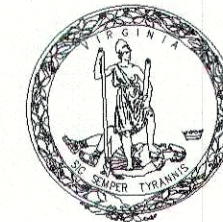


FOR INDEX OF SHEETS SEE SHEET C0.0



COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

CITY OF STAUNTON

FROM: 0.0025 MI SOUTH OF VA-254P (FREDERICK ST.)
TO: 0.278 MI NORTH OF VA-254P (FREDERICK ST.)
N. CENTRAL AVE. (UR-4913)

UPC-80485

STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.		UR-4913	SLEN-132-101 SEE TABULATIONS BELOW FOR SECTION NUMBERS	1

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
URBAN PRINCIPAL ARTERIAL (GS-5)	
Fr:	0.0025 MILES SOUTH OF VA-254P
To:	0.278 MILES NORTH OF VA-254P
ADT(2014)	2500
DHV	
D (%)	
T (%)	
V (MPH)	NO SPEED POSTED

THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL SIGNATURE AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

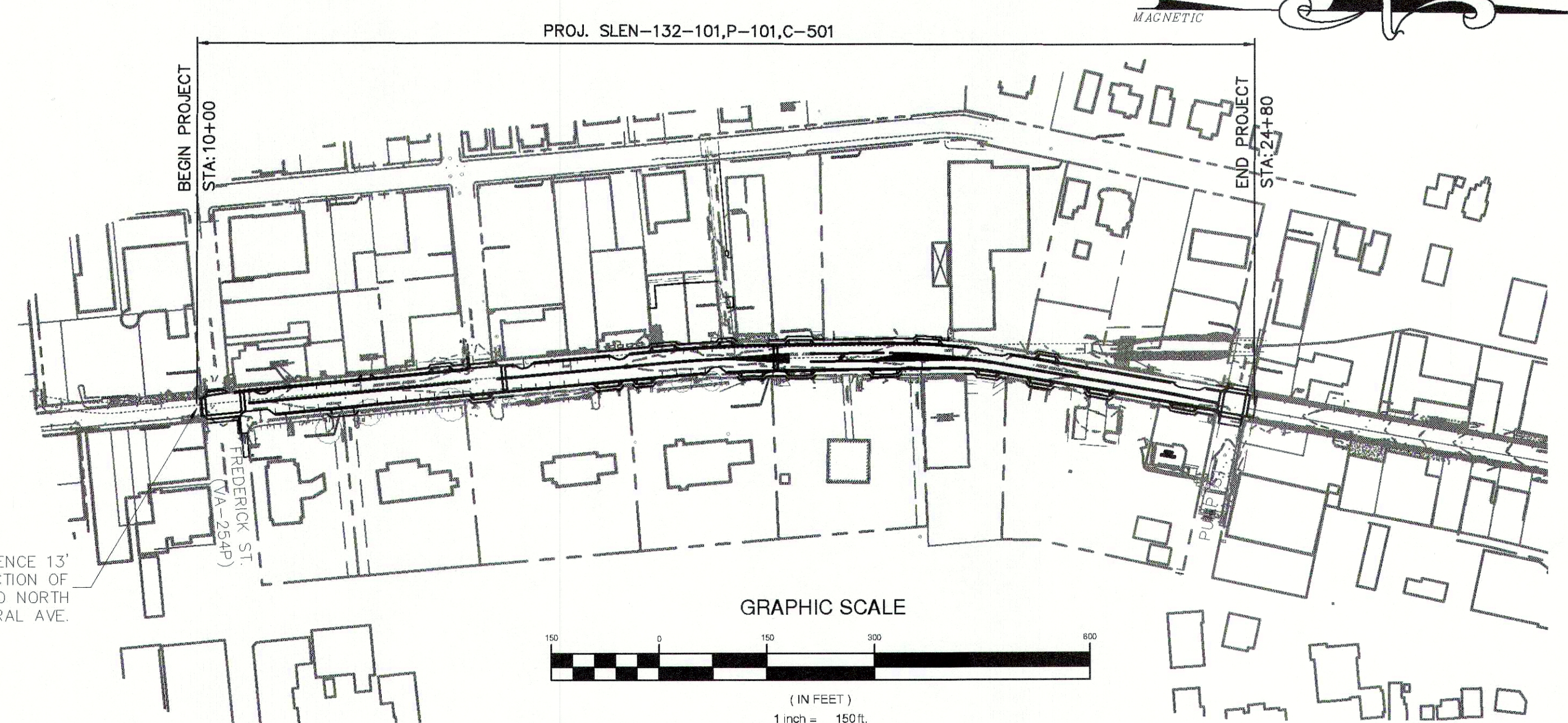
DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2016 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2005 WORK AREA PROTECTION MANUAL, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC .PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD IC-5.01U, EXCEPT WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, IS FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

DESCRIPTION REFERENCE 13' SOUTH OF INTERSECTION OF FREDERICK ST. AND NORTH CENTRAL AVE.



CONVENTIONAL SIGNS

STATE LINE
COUNTY LINE
CITY/TOWN OR VILLAGE
RIGHT OF WAY LINE
FENCE LINE
UNFENCED PROPERTY LINE
FENCED PROPERTY LINE
WATER LINE
SANITARY SEWER LINE
GAS LINE
ELECTRIC UNDERGROUND CABLE
TRAVELED WAY
GUARD RAIL
RETAINING WALL
RAILROADS
BASE OR SURVEY LINE

LEVEE OR EMBANKMENT
BRIDGES
CULVERTS
DROP INLET
POWER POLES
TELEPHONE OR TELEGRAPH POLES
TELEPHONE OR TELEGRAPH LINES
HEDGE
TREES
HEAVY WOODS
GROUND ELEVATION
GRADE ELEVATION

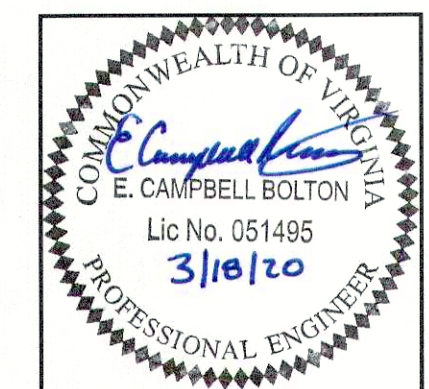
STANDARD SYMBOLS FOR THE PLAN
DATE: 10/1/11
DRAWN BY: J. L. BROWN
CHECKED BY: J. L. BROWN

CITY OF STAUNTON, POPULATION 23,746 (2010 CENSUS)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		TYPE PROJECT	DESCRIPTION
					FEET	MILES	FEET	MILES		
SLEN-132-101	P-101			80485	1480	0.28	1480	0.28	PAVING	ENTIRE LENGTH OF PROJECT
	C-501			80485	1480	0.28	1480	0.28	CONSTRUCTION	ENTIRE LENGTH OF PROJECT
	R-201									ENTIRE LENGTH OF PROJECT

NOTE: PROJECT LENGTH BASED ON CONSTRUCTION BASELINE

REVISED



TIER 1 PROJECT

LOCALLY ADMINISTERED PROJECTS	
CITY OF STAUNTON	
NAME OF LOCALITY	
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
(SIGNATURE)	
3-26-2020	NICKIE D. MILLS
DATE	CITY ENGINEER
(SIGNATURE)	
3-26-2020	STEVEN ROSENBERG
DATE	CITY MANAGER

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PROJECT	SHEET NO.
SLEN-132-101	1

PROJECT MANAGER NICKIE D. MILLS, CITY ENGINEER, CITY OF STAUNTON (540-332-3858)
SURVEYED BY CHERYL A. STOCKTON, L.S., DRAPER ADEN ASSOCIATES (434-295-0700)
DESIGN SUPERVISED BY CAROLYN A. HOWARD, P.E., DRAPER ADEN ASSOCIATES (434-295-0700)
DESIGNED BY DRAPER ADEN ASSOCIATES (434-295-0700)

N	REVISED	FEDERAL AID		STATE		SHEET NO.
	STATE	PROJECT	ROUTE	PROJECT		
	VA.		UR-4913	SLEN-132-101, P101 C501	IC	

PRELIMINARY RIGHT OF WAY DATA SHEET

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	SLEN-132-101		1C

SITE SUMMARY

SITE LOCATION: CENTRAL AVENUE (FREDERICK ST TO PUMP ST)
STAUNTON, VA 24401

OWNER/DEVELOPER: CITY OF STAUNTON
CONTACT: NICKIE D. MILLS, P.E.
ADDRESS: 116 W BEVERLEY ST
STAUNTON, VA 22401

ENGINEER: DRAPER ADEN ASSOCIATES
CONTACT: E. CAMPBELL BOLTON, P.E.
ADDRESS: 110 AVON STREET
CHARLOTTESVILLE, VA 22902
TELEPHONE NO: 434-295-0700

ELECTRICAL ENGINEER: 2rw CONSULTANTS, INC.
CONTACT: ADRIENNE HENDRICKSON, P.E.
ADDRESS: 100 10TH ST NE, SUITE 202
CHARLOTTESVILLE, VA VA 22902
TELEPHONE NO: 434-296-2116

SOURCE OF SURVEY: DRAPER ADEN ASSOCIATES
CONTACT: CHERYL A. STOCKTON, L.S.
ADDRESS: 110 AVON STREET
CHARLOTTESVILLE, VA 22902
TELEPHONE NO: 434-295-0700
DATE OF MAPPING: DECEMBER 5, 2012

PRESENT ZONING: B-2 (GENERAL BUSINESS DISTRICT)

PERVIOUS AREA: PRE - 3,674 SF OR 0.08 AC
POST - 4,467 SF OR 0.10 AC

TOTAL PROJECT AREA: 82,920 SQUARE FEET (1.90 ACRES)

FLOOD MAP: #51015C0339E (JANUARY 6, 2010)
ZONE AE - 100 YEAR FLOOD PLAIN & FLOODWAY

GENERAL NOTES

- DIMENSIONS AND RADII ARE TO FACE OF CURB AND TO OUTSIDE FACE OF BUILDINGS, WHERE APPLICABLE, UNLESS OTHERWISE INDICATED.
- 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 CITY OF STAUNTON INSPECTORS.
- VERIFY THE PROPOSED LAYOUT WITH ITS RELATIONSHIP TO THE EXISTING SITE SURVEY. ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS, AND MATERIAL SPECIFICATIONS AND NOTIFY THE CITY OF STAUNTON AND 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 CITY OR ENGINEER.
- WHEN WORKING FROM HARD COPIES, PERFORM ALL WORK USING DIMENSIONS SHOWN. DO NOT USE SCALES, RULERS, MAP WHEELS 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 RESEEDED TO THE SATISFACTION OF THE OWNER.
- FIRE LANE DESIGNATION AND MARKING TO BE DETERMINED BY THE CITY OF STAUNTON FIRE DEPARTMENT, IF REQUIRED.
- 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; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND SHALL DEFEND, INDEMNIFY, AND HOLD THE OWNER AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER."
- RETAIN A COPY OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION ON SITE AND ADHERE TO THE STANDARDS LISTED AT ALL TIMES.
- PRIOR TO ANY LAND DISTURBING ACTIVITY, CONTRACTOR SHALL PROVIDE THE NAME, CERTIFICATION INFORMATION, AND CONTACT INFORMATION OF THE DESIGNATED RESPONSIBLE LAND DISTURBER (RLD) TO THE APPROPRIATE AUTHORITY.

PAVEMENT AND DRAINAGE STANDARD NOTES

- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM WITH THE STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION'S, LATEST EDITION, EXCEPT WHERE THE CITY OF STAUNTON STANDARDS ARE APPLICABLE.
- ALL STORM SEWER MAINS SHALL BE REINFORCED CONCRETE PIPE (RCP).
- ALL CONCRETE DRAINAGE STRUCTURES MAY BE EITHER PRECAST OR CAST-IN-PLACE.
- ALL STORM SEWER SHALL HAVE A MINIMUM OF 4" AGGREGATE BEDDING MATERIAL.
- THE CONTRACTOR IS REQUIRED TO MAINTAIN ALL DITCHES, PIPES, AND OTHER DRAINAGE STRUCTURES FREE FROM OBSTRUCTION UNTIL WORK IS ACCEPTED BY THE OWNER. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO MAINTAIN DRAINAGE STRUCTURE IN OPERABLE CONDITION.
- 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, AS DETERMINED BY THE INSPECTORS FOR THE CITY OF STAUNTON.
- ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS OF PAVED AREAS.
- ANY NECESSARY PAVEMENT WIDENING BETWEEN THE EXISTING PAVEMENT AND PROPOSED IMPROVEMENTS IS THE RESPONSIBILITY OF THE CONTRACTOR.
- WHERE PAVEMENT IS BEING REMOVED, THE CONTRACTOR SHALL REMOVE AGGREGATE BASE MATERIAL TO SUB-GRADE.
- EXISTING PAVEMENT AND OTHER SURFACES DISTURBED BY CONTRACTOR (WHICH ARE NOT TO BE REMOVED) SHALL BE REPAIRED TO LIKE-NEW CONDITION.
- IN ACCORDANCE WITH HANDICAP ACCESSIBILITY REQUIREMENTS, ALL APPLICABLE CODES AND REQUIREMENTS FOR ACCESSIBILITY FOR DISABLED PERSONS SHALL BE STRICTLY COMPLIED WITH.

CITY OF STAUNTON GENERAL NOTES

- This project is to be constructed in accordance with the Contract Documents, Special Conditions, City of Staunton Design & Construction Standards, VDOT Road & Bridge Standards, Health Department Water Works & Sewerage Regulations and any other applicable standards.
- All materials used on this project shall be new and comply with the latest revision of the applicable American Society for Testing & Materials (ASTM), American Water Works Association (AWWA), American National Standards Institute (ANSI) & Virginia Department of Transportation (VDOT) Road & Bridge Standards & Specifications unless otherwise noted.
- The location of existing utilities as shown on the plans are as they were known at the time the plans were prepared. However, nothing in the contract documents shall be construed as a guarantee that such utilities are in the location indicated or that they actually exist, or that other utilities are not in the area of operation. The contractor shall make all necessary investigations to determine the existence and location of such lines. The contractor shall pay for any damage to and for maintenance and protection of existing utilities and structures. CALL MISS UTILITY 48 HOURS IN ADVANCE OF DIGGING.
- The contractor is to dig & locate existing utilities in advance of pipe laying to allow for horizontal and vertical alignment adjustments.
- Utility services shall be uninterrupted unless prior approval is given by the City Engineer. The contractor is required to hang (City provided) notices on all customer doors 24 hours prior to utility shut-offs.
- Maintain 18" vertical clearance at all sanitary sewer crossings, and 12" clearance at all storm sewer crossings. Maintain 10' horizontal distance between water lines and sanitary sewer lines and manholes.
- Waterline appurtenances shall be located away from drainage patterns.
- All topsoil, seeding & mulching operations are to follow immediately behind pipe laying operations.
- All pavement repair is to be kept up with line installation as directed by the inspector.
- All salvage items removed from the project shall be deposited at the city salvage yard.
- All traffic control devices must be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) and the Virginia Work Area Protection Manual.
- Existing lines are not to be abandoned until all services in the project area are connected to new lines.
- Contacts for associated utility coordination are:

Columbia Gas	Chris McDonald	540-851-2332
Dominion Power	Rich Paraska	540-292-6598
Comcast	Sam Bloom	540-974-5123
Verizon	Allen Asbury	540-265-7574
Lingo	Robert Huff	540-712-0000 EXT. 306
Shentel	Eric Bulter	540-941-4270
Segro	Jared Morris	540-949-3466



NOTE: CONTRACTOR TO CONTACT MISS UTILITY (811) IN ADVANCE OF PLANNED WORK. ADVANCE TIME PERIOD SHALL BE IN ACCORDANCE WITH CURRENT MISS UTILITY GUIDELINES (www.missutilityofvirginia.com).

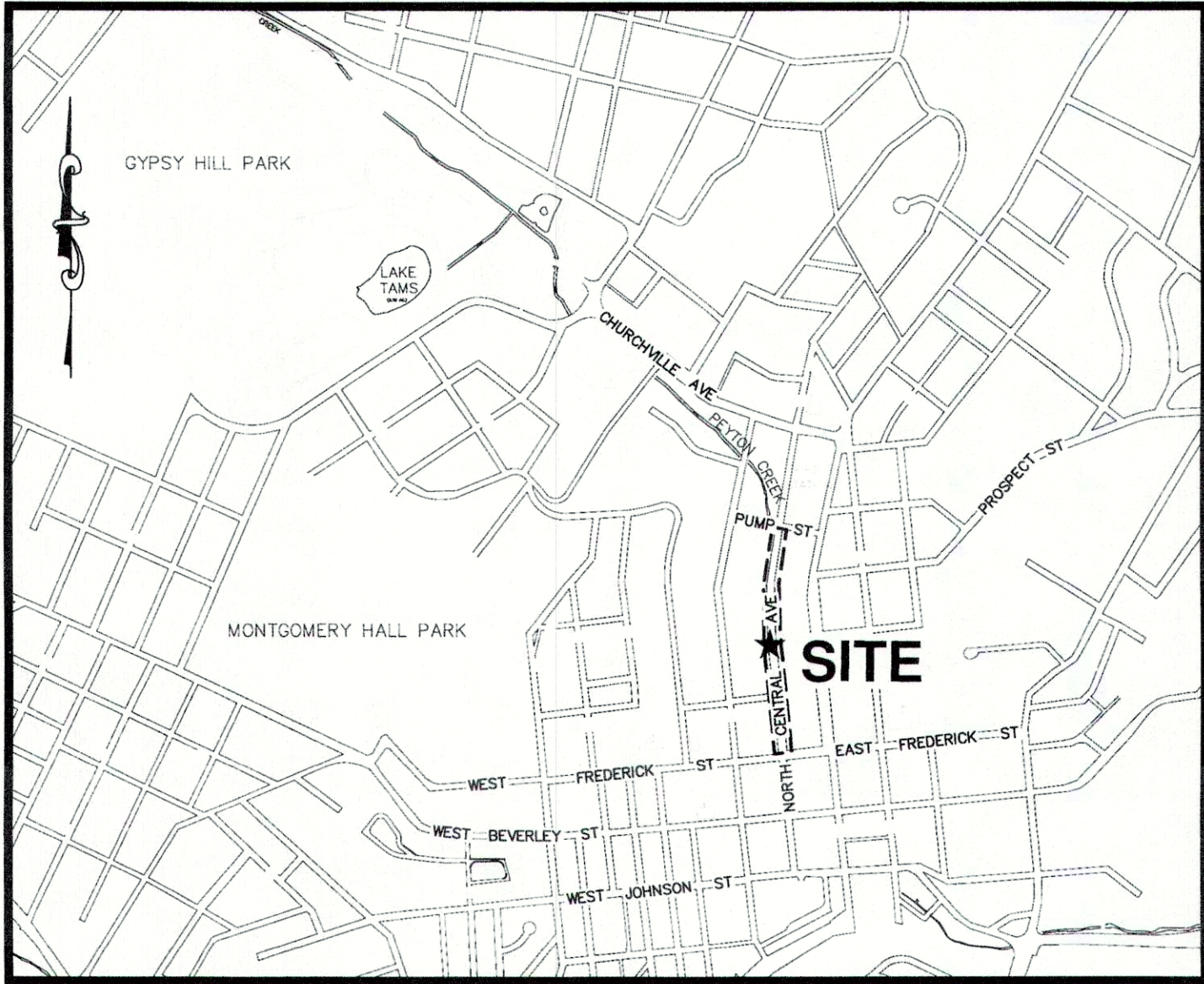
CONSTRUCTION DOCUMENTS

* * *

NORTH CENTRAL AVENUE
STREETSCAPE IMPROVEMENTS

* * *

CITY OF STAUNTON, VIRGINIA



VICINITY MAP
STAUNTON, VIRGINIA
1" = 1000'

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF STREETSCAPE IMPROVEMENTS TO 1,400 LINEAR FEET OF ROADWAY ON NORTH CENTRAL AVENUE BETWEEN FREDERICK ST AND PUMP ST. EXISTING CONCRETE SIDEWALKS, ENTRANCES, AND CURB AND GUTTERS WILL BE REMOVED AND REPLACED WITH BRICK SIDEWALKS, CONCRETE ENTRANCES, AND CURB AND GUTTERS. EXISTING ASPHALT PAVEMENT WILL BE MILLED OR REMOVED, REGRADED, AND REPLACED OR OVERLAID. UTILITY IMPROVEMENTS INCLUDE ELECTRICAL AND COMMUNICATION CONDUIT, LIGHT POLES, STORM STRUCTURE REPLACEMENTS, AND ADJUSTMENTS TO OTHER UTILITY STRUCTURE TOPS.

ORIGINAL DATE OF PLANS

MARCH 18, 2020

* * *

DAA PROJECT R08349-17CV

DRAWING SHEET LIST

Sheet Number	Sheet Title
C0	VDOT COVER SHEET
C1	VDOT RIGHT OF WAY DATA SHEET
C0.0	COVER SHEET
C0.1	EROSION & SEDIMENT CONTROL NOTES AND NARRATIVE
C1.0	OVERALL SITE MAP
C1.1	TOPOGRAPHIC SURVEY (1 of 4)
C1.2	TOPOGRAPHIC SURVEY (2 of 4)
C1.3	TOPOGRAPHIC SURVEY (3 of 4)
C1.4	TOPOGRAPHIC SURVEY (4 of 4)
C2.1	DEMOLITION AND EROSION & SEDIMENT CONTROL PLAN (1 of 3)
C2.2	DEMOLITION AND EROSION & SEDIMENT CONTROL PLAN (2 of 3)
C2.3	DEMOLITION AND EROSION & SEDIMENT CONTROL PLAN (3 of 3)
C3.1	SITE AND UTILITY PLAN (1 of 3)
C3.2	SITE AND UTILITY PLAN (2 of 3)
C3.3	SITE AND UTILITY PLAN (3 of 3)
C4.1	GRADING, LANDSCAPE AND STORMWATER PLAN (1 of 6)
C4.2	GRADING, LANDSCAPE AND STORMWATER PLAN (2 of 6)
C4.3	GRADING, LANDSCAPE AND STORMWATER PLAN (3 of 6)
C4.4	GRADING, LANDSCAPE AND STORMWATER PLAN (4 of 6)
C4.5	GRADING, LANDSCAPE AND STORMWATER PLAN (5 of 6)
C4.6	GRADING, LANDSCAPE AND STORMWATER PLAN (6 of 6)
C5.0	TYPICAL ROAD SECTIONS
C6.0	EROSION & SEDIMENT CONTROL DETAILS
C6.1	CURB AND PAVEMENT DETAILS
C6.2	PLANTING LIST AND DETAILS
C7.0	EASEMENT LINE INFORMATION
C8.0	MAINTENANCE OF TRAFFIC NOTES
C8.1	MAINTENANCE OF TRAFFIC PLAN
E0	ELECTRICAL SITE PLAN
E1	ELECTRICAL SITE PLAN
E2	ELECTRICAL SITE PLAN
E3	ELECTRICAL SITE PLAN
E4	ELECTRICAL SITE PLAN
E5	ELECTRICAL SITE PLAN
E6	ELECTRICAL SITE PLAN

RESPONSIBLE LAND DISTURBER (RLD)

THE RESPONSIBLE LAND DISTURBER SHALL BE THE ENGINEER OF RECORD FOR THE PURPOSES OF PLAN APPROVAL ONLY. THE CONTRACTOR SHALL DESIGNATE A QUALIFIED RESPONSIBLE LAND DISTURBER UPON AWARD OF CONTRACT.

THESE PLANS HAVE BEEN SUBJECTED TO TECHNICAL AND QUALITY REVIEWS BY:

E. CAMPBELL BOLTON, P.E.

NAME: PRINTED
PROJECT MANAGER

SIGNATURE

DATE

CAROLYN A. HOWARD, P.E.

NAME: PRINTED
QUALITY REVIEWER

SIGNATURE

DATE



Draper Aden Associates
Engineering • Surveying • Environmental Services



COVER SHEET
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS

DESIGNED BY:	DAA
DRAWN BY:	ECB
CHECKED BY:	CAH
SCALE:	NO SCALE
DATE:	MARCH 18, 2020
PROJECT NUMBER:	R08349-17CV
	C0.0

- POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED 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
- (B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND BY THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND
- (C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM
- C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
 - (1) IMPROVE THE CHANNELS TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL, THE BED, OR THE BANKS; OR
 - (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES;
 - (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL. ONE WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR
 - (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR

OTHER MEASURES WHICH IS SATISFACTORY TO THE VESP OR 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, HE
SHALL OBTAIN APPROVAL FROM THE VESP OF A PLAN FOR MAINTENANCE OF THE
DETENTION FACILITIES. THE PLAN SHALL SET FORTH THE MAINTENANCE REQUIREMENTS
OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.

G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING
CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL
DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM
THE FACILITY TO THE RECEIVING CHANNEL.

H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.

I. INCREASED VOLUMES OF SHEET FLOW THAT MAY CAUSE EROSION OR SEDIMENTATION
ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE
CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY.

J. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR
PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT
BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE
DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT
PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT
CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.

K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE
EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND
BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.
ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER
MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY
REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS SHALL SATISFY THE FLOW
RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE
CHANNELS. 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, 2, AND 10-YEAR, 24-HOUR STORMS TO A LEVEL THAT IS LESS THAN
OR EQUAL TO THE PEAK FLOW RATE FROM THE SITE ASSUMING IT WAS IN A GOOD
FORESTED CONDITION, ACHIEVED THROUGH MULTIPLICATION OF THE FORESTED PEAK
FLOW RATE BY A REDUCTION FACTOR THAT IS EQUAL TO THE RUNOFF VOLUME FROM
THE SITE WHEN THE SITE IS IN A GOOD FORESTED CONDITION DIVIDED BY THE RUNOFF
VOLUME FROM THE SITE IN ITS PROPOSED CONDITION. IT SHALL BE EXEMPT FROM
ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR
MAN-MADE CHANNELS AS DEFINED IN ANY REGULATIONS PROMULGATED PURSUANT
TO § 621-44.15:54 OR § 621-44.15:65 OF THE ACT.

M. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND
VELOCITY REQUIREMENTS OF § 621-44.15:52 A OF THE ACT AND THIS SUBSECTION
SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE
STORMWATER MANAGEMENT ACT (§ 621-44.15:24 ET SEQ. OF THE CODE OF
VIRGINIA) AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES
ARE IN ACCORDANCE WITH § 62.2-62.27 OF THE VIRGINIA STORMWATER
MANAGEMENT PROGRAM (VSWMP) REGULATIONS.

N. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN
§ 62.2-62.27-66 OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSWMP)
REGULATIONS SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF SUBDIVISION 19
OF THIS SUBSECTION.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-2 THE CITY OF STAUNTON MUST 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.
- ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING, GRADING OR LAND-DISTURBING AND SEQUENCE OF CONSTRUCTION APPROVED.
- ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- ES-5 PRIOR TO AND DURING CONSTRUCTION ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS OR OFF-SITE FILL ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN FOR REVIEW AND FOR APPROVAL BY THE CITY OF STAUNTON.
- ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE CITY OF STAUNTON.
- ES-7 SITE GRADING IS TO DRAIN TO THE PERIMETER CONTROLS AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING CONSTRUCTION, UNTIL FINAL STABILIZATION IS ACHIEVED.
- ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY (AT LEAST DAILY) AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

