



Rice Creek Watershed District Stormwater Management Grant Program 2025 Application Form

I. APPLICANT INFORMATION

Organization (to be named as Grantee): The City of Mounds View
Street Address: 2466 Bronson Drive
City, State, Zip: Saint Paul, MN, 55112
Tax Status: Local Government Tax ID#: 416008912
(e.g., local government, non-profit 501(c)(3), private business, etc.)

II. PROJECT CONTACT:

Project Officer: Pete Szurek Financial Officer: Don Peterson
Title: Public Works Superintendent Title: Public Works Director
Telephone: 763-286-3632 Telephone: 763-286-2062
Fax: _____ Fax: _____
Email: pete.szurek@moundsviewmn.org Email: don.peterson@moundsviewmn.org

III. PROJECT INFORMATION

Project Name: Silver View Pond Improvement Project
Location(s) of Project: 2700 County Road I
City: Mounds View State: MN County: 55112
Project Start Date: 4/1/2025 Project Completion Date: 11/28/2025
Project Type (check only those that directly apply):

- Water Quality Treatment Project Stormwater Reuse Irrigation Project
 Peak Runoff Rate Control Project Runoff Volume Control / Flood Storage Project
 Other: _____

Is a RCWD Rule C permit required for this project? YES NO UNKNOWN

IV. GRANT REQUEST

RCWD Grant Funding Requested: \$ 100,000
Applicant Match Funding Committed: \$ 375,000
State/Other Funding Committed: \$ 0.00 Source(s): NA
Total Estimated Project Cost: \$ 475,000

Would you be willing to accept grant funding in an amount less than requested? YES NO

V. SIGNATURE OF APPLICANT

I certify that the information contained within this application is true and accurate.



Signature of Project Officer

12/18/2024

Date

VI. Executive Summary / Abstract

Include a brief Executive Summary (100 words or less) that summarizes the main goals and activities of the project and the expected environmental outcomes that will be achieved. Identification of the total amount of funds being requested along with the required match. The summaries will be used in the grant review process and on the RCWD website, for projects that are funded.

The Silver View Pond Project in Mounds View improves water quality and stormwater management. It will add a forebay with an iron-enhanced filtration bench, infiltration/biofiltration basins, and pretreatment. These changes are based on the June 2023 Stormwater Pond Assessment. Utilizing 2023 field data, the project restores the pond's functionality, reducing pollutant loads, mitigating flooding, and promoting long-term environmental health. The funding request is \$100,000, with a City match of \$375,000. This initiative supports regional water quality goals, aligns with RCWD priorities, and delivers lasting benefits to the Rice Creek watershed.

VII. Description (10 points)

The RCWD has established guidelines for prioritizing projects based on location. Water quality improvement projects should be located to benefit a RCWD lake classified as either "Protection" or "Restoration" (see Table 2-4 in the RCWD 2020 Watershed Management Plan), and/or a waterbody with an approved Total Maximum Daily Load (TMDL) study or other recognized diagnostic water quality study. Flood storage and runoff rate control projects should focus on reducing peak flood elevations in known regional flood hazard areas and/or documented local problem areas. Describe the specific watershed management, water quality or quantity need(s) that the project will address and its impact on the target water resource within the District.

Name the target waterbody benefiting from this project: Silver View Pond
List and describe the Best Management Practices (BMPs) to be incorporated into this project

The Silver View Pond Improvement Project incorporates many Best Management Practices (BMPs) to improve stormwater management and water quality. These include a forebay with an iron-enhanced filtration bench, four infiltration/biofiltration basins, and two SAFL Baffle (or equivalent) sump structures. Engineers designed the forebay to capture, settle, and filter debris, sediment, and nutrients before they enter Silver View Pond, with iron filings enhancing the phosphorus removal process and improving pollutant removal efficiency. The infiltration/biofiltration basins will store stormwater temporarily. This will reduce runoff and recharge groundwater by allowing the water to infiltrate into the soil. Drain tile will be added to capture excess runoff. It will filter the water through an engineered subgrade. The SAFL Baffle sump structures will be placed to catch and remove larger particles and pollutants from street runoff before it enters the pond. This will further improve water quality. These BMPs will improve the water quality of Silver View Pond and work in tandem with the pond to improve the overall system's capacity to manage sediment and nutrients, improve stormwater management, and contribute to the long-term health of the watershed.

If applicable, describe how the project impacts or protects RCWD groundwater resources, minimizes impervious surfaces, and/or maximizes infiltration.

The Silver View Pond Improvement project provides biofiltration features that capture runoff and filter it before providing the opportunity to infiltrate into the native soils, which in Mounds View are generally sandy with high infiltration capacity. As part of the project, existing areas of turf grass and invasive species within the park will be replaced with native vegetation. These natives are diverse, deep-rooted plantings that will enhance infiltration and promote sustainable ecosystem management, benefiting both surface water and groundwater quality.

Provide drawings, maps and/or schematics which graphically illustrate the location and conceptual design of the project. **(Attach separate sheets.)**

See attached plan set.

Describe how long-term operation and maintenance of the project will be accomplished and identify the individual(s) responsible for maintenance activities if different than the project officer listed in section 2.

The City of Mounds View will integrate the Silver View Pond Improvement project's long-term operation and maintenance into its existing surface water management system. The City's Stormwater Management Fund will support maintenance work. Rates will be reviewed annually to ensure enough funding. Maintenance will follow established policies and schedules outlined in the City's Storm Water Pollution Prevention Plan (SWPPP), including semiannual street sweeping, regular inspections of BMPs, inspections of stormwater ponds every five years, and cleaning and maintenance as needed. A new Stormwater Pond Maintenance Program will be developed to include design volume estimation, sediment tracking, and triggers for sediment removal. The program will ensure ongoing monitoring of the pond's function and effectiveness. City staff will be responsible for the maintenance activities, with the support of contracted services for specialized tasks such as sediment removal and pond dredging. Employee training will continue to ensure proper operation, maintenance, and inspection of the system, as part of the City's broader stormwater management efforts.

VIII. Prioritization (15 points)

How does the project support existing regional planning efforts such as the RCWD Watershed Management Plan, municipal surface water management plans, TMDLs, or other recognized diagnostic studies? Is the project included on the Member Community Project List (Appendix G) within the RCWD Watershed Management Plan? Please provide citations where possible.

The Silver View Pond Improvement project supports several regional planning efforts, including the RCWD Watershed Management Plan and the City of Mounds View's Local Surface Water Management Plan (LSWMP). It aligns with the broader goal of improving water quality and mitigating pollution to comply with Total Maximum Daily Load (TMDL) regulations. Specifically, the project contributes to addressing water quality issues related to impaired waters in the region such as Rice Creek and Long Lake, which are listed on the MPCA's 303(d) list of impaired waters. By improving stormwater filtration and reducing nutrient loading through the installation of a forebay and infiltration basins, the project helps reduce the impact of pollutants, such as phosphorus and sediment, which contribute to impairments in these waterbodies.

While not explicitly listed in Appendix G of the RCWD Watershed Management Plan, the Silver View Pond project aligns with the objectives outlined in both the RCWD Watershed Management Plan and the City's LSWMP to restore water quality and address TMDL requirements for local and regional water bodies. It addresses three of the issues cited in the updated 2020 WMP Tables ES-1:

- *Water Quality Management, Protecting and/or improving the water quality of District streams, rivers, lakes, and other watercourses:* The proposed BMPs address the issues of *Accelerated Sedimentation* and *Nutrient Enrichment*. Wetland restoration around the pond addresses the issue of *Wetlands*.
- *Collaborations, Developing and maintaining positive collaborative relationships and agreements with other agencies and partners:* Providing funding assistance for the proposed water quality improvements would address the issue of *Collaborations with Local Partners*.
- *Communication, Outreach, and Education; Implementation of effective outreach efforts, with outreach efforts tailored to four main audiences, including the general public:* Silver View Park is one of the most visited sites in the City by the general public, and the City's plans to provide educational signage concerning water quality improvements would address the issue of *Communication Opportunities and Strategies*.

The proposed BMPs are also consistent with updated 2020 WMP Table 2-3, which classifies Long Lake (North) as a Restoration lake. The stormwater system from Silver View discharges to Rice Creek shortly upstream of Long Lake (North).

The proposed project is consistent with the City's LSWMP, specifically Goals 7.2.3 Runoff Volume, 7.2.4 Nutrient and Sediment Loading, 7.2.5 Erosion and Sediment Control, 7.3 Resource Management (specifically wetlands, groundwater, and natural areas), and 7.4.3 Public Education. It also addresses Section 8.2.1 Stormwater Pond Maintenance Program, as the program referenced in the LSWMP has not been completed, and Silver View Pond is one of the initial ponds recommended for maintenance and restoration.

Additionally, the project supports the City of Mounds View's efforts to comply with TMDLs, including the Upper Mississippi River Bacteria TMDL and the South Metro TSS TMDL, which focus on reducing Total Suspended Solids (TSS) loading. The improvements in stormwater management at Silver View Pond, including sediment removal and the addition of forebay improvements and infiltration basins, will help meet these regulatory requirements while supporting the health of the watershed.

IX. Targeting (15 points)

Describe the critical pollution or flooding sources and risks addressed by this project. Explain why the proposed project is the most cost-effective and feasible means to attain the expected resource benefits. Has a formal analysis been conducted to substantiate this position?

The Silver View Pond Improvement project addresses critical pollution and flooding risks in Mounds View. Sediments and nutrients have built up over time in the pond. This has reduced its ability to manage stormwater effectively. Pollutants now flow into downstream water bodies, such as Rice Creek and Long Lake, which are already impaired. Sediment buildup is reducing the pond's capacity. This raises the risk of flooding during heavy rain events. The project proposes to use proven BMPs. These include forebay improvements and infiltration basins that effectively capture sediments and improve stormwater filtration. These measures cut pollutant loads, boost infiltration, and help meet TMDL rules for impaired downstream waters.

This solution is the most cost effective. Silver View Pond is an existing regional basin and it collects runoff from a large, developed area. Existing municipal stormwater infrastructure conveys runoff to this location. It minimizes the need for new facilities or street restoration. It uses efficient, recognized BMPs that fit into local and regional water management plans.

