STAFF REPORT

CITY COUNCIL
DATE: 5/16/23

TO: Lake Elmo City Council

FROM: Jenni Faulkner, Consulting Senior Planner

Nathan Fuerst, Consulting Planner

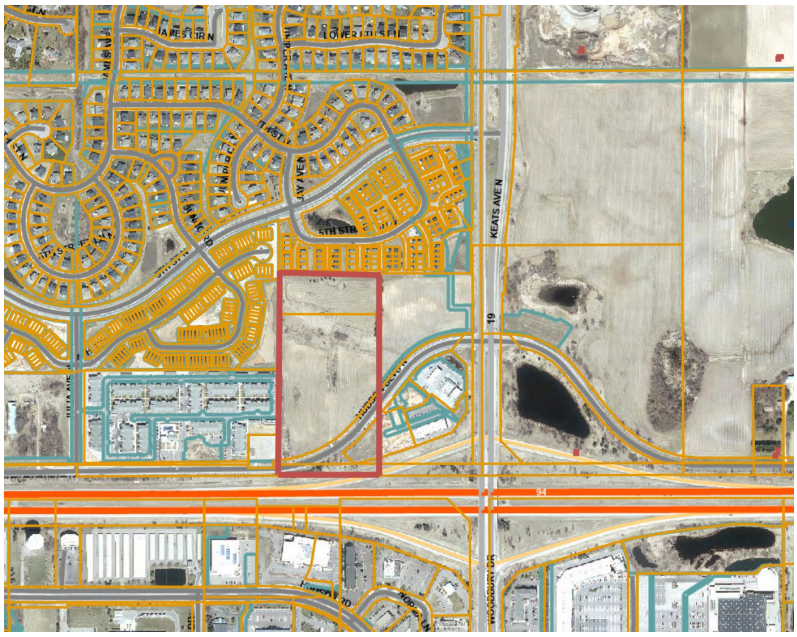
AGENDA ITEM: Public Hearing- Drake Motor Partners for Final Plat/Planned Unit Development

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BACKGROUND:

On March 21, 2023 the City Council conditionally approved an application from Drake Motor Partners requesting Preliminary Plat and Planned Unit Development (PUD) approval for a four-lot subdivision to facilitate the construction of an auto dealership (50,527 square feet) and a 3,270 square foot fast-food restaurant. Since their preliminary approval, the Applicant's team has worked with City Staff to satisfy the conditions of preliminary plat approval. They have since revised plans according to the approvals granted in March and are seeking the Final approvals required to entitle their development.

The City does not require final plat or PUD requests to be reviewed by the Planning Commission. As such, City staff have reviewed this application for conformance with the City's previous conditions and approvals, and for conformance with existing City Standards.



ISSUE BEFORE THE CITY COUNCIL:

The City Council is asked to review and make a determination on the Final Plat, and Final Planned Unit Development (PUD). The Council should discuss the proposed development and make a decision on the application by adoption of a PUD Ordinance, resolution with findings and conditions, and approval of the Development Agreement.

GENERAL INFORMATION:

Applicant:	Jon Hauser, 496 S. Broadway, Denver, CO 80209
Property Owner:	Ebertz Enterprises, 1147 Clipper Way, Woodbury, MN
Location:	Two parcels west of Keats Ave and north of Interstate 94
PID#s:	34.029.21.44.0006 and 34.029.21.44.0004
Request:	Preliminary Plat/Planned Unit Development (PUD)
Site Area:	17.06 acres
Land Use Map:	Commercial (C)
Current Zoning:	C – Commercial
Surrounding:	MDR- Medium Density Residential (north); C- Commercial (east); I94/City of Woodbury (south); MDR- Medium Density Residential and HDR- High Density Residential (west)
History:	The parcel is undeveloped and currently zoned C. The City reviewed the PUD Concept Plan on November 28, 2022.
Wetland:	There is a small wetland located in the SW corner of the site
Deadline:	Application Complete – 4/14/23 60 Day Deadline – 6/13/23 Extension Letter – n/a 120 Day Deadline – n/a
Applicable Code:	Article 7- General Regulations Article 13 –Commercial District Article 18 – Planned Unit Development Regulations Title 103 – Subdivision Regulations Lake Elmo Design Guidelines

PROPOSAL DETAILS/ANALYSIS:

Plat Summary:

Total Site Area	17.06 acres
Right-of-Way (R/W)	0.09 acres
Wetlands	0.09 acres

Block 2, on the north side of Hudson Boulevard, consists of three proposed lots with one shared private driveway. The proposed auto dealer on Lot 1 will consist of auto sales, service, parts, and a car wash. Automobile sales and storage lots, car wash, and automobile maintenance services are conditional use while automobile parts/supply are permitted uses. The users of Lots 2 and 3 are unknown at this time.

On the opposite side of Hudson Boulevard on Block 1, a fast-food restaurant (Dairy Queen) is proposed. The restaurant will have a drive-through and feature a small inside dining area as well as an outdoor dining area. The site will offer an internal driveway connection to the adjacent retail strip mall. Fast food restaurants are permitted use while drive-in (including drive-through's by definition) are a conditional use. Conditional uses are being requested as permitted uses within this PUD.

Final Plat an PUD Conformance
The development is being proposed as a PUD because of the unique layout (Hudson Blvd through the subdivision) with a private access drive proposed along with shared stormwater ponding and signage. The developer proposes deviation from the zoning standards and from certain standards in the City's Engineering Design Standards Manual regulating public and private roads in Lake Elmo.

A PUD is a negotiated zoning district, and according to the Lake Elmo Zoning Code Article 18, Planned Unit Development Regulations, zoning flexibility can be granted to better utilize site features and to obtain a higher quality of development.

PUD Deviations
When evaluating a PUD proposal, a PUD must meet one or more objectives contained in Article 18 and meet the minimum requirements for a PUD. When evaluating the preliminary PUD, the Council found three objectives met along with the minimum PUD requirements.

Requested PUD Deviations/Flexibility:

1. Block 2 lots to have sole access from private driveway.
2. Lot 3, Block 2 to be created without street frontage.
3. Shared access is allowed between Lot 1, Block 1 and the adjacent commercial development.
4. 41-foot driveway width for combined Lots 1 & 2, Block 2. (This is to accommodate delivery trucks and for safety reasons).
5. A deviation to allow compatible, but not the same materials for trash enclosures.
6. Consider the longer front lot line of Lot 1 Block 1 the front (it's a corner lot).
7. Required screening from residential to not have a 6-foot-tall fence along the westerly lot line of Lot 1 Block 2 in front of the retaining existing adjacent retaining wall. (Placing a fence in front of the retaining wall does not improve the screening between uses).
8. Deviation to not meet the one tree per 50 feet of frontage along north side of Hudson Boulevard and parking lot screening due to existing utilities and overhead powerlines that

will remain in the boulevard area and proposed sidewalk/trail. These plantings are proposed along the private drive within Block 2.

9. Lighting to exceed 0.4-foot candles at the property line between Lots 1-2, Block 2 and on Lot 1, Block 1.
10. Comprehensive Sign Plan to allow off-premises signs for entire PUD; multi-colored digital sign; digital sign exceeding 40 sq. feet; freestanding sign height of 50'; consider the private driveway to be street frontage; increase in number of wall signs; increase in size of wall signs; decreased ground sign setback; and increase in square footage allowed for ground sign and wall signs.
11. Deviations to design guidelines for Lot 1, Block1 including allowing more than 60% parking frontage on a public street and allow primary colors for exterior materials.

PUD Ordinance: The City Code requires the Council adopt a PUD Ordinance as part of a PUD approval. It is attached for review and Council consideration. The ordinance details the permitted uses proposed in this PUD. The ordinance details future uses to be the following:

a) All of the permitted uses within the C- Commercial zoning district

b) All the auto dealer uses as in the proposed plans

c) Fast-food uses as in the proposed plans (DQ)

d) Indoor recreation facility

e) Daycare

f) Conditional or interim uses shall be subject to approval as outlined in the City Code.

Accessory uses are the same as those allowed in the C-Commercial District. Bulk Standards are the same as those in the C-Commercial Zoning District unless otherwise noted in the PUD (Deviation or flexibility given). Other provisions in the PUD Ordinance (which were preliminary PUD conditions of approval) include:

1. The total square feet of buildings on Lots 1, 2, and 3 Block 2 shall not exceed 124,000 sq. feet unless a secondary access is approved by the City.
2. Future development of Lots 2-3 Block 2 shall provide a minimum of 25% open space.
3. A maximum height of 30 feet shall be required for the future development of Lots 2 and 3, Block 2.
4. Setbacks for Block 2 along the shared private drive shall be met as measured from the edge of the shared driveway. All other setbacks shall be that of the C underlying zoning district.
5. The future use of Lot 3, Block 2 shall comply with the screening requirements from abutting residential uses to the north.
6. For purposes of this PUD and allowed signage, the private driveway shall be considered street frontage. No wall signage is allowed on Block 2 facing north or west.

7. All automobile repairs are conducted within an enclosed building and the storage or display of inoperable vehicles or other equipment shall meet all setback requirements of a primary structure and shall be totally screened from view from adjacent public streets and adjacent residential properties.
8. Except for the fast-food restaurant use, no outdoor speakers are allowed. Sound from any speakers used on the restaurant premises shall not be audible above a level of normal conversation at the boundary of any surrounding residential district or on any residential property.
9. Each food or beverage drive-through business shall maintain refuse receptacles at all exits.
10. Sign permits are required and they must comply with the approved Comprehensive Sign Plan and City Ordinances.

Required vs. Proposed C- Commercial Bulk Standards
Cells in the 'As Proposed' column shaded in **blue** indicate a deviation from City Code.

Lots 1-3 Block 2 are proposed to be accessed from a shared private driveway. Setbacks are measured from property lines. The proposed development of Lot 1 meets setbacks as measured from the back of curb (implied property line). A provision has been added to the PUD Ordinance providing that setbacks are measured from the edge of the driveway for future development.

Lot 1, Block 1 is considered a corner lot due to the curve in Hudson Blvd. as the lot is abutting the street right-of-way on both sides. Generally, on a corner lot the side with the shortest dimension is considered the front, however given the side is excess right-of-way and not an actual street, and this is a PUD, the longer side fronting the street is being considered the front.

Standards (105.12.930)	C-Commercial	As Proposed Auto sales lot (L1 B2)	Vacant Lot (L2 B2)	Vacant Lot (L2 B2)	As proposed Fast Food Lot (L1 B1)
Minimum Lot Area	20,000 sq. feet	269,112 sq. ft	116,440 sq. feet	312,863 sq. feet	40,681 sq. feet
Minimum Lot Width	100 feet	603 feet	327 feet	n/a	248 feet
Max Impervious Cover	75%	74.1%			67%
Minimum Setback - Front	30 feet	295 feet			63 feet
Minimum Setback - Side	10 feet	107 feet west 98 feet east (to drive centerline)			35 feet
Minimum Setback-Corner side	25 feet	n/a			97 feet
Minimum Setback - Rear	30 feet	86 feet			40 feet
Setback from residential zones	50 feet	107 feet			n/a
Maximum Height	45 feet	30 feet			20 feet
Parking- Front Yard setback	15 feet	15 feet			15.7 feet
Parking – Interior side setback	10 feet	36 feet west			n/a

		55 feet east (to drive centerline)			
Parking- Corner side yard setback	15 feet	n/a			20 feet
Parking- Rear yard setback	10 feet	10 feet			11.2 feet
Parking setback from residential zones	35 feet	36 feet			n/a
Driveway Setback from intersection	n/a	n/a			n/a
Driveway setback from side lot line	5 feet	met			10.7 feet
Driveway Width	20-34 feet	41 feet, for the shared driveway			28 feet

The developer is proposing a maximum height of 30 feet for the future development of Lots 2-3, Block 2. Said provision has been added to the PUD Ordinance.

Further, 105.12.950 Commercial Districts has specific regulations for automobile maintenance service and automobile parts/supply and requires that all repairs are conducted within an enclosed building and that the storage or display of inoperable or unlicensed vehicles or other equipment shall meet all setback requirements of a primary structure and shall be totally screened from view from adjacent public streets and adjacent residential properties. This provision has been included in the PUD Ordinance.

Architecture: During the preliminary plat and PUD review, staff found this use of the auto dealer and fast-food restaurant to be consistent with applicable City design standards. The final plans submitted are consistent with the preliminary approval.

The automobile dealership proposed materials are:

- Painted tip-up concrete panels in dark gray
- Stucco accent panels in light gray
- Metal wall panels (front) light gray
- Glass on front façade
- 2 overhead doors on front and one on each side, none on the rear
- Deviation for trash enclosure to have painted CMU blocks and steel gates in lieu of same materials as principal building as was approved with preliminary PUD have been carried forward into the final PUD.

The fast food restaurant materials are:

- EFIS- dark panels on the entry façades, light panels on the side and rear, red accent panels on long sides of building, and blue accent for “Blizzard” wall sign.
- Glass throughout (except back façade)
- Metal panel (red around entry); metal coping; drive-up window
- Corrugated metal accent on top front and side facades

- Deviation for trash enclosure to have painted CMU blocks and composite gates in lieu of same materials as principal building as was approved with preliminary PUD have been carried forward into the final PUD.

Design Review Guidelines: The standards in the guidelines call for aesthetically pleasing and compatible site design. The proposed two sites generally meet the standards. The two buildings are modern in design and colors and of good architectural materials. The site design incorporates pedestrians ways and landscaping. Parking is oriented away from Hudson Boulevard, except on Lot 1 Block 1, where the site is very limited for alternatives. There is an outdoor dining space at the fast-food restaurant. Having a shared access point for multiple buildings is preferred as well as buildings oriented towards the street frontages.

Interstate Corridor Overlay District 105.04.590 : This overlay applies to lands near the interstate. The proposed PUD complies with the requirements. The amount of metal allowed (50% maximum) is not exceeded on any façade.

Parking and Loading: The final plans are consistent with the preliminary plans and provide parking that meets the ordinance requirements for both proposed uses. They have also provided a location for the required off-street loading zone for the auto dealer (it's in the drive aisle near the trash enclosure). The drive aisle widths on the fast-food site are not met, however there is enough room to mee the ordinance. A condition has been added that the plans be revised indicating driveway widths that meet the ordinance.

Standards for Automotive/Vehicular uses 105.12.530
City code specifies specific standards for car washes and sales and storage lots. This proposal meets the requirements and is consistent with the preliminary approval. The proposed car wash is inside the building and not for public use. Conditions are included in the PUD Ordinance relating to repairs being conducted within the building and that no outdoor speakers are allowed except for the fast-food drive-through restaurant.

Standard for Food Service 105.12.520
City code specifies specific standard for restaurants with a drive-through. The proposed Dairy Queen will have a drive-through. The standards are met, except for drive lane width. The plans shall be revised to indicate compliance with the City Code. A condition is included. A provision in the ordinance recites current noise provisions and that refuse receptacles are at all exits.

Landscaping and Tree Preservation: The City's Landscape Architect has reviewed the proposed plans and provided comments dated May 2, 2023. The tree preservation plan reflects the preliminary PUD approval with 76 caliper inches required to be replanted. A condition is in the Landscape Architect's memo requesting that the East Infiltration Basin located on Lot 3, Block 2 be redesigned to maximize tree preservation if soils permit. Overall, the landscape plan has been modified to meet previous Landscape Architect's comments. However, a few minor items remain outstanding. A revised landscape plan meeting ordinance requirements is required to be submitted with prior to release of the final plat. The applicant is requesting PUD flexibility from the one tree per 50 feet of frontage due to existing utilities and overhead powerlines that will remain in the boulevard area. This area is located along the north side of Hudson Blvd.

Screening 105.04.040: Screening is required along Lot 1 Block 2 and Lot 3 Block 2 as they both abut residential uses. The screening plan is consistent with preliminary plan and PUD approval. Required screening is to be minimum 6 feet tall (above elevation of less intensive use) and 90% opaque year-round. The applicant is proposing a variety of 6-10' tall coniferous trees within the westerly and northerly buffer areas. The grade difference ranges from 4-12' along that side lot line. The applicant is proposing a high quality 6 foot fence on the northerly lot line and the westerly lot line, until it meets the retaining wall on the adjacent residential lot. The fence is not proposed to be place in front of (below) the retaining wall. The slopes and adjacent retaining wall are problematic for achieving ordinance requirements. It is reasonable to grant a deviation for screening (fencing) given the topography of the buffer area. The proposed planting plan exceeds ordinance requirements and is a benefit to the PUD.

Parkland Dedication 103.00.150: The City Code outlines the type of land that is considered acceptable for park dedication. For C- Commercial district cash payment in lieu of land is required in the amount of $6,000 per acre. This equates to $102,360. A condition has been added that this is paid prior to recording of the final plat.

Wetlands: There is a small wetland located on Lot 1, Block 2 in the southwest corner. There will be approximately 1,000 sq. feet of this wetland filled which is adjacent to Hudson Boulevard. A condition regarding required mitigation is included.

Streets and Access: Access is consistent with the preliminary approval. Lots 1-3, Block 2 will be provided from a private shared commercial drive that extends north from Hudson Boulevard through the center of the site. Due to Fire Code regulations, there are limitations on the size of future buildings accessed from this private drive. A provision in the PUD Ordinance is that the total square feet of buildings on Lots 1-3 Block 2 not exceed 124,000 sq. feet unless a secondary access is approved by the City. Lot 1, Block 1 is proposing to connect driveways with the adjacent retail strip center. Pedestrian access is proposed with a marked crosswalk across Hudson Boulevard. Sidewalk and trails will be connected within the PUD and to the adjacent properties.

Subdivision requirements: The subdivision has been reviewed in conjunction with the PUD. Deviations from the standards are allowed with the PUD. The proposed lots meet minimum lot area and width requirements. A deviation is being requested to allow lots to front on a private driveway versus a required public street (103.00.140). A Developers Agreement is required and part of this review.

Lighting 105.04.070: City code requires that light fixtures be downcast and shielded. Light quantities shall not exceed one footcandle meter reading as measured from the centerline of the street, nor shall any light or combination of lights, which cast light on an adjacent property, exceed 0.4 footcandles as measured from said property line. A deviation is requested to allow footcandles to exceed ordinance requirements along the property line and within the private drive. The lighting plans (fixtures and foot-candles) have been updated from the preliminary approval.

The auto dealer is proposing downcast and shielded light fixtures that are wall mounted and on poles. Pole heights are 8 feet and 25 feet on 2.5-foot base. (Not taller than the building). There

is downcast accent lighting in the front of the building. Foot candles exceed .4 at the property lines along the private drive, between Lots 1-2, Block 2. This is for security and safety reasons as the private drive functions like a private street.

On the fast-food site, 18-foot-tall poles on 2-foot base are proposed (same height as the building). Foot candles proposed meet the requirements for the centerline of the street and front property lines. However, they exceed at the rear property line (I-94 side) and on the side abutting the retail strip mall. Deviations are being requested to exceed the footcandles as noted on the plans.

Comprehensive Sign Plan: A Comprehensive sign plan is proposed for this PUD (attached) and has more details provided at the preliminary approval. The applicant is proposing wall signs, ground signs, and directional and informational signs. Multiple deviations are being requested: allow off-premises signs for entire PUD; multi-colored digital sign; digital sign exceeding 40 sq. feet; freestanding sign height of 50'; consider the private driveway to be street frontage; increase in number of wall signs; increase in size of wall signs; decreased ground sign setback; increased heigh for drive-thru menu board; and increase in square footage allowed for ground sign and wall signs. The signs will meet illumination standards. Sign permits are required, and they must comply with the approved Comprehensive Sign Plan and City Ordinances.

One wall sign and one ground sign per street frontage is allowed with exceptions. For buildings with over 100 feet of frontage, up to 3 ancillary wall signs are allowed (up to 50% of that size). The maximum allowed wall sign is 1 sq. foot per length of building frontage. The maximum size of any wall sign is 100 sq. feet.

Lot 1, Block 1, the fast-food restaurant has multiple wall signs on three of the four walls. The sign plan proposes two wall signs on three different facades. One of those facades does not have street frontage but is fronting on the shared commercial access to the east. No one wall is over 80 sq. feet combined, however the proposed sign plan would allow up to 150 sq. feet of wall sign per façade. Additionally, the sign plan calls for ancillary signs on facades less than 100 feet of frontage or no frontage. The sign plan includes a provision that the DQ menu board is approximately 7.5 feet tall where a maximum of 6 feet is permitted.

Lot 1, Block 2, the automobile dealer is proposing a 150 sq. foot primary wall sign on the front of the building along with two 75 sq. foot ancillary signs (service sign and logo sign). The same walls signage is also proposed on the east façade facing the private driveway. The front of the automobile dealer is 200 feet equating to 200 sq feet of signage allowed on that façade and the east façade is 250 feet long resulting in up to 250 sq. feet of signage allowed (with the deviation that the private drive is considered a street for sign ordinance purposes). The proposed sign plan calls for up to 300 sq. feet and the proposed sign plan indicates 150 sq. feet is allowed per façade.

Wall signage for Lot 2 and Lot 3 of Block 2 are unknown currently. The Comprehensive Sign Plan calls for 2-3 walls signs and 2 ancillary wall signs with a total of 300 sq. feet per façade being allowed opposed to a total of 150 sq. feet allowed. No future ground signs are contemplated. As buffer to the adjacent residential on Block 2, the applicant is proposing no wall signs face north or west.

Two ground signs are proposed. Due to the location near the interstate, ground signs may be up to 30' tall and 250 sq. feet. A 30' tall directory sign is proposed at the entrance to Lot 1 Block 2 and a 50' tall ground sign is proposed on the back of Lot 1, Block 1 (the fast-food restaurant) facing Interstate 94. Ground signs setbacks are the same as the height of the sign. The 30' tall sign at the entrance to the auto dealer meets the size, height, and setbacks allowed. The 50' tall sign proposed on the fast-foot restaurant site faces the interstate. It is proposed to be 565 sq. feet. and containing a 108 sq. foot digital sign panel. The applicant is seeking a deviation to allow multi-colored signs for the digital sign as well as a digital sign larger than 40 sq. feet. This sign would require a 50' setback given its height. It is shown to be up to the property line. A deviation is requested; however, it should not be located within any public easements.

After reviewing the location and alternatives for the proposed shared ground sign abutting Interstate I-94 on Lot 1 Block 1, the applicant is proposing a land swap with the city which would move the sign to the west in a triangle piece of land currently owned by the city (Hudson Blvd r-o-w area). In exchange for this unused portion of land, the city would get land within Lot 1 Block 1 abutting Hudson Blvd. This is a benefit to both parties as the city would get more control of land abutting the street and the developer would get land the city has no use for abutting I-94 for their sign. A condition is added that the land exchange is to be completed prior to issuance of a sign permit for said ground sign. If for some reason the land exchange is technically not feasible, then the developer could grant the city an easement for the piece and the city could grant the developer an Encroachment Agreement. However, both parties prefer the land swap as the first option to pursue and the Developer has submitted the paperwork for the lot line adjustment which could be executed after the final plat is recorded.

City Engineer Comments: See attached memo dated May 6, 2023. Most of the comments relate to easements and proper dedication of easements. Of note, is that Outlot A be dedicated to the City. Outlot A is part of the r-o-w and contains a MNDOT highway easement. The City would like a portion of the MNDOT easement that is on the city side of a fence to be turned back to the City. The turnback process can be long and the outcome is unknown at this time. A condition is added that the developer shall provide the City with legal description and drawing for the City to work with MnDOT on a turnback request for portions of an existing MnDOT Highway Easement (located within Outlot A) and provide $10,000 in escrow funds to cover the city's costs to go through MnDOT's process. A standard condition of Final Plat approval is that all public improvements constructed to support the development must be designed and constructed in accordance with the City Engineering Design Standards Manual dated January 2022, unless approved otherwise by the City Engineer, is also included along with obtaining necessary permits.

Fire Chief Comments: There are no major outstanding items. Any remaining items will be addressed upon building permit review. See attached memo dated April 17, 2023. Due to access on Block 2, the square footage of future building is limited by the Fire Code. This has been articulated in the PUD Ordinance.

Valley Branch Watershed District: The city has not received comments to date from the watershed district. The applicant will have to comply with comments and permits from the watershed.

MnDOT Comments: There are no outstanding issues. Comments regarding ADA compliance for the sidewalk have been made as well as the potential for a drainage permit and potential r-o-w permit needed.

City Attorney Review: The City Attorney has provided a plat opinion and is comfortable with the plat proceeding for Council review.

Development Agreement: The Development Agreement has been prepared and the applicant agrees with the terms. The Agreement is typical and outlines the required public improvements, timing for permits, securities for improvements, etc. The Development Agreement does not include the future buyers (DQ otherwise) to be a party. Therefore a condition is included to require the future owner of Lot 1, Block 1 (the DQ) to enter into a Site Work Agreement prior to any permit being issued.

PRELIMINARY PLAT/PUD CONDITIONS OF APPROVAL

1. As part of final PUD submittal, plans shall be revised to indicate the location of the required off-street loading area for Lot 1 Block 2. Provision of City Code 105.12.420 Off Street Loading shall be met. ***Condition satisfied.***
2. As part of final PUD submittal, the plans shall indicate the percentage of building materials and more detail of types of materials to show compliance with Interstate Corridor Overlay District architectural requirements (105.04.610) ***Condition Satisfied.***
3. As part of final PUD submittal, the Comprehensive Sign Plan shall be revised to accurately reflect the number and size of wall signs proposed for Lot 1, Block 1; to accurately reflect the maximum wall area allowed per facade; to incorporate landscape features around the base of all permanent ground signs; provide foot candle measurements or statement to meet the ordinance. ***Condition Satisfied.***
4. That the application for final plat and final PUD Plans identify all requests for flexibility from the City Code. ***Condition Satisfied.***
5. The applicant shall revise the site plans, utility plans and grading plans to address each review comment and condition of approval to the satisfaction of City staff, as part of the Final Plat application. ***Condition Satisfied, however, some outstanding items remain and are a condition of final plat approval.***
6. That prior to the City finding any application for final plat and PUD plan complete the applicant shall address all comments in the City Engineer's memo dated February 28, 2023 to the satisfaction of the City Engineer. ***Condition Satisfied, however, some outstanding items remain and are a condition of final plat approval.***
7. That prior to the City finding any application for final plat and PUD plan complete the applicant shall revise the landscape plan and tree preservation plan in accordance with the City Landscape Architect's memo dated February 27, 2023 to the satisfaction of the City Landscape Architect. ***Condition Satisfied, however, some outstanding items remain and are a condition of final plat approval.***
8. That prior to the City finding any application for final plat and PUD plan complete the applicant shall revise the preliminary plat and PUD Plan to address any comments received by Washington County. ***No comments received; Condition satisfied.***
9. That prior to the City finding any application for final plat and PUD plan complete

the applicant shall demonstrate compliance with the items listed in the March 1, 2023, memo from the Fire Department to the satisfaction of the Fire Chief. ***Condition Satisfied, however, some outstanding items remain and are a condition of final plat approval.***

10. The City Attorney shall issue a plat opinion certifying that the plat, title evidence, and all agreements and documents required under this title meet the requirements of the city prior to City Council review or approval of the final plat. ***Condition satisfied.***
11. The Final Plat/Final PUD shall include all necessary and additional public right-of-way and easements. ***Condition satisfied.***
12. If necessary, the applicant shall provide the City with a copy of written permission for any off-site grading work and storm sewer discharges to adjacent properties before starting any site work, grading and as part of any final plat or final PUD application. ***Condition of Final Plat Approval.***
13. The Preliminary Plat/Preliminary PUD approval is conditioned upon the applicant meeting all City standards and design requirements unless specifically addressed otherwise in these conditions. ***Condition of Final Plat Approval.***
14. The total square feet of buildings on Lots 1, 2, and 3 Block 2 shall not exceed 124,000 sq. feet unless a secondary access is approved by the City. ***This has been incorporated into the PUD Ordinance.***
15. Future development of Lots 2-3 Block 2 shall provide a minimum of 25% open space. ***This has been incorporated into the PUD Ordinance.***
16. A maximum height of 30 feet shall be required for the future development of Lots 2 and 3, Block 2. ***This has been incorporated into the PUD Ordinance.***
17. Setbacks for Block 2 along the shared private drive shall be met as measured from the edge of the shared driveway. All other setbacks shall be that of the C underlying zoning district. ***This has been incorporated into the PUD Ordinance.***
18. The future use of Lot 3, Block 2 shall comply with the screening requirements from abutting residential uses to the north. ***This has been incorporated into the PUD Ordinance.***
19. For purposes of this PUD and allowed signage, the private driveway shall be considered street frontage. ***This has been incorporated into the PUD Ordinance.***
20. All automobile repairs are conducted within an enclosed building and the storage or display of inoperable vehicles or other equipment shall meet all setback requirements of a primary structure and shall be totally screened from view from adjacent public streets and adjacent residential properties. ***This has been incorporated into the PUD Ordinance.***
21. Sound from any speakers used on the premises shall not be audible above a level of normal conversation at the boundary of any surrounding residential district or on any residential property. ***This has been incorporated into the PUD Ordinance.***
22. Each food or beverage drive-through business shall maintain refuse receptacles at all exits. ***This has been incorporated into the PUD Ordinance.***
23. Sign permits are required and they must comply with the approved Comprehensive Sign Plan and City Ordinances. ***This has been incorporated into the PUD Ordinance.***
24. All public improvements constructed to support the development must be designed and constructed in accordance with the City Engineering Design Standards Manual dated January 2022, unless approved otherwise by the City Engineer. ***Condition of Final Plat Approval.***
25. The applicant shall verify compliance with Valley Branch Watershed (VBWD) comments and that the applicant provide the City evidence that all conditions attached to a VBWD permit will be met before the starting any grading activity on the site. ***Condition of Final***

Plat Approval.

26. That the applicant shall obtain all necessary permits including but not limited to all applicable City permits (building, grading, wetland, sign, etc.), NPDES/SWPPP permits and Valley Branch Watershed District approval before starting any grading or construction activities. ***Condition of Final Plat Approval.***

27. A wetland permit is required for the proposed wetland filling. Required wetland mitigation shall be provided for at the time of permit. ***Condition of Final Plat Approval.***

28. The applicant/developer is responsible, at their own expense, for installing all required right of way improvements. Improvements in Hudson Boulevard shall be consistent with Washington County and city standards. ***Condition of Final Plat Approval.***

29. Park dedication in the amount of $102,360.00 shall be paid prior to paid prior to recording of the final plat. ***This condition will be met upon recording of the final plat.***

30. A storm water maintenance and easement agreement in a form acceptable to the City shall be executed and recorded with the final plat. ***This condition will be met upon recording of the final plat.***

31. A landscape and irrigation license agreement in a form acceptable to the City shall be executed and recorded with the final plat. ***This condition will be met upon recording of the final plat.***

32. The finalization, adoption, and publication of an overlay district ordinance shall occur before the recording of the final plat. ***This condition will be met upon recording of the final plat.***

33. Before the execution and recording of a final plat for the development, the developer or applicant shall enter into a Developer's Agreement or a Site Work Agreement with the City. Such an Agreement must be approved by the City Attorney and by the City Council. The Agreement shall delineate who is responsible for the design, construction and payment for the required improvements with financial guarantees therefore. The Agreement shall outline any approved phasing plan. ***This condition will be met upon recording of the final plat.***

34. The applicant or developer shall enter into a separate grading agreement with the City before starting any grading activity in advance of final plat/ PUD approval. The City Engineer shall review any grading plan that is submitted in advance of a final plat or final PUD and said plan shall document the extent of any proposed grading on the site. ***This condition is carried over to allow for grading prior to recording of the final plat.***

35. That the applicant shall submit revised preliminary plat and project plans meeting all conditions of approval for City review and approval. The revised applicant/developer project plans and other materials shall meet all of the above conditions before the City will find complete any final plat or final PUD application for the development and before the start of any clearing or grading activity on the site. ***Condition satisfied.***
36. That the City's preliminary plat/preliminary PUD approval is good for one year from the date of City Council action, unless the applicant requests and the City Council approves a time extension. ***This condition is no longer needed.***

RECOMMENDED FINDINGS:

Recommended Findings for Final Plat/Final PUD. Staff recommends approval of the Preliminary Plat/Preliminary PUD for PID 34.029.21.44.0006 and 34.029.21.44.0004 based on the following findings:

1. That the final plat and Final PUD Plan is consistent with the preliminary plat and Preliminary PUD Plan approval.
2. That the Final PUD Plan would be consistent with the intent of the 2040 Lake Elmo Comprehensive Plan and the 2040 Land Use Map for this area.
3. That the Final PUD Plan complies with the general intent of the C- Commercial zoning district with PUD modifications.
4. That the Final PUD Plan generally complies with the Lake Elmo Design Guidelines and Standards Manual.
5. That the final plat generally complies with the City's Subdivision regulations.
6. That the final plat generally complies with the City's design standards.
7. That the final plat generally complies with the City's Zoning Code with the exceptions provided for in the PUD.
8. That the final plat and PUD Plan must be revised to address the comments noted in the City Engineer's memorandum.
9. That the final PUD Plan must be revised to be consistent with City's landscape plan and tree replacement standards pursuant to the Landscape Architects memo.
10. That the final plat and PUD Plan must be revised to address the comments noted in the Fire Department memo.
11. That the final PUD Plan meets the minimum requirements for a PUD.
12. That the final PUD Plan meets items a, c, d, and i from the identified PUD objectives identified in Section 105.12.1130. Planned unit developments should not be allowed simply for the purpose of increasing overall density or allowing development that otherwise could not be approved.

    a) Innovation in land development techniques that may be more suitable for a given parcel than conventional approaches. ***The shared access drive and stormwater ponding areas allow for more efficient use of land.***
    b) Promotion of integrated land uses, allowing for a mixture of residential, commercial, and public facilities.
    c) Establishment of appropriate transitions between differing land uses. ***This overall PUD provides a buffer between the interstate highway and residential uses. There are significant site specific plantings proposed to buffer the adjacent residential uses and to the most reasonable extent possible, existing trees are being preserved within the buffer area.***
    d) Provision of more adequate, usable, and suitably located open space, recreational amenities, natural resource protection and other public facilities than would otherwise be provided under conventional land development techniques. ***This is achieved with shared stormwater ponding.***
    e) Accommodation of housing of all types with convenient access to employment opportunities and/or commercial facilities; and especially to create additional opportunities for lifecycle housing to all income and age groups.
    f) Preservation and enhancement of important environmental features through careful and

sensitive placement of buildings and facilities.
h) Coordination of architectural styles and building forms to achieve greater compatibility within the development and surrounding land uses.
i) Creation of more efficient provision of public utilities and services, lessened demand on transportation, and/or the promotion of energy resource conservation. ***With the proposed private access drive, there will be less demand on public services.***
j) Establishing measures to protect and preserve groundwater storage.
k) Allowing the development to operate in concert with a redevelopment plan in certain areas of the City and to ensure the redevelopment goals and objectives will be achieved.

13. That the site will be served by public utilities, not have a detrimental impact on traffic, supply adequate off-street parking.

14. That the proposed land uses will be compatible both in terms of internal site plans, and with regard to adjacent land uses.

15. That the site complies with wetland, stormwater management requirements.

16. That the use will maintain standards of architectural design and building quality consistent with the uniform building code and all other applicable city codes,

17. That the proposed use will not create fiscal problems for the city or adversely impact the health, safety, or welfare of the city.

18. That the applicant has proposed significant mitigating efforts to buffer the proposed commercial uses on Block 2 form the adjacent residential uses including no wall signs facing north or west, additional landscaping, and higher quality fencing materials.

19. That the proposed uses will bring commerce and employment to the city.

Recommended Conditions of Approval. Staff recommends the City Council approve the final PUD and final plat for PID 34.029.21.44.0006 and 34.029.21.44.0004 as proposed with the following conditions:

1. The Final Plat/Final PUD approval is conditioned upon the applicant meeting all City standards and design requirements unless specifically addressed otherwise in these conditions.
2. Prior to the City releasing the final plat, the applicant shall address all comments in the City Engineer's memo dated May 9, 2023 to the satisfaction of the City Engineer.
3. Prior to the City releasing the final plat the applicant shall revise the landscape plan and tree preservation plan in accordance with the City Landscape Architect's memo dated May 2, 2023 to the satisfaction of the City Landscape Architect.
4. Prior to the City releasing the final plat, the applicant shall demonstrate compliance with the items listed in the April 17, 2023, memo from the Fire Department to the satisfaction of the Fire Chief.
5. All public improvements constructed to support the development must be designed and constructed in accordance with the City Engineering Design Standards Manual

dated January 2022, unless approved otherwise by the City Engineer.

6. The applicant shall verify compliance with Valley Branch Watershed (VBWD) comments and that the applicant provide the City evidence that all conditions attached to a VBWD permit will be met before the starting any grading activity on the site.
7. The applicant shall verify compliance with Minnesota Department of Transportation (MnDOT) comments (dated May 4, 2023) and permitting, and that the applicant provide the City evidence that all conditions attached to a MnDOT permit will be met before the starting any grading activity on the site.
8. That the applicant shall obtain all necessary permits including but not limited to all applicable City permits (building, grading, wetland, sign, etc.), NPDES/SWPPP permits and Valley Branch Watershed District approval before starting any grading or construction activities.
9. A wetland permit is required for the proposed wetland filling. Required wetland mitigation shall be provided for at the time of permit.
10. The applicant/developer is responsible, at their own expense, for installing all required right of way improvements. Improvements in Hudson Boulevard shall be consistent with Washington County and city standards.
11. Park dedication in the amount of $102,360.00 shall be paid prior to paid prior to recording of the final plat.
12. Prior to the City releasing the final plat, the developer shall provide the City with legal description and drawing for the City to work with MnDOT on a turnback request for portions of an existing MnDOT Highway Easement (located within Outlot A) and provide $10,000 in escrow funds to cover the city's costs to go through MnDOT's process.
13. A storm water maintenance and easement agreement in a form acceptable to the City shall be executed and recorded with the final plat.
14. A landscape and irrigation license agreement in a form acceptable to the City shall be executed and recorded with the final plat.
15. The finalization, adoption, and publication of an overlay district ordinance shall occur before the recording of the final plat.
16. Before the execution and recording of a final plat for the development, the developer or applicant shall enter into a Developer's Agreement with the City. Such an Agreement must be approved by the City Attorney and by the City Council. The Agreement shall delineate who is responsible for the design, construction and payment for the required improvements with financial guarantees therefore. The Agreement shall outline any approved phasing plan.
17. The Developer shall pay all outstanding taxes and assessments at the time of recording the final plat.
18. The Developer shall provide the City with a copy of final title insurance policy at the time of recording the final plat.
19. Upon recording the final plat, the developer shall convey Outlot A to the City prior to the building permit being issued.
20. The future owner of Lot 1, Block 1 (the DQ) shall enter into a Site Work Agreement prior to any permit being issued for said lot. This will require separate securities for code compliance.
21. For Lot 1,Block 1, the drive aisle widths shall be modified to meet City Code minimum requirements prior to issuance of a permit.
22. The applicant or developer shall enter into a separate grading agreement with the City before

starting any grading activity in advance of final plat/ PUD approval. The City Engineer shall review any grading plan that is submitted in advance of a final plat or final PUD, and said plan shall document the extent of any proposed grading on the site.

23. If necessary, the applicant shall provide the City with a copy of written permission for any off-site grading work and storm sewer discharges to adjacent properties before starting any site work, grading and as part of any final plat or final PUD application.
24. The land exchange for the 50-foot-tall ground sign shall be completed prior to issuance of said sign permit. If the land exchange is technically not feasible, then the developer may grant the city an easement and the city may grant the developer an Encroachment Agreement to achieve the same purpose.
25. Approval of the final plat expires if not recorded within 180 days of the approval date. Extensions may be granted per City Code 103.00.100(b)(7).

FISCAL IMPACT: Prior to recording the Final Plat, the Applicant will pay the City fees for Utility Area and Impact Charges and Parkland Dedication. Building Permit fees will be collected at the time of permit issuance. The City is not providing financial assistance as part of this project.

OPTIONS:
The City Council may:

- Approve the requests.
- Approve the requests with conditions.
- Deny the requests, citing findings of fact.

RECOMMENDATION:

Should the City Council agree with staff's recommendations and findings, it should conditionally approve the proposed Final Plat, Final PUD, and Development Agreement for the subject property with the recommended findings and conditions of approval listed in the staff report. The following approvals will be required:

"Motion to adopt Resolution 2023-047 approving the final plat and PUD requested by Jon Hauser, Drake Motor Partners Le LLC for the subject property based on the findings of fact and recommended conditions of approval listed in the staff report."

[AND]

"Motion to adopt Ordinance 2023-011 adopting the PUD standards requested by Jon Hauser, Drake Motor Partners Le LLC for the project on the subject property."

[AND]

"Motion to adopt Resolution 2023-048 authorizing summary publication of Ordinance 2023-011."

[AND]

"Motion to adopt Resolution 2023-046 approving Development Agreement with Jon Hauser, Drake Motor Partners LE LLC ."

ATTACHMENTS:

1. Application Narrative, including proposed PUD uses
2. Final Plat, PUD, Architectural Plans Auto Dealer
3. Final Plat, PUD, Architectural Plans Fast Food
4. Comprehensive Sign Plan
5. Land Swap Description
6. Fire Chief Memo
7. City Engineer Memo
8. Landscape Architect Memo
9. MnDOT Memo
10. Draft PUD Ordinance
11. Resolutions of Approval
12. Development Agreement
13. Public Comment

LANDFORM
From Site to Finish

Final Plat and Final Planned Unit Development

Narrative

Lake Elmo, MN

Prepared for:

DRAKE
REAL ESTATE SERVICES

April 14, 2023



SUBMITTED TO
Lake Elmo Planning & Zoning
3880 Laverne Avenue N
Lake Elmo, MN 55042

CREATING MEMORABLE PLACES 25 YEARS

PREPARED BY
Landform Professional Services, LLC
105 5th Ave S, Suite 513
Minneapolis, MN 55401

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Introduction

On behalf of Drake Motor Partners LE LLC, Landform is pleased to submit this application for Final Plat and Final Planned Unit Development (PUD) approval to allow for the construction of an electric auto dealership and services building and fast food restaurant (Dairy Queen) on the Ebertz property along Hudson Boulevard. The development plan includes a plat to create four lots from the two existing lots. We are excited about the improvements for this site.

The property includes the following PIDs:

Parcel #1 – PID 34.029.21.44.0006
Parcel #2 – PID 34.029.21.44.0004

The legal description of the property is as follows:

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 29, RANGE 21, EXCEPT THAT PART DEPICTED AS PARCEL 33B ON MINNESOTA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY PLAT NO. 82-43 FILED MARCH 22, 1982, AS DOCUMENT NO. 429592, WHICH WAS TAKEN BY THE STATE OF MINNESOTA IN FINAL CERTIFICATE DATED OCTOBER 4, 1989, FILED OCTOBER 24, 1989, AS DOCUMENT NO. 613150.

WASHINGTON COUNTY, MINNESOTA

Project Contacts

Owner:	Ebertz Enterprises 1147 Clipper Way Woodbury, MN 55125 jgebertz@aol.com	Applicant:	Jon Hauser 496 South Broadway Denver, CO 80209 hauser@drakeres.com 303-825-6200
Engineer:	Tom Meyer, PE 105 South 5th Avenue Suite 513 Minneapolis, MN 55401 tmeyer@landform.net 612-638-0241	Dairy Queen Engineer:	Joseph Radach, PE 8915 Vernon Street Rockford, MN 55373 jradach@contourcd.com 612-730-2265

Existing Conditions

The site is currently vacant. There is an existing 0.12-acre wetland in the southwest corner of the site. The site is guided and zoned Commercial and surrounding properties are zoned Medium Density Residential PUD to the north, Commercial to the east and High Density Residential PUD to the west. Interstate 94 and the City of Woodbury are located to the south.

The existing south parcel is 14.2-acres in size and the north parcel is 4.0-acres in size. Hudson Boulevard divides the southern parcel into a 13.27-acre section north of the road and a 0.93-acre section south of the road. The northern parcel does not have any existing street frontage.

Final Plat

We are requesting approval of a final plat to establish four lots from two existing lots. The four proposed parcels comply with the minimum lot requirements with the exception of the minimum lot width for Lot 3, Block 2 for which flexibility has been requested via the PUD.

