

Hydrant coverage shall be provided within 50' of the FDC and within 150' of all portions of the structure.

SURVEY LEGEND

AS ASH	● CATCH BASIN	— STORM SEWER
EL ELM	○ STORM MANHOLE	— SANITARY SEWER
LD LOCUST	○ SANITARY MANHOLE	— WATERMAIN
SP SPRUCE	○ HYDRANT	— UNDERGROUND ELECTRIC
THSD ELEV. THRESHOLD	○ GATE VALVE	— UNDERGROUND GAS
TC TOP OF CURB	○ POWER POLE	— OVERHEAD UTILITY
CC CURB CUT	○ LIGHT POLE	— CHAIN LINK FENCE
TW TOP OF WALL	— GUY WIRE	— GUARDRAIL
BW BOTTOM OF WALL	— SON	— WALL
92.3 SPOT ELEVATION	□ ELECTRIC TRANSFORMER	— CONCRETE CURB
() PER MAP / RECORD	— HAND HOLE	— CONCRETE
	— ROOF DRAIN	— CONTOUR
	○ ELECTRIC OUTLET	○ CONIFEROUS TREE
	○ FIRE CONNECTION	○ DECIDUOUS TREE
	○ GUARD POST	— RESTRICTED ACCESS
	○ FLAG POLE	

DEMOLITION LEGEND:

	REMOVE BITUMINOUS PAVEMENT (FULL DEPTH)
	REMOVE EXISTING CONCRETE PAVING, SIDEWALKS, ETC.
	REMOVE EXISTING CURB & GUTTER, RETAINING WALLS, FENCE, ETC.
	REMOVE EXISTING TREES

CADD QUALIFICATION

I, the undersigned, being a duly licensed and qualified professional engineer or architect, do hereby certify that I am a duly licensed and qualified professional engineer or architect in the State of Minnesota, and that I am the author of the design and content of the drawings herein, or that I am a duly licensed and qualified professional engineer or architect in the State of Minnesota, and that I am the author of the design and content of the drawings herein, or that I am a duly licensed and qualified professional engineer or architect in the State of Minnesota, and that I am the author of the design and content of the drawings herein.

SUBMITTAL/REVISIONS

12/22/20 CITY SUBMITTAL

PROFESSIONAL SIGNATURE

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly licensed and qualified professional engineer or architect in the State of Minnesota, and that I am the author of the design and content of the drawings herein.

License No. 49933
Date: 12/22/20

QUALITY CONTROL

Loucks Project No. 20458A
Project Lead: PJD
Drawn By: DDL
Checked By: PJD
Review Date: 12/22/20

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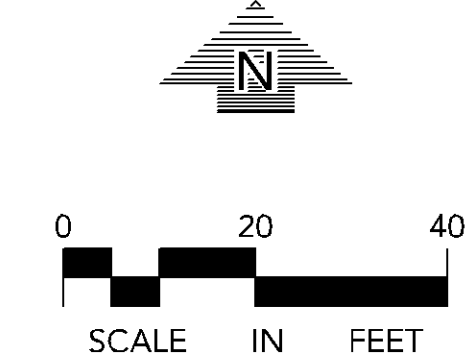
SITE DEMOLITION NOTES

- CONTRACTOR SHALL REMOVE AND/OR RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. CONTRACTOR TO COORDINATE ACTIVITIES WITH UTILITY COMPANIES.
- CONTRACTOR SHALL PROTECT SURFACE AND SUBSURFACE FEATURES NOT NOTED FOR REMOVAL.
- CONTRACTOR TO CLEAR AND GRUB EXISTING VEGETATION WITHIN CONSTRUCTION LIMITS, STRIP TOP SOIL, AND STOCKPILE ON-SITE. REFER TO GRADING PLAN AND SWPPP FOR SEDIMENT AND EROSION CONTROL REQUIREMENTS.
- CLEAR AND GRUB AND REMOVE ALL TREES, VEGETATION AND SITE DEBRIS PRIOR TO GRADING. ALL REMOVED MATERIAL SHALL BE HAULED FROM THE SITE DAILY. EROSION CONTROL MEASURES SHALL BE IMMEDIATELY ESTABLISHED UPON REMOVAL. SEE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
- CONTRACTOR SHALL REMOVE ALL SITE SURFACE FEATURES WITHIN REMOVAL LIMITS UNLESS OTHERWISE NOTED.
- BITUMINOUS PAVEMENT REMOVALS ARE TO BE MADE TO A VERTICAL SAW CUT OR TO A NEAT MILLED EDGE.
- CONCRETE PAVEMENT, SIDEWALK, CURB & GUTTER AND OTHER POURED CONCRETE ITEMS ARE TO BE REMOVED TO AN EXISTING EXPANSION OR CONTRACTION JOINT, SAW CUT AS NECESSARY FOR A NEAT EDGE OF REMOVAL.
- ALL REMOVAL ITEMS SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS SPECIFIED OTHERWISE AND SHALL BE DISPOSED OF OFF-SITE IN A MANNER MEETING ALL APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF ALL SIGNS, MAILBOXES, ETC.
- ANY DAMAGE TO ITEMS NOTED TO BE REMOVED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION WITH NO ADDITIONAL COMPENSATION.

Gopher State One Call
TWIN CITY AREA: 651-454-8802
TOLL FREE: 1-800-252-1166

WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND / OR RELOCATION OF LINES.
THE CONTRACTOR SHALL CONTACT GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS IN ADVANCE FOR THE LOCATIONS OF ALL UNDERGROUND WIRES, CABLES, CONDUITS, PIPES, MANHOLES, VALVES OR OTHER BURIED STRUCTURES BEFORE DIGGING. THE CONTRACTOR SHALL REPAIR OR REPLACE THE ABOVE WHEN DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.



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CADD QUALIFICATION

AKED: The proposal by the Contractor for this project represents the Contractor's professional opinion for use only with respect to the project. These CADD files shall not be used on other projects for additions to this project or for completion of this project by others without written approval by the Contractor. The Contractor warrants that the information contained herein is true and correct to the best of their knowledge and belief. The Contractor shall be responsible for obtaining all necessary permits, licenses, or approvals for this project. The Contractor shall be responsible for obtaining all necessary permits, licenses, or approvals for this project. The Contractor shall be responsible for obtaining all necessary permits, licenses, or approvals for this project.

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EXISTING	PROPOSED

SITE PLAN LEGEND

	CONCRETE SIDEWALK
	HEAVY-DUTY BITUMINOUS PAVEMENT
	HEAVY-DUTY CONCRETE PAVEMENT

SITE DATA

CURRENT ZONING:	HR WITH PD OVERLAY
PROPERTY AREA:	108,519 SF
EXISTING IMPERVIOUS AREA:	55,980 (51.5%)
PROPOSED IMPERVIOUS AREA:	62,591 (57.7%)

ELEVATION NOTES

818.25 = ARCHITECTURAL 100' 0" (VERIFY WITH ARCHITECTURAL)

OFF-STREET PARKING CALCULATIONS

TOTAL PROPOSED SURFACE PARKING PROVIDED	= 40 STALLS (3 ADA STALLS)
TOTAL PROPOSED SURFACE PARKING ADJACENT SITE	= 49 STALLS (4 ADA STALLS)
PROPOSED GARAGE	= 178 STALLS (SEE ARCHITECTURAL)
TOTAL STALLS	= 267 STALLS

1.545 STALLS PER UNIT
1.12 STALLS PER BEDROOM

This number is different than parking study, verify

SITE NOTES

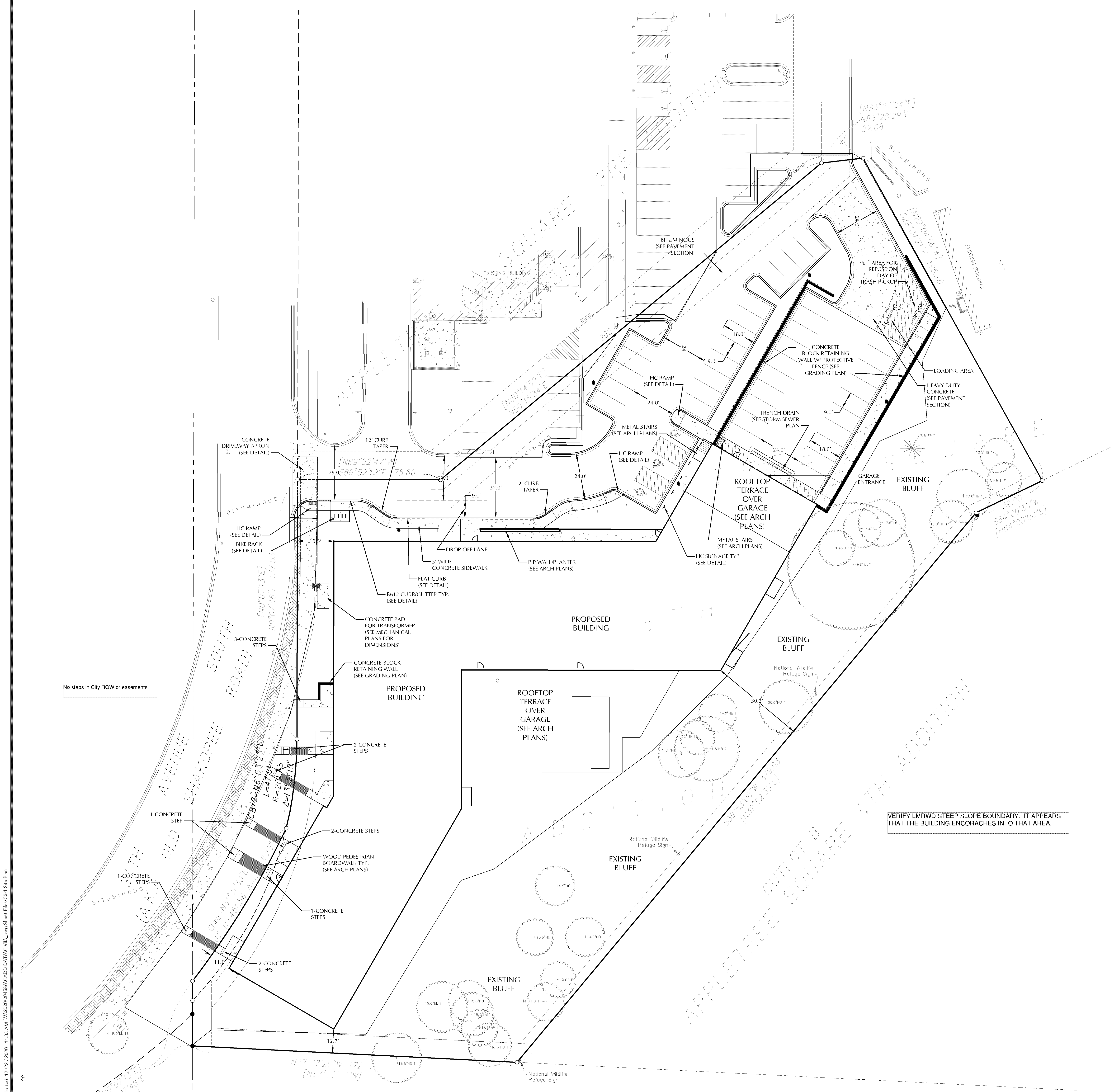
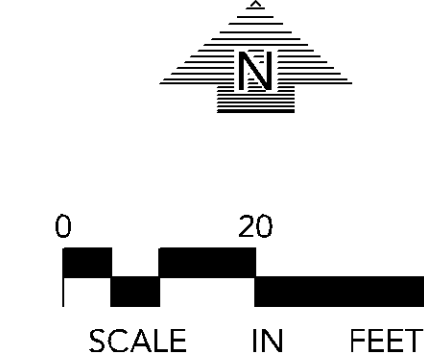
- ALL PAVING, CONCRETE CURB, GUTTER AND SIDEWALK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DETAILS SHOWN PER THE DETAIL SHEETS) AND STATE/LOCAL JURISDICTION REQUIREMENTS.
- ACCESSIBLE PARKING AND ACCESSIBLE ROUTES SHALL BE PROVIDED PER CURRENT ADA STANDARDS AND LOCAL STATE REQUIREMENTS.
- ALL CURB DIMENSIONS SHOWN ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.
- ALL BUILDING DIMENSIONS ARE TO THE OUTSIDE FACE OF WALL UNLESS OTHERWISE NOTED.
- TYPICAL FULL SIZED PARKING STALL IS 9' X 18' WITH A 24" WIDE TWO WAY DRIVE UNLESS OTHERWISE NOTED.
- ALL CURB RADIUS SHALL BE 3.0' UNLESS OTHERWISE NOTED.
- BITUMINOUS IMPREGNATED FIBER BOARD TO BE PLACED AT FULL DEPTH OF CONCRETE ADJACENT TO EXISTING STRUCTURES AND BEHIND CURB ADJACENT TO DRIVEWAYS AND SIDEWALKS.
- SEE SITE ELEVATION PLAN FOR SITE LIGHTING.
- ANY EXISTING CONCRETE INFRASTRUCTURE IN THE PUBLIC RIGHT OF WAY, INCLUDING BUT NOT LIMITED TO PUBLIC SIDEWALKS, CURB AND GUTTER, AND ADA PEDESTRIAN RAMPS, THAT IS EITHER CURRENTLY DEFECTIVE OR THAT IS DAMAGED DURING THE TIME OF SITE RE-DEVELOPMENT, MUST BE REMOVED AND REPLACED AT THE TIME OF SITE RE-DEVELOPMENT.
- SNOW TO BE REMOVED FROM SITE AS NEEDED TO KEEP ALL PARKING STALLS OPEN.



