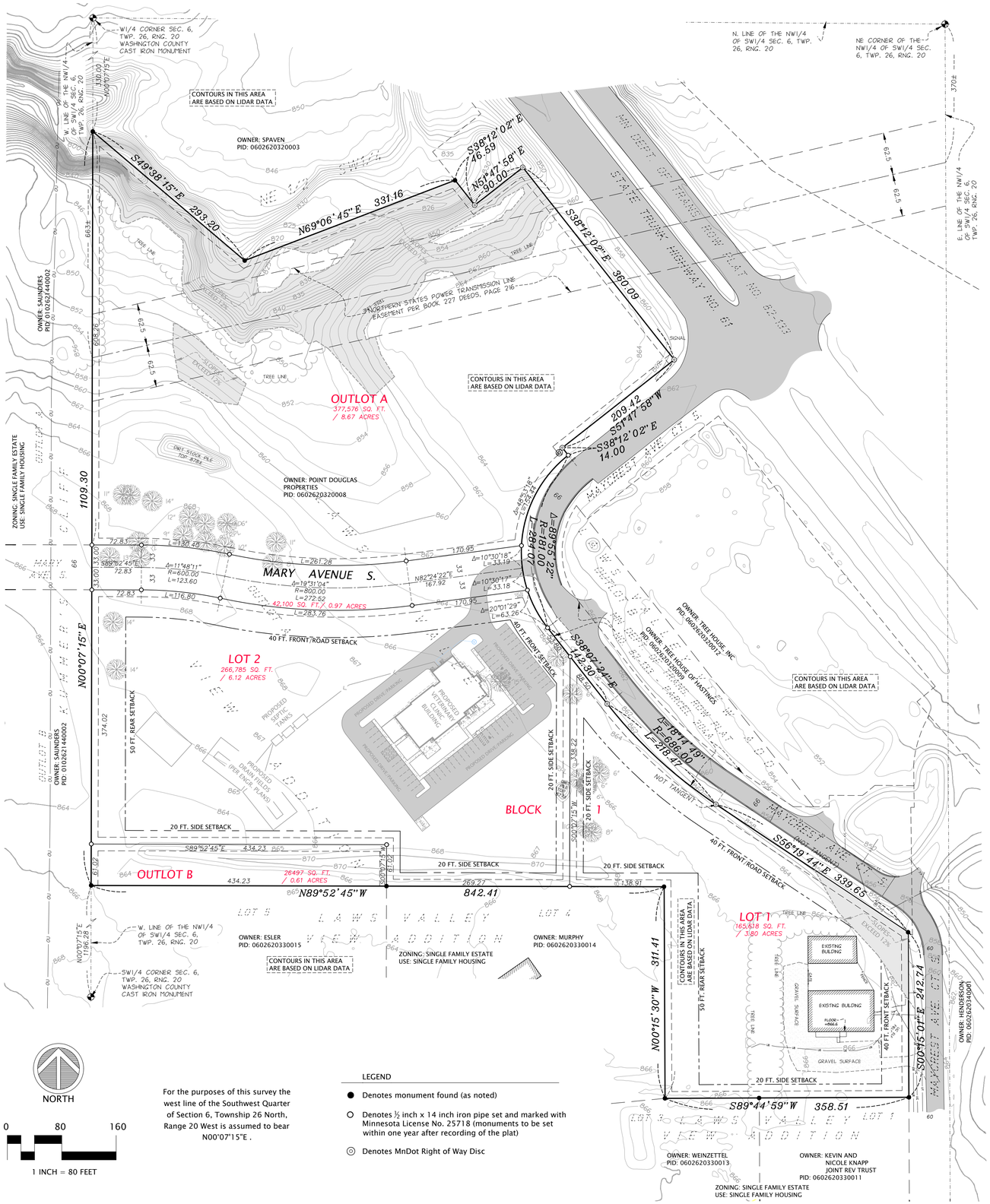


For the purposes of this survey the west line of the Southwest Quarter of Section 6, Township 26 North, Range 20 West is assumed to bear N00°07'15"E .

LEGEND

- ● Denotes monument found (as noted)
- ○ Denotes ½ inch x 14 inch iron pipe set and marked with Minnesota License No. 25718 (monuments to be set within one year after recording of the plat)
- ⊙ Denotes MnDot Right of Way Disc

ZONING AND SETBACK INFORMATION:

PER DENMARK TOWNSHIP STAFF ON APRIL 2, 2026

ZONING: SFE - SINGLE FAMILY ESTATE
OVERLAY DISTRICT:

SETBACKS:

FRONT = 40 FT
SIDE = 20 FT
REAR = 50 FT

PROPOSED EASEMENT NOTES:

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:

Being 10.00 feet in width and adjoining public ways and adjoining lot lines, unless otherwise shown on this plat.

PROPOSED LOT TABULATION:

LOT 1	= 165,618 SQ. FT. / 3.80 ACRES
LOT 2	= 266,785 SQ. FT. / 6.12 ACRES
OUTLOT A	= 377,576 SQ. FT. / 8.67 ACRES
OUTLOT B	= 26,497 SQ. FT. / 0.61 ACRES
PROPOSED ROW	= 42,100 SQ. FT. / 0.97 ACRES
TOTAL AREA	= 878,576 SQ. FT. / 20.17 ACRES

EXISTING LEGAL DESCRIPTION:

(LEGAL DESCRIPTION PER WASHINGTON COUNTY TAXATION)

OUTLOT A, LAWS VALLEY VIEW ADDITION, WASHINGTON COUNTY, MINNESOTA.

PARCEL AREA:

OVERALL AREA = 878,576 SQ. FT. / 20.17 ACRES

EASEMENT NOTES:

*NO TITLEWORK WAS PROVIDED FOR OUR REVIEW. ADDITIONAL EASEMENTS OF WHICH WE ARE UNAWARE MAY EXIST.

**DRAWING TO BE UPDATED UPON RECEIPT OF TITLE WORK.

FLOOD INFORMATION:

THIS PROPERTY LIES WITHIN THE UNSHADED ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 27163C0438E HAVING AN EFFECTIVE DATE OF 02/02/2010.

BENCHMARKS

ELEVATIONS BASED ON INFORMATION AS SHOWN ON THE MNDOT GEODETIC WEBSITE. SURVEY DISK KIRK WITH AN ELEVATION OF 864.12 WAS USED TO ESTABLISH VERTICAL CONTROL FOR THIS SURVEY (NAVD 88). SHOWN GRAPHICALLY.

SURVEY NOTES:

1. BEARINGS ARE BASED ON COORDINATES SUPPLIED BY THE WASHINGTON COUNTY SURVEYORS OFFICE.
2. UNDERGROUND UTILITIES SHOWN PER GOPHER ONE LOCATES AND AS-BUILTS PLANS PROVIDED BY THE DENMARK TOWNSHIP.
3. THERE MAY SOME UNDERGROUND UTILITIES, GAS, ELECTRIC, ETC. NOT SHOWN OR LOCATED.
4. SURVEY FIELD WORK WAS PERFORMED ON 02/13/2026 DURING WINTER CONDITIONS WITH SNOW/ICE COVER. EVERY EFFORT WAS MADE TO LOCATE VISIBLE IMPROVEMENTS. ADDITIONAL IMPROVEMENTS THAT WERE NOT VISIBLE AT THE TIME OF SURVEY FIELD WORK MAY EXIST THAT THE SURVEYOR IS UNAWARE OF.
5. SOME CONTOURS SHOWN PER LIDAR DATA TAKEN FROM THE NOAA - DATA ACCESS VIEWER WEBSITE. CONTOURS WERE NOT VERIFIED. AREAS BASED ON FIELD SURVEY DATA ARE INDICATED BY SPOT ELEVATIONS

UNDERGROUND UTILITIES NOTES:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THIS SURVEY HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. GOPHER STATE ONE CALL LOCATE TICKET NUMBER(S) 260340503. SOME MAPS WERE RECEIVED, WHILE OTHER UTILITIES DID NOT RESPOND TO THE LOCATE REQUEST. ADDITIONAL UTILITIES OF WHICH WE ARE UNAWARE MAY EXIST.

CALL BEFORE YOU DIG!
Gopher State One Call
TWIN CITY AREA: 651-454-0002
TOLL FREE: 1-800-252-1166

LEGEND:

- FOUND MONUMENT
- SET 1/2" IRON PIPE MARKED RLS NO. 25718
- MNDOT ROW DISC
- AIR CONDITIONER
- ELECTRIC MANHOLE
- ELECTRIC METER
- ELECTRIC PEDESTAL
- ELECTRIC TRANSFORMER
- LIGHT POLE
- GUY WIRE
- POWER POLE
- GAS METER
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- SANITARY CLEANOUT
- SANITARY MANHOLE
- CATCH BASIN or STORM DRAIN or FLARED END SECTION or STORM MANHOLE
- FIRE DEPT. CONNECTION
- HYDRANT
- CURB STOP
- WATER WELL
- WATER MANHOLE
- WATER METER
- POST INDICATOR VALVE
- WATER VALVE
- BOLLARD
- FLAG POLE
- MAIL BOX
- TRAFFIC SIGN
- UNKNOWN MANHOLE
- SOIL BORING
- SPOT ELEVATION
- TRAFFIC SIGNAL
- CONIFEROUS TREE
- DECIDUOUS TREE
- UE — UNDERGROUND ELECTRIC
- UTV — UNDERGROUND CABLE TV
- UF — UNDERGROUND FIBER OPTIC
- UT — UNDERGROUND TELEPHONE
- OU — OVERHEAD UTILITY
- UG — UNDERGROUND GAS
- > — SANITARY SEWER
- >> — STORM SEWER
- W — WATERMAIN
- FENCE
- CURB [TYPICAL]
- 1230 — CONTOURS

LAWS VALLEY
VIEW ADDITION 2ND

CONTACT:

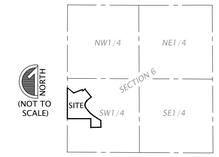
POINT DOUGLAS PROPERTIES, INC.
C/O Torry Kraftson
Larson Engineering
3524 Labore Road
White Bear Lake, MN 55110
Phone: 651.481.9120
Email: tkraftson@larsonengr.com

COUNTY/CITY:

WASHINGTON COUNTY

TOWN OF DENMARK

VICINITY MAP



SEC. 6, TWP. 26, RNG. 20, DENMARK TWP, WASHINGTON COUNTY, MINNESOTA

REVISIONS:

DATE	REVISION
04-14-2026	INITIAL ISSUE
04-16-2026	PID REV
05-27-2026	REVISE LOT LINES
05-28-2026	ESMT OLB

CERTIFICATION:

I hereby certify that this plan was prepared by me, or under my direct supervision, and that I am a duly Licensed Land Surveyor under the laws of the state of Minnesota.

Daniel L. Thurmes Registration Number: 25718

Date: 04-14-2026

PROJECT LOCATION:

13030 MAYCREST AVE. CT. S.
PID#0602620320008

Suite #200
1970 Northwestern Ave
Stillwater, MN 55082
Phone 651.275.8969
Fax 651.275.8976
dan@
cssurvey
.net

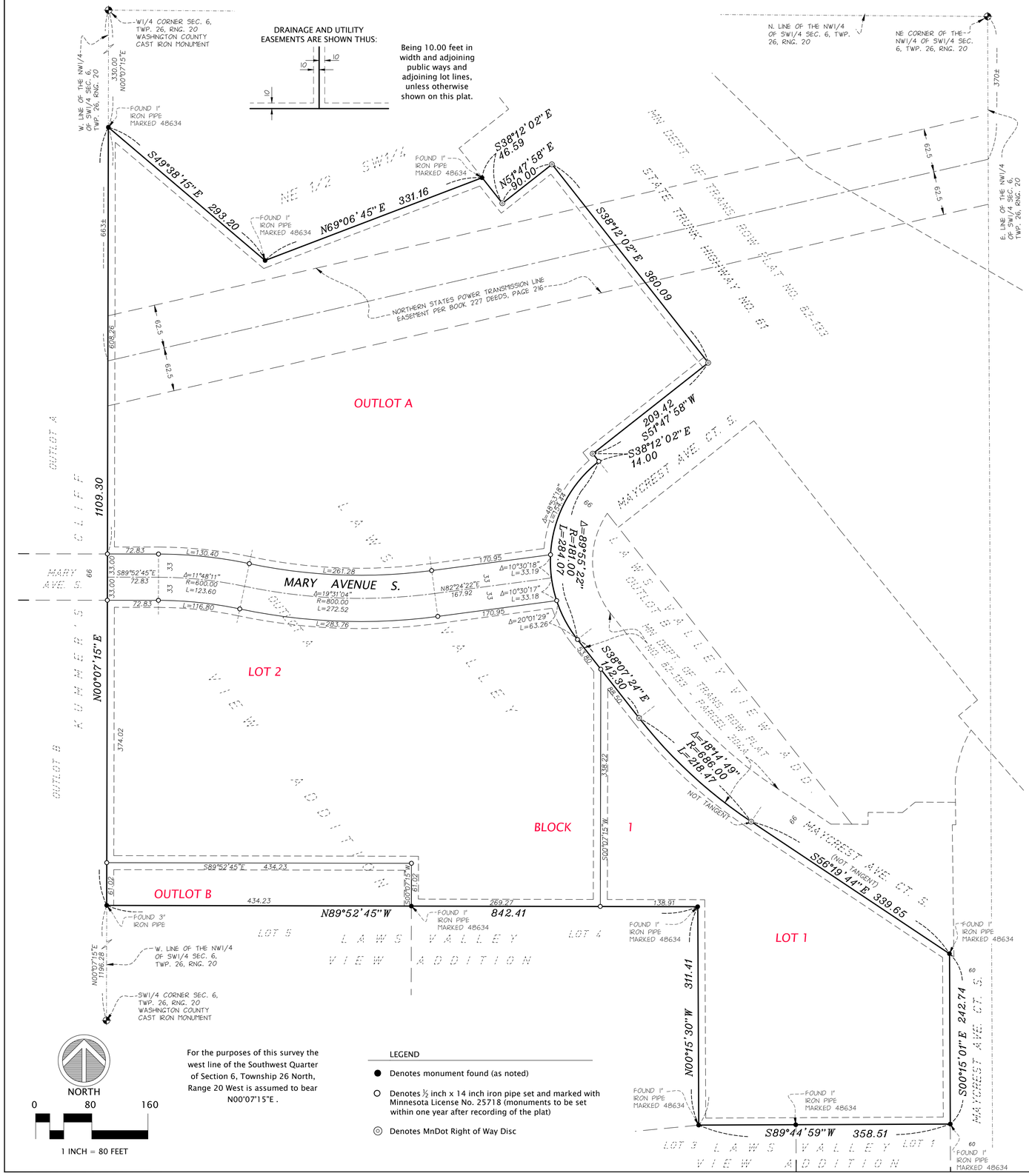
CORNERSTONE
LAND SURVEYING, INC.