EROSION AND SEDIMENT CONTROL NARRATIVE

- PROJECT DESCRIPTION
- THE CITY OF STAUNTON PROPOSES LANDSCAPE IMPROVEMENTS TO APPROXIMATELY 1,400 LINEAR FEET OF ROADWAY ALONG NORTH CENTRAL AVENUE IN DOWNTOWN STAUNTON, VIRGINIA BETWEEN FREDERICK STREET AND PUMP STREET. EXISTING CONCRETE SIDEWALKS, ENTRANCES, AND CURB AND GUTTERS WILL BE REMOVED AND REPLACED WITH BRICK SIDEWALK, CONCRETE ENTRANCES, AND CURB AND GUTTERS. EXISTING PAVEMENT WILL BE MILLED OR REMOVED, REGRADED AND REPLACED OR OVERLAD. UTILITY IMPROVEMENTS INCLUDE ELECTRICAL AND COMMUNICATION CONDUIT, LIGHT POLES, STORM STRUCTURE REPLACEMENTS, AND ADJUSTMENTS TO OTHER UTILITY STRUCTURE TOPS. THE TOTAL PROJECT AREA IS APPROXIMATELY 1.90 ACRES, WHICH INCLUDES AREAS ASSUMED TO ONLY REQUIRE MILLING (ROADWAY AREAS ONE FOOT OUTSIDE OF CURBS, CROSSWALKS, UTILITY CROSSINGS, PAVERS, ETC.). WITHIN THE PROJECT LIMITS, THE EXISTING CONDITION CONSISTS OF APPROXIMATELY 0.08 ACRES OF PERVIOUS AREA. THE POST-DEVELOPED CONDITION WILL INCREASE THE PERVIOUS AREA TO 0.10 ACRES. ALL RUNOFF FROM THE PROJECT FLOWS INTO THE EXISTING STORM SEWER SYSTEM IN THE ROADWAY AND IS DISCHARGED DIRECTLY INTO THE UNDERGROUND TUNNEL RUNNING UNDER THE ROADWAY CONTAINING PEYTON CREEK. CONSTRUCTION OF THIS PROJECT IS ANTICIPATED TO BEGIN IN THE SPRING 2020 WITH A DURATION OF APPROXIMATELY 18 MONTHS.
- B. EXISTING SITE CONDITIONS**
- NORTH CENTRAL AVENUE RUNS NORTH/SOUTH THROUGH DOWNTOWN STAUNTON, VIRGINIA WITH BUSINESSES ALONG BOTH THE EAST AND WEST SIDES OF THE STREET. THE MAJORITY OF THE LIMITS OF DISTURBANCE IS PAVEMENT OR HARDCAPE, WITH RELATIVELY FLAT SLOPES BETWEEN 0% AND 2%. IN GENERAL, THE ROADWAY SLOPES TO THE SOUTH AND IS AT A LOW POINT WITH PROPERTIES SLOPING TOWARD THE ROADWAY FROM THE EAST AND WEST. PEYTON CREEK FLOWS NORTH TO SOUTH IN A TUNNEL UNDER THE ROADWAY.
- C. ADJACENT AREAS**
- NORTH CENTRAL AVENUE RUNS FROM WEST JOHNSON STREET AT THE SOUTH TO CHURCHVILLE AVENUE (ROUTE 250) AT THE NORTH. IT IS LOCATED BETWEEN NORTH LEWIS STREET TO THE WEST AND NORTH AUGUSTA STREET (ROUTE 250/11) TO THE EAST. THE LIMITS OF THIS PROJECT ARE FREDERICK STREET TO THE SOUTH AND PUMP STREET TO THE NORTH. THERE ARE 20 PROPERTIES BORDERING THIS STREET IN DOWNTOWN. THE MAJORITY ARE WITHIN THE ENTRANCE CORRIDOR OVERLAY DISTRICT AND ALL ARE ZONED B2. SOME DISTURBANCE WILL BE REQUIRED ON ALL ADJACENT PROPERTIES TO COMPLETE CONSTRUCTION.
- D. OFF-SITE AREAS**
- ALL EXCESS OR UNSUITABLE MATERIAL SHALL BE TRANSPORTED TO A PERMITTED OFF-SITE DISPOSAL AREA. ALL IMPORTED MATERIAL REQUIRED FOR BACKFILL, TOPSOIL, PIPE BEDDING, ETC., SHALL BE OBTAINED FROM A PERMITTED OFF-SITE AREA OR A COMMERCIAL FACILITY. SHOULD ADDITIONAL OFF-SITE AREAS BE REQUIRED, THEY SHALL HAVE SEPARATE EROSION AND SEDIMENT CONTROL PLAN APPROVED BY THE AUTHORITY HAVING JURISDICTION. THE NAMES OF ANY OFFSITE AREAS MUST BE PROVIDED TO THE CITY OF STAUNTON BEFORE ANY SOIL IS TRANSPORTED OFFSITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE APPROVED EROSION AND SEDIMENT CONTROL PLAN ALONG WITH FINAL STABILIZATION AND MAINTENANCE OF ALL OFF-SITE AREAS.
- E. SOILS**
- THE SITE BOUNDARY WAS ENTERED INTO THE NATURAL RESOURCE CONSERVATION SERVICE (NRCS) WEB SOIL SURVEY APPLICATION AND NO SOIL TYPES WERE ABLE TO BE DETERMINED. THE VAST MAJORITY OF THE SITE IS PAVED WITH A SIGNIFICANT AMOUNT OF UTILITIES UNDERNEATH. IT IS ANTICIPATED THE MAJORITY OF THE MATERIAL ENCOUNTERED UNDER THE ROADWAY AND SIDEWALKS WILL BE STONE BACKFILL.
- F. CRITICAL EROSION AREAS**
- THE SITE IS LOCATED WITHIN THE FLOODWAY AND FLOODPLAIN ACCORDING TO FEMA MAPS (#5101500339E) DUE TO PEYTON CREEK FLOWING THROUGH THE TUNNEL UNDER THE ROADWAY. ALL STORM STRUCTURES LOCATED ALONG THE ROADWAY DISCHARGE DIRECTLY INTO THE TUNNEL, WHILE VERY LITTLE SOIL EROSION IS ANTICIPATED WITH THIS CONSTRUCTION, IT WILL BE IMPORTANT TO KEEP INLET PROTECTION MEASURES IN PLACE AND OPERATIONAL ON ALL INLETS THROUGHOUT CONSTRUCTION TO LIMIT ANY SOIL, MATERIALS OR DEBRIS FROM ENTERING THE STORM SYSTEM.
- G. EROSION AND SEDIMENT CONTROL MEASURES**
- ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE "VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK" (VESCH), LATEST EDITION AND IN CONFORMANCE WITH THE CONDITIONS OF APPLICABLE ENVIRONMENTAL PERMITS.
- H. STRUCTURAL PRACTICES**
1. **SAFETY FENCE – 3.01**
TO BE INSTALLED AROUND THE SITE AS NEEDED TO PROTECT THE PUBLIC FROM THE CONSTRUCTION SITE AND TO SECURE ITEMS KEPT ON SITE. EXACT LIMITS MAY NEED TO BE ADJUSTED BY THE CONTRACTOR AND OWNER IN THE FIELD BASED ON PHASING.
2. **SILT FENCING – 3.05**
TO BE INSTALLED DOWN SLOPE OF DISTURBED VEGETATED AREAS TO FILTER SEDIMENT LADEN RUNOFF.
3. **INLET PROTECTION – 3.07**
TO BE INSTALLED ON ALL EXISTING INLETS WITHIN THE LIMITS OF CONSTRUCTION AND DOWNSTREAM AS WELL AS PROPOSED INLETS AS THEY ARE INSTALLED TO FILTER SEDIMENT LADEN RUNOFF BEFORE ENTERING STORM DRAIN INLETS AND PIPING SYSTEMS.
4. **TREE PROTECTION – 3.38**
A TEMPORARY FENCE TO BE INSTALLED AROUND TREES OR VEGETATION TO REMAIN TO PREVENT DAMAGE DURING CONSTRUCTION. THE FENCING SHALL BE INSTALLED ALONG THE DRIP LINE OF THE TREE WHERE POSSIBLE.
5. **DUST CONTROL – 3.39**
DUST CONTROL MEASURES SHALL BE USED OVER THE ENTIRE SITE TO REDUCE SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBANCE, DEMOLITION, AND CONSTRUCTION ACTIVITIES.
- I. VEGETATIVE PRACTICES**
- GENERAL: A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED BY CONCRETE, PAVEMENT OR LANDSCAPED MULCHED BEDS. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION. NEW VEGETATION SHALL BE MAINTAINED FOR ONE FULL YEAR AFTER PLANTING. NEW SEEDING SHALL BE SUPPLIED WITH ADEQUATE MOISTURE, ESPECIALLY LATE IN THE SEASON, AND IN ABNORMALLY HOT OR DRY WEATHER. STABILIZATION PRACTICES SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPROPRIATE VESCH STD. & SPEC. AND AS PART OF THE EROSION AND SEDIMENT CONTROL PLAN. SELECTION OF THE APPROPRIATE SEED MIXTURE FOR TEMPORARY SEEDING WILL DEPEND UPON THE TIME OF YEAR IT IS APPLIED.
1. **TOPSOILING – 3.30**
A 2" TO 4" LAYER OF TOPSOIL SHALL BE APPLIED TO ALL LANDSCAPED AND GRASSED AREAS. THE TOPSOIL SHALL BE FREE OF ROCKS AND DEBRIS. TOPSOIL ALLOWS A STRONGER AND HEALTHIER STAND OF GRASS TO ESTABLISH QUICKLY TO STABILIZE UNPAVED AREAS OF THE SITE.
2. **TEMPORARY SEEDING – 3.31**
TEMPORARY SEEDING SHALL BE APPLIED OVER ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE WITHIN 30 DAYS. AREAS SHALL BE RESEED AS REQUIRED TO MAINTAIN A HEALTHY STAND OF VEGETATION WHICH IS CAPABLE OF PREVENTING EROSION. TEMPORARY SEEDING MIXES AND MAINTENANCE PROCEDURES SHALL BE AS DESCRIBED IN VESCH STD. & SPEC. 3.31.
3. **PERMANENT SEEDING – 3.32**
PERMANENT SEEDING SHALL BE APPLIED TO ALL AREAS WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE WHICH WILL NOT RECEIVE HARDCAPE OR OTHER LANDSCAPE. PERMANENT SEEDING SHALL ALSO BE USED ON ALL AREAS NOT AT FINAL GRADE BUT WILL BE LEFT DORMANT FOR A PERIOD OF MORE THAN ONE (1) YEAR. IF CONFLICTS EXIST BETWEEN THE PROJECT SPECIFICATIONS AND THE VESCH STD. & SPEC. 3.32, THE MORE STRINGENT REQUIREMENT SHALL APPLY. PERMANENT SEEDING MIXES AND RATES, SOIL TESTING REQUIREMENTS AND MAINTENANCE PROCEDURES ARE FOUND IN VESCH STD. & SPEC. 3.32.
4. **MULCHING – 3.35**
APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIALS TO THE SOIL SURFACE TO PREVENT EROSION BY PROTECTING THE SOIL SURFACE FROM RAINDROP IMPACT AND REDUCING THE VELOCITY OF OVERLAND FLOW. IT IS ALSO USED TO FOSTER THE GROWTH OF VEGETATION BY INCREASING AVAILABLE MOISTURE AND PROVIDING INSULATION AGAINST EXTREME HEAT AND COLD. MULCHING WILL BE APPLIED THROUGHOUT CONSTRUCTION ON DENUDED AREAS. APPLICATION RATES AND MULCHING TYPES ARE FOUND IN VESCH STD. & SPEC. 3.35.
- J. PERMANENT STABILIZATION**
- ALL AREAS WITHIN THE LIMITS OF DISTURBANCE SHALL BE STABILIZED WITH PERMANENT SEEDING, LANDSCAPING OR PAVEMENT FOLLOWING THE FINAL GRADING.
- K. SEQUENCE OF CONSTRUCTION**
1. A PRE-CONSTRUCTION CONFERENCE WILL BE REQUIRED. CONTACT THE CITY OF STAUNTON TO SET UP THE MEETING AND PROVIDE THE NAME, CERTIFICATION INFORMATION, AND CONTACT INFORMATION OF THE DESIGNATED RESPONSIBLE LAND DISTURBER (RLD) PRIOR TO STARTING CONSTRUCTION.
2. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL APPLICABLE PERMITS FOR LAND DISTURBANCE HAVE BEEN OBTAINED.
3. ALL ITEMS OF WORK NECESSARY TO COMPLETE THIS PROJECT SHALL BE IN COMPLIANCE WITH ALL LOCAL, STATE, AND FEDERAL CODES.
4. **INITIAL E&S MEASURES AND DEMOLITION:**
- a) INSTALL PERIMETER SAFETY FENCE, SILT FENCE, INLET PROTECTION, TREE PROTECTION AND OTHER MEASURES AS SHOWN ON THE PLANS AND DEEMED NECESSARY THROUGH INSPECTION. NOTE: LIMITS OF SAFETY FENCE TO BE DETERMINED BY CONTRACTOR IN THE FIELD.
- b) CONTACT THE CITY OF STAUNTON'S EROSION AND SEDIMENT CONTROL INSPECTOR FOR AN INSPECTION OF THE PERIMETER MEASURES.
- c) BEGIN CLEARING AND DEMOLITION OF ITEMS AS SHOWN ON THE PLANS. CLEARING AND DEMOLITION ACTIVITIES SHALL BE PERFORMED AS NEEDED FOR THE NEXT CONSTRUCTION ACTIVITY AND NOT ACROSS THE ENTIRE SITE AT ONCE.
- d) THROUGHOUT CONSTRUCTION ACTIVITIES, APPLY DUST CONTROL MEASURES ACCORDING TO VESCH STD. & SPEC. 3.39. ANY AND ALL MATERIAL OR DEBRIS TRACKED ONTO A PUBLIC OR PRIVATE ROAD SURFACE WILL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED

- FROM ROADS BY SHOVELING OR SWEEPING AND BE TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA.
- e) APPLY TEMPORARY SEEDING AND MULCHING AS NECESSARY.
- 5) CONSTRUCTION PHASE:
 - a) MAINTAIN ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES FROM DEMOLITION PHASE. EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED UNTIL SUCH A TIME AS A VEGETATIVE COVER IS ESTABLISHED OR HARDSCAPE IS INSTALLED ON ALL AREAS UPHILL OF THE MEASURES.
 - b) INSTALL ALL ADDITIONAL MEASURES SHOWN ON THE PLANS AND AS DEEMED NECESSARY THROUGH INSPECTIONS BY THE RLD, DEQ, CIVIL OR ENGINEER.
 - c) BEFORE CONSTRUCTION, ALL EXCAVATED MATERIAL AND DEBRIS SHALL BE USED AS FILL MATERIAL ORITE STOCKPILED OR DISPOSED OF IN A LAWFUL MANNER. THE CITY OF STAUNTON IS TO BE NOTIFIED PRIOR TO ANY HAULING TO OR FROM ANY OFFSITE BORROW OR WASTE AREA.
 - d) INSTALL INLET PROTECTION ON ALL STORM INLETS AS THEY ARE INSTALLED AND ACTIVATED.
 - e) USE APPROPRIATE DUST CONTROL MEASURES FOR DISTURBED AREAS AS WELL AS TEMPORARY SEEDING AND STRAW MULCHING AS NECESSARY.
 - f) PROCEED WITH HARDSCAPES AND LANDSCAPE INSTALLATION AND FINALIZE MAJOR CONSTRUCTION ACTIVITIES.
 - g) APPLY PERMANENT SEEDING, TOPSOIL AND STRAW MULCHING TO ALL DISTURBED AREA, OUTSIDE OF THE HARDSCAPE AND MULCHED LANDSCAPED AREAS.
- 6) ONCE SITE WORK HAS BEEN FINALIZED, ALL STORMWATER PIPES AND STRUCTURES SHALL BE CLEANED OF ALL SEDIMENT BUILD UP.
- 7) ONCE THE SITE HAS BEEN STABILIZED, NOTIFY THE INSPECTORS FOR A FINAL INSPECTION.
- 8) ONCE APPROVAL IS ACQUIRED FROM THE INSPECTOR AND ALL UPSTREAM AREAS HAVE ESTABLISHED VEGETATION, ALL REMAINING EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS.
- 9) REMOVE ALL EQUIPMENT, CONSTRUCTION MATERIALS AND DEBRIS FROM THE SITE.
- 10. MAINTENANCE:

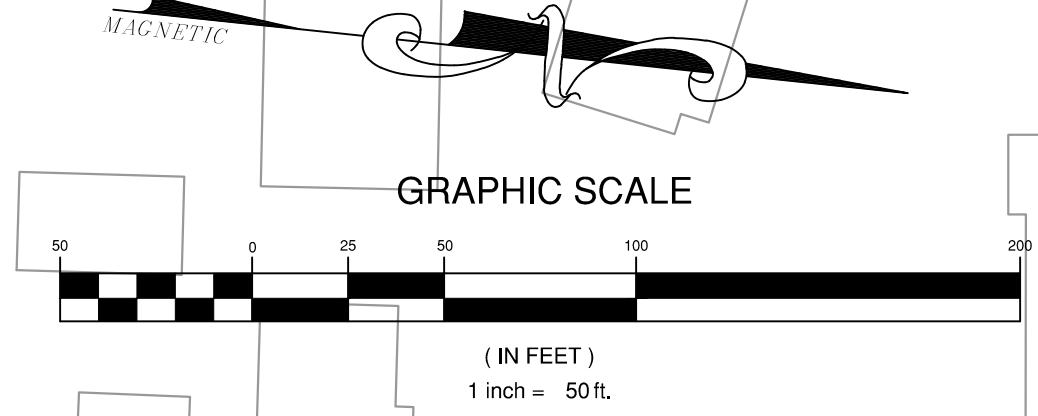
PRIOR TO ANY LAND DISTURBING ACTIVITY, CONTRACTOR SHALL PROVIDE THE NAME, CERTIFICATION INFORMATION, AND CONTACT INFORMATION OF THE DESIGNATED RESPONSIBLE LAND DISTURBER (RLD) TO THE APPROPRIATE AUTHORITY. IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED PER THE REQUIREMENTS OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSPM) CONSTRUCTION GENERAL PERMIT (CGP). DURING CONSTRUCTION, THE CONTRACTOR'S DESIGNATED RLD WILL BE RESPONSIBLE FOR INSPECTIONS AND REPAIR OF DAMAGED EROSION/SEDIMENT CONTROL MEASURES. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

 - 1) THE SILT FENCE AND INLET PROTECTION BARRIERS SHALL BE CHECKED FOR UNDERMINING AND DETERIORATION OF OR DAMAGE TO THE FABRIC. DAMAGES SHALL BE IMMEDIATELY REPAIRED. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES ONE HALF THE HEIGHT OF THE BARRIER.
 - 2) LOW POINTS IN THE SILT FENCE SHALL BE CHECKED FOR DAMAGE CAUSED BY PONDING WATER. IF DAMAGE IS FOUND, ADDITIONAL ROWS OF SILT FENCE SHALL BE PLACED BEHIND AND PARALLEL TO THE PRIMARY ROW TO INCREASEMENTS OF ONE FOOT AS REQUIRED.
 - 3) ALL SEDIMENT REMOVED FROM TRAPPING MEASURES SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE OR CAUSE SEDIMENTATION PROBLEMS.
 - 4) THE SEEDED AND MULCHED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED. REFER TO ESC TECHNICAL BULLETIN #4. PROVIDE REMEDIAL STABILIZATION AND SEEDING FOR A PERIOD OF ONE YEAR AFTER CONSTRUCTION.

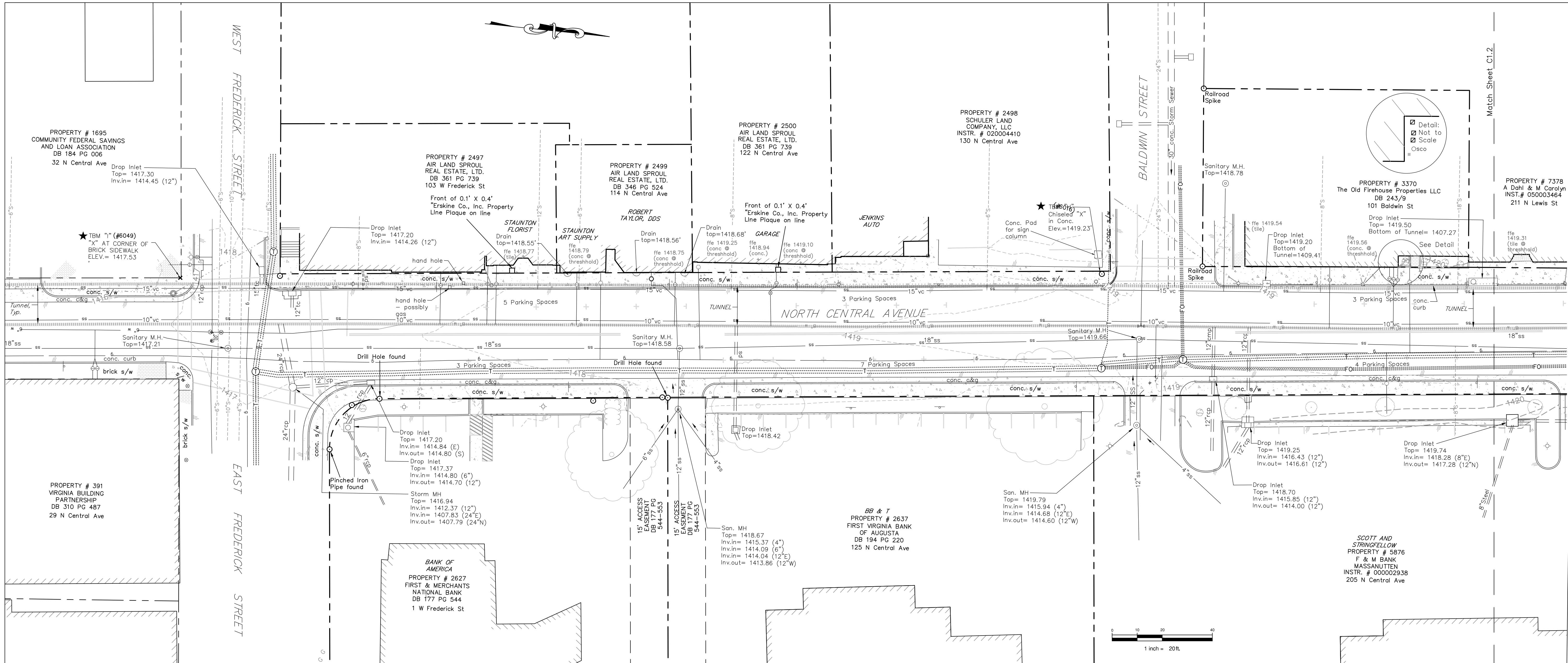
STORMWATER MANAGEMENT NARRATIVE

- A. STORMWATER MANAGEMENT OVERVIEW
- THE TOTAL PROJECT AREA IS APPROXIMATELY 1.90 ACRES, WHICH INCLUDES AREAS ASSUMED TO ONLY REQUIRE MILLING AND UTILITY LINE INSTALLATIONS. THE POST-DEVELOPED CONDITION WILL REDUCE THE IMPERVIOUS AREA BY APPROXIMATELY 0.02 ACRES. ALL RUNOFF FROM THE PROJECT FLOWS INTO THE EXISTING STORM SEWER SYSTEM IN THE ROADWAY AND IS DISCHARGED DIRECTLY INTO THE UNDERGROUND TUNNEL RUNNING UNDER THE ROADWAY CONTAINING PEYTON CREEK. AT THE LOCATION OF THE PROJECT, PEYTON CREEK HAS A DRAINAGE AREA OF APPROXIMATELY 2,375 ACRES.
- THE PROJECT PROPOSES TO UTILIZE THE EXISTING STORM SEWER SYSTEM AND MAINTAIN A SIMILAR DRAINAGE PATTERN IN THE POST DEVELOPED CONDITION.
- DUE TO THE NATURE OF THE PROJECT, IT HAS BEEN DETERMINED IT IS EXEMPT FROM STORMWATER MANAGEMENT REGULATIONS BASED ON BEING CLASSIFIED AS A LINEAR DEVELOPMENT PROJECT (9VAC25-870-76). VA DEQ GUIDANCE MEMO NO. 15-2003 STATES LINEAR PROJECTS THAT DO NOT SIGNIFICANTLY ALTER THE PREDEVELOPMENT RUNOFF CHARACTERISTICS OF THE LAND SURFACE AFTER THE COMPLETION OF CONSTRUCTION AND FINAL STABILIZATION MAY HAVE STORMWATER MANAGEMENT PLAN REQUIREMENTS WAIVED BY THE VSPM AUTHORITY.
- B. WATER QUALITY ANALYSIS
- WATER QUALITY ANALYSIS IS NOT REQUIRED, AS THE PROJECT IS EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENTS
- C. WATER QUANTITY ANALYSIS
- WHILE THE PROJECT IS EXEMPT FROM STORMWATER MANAGEMENT REGULATIONS, IT STILL MUST MEET MINIMUM STANDARD #19 (MS-19) FOR PROTECTION OF DOWNSTREAM WATERWAYS AND PROPERTY. THE OVERALL IMPERVIOUS AREA IS DECREASED IN THE POST-DEVELOPED CONDITION RESULTING IN A DECREASE IN THE FLOW RATE OF THE RUNOFF LEAVING THE SITE. THE SITE IS ALSO LOCATED IN THE FLOODPLAIN WITH AN OVERALL DRAINAGE AREA OF APPROXIMATELY 2,375 ACRES. THE OVERALL DRAINAGE AREA EXCEEDS 100 TIMES THE PROJECT AREA, AND, THEREFORE, SATISFIES THE 1% RULE OF THE REGULATIONS. THE DECREASE IN POST-DEVELOPED FLOW RATE AND THE 1% RULE RESULT IN COMPLIANCE WITH BOTH CHANNEL PROTECTION AND FLOODING CRITERIA.
- D. MAINTENANCE
- THE CITY OF STAUNTON SHALL BE RESPONSIBLE FOR MAINTAINING THE PROPOSED STORM SEWER SYSTEM.

		Draper Aden Associates <i>Engineering • Surveying • Environmental Services</i>	
		Charlottesville, VA 1100 N. 3rd Street Charlottesville, VA 22902 434-295-0700 Fax: 434-295-2105 www.daa.com	Richmond, VA Blacksburg, VA Fayetteville, NC Hampton Roads, VA Coats, NC Northern Virginia
EROSION & SEDIMENT CONTROL NOTES AND NARRATIVE NORTH CENTRAL AVENUE IMPROVEMENTS STAUNTON, VIRGINIA		REVISIONS	
DESIGNED BY:	DA A		
DRAWN BY:	ECB		
CHECKED BY:	CAH		
SCALE:	NO SCALE		
DATE:	MARCH 18, 2020		
PROJECT NUMBER:	R08349-17CV		
C0.1			



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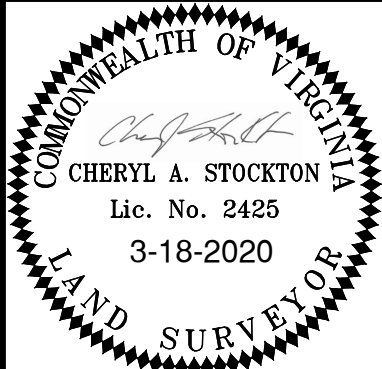


NOTES:

- 1.) Source of Meridian: Virginia Coordinate System NAD 83, North Zone based upon City of Staunton Disks 2007-21 & 2008-32.
- 2.) Vertical datum: City of Staunton Control, Disk 2007-21. Elevation=1371.93'.
- 3.) This survey was prepared without the benefit of a title commitment or title report and all easements and encumbrances that might be disclosed in a title search may not be shown.
- 4.) Underground utilities from Frederick Street to Pump Street are based upon a survey performed on 11/06/08 in conjunction with proposed utilities shown a Site Plan entitled "Central Avenue Tunnel Relief" dated 10/15/09. Underground utilities from Pump Street to Churchville Avenue are located per SUE Quality Level B, ASCE 38-02 - field designation of underground utilities performed by Draper Aden Associates and visible evidence in conjunction with compiled records. Storm and sanitary sewer lines and inverts were taken from the previous survey. Lines from Pump Street to Churchville Avenue are shown per GIS.
- 5.) This Topographic Survey was completed under the direct and responsible charge of Cheryl A. Stockton, L.S. from an actual Ground survey made under my supervision; that the imagery and/or original data was obtained on December 5, 2012 and June 25, 2019; and that this plat and/or map meets minimum accuracy standards unless otherwise noted.
- 6.) Contour interval: 1'.
- 7.) This survey was prepared for the City of Staunton. Draper Aden Associates assumes no liability for reuse or modification of this document.
- 8.) Property lines shown hereon are compiled from record information and are for reference only. A boundary survey was not performed with this topographic survey.
- 9.) Draper Aden Associates provides benchmarks for the construction of the improvements shown on these plans. All other existing elevations are for reference to existing conditions only. Do not use spot elevations, finish floor elevations, elevations on manholes, elevations on survey nails, survey hubs, control points (horizontal points provided) or any other points for construction other than the provided benchmarks. Failure to utilize and verify the provided benchmarks could result in damages and additional cost that are the contractor's responsibility.
- 10.) The site shown hereon appears to be situated within a Floodway, Floodplain Zone X (Unshaded), and Zone AE per FEMA Community Panel 5105C0339E with an original date of September 28, 2007 and revised January 6, 2010.

LEGEND

Property Line	Rod Found	Electric Box
-1000- Contour	Monument Found	Guy Pole
Gas Line	Telephone Pedestal	Electric Marker
Overhead Power	Telephone Manhole	Electrical Manhole
Sanitary Sewer and Manhole	Telephone Box	Utility Pole
Storm Line and Manhole	Fire Hydrant	Electric Transformer
Storm Line and Inlet	Water Valve	Ground Light
Underground Cable TV	Water Meter	Light Pole
Underground Electric	Well	Fiber Optic Pedestal
Underground Telephone	Benchmark	Fiber Optic Handhole
Underground Fiber Optic	Bollard	Gas Vent
Unknown Utility	Sign (1-post)	Gas Valve
Waterline	Sign (2-post)	Gas Meter
Asphalt	1561.3 Spot Elevation	Sewer Clean Out
Building	Deciduous Tree	Wood Post
Fence (as noted)	Evergreen Tree	Metal Post
Stream	Shrub	Traffic Pole
Treeline	Concrete	Gravel
Guy Wire	Roof Drain	Gas Test Station



Draper Aden Associates
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Charlottesville, VA
110 Avon Street
Charlottesville, VA 22902
434-295-0700 Fax: 434-295-2105
www.daa.com

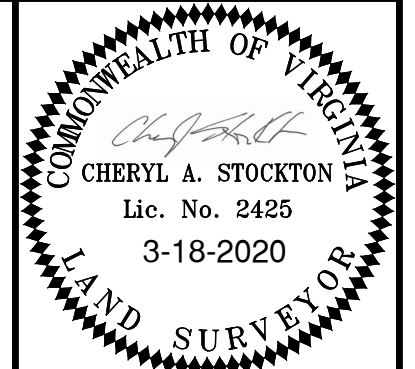
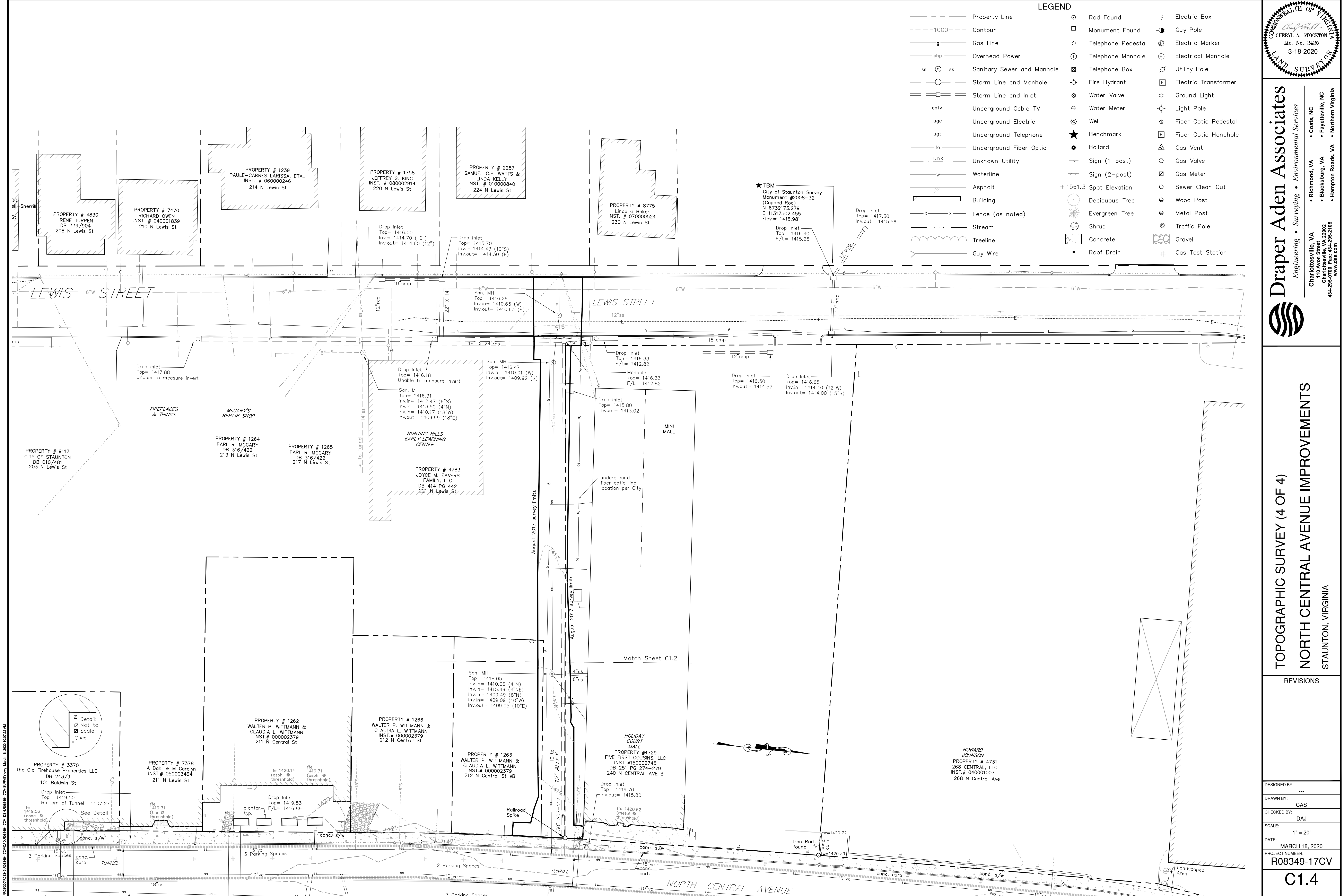
Richmond, VA
Coats, NC
Fayetteville, NC
Blacksburg, VA
Hampton Roads, VA
Northern Virginia

TOPOGRAPHIC SURVEY (1 OF 4)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS

