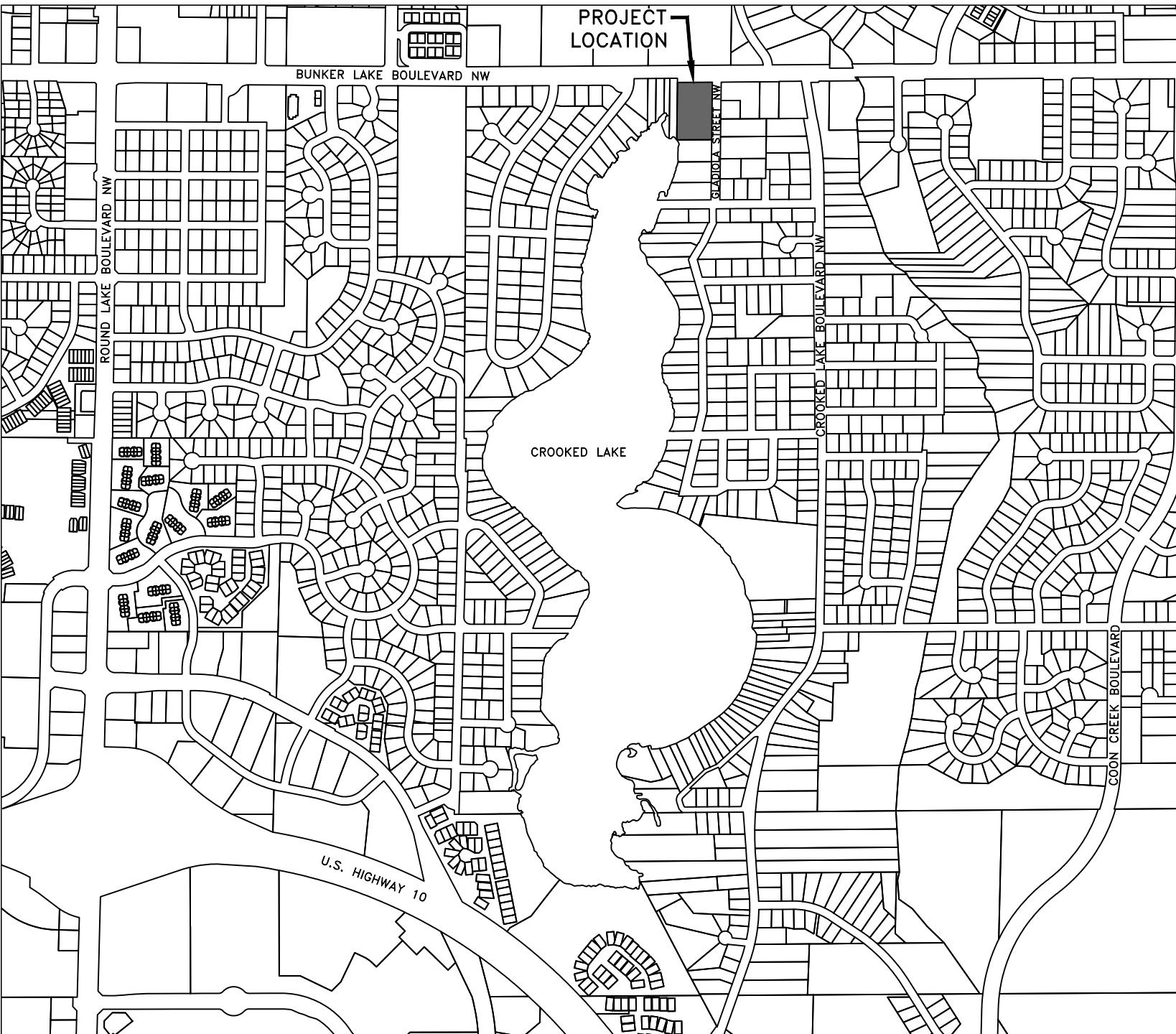


# LAKEVIEW AT SLOTH FARM

## ANDOVER, MINNESOTA



THE SUBSURFACE UTILITY INFORMATION  
IN THIS PLAN IS UTILITY QUALITY LEVEL  
D. THIS QUALITY LEVEL WAS DETERMINED  
ACCORDING TO THE GUIDELINES OF  
CI/ASCE 38-22, ENTITLED "STANDARD  
GUIDELINES FOR THE COLLECTION AND  
DEPICTION OF EXISTING SUBSURFACE  
UTILITY DATA."

SITE IS LOCATED WITHIN THE  
BOUNDARY OF THE COON  
CREEK WATERSHED DISTRICT.

## GOVERNING SPECIFICATIONS

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION  
"STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

THE 2018 EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA  
(CEAM) STANDARD SPECIFICATIONS SHALL APPLY.

THE CITY OF ANDOVER 2025 UTILITY AND STREET CONSTRUCTION  
SPECIFICATION SHALL APPLY.

ALL FEDERAL, STATE AND LOCAL LAWS, REGULATIONS, AND ORDINANCES  
SHALL BE COMPLIED WITH IN THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL DEVICES AND SIGNING SHALL CONFORM TO THE  
LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC  
CONTROL DEVICES, INCLUDING THE LATEST FIELD MANUAL FOR  
TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS.

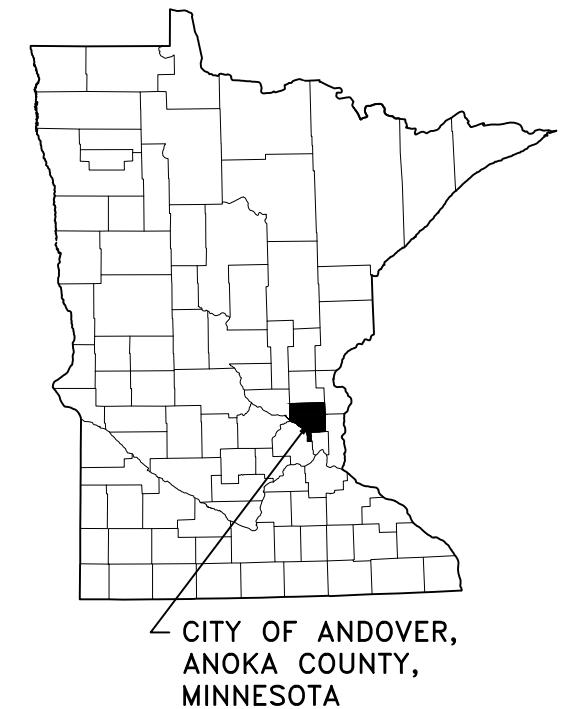
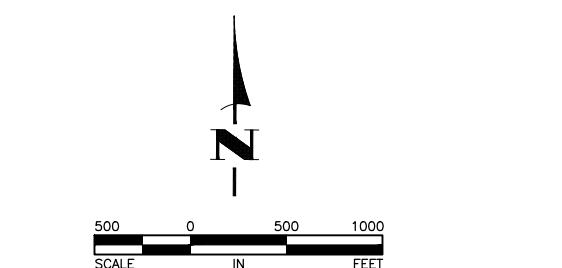
## SHEET INDEX

THIS PLAN CONTAINS 10 SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	CONSTRUCTION NOTES, TYPICAL SECTION AND LOT TABULATION
3-5	DETAILS
6	EXISTING CONDITIONS AND REMOVALS PLAN
7	GRADING, DRAINAGE, AND EROSION CONTROL PLAN
8	SANITARY SEWER AND WATERMAIN PLAN AND STREET CONSTRUCTION
9	TREE PRESERVATION PLAN
10	TRAFFIC CONTROL PLAN

### PROJECT LEGEND

900	EXISTING CONTOUR
900	PROPOSED CONTOUR
FO-BUR	BURIED FIBER OPTIC CABLE
T-BUR	BURIED TELEPHONE CABLE
G	GAS MAIN
P-BUR	BURIED ELECTRIC CABLE
P-OH	OVERHEAD ELECTRIC CABLE
■	UTILITY PEDESTAL
♂	POWER POLE
→	GUY WIRE
◊	LIGHT POLE
□	SIGNAL POLE
■	HANDHOLE
◎	ELECTRIC MANHOLE
○	TELEPHONE MANHOLE
◎	GAS VALVE
>>	EXISTING STORM SEWER
◎	EXISTING STORM SEWER MANHOLE
■	EXISTING CATCH BASIN
△	EXISTING FLARED END SECTION
>>	PROPOSED STORM SEWER
○	PROPOSED STORM SEWER MANHOLE
■	PROPOSED CATCH BASIN
△	PROPOSED FLARED END SECTION
●	TREES AND SHRUBS
●	TRUNCATED DOMES
—	EXISTING CONCRETE CURB & GUTTER
—	PROPOSED CONCRETE CURB & GUTTER
+	SIGN
■	MAILBOX
●	SOIL BORING
○	MANHOLE
—	DETAIL NUMBER
2 3	SHEET NUMBER
—	SILT FENCE PER
○	INLET PROTECTION DEVICE
→	DRAINAGE ARROW
■	EXISTING BITUMINOUS PAVEMENT
✗	CLEAR AND GRUB TREE



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  
Professional Engineer under the laws of the State of Minnesota.

