

# VINTON WAR MEMORIAL PARK

## TOWN OF VINTON



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**HUGHES ASSOCIATES**  
ARCHITECTS & ENGINEERS

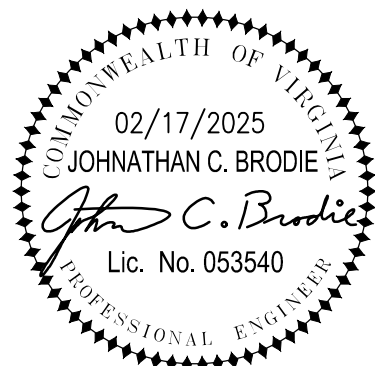
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540.342.4002 [www.HughesAE.com](http://www.HughesAE.com)

**OWNER**  
TOWN OF VINTON  
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VINTON, VA 24179  
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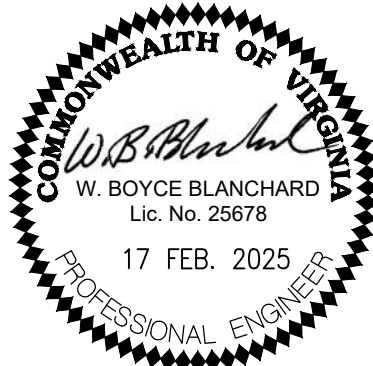
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Civil



Electrical

DATE: FEB. 17, 2025

REVISIONS  
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3800 ELECTRIC ROAD | STE 300 | ROANOKE, VIRGINIA  
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NEW CONSTRUCTION  
VINTON WAR MEMORIAL PARK  
330 MEADOW STREET  
Vinton, Virginia

COVER SHEET

COMMISSION No.  
24058.002

SHEET

**T-1**

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PRE-CONSTRUCTION MEETING AND CONSTRUCTION COMMENCEMENT:

- ## TOWN OF VINTON STREETS & RIGHTS-OF-WAY

- See Sheet C5.0 for Stormwater Site Statistics Table.  
See Sheet N/A for New BMP Information Table.

NAME OF DEVELOPMENT	VINTON WAR MEMORIAL PARK	I, _____, OWNER/DEVELOPER, AM AWARE OF THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN, ALL REVISIONS THEREOF, AND OTHER APPLICABLE ROANOKE COUNTY CODES AND ORDINANCES.
MAGISTERIAL DISTRICT(S)	VINTON	I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS SHOWN ON THIS COVER SHEET UNLESS MODIFIED IN ACCORDANCE WITH LOCAL LAW.
OWNER (name, address, telephone)	TOWN OF VINTON, 311 SOUTH POLLARD ST. VINTON, VA. 24179	CONTACT: MR. JAMIE HURT
DEVELOPER (name, address, telephone)	TOWN OF VINTON, 311 SOUTH POLLARD ST. VINTON, VA. 24179	CONTACT: MR. JAMIE HURT (540) 283-7023 JHURT@VINTONVA.GOV
ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone)	TIMMONS GROUP	CONTACT: JOHN BRODIE (540) 342-4002 JOHN.BRODIE@TIMMONS.COM
TAX MAP NO(S)	060.16-06-33.01-0000	

1. All construction methods and materials shall conform to the latest edition of the Design and Construction Standards and Specifications of the Western Virginia Water Authority (WVWA) available at [www.westernvirginiawater.org](http://www.westernvirginiawater.org) or by contacting the authority at 540-853-5700. The project shall also comply with the governing jurisdiction's standards and other agency standards (e.g. VDOT, DEQ, DCR, VDH, etc.) where applicable.
2. A minimum cover of three (3) feet is required on all WVWA water and sewer lines.
3. All existing utilities may not be shown in their exact locations. The contractor shall notify Miss Utility and shall verify location and elevation of all underground utilities in the areas of construction prior to starting work.
4. Please show all WVWA water and sewer utilities on any development plan.
5. The location of existing utilities across or along the line of proposed work are not necessarily shown on the plans and where shown are only approximately correct. The contractor shall on their own initiative and at no extra cost, locate all underground lines and structures and potholes as necessary. The contractor shall be responsible for any damage to underground structures. All damage incurred to existing utilities during construction shall be repaired at the contractor's expense.
6. Plan approval by the WVWA does not remove the contractor's responsibility to remove or relocate any existing conflicts found during construction.
7. The contractor shall maintain a minimum of 18" clearance vertically and two (2) feet minimum horizontally from the outside of pipe to outside of pipe with all other underground utilities. Where this cannot be achieved, additional measures in accordance with the WVWA standards shall be enforced.
8. All utility grade adjustments shall be in accordance with WVWA standards and are the responsibility of the contractor.
9. Field changes shall be submitted by the engineer of record to the locality and approved by the WVWA.

**Vicinity Map**

The map shows the site location (indicated by a black dot) situated near the intersection of Bernley Rd and Ruddell Rd. Other roads shown include Mountain View Rd, Charles R. Hill Community Center, and Washington Ave. A north arrow is located in the upper right corner of the map.

Property Line

Right-of-way

Centerline

Minimum Building Line

Existing Storm Sewer

Existing Sanitary Sewer

Existing Water Main

Existing Contour

Proposed Contour

Proposed Drainage Divide

Proposed Limits of Clearing

Proposed Storm Sewer

Proposed Sanitary Sewer

Proposed Water Main

1045

1045

24' S.D.

8' M.H.

HYDRANT VALVE BLOWOFF

[illegible]

**New Facility for  
VINTON PLAYGROUND  
330 MEADOW STREET  
Vinton, Virginia**

### Approval Stamp



Denise Sower  
REVIEW COORDINATOR, 4/24/2021



S:\10305599-Vinton\_Playground\DWG\Sheet\CD\65599-CD\_1\NTDT.dwg | Plotted on 4/22/2025 4:17 PM | by John Brodie

### GENERAL NOTES

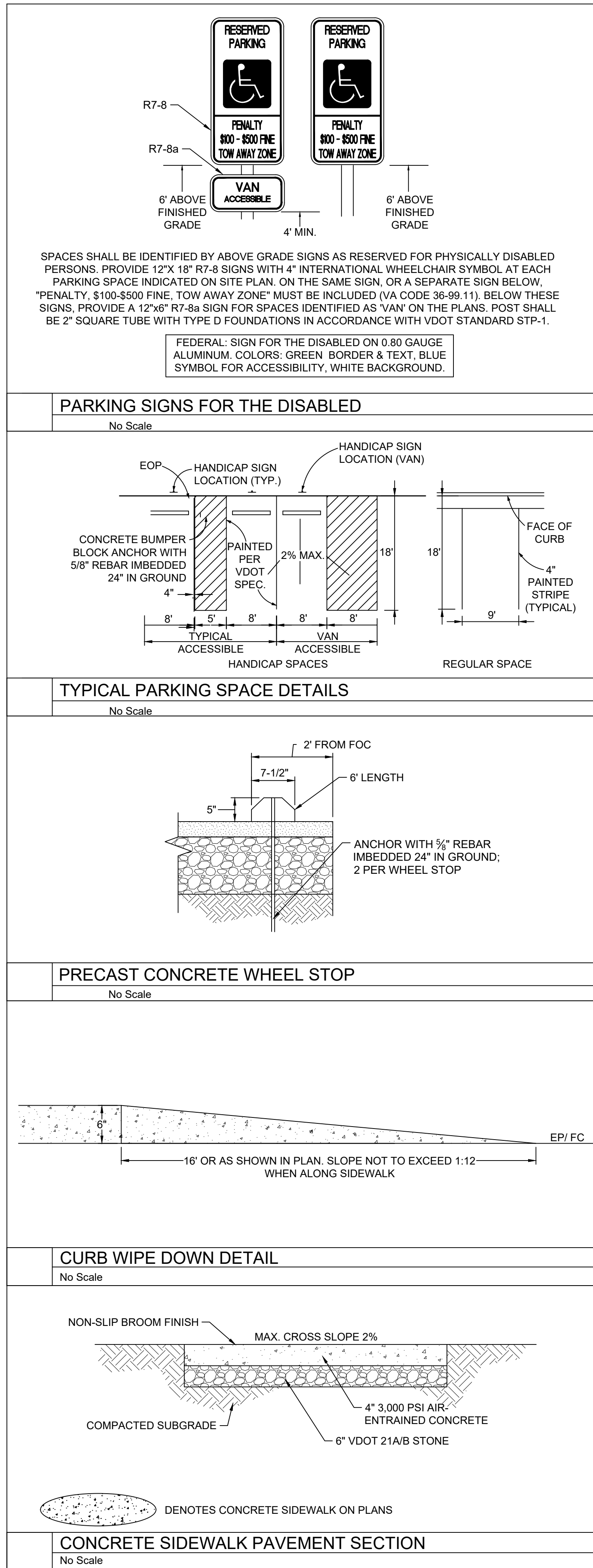
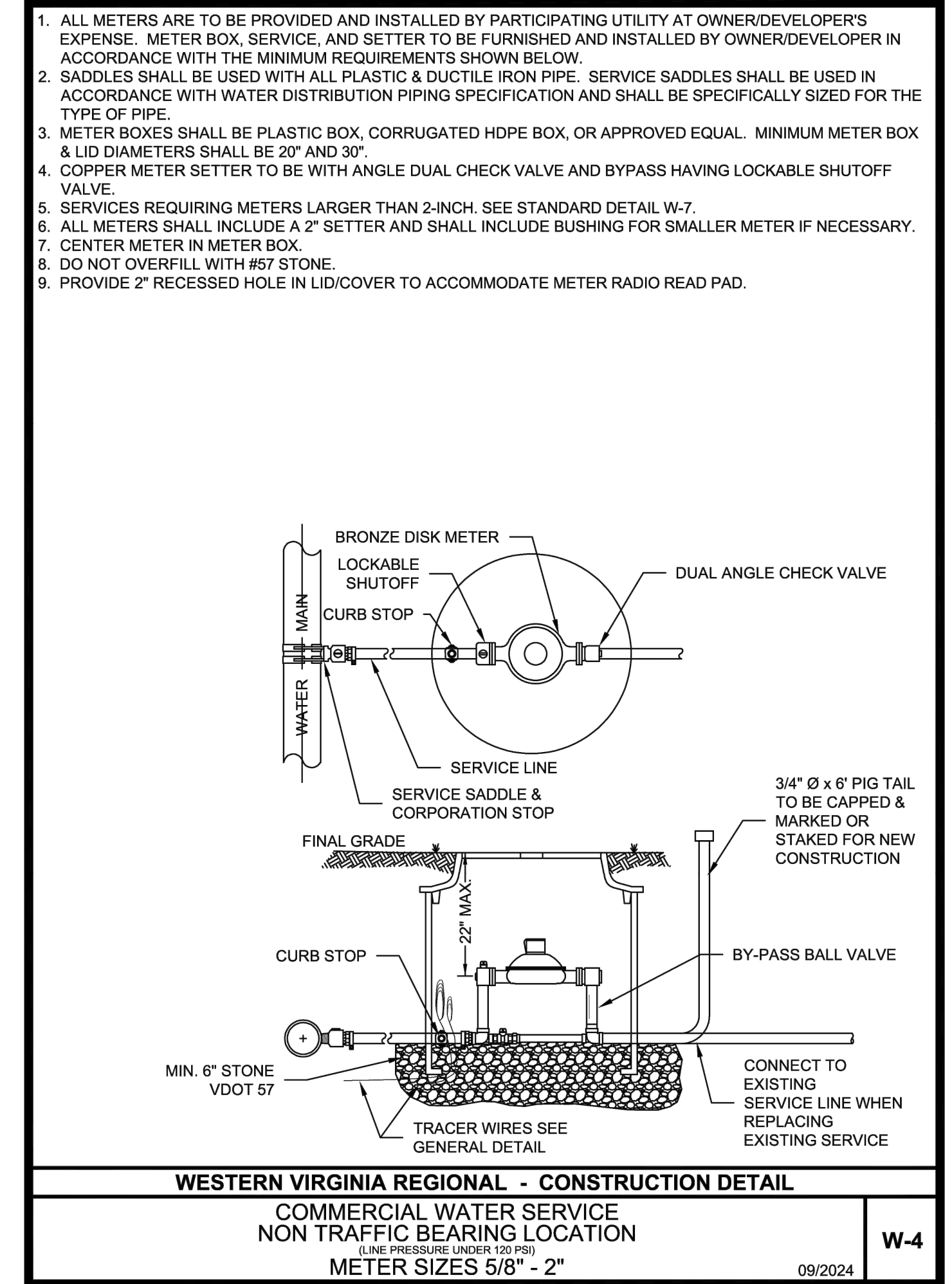
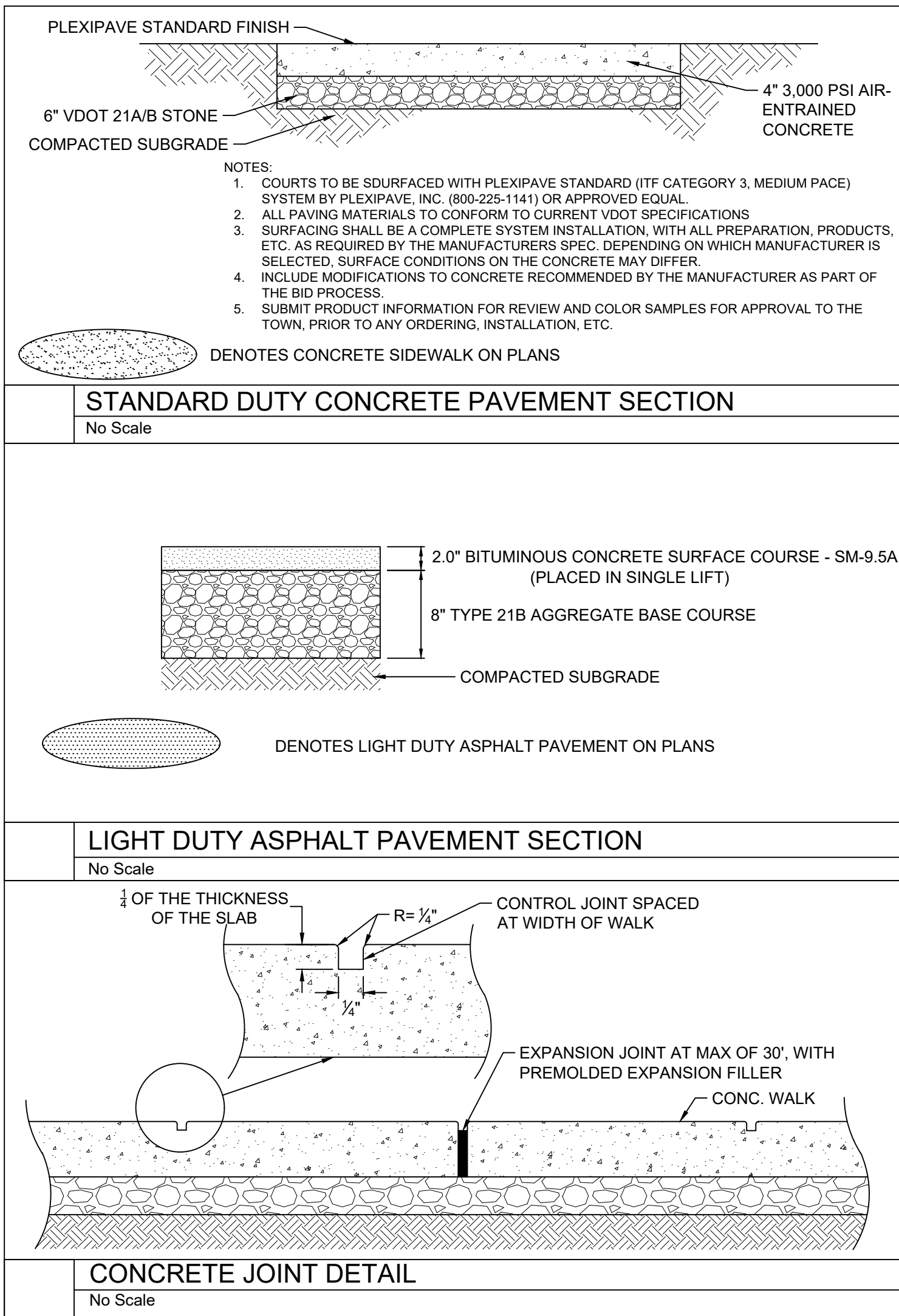
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT TOWN OF VINTON, ROANOKE COUNTY, AND VIRGINIA DEPARTMENT OF TRANSPORTATION'S (VDOT) SPECIFICATIONS AND STANDARDS.
- THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM THE LOCAL OR STATE AGENCIES AT THEIR EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
- PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL CONSULT THE ENGINEER AND VERIFY THE APPROVAL OF THE PLANS BY ALL FEDERAL, STATE AND LOCAL AGENCIES.
- THE CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS AVAILABLE AT THE SITE AT ALL TIMES WHEN WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY INSPECTORS.
- THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. ALSO VERIFY ALL DIMENSIONS, TIE-IN ELEVATIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND NOTIFY THE ENGINEER OF ANY ERRORS, OMISSIONS, OR DISCREPANCIES BEFORE COMMENCING OR PROCEEDING WITH WORK.
- DEVIATIONS FROM OR CHANGES TO THESE PLANS WILL NOT BE ALLOWED, UNLESS OTHERWISE APPROVED BY THE ARCHITECT/ENGINEER.
- PERFORM ALL WORK USING DIMENSIONS SHOWN ON THESE PLANS. DO NOT USE SCALES, RULERS, OR OTHER MEASURING DEVICES TO DETERMINE SPATIAL RELATIONSHIPS ON THESE DRAWINGS.
- ALL GROUND COVER AND LANDSCAPING SHALL BE PROPERLY MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. DEAD PLANT MATERIALS SHALL BE REMOVED IN A REASONABLE TIME AND REPLACED DURING THE NORMAL PLANTING SEASON.
- ALL TURF AREAS THAT ARE IMPACTED OR DISTURBED BY VEHICLES, EQUIPMENT, OR ACTIVITY SHALL BE REPAIRED, REGRADED, AND RESEEDD TO THE SATISFACTION OF THE OWNER.
- NO STORED MATERIALS AND PARKED EQUIPMENT IS PERMITTED WITHIN TREE PROTECTION AREAS.
- PROPERLY SECURE THE CONSTRUCTION AREA AT ALL TIMES AGAINST UNAUTHORIZED ENTRY AND ADEQUATELY PROTECT EQUIPMENT, MATERIALS, AND COMPLETED WORK FROM THEFT AND VANDALISM. THE OWNER IS NOT RESPONSIBLE FOR THE LOSS OF ANY MATERIAL STORED AT THE SITE. ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS.
- CONTRACTOR SHALL COORDINATE ALL REQUIREMENTS FOR AS BUILT DOCUMENTATION, AS REQUIRED BY THE LOCALITY. THIS INCLUDES, BUT IS NOT LIMITED TO, TESTING, INSTALLATION DOCUMENTATION, SURVEY, ETC. ALL REQUIREMENTS SHALL BE DISCUSSED WITH THE LOCALITY PRIOR TO THE BEGINNING CONSTRUCTION.
- WORK ON THIS PROJECT CAN NOT COMMENCE UNTIL A PRECONSTRUCTION MEETING IS PERFORMED WITH THE LOCALITY AND PROPER PERMITTING IS OBTAINED.

### EARTHWORK AND SITE CONDITIONS NOTES

- BLASTING SHALL NOT BE PERMITTED ON THIS PROJECT.
- PRIOR TO REMOVING ANY VEGETATION, THE CONTRACTOR SHALL MEET WITH THE PROPERTY OWNERS AND THE ENGINEER TO REVIEW THE LIMITS OF CONSTRUCTION AND OBTAIN PERMISSION TO REMOVE VEGETATION REQUIRED TO DO THE WORK.
- TREE AND PLANT ROOTS OR BRANCHES THAT MAY INTERFERE WITH THE WORK SHALL BE TRIMMED OR CUT ONLY WITH THE APPROVAL OF THE OWNER AND ENGINEER. ANY TREES OR PLANTS WHICH ARE SHOWN TO REMAIN THAT DO NOT INTERFERE WITH THE WORK, BUT ARE DAMAGED BY CONTRACTOR OR HIS SUBCONTRACTORS, SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST.
- UPON DISCOVERY OF SOILS THAT ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR OTHER ROADWAY CONSTRUCTION PURPOSES, THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE OWNER. THESE AREAS SHALL BE EXCAVATED BELOW PLAN GRADE AS DIRECTED BY THE OWNER'S REPRESENTATIVE, BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED IN ACCORDANCE WITH SPECIFICATIONS.
- EXCEPT AS OTHERWISE SHOWN ON THE PLANS, ALL CUTS AND FILLS SHALL MATCH EXISTING SLOPES OR BE NO GREATER THAN 2:1.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND LOCATIONS PRIOR TO BEGINNING WORK, AND IMMEDIATELY NOTIFY THE ENGINEER IN THE EVENT THAT THERE ARE DISCREPANCIES BETWEEN SUCH CONDITIONS AND THOSE SHOWN ON THE PLANS AND SPECIFICATIONS.
- ALL GRADING AND IMPROVEMENTS TO BE CONFINED TO THE PROJECT AREA UNLESS OTHERWISE INDICATED.
- ANY UNUSUAL OR UNANTICIPATED SUBSURFACE CONDITIONS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.

