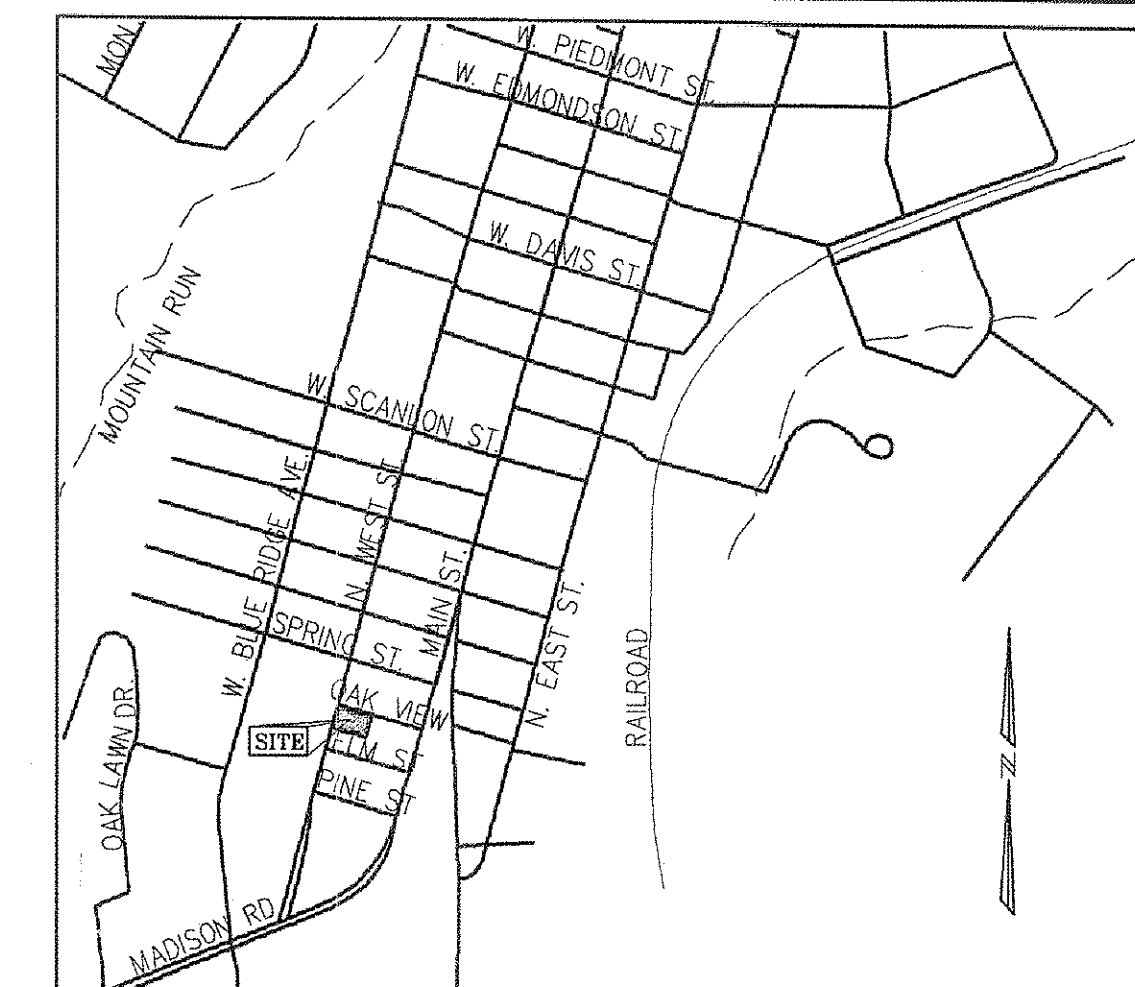


**GENERAL NOTES**

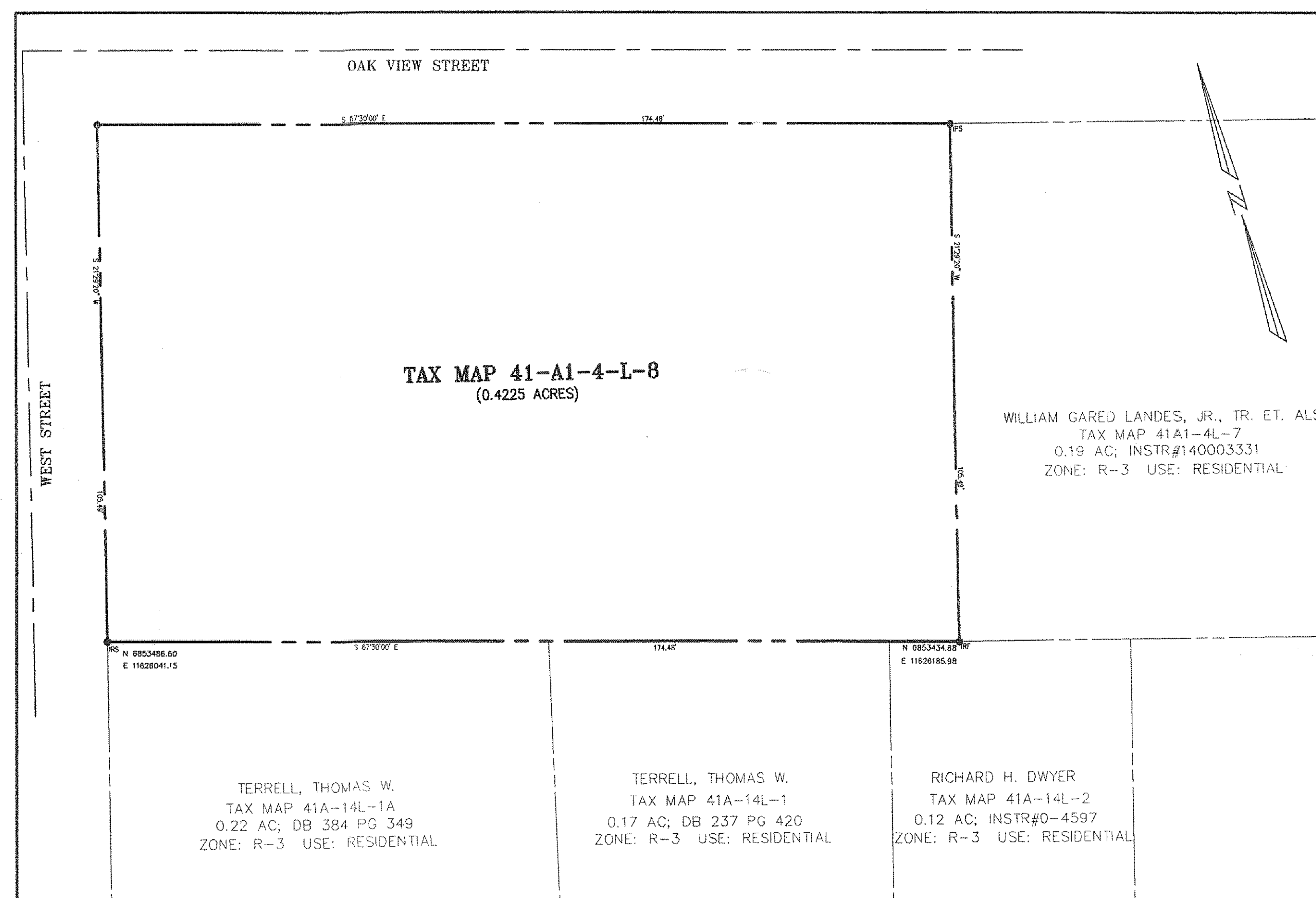
- All construction shall conform to existing State and Town building codes. It is the contractor's responsibility to be aware of all applicable standards and specifications as well as required methods of construction. The contractor shall furnish all materials, labor, and equipment to perform all work, including restoration, for the completed installation of all improvements shown hereon or implied as necessary to complete the proposed improvements.
- The contractor or his agent shall be responsible for digging test pits to determine the exact location of any existing underground utilities prior to the beginning of construction. In particular, test pits adjacent to existing high pressure gas mains shall be performed in the presence of a gas company representative and shall be hand dug according to their instruction. Utilities shown hereon are based on available information.
- A title report has not been furnished, however this property is subject to any existing easements, covenants and servitudes of record.
- All erosion and sediment control practices shall be constructed and maintained in accordance with the minimum standards and specifications of the 1992 Virginia Erosion and Sediment Control Handbook and Town ordinances. Removal of said controls shall be authorized by the Town inspector but, at least, shall not be removed until permanent vegetative cover is established on all denuded areas.
- Construction should be sequenced so that grading operations can begin and end as quickly as possible. Sediment trapping measures, such as silt fences, shall be installed and made functional before any land disturbing activity begins.
- Prior to development, the limits of clearing shall be clearly marked on the property and suitable protective barriers shall be erected five (5) feet outside the dripline of any tree or stand of trees to be preserved within 100 feet of the construction footprint. The barriers shall remain erected throughout all phases of construction. The storage of equipment, materials, debris or fill shall not be allowed with the area protected by the barrier.
- Engineered fill and backfill shall be approved select materials and shall be placed in six to eight inch layers and compacted at optimum moisture, plus or minus two percent, to a density of not less than 95 percent in accordance with A.A.S.H.T.O. T-99 or A.S.T.M. D-698.
- No subsurface investigation has been performed by Hinchey and Baines, PLC. to attest to the soil conditions or the presence of toxic or contaminated waste.
- It shall be the responsibility of the contractor or developer to have sufficient soils and foundation testing performed to determine that the support values and C.B.R.'s are adequate for the standards shown on this plan.
- All construction involving problem soils must be performed under the full-time inspection of a professional geotechnical engineer.
- The contractor shall perform necessary grading to preclude the ponding of water on roadways and buildable areas.
- There are no known gravesites on this site. In the event gravesites are discovered during construction, the Town Planning Office should be notified immediately. All activities must cease and shall not resume until authorization to proceed is granted by the Town Planning Office. Gravesites shall be protected in accordance with state law.
- Prior to clearing and grading on slopes 25% or greater, all surface drainage will be routed away from the area to be graded.
- All fill materials and their subgrade will be approved by the soils engineer for this site.
- No portion of the land hereon is located in the F.I.R.M. 100-year special floodplain area zone "A", as indicated on Flood Insurance Rate Map (FIRM) number 51047C0226C, effective date June 18, 2007. This property is located in zone "X".
- According to the National Wetlands Inventory there are no known wetlands on site. All wetland permits required by federal, state, and local laws and regulations shall have been obtained prior to initiating grading or any other on-site land disturbing activity.
- The developer shall be responsible for the relocation of any utilities which may be required as a result of this project. The relocation should be done prior to construction.
- The developer shall be responsible for any damage to the existing streets and utilities which occurs as a result of this project within or contiguous to the existing right-of-way.
- All construction in street right-of-way shall be in conformance with standards and specifications of the Virginia Department of Transportation and the Town of Culpeper.
- There are no known historic buildings or features on site.
- Any work performed within existing or proposed VDOT maintained Right-of-Way shall conform to the current editions of and latest revisions to the Virginia Department of Transportation (VDOT) Road and Bridge Specifications and Standards and the Town of Culpeper. In case of discrepancy or conflict between the Standards, Specifications or Regulations, the most stringent shall apply.
- Prior to initiation of work, a VDOT Land Use Permit for any work within VDOT's Right-of-Way shall be obtained.
- The Applicant is responsible for certifying that the completed Stormwater Management Facility (SWFM) or Integrated Management Practice (IMP) are in accordance with the approved plans and specifications, and shall provide a written log or regular inspections sufficient to adequately document compliance.

# SITE PLAN FOR OAK VIEW STREET CONDOMINIUMS

## TAX MAP #41-A1-4-L-8 TOWN OF CULPEPER, VIRGINIA



**VICINITY MAP**  
SCALE: 1" = 1,000'



**BOUNDARY & ADJOINER INFORMATION**



**NOTICE REQUIRED**

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS, PRIOR TO COMMENCEMENT OF CONSTRUCTION.

**ENGINEER'S CERTIFICATION**

THE PROPERTY SHOWN HEREON IS IN THE NAME OF RICHARD H. DWYER PER DEED BOOK 727, PAGE 317 AS RECORDED IN THE LAND RECORDS OF THE COUNTY OF CULPEPER, VIRGINIA.

*[Signature]*  
ENGINEER VA PE 17569 12-12-2017  
LICENSE NUMBER DATE

**SHEET INDEX**

- COVER SHEET
- CONSTRUCTION NOTES AND DETAILS
- EXISTING CONDITIONS AND DEMOLITION PLAN
- SITE PLAN
- STORM SEWER DETAILS AND E&S CONTROL PLAN
- EROSION AND SEDIMENT CONTROL NARRATIVE
- LANDSCAPE PLAN
- LANDSCAPE DETAILS

