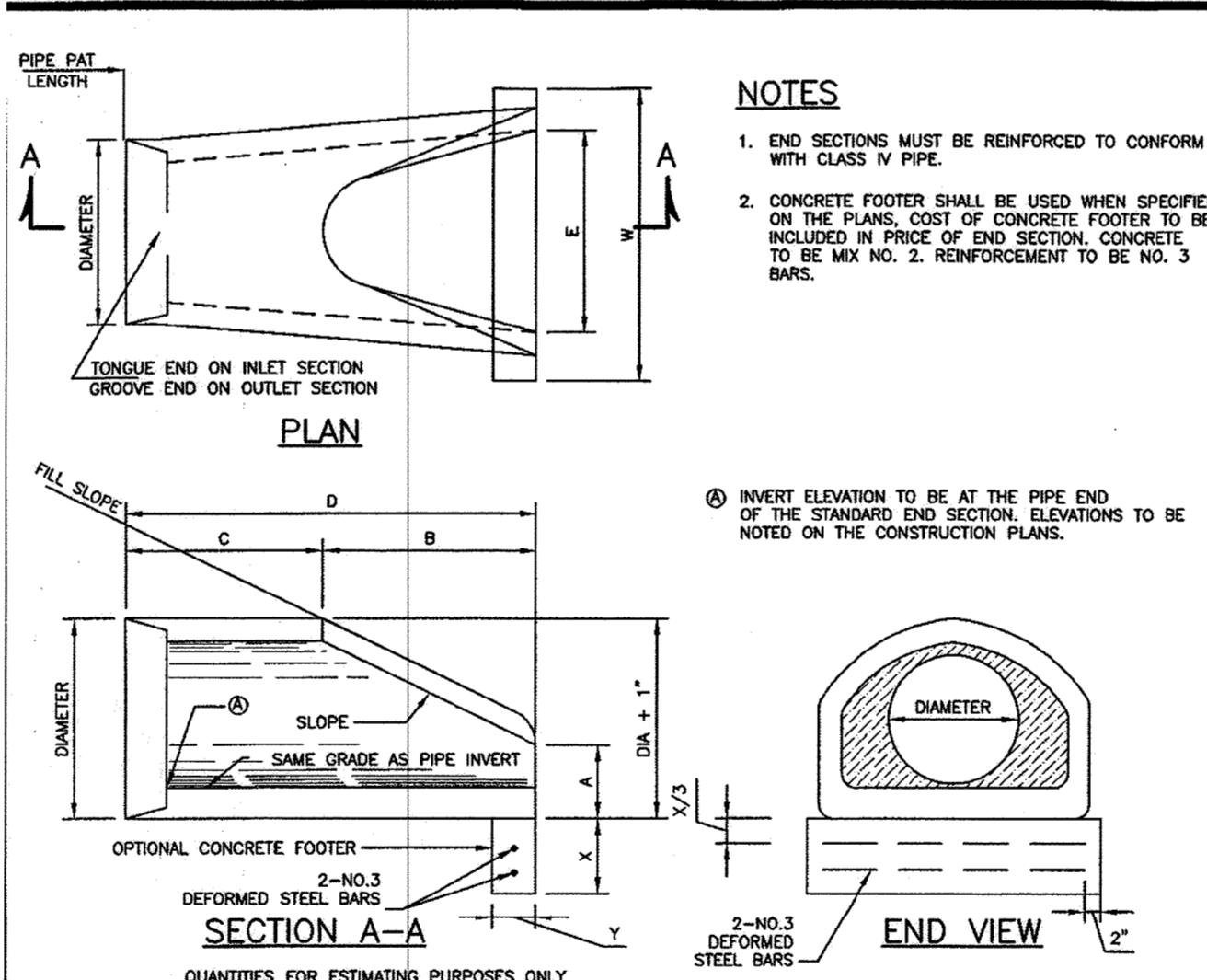
**4 PAVEMENT OVERLAY**  
SCALE: NONE



**2 HANDRAIL**  
SCALE: NONE



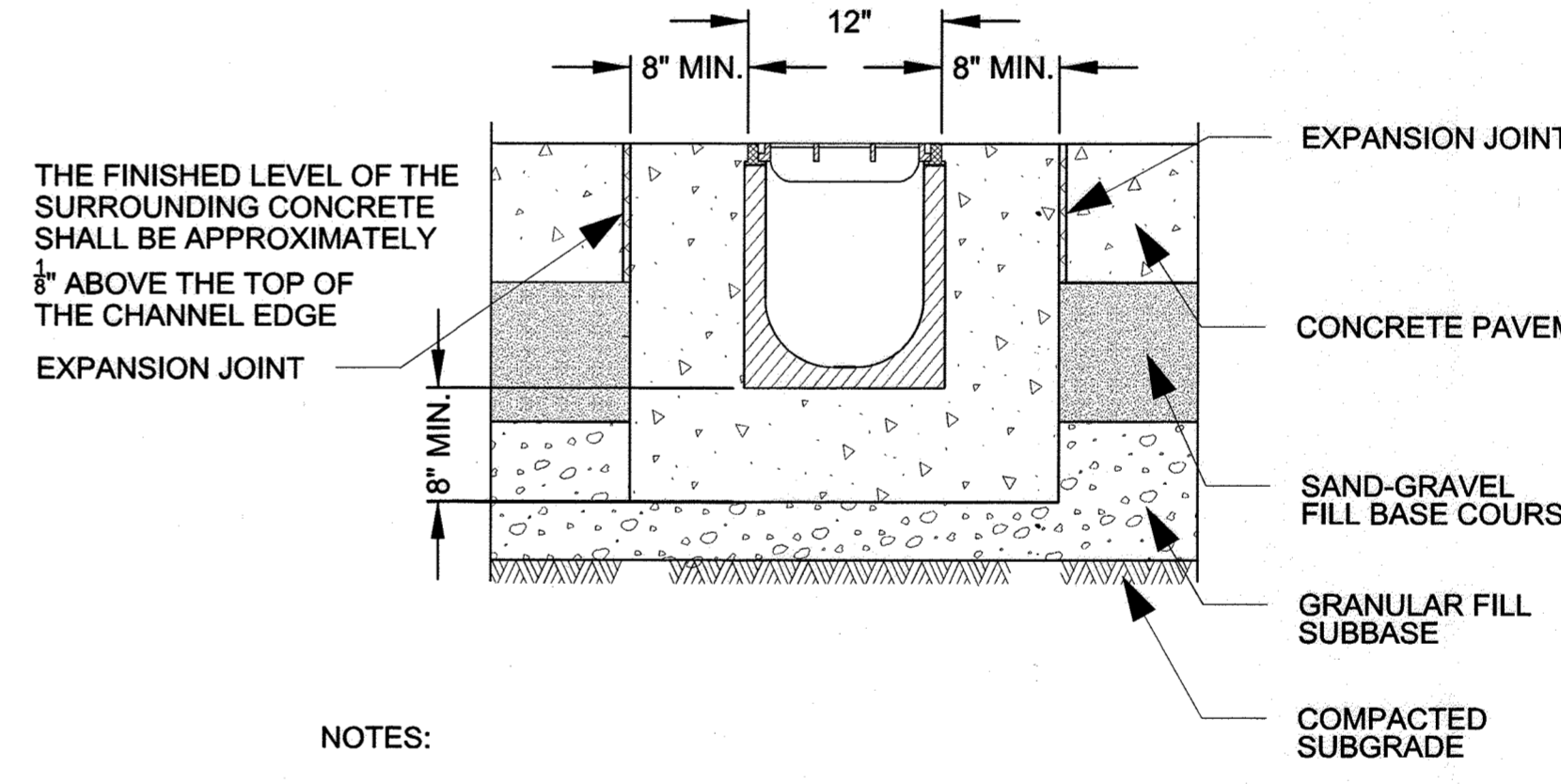
**3 K12-RATED BOLLARD**  
SCALE: NONE



QUANTITIES FOR ESTIMATING PURPOSES ONLY

DIA	SLOPE	CONCRETE END SECTION										CONCRETE FOOTER		
		A	B	C	D	E	W	X	Y	CONC CY	STEEL LBS			
12"	3:1	4"	2'-0"	4'-0"	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	0.08	24.00
15"	3:1	4 1/2"	2'-4"	4'-4"	6'-4"	8'-4"	10'-4"	12'-4"	14'-4"	16'-4"	18'-4"	20'-4"	0.10	28.50
18"	3:1	5"	2'-2"	4'-2"	6'-2"	8'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	0.11	33.00
21"	3:1	5 1/2"	2'-6"	4'-6"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	20'-6"	0.13	37.50
24"	3:1	6"	3'-0"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	21'-0"	0.17	42.00
27"	3:1	6 1/2"	3'-4"	5'-4"	7'-4"	9'-4"	11'-4"	13'-4"	15'-4"	17'-4"	19'-4"	21'-4"	0.19	46.50
30"	3:1	7"	3'-8"	5'-8"	7'-8"	9'-8"	11'-8"	13'-8"	15'-8"	17'-8"	19'-8"	21'-8"	0.21	51.00
33"	3:1	7 1/2"	4'-2"	6'-2"	8'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	0.23	55.50
36"	3:1	8"	4'-6"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	20'-6"	22'-6"	0.25	60.00
42"	3:1	9"	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	21'-0"	23'-0"	0.27	66.75
48"	3:1	10"	5'-4"	7'-4"	9'-4"	11'-4"	13'-4"	15'-4"	17'-4"	19'-4"	21'-4"	23'-4"	0.27	73.50
54"	2.4:1	11"	5'-8"	7'-8"	9'-8"	11'-8"	13'-8"	15'-8"	17'-8"	19'-8"	21'-8"	23'-8"	0.30	78.00
60"	3:1	12"	6'-2"	8'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	24'-2"	0.33	82.50
66"	3:1	13"	6'-6"	8'-6"	10'-6"	12'-6"	14'-6"	16'-6"	18'-6"	20'-6"	22'-6"	24'-6"	0.36	87.00
72"	3:1	14"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	21'-0"	23'-0"	25'-0"	0.40	93.75

**6 CONCRETE END SECTION**  
SCALE: NONE



- NOTES:
- SURFACE DRAINAGE SYSTEM SHALL BE POLYMER CONCRETE CHANNEL SYSTEM WITH DUCTILE IRON RAIL AND GRATE.
  - THE CHANNEL SYSTEM SHALL BE CERTIFIED TO WITHSTAND LOADINGS TO LOAD CLASS F (DIN19580).
  - GRATES SHALL BE SECURED USING A BOLTLESS LOCKING SYSTEM. GRATE AND LOCKING SYSTEM SHALL BE FULLY REMOVABLE FROM THE CHANNEL.
  - TRENCH DRAIN CHANNEL SHALL BE SLOPED AT 0.60% ALONG ENTIRE LENGTH OF RUN.

**7 TRENCH DRAIN**  
SCALE: NONE

AS BUILT CERTIFICATION FOR PSWIM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
75292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

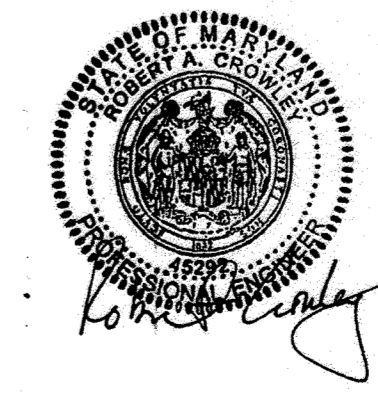
**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(703) 218-1000

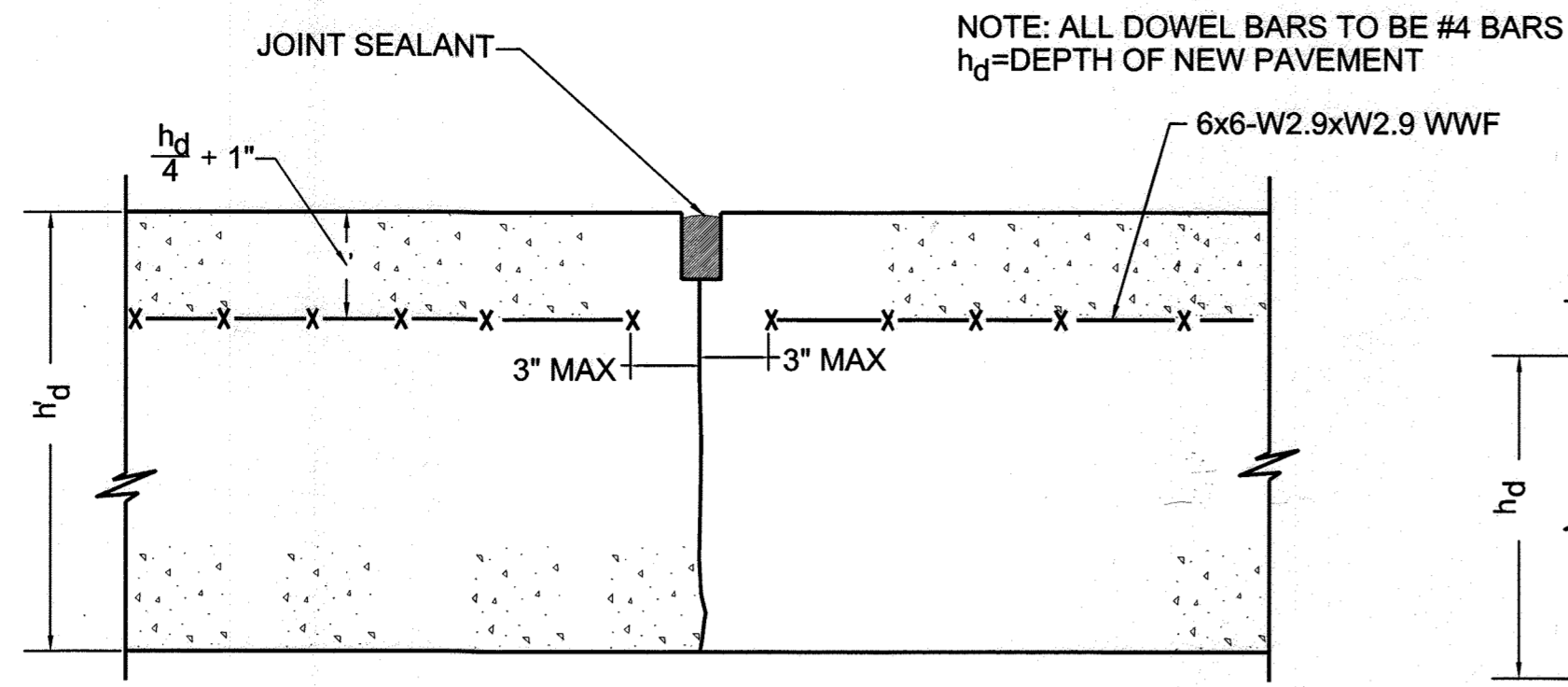
SUBDIVISION NAME	TAX MAP #	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q

TITLE: SITE DETAILS

DES. BY	SCALE	PROJ. No.
M. WERDER	NTS	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	55 OF 60
R. CROWLEY		

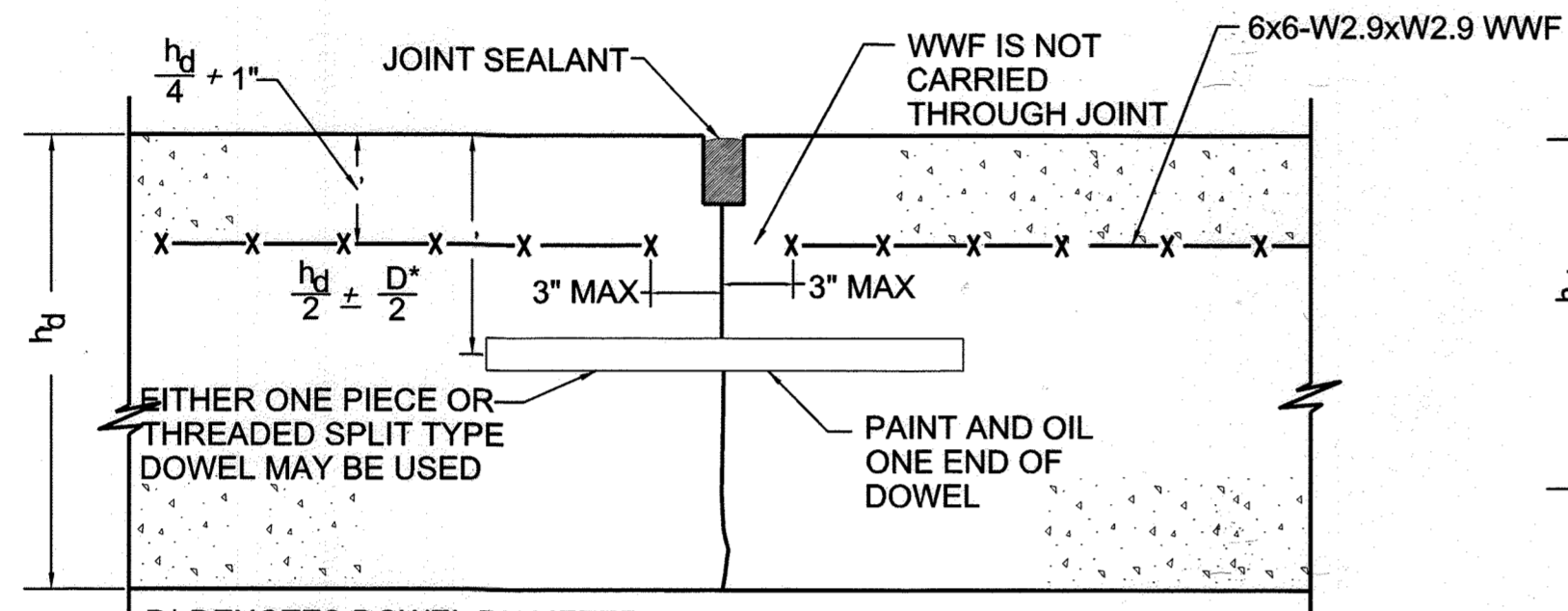
PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 45292 EXPIRATION DATE: 05/21/2016





NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

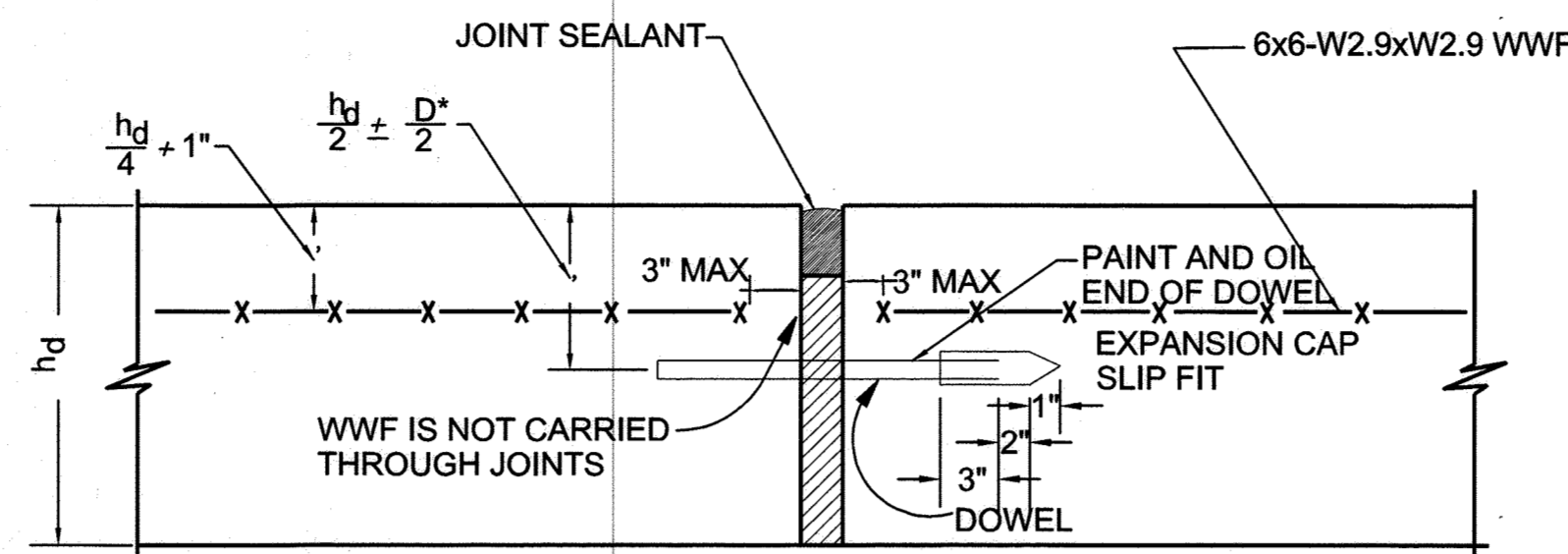
LONGITUDNAL



NOTE: SAW CUT WILL NOT EXTEND BELOW STEEL REINFORCING.

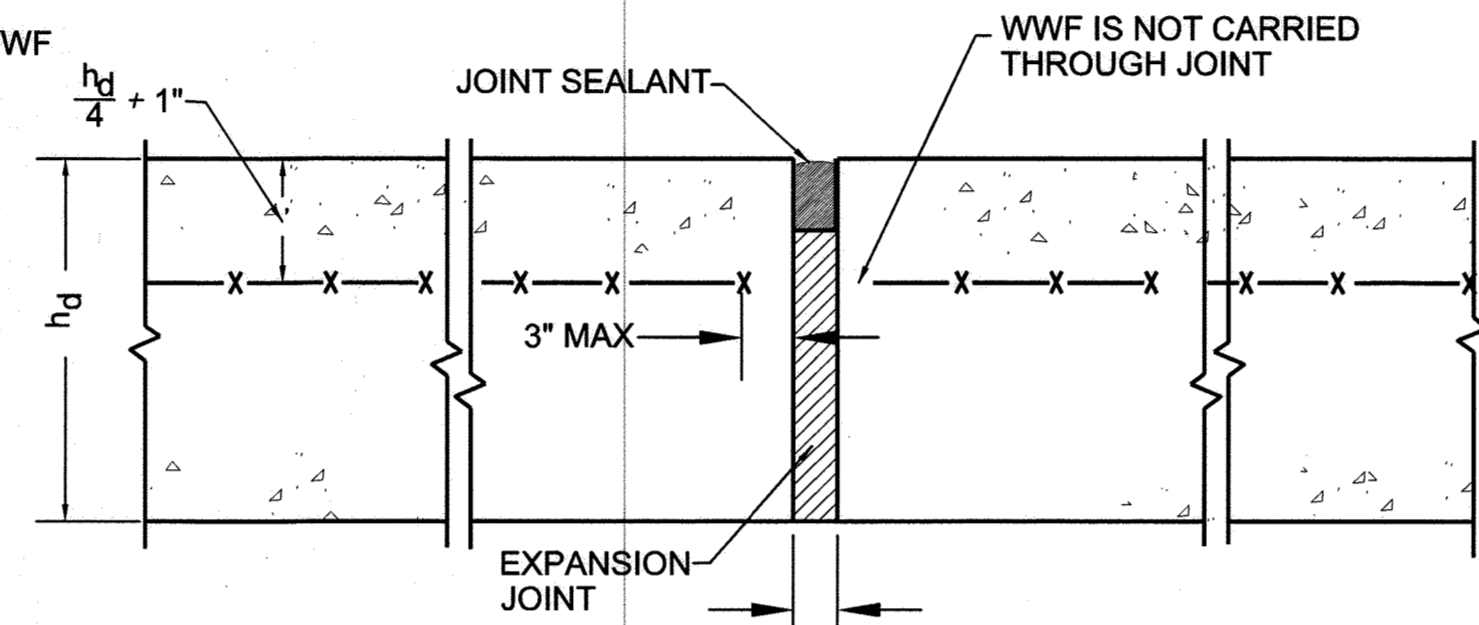
TRANSVERSE

1 CONCRETE CONTRACTION JOINT DETAIL  
SCALE: NONE



D' DENOTES DOWEL DIAMETER, EITHER ONE PIECE OR THREADED SPLIT-TYPE DOWELS MAY BE USED

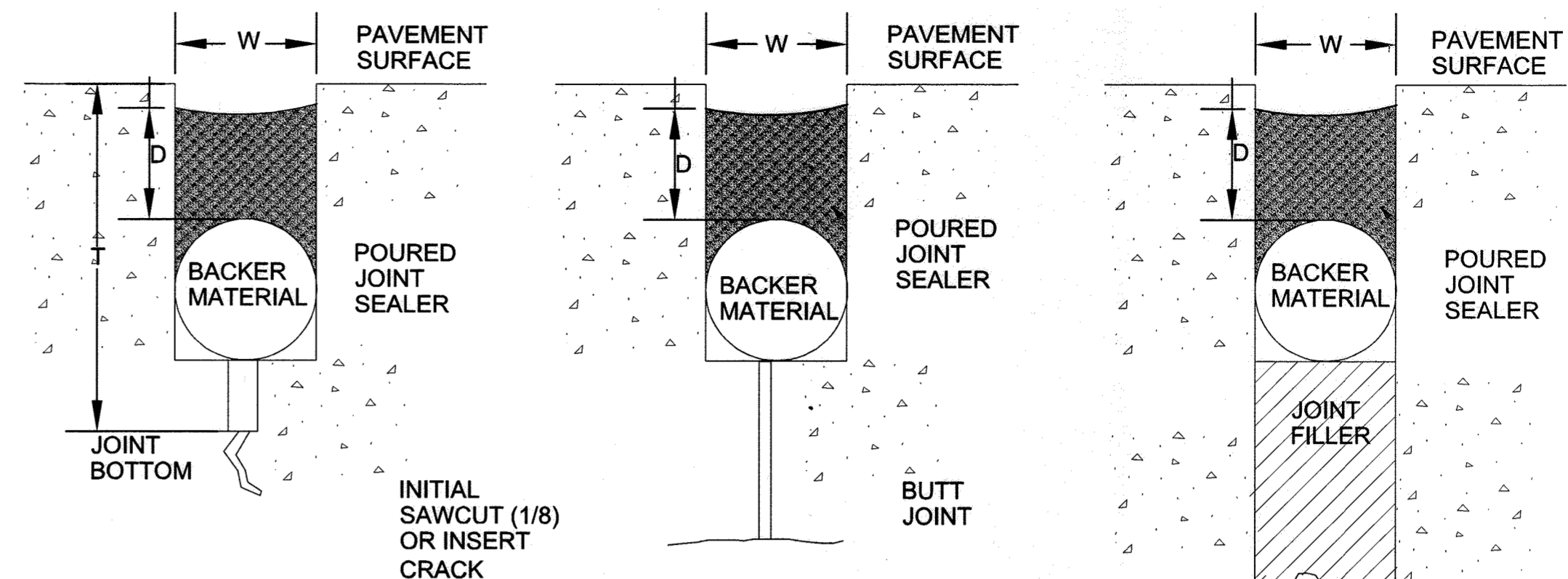
TRANSVERSE



NOTE: ALL DOWEL BARS TO BE #4 BARS  
h<sub>d</sub>=DEPTH OF NEW PAVEMENT

LONGITUDNAL

2 CONCRETE EXPANSION JOINT DETAIL  
SCALE: NONE



CONTRACTION JOINT

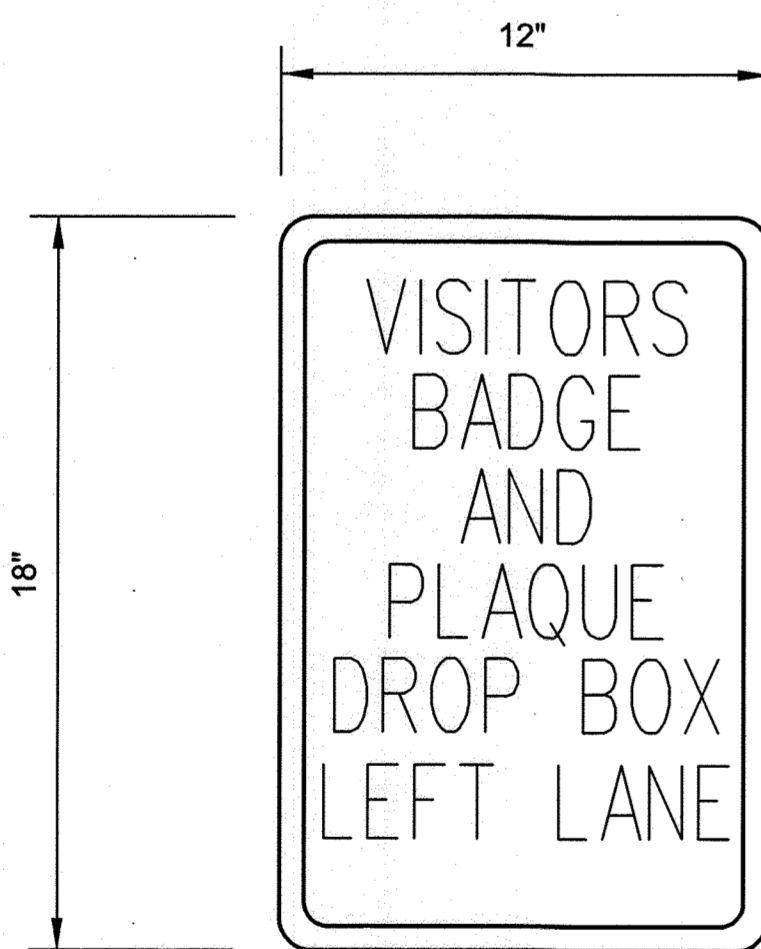
CONSTRUCTION JOINT

EXPANSION JOINT

W = WIDTH OF SEALANT RESERVOIR (SEE TABLE)  
D = DEPTH OF SEALANT (1.0 TO 1.5 X W)  
T = DEPTH OF INITIAL SAWCUT OR INSERT TYPE JOINT FORMER (CONSTRUCTION JOINT)  
a. 1/4" SLAB THICKNESS FOR PAVEMENT LESS THAN 12 INCHES  
b. 3 INCHES FOR PAVEMENT 12-18 INCHES  
c. 1/8" SLAB THICKNESS FOR PAVEMENT MORE THAN 18 INCHES

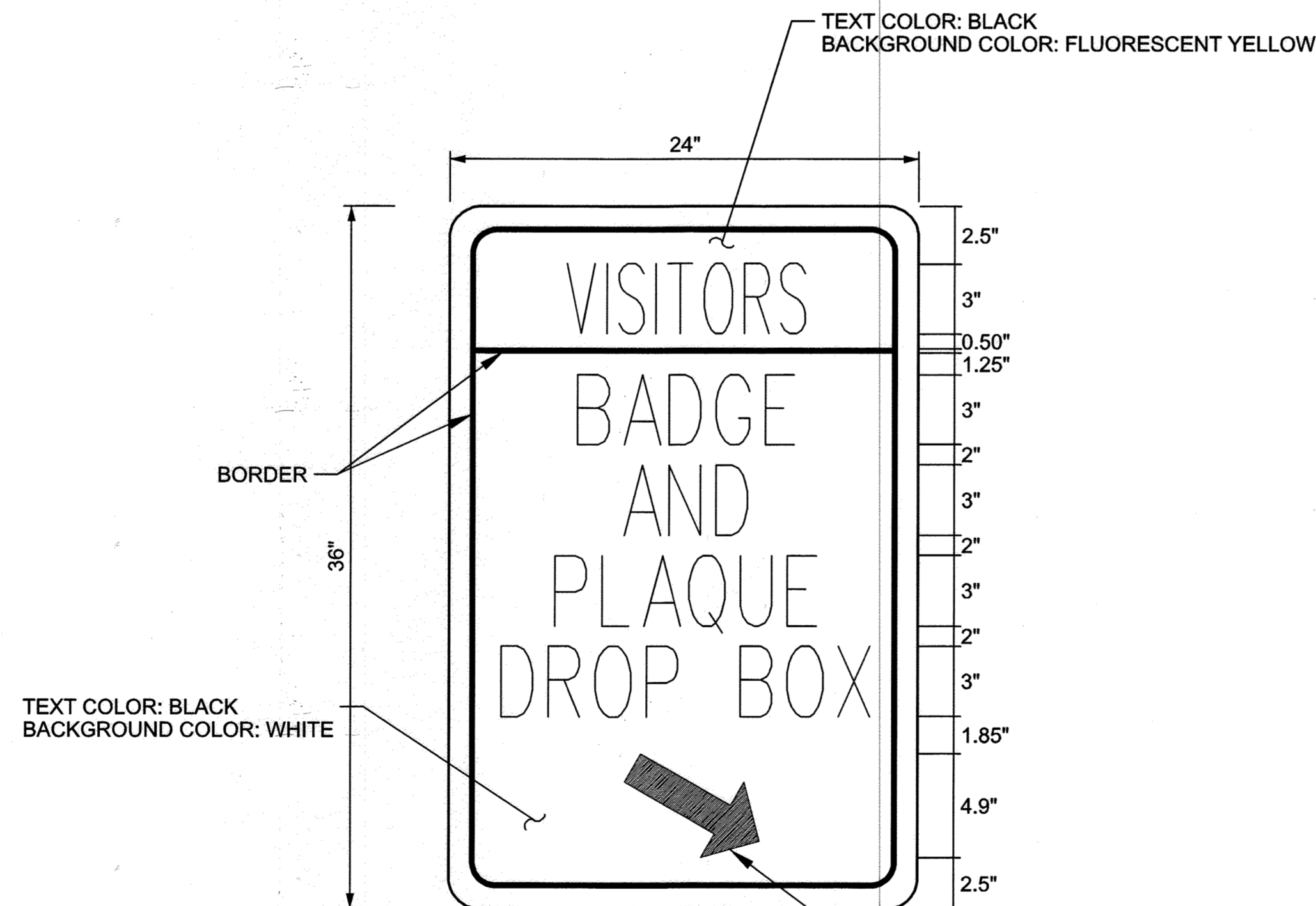
JOINT SPACING FT.	WIDTH, IN.	
	MIN.	MAX.
<25	1/2	5/8
24 - 50	3/4	7/8
>50	1.0	1-1/8

3 JOINT SEALANT DETAIL  
SCALE: NONE



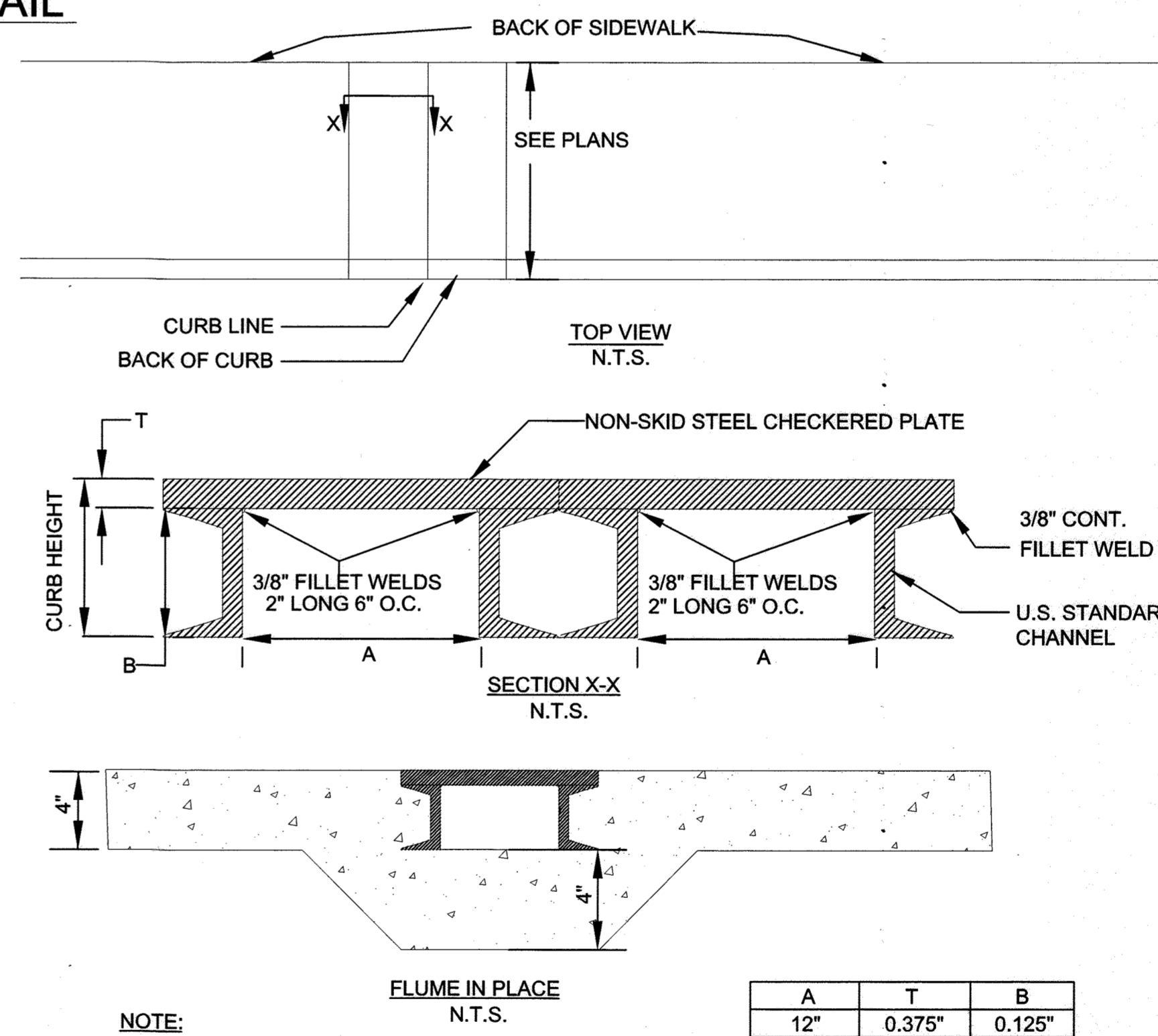
NOTES:  
1. MOUNTING HEIGHT - 84" FROM BOTTOM OF SIGN TO PAVEMENT.  
2. ALL SIGNS SHALL BE MOUNTED TO U CHANNEL POSTS 2.0 WT/FT MIN., AND DRIVEN A MINIMUM OF 4" INTO THE GROUND.

4 DROP BOX LEFT LANE SIGN  
SCALE: NONE



NOTES:  
1. MOUNTING HEIGHT - 84" FROM BOTTOM OF SIGN TO PAVEMENT.  
2. SIGN SHALL BE MOUNTED TO BREAKAWAY TUBULAR STEEL SIGN SUPPORT POST (SEE DETAIL 2 / SHEET 26), AND DRIVEN A MINIMUM OF 4" INTO THE GROUND.  
3. BORDER:  
R = 1.875"  
TH = 0.75"  
IN = 0.5"

5 DROP BOX SIGN  
SCALE: NONE



NOTE:  
1. ALL MATERIAL NEW STRUCTURAL STEEL.

6 CONCRETE FLUME UNDER SIDEWALK  
SCALE: NONE

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. 45292 EXPIRATION DATE: 05/21/2016.

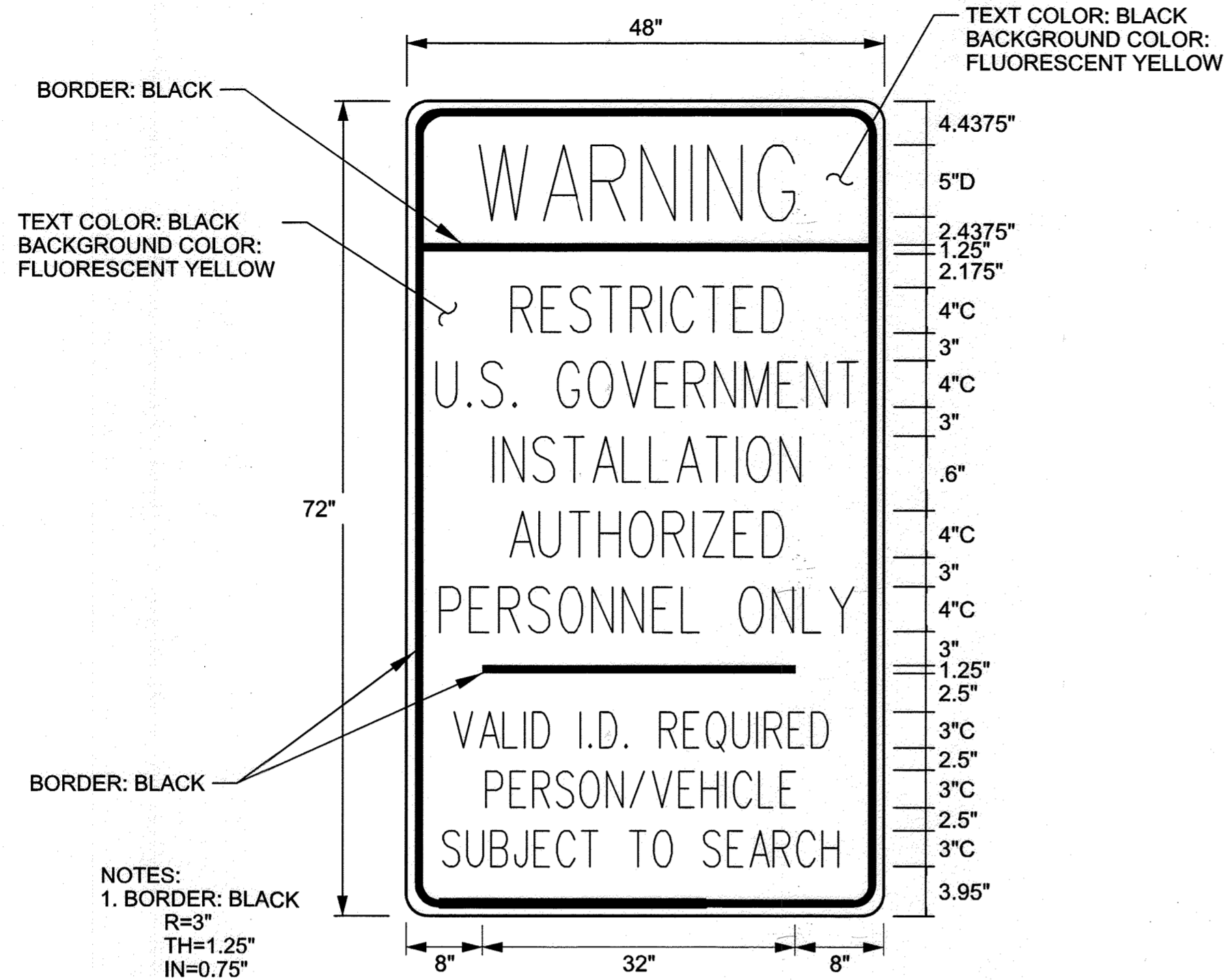


AS BUILT CERTIFICATION FOR R3MM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
46292  
2/3/17

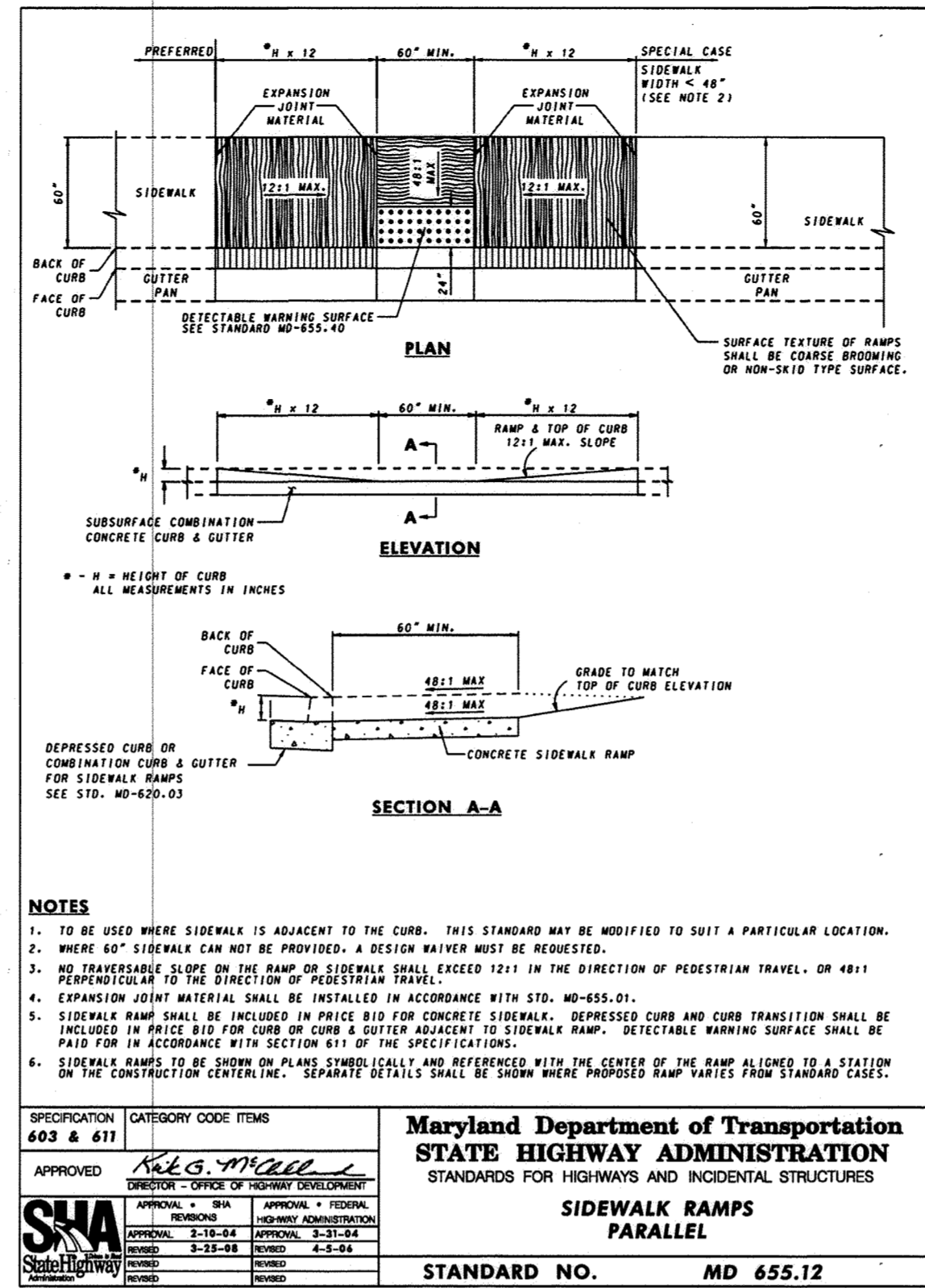
APPROVED: DEPARTMENT OF PLANNING AND ZONING		
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16	DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16	DATE
<i>[Signature]</i> DIRECTOR	5-10-16	DATE
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/RENTZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 25114-2014	ZONE	GRID
15786	PEC	20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
SITE DETAILS		
DES. BY M. WERDER	SCALE NTS	PROJ. No.
DRN. BY M. WERDER	DATE 04/04/2016	56 OF 60
CHK. BY R. CROWLEY	APPROVED	



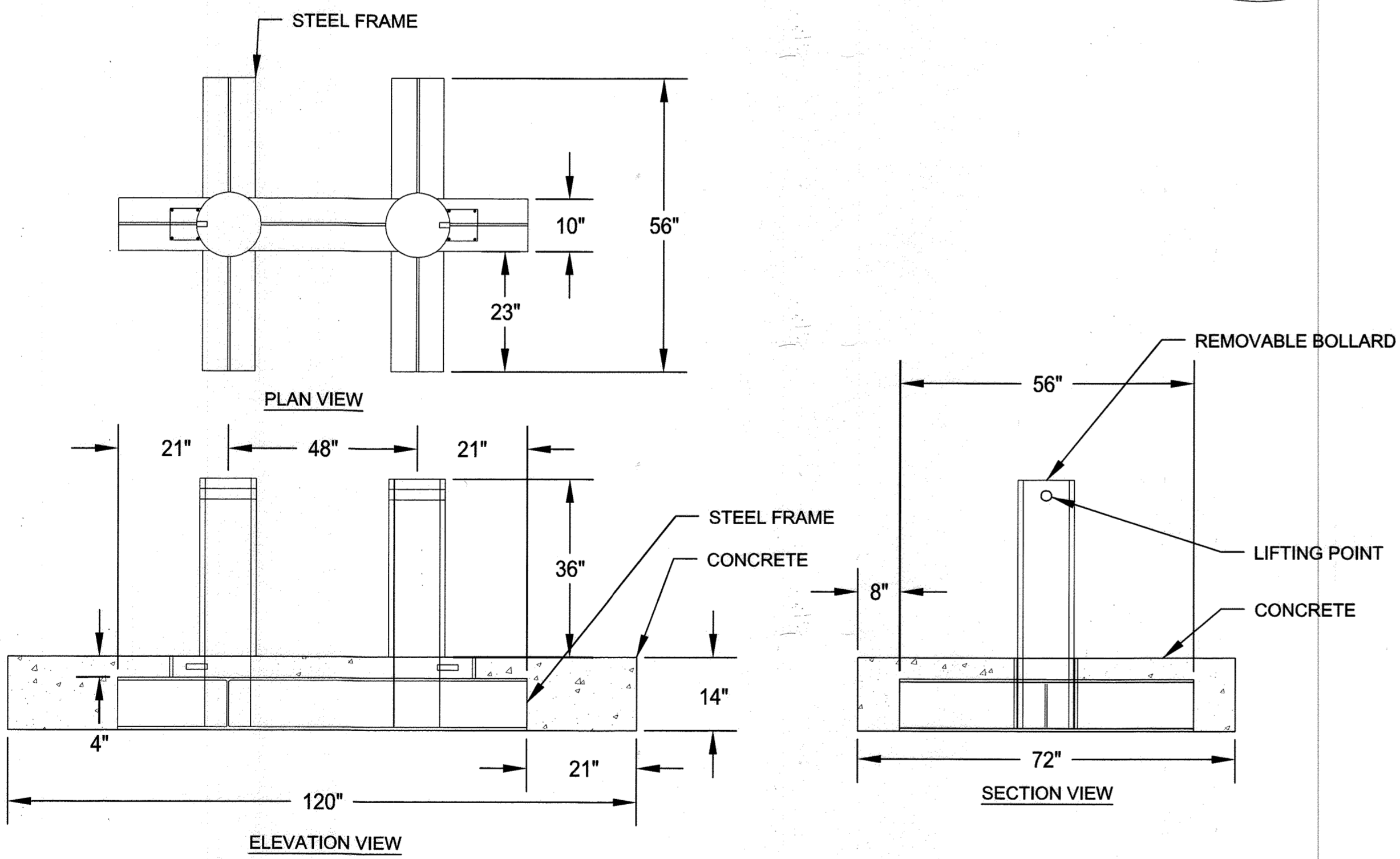




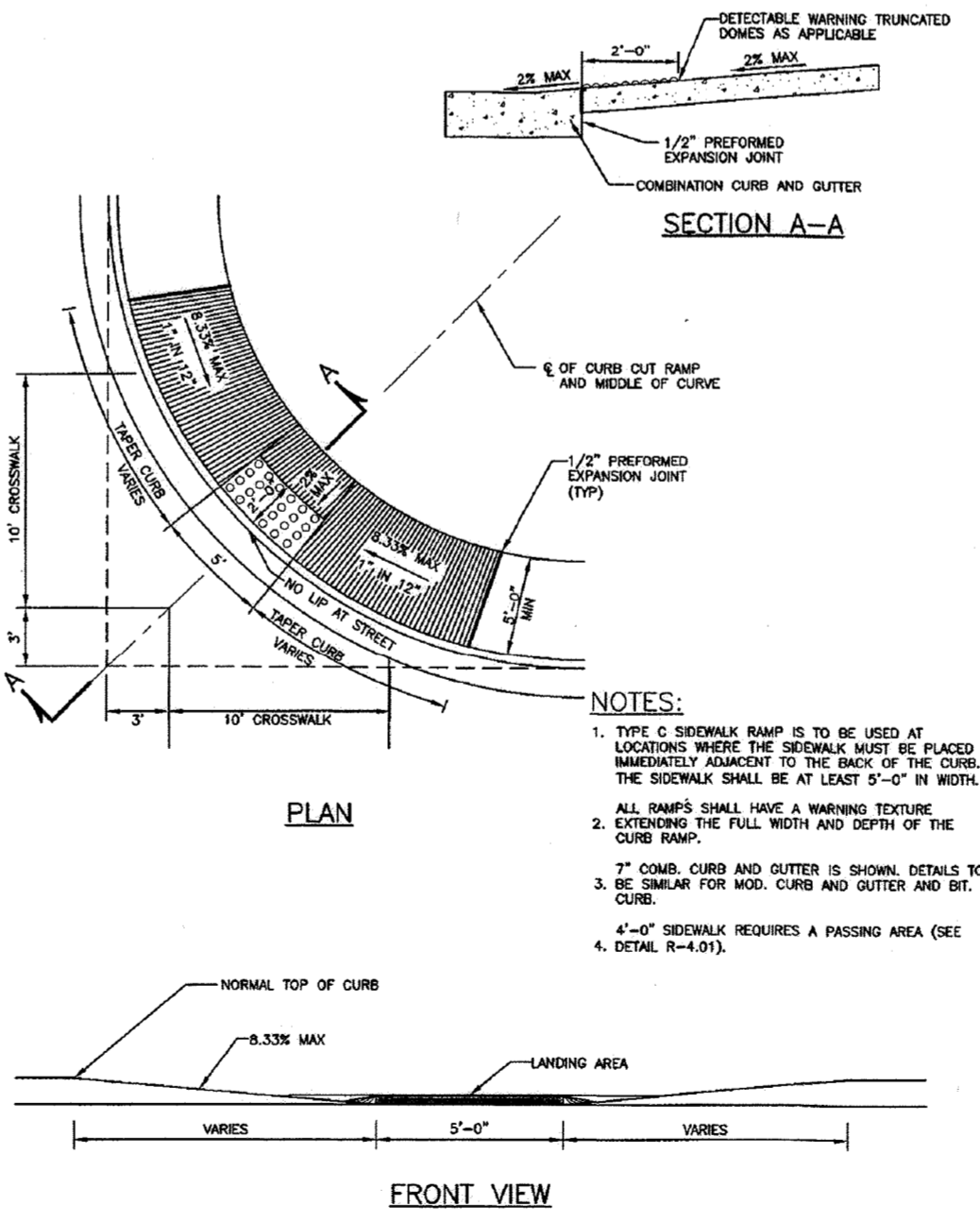
1 WARNING RESTRICTED AREA SIGN  
SCALE: NONE



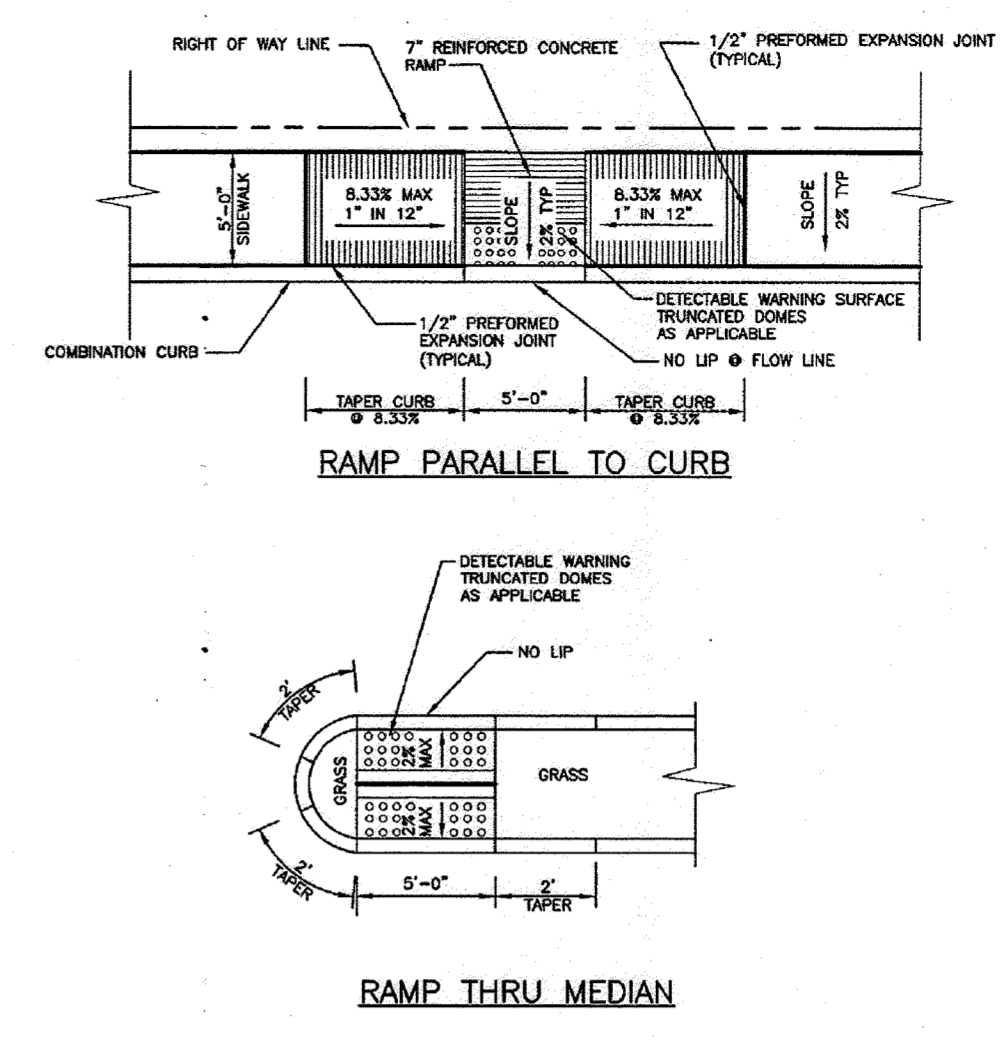
2 SIDEWALK RAMP - PARALLEL  
SCALE: NONE



