



**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON,  
MN 55388  
**CARLSTON DEVELOPMENTS / RYAN JOHNSON**  
612-889-7898  
RJJOHNSON@CORE4TECHNOLOGIES.COM

PROJECT  
OWNER

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.

Matthew R. Pavak  
DATE: 03-26-2026 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAT SUBMITTAL

REVISION SUMMARY

DATE	DESCRIPTION

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**REMOVAL NOTES:**

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) PLAN FOR CONSTRUCTION STORM WATER MANAGEMENT PLAN.
- REMOVAL OF MATERIALS NOTED ON THE DRAWINGS SHALL BE IN ACCORDANCE WITH MNDOT, STATE AND LOCAL REGULATIONS.
- REMOVAL OF PRIVATE UTILITIES SHALL BE COORDINATED WITH UTILITY OWNER PRIOR TO CONSTRUCTION ACTIVITIES.
- EXISTING PAVEMENTS SHALL BE SAWCUT IN LOCATIONS AS SHOWN ON THE DRAWINGS OR THE NEAREST JOINT FOR PROPOSED PAVEMENT CONNECTIONS.
- REMOVED MATERIALS SHALL BE DISPOSED OF TO A LEGAL OFF-SITE LOCATION AND IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- ABANDON, REMOVAL, CONNECTION, AND PROTECTION NOTES SHOWN ON THE DRAWINGS ARE APPROXIMATE. COORDINATE WITH PROPOSED PLANS.
- EXISTING ON-SITE FEATURES NOT NOTED FOR REMOVAL SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONTRACT.
- PROPERTY LINES SHALL BE CONSIDERED GENERAL CONSTRUCTION LIMITS UNLESS OTHERWISE NOTED ON THE DRAWINGS. WORK WITHIN THE GENERAL CONSTRUCTION LIMITS SHALL INCLUDE STAGING, DEMOLITION AND CLEAN-UP OPERATIONS AS WELL AS CONSTRUCTION SHOWN ON THE DRAWINGS.
- MINOR WORK OUTSIDE OF THE GENERAL CONSTRUCTION LIMITS SHALL BE ALLOWED AS SHOWN ON THE PLAN AND PER CITY REQUIREMENTS. FOR ANY WORK ON ADJACENT PRIVATE PROPERTY, THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION FROM THE ADJACENT PROPERTY OWNER PRIOR TO ANY WORK.
- DAMAGE BEYOND THE PROPERTY LIMITS CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED IN A MANNER APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT OR IN ACCORDANCE WITH THE CITY.
- PROPOSED WORK (BUILDING AND CIVIL) SHALL NOT DISTURB EXISTING UTILITIES UNLESS OTHERWISE SHOWN ON THE DRAWINGS AND APPROVED BY THE CITY PRIOR TO CONSTRUCTION.
- SITE SECURITY MAY BE NECESSARY AND PROVIDED IN A MANNER TO PROHIBIT VANDALISM, AND THEFT, DURING AND AFTER NORMAL WORK HOURS, THROUGHOUT THE DURATION OF THE CONTRACT. SECURITY MATERIALS SHALL BE IN ACCORDANCE WITH THE CITY.
- VEHICULAR ACCESS TO THE SITE SHALL BE MAINTAINED FOR DELIVERY AND INSPECTION ACCESS DURING NORMAL OPERATING HOURS. AT NO POINT THROUGHOUT THE DURATION OF THE CONTRACT SHALL CIRCULATION OF ADJACENT STREETS BE BLOCKED WITHOUT APPROVAL BY THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- ALL TRAFFIC CONTROLS SHALL BE PROVIDED AND ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL REMAIN OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- SHORING FOR BUILDING EXCAVATION MAY BE USED AT THE DISCRETION OF THE CONTRACTOR AND AS APPROVED BY THE OWNERS REPRESENTATIVE AND THE CITY PRIOR TO CONSTRUCTION ACTIVITIES.
- STAGING, DEMOLITION, AND CLEAN-UP AREAS SHALL BE WITHIN THE PROPERTY LIMITS AS SHOWN ON THE DRAWINGS AND MAINTAINED IN A MANNER AS REQUIRED BY THE CITY.
- ALL EXISTING SITE TRAFFIC/REGULATORY SIGNAGE TO BE INVENTORIED AND IF REMOVED FOR CONSTRUCTION SHALL BE RETURNED TO LGU.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

**CITY OF BLOOMINGTON REMOVAL NOTES:**

- RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

An obstruction permit will be needed for any trail or lane closure needed for this planned demolition work.

Add the same City notes that were included on sheet C2.0

**EROSION CONTROL NOTES:**

SEE SWPPP ON SHEETS SW1.0 - SW1.5

**OWNER INFORMATION**

SCOTT CARLSTON  
612-889-7898  
SCOTTSCARLSTON@GMAIL.COM

RYAN JOHNSON  
612-801-6004  
RJJOHNSON@CORE4TECHNOLOGIES.COM

**REMOVALS PLAN LEGEND:**

- REMOVAL OF PAVEMENT AND ALL BASE MATERIAL, INCLUDING BIT., CONC., AND GRAVEL P.V.M.TS.
- REMOVAL OF STRUCTURE INCLUDING ALL FOOTINGS AND FOUNDATIONS.
- CONSTRUCTION LIMITS
- PROPERTY LINE
- REMOVE CURB AND GUTTER, IF IN RIGHT-OF-WAY. COORDINATE WITH LOCAL GOVERNING UNIT.
- TREE PROTECTION
- TREE REMOVAL - INCLUDING ROOTS AND STUMPS

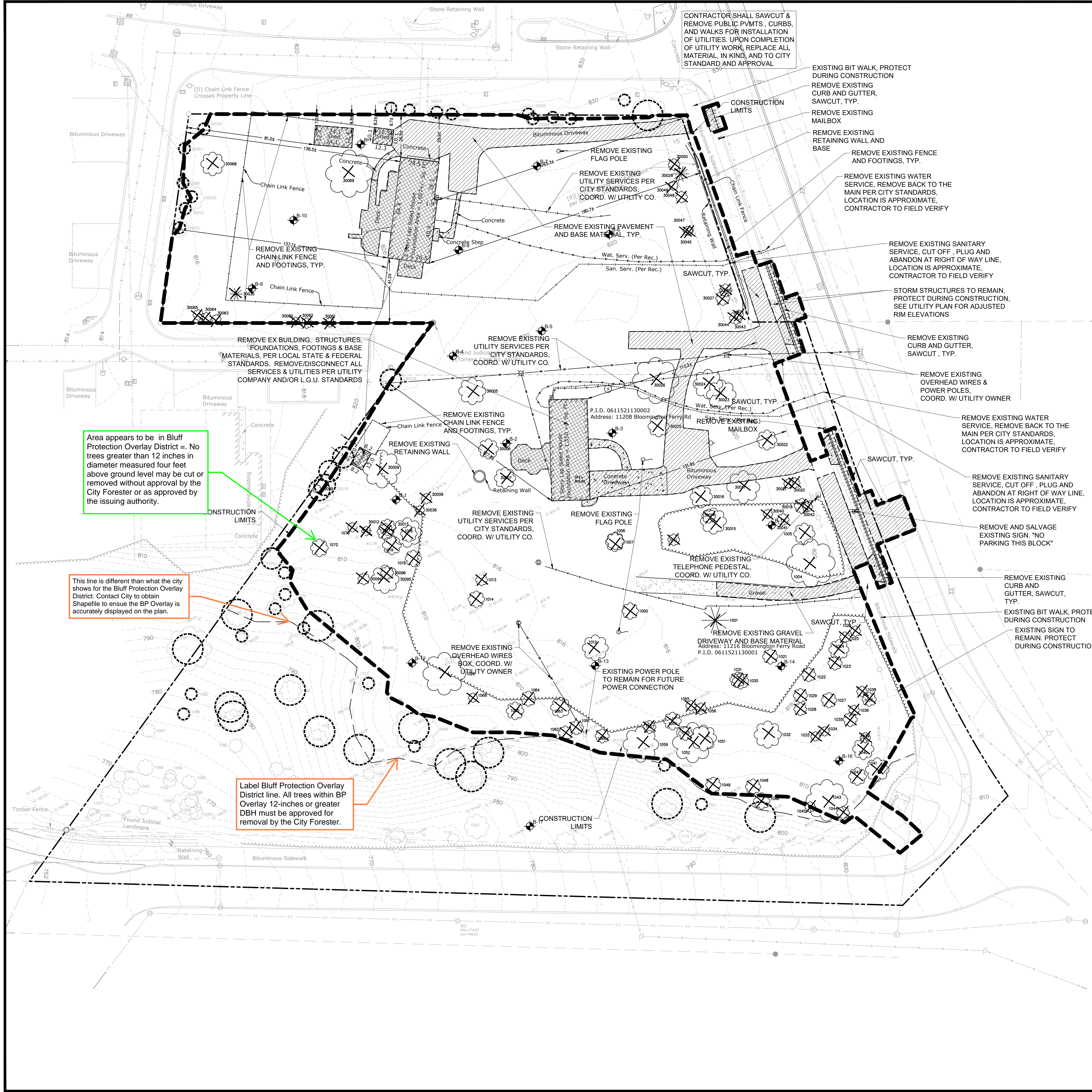


Know what's below.  
Call before you dig.

1" = 30'-0"  
15'-0" 30'-0"

**C1.0**

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Area appears to be in Bluff Protection Overlay District = No trees greater than 12 inches in diameter measured four feet above ground level may be cut or removed without approval by the City Forester or as approved by the issuing authority.

This line is different than what the city shows for the Bluff Protection Overlay District. Contact City to obtain Shapelle to ensure the BP Overlay is accurately displayed on the plan.

Label Bluff Protection Overlay District line. All trees within BP Overlay 12-inches or greater DBH must be approved for removal by the City Forester.

CONTRACTOR SHALL SAWCUT & REMOVE PUBLIC P.V.M.TS., CURBS, AND WALKS FOR INSTALLATION OF UTILITIES. UPON COMPLETION OF UTILITY WORK, REPLACE ALL MATERIAL, IN KIND, AND TO CITY STANDARD AND APPROVAL.

EXISTING BIT WALK, PROTECT DURING CONSTRUCTION  
REMOVE EXISTING CURB AND GUTTER, SAWCUT, TYP.  
REMOVE EXISTING MAILBOX  
REMOVE EXISTING RETAINING WALL AND BASE  
REMOVE EXISTING FENCE AND FOOTINGS, TYP.  
REMOVE EXISTING WATER SERVICE, REMOVE BACK TO THE MAIN PER CITY STANDARDS, LOCATION IS APPROXIMATE, CONTRACTOR TO FIELD VERIFY

REMOVE EXISTING SANITARY SERVICE, CUT OFF, PLUG AND ABANDON AT RIGHT OF WAY LINE, LOCATION IS APPROXIMATE, CONTRACTOR TO FIELD VERIFY  
STORM STRUCTURES TO REMAIN, PROTECT DURING CONSTRUCTION, SEE UTILITY PLAN FOR ADJUSTED RIM ELEVATIONS

REMOVE EXISTING CURB AND GUTTER, SAWCUT, TYP.

REMOVE EXISTING OVERHEAD WIRES & POWER POLES, COORD. W/ UTILITY OWNER

REMOVE EXISTING WATER SERVICE, REMOVE BACK TO THE MAIN PER CITY STANDARDS, LOCATION IS APPROXIMATE, CONTRACTOR TO FIELD VERIFY

REMOVE EXISTING SANITARY SERVICE, CUT OFF, PLUG AND ABANDON AT RIGHT OF WAY LINE, LOCATION IS APPROXIMATE, CONTRACTOR TO FIELD VERIFY

REMOVE AND SALVAGE EXISTING SIGN "NO PARKING THIS BLOCK"

REMOVE EXISTING CURB AND GUTTER, SAWCUT, TYP.  
EXISTING BIT WALK, PROTECT DURING CONSTRUCTION  
EXISTING SIGN TO REMAIN, PROTECT DURING CONSTRUCTION

REMOVE EXISTING GRAVEL DRIVEWAY AND BASE MATERIAL  
Address: 11216 Bloomington Ferry Road  
P.I.D. 0611521130001

EXISTING POWER POLE TO REMAIN FOR FUTURE POWER CONNECTION

REMOVE EXISTING OVERHEAD WIRES BOX, COORD. W/ UTILITY OWNER

REMOVE EXISTING UTILITY SERVICES PER CITY STANDARDS, COORD. W/ UTILITY CO.

REMOVE EXISTING CHAIN LINK FENCE AND FOOTINGS, TYP.

REMOVE EXISTING UTILITY SERVICES PER CITY STANDARDS, COORD. W/ UTILITY CO.

REMOVE EX-BUILDING, STRUCTURES, FOUNDATIONS, FOOTINGS & BASE MATERIALS, PER LOCAL STATE & FEDERAL STANDARDS. REMOVE/DISCONNECT ALL SERVICES & UTILITIES PER UTILITY COMPANY AND/OR L.G.U. STANDARDS

REMOVE EXISTING CHAIN LINK FENCE AND FOOTINGS, TYP.

REMOVE EXISTING PAVEMENT AND BASE MATERIAL, TYP.

REMOVE EXISTING UTILITY SERVICES PER CITY STANDARDS, COORD. W/ UTILITY CO.

REMOVE EXISTING FLAG POLE

REMOVE EXISTING WATER SERVICE, REMOVE BACK TO THE MAIN PER CITY STANDARDS, LOCATION IS APPROXIMATE, CONTRACTOR TO FIELD VERIFY

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*Matthew R. Pavak*  
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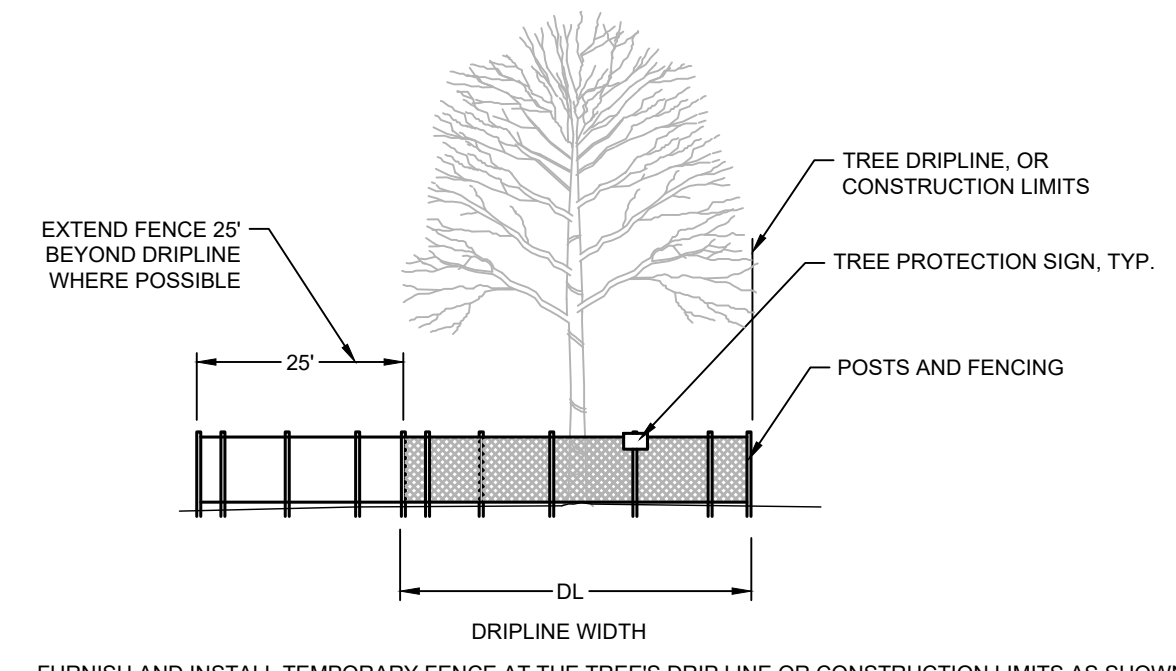
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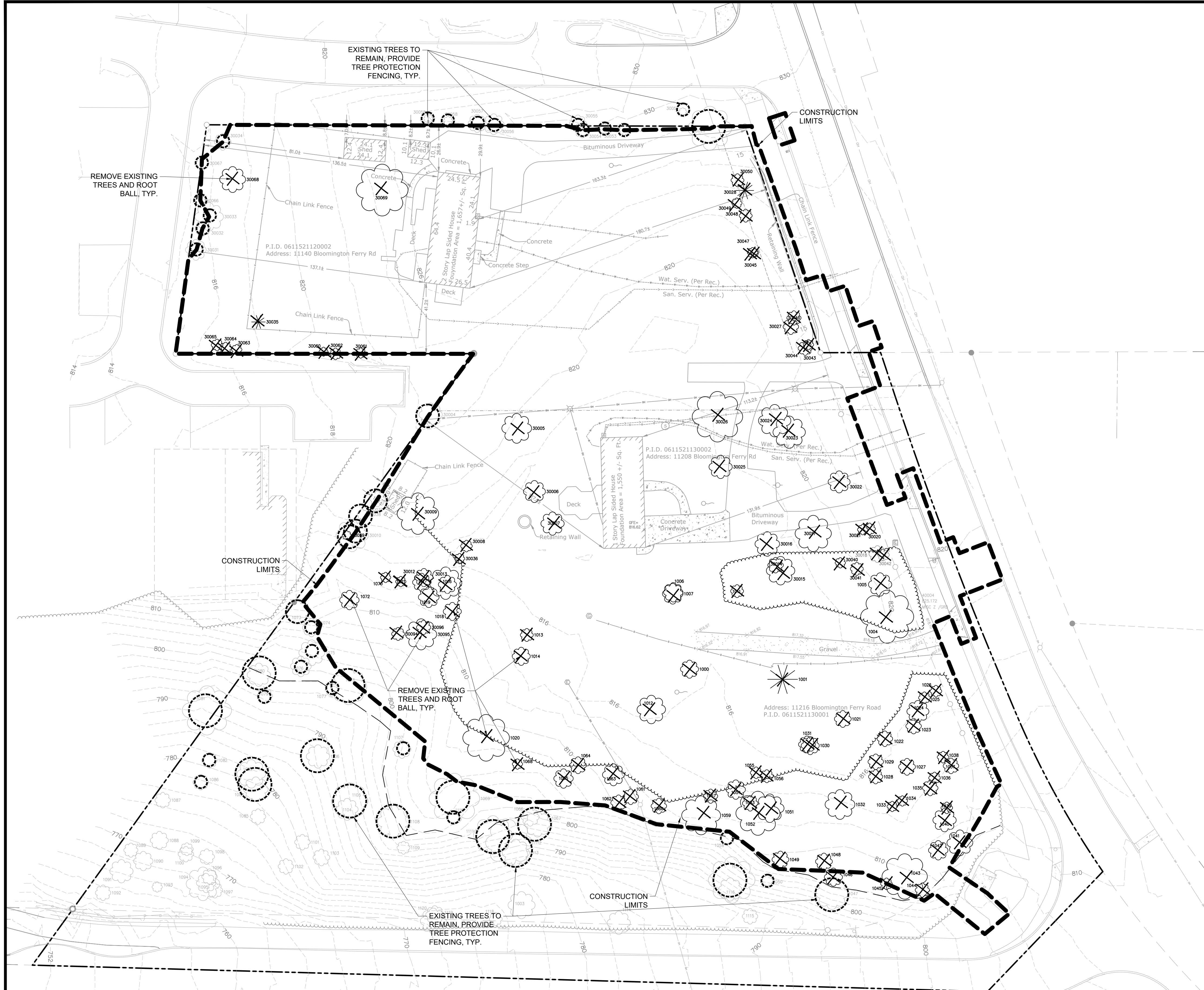
**TREE PRESERVATION PLAN**

**C1.1**  
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**1 TREE PROTECTION**  
N T S

FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIP LINE OR CONSTRUCTION LIMITS AS SHOWN ON PLAN, PRIOR TO ANY CONSTRUCTION. WHERE POSSIBLE PLACE FENCE 25' BEYOND DRIP LINE. PLACE TREE PROTECTION SIGN ON POSTS, ONE PER INDIVIDUAL TREE (FACING CONSTRUCTION ACTIVITY), OR ONE EVERY 100' LF ALONG A GROVE OR MULTI-TREE PROTECTION AREA.



