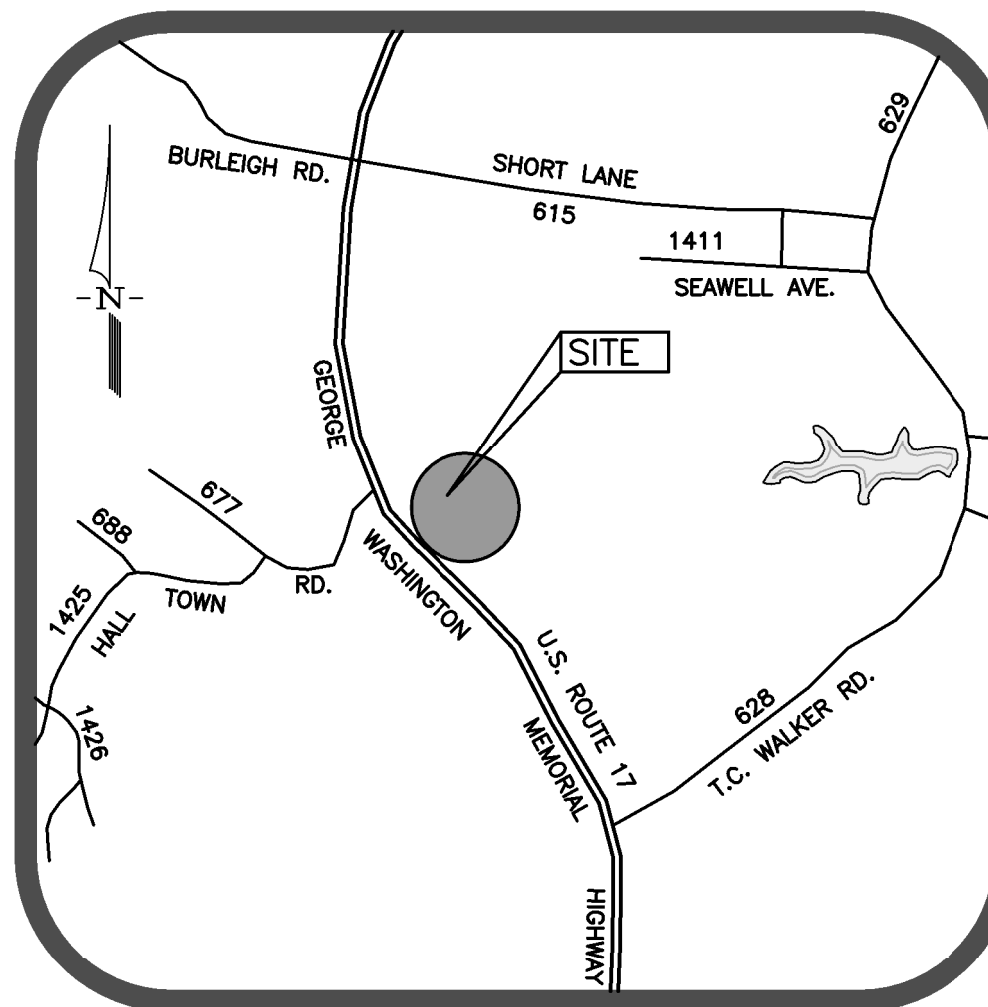


RIVERBEND APARTMENTS

ALL ONSITE ROADS ARE PRIVATE

ABINGDON DISTRICT
GLOUCESTER COUNTY, VIRGINIA



VICINITY MAP
SCALE: 1" = 1/2 MILE

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GENERAL NOTES

1. OWNER/DEVELOPER: S.L. NUSBAUM REALTY CO.
VICE PRESIDENT, MULTIFAMILY DEVELOPMENT, PARTNER: RICHARD COUNSELMAN
440 MONTICELLO AVE, SUITE 1700
NORFOLK, VA 23510
rcounselm@slnusaum.com
2. THE LAND DELINEATED HEREON IS LOCATED ON COUNTY TAX MAP 39 208.
3. PROPERTY ADDRESS: 6139 GEORGE WASHINGTON MEMORIAL HIGHWAY.
4. SITE IS ZONED: MF-1 (MULTI-FAMILY) PER RE-ZONING APPLICATION Z-13-01
APPROVED BY GLOUCESTER COUNTY BOARD OF SUPERVISORS OCTOBER 21, 2014.
PRINCIPAL MF-1 BUILDING SETBACKS: FRONT: 35' REAR: 35'
5. PROPERTY REFERENCE: TAX MAP 29, PARCEL 208; INST. NO. 17-0378; C.P.B. 26 PG. 580;
D.B. 85 PG. 480 (PLAT PG. 580); D.B. 124 PG. 248;
S.H.P.B. 3 PG. 44 & 44A; C.P.B. 1 PG. 234
6. VERTICAL DATUM: NAVD 1988 DATUM (NAVD 88).
7. THIS SITE LIES IN ZONE X, AS DEFINED ON THE NATIONAL FLOOD INSURANCE RATE MAP PANEL NO. 51073 C 0185 E, DATED NOVEMBER 19, 2014.
8. TOTAL PROJECT SITE = 27.43 AC. (PHASE 1= 16.2524 AC.; PHASE 2=11.1766 AC.)
9. THE PROJECT SITE IS LOCATED WITHIN A CHESAPEAKE BAY PRESERVATION AREA. THERE ARE NON-TIDAL WETLANDS LOCATED ON-SITE AND THERE IS A 100' RESOURCE PROTECTION AREA BUFFER ASSOCIATED WITH THESE WETLANDS AS SHOWN ON THE PLAN.
10. TOTAL AREA OF LAND DISTURBANCE = 13.60 AC.±
11. CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPE, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN THE WATERWAYS IN OPERABLE CONDITION.
12. THE LOCATION OF ALL EXISTING UTILITIES MAY OR MAY NOT BE SHOWN; ALL LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL EXISTING UTILITIES TO HIS SATISFACTION PRIOR TO EXCAVATION. THE CONTRACTOR SHALL PROVIDE PROPER NOTIFICATION TO "MISS UTILITY" (800-552-7001) PRIOR TO COMMENCEMENT OF CONSTRUCTION.
13. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND AFTER EACH RUNOFF PRODUCING RAINFALL. THE FOLLOWING ITEMS SHALL BE CHECKED IN PARTICULAR:
A. THE SILT FENCE BARRIER SHALL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF THE SEDIMENT DEPOSITION REACHES HALF WAY TO THE TOP OF THE BARRIER.
B. THE SEEDER AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHALL BE FERTILIZED AND RESEDED AS NEEDED.
C. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY.
14. THE CONTRACTOR SHALL DO SUCH OVERLOT GRADING AS NECESSARY TO PRECLUDE PONDING OF WATER ADJACENT TO ROADWAY.
15. A LAND DISTURBANCE PERMIT IS REQUIRED. PRIOR TO RECEIVING A LAND DISTURBANCE PERMIT, THE CONTRACTOR WILL BE REQUIRED TO SUBMIT SURETIES FOR ALL MATERIALS AND CONSTRUCTION OF ESC AND STORMWATER PRACTICES.
16. BITUMINOUS SURFACE SHALL BE APPLIED BETWEEN APRIL 1ST AND NOVEMBER 1ST. ANY CHANGES SHALL BE APPROVED BY THE ENGINEER.
17. THE RESPONSIBLE LAND DISTURBER FOR THE PROJECT SHALL BE IDENTIFIED ON THE GLOUCESTER COUNTY LAND DISTURBER PERMIT APPLICATION PRIOR TO ANY CLEARING, GRADING, OR OTHER LAND DISTURBANCE.
18. EXTERIOR CONCRETE SHALL BE 3000 PSI WITH 5%-7% AIR ENTRAINMENT.
19. ALL PROPOSED ON-SITE PAVEMENT MARKINGS SHALL BE REFLECTORIZED TYPE A (PAINT) OR TYPE B (PERFORMED OR THERMOPLASTIC MATERIAL) IN ACCORDANCE WITH THE LATEST EDITION OF THE VDOT ROAD & BRIDGE SPECIFICATIONS. PARKING SPACES SHALL BE DELINEATED BY 4" WHITE LINES. (FEDERAL STANDARD COLOR #595-17886), HANDICAPPED PARKING SPACES SHALL BE DELINEATED BY 4" BLUE LINES (BENNETT'S PAINT BLUE WAVE Q13-285) FOR SPACES & SYMBOLS, FIRE LANES AND PARCEL PICK-UP MARKINGS SHALL BE 4" YELLOW (FEDERAL STANDARD COLOR #595-13539).
20. THE PROPERTY OWNER OR DEVELOPER, AS APPLICABLE, SHALL BE RESPONSIBLE FOR THE PERPETUATION & MAINTENANCE OF ALL SITE IMPROVEMENTS, INCLUDING LANDSCAPING AND STORMWATER MEASURES.
21. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING UTILITIES ABOVE & BELOW GROUND DURING CONSTRUCTION. OWNER AND CONTRACTOR SHALL RESOLVE ANY CONFLICTS WITH EXISTING UTILITIES.
22. INVERTS, SIZES, AND LOCATIONS OF ALL UNDERGROUND EXISTING UTILITIES SHOWN OR NOT SHOWN TO BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION BEGINS.
23. ANY ITEM WITHIN THE VDOT RIGHT-OF-WAY NOT COVERED BY SPECIFIC INSTRUCTIONS SHALL BE BUILT IN ACCORDANCE WITH THE CURRENT EDITION OF VDOT ROAD AND BRIDGE SPECIFICATIONS.
24. ALL MATERIALS USED WITHIN VDOT RIGHT-OF-WAY SHALL MEET VDOT ROAD AND BRIDGE SPECIFICATIONS AND COPIES OF THE TESTS AND/OR LETTERS OF CERTIFICATIONS SHALL BE SUPPLIED TO VDOT BY CONTRACTORS.
25. ALL PAVEMENT MARKINGS SHOWN SHALL BE COMPLETED AS SHOWN PURSUANT TO ARTICLE 11 OF THE GLOUCESTER COUNTY ZONING ORDINANCE.
26. ALL WORK ADJACENT TO OR WITHIN THE VDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE VDOT VIRGINIA WORK AREA PROTECTION MANUAL (STANDARDS AND GUIDELINES). ANY WORK THAT WILL IMPACT OR IMPEDE TRAFFIC FLOW SHALL BE REPORTED TO THE SALUDA RESIDENCY OFFICE 72 HRS. PRIOR TO START OF WORK TO JOYCE MCGOWEN OR CAROLYN FAIVRE SO NOTIFICATION CAN BE MADE TO THE VIRGINIA OPERATIONAL INFORMATIONAL SYSTEM.
27. A VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMMP) PERMIT IS REQUIRED PRIOR TO ISSUANCE OF A LAND DISTURBANCE PERMIT. GLOUCESTER COUNTY HAS ADOPTED THE STORMWATER PROGRAM FROM THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY AND CAN BE CONTACTED AT (804)-693-1217 FOR ISSUANCE OF VSMMP. THE SECOND HALF OF THE STORMWATER FEE WILL BE DUE BEFORE ISSUANCE OF A VSMMP AND LAND DISTURBANCE PERMIT.
28. A PRECONSTRUCTION CONFERENCE WILL BE REQUIRED PRIOR TO ISSUING A LAND DISTURBANCE PERMIT; CONTRACTOR SHALL CONTACT THE ENVIRONMENTAL PROGRAMS DEPARTMENT TO SCHEDULE THIS MEETING FOLLOWING SUBMITTAL OF LOC'S, VSMMP, AND ANY OTHER FEDERAL, STATE, AND LOCAL PERMITTING REQUIREMENTS. CONTRACTOR SHALL CONTACT RELEVANT PERSONNEL OF GLOUCESTER UTILITIES DEPARTMENT, VA DEPARTMENT OF TRANSPORTATION, ENGINEER, AND OTHER APPLICABLE PARTIES REGARDING DATE, TIME, AND LOCATION OF PRECONSTRUCTION CONFERENCE. FURTHERMORE, THE LIMITS OF DISTURBANCE/CLEARING SHALL BE FLAGGED PRIOR TO THE PRECONSTRUCTION CONFERENCE.
29. THE COUNTY OF GLOUCESTER RECOMMENDS TAKING SOIL TEST ON SITE WHEN THE FIRST ESC MEASURES ARE INSTALLED. TEST RESULTS SHOULD DETERMINE LIMING/FERTILIZER RATES TO PROMOTE SUCCESSFUL SEEDING AND PERMANENT STABILIZATION.
30. AS-BUILT/CONSTRUCTION DRAWINGS ARE REQUIRED FOR THE STORMWATER APPURTENANCES - 3 HARD COPIES AND ELECTRONIC FILES (*.DWG) MAY BE EMAILED TO MAPBOOK@GLOUCESTERVA.INFO AND CGROVER@GLOUCESTERVA.INFO. RELEASE OF SURETY FRACTIONALLY CONTINGENT UPON RECEIPT OF AS-BUILTS.
31. EACH SITE PLAN SUBMITTAL SHALL BE PROVIDED IN PDF FORMAT EITHER BY EMAIL TO CGROVER@GLOUCESTERVA.INFO OR BY CD-ROM TO CHRISTINA GROVER, COMMUNITY DEVELOPMENT COORDINATOR, GLOUCESTER COUNTY ADMINISTRATION.
32. FOR ADDITIONAL INFORMATION REGARDING STORMWATER MANAGEMENT SEE "SUMMARY OF RUNOFF REDUCTION ANALYSIS AND STORMWATER MANAGEMENT FOR CARRIAGE POINT" BOOKLET AND CARRIAGE POINT: MASTER STORMWATER MANAGEMENT PLAN DATED DECEMBER 1, 2017; REVISED THROUGH JUNE 20, 2018 PREPARED BY BAY DESIGN GROUP. ANY SUBSEQUENT REVISION APPROVED BY THE REVIEWING AUTHORITY MAY SUPERSEDE THE PLAN-REFERENCED DOCUMENT(S).
33. AS-BUILT/CONSTRUCTION DRAWINGS ARE REQUIRED FOR THE WATER AND SANITARY SEWER SYSTEM APPURTENANCES - 3 HARD COPIES AND ELECTRONIC FILES (*.DWG) MAY BE EMAILED TO MAPBOOK@GLOUCESTERVA.INFO AND JDAWSON@GLOUCESTERVA.INFO. RELEASE OF SURETY FRACTIONALLY CONTINGENT UPON RECEIPT OF AS-BUILTS.
34. A STORMWATER MAINTENANCE AGREEMENT (SWMA), PREPARED BY GLOUCESTER COUNTY ENVIRONMENTAL PROGRAMS, IS REQUIRED FOR THE PROJECT'S BMP'S PIPING, DITCHING, AND STORMWATER CONVEYANCE STRUCTURES; TO BE RECORDED IN THE CLERK OF THE COURTS OFFICE PRIOR TO RECEIVING THE VSMMP AND LAND DISTURBANCE PERMITS.
35. A STORMWATER PERMIT TERMINATION FORM MUST BE SUBMITTED WHEN PROJECT IS COMPLETE IN ORDER FOR FINAL SURETY CAN BE RELEASED.
36. PARKING TABULATION:
REQUIRED PARKING SPACES
TOTAL MULTI-FAMILY DWELLINGS = 218 UNITS (REQ'D 1.5 PER UNIT & 1 PER 3 UNITS FOR VISITOR PARKING)
REQUIRED PARKING SPACES FOR MULTI-FAMILY = (218 x 1.5) + (218/3) = 400 SPACES
TOTAL PROVIDED PARKING SPACES = 400 SPACES
TOTAL REQUIRED HANDICAP PARKING SPACES = 8 SPACES (2 VAN ACCESSIBLE)
TOTAL PROVIDED HANDICAP PARKING SPACES = 24 SPACES (ALL VAN ACCESSIBLE)
REQUIRED BICYCLE PARKING SPACES
BICYCLE PARKING REQUIRED FOR MULTI-FAMILY 1 PER 10 UNITS FOR (218/10) = 21.8 SPACES; USE 22 SPACES
TOTAL PROVIDED BICYCLE PARKING SPACES = 25 SPACES
37. NO BUILDING EXTERIOR SHALL BE CONSTRUCTED OF UNPAINTED CONCRETE BLOCK OR UNPAINTED OR UNTREATED CORRUGATED AND/OR SHEET METAL.
38. MECHANICAL EQUIPMENT, WHETHER GROUND-LEVEL OR ROOFTOP, SHALL BE SHIELDED AND SCREENED FROM VIEW FROM THE PUBLIC RIGHT-OF-WAY, AND SHALL BE DESIGNED TO BE PERCEIVED AS AN INTEGRAL PART OF THE BUILDING.
39. DUMPSTERS AND OTHER TYPES OF WASTE RECEPTACLES AND OUTSIDE STORAGE OF MATERIALS OR EQUIPMENT SHALL BE SCREENED FROM VIEW FROM THE PUBLIC RIGHT-OF-WAY.
40. ADEQUATE LIGHTING SHALL BE PROVIDED IN PARKING AREAS TO ASSURE GENERAL SAFETY AND CONVENIENCE.
41. ANY LIGHTS USED TO ILLUMINATE PARKING AREAS SHALL BE SO ARRANGED AS TO REFLECT LIGHT AWAY FROM ADJOINING PREMISES.
42. THE OWNER OF THE PROPERTY USED FOR PARKING SHALL MAINTAIN SUCH AREAS IN GOOD CONDITION WITHOUT HOLES AND FREE OF ALL TRASH AND OTHER DEBRIS.

CONSTRUCTION NOTES FOR VDOT (REVISED 06/12/2012)

1. SUBDIVISIONS ONLY - THESE REQUIREMENTS WERE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF (SELECT ONE):
o VDOT'S 2005 SUBDIVISION STREET REQUIREMENTS (SSR)
o VDOT'S 2009 SECONDARY STREET ACCEPTANCE REQUIREMENTS (SSAR)
o VDOT'S 2011 SECONDARY STREET ACCEPTANCE REQUIREMENTS (SSAR 2011)
2. ALL WORK SHOWN HEREON SHALL BE IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) AND COUNTY ORDINANCES.
3. IT IS THE INTENT OF THESE DRAWINGS TO SHOW ALL NECESSARY WORK. ANY ITEM OF WORK NOT SPECIFICALLY SHOWN, BUT NECESSARY TO ELIGIBILITY FOR ACCEPTANCE IS HEREBY IMPLIED.
4. A VDOT PERMIT MUST BE OBTAINED PRIOR TO STARTING CONSTRUCTION WITHIN ANY STATE HIGHWAY RIGHTS-OF-WAY.
5. THE CONTRACTOR/OWNER SHALL PERFORM CBR TESTING ON THE SUBGRADE IN ACCORDANCE WITH VDOT SPECIFICATIONS BY A CERTIFIED GEOTECHNICAL ENGINEER TO DETERMINE BASE AND PAVEMENT DESIGNS, AND THIS INFORMATION MUST BE FORWARDED TO VDOT AND REVIEWED PRIOR TO PLACEMENT OF AGGREGATE BASE.
6. THE CONTRACTOR/OWNER MUST SPECIFY IN WRITING TO VDOT PRIOR TO CONSTRUCTION, THE TYPE OF SUBBASE, BASE AND SURFACE PAVEMENT TO BE UTILIZED ON EACH STREET FOR EACH TRAFFIC GROUP.
7. THE CONTRACTOR SHALL NOTIFY VDOT 72 HOURS PRIOR TO PLACEMENT OF BASE MATERIALS AND PRIOR TO THE PLACEMENT OF ASPHALT MATERIAL TO ENSURE VDOT'S ABILITY TO PERFORM TESTING, SUCH AS PROOF-ROLLING, DEPTH CHECKS, COMPACTION, AND CONTAMINATION. OPTION: A CERTIFIED ANALYSIS FROM A PRIVATE ENGINEERING/TESTING FIRM MAY BE SUBMITTED WITHIN 7 WORKING DAYS OF THE REQUIRED TESTS. 72 HOURS NOTICE IS STILL REQUIRED PRIOR TO EACH ACTIVITY.
8. ALL CULVERT PIPES SHALL BE OF A TYPE APPROVED BY VDOT AND THE LOCALITY.
9. ALL ENTRANCE PIPES FOR DRIVEWAYS SHALL BE A MINIMUM OF 12" IN DIAMETER, AND 30' IN LENGTH (CONCRETE CULVERTS MAY BE 28' IN LENGTH), UNLESS OTHERWISE APPROVED BY VDOT. DRIVEWAY CULVERTS IN CUL-DE-SACS SHALL BE CONCRETE. SEE APPROVED ROAD PLANS FOR THE PROPER CULVERT SIZES.
10. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD BEFORE STARTING CONSTRUCTION AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES.
11. THE CONTRACTOR SHALL ERECT STREET SIGNS AND TRAFFIC CONTROL SIGNS AS INDICATED ON THE SUBDIVISION CONSTRUCTION PLANS. THE SIGNS SHALL CONFORM TO VDOT AND COUNTY SPECIFICATIONS. ALL PROPOSED SIGN ARE TO BE INSTALLED PER STP-1 OF THE 2008 ROAD AND BRIDGE STANDARDS.
12. A MINIMUM 35' PAVEMENT FILLET RADIUS IS RECOMMENDED.
13. THE CONTRACTOR SHALL DO SUCH OVERLOT GRADING AS NECESSARY TO PRECLUDE THE PONDING OF WATER ADJACENT TO THE ROADWAY.
14. SLOPE EASEMENTS WILL BE REQUIRED AT ALL LOCATIONS WHERE THE TOP OF THE CUT OR THE TOE OF THE FILL EXCEEDS THE PROPOSED DEDICATION OF RIGHT-OF-WAY. SEE PLAN FOR EXACT LOCATION.
15. IF RUNNING WATER IS PRESENT IN ANY OUTLET CHANNEL DURING CONSTRUCTION WHERE DITCH PROTECTION IS REQUIRED, THE BOTTOM OF THE CHANNEL SHALL BE LINED WITH RIP-RAP STONE WITH EC-1 PLACEMENT. FURTHER, EC-2 OR EC-3 MUST HAVE A MINIMUM WIDTH OF 4' IN FILL SECTIONS, AND 5' IN CUT SECTIONS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE TO SEE THAT ALL EROSION AND SEDIMENT CONTROL STANDARDS ARE MET, AND THE CONTRACTOR MUST SEED AND MULCH ALL DISTURBED AREAS ALONG WITH ALL GRADED AREAS WITHIN THE PROPOSED RIGHT-OF-WAY IN ACCORDANCE WITH VDOT STANDARDS AND SPECIFICATIONS.
17. FINAL LOCATION OF MANHOLES, VALVES, FIRE HYDRANTS, AND OTHER APPURTENANCES SHALL NOT CONFLICT WITH OR CONSTRUCT ROADWAY DRAINAGE. CONTRACTOR SHALL ADJUST MANHOLES AND/OR DITCH ALIGNMENT TO ENSURE PROPER ROADSIDE DRAINAGE, COMPATIBLE WITH EXISTING FIELD CONDITIONS.
18. ALL WATER, SANITARY SEWER, AND STORM SEWER TRENCHES SHALL BE COMPACTED TO 95% DENSITY IN 6" LAYERS. COMPACTION TESTS MAY BE REQUIRED BY VDOT.
19. VDOT WILL REQUIRE DENSITY TESTS FROM A CERTIFIED ENGINEERING FIRM FOR ALL CULVERT INSTALLATIONS WITH A DIAMETER OF 36" OR LARGER.
20. VIDEO INSPECTION MAY BE REQUIRED ON ALL STORM SEWER SYSTEMS PRIOR TO FINAL CONSTRUCTION APPROVAL. A VDOT INSPECTOR MUST BE ON-SITE DURING THE VIDEO INSPECTION PROCESS.
21. THE CONTRACTOR NEEDS TO CONTACT CENTRAL REGION OPERATIONS TRAFFIC SIGNALS AT (804) 524-8592 FOR A MARK OUT OF THE TRAFFIC SIGNAL EQUIPMENT A MINIMUM OF 72 HOURS PRIOR TO WORK BEGINNING WHEN WORKING WITHIN A 1,000 FEET OF A TRAFFIC SIGNAL.
22. THE FINAL FOOTAGE AND LOCATION FOR VDOT STANDARD GUARDRAIL IS TO BE ESTABLISHED PRIOR TO THE COMPLETION OF FINE GRADING BY JOINT INSPECTION WITH THE CONTRACTOR, VDOT, AND THE OWNER'S REPRESENTATIVE.
23. WHENEVER TYING IN TO AN EXISTING ROAD, VDOT'S WP-2 STANDARD WILL APPLY, WHICH INCLUDE MILLING AND OVERLAY OF THE ADJACENT TRAVEL LANE.
24. A PAVEMENT LEVELING COURSE MAY BE REQUIRED TO MEET THE INTENDED CROSS-SLOPE AND TYPICAL SECTION.
25. ALL STORM STRUCTURES SHALL HAVE IS-1 INVERT SHAPING, AND SL-1'S (SAFETY LANDINGS) WILL BE REQUIRED IN ALL STRUCTURES WITH A DEPTH OVER 12'. ST-1'S (STEPS) ARE REQUIRED IN ANY STRUCTURE WITH A DEPTH OF 4' OR GREATER.

JOB NO. 12211-14

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CHECKED: WBB
FILED:

DATE: JANUARY 10, 2018

REVISED: APRIL 20, 2018

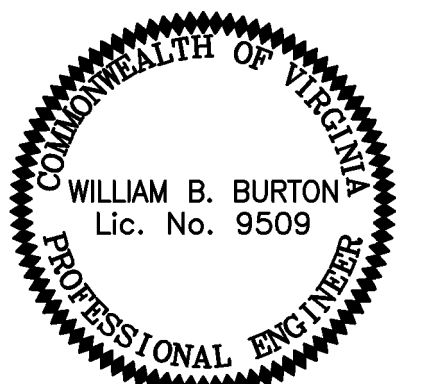
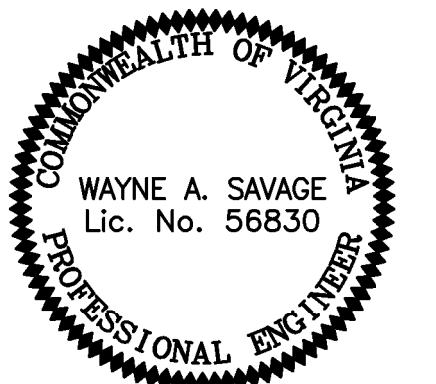
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PROJECT:

RIVERBEND APARTMENTS

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

SHEET:

COVER SHEET

SHEET NO:

C1

JOB NO. 12211-14

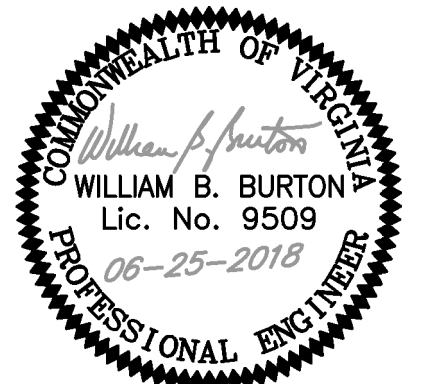
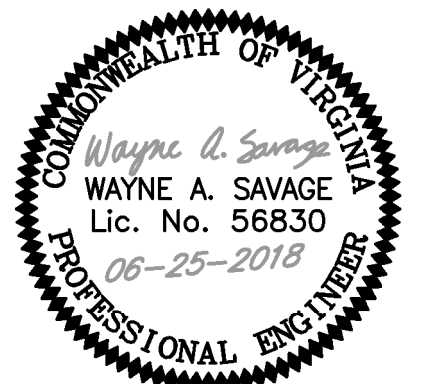
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PROJECT:

RIVERBEND APARTMENTS

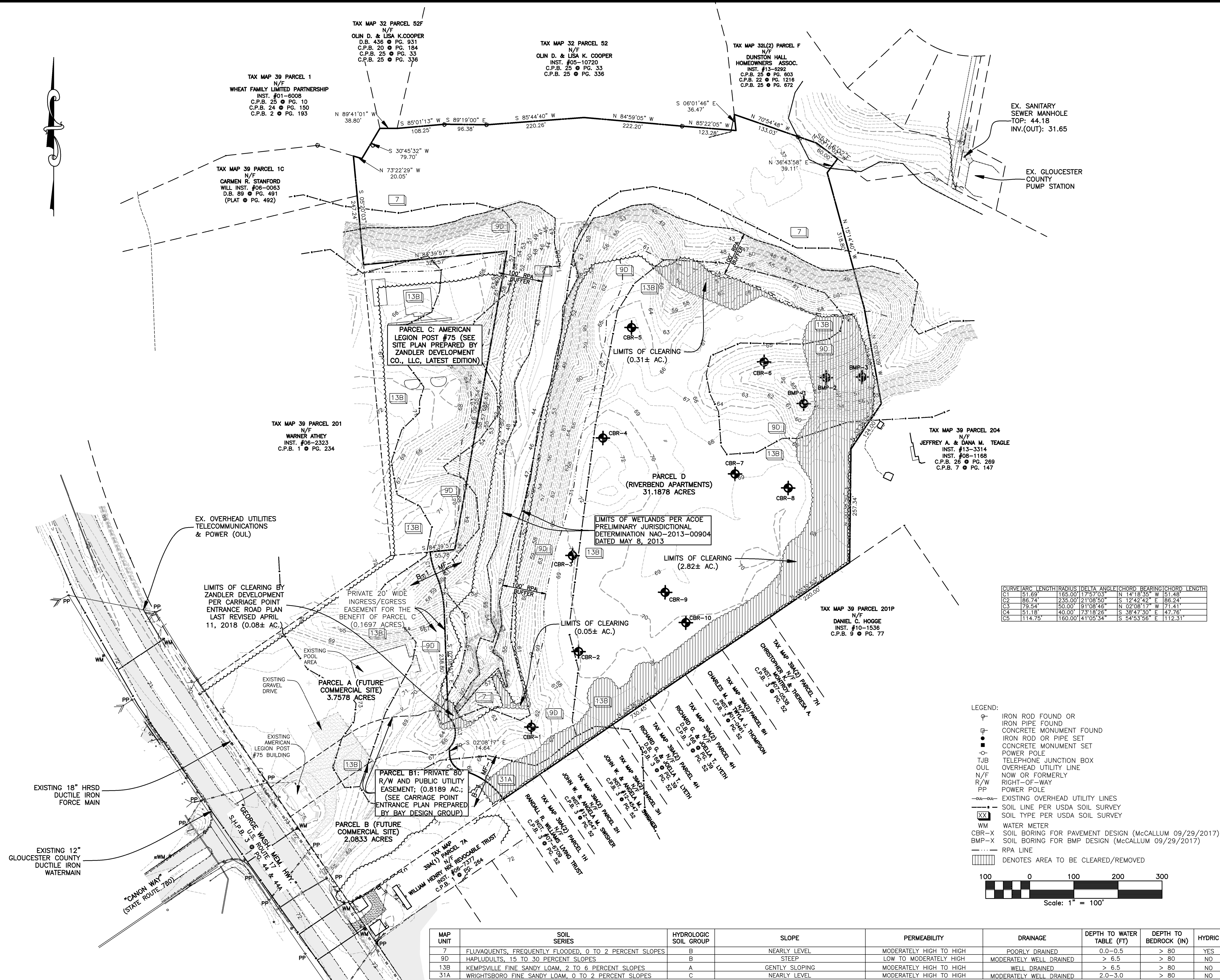
ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET:

EXISTING CONDITIONS AND DEMOLITION PLAN

SHEET NO:

C2



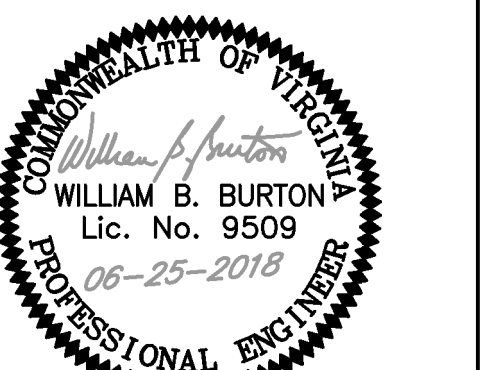
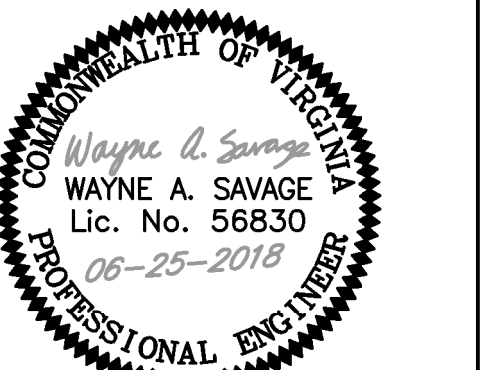
MAP UNIT	SOIL SERIES	HYDROLOGIC SOIL GROUP	SLOPE	PERMEABILITY	DRAINAGE	DEPTH TO WATER TABLE (FT)	DEPTH TO BEDROCK (IN)	HYDRIC	K FACTOR
7	FLUVAQUENTS, FREQUENTLY FLOODED, 0 TO 2 PERCENT SLOPES	B	NEARLY LEVEL	MODERATELY HIGH TO HIGH	POORLY DRAINED	0.0-0.5	> 80	YES	0.32
9D	HAPLUDULTS, 15 TO 30 PERCENT SLOPES	B	STEEP	LOW TO MODERATELY HIGH	MODERATELY WELL DRAINED	> 6.5	> 80	NO	0.28
13B	KEMPSVILLE FINE SANDY LOAM, 2 TO 6 PERCENT SLOPES	A	GENTLY SLOPING	MODERATELY HIGH TO HIGH	WELL DRAINED	> 6.5	> 80	NO	0.28
31A	WRIGHTSBORO FINE SANDY LOAM, 0 TO 2 PERCENT SLOPES	C	NEARLY LEVEL	MODERATELY HIGH TO HIGH	MODERATELY WELL DRAINED	2.0-3.0	> 80	NO	0.28