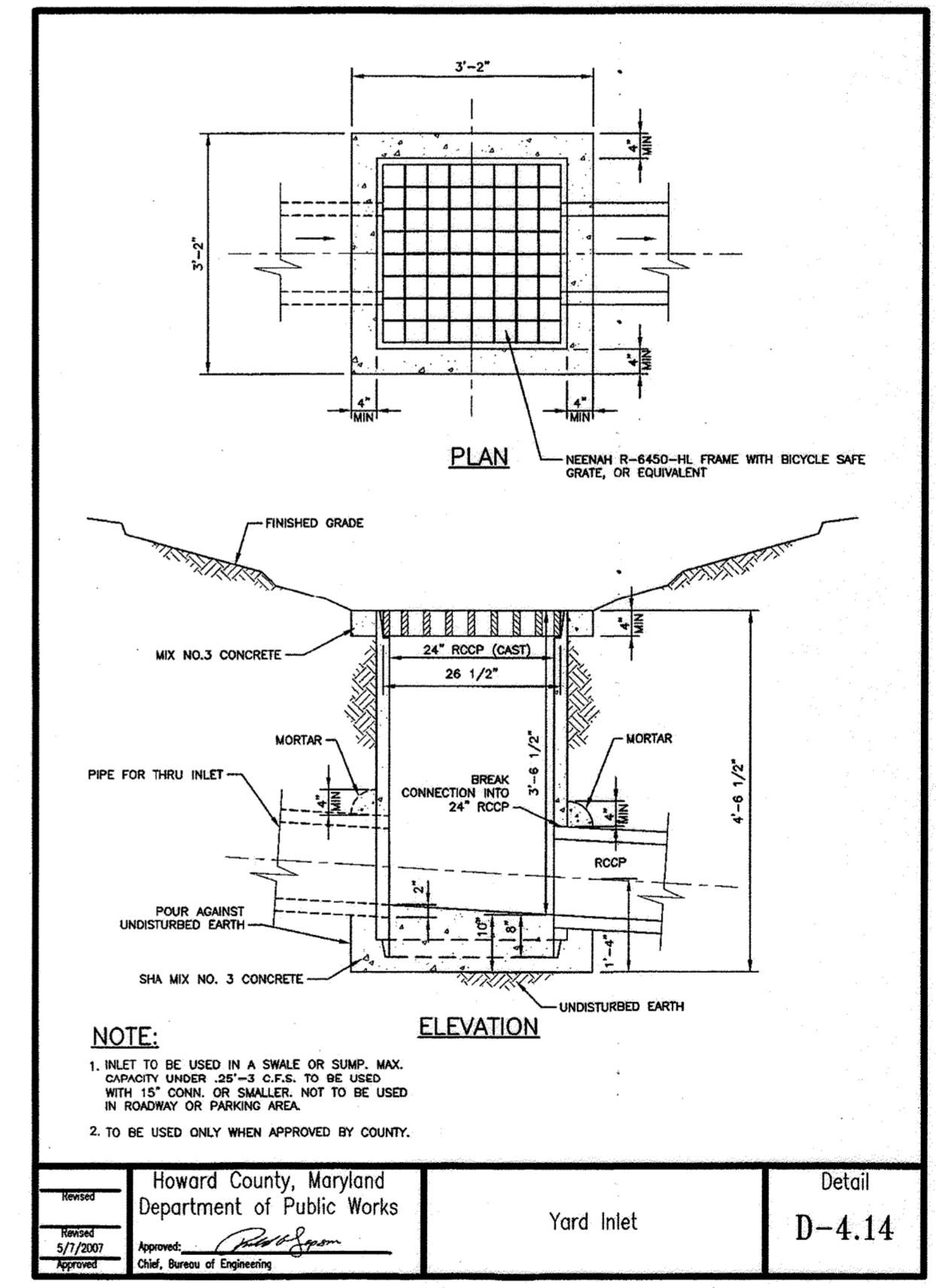
3 6" REMOVABLE BOLLARD- K4 RATED  
SCALE: NONE



5 SIDEWALK RAMP TYPE C  
SCALE: NONE

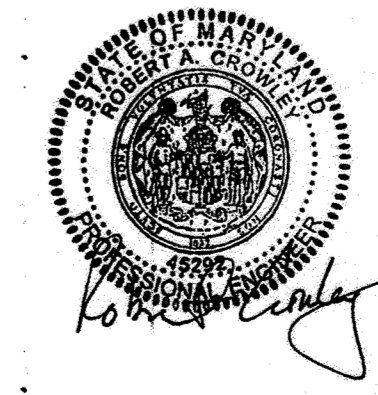


4 SIDEWALK RAMP THROUGH MEDIAN  
SCALE: NONE



6 YARD INLET  
SCALE: NONE

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. 45292 EXPIRATION DATE: 05/21/2016



AS BUILT CERTIFICATION FOR PSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
45292  
2/3/17

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

5-6-11  
5-11-16  
5-16-10

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME: EMERSON / REWITZ PROPERTY  
TAX MAP: 47  
LOT/PARCEL #: LOT 185 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I-1, PARCEL O, PARCEL Q

PLAT # 4318-0784  
ZONE: PEC  
GRID: 20

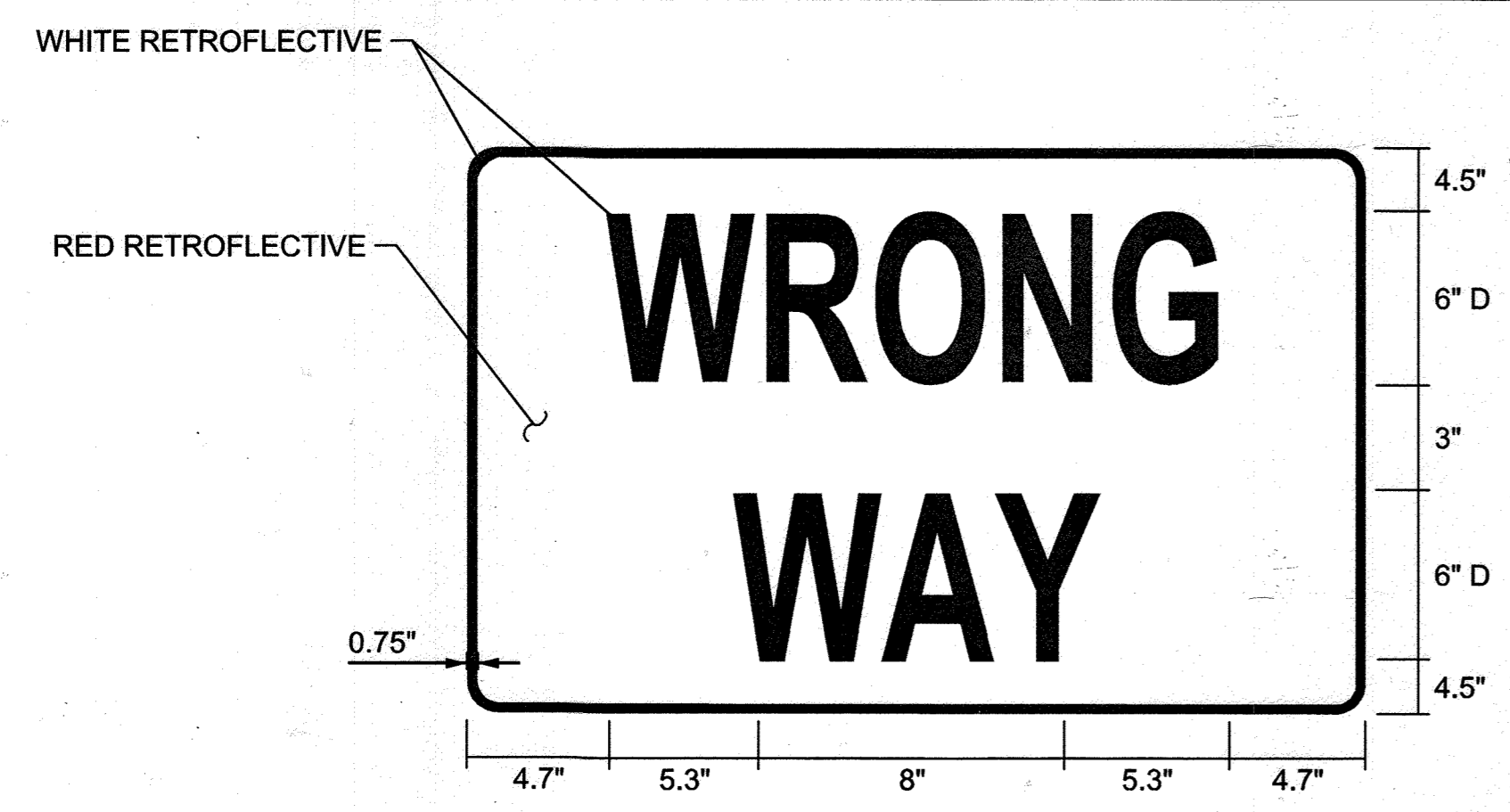
DEED: 11479 / 005  
ELEC. DISTRICT: 6TH  
WATER CODE: SEWER CODE

SITE DETAILS

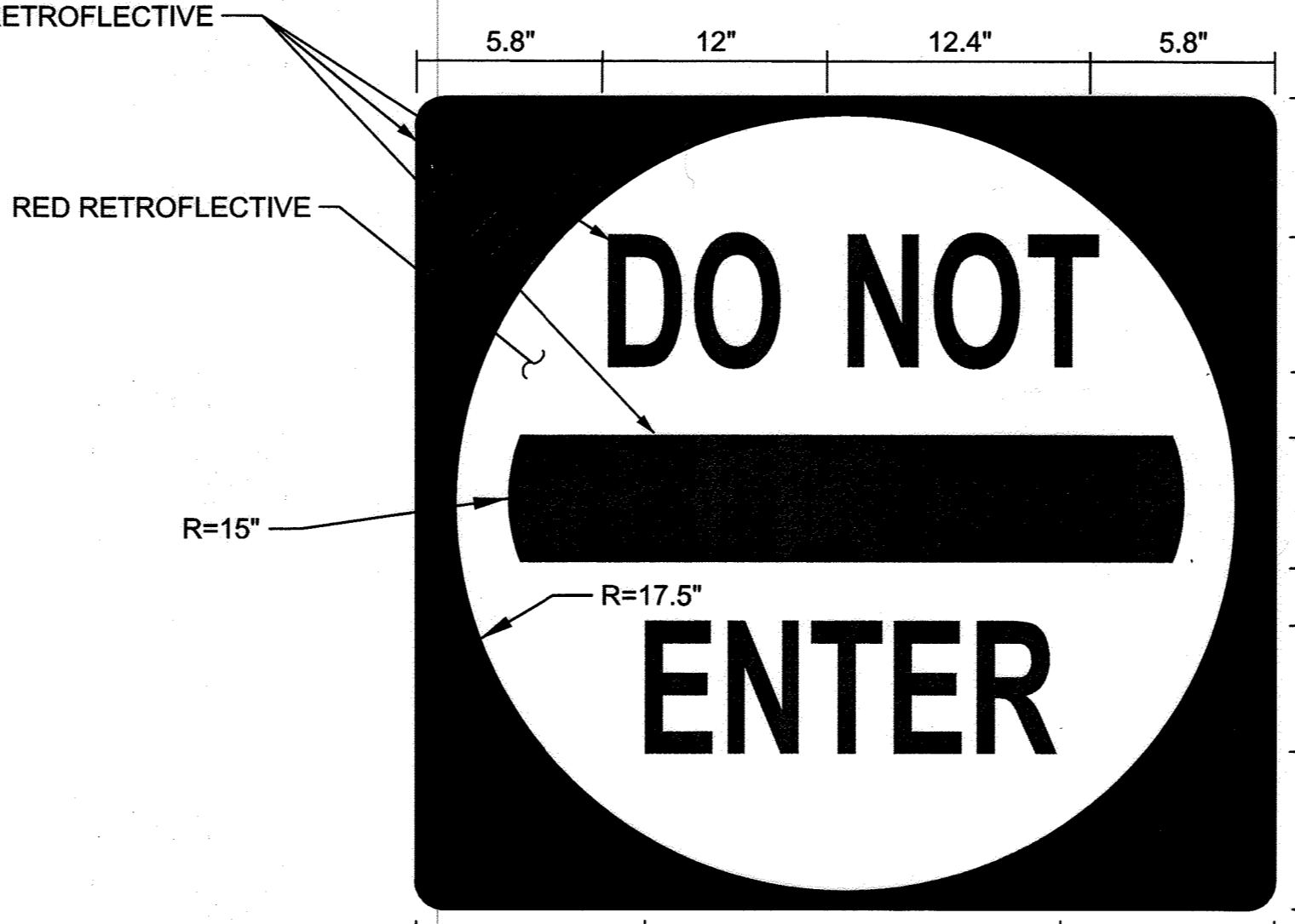
DES. BY: M. WERDER  
SCALE: NTS  
PROJ. No.: 58 OF 80

DRN. BY: M. WERDER  
DATE: 04/04/2016

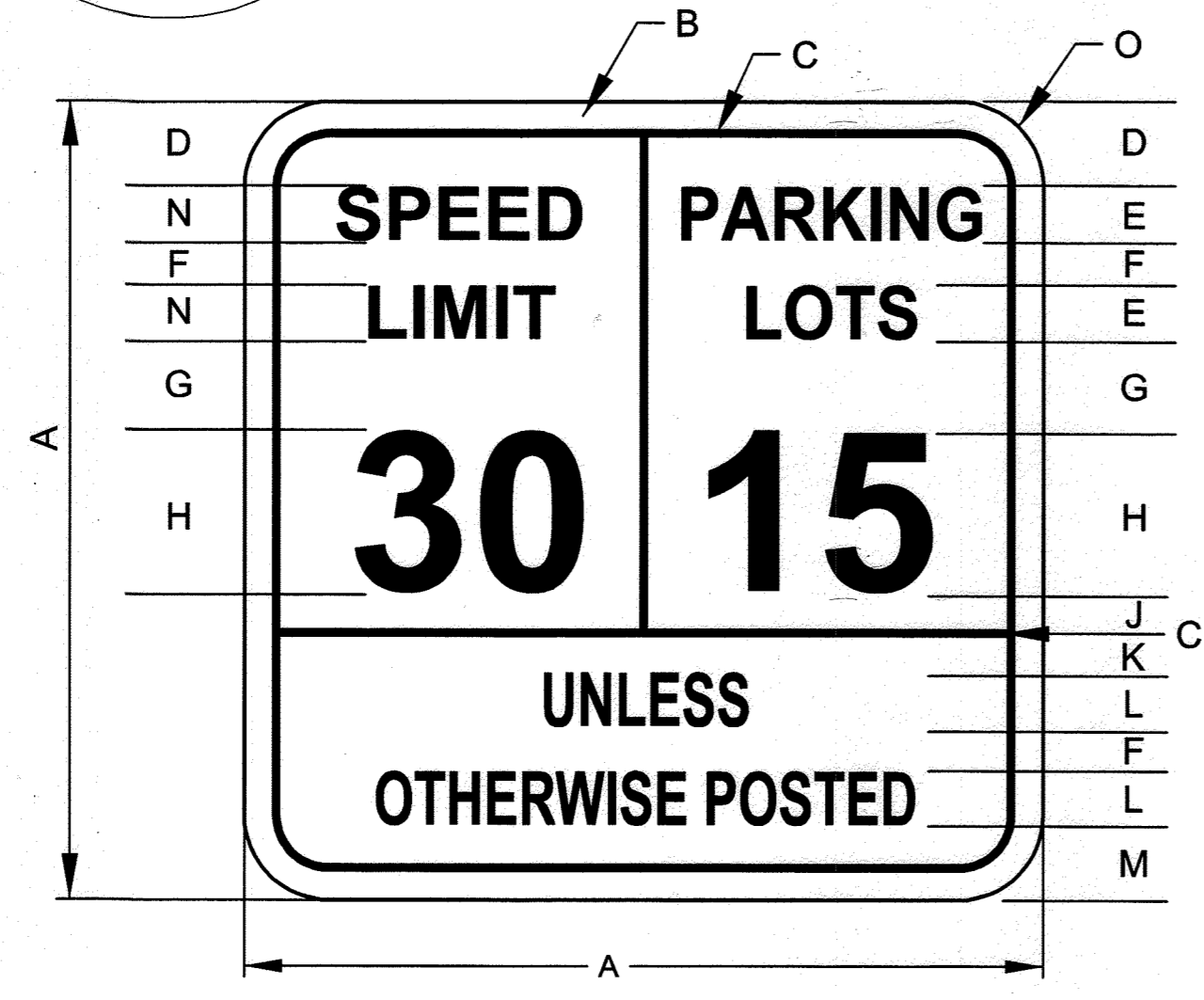
CHK. BY: R. CROWLEY  
APPROVED



1 WRONG WAY SIGN  
SCALE: NONE

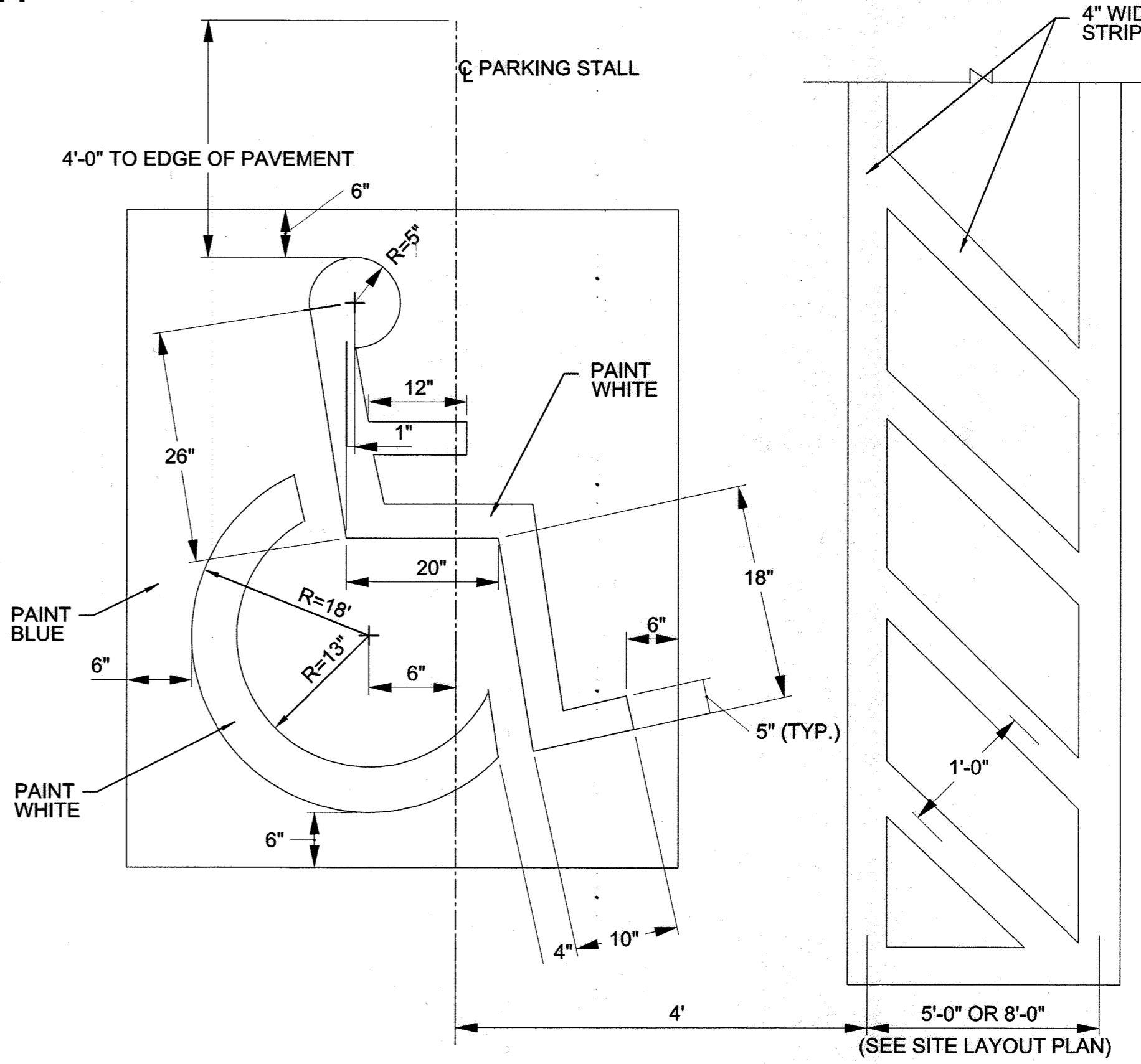


2 DO NOT ENTER SIGN  
SCALE: NONE

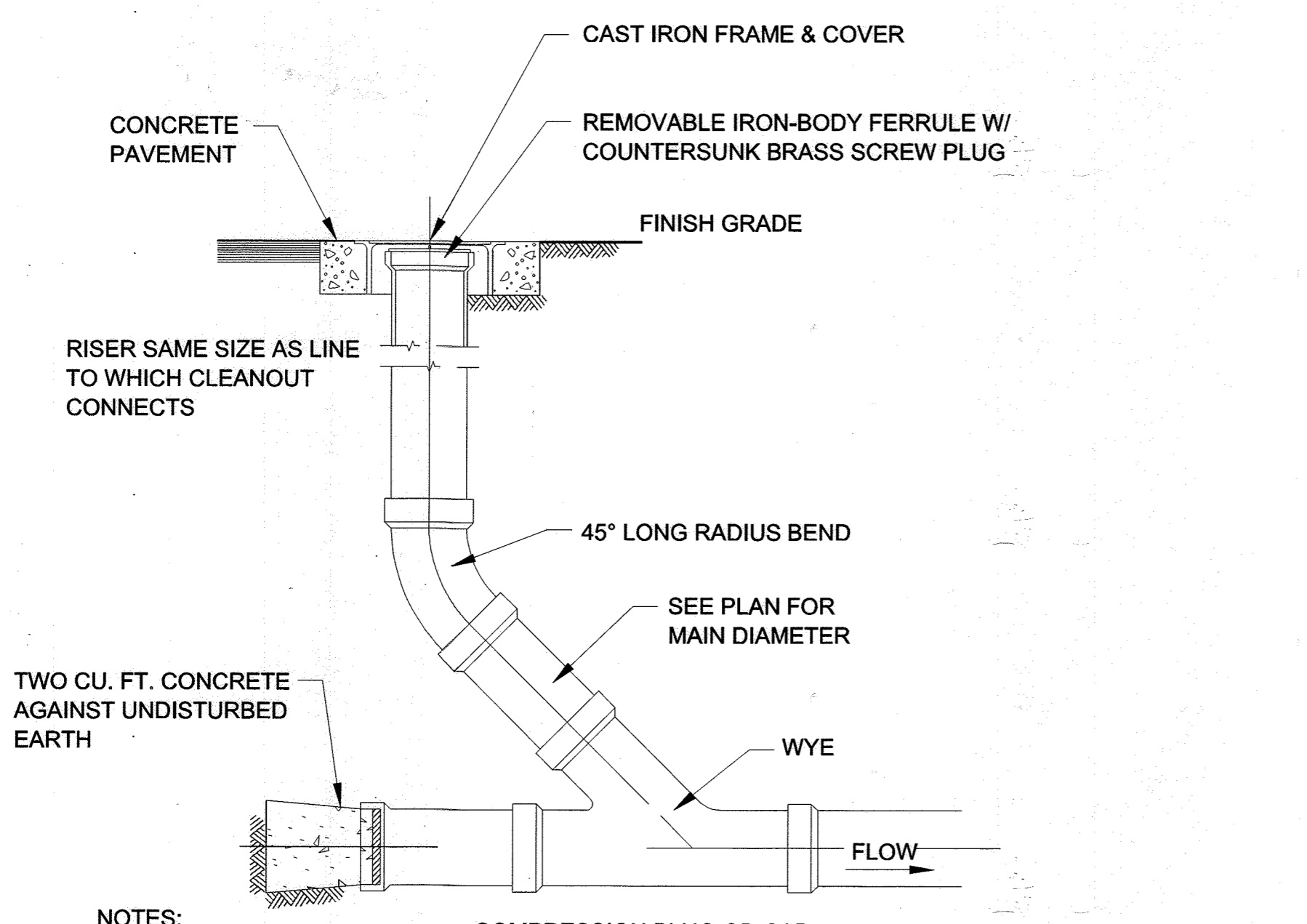


ID	A	B	C	D	E	F	G	H	J	K	L	M	N	O
INCHES	48	0.75	1.25	4	4C	2.5	3.5	10E	2	1.75	4B	4.5	4D	3

4 SPEED LIMIT SIGN  
SCALE: NONE

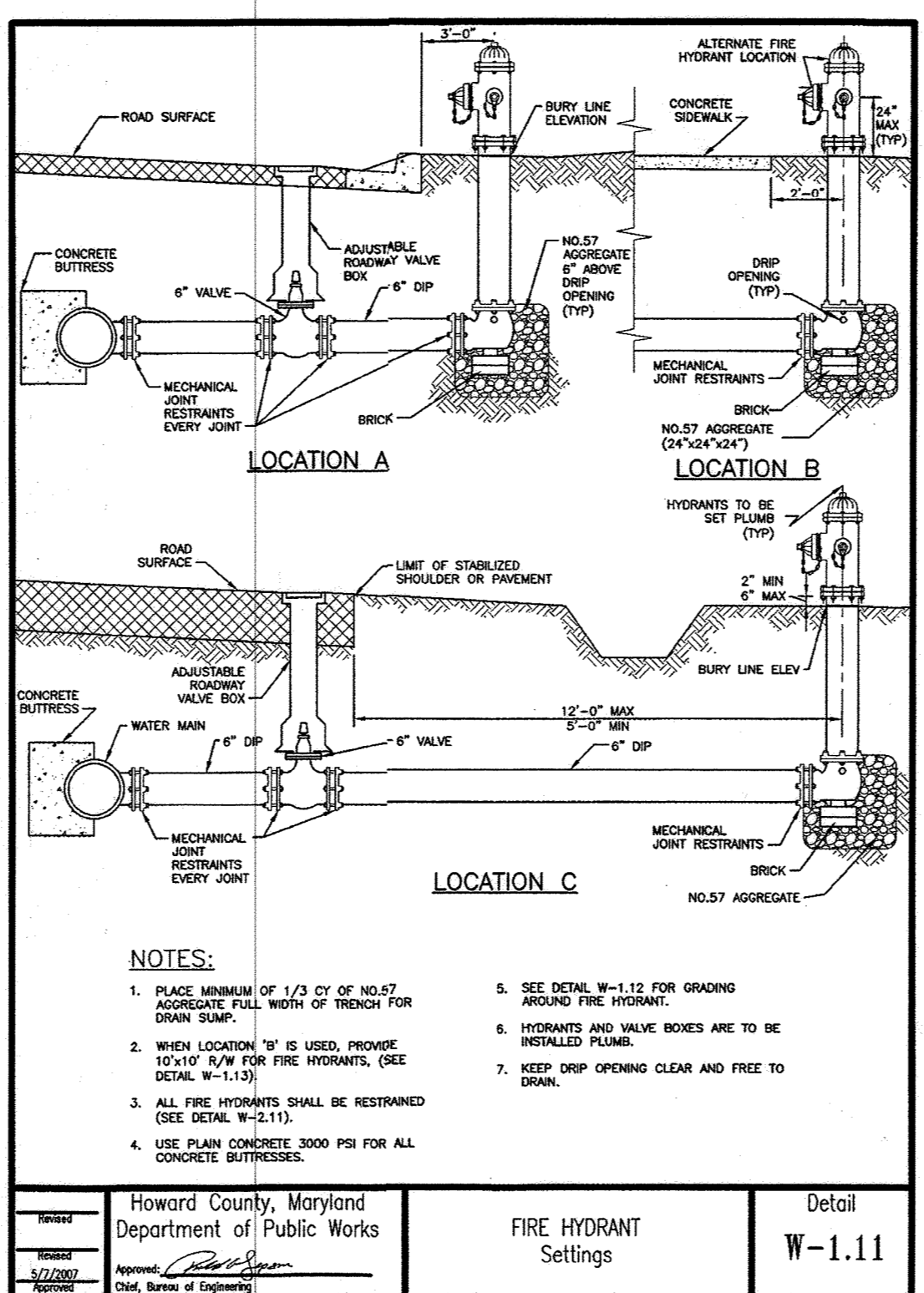


3 HANDICAP PARKING STALL  
SCALE: NONE

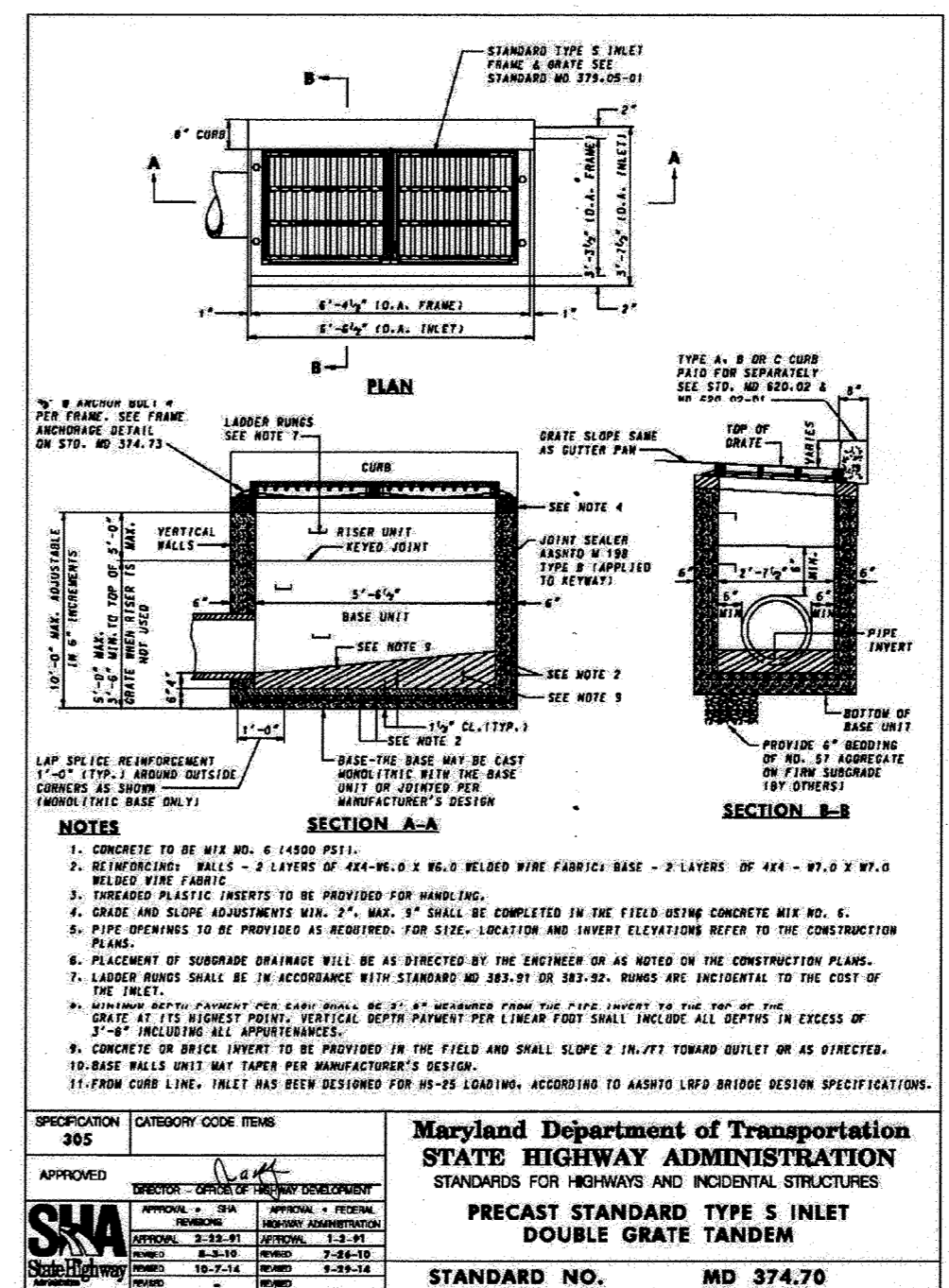


- NOTES:
- FERRULE AS SHOWN IS APPLICABLE TO 4"-8" PIPE. FOR 10"-15" PIPE USE A BLIND PLUG.
  - SUBSTITUTE CONNECTION TO UPSTREAM LINE FOR PLUG, WHERE SHOWN ON PLANS.
  - COVER SHALL BE CAST WITH LETTERS "C.O." ON TOP.
  - CLEANOUTS SHALL BE STANDARD TYPE UNLESS NOTED ON PLANS.

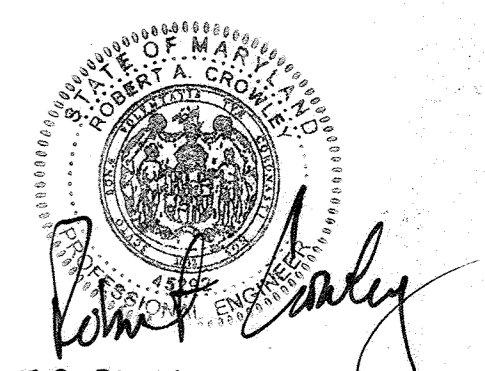
5 CLEANOUT  
SCALE: NONE



6 FIRE HYDRANT  
SCALE: NONE



7 TYPE S INLET  
SCALE: NONE



AS BUILT CERTIFICATION FOR PSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CROWLEY  
46292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Robert Crowley* 5-6-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Robert Crowley* 5-11-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*Robert Crowley* 5-16-16  
DIRECTOR DATE

DATE No. REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME TAX MAP LOT/PARCEL #  
EMERSON/RENTZ PROPERTY 47 15786  
PARCEL H, PARCEL D-1,  
PARCEL E-1, PARCEL F-1,  
PARCEL G-1, PARCEL I,  
PARCEL O, PARCEL Q

PLAT # 2379-2379 ZONE GRID  
15786 PEC 20  
DEED 11479 / 005 ELEC. DISTRICT  
6TH  
WATER CODE SEWER CODE

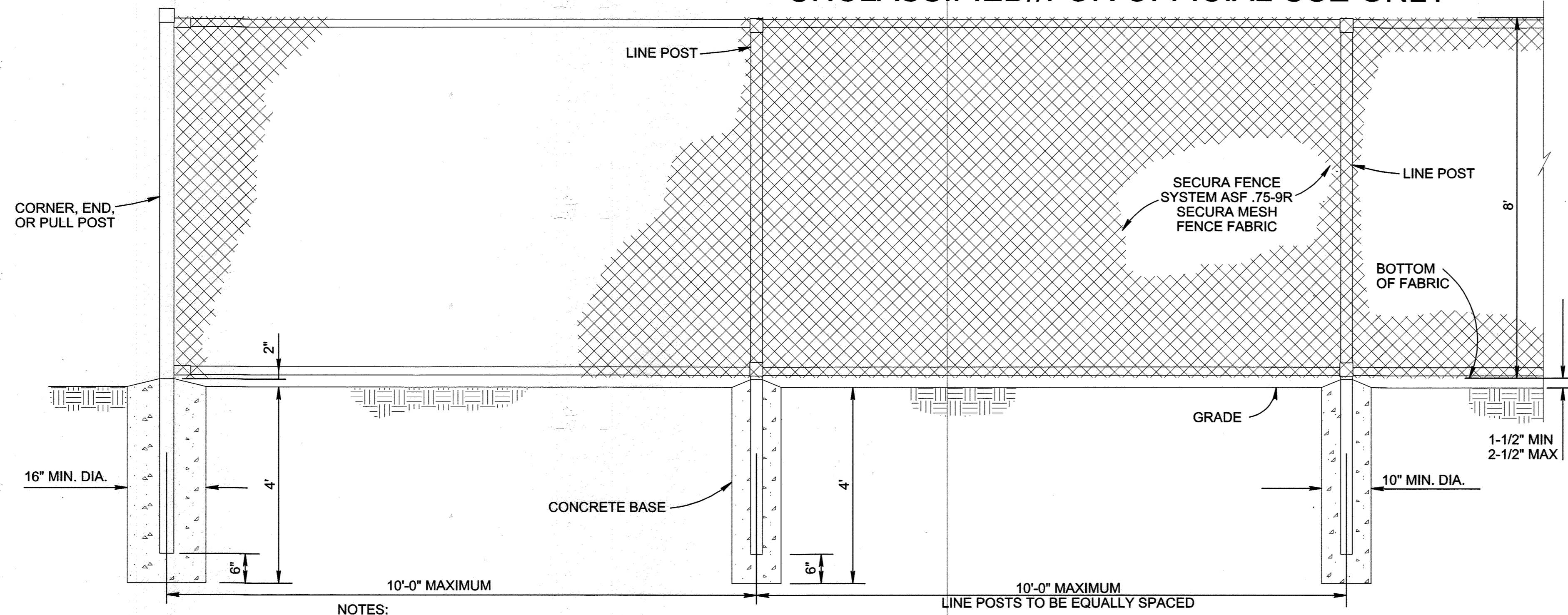
TITLE

SITE DETAILS

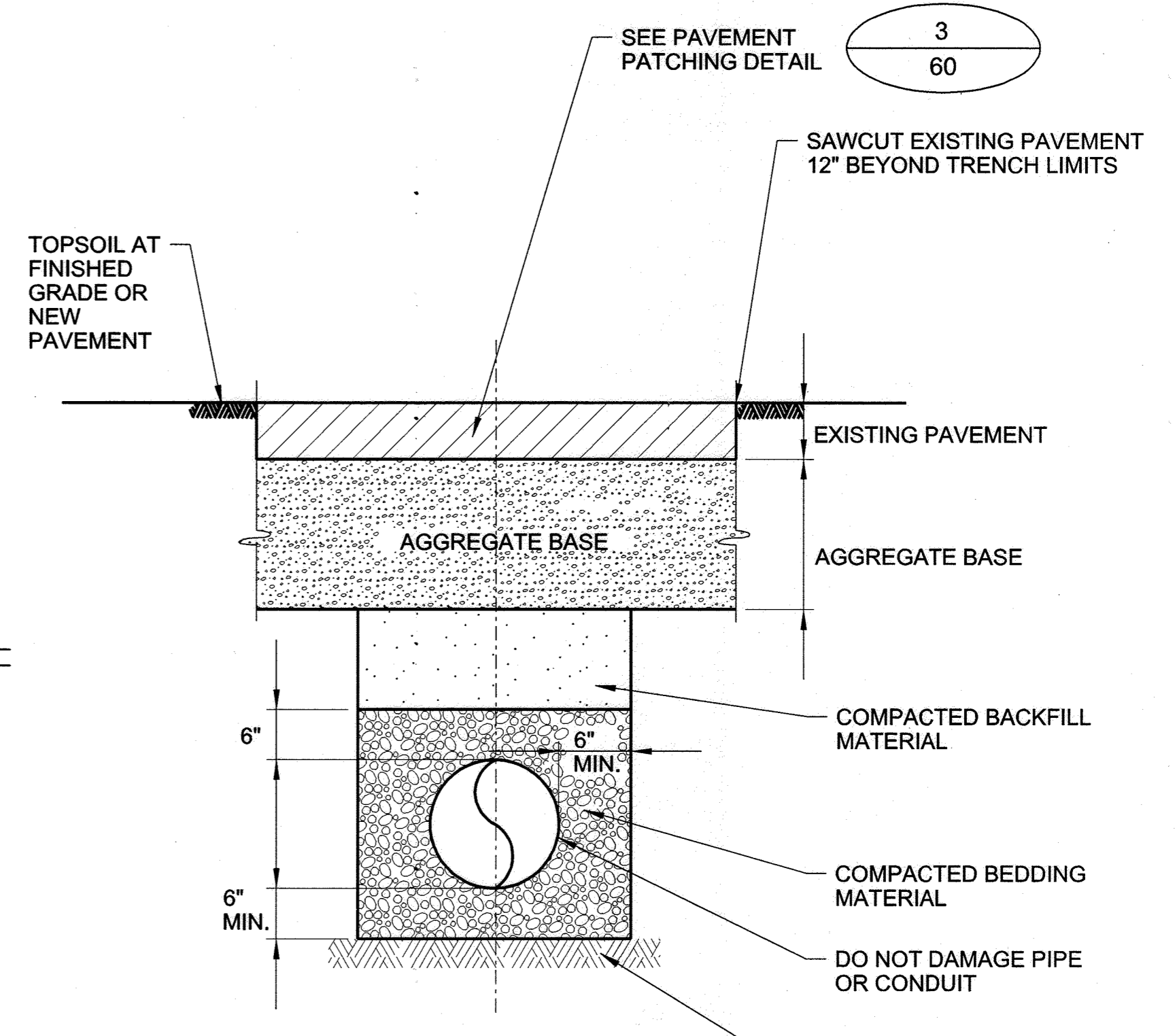
DWG. BY M. WERDER SCALE NTS PROJ. No.  
DRN. BY M. WERDER DATE 04/04/2016 59 OF 80  
CHK BY R. CROWLEY APPROVED



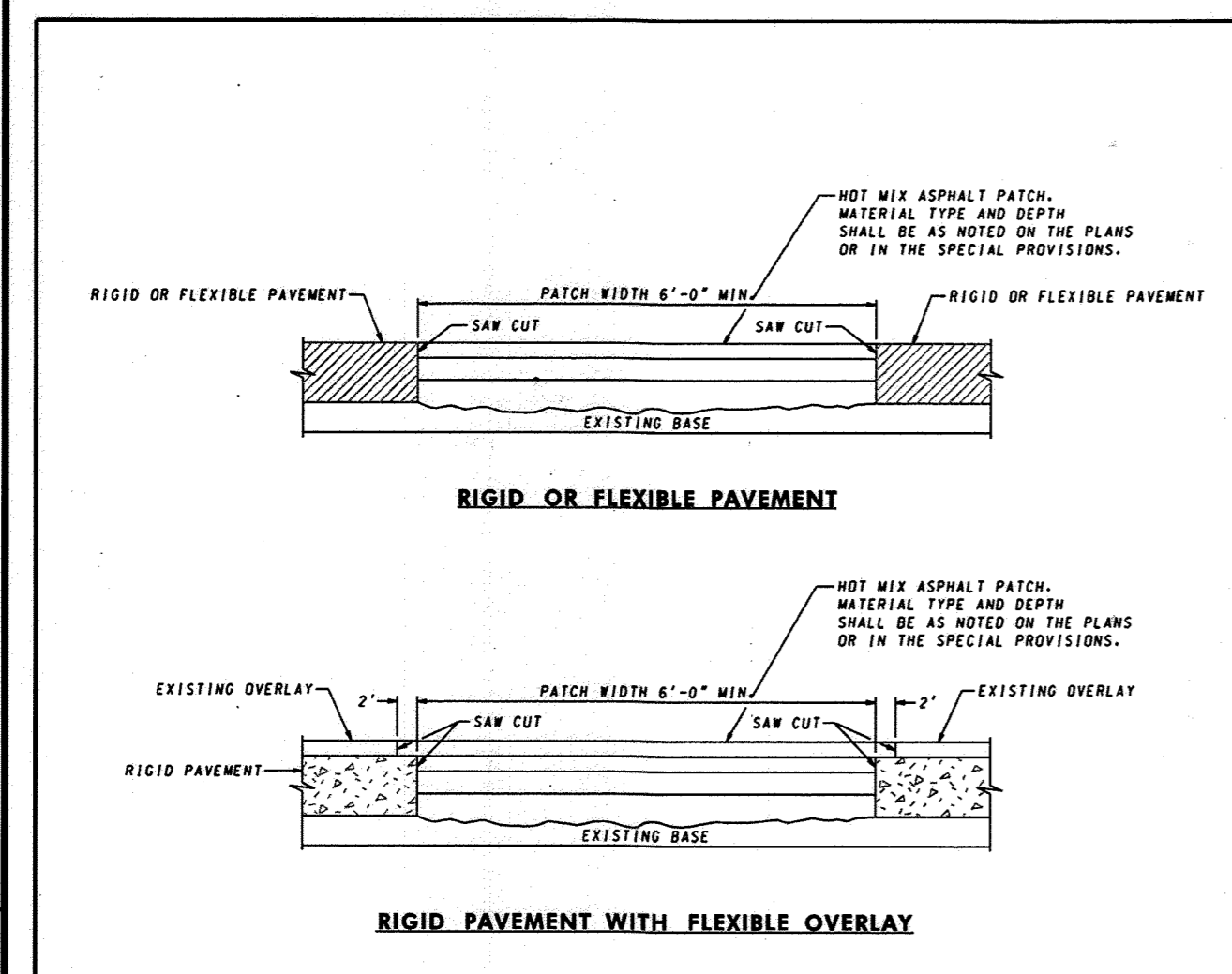
PROFESSIONAL CERTIFICATION  
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**1 8' AMERISTAR MATRIX FENCE FRAME**  
 SCALE: NONE  
 NOTES:  
 1. RAILS, POSTS, AND BRACES SHALL BE CONSTRUCTED ON THE SECURE SIDE OF THE FENCE ALIGNMENT. SECURA MESH FABRIC SHALL BE PLACED ON THE SIDE OPPOSITE THE SECURE AREA. FABRIC SHALL BE ATTACHED TO THE FENCE PER SECURA FENCE SYSTEM ASF .75-9R REQUIREMENTS.  
 DETAIL IS BASE DESIGN. CONTRACTOR MAY USE EQUIVALENT PRODUCT THAT MEETS PROJECT REQUIREMENTS AND SPECIFICATIONS AND AS APPROVED BY THE COR.

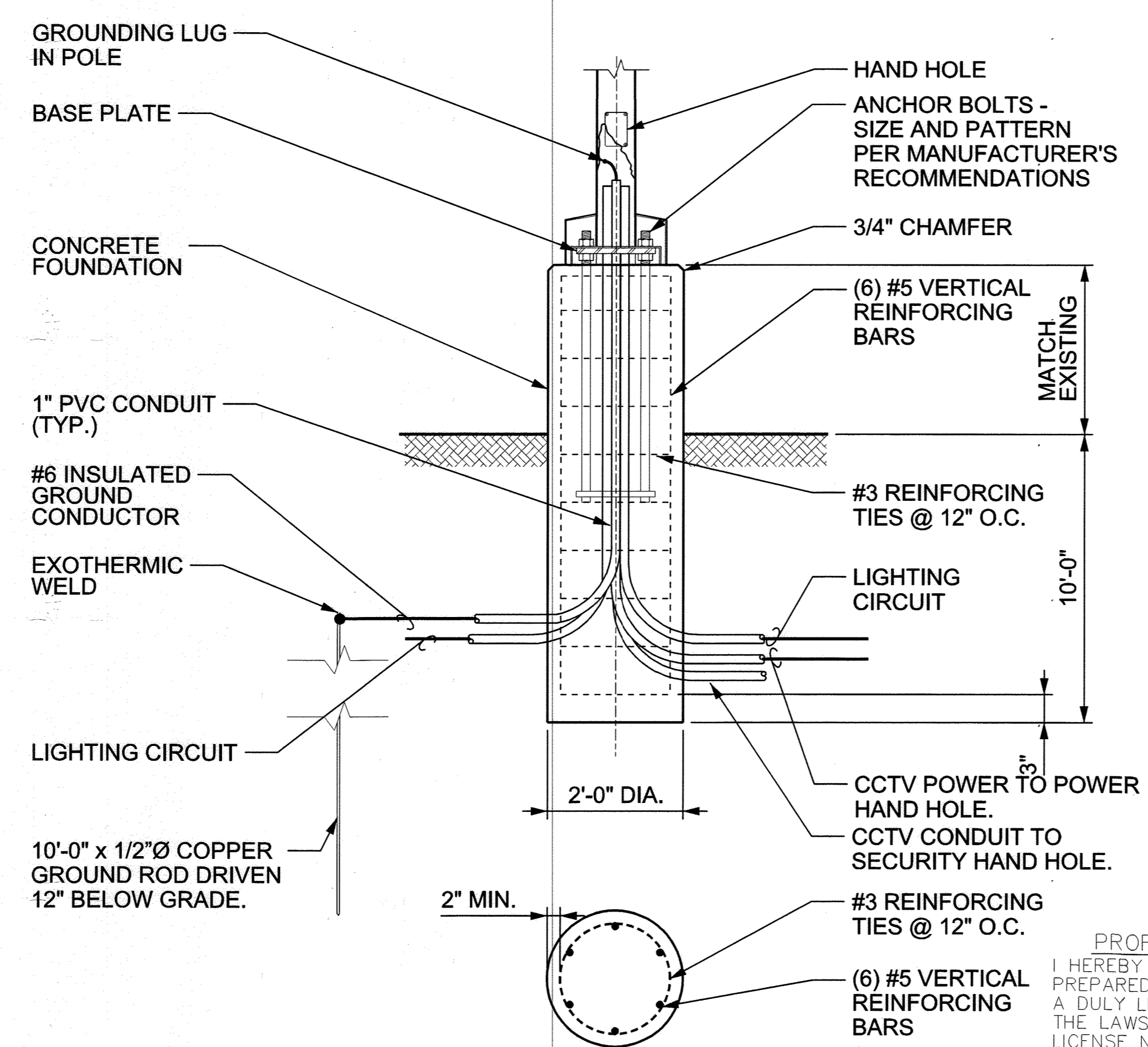


**2 TRENCHING DETAIL**  
 SCALE: NONE

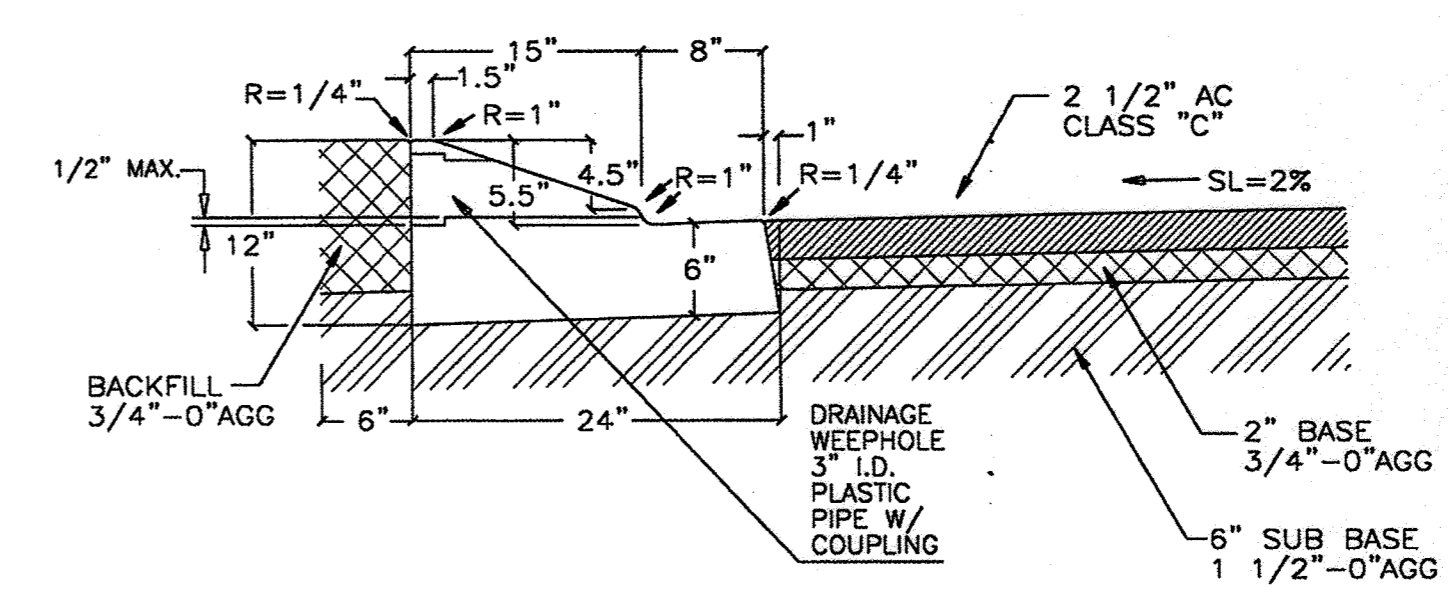


**3 PAVEMENT PATCHING DETAIL**  
 SCALE: NONE

APPROVED	<i>K.G. Miller</i>	DIRECTOR - OFFICE OF HIGHWAY DEVELOPMENT
APPROVED	<i>[Signature]</i>	DEPARTMENT OF TRANSPORTATION
APPROVED	<i>[Signature]</i>	STATE HIGHWAY ADMINISTRATION
APPROVED	<i>[Signature]</i>	PERMANENT PATCHING FOR RIGID OR FLEXIBLE PAVEMENT USING HOT MIX ASPHALT
APPROVED	<i>[Signature]</i>	STANDARD NO. MD 578.03



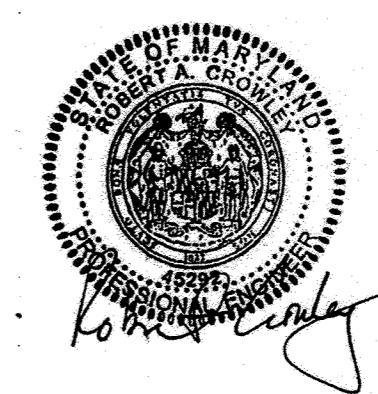
**4 SITE LIGHTING POLE FOUNDATION DETAIL**  
 SCALE: NTS



**5 MOUNTABLE CURB DETAIL**  
 SCALE: NONE

- NOTES**
- CONCRETE TO HAVE A COMPRESSIVE STRENGTH OF 3300 P.S.I. AT 28 DAYS.
  - CONTRACTION JOINTS
    - A. SPACING TO BE NOT MORE THAN 15 FEET.
    - B. THE DEPTH OF THE JOINT SHALL BE AT LEAST 1-1/2 INCHES.
    - C. WEEPHOLES TO BE CENTERED WITH CONTRACTION JOINTS.
  - BASE ROCK 1 1/2"-0 OR 3/4"-0, 95% (ASHTO T-180) COMPACTION. BASE ROCK SHALL BE TO SUBGRADE OF STREET STRUCTURE OR 4 INCHES, WHICHEVER IS GREATER, AND SHALL EXTEND 12" BEHIND THE CURB.
  - DRAINAGE WEEPHOLE - 3" DIAMETER PLASTIC PIPE
    - A. I.D. PLASTIC PIPE WITH COUPLING.
    - B. DRAINAGE ACCESS THROUGH EXISTING CURBS SHALL BE CORE DRILLED.
  - WHEN USING MOUNTABLE CURB 6" S/W SHALL BE USED.