### PAVEMENT NOTES

- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS AND STANDARDS.
- ALL ENTRANCES ARE TO BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CURRENT VDOT STANDARDS.
- ALL CURB AND GUTTER SHALL BE VDOT STANDARD, EXCEPT AS NOTED.
- THE PAVEMENT DESIGN IS SUBJECT TO CHANGE DUE TO SOIL CONDITIONS AT THE TIME OF CONSTRUCTION.
- ALL VEGETATION, UNSUITABLE MATERIAL, AND ORGANIC MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS OF PAVED AREAS AND DISPOSED OF PROPERLY AT AN APPROVED LOCATION.
- EXISTING ASPHALT PAVEMENT SHALL BE SAWCUT AND REMOVED. REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO NOT TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL. ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE DIRECTION OF TRAFFIC.
- WHERE PAVEMENT IS BEING REMOVED, THE CONTRACTOR SHALL REMOVE AGGREGATE BASE MATERIAL TO SUB-GRADE.
- EXISTING CURBS, CURB & GUTTER, SIDEWALKS, AND/OR STEPS TO BE REMOVED SHALL BE TAKEN OUT TO THE NEAREST JOINT. DEMOLITION AND DISPOSAL COST TO BE INCLUDED IN OTHER UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO LIKE-NEW CONDITION.
- THE SCHEDULING OF AGGREGATE BASE INSTALLATION AND SUBSEQUENT PAVING ACTIVITIES SHALL ACCOMMODATE FORECAST WEATHER CONDITIONS PER SECTION 315 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
- THE PROJECT'S INSPECTOR SHALL HAVE APPROVED THE AGGREGATE BASE COURSE(S) AND PERFORMED THE REQUIRED FIELD INSPECTION (PROOF ROLL) PRIOR TO PLACEMENT OF ANY SURFACE COURSE(S). CONTACT THE OWNER'S REPRESENTATIVE FOR INSPECTION FOR THE AGGREGATE BASE COURSE(S) 48 HOURS PRIOR TO APPLICATION OF THE SURFACE COURSE(S).
- IN ACCORDANCE WITH THE LATEST VERSION OF THE AMERICANS WITH DISABILITY ACT ACCESSIBILITY GUIDELINES (ADAAG), ALL APPLICABLE CODES AND REQUIREMENTS FOR ACCESSIBILITY SHALL BE STRICTLY COMPLIED WITH.
- ALL APPROACH GUTTERS TO SAG INLETS SHALL MAINTAIN A MINIMUM SLOPE OF 0.004 ft./ft.
- CONTRACTOR SHALL EXERCISE CARE, ESPECIALLY AT INTERSECTIONS AND GUTTER LINES, TO PROVIDE POSITIVE DRAINAGE. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL COST. POSITIVE DRAINAGE OF ALL ROADWAY AREAS TO THE STORM DRAIN INLETS OR OTHER ACCEPTABLE DRAINAGE CHANNELS AS NOTED ON THE PLANS IS REQUIRED.
- A PRIME COAT SEAL BETWEEN THE AGGREGATE BASE AND BITUMINOUS CONCRETE WILL BE REQUIRED AT THE RATE OF 0.30 GALLONS PER SQUARE YARD (REC-250 PRIME COAT) PER VDOT STANDARDS AND SPECIFICATIONS.
- CERTIFICATION AND SOURCE OF MATERIALS ARE TO BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR ALL MATERIALS AND BE IN ACCORDANCE WITH THE ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS.



DATE: 03/13/2025

REVISIONS

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**HUGHES ASSOCIATES**

ARCHITECTS & ENGINEERS

3800 ELECTRIC ROAD | STE 300 | ROANOKE, VIRGINIA 24002

www.HughesAE.com

NEW CONSTRUCTION

VINTON WAR MEMORIAL PARK

VINTON, VIRGINIA

DRAWN BY: C. ROTHERMEL

CHECKED BY: J. BRODIE

GENERAL NOTES & DETAILS

**TIMMONS GROUP**

YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA

03/13/2025

JOHNATHAN C. BRODIE

Lic. No. 053540

PROFESSIONAL ENGINEER

COMMISSION No. 24058.002

SHEET C0.1

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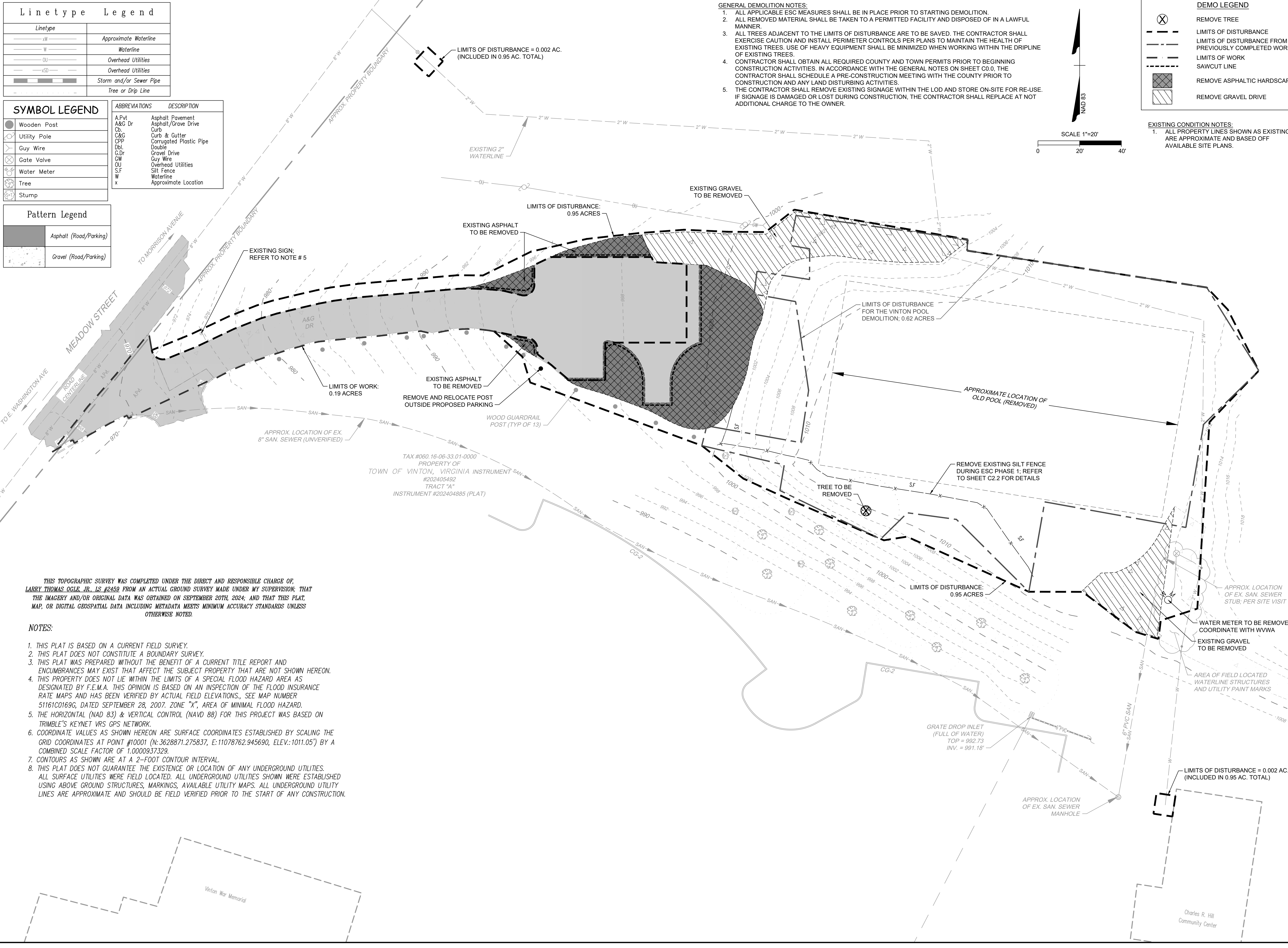
APPROVED, 4/24/2025



Linetype Legend	
Line	Approximate Waterline
Line	Waterline
Line	Overhead Utilities
Line	Overhead Utilities
Line	Storm and/or Sewer Pipe
Line	Tree or Drip Line

SYMBOL LEGEND	
Symbol	DESCRIPTION
Symbol	Wooden Post
Symbol	Utility Pole
Symbol	Guy Wire
Symbol	Gate Valve
Symbol	Water Meter
Symbol	Tree
Symbol	Stump
Pattern Legend	
Pattern	Asphalt (Road/Parking)
Pattern	Gravel (Road/Parking)

ABBREVIATIONS	DESCRIPTION
A.Pvt	Asphalt Pavement
A&G Dr	Asphalt/Gravel Drive
Cu	Curb
C&G	Curb & Gutter
CPP	Corrugated Plastic Pipe
Dbl.	Double
G.Dr	Gravel Drive
G.W	Guy Wire
OU	Overhead Utilities
S.F	Silt Fence
W	Waterline
x	Approximate Location



- GENERAL DEMOLITION NOTES:
1. ALL APPLICABLE ESC MEASURES SHALL BE IN PLACE PRIOR TO STARTING DEMOLITION.
  2. ALL REMOVED MATERIAL SHALL BE TAKEN TO A PERMITTED FACILITY AND DISPOSED OF IN A LAWFUL MANNER.
  3. ALL TREES ADJACENT TO THE LIMITS OF DISTURBANCE ARE TO BE SAVED. THE CONTRACTOR SHALL EXERCISE CAUTION AND INSTALL PERIMETER CONTROLS PER PLANS TO MAINTAIN THE HEALTH OF EXISTING TREES. USE OF HEAVY EQUIPMENT SHALL BE MINIMIZED WHEN WORKING WITHIN THE DRIPLINE OF EXISTING TREES.
  4. CONTRACTOR SHALL OBTAIN ALL REQUIRED COUNTY AND TOWN PERMITS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES. IN ACCORDANCE WITH THE GENERAL NOTES ON SHEET C0.0, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE COUNTY PRIOR TO CONSTRUCTION AND ANY LAND DISTURBING ACTIVITIES.
  5. THE CONTRACTOR SHALL REMOVE EXISTING SIGNAGE WITHIN THE LOD AND STORE ON-SITE FOR RE-USE. IF SIGNAGE IS DAMAGED OR LOST DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE AT NOT ADDITIONAL CHARGE TO THE OWNER.

DEMO LEGEND	
Symbol	REMOVE TREE
Symbol	LIMITS OF DISTURBANCE
Symbol	LIMITS OF DISTURBANCE FROM PREVIOUSLY COMPLETED WORK
Symbol	LIMITS OF WORK
Symbol	SAWCUT LINE
Symbol	REMOVE ASPHALTIC HARDSCAPE
Symbol	REMOVE GRAVEL DRIVE

- EXISTING CONDITION NOTES:
1. ALL PROPERTY LINES SHOWN AS EXISTING ARE APPROXIMATE AND BASED OFF AVAILABLE SITE PLANS.

DATE:	03/13/2025
REVISIONS	
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NEW CONSTRUCTION  
**VINTON WAR MEMORIAL PARK**  
VINTON, VIRGINIA

DRAWN BY: C. ROTHERMEL  
CHECKED BY: J. BRODIE

EXISTING  
CONDITIONS &  
DEMOLITION PLAN

**TIMMONS GROUP**  
YOUR VISION ACHIEVED THROUGH OURS.

COMMONWEALTH OF VIRGINIA  
03/13/2025  
JOHNATHAN C. BRODIE  
Lic. No. 053540  
PROFESSIONAL ENGINEER

COMMISSION No.  
24058.002  
SHEET  
C1.0

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THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, LARRY THOMAS OGLE JR., IS #2459 FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION. THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON SEPTEMBER 20TH, 2024, AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

- NOTES:
1. THIS PLAT IS BASED ON A CURRENT FIELD SURVEY.
  2. THIS PLAT DOES NOT CONSTITUTE A BOUNDARY SURVEY.
  3. THIS PLAT WAS PREPARED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT AND ENCUMBRANCES MAY EXIST THAT AFFECT THE SUBJECT PROPERTY THAT ARE NOT SHOWN HEREON.
  4. THIS PROPERTY DOES NOT LIE WITHIN THE LIMITS OF A SPECIAL FLOOD HAZARD AREA AS DESIGNATED BY F.E.M.A. THIS OPINION IS BASED ON AN INSPECTION OF THE FLOOD INSURANCE RATE MAPS AND HAS BEEN VERIFIED BY ACTUAL FIELD ELEVATIONS., SEE MAP NUMBER 51161C0169G, DATED SEPTEMBER 28, 2007. ZONE "X", AREA OF MINIMAL FLOOD HAZARD.
  5. THE HORIZONTAL (NAD 83) & VERTICAL CONTROL (NAVD 88) FOR THIS PROJECT WAS BASED ON TRIMBLE'S KEYNET VRS GPS NETWORK.
  6. COORDINATE VALUES AS SHOWN HEREON ARE SURFACE COORDINATES ESTABLISHED BY SCALING THE GRID COORDINATES AT POINT #10001 (N:3628871.275837, E:11078762.945690, ELEV.:1011.05') BY A COMBINED SCALE FACTOR OF 1.0000937329.
  7. CONTOURS AS SHOWN ARE AT A 2-FOOT CONTOUR INTERVAL.
  8. THIS PLAT DOES NOT GUARANTEE THE EXISTENCE OR LOCATION OF ANY UNDERGROUND UTILITIES. ALL SURFACE UTILITIES WERE FIELD LOCATED. ALL UNDERGROUND UTILITIES SHOWN WERE ESTABLISHED USING ABOVE GROUND STRUCTURES, MARKINGS, AVAILABLE UTILITY MAPS. ALL UNDERGROUND UTILITY LINES ARE APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO THE START OF ANY CONSTRUCTION.

APPROVED, 4/24/2025



EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION  
THE PURPOSE OF THIS PROJECT IS TO CONSTRUCT A RECREATIONAL PARK IN VINTON, VA., WITHIN ROANOKE COUNTY. THE PROPOSED PARK SHALL INCLUDE AN ASPHALT PARKING AREA, IMPERVIOUS RECREATIONAL SURFACE, SHADE AREAS, A RESTROOM FACILITY, AND IMPERVIOUS SIDEWALKS CONNECTING THESE AREAS. THESE IMPROVEMENTS ARE PROPOSED ON AREA PREVIOUSLY OCCUPIED BY THE VINTON SWIMMING POOL (DEMOLISHED BY OTHERS). THE LIMITS OF DISTURBANCE IS 0.95 AC.

ADJACENT PROPERTY  
THE PROJECT SITE IS BOUND BY MEADOW STREET TO THE WEST AND THE VINTON WAR MEMORIAL/CHARLES R. HILL COMMUNITY CENTER TO THE SOUTH. THE AREA IMMEDIATELY NORTH AND EAST OF THE SITE IS WOODED, WITH THE MORRISON AVE. NEIGHBORHOOD BEYOND THAT.

EXISTING SITE CONDITIONS  
THE PROJECT SITE IS CURRENTLY COMPRISED OF AREA DISTURBED BY THE DEMOLITION OF THE VINTON POOL. SILT FENCE HAS BEEN INSTALLED RUNNING EAST TO WEST ON THE SOUTH SIDE OF THE SITE, UPHILL OF THE VINTON WAR MEMORIAL PARKING LOT. THE EXISTING DRAINAGE PATTERN SHEDS WATER NORTH AND SOUTH VIA SHEET FLOW FROM A CENTRAL RIDGE LINE. THIS FLOW IS PARTIALLY INTERCEPTED TO THE SOUTH BY A YARD DRAIN. DRAINAGE NORTH OF THE SITE FLOWS INTO A WOODED AREA.

DISPOSAL AREA  
ALL MATERIALS RESULTING FROM DEMOLITION WORK SHALL BECOME THE PROPERTY OF THE CONTRACTOR, SHALL BE REMOVED FROM THE PROPERTY, AND SHALL BE DISPOSED OF IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.

CRITICAL EROSION AREAS  
THERE ARE NO CRITICAL EROSION AREAS WITHIN THE PROJECT AREAS. STEEP SLOPES CREATED BY CONSTRUCTION ACTIVITIES MAY BECOME CRITICAL AREAS IF NOT STABILIZED AND MAINTAINED PROPERLY. ALL SLOPES STEEPER THAN 4:1 SHALL BE STABILIZED WITH BLANKET MATTING AND PERMANENT SEEDING IMMEDIATELY UPON REACHING FINAL GRADE.  
THE CONTRACTOR SHALL MAKE REPAIRS AND / OR ADJUSTMENTS TO THE PROPOSED EROSION AND SEDIMENT CONTROL MEASURES AS REQUIRED TO MINIMIZE ANY SEDIMENT LEAVING THE LIMITS OF DISTURBANCE TO THE MAXIMUM EXTENT POSSIBLE.

EROSION AND SEDIMENT CONTROL MEASURES  
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE CURRENT ADDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. THE MINIMUM STANDARDS OF THE VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE BY LOCAL AUTHORITIES HAVING JURISDICTION.

EROSION AND SEDIMENT CONTROL MAINTENANCE  
ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN ACCORDANCE WITH VESCH AND THE CONSTRUCTION SEQUENCE, INCLUDING THE INSPECTION OF ALL MEASURES AFTER ALL RAIN EVENTS.

- STRUCTURAL PRACTICES:
1. TEMPORARY CONSTRUCTION ENTRANCE - 3.02 - A TEMPORARY CONSTRUCTION ENTRANCE SHALL BE PROVIDED AT THE LOCATION INDICATED ON THE PLANS. IT IS IMPERATIVE THAT THIS MEASURE BE MAINTAINED THROUGHOUT CONSTRUCTION. ITS PURPOSE IS TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.
  2. SILT FENCE - 3.05 - SILT FENCE SEDIMENT BARRIERS SHALL BE INSTALLED DOWNSLOPE OF AREAS WITH MINIMAL GRADES - 20 FILTER SETTLING LATER RUNOFF FROM SHEET FLOW AS INDICATED. ITS PURPOSE IS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
  3. DIVERSION DIKE - 3.09 - A TEMPORARY RIDGE OF COMPACTED AND STABILIZED SOIL TO DIVERT WATER FROM A CERTAIN AREA.
  4. TREE PROTECTION - 3.38 - FENCING INSTALLED AROUND THE PERIMETER OF THE SITE WHERE THE LIMITS OF DISTURBANCE IS ADJACENT TO WOODED AREAS TO REMAIN.
  5. DUST CONTROL - 3.39 - DUST CONTROL IS TO BE USED THROUGH CONSTRUCTION IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT TO MINIMIZE AIRBORNE MATERIALS FROM LEAVING THE SITE.

- VEGETATIVE PRACTICES:
6. TOPSOILING - 3.30 TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS SHALL BE LOCATED ON-SITE AND ARE TO BE STABILIZED WITH TEMPORARY VEGETATION.
  7. TEMPORARY SEEDING - 3.31 - ALL DENUDED AREAS WHICH WILL BE LEFT DORMANT FOR MORE THAN 14 DAYS SHALL BE SEEDDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING OF THOSE AREAS. SELECTION OF THE SEED MIXTURE SHALL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
  8. PERMANENT SEEDING - 3.32 - FOLLOWING GRADING ACTIVITIES, ESTABLISH PERENNIAL VEGETATIVE COVER BY PLANTING SEED TO REDUCE EROSION, STABILIZE DISTURBED AREAS, AND ENHANCE NATURAL BEAUTY.

- MANAGEMENT STRATEGIES
1. PROVIDE TEMPORARY SEEDING OR OTHER STABILIZATION IMMEDIATELY AFTER GRADING.
  2. ISOLATE TRENCHING FOR UTILITIES AND DRAINAGE FROM DOWNSTREAM CONVEYANCES IN ORDER TO MINIMIZE PERIMETER CONTROLS.
  3. ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MAINTAINED UNTIL THEY ARE NO LONGER REQUIRED TO COMPLY WITH THE CONTRACT DOCUMENTS OR STATE LAW.

PERMANENT STABILIZATION  
ALL NON-PAVED AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISHED GRADING. SEEDING SHALL BE IN ACCORDANCE WITH ROANOKE COUNTY GUIDELINES. TOP SOIL (STRAW OR FIBER) SHALL BE USED ON ALL SEEDED SURFACES. IN ALL SEEDING OPERATIONS SEED, FERTILIZER AND LIME SHALL BE APPLIED PRIOR TO MULCHING. INSTALL BLANKET MATTING ON ALL SLOPES 4:1 AND STEEPER.

- SEQUENCE OF CONSTRUCTION
- PHASE 1 - SITE PREPARATION AND DEMOLITION
1. THE CONTRACTOR SHALL STAKE THE LIMITS OF DISTURBANCE AND OBTAIN ALL NECESSARY PERMITS PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITIES.
  2. ONSITE: PRIOR TO STARTING CONSTRUCTION OR EARTHWORK ACTIVITIES, INITIAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MADE OPERATIONAL PER THESE PLANS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
    1. INSTALL THE CONSTRUCTION ENTRANCE.
    2. INSTALL PERIMETER MEASURES INCLUDING DIVERSION DIKES, SILT FENCE, AND TREE PROTECTION, AS WELL AS INLET PROTECTION ON EXISTING INLETS.
    3. AFTER INITIAL ESC MEASURES ARE INSTALLED SITE DEMOLITION AND ROUGH GRADING MAY BEGIN.
  - 3.1. THE EXISTING SILT FENCE MAY BE REMOVED ONCE SILT FENCE IS INSTALLED DOWNSTREAM.

- PHASE 2 - GRADING, UTILITY, AND HARDSCAPE CONSTRUCTION
1. AFTER ALL PHASE 1 EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE AND THE EARTHEN MEASURES ARE STABILIZED, CLEARING AND GRUBBING OF THE SITE MAY BEGIN. TOPSOIL SHOULD BE STOCKPILED AND SAVED FOR USE DURING FINAL SITE GRADING. CLEARING AND GRUBBING ACTIVITIES SHOULD BE PERFORMED AS NEEDED FOR THE NEXT CONSTRUCTION ACTIVITY AND NOT ACROSS THE ENTIRE SITE AT ONCE. ALL EXCAVATED MATERIAL AND DEBRIS SHALL BE STOCKPILED ON SITE OR DISPOSED OF IN A LAWFUL MANNER. ROANOKE COUNTY IS TO BE NOTIFIED PRIOR TO ANY HAULING TO OR FROM AN OFFSITE BORROW OR WASTE AREA NOT DETAILED ON THESE PLANS.
  2. ALL STOCKPILES SHALL BE SURROUNDED BY SILT FENCE AND SEEDDED IN COMPLIANCE WITH MS-2.
  3. BEGIN FINE GRADING AND INSTALLATION OF THE SITE AND PLAYGROUND FEATURES.
  4. THROUGHOUT CONSTRUCTION ACTIVITIES, APPLY DUST CONTROL MEASURES ACCORDING TO VESCH STD. & SPEC. 3.39.
  5. ALL MATERIALS OR DEBRIS TRACKED ONTO A ROAD OR PAVED SURFACE SHALL BE CLEANED THOROUGHLY, PERIODICALLY THROUGHOUT EVERY DAY. SEDIMENT SHALL NOT BE PERMITTED TO BE CARRIED OR TRACKED ONTO THE NEIGHBORING GREEN OR UNDISTURBED COURSE GREEN. SEDIMENT SHALL BE REMOVED FROM THESE AREAS AND BE TRANSPORTED TO A SEDIMENT-CONTROLLED DISPOSAL AREA.
  6. APPLY TEMPORARY SEEDING AND MULCHING THROUGHOUT THE LIMITS OF DISTURBANCE AS NECESSARY.
  7. MAINTAIN ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED UNTIL SUCH A TIME AS VEGETATIVE COVER IS ESTABLISHED OR HARDSCAPE IS INSTALLED ON ALL AREAS UPHILL OF THE MEASURES.
  8. INSTALL ADDITIONAL MEASURES SHOWN ON THE PLANS AND AS DEEMED NECESSARY THROUGH INSPECTIONS BY THE RLD OR COUNTY.
  9. FINALIZE ROUGH GRADING ACTIVITIES. APPLY PERMANENT SEEDING, TOPSOIL AND STRAW MULCHING TO ALL DISTURBED AREAS AS THEY REACH FINISHED GRADE.
  10. ONCE THE SITE WORK IS FINALIZED AND ALL FINAL STABILIZATION MEASURES ARE IN PLACE, NOTIFY THE INSPECTORS FOR FINAL INSPECTION.
  11. ONCE APPROVAL IS REQUIRED FROM THE INSPECTOR AND ALL UPSTREAM AREAS HAVE BEEN ESTABLISHED VEGETATION, ALL REMAINING EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS.
  12. REMOVE ALL EQUIPMENT, CONSTRUCTION MATERIALS, AND DEBRIS FROM THE SITE.
  13. PROVIDE ALL APPROPRIATE INFORMATION NEEDED TO CLOSE OUT THE LAND DISTURBING PERMIT AND THE VSPM CONSTRUCTION GENERAL PERMIT WITH ROANOKE COUNTY, INCLUDING ASSISTING IN PREPARING CERTIFICATION DOCUMENTS.