FILE NAME SURVLE167
PROJECT NO. LE26167

PRELIMINARY PLAT

PLAT FILE NO.
C.R. FILE NO.

LAWS VALLEY VIEW 2ND ADDITION



For the purposes of this survey the west line of the Southwest Quarter of Section 6, Township 26 North, Range 20 West is assumed to bear N00°07'15"E .

LEGEND

- ● Denotes monument found (as noted)
- ○ Denotes ½ inch x 14 inch iron pipe set and marked with Minnesota License No. 25718 (monuments to be set within one year after recording of the plat)
- ⓞ Denotes MnDot Right of Way Disc

KNOW ALL PERSONS BY THESE PRESENTS: That Point Douglas Properties Inc., a Minnesota Corporation, fee owner of the following described property situated in the County of Washington, State of Minnesota, to wit:

Outlot A, LAWS VALLEY VIEW ADDITION, Washington County, Minnesota

Has caused the same to be surveyed and platted as and does hereby dedicate to the public for public use the public way and the drainage and utility easements as LAWS VALLEY VIEW 2ND ADDITION created by this plat.

In witness whereof said Point Douglas Properties Inc., a Minnesota Corporation, has caused these presents to be signed by its proper officer this _____ day of _____, 2026.

Point Douglas Properties Inc., a Minnesota Corporation

By _____
Paul L. Morlock, Co-Owner

STATE OF MINNESOTA
COUNTY OF _____

This instrument was acknowledged before me this_____day of_____, 2026 by Paul L. Morlock, Co-Owner of Point Douglas Properties Inc., a Minnesota Corporation on behalf of the corporation.

_____ _____ _____
(signature) (printed name)

Notary Public, _____ County, _____.
My Commission Expires _____.

I, Daniel L. Thurmes, do hereby certify that this plat was prepared by me or under my direct supervision; that I am a duly Licensed Land Surveyor in the State of Minnesota; that this plat is a correct representation of the boundary survey; that all mathematical data and labels are correctly designated on this plat; that all monuments depicted on the plat have been, or will be correctly set within one year; that all water boundaries and wet lands, as defined in Minnesota Statutes Section 505.01, Subd. 3, as of the date of this certificate are shown and labeled; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 2026.

_____
Daniel L. Thurmes, Licensed Land Surveyor, Minnesota License No. 25718

STATE OF MINNESOTA
COUNTY OF WASHINGTON
This instrument was acknowledged before me on this _____ day of _____, 2026, by Daniel L. Thurmes, Licensed Land Surveyor, Minnesota License No. 25718

_____ _____ _____
(signature) (printed name)

Notary Public,
Dakota County, Minnesota
My Commission Expires January 31, 2030

TOWN OF DENMARK, MINNESOTA
This plat of LAWS VALLEY VIEW 2ND ADDITION was approved and accepted by the Town Board of Denmark, Minnesota, at a regular meeting thereof held this _____ day of _____, 2026, and said plat is in compliance with the provisions of Minnesota Statutes, Section 505.03, Subd. 2.

By: _____ , Chair

By: _____ , Clerk

WASHINGTON COUNTY SURVEYOR
Pursuant to Chapter 820, Laws of Minnesota, 1971, and in accordance with Minnesota Statutes, Section 505.021, Subd. 11, this plat has been reviewed and approved this _____ day of _____, 2026

By _____ By_____
Washington County Surveyor

WASHINGTON COUNTY AUDITOR/TREASURER
Pursuant to Minnesota Statutes, Section 505.021, Subd. 9 and Section 272.12, taxes payable in the year 202___, on real estate hereinbefore described, have been paid; and there are no delinquent taxes, and transfer has been entered, on this _____ day of _____ 2026.

By _____Washington County Auditor/Treasurer

By _____ Deputy

WASHINGTON COUNTY RECORDER
Document Number _____

I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____, 2026, at _____ o'clock ____. M., and was duly recorded in Washington County Records.

By_____ Washington County Recorder

By _____ Deputy

CORNERSTONE
LAND SURVEYING, INC.

PROJECT SPECIFIC SWPPP INFORMATION:

I. GENERAL CONSTRUCTION ACTIVITY INFORMATION

PROJECT NAME: HASTINGS VETERINARY CLINIC
PROJECT LOCATION: MAYCREST AVE
DENMARK TWP, MN, 55033

PROJECT CONTACTS
OWNER: HASTINGS VETERINARY CLINIC
3150 RED WING BLVD
HASTINGS, MN 55033
CONTACT: JAMES BROWN
JBBROWN6@GMAIL.COM

ENGINEER: LARSON ENGINEERING, INC.
3524 LABORE ROAD
WHITE BEAR LAKE, MN 55110
CONTACT: TORRY KRAFTSON., 651-260-5159,
TKRAFTSON@LARSONENGR.COM

CONTRACTOR: [co name]
[street]
[city, st, zip]
CONTACT:
[email]

CITY WHERE WORK WILL TAKE PLACE: DENMARK TWP
COUNTY WHERE WORK WILL TAKE PLACE: WASHINGTON

LATITUDE/LONGITUDE OF APPROXIMATE CENTROID OF PROJECT: 44° 45' 56" N, 92° 51' 39" W

PROJECT TYPE: RESIDENTIAL
INSTITUTIONAL
COMMERCIAL/INDUSTRIAL
ROAD CONSTRUCTION
RESIDENTIAL & ROAD CONSTRUCTION
OTHER: _____

DATES OF CONSTRUCTION (ESTIMATED):
Construction start date: xx/20xx
Construction completion date: xx/20xx

PROJECT DESCRIPTION:
This project will consist of the construction of a new veterinary clinic building, parking lots, drives, sidewalk, stormwater basins, and related utilities.

PROJECT LIMITS:
See the project plans, in particular the grading & erosion control plans, for site disturbance limits.

SITE DISTURBANCE SUMMARY (to nearest tenth acre):

Total number of acres to be disturbed:	2.2
Pre-Construction acres of impervious:	0.0
Post-Construction acres of impervious:	1.1
Total new impervious acres:	1.1

II. RECEIVING WATERS

RECEIVING WATERS (WITHIN ONE MILE OF PROJECT PROPERTY EDGE):

NAME OF WATER BODY	TYPE	SPECIAL WATER?	IMPAIRED WATER?
Mississippi River	Stream	Yes	Yes

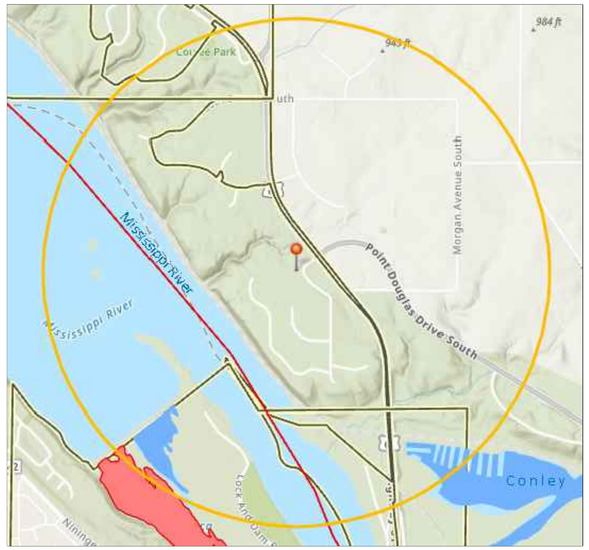
TOTAL MAXIMUM DAILY LOAD (TMDL) WATERS
N/A

IDENTIFY WETLAND IMPACTS:
1. Will construction result in any potential adverse impacts to wetlands, including excavation, degradation of water quality, draining, filling, permanent inundation or flooding, conversion to a stormwater pond?
No.
If yes, describe impacts and mitigation measures that were taken to address the impacts and include copies of permits or approvals from an official state wide wetland program issued specifically for this project or site:
N/A

ENVIRONMENTALLY SENSITIVE AREAS:
1. Identify adjacent public waters where the MN DNR has declared "work in water restrictions" during fish spawning timeframes:
None identified.

2. Describe any stormwater mitigation measures that will be implemented, as a result of an environmental review, endangered or threatened species review or archeological site review:
N/A

PROJECT LOCATION AND RECEIVING WATERS MAP:



III. PROJECT PLANS AND SPECIFICATIONS

Refer to the project plans, specifications, geotechnical report, and stormwater calculations which depict various features that are relevant to this project. Such features may include, but are not limited to, the following:

- Project location and construction limits.
- Existing and final grades, including dividing lines and direction of flow for all pre and post-construction stormwater runoff drainage areas located within the project limits.
- Soil types at the site.
- Locations of impervious surfaces.
- Locations of areas not to be disturbed (e.g., buffer zones, wetlands, etc.)
- Steep slope locations.
- Locations of areas where construction will be phased to minimize duration of exposed soils.
- Locations of all temporary and permanent erosion control and sediment control best management practices (BMP's).
- Buffer zones as required in item 9.17 and 23.11 of the permit.
- Locations of potential pollution-generating activities identified in Section 12 of the permit.
- Standard details for erosion and sediment control BMP's to be installed at the site.

The anticipated erosion prevention and sediment control BMP quantities needed for the life of this project include the following. These quantities are estimated only and shall be verified by the Contractor.

BMP	Estimated Quantity	Final Quantity
Rock Construction Entrance	1 EA	_____
Silt Fence	390 LF	_____
Sediment Log	480 LF	_____
Inlet Protection	0 EA	_____
Concrete Washout	1 EA	_____
FES Outlet Rip-Rap	0 EA (size per plan)	_____
Turf Seeding	1.1 ACRE	_____
Erosion Blanket	1372 SY	_____

SOIL INFORMATION

Refer to geotechnical report for site specific soil information.

TEMPORARY SEDIMENT CONTROL (SITE SPECIFIC ITEMS)

1. Is the project required to install a temporary sediment basin due to 10 or more acres draining to a common location, or 5 acres or more if the site is located within 1 mile of a special or impaired water?
No
If yes, describe (or attach plans) showing how the basin will be designed and constructed in accordance with Section 14.
N/A

2. Will the project include dewatering, basin draining?
No.
If yes, describe measures to be used to treat/dispose of turbid or sediment-laden water and method to prevent erosion or scour of discharge points (see Section 10 of the permit):
N/A. Based on soil boring results, dewatering is not anticipated.

3. Will the project include use of filters for backwash water?
No.
If yes, describe how filter backwash water will be managed on the site or properly disposed of:
N/A

PERMANENT STORMWATER MANAGEMENT (SITE SPECIFIC ITEMS)

1. Will the project result in one acre or more of new impervious surface or result in one acre or more of new impervious in total if the project is part of a larger plan of development?
Yes
If yes, a water quality volume of one inch of runoff from the cumulative new impervious surfaces must be retained on site (Section 15) through infiltration unless prohibited due to one of the reasons in item 16.14 through 16.21. If infiltration is prohibited, identify other methods of stormwater treatment used (e.g. filtration, wet sedimentation basin, regional ponding, or equivalent method):
Two (2) new infiltration basins are proposed as part of the project to provide the required water quality volume from the total new impervious areas.

2. Attach design parameters for the planned permanent stormwater management system, including volume calculations, discharge rate calculations, construction details including basin depth, outlet configurations, location, design of pre-treatment devices, and timing for installation.
See the project plans and stormwater calculations.

3. For infiltration systems, provide at least one soil boring, test pit, or infiltrometer test in the location of the infiltration practice for determining infiltration rates.
See the geotechnical evaluation reports contained within the stormwater calculations. Additional in-field testing and geotechnical observations are planned during construction to verify soil characteristics at the proposed basin location.

4. For projects that discharge to trout streams, including tributaries to trout streams, identify method of incorporating temperature controls into the permanent stormwater management system.
N/A

SEQUENCE OF CONSTRUCTION ACTIVITIES

1. Install stabilized rock construction entrances.
2. Install perimeter erosion control BMP's (silt fence, bio-logs, etc).
3. Install temporary construction fencing at infiltration areas and other areas not be disturbed.
4. Install inlet protection throughout project area and downstream inlets.
5. Construct temporary sediment basins/traps as necessary.
6. Strip and stockpile topsoil.
7. Complete rough grading of site.
8. Stabilize denuded areas and stockpiles.
9. Install site utilities.
10. Install temporary inlet protection at newly installed catch basins/inlets.
11. Install curb and gutter and pavement sections.
12. Place topsoil and final grading of areas to be vegetated.
13. Remove accumulated sediment from basins / ponds.
14. Final grade pond and infiltration areas, including soil de-compaction as specified.
15. Complete stormwater basin as-built surveys (as required by project specifications and/or local jurisdictional authorities).
16. Complete permanent stabilization including plantings, seeding, and mulch.
17. Upon completion of construction activity and satisfactory vegetation establishment, remove remaining temporary erosion and sediment control BMPs.
18. Reseed / restore any areas disturbed during BMP removal.