CALL BEFORE YOU DIG:
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CADD QUALIFICATION

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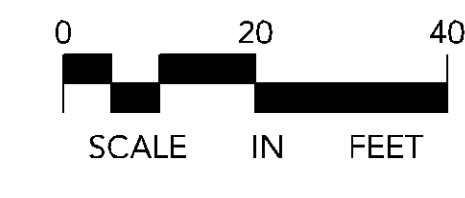
EXISTING	PROPOSED

GRADING, DRAINAGE & EROSION CONTROL NOTES

- SPOT ELEVATIONS REPRESENT FINISHED SURFACE GRADES, CUTTERFLOW LINE, FACE OF BUILDING, OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SLUMPED 0.16 FEET. ALL CATCH BASINS IN CUTTERS SHALL BE SLUMPED 0.16 FEET. RIM ELEVATIONS SHOWN ON PLANS DO NOT REFLECT SLUMPED ELEVATIONS.
- ALL DISTURBED UNPAVED AREAS ARE TO RECEIVE MINIMUM OF 4 INCHES OF TOP SOIL AND SPREADMULCH OR SOIL. THESE AREAS SHALL BE WATERED/MAINTAINED BY THE CONTRACTOR UNTIL VEGETATION IS ESTABLISHED.
- FOR SITE RETAINING WALLS "TW" EQUALS SURFACE GRADE AT TOP FACE OF WALL (NOT TOP OF WALL), AND "GW" EQUALS SURFACE GRADE AT BOTTOM FACE OF WALL (NOT BOTTOM OF BURIED WALL COURSES).
- RETAINING WALLS OVER 4 FEET IN HEIGHT WILL REQUIRE A BUILDING PERMIT.
- STREETS MUST BE CLEANED AND SWEEPED WHENEVER TRACKING OF SEDIMENTS OCCURS AND BEFORE SITES ARE LEFT IDLE FOR WEEKENDS AND HOLIDAYS. A REGULAR SWEEPING SCHEDULE MUST BE ESTABLISHED.
- DUST MUST BE ADEQUATELY CONTROLLED.
- SEE SWPPP FOR ADDITIONAL EROSION CONTROL NOTES AND REQUIREMENTS.
- SEE UTILITY PLANS FOR WATER, STORM AND SANITARY SEWER INFORMATION.
- SEE SITE PLAN FOR CURB AND BITUMINOUS TAPER LOCATIONS.
- A POST CONSTRUCTION TEST ON THE FILTRATION TANKS AND RAIN GARDEN WILL BE CONDUCTED BY FILLING THE BASIN TO A MINIMUM DEPTH OF 6 INCHES WITH WATER AND MONITOR THE TIME NECESSARY TO DRAIN. THE COON CREEK WATERSHED DISTRICT SHALL BE NOTIFIED PRIOR TO THE TEST TO WITNESS THE RESULTS.
- NO GROUNDWATER PUMPING IS ANTICIPATED. IF PUMPING IS REQUIRE CONTRACTOR TO PROVIDE WELL-FIELD LOCATION, WATES, DISCHARGE LOCATION, SCHEDULE AND QUANTITIES. APPLY FOR DNR WATER APPROPRIATION PERMIT.
- CONCRETE SIDEWALKS AND HANDICAP RAMPS ARE DESIGNED TO COMPLY WITH ADA REGULATIONS. CONTRACTOR TO NOTIFY CIVIL ENGINEER SHOULD RUNNING SLOPES EXCEED 3% AND CROSS SLOPES EXCEED 2%.



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Why isn't a pedestrian ramp being installed on the opposite side?

This ADA ramp only leads to two sets of metal stairs

CONSIDER CONNECTING TO THIS STORM SEWER MH.

PROVIDE DOCUMENTATION OF DRAINAGE AND UTILITY EASEMENT FROM US FISH AND WILDLIFE SERVICE.

THE CITY OF BLOOMINGTON DOES NOT INTEND TO MAINTAIN THE STORM SEWER LOCATED SOUTH OF THIS PROPERTY.

THERE IS NO ACCESS OR WORKING PAD AROUND THE BACK SIDE. HOW WILL MAINTENANCE BE PERFORMED WITHOUT FURTHER DISRUPTION TO THE SLOPES?

Also, will need to be designed by Licensed Professional Engineer in the State of MN

SWPPP NOTES

- THE NATURE OF THIS PROJECT WILL CONSIST OF CONSTRUCTING AN APARTMENT BUILDING, ASSOCIATED SURFACE PAVEMENTS, STORMWATER MANAGEMENT SYSTEMS AND UTILITIES.
- THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES ARE AS FOLLOWS:
 - INSTALL VEHICLE TRACKING BMP
 - INSTALL SILT FENCE AND BIO-ROLL AROUND SITE
 - CLEAR AND GRUB SITE
 - STRIP AND STOCKPILE TOPSOIL
 - REMOVE PAVEMENTS AND UTILITIES
 - CONSTRUCT STORMWATER MANAGEMENT FACILITY
 - ROUGH GRADE SITE
 - IMPORT CLEAN FILL FOR REPLACEMENT AND BALANCE
 - INSTALL UTILITIES
 - INSTALL BUILDING FOUNDATIONS
 - INSTALL CURBS AND GUTTERS
 - INSTALL PAVEMENTS AND WALKS
 - FINAL GRADE SITE
 - REMOVE ACCUMULATED SEDIMENT FROM STORMWATER SYSTEMS
 - SEED AND MULCH
 - WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.
- SITE DATA:

AREA OF DISTURBANCE:	1.90± AC
PRE-CONSTRUCTION IMPERVIOUS AREA:	1.29± AC
POST-CONSTRUCTION IMPERVIOUS AREA:	1.44± AC

GENERAL SOIL TYPE: SEE GEOTECHNICAL EVALUATION REPORT
- THE LOCATION OF AREAS NOT TO BE DISTURBED MUST BE IDENTIFIED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC., BEFORE CONSTRUCTION BEGINS.
- ALL DISTURBED GROUND LEFT INACTIVE FOR FOURTEEN (14) OR MORE DAYS SHALL BE STABILIZED BY SEEDING OR SODDING ONLY AVAILABLE PRIOR TO SEPTEMBER 15TH OR BY MULCHING OR COVERING OR OTHER EQUIVALENT CONTROL MEASURE.
- ON SLOPES 3:1 OR GREATER MAINTAIN SHEET FLOW AND MINIMIZE RILLS AND/OR GULLIES. SLOPE LENGTHS CAN NOT BE GREATER THAN 75 FEET.
- ALL STORM DRAINS AND INLETS MUST BE PROTECTED UNTIL ALL SOURCES OF POTENTIAL DISCHARGE ARE STABILIZED.
- TEMPORARY SOIL STOCKPILES MUST HAVE EFFECTIVE SEDIMENT CONTROL, AND CAN NOT BE PLACED IN SURFACE WATERS OR STORM WATER CONVEYANCE SYSTEMS. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT AMOUNT OF SILT, CLAY, OR ORGANIC COMPOUNDS ARE EXEMPT FROM CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, AND STOCKPILES.
- SEDIMENT LADEN WATER MUST BE DISCHARGED TO A SEDIMENTATION BASIN WHENEVER POSSIBLE. IF NOT POSSIBLE, IT MUST BE TREATED WITH THE APPROPRIATE BMP'S.
- SOLID WASTE MUST BE DISPOSED OF PROPERLY AND MUST COMPLY WITH APCA DISPOSAL REQUIREMENTS.
- EXTERNAL WASHING OF CONSTRUCTION VEHICLES MUST BE LIMITED TO A DEFINED AREA OF THE SITE. RUNOFF MUST BE PROPERLY CONTAINED.
- NO ENGINE DEGREASING IS ALLOWED ON SITE.
- THE OWNER WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE, AND IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THE PERMIT. THE OPERATOR/CONTRACTOR WHO SIGNS THE NPDES PERMIT APPLICATION IS A PERMITEE FOR PARTS B.B., PART B.C., PART B.F., PART V, PART W, AND APPLICABLE CONSTRUCTION ACTIVITY REQUIREMENTS FOUND IN APPENDIX A, PART C, OF THE NPDES PERMIT AND IS JOINTLY RESPONSIBLE WITH THE OWNER FOR COMPLIANCE WITH THOSE PORTIONS OF THE PERMIT.
- TERMINATION OF COVERAGE: PERMITEES WISHING TO TERMINATE COVERAGE MUST SUBMIT A NOTICE OF TERMINATION TO THE APCA. ALL PERMITEES MUST SUBMIT A NOTICE WITHIN 30 DAYS AFTER ONE OR MORE OF THE FOLLOWING CONDITIONS HAVE BEEN MET:
 - FINAL STABILIZATION PER NPDES PERMIT PART V.G. HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITEE IS RESPONSIBLE.
 - TRANSFER OF OWNERSHIP AS DESCRIBED IN THE PERMIT.
- INSPECTIONS
 - INITIAL INSPECTION FOLLOWING SILT FENCE INSTALLATION BY CITY REPRESENTATIVE IS REQUIRED.
 - EXPOSED SOIL AREAS: ONCE EVERY 7 DAYS AND WITHIN 24 HOURS FOLLOWING A 0.5" OVER 24 HOUR RAIN EVENT.
 - STABILIZED AREAS: ONCE EVERY 30 DAYS
 - FROZEN CIRCUITS: AS SOON AS RUNOFF OCCURS OR PRIOR TO RESUMING CONSTRUCTION.
 - INSPECTION AND MAINTENANCE RECORDS MUST BE RETAINED FOR 3 YEARS AFTER FILING OF THE

NOTICE OF TERMINATION AND MUST INCLUDE: DATE AND TIME OF ACTION, NAME OF PERSON(S) CONDUCTING WORK, FINDING OF INSPECTIONS AND RECOMMENDATIONS FOR CORRECTIVE ACTION, DATE AND AMOUNT OF RAIN/FALL EVENTS GREATER THAN 0.5 INCHES IN A 24 HOUR PERIOD.