GENERAL CONSTRUCTION NOTES FOR EROSION AND SEDIMENT CONTROL

1. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
9. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING EVENT, ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
10. ALL FILL MATERIAL TO BE TAKEN FROM AN APPROVED, DESIGNATED BORROW AREA.
11. ALL WASTE MATERIALS SHALL BE TAKEN TO AN APPROVED WASTE AREA. EARTH FILL SHALL BE INERT MATERIALS ONLY, FREE OF ROOTS, STUMPS, WOOD, RUBBISH, AND OTHER DEBRIS.
12. BORROW OR WASTE AREAS ARE TO BE RECLAIMED WITHIN 7 DAYS OF COMPLETION PER ZONING ORDINANCE SECTION 5.1.28.
13. ALL INERT MATERIALS SHALL BE TRANSPORTED IN COMPLIANCE WITH LOCAL REQUIREMENTS.
14. BORROW, FILL OR WASTE ACTIVITY INVOLVING INDUSTRIAL-TYPE POWER EQUIPMENT SHALL BE LIMITED TO THE HOURS OF 7:00AM TO 9:00PM.
15. BORROW, FILL OR WASTE ACTIVITY SHALL BE CONDUCTED IN A SAFE MANNER THAT MAINTAINS LATERAL SUPPORT, OR ORDER TO MINIMIZE ANY HAZARD TO PERSONS, PHYSICAL DAMAGE TO ADJACENT LAND AND STRUCTURES/IMPROVEMENTS, AND DAMAGE TO ANY PUBLIC STREET BECAUSE OF SLIDES, SINKING, OR COLLAPSE.
16. TEMPORARY STABILIZATION SHALL BE TEMPORARY SEEDING AND MULCHING. SEEDING IS TO BE AT 75 LBS/ACRE, AND IN THE MONTHS OF SEPTEMBER TO FEBRUARY TO CONSIST A 50/50 MIX OF ANNUAL RYEGRASS AND CEREAL WINTER RYE, OR IN MARCH AND APRIL TO CONSIST OF ANNUAL RYE, OR MAY THROUGH AUGUST TO CONSIST OF GERMAN MILLET. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE COUNTY EROSION CONTROL INSPECTOR.
17. PERMANENT STABILIZATION SHALL BE LIME AND FERTILIZER. PERMANENT SEEDING, AND MULCH. AGRICULTURAL GRADE LIMESTONE SHALL BE APPLIED AT 90LBS/1000SF, INCORPORATED INTO THE TOP 4-6 INCHES OF SOIL. FERTILIZER SHALL BE APPLIED AT 1000LBS/ACRE AND CONSIST OF A 10-20-10 NUTRIENT MIX. PERMANENT SEEDING SHALL BE APPLIED AT 180LBS/ACRE AND CONSIST OF 95% KENTUCKY 31 OR TALL FESCUE AND 0-5% PERENNIAL RYEGRASS OR KENTUCKY BLUEGRASS. STRAW MULCH IS TO BE APPLIED AT 80LBS/100SF. ALTERNATIVES ARE SUBJECT TO APPROVAL BY THE COUNTY EROSION CONTROL INSPECTOR.
18. MAINTENANCE: ALL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT, ANY DAMAGE OR CLOGGING TO STRUCTURAL MEASURES SHALL BE REPAIRED IMMEDIATELY. SILT TRAPS SHALL BE CLEANED WHEN 50% OF THE WET STORAGE VOLUME IS FILLED WITH SEDIMENT. ALL SEEDED AREAS SHALL BE RESEEDD WHEN NECESSARY TO ACHIEVE A GOOD STAND OF GRASS. SILT FENCE AND DIVERSION DYKES WHICH COLLECT SEDIMENT TO HALF THEIR HEIGHT MUST BE CLEANED AND REPAIRED IMMEDIATELY.
19. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF FINAL SITE STABILIZATION, WHEN MEASURES ARE NO LONGER NEEDED, SUBJECT TO APPROVAL BY THE COUNTY EROSION CONTROL INSPECTOR.

MINIMUM STANDARDS:

AN EROSION AND SEDIMENT CONTROL PROGRAM ADOPTED BY A DISTRICT OR LOCALITY MUST BE CONSISTENT WITH THE FOLLOWING CRITERIA, TECHNIQUES AND METHODS:

- MS-1: STABILIZATION  
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. IF FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE, VEGETATION MUST BE ESTABLISHED TO PREVENT EROSION. BECAUSE GROUND COVER CAN REDUCE EROSION POTENTIAL BY MORE THAN 90%, TEMPORARY SEEDING MUST BE APPLIED IF ANY PORTION OF THE SITE WILL REMAIN DORMANT FOR MORE THAN 14 DAYS.
- REFER TO EROSION AND SEDIMENT CONTROL NARRATIVE, THIS SHEET.
- MS-2: STOCKPILES, WASTE, AND BORROW AREAS  
DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES 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. LOCATIONS OF STOCKPILES AND BORROW PITS SHOULD BE IDENTIFIED ON SITE PLANS AD STOCKPILES SHOULD HAVE PERIMETER EROSION AND SEDIMENT CONTROL MEASURES INSTALLED AS WELL AS LOCATED WITH ENOUGH SETBACK DISTANCE FROM STREAMS, WATERWAYS, AND ENTRANCES/LINE OF SIGHT. SOIL STOCKPILE SLOPES SHOULD NOT EXCEED 2:1 (H:V).
- REFER TO EROSION AND SEDIMENT CONTROL NARRATIVE, THIS SHEET.
- MS-3: PERMANENT VEGETATION  
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.
- REFER TO EROSION AND SEDIMENT CONTROL NARRATIVE, THIS SHEET.
- MS-4: FIRST-STEP MEASURES  
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.
- NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- MS-5: EARTHEN STRUCTURE STABILIZATION  
STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
- REFER TO EROSION AND SEDIMENT CONTROL NARRATIVE, THIS SHEET.
- MS-6: TRAPS AND BASINS  
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. PROVIDE A COMBINATION OF MAN-MADE STORMWATER CONVEYANCE SYSTEM IMPROVEMENT, STORMWATER DETENTION, OR OTHER MEASURES THAT IS SATISFACTORY TO THE VSPM OR VESCP AUTHORITY. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPOSED OF FLOW FROM DRAINAGE AREA GREATER THAN OR EQUAL TO 3 ACRES WILL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A BASIN WILL BE 134 CY PER ACRE OF DRAINAGE AREA. TEMPORARY SEDIMENT BASINS SHOULD BE DESIGNED AND CONSTRUCTED BASED ON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE SEDIMENT BASIN. THE MAXIMUM TOTAL DRAINAGE AREA TO BE SERVED BY A TEMPORARY SEDIMENT BASIN SHOULD BE 100 ACRES. THE OUTFALL SYSTEM WILL, 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 WILL CORRESPOND TO A BARE EARTH CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS USED. C. THE MINIMUM STORAGE CAPACITY OF A TEMPORARY SEDIMENT TRAP SHOULD BE 134 CUBIC YARDS PER ACRE OF TOTAL DRAINAGE AREA, HALF OF WHICH SHOULD BE IN THE FORM OF A PERMANENT POOL OR WET STORAGE TO PROVIDE A STABLE SETTLING MEDIUM. THE REMAINING HALF SHOULD BE IN THE FORM OF A DRAWDOWN OR DRY STORAGE TO PROVIDE EXTENDED SETTLING TIME DURING LESS FREQUENT, LARGER STORM EVENTS. CONCENTRATED STORMWATER FLOW FROM A TEMPORARY SEDIMENT BASIN SHOULD BE RELEASED INTO AN ADEQUATE STORMWATER CONVEYANCE SYSTEM. DEMONSTRATE THAT THE TOTAL DRAINAGE AREA AT THE POINT OF DISCHARGE WITHIN THE STORMWATER CONVEYANCE SYSTEM IS AT LEAST 100 TIMES GREATER THAN THE DRAINAGE AREA SERVED BY THE SEDIMENT BASIN IN QUESTION.
- NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- MS-7: CUT AND FILL SLOPES  
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.
- PROPOSED SLOPES SHALL CONFORM TO MS-7 STANDARDS.
- MS-8: CONCENTRATED RUNOFF  
CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
- ALL CONCENTRATED RUNOFF SHALL BE DIRECTED TO AN APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURE, AND WILL NOT FLOW DOWN PROPOSED SLOPES.
- MS-9: WATER SEEPS  
WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
- NO SEEP IS ANTICIPATED FOR THE SCOPE OF THIS PROJECT. CONTRACTOR TO NOTIFY DESIGN ENGINEER DURING CONSTRUCTION.
- MS-10: INLET PROTECTION  
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.
- INLET PROTECTION SHALL BE INSTALLED OVER ALL NEW INLETS BEFORE BRINGING THEM ONLINE; REFER TO ESC PHASE 2 ON SHEET C2.
- MS-11: OUTLET PROTECTION  
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.
- OUTLET PROTECTION TO BE INSTALLED AT ALL PROPOSED OUTFALL POINTS; REFER TO ESC PHASE 2 ON SHEET C2.3.
- MS-12: WATERCOURSE CONSTRUCTION  
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.
- NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- MS-13: TEMPORARY VEHICULAR STREAM CROSSING  
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.
- NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- MS-14: OTHER WATERCOURSE REGULATIONS  
ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
- NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- MS-15: BED AND BANK STABILIZATION  
THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
- NOT APPLICABLE TO THE SCOPE OF THIS PROJECT.
- MS-16: UTILITY CONSTRUCTION  
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 THESE REGULATIONS.  
F. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
- ALL UNDERGROUND STORM LINES AND PROPOSED UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH MS-16.
- MS-17: VEHICULAR TRACKING AND CONSTRUCTION ENTRANCES  
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.
- REFER TO SHEET C2.2 FOR THE CONSTRUCTION ENTRANCE LOCATION.
- MS-18: TEMPORARY CONTROL REMOVE  
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 LOCAL PROGRAM 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.
- REFER TO EROSION AND SEDIMENT CONTROL NARRATIVE, THIS SHEET.
- MS-19: ADEQUATE STORMWATER CONVEYANCE TO ADEQUATE STORMWATER OUTFALL  
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 MANMADE CHANNELS AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MANMADE CHANNELS.
  - (a) CONCENTRATED STORMWATER RUNOFF LEAVING THE DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MANMADE 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 PIE SYSTEM SHALL BE PERFORMED.
  - (b) ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
    - (1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS 100 TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
    - (2) (a) NATURAL CHANNELS 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 MANMADE CHANNELS SHALL BE ANALYZED BY THE USE OF A 10-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP THE STORMWATER'S 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 10-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
  - (c) IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MANMADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
    - (1) IMPROVE THE CONDITION WHERE A 10-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS;
    - (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE 10-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;
    - (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PREDEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PREDEVELOPMENT PEAK RUNOFF RATE FROM A 10-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MANMADE CHANNEL; OR
    - (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION, OR OTHER MEASURES THAT IS SATISFACTORY TO THE VESCP OR VESPM AUTHORITY TO PREVENT DOWNSTREAM EROSION.
  - (d) THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
  - (e) 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, THE APPLICANT SHALL OBTAIN APPROVAL FROM THE VESCP OR VESPM AUTHORITY FOR 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 PROVIDED AT ALL OUTFALLS 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 THAT 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 MANMADE CHANNELS SHALL SATISFY THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MANMADE CHANNELS IF THE PRACTICES ARE DESIGNED TO (i) DETAIN THE WATER QUALITY VOLUME AND TO RELEASE IT OVER 48 HOURS; (ii) DETAIN 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-YEAR, TWO-YEAR, AND 10-YEAR 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING THE SITE 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 THE SITE WAS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF VOLUME FROM THE SITE IN THE SITE'S PROPOSED CONDITION, AND SHALL BE EXEMPT FROM ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MANMADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT TO § 62.1-44.15:28 OF THE CODE OF VIRGINIA (VESMA) OR § 62.1-44.15:54 OR 62.1-44.15:65 OF THE CODE OF VIRGINIA (ESCL).
  - (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 CODE OF VIRGINIA (ESCL) AND THIS SUBDIVISION 19 SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE VESMA AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES (i) ARE IN ACCORDANCE WITH PROVISIONS FOR TIME LIMITS ON APPLICABILITY OF APPROVED DESIGN CRITERIA IN 9VAC25-875-480 OR GRANDFATHERING IN 9VAC25-875-490, IN WHICH CASE THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 62.1-44.15:52 A OF THE CODE OF VIRGINIA (ESCL) SHALL APPLY; OR (ii) ARE EXEMPT PURSUANT TO § 62.1-44.15:34 G 2 OF THE CODE OF VIRGINIA (VESMA).
  - (n) COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN 9VAC25-875-600 SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF THIS SUBDIVISION 19.
- DOWNSTREAM PROPERTIES ARE PROTECTED FROM RUNOFF AND EROSION DAMAGE BUT UTILIZING THE PERIMETER CONTROLS AND PERMANENT STORMWATER MANAGEMENT MEASURES SHOWN WITHIN THIS PLAN SET. PROPOSED TEMPORARY AND PERMANENT MEASURES HAVE BEEN DESIGNED PER THE LATEST VERSION OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK.

EROSION-SILTATION CONTROL COST ESTIMATE				
ALL COSTS GIVEN ARE COMPLETE IN PLACE				
DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CONSTRUCTION ENTRANCE	EA	1	\$ 1,200.00	\$ 1,200.00
SILT FENCE	LF	852	\$ 4.00	\$ 3,408.00
CLEAN WATER DIVERSION	LF	143	\$ 5.00	\$ 715.00
TREE PROTECTION	LF	196	\$ 5.00	\$ 980.00
PERMANENT SEEDING	SF	39,204	\$ 0.05	\$ 1,960.20
TEMP. SEEDING	SF	39,204	\$ 0.04	\$ 1,568.16
MULCHING	SF	39,204	\$ 0.04	\$ 1,568.16
SUBTOTAL				\$ 11,399.52
10% CONTINGENCY				\$ 1,139.95
TOTAL PROJECT COST				\$ 12,539.47

DATE: 03/13/2025

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NEW CONSTRUCTION  
VINTON WAR MEMORIAL PARK  
VINTON, VIRGINIA

DRAWN BY: C. ROTHERMEL

CHECKED BY: J. BRODIE

EROSION & SEDIMENT CONTROL - NOTES

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03/13/2025  
JOHNATHAN C. BRODIE  
Lic. No. 053540  
PROFESSIONAL ENGINEER

COMMISSION No.  
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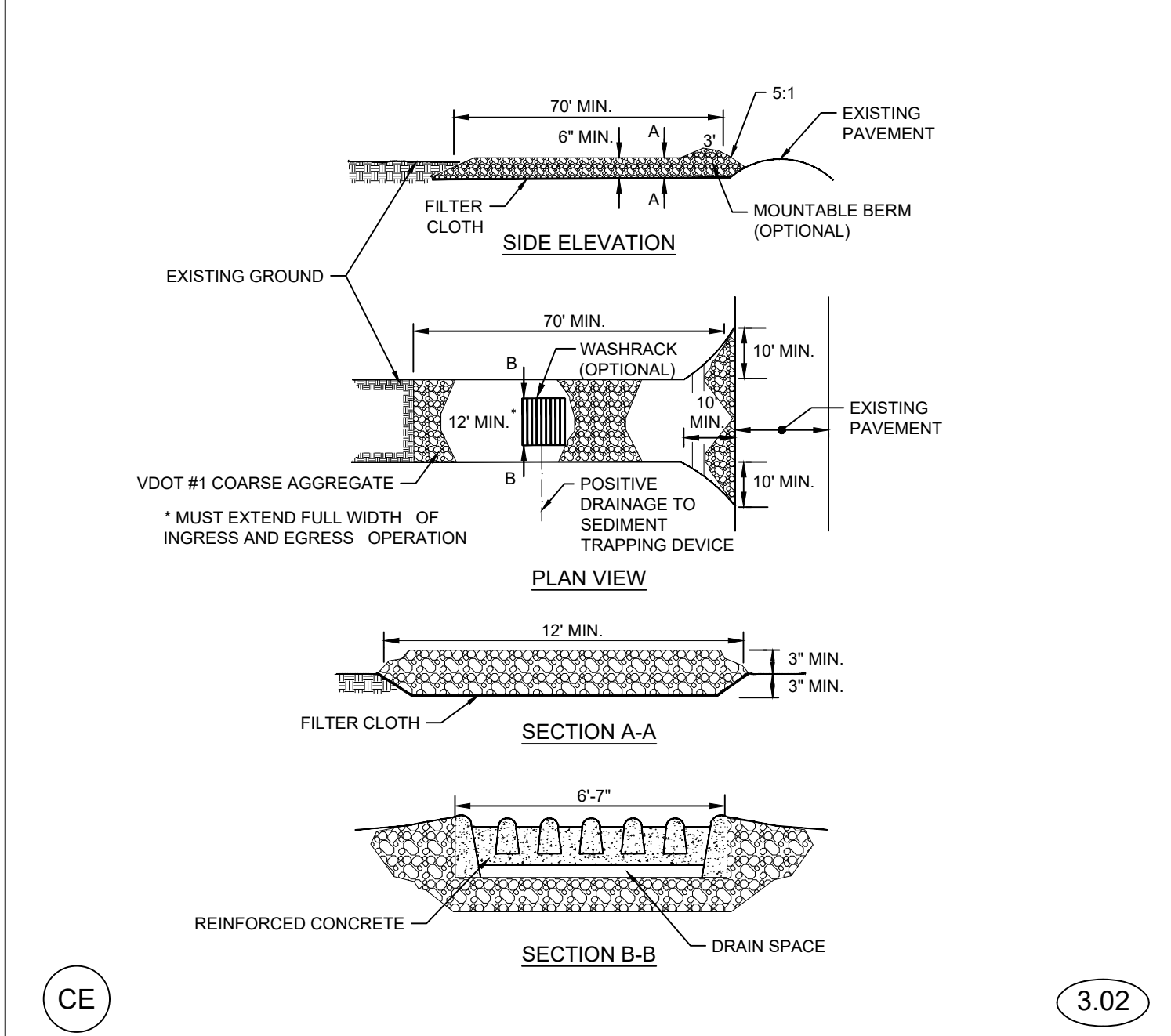
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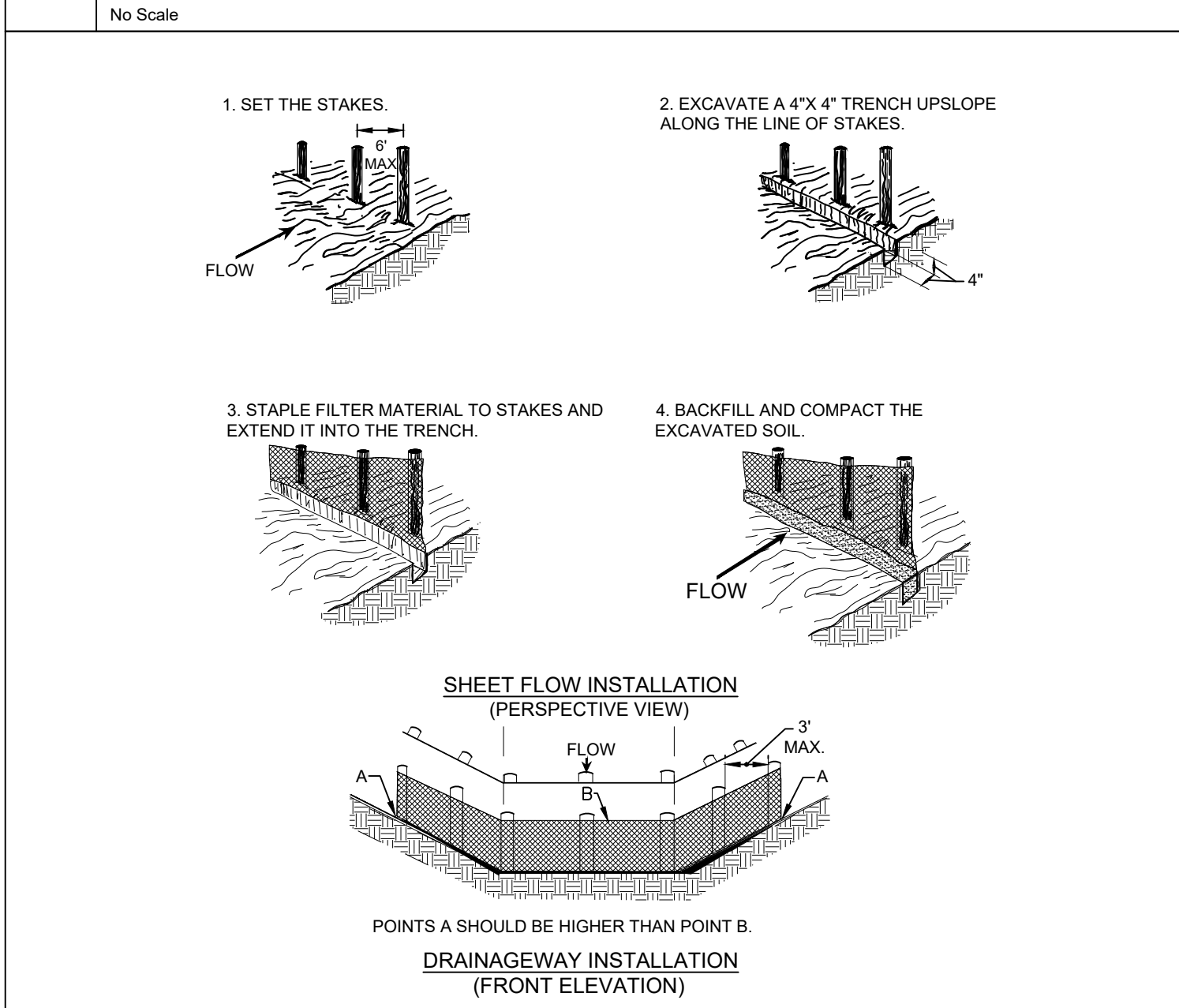
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CE 3.02

