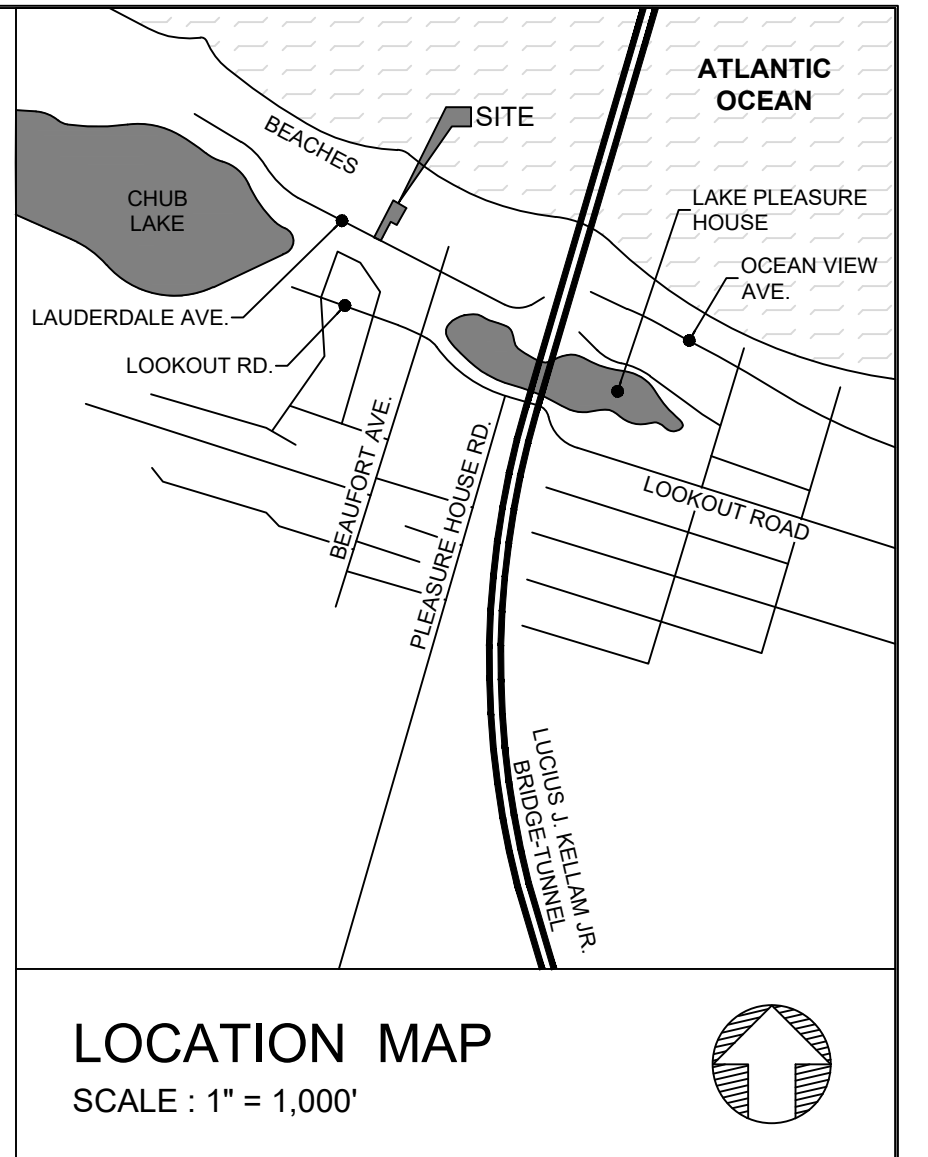


SINGLE FAMILY SITE PLAN
FOR
LOTS 11, 12, & 31, BLOCK 18,
SUBDIVISION OF CHESAPEAKE PARK
M.B. 4, PG. 47
BAYSIDE BOROUGH-VIRGINIA BEACH, VIRGINIA



Sheet List Table	
Sheet Number	Sheet Title
C1	COVER SHEET
C2	TOPOGRAPHIC SURVEY, DEMOLITION, EROSION, & SEDIMENT PLAN
C3	SITE PLAN
C4	DETAILS
C5	DETAILS

Agreement in Lieu of an Erosion and Sediment Control Plan Required

Agreement in Lieu of a Stormwater Management Plan Required

**Development Plan
Approval City of
Virginia Beach
Planning/Development Service
Center (DSC)**

- ☐ Commercial Site Plan
☐ Multi-Lot Residential
☒ Single Family Site Plan
☐ Duplex Site Plan
☐ Land Management Drainage Plan
☐ Single Family Site Plan in RPA

- The City of Virginia Beach has reviewed this development plan solely for the purpose of ascertaining its compliance with applicable City ordinances, specifications, standards, policies, and procedures. Therefore, the approval of this development plan is merely a determination that the plan, as submitted, complies with applicable City ordinances, specifications, standards, policies, and procedures. The City's approval of this development plan is not an endorsement, and shall not in any way be deemed or construed to constitute, approval by the City of the accuracy or sufficiency of any design, engineering, structure, improvement, or other information set forth therein. Rather, the City relies solely upon the seal of the design professional of record that this development plan is designed and engineered in accordance with all applicable industry standards of care and practices. Accordingly, the City, and its volunteers, students, employees and officials shall be neither responsible nor liable for any claims, actions, suits, damages, losses, or expenses, including reasonable attorney's fees and any litigation expenses, resulting from or arising out of or in connection with the design or engineering shown on this approved development plan, the information set forth therein or any work performed in accordance with said approved development plan.
- The approval of this development plan or the subsequent issuance of a building permit by the City does not constitute an endorsement or create any liability authority for any person, firm or agency to perform work of any nature within the limits of City street rights-of-way/easements without first obtaining a right-of-way permit from Planning/Development Services Center (DSC). Exception: driveway apron associated with a residential building permit.
 - The City of Virginia Beach hereby grants **APPROVAL** for the proposed improvements shown in this development plan. All improvements shall be installed as shown on this development plan and in accordance with applicable City ordinances, specifications, standards, policies, and procedures. This approval is VALID for a period of five (5) years from the approval date shown below.

Zoning Information

Use: SINGLE FAMILY RESIDENTIAL

Zoning: R5R (NE)

Standard Setbacks – Variance Setbacks:

<u>20</u> Front	<u> </u>	Zoning Inspection: BZA <u> </u> CUP <u> </u>
<u>8</u> Side	<u> </u>	FVR <u> </u> CRZ <u> </u>
<u> </u> Side Corner	<u> </u>	CBPA Inspection: YES <u> </u> NO <u> </u> X
<u>20</u> Rear	<u> </u>	Flood Plain <u> </u> X/VE
<u>35</u> Height	<u> </u>	Watershed <u> </u> CB <u> </u>
		AICUZ: <u> </u> <65 <u> </u>

Remarks: _____

DSC File Number: E02-010247-SF Date: 07/01/2021 Beth Sykes
DSC/Zoning Staff

RESERVED FOR APPROVAL CERTIFICATION & NOTES

PLAN STATUS		
DATE	INITIAL	DESCRIPTION
08.08.19	MSG	1st Site Plan Submittal
03.23.21	MSG	2nd Site Plan Submittal
04.14.21	MSG	3rd Site Plan Submittal
05.21.21	MSG	4th Site Plan Submittal
06.11.21	MSG	5th Site Plan Submittal

COVER
SHEET

C1

of 5 Sheets

- | EXISTING | | NEW |
|----------|----------------------------|-----|
| | MANHOLE | |
| | SANITARY CLEANOUT | |
| | VALVE | |
| | WATER METER | |
| | FIRE HYDRANT | |
| | WELL | |
| | DROP INLET | |
| | CURB INLET | |
| | GAS METER | |
| | POWER POLE | |
| | LIGHT POLE | |
| | LIGHT POLE / CONCRETE BASE | |
| | PEDESTAL | |
| | CURB AND GUTTER | |
| | FENCE | |
| | PROPERTY LINE | |
| | BUILDINGS | |
| | STORM SEWER | |
| | SANITARY SEWER | |
| | WATER | |
| | ELECTRIC & TELEPHONE LINE | |
| | TRAFFIC BOX | |
| | SIGN | |
| | TREE | |
| | BUSH | |
| | PAVEMENT | |
| | CONCRETE | |
| | TEMPORARY BENCHMARK (TBM) | |
| | ELEVATIONS | |
| | TOP OF CURB ELEVATIONS | |
| | TOP OF WALK ELEVATIONS | |
| | SILT FENCE | |

- TRAFFIC MAINTENANCE, CONTROL, & LIGHTING NOTES:

1. ALL TRIPPING IN THE PUBLIC RIGHT-OF-WAY MUST BE OF THERMOPLASTIC MATERIAL FOR LANE MARKINGS, CURB MARKINGS, SIDEWALKS, ETC. ALL MARKINGS SHALL BE OF THE VDOT APPROVED TYPE B, CLASS V PREFORMED PAVEMENT MESSAGE MARKING MATERIAL.
2. THE CITY OF VIRGINIA BEACH, TRAFFIC ENGINEERING DIVISION IS RESPONSIBLE FOR REVIEWING AND APPROVING ALL TRAFFIC MAINTENANCE AND CONTROL PLANS AND REVIEWING THE SEQUENCE OF CONSTRUCTION PLANS ESSENTIAL TO COMPLETE THIS PROJECT.
3. ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES, METHODS, AND APPLICATIONS WILL COMPLY WITH THE FOLLOWING PUBLICATIONS INCLUDING ALL CURRENT EDITIONS AND REVISIONS:
 - a). MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS ISSUED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION, (2003 EDITION)
 - b). VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS VOL. II
 - c). VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS
 - d). VIRGINIA DEPARTMENT OF TRANSPORTATION WORK AREA PROTECTION MANUAL
 - e). CITY OF VIRGINIA BEACH, PUBLIC WORKS SPECIFICATIONS AND STANDARDS MANUAL
4. WORK HOURS IN ROADWAY OPEN TO TRAFFIC AND/OR PEDESTRIAN AREA:
 - a). MONDAY THROUGH SATURDAY: WORK WILL BE COMPLETED BETWEEN THE HOURS OF 9:00 AM AND 4:00 PM ONLY.
 - b). SUNDAYS AND HOLIDAYS: NO WORK MAY BE COMPLETED IN THE ROADWAY OR PEDESTRIAN AREAS UNLESS OTHERWISE NOTED OR APPROVED IN WRITING BY THE CITY.
 - c). ADDITIONAL RESTRICTIONS MAY BE BASED ON TRAFFIC CONDITIONS.
EXTENDED WORK HOURS AND WORKDAYS WILL BE REQUESTED WITH A WRITTEN REQUEST TO THE CITY. THIS REQUEST MUST BE SUBMITTED AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE EXTENDED WORK PERIODS. **(PLEASE NOTE THAT IF WORK IS TO BE CONDUCTED IN THE ROADWAY AREA, CERTAIN RESTRICTIONS WILL APPLY FROM OCTOBER 1 TO OCTOBER 31, 2019. CONTACT TRAFFIC ENGINEERING FOR THESE RESTRICTIONS)**
5. TRAFFIC CONTROL PLANS:

TRAFFIC CONTROL PLANS ARE INCLUDED IN THE CONSTRUCTION PLANS FOR THE REFERENCED PROJECT. HOWEVER, FIELD CONDITIONS MAY REQUIRE MODIFICATIONS. IF THE CONTRACTOR FEELS THAT THE TRAFFIC CONTROL PLANS INCLUDED WITH THIS PROJECT DOES NOT SUIT CONDITIONS AT A WORK SITE, THEN THE CONTRACTOR SHALL SUBMIT TO THE CITY A REVISED PLAN TO MAINTAIN TRAFFIC. THE REVISED PLAN SHALL INCLUDE THE SPECIFIC TRAFFIC CONTROL DETAILS AND SHALL IDENTIFY THE SEQUENCE OF CONSTRUCTION. THE CONTRACTOR WILL SUBMIT THE REVISED TRAFFIC CONTROL PLAN(S) A **MINIMUM 10 CALENDAR DAYS** PRIOR TO THE START OF WORK. THE CONTRACTOR WILL NOT DISRUPT TRAFFIC PATTERNS UNTIL THE CITY HAS APPROVED THE REVISED TRAFFIC CONTROL PLAN(S). THE CITY RESERVES THE RIGHT TO MODIFY ANY TRAFFIC CONTROL PLAN(S) AS NECESSARY IN THE INTEREST OF PUBLIC SAFETY OR TRAFFIC EFFICIENCY. PRIOR TO BEGINNING WORK, IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSURE THAT ALL REQUIREMENTS HAVE BEEN MET AND THAT ALL TRAFFIC CONTROL DEVICES HAVE BEEN INSTALLED ACCORDING TO THE APPROVED TRAFFIC PLAN(S).
6. THE CONTRACTOR SHALL CHECK ALL TRAFFIC MAINTENANCE AND CONTROL DEVICES AND WORK ZONES BEFORE, DURING, AND AFTER EACH WORKDAY TO ENSURE PROPER OPERATION. ON WEEKENDS AND HOLIDAYS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CHECKING THE TRAFFIC MAINTENANCE AND CONTROL DEVICES FOR PROPER OPERATION.
7. TWO-WAY TRAFFIC WILL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION UNLESS TRAFFIC ENGINEERING HAS APPROVED ANOTHER ALTERNATIVE FOR TRAFFIC CONTROL, SUCH AS A LANE CLOSURE OR A TEMPORARY STREET CLOSURE. TEMPORARY STREET CLOSURES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION REGARDLESS IF A STREET CLOSURE IS IN EFFECT OR NOT.
8. IF THERE IS AN APPROVAL FROM TRAFFIC ENGINEERING FOR A LANE CLOSURE OR A TEMPORARY STREET CLOSURE, ALL LANES OF TRAFFIC WILL BE REOPENED TO TRAFFIC AT THE CONCLUSION OF EACH CONSTRUCTION DAY, **UNLESS** A 24-HOUR TEMPORARY STREET CLOSURE IS APPROVED AND IN EFFECT.
9. IN ALL CASES IN WHICH EXISTING OR ESTABLISHED TRAFFIC PATTERNS WILL BE DISRUPTED, THE CONTRACTOR WILL NOTIFY ALL AFFECTED RESIDENTS AND/OR BUSINESSES A **MINIMUM OF 48 HOURS** IN ADVANCE. IN ALL CASES IN WHICH EXISTING OR ESTABLISHED TRAFFIC PATTERNS WILL BE DISRUPTED, A COPY OF THE NOTICE SHALL BE FORWARDED TO TRAFFIC ENGINEERING FOR REVIEW AND APPROVAL PRIOR TO BEGINNING WORK.
10. AT NIGHT OR DURING NON-CONSTRUCTION HOURS, ALL EXCAVATED AREAS ARE TO BE BACKFILLED OR SECURED AND PROTECTED BY USING APPROVED SAFETY DEVICES OR MATERIALS.
11. ANY TRAFFIC CONTROL DEVICES INCLUDING BUT NOT LIMITED TO PAVEMENT MARKINGS, SIGN, AND TRAFFIC CONTROL SIGNAL EQUIPMENT DAMAGED OR DESTROYED BY THE CONTRACTOR MUST BE REPLACED AT THE CONTRACTOR'S EXPENSE UNLESS THEIR REMOVAL OR DESTRUCTION IS CALLED FOR BY THE PLANS.
12. FOR ANY FURTHER INFORMATION ON TRAFFIC MAINTENANCE AND CONTROL REQUIREMENTS, PLEASE CONTACT THE TRAFFIC ENGINEERING DIVISION, 2405 COURTHOUSE DRIVE, VIRGINIA BEACH, VIRGINIA 23464-9031, (757) 385-4131 FAX: (757) 385-4913.