- MINIMUM MAINTENANCE
 - SILT FENCE TO BE REPAIRED, REPLACED, SUPPLEMENTED WHEN NONFUNCTIONAL, OR 1/3 FULL: WITHIN 24 HOURS
 - SEDIMENT BASINS DRAINED AND SEDIMENT REMOVED WHEN REACHES 1/2 STORAGE VOLUME. REMOVAL MUST BE COMPLETE WITHIN 72 HOURS OF DISCOVERY.
 - SEDIMENT REMOVED FROM SURFACE WATERS WITHIN 17 SEVEN DAYS
 - CONSTRUCTION SITE EXITS INSPECTED, TRACKED SEDIMENT REMOVED WITH 24 HOURS.
 - PROVIDE COPIES OF EROSION INSPECTION RESULTS TO CITY ENGINEER FOR ALL EVENTS GREATER THAN 1/2" IN 24 HOURS
- THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION ACTIVITY BY THE PERMITEES WHO HAVE OPERATIONAL CONTROL OF THE SITE.
- OWNER MUST KEEP RECORDS OF ALL PERMITS REQUIRED FOR THE PROJECT, THE SWPPP, ALL INSPECTIONS AND MAINTENANCE, PERMANENT OPERATION AND MAINTENANCE AGREEMENTS, AND REQUIRED CALCULATIONS FOR TEMPORARY AND PERMANENT STORM WATER MANAGEMENT SYSTEMS. THESE RECORDS MUST BE RETAINED FOR THREE YEARS AFTER FILING NOTICE OF TERMINATION.
- SWPPP MUST BE AMENDED WHEN:
 - THERE IS A CHANGE IN DESIGN, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON DISCHARGE
 - INSPECTIONS INDICATE THAT THE SWPPP IS NOT EFFECTIVE AND DISCHARGE IS EXCEEDING WATER QUALITY STANDARDS.
 - THE BMP'S IN THE SWPPP ARE NOT CONTROLLING POLLUTANTS IN DISCHARGES OR IS NOT CONSISTENT WITH THE TERMS AND CONDITIONS OF THE PERMIT.
- CONCRETE WASHOUT AREA
 - CONTRACTOR TO PROVIDE PREFABRICATED CONCRETE WASH-OUT CONTAINER WITH RAIN PROTECTION PER PLAN.
 - CONCRETE WASH-OUT TO BE IDENTIFIED WITH SIGNAGE STATING "CONCRETE WASHOUT AREA DO NOT OVERFILL"
 - CONCRETE WASHOUT WATER NEEDS TO BE PUMPED WITHIN 24 HOURS OF STANDING WATER IN WASHOUT AREA.
- IN THE EVENT OF ENCOUNTERING A WELL OR SPRING DURING CONSTRUCTION CONTRACTOR TO CEASE CONSTRUCTION ACTIVITY AND NOTIFY ENGINEER.
- PIPE OULETS MUST BE PROVIDED WITH TEMPORARY OR PERMANENT ENERGY DISSIPATION WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER.
- FINAL STABILIZATION

FINAL STABILIZATION REQUIRES THAT ALL SOIL DISTURBING ACTIVITIES HAVE BEEN COMPLETED AND THAT DISTURBED AREAS ARE STABILIZED BY A UNIFORM PERENNIAL VEGETATIVE COVER WITH 70% OF THE EXPECTED FINAL DENSITY, AND THAT ALL PERMANENT PAVEMENTS HAVE BEEN INSTALLED. ALL TEMPORARY BMP'S SHALL BE REMOVED, DITCHES STABILIZED, AND SEDIMENT SHALL BE REMOVED FROM PERMANENT CONVEYANCES AND SEDIMENTATION BASINS IN ORDER TO RETURN THE POND TO DESIGN CAPACITY.
- RESPONSIBILITIES
 - THE OWNER MUST IDENTIFY A PERSON WHO WILL OVERSEE THE SWPPP IMPLEMENTATION AND THE PERSON RESPONSIBLE FOR INSPECTION AND MAINTENANCE.

CONTACT:
COMPANY: _____
PHONE: _____

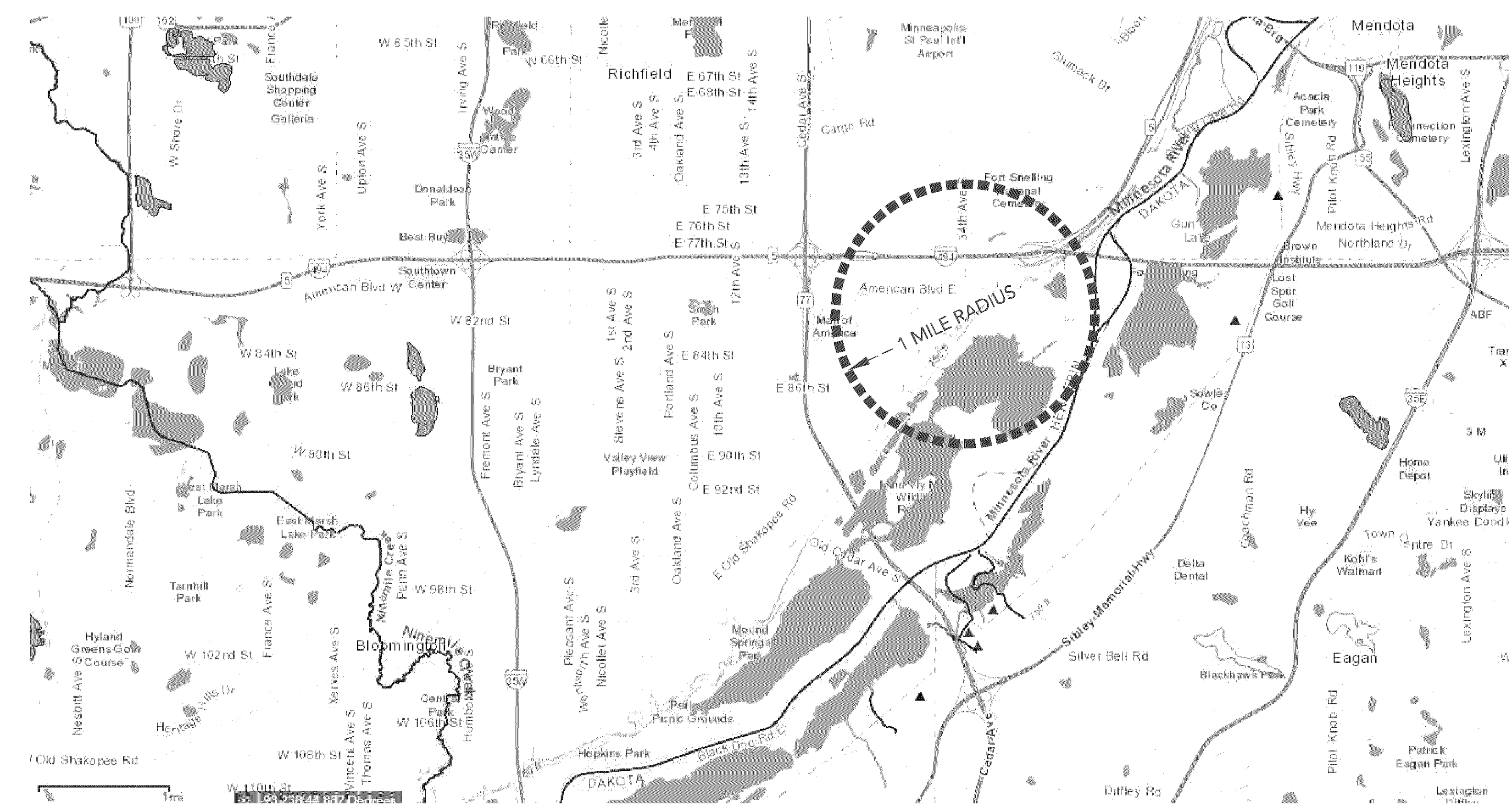
 - THE OWNER MUST IDENTIFY THE A PERSON WHO WILL BE RESPONSIBLE FOR LONG TERM OPERATIONS AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM:

CONTACT:
COMPANY: _____
PHONE: _____
- THE WATERSHED DISTRICT OR THE CITY MAY HAVE REQUIREMENTS FOR INSPECTIONS OR AS-BUILT DRAWINGS VERIFYING PROPER CONSTRUCTION OF THE BMP'S.

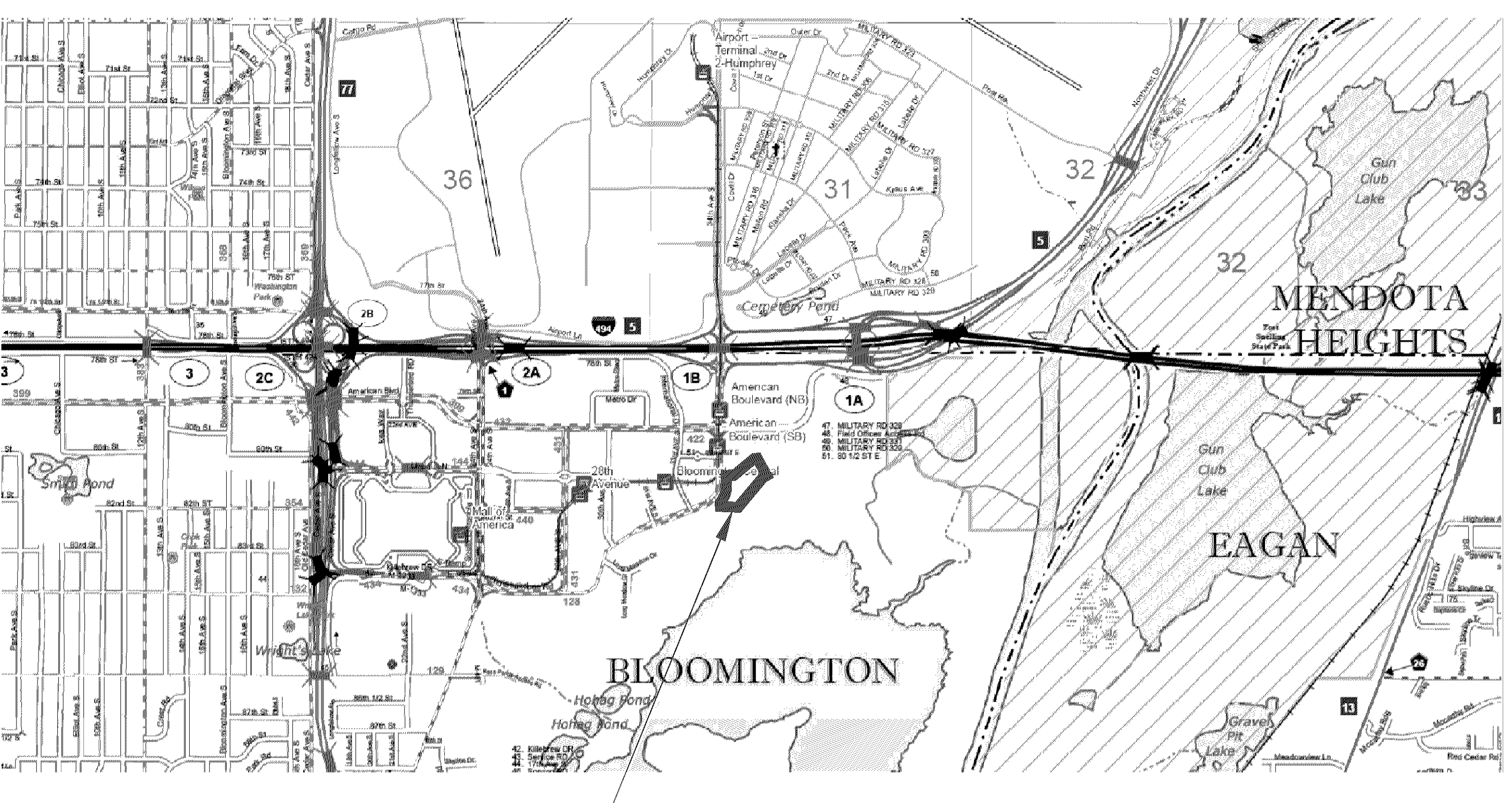
PROVIDE EROSION CONTROL PLAN SHOWING LOCATION OF EC MEASURES.