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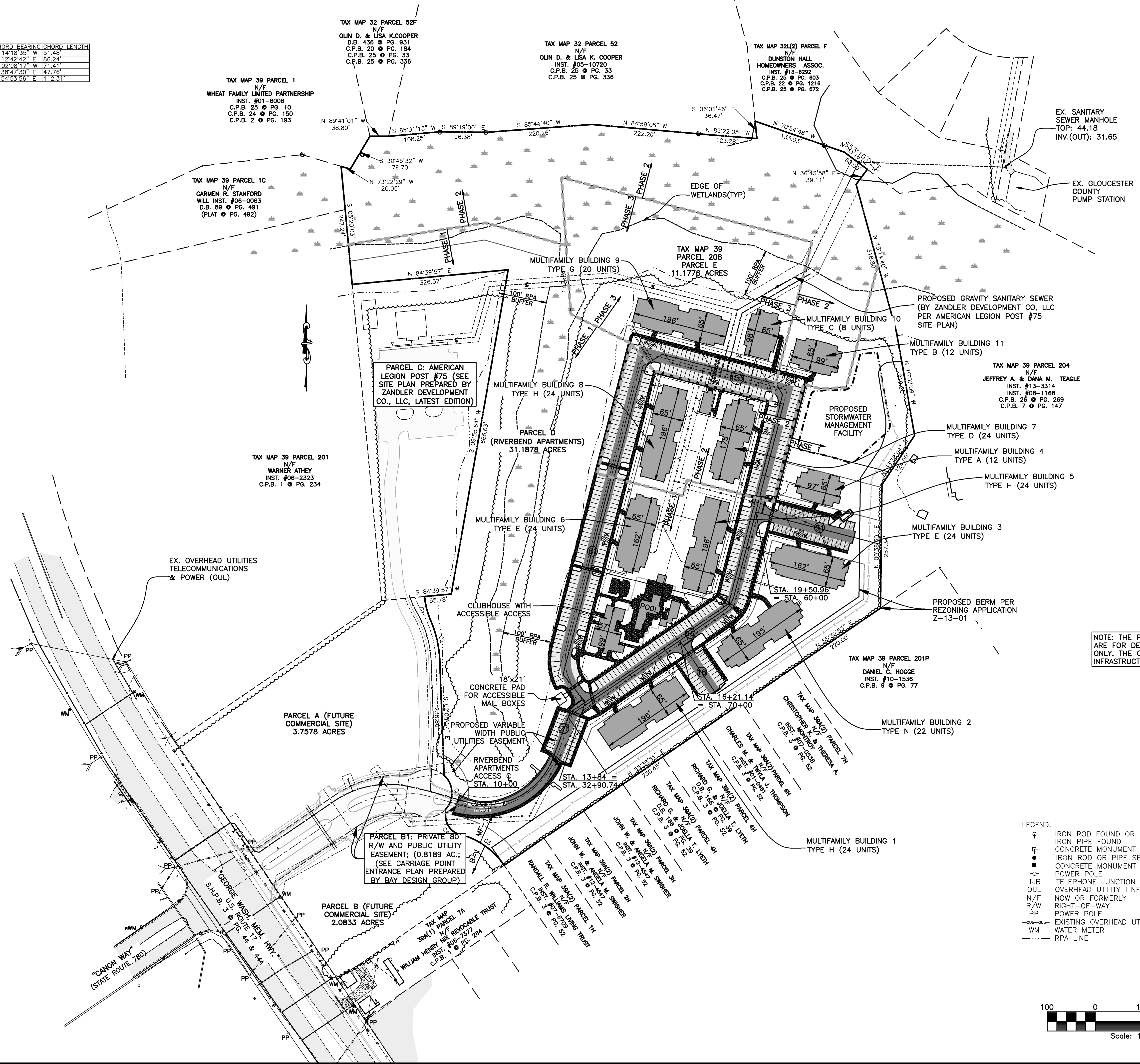
PROJECT: **RIVERBEND APARTMENTS**

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

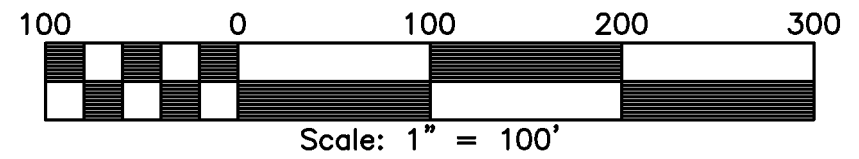
SHEET: **MASTER LAYOUT PLAN**

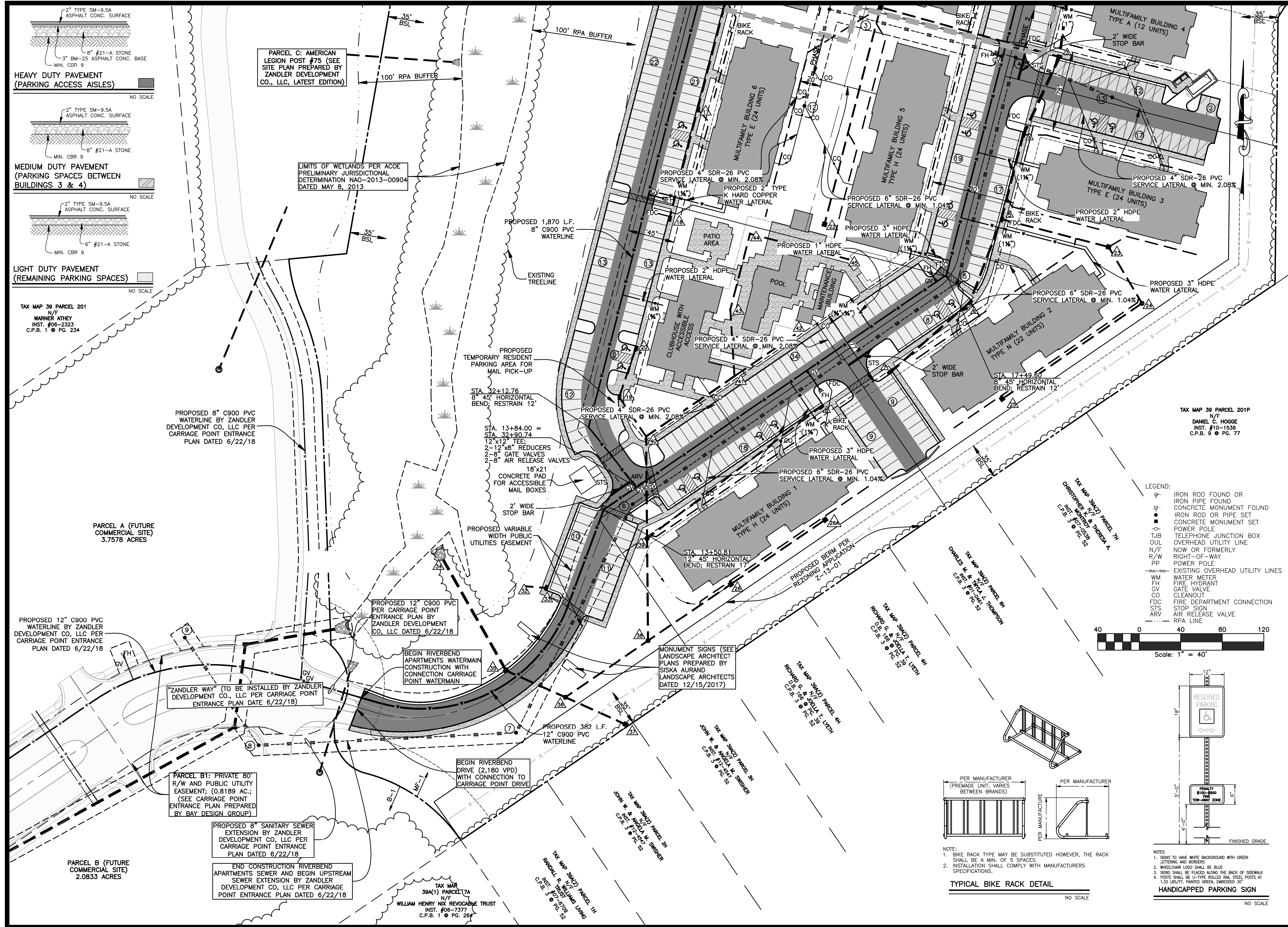
SHEET NO: **C3**

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	51.69'	165.00'	17°57'03"	N 12°18'35" W	51.48'
C2	86.74'	235.00'	21°08'50"	S 12°42'42" E	86.24'
C3	79.54'	50.00'	91°08'45"	N 02°08'17" W	71.41'
C4	51.98'	40.00'	73°18'28"	S 38°47'30" E	47.76'
C5	114.75'	160.00'	41°05'34"	S 54°53'56" E	112.31'



- LEGEND:
- ⊕ IRON ROD FOUND OR IRON PIPE FOUND
 - ⊞ CONCRETE MONUMENT FOUND
 - ⊙ IRON ROD OR PIPE SET
 - ⊚ CONCRETE MONUMENT SET
 - ⊖ POWER POLE
 - ⊕ TELEPHONE JUNCTION BOX
 - OUL OVERHEAD UTILITY LINE
 - N/W NOW OR FORMERLY
 - R/W RIGHT-OF-WAY
 - PP POWER POLE
 - EXISTING OVERHEAD UTILITY LINES
 - WM WATER METER
 - RPA LINE





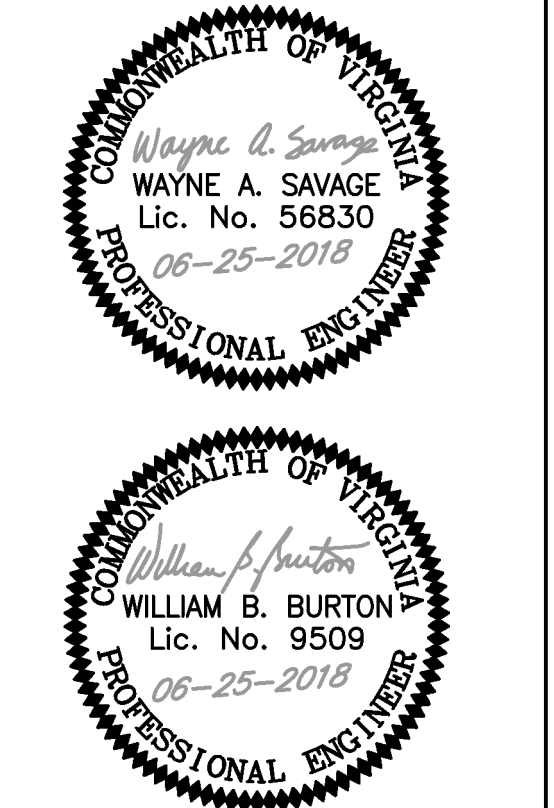
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 CAD: WAS
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 FILED:
 DATE: JANUARY 10, 2018
 REVISED: APRIL 20, 2018
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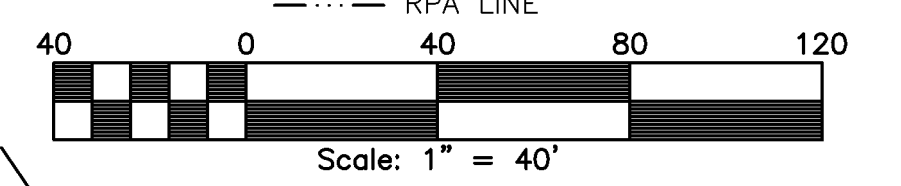
PROJECT: **RIVERBEND APARTMENTS**

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

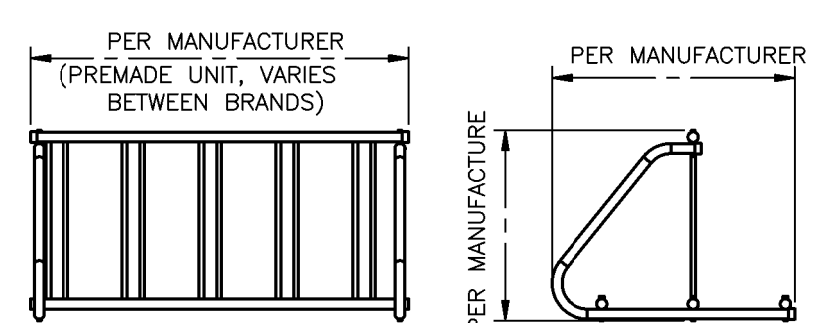
SHEET: **DETAILED LAYOUT AND UTILITIES PLAN**

SHEET NO: **C4**

JOB NO. 12211-14

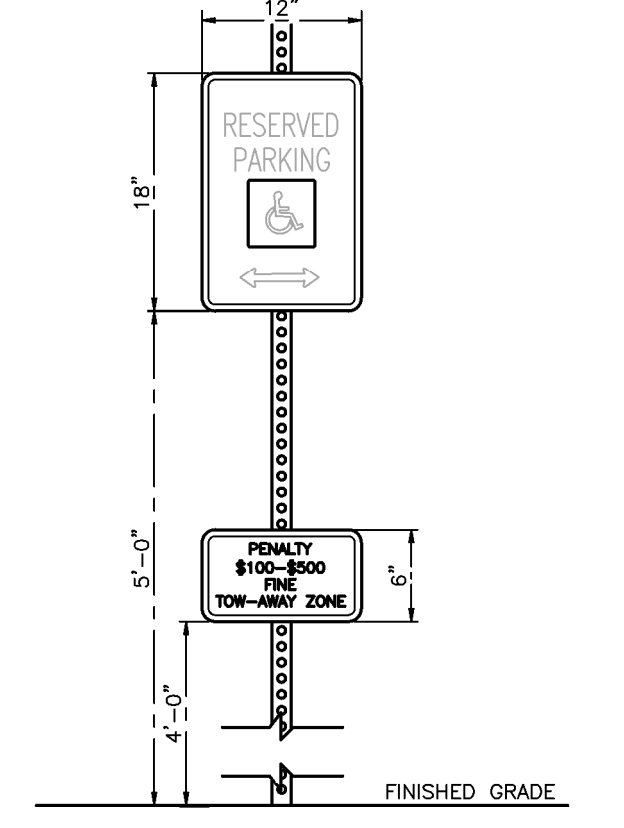


- LEGEND:
- ⊕ IRON ROD FOUND OR IRON PIPE FOUND
 - ⊞ CONCRETE MONUMENT FOUND
 - ⊙ IRON ROD OR PIPE SET
 - ⊚ CONCRETE MONUMENT SET
 - ⊛ POWER POLE
 - TJB TELEPHONE JUNCTION BOX
 - OUL OVERHEAD UTILITY LINE
 - N/F NOW OR FORMERLY
 - R/W RIGHT-OF-WAY
 - PP POWER POLE
 - EXISTING OVERHEAD UTILITY LINES
 - WM WATER METER
 - FH FIRE HYDRANT
 - GV GATE VALVE
 - CO CLEANOUT
 - FDC FIRE DEPARTMENT CONNECTION
 - STS STOP SIGN
 - ARV AIR RELEASE VALVE
 - RPA LINE



- NOTES:
- BIKE RACK TYPE MAY BE SUBSTITUTED HOWEVER, THE RACK SHALL BE A MIN. OF 5 SPACES.
 - INSTALLATION SHALL COMPLY WITH MANUFACTURERS SPECIFICATIONS.

TYPICAL BIKE RACK DETAIL
 NO SCALE



- NOTES:
- SIGNS TO HAVE WHITE BACKGROUND WITH GREEN LETTERING AND BORDERS
 - WHEELCHAIR LOGO SHALL BE BLUE
 - SIGNS SHALL BE PLACED ALONG THE BACK OF SIDEWALK
 - POSTS SHALL BE 1-1/2\"/>

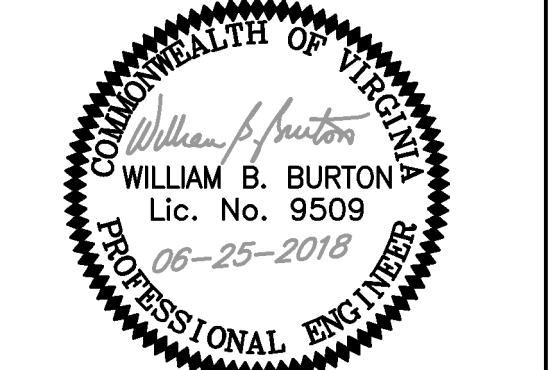
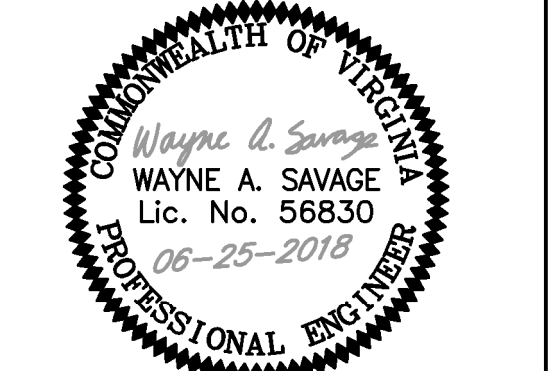
HANDICAPPED PARKING SIGN
 NO SCALE

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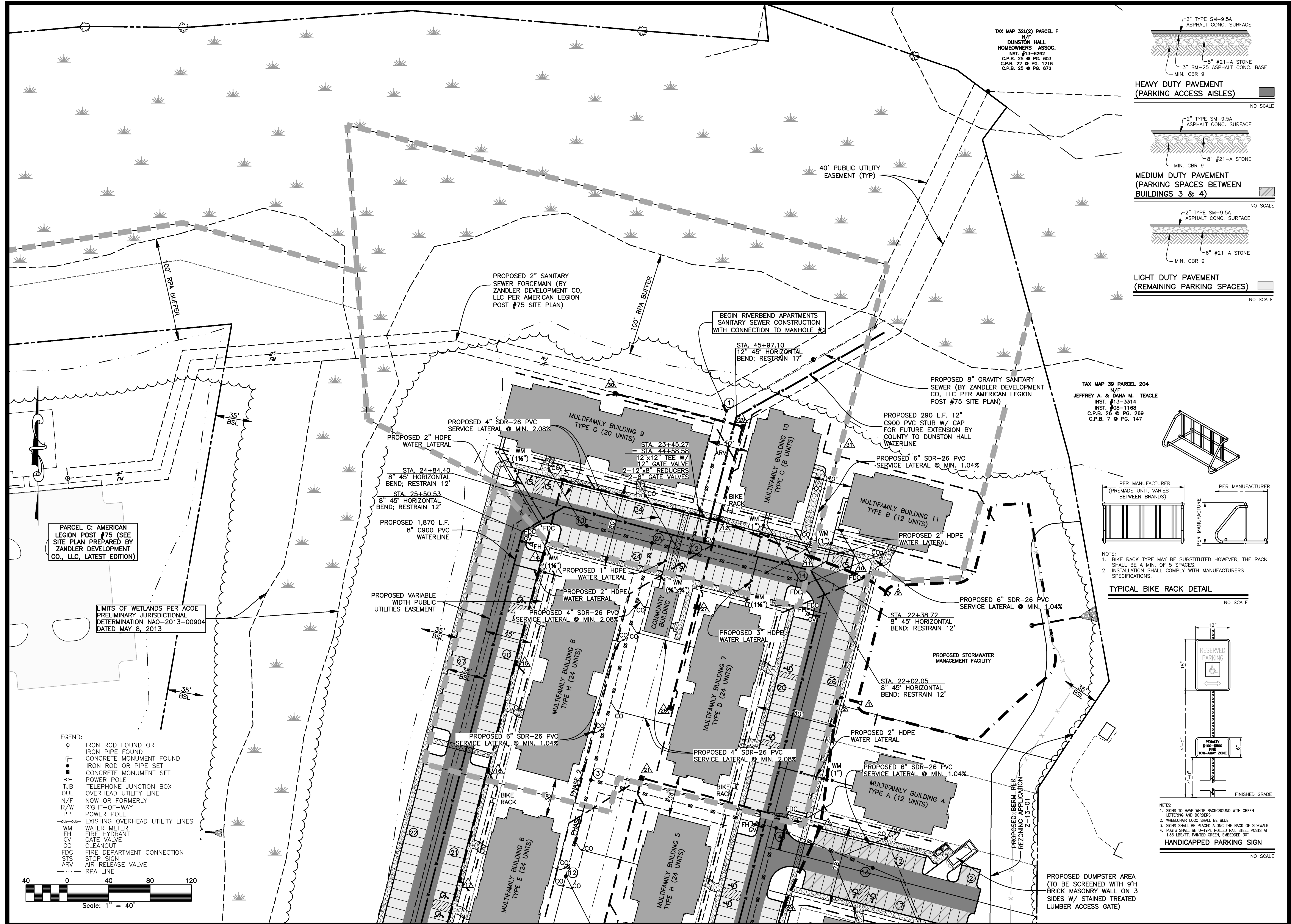


PROJECT: **RIVERBEND APARTMENTS**

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET: **DETAILED LAYOUT AND UTILITIES PLAN**

SHEET NO: **C5**

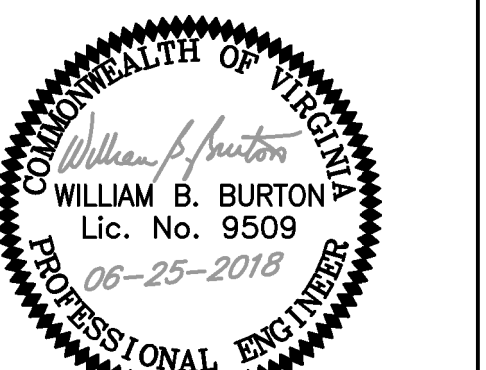
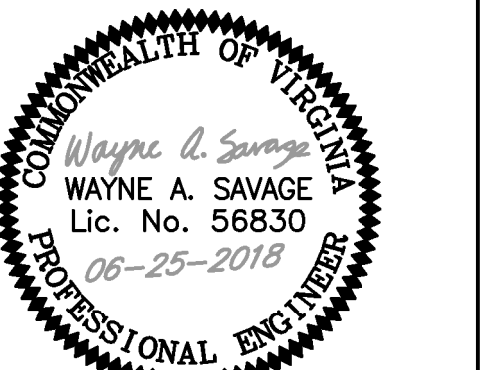


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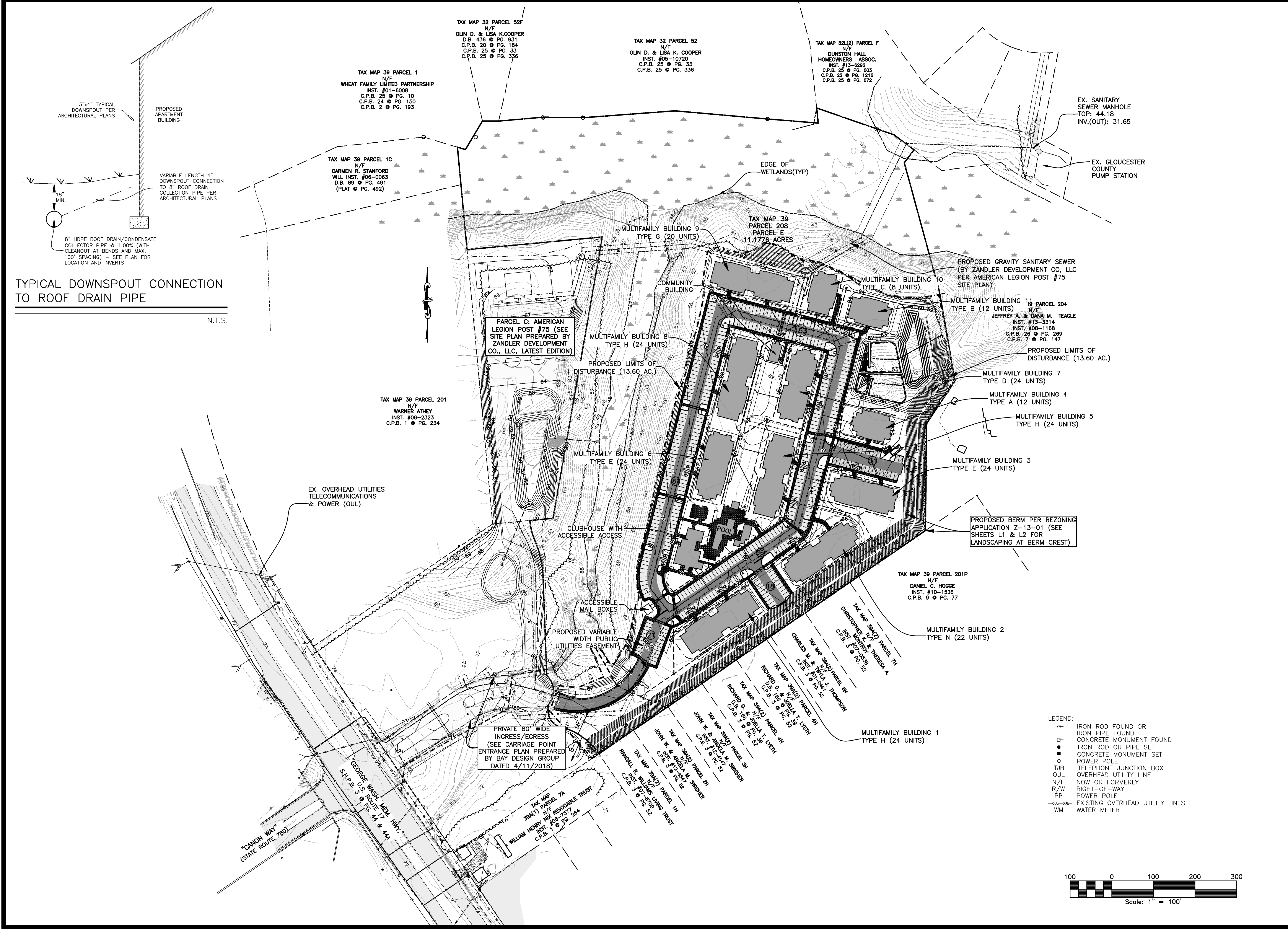


PROJECT: RIVERBEND APARTMENTS

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET: MASTER GRADING PLAN

SHEET NO: C6

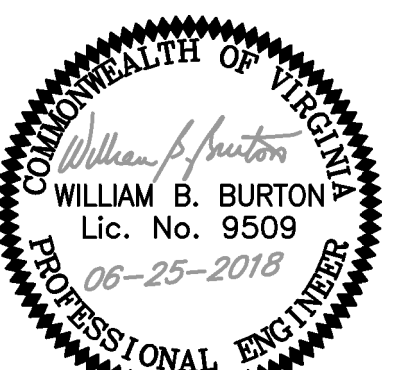
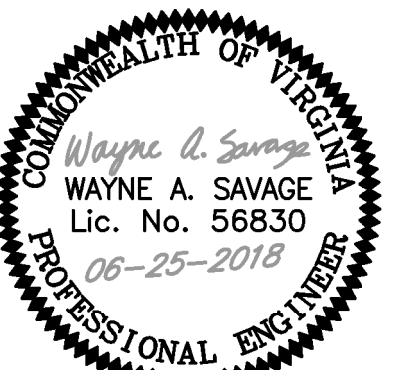


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PROJECT MANAGER: GLJ
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PROJECT: **RIVERBEND APARTMENTS**

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

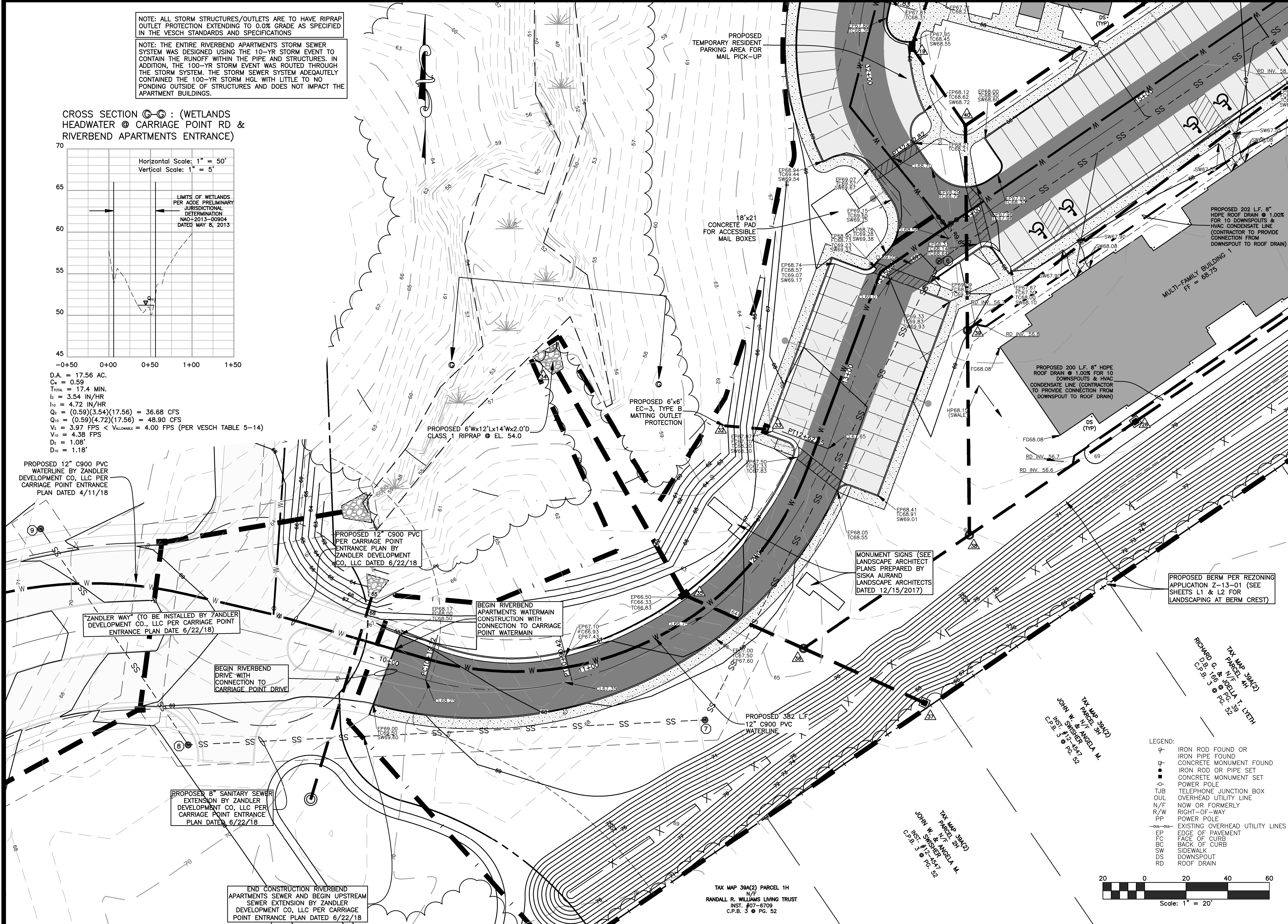
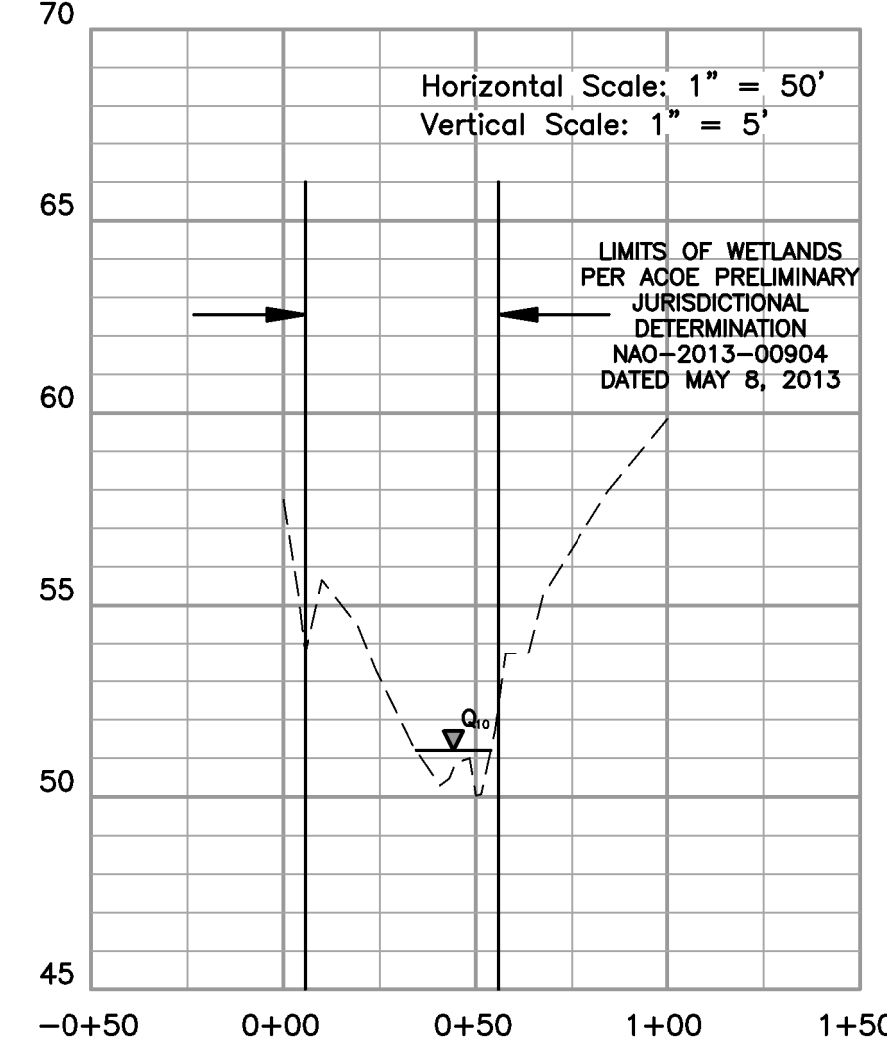
SHEET: **DETAILED GRADING PLAN**

SHEET NO: **C7**

NOTE: ALL STORM STRUCTURES/OUTLETS ARE TO HAVE RIPRAP OUTLET PROTECTION EXTENDING TO 0.0% GRADE AS SPECIFIED IN THE VESCH STANDARDS AND SPECIFICATIONS

NOTE: THE ENTIRE RIVERBEND APARTMENTS STORM SEWER SYSTEM WAS DESIGNED USING THE 10-YR STORM EVENT TO CONTAIN THE RUNOFF WITHIN THE PIPE AND STRUCTURES. IN ADDITION, THE 100-YR STORM EVENT WAS ROUTED THROUGH THE STORM SYSTEM. THE STORM SEWER SYSTEM ADEQUATELY CONTAINED THE 100-YR STORM HGL WITH LITTLE TO NO PONDING OUTSIDE OF STRUCTURES AND DOES NOT IMPACT THE APARTMENT BUILDINGS.