1. **GENERAL NOTES**
2. AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONTACT MISS UTILITIES OF VA AT 811 OR ONLINE TO HAVE UTILITIES MARKED.
3. THE OWNER/DEVELOPER IS RESPONSIBLE FOR REPLACING OR REPAIRING ANY AND ALL DAMAGES TO DRIVEWAYS, ROADS, SIDEWALKS, AND OTHER PUBLIC OR PRIVATE IMPROVEMENTS AND ABOVE AND BELOW GROUND UTILITIES DAMAGED DURING CONSTRUCTION. MILLING AND/OR OVERLAY OF THE STREET MAY BE REQUIRED AT THE DIRECTION OF THE CITY INSPECTOR.
4. GPIN: 1570-42-8869, 1570-42-8814, & 1570-42-7880
5. THIS LOT OR PARCEL WAS CREATED BY PLAT RECORDED VIA MAP BOOK 4, PAGE 47
6. LEGAL DESCRIPTION: LOTS 11, 12, & 31 BLOCK 18, SUBDIVISION OF CHESAPEAKE BEACH
7. ZONING: R5R
8. THIS SITE LIES WITHIN AIRCRAFT ACCIDENT POTENTIAL ZONE N1A AND NOISE ZONE -65 db LDN and IS NOT SUBJECT TO AIRCRAFT ACCIDENTS AND/OR ABOVE AVERAGE NOISE LEVELS DUE TO ITS PROXIMITY TO AIRPORT OPERATIONS. AIRCRAFT ACCIDENT POTENTIAL ZONE N1A AND NOISE ZONE -65 db LDN ARE NOT REQUIRED IN ACCORDANCE WITH THE AIRPORT NOISE ATTENUATION AND SAFETY ORDINANCE AND HEIGHT RESTRICTIONS HAVE BEEN IMPOSED IN ACCORDANCE WITH SECTION 202(b) OF THE CITY ZONING ORDINANCE.
9. THIS PLAN IS BASED ON THE NAVD 1988 DATUM. THE CITY OF VIRGINIA BEACH CONTROL REFERENCE POINT FOR THE ELEVATION DESIGN OF THIS PLAN IS THE VERTICAL CONTROL STATION PS-360 ELEVATION = 8.94'
10. NORTH MERIDIAN SHOWN HEREON IS BASED ON VIRGINIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE 1983/1993 (HARN).
11. THE SITE IS LOCATED IN THIS MAJOR WATERSHED(S): CHESAPEAKE BAY
12. THIS PROPERTY DOES FALL IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON THE FEMA NP1 FIRM FOR THE CITY OF VIRGINIA BEACH, COMMUNITY-PANEL NUMBER 515531-0017G, DATED JANUARY 16, 2015.
13. THE PROPERTY FALLS IN FLOOD ZONE "X and VE (EL 9)".
14. THE PROPOSED DWELLING IS LOCATED IN A SPECIAL FLOOD HAZARD AREA.

- EXISTING USE: **RESIDENTIAL/SINGLE FAMILY**

16. PROPOSED USE: **RESIDENTIAL/SINGLE FAMILY**

17. PROPOSED NUMBER OF DWELLING UNITS: **1**

18. PROPERTY IS LOCATED IN A "FLOOD ZONE SUBJECT TO SPECIAL RESTRICTIONS" PER CITY CODE, APPENDIX K, FLOODPLAIN ORDINANCE, SECTION 4.10.

19. LOWEST FINISHED FLOOR NOTE: FOR NEW CONSTRUCTION OR SUBSTANTIAL IMPROVEMENT OF ANY EXISTING STRUCTURE, THE LOWEST FINISHED FLOOR ELEVATION, INCLUDING BASEMENTS, OR BOTTOM OF LOWEST STRUCTURAL MEMBER, WHICHEVER IS APPLICABLE, IS AT LEAST TWO (2) FEET ABOVE THE 100-YEAR BASE FLOOD ELEVATION PER THE FIRM MAP OR THE 100-YEAR WATER SURFACE ELEVATION SHOWN ON THE APPROVED SUBDIVISION CONSTRUCTION PLAN.

20. THE LOT GRADING ON THIS PLAN IS IN ACCORDANCE WITH THE LATEST SUBDIVISION CONSTRUCTION PLAN SUBMITTED TO AND APPROVED BY THE CITY OF VIRGINIA BEACH. THE DESIGNER HAS DESIGNED ON THIS PLAN:

1. A 5' WIDE CONCRETE SIDEWALK IS **NOT** REQUIRED ALONG THE FRONTAGE OF THIS LOT AS SHOWN ON THIS SITE PLAN.

22. PLATTED LOT AREA: **7,500 S.F. OR 0.172 AC. (LOTS 11, 12 & 13)**

23. LOT AREA OUTSIDE OF WATER, MARSH AND WETLANDS: **7,500 S.F. OR 0.172 AC.**

24. SOIL CLASSIFICATION (PER USDA SOIL SURVEY) SOIL TYPE: **22E, NEWHAM**

25. AREA OF SITE WITHIN THE RPA: **0 S.F. OR 0 AC.**

26. IMPROVEMENT AREA:

PRE-DEVELOPMENT - **3,822 S.F. OR 51%**
POST-DEVELOPMENT - **4,490 S.F. OR 60%**

27. AREA OF LAND DISTURBANCE: **7,500 S.F. OR 0.172 AC.**

28. LOT COVERAGE PER CITY CODE APPENDIX A, ARTICLE 5, SECTION 502a(1)(2), **23% SQ.FT., 17.5% (30% MAX.)**

29. PROPOSED BUILDING HEIGHT (MEASURED FROM THE LOWEST GRADE OF STRUCTURE TO HIGHEST POINT ON STRUCTURE): **25 FEET.**

30. BUILDING CONSTRUCTION TYPE: **TYPE IIB**

31. RESIDENTIAL TREE CANOPY, PER CITY CODE APPENDIX E, TREE PLANTING, PRESERVATION AND REPLACEMENT: REQUIRED: **400 S.F.**, PROVIDED: **400 S.F.**

32. TREES AND VEGETATION LOCATED IN THE CITY RIGHT OF WAY ARE CITY PROPERTY AND CANNOT BE CUT, DAMAGED OR REMOVED WITHOUT PERMISSION FROM THE DEPARTMENT OF PARKS AND RECREATION/LANDSCAPE MANAGEMENT OFFICE. CALL (757) 385-4461 FOR ASSISTANCE. REMOVAL WITHOUT REQUIRED PERMISSION IS A PUNISHABLE CLASS 3 MISDEMEANOR PER CITY CODE ARTICLE 1, SECTION 23-39.

33. ALL TREES IN THE CITY RIGHT OF WAY AND INTEND TO REMAIN ARE REQUIRED TO HAVE TREE PROTECTION IN COMPLIANCE WITH THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) SPECIFICATIONS AND STANDARDS

34. EROSION AND SEDIMENT (E&S) CONTROL AGREEMENT IN LIEU OF A PLAN: ALL LAND DISTURBANCE OF 2,500 SQUARE FEET OR GREATER REQUIRES AN APPROVED EROSION AND SEDIMENT CONTROL PLAN. THE OWNER/DEVELOPER OF THIS SINGLE FAMILY RESIDENCE CHOOSES TO UTILIZE AN AGREEMENT IN LIEU OF A PLAN TO MEET THIS REQUIREMENT. ALL E&S MEASURES HAVE NOT BEEN SHOWN HEREON. AT A MINIMUM, SILT FENCE SHALL BE INSTALLED AROUND THE AREA OF CONSTRUCTION. A CONSTRUCTION ENTRANCE AND INLET PROTECTION SHALL ALSO BE INSTALLED AND ANY OTHER MEASURES DEEMED NECESSARY BY THE CITY INSPECTOR(S). ALL E&S MEASURES AND PRACTICES SHALL COMPLY WITH THE CITY OF VIRGINIA BEACH AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) REGULATIONS, SPECIFICATIONS AND STANDARDS.

35. STORMWATER MANAGEMENT AGREEMENT IN LIEU OF A PLAN: A STORMWATER MANAGEMENT PLAN IS REQUIRED FOR THE CONSTRUCTION OF A SINGLE FAMILY RESIDENCE WITH LAND DISTURBANCE OF 2,500 SQUARE FEET OR GREATER LOCATED IN THE CHESAPEAKE BAY WATERSHED, AND LAND DISTURBANCE OF 1 ACRE OR GREATER IN OTHER WATERSHEDS. THE OWNER/DEVELOPER OF THIS SINGLE FAMILY RESIDENCE CHOOSES TO UTILIZE AN AGREEMENT IN LIEU OF A PLAN TO MEET THIS REQUIREMENT. THEREFORE STORMWATER MANAGEMENT MEASURES SHOWN HEREON ARE NOT INTENDED FOR REVIEW, AND ARE SHOWN FOR INFORMATION AND OWNER'S ATTENTION PURPOSES ONLY. ALL STORMWATER MEASURES AND PRACTICES SHALL COMPLY WITH THE CITY OF VIRGINIA BEACH AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) REGULATIONS, SPECIFICATIONS AND STANDARDS.

36. TOTAL AREA TREATED BY BMP: IMPERVIOUS **2,238 SQ.FT.**

37. HYDRAULIC UNIT CODE (HUC 6): **C626 (HUC 12): 020801082022**

38. DOMESTIC WATER - COMBINED FIXTURE VALUES (AWWA) - **80.7; 22.5 GPM DEMAND**

5. ANY MILLING AND OVERLAYING REQUIRED WITHIN RIDGE ROAD RIGHT-OF-WAY TO OBTAIN A SMOOTH PAVEMENT TRANSITION SHALL BE AT THE DIRECTION AND DISCRETION OF THE PLANNING/CIVIL INSPECTOR.

8. ALL STAGING OF CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE ONSITE. NO VEHICLES WILL BE ALLOWED TO PARK WITHIN THE RIGHT-OF-WAY OF ANY PUBLIC STREET UNLESS THE VEHICLE IS BEING USED AS PART OF AN ACTIVE CONSTRUCTION ZONE WITHIN THE RIGHT-OF-WAY.

9. NO RIGHTS-OF-WAY WILL BE DEDICATED WITH THIS PLAN.

10. THE LOWEST FLOOR ELEVATION, INCLUDING BASEMENTS AND ATTACHED GARAGES, IS AT LEAST TWO-FOOT ABOVE THE ONE-HUNDRED YEAR BASE FLOOD ELEVATION AS ADOPTED BY THE CITY OF VIRGINIA BEACH.

11. THE CERTIFYING DESIGN PROFESSIONAL IS RESPONSIBLE AND LIABLE FOR THE DESIGN AND THE CONTENTS OF THIS APPROVED PLAN.

12. WHETHER A STORMWATER MANAGEMENT PLAN IS OR IS NOT REQUIRED, WHERE DRAINAGE FACILITIES (BMPs) ARE NECESSARY DUE TO INADEQUACY OF THE DOWNSLOPE SYSTEM, THE DRAINAGE FACILITIES ARE REVIEWED AND APPROVED AS SHOWN HEREON. ADDITIONAL SEPARATE DRAINAGE CALCULATIONS MAY BE SUBMITTED AND ARE CONSIDERED A PART OF THIS PLAN.

13. SEE SEQUENCE OF CONSTRUCTION.

14. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, AND AS REQUIRED BY THE CITY'S INSPECTORS.

15. ANY AND ALL MATERIALS OR DEBRIS TRACKED ONTO A PUBLIC OR PRIVATE ROAD SURFACE WILL BE REMOVED AT THE END OF EACH DAY OR AS DIRECTED BY THE CIVIL INSPECTOR. SEDIMENT WILL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A LEGALLY PERMITTED SEDIMENT CONTROLLED DISPOSAL FACILITY.

16. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN A LAWFUL MANNER AT A LEGALLY PERMITTED SITE.

17. SEED IN ACCORDANCE WITH PERMANENT SEEDING SPEC. FOR COASTAL PLAIN AREAS, PER THE VIRGINIA EROSION & CONTROL HANDBOOK STANDARD & SPECIFICATION SECTION 3.32.

18. SEE SILT FENCE DETAIL.

19. ALL LAND DISTURBING ACTIVITIES MUST CONFORM WITH THE APPLICABLE REGULATIONS OF THE CITY OF VIRGINIA BEACH CODES, ORDINANCES, AND PUBLIC WORKS SPECIFICATIONS AND STANDARDS AND THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION EROSION AND SEDIMENT CONTROL HANDBOOK. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION, INCLUDING THE APPLICATION OF TEMPORARY AND/OR PERMANENT MEASURES DEEMED NECESSARY BEFORE, DURING AND AFTER CONSTRUCTION TO CONTROL EROSION AND PREVENT OR MINIMIZE SEDIMENT RUNOFF. THE PLANNING DEPARTMENT PERMITS AND INSPECTION DIVISION SHALL ENFORCE THESE REQUIREMENTS. THE CITY INSPECTOR RESERVES THE RIGHT TO REQUIRE OTHER MEASURES NOT SPECIFICALLY DESCRIBED HEREIN TO CORRECT ANY EROSION OR SILTATION CONDITIONS.

20. AFTER OBTAINING ALL REQUIRED PERMITS, AND AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT CITY INSPECTIONS AT 368-5548 TO SCHEDULE A PRE-CONSTRUCTION MEETING. FAILURE TO CONTACT CITY INSPECTIONS PRIOR TO ANY LAND DISTURBING ACTIVITY MAY RESULT IN A STOP WORK ORDER OR OTHER LEGAL ACTION.