TWO ROWS OF SILT FENCE WILL BE REQUIRED AT TOP OF SLOPE.

CONSTRUCTION STORMWATER SPECIAL WATERS SEARCH MAP



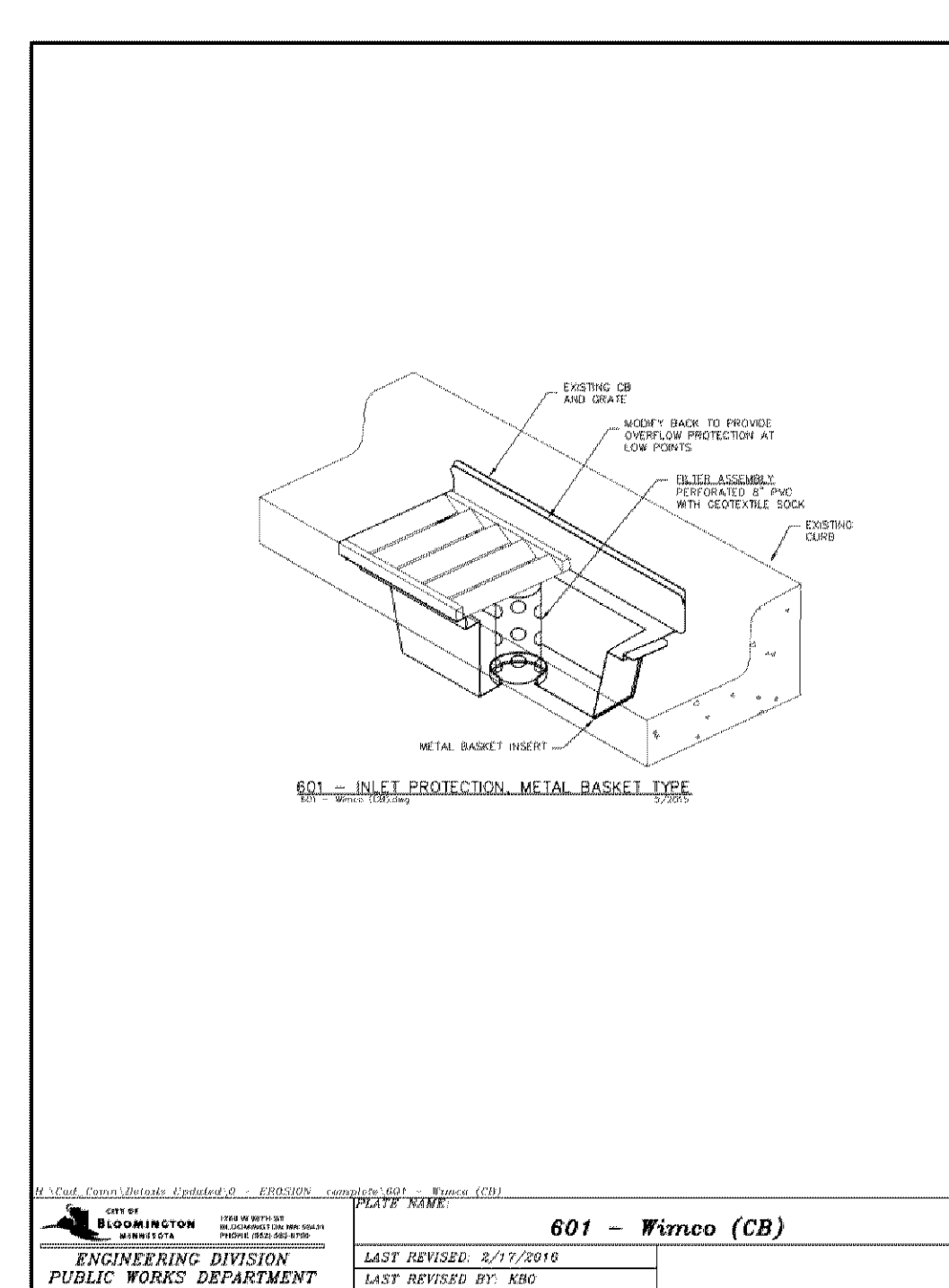
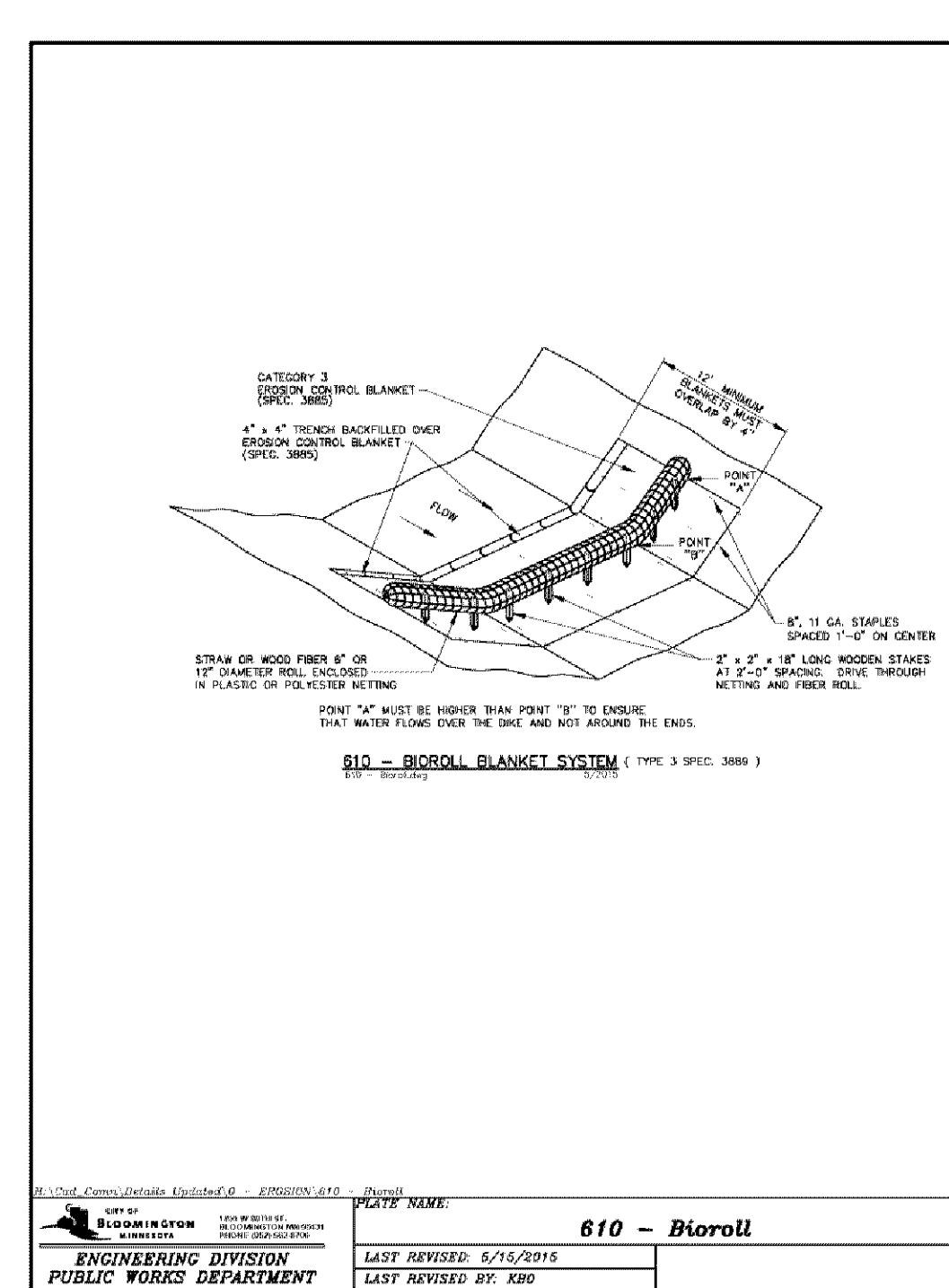