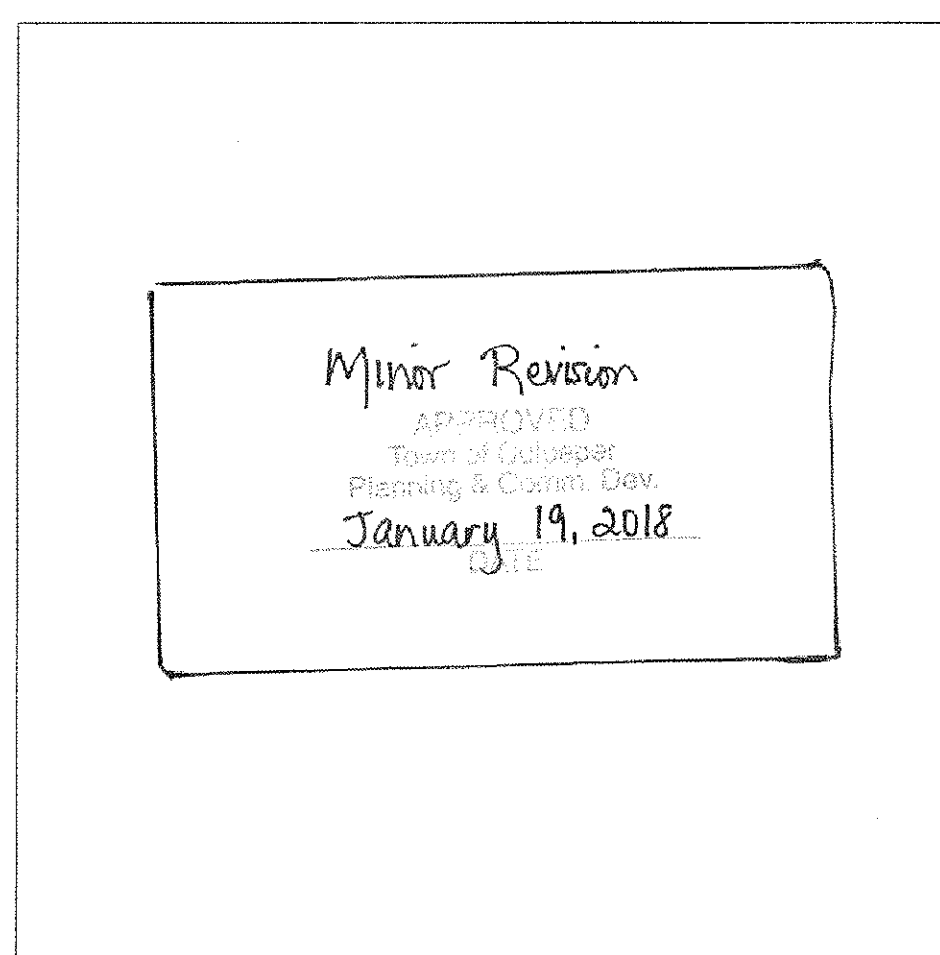
**PLAN NOTES**

- SITE IDENTIFICATION: 41-A1-4-L-8
- TOTAL SITE AREA: 0.4225 ACRES (±18,403 SF)
- CONTRACT OWNER/APPLICANT: KILEY DOLL  
360 SNYDER LANE  
CULPEPER, VA 22701
- EXISTING USE: SINGLE-FAMILY RESIDENTIAL  
PROPOSED USE: 6-UNIT MULTI-FAMILY
- ZONING: R-3
- THIS PROJECT WILL BE SERVED BY TOWN OF CULPEPER WATER & SEWER.
- BOUNDARY INFORMATION TAKEN FROM A FIELD SURVEY BY PIEDMONT LAND SURVEYORS PLC, DATED AUGUST 31, 2017 AND TOPOGRAPHICAL INFORMATION TAKEN FROM TOWN TOPO.
- SITE LIGHTING WILL BE PROVIDED BY INDIVIDUAL LAMP POSTS AT EACH DRIVEWAY.

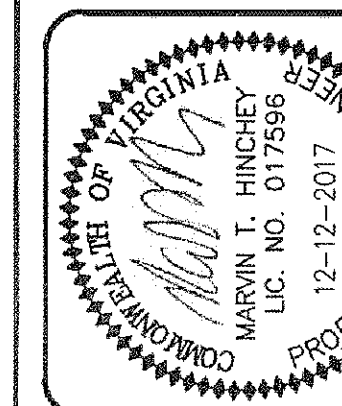
**ZONING INFORMATION**

- ZONE: R-3
- MINIMUM LOT SIZE: 15,000 SF LOT SIZE: ±18,318 SF
- MINIMUM OPEN SPACE: 15% (2748 SF) PROP. OPEN SPACE: 45% (8,267 SF)
- DENSITY (2-3 BR MULTIFAMILY PER R-3) - 15 UNITS/AC PROP. DENSITY: 14.3 UNITS/AC  
0.42 x 15 = 6.3 UNITS ALLOWED 6 UNITS PROVIDED
- SETBACKS:  
FRONT - 10' FROM ALL RIGHT OF WAY LINES; 15' FROM SIDE STREET  
SIDE YARD - 10'  
REAR YARD - 25'
- PARKING REQUIREMENT: 2 SPACES/UNIT. THERE WILL BE A GARAGE SPACE AND A SPACE IN FRONT OF THE GARAGE FOR EACH OF THE UNITS.

**APPROVAL BLOCK**



**HINCHEY & BAINES, PLC**  
ENGINEERING AND LAND PLANNING  
PHONE (540) 829-2220  
FAX (540) 829-2239  
125 EAST DAVIS STREET  
SUITE 201  
CULPEPER, VIRGINIA 22701



COVER SHEET  
**OAK VIEW STREET CONDOMINIUMS**  
SITE PLAN  
WEST FAIRFAX DISTRICT - TOWN OF CULPEPER, VIRGINIA

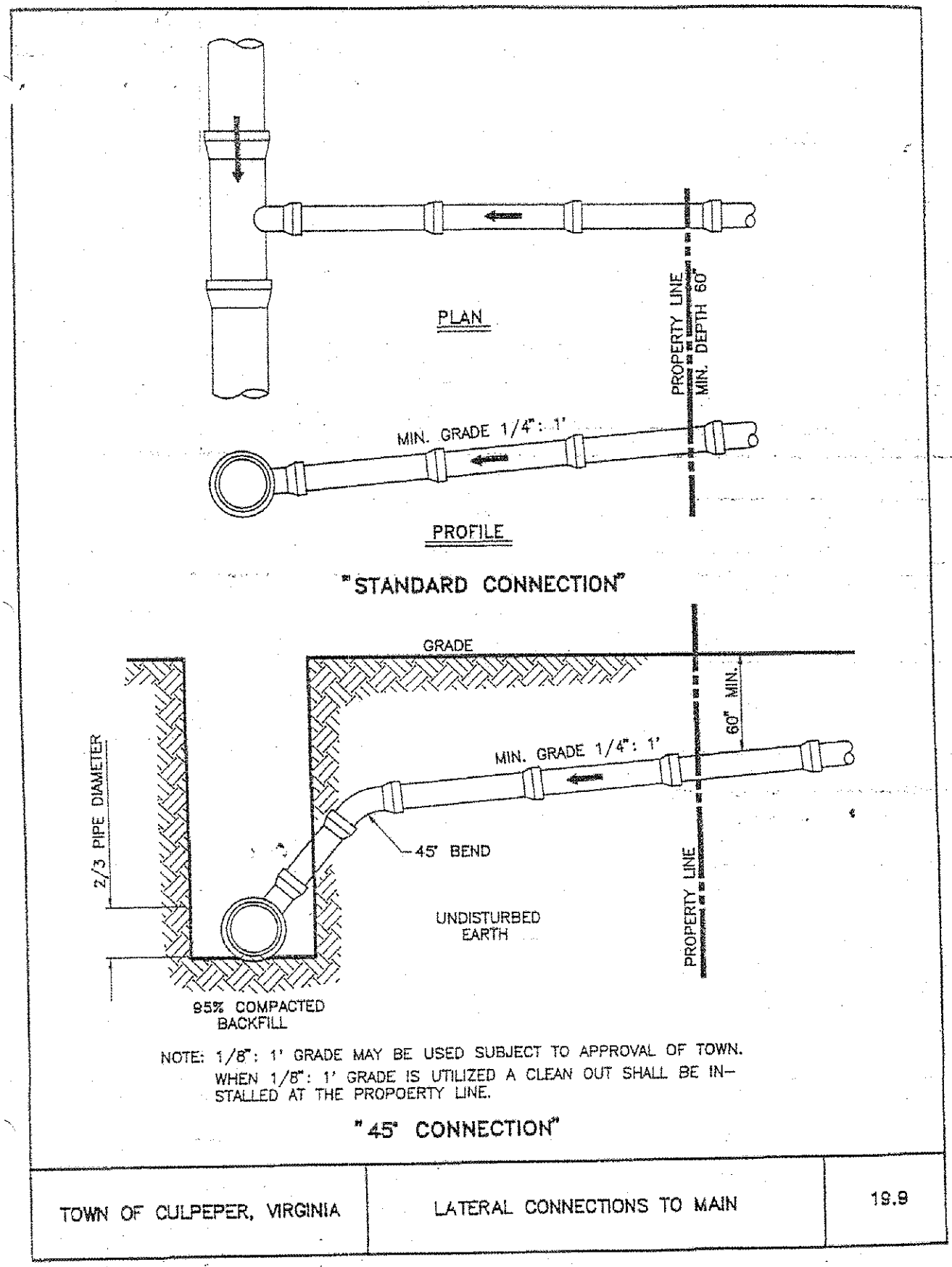
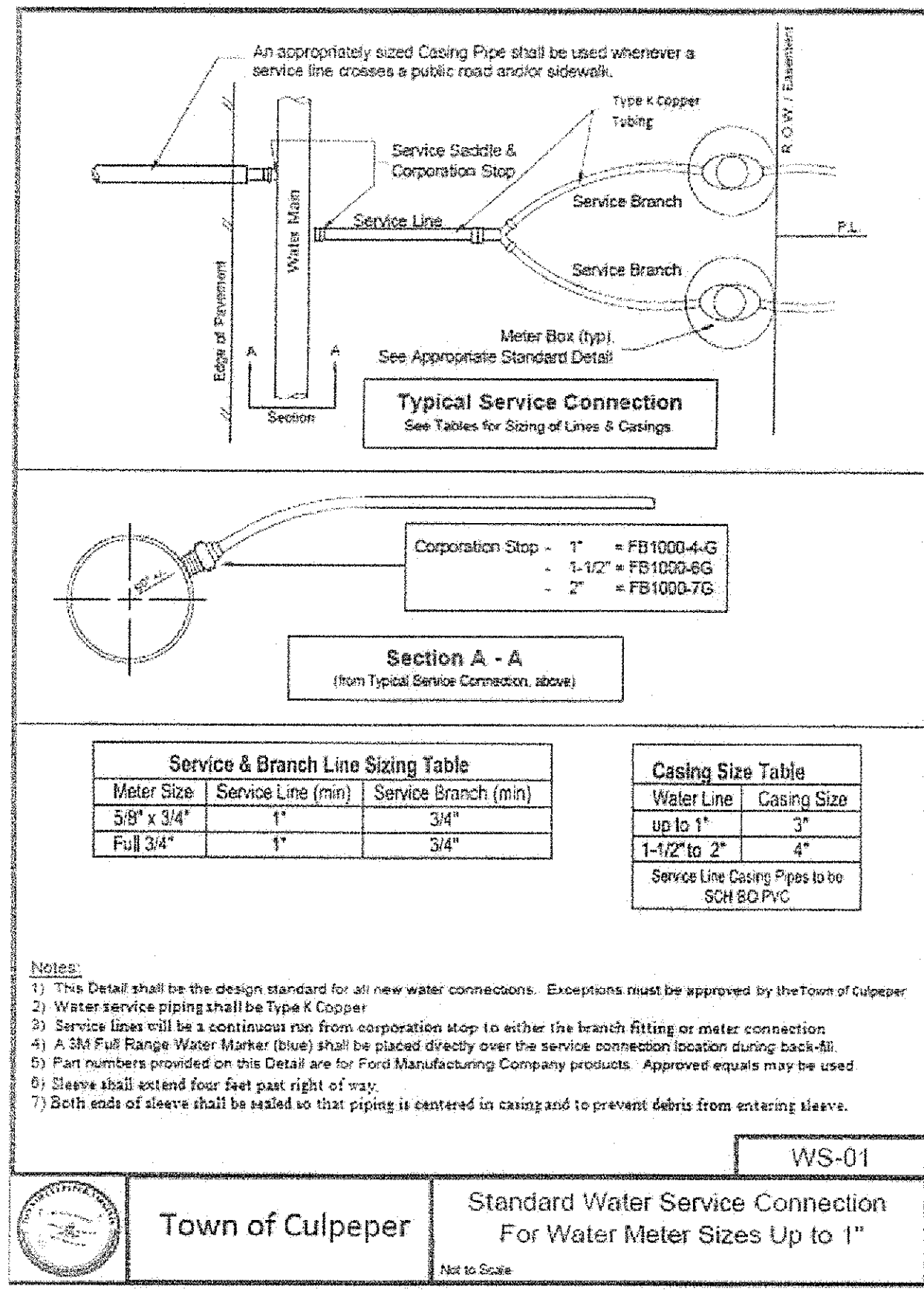
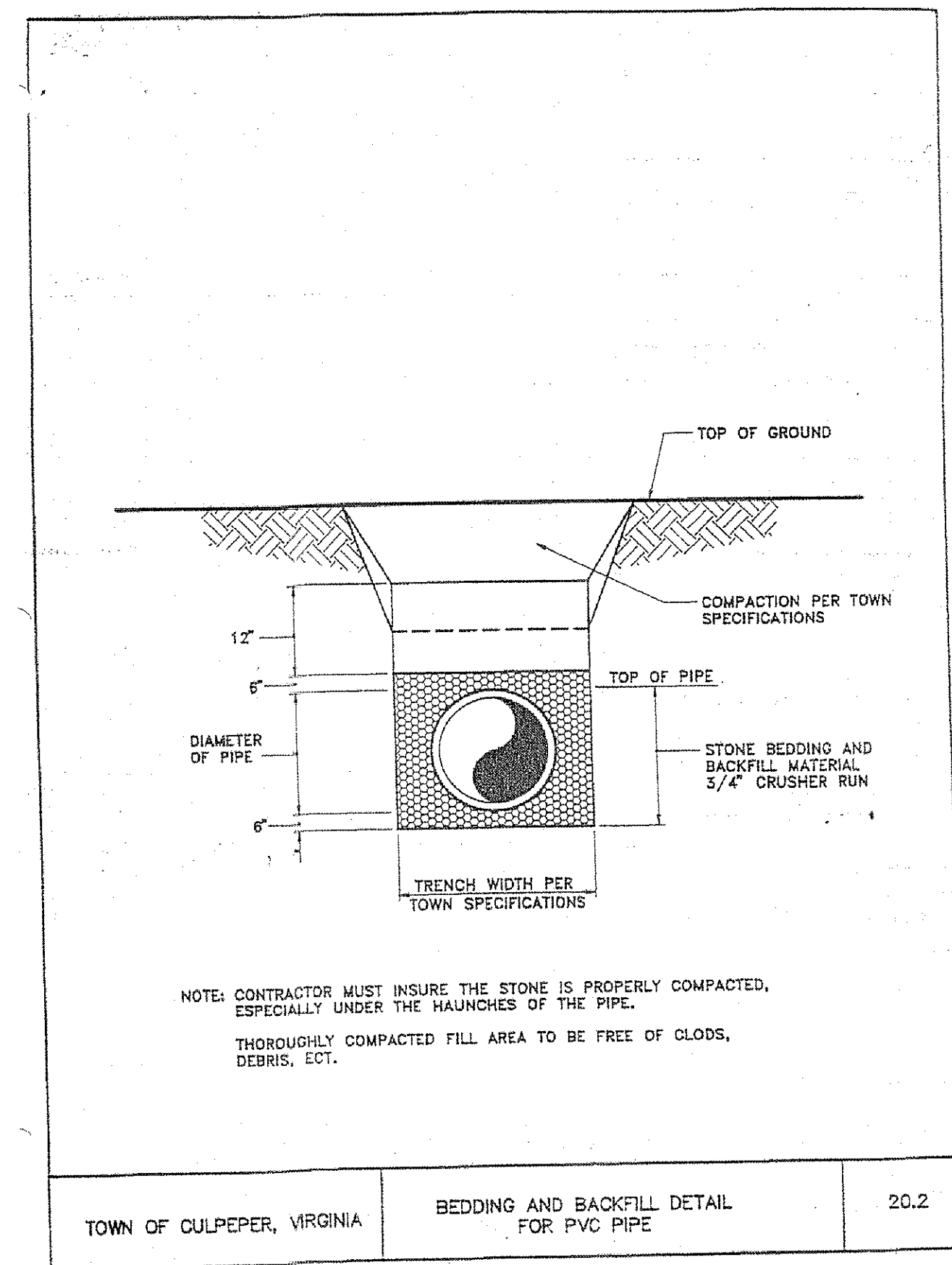
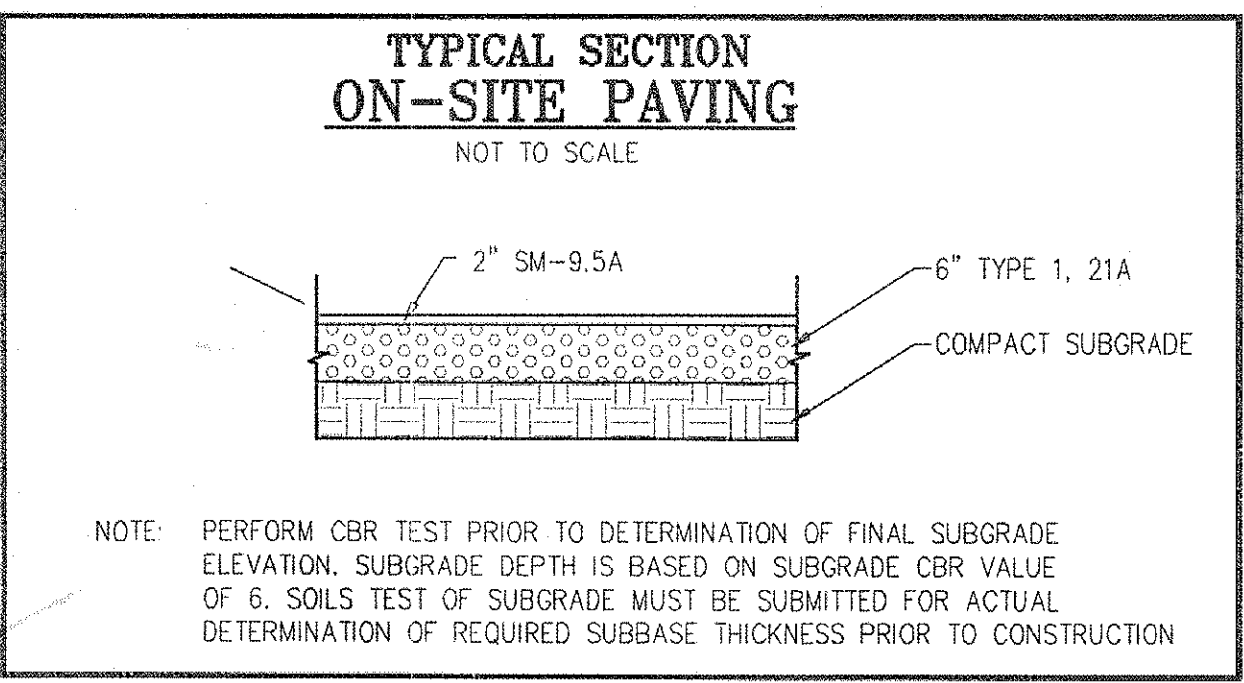
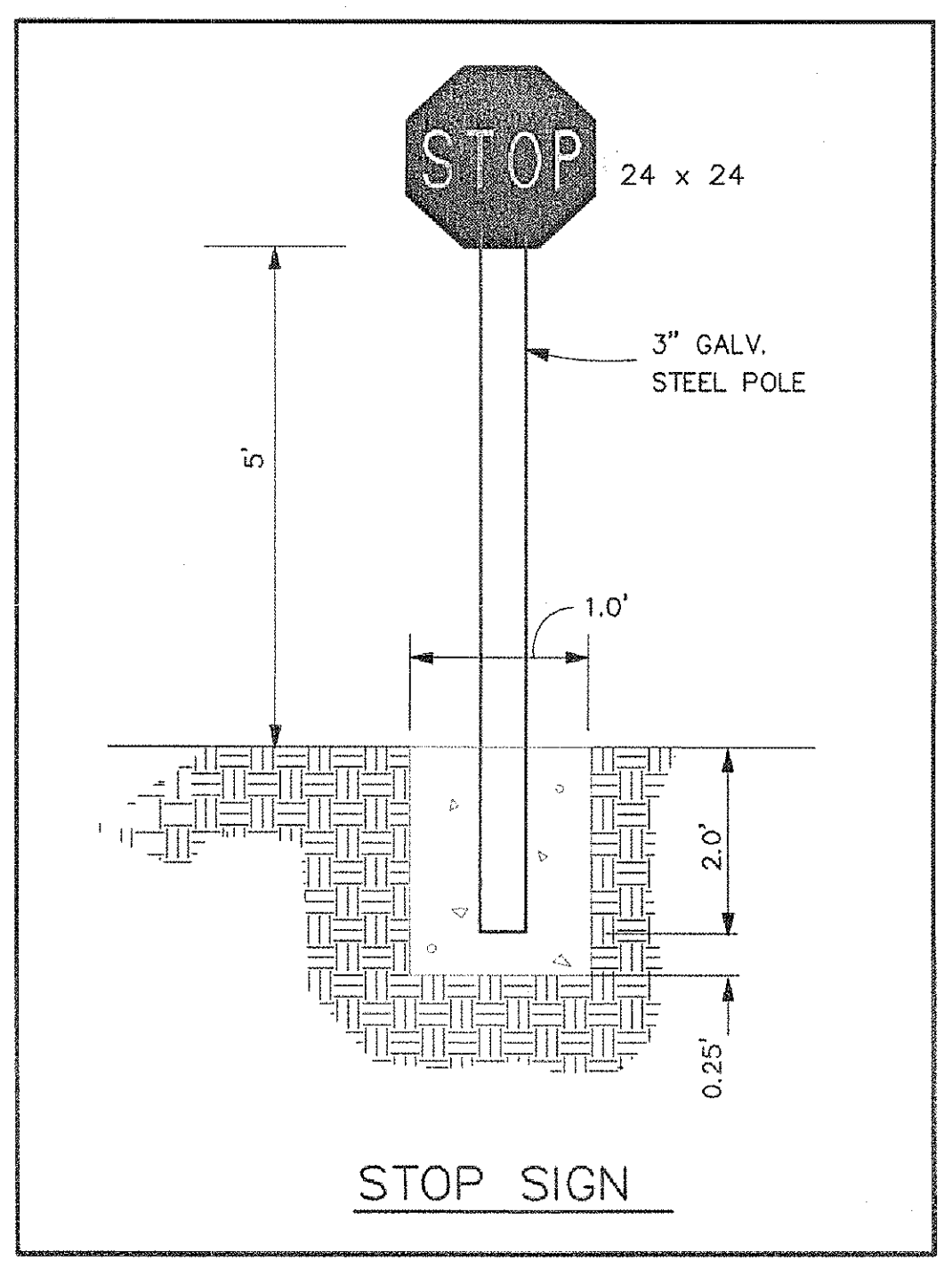
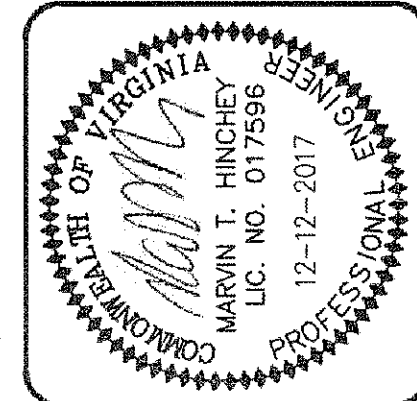
SCALE: AS NOTED