NOTES

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREA WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE DISTURBED AREA. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR, IN ACCORDANCE WITH MS-1.
2. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE VOLUME OF EROSION AND SEDIMENT TO BE PREVENTED, PERMANENT SEEDING, SOIL OR SOIL STABILIZATION BLENKETS AND MATTING. THE BUILDING CODE OFFICIAL MAY AUTHORIZE A TEMPORARY CERTIFICATE OF OCCUPANCY WITHOUT THE REQUIRED SOIL STABILIZATION AND SEEDING TO STABILIZE IS DUE TO CIRCUMSTANCES BEYOND THE CONTROL OF THE PERMIT HOLDER.
4. ANY SPACE LESS THAN TWO-FOOT ABOVE THE BASE FLOOD ELEVATION SHALL **NOT** BE CONVERTED TO LIVING SPACE.
5. THE GARAGE SHALL BE WATERPROOFED TWO-FOOT ABOVE THE BASE FLOOD ELEVATION.
6. ALL ELECTRICAL AND MECHANICAL EQUIPMENT SHALL BE LOCATED A MINIMUM OF TWO-FOET ABOVE THE BASE FLOOD ELEVATION
7. ANY MILLING AND OVER-LAYING REQUIRED WITHIN RIDGE ROAD RIGHT-OF-WAY TO RESTORE BOTH PAVED AND UNPAVED TRANSITION SHALL BE AT THE DIRECTION AND DISCRETION OF THE PLANNING/CITY INSPECTOR
8. ALL STAGING OF CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE ONSITE. NO VEHICLES WILL BE ALLOWED TO PARK WITHIN THE RIGHT-OF-WAY OF ANY PUBLIC STREET UNLESS THE VEHICLE IS BEING USED AS PART OF AN ACTIVE CONSTRUCTION PROJECT WITHIN THE ROADWAY.
9. NO RIGHTS-OF-WAY WILL BE DEDICATED WITH THIS PLAN.
10. THE LOWEST FLOOD ELEVATION, INCLUDING BASEMENTS AND ATTACHED GARAGES, IS AT LEAST TWO-FOOT ABOVE THE ONE-HUNDRED YEAR BASE FLOOD ELEVATION AS ADOPTED BY THE CITY OF VIRGINIA BEACH.
11. THE CERTIFYING DESIGN PROFESSIONAL IS RESPONSIBLE AND LIABLE FOR THE DESIGN AND THE CONTENTS OF THIS APPROVED PLAN.
12. WHETHER A STORMWATER MANAGEMENT PLAN IS OR IS NOT REQUIRED, WHERE DRAINAGE FACILITIES (BWPS) ARE NECESSARY DUE TO INADEQUACY OF THE EXISTING DRAINAGE SYSTEM, THE CITY ENGINEER/PERCULANES ARE REVIEWED AND APPROVED AS SHOWN HEREON. ADDITIONAL SEPARATE DRAINAGE CALCULATIONS MAY BE SUBMITTED AND ARE CONSIDERED A PART OF THIS PLAN.
13. SEE SEQUENCE OF CONSTRUCTION.
14. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, AND AS REQUIRED BY THE CITY INSPECTOR.
15. ANY AND ALL MATERIALS OR DEBRIS TRACKED ONTO A PUBLIC OR PRIVATE ROAD SURFACE WILL BE REMOVED AT THE END OF EACH DAY OR AS DIRECTED BY THE CIVIL INSPECTOR. SEDIMENT WILL BE REMOVED FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A LEGALLY PERMITTED SEDIMENT CONTROLLED DISPOSAL FACILITY.
16. ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF IN A LAWFUL MANNER AT A LEGALLY PERMITTED SITE.
17. SEED IN ACCORDANCE WITH PERMANENT SEEDING SPEC. FOR COASTAL PLAIN AREAS, PER THE VIRGINIA EROSION & CONTROL HANDBOOK STANDARD 8 SPECIFICATION SECTION 3.32
18. SEE SILT FENCE DETAIL.
19. ALL LAND DISTURBING ACTIVITIES MUST CONFORM WITH THE APPLICABLE ORDINANCE OF THE CITY OF VIRGINIA BEACH CODES, ORDINANCES, AND PUBLIC WORKS SPECIFICATIONS AND STANDARDS AND THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION EROSION AND SEDIMENT CONTROL HANDBOOK. THE CONTRACTOR SHALL EXERCISE EVERY REASONABLE PRECAUTION, INCLUDING THE INSTALLATION OF EROSION CONTROL MEASURES, TO PREVENT EROSION AND SEDIMENT BEFORE, DURING AND AFTER CONSTRUCTION TO CONTROL EROSION AND PREVENT OR MINIMIZE SEDIMENT RUNOFF. THE PLANNING DEPARTMENT/PERMITS AND INSPECTION DIVISION SHALL ENFORCE THESE REQUIREMENTS. THE CITY INSPECTOR RESERVES THE RIGHT TO REQUIRE OF ANY AND ALL DISTURBING ACTIVITY NOT SPECIFICALLY DESCRIBED HEREIN TO CORRECT ANY EROSION OR SILTATION CONDITIONS.
20. AFTER OBTAINING ALL REQUIRED PERMITS, AND AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT CIVIL INSPECTIONS AT 358-4558 TO SCHEDULE A PRE-CONSTRUCTION MEETING. FAILURE TO CONTACT CIVIL INSPECTIONS PRIOR TO ANY LAND DISTURBING ACTIVITY MAY RESULT IN A STOP WORK ORDER OR OTHER LEGAL ACTION.

UTILITY NOTES:

1. CITY WATER AND SEWER ARE AVAILABLE.
2. DEVELOPER MUST VERIFY AND STAKE THE LOCATION OF THE EXISTING SANITARY SEWER CLEANOUT OR LATERAL (AT THE RIGHT-OF-WAY) PRIOR TO DEMOLITION OF EXISTING STRUCTURE.
3. SEWER AND WATER CONNECTION INSTALLATIONS, RELOCATIONS, AND ABANDONMENTS WILL BE COMPLETED BY THE CITY AT THE DEVELOPER'S EXPENSE.
4. IF WATER AND/OR SEWER SERVICES ARE TO BE INSTALLED BY THE CITY, CONTACT THE CITY'S TAPS PROGRAM PROJECT MANAGER AT 386-4171 IMMEDIATELY FOLLOWING PAYMENT OF THE CITY'S SHARE OF THE COST OF THE LATERAL WATER OR SEWER SERVICE.
5. IF WATER AND SEWER SERVICES ARE TO BE INSTALLED BY DEVELOPER'S UTILITY CONTRACTOR:
 - a. UTILITIES TO BE INSTALLED BY THE DEVELOPER'S CONTRACTOR IN THE CITY RIGHT-OF-WAY OR PUBLIC EASEMENT REQUIRE A RIGHT-OF-WAY PERMIT, AND POSTING OF A SURETY (CHECK, LETTER OF CREDIT OR BOND) BASED ON AN APPROVED ENGINEER'S COST ESTIMATE. CONTACT THE DEVELOPMENT SERVICES CENTER (DSC) AT (757) 385-8277 FOR ADDITIONAL INFORMATION.
 - b. THE OWNER/DEVELOPER/CONTRACTOR MUST CONTACT PUBLIC UTILITIES INSPECTIONS AT (757) 386-4175 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION (PERMITTING OR PRIVATELY) TO SCHEDULE AN INSPECTION OF THE UTILITIES.
 - c. THE OWNER/DEVELOPER/CONTRACTOR MUST CONTACT PUBLIC UTILITIES INSPECTIONS TO SCHEDULE AN INSPECTION PRIOR TO BACKFILL OF THE SERVICE LINE(S).
6. TO ORDER INSTALLATION OF A WATER METER FOR ALL PROJECTS, THE OWNER/DEVELOPER/CONTRACTOR MUST CONTACT PUBLIC UTILITIES INSPECTIONS AT (757) 385-4175 AFTER THE WATER AND/OR SEWER SERVICES HAVE PASSED INSPECTION.
7. THE DEPARTMENT OF PUBLIC UTILITIES REQUIRES THE INSTALLATION OF A LATERAL WYE CONNECTION TO THE SANITARY SEWER GRAVITY MAIN. IN ADDITION, A MINIMUM OF 10 FEET OF THE EXISTING MAIN MUST BE REMOVED AND REPLACED IN CONJUNCTION WITH THE INSTALLATION OF THE LATERAL WYE.
8. BRASS FITTINGS TO MEET CDA NO. C89520, WITH NO MORE THAN ONE-QUARTER OF ONE PERCENT (0.25% OR LESS) TOTAL LEAD CONTENT BY WEIGHT SHALL BE USED FOR CORROSION PROSTS, METER VALVES AND SEWER COUPLINGS.
9. EXISTING WATER AND/OR SEWER SERVICES TO BE ABANDONED SHALL BE ABANDONED AT THE PROPERTY LINE OR AT THE CITY RIGHT-OF-WAY (10' AND 4.5' WATER) OF THE CITY OF VIRGINIA BEACH DEPARTMENT OF PUBLIC UTILITIES DESIGN STANDARD MANUAL. ANY ADDITIONAL, EXISTING SEWER AND WATER SERVICE LINES THAT ARE LOCATED DURING CONSTRUCTION AND ARE NOT REQUIRED FOR THE PROJECT SHALL BE REMOVED OR REMOVED/ABANDONED AS PER CITY SPECIFICATIONS. AT THE DEVELOPER'S EXPENSE.
10. IF A BUILDING STRUCTURE IS TO BE DEMOLISHED:
 - a. DEVELOPER MUST VERIFY AND STAKE THE LOCATION OF THE EXISTING SANITARY SEWER CLEANOUT OR LATERAL AT THE RIGHT OF WAY PRIOR TO DEMOLITION OF EXISTING STRUCTURE.
 - b. PRIOR TO DEMOLITION, DEVELOPER SHALL CONTACT PUBLIC UTILITIES BUSINESS DIVISION AT (757) 386-4171 TO HAVE THE EXISTING WATER METER REMOVED. THE EXISTING METER MAY NOT BE USED FOR THE NEW BUILDING. A NEW WATER METER SHALL BE INSTALLED BY THE CITY AT THE DEVELOPER'S EXPENSE AS SHOWN ON THE PLAN.
11. INSTALL WATER AND SANITARY SEWER SERVICE LINES UNDER EXISTING TREE ROOTS BY TUNNELING WITH A SOIL AUGER OR TRENCHING WITH A PNEUMATIC AIR EXCAVATOR. WORK IN THIS AREA SHALL BE SUPERVISED OR PERFORMED BY A CERTIFIED ARBORIST.
12. THE CITY WILL PERFORM THE INSTALLATION, RELOCATION AND ABANDONMENT OF UTILITY LINES AND STRUCTURES IN THE CITY RIGHT-OF-WAY AND PUBLIC EASEMENTS.
13. TYPE "K" SOFT DRAWN COPPER WILL BE USED FOR WATER SERVICE LINES, 2-INCH AND LESS, IN RIGHT-OF-WAYS AND PUBLIC UTILITY EASEMENTS.
14. WATER AND SEWER UTILITIES, WITHIN THE RIGHT OF WAY AND UP TO AND INCLUDING THE SEWER CLEANOUT AND WATER METERS, SHALL BE SET BY THE CITY AT THE DEVELOPERS EXPENSE.
15. PRIOR TO CONSTRUCTION OR EXCAVATION, THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE AREA OF CONSTRUCTION. "MISS UTILITY" OF VIRGINIA (1-800-552-7001) MUST BE CONTACTED A MINIMUM OF 72 HOURS PRIOR TO EXCAVATING. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION. AT HIS OWN EXPENSE.


OWNER/DEVELOPER:

STEVE HALLIDAY
4926B LAUDERDALE AVENUE
VIRGINIA BEACH, VIRGINIA 23455
PHONE: 757-777-2277
EMAIL ADDRESS: SHALLIDAY @ AFFINITY4.COM


CIVIL ENGINEER:

GADDY ENGINEERING SERVICES, LLC
MICHAEL S. GADDY, PE, LS
508 BIRDNECK RD., SUITE D.
VIRGINIA BEACH, VIRGINIA 23451
PH: (757)-289-5933
EMAIL: mike.gaddy@gmail.com

The undersigned Consulting Firm agrees that the City of Virginia Beach and its representatives shall have the right to use these plans to complete any physical improvements the City deems necessary in the event the developer defaults in his/her obligations to complete these facilities as required by City Code. The undersigned Engineer also agrees that the City may use these plans for any purpose the City feels necessary in order to complete the project. The Design Professional Consulting Firm further agrees that the rights to use these plans shall be provided without cost to the City.

Name of entity (Consulting firm): Gaddy Engineering Services, LLC By: _____

 _____ Date: 06.11.21
 (authorized signature)

Title: PRESIDENT

Signature of Design Professional:  Date: 06.11.21

NO OFFSITE HAULING
WILL BE ALLOWED
WITHOUT PERMITTING

SLL

DEPARTMENT OF PLANNING
ADDRESSING OFFICE

C3



GADDY ENGINEERING SERVICES, LLC
508 N. Birdneck Rd.
Virginia Beach, Virginia 23451
mike.gaddy@gmail.com
(757)289-5933

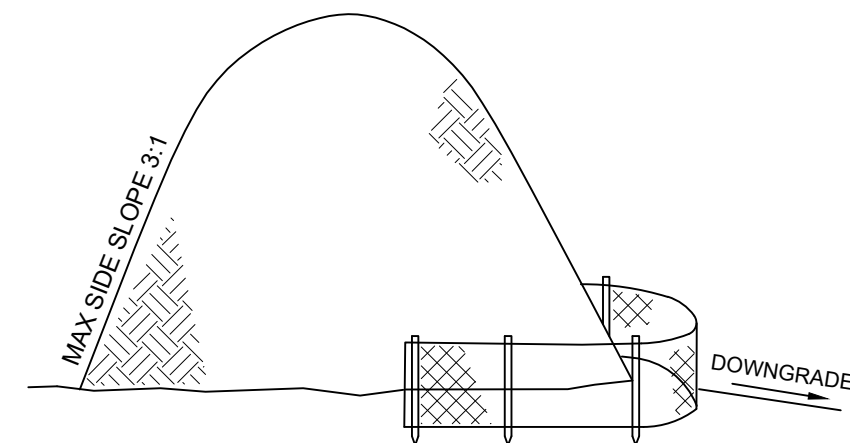
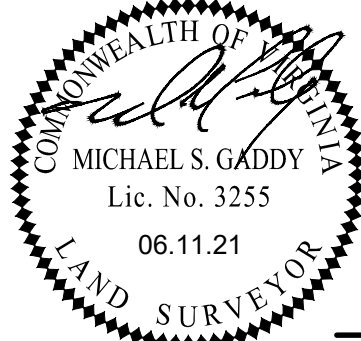