**TREE PRESERVATION PLAN LEGEND:**

	CONSTRUCTION LIMITS
	PROPERTY LINE
	TREE PROTECTION
	TREE REMOVAL - INCLUDING ROOTS AND STUMPS

**811**  
Know what's below.  
Call before you dig.

**1" = 30'-0"**  
15'-0" 0 30'-0"

TREE TAG NO.	CAL. INCH SIZE	SPECIES	TREE CATEGORY	REMOVED	REMARKS	TREE TAG NO.	CAL. INCH SIZE	SPECIES	TREE CATEGORY	REMOVED	REMARKS
1000	14	ASH	PQS	X		30048	10	OAK	C	X	
1001	22	SPRUCE	S	X		30049	8	ELM	C	X	
1004	41	OAK	D	X	DISEASED, OOZE, LARGE DEAD BRANCHES	30050	10	ELM	C	X	
1005	18	ASH	PQS	X		30052	8	WALNUT	C		
1006	15	BIRCH	S	X		30053	8	WALNUT	C		
1007	16	BIRCH	S	X		30054	12	BITTERNUT WALNUT	S		
1011	10	ELM	C	X		30063	8	WALNUT	C	X	
1012	22	ASH	PQS	X		30064	9	ASH	PQS	X	
1013	10	APPLE	C	X		30065	9	ASH	PQS	X	
1014	14	ASH	PQS	X		30066	8	HACKBERRY	C		
1016	14	HACKBERRY	S	X		30067	10	HACKBERRY	C		
1017	14	HACKBERRY	S	X		30068	20	WALNUT	S	X	
1018	14	ELM	S	X		30069	40	MAPLE	D	X	CODOMINANT LEADER PEELING BARK AT BASE, HOLLOW, LARGE BRANCHES MISSING
1019	16	MAPLE	D	X	LARGE DEAD BRANCH, CODOMINANT LEADERS HOLLOW	30094	10	OAK	C	X	
1020	36	OAK	D	X	NUMEROUS DEAD BRANCHES, HOLLOW, OOZE	30095	24	OAK	S	X	
1021	13	WALNUT	S	X		30096	11	OAK	C	X	
1022	12	OAK	S	X		1003	21	MULBERRY	S		
1023	12	CHERRY	S	X		1044	11	HACKBERRY	C		
1024	17	OAK	S	X		1045	9	HACKBERRY	C		
1025	9	OAK	S	X		1046	14	WALNUT	S	X	
1026	9	OAK	S	X		1047	25	OAK	S		
1027	13	OAK	S	X		1049	13	HACKBERRY	S	X	
1028	11	ASH	PQS	X		1050	9	OAK	S		
1029	12	ASH	PQS	X		1055	9	CHERRY	D	X	POOR STRUCTURE, DOMINANT BRANCH BROKEN, UNBALANCED
1030	14	OAK	S	X		1056	10	CHERRY	C	X	
1031	13	HACKBERRY	S	X		1058	10	HACKBERRY	C		
1032	23	OAK	D	X	LIKELY DISEASED - THINNED, LARGE DEAD BRANCHES, OOZE, SAPWOOD DECAY	1066	14	HACKBERRY	S		
1033	8	OAK	S	X		1067	20	HACKBERRY	S		
1034	8	ASH	PQS	X		1077	10	HACKBERRY	C		
1035	12	OAK	S	X		1081	38	OAK	S		
1036	9	OAK	S	X		1082	12	ASH	PQS		
1037	12	OAK	S	X		1083	22	ELM	S		
1038	9	OAK	S	X		1084	19	OAK	S		
1039	9	OAK	S	X		1085	12	ASH	PQS		
1040	18	OAK	S	X		1086	12	ASH	PQS		
1041	20	OAK	S	X		1087	12	BOX ELDER	S		
1042	15	OAK	S	X		1088	14	HACKBERRY	S		
1043	35	OAK	S	X		1089	11	HICKORY	C		
1048	13	HACKBERRY	S	X		1090	15	OAK	S		
1051	22	OAK	S	X		1091	18	OAK	S		
1052	34	OAK	D	X	OOZE, CRACKS, RIDGES, HOLLOW	1092	12	HICKORY	S		
1053	12	OAK	S	X		1093	8	ASH	PQS		
1054	15	OAK	S	X		1094	26	BASSWOOD	S		
1057	11	HACKBERRY	C	X		1095	15	BASSWOOD	S		
1059	30	OAK	S	X		1096	12	BASSWOOD	S		
1060	12	ASH	PQS	X		1097	12	OAK	S		
1061	12	ASH	PQS	X		1098	12	ASH	S		
1062	12	MULBERRY	S	X		1099	10	ASH	PQS		
1063	17	ASH	PQS	X		1100	12	HACKBERRY	S		
1064	13	ASH	PQS	X		1101	12	ELM	S		
1065	15	BOX ELDER	S	X		1102	12	HACKBERRY	S		
1068	8	HACKBERRY	C	X		1103	13	ELM	S		
1069	39	OAK	S			1104	17	OAK	S		
1070	8	HACKBERRY	C	X		1105	28	OAK	S		
1071	8	BOX ELDERWOOD	C	X		1106	18	OAK	S		
1072	15	HACKBERRY	S	X		1108	25	OAK	S	X	
1073	18	HACKBERRY	S			1109	10	HACKBERRY	C		
1074	14	HACKBERRY	S			1111	30	OAK	S		
1075	20	ASH	PQS			1112	36	OAK	S		
1076	16	ASH	PQS	X		1113	21	OAK	S		
1078	28	OAK	S			1114	18	ELM	S		
1079	12	HACKBERRY	S			1115	12	HACKBERRY	S		
1080	18	MULBERRY	S			1116	18	ELM	S		
1107	14	HACKBERRY	S			1117	36	COTTONWOOD	S		
1110	10	HACKBERRY	C			1118	10	HACKBERRY	C		
30004	18	MAPLE	S			1119	20	LOCUST	S		
30005	23	HACKBERRY	S	X		1120	14	ASH	PQS		
30006	17	CRABAPPLE	S	X		30051	6	HACKBERRY	C		
30007	18	MAPLE	S	X		30055	13	BITTERNUT WALNUT	S		
30008	9	MAPLE	C	X		30056	16	HACKBERRY	S		
30009	32	OAK	S	X		30057	14	HACKBERRY	S		
30010	25	OAK	S			30058	7	HACKBERRY	C		
30012	14	HACKBERRY	S	X		30059	7	HACKBERRY	C		
30013	25	OAK	S	X		30060	7	BOX ELDER	C		
30014	12	HACKBERRY	S	X		30061	8	WALNUT	C		
30015	22	HACKBERRY	S	X		30062	9	BOX ELDER	C		
30016	19	MAPLE	S	X							
30017	28	OAK	S	X							
30018	13	ELM	S	X							
30020	9	OAK	C	X							
30021	8	OAK	C	X							
30022	17	OAK	S	X							
30023	25	OAK	S	X							
30024	25	OAK	S	X							
30025	18	OAK	S	X							
30026	39	OAK	S	X							
30027	12	MULBERRY	S	X							
30028	13	CEDAR	S	X							
30029	34	OAK	S								
30031	16	HACKBERRY	S								
30032	12	HACKBERRY	S								
30033	22	BITTERNUT WALNUT	S								
30034	13	HACKBERRY	S								
30035	10	SPRUCE	C	X							
30036	8	CHERRY	C	X							
30037	12	HACKBERRY	S								
30038	8	OAK	C								
30039	7	HACKBERRY	D	X	REMOVED, HAZARD TO ADJACENT PROPERTY						
30040	8	ASH	PQS	X							
30041	10	ASH	PQS	X							
30042	9	ELM	C	X							
30043	11	HACKBERRY	C	X							
30044	8	ELM	C	X							
30045	8	ELM	C	X							
30046	11	ELM	C	X							
30047	6	ELM	C	X							

**SUMMARY TABLE:**

	ON-SITE NUMBER OF TREES	ON-SITE CAL. IN.	PERCENT REMOVAL ALLOWED	ALLOWED REMOVAL IN CAL. IN.	PROPOSED NUMBER OF TREE REMOVALS	PROPOSED REMOVALS IN CAL. IN.	<sup>2</sup> NET REMOVAL (-) OR PRES. (+) IN CAL. IN.	REPLACEMENT MULTIPLIER	REQUIRED REPLACEMENT IN CAL. IN. *
SIGNIFICANT	108	1925	50%	963	56	956	7	1.25	8
COMMON	43	386	100%	386	24	219	-219		0
<sup>1</sup> POOR QUALITY SPECIES	23	293	100%	293	16	205	-205		
<sup>3</sup> DISEASED OR DAMAGED	8	206	100%	206	8	206	-206		
<b>Total</b>	<b>182</b>	<b>2,810</b>		<b>1848</b>	<b>104</b>	<b>1586</b>	<b>-624</b>		<b>8</b>

TOTAL CAL. IN. REPLACEMENT TREES REQUIRED: 8 CAL. IN.  
TOTAL NUMBER OF REPLACEMENT TREES REQUIRED: 2.5 IN. CAL. **3 TREES**

<sup>1</sup> POOR QUALITY SPECIES (PQS) TREES NOT USED IN ANY REPLACEMENT OR PRESERVATION CALCULATIONS, SHOWN IN TABLE FOR REFERENCE ONLY  
<sup>2</sup> DISEASED OR DAMAGED SPECIES (D) TREES NOT USED IN ANY REPLACEMENT OR PRESERVATION CALCULATIONS, SHOWN IN TABLE FOR REFERENCE ONLY  
<sup>3</sup> NEGATIVE NUMBER INDICATES CAL. IN. OF TREE REPLACEMENT REQUIRED. POSITIVE NUMBER INDICATES NO TREE REPLACEMENT IS REQUIRED

TREE CATEGORY DESIGNATIONS  
S = SIGNIFICANT - ANY HEALTHY DECIDUOUS HARDWOOD TREE (EXCEPT WILLOW, BOXELDER, ASPEN, SILVER MAPLE AND MULTIPLE STEM COTTONWOOD) MEASURING 12 INCHES DBH OR GREATER (OR SIX INCHES DBH OR GREATER IN THE CASE OF OAK, SUGAR MAPLE, IRONWOOD AND HICKORY) AND ANY HEALTHY CONIFEROUS TREE (EXCEPT MULTIPLE STEM WHITE CEDAR) MEASURING EIGHT INCHES DBH OR GREATER.  
PQS = POOR QUALITY SPECIES - UNDESIRABLE TREE SPECIES AS NAMED IN ZONING ORDINANCE - WILLOW, BOX ELDER, ASPEN, SILVER MAPLE, MULTI-STEM COTTONWOOD, MULTI-STEM WHITE CEDAR  
C = COMMON SPECIES - ALL TREES NOT DEEMED "PQS" NOR "S".  
D = DISEASED OR DAMAGED TREES.

NOTE: PRESERVED SIGNIFICANT TREES CAN COUNT TOWARD REQUIRED LANDSCAPING TREES

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11140 BLOOMINGTON FERRY RD., BLOOMINGTON, MN 55338  
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60177 HILLSBORO AVE S., BLOOMINGTON, MN 55425

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*Patrick J. Sarver*  
Patrick J. Sarver  
DATE: 03-26-2026 LICENSE NO. 24904

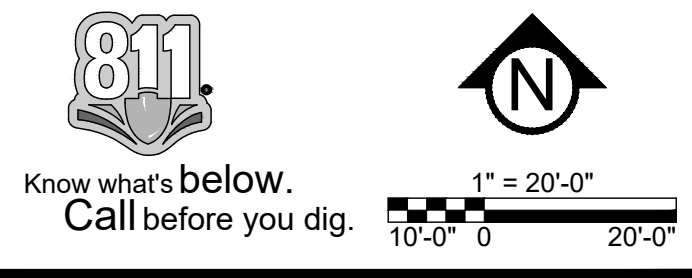
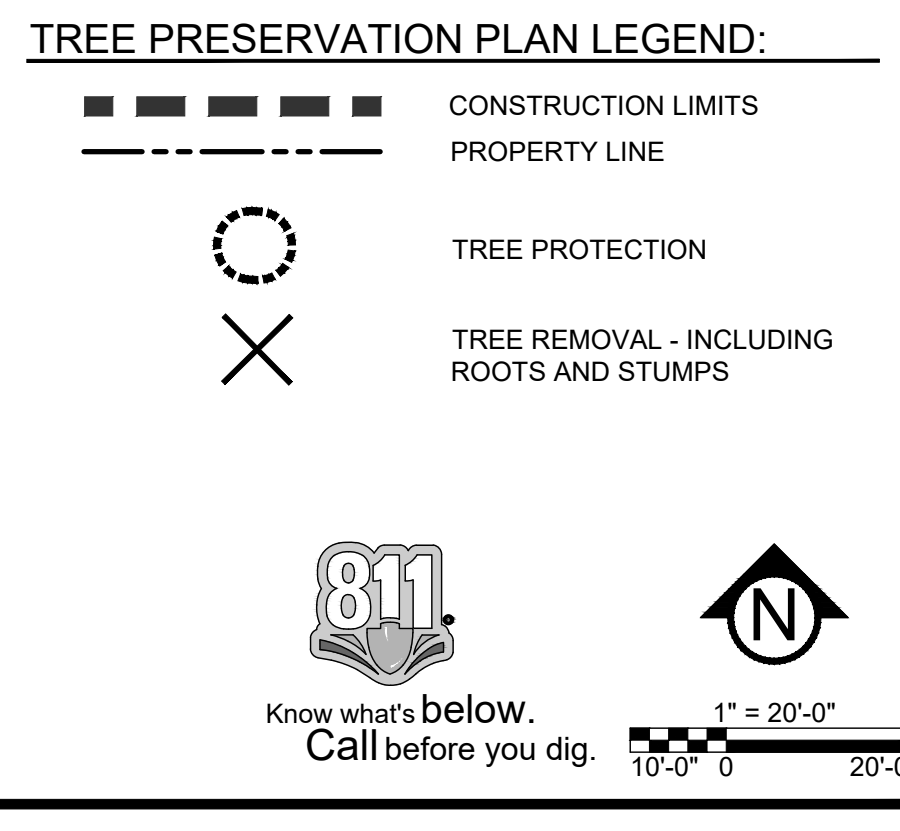
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**TREE PRESERVATION PLAN**  
**C1.2**  
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**SITE PLAN**

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**SITE LAYOUT NOTES:**

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
- THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
- CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS & ELEVATIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
- LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
- CURB DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING, FURNISHINGS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
- PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
- CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
- SEE SITE PLAN FOR CURB AND GUTTER TYPE. TAPER BETWEEN CURB TYPES-SEE DETAIL.
- ALL CURB RADI ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
- FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
- PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
- ALL PARKING LOT PAINT STRIPING TO BE WHITE, 4" WIDE TYP.
- BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
- ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.
- CONTRACTOR IS RESPONSIBLE TO INSTALL ANY SIDEWALK AND CURBING PER DESIGN PLAN. CONTRACTOR TO VERIFY ALL CURBS AND SIDEWALKS WILL DRAIN PROPERLY IN FIELD CONDITIONS. CONTRACTOR MUST CONTACT THE CIVIL ENGINEER 24-HOURS PRIOR TO ANY CURB AND/OR SIDEWALK INSTALLATION TO REVIEW AND INSPECT CURB STAKES. CONTRACTOR IS RESPONSIBLE FOR ANY CURB OR SIDEWALK REPLACEMENT IF THIS PROCEDURE IS NOT FOLLOWED.
- FINISH GRADING FOR HARDSCAPE AREAS I.E. PARKING LOTS, CURBS, SIDEWALKS SHALL BE WITHIN 0.05 FEET. ADA AREAS MUST COMPLY WITH REQUIREMENTS ON PLANS AND ADA REGULATIONS. TOLERANCE WITHIN ADA AREAS IS 0.00 FEET DISCUSS ANY DEVIATIONS WITH ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY CURB, SIDEWALK AND/OR PAVEMENT REPLACEMENT THAT DOES NOT MEET TOLERANCE/ADA REQUIREMENTS.

**CITY OF BLOOMINGTON SITE SPECIFIC NOTES:**

- ALL CONSTRUCTION AND POST-CONSTRUCTION PARKING AND STORAGE OF EQUIPMENT AND MATERIALS MUST BE ON-SITE. USE OF PUBLIC STREETS FOR PRIVATE CONSTRUCTION PARKING, LOADING/UNLOADING, AND STORAGE WILL NOT BE ALLOWED.
- CONTRACTOR TO PROVIDE A CONSTRUCTION SITE CIRCULATION PLAN THAT INCLUDES THE FOLLOWING: SITE ACCESS LOCATIONS, VEHICLE CIRCULATION, PEDESTRIAN CIRCULATION, CONSTRUCTION PARKING AREA, LAYDOWN/STAGING/DELIVERY AREA, CONSTRUCTION FENCING LIMITS.
- CONTRACTOR TO COORDINATE SIDEWALK CLOSURES AND PEDESTRIAN DETOURS WITH THE CITY'S TRAFFIC DIVISION. THE SIDEWALK CLOSURE WILL BE ALLOWED FOR ONLY A MINIMAL DURATION AND A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) WILL BE REQUIRED. COORDINATE WITH CITY.

**OWNER INFORMATION**

SCOTT CARLSTON  
612-889-7898  
SCOTTSCARLSTON@GMAIL.COM  
  
RYAN JOHNSON  
612-801-6004  
RJOHNSON@CORE4TECHNOLOGIES.COM

ZONING SUMMARY		EXISTING ZONING		PROPOSED ZONING	
REAR	30'	30'	30'	30'	30'
SIDE	10'	10'	10'	10'	10'
FRONT	20'	20'	20'	20'	20'
REAR	5'	5'	5'	5'	5'
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**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON,  
MN 55388

**OWNER:**  
CARLSTON DEVELOPMENTS / RYAN JOHNSON  
601 FULSBURY AVE S, BLOOMINGTON, MN 55425

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.

Matthew R. Pavak  
DATE: 03-26-2026 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL SUBMITTAL

REVISION SUMMARY

DATE	DESCRIPTION

GRADING PLAN

**C3.0**  
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**GENERAL GRADING NOTES:**

- CONTRACTOR SHALL VERIFY ALL BUILDING ELEVATIONS, (FFE, LFE, GFE), PRIOR TO CONSTRUCTION BY CROSS CHECKING WITH ARCHITECTURAL, STRUCTURAL AND CIVIL ELEVATIONS FOR EQUIVALENT "100" ELEVATIONS. THIS MUST BE DONE PRIOR TO EXCAVATION AND INSTALLATION OF ANY FOOTING MATERIALS. VERIFICATION OF THIS COORDINATION SHALL BE CONFIRMED IN WRITING BY CIVIL, SURVEYOR, ARCHITECTURAL, STRUCTURAL AND CONTRACTOR PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE SITE PLAN FOR HORIZONTAL LAYOUT & GENERAL GRADING NOTES.
- THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION (INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION, EXCAVATION, EMBANKMENT, ETC.) IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AND INSPECTIONS WITH THE SOILS ENGINEER.
- ANY ELEMENTS OF AN EARTH RETENTION SYSTEM AND RELATED EXCAVATIONS THAT FALL WITHIN THE PUBLIC RIGHT OF WAY WILL REQUIRE A "RIGHT OF WAY EXCAVATION PERMIT". CONTRACTOR IS RESPONSIBLE FOR ACQUIRING THIS PERMIT PRIOR TO CONSTRUCTION IF APPLICABLE.
- GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
- PROPOSED SPOT GRADES ARE FLOW-LINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
- GRADES OF WALKS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE NOTED.
- PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:1.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLISH PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SODDING ACTIVITIES.
- IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN AREA SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
- EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESPREADING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS, WHERE TURF IS TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES. RESPREAD TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES.
- FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACENT TRANSITION AREAS. PROVIDE A SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BECOME RUTTED BY TRAFFIC OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
- PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIRECTION OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORDANCE WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENTION SYSTEMS.
- AN OSHA-APPROVED QUALIFIED PERSON SHOULD REVIEW THE SOIL CLASSIFICATION PRESENTED IN THE GEOTECHNICAL REPORT IN THE FIELD. EXCAVATIONS MUST COMPLY WITH CURRENT OSHA REQUIREMENTS IN THE CODE OF FEDERAL REGULATIONS PERTAINING TO EXCAVATIONS AND TRENCHES. EXCAVATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.
- TOLERANCES
- 17.1. THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PRESCRIBED ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
- 17.2. THE STREET OR PARKING AREA SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOOT BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
- 17.3. AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 17.4. TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.
- 17.5. FINISH GRADING FOR HARDSCAPE AREAS IE. PARKING LOTS, CURBS, SIDEWALKS SHALL BE WITHIN 0.05 FEET. ADA AREAS MUST COMPLY WITH REQUIREMENTS ON PLANS AND ADA REGULATIONS. TOLERANCE WITHIN ADA AREAS IS 0.00 FEET DISCUSS ANY DEVIATIONS WITH ENGINEER PRIOR TO CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ANY CURB, SIDEWALK AND/OR PAVEMENT REPLACEMENT THAT DOES NOT MEET TOLERANCE/ADA REQUIREMENTS.
- MAINTENANCE
- 18.1. THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
- 18.2. CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES. DURING THE CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD, ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEEDED AND MULCHED.
- 18.3. WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESHAPE, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

**EROSION CONTROL NOTES:**  
SEE SWPPP ON SHEETS SW1.0 - SW1.5

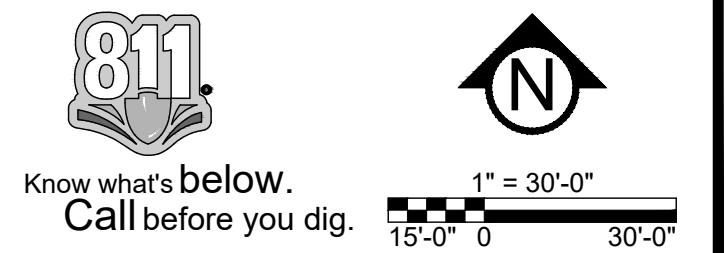
**CITY OF BLOOMINGTON GRADING NOTES:**

- RESERVED FOR CITY SPECIFIC GRADING NOTES.