DESIGNED BY:	---
DRAWN BY:	CAS
CHECKED BY:	DAJ
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C1.1



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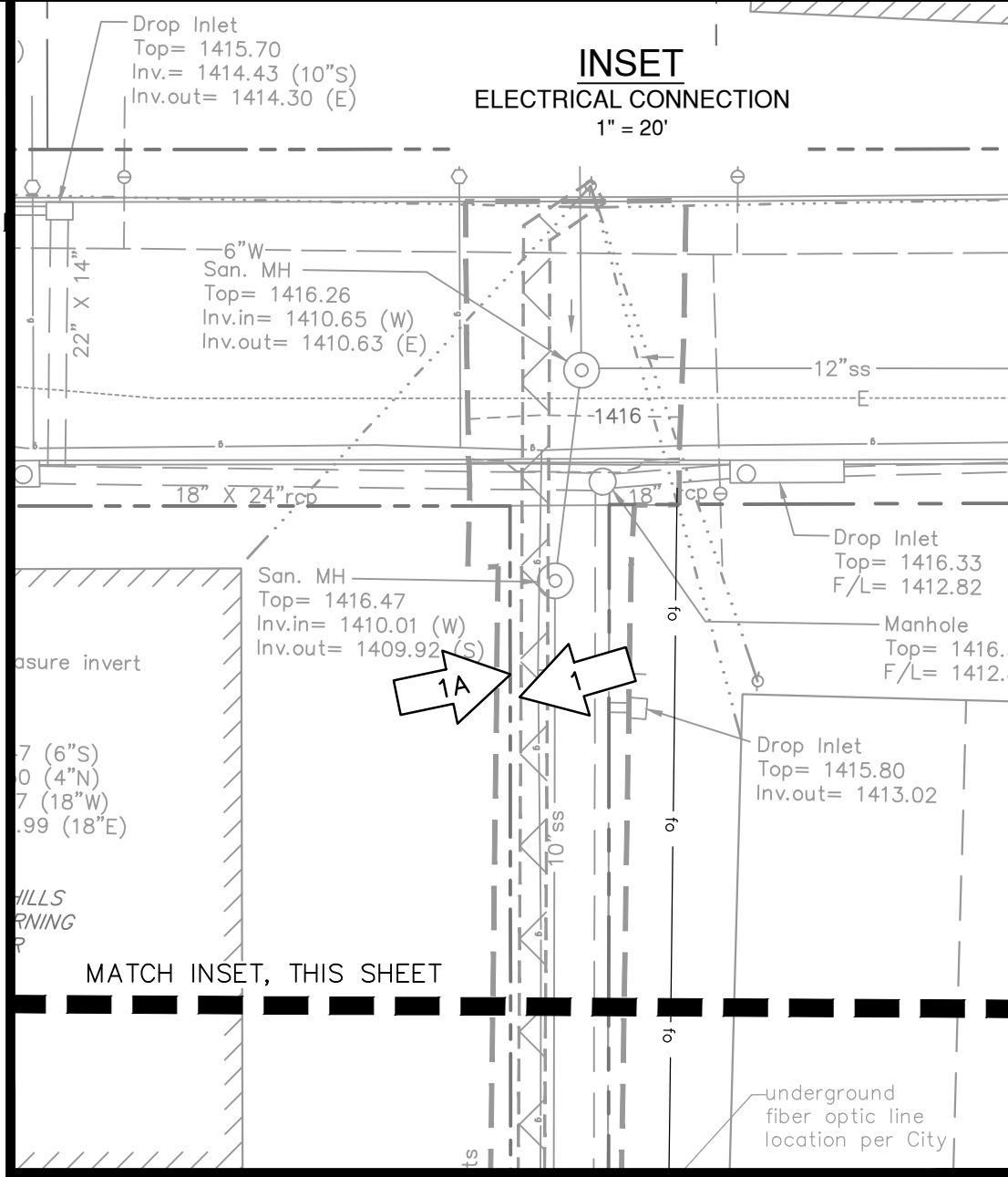
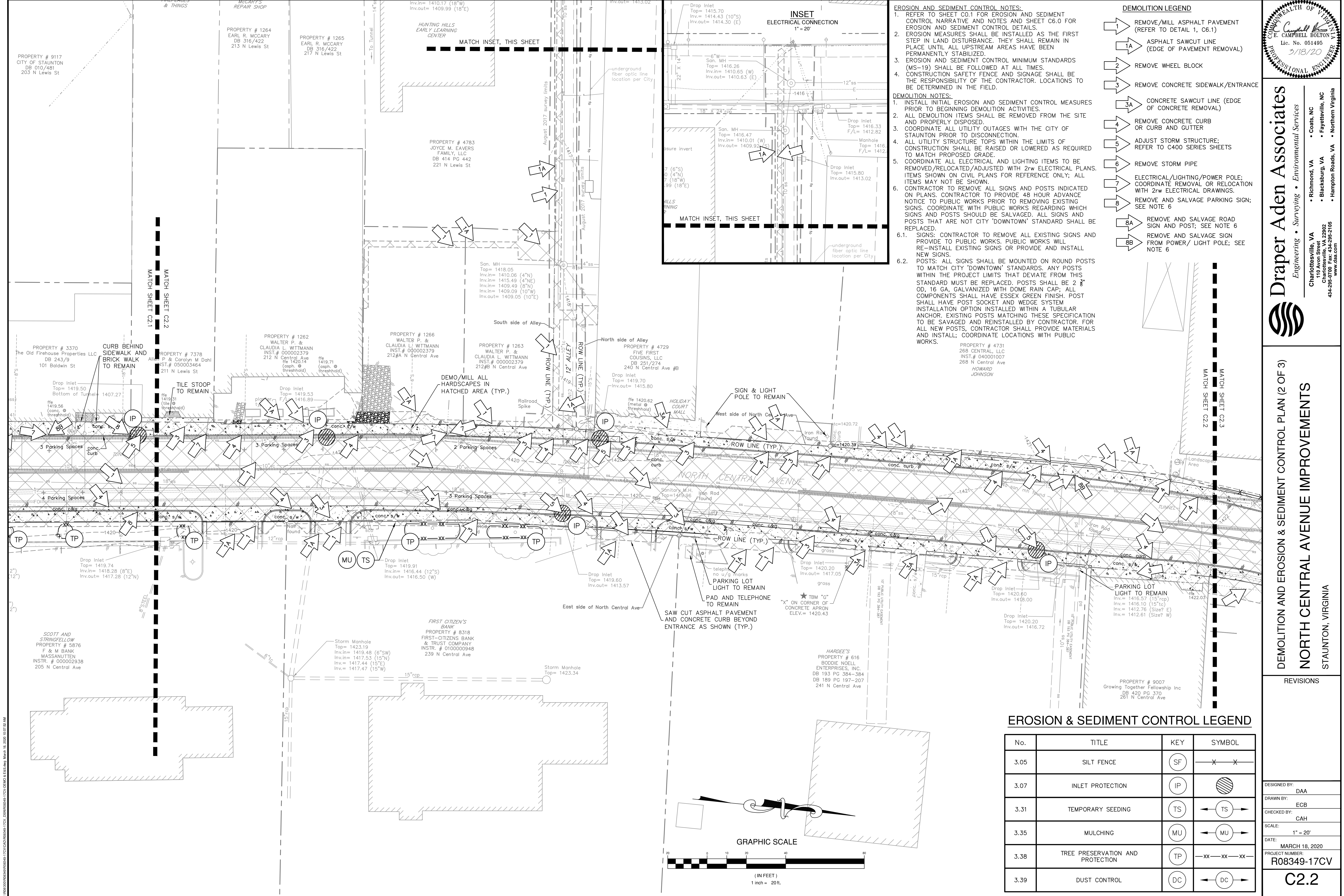
- Coats, NC
- Richmond, VA
- Blacksburg, VA
- Hampton Roads, VA
- Fayetteville, NC
- Northern Virginia

TOPOGRAPHIC SURVEY (4 OF 4)

NORTH CENTRAL AVENUE IMPROVEMENTS

STAUNTON, VIRGINIA

REVISIONS	
DESIGNED BY:	---
DRAWN BY:	CAS
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SCALE:	1" = 20'
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C1.4	



- EROSION AND SEDIMENT CONTROL NOTES:**
1. REFER TO SHEET C0.1 FOR EROSION AND SEDIMENT CONTROL NARRATIVE AND NOTES AND SHEET C6.0 FOR EROSION AND SEDIMENT CONTROL DETAILS.
 2. EROSION MEASURES SHALL BE INSTALLED AS THE FIRST STEP IN LAND DISTURBANCE. THEY SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.
 3. EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS (MS-19) SHALL BE FOLLOWED AT ALL TIMES.
 4. CONSTRUCTION SAFETY FENCE AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. LOCATIONS TO BE DETERMINED IN THE FIELD.
- DEMOLITION NOTES:**
1. INSTALL INITIAL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO BEGINNING DEMOLITION ACTIVITIES.
 2. ALL DEMOLITION ITEMS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
 3. COORDINATE ALL UTILITY OUTAGES WITH THE CITY OF STAUNTON PRIOR TO DISCONNECTION.
 4. ALL UTILITY STRUCTURE TOPS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RAISED OR LOWERED AS REQUIRED TO MATCH PROPOSED GRADE.
 5. REMOVE/RELOCATED/ADJUSTED WITH 2" W ELECTRICAL PLANS. ITEMS SHOWN ON CIVIL PLANS FOR REFERENCE ONLY; ALL ITEMS MAY NOT BE SHOWN.
 6. CONTRACTOR TO REMOVE ALL SIGNS AND POSTS INDICATED ON PLANS. CONTRACTOR TO PROVIDE 48 HOUR ADVANCE NOTICE TO PUBLIC WORKS PRIOR TO REMOVING EXISTING SIGNS. COORDINATE WITH PUBLIC WORKS REGARDING WHICH SIGNS AND POSTS SHOULD BE SALVAGED. ALL SIGNS AND POSTS THAT ARE NOT CITY 'DOWNTOWN' STANDARD SHALL BE REPLACED.
 - 6.1. SIGNS: CONTRACTOR TO REMOVE ALL EXISTING SIGNS AND PROVIDE TO PUBLIC WORKS. PUBLIC WORKS WILL RE-INSTALL EXISTING SIGNS OR PROVIDE AND INSTALL NEW SIGNS.
 - 6.2. POSTS: ALL SIGNS SHALL BE MOUNTED ON ROUND POSTS TO MATCH CITY 'DOWNTOWN' STANDARDS. ANY POSTS WITHIN THE PROJECT LIMITS THAT DEVIATE FROM THIS STANDARD MUST BE REPLACED. POSTS SHALL BE 2" OD, 16 GA, GALVANIZED WITH DOME RAIN CAP; ALL COMPONENTS SHALL HAVE ESSEX GREEN FINISH. POST SHALL HAVE POST SOCKET AND WEDGE SYSTEM INSTALLATION OPTION INSTALLED WITHIN A TUBULAR ANCHOR. EXISTING POSTS MATCHING THESE SPECIFICATION TO BE SALVAGED AND REINSTALLED BY CONTRACTOR. FOR ALL NEW POSTS, CONTRACTOR SHALL PROVIDE MATERIALS AND INSTALL; COORDINATE LOCATIONS WITH PUBLIC WORKS.
- DEMOLITION LEGEND**
- 1 REMOVE/MILL ASPHALT PAVEMENT (REFER TO DETAIL 1, C6.1)
 - 1A ASPHALT SAWCUT LINE (EDGE OF PAVEMENT REMOVAL)
 - 2 REMOVE WHEEL BLOCK
 - 3 REMOVE CONCRETE SIDEWALK/ENTRANCE
 - 3A CONCRETE SAWCUT LINE (EDGE OF CONCRETE REMOVAL)
 - 4 REMOVE CONCRETE CURB OR CURB AND GUTTER
 - 5 ADJUST STORM STRUCTURE; REFER TO C400 SERIES SHEETS
 - 6 REMOVE STORM PIPE
 - 7 ELECTRICAL/LIGHTING/POWER POLE; COORDINATE REMOVAL OR RELOCATION WITH 2" W ELECTRICAL DRAWINGS.
 - 8 REMOVE AND SALVAGE PARKING SIGN; SEE NOTE 6
 - 8A REMOVE AND SALVAGE ROAD SIGN AND POST; SEE NOTE 6
 - 8B REMOVE AND SALVAGE SIGN FROM POWER/ LIGHT POLE; SEE NOTE 6

EROSION & SEDIMENT CONTROL LEGEND

No.	TITLE	KEY	SYMBOL
3.05	SILT FENCE	SF	— X — X —
3.07	INLET PROTECTION	IP	
3.31	TEMPORARY SEEDING	TS	← TS →
3.35	MULCHING	MU	← MU →
3.38	TREE PRESERVATION AND PROTECTION	TP	— XX — XX — XX —
3.39	DUST CONTROL	DC	← DC →

COMMONWEALTH OF VIRGINIA
C. CAMPBELL BOLTON
Lic. No. 051495
3/18/20
PROFESSIONAL ENGINEER

Draper Aden Associates
Engineering • Surveying • Environmental Services
Charlottesville, VA
110 Avon Street
Charlottesville, VA 22902
434-995-0700 Fax: 434-295-2105
www.daa.com

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DESIGNED BY: DAA
DRAWN BY: ECB
CHECKED BY: CAH
SCALE: 1" = 20'
DATE: MARCH 18, 2020
PROJECT NUMBER: R08349-17CV

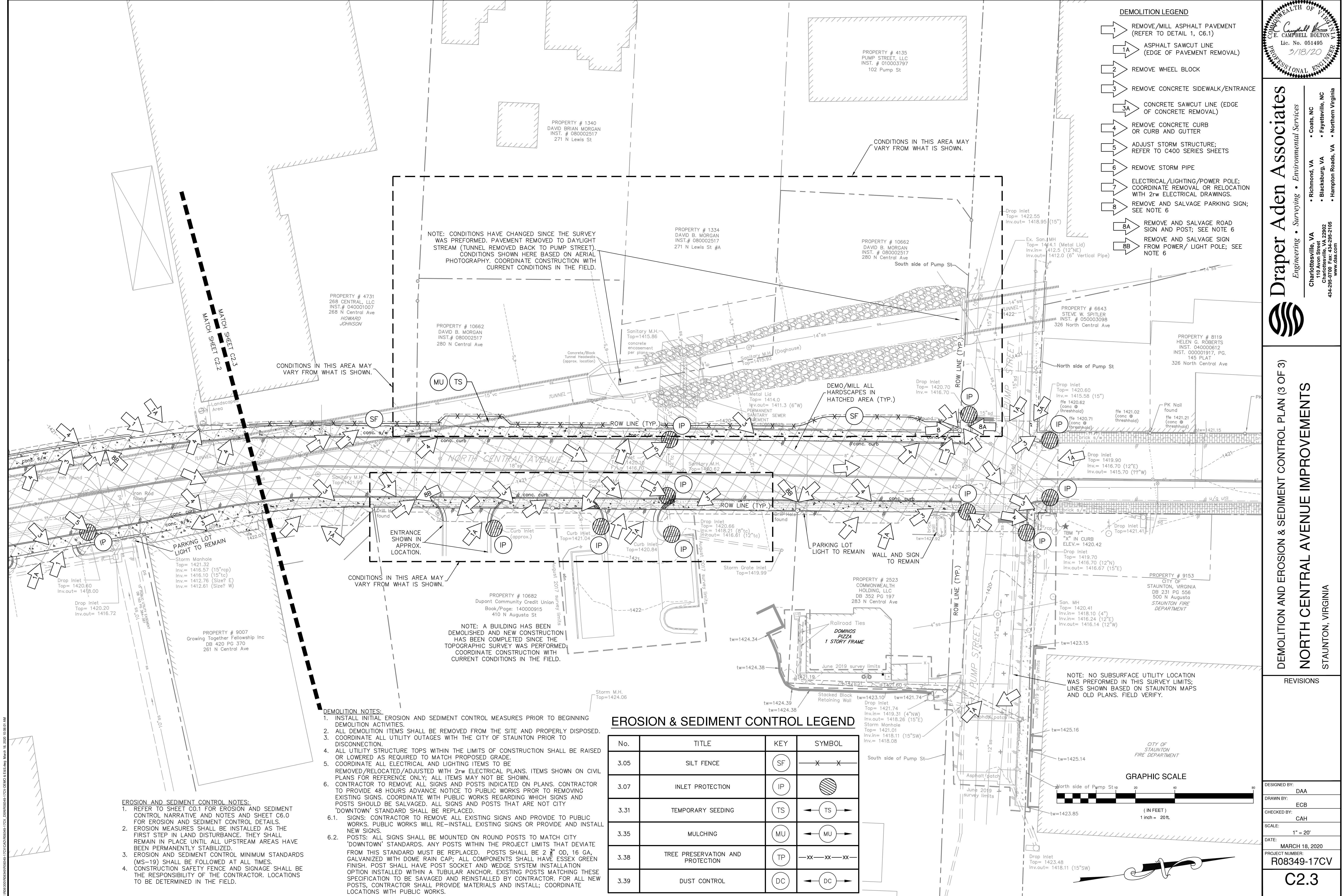
DEMOLITION AND EROSION & SEDIMENT CONTROL PLAN (2 OF 3)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS

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C2.2

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DEMOLITION LEGEND

- 1 REMOVE/MILL ASPHALT PAVEMENT (REFER TO DETAIL 1, C6.1)
- 1A ASPHALT SAWCUT LINE (EDGE OF PAVEMENT REMOVAL)
- 2 REMOVE WHEEL BLOCK
- 3 REMOVE CONCRETE SIDEWALK/ENTRANCE
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- 8 REMOVE AND SALVAGE PARKING SIGN; SEE NOTE 6
- 8A REMOVE AND SALVAGE ROAD SIGN AND POST; SEE NOTE 6
- 8B REMOVE AND SALVAGE SIGN FROM POWER/ LIGHT POLE; SEE NOTE 6

EROSION & SEDIMENT CONTROL LEGEND

No.	TITLE	KEY	SYMBOL
3.05	SILT FENCE	SF	X X
3.07	INLET PROTECTION	IP	Circle with diagonal lines
3.31	TEMPORARY SEEDING	TS	Circle with horizontal lines
3.35	MULCHING	MU	Circle with vertical lines
3.38	TREE PRESERVATION AND PROTECTION	TP	XX XX XX
3.39	DUST CONTROL	DC	Circle with crosshairs

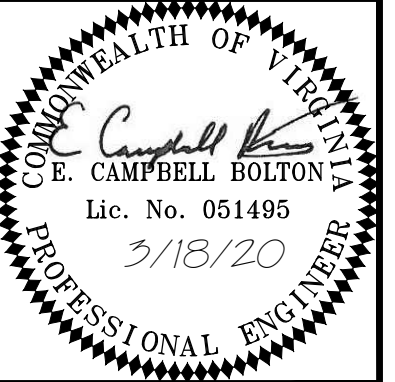
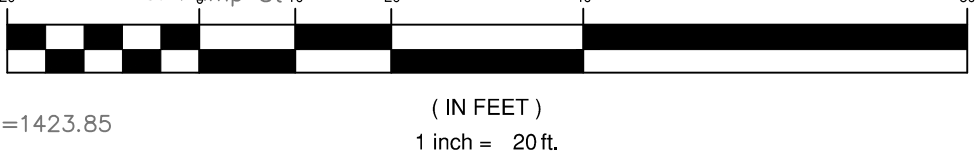
EROSION AND SEDIMENT CONTROL NOTES:

- REFER TO SHEET C0.1 FOR EROSION AND SEDIMENT CONTROL NARRATIVE AND NOTES AND SHEET C6.0 FOR EROSION AND SEDIMENT CONTROL DETAILS.
- EROSION MEASURES SHALL BE INSTALLED AS THE FIRST STEP IN LAND DISTURBANCE. THEY SHALL REMAIN IN PLACE UNTIL ALL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.
- EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS (MS-19) SHALL BE FOLLOWED AT ALL TIMES.
- CONSTRUCTION SAFETY FENCE AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. LOCATIONS TO BE DETERMINED IN THE FIELD.

DEMOLITION NOTES:

- INSTALL INITIAL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO BEGINNING DEMOLITION ACTIVITIES.
- ALL DEMOLITION ITEMS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- COORDINATE ALL UTILITY OUTAGES WITH THE CITY OF STAUNTON PRIOR TO DISCONNECTION.
- ALL UTILITY STRUCTURE TOPS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE RAISED OR LOWERED AS REQUIRED TO MATCH PROPOSED GRADE.
- COORDINATE ALL ELECTRICAL AND LIGHTING ITEMS TO BE REMOVED/RELOCATED/ADJUSTED WITH 2rw ELECTRICAL PLANS. ITEMS SHOWN ON CIVIL PLANS FOR REFERENCE ONLY; ALL ITEMS MAY NOT BE SHOWN.
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GRAPHIC SCALE



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- 110 Avon Street
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DEMOLITION AND EROSION & SEDIMENT CONTROL PLAN (3 OF 3)

NORTH CENTRAL AVENUE IMPROVEMENTS

STAUNTON, VIRGINIA

REVISIONS

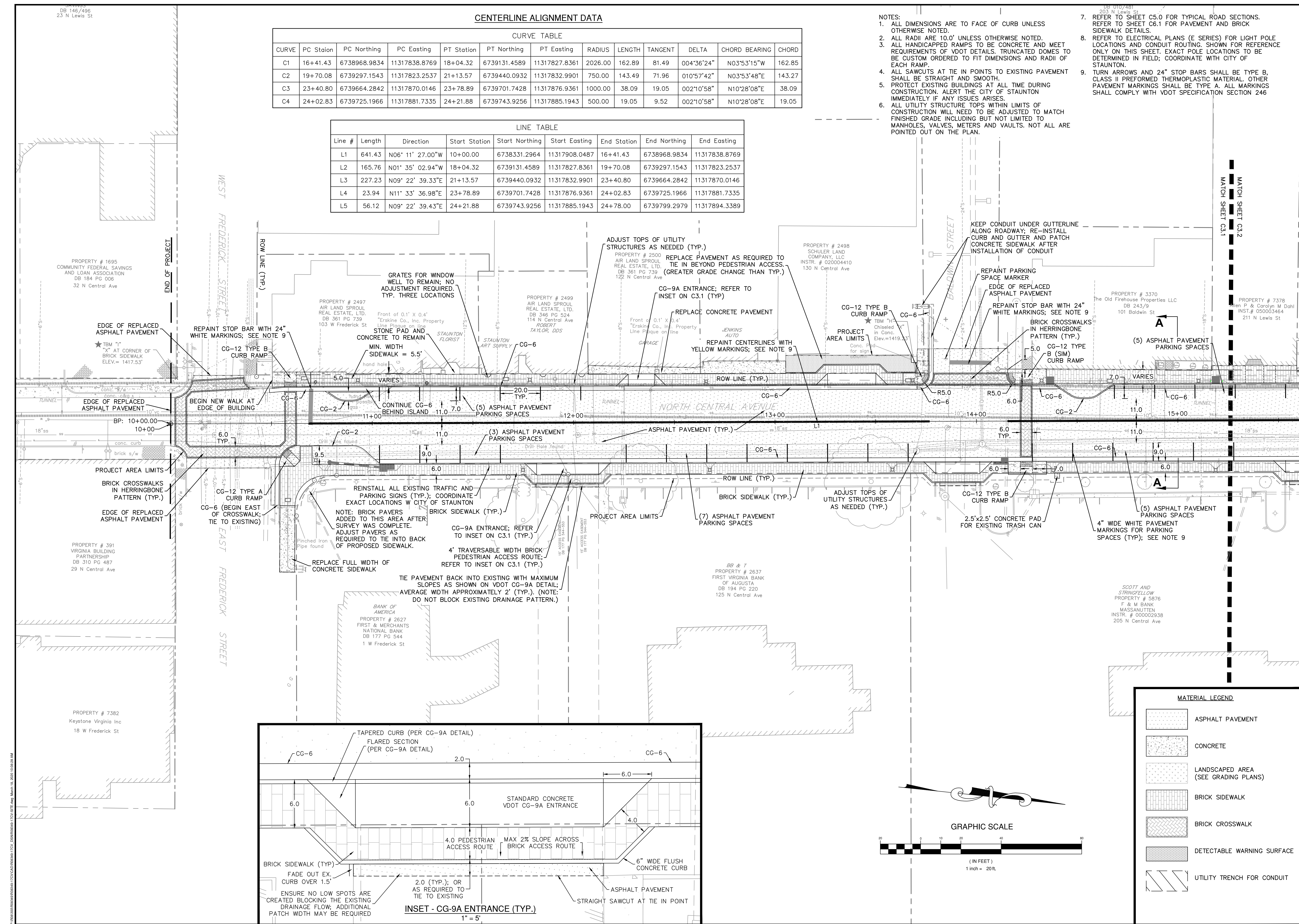
DESIGNED BY: DAA
DRAWN BY: ECB
CHECKED BY: CAH
SCALE: 1" = 20'
DATE: MARCH 18, 2020
PROJECT NUMBER: R08349-17CV

C2.3

CENTERLINE ALIGNMENT DATA												
CURVE TABLE												
CURVE	PC Station	PC Northing	PC Easting	PT Station	PT Northing	PT Easting	RADIUS	LENGTH	TANGENT	DELTA	CHORD BEARING	CHORD
C1	16+41.43	6738968.9834	11317838.8769	18+04.32	6739131.4589	11317827.8361	2026.00	162.89	81.49	004°36'24"	N03°53'15"W	162.85
C2	19+70.08	6739297.1543	11317823.2537	21+13.57	6739440.0932	11317832.9901	750.00	143.49	71.96	010°57'42"	N03°53'48"E	143.27
C3	23+40.80	6739664.2842	11317870.0146	23+78.89	6739701.7428	11317876.9361	1000.00	38.09	19.05	002°10'58"	N10°28'08"E	38.09
C4	24+02.83	6739725.1966	11317881.7335	24+21.88	6739743.9256	11317885.1943	500.00	19.05	9.52	002°10'58"	N10°28'08"E	19.05

LINE TABLE									
Line #	Length	Direction	Start Station	Start Northing	Start Easting	End Station	End Northing	End Easting	
L1	641.43	N06° 11' 27.00"W	10+00.00	6738331.2964	11317908.0487	16+41.43	6738968.9834	11317838.8769	
L2	165.76	N01° 35' 02.94"W	18+04.32	6739131.4589	11317827.8361	19+70.08	6739297.1543	11317823.2537	
L3	227.23	N09° 22' 39.33"E	21+13.57	6739440.0932	11317832.9901	23+40.80	6739664.2842	11317870.0146	
L4	23.94	N11° 33' 36.98"E	23+78.89	6739701.7428	11317876.9361	24+02.83	6739725.1966	11317881.7335	
L5	56.12	N09° 22' 39.43"E	24+21.88	6739743.9256	11317885.1943	24+78.00	6739799.2979	11317894.3389	

- NOTES:
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL RADII ARE 10.0' UNLESS OTHERWISE NOTED.
 3. ALL HANDICAPPED RAMPS TO BE CONCRETE AND MEET REQUIREMENTS OF VDOT DETAILS. TRUNCATED DOMES TO BE CUSTOM ORDERED TO FIT DIMENSIONS AND RADI OF EACH RAMP.
 4. ALL SAWCUTS AT TIE IN POINTS TO EXISTING PAVEMENT SHALL BE STRAIGHT AND SMOOTH.
 5. PROTECT EXISTING BUILDINGS AT ALL TIME DURING CONSTRUCTION. ALERT THE CITY OF STAUNTON IMMEDIATELY IF ANY ISSUES ARISES.
 6. ALL UTILITY STRUCTURE TOPS WITHIN LIMITS OF CONSTRUCTION WILL NEED TO BE ADJUSTED TO MATCH FINISHED GRADE INCLUDING BUT NOT LIMITED TO MANHOLES, VALVES, METERS AND VAULTS. NOT ALL ARE POINTED OUT ON THE PLAN.
 7. REFER TO SHEET C5.0 FOR TYPICAL ROAD SECTIONS. REFER TO SHEET C6.1 FOR PAVEMENT AND BRICK SIDEWALK DETAILS.
 8. REFER TO ELECTRICAL PLANS (E SERIES) FOR LIGHT POLE LOCATIONS AND CONDUIT ROUTING. SHOWN FOR REFERENCE ONLY ON THIS SHEET. EXACT POLE LOCATIONS TO BE DETERMINED IN FIELD; COORDINATE WITH CITY OF STAUNTON.
 9. TURN ARROWS AND 24" STOP BARS SHALL BE TYPE B, CLASS II PREFORMED THERMOPLASTIC MATERIAL. OTHER PAVEMENT MARKINGS SHALL BE TYPE A. ALL MARKINGS SHALL COMPLY WITH VDOT SPECIFICATION SECTION 246



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434-955-0700 Fax: 434-295-2105
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SITE AND UTILITY PLAN (1 OF 3)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

DESIGNED BY: DAA
DRAWN BY: ECB
CHECKED BY: CAH
SCALE: 1" = 20'
DATE: MARCH 18, 2020
PROJECT NUMBER: R08349-17CV

REVISIONS

1	ASPHALT PAVEMENT
2	CONCRETE
3	LANDSCAPED AREA (SEE GRADING PLANS)
4	BRICK SIDEWALK
5	BRICK CROSSWALK
6	DETECTABLE WARNING SURFACE
7	UTILITY TRENCH FOR CONDUIT

C3.1

SITE AND UTILITY PLAN (2 OF 3)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS

SIGNED BY: DA

AWN BY:

HECKED BY:

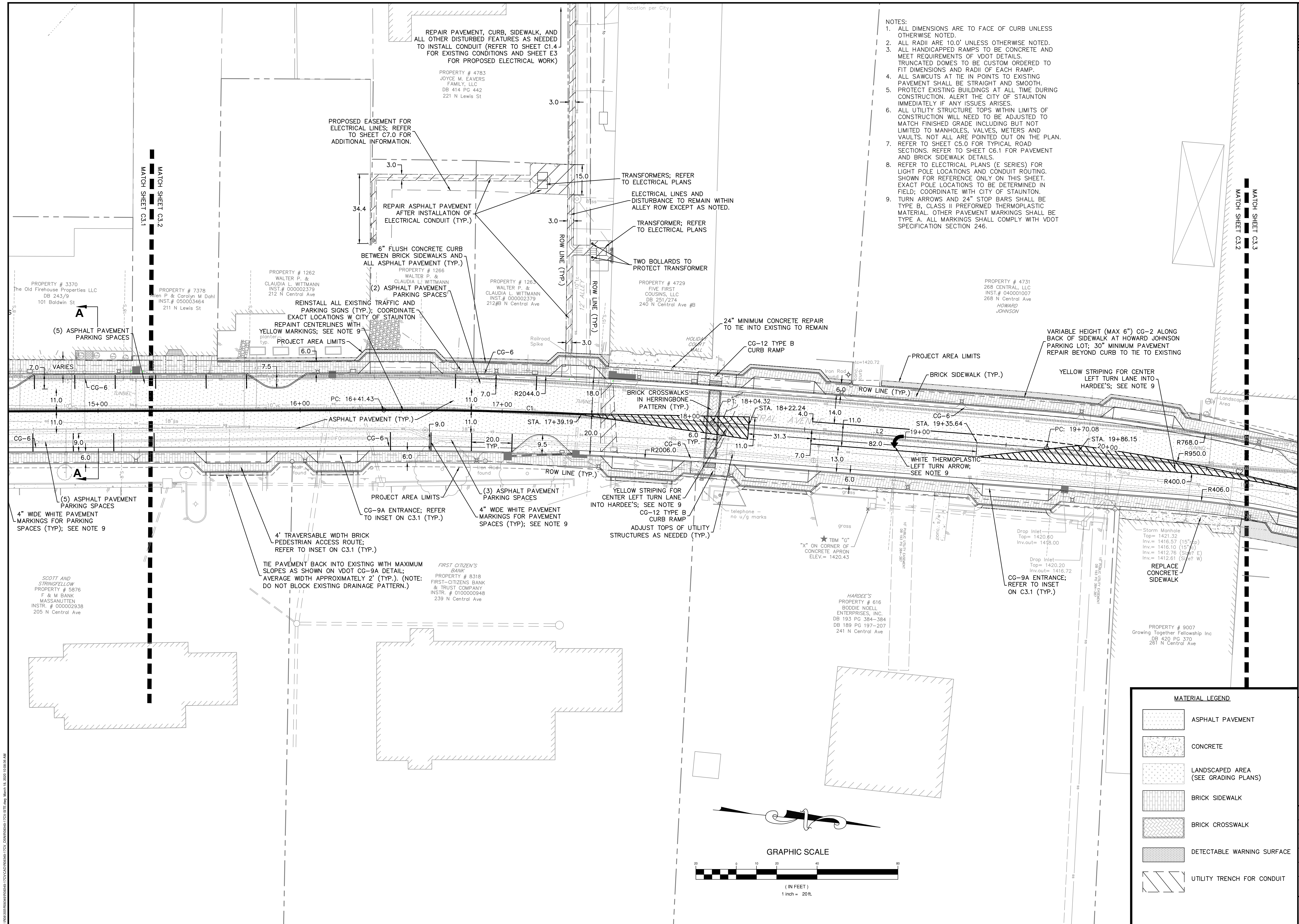
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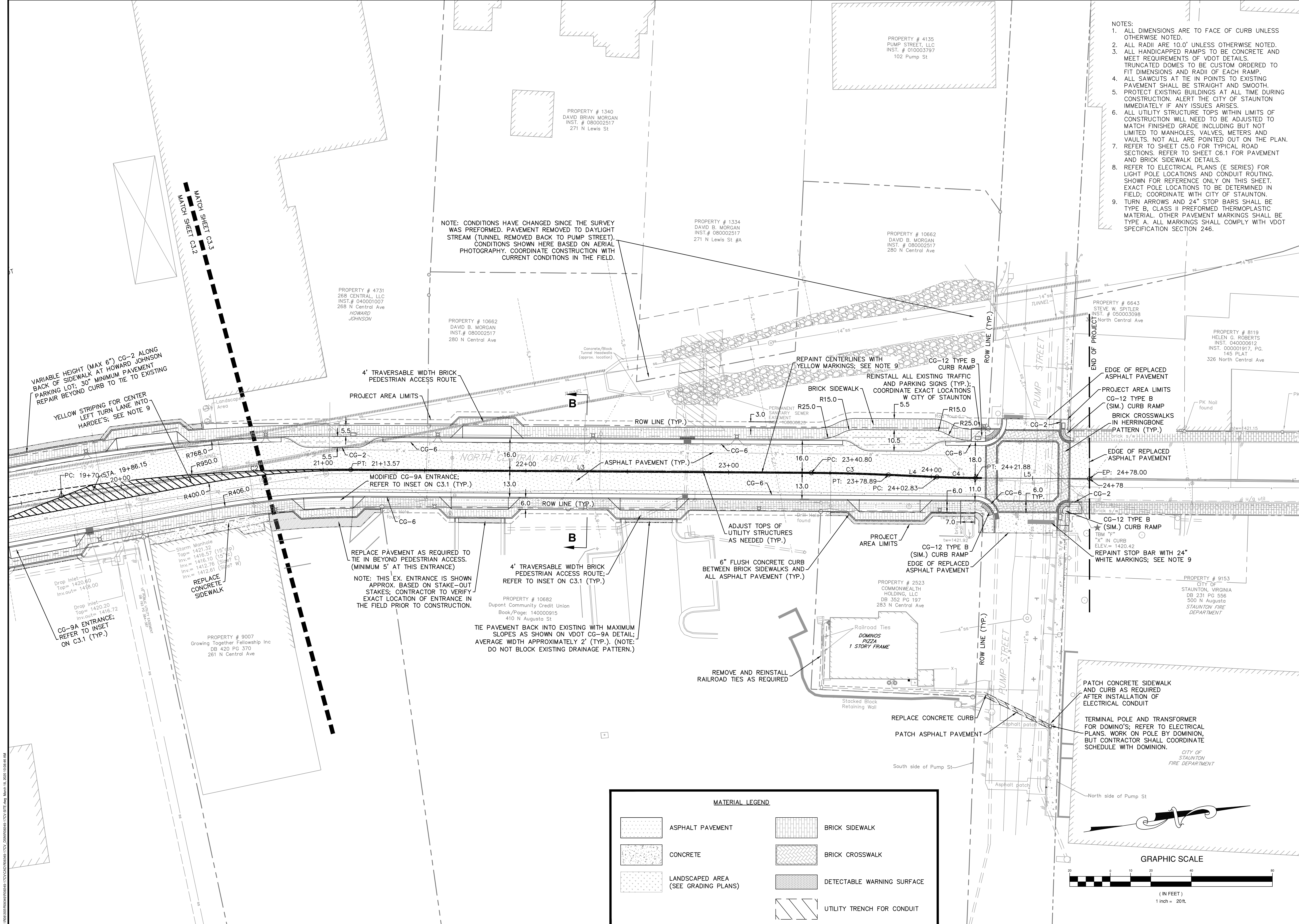
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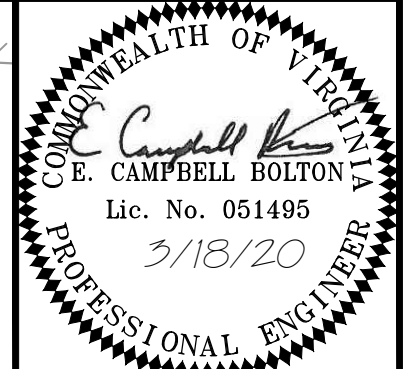
R08349

C3.2





- NOTES:
1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 2. ALL RADI ARE 10.0' UNLESS OTHERWISE NOTED.
 3. ALL HANDICAPPED RAMPS TO BE CONCRETE AND MEET REQUIREMENTS OF VDOT DETAILS. TRUNCATED DOMES TO BE CUSTOM ORDERED TO FIT DIMENSIONS AND RADII OF EACH RAMP.
 4. ALL SAWCUTS AT TIE IN POINTS TO EXISTING PAVEMENT SHALL BE STRAIGHT AND SMOOTH.
 5. PROTECT EXISTING BUILDINGS AT ALL TIME DURING CONSTRUCTION. ALERT THE CITY OF STAUNTON IMMEDIATELY IF ANY ISSUES ARISES.
 6. ALL UTILITY STRUCTURE TOPS WITHIN LIMITS OF CONSTRUCTION WILL NEED TO BE ADJUSTED TO MATCH FINISHED GRADE INCLUDING BUT NOT LIMITED TO MANHOLES, VALVES, METERS AND VAULTS. NOT ALL ARE POINTED OUT ON THE PLAN.
 7. REFER TO SHEET C5.0 FOR TYPICAL ROAD SECTIONS. REFER TO SHEET C6.1 FOR PAVEMENT AND BRICK SIDEWALK DETAILS.
 8. REFER TO ELECTRICAL PLANS (E SERIES) FOR LIGHT POLE LOCATIONS AND CONDUIT ROUTING. SHOWN FOR REFERENCE ONLY ON THIS SHEET. EXACT POLE LOCATIONS TO BE DETERMINED IN FIELD; COORDINATE WITH CITY OF STAUNTON.
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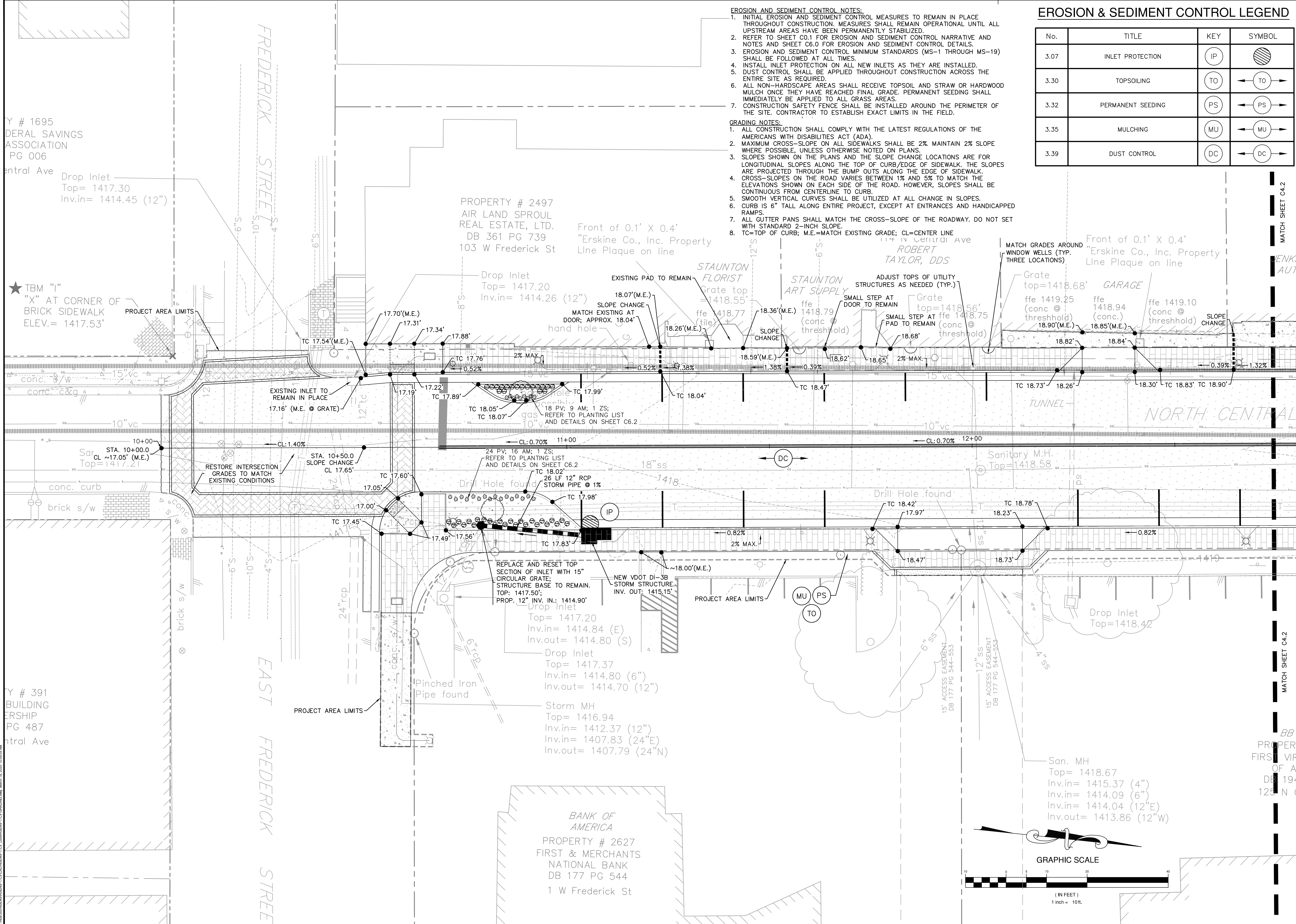
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SITE AND UTILITY PLAN (3 OF 3)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS	
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C3.3	



- EROSION AND SEDIMENT CONTROL NOTES:**
1. INITIAL EROSION AND SEDIMENT CONTROL MEASURES TO REMAIN IN PLACE THROUGHOUT CONSTRUCTION. MEASURES SHALL REMAIN OPERATIONAL UNTIL ALL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.
 2. REFER TO SHEET C0.1 FOR EROSION AND SEDIMENT CONTROL NARRATIVE AND NOTES AND SHEET C6.0 FOR EROSION AND SEDIMENT CONTROL DETAILS.
 3. EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS (MS-1 THROUGH MS-19) SHALL BE FOLLOWED AT ALL TIMES.
 4. INSTALL INLET PROTECTION ON ALL NEW INLETS AS THEY ARE INSTALLED.
 5. DUST CONTROL SHALL BE APPLIED THROUGHOUT CONSTRUCTION ACROSS THE ENTIRE SITE AS REQUIRED.
 6. ALL NON-HARDSCAPE AREAS SHALL RECEIVE TOPSOIL AND STRAW OR HARDWOOD MULCH ONCE THEY HAVE REACHED FINAL GRADE. PERMANENT SEEDING SHALL IMMEDIATELY BE APPLIED TO ALL GRASS AREAS.
 7. CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE. CONTRACTOR TO ESTABLISH EXACT LIMITS IN THE FIELD.

- GRADING NOTES:**
1. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
 2. MAXIMUM CROSS-SLOPE ON ALL SIDEWALKS SHALL BE 2%. MAINTAIN 2% SLOPE WHERE POSSIBLE, UNLESS OTHERWISE NOTED ON PLANS.
 3. SLOPES SHOWN ON THE PLANS AND THE SLOPE CHANGE LOCATIONS ARE FOR LONGITUDINAL SLOPES ALONG THE TOP OF CURB/EDGE OF SIDEWALK. THE SLOPES ARE PROJECTED THROUGH THE BUMP OUTS ALONG THE EDGE OF SIDEWALK.
 4. CROSS-SLOPES ON THE ROAD VARIES BETWEEN 1% AND 5% TO MATCH THE ELEVATIONS SHOWN ON EACH SIDE OF THE ROAD. HOWEVER, SLOPES SHALL BE CONTINUOUS FROM CENTERLINE TO CURB.
 5. SMOOTH VERTICAL CURVES SHALL BE UTILIZED AT ALL CHANGE IN SLOPES.
 6. CURB IS 6" TALL ALONG ENTIRE PROJECT, EXCEPT AT ENTRANCES AND HANDICAPPED RAMPS.
 7. ALL GUTTER PANS SHALL MATCH THE CROSS-SLOPE OF THE ROADWAY. DO NOT SET WITH STANDARD 2-INCH SLOPE.
 8. TC=TOP OF CURB; M.E.=MATCH EXISTING GRADE; CL=CENTER LINE

EROSION & SEDIMENT CONTROL LEGEND

No.	TITLE	KEY	SYMBOL
3.07	INLET PROTECTION	IP	
3.30	TOPSOILING	TO	
3.32	PERMANENT SEEDING	PS	
3.35	MULCHING	MU	
3.39	DUST CONTROL	DC	



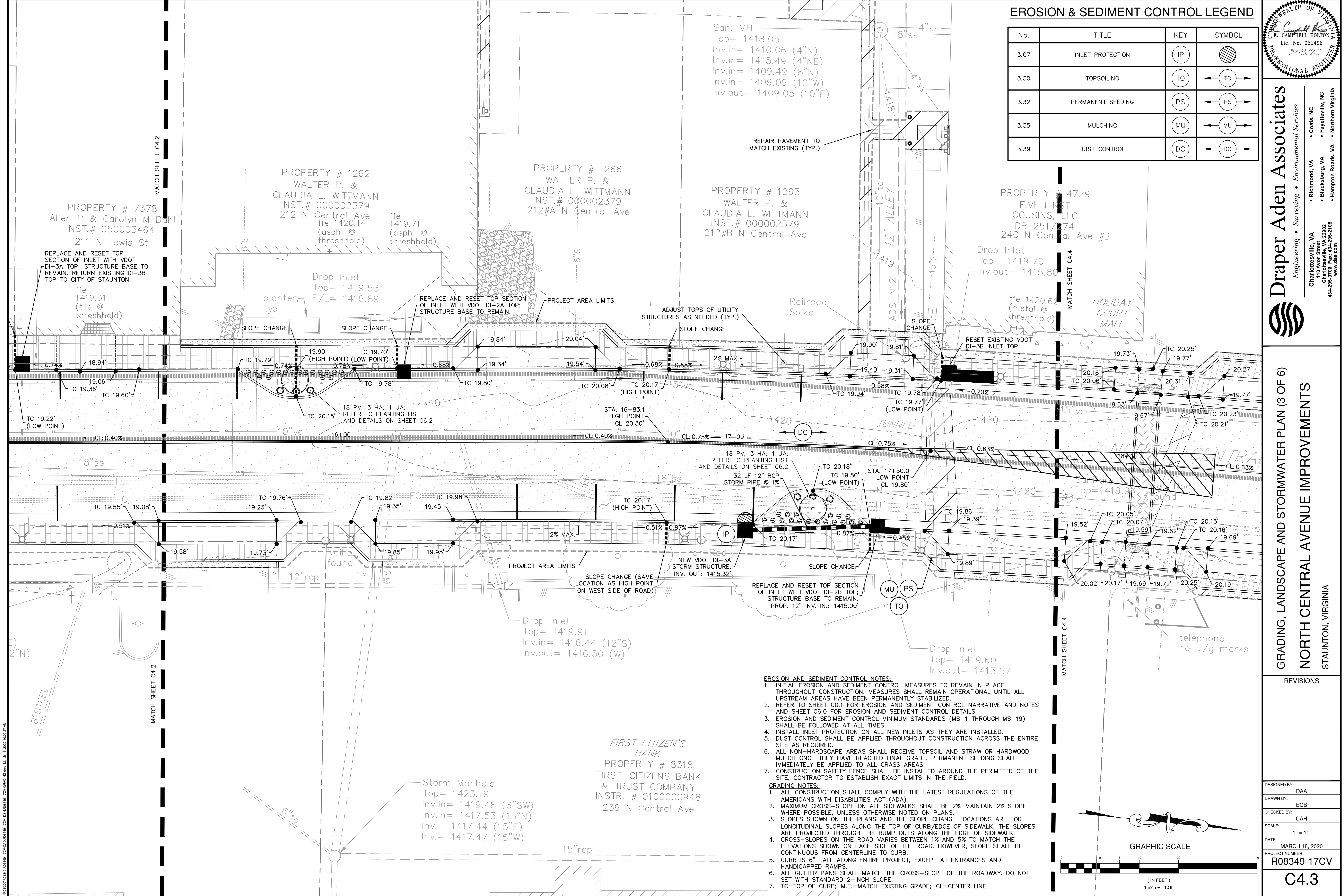
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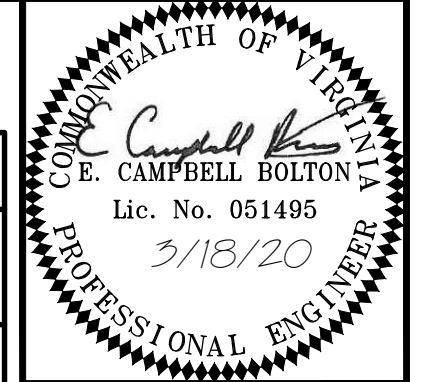
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GRADING, LANDSCAPE AND STORMWATER PLAN (1 OF 6)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS	
DESIGNED BY:	DAA
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CHECKED BY:	CAH
SCALE:	1" = 10'
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C4.1	



EROSION & SEDIMENT CONTROL LEGEND			
No.	TITLE	KEY	SYMBOL
3.07	INLET PROTECTION	IP	
3.30	TOPSOILING	TO	
3.32	PERMANENT SEEDING	PS	
3.35	MULCHING	MU	
3.39	DUST CONTROL	DC	



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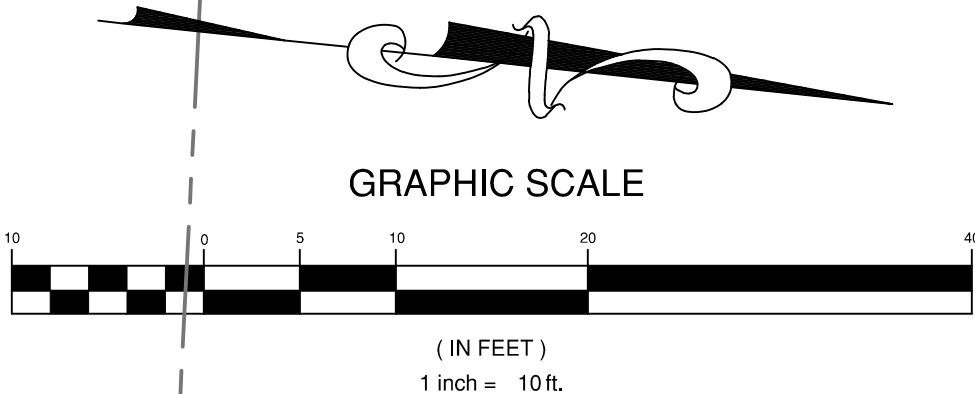
GRADING, LANDSCAPE AND STORMWATER PLAN (3 OF 6)

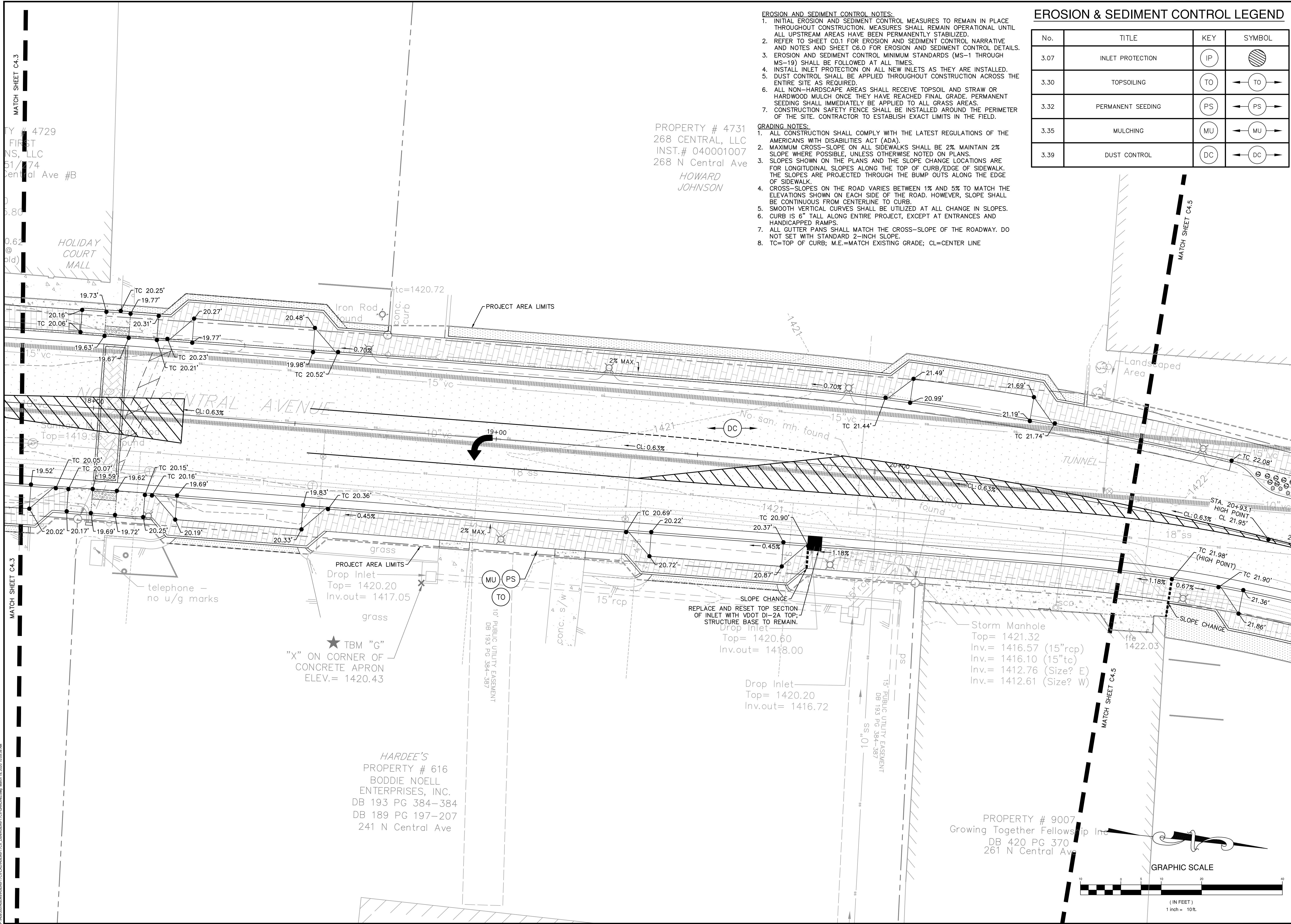
NORTH CENTRAL AVENUE IMPROVEMENTS

STAUNTON, VIRGINIA

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C4.3	

- EROSION AND SEDIMENT CONTROL NOTES:**
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 - ALL NON-HARDSCAPE AREAS SHALL RECEIVE TOPSOIL AND STRAW OR HARDWOOD MULCH ONCE THEY HAVE REACHED FINAL GRADE. PERMANENT SEEDING SHALL IMMEDIATELY BE APPLIED TO ALL GRASS AREAS.
 - CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE. CONTRACTOR TO ESTABLISH EXACT LIMITS IN THE FIELD.
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- ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
 - MAXIMUM CROSS-SLOPE ON ALL SIDEWALKS SHALL BE 2%. MAINTAIN 2% SLOPE WHERE POSSIBLE, UNLESS OTHERWISE NOTED ON PLANS.
 - SLOPES SHOWN ON THE PLANS AND THE SLOPE CHANGE LOCATIONS ARE FOR LONGITUDINAL SLOPES ALONG THE TOP OF CURB/EDGE OF SIDEWALK. THE SLOPES ARE PROJECTED THROUGH THE BUMP OUTS ALONG THE EDGE OF SIDEWALK. CROSS-SLOPES ON THE ROAD VARY BETWEEN 1% AND 5% TO MATCH THE ELEVATIONS SHOWN ON EACH SIDE OF THE ROAD. HOWEVER, SLOPE SHALL BE CONTINUOUS FROM CENTERLINE TO CURB.
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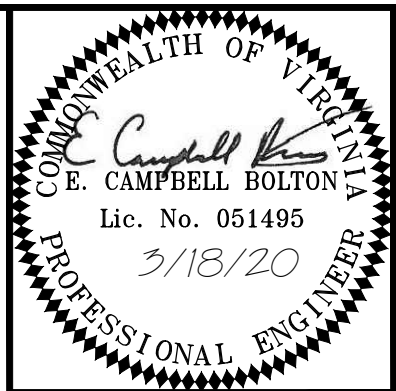


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- GRADING NOTES:**
1. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
 2. MAXIMUM CROSS-SLOPE ON ALL SIDEWALKS SHALL BE 2%. MAINTAIN 2% SLOPE WHERE POSSIBLE, UNLESS OTHERWISE NOTED ON PLANS.
 3. SLOPES SHOWN ON THE PLANS AND THE SLOPE CHANGE LOCATIONS ARE FOR LONGITUDINAL SLOPES ALONG THE TOP OF CURB/EDGE OF SIDEWALK. THE SLOPES ARE PROJECTED THROUGH THE BUMP OUTS ALONG THE EDGE OF SIDEWALK.
 4. CROSS-SLOPES ON THE ROAD VARIES BETWEEN 1% AND 5% TO MATCH THE ELEVATIONS SHOWN ON EACH SIDE OF THE ROAD. HOWEVER, SLOPE SHALL BE CONTINUOUS FROM CENTERLINE TO CURB.
 5. SMOOTH VERTICAL CURVES SHALL BE UTILIZED AT ALL CHANGE IN SLOPES.
 6. CURB IS 6" TALL ALONG ENTIRE PROJECT, EXCEPT AT ENTRANCES AND HANDICAPPED RAMPS.
 7. ALL GUTTER PANS SHALL MATCH THE CROSS-SLOPE OF THE ROADWAY. DO NOT SET WITH STANDARD 2-INCH SLOPE.
 8. TC=TOP OF CURB; M.E.=MATCH EXISTING GRADE; CL=CENTER LINE

EROSION & SEDIMENT CONTROL LEGEND

No.	TITLE	KEY	SYMBOL
3.07	INLET PROTECTION	IP	
3.30	TOPSOILING	TO	
3.32	PERMANENT SEEDING	PS	
3.35	MULCHING	MU	
3.39	DUST CONTROL	DC	



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Charlottesville, VA 22902
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GRADING, LANDSCAPE AND STORMWATER PLAN (4 OF 6)
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS

DESIGNED BY:	DAA
DRAWN BY:	ECB
CHECKED BY:	CAH
SCALE:	1" = 10'
DATE:	MARCH 18, 2020
PROJECT NUMBER:	R08349-17CV

C4.4

PROPERTY # 4731
268 CENTRAL, LLC
INST.# 040001007
268 N Central Ave
HOWARD
JOHNSON

PROPERTY # 10662
DAVID B. MORGAN
INST.# 080002517
280 N Central Ave

PROPERTY # 10682
Dupont Community Credit Union
Book/Page: 140000915
410 N Augusta St

PROPERTY # 9007
Living Together Fellowship Inc
DB 420 PG 370
261 N Central Ave

- EROSION AND SEDIMENT CONTROL NOTES:
1. INITIAL EROSION AND SEDIMENT CONTROL MEASURES TO REMAIN IN PLACE THROUGHOUT CONSTRUCTION. MEASURES SHALL REMAIN OPERATIONAL UNTIL ALL UPSTREAM AREAS HAVE BEEN PERMANENTLY STABILIZED.
 2. REFER TO SHEET C0.1 FOR EROSION AND SEDIMENT CONTROL NARRATIVE AND NOTES AND SHEET C6.0 FOR EROSION AND SEDIMENT CONTROL DETAILS.
 3. EROSION AND SEDIMENT CONTROL MINIMUM STANDARDS (MS-1 THROUGH MS-19) SHALL BE FOLLOWED AT ALL TIMES.
 4. INSTALL INLET PROTECTION ON ALL NEW INLETS AS THEY ARE INSTALLED.
 5. DUST CONTROL SHALL BE APPLIED THROUGHOUT CONSTRUCTION ACROSS THE ENTIRE SITE AS REQUIRED.
 6. ALL NON-HARDSCAPE AREAS SHALL RECEIVE TOPSOIL AND STRAW OR HARDWOOD MULCH ONCE THEY HAVE REACHED FINAL GRADE. PERMANENT SEEDING SHALL IMMEDIATELY BE APPLIED TO ALL GRASS AREAS.
 7. CONSTRUCTION SAFETY FENCE SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE. CONTRACTOR TO ESTABLISH EXACT LIMITS IN THE FIELD.
- GRADING NOTES:
1. ALL CONSTRUCTION SHALL COMPLY WITH THE LATEST REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA).
 2. MAXIMUM CROSS-SLOPE ON ALL SIDEWALKS SHALL BE 2%. MAINTAIN 2% SLOPE WHERE POSSIBLE, UNLESS OTHERWISE NOTED ON PLANS.
 3. SLOPES SHOWN ON THE PLANS AND THE SLOPE CHANGE LOCATIONS ARE FOR LONGITUDINAL SLOPES ALONG THE TOP OF CURB/EDGE OF SIDEWALK. THE SLOPES ARE PROJECTED THROUGH THE BUMP OUTS ALONG THE EDGE OF SIDEWALK.
 4. CROSS-SLOPES ON THE ROAD VARIES BETWEEN 1% AND 5% TO MATCH THE ELEVATIONS SHOWN ON EACH SIDE OF THE ROAD. HOWEVER, SLOPE SHALL BE CONTINUOUS FROM CENTERLINE TO CURB.
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EROSION & SEDIMENT CONTROL LEGEND