PROFESSIONAL CERTIFICATION  
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AS BUILT CERTIFICATION FOR PSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY 2/18/19  
 45292

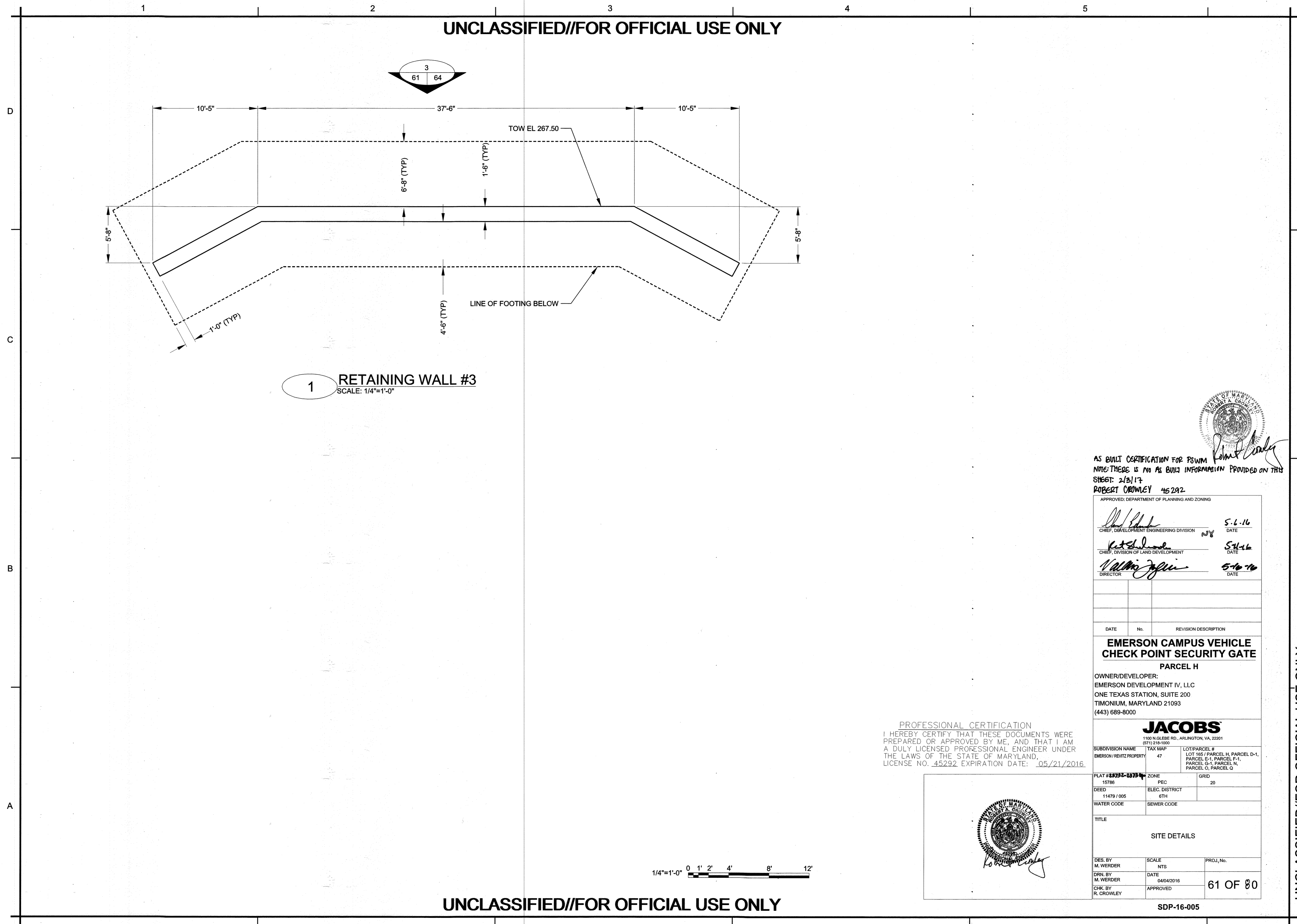
APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5-6-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

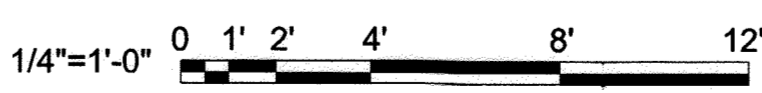
*[Signature]* 5-11-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 5-16-16  
 DIRECTOR DATE

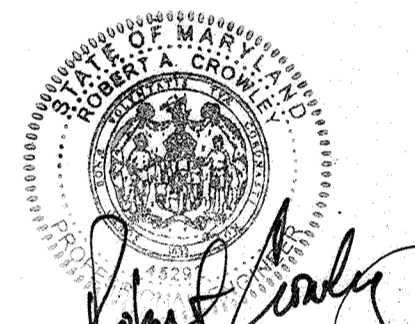
DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b> PARCEL H OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b> 1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT #	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
SITE DETAILS		
DES. BY	SCALE	PROJ. No.
M. WERDER	NTS	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK BY	APPROVED	60 OF 80
R. CROWLEY		



1 RETAINING WALL #3  
SCALE: 1/4"=1'-0"



AS BUILT CERTIFICATION FOR PSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET: 2/3/17  
ROBERT CROWLEY 45292



APPROVED: DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 5-6-16  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 5-16-16  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 5-16-16  
DIRECTOR DATE

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H

OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

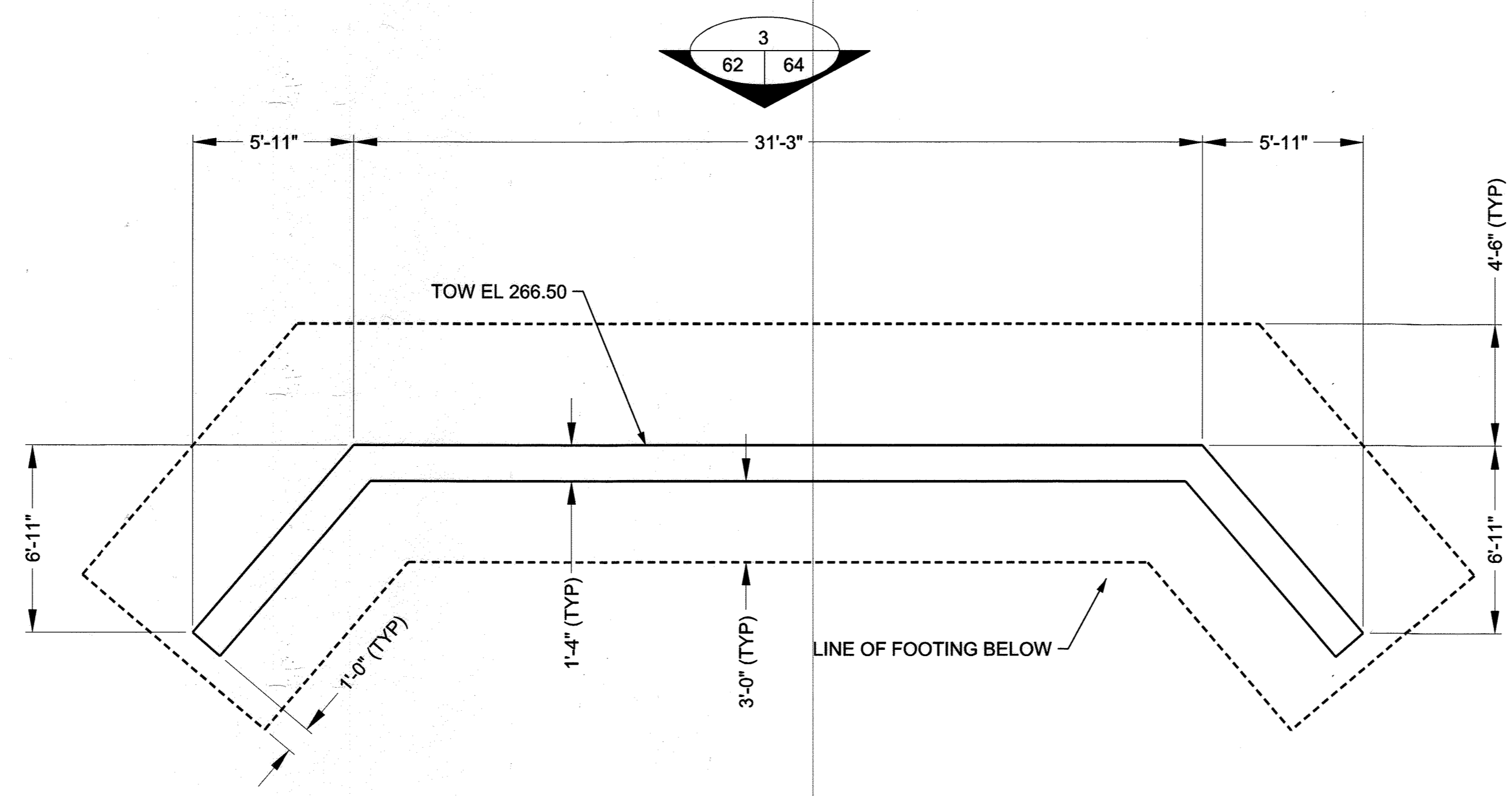


SUBDIVISION NAME EMERSON/RENTZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	SEWER CODE
TITLE		

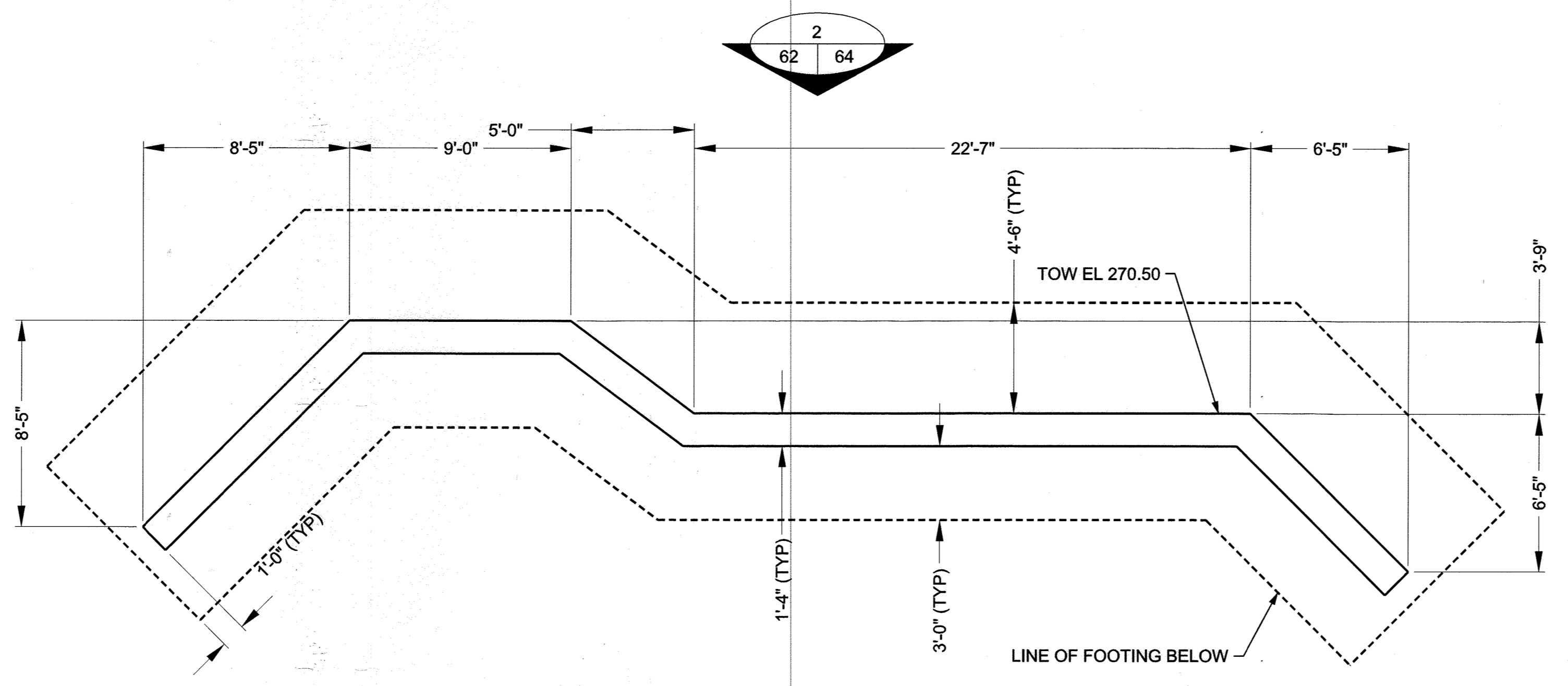
SITE DETAILS		
DES. BY M. WERDER	SCALE NTS	PROJ. No.
DRN. BY M. WERDER	DATE 04/04/2016	61 OF 80
CHK. BY R. CROWLEY	APPROVED	

PROFESSIONAL CERTIFICATION  
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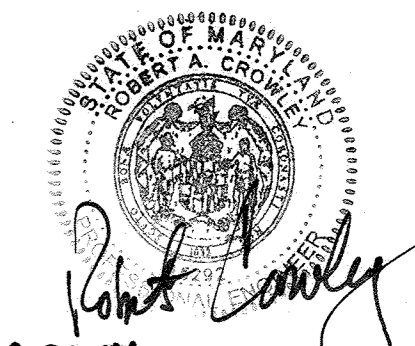
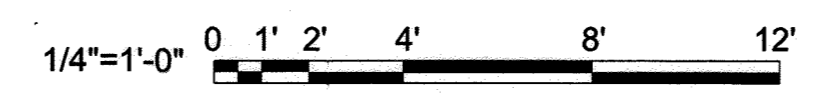
D  
C  
B  
A



1 RETAINING WALL #2  
SCALE: 1/4"=1'-0"



2 RETAINING WALL #1  
SCALE: 1/4"=1'-0"



AS BUILT CERTIFICATION FOR PSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/2/17  
 ROBERT CROWLEY 45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>Shel Edick</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>Kate Schuch</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>Neil W. Joffe</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
------	-----	----------------------

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000



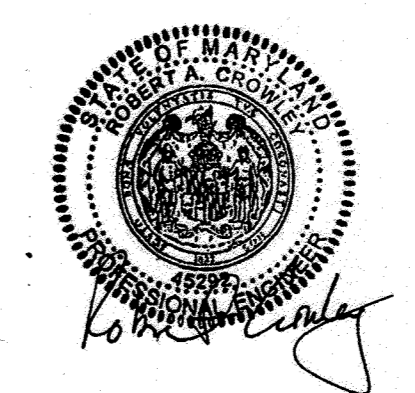
SUBDIVISION NAME EMERSON / REVITZ PROPERTY		TAX MAP 47	LOT/PARCEL # LOT 155 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
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PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

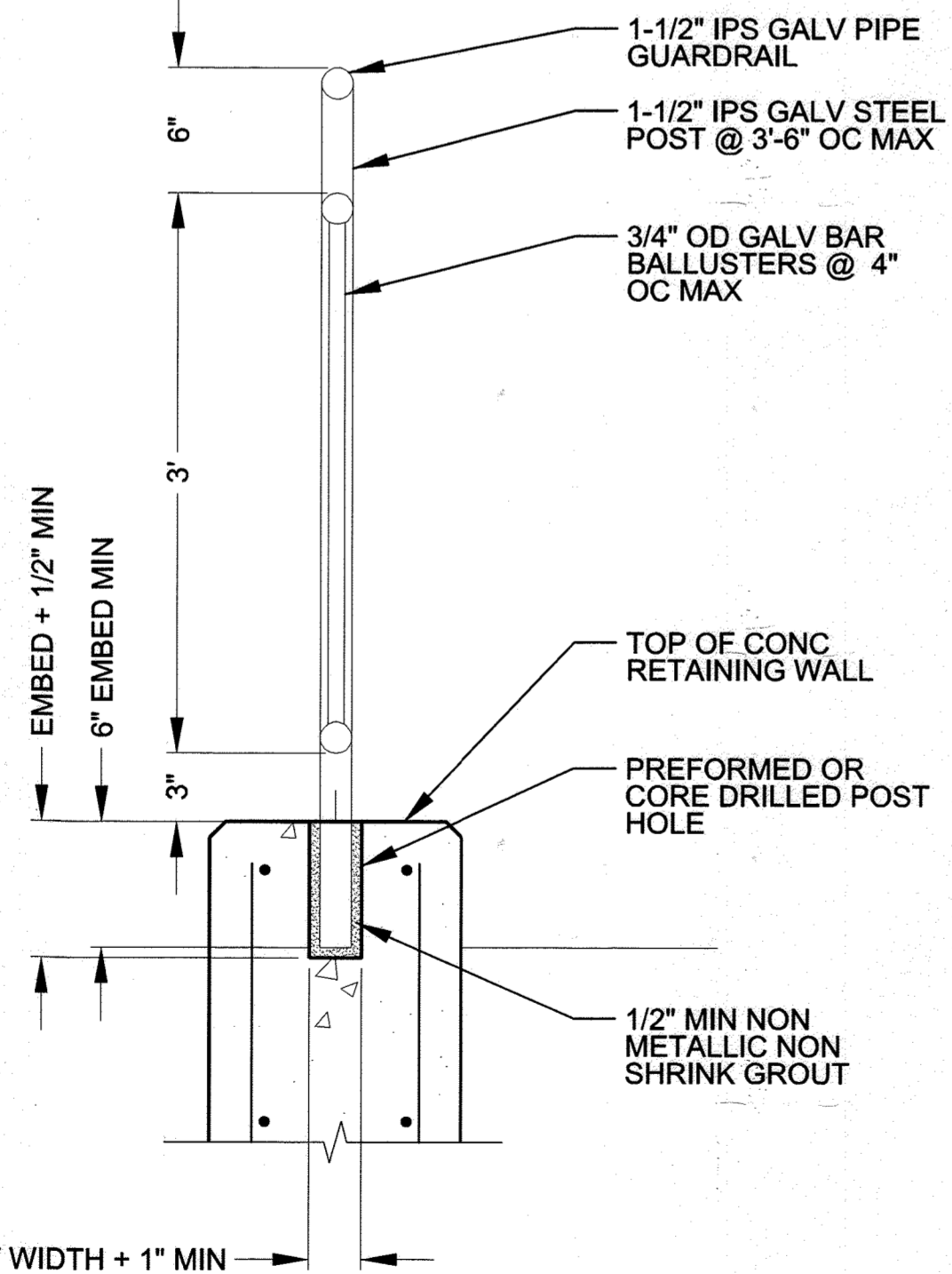
TITLE

SITE DETAILS

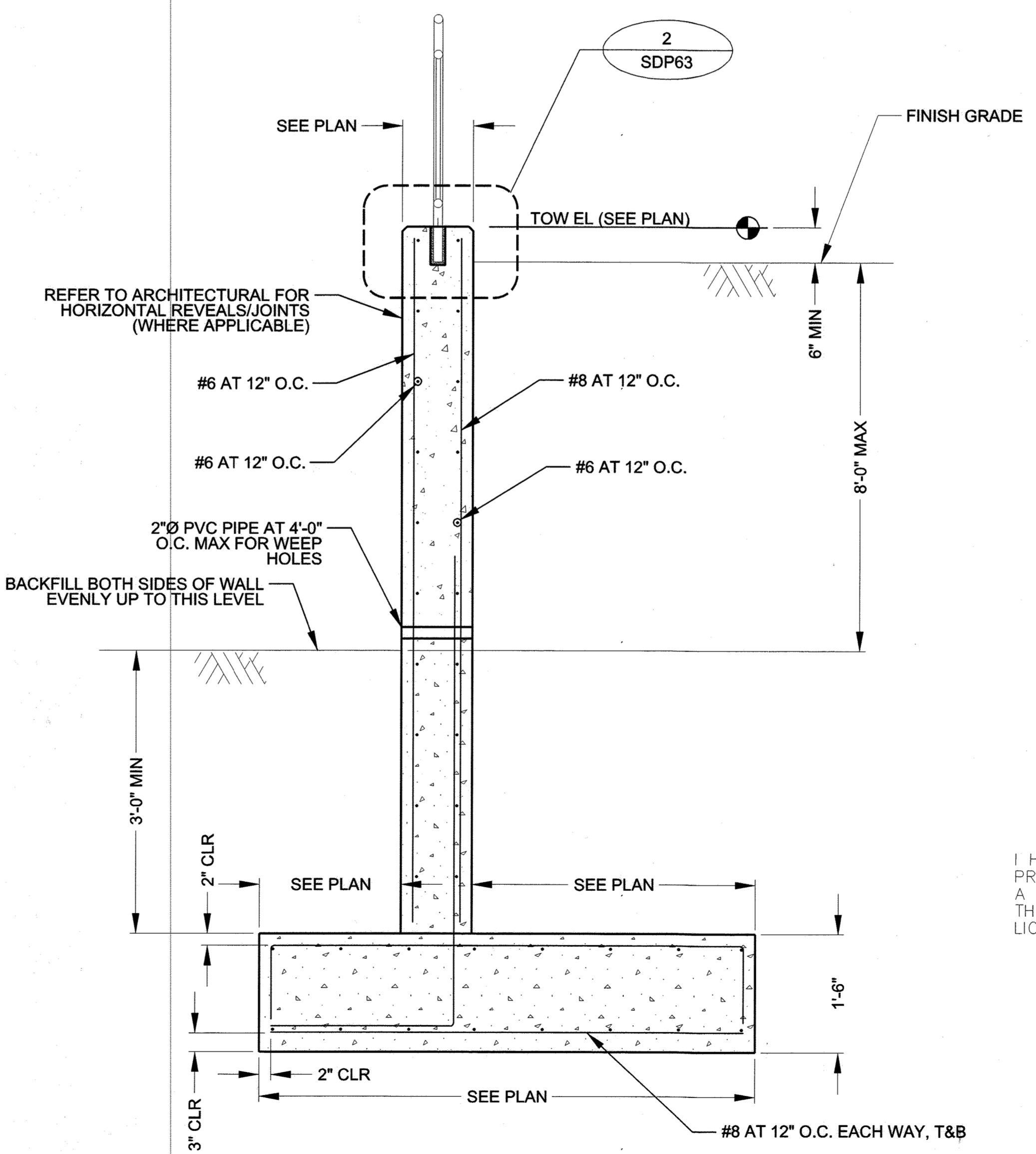
DES. BY M. WERDER	SCALE NTS	PROJ. No. 62 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	



UNCLASSIFIED//FOR OFFICIAL USE ONLY

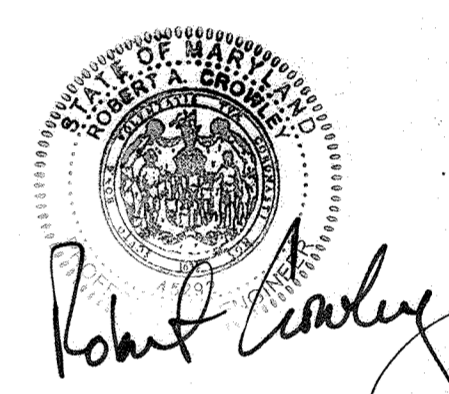
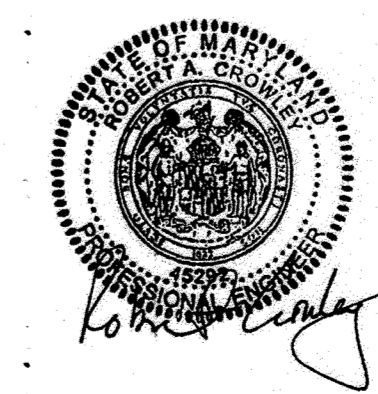


**2 RAILING EMBEDMENT DETAIL**  
 SCALE: 1-1/2"=1'-0"  
 1 1/2"=1'-0" 0 3" 6" 1' 2'



**1 RETAINING WALL SECTION**  
 SCALE: 3/4"=1'-0"  
 3/4"=1'-0" 0 6" 1' 2' 4'

PROFESSIONAL CERTIFICATION  
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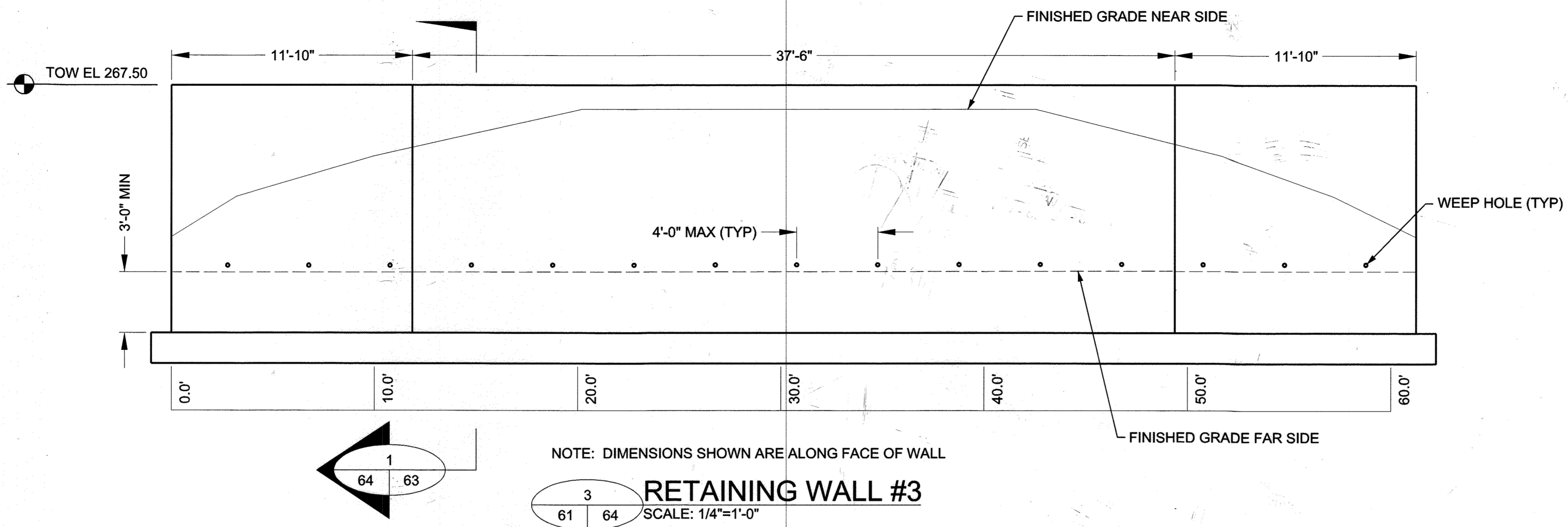


AS BUILT CERTIFICATION FOR PSWM  
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 ROBERT CROWLEY 45292

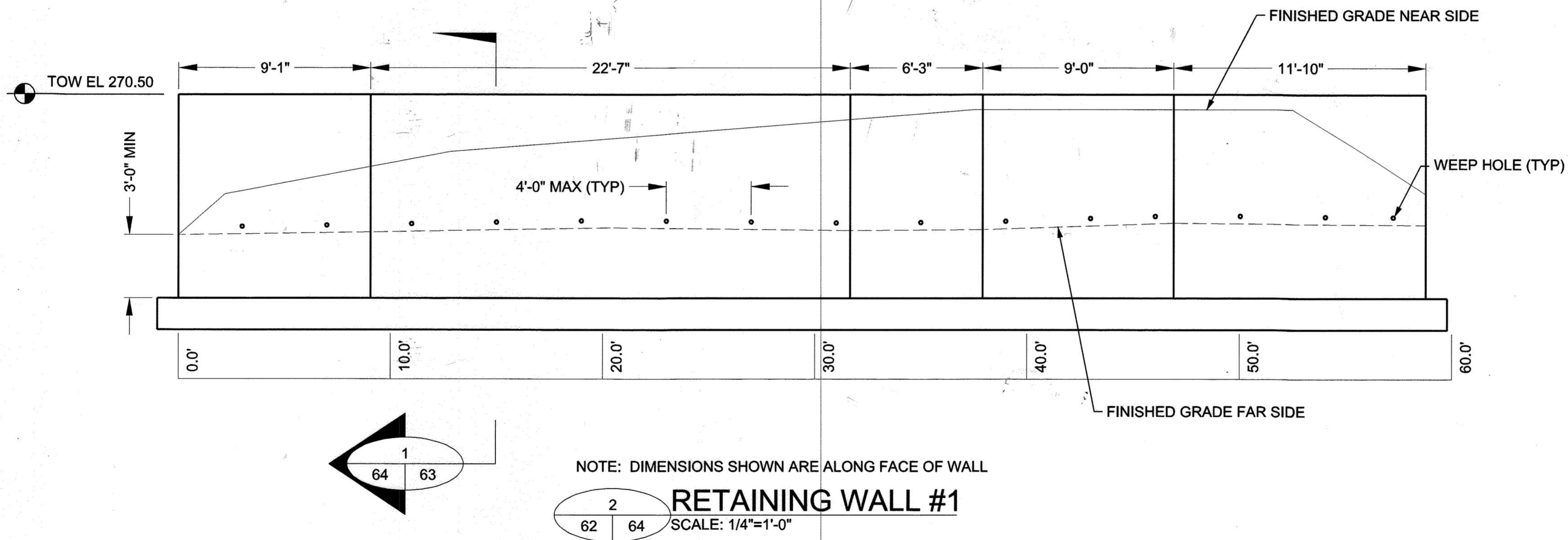
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
PARCEL H		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N. GLEBE RD., ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME EMERSON/REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	
TITLE		
SITE DETAILS		
DES. BY M. WERDER	SCALE NTS	PROJ. No. 63 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

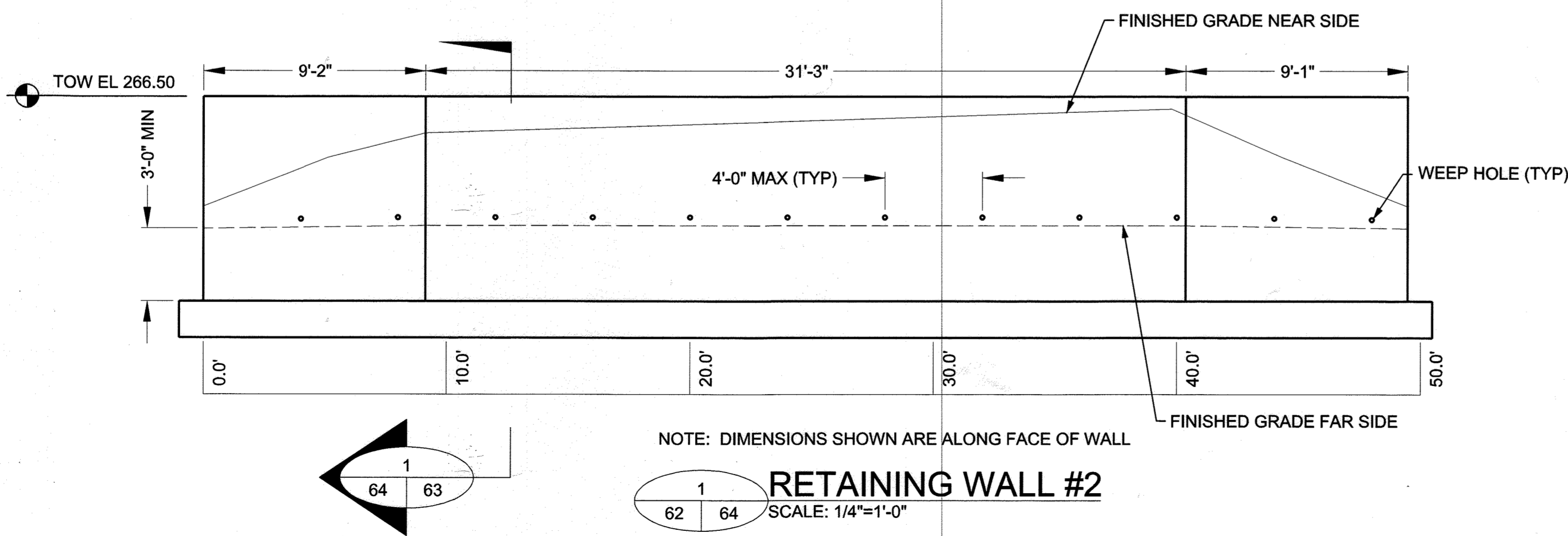
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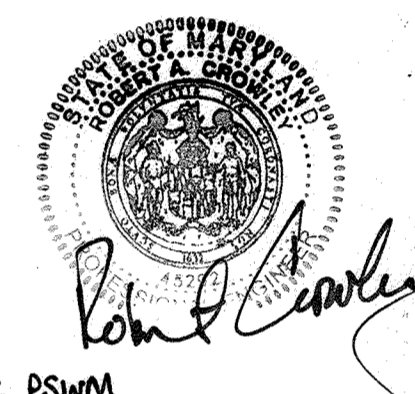
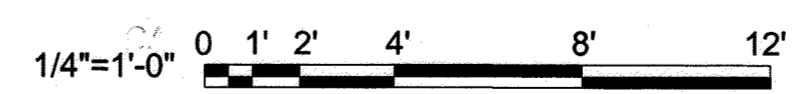
**RETAINING WALL #3**  
SCALE: 1/4"=1'-0"



**RETAINING WALL #1**  
SCALE: 1/4"=1'-0"



**RETAINING WALL #2**  
SCALE: 1/4"=1'-0"



AS BUILT CERTIFICATION FOR PSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/3/17  
ROBERT CROWLEY 46292

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-11-16 DATE
<i>[Signature]</i> DIRECTOR	5-10-16 DATE

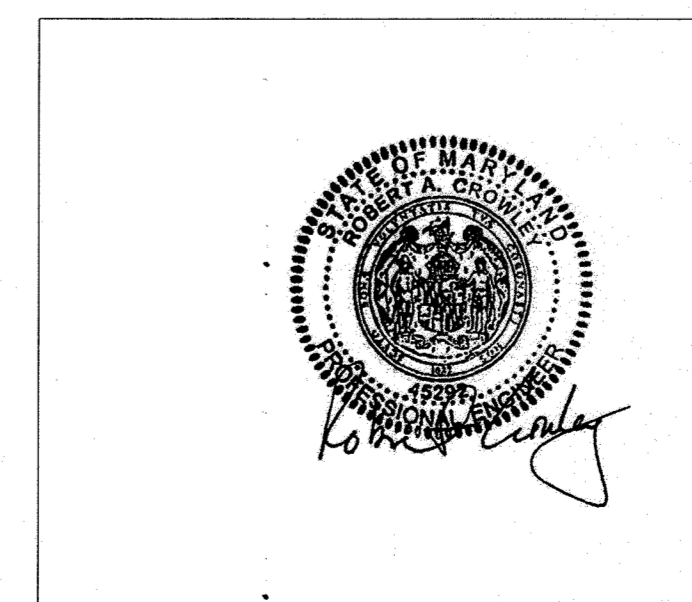
DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
PARCEL H  
OWNER/DEVELOPER:  
EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(703) 218-1000

SUBDIVISION NAME EMERSON/REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 155 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	SEWER CODE
WATER CODE	TITLE	

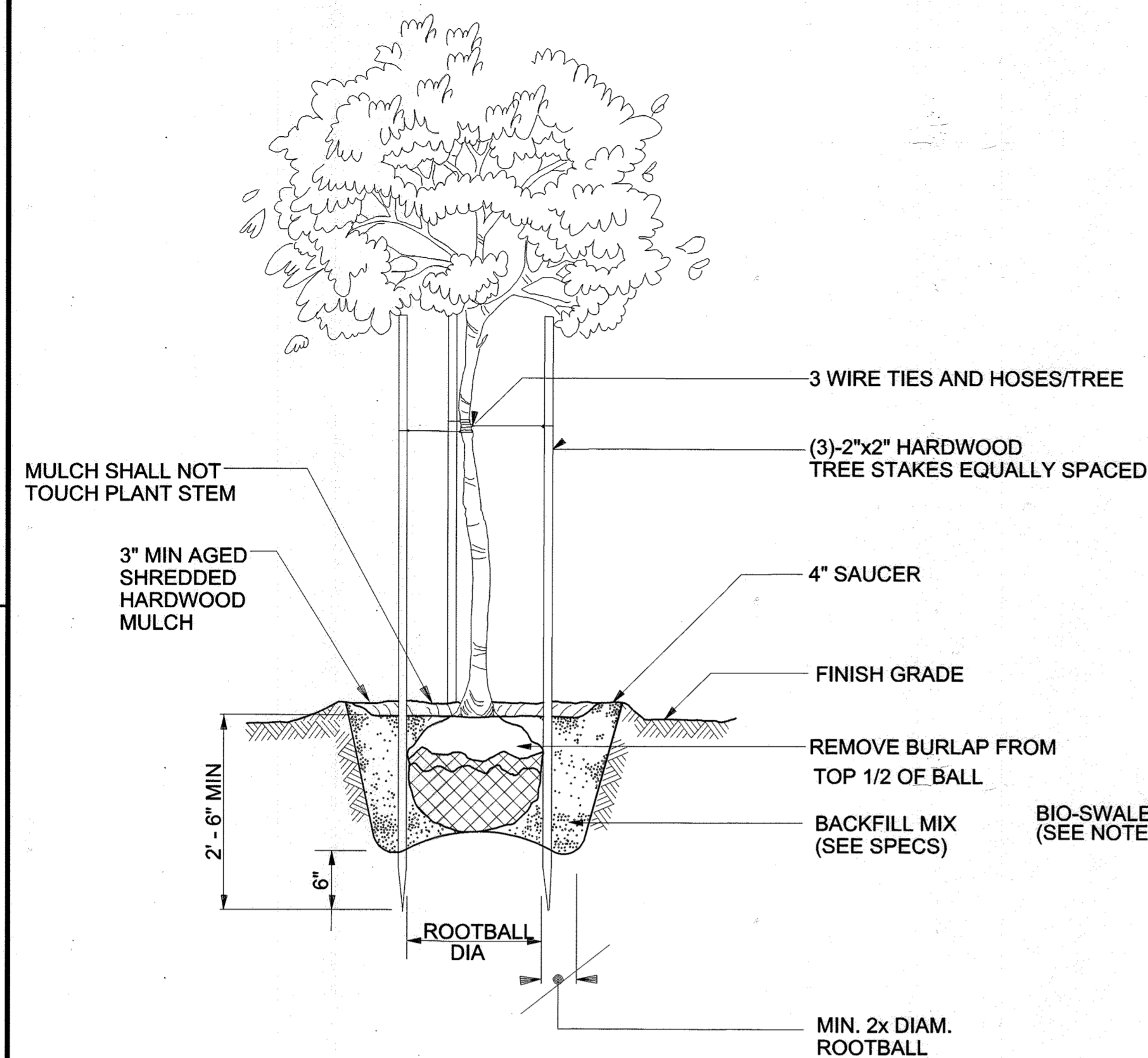
SITE DETAILS		
DES. BY M. WERDER	SCALE NTS	PROJ. No. 64 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	



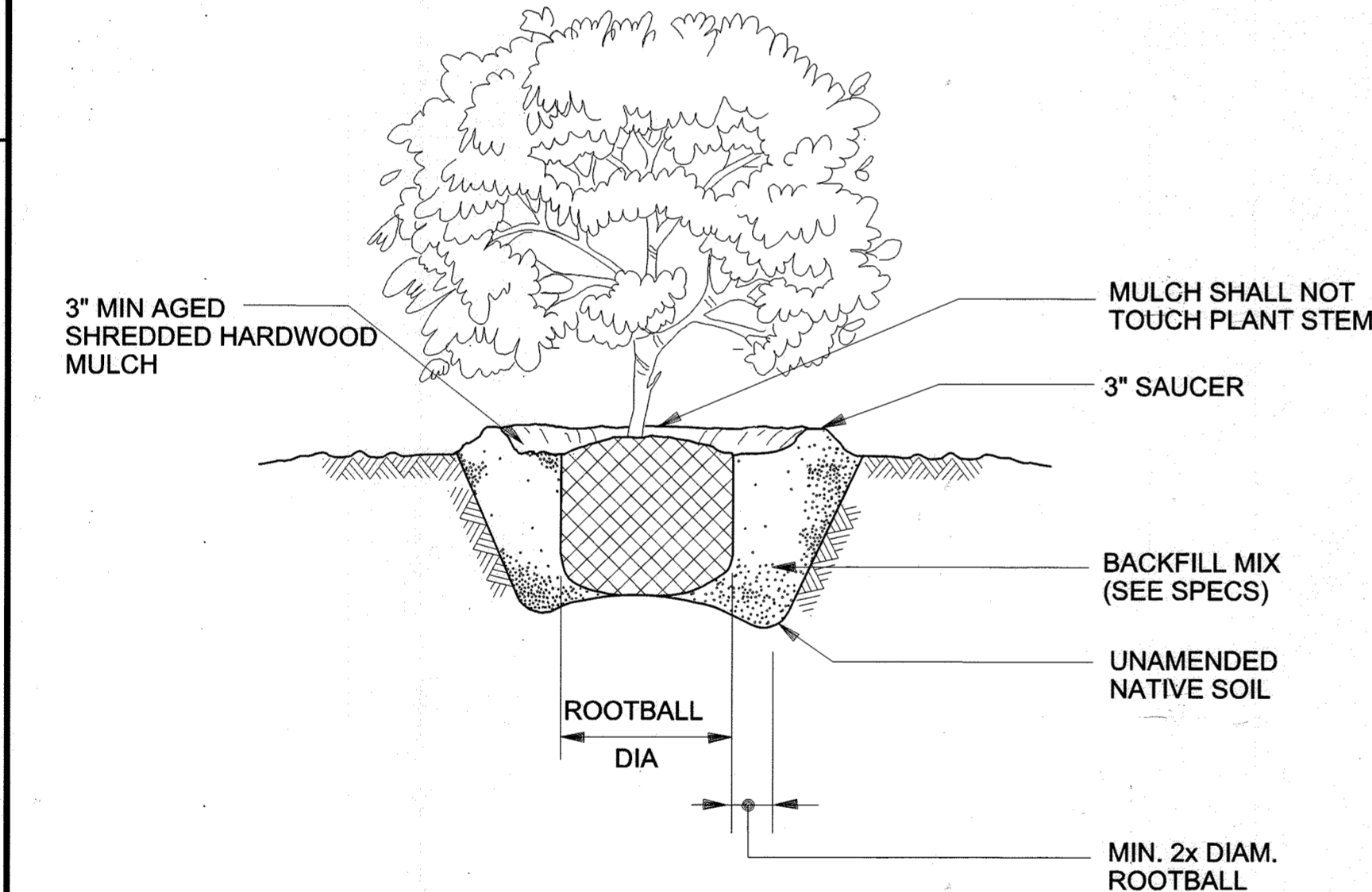
UNCLASSIFIED//FOR OFFICIAL USE ONLY



UNCLASSIFIED//FOR OFFICIAL USE ONLY



2 DECIDUOUS TREE PLANTING  
SCALE: NONE



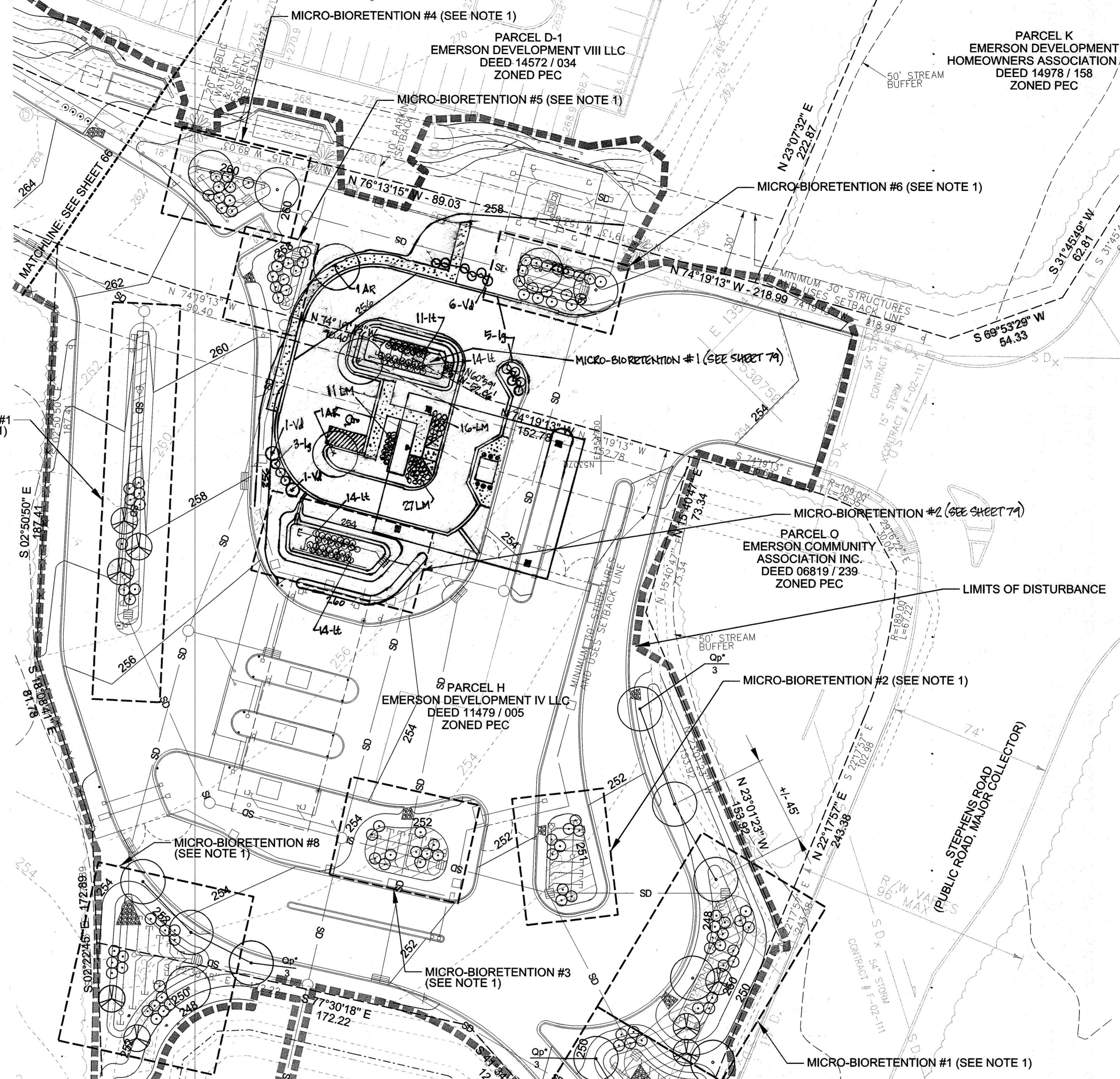
1 SHRUB PLANTING  
SCALE: NONE

LM	GROUND COVER	LILY TURF	1 GALLON	1/2\"/>		
<b>PLANT LIST</b>						
<b>TREES</b>						
Key	Quantity	Botanical Name	Common Name	Size	Condition	Notes
Ar	7	Acer rubrum 'October Glory'	October Glory Red Maple	2.5" cal. min	B & B	ADDED PER REVISION 1
Qp	27	Quercus phellos	Willow Oak	2.5" cal. min	B & B	
Bn	6	Betula nigra 'Heritage'	Heritage River Birch	2.5" cal. min	B & B	
Mv	3	Magnolia virginiana	Sweetbay Magnolia	8' ht	B & B	
<b>SHRUBS</b>						
Key	Quantity	Botanical Name	Common Name	Size	Condition	Notes
Vd	28	Viburnum dentatum	Arrowwood Viburnum	36" min.	B & B	1 ADDED PER REVISION 1
It	28	Itea virginica 'Henry's Garnet'	Virginia Sweetpire	30" Min.	B & B	68 ADDED PER REVISION 1
Iv	34	Ilex verticillata 'Winter Red'	Winterberry 'Winter Red'	36" min.	B & B	Provide 1 male plant per group
Cl	28	Cethra alnifolia	Summerweet	36" min.	B & B	
Ig	18	Ilex glabra	Inkberry	36" min.	B & B	8 ADDED PER REVISION 1

\* DENOTES STREET TREE REPLACEMENT

**SHEET NOTES:**

- FOR ENLARGED VIEWS OF THE MICRO-BIORETENTION FACILITIES AND BIO-SWALE SEE SHEETS 67-68 OF THE LANDSCAPING PLANS.
- FOR MICRO-BIORETENTION AND BIO-SWALE DETAILS SEE SHEET 34.



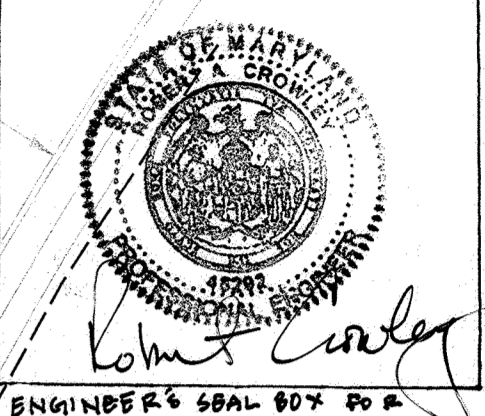
**SEED MIX SPECIFICATION**

FACTW SEED MIX- ERNMX 733 MD COASTAL PLAIN FACTW MIX BY ERNST SEEDS- SOW AT 0.34 LB/1,000 SF. LOCATION: BOTTOM TO 1' DEPTH.

- 30% REDTOP PANICGRASS, COASTAL PLAIN NC ECOTYPE (PANICUM RIGIDULUM (P. STIPITATUM), COASTAL PLAIN NC ECOTYPE)
- 15% VIRGINIA WILDRYE, PA ECOTYPE (ELYMUS VIRGINICUS, PA ECOTYPE)
- 12% LURID (SHALLOW) SEDGE, PA ECOTYPE (CAREX LURIDA, PA ECOTYPE)
- 6% GREEN BULRUSH, PA ECOTYPE (SCIRPUS ATROVIRENS, PA ECOTYPE)
- 5% BLUNT BROOM SEDGE, PA ECOTYPE (CAREX SCOPARIA, PA ECOTYPE)
- 5% HOP SEDGE, MD ECOTYPE (CAREX LUPULINA, MD ECOTYPE)
- 5% BEAKED PANICGRASS, EASTERN SHORE MD ECOTYPE (PANICUM ANCEPS, EASTERN SHORE MD ECOTYPE)
- 4% BLUE VERVAIN, PA ECOTYPE (VERBENA HASTATA, PA ECOTYPE)
- 3% SQUARROSE SEDGE, VA ECOTYPE (CAREX SQUARROSA, VA ECOTYPE)
- 3% SOFT RUSH (JUNCUS EFFUSUS)
- 2% COMMON SNEEZEWEED, NORTHERN VA ECOTYPE (HELENIUM AUTUMNALE, NORTHERN VA ECOTYPE)
- 2% BONESET, PA ECOTYPE (EUPATORIUM PERFOLIATUM, PA ECOTYPE)
- 2% WOOLGRASS, PA ECOTYPE (SCIRPUS CYPERINUS, PA ECOTYPE)
- 1% FRINGED (NODDING) SEDGE, PA ECOTYPE (CAREX CRINITA, PA ECOTYPE)
- 1% SWAMP MILKWEED, PA ECOTYPE (ASCLEPIAS INCARNATA, PA ECOTYPE)
- 1% NEW YORK IRONWEED, PA ECOTYPE (VERNONIA NOVEBORACENSIS, PA ECOTYPE)
- 1% SENSITIVE FERN (ONOCLEA SENSIBILIS)
- 1% SQUARE STEMMED MONKEYFLOWER, PA ECOTYPE (MIMULUS RINGENS, PA ECOTYPE)
- 0.5% SEEDBOX, PA ECOTYPE (LUDWIGIA ALTERNIFOLIA, PA ECOTYPE)
- 0.5% LIZARD'S TAIL, NC ECOTYPE (SAURURUS CERNUUS, NC ECOTYPE)

PROFESSIONAL CERTIFICATION  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 966 EXPIRATION DATE: 04/21/2016

REVISED PLAN TO INCLUDE NEW SITE LAYOUT AND LANDSCAPE



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. 45292 Expiration Date: 05/12/2016



AS BUILT CERTIFICATION FOR PSWIM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET. 2/13/17  
ROBERT CROWLEY 45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING	
Chief, Development Engineering Division	5-6-16
DATE	
Chief, Division of Land Development	5-11-16
DATE	
Director	5-10-16
DATE	

09/24/16	1	REVISED SITE LAYOUT TO ADD VISITOR CENTER INSPECTION FACILITY
----------	---	---

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		

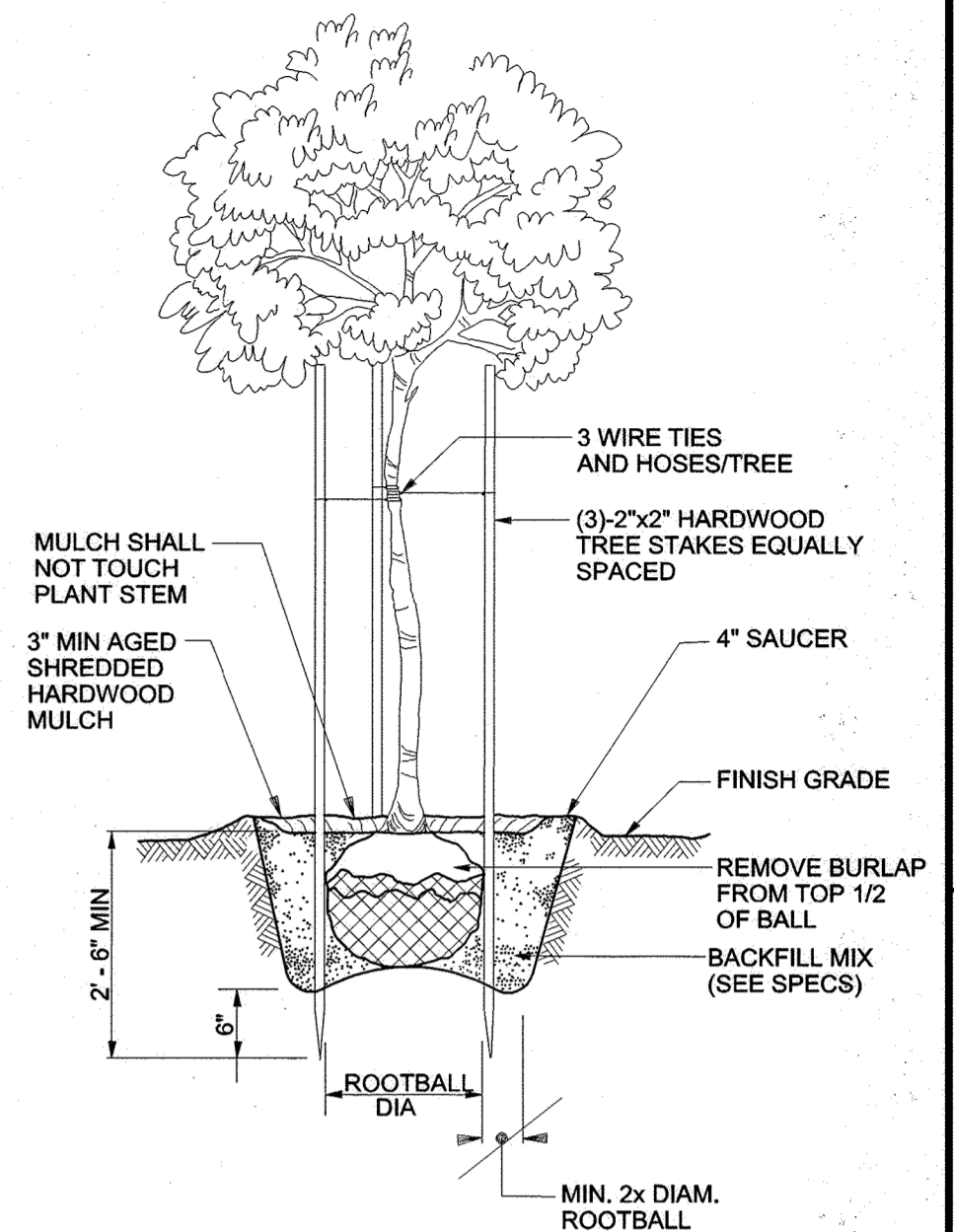
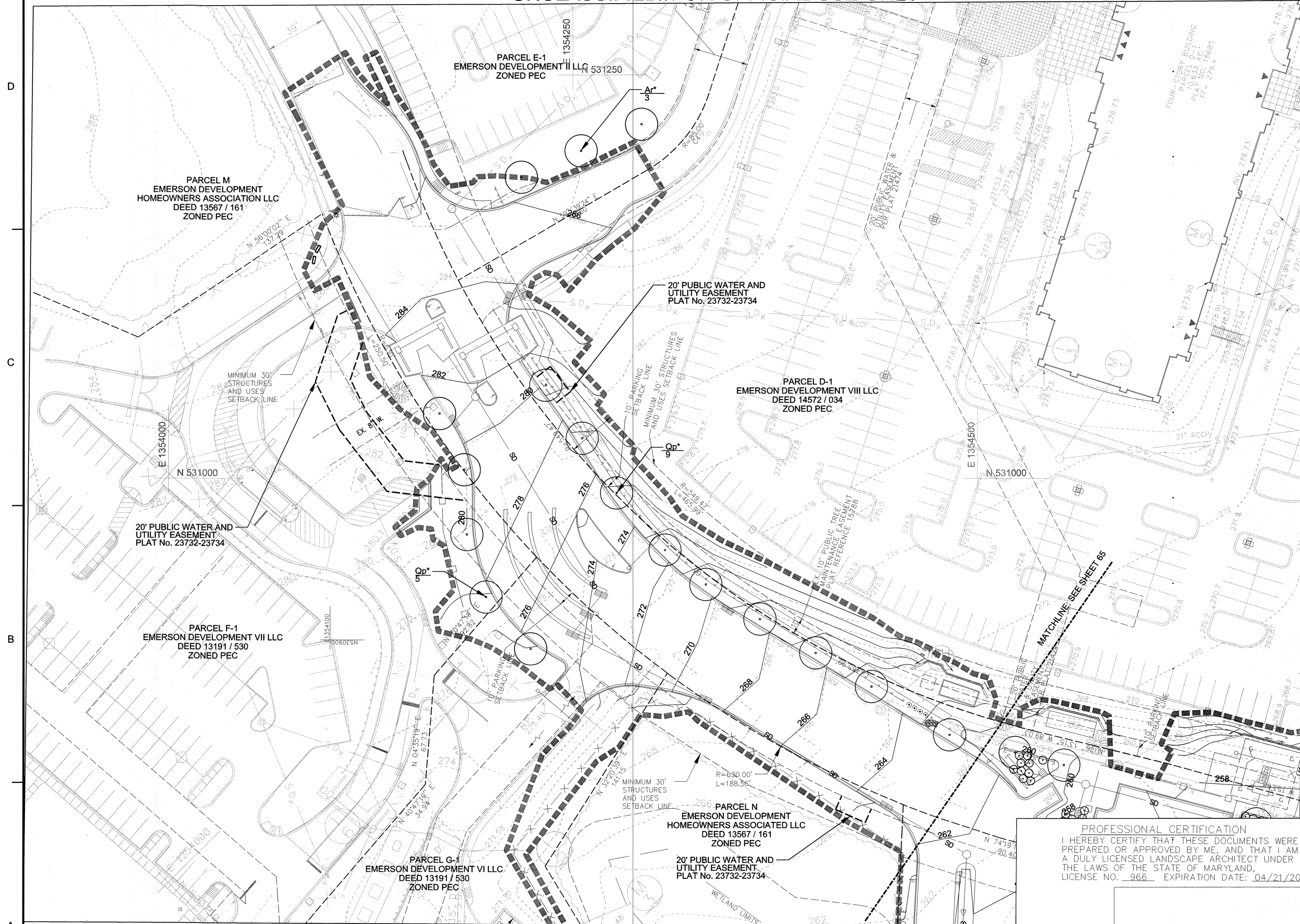
**JACOBS**

1100 N. GLEBE RD., ARLINGTON, VA, 22201  
(571) 218-1000

SUBDIVISION NAME	TAX MAP	LOT/PARCEL
EMERSON / REVITZ PROPERTY	47	LOT 1051 PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
OVERALL MICROBIORETENTION LANDSCAPE PLAN		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:30	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	65 OF 80
R. CROWLEY		

UNCLASSIFIED//FOR OFFICIAL USE ONLY

UNCLASSIFIED//FOR OFFICIAL USE ONLY



1 DECIDUOUS TREE PLANTING  
SCALE: NONE

AS BUILT CERTIFICATION FOR PSWM  
NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
ROBERT CRAWLEY 45292  
2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 5-6-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
 [Signature] 5-4-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
 [Signature] 5-10-16  
 DIRECTOR DATE

DATE No. REVISION DESCRIPTION  
**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000  
 SUBDIVISION NAME TAX MAP LOT/PARCEL #  
 EMERSON/REVITZ PROPERTY 47 15786/15786  
 DEED ELEC. DISTRICT 11479 / 005 6TH  
 WATER CODE SEWER CODE

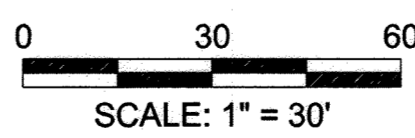
TITLE  
**STREET TREE PLAN**

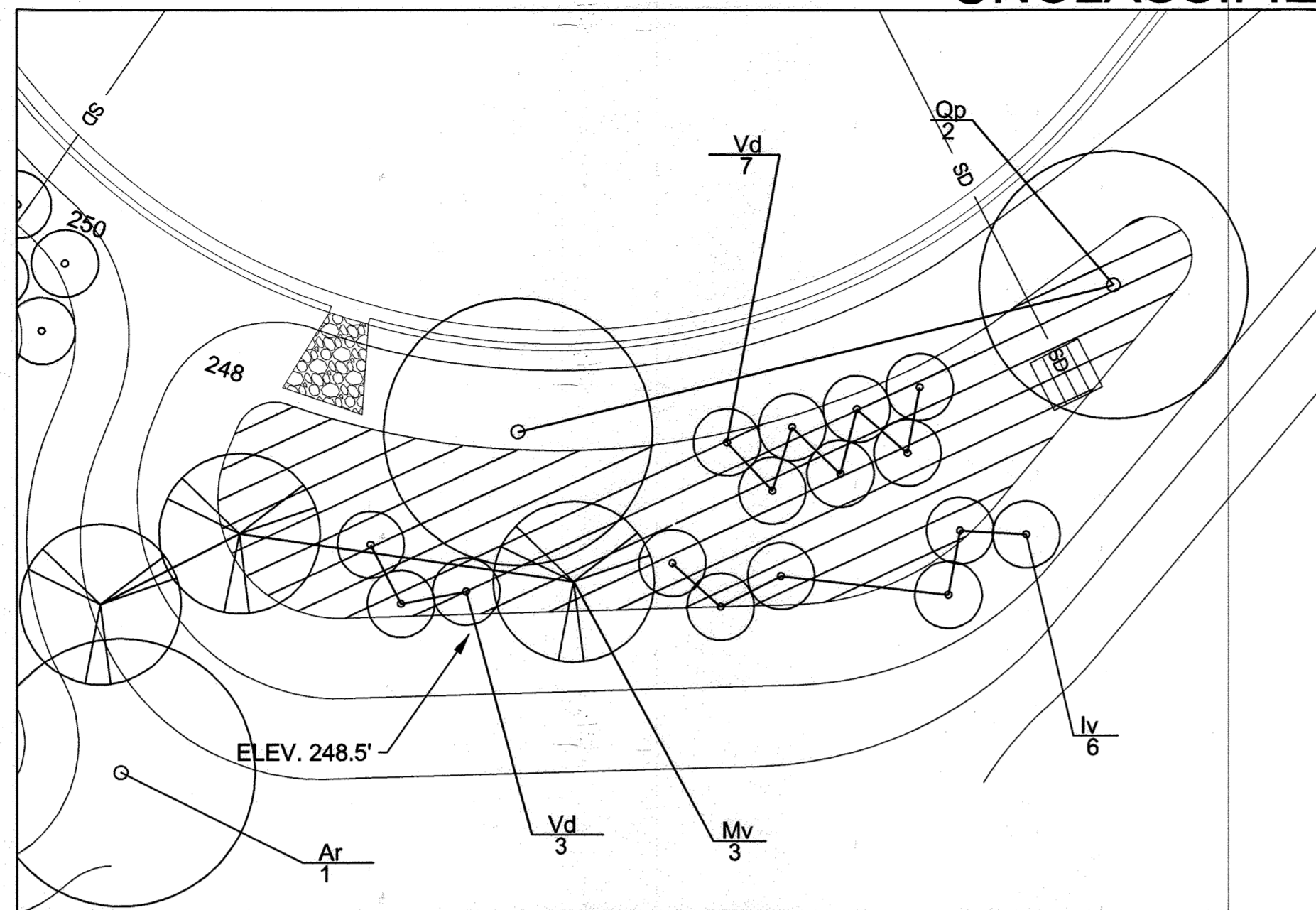
DES. BY M. WERDER SCALE 1:30 PROJ. No.  
 DRN. BY M. WERDER DATE 04/04/2016 66 OF 80  
 CHK. BY R. CROWLEY APPROVED

PLANT LIST					
TREES					
KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION
AR	3	Acer rubrum "October Glory"	October Glory Red Maple	2.5" cal. Min	B&B
QP	14	Quercus phellos	Willow Oak	2.5" cal. Min	B&B

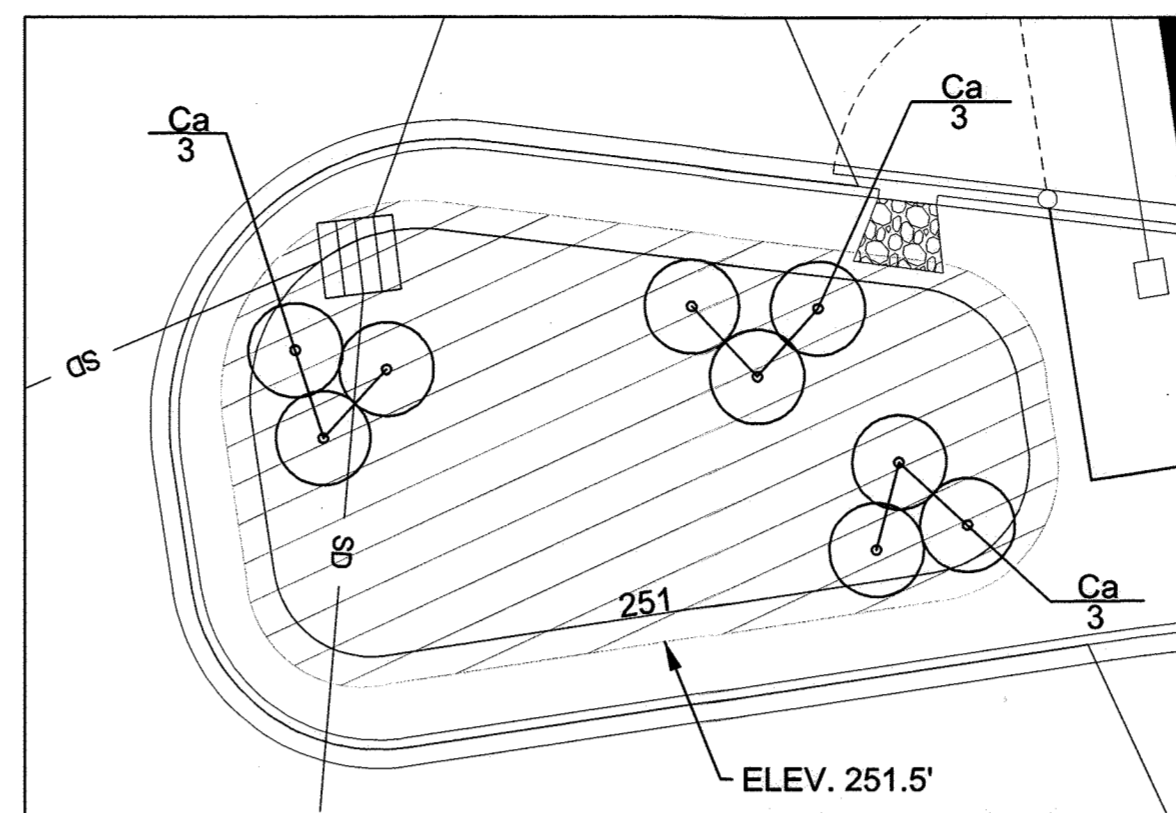
\* INDICATES TREE REPLACEMENT

NOTES:  
 1. TREES SHOWN ARE REPLACEMENT OF TREES PREVIOUSLY ADDRESSED UNDER F-02-111.

