

GENERAL NOTES

OWNER/ DEVELOPER: TOWN OF VIENNA DEPARTMENT OF PUBLIC WORKS 300 CENTER STREET, SOUTH VIENNA, VA 22180

- 1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION DURING CONSTRUCTION OPERATIONS... 2. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED ON THE FIELD RUN SURVEY PERFORMED BY URBAN, LTD IN OCT. 2021... 3. SUBSURFACE UTILITIES SHOWN PER MISS UTILITY MARK OUT FIELD LOCATION... 4. NO TITLE REPORT FURNISHED... 5. CLEARING AND GRADING SHALL BE IN ACCORDANCE WITH THE GRADING AND EROSION CONTROL PLANS AND STANDARDS SET FORTH BY THE VIRGINIA EROSION AND SEDIMENTATION CONTROL HANDBOOK...

- 6. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING THE TOWN STREETS... 7. THE CONTRACTOR SHALL PROTECT AND ADJUST, AS REQUIRED, ALL EXISTING MANHOLES AND VALVES WITHIN THE LIMITS OF DISTURBANCE... 8. IF APPLICABLE, ANY UTILITIES AND UTILITY POLES TO BE BRACED DUE TO THIS IMPROVEMENT SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR...

- 9. ALL STORM SEWER STRUCTURES AND PIPING WITHIN THE AREA OF CONSTRUCTION SHALL BE CLEANED OUT FOLLOWING THE COMPLETION OF CONSTRUCTION... 10. ANY DAMAGE TO EXISTING STREETS, PUBLIC UTILITIES OR PRIVATE UTILITIES, INCLUDING BUT NOT LIMITED TO, VALVE BOXES, WATER METER LIDS, FRAMES OR CROCKS AND WATER LATERALS, DUE TO THIS IMPROVEMENT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR... 11. ALL CONSTRUCTION DUE TO THIS IMPROVEMENT IS TO BE PERFORMED IN ACCORDANCE WITH THE STANDARDS SET FORTH BY THE STATE OF VIRGINIA...

- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE TOWN AND THE ENGINEER/SURVEYOR OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM TOWN OF VIENNA... 13. A SMOOTH GRADE SHALL BE MAINTAINED FROM CENTERLINE TO THE CURB AND OUTER TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR PONDING OF WATER ON ANY ROAD OR PARKING AREA... 14. PLANS MAY NOT INCLUDE MINOR SITE FEATURES SUCH AS MAILBOXES, PRIVATE LIGHTING FIXTURES, SIGNS, ETC. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM A PRE-CONSTRUCTION SURVEY OF THE PROPOSED STREETS TO LOCATE THESE PRIVATE FEATURES AND RELOCATE THEM AS NECESSARY...

- 15. THE CONTRACTOR SHALL INSPECT ALL EXISTING UTILITIES FOR NECESSARY REPAIRS PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES... 16. THE CONTRACTOR SHALL NOTIFY THE TOWN AND ENGINEER OF ANY DISCREPANCIES BETWEEN EXISTING FIELD CONDITIONS AND THOSE SHOWN ON THE CONTRACT DOCUMENTS THAT IMPACT PROPOSED CONSTRUCTION ACTIVITIES... 17. ALL CONCRETE AND PAVEMENT DEMOLITION/REMOVAL SHALL EMPLOY SAW CUT JOINTS...

- 18. ROOT PRUNING SHALL BE TO THE DEPTH OF EXCAVATION, OR 24 INCHES, WHICHEVER IS LESS... 19. A ROOT BIOSTIMULANT SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS TO ALL TREES THAT ARE ROOT PRUNED... 20. CONCRETE PIPE TO BE CLASS III UNLESS OTHERWISE SPECIFIED... 21. SIGHT DISTANCE TO BE MAINTAINED BY CONTRACTOR DURING CONSTRUCTION... 22. THE CONTRACTOR SHALL PROVIDE A SMOOTH GRADE FROM THE LIMITS OF DISTURBANCE TO THE BACK OF SIDEWALK...

TOWN OF VIENNA NOTES

- 1. NOTIFY THE TOWN OF VIENNA DEPARTMENT OF PUBLIC WORKS AT 703-255-6390 WHEN WORK IS TO BE STARTED... 2. ALL CONTRACTOR GENERATED DEBRIS MUST BE HAULED AWAY BY THE CONTRACTOR OR OWNER... 3. ALL RUNOFF MUST SHEET FLOW ACROSS PROPERTY LINES UNLESS APPROVED OTHERWISE BY THE DIRECTOR OF PUBLIC WORKS... 4. ALL PRIVATE STORM DRAINS (I.E. ROOF DRAINS, SUMP PUMP ETC.) MUST DAYLIGHT AT A MINIMUM OF 10 FEET FROM A PROPERTY LINE...

ROAD CONSTRUCTION NOTES

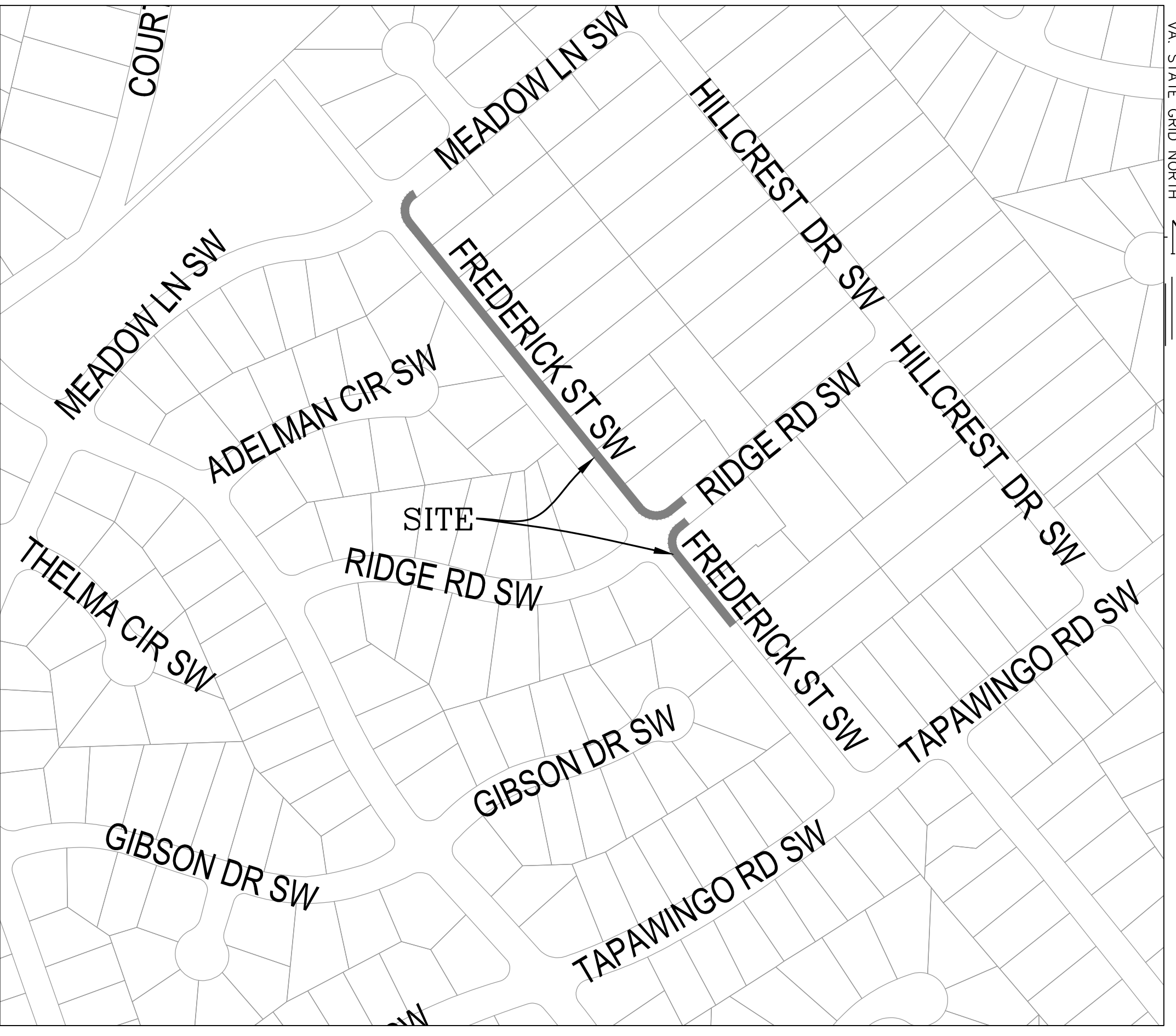
- 1. ALL CONSTRUCTION SHALL CONFORM TO CURRENT TOWN OF VIENNA AND VDOT STANDARDS AND SPECIFICATIONS... 2. THE LOCATIONS OF EXISTING UTILITIES ON THESE DRAWINGS ARE GENERALLY APPROXIMATE... 3. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND MAKE ALL INSPECTIONS NECESSARY IN ORDER TO DETERMINE THE FULL EXTENT OF WORK REQUIRED TO MAKE THE COMPLETED WORK CONFORM TO THE DRAWINGS AND SPECIFICATIONS... 4. WHERE CONFLICTS REQUIRE RELOCATION OF EXISTING UTILITIES (E.G. AT&T, MCI, C&P, VEPCO, MEDIA GENERAL) UTILITY COMPANIES SHALL BE NOTIFIED...

- 5. ALL EXISTING SIGNS, FENCES, ETC. DISTURBED BY THIS CONSTRUCTION SHALL BE RELOCATED BY THE CONTRACTOR AS NECESSARY PER TOWN OF VIENNA REQUIREMENTS... 6. ALL EXISTING TOWN OF VIENNA TRAFFIC CONTROL EQUIPMENT WILL BE RELOCATED BY THE CONTRACTOR AS NECESSARY PER VDOT REQUIREMENTS... 7. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS AND UTILITIES WHICH OCCUR AS A RESULT OF PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE SITE... 8. ANY EXISTING C&G AND PAVEMENT TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED/REPAIRED TO TOWN OF VIENNA SATISFACTION...

- 9. THE CONTRACTOR SHALL CONTACT MISS UTILITY COMPANY REPRESENTATIVE, REVIEW TEST PIT DATA AND ANY OTHER OPERATIONS AVAILABLE TO ENSURE ALL EXISTING UTILITIES IN THE AREA OF CONSTRUCTION ARE SHOWN ON THE PLANS PRIOR TO CONSTRUCTION... 10. WHERE MANHOLES ARE TO BE PLACED IN THE ROAD R/W, THE TOPS SHALL BE OFFSET TO ASSURE THAT THEY AREA POSITIONED TO MINIMIZE IMPACT TO VEHICULAR WHEEL PATHS... 11. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REQUIREMENTS... 12. ALL FILL MATERIAL REQUIRED TO RAISE GRADES AND UNDER SLABS, WHICH MAY CONSIST OF APPROVED ONSITE SOILS AND/OR OFFSITE BORROW MATERIAL...

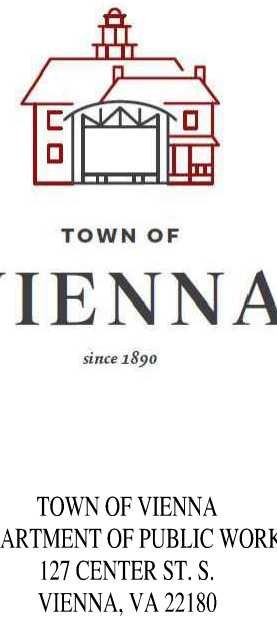
TOWN OF VIENNA DEPARTMENT OF PUBLIC WORKS FAIRFAX COUNTY, VIRGINIA

FREDERICK ST, SW SIDEWALK IMPROVEMENT PLAN (PHASE I) 100% DESIGN CONSTRUCTION DRAWINGS



VICINITY MAP SCALE : 1"= 200'

OWNER/DEVELOPER:



SURVEY NOTES

TOPOGRAPHICAL SURVEY PERFORMED BY FIELD RUN BY URBAN, LTD. VERTICAL NOTE: ELEVATIONS SHOWN HEREON ARE BASED ON STATIC GPS OBSERVATIONS AS PROCESSED BY THE NATIONAL GEODETIC SURVEY... HORIZONTAL NOTE: BEARINGS AND COORDINATES SHOWN HEREON ARE BASED ON STATIC GPS OBSERVATIONS AS PROCESSED BY THE NATIONAL GEODETIC SURVEY...

UTILITIES UNDERGROUND UTILITIES WERE PAINTED BY UTILITIES SEARCH, INC. AND MAPPED INTO THE BASE BY URBAN, LTD.