23461 DATE 2/10/25  
LIC. NO.

CRAIG J. JOCHUM, P.E.  
HAKANSON ANDERSON  
DESIGN ENGINEER

DATE	REVISION
4/18/25	CITY COMMENTS - REVIEW #1
5/7/25	CITY AND CCWD REVIEW

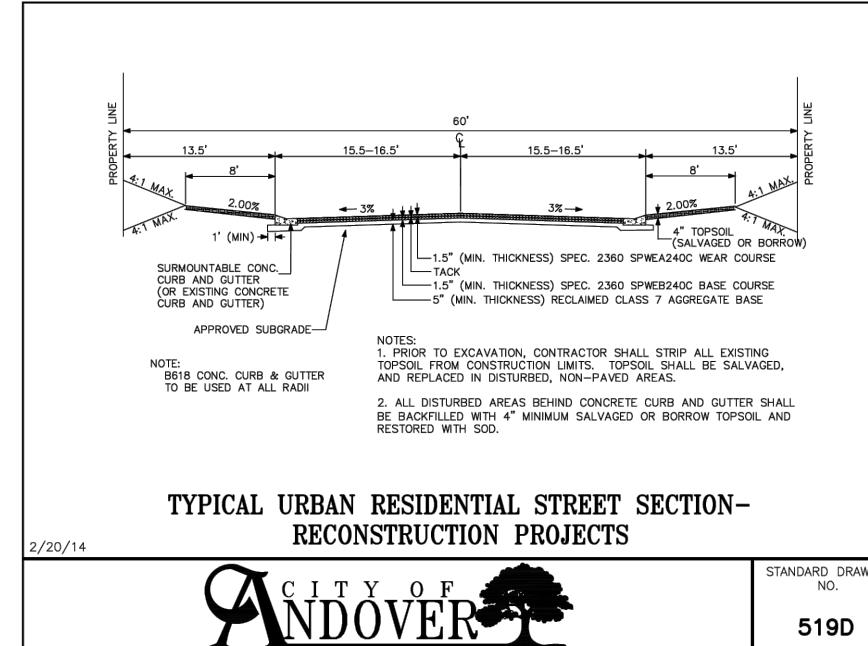
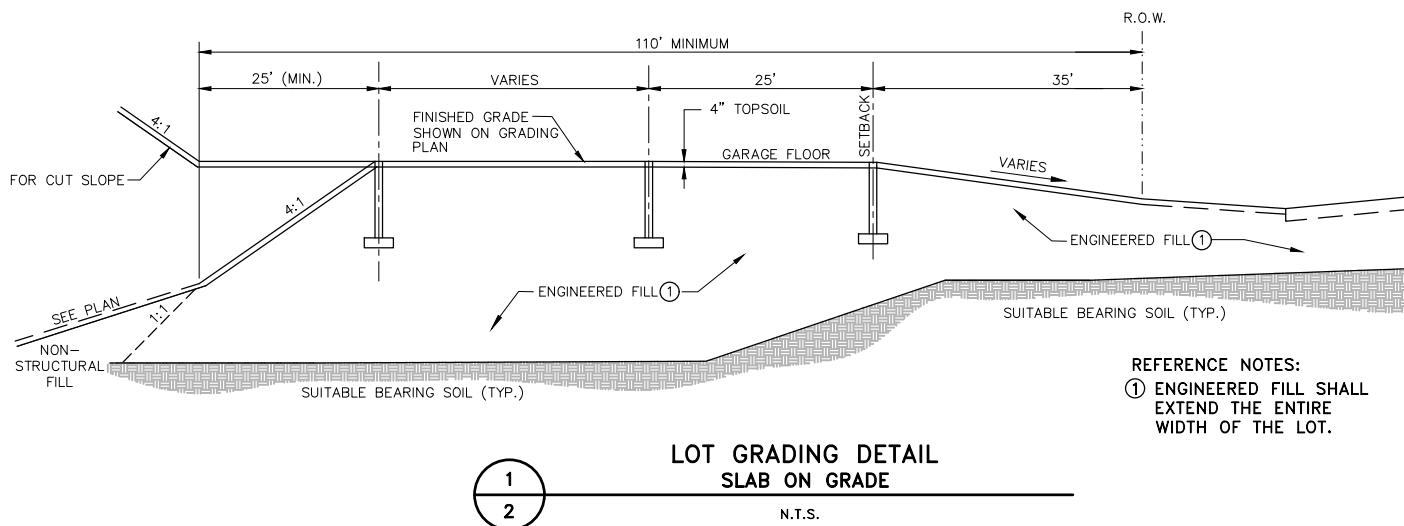
SHEET 1 OF 10 SHEETS

GENERAL CONSTRUCTION AND SOILS NOTES:

1. UNLESS OTHERWISE RECOMMENDED IN THESE PLANS, THE GRADING SUBGRADE SHALL BE CONSTRUCTED OF SUITABLE GRADING MATERIAL. THE FILL SHALL BE PLACED IN 8" TO 10" LOOSE LIFTS, AND COMPAKTED TO 100% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
2. SUITABLE GRADING MATERIAL FOR THIS PROJECT SHALL CONSIST OF ALL SOILS ENCOUNTERED WITH THE EXCEPTION OF TOPSOIL, SILT, DEBRIS, ORGANIC MATERIAL AND OTHER UNSTABLE MATERIAL.
3. PROVIDE A SAWCUT WHEN PLACING NEW PAVEMENT ADJACENT TO INPLACE PAVEMENT AND AT TERMINI OF CONSTRUCTION TO ENSURE A UNIFORM JOINT.
4. BITUMINOUS AND CONCRETE ITEMS DISTURBED BY CONSTRUCTION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF IN ACCORDANCE WITH MN/DOT SPEC. 2104.
5. USE TACK COAT BETWEEN ALL BITUMINOUS MIXTURES. THE BITUMINOUS TACK COAT MATERIAL SHALL BE APPLIED AT A UNIFORM RATE OF 0.04 GAL/SY TO 0.06 GAL/SY BETWEEN BITUMINOUS LAYERS. THE APPLICATION RATES ARE FOR UNDILUTED EMULSIONS.
6. THE BITUMINOUS MIXTURES SHALL MEET THE REQUIREMENTS OF SPECIFICATIONS 2360 AND 3139.
7. ALL DISTURBED AREAS AND STOCKPILES SHALL BE RESTORED WITH 4" OF TOPSOIL, FERTILIZER, SEED AND MULCH. RATES ARE SHOWN ON THE BASIS OF ESTIMATED QUANTITIES.
8. IF NECESSARY, CONTRACTOR SHALL APPLY FOR A DEPARTMENT OF LABOR AND INDUSTRY PERMIT PRIOR TO CONSTRUCTING ANY UNDERGROUND UTILITIES SHOWN ON THESE PLANS. CONTRACTOR SHALL ADDRESS ALL THE COMMENTS FROM THE DEPARTMENT OF LABOR AND INDUSTRY AS PART OF THE PERMIT APPLICATION PROCESS. NO CONSTRUCTION SHALL BEGIN UNTIL ALL PERMITS ARE APPROVED.