Biofiltration BMPs on the south side of the pond will treat runoff from CR H2 that discharges to Silver View Pond. Biofiltration BMPs on the pond's east side will treat runoff from the H2 Flats apartments and parking lot. It currently discharges untreated to Silver View Pond. The forebay improvements will upgrade an undersized forebay. We will add an iron-enhanced filtration bench to treat runoff from Silver Lake Road, CSAH 10, and nearby commercial properties. These currently discharge untreated runoff to Silver View Pond. There is limited space for biofiltration BMPs along the pond's northeast side. So, existing CBs will be retrofitted as sump structures with SAFL Baffles (or equivalent). They will treat runoff from Lake Court Drive and the nearby residential area.

The project's benefits are supported by formal analysis, including field data collection and findings from the June 2023 Mounds View Stormwater Pond Assessment. These studies confirm that the proposed interventions at Silver View Pond represent the most practical and economical means to achieve the desired water quality improvements and mitigate flooding risks. P8 modeling of the proposed improvements was performed that indicated a proposed reduction of 8,600 lb/year of TSS and 18 lb/year of TP resulting from the proposed improvements.

X. Measurable Outcomes (20 points)

Provide a detailed estimate and description of the anticipated pollutant reduction, stormwater rate/volume reduction, groundwater withdrawal reduction, and/or other environmental or natural resource benefits associated with the project. Describe the methods and cite the sources (i.e. P8 model, HydroCAD, XP-SWMM, MIDS, MN Stormwater Manual, etc.) used to calculate or estimate the pollutant reductions and/or hydrologic outcomes. **(Mandatory for RCWD to consider your proposal!)**

The Silver View Pond Improvement Project is expected to yield significant environmental benefits, including pollution reduction, stormwater volume management, and improved groundwater recharge. Based on field surveys and sedimentation analysis conducted by Stantec in 2023, Silver View Pond currently exhibits a sediment accumulation rate of approximately 0.9% per year, with 34.7% of its storage capacity already filled with sediment. This accumulation contributes to high phosphorus and total suspended soil (TSS) levels in the watershed. By implementing forebay improvements and infiltration basins, the project will reduce loading by capturing and settling sediments more effectively, minimizing nutrient flow to downstream impaired waters such as Rice Creek and Long Lake. P8 modeling of the proposed improvements was performed that indicated a proposed reduction of 8,600 lb/year of TSS and 18 lb/year of TP resulting from the proposed improvements.

The installation of infiltration basins will also enhance stormwater management by reducing runoff volumes and increasing infiltration rates. This improves groundwater recharge and decreases peak stormwater flows, mitigating localized flood risks. Quantitative modeling using industry standard tools like ArcGIS Pro for sedimentation analysis and Triangulated Irregular Networks (TINs) for bathymetry informed the project's design, ensuring precise targeting of sediment and nutrient reductions. Additional modeling through the Minnesota Stormwater Manual guidelines has been recommended for adaptive management and long-term monitoring.

The reduction in impervious surface area through regrading and the restoration of native vegetation will further promote natural infiltration, enhancing groundwater recharge. The combined measures will provide long-term improvements in water quality, compliance with TMDL requirements, and overall watershed health.

This integrated approach leverages detailed assessments, regulatory frameworks, and community engagement to ensure the project's cost-effectiveness and environmental sustainability.

XI. Cost-Effectiveness (20 points)

Provide a detailed budget that lists each item for which funding is being requested. You must also list the sources of required local matching contributions. Why is this the most cost-effective approach to solving the problem? Have other alternatives been explored? **(Attach separate sheets if needed.)**

Item:	Cost:
Biofiltration Basins EW 04.10 and EW04.11	\$179,000
SAFL Baffles	\$52,000
Forebay with Filtration Bench	\$86,000
Biofiltration Basins EW 04.P1 and EW 04.P, along CR H2	\$31,000
Design, Admin, Public Engagement	\$127,000
Total Project Cost	\$475,000

The City’s Stormwater Management Fund will be used to provide the City match of \$375,000 for the project. This is the most cost-effective approach in that Silver View Pond is an existing regional basin that is a collection point for a large, fully-developed drainage area. Municipal stormwater infrastructure already exists to convey runoff to this location. In addition, the pond is in a park that is the most visible and visited outdoor amenity in the City, with Silver View Pond as the centerpiece. The proposed improvements will not only provide water quality improvements on a regional basis, but they will also enhance an amenity for the local community and provide an outstanding opportunity for educational signage regarding the City’s surface water management system.

XII. Project Readiness (10 points)

Please describe the anticipated timeline for implementing this project. What steps have been taken to ensure that the project can be implemented according to this timeline? Are any permits needed? (If permits are required please cite from what agency and where the project is in that process)

The project has been designed and bid, and a contractor selected. The construction substantial completion date is 8/29/2025, with final completion by 11/28/2025. A WCA wetland permit is in process; the City is the LGU. An NPDES construction permit will be obtained by the contractor; the SWPPP and erosion control plan have been completed. An erosion control permit from the City, acting as stormwater LGU, will also be obtained.

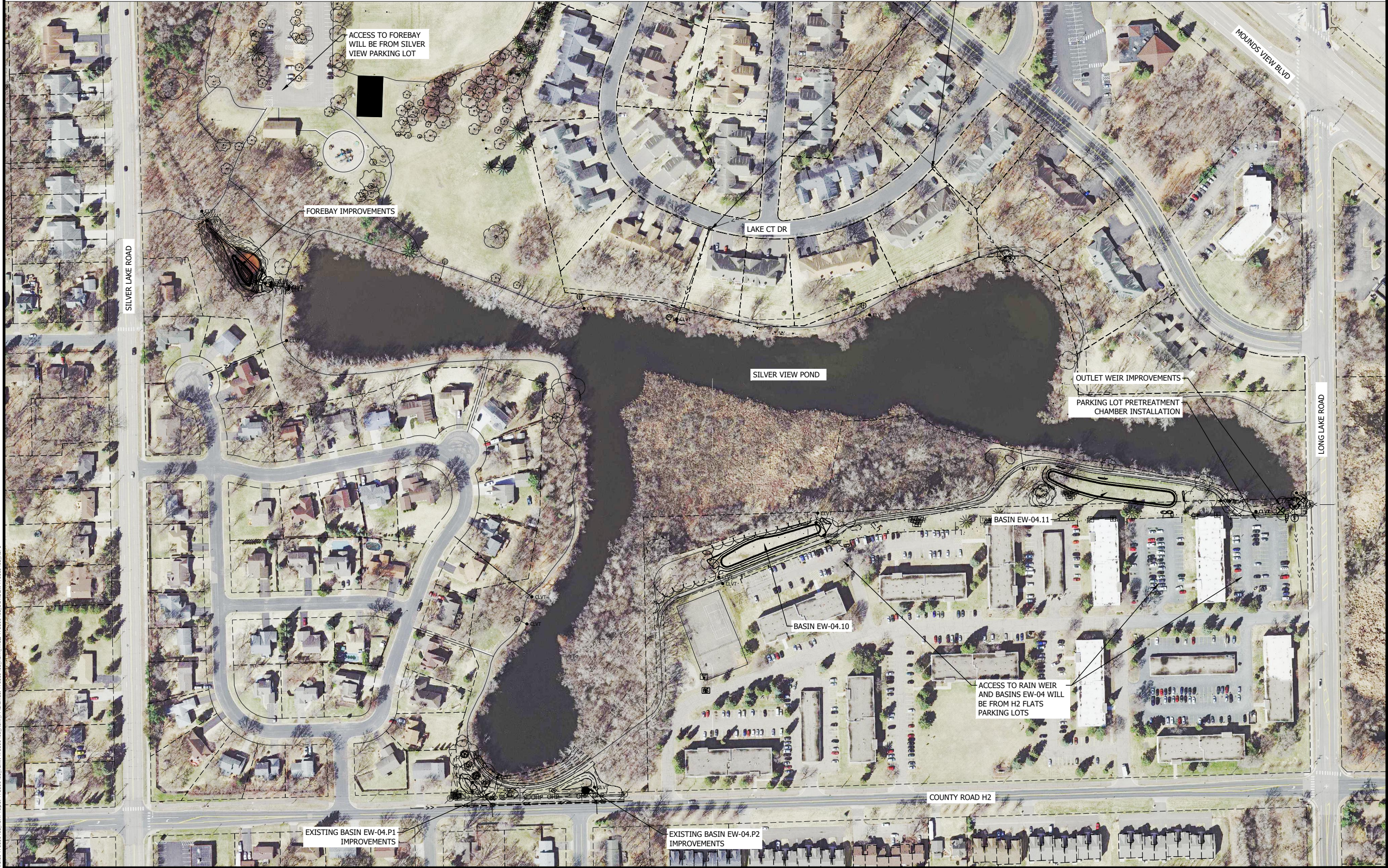
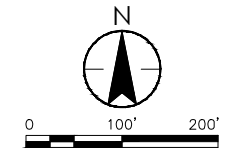
XIII. Engagement Opportunities (10 points)

Demonstrate any potential for public engagement, education and demonstration and describe what methods will be used to ensure that the purpose and success of the project are made known to the public. Applicants must incorporate a public engagement component into the project.

The Silver View Pond Improvement Project incorporates a comprehensive public engagement and education component to highlight its purpose and successes. Two public information meetings have been held to date, one on site and one at City Hall. Future community meetings and workshops will inform residents about the project's goals, timeline, and benefits while offering practical guidance on stormwater management practices, such as proper lawn care and waste disposal.

Interpretive signage will be installed around the pond to educate visitors about the role of forebays, infiltration basins, and native vegetation in improving water quality and managing stormwater. Digital outreach, including a dedicated project webpage and newsletters, will keep the public informed of the project's progress and outcomes. These efforts will ensure the community understands the project's environmental impact and encourages stewardship of local water resources.

LOCATION PLAN



THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING. ANY ERRORS OR OMISSIONS SHALL BE REPORTED TO STANTEC WITHOUT DELAY. REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY STANTEC IS FORBIDDEN.