Lot 1, Block 1: 0.93-acre lot south of Hudson Boulevard for a fast-food restaurant (Dairy Queen).
Lot 1, Block 2: 6.57-acre lot north of Hudson Boulevard for an electric auto sales and service business.
Lot 2, Block 2: 2.07-acre outlot north of Hudson Boulevard for future commercial development.
Lot 3, Block 2: 7.49-acre outlot north of Hudson Boulevard for future commercial development.

Site Plan

Lots

The proposed development will create four lots which comply with the preliminary PUD approvals:

	C District Allowed	Lot 1, Block 1	Lot 1, Block 2	Lot 2, Block 2**	Lot 3, Block 2**
Minimum Lot Area	20,000 sq. ft.	40,681 sq. ft.	269,112 sq. ft.	116,440 sq. ft.	312,863 sq. ft.
Maximum Impervious Coverage	75%	63.8%	74.1%	75%	75%
Minimum Lot Width	100 ft.	358.2 ft.	384.6 ft.	453 ft.	N/A
Maximum Building Height	45 ft.	20 ft.	30 ft.	30 ft.	30ft.
Minimum Building Setbacks					
Front Yard	30 ft.	63.3 ft. (*Hudson*)	275.2 ft.	30 ft.	30 ft.
Interior Side Yard*	10 ft.	38.7 ft.	82.2 ft.	10 ft.	10 ft.
Rear Yard	30 ft.	38.7 ft. *(I-94)*	86.5 ft.	30 ft.	30 ft.
Residential Zones	50 ft.	N/A	107 ft.	50 ft.	50 ft.
Minimum Parking Setbacks					
Front Yard	15 ft.	15.7 ft. (*Hudson*)	15 ft.	15 ft.	15 ft.
Interior Side Yard*	10 ft.	10.7 ft.	34.6 ft.	10 ft.	10 ft.
Rear Yard	10 ft.	10.7 ft. *(I-94)*	10 ft.	10 ft.	10 ft.
Residential Zones	35 ft.	N/A	35 ft.	35 ft.	35 ft.

* *Interior side yard setbacks for Lots 1 and 2, Block 2 are measured to the curb line of the interior private drive.*

** *Future uses for proposed Lots 2 and 3, Block 2 will comply with the maximum lot standards required for the Commercial District.*

The following is a summary of the proposed lot coverage:

Lot Number	Total Area	Proposed Open Space	% Open Space
Lot 1 – Block 1	40,681 sq. ft.	14,714 sq. ft.	36.2%
Lot 1 – Block 2	269,112 sq. ft.	69,723 sq. ft.	25.9%
Lot 2 – Block 2 (Future)	116,440 sq. ft.	29,110 sq. ft. (min)	25.0% (min)
Lot 3 – Block 2 (Future)	312,863 sq. ft.	78,216 sq. ft. (min)	25.0% (min)
Total	739,096 sq. ft.	191,763 sq. ft.	25.9%

Access

Access to Lot 1, Block 1 will be directly from Hudson Boulevard. Access to lots in Block 2 will be provided from a private drive that extends north from Hudson Boulevard through the center of the site. The private drive is designed to meet the City standards for local streets. Sales and storage lots are required to have access to a collector or higher classification street; the site complies as it will have access to Hudson Boulevard which is classified as a major collector in the Comprehensive Plan. The location of the private drive access from Hudson Boulevard aligns with the approved access location in the Hudson Boulevard Design Standards. None of the lots in Block 2 have direct access from Hudson Boulevard.

The Engineering Design and Construction Standards Manual requires a secondary access street for commercial developments with more than 124,000 square feet of sprinkled building area. The size of buildings across the three lots north of Hudson Boulevard in Block 2 do not exceed this standard. This item is discussed in further detail in the proposed buildings section below.

Proposed Buildings

The proposed Dairy Queen building on Lot 1, Block 1 is 2,875 square feet in size. The design of the Dairy Queen project will be completed by other applicants.

The proposed electric auto dealership building for Lot 1, Block 2 is 50,527 square feet in size and will house electric auto sales, maintenance and showroom areas. A car wash is included within the maintenance area of the building--this is not a commercial car wash and will be used for maintenance of vehicle inventory. The proposed building complies with the required principal building setbacks for the Commercial district. The dealership building has a 107-foot setback from the west property line which abuts residential lots where a minimum 50-foot setback is required. Trash enclosures are situated along the north side of the building in compliance with the required setbacks.

As noted in the prior section, providing a single access street to the site restricts the area north of Hudson Boulevard to a total of 124,000 square feet of sprinkled building area. A 50,527 square foot dealership building is proposed for Lot 1, Block 2. A combined 73,473 square feet of sprinkled building area to be permitted for Lots 2 and 3, Block 2. Plans conceptually show a 15,000 square foot building on Lot 2, Block 2 and a 58,000 square foot building on Lot 3, Block 2, which complies with the single-access building-area threshold. A condition of the PUD approval restricts the building area and height for Block 2 to a total 124,000 square foot of building area and height of 30 feet.

Parking and Storage Lots

The Zoning Ordinance requires 28 parking stalls for the drive-in fast food restaurant. The site plan for Dairy Queen on Lot 1, Block 1 provides 31 parking stalls in compliance with the parking standards.

The site plan for Lot 1, Block 2 complies with the parking requirements for sales/customer service and outside sales/display areas for auto sale and service. Section 105.12.410 of the Zoning Ordinance requires 166 parking stalls for the auto sales and service use and 352 parking stalls have been provided. The parking/storage lot for the auto sales and service will be used for customer and employee parking and for display and storage of vehicle inventory. The site plan identifies areas proposed for customer and employee parking. The parking lot complies with the 35-foot setback requirement from residential property to the west. Parking proposed along the front property line with Hudson Boulevard will be buffered by green space and landscaping materials. Landscape islands are provided throughout the development which break up the continuous hardscape.

Proposed uses for Lots 2 and 3, Block 2 have not yet been identified, so the number of required parking spaces is not known. However, there is ample room on each lot to accommodate required parking, which will be determined when they are developed in a future phase.

Landscaping and Screening

Landscaping provided for Lot 1, Block 1 is in compliance with the Zoning Ordinance requirements. Eleven deciduous trees and are provided along the perimeter of the site. The trees, in addition to 24 shrubs, will effectively screen the parking lot from adjacent properties and rights-of-way. The design of the Dairy Queen landscaping plan will be completed by other applicants.

Landscaping provided on the site exceeds the minimum requirements: 222 trees are provided where a minimum of 98 trees are required. A double row of trees is provided along the north and west property lines of Block 2, where the development abuts residential properties. Even though Lot 3, Block 2 will not be developed at this time, trees will be installed on this lot to provide screening for the residential properties when Lot 1, Block 2 is initially developed. A privacy fence will also be installed along the north and west property lines of Block 2 to provide further screening for residential properties. Enhanced landscaping is provided along the private drive to differentiate it as a shared roadway from which each lot has driveway access. Lot 2, Block 2 shows conceptual landscaping at this time. Landscaping for Lots 2 and 3, Block 2 will comply with the City requirements when they are developed in the future. Additionally, the landscape plan shows that 77 equivalent trees will be provided to replace the 76 equivalent trees that are being removed for development.

Flexibility is provided from the one tree per 50 feet of street frontage requirement in Section 105.12.480 of the Zoning Ordinance. Existing utilities and overhead powerlines conflict with potential planting areas for the required trees. The required trees are planted elsewhere on site. Flexibility from the boulevard tree requirement is discussed further in this report.

Phasing

Lot 1, Block 1 and Lot 1, Block 2 will be developed immediately along with improvements to Hudson Boulevard. Lots 2 and 3, Block 2 are conceptual at this time. Future development will be determined by market demand.

Comprehensive Sign Plan

A comprehensive sign plan has been provided to coordinate the location and copy area provided for each tenant. The comprehensive sign plan provides criteria to establish signage standards for both wall signs and ground signs within the development. The PUD flexibility provided for signage is discussed further below in addition to the Comprehensive Sign Plan narrative.

Planned Unit Development

The proposed project and PUD are intended to serve the commercial market and bring additional commercial business to the City of Lake Elmo. The project will be privately financed.

PUD Flexibility

PUD flexibility is provided to allow:

1. Lot 3, Block 2 without street frontage.
2. Access to the lots in Block 2 by means of a private drive.

3. Shared driveway access for Lot 1, Block 1 and the previously approved adjacent commercial development.
4. Up to 300 square feet of wall signage on the south and east facades of buildings on Block 2 where up to 150 square feet of wall signage is permitted per street frontage.
5. One ground sign exceeding 30 feet tall and 250 square feet in area including increased surface area for a multi-color electronic variable message sign. And for the ground sign to be located off premise until a land swap agreement between the applicant and the city is in place.
6. Street frontage trees to be relocated along the proposed private drive.
7. Screening between different land uses and parking lots abutting residential districts.
8. Lighting glare exceeding four-tenths footcandles at the property line between:
    a. Lot 1, Block 2 and 9931 Hudson Boulevard N.
    b. Lots 1 and 2, Block 2.
9. Indoor recreational facilities and daycare operations as permitted uses in the PUD.
10. Maximum driveway width of 41 feet for the Block 2 private drive entrance where 30 feet is permitted.
11. Deviations to design guidelines for Lot 1, Block1 including allowing more than 60% parking frontage on a public street and primary colors for exterior materials.
12. Deviation to allow for compatible, but not the same building materials for trash enclosures.
13. Consider the longer lot line of Lot 1 Block 1 the front (it is a corner lot)
14. Deviation to allow more than 60% of the parking for Lot 1, Block 1 adjacent to the public street.
15. Deviation to allow for primary colors for exterior building materials on Lot 1, Block 1.

Lot 3, Block 2 Street Frontage

Flexibility is provided from the required 100-foot minimum lot width required for proposed Lot 3, Block 2. This lot does not have frontage on a public right-of-way from which to measure lot width. As noted above, the City indicated a preference against dedicating a right-of-way through the project which would provide street frontage and lot width for Lot 3, Block 2. The private drive is designed as a local street and a driveway will provide access to Lot 3, Block 2 from the private drive. The south lot line where the driveway access is located will serve as the front lot line for Lot 3, Block 2. The proposed lot complies with the remaining Commercial district lot standards as shown on the plans.

Private Drive Access

Flexibility is provided to allow access to Block 2 via the private drive extending north from the approved access point along Hudson Boulevard. Lots in Block 2 will have driveway access from the private drive which is being designed to meet City standards for a local street. Creating a public street and extending in each cardinal direction does not provide a benefit to the City, applicant or adjacent property owners. Existing topography with over 30 feet of grade change makes it difficult to extend a public road and right-of-way east for a possible future connection.

There will be no parking on either side of the private drive. Lighting, landscaping and pedestrian facilities are also provided along the private drive to distinguish it from driveway access points to the lots. Flexibility is also provided to allow a 41-foot wide private driveway entrance in order to accommodate trucks and increase traffic safety.

Shared Driveway Access

The proposed access to Lot 1, Block 1 will be shared with the existing, adjacent commercial property east of the site. This access was previously approved by the City.

Ground and Wall Signage

Flexibility is provided for wall and ground (monument) signage which is being coordinated for the development as a whole. A Comprehensive Sign Plan has been included with the submittal and indicates the proposed sign standards for the development and where flexibility has been provided from the sign standards.

As a multi-tenant development each occupant will have a varying need for signage. The nature of the site creates challenges with respect to the location and visibility of tenant signs. Flexibility has been provided from the permitted height, sign area and setback standards for ground signs on properties located south of 5th Street and north of I-94. One multi-tenant monument sign for the entire development adjacent to Lot 1, Block 1. The proposed sign is 50 feet tall and 565 square feet in area and includes a multi-color electronic variable message sign on one of the panels. The ground sign on Lot 1, Block 1 is designed to increase visibility to the I-94 corridor where existing trees limit the visibility of a shorter sign. Signage along the interstate is an important component of the business design and model and the larger sign area will more effectively display tenant information to vehicles travelling along the I-94 corridor. A revision from the preliminary approvals is requested to locate the 50-foot ground sign in the right-of-way. The City will provide an encroachment agreement to the applicant to allow the sign to be located in the right-of-way as shown on the plans. The applicant has provided the City with an easement area over Lot 1, Block 1 adjacent to Hudson Boulevard in exchange for the encroachment agreement.

One multi-tenant ground sign is also proposed on Lot 2, Block 2 for tenants in Block 2. The Block 2 sign is designed to meet permitted sign standards for lots south of 5th Street and north of I-94. The Zoning Ordinance permits each lot to have one ground sign 30 feet tall and 250 square feet in area. The provided sign flexibility allows for coordinated signage which reduces the number of monument signs and provides a more uniform design. No ground signs are proposed for Lots 1 and 3, Block 2.

Flexibility is provided to allow wall signs on multiple facades and increase the permitted area. The provided flexibility allows wall signage on building facades without street frontage. This is important because it will allow buildings on Block 2 to have wall signs facing Hudson Boulevard and along frontages with the private access drive. Hudson Boulevard is also a major collector with high-speed vehicle traffic and the proposed buildings on Block 2 exceed the required setbacks from Hudson Boulevard. The speed of vehicle traffic and distance of buildings to Hudson Boulevard supports larger wall signs to be visually effective. Lot 3, Block 2 is also set back a considerable distance from Hudson Boulevard, so increased wall signage area will help with visibility. Specific standards proposed for wall signage are discussed in the Comprehensive Sign Plan Narrative.

Street Frontage Trees

Flexibility is provided from the street frontage tree requirement in Section 105.12.480 of the Zoning Ordinance, which requires a minimum of one tree be planted for every 50 feet of street frontage. Buried utilities and overhead power lines along Hudson Boulevard conflict with potential planting areas. The required boulevard trees will be placed along the private drive and Hudson Boulevard in locations where there will be less conflict with the existing utilities.

Lighting

Flexibility is provided from the maximum allowable light cast at the property lines that are shared with other commercial uses. Section 105.04.070(d) of the Zoning Ordinance regulates that light cast glare shall not exceed four-tenths footcandles at the property line. The property line between Lots 1 and 2, Block 2 is situated in the center of the proposed private drive. The footcandle measurement in the private drive may exceed four-tenths because streetlights are proposed along the private drive to illuminate the drive for vehicle and pedestrian safety. Lighting may also exceed four-tenths footcandles along the property line shared by Lot 1, Block 1 and 9931 Hudson Boulevard N to the east. Lot 1, Block 1 shares access with the existing commercial property to the east and additional lighting is necessary for vehicle and pedestrian safety. The lighting at the residential property lines complies with City standards.

Driveway Width

Flexibility is provided to allow a commercial driveway width of 41-feet, greater than the 32-feet that is allowed by ordinance. The larger width allows for safer access for transport vehicles and also allows for dedicated right and left turn lanes for vehicles exiting the development and turning onto Hudson Boulevard.

Trash Enclosure Materials

Flexibility is provided to allow compatible, but not the same building materials for the trash enclosures. The trash enclosures will be constructed with concrete block, which is a standard building material for trash enclosures. The block color will be compatible with the principal building.

Lot 1, Block 1 Front Yard

Flexibility is provided to allow the longer lot line of Lot 1, Block 1 as the front. The lot is considered a corner lot and is surrounded on three sides by right-of-way.

Lot 1, Block 1 Parking

Flexibility is provided to allow more than 60% of the site parking for Lot 1, Block 1 to be adjacent to the public road. Lot 1, Block 1 is a remnant piece of property surrounded by right-of-way on three sides. The odd shape and small size limits where parking can be located.

Lot 1, Block 1 Building Colors

Flexibility is provided to allow the use of primary colors for exterior materials on Lot 1, Block 1. The building elevations include areas of red that match Dairy Queen's branding.

PUD Benefit

Consider the following list of benefits that are provided with the development:

- Enhanced design of the private road, including, but not limited to boulevard landscaping, pedestrian connectivity through the site, pedestrian connectivity to Hudson Boulevard and street lighting.
- Building design which includes greater use of high-quality architectural materials such as anodized metal panels and glass storefront.
- Increased building setback to residential properties to the west.
- Coordinated ground signage for the entire development reduces the number of ground signs from four allowed to the two proposed creating less sign clutter.
- Additional landscaping to screen project elements from adjacent residential properties to the west and north. While Lot 3, Block 2 is proposed for future development, landscape screening will be installed in the first phase of development.
- A privacy fence along the west and north property lines to provide additional screening to adjacent residential lots, installed in advance of Lot 3, Block 2 development.
- Increased tax base provided through commercial development and site design with a private road versus dedicating public right-of-way.
- Increased opportunities for employment and commercial development in Lake Elmo.

Proposed Uses

The following uses are known proposed permitted uses within the PUD:

1. Sales and Storage Lot on Lot 1, Block 2

2. Automotive Maintenance on Lot 1, Block 2
3. Fast Food Restaurant on Lot 1, Block 1
4. Drive Through Facility on Lot 1, Block 1.

The above uses are proposed to allow for the sale of new and pre-owned automobiles; the sale of auto parts and accessories; test drives, parking and delivery of new and pre-owned automobiles; indoor and outdoor overnight storage of new and pre-owned automobiles; sale of solar panels, batteries and other energy products; general office use; inside car wash (not open to the public); fast food restaurant service, and; fast food drive-through facility.

The following are proposed within the PUD as allowed uses. Should conditional or interim uses be proposed for future development, such uses shall be subject to conditions of approval as outlined in the City Code.

1. Uses already permitted in the Commercial district.
2. Indoor recreational facilities.
3. Daycare operations.

Lots 2 and 3, Block 2

The proposed uses for Lots 2 and 3, Block 2 are not known at this time and are reserved for future development with one the allowed uses listed above.

Lot 1, Block 1

The proposed use for Lot 1, Block 1 is a Dairy Queen fast food and drive-through restaurant. The fast food restaurant is a permitted use and the drive-through is a conditional use in the Commercial district. Both uses are proposed permitted uses with the PUD. The conditional use permit standards for a drive-through restaurant are provided below in order to demonstrate the proposed use is compatible as a permitted use in the PUD.

The proposed drive-through use complies with the conditional use permit standards for food services in Section 105.12.520 of the Zoning Ordinance:

(1) Drive-through elements shall not be located between the front facade of the principal building and the street. No service shall be rendered, deliveries made or sales conducted within the required front yard, although tables may be provided for customer use.

The drive-through elements and delivery door are located on the south side of the building, away from the front façade and Hudson Boulevard right-of-way. A concrete walk/patio is situated in the east side yard next to the building.

(2) Site design shall accommodate a logical and safe vehicle and pedestrian circulation pattern. Adequate queuing lane space shall be provided, without interfering with on-site parking/circulation.

Vehicle and pedestrian circulation is typical of similar drive-through restaurants and adequate queuing is provided on site.

(3) Drive-through canopies and other structures, where present, shall be constructed from the same materials as the primary building, and with a similar level of architectural quality and detailing.

The drive-through canopy will match the design of the primary building.

(4) Sound from any speakers used on the premises shall not be audible above a level of normal conversation at the boundary of any surrounding residential district or on any residential property.

Sound will not be audible above a level of normal conversation beyond the property boundaries. The site does not abut residentially zoned property.

We have also reviewed the proposed site plan for Lot 1, Block 1 in accordance with general Conditional Use Permit standards in Section 105.12.290 and find that the ordinance standards have been met, specifically:

(1) The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience, or general welfare of the neighborhood or the city.

The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience or general welfare of the neighborhood or the City.

(2) The use or development conforms to the city comprehensive plan.

The property is guided and zoned Commercial. Drive-through establishments are permitted as a conditional use in Commercially zoned properties. The proposed development conforms with the Comprehensive Plan and Zoning Ordinance.

(3) The use or development is compatible with the existing neighborhood.

The proposed use is compatible with the adjacent commercial and retail uses.

(4) The proposed use meets all specific development standards.

The proposed use meets all specific development standards, including the Standards for Food Services in Section 105.12.520 of the Zoning Ordinance, as discussed above.

(5) If the proposed use is in a floodplain management or shore land area, the proposed use meets all the standards.

The proposed use is not located in a floodplain management or shoreland area.

(6) The proposed use will be designed, constructed, operated, and maintained so it will not change the essential character of that area.

The proposed use will be designed, constructed, operated and maintained so as to be compatible with the adjacent commercial and retail uses.

(7) The proposed use will not be hazardous or create a nuisance to existing or future neighboring structures.

The proposed use will not be hazardous or create a nuisance to existing or future neighboring structures.

(8) The proposed use will be served adequately by essential public facilities and services, including streets, police and fire protection, drainage structures, refuse disposal, water and sewer systems and schools or will be served

adequately by such facilities and services provided by the persons or agencies responsible for the establishment of the proposed use.

The proposed use will be served adequately by essential public facilities and services.

(9) The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.

Adequate public facilities and services exist for the proposed use. No public costs are anticipated for the proposed use.

(10) The proposed use will not involve uses, activities, processes, materials, equipment, and conditions of operation that will be detrimental to any persons, property or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare, or odors.

The proposed use does not include any uses, activities, equipment or conditions of operation that will be detrimental to the general welfare of any person or property.

(11) Vehicular approaches to the property will not create traffic congestion or interfere with traffic on surrounding public thoroughfares.

Vehicular approaches to the property will not create traffic congestion or interfere with traffic on surrounding public thoroughfares. The site complies with Hudson Boulevard design guidelines.

(12) The proposed use will not result in the destruction, loss, or damage of a natural or scenic features of major importance.

Not applicable.

Lot 1, Block 2

The proposed use for Lot 1, Block 2 is an auto sales and service dealership (automotive sales and storage lots and automotive maintenance services. This includes the sale of new and pre-owned automobiles; the sale of auto parts and accessories; test drives, parking, and delivery of new and pre-owned automobiles; indoor and outdoor overnight storage of new and pre-owned vehicles; maintenance, repair and charging of new and pre-owned automobiles; sale of solar panels, batteries and other energy products; and general office use. All vehicle repairs for this facility will occur within the dealership building.

The proposed uses for Lot 1, Block 2 are permitted as conditional uses in the Commercial district. The Lot 1, Block 2 uses are proposed permitted uses with the PUD. The conditional use permit standards in Section 105.12.290 are provided below in order to demonstrate compatibility as a permitted use in the PUD. We find that the ordinance standards have been met, specifically:

(1) The proposed use will not be detrimental to or endanger the public health, safety, comfort, convenience, or general welfare of the neighborhood or the city.

The auto dealership and service will not be detrimental or endanger the safety, comfort or welfare of the neighborhood or the city.

(2) The use or development conforms to the city comprehensive plan.

The auto dealership and service is proposed for a lot that is guided and zoned Commercial. The proposed development conforms with the Comprehensive Plan and Zoning Ordinance.

(3) The use or development is compatible with the existing neighborhood.

The auto sales and service dealership is compatible with the existing neighborhood. Adjacent residential developments are high density and provide an appropriate transition between commercial and lower density residential areas. The dealership will add to existing commercial and retail developments at the northwest corner of the I-94 interchange. The proposed use is likely to have a positive effect in the surrounding commercial area with the investment that is put into developing the property and providing access to additional commercial lots.

(4) The proposed use meets all specific development standards.

The proposed use complies with all specific development standards, including additional standards for sales and storage lots and automobile maintenance services.

(5) If the proposed use is in a floodplain management or shore land area, the proposed use meets all the standards.

The auto dealership and service is not located in a floodplain management or shoreland area.

(6) The proposed use will be designed, constructed, operated, and maintained so it will not change the essential character of that area.

The auto dealership and service will be constructed to a high standard of design. Stucco facades and parapets break up the mass of the building. Glazed glass and accented metal panels mark the entrance which faces towards Hudson Boulevard. The dealership will be maintained as a sales lot and servicing facility and is not anticipated to have any negative effect on the essential character of the area.

(7) The proposed use will not be hazardous or create a nuisance to existing or future neighboring structures.

The proposed use will not be hazardous or create a nuisance to existing or future neighboring structures. The facility will also sell and service electric vehicles which do not use carburetor engines or exhaust systems. Electric vehicles are mostly silent.

(8) The proposed use will be served adequately by essential public facilities and services, including streets, police and fire protection, drainage structures, refuse disposal, water and sewer systems and schools or will be served adequately by such facilities and services provided by the persons or agencies responsible for the establishment of the proposed use.

The auto dealership and service will be served adequately by essential public facilities and services.

(9) The proposed use will not create excessive additional requirements at public cost for public facilities and services and will not be detrimental to the economic welfare of the community.

The auto dealership and service will not create excessive additional requirements at public cost for public facilities and will not be detrimental to the economic welfare of the community. The proposed development will provide access to new commercial lots and promote the economic welfare of the community.

(10) The proposed use will not involve uses, activities, processes, materials, equipment, and conditions of operation that will be detrimental to any persons, property or the general welfare because of excessive production of traffic, noise, smoke, fumes, glare, or odors.

The auto dealership and service does not include any uses, activities, equipment or conditions of operation that will be detrimental to the general welfare of any person or property. The facility will sell and service electric vehicles which do not use carburetor engines or exhaust systems.

(11) Vehicular approaches to the property will not create traffic congestion or interfere with traffic on surrounding public thoroughfares.

Improvements to Hudson Boulevard are proposed that will adequately control and manage traffic on surrounding public throughfares. The improvement will follow the city's Hudson Boulevard design standards and include construction of turn lanes at previously approved access points into the site.

(12) The proposed use will not result in the destruction, loss, or damage of a natural or scenic features of major importance.

There are no natural or scenic features of major importance on the site.

Summary

We respectfully request approval of the Final Plat and Final PUD to allow for the construction of the electric auto sales dealership and fast food restaurant (Dairy Queen) on the site. The final plat and final PUD are consistent with the preliminary approvals granted on March 21, 2023. We anticipate the application will be heard at the City Council on May 16th.

Contact Information

This document was prepared by:

Nicholas Ouellette
Landform
105 South Fifth Avenue, Suite 513
Minneapolis, MN 55401

Any additional questions regarding this application can be directed to Tom Meyer at tmeyer@landform.net or 612.638.0241.

EBERTZ ADDITION

KNOW ALL PERSONS BY THESE PRESENTS: That Drake Motor Partners LE LLC, a Colorado limited liability company, fee owner of the following described property situated in the County of Washington, State of Minnesota, to wit:

The West One-half of the Southeast Quarter of the Southeast Quarter of Section 34, Township 29, Range 21, EXCEPT that part depicted as Parcel 33B on Minnesota Department of Transportation Right of Way Plat No. 82-43 filed March 22, 1982, as Document No. 429592, which was taken by the State of Minnesota in Final Certificate dated October 4, 1989, filed October 24, 1989, as Document No. 613150.

Has caused the same to be surveyed and platted as EBERTZ ADDITION and does hereby dedicate to the public for public use the public ways and the drainage and utility easements as created by this plat.

In witness whereof said Drake Motor Partners LE LLC, a Colorado limited liability company, has caused these presents to be signed by its proper officer this _____ day of _____, 20____.

Signed: Drake Motor Partners LE LLC, a Colorado limited liability company

By: Drake Developments LLC, a Colorado limited liability company, Manager

By: Drake Real Estate Services, Inc. a Colorado corporation, Manager

By: _____

Jon Hauser, General Manager

STATE OF _____
COUNTY OF _____
This instrument was acknowledged before me on this _____ day of _____, 20____ by Jon Hauser, as General Manager of Drake Real Estate Services, Inc., a Colorado corporation, as Manager of Drake Developments LLC, a Colorado limited liability company, as Manager of Drake Motor Partners LE LLC, a Colorado limited liability company.

_____ _____

(Signature) (Print Notary's name)

Notary Public, _____ County, Minnesota
My Commission Expires _____

I Larry J. Huhn 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 the 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 on this plat; and all public ways are shown and labeled on this plat.

Dated this _____ day of _____, 20____.

_____

Larry J. Huhn, Licensed Land Surveyor
Minnesota License Number 24332

STATE OF MINNESOTA
COUNTY OF _____
This instrument was acknowledged before me on this _____ day of _____, 20____by Larry J. Huhn.

_____ _____

(Signature) (Print Notary's name)

Notary Public, _____County, Minnesota
My Commission Expires _____

Lake Elmo Planning Commission

Approved by the Planning Commission of the City of Lake Elmo, Minnesota, this ___ day of _____, 20___.

_____ _____

Chair Secretary

CITY OF LAKE ELMO, MINNESOTA

This plat was approved by the City Council of the City of Lake Elmo, Minnesota this _____ day of _____, 20____, and hereby certifies compliance with all requirements as set forth in Minnesota Statutes, Section 505.03, Subdivision 2.

_____ _____

Mayor City 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 _____, 20____.

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 20____, on the real estate hereinbefore described have been paid, and there are no delinquent taxes, and transfer has been entered on this _____ day of _____, 20____.

By _____ By _____

Washington County Auditor/Treasurer Deputy

WASHINGTON COUNTY RECORDER

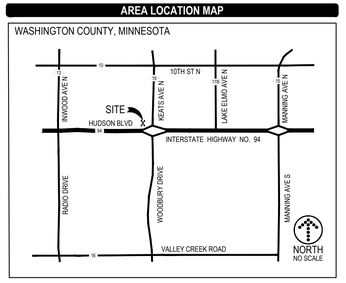
Document Number _____

I hereby certify that this instrument was recorded in the Office of the County Recorder for record on this _____ day of _____, 20____ at _____ o'clock ___M., and was duly recorded in Washington County Records.

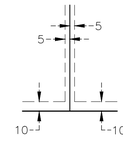
By _____ By _____

Washington County Recorder Deputy

AREA LOCATION MAP



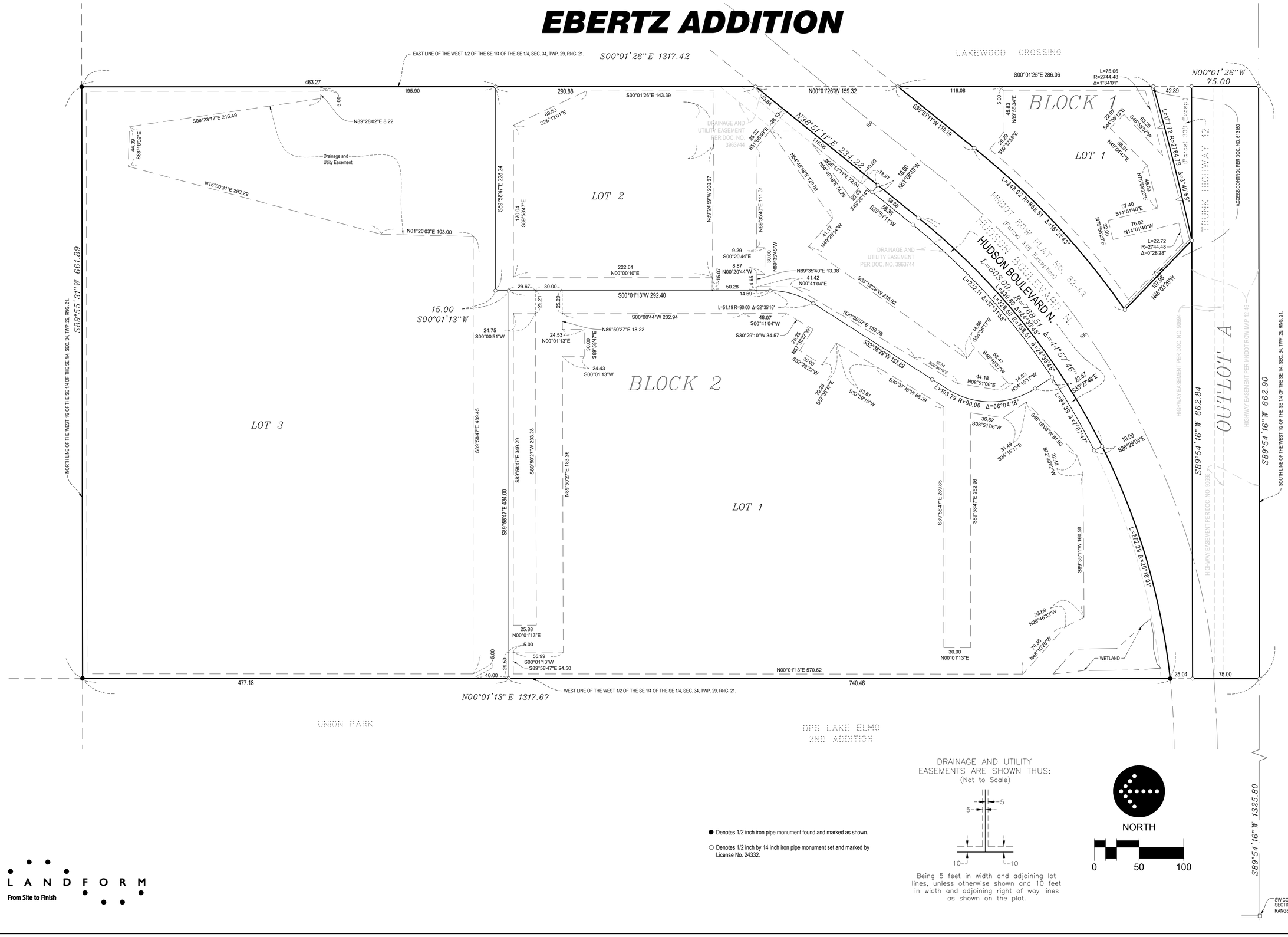
DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:
(Not to Scale)



Being 5 feet in width and adjoining lot lines, unless otherwise shown and 10 feet in width and adjoining right of way lines as shown on the plat.

LANDFORM
From Site to Finish

EBERTZ ADDITION



● Denotes 1/2 inch iron pipe monument found and marked as shown.

○ Denotes 1/2 inch by 14 inch iron pipe monument set and marked by License No. 24332.

DRAINAGE AND UTILITY EASEMENTS ARE SHOWN THUS:
(Not to Scale)

Being 5 feet in width and adjoining lot lines, unless otherwise shown and 10 feet in width and adjoining right of way lines as shown on the plat.

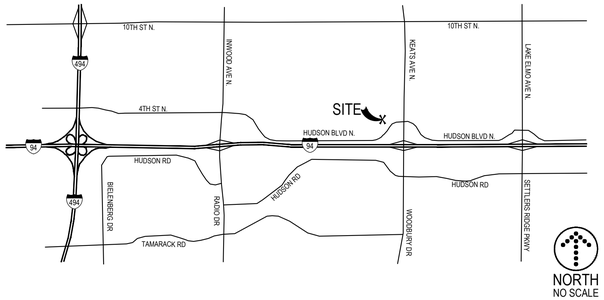
LANDFORM
From Site to Finish

ELECTRIC AUTO SALES & SERVICE

LAKE ELMO, MINNESOTA

AREA LOCATION MAP

LAKE ELMO, MN



ABBREVIATIONS

D	Angle
&	And
@	At
100 YR.	100 Year Flood Elevation
A.B.	Anchor Bolt
A.D.	Area Drain
A/C	Air Conditioning Unit
ADD.	Addendum
ADDL.	Additional
ADJ.	Adjacent / Adjust
AHU	Air Handling Unit
ALT.	Alternate
ALUM.	Aluminum
ANOD.	Anodized
APPROX.	Approximate
ARCH	Architect / Architectural
AUTO.	Automatic
AVG.	Average
B.C.	Back of Curb
B/W	Bottom of Wall
BFE	Basement Floor Elevation
BIT.	Bituminous (Asphaltic)
BLDG.	Building
BM	Benchmark
BSMT.	Basement
C.F.	Cubic Feet
C.F.S.	Cubic Feet Per Second
C.G.	Corner Guard
C.J.	Control Joint
C.L.	Centerline
C.M.U.	Concrete Masonry Unit
C.O.	Cleanout
C.O.E.	U.S. Army Corps Of Engineers
C.Y.	Cubic Yards
CB	Catch Basin
CBMH	Catch Basin Manhole
CEM.	Cement
CIP	Cast Iron Pipe
CMP	Corrugated Metal Pipe
CONC.	Concrete (Portland)
CONN.	Connection
CONST.	Construction
CONT.	Continuous
CONTR.	Contractor
COP.	Copper
CU.	Cubic
D.S.	Down Spout
DEG.	Degree
DEMO.	Demolition / Demolish
DEPT.	Department
DET.	Detail
DIA.	Diameter
DIAG.	Diagonal
DIM.	Dimension
DIP	Ductile Iron Pipe
DN	Down
DWG.	Drawing
E.	East
E.J.	Expansion Joint
E.O.	Emergency Overflow
E.O.S.	Emergency Overflow Swale
E.W.	Each Way
EA.	Each EL. Elevation
ELEC.	Electrical
ELEV.	Elevation
EMER.	Emergency
ENGR.	Engineer
ENTR.	Entrance
EQ.	Equal
EQUIP.	Equipment
EQUIV.	Equivalent
EXIST.	Existing
EXP.	Expansion
F & I	Furnish and Install
F.B.O.	Furnished by Others
F.C.	Face of Curb
F.D.	Floor Drain
F.D.C.	Fire Department Connection
F.V.	Field Verify
FB	Full Basement
FBWO	Full Basement Walk Out
FBLO	Full Basement Look Out
FDN.	Foundation
FES	Flared End Section
FFE	Finished Floor Elevation
FLR.	Floor
FT. OR (')	Foot
FUT.	Future
G.B.	Grade Break
G.C.	General Contractor
GAL.	Gallon
GALV.	Galvanized
GFE	Garage Floor Elevation
GL.	Glass
GR.	Grade
H.	Height
H.P.	High Point
HDPEP	High Density Polyethylene Pipe
HGT.	Height
HORIZ.	Horizontal
HVAC	Heating, Ventilation, Air Conditioning
HYD	Hydrant
I.D.	Inside Dimension OR Identification
I.E. or IE	Invert Elevation
IN. OR (")	Inches
INFO.	Information
INL.	Inlet Elevation
INSUL.	Insulation
INV.	Invert Elevation
JT.	Joint
L.F.	Linear Feet
L.P.	Low Point / Liquid Petroleum
LB.	Pound
LGU	Local Government Unit
LB.	Pound
LB.	Longitudinal
LT.	Light / Lighting
MAINT.	Maintenance
MAS.	Masonry
MATL.	Material
MAX.	Maximum
MECH	Mechanical
MED.	Medium
MFR.	Manufacturer
MH	Manhole
MIN.	Minimum / Minute
MISC.	Miscellaneous
MNDOT	Minnesota Department Of Transportation
MOD.	Module / Modular
MUL.	Mullion
N.	North
N.I.C.	Not In Contract
NO. OR #	Number
NOM	Nominal
NTS	Not to Scale
NWE	Normal Water Elevation
NWL	Normal Water Level
O.F.	On Center
O.G.	Outside Dimension
O.H.	Overhead Electric
OH.	Overhead
OHWL	Ordinary High Water Level
OPNG.	Opening
ORIG.	Original
P.C.	Point of Curvature
P.I.	Point of Intersection
PIV	Post Indicator Valve
P.L. OR P/L	Property Line
P.O.B.	Point of Beginning
P.S.F.	Pounds Per Square Foot
P.S.I.	Pounds Per Square Inch
P.T.	Point of Tangency
P.V.C.	Point of Vertical Curvature
P.V.I.	Point of Vertical Intersection
P.V.T.	Point of Vertical Tangency
PE	Polyethylene
PED.	Pedestal / Pedestrian
PERF.	Perforated
PREP.	Preparation
PROJ.	Project
PROP.	Proposed
PVC	Poly-Vinyl-Chloride (Piping)
PVMT.	Pavement
QTR.	Quarter
QTY.	Quantity
R	Radius
RAD.	Radius
RE	Rim Elevation (Casting)
R.D.	Roof Drain
R.E.	Remove Existing
R.O.	Rough Opening
R.P.	Radius Point
RC	Reinforced Concrete Pipe
R.S.	Rough Slab
RSD	Roof Storm Drain
RE.	Regarding
REINF.	Reinforced
REQ'D	Required
REV.	Revision / Revised
RGU	Regulatory Government Unit
ROW OR R/W	Right of Way
S.	South
S.F.	Square Feet
SAN.	Sanitary Sewer
SECT.	Section
SE	Split Entry /Side Exit
SEWO	Split Entry Walk Out /Side Exit Walk Out
SHT.	Sheet
SIM.	Similar
SLNT.	Sealant
SPEC.	Specification
SQ.	Square
SSD	Subsurface drain
STMH	Storm Sewer Manhole
STD.	Standard
STRUCT.	Structural
SYM.	Symmetrical
T	Thickness
T/R	Top of Rim
T/W	Top of Wall
TEMP.	Temporary
THK.	Thick / Thickness
T.J.	Tooled Joint
TNH	Top Nut Hydrant
TYP.	Typical
U.N.O.	Unless Noted Otherwise
V.B.	Vapor Barrier
V.C.	Vertical Curve
V.I.F.	Verify In Field
VER.	Verify
VER.	Vertical
VEST.	Vestibule
W	Width
W.P.T.	Working Point
W.W.F.	Welded Wire Fabric
W/	With
W/O	Without
WO	Walk Out
VER.	Wetland
WP	Waterproof
WETL.	Weight
YD.	Yard
YR.	Year

SYMBOLS

EXISTING	DESCRIPTION	NEW	DESCRIPTION
120	MAJOR CONTOUR	120	MAJOR CONTOUR
123	MINOR CONTOUR	123	MINOR CONTOUR
× 234.5	SPOT ELEVATION	× 123.45	SPOT ELEVATION
	BUILDING		BUILDING
	CANOPY / OVERHANG		CANOPY/OVERHANG
	CONCRETE		UNDERGROUND STRUCTURE
	BITUMINOUS		CONCRETE
	LANDSCAPING		CONCRETE CURB
	GRAVEL	BIT. EDGE HEIGHT, TYPE	EDGE OF PAVEMENT
	PAVING BLOCK		FENCING
	PAVING BLOCK		GUARD RAIL
			CONCRETE RETAINING WALL
12"STS >>	STORM SEWER LINE		MODULAR RETAINING WALL
8"SAN >	SANITARY SEWER LINE		FIELDSTONE RETAINING WALL
6"WTR	WATER MAIN		EXIT LOCATION
OE	OVERHEAD ELECTRIC		LIGHT STANDARD
UT	UNDERGROUND TELEPHONE	∅	POWER POLE
FO	UNDERGROUND FIBER OPTIC	1.00 %	SLOPE DIRECTION
UE	UNDERGROUND ELECTRIC		CATCH BASIN
G	GAS LINE		MANHOLE
	CONCRETE CURB	FES	BOLLARD
X HEIGHT, TYPE X	FENCING	STS >> RIPRAP	STORM SEWER
	RETAINING WALL	SAN >	SANITARY SEWER-WASTE
	SET 1/2" X 14" IRON PIPE	FM >	FORCE MAIN
	IRON MONUMENT FOUND	RD >>	ROOF DRAIN SYSTEM
	SURVEY DISK (BENCHMARK)	GATE VALVE WTR HYD	WATERMAIN
	POWERPOLE	FIRE	FIRE LINE (IF SEPARATE)
	GUY WIRE	BLDG. FDC	FIRE DEPT. CONNECTION
	GUARD POST	C.O. X"SSD	SOIL SUBDRAIN
GM	GAS METER	GAS	GAS LINE-UNDERGROUND
T	TRANSFORMER	ELEC	ELECTRIC-UNDERGROUND
	WATER SHUT-OFF VALVE	TELE	TELEPHONE-UNDERGROUND
	TRAFFIC SIGN	CATV	UNDERGROUND CABLE/TV
	FLAG POLE	LSS	LAWN SPRINKLER SLEEVE
LT	LIGHT POLE		
	TREES		
	TREE LINE		
	MANHOLE		
	CATCH BASIN		
	FIRE HYDRANT		
	WATER VALVE		
	FLARED END SECTION		
MB	MAILBOX		
1	NOTE NUMBER		
(M)	MEASURED DISTANCE		
(P)	DISTANCE PER RECORDED PLAT		
B-X	SOIL BORING		

EROSION CONTROL SYMBOLS

SYMBOL	DESCRIPTION
	SILT FENCE
	COMPOST/BIO LOG
	INLET PROTECTION
	EROSION CONTROL BLANKET

DRAWING SYMBOLS

SYMBOL	DESCRIPTION
3	NOTE REFERENCE
12	PARKING STALL COUNT
C7.3 / 1	LARGE SHEET DETAIL
C21	COORDINATE POINT
2 / 2	REVISION - ADDENDUM, BULLETIN, ETC.
	REVISED AREA (THIS ISSUE)

LEGAL DESCRIPTION

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 29, RANGE 21, EXCEPT THAT PART DEPICTED AS PARCEL 33B ON MINNESOTA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY PLAT NO. 82-43 FILED MARCH 22, 1982, AS DOCUMENT NO. 429692, WHICH WAS TAKEN BY THE STATE OF MINNESOTA IN FINAL CERTIFICATE DATED OCTOBER 4, 1989, FILED OCTOBER 24, 1989, AS DOCUMENT NO. 613150.