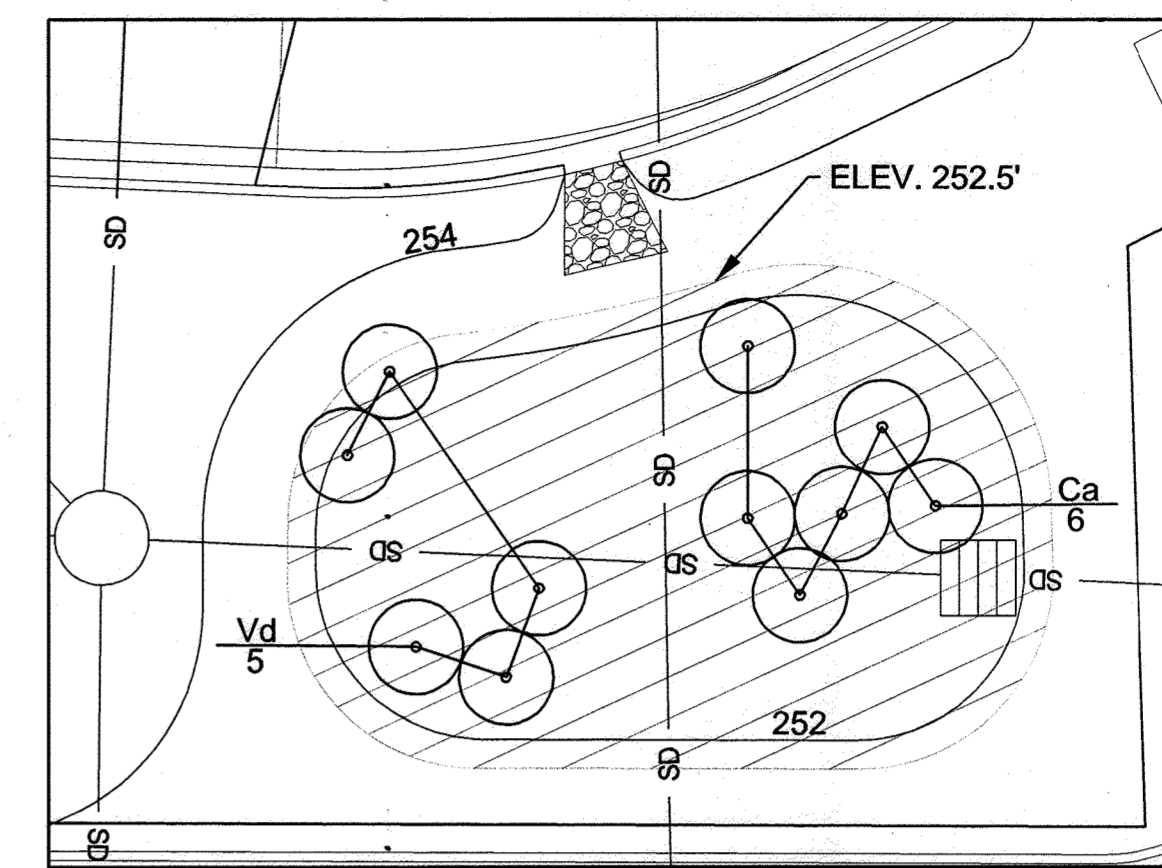




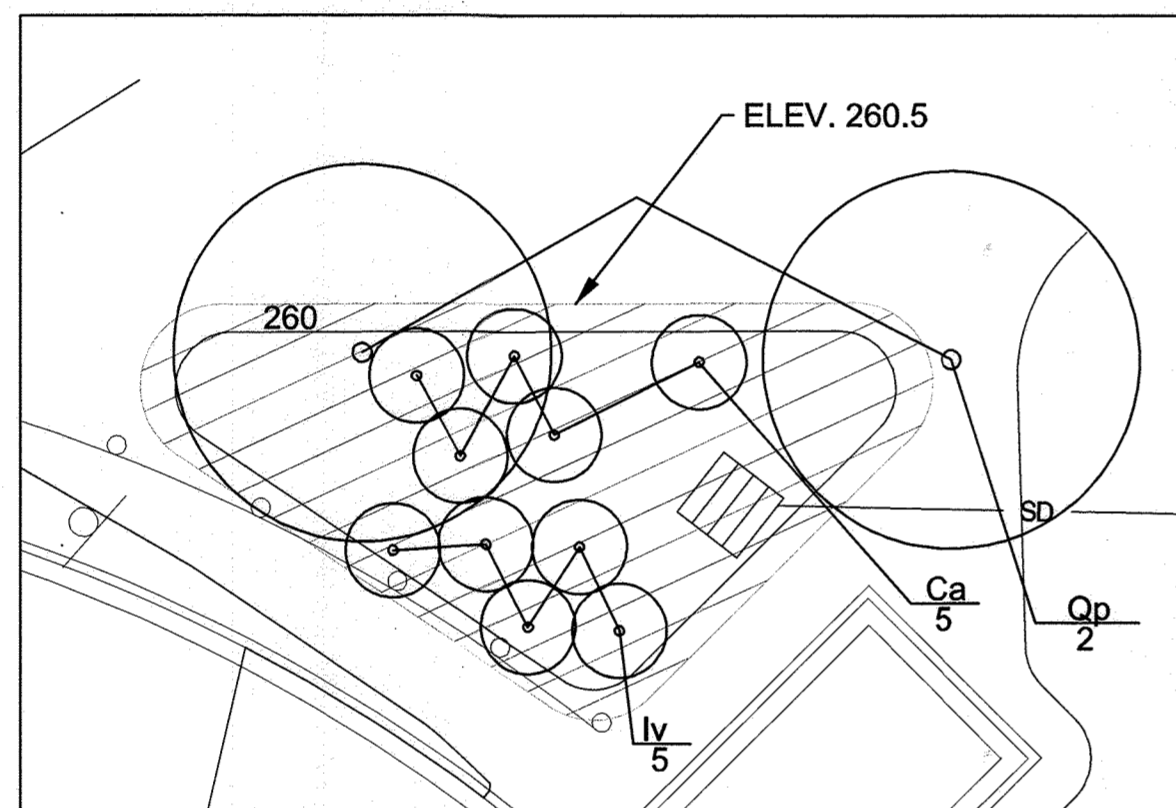
MICRO-BIORETENTION #1



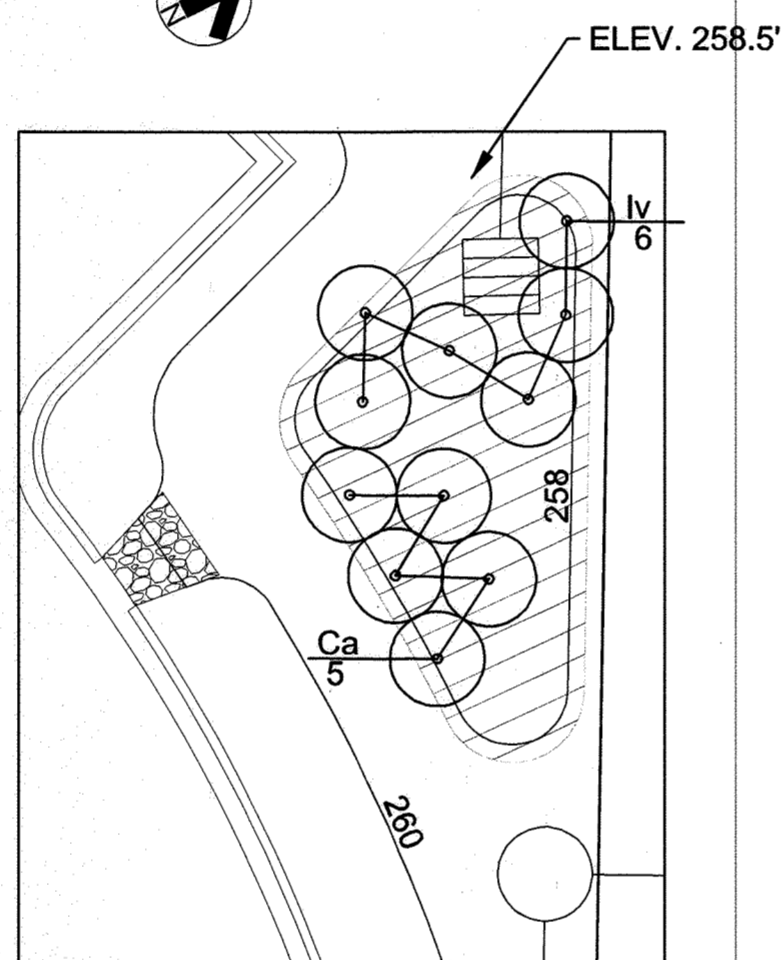
MICRO-BIORETENTION #2



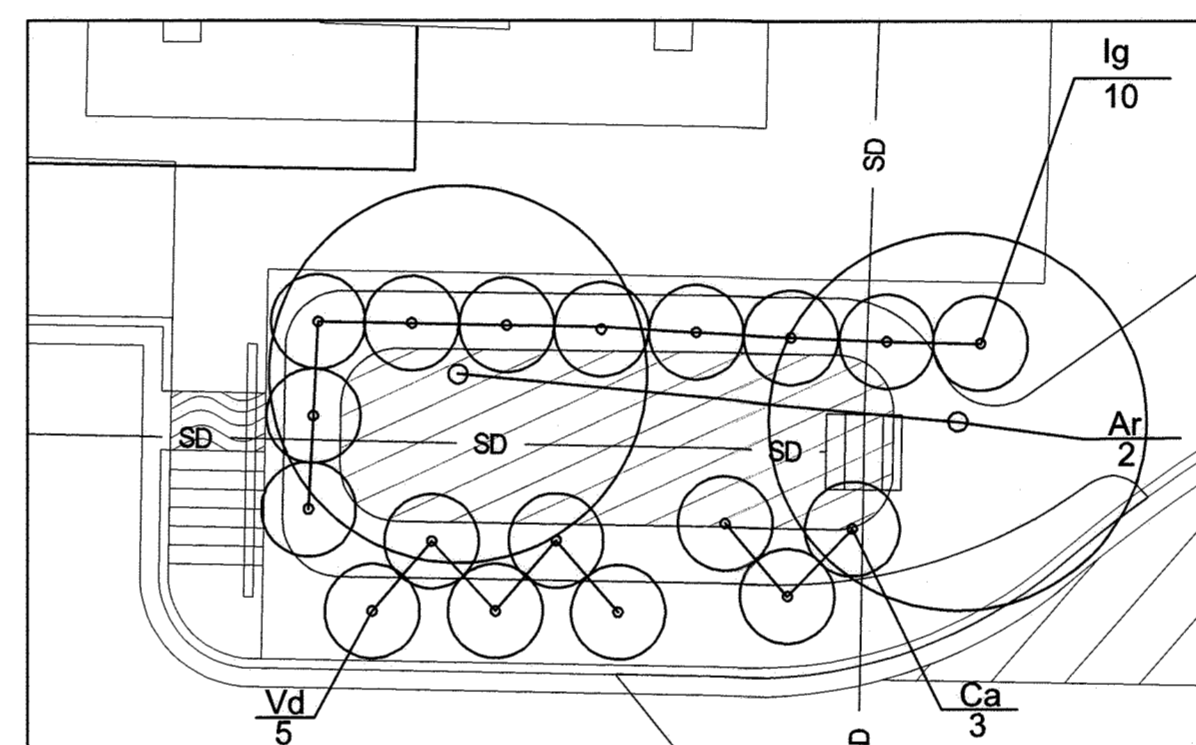
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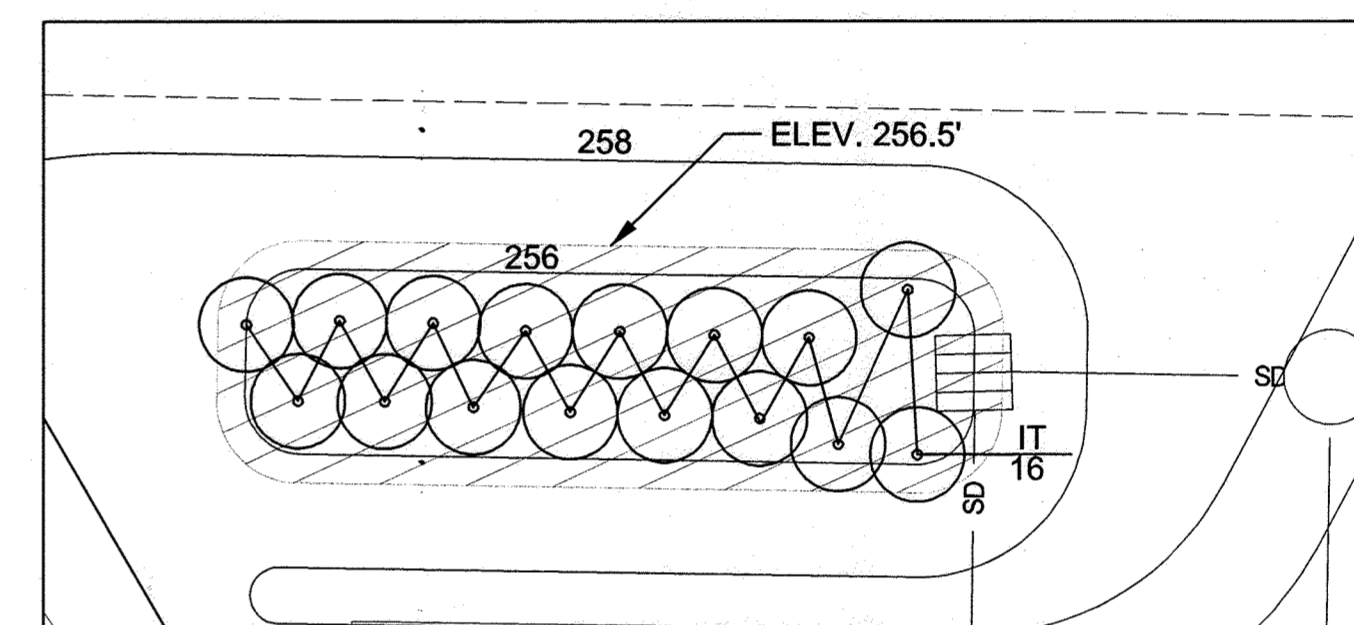
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MICRO-BIORETENTION #5

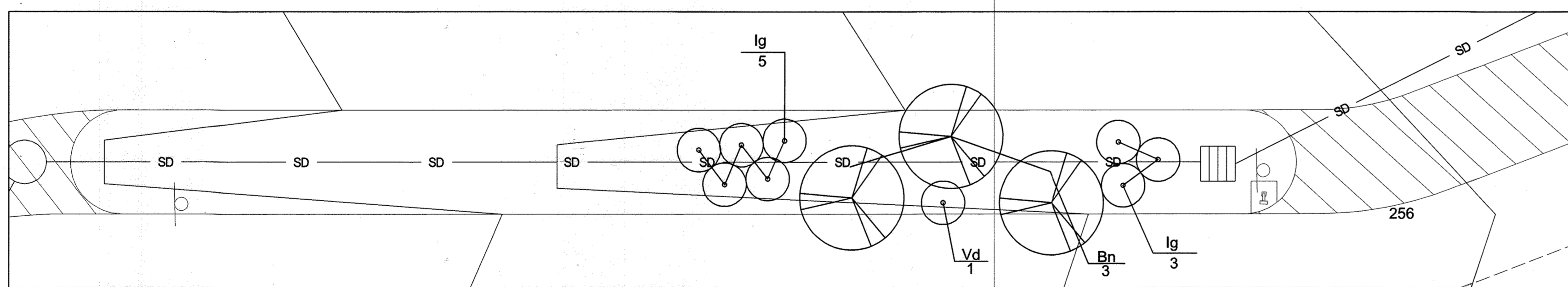


MICRO-BIORETENTION #6



MICRO-BIORETENTION #7

*Robert Crowley*



BIO-SWALE #1

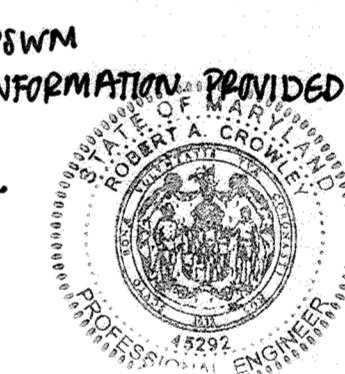
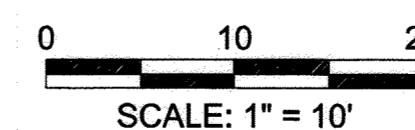
LEGEND:

- ERNST SEED MIX OR EQUIVALENT
- CANOPY TREE
- ORNAMENTAL TREE
- SHRUB

SHEET NOTES:

1. SEE SHEET 37 FOR PLANT AND SEED MIX LISTS AND PLANTING DETAILS.
2. ADJUST PLANT LOCATIONS TO AVOID CONFLICTS WITH CLEANOUTS AND DRAINAGE INLETS.

PROFESSIONAL CERTIFICATION  
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 966 EXPIRATION DATE: 04/21/2016.



APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>M. Werder</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	5-6-16 DATE
<i>R. Crowley</i> CHIEF, DIVISION OF LAND DEVELOPMENT	5-21-16 DATE
<i>M. J. J. J.</i> DIRECTOR	5-16-16 DATE

DATE	No.	REVISION DESCRIPTION
------	-----	----------------------

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000



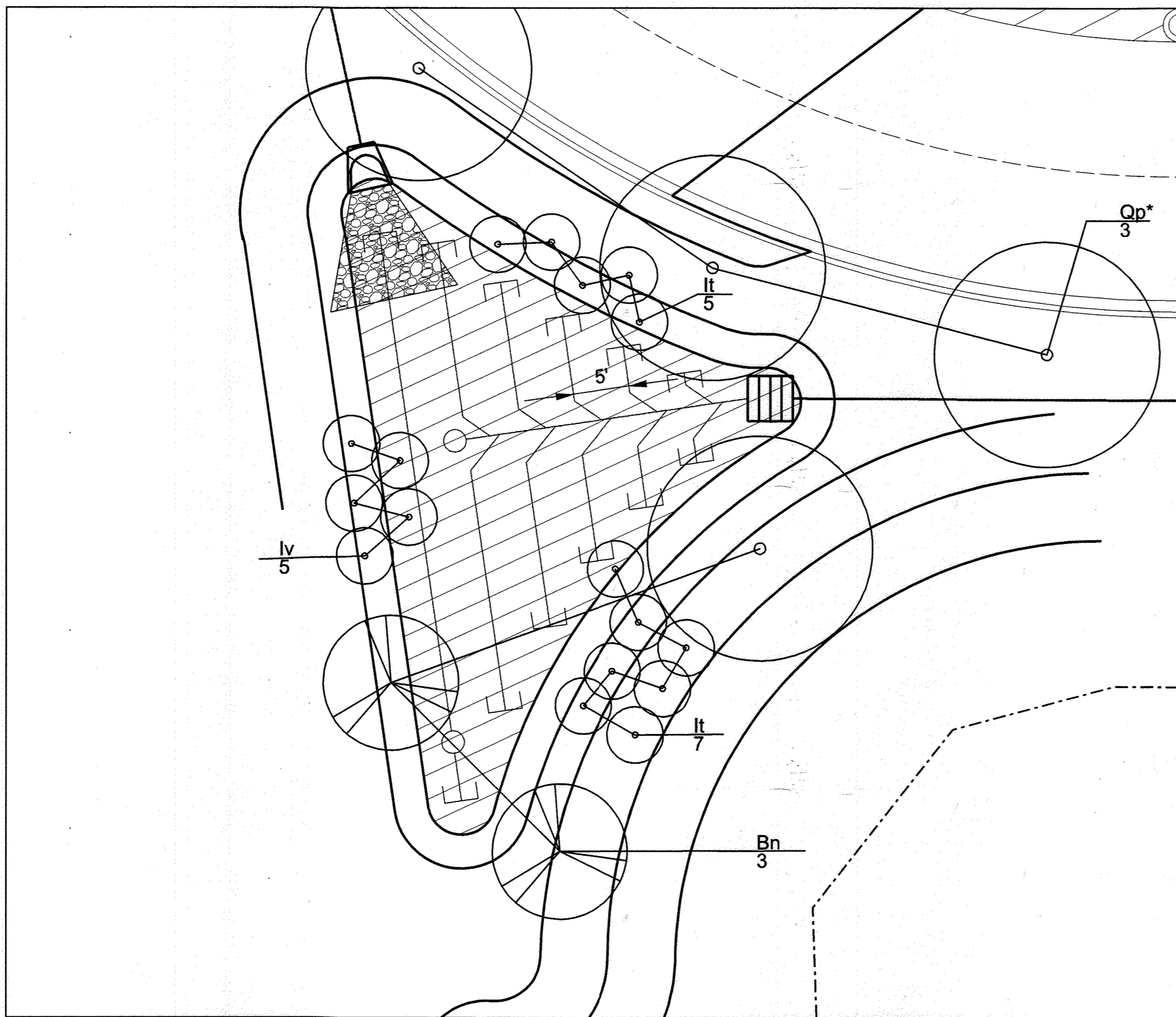
SUBDIVISION NAME	EMERSON/REVITZ PROPERTY	TAX MAP	47	LOT/PARCEL #	47
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PLAT #	22132-2734	ZONE	PEC	GRID	20
DEED	15786	ELEC. DISTRICT	6TH	SEWER CODE	

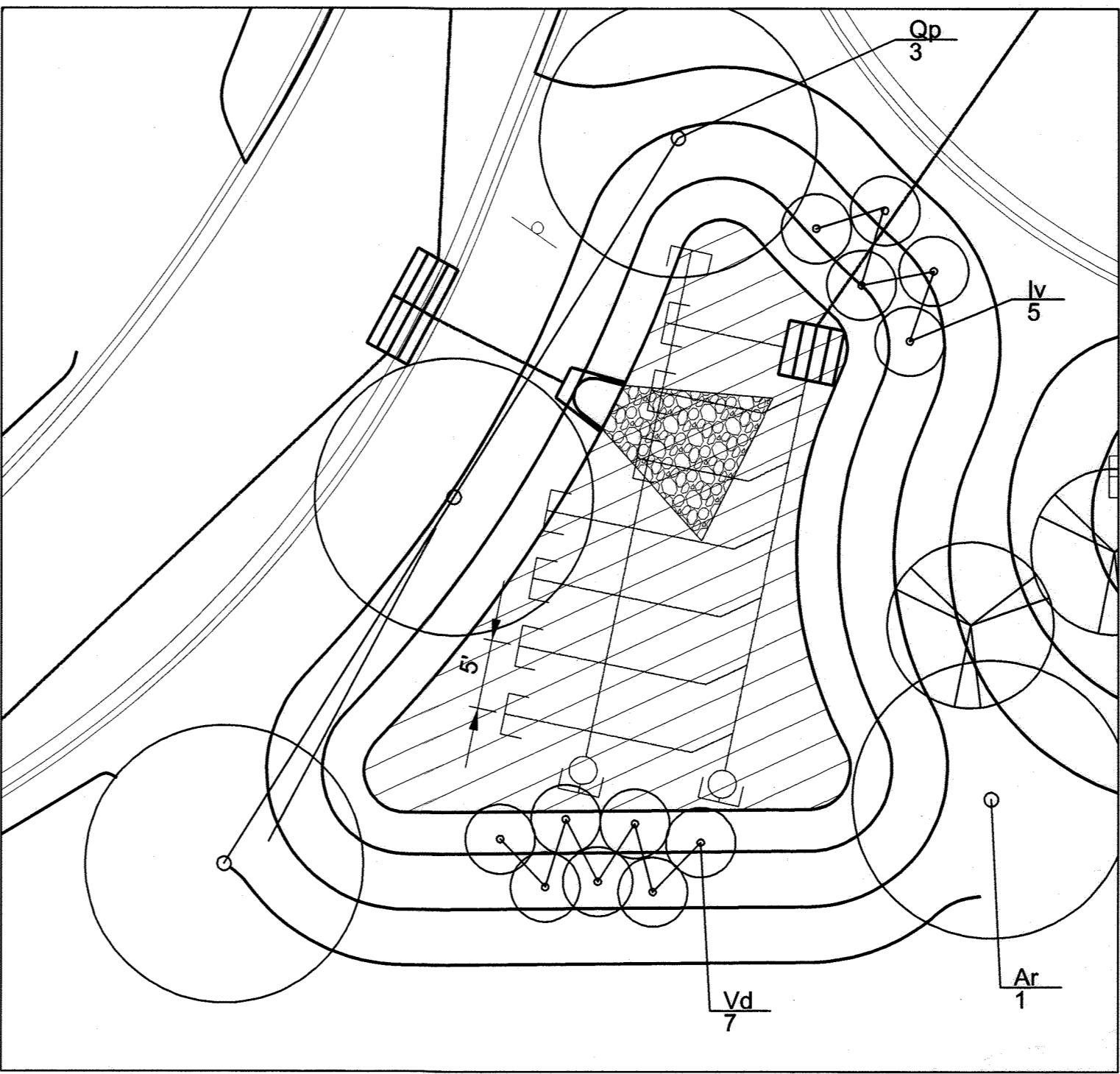
TITLE  
 ENLARGED LANDSCAPING PLAN

DES. BY	M. WERDER	SCALE	NTS	PROJ. No.	
DRN. BY	M. WERDER	DATE	04/04/2016		
CHK. BY	R. CROWLEY	APPROVED			67 OF 80

SDP-16-005



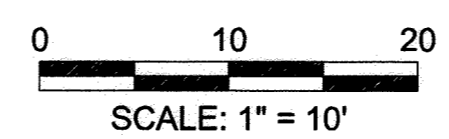
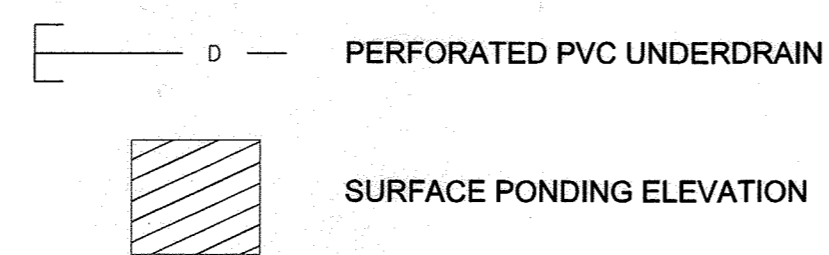
MICRO-BIORETENTION #8



MICRO-BIORETENTION #9

MBR ID	SURFACE ELEV.	PONDING ELEV.	SURFACE AREA (SF)
#8	251.00'	252.00'	1092
#9	245.00'	246.00'	848

**LEGEND**



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. 45292 EXPIRATION DATE: 05/21/2016.



AS BUILT CERTIFICATION FOR BSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 2/3/17 45292

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 5-6-16 DATE  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT 5-4-16 DATE  
  
 DIRECTOR 5-16-16 DATE

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
**PARCEL H**  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

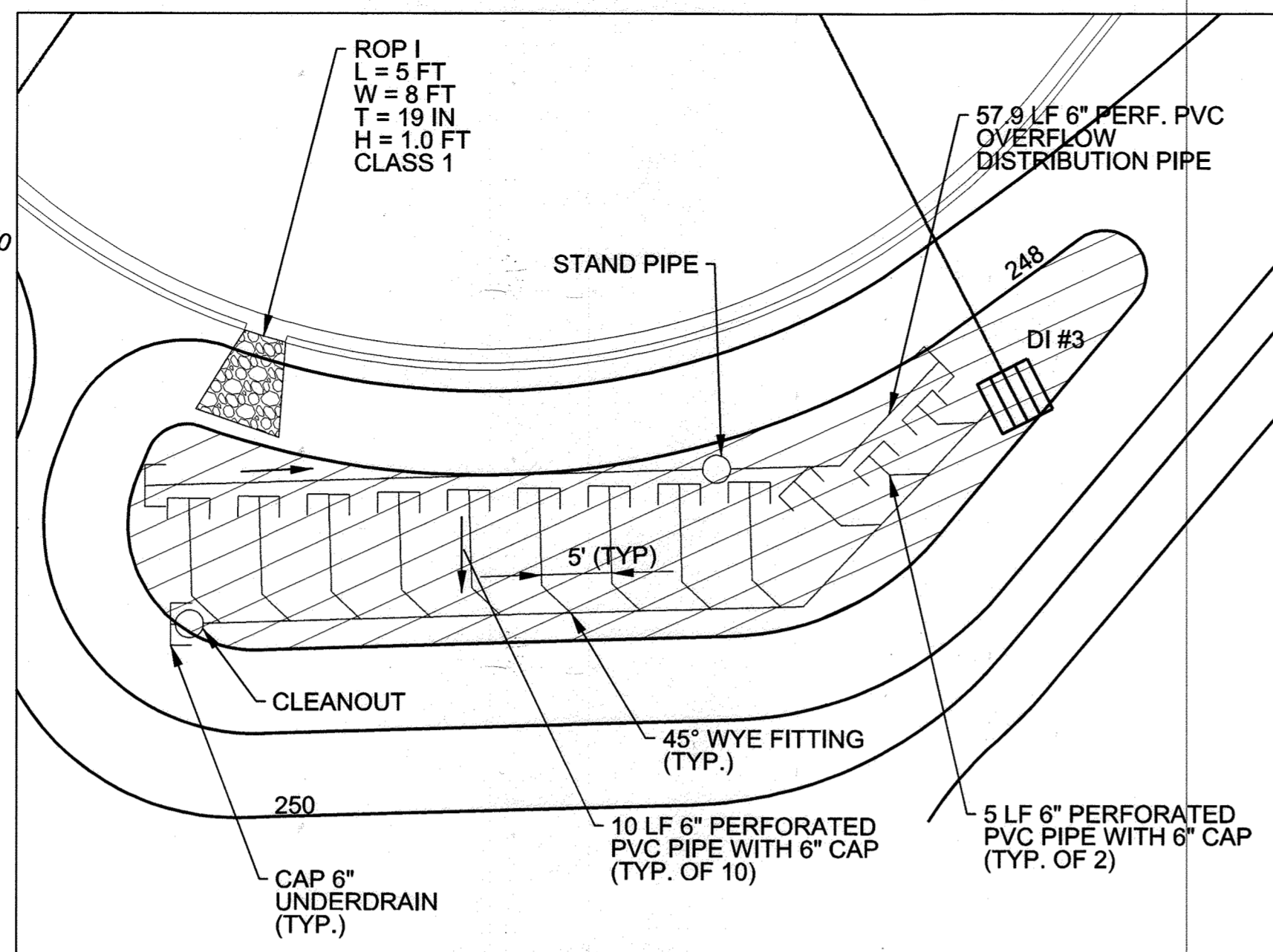
SUBDIVISION NAME TAX MAP LOT/PARCEL #  
 EMERSON/RENTZ PROPERTY 47 LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q

PLAT # 22752-2015-4 ZONE GRID  
 15786 PEC 20  
 DEED 11479 / 005 ELEC. DISTRICT  
 WATER CODE SEWER CODE

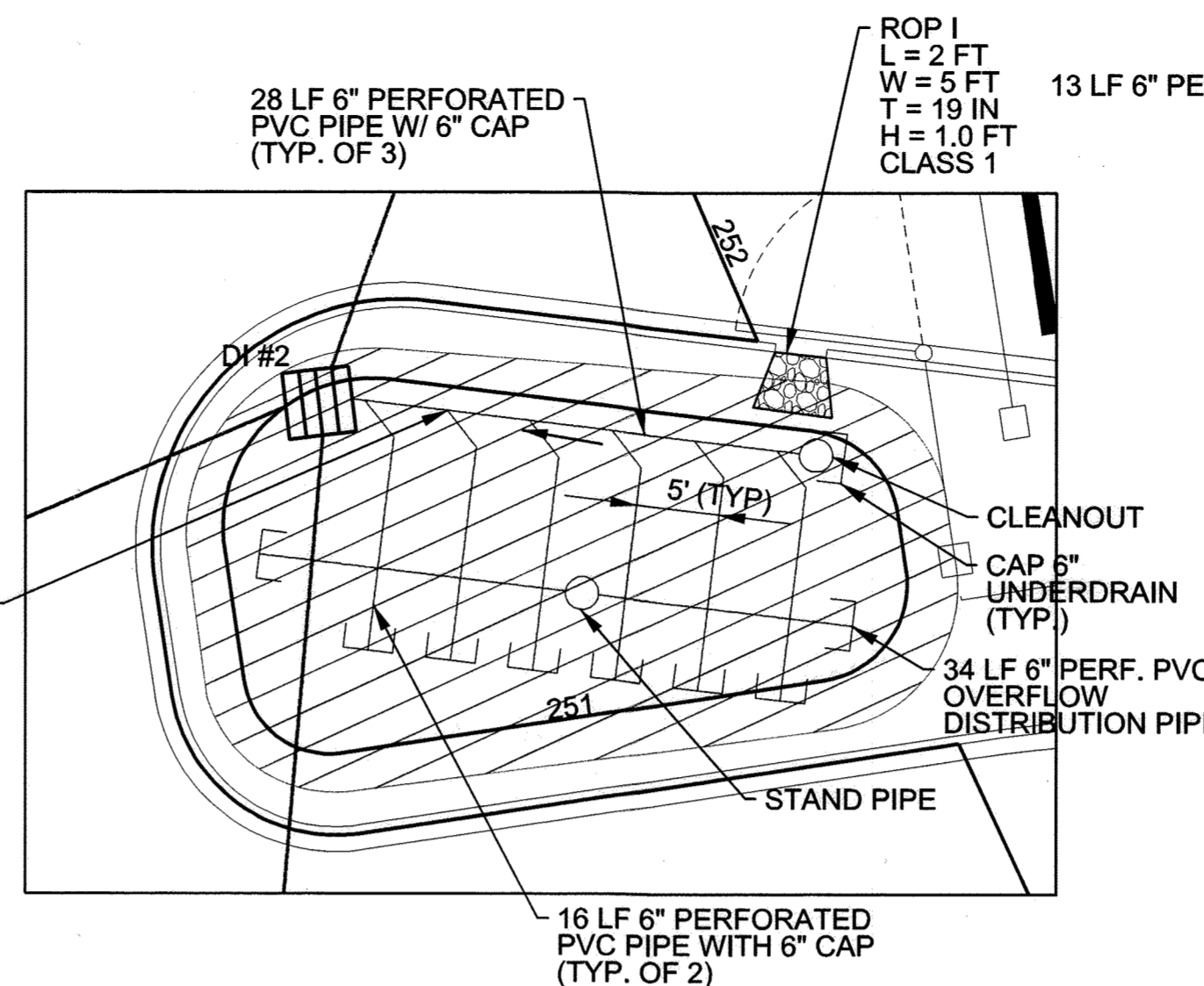
TITLE

ENLARGED MICROBIORETENTION FACILITIES

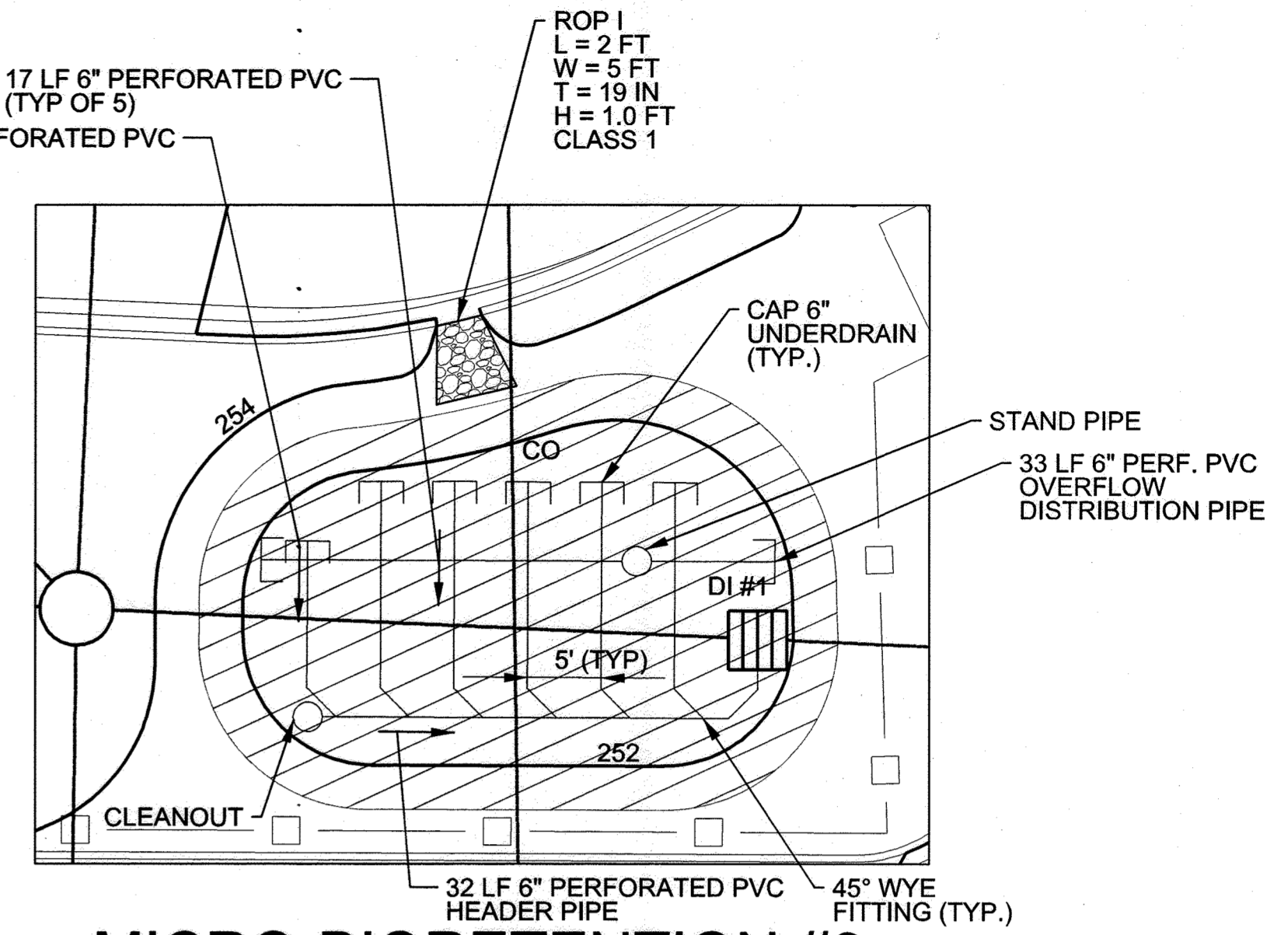
DES. BY M. WERDER SCALE 1:10 PROJ. No. 68 OF 80  
 DRN. BY M. WERDER DATE 04/04/2016  
 CHK. BY R. CROWLEY APPROVED



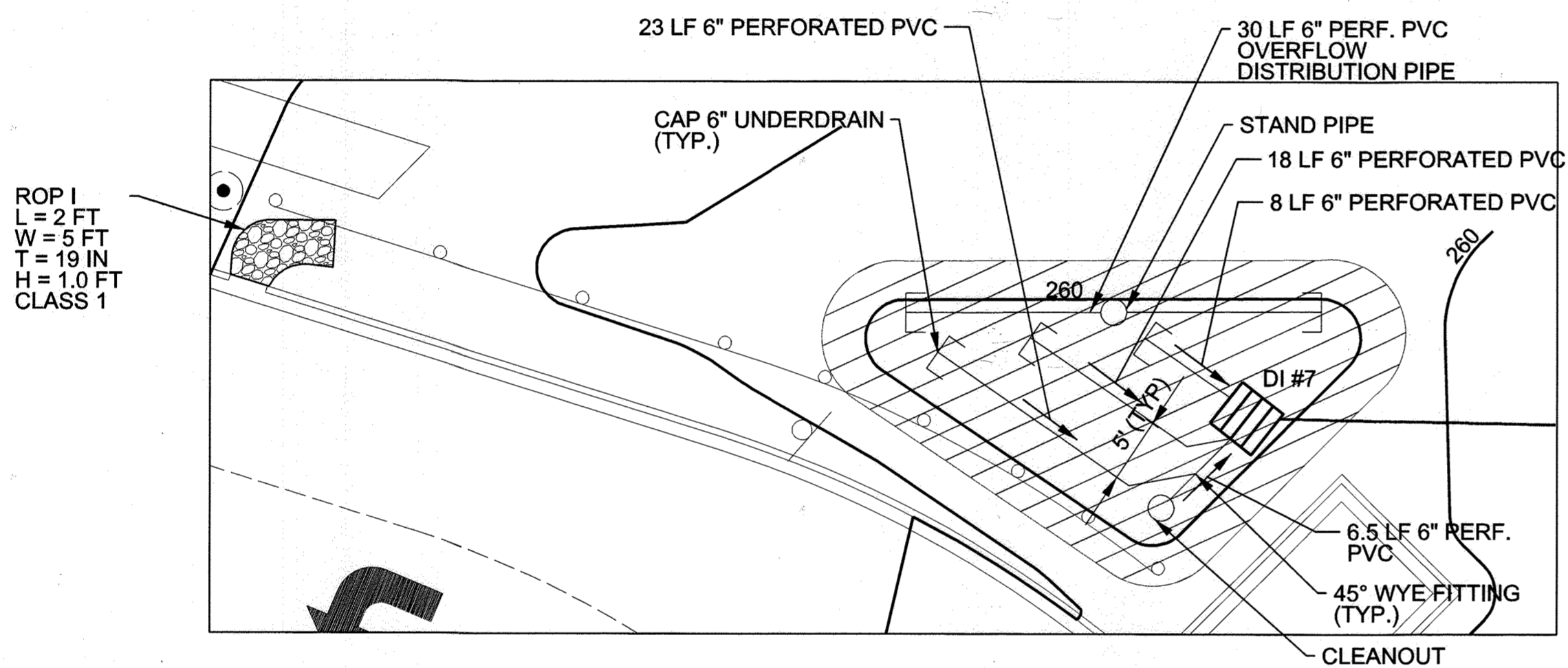
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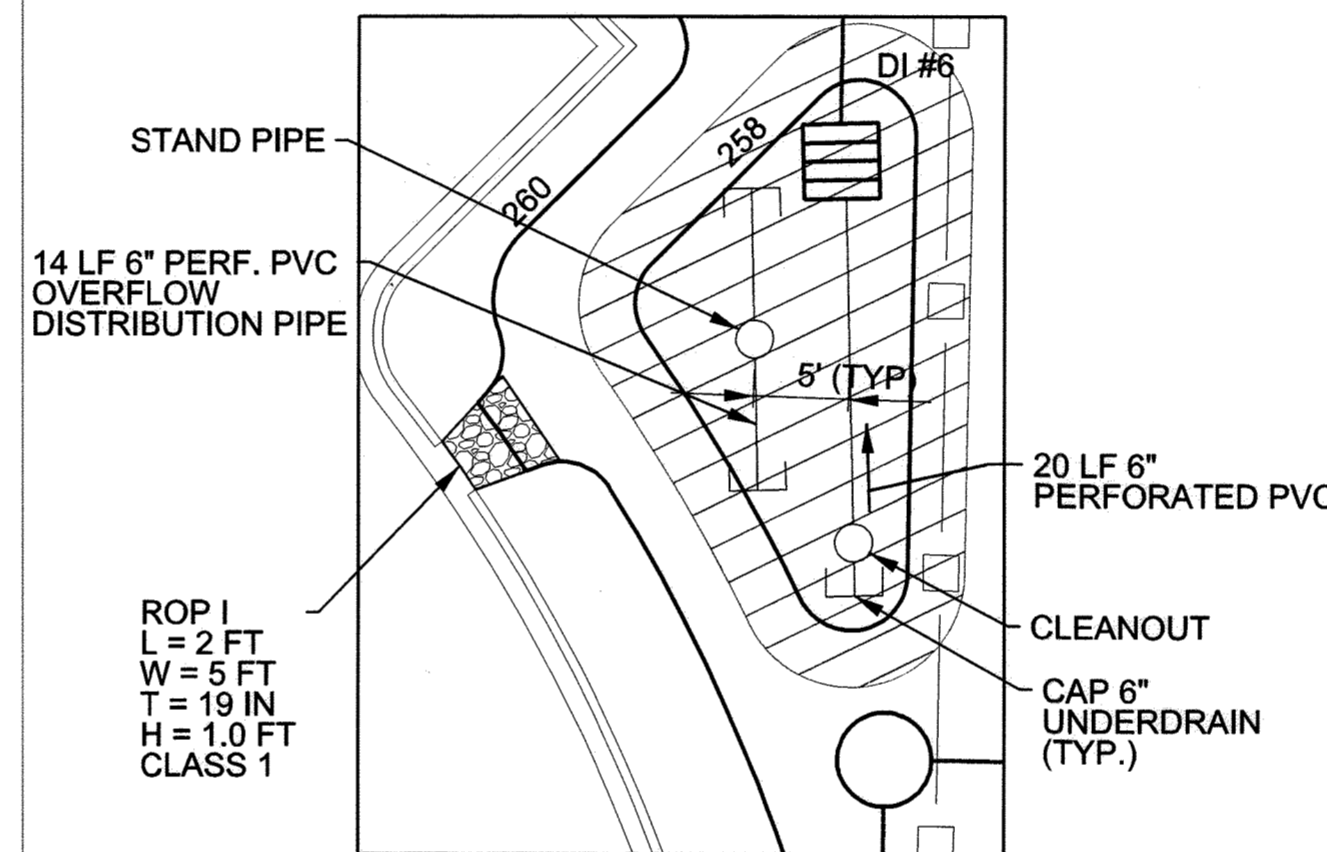
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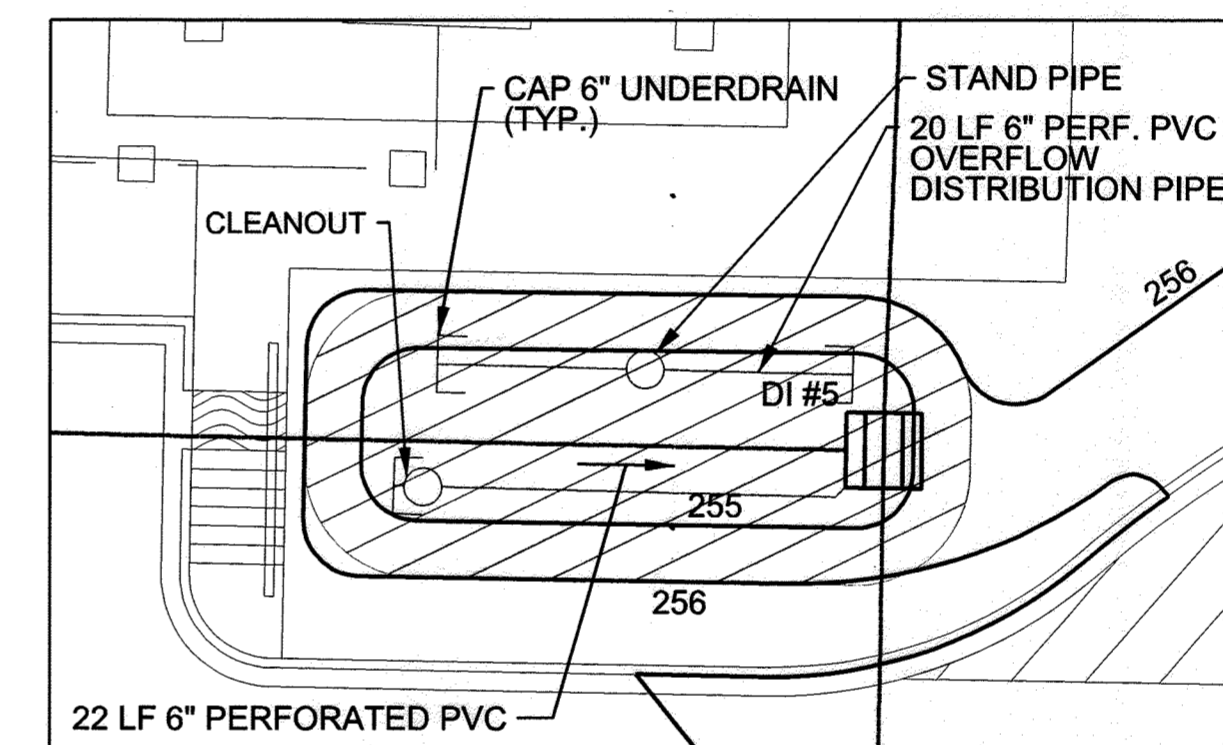
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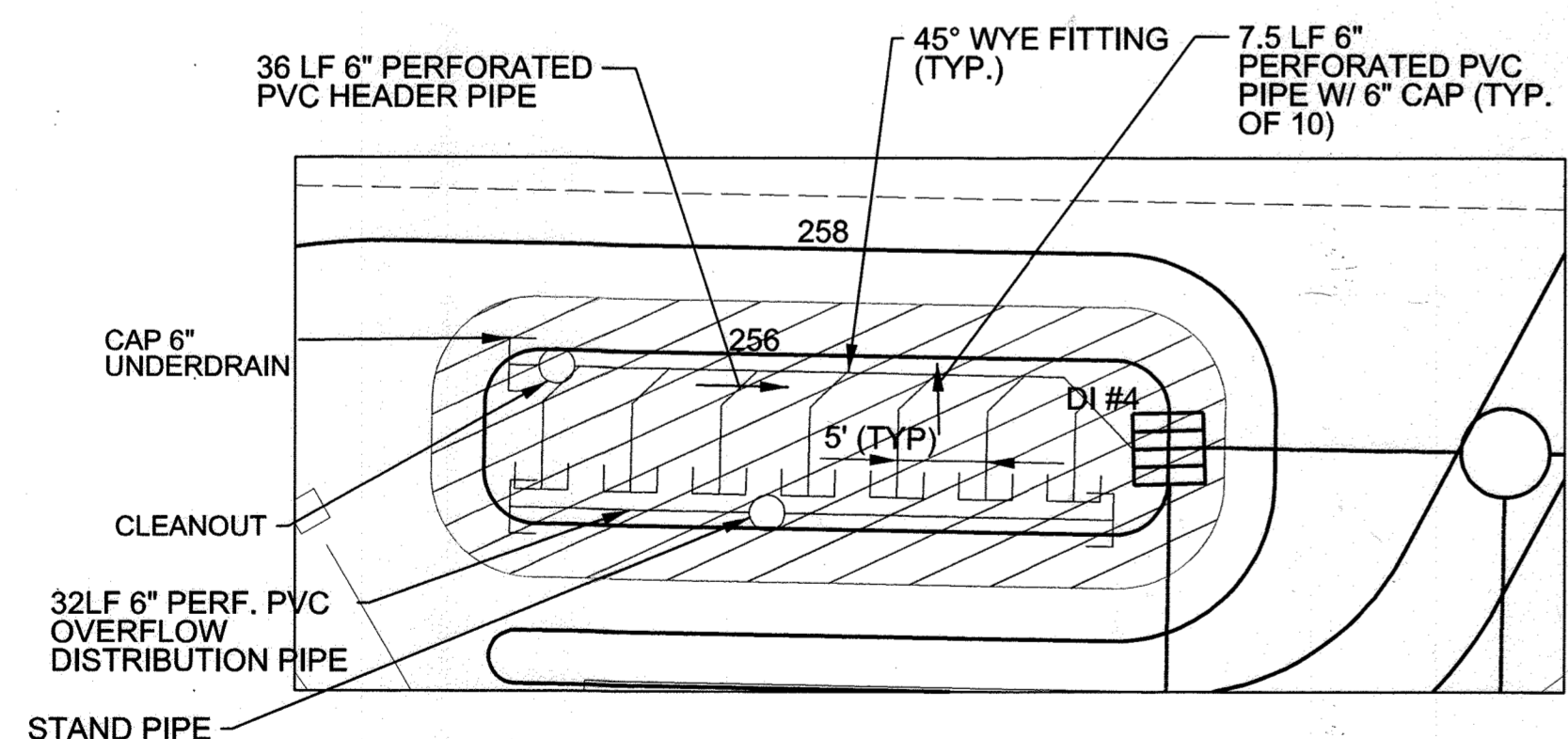
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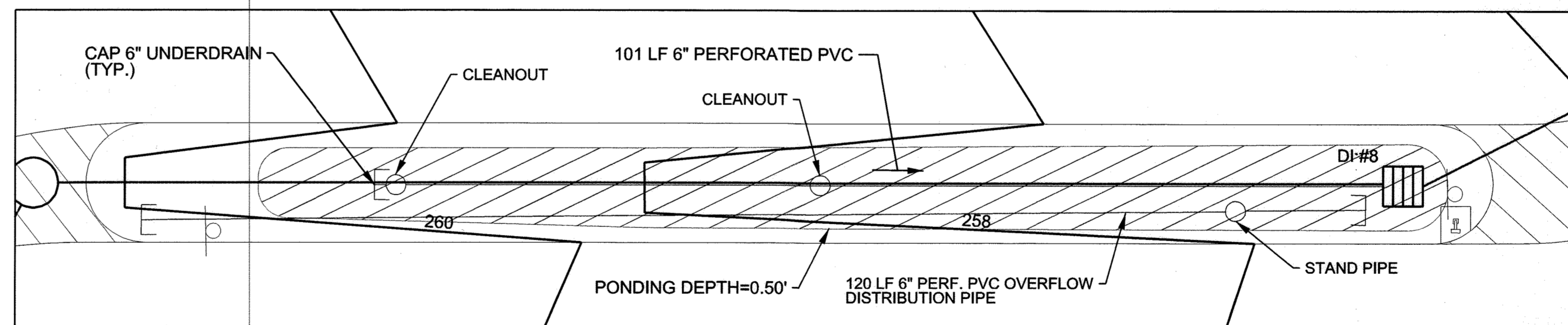
MICRO-BIORETENTION #5



MICRO-BIORETENTION #6



MICRO-BIORETENTION #7

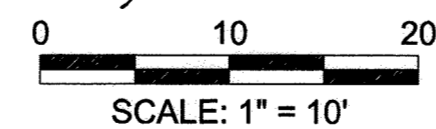


BIO-SWALE #1

MBR ID	SURFACE ELEV.	PONDING ELEV.	SURFACE AREA (SF)
#1	248.00'	249.00'	963
#2	251.00'	252.00'	738
#3	252.00'	253.00'	742
#4	260.00'	261.00'	460
#5	258.00'	259.00'	352
#6	255.00'	256.00'	320
#7	256.00'	257.00'	370

LEGEND

- PERFORATED PVC UNDERDRAIN
- SURFACE PONDING ELEVATION



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. 45292 EXPIRATION DATE: 05/21/2016