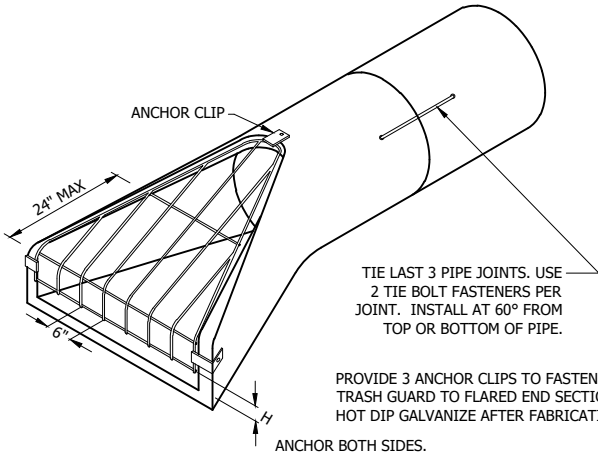
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 User: 193806465_XSXT
 Project: 193806465_XSXT

NO	REVISION	DATE

SURVEY	
DRAWN	XWM/JDP
DESIGNED	XWM
CHECKED	KAS
APPROVED	
PROJ. NO.	193806465
SHEET NUMBER	C1.01

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SEE CITY PLATE NO. STO-13 FOR RIPRAP PLACEMENT.



TIE LAST 3 PIPE JOINTS. USE 2 TIE BOLT FASTENERS PER JOINT. INSTALL AT 60° FROM TOP OR BOTTOM OF PIPE.

PROVIDE 3 ANCHOR CLIPS TO FASTEN TRASH GUARD TO FLARED END SECTION. HOT DIP GALVANIZE AFTER FABRICATION.

ANCHOR BOTH SIDES.

ISOMETRIC

PIPE SIZE	TRASH GUARD SIZING	BARS	H'	BOLTS
12"- 18"	3/4"Ø	4"	5/8"	
21"- 42"	1"Ø	6"	3/4"	
48"-72"	1 1/4"Ø	12"	1"	

No Scale

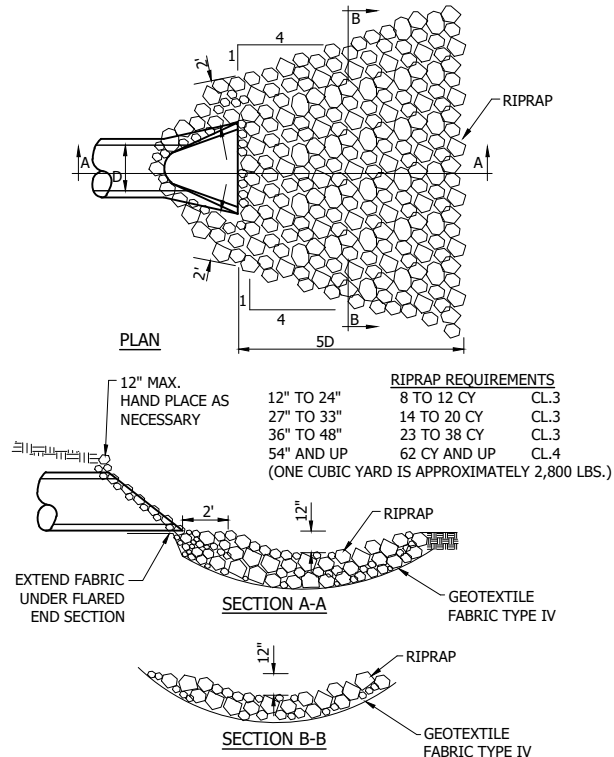


STANDARD DETAILS
FLARED END SECTION
WITH TRASH GUARD

LAST REVISION:
MAR. 2001

MOUNDS VIEW, MINNESOTA

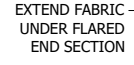
City Plate No.
STO-12



RIPRAP REQUIREMENTS

12" TO 24"	8 TO 12 CY	CL.3
27" TO 33"	14 TO 20 CY	CL.3
36" TO 48"	23 TO 38 CY	CL.3
54" AND UP	62 CY AND UP	CL.4

(ONE CUBIC YARD IS APPROXIMATELY 2,800 LBS.)

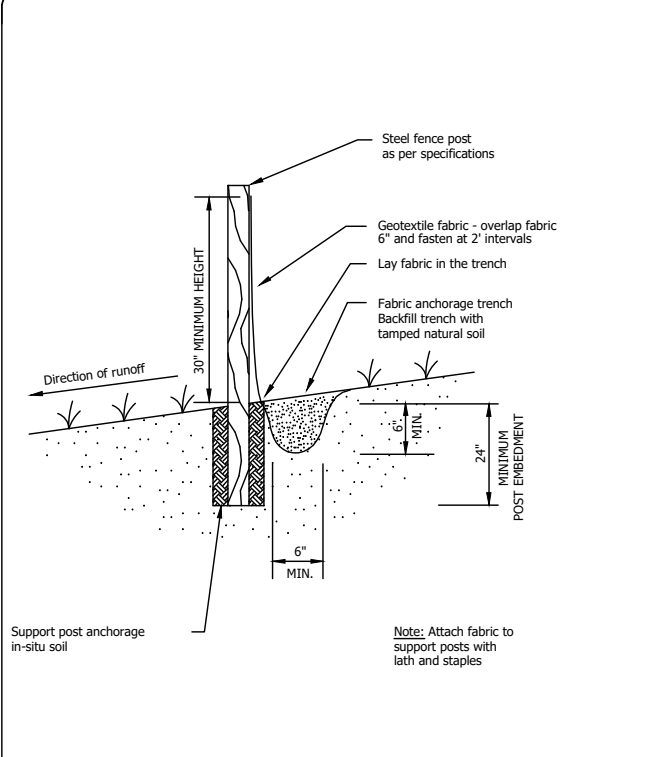


STANDARD DETAILS
RIP RAP AT OUTLETS
STORM SEWER STRUCTURE

LAST REVISION:
MAR. 2001

MOUNDS VIEW, MINNESOTA

City Plate No.
STO-13

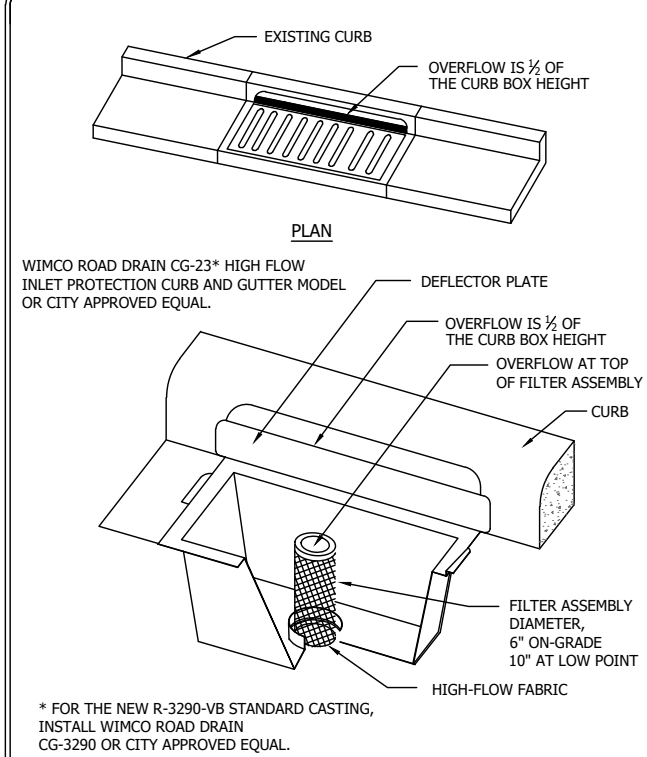


STANDARD DETAILS
SILT FENCE

LAST REVISION:
MAR. 2001

MOUNDS VIEW, MINNESOTA

City Plate No.
ERO-1



WIMCO ROAD DRAIN CG-23* HIGH FLOW
INLET PROTECTION CURB AND GUTTER MODEL
OR CITY APPROVED EQUAL.

* FOR THE NEW R-3290-VB STANDARD CASTING,
INSTALL WIMCO ROAD DRAIN
CG-3290 OR CITY APPROVED EQUAL.

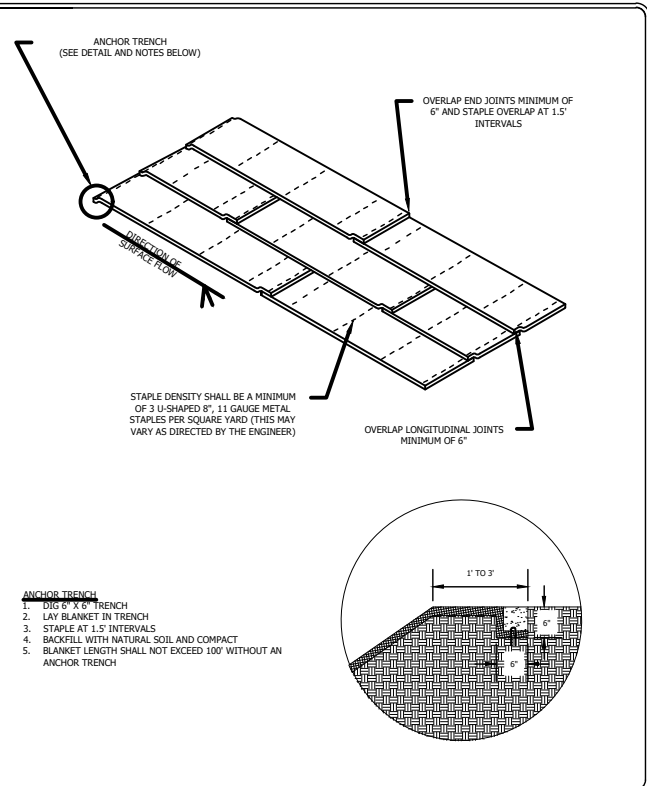


STANDARD DETAILS
CATCH BASIN INLET PROTECTION
AFTER PAVING

LAST REVISION:
MAR. 2001

MOUNDS VIEW, MINNESOTA

City Plate No.
ERO-4C



ANCHOR TRENCH
(SEE DETAIL AND NOTES BELOW)

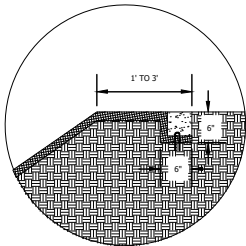
OVERLAP END JOINTS MINIMUM OF
6" AND STAPLE OVERLAP AT 1.5"
INTERVALS

STAPLE DENSITY SHALL BE A MINIMUM
OF 3 U-SHAPED 8", 11 GAUGE METAL
STAPLES PER SQUARE YARD (THIS MAY
VARY AS DIRECTED BY THE ENGINEER)