WASHINGTON COUNTY, MINNESOTA

BENCHMARK

PROJECT BENCHMARK:

MNDOT NAME: 8282 AX
IN LAKE ELMO, 0.05 MILE EAST ALONG INTERSTATE HIGHWAY 94 FROM THE JUNCTION OF INTERSTATE HIGHWAY 94 AND WOODBURY DRIVE (KEATS AVENUE NORTH) IN LAKE ELMO, AT INTERSTATE HIGHWAY 94 MILEPOINT 251.75, 69.8 FEET NORTH OF WESTBOUND INTERSTATE HIGHWAY 94 FOG LINE, 1.5 FEET SOUTH OF WITNESS POST.

ELEVATION = 938.31 (NAVD 88)

MNDOT NAME: 8282 AY
IN LAKE ELMO, 0.7 MILE EAST ALONG INTERSTATE HIGHWAY 94 ROM THE JUNCTION OF INTERSTATE HIGHWAY 94 AND INWOOD AVENUE NORTH/RADIO DRIVE IN LAKE ELMO, AT INTERSTATE HIGHWAY 94 MILEPOINT 250.85, 38.7 FEET NORTH OF WESTBOUND INTERSTATE HIGHWAY 94 FOG LONE, 41.7 FEET SOUTH OF RIGHT-OF-WAY FENCE, 1.5 FEET SOUTH OF A WITNESS POST.

ELEVATION = 985.73 (NAVD 88)

SITE BENCHMARK:
TBD

ELEVATION = TBD (NAVD 88)

CERTIFICATIONS

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. THIS CERTIFICATION IS FOR SHEET NUMBERS BEGINNING WITH "C".

THOMAS O. MEYER, P.E.

LICENSE NUMBER: 42016 DATE: 04/14/2023

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA. THIS CERTIFICATION IS FOR SHEET NUMBERS BEGINNING WITH "L".

JOSH POPEHN, RLA

LICENSE NUMBER: 44803 DATE: 04/14/2023

OWNER

DRAKE REAL ESTATE SERVICES
496 S. BROADWAY
DENVER, CO, 80209
TEL (303) 825-6200
CONTACT: JON HAUSER

PROJECT CONTACTS

CIVIL ENGINEER
LANDFORM
105 SOUTH FIFTH AVENUE, SUITE 513
MINNEAPOLIS, MN 55401
TEL 612-252-9070
CONTACT: TOM MEYER

SURVEYOR
LANDFORM
105 SOUTH FIFTH AVENUE, SUITE 513
MINNEAPOLIS, MN 55401
TEL 612-252-9070
CONTACT: LARRY HUHN

LANDSCAPE ARCHITECT
LANDFORM
105 SOUTH FIFTH AVENUE, SUITE 513
MINNEAPOLIS, MN 55401
TEL 612-252-9070
CONTACT: JOSH POPEHN

ARCHITECT
NAMA PARTNERS
6140 GREENWOOD PLAZA BOULEVARD, SUITE 100
GREENWOOD VILLAGE, CO 80111
TEL 720-289-0001
CONTACT: MIKE BRETTMANN

CIVIL / LANDSCAPE SHEET INDEX & REVISION MATRIX

SHEET NO.	DESCRIPTION	08.29.22	10.26.22	12.21.22	01.25.23	02.13.23	03.07.23	03.16.23	03.30.23	04.14.23				
	SHEETS ISSUED BY DATE													
C0.1	CIVIL & LANDSCAPE TITLE SHEET	X	X	X	X	X	X	X	X	X				
C1.1	EXISTING CONDITIONS	X	X	X	X	X	X		X	X				
C1.2	PRELIMINARY PLAT		X		X	X	X		X	X				
C1.4	TREE PRESERVATION			X	X	X	X	X	X	X				
C2.0	OVERALL SITE PLAN	X	X	X	X	X	X	X	X	X				
C2.1	LOT 1 BLOCK 2 SITE PLAN			X	X	X	X	X	X	X				
C3.0	OVERALL GRADING, DRAINAGE, PAVING & EROSION CONTROL	X	X	X	X	X	X		X	X				
C3.1	ENLARGED BUILDING GRADING, DRAINAGE, PAVING & EROSION CONTROL			X	X	X	X		X	X				
C3.2	SOUTH GRADING, DRAINAGE, PAVING & EROSION CONTROL PLAN			X	X	X	X		X	X				
C3.3	NORTH GRADING, DRAINAGE, PAVING & EROSION CONTROL PLAN			X	X	X	X		X	X				
C3.4	SWPPP NOTES			X	X	X	X		X	X				
C3.5	MASS GRADING								X	X				
C4.0	OVERALL UTILITIES	X	X	X	X	X	X	X	X	X				
C4.1	STORM SEWER			X	X	X	X		X	X				
C4.2	SANITARY & WATER			X	X	X	X		X	X				
C4.3	SANITARY & WATER PLAN AND PROFILE								X	X				
C4.4	SANITARY & WATER PLAN AND PROFILE								X	X				
C4.5	SANITARY & WATER PLAN AND PROFILE								X	X				
C4.6	SANITARY & WATER PLAN AND PROFILE								X	X				
C4.7	CITY OF LAKE ELMO STANDARD UTILITY NOTES									X				
C5.1	HUDSON BOULEVARD EXISTING CONDITIONS & DEMOLITION			X	X	X	X		X	X				
C5.2A	HUDSON BOULEVARD STRIPING AND SIGNAGE				X	X	X		X	X				
C5.2B	HUDSON BOULEVARD LAYOUT PLAN									X				
C5.3A	HUDSON BOULEVARD PLAN & PROFILE	X	X	X	X	X	X		X	X				
C5.3B	HUDSON BOULEVARD PLAN & PROFILE				X	X	X		X	X				
C5.3C	HUDSON BOULEVARD STORM CROSS SECTIONS									X				
C5.4	HUDSON BOULEVARD TYPICAL SECTIONS			X	X	X	X		X	X				
C5.5	HUDSON BOULEVARD PAVING PLAN			X	X	X	X		X	X				
C5.6	HUDSON BOULEVARD CROSS SECTIONS			X					X	X				
C5.7	HUDSON BOULEVARD CROSS SECTIONS			X					X	X				
C5.8	HUDSON BOULEVARD CROSS SECTIONS			X					X	X				
C5.9	HUDSON BOULEVARD CROSS SECTIONS			X					X	X				
C5.10	HUDSON BOULEVARD CROSS SECTIONS			X					X	X				
C7.1	CIVIL CONSTRUCTION DETAILS			X	X	X	X		X	X				
C7.2	CIVIL CONSTRUCTION DETAILS			X	X	X	X		X	X				
C7.3	CIVIL CONSTRUCTION DETAILS			X	X	X	X		X	X				
C7.4	CIVIL CONSTRUCTION DETAILS					X	X		X	X				
C7.5	CIVIL CONSTRUCTION DETAILS								X	X				
L2.0	OVERALL LANDSCAPE PLAN			X	X	X	X	X	X	X				
L2.1	ENLARGED LANDSCAPE PLAN			X	X	X	X	X	X	X				
L3.0	SOIL AMENDMENT PLAN					X		X	X	X				
L7.1	LANDSCAPE DETAILS			X	X	X	X	X	X	X				

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LAKE ELMO, MN 55042

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OCT. 26, 2022	REVIEW SET
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MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

DRAWING TITLE

CIVIL & LANDSCAPE TITLE SHEET

PROJECT NUMBER: DRS22002

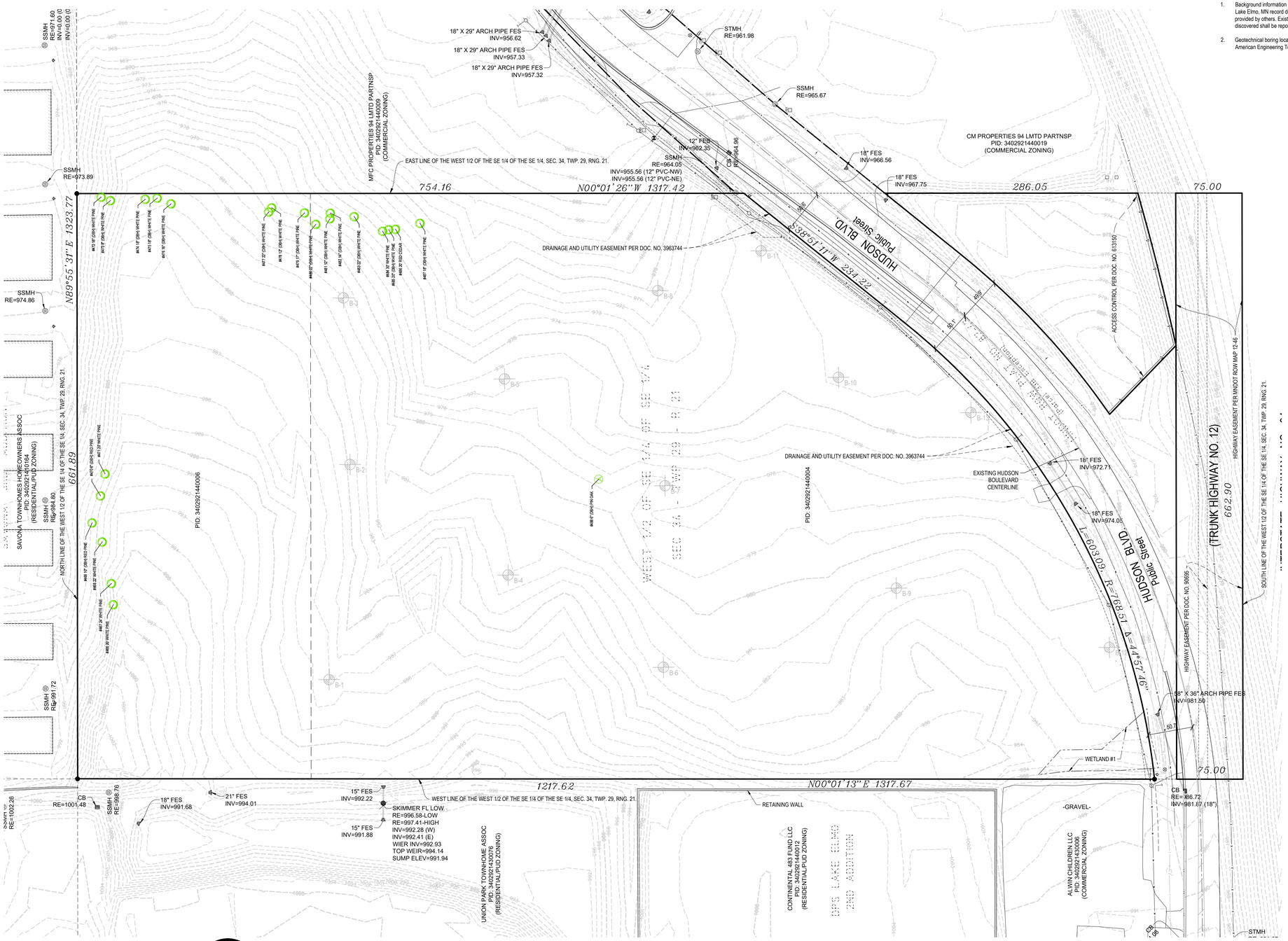
SHEET NUMBER

C0.1

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EXISTING CONDITIONS

1. Background information shown is from survey by Landform, Minneapolis, MN, on July 19, 2022, expressly for this project; City of Lake Elmo, MN record drawings; and utility service providers. Landform offers no warranty, expressed or written, for information provided by others. Existing project conditions shall be verified prior to beginning construction. Errors, inconsistencies, or omissions discovered shall be reported to the Engineer.
2. Geotechnical boring locations are approximate and are based on information provided in the Geotechnical Report prepared by American Engineering Testing, Albertville, MN, on August 1, 2022.



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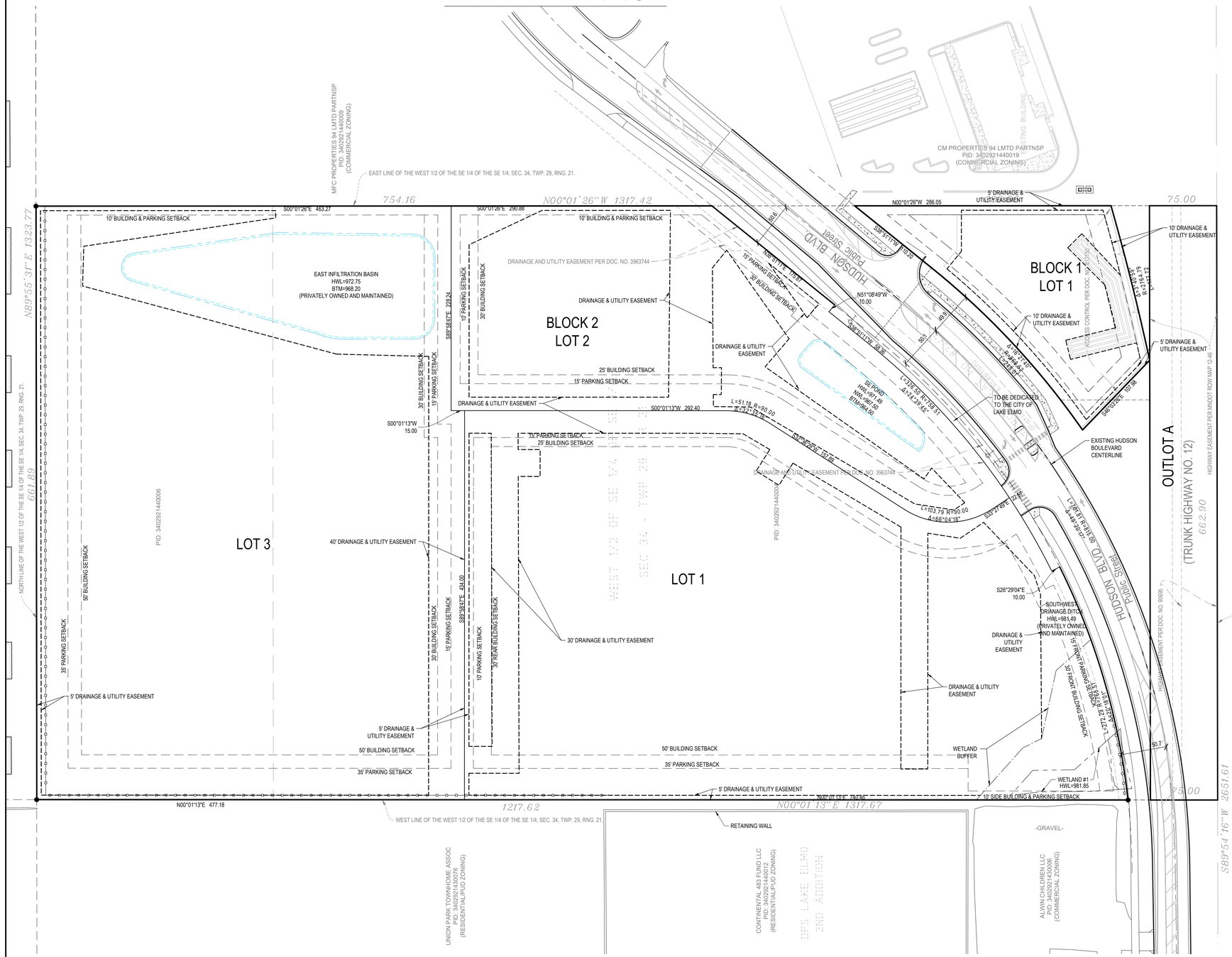
EXISTING CONDITIONS

PROJECT NUMBER: DRS22002

SHEET NUMBER

C1.1

EBERTZ ADDITION



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LEGAL DESCRIPTION

THE WEST ONE-HALF OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 34, TOWNSHIP 29, RANGE 21, EXCEPT THAT PART DEPICTED AS PARCEL 33B ON MINNESOTA DEPARTMENT OF TRANSPORTATION RIGHT OF WAY PLAT NO. 82-43 FILED MARCH 22, 1982, AS DOCUMENT NO. 429592, WHICH WAS TAKEN BY THE STATE OF MINNESOTA IN FINAL CERTIFICATE DATED OCTOBER 4, 1989, FILED OCTOBER 24, 1989, AS DOCUMENT NO. 613150.

WASHINGTON COUNTY, MINNESOTA

BENCHMARK

PROJECT BENCHMARK:

MNDOT NAME: 8282 AX
IN LAKE ELMO, 0.05 MILE EAST ALONG INTERSTATE HIGHWAY 94 FROM THE JUNCTION OF INTERSTATE HIGHWAY 94 AND WOODBURY DRIVE (KEATS AVENUE NORTH) IN LAKE ELMO, AT INTERSTATE HIGHWAY 94 MILEPOINT 251.75, 69.8 FEET NORTH OF WESTBOUND INTERSTATE HIGHWAY 94 FOG LINE, 1.5 FEET SOUTH OF WITNESS POST.

ELEVATION = 938.31 (NAVD 88)

MNDOT NAME: 8282 AY
IN LAKE ELMO, 0.7 MILE EAST ALONG INTERSTATE HIGHWAY 94 ROM THE JUNCTION OF INTERSTATE HIGHWAY 94 AND INWOOD AVENUE NORTH/RADIO DRIVE IN LAKE ELMO, AT INTERSTATE HIGHWAY 94 MILEPOINT 250.85, 38.7 FEET NORTH OF WESTBOUND INTERSTATE HIGHWAY 94 FOG LONE, 41.7 FEET SOUTH OF RIGHT-OF-WAY FENCE, 1.5 FEET SOUTH OF A WITNESS POST.

ELEVATION = 985.73 (NAVD 88)

SITE BENCHMARK:
TBD

ELEVATION = TBD (NAVD 88)

AREA SUMMARY

Total Existing Site Area: 742,966 S.F. = 17.06 AC.

Wetland Area: 3,944 S.F. = 0.09 AC.

Upland Area: 739,022 S.F. = 16.97 AC.

ZONING AND SETBACK SUMMARY

The Property is Zoned C- Commercial

Building Setback Information is as follows:
Front Yard = 30 ft.
Rear = 30 ft.
Side (Interior) = 10 ft.
Side (Corner) = 25 ft.

Parking Setback Information is as follows:
Front Yard = 15 ft.
Rear = 10 ft.
Side (Interior) = 10 ft.
Side (Corner) = 15 ft.

LOT AREA TABLE

Lot, Block:	LOT SIZE:
Lot 1, Blk 1	40,681 s.f.
Lot 1, Blk 2	269,112 s.f.
Lot 2, Blk 2	116,440 s.f.
Lot 3, Blk 2	312,863 s.f.

*3,870 s.f. Right-of-Way Dedication

LEGEND

- Property Line
- Interior Lot Line
- Underlying Parcel Line
- Existing Easement
- Proposed Easement
- Proposed Setback

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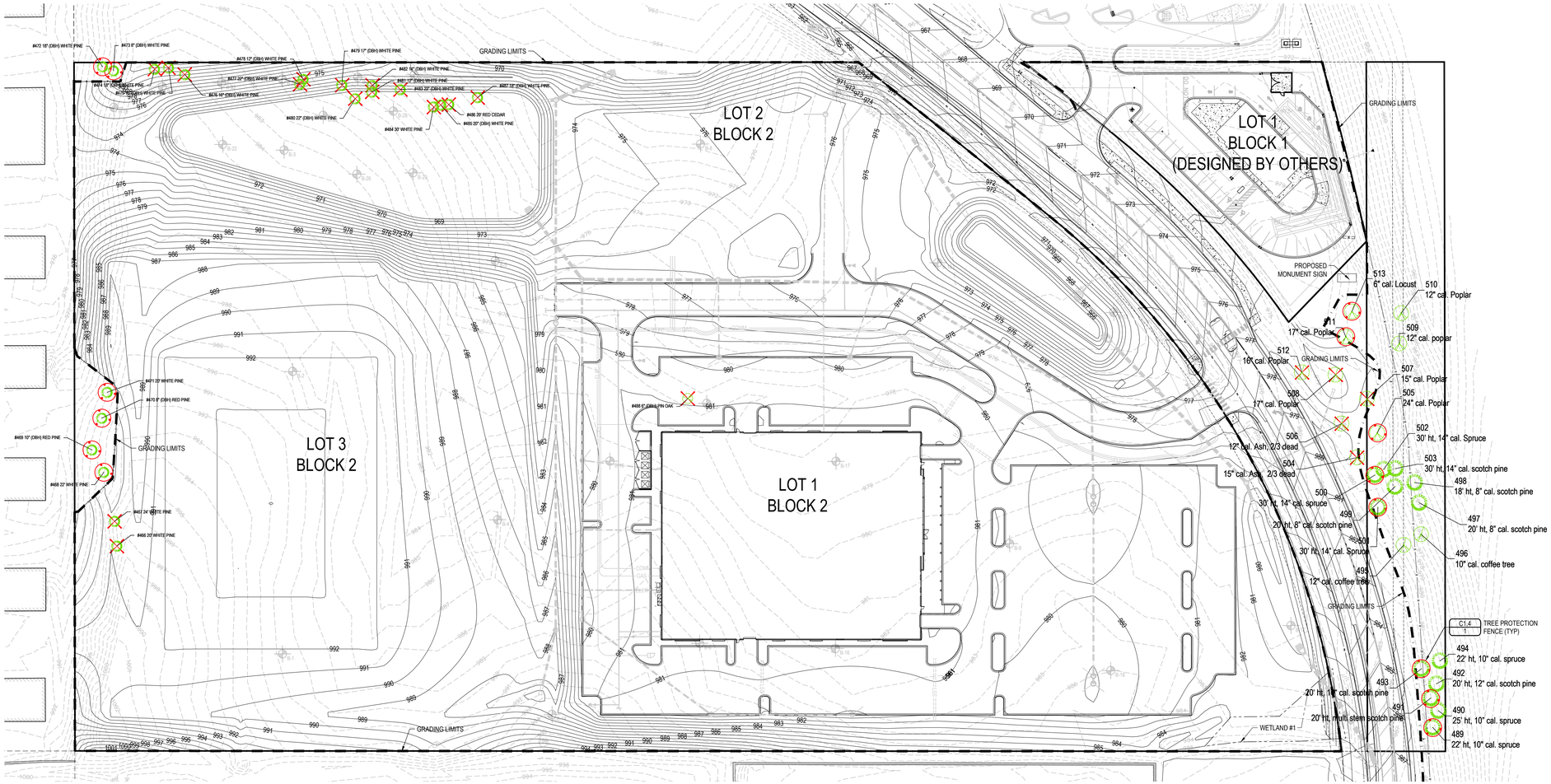
DRAWING TITLE

PRELIMINARY PLAT

PROJECT NUMBER: DRS22002

SHEET NUMBER

C1.2



Coniferous

Tag #	Size		Species	Health	Category	Remove	Replacement Inches
466	8	Cal	White Pine	H	Conifer	1	4
467	9	Cal	White Pine	H	Conifer	1	4.5
468	9	Cal	White Pine	H	Conifer		
469	8	Cal	Red Pine	H	Conifer		
470	8	Cal	Red Pine	H	Conifer		
471	8	Cal	White Pine	H	Conifer		
472	8	Cal	White Pine	H	Conifer		
473	18	Cal	White Pine	H	Conifer		
474	18	Cal	White Pine	H	Conifer	1	9
475	18	Cal	White Pine	H	Conifer	1	9
476	16	Cal	White Pine	H	Conifer	1	8
477	22	Cal	White Pine	H	Conifer	1	11
478	12	Cal	White Pine	H	Conifer	1	6
479	17	Cal	White Pine	H	Conifer	1	8.5
480	20	Cal	White Pine	H	Conifer	1	10
481	12	Cal	White Pine	H	Conifer	1	6
482	14	Cal	White Pine	H	Conifer	1	7
483	22	Cal	White Pine	H	Conifer	1	11

Coniferous

Tag #	Size		Species	Health	Category	Remove	Replacement Inches
484	20	Cal	White Pine	H	Conifer	1	10
485	8	Cal	White Pine	H	Conifer	1	4
486	8	Cal	Eastern Red Cedar	H	Conifer	1	4
487	18	Cal	White Pine	H	Conifer	1	9
489	10	Cal	Spruce (22' ht)	H	Conifer		
490	10	Cal	Spruce (22' ht)	H	Conifer		
491	20' ht	Ht.	Scotch Pine (20' ht, 3-stem)	H	Conifer		
492	12	Cal	Scotch Pine (20' ht)	H	Conifer		
493	10	Cal	Scotch Pine (20' ht)	H	Conifer		
494	10	Cal	Spruce (22' ht)	H	Conifer		
497	8	Cal	Scotch Pine (20' ht)	H	Conifer		
498	8	Cal	Scotch Pine (18' ht)	H	Conifer		
499	8	Cal	Scotch Pine (20' ht)	H	Conifer		
500	14	Cal	Spruce (30' ht)	H	Conifer		
501	14	Cal	Spruce (30' ht)	H	Conifer		
502	14	Cal	Spruce (30' ht)	H	Conifer		
503	14	Cal	Scotch Pine (30' ht)	H	Conifer		

Totals 35

Hardwoods

Tag #	Size		Species	Health	Category	Remove	Replacement Inches
488	6	Cal	Pin Oak	H	Hardwood	1	3
495	12	Cal	Coffee Tree	H	Common		
496	10	Cal	Coffee Tree	H	Common		
504*	15	Cal	Ash	2/3 dead	Common	1	
505	24	Cal	Poplar	H	Common		
506*	12	Cal	Ash	2/3 dead	Common	1	
507*	15	Cal	Poplar	H	Common	1	
508*	17	Cal	Poplar	H	Common	1	
509	12	Cal	Poplar	H	Common		
510	12	Cal	Poplar	H	Common		
511*	17	Cal	Poplar	H	Common		
512*	16	Cal	Poplar	H	Common	1	
513*	6	Cal	Locust	H	Common		

Totals 13

* Existing trees located on City Property shall be exempt from tree removal/replacement requirements.

LEGEND

:Tree Removal

:Tree Protection Fencing

:Grading Limits

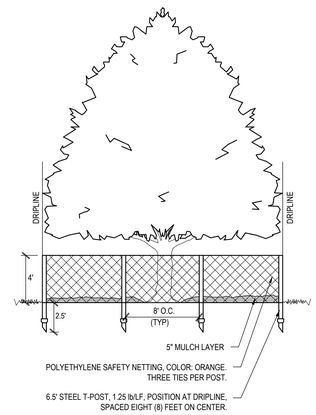
TREE PRESERVATION REQUIREMENTS

Code Sec. 105.12.470
Up to 30% removals without replacement. Removal calculations apply to each tree type individually and any replacements needed shall apply to each tree type (hardwood, coniferous, common).

Replacement multipliers
Hardwoods - 1/2 per inch lost
Coniferous - 1/2 per inch lost
Common - 1/4 per inch lost

Tree Type	Total inches	Inches Removed (30% allowed)	Inches Mitigated	Replacement Inches Required
Hardwoods	6	6	4	2
Coniferous	301	242 (80%)	152 (50%)	76 (19-8' ht. trees*)
Common	0	0	0	0

*Height of replacement tree / 2 = caliper inches of credit



INSTALL TREE PROTECTION DEVICES PRIOR TO START OF LAND DISTURBANCE.
MAINTAIN UNTIL FINAL LANDSCAPE IS INSTALLED.

1 **TREE PROTECTION**

NO SCALE

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

NORTH

0 60 120

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I hereby certify that this plan 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

Joshua K. Popehn
License No: 44803 Date: 04/14/2023

Signature shown is a digital reproduction of original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

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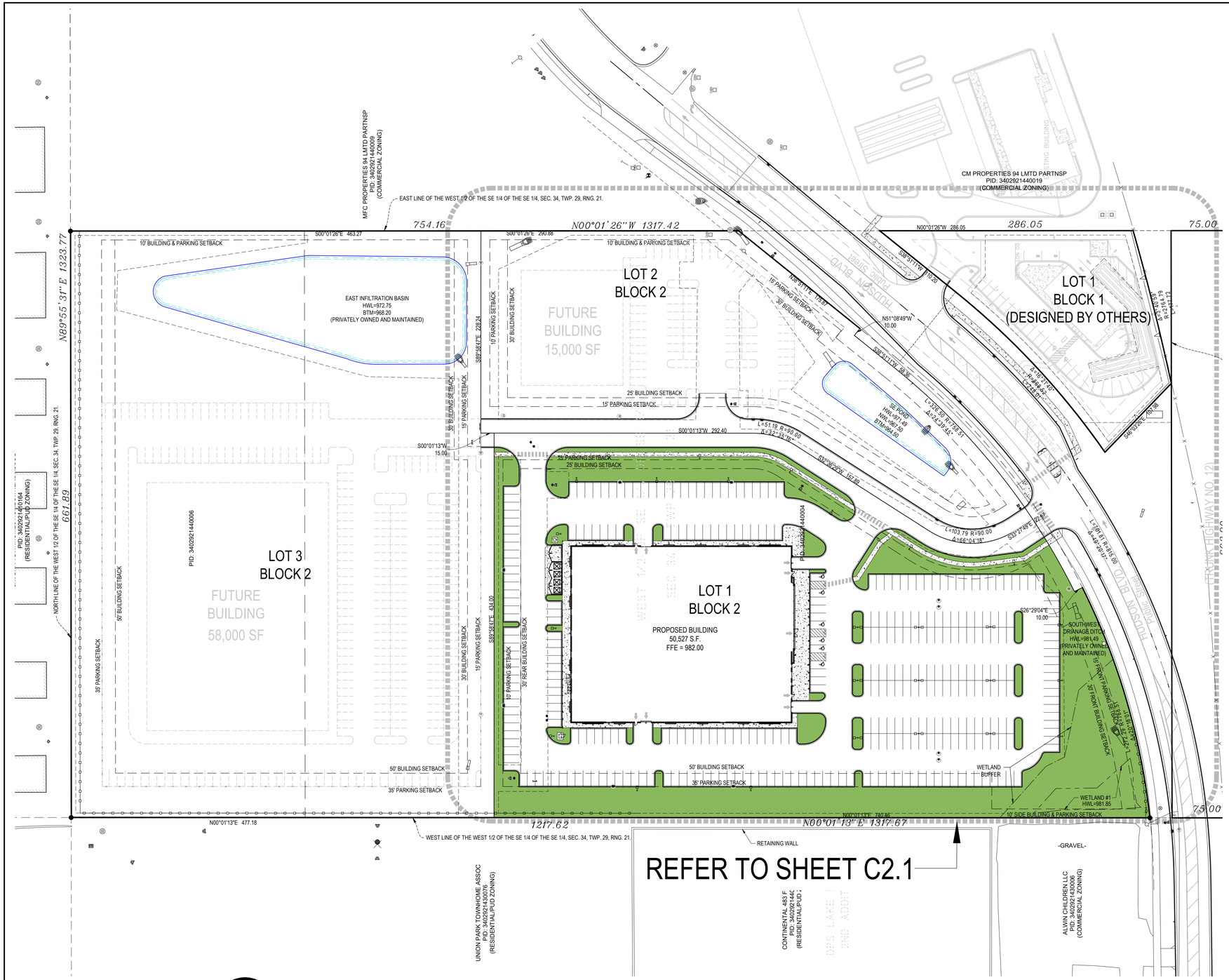
DRAWING TITLE

TREE PRESERVATION

PROJECT NUMBER: DRS22002

SHEET NUMBER

C1.4



GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

SITE PLAN NOTES

2. Obtain all necessary permits for construction within, or use of, public right-of-way.
3. The digital file, which can be obtained from the Engineer, shall be used for staking. Discrepancies between the drawings and the digital file shall be reported to the Engineer. The building footprint, as shown on these drawings, and the digital file, shall be compared to the structural drawings prior to staking.
4. Building layout angles are parallel with or perpendicular to the property line at the location indicated.
5. Dimensions shown are to face of curb and exterior face of building unless noted otherwise.
6. Delineate parking stalls with a 4-inch wide white painted stripe. Delineate access aisles with 4-inch wide white painted stripes 18 inches on center and at 45 degree angle to direction of travel.
7. Trash / Recycling areas: See Architectural drawings.
8. Six (6') foot privacy fence. Trex or similar approved by Owner. Color: TBD. See Sheet L2.0 and Detail L7.0/6.
9. 42-inch high chain link fence. See Detail C7.4/6.

ZONING AND SETBACK SUMMARY

The Property is Zoned C - Commercial

Building Setback Information is as follows:
Front Yard = 30 ft.
Rear = 30 ft.
Side (interior) = 10 ft.
Side (corner) = 25 ft

Parking Setback Information is as follows:
Front Yard = 15 ft.
Rear = 10 ft.
Side (interior) = 10 ft.
Side (corner) = 15 ft

Lot Coverage Information is as follows:
Lot Area Minimum = 20,000 s.f. = 0.46 ac.
Lot Width Minimum = 100 ft.
Total Site Area = 742,967 s.f. = 17.06 ac.

AREA SUMMARY (LOT 1 - BLOCK 1)

Existing:					
Pervious	40,681	s.f.	0.93	ac.	100.0%
Impervious	0	s.f.	0.00	ac.	0.0%
Total	40,681	s.f.	0.93	ac.	100.0%
Proposed:					
Pervious	14,714	s.f.	0.33	ac.	36.2%
Impervious	25,967	s.f.	0.60	ac.	63.8%
Total	40,681	s.f.	0.93	ac.	100.0%

AREA SUMMARY (LOT 1 - BLOCK 2)

Existing:					
Pervious	269,112	s.f.	6.18	ac.	100.0%
Impervious	0	s.f.	0.00	ac.	0.0%
Total	269,112	s.f.	6.18	ac.	100.0%
Proposed:					
Pervious	69,723	s.f.	1.60	ac.	25.9%
Impervious	199,389	s.f.	4.58	ac.	74.1%
Total	269,112	s.f	6.18	ac.	100.0%

AREA SUMMARY (FUTURE LOT 2 - BLOCK 2)

Existing:					
Pervious	116,440	s.f.	2.67	ac.	100.0%
Impervious	0	s.f.	0	ac.	0.0%
Total	116,440	s.f.	2.67	ac.	100.0%
Proposed (Assume 75% Max. Impervious Area):					
Pervious	29,110	s.f.	0.67	ac.	25.0%
Impervious	87,330	s.f.	2.03	ac.	75.0%
Total	116,440	s.f	2.70	ac.	100.0%

AREA SUMMARY (FUTURE LOT 3 - BLOCK 2)

Existing:					
Pervious	312,863	s.f.	7.18	ac.	100.0%
Impervious	0	s.f.	0	ac.	0.0%
Total	312,863	s.f.	7.18	ac.	100.0%
Proposed (Assume 75% Max. Impervious Area):					
Pervious	78,216	s.f.	1.80	ac.	25.0%
Impervious	234,647	s.f.	5.38	ac.	75.0%
Total	312,863	s.f	7.18	ac.	100.0%

PARKING SUMMARY (LOT 1 - BLOCK 2)

Required Parking:

One Stall per 250 s.f. of gross floor area used for sales or customer service. One stall per 2,000 s.f. of outside sales/display area.
37,536 s.f. Total gross floor area
37,536 s.f. / 250 = 151 stalls
29,970 s.f. Total outside sales/display area
29,970 s.f. / 2,000 = 15 stalls

Total Parking Stalls Required	166	ea.

Provided Parking:

Standard Stalls	(9x18)	346	ea.
Accessible Stalls	(9x18)	6	ea.
Total Parking Stalls Provided		352	ea.

LEGEND

- Green Space (Landscape Area)
- Customer Parking - 126 stalls
- Employee Parking - 40 stalls
- Off-Street Loading Area - 12' x 50'

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Tom O. Meyer
License No: 42016 Date:

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ISSUE / REVISION	
AUG. 29, 2022	CITY SUBMITTAL
OCT. 26, 2022	REVIEW SET
JAN. 25, 2023	PRELIM BID SET
FEB. 13, 2023	CITY SUBMITTAL
MAR. 07, 2023	WATERSHED SUBMITTAL
MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

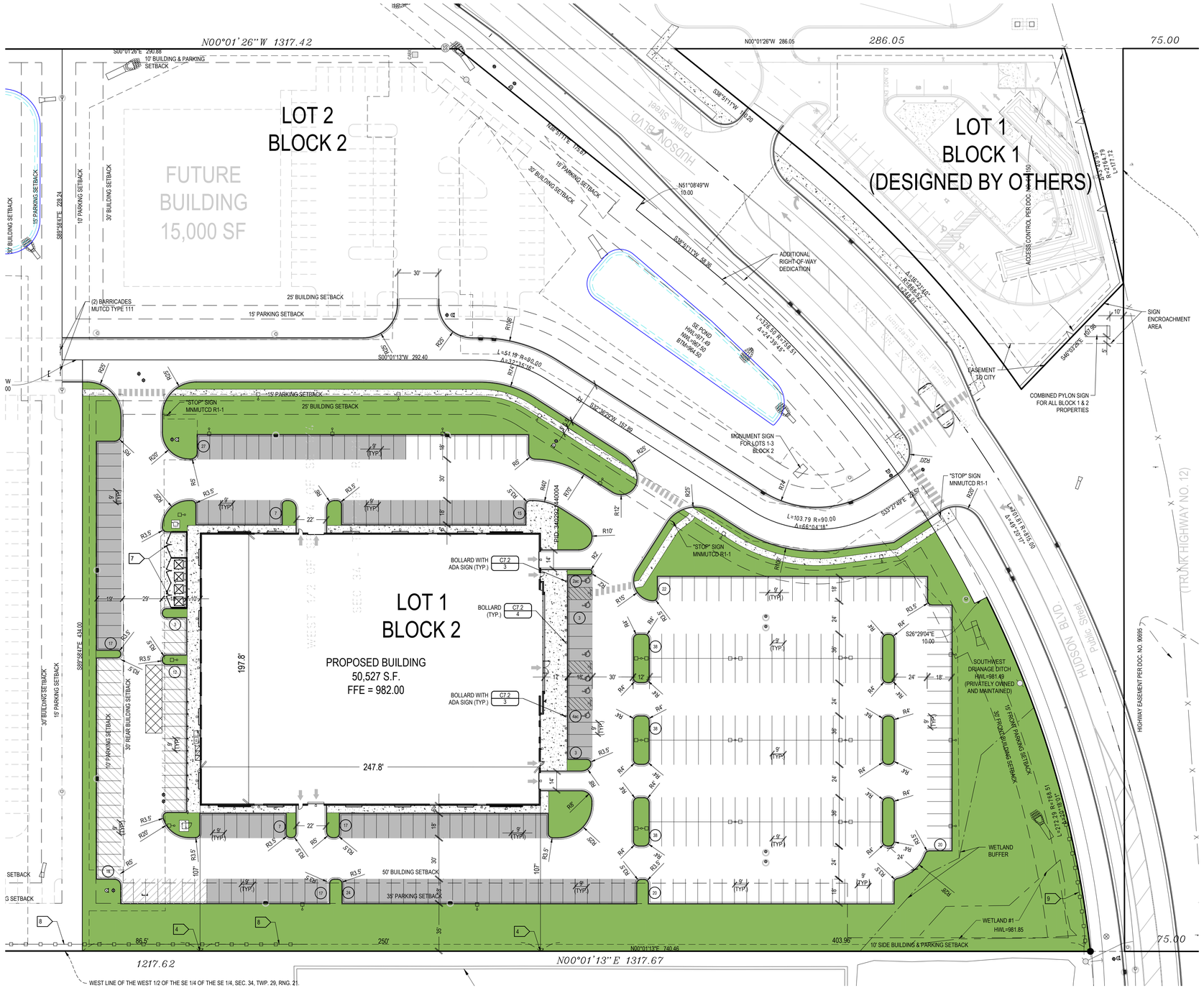
DRAWING TITLE

OVERALL SITE PLAN

PROJECT NUMBER: DRS22002

SHEET NUMBER

C2.0



GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

SITE PLAN NOTES

2. Obtain all necessary permits for construction within, or use of, public right-of-way.
3. The digital file, which can be obtained from the Engineer, shall be used for staking. Discrepancies between the drawings and the digital file shall be reported to the Engineer. The building footprint, as shown on these drawings, and the digital file, shall be compared to the structural drawings prior to staking.
4. Building layout angles are parallel with or perpendicular to the property line at the location indicated.
5. Dimensions shown are to face of curb and exterior face of building unless noted otherwise.
6. Delineate parking stalls with a 4-inch wide white painted stripe. Delineate access aisles with 4-inch wide white painted stripes 18 inches on center and at 45 degree angle to direction of travel.
7. Trash / Recycling areas: See Architectural drawings.
8. Six (6') foot privacy fence. Trex or similar approved by Owner. Color: TBD. See Sheet L2.0 and Detail L7.0/6.
9. 42-inch high chain link fence. See Detail C7.4/6.

ZONING AND SETBACK SUMMARY

The Property is Zoned C - Commercial

Building Setback Information is as follows:
Front Yard = 30 ft.
Rear = 30 ft.
Side (interior) = 10 ft.
Side (corner) = 25 ft

Parking Setback Information is as follows:
Front Yard = 15 ft.
Rear = 10 ft.
Side (interior) = 10 ft.
Side (corner) = 15 ft

Lot Coverage Information is as follows:
Lot Area Minimum = 20,000 s.f. = 0.46 ac.
Lot Width Minimum = 100 ft.
Total Site Area = 742,967 s.f. = 17.06 ac.

AREA SUMMARY (LOT 1 - BLOCK 1)

Existing:					
Pervious	40,681	s.f.	0.93	ac.	100.0%
Impervious	0	s.f.	0.00	ac.	0.0%
Total	40,681	s.f.	0.93	ac.	100.0%
Proposed:					
Pervious	14,714	s.f.	0.33	ac.	36.2%
Impervious	25,967	s.f.	0.60	ac.	63.8%
Total	40,681	s.f.	0.93	ac.	100.0%

AREA SUMMARY (LOT 1 - BLOCK 2)

Existing:					
Pervious	269,112	s.f.	6.18	ac.	100.0%
Impervious	0	s.f.	0.00	ac.	0.0%
Total	269,112	s.f.	6.18	ac.	100.0%
Proposed:					
Pervious	69,723	s.f.	1.60	ac.	25.9%
Impervious	199,389	s.f.	4.58	ac.	74.1%
Total	269,112	s.f	6.18	ac.	100.0%

AREA SUMMARY (FUTURE LOT 2 - BLOCK 2)

Existing:					
Pervious	116,440	s.f.	2.67	ac.	100.0%
Impervious	0	s.f.	0	ac.	0.0%
Total	116,440	s.f.	2.67	ac.	100.0%
Proposed (Assume 75% Max. Impervious Area):					
Pervious	29,110	s.f.	0.67	ac.	25.0%
Impervious	87,330	s.f.	2.03	ac.	75.0%
Total	116,440	s.f	2.70	ac.	100.0%

AREA SUMMARY (FUTURE LOT 3 - BLOCK 2)

Existing:					
Pervious	312,863	s.f.	7.18	ac.	100.0%
Impervious	0	s.f.	0	ac.	0.0%
Total	312,863	s.f.	7.18	ac.	100.0%
Proposed (Assume 75% Max. Impervious Area):					
Pervious	78,216	s.f.	1.80	ac.	25.0%
Impervious	234,647	s.f.	5.38	ac.	75.0%
Total	312,863	s.f.	7.18	ac.	100.0%

PARKING SUMMARY (LOT 1 - BLOCK 2)

Required Parking:

One Stall per 250 s.f. of gross floor area used for sales or customer service. One stall per 2,000 s.f. of outside sales/display area.
37,536 s.f. Total gross floor area
37,536 s.f. / 250 = 151 stalls
29,970 s.f. Total outside sales/display area
29,970 s.f. / 2,000 = 15 stalls

Total Parking Stalls Required	166	ea.

Provided Parking:

Standard Stalls	(9x18)	346	ea.
Accessible Stalls	(9x18)	6	ea.
Total Parking Stalls Provided		352	ea.