No.	TITLE	KEY	SYMBOL
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3.30	TOPSOILING	TO	
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GRADING, LANDSCAPE AND STORMWATER PLAN (5 OF 6)

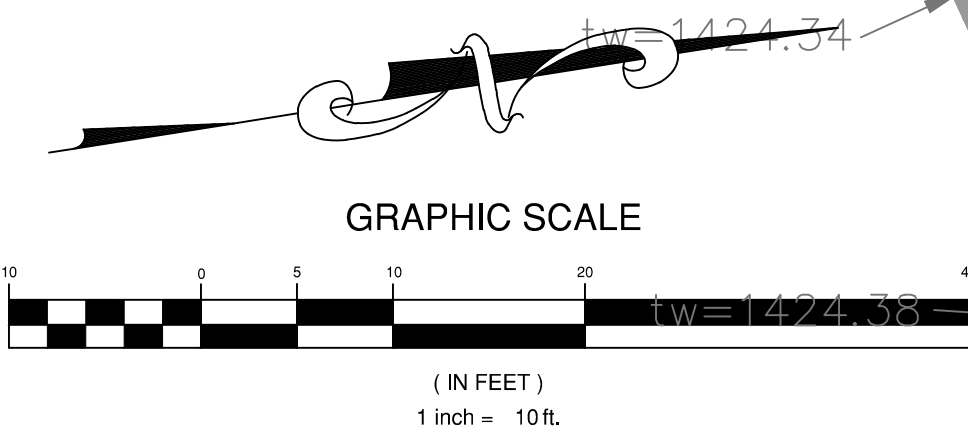
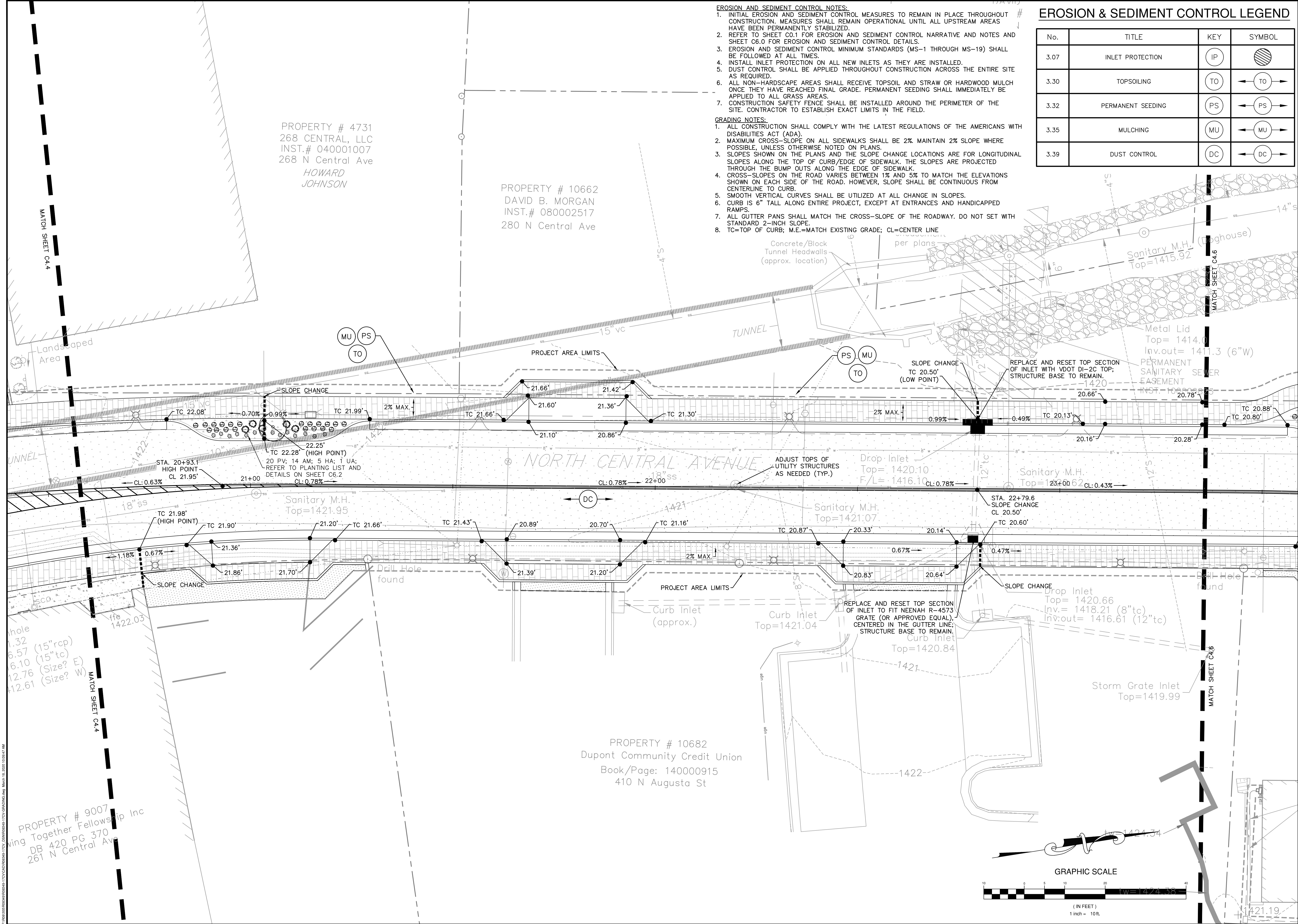
NORTH CENTRAL AVENUE IMPROVEMENTS

STAUNTON, VIRGINIA

REVISIONS

DESIGNED BY: DAA
DRAWN BY: ECB
CHECKED BY: CAH
SCALE: 1" = 10'
DATE: MARCH 18, 2020
PROJECT NUMBER: R08349-17CV

C4.5





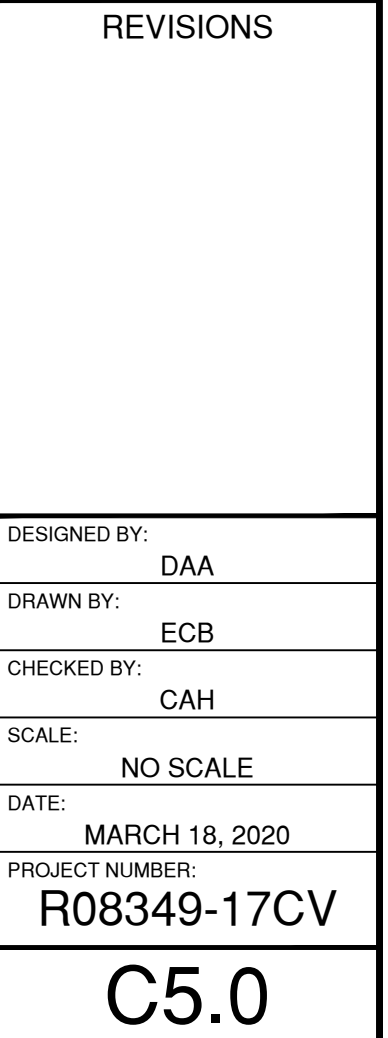
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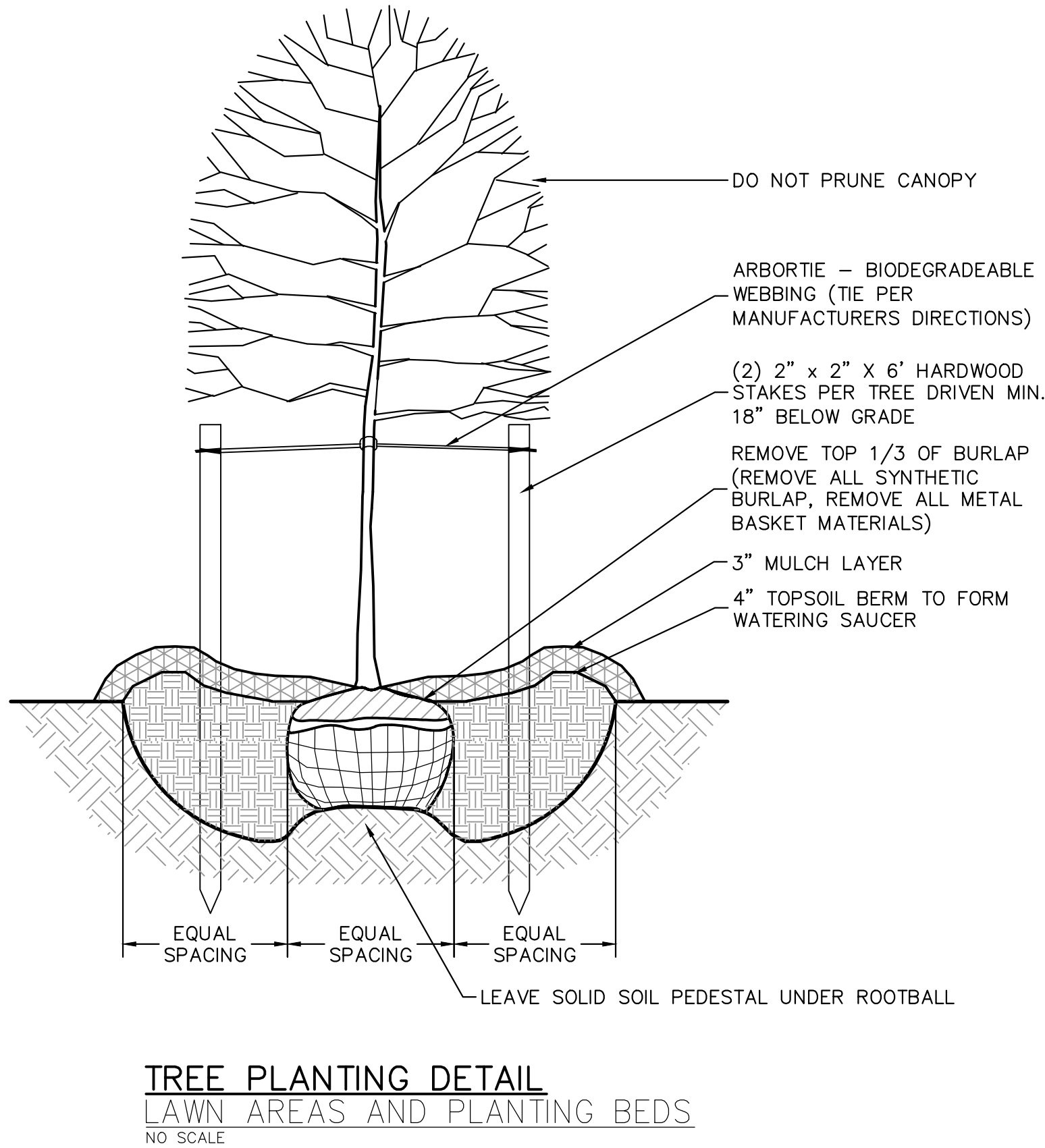
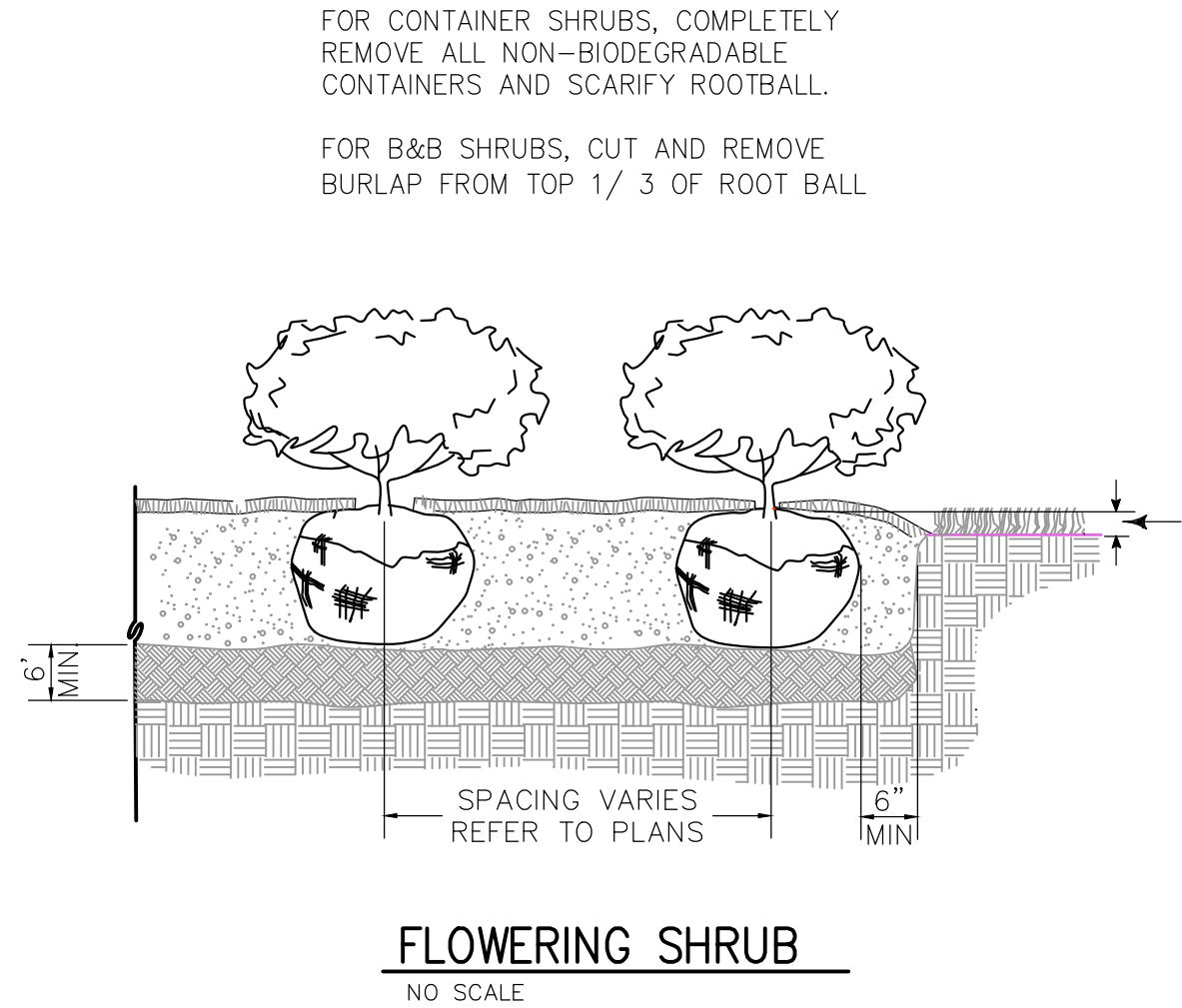
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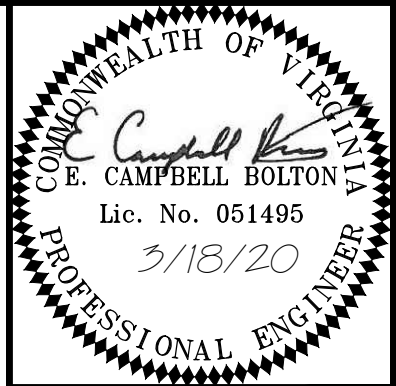
NOTES

PLANTING AND LANDSCAPE SPECIFICATIONS:

- ALL TREES SHALL BE PLANTED IN GOOD CONDITION AND MEET 'AMERICAN STANDARD FOR NURSERY STOCK' (1990), ANSI Z60.1-1990, AS MAY BE AMENDED.
- ALL TREES OF THE SAME SPECIES SHALL BE UNIFORM IN SIZE AND STRUCTURE AND SHALL COME FROM THE SAME SOURCE.
- THE PLANTING OF TREES SHALL BE DONE IN ACCORDANCE WITH THE STANDARDIZED LANDSCAPE SPECIFICATION JOINTLY ADOPTED BY THE VA NURSERYMAN'S ASSOCIATION AND THE VA SOCIETY OF LANDSCAPE DESIGNERS.
- REFER TO DRAWINGS FOR VARIETIES, LAYOUT, AND SPACING OF PLANT MATERIALS. HAVE TREE LOCATIONS STAKED AND GROUNDCOVER BEDS PREPARED AND SPRAY-PAINT OUTLINED ON THE GROUND FOR APPROVAL BY OWNER'S REPRESENTATIVE PRIOR TO PLANT INSTALLATION. QUANTITIES SHOWN ON DRAWINGS SHALL TAKE PRECEDENCE OVER QUANTITIES SHOWN ON THE PLANT LIST. FIELD ADJUSTMENTS NECESSARY TO WORK AROUND UNKNOWN UTILITIES MAY BE REQUIRED.
- ALL PLANT MATERIALS MUST BE APPROVED AND INSPECTED BY OWNER'S REPRESENTATIVE AND ACCEPTED PRIOR TO INSTALLATION. NOTIFY OWNER'S REPRESENTATIVE 48 HOURS PRIOR TO ARRIVAL TO SITE.
- PLANTING TIMING: UNLESS OTHERWISE SHOWN ON THE PLANS OR DIRECTED BY THE OWNER'S REPRESENTATIVE, THE PLANTING SHALL BE DONE DURING THE FOLLOWING SEASONS FOR ALL TREES, SHRUBS, AND GROUNDCOVERS:
 - SEPTEMBER 15 TO DECEMBER 1 OR MARCH 1 TO MAY 1.
 - PLANTING AT OTHER DATES WILL BE SUBJECT TO APPROVAL BY THE OWNER'S REPRESENTATIVE AND MAY REQUIRE SPECIAL PROCEDURES.
- ALL DISTURBED AREAS NOT OTHERWISE TREATED, ARE TO BE SEEDD AS SPECIFIED.
- MOVE AND LIFT TREES, SHRUBS, AND PLANTS BY THE ROOTBALL ONLY AND NEVER BY THE TRUNK OR STALK.
- IF SYNTHETIC OR METAL WRAPPING IS USED ON ANY ROOTBALL, REMOVE IT ENTIRELY BEFORE PLANTING. METAL CAGES MUST ALSO BE REMOVED ENTIRELY FROM THE ROOTBALL.
- CUT, TRIM AND REMOVE THE TOP 6"-9" OF NATURAL BURLAP WRAPPING FROM ROOTBALL PRIOR TO FINAL PLANTING SOIL BACKFILLING.
- WATERING OF PLANTS: WATERING IS TO PROVIDE VIGOROUS PLANT GROWTH AND SHALL BE SUFFICIENT TO MAINTAIN MOISTURE IN THE ENTIRE ROOT ZONE.
 - WATERING OF PLANT MATERIAL SHALL OCCUR IMMEDIATELY AFTER PLANTING AND WITHIN IN 24 HOURS OF INSTALLATION. THE FIRST WATERING SHALL FLOOD THE PLANTING HOLE TO REMOVE AIR POCKETS AND SATURATE THE SOIL.
 - WATERING SHALL CONTINUE EACH DAY FOR ONE WEEK FROM INSTALLATION AT A RATE OF 2 GALLONS PER INCH TREE CALIPER.
 - AFTER THE FIRST WEEK OF WATERING, WATERING SHALL CONTINUE ON A WEEKLY BASIS UNTIL PLANTS ARE FULLY ESTABLISHED. WEEKLY WATERING SHALL BE AT A RATE OF 2 GALLONS PER INCH OF TREE CALIPER.
- ALL PLANTS SHALL BE GUARANTEED TO REMAIN ALIVE AND HEALTHY FOR A PERIOD OF ONE YEAR BEGINNING FROM THE DATE OF INSPECTION BY THE OWNER'S REPRESENTATIVE AND A WRITTEN FIELD REPORT STATING OWNER ACCEPTANCE FOR PLANTS THAT MEET QUALITY STANDARDS, PLANTING SPECIFICATIONS, PROPER LAYOUT PLACEMENT, AND EXHIBIT A HEALTHY VIGOROUS GROWTH.
 - PLANTS THAT ARE EXHIBITING 25 PERCENT OR MORE DEAD GROWTH OR DO NOT MEET THE PLANT MATERIAL QUALITY SPECIFICATIONS SHALL BE REPLACED IMMEDIATELY OR UPON THE NEXT PLANTING SEASON WHICHEVER IS SOONER.
 - NEW PLANTS, REQUIREMENTS, ETC. AND METHOD OF PLACING SHALL COMPLY WITH THESE SPECIFICATIONS AND DRAWINGS. PLANTS REPLACING DEAD PLANTS SHALL RECEIVE THE SAME CARE AND MEET SPECIFICATIONS.
 - WARRANTY SHALL BE LIMITED TO ONE REPLACEMENT PER PLANT.
 - CONFORMANCE OF PLANTING LAYOUT TO PLANTING PLAN MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. PLANTS NOT PROPERLY LOCATED AS SHOWN ON THE PLANTING PLAN SHALL BE REPLANTED TO THE PROPER LOCATION AT THE EXPENSE OF THE CONTRACTOR.
- PLANTING HOLE SHALL BE 3 TIMES LARGER THAN THE SIZE OF THE ROOT BALL DIAMETER. SCARIFY BOTTOM AND EDGES OF PLANTING PIT SUFFICIENTLY TO ALLOW BONDING OF THE PLANTING SOIL AND EXISTING SOIL.
- ALL PLANTS SHALL BE MULCHED WITH A 3" MULCH LAYER WITHIN 24 HOURS OF PLANTING. MULCH SHALL BE DOUBLE-SHREDDED HARDWOOD BARK MULCH AND SHALL COVER THE PLANTING BED ENTIRELY, EXCEPT FOR A ONE INCH CLEAR SPACE AROUND THE TRUNK SHALL REMAIN FREE FROM MULCH.
- WATERING BERM: CONSTRUCT A 4" MIN. SOIL BERM AROUND EVERY TREE PLANTING, SAUCERS WILL BE ESTABLISHED AT PLANTING TO HOLD WATERING, SAUCERS ARE TO BE MAINTAINED UNTIL PLANTS ARE FULLY ESTABLISHED, 2 YEARS.
- TREE STAKING SHALL BE REQUIRED FOR PLANTS TALLER THAN 6 FEET AND WITH A TREE CALIPER GREATER THAN 1". USE TWO 3" DIA. OR 2"x2" WOOD STAKES, 6'-0" LENGTH. STAKES SHALL BE PLACED A MIN. OF 18" INTO ADJACENT GROUND. TREE GUYS SHALL BE "ARBORTIE", A UV DEGRADABLE NYLON WEBBING AND INSTALLED PER MANUFACTURERS RECOMMENDATIONS.
- ALL PLANTING AREAS (TREE PITS AND PLANTING BEDS) SHALL BE PROVIDED WITH STRUCTURAL SOIL MIX.

Tree Planting List

Sym.	Key	Qty.	Botanical Name	Common Name	Size/Condition
TREES					
	ZS	4	Zelkova Serrata	Musashino	2.5" Cal.
	UA	3	Ulmus americana	New Harmony American Elm	2.5" Cal.
SHRUBS					
	PV	146	Panicum Virgatum	Shenandoah Switch Grass	1 Gal. Pot
	AM	66	Achillea millefolium	Desert Eve Terracotta	1 Gal. Pot
	HA	16	Hydrangea arborescens	Annabelle Hydrangea	3 Gal. Pot



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Charlottesville, VA
110 Avon Street
Charlottesville, VA 22902
434-995-0700 Fax: 434-295-2105
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PLANTING LIST AND DETAILS
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS

DESIGNED BY:

DAA

DRAWN BY:

ECB

CHECKED BY:

CAH

SCALE:

NO SCALE

DATE:

MARCH 18, 2020

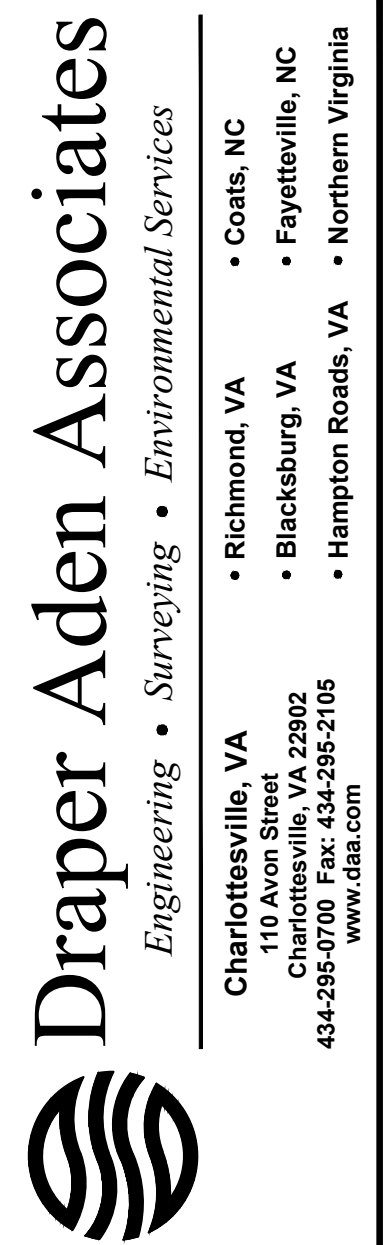
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C6.2



COMMONWEALTH OF VIRGINIA
E. Campbell Bolton
 E. CAMPBELL BOLTON
 Lic. No. 051495
 3/18/20
 PROFESSIONAL ENGINEER



EASEMENT LINE INFORMATION

DESIGNED BY:	DA A
DRAWN BY:	ECB
CHECKED BY:	CAH
SCALE:	1" = 10'
DATE:	MARCH 18, 2020
PROJECT NUMBER:	R08349-17CV
	C7.0

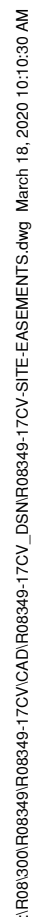
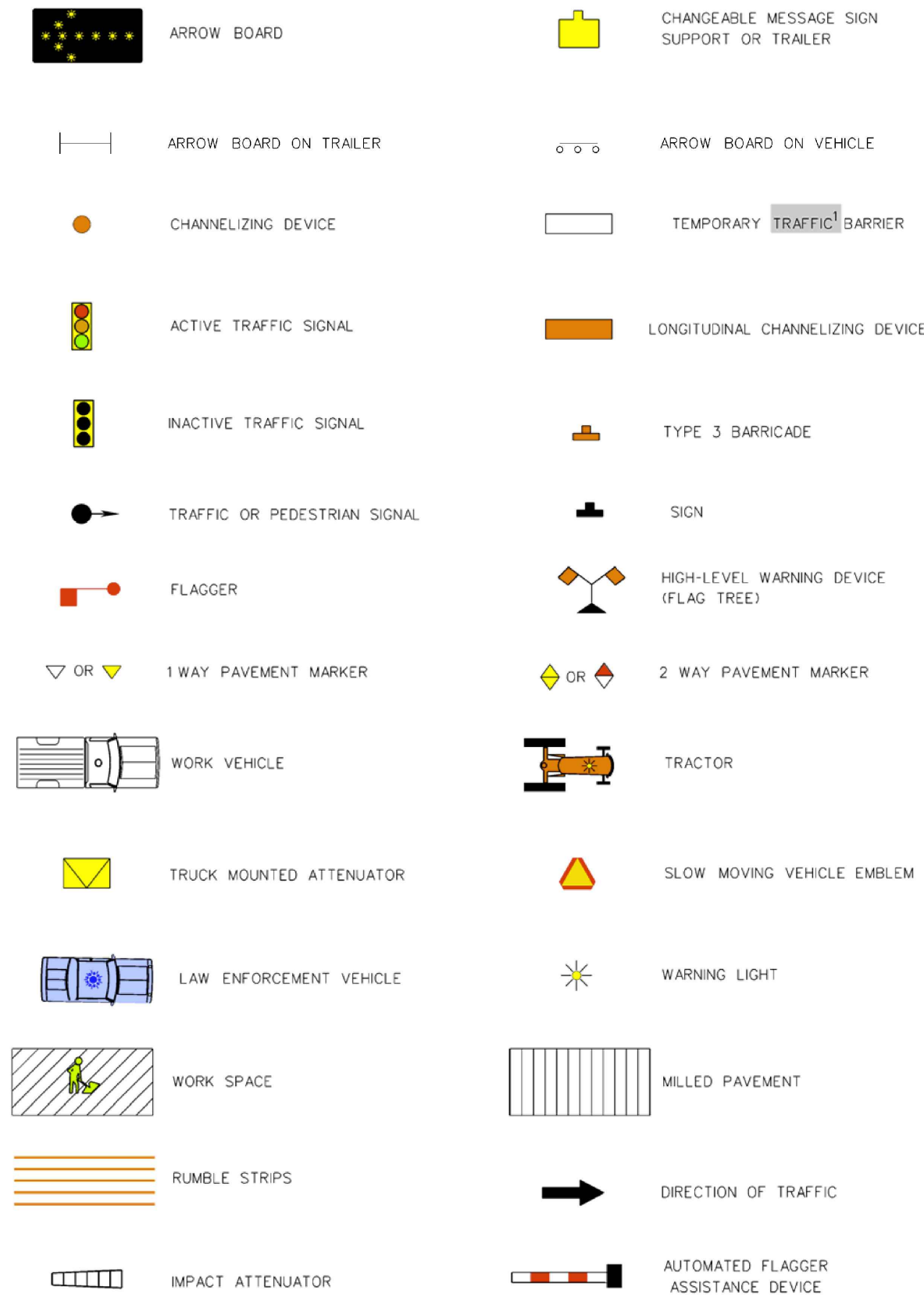


Figure 6H-1, Symbols Used In Typical Temporary Traffic Control Figures Application