GENERAL EROSION CONTROL NOTES:

1. PRIOR TO ANY CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL ACQUIRE THE MPCA-CONSTRUCTION STORMWATER GENERAL PERMIT. A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED COVERING CONSTRUCTION ACTIVITIES.
2. THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL FACILITIES (BMP'S) PRIOR TO GRADING AND REMOVAL ACTIVITIES. BMP'S SHALL BE MAINTAINED FOR THE DURATION OF CONSTRUCTION ACTIVITIES AND POTENTIAL FOR EROSION HAS PASSED.
3. THE CONTRACTOR SHALL SCHEDULE THEIR OPERATION TO MINIMIZE THE AMOUNT OF DISTURBED AREA AT ANY GIVEN TIME.
4. BMP'S SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND DOCUMENTED IN THE SWPPP INSPECTION LOG. WEEKLY LOGS MUST BE FORWARDED TO THE ENGINEER FOR REVIEW.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR WITHIN THIRTY (30) DAYS AFTER FINAL SITE STABILIZATION IS APPROVED BY THE CITY.
6. THE CONTRACTOR SHALL FILE NOTICE OF TERMINATION (NOT) WITH THE MPCA WHEN FINAL STABILIZATION IS APPROVED BY THE ENGINEER.
7. CONTRACTOR SHALL PROMPTLY SWEEP EXISTING STREETS WHEN ANY SEDIMENT TRACKING OCCURS.
8. THE CONTRACTOR SHALL MEET ALL REQUIREMENTS OF THE GENERAL PERMIT, WHICH IS INCLUDED IN THE SWPPP.
9. PRIOR TO THE START OF ANY CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE CERTIFICATION DOCUMENTATION FOR THE EROSION CONTROL SUPERVISOR AND INSTALLERS TO THE ENGINEER.
10. THE CONTRACTOR IS RESPONSIBLE FOR ALL INSPECTIONS AND MAINTENANCE AS OUTLINED IN PART IV.E INSPECTIONS AND MAINTENANCE OF THE GENERAL PERMIT.
11. CONTRACTOR SHALL STABILIZE ALL EXPOSED SOILS AND STOCKPILE AREAS IMMEDIATELY TO LIMIT SOIL EROSION BUT IN NO CASE SHALL BE COMPLETED NO LATER THAN 7 DAYS AFTER THE CONSTRUCTION ACTIVITIES IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. DEPENDING ON THE CONTRACTOR'S OPERATION, TEMPORARY SEEDING AND MULCHING MAY BE REQUIRED TO MEET THE REQUIREMENTS OF THE SPECIFICATIONS AND SWPPP.
12. EROSION CONTROL SHALL CONFORM TO THE MN/DOT EROSION CONTROL HANDBOOK.
13. WHEN SEDIMENTS DEPOSIT IN A WATER OF THE STATE, THE MATERIAL MUST BE REMOVED WITHIN 7 DAYS.
14. PRIOR TO SEEDING, SOIL SHALL BE PREPARED PER MN/DOT SPEC 2574.3.A.3.
15. ALL DISTURBED AREAS REQUIRE SALVAGED TOPSOIL, SEED, TYPE 1 FERTILIZER AND DISKED ANCHORED TYPE 1 MULCH UNLESS OTHERWISE NOTED ON THE PLANS.
16. CONTRACTOR SHALL DETERMINE A LOCATION FOR CONCRETE AND OTHER WASHOUT WASTE. A SIGN SHALL BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY THAT REQUIRES SITE PERSONNEL TO UTILIZE THE PROPER FACILITIES FOR DISPOSAL OF CONCRETE AND OTHER WASTES.
17. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL FEATURES UPON ESTABLISHMENT OF PERMANENT EROSION CONTROL.
18. INLET PROTECTION SHALL BE REMOVED BY CONTRACTOR PRIOR TO WINTER FREEZE AND REPLACED IN SPRING IF SITE STABILIZATION IS NOT ACHIEVED, OR AT DIRECTION OF THE CITY ENGINEER.



LOT BY LOT TABULATION										
LOT	BLOCK	HOUSE TYPE	TOP OF CURB ELEVATION AT DRIVEWAY	GARAGE FLOOR ELEVATION	DRIVEWAY GRADE (%)	LOWEST LIVABLE FLOOR ELEVATION	LOWEST OPENING ELEVATION	HIGHEST ANTICIPATED GROUNDWATER LEVEL	100-YEAR FLOOD ELEVATION	EMERGENCY OVERFLOW ELEVATION
1	1	SOG	876.3	876.9	0.9%	877.2	877.2	864.7	869.0	869.0
2	1	SOG	876.0	876.7	1.1%	877.0	877.0	864.7	869.0	869.0
3	1	SOG	875.7	876.3	1.0%	876.6	876.6	864.7	869.0	869.0
4	1	SOG	875.4	876.1	1.2%	876.4	876.4	864.7	869.0	869.0
5	1	SOG	875.1	875.8	1.2%	876.1	876.1	864.7	869.0	869.0

BASIS OF ESTIMATED QUANTITIES	
AGGREGATE BASE CLASS 5	100 lbs/yd <sup>2</sup> /in
NON WEARING BITUMINOUS COURSE MIXTURE	110 lbs/yd <sup>2</sup> /in
WEARING COURSE BITUMINOUS MIXTURE	110 lbs/yd <sup>2</sup> /in
BITUMINOUS MATERIAL FOR TACK COAT - NEW ASPHALT	0.06 gal/yd <sup>2</sup>
BITUMINOUS MATERIAL FOR TACK COAT - OLD ASPHALT	0.07 gal/yd <sup>2</sup>
BITUMINOUS MATERIAL FOR TACK COAT - MILLED ASPHALT	0.08 gal/yd <sup>2</sup>
MULCH TYPE 1 - DISK ANCHORED	2 tons/acre
SEED MIX 25-121	122 lbs/acre
SEED MIX 35-241	73 lbs/acre
TYPE 1, COMMERCIAL FERTILIZER	300 lbs/acre

DATE	REVISION
4/18/25	CITY COMMENTS - REVIEW #1
5/7/25	CITY AND CCWD REVIEW
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 Professional Engineer under the laws of the State of Minnesota.	
CRAIG J. JOCHUM, P.E.	
Date 2/10/25	
Lic. No. 23461	