*** CAUTION ***

THE UTILITIES SHOWN ARE FOR CONVENIENCE ONLY. THERE MAY BE OTHER UTILITIES NOT SHOWN ON THESE PLANS. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION, SIZE, DIMENSION AND ELEVATION OF ALL UNDERGROUND UTILITIES. GADDY ENGINEERING SERVICES, LLC ASSUMES NO RESPONSIBILITY FOR THE LOCATION OF BURIED UTILITIES SHOWN ON THE PLANS OR LACK THEREOF. THE CONTRACTOR IS RESPONSIBLE FOR HIRING A PROFESSIONAL SUBSURFACE UTILITY LOCATOR FOR FIELD VERIFICATION OF THE LOCATION OF ALL UNDERGROUND UTILITIES WITHIN THE LIMITS OF WORK. FOR MORE INFORMATION REGARDING THE LOCATION OF UNDERGROUND UTILITIES CALL MISS UTILITIES AT 1-800-552-7001 OR DIAL 811 IN VIRGINIA. ANY DISCREPANCIES IN REFERENCED HORIZONTAL LOCATIONS, ELEVATIONS, DIMENSIONS OR DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER OR OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH THE WORK. ANY DAMAGE MADE TO EXISTING UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

NOTES:

- THE PROPERTY SHOWN HEREON IS LOCATED WITHIN FLOOD ZONE "X and VE (EL 9)" AS SHOWN ON THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR THE CITY OF VIRGINIA BEACH, VIRGINIA COMMUNITY MAP #5155310017G AND LAST DATED JANUARY 16, 2015.
- THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF MICHAEL S. GADDY, L.S. (LIC. NO. 3255) FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON MARCH 29, 2019; AND THAT THIS PLAN, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
- SANITARY SEWER AND WATERLINES SHOWN FROM CITY RECORD 'AS-BUILTS'. REFERENCE FLAT FILE #S E02-002 AND E02-008



NOTES:

- STOCKPILING - SELECT STOCKPILE LOCATION TO AVOID SLOPES, NATURAL DRAINAGEWAYS, AND TRAFFIC ROUTES. ON LARGE SITES, RESPREADING IS EASIER AND MORE ECONOMICAL WHEN TOPSOIL IS STOCKPILED IN SMALL PILES LOCATED NEAR AREAS WHERE THEY WILL BE USED.
- SEDIMENT BARRIERS - USE BARRIERS AROUND STOCKPILES TO RETAIN SEDIMENT AS SHOWN ON THE PLANS.
- TEMPORARY SEEDING - PROTECT TOPSOIL STOCKPILES BY TEMPORARILY SEEDING AS SOON AS POSSIBLE, NO MORE THAN 21 CALENDAR DAYS AFTER THE FORMATION OF THE STOCKPILE.
- PERMANENT VEGETATION - IF STOCKPILES WILL NOT BE USED WITHIN 90 DAYS THEY MUST BE STABILIZED WITH PERMANENT VEGETATION TO CONTROL EROSION AND WEED GROWTH.

TYPICAL STOCKPILE

NTS

TABLE 3.32-E (Revised June 2003) PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA		
LAND USE	SEED SPECIES	APPLICATION RATES
Minimum Care Lawn (Commercial or Residential)	Tall Fescue Bermudagrass	175-200 lbs. 75 lbs.
High-Maintenance Lawn	Tall Fescue Bermudagrass (seed)	200-250 lbs. 40 lbs. (unhulled) 30 lbs. (hulled)
General Slope (3:1 or less)	Tall Fescue Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop	128 lbs. 2 lbs. TOTAL: 130 lbs.
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue Bermudagrass Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop Sericea Lespedeza	93-108 lbs. 0-15 lbs. 2 lbs. 20 lbs. 20 lbs. TOTAL: 150 lbs.

- When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at <http://suden.cses.vt.edu/html/Turf/publications/publications2.html>
- Use seasonal nurse crop in accordance with seeding dates as stated below:
February, March-April..... Annual Rye
May 1st-August..... Fodder Millet
September, October-November 15th..... Annual Rye
November 16th-January..... Winter Rye
- May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods increase to 30-40 lbs./acre.

FERTILIZER & LIME

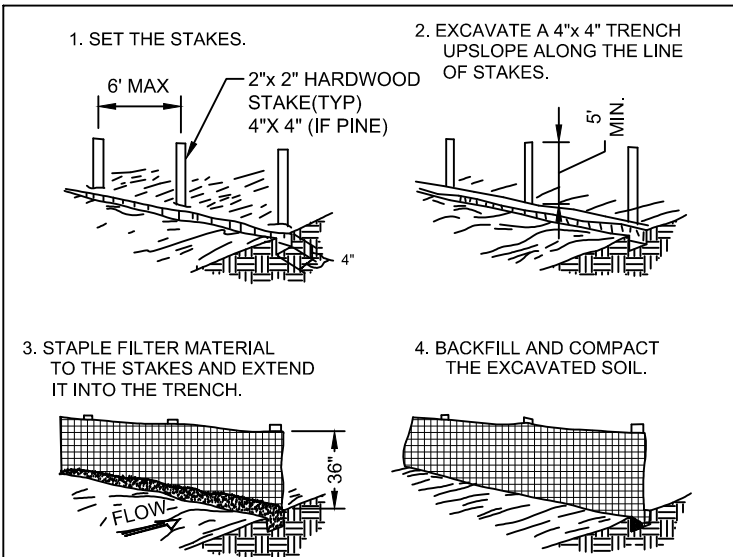
Apply 10-20-10 fertilizer at a rate of 500 lbs. / acre (or 12 lbs. / 1,000 sq. ft.) Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:

- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4-6 inches of the soil by disk or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at <http://www.dcr.state.va.us/sw/ve/s3.html#pubs>

SEEDING SCHEDULE

VE&S STD & SPEC 3.32



SILT FENCE

VE&S STD & SPEC 3.05 NTS
(WITHOUT WIRE SUPPORT)

TABLE 3.31-B ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS "QUICK REFERENCE FOR ALL REGIONS"		
PLANTING DATES	SPECIES	RATE (LBS/ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS (Lolium multiflorum) & CEREAL (WINTER) RYE (Secale cereale)	50 - 100
FEB. 16 - APR. 30	ANNUAL RYEGRASS (Lolium multiflorum)	60 - 100
MAY 1 - AUG. 31	CERIAL MILLET (Setaria italica)	50

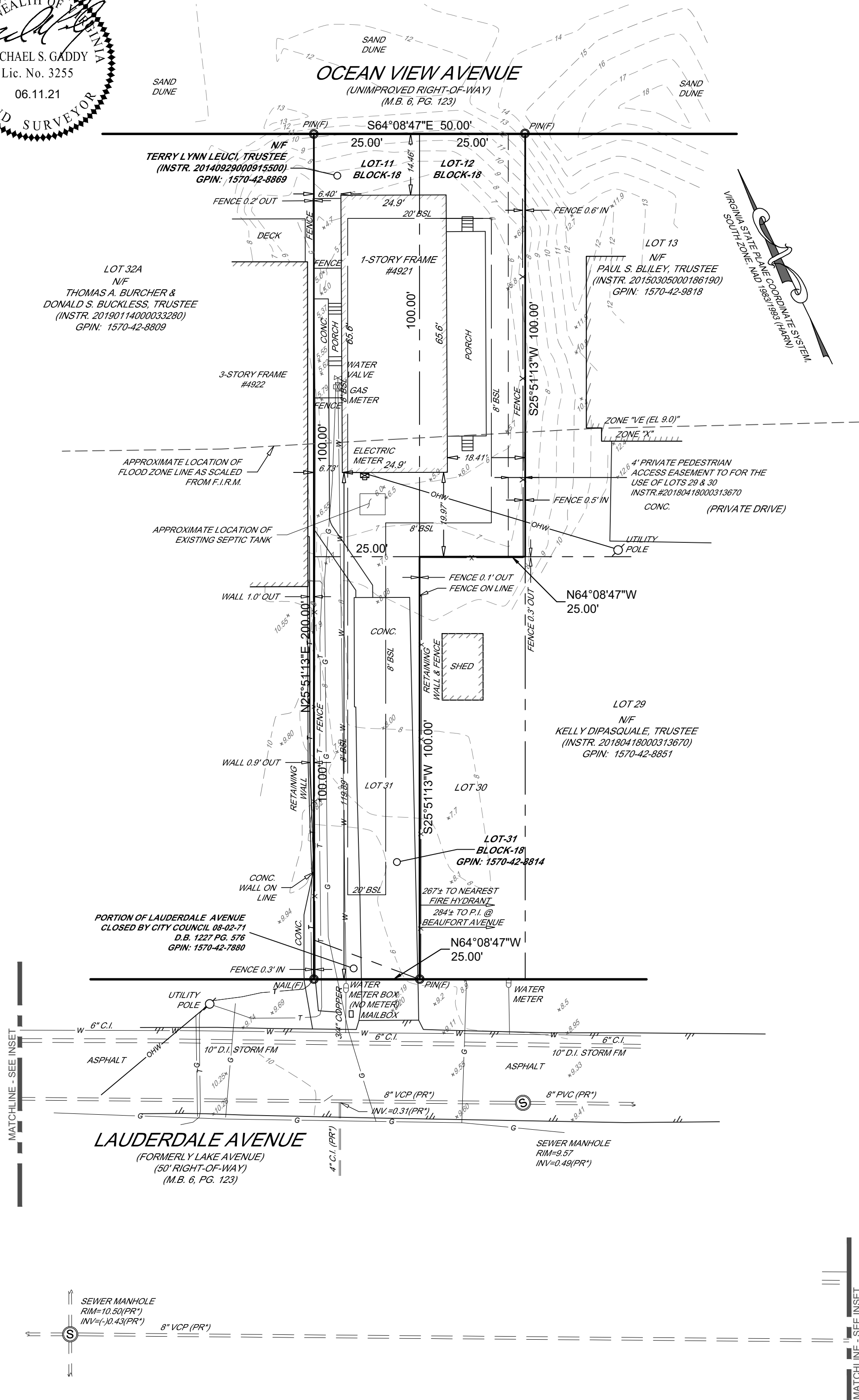
TEMPORARY SEEDING SCHEDULE
VE&S STD & SPEC 3.31

EROSION & SEDIMENT CONTROL LEGEND

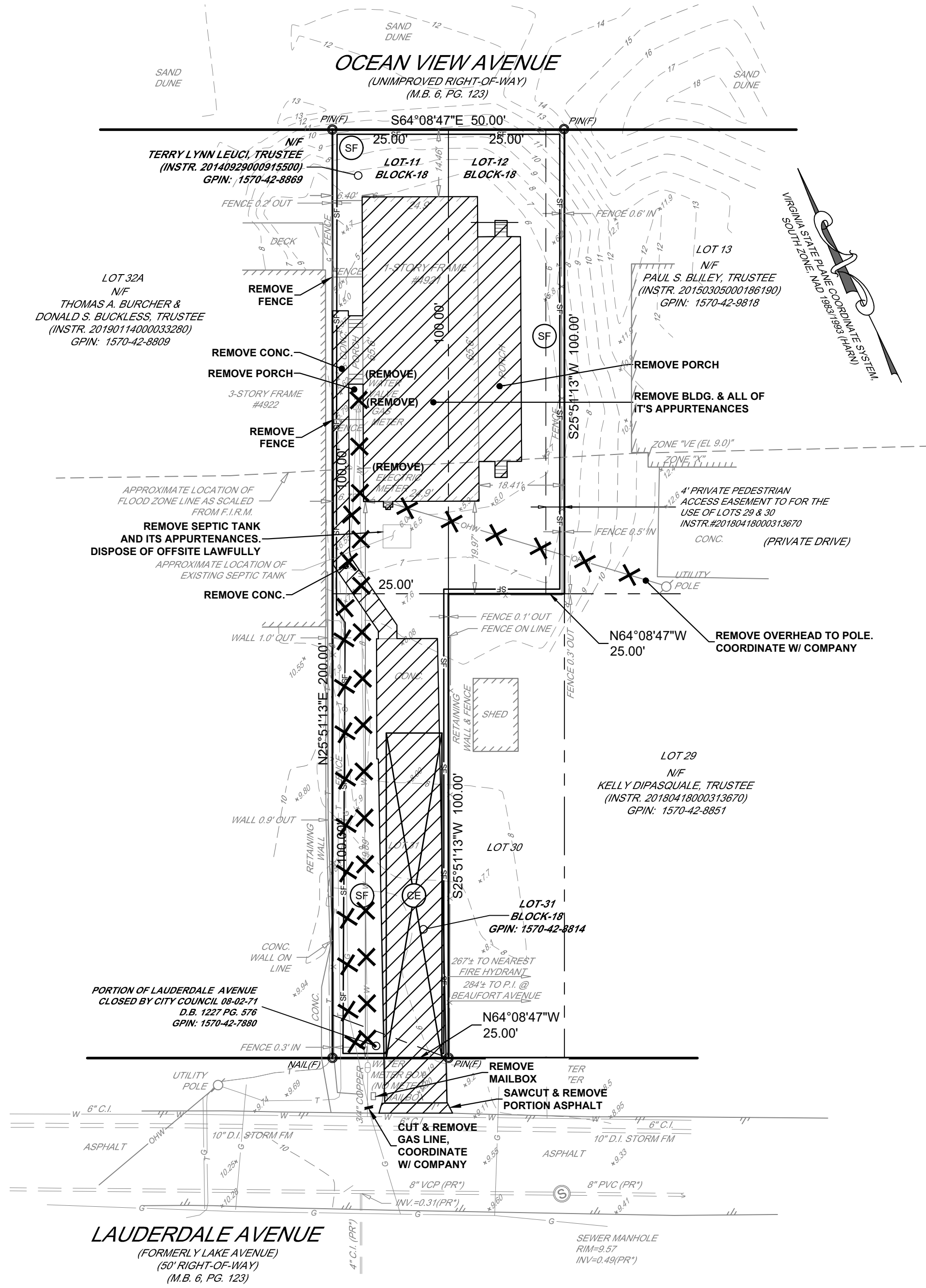
DESCRIPTION	SYMBOL
DENOTES AREA TO BE REMOVED	
TEMPORARY STONE CONSTRUCTION ENTRANCE	
SILT FENCE	