SEEDING NOTES AND REQUIREMENTS:

1. The Contractor is responsible to salvage and preserve existing topsoil as necessary for final stabilization. All topsoil to be salvaged and re-used shall be processed as necessary to meet project specifications.
2. Prior to final seeding, all areas to be vegetated shall be scarified/decompacted and amended as specified in the plans and specifications.
3. Unless otherwise noted, all seed mixes and applications shall be in accordance with MNDOT Seeding Manual, latest edition.
4. See the project plans and specifications for seed mixtures, mulch, slope stabilization, and all other landscaping requirements.

FINAL STABILIZATION:

Ensure Final Stabilization of the site. Final Stabilization is not complete until all of the following requirements are complete:
1. All soil disturbing activities at the site have been completed and soils are stabilized by a uniform perennial vegetative cover with a density of 70 percent of its expected final growth over the entire pervious surface area, or other equivalent means necessary to prevent soil erosion under erosive conditions.
2. The permanent stormwater management system is constructed and operating as designed. Temporary or permanent sedimentation basins that are to be used as permanent water quality management basins have been cleaned of any accumulated sediment. All sediment has been removed from conveyance systems and ditches are stabilized with permanent cover.
3. All temporary synthetic and structural erosion prevention and sediment control BMPs (such as silt fence, bio-logs, etc.) have been removed from the site. BMPs designed to decompose on site may be left in place.
4. Upon correction of all erosion and sediment items and achieving vegetative cover, temporary erosion prevention and sediment control BMPs will be removed and properly disposed/recycled.
5. Within 30 days of final stabilization, a notice of termination shall be submitted to the MPCA (see Permit Termination Req's) .

GENERAL SWPPP NOTES:

1. The Contractor and all Subcontractors involved with construction activity that disturbs soil, or implements a pollution control measure as part of the Storm Water Pollution Prevention Plan (SWPPP) for this project, must comply with the requirements of the National Pollution Discharge Elimination System (NPDES) / State Disposal System (SDS) Program, General Permit MNR10001, Dated August 1, 2018.

2. The Contractor and all Subcontractors shall be responsible for reviewing the NPDES Permit in its entirety, to ensure that all SWPPP measures are in place and permit requirements fulfilled throughout the duration of the project.

SWPPP TRAINING (SECTION 21):

SWPPP PREPARER:
COMPANY: LARSON ENGINEERING, INC.
CONTACT: TORRY KRAFTSON, 651-481-9120, TKRAFTSON@LARSONENGR.COM
COURSE, INSTRUCTOR: DESIGN OF SWPPP
TRAINING ENTITY: UNIVERSITY OF MINNESOTA
EXPIRATION: MAY 31, 2027

SWPPP CONTACT:
CONTRACTOR: _____
CONTACT: _____
COURSE, INSTRUCTOR: _____
TRAINING ENTITY: _____
EXPIRATION: _____

This SWPPP was prepared by personnel certified in design of construction SWPPP's as listed above. Copies of respective certifications are available upon request. In accordance with Section 21 of the permit, the following individuals must receive training, and the content and extent of the training is commensurate with the individual's job duties and responsibilities with regard to activities covered under the permit:
a. Individuals preparing the SWPPP for the project.
b. Individuals overseeing implementation of, revising and/or amending the SWPPP, and individuals performing inspections for the project.
c. Individuals performing or supervising the installation, maintenance and repair of BMP's.

Individuals must receive training from local, state, federal agencies, professional organizations, or other entities with expertise in erosion prevention, sediment control, permanent stormwater treatment and the MN NPDES/SDS Construction Stormwater permit. Individuals shall attend a refresher-training course every three (3) years.

SWPPP IMPLEMENTATION RESPONSIBILITIES:

1. Unless otherwise directed, the Contractor shall obtain the MPCA-NPDES permit. Contractor shall be responsible for all fees pertaining to this permit. The SWPPP shall be kept onsite at all times.
2. The Owner and Contractor are Permittee(s) as identified by the NPDES permit.
3. The Contractor shall be responsible for all on-site implementation of the SWPPP, including all Subcontractor activities.
4. The Contractor shall provide knowledgeable and experienced person(s) in the application, installation, and maintenance of Erosion and Sediment Control BMP's throughout the project.
5. The Contractor shall provide person(s) meeting the training requirements of the NPDES permit to conduct inspection and maintenance of all erosion prevention and sediment control BMP's in accordance with permit requirements. One of these individuals must be available for an on-site inspection within 72 hours upon request by the MPCA.
6. The Contractor shall provide training documentation for all individual(s) required by the permit. This training documentation shall be recorded in the SWPPP prior to construction, or as soon as personnel for the project have been determined. Documentation shall include:
a. Names of personnel associated with the project required to be trained (as listed above and under Section 21 of the permit).
b. Dates of training, name of instructor, and entity providing training.
c. Content of training course or workshop including number of hours of training.

INSPECTIONS AND MAINTENANCE:

1. The Contractor shall provide person(s) meeting the training requirements to conduct inspection and maintenance of all erosion prevention and sediment control BMP's under this project in accordance with permit requirements.
2. An example MPCA construction stormwater checklist can be found at the link below. Note: This template inspection report does not address all aspects of the NPDES Permit. The completion of this checklist does not guarantee that all permit requirements are in compliance; it is the responsibility of the Permittee(s) to read and understand the full permit requirements.

https://www.pca.state.mn.us/sites/default/files/wq-strm2-36.docx

RECORDS RETENTION:

The SWPPP, including all changes/amendments, and inspections and maintenance records shall be kept on site during normal working hours by individuals who have operational control of that portion of the site.

All Owner(s) shall 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:
a. The Final SWPPP;
b. Any other stormwater related permits required for the project;
c. Records of all inspection and maintenance conducted during construction;
d. 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
e. All required calculations for design of the temporary and permanent stormwater management systems.

PRELIMINARY NOT FOR CONSTRUCTION

Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120
www.larsonengr.com
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Client:
HASTINGS VETERINARY CLINIC
3150 RED WING BLVD.
HASTINGS, MN 55033

Project Title:
HASTINGS VETERINARY CLINIC
MAYCREST AVENUE, DENMARK TOWNSHIP

I hereby certify that this plan, specifications 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.

Torry Kraftson, P.E.
Date: 04.17.26 Lic. No.: 41371

Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26
Sheet Title: SWPPP
Sheet: C001

GENERAL SWPPP REQUIREMENTS AND NOTES:

SWPPP AMENDMENTS (SECTION 6):

1. One of the individuals described in item 21.2.a or 21.2.b of the permit or another qualified individual must complete all SWPPP changes. Changes involving the use of less stringent BMPs must include a justification describing how the replacement BMP is effective for the site characteristics.
2. The SWPPP shall be amended to include additional or modified BMPs as necessary 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. The SWPPP shall be amended 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 significnatly minimizing the iscarge of pollutants to surface waters or groundwater or the discharges are cuasing water quality standard exceedances (e.g., nuisance conditions as defined in Minn. R. 7050.0210, subp. 2 or the SWPPP is not consistend with the ofjectives of the USEPA approved TMDL.

BMP SELECTION AND INSTALLATION (SECTION 7):

1. All BMPs identified in the SWPPP document and construction plans shall be selected, installed, and maintained in an appropriate and functional manner in accordance with relevant manufacturer specifications and accepted engineering practices.
2. Do not disturb more land (i.e., phasing) than can be effectively inspected and maintained in accordance with Section 11.

TEMPORARY EROSION PREVENTION PRACTICES (SECTION 8)

1. Prior to beginning any construction work at the site, locations of areas not to be disturbed must be delineated (e.g., with flags, stakes, signs, silt fence, snow fence, etc.) throughout the project site.

2. Minimize the need for disturbance of portions of the project with steep slopes. For those sloped areas which must be disturbed, use techniques such as phasing and stabilization practices designed for steep slopes (e.g., slope draining and terracing).

3. Stabilize all exposed soil areas (including stockpiles). Stabilization must be initiated immediately to limit soil erosion whenever any construction activity has permanently or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days (or 7 days if within one mile of an identified impaired water). Stabilization must be completed no later than 14 calendar days (or 7 days if within one mile of an identified impaired water) after the construction activity has ceased.

4. 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 sediment controls must be placed at the base of the stockpile.

5. For Public Waters that the Minnesota Department of Natural Resources has promulgated “work in water restrictions” during specified fish spawning time frames, all exposed soil areas that are within 200 feet of the water's edge, and drain to these waters must complete the stabilization activities within 24 hours during the restriction period.

6. 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. Stabilize remaining portions of temporary or permanent ditches or swales within 14 calendar days (or 7 days if within one mile of an identified impaired water) after connecting to a surface water or property edge and construction in that portion of the ditch temporarily or permanently ceases.

7. Temporary or permanent ditches or swales being used as sediment containment systems during construction (with properly designed rock-ditch checks, bio rolls, silt dikes, etc.) do not need to be stabilized during the temporary period of use as a sediment containment system. These areas must be stabilized within 24 hours after no longer being used for as a sediment containment system.

8. Applying mulch, hydromulch, tackifier, polyacrylamide or similar erosion prevention practices is not acceptable 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.

9. Pipe outlets must be provided with temporary or permanent energy dissipation within 24 hours after connection to a surface water or permanent stormwater treatment system.

10. Route water around unstabilized areas on the site and to reduce erosion, unless infeasible. Use erosion controls and velocity dissipation devices such as check dams, sediment traps, riprap, or grouted riprap at outlets within and along the length of any constructed stormwater conveyance channel, and at any outlet, to provide a non-erosive flow velocity, to minimize erosion of channels and their embankments, outlets, adjacent stream banks, slopes, and downstream waters during discharge conditions.

11. Unless infeasible due to lack of pervious or vegetated areas, direct discharges from BMPs to vegetated areas of the site (including any natural buffers) in order to increase sediment removal and maximize stormwater infiltration. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

12. Infiltration areas shall not be excavated until all upstream areas have been stabilized and/or upstream BMPs are in place to properly prevent sediment deposition. Only low impact equipment shall be allowed in infiltration areas which shall be clearly identified, staked, and marked/fenced off.

13. Project phasing shall be implemented to ensure land disturbance and temporary erosion control measures can be effectively inspected and maintained throughout the duration of the project in accordance with the Inspection and Maintenance requirements of Section 11.

TEMPORARY SEDIMENT CONTROL PRACTICES (SECTION 9)

1. Sediment control practices must be established on all down gradient perimeters and be located upgradient of any buffer zones. The perimeter sediment control practices must be in place before any upgradient land-disturbing activities begin. These practices shall remain in place until Final Stabilization has been established.

2. If downgradient sediment controls become overloaded, based on frequent failure or excessive maintenance requirements, additional upgradient sediment control practices or redundant BMPs shall be installed to eliminate the overloading concerns. All changes shall be recorded in the SWPPP.

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 an acceptable sediment control BMP except when working on a shoreline or below the waterline. Immediately after construction activity (e.g., installation of rip rap along the shoreline) in that area is complete, upland perimeter control practices shall be installed if exposed soils still drain to a surface water.

5. Re-install all sediment control practices that have been adjusted or removed to accommodate short-term activities such as clearing or grubbing, or passage of vehicles, immediately after the short-term activity has been completed. Complete any short-term activity that requires removal of sediment control practices as quickly as possible and re-install sediment control practices before the next precipitation event even if the short-term activity is not complete.

6. All storm drain inlets must be protected by appropriate BMPs during construction until all sources with potential for discharging to the inlet have been stabilized. Inlet protection may be removed for a particular inlet if a specific safety concern (street flooding/freezing) has been identified by the Permittee(s) or the jurisdictional authority (e.g., city/county/township/MnDOT engineer).The Permittee(s) must document the need for removal in the SWPPP.

7. Temporary soil stockpiles must have silt fence or other effective sediment controls, and cannot be placed in any natural buffers or surface waters, including stormwater conveyances such as curb and gutter systems, or conduits and ditches unless there is a bypass in place for the stormwater.

8. Where vehicle traffic leaves any part of the site (or onto paved roads within the site) install a vehicle tracking BMP to minimize the track out of sediment from the construction site. Examples of vehicle tracking BMPs include (but are not limited to) rock pads, mud mats, slash mulch, concrete or steel wash racks, or equivalent systems. Use street sweeping if such vehicle tracking BMPs are not adequate to prevent sediment from being tracked onto the street.

9. The Permittee(s) must install temporary sedimentation basins as required in accordance with permit requirements.

10. Minimize soil compaction by restricting vehicle access in areas where final vegetative stabilization will occur, unless otherwise infeasible.

11. Discharges from BMPs shall be directed to vegetated areas unless infeasible.

12. 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.

13. Perimeter sediment controls shall be installed 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, the reasons for which shall be recorded in the SWPPP.

14. The use of polymers, flocculants, or other sedimentation treatment chemicals, if used on the project, shall be used in accordance with accepted engineering practices, dosing specifications, and sediment removal design specifications provided by the product manufacturer or supplier. Use conventional erosion and sediment controls prior to the chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control system which allows or filtration of settlement of the floc prior to discharge.

15. If the proposed project as shown on the plans has 10 or more acres draining to a common location or 5 acres or more if the site is within one mile of a special or impaired water (as identified in Section II - Receiving Waters and Environmentally Sensitive Areas), then a temporary sediment basin must be constructed as shown on the plans. Temporary sediment basins will have a minimum of 3,600 cubic feet of storage per acre draining to the basin. The basin outlet shall provide for discharging water from the surface to minimize discharging of pollutants. A stabilized emergency overflow shall be constructed.

DEWATERING AND BASIN DRAINING (SECTION 10)

1. Discharge turbid or sediment-laden 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. Discharge from the temporary or permanent sedimentation basins to surface waters if the basin water has been visually checked to ensure adequate treatment has been obtained in the basin and that nuisance conditions will not result from the discharge. If the water cannot be discharged to a sedimentation basin prior to entering the surface water, it must be treated with the appropriate BMPs, such that the discharge does not adversely affect the receiving water or downstream properties.

2. Discharge water that contains oil or grease, must use an oil-water separator or suitable filtration device (e.g. cartridge filters, absorbents pads) prior to discharging the water.