**GRADING PLAN LEGEND:**

- 1126 EX. 2' CONTOUR ELEVATION INTERVAL
- 1136 2.0' CONTOUR ELEVATION INTERVAL
- 41.26 SPOT GRADE ELEVATION (GUTTER/FLOW LINE UNLESS OTHERWISE NOTED)
- 891.00 G SPOT GRADE ELEVATION GUTTER
- 891.00 TC SPOT GRADE ELEVATION TOP OF CURB
- 891.00 BS/TS SPOT GRADE ELEVATION BOTTOM OF STAIRS/TOP OF STAIRS
- 891.00 ME SPOT GRADE ELEVATION MATCH EXISTING
- 891.00 ME SPOT GRADE ELEVATION MATCH EXISTING
- GRADE BREAK - HIGH POINTS
- CURB AND GUTTER (T.O = TIP OUT)
- EMERGENCY OVERFLOW
- CONSTRUCTION LIMITS

**GROUNDWATER STATEMENT:**  
GROUNDWATER WAS NOT OBSERVED IN THE BORINGS, SO DEWATERING IS NOT EXPECTED TO BE NEEDED FOR UTILITY INSTALLATIONS OR OTHER DEEP EXCAVATIONS.  
GEOTECHNICAL REPORT COMPLETED BY CHOSEN VALLEY TESTING, ON 12/10/2024



Retaining walls that equal or exceed 4-feet in height requires additional permitting

Max 2% cross slope where trail crosses both driveways

CONSTRUCTION LIMITS

UNDERGROUND INFILTRATION CHAMBER "STORMPANK" OR SIMILAR NOT TANK=800.00 M3 STONE BASE C=801.60 W=100' YR HWL=806.74 TOP TANK=806.67 SIDE AND END STONE=12" EOF=808.50

**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON,  
MN 55388

**OWNER:**  
CARLSTON DEVELOPMENTS / RYAN JOHNSON  
60177 FULSBURY AVE S, BLOOMINGTON, MN 55425

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.

Matthew R. Pavak  
DATE 03-26-2026 LICENSE NO. 44263

**ISSUE/SUBMITTAL SUMMARY**

DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAN SUBMITTAL

**REVISION SUMMARY**

DATE	DESCRIPTION

**UTILITY PLAN**

**C4.0**  
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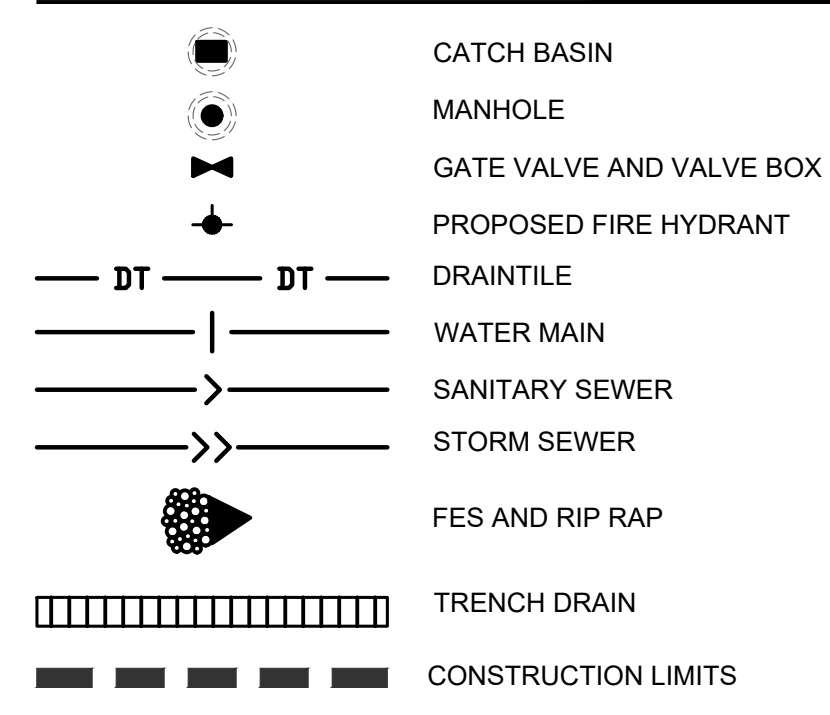
**GENERAL UTILITY NOTES:**

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
- CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
- CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND RE-USED OR PLACED AT THE DIRECTION OF THE OWNER.
- PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
- UTILITIES CONNECTIONS ON THE PLAN ARE SHOWN TO WITHIN 5' OF THE BUILDING FOOTPRINT. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR THE FINAL CONNECTION TO BUILDING LINES. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS.
- CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.15 FEET PER DETAILS. RIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT SUMPED ELEVATIONS.
- ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
- HYDRANT TYPE, VALVE, AND CONNECTION SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. HYDRANT EXTENSIONS ARE INCIDENTAL.
- A MINIMUM OF 8 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
- A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
- CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
- COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
- COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
- ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
- CONTRACTOR SHALL COORDINATE CONNECTION OF IRRIGATION SERVICE TO UTILITIES. COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES NECESSARY AS TO NOT IMPACT INSTALLATION OF UTILITIES.
- CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
- FOR ALL SITES LOCATED IN CLAY SOIL AREAS, DRAIN TILE MUST BE INSTALLED AT ALL LOW POINT CATCH BASINS 25' IN EACH DIRECTION. SEE PLAN AND DETAIL. INSTALL LOW POINT DRAIN TILE PER PLANS AND GEOTECHNICAL REPORT RECOMMENDATIONS AND REQUIREMENTS.
- AN OSHA-APPROVED QUALIFIED PERSON SHOULD REVIEW THE SOIL CLASSIFICATION PRESENTED IN THE GEOTECHNICAL REPORT IN THE FIELD. EXCAVATIONS MUST COMPLY WITH CURRENT OSHA REQUIREMENTS IN THE CODE OF FEDERAL REGULATIONS PERTAINING TO EXCAVATIONS AND TRENCHES. EXCAVATION SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR.

**CITY OF BLOOMINGTON UTILITY NOTES:**

- UTILITY AS-BUILTS MUST BE PROVIDED TO THE CITY PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- HDPE PIPE CONNECTIONS INTO ALL CONCRETE STRUCTURES MUST BE MADE WITH WATER TIGHT MATERIALS UTILIZING AN A-LOK OR WATERSTOP GASKET OR BOOT, CAST-IN-PLACE RUBBER BOOT, OR APPROVED EQUAL. WHERE THE ALIGNMENT PRECLUDES THE USE OF THE ABOVE APPROVED WATERTIGHT METHODS, CONSEAL 231 WATERSTOP SEALANT, OR APPROVED EQUAL WILL ONLY BE ALLOWED AS APPROVED BY THE ENGINEER.
- UTILITY PERMITS ARE REQUIRED FOR CONNECTIONS TO THE PUBLIC STORM, SANITARY, AND WATER SYSTEM. CONTACT UTILITIES (952-563-8777) FOR PERMIT INFORMATION.
- UTILITY AS-BUILTS MUST BE PROVIDED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY.
- COMBINATION OF FIRE AND DOMESTIC SERVICE MUST TERMINATE WITH A THREAD ON FLANGE OR AN MJ TO FLANGE ADAPTER.
- TAPS OF LIVE WATER MAINS ARE DONE BY CITY FORCES. THE CONTRACTOR PAYS FOR AND COORDINATES THIS WORK.
- CONTRACTOR SHALL OBTAIN A PUBLIC WORKS PERMIT FOR UNDERGROUND WORK WITHIN THE RIGHT-OF-WAY. A PERMIT IS REQUIRED PRIOR TO REMOVALS OR INSTALLATION. CONTACT UTILITIES (952-563-4568) FOR PERMIT INFORMATION.
- UTILITY AND MECHANICAL CONTRACTORS MUST COORDINATE THE INSTALLATION OF ALL WATER AND SEWER SERVICE PIPES INTO THE BUILDING TO ACCOMMODATE CITY INSPECTION AND TESTING.
- A MINIMUM 10-FOOT HORIZONTAL SEPARATION AND 18-INCH VERTICAL SEPARATION IS REQUIRED BETWEEN WATER MAIN AND SEWERS.
- USE CLASS 52 DIP WATER MAIN FOR PIPE 12 INCH DIAMETER AND SMALLER. A MINIMUM 8 MIL POLYWRAP IS REQUIRED ON ALL DIP.
- ALL COMPONENTS OF THE WATER SYSTEM, UP TO THE WATER METER OR FIRE SERVICE EQUIPMENT MUST UTILIZE PROTECTIVE INTERNAL COATINGS MEETING CURRENT ANSIAWWA STANDARDS FOR CEMENT MORTAR LINING OR SPECIAL COATINGS. THE USE OF UNLINED OR UNCOATED PIPE IS NOT ALLOWED.
- CONTRACTOR TO COORDINATE SIDEWALK CLOSURES AND PEDESTRIAN DETOURS RESULTING FROM THE INSTALLATION OF THE STORM CONNECTION IN THE NE OF THE PROJECT SITE. THE SIDEWALK CLOSURE WILL BE ALLOWED FOR ONLY A MINIMAL DURATION AND A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) WILL BE REQUIRED. COORDINATE WITH CITY.

**UTILITY PLAN LEGEND:**



Private utilities should be covered by private utility easement agreement not with a public drainage and utility easement. May not want a public drainage and utility easement over all of outlots, just 10' along roads.

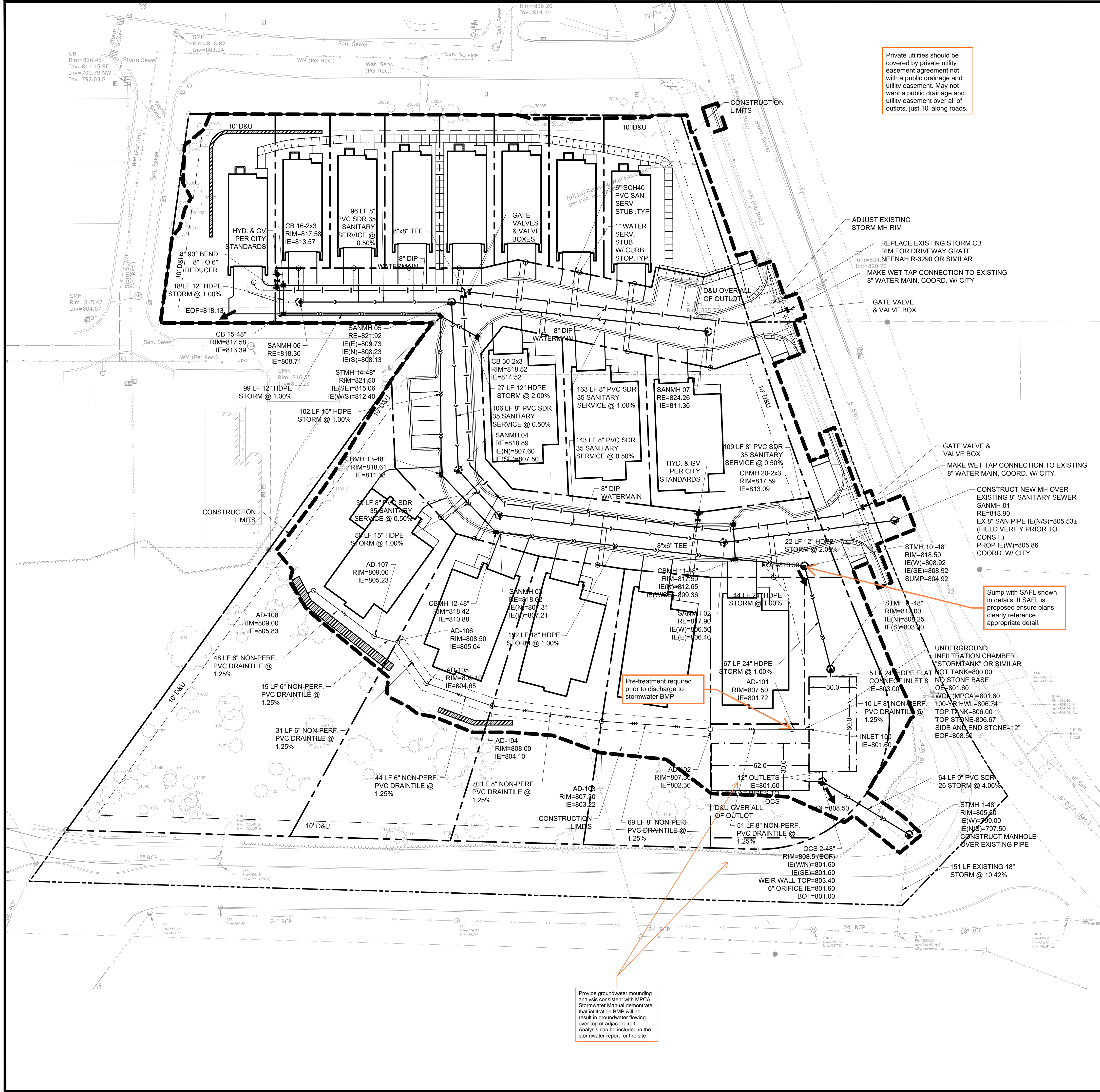
REPLACE EXISTING STORM CB RIM FOR DRIVEWAY GRATE, NEENAH R-3290 OR SIMILAR  
MAKE WET TAP CONNECTION TO EXISTING 8" WATER MAIN, COORD. W/ CITY

GATE VALVE & VALVE BOX  
MAKE WET TAP CONNECTION TO EXISTING 8" WATER MAIN, COORD. W/ CITY

Sump with SAFL shown in details. If SAFL is proposed ensure plans clearly reference appropriate detail.

Pre-treatment required prior to discharge to stormwater BMP

Provide groundwater mound analysis consistent with MPCA Stormwater Manual demonstrate that infiltration BMP will not result in groundwater flowing over top of adjacent trail. Analysis can be included in the stormwater report for the site.



Know what's below. Call before you dig.



1" = 30'-0"







PRELIMINARY:  
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**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON,  
MN 55338

**OWNER**  
CARLSTON DEVELOPMENTS / RYAN JOHNSON  
6017 FULSBURY AVE S, BLOOMINGTON, MN 55425

PROJECT

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Matthew R. Pavak  
DATE 03-26-2026 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY

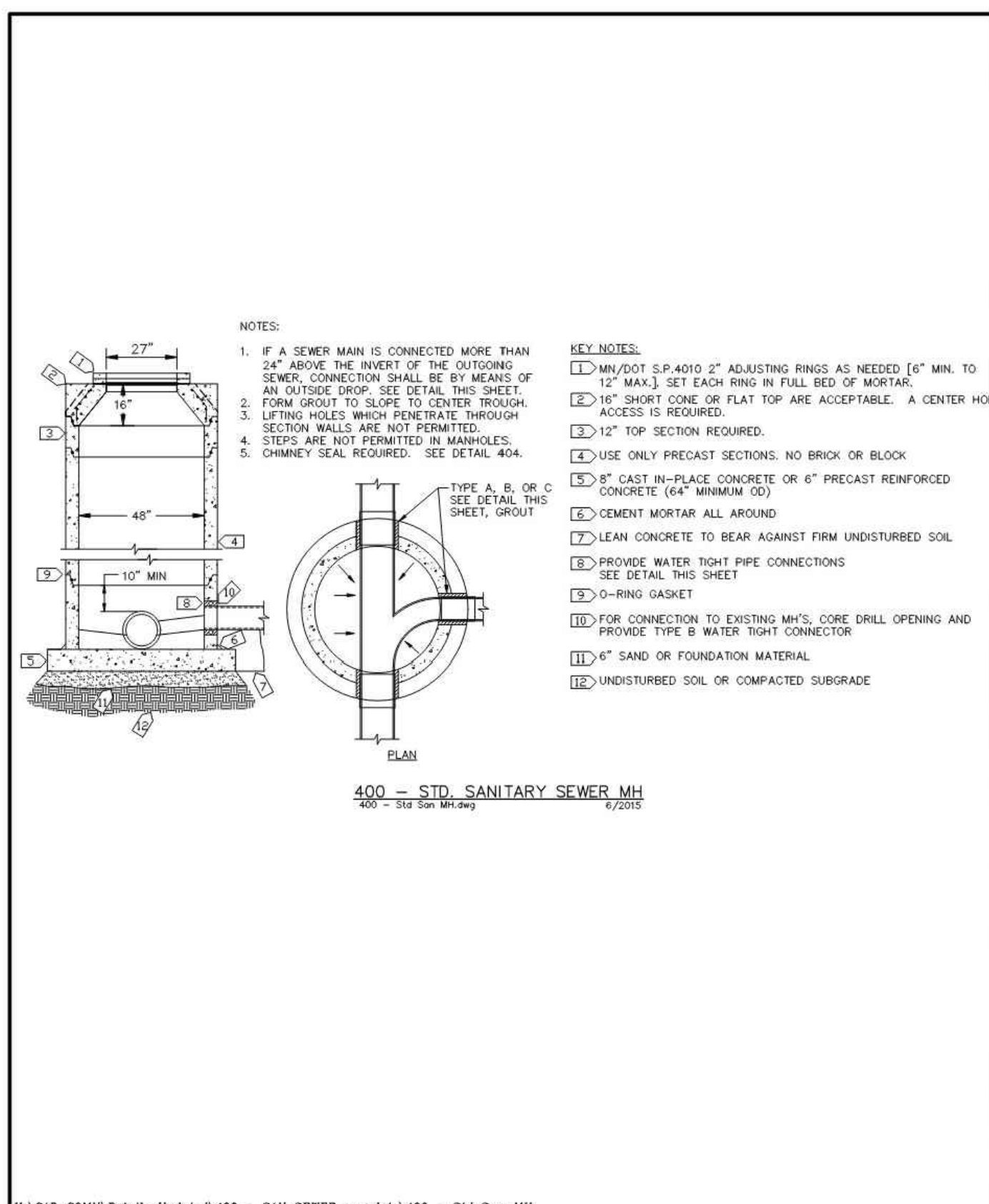
DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAN SUBMITTAL

REVISION SUMMARY

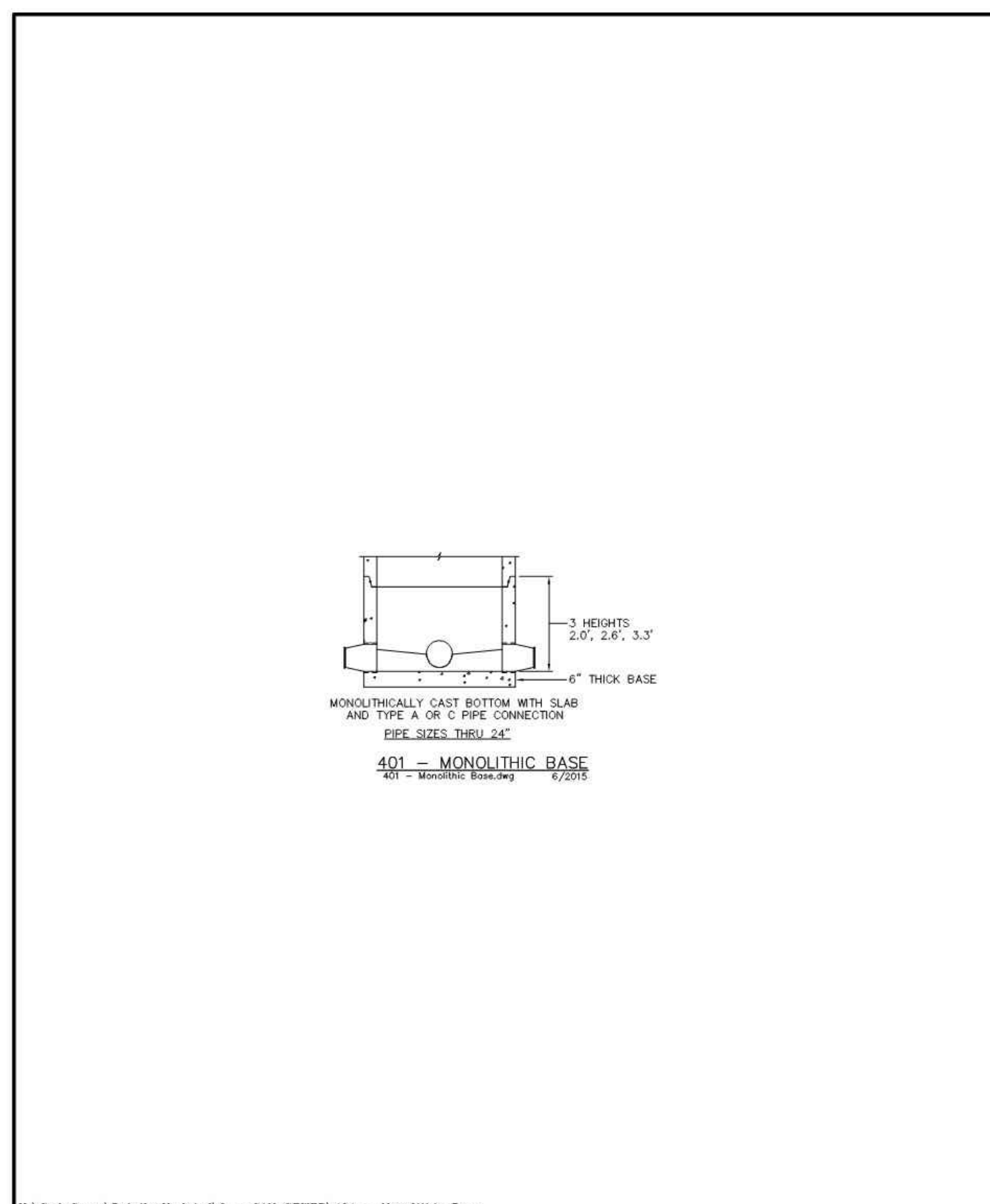
DATE	DESCRIPTION

PROJECT MANAGER: MATT PAVAK  
CONTACT NUMBER: 612-615-0060  
DRAWN BY: VMB-AM/BN  
REVIEWED BY: MP  
PROJECT NUMBER: 15143