STONE CONSTRUCTION ENTRANCE

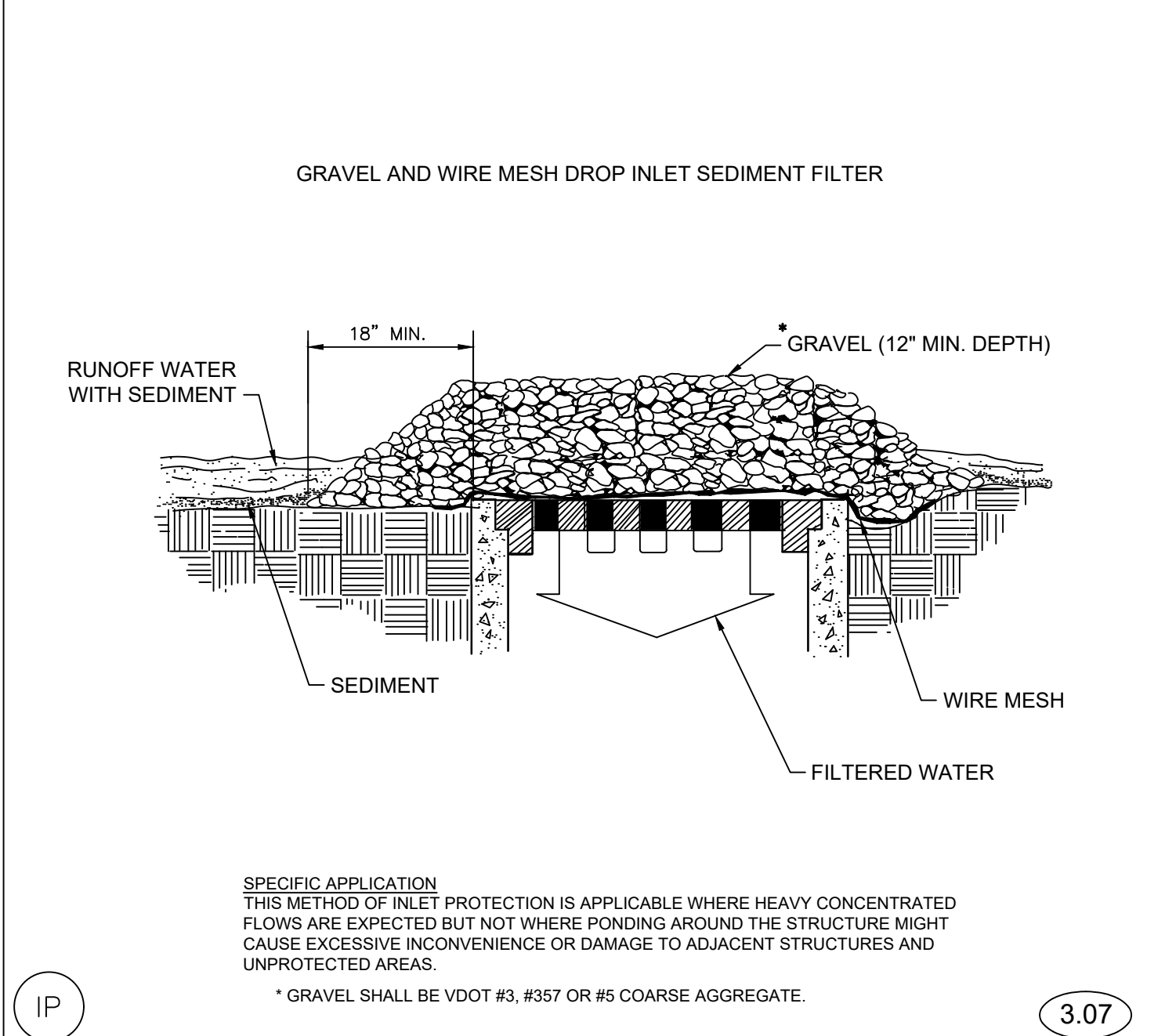
No Scale



SF 3.05

SILT FENCE (W/O WIRE SUPPORT)

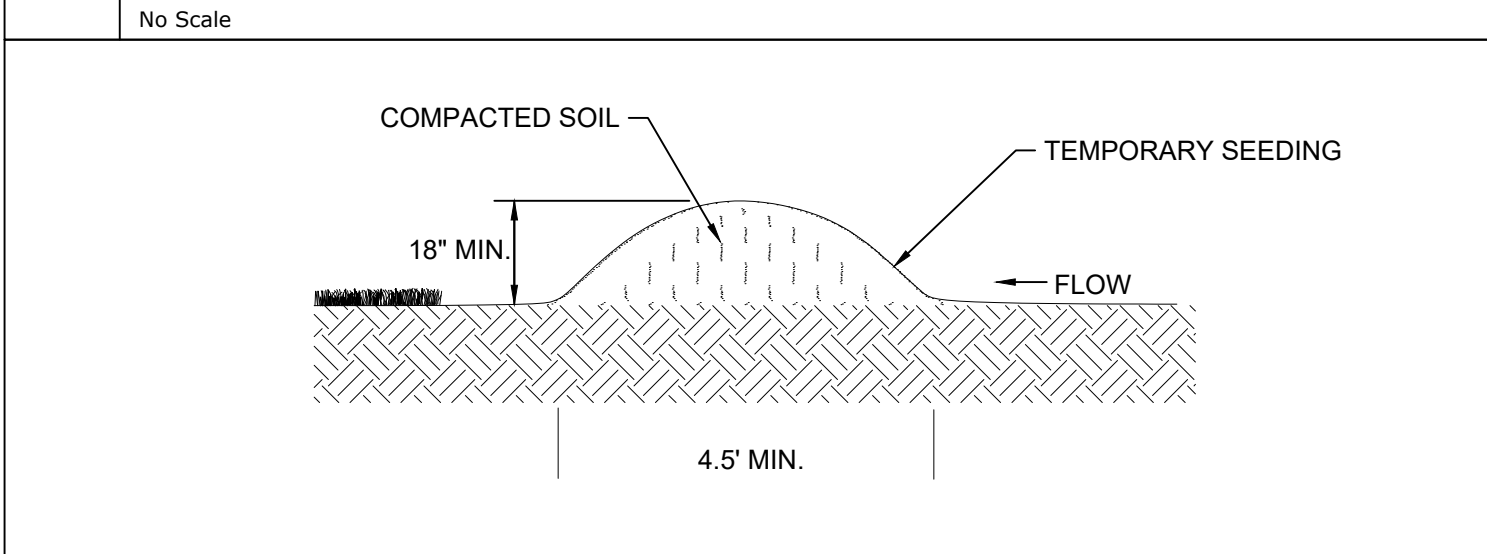
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IP 3.07

STORM DRAIN INLET PROTECTION

No Scale



CWD 3.09

TEMPORARY DIVERSION DIKE

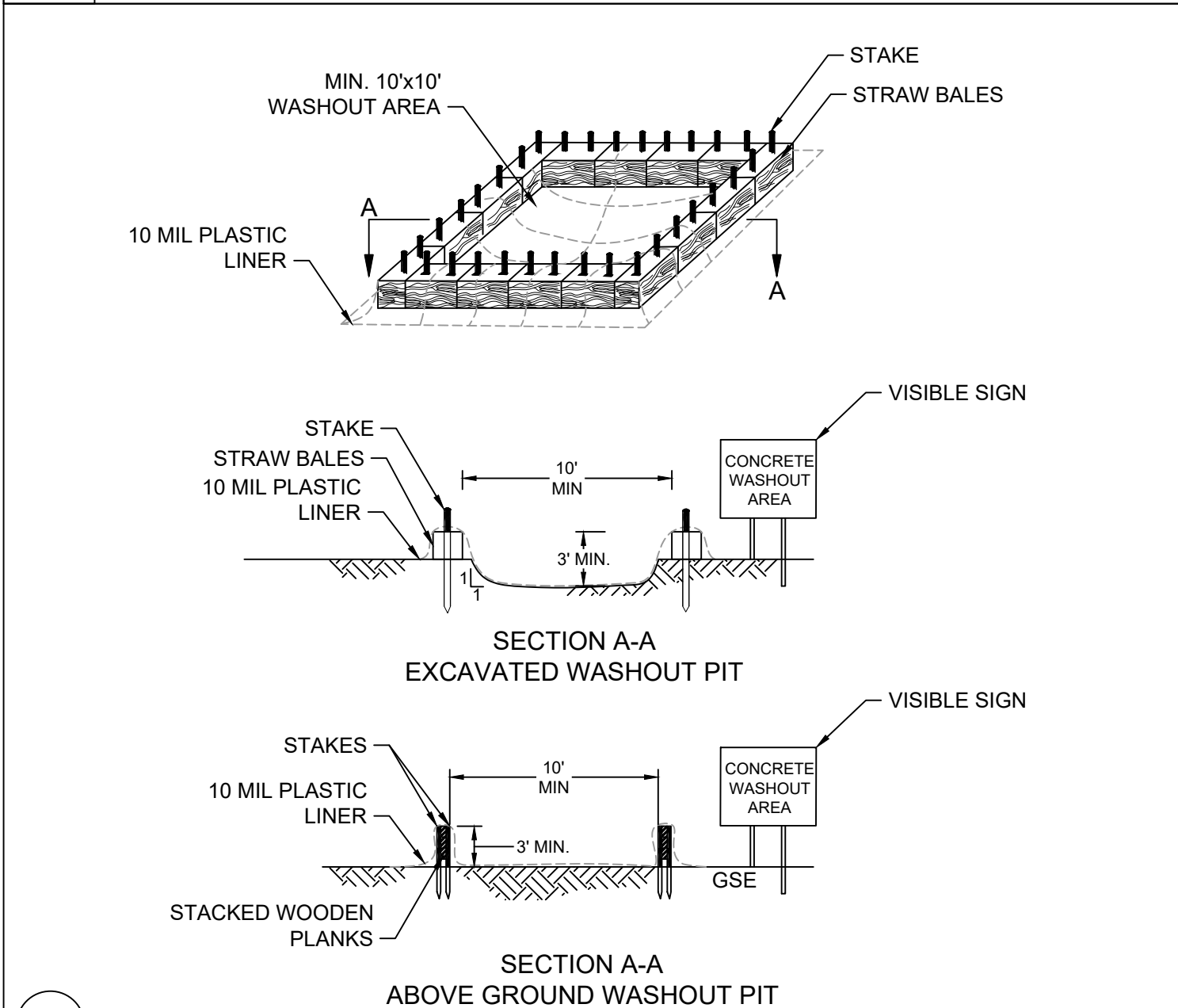
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TABLE 3.31-B ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS "QUICK REFERENCE FOR ALL REGIONS"		
PLANTING DATES	SPECIES	RATE (LBS./ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) & CEREAL (WINTER) RYE (SECALE CEREALE)	50-100
FEB. 16 - APR. 30	ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM)	60-100
MAY 1 - AUG. 31	GERMAN MILLET (SETARIA ITALICA)	50

TS 3.31

TEMPORARY SEEDING PLANT MATERIALS

No Scale



CW 3.36

TYPICAL CONCRETE WASHOUT AREA

No Scale

TABLE 3.32-C SITE SPECIFIC SEEDING MIXTURES FOR APPALACHIAN/MOUNTAIN AREA	
	TOTAL LBS. PER ACRE
MINIMUM CARE LAWN COMMERCIAL OR RESIDENTIAL KENTUCKY 31 OR TURF-TYPE TALL FESCUE IMPROVED PERENNIAL RYEGRASS * KENTUCKY BLUEGRASS	200-250 LBS. 90-100% 0-10% 0-10%
HIGH-MAINTENANCE LAWN MINIMUM OF THREE (3) UP TO FIVE (5) VARIETIES OF BLUEGRASS FROM APPROVED LIST FOR USE IN VIRGINIA.	125 LBS.
GENERAL SLOPE (3:1 OR LESS) KENTUCKY 31 FESCUE RED TOP GRASS SEASONAL NURSE CROP **	128 LBS. 2 LBS. 20 LBS. 150 LBS.
LOW-MAINTENANCE SLOPE (STEEPER THAN 3:1) KENTUCKY 31 FESCUE RED TOP GRASS SEASONAL NURSE CROP ** CROWN VETCH ***	168 LBS. 2 LBS. 20 LBS. 20 LBS. 150 LBS.

\* PERENNIAL RYEGRASS WILL GERMINATE FASTER AND AT LOWER SOIL TEMPERATURES THAN FESCUE, THEREBY PROVIDING COVER AND EROSION RESISTANCE FOR SEEDBED.

\*\* USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:

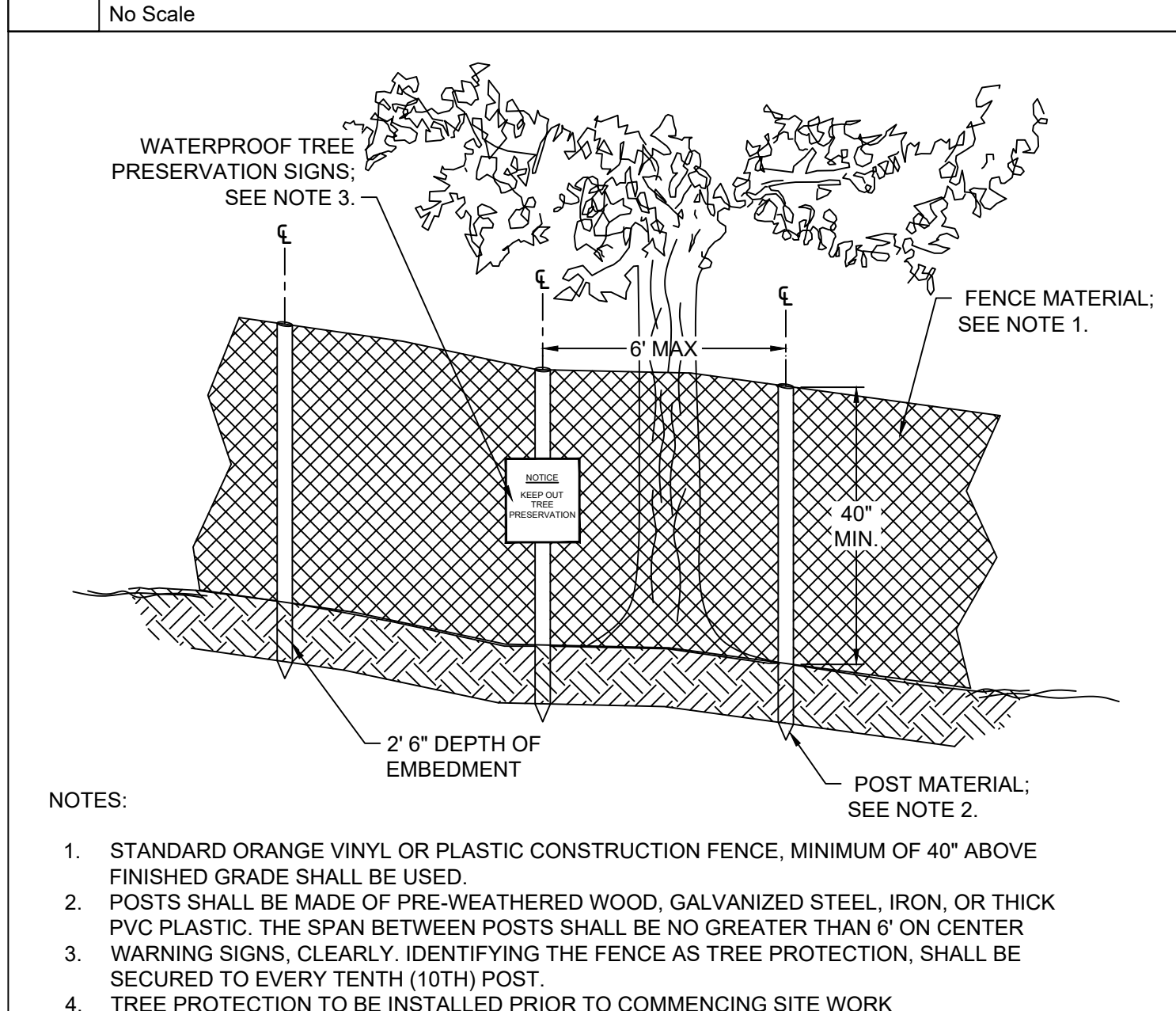
MARCH, APRIL THROUGH MAY 15TH..... ANNUAL RYE  
MAY 16TH THROUGH AUGUST 15TH..... FOXTAIL MILLET  
AUGUST 16TH THROUGH SEPTEMBER, OCTOBER..... ANNUAL RYE  
NOVEMBER THROUGH FEBRUARY..... WINTER RYE

\*\*\* IF FLATPEA IS USED, INCREASE TO 30 LBS./ACRE. ALL LEGUME SEED MUST BE PROPERLY INOCULATED. WEEPING LOVEGRASS MAY ALSO BE INCLUDED IN ANY SLOPE OR LOW-MAINTENANCE MIXTURE DURING WARMER SEEDING PERIODS; ADD 10-20 LBS./ACRE IN MIXES.

PS 3.32

PERMANENT SEEDING MIX FOR APPALACHIAN/MOUNTAIN AREA

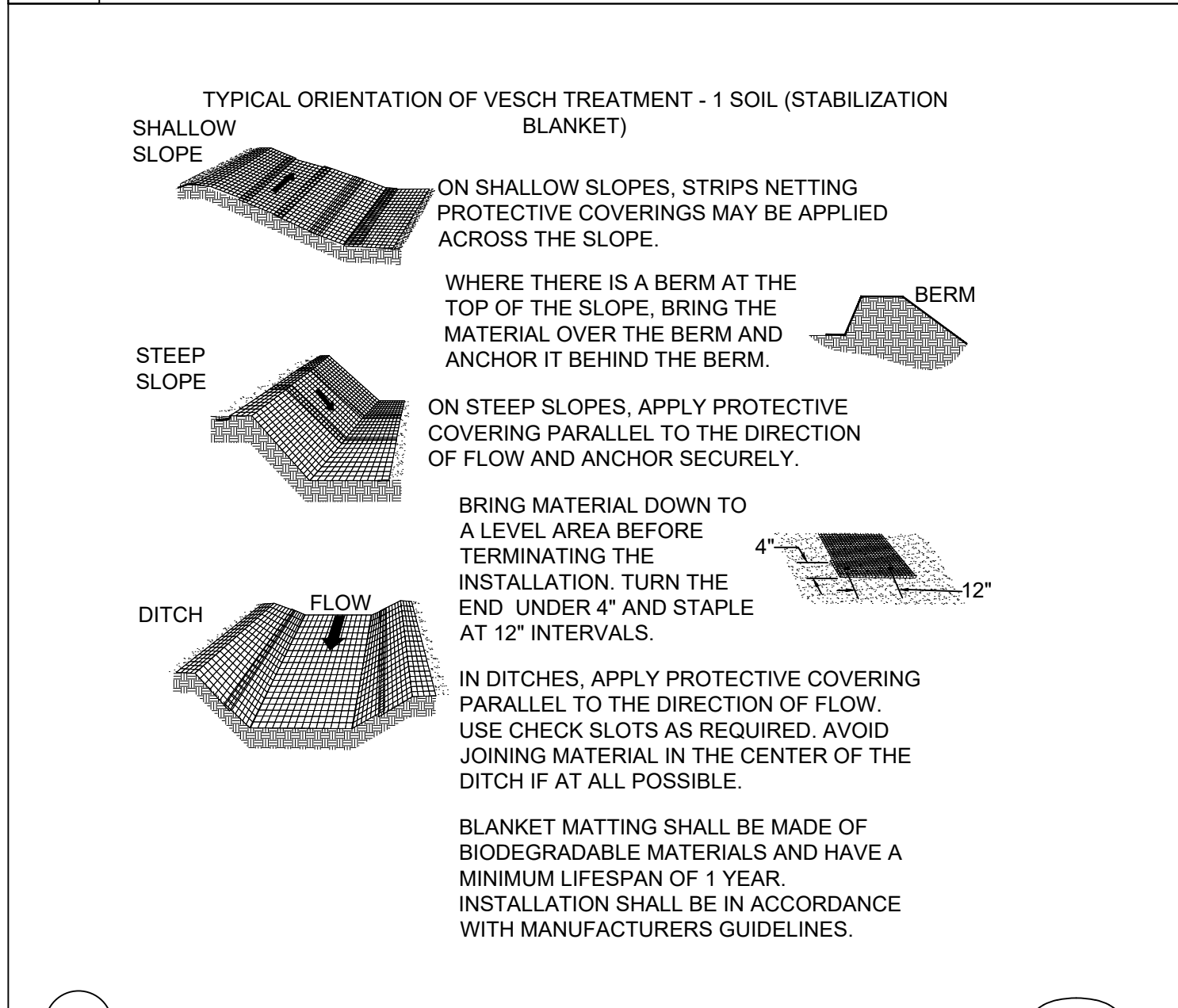
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TP 3.38

TREE PROTECTION

No Scale



BM 3.36

SOIL STABILIZATION BLANKET (TREATMENT-1)