DATE: 9/12/2017

REVISIONS:  
12-12-2017 REMOVE STM SEW

SHEET 1 OF 8

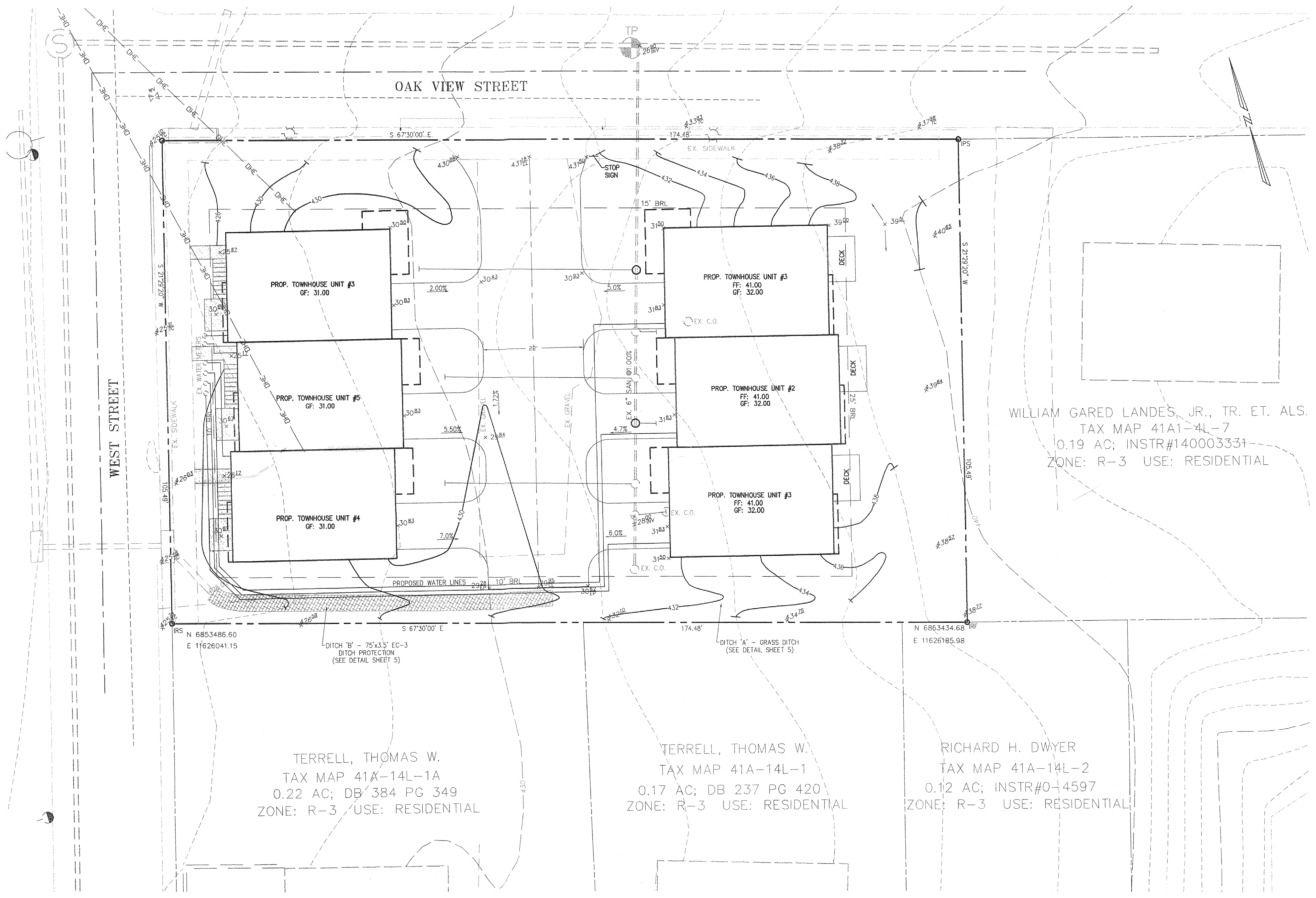
FILE NO. 1317



GENERAL NOTES & DETAILS  
**OAK VIEW STREET CONDOMINIUMS**  
 SITE PLAN  
 WEST FAIRFAX DISTRICT - TOWN OF CULPEPER, VIRGINIA

SCALE: AS NOTED  
 DATE: 9/12/17  
 REVISIONS:  
 12-12-2017 REMOVE STM SEW





WEST STREET

OAK VIEW STREET

PROP. TOWNHOUSE UNIT #3  
GF: 31.00

PROP. TOWNHOUSE UNIT #5  
GF: 31.00

PROP. TOWNHOUSE UNIT #4  
GF: 31.00

PROP. TOWNHOUSE UNIT #3  
FF: 41.00  
GF: 32.00

PROP. TOWNHOUSE UNIT #2  
FF: 41.00  
GF: 32.00

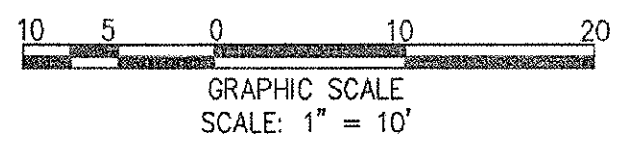
PROP. TOWNHOUSE UNIT #3  
FF: 41.00  
GF: 32.00

WILLIAM GARED LANDES, JR., TR. ET. ALS.  
TAX MAP 41A1-4L-7  
0.19 AC; INSTR#140003331  
ZONE: R-3 USE: RESIDENTIAL

TERRELL, THOMAS W.  
TAX MAP 41A-14L-1A  
0.22 AC; DB 384 PG 349  
ZONE: R-3 USE: RESIDENTIAL

TERRELL, THOMAS W.  
TAX MAP 41A-14L-1  
0.17 AC; DB 237 PG 420  
ZONE: R-3 USE: RESIDENTIAL

RICHARD H. DWYER  
TAX MAP 41A-14L-2  
0.12 AC; INSTR#0-4597  
ZONE: R-3 USE: RESIDENTIAL



HINCHEY & BAINES, PLC  
ENGINEERING AND LAND PLANNING  
PHONE (540) 829-2220  
FAX (540) 829-2239  
125 EAST DAVIS STREET  
SUITE 201  
CULPEPER, VIRGINIA 22701