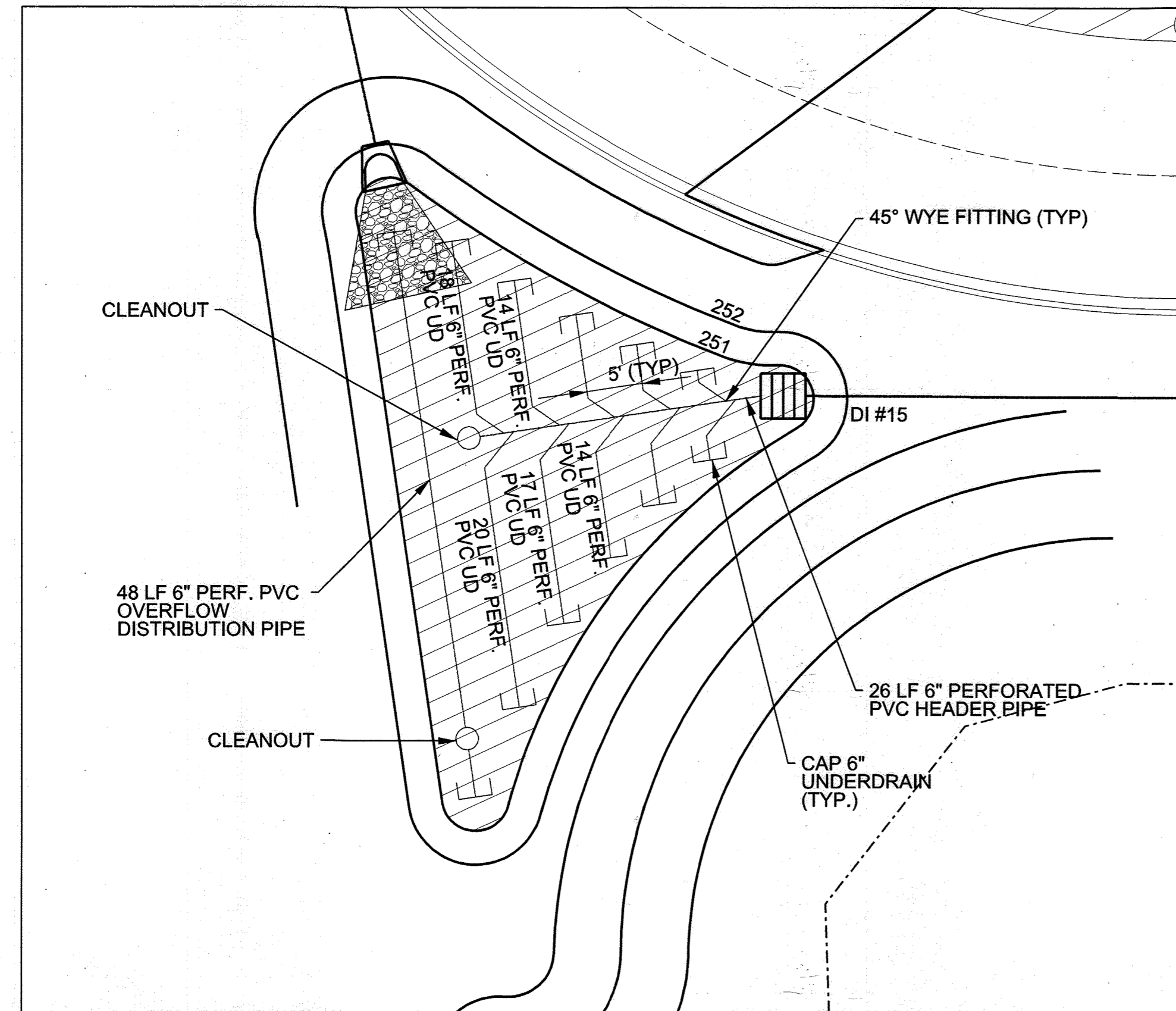


AS BUILT CERTIFICATION FOR PSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 2/3/17 45292

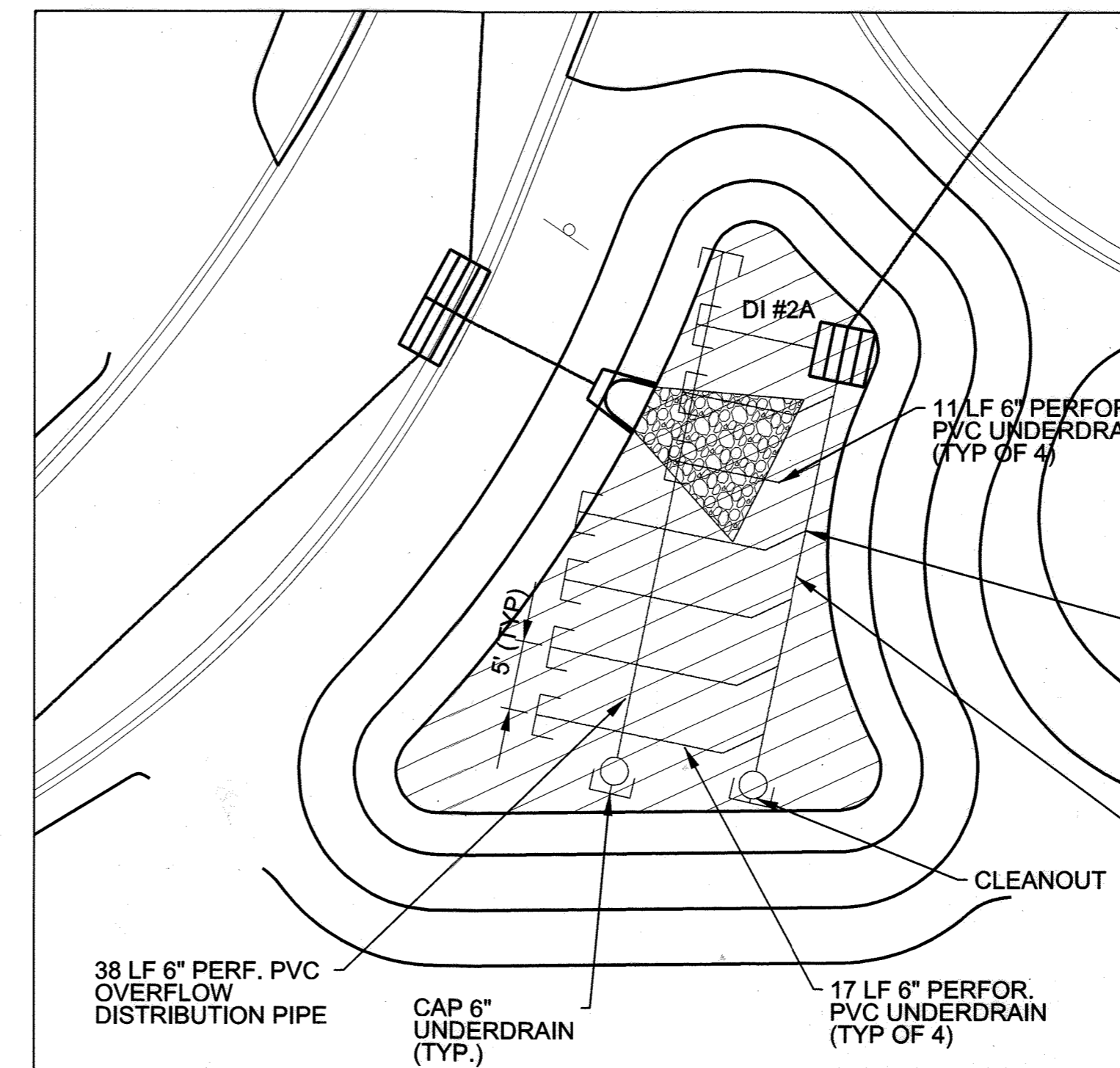
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 5-6-16 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 5-1-16 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 5-10-16 DATE  
 DIRECTOR

DATE	No.	REVISION DESCRIPTION
<b>EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE</b>		
<b>PARCEL H</b>		
OWNER/DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
<b>JACOBS</b>		
1100 N GLEBE RD, ARLINGTON, VA, 22201 (571) 218-1000		
SUBDIVISION NAME	TAX MAP	LOT/PARCEL #
EMERSON / REVITZ PROPERTY	47	LOT 16 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL I, PARCEL O, PARCEL Q
PLAT # 2012-001	ZONE	GRID
15786	PEC	20
DEED	ELEC. DISTRICT	
11479 / 005	6TH	
WATER CODE	SEWER CODE	
TITLE		
ENLARGED MICROBIRETENTION FACILITIES		
DES. BY	SCALE	PROJ. No.
M. WERDER	1:10	
DRN. BY	DATE	
M. WERDER	04/04/2016	
CHK. BY	APPROVED	69 OF 80
R. CROWLEY		

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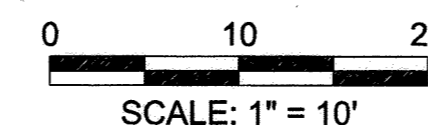
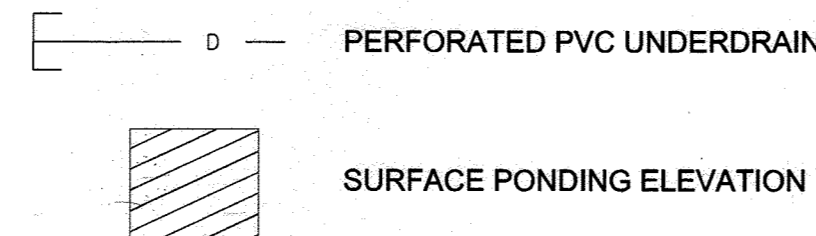
MICRO-BIORETENTION #8



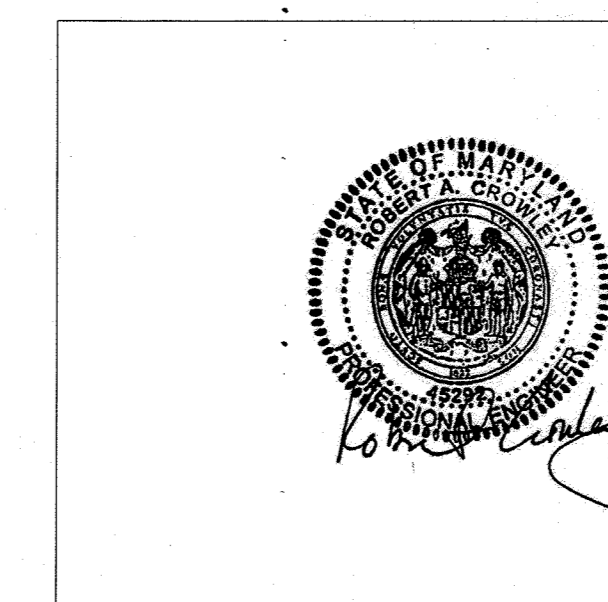
MICRO-BIORETENTION #9

MBR ID	SURFACE ELEV.	PONDING ELEV.	SURFACE AREA (SF)
#8	251.00'	252.00'	1092
#9	245.00'	246.00'	848

**LEGEND**



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. 45292 EXPIRATION DATE: 05/21/2016.



AS BUILT CERTIFICATION FOR PSWM  
 NOTE: THERE IS NO AS BUILT INFORMATION PROVIDED ON THIS SHEET.  
 ROBERT CROWLEY  
 45292 2/3/17

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 5-6-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE  
 [Signature] 5-11-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE  
 [Signature] 5-16-16  
 DIRECTOR DATE

DATE	No.	REVISION DESCRIPTION

**EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE**  
 PARCEL H  
 OWNER/DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA, 22201  
 (571) 218-1000

SUBDIVISION NAME EMERSON / REVITZ PROPERTY	TAX MAP 47	LOT/PARCEL # LOT 165 / PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G-1, PARCEL N, PARCEL O, PARCEL Q
PLAT # 15786	ZONE PEC	GRID 20
DEED 11479 / 005	ELEC. DISTRICT 6TH	
WATER CODE	SEWER CODE	

TITLE  
**ENLARGED MICROBIORETENTION FACILITIES**

DES. BY M. WERDER	SCALE 1:10	PROJ. No. 70 OF 80
DRN. BY M. WERDER	DATE 04/04/2016	
CHK. BY R. CROWLEY	APPROVED	

- DEMOLITION OF THE EXISTING BIO-RETENTION AREA BEYOND THE SOUTHERN LIMITS OF THE SITE WILL REQUIRE THE TEMPORARY REMOVAL OF THE K-12 RATED FENCING THAT RUNS ALONG THE SOUTHERN PORTION OF THE SITE. THE CONTRACTOR SHALL REMOVE THE SECURITY FENCING AS AN INITIAL STEP IN CONSTRUCTION AND SHALL COORDINATE ALL CONSTRUCTION ELEMENTS WITH SECURITY PERSONNEL. PERIMETER SECURITY SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

KEY NOTES

- REMOVE EXISTING STORM SEWER STRUCTURE
- REMOVE EXISTING STORM SEWER PIPE TO THE DOWNSTREAM MANHOLE
- REMOVE CURB AND GUTTER TO LIMITS SHOWN
- REMOVE CONCRETE PAVEMENT TO LIMITS SHOWN
- REMOVE AND REPLACE SECURITY FENCING
- REMOVE EXISTING WATERLINE

SITE REMOVAL LEGEND

- REMOVE CONCRETE PAVEMENT
- UTILITY LINE/STORM SEWER REMOVAL
- K-12 RATED PERIMETER FENCE REMOVAL (SEE NOTE 1)

US Army Corps of Engineers  
Baltimore District

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ANNAPOLIS, JUNCTION, MARYLAND

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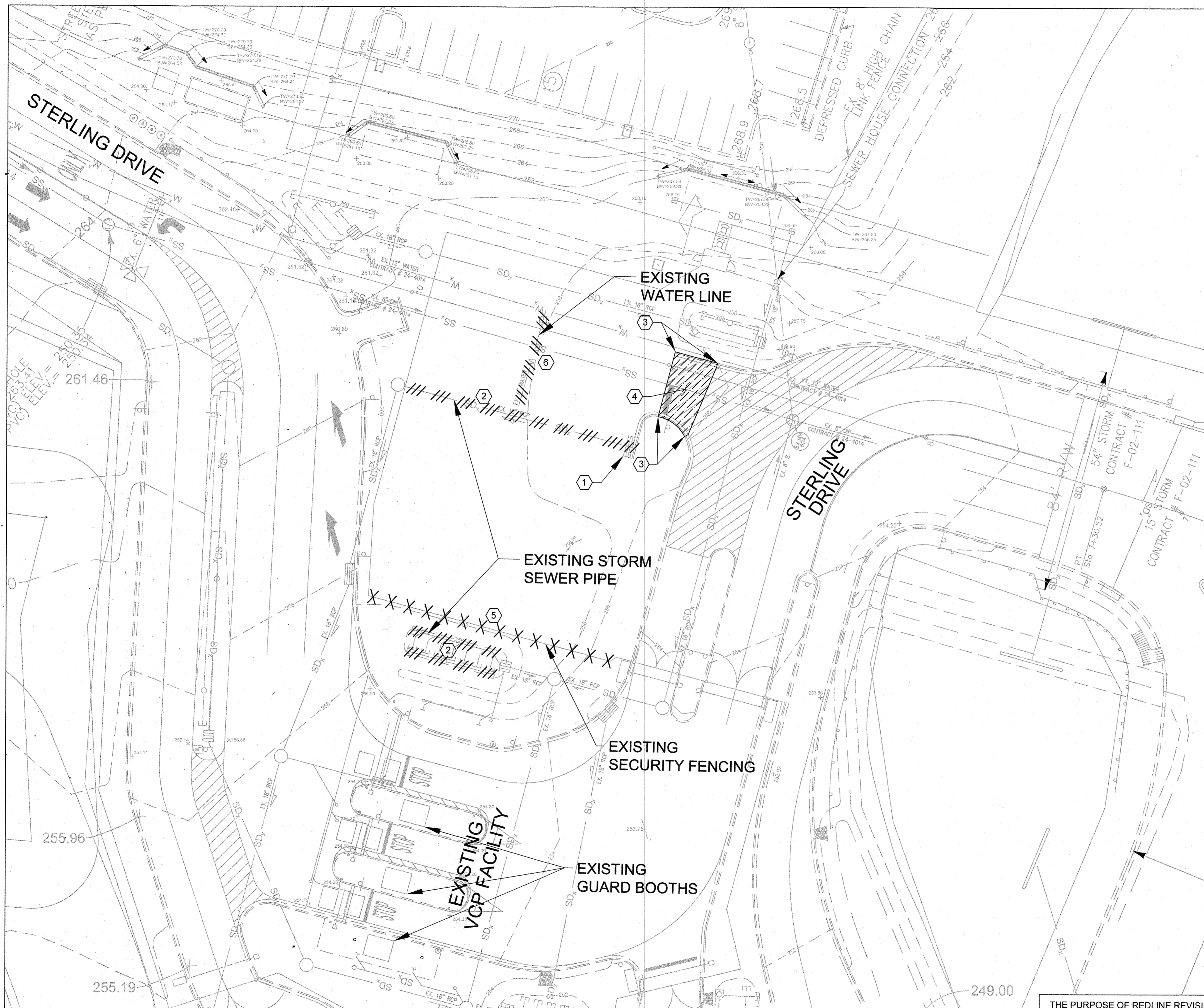
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Work	Description	Date	Appr.

Designed by: D. BROWN	Checked by: S. DAVIS	Date: SEPT. 12, 2019	Project No. 38345	Rev.:
Dwn. by: D. BROWN	RSFO Project Manager			
Submitted by: ROBERT CROWLEY	PROJECT MANAGER			

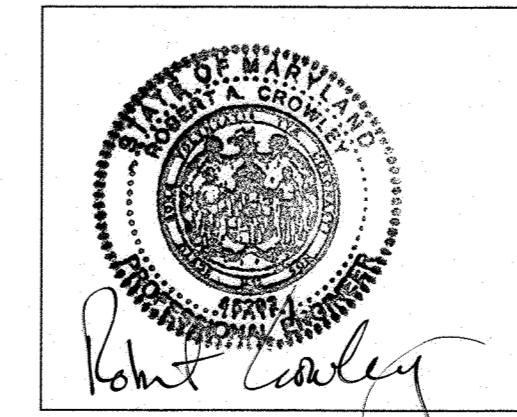
EMERSON 8 - PHASE 6  
VEHICLE CONTROL INSPECTION FACILITY (VOIF)  
EXISTING CONDITIONS AND  
SITE DEMOLITION PLAN  
LAUREL, MD

Drawing No.  
Sheet Reference No.  
71 of 80  
Plate of  
SDP-16-005



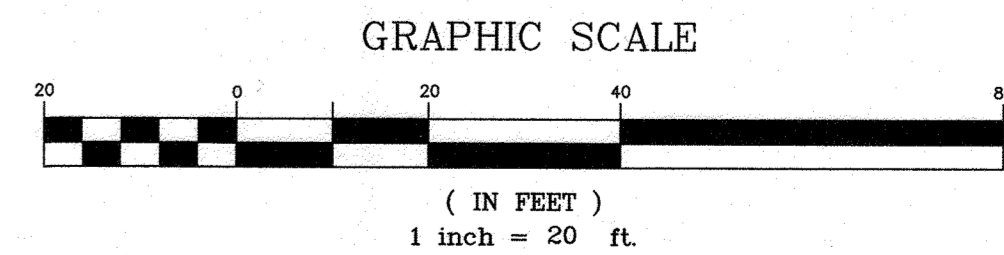
1 EXISTING CONDITIONS AND SITE DEMOLITION PLAN  
1" = 20'

THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP SET

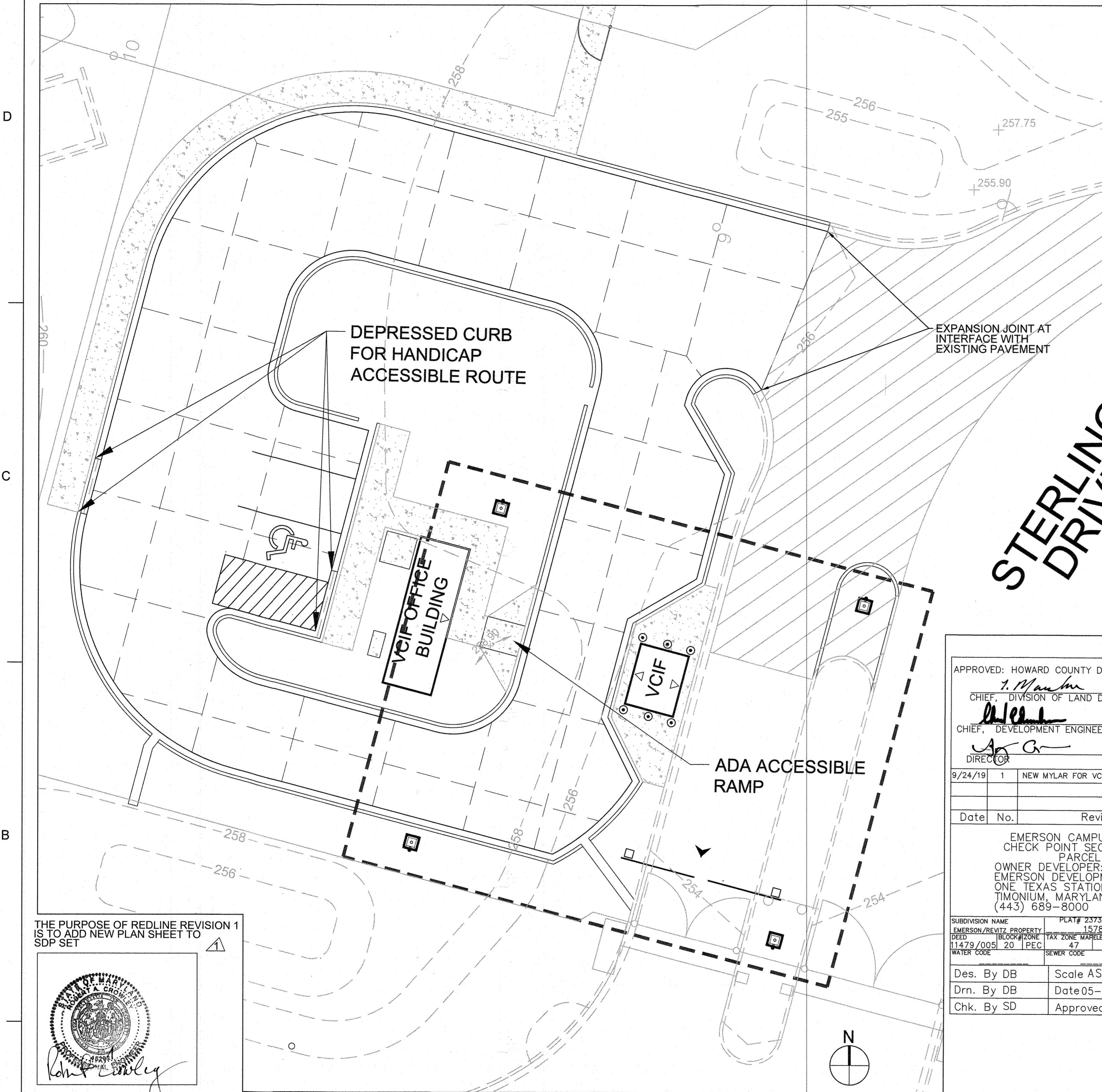


ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

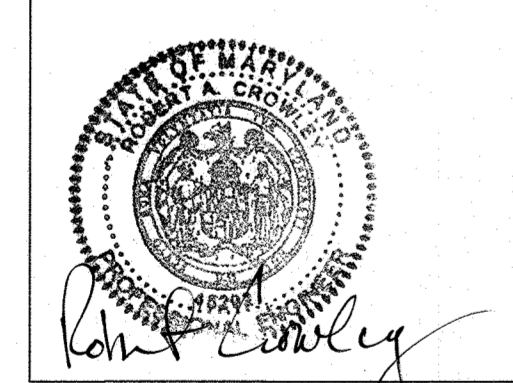
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING		
<i>J. Mawhood</i>	12-16-19	
CHIEF, DIVISION OF LAND DEVELOPMENT		
<i>Phil Edwards</i>	12-18-19	
CHIEF, DEVELOPMENT ENGINEERING DIVISION		
<i>AJ Gr</i>	12-18-19	
DIRECTOR		
9/24/19	1	NEW MYLAR FOR VCP REVISIONS
Date	No.	Revision Description
EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE PARCEL H		
OWNER DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
SUBDIVISION NAME EMERSON/REVITZ PROPERTY	PLAT# 23732-23734 15786	LOT PARCEL # PARCEL H, PARCEL D-1, PARCEL E-1, PARCEL F-1, PARCEL G, PARCEL I, PARCEL J, PARCEL K, PARCEL L, PARCEL M, PARCEL N, PARCEL O, PARCEL P, PARCEL Q, PARCEL R, PARCEL S, PARCEL T, PARCEL U, PARCEL V, PARCEL W, PARCEL X, PARCEL Y, PARCEL Z
DEED 11479/0051	BLOCK# ZONE 20 PEC	TAX ZONE MAP/ELECT. DISTRICT 47 6
WATER CODE	SEWER CODE	
Des. By DB	Scale AS SHOWN	Proj. No.
Drn. By DB	Date 05-09-2019	
Chk. By SD	Approved	



PROFESSIONAL CERTIFICATION  
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THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP SET

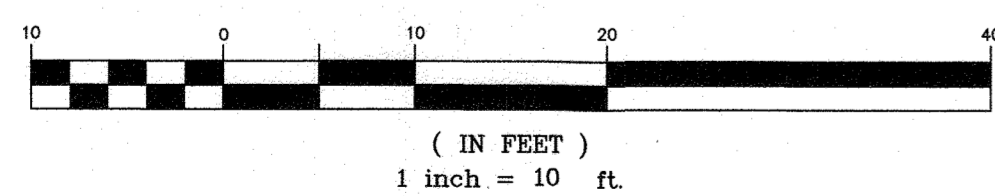


ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

**1 CONCRETE JOINTING PLAN**

1" = 10'

GRAPHIC SCALE



**NOTES:**

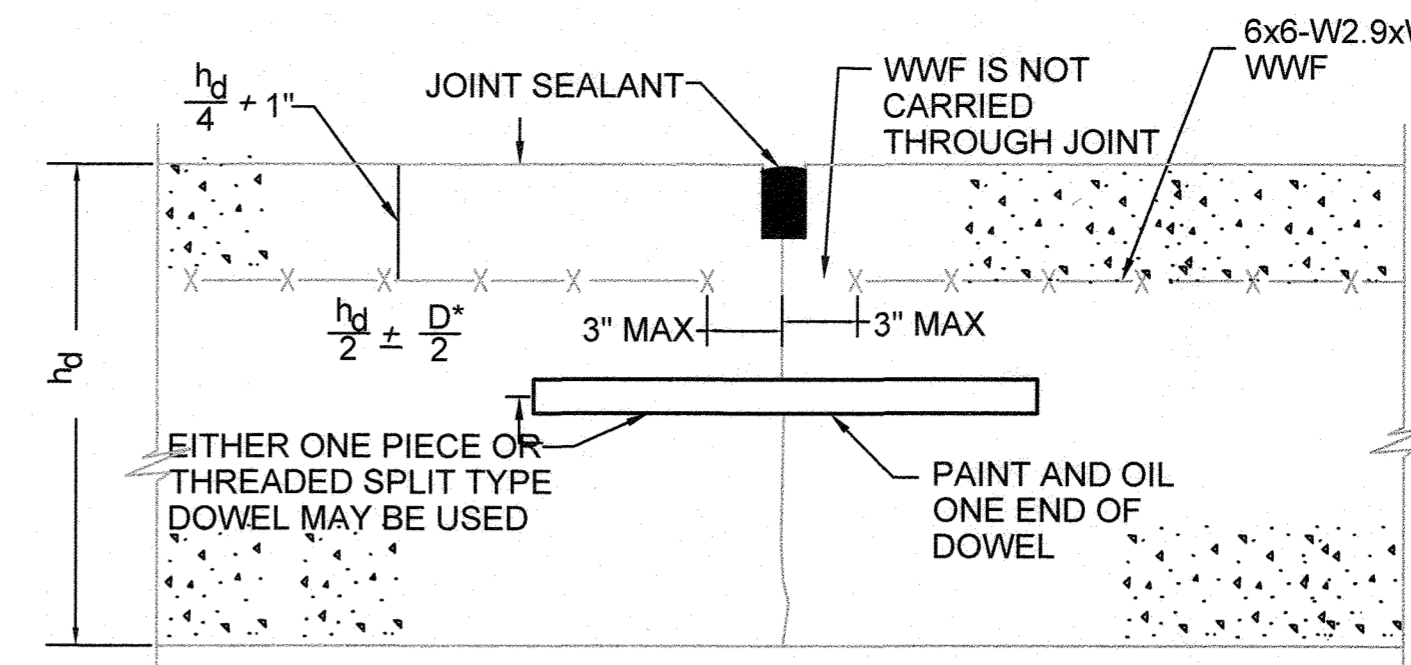
1. TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS SHALL BE SPACED AT 15 FEET EACH WAY.
2. JOINT SPACING SHOULD NOT EXTEND MORE THAN 15 FEET.
3. DOWEL BARS SHALL BE PLACED AT TRANSVERSE JOINTS. DOWEL BARS SHALL BE ROUND SMOOTH NO. 8 SIZE STEEL BARS, 18 INCHES IN LENGTH AND PLACED 12 INCHES ON CENTER AND 6 INCHES FROM THE LONGITUDINAL JOINT. DOWEL BARS SHALL BE PLACED IN ACCORDANCE WITH STANDARD 57.02 OF THE MDSA STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES.
4. TIE-BARS SHALL BE PLACED AT LONGITUDINAL JOINTS. TIE-BARS SHALL BE NO. 4 SIZE STEEL (J) BARS, 14 INCHES IN LENGTH AND PLACED 36 INCHES ON CENTER AT ALL LONGITUDINAL JOINTS AND SLAB/CURB INTERFACES. EXPANSION JOINTS SHALL BE PLACED AT FIXED OBJECTS.
5. CONTRACTOR MAY SUBMIT ALTERNATE JOINTING PLAN FOR REVIEW AND APPROVAL.

W = WIDTH OF SEALANT RESERVOIR (SEE TABLE)  
 D = DEPTH OF SEALANT (1.0 TO 1.5 X W)  
 T = DEPTH OF INITIAL SAWCUT OR INSERT TYPE JOINT FORMER (CONSTRUCTION JOINT)

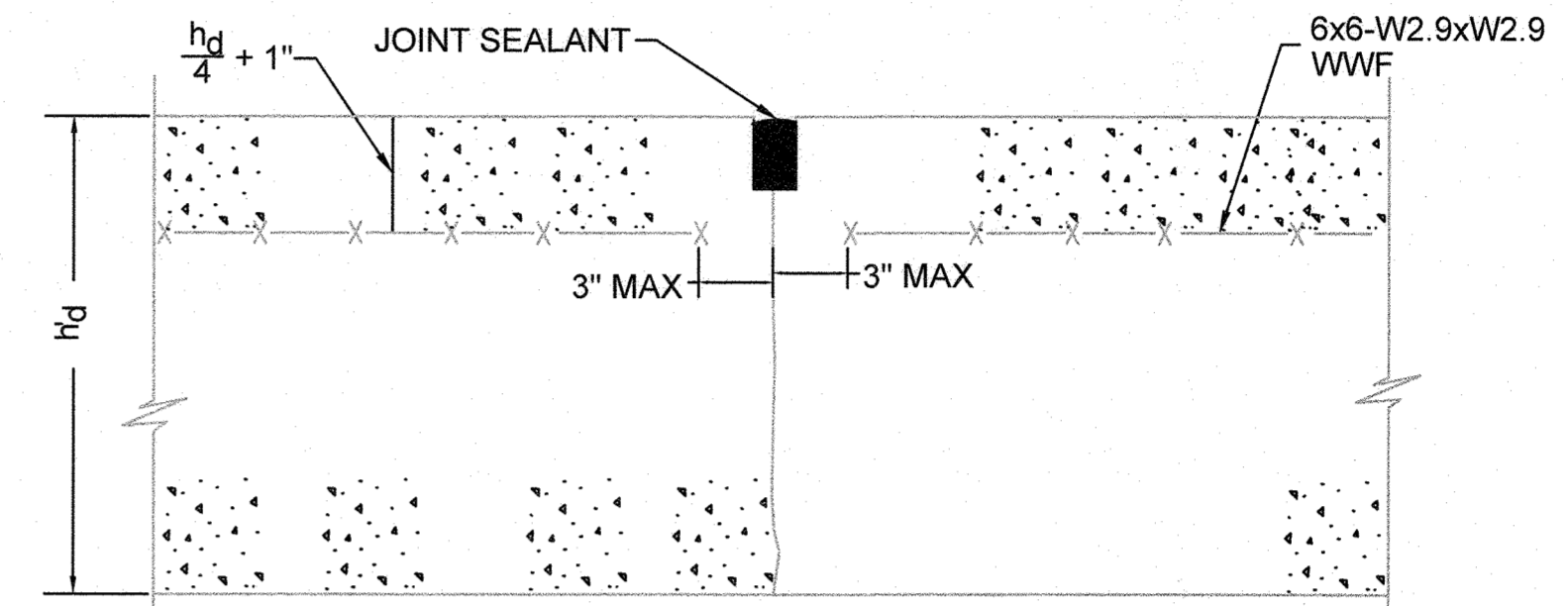
- a) 1/4" SLAB THICKNESS FOR PAVEMENT LESS THAN 12 INCHES
- b) 3 INCHES FOR PAVEMENT 12-18 INCHES
- c) 1/2" SLAB THICKNESS FOR PAVEMENT MORE THAN 18 INCHES

TABLE

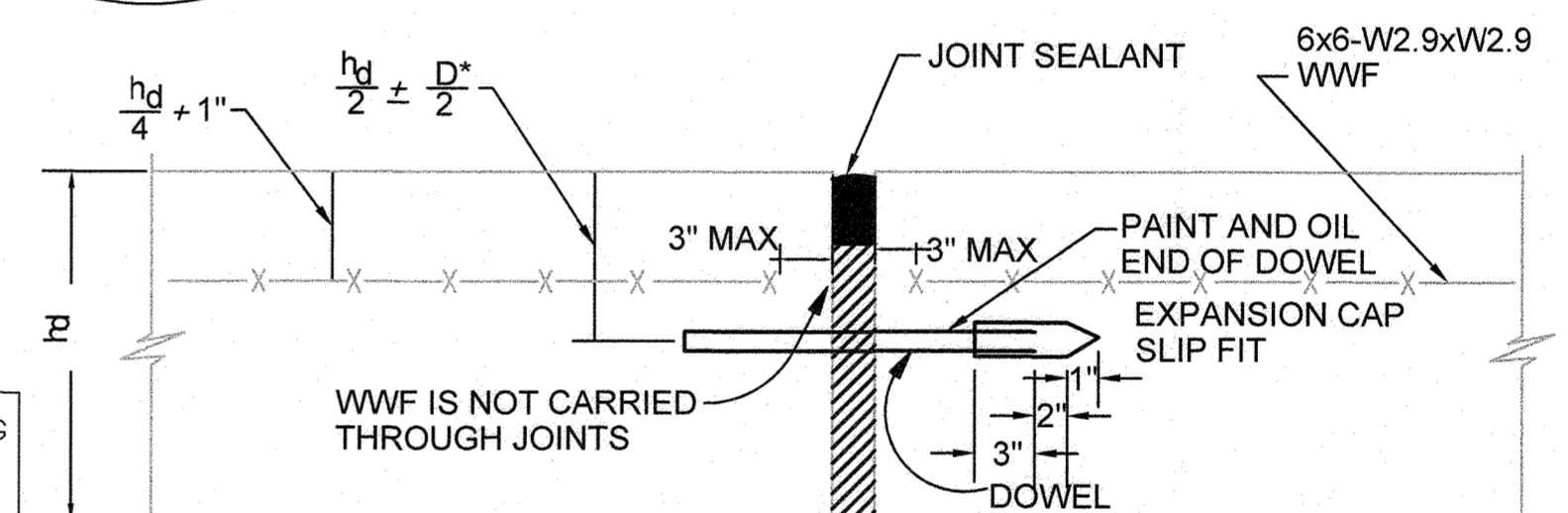
JOINT SPACING FT.	WIDTH, IN.	
	MIN.	MAX.
<25	1/2	5/8
24 - 50	3/4	7/8
>50	1.0	1-1/8



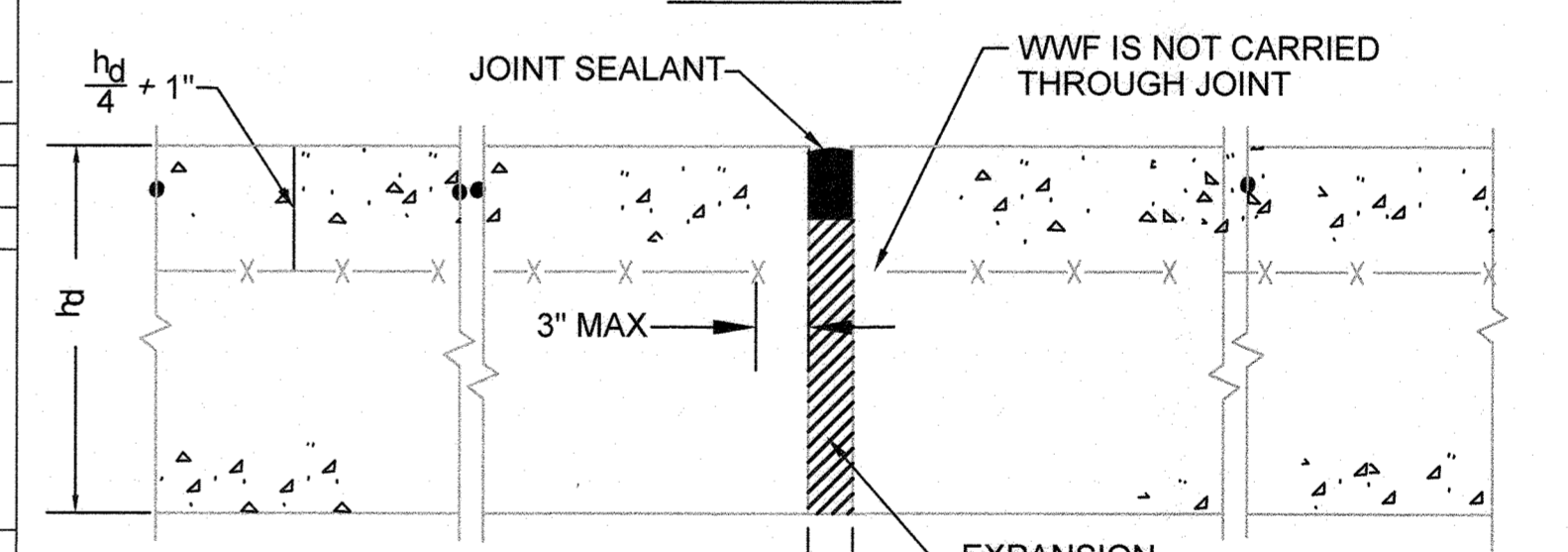
**1 CONCRETE CONTRACTION JOINT DETAIL**  
SCALE: NONE



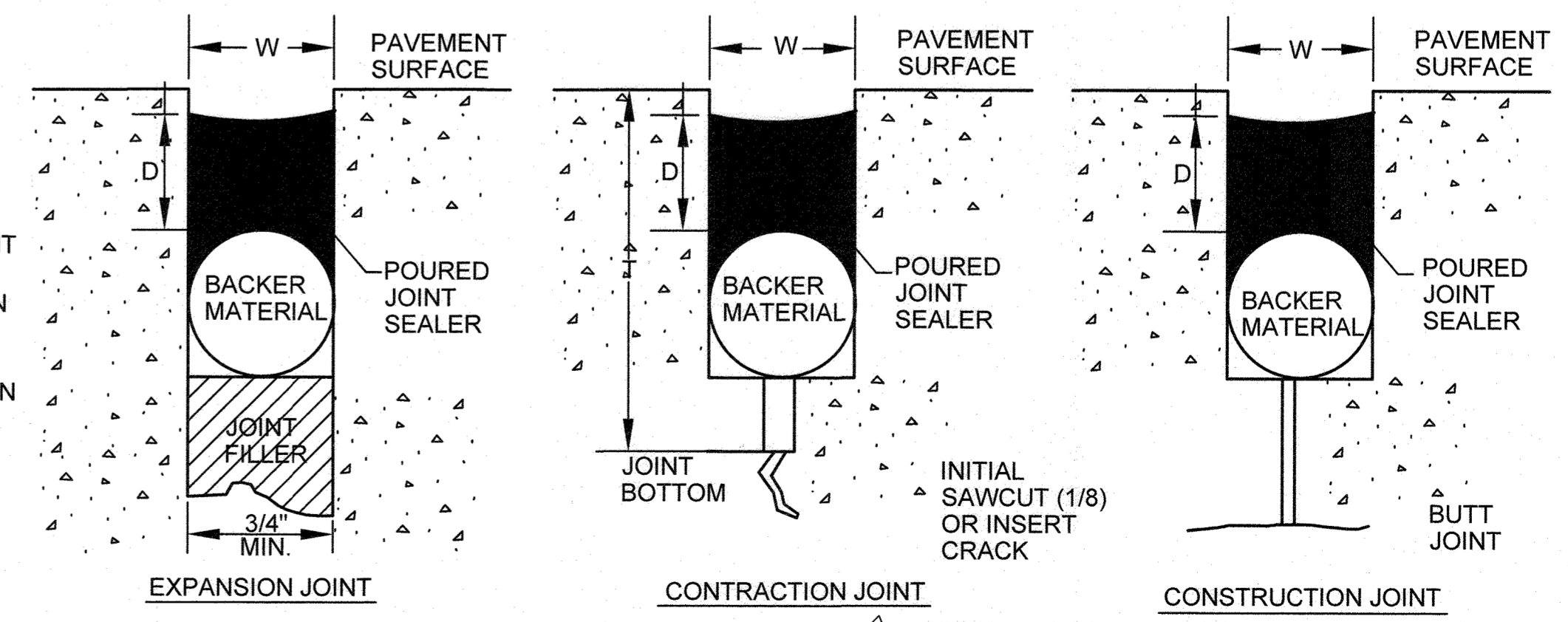
**2 CONCRETE EXPANSION JOINT DETAIL**  
SCALE: NONE



**3 JOINT SEALANT DETAIL**  
SCALE: NONE



**4 JOINT SEALANT DETAIL**  
SCALE: NONE



**5 JOINT SEALANT DETAIL**  
SCALE: NONE

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APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

*J. Manahan* 12-16-19  
 CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 12-16-19  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

*[Signature]* 12-13-19  
 DIRECTOR

9/24/19	1	NEW MYLAR FOR VCP REVISIONS
---------	---	-----------------------------

Date	No.	Revision Description
		EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE PARCEL H OWNER DEVELOPER, EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000

SUBDIVISION NAME	PLAT# 23732-23734	LOT PARCEL #	PARCEL #
EMERSON/REVITZ PROPERTY	15786	1	PARCEL D-1
DEED	BOOK#ZONE	TAX ZONE	MARBLCT. DISTRICT
11479/005	20	PEC	6
WATER CODE	SEWER CODE		

Des. By DB	Scale AS SHOWN	Proj. No.
Drn. By DB	Date 05-09-2019	
Chk. By SD	Approved	

US Army Corps of Engineers  
 Baltimore District

REAL PROPERTY SERVICES  
 ANNAPOLIS JUNCTION, MARYLAND

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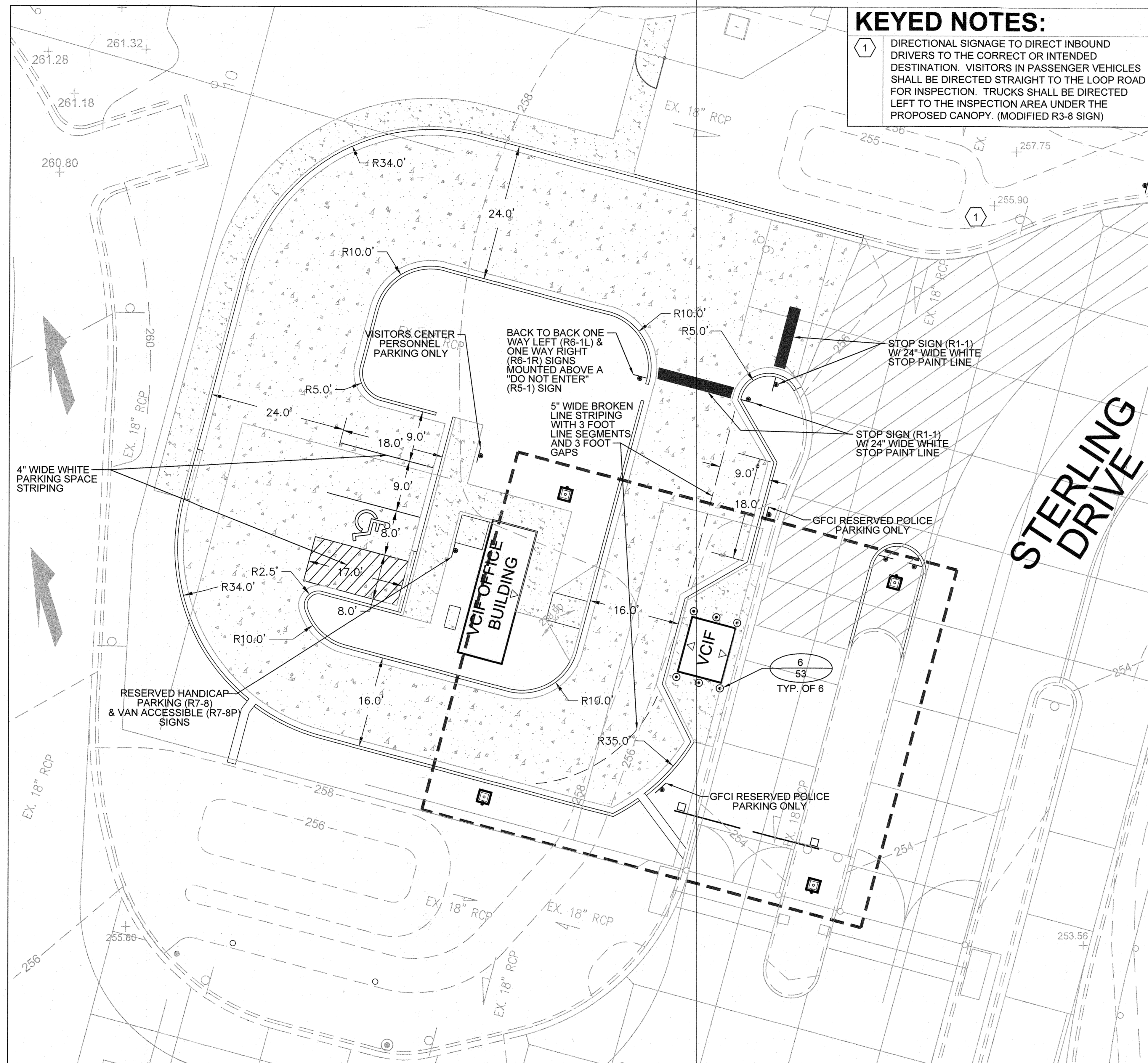
Rev.	Date	Description
1	SEPT. 12, 2019	Project No. 38345

Designed by: D. BROWN  
 Drawn by: D. BROWN  
 RSD Project Manager: S. DAVIS  
 RICK PACK  
 Submitted by: ROBERT CROWLEY  
 PROJECT MANAGER

EMERSON 8 - PHASE 6  
 VEHICLE CONTROL INSPECTION FACILITY (VOIF)  
 CONCRETE JOINTING PLAN  
 LAUREL MD

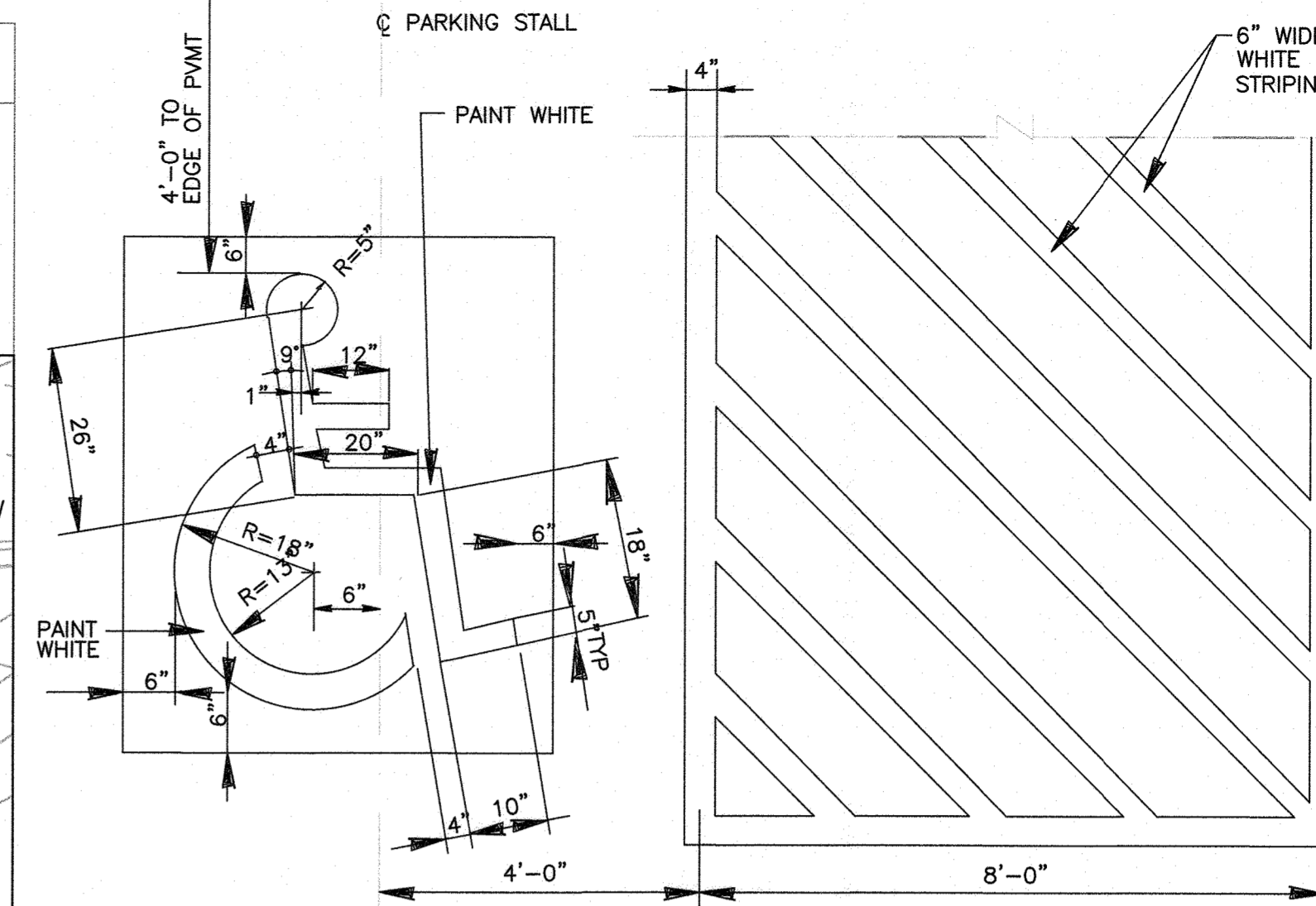
Drawing No.  
 Sheet Reference No. 72 of 80  
 Plate of  
 SDP-16-005



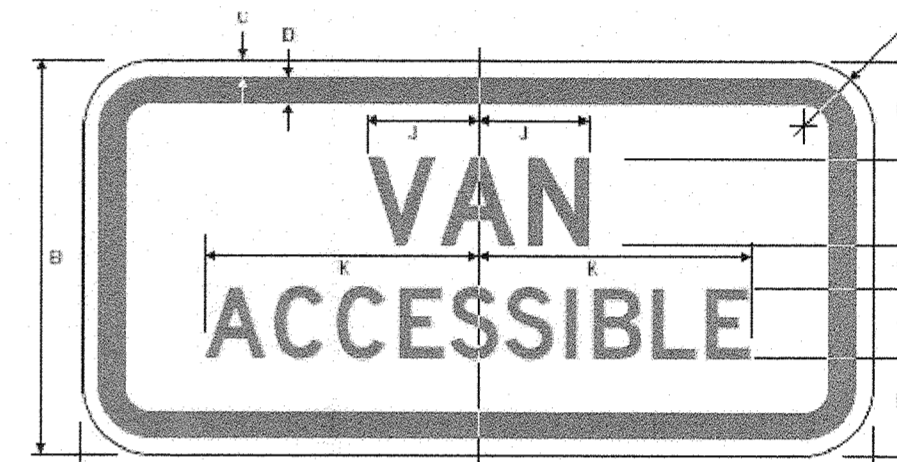
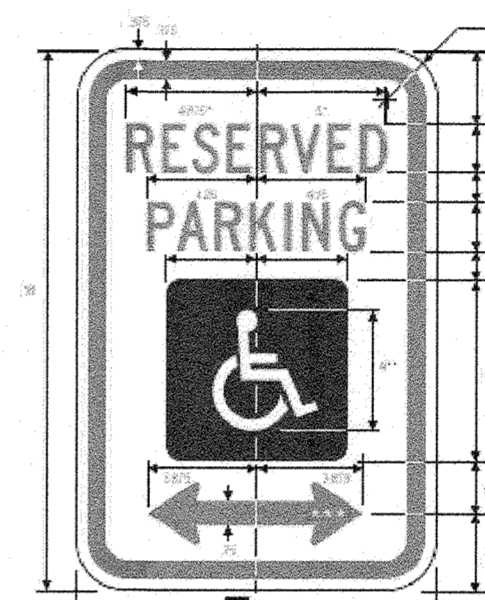


**KEYED NOTES:**

1 DIRECTIONAL SIGNAGE TO DIRECT INBOUND DRIVERS TO THE CORRECT OR INTENDED DESTINATION. VISITORS IN PASSENGER VEHICLES SHALL BE DIRECTED STRAIGHT TO THE LOOP ROAD FOR INSPECTION. TRUCKS SHALL BE DIRECTED LEFT TO THE INSPECTION AREA UNDER THE PROPOSED CANOPY. (MODIFIED R3-8 SIGN)

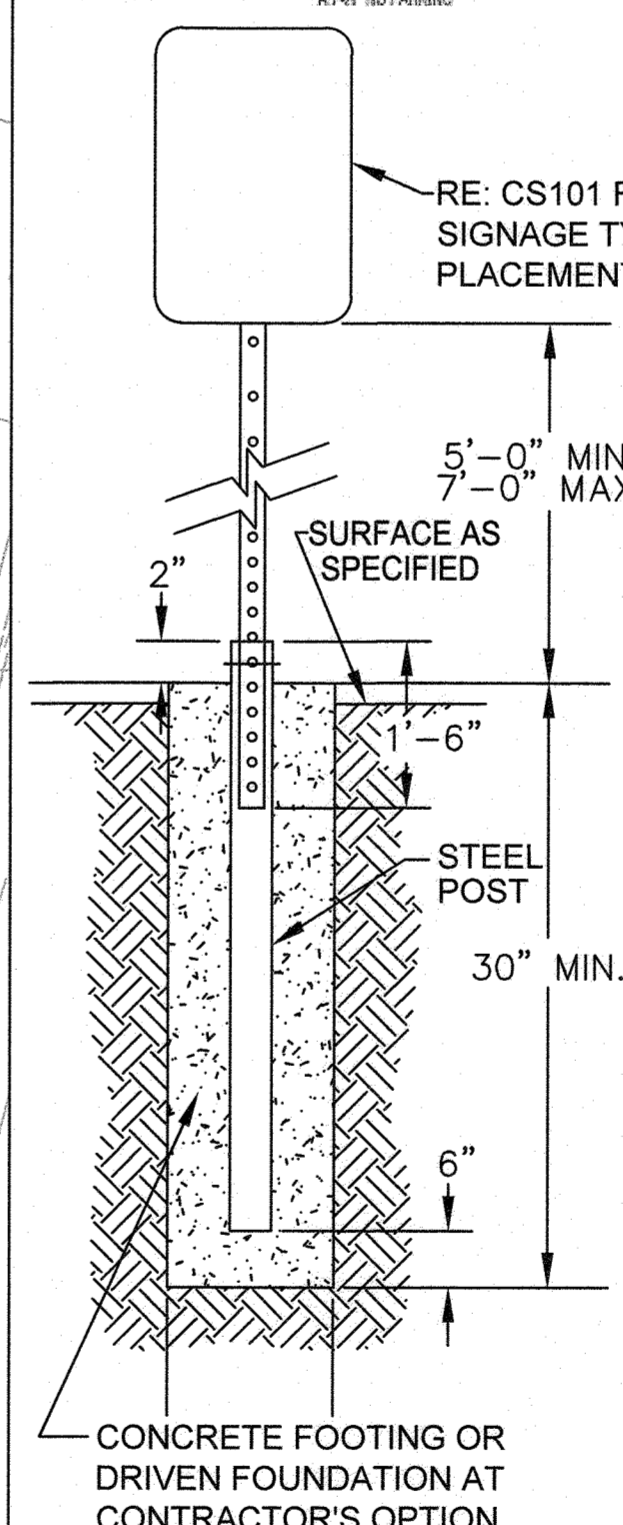


HANDICAPPED PARKING DETAIL



R7-8P VAN ACCESSIBLE SIGNATURES SECTION 26.09.08.01, 70-14										
A	B	C	D	E	F	G	H	J	K	L
12	16	37.5	4.38	1.5	1.5D	5	10	1.571	3.959	1.5
18	6	37.5	4.38	2.25	2D	1	1.5D	2.463	5.794	1.5

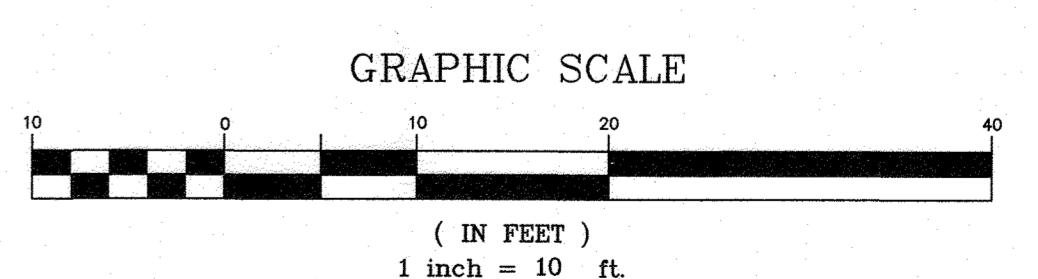
HANDICAPPED PARKING SIGN DETAIL



HANDICAPPED PARKING SIGN BASE DETAIL

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 Chief, DIVISION OF LAND DEVELOPMENT  
 Chief, DEVELOPMENT ENGINEERING DIVISION  
 Director

Date	9/24/19	1	NEW MYLAR FOR VCP REVISIONS
Date No.	Revision Description		
Des. By	DB	Scale	AS SHOWN
Drn. By	DB	Date	05-09-2019
Chk. By	SD	Approved	



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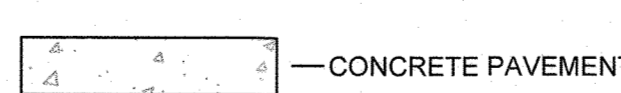


**PAVING, PAVEMENT MARKING AND SIGNAGE PLAN**

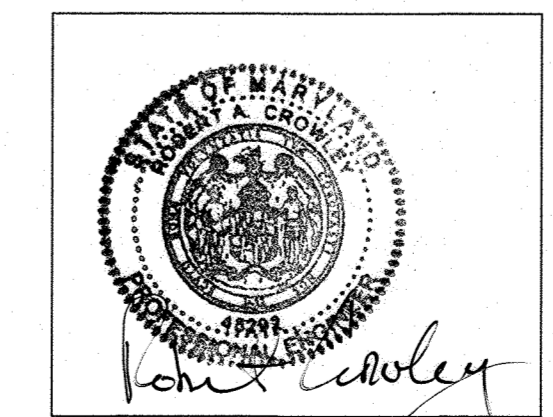
**NOTES:**

- ALL STRIPING SHALL BE 5 INCH WIDE WHITE PAINT UNLESS NOTED OTHERWISE.
- STOP PAINT LINES ARE TO BE IN LINE WITH STOP SIGNS AND SHALL EXTEND THE WIDTH OF THE LANE.
- ALL 12"x18" SIGNS SHALL BE MOUNTED ON U-CHANNEL POSTS.
- ALL SIGNS (NOT INCLUDING SIGNS WITH FLASHING YELLOW BEACONS) GREATER THAN 12"x18" SIGNS SHALL BE MOUNTED ON BREAKAWAY TUBULAR STEEL SIGN SUPPORTS IN ACCORDANCE WITH MDSA STD. 802.04.
- REFER TO MDSA FOR PAVEMENT WORD, SYMBOL, AND ARROW MARKINGS. ALL DIMENSIONS ARE TO INSIDE FACE OF CURB, UNLESS NOTED OTHERWISE.