LEGEND

- Green Space (Landscape Area)
- Customer Parking - 126 stalls
- Employee Parking - 40 stalls
- Off-Street Loading Area - 12' x 50'

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CONSTRUCTION

I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

Signature shown is a digital reproduction of original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

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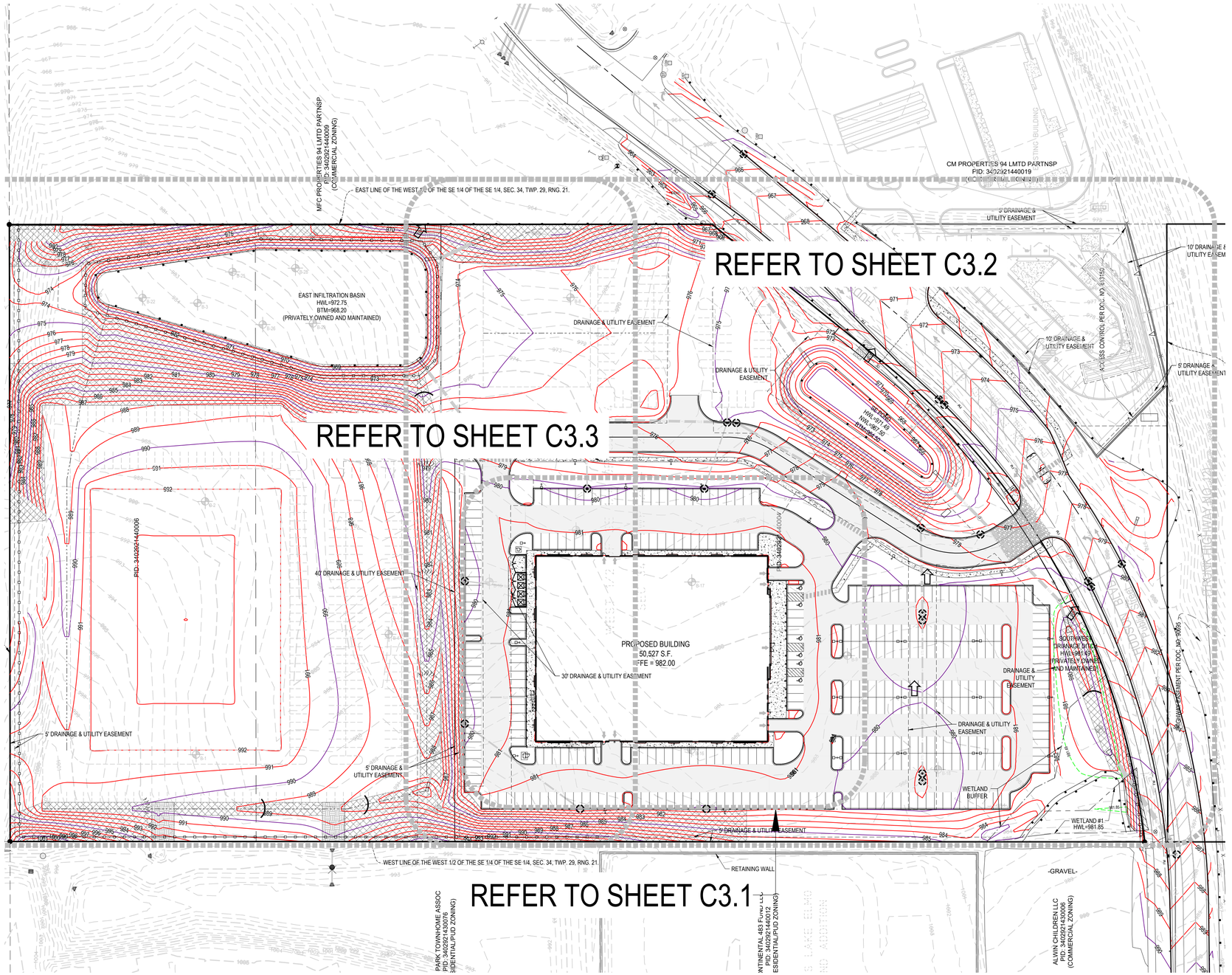
DRAWING TITLE

LOT 1 BLOCK 2
SITE PLAN

PROJECT NUMBER: DRS22002

SHEET NUMBER

C2.1



GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

2. Install perimeter sediment controls prior to beginning work and maintain for duration of construction. Remove controls after areas contributing runoff are permanently stabilized and dispose of off site.

3. Install inlet protection: Wimco RD or CG models as appropriate, or approved equal. Maintain protection until project is stabilized.

4. Limit soil disturbance to the grading limits shown. Schedule operations to minimize length of exposure of disturbed areas.

5. Management practices shown are the minimum requirement. Install and maintain additional controls as work proceeds to prevent erosion and control sediment carried by wind or water.

6. Refer to SWPPP Notes on Sheet C3.4 for additional requirements.

7. Contractor shall prevent sediment laden water from entering the filtration / infiltration system until the site is completely stabilized.

8. Stabilization must be started immediately to limit soil erosion when the construction activity in that portion of the site has temporarily or permanently ceased and will not resume for 14 calendar days.

   Seed, Sod, Mulch, Erosion Control Blanket, and Fertilizer shall meet the following Specifications, as modified.

Item	Specification Number
Sod	MNDOT 3878
Seed	MNDOT 3876
MN Type 21-111 @ 100 lb./ac. - Temporary Erosion Control - Temporary Erosion Control, May 1 - Jul 31	
MN Type 21-112 @ 100 lb./ac. - Temporary Erosion Control - Temporary Erosion Control, Aug 1 - Oct 31	
Mulch	MNDOT 3882
(MNDOT Type 1 @ 2 ton/ac., Disc Anchored)	
Erosion Control Blanket	MNDOT 3885
(MNDOT Type 3N (for 12 mo.) 4N (for 24 mo.))	
Fertilizer	MNDOT 3881
General Placement	MNDOT 2575

9. See Landscape Sheets for permanent turf and landscape establishment.

10. Scrape adjacent streets clean daily and sweep clean weekly.

GRADING NOTES

11. Contact utility service providers for field location of services 72 hours prior to beginning grading.

12. Refer to the Geotechnical Report prepared by American Engineering Testing, Dated 09/14/22, for additional information on backfill material and groundwater conditions.

13. Remove topsoil from grading areas and stockpile sufficient quantity for reuse. Materials may be mined from landscape areas for use on site and replaced with excess organic material with prior Owner approval.

14. Contractor to restore soils structure over 50% of the disturbed pervious area per Valley Branch Watershed District Requirements. Refer to landscape sheets for detail.

15. Remove surface and ground water from excavations. Provide initial lifts of stable foundation material if exposed soils are wet and unstable.

16. Rough grade Building Pad to 12 Inches below Finished Floor Elevation (FFE).

17. Refer to Structural Specifications for earthwork requirements for building pads.

18. An Independent Testing Firm shall verify the removal of organic and unsuitable soils, soil correction, and compaction and provide periodic reports to the Owner.

19. Place and compact fill using lift thicknesses matched to soil type and compaction equipment to obtain specified compaction throughout the lift.

20. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. Compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).

21. Coordinate with Architectural for building stoop locations. Slopes shown on adjacent walks and pavements should continue over stoops.

INFILTRATION BASIN INFORMATION & TESTING

22. Avoid soil compaction of infiltration practices. Any equipment used in infiltration areas should be small scaled and tracked. Install protective fencing as shown before work begins.

23. The bottom of surface infiltration basins (not underground) shall be scarified to a depth of 12" prior to placement of topsoil or planting media.

24. DESIGN PERMEABILITY RATES:
    Infiltration 1 was designed with a permeability of 0.45 inches/hour.

25. TESTING:

a. Infiltration Basins: At the time of basin excavation, and prior to placement of any material (soil, chambers, etc.), permeability testing shall be performed.

b. Filtration Basins: Once filtration basin media has been placed, permeability testing shall be performed.

c. Contractor shall engage a qualified testing firm to measure the permeability of the basin surface utilizing a Double Ring Infiltrometer, Modified Philip Dunn (MPD) Infiltrometer, or other method approved by the Civil Engineer or Geotechnical Engineer. Test results shall be greater than or equal to the following rates to meet long term rates required for design:
Infiltration 1 needs a permeability of 0.9 inches/hour. - - DESIGNER: TESTED RATE SHALL BE TWICE REQ'D.

d. Contractor to contact the following to schedule testing. Representative staff from each entity may wish to observe the tests. Contact shall be made 72 hours prior to testing.

Civil Engineer: Tom Meyer, tmeyer@landform.net, 612-252-9070
Geotechnical Engineer: Rob Olson, rolson@teamAET.com, 651-659-1316
Valley Branch Watershed: John Hanson, jhanson@barr.com, 952-832-2622
City of Lake Elmo: Jack Griffin, jack.griffin@Focusengineering.com, 651-300-4264

26. RATE OF TESTING: Contractor shall coordinate with the testing firm to provide permeameter tests at the following rates:

Filtration/Infiltration Basin I.D.	Basin Area (s.f.)	No. of Tests Required
1	32,441	7

27. Test results shall be provided to the Civil Engineer, Geotechnical Engineer, Watershed & City.

28. Soils at proposed infiltration basin must be decompacted per VBWD requirements. Infiltration basins shall not be excavated to final grade until contributing drainage areas are constructed and fully stabilized.

29. The final phase of excavation to infiltration basin shall remove all accumulated sediment and be done by light, tracked equipemnt to avoid compaction of basin floor.

30. Soils of the basin floor should be loosened to a depth of at least 5 feet to a maximum compaction of 85% standard proctor density prior to planting. The upper 12 inches of soil shall be tilled prior to planting

PAVING NOTES

31. Spot Elevations at curblines indicate flowlines unless noted otherwise. See Sheet C4.2 for rim elevations of catch basins.

32. Grades between proposed spot elevations shall be continuous and nonvariable. Spot Elevations shall govern over contour lines.

33. Meet and Match existing curb. Transition as needed.

34. Paving Sections (Refer to Geotechnical Report by American Engineering Testing, Dated 09-14-2022)
    a. Bituminous Paving (Light Duty)
    2-inch Bituminous Wear (MNDOT 2360, SPWEA330F)
    Tack Coat (MNDOT 2357)
    2-inch Bituminous Base (MNDOT 2360, SPNWB340F)
    6-inch Aggregate Base (MNDOT 3138, Class 5)
    12-inch Granular Sub-Base (MNDOT 3149.2B4)
    Compacted Subsoil

    b. Bituminous Paving (Heavy Duty)
    2-inch Bituminous Wear (MNDOT 2360, SPWEA440F)
    Tack Coat (MNDOT 2357)
    2.5-inch Bituminous Base (MNDOT 2360, SPNWB330F)
    8-inch Aggregate Base (MNDOT 3138, Class 5)
    12-inch Granular Sub-Base (MNDOT 3149.2B4)
    Compacted Subsoil

    c. Concrete Walkways
    4-inch Concrete Walk, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
    4-inch Aggregate Base (MNDOT 3138, CLASS 5)
    Compacted Subsoil

    d. Concrete Drives, Aprons, and Exterior Slabs
    8-inch Concrete, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
    6-inch Aggregate Base (MNDOT 3138, CLASS 5)
    Compacted Subsoil

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:Inlet Protection	21 ea.
	:Silt Fence	4,000 ft.
	:Vehicle Tracking Pad	1 ea.
	:Erosion Control Blanket	
	:Tip Out Curb	

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:Pavement Sawcut	
	:Construction Limits	
	:Wetland Fill	985 s.f.
	:Enkamat 7020	2,958 s.f.
	:Maintenance Access Route	

PAVING NOTES

35. Concrete Joints
    Install joints as shown and align across sidewalks, curbs, and pavement, paying attention to spacing of expansion joints.
    Joint spacing shall be as follows:
    a. Tooled joints: Divide panels into nominally equal areas unless shown otherwise.
    b. Expansion Joints: Sidewalks - 40 feet max.; Curbs - 60 feet max.; Pavement: 80 feet max.; Adjacent to building foundations and stoops.
    c. Contraction Joints: Sidewalks - 8 to 10 feet; Curbs and Aprons - 12 to 15 feet.

36. Accessible Parking Stalls and adjacent access aisles shall not exceed a 2.00% slope in any direction.

37. Accessible Routes shall have a maximum cross slope of 2.00% and a maximum running slope of 5.00%.

38. Adjust all structure rims to match pavement elevations.

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I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

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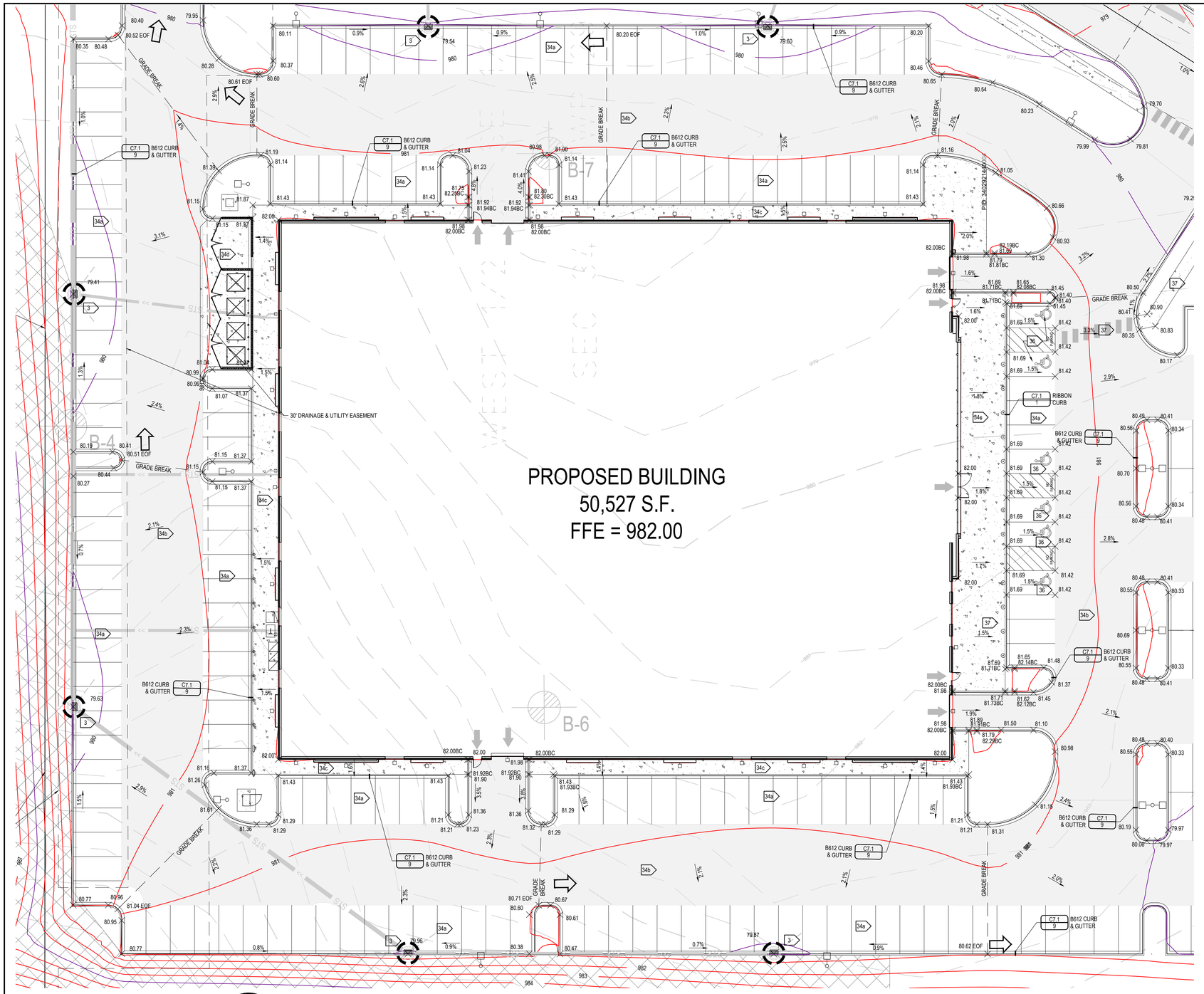
DRAWING TITLE

OVERALL GRADING, DRAINAGE, PAVING, & EROSION CONTROL

PROJECT NUMBER: DRS22002

SHEET NUMBER

C3.0



GENERAL NOTES

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   2-inch Bituminous Base (MNDOT 2360, SPNWB340F)
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   12-inch Granular Sub-Base (MNDOT 3149.2B4)
   Compacted Subsoil

b. Bituminous Paving (Heavy Duty)
   2-inch Bituminous Wear (MNDOT 2360, SPWEA440F)
   Tack Coat (MNDOT 2357)
   2.5-inch Bituminous Base (MNDOT 2360, SPNWB330F)
   8-inch Aggregate Base (MNDOT 3138, Class 5)
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   Compacted Subsoil

c. Concrete Walkways
   4-inch Concrete Walk, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
   4-inch Aggregate Base (MNDOT 3138, CLASS 5)
   Compacted Subsoil

d. Concrete Drives, Aprons, and Exterior Slabs
   8-inch Concrete, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
   6-inch Aggregate Base (MNDOT 3138, CLASS 5)
   Compacted Subsoil

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
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	:Silt Fence	4,000 ft.
	:Vehicle Tracking Pad	1 ea.
	:Erosion Control Blanket	
	:Tip Out Curb	

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
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	:Construction Limits	
	:Wetland Fill	985 s.f.
	:Enkamat 7020	2,958 s.f.
	:Maintenance Access Route	

PAVING NOTES

35. Concrete Joints
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    c. Contraction Joints: Sidewalks - 8 to 10 feet; Curbs and Aprons - 12 to 15 feet.

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LAKE ELMO, MN 55042

ISSUE / REVISION	
AUG. 29, 2022	CITY SUBMITTAL
OCT. 26, 2022	REVIEW SET
JAN. 25, 2023	PRELIM BID SET
FEB. 13, 2023	CITY SUBMITTAL
MAR. 07, 2023	WATERSHED SUBMITTAL
MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

DRAWING TITLE

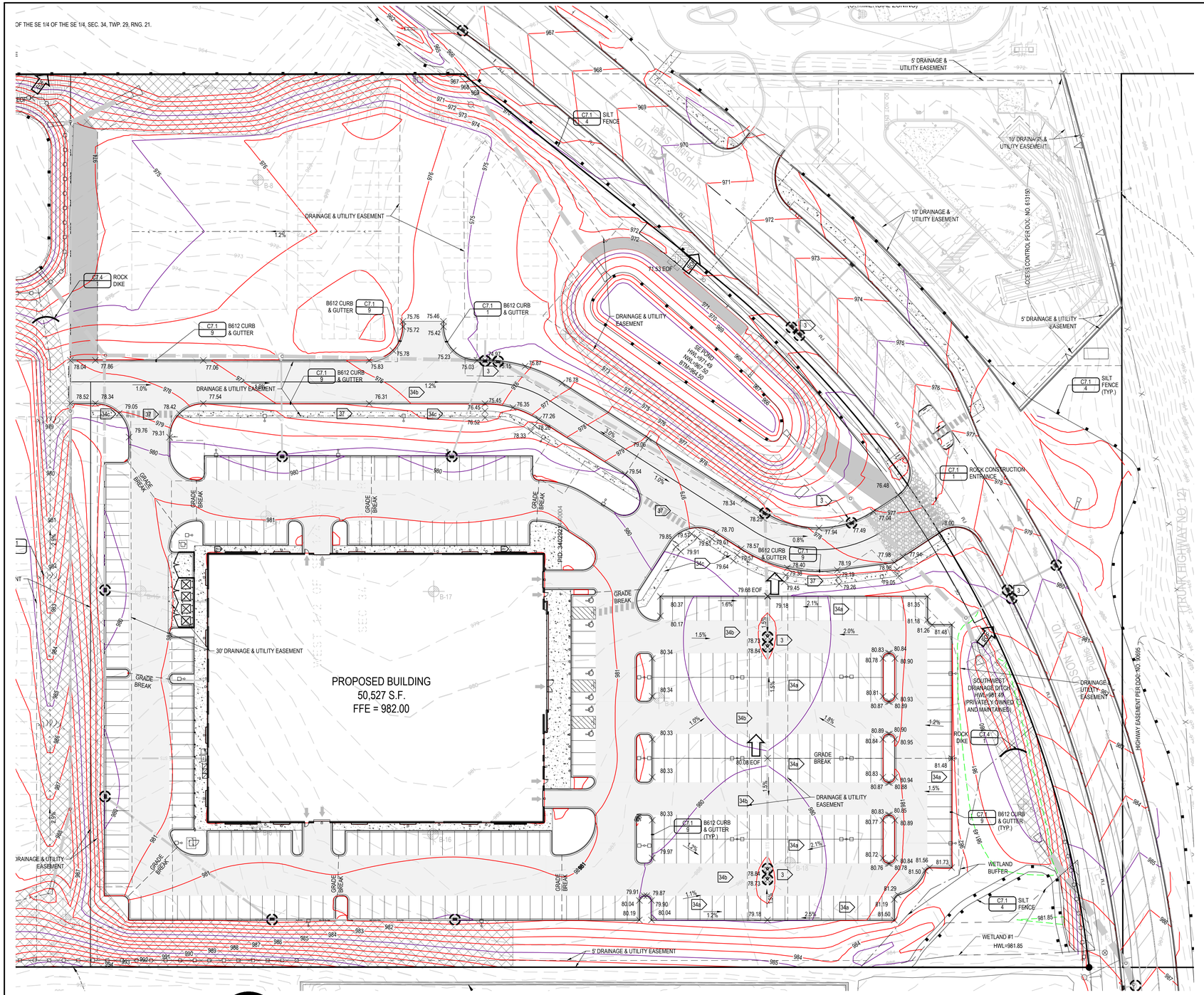
ENLARGED BLDG GRADING, DRAINAGE, PAVING, & EROSION CONTROL

PROJECT NUMBER: DRS22002

SHEET NUMBER

C3.1

OF THE SE 1/4 OF THE SE 1/4, SEC. 34, TWP. 29, RNG. 21.



GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

2. Install perimeter sediment controls prior to beginning work and maintain for duration of construction. Remove controls after areas contributing runoff are permanently stabilized and dispose of off site.

3. Install inlet protection: Wimco RD or CG models as appropriate, or approved equal. Maintain protection until project is stabilized.

4. Limit soil disturbance to the grading limits shown. Schedule operations to minimize length of exposure of disturbed areas.

5. Management practices shown are the minimum requirement. Install and maintain additional controls as work proceeds to prevent erosion and control sediment carried by wind or water.

6. Refer to SWPPP Notes on Sheet C3.4 for additional requirements.

7. Contractor shall prevent sediment laden water from entering the filtration / infiltration system until the site is completely stabilized.

8. Stabilization must be started immediately to limit soil erosion when the construction activity in that portion of the site has temporarily or permanently ceased and will not resume for 14 calendar days.

   Seed, Sod, Mulch, Erosion Control Blanket, and Fertilizer shall meet the following Specifications, as modified.

Item	Specification Number
Sod	MNDOT 3878
Seed	MNDOT 3876
MN Type 21-111 @ 100 lb./ac. - Temporary Erosion Control - Temporary Erosion Control, May 1 - Jul 31	
MN Type 21-112 @ 100 lb./ac. - Temporary Erosion Control - Temporary Erosion Control, Aug 1 - Oct 31	
Mulch	MNDOT 3882
(MNDOT Type 1 @ 2 ton/ac., Disc Anchored)	
Erosion Control Blanket	MNDOT 3885
(MNDOT Type 3N (for 12 mo.) 4N (for 24 mo.))	
Fertilizer	MNDOT 3881
General Placement	MNDOT 2575

9. See Landscape Sheets for permanent turf and landscape establishment.

10. Scrape adjacent streets clean daily and sweep clean weekly.

GRADING NOTES

11. Contact utility service providers for field location of services 72 hours prior to beginning grading.

12. Refer to the Geotechnical Report prepared by American Engineering Testing, Dated 09/14/22, for additional information on backfill material and groundwater conditions.

13. Remove topsoil from grading areas and stockpile sufficient quantity for reuse. Materials may be mined from landscape areas for use on site and replaced with excess organic material with prior Owner approval.

14. Contractor to restore soils structure over 50% of the disturbed pervious area per Valley Branch Watershed District Requirements. Refer to landscape sheets for detail.

15. Remove surface and ground water from excavations. Provide initial lifts of stable foundation material if exposed soils are wet and unstable.

16. Rough grade Building Pad to 12 Inches below Finished Floor Elevation (FFE).

17. Refer to Structural Specifications for earthwork requirements for building pads.

18. An Independent Testing Firm shall verify the removal of organic and unsuitable soils, soil correction, and compaction and provide periodic reports to the Owner.

19. Place and compact fill using lift thicknesses matched to soil type and compaction equipment to obtain specified compaction throughout the lift.

20. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. Compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).

21. Coordinate with Architectural for building stoop locations. Slopes shown on adjacent walks and pavements should continue over stoops.

INFILTRATION BASIN INFORMATION & TESTING

22. Avoid soil compaction of infiltration practices. Any equipment used in infiltration areas should be small scaled and tracked. Install protective fencing as shown before work begins.

23. The bottom of surface infiltration basins (not underground) shall be scarified to a depth of 12" prior to placement of topsoil or planting media.

24. DESIGN PERMEABILITY RATES:
    Infiltration 1 was designed with a permeability of 0.45 inches/hour.

25. TESTING:

a. Infiltration Basins: At the time of basin excavation, and prior to placement of any material (soil, chambers, etc.), permeability testing shall be performed.

b. Filtration Basins: Once filtration basin media has been placed, permeability testing shall be performed.

c. Contractor shall engage a qualified testing firm to measure the permeability of the basin surface utilizing a Double Ring Infiltrometer, Modified Philip Dunn (MPD) Infiltrometer, or other method approved by the Civil Engineer or Geotechnical Engineer. Test results shall be greater than or equal to the following rates to meet long term rates required for design:
    Infiltration 1 needs a permeability of 0.9 inches/hour. - - DESIGNER: TESTED RATE SHALL BE TWICE REQ'D.

d. Contractor to contact the following to schedule testing. Representative staff from each entity may wish to observe the tests. Contact shall be made 72 hours prior to testing.

   Civil Engineer: Tom Meyer, tmeyer@landform.net, 612-252-9070
   Geotechnical Engineer: Rob Olson, rolson@barrAET.com, 651-659-1316
   Valley Branch Watershed: John Hanson, jhanson@barr.com, 952-832-2622
   City of Lake Elmo: Jack Griffin, jack.griffin@Focusengineering.com, 651-300-4264

26. RATE OF TESTING: Contractor shall coordinate with the testing firm to provide permeameter tests at the following rates:

Filtration/Infiltration Basin I.D.	Basin Area (s.f.)	No. of Tests Required
1	32,441	7

27. Test results shall be provided to the Civil Engineer, Geotechnical Engineer, Watershed & City.

28. Soils at proposed infiltration basin must be decompacted per VBWD requirements. Infiltration basins shall not be excavated to final grade until contributing drainage areas are constructed and fully stabilized.

29. The final phase of excavation to infiltration basin shall remove all accumulated sediment and be done by light, tracked equipemnt to avoid compaction of basin floor.

30. Soils of the basin floor should be loosened to a depth of at least 5 feet to a maximum compaction of 85% standard proctor density prior to planting. The upper 12 inches of soil shall be tilled prior to planting.

PAVING NOTES

31. Spot Elevations at curblines indicate flowlines unless noted otherwise. See Sheet C4.2 for rim elevations of catch basins.

32. Grades between proposed spot elevations shall be continuous and nonvariable. Spot Elevations shall govern over contour lines.

33 Meet and Match existing curb. Transition as needed.

34 Paving Sections (Refer to Geotechnical Report by American Engineering Testing, Dated 09-14-2022)

a. Bituminous Paving (Light Duty)
   2-inch Bituminous Wear (MNDOT 2360, SPWEA330F)
   Tack Coat (MNDOT 2357)
   2-inch Bituminous Base (MNDOT 2360, SPNWB340F)
   6-inch Aggregate Base (MNDOT 3138, Class 5)
   12-inch Granular Sub-Base (MNDOT 3149.2B4)
   Compacted Subsoil

b. Bituminous Paving (Heavy Duty)
   2-inch Bituminous Wear (MNDOT 2360, SPWEA440F)
   Tack Coat (MNDOT 2357)
   2.5-inch Bituminous Base (MNDOT 2360, SPNWB330F)
   6-inch Aggregate Base (MNDOT 3138, Class 5)
   12-inch Granular Sub-Base (MNDOT 3149.2B4)
   Compacted Subsoil

c. Concrete Walkways
   4-inch Concrete Walk, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
   4-inch Aggregate Base (MNDOT 3138, CLASS 5)
   Compacted Subsoil

d. Concrete Drives, Aprons, and Exterior Slabs
   8-inch Concrete, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
   6-inch Aggregate Base (MNDOT 3138, CLASS 5)
   Compacted Subsoil

PAVING NOTES

35. Concrete Joints
    Install joints as shown and align across sidewalks, curbs, and pavement, paying attention to spacing of expansion joints. Joint spacing shall be as follows:
    a. Tooled joints: Divide panels into nominally equal areas unless shown otherwise.
    b. Expansion Joints: Sidewalks - 40 feet max.; Curbs - 60 feet max.; Pavement: 80 feet max.; Adjacent to building foundations and stoops.
    c. Contraction Joints: Sidewalks - 8 to 10 feet; Curbs and Aprons - 12 to 15 feet.

36 Accessible Parking Stalls and adjacent access aisles shall not exceed a 2.00% slope in any direction.

37 Accessible Routes shall have a maximum cross slope of 2.00% and a maximum running slope of 5.00%.

38. Adjust all structure rims to match pavement elevations.

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:Inlet Protection	21 ea.
	:Silt Fence	4,000 ft.
	:Vehicle Tracking Pad	1 ea.
	:Erosion Control Blanket	
	:Tip Out Curb	
	:Pavement Sawcut	
	:Construction Limits	
	:Wetland Fill	985 s.f.
	:Enkamat 7020	2,958 s.f.
	:Maintenance Access Route	

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NORTH

0 40 80

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TESLA

PRELIMINARY NOT FOR CONSTRUCTION

I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

Signature shown is a digital reproduction of original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

LANDFORM
From Site to Finish
105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

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MOTOR PARTNERS VANCOUVER, LLC
496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

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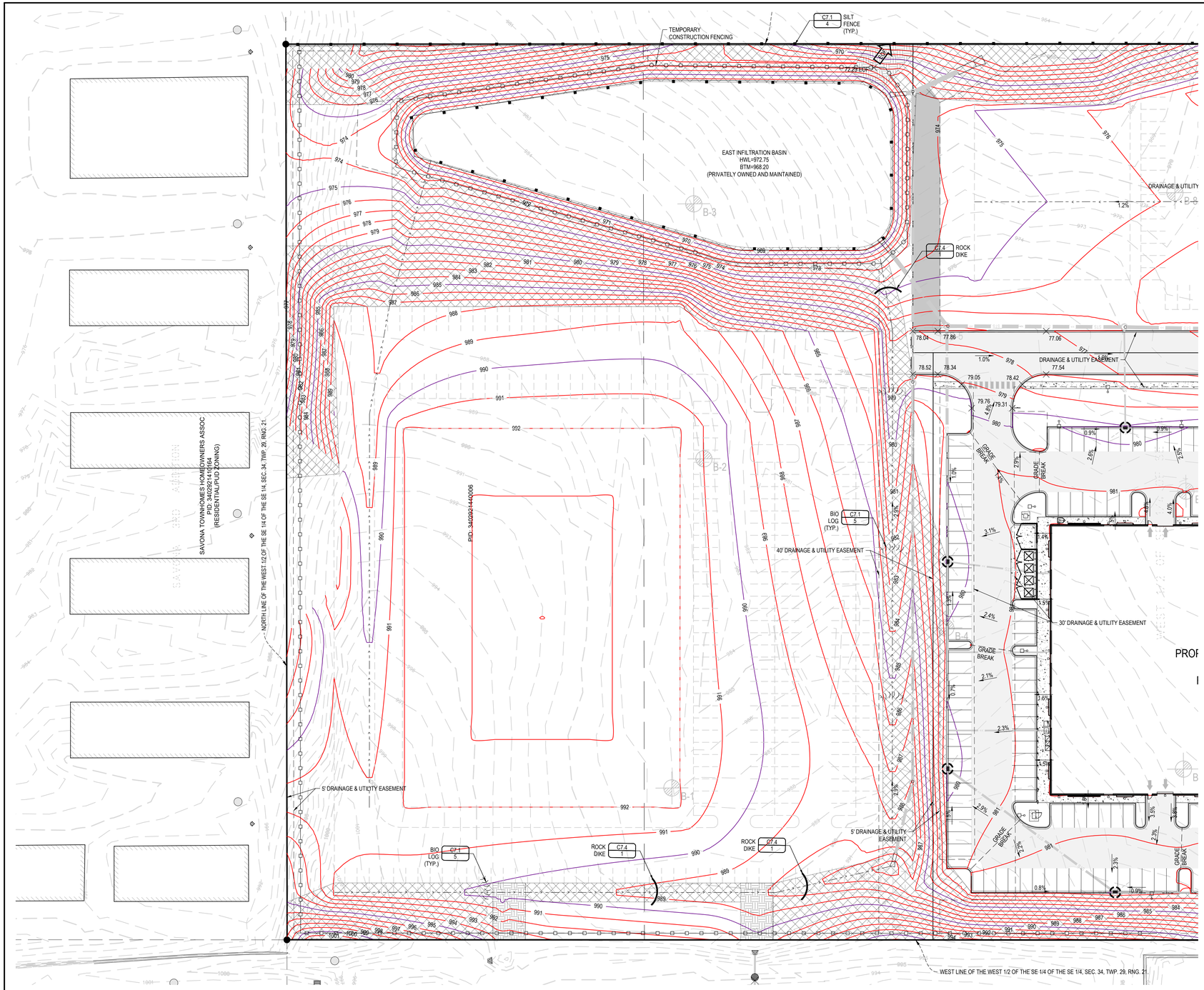
DRAWING TITLE

SOUTH GRADING, DRAINAGE, PAVING, & EROSION CONTROL

PROJECT NUMBER: DRS22002

SHEET NUMBER

C3.2



GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

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Fertilizer	MNDOT 3881
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Tack Coat (MNDOT 2357)
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6-inch Aggregate Base (MNDOT 3138, Class 5)
12-inch Granular Sub-Base (MNDOT 3149.2B4)
Compacted Subsoil

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2-inch Bituminous Wear (MNDOT 2360, SPWEA440F)
Tack Coat (MNDOT 2357)
2.5-inch Bituminous Base (MNDOT 2360, SPNWB330F)
8-inch Aggregate Base (MNDOT 3138, Class 5)
12-inch Granular Sub-Base (MNDOT 3149.2B4)
Compacted Subsoil

c. Concrete Walkways
4-inch Concrete Walk, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
4-inch Aggregate Base (MNDOT 3138, CLASS 5)
Compacted Subsoil

d. Concrete Drives, Aprons, and Exterior Slabs
8-inch Concrete, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
6-inch Aggregate Base (MNDOT 3138, CLASS 5)
Compacted Subsoil

LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:Inlet Protection	21 ea.
	:Silt Fence	4,000 ft.
	:Vehicle Tracking Pad	1 ea.
	:Erosion Control Blanket	
	:Tip Out Curb	

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:Pavement Sawcut	
	:Construction Limits	
	:Wetland Fill	985 s.f.
	:Enkamat 7020	2,958 s.f.
	:Maintenance Access Route	

PAVING NOTES

35. Concrete Joints
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a. Tooled joints: Divide panels into nominally equal areas unless shown otherwise.
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37 Accessible Routes shall have a maximum cross slope of 2.00% and a maximum running slope of 5.00%.

38. Adjust all structure rims to match pavement elevations.

Know what's Below. Call before you dig.

NORTH

0 40 80

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TESLA

PRELIMINARY NOT FOR CONSTRUCTION

I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

Signature shown is a digital reproduction of original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

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From Site to Finish
105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
Web: landform.net

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MOTOR PARTNERS VANCOUVER, LLC
496 S. BROADWAY
DENVER, CO 80209
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DRAWING TITLE

NORTH GRADING, DRAINAGE, PAVING, & EROSION CONTROL

PROJECT NUMBER: DRS22002

SHEET NUMBER

C3.3

NPDES PERMIT AND SWPPP COMPONENTS

1. ***The current Minnesota Construction Stormwater General Permit (Permit) dated August 1, 2018 is referenced in this document as the Permit.***

   The SWPPP includes the following components:
   - Construction Documents prepared by Landform
   - Stormwater Management Plan prepared by Landform
   - Maintenance Plan for permanent stormwater BMPs
   - Geotechnical Report prepared by American Engineering Testing

   All components must be kept onsite by the Operator. The Operator shall contact Civil Engineer if they do not have all of the above documents.

SITE INFORMATION

Site location: Latitude: 44.95030, Longitude: -92.90775
Disturbed area = 16.1 ac.
Pre-construction impervious area within disturbed area = 0.0 ac.
Post-construction impervious area within disturbed area = 12.5 ac.
Net change in impervious area within disturbed area = 12.5 ac.

Type of stormwater management:
- Infiltration
- Wet sedimentation basin

Erosion prevention and sediment control quantities are on sheets C3.1 - C3.3.

SITE EVALUATION / ASSESSMENT / PLANNING

1. The Operator shall have primary responsibility and significant authority for the development, implementation, maintenance, inspection and amendments to the approved SWPPP. Duties include but are not limited to:
   - Ensuring full compliance with the SWPPP and the Permit
   - Implementing all elements of the SWPPP, including but not limited to:
     - Implementing prompt and effective erosion and sediment control measures
     - Implementing all non-storm water management, and good housekeeping BMPs ensuring that no materials other than Storm water are discharged in quantities, which will have an adverse effect on receiving waters or storm drain systems, etc.
   - Conducting routine inspections and maintenance
   - Ensuring elimination of all unauthorized discharges
   - Coordinating to ensure all of the necessary corrections / repairs are made immediately, and that the project complies with the SWPPP, the Permit, and approved plans at all times.

STORMWATER POLLUTION PREVENTION MANAGEMENT MEASURES

1. ***Operator must develop pollution prevention management measures, implement good housekeeping BMPs, must follow all applicable federal, state, and local building codes, Occupational Safety and Health Act (OSHA), and the general conditions and general requirements of the construction contract.***
2. The Operator shall minimize the exposure to stormwater of any of the products, material, or wastes stored on site that may wash downstream or contaminate stormwater.
3. Building products that have the potential to leach pollutants must be under cover.
4. Chemicals and landscape materials shall be under cover to prevent the discharge of pollutants.
5. Operator to track progress of the following items on site maps: portable toilets, material storage areas, vehicle and equipment fueling and maintenance areas, concrete washouts, paint and stucco washouts, dumpsters or other trash and debris containers, spill kits, stockpiles, any other non-structural non-storm water management BMPs, any temporarily removed structural BMPs, any changes to the structural BMPs.
6. Solid waste: collected sediment, asphalt and concrete millings, floating debris, paper, plastic, fabric, construction and demolition debris and other wastes must be disposed of properly and must comply with MPCA disposal requirements.
7. Hazardous waste: oil, gasoline, paint and any hazardous substances must be properly stored in sealed containers to prevent spills, leaks or other discharge. Restricted access to storage areas must be provided to prevent vandalism. Storage and disposal of hazardous waste or materials must be in compliance with Minn. R. Ch. 7045 including secondary containment as applicable.
8. Portable toilets must be positioned so that they are secure and will not be tipped or knocked over.
9. Concrete and other washout waste: operator must provide effective containment for all liquid and solid wastes generated by washout operations. The liquid and solid 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.
10. External vehicle washing: external washing of trucks and other construction vehicles must be limited to a defined area of the site. Runoff must be contained and waste properly disposed of. No engine degreasing is allowed on site.
11. Operator shall take reasonable steps to prevent the discharge of spilled or leaked chemicals, including fuel, from any area where they will be loaded or unloaded as detailed in the Permit.

SWPPP CONTACT AND TRAINING INFORMATION

1. Owner:
   Drake Real Estate Services
   attn: John Hauser
   496 S. Broadway
   Denver, CO 80209
   (303) 825-6200
   hauser@drakeres.com
2. Operator:
   To Be Determined. Contact Owner until Contractor Is Selected.
3. Long Term Maintenance And Operation:
   To Be Determined. Contact Owner until Contractor Is Selected.
4. SWPPP Designer:
   Tom Meyer, P.E.
   Landform Professional Services
   105 South Fifth Avenue, Suite 513
   Minneapolis, Mn 55401
   612-252-9070
   tmeyer@landform.net
   Certification: U Of MN, Design Of Construction SWPPP, Exp. May 31, 2025
5. SWPPP Inspector / Manager:
   Chris Olson
   Landform Professional Services
   105 South Fifth Avenue, Suite 513
   Minneapolis, MN 55401
   612-638-0239
   colson@landform.net
   Certification: U of MN, Construction Site Management, Exp. May 31, 2024

   BMP Installation And Repair:
6. To Be Determined. Contact Owner until BMP Installer And Maintainer is selected.
   Certification: , Exp.

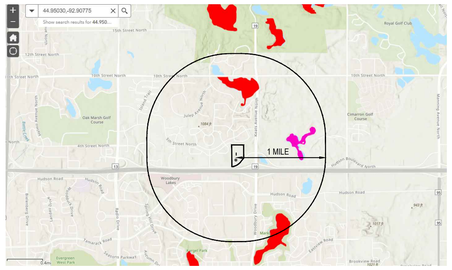
DESCRIPTION OF CONSTRUCTION ACTIVITY

1. Construction activity includes erosion and sediment control BMPs installation, clearing and grubbing, site grading, utility installation, building construction, paving, and landscaping.

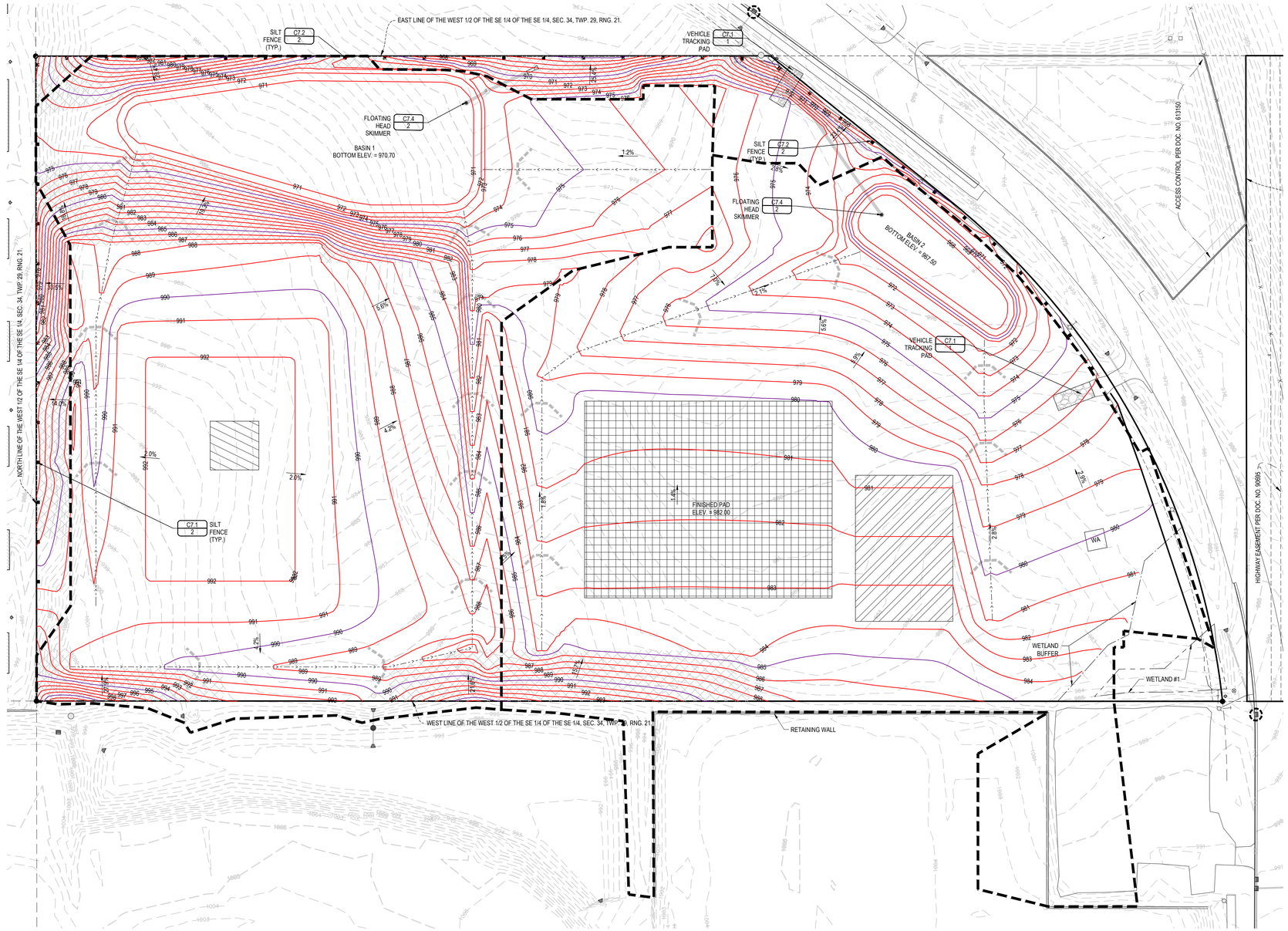
SCHEDULE OF BMP INSTALLATION AND CONSTRUCTION ACTIVITY

1. Install perimeter sediment control BMPs prior to start of other site work. Refer to Grading, Drainage, Paving and Erosion Control sheet(s) for initial locations of BMPs.
2. Protect infiltration areas with construction fencing. Install fencing prior to site grading or within 24-hours of excavating an infiltration basin.
3. Construct temporary / permanent sedimentation basins prior to upland disturbance. Install perimeter sediment control BMPs around normal water levels within 48-hours of completion of basin grading.
4. Stabilize outlets from temporary / permanent sedimentation basins within 24-hours of outlet construction.
5. Perform work in phases to minimize disturbed area at any one time. Operator to develop phasing plan prior to start of work.
6. Strip topsoil from areas to be disturbed and stockpile with perimeter sediment control BMPs. Provide stabilization if stockpile is left longer than 14 days.
7. Rough grade site.
8. Install utilities.
9. Install small utilities (gas, electric, communications).
10. Final grade pavement areas and compact subgrade.
11. Lay down pavement aggregate and compact.
12. Install curb and gutter. Backfill after a minimum of three days and provide a minimum of two rolls of sod at the back of curb.
13. Construct building and site features.
14. Construct site walks.
15. Provide final stabilization.
16. Connect infiltration practices to storm sewer inlets.
17. Remove temporary BMPs and dispose of properly.