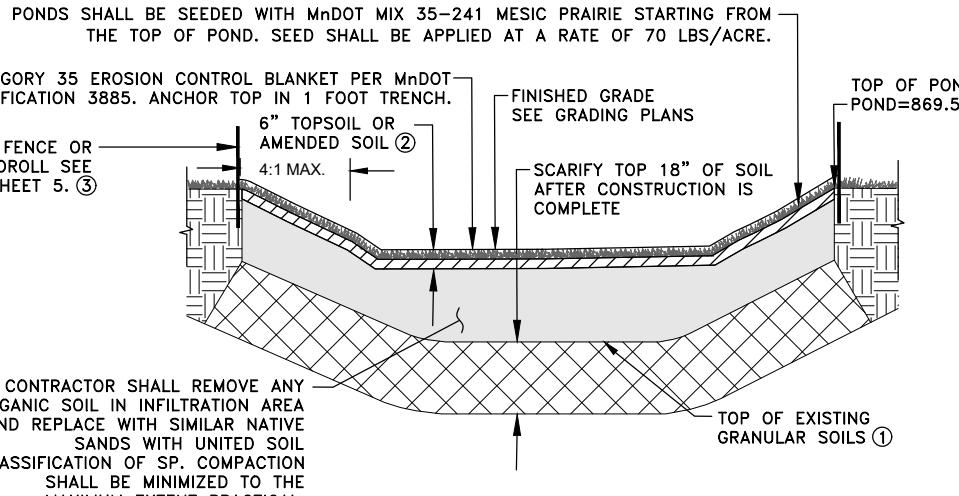


Hakanson Anderson  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

LAKEVIEW AT SLOTH FARM

CONSTRUCTION NOTES, TYPICAL SECTION  
AND LOT TABULATION  
ANDOVER, MINNESOTA

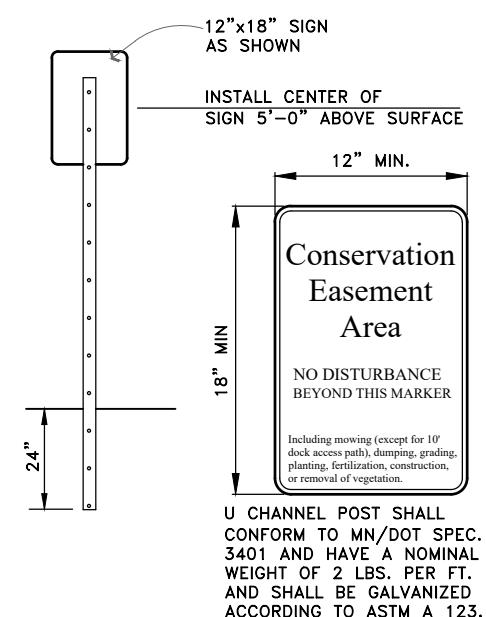
SHEET  
2  
OF  
10  
SHEETS



### 1 INFILTRATION POND

#### POND NOTE:

1. CONTRACTOR SHALL PROTECT THE POND WITH 48" HIGH ORANGE SAFETY FENCE PRIOR TO THE START OF CONSTRUCTION.
2. IMPERVIOUS AREA CONSTRUCTION SHALL BE COMPLETE AND PERVERSUS AREAS SHALL BE ESTABLISHED WITH DENSE HEALTHY VEGETATION PRIOR TO INTRODUCING STORMWATER TO THE PONDS.
3. CONSTRUCTION EQUIPMENT SHALL BE MINIMIZED OVER THE FOOTPRINT OF THE PONDS. ONLY LOW PRESSURE WIDE TRACKED EQUIPMENT SHALL BE USED FOR CONSTRUCTION.

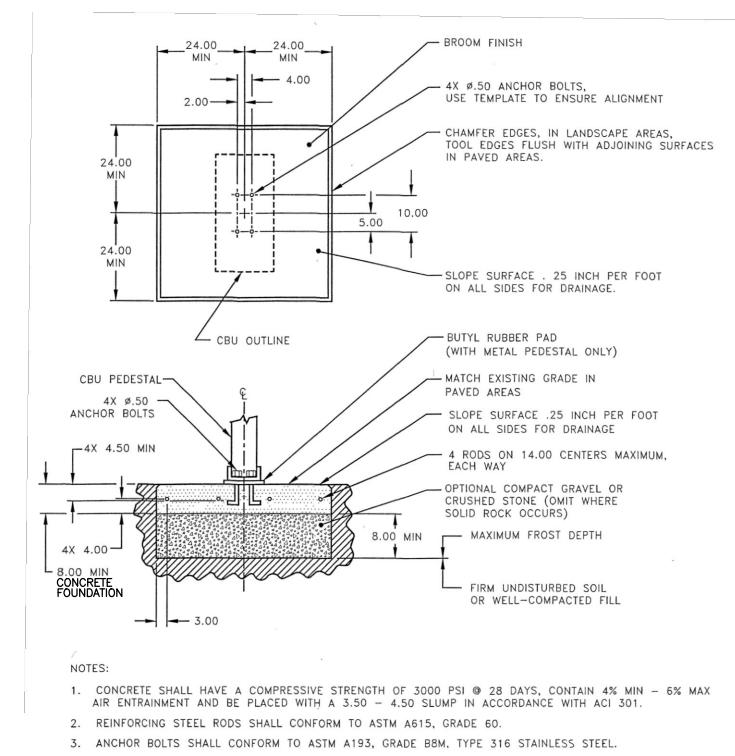
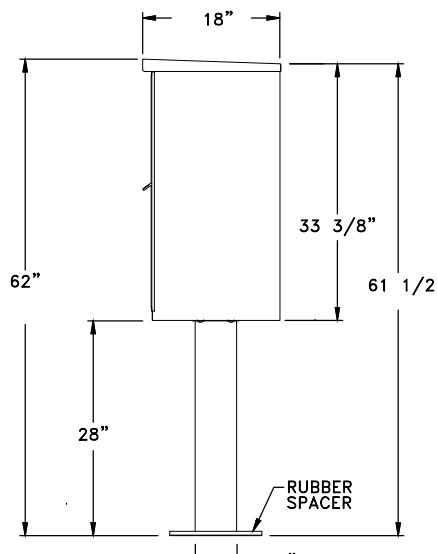
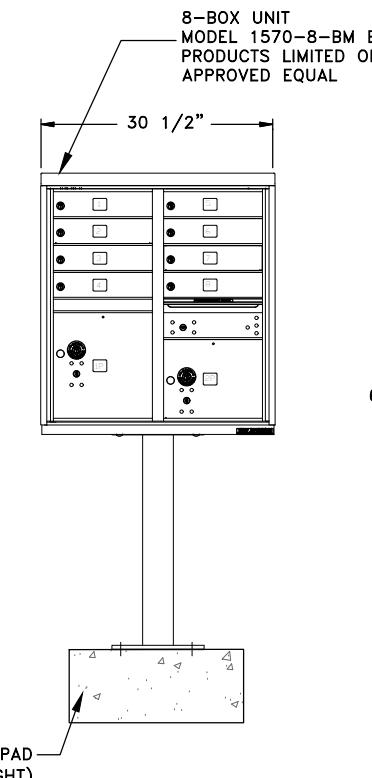


WETLAND SIGNS SHALL BE 12" X 18" WHITE WITH BLACK LETTERS

### 2 CONSERVATION EASEMENT SIGN

#### REFERENCE NOTES:

- ① GRANULAR SOIL SHALL BE ON SITE OR IMPORTED MATERIAL WITH A UNIFIED SOIL CLASSIFICATION OF SP.
- ② THE INFILTRATION RATE IN THE BOTTOM OF ALL THE INFILTRATION PONDS SHALL BE BETWEEN 0.80 AND 8.3 INCHES PER HOUR. THE CONTRACTOR MAY HAVE TO AMEND THE SOIL TO MEET THIS REQUIREMENT. FOLLOWING CONSTRUCTION OF THE INFILTRATION POND, CONTRACTOR SHALL COMPLETE FIELD TESTING TO DETERMINE THE ACTUAL INFILTRATION RATE IN THE POND. ADDITIONAL TESTS WILL BE REQUIRED IF SOILS NEED TO BE AMENDED TO MEET THE REQUIRED INFILTRATION RATES. TESTS SHALL INCLUDE A DOUBLE RING INFILTRATION OR FLOOD TEST AS APPROVED BY THE COON CREEK WATERSHED DISTRICT. THE CONTRACTOR MUST CONTACT THE COON CREEK WATERSHED DISTRICT TO WITNESS THE TEST. TEST RESULTS SHALL ALSO BE SUBMITTED TO THE CITY.
- ③ AFTER INITIAL GRADING, COMPLETELY SURROUND THE PROPOSED INFILTRATION PONDS TO PREVENT THE BASIN FROM CLOGGING.