SHEET INDEX

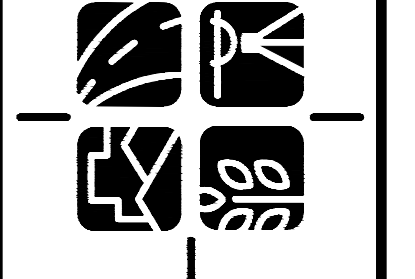
- 1. COVER SHEET 2. NOTES AND DETAILS 3. EXISTING CONDITIONS AND DEMOLITION PLAN 4. SITE PLAN 5. PAVEMENT IMPROVEMENT PLAN 6. EROSION AND SEDIMENT CONTROL PLAN PH I & PH II 7. EROSION AND SEDIMENT CONTROL NARRATIVE AND DETAILS 8. VRRM SPREADSHEET & BMP NARRATIVE

NOTICE REQUIRED CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION OR BLASTING AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. CONTACT "MISS UTILITY" AT 1-800-552-7001 FOR THESE UTILITIES... CONTACT THESE UTILITIES TRI-COUNTY ELEC. CO-OP 1-777-2151... EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

Table with 4 columns: No., DATE, DESCRIPTION, REVISION/ APPROVED

PLAN DATE: 11-20-2023, 01-17-2024, 03-06-2024

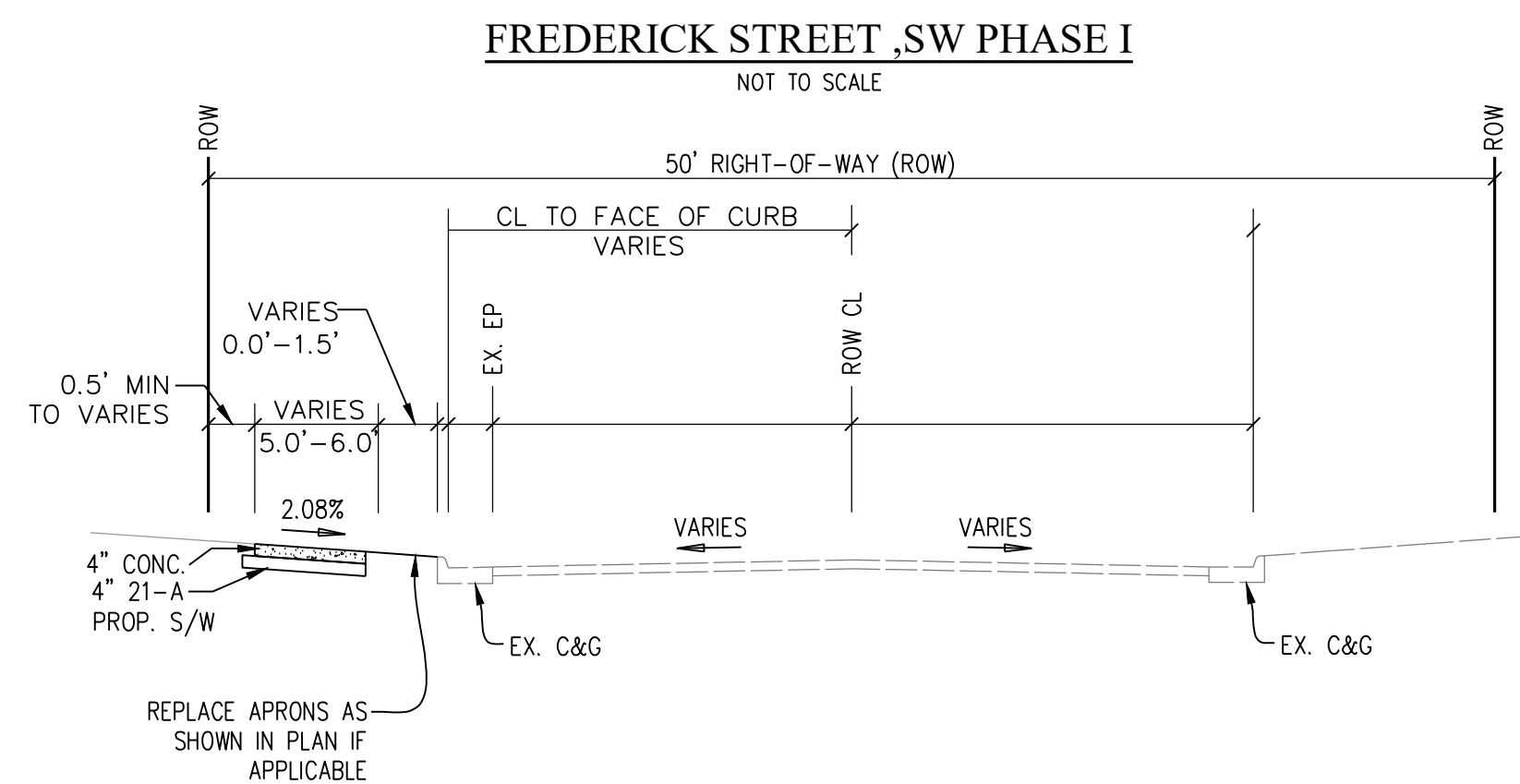
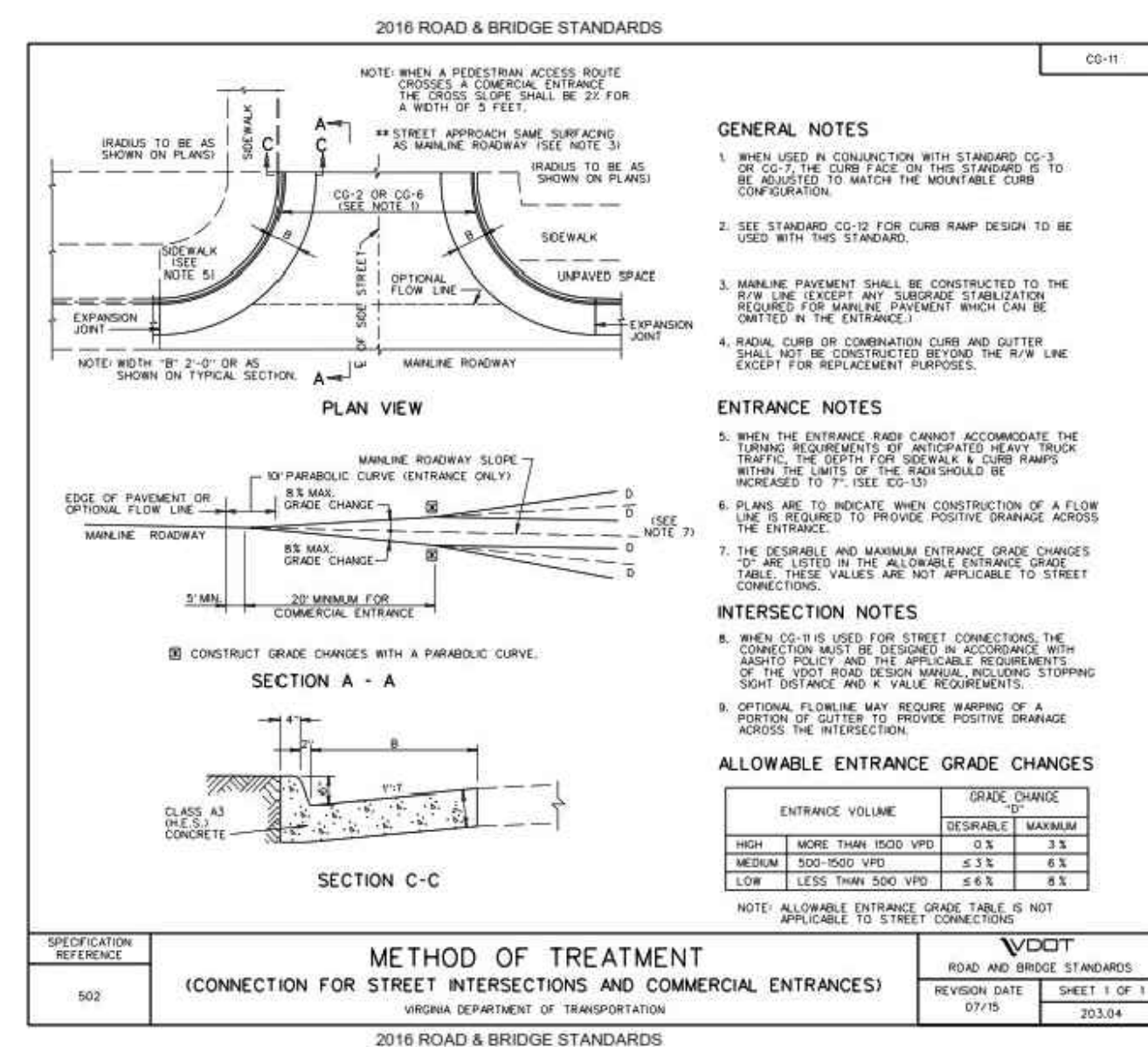
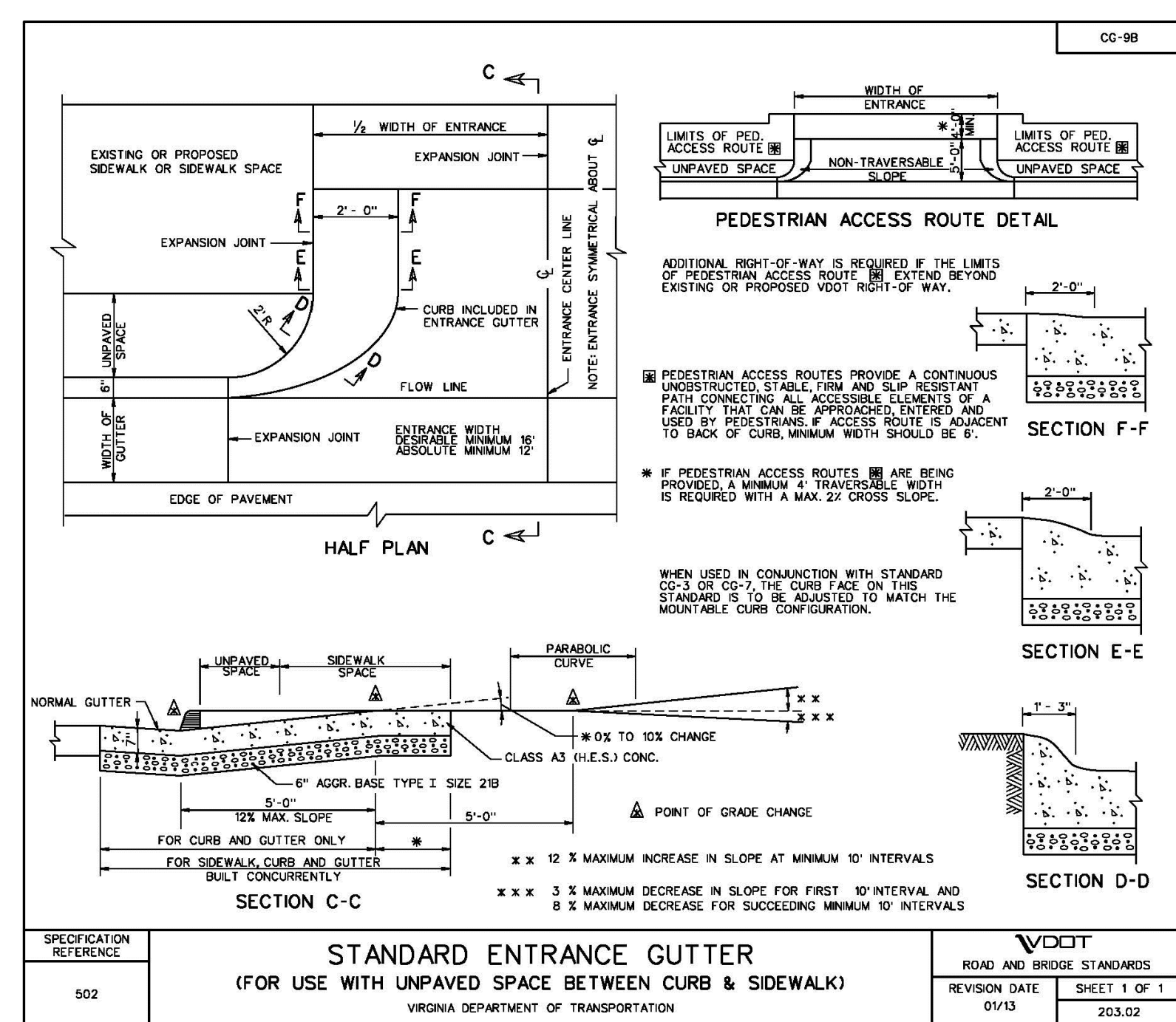
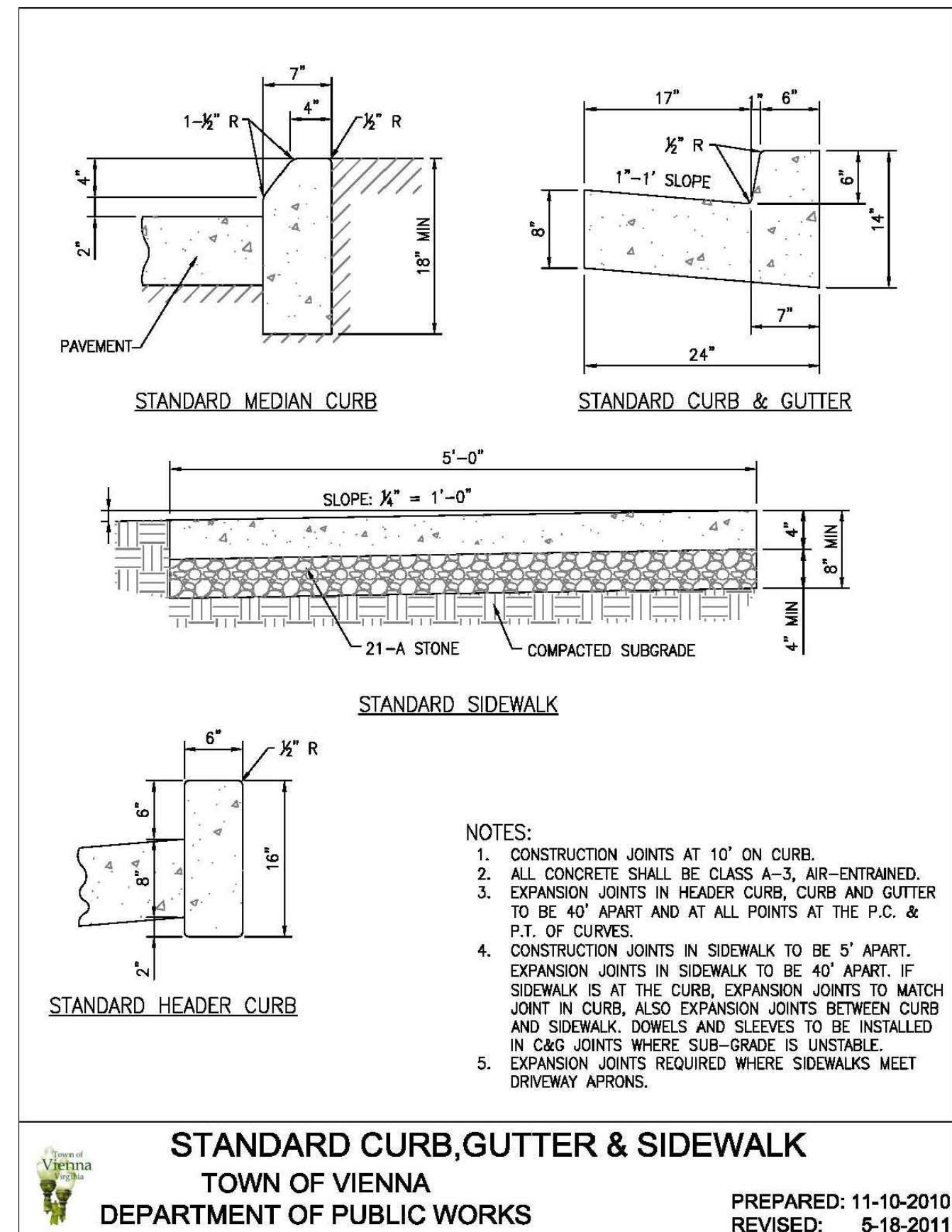
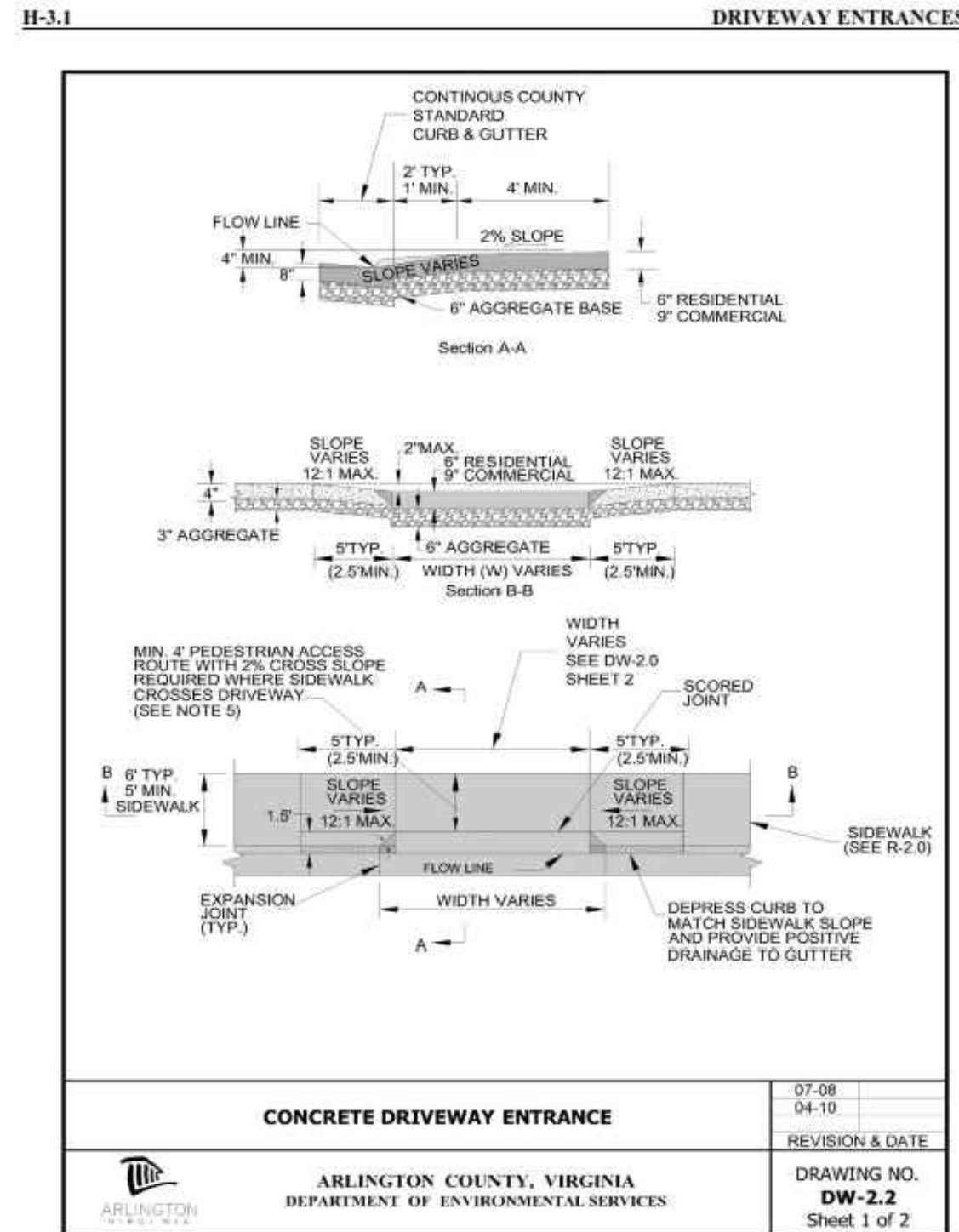
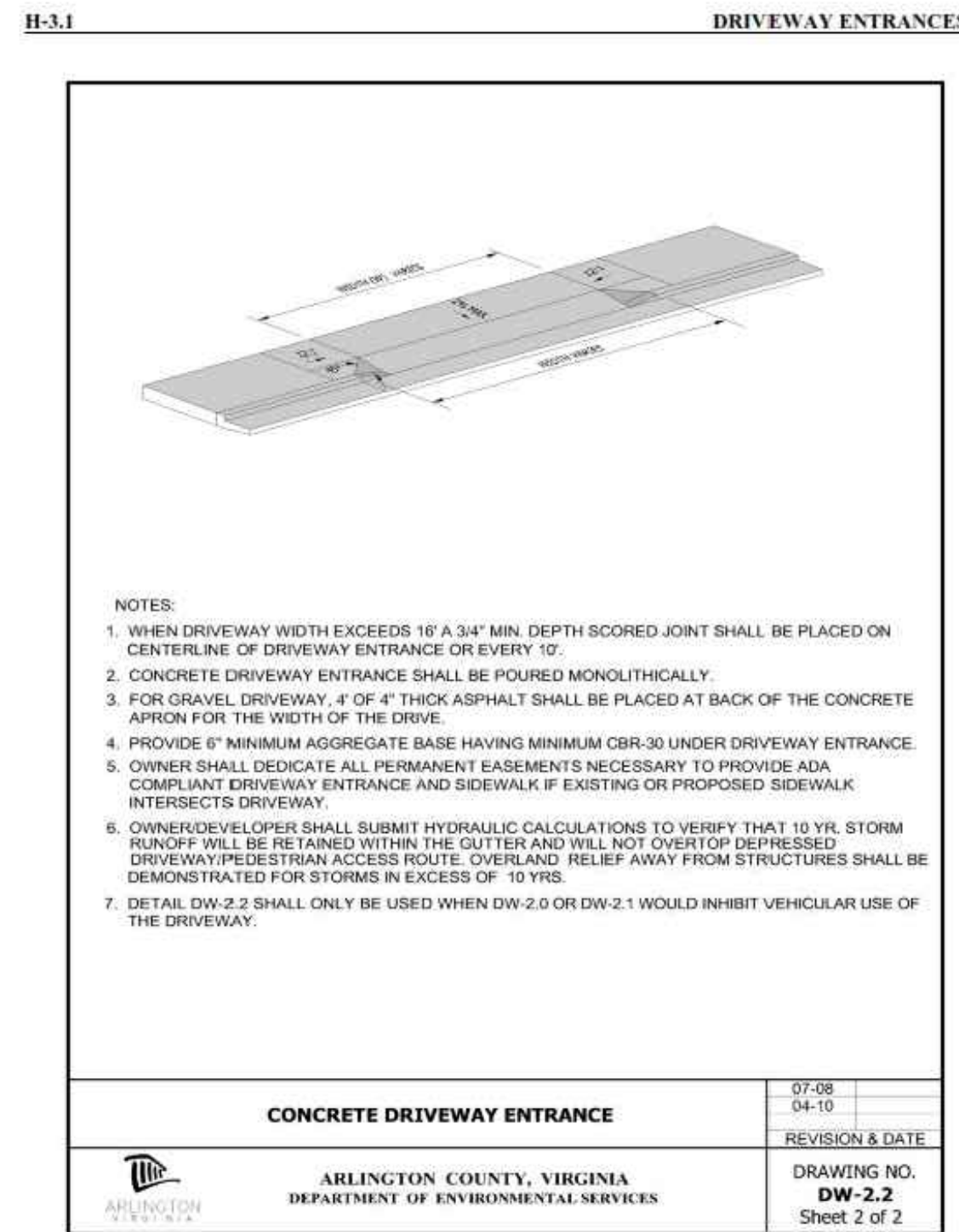
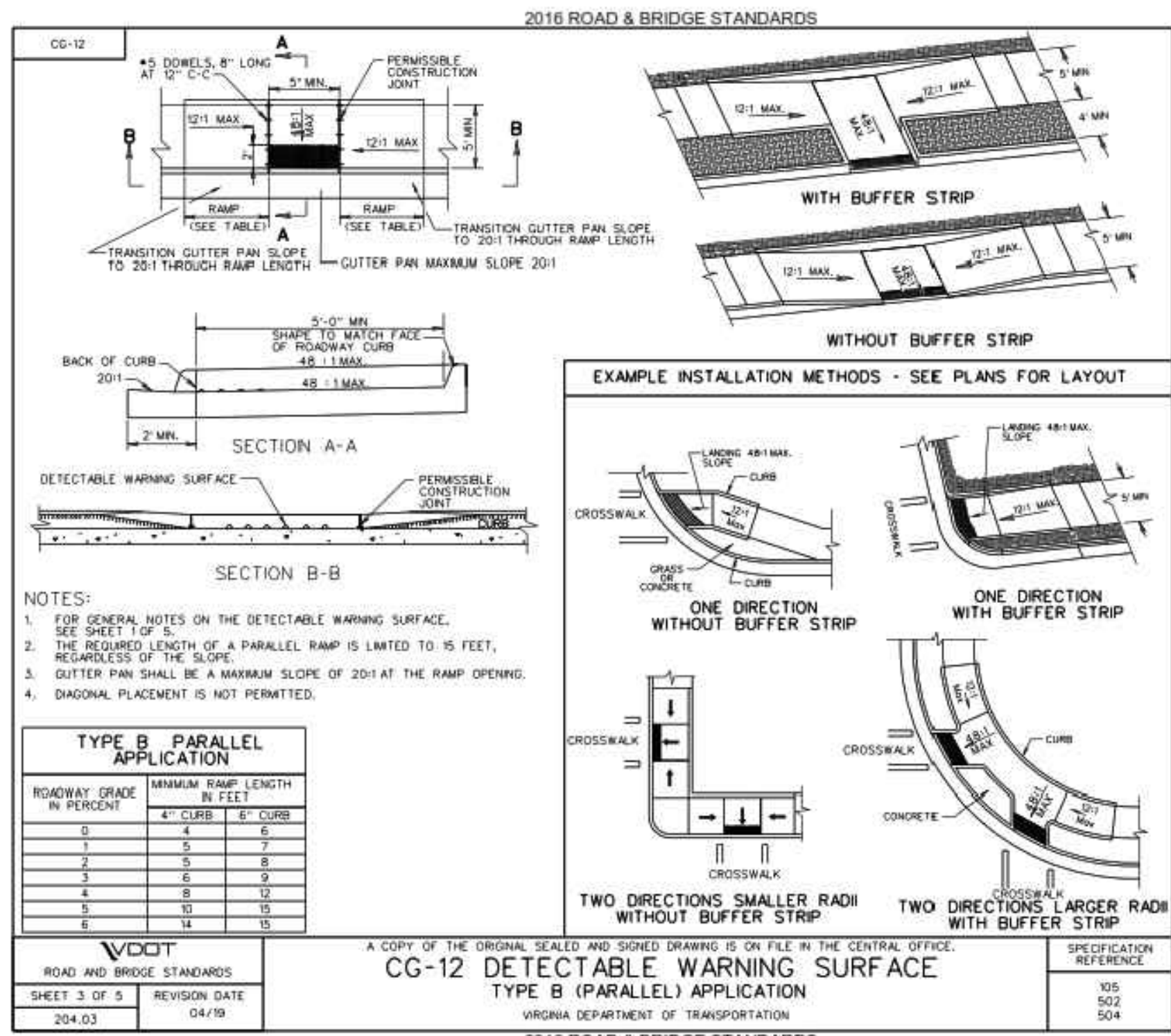
Urban, Ltd. 7712 Little River Turnpike Annandale, Virginia 22003... Planners - Engineers - Landscape Architects - Land Surveyors



COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER C. RYAN CONNOR Lic. No. 0395531 03/06/2024

COVER SHEET FREDERICK STREET, SW SIDEWALK IMPROVEMENT PLAN (PHASE I) TOWN OF VIENNA FAIRFAX COUNTY, VIRGINIA SCALE: AS NOTED DATE: NOV. 2023 C.I. N/A

SHEET 1 OF 8 FILE No. 2572



EXISTING	DESCRIPTION	PROPOSED
350	INDEX CONTOUR	350
352	INTERMEDIATE CONTOUR	352
EX. E.P.	EDGE OF PAVEMENT	PROP. E.P.
EX. C & G	CURB AND GUTTER	C & G
	TRANSITION FROM SPILL TO CATCH CURB	SPILL CATCH
	HEADER CURB	
	PROPERTY LINE	
	DEPARTING PROPERTY LINE	
	LOT LINE	
	RIGHT-OF-WAY	
	CENTERLINE	
	FLOOD PLAN	
	LIMIT OF DISTURBANCE	
	TREE LINE	
	FLOW LINE OF SWALE	
	STREAM	
	OVERLAND RELIEF PATHWAY	
	FENCE LINE	
	EASEMENT	
W EX 8" W/W	WATER LINE	8" DIP W/W
RW EX REUSE W/W	REUSE WATER MAIN	RW RW
W EX W/V	WATER VALVE	W
W EX 8" SAN	SANITARY SEWER	8" SAN
EX 18" RCP	STORM SEWER	18" RCP
E	ELECTRIC SERVICE	E
T	TELEPHONE SERVICE	T
G	GAS LINE	G
IRR	IRRIGATION LINE	IRR
MA	OVERHEAD WIRE	MA
FO	FIBER OPTIC LINE	FO
UNK	UNKNOWN LINE	UNK
+ 25.32	SPOT ELEVATION	25.32
MB	GUY WIRE	MB
MB	MAILBOX	MB
MB	SANITARY SEWER IDENTIFIER	MB
MB	STORM DRAIN IDENTIFIER	MB
MB	EASEMENT IDENTIFIER	MB
MB	WATER METER	MB
MB	WATER VALVE	MB
MB	FIRE HYDRANT	MB
CV	COMMUNICATION VAULT (MANHOLE)	CV
CP	COMMUNICATION PEDESTAL	CP
25	PARKING INDICATOR	25
16ST AD	INDICATES THE NUMBER OF TYPICAL PARKING SPACES	16ST AD
16ST AD	STREET LIGHT	16ST AD
16ST AD	VEHICLES PER DAY (TRAFFIC COUNT)	16ST AD
16ST AD	TEST PIT REQUIRED	16ST AD
16ST AD	CRITICAL SLOPE	16ST AD
16ST AD	SLOPES TO BE STABILIZED PURSUANT TO VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK	16ST AD
16ST AD	HANDICAP RAMP	16ST AD
16ST AD	DENOTES LOCATION OF STANDARD RAMP CONSTRUCTION	16ST AD
16ST AD	DENOTES CLEAR SIGHT TRIANGLE	16ST AD
15' DT	DECIDUOUS TREE	15' DT
15' DT	BENCHMARK	15' DT
15' DT	NEW ASPHALT	15' DT
15' DT	ASPHALT TRAIL	15' DT
15' DT	CONCRETE SIDEWALK	15' DT
15' DT	END WALLS	15' DT
15' DT	END SECTIONS	15' DT
15' DT	STOP SIGN	15' DT
15' DT	STREET SIGN	15' DT
15' DT	GEOTHERMAL LINE	15' DT

PLAN DATE: 11-20-2023
DATE: 01-17-2024
DATE: 03-06-2024

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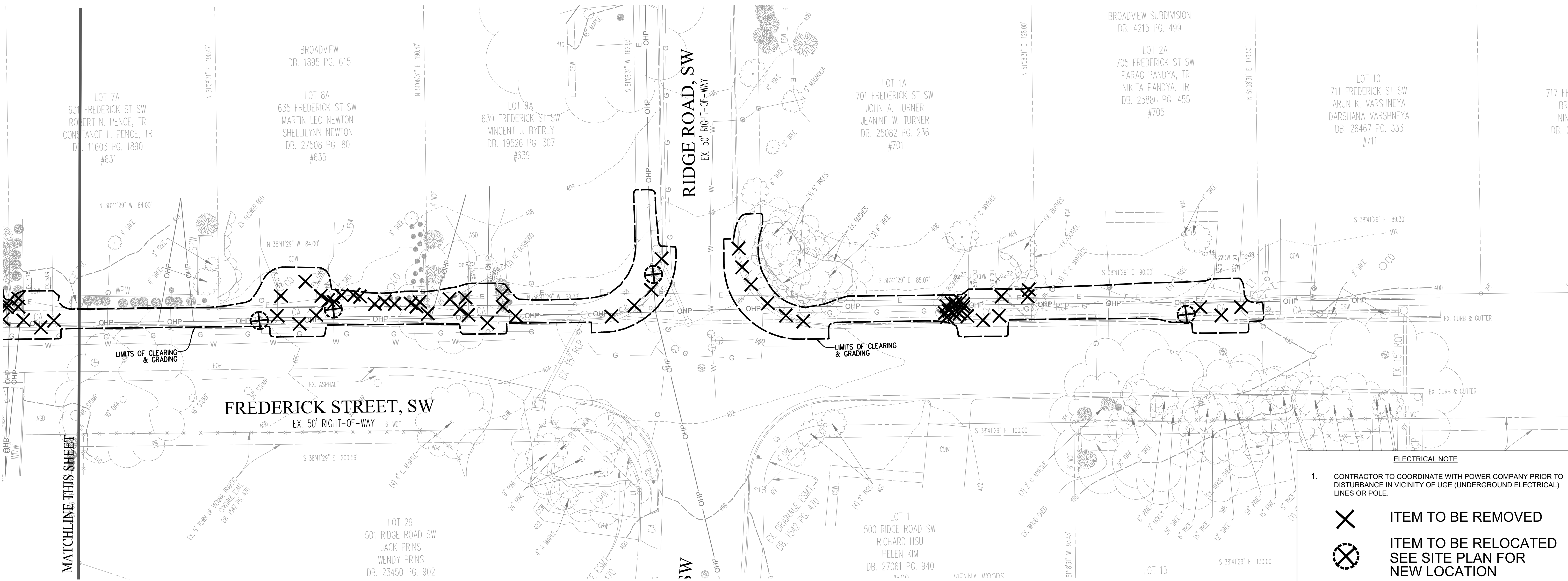
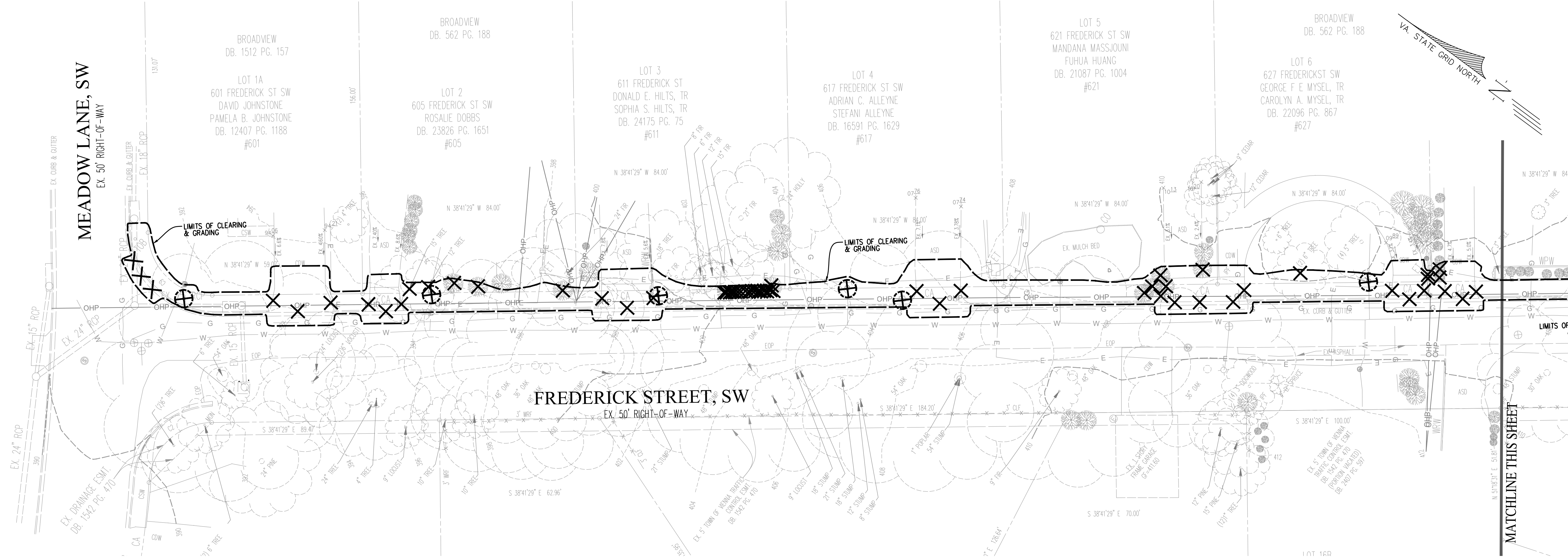
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COMMONWEALTH OF VIRGINIA
C. RYAN CONNOR
Lic. No. 039531
03/06/2024
PROFESSIONAL ENGINEER

NOTES AND DETAILS
FREDERICK STREET, SW
SIDEWALK IMPROVEMENT PLAN (PHASE I)
TOWN OF VIENNA
FAIRFAX COUNTY, VIRGINIA



DATE: NOV. 2023
SCALE: N/A

SHEET 2 OF 8
FILE No. 2572



ELECTRICAL NOTE

1. CONTRACTOR TO COORDINATE WITH POWER COMPANY PRIOR TO DISTURBANCE IN VICINITY OF UGE (UNDERGROUND ELECTRICAL) LINES OR POLE.

 **ITEM TO BE REMOVED**
 **ITEM TO BE RELOCATED**
 SEE SITE PLAN FOR NEW LOCATION

NO.	DATE	DESCRIPTION	REVBY	APPROVED	DATE
1	11-20-2023	30% PLAN			
2	01-17-2024	65% PLAN			
3	03-06-2024	100% PLAN			

PLAN DATE: 11-20-2023
 01-17-2024
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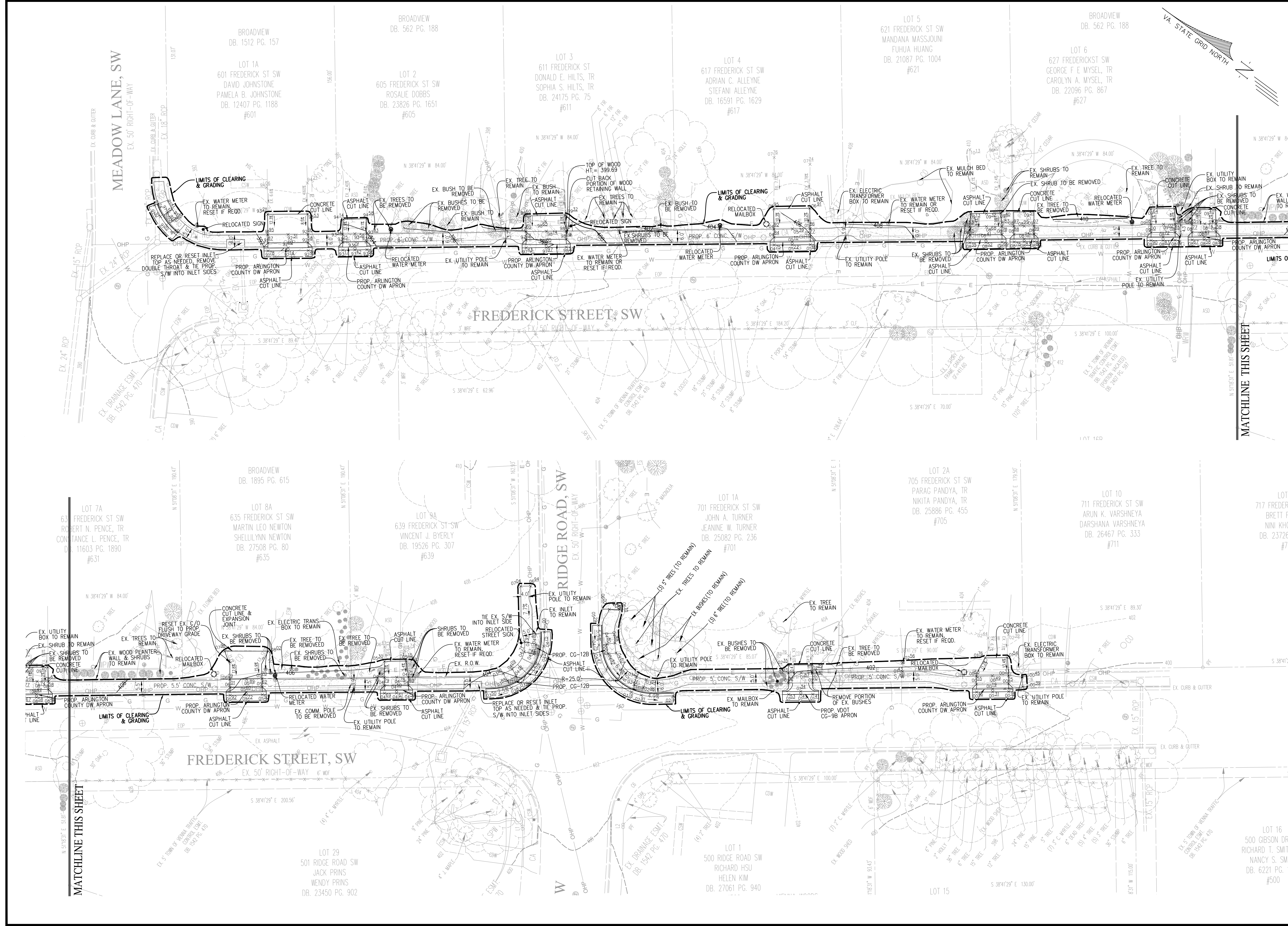
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COMMONWEALTH OF VIRGINIA
 C. RYAN CONNOR
 Lic. No. 0395931
 03/06/2024
 PROFESSIONAL ENGINEER