No Scale

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NEW CONSTRUCTION  
VINTON WAR MEMORIAL PARK  
VINTON, VIRGINIA

DRAWN BY: C. ROTHERMEL  
CHECKED BY: J. BRODIE

EROSION & SEDIMENT CONTROL - DETAILS

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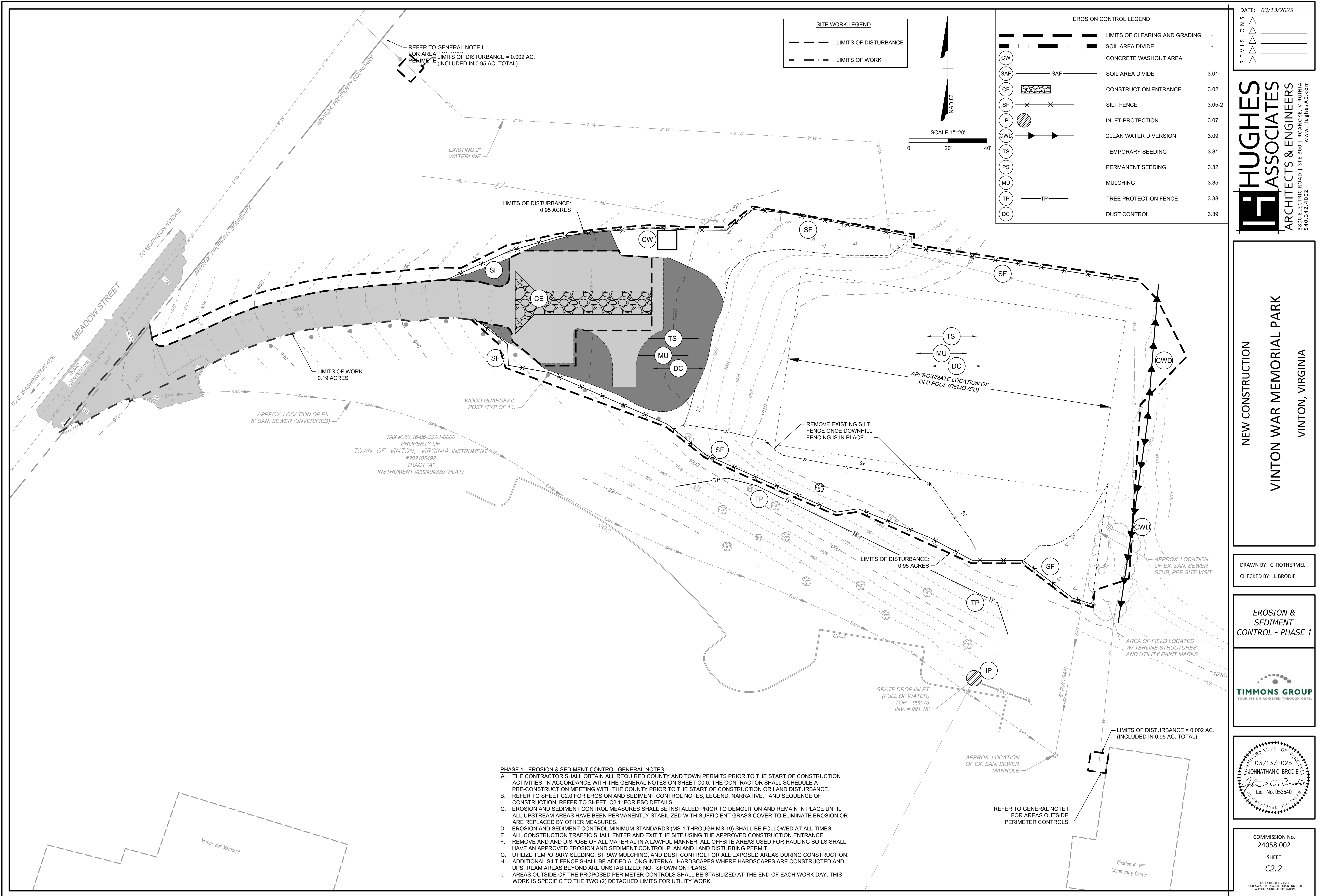
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03/13/2025  
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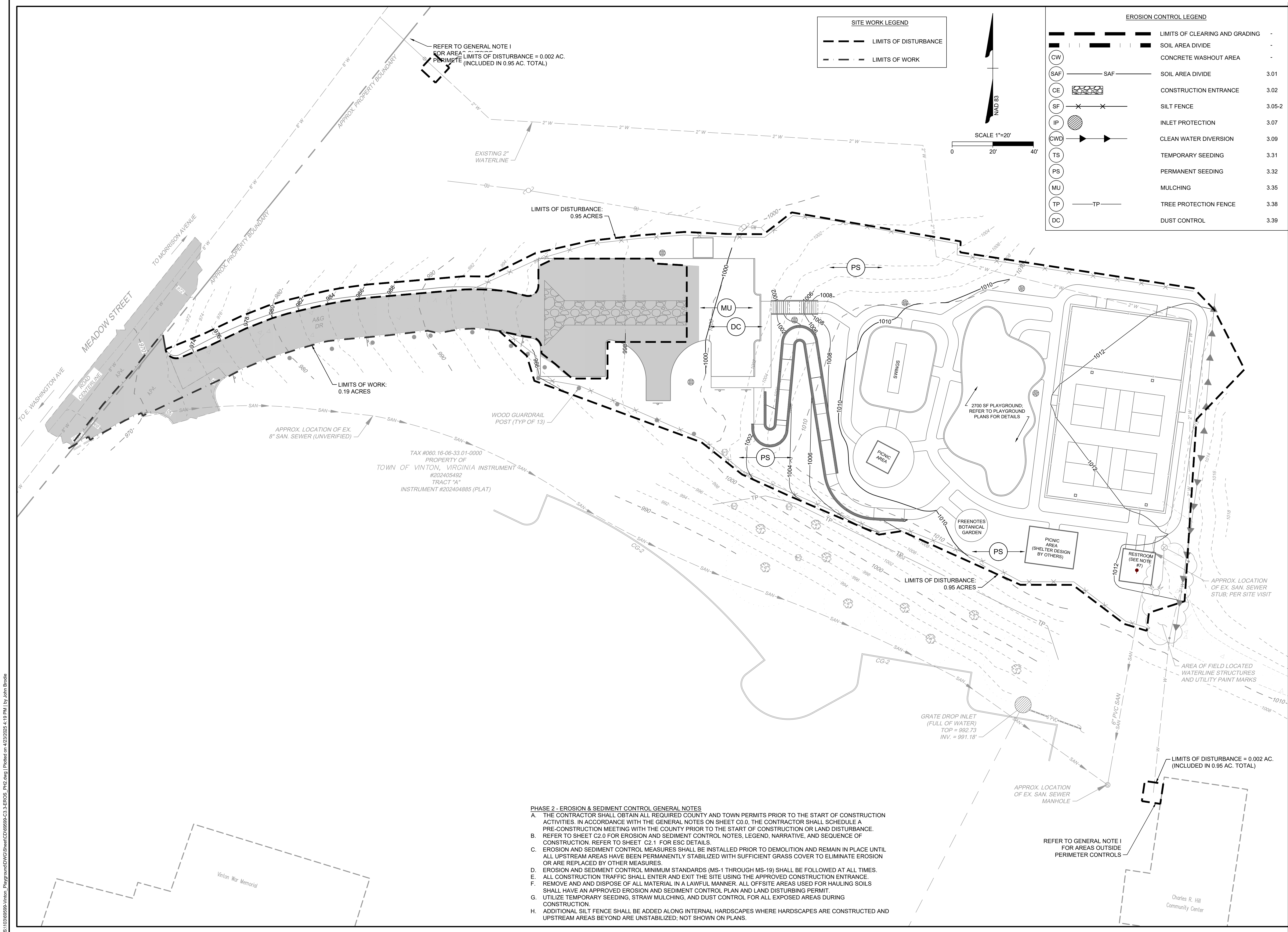
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- PHASE 2 - EROSION & SEDIMENT CONTROL GENERAL NOTES**
- A. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED COUNTY AND TOWN PERMITS PRIOR TO THE START OF CONSTRUCTION ACTIVITIES. IN ACCORDANCE WITH THE GENERAL NOTES ON SHEET C0.0, THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE COUNTY PRIOR TO THE START OF CONSTRUCTION OR LAND DISTURBANCE.
  - B. REFER TO SHEET C2.0 FOR EROSION AND SEDIMENT CONTROL NOTES, LEGEND, NARRATIVE, AND SEQUENCE OF CONSTRUCTION. REFER TO SHEET C2.1 FOR ESC DETAILS.
  - C. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO DEMOLITION AND REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED WITH SUFFICIENT GRASS COVER TO ELIMINATE EROSION OR ARE REPLACED BY OTHER MEASURES.
  - D. EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS (MS-1 THROUGH MS-19) SHALL BE FOLLOWED AT ALL TIMES.
  - E. ALL CONSTRUCTION TRAFFIC SHALL ENTER AND EXIT THE SITE USING THE APPROVED CONSTRUCTION ENTRANCE.
  - F. REMOVE AND AND DISPOSE OF ALL MATERIAL IN A LAWFUL MANNER. ALL OFFSITE AREAS USED FOR HAULING SOILS SHALL HAVE AN APPROVED EROSION AND SEDIMENT CONTROL PLAN AND LAND DISTURBING PERMIT.
  - G. UTILIZE TEMPORARY SEEDING, STRAW MULCHING, AND DUST CONTROL FOR ALL EXPOSED AREAS DURING CONSTRUCTION.
  - H. ADDITIONAL SILT FENCE SHALL BE ADDED ALONG INTERNAL HARDSCAPES WHERE HARDSCAPES ARE CONSTRUCTED AND UPSTREAM AREAS BEYOND ARE UNSTABILIZED; NOT SHOWN ON PLANS.

SITE WORK LEGEND	
---	LIMITS OF DISTURBANCE
---	LIMITS OF WORK

EROSION CONTROL LEGEND	
---	LIMITS OF CLEARING AND GRADING
---	SOIL AREA DIVIDE
---	CONCRETE WASHOUT AREA
CW	SAF
SAF	SAF
CE	CONSTRUCTION ENTRANCE
SF	SILT FENCE
IP	INLET PROTECTION
CWD	CLEAN WATER DIVERSION
TS	TEMPORARY SEEDING
PS	PERMANENT SEEDING
MU	MULCHING
TP	TREE PROTECTION FENCE
DC	DUST CONTROL

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**NEW CONSTRUCTION**  
**VINTON WAR MEMORIAL PARK**  
VINTON, VIRGINIA

DRAWN BY: C. ROTHERMEL  
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**EROSION & SEDIMENT CONTROL - PHASE 2**

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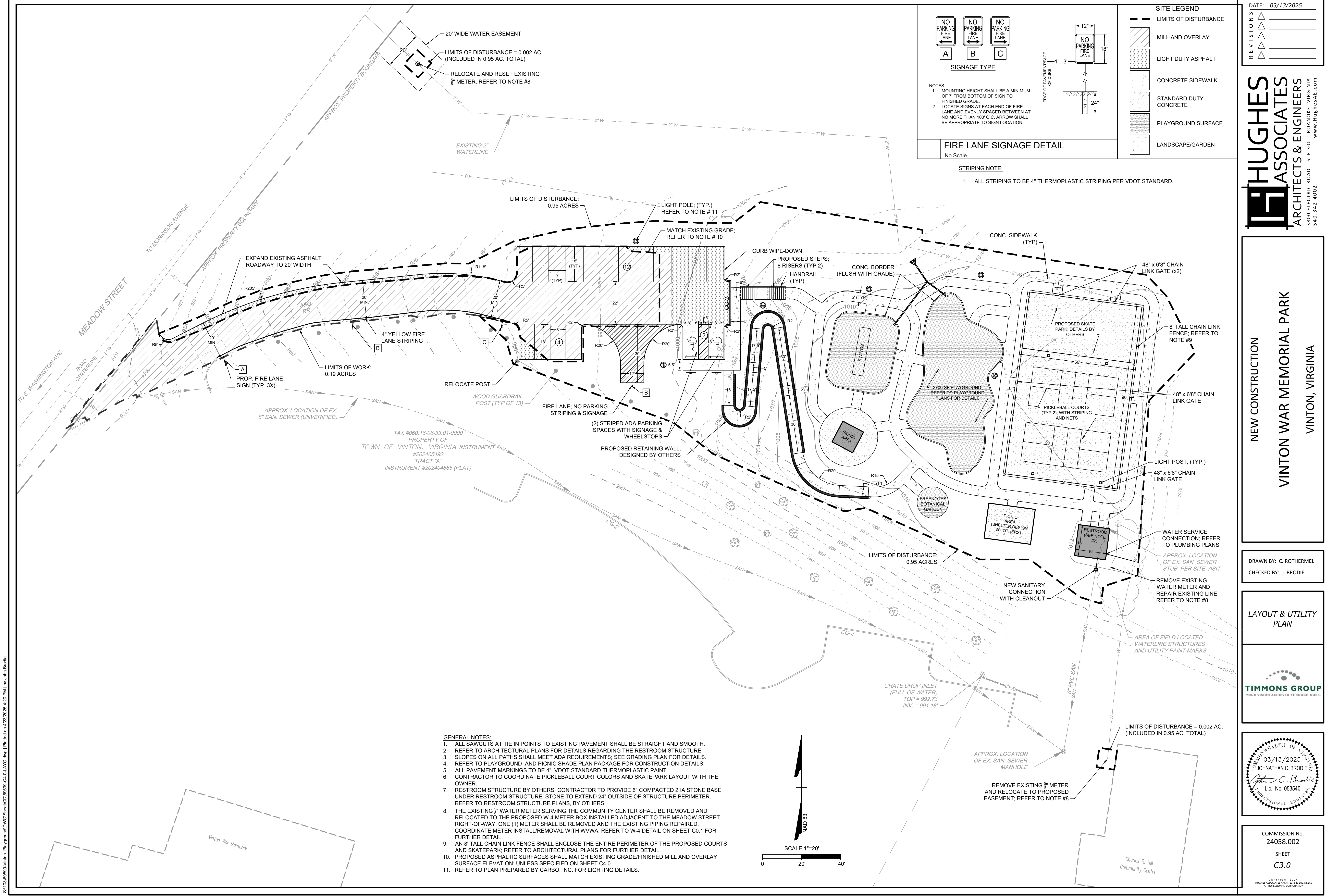
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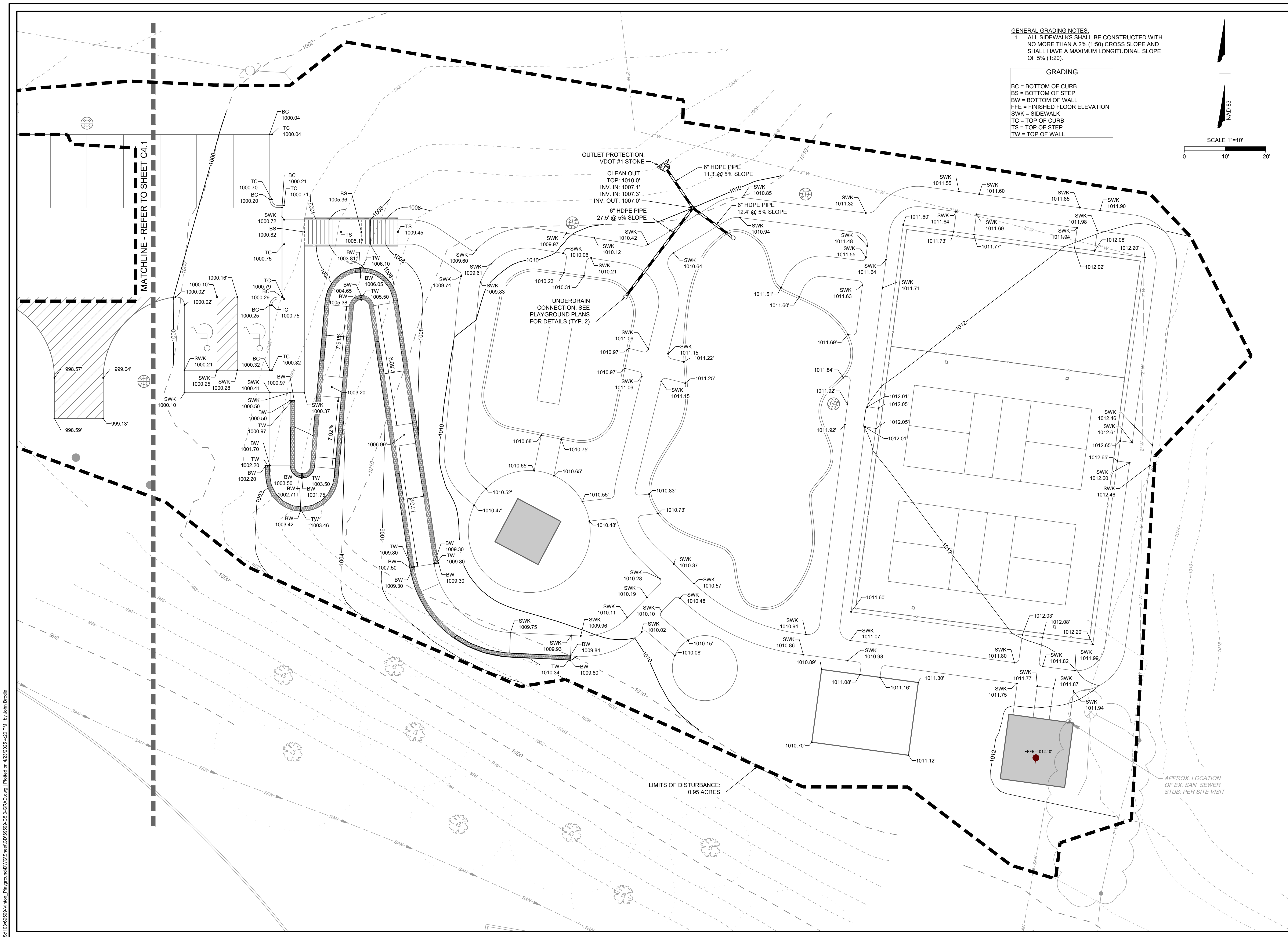


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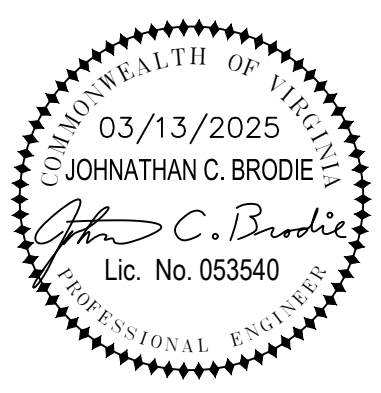
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GRADING &  
DRAINAGE PLAN



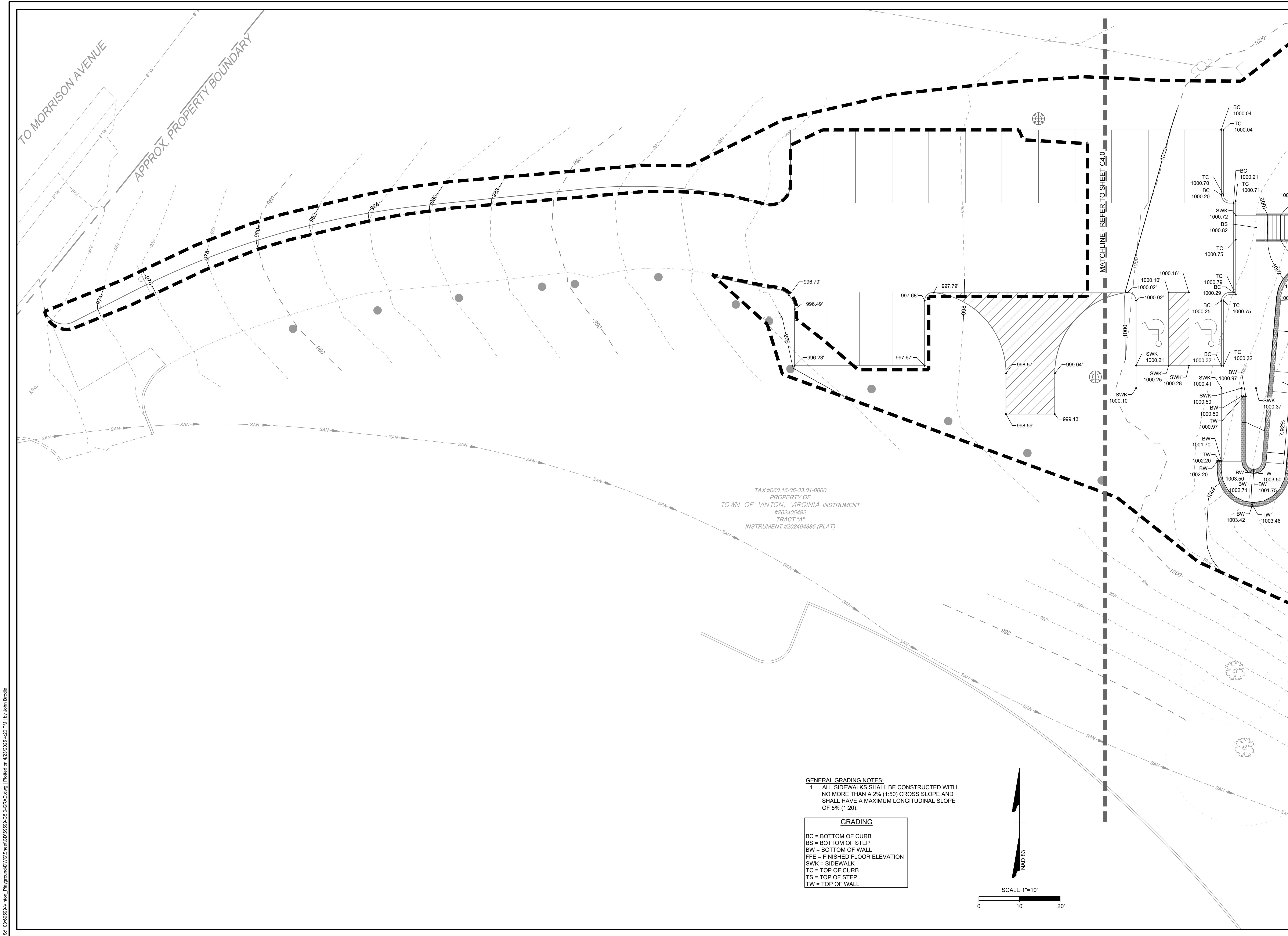
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TAX #060.16-06-33.01-0000  
PROPERTY OF  
TOWN OF VINTON, VIRGINIA INSTRUMENT  
#202405492  
TRACT "A"  
INSTRUMENT #202404885 (PLAT)

GENERAL GRADING NOTES:  
1. ALL SIDEWALKS SHALL BE CONSTRUCTED WITH  
NO MORE THAN A 2% (1:50) CROSS SLOPE AND  
SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE  
OF 5% (1:20).