OVERLAP LONGITUDINAL JOINTS
MINIMUM OF 6"

ANCHOR TRENCH

1. DIG 6" X 6" TRENCH
2. LAY BLANKET IN TRENCH
3. STAPLE AT 1.5" INTERVALS
4. BACKFILL WITH NATURAL SOIL AND COMPACT
5. BLANKET LENGTH SHALL NOT EXCEED 100' WITHOUT AN ANCHOR TRENCH

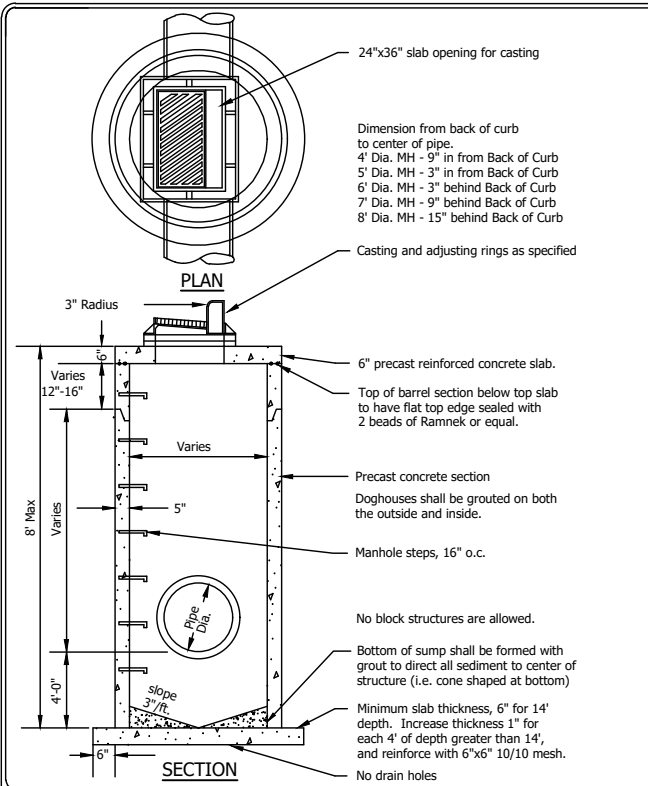


STANDARD DETAILS
EROSION CONTROL
BLANKET INSTALLATION

LAST REVISION:
MAR. 2014

MOUNDS VIEW, MINNESOTA

City Plate No.
ERO-X



24"x36" slab opening for casting

Dimension from back of curb
to center of pipe:
4" Dia. MH - 9" in from Back of Curb
5" Dia. MH - 3" in from Back of Curb
6" Dia. MH - 3" behind Back of Curb
7" Dia. MH - 9" behind Back of Curb
8" Dia. MH - 15" behind Back of Curb

Casting and adjusting rings as specified

6" precast reinforced concrete slab.

Top of barrel section below top slab
to have flat top edge sealed with
2 beads of Ramnek or equal.

Precast concrete section

Doghouses shall be grouted on both
the outside and inside.

Manhole steps, 16" o.c.

No block structures are allowed.

Bottom of sump shall be formed with
grout to direct all sediment to center
of structure (i.e. cone shaped at bottom)

Minimum slab thickness, 6" for 14'
depth. Increase thickness 1" for
each 4' of depth greater than 14',
and reinforce with 6"x6" 10/10 mesh.

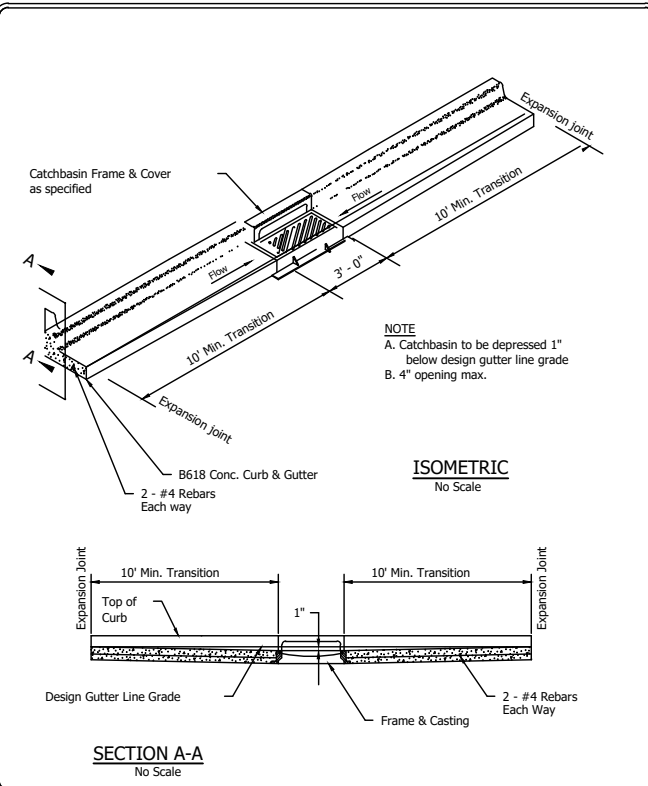
No drain holes

Last Revision:
Mar. 2001

STANDARD DETAILS
CATCHBASIN MANHOLE WITH SUMP

MOUNDS VIEW, MINNESOTA

City Plate No.
STO-21



Catchbasin Frame & Cover
as specified

Flow

Flow

Expansion Joint

10' Min. Transition

Expansion Joint

10' Min. Transition

Expansion Joint

10' Min. Transition

Top of Curb

Design Gutter Line Grade

10' Min. Transition

Expansion Joint

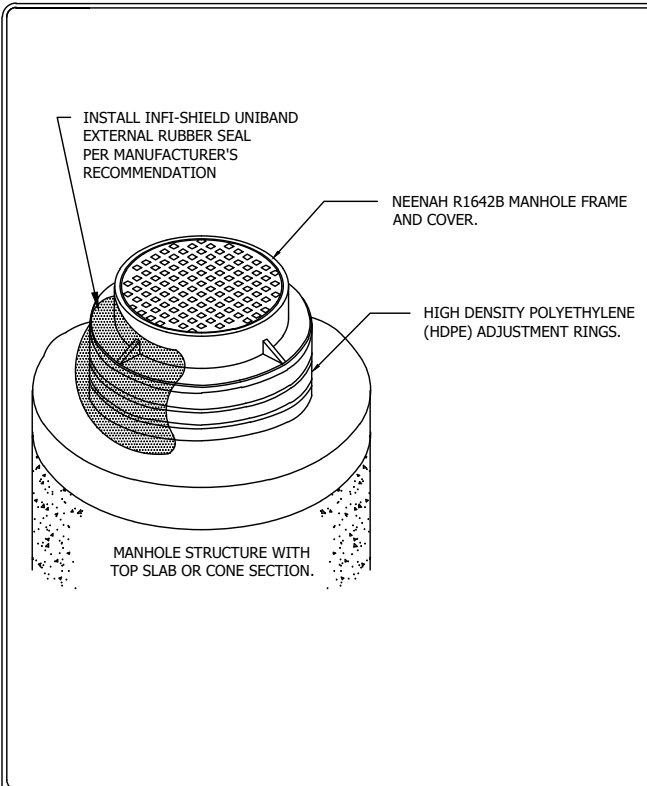
2 - #4 Rebars
Each Way

Last Revision:
Mar. 2001

STANDARD DETAILS
B618 CURB & GUTTER
CONSTRUCTION AT CATCH BASIN

MOUNDS VIEW, MINNESOTA

City Plate No.
STR-4



INSTALL INFI-SHIELD UNIBAND
EXTERNAL RUBBER SEAL
PER MANUFACTURER'S
RECOMMENDATION

NEENAH R1642B MANHOLE FRAME
AND COVER.

HIGH DENSITY POLYETHYLENE
(HDPE) ADJUSTMENT RINGS.

MANHOLE STRUCTURE WITH
TOP SLAB OR CONE SECTION.

Last Revision:
Feb. 2011

STANDARD DETAILS
MANHOLE ADJUSTMENT
HIGH DENSITY POLYETHYLENE RINGS

MOUNDS VIEW, MINNESOTA

City Plate No.
STR-18b



733 Marquette Avenue, Suite 1000
Minneapolis, MN 55402
www.stantec.com

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.
PRINT NAME: KELLIE M. SCHLEGEL
SIGNATURE: Kelli M. Schlegel
DATE: 9/30/2024 LIC. NO. 4600

CITY OF MOUNDS VIEW, MINNESOTA
SILVER VIEW POND IMPROVEMENTS
STANDARD DETAILS

NO REVISION DATE

SURVEY
DRAWN: XWM/JJP
DESIGNED: XWM
CHECKED: KAS
APPROVED

PROJ. NO. 193806465

SHEET NUMBER
C8.01

THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING. ANY ERRORS OR OMISSIONS SHALL BE REPORTED TO STANTEC WITHOUT DELAY. REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY STANTEC IS FORBIDDEN.