### 3 USPS APPROVED 8-UNIT CLUSTER BOX

DATE	REVISION	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 Professional Engineer under the laws of the State of Minnesota.			DESIGNED BY:	DRAWN BY:	CHECKED BY:
4/18/25	CITY COMMENTS - REVIEW #1				CJJ		
5/7/25	CITY AND CCWD REVIEW					MSS	
6/3/25	REVISE CONSERVATION EASEMENT SIGN						TAE
		CRAIG J. JOCHUM, P.E.					
		Date 2/10/25					
		Lic. No. 23461					



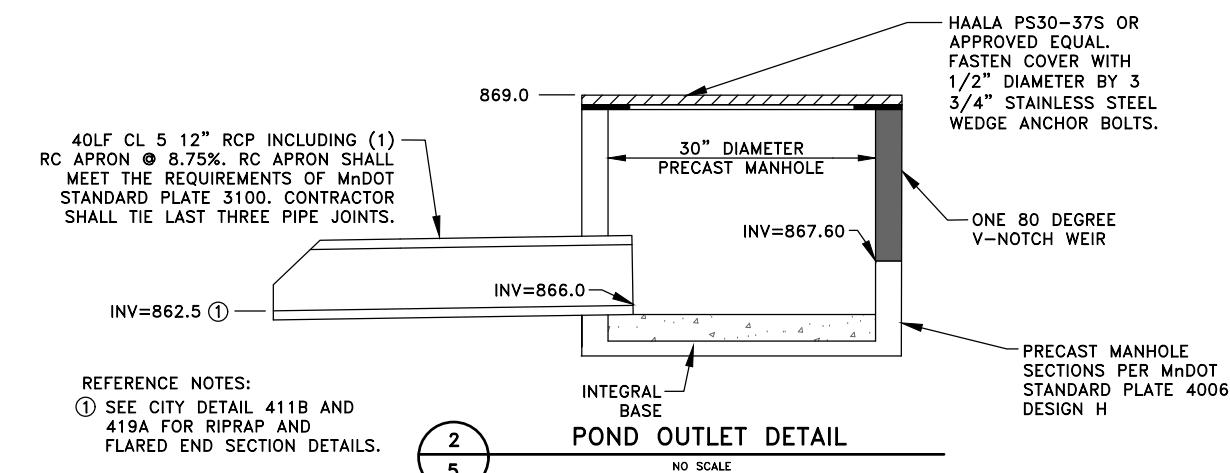
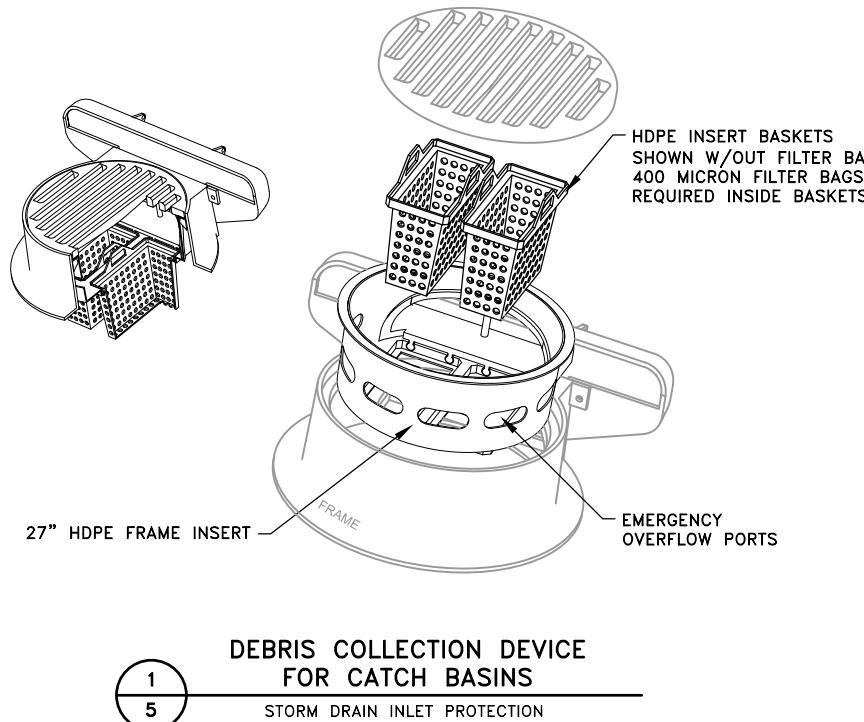
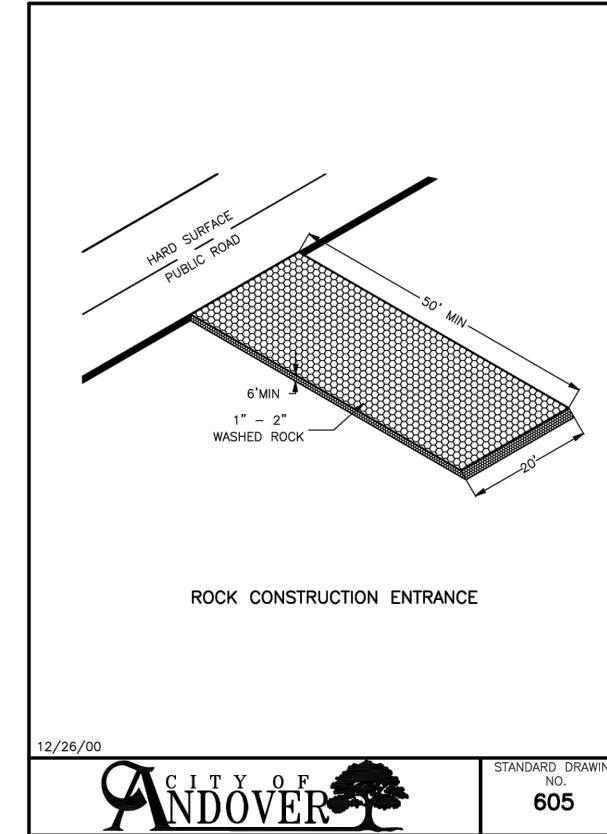
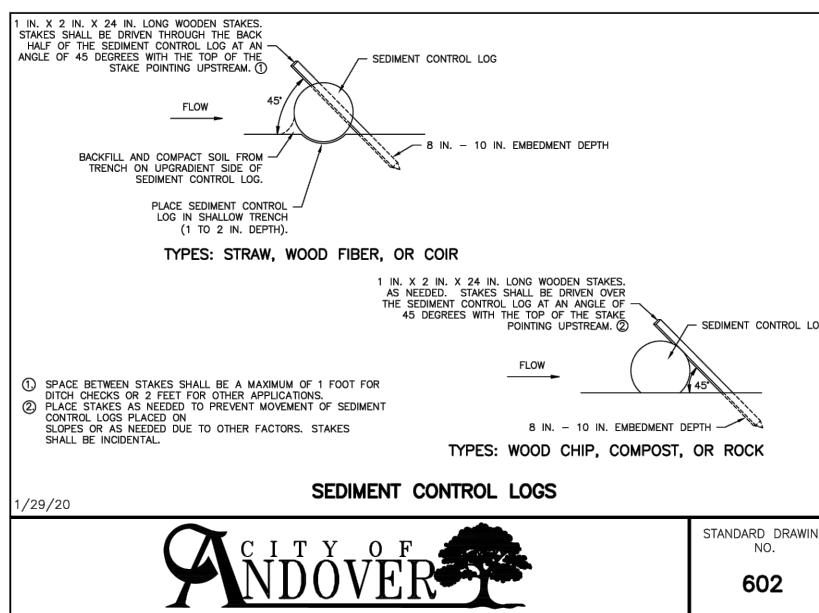
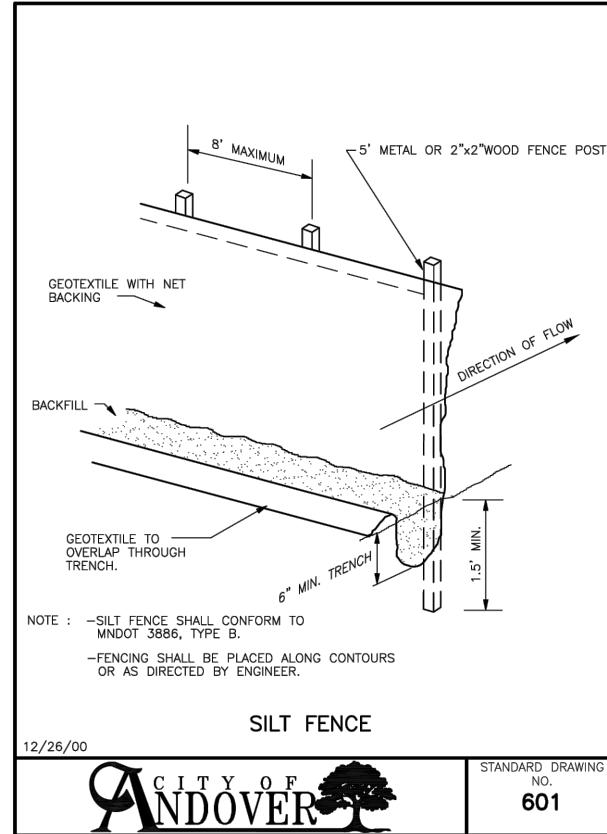
**Hakanson Anderson**  
Civil Engineers and Land Surveyors  
3601 Thurston Ave., Anoka, Minnesota 55303  
763-427-5860 FAX 763-427-0520  
www.hakanson-anderson.com