GRADING

BC = BOTTOM OF CURB  
BS = BOTTOM OF STEP  
BW = BOTTOM OF WALL  
FFE = FINISHED FLOOR ELEVATION  
SWK = SIDEWALK  
TC = TOP OF CURB  
TS = TOP OF STEP  
TW = TOP OF WALL

SCALE 1"=10'  
0 10' 20'

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GRADING &  
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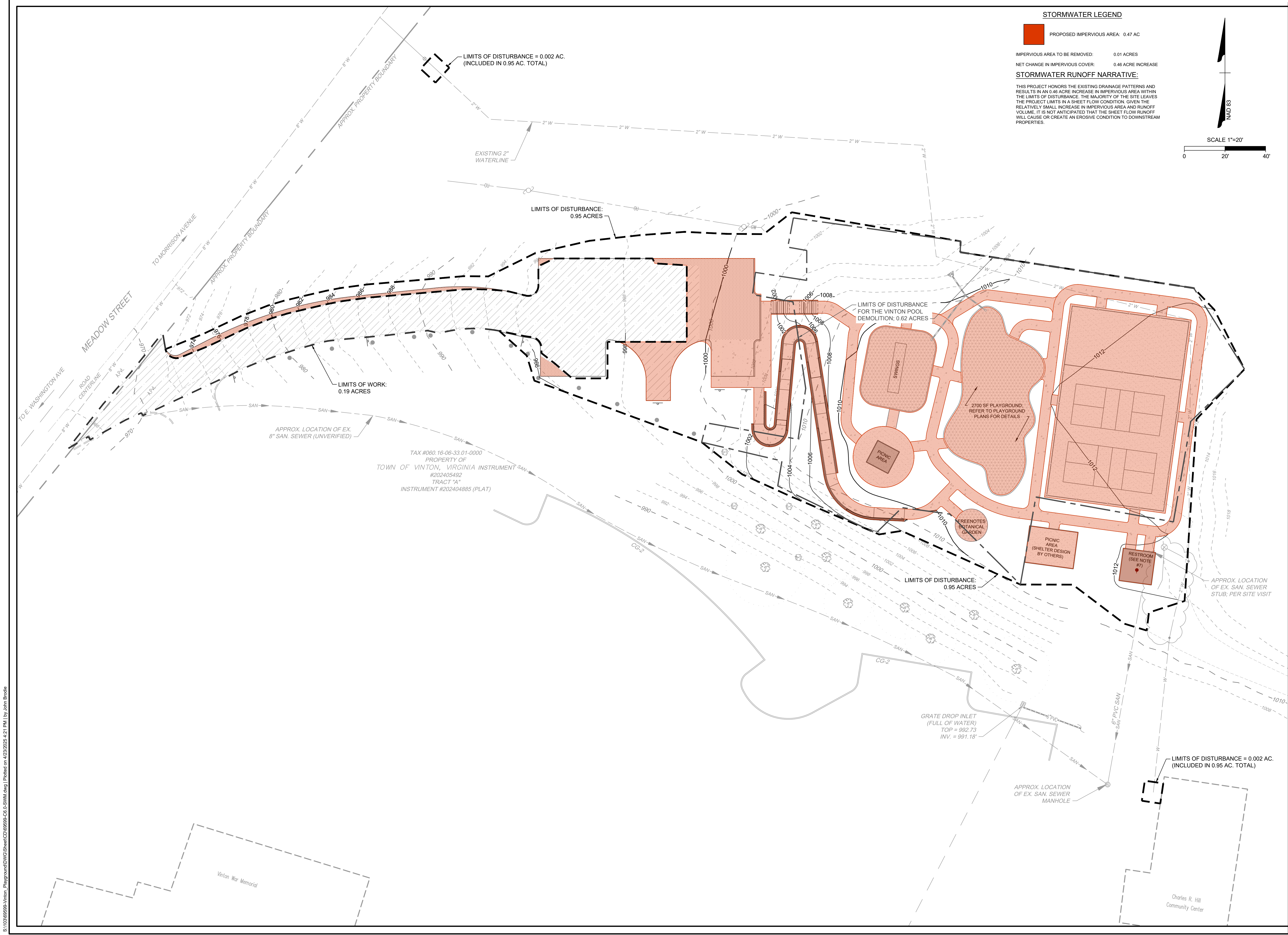
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#### STORMWATER LEGEND

PROPOSED IMPERVIOUS AREA: 0.47 AC

IMPERVIOUS AREA TO BE REMOVED: 0.01 ACRES  
NET CHANGE IN IMPERVIOUS COVER: 0.46 ACRE INCREASE

#### STORMWATER RUNOFF NARRATIVE:

THIS PROJECT HONORS THE EXISTING DRAINAGE PATTERNS AND RESULTS IN AN 0.46 ACRE INCREASE IN IMPERVIOUS AREA WITHIN THE LIMITS OF DISTURBANCE. THE MAJORITY OF THE SITE LEAVES THE PROJECT LIMITS IN A SHEET FLOW CONDITION. GIVEN THE RELATIVELY SMALL INCREASE IN IMPERVIOUS AREA AND RUNOFF VOLUME, IT IS NOT ANTICIPATED THAT THE SHEET FLOW RUNOFF WILL CAUSE OR CREATE AN EROSION CONDITION TO DOWNSTREAM PROPERTIES.

SCALE 1"=20'

NAD 83

DATE: 03/13/2025

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POST-DEVELOPMENT  
CONDITIONS

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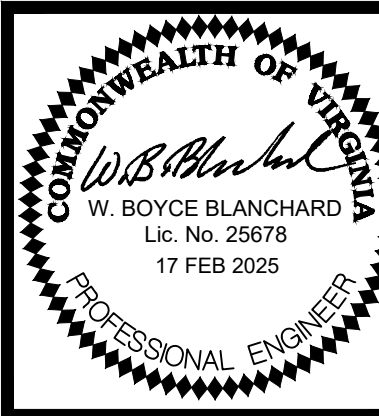
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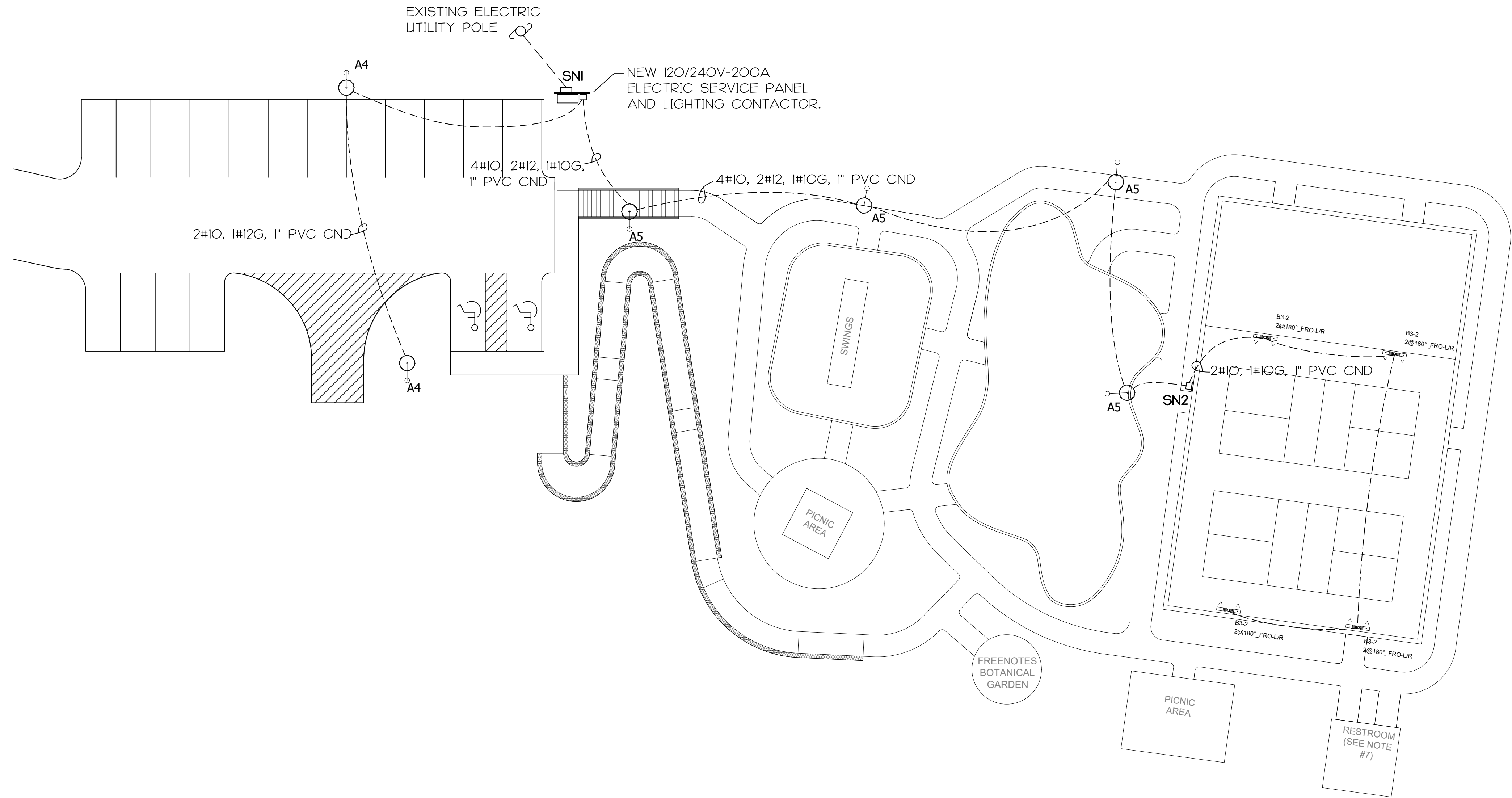
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SITE PLAN

**CARBO, INC.**  
ENGINEERING SERVICES  
ROCKY MOUNT, VA 24151  
PH 540-459-0313 FAX 540-453-0256  
CARBOINC@EMBARQMAIL.COM



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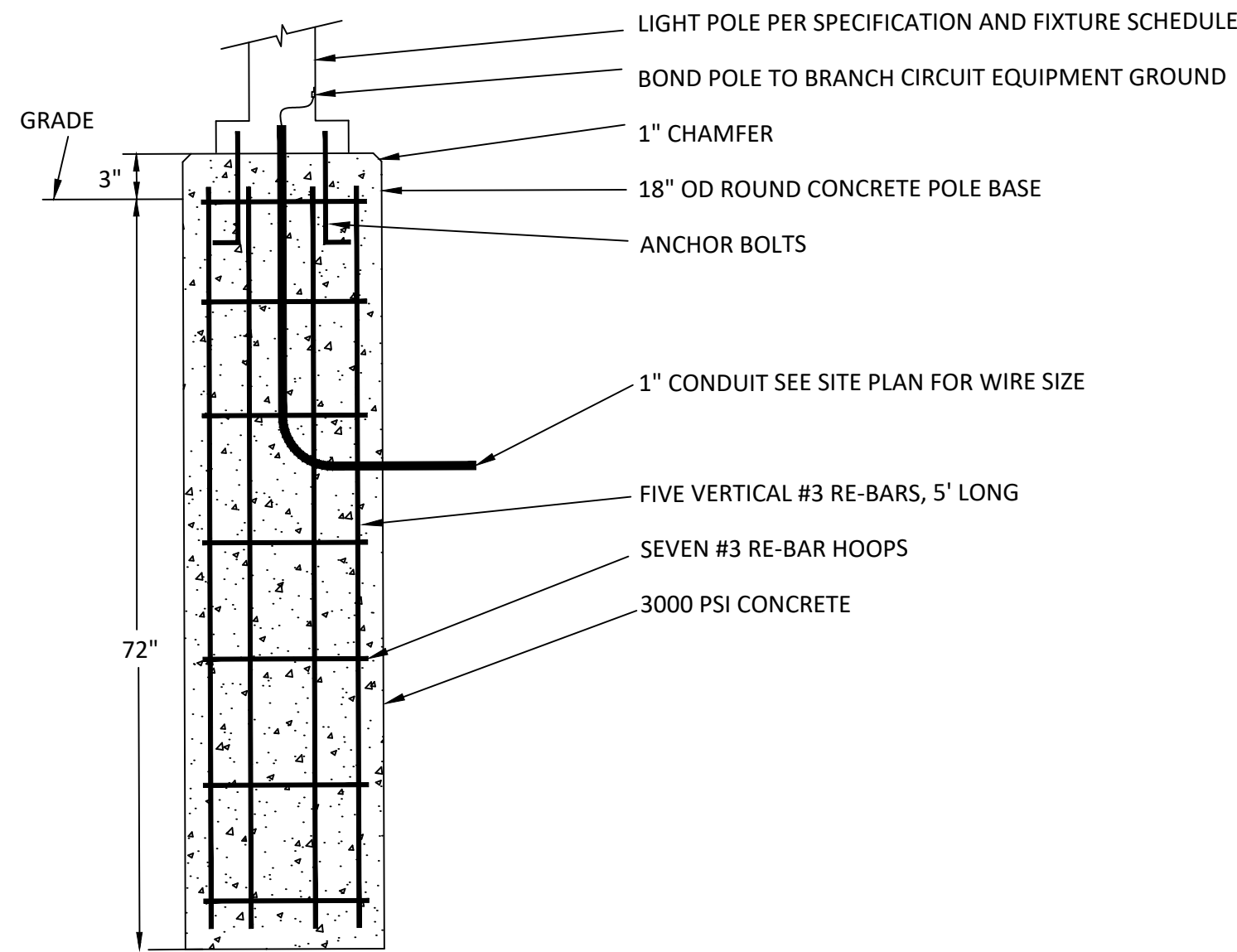


**SHEET NOTES:**

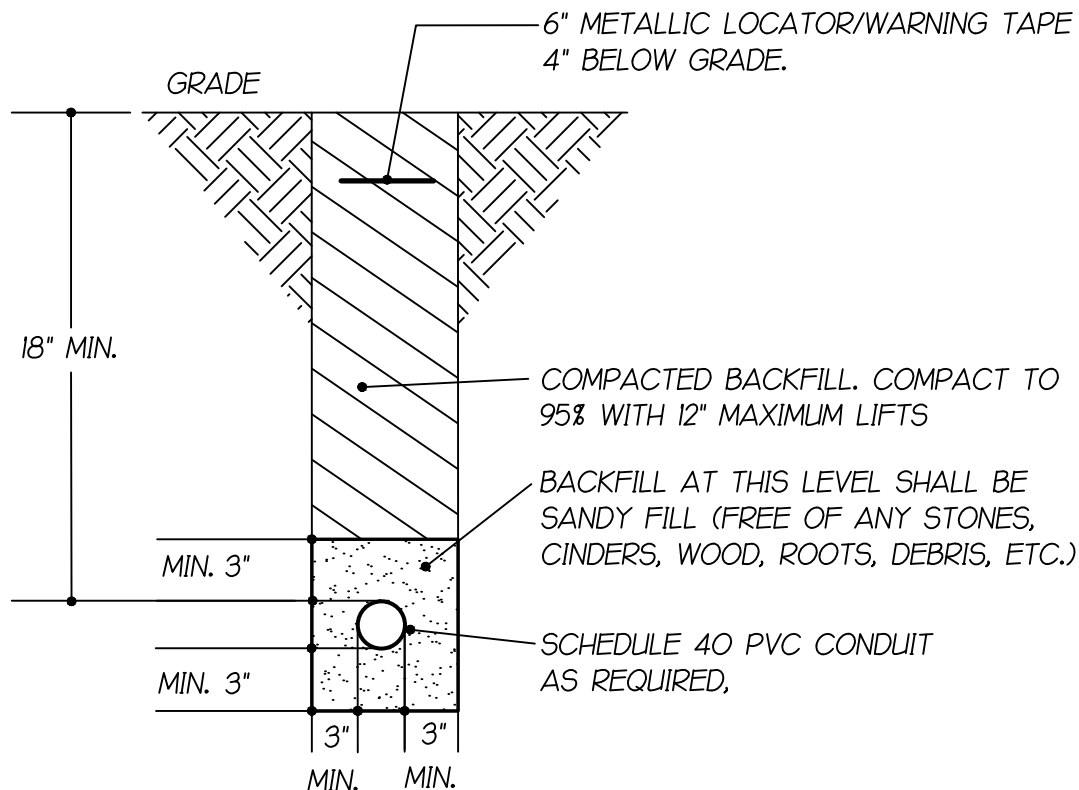
SN1 - PROVIDE A 12 GA GALVANIZED EQUIPMENT SUPPORT STRUCTURE FOR ELECTRIC SERVICE. MOUNT ON A 4'X3'X8" THICK CONCRETE PAD.

SN2 - PROVIDE A 12 GA GALVANIZED SUPPORT STRUCTURE FOR LIGHTING CONTACTOR. LOCATED NEXT TO GATE, MOUNT ON OR ADJACENT TO FENCE.

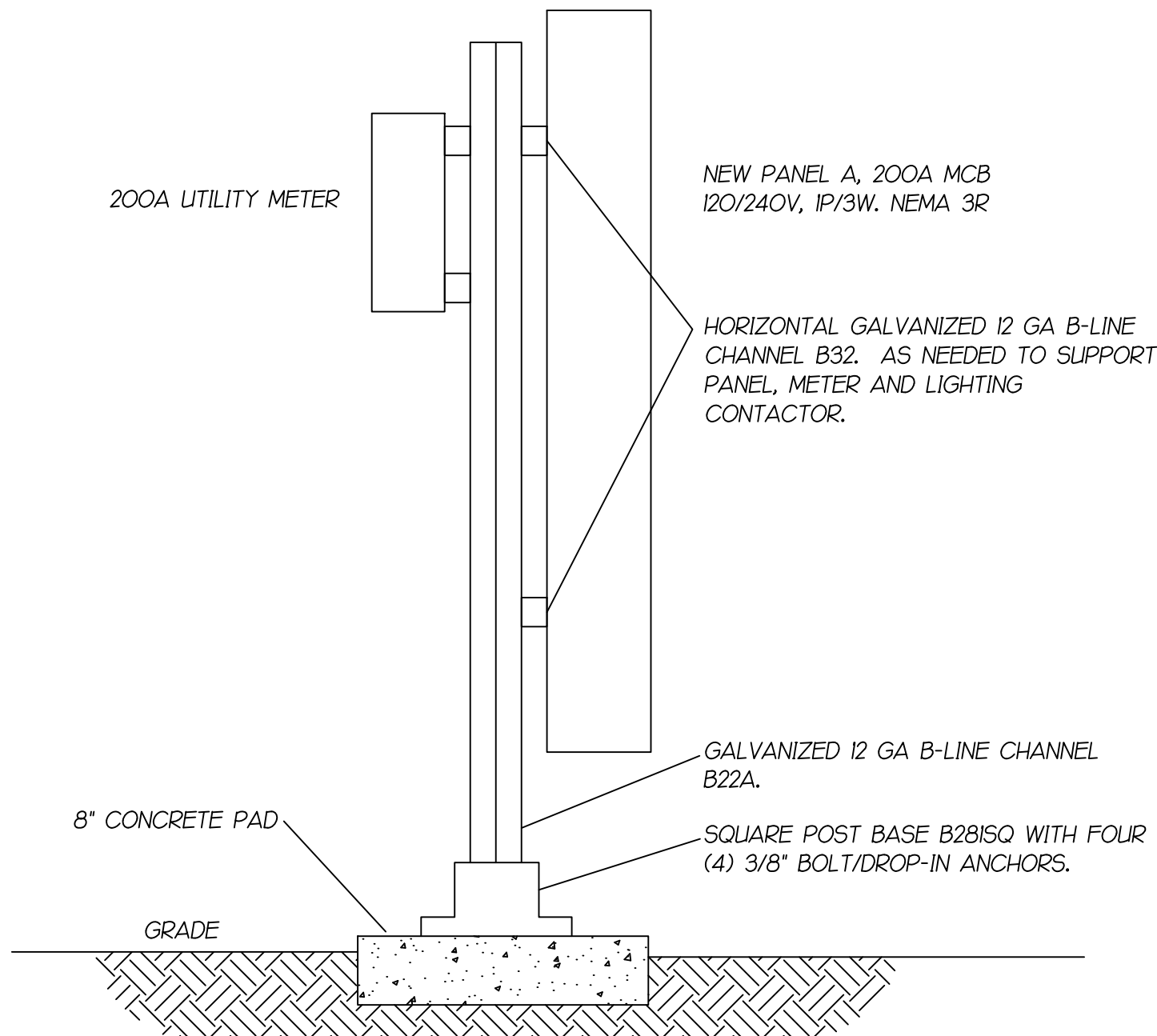
**SITE ELECTRICAL PLAN**  
SCALE: 1/16" = 1'-0"



**POLE BASE DETAIL**  
NOT TO SCALE



**DIRECT BURY CONDUIT DETAIL**  
NOT TO SCALE



**SERVICE EQUIPMENT SUPPORT DETAIL**  
NOT TO SCALE



BEACON  
single piece thermal technology

URBAN SERIES  
URBAN LUMINAIRE

FEATURES

- Decorative transitional style lighting fixture series is suitable for walkway lighting and wall mounting.
- Two unique shade and style options
- LED turtle-friendly option available
- Integral Surge and Thermal Protection



CONTROL TECHNOLOGY

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SPECIFICATIONS

CONSTRUCTION

- The drivers shall be located in the top cast housing and shall be accessible without tools by hinging the lower shade assembly. The driver and all electrical components shall be on a tray
- The lower shade shall be made from a one-piece aluminum spinning
- The housing is designed for LED thermal management without the use of metallic screens, cages, or fans. The top casting shall be able to be pendent mounted in place with a stainless steel safety pin and then permanently held in place with four stainless steel bolts

ELECTRICAL

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input
- Power factor is ≥0.90 at full load
- Dimming drivers are standard with connections for external dimming equipment available upon request
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher, 13A rating applies to primary (AC) side only
- Fixture electrical compartment shall contain all LED driver components
- Button photocell available
- Ambient operating temperature -40°C to 40°C

ELECTRICAL (CONTINUED)

- Surge protection - 20KA
- LifeShield® Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55°C (131°F). Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.)

CONTROLS

- Available with Energent for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night visit

FINISH

- IPS polyester powder-coat electrostatically applied and thermocured
- IPS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGC polyester powder-coat finish
- The finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds

KEY DATA	
Lumen Range	3,300-13,000
Wattage Range	27.8-137.5
Efficacy Range (LPW)	61-87

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Urban\_LED\_spec\_sheet\_Strike\_R03

TYPE 4 FIXTURE

BEACON  
single piece thermal technology

AA-44 Strut  
ARMS

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
TYPE: AA/AS PROJECT: VINTON PLAYGROUND  
CATALOG #: AA-44/S/4/B/P/ADVISE

Sample AA-44 S 4 B P BBT  
Ordering A B C D E F

A. MODEL  
AA-44 Strut

B. POST SHAFT PROFILE  
W wall mount  
S wall mount  
F fluid

C. POST SHAFT DIAMETER  
4 4.5  
5 5  
6 6  
OTHER

D. ARRANGEMENT  
B see arrangement table below

E. LUMINAIRE MOUNTING  
P pendent

F. COLOR ADVISE  
BBT black matte textured  
BMT black matte textured  
WHT white textured  
MBT metallic bronze textured  
BZT bronze textured  
DBT dark bronze textured  
GYS grey smooth  
DPS dark platinum smooth  
GNT green textured  
MST metallic silver textured  
MTT metallic titanium textured  
OWI old world iron  
RAL

Construction: All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6, 6063-T5 or equal.

EPA (effective projected area): EPA is defined as projected surface area x drag factor and measured in ft². Allowable post, luminaire arm, luminaire and accessory EPA's are derived from the most current published ASHTD (American Association of State Highway and Transportation Officials) standard, currently ASHTD 2001 (2001 design life). Customer assumes all responsibility for selecting the appropriate post for installation (consult factory for assistance). Luminaire arm, luminaire and accessory EPA must be equal to or less than allowable EPA of post. Consult a professional engineer for compliance with local codes and standards.

Fasteners: All fasteners shall be Corrosion Resistant. When tamper resistant fasteners are required, spanner HD (mark) style shall be provided (special tool required, available at additional cost).

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, over dry off, and top coated with a thermoset super TGC polyester pow-der coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

Limited Warranty: Beacon Products warrants its products, to the original purchaser, against defects in materials and workmanship for proper usage for a period of 5 years after date of production, when properly installed, maintained and appropriately specified.