Plot Date: 09/30/2024 - 3:59pm
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 Xref: 193806465_BORDER; 193806465_XST; 193806465_XST; 193806465_XST



LEGEND	
	BUR OAK - PIN OAK WOODLAND
	LOWLAND HARDWOODS
	NATIVE GROUND COVER
	MOWED NONNATIVE GRASSES & SCATTERED LANDSCAPE TREES
	WET MEADOW/CARR & HARDWOOD SWAMP

LANDSCAPING NOTES:

1. BUR OAK - PIN OAK WOODLAND
 - 1.1. REMOVE AND TREAT INVASIVE AND NONNATIVE TREES (MAINLY BLACK LOCUST).
 - 1.2. REMOVE DISEASED NATIVE TREES (SUCH AS CHERRY, ASH INFECTED WITH EMERALD ASH BORER AND OAKS INFECTED WITH OAK WILT).
 - 1.3. REMOVE ELM AND BOXELDER TREES.
 - 1.4. REMOVE DOWNED TREES.
 - 1.5. REMOVE AND TREAT INVASIVE SHRUBS (MAINLY BUCKTHORN, NATIVE PRICKLY ASH, AND TARTARIAN HONEYSUCKLE).
 - 1.6. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, CREEPING BELLFLOWER, REED CANARY GRASS, AND SMOOTH BROME).
 - 1.7. SEED WITH OAK WOODLAND CUSTOM NATIVE SEED MIX (GRASS/SEDGE COMPONENT OF MIX IN SPRING, FORB COMPONENT AFTER NOVEMBER 1).
2. LOWLAND HARDWOODS
 - 2.1. REMOVE AND TREAT INVASIVE AND NONNATIVE TREES.
 - 2.2. REMOVE DISEASED NATIVE TREES (SUCH AS CHERRY, ASH INFECTED WITH EMERALD ASH BORER AND OAKS INFECTED WITH OAK WILT).
 - 2.3. REMOVE DOWNED TREES.
 - 2.4. REMOVE AND TREAT INVASIVE SHRUBS (MAINLY BUCKTHORN AND TARTARIAN HONEYSUCKLE).
 - 2.5. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, PURPLE LOOSESTRIFE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, NONNATIVE CATTAIL, VIRGINIA STICKWEED, REED CANARY GRASS, AND SMOOTH BROME).
 - 2.6. SEED WITH LOWLAND HARDWOODS CUSTOM NATIVE SEED MIX (GRASS/SEDGE COMPONENT OF MIX IN SPRING, FORB COMPONENT AFTER NOVEMBER 1) AND MULCH.
3. MOWED NONNATIVE TURF
 - 3.1. SEED ALL DISTURBED TURF AREAS NOT CALLED FOR NATIVE GROUND COVER SEED, WITH MNDOT 25-131 LOW MAINTENANCE TURF.
4. NATIVE GROUND COVER
 - 4.1. PREP AND APPLY TWO ROUNDS OF WEED SPRAY TREATMENT PER SPECIFICATIONS.
 - 4.2. SCARIFY SOILS TO PREP FOR SEED APPLICATION.
 - 4.3. SEED BASIN BOTTOMS AND SIDESLOPES WITH MESIC PRAIRIE SOUTHEAST 35-642 NATIVE SEED MIX, COVER CROP AND EROSION CONTROL BLANKET (SEE SHEETS L-102 THROUGH L-104).
 - 4.4. INSTALL NATIVE PLUGS WITHIN BOTTOM OF BASINS EW-04.10 AND EW-04.11.
 - 4.5. SEED FOREBAY AREA (L-101) WITH THE FOLLOWING SEED MIXES, COVER CROP AND MULCH: IMPOUNDMENT GENERAL 33-161 NATIVE SEED MIX FROM NWL 897 TO 899 CONTOURS, MESIC PRAIRIE SOUTHEAST 35-642 UPLAND OF 899 CONTOUR IN FULL TO PARTIAL SUN AREAS, AND WOODLAND EDGE SOUTH & WEST 36-211 MODIFIED IN SHADE AREAS.
 - 4.6. SEED ALL OTHER AREAS WITH POLLINATOR PLOT URBAN SE 38-631 NATIVE SEED MIX, COVER CROP AND MULCH.
5. WET MEADOW/CARR AND HARDWOOD SWAMP
 - 5.1. REMOVE INVASIVE SHRUBS (MAINLY BUCKTHORN).
 - 5.2. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, PURPLE LOOSESTRIFE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, NONNATIVE CATTAIL, REED CANARY GRASS, AND SMOOTH BROME).
 - 5.3. SEED WITH RIPARIAN SOUTH AND WEST 34-265, MODIFIED NATIVE SEED MIX, COVER CROP AND MULCH.

733 Marquette Avenue, Suite 1000
 Minneapolis, MN 55402
 www.stantec.com

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.

PRINT NAME: SARAH HARDING
 SIGNATURE:
 DATE: 09/30/2024 LIC. NO. 48972

CITY OF MOUNDS VIEW, MINNESOTA
 SILVER VIEW POND IMPROVEMENTS
 LANDSCAPING PLAN OVERVIEW

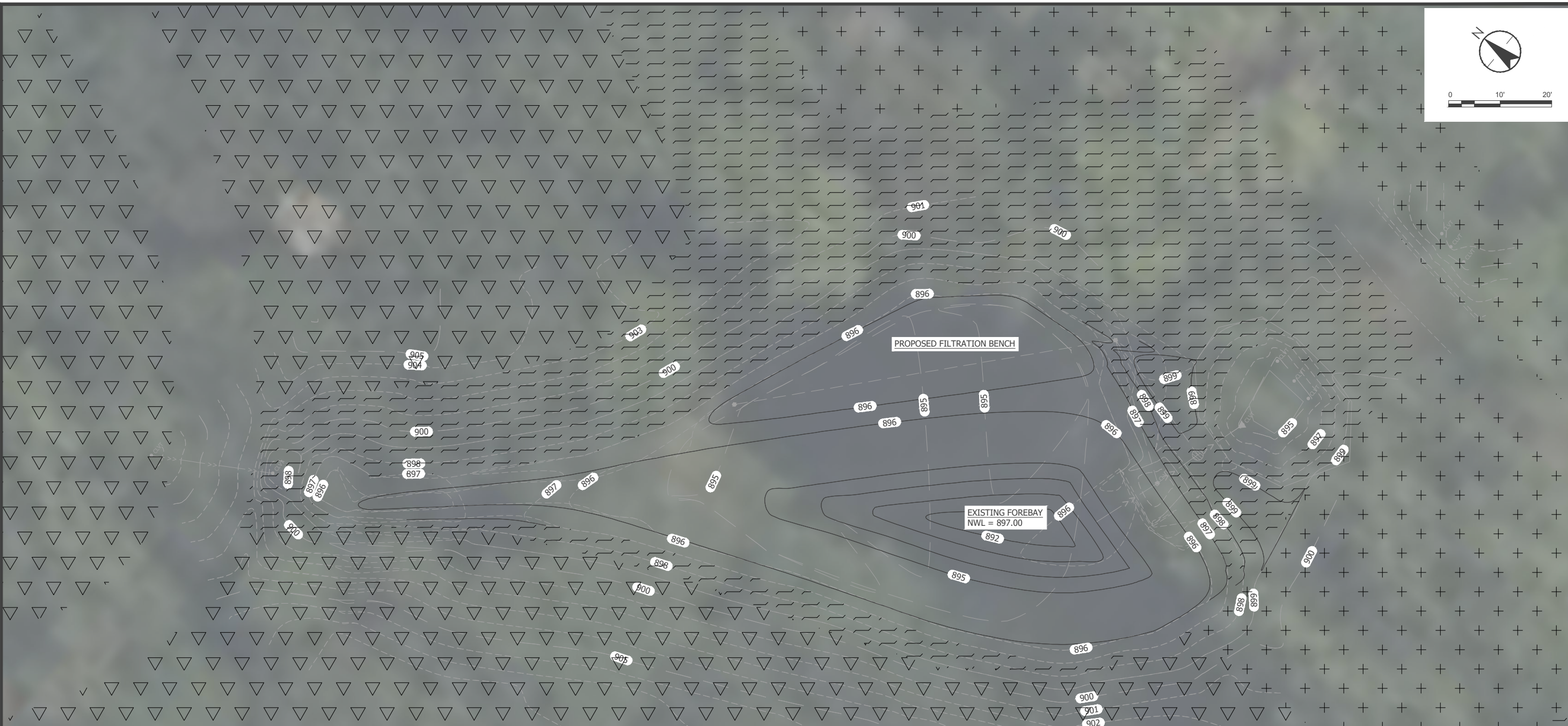
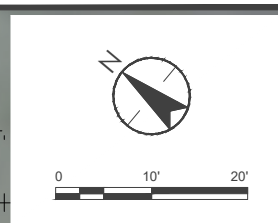
NO.	REVISION	DATE

SURVEY	JRP
DRAWN	JRP
DESIGNED	XWM
CHECKED	KAS
APPROVED	SEH
PROJ. NO.	193806465

SHEET NUMBER
L-100

THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING. ANY ERRORS OR OMISSIONS SHALL BE REFERRED TO STANTEC WITHOUT DELAY. STANTEC SHALL NOT BE RESPONSIBLE FOR ANY DAMAGE TO OR LOSS OF ANY PROPERTY OR PERSON OR FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY STANTEC'S PERMISSION.

Plot Date: 09/30/2024 - 4:02pm
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 User: jh...
 Xref: 193806465_BORDER; 193806465_XREF; 193806465_XREF; 193806465_XREF



LANDSCAPING NOTES:

1. BUR OAK - PIN OAK WOODLAND
 - 1.1. REMOVE AND TREAT INVASIVE AND NONNATIVE TREES (MAINLY BLACK LOCUST).
 - 1.2. REMOVE DISEASED NATIVE TREES (SUCH AS CHERRY, ASH INFECTED WITH EMERALD ASH BORER AND OAKS INFECTED WITH OAK WILT).
 - 1.3. REMOVE ELM AND BOXELDER TREES.
 - 1.4. REMOVE DOWNED TREES.
 - 1.5. REMOVE AND TREAT INVASIVE SHRUBS (MAINLY BUCKTHORN, NATIVE PRICKLY ASH, AND TARTARIAN HONEYSUCKLE).
 - 1.6. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, CREEPING BELLFLOWER, REED CANARY GRASS, AND SMOOTH BROME).
 - 1.7. SEED WITH OAK WOODLAND CUSTOM NATIVE SEED MIX (GRASS/SEDGE COMPONENT OF MIX IN SPRING, FORB COMPONENT AFTER NOVEMBER 1).
2. LOWLAND HARDWOODS
 - 2.1. REMOVE AND TREAT INVASIVE AND NONNATIVE TREES.
 - 2.2. REMOVE DISEASED NATIVE TREES (SUCH AS CHERRY, ASH INFECTED WITH EMERALD ASH BORER AND OAKS INFECTED WITH OAK WILT).
 - 2.3. REMOVE DOWNED TREES.
 - 2.4. REMOVE AND TREAT INVASIVE SHRUBS (MAINLY BUCKTHORN AND TARTARIAN HONEYSUCKLE).
- 2.5. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, PURPLE LOOSESTRIFE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, NONNATIVE CATTAIL, VIRGINIA STICKWEED, REED CANARY GRASS, AND SMOOTH BROME).
- 2.6. SEED WITH LOWLAND HARDWOODS CUSTOM NATIVE SEED MIX (GRASS/SEDGE COMPONENT OF MIX IN SPRING, FORB COMPONENT AFTER NOVEMBER 1) AND MULCH.
3. NATIVE GROUND COVER
 - 3.1. PREP AND APPLY TWO ROUNDS OF WEED SPRAY TREATMENT PER SPECIFICATIONS.
 - 3.2. SCARIFY SOILS TO PREP FOR SEED APPLICATION.
 - 3.3. SEED BASIN BOTTOMS AND SIDESLOPES WITH MESIC PRAIRIE SOUTHEAST 35-642 NATIVE SEED MIX, COVER CROP AND EROSION CONTROL BLANKET (SEE SHEETS L-102 THROUGH L-104).
 - 3.4. INSTALL NATIVE PLUGS WITHIN BOTTOM OF BASINS EW-04.10 AND EW-04.11.
 - 3.5. SEED FOREBAY AREA (L-101) WITH THE FOLLOWING SEED MIXES, COVER CROP AND MULCH: IMPOUNDMENT GENERAL 33-161 NATIVE SEED MIX FROM NWL 897 TO 899 CONTOURS, MESIC PRAIRIE SOUTHEAST 35-642 UPLAND OF 899 CONTOUR IN FULL TO PARTIAL SUN AREAS, AND WOODLAND EDGE SOUTH & WEST 36-211 MODIFIED IN SHADE AREAS.
 - 3.6. SEED ALL OTHER AREAS WITH POLLINATOR PLOT URBAN SE 38-631 NATIVE SEED MIX, COVER CROP AND MULCH.