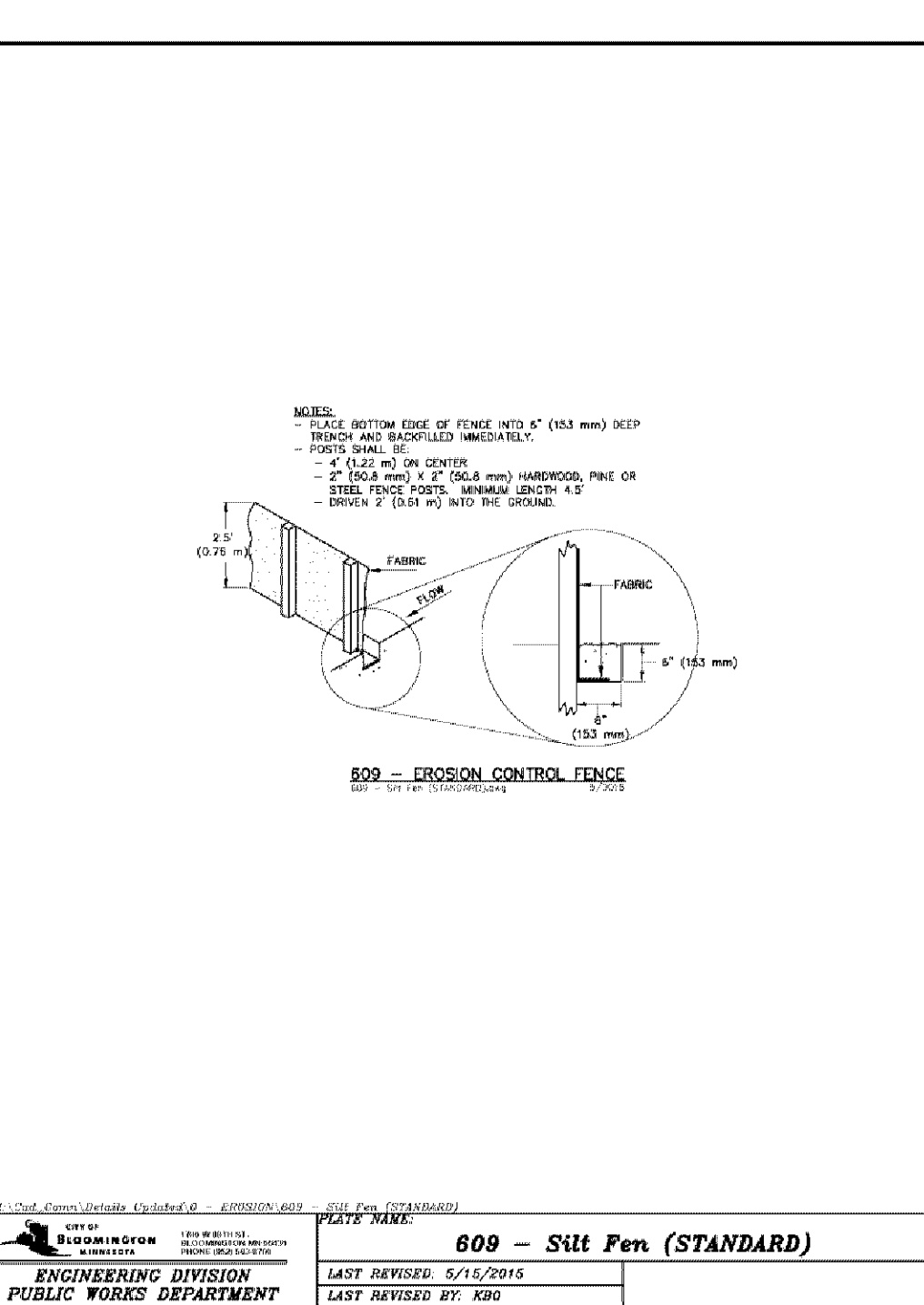
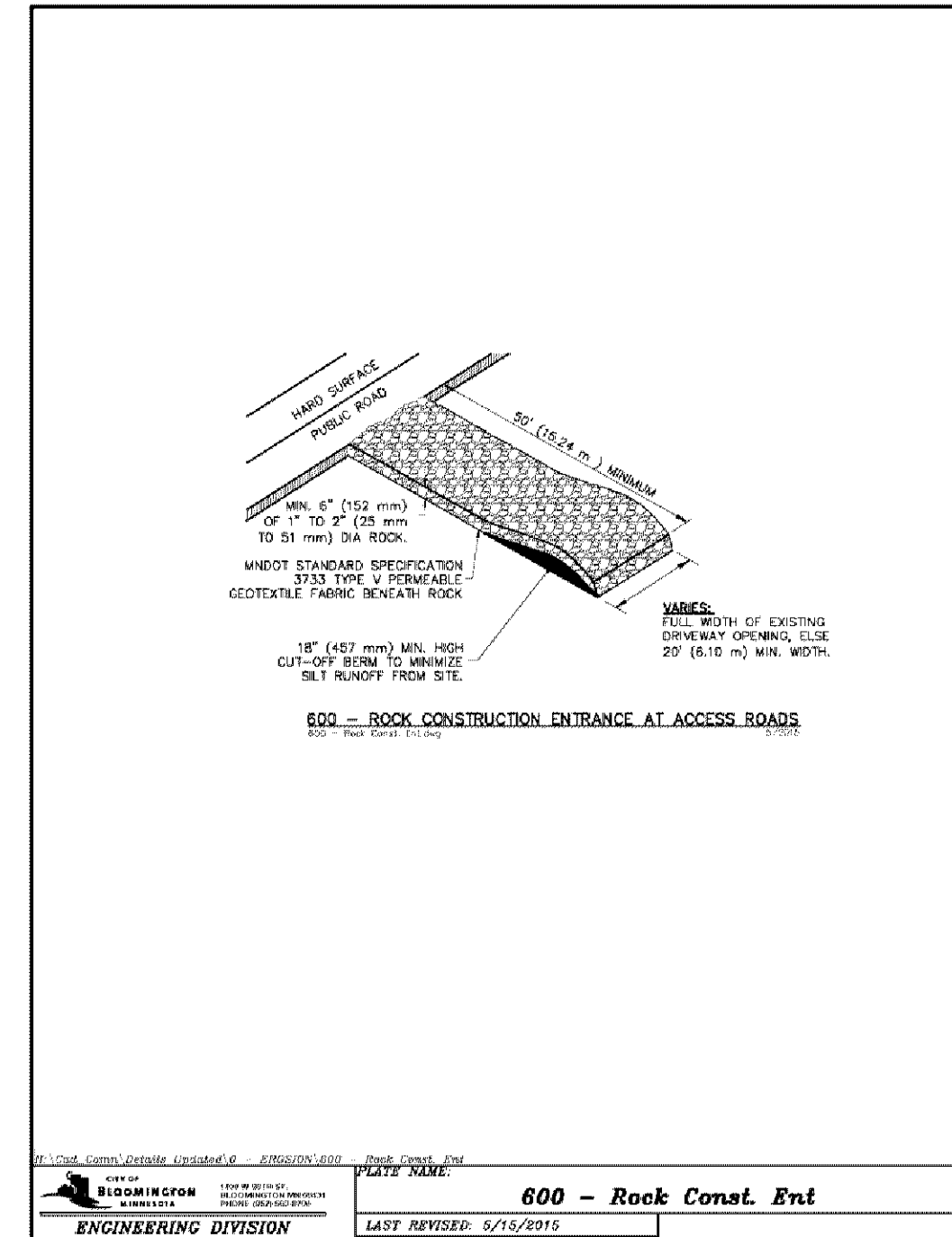
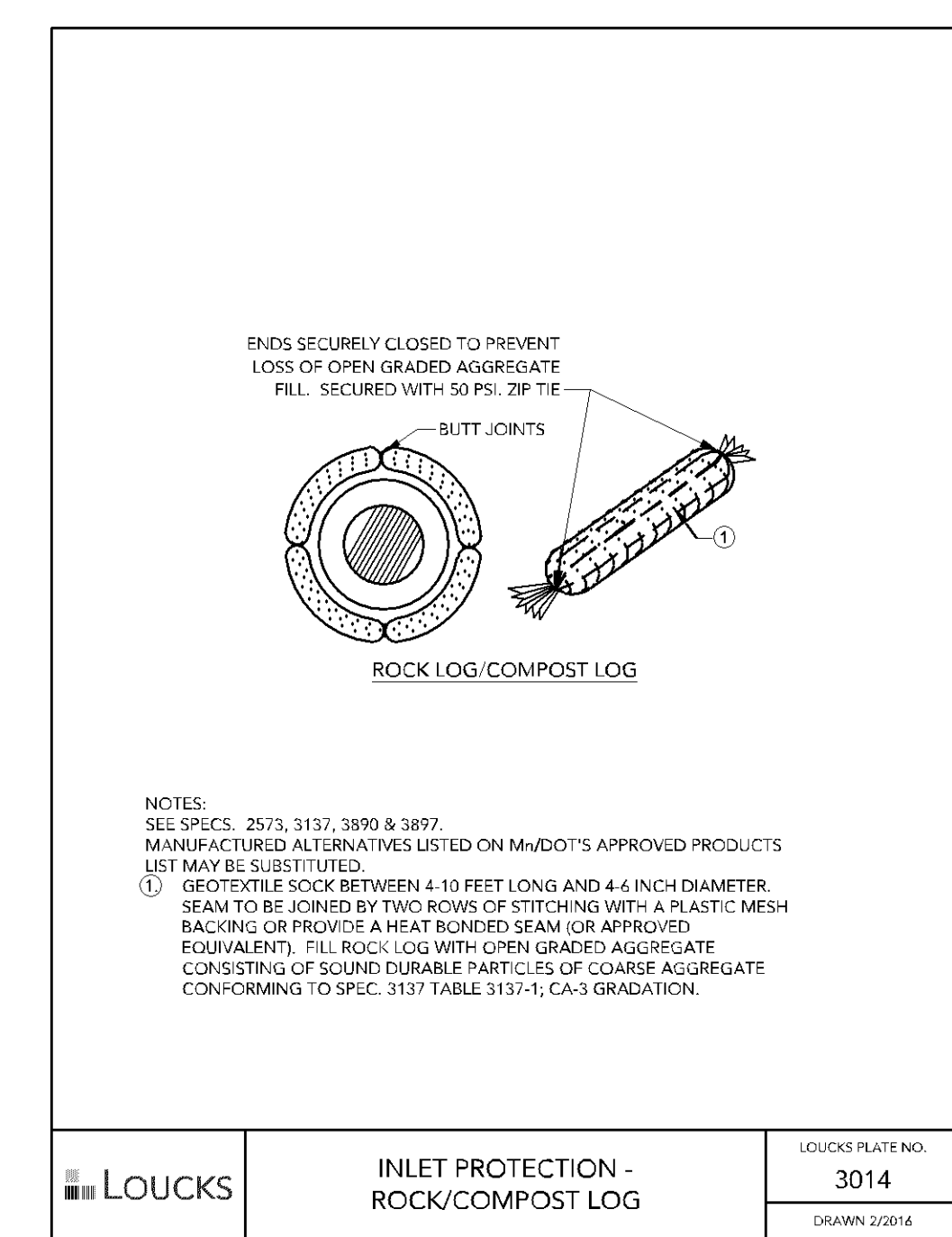
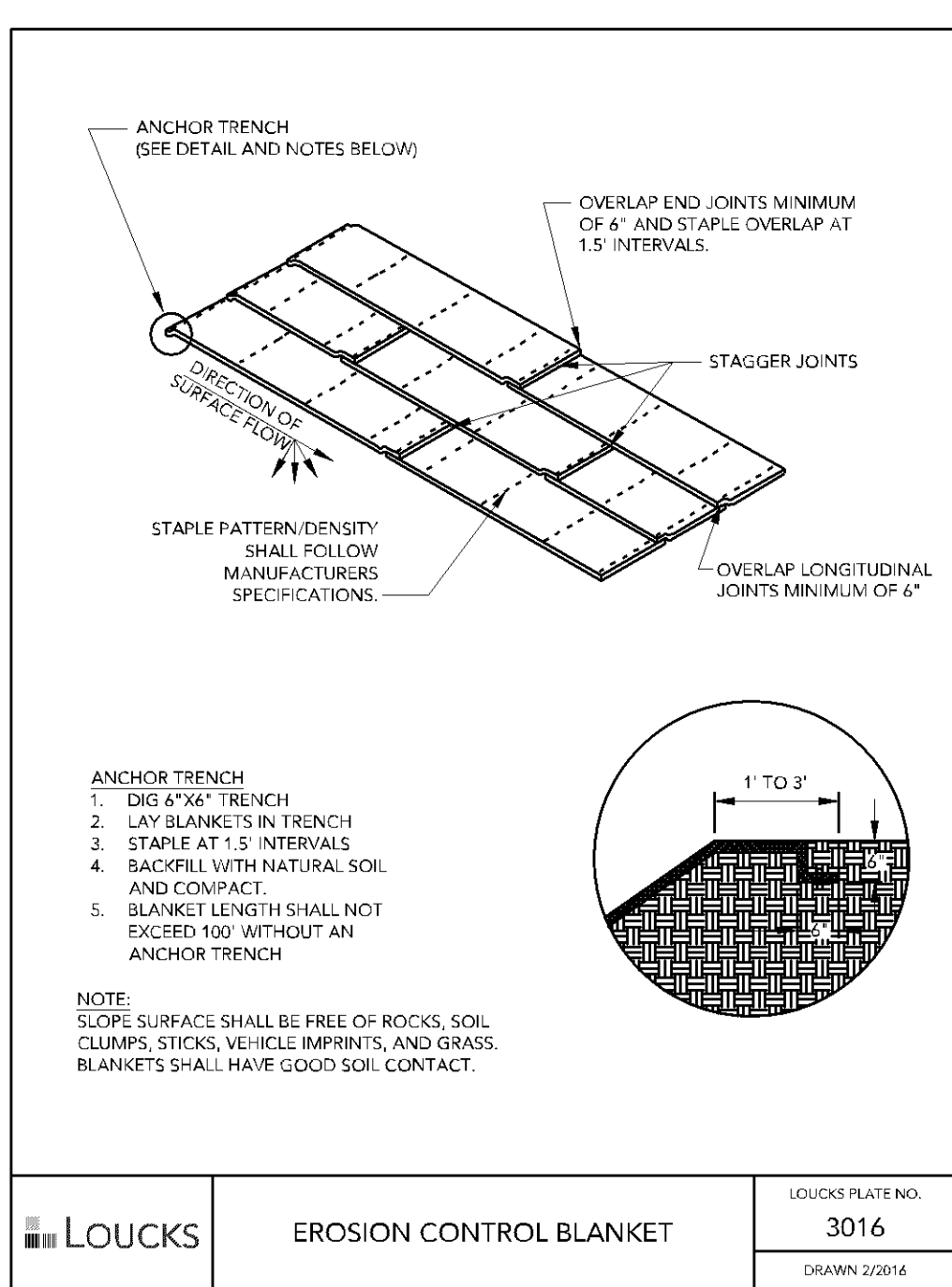
SITE VICINITY MAP