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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strut\_spec\_sheet\_R01

TYPE 4 ARM

BEACON  
single piece thermal technology

RSA-B-S Series Poles  
ROUND STRAIGHT ALUMINUM

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
TYPE: A4 PROJECT: VINTON PLAYGROUND  
CATALOG #: RSAB-S18-40-B-OT-TBD 18 FT POLE

Sample AA-44 S 4 B P BBT  
Ordering A B C D E F

A. MODEL  
AA-44 Strut

B. POST SHAFT PROFILE  
W wall mount  
S wall mount  
F fluid

C. POST SHAFT DIAMETER  
4 4.5  
5 5  
6 6  
OTHER

D. ARRANGEMENT  
B see arrangement table below

E. LUMINAIRE MOUNTING  
P pendent

F. COLOR ADVISE  
BBT black matte textured  
BMT black matte textured  
WHT white textured  
MBT metallic bronze textured  
BZT bronze textured  
DBT dark bronze textured  
GYS grey smooth  
DPS dark platinum smooth  
GNT green textured  
MST metallic silver textured  
MTT metallic titanium textured  
OWI old world iron  
RAL

Construction: All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6, 6063-T5 or equal.

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Fasteners: All fasteners shall be Corrosion Resistant. When tamper resistant fasteners are required, spanner HD (mark) style shall be provided (special tool required, available at additional cost).

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, over dry off, and top coated with a thermoset super TGC polyester pow-der coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

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RSA\_RSA-B-S-Pole\_spec\_R03

TYPE 4 POLE

BEACON  
single piece thermal technology

URBAN SERIES  
URBAN LUMINAIRE

FEATURES

- Decorative transitional style lighting fixture series is suitable for walkway lighting and wall mounting.
- Two unique shade and style options
- LED turtle-friendly option available
- Integral Surge and Thermal Protection



CONTROL TECHNOLOGY

energent®

SPECIFICATIONS

CONSTRUCTION

- The drivers shall be located in the top cast housing and shall be accessible without tools by hinging the lower shade assembly. The driver and all electrical components shall be on a tray
- The lower shade shall be made from a one-piece aluminum spinning
- The housing is designed for LED thermal management without the use of metallic screens, cages, or fans. The top casting shall be able to be pendent mounted in place with a stainless steel safety pin and then permanently held in place with four stainless steel bolts

ELECTRICAL

- 100V through 277V, 50 Hz to 60 Hz (UNV), or 347V or 480V input
- Power factor is ≥0.90 at full load
- Dimming drivers are standard with connections for external dimming equipment available upon request
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher
- Plug disconnects are listed by UL for use at 600 VAC, 13A or higher, 13A rating applies to primary (AC) side only
- Fixture electrical compartment shall contain all LED driver components
- Button photocell available
- Ambient operating temperature -40°C to 40°C

ELECTRICAL (CONTINUED)

- Surge protection - 20KA
- LifeShield® Circuit - protects luminaire from excessive temperature. The device shall activate at a specific, factory-preset temperature, and progressively reduce power over a finite temperature range. A luminaire equipped with the device may be reliably operated in any ambient temperature up to 55°C (131°F). Operation shall be smooth and undetectable to the eye. Thermal circuit is designed to "fail on", allowing the luminaire to revert to full power in the event of an interruption of its power supply, or faulty wiring connection to the drivers. The device shall be able to co-exist with other 0-10V control devices (occupancy sensors, external dimmers, etc.)

CONTROLS

- Available with Energent for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night visit

FINISH

- IPS polyester powder-coat electrostatically applied and thermocured
- IPS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGC polyester powder-coat finish
- The finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds

KEY DATA	
Lumen Range	3,300-13,000
Wattage Range	27.8-137.5
Efficacy Range (LPW)	61-87

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Urban\_LED\_spec\_sheet\_Strike\_R03

TYPE 5 FIXTURE

BEACON  
single piece thermal technology

AA-44 Strut  
ARMS

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
TYPE: AA/AS PROJECT: VINTON PLAYGROUND  
CATALOG #: AA-44/S/4/B/P/ADVISE

Sample AA-44 S 4 B P BBT  
Ordering A B C D E F

A. MODEL  
AA-44 Strut

B. POST SHAFT PROFILE  
W wall mount  
S wall mount  
F fluid

C. POST SHAFT DIAMETER  
4 4.5  
5 5  
6 6  
OTHER

D. ARRANGEMENT  
B see arrangement table below

E. LUMINAIRE MOUNTING  
P pendent

F. COLOR ADVISE  
BBT black matte textured  
BMT black matte textured  
WHT white textured  
MBT metallic bronze textured  
BZT bronze textured  
DBT dark bronze textured  
GYS grey smooth  
DPS dark platinum smooth  
GNT green textured  
MST metallic silver textured  
MTT metallic titanium textured  
OWI old world iron  
RAL

Construction: All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6, 6063-T5 or equal.

EPA (effective projected area): EPA is defined as projected surface area x drag factor and measured in ft². Allowable post, luminaire arm, luminaire and accessory EPA's are derived from the most current published ASHTD (American Association of State Highway and Transportation Officials) standard, currently ASHTD 2001 (2001 design life). Customer assumes all responsibility for selecting the appropriate post for installation (consult factory for assistance). Luminaire arm, luminaire and accessory EPA must be equal to or less than allowable EPA of post. Consult a professional engineer for compliance with local codes and standards.

Fasteners: All fasteners shall be Corrosion Resistant. When tamper resistant fasteners are required, spanner HD (mark) style shall be provided (special tool required, available at additional cost).

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, over dry off, and top coated with a thermoset super TGC polyester pow-der coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

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strut\_spec\_sheet\_R01

TYPE 5 ARM

BEACON  
single piece thermal technology

RSA-B-S Series Poles  
ROUND STRAIGHT ALUMINUM

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_  
TYPE: A5 PROJECT: VINTON PLAYGROUND  
CATALOG #: RSAB-S16-40-B-OT-TBD 16 FT POLE

Sample AA-44 S 4 B P BBT  
Ordering A B C D E F

A. MODEL  
AA-44 Strut

B. POST SHAFT PROFILE  
W wall mount  
S wall mount  
F fluid

C. POST SHAFT DIAMETER  
4 4.5  
5 5  
6 6  
OTHER

D. ARRANGEMENT  
B see arrangement table below

E. LUMINAIRE MOUNTING  
P pendent

F. COLOR ADVISE  
BBT black matte textured  
BMT black matte textured  
WHT white textured  
MBT metallic bronze textured  
BZT bronze textured  
DBT dark bronze textured  
GYS grey smooth  
DPS dark platinum smooth  
GNT green textured  
MST metallic silver textured  
MTT metallic titanium textured  
OWI old world iron  
RAL

Construction: All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6, 6063-T5 or equal.

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RSA\_RSA-B-S-Pole\_spec\_R03

TYPE 5 POLE

No.	Date	Revision

REVISIONS  
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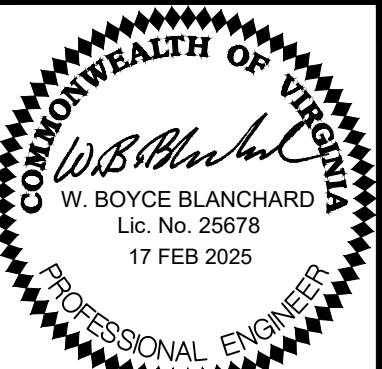
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ARCHITECTS & ENGINEERS  
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540.342.4002  
www.hughesae.com

NEW CONSTRUCTION  
VINTON WAR MEMORIAL PARK  
VINTON, VIRGINIA

DRAWN BY: WBB  
CHECKED BY: WBB

LIGHT FIXTURE  
SPECIFICATION

CARBON, INC.  
ENGINEERING SERVICES  
ROCKY MOUNT, VA 24151  
PH 540-459-0313 FAX 540-483-0366  
CARBON@GEMBARMAIL.COM



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A PROFESSIONAL CORPORATION



## BAS<sup>®</sup> LINE

### Optical Housing

Extruded aluminum (6063-T5 alloy) assembly with integral cooling fins. The Optical Panel mounting surface is extruded flat (surface variance  $\pm .003$ ) to facilitate thermal transfer of heat to the housing and cooling fins. Cooling fins are tapered from bottom to top to promote thermal flow away from the Optical Panel mounting surface. Optical and Electrical Housings are mechanically bonded to form a continuous rigid assembly.

### Mounting Arm/Electrical Housing

Heavy wall cast aluminum (A356 Alloy, 0.2% copper) housing with hinged cast door. Closure uses two stainless steel captive hex head screws and silicone gasketing. Two mounting holes allow fixture to be bolted to the pole. The top mounting hole and wiring hole are slotted to allow the fixture to be tilted up to 5° along its long axis.

### PLED<sup>®</sup> Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED reflector. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the reflector re-directs the house side emitter output towards the street side, maximizing usable light. Optional house side shields are available that cover each individual optic. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments. Quick-disconnects are provided above each panel for fast field replacement. No lens (NL) and all flat lens options will provide "00" no uplight optical package that are Dark Sky friendly.

### LED Emitters

LED thermal management is designed to maintain LED operating temperature below 90°C, well below the manufacturers thermal max of 150°C for long life, high lumen maintenance and color stability. High Power White LED's are driven between 350mA and 875mA for a maximum output of 2.5 Watts nominal. LED's are available in standard 2700K & 3000K, 4000K, or 5000K. All Standard LED's have a minimum of 70,000 hours (TM-21 calculated at 6x Test Time).

### LED Driver

Constant current electronic with a power factor of > .90 and a minimum operating temperature of -40°F/-40°C. Driver(s) will pass UL and cUL recognized. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50/60Hz (0-10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field installation.)

### Finish

Super TGIC polyester powder coating is applied onto a metal substrate this has been pretreated with a four-stage process for maximum adhesion and color retention. The top coat is baked at 400° F for maximum hardness and exterior durability.

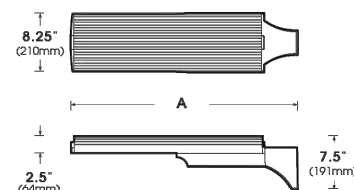
PROJECT NAME: VINTON PLAYGROUND

PROJECT TYPE: A6L/A6R



BAS

(Models: BAS6, BAS4, BAS2 2-180 & BAS2 2X2-180)



FIXTURE	A
BAS6	54.375" (1394mm)
BAS5	47.3125" (1200mm)
BAS4	40.25" (1023mm)
BAS3	33.1875" (845mm)
BAS2	26.125" (665mm)



2024310

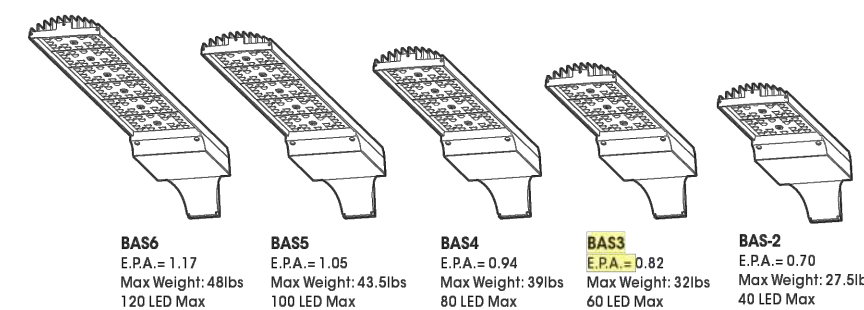
U.S. Pole Company Inc. | 660 West Avenue O, Palmdale, CA 93551  
An Employee Owned Company | Phone (661) 333-0300 | www.usaplg.com



## BAS<sup>®</sup> LINE SERIES - LED

### SPECIFICATIONS

#### EPA & WEIGHT



BAS6  
EPA = 1.17  
Max Weight: 48lbs  
120 LED Max

BAS5  
EPA = 1.08  
Max Weight: 43.5lbs  
100 LED Max

BAS4  
EPA = 0.94  
Max Weight: 39lbs  
80 LED Max

BAS3  
EPA = 0.82  
Max Weight: 33lbs  
60 LED Max

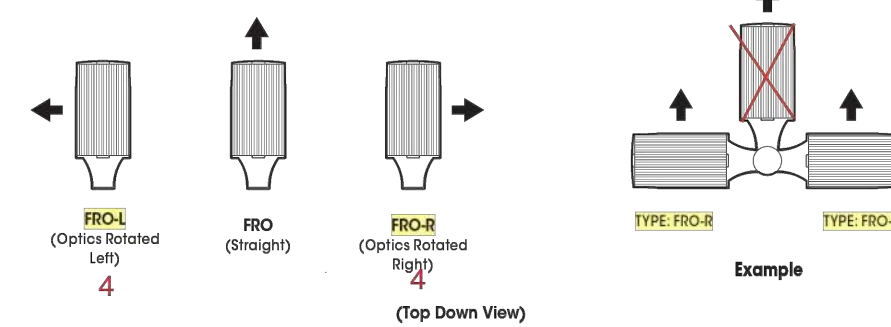
BAS2  
EPA = 0.70  
Max Weight: 27.5lbs  
40 LED Max

#### PLED<sup>®</sup> MODULES

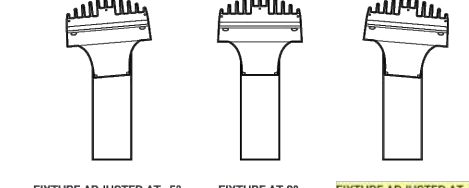


20 LED Module

#### FACTORY ROTATED OPTICS SCHEMATIC



#### PIVOT TILT FEATURE



Flexibility in Baseline is in the adjustability of the entire luminaire assembly. Accessed inside the electrical/mounting compartment, Baseline may be rotated a 5° around its center axis.

U.S. Pole Company Inc. | 660 West Avenue O, Palmdale, CA 93551  
An Employee Owned Company | Phone (661) 333-0300 | www.usaplg.com



SQUARE NON-TAPERED STEEL POLE

## SNTS

### Shaft

Square, fabricated from high grade structural steel tube. Shaft conforms to ASTM A501-68 specifications. Meets or exceeds minimum yield strength of 46,000 P.S.I. wall thickness 11 GA. (120 wall) or 7 GA. (180 wall) as specified. Shaft is furnished with ground lug located inside pole on wall opposite hand hole.

### Drilling Side Mount

A removable pole cap is included. Pole will be drilled to match U.S. Architectural fixtures. For other Drilling required, please specify DP after specified drill pattern. (example: 2-180DP)

### Pole Top Mount

Standard pole top mount - PT27, fabricated from 2.5" (2.875" O.D.) steel pipe - tenon options available for pole tops please see Mounting column. For other pole top configurations please consult factory.

### Hand Hole Cover

All square Steel Poles - Supplied with reinforced steel 2 5/8" x 4 5/8" access opening. Hand Hole provided with rectangular 3"x2" stamped heavy gauge aluminum material. Sealed door is secured by a formed aluminum bar and a stainless steel, tamper proof screw.

### Base Plate

Fabricated from structural quality hot rolled steel. Meets or exceeds minimum yield strength of 36,000 P.S.I. Base telescopes and is circumferentially welded to pole shaft. Slotted bolt holes provide 1" flexibility on either side of bolt circle centerline.

### Anchorage

(4) anchor bolts fabricated from hot rolled steel bar. Minimum yield strength of 50,000 P.S.I. Bolts have 1" bend on one end and are threaded on the other. Bolts are fully galvanized and are furnished with two nuts and two washers.

### Base Cover

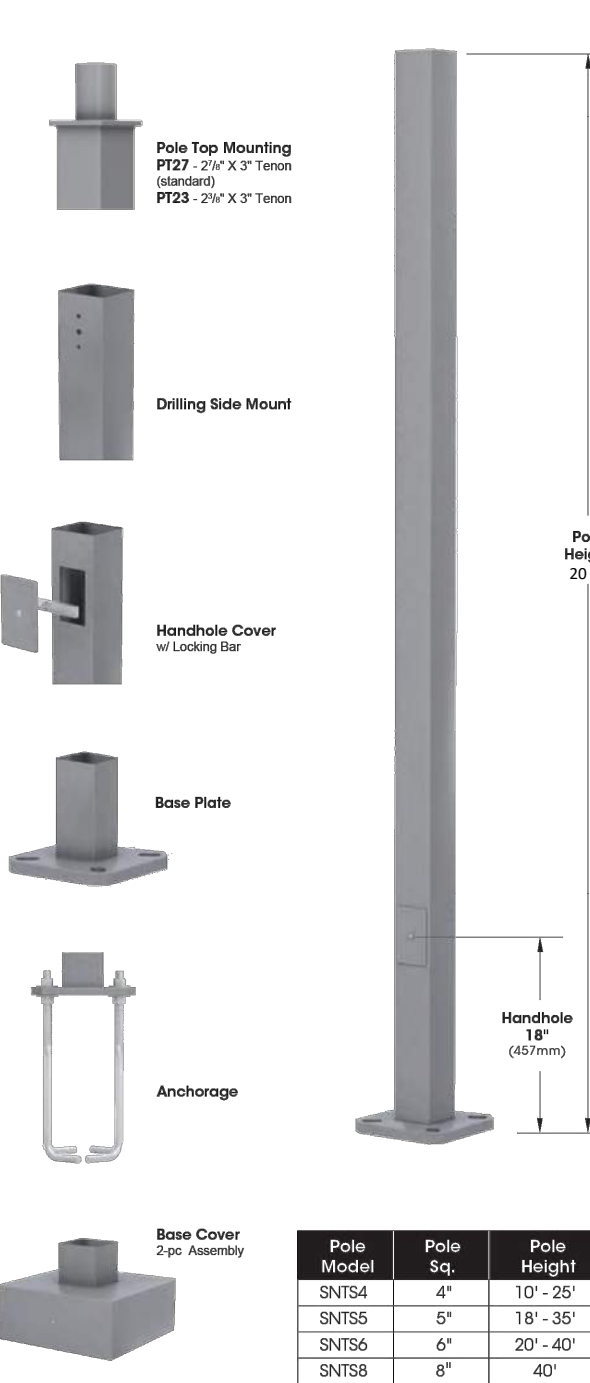
Fabricated from heavy wall aluminum construction. Two piece cover conceals base.

### Finish

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

PROJECT NAME: VINTON PLAYGROUND

PROJECT TYPE: A6



Pole Model	Pole Sq.	Pole Height
SNTS4	4"	10' - 25'
SNTS5	5"	18' - 35'
SNTS6	6"	20' - 40'
SNTS8	8"	40'

2023307

U.S. Pole Company Inc. | 660 West Avenue O, Palmdale, CA 93551  
An Employee Owned Company | Phone (661) 333-0300 | www.usaplg.com



## TYPE 6 FIXTURE

## TYPE 6 ARM

## TYPE 6 POLE

### LIGHT FIXTURE SCHEDULE

TYPE	MANUFACTURER	CAT. NUMBER
A4	BEACON	URB-CAP21-18L-70-4K7-UNV-4W-PM-NRNV-TBD
A4	BEACON	WITH AA-44 ARM
A4	BEACON	RSAB-S18-40-B-OT-TBD POLE
A5	BEACON	URB-CAP21-18L-50-4K7-UNV-5QW-PM-NRNV-TBD
A5	BEACON	WITH AA-44 ARM
A5	BEACON	RSAB-S16-40-B-OT-TBD
A6L/R	US ARCHITECTURAL	BAS3-PLED-IV-CL-60LED-1050mA-40K-UNV-FRO-R/L-2-180-+5o
A6L/R	US ARCHITECTURAL	SNTS-204-11-2@180-TBD POLE

DATE: FEB 17, 2025

REVISIONS

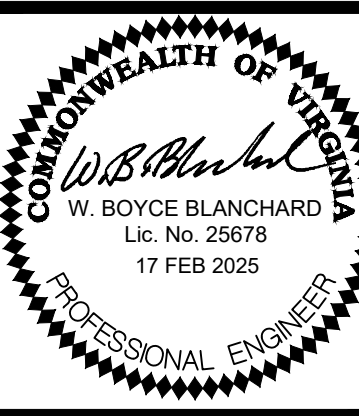
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ARCHITECTS & ENGINEERS  
3800 ELECTRIC ROAD | STE 300 | ROANOKE, VIRGINIA  
540.342.4002  
www.HughesAE.com

NEW CONSTRUCTION  
VINTON WAR MEMORIAL PARK  
VINTON, VIRGINIA

DRAWN BY: WBB  
CHECKED BY: WBB

### LIGHT FIXTURE SPECIFICATION

CARBO, INC.  
ENGINEERING SERVICES  
ROCKY MOUNT, VA 24151  
PH 540-459-0313 FAX 540-463-0266  
CARBOINC@EMBARQMAIL.COM



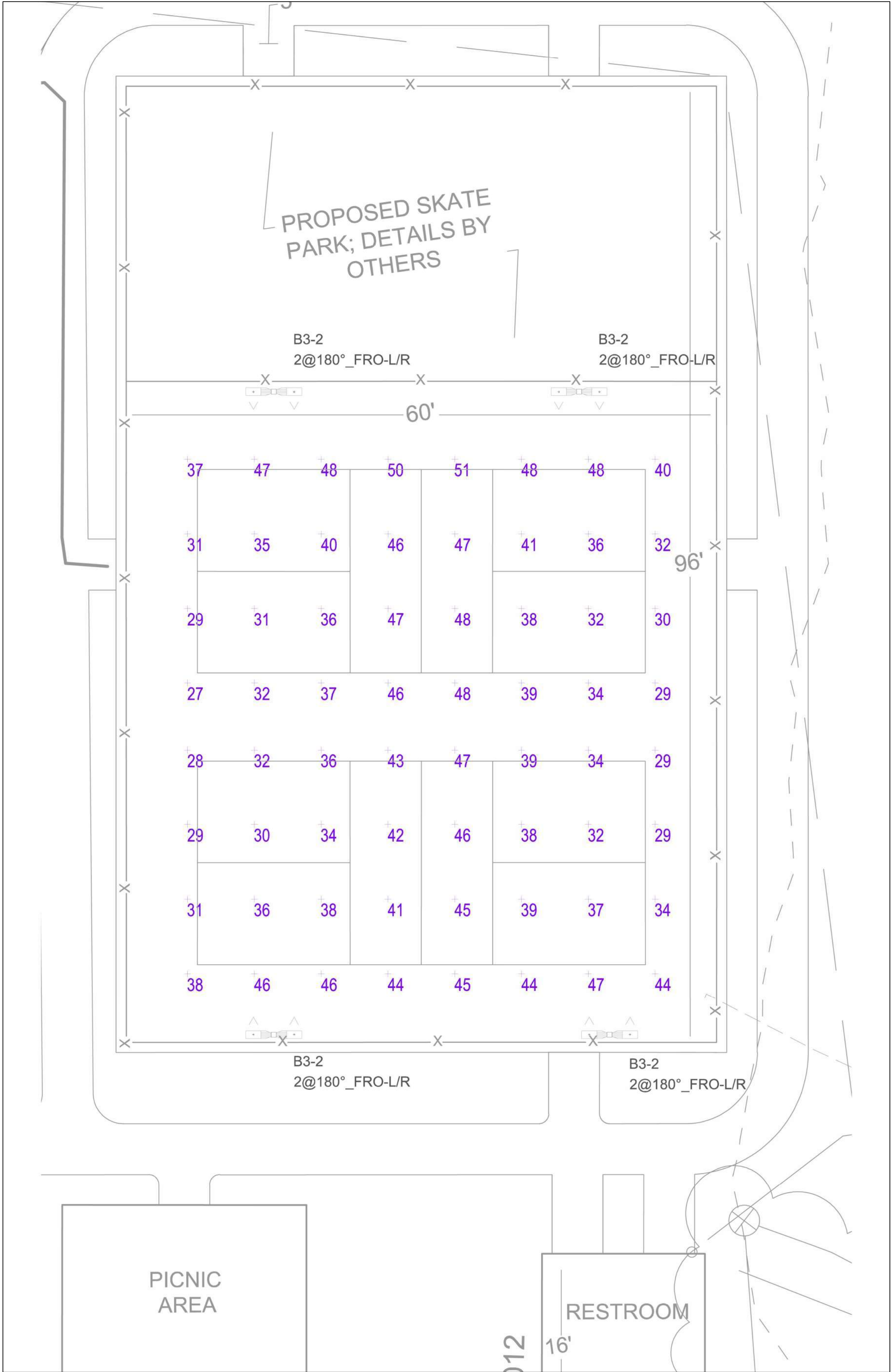
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24058.002  
SHEET  
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PICKLEBALL COURT PHOTOMETRIC PLAN  
NOT TO SCALE