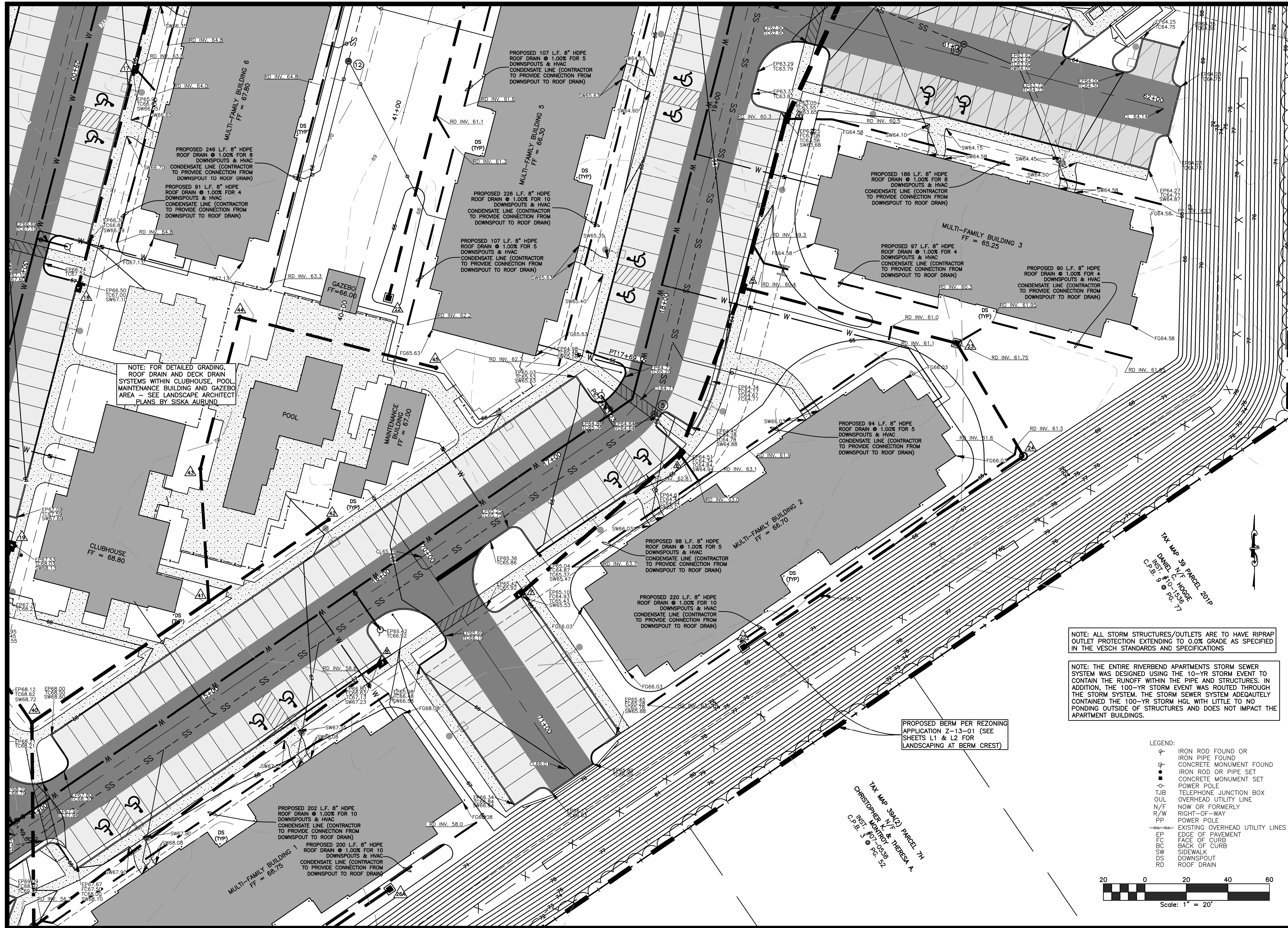
CROSS SECTION C-C : (WETLANDS HEADWATER @ CARRIAGE POINT RD & RIVERBEND APARTMENTS ENTRANCE)



LEGEND:

- ⊕ IRON ROD FOUND OR IRON PIPE FOUND
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- ⊕ CONCRETE MONUMENT SET
- ⊕ POWER POLE
- ⊕ TJB TELEPHONE JUNCTION BOX
- ⊕ OUL OVERHEAD UTILITY LINE
- ⊕ N/F NOW OR FORMERLY
- ⊕ R/W RIGHT-OF-WAY
- ⊕ PP POWER POLE
- ⊕ EXISTING OVERHEAD UTILITY LINES
- EP EDGE OF PAVEMENT
- BC FACE OF CURB
- SW BACK OF CURB
- SW SIDEWALK
- DS DOWNSPOUT
- RD ROOF DRAIN

Scale: 1" = 20'



JOB NO. 12211-14

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PROJECT MANAGER: GLJ

DESIGNED: WAS

CAD: WAS

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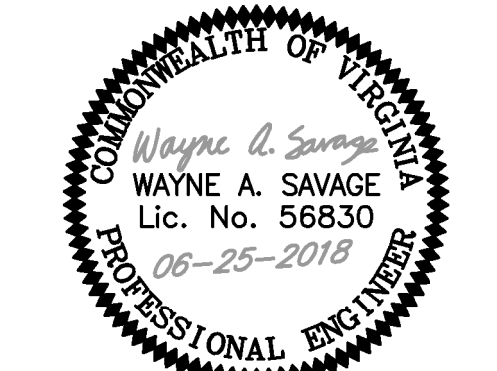
DATE: JANUARY 10, 2018

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PROJECT:

RIVERBEND APARTMENTS

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

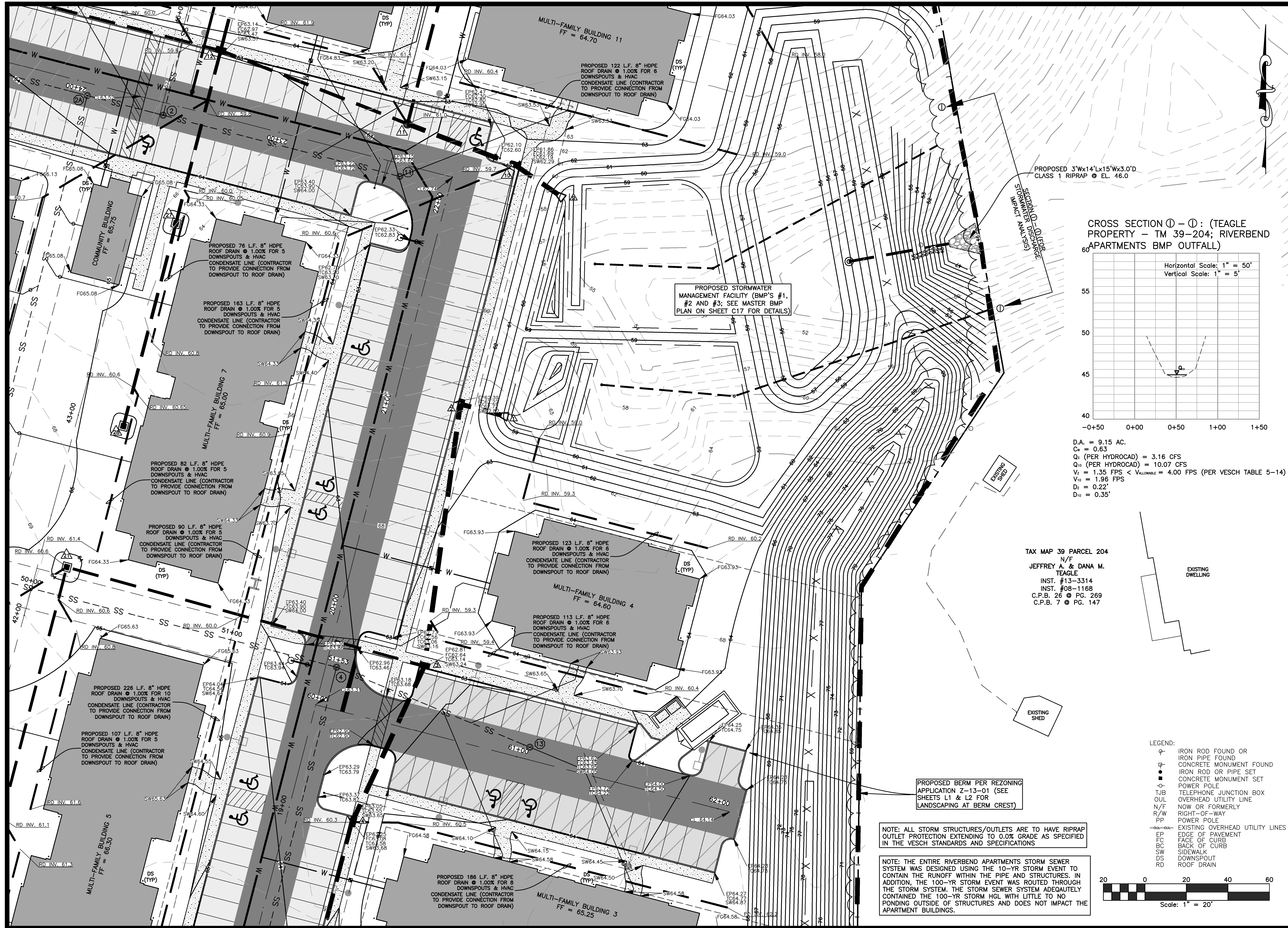
SHEET:

DETAILED GRADING PLAN

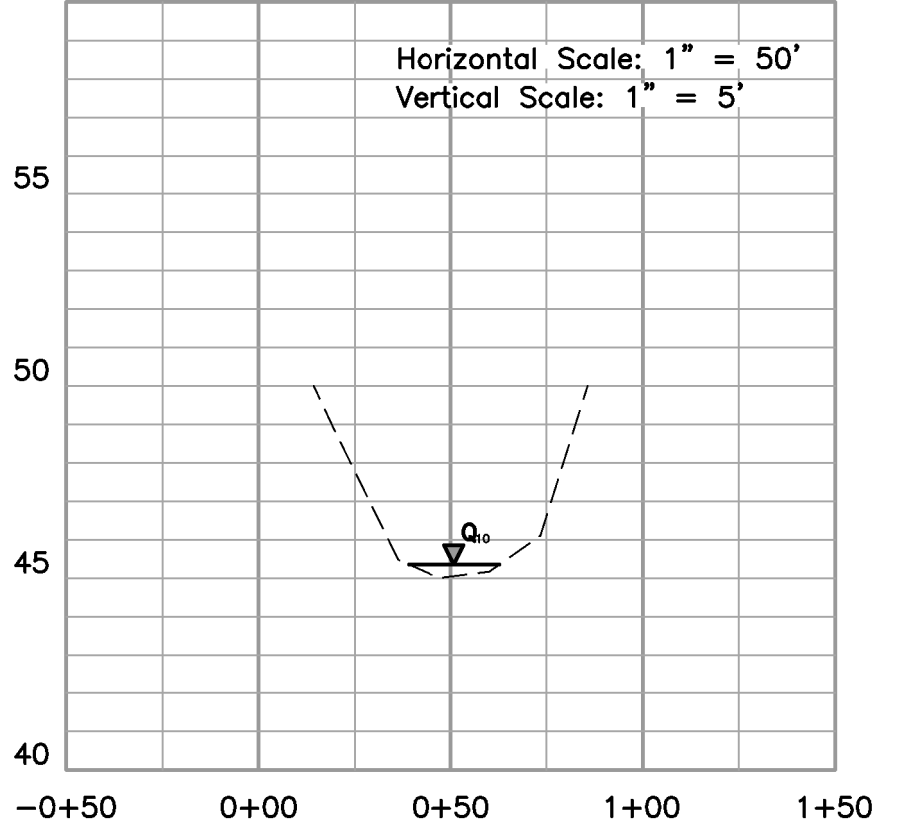
SHEET NO:

C8

JOB NO. 12211-14



CROSS SECTION ① - ①: (TEAGLE PROPERTY - TM 39-204; RIVERBEND APARTMENTS BMP OUTFALL)



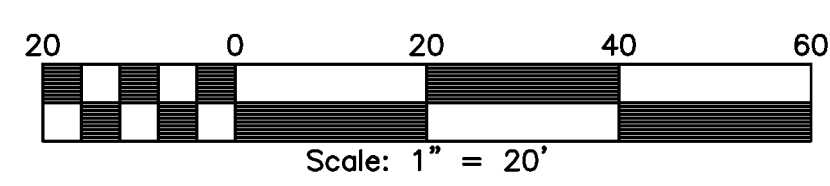
D.A. = 9.15 AC.
 C_w = 0.63
 Q₂ (PER HYDROCAD) = 3.16 CFS
 Q₁₀ (PER HYDROCAD) = 10.07 CFS
 V₂ = 1.35 FPS < V_{ALLOWABLE} = 4.00 FPS (PER VESCH TABLE 5-14)
 V₁₀ = 1.96 FPS
 D₂ = 0.22'
 D₁₀ = 0.35'

TAX MAP 39 PARCEL 204
 N/F
 JEFFREY A. & DANA M. TEAGLE
 INST. #13-3314
 INST. #08-1168
 C.P.B. 26 @ PG. 269
 C.P.B. 7 @ PG. 147

NOTE: ALL STORM STRUCTURES/OUTLETS ARE TO HAVE RIPRAP OUTLET PROTECTION EXTENDING TO 0.0% GRADE AS SPECIFIED IN THE VESCH STANDARDS AND SPECIFICATIONS

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 - ⊕ CONCRETE MONUMENT SET
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 - ⊕ TJB TELEPHONE JUNCTION BOX
 - ⊕ OUL OVERHEAD UTILITY LINE
 - N/F NOW OR FORMERLY
 - R/W RIGHT-OF-WAY
 - PP POWER POLE
 - 0.0%—0.0% EXISTING OVERHEAD UTILITY LINES
 - EP EDGE OF PAVEMENT
 - FC FACE OF CURB
 - BC BACK OF CURB
 - SW SIDEWALK
 - DS DOWNSPOUT
 - RD ROOF DRAIN



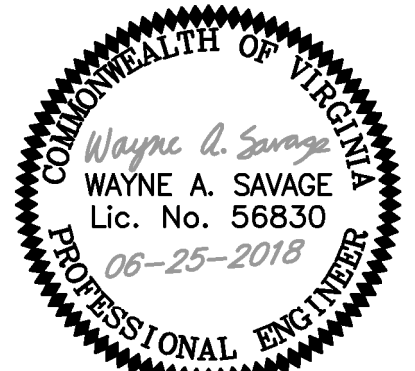
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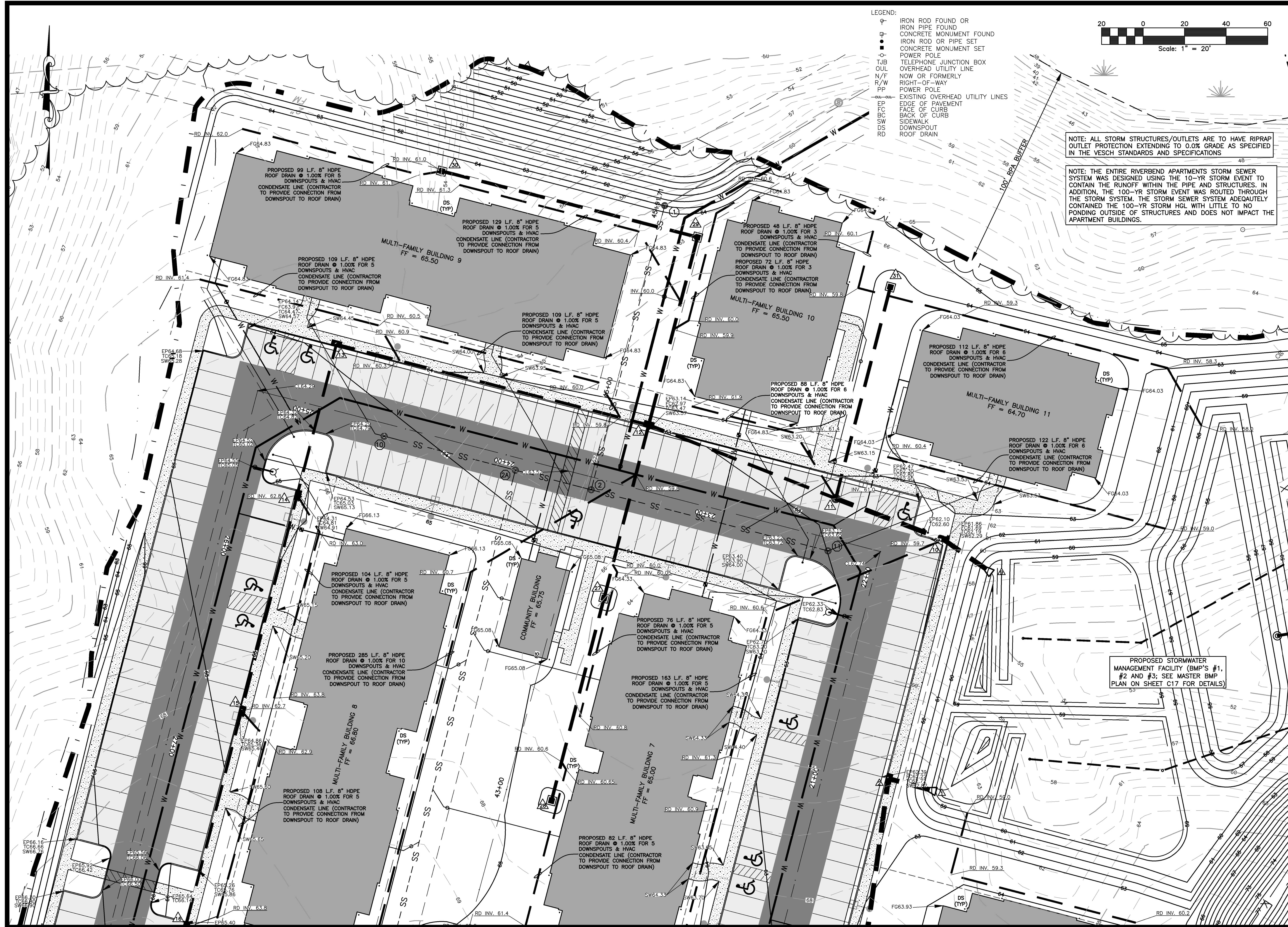


PROJECT:
RIVERBEND APARTMENTS

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET:
DETAILED GRADING PLAN

SHEET NO:
C9



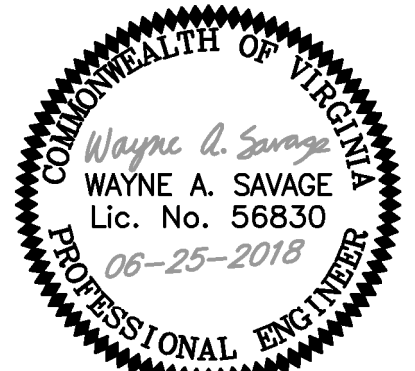
JOB NO. 12211-14

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PROJECT: RIVERBEND APARTMENTS

ABINGDON DISTRICT GLOUCESTER, VIRGINIA

SHEET: DETAILED GRADING PLAN

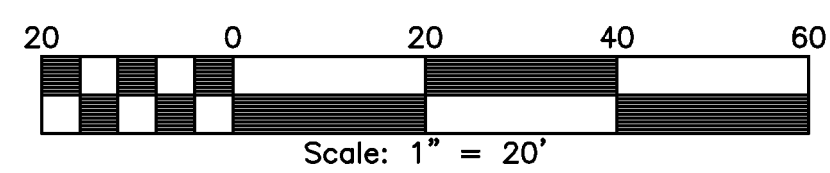
SHEET NO: C10

JOB NO. 12211-14

NOTE: ALL STORM STRUCTURES/OUTLETS ARE TO HAVE RIPRAP OUTLET PROTECTION EXTENDING TO 0.0% GRADE AS SPECIFIED IN THE VESCH STANDARDS AND SPECIFICATIONS

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 - ⊕ CONCRETE MONUMENT FOUND
 - ⊕ IRON ROD OR PIPE SET
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 - PP POWER POLE
 - EXISTING OVERHEAD UTILITY LINES
 - EP EDGE OF PAVEMENT
 - FC FACE OF CURB
 - BC BACK OF CURB
 - SW SIDEWALK
 - DS DOWNSPOUT
 - RD ROOF DRAIN



NOTE: FOR DETAILED GRADING, ROOF DRAIN AND DECK DRAIN SYSTEMS WITHIN CLUBHOUSE, POOL, MAINTENANCE BUILDING AND GAZEBO AREA - SEE LANDSCAPE ARCHITECT PLANS BY SISKI AURUND

JOB NO. 12211-14

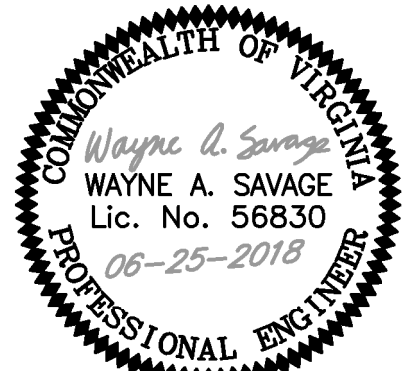
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PROJECT: RIVERBEND APARTMENTS

ABINGDON DISTRICT GLOUCESTER, VIRGINIA

SHEET: DETAILED GRADING PLAN

SHEET NO: C11

JOB NO. 12211-14

STORM SEWER

7	ST. STD. DI-3B W/ ST-1 H=4.07'; L = 8'	TOP = 65.66 OUT = 61.59
7 TO 8	102.74 L.F. 12" HDPE @ 0.50%	
6	ST. STD. DI-3B H=3.78'; L = 8'	TOP = 64.76 IN = 61.08 OUT = 60.98
6 TO 5	85.33 L.F. 15" HDPE @ 0.50%	
5	ST. STD. DI-3B H=3.79'; L = 6'	TOP = 64.24 IN = 60.55 OUT = 60.45
5 TO 4	84.66 L.F. 18" HDPE @ 0.50%	
4	ST. STD. DI-3B H=3.67'; L = 8'	TOP = 63.60 IN = 60.03 OUT = 59.93
4 TO 3	82.47 L.F. 18" HDPE @ 0.50%	
3	ST. STD. DI-3B H=3.71'; L = 10'	TOP = 63.13 IN = 59.52 OUT = 59.42
3 TO 2	127.47 L.F. 24" HDPE @ 0.50%	
2	ST. STD. DI-3B W/ ST-1 H=4.04'; L = 10'	TOP = 62.72 IN = 58.78 OUT = 58.68
2 TO 1	36.32 L.F. 24" HDPE @ 0.50%	
1	ST. STD. ES-2	OUT = 58.50
18	ST. STD. DI-3B H=3.50'; L = 8'	TOP = 67.00 OUT = 63.50
18 TO 17	109.00 L.F. 12" HDPE @ 0.50%	
17	ST. STD. DI-3B H=3.60'; L = 6'	TOP = 66.45 IN = 62.95 OUT = 62.85
17 TO 16	109.00 L.F. 15" HDPE @ 0.50%	
16	ST. STD. DI-3B H=3.70'; L = 8'	TOP = 65.90 IN = 62.30 OUT = 62.20
16 TO 15	107.50 L.F. 15" HDPE @ 0.50%	
15	ST. STD. DI-3B H=3.80'; L = 6'	TOP = 65.36 IN = 61.86 OUT = 61.56
15 TO 14	107.50 L.F. 18" HDPE @ 0.50%	
14	ST. STD. DI-3B H=3.89'; L = 8'	TOP = 64.81 IN = 61.02 OUT = 60.92
14 TO 13	75.08 L.F. 18" HDPE @ 0.50%	
13	ST. STD. DI-3B H=3.81'; L = 4'	TOP = 64.25 IN = 60.54 OUT = 60.44
13 TO 12	155.52 L.F. 18" HDPE @ 0.50%	
12	ST. STD. DI-3B H=3.91'; L = 8'	TOP = 63.47 IN = 59.66 OUT = 59.56
12 TO 11	96.79 L.F. 24" HDPE @ 0.50%	
11	ST. STD. MH-1 H=3.50'	TOP = 62.48 IN = 59.08 OUT = 58.98
11 TO 10	55.68 L.F. 24" HDPE @ 0.50%	
10	ST. STD. DI-3B H=3.77'; L = 10'	TOP = 62.37 IN = 58.70 OUT = 58.60
10 TO 9	30.11 L.F. 24" HDPE @ 0.33%	
9	ST. STD. ES-2	OUT = 58.50
33	ST. STD. DI-3B W/ ST-1 H=5.85'; L = 6'	TOP = 68.20 OUT = 62.35
33 TO 32	20.00 L.F. 12" HDPE @ 0.50%	
32	ST. STD. ES-2	OUT = 62.25
28	ST. STD. DI-1 H=3.08'	TOP = 65.50 OUT = 62.42
28 TO 24	163.26 L.F. 12" HDPE @ 0.50%	
24	ST. STD. MH-1 H=3.25'	TOP = 64.75 IN = 61.60 OUT = 61.50
24 TO 23	63.21 L.F. 12" HDPE @ 0.50%	
23	ST. STD. DI-1 H=3.17'	TOP = 64.25 IN = 61.18 OUT = 61.08
23 TO 21	106.77 L.F. 12" HDPE @ 0.50%	
22	ST. STD. DI-1 H=3.16'	TOP = 64.75 OUT = 61.59
22 TO 21	216.17 L.F. 12" HDPE @ 0.50%	
21	ST. STD. DI-1 H=3.34'	TOP = 63.75 IN = 60.51 OUT = 60.41
21 TO 20	178.92 L.F. 15" HDPE @ 0.50%	
37	ST. STD. DI-1 W/ ST-1 W/ ANTI VORTEX TRASH RACK (STORMRAX ROUND TRASH RACK RS-48 BY PLASTIC SOLUTIONS, OR EQUAL) H=9.66'	TOP = 65.75 OUT = 56.09
37 TO 36	63.74 L.F. 15" HDPE @ 1.00%	
36	ST. STD. MH-1 W/ ST-1 H=13.30'	TOP = 68.65 IN = 55.45 OUT = 55.35
36 TO 35	62.80 L.F. 24" HDPE @ 1.00%	
35	ST. STD. DI-3B W/ ST-1 H=12.21'; L = 8'	TOP = 66.83 IN = 54.72 OUT = 54.62
35 TO 34	76.00 L.F. 24" HDPE @ 0.50%	
34	ST. STD. ES-2	OUT = 54.00
28	ST. STD. DI-1 H=3.81'	TOP = 64.50 OUT = 60.89
28 TO 27	100.93 L.F. 12" HDPE @ 0.50%	
27	ST. STD. DI-1 H=3.41'	TOP = 63.50 IN = 60.19 OUT = 60.09
27 TO 26	86.16 L.F. 12" HDPE @ 0.50%	
26	ST. STD. DI-1 H=3.63'	TOP = 64.50 OUT = 60.87
26 TO 25	127.22 L.F. 12" HDPE @ 0.50%	
25	ST. STD. DI-1 H=3.87'	TOP = 64.00 IN = 60.23 OUT = 60.13
25 TO 24	93.54 L.F. 12" HDPE @ 0.50%	
24	ST. STD. DI-1 H=3.62'	TOP = 63.75 OUT = 60.13
24 TO 21	105.27 L.F. 12" HDPE @ 1.00%	

SANITARY SEWER

9	48" MH	RIM = 70.25 OUT = 64.00
9 TO 8	125.80 LF 8" PVC SDR-26 PIPE @ 0.40%	
8	48" MH	RIM = 69.27 IN = 63.49 OUT = 61.59
8 TO 7	248.60 LF 8" PVC SDR-26 PIPE @ 0.62%	
7	48" MH	RIM = 68.50 IN = 60.06 OUT = 59.96
7 TO 6	247.62 LF 8" PVC SDR-26 PIPE @ 0.50%	
6	48" MH	RIM = 68.88 IN = 58.72 OUT = 58.62
6 TO 5	378.75 LF 8" PVC SDR-26 PIPE @ 0.50%	
5	48" MH	RIM = 64.64 IN = 56.73 OUT = 56.63
5 TO 4	224.15 LF 8" PVC SDR-26 PIPE @ 0.50%	
4	48" MH	RIM = 63.15 IN(13) = 57.31 IN(5) = 55.51 OUT = 55.41
4 TO 3	185.25 LF 8" PVC SDR-26 PIPE @ 0.50%	
3	48" MH	RIM = 65.10 IN(12) = 56.28 IN(4) = 54.48 OUT = 54.38
3 TO 2A	236.73 LF 8" PVC SDR-26 PIPE @ 0.50%	
2A	48" MH	RIM = 63.66 IN(10) = 55.00 IN(3) = 53.20 OUT = 53.10
2A TO 2	37.68 LF 8" PVC SDR-26 PIPE @ 0.50%	
2	48" MH	RIM = 63.58 IN(11) = 54.71 IN(2) = 52.91 OUT = 52.81
2 TO 1	141.48 LF 8" PVC SDR-26 PIPE @ 0.50% W/ 60 L.F. 16" STEEL ENCASUREMENT PIPE	
1	48" MH	RIM = 63.00 IN = 52.10 OUT = 52.00
13	48" MH	RIM = 63.36 OUT = 58.352
13 TO 4	100.85 LF 8" PVC SDR-26 PIPE @ 1.00%	
12	48" MH	RIM = 65.26 OUT = 57.24
12 TO 3	96.20 LF 8" PVC SDR-26 PIPE @ 1.00%	
11	48" MH	RIM = 62.99 OUT = 55.89
11 TO 2	117.88 LF 8" PVC SDR-26 PIPE @ 1.00%	
10	48" MH	RIM = 64.10 OUT = 55.65
10 TO 2A	65.41 LF 8" PVC SDR-26 PIPE @ 1.00%	
45	NDS 24" DRAIN BASIN W/ STANDARD H-25 GRATE; H=2.07'	TOP = 65.50 OUT = 63.43
45 TO 44	97.76 L.F. 12" HDPE @ 0.50%	
44	NDS 24" DRAIN BASIN W/ STANDARD H-25 GRATE; H=3.91'	TOP = 66.75 IN = 62.94 OUT = 62.84
44 TO 43	75.59 L.F. 12" HDPE @ 0.50%	
43	NDS 24" DRAIN BASIN W/ STANDARD H-25 GRATE; H=6.00'	TOP = 67.75 IN = 62.46 OUT = 61.75
43 TO 41	64.17 L.F. 12" HDPE @ 0.50%	
40	ST. STD. DI-3B W/ ST-1 H=6.16'; L = 6'	TOP = 68.03 OUT = 61.87
40 TO 19	49.76 L.F. 12" HDPE @ 1.00%	
19	ST. STD. DI-3B W/ ST-1 H=8.98'; L = 4'	TOP = 68.45 IN = 61.37 OUT = 59.47
19 TO 40	46.01 L.F. 12" HDPE @ 1.00%	
8	ST. STD. DI-3B W/ ST-1 H=8.40'; L = 10'	TOP = 67.13 OUT = 58.73
8 TO 39	210.52 L.F. 12" HDPE @ 1.00%	
26A	ST. STD. DI-1 W/ ST-1 H=7.50'	TOP = 67.50 OUT = 60.00
26A TO 28	109.97 L.F. 12" HDPE @ 1.00%	
28	ST. STD. DI-1 W/ ST-1 H=10.50'	TOP = 67.50 IN = 58.90 OUT = 57.00
28 TO 28	96.60 L.F. 12" HDPE @ 1.00%	
42	NDS 24" DRAIN BASIN W/ STANDARD H-25 GRATE; H=4.37'	TOP = 66.50 OUT = 62.13
42 TO 41	70.00 L.F. 12" HDPE @ 0.50%	
41	NDS 24" DRAIN BASIN W/ STANDARD H-25 GRATE; H=7.97'	TOP = 67.50 IN = 61.43 OUT = 59.53
41 TO 40	103.26 L.F. 12" HDPE @ 0.50%	
40	NDS 24" DRAIN BASIN W/ STANDARD H-25 GRATE; H=10.79'	TOP = 67.90 IN = 59.01 OUT = 57.11
40 TO 39	98.46 L.F. 15" HDPE @ 0.50%	
39	ST. STD. MH-1 W/ ST-1 H=12.48'	TOP = 69.00 IN = 56.62 OUT = 56.52
39 TO 38	98.46 L.F. 15" HDPE @ 0.50%	
38	ST. STD. MH-1 W/ ST-1 H=12.87'	TOP = 68.80 IN = 56.03 OUT = 55.93
38 TO 38	96.60 L.F. 18" HDPE @ 0.50%	

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PROJECT MANAGER: GLJ

DESIGNED: WAS

CAD: WAS

CHECKED: WBB

FILED:

DATE: JANUARY 10, 2018

REVISED: APRIL 20, 2018

REVISED: JUNE 25, 2018



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PROJECT:

RIVERBEND APARTMENTS

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

SHEET:

SANITARY AND STORM SEWER

SHEET NO:

C12

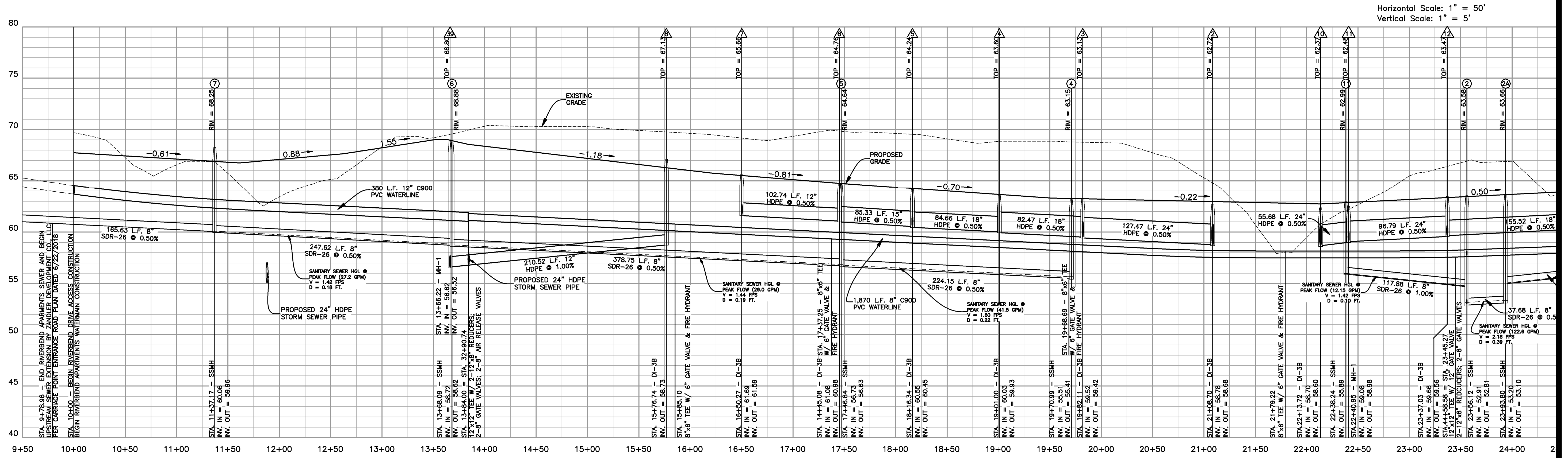
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PROJECT MANAGER: GLJ
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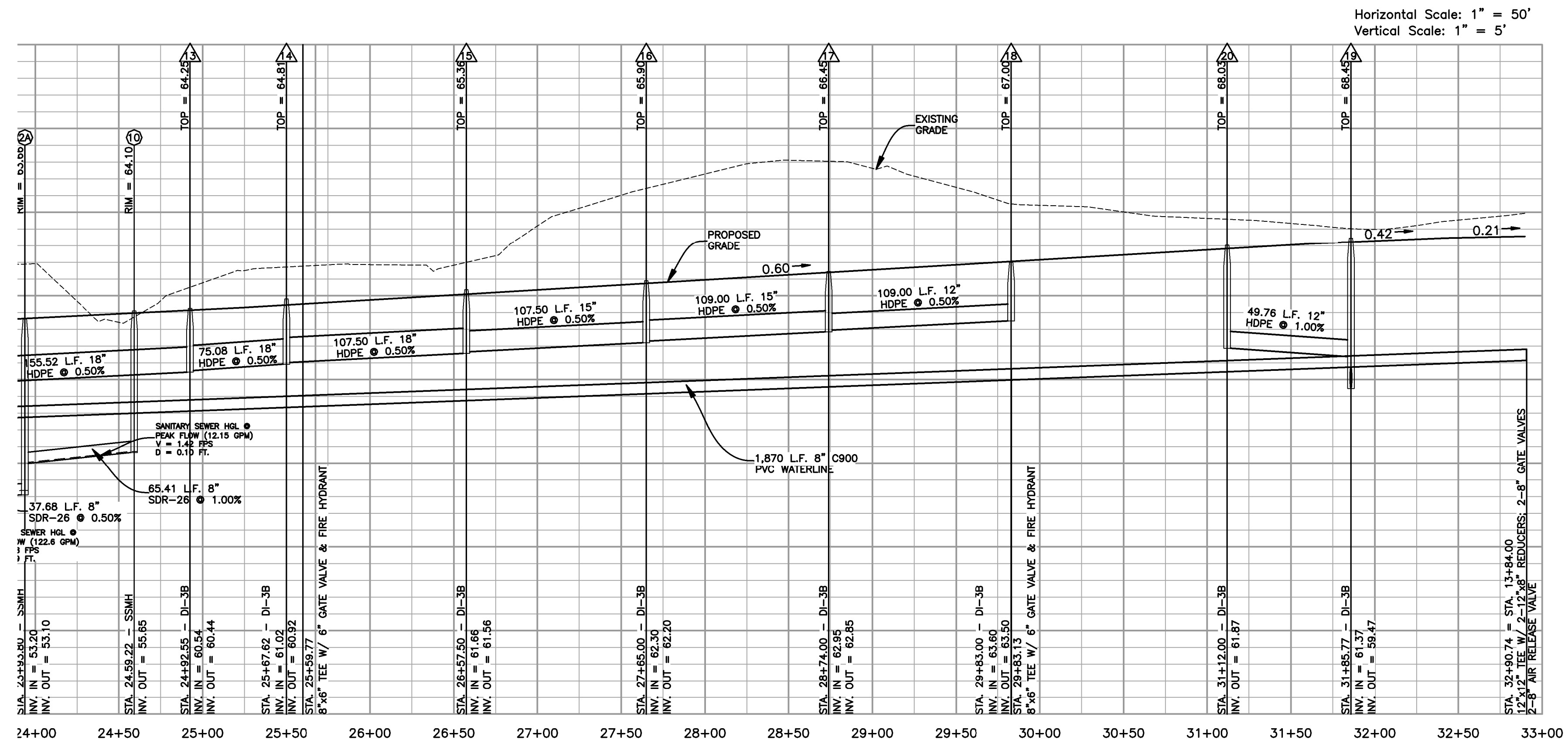
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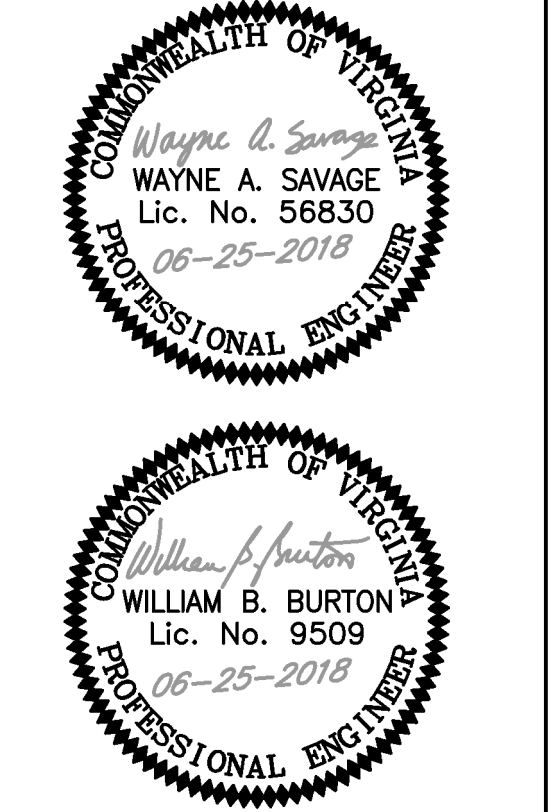
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"RIVERBEND DRIVE"



"RIVERBEND DRIVE"



PROJECT: RIVERBEND APARTMENTS

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET: RIVERBEND DRIVE PROFILE

SHEET NO: C13

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CAD: WAS

CHECKED: WBB

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DATE: JANUARY 10, 2018

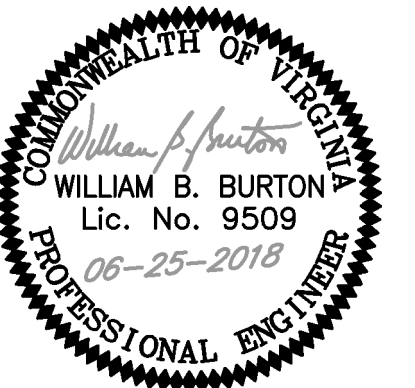
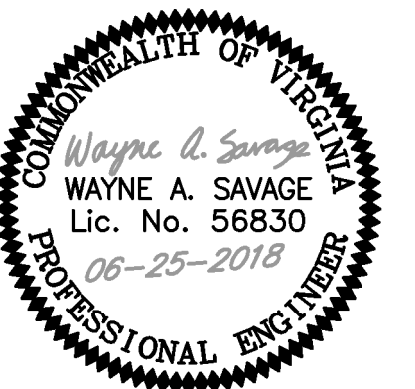
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PROJECT:

RIVERBEND APARTMENTS

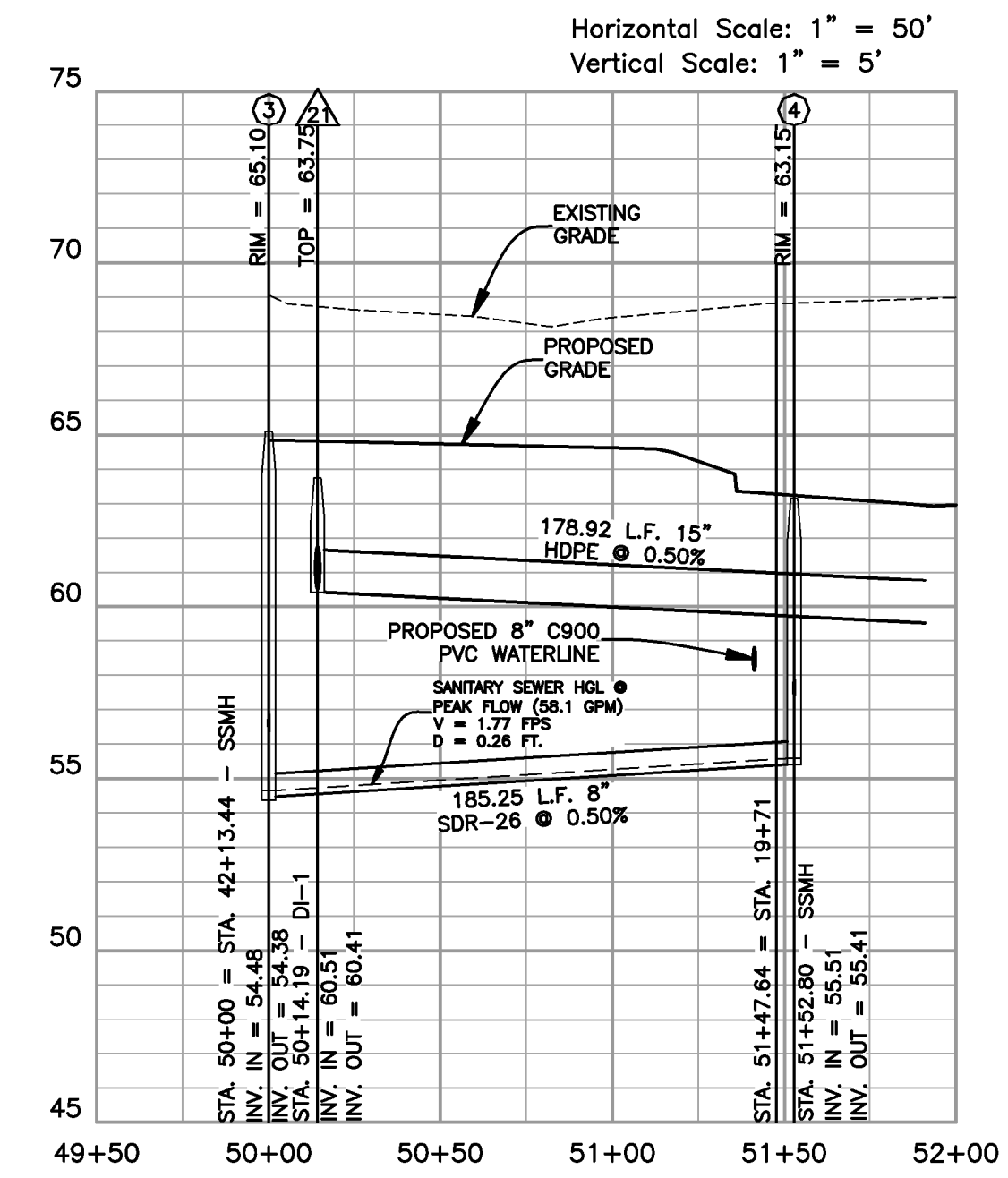
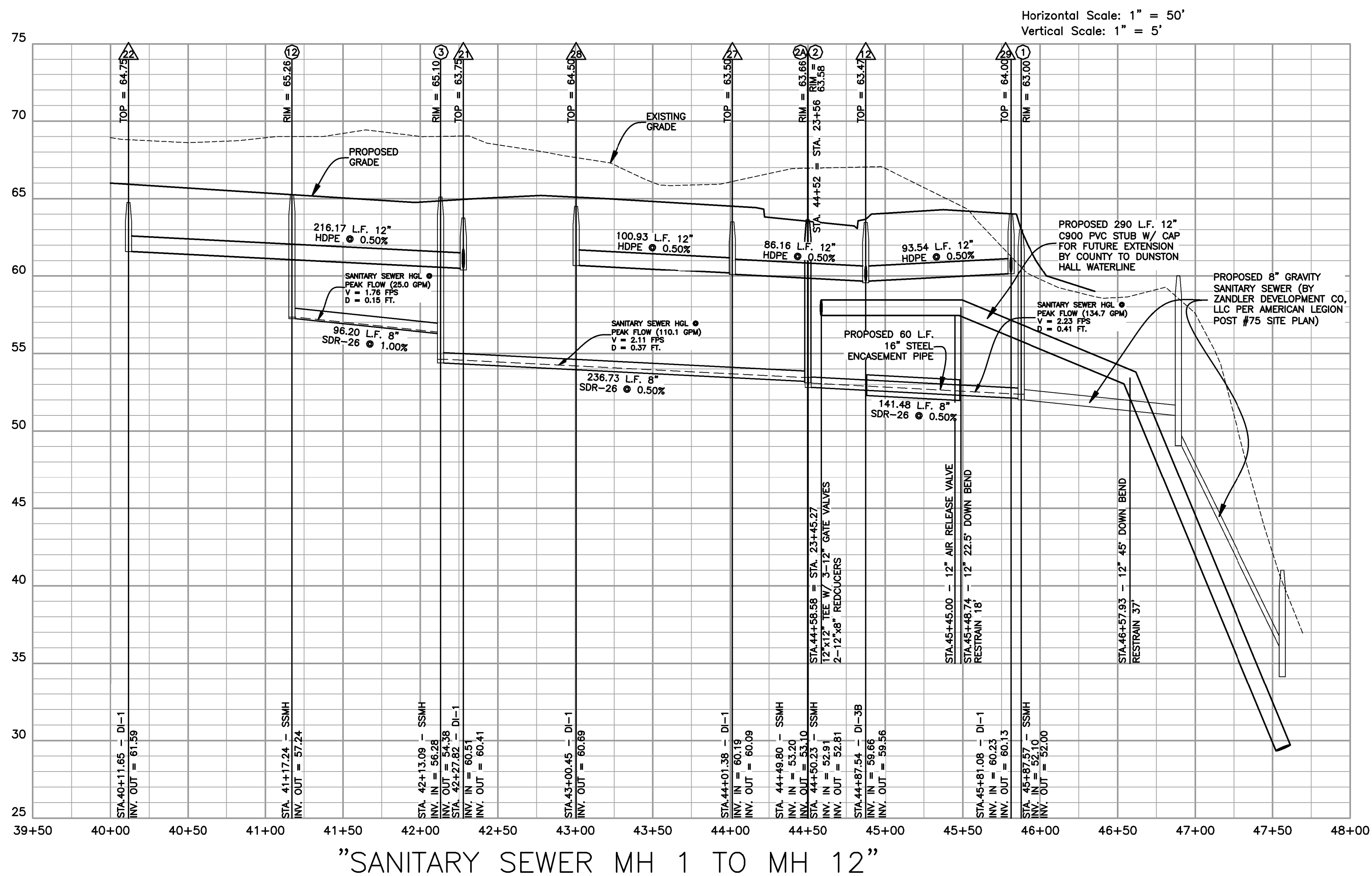
ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

SHEET:

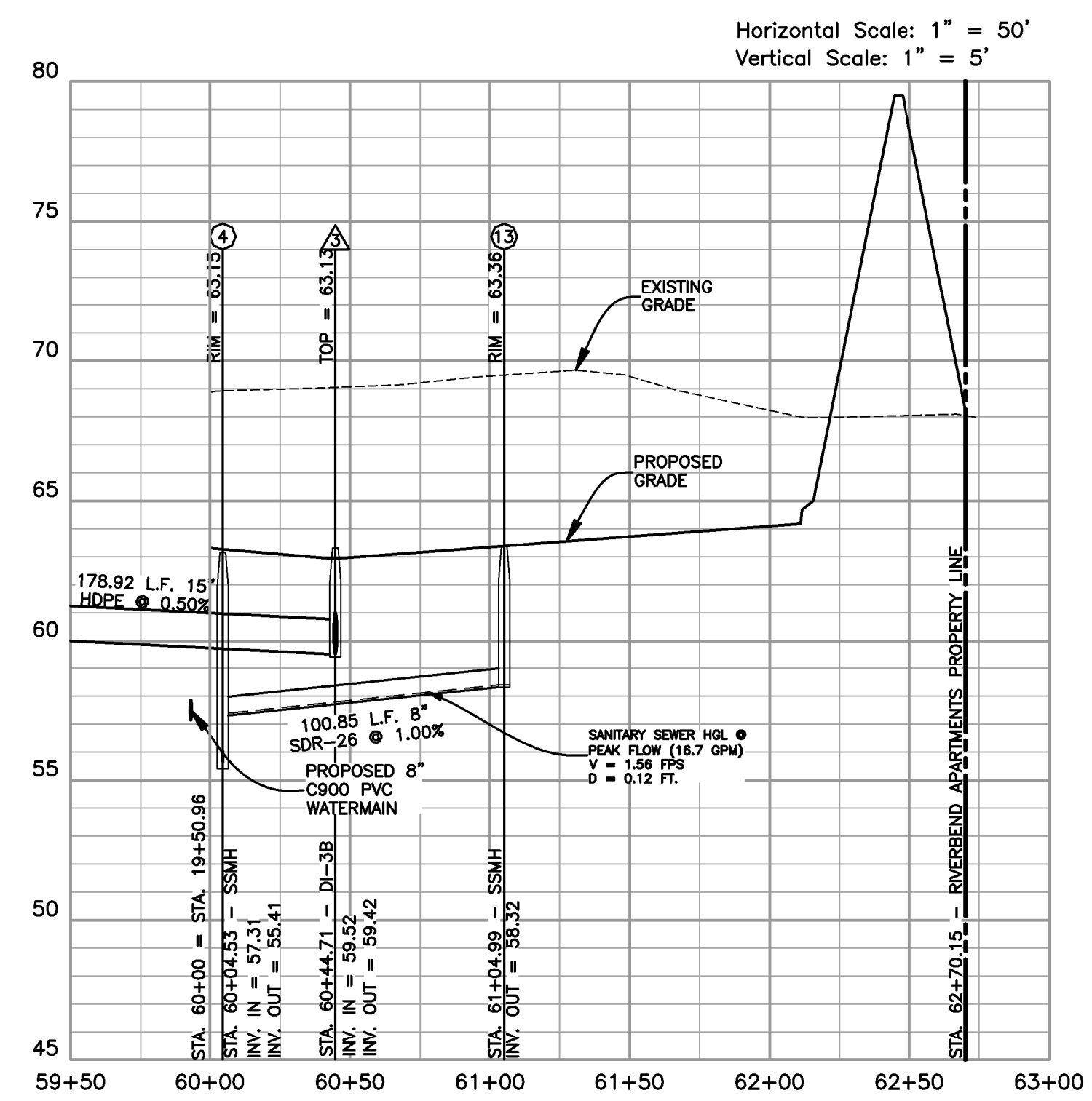
UTILITY PROFILES

SHEET NO:

C14



"SANITARY SEWER MH 3 TO MH 4"



"PARKING LOT BETWEEN BUILDINGS 3 & 4"



TAX MAP 32L(2) PARCEL F
N/E
DUNSTON HALL
HOMEOWNERS ASSOC.
INST. #13-6292
C.P.B. 25 ● PG. 603
C.P.B. 22 ● PG. 1216
C.P.B. 25 ● PG. 672

NOTE: SITE DESIGN AND PERMISSIONS OF OFF-SITE PROPERTIES IMPACTED BY CONSTRUCTION OF BERM AND SANITARY SEWER WILL BE PROVIDED IN ADVANCE OF LAND DISTURBANCE PERMITTING.

NOTE: NO STORMWATER OR EROSION AND SEDIMENT CONTROL SURETY IS TO BE CONSIDERED TO BE REDUCED OR RELEASED UNTIL TEMPORARY STOCKPILE HAS BEEN REMOVED AND/OR PERMANENTLY STABILIZED.

NOTE: ALL STORM STRUCTURES/OUTLETS ARE TO HAVE RIPRAP OUTLET PROTECTION EXTENDING TO 0.0% GRADE AS SPECIFIED IN THE VESCH STANDARDS AND SPECIFICATIONS

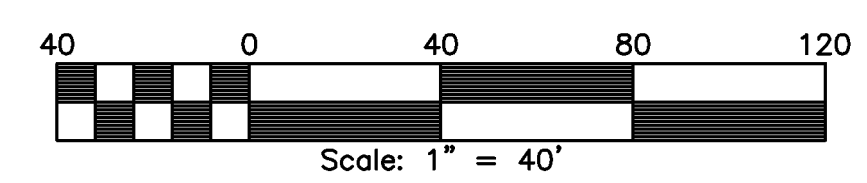
PARCEL C: AMERICAN LEGION POST #75 (SEE SITE PLAN PREPARED BY ZANDLER DEVELOPMENT CO., LLC, LATEST EDITION)

LIMITS OF WETLANDS PER ACOE PRELIMINARY JURISDICTIONAL DETERMINATION NAO-2013-00904 DATED MAY 8, 2013

TAX MAP 39 PARCEL 204
N/E
JEFFREY A. & DANA M. TEAGLE
INST. #13-3314
INST. #08-1166
C.P.B. 28 ● PG. 269
C.P.B. 7 ● PG. 147

E & S LEGEND:

- (SF) - SILT FENCE
- (DIP) - DROP INLET PROTECTION
- (OP) - OUTLET PROTECTION
- (TS) - TEMPORARY SEEDING
- (PS) - PERMANENT SEEDING
- (SM) - SOIL STABILIZATION & MATTING
- (MU) - MULCHING
- (TO) - TOPSOIL
- (CE) - CONSTRUCTION ENTRANCE
- (CRS) - CONSTRUCTION ROAD STABILIZATION
- LIMITS OF DISTURBANCE



JOB NO. 12211-14

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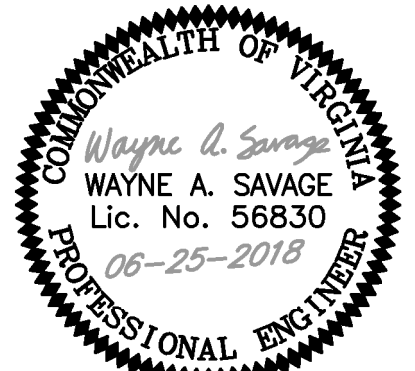
PROJECT MANAGER: GLJ
DESIGNED: WAS
CAD: WAS
CHECKED: WBB

FILED:
DATE: JANUARY 10, 2018
REVISED: APRIL 20, 2018
REVISED: JUNE 25, 2018



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PROJECT:

RIVERBEND APARTMENTS

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

SHEET:
EROSION AND SEDIMENT CONTROL PLAN

SHEET NO:

C15A

JOB NO. 12211-14

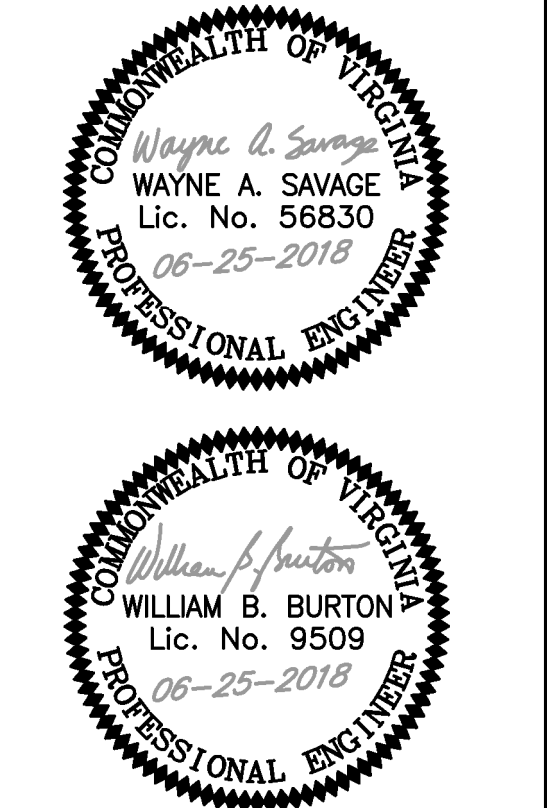
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PROJECT MANAGER: GLJ
 DESIGNED: WAS
 CAD: WAS
 CHECKED: WBB
 FILED:

DATE: JANUARY 10, 2018
 REVISED: APRIL 20, 2018
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PROJECT: **RIVERBEND APARTMENTS**

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

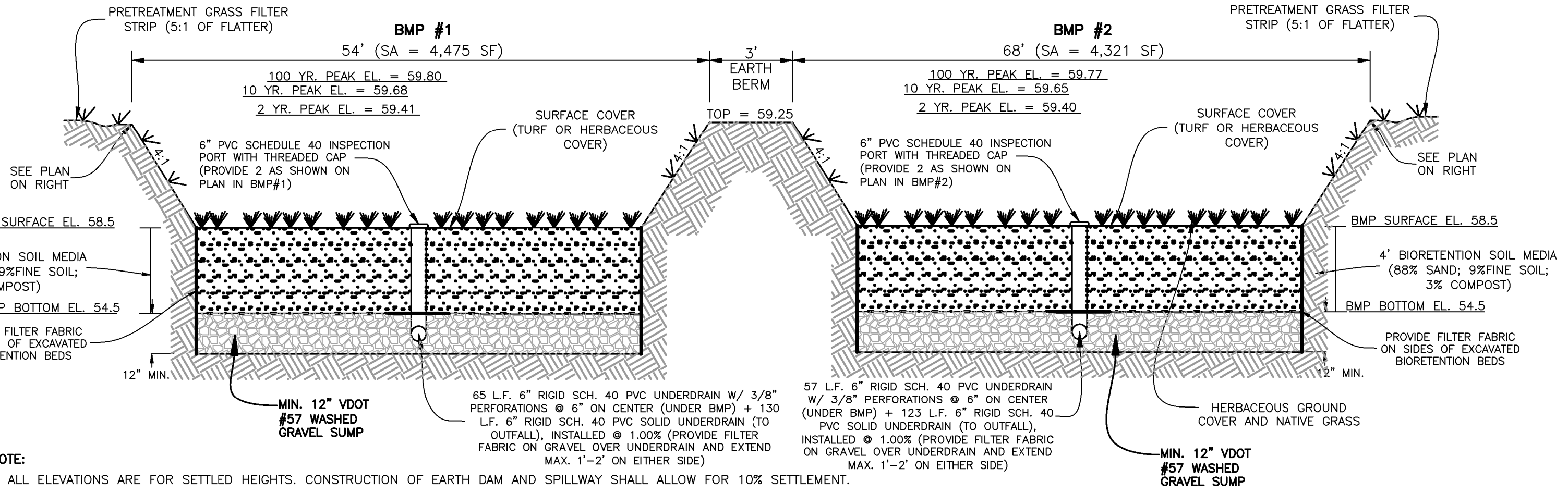
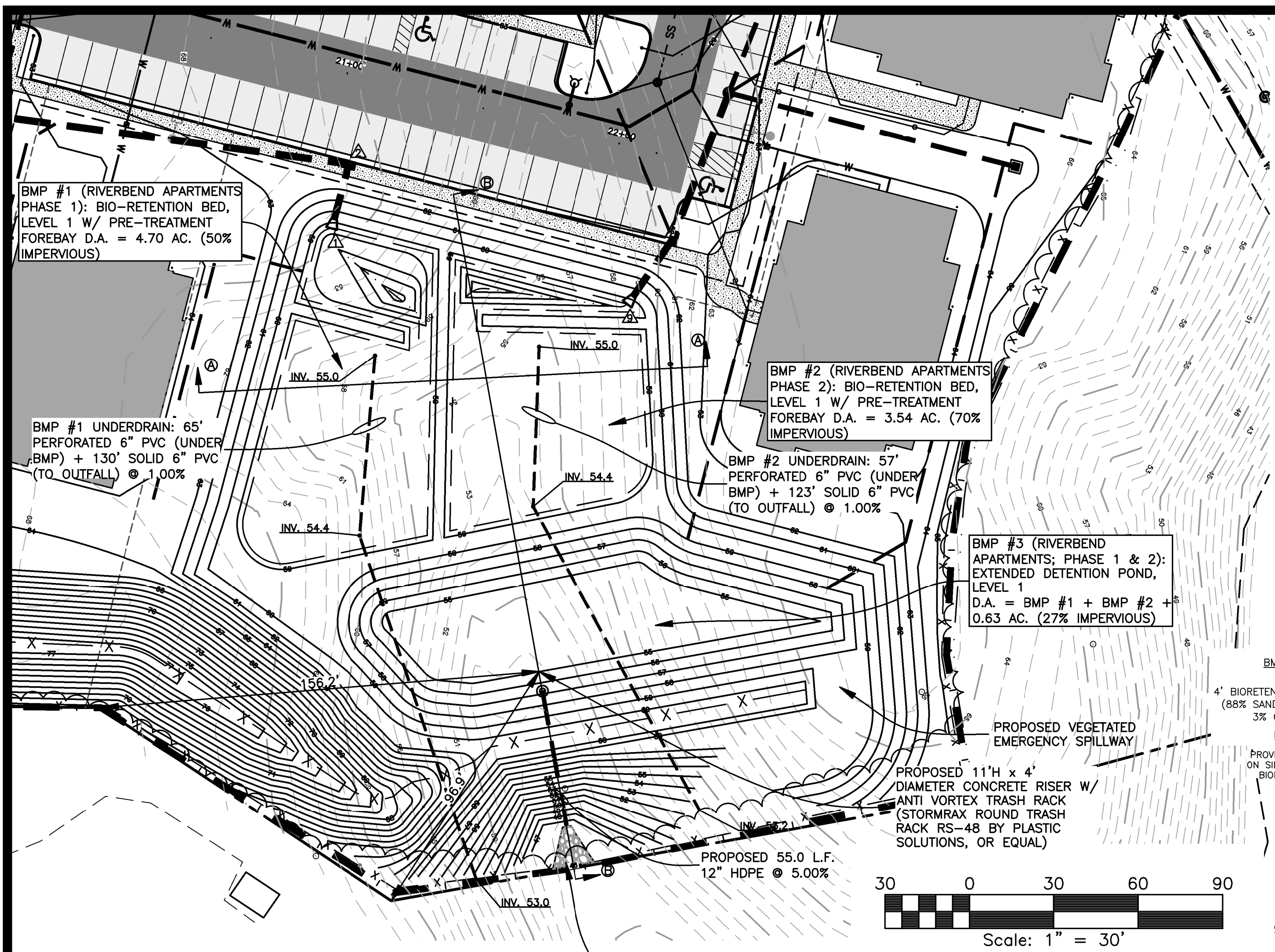
SHEET: **MASTER BMP PLAN**

SHEET NO: **C17**

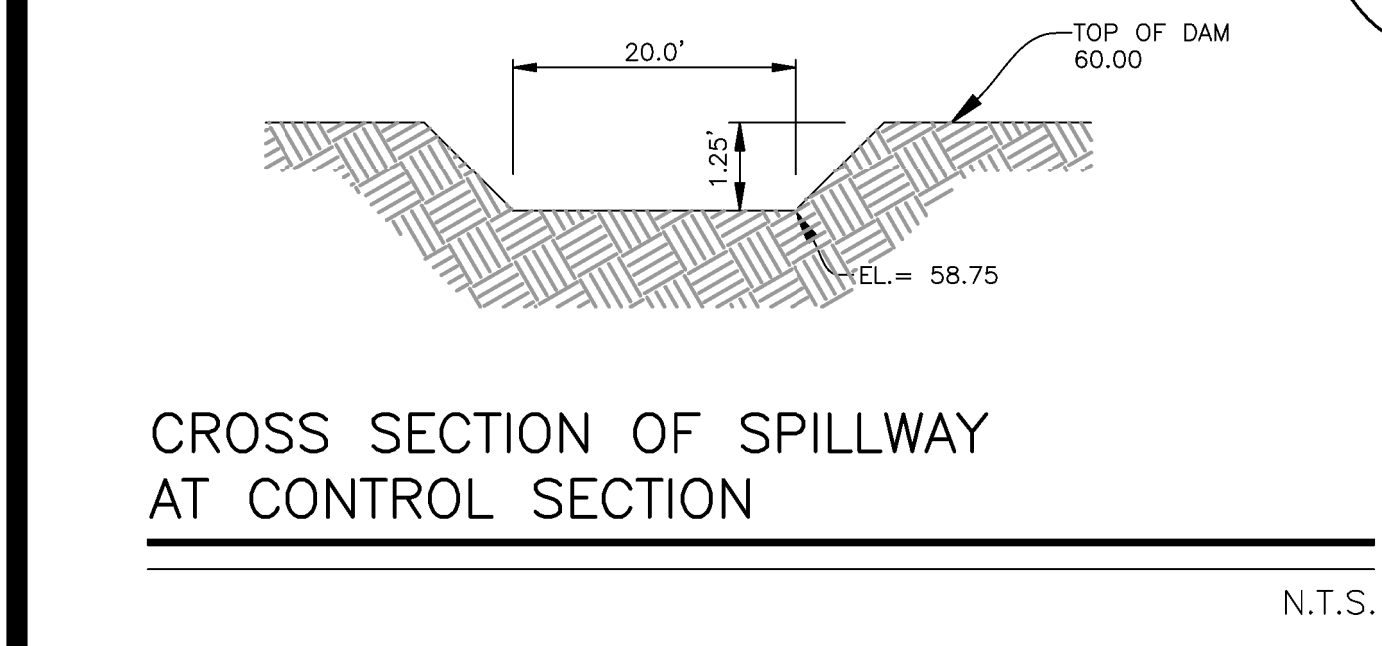
THIS PLAN IS FOR STORMWATER MANAGEMENT DESIGN PURPOSES ONLY.