ESTIMATED QUANTITIES

DESCRIPTION	UNIT	QUANTITY
TEMPORARY ROCK CONSTRUCTION ENTRANCE	EA	1
SILT FENCE (STANDARD)	LF	740
BIO-ROLL	LF	735
INLET PROTECTION	EA	9
EROSION CONTROL BLANKET	SY	900

UNIVERSITY OF MINNESOTA
Zachary H. Webber
Design of Construction SWPPP (May 31 2021)



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BLOOMINGTON, MN

ROERS COMPANIES
110 Cheshire Lane, Suite 120
Minnetonka, MN 55305

Loucks
PLANNING
CIVIL ENGINEERING
LAND SURVEYING
LANDSCAPE ARCHITECTURE
ENVIRONMENTAL
7200 Hemlock Lane, Suite 300
Maple Grove, MN 55369
763.424.5505
www.loucksinc.com

CADD QUALIFICATION
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SUBMITTALS/REVISIONS
12/22/20 CITY SUBMITTAL

PROFESSIONAL SIGNATURE
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PRELIMINARY

Lic. No. 49993
Date: 12/22/20

QUALITY CONTROL
Loucks Project No. 20458A
Project Lead: PJD
Drawn By: DDL
Checked By: BDB
Review Date: 12/22/20

SHEET INDEX

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C8-2	CIVIL DETAILS
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P1-1	PHOTOMETRICS PLAN

SWPPP
C3-3

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EXISTING	PROPOSED

UTILITY PLAN GENERAL NOTES

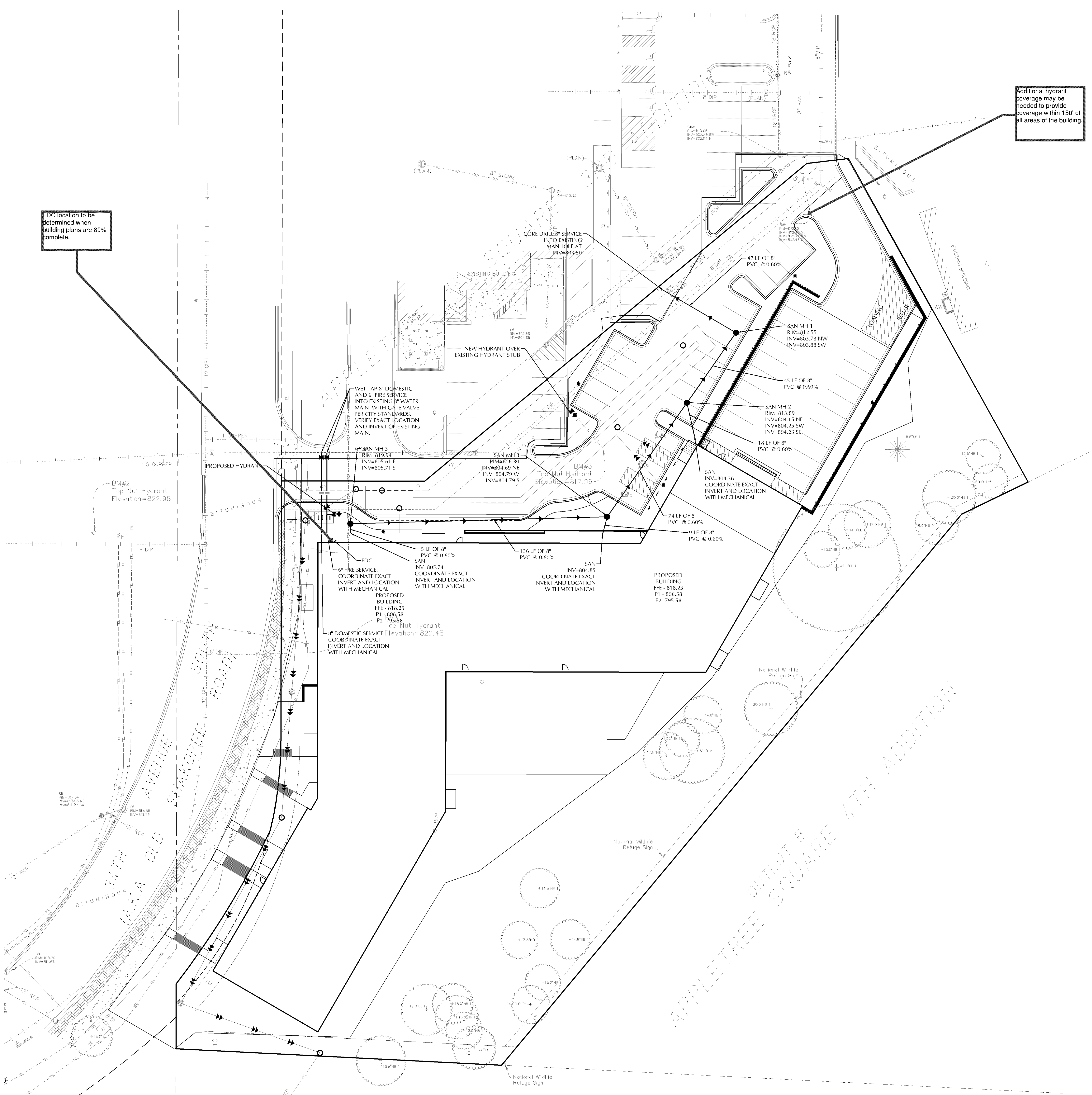
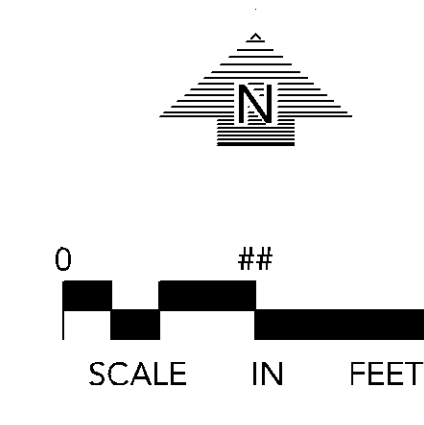
1. ALL SANITARY SEWER, STORM SEWER AND WATERMAIN UTILITIES SHALL BE FURNISHED AND INSTALLED PER THE REQUIREMENTS OF THE SPECIFICATIONS, THE CITY AND THE STANDARD UTILITIES SPECIFICATION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM, 1999 EDITION). ALL HDPE CONNECTIONS TO CONCRETE MANHOLES SHALL BE CONNECTED WITH AN INTERNAL RUBBER GASKET OR BY USING ADS WATERSTOP GASKET. ALL SANITARY SEWER MAIN LINE SHALL BE SDR 35. ALL SANITARY SEWER SERVICES SHALL BE SDR 26.
2. SEE SHEET C8-1 AND THE CONTRACT SPECIFICATIONS FOR SPECIFIC UTILITY DETAILS AND UTILITY SERVICE DETAILS.
3. ALL UTILITY PIPE BEDDING SHALL BE COMPACTED SAND OR FINE GRANULAR MATERIAL PER THE REQUIREMENTS OF THE CITY. ALL CONNECTION SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CONTRACT SPECIFICATION.
4. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY, THE CITY DEPARTMENT OF ENGINEERING AND BUILDING INSPECTIONS DEPARTMENT AND THE CONSTRUCTION ENGINEERS MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY WORK WITHIN THE PUBLIC RIGHT OF WAY, OR WORK IMPACTING PUBLIC UTILITIES.
5. ALL SANITARY SEWER AND WATER SERVICES SHALL TERMINATE AT THE PROPERTY LINE UNLESS OTHERWISE NOTED.
6. THE CONTRACTOR SHALL NOTIFY GOPHER STATE ONE CALL AT 651-454-0002 AT LEAST 48 HOURS PRIOR TO PERFORMING ANY EXCAVATION OR UNDERGROUND WORK.
7. THE CONTRACTOR SHALL FIELD ADJUST WATERMAIN TO AVOID CONFLICTS WITH SANITARY SEWER, STORM SEWER, AND SERVICES AS REQUIRED. INSULATION OF WATER AND SANITARY SEWER LINES SHALL BE PROVIDED WHERE 7.5 FEET MINIMUM DEPTH CAN NOT BE ATTAINED.
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9. ALL NEW WATERMAIN MUST HAVE A MINIMUM OF 8.0 FEET OF COVER.
10. ADJUST ALL EXISTING STRUCTURES, BOTH PUBLIC AND PRIVATE TO THE PROPOSED GRADES WHERE DISTURBED AND COMPLY WITH ALL REQUIREMENTS OF THE UTILITY OWNERS. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
11. PROPOSED PIPE MATERIALS:

WATERMAIN	DIP CLASS 20 WITH 8 MIL POLYWRAP
SANITARY SEWER	PVC SDR 26 OR SHD 40
STORM SEWER	RCP OR HDPE



WARNING:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING FOR LOCATIONS OF ALL EXISTING UTILITIES. THEY SHALL COOPERATE WITH ALL UTILITY COMPANIES IN MAINTAINING THEIR SERVICE AND /OR RELOCATION OF LINES.
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Drawn By	DDL
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Review Date	12/22/20

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LEGEND

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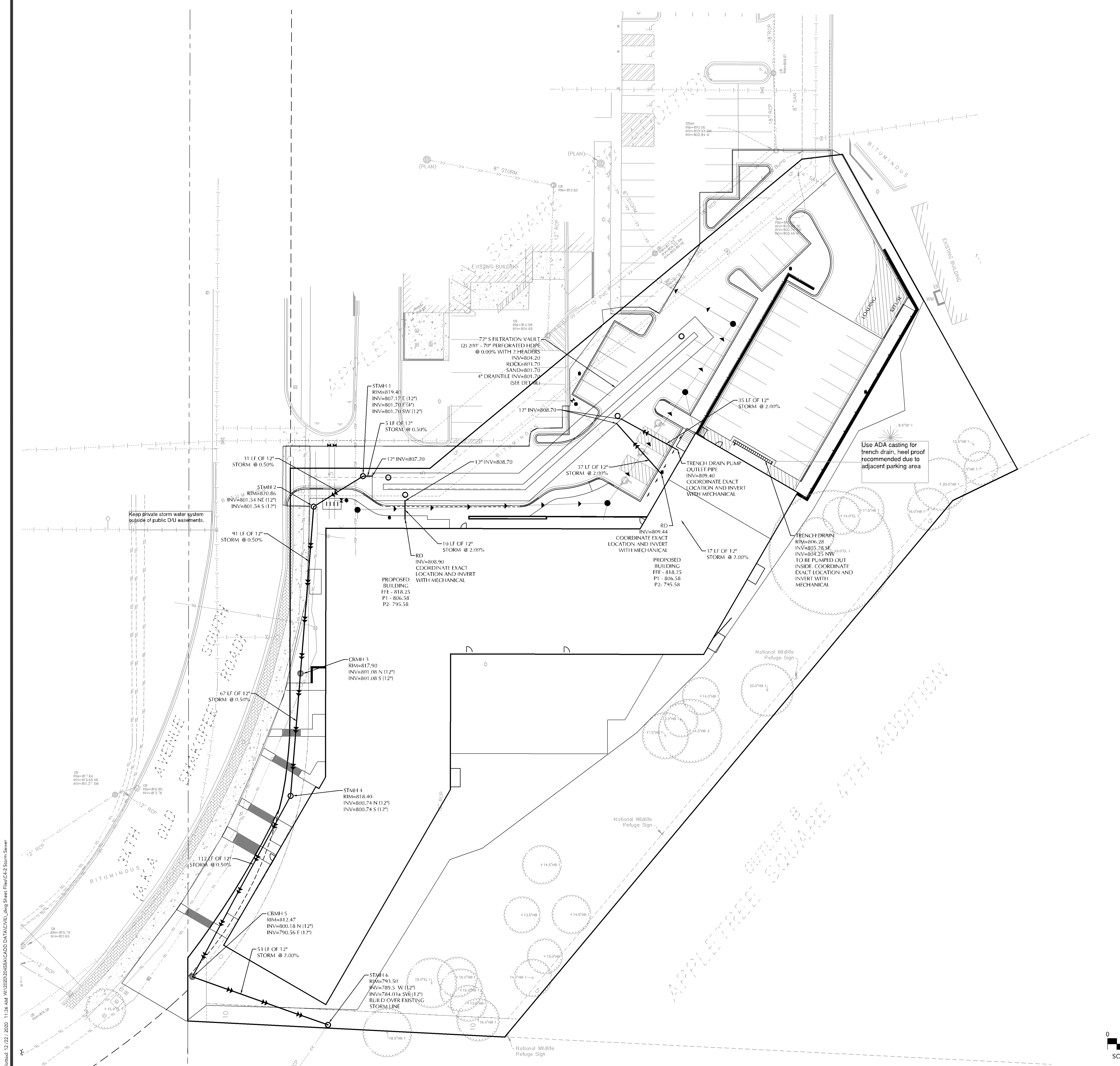
WATERMAIN	DIP CLASS 20 WITH 8 MIL POLYWRAP
SANITARY SEWER	PVC SDR 26 OR PVC SCH 40
STORM SEWER	RCP, HDPE OR PVC SCH 40