LEGEND

- BUR OAK - PIN OAK WOODLAND
- LOWLAND HARDWOODS
- NATIVE GROUND COVER

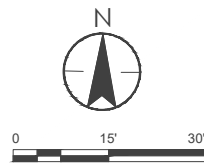
I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 PRINT NAME: SARAH HARDING
 SIGNATURE:
 DATE: 09/30/2024 LIC. NO. 48972

CITY OF MOUNDS VIEW, MINNESOTA
SILVER VIEW POND IMPROVEMENTS
 LANDSCAPING PLAN (1 OF 4)

NO.	REVISION	DATE

SURVEY	JRP
DRAWN	XWM
CHECKED	KAS
APPROVED	SEH
PROJ. NO.	193806465
SHEET NUMBER	L-101

THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING. ANY ERRORS OR OMISSIONS SHALL BE REPORTED TO STANTEC WITHOUT DELAY. NO REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY STANTEC IS FORBIDDEN.



SILVER VIEW POND

INSTALL NATIVE PLUGS AT 2-FT ON CENTER SPACING THROUGHOUT BOTTOM OF BASIN (895 CONTOUR). REFER TO SPECIFICATIONS.

BASIN EW-04.11

2655 SCOTLAND COURT

2651 SCOTLAND COURT

LANDSCAPING NOTES:

1. LOWLAND HARDWOODS

- 1.1. REMOVE AND TREAT INVASIVE AND NONNATIVE TREES.
- 1.2. REMOVE DISEASED NATIVE TREES (SUCH AS CHERRY, ASH INFECTED WITH EMERALD ASH BORER AND OAKS INFECTED WITH OAK WILT).
- 1.3. REMOVE DOWNED TREES.
- 1.4. REMOVE AND TREAT INVASIVE SHRUBS (MAINLY BUCKTHORN AND TARTARIAN HONEYSUCKLE).
- 1.5. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, PURPLE LOOSESTRIFE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, NONNATIVE CATTAIL, VIRGINIA STICKWEED, REED CANARY GRASS, AND SMOOTH BROME).
- 1.6. SEED WITH LOWLAND HARDWOODS CUSTOM NATIVE SEED MIX (GRASS/SEDGE COMPONENT OF MIX IN SPRING, FORB COMPONENT AFTER NOVEMBER 1) AND MULCH.

2. NATIVE GROUND COVER

- 2.1. PREP AND APPLY TWO ROUNDS OF WEED SPRAY TREATMENT PER SPECIFICATIONS.
- 2.2. SCARIFY SOILS TO PREP FOR SEED APPLICATION.
- 2.3. SEED BASIN BOTTOMS AND SIDESLOPES WITH MESIC PRAIRIE SOUTHEAST 35-642 NATIVE SEED MIX, COVER CROP AND EROSION CONTROL BLANKET (SEE SHEETS L-102 THROUGH L-104).
- 2.4. INSTALL NATIVE PLUGS WITHIN BOTTOM OF BASINS EW-04.10 AND EW-04.11.
- 2.5. SEED FOREBAY AREA (L-101) WITH THE FOLLOWING SEED MIXES, COVER CROP AND MULCH: IMPOUNDMENT GENERAL 33-161 NATIVE SEED MIX FROM NWL 897 TO 899 CONTOURS, MESIC PRAIRIE SOUTHEAST 35-642 UPLAND OF 899 CONTOUR IN FULL TO PARTIAL SUN AREAS, AND WOODLAND EDGE SOUTH & WEST 36-211 MODIFIED IN SHADE AREAS.
- 2.6. SEED ALL OTHER AREAS WITH POLLINATOR PLOT URBAN SE 38-631 NATIVE SEED MIX, COVER CROP AND MULCH.

LEGEND

- LOWLAND HARDWOODS
- NATIVE GROUND COVER

CITY OF MOUNDS VIEW, MINNESOTA
SILVER VIEW POND IMPROVEMENTS
LANDSCAPING PLAN (3 OF 4)

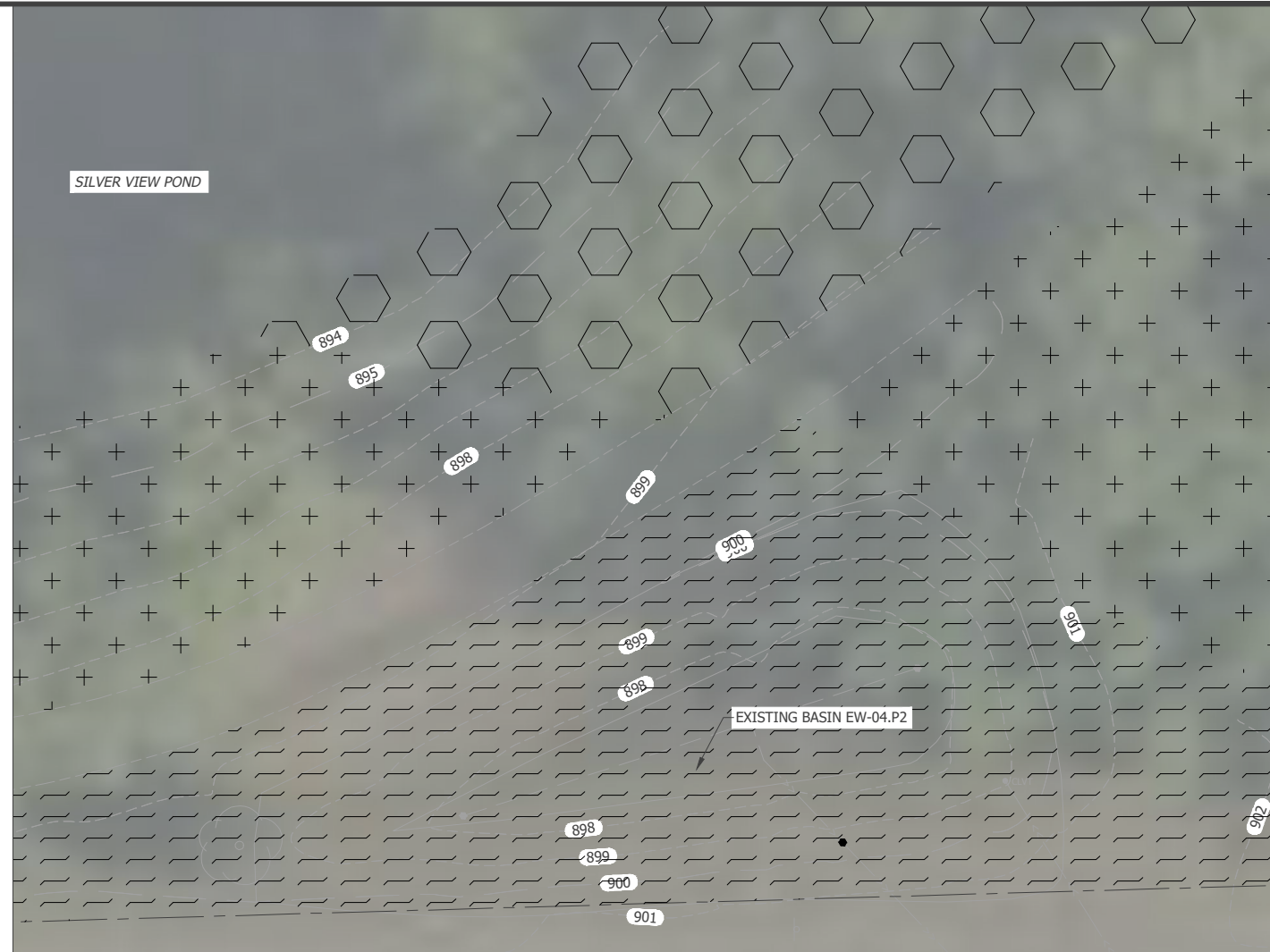
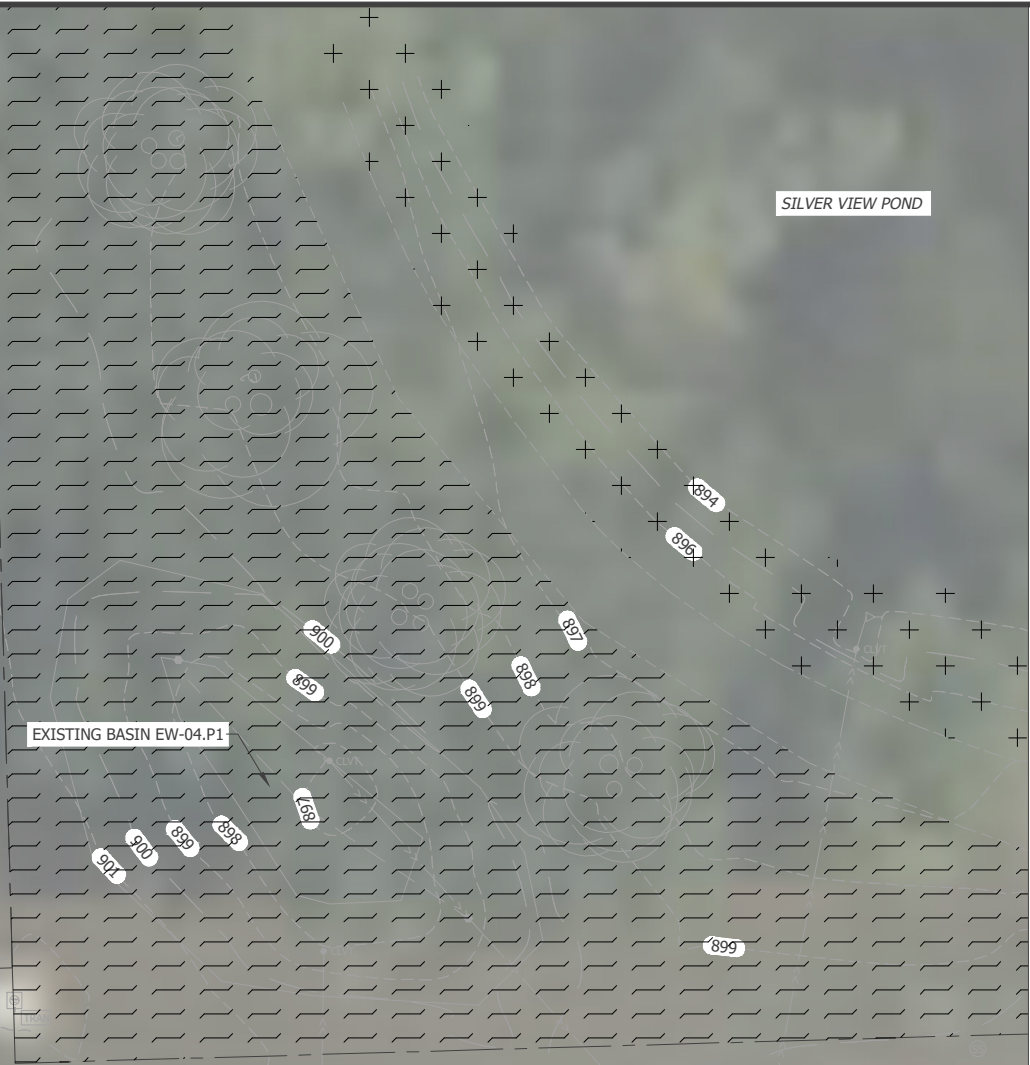
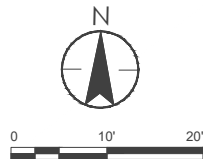
NO.	REVISION	DATE