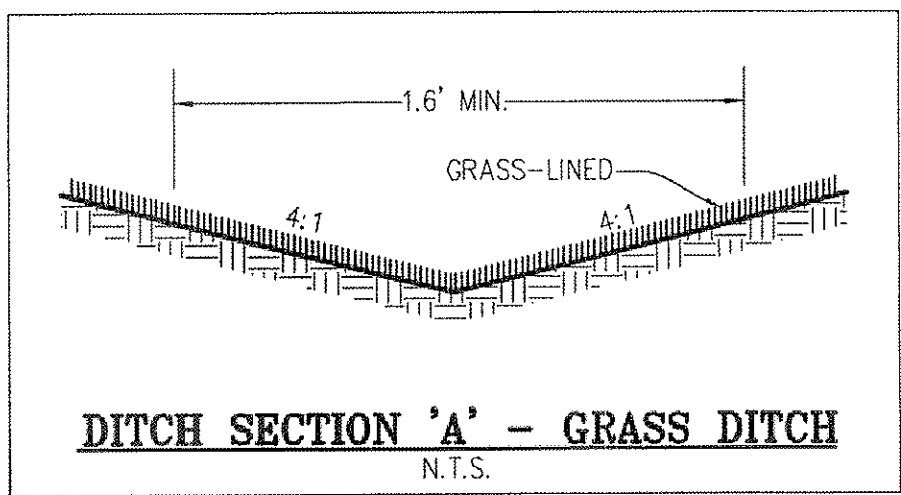


SITE PLAN  
**OAK VIEW STREET CONDOMINIUMS**  
SITE PLAN  
WEST FAIRFAX DISTRICT - TOWN OF CULPEPER, VIRGINIA

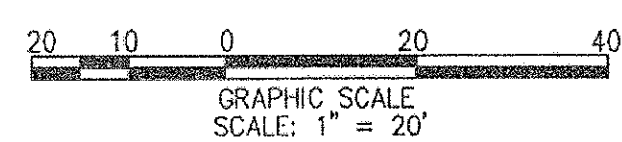
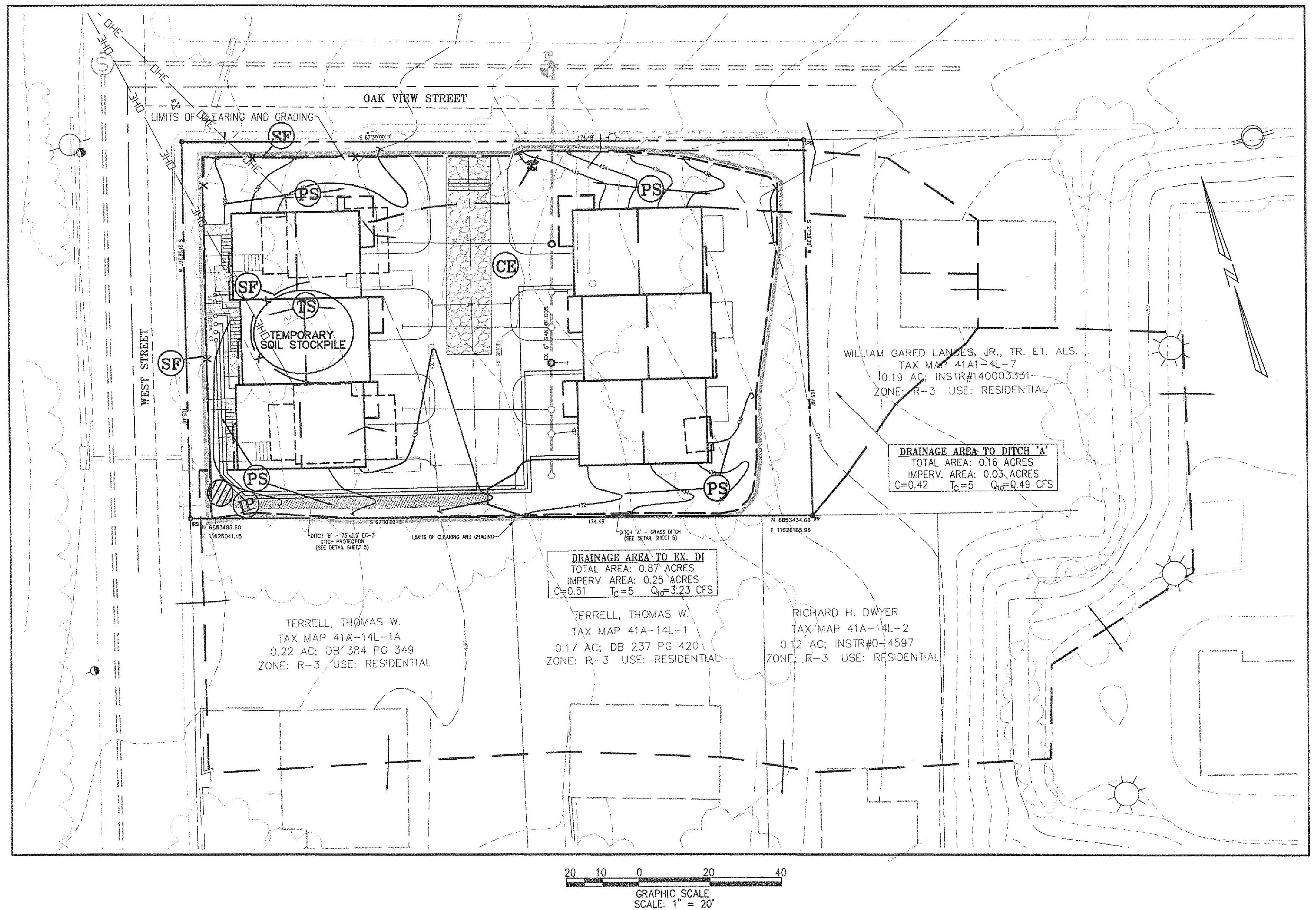
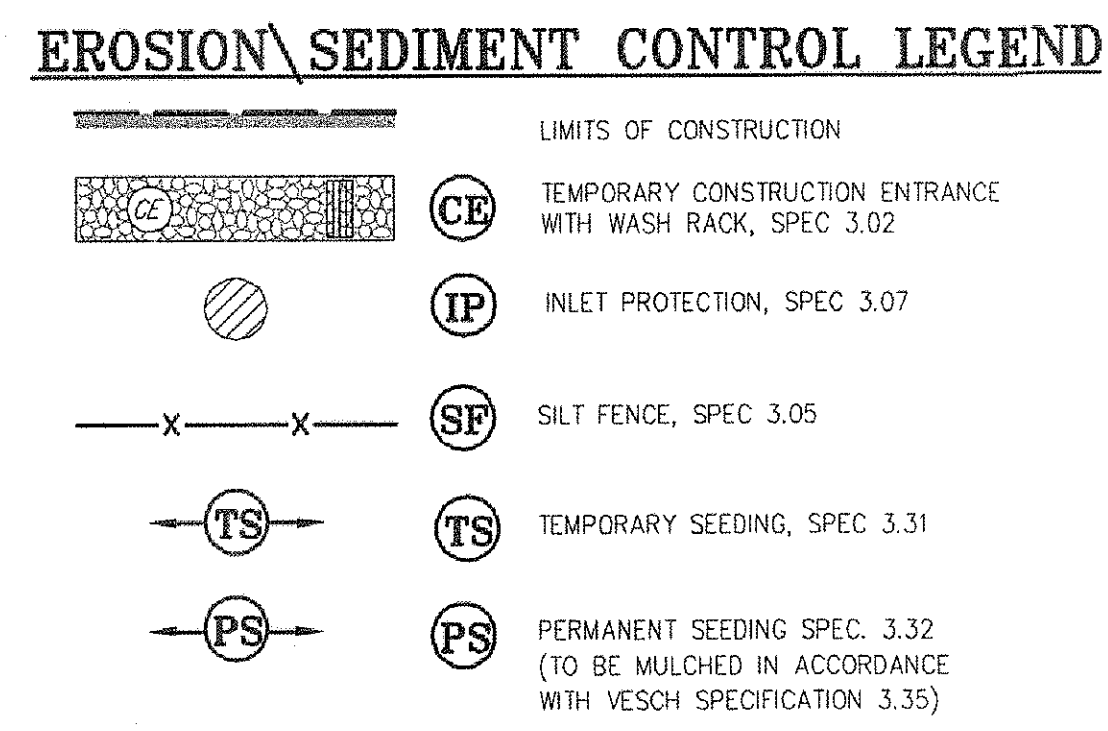
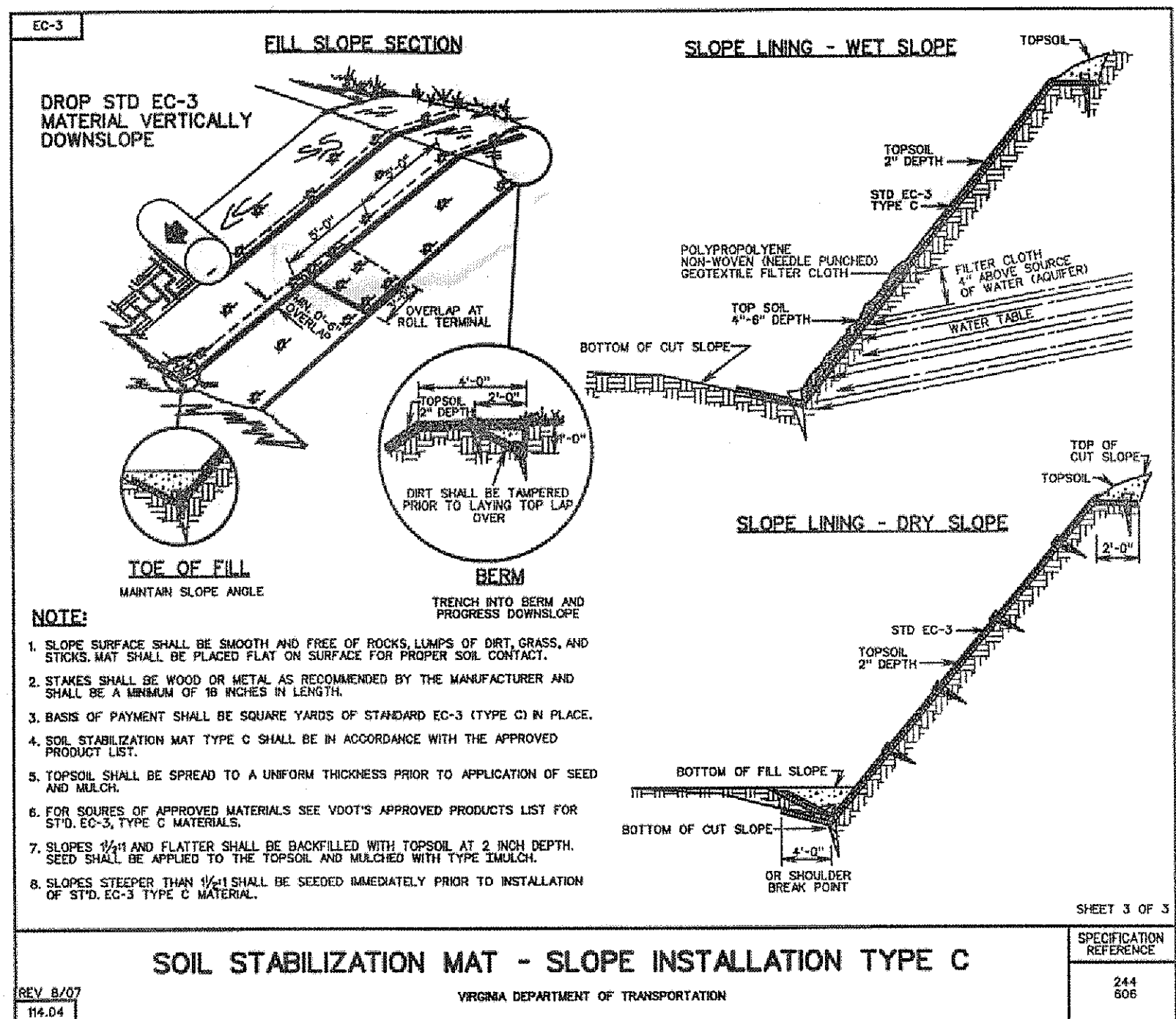
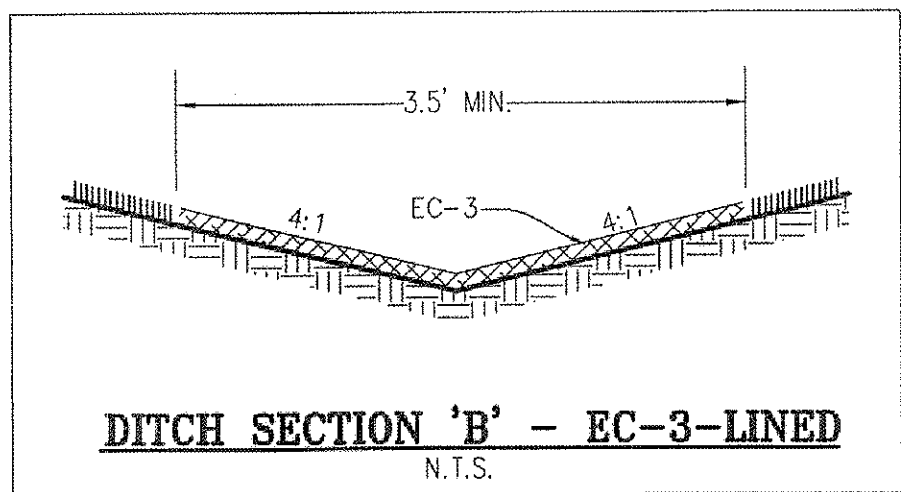
SCALE: AS NOTED  
DATE: 9/12/2017  
REVISIONS:  
12-12-2017 REMOVE STM SEW

SHEET  
4 OF 8  
FILE NO.  
1317

Project Description	
Worksheet	Triangular Channel - 1
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth
Input Data	
Mannings Coefficient	0.030
Slope	0.065000 R/H
Left Side Slope	0.25 V:H
Right Side Slope	0.25 V:H
Discharge	3.23 cfs
Results	
Depth	0.43 ft
Flow Area	0.7 ft <sup>2</sup>
Wetted Perimeter	3.52 ft
Top Width	3.42 ft
Critical Depth	0.53 ft
Critical Slope	0.021304 R/H
Velocity	4.42 ft/s
Velocity Head	0.30 ft
Specific Energy	0.73 ft
Froude Number	1.69
Flow Type	Supercritical