EXISTING CONDITIONS AND DEMOLITION PLAN
FREDERICK STREET, SW
SIDEWALK IMPROVEMENT PLAN (PHASE I)
 TOWN OF VIENNA
 FAIRFAX COUNTY, VIRGINIA

DATE: NOV. 2023
 SCALE: 1"=20'
 C.I.: 2

SHEET 3
 OF 8
 FILE No. 2572



No.	DATE	DESCRIPTION	REVIEW	APPROVED	DATE
1	11-20-2023	50% PLAN			
2	01-17-2024	100% PLAN			
3	03-06-2024	100% PLAN			

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COMMONWEALTH OF VIRGINIA
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 Lic. No. 039531
 03/06/2024
 PROFESSIONAL ENGINEER

SITE PLAN

FREDERICK STREET, SW

SIDEWALK IMPROVEMENT PLAN (PHASE I)

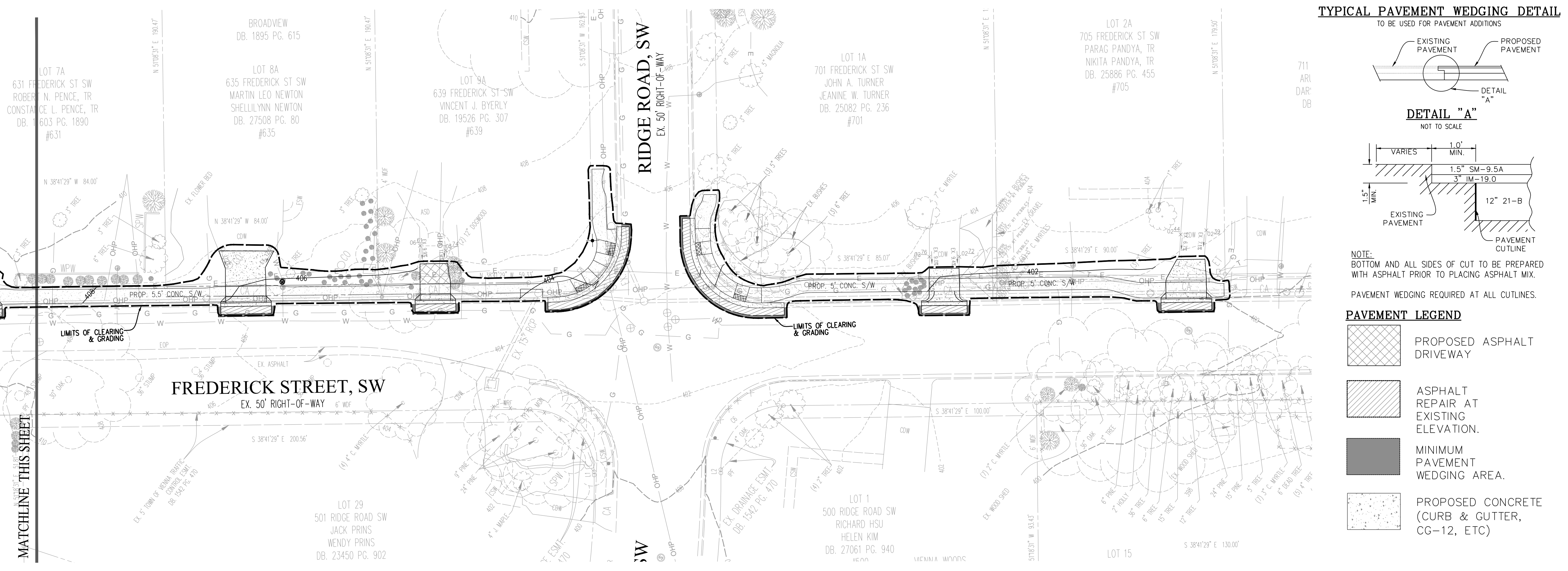
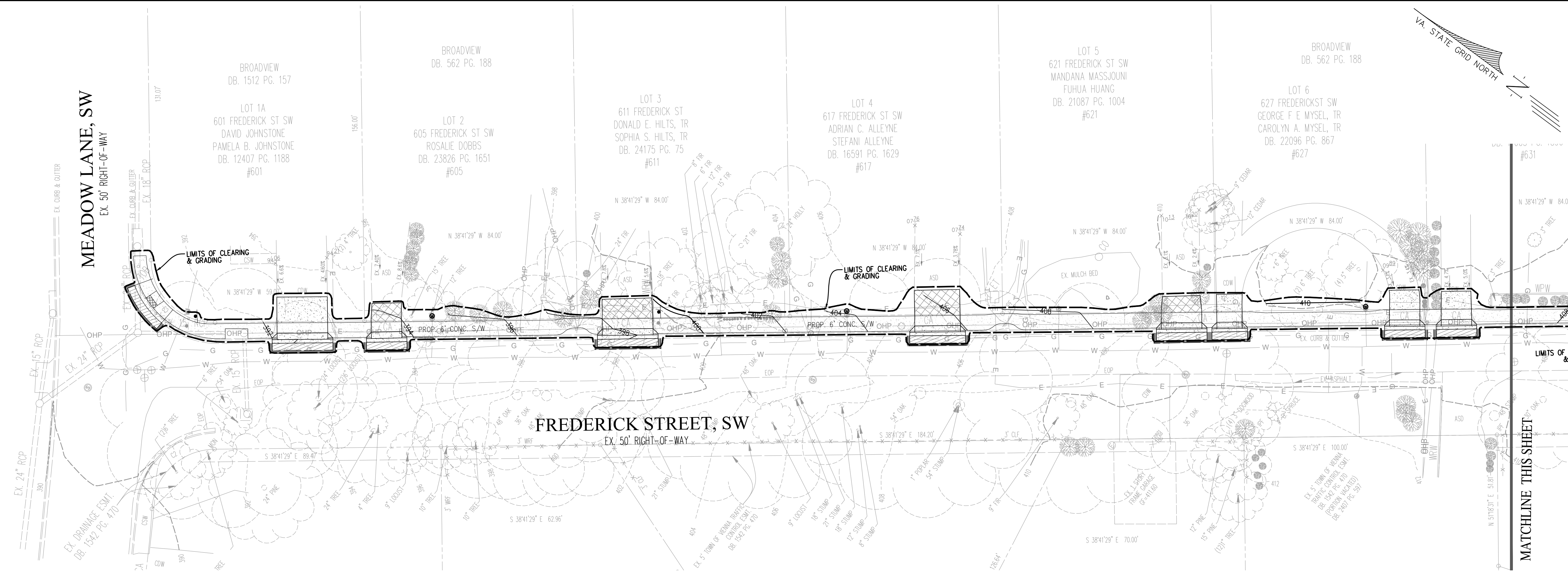
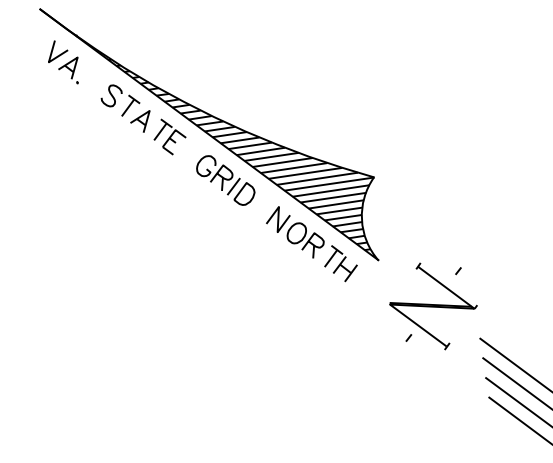
TOWN OF VIENNA
 FAIRFAX COUNTY, VIRGINIA

DATE: NOV, 2023

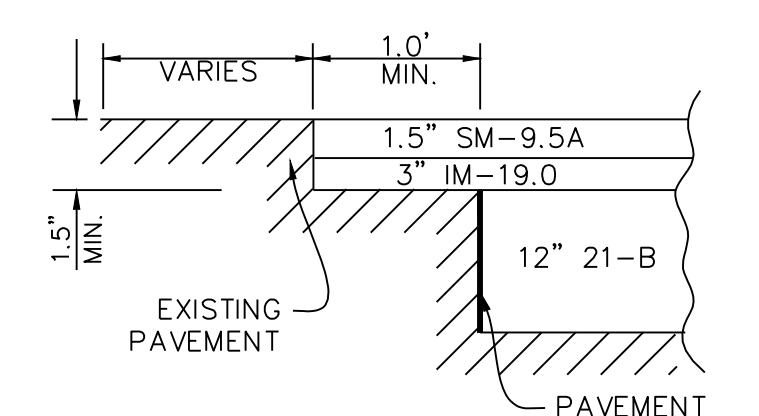
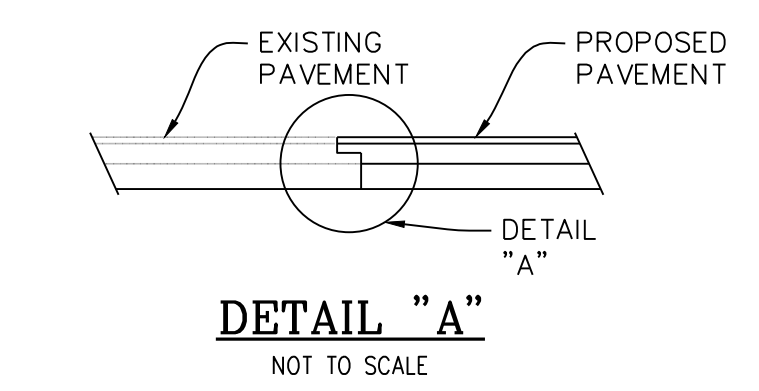
SCALE: 1"=20'

SHEET
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 OF
 8

FILE No.
 2572

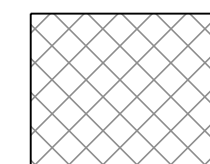
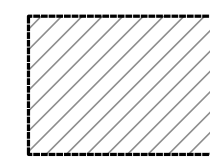

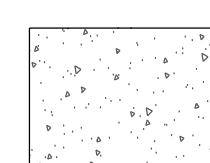


TYPICAL PAVEMENT WEDGING DETAIL
TO BE USED FOR PAVEMENT ADDITIONS



NOTE:
BOTTOM AND ALL SIDES OF CUT TO BE PREPARED WITH ASPHALT PRIOR TO PLACING ASPHALT MIX.
PAVEMENT WEDGING REQUIRED AT ALL CUTLINES.

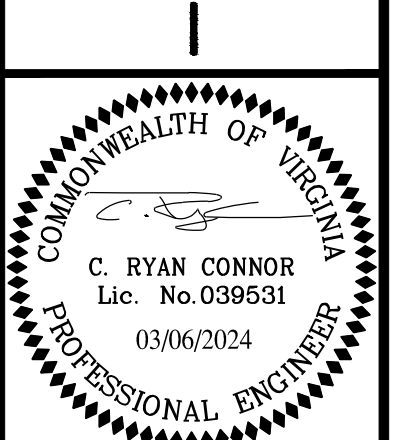
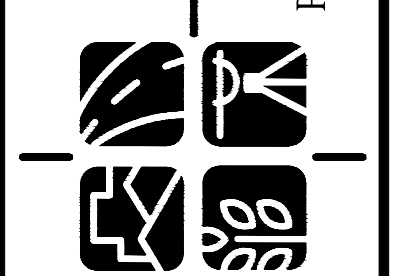
PAVEMENT LEGEND

-  PROPOSED ASPHALT DRIVEWAY
-  ASPHALT REPAIR AT EXISTING ELEVATION.
-  MINIMUM PAVEMENT WEDGING AREA.
-  PROPOSED CONCRETE (CURB & GUTTER, CG-12, ETC)