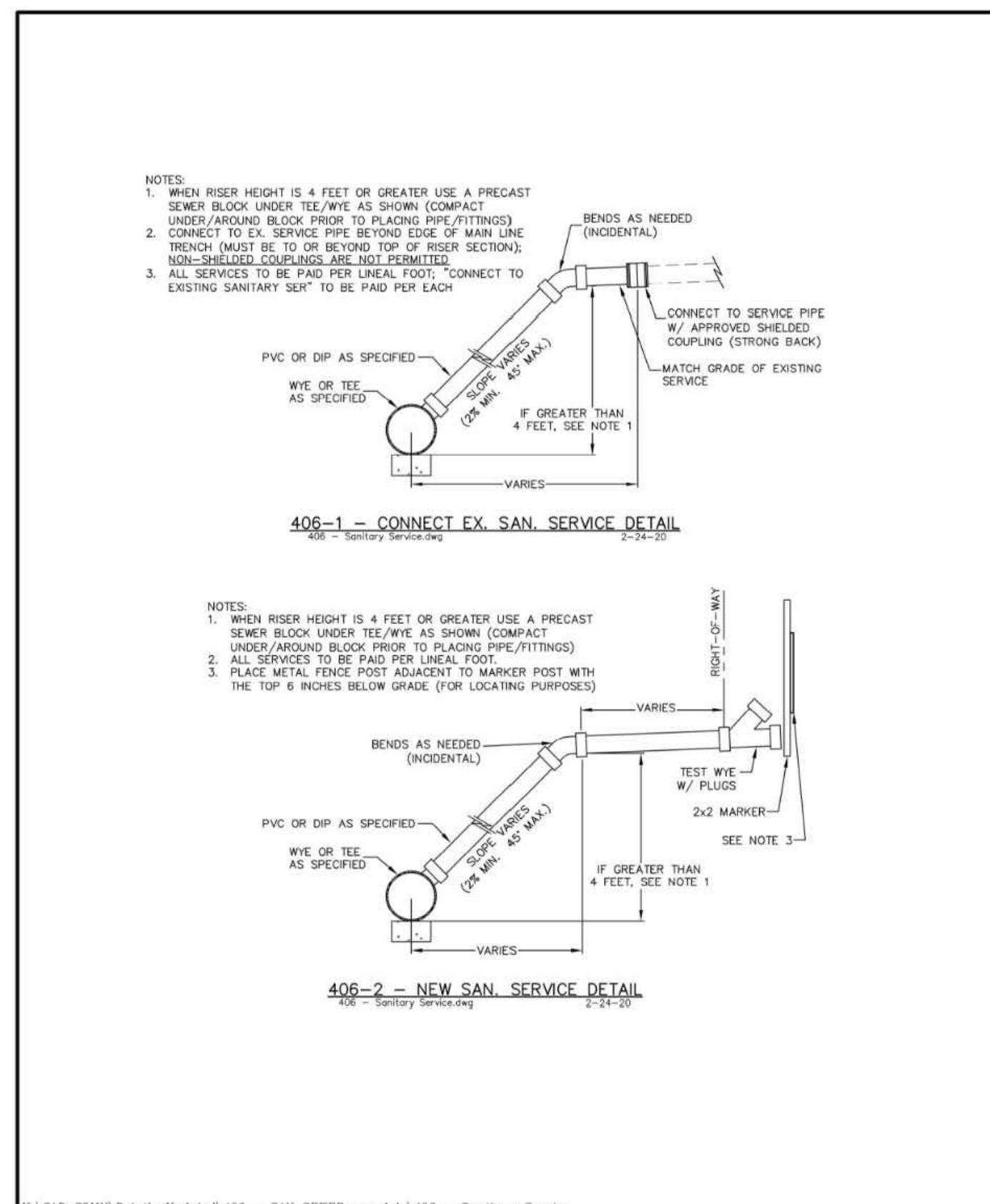
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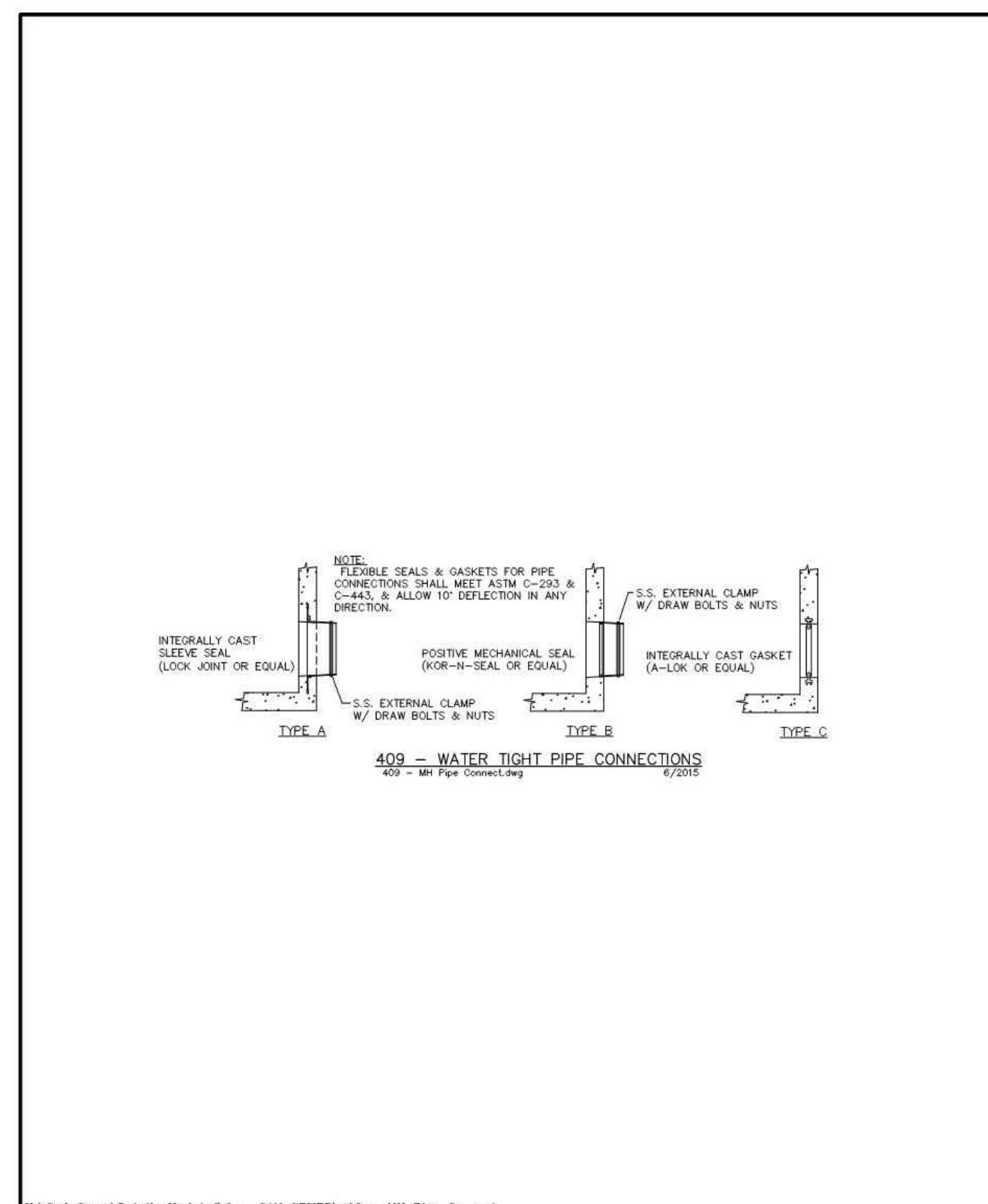
<b>PLATE NAME:</b> <b>400 - Std San MH</b>
LAST REVISED: 2/27/2023 LAST REVISED BY: KBO



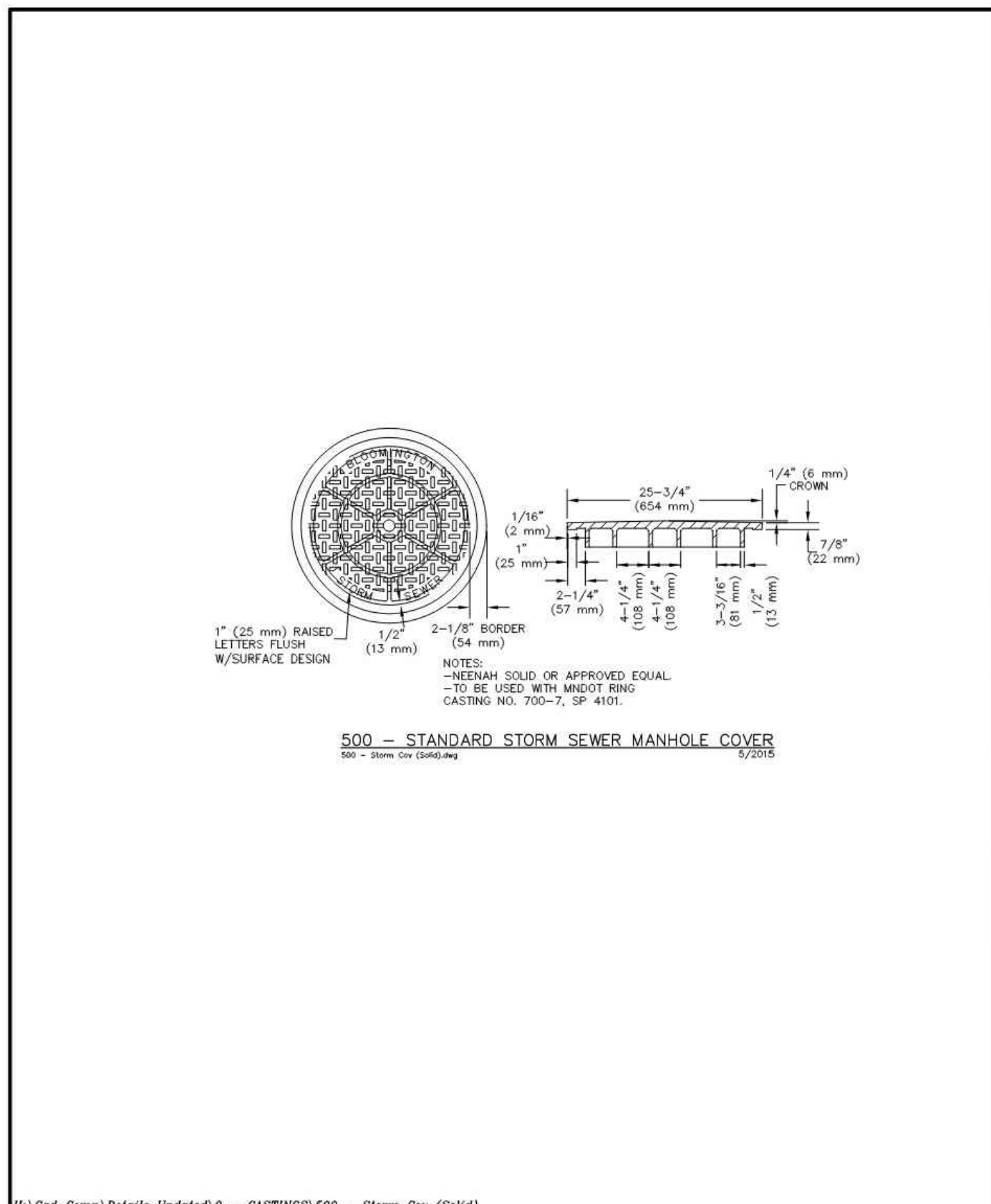
<b>PLATE NAME:</b> <b>401 - Monolithic Base</b>
LAST REVISED: 6/15/2015 LAST REVISED BY: KBO



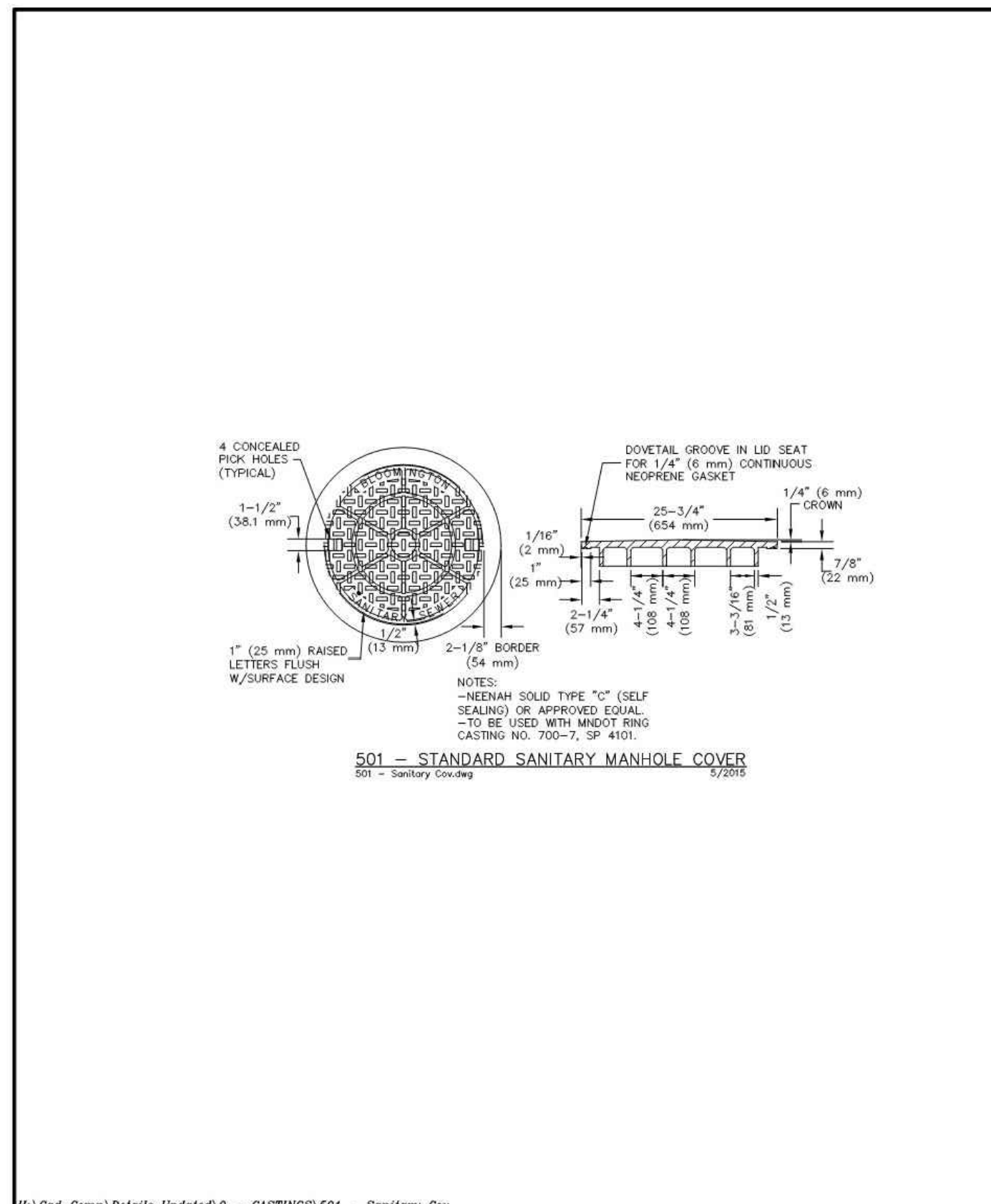
<b>PLATE NAME:</b> <b>406 - Sanitary Service</b>
LAST REVISED: 2/24/2020 LAST REVISED BY: KBO



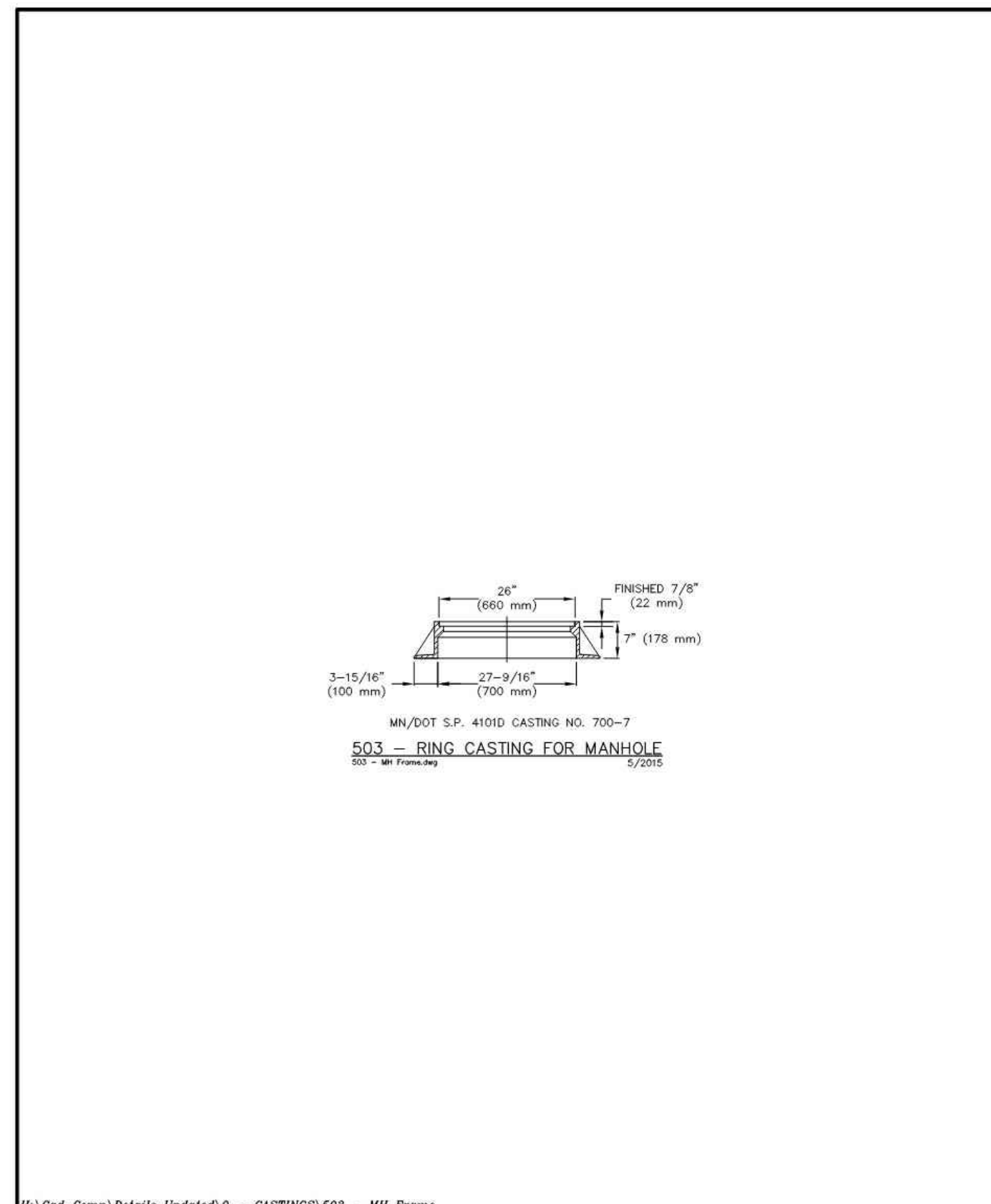
<b>PLATE NAME:</b> <b>409 - MH Pipe Connect</b>
LAST REVISED: 6/15/2015 LAST REVISED BY: KBO



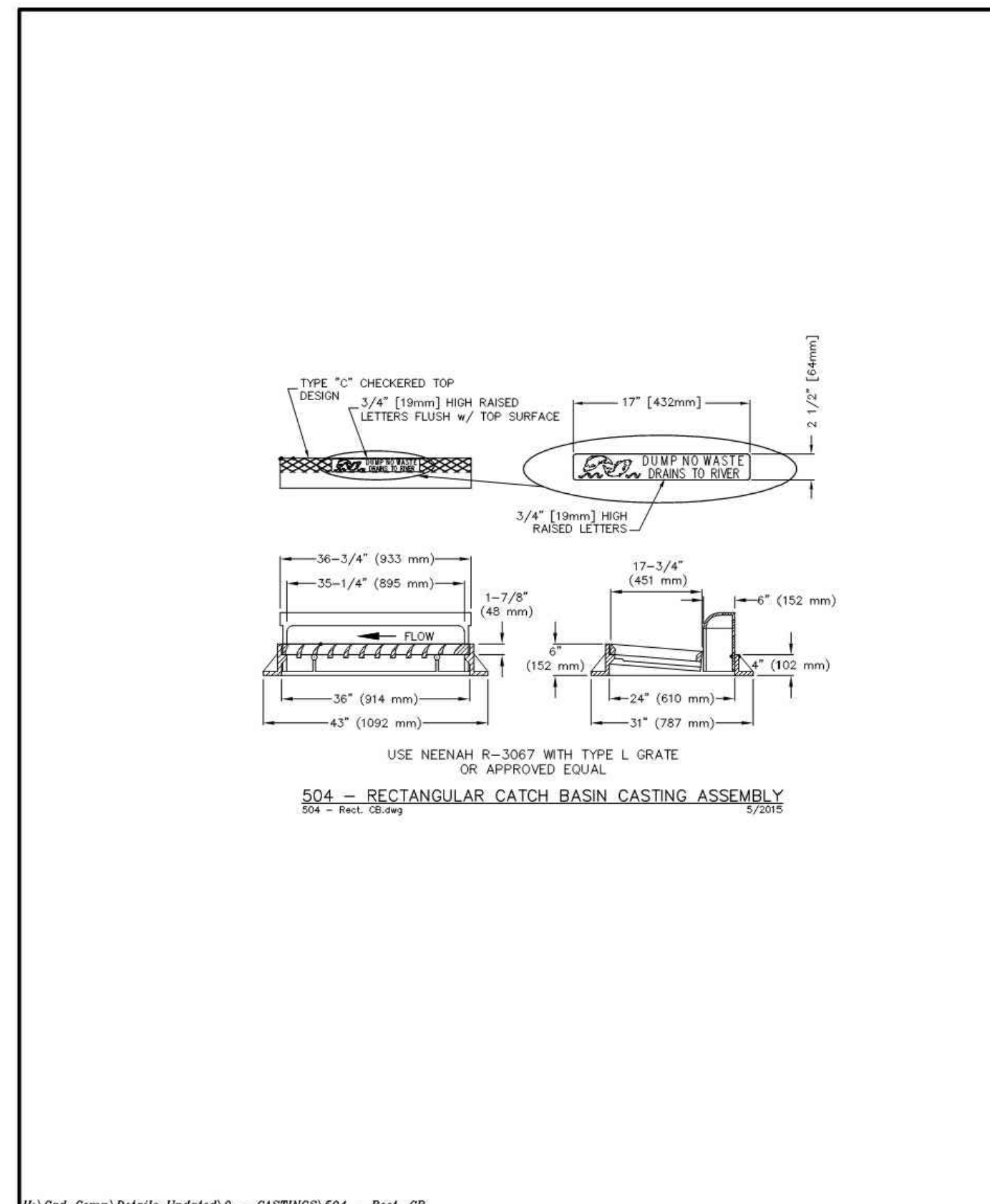
<b>PLATE NAME:</b> <b>500 - Storm Cov (Solid)</b>
LAST REVISED: 5/15/2015 LAST REVISED BY: KBO



<b>PLATE NAME:</b> <b>501 - Sanitary Cov</b>
LAST REVISED: 5/15/2015 LAST REVISED BY: KBO



<b>PLATE NAME:</b> <b>503 - MH Frame</b>
LAST REVISED: 5/15/2015 LAST REVISED BY: KBO



<b>PLATE NAME:</b> <b>504 - Rect. CB</b>
LAST REVISED: 5/15/2015 LAST REVISED BY: KBO



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**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD., BLOOMINGTON,  
MN 55388

**CARLSTON DEVELOPMENTS / RYAN JOHNSON**  
OWNER  
60177 FULSBURY AVE S., BLOOMINGTON, MN 55425

PROJECT

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.