SURVEY	JRP
DRAWN	XWM
DESIGNED	KAS
CHECKED	SEH
APPROVED	
PROJ. NO.	193806465

SHEET NUMBER
L-103

HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
PRINT NAME: SARAH HARDING
SIGNATURE: LIC. NO. 48972
DATE: 07/20/2024

THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING. ANY ERRORS OR OMISSIONS SHALL BE REFERRED TO STANTEC WITHOUT DELAY. NO REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY STANTEC IS FORBIDDEN.

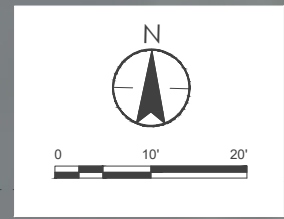


LANDSCAPING NOTES:

1. LOWLAND HARDWOODS
 - 1.1. REMOVE AND TREAT INVASIVE AND NONNATIVE TREES.
 - 1.2. REMOVE DISEASED NATIVE TREES (SUCH AS CHERRY, ASH INFECTED WITH EMERALD ASH BORER AND OAKS INFECTED WITH OAK WILT).
 - 1.3. REMOVE DOWNED TREES.
 - 1.4. REMOVE AND TREAT INVASIVE SHRUBS (MAINLY BUCKTHORN AND TARTARIAN HONEYSUCKLE).
 - 1.5. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, PURPLE LOOSESTRIFE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, NONNATIVE CATTAIL, VIRGINIA STICKWEED, REED CANARY GRASS, AND SMOOTH BROME).
 - 1.6. SEED WITH LOWLAND HARDWOODS CUSTOM NATIVE SEED MIX (GRASS/SEDGE COMPONENT OF MIX IN SPRING, FORB COMPONENT AFTER NOVEMBER 1) AND MULCH.
2. NATIVE GROUND COVER
 - 2.1. PREP AND APPLY TWO ROUNDS OF WEED SPRAY TREATMENT PER SPECIFICATIONS.
 - 2.2. SCARIFY SOILS TO PREP FOR SEED APPLICATION.
- 2.3. SEED BASIN BOTTOMS AND SIDESLOPES WITH MESIC PRAIRIE SOUTHEAST 35-642 NATIVE SEED MIX, COVER CROP AND EROSION CONTROL BLANKET (SEE SHEETS L-102 THROUGH L-104).
- 2.4. INSTALL NATIVE PLUGS WITHIN BOTTOM OF BASINS EW-04.10 AND EW-04.11.
- 2.5. SEED FOREBAY AREA (L-101) WITH THE FOLLOWING SEED MIXES, COVER CROP AND MULCH: IMPOUNDMENT GENERAL 33-161 NATIVE SEED MIX FROM NWL 897 TO 899 CONTOURS, MESIC PRAIRIE SOUTHEAST 35-642 UPLAND OF 899 CONTOUR IN FULL TO PARTIAL SUN AREAS, AND WOODLAND EDGE SOUTH & WEST 36-211 MODIFIED IN SHADE AREAS.
- 2.6. SEED ALL OTHER AREAS WITH POLLINATOR PLOT URBAN SE 38-631 NATIVE SEED MIX, COVER CROP AND MULCH.
3. WET MEADOW/CARR AND HARDWOOD SWAMP
 - 3.1. REMOVE INVASIVE SHRUBS (MAINLY BUCKTHORN).
 - 3.2. CONDUCT HERBACEOUS WEED SPOT TREATMENTS FOR INVASIVE PLANTS (CANADA THISTLE, PURPLE LOOSESTRIFE, CREEPING CHARLIE, GARLIC MUSTARD, BURDOCK, MOTHERWORT, NONNATIVE CATTAIL, REED CANARY GRASS, AND SMOOTH BROME).
 - 3.3. SEED WITH RIPARIAN SOUTH AND WEST 34-265, MODIFIED NATIVE SEED MIX, COVER CROP AND MULCH.

LEGEND

- LOWLAND HARDWOODS
- NATIVE GROUND COVER
- WET MEADOW/CARR & HARDWOOD SWAMP



Plot Date: 09/30/2024 - 4:02pm
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 User: jh...
 Title: 193806465_BORDER_193806465_XST.Topo_193806465_XST_193806465_XST_193806465_XST



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.
 PRINT NAME: SARAH HARDING
 SIGNATURE: *Sarah Harding*
 DATE: 09/30/2024 LIC. NO. 48972

CITY OF MOUNDS VIEW, MINNESOTA
 SILVER VIEW POND IMPROVEMENTS
 LANDSCAPING PLAN (4 OF 4)

NO	REVISION	DATE

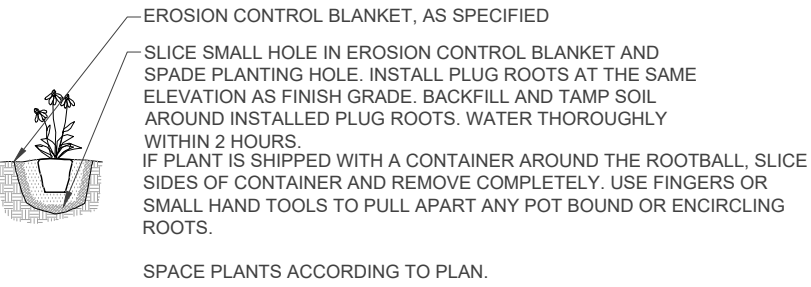
SURVEY	JRP
DRAWN	JRP
DESIGNED	XWM
CHECKED	KAS
APPROVED	SEH
PROJ. NO.	193806465
SHEET NUMBER	L-104

THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS. DO NOT SCALE THE DRAWING. ANY ERRORS OR OMISSIONS SHALL BE REPORTED TO STANTEC WITHOUT DELAY. REPRODUCTION OR USE FOR ANY PURPOSE OTHER THAN THAT AUTHORIZED BY STANTEC IS FORBIDDEN.