3. All water from dewatering or basin-draining activities must be discharged in a manner that does not cause nuisance conditions, erosion in receiving channels or downslope properties, erosion or scour in the immediate vicinity of discharge points, or inundation in wetlands causing significant adverse impact to the wetland.

4. The use of filters with backwash water, 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. Discharge backwash water to the sanitary sewer if permission is granted by the sanitary sewer authority. Replace and clean the filter media used in dewatering devices when required to retain adequate function.

INSPECTIONS AND MAINTENANCE (SECTION 11)

1. Owner and Contractor shall ensure that a trained person (as identified in item 21.2.b) of the permit will inspect the entire construction site at a minimum:
   - 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. Inspect all erosion prevention and sediment control BMPs and Pollution Prevention Management Measures to ensure integrity and effectiveness during all routine and post-rainfall event inspections. All nonfunctional BMPs must be repaired, replaced, or supplemented with functional BMPs by the end of the next business day after discovery, or as soon as field conditions allow access unless another time frame is specified below. Investigate and comply with the following Inspection and Maintenance requirements:

   a. All perimeter control devices must be repaired, replaced, or supplemented when they become nonfunctional or the sediment reaches one-half (1/2) of the height of the device. These repairs must be made by the end of the next business day after discovery, or thereafter as soon as field conditions allow access.
   b. Temporary and permanent sedimentation basins must be drained and the sediment removed when the depth of sediment collected in the basin reaches one-half (1/2) the storage volume. Drainage and removal must be completed within 72 hours of discovery, or as soon as field conditions allow access.
   c. Inspect and photograph dewatering discharges at the beginning and at least once every 24 hours during operation.
   d. Surface waters, including drainage ditches and conveyance systems, must be inspected for evidence of erosion and sediment deposition during each inspection. 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. The removal and stabilization must take place within seven (7) days of discovery unless precluded by legal, regulatory, or physical access constraints. Use all reasonable efforts to obtain access. If precluded, removal and stabilization must take place within seven (7) calendar days of obtaining access. Contact all local, regional, state and federal authorities and receiving any applicable permits, prior to conducting any work in surface waters.
   e. Construction site vehicle exit locations must be inspected for evidence of off-site sediment tracking onto paved surfaces. Tracked sediment must be removed from all paved surfaces both on and off site within 24 hours of discovery, or if applicable, within a shorter time.
   f. Streets and other areas adjacent to the project must be inspected for evidence of off-site accumulations of sediment. If sediment is present, it must be removed in a manner and at a frequency sufficient to minimize off-site impacts (e.g., fugitive sediment in streets could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

5. Inspection frequency adjustment:
   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.

3. All inspections and maintenance activities within 24 hours of being conducted must be recorded and retained in the SWPPP. These records must include:
   a. Date and time of inspections
   b. Name of person(s) conducting inspections
   c. Findings of inspections, including the specific location where corrective actions are needed
   d. Corrective actions taken (including dates, times, and party completing maintenance activities)
   e. Date and amount of all rainfall events greater than 1/2 inch (0.5 inches) in 24 hours. Rainfall amounts must be obtained by a properly maintained rain gauge installed onsite, a weather station that is within 1 mile of your location or a weather reporting system that provides site specific rainfall data from radar summaries.
   f. If any discharge is observed to be occurring during the inspection, a record of all points of the property from which there is a discharge must be made, and the discharge should be described (i.e., color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of pollutants) and photographed.
   g. Any amendments to the SWPPP proposed as a result of the inspection must be documented within seven (7) calendar days.

4. All infiltration areas must be inspected to ensure that no sediment from ongoing construction activity is reaching the infiltration area. All infiltration areas must be inspected to ensure that equipment is not being driven across the infiltration area.

POLLUTION PREVENTION MANAGEMENT MEASURES (SECTION 12)

Implement the following pollution prevention management measures on the site:

1. Storage, Handling, and Disposal of Construction Products, Materials, and Wastes shall comply with the following to minimize the exposure to stormwater of any of the products, materials, or wastes. Products or wastes which are either not a source of contamination to stormwater or are designed to be exposed to stormwater are not held to this requirement:

   a. Building products that have the potential to leach pollutants must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by a similarly effective means designed to minimize contact with stormwater.
   b. Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials must be under cover (e.g., plastic sheeting or temporary roofs) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize contact with stormwater.
   c. Hazardous materials, toxic waste, (including oil, diesel fuel, gasoline, hydraulic fluids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste or hazardous materials must be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.
   d. Solid waste must be stored, collected and disposed of properly in compliance with Minn. R. ch. 7035.
   e. Portable toilets must be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041.

2. Fueling and Maintenance of Equipment or Vehicles; Spill Prevention and Response: 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. Conduct fueling in a contained area unless infeasible. 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. Report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible.

3. Vehicle and equipment washing: Wash the exterior of vehicles or equipment on the project site, washing must be limited to a defined area of the site. Runoff from the washing area must be contained in a sediment basin or other similarly effective controls and waste from the washing activity must be properly disposed of. Properly use and store soaps, detergents, or solvents. No engine degreasing is allowed on site.

4. Concrete and other washouts waste: Provide effective containment for all liquid and solid wastes generated by washout operations (concrete, stucco, paint, form release oils, curing compounds and other construction materials) related to the construction activity. The liquid and solid washout wastes must not contact the ground, and the containment must be designed so that it does not result in runoff from the washout operations or areas. Liquid and solid wastes must be disposed of properly and in compliance with MPCA rules. A sign must be installed adjacent to each washout facility that requires site personnel to utilize the proper facilities for disposal of concrete and other washout wastes.

PERMIT TERMINATION (SECTIONS 4 AND 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 the permit terminates at midnight on the submission date of the NOT.

3. Permittees may terminate permit coverage prior to completion of all construction activity if they meet all of the following conditions:
   a. Construction activity has ceased for at least 90 days; and
   b. at least 90 percent (by area) of all originally proposed construction activity has been completed and permanent cover has been established on those areas; and
   c. on areas where construction activity is not complete, permanent cover has been established; and
   d. the site complies with items 13.3 through 13.7 of the permit.

   After permit coverage is terminated under this item, any subsequent development on the remaining portions of the site will require permit coverage if the subsequent development itself or as part of the remaining common plan of development or sale will result in land disturbing activity of one (1) or more acres in size.

4. Permittees may terminate coverage upon MPCA approval after submitting information documenting the owner canceled the project.

5. 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.

6. Permittees must clean the permanent stormwater system of any accumulated sediment and must ensure the system meets all applicable requirements in Section 15 through 19 of the permit and is operating as designed.

7. Permittees must remove all sediment from conveyance systems prior to submitting the NOT.

8. Permittees must remove all temporary synthetic erosion prevention and sediment control BMPs prior to submitting the NOT. BMPs designed to decompose on-site may be left in place.

9. 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.

10. For construction projects on agricultural land (e.g., pipelines across cropland), disturbed land must be returned to its preconstruction agricultural condition prior to submitting the NOT.

11. When submitting the NOT, permittees must include either ground or aerial photographs showing vegetative cover requirements have been met as listed above. All submitted photographs shall include the date and specific site location.

LONG TERM OPERATION AND MAINTENANCE:

1. Upon the completion of construction activity and NPDES permit termination, in accordance with Sections 4 and 13, the Property Owner shall become the responsible party for long term operation and maintenance (O&M) of all permanent stormwater management features under this project.

2. All associated operations, inspections, maintenance, and record keeping shall be performed by trained individual(s) familiar with the site stormwater management system.

3. Record keeping of inspections and maintenance items shall be maintained by the Owner in accordance with applicable Maintenance Agreements/Declarations as required by local jurisdictional authorities.

Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120
www.larsonengr.com

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PRELIMINARY NOT FOR CONSTRUCTION

Client:
HASTINGS VETERINARY CLINIC
3150 RED WING BLVD.
HASTINGS, MN 55033

Project Title:
HASTINGS VETERINARY CLINIC
MAYCREST AVENUE, DENMARK TOWNSHIP

I hereby certify that this plan, specifications 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.

Torry Kraftson, P.E.

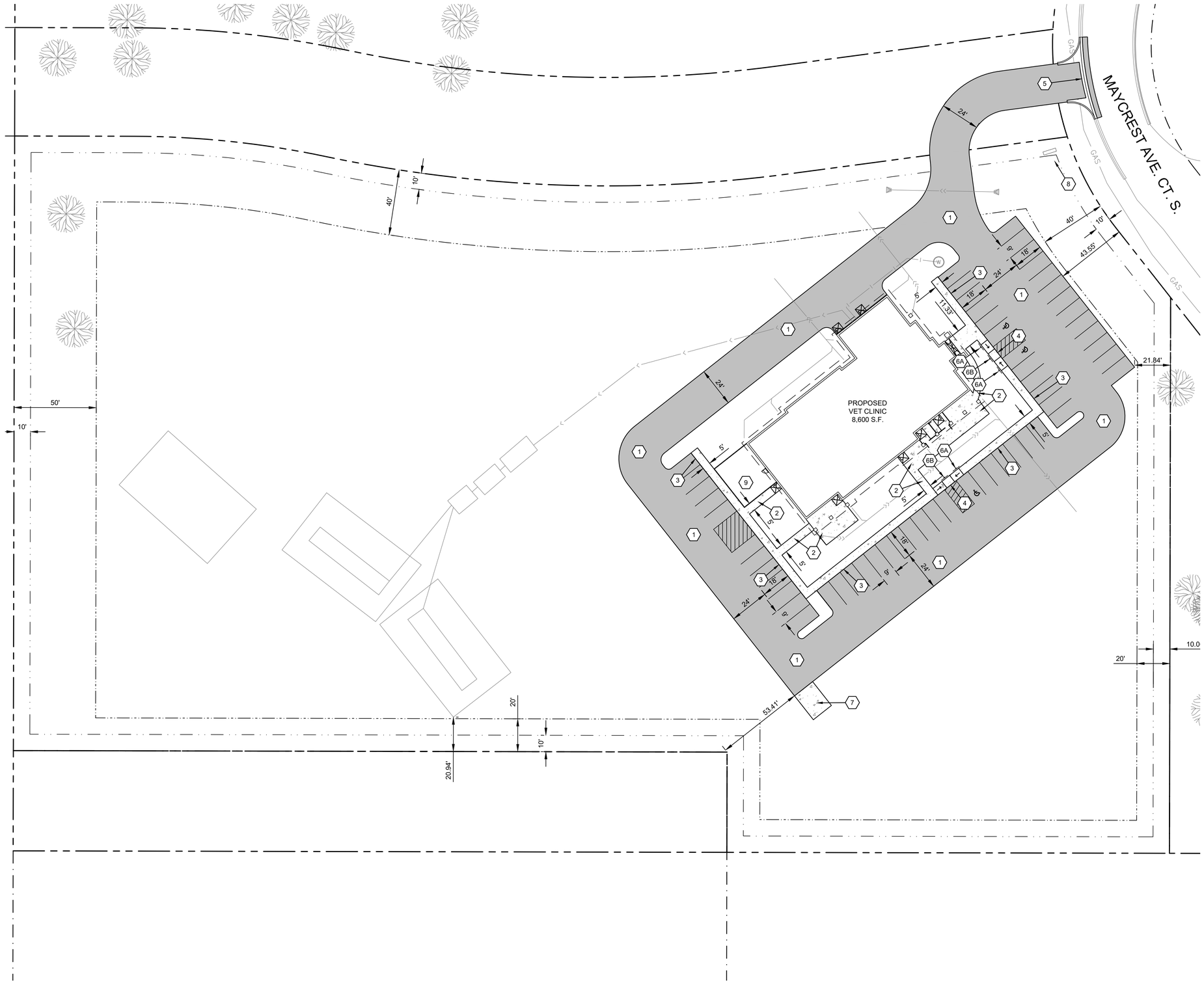
Date: 04.17.26 Lic. No.: 41371

Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26

Sheet Title:
SWPPP

Sheet:
C002



SYMBOL LEGEND

NEW BITUMINOUS PAVEMENT
SEE DETAIL

NEW CONCRETE PAVEMENT
SEE DETAIL

NOTE: CONCRETE JOINTS WHERE SHOWN ARE FOR GENERAL REFERENCE TO DIFFERENTIATE CONCRETE PAVEMENT TYPES. ACTUAL JOINTS SHALL BE CONSTRUCTED PER PROJECT SPECIFICATIONS.