Gopher State One Call
1200 CITY BLVD. SUITE 400
MINNETONKA, MN 55305
TEL: 1-800-252-1166

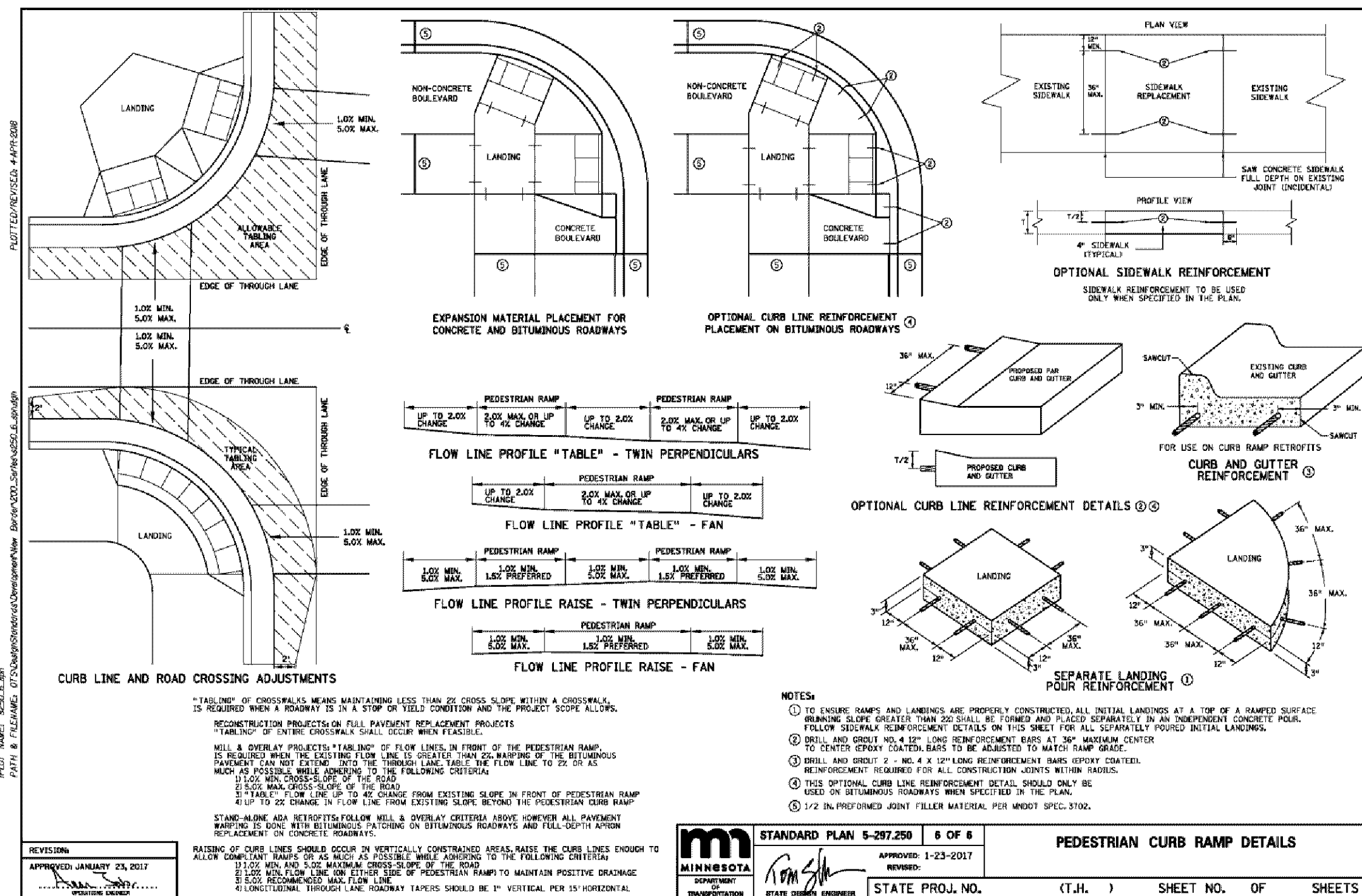
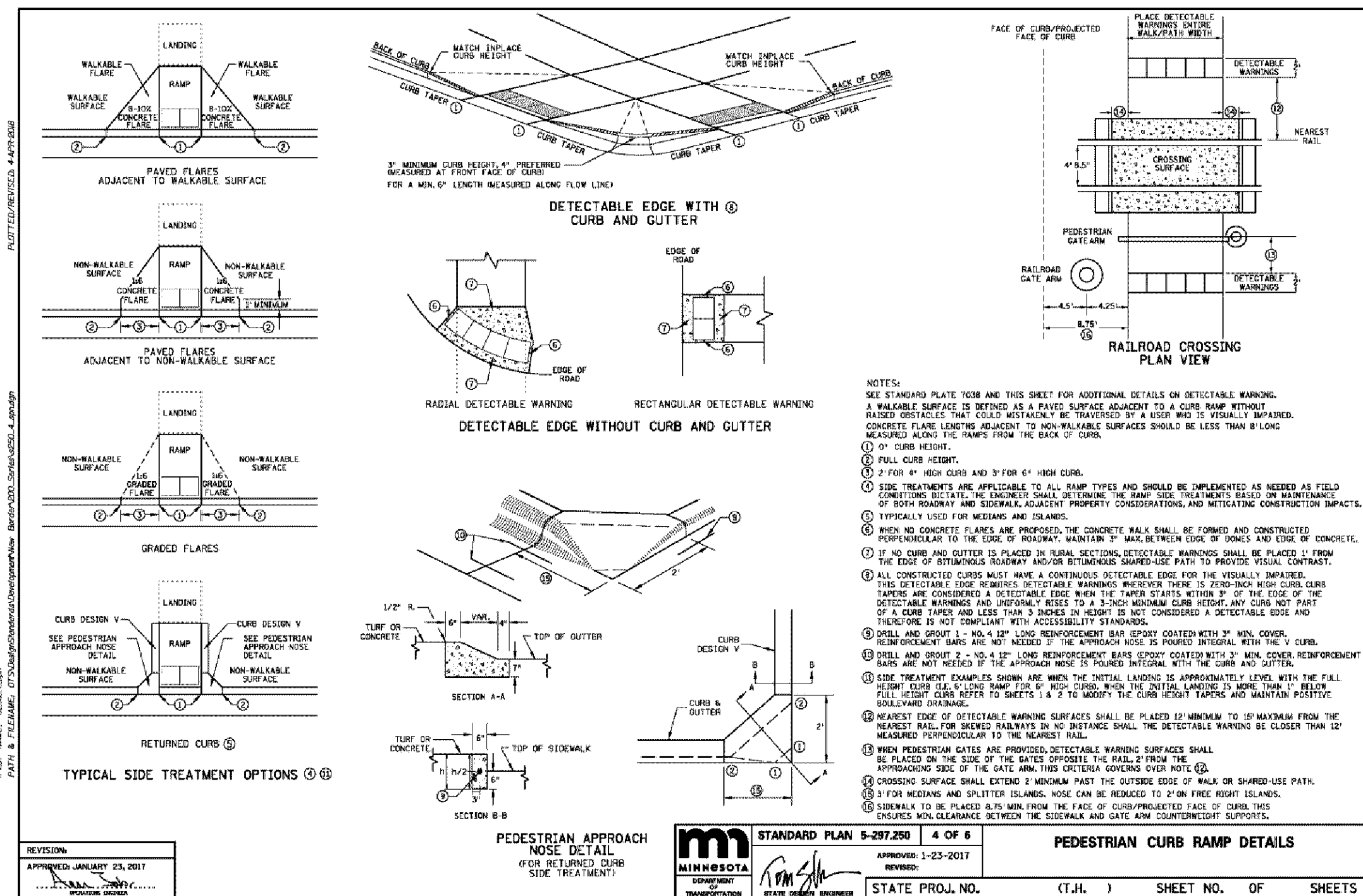
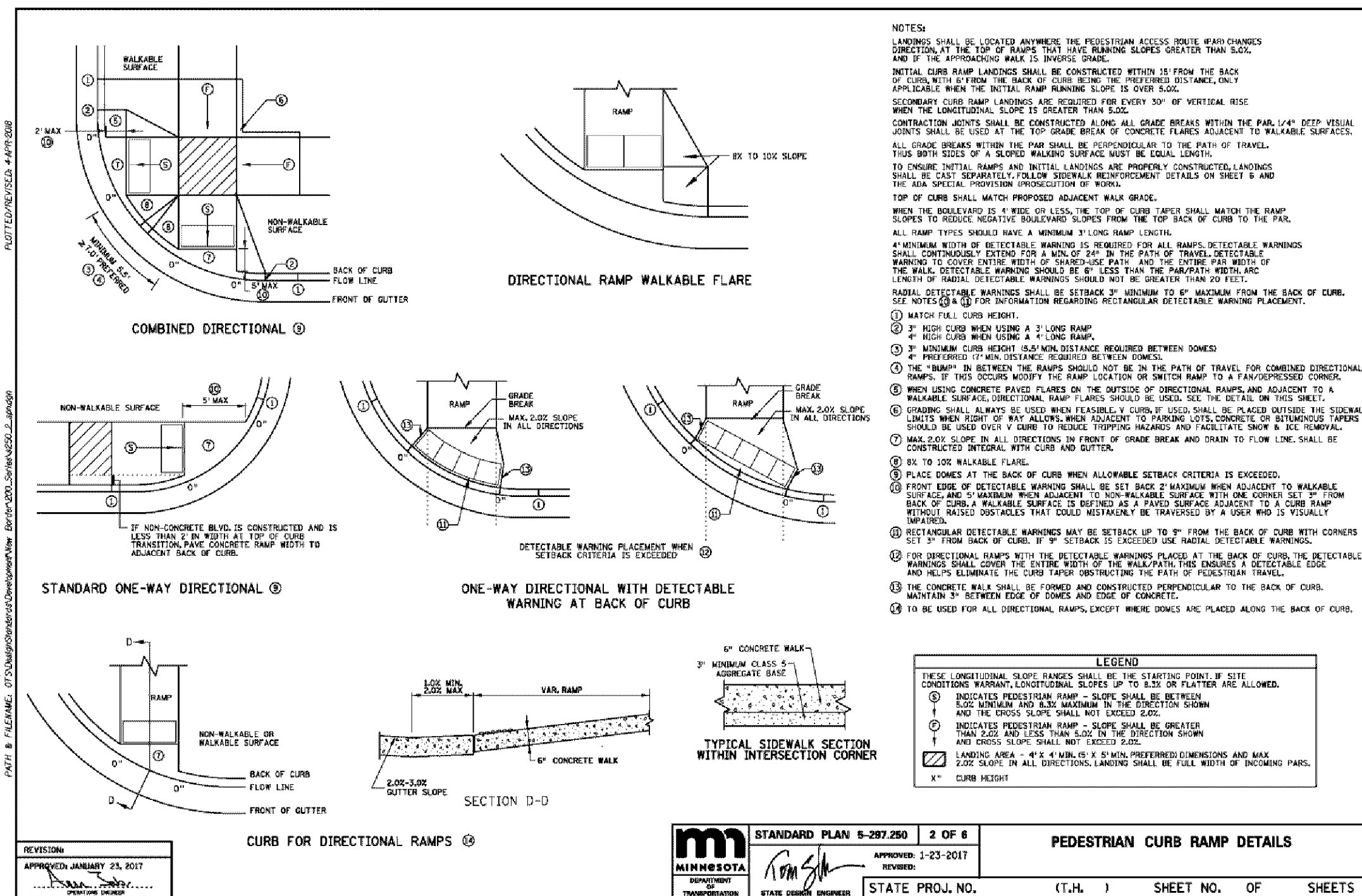
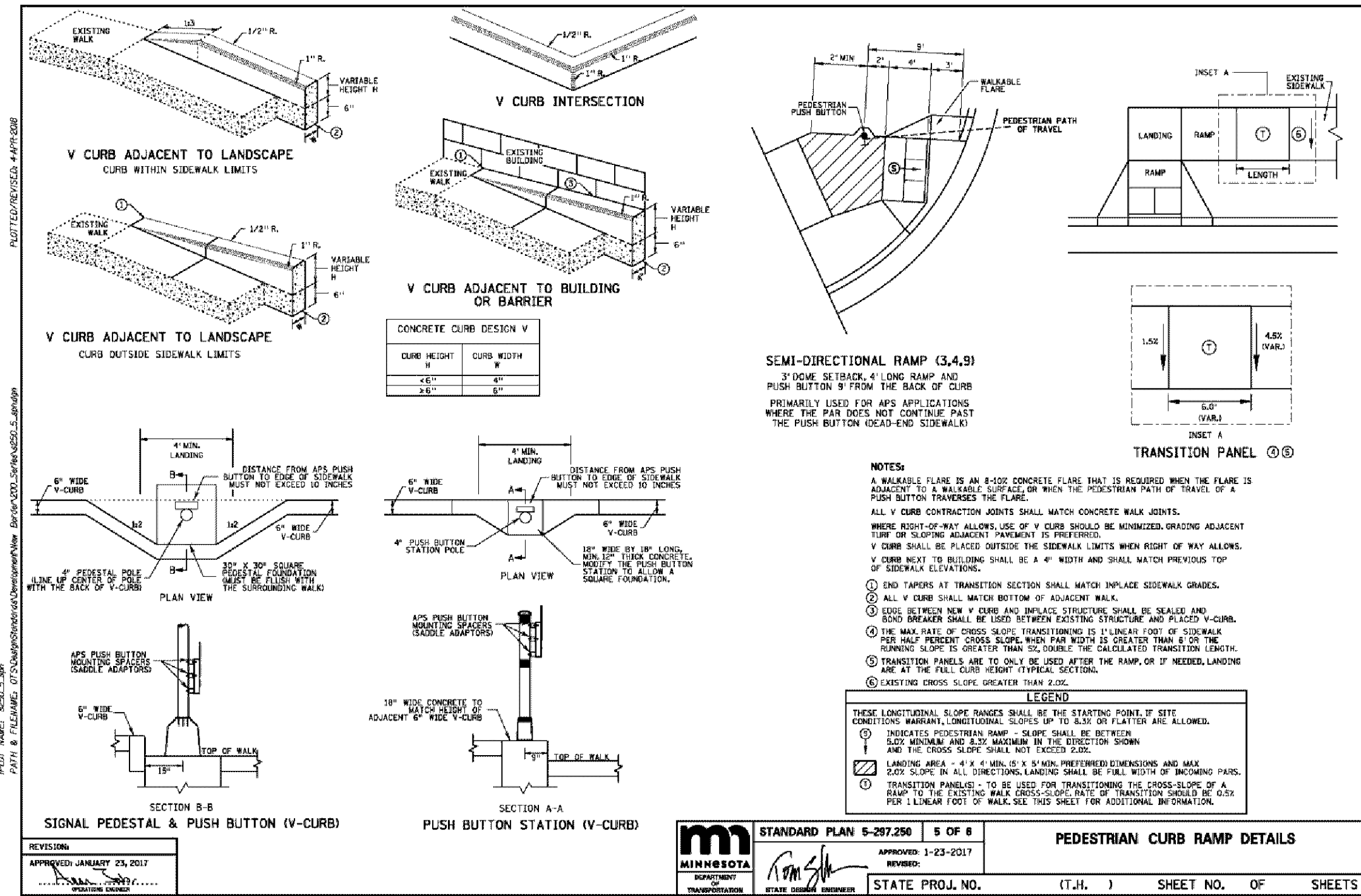
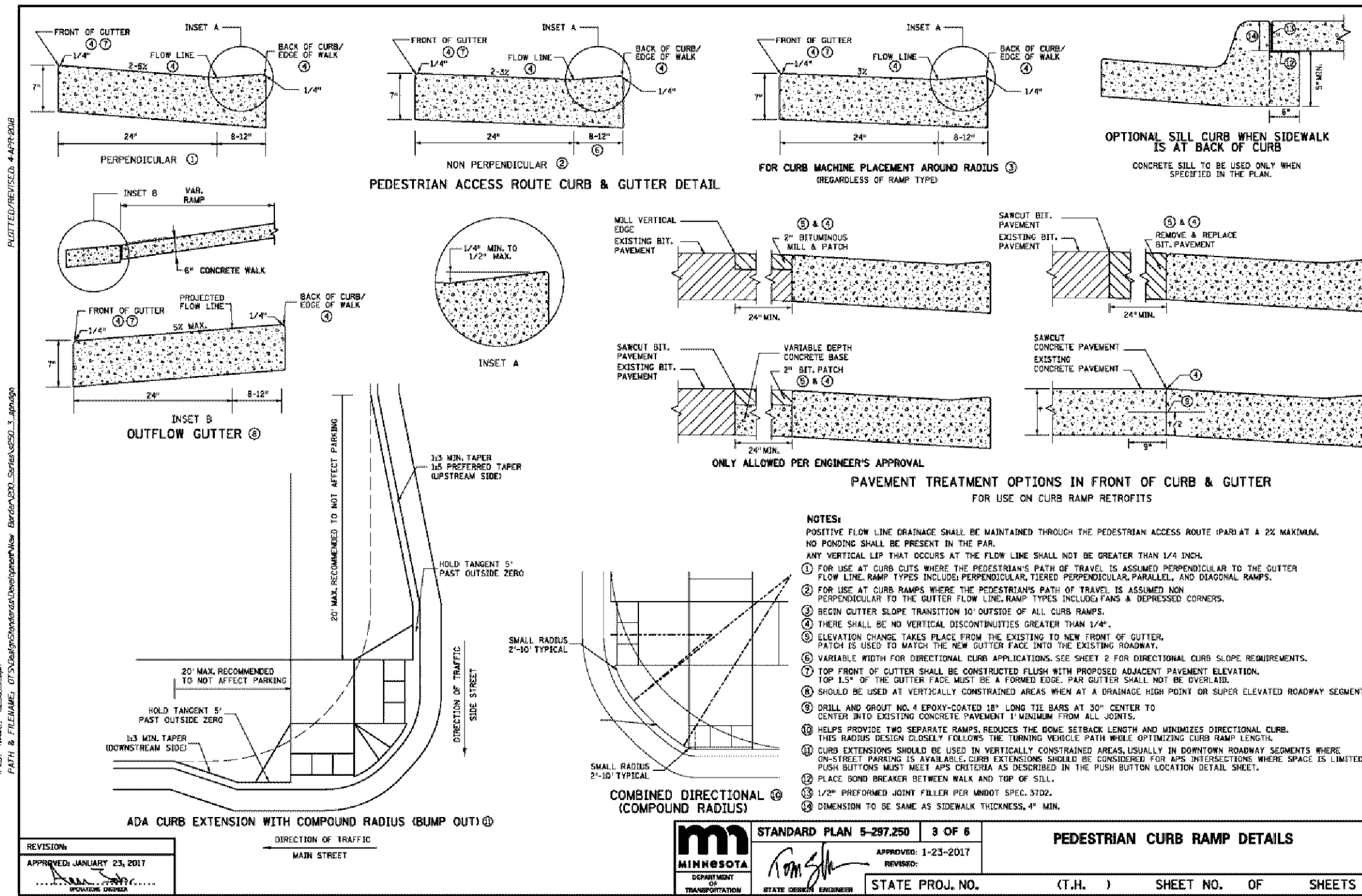