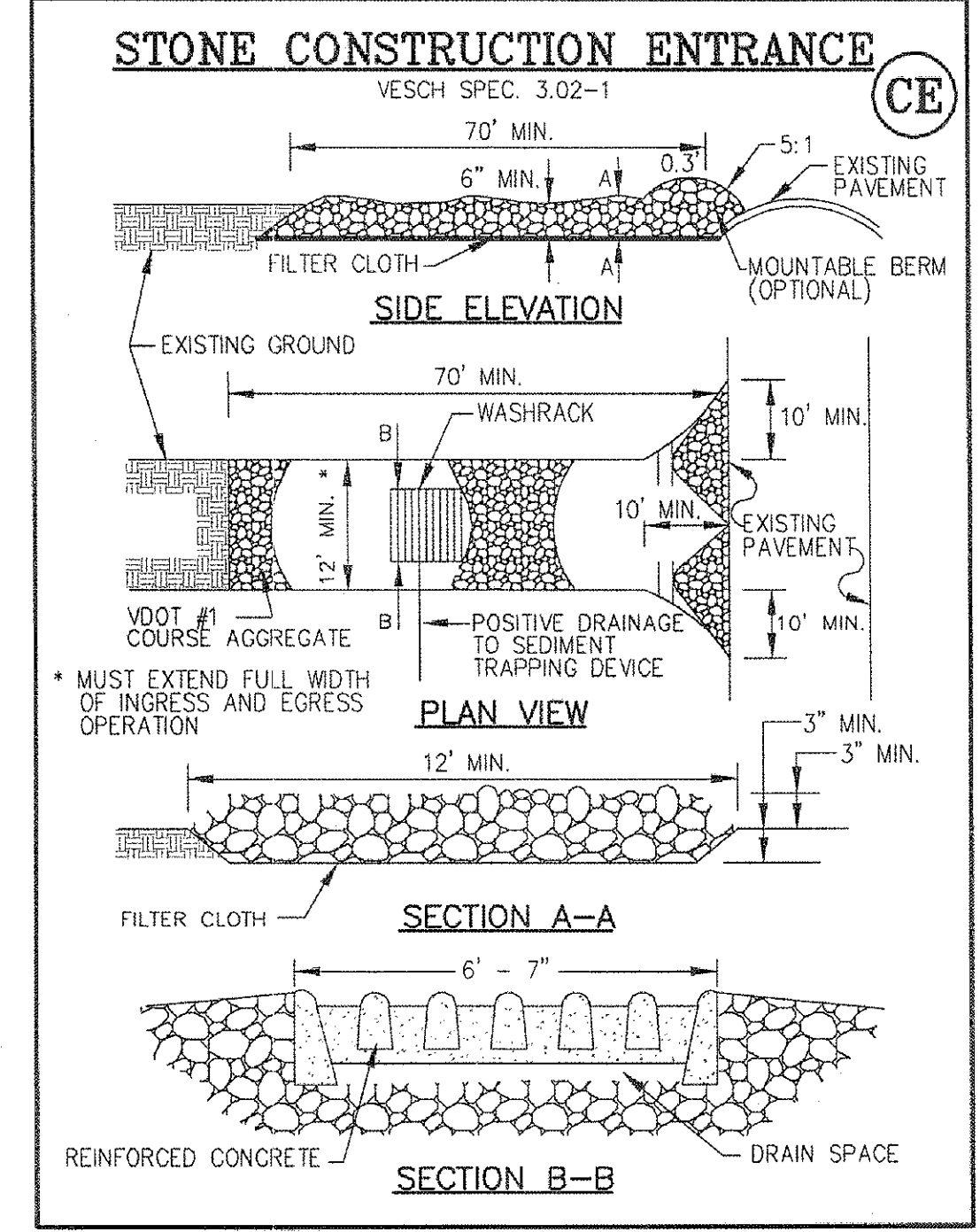
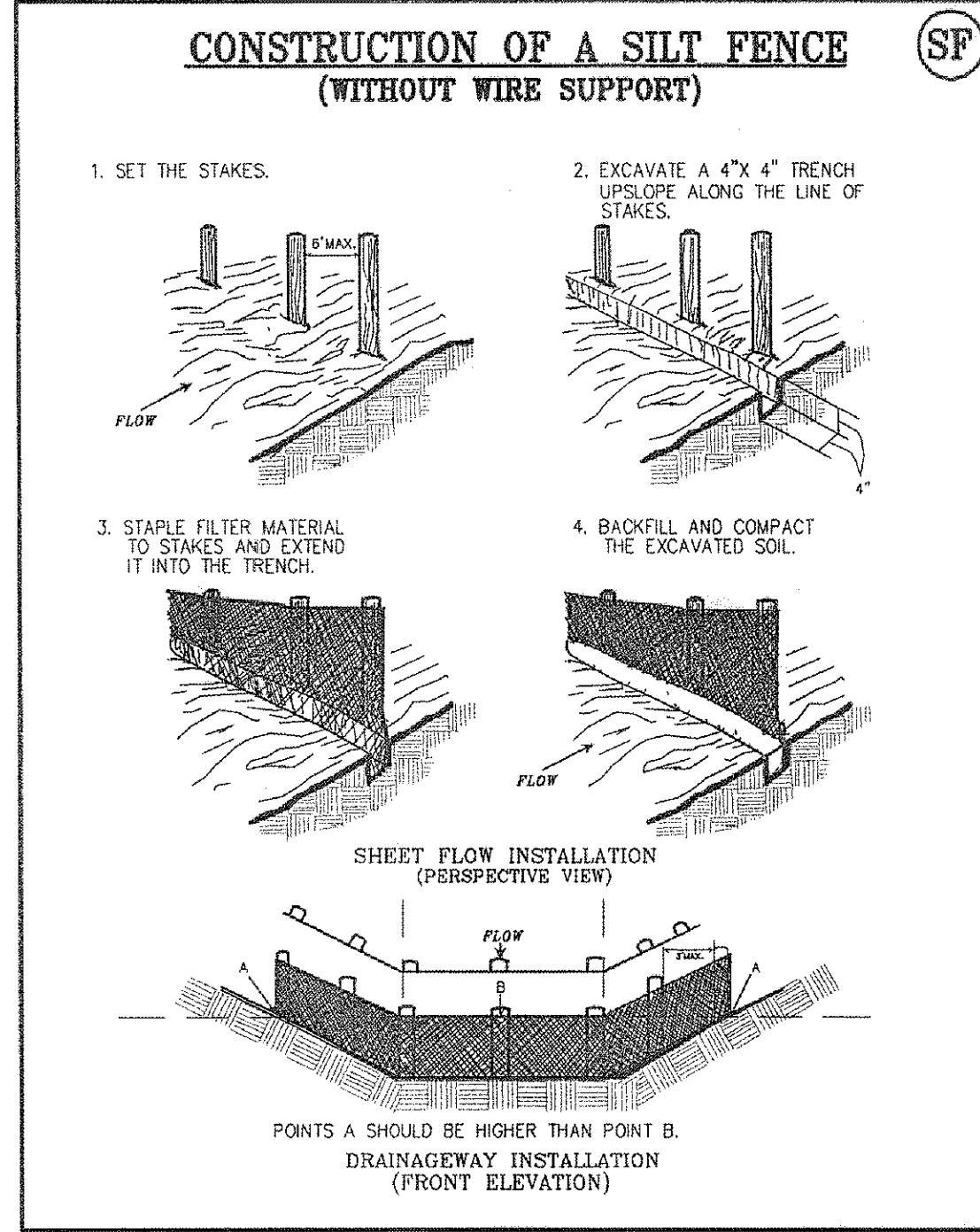
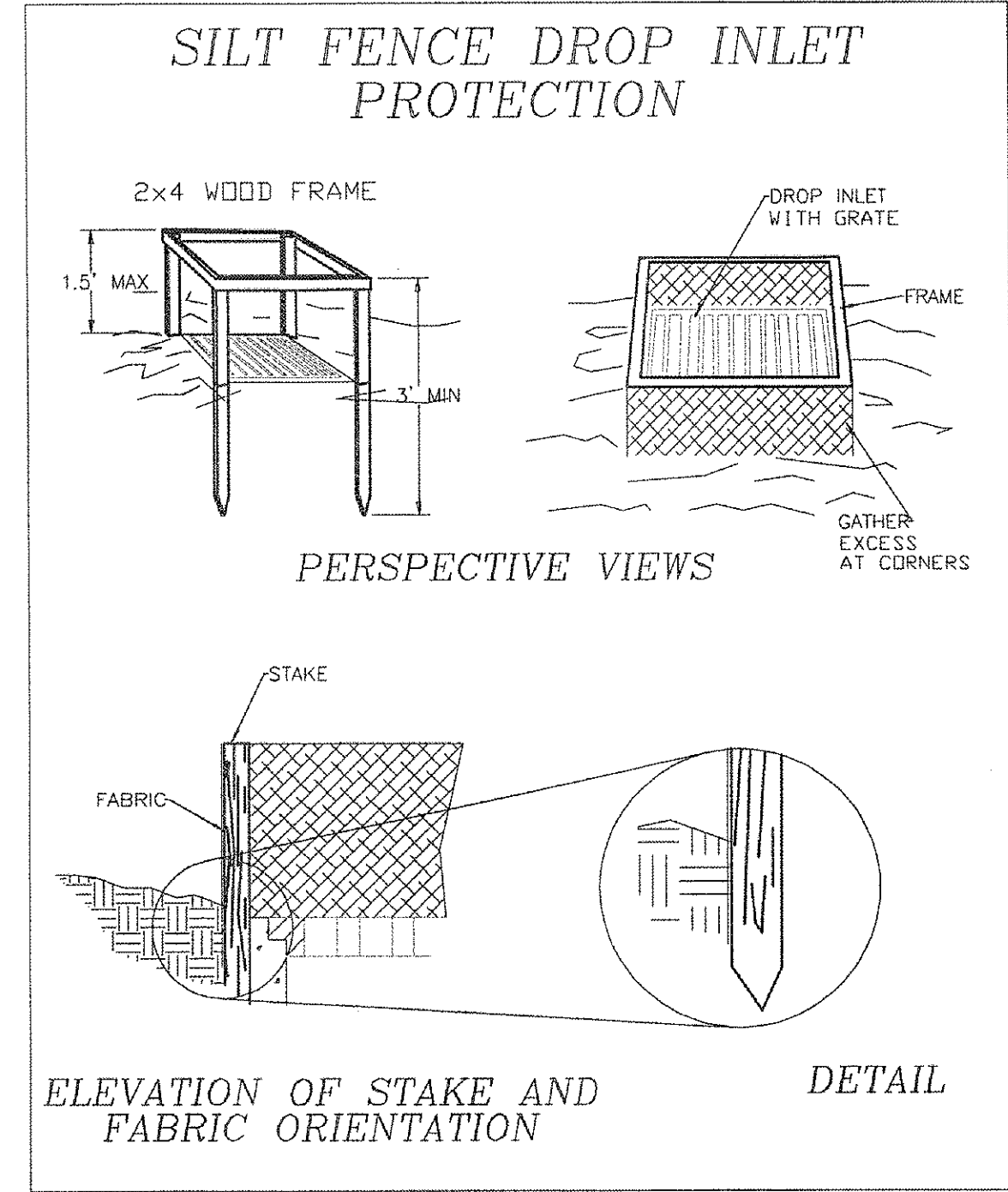
Project Description	
Worksheet	Triangular Channel - 1
Flow Element	Triangular Channel
Method	Manning's Formula
Solve For	Channel Depth
Input Data	
Mannings Coefficient	0.030
Slope	0.100000 R/H
Left Side Slope	0.25 V:H
Right Side Slope	0.25 V:H
Discharge	0.49 cfs
Results	
Depth	0.19 ft
Flow Area	0.2 ft <sup>2</sup>
Wetted Perimeter	1.60 ft
Top Width	1.55 ft
Critical Depth	0.29 ft
Critical Slope	0.027395 R/H
Velocity	3.24 ft/s
Velocity Head	0.16 ft
Specific Energy	0.36 ft
Froude Number	1.83
Flow Type	Supercritical



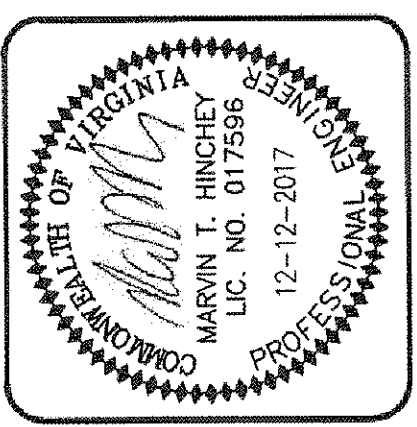
**SOIL DATA**

MAP SYMBOL	SOIL NAME	HYDRIC (%)	K-FACTOR (WHOLE SOIL)	HYDRO-LOGIC SOIL GROUP	DEPTH (FT.)	DEPTH TO WATER (FT.)	SATURATED HYDROLOGIC CONDUCTIVITY (IN/HR)	AVAILABLE WATER CAPACITY (%)	FLOODING FREQUENCY CLASS
48C	Rapidan-Penn Complex 7-15% rocky	4	0.43	C	>6'	>6'	0.35	14	none

AS LISTED BY THE USDA, SOIL CONSERVATION SERVICE



**HINCHEY & BAINES, PLC**  
**ENGINEERING AND LAND PLANNING**  
 125 EAST DAVIS STREET  
 SUITE 201  
 CULPEPER, VIRGINIA 22701  
 PHONE (540) 829-2220  
 FAX (540) 829-2259



**STORM SEWER DETAILS AND E&S CONTROL PLAN**  
**OAK VIEW STREET CONDOMINIUMS**  
 SITE PLAN  
 WEST FAIRFAX DISTRICT - TOWN OF CULPEPER, VIRGINIA

SCALE:	AS NOTED
DATE:	9/12/2017
REVISIONS:	12-12-2017 REMOVE STM SEW
SHEET	5 OF 8
FILE NO.	1317

**9VAC25-840-40. MINIMUM STANDARDS**

A VESCP MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. 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 14 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
  - A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
  - B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT A MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR STORM OF 24-HOUR DURATION. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SLOPE STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
9. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
  - I. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
  - II. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
  - III. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
  - IV. ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
  - V. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
  - VI. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
    - A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
    - B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
    - C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
    - D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
    - E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THIS CHAPTER.
    - F. APPLICABLE SAFETY REQUIREMENTS SHALL BE COMPLIED WITH.
11. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
12. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE VESCP AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.