GENERAL

- PROPERTY LINE
- EASEMENT LINE
- RIGHT-OF-WAY LINE
- SETBACK LINE

KEY NOTES

1. NEW BITUMINOUS PAVEMENT, SEE DETAIL 1/C500
2. NEW CONCRETE PAVEMENT, SEE DETAIL 2/C500
3. NEW CONCRTETE WITH THICKENED EDGE, SEE DETAIL 3/C500
4. NEW PARALLEL ACCESSIBLE CURB RAMP, SEE DETAIL 2/C501
5. NEW CONCRETE VALLEY GUTTER WITH BITUMINOUS APRON, SEE DETAIL 5/C500
6. NEW PARKING SIGN AND POST, SEE DETAIL 6/C500
   - _A: ADA PARKING
   - _B: ADA ACCESS AISLE
7. NEW TRASH ENCLOSURE, SEE ARCHITECTURAL
8. NEW MONUMENT SIGN, SEE ARCHITECTURAL
9. NEW RELIEF YARD, SEE ARCHITECTURAL

SITE AREAS

LOT AREA:	266,781 SF	(6.124 AC)	(100%)
GREEN SPACE	223,388 SF	(5.128 AC)	(83.7%)
NEW IMPERVIOUS:	43,393 SF	(0.996 AC)	(16.3%)
BUILDABLE AREA (EXLUSIVE OF SETBACKS)	200,714 SF	(4.608 AC)	(75.2%)

PARKING COUNT

55 STALLS PROVIDED

3 ADA STALLS REQUIRED
3 ADA STALLS PROVIDED

NORTH

0 15 30 60

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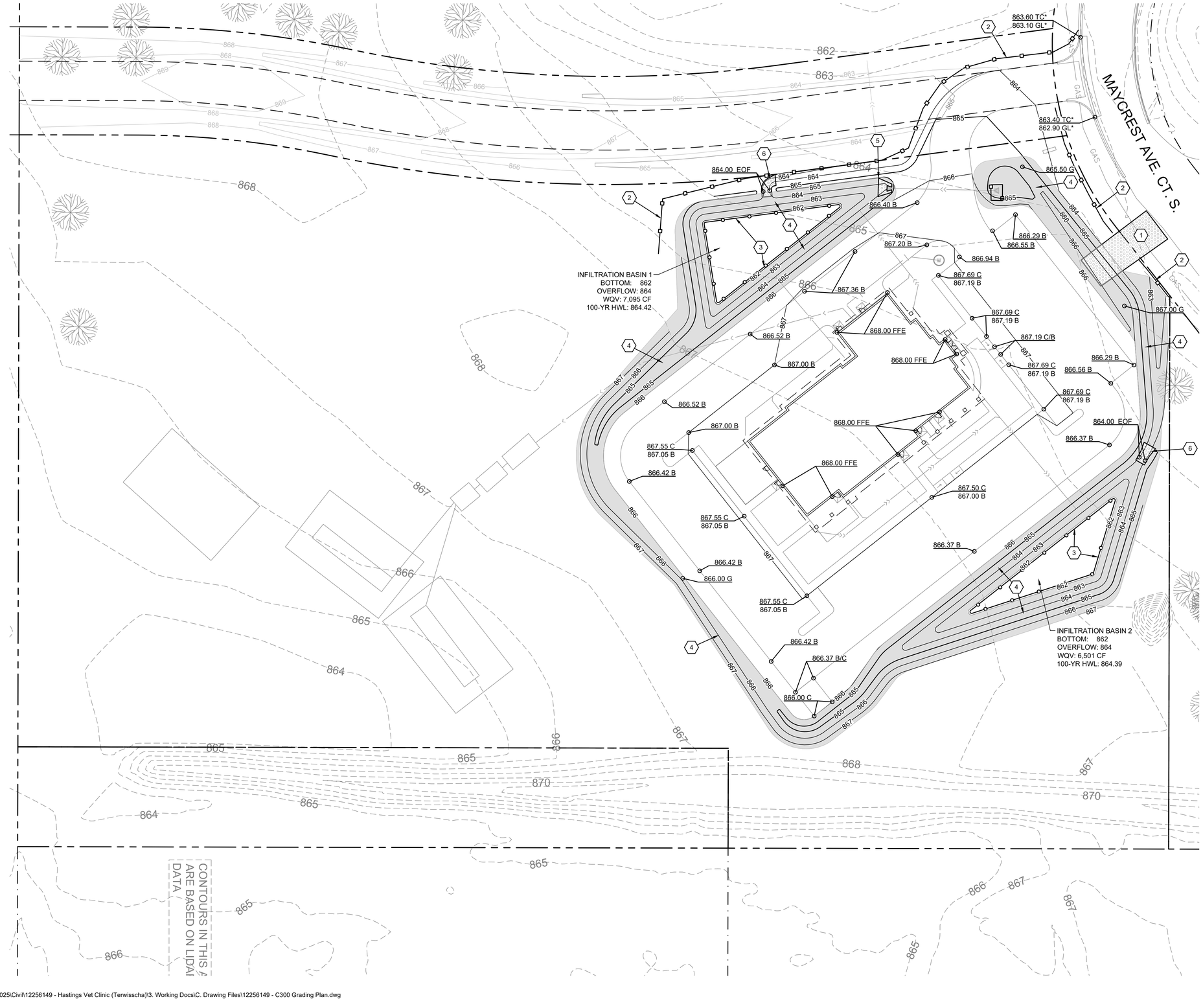
Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26

Sheet Title:
SITE PLAN

Sheet:
C200

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SYMBOL LEGEND

- 950 — EXISTING CONTOURS
- 950 — PROPOSED CONTOURS - MAJOR
- 949 — PROPOSED CONTOURS - MINOR
- 2.0% — GRADE SLOPE
- SILT FENCE
- SEDIMENT LOG
- RIP-RAP / ROCK CONST. ENTRANCE
- EROSION CONTROL BLANKET
- INLET PROTECTION

SPOT ABBREVIATIONS:

950.00 TC / 949.50 GL

TC - TOP OF CURB
GL - GUTTER LINE
B - BITUMINOUS
C - CONCRETE
G - FINISHED GRADE
EOF - EMERGENCY OVERFLOW
(*) - EXISTING TO BE VERIFIED

KEY NOTES

1. ROCK CONSTRUCTION ENTRANCE, SEE DETAIL 4/C500
2. SILT FENCE, SEE DETAIL 9/C500
3. SEDIMENT LOG, SEE DETAIL 8/C500
4. EROSION CONTROL BLANKET, SEE DETAIL 1/C501
5. RIP RAP, SEE DETAIL 7/C500
6. RIP RAP WEIR OVERFLOW, SEE DETAIL 3/C501

GRADING NOTES

1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. All disturbed areas to receive 6" of good quality topsoil and seed.
5. All construction shall be performed in accordance with state and local standard specifications for construction.

NORTH

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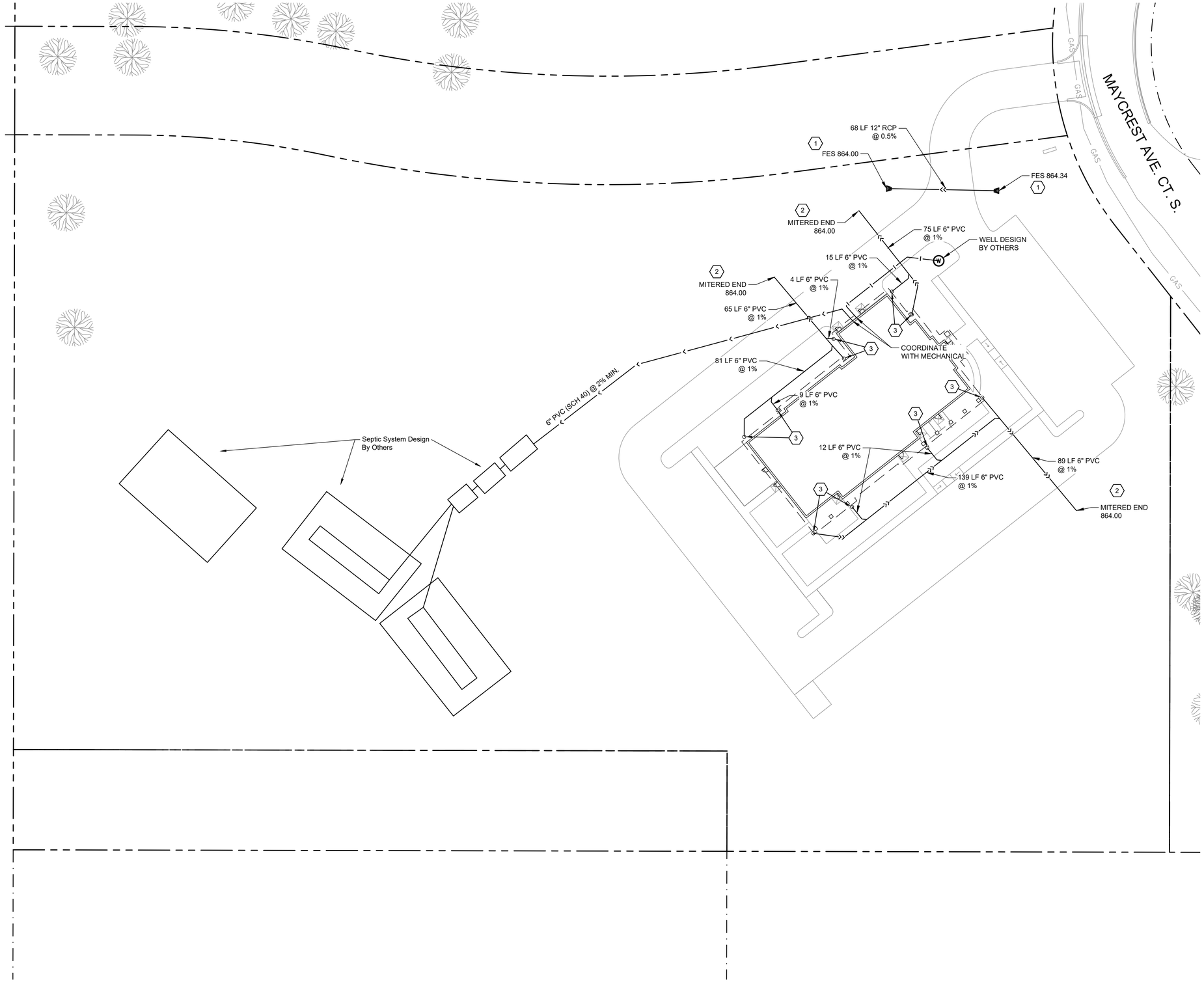
Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26

Sheet Title:
GRADING, DRAINAGE, AND EROSION CONTROL PLAN

Sheet:
C300

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SYMBOL LEGEND

- FLARED END
- PROPOSED WELL (BY OTHERS)
- GAS GAS — NATURAL GAS UNDERGROUND LINE
- SANITARY SEWER PIPE
- STORM SEWER PIPE
- WATERMAIN PIPE

KEY NOTES

1. FLARED END SECTION, SEE DETAIL 10/C500
2. MITERED END, SEE DETAIL 12/C500
3. ROOF DRAIN CONNECTION, SEE DETAIL 11/C500

UTILITY NOTES

1. It is the responsibility of the contractor to perform or coordinate all necessary utility connections and relocations from existing utility locations to the proposed building, as well as to all onsite amenities. These connections include but are not limited to water, sanitary sewer, cable TV, telephone, gas, electric, site lighting, etc.
2. All service connections shall be performed in accordance with state and local standard specifications for construction. Utility connections (sanitary sewer, watermain, and storm sewer) may require a permit from the City.
3. The contractor shall verify the elevations at proposed connections to existing utilities prior to any demolition or excavation. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
4. The contractor shall notify all appropriate engineering departments and utility companies 72 hours prior to construction. All necessary precautions shall be made to avoid damage to existing utilities.
5. Storm sewer requires testing in accordance with Minnesota plumbing code 4714.1107 where located within 10 feet of waterlines or the building.
6. HDPE storm sewer piping shall meet ASTM F2306 and fittings shall meet ASTM D3212 joint pressure test. Installation shall meet ASTM C2321.
7. All RCP pipe shown on the plans shall be MN/DOT class 3.
8. Maintain a minimum of 7 ½' of cover over all water lines and sanitary sewer lines. Where 7 ½' of cover is not provided, install 2" rigid polystyrene insulation (MN/DOT 3760) with a thermal resistance of at least 5 and a compressive strength of at least 25 psi. Insulation shall be 8' wide, centered over pipe with 6" sand cushion between pipe and insulation. Where depth is less than 5', use 4" of insulation.
9. Install water lines 12" above sewers. Where the sewer is above the water line or less than 12" below the water line, install sewer piping of materials approved for inside building use for 10 feet on each side of the crossing.
10. All watermain piping shall be class 52 ductile iron pipe unless noted otherwise.
11. See Project Specifications for bedding requirements.
12. Pressure test and disinfect all new watermains in accordance with state and local requirements.
13. Sanitary sewer piping shall be PVC, SDR-35 for depths less than 12', PVC SDR-26 for depths between 12' and 26', and class 52 D.I.P. for depths of 26' or more.
14. A structure adjustment shall include removing and salvaging the existing casting assembly, removing existing concrete rings to the precast section. Install new rings and salvaged casting to proposed grades, cleaning casting flange by mechanical means to insure a sound surface and install an external chimney seal from casting to precast section. Chimney seals shall be Infi-Shield Uni-Band or an approved equal.

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HASTINGS VETERINARY CLINIC
MAYCREST AVENUE, DENMARK TOWNSHIP

I hereby certify that this plan, specifications 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.

Torry Kraftson, P.E.