Matthew R. Pavak  
DATE 03-26-2026 LICENSE NO. 44263

DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAT SUBMITTAL

DATE	DESCRIPTION

DATE	DESCRIPTION

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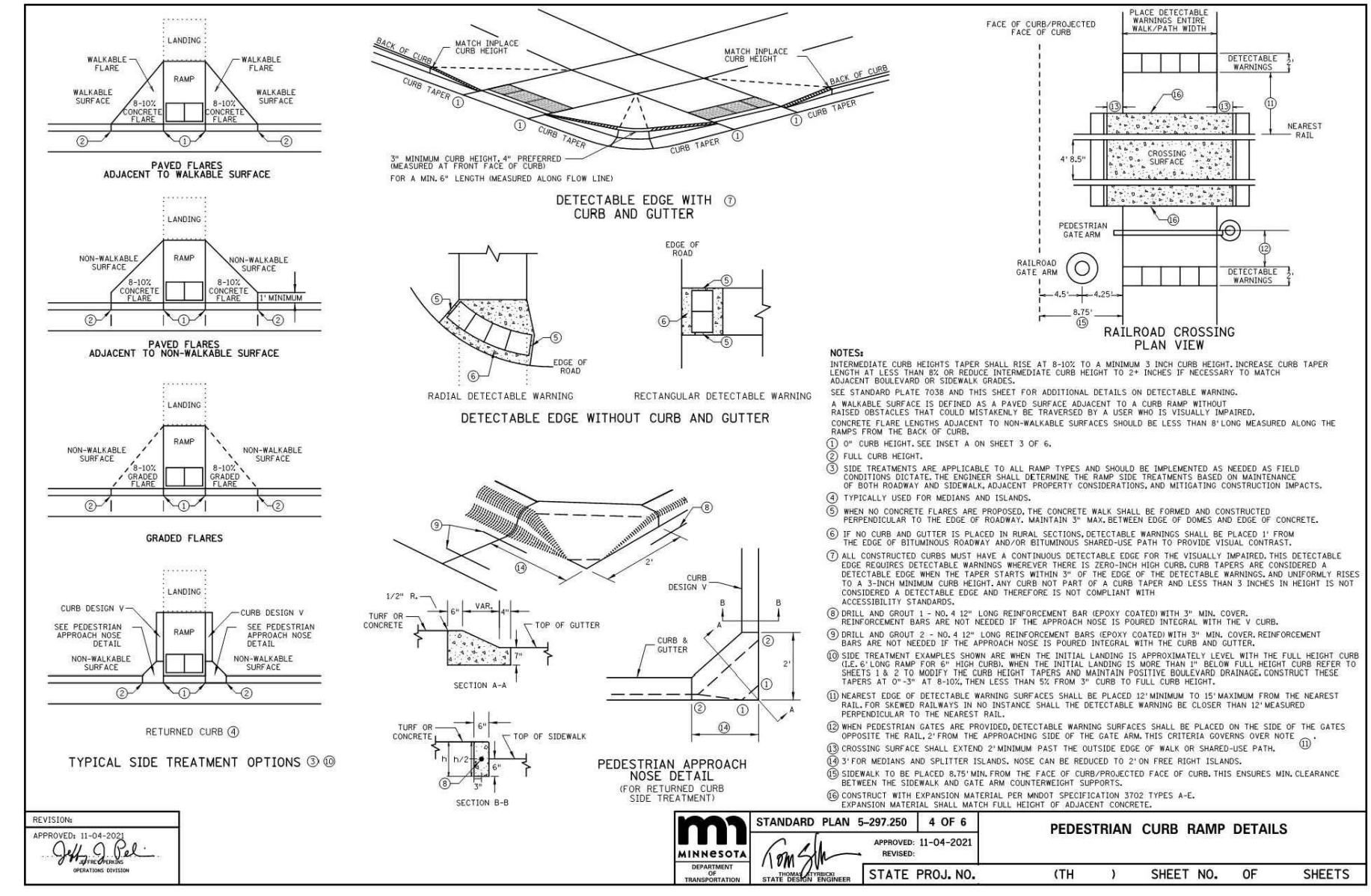
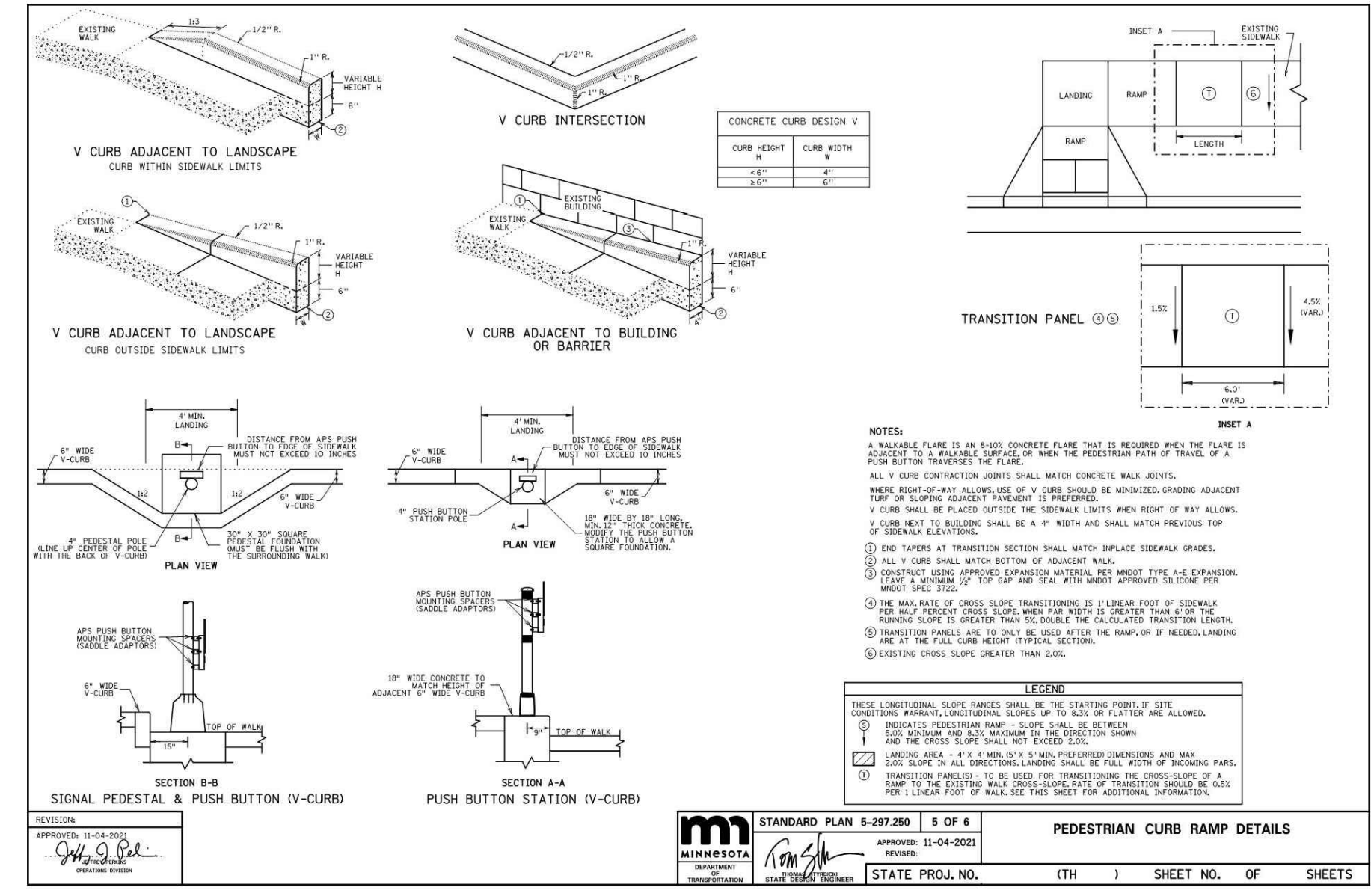
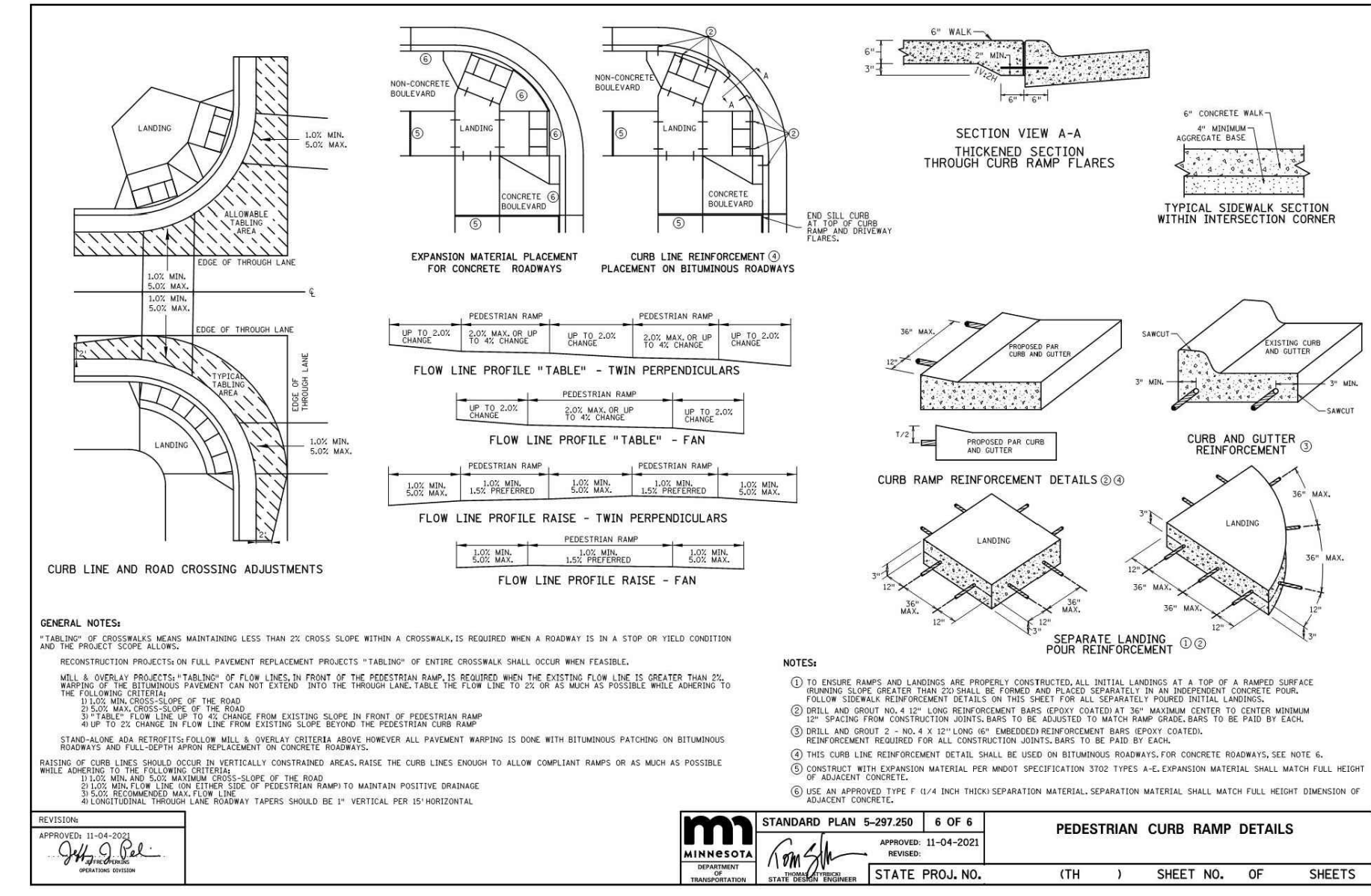
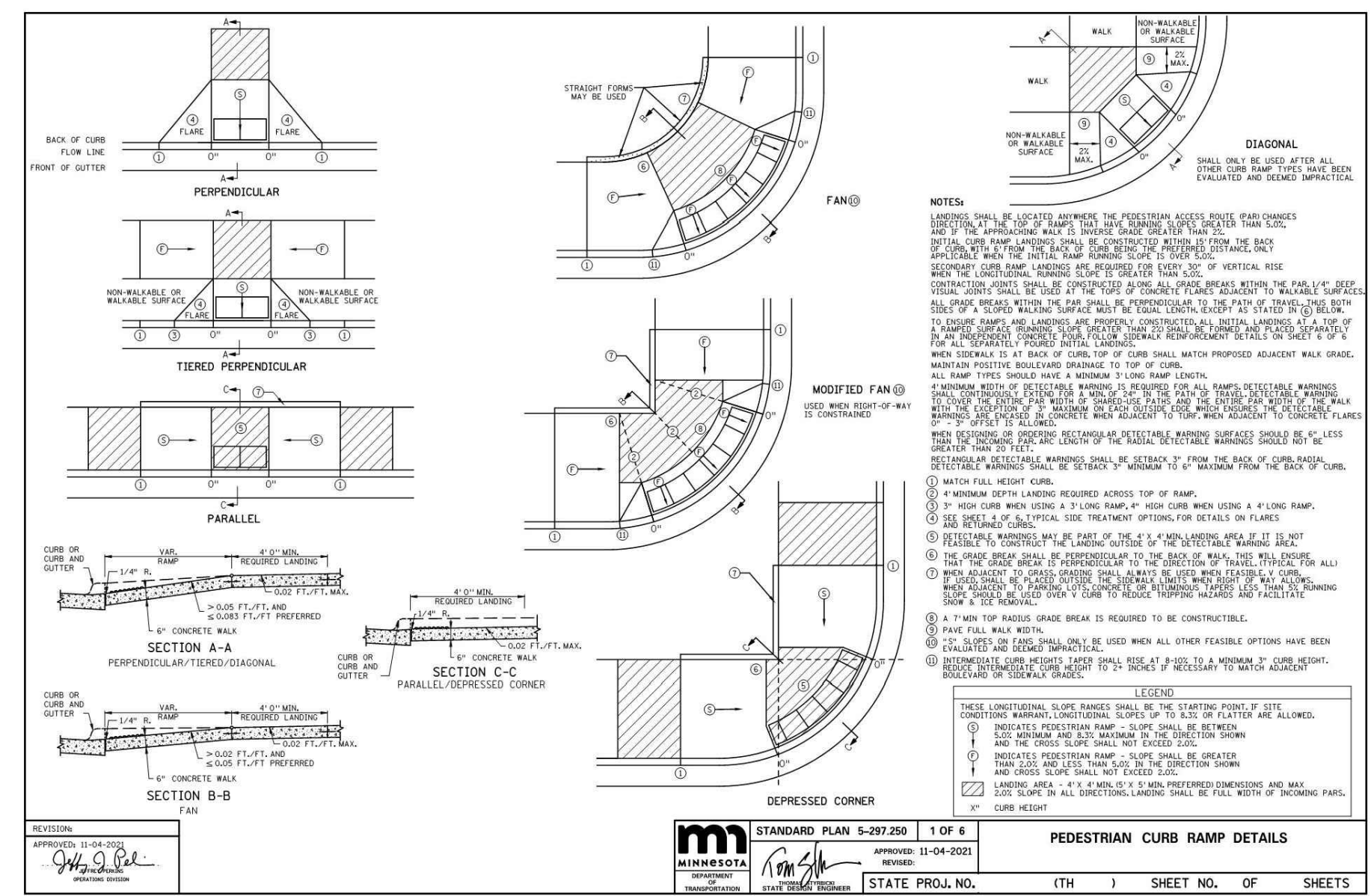
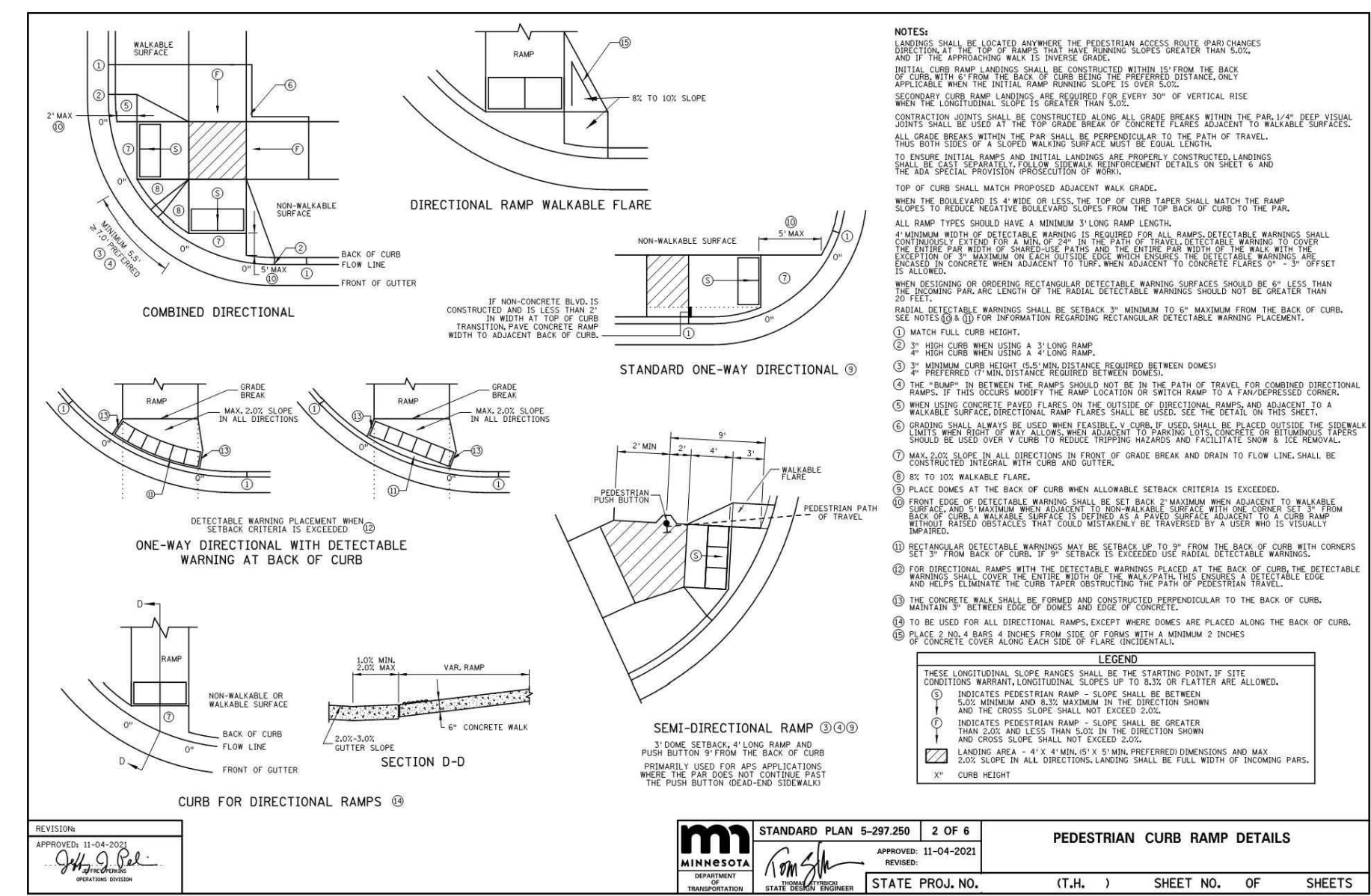
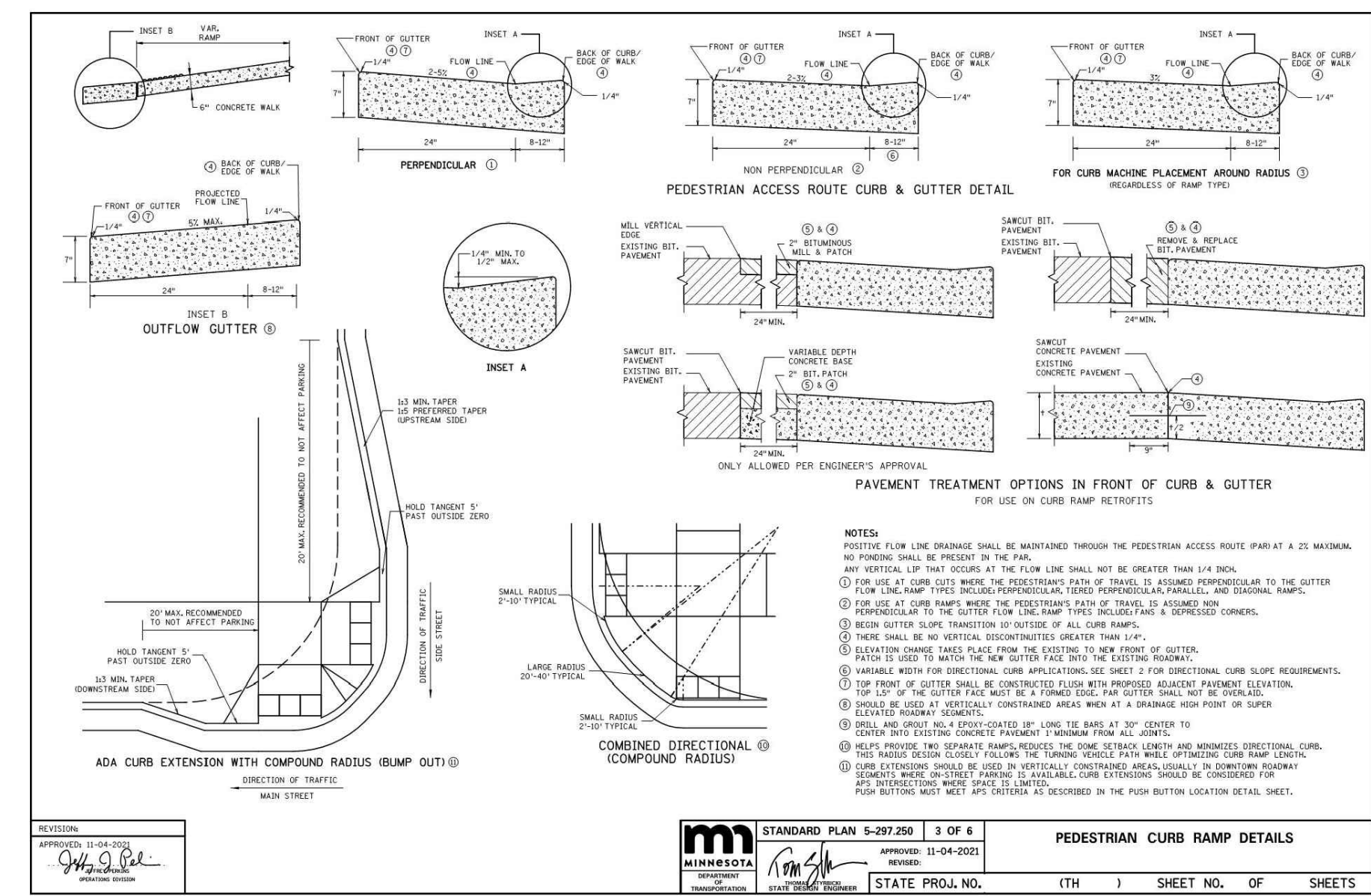
DATE	DESCRIPTION