CONSTRUCTION OF SITE INFRASTRUCTURE AND STORMWATER MANAGEMENT FACILITIES SHALL BE DONE ACCORDING TO THE INDIVIDUAL SITE PLANS SUBMITTED FOR VARIOUS PARCELS WITHIN THE CARRIAGE POINT TRACT. THE CONSTRUCTION OF EACH STORMWATER MANAGEMENT FACILITY WILL BE INCLUDED AS PART OF EACH SITE PLAN AND WILL BE IN SUBSTANTIAL CONFORMANCE WITH THIS MASTER DESIGN PLAN AND THE "SUMMARY OF RUNOFF REDUCTION ANALYSIS AND STORMWATER MANAGEMENT FOR CARRIAGE POINT" BOOKLET DATED DECEMBER 1, 2017; REV. APRIL 5, 2018; REV. JUNE 20, 2018.

Maintenance Items	Frequency
Mowing of grass filter strips and turf cover	At least 4 times a year
Spot weeding, erosion repair, trash removal	Twice during growing season
Add reinforcement planting to maintain the desired vegetation density	As needed
Remove invasive plants using recommended control methods	As needed
Stabilize the contributing drainage area to prevent erosion	As needed
Spring inspection and cleanup	Annually
Supplement mulch to maintain a 3-inch layer	Annually
Prune trees and shrubs	Annually
Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years
Replace the mulch layer	Every 3 years



SECTION A-A BMP #1 & BMP #2 N.T.S.



CROSS SECTION OF SPILLWAY AT CONTROL SECTION N.T.S.

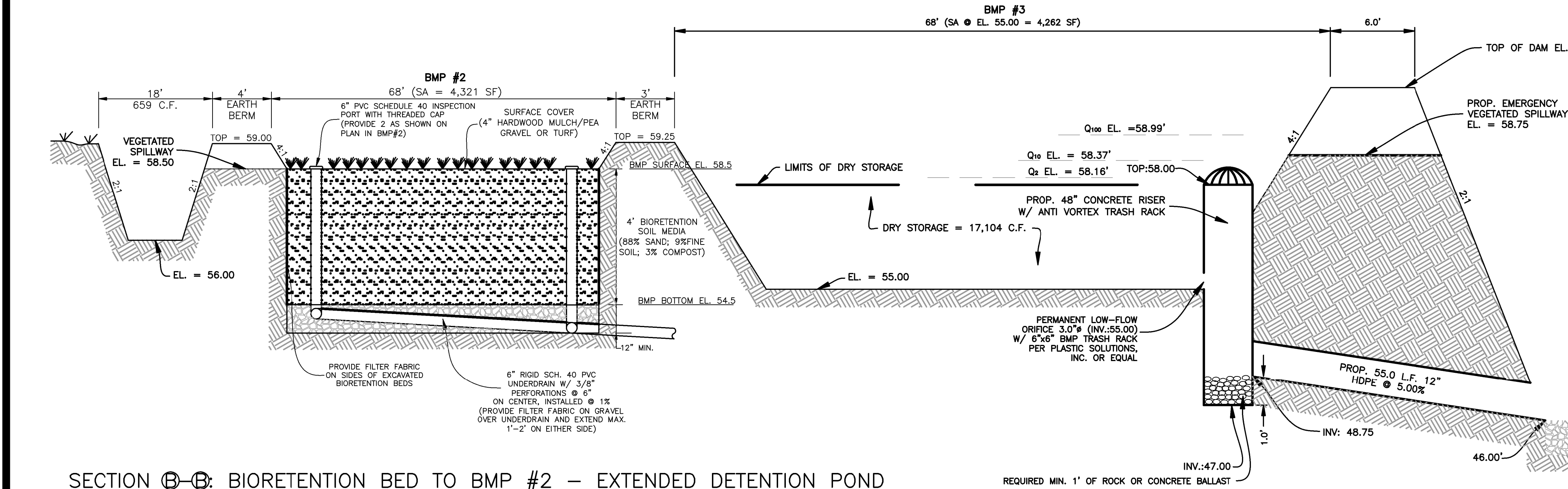
NOTE: FOR ADDITIONAL INFORMATION REGARDING STORMWATER MANAGEMENT SEE "SUMMARY OF RUNOFF REDUCTION ANALYSIS AND STORMWATER MANAGEMENT" BOOKLET PREPARED BY BAY DESIGN GROUP DATED DECEMBER 1, 2017; REVISED APRIL 5, 2018; REVISED JUNE 20, 2018.

NOTE: CONSTRUCTION AND DESIGN OF THE STORMWATER BMP'S SHALL BE CONSISTENT WITH THE DESIGN SPECIFICATIONS FOUND AT THE FOLLOWING VIRGINIA STORMWATER BMP CLEARINGHOUSE WEBSITE - <http://www.vwrcc.vt.edu/swc/NonProprietaryBMPs.html>

BMP INSPECTION & MAINTENANCE

- I. GENERAL
 - A. PERIODIC INSPECTIONS (BUT NO LESS THAN ANNUAL) ARE THE RESPONSIBILITY OF THE PROPERTY OWNER(S) AND SHALL BE CONDUCTED FOR THE BMP'S NOTED BELOW.
 - B. INSPECTION REPORTS SHALL BE MAINTAINED ON-SITE AND PROVIDED TO GLOUCESTER COUNTY DEPARTMENT OF ENVIRONMENTAL PROGRAMS AS REQUESTED.
 - C. INSPECTION RECORDS SHALL BE RETAINED FOR A MINIMUM OF 5 YEARS FROM INSPECTION DATE.
- II. BIORETENTION BED BMP (VDEQ STORMWATER DESIGN SPECIFICATION No. 9; V1.9; MARCH 1, 2011)
 - A. CONDUCT ANNUAL MAINTENANCE INSPECTION, PREFERABLY DURING MARCH TO MAY.
 - B. PERFORM PERIODIC MAINTENANCE PER FOLLOWING CHECKLIST:
 - i. MOW BIORETENTION TURF COVER.
 - ii. SPOT WEED, REPAIR EROSION, REMOVE TRASH & RAKE MULCH.
 - iii. ADD REINFORCEMENT PLANTING TO MAINTAIN THE DESIRED VEGETATION DENSITY
 - iv. REMOVE INVASIVE PLANTS USING RECOMMENDED CONTROL METHODS
 - v. STABILIZE THE CONTRIBUTING DRAINAGE AREA TO PREVENT EROSION
 - vi. INSPECT & CLEANUP; MAINTAIN 3" MULCH LAYER & PRUNE TREES & SHRUBS
 - vii. INSPECT AND REMOVE SEDIMENT IN PRE-TREATMENT CELLS AND INFLOW POINTS
- III. EXTENDED DETENTION BMP (VDEQ STORMWATER DESIGN SPECIFICATION No. 15; V1.8; APRIL 13, 2010)
 - A. CONDUCT ANNUAL MAINTENANCE INSPECTION, PREFERABLY DURING MARCH TO MAY.
 - B. PERFORM PERIODIC MAINTENANCE PER FOLLOWING CHECKLIST:
 - i. INSPECT CONDITION OF INLETS FOR MATERIAL DAMAGE AND EROSION
 - ii. INSPECT BANKS OF UPSTREAM AND DOWNSTREAM CHANNELS FOR INDICATION OF UNDERMINING
 - iii. INSPECT POND OUTFALL FOR EROSION, UNDERCUTTING, ETC.
 - iv. INSPECT PRINCIPAL SPILLWAY FOR EVIDENCE OF CORROSION, LEAKAGE, ETC.
 - v. INSPECT CONDITION OF TRASH RACK & ORIFICE FOR CLOGGING, ETC.
 - vi. ENSURE MAINTENANCE ACCESS IS UNBLOCKED.
 - vii. INSPECT SIDE SLOPES FOR EVIDENCE OF EROSION, SLUMPING, ETC.

NOTE: GLOUCESTER COUNTY STORMWATER MANAGEMENT ORDINANCE [SECTION 6-11] SPECIFIES THAT THE OWNER, AT THE OWNERS' EXPENSE, SHALL FURNISH AN INSPECTION REPORT PREPARED BY A QUALIFIED INSPECTOR (P.E., L.S., L.A., ETC.) ANNUALLY. THE INSPECTION REPORT SHALL INCLUDE CURRENT BMP PHOTOGRAPHS, SUMMARY OF BMP CONDITION, AND RECOMMENDATIONS FOR IMPROVEMENT IF NECESSARY. THE INSPECTION ENTITY FOR THIS PROJECT WILL BE BAY DESIGN GROUP UNTIL FURTHER NOTICE.



SECTION B-B: BIORETENTION BED TO BMP #2 - EXTENDED DETENTION POND

PROPOSED MIN. 3'Wx14'Lx15'Wx3.0'D CLASS 1 RIPRAP OUTLET PROTECTION (EL. 46.0) NOTE:
 1. ALL ELEVATIONS ARE FOR SETTLED HEIGHTS. CONSTRUCTION OF EARTH DAM AND SPILLWAY SHALL ALLOW FOR 10% SETTLEMENT.
 2. TO CONVERT TEMPORARY SEDIMENT BASIN TO PERMANENT BMP, DRAIN REMAINING WATER, REMOVE THE LAYER OF BUILT UP SILT AND BACKFILL TO COMPLY WITH PERMANENT ELEVATIONS.

SCALE: NONE

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DESIGNED: WAS

CAD: WAS

CHECKED: WBB

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DATE: JANUARY 10, 2018

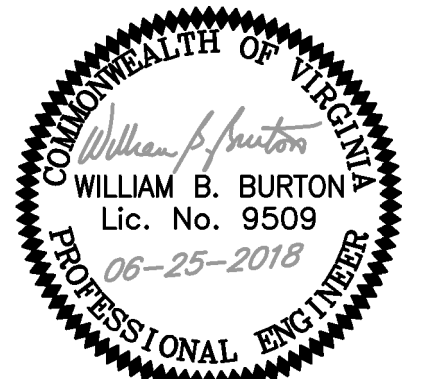
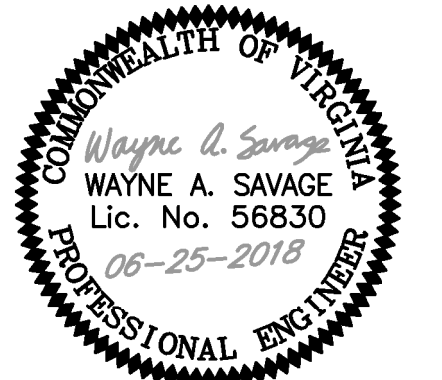
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PROJECT:

RIVERBEND APARTMENTS

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

SHEET:

STORM SEWER SYSTEM ANALYSIS

SHEET NO:

C18

6/23/2018

Riverbend Apartments (BDG #12211-14)

STORM SEWER DESIGN

FROM POINT	TO POINT	AREA DRAIN "A"	R/C	CA		INLET TIMES	RAIN FALL	RUNOFF Q	INVERT ELEVATIONS		LENGTH	SLOPE	DIAMETER	CAPACITY	VELOCITY	FLOW TIME	REMARKS
				INCREMENT	ACCUMULATED				UPPER END	LOWER END							
		ACRES				MIN	IN/HR	CFS			FEET	FT/FT	IN	CFS	FPS	MIN	
7	6	0.44	0.62	0.27	0.27	10.0	5.86	1.83	61.59	61.08	102.74	0.0050	12	2.84	3.83	0.5	DI-3B
6	5	0.43	0.73	0.31	0.59	10.5	5.86	3.44	60.98	60.55	85.33	0.0050	15	5.32	4.36	0.3	DI-3B
5	4	0.25	0.66	0.17	1.05	11.3	5.69	5.95	60.45	60.03	84.66	0.0050	18	8.66	4.96	0.3	DI-3B
4	3	0.43	0.62	0.27	1.31	12.2	5.51	7.23	59.93	59.52	82.47	0.0050	18	8.66	5.15	0.3	DI-3B
3	2	0.87	0.65	0.57	2.51	13.2	5.34	13.42	59.42	58.78	127.47	0.0050	24	18.64	6.06	0.3	DI-3B
2	1	0.57	0.71	0.40	2.92	13.5	5.28	15.41	58.68	58.50	36.32	0.0050	24	18.64	6.23	0.1	DI-3B
18	17	0.37	0.77	0.28	0.28	10.0	5.86	1.70	63.50	62.95	109.00	0.0050	12	2.84	3.86	0.5	DI-3B
17	16	0.30	0.74	0.22	0.51	10.5	5.86	2.97	62.85	62.30	109.00	0.0050	15	5.32	4.21	0.4	DI-3B
16	15	0.33	0.75	0.25	0.75	10.9	5.77	4.35	62.20	61.66	107.50	0.0050	15	5.32	4.50	0.4	DI-3B
15	14	0.29	0.76	0.22	0.97	11.3	5.69	5.54	61.66	61.02	107.50	0.0050	18	8.66	4.91	0.4	DI-3B
14	13	0.30	0.80	0.24	1.21	11.7	5.62	6.82	60.92	60.54	75.08	0.0051	18	8.66	5.11	0.2	DI-3B
13	12	0.16	0.79	0.13	1.34	11.9	5.57	7.47	60.44	59.66	155.52	0.0050	18	8.66	5.17	0.5	DI-3B
12	11	0.41	0.75	0.31	2.15	13.3	5.32	11.47	59.56	59.08	98.79	0.0050	24	18.64	5.90	0.3	DI-3B
11	10	0.00	0.00	0.00	2.28	14.0	5.20	11.85	58.98	58.70	55.69	0.0050	24	18.64	5.94	0.2	MH-1
10	9	0.71	0.75	0.53	3.01	15.5	4.98	14.89	58.60	58.50	30.11	0.0033	24	18.64	6.21	0.1	DI-3B
22	21	0.80	0.64	0.38	0.38	10.0	5.86	2.29	61.59	60.51	216.17	0.0050	12	2.84	3.89	0.9	DI-1
21	3	0.51	0.49	0.25	0.83	10.9	5.77	3.66	60.41	59.52	178.92	0.0050	15	5.32	4.41	0.7	DI-1
25	24	0.12	0.65	0.08	0.08	10.0	5.86	0.47	62.42	61.89	163.26	0.0050	12	2.84	2.86	1.0	DI-1
24	23	0.00	0.00	0.00	0.08	11.0	5.74	0.45	61.50	61.18	83.21	0.0051	12	2.84	2.57	0.4	MH-1
23	5	0.48	0.45	0.22	0.29	11.5	5.66	1.06	61.08	60.55	106.77	0.0050	12	2.84	3.04	0.5	DI-1
28	27	0.22	0.65	0.14	0.14	10.0	5.86	0.85	60.69	60.19	100.93	0.0050	12	2.84	3.07	0.5	DI-1
27	12	0.30	0.58	0.17	0.32	10.5	5.84	1.85	60.09	59.66	88.16	0.0050	12	2.84	3.73	0.4	DI-1
30	29	0.11	0.68	0.07	0.07	10.0	5.86	0.15	60.87	60.23	127.22	0.0050	12	2.84	2.57	0.8	DI-1
29	17	0.18	0.63	0.11	0.19	10.8	5.79	1.09	60.13	59.66	93.54	0.0050	17	7.84	3.76	0.5	DI-1
31	11	0.21	0.59	0.12	0.12	10.0	5.86	0.74	60.13	59.08	105.27	0.0100	12	4.15	3.79	0.5	DI-1
33	32	0.14	0.60	0.12	0.12	10.0	5.86	0.73	62.35	62.25	20.00	0.0050	12	2.84	2.94	0.1	DI-3B
37	36	4.81	0.30	1.47	1.47	15.0	5.05	7.44	58.09	55.45	83.74	0.0100	15	7.53	6.42	0.2	DI-1
36	35	0.00	0.00	0.00	2.82	15.5	4.98	13.05	55.35	54.72	82.80	0.0100	24	26.36	7.92	0.1	MH-1
35	34	0.27	0.80	0.24	2.86	15.6	4.86	14.20	54.62	54.00	123.47	0.0050	24	18.64	6.15	0.3	DI-3B
42	41	0.05	0.66	0.03	0.03	10.0	5.86	0.20	62.13	61.43	70.00	0.0100	12	4.15	2.59	0.5	NDS 24" GRATE
41	40	0.16	0.74	0.11	0.31	10.8	5.79	1.79	59.53	59.01	103.26	0.0050	12	2.84	3.71	0.5	NDS 24" GRATE
40	39	0.07	0.47	0.03	0.53	11.4	5.66	3.00	57.11	56.62	98.46	0.0050	15	5.32	4.22	0.4	NDS 24" GRATE
39	38	0.00	0.00	0.00	0.95	12.5	5.46	5.18	56.52	56.03	98.46	0.0050	15	5.32	4.57	0.4	MH-1
38	36	0.00	0.00	0.00	1.15	13.2	5.34	6.12	55.93	55.45	95.60	0.0050	18	8.66	5.01	0.3	MH-1
46	44	0.08	0.46	0.04	0.04	10.0	5.86	0.21	63.43	62.94	97.76	0.0050	12	2.84	2.06	0.8	NDS 24" GRATE
44	43	0.12	0.65	0.08	0.11	10.8	5.79	0.66	62.84	62.46	75.59	0.0050	12	2.84	2.86	0.4	NDS 24" GRATE
43	41	0.37	0.73	0.05	0.17	11.2	5.70	0.94	61.75	61.43	64.17	0.0050	12	2.84	3.15	0.3	NDS 24" GRATE
20	19	0.18	0.63	0.11	0.11	10.0	5.86	0.68	61.87	61.37	49.76	0.0100	12	4.15	3.70	0.2	DI-3B
19	40	0.11	0.68	0.07	0.10	10.2	5.91	1.11	59.47	59.01	46.01	0.0100	12	4.15	4.24	0.2	DI-3B
8	39	0.51	0.82	0.42	0.42	10.0	5.86	2.49	58.73	58.62	210.52	0.0100	12	4.15	5.22	0.7	DI-3B
26A	26	0.11	0.68	0.07	0.07	10.0	5.86	0.16	60.00	59.80	109.97	0.0100	12	4.15	3.28	0.6	DI-1
26	38	0.27	0.46	0.12	0.20	10.6	5.84	1.16	57.00	56.03	95.60	0.0100	12	4.15	4.30	0.4	DI-1

6/23/2018

Riverbend Apartments (BDG #12211-14)

HYDRAULIC GRADE LINE

INLET STATION	Outlet Water Surface Elev.	D _o (in)	Q _o (cfs)	L _o (ft)	S _o %	H _o (ft)	JUNCTION LOSS													RIM P.F.V.	RIM ELEV. -1(G)
							V ₁ (ft/sec)	H ₁ (ft)	Q ₁	V ₂	QV ₂	V ₂ ² /2g	H ₂	Angle (Degrees)	K	H _Δ	H ₁	1.3 H ₁	0.5 H ₁		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	F.E.U.
2	60.28	24	15.41	36.32	0.46%	0.17	6.23	0.15	13.42	4.27	57.3	0.28	0.10	82	0.67	0.19	0.44	0.78	61.80	62.22	1.33
3	61.02	24	13.42	127.47	0.35%	0.45	6.09	0.14	10.89	3.47	37.7	0.19	0.07	82	0.67	0.12	0.33	0.54	62.35	63.10	0.75
4	61.83	18	7.23	82.47	0.47%	0.39	5.15	0.10	5.95	2.53	15.0	0.10	0.03	10	0.13	0.01	0.19	0.45	62.79	63.74	0.95
5	62.35	18	5.95	84.66	0.52%	0.27	4.98	0.10	5.10	2.17	11.1	0.07	0.03	80	0.70	0.05	0.17	0.32	63.11	64.28	1.15
6	62.79	15	3.44	85.33	0.28%	0.24	4.38	0.07	1.63	0.83	1.3	0.01	0.00	27	0.32	0.00	0.08	0.27	63.38	65.16	1.78
7	63.11	12	1.83	102.74	0.21%	0.21	3.63	0.05	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.05	0.27	63.38	65.16	1.78
10	60.20	24	14.99	30.11	0.44%	0.13	6.21	0.15	11.85	3.77	44.7	0.22	0.08	2	0.03	0.01	0.23	0.37	60.57	61.87	1.30
11	60.58	24	11.85	59.68	0.27%	0.15	5.94	0.14	12.21	3.89	47.4	0.23	0.08	0	0.00	0.00	0.22	0.37	60.95	62.48	1.53
12	61.18	24	11.47	98.79	0.26%	0.25	5.90	0.14	10.41	3.31	34.5	0.17	0.08	83	0.67	0.11	0.31	0.58	61.72	62.97	1.25
13	61.72	18	7.47	155.52	0.51%	0.79	5.17	0.10	6.82	2.80	19.7	0.13	0.05	80	0.70	0.09	0.24	1.03	62.75	63.75	1.00
14	62.75	18	6.82	75.08	0.42%	0.32	5.11	0.10	5.54	2.35	13.0	0.09	0.03	0	0.00	0.00	0.13	0.45	63.19	64.31	1.12
15	63.19	18	5.54	107.50	0.28%	0.30	4.91	0.09	4.38	1.85	8.0	0.05	0.02	0	0.00	0.00	0.11	0.41	63.91	64.86	1.25
16	63.61	15	4.35	107.50	0.45%	0.49	4.55	0.08	2.97	1.51	4.5	0.04	0.01	0	0.00	0.00	0.08	0.58	64.19	65.40	1.21
17	64.19	15	2.97	109.00	0.21%	0.23	4.21	0.07	1.70	0.87	1.5	0.01	0.00	0	0.00	0.00	0.07	0.30	64.49	65.95	1.46
18	64.43	12	1.70	109.00	0.23%	0.25	3.68	0.05	0.00	0.00	0.00	0.00	0.00	0	0.00	0.00	0.05	0.33	64.79	66.50	

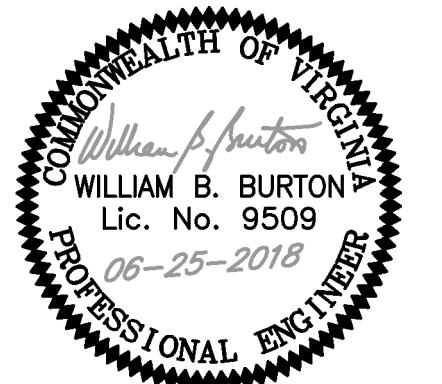
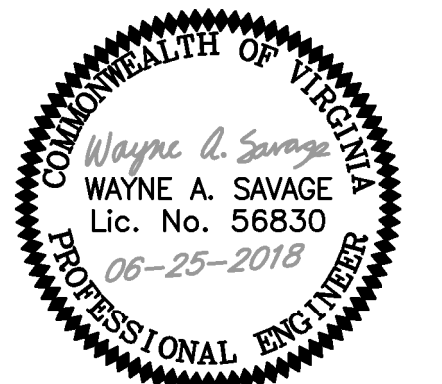
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Engineering Surveying & Land Planning

40 CROSS ST., SUITE 100
 P.O. BOX 51
 URBANA, VA 23175
 (804) 693-2993



PROJECT:

RIVERBEND APARTMENTS

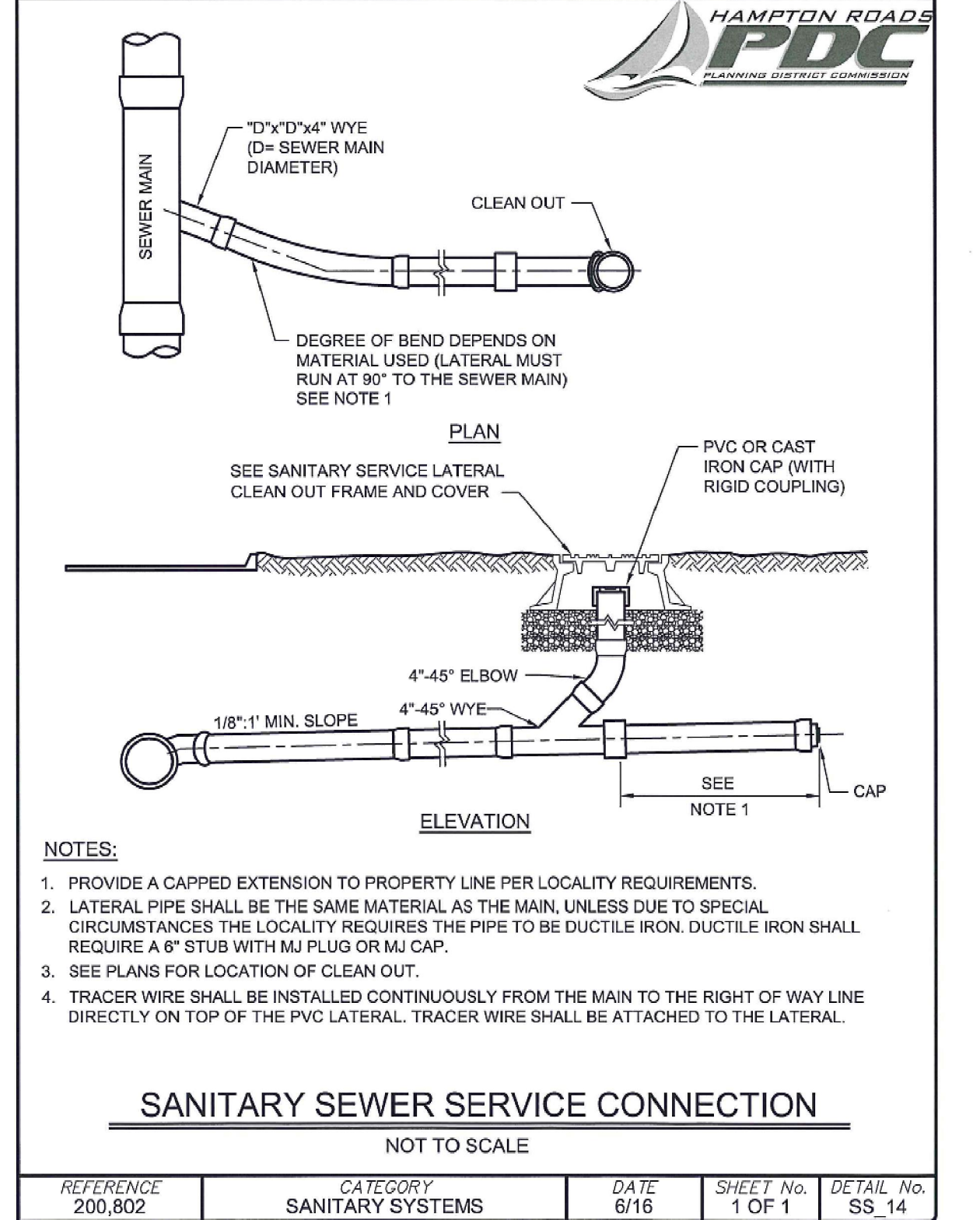
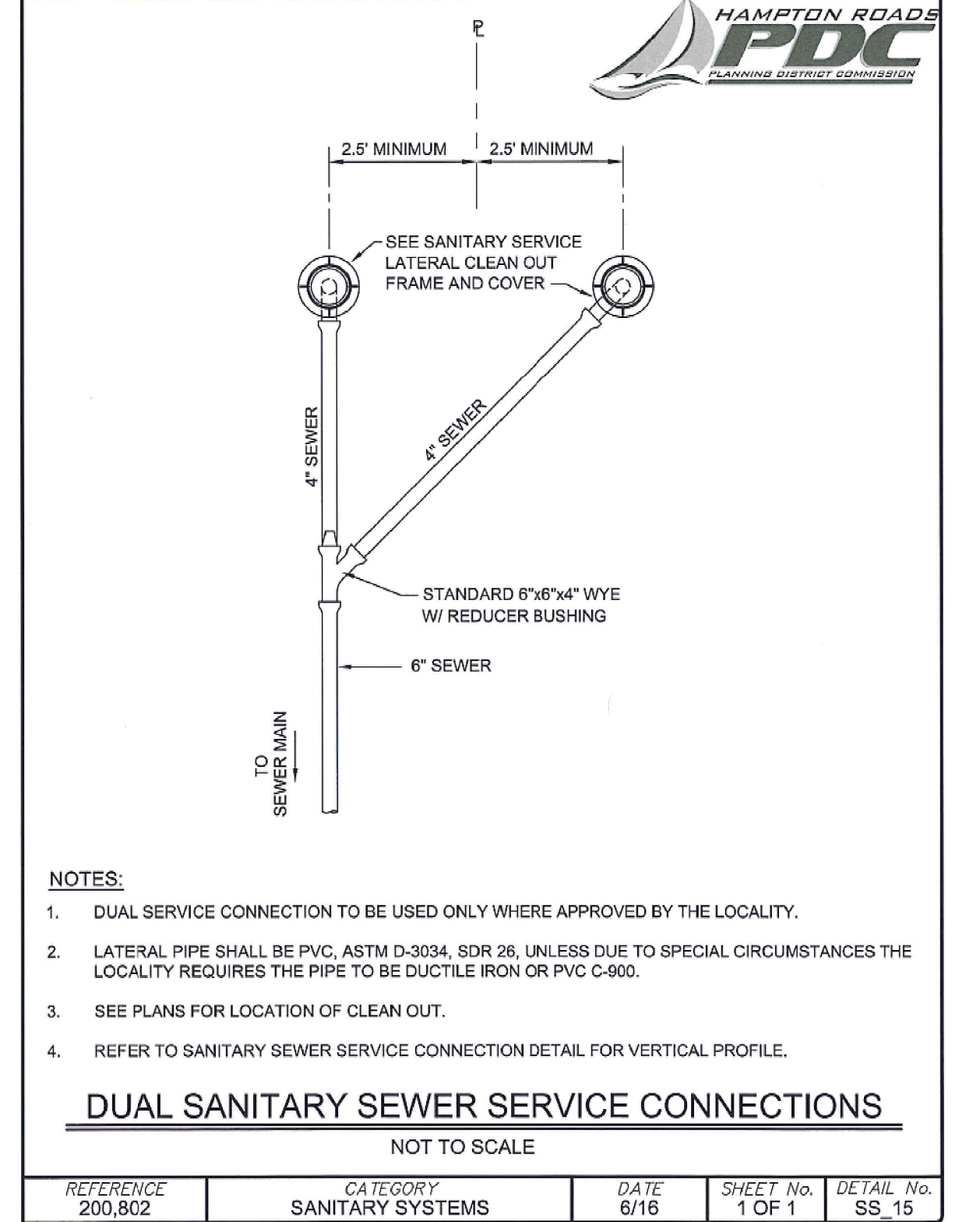
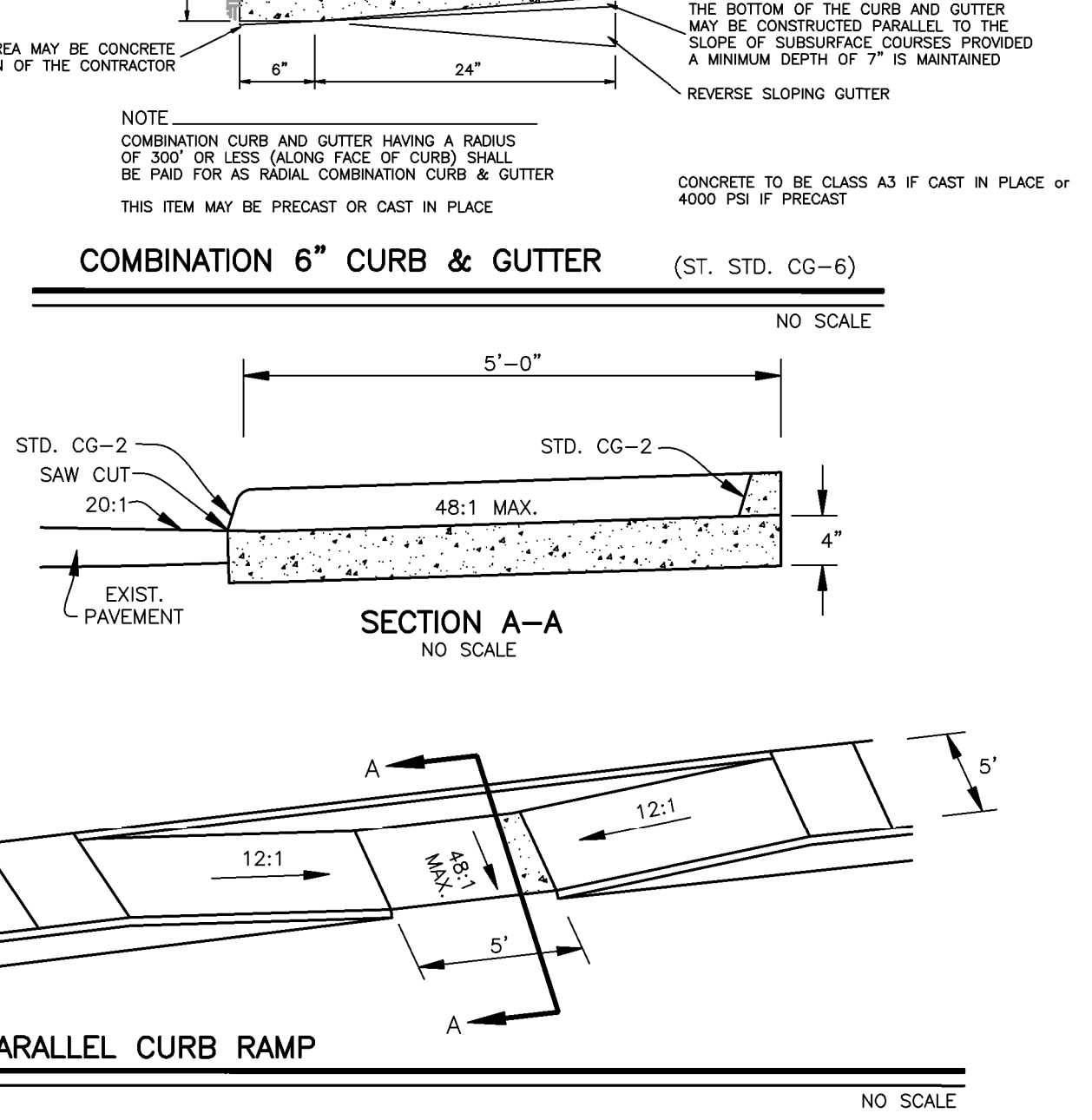
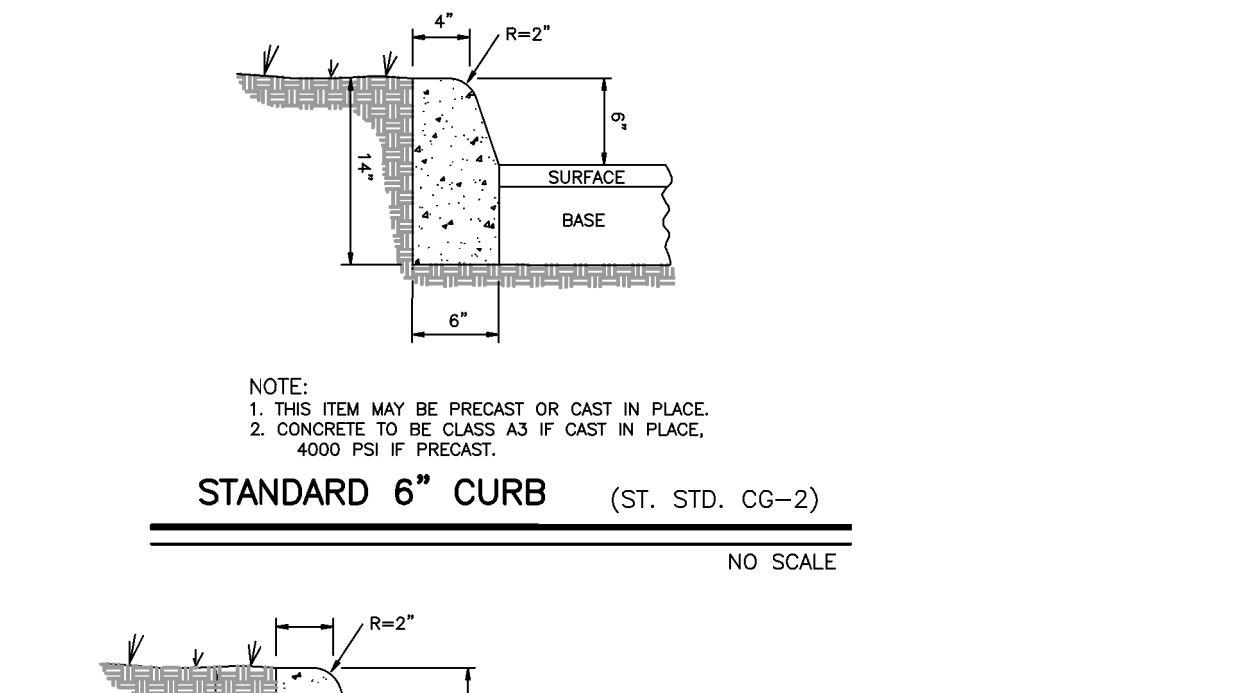
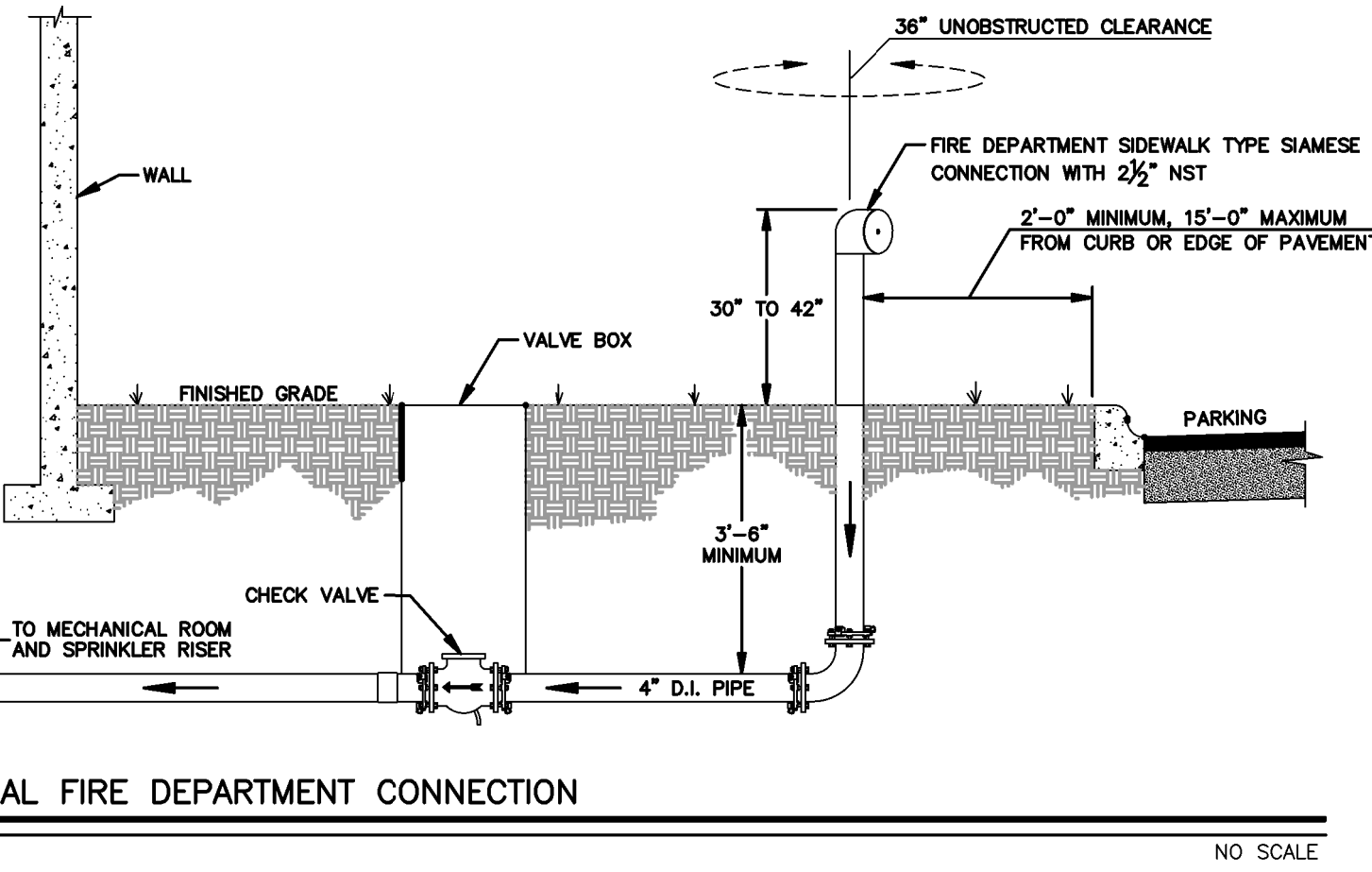
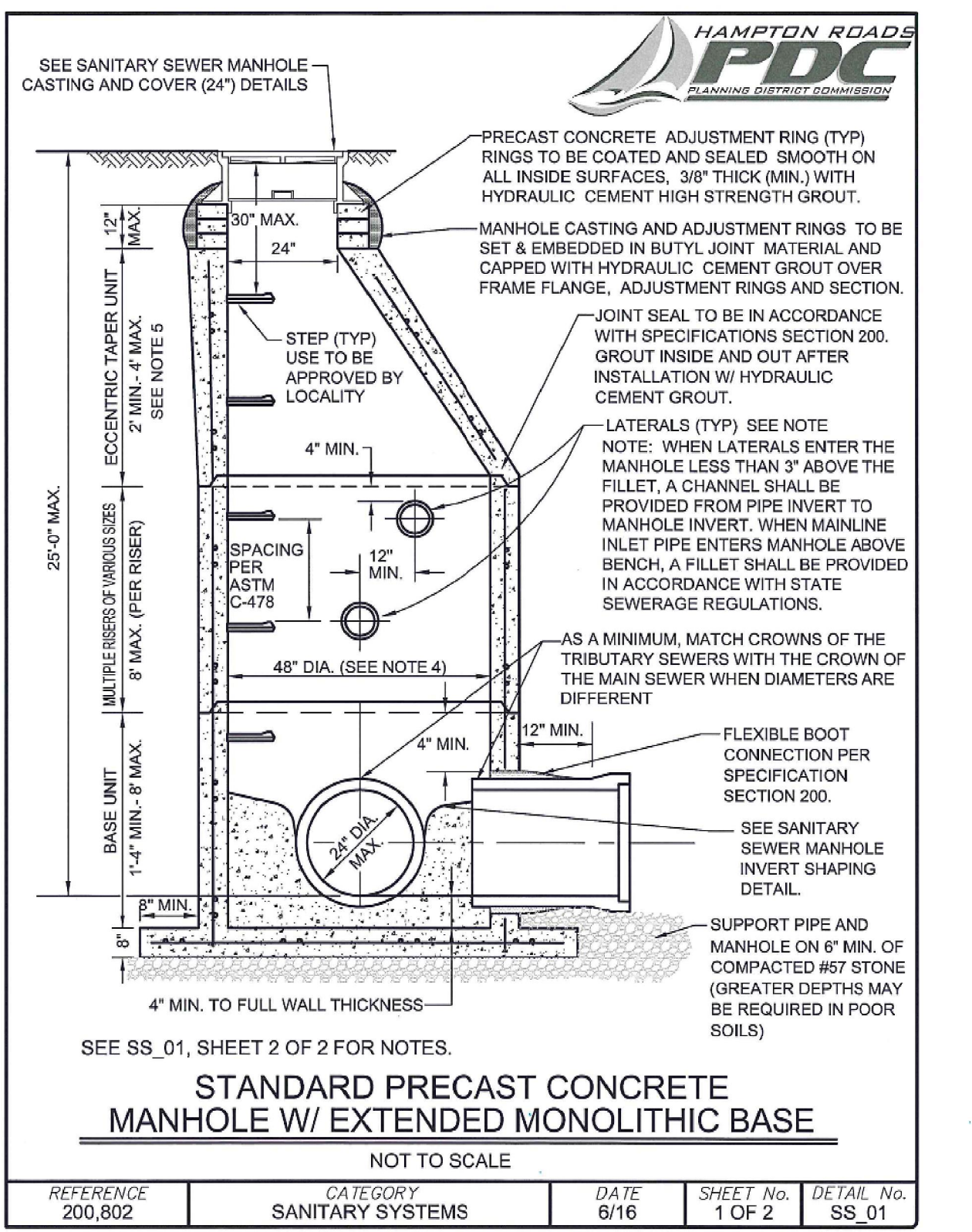
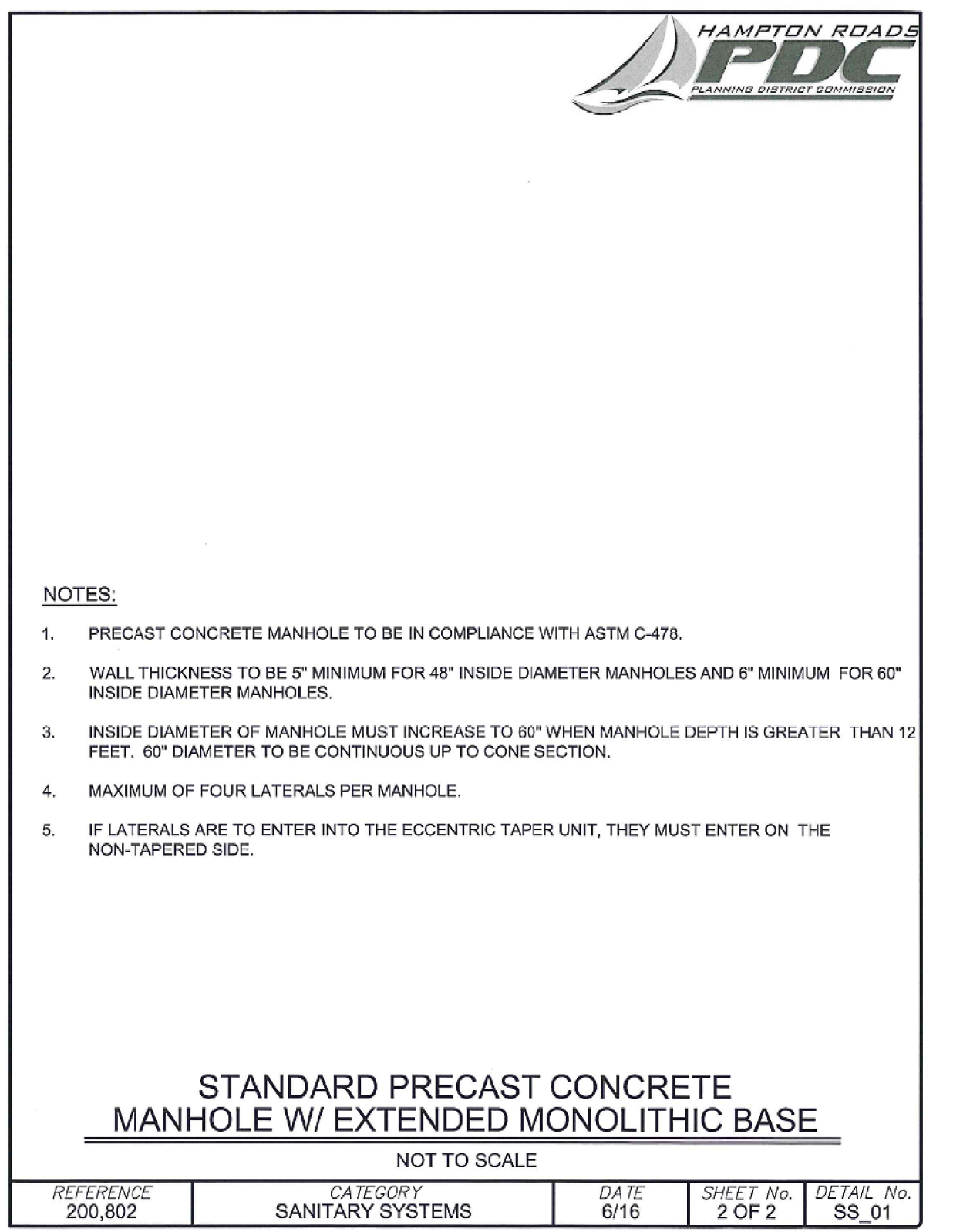
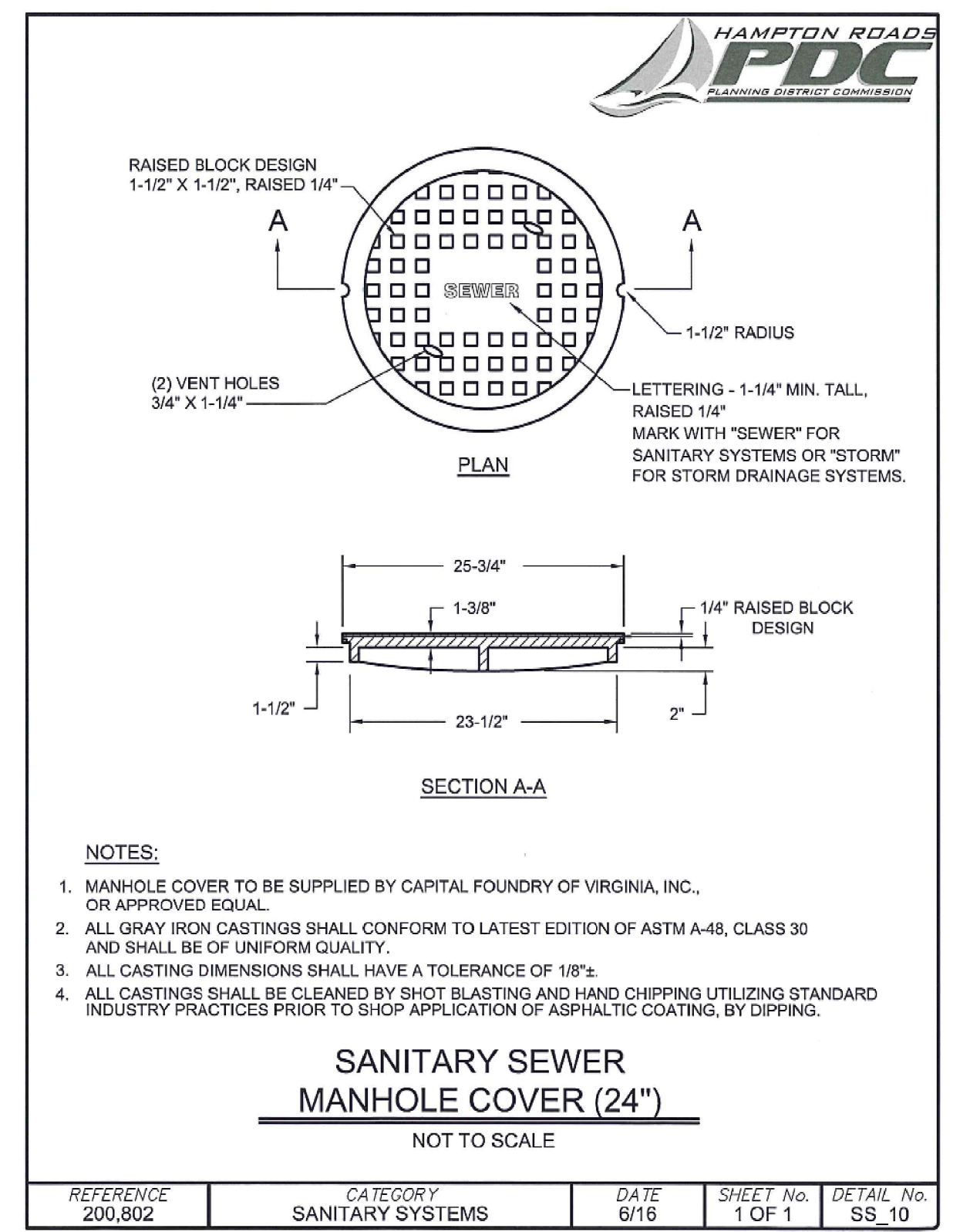
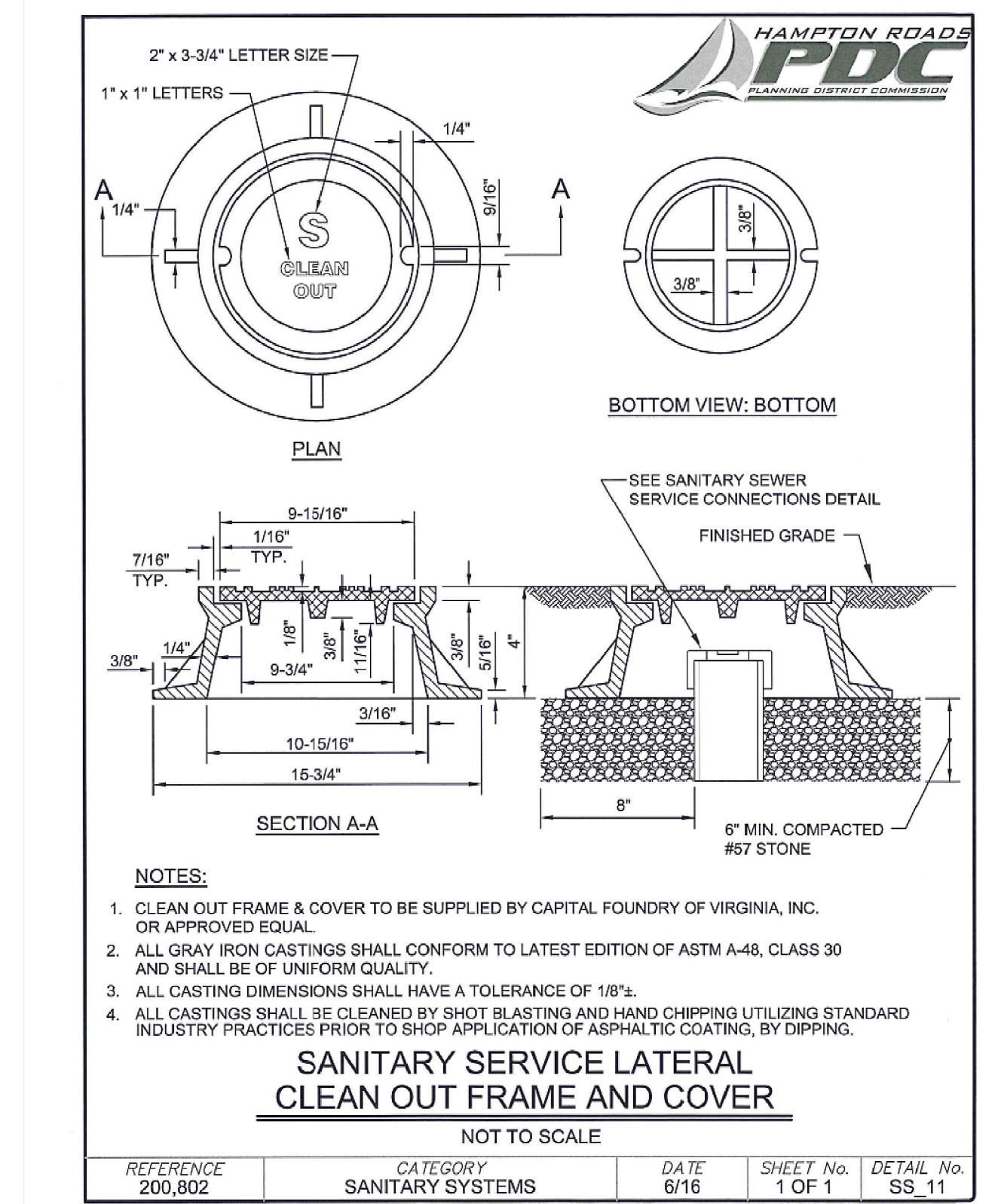
ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET:

SANITARY SEWER & MISCELLANEOUS DETAILS

SHEET NO:

C19



AUTOMATIC FIRE SUPPRESSION SYSTEM:
 THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A LICENSED FIRE PROTECTION SYSTEM PROVIDER TO DESIGN AND INSTALL AN NFPA 13R FIRE SUPPRESSION SYSTEM THAT MEETS THE FOLLOWING CRITERIA:

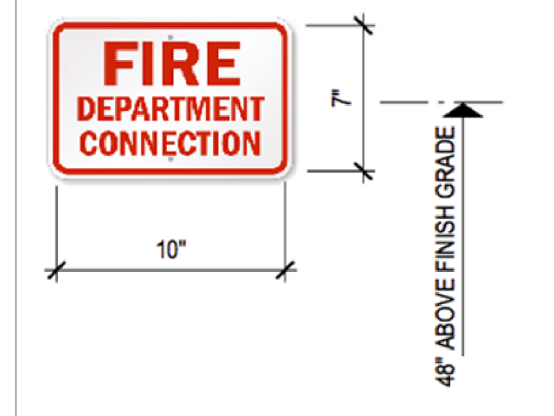
COMPLY WITH:

Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies
 NFPA 13R is a residential sprinkler design standard focused on low-rise residential occupancies. The Standard's intent is to provide a sprinkler system that aids in the control of residential fires and provides improved protection against injury and life loss in multi-family dwellings.

THE NFPA 13R SYSTEM DESIGN AND INSTALLATION SHALL ADDRESS THE FOLLOWING:
 Requirements concerning automatic sprinkler system design, installation, and maintenance including component listing, hydrostatic tests, sprinkler temperature ratings, design documentation, above ground pipe and equipment, underground pipe, pre-engineered systems, water supply sources, multipurpose piping systems, and hydraulic calculations.

DRAWINGS AND PERMITS
 The System Provider shall be responsible for all drawings and permits necessary for the complete installation of the system.

Fire Department Connection (FDC)
 The design shall include a FDC adjacent to the water meter at each apartment building with a valve accessible only by the Fire Department which controls the flow of water to the system without eliminating the flow to the domestic water system. Permanent signage shall be located at the FDC (see diagram below)



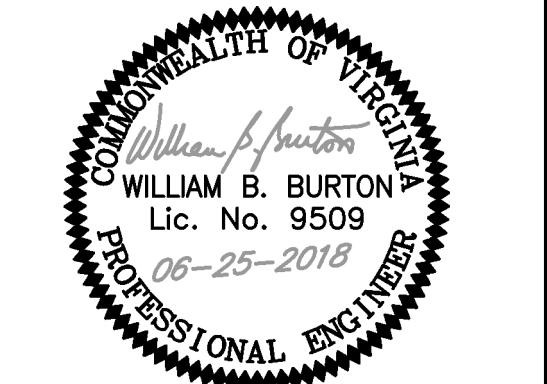
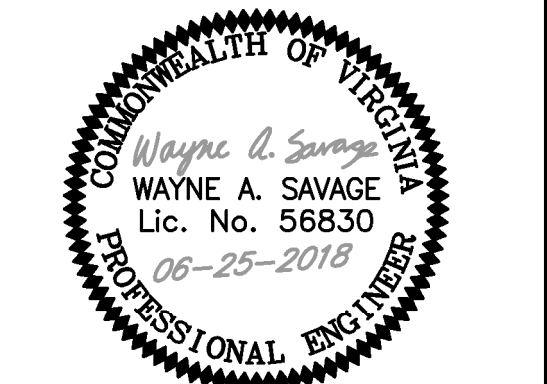
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www.baydesigngroup.com
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 URBANNA, VA 23175
 (804) 693-2993