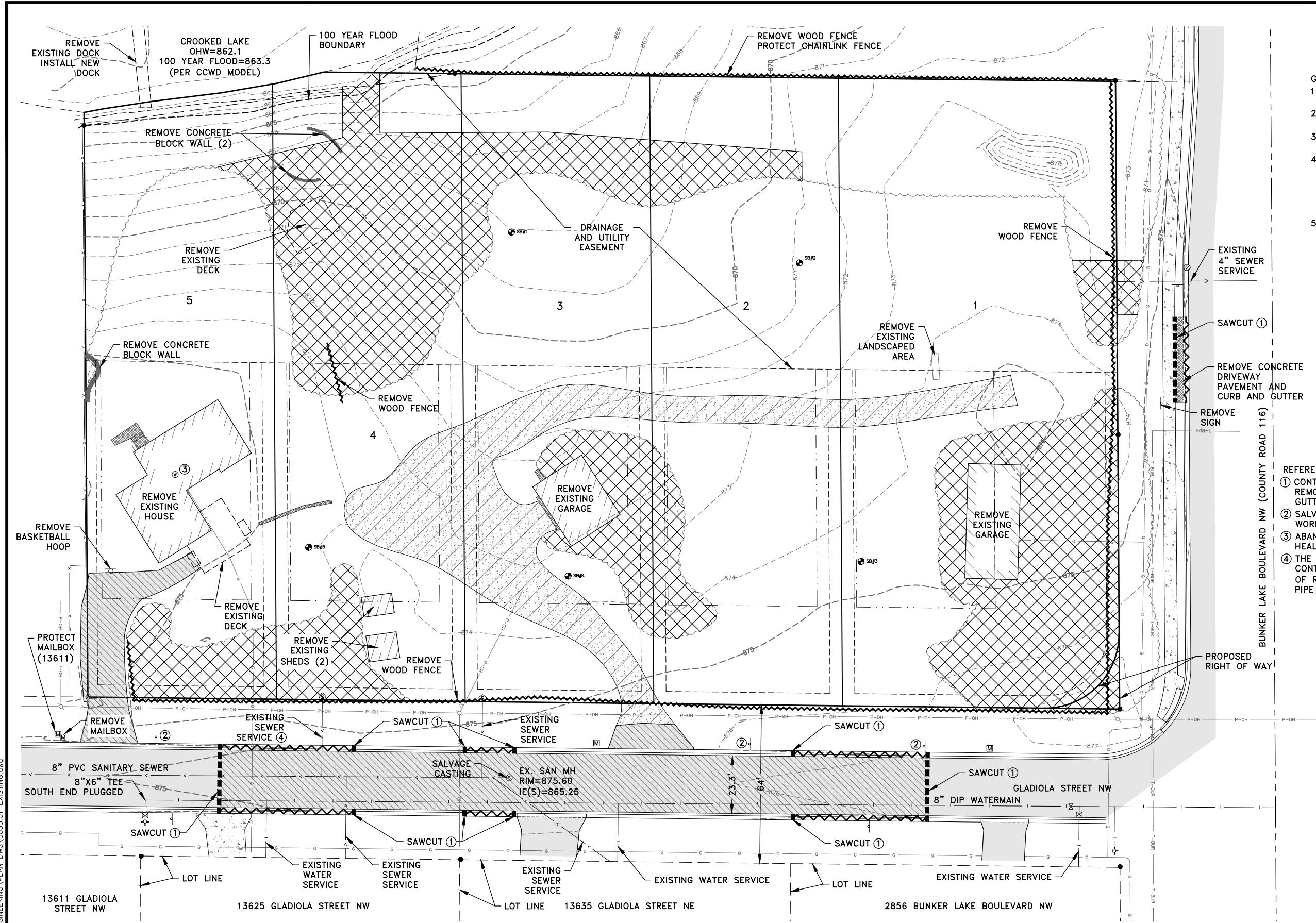
LAKEVIEW AT SLOTH FARM

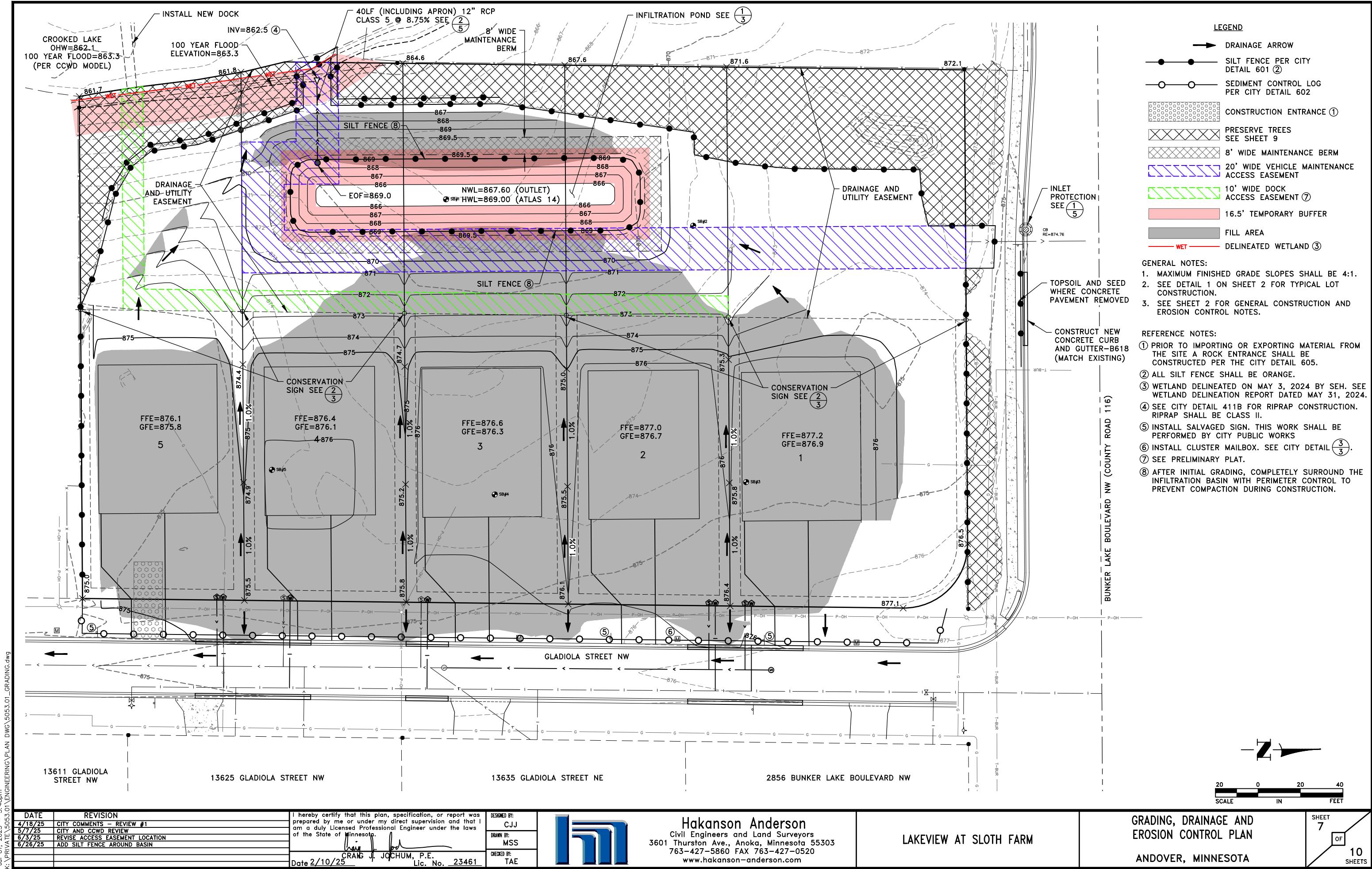
DETAILS  