DATE	DESCRIPTION

DATE	DESCRIPTION

CIVIL DETAILS

C5.4



**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON,  
MN 55388  
OWNER: CARLSTON DEVELOPMENTS / RYAN JOHNSON  
601 7TH HILLSBORO AVE S, BLOOMINGTON, MN 55425

PROJECT  
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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

Patrick J. Sarver  
DATE: 03-26-2026 LICENSE NO. 24904

ISSUE/SUBMITTAL SUMMARY  
DATE DESCRIPTION  
3-26-26 PRELIMINARY/FINAL PLAT SUBMITTAL

REVISION SUMMARY  
DATE DESCRIPTION

PROJECT MANAGER: MATT PAVEN  
CONTACT NUMBER: 612-615-0060  
DRAWN BY: WMB-AM-SB  
REVIEWED BY: MP  
PROJECT NUMBER: 15143

REVISION SUMMARY  
DATE DESCRIPTION

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DATE DESCRIPTION

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DATE DESCRIPTION

REVISION SUMMARY  
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REVISION SUMMARY  
DATE DESCRIPTION

LANDSCAPE PLAN  
**L1.0**  
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**LANDSCAPE NOTES:**

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- REFERENCE MULCH SCHEDULE FOR MULCH MATERIALS AND LOCATIONS.
- ALL TREES SHALL BE MULCHED WITH SHREDDED CEDAR MULCH TO OUTER EDGE OF SAUCER OR TO EDGE OF PLANTING BED, IF APPLICABLE. ALL MULCH SHALL BE KEPT WITHIN A MINIMUM OF 2" FROM TREE TRUNK.
- IF SHOWN ON PLAN, RANDOM SIZED LIMESTONE BOULDERS COLOR AND SIZE TO COMPLEMENT NEW LANDSCAPING. OWNER TO APPROVE BOULDER SAMPLES PRIOR TO INSTALLATION.
- PLANT MATERIALS SHALL CONFORM WITH THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND SHALL BE OF HARDY STOCK, FREE FROM DISEASE, DAMAGE AND DISFIGURATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PLUMPNESS OF PLANT MATERIAL FOR DURATION OF ACCEPTANCE PERIOD.
- UPON DISCOVERY OF A DISCREPANCY BETWEEN THE QUANTITY OF PLANTS SHOWN ON THE SCHEDULE AND THE QUANTITY SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.
- CONDITION OF VEGETATION SHALL BE MONITORED BY THE LANDSCAPE ARCHITECT THROUGHOUT THE DURATION OF THE CONTRACT. LANDSCAPE MATERIALS PART OF THE CONTRACT SHALL BE WARRANTED FOR TWO (2) FULL GROWING SEASONS FROM SUBSTANTIAL COMPLETION DATE.
- ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL RECEIVE 6" LAYER TOPSOIL AND SOD AS SPECIFIED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- COORDINATE LOCATION OF VEGETATION WITH UNDERGROUND AND OVERHEAD UTILITIES, LIGHTING FIXTURES, DOORS AND WINDOWS. CONTRACTOR SHALL STAKE IN THE FIELD FINAL LOCATION OF TREES AND SHRUBS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- ALL PLANT MATERIALS SHALL BE WATERED AND MAINTAINED UNTIL ACCEPTANCE.
- REPAIR AT NO COST TO OWNER ALL DAMAGE RESULTING FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
- SWEEP AND MAINTAIN ALL PAVED SURFACES FREE OF DEBRIS GENERATED FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
- PROVIDE SITE WIDE IRRIGATION SYSTEM DESIGN AND INSTALLATION. SYSTEM SHALL BE FULLY PROGRAMMABLE AND CAPABLE OF ALTERNATE DATE WATERING. THE SYSTEM SHALL PROVIDE HEAD TO HEAD OR DRIP COVERAGE AND BE CAPABLE OF DELIVERING ONE INCH OF PRECIPITATION PER WEEK. SYSTEM SHALL EXTEND INTO THE PUBLIC RIGHT-OF-WAY TO THE EDGE OF PAVEMENT/BACK OF CURB.
- CONTRACTOR SHALL SECURE APPROVAL OF PROPOSED IRRIGATION SYSTEM INCLUDING PRICING FROM OWNER, PRIOR TO INSTALLATION.

PLANTING SEASON SCHEDULE			
SEASON	CONIFEROUS	DECIDUOUS	REMARKS
SPRING PLANTING	APRIL 15 - JUNE 15	APRIL 15 - JUNE 15	
FALL PLANTING	AUGUST 21 - SEPTEMBER 30	AUGUST 15 - NOVEMBER 15	

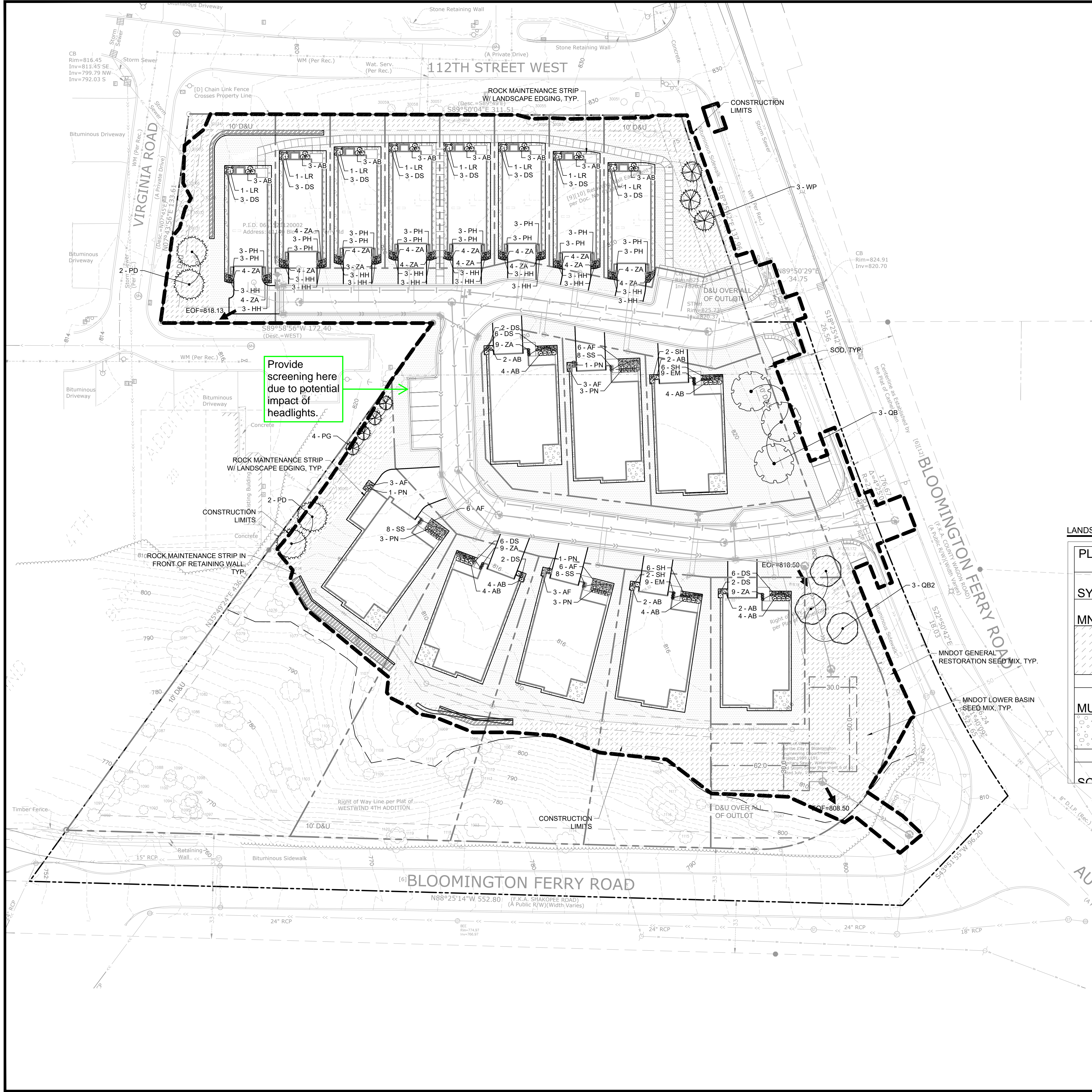
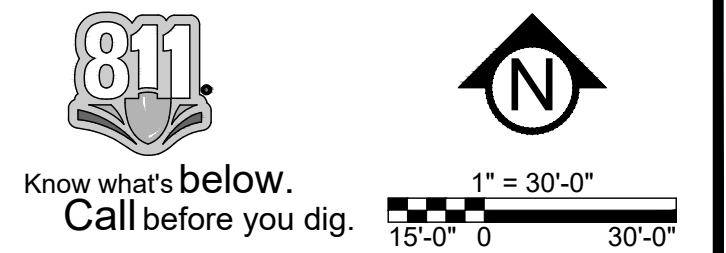
NOTE: ADJUSTMENTS TO PLANTING DATES MUST BE APPROVED IN WRITING BY THE LANDSCAPE ARCHITECT.

**LANDSCAPE PLAN LEGEND:**

PLANT SCHEDULE	
SYMBOL	COMMON / BOTANICAL NAME
<b>MNDOT - SEED MIXES</b>	
	MN SEED MIX #35-221 DRY PRAIRIE GENERAL, / MNDOT - GENERAL RESTOR SEEDING RATE: 36.5 LB/ACRE (98.7 SEEDS/SF). MNDOT TYPE1 MULCH W/ST CONTROL BLANKET, OR HYDROMULCH. REFERENCE MNDOT SEEDING MAN SPECIFICATIONS (2023).
	SUBTOTAL:
<b>MULCH - ROCK</b>	
	ROCK MAINTENANCE STRIP / ROCK MAINTENANCE STRIP 1.5" DECORATIVE SCREENED ROCK/STONE INSTALLED 3" DEEP OVER GEO PROVIDE EDGING AS SHOWN ON LANDSCAPE PLAN.
	SUBTOTAL:
<b>SOD</b>	

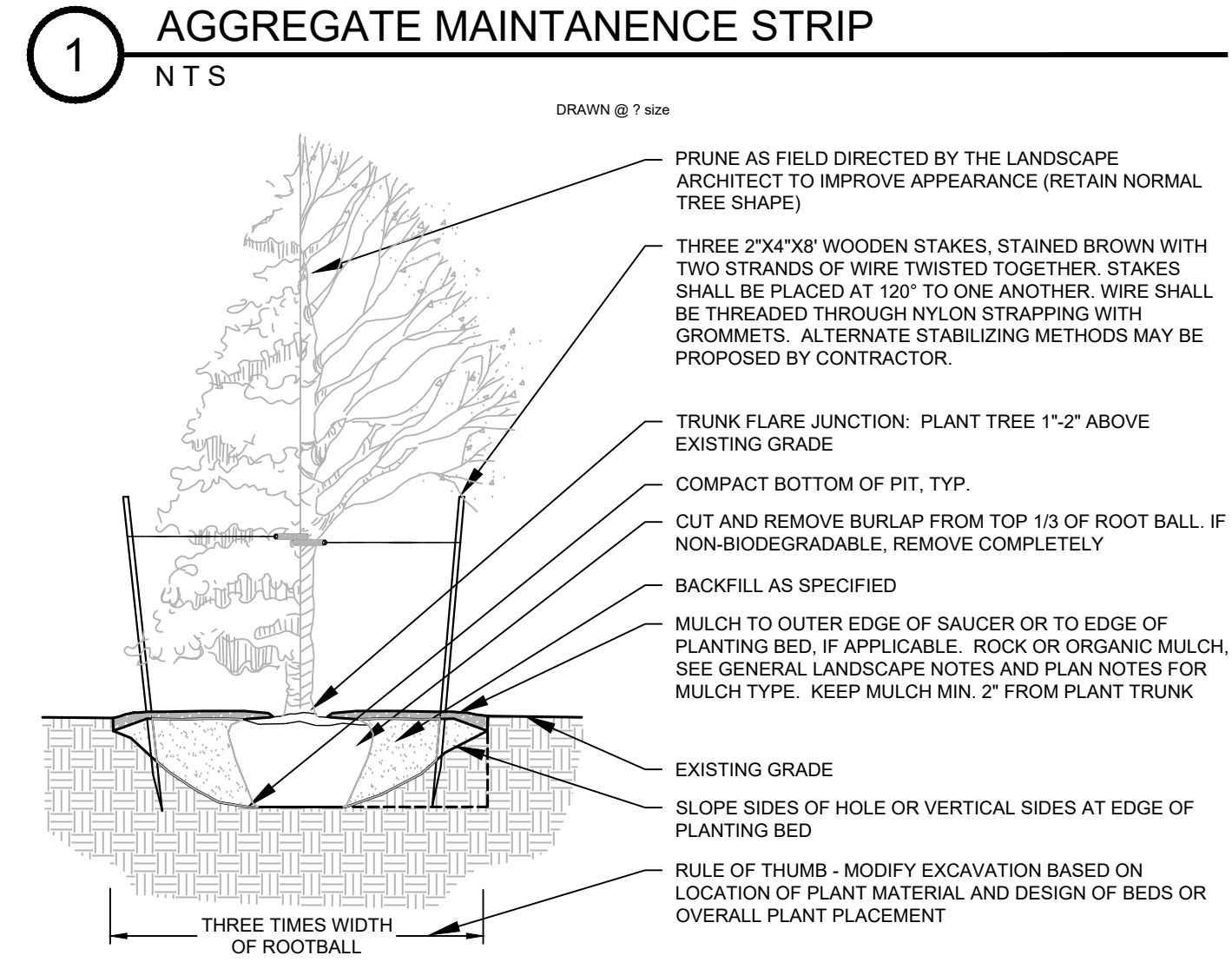
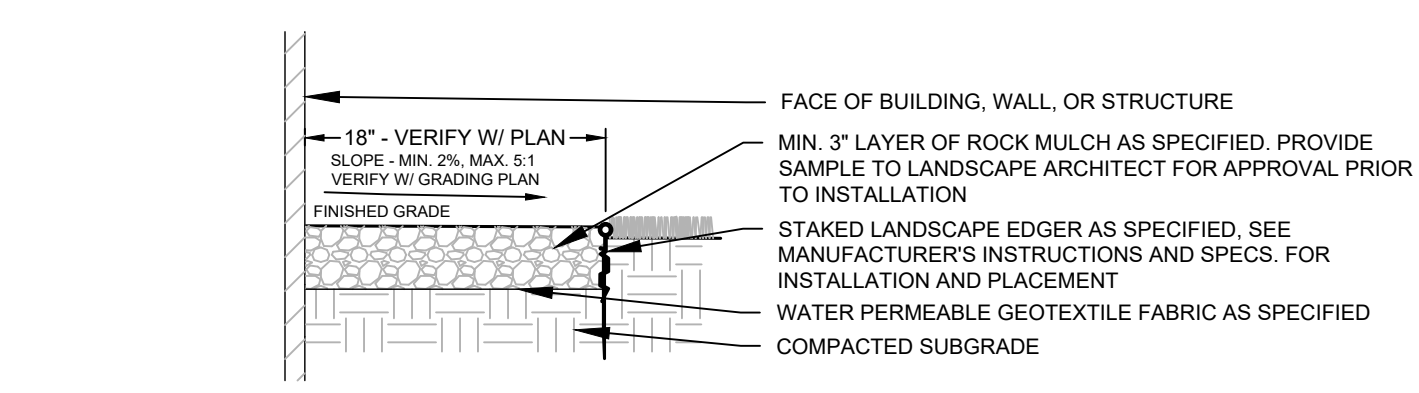
- PROPOSED CANOPY TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES
- PROPOSED EVERGREEN TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES
- PROPOSED ORNAMENTAL TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES
- PROPOSED DECIDUOUS AND EVERGREEN SHRUB SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES
- PROPOSED PERENNIAL PLANT SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES
- EDGING - SHALL BE COMMERCIAL GRADE, 4" DEPTH ALUMINUM, BLACK OR DARK GREEN IN COLOR. INCLUDE ALL CONNECTORS, STAKES, & ALL APPURTENANCES PER MANUF. INSTRUC./SPECS.
- DECORATIVE BOULDERS (ROUNDED & BLOCK STYLE), 18"-30" DIA.
- CONSTRUCTION LIMITS

SEE SHEET L1.1 FOR PLANTING SCHEDULE



Provide screening here due to potential impact of headlights.