Date: 04.17.26 Lic. No.: 41371

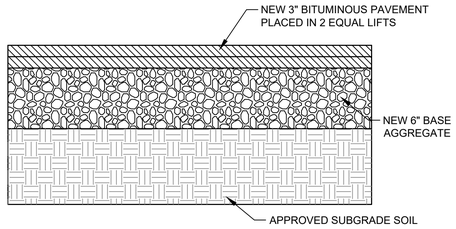
Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26

Sheet Title:
UTILITY PLAN

Sheet:
C400

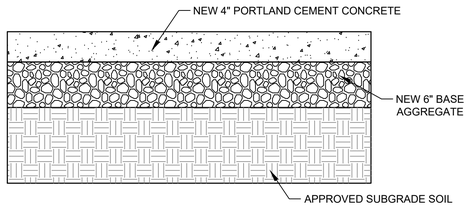
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BITUMINOUS PAVEMENT SECTION

1 / C500

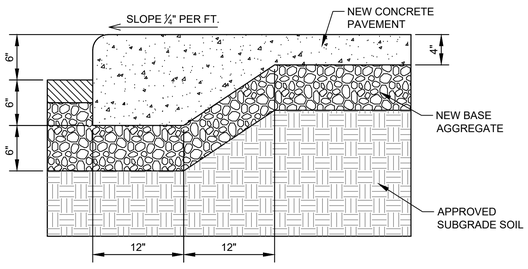
NOT TO SCALE



CONCRETE CONSTRUCTION DETAIL

2 / C500

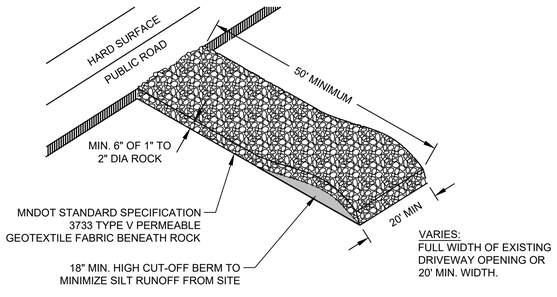
NOT TO SCALE



INTEGRAL CURB & SIDEWALK DETAIL

3 / C500

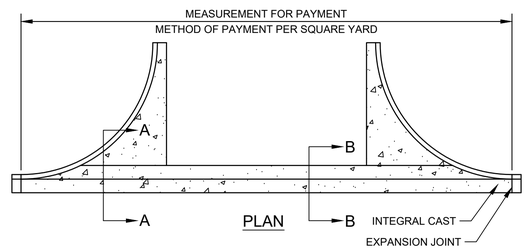
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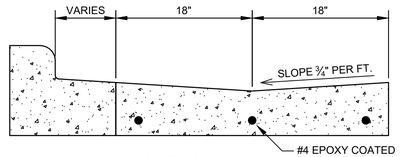


ROCK CONSTRUCTION ENTRANCE

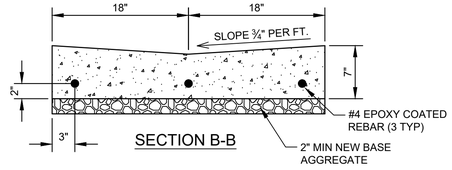
4 / C500

NOT TO SCALE





SECTION A-A

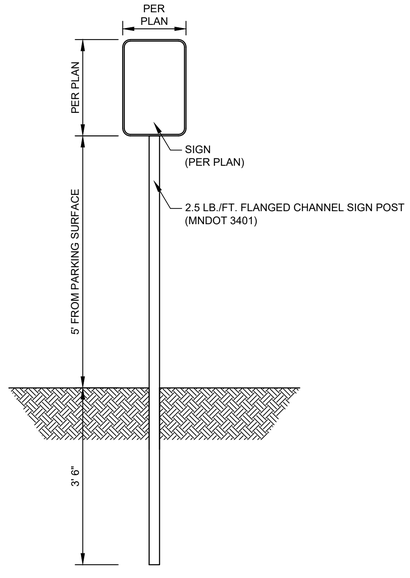


SECTION B-B

CONCRETE VALLEY GUTTER WITH BITUMINOUS APRON

5 / C500

NOT TO SCALE

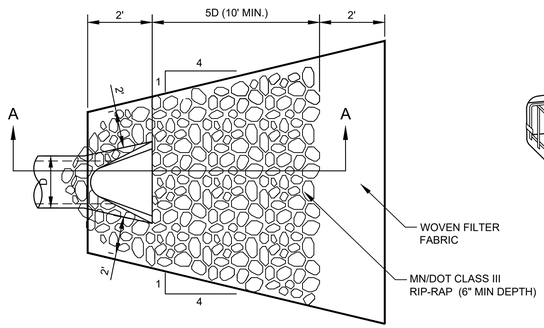


NOTES:
1. ALL SIGNS TO BE INSTALLED IN ACCORDANCE WITH MMUTCD AND MNDOT CURRENT STANDARD SIGNS MANUAL.
2. SEE PROJECT MANUAL FOR SIGN TYPES AND SPECIFICATION.
3. ALL SIGNS SHALL BE REVIEWED AND APPROVED BY OWNER/ENGINEER PRIOR TO CONSTRUCTION.
4. SIGN POSTS TO BE 6" BEHIND THE BACK OF CURB, UNLESS OTHERWISE DIRECTED.
5. SHARE POST WHERE APPLICABLE.
6. SIGNS WITHIN CONCRETE SIDEWALKS SHALL BE SURFACE MOUNTED WITH APPROVED BREAK-AWAY DEVICES.

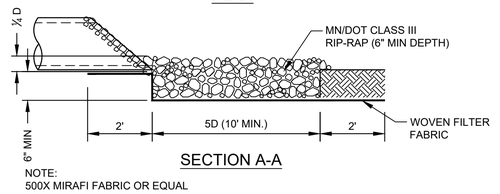
PARKING SIGN AND POST DETAIL

6 / C500

NOT TO SCALE



PLAN



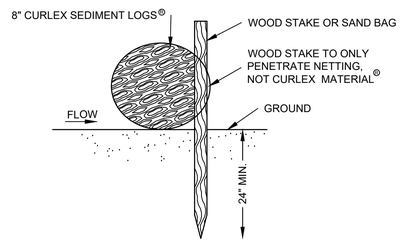
SECTION A-A

NOTE:
500X MIRAFI FABRIC OR EQUAL

RIP-RAP AT OUTLETS

7 / C500

NOT TO SCALE

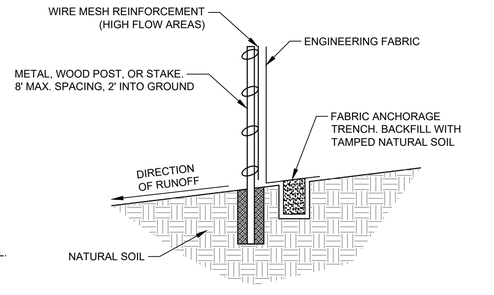


NOTES:
1. STAKE OR SAND BAG SPACING SHALL BE 2 FEET O.C.

SEDIMENT LOG DETAIL

8 / C500

NOT TO SCALE

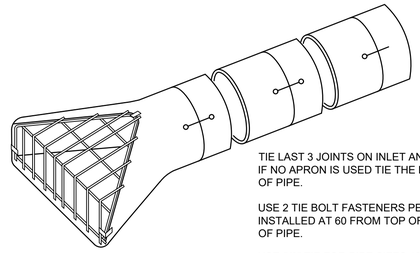


NOTE: DEPENDING UPON CONFIGURATION, ATTACH FABRIC TO WIRE MESH WITH HOG RINGS, STEEL POSTS WITH WIRES, OR WOOD POSTS WITH STAPLES.

SILT FENCE INSTALLATION DETAIL

9 / C500

NOT TO SCALE



TIE LAST 3 JOINTS ON INLET AND OUTLET.
IF NO APRON IS USED TIE THE LAST 3 SECTIONS OF PIPE.

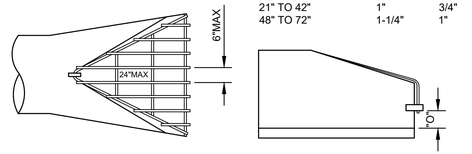
USE 2 TIE BOLT FASTENERS PER JOINT INSTALLED AT 60 FROM TOP OR BOTTOM OF PIPE.

USE 5/8" TIE FOR PIPE SIZES 12" TO 27".
USE 3/4" TIE FOR PIPE SIZES 30" TO 66".
USE 1" TIE FOR PIPE SIZES OVER 72".

NUTS AND WASHERS ARE NOT REQUIRED ON PIPE SIZE LESS THAN 21".

TRASH GUARDS WILL BE REQUIRED ON 18" OR LARGER PIPE.

SIZE OF PIPE	BARS	BOLTS	"O"
12" TO 18"	3/4"	5/8"	4"
21" TO 42"	1"	3/4"	6"
48" TO 72"	1-1/4"	1"	12"

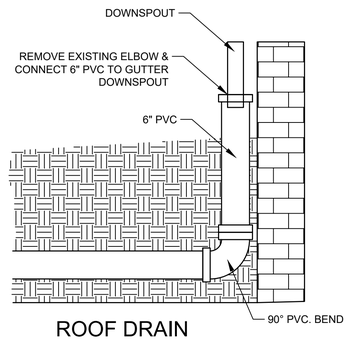


PROVIDE 3 CLIPS TO FASTEN TRASH GUARD TO F.E.S.
HOT DIP GALVANIZE AFTER FABRICATION.

FLARED END SECTION DETAIL

10 / C500

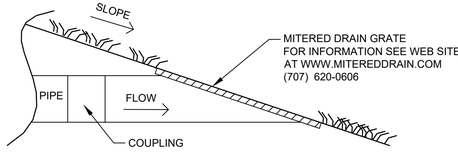
NOT TO SCALE



ROOF DRAIN CONNECTION DETAIL (TURF)

11 / C500

NOT TO SCALE



MITERED END GRATE DETAIL

12 / C500

NOT TO SCALE

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Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120
www.larsonengr.com

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Client:

HASTINGS VETERINARY CLINIC
3150 RED WING BLVD.
HASTINGS, MN 55033

Project Title:

HASTINGS VETERINARY CLINIC
MAYCREST AVENUE, DENMARK TOWNSHIP

I hereby certify that this plan, specifications 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.

Torry Kraftson, P.E.

Date: 04.17.26 Lic. No.: 41371

Rev.	Date	Description
	05.26.26	Boundary Adjustment

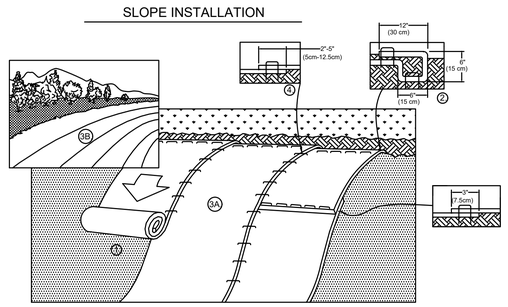
Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26

Sheet Title:

DETAILS

Sheet:

C500



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" (15 CM) DEEP X 6" (15 CM) WIDE TRENCH WITH APPROXIMATELY 12" (30cm) OF RECP's EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" (30 CM) APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" (30 CM) PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" (30 CM) APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM , STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" - 5" (5 CM - 12.5 CM) OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" (7.5 CM) OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" (30 CM) APART ACROSS ENTIRE RECP's WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 CM) MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.

1 C501

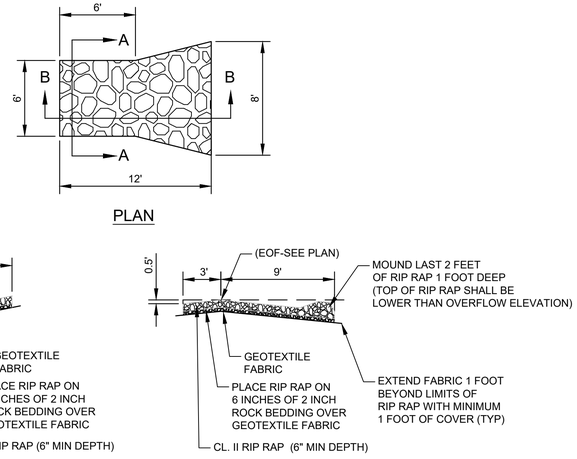
EROSION CONTROL BLANKET

NOT TO SCALE

2 C501

ACCESSIBLE RAMP DETAIL

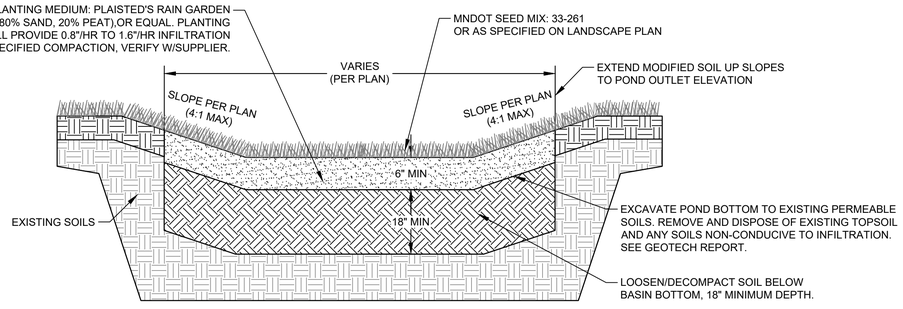
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3 C501

TYPICAL RIP RAP WEIR OVERFLOW

NOT TO SCALE

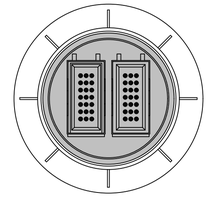


NOTES:
1. THE EXISTING SOILS SHALL BE PROTECTED FROM COMPACTION DUE TO CONSTRUCTION TRAFFIC. AREAS SHALL BE STAKED AND MARKED OFF, WITH ONLY LOW IMPACT EQUIPMENT (TRACKED OR SIMILAR) ALLOWED.

4 C501

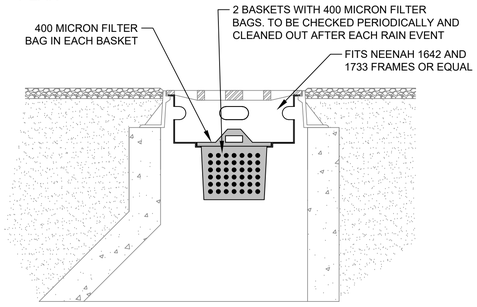
INFILTRATION BASIN CROSS SECTION

NOT TO SCALE



FILTER AREA	5.65 FT^2
OVERFLOW AREA	0.42 FT^2
MAXIMUM OVERFLOW RATE (@ 7" HEAD)	1.99 CFS
MAXIMUM OVERFLOW RATE (@ 13" HEAD)	2.79 CFS
BASKET WEIGHT (EMPTY)	1 LB
BASKET WEIGHT (FULL-APPROX.)	45 LBS

PLAN



PROFILE

5 C501

INFRASAFE INLET PROTECTION DEVICE (OR EQ.)

NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION

Larson Engineering, Inc.
3524 Labore Road
White Bear Lake, MN 55110
651.481.9120
www.larsonengr.com

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Client:

HASTINGS VETERINARY CLINIC
3150 RED WING BLVD.
HASTINGS, MN 55033

Project Title:

HASTINGS VETERINARY CLINIC
MAYCREST AVENUE, DENMARK TOWNSHIP

I hereby certify that this plan, specifications 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.

Torry Kraftson, P.E.