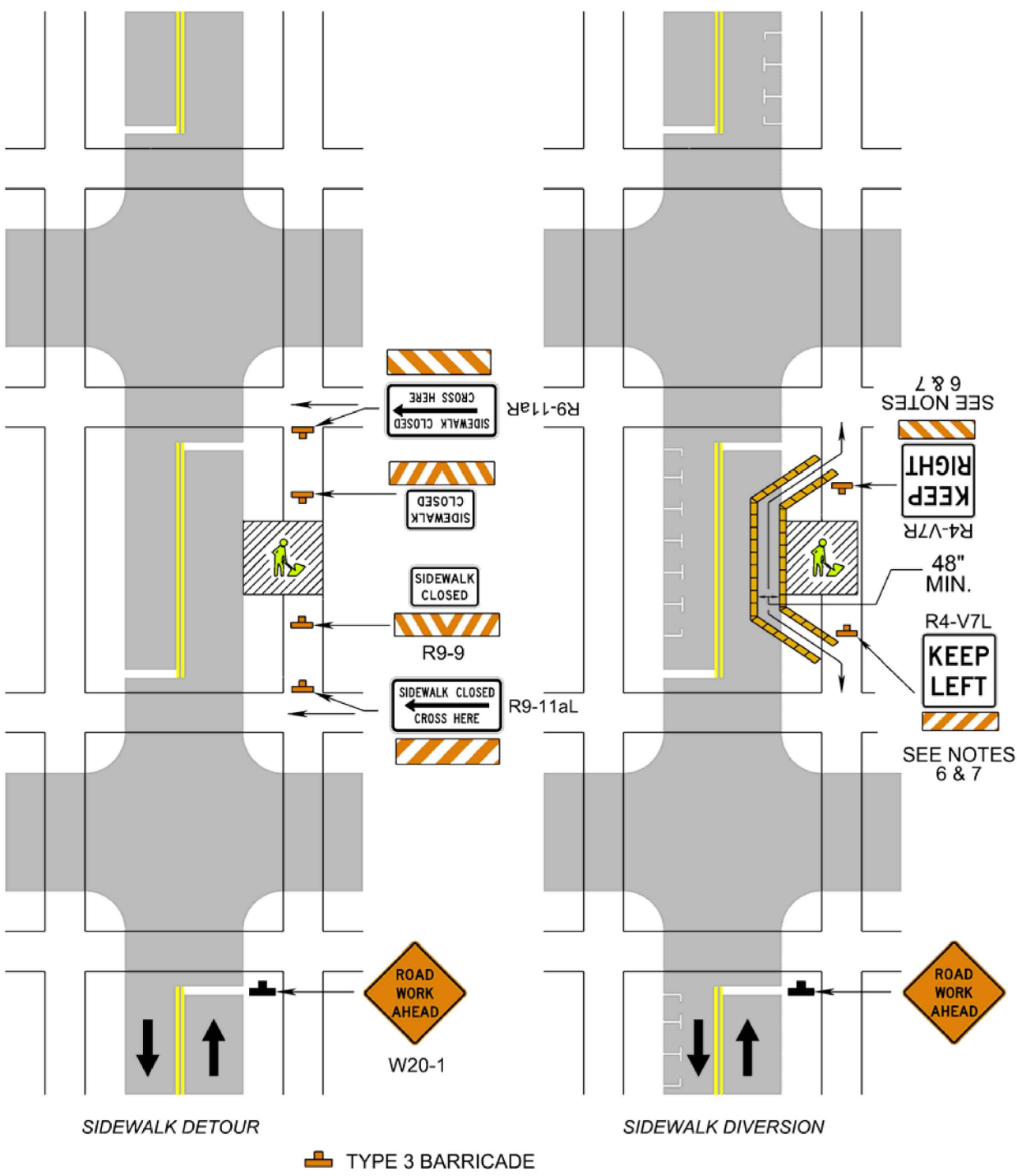


1: Revision 1 - 4/1/2015

ADDITIONAL NOTE

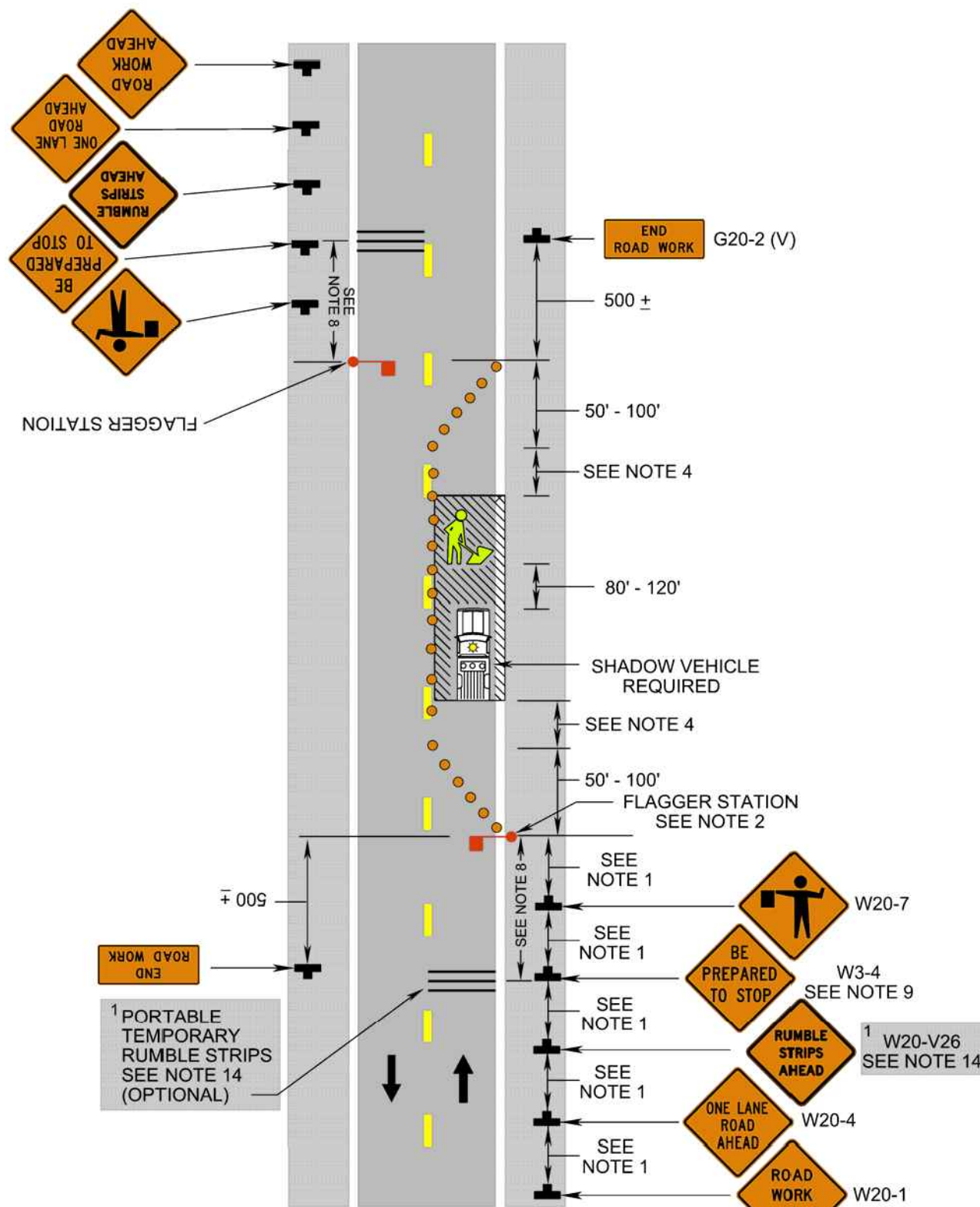
1. ALL WORK AND TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE MOST RECENT VDOT STANDARDS AND SPECIFICATIONS.

Sidewalk Closure and Bypass Sidewalk Operation
(Figure TTC-35.0)



TYPE 3 BARRICADE

Lane Closure on a Two-Lane Roadway Using Flaggers
(Figure TTC-23.1)



1: Revision 1 - 4/1/2015

NOTES FROM VDOT WORK AREA PROTECTION MANUAL

1. SIGN SPACING DISTANCE SHOULD BE 350' TO 500' WHERE THE POSTED SPEED LIMIT IS 45 MPH OR LESS, AND 500' TO 800' WHERE POSTED SPEED LIMIT IS GREATER THAN 45 MPH.
 2. CARE SHOULD BE EXERCISED WHEN ESTABLISHING THE LIMITS OF THE WORK ZONE TO INSURE MAXIMUM POSSIBLE SIGHT DISTANCE IN ADVANCE OF THE FLAGGER STATION AND TRANSITION, BASED ON THE POSTED SPEED LIMIT AND AT LEAST EQUAL TO OR GREATER THAN THE VALUES IN TABLE 6H-3 (TO THE LEFT). GENERALLY SPEAKING, MOTORISTS SHOULD HAVE A CLEAR LINE OF SIGHT FROM THE GRAPHIC FLAGGER SYMBOL SIGN TO THE FLAGGER.
 3. WHERE RIGHT OF WAY OR GEOMETRIC CONDITIONS PREVENT THE USE OF 48"X48" SIGNS, 36"X36" SIGNS MAY BE USED.
 4. FLAGGING STATIONS SHALL BE LOCATED FAR ENOUGH IN ADVANCE OF THE WORK ZONE TO PERMIT APPROACHING TRAFFIC TO REDUCE SPEED AND/OR STOP BEFORE PASSING THE WORK ZONE AND ALLOW SUFFICIENT DISTANCE FOR DEPARTING TRAFFIC IN THE LEFT LANE TO RETURN TO THE RIGHT LANE BEFORE REACHING OPPOSING TRAFFIC (SEE TABLE 6H-3, TO THE LEFT).
 5. ALL FLAGGERS SHALL BE STATE CERTIFIED AND HAVE THEIR CERTIFICATION CARD IN THEIR POSSESSION WHEN PERFORMING FLAGGING DUTIES.
 6. CONE SPACING SHALL BE BASED ON THE POSTED SPEED AND THE VALUES IN TABLE 6H-4 ON PAGE 6H-6.
 7. A SHADOW VEHICLE WITH AT LEAST ONE HIGH INTENSITY AMBER ROTATING, OSCILLATING, OR STROBE LIGHT SHALL BE PARKED 80'-120' IN ADVANCE OF THE FIRST WORK CREW.
 8. A SUPPLEMENTAL FLAGGER MAY BE REQUIRED IN THIS AREA TO GIVE ADVANCE WARNING OF THE OPERATION AHEAD BY SLOWING APPROACHING TRAFFIC PRIOR TO REACHING THE FLAGGER STATION OR QUEUED TRAFFIC.
 9. IF THE QUEUE OF TRAFFIC REACHES THE "BE PREPARED TO STOP" (W3-4) SIGN THEN THE SIGNS, AND IF USED THE PORTABLE TEMPORARY RUMBLE STRIPS (PTRS), SHOULD BE READJUSTED AT GREATER DISTANCES.
 10. WHEN A HIGHWAY-RAIL CROSSING EXISTS WITHIN OR UPSTREAM OF THE TRANSITION AREA AND IT IS ANTICIPATED THAT QUEUES RESULTING FROM THE LANE CLOSURE MIGHT EXTEND THROUGH THE HIGHWAY-RAIL GRADE CROSSING, THE TEMPORARY TRAFFIC CONTROL ZONE SHOULD BE EXTENDED SO THAT THE TRANSITION AREA PRECEDES THE HIGHWAY-RAIL CROSSING (REFER TO FIGURE TTC-56 OF THE VDOT WORK AREA PROTECTION MANUAL FOR ADDITIONAL INFORMATION ON HIGHWAY-RAIL CROSSINGS).
 11. AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED, EXCEPT IN EMERGENCIES.
 12. CONES MAY BE ELIMINATED WHEN USING A PILOT VEHICLE OPERATION OR WHEN THE TOTAL ROADWAY WIDTH IS 20 FEET OR LESS.
 13. FOR LOW-VOLUME SITUATIONS WITH SHORT WORK ZONES ON STRAIGHT ROADWAYS WHERE THE FLAGGER IS VISIBLE TO ROAD USERS APPROACHING FROM BOTH DIRECTIONS, A SINGLE FLAGGER, POSITIONED TO BE VISIBLE TO ROAD USERS APPROACHING FROM BOTH DIRECTIONS, MAY BE USED (SEE CHAPTER 6E).
 14. WHEN APPROVED FOR USE, THREE PORTABLE TEMPORARY RUMBLE (PTRS) STRIPS SHALL BE INSTALLED ACROSS THE ENTIRE TRAVEL LANE ADJACENT TO THE BE PREPARED TO STOP (W3-4) SIGN. THE PORTABLE TEMPORARY RUMBLE STRIPS SHALL BE MONITORED AND ADJUSTED AS NECESSARY DURING THE WORK SHIFT TO ENSURE PROPER PLACEMENT ON THE ROADWAY. WHEN THE PTRS ARE INSTALLED, THE RUMBLE STRIPS AHEAD (W20-V26) SIGN SHALL ALSO BE UTILIZED.
- POSTED SPEED
PTRS SPACING (CENTER TO CENTER) 0 - 35 MPH 36 - 55 MPH
5 FEET 8 FEET

NORTH CENTRAL AVENUE TO BE CONVERTED TO A ONE-WAY (SOUTHBOUND) STREET DURING CONSTRUCTION. WORK CAN BE PREFORMED ALONG THE ENTIRE EAST (AND THEN WEST) HALF OF THE ROADWAY AT ONE TIME. DIAGRAMS ON THIS PAGE ARE SHOWN FOR REFERENCE AND ONLY NEED TO BE USED WHEN REQUIRED.

NOTES FROM VDOT WORK AREA PROTECTION MANUAL

SIDEWALK CLOSURE

STANDARD:

1. WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.

GUIDANCE:

2. WHERE HIGH SPEEDS ARE ANTICIPATED, A TEMPORARY TRAFFIC BARRIER AND, IF NECESSARY, A CRASH CUSHION SHOULD BE USED TO SEPARATE THE TEMPORARY SIDEWALKS FROM VEHICULAR TRAFFIC.
3. AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.
4. TEMPORARY MARKINGS SHOULD BE CONSIDERED FOR OPERATIONS EXCEEDING THREE DAYS IN DURATION.

OPTION:

5. ONLY THE TTC DEVICES RELATED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, SUCH AS LANE CLOSURE SIGNING OR ROAD NARROWS SIGNS, MAY BE USED TO CONTROL VEHICULAR TRAFFIC.
6. FOR NIGHTTIME CLOSURES, TYPE A FLASHING WARNING LIGHTS MAY BE USED ON BARRICADES THAT SUPPORT SIGNS AND CLOSE SIDEWALKS.
7. SIGNS, SUCH AS KEEP RIGHT AND KEEP LEFT, MAY BE PLACED ALONG A TEMPORARY SIDEWALK TO GUIDE OR DIRECT PEDESTRIANS.

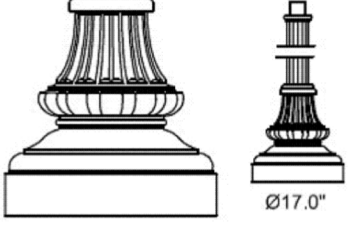
STANDARD:

8. ALL SIDEWALK CLOSURES SHALL BE CLOSED WITH TYPE 3 BARRICADES.

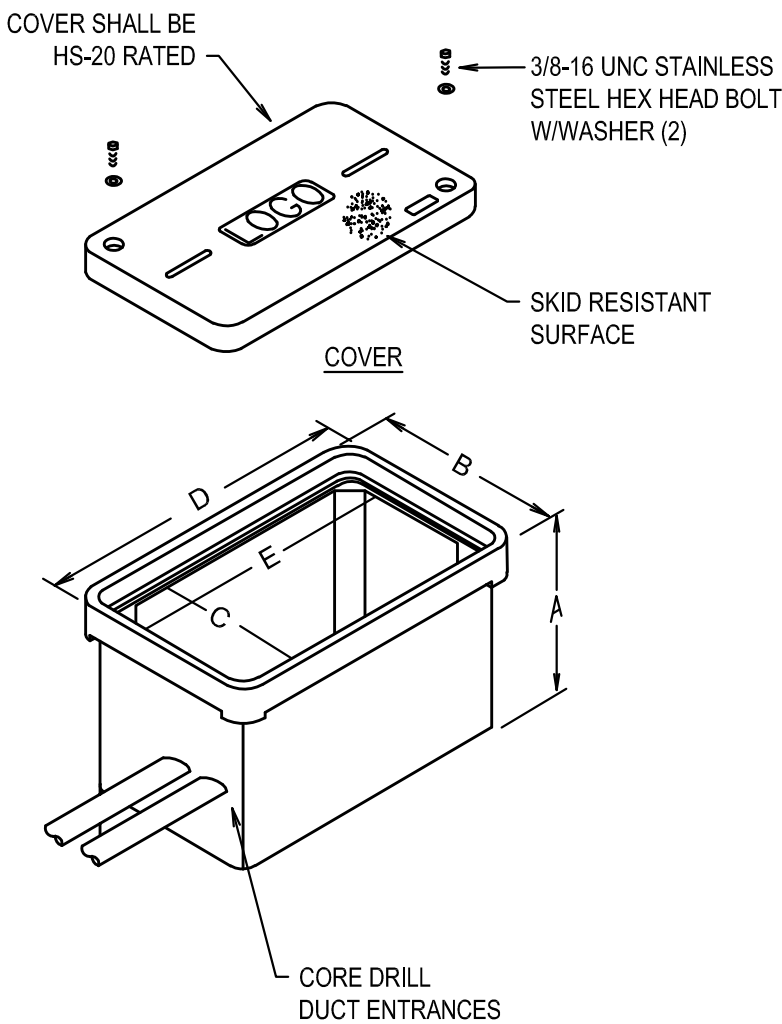
Table 6H-3. Length of the Longitudinal Buffer Space

Posted Speed Limit (mph)	Distance (Feet)
≤ 20	115 - 120
25	155 - 165
30	200 - 210
35	250 - 260
40	305 - 325
45	360 - 380
50	425 - 445
55	500 - 530
60	570 - 600
65	645 - 675
70	730 - 760

Plot: Draper Aden Associates - Electrical - Phase 2 - 10/20/2020

LIGHTING FIXTURE SCHEDULE							
MARK	IMAGE	DESCRIPTION	MFR/MODEL (BASIS OF DESIGN)	MTG	LAMPS		REMARKS
					NO.	TYPE	
S1		CLASSIC GLOBE STYLE FIXTURE. CAST ALUMINUM HOUSING. TYPE 3 DISTRIBUTION. LED BOARD IN TOP COVER. FULL OUT-OFF. FLAT GLASS LENS. FINISH WITH BENJAMIN MOORE ESSEX GREEN. DECORATIVE TOP COVER. BAND, RIBS AND SPIKE FINAL. WET LOCATION LISTED WITH IP65 RATED ELECTRICAL ENCLOSURE.	HOLOPHANE UTILITY WASHINGTON POSTLIGHT WFLQ2-P50-30K-AS-CMC-L3-S	P	--	LED 139W	FIXTURE TO HAVE 3000K COLOR TEMPERATURE.
S1 POLE		HEAVY WALL CAST ALUMINUM POLE WITH FLUTED BASE, 16" HEIGHT, 5" DIAMETER. POLE BASE AT 17" HIGH WITH 17" DIAMETER BASE AND 3" X 5" X 4.5" DOOR OPENING TO ACCESS WIRES. BREAKAWAY FEATURE. ESSEX GREEN FINISH TO MATCH FIXTURE HEAD. HOT DIP GALVANIZED STEEL. ANCHOR BOLTS. WP IN USE GFCI RECEPTACLE, MTD 6" BELOW TOP OF POLE.	HOLOPHANE CAST ALUMINUM POST. WADSWORTH SERIES WDA 16.5SJ 17'XX ABG XX WITH WDA 17BRKVVY KITXX	--	--	--	NOTES 2-5
BASIS OF DESIGN STATEMENT: THE DESIGN SHOWN IS BASED ON THE MANUFACTURERS AND MODELS INDICATED AND IS INTENDED ONLY TO SHOW THE GENERAL SIZE, CONFIGURATION, LOCATION, CONNECTIONS AND/OR SUPPORT FOR THE EQUIPMENT OR SYSTEMS SPECIFIED WITH RELATION TO THE OTHER BUILDING SYSTEMS. SEE SPECIFICATION FOR ADDITIONAL TECHNICAL REQUIREMENTS.							
KEY: P	POLE	NOTES: 1. ALL FIXTURES SHALL BE AUTO-SENSING 120 THRU 277 VOLTS, UNLESS NOTED OTHERWISE. 2. PROVIDE ALL POLES WITH FLAG POLE MOUNTED AND BANNER ARMS. FLAG POLE MOUNTS AND BANNER ARMS ARE TO BE PRICED AS SEPARATE BID LINE ITEMS. 3. COLOR OF FLAG POLE MOUNTS AND BANNER ARMS TO MATCH LIGHT POLE. 4. FLAG POLE HOLDERS ARE TO ACCOMMODATE 1" DIAMETER BY 5' LONG POLES FOR 3" X 5' FLAG HOLDERS TO BE HOLOPHANE #FPHO OR APPROVED EQUAL. 5. BANNER ARMS ARE TO STANDARD BANNER ARMS, SIZED TO HANDLE 30" WIDE SLIDE ON BANNERS. ARMS TO BE HOLOPHANE #BA 34 BD H5 CMC OR APPROVED EQUAL. FINAL AND ARM DIAMETER TO BE SELECTED BY OWNER DURING SHOP DRAWING REVIEW.					

PANELBOARD LP	LOCATION: EXTERIOR		VOLTS: 120/240		60A MB	
	PHASE: 1		MAINS AMPS: 60		KAC: 22 (NOTE 3)	
	MOUNTING: SURFACE		SERVICE ENTRANCE RATED			
LOAD SERVED	WIRE SIZE	GND SIZE	CND SIZE	CKT BRKR	CKT NO.	LOAD SERVED
POLE LTS - SOUTH SIDE 1	10	10	--	20	1	POLE LTS - NORTH SIDE 1
					3	
POLE LTS - SOUTH SIDE 2	10	10	--	20	5	POLE LTS - NORTH SIDE 2
					7	
RECEPTACLES	12	12	3/4	20	9	RECEPTACLES - NORTH
RECEPTACLES - SOUTH	8	8	--	20	11	RECEPTACLES - NORTH
RECEPTACLES - SOUTH	10	10	--	20	13	RECEPTACLES - NORTH
RECEPTACLES - SOUTH	8	8	--	20	15	RECEPTACLES - NORTH
RECEPTACLES - SOUTH	8	8	--	20	17	SPACE
SPACE					19	SPACE
					7.8	
					7.0	
						KVA TTL= 14.7
						VOLTAGE: 240 0.240
						CONNECTED AMPS: 61
						DEMAND FACTOR 1.0
						DEMAND AMPS: 61
NOTES: 1. SEE PLANS FOR CONDUIT SIZE(S) 2. LOAD CENTER HAS 16 SPACES WITH CAPACITY FOR 24 CIRCUITS. UP TO 8 TANDEM BREAKERS ALLOWED. 3. COORDINATE AVAILABLE FAULT CURRENT WITH UTILITY.						

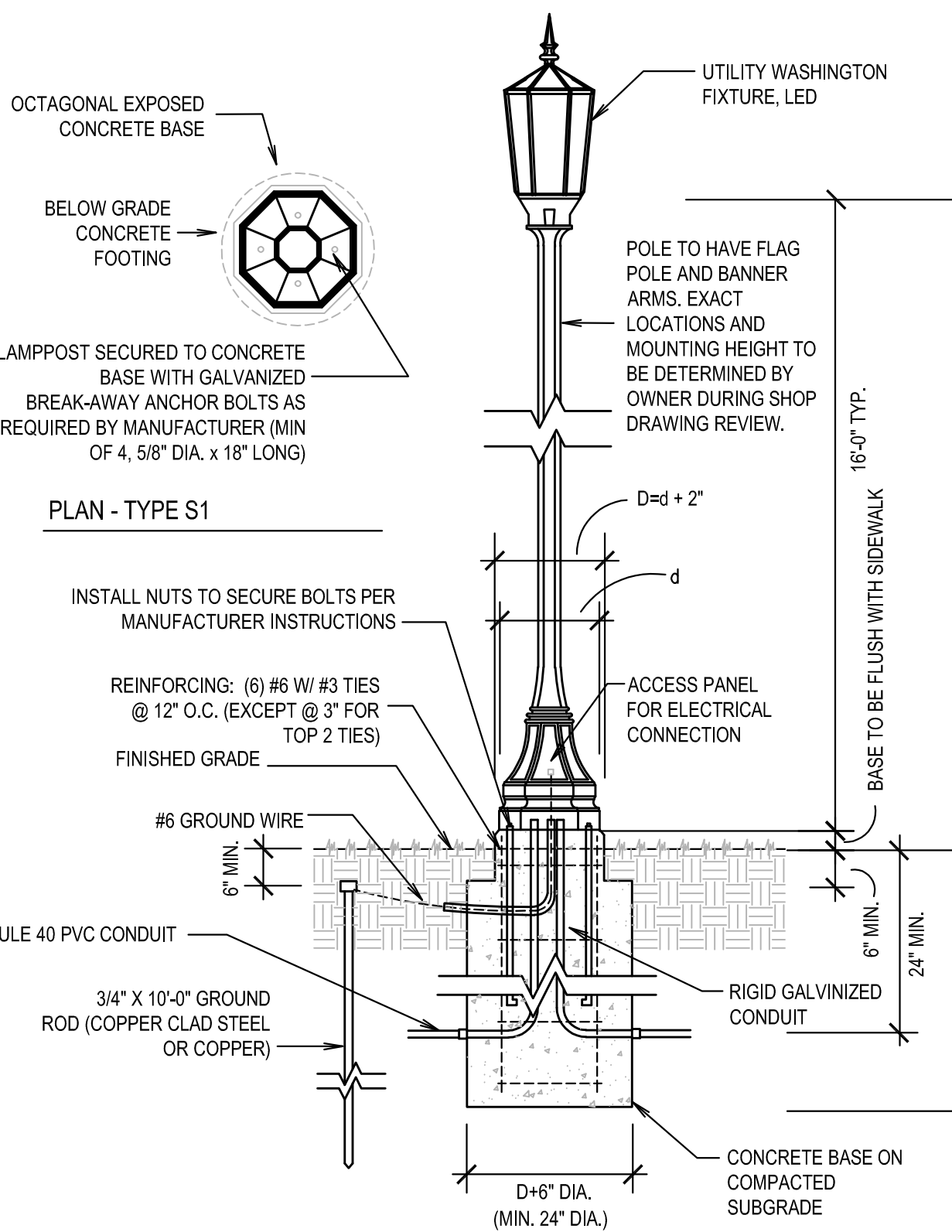
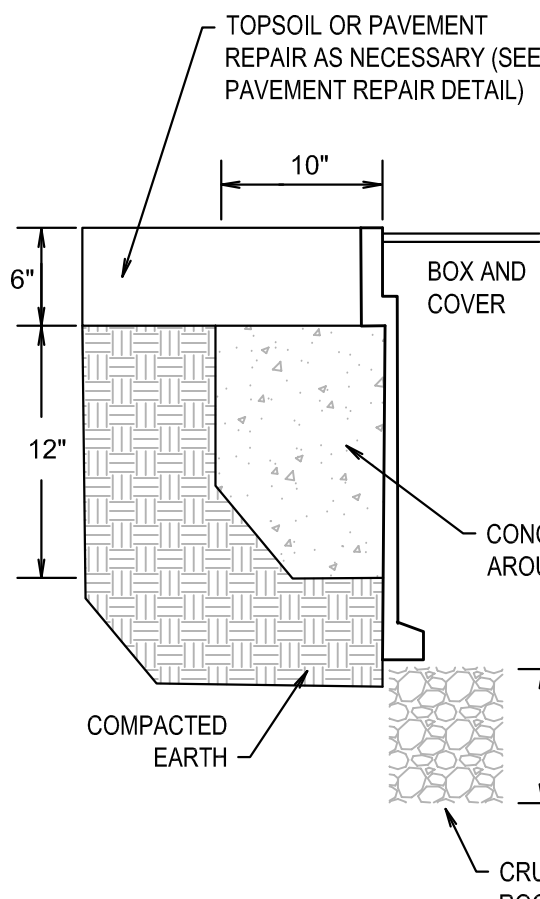


2 IN-GRADE PULL BOX DETAIL

SCALE: NONE

- NOTES:
- HOUSING SHALL BE A POLYMER CONCRETE REINFORCED WITH A HEAVY WEAVE FIBERGLASS REINFORCING WITH COMPRESSIVE STRENGTH OF NO LESS THAN 10,000 PSI. COLOR TO BE BRICK RED.
 - PROVIDE STAINLESS STEEL BOLTS AND INSERTS.

HANDHOLE TYPE	SCHEDULE					CUSTOM COVER DESIGNATION
	A	B	C	D	E	
A	18"	15-1/2"	11-3/4"	25"	21-1/4"	LIGHTING
B	24"	26"	22-1/4"	37-5/8"	33-7/8"	ELECTRIC
C	33"	32-1/8"	28-1/8"	49-5/8"	45-5/8"	ELECTRIC



1 POLE BASE DETAIL - TYPE S1

SCALE: NONE

3 RISER DIAGRAM

SCALE: NONE

GENERAL ELECTRICAL SPECIFICATIONS

26 0500 - ELECTRICAL GENERAL PROVISIONS
ALL WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE 2012 VUSBC AND THE 2011 NEC (NFPA 70) AND ALL LOCAL CODES. ALL MATERIALS AND EQUIPMENT SHALL BE UL LISTED AND LABELED WHERE APPLICABLE.

THE CONTRACTOR SHALL GIVE CONSIDERATION TO ALL OTHER TRADES, AND MAKE ARRANGEMENTS TO AVOID CONFLICTS AND INTERFERENCE WITH OTHER WORK, NEW OR EXISTING. CONTRACTOR SHALL COORDINATE ALL COMPONENTS OF THE WORK, AND PROVIDE MINOR ADJUSTMENTS AS REQUIRED, INCLUDING OFFSETS, TRANSITIONS, FITTINGS, AND ACCESSORIES TO MEET ACTUAL CONDITIONS.

INSTALL FIXTURES SECURELY, IN A NEAT AND WORKMANLIKE MANNER.

CONCRETE POLE FOUNDATIONS: CAST IN PLACE, WITH ANCHOR BOLTS TO MATCH POLE-BASE FLANGE. GROUNDING AND BONDING LUGS: WELDED 1/2 INCH THREADED LUG, LISTED FOR ATTACHING GROUNDING AND BONDING CONDUCTORS OF TYPE AND SIZE LISTED IN THAT SECTION, AND ACCESSIBLE THROUGH HANDHOLE. CONCRETE PER REQUIREMENTS OF DIVISION 3. PROVIDE CONCRETE BASES FOR LIGHTING POLES AT LOCATIONS INDICATED. INSTALL POLES PLUMB. PROVIDE SHIMS TO ADJUST PLUMB. GROUT AROUND EACH BASE.

TESTING AND CLEANING: OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION. CLEAN ELECTRICAL PARTS TO REMOVE CONDUCTIVE AND DELETERIOUS MATERIALS. REMOVE DIRT AND DEBRIS FROM ENCLOSURE. CLEAN PHOTOMETRIC CONTROL SURFACES AS RECOMMENDED BY MANUFACTURER. CLEAN FINISHES AND TOUCH UP DAMAGE.

SUBMITTALS: THE CONTRACTOR SHALL SUBMIT INFORMATION, FOR ARCHITECT/ENGINEER'S REVIEW, TO DEMONSTRATE COMPLIANCE OF PROPOSED PRODUCTS AND/OR INSTALLATIONS WITH THE CONTRACT DOCUMENTS. THIS INFORMATION SHALL INCLUDE, BUT NOT BE LIMITED TO: CATALOG DATA; PERFORMANCE DATA; ETC. PROPOSED PRODUCTS THAT ARE NOT IN COMPLIANCE WITH THE CONTRACT DOCUMENTS MAY BE REJECTED. INFORMATION MUST BE SUBMITTED ON ALL REQUIRED PRODUCTS.

RECORD DRAWINGS: DURING CONSTRUCTION AN ACCURATE RECORD OF ALL DEVIATIONS BETWEEN THE WORK SHOWN ON THE CONTRACT DOCUMENTS AND THAT WHICH IS ACTUALLY INSTALLED SHALL BE MAINTAINED. THESE DEVIATIONS SHALL BE NOTED NEATLY AND ACCURATELY IN RED INK ON ONE SETS OF FULL-SIZE PRINTS OF THE CONTRACT DOCUMENTS. WHEN ALL DEVIATIONS HAVE BEEN NOTED ON THESE PRINTS, THEY SHALL BE DATED AND LABELED AS RECORD DRAWINGS AND BE DELIVERED TO THE ARCHITECT/ENGINEER.