ANDOVER, MINNESOTA

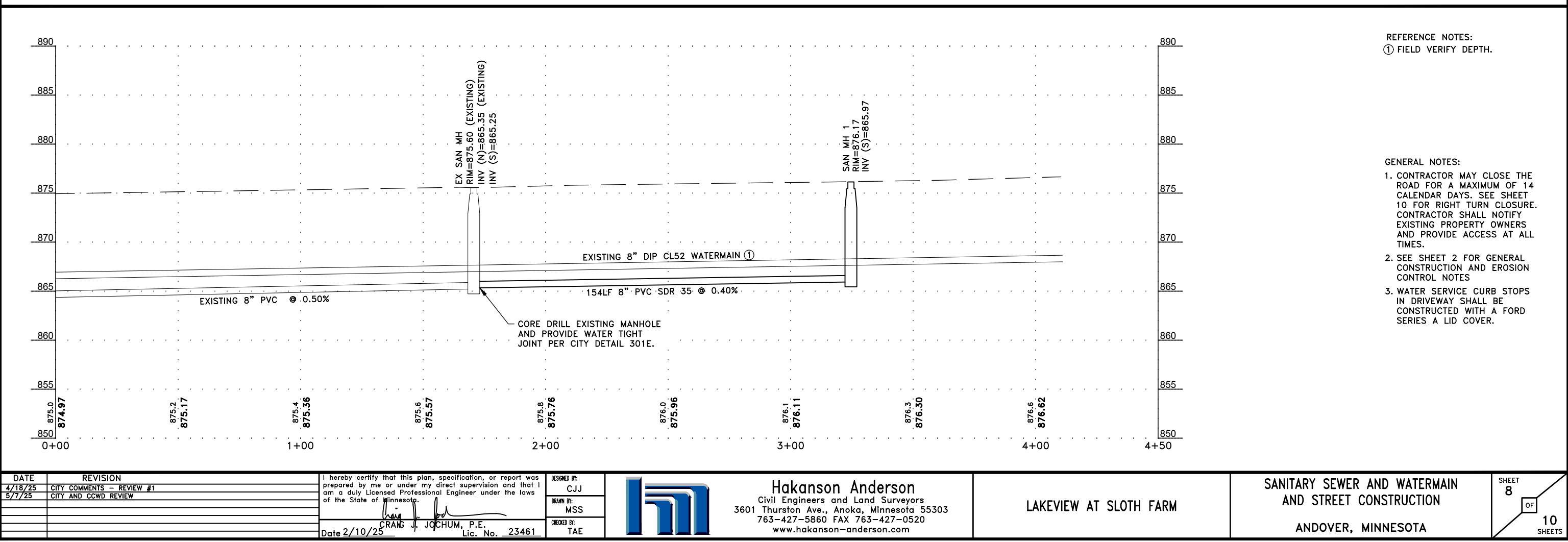
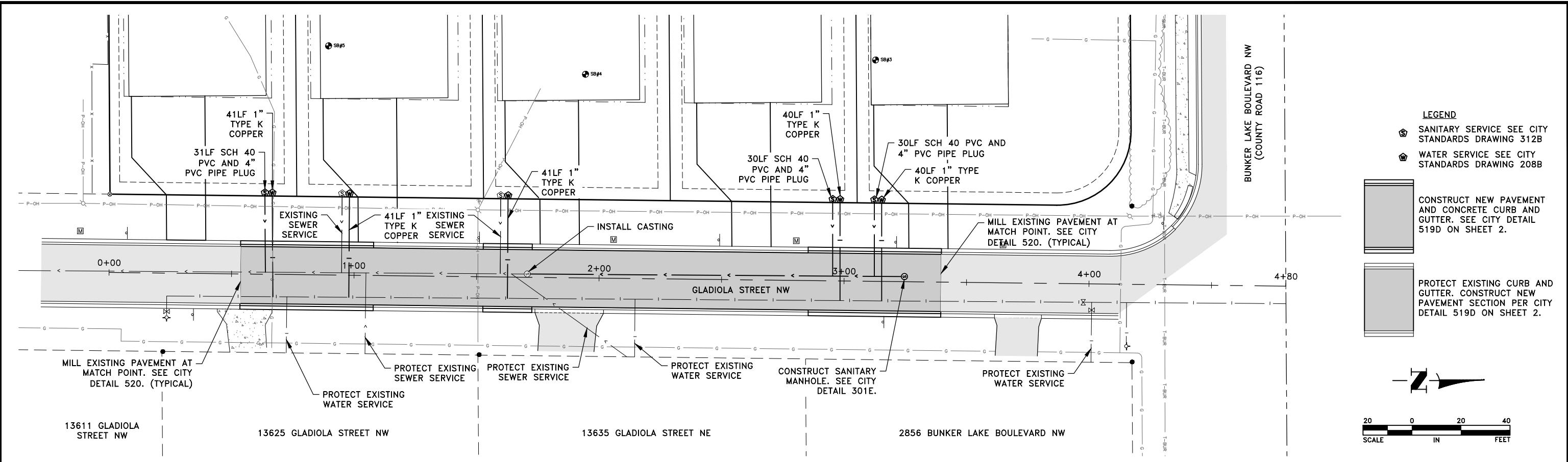
SHEET 3 OF 10 SHEETS