WATERS WITHIN ONE MILE OF SITE



TEMPORARY SEDIMENTATION BASIN STORAGE			
BASIN	DRAINAGE AREA (AC)	REQ VOL (3600 CF/AC)	PROVIDED VOL (CF)
1	7.9	28,440	56,543
2	8.1	29,160	45,803



LEGEND

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:Inlet Protection	2 ea.
	:Silt Fence	1,800 ft.
	:Vehicle Tracking Pad	1 ea.
	:Erosion Control Blanket	10,600 sy.
	:DENOTES POSSIBLE STOCKPILE AREA	
	:DENOTES TEMPORARY COMPOST BIO-LOG	

SYMBOL	DESCRIPTION	ESTIMATED QUANTITY
	:SWALE	
	:DRAINAGE BOUNDARY	
	:DENOTES BUILDING PAD AREA	
WA	:DENOTES CONCRETE WASHOUT AREA	
	:DENOTES STAGING AREA	

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NORTH

0 60 120

GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

2. Install perimeter sediment controls prior to beginning work and maintain for duration of construction. Remove controls after areas contributing runoff are permanently stabilized and dispose of off site.

3. Install inlet protection: Wimco RD or CG models as appropriate, or approved equal. Maintain protection until project is stabilized.

4. Limit soil disturbance to the grading limits shown. Schedule operations to minimize length of exposure of disturbed areas.

5. Management practices shown are the minimum requirement. Install and maintain additional controls as work proceeds to prevent erosion and control sediment carried by wind or water.

6. Refer to SWPPP Notes on Sheet C3.4 for additional requirements.

7. Contractor shall prevent sediment laden water from entering the filtration / infiltration system until the site is completely stabilized.

8. Stabilization must be started immediately to limit soil erosion when the construction activity in that portion of the site has temporarily or permanently ceased and will not resume for 14 calendar days.

   Seed, Sod, Mulch, Erosion Control Blanket, and Fertilizer shall meet the following Specifications, as modified.

Item	Specification Number
Sod	MNDOT 3878
Seed	MNDOT 3876
MN Type 21-111 @ 100 lb./ac. - Temporary Erosion Control - Temporary Erosion Control, May 1 - Jul 31	
MN Type 21-112 @ 100 lb./ac. - Temporary Erosion Control - Temporary Erosion Control, Aug 1 - Oct 31	
Mulch	MNDOT 3882
(MNDOT Type 1 @ 2 ton/ac., Disc Anchored)	
Erosion Control Blanket	MNDOT 3885
(MNDOT Type 3N (for 12 mo.) 4N (for 24 mo.))	
Fertilizer	MNDOT 3881
General Placement	MNDOT 2575

9. See Landscape Sheets for permanent turf and landscape establishment.

10. Scrape adjacent streets clean daily and sweep clean weekly.

GRADING NOTES

11. Contact utility service providers for field location of services 72 hours prior to beginning grading.

12. Refer to the Geotechnical Report prepared by American Engineering Testing, Dated 09/14/22, for additional information on backfill material and groundwater conditions.

13. Remove topsoil from grading areas and stockpile sufficient quantity for reuse. Materials may be mined from landscape areas for use on site and replaced with excess organic material with prior Owner approval.

14. Contractor to restore soils structure over 50% of the disturbed pervious area per Valley Branch Watershed District Requirements. Refer to landscape sheets for detail.

15. Remove surface and ground water from excavations. Provide initial lifts of stable foundation material if exposed soils are wet and unstable.

16. Rough grade Building Pad to 12 Inches below Finished Floor Elevation (FFE).

17. Refer to Structural Specifications for earthwork requirements for building pads.

18. An Independent Testing Firm shall verify the removal of organic and unsuitable soils, soil correction, and compaction and provide periodic reports to the Owner.

19. Place and compact fill using lift thicknesses matched to soil type and compaction equipment to obtain specified compaction throughout the lift.

20. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. Compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).

21. Coordinate with Architectural for building stoop locations. Slopes shown on adjacent walks and pavements should continue over stoops.

INFILTRATION BASIN INFORMATION & TESTING

22. Avoid soil compaction of infiltration practices. Any equipment used in infiltration areas should be small scaled and tracked. Install protective fencing as shown before work begins.

23. The bottom of surface infiltration basins (not underground) shall be scarified to a depth of 12" prior to placement of topsoil or planting media.

24. DESIGN PERMEABILITY RATES:
    Infiltration 1 was designed with a permeability of 0.45 inches/hour.

25. TESTING:

a. Infiltration Basins: At the time of basin excavation, and prior to placement of any material (soil, chambers, etc.), permeability testing shall be performed.

b. Filtration Basins: Once filtration basin media has been placed, permeability testing shall be performed.

c. Contractor shall engage a qualified testing firm to measure the permeability of the basin surface utilizing a Double Ring Infiltrometer, Modified Philip Dunn (MPD) Infiltrometer, or other method approved by the Civil Engineer or Geotechnical Engineer. Test results shall be greater than or equal to the following rates to meet long term rates required for design:
Infiltration 1 needs a permeability of 0.9 inches/hour. - - DESIGNER: TESTED RATE SHALL BE TWICE REQ'D.

d. Contractor to contact the following to schedule testing. Representative staff from each entity may wish to observe the tests. Contact shall be made 72 hours prior to testing.

Civil Engineer: Tom Meyer, tmeyer@landform.net, 612-252-9070
Geotechnical Engineer: Rob Olson, rolson@teamAET.com, 651-659-1316
Valley Branch Watershed: John Hanson, jhanson@barr.com, 952-832-2622
City of Lake Elmo: Jack Griffin, jack.griffin@Focusengineering.com, 651-300-4264

26. RATE OF TESTING: Contractor shall coordinate with the testing firm to provide permeameter tests at the following rates:

Filtration/Infiltration Basin I.D.	Basin Area (s.f.)	No. of Tests Required
1	32,441	7

27. Test results shall be provided to the Civil Engineer, Geotechnical Engineer, Watershed & City.

28. Soils at proposed infiltration basin must be decompacted per VBWD requirements. Infiltration basins shall not be excavated to final grade until contributing drainage areas are constructed and fully stabilized.

29. The final phase of excavation to infiltration basin shall remove all accumulated sediment and be done by light, tracked equipemnt to avoid compaction of basin floor.

30. Soils of the basin floor should be loosened to a depth of at least 5 feet to a maximum compaction of 85% standard proctor density prior to planting. The upper 12 inches of soil shall be tilled prior to planting

PAVING NOTES

31. Spot Elevations at curblines indicate flowlines unless noted otherwise. See Sheet C4.2 for rim elevations of catch basins.

32. Grades between proposed spot elevations shall be continuous and nonvariable. Spot Elevations shall govern over contour lines.

33. Meet and Match existing curb. Transition as needed.

34. Paving Sections (Refer to Geotechnical Report by American Engineering Testing, Dated 09-14-2022)
    a. Bituminous Paving (Light Duty)
    2-inch Bituminous Wear (MNDOT 2360, SPWEA330F)
    Tack Coat (MNDOT 2357)
    2-inch Bituminous Base (MNDOT 2360, SPNWB340F)
    6-inch Aggregate Base (MNDOT 3138, Class 5)
    12-inch Granular Sub-Base (MNDOT 3149.2B4)
    Compacted Subsoil

    b. Bituminous Paving (Heavy Duty)
    2-inch Bituminous Wear (MNDOT 2360, SPWEA440F)
    Tack Coat (MNDOT 2357)
    2.5-inch Bituminous Base (MNDOT 2360, SPNWB330F)
    8-inch Aggregate Base (MNDOT 3138, Class 5)
    12-inch Granular Sub-Base (MNDOT 3149.2B4)
    Compacted Subsoil

    c. Concrete Walkways
    4-inch Concrete Walk, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
    4-inch Aggregate Base (MNDOT 3138, CLASS 5)
    Compacted Subsoil

    d. Concrete Drives, Aprons, and Exterior Slabs
    8-inch Concrete, 4000 PSI, 5%-8% Air Entrained, Max. 4" Slump (MNDOT 2301)
    6-inch Aggregate Base (MNDOT 3138, CLASS 5)
    Compacted Subsoil

PAVING NOTES

35. Concrete Joints
    Install joints as shown and align across sidewalks, curbs, and pavement, paying attention to spacing of expansion joints. Joint spacing shall be as follows:
    a. Tooled joints: Divide panels into nominally equal areas unless shown otherwise.
    b. Expansion Joints: Sidewalks - 40 feet max.; Curbs - 60 feet max.; Pavement: 80 feet max.; Adjacent to building foundations and stoops.
    c. Contraction Joints: Sidewalks - 8 to 10 feet; Curbs and Aprons - 12 to 15 feet.

36. Accessible Parking Stalls and adjacent access aisles shall not exceed a 2.00% slope in any direction.

37. Accessible Routes shall have a maximum cross slope of 2.00% and a maximum running slope of 5.00%.

38. Adjust all structure rims to match pavement elevations.

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I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

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105 South Fifth Avenue
Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
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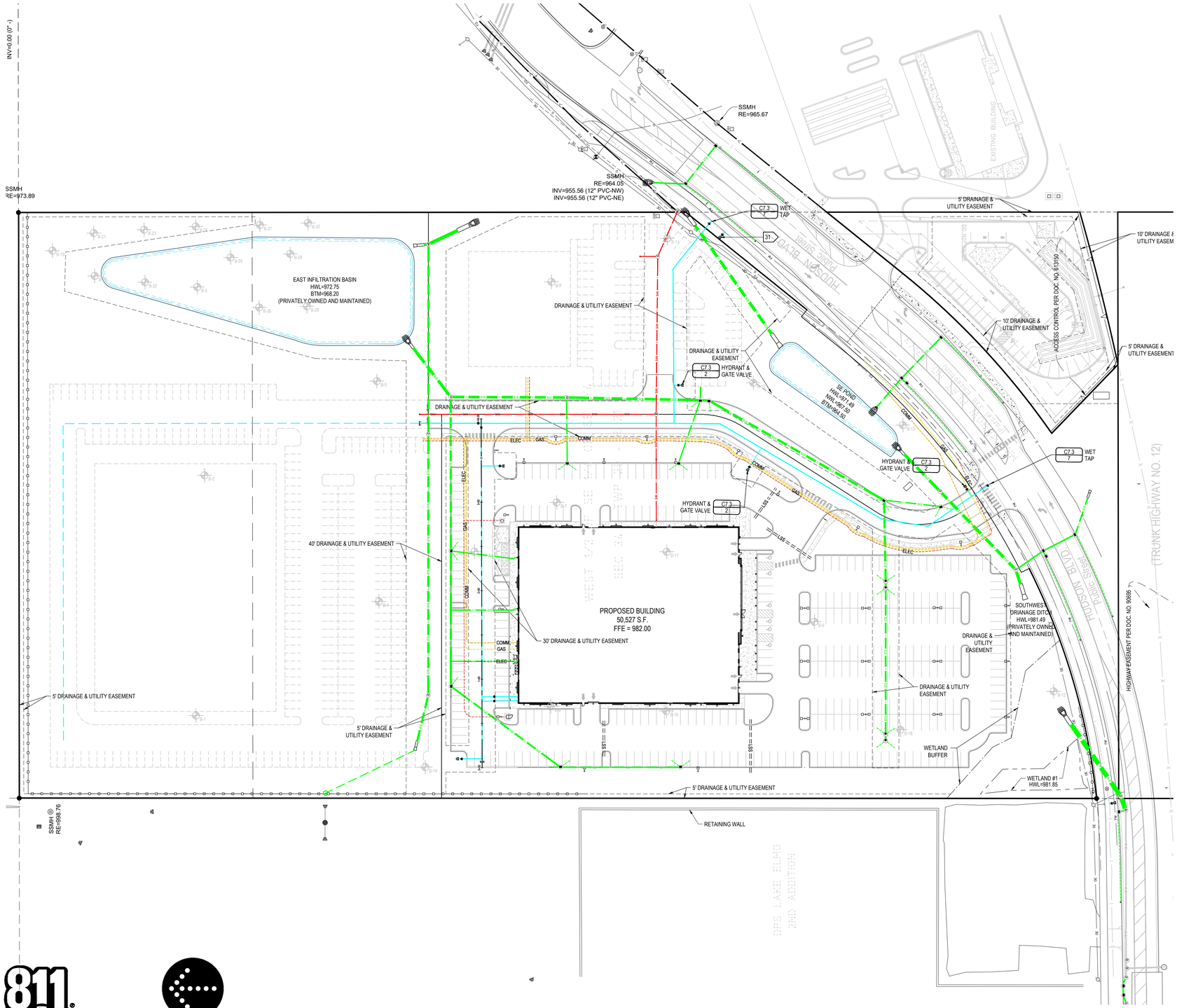
DRAWING TITLE

MASS GRADING

PROJECT NUMBER: DRS22002

SHEET NUMBER

C3.5



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GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.
2. Lot 1, Block 1 designed by others and under separate application

UTILITY NOTES

2. Pipe Materials
   - Watermain: DIP Class 52 (ANSI A21.51/AWWA C151)
   - Private Sanitary Sewer: PVC Schedule 40 (ASTM: D1785, D2665, F891, F1488, F1760)
   - Storm Sewer: PVC Schedule 40 (ASTM: D1785, D2665, F891, F1488, F1760); RCP 12"-18" Class 5 (ASTM C76); RCP 21" Class 4 (ASTM C76); RCP 24"-48" Class 3 (ASTM C76)
   - Drain Tile: PVC (ASTM D2729)
3. Contact utility service providers for field location of services 72 hours prior to beginning.
4. Contractor to field verify location and elevation of all utility points of connection prior to construction of any proposed utilities. Contractor to notify Engineer immediately if there is any discrepancy.
5. Contractor to pothole all utility crossings prior to construction of new utilities to verify depths of existing lines. Contact Engineer immediately if any conflicts are discovered.
6. Provide means and measures to protect adjacent property from damage during utility installation.
7. Pipe lengths shown are from center of structure to center of structure or end of end section.
8. Install tracer wire with all non-conductive utilities in accordance with City of Lake Elmo Standards.
9. Connect to City utilities in accordance with City of Lake Elmo Standards.
10. Contact City of Lake Elmo Public Works at 651.747.3940 for wet tap inspection.
11. Maintain 7.5 feet of cover on water.
12. Deflect water to maintain 18-inch minimum outside separation at sewer crossings. Center pipe lengths to provide greatest separation between joints.
13. Contact City of Lake Elmo Public Works at 651.747.3940 for flushing and pressure test inspections.
14. The water distribution system shall be disinfected per Minnesota Rules, Part 4714.
15. Provide 4-inch rigid foam (ASTM D1621) insulation on sanitary sewer less than 6 feet deep.
16. Refer to Plumbing plans for sand separator detail. The tank and top slab must be designed to handle traffic and soil loads. The tank must be protected from freezing and must comply with all local and state codes.
17. All portions of the storm sewer system, located within 10 feet of the building or water service line must be tested in accordance with Minnesota Rules, Part 4714.
18. All joints and connections in the storm sewer system shall be gastight or water tight. Approved resilient rubber joints must be used to make watertight connections to manholes, catch basins, and other structures.
19. Catch basins in curb and gutter are sumped 2 inches below the gutter grade. Refer to Detail 5 on Sheet C7.3.
20. Rock media in infiltration or filtration systems shall be angular, non-calcareous rock.
21. Irrigation sleeve to be 4 inch Schedule 80 PVC buried 24" below grade. Extend sleeves 3-feet beyond the edge of pavement. Mark each end of sleeve with 3/4-inch rebar 12 inches below finish grade. (Coordinate with irrigation contractor.)
22. Coordinate with Private Utilities to provide electric, natural gas, and communications services to building.
23. The primary electric feed, transformer, and meter are provided and installed by Xcel Energy. The transformer pad design is provided by the Utility and construction is by the Contractor. Contact Utility for pad detail. The secondary electric and conduits shall be installed by the Electrical Contractor.
24. See site lighting plan for additional information.
25. Xcel Energy will furnish and install gas service piping from the mainline to the meter and the meter. Gas service from the meter shall be installed by the Mechanical Contractor.
26. Provide one 4-inch PVC conduit with pull-string from existing telephone service to building.
27. Provide conduits for cable television and other electronic communication.
28. Coordinate with Mechanical, Plumbing, and Electrical Drawings for locations of service connections and continuation of services within building.
29. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).
30. Adjust structures to final grade where disturbed. Comply with requirements of Utility. Meet requirements for traffic loading in paved areas.
31. Reinstall salvaged hydrant
32. Refer to sheet C4.7 for City of Lake Elmo standard notes on watermain, sanitary sewer, and storm sewer.
33. Contractor shall furnish and install all parts necessary for new casting configuration.
34. Construct storm structure over existing storm line. Contractor shall field verify location and inverts. All connections shall be watertight.

INFILTRATION / FILTRATION BASIN REQUIREMENTS

35. Refer to the C3.1 sheet notes for requirements.

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I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

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Suite 513 Fax: 612-252-9077
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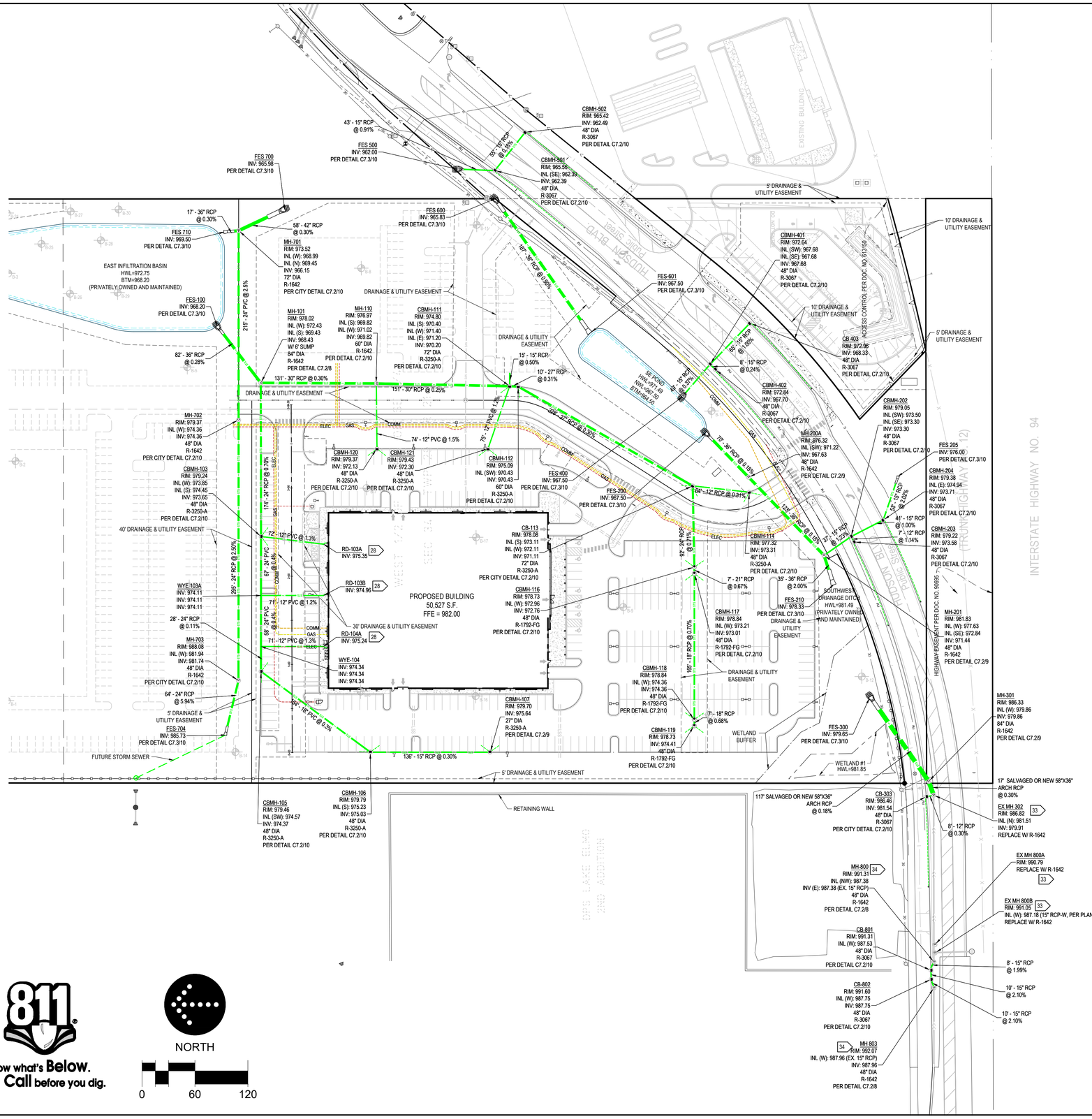
DRAWING TITLE

OVERALL UTILITIES

PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.0



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GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.
2. Lot 1, Block 1 designed by others and under separate application

UTILITY NOTES

2. Pipe Materials

Watermain	DIP Class 52 (ANSI A21.51/AWWA C151)
Private Sanitary Sewer	PVC Schedule 40 (ASTM: D1785, D2665, F891, F1488, F1760)
Storm Sewer	PVC Schedule 40 (ASTM: D1785, D2665, F891, F1488, F1760) RCP 12"-18" Class 5 (ASTM C76) RCP 21" Class 4 (ASTM C76) RCP 24"-48" Class 3 (ASTM C76)
Drain Tile	PVC (ASTM D2729)

3. Contact utility service providers for field location of services 72 hours prior to beginning.
4. Contractor to field verify location and elevation of all utility points of connection prior to construction of any proposed utilities. Contractor to notify Engineer immediately if there is any discrepancy.
5. Contractor to pothole all utility crossings prior to construction of new utilities to verify depths of existing lines. Contact Engineer immediately if any conflicts are discovered.
6. Provide means and measures to protect adjacent property from damage during utility installation.
7. Pipe lengths shown are from center of structure to center of structure or end of end section.
8. Install tracer wire with all non-conductive utilities in accordance with City of Lake Elmo Standards.
9. Connect to City utilities in accordance with City of Lake Elmo Standards.
10. Contact City of Lake Elmo Public Works at 651.747.3940 for wet tap inspection.
11. Maintain 7.5 feet of cover on water.
12. Deflect water to maintain 18-inch minimum outside separation at sewer crossings. Center pipe lengths to provide greatest separation between joints.
13. Contact City of Lake Elmo Public Works at 651.747.3940 for flushing and pressure test inspections.
14. The water distribution system shall be disinfected per Minnesota Rules, Part 4714.
15. Provide 4-inch rigid foam (ASTM D1621) insulation on sanitary sewer less than 6 feet deep.
16. Refer to Plumbing plans for sand separator detail. The tank and top slab must be designed to handle traffic and soil loads. The tank must be protected from freezing and must comply with all local and state codes.
17. All portions of the storm sewer system, located within 10 feet of the building or water service line must be tested in accordance with Minnesota Rules, Part 4714.
18. All joints and connections in the storm sewer system shall be gastight or water tight. Approved resilient rubber joints must be used to make watertight connections to manholes, catch basins, and other structures.
19. Catch basins in curb and gutter are sumped 2 inches below the gutter grade. Refer to Detail 5 on Sheet C7.3.
20. Rock media in infiltration or filtration systems shall be angular, non-calcareous rock.
21. Irrigation sleeve to be 4 inch Schedule 80 PVC buried 24" below grade. Extend sleeves 3-feet beyond the edge of pavement. Mark each end of sleeve with 3/4-inch rebar 12 inches below finish grade. (Coordinate with irrigation contractor.)
22. Coordinate with Private Utilities to provide electric, natural gas, and communications services to building.
23. The primary electric feed, transformer, and meter are provided and installed by Xcel Energy. The transformer pad design is provided by the Utility and construction is by the Contractor. Contact Utility for pad detail. The secondary electric and conduits shall be installed by the Electrical Contractor.
24. See site lighting plan for additional information.
25. Xcel Energy will furnish and install gas service piping from the mainline to the meter and the meter. Gas service from the meter shall be installed by the Mechanical Contractor.
26. Provide one 4-inch PVC conduit with pull-string from existing telephone service to building.
27. Provide conduits for cable television and other electronic communication.
28. Coordinate with Mechanical, Plumbing, and Electrical Drawings for locations of service connections and continuation of services within building.
29. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).
30. Adjust structures to final grade where disturbed. Comply with requirements of Utility. Meet requirements for traffic loading in paved areas.
31. Reinstall salvaged hydrant
32. Refer to sheet C4.7 for City of Lake Elmo standard notes on watermain, sanitary sewer, and storm sewer.
33. Contractor shall furnish and install all parts necessary for new casting configuration.
34. Construct storm structure over existing storm line. Contractor shall field verify location and inverts. All connections shall be watertight.

INFILTRATION / FILTRATION BASIN REQUIREMENTS

35. Refer to the C3.1 sheet notes for requirements.

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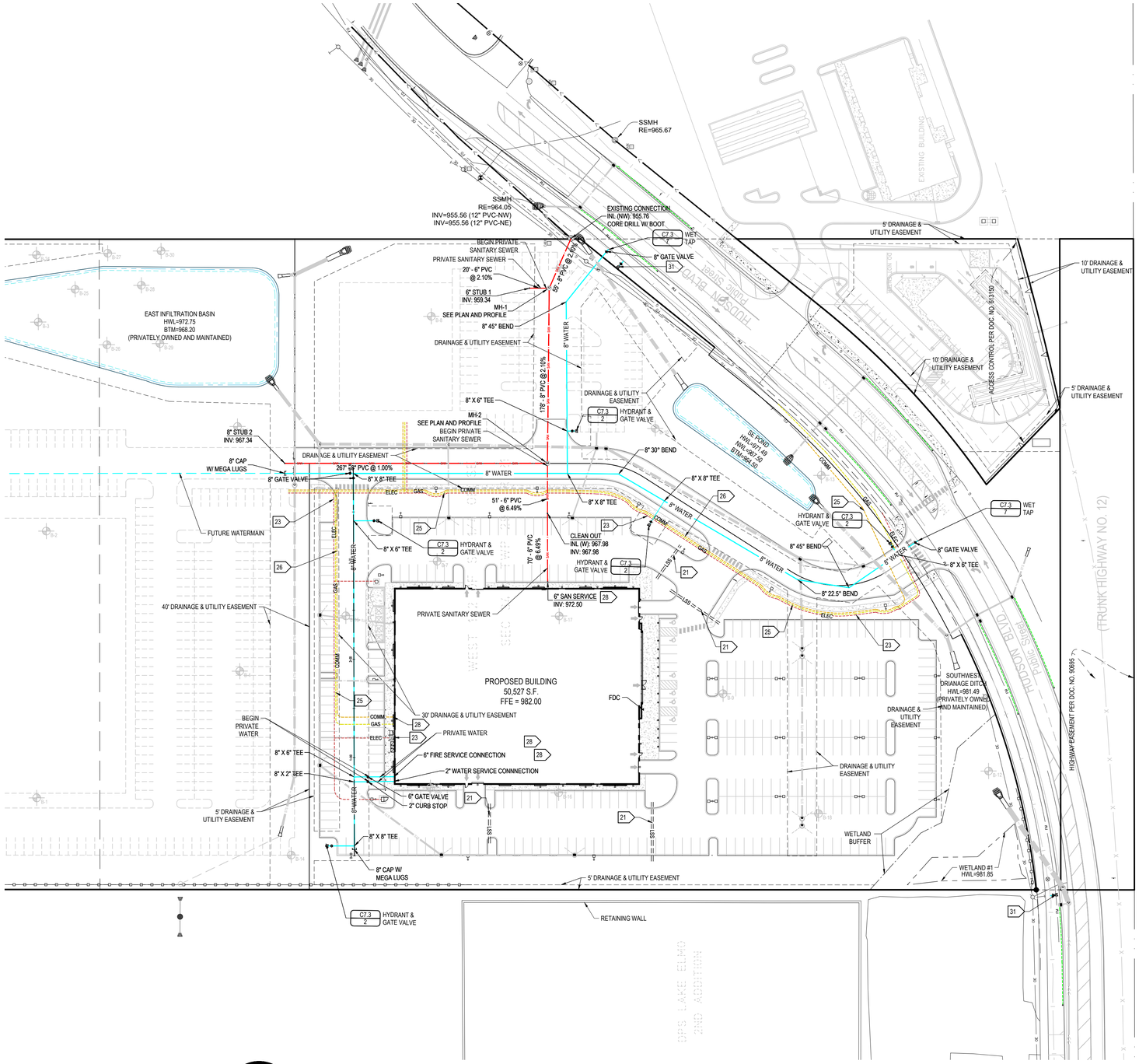
DRAWING TITLE

STORM SEWER

PROJECT NUMBER: DRS22002

SHEET NUMBER

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GENERAL NOTES

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2. Lot 1, Block 1 designed by others and under separate application

UTILITY NOTES

2. Pipe Materials

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Drain Tile	PVC (ASTM D2729)

3. Contact utility service providers for field location of services 72 hours prior to beginning.
4. Contractor to field verify location and elevation of all utility points of connection prior to construction of any proposed utilities. Contractor to notify Engineer immediately if there is any discrepancy.
5. Contractor to pothole all utility crossings prior to construction of new utilities to verify depths of existing lines. Contact Engineer immediately if any conflicts are discovered.
6. Provide means and measures to protect adjacent property from damage during utility installation.
7. Pipe lengths shown are from center of structure to center of structure or end of end section.
8. Install tracer wire with all non-conductive utilities in accordance with City of Lake Elmo Standards.
9. Connect to City utilities in accordance with City of Lake Elmo Standards.
10. Contact City of Lake Elmo Public Works at 651.747.3940 for wet tap inspection.
11. Maintain 7.5 feet of cover on water.
12. Deflect water to maintain 18-inch minimum outside separation at sewer crossings. Center pipe lengths to provide greatest separation between joints.
13. Contact City of Lake Elmo Public Works at 651.747.3940 for flushing and pressure test inspections.
14. The water distribution system shall be disinfected per Minnesota Rules, Part 4714.
15. Provide 4-inch rigid foam (ASTM D1621) insulation on sanitary sewer less than 6 feet deep.
16. Refer to Plumbing plans for sand separator detail. The tank and top slab must be designed to handle traffic and soil loads. The tank must be protected from freezing and must comply with all local and state codes.
17. All portions of the storm sewer system, located within 10 feet of the building or water service line must be tested in accordance with Minnesota Rules, Part 4714.
18. All joints and connections in the storm sewer system shall be gastight or water tight. Approved resilient rubber joints must be used to make watertight connections to manholes, catch basins, and other structures.
19. Catch basins in curb and gutter are sumped 2 inches below the gutter grade. Refer to Detail 5 on Sheet C7.3.
20. Rock media in infiltration or filtration systems shall be angular, non-calcareous rock.
21. Irrigation sleeve to be 4 inch Schedule 80 PVC buried 24" below grade. Extend sleeves 3-feet beyond the edge of pavement. Mark each end of sleeve with 3/4-inch rebar 12 inches below finish grade. (Coordinate with irrigation contractor.)
22. Coordinate with Private Utilities to provide electric, natural gas, and communications services to building.
23. The primary electric feed, transformer, and meter are provided and installed by Xcel Energy. The transformer pad design is provided by the Utility and construction is by the Contractor. Contact Utility for pad detail. The secondary electric and conduits shall be installed by the Electrical Contractor.
24. See site lighting plan for additional information.
25. Xcel Energy will furnish and install gas service piping from the mainline to the meter and the meter. Gas service from the meter shall be installed by the Mechanical Contractor.
26. Provide one 4-inch PVC conduit with pull-string from existing telephone service to building.
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28. Coordinate with Mechanical, Plumbing, and Electrical Drawings for locations of service connections and continuation of services within building.
29. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).
30. Adjust structures to final grade where disturbed. Comply with requirements of Utility. Meet requirements for traffic loading in paved areas.
31. Reinstall salvaged hydrant
32. Refer to sheet C4.7 for City of Lake Elmo standard notes on watermain, sanitary sewer, and storm sewer.
33. Contractor shall furnish and install all parts necessary for new casting configuration.
34. Construct storm structure over existing storm line. Contractor shall field verify location and inverts. All connections shall be watertight.

INFILTRATION / FILTRATION BASIN REQUIREMENTS

35. Refer to the C3.1 sheet notes for requirements.

TESLA

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Tom O. Meyer
License No: 42016 Date:

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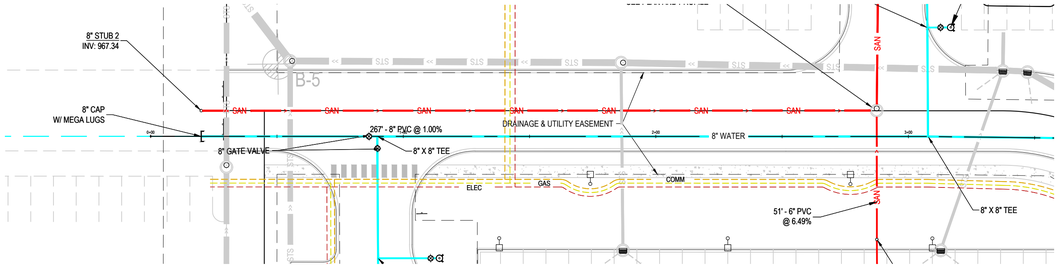
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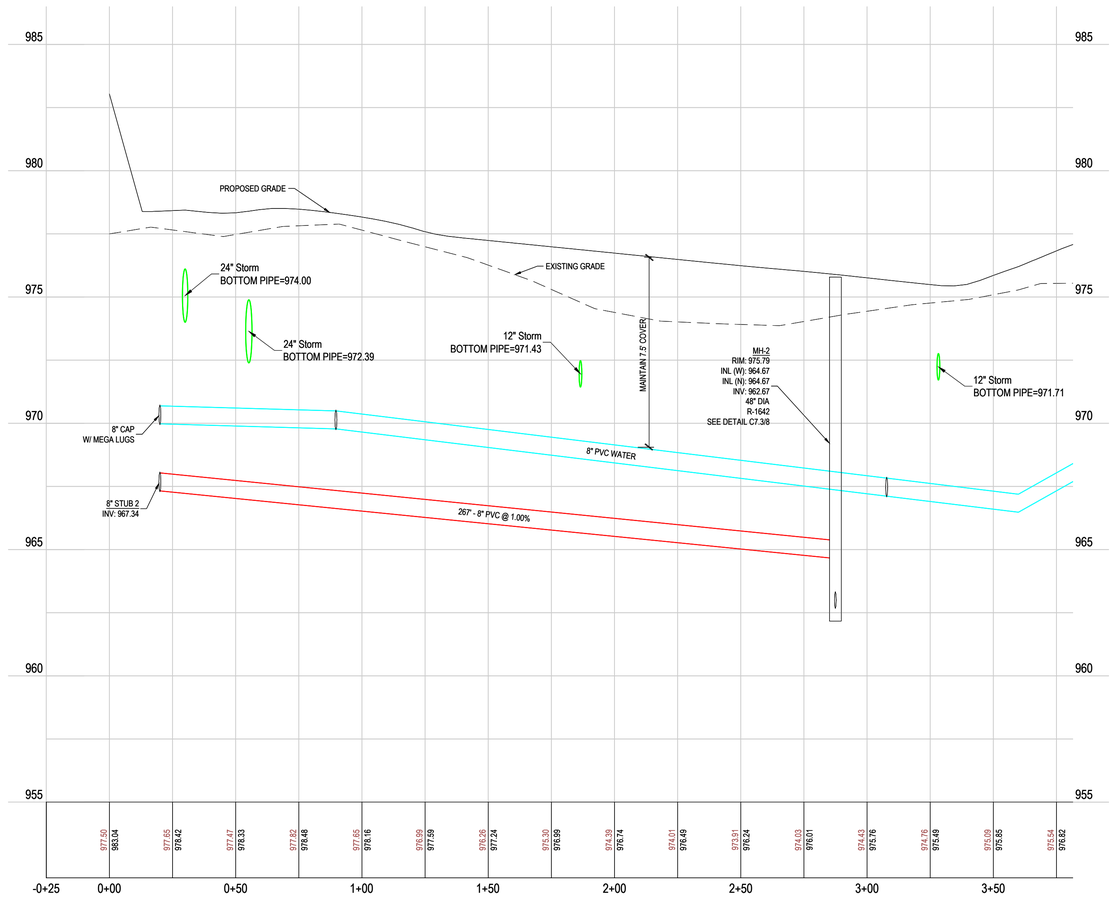
WATER & SANITARY

PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.2





Watermain Common Drive
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

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

NORTH

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GENERAL NOTES

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2. Lot 1, Block 1 designed by others and under separate application

UTILITY NOTES

2. Pipe Materials

Watermain	DIP Class 52 (ANSI A21.51/AWWA C151)
Private Sanitary Sewer	PVC Schedule 40 (ASTM: D1785, D2665, F891, F1488, F1760)
Storm Sewer	PVC Schedule 40 (ASTM: D1785, D2665, F891, F1488, F1760) RCP 12"-18" Class 5 (ASTM C76) RCP 21" Class 4 (ASTM C76) RCP 24"-48" Class 3 (ASTM C76)
Drain Tile	PVC (ASTM D2729)

3. Contact utility service providers for field location of services 72 hours prior to beginning.
4. Contractor to field verify location and elevation of all utility points of connection prior to construction of any proposed utilities. Contractor to notify Engineer immediately if there is any discrepancy.
5. Contractor to pothole all utility crossings prior to construction of new utilities to verify depths of existing lines. Contact Engineer immediately if any conflicts are discovered.
6. Provide means and measures to protect adjacent property from damage during utility installation.
7. Pipe lengths shown are from center of structure to center of structure or end of end section.
8. Install tracer wire with all non-conductive utilities in accordance with City of Lake Elmo Standards.
9. Connect to City utilities in accordance with City of Lake Elmo Standards.
10. Contact City of Lake Elmo Public Works at 651.747.3940 for wet tap inspection.
11. Maintain 7.5 feet of cover on water.
12. Deflect water to maintain 18-inch minimum outside separation at sewer crossings. Center pipe lengths to provide greatest separation between joints.
13. Contact City of Lake Elmo Public Works at 651.747.3940 for flushing and pressure test inspections.
14. The water distribution system shall be disinfected per Minnesota Rules, Part 4714.
15. Provide 4-inch rigid foam (ASTM D1621) insulation on sanitary sewer less than 6 feet deep.
16. Refer to Plumbing plans for sand separator detail. The tank and top slab must be designed to handle traffic and soil loads. The tank must be protected from freezing and must comply with all local and state codes.
17. All portions of the storm sewer system, located within 10 feet of the building or water service line must be tested in accordance with Minnesota Rules, Part 4714.
18. All joints and connections in the storm sewer system shall be gastight or water tight. Approved resilient rubber joints must be used to make watertight connections to manholes, catch basins, and other structures.
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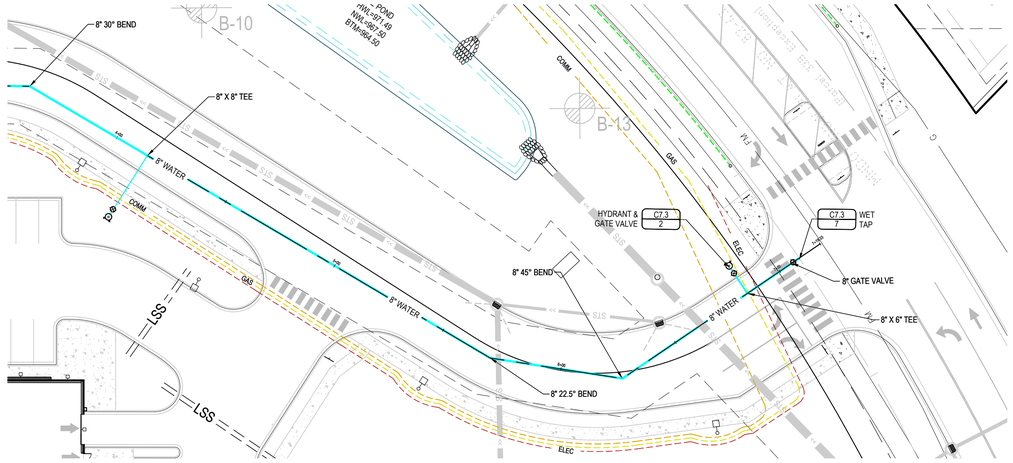
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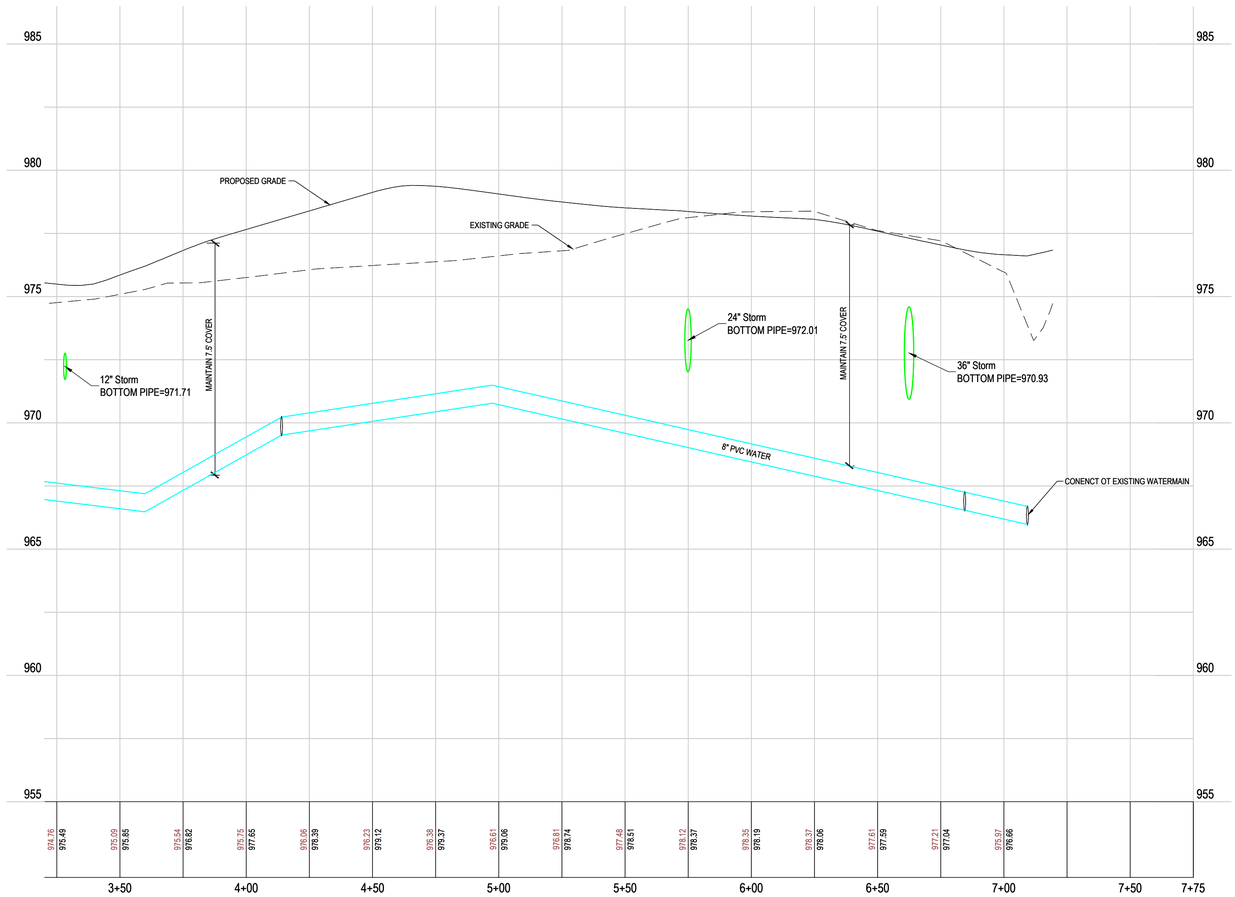
WATER & SANITARY PLAN AND PROFILE

PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.3





Watermain Common Drive
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

Know what's **Below.** **Call** before you dig.