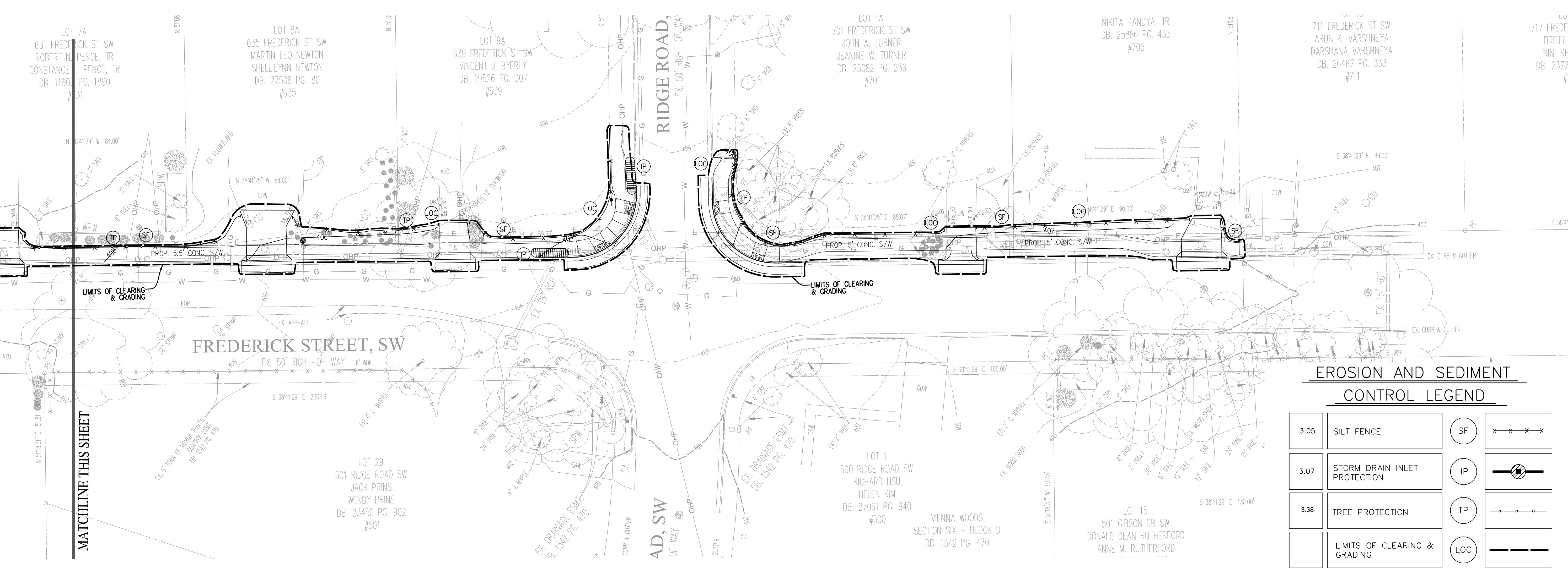
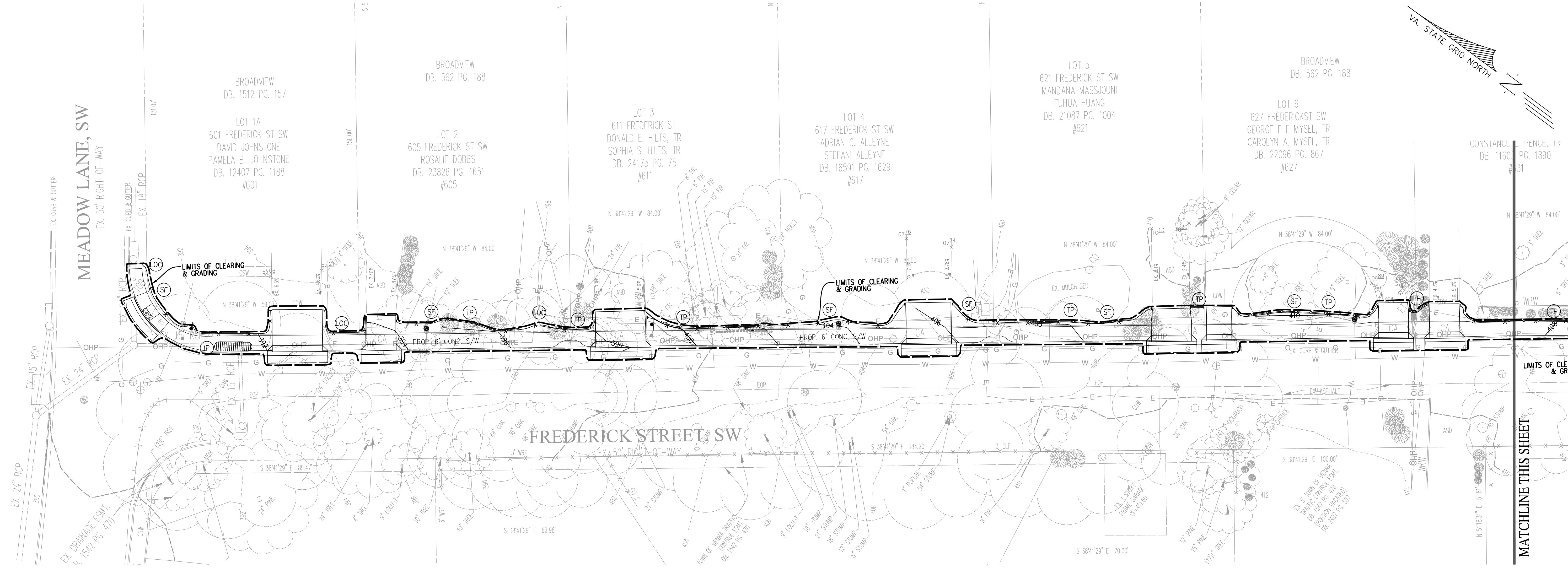
NO.	DATE	DESCRIPTION	REVISIONS
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2	01-17-2024	95% PLAN	
1	11-20-2023	50% PLAN	

PLAN DATE: 11-20-2023
01-17-2024
03-06-2024

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PAVEMENT IMPROVEMENT PLAN
FREDERICK STREET, SW
SIDEWALK IMPROVEMENT PLAN (PHASE I)
TOWN OF VIENNA
FAIRFAX COUNTY, VIRGINIA
DATE: NOV. 2023
SCALE: 1"=20'
SHEET 5 OF 8
FILE No. 2572



EROSION AND SEDIMENT CONTROL LEGEND

3.05	SILT FENCE	SF	XXXXX
3.07	STORM DRAIN INLET PROTECTION	IP	⊗
3.38	TREE PROTECTION	TP	—○—
	LIMITS OF CLEARING & GRADING	LOC	—

REVISIONS

No.	DATE	DESCRIPTION	REVIEWER	DATE
1	11-20-2023	30% PLAN		
2	01-17-2024	95% PLAN		
3	03-06-2024	100% PLAN		

PLAN DATE
 11-20-2023
 01-17-2024
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COMMONWEALTH OF VIRGINIA
 C. RYAN CONNOR
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 03/06/2024
 PROFESSIONAL ENGINEER

EROSION AND SEDIMENT CONTROL PH I & PH II
 FREDERICK STREET, SW
 SIDEWALK IMPROVEMENT PLAN (PHASE I)
 TOWN OF VIENNA
 FAIRFAX COUNTY, VIRGINIA
 C.I. 2'

SHEET
 6
 OF
 8
 FILE No.
 2572

DATE: NOV. 2023

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A SIDEWALK IMPROVEMENT PLAN FOR THE EXISTING FREDERICK STREET SW. IMPROVEMENTS INCLUDE CURB AND GUTTER, SIDEWALK, DRIVEWAY ENTRANCES AND CG-12 DETECTABLE WARNING SURFACES. THE TOTAL DISTURBED ACREAGE FOR THE PROJECT IS 0.31 ACRES.

EXISTING SITE CONDITIONS

THE SITE IS AN EXISTING ROAD, FREDERICK STREET SW WITH CURB & GUTTER, DRIVEWAY ENTRANCES, AND FRONT YARDS CONTAINING MAILBOXES, WATER METERS, TREES ETC.

ADJACENT PROPERTIES

THE SITE IS MOSTLY SURROUNDED ON ALL SIDES BY SINGLE-FAMILY LOTS. THE NW END OF THE SITE IS ADJACENT TO A COMMERCIAL LOT TO THE WEST.

OFF-SITE AREAS

THERE IS CONSTRUCTION ON OFFSITE AREAS ADJACENT TO ROADWAY. EROSION AND SEDIMENT CONTROL DEVICES WILL BE PLACED OFFSITE AS SHOWN ON PLAN.

SOILS INFORMATION

SOIL ID NUMBERS	SOIL SERIES NAME	FOUNDATION SUPPORT	SOIL DRAINAGE	EROSION POTENTIAL	PROBLEM CLASS
105B	WHEATON-GLENELG COMPLEX*	GOOD	GOOD	HIGH	IVB

CRITICAL EROSION AREAS

THERE ARE NO CRITICAL AREAS ASSOCIATED WITH THIS PROJECT. NO SLOPES ARE GREATER THAN 20%, AND THERE ARE NO RESOURCE PROTECTION AREAS WITHIN THE PROJECT LIMITS.

EROSION AND SEDIMENT CONTROL MEASURES

THE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT AREA ARE DESCRIBED IN DETAIL IN THE EROSION AND SEDIMENT CONTROL PROGRAM ON THIS SHEET.

OVERALL MANAGEMENT STRATEGY

THE OVERALL STRATEGY FOR THIS SITE IS TO TREAT THE ONSITE RUNOFF WITH PERIMETER SILT FENCE AND INLET PROTECTION.

EROSION CONTROL PROGRAM (GENERAL GUIDELINES)

NOT MORE THAN 75% OF THE SITE IS TO BE DENUDED AT ONE TIME. TEMPORARY SEEDING AND MULCHING ARE TO BE APPLIED TO ANY AREA WITHIN THE SITE NOT CONTINUOUSLY WORKED FOR 5 DAYS AFTER CLEARING AND ROUGH GRADING. IN ADDITION, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS TO MINIMIZE THE VOLUME OF SILT:

- CONTRACTOR SHALL EVALUATE THE SITE TO DETERMINE EXTENSIVE CUT AND FILL AREAS AND SHALL WORK THOSE AREAS TO MINIMIZE THE EXTENT OF HEAVY EQUIPMENT WORK. CONTRACTOR SHALL STRIVE TO BRING AREAS TO GRADE (ROUGH OR FINISH) AND TO STABILIZE, BY TEMPORARY OR PERMANENT VEGETATION, THESE DISTURBED AREAS PRIOR TO BEGINNING WORK IN OTHER AREAS.
- FILL AREAS SHALL BE COMPACTED COMPLETELY PRIOR TO THE END OF EACH WORK DAY. FILL SLOPE SURFACES SHALL BE LEFT ROUGHENED TO REDUCE SHEET EROSION OF THE SLOPES. CONTRACTOR SHALL REDIRECT CONCENTRATED RUNOFF, BY EARTH BERMS OR OTHER DEVICES, AROUND ACTIVELY DISTURBED AREAS TO STABILIZE OUTLETS.
- CUT SLOPE, AS NECESSARY, SHALL BE PROTECTED FROM CONCENTRATED FLOW BY BERMS ABOVE THE SLOPE AND DIRECTED AROUND THE DISTURBED AREA TO STABILIZED OUTLETS.
- IN NEW PAVEMENT AREAS, PLACE THE AGGREGATE BASE STONE ON THE FINISH SUBGRADE AT THE EARLIEST POSSIBLE TIME.
- MATERIALS AND METHODS USED IN CONSTRUCTION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES REQUIRED SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATIONS IN CHAPTER 3 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), THIRD EDITION, 1992, AS WELL AS ANY OTHER APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- WHERE APPROPRIATE AND FEASIBLE, AREAS IN WHICH NATURAL GRADES ARE NOT IMPACTED BY PROPOSED GRADING OR STOCKPILE AREAS, SHALL BE LEFT WITH THEIR EXISTING VEGETATION IN PLACE. ALL AREAS SUBJECT TO GRADING SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL.
- PERMANENT OR SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN 1 YEAR.

SEDIMENT CONTROL PROGRAM (PHASE I)

- INSTALL PERIMETER CONTROLS AS SHOWN ON THE PHASE I PLAN (SILT FENCE, ETC.)
PERIMETER CONTROLS MUST BE APPROVED IN WRITING BY THE TOWN E & S INSPECTOR BEFORE CLEARING OF THE SITE CAN TAKE PLACE
- COMMENCE CONSTRUCTION OF ALL UTILITIES AND GRADING OF THE SITE.

SEDIMENT CONTROL PROGRAM (PHASE II)

- COMMENCE CONSTRUCTION OF CURB AND GUTTER, DRIVEWAY ENTRANCE, PAVEMENT AND SIDEWALK AS SHOWN ON THE CONSTRUCTION PLANS.
- INLET PROTECTION (IP) SHALL BE PROVIDED AT STORM DRAIN INLETS AS THEY ARE CONSTRUCTED.
- PERMANENTLY STABILIZE UNPAVED AREAS WITH SOD (PER SEC. 3.33 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK).
- THE CONTROL MEASURES MAY NOT BE REMOVED UNTIL ALL OF THE DISTURBED AREAS HAVE BEEN STABILIZED AND ONLY AS APPROVED AND DIRECTED BY THE INSPECTOR.

MAINTENANCE

THE FOLLOWING IS A PROGRAM OF MAINTENANCE FOR THE MECHANICAL AND PERMANENT CONTROLS SPECIFIED IN THIS NARRATIVE AND ON THE PLAN:

- THE SITE SUPERINTENDENT, OR HIS REPRESENTATIVE, SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E., SEEDED OR SODDEN AREAS) ON A DAILY BASIS (ESPECIALLY AFTER A HEAVY RAINFALL) TO INSURE THAT ALL CONTROLS ARE IN PLACE AND THAT NONE HAVE BEEN DAMAGED. ANY DAMAGED CONTROL SHALL BE REPAIRED PRIOR TO END OF THE WORK DAY TO INCLUDE RESEEDING OR RESETTling, IF NECESSARY. WHEN IT IS CLEAR THAT PLANTS HAVE NOT GERMINATED ON AN AREA OR HAVE DIED, THESE AREAS MUST BE RE-SEEDING IMMEDIATELY TO PREVENT EROSION DAMAGE.
- AFTER ALL CONSTRUCTION OPERATIONS HAVE ENDED AND ALL DISTURBED AREAS ARE STABILIZED, MECHANICAL SEDIMENT CONTROLS SHALL BE REMOVED AND GROUND SHALL BE RESTORED ESTABLISHMENT OF VEGETATION, TO ITS NATURAL OR PROPOSED CONDITION. REMOVAL OF ANY CONTROL IS CONTINGENT UPON APPROVAL BY THE TOWN INSPECTOR.

PERMANENT STABILIZATION

AFTER CONSTRUCTION IS COMPLETE ALL DISTURBED AREAS SHALL BE SEEDING AND MULCHED IN ACCORDANCE WITH SEC. 3.32 AND 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

STORMWATER MANAGEMENT

N/A

ADDITIONAL NOTES

- THE TOWN INSPECTOR SHALL HAVE THE AUTHORITY TO DIRECT THE ADDITION OR DELETION OF EROSION AND SEDIMENT CONTROLS AS SITE CONDITIONS WARRANT.
- EARTHEN STRUCTURES ARE TO BE STABILIZED IMMEDIATELY UPON COMPLETION.