PROJECT: RIVERBEND APARTMENTS

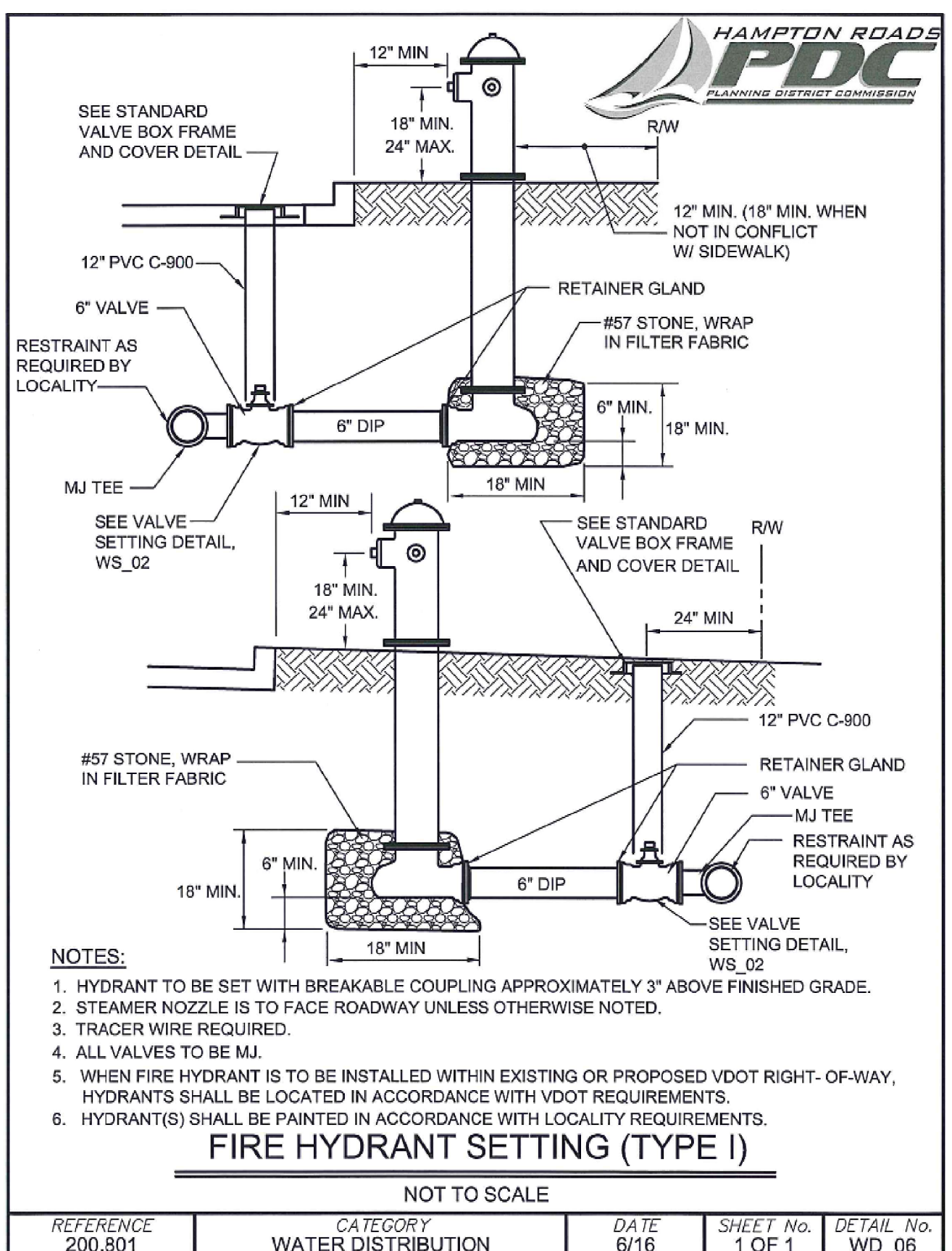
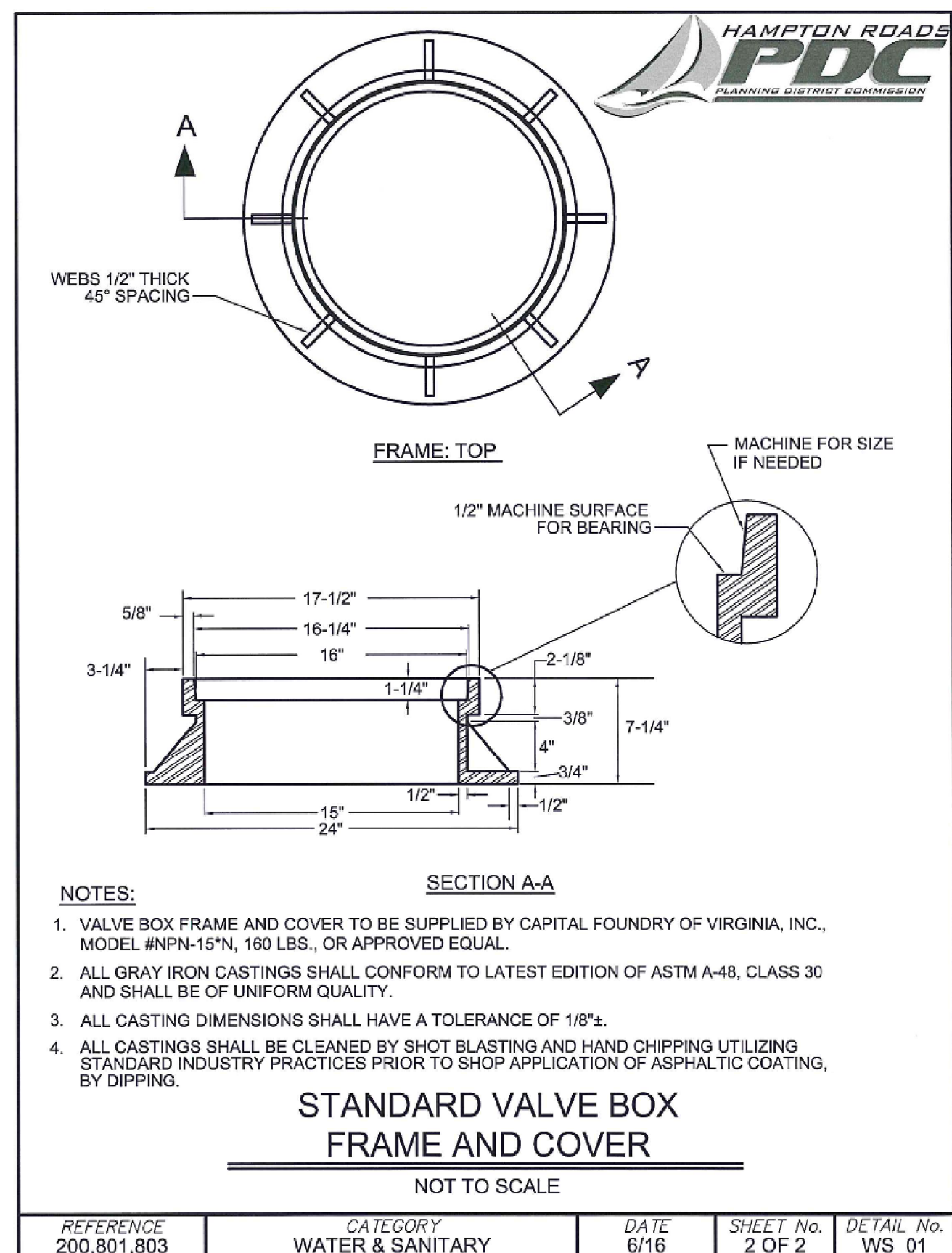
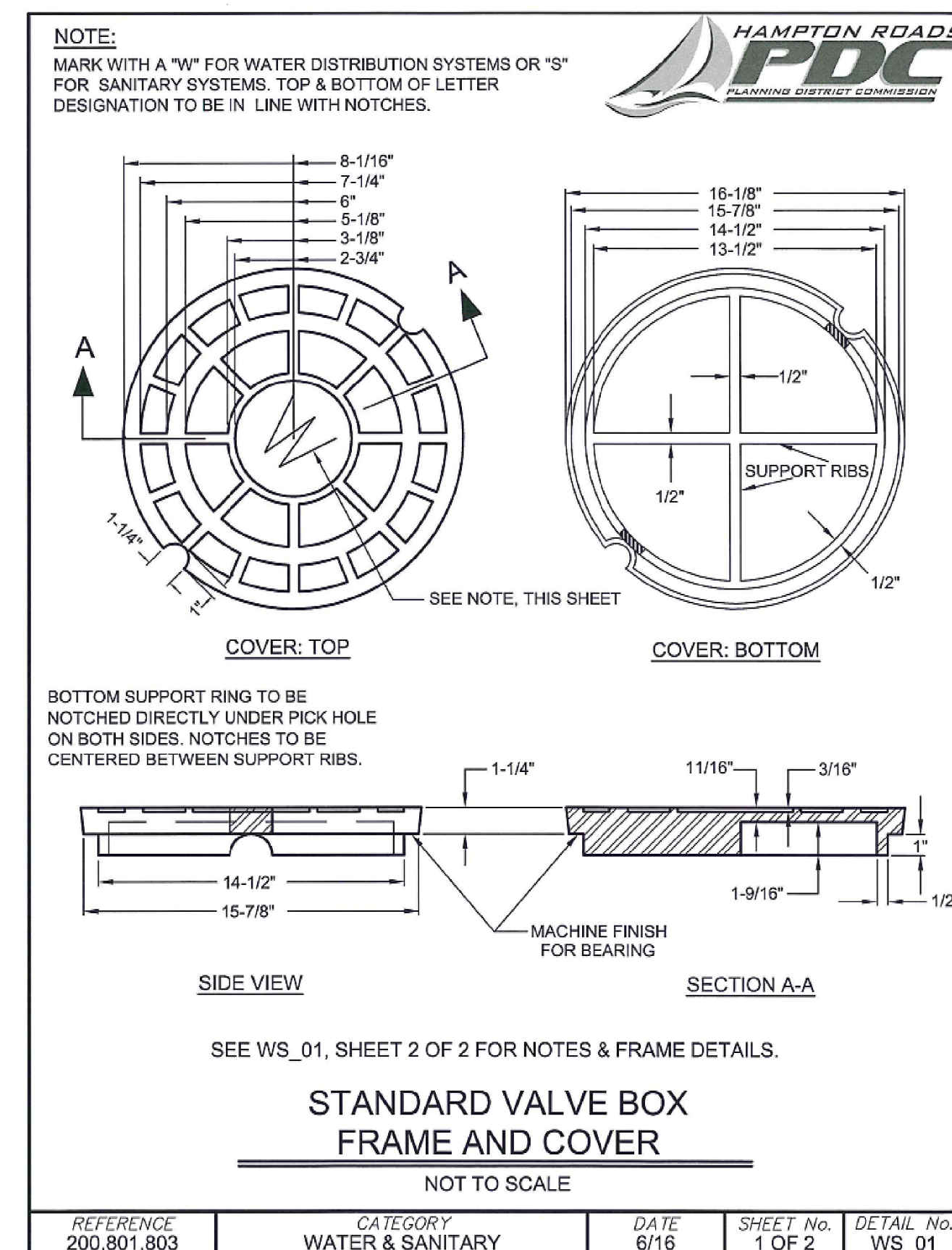
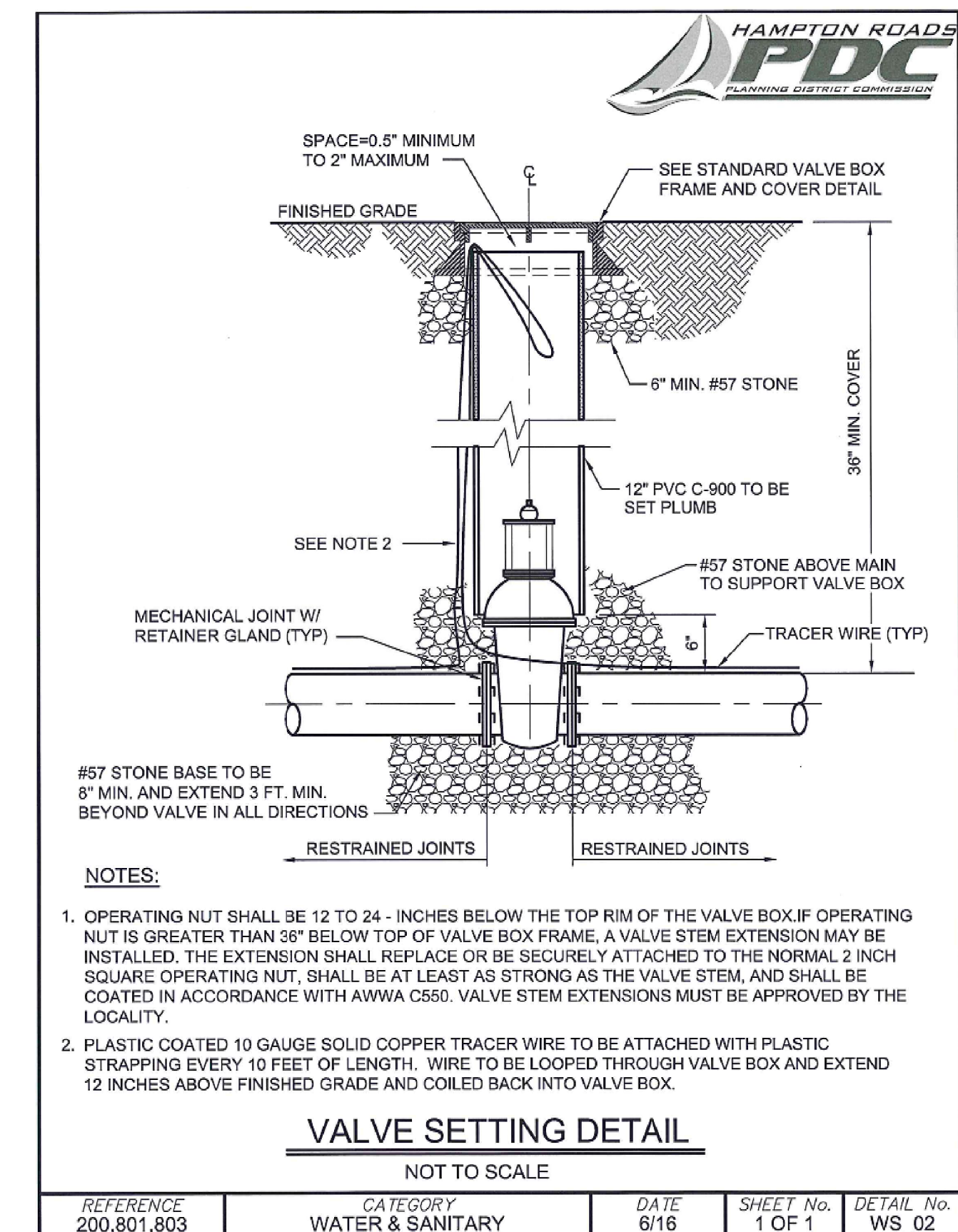
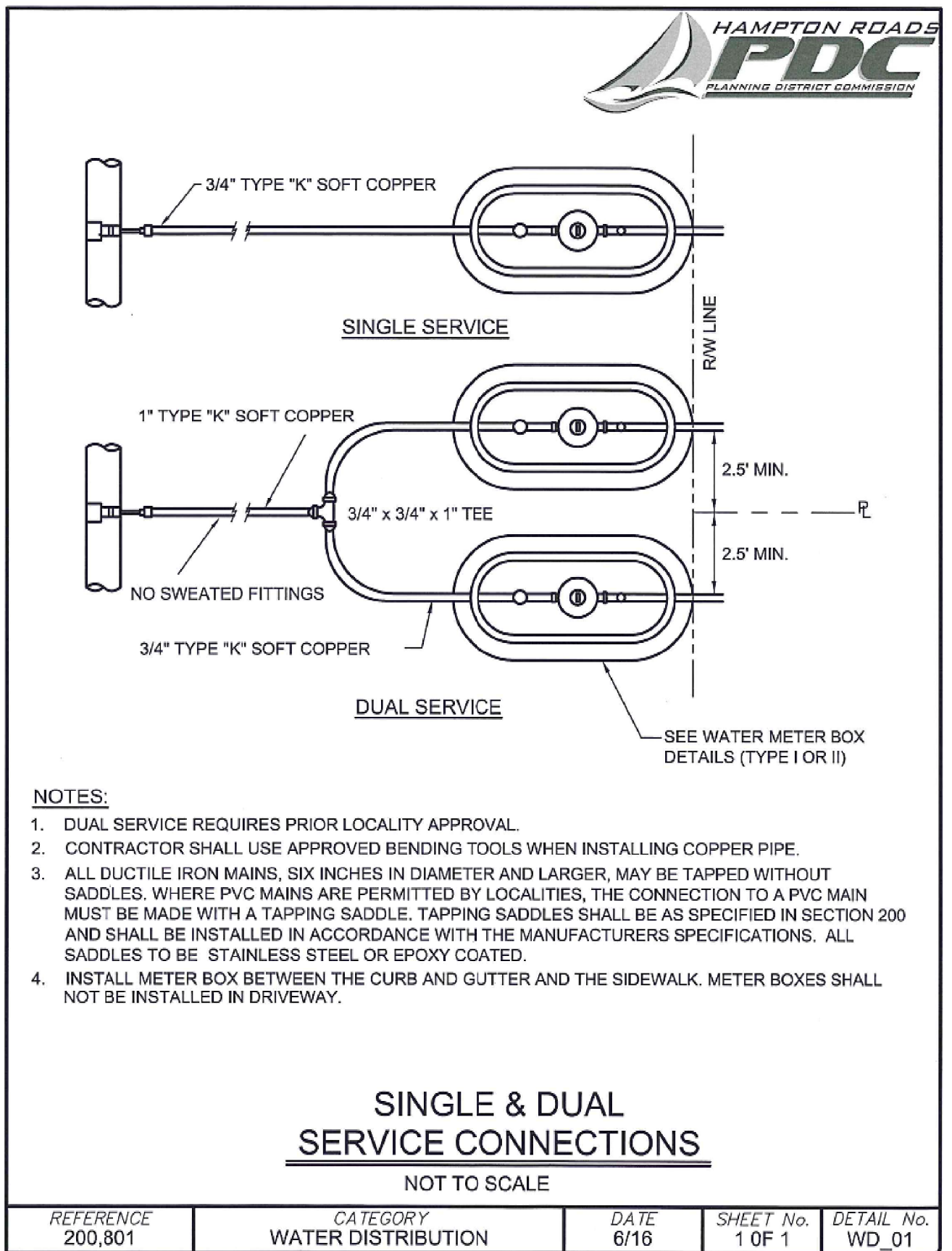
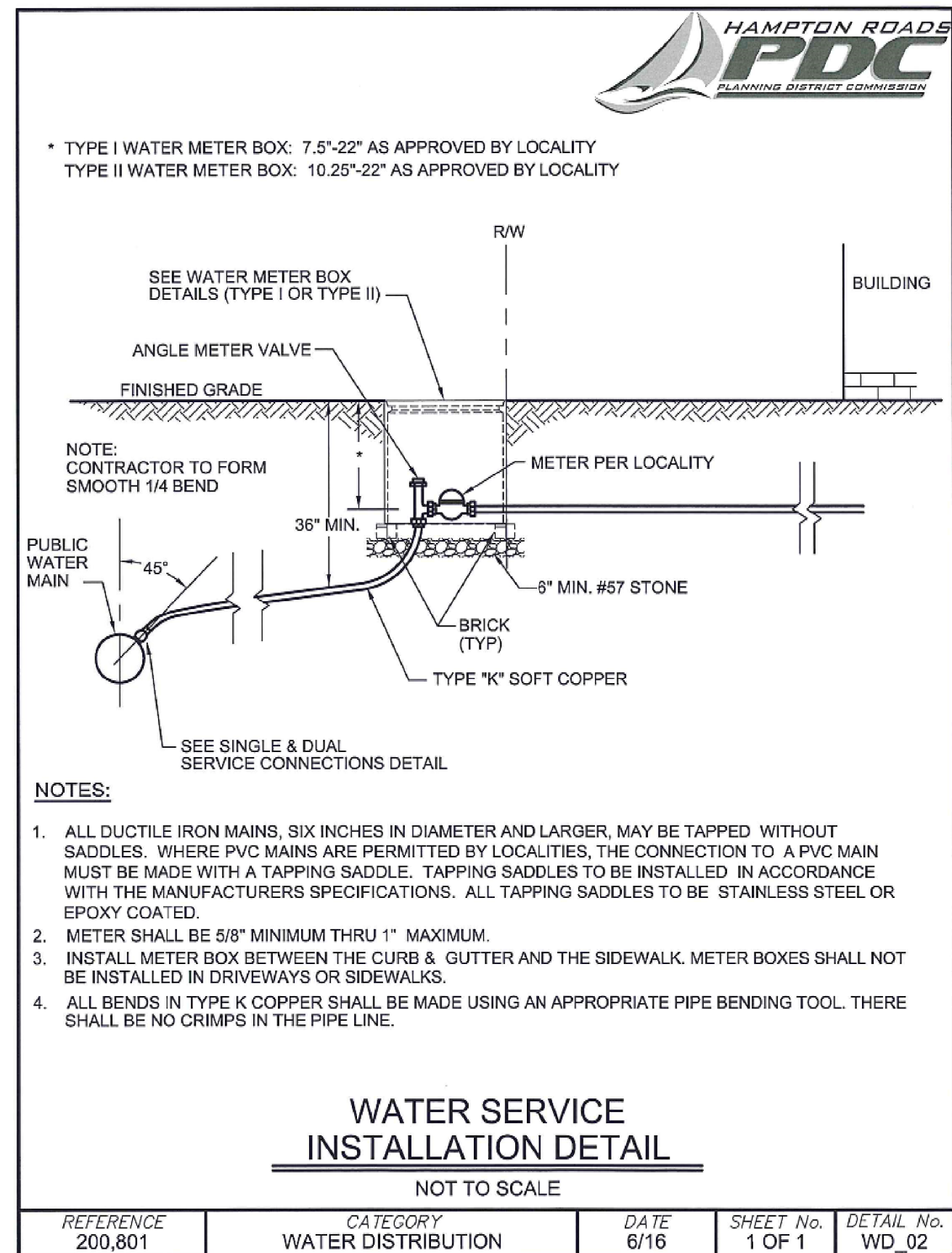
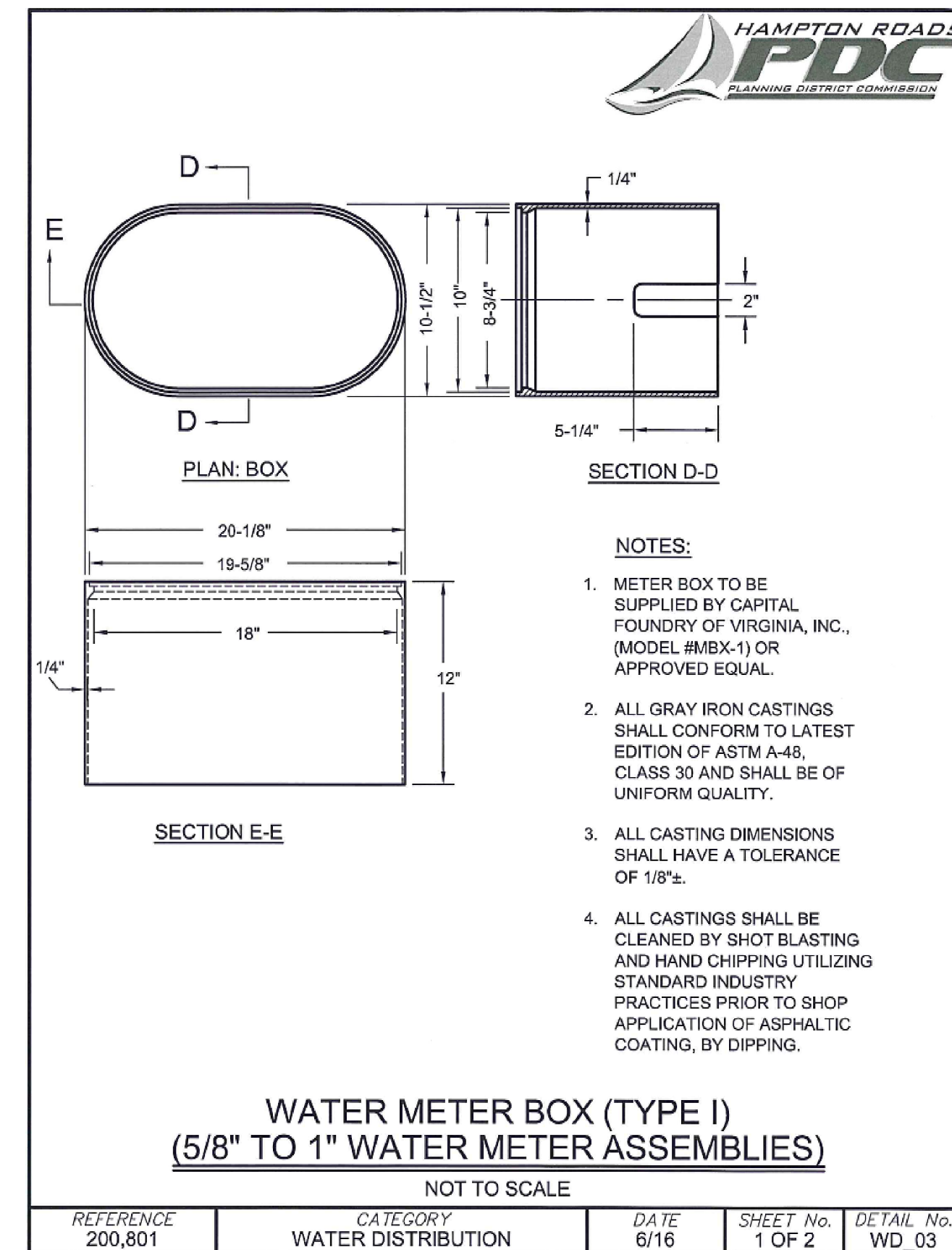
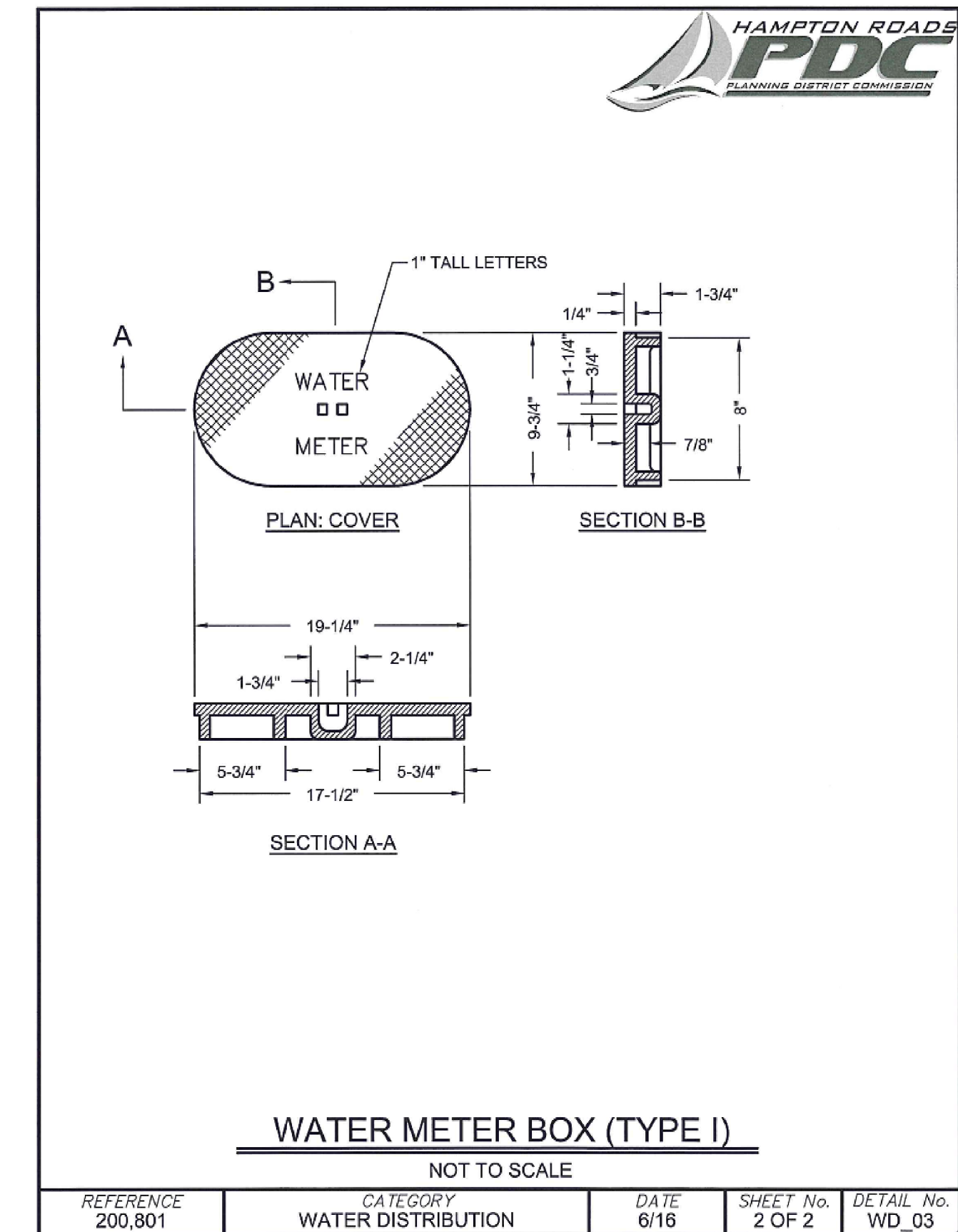
ABINGDON DISTRICT GLOUCESTER, VIRGINIA

SHEET:

WATERLINE DETAILS

SHEET NO:

C20



LANDSCAPE REQUIREMENTS:

- INTERNAL ANALYSIS -
 - REQUIRED INTERNAL LANDSCAPE AREA = (400 SPACES)(20 S.F./SPACE) = 8,000 S.F.
 - PROVIDED INTERNAL LANDSCAPE AREA = 8,454 S.F.
 - REQUIRED PLANTING WITHIN THE INTERNAL LANDSCAPE AREA:
 - NO. SMALL DECIDUOUS TREE = 8,454/100 = 85 SMALL DECIDUOUS TREE, OR
 - NO. LARGE DECIDUOUS TREE = 8,454/200 = 43 LARGE DECIDUOUS TREE

PLANT TABLE

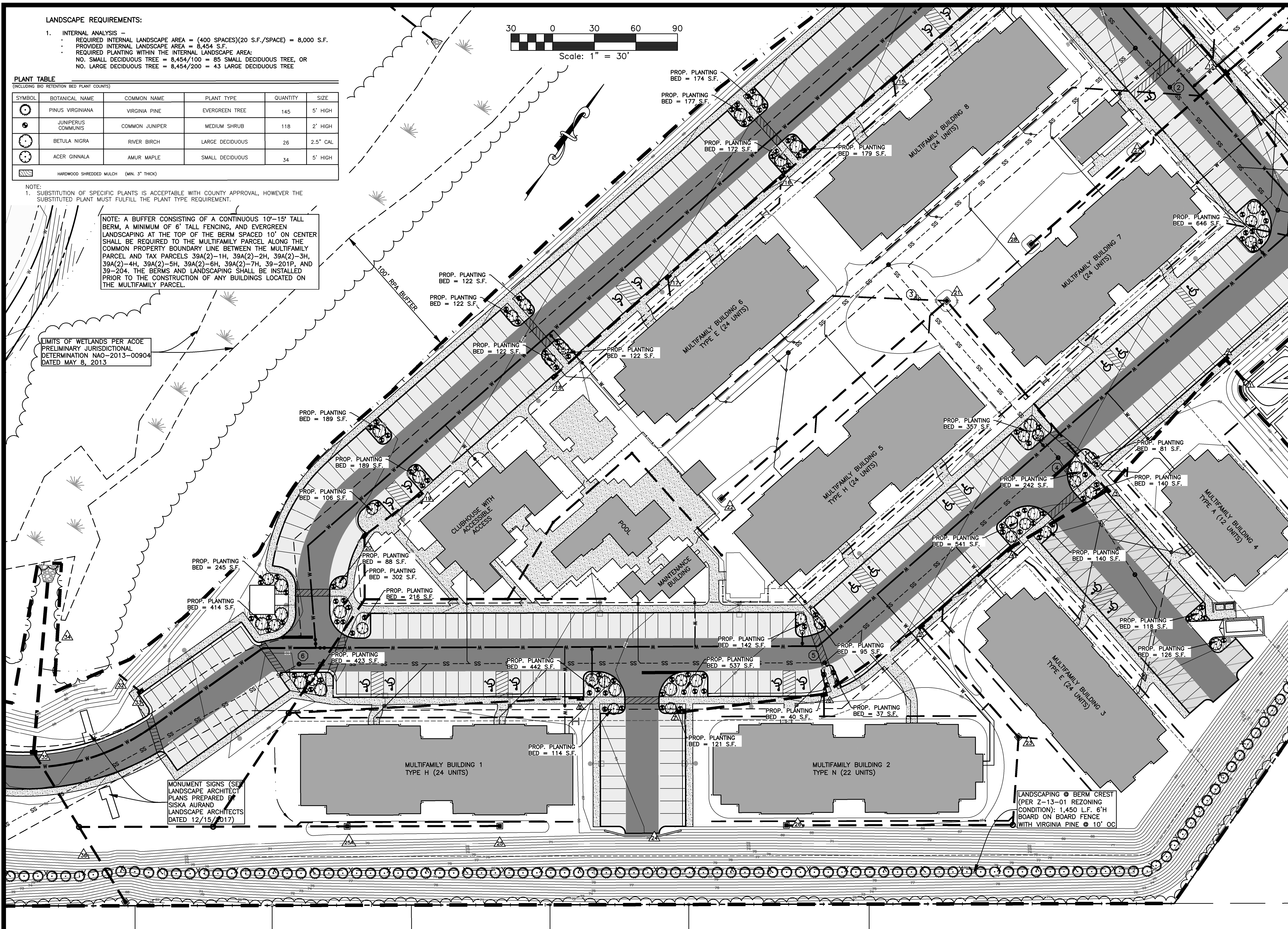
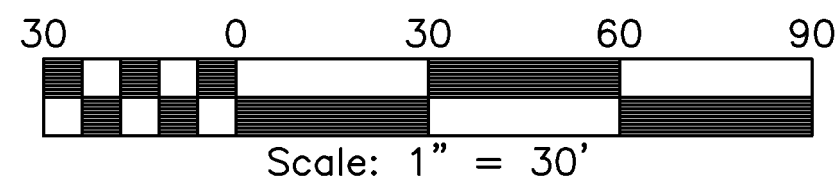
(INCLUDING BQ RETENTION BED PLANT COUNTS)

SYMBOL	BOTANICAL NAME	COMMON NAME	PLANT TYPE	QUANTITY	SIZE
	PINUS VIRGINIANA	VIRGINIA PINE	EVERGREEN TREE	145	5' HIGH
	JUNIPERUS COMMUNIS	COMMON JUNIPER	MEDIUM SHRUB	118	2' HIGH
	BETULA NIGRA	RIVER BIRCH	LARGE DECIDUOUS	26	2.5" CAL.
	ACER GINNALA	AMUR MAPLE	SMALL DECIDUOUS	34	5' HIGH

NOTE:
1. SUBSTITUTION OF SPECIFIC PLANTS IS ACCEPTABLE WITH COUNTY APPROVAL, HOWEVER THE SUBSTITUTED PLANT MUST FULFILL THE PLANT TYPE REQUIREMENT.

NOTE: A BUFFER CONSISTING OF A CONTINUOUS 10'-15' TALL BERM, A MINIMUM OF 6' TALL FENCING, AND EVERGREEN LANDSCAPING AT THE TOP OF THE BERM SPACED 10' ON CENTER SHALL BE REQUIRED TO THE MULTIFAMILY PARCEL ALONG THE COMMON PROPERTY BOUNDARY LINE BETWEEN THE MULTIFAMILY PARCEL AND TAX PARCELS 39A(2)-1H, 39A(2)-2H, 39A(2)-3H, 39A(2)-4H, 39A(2)-5H, 39A(2)-6H, 39A(2)-7H, 39-201P, AND 39-204. THE BERMS AND LANDSCAPING SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF ANY BUILDINGS LOCATED ON THE MULTIFAMILY PARCEL.

LIMITS OF WETLANDS PER ACOE PRELIMINARY JURISDICTIONAL DETERMINATION NAO-2013-00904 DATED MAY 8, 2013



MONUMENT SIGNS (SEE LANDSCAPE ARCHITECT PLANS PREPARED BY SISKIA AURAND LANDSCAPE ARCHITECTS DATED 12/15/2017)

LANDSCAPING @ BERM CREST (PER Z-13-01 REZONING CONDITION): 1,450 L.F. 6'H BOARD ON BOARD FENCE WITH VIRGINIA PINE @ 10' OC

JOB NO. 12211-14

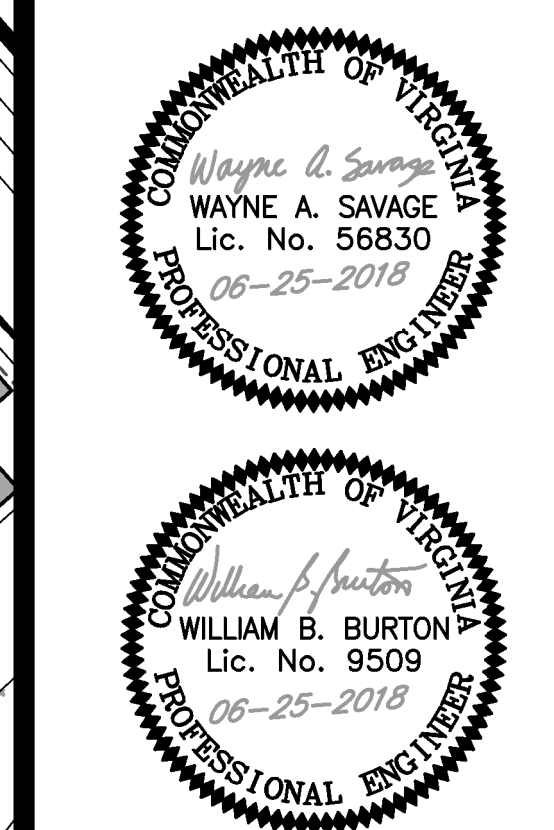
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FILED:

DATE: JANUARY 10, 2018
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REVISED: JUNE 25, 2018



40 CROSS ST., SUITE 100
P.O. BOX 51
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(804) 693-2993



PROJECT: **RIVERBEND APARTMENTS**

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA
SHEET: **LANDSCAPING PLAN (COUNTY REQ'T ONLY)**
SHEET NO:

L1

JOB NO. 12211-14

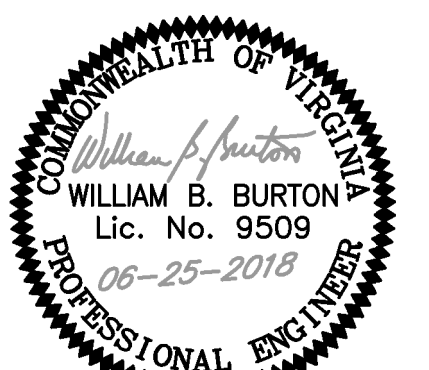
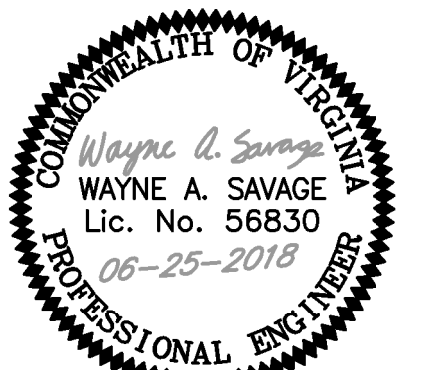
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PROJECT:
RIVERBEND APARTMENTS

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA
 SHEET:
**LANDSCAPING PLAN
 (COUNTY
 REQ'T ONLY)**
 SHEET NO:

L2

LANDSCAPE REQUIREMENTS:

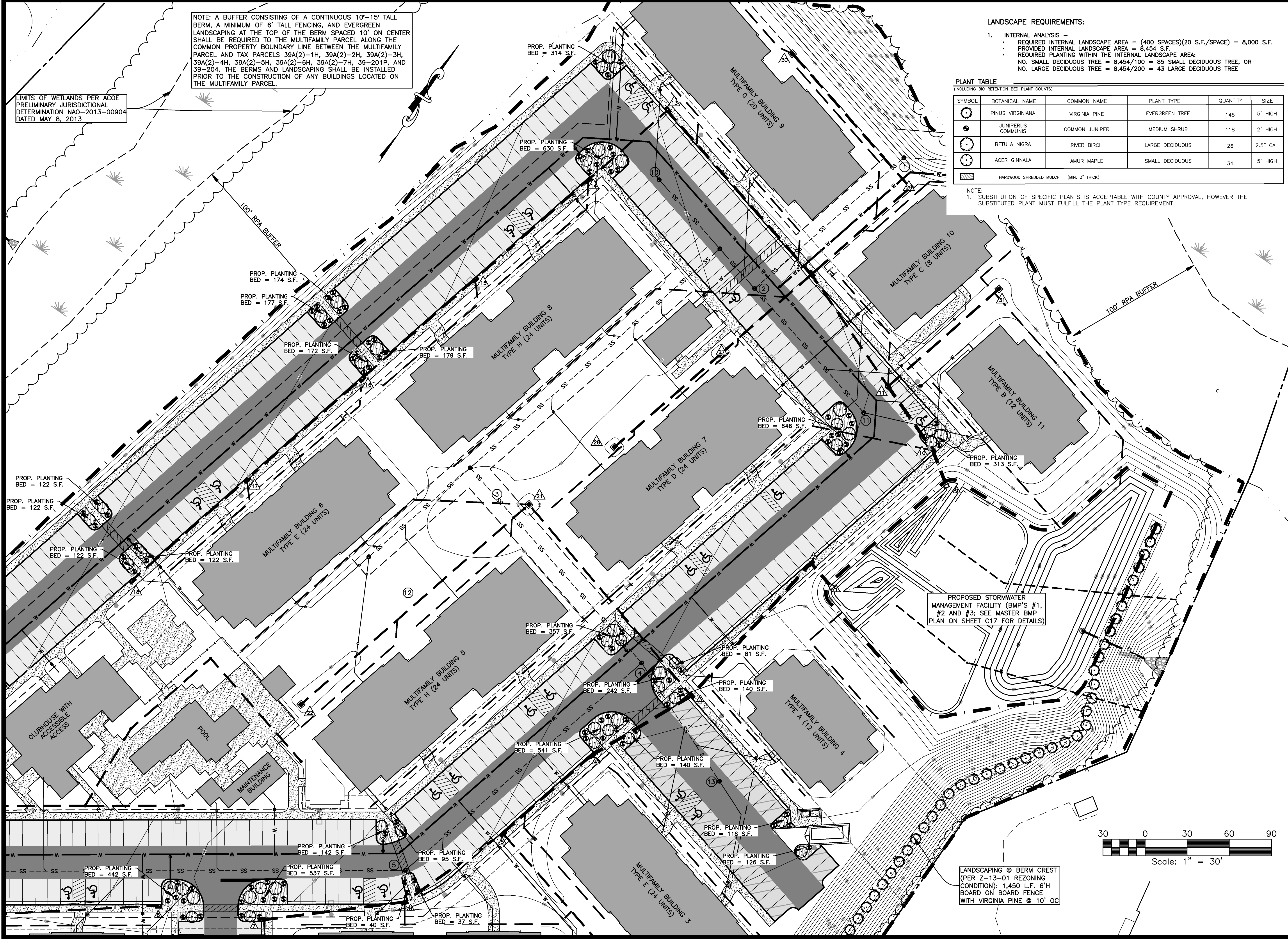
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PLANT TABLE

(INCLUDING BIO RETENTION BED PLANT COUNTS)

SYMBOL	BOTANICAL NAME	COMMON NAME	PLANT TYPE	QUANTITY	SIZE
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	ACER GINNALA	AMUR MAPLE	SMALL DECIDUOUS	34	5' HIGH
	HARDWOOD SHREDDED MULCH (MIN. 3" THICK)				

NOTE:
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NOTE: A BUFFER CONSISTING OF A CONTINUOUS 10'-15' TALL BERM, A MINIMUM OF 6' TALL FENCING, AND EVERGREEN LANDSCAPING AT THE TOP OF THE BERM SPACED 10' ON CENTER SHALL BE REQUIRED TO THE MULTIFAMILY PARCEL ALONG THE COMMON PROPERTY BOUNDARY LINE BETWEEN THE MULTIFAMILY PARCEL AND TAX PARCELS 39A(2)-1H, 39A(2)-2H, 39A(2)-3H, 39A(2)-4H, 39A(2)-5H, 39A(2)-6H, 39A(2)-7H, 39-201P, AND 39-204. THE BERMS AND LANDSCAPING SHALL BE INSTALLED PRIOR TO THE CONSTRUCTION OF ANY BUILDINGS LOCATED ON THE MULTIFAMILY PARCEL.