NORTH
0 30 60

GENERAL NOTES

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UTILITY NOTES

2. Pipe Materials

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	RCP 12"-18" Class 5 (ASTM C76)
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Drain Tile	PVC (ASTM D2729)

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INFILTRATION / FILTRATION BASIN REQUIREMENTS

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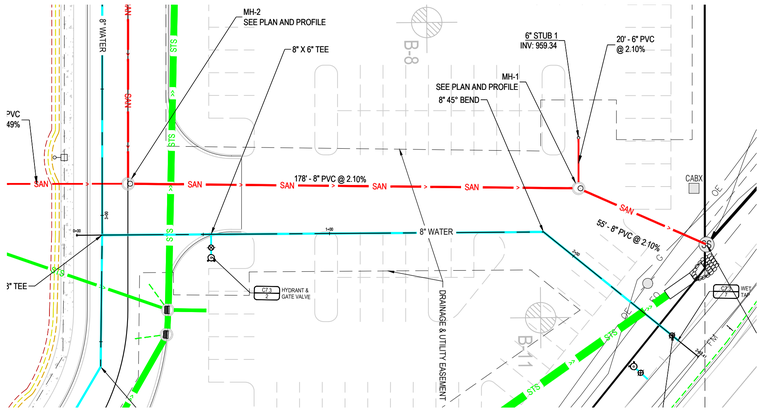
WATER & SANITARY PLAN AND PROFILE

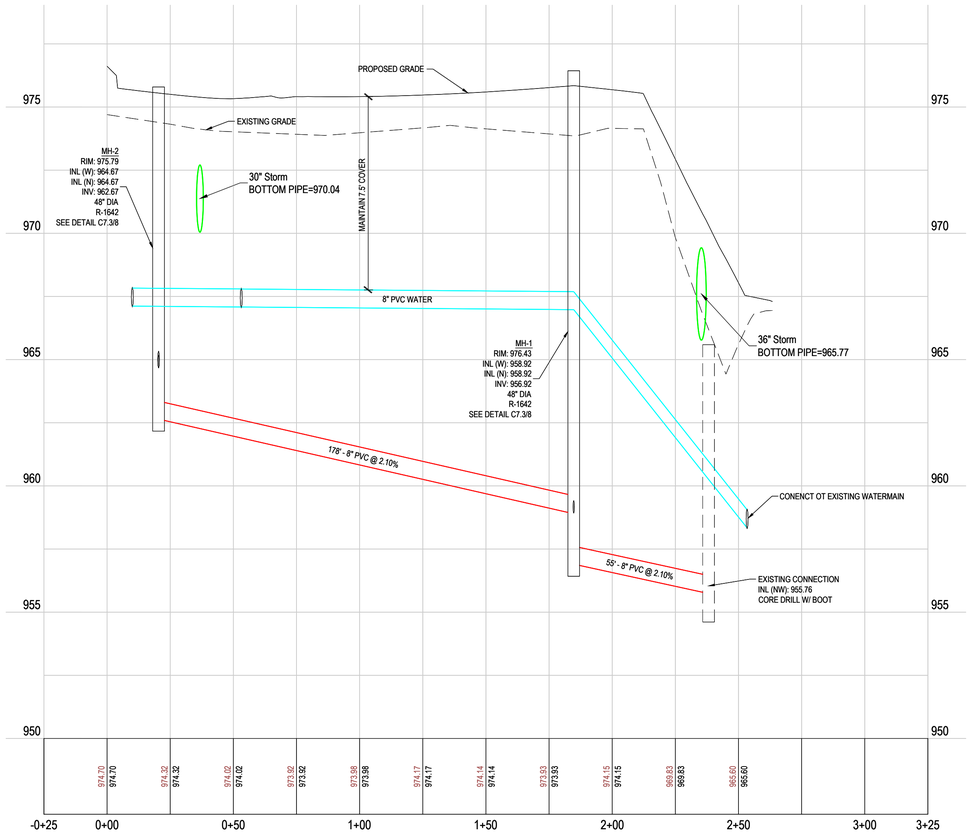
PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.4

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Watermain Lot 2
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

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2. Pipe Materials

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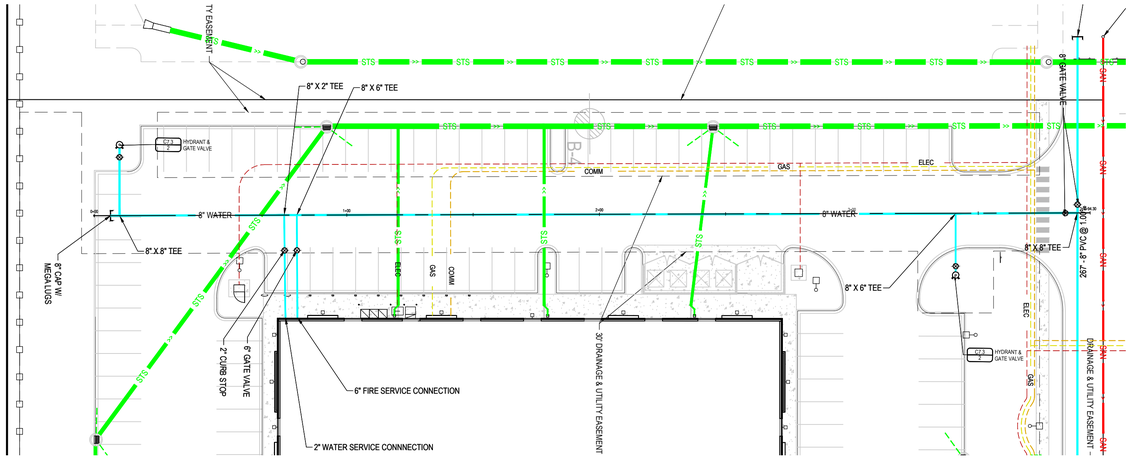
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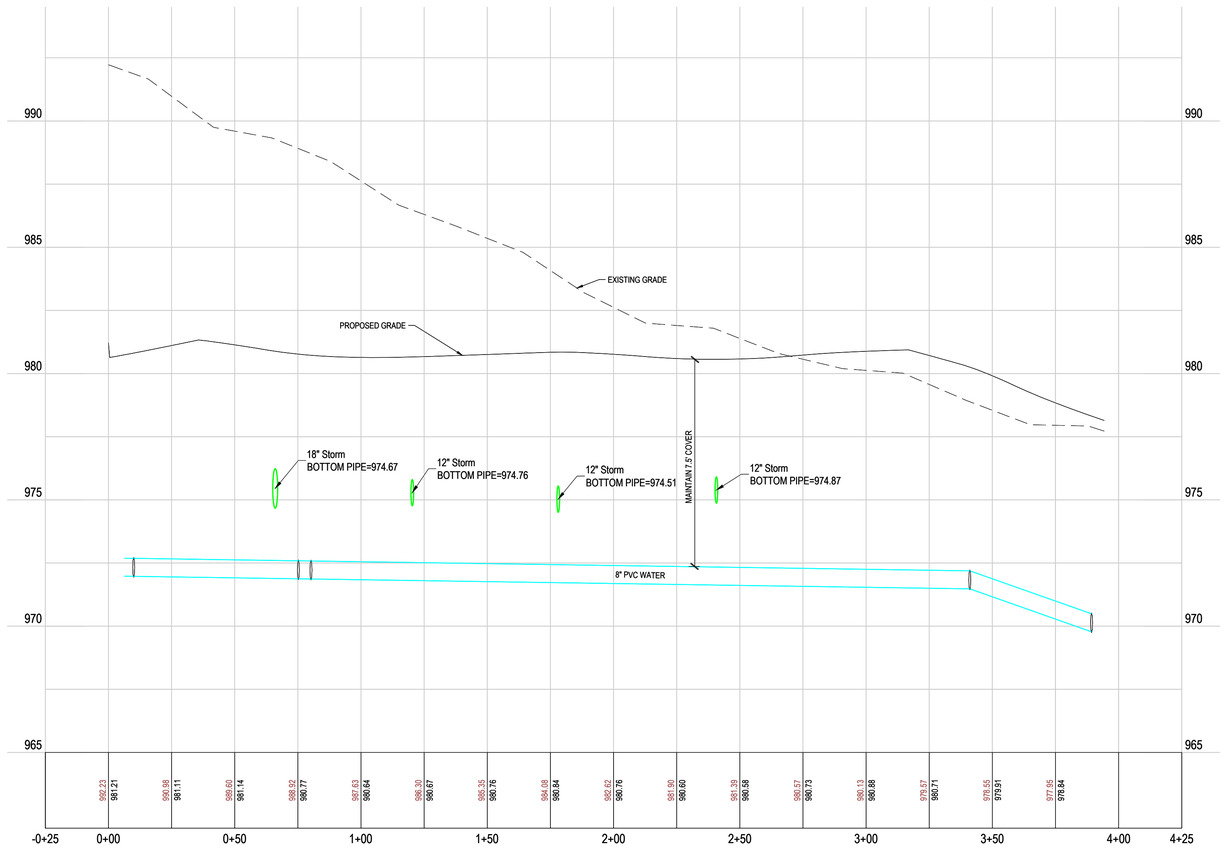
PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.5

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Watermain Lot 1
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

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24. See site lighting plan for additional information.
25. Xcel Energy will furnish and install gas service piping from the mainline to the meter and the meter. Gas service from the meter shall be installed by the Mechanical Contractor.
26. Provide one 4-inch PVC conduit with pull-string from existing telephone service to building.
27. Provide conduits for cable television and other electronic communication.
28. Coordinate with Mechanical, Plumbing, and Electrical Drawings for locations of service connections and continuation of services within building.
29. Compact cohesive soils in paved areas to 95% of maximum dry density, Standard Proctor (ASTM D698) except the top 3 feet which shall be compacted to 100%. compact to 98% density where fill depth exceeds 10 feet. The soils shall be within 3% of optimum moisture content. In granular soils all portions of the embankment shall be compacted to not less than 95% of Modified Proctor Density (ASTM D1557).
30. Adjust structures to final grade where disturbed. Comply with requirements of Utility. Meet requirements for traffic loading in paved areas.
31. Reinstall salvaged hydrant
32. Refer to sheet C4.7 for City of Lake Elmo standard notes on watermain, sanitary sewer, and storm sewer.
33. Contractor shall furnish and install all parts necessary for new casting configuration.
34. Construct storm structure over existing storm line. Contractor shall field verify location and inverts. All connections shall be watertight.

INFILTRATION / FILTRATION BASIN REQUIREMENTS

35. Refer to the C3.1 sheet notes for requirements.

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DRAWING TITLE

WATER & SANITARY PLAN AND PROFILE

PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.6

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1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 "GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4–INCH PVC, SCH. 40.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D–3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES.
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE TO TAKE PLACE.
9. A 1'–0" TO 1'–4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
10. ALL SERVICE LINE STUBS MUST HAVE A 2"x2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
11. UPON MAKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSTALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.
12. ALL MAINLINE SANITARY SEWER AND SERVICES SHALL HAVE TRACER WIRE PER CITY SPECIFICATIONS AND DETAILS.

STANDARD PLAN NOTES
SANITARY SEWER PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 300A LAKE ELMO

1. ALL STORM SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
3. PRECAST CONCRETE MANHOLE AND CATCH BASIN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C–477.
4. A 1'–0" TO 1'–4" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
5. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL STORM SEWER MANHOLES.
6. RIP–RAP SHALL BE HAND–PLACED OVER GEOTEXTILE FABRIC AND CONFORM TO MnDOT SPEC. 3601, CLASS III, OR AS SPECIFIED HEREIN.
7. THE GEOTEXTILE FABRIC USED UNDER RIP–RAP SHALL EXTEND 3 FT UNDER THE APRON.
8. FURNISH & INSTALL TRASH GUARDS ON ALL FLARED END SECTIONS.
9. ALL SILT SHALL BE CLEANED OUT FROM THE RIP–RAP AT THE END OF THE PROJECT.
10. STORM SEWER STRUCTURES WITHIN 10 FT OF WATERMAIN ARE TO HAVE WATER TIGHT CONNECTIONS PER MDH REQUIREMENTS.
11. ALL NEW STORM SEWER PIPE SHALL BE FLUSHED AND TELEVISED PRIOR TO SUBSTANTIAL COMPLETION – SEE SPECIFICATION SECTION 1700 – CLOSEOUT REQUIREMENTS.

STANDARD PLAN NOTES
STORM SEWER PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 400A LAKE ELMO

1. ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
3. WATERMAIN SHALL BE DUCTILE IRON PIPE, ENCASED IN POLYETHYLENE, CLASS–52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR–BLUE NUTS & BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2.C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2.C3.
9. BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
10. ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
11. HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB–67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2–1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE (MODEL WB–67) AND PENTAGON NUT END CAP.
13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1–FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.

STANDARD PLAN NOTES
WATERMAIN PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 200A LAKE ELMO

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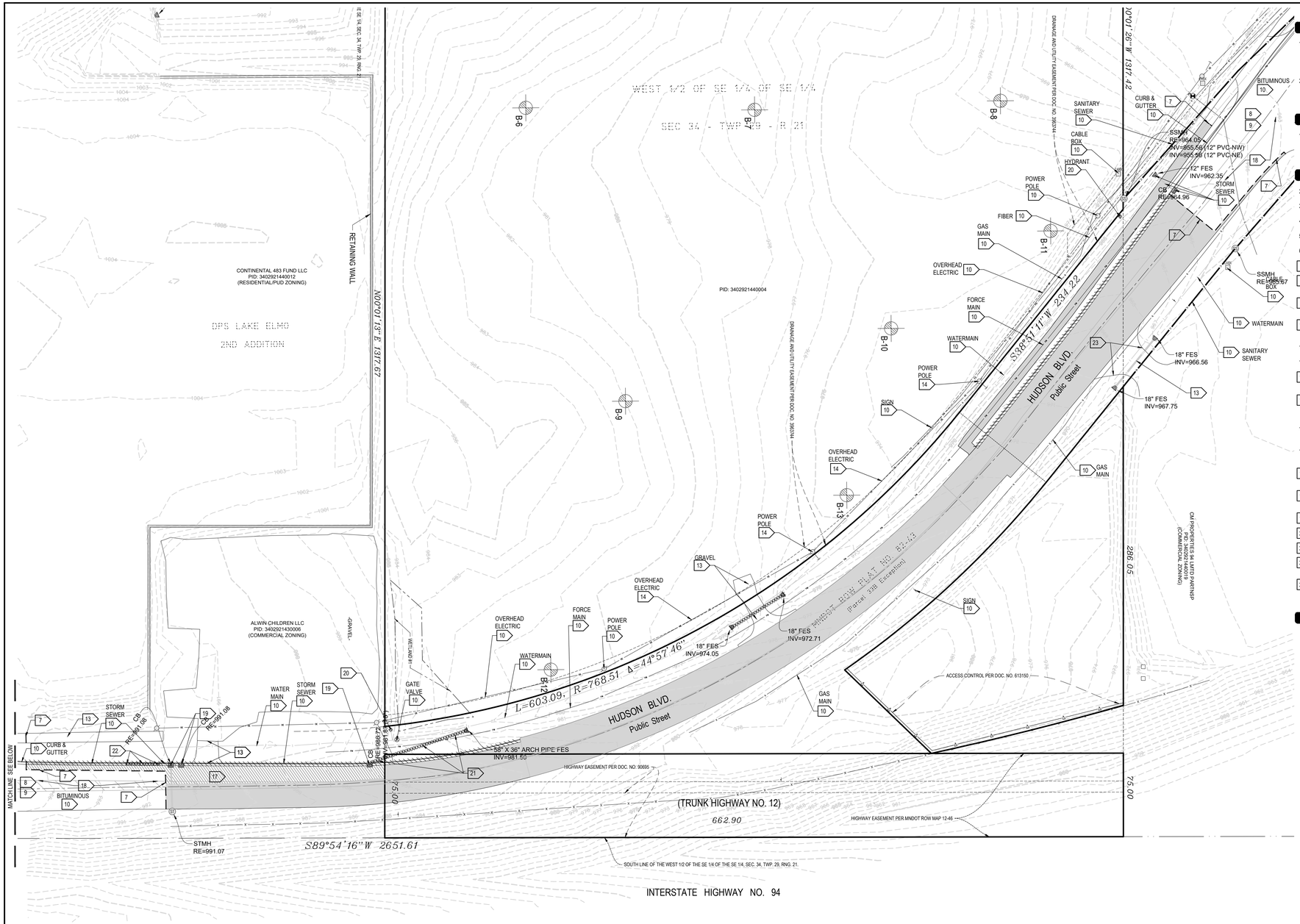
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CITY OF LAKE ELMO
STANDARD UTILITY NOTES

PROJECT NUMBER: DRS22002

SHEET NUMBER

C4.7



EXISTING CONDITIONS

1. Background information shown is from survey by Landform, Minneapolis, MN, on July 19, 2022, expressly for this project; City of Lake Elmo, MN record drawings; and utility service providers. Landform offers no warranty, expressed or written, for information provided by others. Existing project conditions shall be verified prior to beginning construction. Errors, inconsistencies, or omissions discovered shall be reported to the Engineer IMMEDIATELY.
2. Geotechnical boring locations are approximate and are based on information provided in the Geotechnical Report prepared by American Engineering Testing, Albertville, MN, on August 1, 2022.

GENERAL NOTES

1. For construction staking and surveying services contact Landform at 612.252.9070.

DEMOLITION AND CLEARING NOTES

2. Obtain permits for demolition, clearing, and disposal prior to beginning.
3. Contact utility service providers for field location of services 72 hours prior to beginning demolition and clearing.
4. See Sheet C3.1 for erosion prevention and sediment control measures that must be in place prior to disturbances to site.
5. Reserved.
6. Dimensions shown for removal are approximate. Coordinate with new construction to ensure appropriate removal of existing facilities.

7. Pavement sawcut. Remove concrete walks and curbing to the nearest existing joint beyond construction limits.
8. Complete demolition with minimal disruption of traffic. Coordinate lane closures with the regulatory authority and provide advance notification to affected emergency response providers.
9. Provide barricades, lights, signs, traffic control, and other measures necessary for protection and safety of the public and maintain throughout construction.
10. Protect structures, utilities, trees, plant material, sod, and adjacent property from damage during construction unless noted for removal. Damage shall be repaired to equal or better condition at no additional cost.
11. Reserved.
12. Refer to tree preservation plan for additional information.
13. Remove existing site features including, but not limited to, underground utilities, paving, curbing, walkways, aprons, related foundations, signage, and landscaping within the construction limits unless noted otherwise.
14. Contractor to coordinate removal, relocation, termination, and re-use of existing private utility services and appurtenances with the utility companies. Restore electric handholes, pullboxes, powerpoles, guylines, and structures disturbed by construction in accordance with utility owner requirements.
15. Existing piping and conduits may be abandoned in-place if filled with sand and if not in location of proposed building or in conflict with proposed utilities or structures. Terminate existing services at the supply side in conformance with provider's standards.
16. Haul demolition debris off-site to a facility approved by regulatory authorities for the handling of demolition debris, unless noted otherwise.
17. Mill 2" of bituminous surface. Provide a clean vertical edge at connection to existing streets. Refer to Sheets C5.4 and C5.5 for additional information.
18. Remove existing pavement markings necessary for proposed layout. Follow MnDOT specifications for removal. Refer to Sheet C5.2 for proposed striping.
19. Protect structure. Replace casting with Neenah R-1642
20. Remove, salvage, and re-install existing hydrant. See sheet C4.2 for install location.
21. Remove, salvage, and reinstall existing arch storm pipe. Refer to Utility Plan for proposed location.
22. Remove existing storm sewer pipe at shown location. After removal contractor shall install proposed storm sewer structures and piping to maintain constant flow. All connections shall be watertight. Refer to Sheet C4.1 for proposed storm sewer.
23. Driveway to be removed after the construction of new proposed driveway location. Site can not be opened for public use until existing driveway is removed.

LEGEND

- :Tree Removal
- :Tree Protection
- :Tree To Be Protected and Transplanted See Landscape Plan (L2.1) for Relocation
- : Mill Bituminous
- : Full Depth Pavement Removal
- B-X :Soil Boring
- :Curb Removal
- XXXXXXXXXXXXXXXXXXXX :Utility Line Removal
- :Pavement Sawcut

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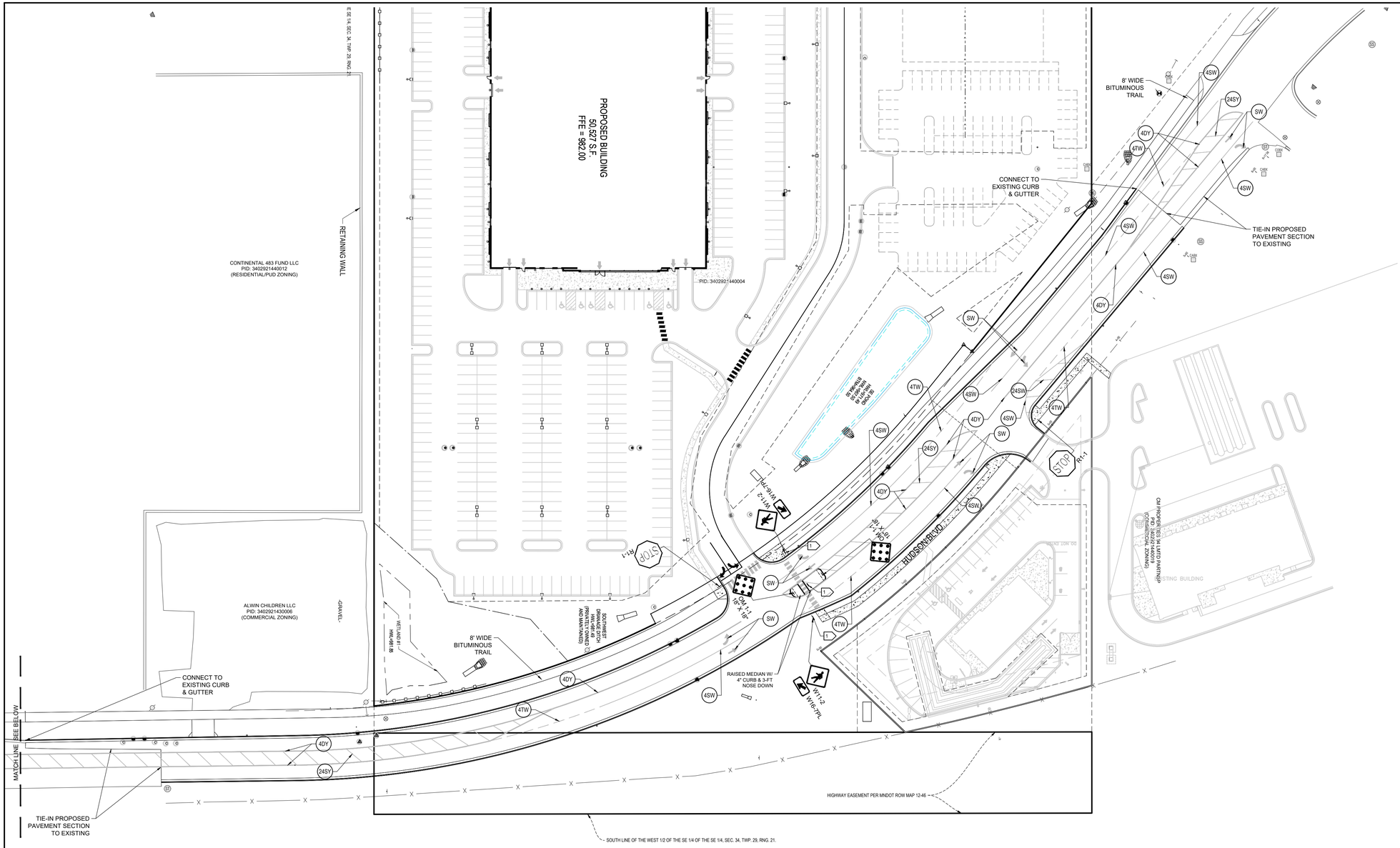
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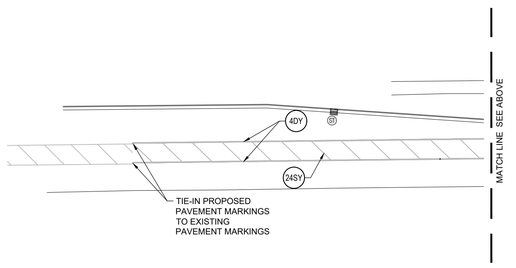
HUDSON BOULEVARD EXISTING CONDITIONS & DEMOLITION

PROJECT NUMBER: DRS22002

SHEET NUMBER

C5.1





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NOTES

1. Rectangular rapid-flashing beacon and pedestrian push-button actuator with R10-25 Sign.
2. OM 1-1 18" x 18" Warning Sign
3. Sign panels and posts shall meet City of Lake Elmo specifications

STRIPING LEGEND

1st Digit: Width
4",8", ect.

3rd Digit: Color
W - White
Y - Yellow
B - Black

2nd Digit: Pattern
S - Solid
B - Broken
T - Dotted
D - Double
K - Double Broken
H - Double Dotted

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HUDSON BOULEVARD STRIPING AND SIGNAGE

PROJECT NUMBER: DRS22002

SHEET NUMBER

C5.2A



NOTES

1. See Sheets C5.4 and C5.5 for typical cross sections.
2. Refer to Sheet C5.6 for mill and overlay and full reconstruction locations.
3. Refer to Sheet C5.3A & C5.3B for Plan and Profile
4. Layout for Hudson Boulevard provided by KLJ Engineering.

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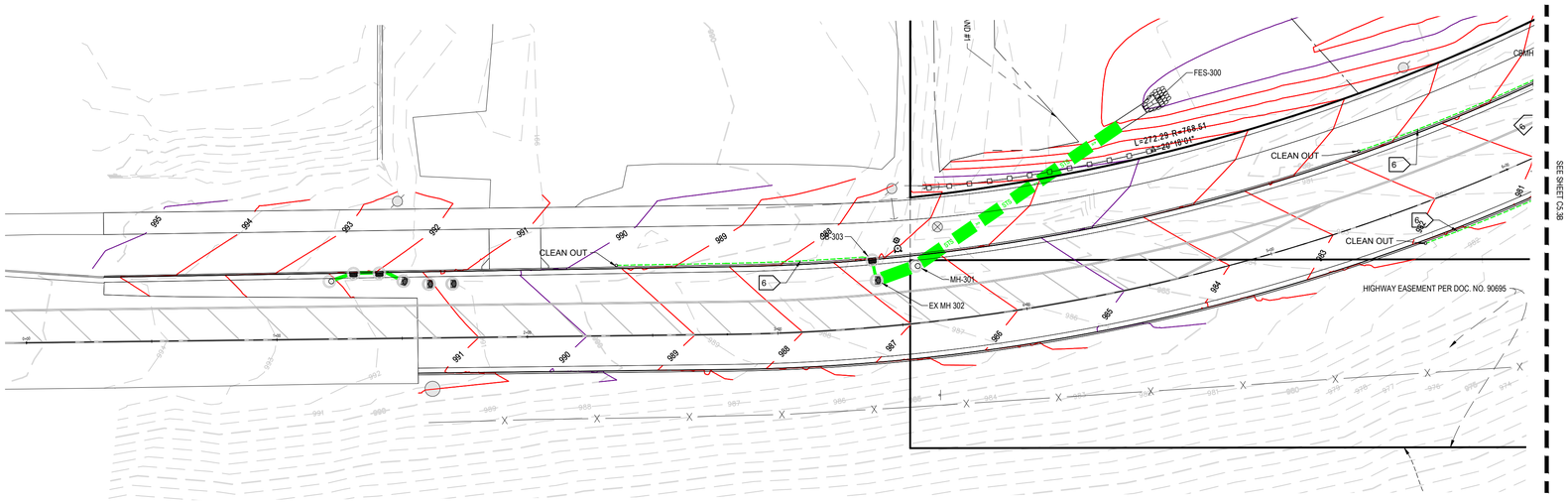
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HUDSON BOULEVARD LAYOUT PLAN

PROJECT NUMBER: DRS22002

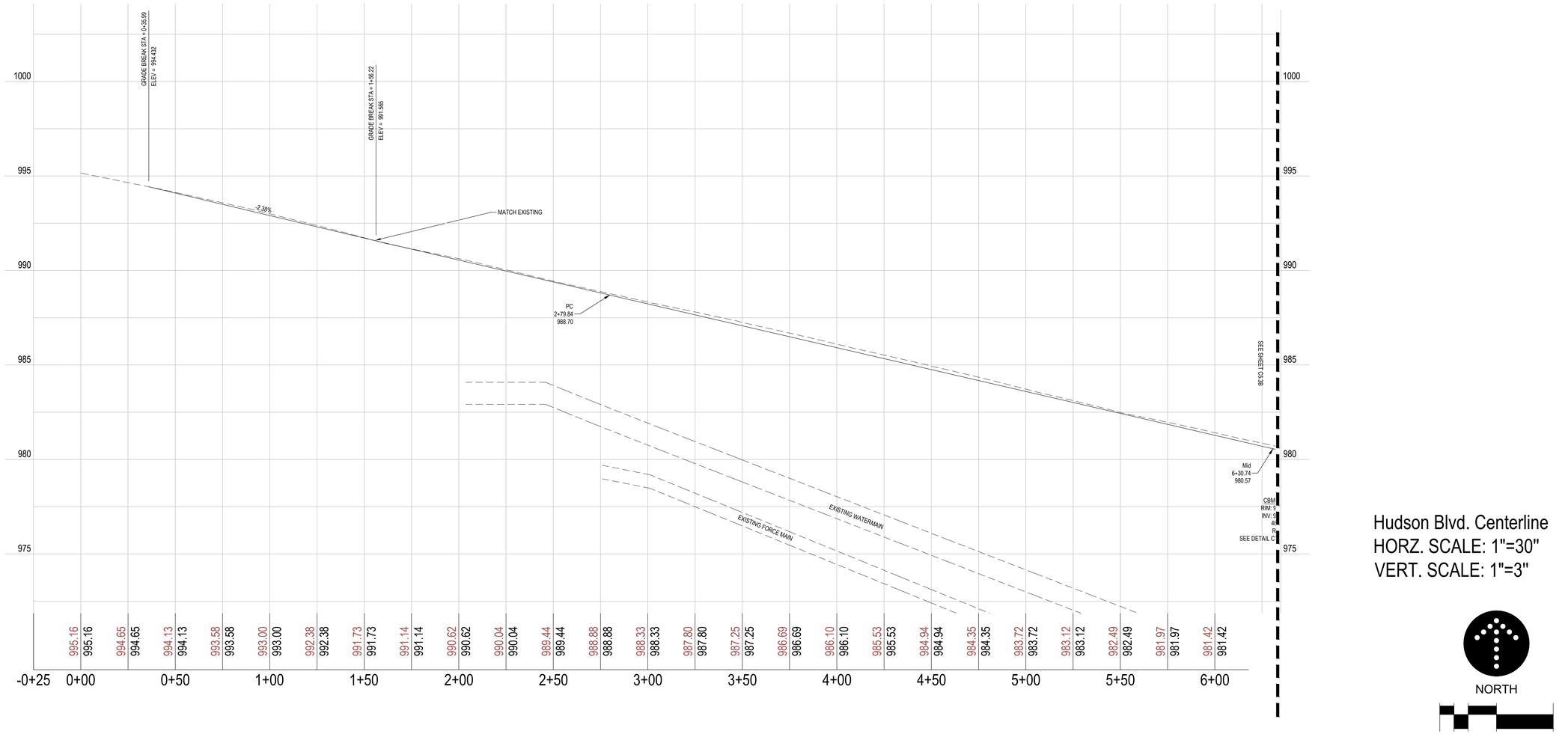
SHEET NUMBER

C5.2B



NOTES

1. See Sheets C5.4 and C5.5 for typical cross sections.
2. Refer to Sheet C5.6 for mill and overlay and full reconstruction locations.
3. The invert of the existing water main along Hudson Boulevard is assumed to be 8 ft. below existing ground elevation. Contractor to verify depth prior to construction.
4. The invert of the existing sanitary sewer force main is assumed to be 11 ft. below existing ground elevation. Contractor to verify depth prior to construction.
5. Layout for Hudson Boulevard provided by KLJ Engineering.
6. Install 4-inch schedule 40 perforated PVC draintile per City of Lake Elmo standards. Refer to details 4-5 on sheet C7.4 for installation information.



Hudson Blvd. Centerline
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

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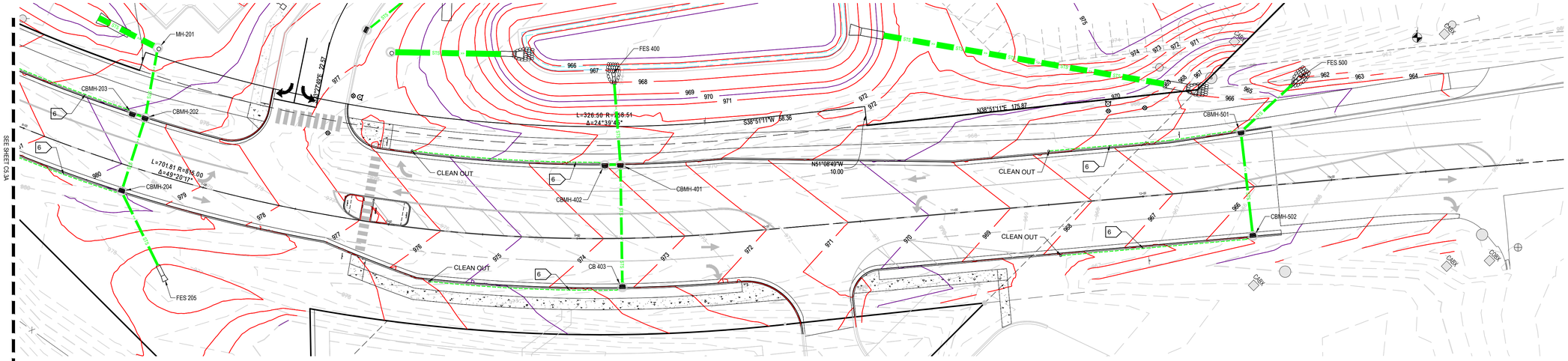
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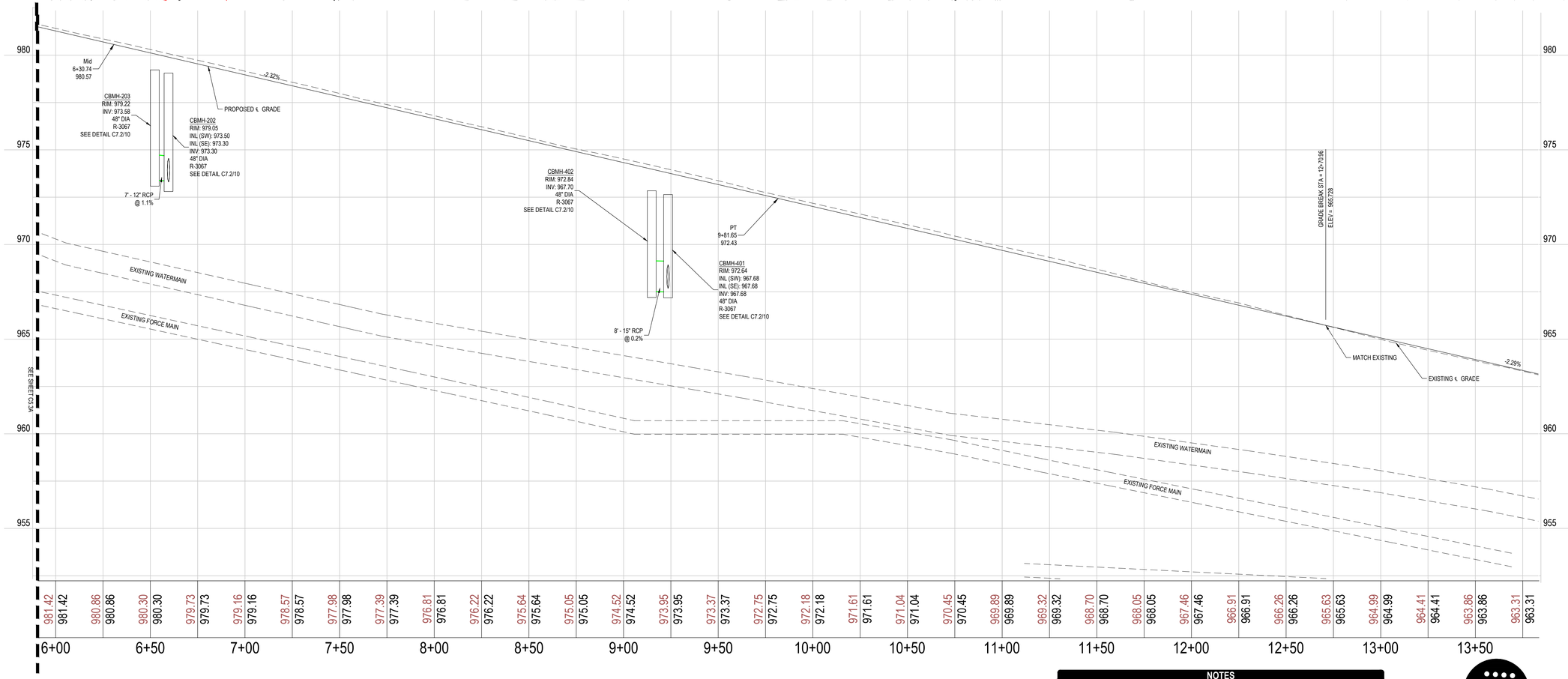
HUDSON BOULEVARD
PLAN & PROFILE

PROJECT NUMBER: DRS22002

SHEET NUMBER

C5.3A





Hudson Blvd. Centerline
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

NOTES

1. See Sheets C5.4 and C5.5 for typical cross sections.
2. Refer to Sheet C5.6 for mill and overlay and full reconstruction locations.
3. The invert of the existing water main along Hudson Boulevard is assumed to be 8 ft. below existing ground elevation. Contractor to verify depth prior to construction.
4. The invert of the existing sanitary sewer force main is assumed to be 11 ft. below existing ground elevation. Contractor to verify depth prior to construction.
5. Layout for Hudson Boulevard provided by KLJ Engineering.
6. Install 4-inch schedule 40 perforated PVC drainitle per City of Lake Elmo standards. Refer to details 4-5 on sheet C7.4 for installation information.

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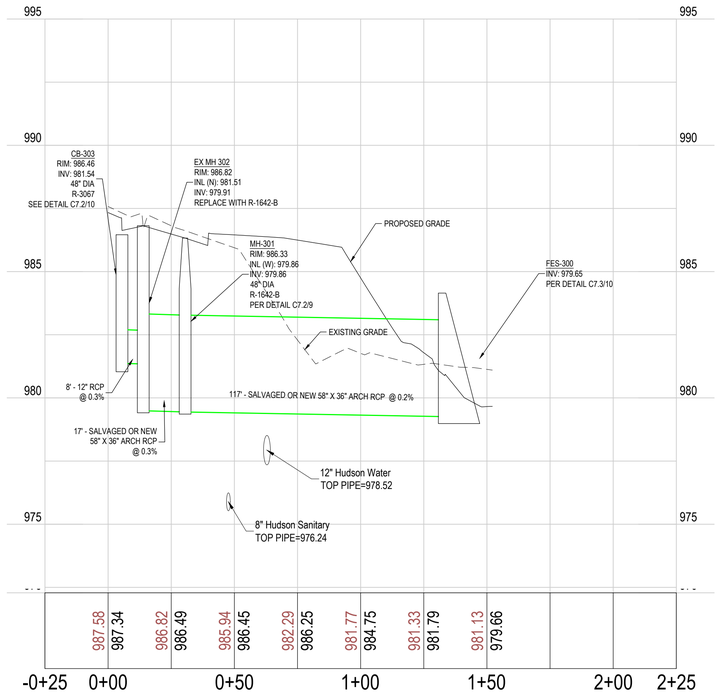
DRAWING TITLE

HUDSON BOULEVARD
PLAN & PROFILE

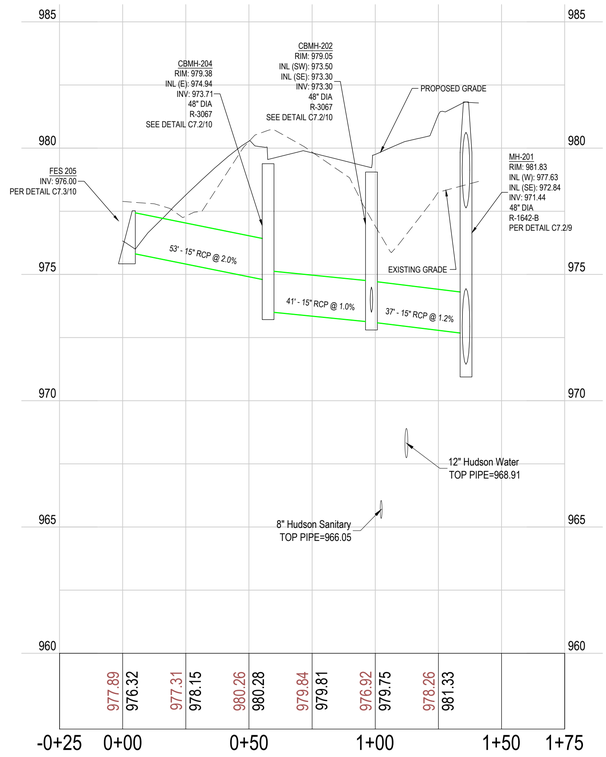
PROJECT NUMBER: DRS22002

SHEET NUMBER

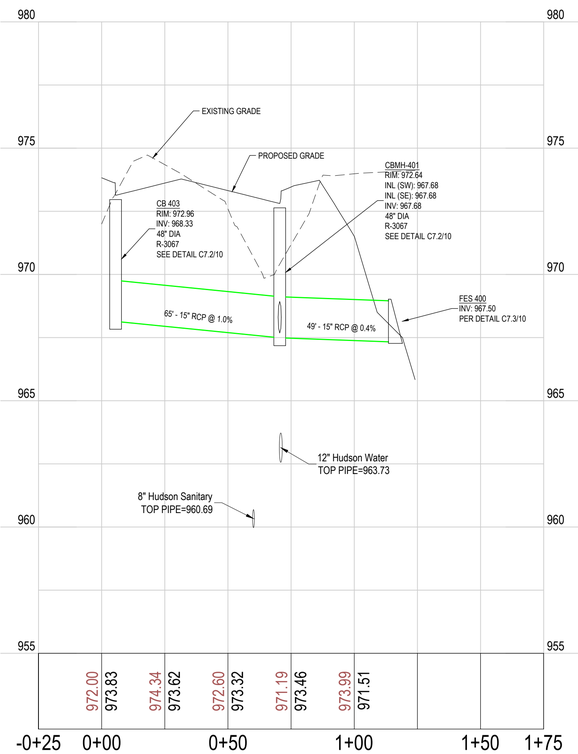
C5.3B



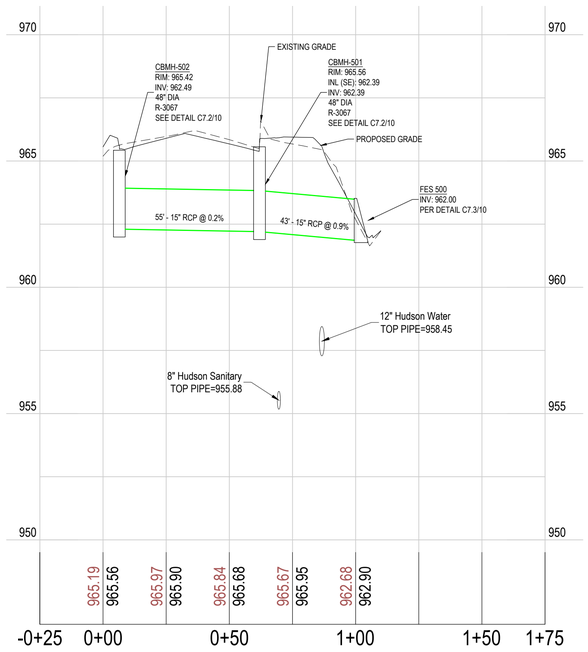
CB 303 - FES 300
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"



FES 205 - MH 201
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"



CB 403 - FES 400
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"



CB 502 - FES 500
HORZ. SCALE: 1"=30"
VERT. SCALE: 1"=3"

NOTES

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NORTH

0 30 60

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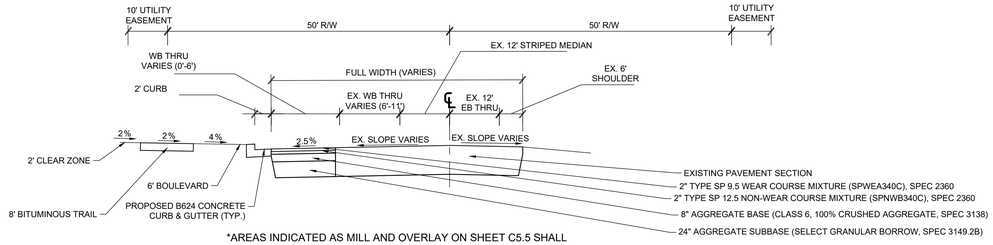
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HUDSON BOULEVARD
STORM CROSS SECTIONS

PROJECT NUMBER: DRS22002

SHEET NUMBER

C5.3C

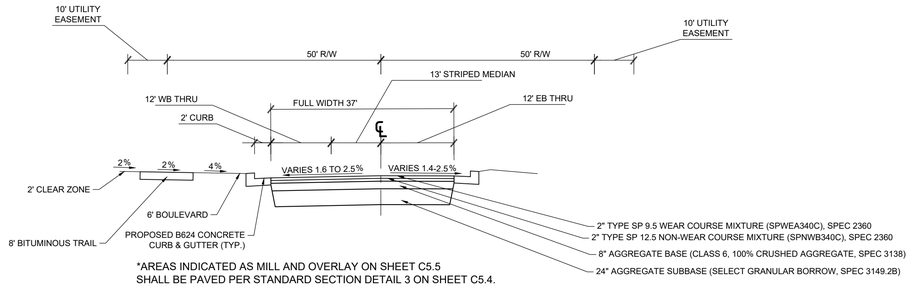


*AREAS INDICATED AS MILL AND OVERLAY ON SHEET C5.5 SHALL BE PAVED PER STANDARD SECTION DETAIL 3 ON SHEET C5.4.