EROSION CONTROL AND CONSTRUCTION SEQUENCING

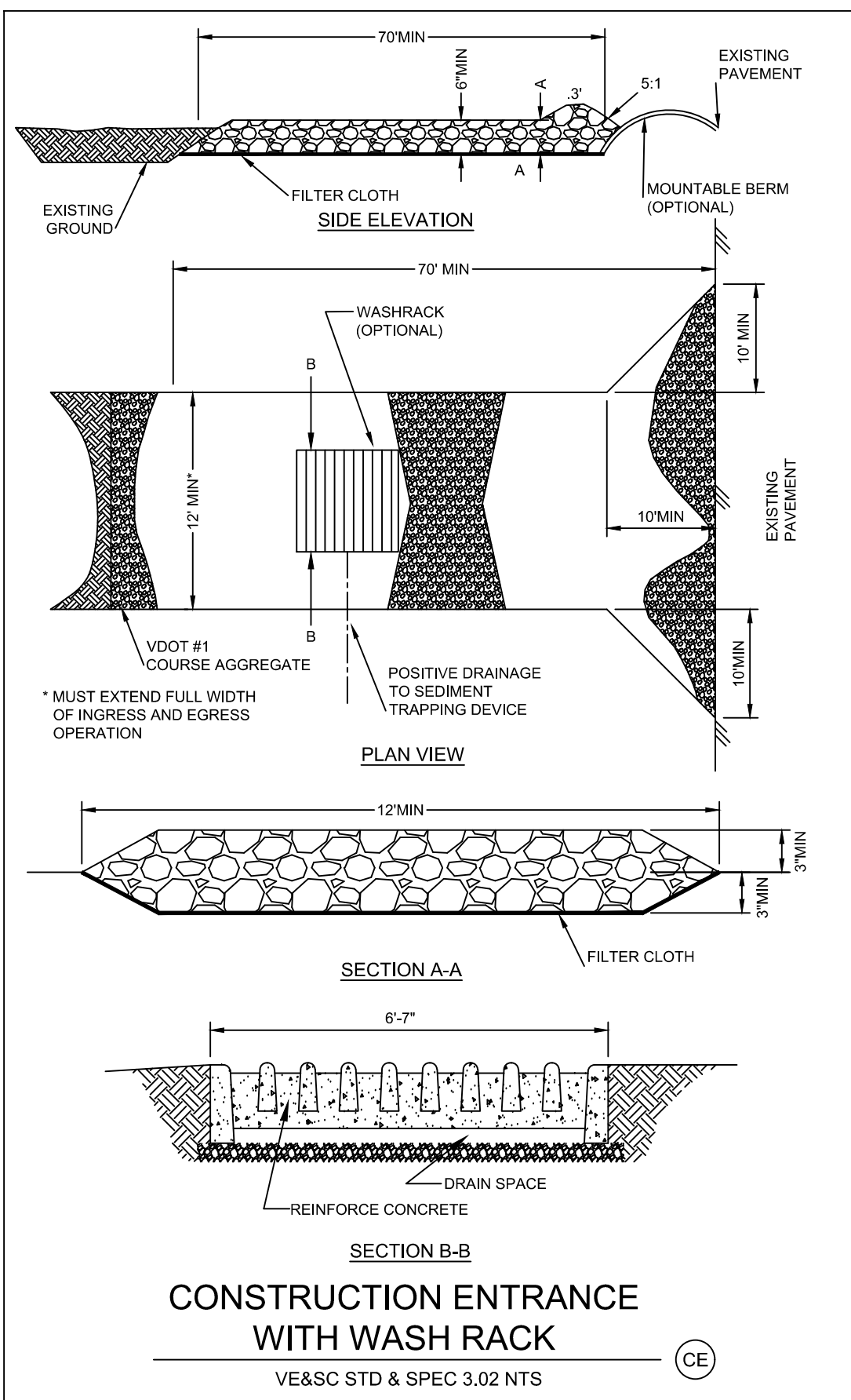
- ACQUIRE NECESSARY PERMITS.
- THE CONTRACTOR MUST CONTACT THE PLANNING/CIVIL INSPECTIONS OFFICE AT 385-4558 FOR A PRE-CONSTRUCTION MEETING BEFORE ANY CONSTRUCTION ACTIVITY BEGINS. IN ADDITION, CONTACT CITY ARBORIST AT 385-4461 PRIOR TO ANY TREE REMOVAL WITHIN THE CITY RIGHT-OF-WAYS.
- INSTALL EROSION AND SEDIMENT CONTROL MEASURES. EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBANCE AND SHALL BE MAINTAINED UNTIL SUCH A TIME AS A VEGETATIVE COVER IS ESTABLISHED.
- REMOVE ITEMS DENOTED ON PLAN.
- CONSTRUCT BUILDING, PAVEMENT, & UTILITIES
- GRADE PER PLAN.
- DRESS AND OVERSEED ALL DISTURBED AREAS AND IMMEDIATELY ESTABLISH PERMANENT VEGETATIVE COVER. MAINTAIN VEGETATIVE COVER THROUGHOUT DURATION OF PROJECT.
- REPAIR ANY INADVERTENT EROSION AND REMOVE ANY INADVERTENT SEDIMENTATION.
- REMOVE REMAINING TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WITHIN THIRTY DAYS AFTER FINAL SITE IS STABILIZED WITH VEGETATIVE GROWTH.
- REMOVE ALL TEMPORARY EQUIPMENT, CONSTRUCTION MATERIALS AND DEBRIS FROM THE SITE.
- PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, OR THE FINAL RELEASE OF ANY PERMIT AUTHORIZING A LAND-DISTURBING ACTIVITY, ALL DISTURBED OR DENUDED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL LAW AND REGULATIONS BY SUCH METHODS AS, BUT NOT LIMITED TO, TEMPORARY SEEDING, PERMANENT SEEDING, SOD OR SOIL STABILIZATION BLANKETS AND MATTING. THE BUILDING CODE OFFICIAL MAY AUTHORIZE A TEMPORARY CERTIFICATE OF OCCUPANCY WITHOUT THE REQUIRED SOIL STABILIZATION IF THE FAILURE TO STABILIZE IS DUE TO CIRCUMSTANCES BEYOND THE CONTROL OF THE PERMIT HOLDER.
- THE CONTRACTOR SHALL PROVIDE WRITTEN NOTIFICATION TO ALL OWNERS AND RESIDENTS OF THE PROPERTY ADJACENT TO A DEVELOPMENT OR OFF-SITE IMPROVEMENTS 30 DAYS PRIOR TO THE COMMENCEMENT OF WORK UNLESS OTHERWISE DIRECTED BY THE CITY



TOPOGRAPHIC SURVEY

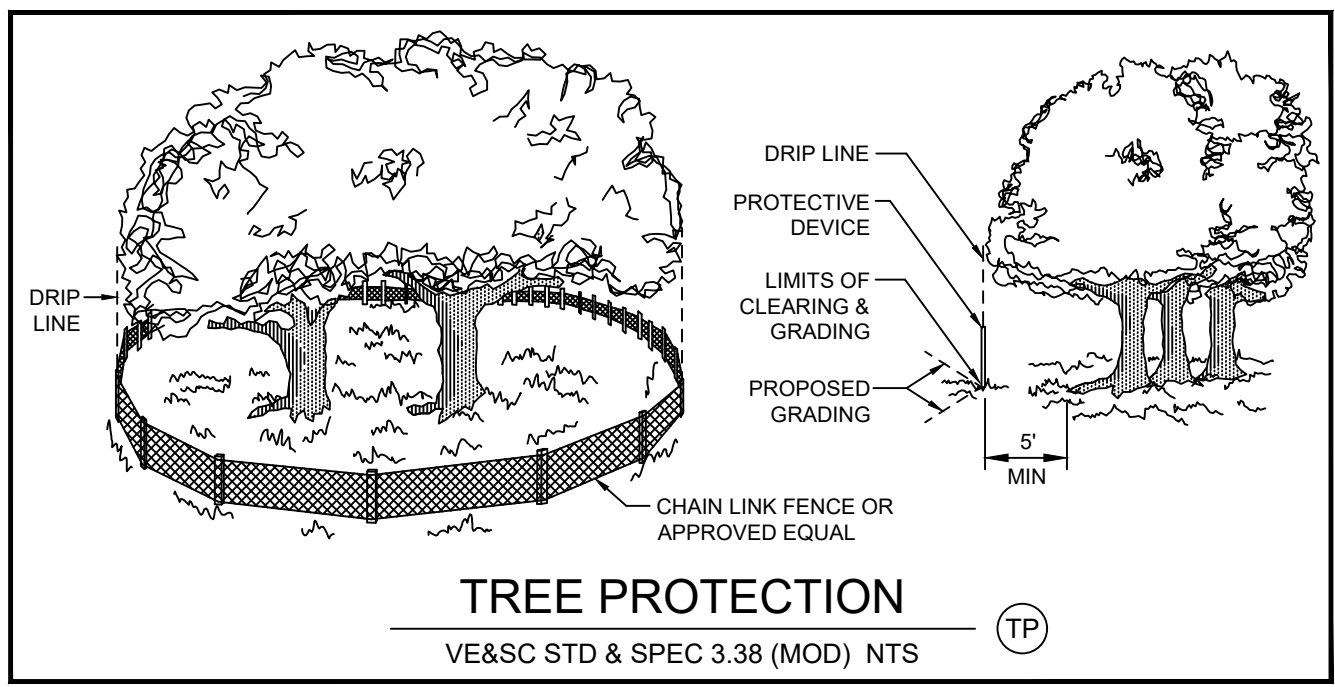


DEMOLITION, EROSION, & SEDIMENT PLAN



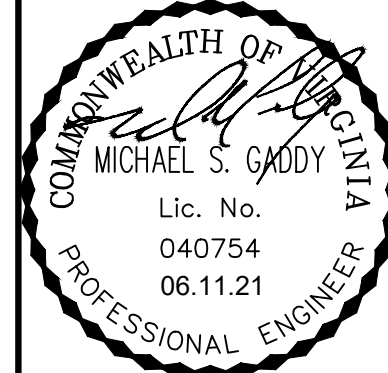
CONSTRUCTION ENTRANCE WITH WASH RACK

VE&S STD & SPEC 3.02 NTS



TREE PROTECTION

VE&S STD & SPEC 3.38 (MOD) NTS



GADDY ENGINEERING SERVICES, LLC
508 N. BIRNBECK RD. SUITE D
VIRGINIA BEACH, VIRGINIA 23451
CONTACT:
MICHAEL S. GADDY, PE, LS
757-289-5933

TOPOGRAPHIC SURVEY, DEMOLITION, EROSION, & SEDIMENT PLAN

FOR

LOTS 11, 12, & 31, BLOCK 18,

SUBDIVISION OF CHESAPEAKE PARK

M.B. 4, PG. 47

BAYSIDE BOROUGH-VIRGINIA BEACH, VIRGINIA

C2

2 of 5 Sheets

SCALE: 1" = 20'

1. THE CUSTOMER/DEVELOPER IS RESPONSIBLE FOR CALLING THE CUSTOMER SERVICE CENTER OF DOMINION VIRGINIA POWER AT 1-888-667-3000 TO ESTABLISH A WORK REQUEST BEFORE SITE WORK IS TO BEGIN.
2. THE CUSTOMER/DEVELOPER WILL BE RESPONSIBLE FOR ANY CONSTRUCTION COST ASSOCIATED WITH THE RELOCATION OF ANY DOMINION VIRGINIA POWER FACILITIES.
3. THE CUSTOMER/DEVELOPER WILL BE RESPONSIBLE FOR ANY CONSTRUCTION COST ASSOCIATED WITH THE INSTALLATION OF PERMANENT POWER.
4. DOMINION VIRGINIA POWER WILL REQUIRE RIGHT-OF-WAY FROM THE PROPERTY OWNER BEFORE ANY LOTS ARE SOLD.
5. DOMINION VIRGINIA POWER WILL REQUIRE RIGHT-OF-WAY FOR ALL LINE EXTENSIONS.
6. THE CUSTOMER/DEVELOPER WILL BE RESPONSIBLE FOR CLEARING THE RIGHT-OF-WAY BEFORE DOMINION VIRGINIA POWER FACILITIES WILL BE INSTALLED.
7. THE CUSTOMER/DEVELOPER WILL BE RESPONSIBLE FOR INSTALLATION OF DOMINION VIRGINIA POWER REQUIRED CONDUITS.
8. THE CUSTOMER/DEVELOPER WILL BE RESPONSIBLE FOR ANY CONSTRUCTION COST ASSOCIATED WITH THE INSTALLATION OF PERMANENT POWER.
9. ALL DOMINION VIRGINIA POWER FACILITIES WILL BE LOCATED IN THE FRONT OF THE PROPOSED LOTS.
10. ANY WORK IN A DOMINION VIRGINIA POWER TRANSMISSION RIGHT-OF-WAY WILL REQUIRE APPROVAL BEFORE THE WORK IS STARTED.

1. ADJUST EXISTING UTILITY RIMS TO MATCH FINISHED GRADE.
2. CONTRACTOR MUST NOTIFY PUBLIC UTILITIES CONSTRUCTION REPRESENTATIVE SEVEN (7) CALENDAR DAYS PRIOR TO ANY NIGHT TIME SHUTDOWN OF THE WATER MAIN.
3. IF ANY METER THAT SERVES AN IRRIGATION SYSTEM OR YARD HYDRANT IS REMOVED IN THE FUTURE, THE WATER SERVICE LINE MUST BE ABANDONED AS PER DSC NOTICE #179, "ABANDONMENT OF A PUBLIC UTILITY SERVICE LINE OR MAIN
4. HVAC UNITS FOR THE BUILDING WILL BE LOCATED ON THE ROOF
5. BRASS FITTINGS TO MEET CDA NO. C89520, WITH NO MORE THAN ONE-FOURTH OF ONE PERCENT (0.25% OR LESS) TOTAL LEAD CONTENT BY WEIGHT FOR CORPORATION STOPS, METER VALVES AND SERVICE COUPLINGS.
6. ALL CONNECTIONS TO EXISTING SANITARY SEWER MANHOLES MUST BE CORE DRILLED AND FLEXIBLE CONNECTOR ADDED

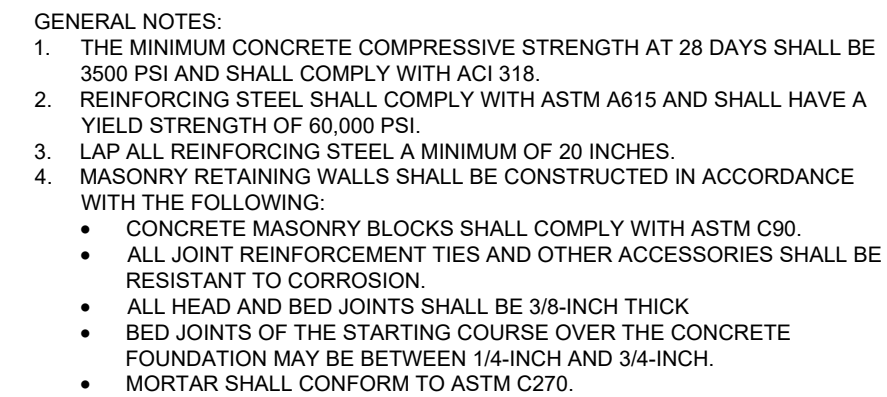
1. NO LANDSCAPING OF ANY TYPE SHALL BE PLACED WITHIN THE THREE FOOT (3') RADIUS OF ANY FIRE HYDRANT, FIRE PUMP TEST HEADER, FIRE DEPARTMENT SPRINKLER SYSTEM CONNECTION, FIRE DEPARTMENT STANDPIPE CONNECTION OR FIRE SUPPRESSION CONTROL VALVE.
2. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL BE ADHERED TO PER THE STATEWIDE FIRE PREVENTION CODE, CHAPTER 33 AND NFPA 241, AS APPLICABLE.