**LEGEND:**



THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP SET



ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

US Army Corps of Engineers  
 Baltimore District

REAL PROPERTY SERVICES  
 FIELD OFFICE  
 ANNAPOLIS JUNCTION, MARYLAND

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Rev.	Date	Description	Appr.
1	SEPT. 12, 2019		

Checked by: D. BROWN  
 Drawn by: D. BROWN  
 Project Manager: S. DAVIS  
 Project Manager: ROBERT CROWLEY  
 Project Manager: LAUREL MD

EMERSON 8 - PHASE 6  
 VEHICLE CONTROL INSPECTION FACILITY (VCI)  
 PAVING, PAVEMENT MARKING AND SIGNAGE PLAN

Drawing No. 111038K  
 Sheet Reference No. 73 of 80  
 Plate 11 of 53  
 SDP-16-005



US Army Corps of Engineers  
Baltimore District

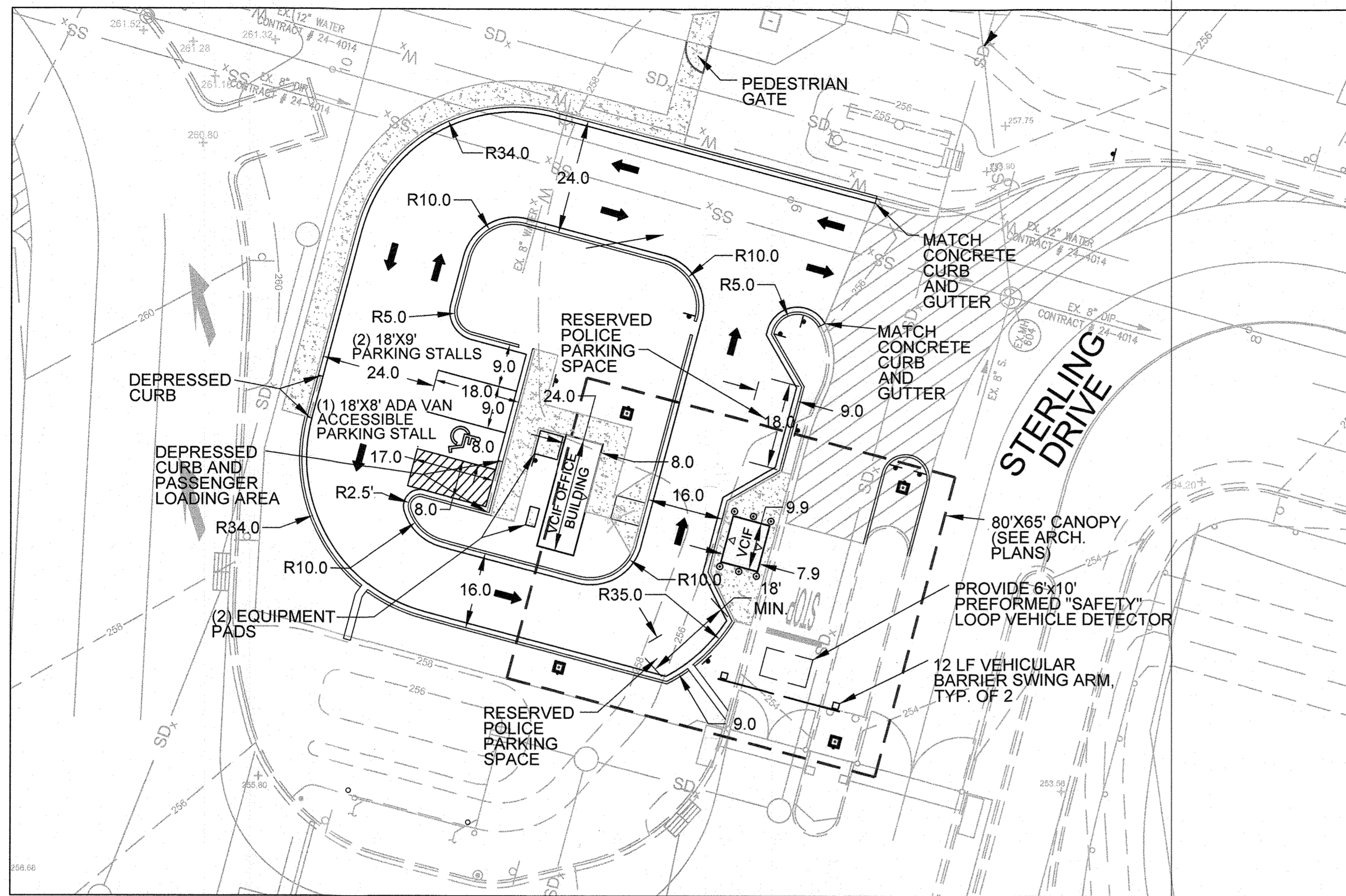
REAL PROPERTY SERVICES  
FIELD OFFICE  
ANAPOLIS JUNCTION, MARYLAND



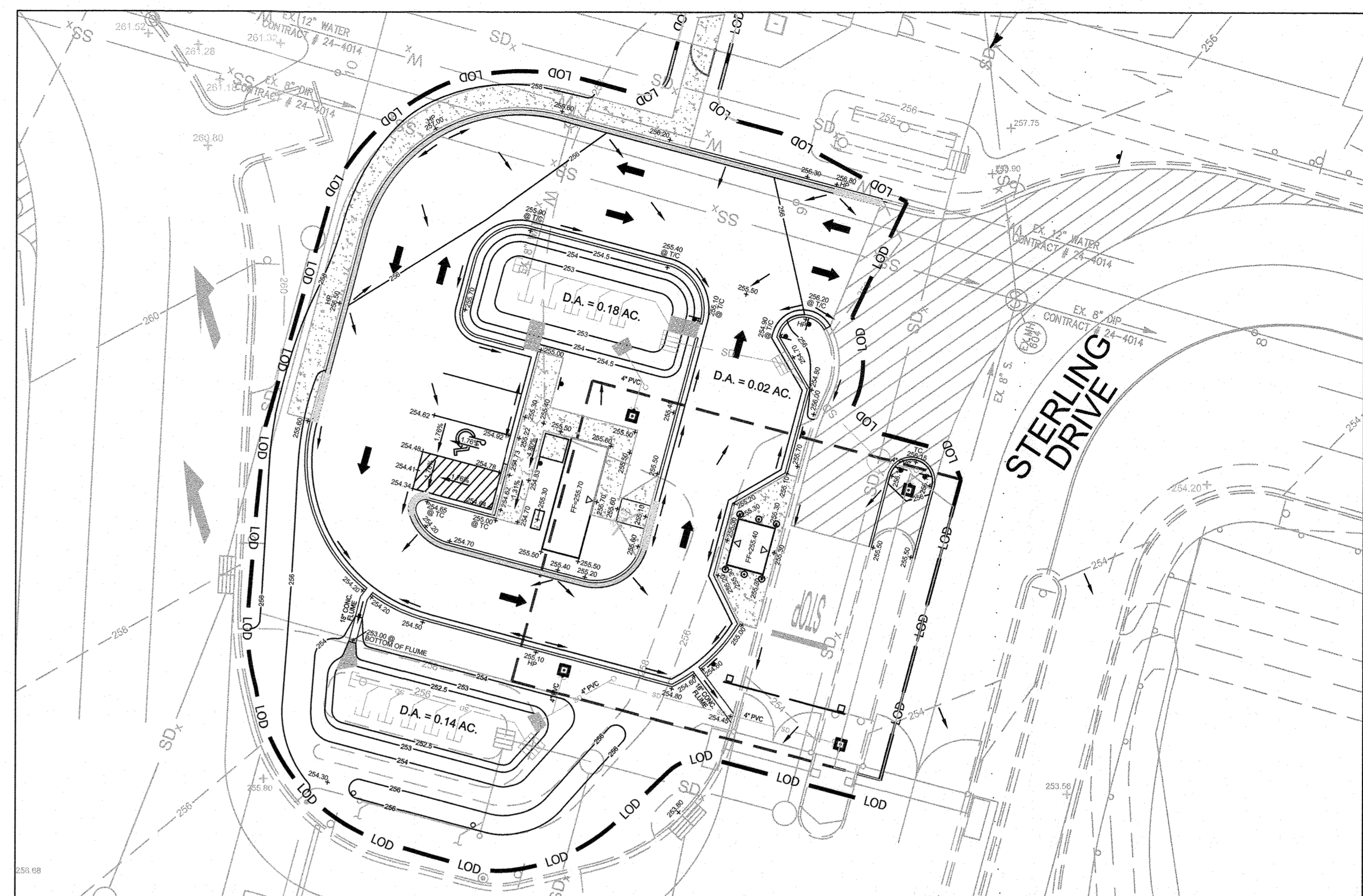
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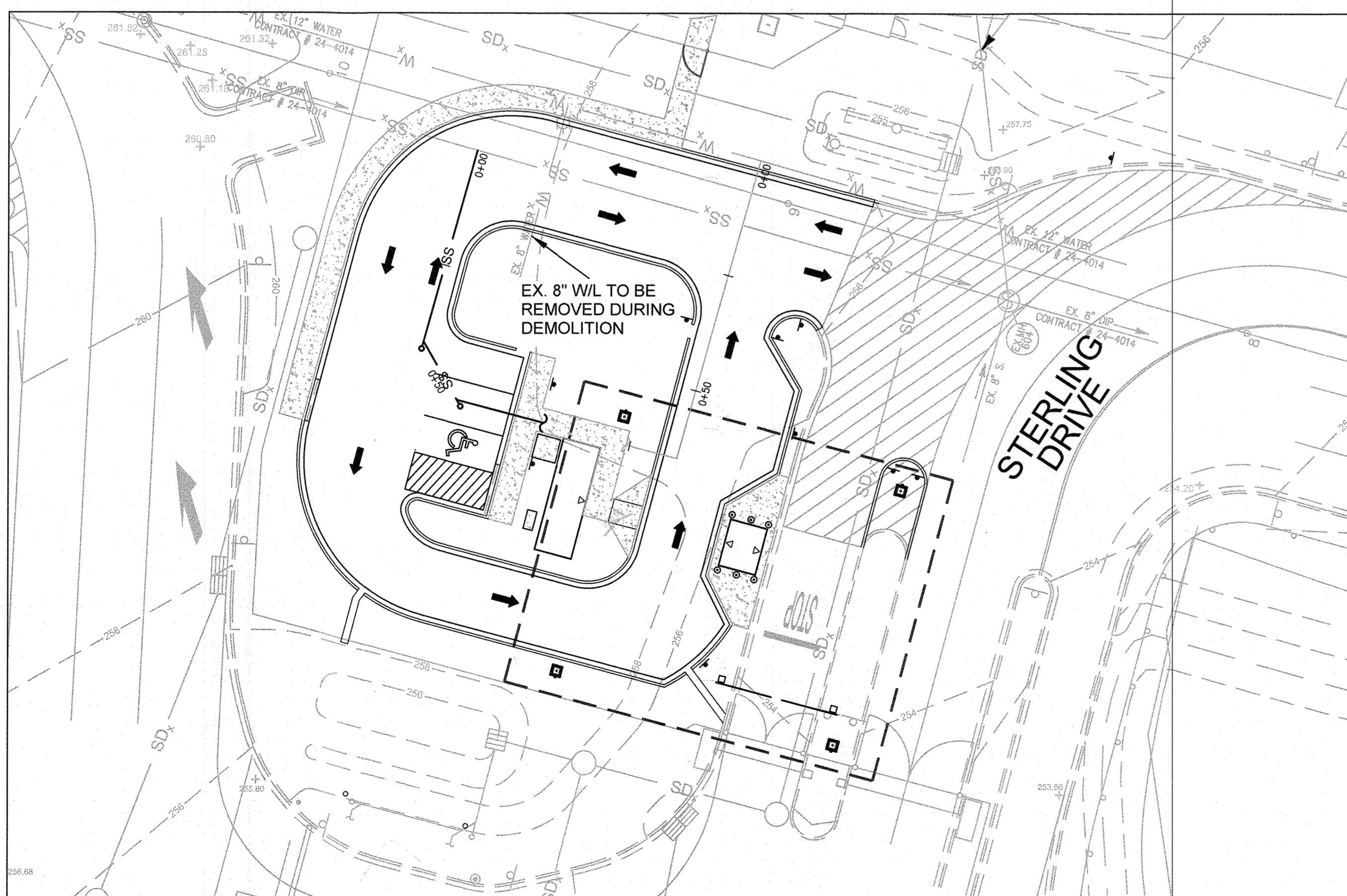
Mark	Description	Date	Appr.



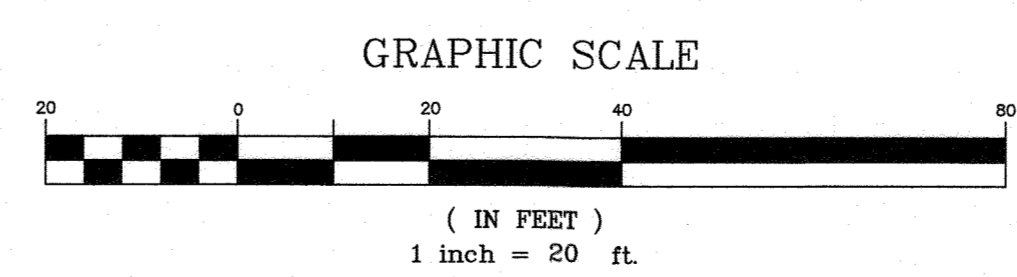
1 SITE LAYOUT PLAN  
1" = 20'



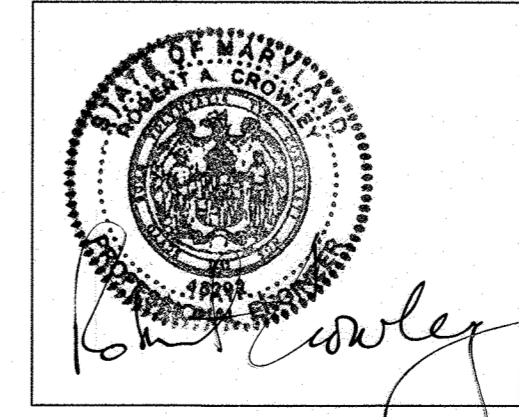
2 SITE GRADING PLAN  
1" = 20'



3 SITE UTILITY PLAN  
1" = 20'



THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP-16-005 SET



ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING		
CHIEF, DIVISION OF LAND DEVELOPMENT	<i>T. Mank</i>	12/16/17
CHIEF, DEVELOPMENT ENGINEERING DIVISION	<i>D. Brown</i>	12-18-19
DIRECTOR	<i>A. Br</i>	12-18-19
Date	No.	Revision Description
9/24/19	1	NEW MYLAR FOR VCP REVISIONS
EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE PARCEL H OWNER DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000		
SUBDIVISION NAME	PLAT# 23732-23734	LOT PARCEL H, PARCEL D-1,
EMERSON/REVITZ PROPERTY	15796	PARCEL C-1, PARCEL N-1,
DEED	TAX ZONE MARLEET, DISTRICT	PARCEL O, PARCEL Q
11479/0051 20 PEC	47	6
WATER CODE	SEWER CODE	
Des. By DB	Scale AS SHOWN	Proj. No.
Drn. By DB	Date 05-09-2019	
Chk. By SD	Approved	

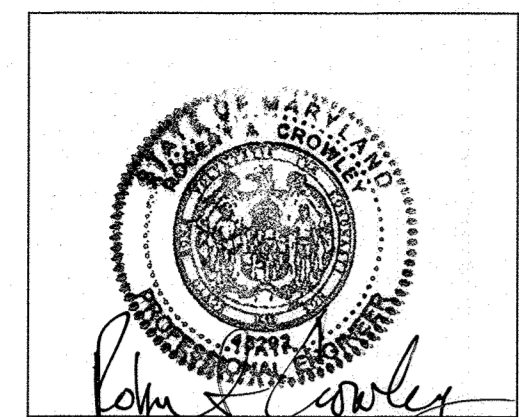
Designed by	D. BROWN	Checked by	S. DAVIS
Dwn by	D. BROWN	RSFO Project Manager	ROBERT CROWLEY
RSFO Project Manager	RICK PACE	Project Manager	ROBERT CROWLEY
Date	SEPT. 12, 2019	Project No.	38345
File name	AUGUST 12, 2019	File size	

EMERSON - PHASE 6  
VEHICLE CONTROL INSPECTION FACILITY (VCI)  
ENLARGED SITE LAYOUT,  
GRADING AND UTILITY PLAN  
LAUREL, MD

Drawing No. 111038L  
Sheet Reference No. 74 of 80  
Plate 12 of 53  
SDP-16-005

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THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP-16-005 SET



ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 ONLY

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**GENERAL NOTES**

1. REVEALS AT EIFS ARE 3/4" DEEP UNO.
2. CANOPY IS A PRE-ENGINEERED STRUCTURE AND IS SHOWN AS DESIGN INTENT ONLY.

**KEYED NOTES**

- 1 EIFS EXTERIOR PANEL SYSTEM. FINISH/COLOR OF EIFS TO MATCH EXISTING VCP EIFS. VIF, BEIGE SIMULATED LIMESTONE (ACID ETCHED) "SUGAR CUBE" FINISH. (BASIS OF DESIGN - SHERWIN-WILLIAMS SW6106 KILIM BEIGE, AND DRYVIT #443A CANVAS W/SANDBLAST FINISH). PROVIDE THREE COLOR SAMPLES WITHIN THE RANGE OF COLOR/FINISH MATCHING EXISTING EIFS.
- 2 GATE, SEE CIVIL.
- 3 OFFICER POST
- 4 COLUMN - SIZED PER CANOPY MANUFACTURER.
- 5 BACKER ROD AND JOINT SEALANT
- 6 1/2" FIBERGLASS MAT GYPSUM SHEATHING OVER LIGHT GAUGE METAL FRAMING
- 7 1 1/2" HORIZONTAL REVEAL
- 8 PERIMETER JOINT SYSTEM BY CANOPY MANUFACTURER. COORDINATE WITH PLACEMENT OF EIFS FASCIA.
- 9 1 1/2" VERTICAL REVEAL
- 10 ROOF SYSTEM BY CANOPY MANUFACTURER
- 11 CANOPY STRUCTURE BY CANOPY MANUFACTURER
- 12 24" X 12" EXTERIOR CONVEX MIRROR (ABOVE) WITH OUTDOOR STEEL J-BRACKET MOUNTED TO STEEL COLUMN WITHIN EIFS COLUMN ENCLOSURE. SEE ELEVATION 1/SHEET 75 FOR TYPICAL MOUNTING HEIGHT.
- 13 CEILING PANEL SYSTEM BY CANOPY MANUFACTURER, TO MATCH EXISTING VCP CEILING PANEL SYSTEM.
- 14 METAL ROOF DECK BY CANOPY MANUFACTURER.
- 15 SHEATHING
- 16 CONCRETE CURB (OUTLINE)
- 17 METAL COPING PROFILE AND COLOR ON VCIF TO MATCH EXISTING VCP.
- 18 CONDUIT WHERE APPLICABLE, COORD. WITH ELEC.
- 19 OVERFLOW DRAIN DISCHARGING INDEPENDANTLY AT GRADE. COORDINATE WITH CANOPY MANUFACTURER.
- 20 ROOF DRAIN DISCHARGING DIRECTLY TO STORM SEWER, ENTIRELY WITHIN COLUMN ENCLOSURE. COORDINATE WITH CANOPY MANUFACTURER.
- 21 FOR REVEAL DETAIL AT CONCRETE ENCASEMENT AND EIFS - SEE DETAIL 5 THIS SHEET - TYP AT EACH COLUMN OF VCIF CANOPY.
- 22 CANOPY SYSTEM TO COMPLY WITH UL 752 RATING AND LEVEL 8 BALLISTIC RESISTANT REQUIREMENT.
- 23 CONCRETE FOOTING- REFER TO STRUCTURAL.
- 24 2'-4" X 2'-4" CONCRETE ENCASEMENT AT COLUMN - REFER TO STRUCTURAL. CONCRETE ENCASEMENT TO BE FLUSH WITH EIFS CLADDING - COORDINATE FINAL DIMENSIONS FOR ENCASEMENT WITH EIFS CONFIGURATION.
- 25 APPROXIMATE GRADE LEVEL, SEE CIVIL.
- 26 OUTLINE OF SLOPING ROOF SYSTEM (BEYOND)
- 27 ROOF DRAIN AND OVERFLOW DRAIN LINES LOCATED WITHIN CANOPY STRUCTURE AND CANOPY COLUMNS (TYP).

US Army Corps of Engineers  
Baltimore District

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FIELD OFFICE  
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Rev.	Date	Description

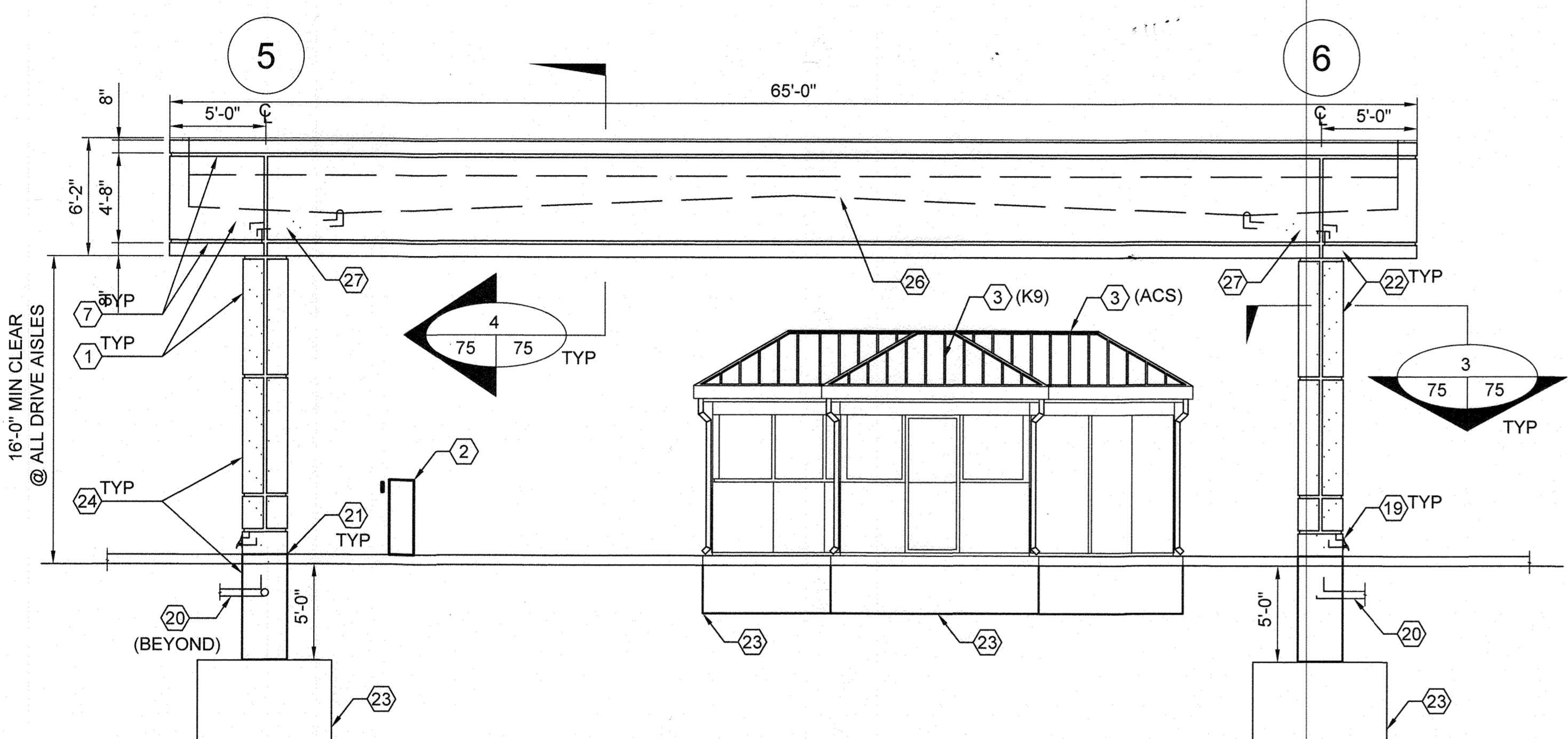
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 T. March 12/16/19  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 D. Brown 12-18-19  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DIRECTOR 12-18-19

EMERSON 8 - PHASE 6  
VEHICLE CARGO INSPECTION FACILITY (VCIF)  
NEW WORK  
VCIF - ELEVATIONS AND DETAILS  
LAUREL, MD

Drawing No. 111038Z  
Sheet Reference No. 75 of 80  
Plate 26 of 53  
SDP-16-005

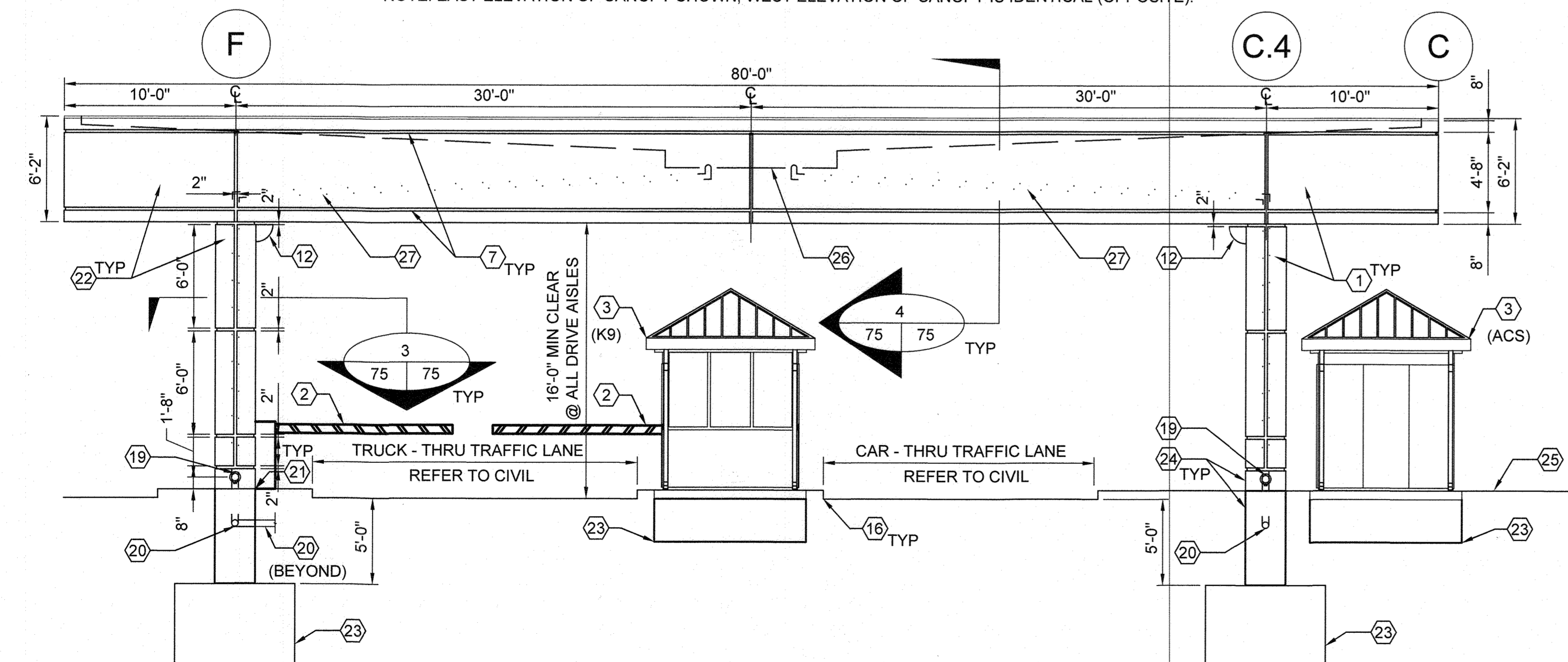
UNCLASSIFIED//FOR OFFICIAL USE ONLY

D  
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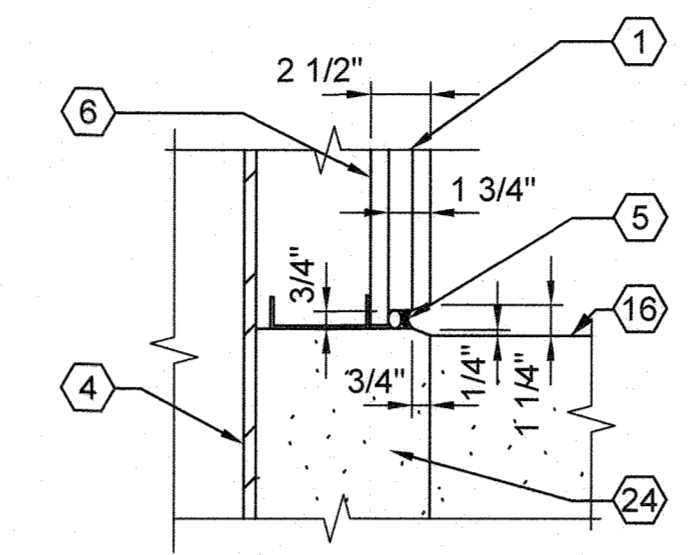
**EAST ELEV. CANOPY AT VCIF (WEST OPP.)**  
SCALE: 3/16"=1'-0"

NOTE: EAST ELEVATION OF CANOPY SHOWN, WEST ELEVATION OF CANOPY IS IDENTICAL (OPPOSITE).

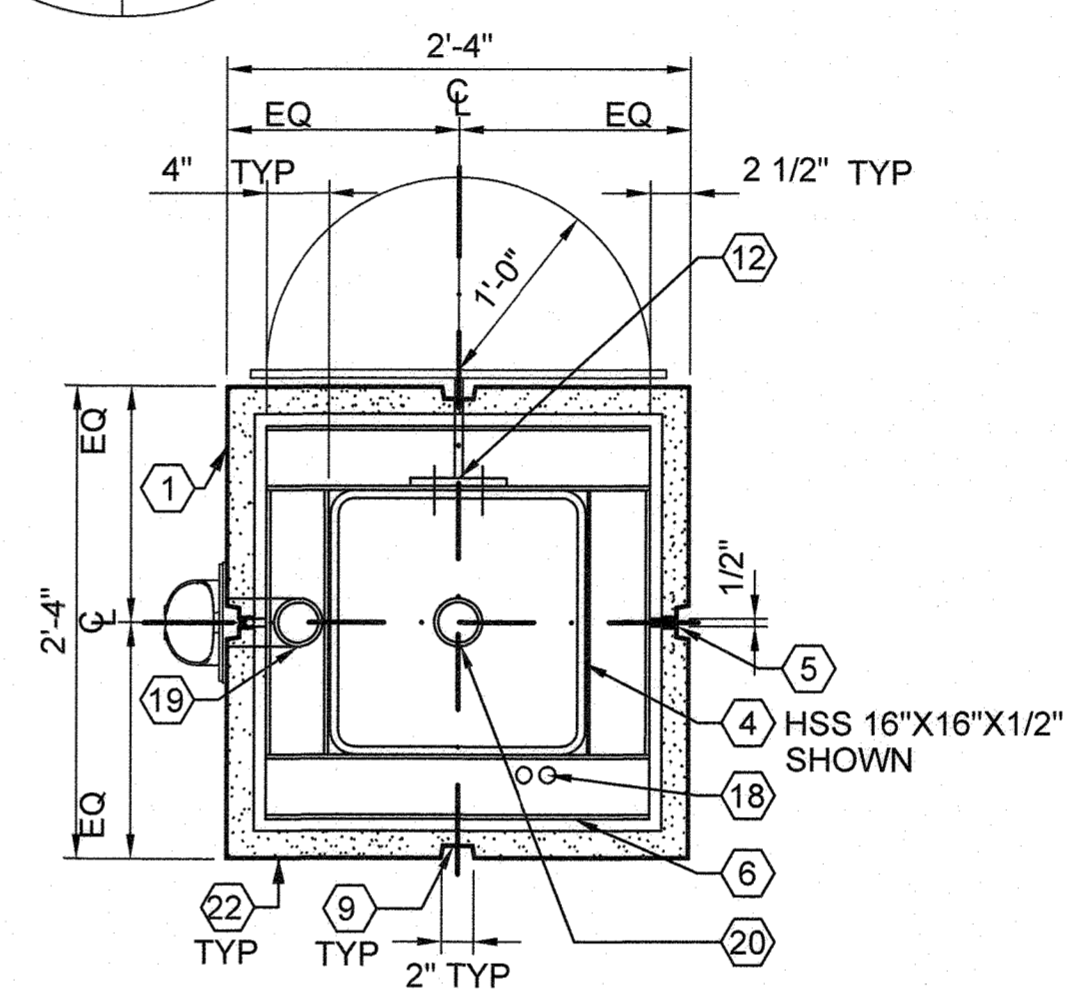


**NORTH ELEV. CANOPY AT VCIF (SOUTH OPP.)**  
SCALE: 3/16"=1'-0"

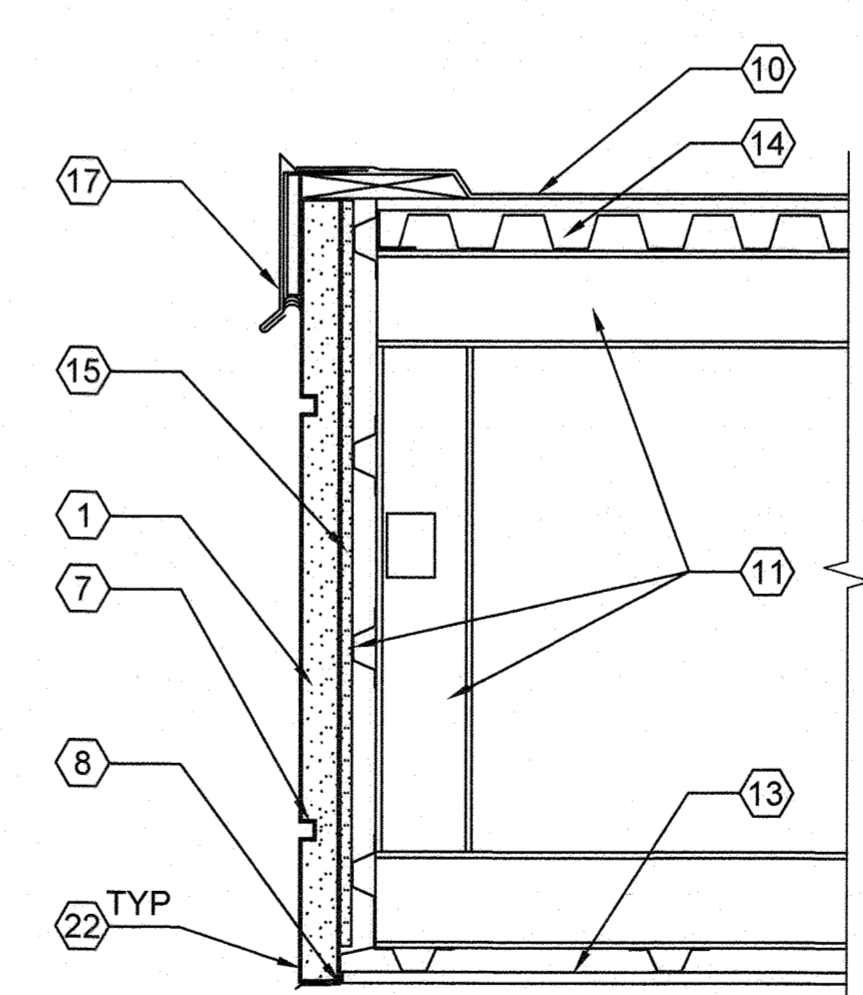
NOTE: NORTH ELEVATION OF CANOPY SHOWN, SOUTH ELEVATION OF CANOPY IS IDENTICAL (OPPOSITE).



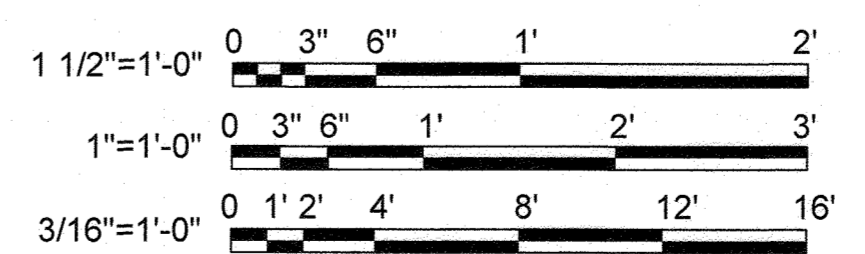
**EIFS REVEAL DETAIL**  
SCALE: 1-1/2"=1'-0"

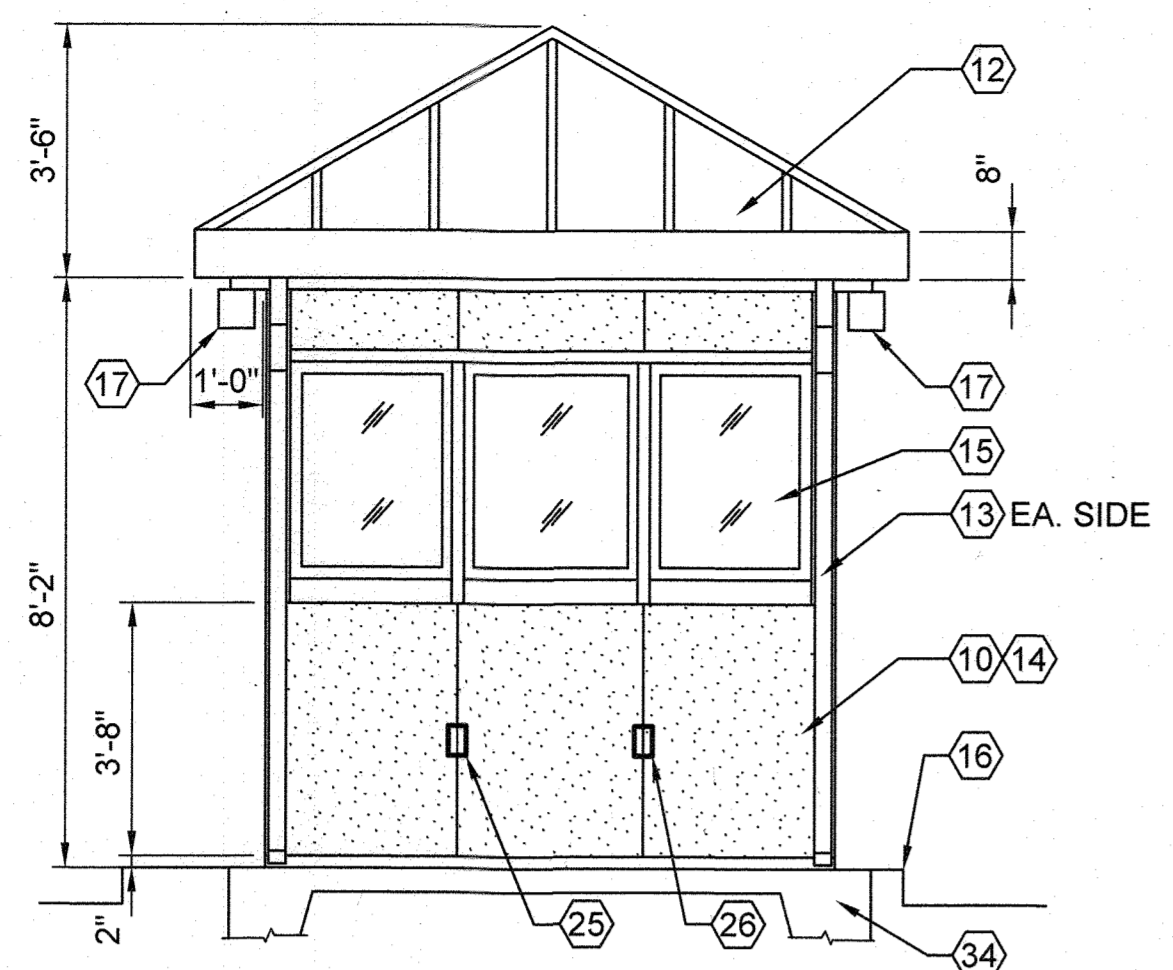


**TYP DETAIL AT COLUMN**  
SCALE: 1"=1'-0"

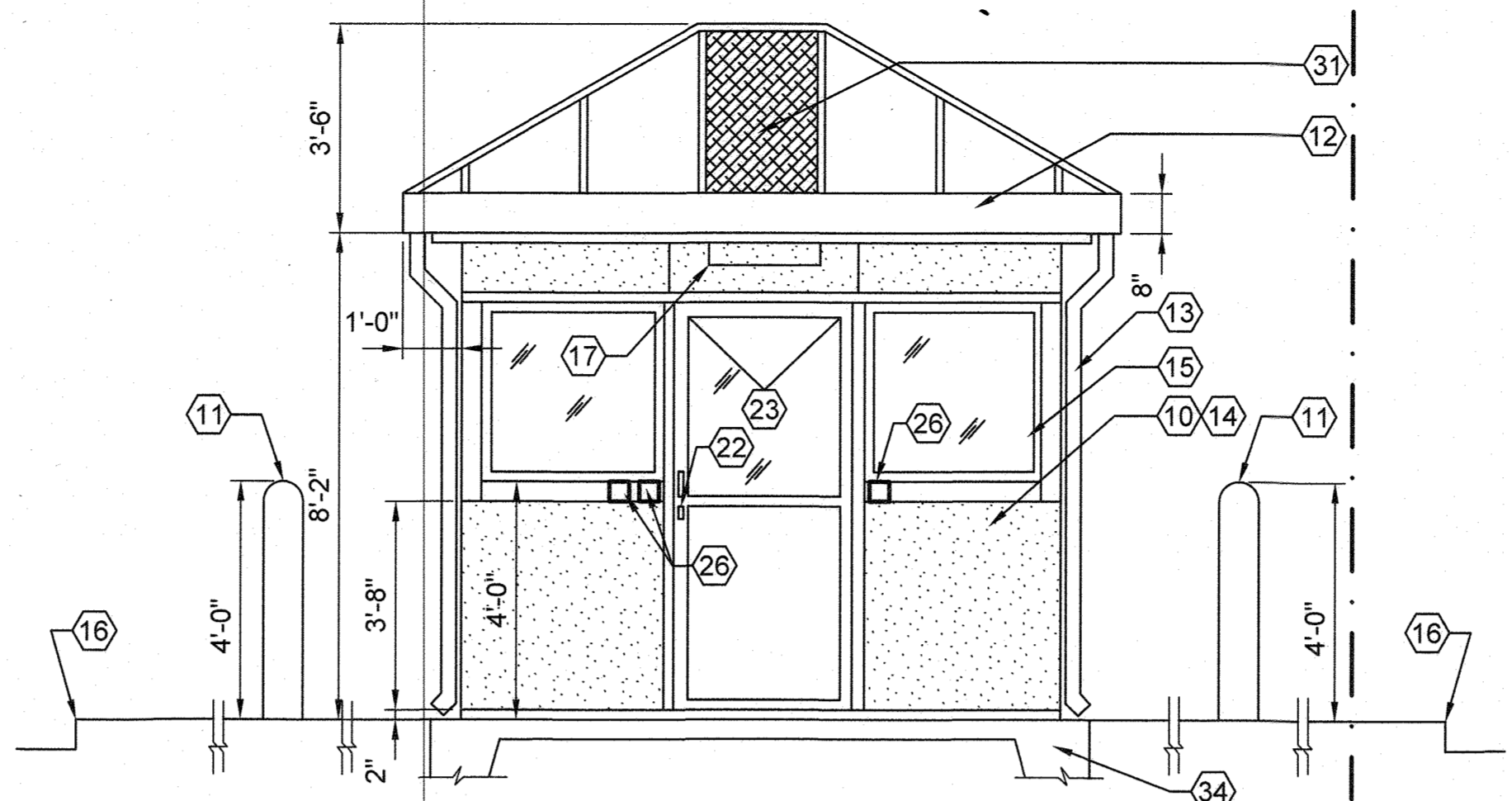


**DETAIL AT FASCIA (H.P.)**  
SCALE: 1"=1'-0"

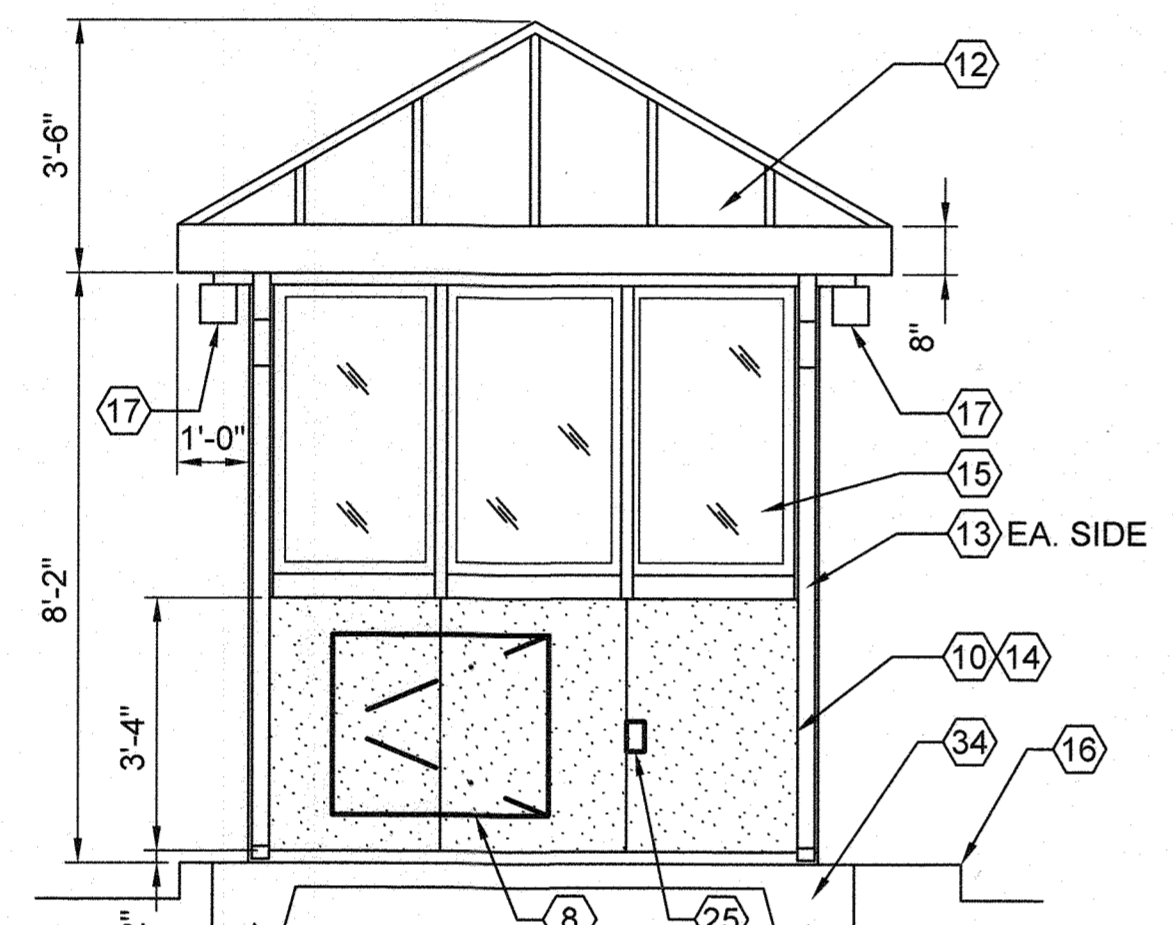




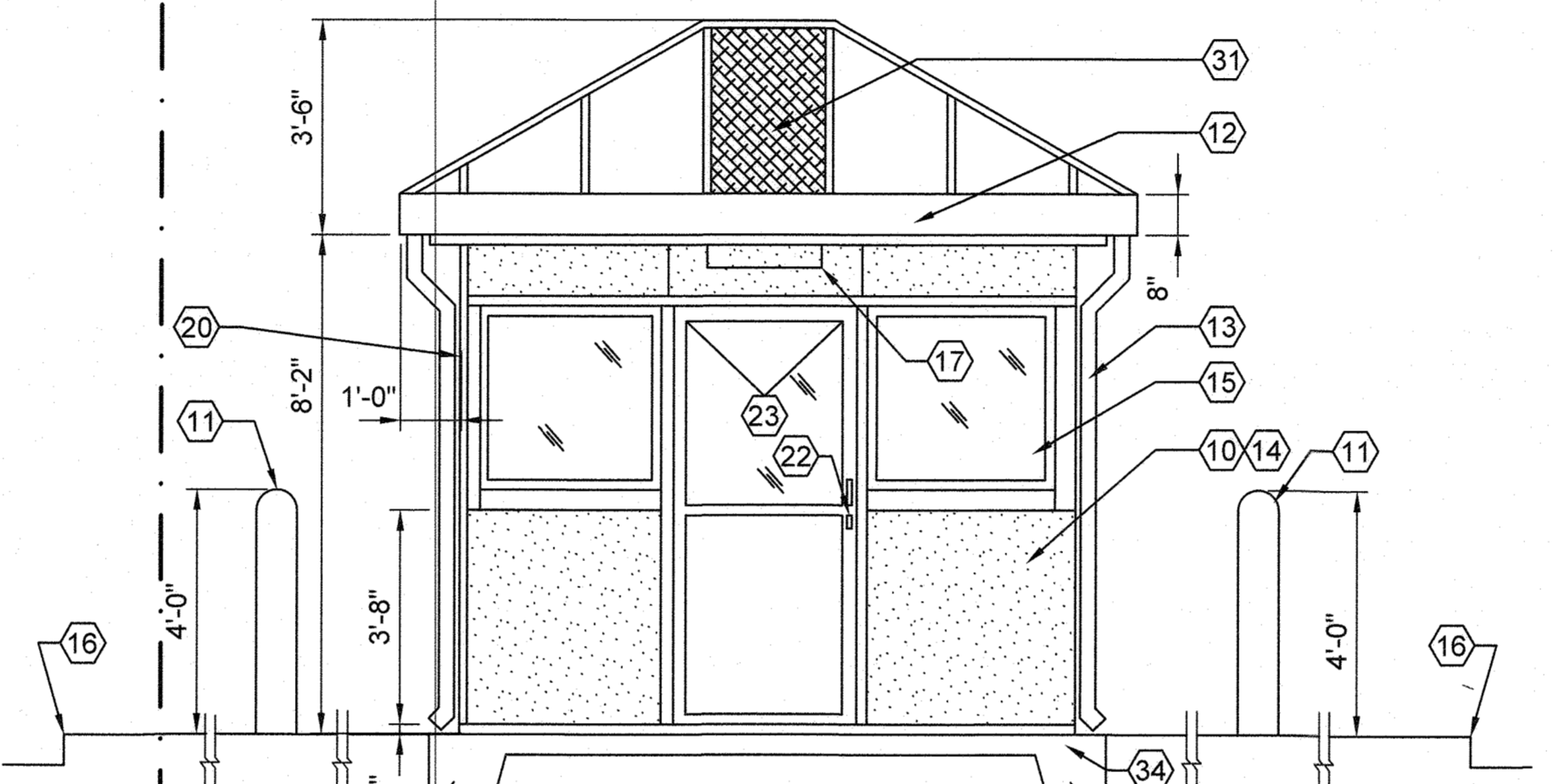
7 ELEVATION - K9 - OFFICER'S POST  
SCALE: 3/8"=1'-0"



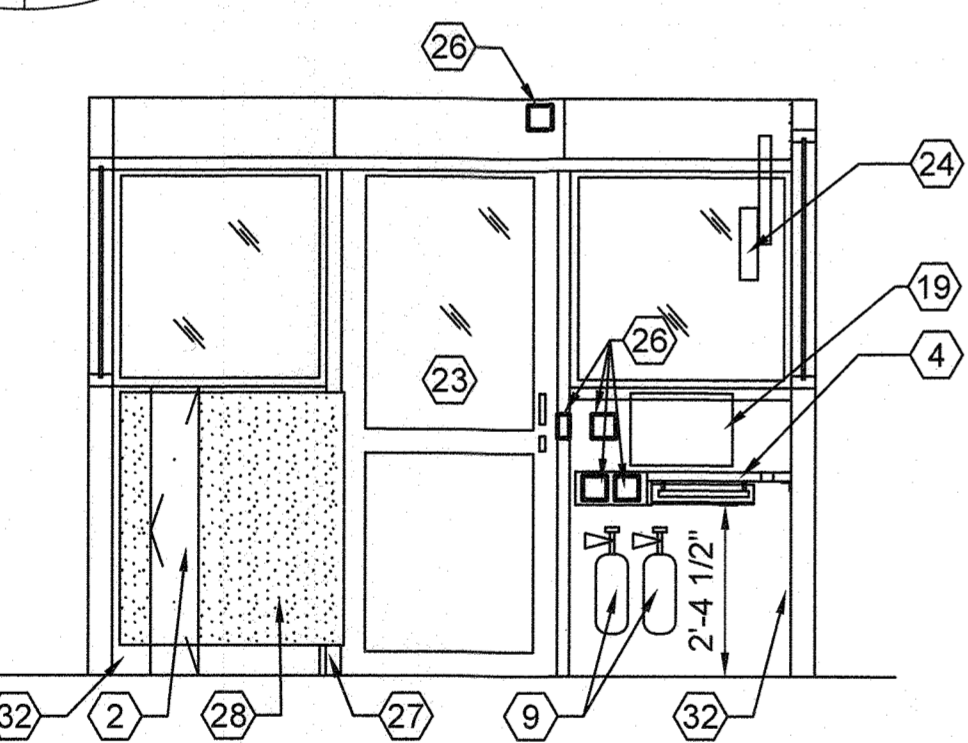
8 ELEVATION - K9 - OFFICER'S POST - (CAR SIDE)  
SCALE: 3/8"=1'-0"



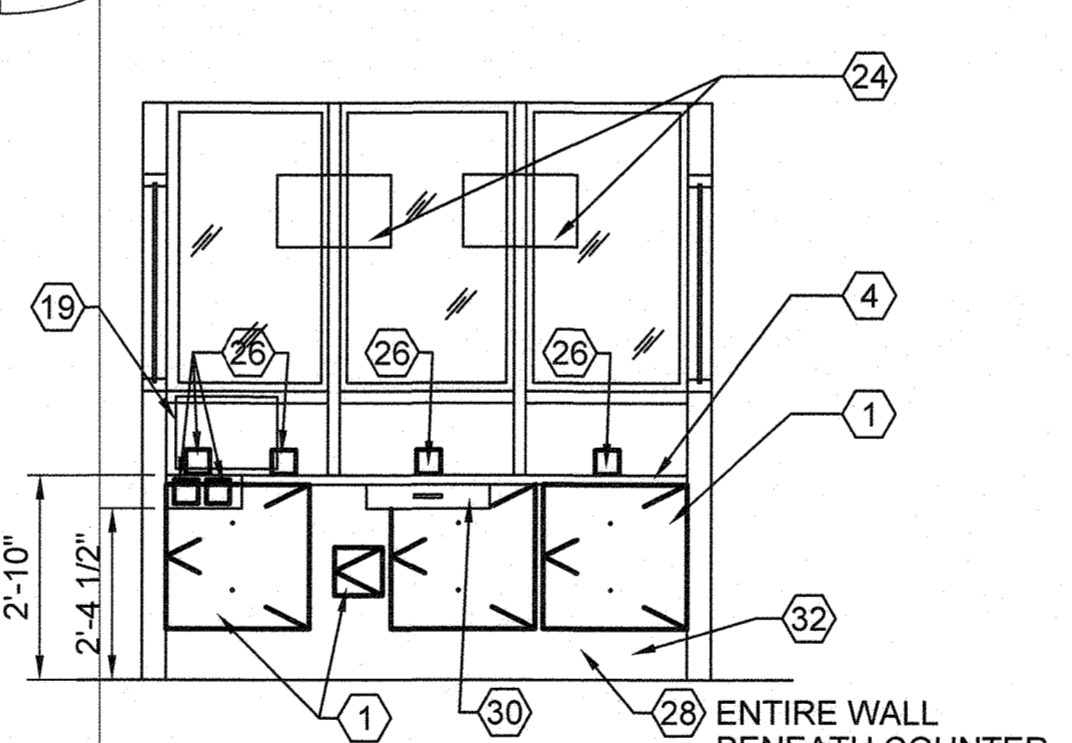
5 ELEVATION - K9 - OFFICER'S POST  
SCALE: 3/8"=1'-0"



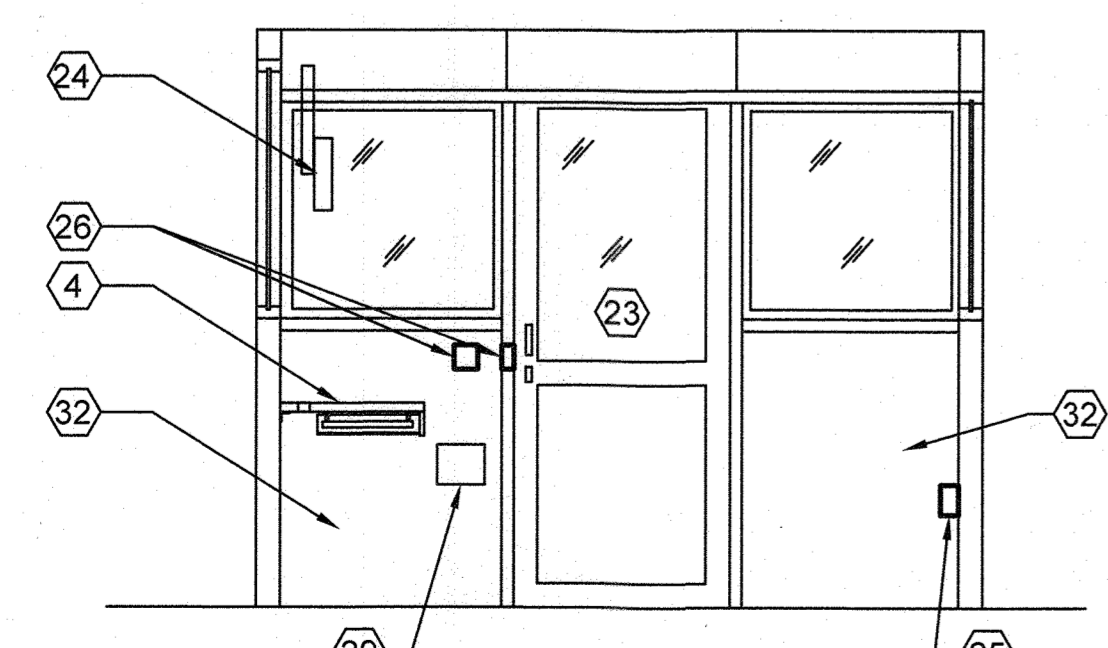
6 ELEVATION - K9 - OFFICER'S POST - (TRUCK SIDE)  
SCALE: 3/8"=1'-0"



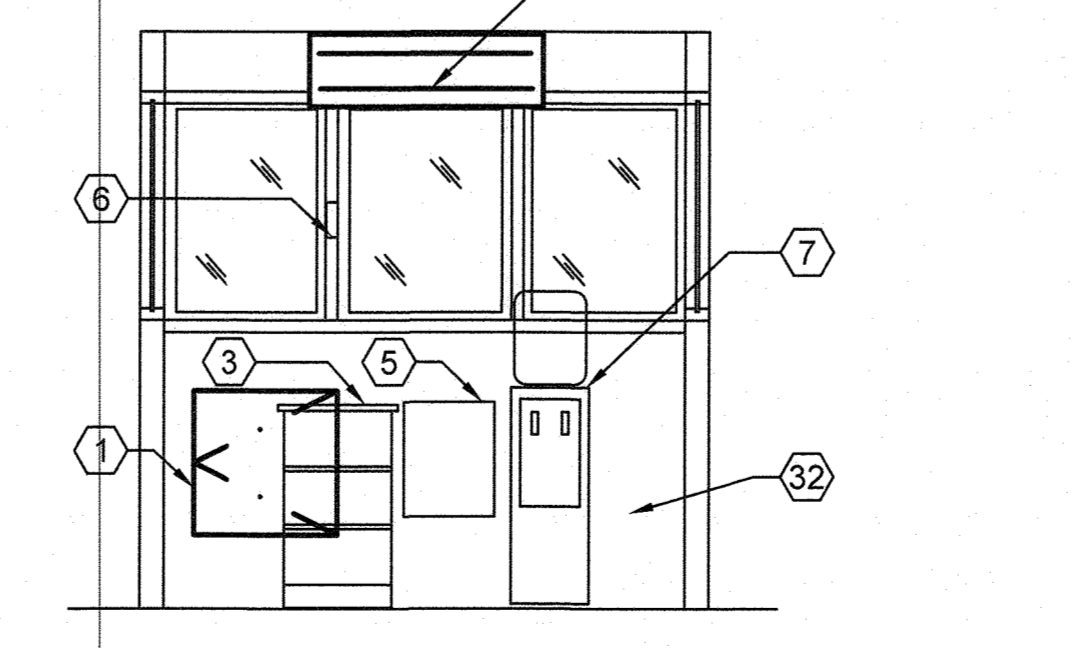
3 INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"



4 INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"



1 INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"



2 INTERIOR ELEVATION  
SCALE: 3/8"=1'-0"

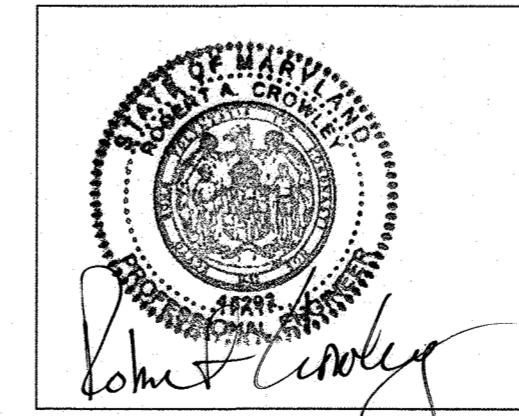
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DIRECTOR

Date	No.	Revision Description
9/24/19	1	NEW MYLAR FOR VCP REVISIONS

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
 PARCEL H  
 OWNER DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONIUM, MARYLAND 21093  
 (443) 689-8000

SUBDIVISION NAME	PLAT# 23732-23734	LOT PARTITION
EMERSON/RENTZ PROPERTY	15736	LOT 1, PARCEL D-1,
DEED	BLOCK# ZONE TAX ZONE WAHELECT. DISTRICT	PARCEL 6-1, PARCEL 6-2,
11479/005 20 PEC	47 6	PARCEL 6, PARCEL 6,
WATER CODE	SEWER CODE	
Des. By DB	Scale AS SHOWN	Proj. No.
Drn. By DB	Date 05-09-2019	
Chk. By SD	Approved	

THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP-16-005 SET



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. 45292 EXPIRATION DATE: 05/21/2020

GENERAL NOTES

- INTENT IS FOR MATERIALS, COLOR AND FINISH OF THIS K-9 OFFICER POST, TO MATCH ADJACENT EXISTING VCP OFFICER POSTS.
- NOTE THAT NO GRABNET CONTROL PANEL IS TO BE PROVIDED AT THIS OFFICER POST.