LIMITS OF WETLANDS PER ACOE PRELIMINARY JURISDICTIONAL DETERMINATION NAO-2013-00904 DATED MAY 8, 2013

PROP. PLANTING BED = 122 S.F.

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PROP. PLANTING BED = 314 S.F.

PROP. PLANTING BED = 630 S.F.

PROP. PLANTING BED = 174 S.F.

PROP. PLANTING BED = 177 S.F.

PROP. PLANTING BED = 172 S.F.

PROP. PLANTING BED = 179 S.F.

PROP. PLANTING BED = 646 S.F.

PROP. PLANTING BED = 313 S.F.

PROP. PLANTING BED = 357 S.F.

PROP. PLANTING BED = 81 S.F.

PROP. PLANTING BED = 242 S.F.

PROP. PLANTING BED = 140 S.F.

PROP. PLANTING BED = 541 S.F.

PROP. PLANTING BED = 140 S.F.

PROP. PLANTING BED = 118 S.F.

PROP. PLANTING BED = 126 S.F.

PROP. PLANTING BED = 142 S.F.

PROP. PLANTING BED = 95 S.F.

PROP. PLANTING BED = 537 S.F.

PROP. PLANTING BED = 40 S.F.

PROP. PLANTING BED = 37 S.F.

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DATE: JANUARY 10, 2018

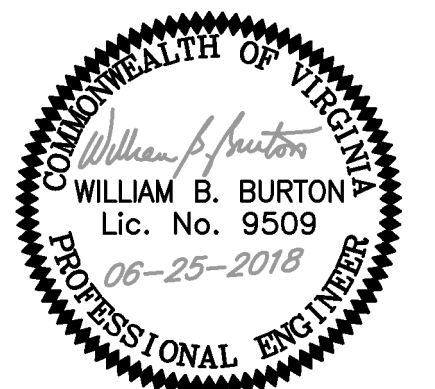
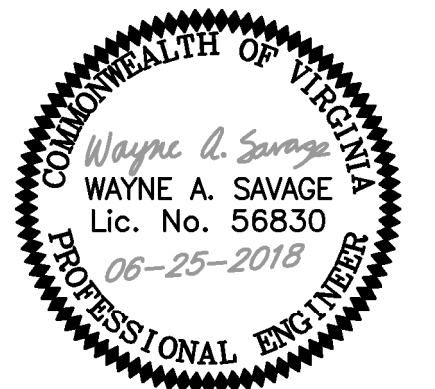
REVISED: APRIL 20, 2018

REVISED: JUNE 25, 2018



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P.O. BOX 51
URBANNA, VA 23175
(804) 693-2993



PROJECT:

RIVERBEND APARTMENTS

ABINGDON DISTRICT
GLOUCESTER, VIRGINIA

SHEET:

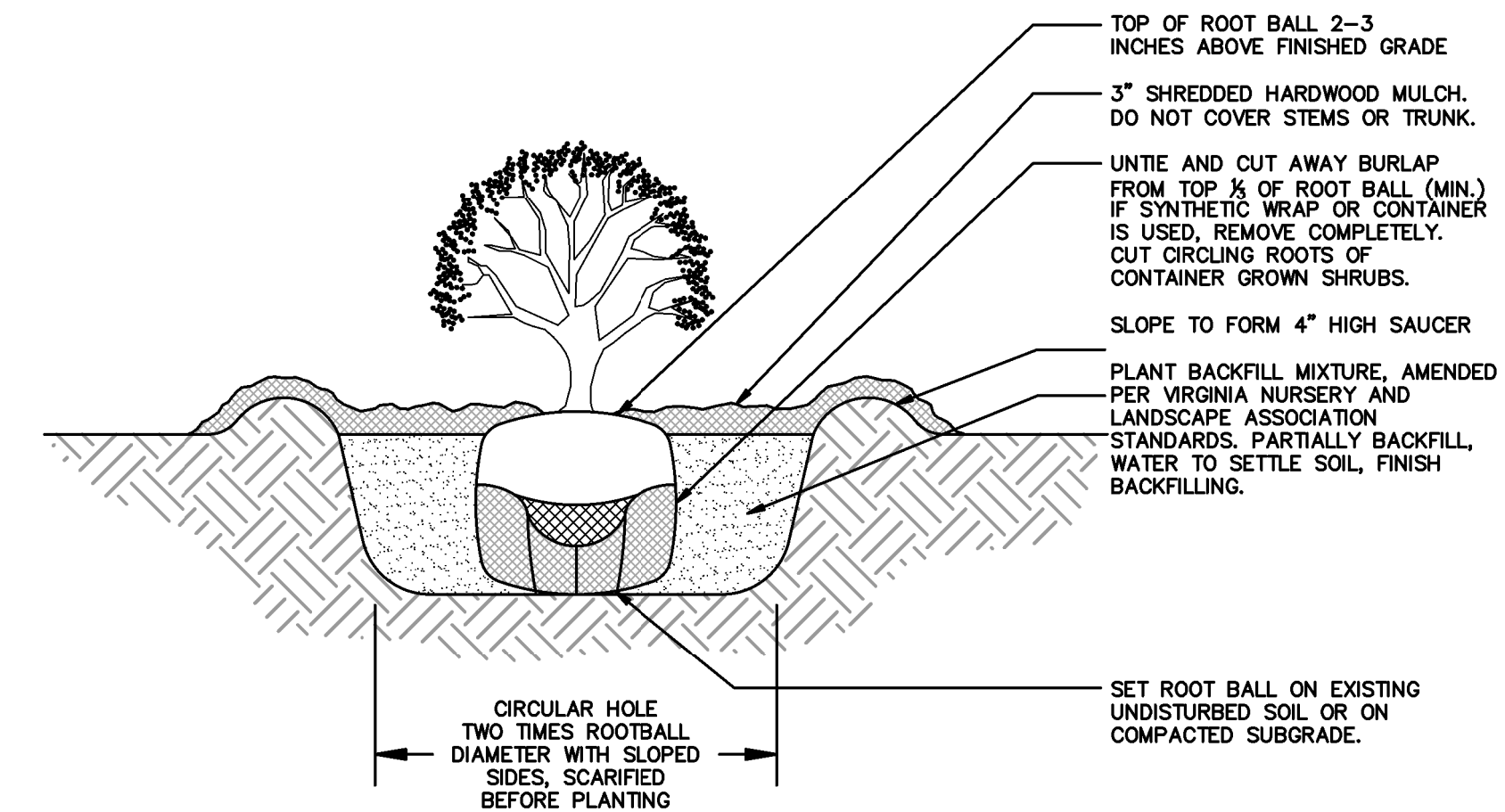
LANDSCAPING DETAILS

SHEET NO:

L3

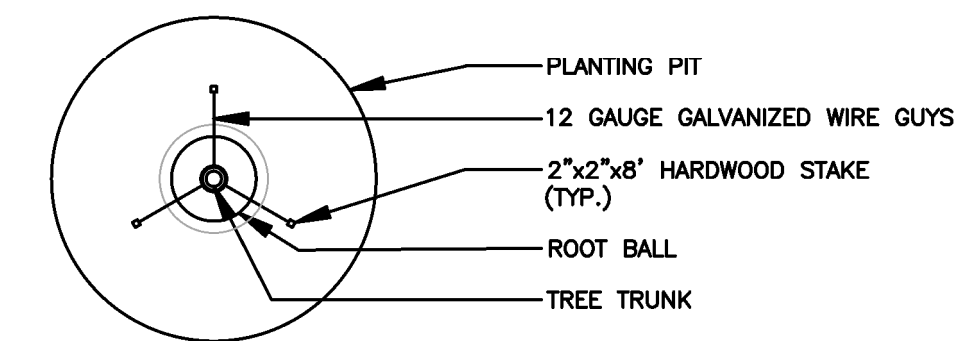
LANDSCAPE NOTES:

- ALL PLANT MATERIAL SHALL MEET OR EXCEED THE SPECIFICATIONS OF "THE AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION (ANSI Z60.1-2004)
- CONTRACTOR SHALL COMPLY WITH "THE STANDARDIZED LANDSCAPE SPECIFICATIONS FOR THE COMMONWEALTH OF VIRGINIA", PUBLISHED BY THE VIRGINIA NURSERY & LANDSCAPE ASSOCIATION, EXCEPT AS STATED WITHIN THE DRAWINGS OR PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UTILITIES WITH MISS UTILITY (1-800-552-7001) PRIOR TO COMMENCING WORK.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- A COMPLETE LIST OF PLANTS, INCLUDING SCHEDULE OF INSTALLED SIZES, QUANTITIES, AND OTHER REQUIREMENTS IS SHOWN ON THE DRAWINGS. IN THE EVENT THAT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANT MATERIALS LIST, THE PLANTING PLANS SHALL GOVERN. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BIDDING.
- EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TREE PROTECTION IN ACCORDANCE WITH THE VIRGINIA SEDIMENT AND EROSION CONTROL HANDBOOK (1992), STANDARD 3.38.
- CONTRACTOR SHALL NOT STORE VEHICLES OR MATERIALS WITHIN THE LANDSCAPE AREAS OR WITHIN DRILINES OF TREES. ANY DAMAGE TO EXISTING TREES, SHRUBS, OR LAWNS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- THE DRAWINGS REFLECT PLANT QUANTITIES, PLANT TYPES, AND PLANT PLACEMENT AS REQUIRED BY ORDINANCE. WRITTEN APPROVAL FOR PLANT SUBSTITUTIONS OR RELOCATION MUST BE OBTAINED IN ADVANCE FROM THE LOCAL APPROVING AUTHORITY AND FROM THE OWNER'S REPRESENTATIVE. THE OWNER MAY INSTALL SUPPLEMENTAL PLANT MATERIAL IN ADDITION TO PLANTS SHOWN. REFER TO LOCAL ORDINANCES FOR RESTRICTIONS THAT MAY APPLY.
- GROUPINGS OF PLANTS SHALL BE MULCHED IN A CONTINUOUS FASHION.
- ALL AREAS NOT OTHERWISE DESIGNATED SHALL RECEIVE TURF SEED OR SOD AS SPECIFIED IN "THE STANDARDIZED LANDSCAPE SPECIFICATIONS FOR THE COMMONWEALTH OF VIRGINIA", PUBLISHED BY THE VIRGINIA NURSERY & LANDSCAPE ASSOCIATION, EXCEPT AS STATED WITHIN THE DRAWINGS OR PROJECT SPECIFICATIONS.
- ALL PLANT MATERIALS SHALL BE LIVING AND IN HEALTHY CONDITION WHEN INSTALLED.
- THE OWNER, OR HIS AGENT, SHALL BE RESPONSIBLE FOR THE MAINTENANCE, REPAIR, AND REPLACEMENT OF ALL LANDSCAPE MATERIALS.
- ALL PLANT MATERIAL SHALL BE TENDED AND MAINTAINED IN A HEALTHY GROWING CONDITION AND FREE FROM REFUSE AND DEBRIS AT ALL TIMES.
- ALL UNHEALTHY, DYING OR DEAD PLANTING MATERIAL SHALL BE REPLACED DURING NEXT PLANTING SEASON.
- WATER SHALL BE SUPPLIED BY OUTSIDE SPIGOT ON BUILDINGS.
- TOTAL PROPOSED LANDSCAPING, TREES AND SHRUBS SHOWN ON THESE PLANS INDICATE THE TOTAL REQUIRED BY ARTICLE 9 AND ARTICLE 11 OF THE GLOUCESTER ZONING ORDINANCE. CREDIT FOR TREES PRESERVED MEETING THE REQUIREMENTS OF SECTION 11-5(4) OF THE ZONING ORDINANCE CAN BE CREDITED AS INTERNAL LANDSCAPING.

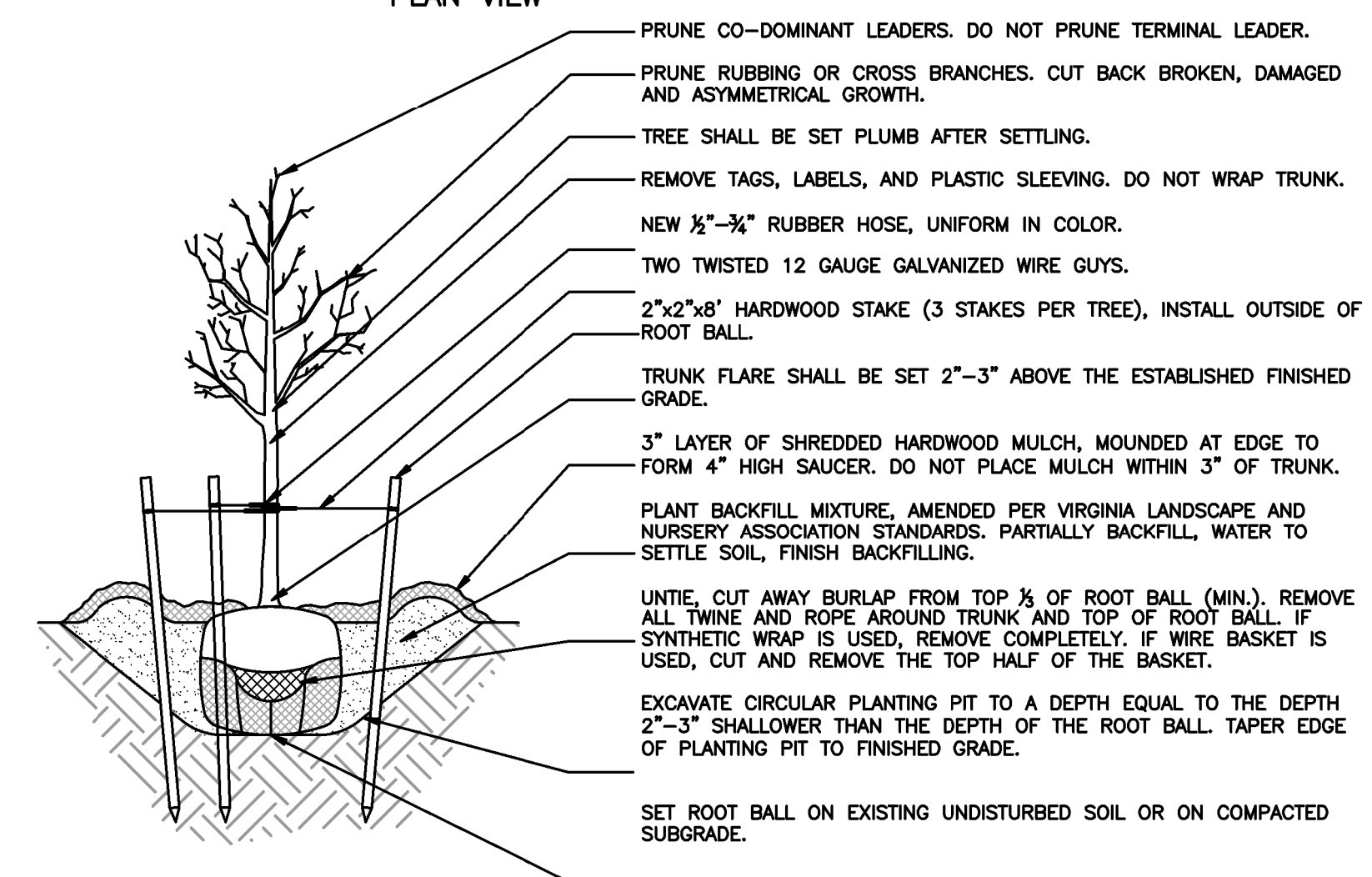


SHRUB PLANTING DETAIL

SCALE: NONE



PLAN VIEW



TREE PLANTING DETAIL

SCALE: NONE

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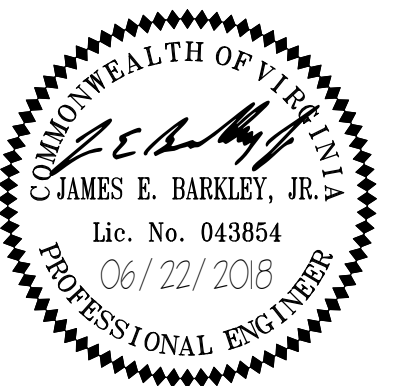
PROJECT MANAGER: GLJ
 DESIGNED: KPM
 CAD: KPM
 CHECKED: JEB

FILED:
 DATE: JUNE 22, 2018

REVISED:
 REVISED:



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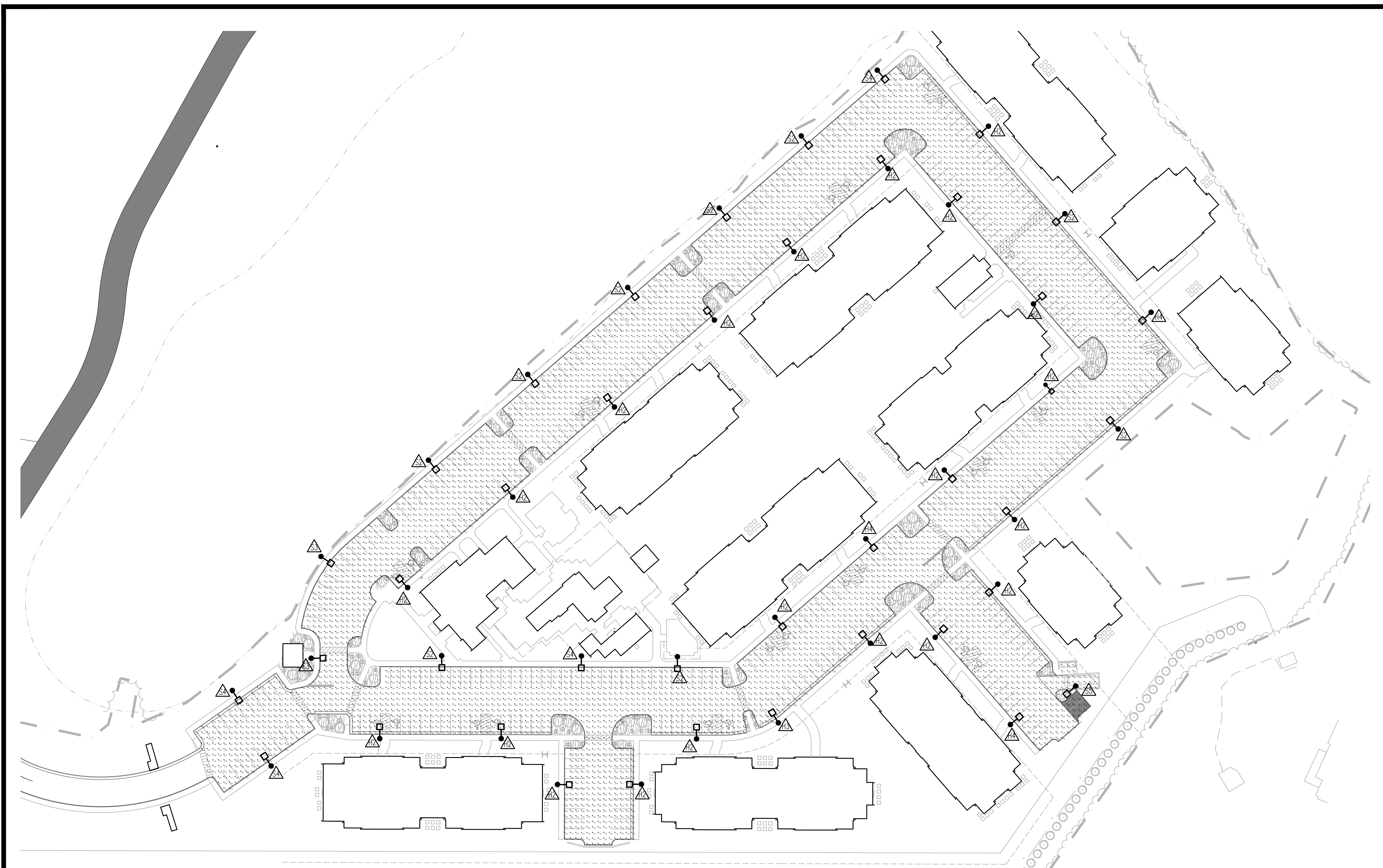


PROJECT:
RIVERBEND APARTMENTS

ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

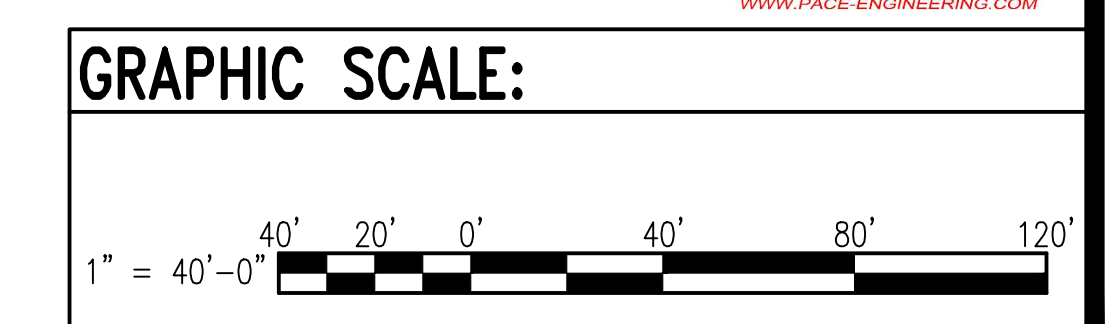
SHEET:
 PHOTOMETRIC CALCULATIONS

SHEET NO:
ELO01



PHOTOMETRIC CALCULATIONS
 SCALE: 1" = 40'-0"

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
PARKING LOT	2.3	4.6	1	2.3	4.6



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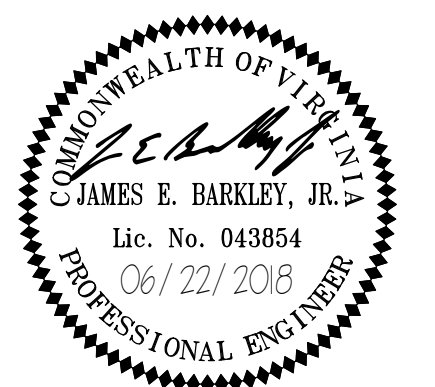
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PROJECT:
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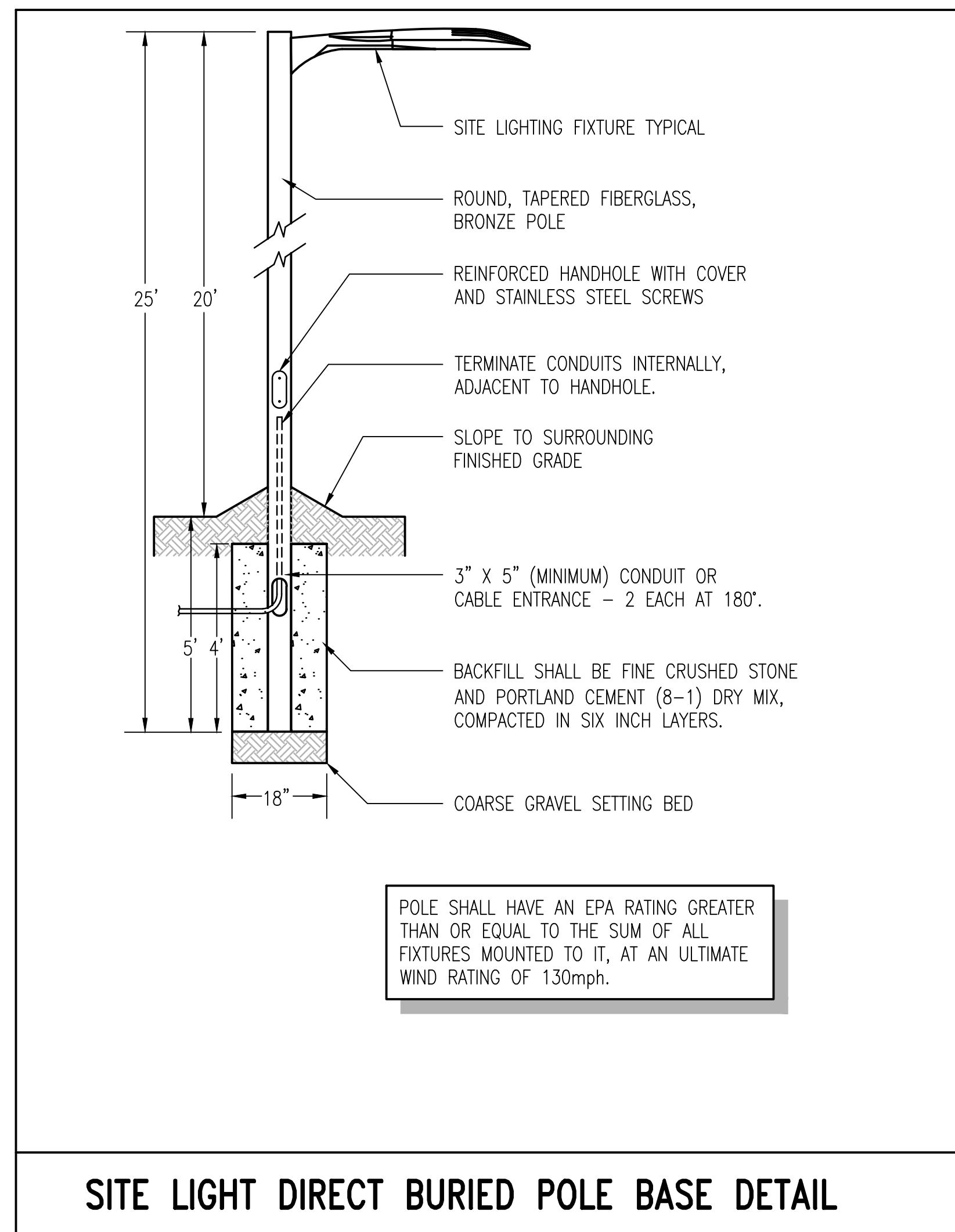
ABINGDON DISTRICT
 GLOUCESTER, VIRGINIA

SHEET:
 LEGEND AND DETAILS

SHEET NO:
EL002

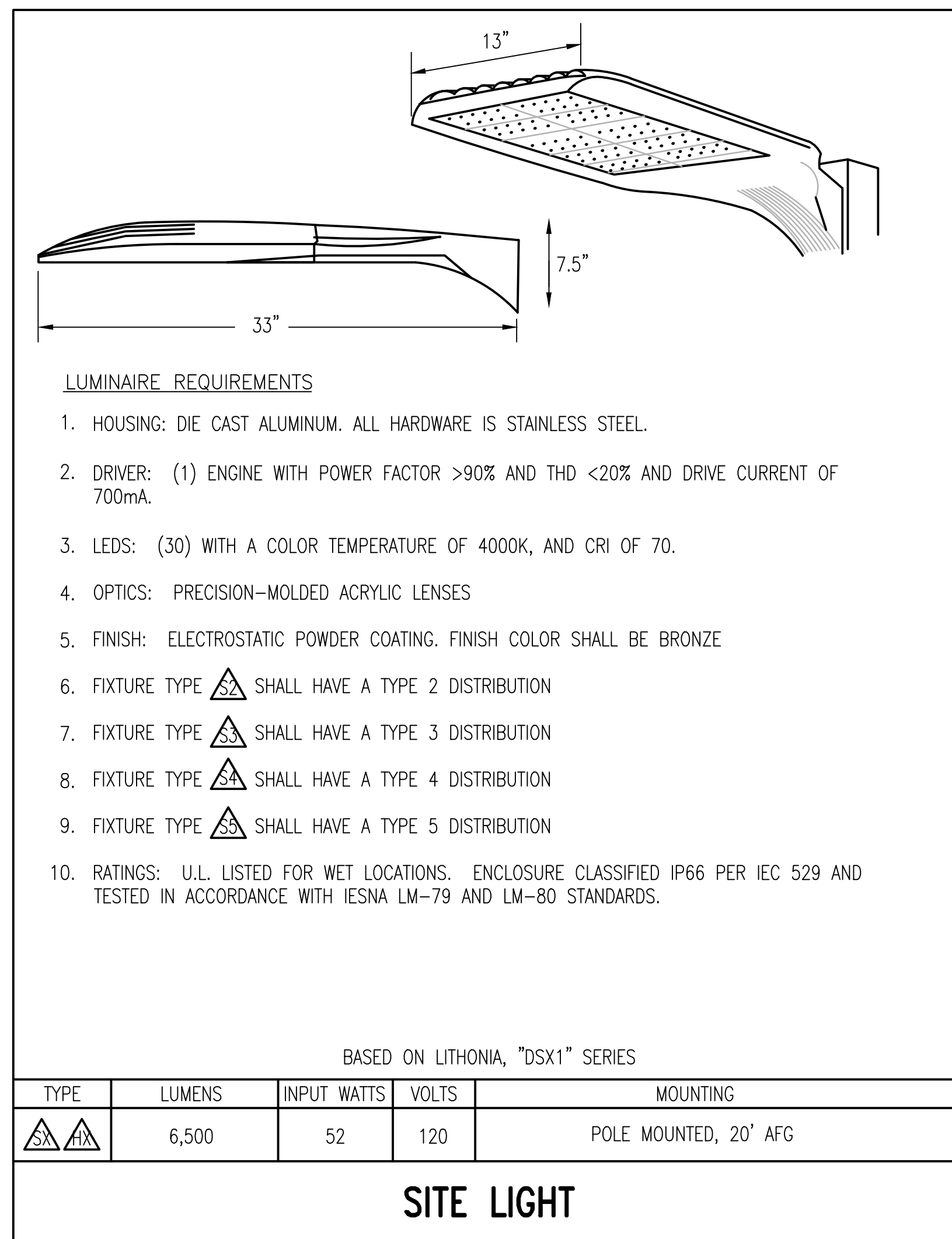
ELECTRICAL LEGEND

- POLE MOUNTED LIGHT FIXTURE
- + X.X PHOTOMETRIC LIGHTING CALCULATION POINT IN FOOT CANDLES.
- △ LIGHTING FIXTURE TYPE SYMBOL. SEE LIGHTING FIXTURE DETAILS.



POLE SHALL HAVE AN EPA RATING GREATER THAN OR EQUAL TO THE SUM OF ALL FIXTURES MOUNTED TO IT, AT AN ULTIMATE WIND RATING OF 130mph.

SITE LIGHT DIRECT BURIED POLE BASE DETAIL



LUMINAIRE REQUIREMENTS

1. HOUSING: DIE CAST ALUMINUM. ALL HARDWARE IS STAINLESS STEEL.
2. DRIVER: (1) ENGINE WITH POWER FACTOR >90% AND THD <20% AND DRIVE CURRENT OF 700mA.
3. LEDES: (30) WITH A COLOR TEMPERATURE OF 4000K, AND CRI OF 70.
4. OPTICS: PRECISION-MOLDED ACRYLIC LENSES
5. FINISH: ELECTROSTATIC POWDER COATING. FINISH COLOR SHALL BE BRONZE
6. FIXTURE TYPE △ SHALL HAVE A TYPE 2 DISTRIBUTION
7. FIXTURE TYPE △ SHALL HAVE A TYPE 3 DISTRIBUTION
8. FIXTURE TYPE △ SHALL HAVE A TYPE 4 DISTRIBUTION
9. FIXTURE TYPE △ SHALL HAVE A TYPE 5 DISTRIBUTION
10. RATINGS: U.L. LISTED FOR WET LOCATIONS. ENCLOSURE CLASSIFIED IP66 PER IEC 529 AND TESTED IN ACCORDANCE WITH IESNA LM-79 AND LM-80 STANDARDS.

BASED ON LITHONIA, "DSX1" SERIES

TYPE	LUMENS	INPUT WATTS	VOLTS	MOUNTING
△ △	6,500	52	120	POLE MOUNTED, 20' AFG

SITE LIGHT