19. 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 FOLLOWING STANDARDS AND CRITERIA. STREAM RESTORATION AND RELOCATION PROJECTS THAT INCORPORATE NATURAL CHANNEL DESIGN CONCEPTS ARE NOT MAN-MADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS.
  - A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
  - B. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
    - (i) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
    - (ii) WATER ANALYSES SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS.
  - (b) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND
  - (c) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
- C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
  - (1) IMPROVE THE CHANNELS TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS; OR
  - (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;
  - (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
  - (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE VESCP AUTHORITY TO PREVENT DOWNSTREAM EROSION.
- D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
  - A. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT CONDITION OF THE SUBJECT PROJECT.
  - F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE VESCP OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
  - G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
  - H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
  - I. INCREASED VOLUMES OF SHEET FLOWS THAT MAY CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.
  - J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
  - K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.
  - L. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS IF SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN THE PRACTICES ARE DESIGNED TO (i) OBTAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (ii) OBTAIN AND RELEASE OVER A 24-HOUR PERIOD THE EXPECTED RAINFALL RESULTING FROM THE ONE YEAR, 24 HOUR STORM; AND (iii) REDUCE THE ALLOWABLE PEAK FLOW RATE RESULTING FROM THE 1.5, 2, AND 10 YEAR, 24 HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM THE SITE WHEN IT WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN ITS PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62.1-44.15-54 OR 62.1-44.15-65 OF THE ACT.
  - M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1-44.15-52 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT (§ 62.1-44.15-24 ET SEQ. OF THE CODE OF VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND DISTURBING ACTIVITIES ARE IN ACCORDANCE WITH 9VAC25-870-48 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSPM) PERMIT REGULATIONS. NON COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-870-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSPM) REGULATIONS SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF SUBDIVISION 19 OF THIS SUBSECTION.

**MAINTENANCE**

1. TEMPORARY CONSTRUCTION ENTRANCE - 3.02 THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE OR THE WASHING AND REWORKING OF EXISTING STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY STRUCTURES USED TO TRAP SEDIMENT. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED ONTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.
2. SILT FENCE - 3.05 SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
3. CURB-INLET PROTECTION - 3.07 THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
4. PERMANENT SEEDING - 3.32 WHEN IT IS CLEAR THAT PLANTS HAVE NOT GERMINATED ON AN AREA OR HAVE DIED, THESE AREAS MUST BE RESEEDED IMMEDIATELY TO PREVENT EROSION DAMAGE. HOWEVER, IT IS EXTREMELY IMPORTANT TO DETERMINE FOR WHAT REASON GERMINATION DID NOT TAKE PLACE AND MAKE ANY CORRECTIVE ACTION NECESSARY PRIOR TO RESEEDING THE AREA.

**RLD NOTE:**

RESPONSE LAND DISTURBER REPORTS CAN BE AUDITED BY THE E&S INSPECTOR AT ANY TIME. IF RLD REPORTS ARE NOT PROVIDED, THE E&S INSPECTOR CAN REPORT THIS TO THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ). A FOLLOW UP INSPECTION MAY TAKE PLACE BY DEQ (VIRGINIA EROSION & SEDIMENT CONTROL LAW, SEC. 62.1-44.15-58.)

**EROSION & SEDIMENT CONTROL NARRATIVE**

**PROJECT DESCRIPTION:**  
TOTAL SITE AREA: 0.4225 ACRES. A TOTAL OF 0.36 ACRES WILL BE DISTURBED DURING CONSTRUCTION. THE PURPOSE OF THIS PROJECT IS THE CONSTRUCTION OF 6 TOWNHOUSES AND ASSOCIATED DRIVEWAYS.

**PROJECT LOCATION:**  
THE SITE IS LOCATED IN THE TOWN OF CULPEPER AT THE INTERSECTION OF WEST STREET AND OAK VIEW STREET. THIS PROJECT WILL DISTURB APPROXIMATELY 0.36 ACRES.

**EXISTING SITE CONDITIONS:**  
THIS SITE CURRENTLY CONSISTS OF A RESIDENTIAL LOT WITH TWO EXISTING HOUSES. THE AREA IS SLOPING.

**ADJACENT PROPERTY:**  
IT IS BOUNDED ON THE NORTH BY OAK VIEW STREET, TO THE WEST BY WEST STREET AND BY RESIDENTIAL LOTS ON THE EAST & SOUTH.

**CRITICAL EROSION AREAS:**  
THERE ARE NO CRITICAL EROSION AREAS WITHIN THE LIMITS OF THIS PROJECT.

**EROSION AND SEDIMENT CONTROL MEASURES:**  
ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE V.E.S.C.H. 3RD ED. 1992 AND SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

**PRIOR TO DEVELOPMENT, THE LIMITS OF CLEARING SHALL BE CLEARLY MARKED ON THE PROPERTY AND SUITABLE PROTECTIVE BARRIERS SHALL BE ERRECTED 5 FEET OUTSIDE THE DRIP LINE OF ANY TREE OR STAND OF TREES TO BE PRESERVED WITHIN 100 FEET OF THE CONSTRUCTION FOOTPRINT. THE BARRIERS SHALL REMAIN ERECTED THROUGHOUT ALL PHASES OF CONSTRUCTION. THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS OR FILL SHALL NOT BE ALLOWED WITHIN THE AREA TO BE PROTECTED BY THE BARRIER.**

**THE E&S INSPECTOR HAS THE AUTHORITY TO ADD OR DELETE E&S CONTROLS AS NECESSARY IN THE FIELD AS SITE CONDITIONS CHANGE. A PRE-CONSTRUCTION MEETING IS REQUIRED WITH THE TOWN ENVIRONMENTAL STAFF PRIOR TO THE INSTALLATION OF ANY EROSION AND SEDIMENT CONTROLS OR START OF ANY LAND DISTURBING ACTIVITY. IN ADDITION, NO SEDIMENT BASIN OR TRAP CAN BE REMOVED WITHOUT WRITTEN AUTHORIZATION.**

**TEMPORARY AND PERMANENT SOIL STABILIZATION:**  
ALL CUT AND FILL SLOPES ARE TO BE STABILIZED IMMEDIATELY UPON COMPLETION IN ACCORDANCE WITH MINIMUM STANDARD NO. 5. AREAS NOT TO BE PAVED SHALL RECEIVE PERMANENT SEEDING AND MULCHING IN ACCORDANCE WITH SPEC 3.32. DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 14 DAYS SHALL RECEIVE TEMPORARY SEEDING AND MULCHING IN ACCORDANCE WITH SPEC 3.31. SEE SEEDING REQUIREMENTS, THIS SHEET.

**STRUCTURAL PRACTICES:**

1. SILT FENCE BARRIER - 3.05 SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW AS INDICATED ON SHEET 5.
2. TEMPORARY CONSTRUCTION ENTRANCE - 3.02 A TEMPORARY CONSTRUCTION ENTRANCE WITH WASH RACK SHALL BE INSTALLED AT THE SITE ACCESS POINT. DURING MUDDY CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE ENTERING THE ADJACENT ROADWAY.
3. INLET PROTECTION - 3.07 THE EXISTING YARD INLET SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLET.

**VEGETATIVE PRACTICES:**

1. TOP SOILING (STOCKPILE) - 3.30 TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR SEDIMENT TRAPPING MEASURES PRIOR TO LAND-DISTURBING ACTIVITIES. SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT PLAN TO THE OWNER COVERING THE STOCKPILE AREA WHICH MAY HAVE TO BE APPROVED BY THE PLAN AUTHORITY BEFORE ANY ACTIVITY COMMENCES. ANY OFFSITE HAULING OF SOIL SPOILS REQUIRES 24-HOUR NOTICE TO THE PLANNING AND COMMUNITY DEVELOPMENT OFFICE ALONG WITH FINAL DESTINATION OF THE HAUL.
2. TEMPORARY SEEDING - 3.31 ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
3. PERMANENT SEEDING - 3.32 ALL DISTURBED AREAS WHERE PERMANENT, LONG-LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL AND WHERE ROUGH-GRADED AREAS WHICH WILL NOT BE BROUGHT TO FINAL GRADE FOR A YEAR OR MORE SHALL BE SEEDED WITH PERMANENT VEGETATION. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED, SOIL TYPES, CLIMATE, AND SLOPES.

**PHASE 1:**

1. CONSTRUCTION WILL BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
2. INSTALL TEMPORARY CONSTRUCTION ENTRANCE WITH WASH RACK AT ENTRANCE LOCATION OF CONSTRUCTION SITE. MUD AND DEBRIS SHALL BE WASHED FROM ALL CONSTRUCTION VEHICLES AND EQUIPMENT BEFORE LEAVING THE SITE. A WATER TANKER TRUCK SHALL BE USED IF PUBLIC WATER IS NOT AVAILABLE.
3. INSTALL PERIMETER SILT FENCING AS SHOWN AS A FIRST STEP IN GRADING PER THE PHASE 1 EROSION & SEDIMENT CONTROL PLAN AND WILL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
4. INLET PROTECTION SHALL BE INSTALLED AT THE EXISTING YARD INLET PER 3.07.
5. GRADING OPERATIONS MAY COMMENCE ONCE PERIMETER SILT FENCING AND INLET PROTECTION HAS BEEN INSTALLED TO THE SATISFACTION OF THE INSPECTOR.
6. FILL SLOPE SURFACES SHALL BE LEFT IN ROUGHENED CONDITION TO REDUCE SHEET AND RILL EROSION OF THE SLOPES. THE CONTRACTOR SHALL REDIRECT CONCENTRATED FLOW AWAY FROM THE FILL SLOPES BY INSTALLING EARTH BERMS AND DIRECT THE RUN-OFF TO STABILIZED OUTLET OR SEDIMENT BASIN AND TRAPPING DEVICES.
7. TEMPORARY SEEDING OR OTHER STABILIZATION WILL FOLLOW IMMEDIATELY AFTER GRADING.
8. AREAS THAT ARE NOT TO BE DISTURBED WILL BE CLEARLY MARKED BY FLAGS, SIGNS, ETC.

**PHASE 2:**

1. PERIMETER CONTROLS FROM PHASE 1 WHICH DO NOT INTERFERE WITH CONSTRUCTION SHALL REMAIN IN PLACE DURING PHASE 2.
2. FOR VEGETATIVE STABILIZATION OF ALL DENUDED AREAS SEE EROSION CONTROL MEASURES AND VEGETATIVE PRACTICES.
3. THE JOB SUPERINTENDENT SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
4. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION AND SILTATION CONTROLS WILL BE CLEANED UP AND REMOVED AT THE DIRECTION OF THE SITE INSPECTOR.

**MAINTENANCE PROGRAM:** ALL MEASURES ARE TO BE INSPECTED DAILY BY THE SITE SUPERINTENDENT. ANY DAMAGED STRUCTURAL MEASURE SHALL BE REPAIRED BY THE CLOSE OF DAY. SEE MAINTENANCE INSTRUCTIONS ON THIS SHEET FOR SPECIFIC MAINTENANCE PROCEDURES FOR EACH CONTROL MEASURE.

**TEMPORARY SEEDING REQUIREMENTS**

VESCH - TABLE 3.31-B

50/50 MIX OF ANNUAL RYEGRASS AND CEREAL (WINTER) RYE @ 50-100 LBS/ACRE (SEPT. 1 - FEB. 15)

OR

ANNUAL RYEGRASS @ 60-100 LBS/ACRE (FEB. 15 - APR. 30)

OR

GERMAN MILLET @ 50 LBS/ACRE (MAY 1 - AUG. 31)

FERTILIZER: 10/20/10 MIX @ 600 LBS/ACRE  
LIME: AGRICULTURAL LIMESTONE @ 2 TONS/ACRE  
STRAW MULCH: APPLIED @ 1.5-2.0 TONS/ACRE

**PERMANENT SEEDING REQUIREMENTS**

VESCH - TABLE 3.32-D

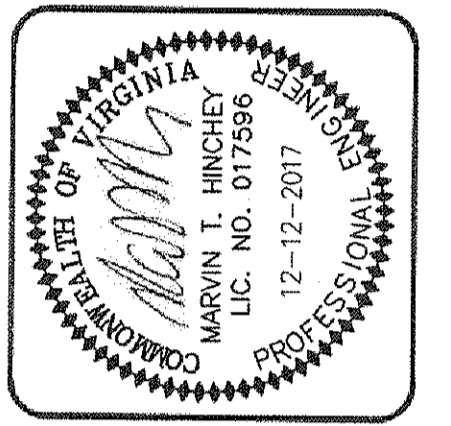
COMMERCIAL/RESIDENTIAL MIXTURE @ 175-200 LBS/ACRE  
KENTUCKY 31 OR TURF TYPE TALL FESCUE (95-100%)  
IMPROVED PERENNIAL RYEGRASS (0-5%)  
KENTUCKY BLUEGRASS (0-5%)

FERTILIZER: 10/20/10 MIX @ 1,000 LBS/ACRE  
LIME: AGRICULTURAL LIMESTONE @ 2 TONS/ACRE  
STRAW MULCH: APPLIED @ 1.5-2.0 TONS/ACRE

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)	50 - 100
	Cereal (Winter) Rye (Secale cereale)	
Feb. 16 - Apr. 30	Annual Ryegrass (Lolium multiflorum)	60 - 100
May 1 - Aug. 31	German Millet (Setaria italica)	50

TABLE 3.32-D SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA		Total Lbs. Per Acre
<b>Minimum Care Lawn</b>		
- Commercial or Residential	Kentucky 31 or Turf-Type Tall Fescue	175-200 lbs.
	Improved Perennial Ryegrass	95-100%
	Kentucky Bluegrass	0-5%
<b>High-Maintenance Lawn</b>		200-250 lbs.
	Kentucky 31 or Turf-Type Tall Fescue	100%
<b>General Slope (3:1 or less)</b>		
-	Kentucky 31 Fescue	128 lbs.
-	Red Top Grass	2 lbs.
-	Seasonal Nurse Crop *	20 lbs.
		150 lbs.
<b>Low-Maintenance Slope (Steeper than 3:1)</b>		
-	Kentucky 31 Fescue	108 lbs.
-	Red Top Grass	2 lbs.
-	Seasonal Nurse Crop *	20 lbs.
-	Crownvetch **	20 lbs.
		150 lbs.
* Use seasonal nurse crop in accordance with seeding dates as stated below: February 16th through April ..... Annual Rye May 1st through August 15th ..... Fowlst Millet August 16th through October ..... Annual Rye November through February 15th ..... Winter Rye		
** Substitute Sericea lespedeza for Crownvetch east of Farmville, Va. (May through September use hulled Sericea, all other periods, use unhulled Sericea). If Flatpea is used in lieu of Crownvetch, increase rate to 30 lbs./acre. All legume seed must be properly inoculated. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.		