KEYED NOTES

- ELECTRICAL PANEL
- GUN RACK, GF/CI
- 18" X 18" X 34" TABLE WITH 3 SHELVES. TABLE TO HAVE PLASTIC LAMINATE TOP WITH A PLEXIGLASS COVER. (BY MANUFACTURER)
- PRE-MANUFACTURED PLASTIC LAMINATE COUNTERTOP
- WALL MOUNTED HEATER
- COAT HOOK @ 48" AFF
- WATER BUBBLER, NIC
- STAINLESS STEEL, LOCKING, NEMA 4, CABINET WITH PLYWOOD BACKBOARD SANDED SMOOTH AND FINISHED WITH CLEAR POLYURETHANE.
- PORTABLE FIRE EXTINGUISHERS, GF/CI.
- INSULATED FABRICATED PARTITION TO COMPLY WITH UL 752 RATING AND LEVEL 8 BALLISTIC RESISTANT REQUIREMENT
- BOLLARD - REFER TO CIVIL.
- MANUFACTURED STANDING SEAM HIP ROOFING SYSTEM WITH PERIMETER GUTTER (COLOR FROM MANUF. STANDARD SELECTION)
- MANUFACTURED DOWNSPOUT, COLOR TO MATCH GUTTER.
- EXTERIOR PANEL COLOR TO MATCH EXISTING VCP OFFICER POST PANELS.
- BALLISTIC RESISTANT ONE-WAY MIRROR, TINTED TEMPERED INSULATED LOW-E GLAZING.
- CONCRETE CURB - REFER TO CIVIL.
- SOFFIT MOUNTED INFRARED HEATER
- CEILING MOUNTED HEATING/COOLING AIR HANDLING UNIT
- COUNTER TOP MONITOR SCREEN, GF/CI.
- CONDENSATE LINE ENCLOSURE, COLOR TO MATCH DOWNSPOUTS.
- NOT USED
- LOCKING HARDWARE FOR BOOTH - BASIS OF DESIGN - ADAMS RITE ASSA ABLOY MS1950S-450-628.
- SLIDING DOOR, TOP AND BOTTOM SLIDE BOLT LOCKS WITH 1" THROW.
- 19" OVERHEAD MONITOR SCREEN, GF/CI. PROVIDE VESA OVERHEAD MOUNTING ASSEMBLY.
- ELECTRICAL RECEPTACLE, SEE ELECTRICAL.
- ELECTRICAL BOX, SEE ELECTRICAL.
- UNISTRUT ANCHORED TO TOP AND BOTTOM
- FINISHED, FIRE RETARDANT, 3/4" PLYWOOD BOARD
- FIRST AID KIT STATION, GF/CI
- UNDER COUNTER 3" PULL-OUT DRAWER
- ROOF MOUNTED COMPRESSOR UNIT. AND ROOF GRILL - COORDINATE FINAL LOCATION PRIOR TO FABRICATION
- RHINO FINISH AT WALL TO MATCH FLOOR - EXTEND UP TO BOTTOM OF WINDOW SILL AT ELEVATIONS 1/SHEET 76, 2/SHEET 76, 3/SHEET 76 & 4/SHEET 76 (BEHIND PLYWOOD).
- NOT USED.
- OFFICER'S POST FOUNDATION (DOTTED) REFER TO STRUCTURAL.

US Army Corps of Engineers  
 Baltimore District  
 REAL PROPERTY SERVICES  
 FIELD OFFICE  
 ANNAPOLIS JUNCTION, MARYLAND  
**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA 22201

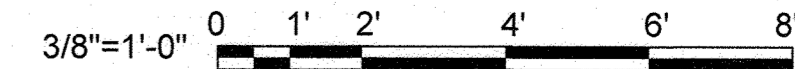
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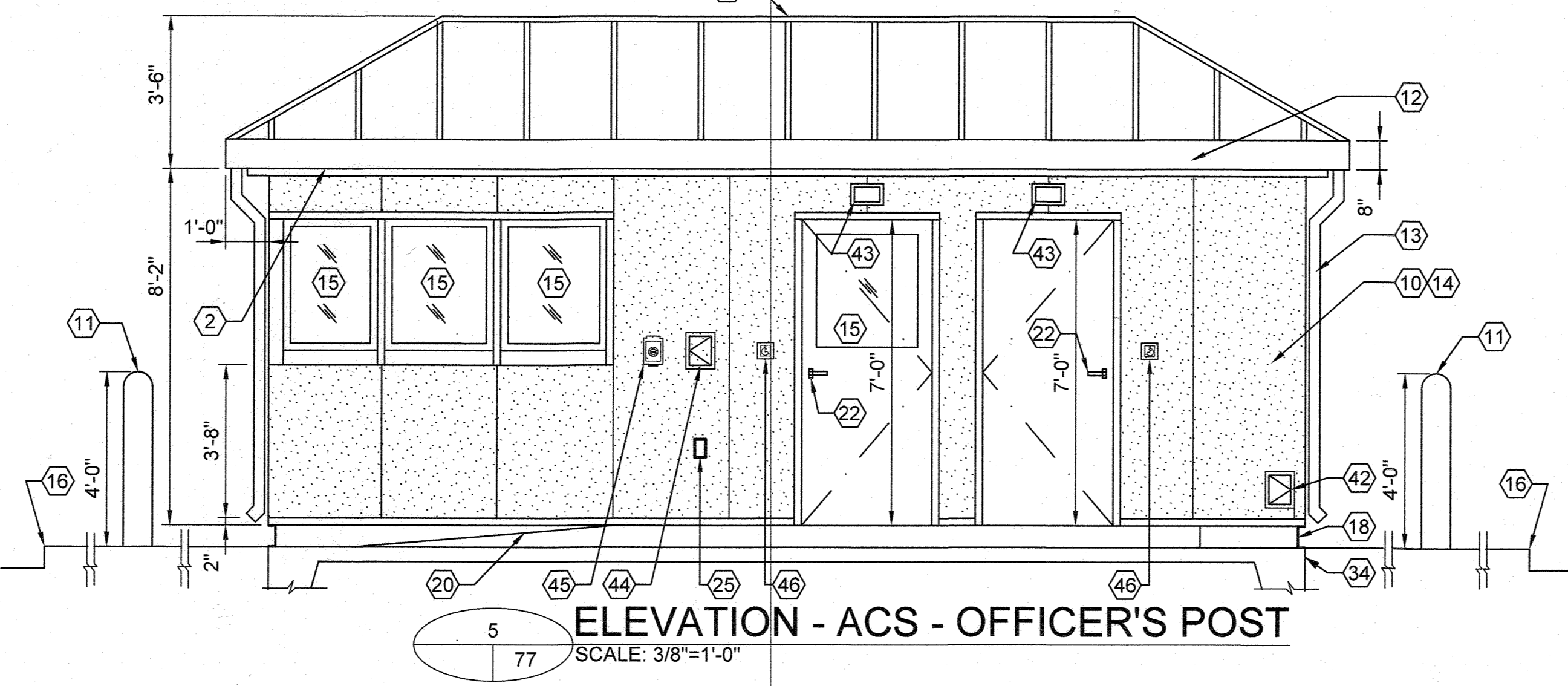
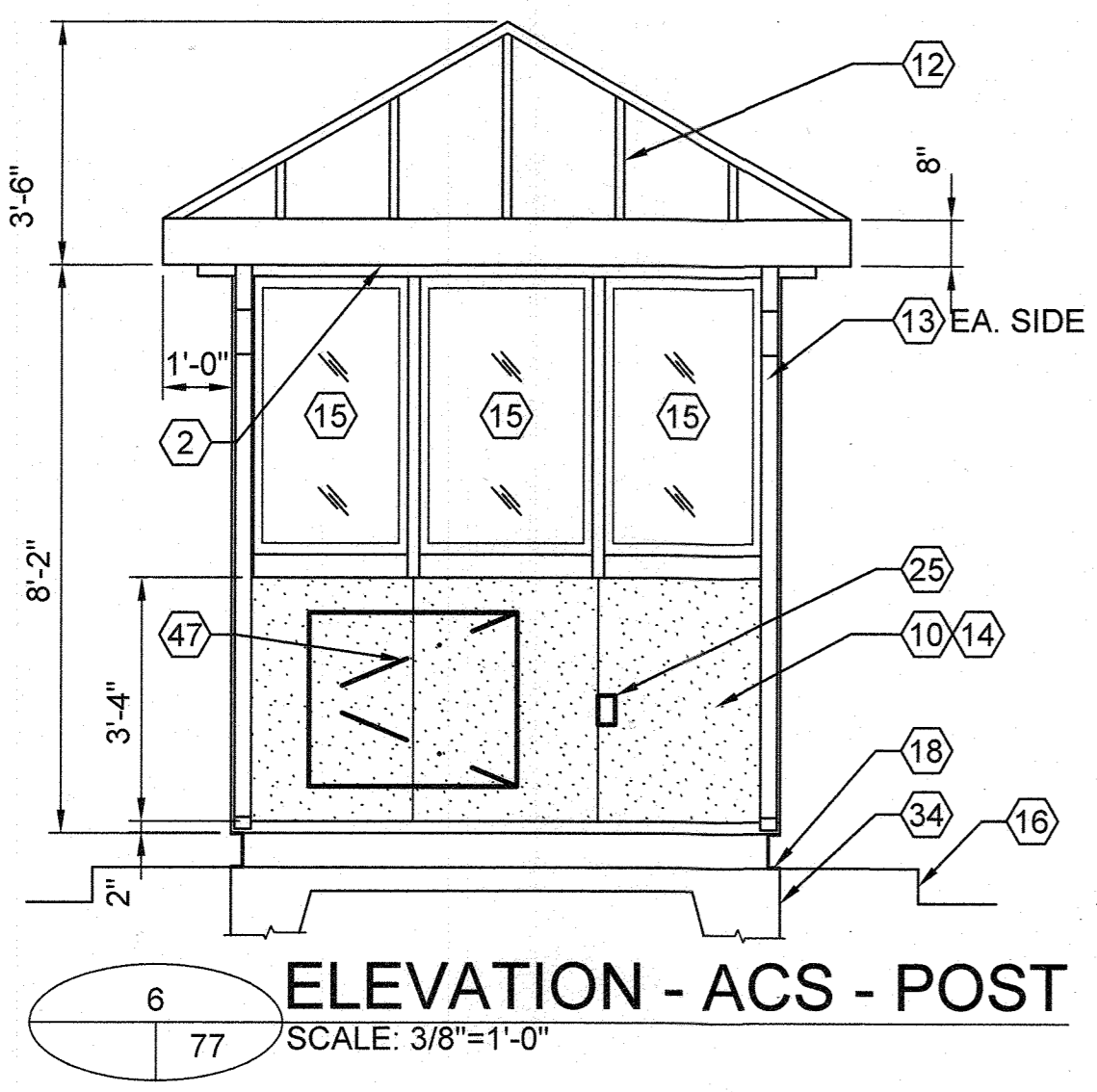
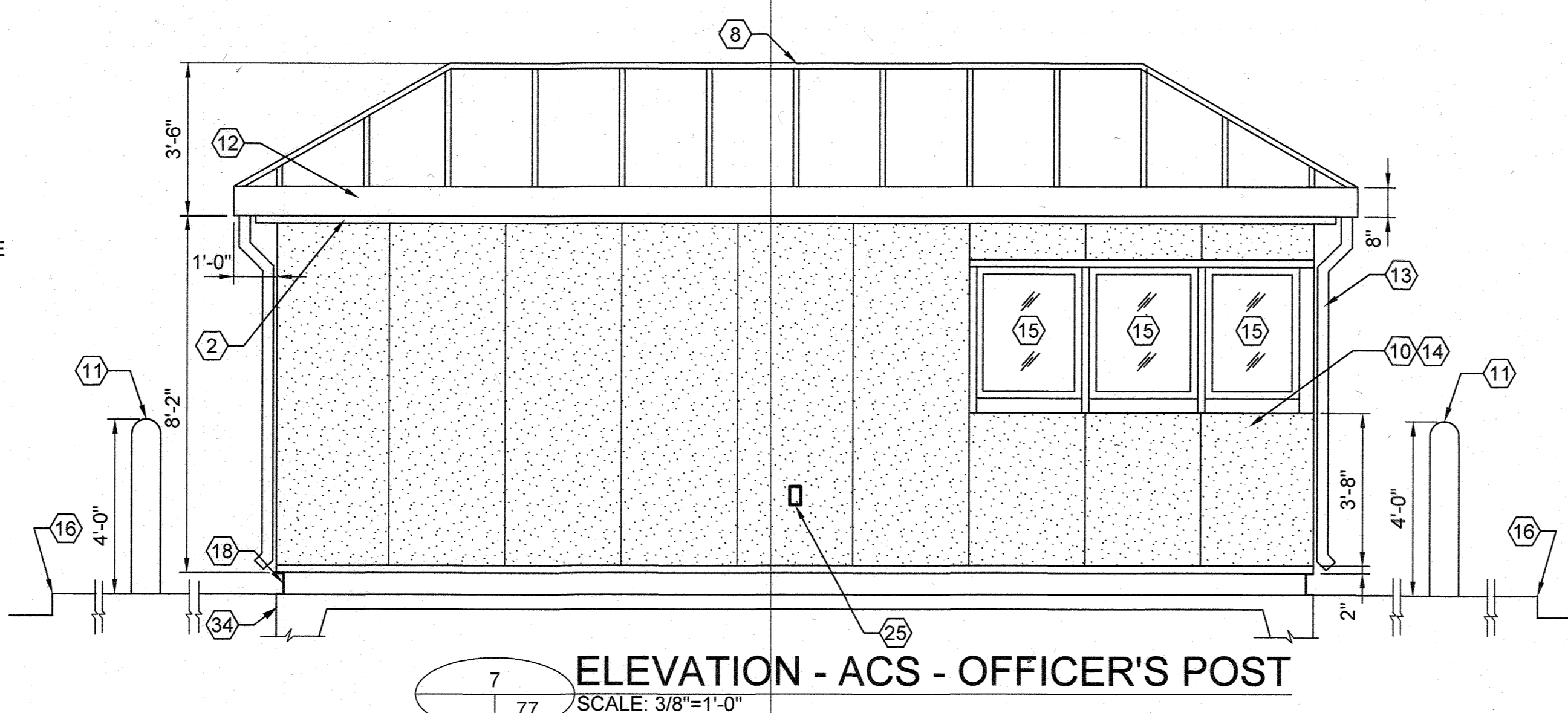
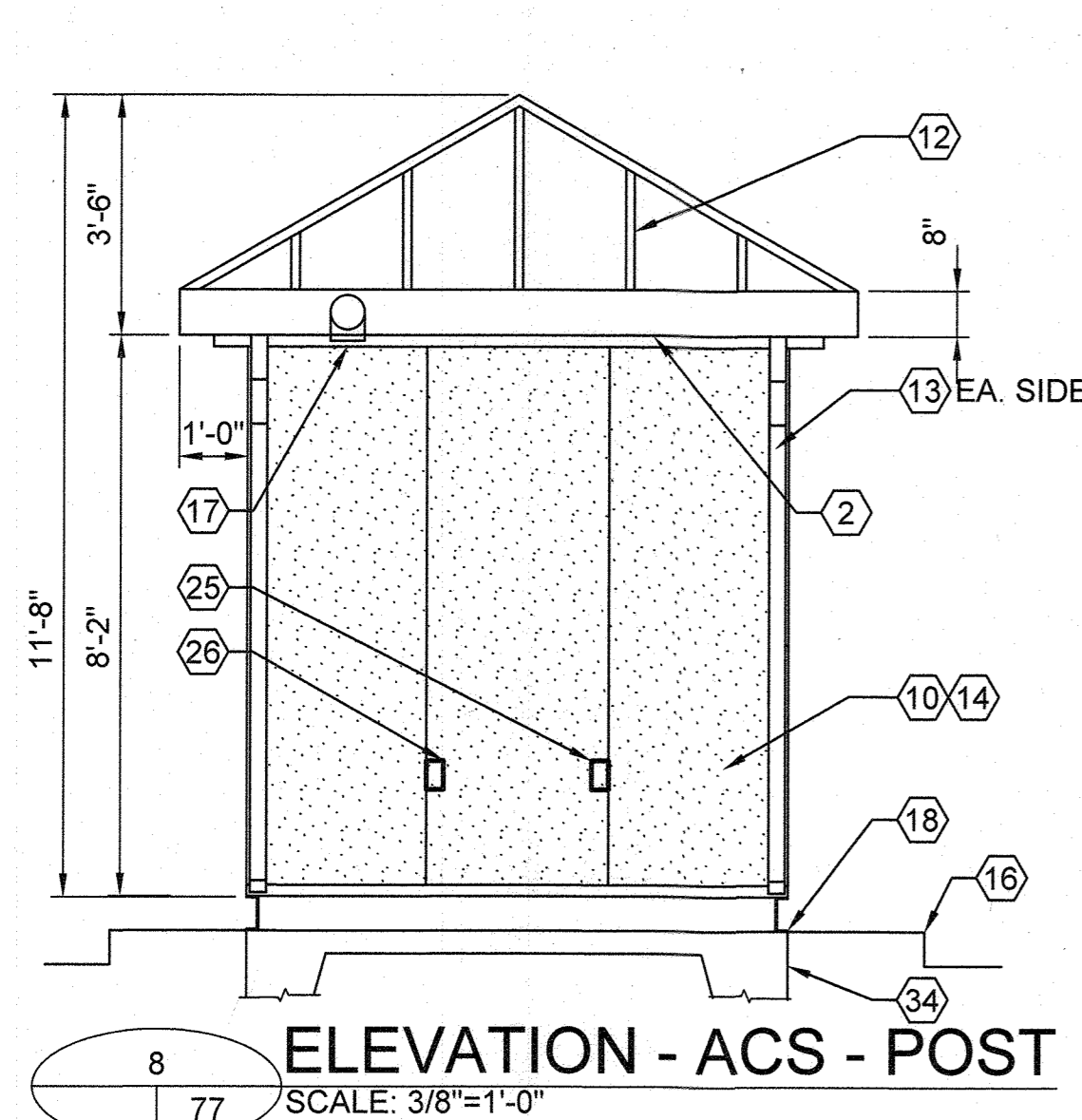
Rev.	Date	Description	Mark

Designed by	D. BROWN	Checked by	S. DAVIS
Drawn by	D. BROWN	Reviewed by	S. DAVIS
Date	OCT. 15, 2019	Project No.	36345
Per name		Per scale	
Project Manager		Project Manager	

EMERSON 8 - PHASE 6  
 VEHICLE CARGO INSPECTION FACILITY (VCF)  
 NEW WORK  
 VCF - K9 OFFICER POST  
 ELEVATIONS AND DETAILS  
 LAUREL, MD

Drawing No.  
 111038AC  
 Sheet Reference No.  
 76 of 80  
 Plate 29 of 53  
 SDP-16-005



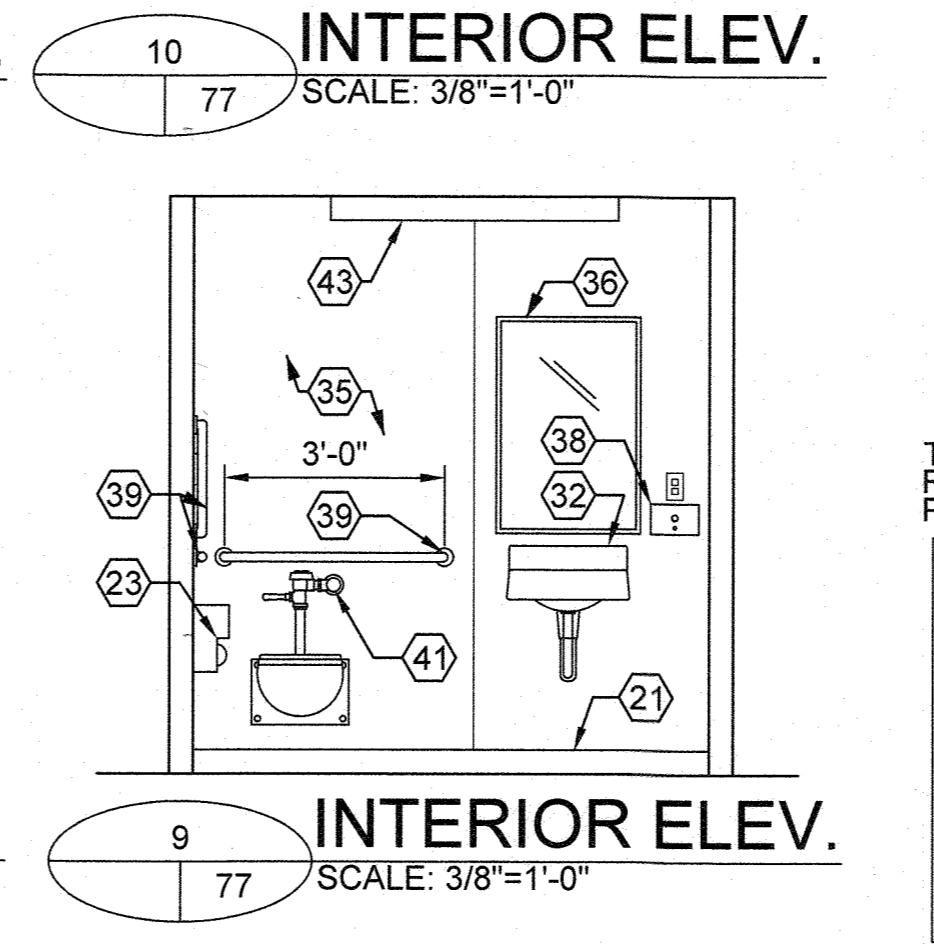
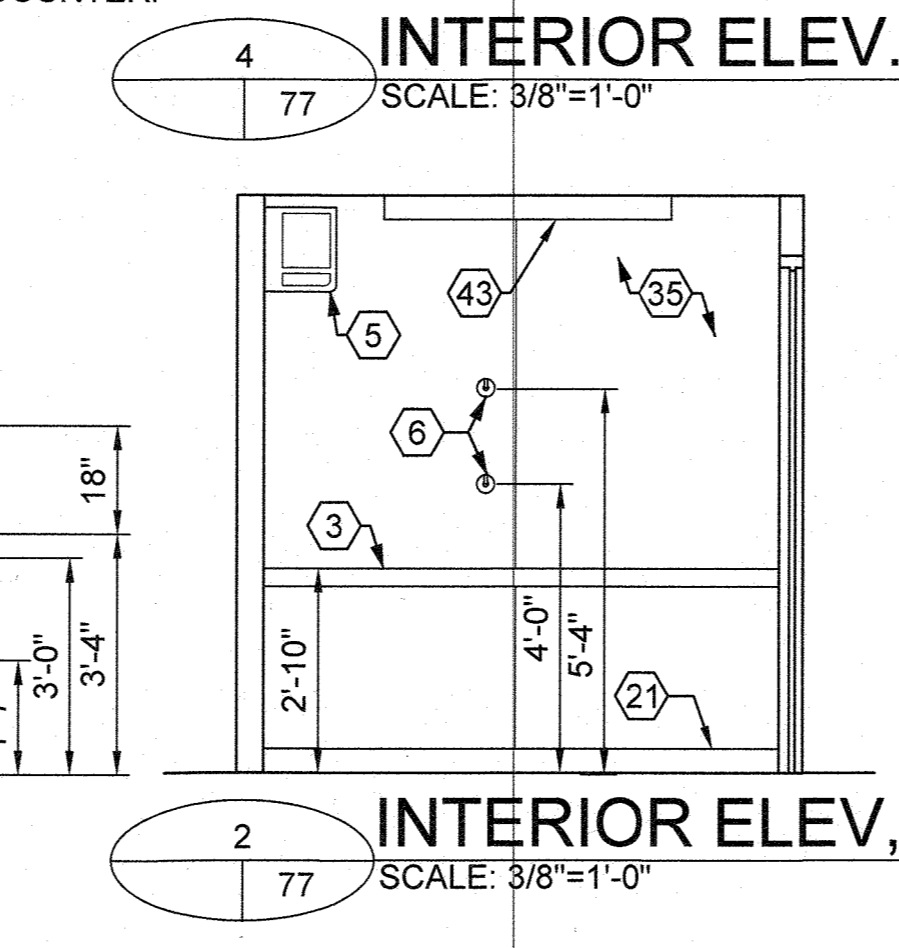
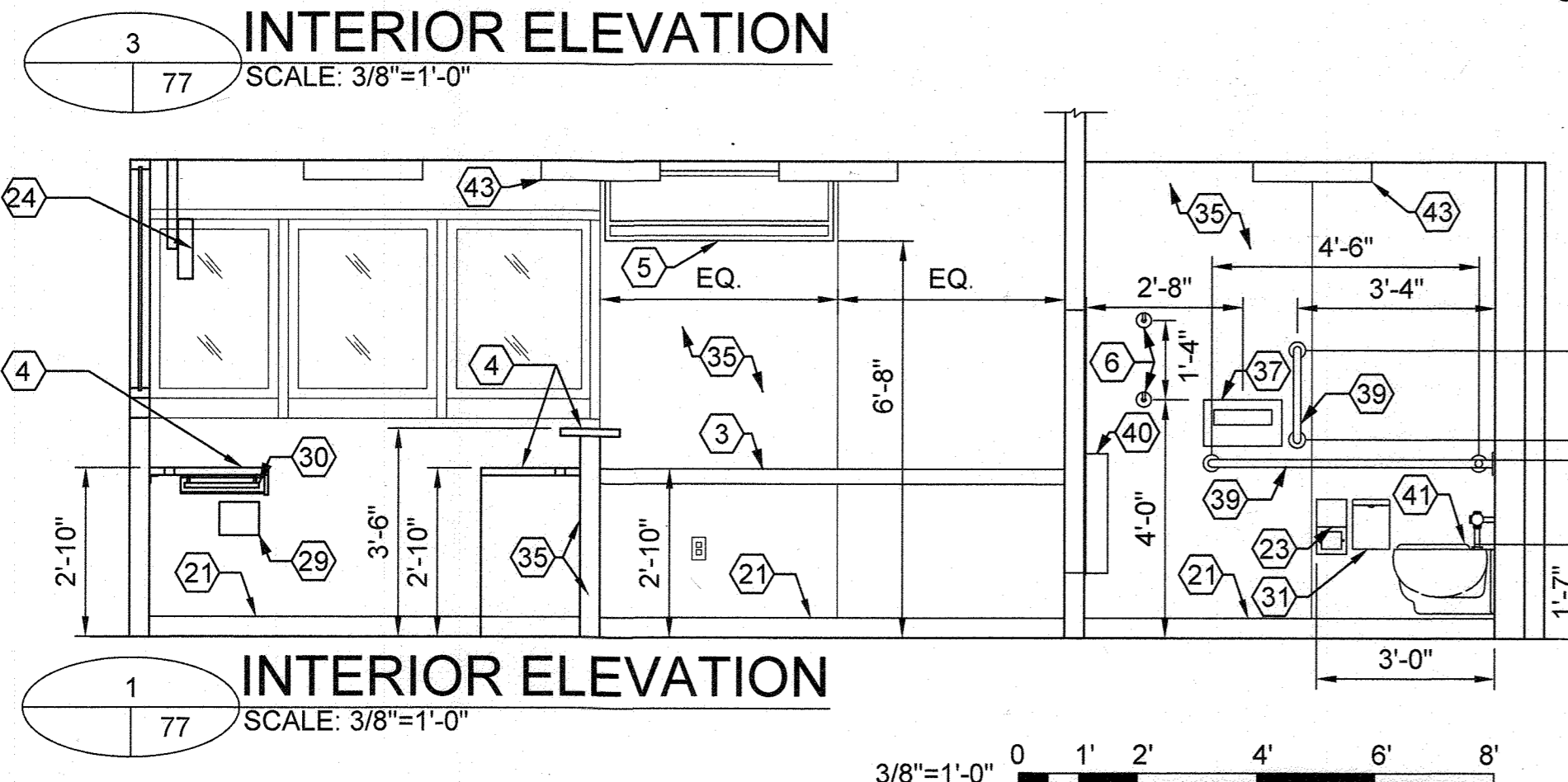
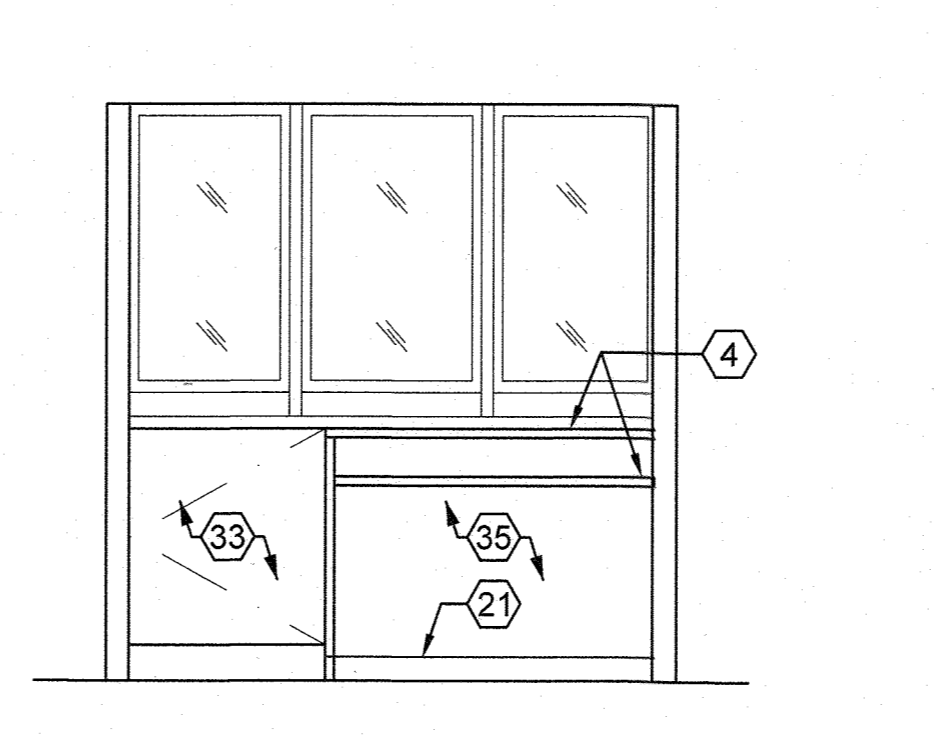
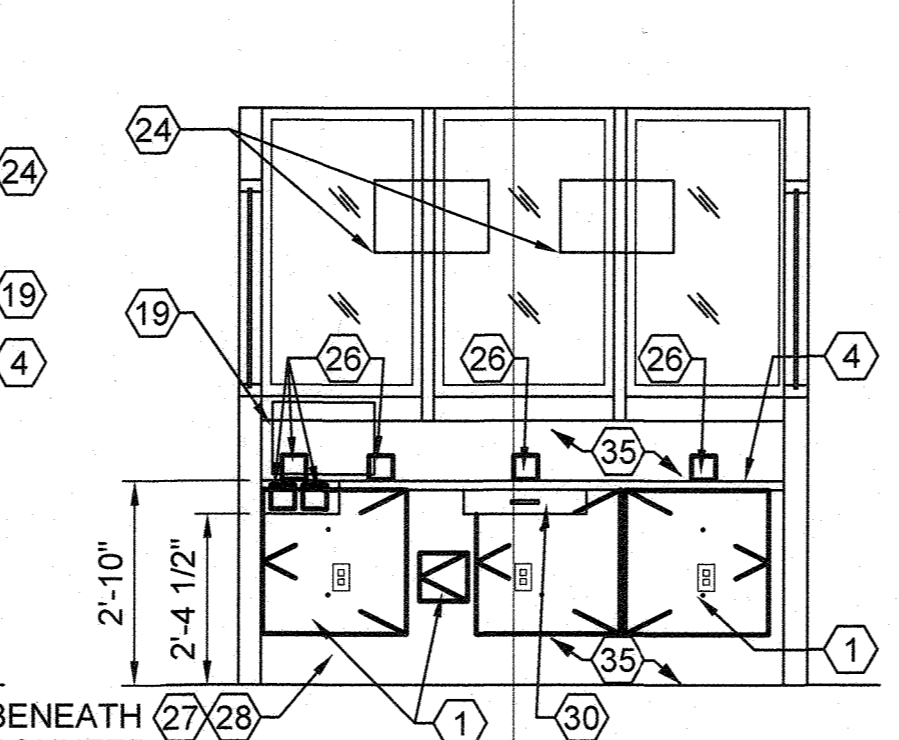
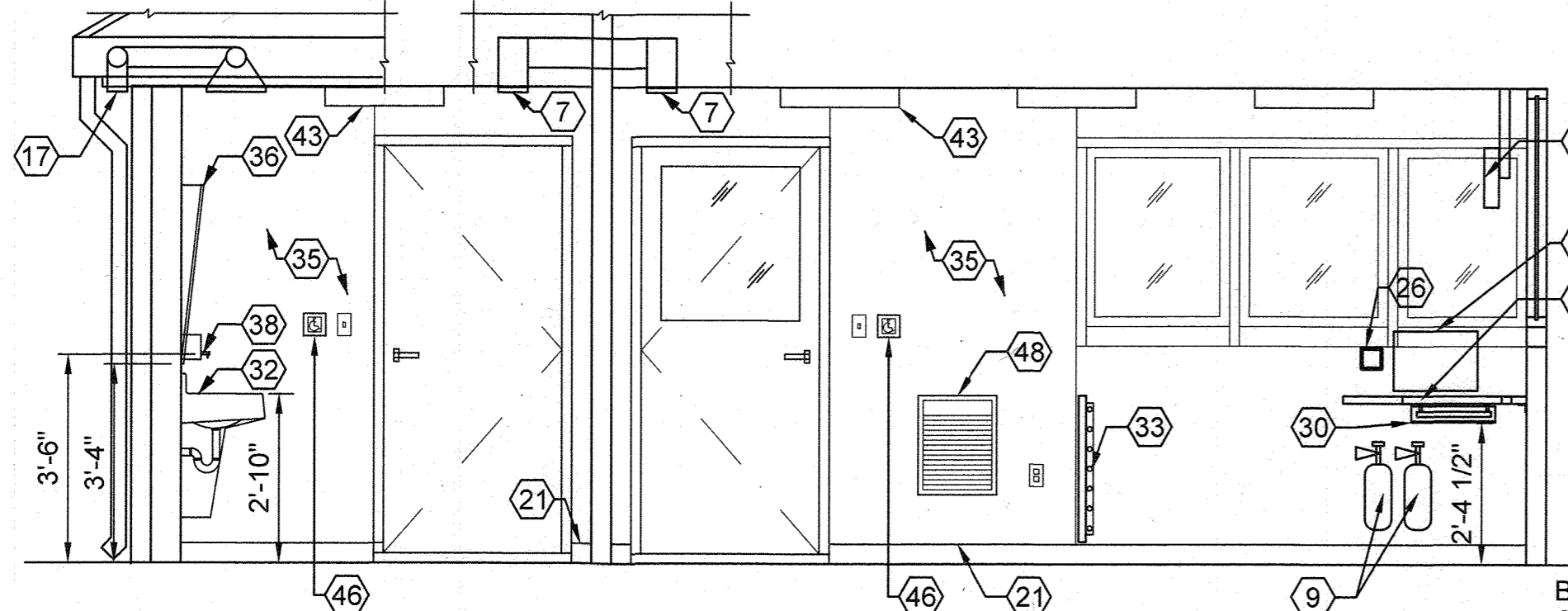
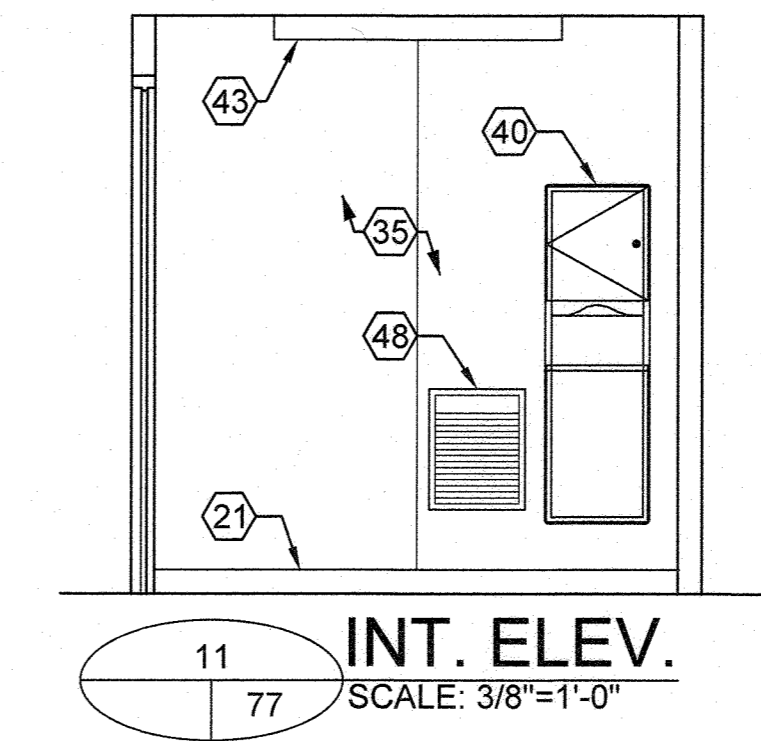


**KEYED NOTES (CONT.)**

- 35 1/2" VINYL COVERED GYPSUM (VCG), WITH MATCHING SINGLE PART TRIM AT EACH DIVIDER, OUTSIDE CORNER, INSIDE CORNER AND END CAP.
- 36 MIRROR, 24" X 56"
- 37 SURFACE MOUNTED TOILET SEAT COVER DISPENSER (ASI MODEL 20477-SM)
- 38 SURFACE MOUNTED SOAP DISPENSER (ASI MODEL 9343)
- 39 1 1/2" DIA. STAINLESS STEEL GRAB BAR W/ SNAP ON FLANGE (ASI MODEL 1315-4)
- 40 RECESSED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE (ASI MODEL 20469)
- 41 WALL MOUNTED ADA ACCESSIBLE WATER CLOSET, REFER TO PLUMBING
- 42 EXTERIOR RECESSED HOSE BIB, WITH MATCHING METAL ACCESS DOOR, SEE PLUMBING.
- 43 LIGHT FIXTURE, TYP. SEE ELECTRICAL
- 44 GFCI WEATHER PROOF PHONE HOUSING AND TELECOM OUTLET, BASIS OF DESIGN GAI-TRONICS.
- 45 DURESS BUTTON WITHIN EXTERIOR WEATHER PROOF ENCLOSURE.
- 46 HARDWIRED, ADA DOOR OPERATOR PUSH PLATE RECESSED IN PARTITION
- 47 STAINLESS STEEL, LOCKING, NEMA 4, CABINET WITH PLYWOOD BACKBOARD SANDED SMOOTH AND FINISHED WITH CLEAR POLYURETHANE.
- 48 RECESSED WALL MOUNTED ELECTRIC HEATER, SEE MECH.

**ADD ALTERNATE #1:**

- 15 BRONZE FRAMED FIXED WINDOW, WITH ONE-WAY MIRROR, TINTED TEMPERED INSULATED LOW-E GLAZING, TO MATCH EXISTING VCP GUARD BOOTHS, TYPICAL.
- 16 CONCRETE CURB - REFER TO CIVIL.
- 17 FLUSH, ROUND EXTERIOR SOFFIT MOUNTED VENT FOR RESTROOM EXHAUST FAN, COLOR TO MATCH SOFFIT.
- 18 GALVANIZED STEEL I-BEAM, A4S OF ACS STRUCTURE. ALL EXPOSED STEEL TO BE PAINTED.
- 19 COUNTER TOP MONITOR SCREEN, GF/CI.
- 20 SLOPE CONCRETE UP TO DOORS, REFER TO CIVIL.
- 21 4" VINYL COVE BASE, TYP AT ALL WALLS.
- 22 LOCKING HARDWARE FOR BOOTH - BASIS OF DESIGN - ADAMS RITE ASSA ABLOY MS1950S-450-828. NOTE THAT THE RESTROOM ENTRY DOOR WILL REQUIRE A PIN ACTIVATED ACCESS CONTROL LOCK WITH KEY BYPASS FOR CUSTOMER USE. COORDINATE WITH MPO LOCKSHOP FOR SELECTION AND APPROVAL OF ALL FINAL HARDWARE.
- 23 SURFACE MOUNTED TOILET TISSUE DISPENSER (ASI MODEL 20030)
- 24 19" OVERHEAD MONITOR SCREEN, GF/CI. PROVIDE VESA OVERHEAD MOUNTING ASSEMBLY.
- 25 ELECTRICAL RECEPTACLE, SEE ELECTRICAL.
- 26 ELECTRICAL BOX, SEE ELECTRICAL.
- 27 UNISTRUT ANCHORED TO TOP AND BOTTOM BOARD
- 28 FINISHED, FIRE RETARDANT, 3/4" PLYWOOD BOARD
- 29 FIRST AID KIT STATION, GF/CI
- 30 UNDER COUNTER 3" PULL-OUT DRAWER
- 31 SURFACE MOUNTED NAPKIN DISPOSAL CONTAINER (ASI MODEL 20852)
- 32 WALL MOUNTED SINK, WITH INSULATED DRAIN PIPE, REFER TO PLUMBING
- 33 HALF DOOR WITH CLOSER.
- 34 OFFICER'S POST FOUNDATION (DOTTED) REFER TO STRUCTURAL.



APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 CHIEF DIVISION OF LAND DEVELOPMENT  
 11 Moore 12/16/19  
 CHIEF DEVELOPMENT ENGINEERING DIVISION  
 12-12-19  
 DIRECTOR 12-18-19

Date	No.	Revision Description
9/24/19	1	NEW MYLAR FOR VCP REVISIONS

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
 PARCEL H  
 OWNER DEVELOPER:  
 EMERSON DEVELOPMENT IV, LLC  
 ONE TEXAS STATION, SUITE 200  
 TIMONUM, MARYLAND 21093  
 (443) 689-8000

Des. By DB Scale AS SHOWN Proj. No.  
 Drn. By DB Date 05-09-2019  
 Chk. By SD Approved

THE PURPOSE OF REDLINE REVISION #1 IS TO ADD NEW PLAN SHEET TO SDP-16-005 SET

ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 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. 45292 EXPIRATION DATE: 05/21/2020

US Army Corps of Engineers  
 Baltimore District

REAL PROPERTY SERVICES  
 FIELD OFFICE  
 ANNAPOLIS JUNCTION, MARYLAND

**JACOBS**  
 1105 GREENE RD., ARLINGTON, VA 22201

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Mark	Description	Date	Appr.

Designed by D. BROWN	Date OCT 15, 2019	Rev.
Drawn by D. BROWN	Project No. 38345	
Checked by S. DAVIS	File name RICK PACK	
Submitted by ROBERT CROWLEY	Print date OCTOBER 15, 2019	
PROJECT MANAGER		

EMERSON 8 - PHASE 6  
 VEHICLE CARGO INSPECTION FACILITY (VCF)

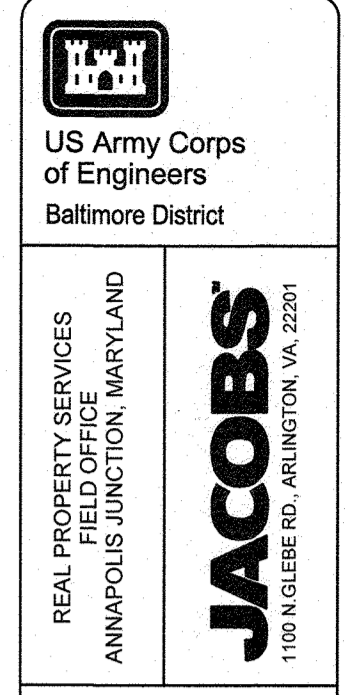
NEWWORK  
 VCF - ACS OFFICER POST  
 ELEVATIONS AND DETAILS

LAUREL, MD

Drawing No.  
111038AD

Sheet Reference No.  
77 of 80

Plate 30 of 53  
 SDP-16-005



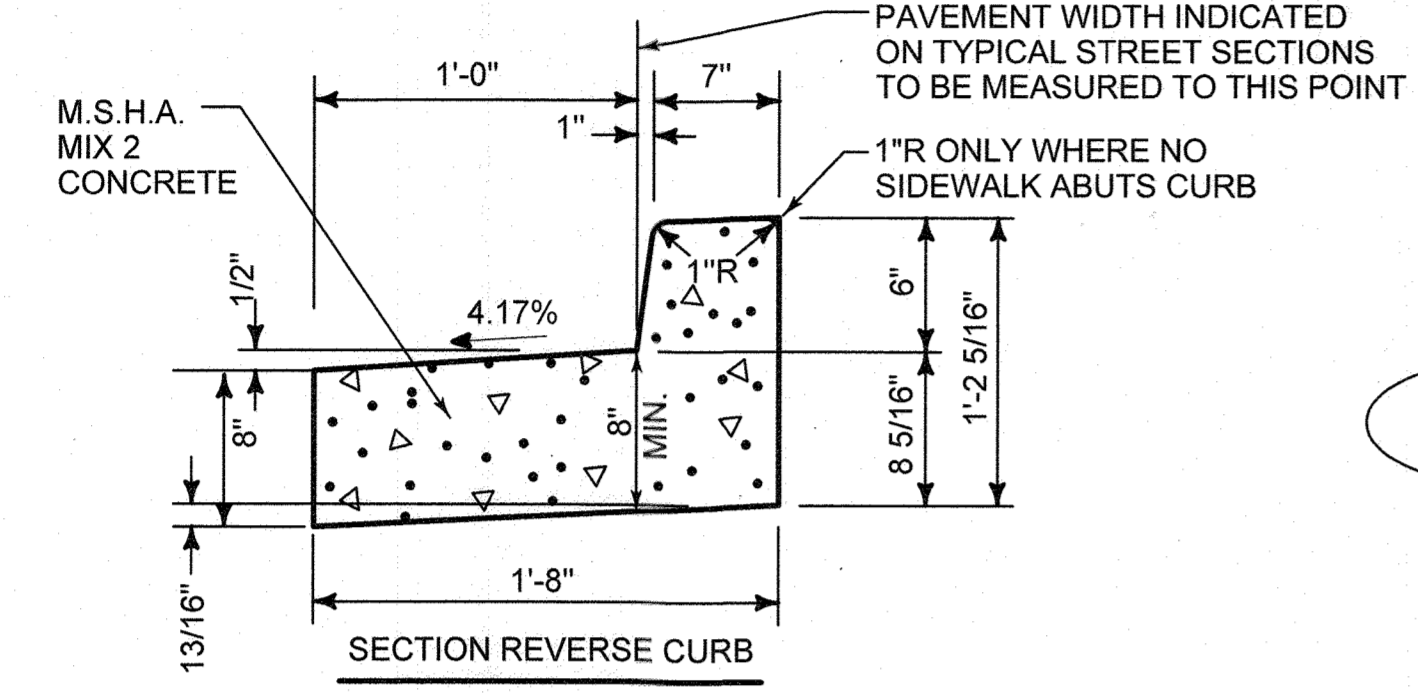
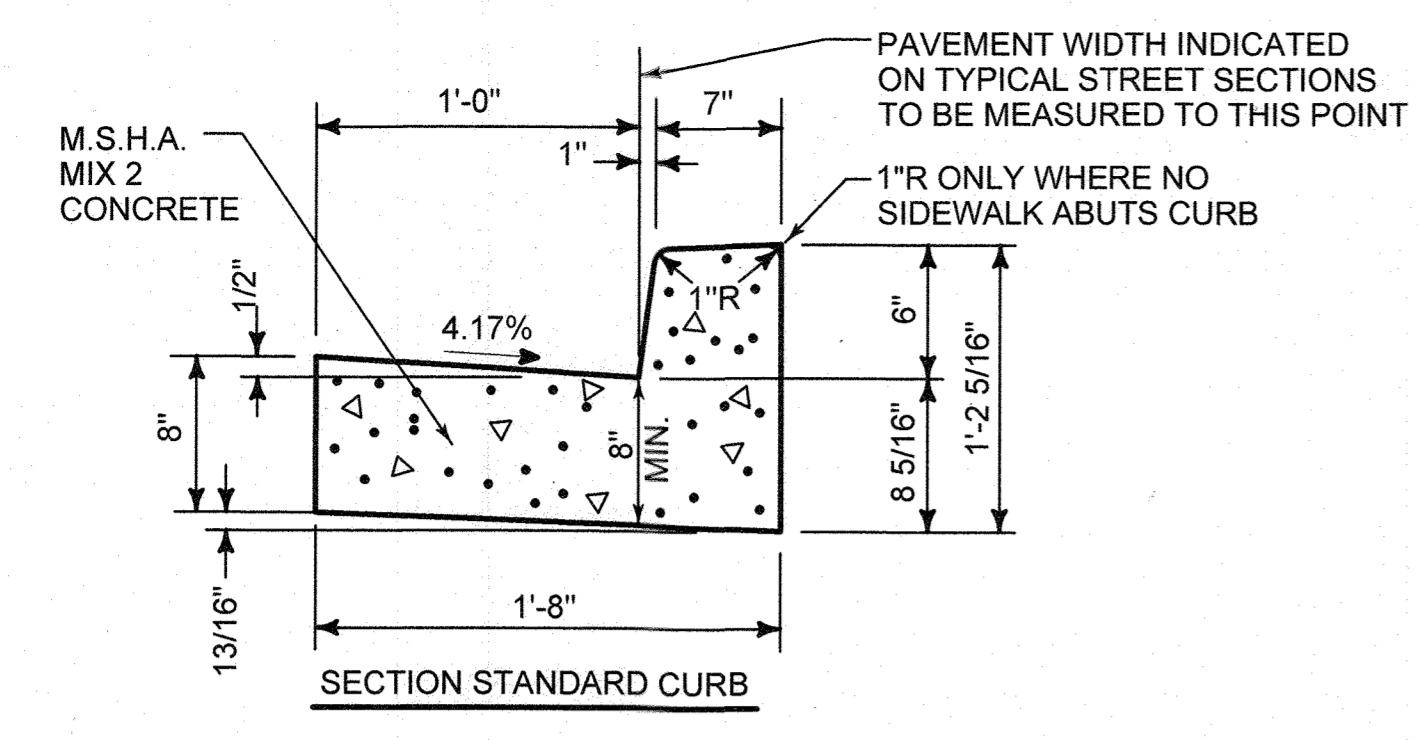
REAL PROPERTY SERVICES  
FIELD DIVISION, MARYLAND  
**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA 22201

Mark	Description	Date	Appr.