Plot Date: 09/30/2024 - 4:02pm
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 User: 193806465.BORDER 193806465.XSD 193806465.XSD

LOWLAND HARDWOODS CUSTOM SEED MIX

Scientific Name	Common Name	Seeds/ SF	PLS lb/ ac
FORBS			
<i>Agastache scrophulariaefolia</i>	Purple hyssop	1.00	0.03
<i>Ageratina altissima</i>	White snakeroot	0.30	0.01
<i>Anemone virginiana</i>	Tall thimbleweed	0.10	0.01
<i>Aquilegia canadensis</i>	Columbine	1.00	0.07
<i>Blephilia hirsuta</i>	Hairy wood mint	0.10	0.00
<i>Campanulastrum americanum</i>	Tall bellflower	5.00	0.08
<i>Desmodium glutinosum</i>	Savanna tick trefoil	0.50	1.60
<i>Eutrochium purpureum</i>	Sweet Joe-pye weed	1.00	0.06
<i>Geranium maculatum</i>	Wild geranium	3.00	1.63
<i>Helianthus strumosus</i>	Woodland sunflower	1.00	0.65
<i>Helopsis helianthoides</i>	Early sunflower	0.50	0.22
<i>Hypericum pyramidatum</i>	great St. John's wort	1.00	0.01
<i>Lobelia cardinalis</i>	Cardinal flower	1.00	0.01
<i>Lobelia siphilitica</i>	Blue Lobelia	1.00	0.01
<i>Lysimachia ciliata</i>	Fringed loosestrife	2.00	0.14
<i>Mentha arvensis</i>	Wild mint	0.75	0.01
<i>Monarda fistulosa</i>	Bergamot	1.00	0.04
<i>Osmorhiza claytonii</i>	Sweet cicely	1.00	1.09
<i>Phryma leptostachya</i>	Lopseed	1.00	0.68
<i>Ratibida pinnata</i>	Yellow coneflower	0.50	0.05
<i>Rudbeckia hirta</i>	Black-eyed Susan	2.00	0.06
<i>Rudbeckia triloba</i>	Brown-eyed Susan	0.20	0.02
<i>Scrophularia marilandica</i>	Late figwort	0.50	0.01
<i>Solidago flexicaulis</i>	Zig zag goldenrod	2.00	0.06
<i>Solidago speciosa</i>	Showy goldenrod	1.00	0.03
<i>Solidago ulmifolia</i>	Elm-leaved goldenrod	1.00	0.02
<i>Symphotrichum cordifolius</i>	Blue wood aster	1.00	0.02
<i>Symphotrichum laeve</i>	Smooth blue aster	1.00	0.05
<i>Symphotrichum lateriflorus</i>	Calico aster	3.00	0.03
<i>Symphotrichum oolentangense</i>	Sky Blue aster	2.00	0.07
<i>Symphotrichum urophyllum</i>	Arrow-leaved aster	2.00	0.04
<i>Teucrium canadense</i>	Germander	0.25	0.03
<i>Thalictrum dasycarpum</i>	Tall meadow rue	0.25	0.06
<i>Thalictrum dioicum</i>	Early meadow rue	0.25	0.09
<i>Verbena hastata</i>	Blue vervain	1.00	0.03
<i>Verbena stricta</i>	Hoary vervain	0.50	0.05
<i>Verbena urticifolia</i>	White vervain	1.00	0.06
<i>Veronicastrum virginicum</i>	Culver's root	1.50	0.01
<i>Zizia aurea</i>	Golden alexanders	1.00	0.25
FORBS SUBTOTALS		44.20	7.38
GRASSES & SEDGES			
<i>Bromus pubescens</i>	Hairy wood chess	0.5	0.18
<i>Carex gracillima</i>	Purple graceful sedge	2	0.53
<i>Carex sprengeii</i>	Sprengel's sedge	3	0.82
<i>Elymus canadensis</i>	Canada wild rye	1	0.52
<i>Elymus hystrix</i>	Bottlebrush grass	3	1.07
<i>Elymus villosus</i>	Silky wild rye	3	1.49
<i>Elymus virginicus</i>	Virginia wild rye	2	1.30
<i>Festuca subverticillata</i>	Nodding fescue	1	0.14
GRASSES & SEDGES SUBTOTALS		15.50	6.05
TOTALS		59.70	13.42



1 PLUG PLANTING
 C-801 NOT TO SCALE

OAK WOODLAND CUSTOM SEED MIX

Scientific Name	Common Name	Seeds/ SF	PLS lb/ ac
FORBS			
<i>Agastache scrophulariaefolia</i>	Purple hyssop	1.00	0.03
<i>Ageratina altissima</i>	White snakeroot	0.30	0.01
<i>Amarpha canescens</i>	Lead plant	0.10	0.02
<i>Anemone virginiana</i>	Tall thimbleweed	0.10	0.01
<i>Aquilegia canadensis</i>	Columbine	1.00	0.07
<i>Asclepias tuberosa</i>	Butterfly weed	0.10	0.06
<i>Blephilia hirsuta</i>	Hairy wood mint	0.10	0.00
<i>Campanulastrum americanum</i>	Tall bellflower	5.00	0.08
<i>Chamaecrista fasciculata</i>	Partridge pea	0.10	0.10
<i>Desmodium glutinosum</i>	Savanna tick trefoil	0.50	1.60
<i>Eutrochium purpureum</i>	Sweet Joe-pye weed	1.00	0.06
<i>Fragaria virginiana</i>	Wild strawberry	0.50	0.02
<i>Gallium boreale</i>	Northern bedstraw	1.00	0.04
<i>Geranium maculatum</i>	Wild geranium	1.00	0.54
<i>Helianthus strumosus</i>	Woodland sunflower	1.00	0.65
<i>Helopsis helianthoides</i>	Early sunflower	0.50	0.22
<i>Hypericum pyramidatum</i>	great St. John's wort	1.00	0.01
<i>Lobelia siphilitica</i>	Blue Lobelia	1.00	0.01
<i>Lysimachia ciliata</i>	Fringed loosestrife	1.00	0.07
<i>Monarda fistulosa</i>	Bergamot	1.00	0.04
<i>Osmorhiza claytonii</i>	Sweet cicely	1.00	1.09
<i>Penstemon digitalis</i>	Foxglove beardstongue	1.00	0.02
<i>Phlox divaricata</i>	Woodland phlox	0.25	0.05
<i>Phryma leptostachya</i>	Lopseed	1.00	0.68
<i>Prenanthes alba</i>	Lions foot	0.50	0.08
<i>Rudbeckia hirta</i>	Black-eyed Susan	2.00	0.06
<i>Rudbeckia triloba</i>	Brown-eyed Susan	0.20	0.02
<i>Scrophularia marilandica</i>	Late figwort	0.10	0.00
<i>Solidago flexicaulis</i>	Zig zag goldenrod	2.00	0.06
<i>Solidago speciosa</i>	Showy goldenrod	1.00	0.03
<i>Solidago ulmifolia</i>	Elm-leaved goldenrod	1.00	0.02
<i>Symphotrichum cordifolius</i>	Blue wood aster	2.00	0.04
<i>Symphotrichum laeve</i>	Smooth blue aster	2.00	0.10
<i>Symphotrichum lateriflorus</i>	Calico aster	2.00	0.02
<i>Symphotrichum oolentangense</i>	Sky Blue aster	2.00	0.07
<i>Symphotrichum urophyllum</i>	Arrow-leaved aster	2.00	0.04
<i>Teucrium canadense</i>	Germander	0.25	0.03
<i>Thalictrum dasycarpum</i>	Tall meadow rue	0.25	0.06
<i>Thalictrum dioicum</i>	Early meadow rue	0.25	0.09
<i>Verbena hastata</i>	Blue vervain	1.00	0.03
<i>Verbena stricta</i>	Hoary vervain	0.50	0.05
<i>Verbena urticifolia</i>	White vervain	1.00	0.06
<i>Veronicastrum virginicum</i>	Culver's root	1.50	0.01
<i>Zizia aurea</i>	Golden alexanders	1.00	0.25
FORBS SUBTOTALS		43.10	6.60
GRASSES & SEDGES			
<i>Bouteloua curtipedula</i>	Side oats	0.5	0.23
<i>Bromus pubescens</i>	Hairy wood chess	0.5	0.18
<i>Carex blanda</i>	Wood sedge	0.5	0.11
<i>Carex gracillima</i>	Purple graceful sedge	2	0.53
<i>Carex grisea</i>	Wood gray sedge	1	0.30
<i>Carex sprengeii</i>	Sprengel's sedge	3	0.82
<i>Elymus canadensis</i>	Canada wild rye	1	0.52
<i>Elymus hystrix</i>	Bottlebrush grass	3	1.07
<i>Elymus villosus</i>	Silky wild rye	2	0.99
<i>Elymus virginicus</i>	Virginia wild rye	2	1.30
<i>Festuca subverticillata</i>	Nodding fescue	1	0.14
GRASSES & SEDGES SUBTOTALS		16.50	6.19
TOTALS		59.60	12.79

MESIC PRAIRIE SOUTHEAST 35-642, MODIFIED

IN ADDITION TO STANDARD SEED MIX, ALSO INCLUDE

Scientific Name	Common Name	Seeds/ SF	PLS lb/ ac
FORBS			
<i>Helienium autumnale</i>	Autumn Sneezeweed		
<i>Monarda punctata</i>	Horsemint		
<i>Solidago riddellii</i>	Riddell's Goldenrod		
<i>Symphotrichum oolentangense</i>	Skyblue Aster		
<i>Tradescantia ohioensis</i>	Ohio Spiderwort		

POLLINATOR PLOT URBAN SE 38-631, MODIFIED

IN ADDITION TO THE STANDARD SEED MIX, ALSO INCLUDE

Scientific Name	Common Name	Seeds/ SF	PLS lb/ ac
FORBS			
<i>Drymocalis arguta</i>	Tall Onquetoil		
<i>Heuchera richardsonii</i>	Alumroot		
<i>Lysimachia ciliata</i>	Fringed Loosestrife		
<i>Penstemon gracilis</i>	Slender Beard Tongue		
<i>Solidago nemoralis</i>	Gray Goldenrod		
<i>Symphotrichum oolentangense</i>	Skyblue Aster		
<i>Teucrium canadense</i>	Germander		
<i>Zizia aptera</i>	Heart-leaved Alexanders		
LEGUMES			
<i>Vicia americana</i>	American Vetch		

RIPARIAN SOUTH AND WEST 34-265, MODIFIED

IN ADDITION TO THE STANDARD SEED MIX, ALSO INCLUDE

Scientific Name	Common Name	Seeds/ SF	PLS lb/ ac
GRASSES			
<i>Calamagrostis canadensis</i>	Bluejoint	3	
<i>Elymus villosus</i>	Downy Wild Rye	3	
FORBS			
<i>Quercus maculata</i>	Spotted Water Hemlock	1	
<i>Lobelia cardinalis</i>	Cardinal Flower	3	
<i>Lysimachia ciliata</i>	Fringed Loosestrife	2	
<i>Mentha arvensis</i> (1-9)	Wild Mint	4	
<i>Scrophularia lanceolata</i> (1, 5-9)	Lance-leaved Figwort	1	
<i>Veronicastrum virginicum</i> (3-9)	Culver's Root	3	

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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.
 PRINT NAME: SARAH HARDING
 SIGNATURE: [Signature]
 LIC. NO. 45972
 DATE: 09/30/2024

CITY OF MOUNDS VIEW, MINNESOTA
 SILVER VIEW POND IMPROVEMENTS
 LANDSCAPING DETAILS

NO	REVISION	DATE

SURVEY	
DRAWN	JRP
DESIGNED	XWM
CHECKED	KAS
APPROVED	SEH
PROJ. NO.	193806465