PLANT SCHEDULE				
CODE	COMMON / BOTANICAL NAME	QTY	CONT	NATIVE PLANTS
<b>DECIDUOUS TREES</b>				
QB2	Swamp White Oak / Quercus bicolor	3	2.5" Cal. B&B	NATIVE
QB	Prairie Stature® Oak / Quercus x bimundorum 'Midwest'	3	2.5" CAL. B&B	NATIVE CULTIVAR
	SUBTOTAL:	6		
<b>EVERGREEN TREES</b>				
PG	White Spruce / Picea glauca	4	6' B&B	NATIVE
PD	Black Hills Spruce / Picea glauca 'Densata'	4	6' HT. B&B	NATIVE CULTIVAR
WP	White Pine / Pinus strobus	3	6' B&B	NATIVE
	SUBTOTAL:	11		
CODE	COMMON / BOTANICAL NAME	QTY	SIZE	NATIVE PLANTS
<b>SHRUBS</b>				
AB	Low Scape Hedger Black Chokeberry / Aronia melanocarpa 'UCONNAM166'™	54	#5 CONT	NATIVE CULTIVAR
LR	Kodiak® Orange Diervilla / Diervilla x 'G2X88544'	8	#5 CONT	NATIVE CULTIVAR
PN	Panther Bloomin' Easy Ninebark / Physocarpus opulifolius 'N5'™	12	#5 CONT	NATIVE CULTIVAR
	SUBTOTAL:	74		
<b>GRASSES</b>				
DS	Schottland Hair Grass / Deschampsia cespitosa 'Schottland'	36	#1 CONT	NATIVE
PH	Heavy Metal Switch Grass / Panicum virgatum 'Heavy Metal'	48	#1 CONT	NATIVE CULTIVAR
SS	Standing Ovation Little Bluestem Grass / Schizachyrium scoparium 'Standing Ovation'	36	#1 CONT	NATIVE CULTIVAR
SH	Prairie Dropseed / Sporobolus heterolepis	16	#1 CONT	NATIVE
	SUBTOTAL:	136		
<b>PERENNIALS</b>				
AF	Blue Fortune Anise Hyssop / Agastache x 'Blue Fortune'	27	#1 CONT	NATIVE CULTIVAR
EM	Magnus Purple Coneflower / Echinacea purpurea 'Magnus'	18	#1 CONT	NATIVE CULTIVAR
HH	Happy Returns Daylily / Hemerocallis x 'Happy Returns'	48	#1 CONT	NOT NATIVE
ZA	Golden Alexander / Zizia aurea	91	#1 CONT	NATIVE
	SUBTOTAL:	184		



- IRRIGATION NOTES:**
- ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
  - PROVIDE SITE WIDE IRRIGATION SYSTEM DESIGN AND INSTALLATION. SYSTEM SHALL BE FULLY PROGRAMMABLE AND CAPABLE OF ALTERNATE DATE WATERING. THE SYSTEM SHALL PROVIDE HEAD TO HEAD OR DRIP COVERAGE AND BE CAPABLE OF DELIVERING ONE INCH OF PRECIPITATION PER WEEK. SYSTEM SHALL EXTEND INTO THE PUBLIC RIGHT-OF-WAY TO THE EDGE OF PAVEMENT/BACK OF CURB.
  - CONTRACTOR SHALL SECURE APPROVAL OF PROPOSED IRRIGATION SYSTEM INCLUDING PRICING FROM OWNER, PRIOR TO INSTALLATION.
  - SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
  - CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION/INSTALLATION. ANY DAMAGE TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE CONTRACTOR.
  - SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
  - CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED ELECTRICAL SERVICE AND METERING FACILITIES.
  - IRRIGATION WATER LINE CONNECTION SIZE IS 1-1/2" AT BUILDING. VERIFY WITH MECHANICAL PLANS.
  - ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.
  - ALL LATERAL LINES SHALL BE 12" BELLOW FINISHED GRADE.
  - ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.
  - CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
  - CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
  - FABRICATE ALL PIPE TO MANUFACTURE'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF CONNECTION.
  - BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
  - ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.
  - GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE.
  - IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.
  - CONTROL WIRES: 14 GAUGE DIRECT BURIAL. SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER. LABEL OR COLOR CODE ALL WIRES.
  - AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.
  - ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.
  - USE SCREENS ON ALL HEADS.
  - A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.
  - ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
  - ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTEND 3' BEYOND PERIMETER OF VALVE BOX.
  - THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.

SUMMARY TABLE:									
	ON-SITE NUMBER OF TREES	ON-SITE CAL. IN.	PERCENT REMOVAL ALLOWED	ALLOWED REMOVAL IN CAL. IN.	PROPOSED NUMBER OF TREE REMOVALS	PROPOSED REMOVALS IN CAL. IN.	<sup>2</sup> NET REMOVAL (-) OR PRES. (+) IN CAL. IN.	REPLACEMENT MULTIPLIER	REQUIRED REPLACEMENT IN CAL. IN. *
SIGNIFICANT	108	1925	50%	963	56	956	7	1.25	8
COMMON	43	386	100%	386	24	219	-219		0
<sup>1</sup> POOR QUALITY SPECIES	23	293	100%	293	16	205	-205		
<sup>2</sup> DISEASED OR DAMAGED	8	206	100%	206	8	206	-206		
<b>Total</b>	<b>182</b>	<b>2,810</b>		<b>1848</b>	<b>104</b>	<b>1586</b>	<b>-624</b>		<b>8</b>

TOTAL CAL. IN. REPLACEMENT TREES REQUIRED	8 CAL. IN.
TOTAL NUMBER OF REPLACEMENT TREES REQUIRED	2.5 IN. CAL. 3 TREES

NOTE: PRESERVED SIGNIFICANT TREES CAN COUNT TOWARD REQUIRED LANDSCAPING TREES	TREE CATEGORY DESIGNATIONS S = SIGNIFICANT - ANY HEALTHY DECIDUOUS HARDWOOD TREE (EXCEPT WILLOW, BOXELDER, ASPEN, SILVER MAPLE AND MULTIPLE STEM COTTONWOOD) MEASURING 12 INCHES DBH OR GREATER (OR SIX INCHES DBH OR GREATER IN THE CASE OF OAK, SUGAR MAPLE, IRONWOOD AND HICKORY) AND ANY HEALTHY CONIFEROUS TREE (EXCEPT MULTIPLE STEM WHITE CEDAR) MEASURING EIGHT INCHES DBH OR GREATER. PQS = POOR QUALITY SPECIES - UNDESIREABLE TREE SPECIES AS NAMED IN ZONING ORDINANCE - WILLOW, BOX ELDER, ASPEN, SILVER MAPLE, MULTI-STEM COTTONWOOD, MULTI-STEM WHITE CEDAR C = COMMON SPECIES - ALL TREES NOT DEEMED "PQS" NOR "S". D = DISEASED OR DAMAGED TREES.
---	--

<b>REQUIRED LANDSCAPE</b>	
TOTAL SITE AREA	200,511 SF
DEVELOPABLE LANDSCAPING AREA (DLA)	165,506 SF
REQUIRED TREES PER CALCULATION (1 PER 2,500 SF OF DLA)	66 TREES
CREDITED SIGNIFICANT TREES PRESERVED	52 TREES
<b>TOTAL REQUIRED TREES</b>	<b>14 TREES</b>
<b>REQUIRED SHRUBS</b>	<b>166 SHRUBS</b>

<b>TREE/ORNAMENTAL TREE COMBINATIONS</b>	
TREES (2.5 CAL. IN.)	12 TREES
ORNAMENTAL TREES (1.5 CAL. IN.) (15% OF TREE DBH ALLOWED)	4 TREES
<b>SHRUB/PERENNIAL COMBINATION</b>	
SHRUBS	83 SHRUBS
PERENNIALS (50% ALLOWED, 1 SHUB = 6 PER.)	331 PERENNIALS

City of Bloomington Zoning Ordinance  
19.52 LANDSCAPING AND SCREENING, (c)  
(2) Minimum number of trees and shrubs. Excluding exceptions specified below in subsection (c)(2)(E) below, development must at a minimum provide the following numbers of trees and shrubs:  
(A) One tree per 2,500 square feet of developable landscaping area; and  
(B) One shrub per 1,000 square feet of developable landscaping area.  
(i) Up to 50% of the required shrubs may be perennial plants.  
(ii) Four perennial plants equal one shrub.  
(C) **DEVELOPABLE LANDSCAPING AREA** is defined as the total area of a development site or phase minus the portion of that area within:  
(i) A natural water body;  
(ii) A protected wetland;  
(iii) A permanent significant natural wooded area; and/or  
(iv) A scenic easement.  
(D) Existing healthy deciduous trees greater than four caliper inches or existing healthy evergreen trees greater than six feet in height that are located within the developable landscaping area and are not identified on the city's prohibited plant species list (see § 18.03) may be credited toward the minimum required trees on a site.

How was developable landscaping area calculated?

**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD., BLOOMINGTON, MN 55308  
**CARLSTON DEVELOPMENTS / RYAN JOHNSON**  
OWNER  
60177 FULSBURY AVE S., BLOOMINGTON, MN 55305

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 LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA.

Patrick J. Sarver  
DATE 03-26-2026 LICENSE NO. 24904

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAT SUBMITTAL

REVISION SUMMARY	
DATE	DESCRIPTION

REVISION SUMMARY	
DATE	DESCRIPTION

SEE SHEET L1.0 FOR GENERAL LANDSCAPE NOTES & LEGEND



**SWPPP NOTES:**

1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
2. THIS PROJECT IS GREATER THAN ONE ACRE AND WILL REQUIRE AN MPCA NPDES PERMIT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY EROSION CONTROL PERMITS REQUIRED BY THE CITY.
3. SEE SHEETS SW1.0 - SW1.5 FOR ALL EROSION CONTROL NOTES, DESCRIPTIONS, AND PRACTICES.
4. SEE GRADING PLAN FOR ADDITIONAL GRADING AND EROSION CONTROL NOTES.
5. CONTRACTOR IS RESPONSIBLE FOR SWPPP IMPLEMENTATION, INSPECTIONS, MAINTENANCE AND COMPLIANCE WITH THE PERMIT.

**CITY OF BLOOMINGTON EROSION CONTROL NOTES:**

1. AN EROSION CONTROL BOND IS REQUIRED. COORDINATE WITH CITY.
2. CITY OWNED PRE-TREATMENT STRUCTURE THAT IS OVERLOADED WITH CONSTRUCTION RELATED SEDIMENT WILL BE THE RESPONSIBILITY OF THE PROJECT TO REMOVE. CITY WILL PERFORM AN INSPECTION OF THE SYSTEM IN EARLY AUGUST 2023 TO DOCUMENT CURRENT CONDITIONS AND PERFORM POST CONSTRUCTION INSPECTION ONCE PROJECT IS COMPLETE. OWNER'S REPRESENTATIVE WELCOME TO COORDINATE WITH CITY TO BE INVOLVED IN ANY CITY INFRASTRUCTURE INSPECTION ACTIVITY.
3. ENSURE ALL INLET PROTECTION DEVICES HAVE EMERGENCY OVERFLOW PROTECTION TO PREVENT FLOODING.
4. ONLY PROTECT INLETS THAT NEED TO BE PROTECTED.

ALL SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES, AND MEASURES CONTAINED IN THIS SWPPP ARE THE MINIMUM REQUIREMENTS. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**PROJECT**  
**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON,  
MN 55338

**OWNER**  
**CARLSTON DEVELOPMENTS / RYAN JOHNSON**  
601 757 FULSBURY AVE S, BLOOMINGTON, MN 55425

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Matthew R. Pavak  
DATE 03-26-2026 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAT SUBMITTAL

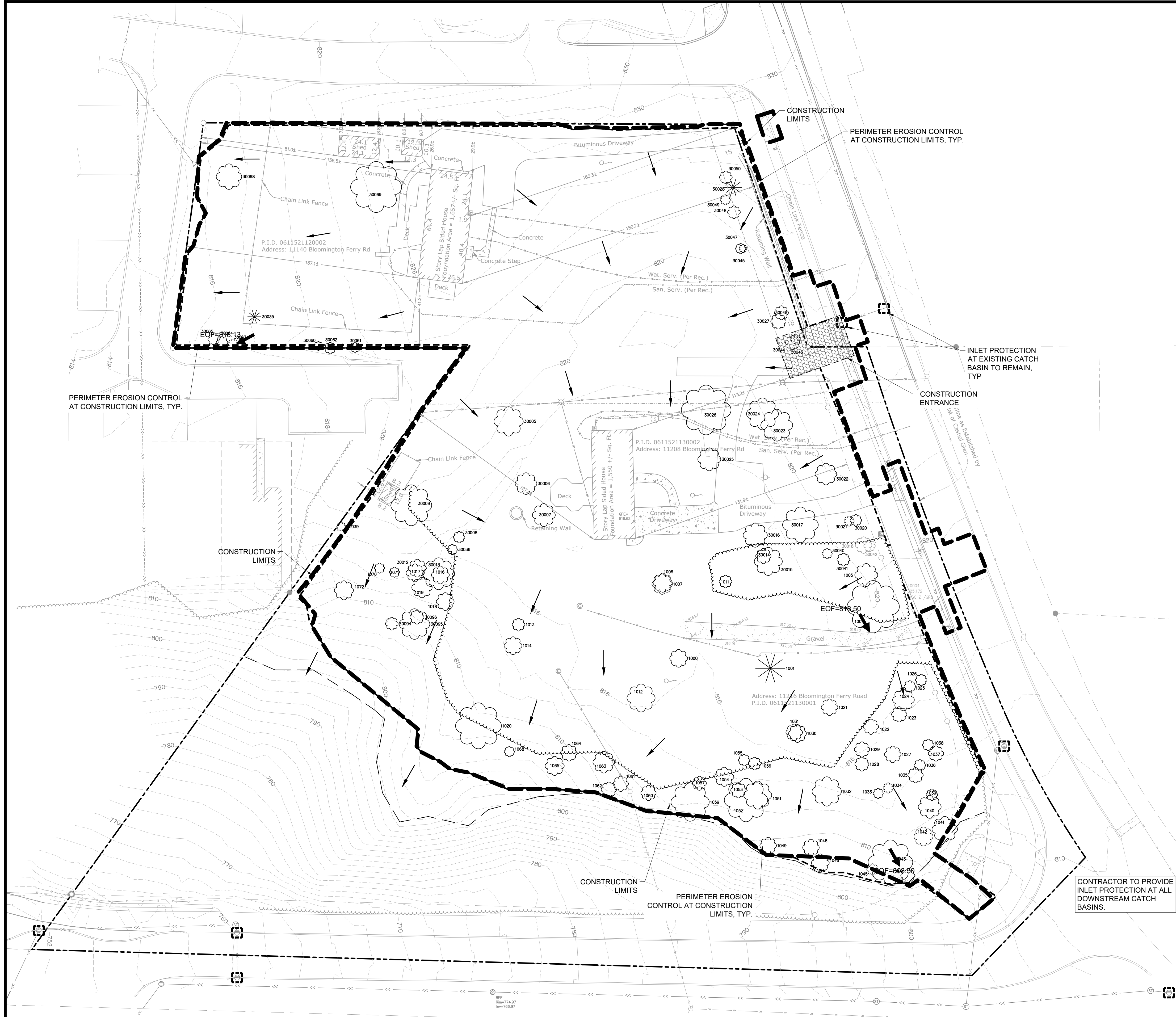
REVISION SUMMARY	
DATE	DESCRIPTION

PROJECT MANAGER	MATT PAVAK
CONTACT NUMBER	612-615-0060 X 701
DRAWN BY	WMB-AM-SH
REVIEWED BY	MP
PROJECT NUMBER	15143

REVISION SUMMARY	
DATE	DESCRIPTION

SWPPP - EXISTING CONDITIONS

**SW1.0**



PERIMETER EROSION CONTROL AT CONSTRUCTION LIMITS, TYP.

CONSTRUCTION LIMITS  
PERIMETER EROSION CONTROL AT CONSTRUCTION LIMITS, TYP.

INLET PROTECTION AT EXISTING CATCH BASIN TO REMAIN, TYP

CONSTRUCTION ENTRANCE

CONTRACTOR TO PROVIDE INLET PROTECTION AT ALL DOWNSTREAM CATCH BASINS.

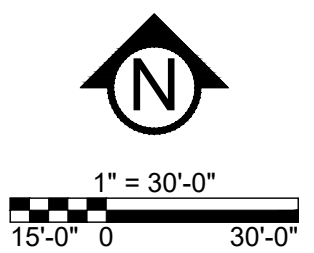
CONSTRUCTION LIMITS  
PERIMETER EROSION CONTROL AT CONSTRUCTION LIMITS, TYP.

**SWPPP LEGEND:**

- 1126 --- EX. 2' CONTOUR ELEVATION INTERVAL
- DRAINAGE ARROW
- SILT FENCE / BIOROLL - GRADING LIMIT
- INLET PROTECTION
- ▨ STABILIZED CONSTRUCTION ENTRANCE



Know what's below.  
Call before you dig.



1" = 30'-0"  
15'-0" 0 30'-0"

**SWPPP NOTES:**

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3. ENSURE ALL INLET PROTECTION DEVICES HAVE EMERGENCY OVERFLOW PROTECTION TO PREVENT FLOODING.
4. ONLY PROTECT INLETS THAT NEED TO BE PROTECTED.

ALL SPECIFIED EROSION AND SEDIMENT CONTROL PRACTICES, AND MEASURES CONTAINED IN THIS SWPPP ARE THE MINIMUM REQUIREMENTS. ADDITIONAL PRACTICES MAY BE REQUIRED DURING THE COURSE OF CONSTRUCTION.

Note 2 appears to be from a different project. Remove note if it does not apply to this project.

**PRELIMINARY:  
NOT FOR  
CONSTRUCTION**

**WEST HAVEN**  
11140 BLOOMINGTON FERRY RD, BLOOMINGTON, MN 55338  
OWNER: CARLSTON DEVELOPMENTS / RYAN JOHNSON  
601 FULSBURY AVE S, BLOOMINGTON, MN 55425

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.

Matthew R. Pavak  
DATE: 03-26-2026 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY	
DATE	DESCRIPTION
3-26-26	PRELIMINARY/FINAL PLAT SUBMITTAL

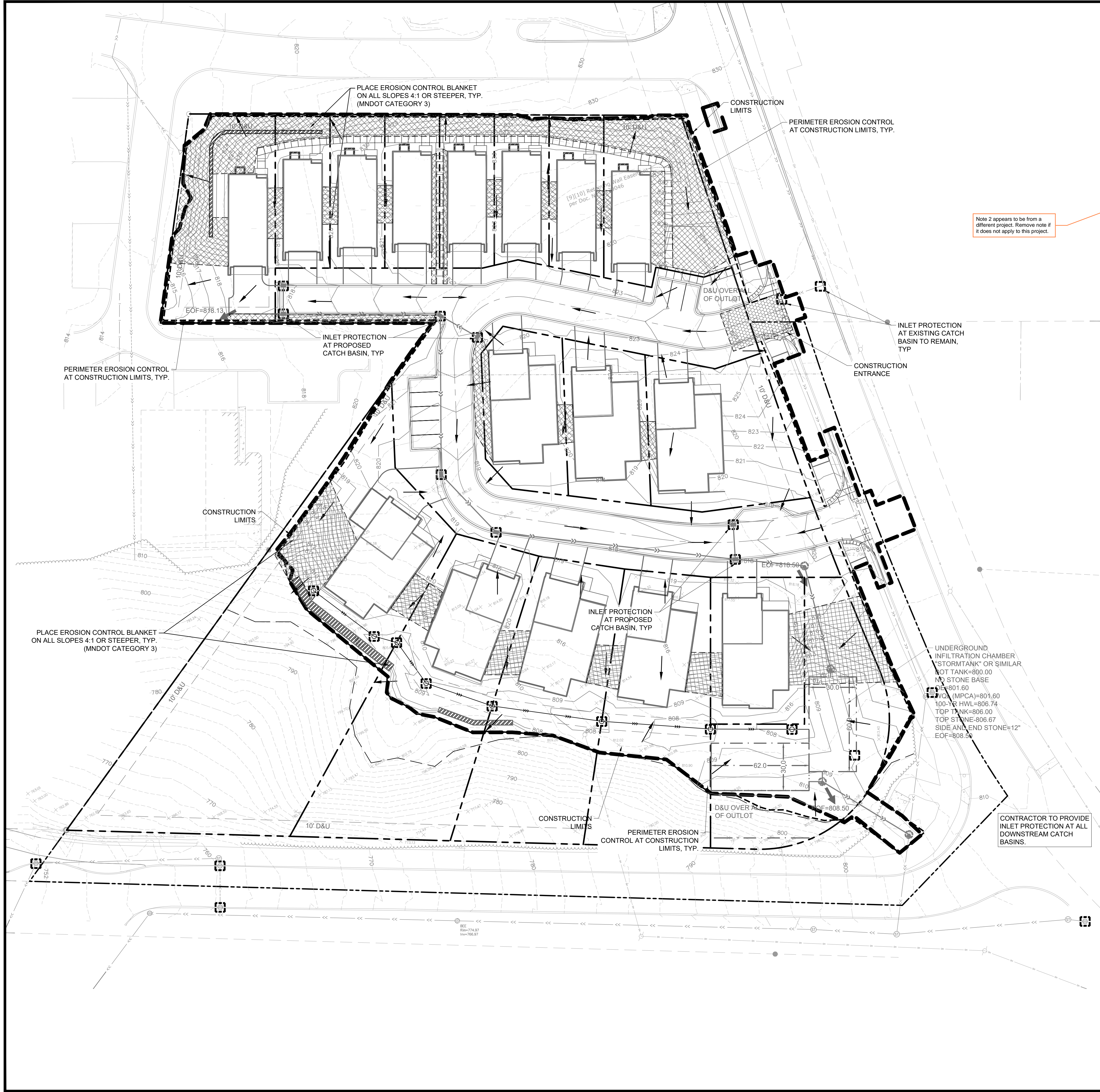
REVISION SUMMARY	
DATE	DESCRIPTION

PROJECT MANAGER: MATT PAVAK  
PROJECT NUMBER: 23-0508A & 201  
DRAWN BY: WMS-AM-SN  
REVIEWED BY: MP  
PROJECT NUMBER: 15143

REVISION SUMMARY	
DATE	DESCRIPTION

SWPPP - PROPOSED CONDITIONS

**SW1.1**



**SWPPP LEGEND:**

----- 11.36 -----	EX. 2' CONTOUR ELEVATION INTERVAL
----- 11.36 -----	2.0' CONTOUR ELEVATION INTERVAL
→	DRAINAGE ARROW
-----	SILT FENCE / BIOROLL - GRADING LIMIT
□	INLET PROTECTION
▨	STABILIZED CONSTRUCTION ENTRANCE
▨	EROSION CONTROL BLANKET

**811**  
Know what's below.  
Call before you dig.

1" = 30'-0"  
15'-0" 0 30'-0"



THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED WITH A CONSTRUCTION ACTIVITY THAT DISTURBS SITE SOIL OR WHO IMPLEMENTS A POLLUTANT CONTROL MEASURE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT (DATED AUGUST 1, 2018 # MNR10001) AND ANY LOCAL GOVERNING AGENCY HAVING JURISDICTION CONCERNING EROSION AND SEDIMENTATION CONTROL.