Designed by: D. BROWN	Rev.:	Date: SEPT. 12, 2019
Drawn by: D. BROWN	Project No.:	38345
RSFO Project Manager: RICK PACE	City by:	S. DAVIS
Submitted by: ROBERT CROWLEY	File name:	AUGUST 12, 2019
Project Manager:	Post code:	

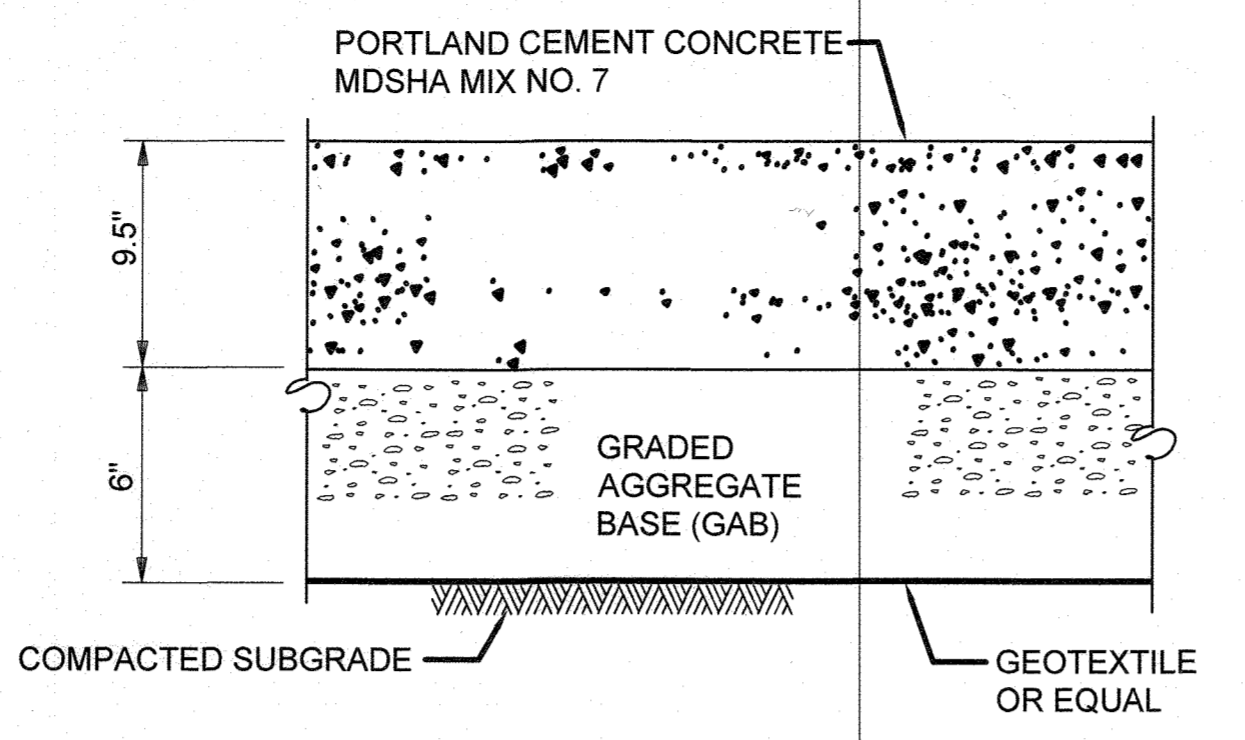
Date	No.	Revision Description
9/24/19	1	NEW MYLAR FOR VCP REVISIONS

EMERSON S. PHASE 6  
VEHICLE CONTROL INSPECTION FACILITY (VCI)  
LAUREL, MD  
SITE DETAILS  
Drawing No. 111038S  
Sheet Reference No. 78 of 80  
Plate 19 of 53  
SDP-16-005



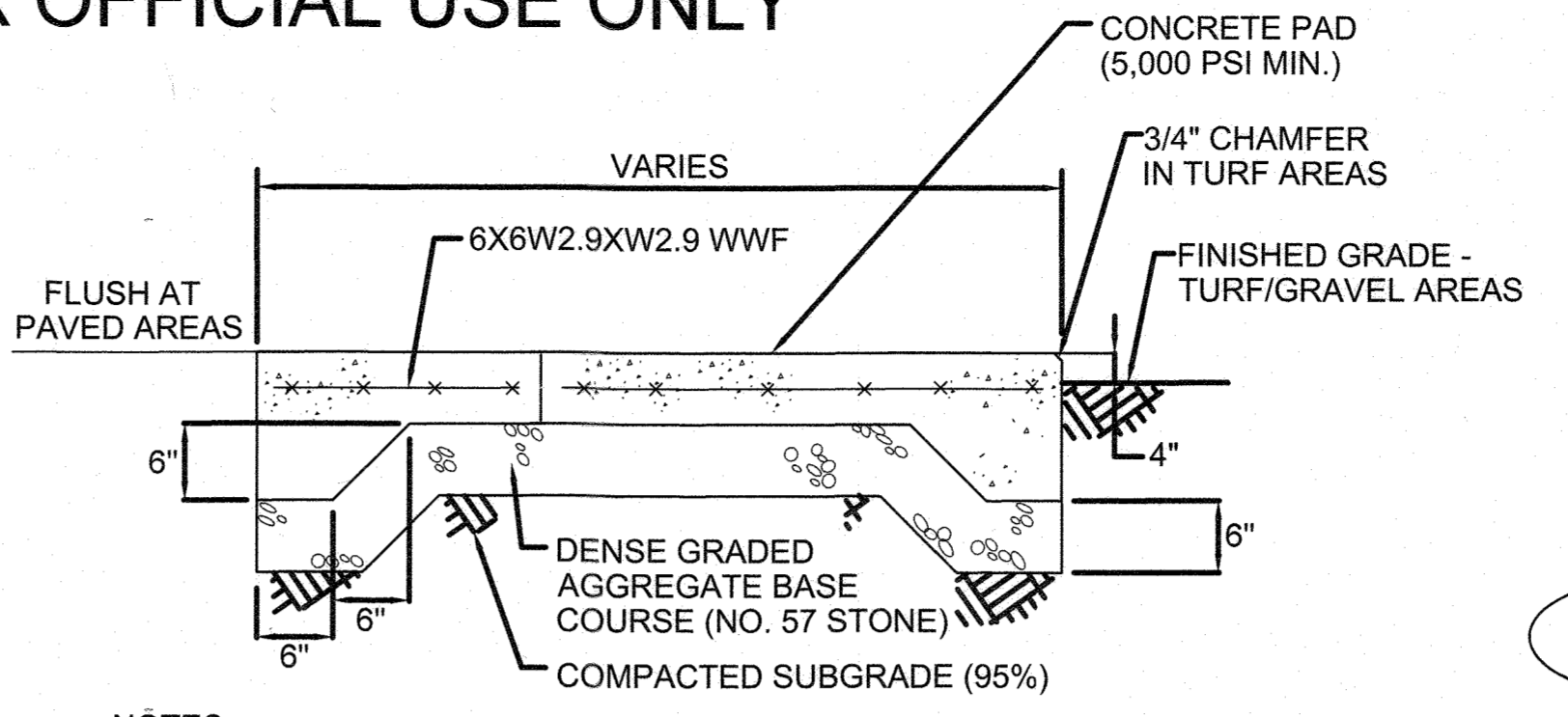
NOTE:  
1. A REVERSE GUTTER PAN SHALL HAVE A GUTTER SLOPE OF 4.17% AWAY FROM THE FLOW LINE, AND SHALL NOT BE USED WHERE THIS DRAINAGE CREATES A HAZARDOUS CONDITION.  
2. GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPER ELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPER ELEVATED SECTION AND THE RATE OF SUPER ELEVATION IS GREATER THAN 3% FOR MOUNTABLE CURB AND GUTTER.  
3. A MINIMUM OF TWO (2) FEET OF COMPACTED STABILIZED EARTH, OR EQUIVALENT, SHALL SUPPORT THE ENTIRE BACK OF CURB.  
4. POSITIVE DRAINAGE SHALL BE PROVIDED BOTH BEHIND THE CURB AND ALONG THE GUTTER AND FLOW LINE.

**1 CONCRETE CURB AND GUTTER**  
SCALE: NONE



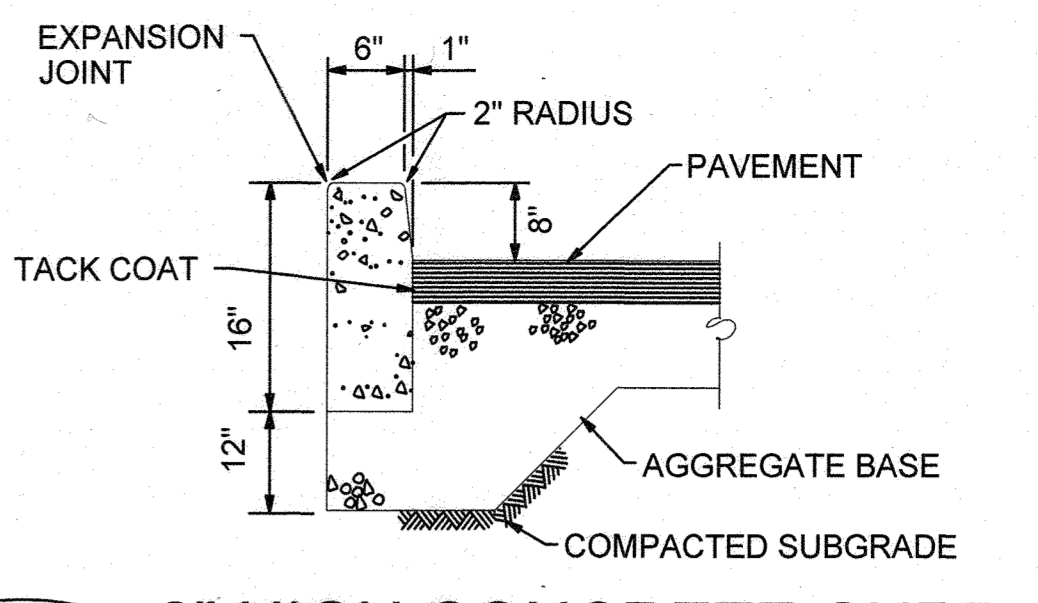
NOTES:  
1. TRANSVERSE FALSE JOINTS AT 15' INTERVALS, LONGITUDINAL FALSE JOINTS AT 15' INTERVALS  
2. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, OR AT PENETRATING STRUCTURES.

**2 CONCRETE PAVEMENT SECTION**  
SCALE: NONE

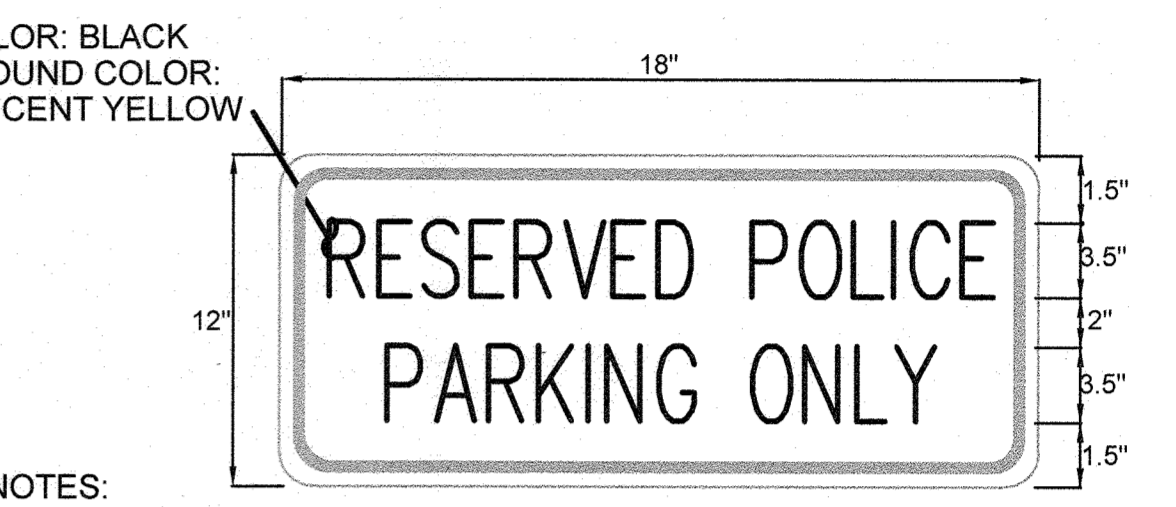


NOTES:  
1. EXACT PAD DIMENSIONS AND LOCATIONS OF OPENINGS AND SLEEVES THROUGH PAD SHALL BE COORDINATED WITH EQUIPMENT SUPPLIERS. PAD TO BE A MIN. OF 1'-0" LARGER THAN EQUIPMENT ON ALL SIDES.

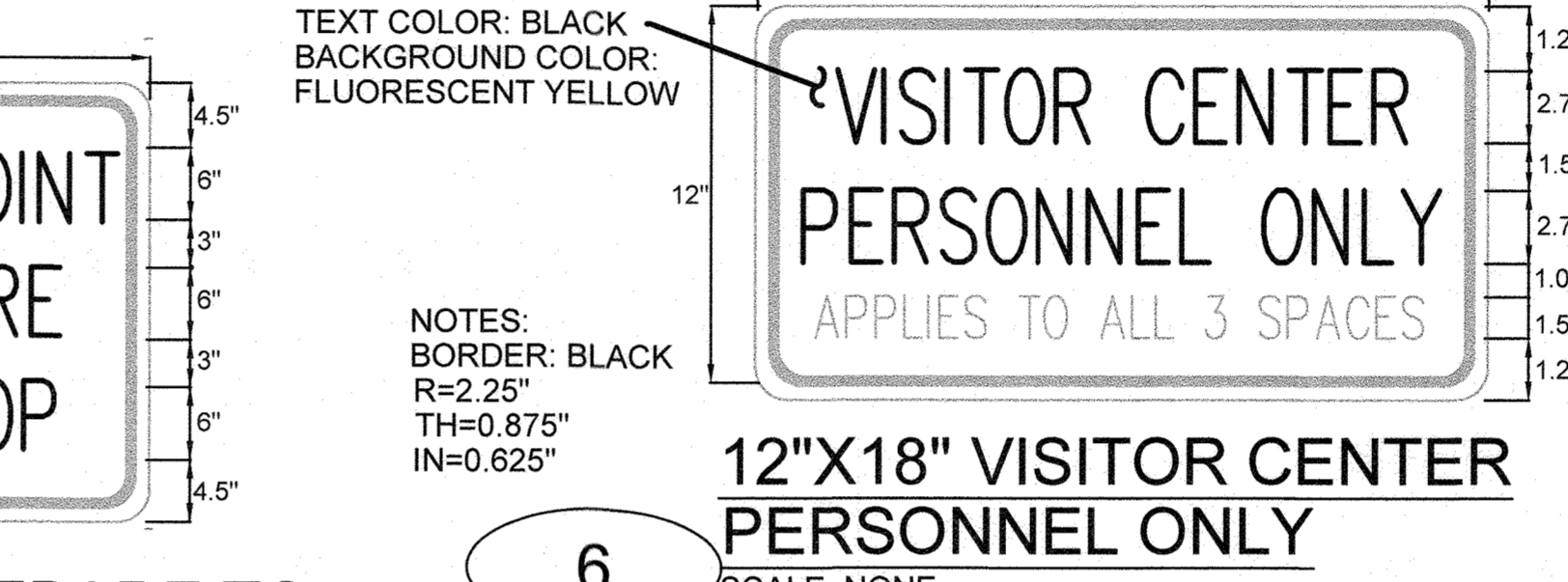
**3 CONCRETE PAD**  
SCALE: NONE



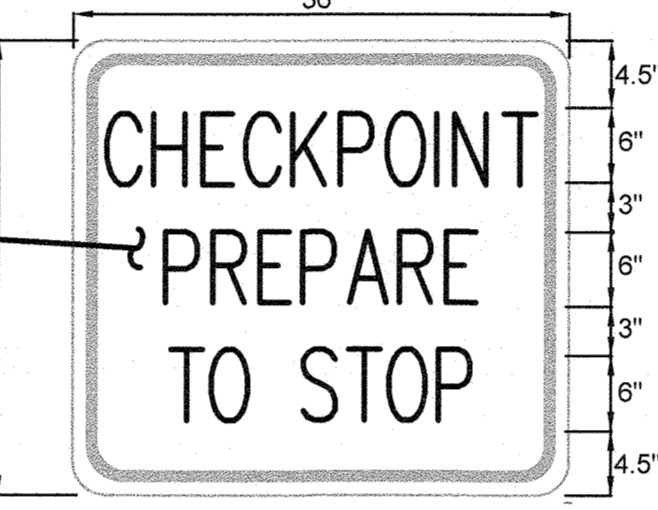
**4 8" HIGH CONCRETE CURB**  
SCALE: NONE



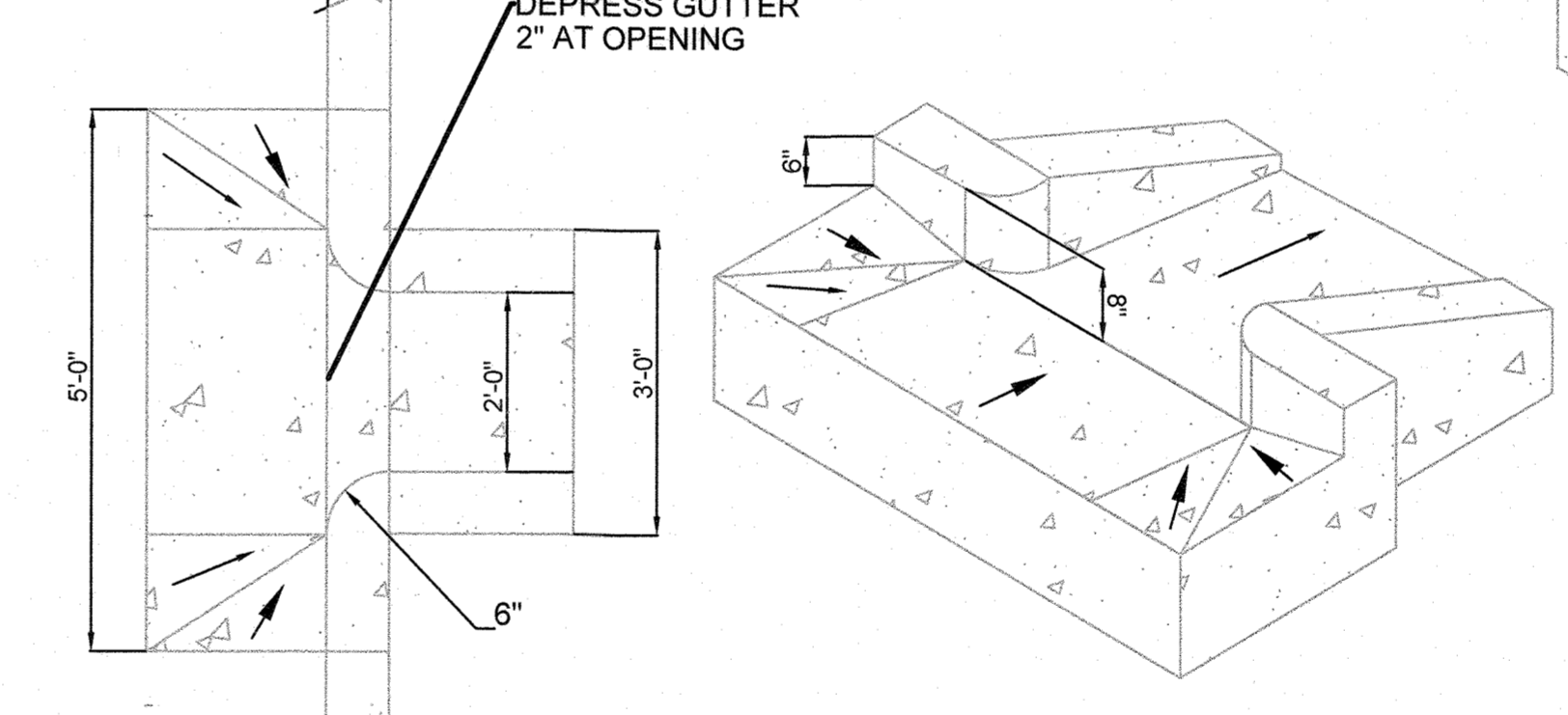
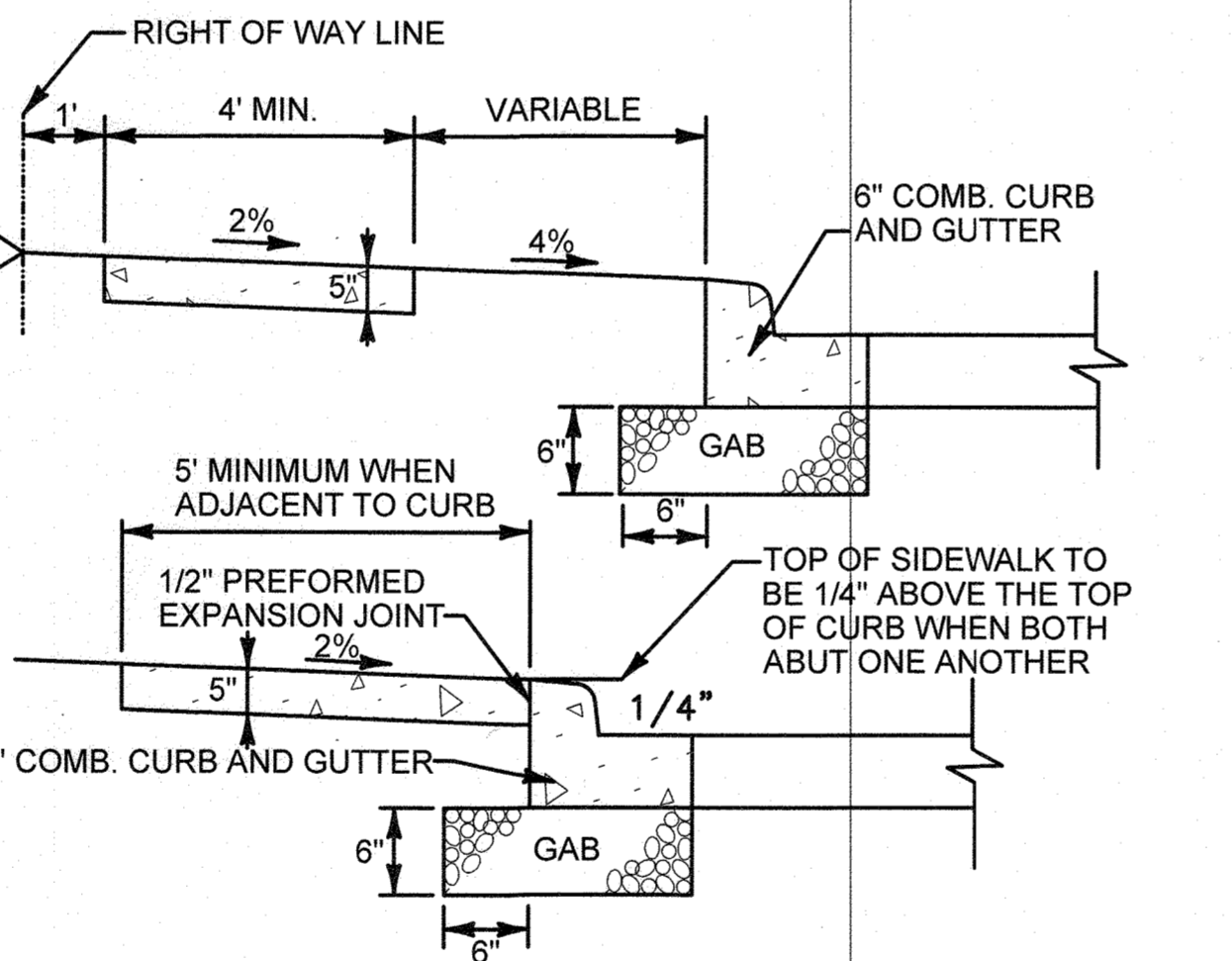
**7 GFCI (FROM CTC) 12"X18" RESERVED POLICE PARKING ONLY SIGN**  
SCALE: NONE



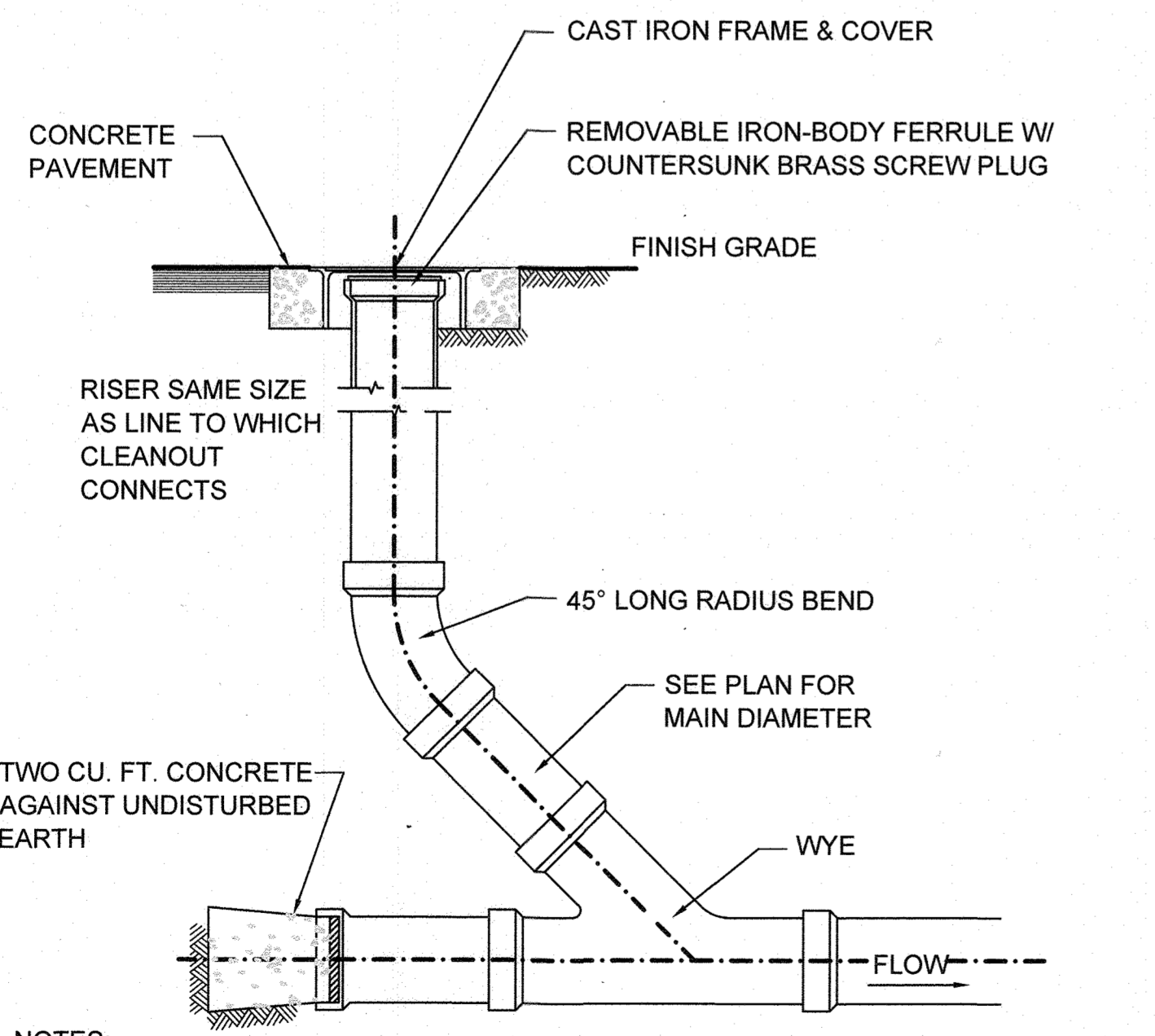
**6 12"X18" VISITOR CENTER PERSONNEL ONLY**  
SCALE: NONE



**5 CHECKPOINT PREPARE TO STOP SIGN**  
SCALE: NONE



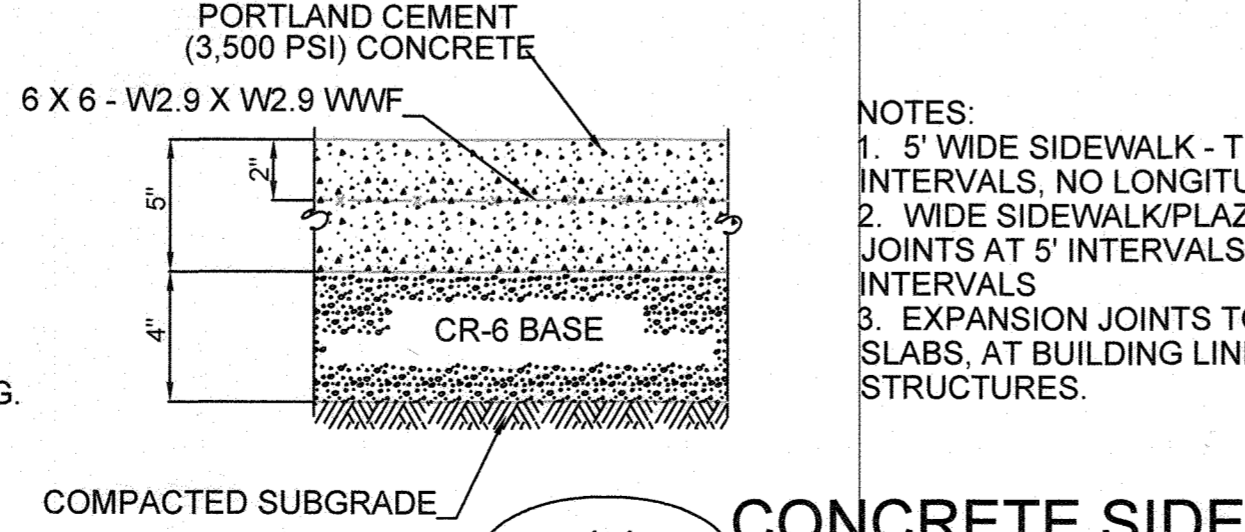
**12 CURB CUT**  
SCALE: NONE



NOTES:  
1. FERRULE AS SHOWN IS APPLICABLE TO 4"-8" PIPE. FOR 10"-15" PIPE USE A BLIND PLUG.  
2. SUBSTITUTE CONNECTION TO UPSTREAM LINE FOR PLUG, WHERE SHOWN ON PLANS.  
3. COVER SHALL BE CAST WITH LETTERS "C.O." ON TOP.  
4. CLEANOUTS SHALL BE STANDARD TYPE UNLESS NOTED ON PLANS.

**10 CLEANOUT**  
SCALE: NONE

NOTES:  
1. SIDEWALK TO BE SCRIBED IN 5'-0" MAXIMUM SQUARES.  
2. EXPANSION JOINTS AT ALL FIXED OBJECTS.  
3. 1/2" PREFORMED EXPANSION MATERIAL IN EXPANSION JOINTS TO BE KEPT 1/4" BELOW SURFACE OF SIDEWALK.  
4. CONCRETE TO BE MIX NO.2 IN ACCORDANCE WITH MDSA STATE HIGHWAY ACCESS MANUAL TECHNICAL DESIGN STANDARDS.  
5. WHEN SIDEWALK ABUTS CURB, SIDEWALK SHALL BE 1/4" ABOVE CURB WITH 1/2" PERFORMED EXPANSION JOINT BETWEEN SIDEWALK AND CURB.  
6. ON LONGITUDINAL SIDEWALK GRADES OF 5% OR GREATER, A CONCRETE HEADER, 6" THICK AND 6" DEEP BELOW THE NORMAL 5" SIDEWALK THICKNESS SHALL BE CONSTRUCTED FOR THE FULL WIDTH OF THE SIDEWALK AT INTERVALS OF 48 FEET. THE HEADERS SHALL BE PLACED AT THE EXPANSION JOINT LOCATIONS AND SHALL BE MONOLITHIC WITH THE SIDEWALK.  
7. 4' SIDEWALK REQUIRES A PASSING AREA (SEE HO.CO.STD. DETAIL R-4.01)  
8. SEE SITE PLAN FOR PROPOSED SIDEWALK WIDTHS.



**11 CONCRETE SIDEWALK SECTION**  
SCALE: NONE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
CHIEF, DIVISION OF LAND DEVELOPMENT  
12/16/19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
12-18-19  
DIRECTOR  
12-18-19

Subdivision Name	PLAT# 23732-23734	LOT PARCEL #
EMERSON/REVITZ PROPERTY	15786	15786
DEED	BLOCK# ZONE TAX ZONE MARBLECT. DISTRICT	PARCELS 1-11, PARCEL D-1, 11479/0051, 20 IPEC 47
WATER CODE	SEWER CODE	6

Des. By DB Scale AS SHOWN Proj. No.  
Drn. By DB Date 05-09-2019  
Chk. By SD Approved

THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP SET

ENGINEER'S SEAL BOX FOR REDLINE REVISION #1 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. 45292 EXPIRATION DATE: 05/21/2020

**TABLE B.4.1 SWM MATERIAL SPECIFICATIONS**

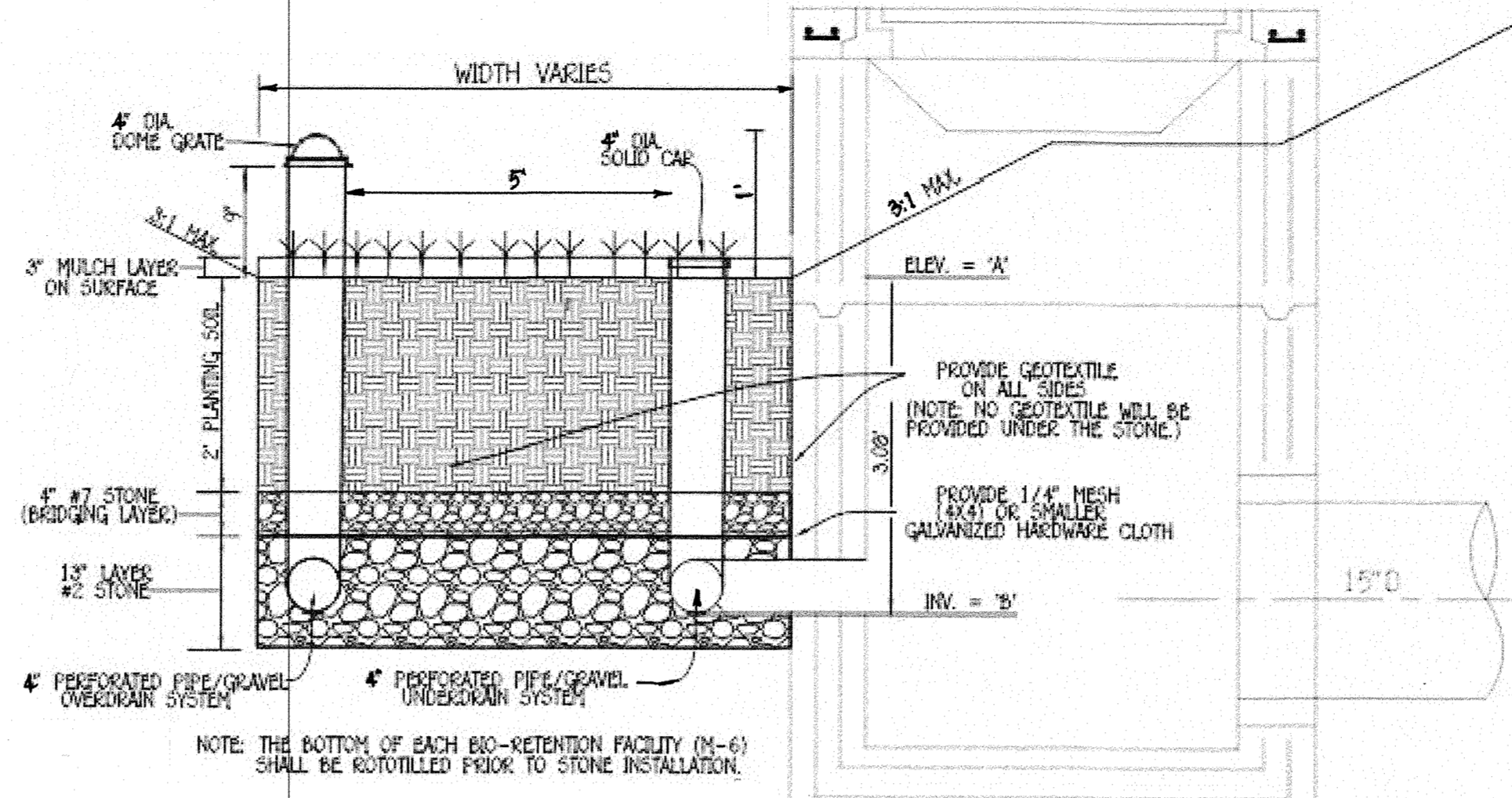
MATERIAL	SPECIFICATIONS	SIZE	NOTES
PLANTINGS	REFER TO LANDSCAPING PLANS	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2" DEEP)	LOAMY SAND (60-65%) & COMPOST (35-40%) OR SANDY LOAM (30%), COARSE SAND (30%) & COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT (PLANTING SOIL)	MIN. 10% BY DRY WEIGHT (ASTM D 2974)	N/A	
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAM	PEA GRAVEL: ASTM-D-448	NO.8 OR NO.9 (3/8" TO 1/2")	
CURTAINRAIN	ORNAMENTAL STONE: WASHED COBBLES	STONE: 2" TO 5"	
GEOTEXTILE		N/A	PE TYPE 1 NON-WOVEN
GRAVEL (UNDERDRAINS AND INFILTRATION BERMS)	AASHTO M-43	NO.57 OR NO.6 AGGREGATE (3/4" TO 1 1/4")	
UNDERDRAIN PIPING	F-758, TYPE PS 28 OR AASHTO M-278	4" SCHEDULE 40 PVC OR SDR 35	SLOTTED OR PERFORATED PIPE; 3/8" PERF. @ 6" ON CENTER 4 HOLES PER ROW; MINIMUM OF 3" GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPES SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
POURED-IN-PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3 F <sub>c</sub> =3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED; 28 DAY STRENGTH AND SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND. DESIGN TO INCLUDE MEETING ACI CODE 350_R/89; VERTICAL LOADING [H-10 OR H-20]; ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING
SAND	AASHTO M-6 OR ASTM C-33	0.02"-0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

**STORMWATER MAINTENANCE SCHEDULE ENVIRONMENTAL SENSITIVE DESIGN**

PRACTICE	FREQUENCY OF INSPECTION	PREVENTIVE MAINTENANCE	MAINTENANCE REQUIREMENTS
MICRO-BIORETENTION	SEASONALLY (AND AFTER A MAJOR STORM)		IRRIGATE DURING PROLONGED DRY PERIODS.
		IF SPECIFIC PLANTS ARE NOT SURVIVING, REPLACE WITH ALTERNATE APPROVED MDE SPECIES.	REMOVE ANY DEAD OR DYING VEGETATION AND REVEGETATE.
			PRUNE VEGETATION OCCASIONALLY.
			IF WATER PONDS FOR MORE THAN 48 HOURS, REMOVE AND REPLACE THE TOP FEW INCHES OF FILTER MEDIA.
			REPLACE MULCH ANNUALLY WHERE PRACTICE TREATS AREAS WITH HIGH CONCENTRATIONS OF HEAVY METALS. OTHERWISE, REPLACE TOP 2-3 INCHES AS NECESSARY.

**STORM SEWER DESIGN COMPUTATIONS**

FROM STR.	TO STR.	AREA (SF)	AREA (AC)	% Impervious	Runoff Coefficient C	10-yr Rainfall Intensity (in./hr)	Q-INC.	Q-Accum.	SLOPE (%)	PIPE SIZE (IN)	PIPE LENGTH (FT)	CAPACITY	INVERT ELEV.		RIM (UPSTREAM)	PIPE COVER (FT)	Q-Accum/CAPACITY (%)	VELOCITY (FT/S)
													INV. OUT UPSTREAM	INV. IN DOWNSTREAM				
DI31 (GRATE INLET - DETAIL 4/C6-012)	DI30	7960	0.18	40.00	0.59	8.50	0.92	0.92	2.50%	15	24.0	10.24	248.60	248.00	254.00	3.96	9%	0.98
DI30 (CURB INLET - DETAIL 4/C6-012)	STMH 4A	991	0.02	66.00	0.75	8.50	0.14	1.06	2.74%	15	28.5	10.72	247.90	247.12	254.40	5.06	10%	1.80
1/2 Existing VCP Canopy Roof	DI4	2178	0.05	100.00	0.95	8.50	0.40	0.4	2.00%	8	42	1.7	253.23	252.33	257.00	2.96	24%	1.3
DI4 (GRATE INLET - DETAIL 4/C6-012)	EX STMH 3	6187	0.14	67.00	0.75	8.50	0.91	1.31	2.92%	15	13.0	11.07	248.23	247.85	253.50	3.83	12%	-



**1 MICRO BIO-RETENTION CROSS-SECTION**  
SCALE: NONE

**MICRO BIORETENTION AS-BUILT INFORMATION**

	MBR #1		MBR #2	
	DESIGN	AS-BUILT	DESIGN	AS-BUILT
FILTER BED AREA (SQ-FT)	445	498.77	511	558.68
LENGTH	36.66	29.96	41.75	45.98
WIDTH	12.33	16.65	12.2	12.88
FILTER BED SURFACE ELEVATION	253	252.71	252.5	252.11
FILTER UNDERDRAIN PIPE	YES	YES	YES	YES
SIZE	4" PVC	4" PVC	4" PVC	4" PVC
INVERT (TOP OF STRUCTURE)	254.00	254.89	253.50	254.11
GRAVEL THICKNESS (RECHARGE DEPTH)	3" MIN	3"	3" MIN	5.5"
BOTTOM OF EXCAVATION	249.33	249.30	248.83	248.60
DATE ACCEPTED BY MDE				

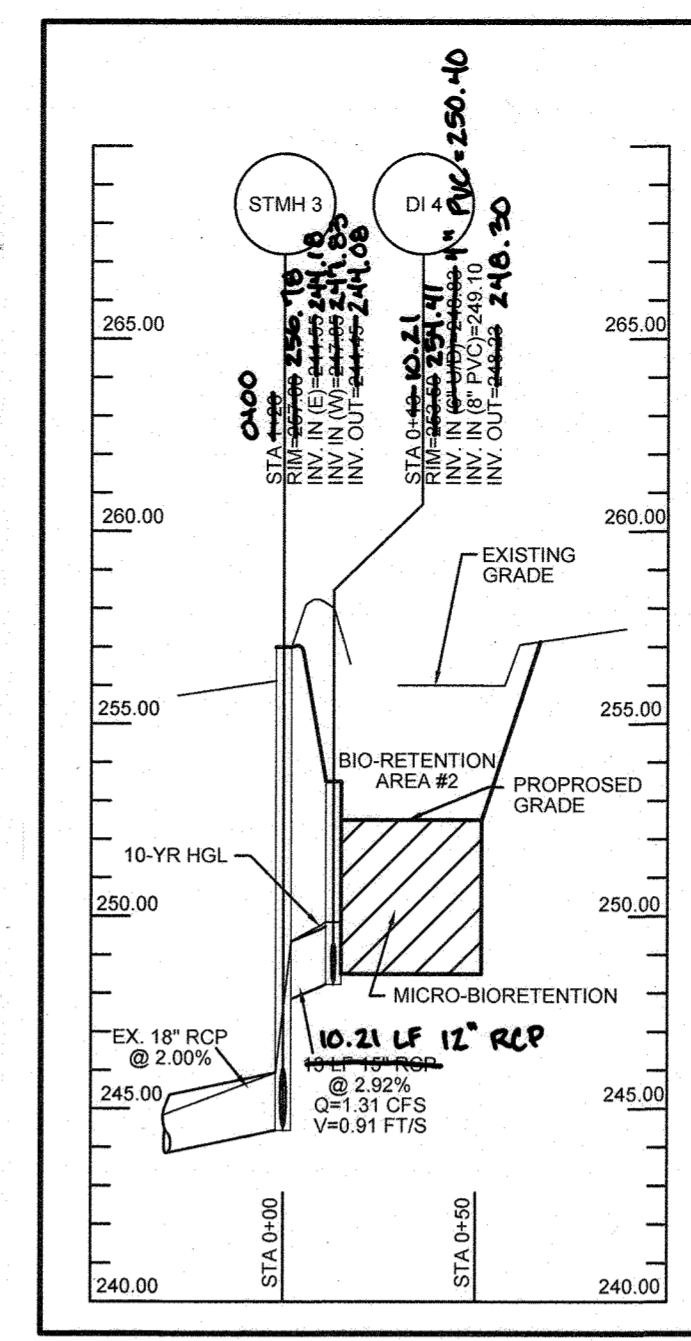
**AS-BUILT CERTIFICATION**

I HEREBY CERTIFY THAT THE STORMWATER MANAGEMENT FACILITIES (BOTH BMPs AND ESD PRACTICES) SHOWN ON THE PLANS HAVE BEEN CONSTRUCTED IN ACCORDANCE WITH THE PLANS APPROVED BY THE MARYLAND DEPARTMENT OF ENVIRONMENT, EXCEPT AS NOTED IN RED ON THE "AS-BUILT" DRAWINGS.

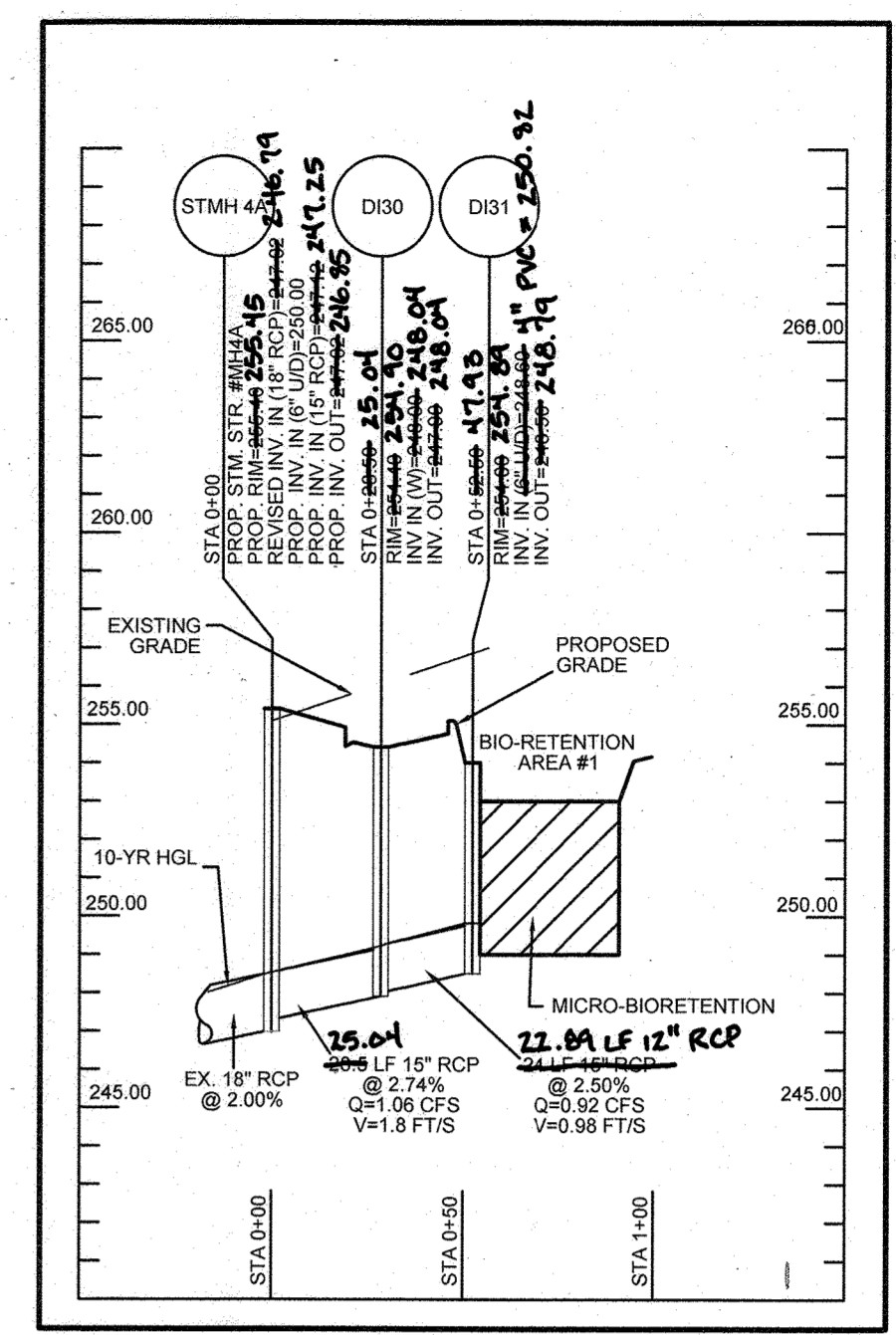
NAME: Robert Crowley SIGNATURE: [Signature]

NAME: 45292 DATE: 2-25-2021

MARYLAND REGISTRATION NUMBER (PE OR LS): \_\_\_\_\_  
MDE NO. \_\_\_\_\_  
FACILITIES BEING CERTIFIED (LIST INDIVIDUALLY USING FACILITY ID NUMBER AND/OR DESCRIPTION)  
MBR #1 \_\_\_\_\_  
MBR #2 \_\_\_\_\_



**2 STORM PROFILE MH3 TO DI4**  
SCALE: HORIZONTAL: 1" = 50' VERTICAL: 1" = 5'



**3 STORM PROFILE MH4A TO DI30 TO DI31**  
SCALE: HORIZONTAL: 1" = 50' VERTICAL: 1" = 5'

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
CHIEF, DIVISION OF LAND DEVELOPMENT: [Signature] 12-16-19  
CHIEF, DEVELOPMENT ENGINEERING DIVISION: [Signature] 12-18-19  
DIRECTOR: [Signature] 12-18-19

9/24/19 1 NEW MYLAR FOR VCP REVISIONS

Date No. Revision Description

EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE  
PARCEL H  
OWNER DEVELOPER: EMERSON DEVELOPMENT IV, LLC  
ONE TEXAS STATION, SUITE 200  
TIMONIUM, MARYLAND 21093  
(443) 689-8000

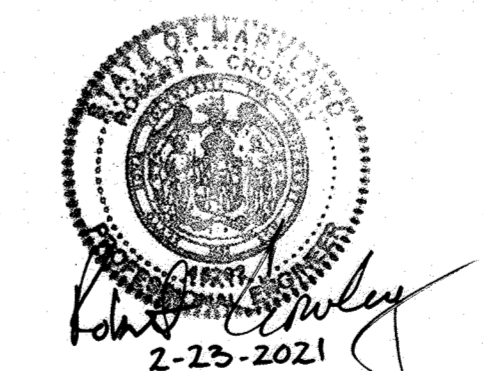
DESIGNED BY: D. BROWN  
DRAWN BY: D. BROWN  
CHECKED BY: S. DAVIS  
SUBMITTED BY: ROBERT CROWLEY  
PROJECT MANAGER: RICK PACE

DATE: SEPT. 12, 2019  
PROJECT NO.: 38345  
FILE NAME: AUGUST 12, 2019

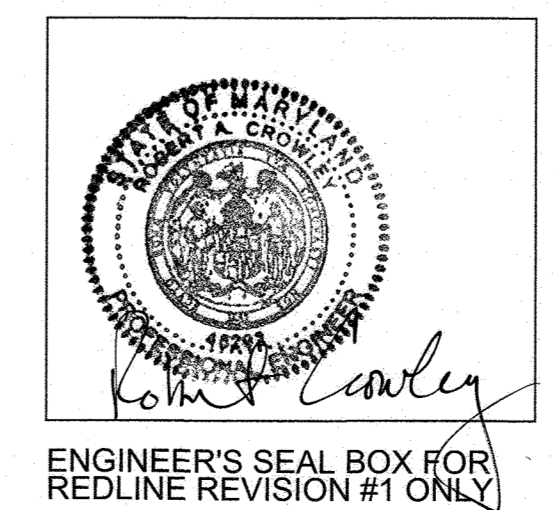
DESIGNATION: PROJECT MANAGER

LAUREL, MD

**AS-BUILT CERTIFICATION FOR PSM**



THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP SET



**AS-BUILT CERTIFICATION FOR PSM**  
I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.  
NAME: ROBERT CROWLEY PE # 45292

**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. 45292 EXPIRATION DATE: 05/21/2020

US Army Corps of Engineers  
Baltimore District

REAL PROPERTY SERVICES  
FIELD OFFICE  
ANAPOLIS JUNCTION, MARYLAND

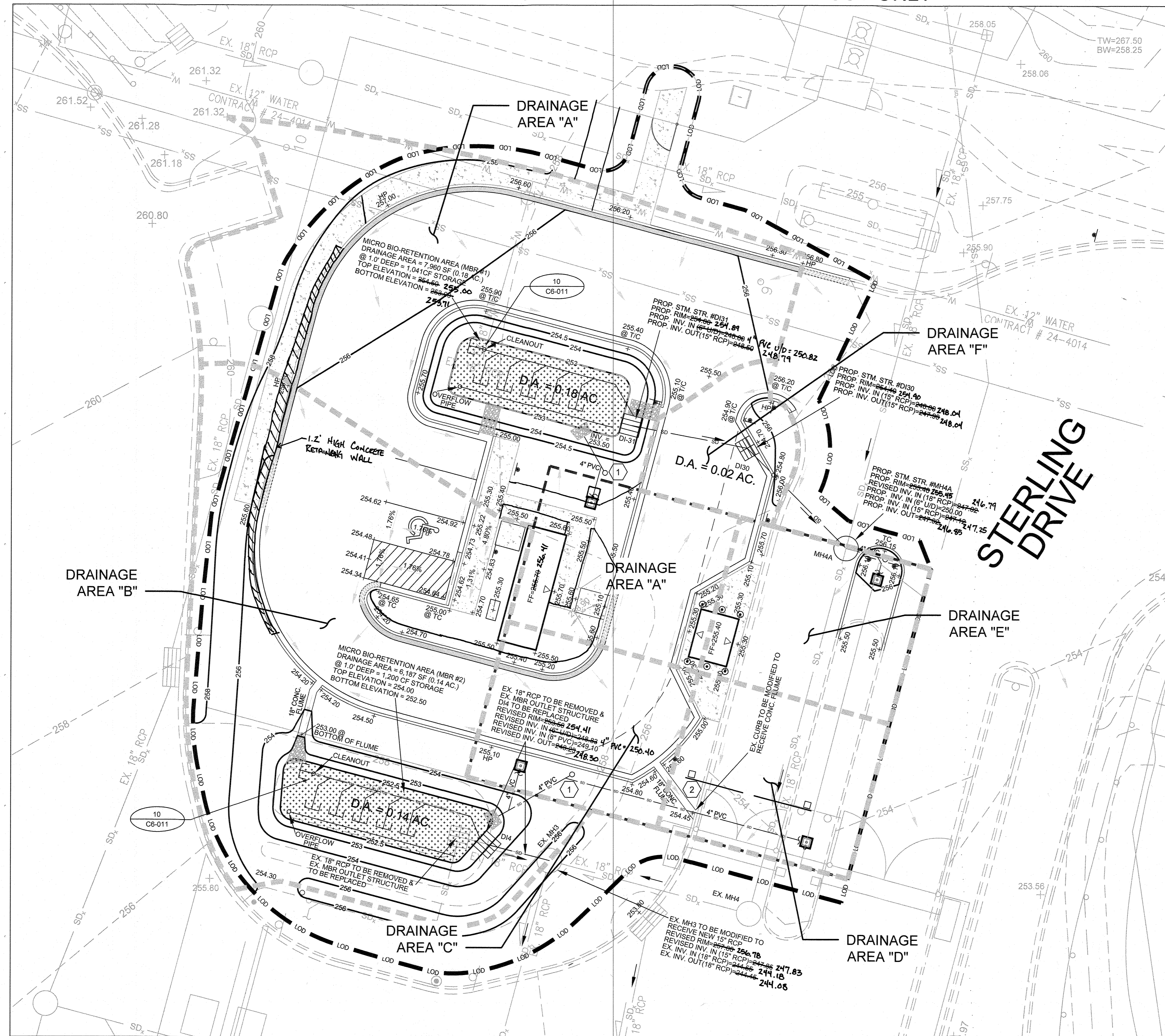
**JACOBS**  
1100 N. GLEBE RD., ARLINGTON, VA. 22201

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Date	Rev.	Description

EMERSON 8 - PHASE 6  
VEHICLE CONTROL INSPECTION FACILITY (VCF)

Drawing No. 111038U  
Sheet Reference No. 79 of 80  
Plate 21 of 53  
SDP-16-005



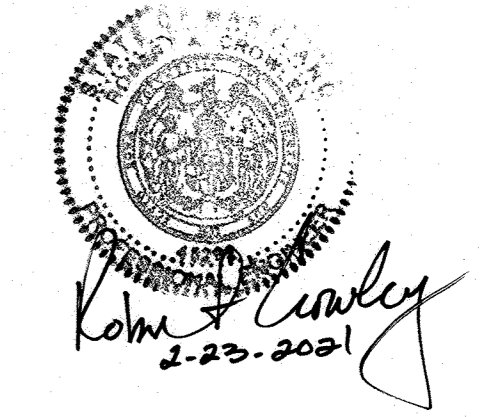
1 SITE DRAINAGE PLAN  
1" = 10'

KEYED NOTES:

- 1 FOR CANOPY ROOF DRAINS, SEE CLEANOUT DETAIL 10 ON SHEET C6-011.
- 2 EXISTING CURB TO BE MODIFIED WHERE 18" CONCRETE FLUME TIES INTO EXISTING CURB

**AS-BUILT CERTIFICATION FOR PSNM**  
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS. I HAVE VERIFIED THAT THE CONTRIBUTING DRAINAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOGGING OF THE UNDERGROUND SWM FACILITY.

**Robert Crowley**  
 NAME  
 45292  
 PE NUMBER



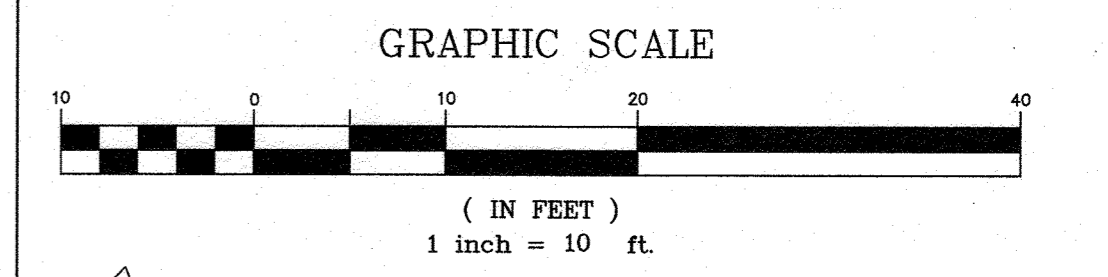
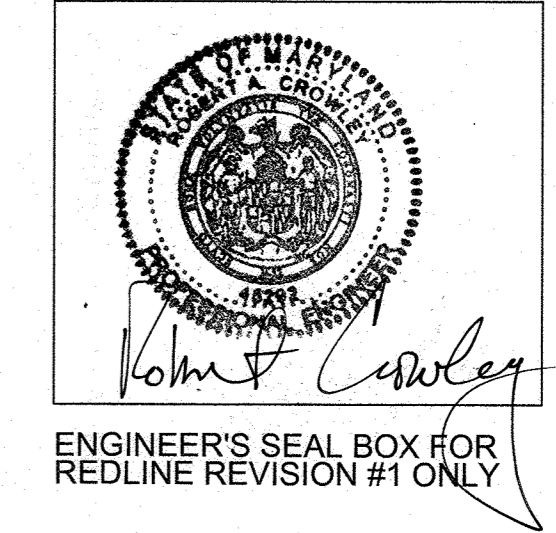
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING  
 T. M... 12/16/17  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 12-12-19  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 12-18-19  
 DIRECTOR

9/24/19	1	NEW MYLAR FOR VCP REVISIONS
---------	---	-----------------------------

Date	No.	Revision Description
		EMERSON CAMPUS VEHICLE CHECK POINT SECURITY GATE PARCEL H OWNER DEVELOPER: EMERSON DEVELOPMENT IV, LLC ONE TEXAS STATION, SUITE 200 TIMONIUM, MARYLAND 21093 (443) 689-8000

SUBDIVISION NAME	EMERSON/REWITZ PROPERTY	PLAT #	23732-23734	LOT #	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20
DEED	11479/005	TAX ZONE	20	WATER CODE	PEC
DESIGNED BY	DB	SCALE	AS SHOWN	PROJECT NO.	
DRAWN BY	DB	DATE	05-09-2019		
CHECKED BY	SD	APPROVED			

THE PURPOSE OF REDLINE REVISION 1 IS TO ADD NEW PLAN SHEET TO SDP SET



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. 45292 EXPIRATION DATE: 05/21/2020

US Army Corps of Engineers  
 Baltimore District

REAL PROPERTY SERVICES  
 ANNAPOLIS JUNCTION, MARYLAND

**JACOBS**  
 1100 N. GLEBE RD., ARLINGTON, VA. 22201

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Rev.	1	2	3	4	5	6	7	8	9	10
Date	SEPT. 12, 2019									
Project No.	38345									
File name	August 12, 2019									

Designed by: D. BROWN  
 Drawn by: D. BROWN  
 RSD Project Manager: RICK PACK  
 Submitted by: ROBERT CROWLEY  
 PROJECT MANAGER

EMERSON - PHASE 6  
 VEHICLE CONTROL INSPECTION FACILITY (VCF)  
 SITE DRAINAGE PLAN  
 LAUREL, MD

Drawing No. 111039V  
 Sheet Reference No. 80 of 80  
 Plate 22 of 53  
 SDP-16-005