1 TYPICAL LANE WIDENING SECTION (WITH TRAIL)

HUDSON BOULEVARD STA 0+31.1 TO 1+56.22

NO SCALE

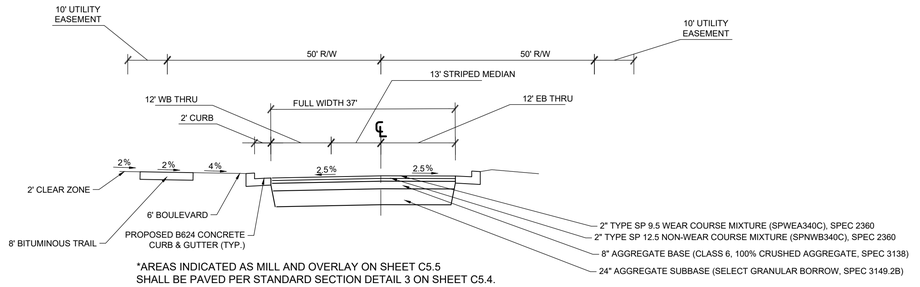


*AREAS INDICATED AS MILL AND OVERLAY ON SHEET C5.5 SHALL BE PAVED PER STANDARD SECTION DETAIL 3 ON SHEET C5.4.

2 TYPICAL TRANSITION SECTION (WITH TRAIL)

HUDSON BOULEVARD STA 1+56.22 TO 1+91.26

NO SCALE

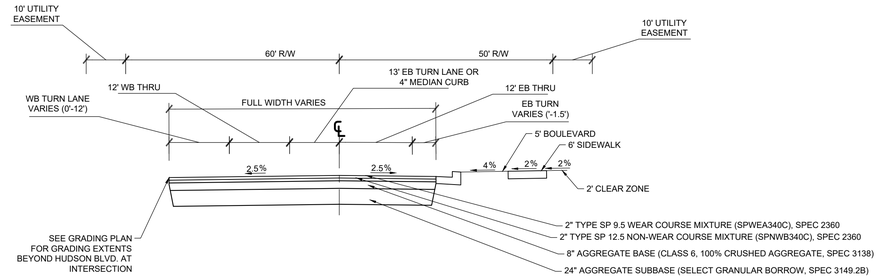


*AREAS INDICATED AS MILL AND OVERLAY ON SHEET C5.5 SHALL BE PAVED PER STANDARD SECTION DETAIL 3 ON SHEET C5.4.

3 TYPICAL CROWN SECTION (WITH TRAIL)

HUDSON BOULEVARD STA 1+91.26 TO 7+01.3

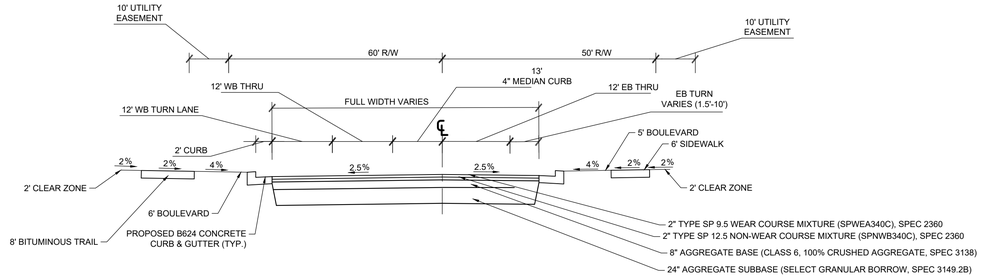
NO SCALE



5 TYPICAL CROWN SECTION (WALK WITH NO TRAIL OR CURB)

HUDSON BOULEVARD STA 7+01.3 TO 7+86.46

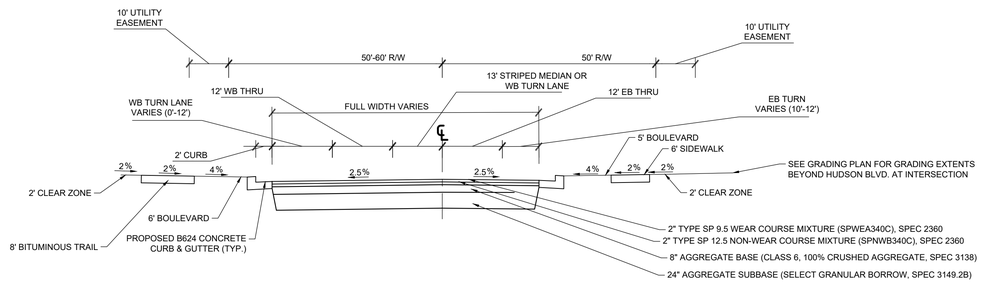
NO SCALE



6 TYPICAL CROWN SECTION (WITH TRAIL AND WALK)

HUDSON BOULEVARD STA 7+86.46 TO 8+10

NO SCALE



7 TYPICAL CROWN SECTION (WITH TRAIL AND WALK)

HUDSON BOULEVARD STA 8+10 TO 9+81.65

NO SCALE

NOTES

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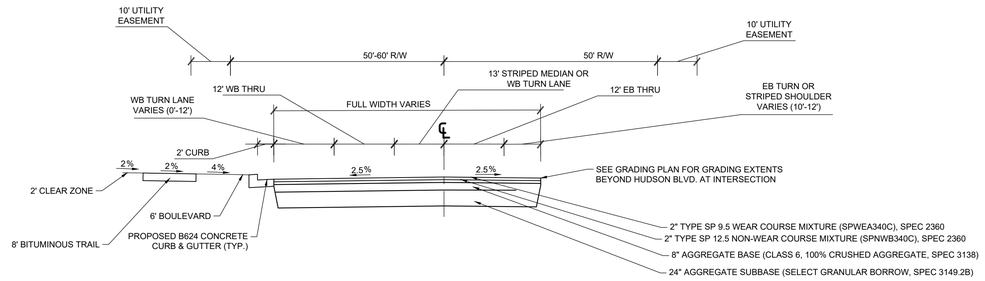
DRAWING TITLE

HUDSON BOULEVARD TYPICAL SECTIONS

PROJECT NUMBER: DRS22002

SHEET NUMBER

C5.4

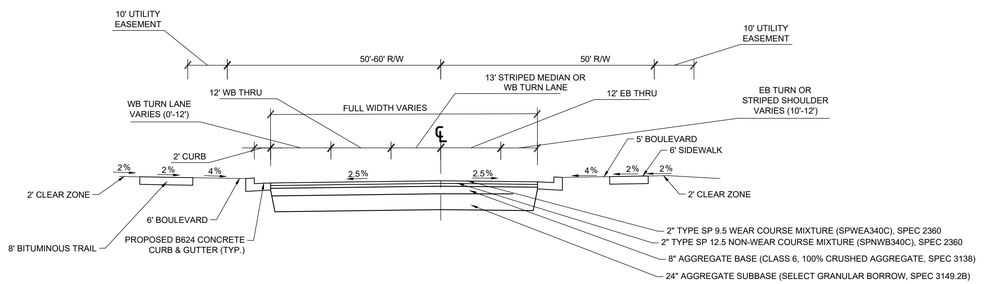


1

TYPICAL CROWN SECTION (WITH TRAIL) SOUTH DRIVEWAY

HUDSON BOULEVARD STA 9+81.65 TO 10+55.92

NO SCALE

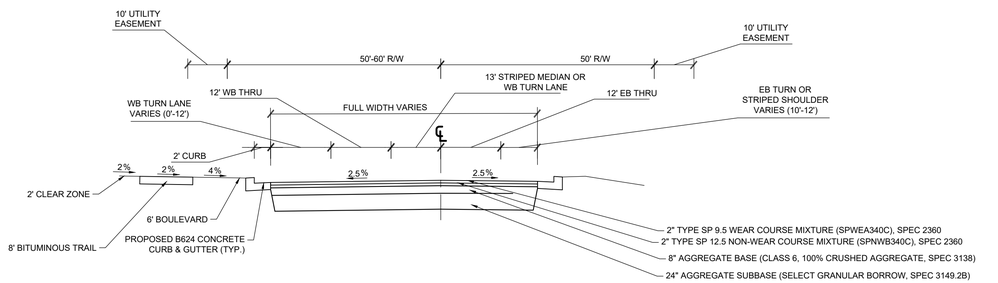


2

TYPICAL CROWN SECTION (WITH TRAIL AND WALK)

HUDSON BOULEVARD STA 10+55.92 TO 11+24.88

NO SCALE

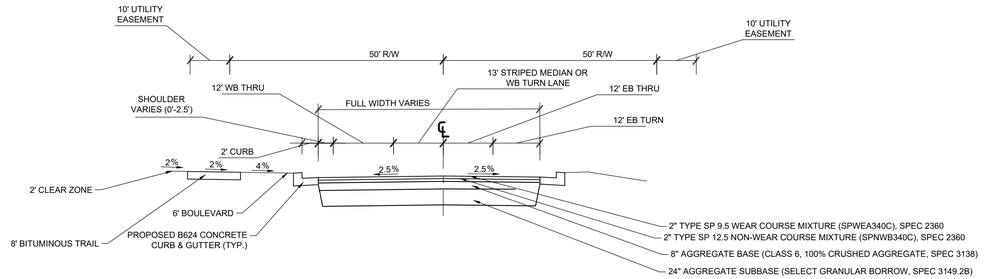


3

TYPICAL CROWN SECTION (WITH TRAIL AND WALK)

HUDSON BOULEVARD STA 11+24.88 TO 12+14.50

NO SCALE

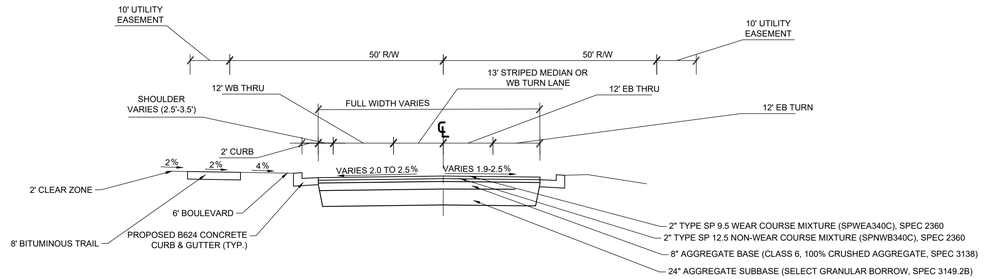


4

TYPICAL TRANSITION SECTION (WITH TRAIL)

HUDSON BOULEVARD STA 12+14.50 TO 12+52.06

NO SCALE

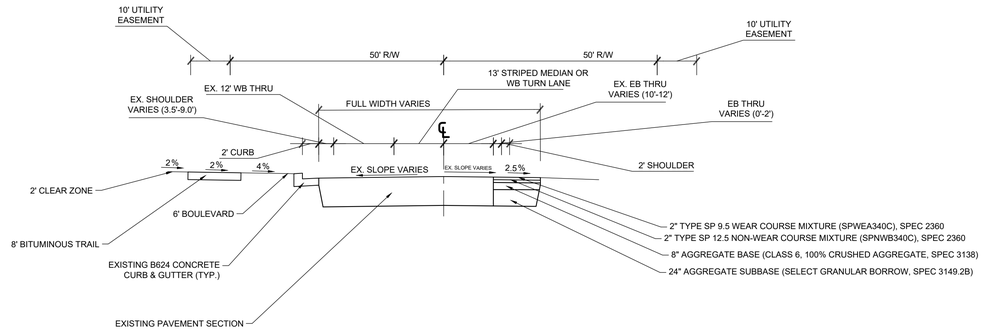


5

TYPICAL TRANSITION SECTION (WITH TRAIL)

HUDSON BOULEVARD STA 12+52.06 TO 12+70.96

NO SCALE

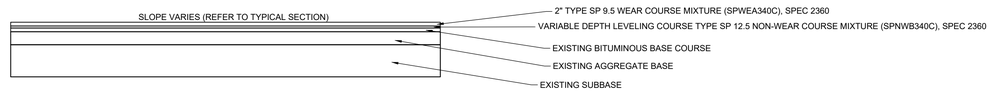


6

TYPICAL LANE WIDENING SECTION (WITH TRAIL)

HUDSON BOULEVARD STA 12+70.96 TO 13+65.85

NO SCALE



7

TYPICAL MILL AND OVERALY SECTION

HUDSON BOULEVARD

NO SCALE

NOTES

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DRAWING TITLE

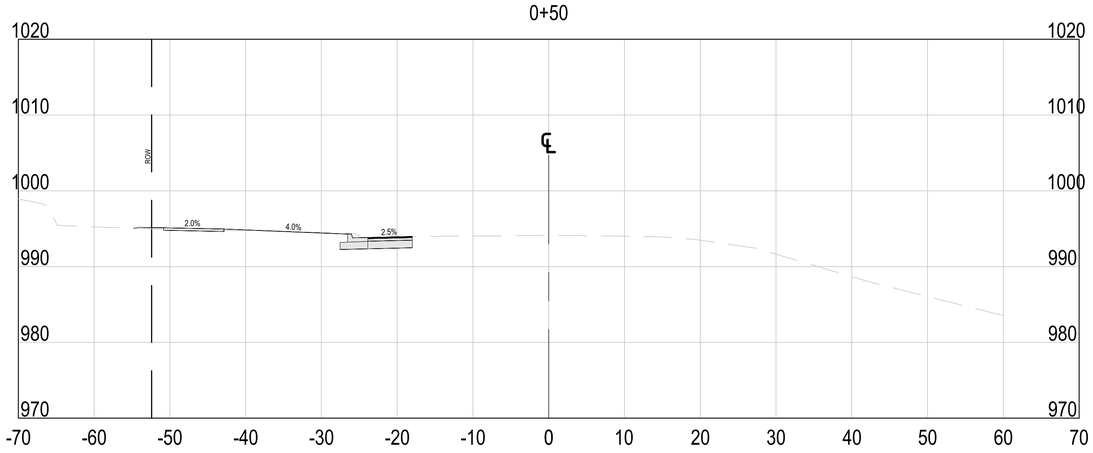
HUDSON BOULEVARD TYPICAL SECTIONS

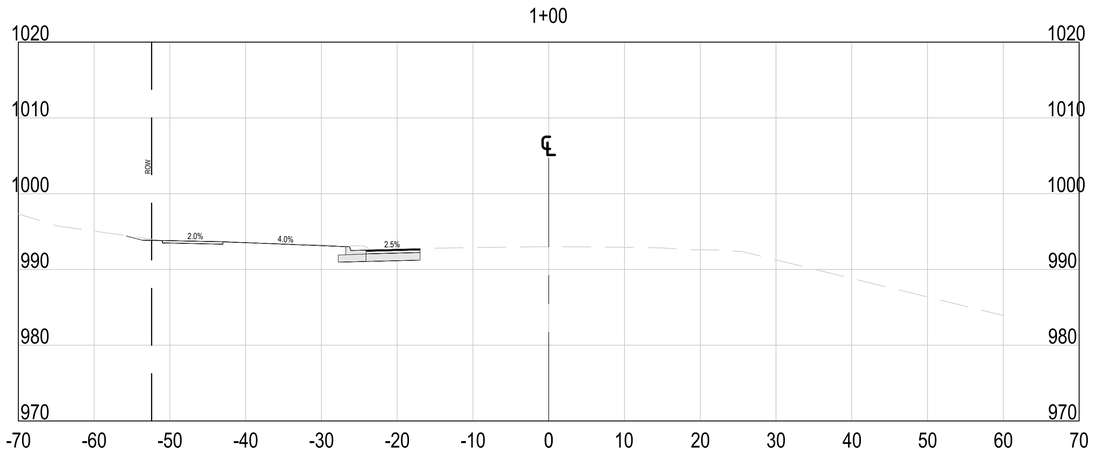
PROJECT NUMBER: DRS22002

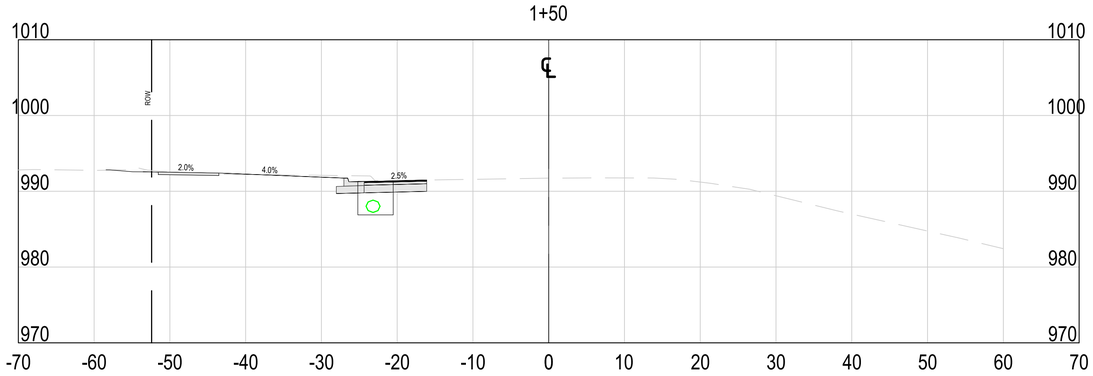
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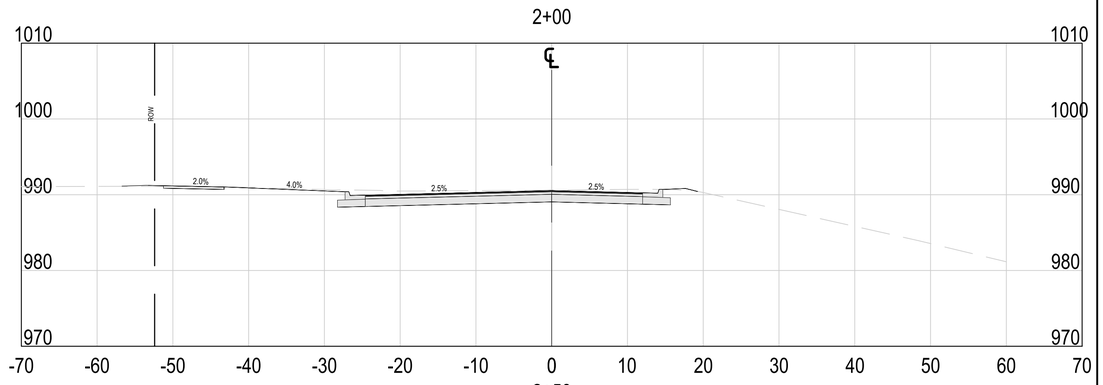
C5.4

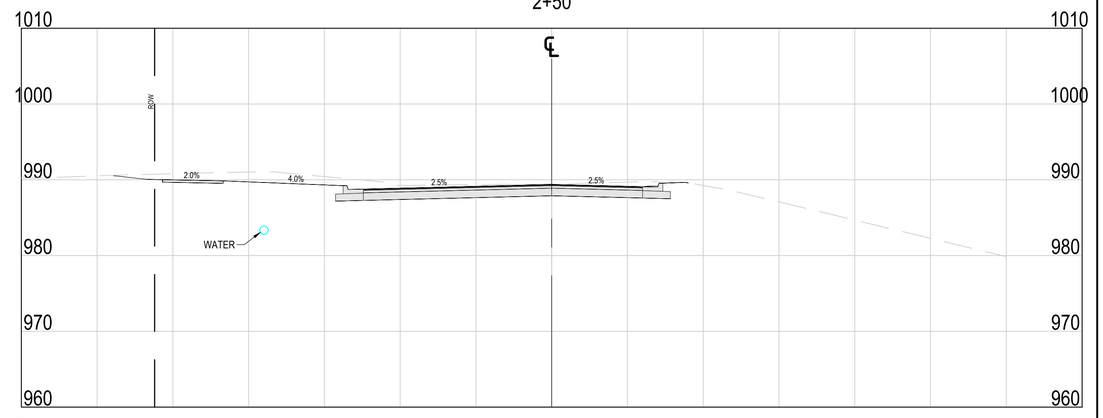

WE 991.8
WE 991.8
WE 991.7
WE 991.8
PROPOSED BUILDING
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FFE = 982.00
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SS1
SS1
LSS
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CONTINENTAL 483 FUND LLC
PID: 3402921440012
(RESIDENTIAL/PUD ZONING)
RETAINING WALL
ALWIN CHILDREN LLC
PID: 3402921430006
(COMMERCIAL ZONING)
"GRAVEL"
WETLAND
WETLAND BUFFER
S26°29'04"E 10.00
S30°27'05"E 292.40
S30°27'05"E 157.89
L=272.29 R=768.51 Δ=20°18'01"
L=701.81 R=815.00 Δ=49°20'17"
L=326.79 R=787.00 Δ=23°47'18"
L=326.50 R=788.51 Δ=23°43'45"
L=327.47 R=787.00 Δ=23°51'18"
N51°08'49"W 10.00
N30°27'05"W 292.40
N51°08'49"W 105.87
S38°51'11"W 95.86
CCEVS CONTROL PER DOC. NO. 613150
CAR
CAR
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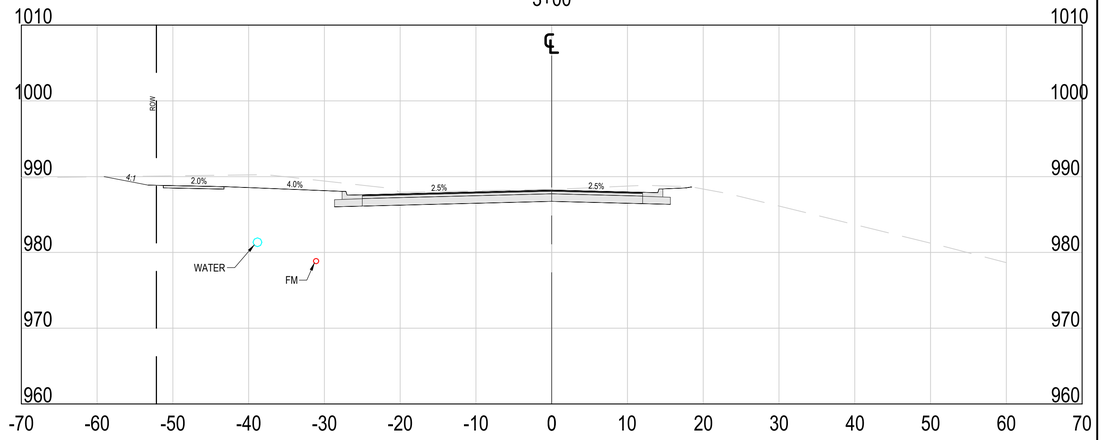












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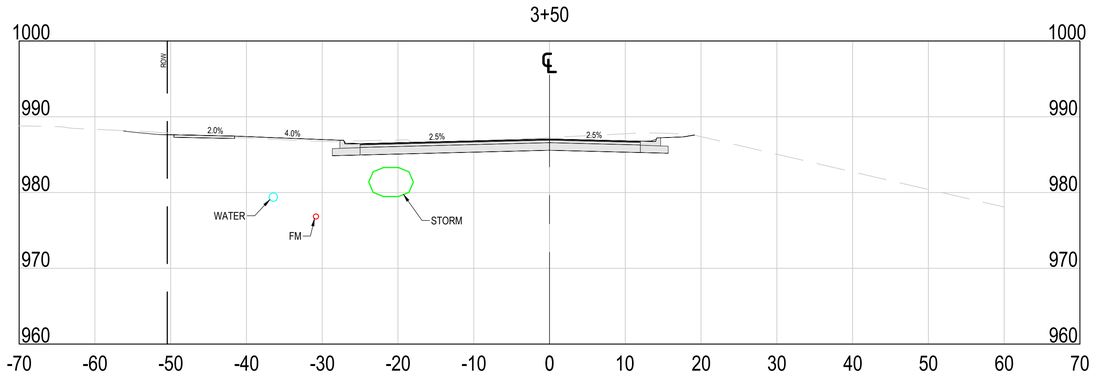
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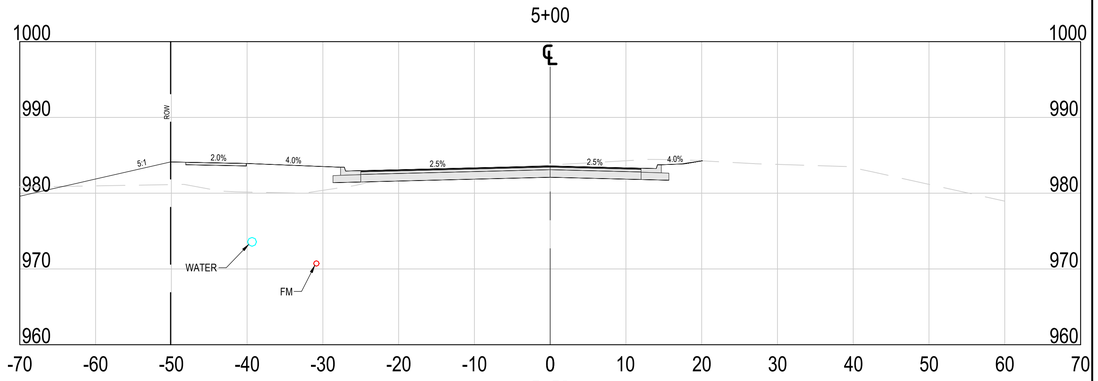
HUDSON BOULEVARD CROSS SECTIONS

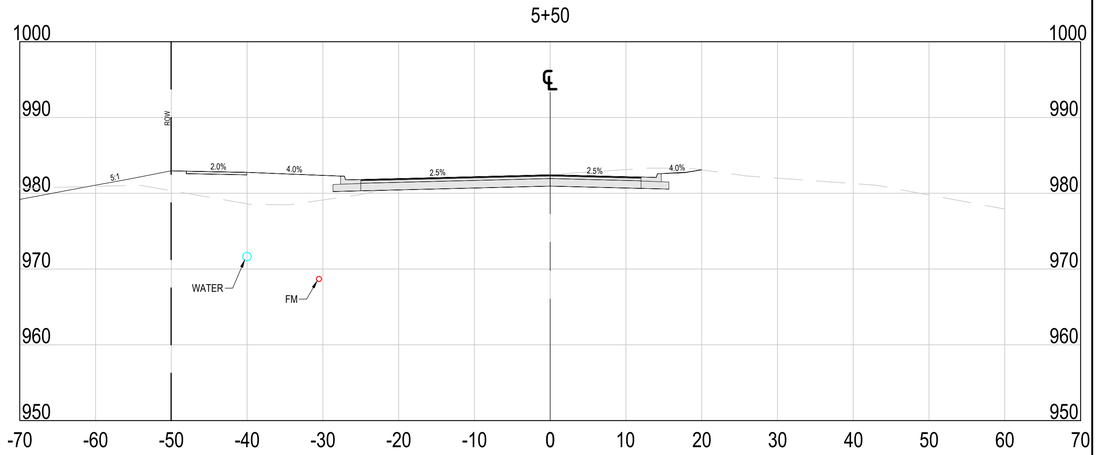
PROJECT NUMBER: DRS22002

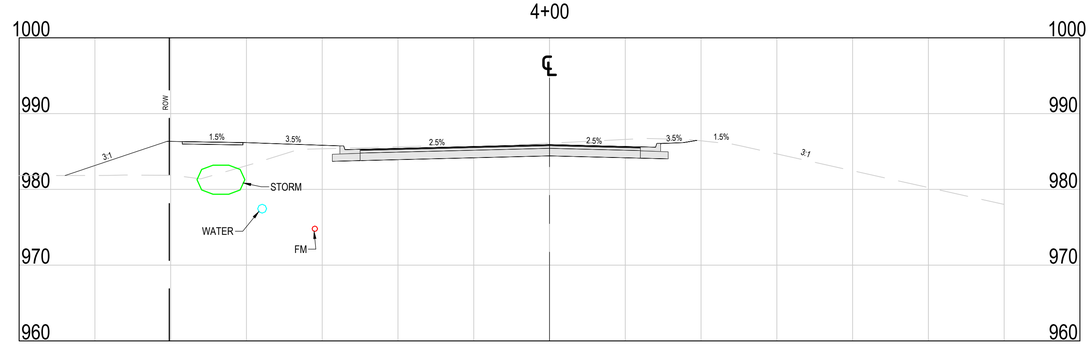
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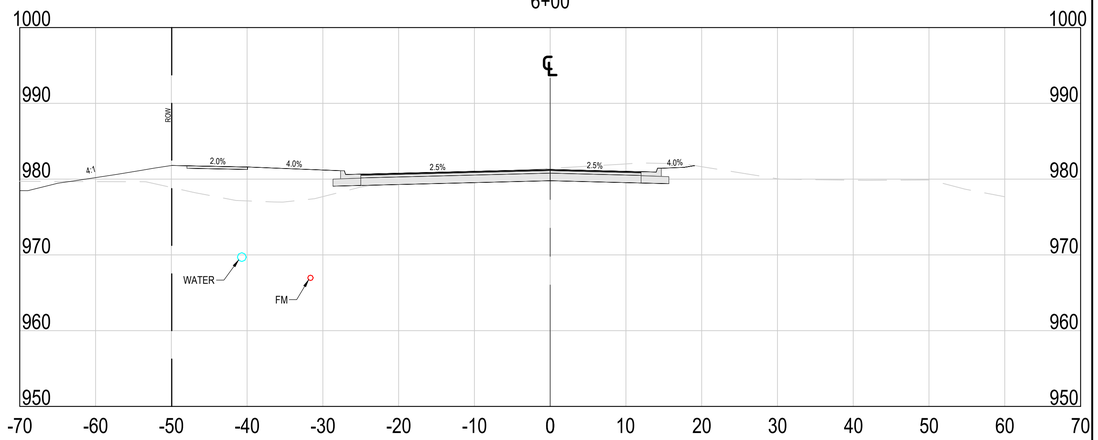
C5.7

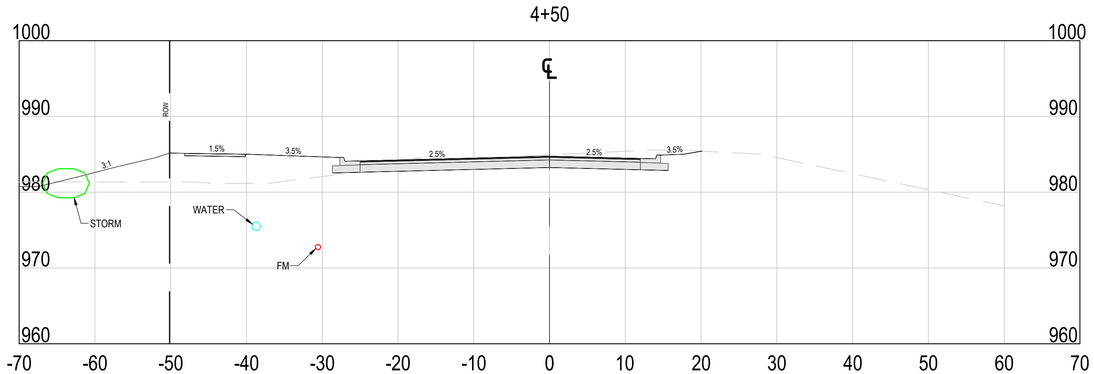












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105 South Fifth Avenue
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Fax: 612-252-9077
Web: landform.net

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DENVER, CO 80209
TEL. 303.825.6200
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ELECTRIC AUTO
SALES & SERVICE

HUDSON BLVD N.
LAKE ELMO, MN 55042

ISSUE / REVISION

AUG. 29, 2022	CITY SUBMITTAL
OCT. 26, 2022	REVIEW SET
JAN. 25, 2023	PRELIM BID SET
FEB. 13, 2023	CITY SUBMITTAL
MAR. 07, 2023	WATERSHED SUBMITTAL
MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

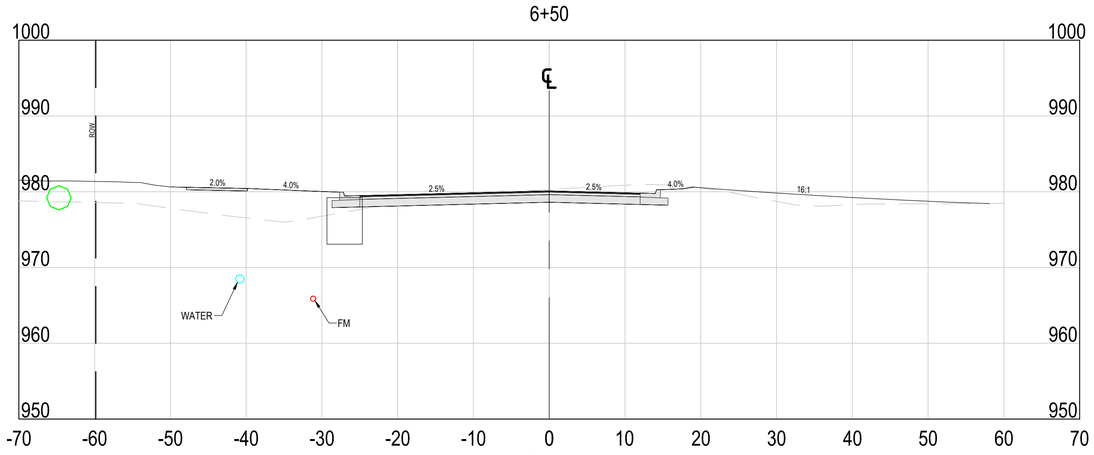
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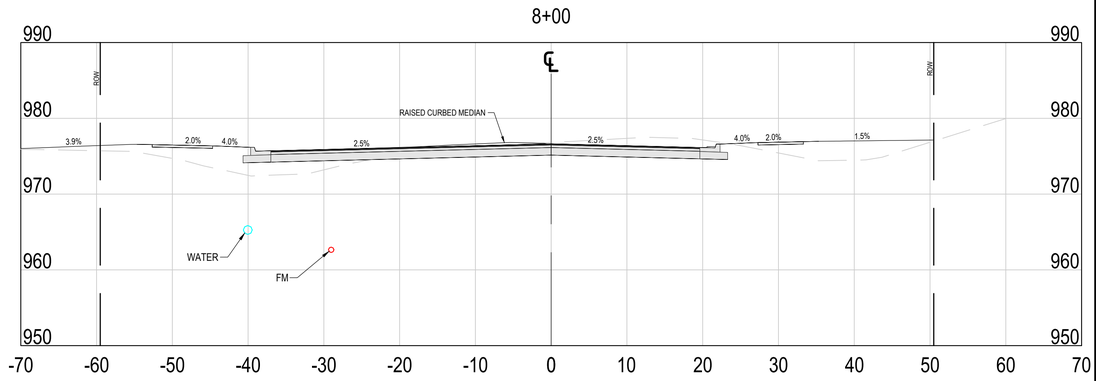
HUDSON BOULEVARD CROSS SECTIONS

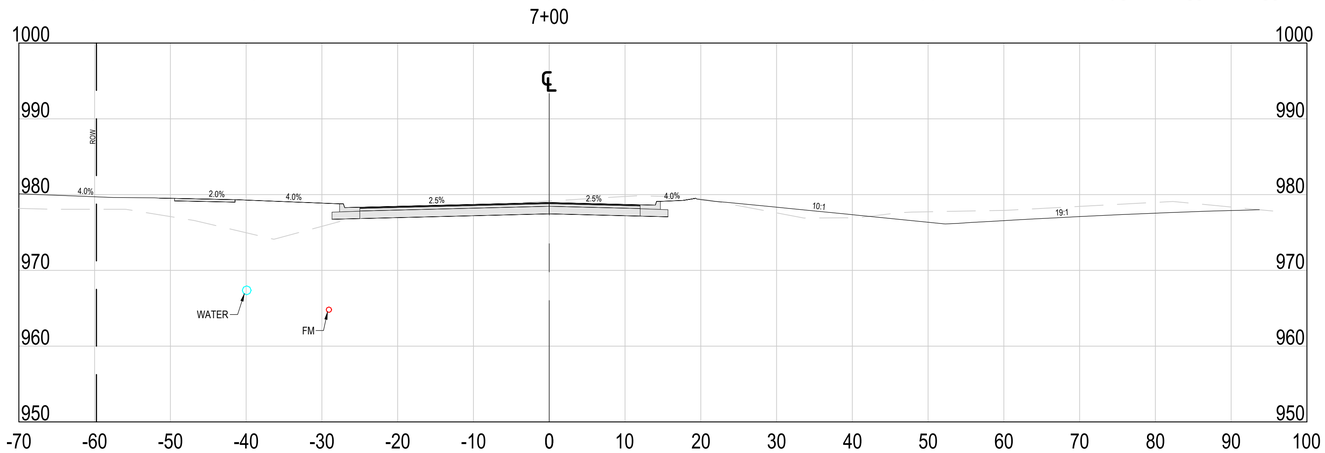
PROJECT NUMBER: DRS22002

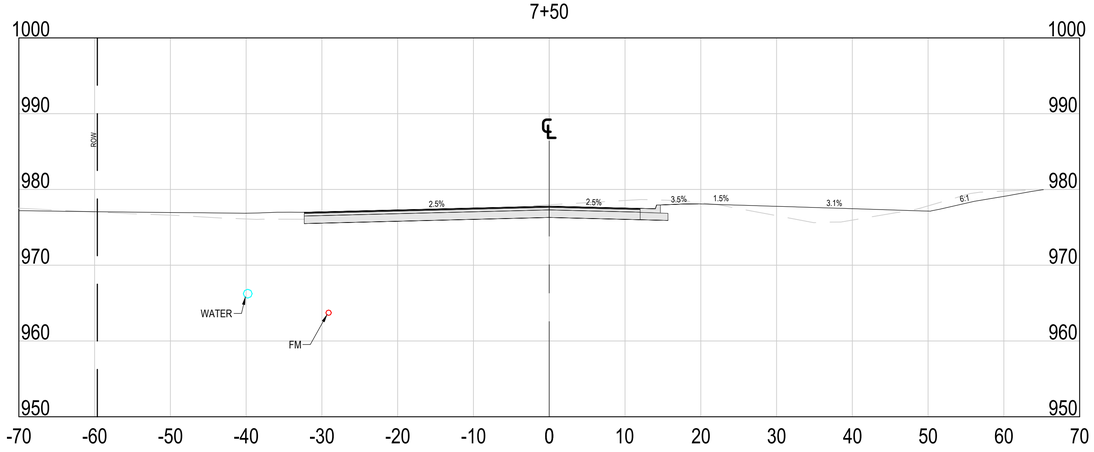
SHEET NUMBER

C5.8









NOTES

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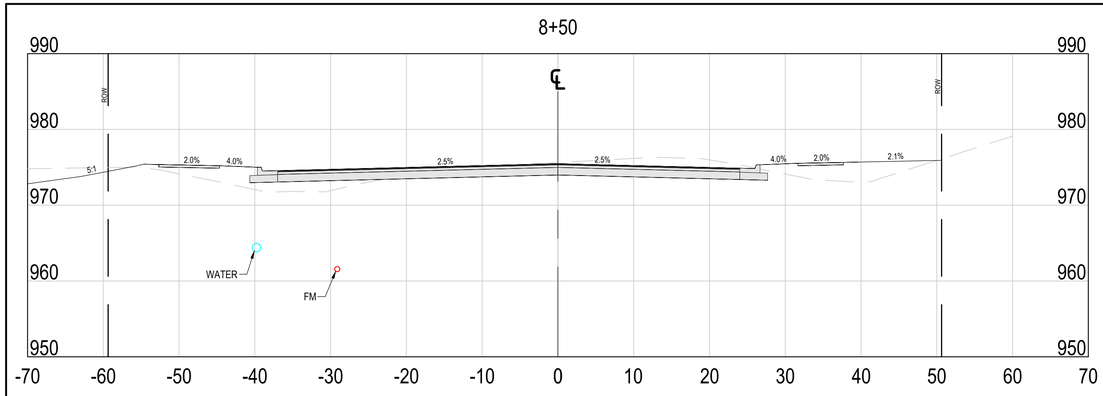
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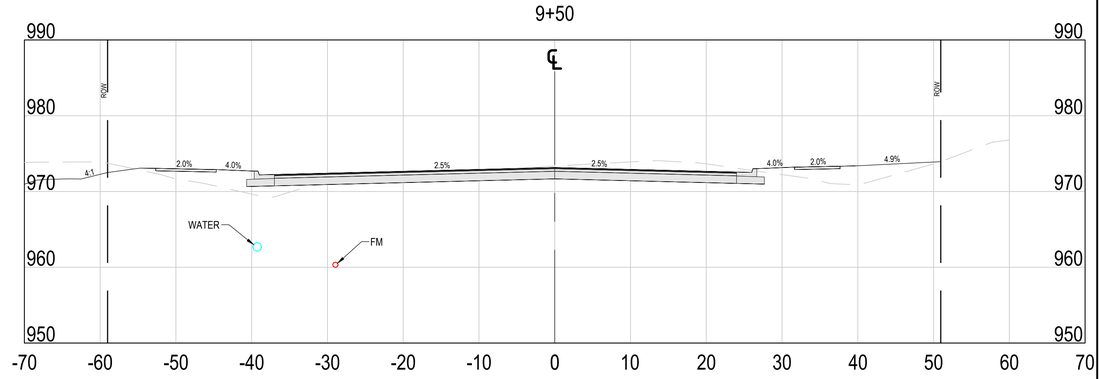
HUDSON BOULEVARD CROSS SECTIONS