No.	Date	Revision

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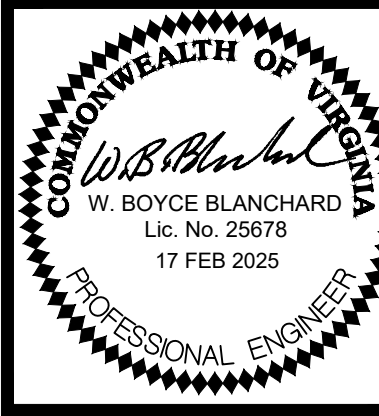
**HUGHES ASSOCIATES**  
ARCHITECTS & ENGINEERS  
3800 ELECTRIC ROAD | STE 300 | ROANOKE, VIRGINIA  
540.342.4002  
www.HughesAE.com

NEW CONSTRUCTION  
VINTON WAR MEMORIAL PARK  
VINTON, VIRGINIA

DRAWN BY: WBB  
CHECKED BY: WBB

PICKLEBALL COURT  
PHOTOMETRIC PLAN

**CARBO, INC.**  
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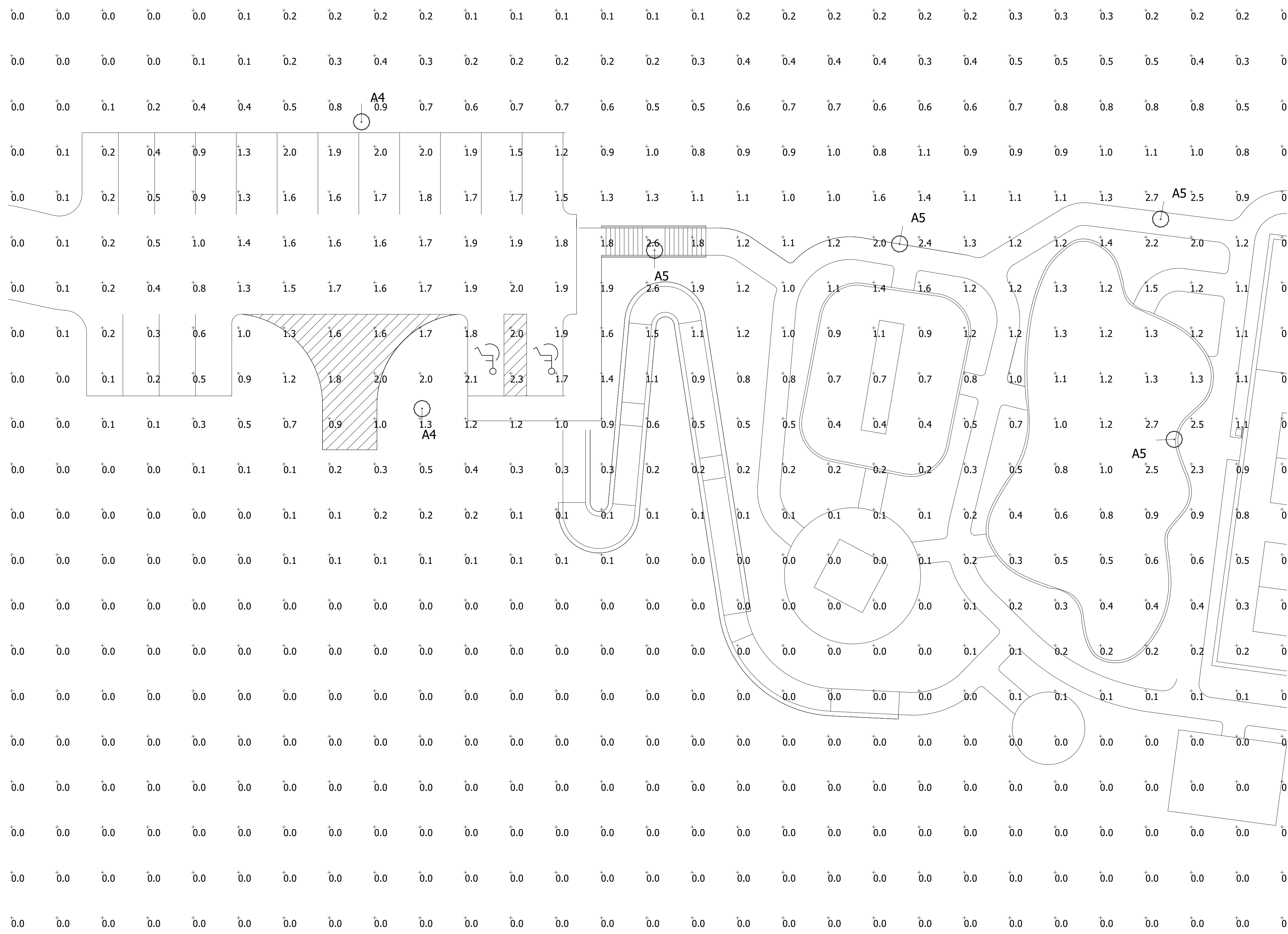
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PARKING & PLAY GROUND PHOTOMETRIC PLAN  
NOT TO SCALE

NEW CONSTRUCTION

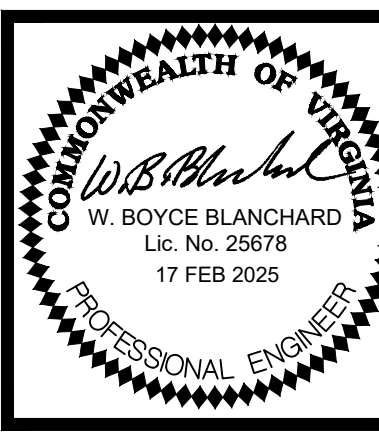
VINTON WAR MEMORIAL PARK

VINTON, VIRGINIA

DRAWN BY: WBB  
CHECKED BY: WBB

PARKING AND PLAY GROUND  
PHOTOMETRIC PLAN

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NOTES

CONTRACTOR TO PROVIDE SHOP DRAWINGS ON PICKLEBALL NET, POSTS, AND SURFACE TREATMENT.

OWNER TO PROVIDE DIRECTION ON COURT COLORS.

SUBSTITUTIONS ARE ALLOWED IF APPROVED BY OWNER. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHOP DRAWINGS AND SPECIFICATIONS RELATED TO ALL SUBSTITUTIONS.

PICKLEBALL COURT CONSTRUCTION

Line Tolerances:

- Net line to outside of NVZ line: 7' +/- 1/8"
- Net line to outside of baseline: 22' +/- 1/8"
- Outside sideline to outside sideline: 20' +/- 1/4"
- Outside sideline to centerline: 10' +/- 1/8"
- Diagonal dimension to out of lines: 48' 4" +/- 3/4"

Recommend Net Posts Extend 12 In. Outside Sideline  
Recommend Line Widths = 2 In.

Net Height at Sideline = 36 in.  
(34 in. at Center)

Non-Volley Line

Non-Volley Zone

Sideline

Baseline

Centerline



You play the best sport. Now build the best court.  
Info at [USAPickleball.org/courts](https://USAPickleball.org/courts)

One of the keys to taking your pickleball game to the next level is having a convenient place to play. Whether you're setting up for serious competition, casual games with friends, or a temporary surface for an event, knowing the basics can help you get the most enjoyment out of your court. These guidelines will get you started on building the court that's perfect for your specific needs.



Application of acrylic coatings over concrete

Concrete can be a long lasting and low maintenance base for sports surfaces if the concrete is designed and prepared properly. Concrete contains chemicals that migrate to its surface, pulled by water and water vapor, which leave residue and salts (efflorescence). Acrylic coatings on concrete without proper design and preparation may bubble or blister, leading to delamination. This condition is caused by the nature of concrete itself and not installation or coating related.

Owners should be made aware of the possibility of bonding problems on concrete slabs that are not designed or prepared correctly for accepting surface coatings. Additionally, resurfacing (new coatings on top of old coatings) a concrete court that was not properly designed or prepared may lead to bubbling/blistering/delamination of the original coatings. This is because new coatings reduce the ability of gases and water vapor to escape the concrete and can expose flaws in the original design/preparation. If proper concrete design and preparation is not performed, the coatings warranty will be invalidated.

Concrete Design and Construction

Proper concrete design and construction is critical and should conform to the American Sports Builders Association guidelines. Additionally, AT Sports recommends the following:

1. A vapor barrier must be installed under new slabs. Vapor barriers generally consist of two layers perpendicular to each other with taped joints.
2. The concrete mix design should not include fly ash. Fly ash is standard in typical concrete mixes but not suitable for when surface coatings are to be applied. Fly ash causes concrete to become especially dense, creates excessive efflorescence (dusting), and can also cause an oily residue on the surface as it is a byproduct of coal.
3. Portland Limestone Cement (PL1) should not be used when possible. PL1 can hinder adhesion, typically when used above 10% in place of cement. Specify Ordinary Portland Cement (OPC/Type1/1A).
4. Control joints should be minimized or left off in sports construction. If they must be used, place them outside of the playing area.
5. Some drying retarders are not appropriate. Contact AT Sports for compatibility.
6. A light to medium broom finish is preferred to ensure a mechanical bond of coatings.
7. In standard practice, concrete should naturally cure a minimum of 30 days, preferably 60, to allow for proper curing. High humidity and cold environmental conditions result in delayed curing times. Alternatively, ACRY-Lock may be applied within 3-7 days of the concrete pour. See ACRY-Lock TDS for more information.
8. Curing agents can cause issues and are not recommended as they may interfere with bonding. Moisture curing is recommended. If a curing agent is requested, verify with the manufacturer for water based latex compatibility, and contact AT Sports for compatibility.

AT Sports, Inc.  
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189 Etowah Industrial Ct. Canton, GA 30114

v. 1.24



9. After standard curing, concrete must be acid etched with a water diluted muriatic or phosphoric acid solution and thoroughly rinsed or pressure washed. Alternatively, concrete may be shot blasted or ground, then pressure washed.
10. A specialty primer must be applied to the top of bare concrete after pressure washing. The primer must be latex compatible. ACRY-Lock is suitable for priming concrete and providing a top side moisture barrier.

Helpful Hints

1. Existing paint may need to be removed if there is delamination or peeling.
2. If an acid solution does not bubble on the concrete surface, it is not going to etch the concrete.
3. To acid etch fill an empty bucket with 4 gallons of water and pour the acid into the bucket. This helps with splattering and potential acid burns. Wear protective clothing, boots and goggles. Pour the solution onto the surface and scrub using stiff brushes. Push brooms work well. Once the solution stops bubbling, move to the next. It is very important to rinse off the spent acid. Pressure washing is recommended.
4. A quick test of how well the new surface will bond is to stick a piece of masking tape on the slab. Another test: In a small area, apply primer and after drying stick a piece of masking tape on it. Peel off the tape. If the primer sticks to the tape instead of the concrete, more preparation is needed.
5. Check moisture content: ASTM F1869: below 20 lb/24hr/1000ft², ASTM F2170: 85% RH or less
6. Concrete that has been slick finished with commercial finishing equipment is difficult to obtain a good bond. Shot blasting, scarifying or extreme etching may be necessary.
7. Fewer coats are better than many coats. More coats seal off water vapor transmission and promote blistering.
8. Fibers in the poured concrete can be problematic but can also aid in bonding of the surface coatings. If the concrete has fibers, they may not be evident until an acid bath is completed. After applying primer, fibers may stick out from the surface. This gives the coatings a stronger bond than without fibers in the concrete. Before the final coat is applied the visible fibers can be scraped or rapidly burned off with a propane torch.

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PickleballCentral Permanent Pickleball Net (36" height) Technical Specifications

Official Size: 21' 9" W x 36" H  
Does not include (or require) a center strap  
3mm Braided Polyethylene  
23oz Vinyl Headband  
27" Steel Cable (approximately 30" of cable on each side of net for attaching to posts)  
1/2" Fiberglass Dowels

Installation:

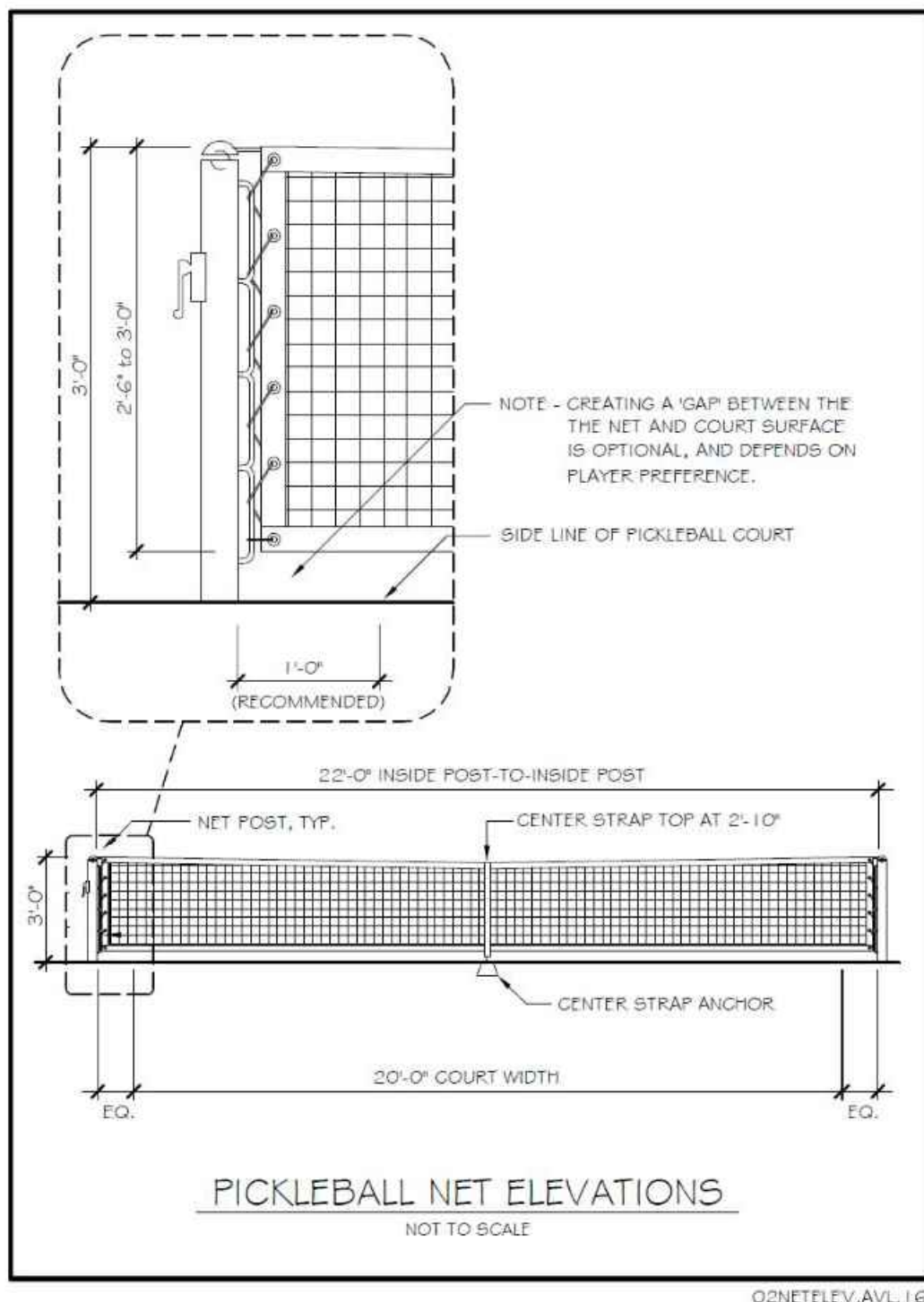
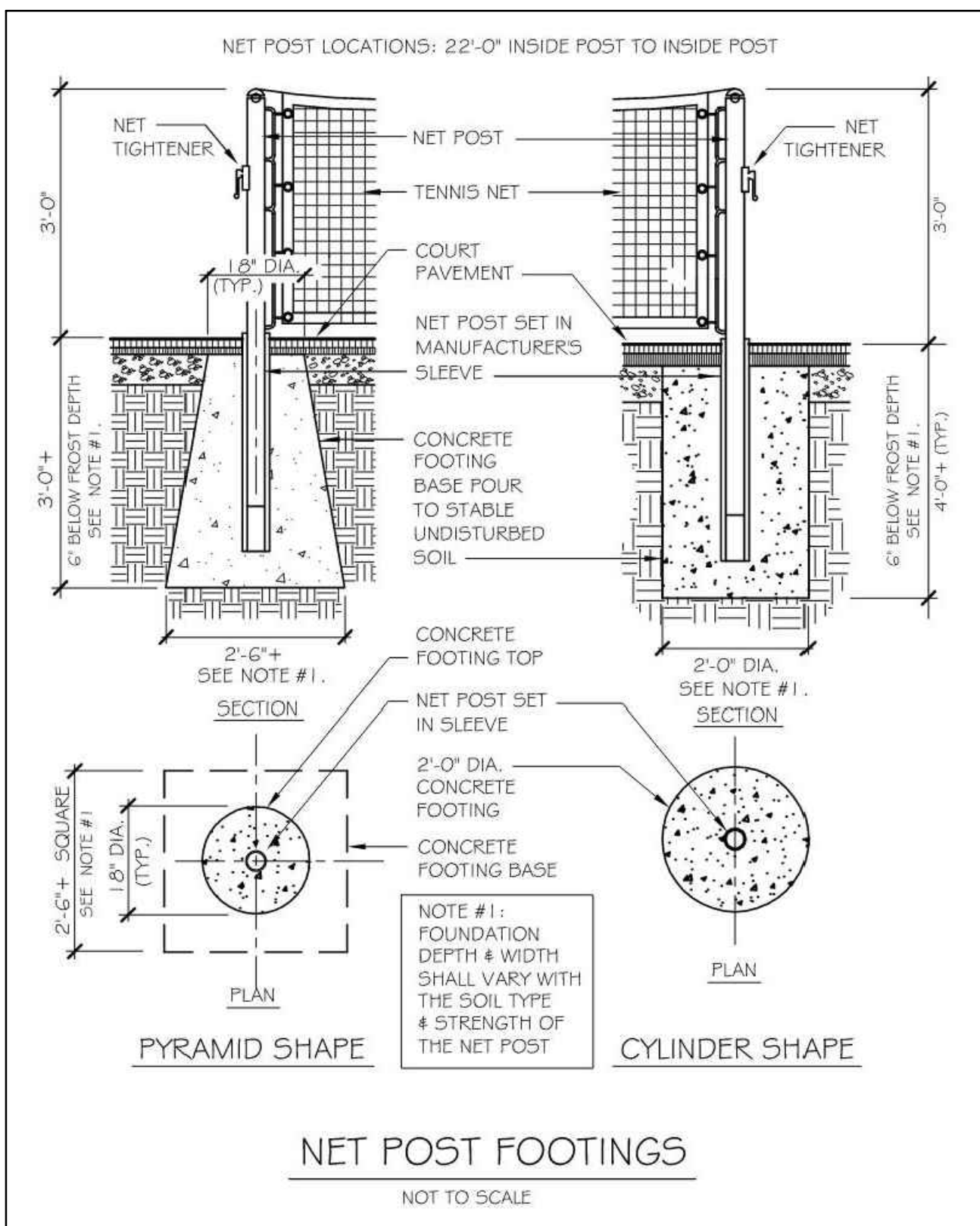
Begin installation by connecting the loop end of the net cable to the post cleat. Take the other cable loop, hook it into the pin on the crank assembly, and begin winding. Continue to crank the post so that the net is at 34" at the center of the court. Fit Dowels/side stakes into the side pockets of the nets. Install lacing cord at each end by making a 2" knotted loop on one end of the lacing cord. Run the other end through both grommets in the headband and around the post through the 2" loop, and back around the post in the opposite direction. Continue wrapping the cord around the post and tie off the cord at the bottom of the post. Repeat for the other post. When you are finished, the net should be fully extended so that it completely fills in the space between the two posts. During the off-season or when winterizing your courts, remove the net. Your installation is now complete, and your PickleballCentral Net should sit comfortably but somewhat tightly between the two posts with a very small gap between the net and net posts.

PickleballCentral Standard-duty Pickleball Posts Technical Specifications

50" Length  
24" PVC Sleeves Included  
3" Internal Sleeve Diameter  
External Heavy Duty Steel Crank Assembly with Non-Removable Handle  
2 7/8" Outside Diameter  
1/8" Thick Steel Wall  
J-Clips included for regulation height requirements.  
Weighs Approximately 36 lbs.

Installation:

PickleballCentral Standard Pickleball Posts with Sleeves are intended to be permanently embedded into the ground and are compatible with the [PickleballCentral Pickleball Net \(36" height\)](#). The footings should be a minimum of 3'6" below the surface or to the local frost depth. The PickleballCentral Pickleball Net is 21' 9" in length. To allow for the proper fitting and correct tension of the net, the center of the footings should be placed 22' 2-3/8" apart. Please measure carefully before installing posts, as installation measurements may vary slightly. Make sure the posts will rest no higher than 1" above the net cord, at a height of about 3' above the court surface. The Pickleball Central Standard Pickleball Posts include a removable "J" hook used to maintain the correct height. The included post sleeves are recommended as they allow for easy removal of the posts for resurfacing, maintenance, post repair/replacement, and alternate uses of the court. During the off-season or when winterizing, it is best to remove the posts and plug the sleeves with sleeve covers to prevent moisture and dirt from entering the sleeves.



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PICKLEBALL COURT COMPONENTS

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