1	NEW 5/8" WATER METER (BY CITY)
2	110 LF - 2" TYPE K COPPER
3	MAINTAIN 3' MIN. COVER
4	RETAINING WALL
5	TWO (2) HVAC ON RAISED WOOD DECKING
6	CONCRETE DRIVEWAY
7	VB STD. D-5, RESIDENTIAL ENTRANCE, (3000 PSI CLASS A-3 CONCRETE POURED 7" THICK AT THE CURBSIDE AND ALL APRONS IN THE RIGHT-OF-WAY)
8	NEW SSCO (BY CITY)
9	51 LF. - 4" SS PVC (SDR 26) @ 1.04% MIN. SLOPE
10	67 LF. - 4" SS PVC (SDR 26) @ 1.04% MIN. SLOPE
11	CONTRACTOR TO VERIFY EX. INVERT. IF DIFFER, STOP AND CONTACT CIVIL ENGINEER IMMEDIATELY.
12	28 LF. - 4" SS PVC (SDR 26) @ 1.04% SLOPE (BY CITY)
13	REPLACE 10 L.F. 8" SANITARY SEWER (BY CITY)
14	VB. STD. FLEXIBLE PAVEMENT PATCH (BY CITY)

1. FLEXIBLE CONNECTORS MUST BE INSTALLED WITH THERMOPLASTIC, HOPE-PIPE, AND HOPE-PIPE CONNECTED TO PRECAST, CAST-IN-PLACE, CONCRETE BLOCK STRUCTURES OR BRICK STRUCTURES TO ELIMINATE THE POTENTIAL FOR SHEAR FAILURE IN ACCORDANCE WITH ASTM STANDARDS.
2. ALL STORM PIPE JOINTS AND CONNECTIONS MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER, ASTM AND VDOT PROVISIONS, SPECIFICATIONS AND STANDARDS AS TO BE SOIL TIGHT AND LEAK RESISTANT.
3. BUILDING ROOF DRAINAGE WILL BE COLLECTED ON THE ROOF AND DIRECTED THROUGH ROOF DRAIN PIPING. CONTRACTOR SHALL COORDINATE LOCATION, SIZE, AND INVERT WITH ARCHITECT'S PLANS.
4. DURING CONSTRUCTION AND PRIOR TO INSTALLATION OF THE FULL PAVEMENT SECTION THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION OVER THE NEW STORM SEWER SYSTEM TO PREVENT DAMAGE.
5. ALL FITTINGS FOR STORM SEWER SYSTEMS (INCLUDING ROOF DRAINAGE) SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION. INSTALL APPROPRIATE FITTINGS & MANUFACTURER'S INSTRUCTIONS AT ALL JOINTS, INCLUDING LOCATIONS OF CHANGE IN MATERIAL OR SIZE. SUBMIT SHOP DRAWINGS TO ENGINEER OF RECORD FOR REVIEW AND APPROVAL.
6. ALL AREAS ADJACENT TO BUILDINGS SHALL BE SLOPED AWAY FROM THE BUILDING AT A POSITIVE SLOPE.
7. CONTRACTOR SHALL INSTALL AND MAINTAIN INLET PROTECTION ON ALL NEW AND EXISTING INLETS THROUGHOUT CONSTRUCTION, UNTIL SITE STABILIZED, IN ACCORDANCE WITH LATEST VERSION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
8. CONTRACTOR SHALL IMPORT OR EXPORT SUITABLE MATERIAL AS REQUIRED TO BALANCE THE EARTHWORK TO THE GRADES INDICATED. CONTRACTOR SHALL BE RESPONSIBLE FOR OWN EARTHWORK TAKEOFFS PRIOR TO BIDDING. IN ADDITION, CONTRACTOR SHALL PROVIDE OWNER WITH A SEPARATE LINE ITEM FOR UNIT COST OF IMPORT AND EXPORT OF SUITABLE MATERIAL.
9. ALL OPEN SPACE AREAS SHALL BE GRADED TO DRAIN.
10. ALL OPEN SPACES SHALL BE PERMANENTLY SEEDED OR SOD.

G	FINISH GRADE
GV	GRAVEL
FF	FINISH FLOOR
MG	MATCH GRADE
TW	TOP OF WALL
SW	SWALE
C	CONCRETE

1. THE CITY OF VIRGINIA BEACH DOES NOT REQUIRE BULKHEADS OR RETAINING WALLS FOR STRUCTURAL INTEGRITY. THE SWAYING OF THE PIER SHOULD HOLD THE CITY OF VIRGINIA BEACH HARMLESS IN THE EVENT OF A FAILURE.
2. WATER AND SEWER UTILITIES, WITHIN THE RIGHT OF WAY AND UP TO AND INCLUDING THE SEWER CLEANOUT AND WATER METERS, SHALL BE SET BY THE CITY AT THE DEVELOPERS EXPENSE.
3. 2) LATERAL WYE CONNECTIONS, THE DEPARTMENT OF PUBLIC UTILITIES REQUIRES THE INSTALLATION OF A LATERAL WYE CONNECTION TO THE SANITARY SEWER GALLERY MAIN WITH A MINIMUM OF TEN (10) LINEAR FEET OF THE GALLERY MAIN TO BE MOVED AND REPLACED IN CONJUNCTION WITH THE INSTALLATION OF THE WYE
4. PRIOR TO CONSTRUCTION OR EXCAVATION, THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST AND CROSS THROUGH THE PROJECT AREA. CONSTRUCTION "UTILITY" OF VIRGINIA (1-800-552-7001) MUST BE CONTACTED A MINIMUM OF 48 HOURS PRIOR TO BEGINNING. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY EXISTING UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION, AT HIS OWN EXPENSE.



TOP ELEV. = 5.0'

TUAL IMP. AREA TO BMP
 0.000000 0.000000 0.000000

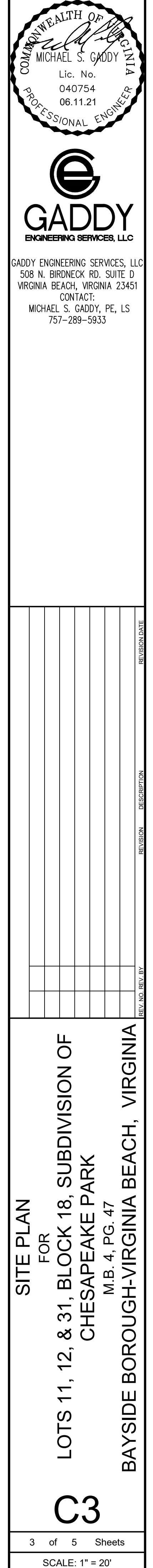
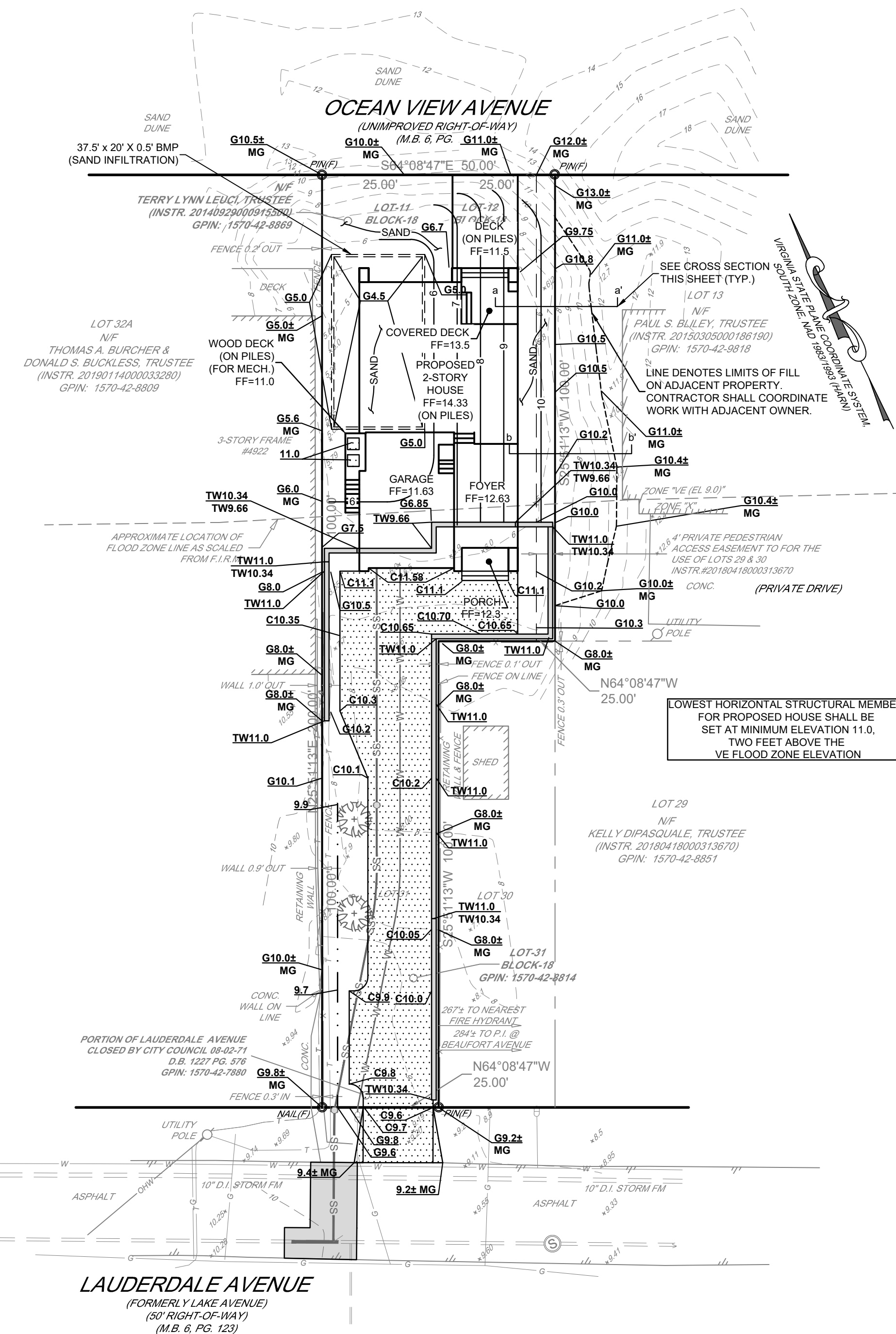
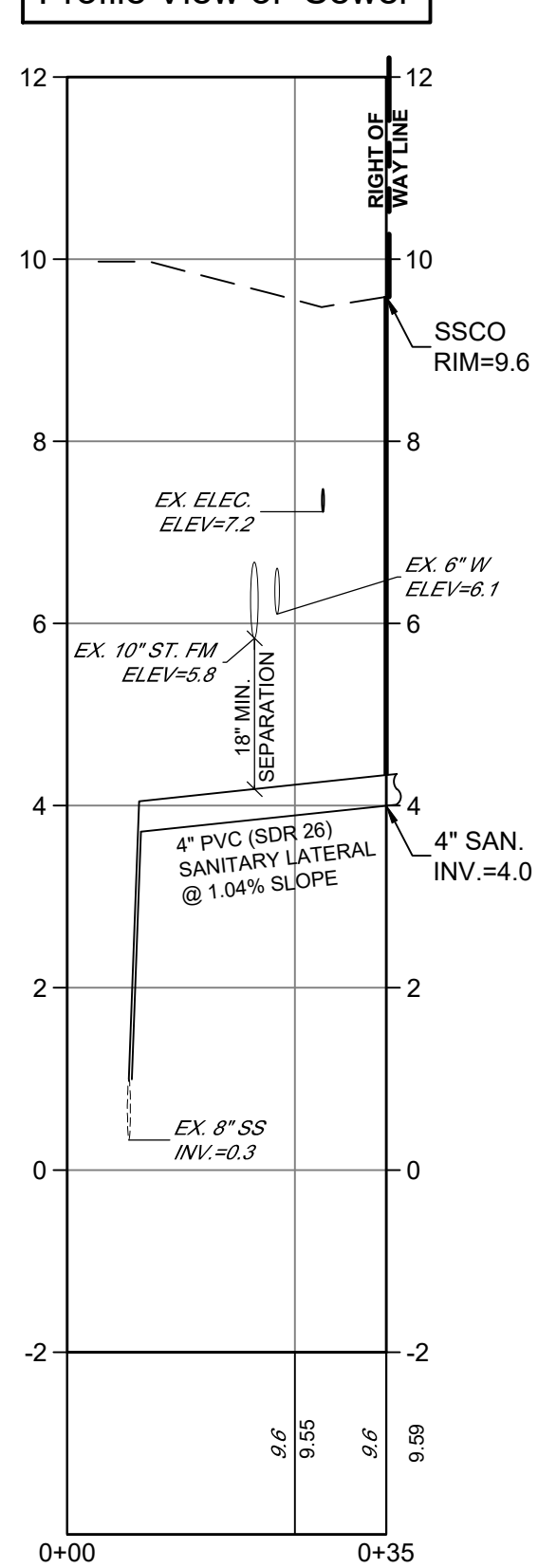
PER CITY REQ'T, BMP SIZED FOR
TOTAL IMP. AREA ON LOT X 1"
PLANT BED BMP SIZING (BMP 1)
MICRO-INFILTRATION LEVEL 1 DESIGN (DEQ SPEC#8)
TREATMENT VOL. REQUIRED = $1.0(A) / 12$
 $= [(1.0)(490)/12]$
 $= 374 \text{ CF}$
SURFACE AREA REQUIRED = $374 \text{ CF} / 0.5 \text{ FT.}$
 $= 748 \text{ S.F.}$
TOTAL SURFACE AREA PROVIDED = 750 S.F.; >OR= 748 REQ'D
TREATMENT VOLUME PROVIDED = 750 S.F. X 0.5 FT. = 375 CF