**HINCHEY & BAINES, PLC**  
ENGINEERING AND LAND PLANNING  
135 EAST DAVIS STREET  
SUITE 201  
CULPEPER, VIRGINIA 22701  
PHONE (540) 829-2220  
FAX (540) 829-2239



**EROSION AND SEDIMENT CONTROL NARRATIVE**

**OAK VIEW STREET CONDOMINIUMS**

**SITE PLAN**

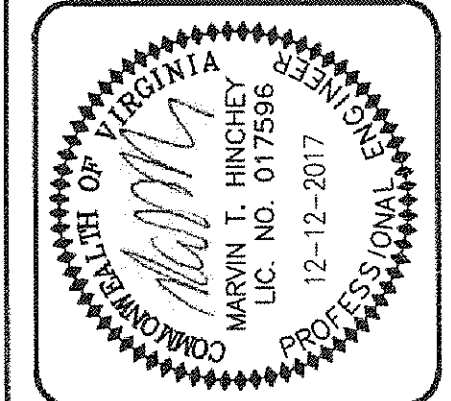
WEST FAIRFAX DISTRICT - TOWN OF CULPEPER, VIRGINIA

SCALE: AS SHOWN

DATE: 9/12/2017

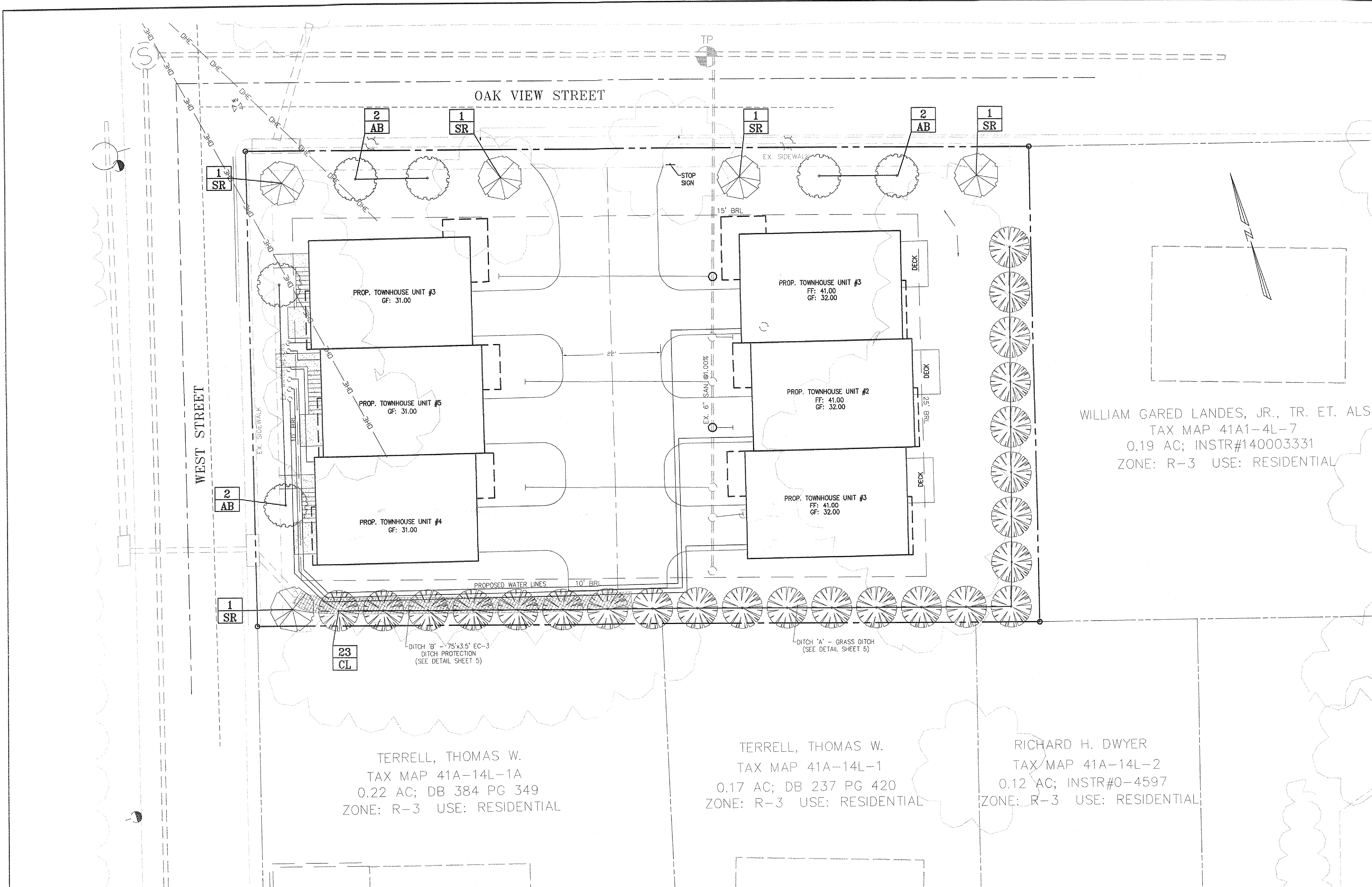
REVISIONS:  
12-12-2017 REMOVE STM SEW

SHEET 6 OF 8  
FILE NO. 1317



LANDSCAPING PLAN  
**OAK VIEW STREET CONDOMINIUMS**  
 SITE PLAN  
 WEST FAIRFAX DISTRICT - TOWN OF CULPEPER, VIRGINIA

SCALE:	AS NOTED
DATE:	9/12/2017
REVISIONS:	12-12-2017 REMOVE STM SEW
SHEET	7 OF 8
FILE NO.	1317

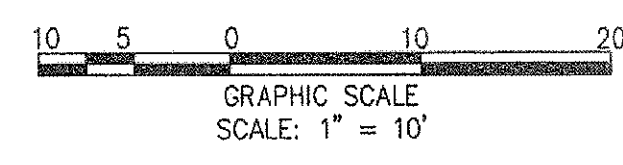


WILLIAM GARED LANDES, JR., TR. ET. ALS.  
 TAX MAP 41A1-4L-7  
 0.19 AC; INSTR#140003331  
 ZONE: R-3 USE: RESIDENTIAL

TERRELL, THOMAS W.  
 TAX MAP 41A-14L-1A  
 0.22 AC; DB 384 PG 349  
 ZONE: R-3 USE: RESIDENTIAL

TERRELL, THOMAS W.  
 TAX MAP 41A-14L-1  
 0.17 AC; DB 237 PG 420  
 ZONE: R-3 USE: RESIDENTIAL

RICHARD H. DWYER  
 TAX MAP 41A-14L-2  
 0.12 AC; INSTR#0-4597  
 ZONE: R-3 USE: RESIDENTIAL



THIS SHEET FOR LANDSCAPING PURPOSES ONLY

**PLANT LEGEND**

- AB Acer Buergianum/Trident Maple
- SR Syringa reticulata/Japanese Tree Lilac
- CL Cupressocyparis leylandii/Leyland Cypress

**SPECIFICATIONS FOR PLANTING**

**PLANT IDENTIFICATION:** ALL PLANTS SHALL BE PROPERLY MARKED FOR IDENTIFICATION AND CHECKING.

**LIST OF PLANT MATERIAL:** THE CONTRACTOR WILL VERIFY PLANT QUANTITIES PRIOR TO BIDDING AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS REQUIRED TO COMPLETE THE WORK AS SHOWN ON THE DRAWINGS. SUBSTITUTIONS SHALL NOT BE MADE WITHOUT THE WRITTEN APPROVAL OF THE OWNER.

**PLANT QUALITY:** ALL SHRUBS SHALL BE DENSE, HEAVY TO THE GROUND, AND WELL GROWN, SHOWING EVIDENCE OF HAVING BEEN SHEARED REGULARLY, SHALL BE VIGOROUS, HEALTHY, AND OF GOOD COLOR. ALL PLANTS SHALL BE SOUND, FREE OF PLANT DISEASE OR INSECT EGGS, AND SHALL HAVE HEALTHY NORMAL ROOT SYSTEMS. PLANTS SHALL BE FRESHLY DUG AND NOT HELD-IN STOCK, NOR STOCK FROM COLD STORAGE. ALL PLANTS SHALL BE NURSERY GROWN. PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY. THE SHAPE OF THE PLANT IN GENERAL SHALL CONFORM TO ITS NATURAL GROWTH PROPORTIONS, UNLESS OTHERWISE SPECIFIED. ALL PLANTS INCLUDING CONTAINER-GROWN SHALL CONFORM TO THE BRANCHING, CALIPER, AND HEIGHT SPECIFICATIONS OF THE VIRGINIA NURSERY AND LANDSCAPE ASSOCIATION.

**PLANT SPACING:** PLANT SPACING IS TO SCALE ON PLAN. NO PLANTS EXCEPT ESPALIERED MATERIAL SHALL BE CLOSER THAN 30 INCHES TO BUILDINGS.

**SOIL MIX:** SOIL MIX WILL BE 2/3 EXISTING SOIL, 1/3 LEAF MOLD OR EQUAL ORGANIC MATERIAL, THOROUGHLY MIXED AND HOMOGENIZED.

**BALL SIZE:** THE BALL SIZE SHALL CONFORM TO THE VIRGINIA NURSERY AND LANDSCAPE ASSOCIATION.

**EXCAVATION:** HOLES FOR ALL PLANTS SHALL BE 18 INCHES LARGER IN DIAMETER THAN SIZE OF BALL OR CONTAINER, AND SHALL HAVE VERTICAL SIDES. HEDGES SHALL BE PLANTED IN A TRENCH 12 INCHES WIDER THAN BALL DIAMETER. BEDS FOR MASS PLANTING SHALL BE ENTIRELY ROTOTILLED TO A DEPTH OF 8 INCHES AND SHALL BE 18 INCHES BEYOND THE AVERAGE OUTSIDE EDGE OF PLANT BALLS. ORGANIC MATERIAL (I.E., LEAF MOLD) WILL BE INCORPORATED INTO PLANT BED BY TILLING AGAIN. PROPORTIONS OF SOIL TO ORGANIC MATERIAL WILL BE 2 PARTS TO 1 PART.

**PLANTING:** BACKFILLING SHALL BE DONE WITH SOIL MIX, REASONABLY FREE OF STONES, SUBSOIL, CLAY, LUMPS, STUMPS, ROOTS, WEEDS, BERMUDA GRASS, LITTER, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER GRADING, PLANTING, OR MAINTENANCE OPERATIONS. SHOULD ANY UNFORESEEN OR UNSUITABLE PLANTING CONDITIONS ARISE SUCH AS FAULTY SOIL DRAINAGE OR CHEMICAL RESIDUES, THEY SHOULD BE CALLED TO THE ATTENTION OF THE OWNER FOR ADJUSTMENT BEFORE PLANTING. THE PLANT SHALL BE SET PLUMB AND STRAIGHT AND SHALL BE STAKED AT THE TIME OF PLANTING. BACKFILL SHALL BE WELL WORKED ABOUT THE ROOTS AND SETTLED BY WATERING. PLANTS WILL BE PLANTED HIGHER THAN SURROUNDING GRADE. SHRUBS WILL BE 1 INCH HIGHER AND TREES WILL BE 3 INCHES HIGHER. REMOVE ROPE FROM AROUND TREE TRUNKS AND LAY BACK BURLAP FROM TOP OF B&B MATERIAL. NYLON OR VINYL ROPE AND/OR BURLAP WILL BE COMPLETELY REMOVED FROM ALL PLANT MATERIAL PRIOR TO PLANTING.

**TRANSPLANTING TREES BY TREE MACHINES:** TREES SHALL BE MOVED BY MACHINES THAT PROVIDE A MINIMUM BALL DIAMETER OF 12 INCHES PER 1 INCH OF TREE CALIPER. HOLES ARE TO BE DUG BY THE SAME SIZE MACHINE AS THE ONE TRANSPORTING THE PLANT. THE PLANT MATERIAL SHALL BE TRANSPLANTED IN APPROXIMATELY THE SAME GROWING CONDITION AS IT IS PRESENTLY GROWING, IN TERMS OF SOIL TYPE AND MOISTURE CONTENT. FERTILIZE AND GUY AS DESCRIBED IN THESE PLANS AND SPECIFICATIONS.

**TRANSPLANTING EXISTING TREES:** HARDWOODS SHOULD BE TRANSPLANTED IN THE LATE FALL FOLLOWING THEIR LEAF DROP. EVERGREENS MAY BE TRANSPLANTED BEGINNING WITH THE FALL COOL-DOWN PERIOD (NORMALLY SEPTEMBER) AND MAY CONTINUE INTO SPRING PRIOR TO ELONGATION OF THE NEW GROWTH. PROPER DIGGING OF A TREE INCLUDES THE CONSERVATION OF AS MUCH OF THE ROOT SYSTEM AS POSSIBLE, PARTICULARLY THE FINE ROOTS. SOIL ADHERING TO THE ROOTS SHOULD BE DAMP WHEN TREE IS DUG, AND KEPT MOIST UNTIL PLANTING. THE SOIL (OR "ROOT") BALL SHOULD BE 12 INCHES IN DIAMETER FOR EACH INCH OF DIAMETER OF THE TRUNK. THE TREE SHOULD BE CAREFULLY EXCAVATED AND THE SOIL BALL WRAPPED IN BURLAP AND TIED WITH ROPE. SOIL AROUND BALLED AND BURLAPPED TREE ROOTS SHOULD BE DUG WITH THE TREE AND NOT JUST PACKED AROUND BARE ROOTS. BALLED AND BURLAPPED PLANT MATERIAL SHALL BE KEPT MOIST.