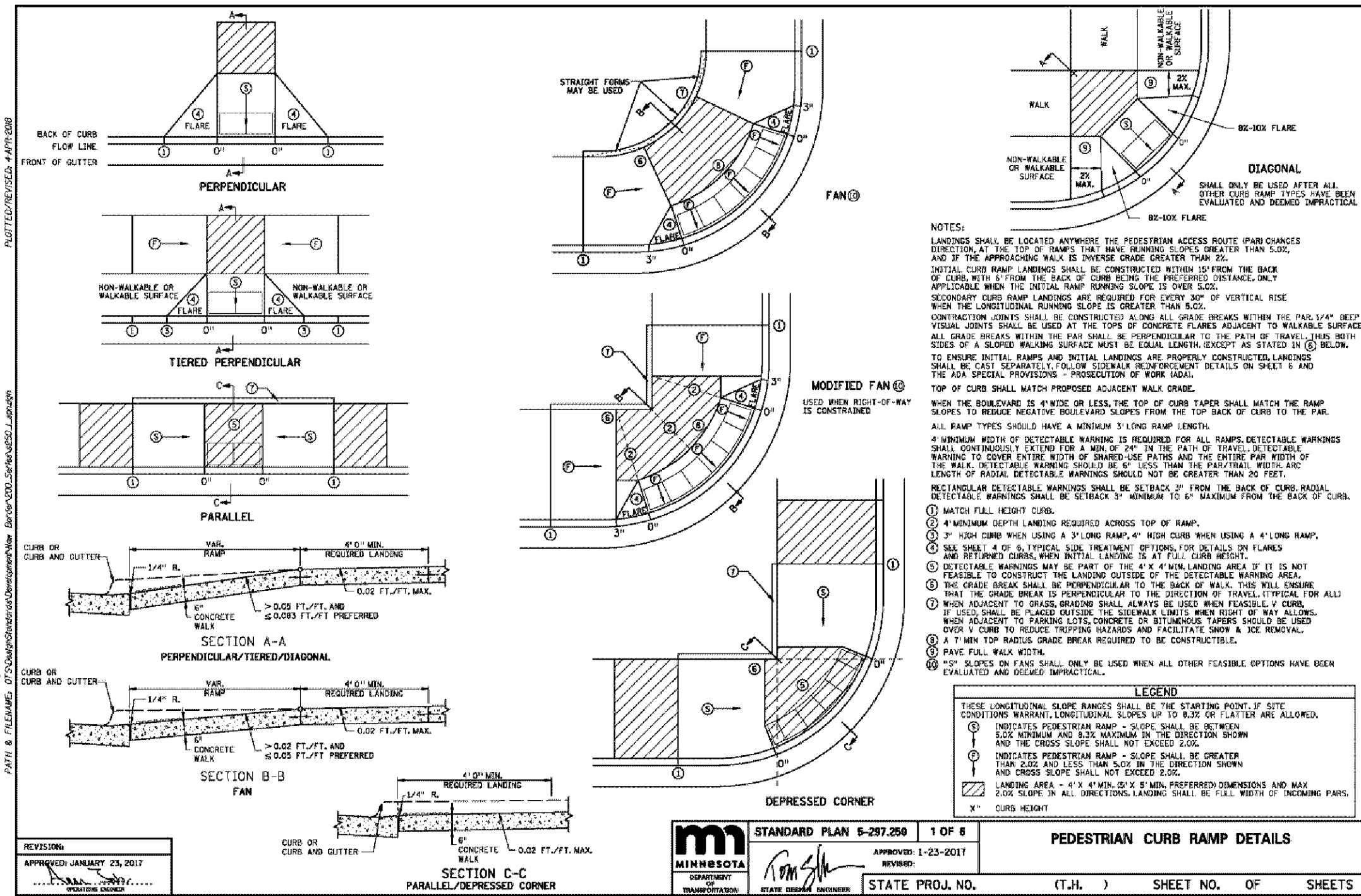
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SCALE IN FEET

STORM SEWER C4-2



Printed: 12/22/2020 11:36 AM W:\32070\BIBACAD\DATA\CIVIL\Map Sheet Files\C4-2 Storm Sewer



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CIVIL DETAILS
C8-2