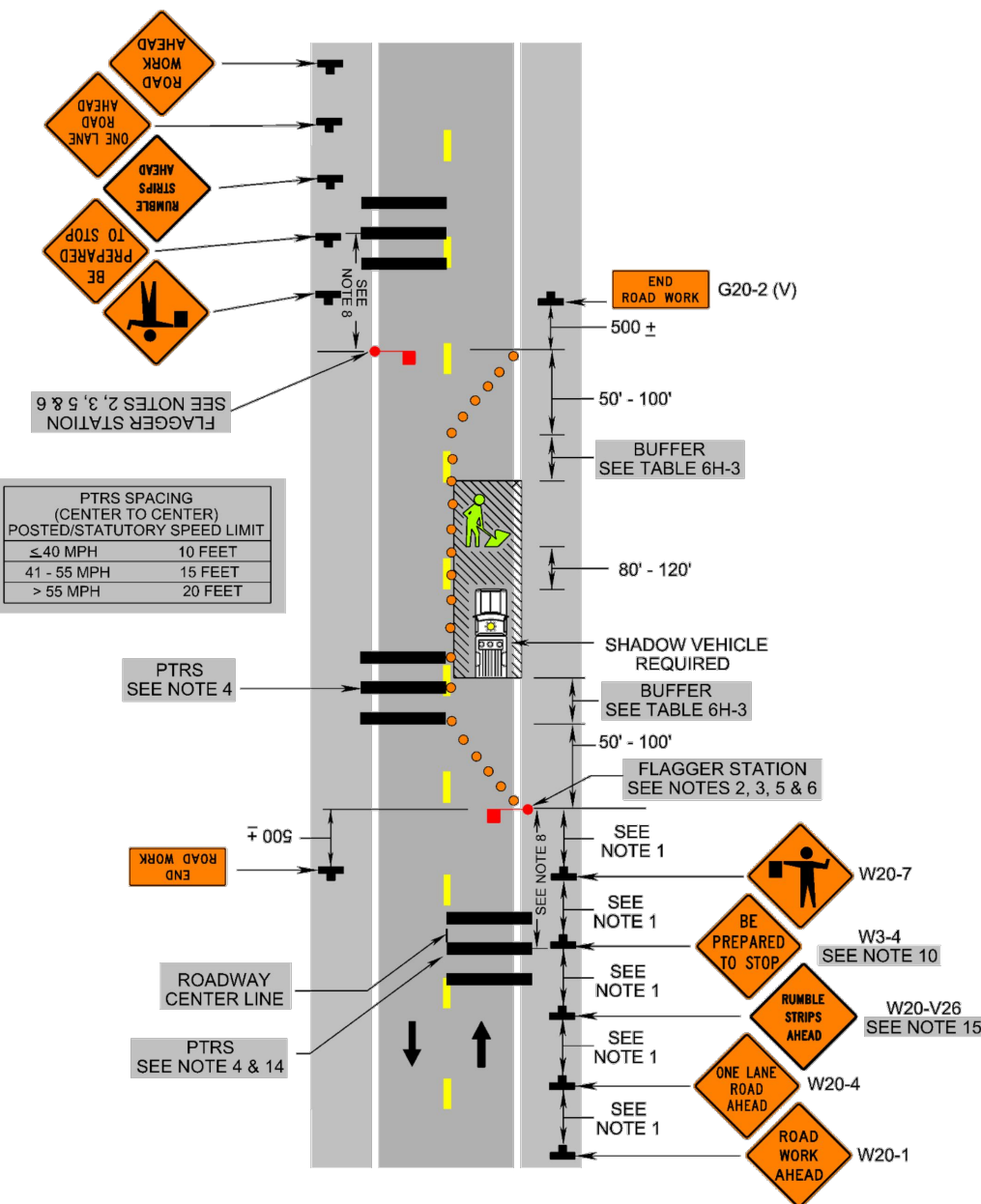
NOT TO SCALE



NOT TO SCALE



Lane Closure on a Two-Lane Roadway Using Flaggers (Figure TTC-23.2)



1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Typical Traffic Control
Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.2)

NOTES

Guidance:

1. Sign spacing distance should be 350'-500' where the posted speed limit is 45 mph or less, and 500'-800' where the posted speed limit is greater than 45 mph.
2. Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance. The minimum sight distance should be the lesser of the posted speed limit and at least equal to or greater than the values in Table 6H-3. Generally speaking, motorists should have a clear line of sight from the graphic flagging symbol sign to the flagger.
3. To maintain efficient traffic flow in a flagging operation on a two-lane roadway, the maximum time a motorist should be stopped at a flagger station is 8 minutes for high volume roadways (average daily traffic volume of more than 1,000 vehicles per day) and 10 minutes for low volume roadways (less than 500 vehicles per day). For additional information see Section 6E.07.

Standard:

4. **Portable Temporary Rumble Strips (PTRS)** shall be used as noted in Section 6F.99.²
5. **Flagging stations** shall be located far enough in advance of the work space to permit approaching traffic to reduce speed and/or stop before passing the work space and allow sufficient distance for departing traffic in the left lane to return to the right lane before reaching opposing traffic (see Table 6H-3 on Page 6H-5).
6. All flaggers shall be state certified and have their certification card in their possession when performing flagging duties (see Section 6E.01, Qualifications for Flaggers).
7. Cone spacing shall be based on the posted speed and the values in Table 6H-4 on Page 6H-6.¹
8. A shadow vehicle with at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80' to 120' in advance of the first work crew.

Option

8. A SLOW (W21-V10) sign² may be required in this area to give advance warning of the operation ahead by slowing approaching traffic prior to reaching the flagger station or queued traffic.

Guidance:

9. If the queue of traffic reaches the BE PREPARED TO STOP (W3-4) sign then the signs, and if used the PTRS' should be readjusted at greater distances.
10. When a highway-rail crossing exists within or upstream of the transition area and it is anticipated that queues resulting from the lane closure might extend through the highway-rail grade crossing, the temporary traffic control zone should be extended so that the transition area precedes the highway-rail crossing (see Figure TTC-56 for additional information on highway-rail crossings).

Standard:

11. **At night, flagger stations shall be illuminated, except in emergencies (see Section 6E.08).**

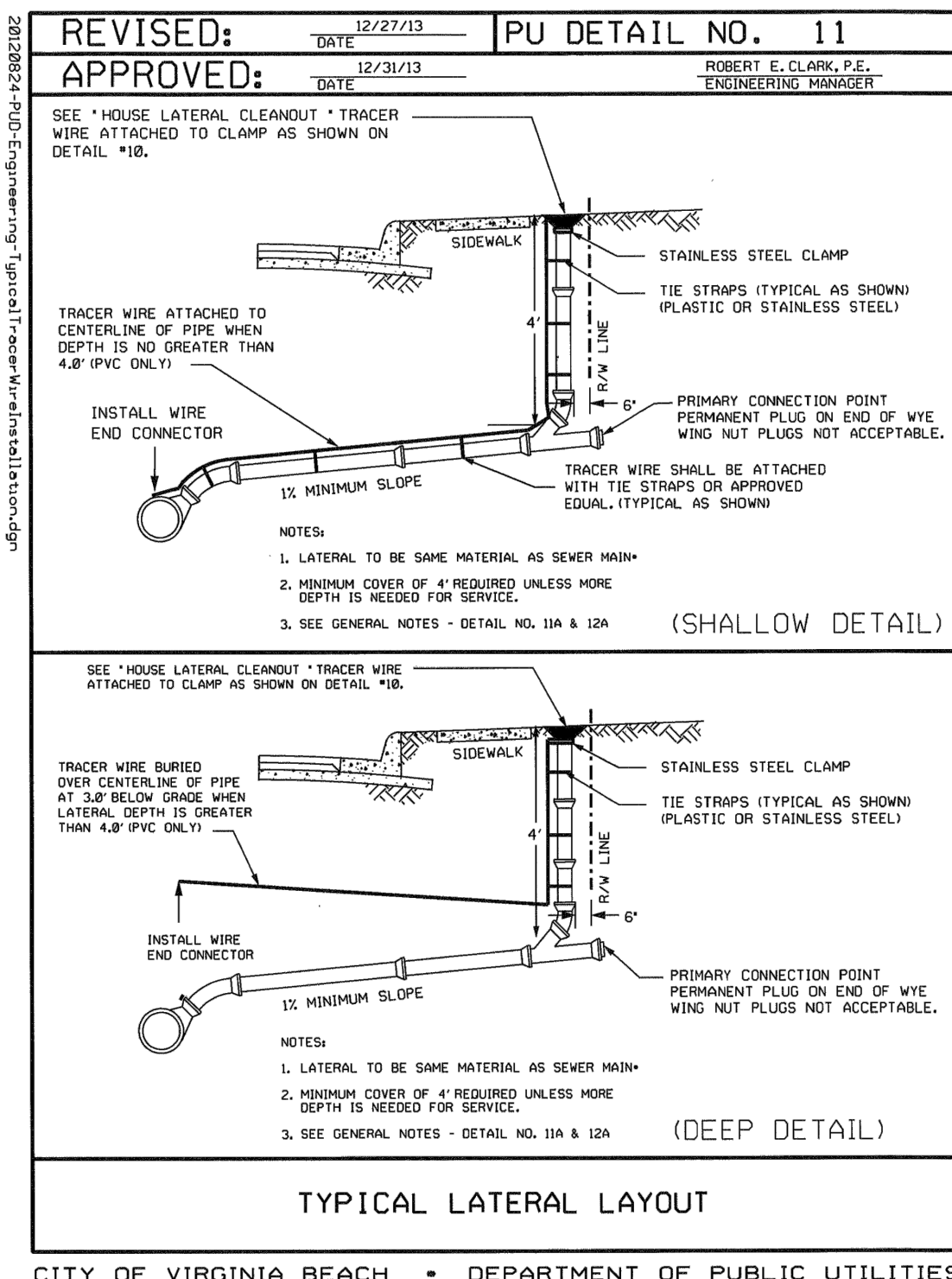
Options

12. Cones may be eliminated when using a pilot vehicle operation or when the total roadway width is 20 feet or less.
13. For low-volume situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger, positioned to be visible to road users approaching from both directions, may be used (see Chapter 6E).

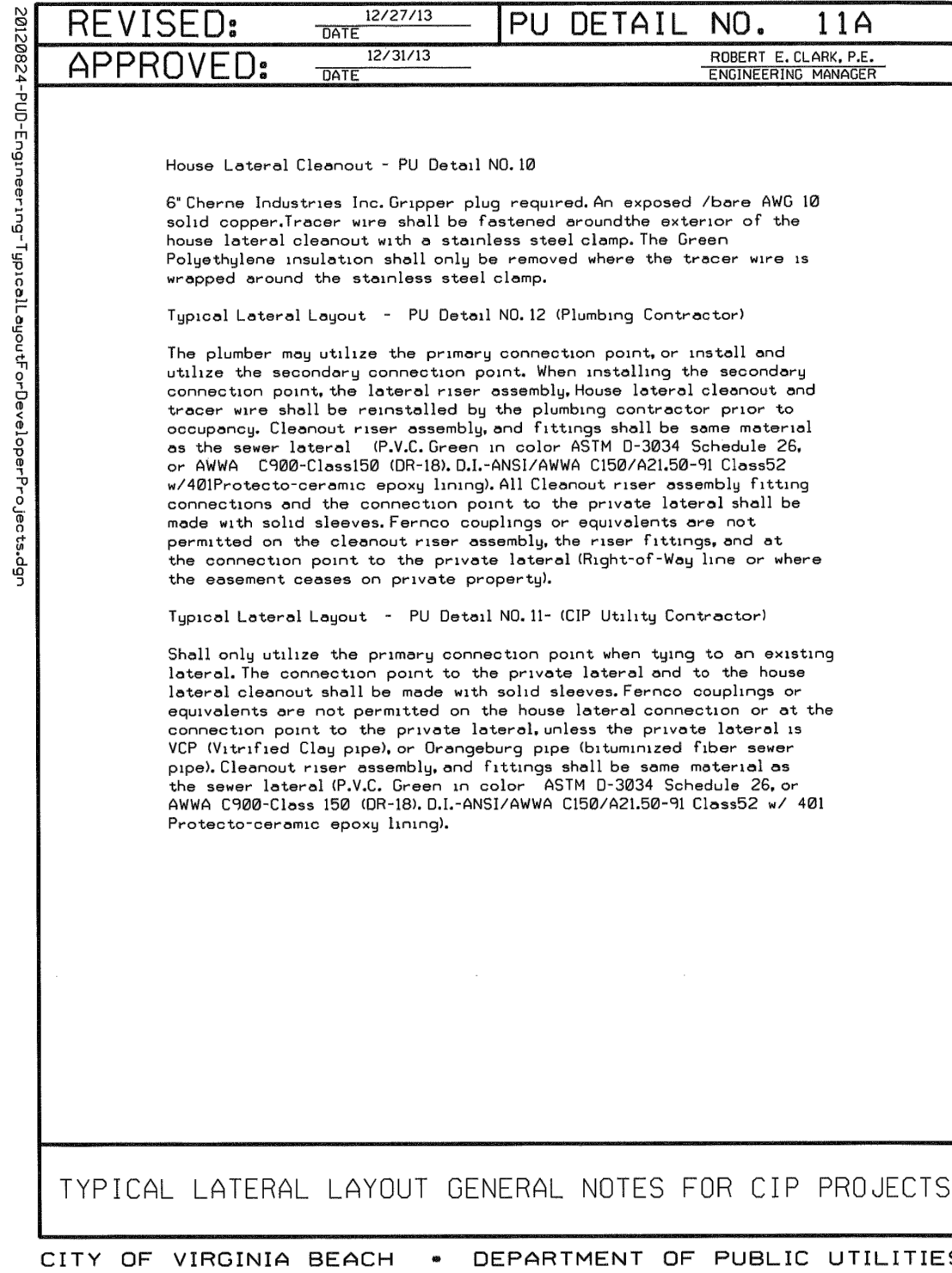
Standard:

14. When used², three portable temporary rumble (PTRS) strips shall be installed across the entire travel lane adjacent to the BE PREPARED TO STOP (W3-4) sign. The portable temporary rumble strips shall be monitored and adjusted as necessary during the work shift to ensure proper placement on the roadway. When the PTRS are installed, the RUMBLE STRIPS AHEAD (W20-V26) sign shall also be utilized.