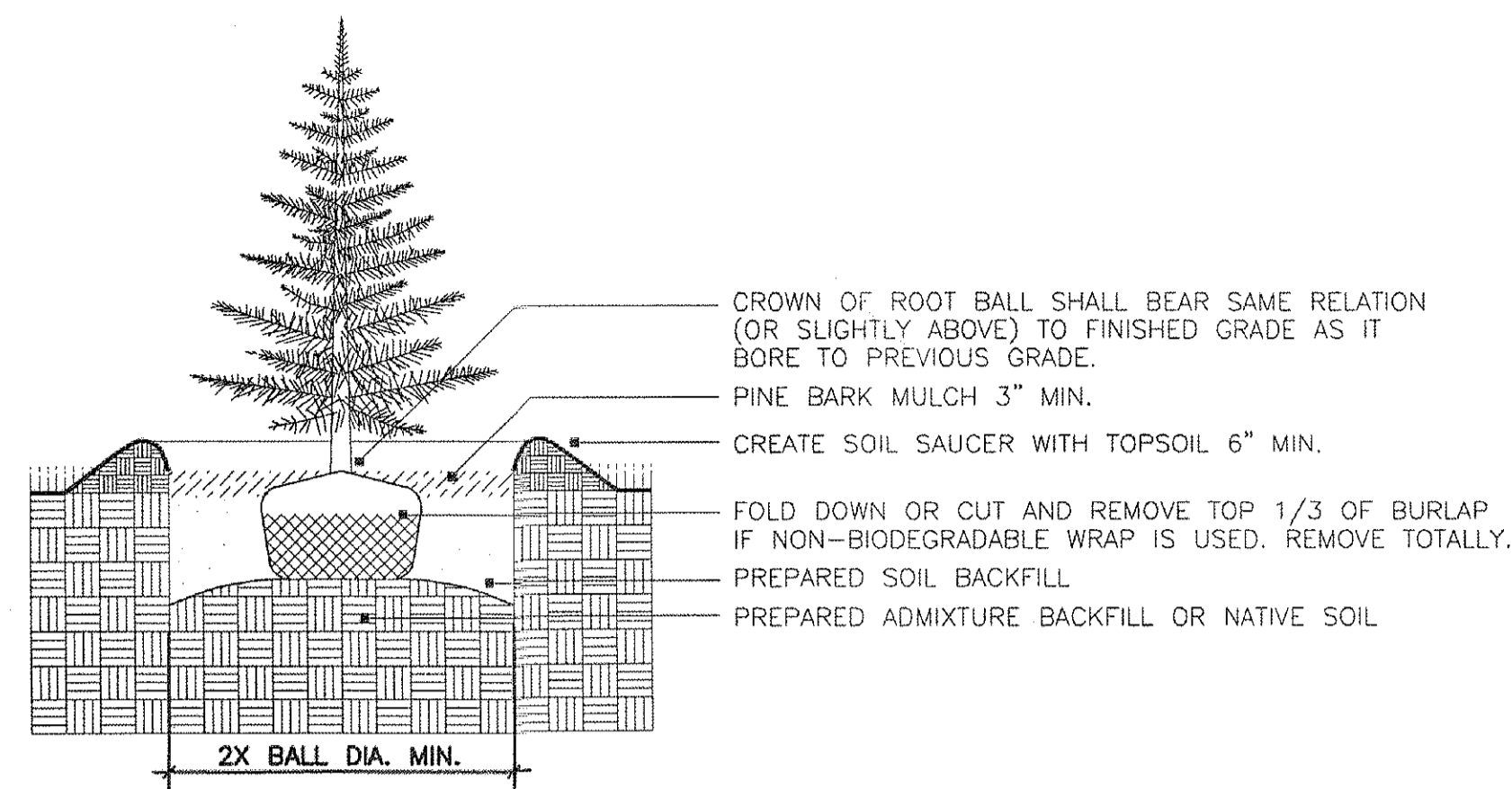
**CULTIVATION:** ALL TRENCHES AND SHRUB BEDS SHALL BE CULTIVATED, EDGED, AND MULCHED TO A DEPTH OF 3 INCHES WITH FINE SHREDDED HARDWOOD BARK. THE AREA AROUND ISOLATED PLANTS SHALL BE MULCHED TO AT LEAST A 6-INCH GREATER DIAMETER THAN THAT OF THE HOLE. PLANT BEDS ADJACENT TO BUILDINGS SHALL BE MULCHED TO THE BUILDING WALL.

**MAINTENANCE:** THE CONTRACTOR SHALL BE RESPONSIBLE DURING THE CONTRACT AND, UP TO THE TIME OF ACCEPTANCE, FOR KEEPING THE PLANTING AND WORK INCIDENTAL THERETO IN GOOD CONDITION, BY REPLANTING, PLANT REPLACEMENT, WATERING, WEEDING, CULTIVATING, PRUNING AND SPRAYING, STAKING, AND CLEANING UP, AND BY PERFORMING ALL OTHER NECESSARY OPERATIONS OF CARE FOR PROMOTION OF GOOD PLANT GROWTH, SO THAT ALL WORK IS IN SATISFACTORY CONDITION AT THE TIME OF ACCEPTANCE, AT NO ADDITIONAL COST TO THE OWNER.

**FERTILIZER:** FERTILIZER SHALL BE A SLOW-RELEASE TYPE CONTAINED IN POLYETHYLENE PERFORATED BAGS WITH MICROPOROUS HOLES FOR CONTROLLED FEEDING, SUCH AS "EASY GROW" AS MANUFACTURED BY SPECIALTY FERTILIZER, INC., BOX 355, SUFFERN, NEW YORK, 10901 OR APPROVED EQUAL. THE BAGS SHALL CONTAIN 1 OUNCE OF SOLUBLE FERTILIZER ANALYSIS 16-18-16 PER UNIT TO LAST FOR THREE YEARS AND SHALL BE APPLIED DURING PLANTING AS RECOMMENDED BY THE MANUFACTURER. IF FERTILIZER PACKETS ARE NOT USED, THE CONTRACTOR SHALL APPLY GRANULAR FERTILIZER TO THE SOIL MIX OF 10-6-6 ANALYSIS, 50% ORGANIC, AT THE FOLLOWING RATES:

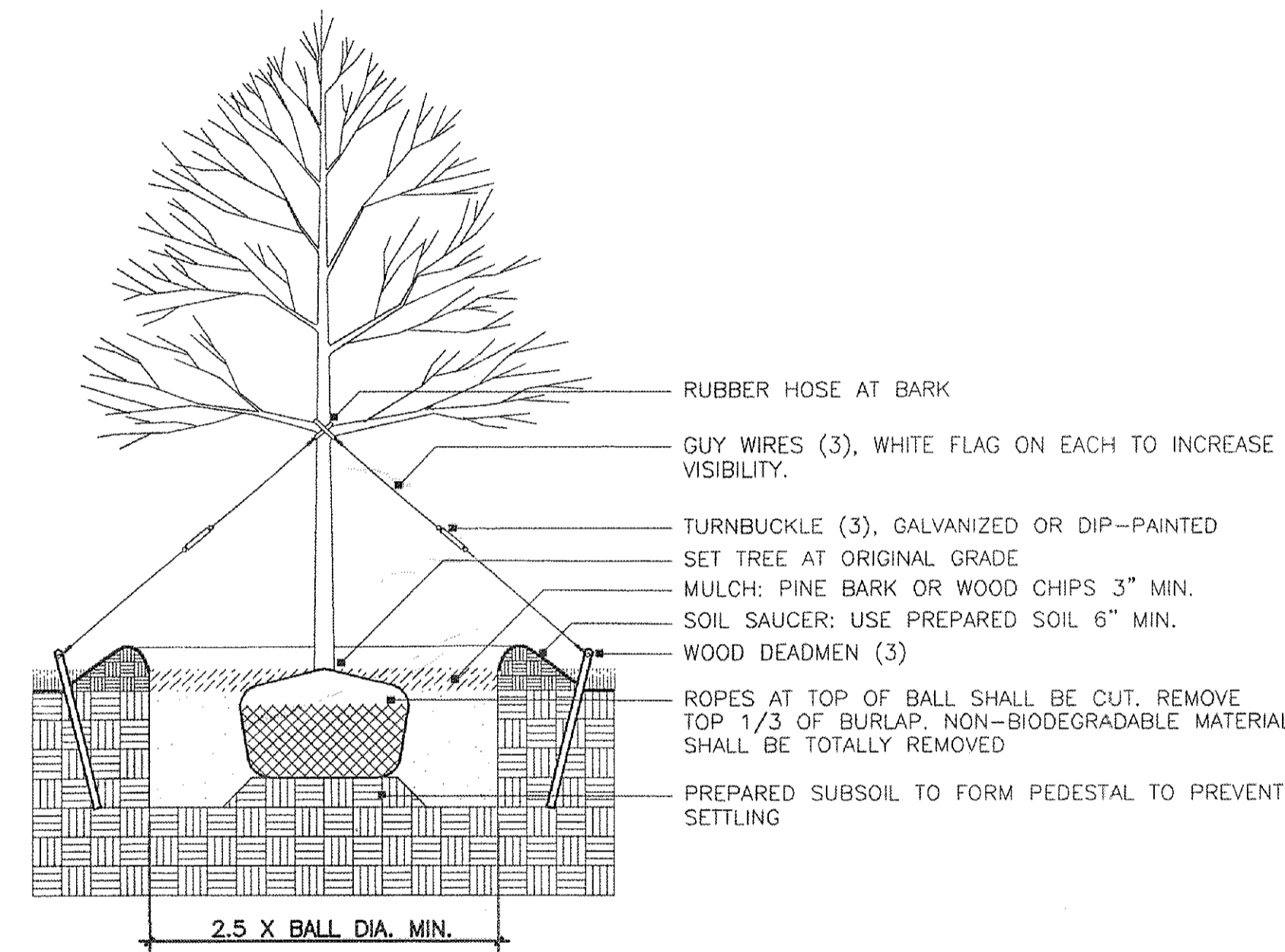
TREE PITS: 2-3 LBS. PER CALIPER INCH  
 SHRUB BEDS: 3-5 LBS. PER 100 SQ. FT.  
 GROUND COVER: 2-3 LBS. PER 100 SQ.FT.

**GROUND COVER:** ALL AREAS OF GROUND COVER SHALL BE ROTOTILLED TO A DEPTH OF SIX INCHES. APPLY 2 INCHES OF ORGANIC MATERIAL AND ROTOTILL UNTIL THOROUGHLY MIXED. APPLY FERTILIZER AS STATED ABOVE.



**TYPICAL EVERGREEN PLANTING**

NOT TO SCALE



**SINGLE-STEM TREE PLANTING DETAIL**

NOT TO SCALE

**PLANT LIST**

KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	CALIPER	HEIGHT	CANOPY/SPREAD	REMARKS	TOTAL
SMALL SHADE TREES:								
AB	6	Acer Buergerianum	Trident Maple	2.5" MIN.	6' MIN.	100 SF	B&B	700 SF
SR	5	Syringa Reticulata	Japanese Tree Lilac	2.5" MIN.	6' MIN.	100 SF	B&B	500 SF
EVERGREEN SCREENING TREES:								TOTAL CANOPY AREA OF TREES TO BE PLANTED: 1,200 SF
CL	24	Cupressocyparis leylandii	Leyland Cypress	N/A	6' MIN.	N/A	B&B	N/A

**LANDSCAPING CALCULATIONS**

**STREET TREES:**

REQUIRED: 1 MEDIUM SHADE TREE PER 25' OF R.O.W. x 250' (280'-30' ENTRANCE) = 10  
 PROVIDED: 11

**VEGETATIVE SCREENING**

REQUIRED: 1 ROW OF EVERGREEN - 10'O.C. ALONG ADJACENT RESIDENTIAL USES  
 PROVIDED: 1 ROW 10' O.C. - 24 TREES

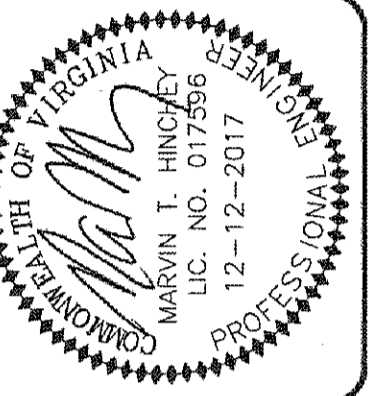
**MAINTENANCE:**

DEAD AND DYING TREES AND REPLACEMENTS. THE APPLICANT SHALL REPLACE ANY TREES PLANTED ALONG THE FORESTED BUFFER THAT DIE WITHIN THREE (3) YEARS OF PLANTING. IF ANY TREES SHOWN ON THE APPROVED SITE PLAN TO BE PRESERVED OR PLANTED AS PART OF THE PERIMETER BUFFER BECOME DISEASED OR ARE DYING, THEN THE APPLICANT MAY REMOVE THOSE TREES. IF THE REMOVED TREES ARE PART OF THE SCREENING BUFFER AS SHOWN ON THE APPROVED LANDSCAPE/BUFFER PLAN, THEN THE APPLICANT SHALL REPLACE WITH SUCH NUMBER OF TREES AS ARE NECESSARY TO SATISFY THE SCREENING INTENT OF THE APPROVED LANDSCAPE/BUFFER PLAN. THE REPLACEMENT TREES MUST BE EQUIVALENT TO THAT SHOWN ON THE APPROVED PLAN.

**PROTECTION:**

THE APPLICANT SHALL BE RESPONSIBLE FOR AND EMPLOY REASONABLE EFFORTS FOR THE PROTECTION OF THE TOPS, TRUNKS AND ROOTS OF ALL EXISTING TREES, AS WELL AS OTHER VEGETATION ON THE SITE. PROTECTION DEVICES SHALL BE INSTALLED ALONG THE LIMITS OF CLEARING AND GRADING, PRIOR TO ANY CONSTRUCTION OCCURRING ON-SITE. SUCH PROTECTION SHALL BE MAINTAINED UNTIL ALL WORK IN THE VICINITY HAS BEEN COMPLETED, AND SHALL NOT BE REMOVED WITHOUT THE CONSENT OF THE ZONING ADMINISTRATOR.

HINCHEY & BAINES, PLC  
 ENGINEERING AND LAND PLANNING  
 PHONE (540) 829-2220  
 SUITE 201  
 CULPEPER, VIRGINIA 22701  
 FAX (540) 829-2239



LANDSCAPE PLAN  
**OAK VIEW STREET CONDOMINIUMS**  
 SITE PLAN  
 TOWN OF CULPEPER, VIRGINIA

SCALE: AS NOTED

DATE: 9-12-2017

REVISIONS:  
 12-12-2017 REMOVE STM SEW

SHEET 8 OF 8

FILE NO. 1317