### STORMWATER DISCHARGE DESIGN REQUIREMENTS

#### SWPPP

THE NATURE OF THIS PROJECT WILL BE CONSISTENT WITH WHAT IS REPRESENTED IN THIS SET OF CONSTRUCTION PLANS AND SPECIFICATIONS. SEE THE SWPPP PLAN SHEETS AND SWPPP NARRATIVE (ATTACHMENT A CONSTRUCTION SWPPP TEMPLATE) FOR ADDITIONAL SITE SPECIFIC SWPPP INFORMATION. THE PLANS SHOW LOCATIONS AND TYPES OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL BMPs. STANDARD DETAILS ARE ATTACHED TO THIS SWPPP DOCUMENT.

THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES IS AS FOLLOWS:

1. INSTALL STABILIZED ROCK CONSTRUCTION ENTRANCE
2. INSTALLATION OF SILT FENCE AROUND SITE
3. INSTALL ORANGE CONSTRUCTION FENCING AROUND INFILTRATION AREAS
4. INSTALL INLET PROTECTION AT ALL ADJACENT AND DOWNSTREAM CATCH BASINS
5. CLEAR AND GRUB FOR TEMPORARY SEDIMENT BASIN / POND INSTALL
6. CONSTRUCT TEMPORARY SEDIMENT BASIN / POND (SECTION 14)
7. CLEAR AND GRUB REMAINDER OF SITE
8. STRIP AND STOCKPILE TOPSOIL
9. ROUGH GRADING OF SITE
10. STABILIZE DENUDED AREAS AND STOCKPILES
11. INSTALL SANITARY SEWER, WATER MAIN STORM SEWER AND SERVICES
12. INSTALL SILT FENCE / INLET PROTECTION AROUND CBS
13. INSTALL STREET SECTION
14. INSTALL CURB AND GUTTER
15. BITUMINOUS ON STREETS
16. FINAL GRADE BOLLIVARDED, INSTALL SEED AND MULCH
17. REMOVE ACCUMULATED SEDIMENT FROM BASIN/ POND
18. FINAL GRADE POND / INFILTRATION BASINS (DO NOT COMPACT SOILS IN INFILTRATION AREAS.)
19. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED BY EITHER SEED OR SOIL/LANDSCAPING, REMOVE SILT FENCE AND RESEED ANY AREAS DISTURBED BY THE REMOVAL.

#### RECORDS RETENTION:

THE SWPPP (ORIGINAL OR COPIES) INCLUDING, ALL CHANGES TO IT, AND INSPECTIONS AND MAINTENANCE RECORDS MUST BE KEPT AT THE SITE DURING CONSTRUCTION BY THE PERMITTEE WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS.

ALL OWNER(S) MUST KEEP THE SWPPP, ALONG WITH THE FOLLOWING ADDITIONAL RECORDS, ON FILE FOR THREE (3) YEARS AFTER SUBMITTAL OF THE NOT AS OUTLINED IN SECTION 4. THIS DOES NOT INCLUDE ANY RECORDS AFTER SUBMITTAL OF THE NOT.

1. THE FINAL SWPPP;
2. ANY OTHER STORMWATER RELATED PERMITS REQUIRED FOR THE PROJECT;
3. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION (SEE SECTION 11, INSPECTIONS AND MAINTENANCE);
4. ALL PERMANENT OPERATION AND MAINTENANCE AGREEMENTS THAT HAVE BEEN IMPLEMENTED, INCLUDING ALL RIGHT OF WAY, CONTRACTS, COVENANTS AND OTHER BINDING REQUIREMENTS REGARDING PERPETUAL MAINTENANCE; AND
5. ALL REQUIRED CALCULATIONS FOR DESIGN OF THE TEMPORARY AND PERMANENT STORMWATER MANAGEMENT SYSTEMS.

#### SWPPP IMPLEMENTATION RESPONSIBILITIES:

1. THE OWNER AND CONTRACTOR ARE PERMITTEE(S) AS IDENTIFIED BY THE NPDES PERMIT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE IMPLEMENTATION OF THE SWPPP, INCLUDING THE ACTIVITIES OF ALL OF THE CONTRACTORS SUBCONTRACTORS.
3. CONTRACTOR SHALL PROVIDE A PERSON(S) KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPs TO OVERSEE ALL INSTALLATION AND MAINTENANCE OF BMPs AND IMPLEMENTATION OF THE SWPPP
4. CONTRACTOR SHALL PROVIDE PERSON(S) MEETING THE TRAINING REQUIREMENTS OF THE NPDES PERMIT TO CONDUCT INSPECTIONS AND MAINTENANCE OF EROSION PREVENTION AND SEDIMENT CONTROL BMPs IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ONSITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY MPCA. CONTRACTOR SHALL PROVIDE TRAINING DOCUMENTATION FOR THESE INDIVIDUAL(S) AS REQUIRED BY THE NPDES PERMIT. THIS TRAINING DOCUMENTATION SHALL BE RECORDED IN WR WITH THE SWPPP BEFORE THE START OF CONSTRUCTION OR AS SOON AS THE PERSONNEL FOR THE PROJECT HAVE BEEN DETERMINED. DOCUMENTATION SHALL INCLUDE:
  - 4.1. NAMES OF THE PERSONNEL ASSOCIATED WITH THE PROJECT THAT ARE REQUIRED TO BE TRAINED PER SECTION 21 OF THE PERMIT.
  - 4.2. DATES OF TRAINING AND NAME OF INSTRUCTOR AND ENTITY PROVIDING TRAINING.
  - 4.3. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING.
5. FOLLOWING FINAL STABILIZATION AND THE TERMINATION OF COVERAGE FOR THE NPDES PERMIT, THE OWNER IS EXPECTED TO FURNISH LONG TERM OPERATION AND MAINTENANCE (O & M) OF THE PERMANENT STORM WATER MANAGEMENT SYSTEM.

### CONSTRUCTION ACTIVITY REQUIREMENTS

#### SWPPP AMENDMENTS (SECTION 6):

1. ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES, CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS.
2. PERMITTEES MUST AEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPs TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER.
3. PERMITTEES MUST AEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPs AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MPCA OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G. NUISANCE CONDITIONS AS DEFINED IN MINN. R. 7050.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TMDL.

#### BMP SELECTION AND INSTALLATION (SECTION 7):

1. PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BMPs IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES.

#### EROSION PREVENTION (SECTION 8):

1. BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED.
2. PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING).
3. PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE.
4. FOR PAVEMENTS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.
5. PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE. PERMITTEES MUST COMPLETE STABILIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES.
6. TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES.
7. PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT.
8. PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM.

9. PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11.

#### SEDIMENT CONTROL (SECTION 9):

1. PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPs ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGINS AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER.
2. IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPs TO ELIMINATE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN ITEM 6.3.
3. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE CONDITIONS.
4. A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPLAND PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER.
5. PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES. IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED, PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
6. PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPs DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET.
7. PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP.
8. PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER.
9. PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER.
10. PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE.
11. PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPs ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING OUT OF THE STREET.
12. PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14.
13. IN ANY AREAS OF THE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION.
14. PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE.
15. PERMITTEES MUST DIRECT DISCHARGES FROM BMPs TO VEGETATED AREAS UNLESS INFEASIBLE.
16. PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER.
17. PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.

#### DEWATERING AND BASIN DRAINING (SECTION 10):

1. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LOADED WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (E.G. MNDOT SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPs SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES.
2. IF PERMITTEES MUST CONTAIN OIL, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE.
3. PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INTRODUCTION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND.
4. IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION.

#### INSPECTIONS AND MAINTENANCE (SECTION 11):

1. PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21.2.B, WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 1/2 INCH IN 24 HOURS.
2. PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPs.
3. PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPs WITH FUNCTIONAL BMPs BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA.
4. DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURBS AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITTEES MUST COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS.
5. PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS.
6. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE.
7. PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME.
8. PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B.
9. PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:
  - a. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE, OR
  - b. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS WARRANT OR
  - c. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST.
10. PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED. THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:
  - a. DATE AND TIME OF INSPECTIONS; AND
  - b. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
  - c. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND
  - d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND
  - e. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT. PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SOURCES; AND

1. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL, SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND
9. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS.

#### POLLUTION PREVENTION MANAGEMENT (SECTION 12):

1. PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. PERMITTEES ARE NOT REQUIRED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER.
2. PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
3. PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE.
4. PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035.
5. PERMITTEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. PERMITTEES MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7047.
6. PERMITTEES MUST TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE. PERMITTEES MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS. PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.
7. PERMITTEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST CONTAIN RUNOFF FROM THE WASHING AREA IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND MUST DISPOSE WASTE FROM THE WASHING ACTIVITY PROPERLY. PERMITTEES MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS.
8. PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.G., CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES FROM CONTACTING THE GROUND AND MUST DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. PERMITTEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY.

#### PERMIT TERMINATION (SECTION 4 AND SECTION 13):

1. PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE.
2. PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTEES' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT.
3. PERMITTEES MUST COMPLETE ALL CONSTRUCTION ACTIVITY AND MUST INSTALL PERMANENT COVER OVER ALL AREAS PRIOR TO SUBMITTING THE NOT. VEGETATIVE COVER MUST CONSIST OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70 PERCENT OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION, SUCH AS IMPERVIOUS SURFACES OR THE BASE OF A SAND FILTER.
4. PERMITTEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 19 AND IS OPERATING AS DESIGNED.
5. PERMITTEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT.
6. PERMITTEES MUST REMOVE ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPs PRIOR TO SUBMITTING THE NOT. PERMITTEES MAY LEAVE BMPs DESIGNED TO DECOMPOSE ON-SITE IN PLACE.
7. FOR RESIDENTIAL CONSTRUCTION ONLY, PERMIT COVERAGE TERMINATES ON INDIVIDUAL LOTS IF THE STRUCTURES ARE FINISHED AND TEMPORARY EROSION PREVENTION AND DOWNGRADIENT PERIMETER CONTROL IS COMPLETE, THE RESIDENCE SELLS TO THE HOMEOWNER, AND THE PERMITTEE DISTRIBUTES THE MPCA'S HOMEOWNER FACT SHEET TO THE HOMEOWNER.
8. FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROPLAND), PERMITTEES MUST RETURN THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOT.

#### SEED NOTES:

ALL SEED MIXES AND APPLICATION SHALL BE IN ACCORDANCE WITH THE MNDOT SEEDING MANUAL.

#### GENERAL RECOMMENDATIONS:

THE CONTRACTOR IS RESPONSIBLE TO SALVAGE AND PRESERVE EXISTING TOPSOIL NECESSARY FOR FINAL STABILIZATION AND TO ALSO MINIMIZE COMPACTION IN ALL LANDSCAPE AREAS. IMMEDIATELY BEFORE SEEDING THE SOIL SHALL BE TILLED TO A MINIMUM DEPTH OF 3 INCHES.

#### TEMPORARY EROSION CONTROL SEEDING, MULCHING & BLANKET.

- SEED
  - TEMPORARY SEED SHALL BE MNDOT SEED MIX 21-112 (WINTER WHEAT COVER CROP) FOR WINTER AND 21-111 (OATS COVER CROP) FOR SPRING/SUMMER APPLICATIONS. BOTH SEED MIXES SHALL BE APPLIED AT A SEEDING RATE OF 100 LBS/ACRE.
- MULCH
  - IMMEDIATELY AFTER SEEDING, WITHIN 24 HOURS, MNDOT TYPE 1 MULCH SHOULD BE APPLIED TO PROTECT AND ENHANCE SEED GERMINATION. MULCH SHALL BE APPLIED AT 90% COVERAGE (2 TONS PER ACRE OF STRAW MULCH)
- SLOPES
  - 3:1 (HORIZ/VERT.) OR FLATTER MULCH SHALL BE COVERED WITH MULCH
  - SLOPES STEEPER THAN 3:1 OR DITCH BOTTOMS SHALL BE COVERED WITH EROSION CONTROL BLANKET.
  - SEE PLAN FOR MORE DETAILED DITCH AND STEEP SLOPE EROSION CONTROL TREATMENTS.

### TRAINING SECTION 21

DESIGN ENGINEER: DAVID J. KNAEBLE P.E.  
TRAINING COURSE: DESIGN OF SWPPP  
TRAINING ENTITY: UNIVERSITY OF MINNESOTA  
INSTRUCTOR: JOHN CHAPMAN  
DATES OF TRAINING COURSE: 8/22/2012- 8/23/2012  
TOTAL TRAINING HOURS: 12  
DATE OF RECERTIFICATION: 4/22/22  
EXPIRATION: 5/31/2025

### OWNER INFORMATION

CARLSTON DEVELOPMENT  
601 CARLSON PARKWAY, #1050  
MINNETONKA, MN 55395  
SCOTT CARLSTON  
RYAN JOHNSON  
850 TREASURELAWN@GMAIL.COM  
BLOOMINGTON, MN 55420  
RYAN JOHNSON  
612-801-6004  
RJJOHNS@CORE4TECHNOLOGIES.COM

### AREAS AND QUANTITIES:

SITE AREA CALCULATIONS					
	EXISTING CONDITION		PROPOSED CONDITION		
IMPERVIOUS SURFACES					
BUILDING COVERAGE	3,734 SF	1.9%	32,901 SF	16.4%	
PAVEMENT	31,271 SF	15.6%	50,699 SF	25.3%	
TOTAL	35,005 SF	17.5%	83,600 SF	41.7%	1.9 AC
PERVIOUS SURFACES					
TOTAL	165,506 SF	82.5%	116,911 SF	58.3%	2.7 AC
TOTAL SITE AREA	200,511 SF	100.0%	200,511 SF	100.0%	4.6 AC
DIFFERENCE (EX. VS PROP.)	48,595 SF	24.2%			
DISTURBED AREA	136,301 SF	3.1 AC			

EROSION CONTROL QUANTITIES					
DISTURBED AREA	136,301 SF				
SILT FENCE/BIO-ROLL	2,500 LF				
EROSION CONTROL BLANKET	30,000 SF				
INLET PROTECTION DEVICES	±16 EA				

NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL DETERMINE FOR THEMSELVES THE EXACT QUANTITIES FOR BIDDING AND CONSTRUCTION.

### SWPPP CONTACT PERSON

CONTRACTOR: SWPPP INSPECTOR TRAINING:  
ALL SWPPP INSPECTIONS MUST BE PERFORMED BY A PERSON THAT MEETS THE TRAINING REQUIREMENTS OF THE NPDES CONSTRUCTION SITE PERMIT. TRAINING CREDENTIALS SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON SITE WITH THE SWPPP

### PARTY RESPONSIBLE FOR LONG TERM OPERATION AND MAINTENANCE OF PERMANENT STORM WATER MANAGEMENT SYSTEM

PERMANENT STORMWATER MANAGEMENT IS REQUIRED AS PART OF THIS PROJECT TO MEET NPDES PERMIT REQUIREMENTS. THE PROPERTY OWNER IS RESPONSIBLE FOR THE LONG TERM OPERATION AND MAINTENANCE OF THE PROPOSED STORMWATER SYSTEM.

### SWPPP ATTACHMENTS (ONLY APPLICABLE IF SITE IS 1 ACRE OR GREATER):

- CONTRACTOR SHALL OBTAIN A COPY OF THE FOLLOWING SWPPP ATTACHMENTS WHICH ARE A PART OF THE OVERALL SWPPP PACKAGE:
- ATTACHMENT A. CONSTRUCTION SWPPP TEMPLATE - SITE SPECIFIC SWPPP DOCUMENT
  - ATTACHMENT B. CONSTRUCTION STORMWATER INSPECTION CHECKLIST
  - ATTACHMENT C. MAINTENANCE PLAN FOR PERMANENT STORM WATER TREATMENT SYSTEMS
  - ATTACHMENT D. STORMWATER MANAGEMENT REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER, AVAILABLE UPON REQUEST.
  - ATTACHMENT E. GEOTECHNICAL EVALUATION REPORT - ON FILE AT THE OFFICE OF PROJECT ENGINEER, AVAILABLE UPON REQUEST.

### SUPPLEMENTARY SITE SPECIFIC EROSION CONTROL NOTES:

THESE NOTES SUPERCEDE ANY GENERAL SWPPP NOTES.

THIS PROJECT IS GREATER THAN 1.0 ACRES SO AN NPDES PERMIT IS REQUIRED AND NEEDS TO BE SUBMITTED TO THE MPCA. THE CONTRACTOR IS REQUIRED TO FOLLOW THE GUIDELINES IN THE NPDES PERMIT THROUGHOUT CONSTRUCTION.

### PROJECT NARRATIVE:

PROJECT IS A REDEVELOPMENT OF MULTIPLE EXISTING SINGLE FAMILY HOMES INTO SINGLE FAMILY VILLA DEVELOPMENT (15 UNITS). SITE, GRADING, UTILITY AND LANDSCAPE IMPROVEMENTS WILL OCCUR.

### NATIVE BUFFER NARRATIVE:

PRESERVING A 50 FOOT NATURAL BUFFER AROUND WATER BODIES IS NOT REQUIRED OF THIS PROJECT BECAUSE WATER BODIES ARE NOT LOCATED ON SITE.

### INFILTRATION NARRATIVE:

INFILTRATION IS PROVIDED AS PART OF THE PROJECTS PERMANENT STORM WATER MANAGEMENT SYSTEM.

### SOIL CONTAMINATION NARRATIVE:

SOILS ONSITE HAVE NOT BEEN IDENTIFIED AS CONTAMINATED.

### SPECIAL TMDL BMP REQUIREMENTS/ SITE SPECIFIC (IF REQUIRED):

THIS PROJECT IS WITHIN ONE MILE AND DISCHARGES TO MINNESOTA RIVER - MINNESOTA RIVER IS IDENTIFIED AS AN IMPAIRED WATER BODY PER THE MPCA'S 303(D) IMPAIRED WATERS LIST. MINNESOTA RIVER IS IMPAIRED FOR NUTRIENT EUTROPHICATION BIOLOGICAL INDICATORS. BECAUSE THIS WATER BODY IS LOCATED WITHIN ONE MILE OF THE SITE, BMPs AS DEFINED IN THE NPDES PERMIT ITEMS 23.9 AND 23.10 APPLY. THESE ARE AS FOLLOWS:

1. DURING CONSTRUCTION:
  - A. STABILIZATION OF ALL EXPOSED SOIL AREAS MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION BUT IN NO CASE COMPLETED LATER THAN SEVEN (7) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.
  - B. TEMPORARY SEDIMENT BASIN REQUIREMENTS DESCRIBED IN SECTION 14. MUST BE USED FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

### PERMANENT STABILIZATION NOTES SITE SPECIFIC:

- PERMANENT SEED MIX
  - FOR THIS PROJECT ALL AREAS THAT ARE NOT TO BE SODDED OR LANDSCAPED SHALL RECEIVE A NATIVE PERMANENT SEED MIX
  - AREAS IN BUFFERS AND ADJACENT TO OR IN WET AREAS MNDOT SEED MIX 33-261 (STORMWATER SOUTH AND WEST) AT 35 LBS PER ACRE.
  - DRY AREAS MNDOT SEED MIX 35-221 (DRY PRAIRIE GENERAL) AT 40 LBS PER ACRE.
  - MAINTENANCE SHALL BE IN ACCORDANCE TO THE MNDOT SEEDING MANUAL.