EROSION AND SEDIMENT CONTROL MEASURES:

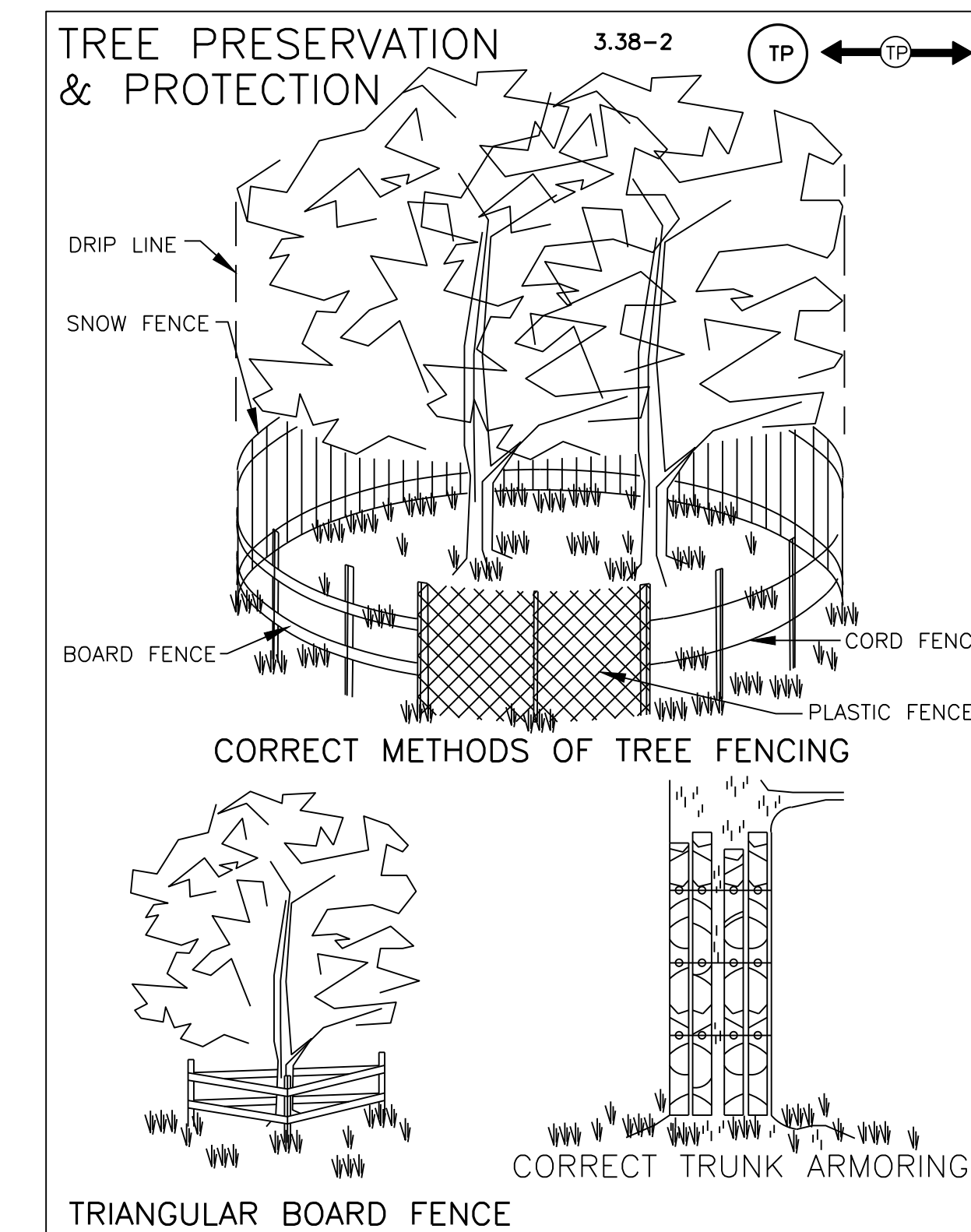
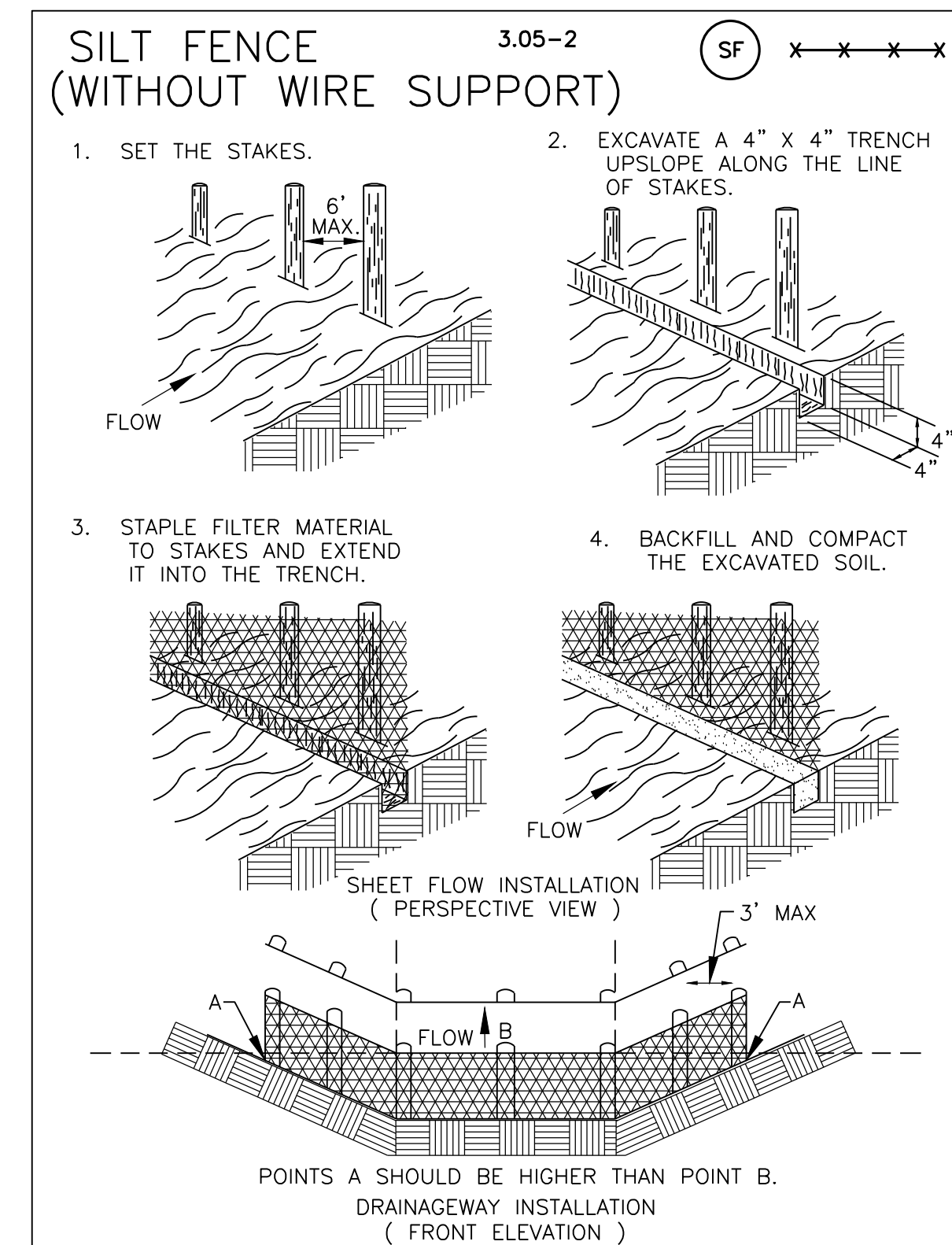
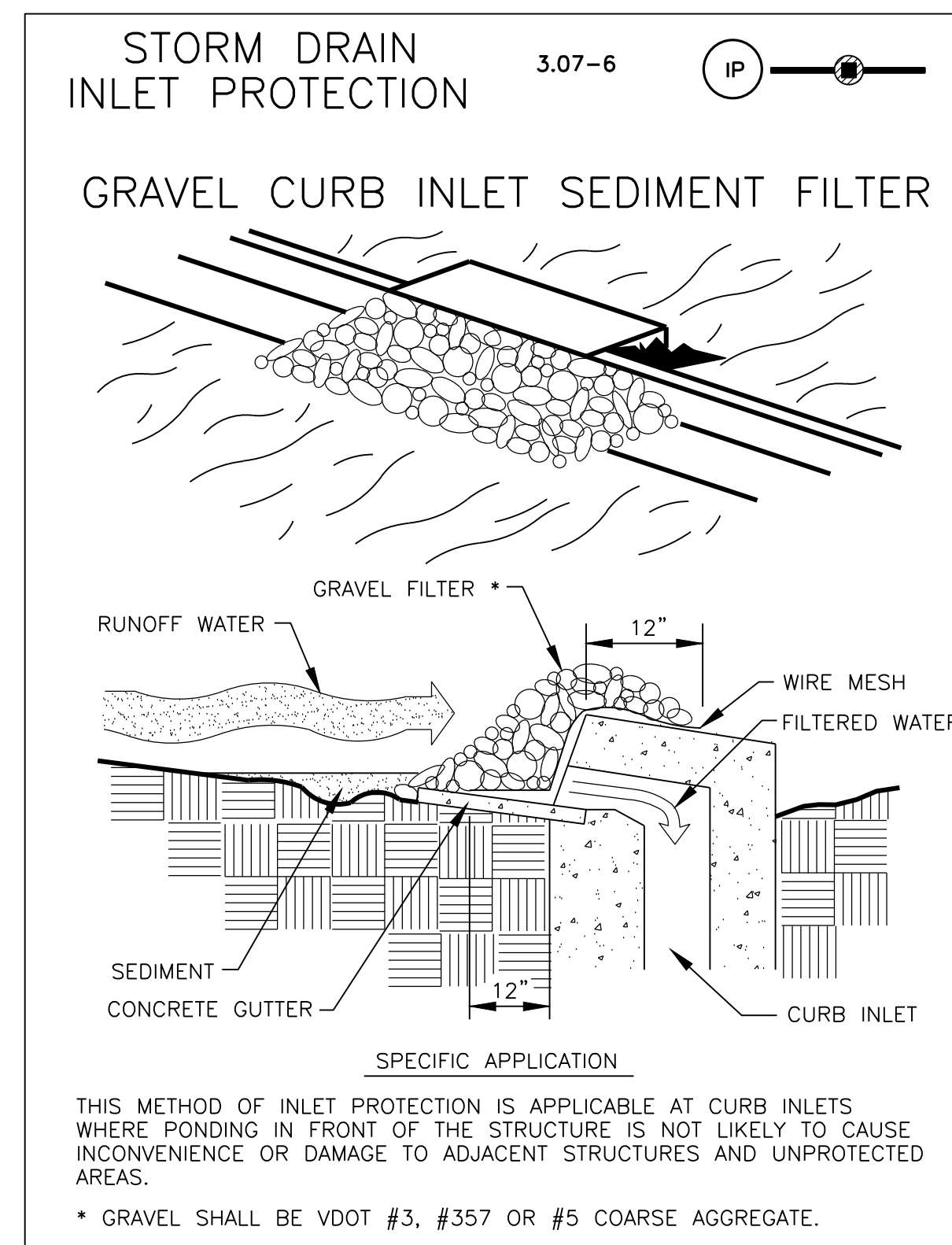
UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VESCH.

THE STRUCTURAL PRACTICES PROPOSED WITH THIS PLAN ARE AS FOLLOWS:

- SILT FENCE - 3.05**
A TEMPORARY SEDIMENT BARRIER CONSISTING OF A SYNTHETIC FILTER FABRIC STRETCHED ACROSS AND ATTACHED TO SUPPORTING POSTS AND ENTRENCHED.
- STORM DRAIN INLET PROTECTION - 3.07**
A SEDIMENT FILTER OR AN EXCAVATED IMPOUNDING AREA AROUND A STORM DRAIN DROP INLET OR CURB INLET.
- TOPSOILING - 3.30**
PRESERVING AND REUSING THE SURFACE LAYER OF SOIL FROM AREAS TO BE GRADED.
- TEMPORARY SEEDING - 3.31**
THE ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS BY SEEDING WITH APPROPRIATE RAPIDLY GROWING ANNUAL PLANTS.
- SODDING - 3.33**
STABILIZING FINE-GRADED DISTURBED AREAS BY ESTABLISHING PERMANENT GRASS STANDS WITH SOD
- MULCHING - 3.35**
APPLICATION OF PLANT RESIDUES OR OTHER SUITABLE MATERIALS TO THE SOIL SURFACE.
- TREE PROTECTION - 3.38**
PROTECTION OF DESIRABLE TREES FROM MECHANICAL AND OTHER INJURY DURING LAND DISTURBING AND CONSTRUCTION ACTIVITY.
- DUST CONTROL - 3.39**
REDUCING SURFACE AND AIR MOVEMENT OF DUST DURING LAND DISTURBING, DEMOLITION, AND CONSTRUCTION ACTIVITIES, BY SPRAYING FROM A WATER TRUCK OR OTHER APPROVED METHOD.