Date: 04.17.26 Lic. No.: 41371

Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 12256149
Drawn By: TRK
Checked By: TRK
Issue Date: 04.17.26

Sheet Title:

DETAILS

Sheet:

C501

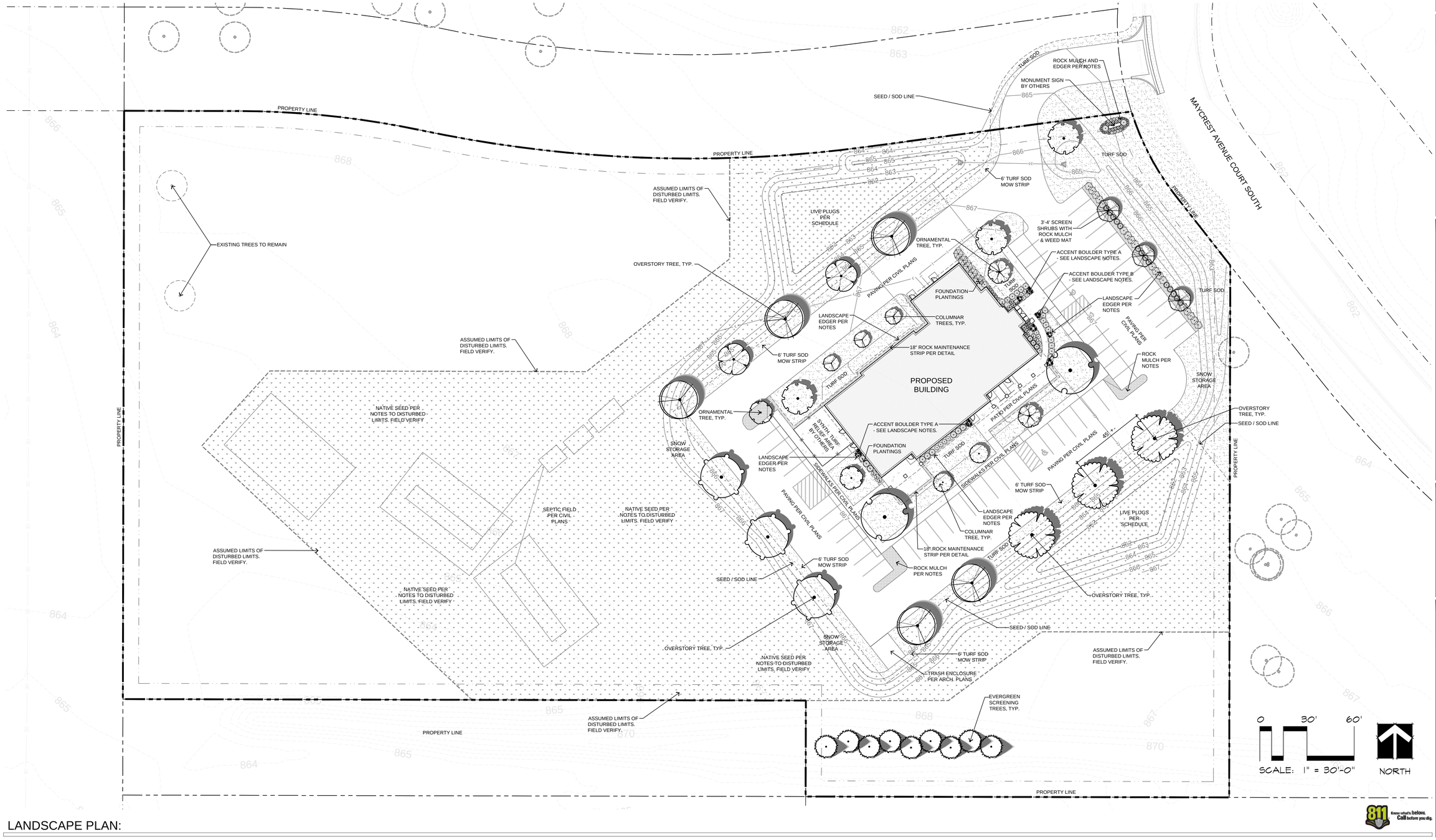
GENERAL NOTES:

1. See Civil Engineer's plans for site plan layout and dimensions.
2. Contractor to coordinate any work in the city right-of-way with Denmark Township's Public Works Department.
3. See Architect's plans for additional requirements regarding the site plan layout.
4. Place a minimum of 4" topsoil or slope dressing on all areas disturbed by construction, including right-of-way boulevards, unless specified otherwise.
5. See Civil Engineer's Plans for utility locations.
6. Irrigation is required for this project. See notes on Sheet L200
7. Refer to Sheet L200 for outcropping boulder information.

LANDSCAPE LEGEND:

- New Turf Sod
- Rock Mulch per Landscape Notes
- Native Seed per Notes
- Live Plugs per Notes
- Edger Line per Landscape Notes

** SEE SHEET L200 FOR PLANT SCHEDULE, NOTES, AND DETAILS **



LANDSCAPE PLAN:

Larson Engineering, Inc.

CALYX
DESIGN GROUP
Landscape Architecture | Planning
475 Cleveland Avenue N. | Suite 101A
St. Paul, MN 55104
telephone: 651.788.9018
internet: www.calyxdesigngroup.com

Client:
TWC CONSTRUCTION
1550 WILLMAR AVENUE S.E.
WILLMAR, MN 56201

Project Title:
ANIMAL VETERINARY CENTER
HASTINGS, MN

I hereby certify that this plan, specifications 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 M...
Anthony Presto, PLA
Date: Lic. No. 63150

PRELIMINARY

Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 26-113
Drawn By: AL
Checked By: HL
Issue Date: 05.26.2026

Sheet Title:
LANDSCAPE PLAN

Sheet:
L100

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

LANDSCAPE NOTES:

1. Tree saucer for individual trees outside of a plant bed to be four inches (4") depth natural single-shred hardwood mulch for trees outside of a plant bed. Install per tree planting detail. Do not place mulch against tree trunk. Remove wire and burlap from top third of root ball before final soil back-fill and mulch.

2. Refer to architectural plans for spot elevations, drainage, site dimensions, survey, tree removal, proposed utilities & erosion control.

3. All plant material shall comply with the latest edition of the American Standard for Nursery Stock, American Association of Nurserymen. Unless noted otherwise, deciduous shrubs shall have at least 5 canes at the specified shrub height. Plant material shall be delivered as specified.

4. Plan takes precedence over plant schedule if discrepancies in quantities exist.

5. All proposed plants shall be located and staked as shown.

6. Adjustment in location of proposed plant material may be needed in field. Should an adjustment be required, the client will provide field approval. Significant changes may require city review and approval.

7. The project landscape contractor shall be held responsible for watering and properly handling all plant materials brought on the site both before and after installation. Schedule plant deliveries to coincide with expected installation time within 36 hours. Install plants and sod between April 15 and June 15 or between September 15 and October 30.

9. The landscape contractor shall provide the owner with a watering schedule appropriate to the project site conditions and to plant material growth requirements.

10. If the landscape contractor is concerned or perceives any deficiencies in the plant selections, soil conditions, drainage or any other site condition that might negatively affect plant establishment, survival or guarantee, they must bring these deficiencies to the attention of the landscape architect & client prior to bid submission. Plant bed drainage concerns during plant installation shall be brought to the attention of the Owner and General Contractor immediately.

11. Contractor shall establish to his/ her satisfaction that soil and compaction conditions are adequate to allow for proper drainage at and around the building site.

12. Contractor is responsible for ongoing maintenance of all newly installed material until time the end of the warranty period. Any acts of vandalism or damage which may occur prior to owner acceptance shall be the responsibility of the contractor. Contractor shall provide the owner with a maintenance program including, but not limited to, pruning, fertilization and disease/pest control.

13. The contractor shall guarantee newly planted material through ONE calendar year from the date of written owner acceptance. Plants that exhibit more than 30% die-back damage shall be replaced at no additional cost to the owner. The contractor shall also provide adequate tree wrap and deer/rodent protection measures for the plantings during the warranty period. Prune dead wood at 11 month warranty review period - use wound paint on trees.

14. This layout plan constitutes our understanding of the landscape requirements listed in the ordinance. Changes and modifications may be requested by the city based on applicant information, public input, council decisions, etc.

15. The landscape contractor shall be responsible for obtaining any permits and coordinating inspections as required throughout the work process.

16. Plant size & species substitutions must be approved in writing prior to acceptance in the field.

17. Irrigation: A new irrigation system is required for the new landscape improvements shown. Refer to the irrigation layout plan for additional information.

18. All edger shall be professional grade 16ga galvanized, perforated steel edger with rounded top edge, Coyote or Equal. Anchor every 18" on-center (minimum). Submit sample for Owner approval.

19. Landscape Contractor is responsible for coordination with the General Contractor, to protect the new improvements on and off-site during landscape work activities. Report any damage to the General Contractor immediately.

21. **Mulch:** Rock mulch areas shall receive 4" depth of 1" dia. clean gray trap rock over weed mat. Submit mulch sample for Owner approval. Dresser or Equal. Install rock mulch 1" below back of curbs or walks to prevent spill-over. Do not mound rock mulch. Coordinate finished grade condition with earthwork subcontractor. Wood mulch areas shall receive 4" depth of Western Red Cedar wood mulch over weed mat.

22. All planting, seeding, and sodded areas shall be prepared prior to installation activities with a harley power box rake or equal to provide a firm planting bed free of stones, sticks, construction debris, etc. Unless otherwise noted, fine grading (within 4" of set grade) shall be by the Landscape Contractor, including topsoil.

23. Turf Sodding activity shall conform to all rules and regulations as established in the MnDOT Seeding Manual, 2024 edition, for seed bed preparation, installation, maintenance, acceptability, and warranty.

24. The Landscape Contractor shall furnish samples of all landscape materials for approval prior to installation, if requested by Owner.

25. The Landscape Contractor shall clear and grub the underbrush from within the work limits to remove dead branches, leaves, trash, weeds and foreign materials.

26. The landscape contractor shall contact Gopher State One Call no less than 48 hours before digging for field utility locations.

27. The landscape contractor shall be responsible for the removal of erosion control measures once vegetation has been established to the satisfaction of the municipal staff. This includes silt curtain fencing and sediment logs placed in the landscape.

28. The landscape contractor shall be responsible for visiting the site to become familiar with the conditions prior to bidding and installation. Coordinate with the general contractor on matters such as fine grading, landscaped area conditions, staging areas, irrigation connection to building, etc.

30. Topsoil Requirements: All graded areas of the site that are designated on the plan set for turf sod shall have no less than 4" of imported (or qualified stockpiled) topsoil, areas designated for shrubs, trees, and perennials shall have no less than 12" of imported top soil, meeting MnDOT classifications for topsoil & planting soil for trees, shrubs, and turf. Slope away from building. Soil Management Strategies (soil loosening to 12-inch depth and soil amendment in top 6-inch depth) must be completed prior to the installation of any irrigation system components, plantings, seeding, or sodding in specific landscape work areas.

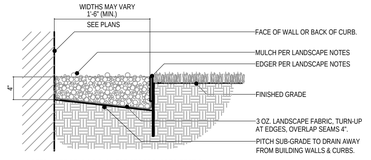
31. Landscape contractor must prove the open sub-grade of all planting areas after their excavation is capable of infiltrating a minimum requirement of 1/4-inch of water per hour prior to installation of plant materials, topsoil, irrigation, weed mat, and mulch. Planting areas not capable of meeting this requirement shall have 4" diameter X 48" depth holes augured every 36" on-center and filled with MnDOT Free-Draining Coarse Filter Aggregate. Re-test sub-grade percolation for compliance to infiltration minimum requirement.

32. Landscape contractor to provide nursery pull list (bill of lading) including plant species and sizes shipped to the site. Additionally, the landscape contractor shall provide nursery stock traceability, proving none of the materials provided contain or are genetic strains of the neonicotinoid family including acetamiprid, clothianidin, imidacloprid, nitenpyram, nithiazine, thiacloprid and thiamethoxam.

33. Boulders: Where noted on the plan, furnish and install the following natural outcropping stone boulders. Place flat-face down.
TYPE A: (1) Gray Trap Boulder, Approximately 3'X4'X24" Tall, Irregular Form
TYPE B: (4) Gray Trap Boulders, Approximately 4'X5'X30" Tall, Irregular Form
Field sort boulders from selection available from the supplier. Available at Rock Hard Landscape Supply, Burnsville, MN.

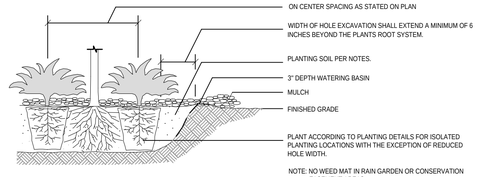


* IMAGE FOR REFERENCE ONLY. MATCH CHARACTER OF STONE SHOWN. VERIFY WITH OWNER BEFORE INSTALLATION *

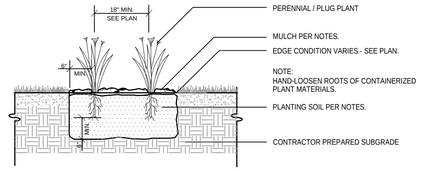


NOTES: SEE GRADING PLAN FOR CROSS SLOPE DIRECTION.
PLANT BED WIDTH VARIES, SEE PLAN.
SUBMIT ROCK MULCH SAMPLE FOR OWNER APPROVAL.
LANDSCAPE FABRIC TO BE FREE-DRAINING.

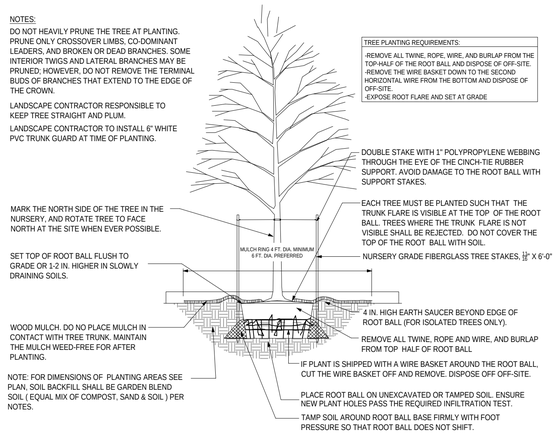
1 L200 MULCH DETAIL
NOT TO SCALE



2 L200 TYP. SHRUB PLANTING - SECTION
NOT TO SCALE



3 L200 TYP. PERENNIAL PLANTING DETAIL
NOT TO SCALE



4 L200 DECIDUOUS TREE PLANTING - SECTION
NOT TO SCALE

PLANT SCHEDULE

Larson Engineering, Inc.