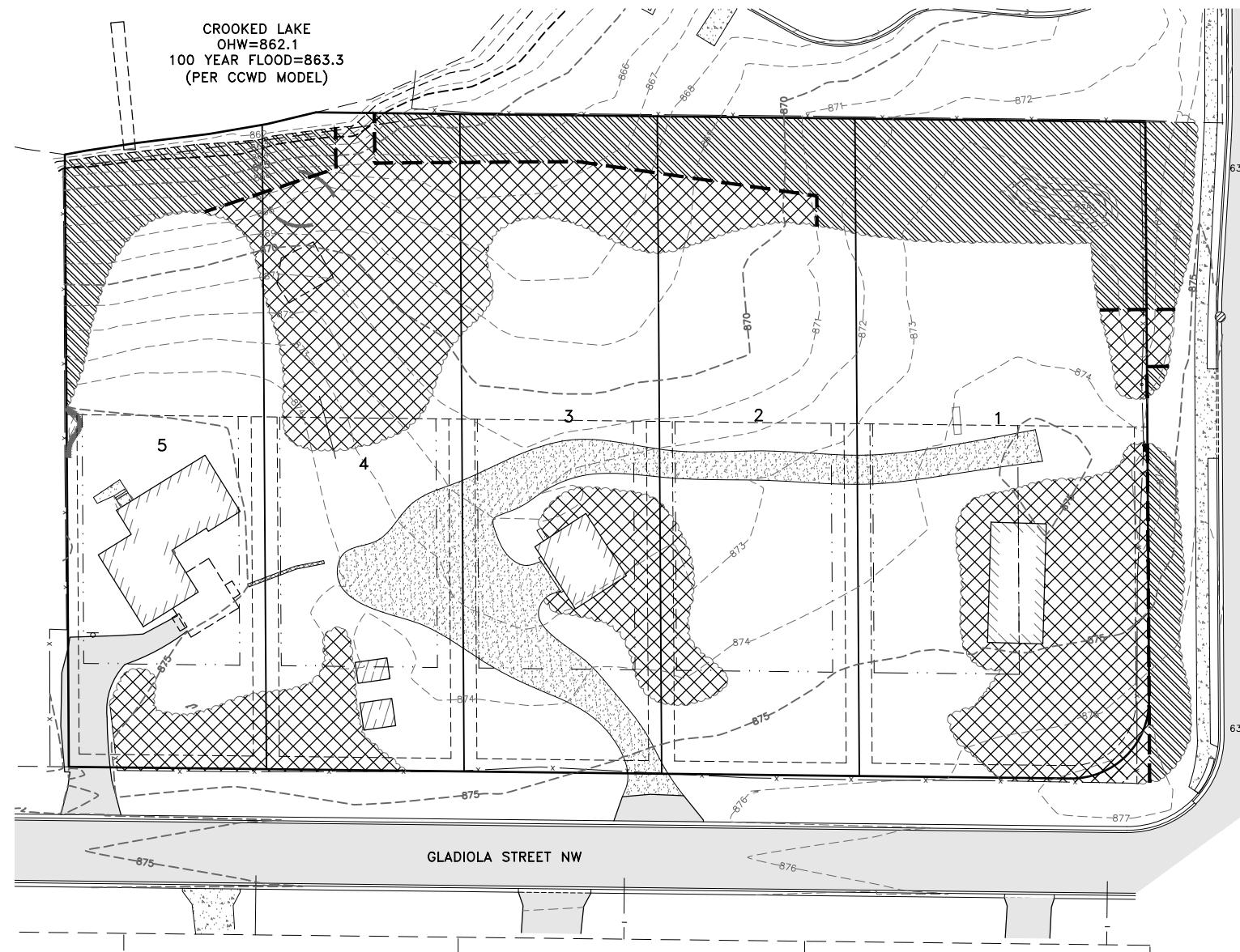










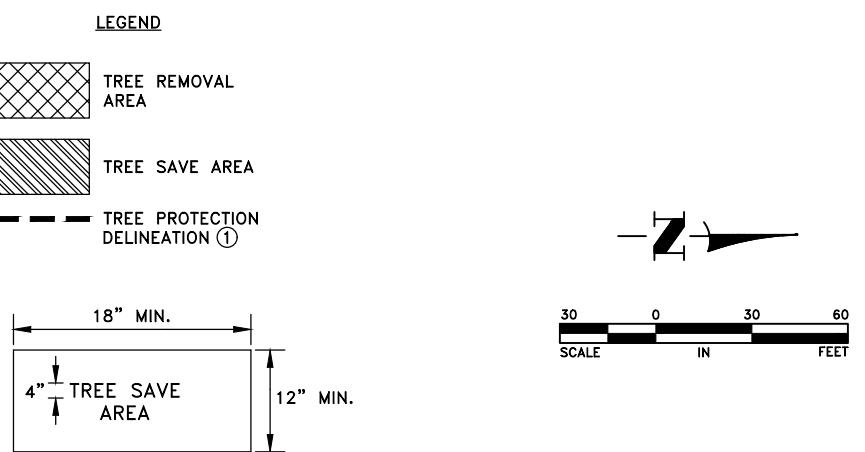


**GENERAL NOTES:**

1. ALL TREES SHOWN IN THE TREE SAVE AREA SHALL BE PROTECTED.
2. NO STORAGE OF MATERIALS, OPERATION OF MACHINERY, OR DEVELOPMENT OF ANY SORT WILL OCCUR WITHIN THE WOODLAND SIDE OF PROTECTIVE DELINEATION WITHOUT APPROVAL BY THE ENGINEER.
3. ERECT PROTECTIVE DELINEATION CONTINUOUSLY ALONG DRIP LINE OF SIGNIFICANT TREES CLOSEST TO STREET RIGHTS-OF-WAY. FINAL LOCATION OF DELINEATION SUBJECT TO APPROVAL BY ENGINEER IN THE FIELD. SECURE DELINEATION TO METAL POSTS AT A HEIGHT OF 4 FEET.
4. GRADING SHALL COMMENCE ONLY AFTER PROTECTIVE MEASURES HAVE BEEN COMPLETED AND ALL CONTRACTORS HAVE BEEN BRIEFED ON PRESERVATION TECHNIQUES AND PROCEDURES.
5. NO TRENCH FOR UNDERGROUND UTILITIES SHALL BE PERMITTED ON THE WOODLAND SIDE OF PROTECTIVE DELINEATION.
6. IF PRUNING IS NECESSARY, PRUNING WILL BE DONE BY PROFESSIONALS DURING APPROPRIATE PRUNING SEASON FOR SPECIES.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF TREE REPLACEMENT RESULTING FROM DAMAGE TO TREES WITHIN PROTECTED AREAS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROTECTIVE DELINEATION AND SIGNS IN GOOD REPAIR THROUGHOUT DURATION OF PROJECT.
9. ALL UTILITIES INSTALLED AS PART OF THE DEVELOPMENT WILL BE WITHIN STREET RIGHTS-OF-WAY OR UTILITY EASEMENTS.
10. CONTACT THE CITY FORESTER (ENGINEERING DEPARTMENT) AT 755-5100 TO ARRANGE A PRECONSTRUCTION CONFERENCE WITH THE CITY FORESTER/TREE INSPECTOR PRIOR TO ANY LAND DISTURBANCE.
11. ALL TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO BUILDING CONSTRUCTION.
12. ORANGE POLY SAFETY FENCE OR ORANGE SILT FENCE SHALL BE LOCATED AT THE OUTER PERIMETER OF THE DRIPLINE OR AS DIRECTED BY CITY FORESTER.

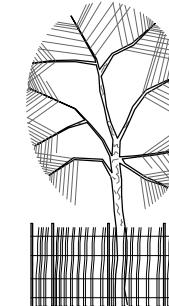
**REFERENCE NOTES:**

① ALL OTHER TREE PROTECTION SHALL BE PASSIVE.

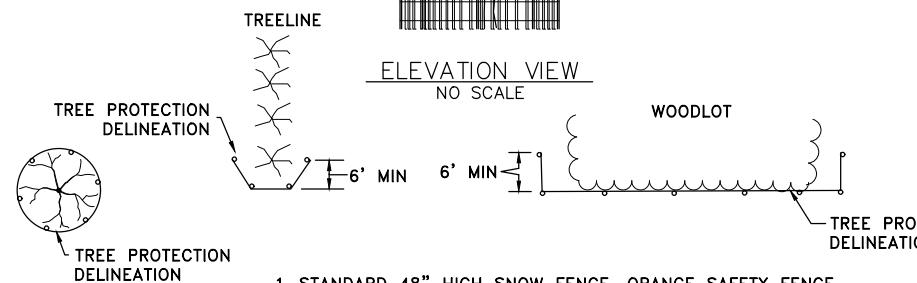


1. SIGN TO BE PLACE 100' O.C. ALONG SILT FENCE THRU WOODED LOT AREA, ON INDIVIDUAL SPECIMENS WHERE NOTED, AND ONE ON EACH TREE LINE AREA TO BE SAVED. SIGNS TO BE AFFIXED TO STEEL POSTS.
2. ALL PASSIVE TREE PROTECTION MUST BE ACCCOMPANIED BY "KEEP OUT" OR "TREE SAVE AREA" SIGNAGE.

TYPICAL SIGN  
NO SCALE



DELINEATION OF TREE LINE  
PROTECTION SHALL IDEALLY  
BE LOCATED AT THE OUTER  
PERIMETER OF THE DRIPLINE.



1. STANDARD 48" HIGH SNOW FENCE, ORANGE SAFETY FENCE OR ORANGE SILT FENCE.
2. CAUTION RIBBON 4" WIDE MAY BE USED AS PASSIVE TREE PROTECTION OR APPROVED EQUAL. PASSIVE TREE PROTECTION MAY ONLY BE UTILIZED TO DELINEATE TREE SAVE AREAS WHICH ARE REMOTE FROM AREAS OF LAND DISTURBANCE.
3. STEEL POSTS AS NEEDED.
4. DELINEATION OF TREE LINE PROTECTION SHALL EXTEND CONTINUOUSLY THROUGH PROTECTION AREAS, TOTALLY SURROUND INDIVIDUAL SPECIMENS AS NOTED, OR EXTEND ACROSS THE FACE AND THE ENDS SHALL EXTEND 6' BACK FOR INDIVIDUAL TREE LINE PROTECTION.