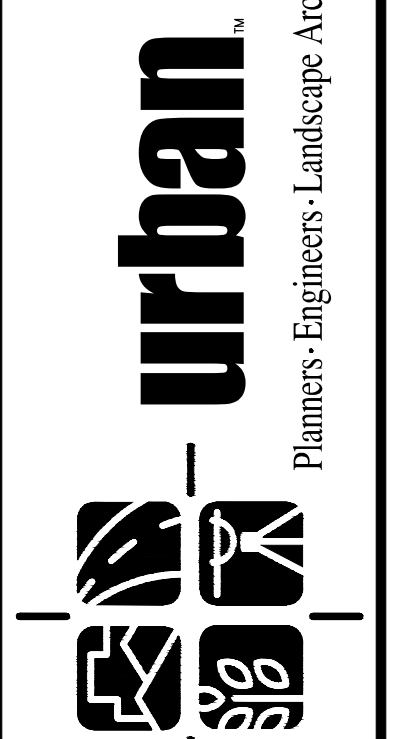
GENERAL LAND CONSERVATION NOTES

- ALL LAND CONSERVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- NO DISTURBED AREA WILL REMAIN DENUDED FOR MORE THAN 14 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE TOWN.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
- ALL STORM SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDING WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ONE TIME.
- ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDING AND MULCHED WITHIN 5 DAYS AFTER BACKFILL.
- ALL TEMPORARY EARTH BERMS, AND DIVERSIONS ARE TO BE MULCHED AND SEEDING FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES.
- DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION DEVICES, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
- AT THE COMPLETION OF CONSTRUCTION, ALL TEMPORARY SILTATION AND EROSION CONTROLS SHALL BE REMOVED AND ALL DISTURBED AREAS SHALL BE STABILIZED.



PLAN DATE	NO.	DATE	DESCRIPTION	REVIEWED	APPROVED	DATE
11-20-2023	1	01-17-2024				
03-06-2024	2	03-06-2024	100% PLAN			
03-06-2024	3	03-06-2024	100% PLAN			

Urban, Ltd.
7712 Little River Turnpike
Annandale, Virginia 22003
Tel: 703.642.8080
www.urbanltd.com



COMMONWEALTH OF VIRGINIA
C. RYAN CONNOR
Lic. No. 039531
03/06/2024
PROFESSIONAL ENGINEER

EROSION AND SEDIMENT CONTROL NARRATIVE & DETAILS
FREDERICK STREET, SW
SIDEWALK IMPROVEMENT PLAN (PHASE I)
TOWN OF VIENNA
FAIRFAX COUNTY, VIRGINIA
SCALE: N/A
DATE: NOV. 2023
C.I. N/A

SHEET
7
OF
8
FILE No.
2572

BMP SITE REQUIREMENT COMPUTATIONS

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

2011 BMP Standards and Specifications 2013 Draft BMP Standards and Specifications
 Project Name: **Town of Vienna Frederick Street SW Phase I**
 Date: **12/29/2023**
 Linear Development Project? No

CLEAR ALL (Ctrl+Shift+R)
 data input cells constant values calculation cells final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → **0.31**

Maximum reduction required: **10%**
 The site's net increase in impervious cover (acres) is: **0.12**
 Post-Development TP Load Reduction for Site (lb/yr): **0.24**

Check:
 BMP Design Specifications List: 2013 Draft Stds & Specs
 Linear project? No
 Land cover areas entered correctly? ✓
 Total disturbed area entered? ✓

Pre-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) – undisturbed forest/open space	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) – disturbed, graded for yards or other turf to be	0.00	0.00	0.00	0.19	0.19
Impervious Cover (acres)	0.00	0.00	0.00	0.12	0.12
Totals					0.31

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) – undisturbed, protected forest/open space or reforested	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres) – disturbed, graded for yards or other turf to be	0.00	0.00	0.00	0.07	0.07
Impervious Cover (acres)	0.00	0.00	0.00	0.24	0.24
Area Check	OK	OK	OK	OK	0.31

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
n) (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY – PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-Development	Listed	Adjusted ¹
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.19	0.07
Weighted Rv(turf)	0.25	0.25
% Managed Turf	61%	37%
Impervious Cover (acres)	0.12	0.12
Rv(impervious)	0.95	0.95
% Impervious	39%	63%
Total Site Area (acres)	0.31	0.19
Site Rv	0.52	0.69

LAND COVER SUMMARY – POST DEVELOPMENT

Land Cover Summary-Post (Final)		
Post-Development	Post-Development	Post-Development
Post-Dev. & New Impervious	Summary-Post	New Impervious
Forest/Open Space Cover (acres)	0.00	
Weighted Rv(forest)	0.00	
% Forest	0%	
Managed Turf Cover (acres)	0.07	
Weighted Rv (turf)	0.25	
% Managed Turf	23%	
Impervious Cover (acres)	0.24	0.12
Rv(impervious)	0.95	0.95
% Impervious	77%	63%
Final Site Area (acres)	0.31	
Final Post Dev Site Rv	0.79	

Treatment Volume and Nutrient Load

Pre-Development	Adjusted ¹
Pre-Development Treatment Volume (acre-ft)	0.0110
Pre-Development Treatment Volume (cubic feet)	477
Pre-Development TP Load (lb/yr)	0.30
Pre-Development TP Load per acre (lb/acre/yr)	1.58
Baseline TP Load (lb/yr) (0.41 lb/acre/yr applied to pre-development area excluding previous land proposed for new impervious cover)	0.08

Treatment Volume and Nutrient Load

Post-Development	Adjusted ¹
Post-Development Treatment Volume (acre-ft)	0.0095
Post-Development Treatment Volume (cubic feet)	414
Post-Development TP Load (lb/yr)	0.26
Post-Development TP Load per acre (lb/acre/yr)	1.58
Max. Reduction Required (Below Pre-Development Load)	10%
TP Load Reduction Required for Redeveloped Area (lb/yr)	0.03
TP Load Reduction Required for New Impervious Area (lb/yr)	0.21

¹ Adjusted Land Cover Summary: Pre-Development land cover minus previous land cover (forest/open space or managed turf) acreage proposed for new impervious cover. Adjusted total acreage is consistent with Post-Development acreage (minus acreage of new impervious cover). Column 1 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lb/acre/yr).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr) **0.24**

Nitrogen Loads (Informational Purposes Only)

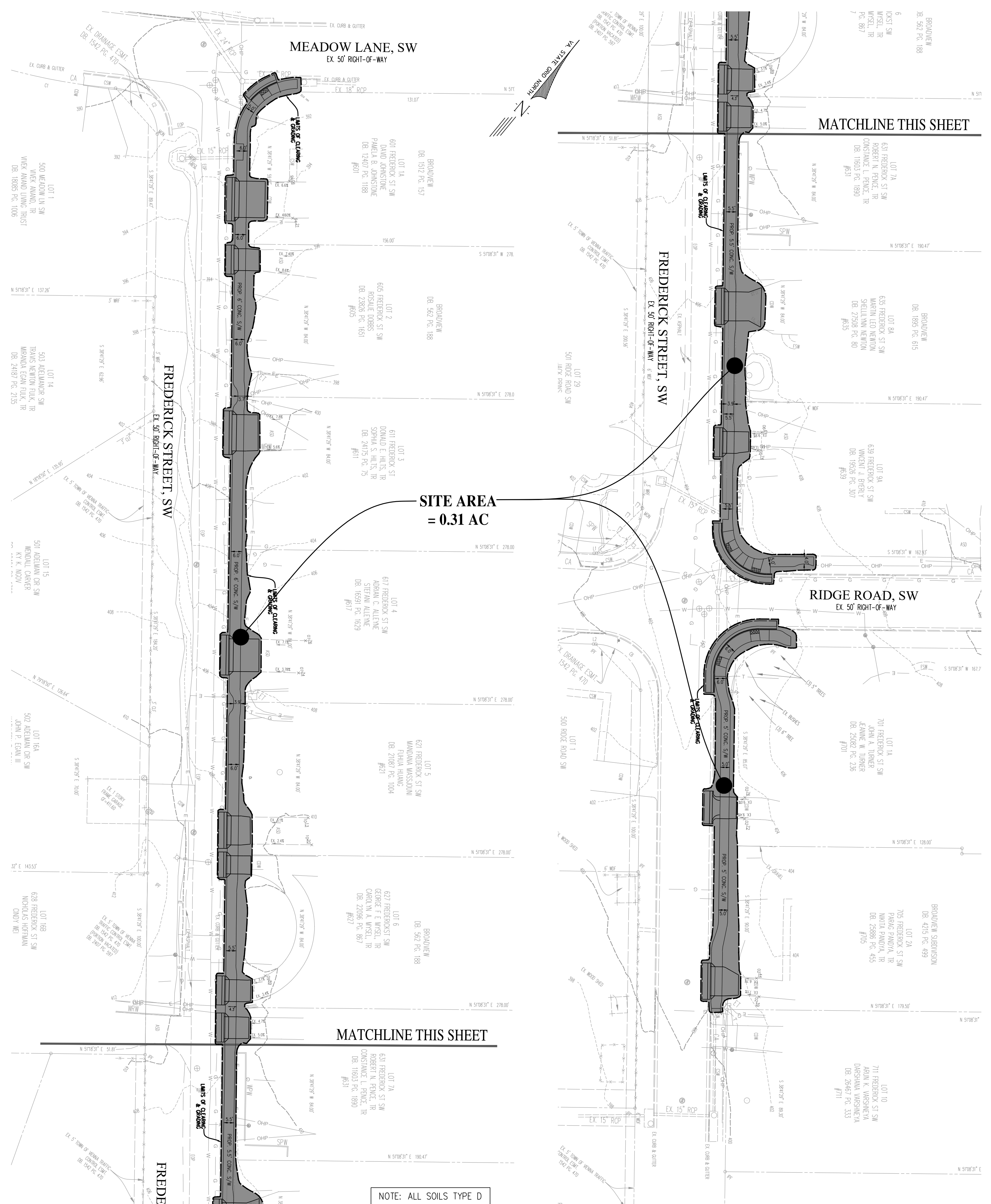
Pre-Development TN Load (lb/yr)	2.64	Final Post-Development TN Load (Post-Development & New Impervious) (lb/yr)	4.01
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BMP NARRATIVE

NOTE: THE COMPUTATIONS SHOWN ON THIS SHEET WERE DETERMINED USING VERSION 3.0 OF THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) RE-DEVELOPMENT COMPLIANCE SPREADSHEET RELEASED MAY, 2016.

THE DRAINAGE AREA UTILIZED IN THE WATER QUALITY COMPUTATIONS CONSISTS OF SITE DISTURBANCE AREA. THE MAJORITY OF THIS SITE DRAINS TO THE EXISTING INLETS AND INTO THE EXISTING STORM SYSTEM WITHIN THE PUBLIC ROW.

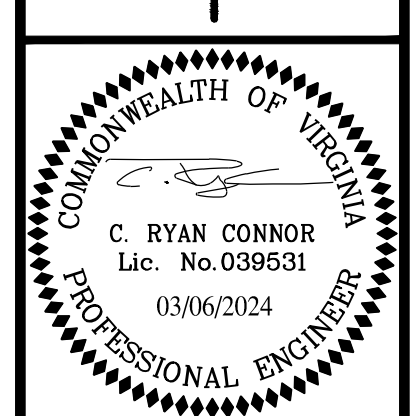
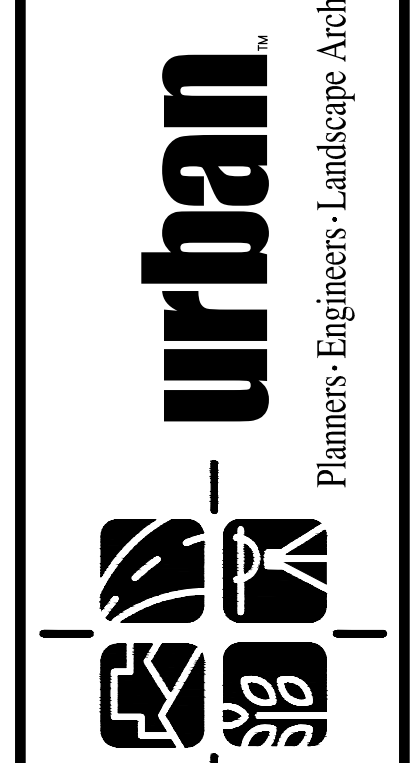
PER THE BMP CALCULATIONS ON THIS SHEET AND IN COMPLIANCE WITH VSMP (VRRM) WATER QUALITY CONTROL REQUIREMENTS, THE PHOSPHORUS REMOVAL REQUIREMENT OF 0.24 POUNDS/YEAR IS TO BE OFFSET BY EITHER THE PURCHASE OF NUTRIENT CREDITS OR THE USE OF EXCESS IN OTHER TOWN PROJECTS, AT THE DISCRETION OF THE TOWN ENGINEER.



NOTE: ALL SOILS TYPE D

No.	DATE	DESCRIPTION	REVISIONS
1	11-20-2023	10% PLAN	APPROVED
2	01-17-2024	10% PLAN	APPROVED
3	03-06-2024	10% PLAN	APPROVED

PLAN DATE: 11-20-2023
 01-17-2024
 03-06-2024
 Urban, Ltd.
 7712 Little River Turnpike
 Suite 22005
 Fairfax, VA 22031
 Tel: 703.642.2088
 Fax: 703.642.2051
 www.urban-llc.com



VRRM SPREADSHEET & WATER QUALITY NARRATIVE
FREDERICK STREET, SW
SIDEWALK IMPROVEMENT PLAN (PHASE I)
 TOWN OF VIENNA
 FAIRFAX COUNTY, VIRGINIA
 DATE: NOV. 2023
 SCALE: 1" = 30'
 C.I. = 2'

SHEET
 8
 OF
 8
 FILE No.
 2572