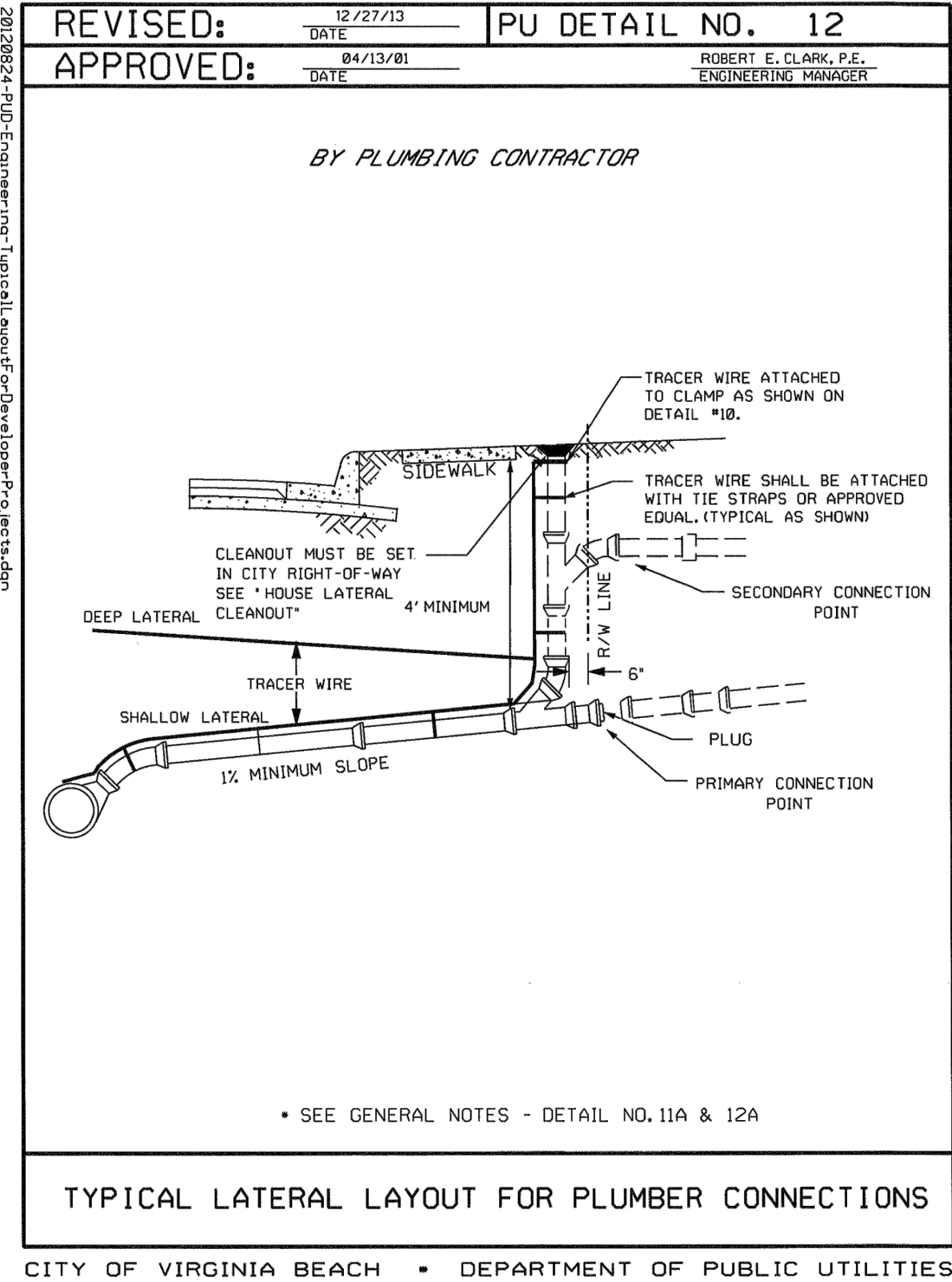
1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019



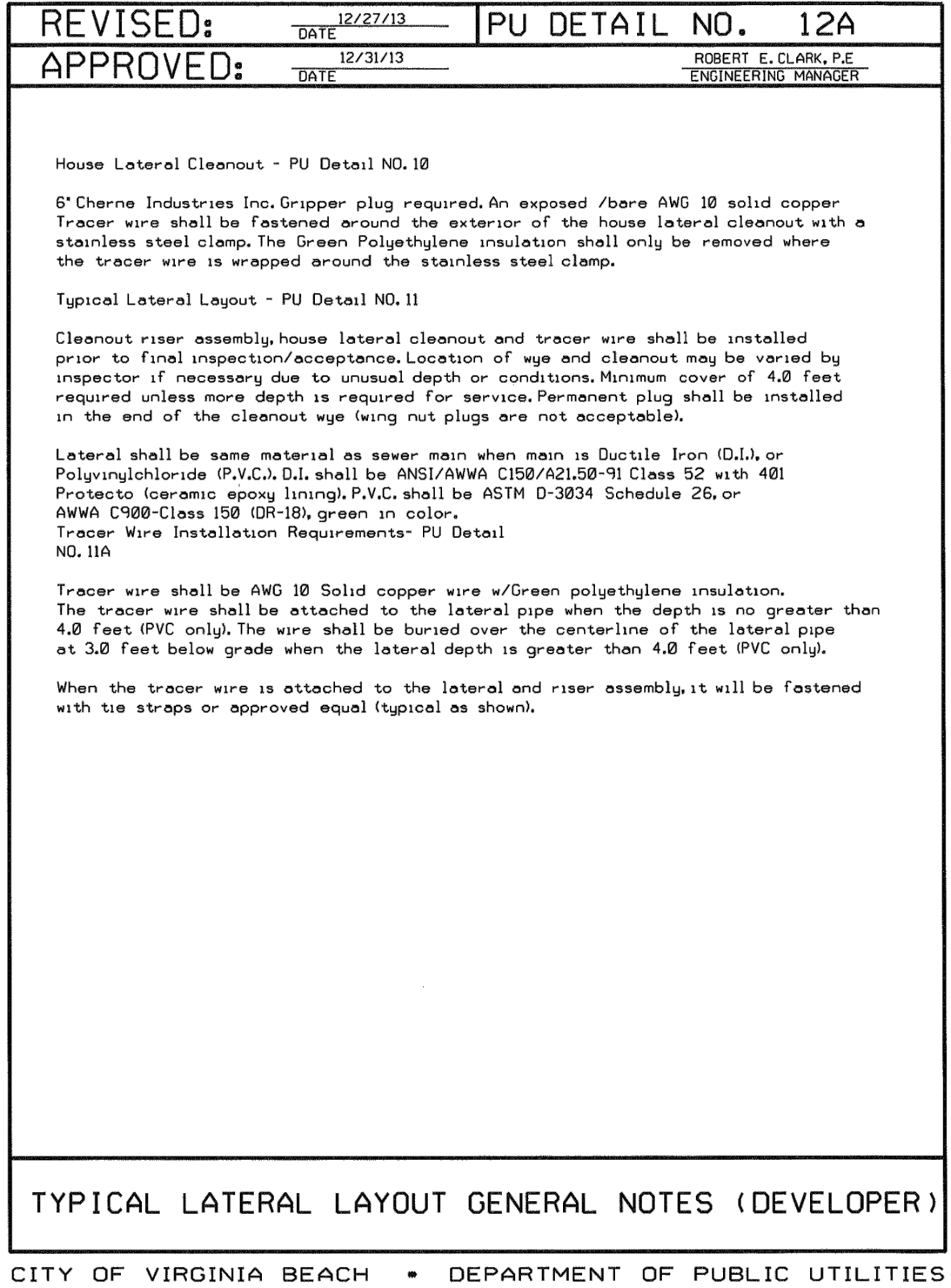
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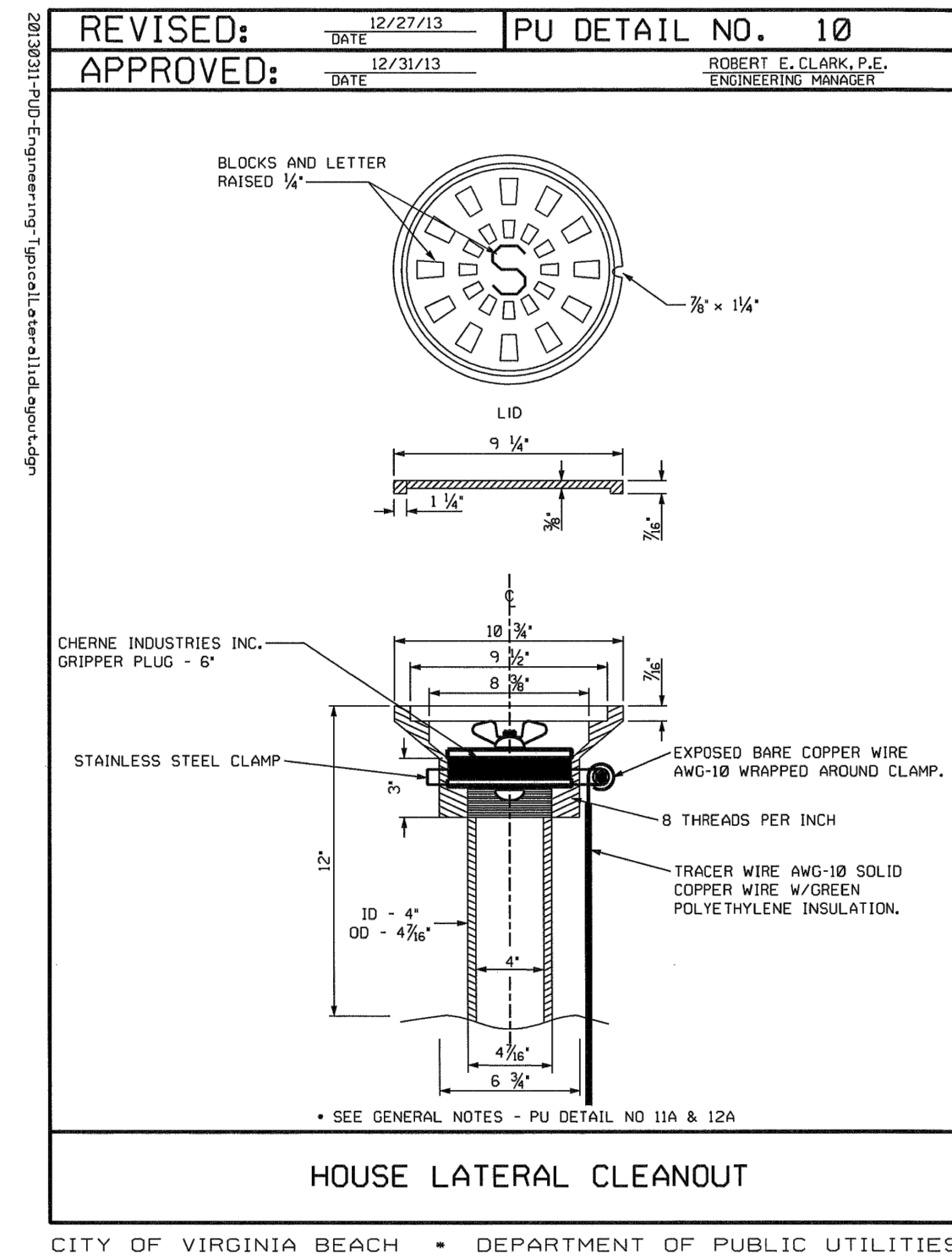
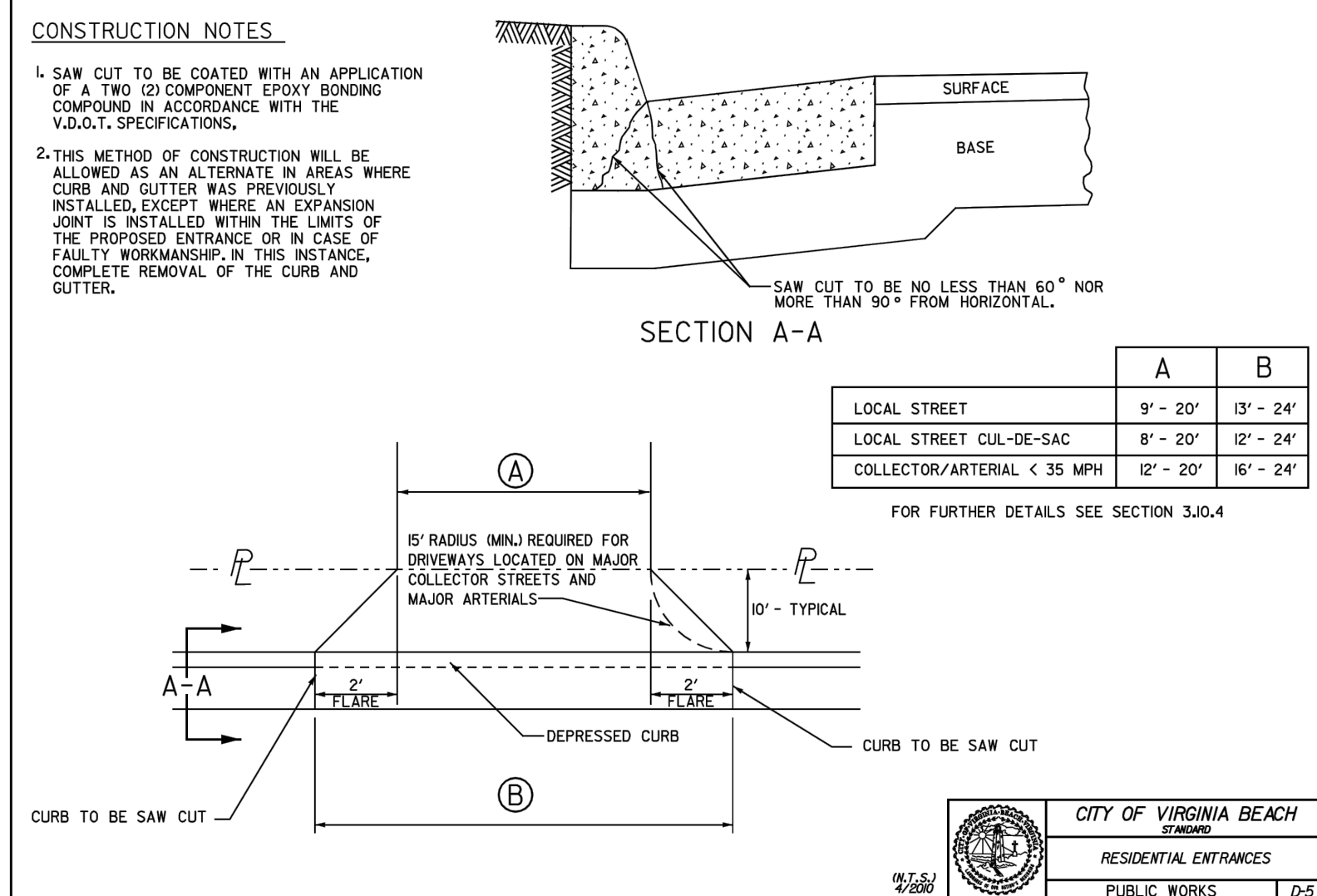
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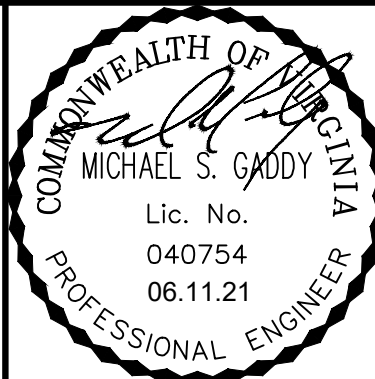
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SUBDIVISION OF CHESAPEAKE PARK
M.B. 4, PG. 47
BAYSIDE BOROUGH-VIRGINIA BEACH, VIRGINIA

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