UNLESS OTHERWISE NOTED, INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS FOR APPLICATION INDICATED. MAINTAIN COPIES OF MANUFACTURER'S PRINTED INSTRUCTIONS AT THE PROJECT SITE. INSTALL, OPERATE, AND ADJUST SYSTEMS IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

VERIFY FINAL LOCATIONS FOR EQUIPMENT WITH FIELD MEASUREMENTS, THE REQUIREMENTS OF THE EQUIPMENT TO BE INSTALLED AND THE OWNER. COORDINATE INSTALLATION OF ELECTRICAL SYSTEMS, EQUIPMENT AND MATERIALS WITH OTHER SYSTEMS.

INSTRUCTION & TRAINING: AFTER ALL EQUIPMENT AND SERVICES ARE IN OPERATION AND RECEIPT OF THE APPROVED OPERATION AND MAINTENANCE MANUALS, INSTRUCTION AND TRAINING SESSIONS SHALL BE CONDUCTED FOR REPRESENTATIVES OF THE OWNER. THE TRAINING SESSION SHALL ADDRESS THE OPERATION AND MAINTENANCE OF EACH PIECE OF EQUIPMENT AND OF THE SYSTEM AS A WHOLE. PREVENTATIVE MAINTENANCE TECHNIQUES SHALL BE INCLUDED. INSTRUCTIONS AND TRAINING SHALL BE GIVEN BY COMPETENT, FACTORY-TRAINED SERVICE AND OPERATING PERSONNEL FROM THE APPROPRIATE MANUFACTURER(S). THE CONTRACTOR SHALL RECORD THE NAMES OF ALL PERSONNEL PRESENT AT EACH INSTRUCTION AND TRAINING SESSION AND SHALL FORWARD A COPY OF THE ATTENDANCE LOG TO THE ARCHITECT/ENGINEER WITHIN SEVEN DAYS AFTER EACH SESSION.

WORK TO BE GUARANTEED/WARRANTED FOR 12 MONTHS FROM THE DATE OF ACCEPTANCE.

26 0519 - BUILDING WIRE & CABLE

CONDUCTORS: CONDUCTORS ARE TO BE COPPER WITH TYPE THW/THHN OR XHHW INSULATION. MINIMUM SIZE SHALL BE #12 AWG FOR POWER AND LIGHTING CIRCUITS. CONDUCTOR COLOR CODING SHALL MATCH EXISTING CONVENTION. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CIRCUITS.

PULL CONDUCTORS SIMULTANEOUSLY WHERE MORE THAN ONE ARE BEING INSTALLED IN THE SAME RACEWAY. USE UL LISTED PULLING COMPOUND OR LUBRICANT WHERE NECESSARY. NO MORE THAN THREE SINGLE PHASE CIRCUITS SHALL BE INSTALLED IN A SINGLE CONDUIT.

KEEP CONDUCTOR SPLICES TO A MINIMUM. INSTALL SPLICE AND TAP CONNECTORS THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATING THAN THE CONDUCTORS BEING SPLICED. USE SPLICE AND TAP CONNECTORS THAT ARE COMPATIBLE WITH THE CONDUCTOR MATERIAL. SPLICES IN IN-GROUND PULL BOXES OR OTHER EXTERIOR LOCATIONS ARE TO BE WATERPROOF.

PRIOR TO ENERGIZING, TEST WIRE AND CABLES FOR ELECTRICAL CONTINUITY AND SHORT-CIRCUITS. SUBSEQUENT TO WIRE AND CABLE HOOKUPS, ENERGIZE CIRCUITS AND DEMONSTRATE PROPER FUNCTIONING. CORRECT ANY MALFUNCTIONS AND RETEST TO DEMONSTRATE COMPLIANCE.

26 0526 - GROUNDING

GROUNDING IS TO BE PER THE REQUIREMENTS OF NEC ARTICLE 250. GROUND AND BOND ALL NON-CURRENT-CARRYING PARTS OF EQUIPMENT. ALL CIRCUITS ARE TO HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR. GROUND RODS TO BE COPPER-CLAD STEEL, 3/4" DIAMETER BY 10' LONG. CONNECTIONS TO GROUND RODS TO BE EXOTHERMAL TYPE. SERVICE ENTRANCE GROUNDING ELECTRODE SYSTEM RESISTANCE SHALL NOT EXCEED 25 OHMS.

BOND LUMINAIRES, METAL ACCESSORIES, AND METAL POLES TO BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTOR. PROVIDE SUPPLEMENTARY GROUNDING ELECTRODE AT EACH POLE.

26 0529 - HANGERS & SUPPORTS

INSTALL SUPPORTING DEVICES TO FASTEN ELECTRICAL COMPONENTS SECURELY AND PERMANENTLY IN ACCORDANCE WITH NEC REQUIREMENTS. COORDINATE WITH EQUIPMENT AND OTHER INSTALLED SYSTEMS.

26 0534 - RACEWAY & BOXES

CONDUIT: ALL WIRING SHALL BE INSTALLED IN CONDUIT. MINIMUM SIZE IS TO BE 3/4". CONDUIT SHALL BE PVC SCHEDULE 40 OR RIGID GALVANIZED STEEL FOR DIRECT BURIAL APPLICATIONS AND PVC SCHEDULE 40 FOR CONCRETE ENCASEMENT. PVC SCHEDULE 40 CONDUIT SHALL CONFORM TO NEMA TC-2 AND NEMA TC-3 SPECIFICATIONS. SWEEP ELLS SHALL HAVE A MINIMUM RADIUS OF SIX TIMES THE CONDUIT DIAMETER WITH THE EXCEPTION OF TWO-INCH CONDUIT, WHICH SHALL BE TWENTY FOUR-INCH MINIMUM RADIUS. LIQUID-TIGHT FLEXIBLE CONDUIT IS TO BE USED FOR CONNECTIONS TO EQUIPMENT SUBJECT TO MOVEMENT OR VIBRATION, MAXIMUM LENGTH TO BE 6'.

BOXES: METAL OUTLET, DEVICE AND JUNCTION BOXES SHALL COMPLY WITH NEMA OS1 AND FB1. BOXES SHALL BE EITHER CAST TYPE OR NEMA 3R RATED. CAST BOXES SHALL BE TYPE FD, CAST FERRALLOY, PROVIDE GASKETED COVER AND THREADED HUBS. WP COVERS ARE TO BE "IN USE" TYPE. IN-GRADE EXTERIOR BOXES TO BE COMPOSITE TYPE.

CONDUIT ROUTING IS SHOWN ON DRAWINGS IN APPROXIMATE LOCATIONS UNLESS DIMENSIONED. ROUTE AS REQUIRED TO COMPLETE WIRING SYSTEM. JOIN NONMETALLIC CONDUIT USING CEMENT AS RECOMMENDED BY MANUFACTURER. WIPE NONMETALLIC CONDUIT DRY AND CLEAN BEFORE JOINING. APPLY FULL EVEN COAT OF CEMENT TO ENTIRE AREA INSERTED IN FITTING. ALLOW JOINT TO CURE FOR 20 MINUTES, MINIMUM.

INSTALL NO MORE THAN EQUIVALENT OF THREE 90 DEGREE (OR TWO AT 45 DEGREES), BENDS BETWEEN BOXES.

PROVIDE SUITABLE PULL STRING IN EACH EMPTY CONDUIT EXCEPT SLEEVES AND NIPPLES.

USE SUITABLE CAPS TO PROTECT INSTALLED CONDUIT AGAINST ENTRANCE OF DIRT AND MOISTURE.

GROUND AND BOND CONDUIT AND BOXES UNDER PROVISIONS OF SECTION 260526.

INSTALL ELECTRICAL RACEWAYS AND BOXES IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, THE NEC AND NECA STANDARDS OF INSTALLATION. UPON COMPLETION OF INSTALLATION OF RACEWAYS AND BOXES, INSPECT INTERIORS. CLEAR ALL BLOCKAGES AND REMOVE BURRS, DIRT AND CONSTRUCTION DEBRIS.

26 0553 - ELECTRICAL IDENTIFICATION

TAG AND LABEL CIRCUITS IN CABINETS, PULL AND JUNCTION BOXES. PHASE AND VOLTAGE MAY BE INDICATED BY COLOR-CODED CONDUCTOR INSULATION.

26 2100 - LOW-VOLTAGE ELECTRICAL SERVICE ENTRANCE

TRANSFORMER PADS: FURNISHED AND INSTALLED BY CONTRACTOR PER UTILITY COMPANY REQUIREMENTS.

TRANSFORMERS: FURNISHED AND INSTALLED BY UTILITY COMPANY.

TRANSFORMER GROUNDING PROVISIONS: FURNISHED AND INSTALLED BY CONTRACTOR PER

UTILITY COMPANY REQUIREMENTS.

PRIMARY:

TRENCHING AND BACKFILLING: PROVIDED BY CONTRACTOR.

CONDUITS: FURNISHED AND INSTALLED BY CONTRACTOR.

CONDUCTORS: FURNISHED AND INSTALLED BY DOMINION.

SECONDARY:

TRENCHING AND BACKFILLING: PROVIDED BY CONTRACTOR.

CONDUITS: FURNISHED AND INSTALLED BY CONTRACTOR.

CONDUCTORS: FURNISHED AND INSTALLED BY DOMINION UNLESS OTHERWISE INDICATED ON DRAWINGS.

TERMINATIONS AT SERVICE POINT OF DELIVERY: PROVIDED BY UTILITY COMPANY.

METERING PROVISIONS: METER BASES FURNISHED AND INSTALLED BY CONTRACTOR PER UTILITY COMPANY REQUIREMENTS.

26 5600 - EXTERIOR LIGHTS

FURNISH FIXTURES AS INDICATED IN SCHEDULE.

LIGHT LEVELS TO BE: 1.2 FC AVERAGE. 3FC MAX.

CONTRACTOR TO PROVIDE POINT-BY-POINT PHOTOMETRIC CALCULATION FOR THE LIGHTING LAYOUT AS A PART OF THE SUBMITTAL PROCESS. POINTS TO BE ON A 10FT X 10FT GRID. FIXTURE SUBMITTAL WILL NOT BE APPROVED WITHOUT CALCULATIONS.

LUMINAIRE ATTACHMENT PROVISIONS: COMPLY WITH LUMINAIRE MANUFACTURERS' MOUNTING REQUIREMENTS. ANCHOR BOLTS, LEVELING NUTS, BOLT CAPS AND WASHERS: HOT-DIP GALVANIZED AFTER FABRICATION. UNLESS STAINLESS-STEEL ITEMS ARE INDICATED. ANCHOR-BOLT TEMPLATE TO BE PLYWOOD OR STEEL.

CONCRETE POLE FOUNDATIONS: CAST IN PLACE, WITH ANCHOR BOLTS TO MATCH POLE-BASE FLANGE. GROUNDING AND BONDING LUGS: WELDED 1/2 INCH THREADED LUG, LISTED FOR ATTACHING GROUNDING AND BONDING CONDUCTORS OF TYPE AND SIZE LISTED IN THAT SECTION, AND ACCESSIBLE THROUGH HANDHOLE. CONCRETE PER REQUIREMENTS OF DIVISION 3.

INSTALL FIXTURES SECURELY, IN A NEAT AND WORKMANLIKE MANNER.

PROVIDE CONCRETE BASES FOR LIGHTING POLES AT LOCATIONS INDICATED. INSTALL POLES PLUMB. PROVIDE SHIMS TO ADJUST PLUMB. GROUT AROUND EACH BASE.

BOND LUMINAIRES, METAL ACCESSORIES, AND METAL POLES TO BRANCH CIRCUIT EQUIPMENT GROUNDING CONDUCTOR. PROVIDE SUPPLEMENTARY GROUNDING ELECTRODE AT EACH POLE.

OPERATE EACH LUMINAIRE AFTER INSTALLATION AND CONNECTION. INSPECT FOR IMPROPER CONNECTIONS AND OPERATION.

CLEAN ELECTRICAL PARTS TO REMOVE CONDUCTIVE AND DELETERIOUS MATERIALS. REMOVE DIRT AND DEBRIS FROM ENCLOSURE. CLEAN PHOTOMETRIC CONTROL SURFACES AS RECOMMENDED BY MANUFACTURER. CLEAN FINISHES AND TOUCH UP DAMAGE.

33 7173 - COMBINATION SERVICE ENTRANCE DEVICES

COMBINATION METER/LOAD CENTER SHALL UL LISTED FOR USE AS SERVICE ENTRANCE EQUIPMENT. NEMA TYPE 3R ENCLOSURE WITH PAINTED, G90 GALVANIZED STEEL. SIDE-HINGED LOAD CENTER DOOR. REQUIRING REMOVAL OF ONE SCREW TO REMOVE DOOR. UNIT SHALL BE SUITABLE FOR SURFACE OR POLE MOUNTING. BUS BARS TO BE TIN-PLATED COPPER BUS BARS. UNIT RATINGS TO BE AS INDICATED IN SCHEDULE. SUITABLE FOR OVERHEAD AND UNDERGROUND UTILITY FEED. METER CENTER TO BE BY SQUARE D OR EQUIVALENT.

INSTALL IN ACCORDANCE WITH MANUFACTURERS WRITTEN INSTRUCTIONS AND NEC REQUIREMENTS. INSPECT COMPLETED INSTALLATION FOR PHYSICAL DAMAGE, PROPER ALIGNMENT, ANCHORAGE AND GROUNDING. ENSURE THAT ALL CONNECTIONS AND TERMINATIONS ARE PROPERLY TIGHTENED. CLEAN TO REMOVE ALL CONSTRUCTION DEBRIS.

GENERAL NOTES ELECTRICAL

- TELEPHONE AND CATV SERVICES REMOVED FROM POLES TO BE PROVIDED BY OTHERS. UNLESS OTHERWISE INDICATED ON DRAWINGS, CONTRACTOR TO INSTALL CONDUIT AND BOXES FURNISHED BY LINGO.
- DIVISION 26 CONTRACTOR(S) SHALL COORDINATE THEIR WORK WITH ALL OTHER TRADES PRIOR TO FABRICATION OF SYSTEMS AND COMMENCEMENT OF INSTALLATION. IT SHALL BE THE RESPONSIBILITY OF EACH CONTRACTOR TO REVIEW THE WORK OF OTHER TRADES (INCLUDING, BUT NOT LIMITED TO CIVIL) AS IT AFFECTS THE ELECTRICAL WORK, AND AS THEIR WORK AFFECTS OTHER TRADES. TO INSURE THAT THE CONSTRUCTION DOCUMENTS ARE CLOSELY FOLLOWED, WHERE DISCREPANCIES ARISE, THEY SHALL BE REFERRED TO THE OWNER AND ENGINEER FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.

LEGEND

- UNDERGROUND CONDUIT/WIRING
- 2-2"C, FURNISHED BY LINGO, INSTALLED BY CONTRACTOR
- PANELBOARD, 120/240V
- IN GROUND PULL BOX
- STREET LIGHT FIXTURE, FIRST # IS LTG CKT NO, SECOND # IS RECEPTACLE CKT NO
- POWER POLE
- EXISTING LIGHT POLE

ABBREVIATIONS

A	AMPS, AMPERE
AFG	ABOVE FINISHED GRADE
BRKR	BREAKER
BLDG	BUILDING
C.CND	CONDUIT
CKT	CIRCUIT
CONC	CONCRETE
COORD	COORDINATE
DIA	DIAMETER
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRIC
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
KAIC	THOUSAND AMPS INTERRUPTING CURRENT
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
MB	MAIN BREAKER
MH	MOUNTING HEIGHT, METAL HALIDE
MIN	MINIMUM
MNTD	MOUNTED
NEC	NATIONAL ELECTRICAL CODE
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NO	NUMBER
O.C.	ON CENTER
OH	OVERHEAD
P	POLE
RGS	RIGID GALVANIZED STEEL
SW	SIDEWALK
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITY
V	VOLTS, VOLTAGE
VUSBC	VIRGINIA UNIFORM STATE BUILDING CODE
W	WIRE
WP	WEATHERPROOF
XFMR	TRANSFORMER
Ø	DIAMETER

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100 10th St. NE, Suite 2012
Charlotte, VA 22902
434.282.2116
2RW.com

ELECTRICAL SITE PLAN - PHASE 2

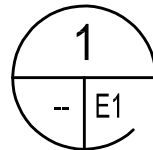
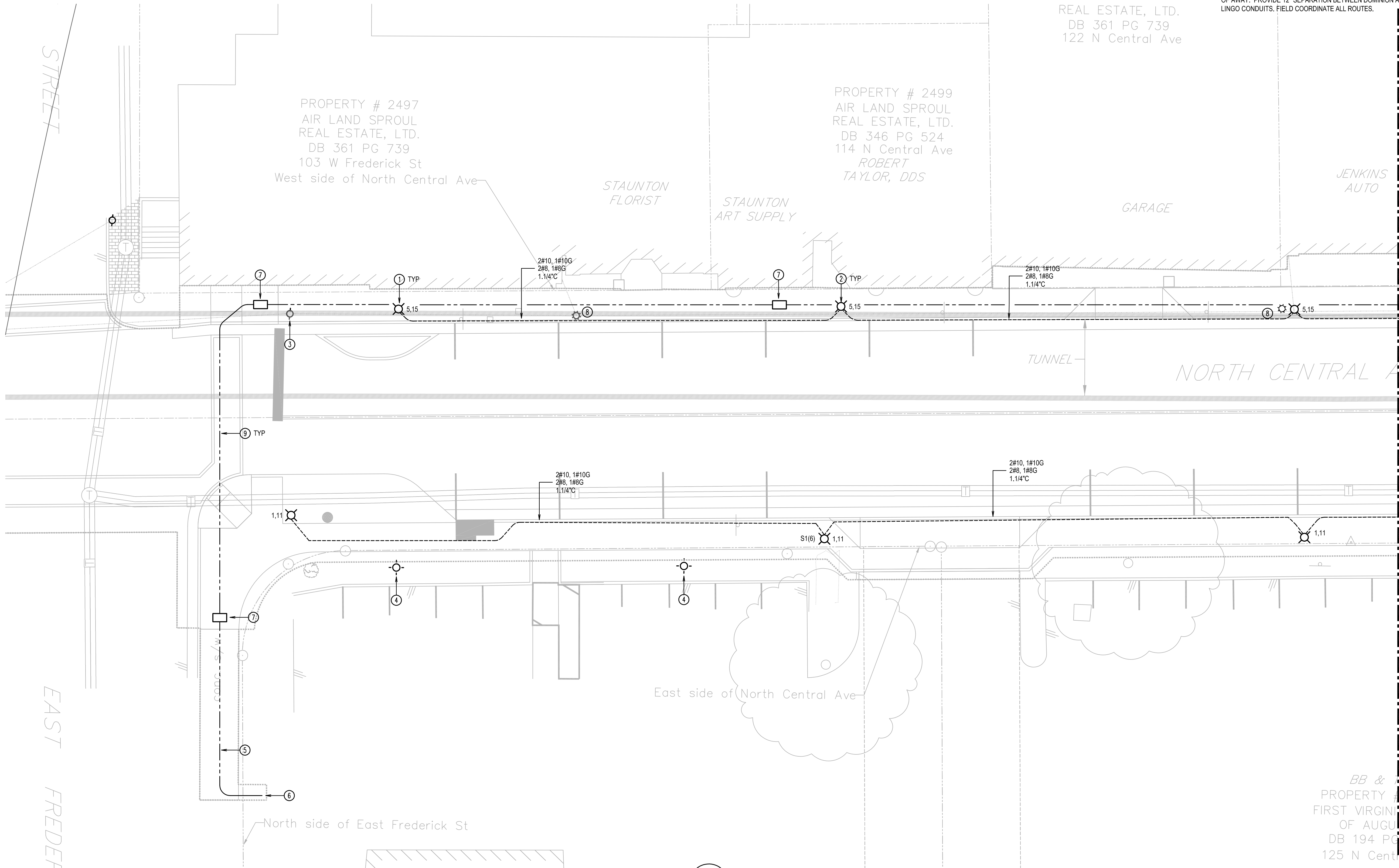
NORTH CENTRAL AVENUE IMPROVEMENTS

STAUNTON, VIRGINIA

REVISIONS

DESIGNED BY:	SAH
DRAWN BY:	BJP
CHECKED BY:	AMH
SCALE:	
DATE:	March 06, 2020
PROJECT NUMBER:	R08349-17CV
E0	

Plot: Draper Aden Associates - Central Avenue, Staunton, VA - 2020-04-23 1:44 PM



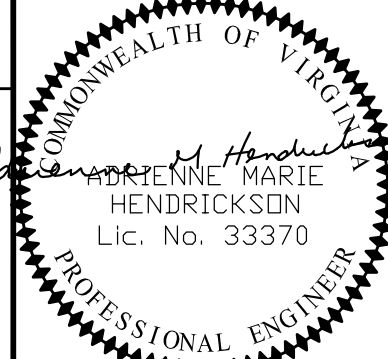
SITE PLAN
SCALE: 1" = 10'

GENERAL NOTES

- LOCATION OF POLE IS TO CENTER OF SYMBOL. FIELD VERIFY/LOCATE ALL POLES PRIOR TO ROUGH-IN.
- X.X AT EACH POLE INDICATES CIRCUIT NUMBERS. FIRST NUMBER IS LTG CKT NUMBER; SECOND IS RECEPTACLE CKT NUMBER.
- SEE PANEL SCHEDULE FOR WHICH CIRCUIT GOES WITH WHICH WIRE SIZE. GROUNDING CONDUCTORS MAY BE SHARED BETWEEN CIRCUITS OF THE SAME WIRE SIZE.
- CONTRACTOR IS TO ASSUME THAT ALL METERS/SERVICES ARE 200A, UNO.
- CONTRACTOR IS TO COORD THE DISCONNECTION OF EXISTING SERVICES FROM THE EXISTING INCOMING OVERHEAD LINES WITH THE UTILITY COMPANY. UNLESS INDICATED OTHERWISE, ALL NEW METERS SHALL BE IN THE SAME LOCATION AS THE EXISTING METERS. CONTRACTOR SHALL RECONNECT CONDUCTORS DOWNSTREAM OF METERS TO NEW METER. EXTEND ALL EXISTING CONDUCTORS FROM EXISTING METER LOCATION TO NEW METER LOCATION AS REQUIRED. USE #3/0 FOR 200A METERS AND 500 KCIL FOR 400A, UNO. FIELD VERIFY EXACT LOCATIONS AND ROUTINGS.
- ALL UNDERGROUND CONDUIT IS TO BE ROUTED IN THE RIGHT OF AWAY. PROVIDE 12" SEPARATION BETWEEN DOMINION AND LINGO CONDUITS. FIELD COORDINATE ALL ROUTES.

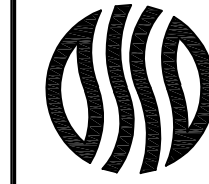
KEY NOTES

- FIXTURES ON WEST SIDE SHALL BE LOCATED ALONG THE BACK OF THE CURB; NO PART OF BASE SHALL BE IN THE CURB. PROVIDE MINIMUM 3' CLEAR WIDTH OF SIDEWALK; FOUR FOOT CLEAR WIDTH IS PREFERRED.
- SEE POLE BASE DETAIL ON SHEET E0.
- EXISTING POLE WITH TRAFFIC SIGNAL BOX TO REMAIN. CONTRACTOR TO INSTALL NEW GUYING FOR POLE PRIOR TO REMOVAL OF POLE TO NORTH. COORDINATE GUYING REQUIREMENTS WITH DOMINION.
- EXISTING LIGHT FIXTURE TO REMAIN, MAINTAIN CIRCUITRY TO FIXTURE. PROVIDE NEW CIRCUITRY AS REQUIRED TO MAINTAIN SERVICE TO FIXTURES. ASSUME 20A, 120V CIRCUIT(S), UNO.
- CONDUIT TO BE ROUTED UNDER SIDEWALK.
- CONNECTION TO EXISTING POLE BY OTHERS.
- FIBER PULL BOX, FURNISHED BY LINGO, INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION.
- EXISTING LIGHT POLE TO BE REMOVED. MAINTAIN CIRCUITRY TO ACTIVE DOWNSTREAM FIXTURES AS REQUIRED.
- (2) 2" CONDUIT FOR LINGO; CONDUIT FURNISHED BY LINGO, INSTALLED BY CONTRACTOR.



Draper Aden Associates
Engineering • Surveying • Environmental Services

Blacksburg, VA
Richmond, VA
Hampton Roads, VA

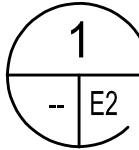
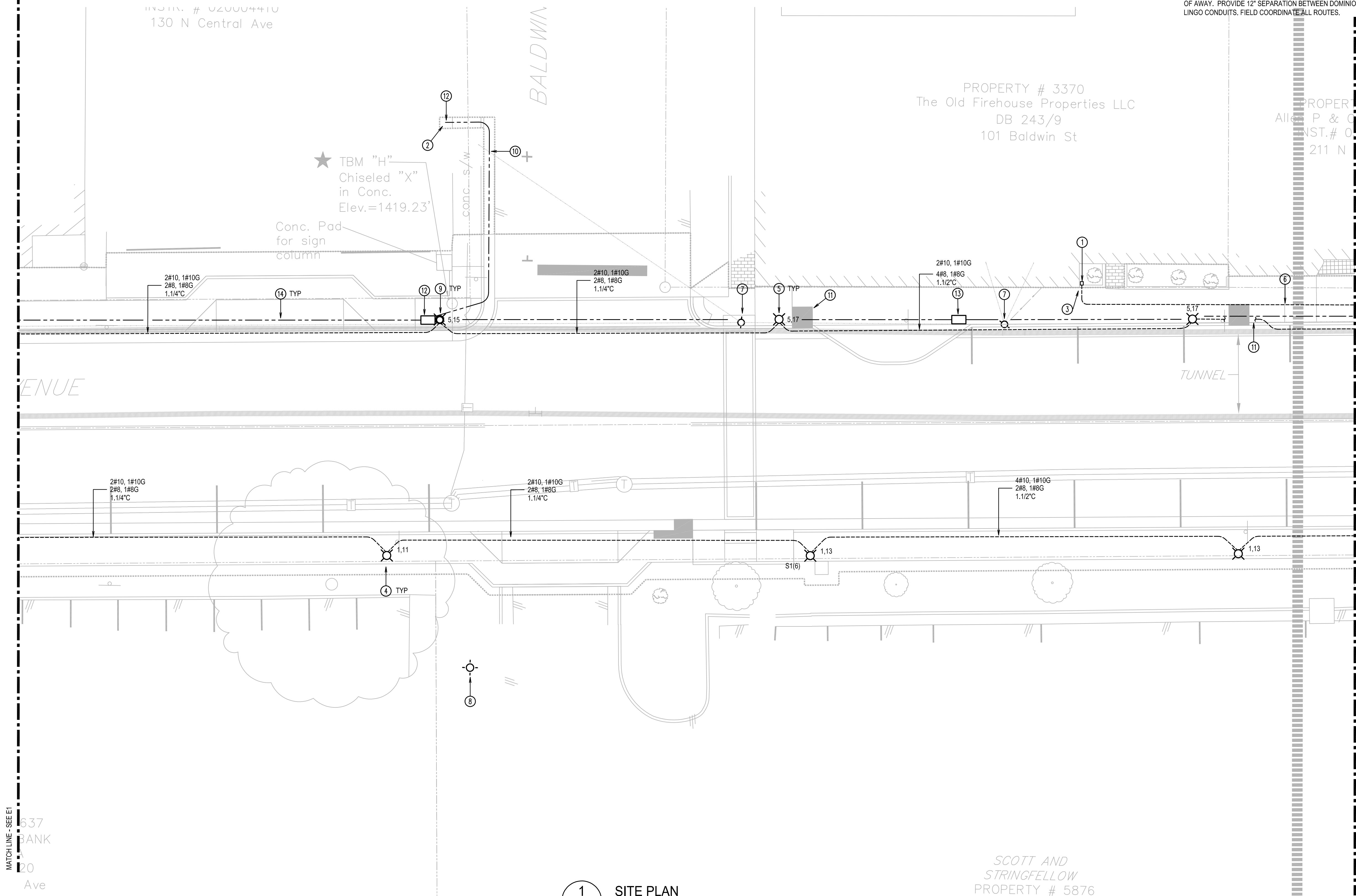


ELECTRICAL SITE PLAN - PHASE 2
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS	
DESIGNED BY:	SAH
DRAWN BY:	BJP
CHECKED BY:	AMH
SCALE:	
DATE:	March 06, 2020
PROJECT NUMBER:	R08349-17CV
E1	



Plot: Draper Aden Associates - Central Avenue, Virginia - Stringfellow Property # 5876 - March 17, 2020 11:42:31 AM



SITE PLAN
SCALE: 1" = 10'

SCOTT AND
STRINGFELLOW
PROPERTY # 5876

GENERAL NOTES

1. LOCATION OF POLE IS TO CENTER OF SYMBOL. FIELD VERIFY/LOCATE ALL POLES PRIOR TO ROUGH-IN.
2. X.X AT EACH POLE INDICATES CIRCUIT NUMBERS. FIRST NUMBER IS LTG CKT NUMBER; SECOND IS RECEPTACLE CKT NUMBER.
3. SEE PANEL SCHEDULE FOR WHICH CIRCUIT GOES WITH WHICH WIRE SIZE. GROUNDING CONDUCTORS MAY BE SHARED BETWEEN CIRCUITS OF THE SAME WIRE SIZE.
4. CONTRACTOR IS TO ASSUME THAT ALL METERS/SERVICES ARE 200A, UNO.
5. CONTRACTOR IS TO COORD THE DISCONNECTION OF EXISTING SERVICES FROM THE EXISTING INCOMING OVERHEAD LINES WITH THE UTILITY COMPANY. UNLESS INDICATED OTHERWISE, ALL NEW METERS SHALL BE IN THE SAME LOCATION AS THE EXISTING METERS. CONTRACTOR SHALL RECONNECT CONDUCTORS DOWNSTREAM OF METERS TO NEW METER. EXTEND ALL EXISTING CONDUCTORS FROM EXISTING METER LOCATION TO NEW METER LOCATION AS REQUIRED. USE #3/0 FOR 200A METERS AND 500 KCML FOR 400A, UNO. FIELD VERIFY EXACT LOCATIONS AND ROUTINGS.
6. ALL UNDERGROUND CONDUIT IS TO BE ROUTED IN THE RIGHT OF AWAY. PROVIDE 12" SEPARATION BETWEEN DOMINION AND LINGO CONDUITS. FIELD COORDINATE ALL ROUTES.