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	MATURE HEIGHT/SPREAD	QTY
EVERGREEN TREES							
	PD	Picea glauca `Densata`	Black Hills Spruce	6` Hgt.	B&B	40'H / 15'W	9
ORNAMENTAL TREES							
	AO	Aesculus glabra	Ohio Buckeye	1.5" Cal.	B&B	25'H / 15'W	2
	MA	Maackia amurensis	Amur Maackia	1.5" Cal.	B&B	15'H / 15'W	2
	MP	Malus x `Prairifire`	Prairifire Crab Apple	1.5" Cal.	B&B	15'H / 15'W	2
OVERSTORY TREE							
	AR2	Acer rubrum `Red Rocket`	`Red Rocket` Red Maple	2.5" Cal.	B&B	25'H / 15'W	3
	AS	Acer x freemanii `Sienna`	Sienna Glen Maple	2.5" Cal.	B&B	40'H / 30'W	5
	BP	Betula platyphylla 'Fargo'	Dakota Pinnacle Birch	2.5" Cal.	B&B	25'H / 15'W	2
	CO	Celtis occidentalis	Common Hackberry	2.5" Cal.	B&B	40'H / 30'W	3
	GD2	Gleditsia triacanthos inermis 'Draves' TM	Street Keeper Honey Locust	2.5" Cal.	B&B	30'H / 20'W	3
	GI2	Gymnocladus dioica `McKBranched` TM	Kentucky Coffeetree	2.5" Cal.	B&B	40'H / 30'W	2
	PE	Populus tremula `Erecta`	Columnar Swedish Aspen	2.5" Cal.	B&B	40'H / 15'W	3
	UN	Ulmus americana 'New Horizon'	New Horizon Elm	2.5" Cal.	B&B	40'H / 40'W	3
SHRUBS							
	Am	Aronia melanocarpa `Morton` TM	Iroquis Beauty Black Chokeberry	5 gal.	Pot	2'H / 4'W	9
	Cr3	Cornus sericea	Red Twig Dogwood	10 gal.	Pot	5'H / 5'W	5
	Ci	Cornus stolonifera `Red Gnome`	Red Gnome Dogwood	2 gal.	Pot	3'H / 4'W	6
	Ha	Hydrangea paniculata `SMLPQF`	Little Quick Fire Hydrangea	3 gal.	Pot	4'H / 4'W	18
	Jf	Juniperus chinensis `Sea Green`	Sea Green Juniper	5 gal.	Pot	3'H / 4'W	17
	Ra	Ribes alpinum	Alpine Currant	5 gal.	Pot	3'H / 4'W	18
	Ss4	Sorbaria sorbifolia `Sem`	Sem Ash Leaf Spirea	2 gal.	Pot	3'H / 3'W	8
	Sc	Syringa x 'SMNJRPU'	Bloomerang® Dwarf Purple Lilac	2 gal.	Pot	2'H / 2'W	11
ANNUALS/PERENNIALS							
	Ed	Echinacea purpurea 'Doubledecker'	Doubledecker Purple Coneflower	1 gal.	Pot	18"H / 14"W	8
	Nw	Nepeta x faassenii `Walkers Low`	Walkers Low Catmint	1 gal.	Pot	18"H / 24"W	10
	Rg2	Rudbeckia fulgida `Goldstrum`	Black Eyed Susan	1 gal.	Pot	18"H / 14"W	20
GRASSES							
	Ck	Calamagrostis x acutiflora `Karl Foerster`	Feather Reed Grass	1 gal.	Pot	4'H / 2'W	15

CALYX
DESIGN GROUP
Landscape Architecture | Planning
475 Cleveland Avenue N. | Suite 101A
St. Paul, MN 55104
telephone: 651.788.9018
internet: www.calyxdesigngroup.com

Client:
TWC CONSTRUCTION
1550 WILLMAR AVENUE S.E.
WILLMAR, MN 56201

Project Title:
ANIMAL VETERINARY CENTER
HASTINGS, MN

I hereby certify that this plan, specifications 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.
Name: Alex Presto, PLA
Date: Lic. No. 63150
PRELIMINARY

Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 26-113
Drawn By: AL
Checked By: HL
Issue Date: 05.26.2026
Sheet Title: LANDSCAPE DETAILS
Sheet: L200

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DETAILS, NOTES, & SCHEDULES:

NATIVE SEED MIX:

Native Seed 'Type A' Areas noted per plan: (unless otherwise noted on civil plans), shall be: MnDOT 'Southern Shortgrass Roadside' Seed Mix, worked into the topsoil layer at 26.0 lbs per acre. Submit seed mix for approval. Grading and Erosion Control per Civil Plans and Specifications.

Southern Shortgrass Roadside

Abbreviation: SSR

Purpose:	Inslopes and medians; full sun to part-shade; any site with dry soils that will get mowed twice per year or less. This mix meets pollinator habitat requirements.				
Planting Area:	Southern 2/3 of MN; MnDOT Districts 3B, 4, 6, 7, 8, & Metro.				
Replaces:	35-221 Dry Prairie General & 36-211 Woodland Edge S & W				
Cost Estimate:	$950/acre (35-221 averages $860/acre, 36-211 averages $1,200/acre)				
Common Name	**Scientific Name**	**Rate (lb/ac)**	**% of Mix (by weight)**	**% by Seed**	**Seeds/ sq ft**
Side-oats Grama	*Bouteloua curtipendula*	3.50	13.46%	5.16%	7.71
Blue Grama	*Bouteloua gracilis*	0.90	3.46%	8.84%	13.22
Kalm's Brome	*Bromus kalmii*	0.90	3.46%	1.77%	2.64
Short Sedge	*Carex brevior*	0.10	0.38%	0.71%	1.07
Nodding Wild Rye	*Elymus canadensis*	2.50	9.62%	3.19%	4.78
Slender Wheatgrass	*Elymus trachycaulus*	6.00	23.08%	10.16%	15.21
Junegrass	*Koeleria macrantha*	0.10	0.38%	4.91%	7.35
Perennial Ryegrass	*Lolium perenne*	6.00	23.08%	19.98%	29.89
Little Blustem	*Schizachyrium scoparium*	3.00	11.54%	11.05%	16.53
	Grasses Subtotal	**23.00**	**88.46%**	**65.76%**	**98.39**
Leadplant	*Amorpha canescens*	0.15	0.58%	0.45%	0.67
Long-headed Thimbleweed	*Anemone cylindrica*	0.04	0.00%	0.26%	0.38
Prairie Sage	*Artemisia ludoviciana*	0.05	0.19%	3.07%	4.59
Butterfly Milkweed	*Asclepias tuberosa*	0.10	0.38%	0.11%	0.16
Whorled Milkweed	*Asclepias verticillata*	0.05	0.19%	0.14%	0.20
Partridge Pea	*Chamaecrista fasiculata*	0.60	2.31%	0.40%	0.60
Purple Prairie Clover	*Dalea purpurea*	0.50	1.92%	1.84%	2.75
Tall Cinquefoil	*Drymocallis arguta*	0.06	0.00%	3.39%	5.07
Narrow-leaved Purple Coneflower	*Echinacea angustifolia*	0.06	0.23%	0.10%	0.15
Stiff Sunflower	*Helianthus pauciflorus*	0.06	0.23%	0.06%	0.09
Alumroot	*Heuchera richardsonii*	0.04	0.15%	6.87%	10.28
Round-headed Bush Clover	*Lespedeza capitata*	0.20	0.77%	0.39%	0.59
Rough Blazing Star	*Liatris aspera*	0.05	0.19%	0.20%	0.29
Wild Bergamot	*Monarda fistulosa*	0.05	0.19%	0.86%	1.29
Prairie Coneflower	*Ratibida columnifera*	0.15	0.58%	1.55%	2.31
Black-eyed Susan	*Rudbeckia hirta*	0.25	0.96%	5.65%	8.45
Gray Goldenrod	*Solidago nemoralis*	0.05	0.19%	3.68%	5.51
Stiff Goldenrod	*Solidago rigida*	0.06	0.23%	0.60%	0.90
Heath Aster	*Symphyotrichum ericoides*	0.05	0.19%	2.45%	3.67
Sky-blue Aster	*Symphyotrichum oolentangiensis*	0.05	0.19%	0.98%	1.47
Prairie Rose	*Rosa arkansana*	0.10	0.38%	0.02%	0.03
Bracted Spiderwort	*Tradescantia bracteata*	0.08	0.31%	0.20%	0.29
Hoary Vervain	*Verbena stricta*	0.10	0.38%	0.69%	1.03
Heart-leaved Alexanders	*Zizia aptera*	0.10	0.38%	0.29%	0.44
	Forbs Subtotal	**3.00**	**11.12%**	**34.24%**	**51.23**
	Total	**26.00**	**100%**	**100%**	**149.63**

NATIVE SEED MAINTENANCE

Native Grass and Forb Mixtures (mixtures beginning with the number 3)

Year 1
Establishment (spring seeding):
1) Prepare site - Late April - May
2) Seed - May 1 - June 1

Maintenance:
1) Mow (6-8 inches) - every 30 days after planting until September 30.
2) Weed Control - mowing should help control annual weeds. Spot spray thistles, etc.

Establishment (fall seeding):
1) Prepare site - Late August - early September
2) Seed - late September to freeze-up

Maintenance (following season):
1) Mow (6-8 inches) - once in May, June, and July
2) Weed Control - mowing should keep annual weeds down. Spot spray thistles, etc.

Evaluation:
1) Cover crop growing within 2 weeks of planting (except dormant plantings).
2) Seedlings spaced 1-6 inches apart in drill rows.
3) Native grass seedlings may only be 4-6 inches tall.
4) If there is a flush of growth from foxtail etc., mow as necessary.

Year 2
Maintenance:
1) Mow (6-8 inches) one time between June 1 - August 15 before weeds set seed.
2) Weed Control - mowing should keep annual weeds down. Spot spray thistles, etc.
3) Some sites may not require much maintenance the second year.

Evaluation:
1) Cover crop will be gone unless winter wheat was used in a fall planting.
2) Grasses forming clumps 1-6 inches apart in drill rows, but still short.
3) Some flowers should be blooming (black-eyed Susans, bergamot, etc.).
4) If there is a flush of growth from foxtail etc., mow site.

Year 3
Maintenance:
1) Mow only if necessary.
2) Weed Control - Spot spray thistles, etc.
3) Sites usually do not require much maintenance the third year.

Evaluation:
1) Planting should begin looking like a prairie - tall grasses, flowers, etc.

Long-term
Maintenance:
1) Weed Control - Spot spray thistles, etc.
2) Burning (3-5 year rotation) alternate spring and fall if possible.
3) Haying (3-5 year rotation) late summer or early fall. Alternate with burning (may substitute for burning).
4) Burning two years in a row will really "clean up" rough-looking sites.

NATIVE SEEDING INSTALLATION METHOD:

Drop Seeding Onto Tilled Sites
This is the "standard" method for seeding on prepared sites such as those on construction projects.

a) Site Preparation: The site should be prepared by loosening topsoil to a minimum depth of 3 inches.
b) Fertilizer: Use a fertilizer analysis based on a soil test or a general recommendation is a 10-10-10 (NPK) commercial grade analysis at 200 lbs/acre.
c) Seed Installation: Seed should be installed with a drop seeder that will accurately meter the types of seed to be planted, keep all seeds uniformly mixed during the seeding and contain drop seed tubes for seed placement (Brillion-type). The drop seeder should be equipped with a cultipacker assembly to ensure seed-to-soil contact.
d) Seeding Rates: Rates are specified in the mixture tabulation for the specified mix.
e) Packing: If the drop seeder is not equipped with a cultipacker, the site should be cultipacked following the seeding to ensure seed-to-soil contact.
f) Mulch: Cover soil with a hydromulch consisting of natural wood fiber or paper fiber, water, and M-Binder at 100 lbs per acre.

Note: Heavy equipment is not allowed in the infiltration basins to keep soils from getting compacted. If any compaction occurs due to seeding operations, the soils must be uncompacted.

BASIN BOTTOM LIVE PLUG SCHEDULE:

Plug Spacing:	Scientific Name	Common Name	Size	Root
24" On-Center	Bolboschoenus fluviatius	River Bullrush	FLAT	PLUG
(Provide a random and equal mixture of the plants listed)	Calamagrostis canadensis	Blue Joint Grass	FLAT	PLUG
	Carex pellita	Wooley Sedge	FLAT	PLUG
	Carex bebbi	Bebb's Sedge	FLAT	PLUG
	Carex vulpinoidea	Fox Sedge	FLAT	PLUG
	Carex comosa	Bottle Brush Sedge	FLAT	PLUG
	Carex lacustris	Lake Sedge	FLAT	PLUG
	Carex stricta	Tussock Sedge	FLAT	PLUG
	Juncus effusus	Common Rush	FLAT	PLUG
	Scirpus atrovirens	Green Bulrush	FLAT	PLUG
	Scirpus cyperinus	Woolgrass	FLAT	PLUG
	Spartina pectinata	Cord Grass	FLAT	PLUG

* Contractor is to evenly distribute the allocated amount of prairie plugs throughout the basin areas located within the site accordingly. Plug specie selections are subject to seasonal availability.

SEEDING NOTES & SCHEDULES:

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I hereby certify that this plan, specifications 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.

PRELIMINARY

Heidi Lesto, PLA
Lic. No. 63150

Rev.	Date	Description
	05.26.26	Boundary Adjustment

Project #: 26-113
Drawn By: AL
Checked By: HL
Issue Date: 05.26.2026

Sheet Title:
SEEDING NOTES & SCHEDULES

Sheet:
L300

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