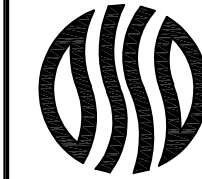
KEY NOTES

1. PROVIDE NEMA 3R PULL BOX FOR SERVICE. SIZE AS REQUIRED. FIELD COORD PULL BOX LOCATION. PROVIDE 3" C WITH #3/0 CONDUCTORS FROM PULL BOX, AROUND BLDG TO LOCATION OF REMOVED WEATHERHEAD, TO INSIDE THE BUILDING. MAKE CONNECTIONS TO EXISTING SERVICE ENTRANCE CTS/MAIN. COORDINATE REMOVAL OF WEATHER HEAD AND OH SERVICE AND CONNECTION OF NEW WITH UTILITY COMPANY.
2. EXISTING POLE WITH TRANSFORMERS THAT SERVES CHURCH OF CHRIST. SEE NOTE 3.
3. EXISTING WEATHERHEAD FOR OVERHEAD SERVICE TO CHURCH OF CHRIST. COORDINATE RELOCATION OF SERVICE TO NEW PULL BOX ON EXTERIOR OF BUILDING. PROVIDE #3/0 PHASE CONDUCTORS AS REQUIRED. COORD WITH UTILITY COMPANY.
4. FIXTURES ON EAST SIDE SHALL BE LOCATED ALONG THE BACK EDGE OF THE SIDEWALK. NO PART OF THE BASE SHALL BE OUTSIDE THE SIDEWALK. PROVIDE MINIMUM 3' CLEAR WIDTH OF SIDEWALK; FOUR FOOT CLEAR WIDTH IS PREFERRED.
5. SEE POLE BASE DETAIL ON SHEET E0.
6. SERVICE FEEDER FOR PROPERTY #3370. 4" CONDUIT. PROVIDE #3/0 PHASE CONDUCTORS FOR 200A SERVICE. COORD WITH UTILITY COMPANY.
7. EXISTING POLE AND ASSOCIATED OH UTILITY LINES TO BE REMOVED. COORD WORK WITH UTILITY COMPANIES.
8. EXISTING LIGHT FIXTURE TO REMAIN. MAINTAIN CIRCUITRY TO FIXTURE. PROVIDE NEW CIRCUITRY AS REQUIRED TO MAINTAIN SERVICE TO FIXTURE. ASSUME 20A, 120V CIRCUIT(S), UNO.
9. FIXTURES ON WEST SIDE SHALL BE LOCATED ALONG THE BACK OF THE CURB; NO PART OF BASE SHALL BE IN THE CURB. PROVIDE MINIMUM 3' CLEAR WIDTH OF SIDEWALK; FOUR FOOT CLEAR WIDTH IS PREFERRED.
10. CONDUIT TO BE ROUTED UNDER GUTTER LINE.
11. COORDINATE ROUTING WITH OTHER UG UTILITIES.
12. CONNECTION TO EXISTING POLE BY OTHERS.
13. FIBER PULL BOX, FURNISHED BY LINGO, INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION.
14. (2) 2" CONDUIT FOR LINGO; CONDUIT FURNISHED BY LINGO AND INSTALLED BY CONTRACTOR.



Draper Aden Associates
Engineering • Surveying • Environmental Services

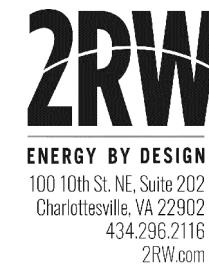
Blacksburg, VA
Richmond, VA
Hampton Roads, VA
Charlottesville, VA
700 Harris Street, Suite E
Charlottesville, VA 22903
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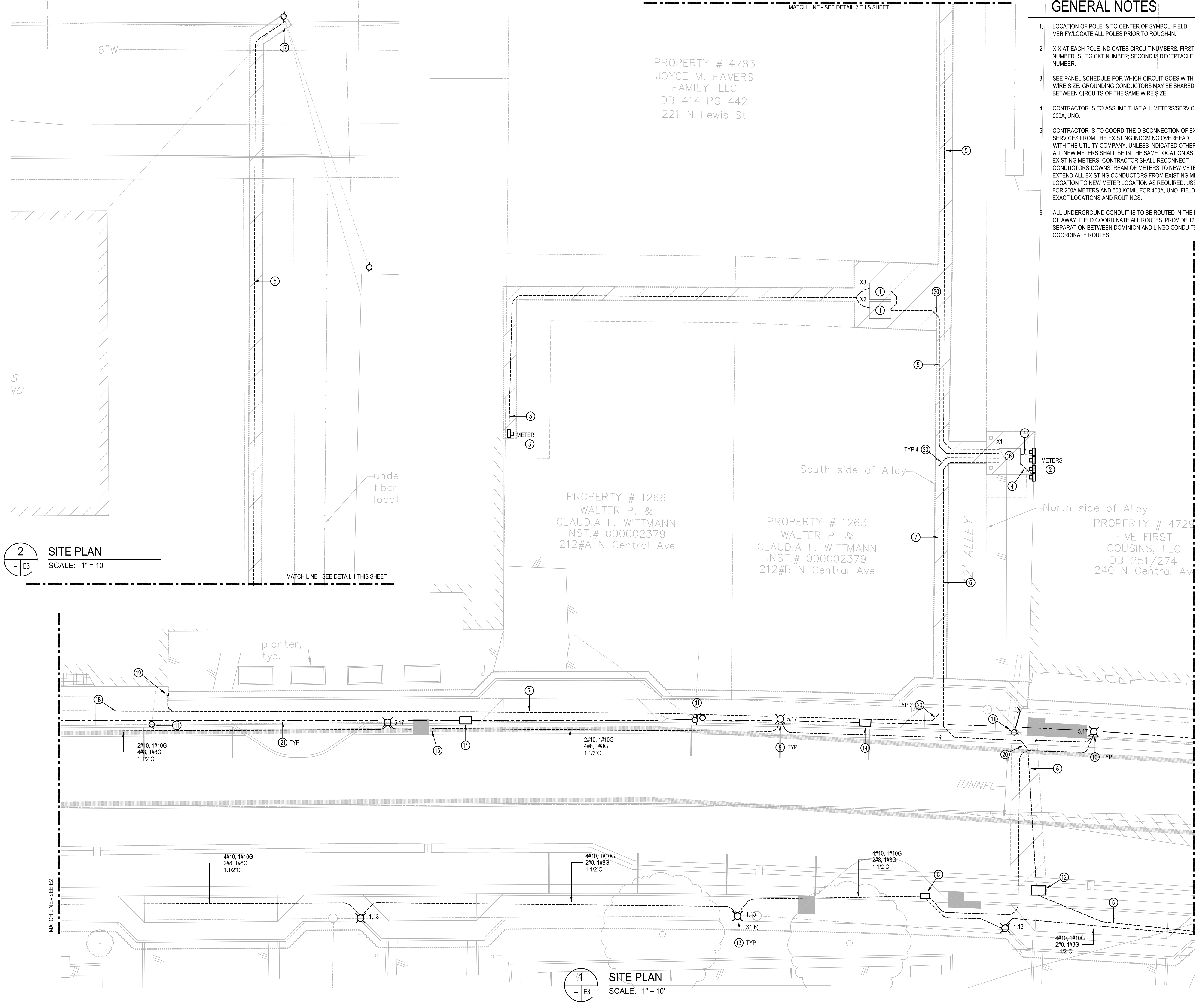
ELECTRICAL SITE PLAN - PHASE 2
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS	
DESIGNED BY:	SAH
DRAWN BY:	BJP
CHECKED BY:	AMH
SCALE:	
DATE:	March 06, 2020
PROJECT NUMBER:	R08349-17CV

E2



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GENERAL NOTES

1. LOCATION OF POLE IS TO CENTER OF SYMBOL. FIELD VERIFY/LOCATE ALL POLES PRIOR TO ROUGH-IN.
2. X.X AT EACH POLE INDICATES CIRCUIT NUMBERS. FIRST NUMBER IS LTG CKT NUMBER; SECOND IS RECEPTACLE CKT NUMBER.
3. SEE PANEL SCHEDULE FOR WHICH CIRCUIT GOES WITH WHICH WIRE SIZE. GROUNDING CONDUCTORS MAY BE SHARED BETWEEN CIRCUITS OF THE SAME WIRE SIZE.
4. CONTRACTOR IS TO ASSUME THAT ALL METERS/SERVICES ARE 200A, UNO.
5. CONTRACTOR IS TO COORD THE DISCONNECTION OF EXISTING SERVICES FROM THE EXISTING INCOMING OVERHEAD LINES WITH THE UTILITY COMPANY. UNLESS INDICATED OTHERWISE, ALL NEW METERS SHALL BE IN THE SAME LOCATION AS THE EXISTING METERS. CONTRACTOR SHALL RECONNECT CONDUCTORS DOWNSTREAM OF METERS TO NEW METER. EXTEND ALL EXISTING CONDUCTORS FROM EXISTING METER LOCATION TO NEW METER LOCATION AS REQUIRED. USE #3/0 FOR 200A METERS AND 500 KCML FOR 400A, UNO. FIELD VERIFY EXACT LOCATIONS AND ROUTINGS.
6. ALL UNDERGROUND CONDUIT IS TO BE ROUTED IN THE RIGHT OF AWAY. FIELD COORDINATE ALL ROUTES. PROVIDE 12\"/>

KEY NOTES

1. NEW PAD MOUNTED TRANSFORMERS X1, X2, AND X3 FOR UNDERGROUND SERVICES. X2 AND X3 PROVIDE OPEN-DELTA 3-PHASE AT 240V. COORD ALL CONDUIT RUNS TO AVOID MANHOLE IN ALLEY. PROVIDE ONE SINGLE TRANSFORMER PAD PER UTILITY COMPANY REQUIREMENTS.
2. PROVIDE NEW (4) METER STACK FOR PROPERTY. SEE NOTE 4. METERS TO BE LAID OUT HORIZONTALLY, TO MATCH EXISTING CONFIGURATION; ONE GROUP OF THREE AND ONE SINGLE METER.
3. PROVIDE NEW METER AND (2) 4\"/>



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Charlottesville, VA
700 Harris Street, Suite E
Charlottesville, VA 22903
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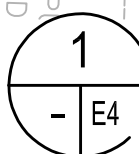
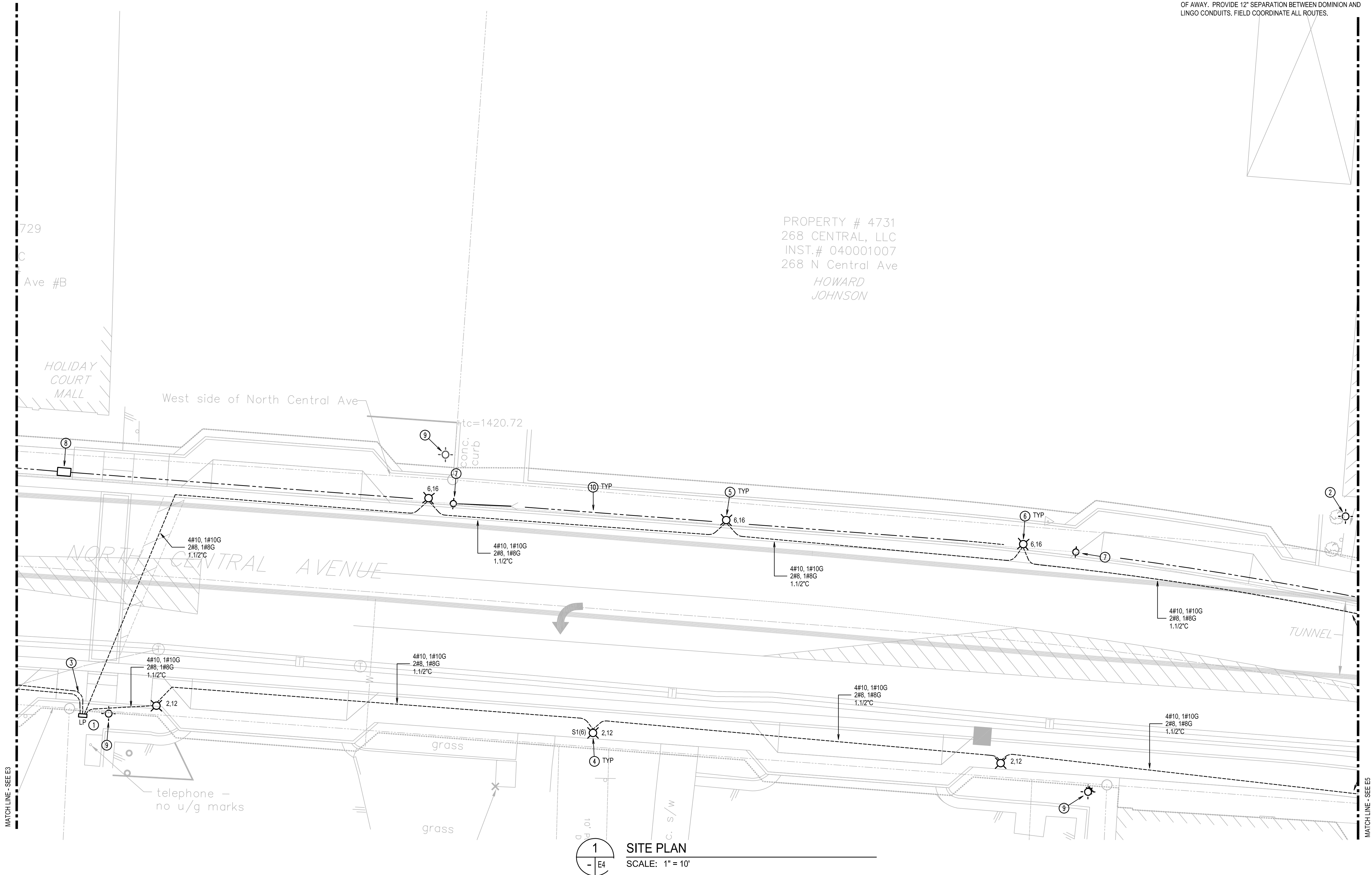
Blacksburg, VA
Richmond, VA
Hampton Roads, VA

ELECTRICAL SITE PLAN - PHASE 2
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS	
DESIGNED BY:	SAH
DRAWN BY:	BJP
CHECKED BY:	AMH
SCALE:	
DATE:	March 06, 2020
PROJECT NUMBER:	R08349-17CV
E3	



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SITE PLAN
SCALE: 1" = 10'

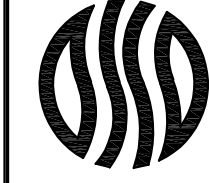
GENERAL NOTES

1. LOCATION OF POLE IS TO CENTER OF SYMBOL. FIELD VERIFY/LOCATE ALL POLES PRIOR TO ROUGH-IN.
2. X.X AT EACH POLE INDICATES CIRCUIT NUMBERS. FIRST NUMBER IS LTG CKT NUMBER; SECOND IS RECEPTACLE CKT NUMBER.
3. SEE PANEL SCHEDULE FOR WHICH CIRCUIT GOES WITH WHICH WIRE SIZE. GROUNDING CONDUCTORS MAY BE SHARED BETWEEN CIRCUITS OF THE SAME WIRE SIZE.
4. CONTRACTOR IS TO ASSUME THAT ALL METERS/SERVICES ARE 200A, UNO.
5. CONTRACTOR IS TO COORD THE DISCONNECTION OF EXISTING SERVICES FROM THE EXISTING INCOMING OVERHEAD LINES WITH THE UTILITY COMPANY. UNLESS INDICATED OTHERWISE, ALL NEW METERS SHALL BE IN THE SAME LOCATION AS THE EXISTING METERS. CONTRACTOR SHALL RECONNECT CONDUCTORS DOWNSTREAM OF METERS TO NEW METER. EXTEND ALL EXISTING CONDUCTORS FROM EXISTING METER LOCATION TO NEW METER LOCATION AS REQUIRED. USE #3/0 FOR 200A METERS AND 500 KCML FOR 400A, UNO. FIELD VERIFY EXACT LOCATIONS AND ROUTINGS.
6. ALL UNDERGROUND CONDUIT IS TO BE ROUTED IN THE RIGHT OF AWAY. PROVIDE 12" SEPARATION BETWEEN DOMINION AND LINGO CONDUITS. FIELD COORDINATE ALL ROUTES.

KEY NOTES

1. PANEL LP. SEE DETAIL 3/E0. PROVIDE FOUR (4) PHOTOCELLS FOR CONTROL OF THE LIGHTING CIRCUITS. LOCATE PANEL IN RIGHT OF WAY.
2. EXISTING STREET LIGHT POLE. COORD REMOVAL OF POLE AND ASSOCIATED CIRCUITRY WITH CITY AND UTILITY COMPANY. SALVAGE POLE AND TURN OVER TO OWNER.
3. FEEDER TO PANEL LP. SEE ALSO RISER DIAGRAM ON E0.
4. FIXTURES ON WEST SIDE SHALL BE LOCATED AN EQUAL DISTANCE FROM THE BACK OF CURB. LOCATE 4' FROM BACK OF CURB.
5. SEE POLE BASE DETAIL ON SHEET E0.
6. FIXTURES ON WEST SIDE SHALL BE LOCATED ALONG THE BACK OF THE CURB; NO PART OF BASE SHALL BE IN THE CURB. PROVIDE MINIMUM 3' CLEAR WIDTH OF SIDEWALK; FOUR FOOT CLEAR WIDTH IS PREFERRED.
7. EXISTING POLE AND ASSOCIATED OH UTILITY LINES TO BE REMOVED. COORD WORK WITH UTILITY COMPANIES.
8. FIBER PULL BOX, FURNISHED BY LINGO, INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION.
9. EXISTING LIGHT FIXTURE TO REMAIN. MAINTAIN CIRCUITRY TO FIXTURE. PROVIDE NEW CIRCUITRY AS REQUIRED TO MAINTAIN SERVICE TO FIXTURES. ASSUME 20A, 120V CIRCUIT(S), UNO.
10. (2) 2" CONDUIT FOR LINGO; CONDUIT FURNISHED BY LINGO, INSTALLED BY CONTRACTOR.





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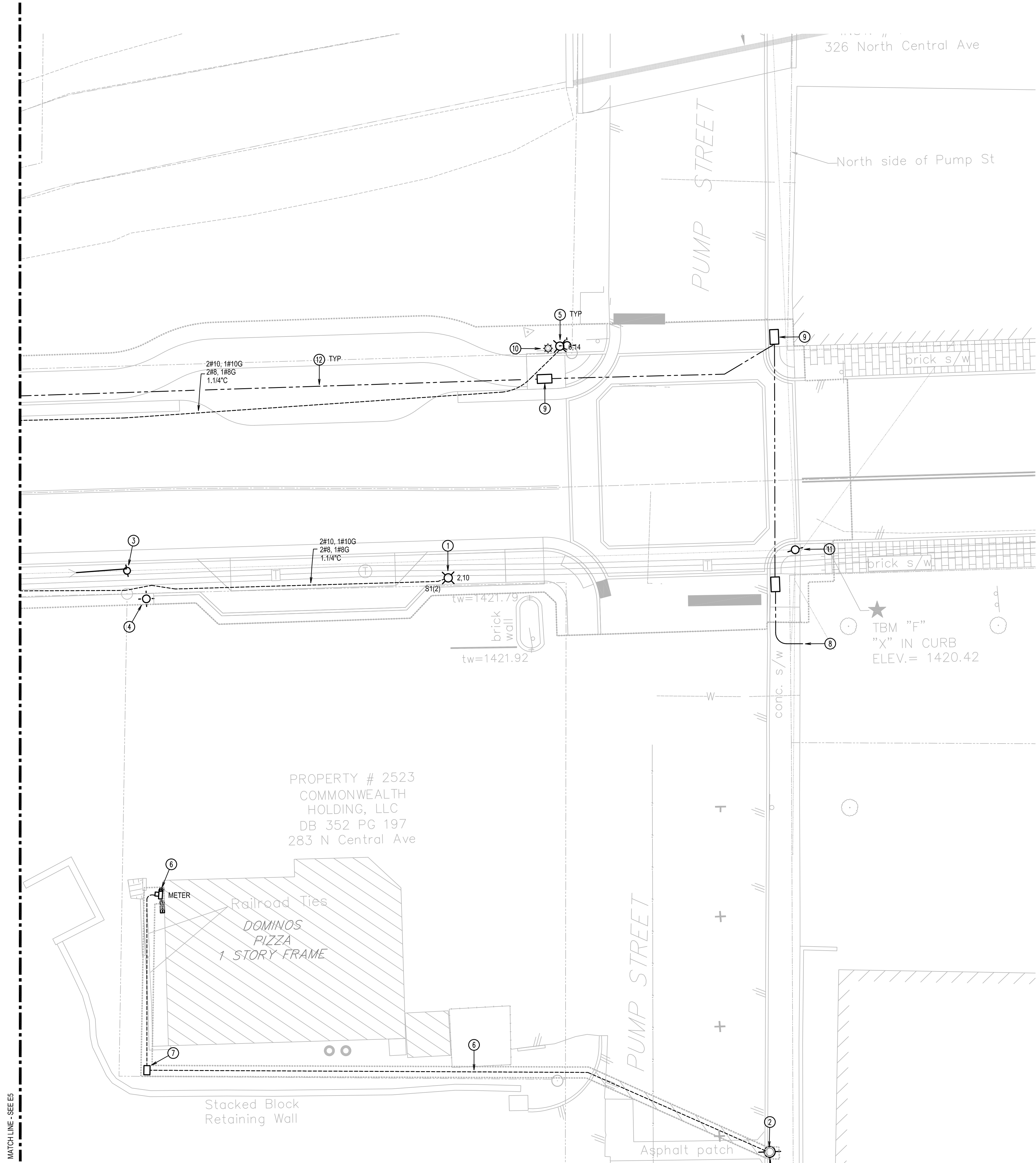
Blacksburg, VA
Richmond, VA
Hampton Roads, VA

ELECTRICAL SITE PLAN - PHASE 2
NORTH CENTRAL AVENUE IMPROVEMENTS
STAUNTON, VIRGINIA

REVISIONS	
DESIGNED BY:	SAH
DRAWN BY:	BJP
CHECKED BY:	AMH
SCALE:	
DATE:	March 06, 2020
PROJECT NUMBER:	R08349-17CV
E4	



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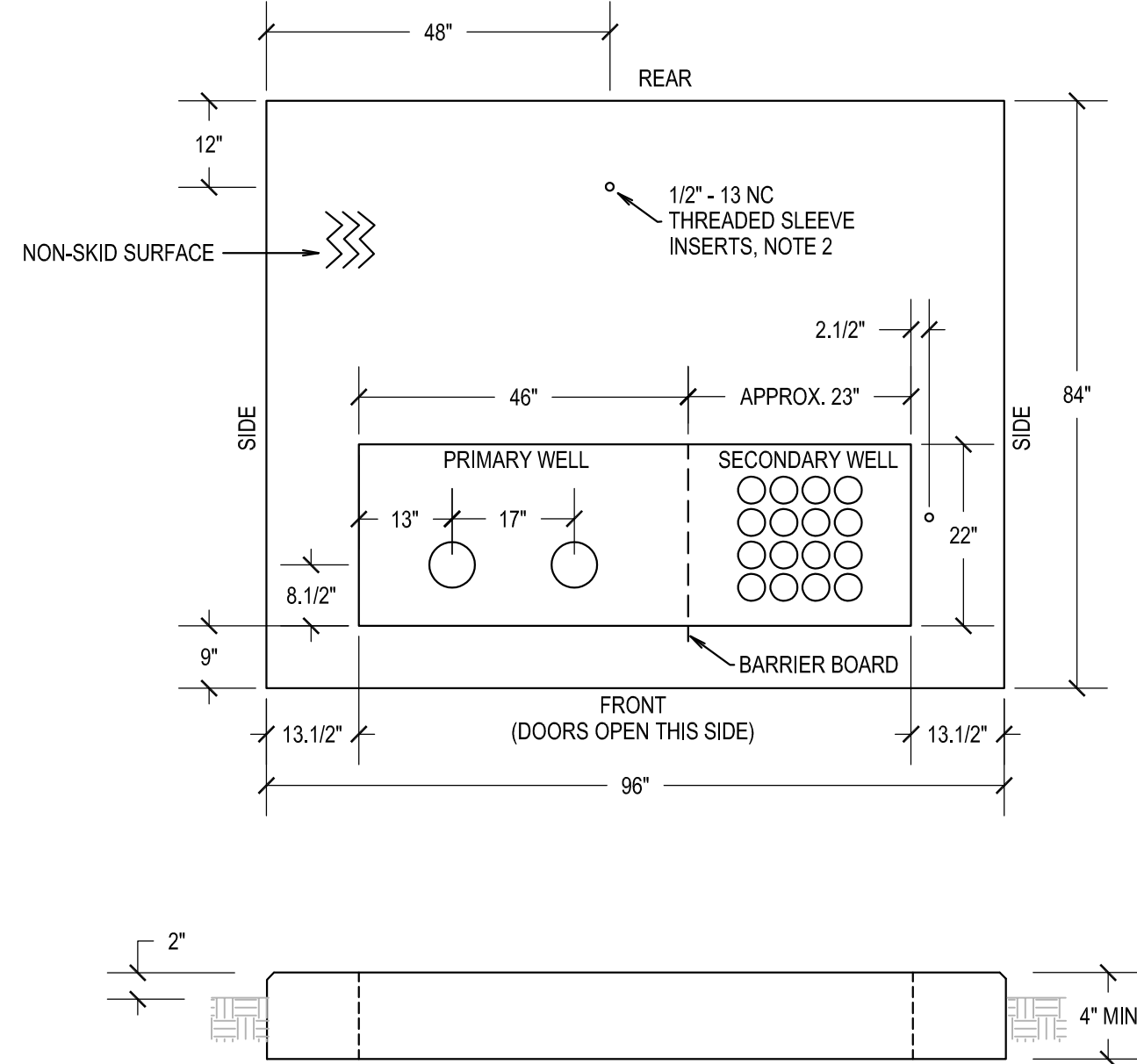
1 SITE PLAN
SCALE: 1" = 10'

GENERAL NOTES

- LOCATION OF POLE IS TO CENTER OF SYMBOL. FIELD VERIFY/LOCATE ALL POLES PRIOR TO ROUGH-IN.
- X.X AT EACH POLE INDICATES CIRCUIT NUMBERS. FIRST NUMBER IS LTG CKT NUMBER; SECOND IS RECEPTACLE CKT NUMBER.
- SEE PANEL SCHEDULE FOR WHICH CIRCUIT GOES WITH WHICH WIRE SIZE. GROUNDING CONDUCTORS MAY BE SHARED BETWEEN CIRCUITS OF THE SAME WIRE SIZE.
- CONTRACTOR IS TO ASSUME THAT ALL METERS/SERVICES ARE 200A, UNO.
- CONTRACTOR IS TO COORD THE DISCONNECTION OF EXISTING SERVICES FROM THE EXISTING INCOMING OVERHEAD LINES WITH THE UTILITY COMPANY. UNLESS INDICATED OTHERWISE, ALL NEW METERS SHALL BE IN THE SAME LOCATION AS THE EXISTING METERS. CONTRACTOR SHALL RECONNECT CONDUCTORS DOWNSTREAM OF METERS TO NEW METER. EXTEND ALL EXISTING CONDUCTORS FROM EXISTING METER LOCATION TO NEW METER LOCATION AS REQUIRED. USE #3/0 FOR 200A METERS AND 500 KCMIL FOR 400A, UNO. FIELD VERIFY EXACT LOCATIONS AND ROUTINGS.
- ALL UNDERGROUND CONDUIT IS TO BE ROUTED IN THE RIGHT OF AWAY. PROVIDE 12" SEPARATION BETWEEN DOMINION AND LINGO CONDUITS. FIELD COORDINATE ALL ROUTES.

KEY NOTES

- FIXTURES ON EAST SIDE SHALL BE LOCATED ALONG THE BACK EDGE OF THE SIDEWALK. NO PART OF THE BASE SHALL BE OUTSIDE THE SIDEWALK. PROVIDE MINIMUM 3' CLEAR WIDTH OF SIDEWALK; FOUR FOOT CLEAR WIDTH IS PREFERRED.
- POLE AND TRANSFORMER TO SERVE DOMINOS. TRANSFORMER BY UTILITY COMPANY.
- EXISTING POLE AND ASSOCIATED OH UTILITY LINES TO BE REMOVED. COORD WORK WITH UTILITY COMPANIES.
- EXISTING LIGHT FIXTURE TO REMAIN, MAINTAIN CIRCUITRY TO FIXTURE. PROVIDE NEW CIRCUITRY AS REQUIRED TO MAINTAIN SERVICE TO FIXTURES. ASSUME 20A, 120V CIRCUIT(S), UNO.
- SEE POLE BASE DETAIL ON SHEET E0.
- NEW SERVICE TO DOMINOS PIZZA. PROVIDE NEW METER AND 4" PVC CONDUIT TO THIS LOCATION. COORD CONDUCTORS WITH UTILITY. ALSO PROVIDE 1-2" C WITH PULL STRING FOR COMCAST FROM POLE TO BLDG. MAINTAIN 12" SEPARATION BETWEEN DOMINION AND COMCAST CONDUITS.
- PROVIDE PULL BOX FOR DOMINOS ELECTRIC SERVICE. COORD PULL BOX SIZE AND TYPE WITH UTILITY COMPANY.
- CONNECT TO NEW POLE BY OTHERS.
- FIBER PULL BOX, FURNISHED BY LINGO, INSTALLED BY CONTRACTOR. FIELD COORDINATE EXACT LOCATION.
- EXISTING LIGHT POLE TO BE REMOVED. MAINTAIN CIRCUITRY TO ACTIVE DOWNSTREAM FIXTURES AS REQUIRED.
- EXISTING UTILITY POLE TO BE REMOVED AND RELOCATED BY UTILITY COMPANY. COORDINATE RELOCATION AND NEW POLE LOCATION WITH UTILITY COMPANIES. MAINTAIN EXISTING EAST-WEST AND NORTH CONDUCTORS; SUPPORT AND EXTEND AS REQUIRED TO NEW POLE LOCATION.
- (2) 2" CONDUIT FOR LINGO; CONDUIT FURNISHED BY LINGO AND INSTALLED BY CONTRACTOR.



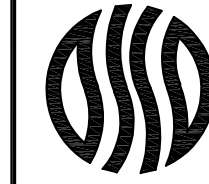
2 TYPICAL UTILITY XFMR PAD DETAIL
SCALE: NONE

- NOTES:
- PAD DESIGNED FOR MAXIMUM TRANSFORMER WEIGHT 10,000 LBS (150 KVA-1000 KVA DEADFRONT TRANSFORMERS AND 150 KVA-1000 KVA LIVEFRONT TRANSFORMERS BUILT SINCE 1977).
 - LIFTING SLEEVE INSERTS, LOCATED AT BALANCE POINT, TO BE USED WITH STANDARD 1/2" BOLT.
 - SURFACE EDGES OF PAD TO BE ROUNDED.
 - GROUND INSIDE OF CABINET AROUND BASE TO MAKE IT TAMPERPROOF.
 - ANY DISTURBED EARTH OR FILL SHALL BE COMPACTED PRIOR TO INSTALLING PAD.
 - INSTALL ONE 6" CONDUIT AT POSITIONS 1 AND 2. (USE 36" RADIUS SCH. 40 PVC CONDUIT ELBOWS)
 - A MAXIMUM OF 16 FOUR INCH SECONDARY CONDUITS MAY BE INSTALLED IN THIS PAD.
 - DO NOT FILL PRIMARY WELL WITH CONCRETE.
 - TRANSFORMER REQUIRES 10' OF CLEAR SPACE FROM FRONT OF PAD.
 - TRANSFORMER REQUIRES 3' OF CLEAR SPACE FROM REAR AND SIDES OF PAD.
 - COORD TRANSFORMER PAD REQUIREMENTS WITH UTILITY COMPANY.



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434-259-7777 Fax 434-259-2105
www.daa.com



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STAUNTON, VIRGINIA

REVISIONS	
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E6	