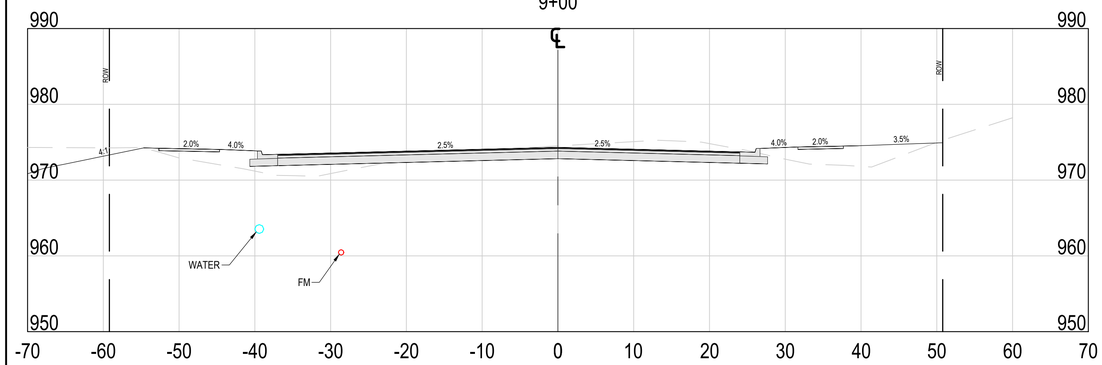
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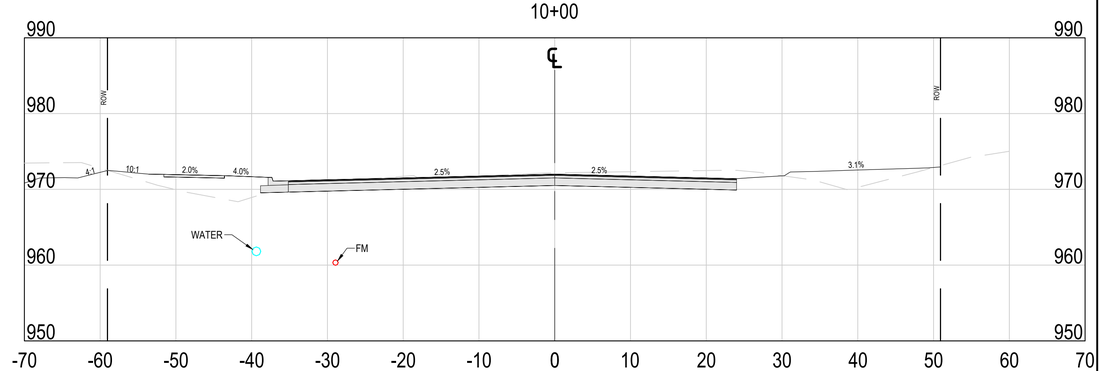
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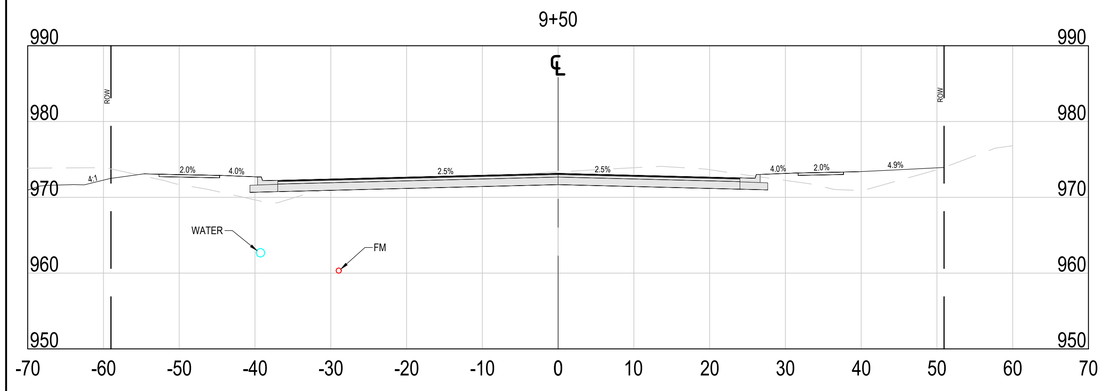
C5.9

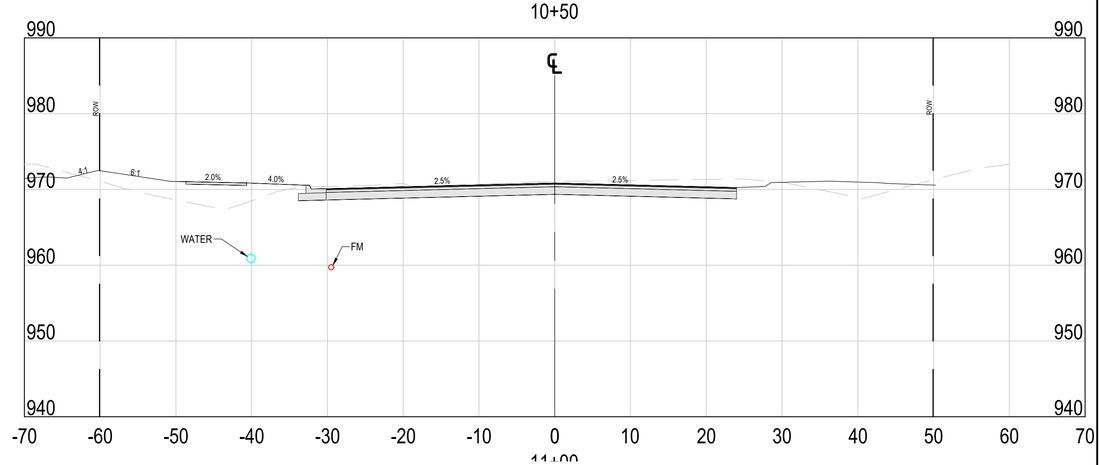












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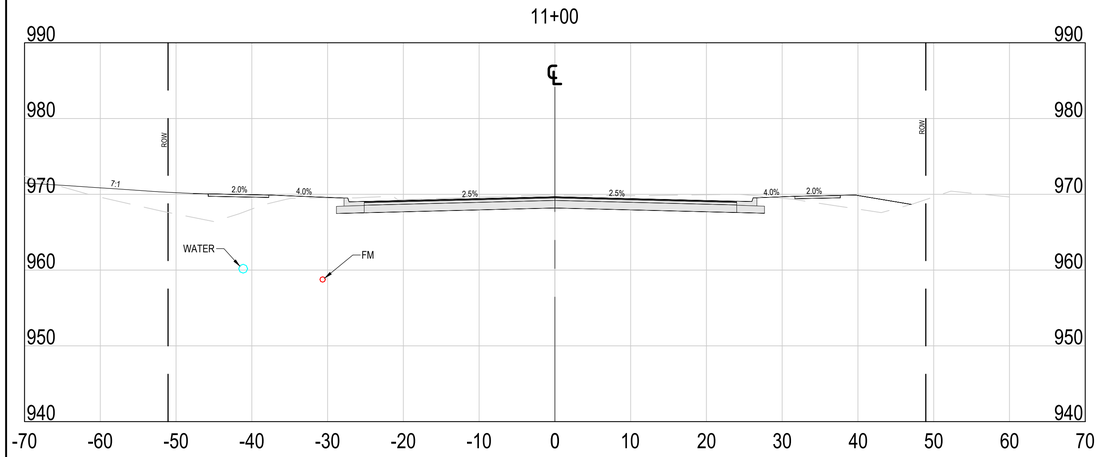
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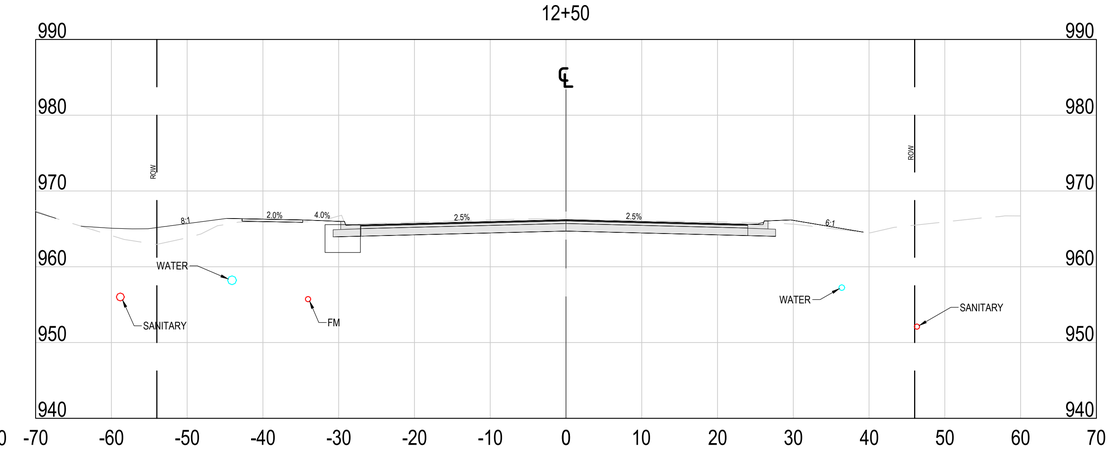
HUDSON BOULEVARD CROSS SECTIONS

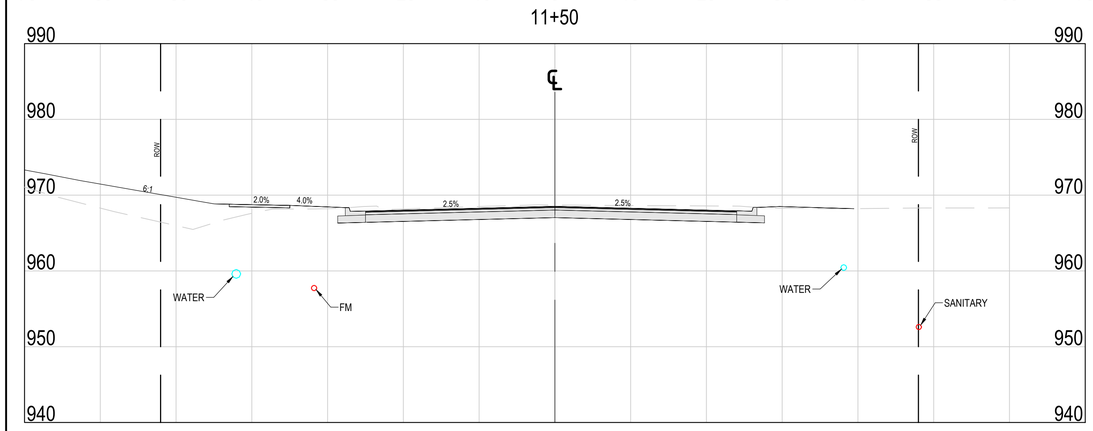
PROJECT NUMBER: DRS22002

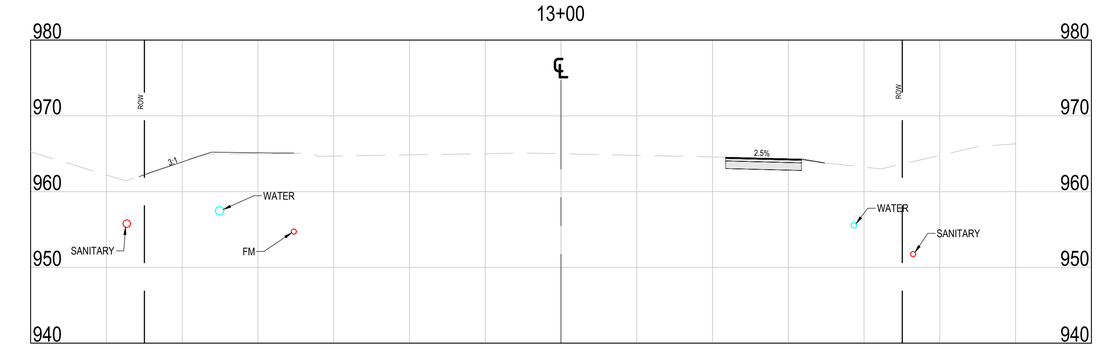
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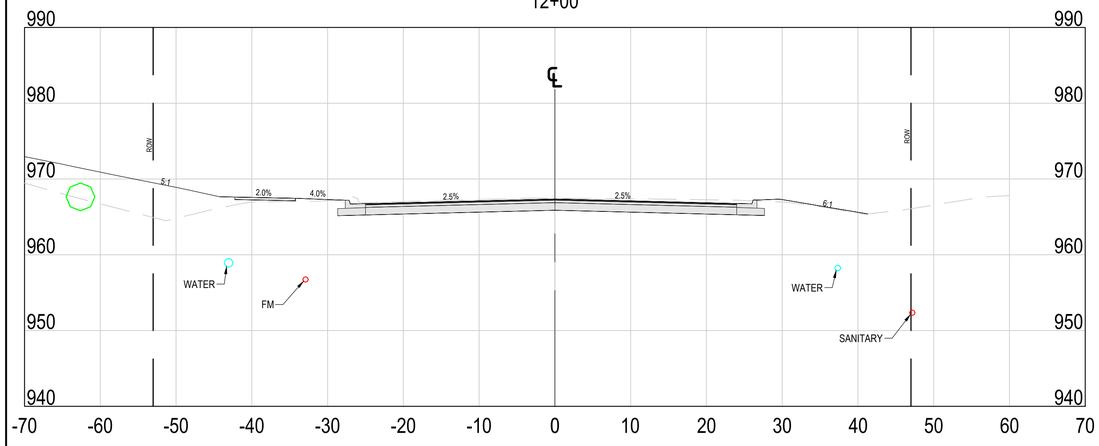
C5.10

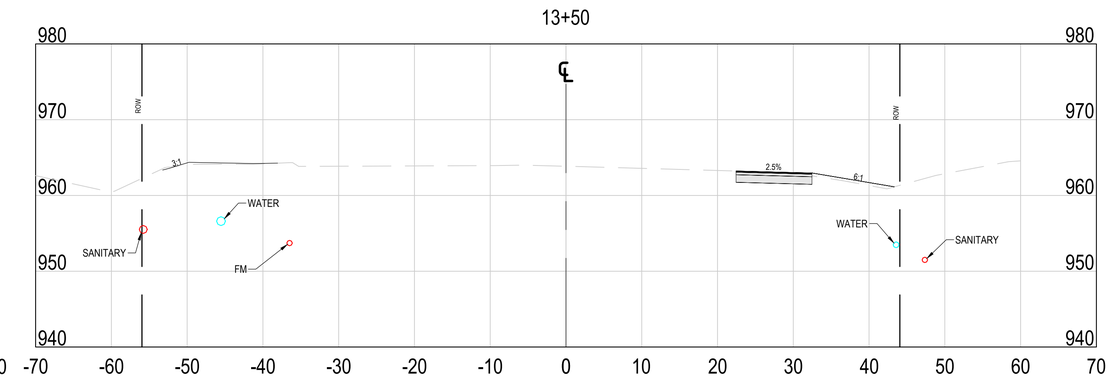












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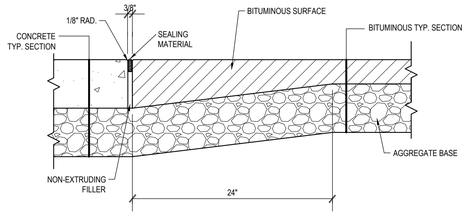
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HUDSON BOULEVARD CROSS SECTIONS

PROJECT NUMBER: DRS22002

SHEET NUMBER

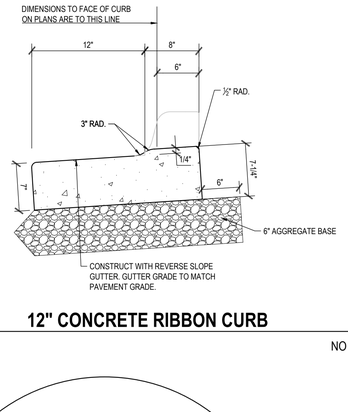
C5.11



10

THICKENED BITUMINOUS EDGE AND CONCRETE SURFACE

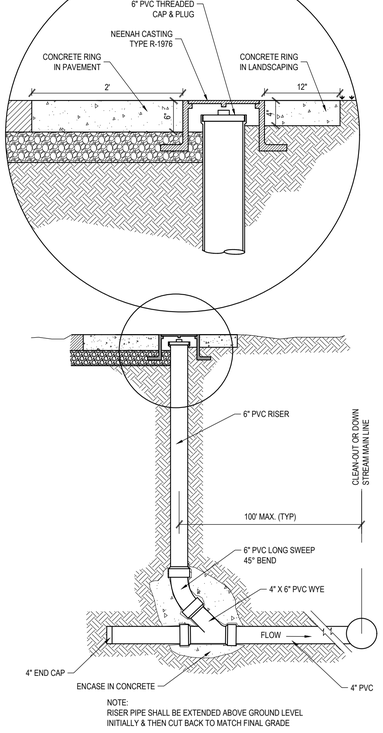
NO SCALE



11

12" CONCRETE RIBBON CURB

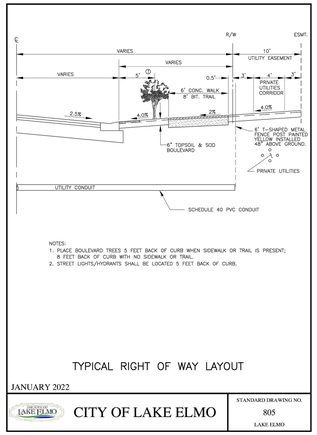
NO SCALE



12

CLEAN-OUT STRUCTURE

NO SCALE



TYPICAL RIGHT OF WAY LAYOUT

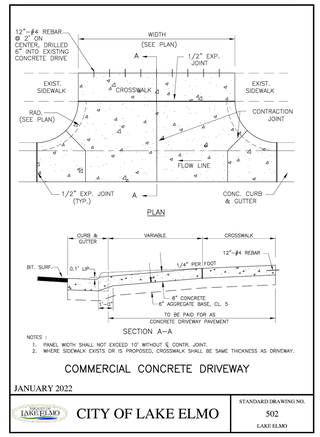
JANUARY 2022

CITY OF LAKE ELMO — STANDARD DRAWING NO. 805 LAKE ELMO

3

TYPICAL RIGHT OF WAY LAYOUT CITY OF LAKE ELMO

NO SCALE



COMMERCIAL CONCRETE DRIVEWAY

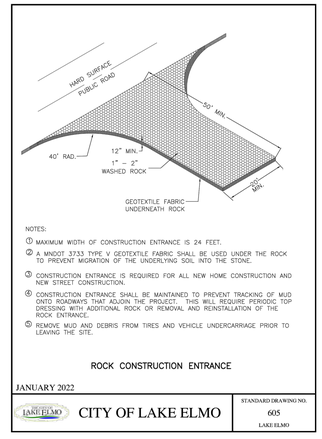
JANUARY 2022

CITY OF LAKE ELMO — STANDARD DRAWING NO. 502 LAKE ELMO

2

COMMERCIAL CONCRETE DRIVEWAY CITY OF LAKE ELMO

NO SCALE



ROCK CONSTRUCTION ENTRANCE

JANUARY 2022

CITY OF LAKE ELMO — STANDARD DRAWING NO. 605 LAKE ELMO

1

ROCK CONSTRUCTION ENTRANCE CITY OF LAKE ELMO

NO SCALE

TYPICAL POND SECTION

JANUARY 2022

CITY OF LAKE ELMO — STANDARD DRAWING NO. 416 LAKE ELMO

6

TYPICAL POND SECTION CITY OF LAKE ELMO

NO SCALE

MAINTAIN BY REMOVING SEDIMENT AND REPLACING DAMAGED LOGS UNTIL TURF IS ESTABLISHED. REMOVE AFTER PERMANENT STABILIZATION IS COMPLETE.

5

TEMPORARY COMPOST/BIO LOG

NO SCALE

SILT FENCE

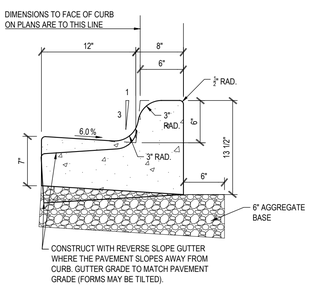
JANUARY 2022

CITY OF LAKE ELMO — STANDARD DRAWING NO. 601 LAKE ELMO

4

SILT FENCE CITY OF LAKE ELMO

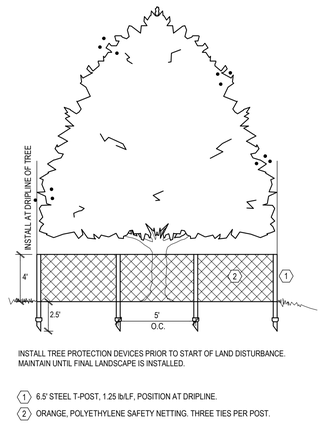
NO SCALE



9

B612 CONCRETE CURB AND GUTTER

NO SCALE



INSTALL TREE PROTECTION DEVICES PRIOR TO START OF LAND DISTURBANCE. MAINTAIN UNTIL FINAL LANDSCAPE IS INSTALLED.

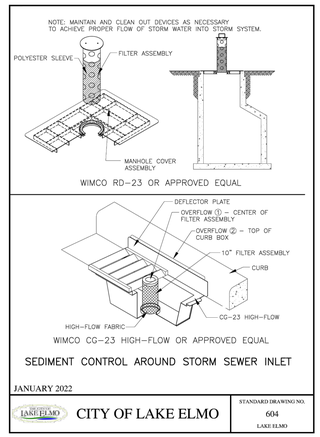
① 6.5' STEEL T-POST, 1.25 lb/LF, POSITION AT DRIPLINE.

② ORANGE, POLYETHYLENE SAFETY NETTING. THREE TIES PER POST.

8

TREE PROTECTION

NO SCALE



SEDIMENT CONTROL AROUND STORM SEWER INLET

JANUARY 2022

CITY OF LAKE ELMO — STANDARD DRAWING NO. 604 LAKE ELMO

7

SEDIMENT CONTROL AROUND SEWER INLET CITY OF LAKE ELMO

NO SCALE

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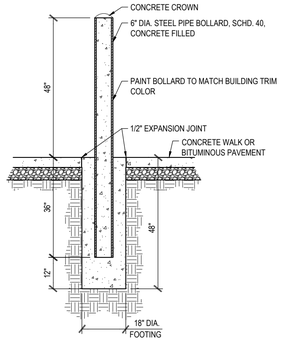
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CIVIL CONSTRUCTION DETAILS

PROJECT NUMBER: DRS22002

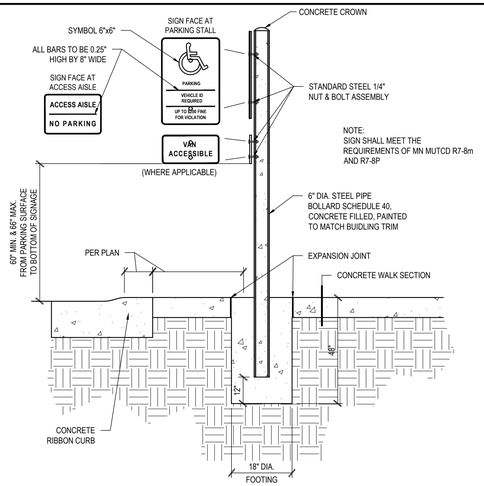
SHEET NUMBER

C7.1



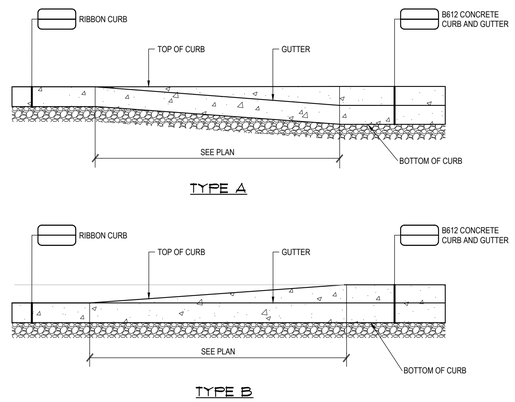
4 ROUND PIPE BOLLARD

NO SCALE



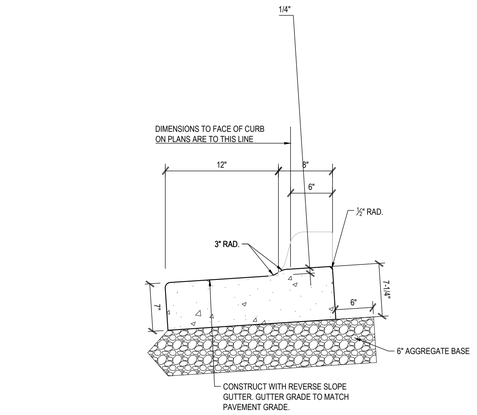
3 PIPE BOLLARD/ACCESSIBLE SIGN - MN

NO SCALE



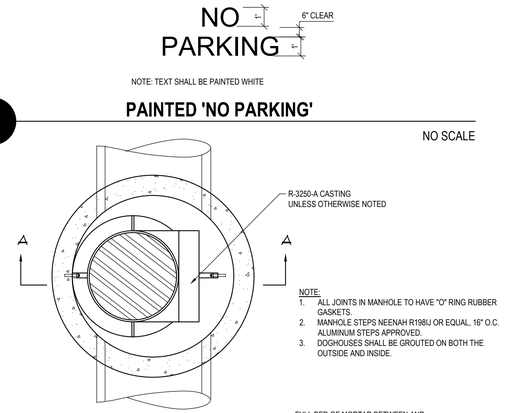
2 CONCRETE CURB TRANSITION

NO SCALE



1 12" CONCRETE RIBBON CURB

NO SCALE



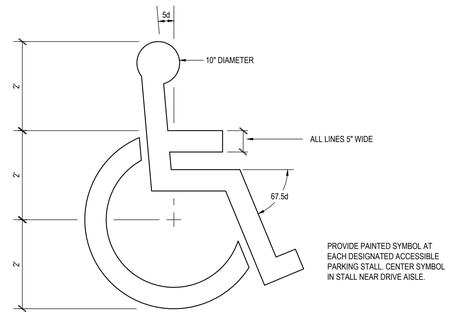
NOTE:
1. ALL JOINTS IN MANHOLE TO HAVE "O" RING RUBBER GASKETS.
2. MANHOLE STEPS NEENAH R1981J OR EQUAL, 16" O.C. ALUMINUM STEPS APPROVED.
3. DOGHOUSES SHALL BE GROUTED ON BOTH THE OUTSIDE AND INSIDE.

6 PAINTED 'NO PARKING'

NO SCALE

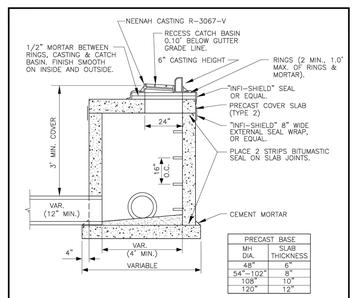
8 STORM SEWER CATCH BASIN MANHOLE WITH SAFL BAFFEL

NO SCALE



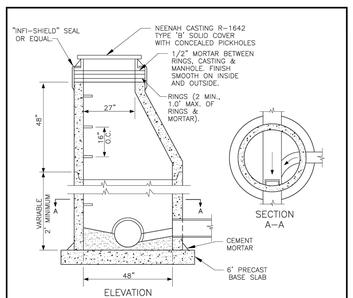
5 INTERNATIONAL SYMBOL OF ACCESS

NO SCALE



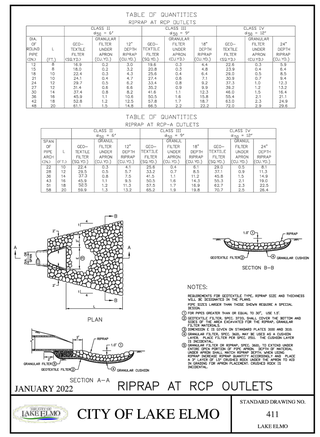
10 STORM SEWER CATCH BASIN MANHOLE

NO SCALE



9 STORM SEWER MANHOLE

NO SCALE



7 RIPRAP AT RCP OUTLETS CITY OF LAKE ELMO

NO SCALE

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Suite 513
Minneapolis, MN 55401
Tel: 612-252-9070
Fax: 612-252-9077
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TEL. 303.825.6200
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AUG. 29, 2022	CITY SUBMITTAL
OCT. 26, 2022	REVIEW SET
JAN. 25, 2023	PRELIM BID SET
FEB. 13, 2023	CITY SUBMITTAL
MAR. 07, 2023	WATERSHED SUBMITTAL
MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

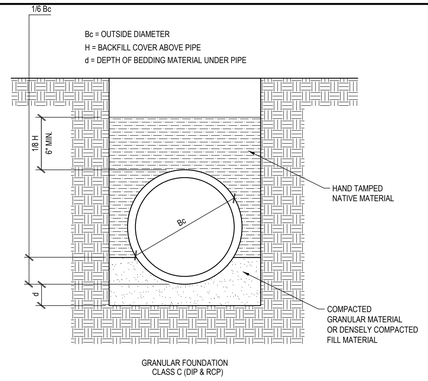
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CIVIL CONSTRUCTION DETAILS

PROJECT NUMBER: DRS22002

SHEET NUMBER

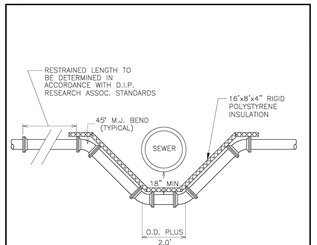
C7.2



CLASS C BEDDING THE PIPE IS BEDDED IN COMPACTED GRANULAR MATERIAL, OR DENSELY COMPACTED FILL MATERIAL UP TO A HEIGHT EQUAL TO ONE-SIXTH THE OUTSIDE DIAMETER OF THE PIPE. THE DEPTH (d) OF THE BEDDING MATERIAL BELOW THE PIPE IS A MINIMUM OF 3" FOR 27" AND SMALLER PIPE, 6" FOR 66" DIAMETER AND LARGER PIPE, AND 4" FOR INTERMEDIATE SIZES. THE REMAINING SIDEFILL AND BACKFILL MATERIAL IS COMPACTED NATIVE SOILS.

4 PIPE BEDDING

NO SCALE



NOTE: FITTINGS SHALL BE RESTRAINED WITH THE USE OF APPROVED MECHANICAL JOINT RESTRAINING GLANDS.

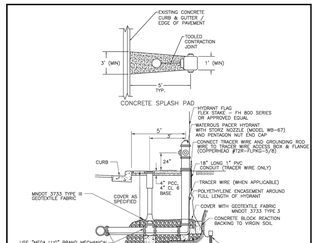
WATERMAIN OFFSET

JANUARY 2022

CITY OF LAKE ELMO	STANDARD DRAWING NO. 210 LAKE ELMO

3 WATERMAIN OFFSET CITY OF LAKE ELMO

NO SCALE



NOTES:
1. USE MEGA LUGS ON ALL JOINTS. PROVIDE CONCRETE BLOCKING BEHIND HYDRANT AND TEE. USE COR-BLUE T BOLTS ON ALL FITTINGS.
2. PLUG WEEP HOLES IF GROUNDWATER IS ENCOUNTERED.
3. ALL HYDRANTS SHALL BE PAINTED GREEN AND A TAG SHALL BE ATTACHED TO THE HYDRANT STATING "DRAIN HOLES PLUGGED".
4. SUPPLY 1 HYDRANT GATE VALVE AND VALVE BOX/ADJUSTABLE, MINIMUM ONE PER PROJECT.
5. SUPPLY 1 EXTRA HYDRANT BARREL AND HYDRANT WEAR AS SIZE PROJECT.
6. SUPPLY 1 6" HYDRANT EXTENSION AS DIRECTED BY THE ENGINEER.
7. ALL HYDRANTS NOT IN SERVICE SHALL BE COVERED WITH BLACK POLY PLASTIC.
8. CONCRETE SPLASH PAD SURFACE SHALL HAVE BROOMED FINISH.
**EXTRA STAKES AND REPAIR KITS ARE TO BE DELIVERED TO THE PUBLIC WORKS BUILDING.

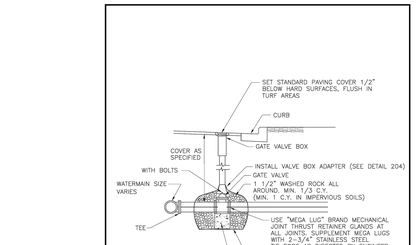
TYPICAL HYDRANT LAYOUT
(VALVE IN BOULEVARD)

JANUARY 2022

CITY OF LAKE ELMO	STANDARD DRAWING NO. 201 LAKE ELMO

2 TYPICAL HYDRANT SECTION CITY OF LAKE ELMO

NO SCALE



NOTES:
1. SUPPLY ONE GATE VALVE KEY PER PROJECT, AS DIRECTED BY THE ENGINEER. EXTRA KEYS SHALL BE DELIVERED TO THE PUBLIC WORKS BUILDING.
2. MAXIMUM DEPTH OF OPERATING NUT ON VALVE TO BE 10 FT.

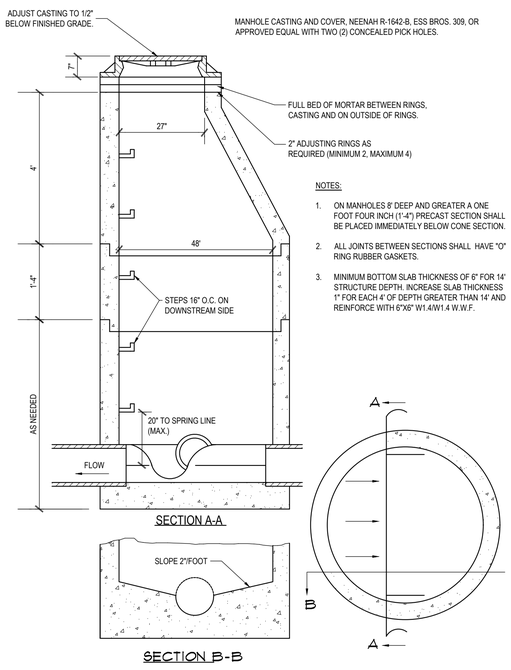
GATE VALVE INSTALLATION

JANUARY 2022

CITY OF LAKE ELMO	STANDARD DRAWING NO. 203 LAKE ELMO

1 GATE VALVE INSTALLATION CITY OF LAKE ELMO

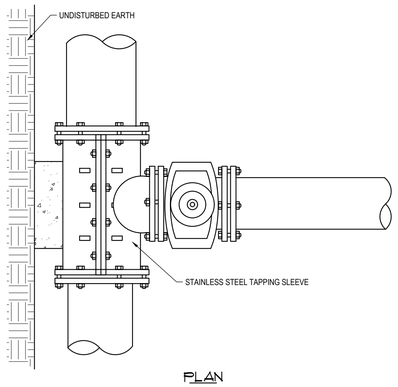
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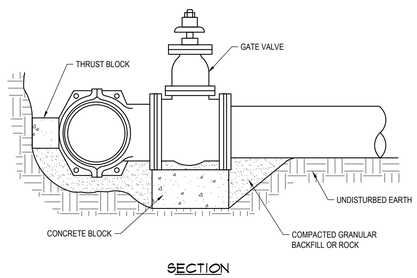


NOTES:
1. ON MANHOLES 8' DEEP AND GREATER A ONE FOOT FOUR INCH (1'-4") PRECAST SECTION SHALL BE PLACED IMMEDIATELY BELOW CONE SECTION.
2. ALL JOINTS BETWEEN SECTIONS SHALL HAVE "O" RING RUBBER GASKETS.
3. MINIMUM BOTTOM SLAB THICKNESS OF 6" FOR 14' STRUCTURE DEPTH. INCREASE SLAB THICKNESS 1" FOR EACH 4' OF DEPTH GREATER THAN 14' AND REINFORCE WITH 6"X6" W1.4/W1.4 W.W.F.

8 SANITARY SEWER MANHOLE

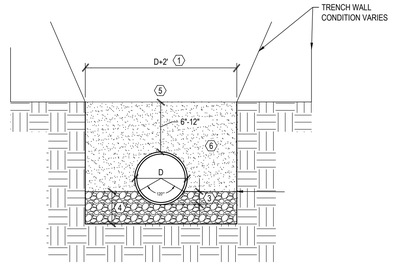
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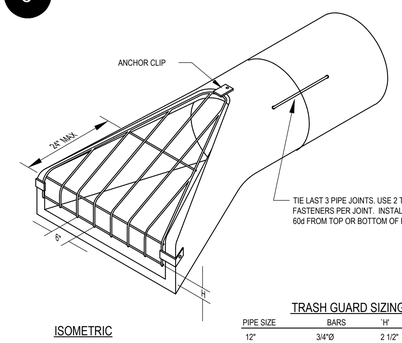
7 WATERMAIN WET TAP

NO SCALE



(1) 2' FOR PIPE 4" OR LESS.
(2) MACHINE EXCAVATION LIMIT FOR RIGID PIPE.
(3) HAND SHAPE BOTTOM FOR SUPPORT OF RIGID PIPE.
(4) MACHINE EXCAVATION LIMIT FOR FLEXIBLE PIPE, GRANULAR FOUNDATION (IF REQUIRED), OR BEDDING REQUIRED FOR LOCAL CONDITIONS. DEPTH VARIES.
(5) PROVIDE LOCATING/MARKING TAPE MEETING LOCAL REQUIREMENTS.
(6) SEE DETAIL FOR BEDDING AND ENCASEMENT

6 UTILITY TRENCHING



NO SCALE

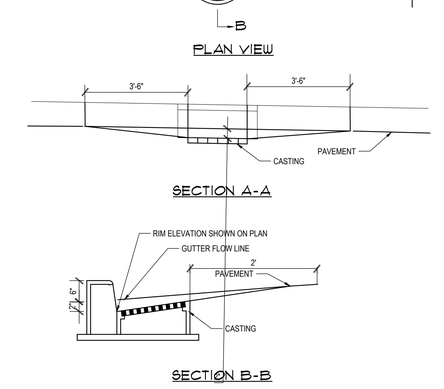
TRASH GUARD SIZING

PIPE SIZE	BARS	'H'	BOLTS
12"	3/4"Ø	2 1/2"	5/8"
15"	3/4"Ø	3"	5/8"
18"	3/4"Ø	4"	5/8"
21"24"	1"Ø	4"	3/4"
27"-36"	1"Ø	5"	3/4"
42"	1"Ø	6"	3/4"
48"-54"	1 1/4"Ø	6"	1"
60"-72"	1 1/4"Ø	7"	1"
78"-90"	1 1/4"Ø	8"	1"

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

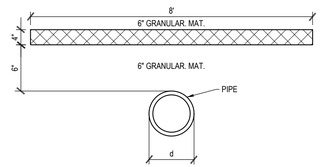
10 FLARED END SECTION AND TRASH GUARD

NO SCALE



5 CATCH BASIN CASTING SUMP AT CONCRETE CURB AND GUTTER

NO SCALE



1. 6" GRANULAR MATERIAL SHALL BE WELL COMPACTED AND LEVELED TO PERMIT PROPER BEARING FOR INSULATION BOARD.
2. INSULATION SHALL BE OF 1" OR 2" THICK BOARDS OF EXTRUDED OR EXPANDED POLYSTYRENE PLASTIC FOAM SPECIFICALLY DESIGNED FOR USE IN UNDERGROUND CONSTRUCTION AND HAVING A MINIMUM COMPRESSIVE STRENGTH OF 35 PSI. SPECIAL NOTE IS TO BE TAKEN THAT THIS TYPE IS DIFFERENT THAN THE TYPE USED IN ORDINARY BUILDING CONSTRUCTION. THE INSULATION BOARD SHALL COMPLY WITH ATSM-D 1621.

9 SANITARY SEWER INSULATION

NO SCALE

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APR. 14, 2023	CITY SUBMITTAL

DRAWING TITLE

CIVIL CONSTRUCTION DETAILS

PROJECT NUMBER: DRS22002

SHEET NUMBER

C7.3

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
5. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES
SITE RESTORATION PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600D LAKE ELMO

9 SITE RESTORATION STANDARD NOTES

NO SCALE

1. BITUMINOUS TRAILS AND SIDEWALKS MUST BE CONSTRUCTED TO MAINTAIN POSITIVE DRAINAGE AWAY FROM THE PATHWAYS THROUGHOUT THE ENTIRE LENGTH.
2. TOPSOIL AND BACKFILLING OPERATIONS MUST BE COMPLETED TO AVOID DAMAGE TO THE BITUMINOUS TRAILS AND SIDEWALKS. FINAL GRADE OF BACKFILL AND TOPSOIL MUST BE FLUSH WITH THE PATH EDGE TO AVOID TRAPPING WATER.
3. DIVIDE SIDEWALK INTO SECTIONS WITH CONTRACTION JOINTS. SPACING SHALL NOT BE LESS THAN 3 FT NOR GREATER THAN 12 FT IN ANY DIMENSION. PLACE ½ INCH EXPANSION JOINT FILLER AT 50 FT (MAXIMUM) INTERVALS.
4. CONCRETE PEDESTRIAN RAMPS MUST BE CONSTRUCTED AT ALL INTERSECTIONS.

STANDARD PLAN NOTES
SIDEWALKS AND TRAILS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 500A LAKE ELMO

9 SIDEWALK AND TRAIL STANDARD NOTES

NO SCALE

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.
2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.
3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.
5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.
6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.
7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.
8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600A LAKE ELMO

9. DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR FOR DEWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR THERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL, OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.
10. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS. PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.
11. DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.
12. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600B LAKE ELMO

13. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.
14. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.
15. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.
16. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.
17. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
18. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

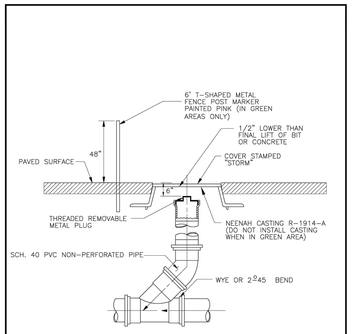
STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600C LAKE ELMO

7 GRADING AND EROSION CONTROL STANDARD NOTES

NO SCALE



NOTE:
INSTALL CLEANOUTS AT A PROPERTY LINE WHENEVER POSSIBLE.

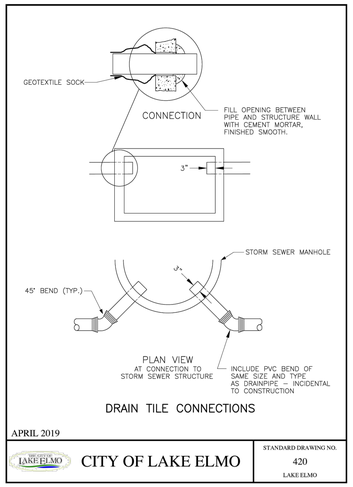
DRAINTILE CLEANOUT
(CASTING USED FOR CURB STOPS IN HARD SURFACES)

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 419 LAKE ELMO

4 DRAINTILE CLEANOUT

NO SCALE



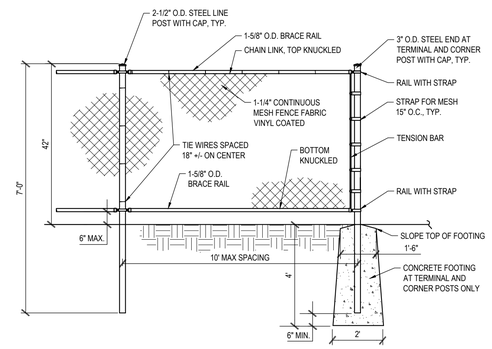
DRAIN TILE CONNECTIONS

APRIL 2019

CITY OF LAKE ELMO | STANDARD DRAWING NO. 420 LAKE ELMO

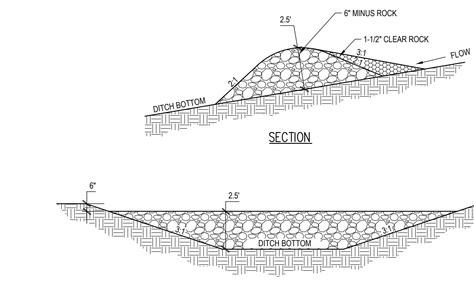
5 DRAINTILE CONNECTIONS

NO SCALE



6 42" VINYL COATED CHAINLINK FENCE

NO SCALE

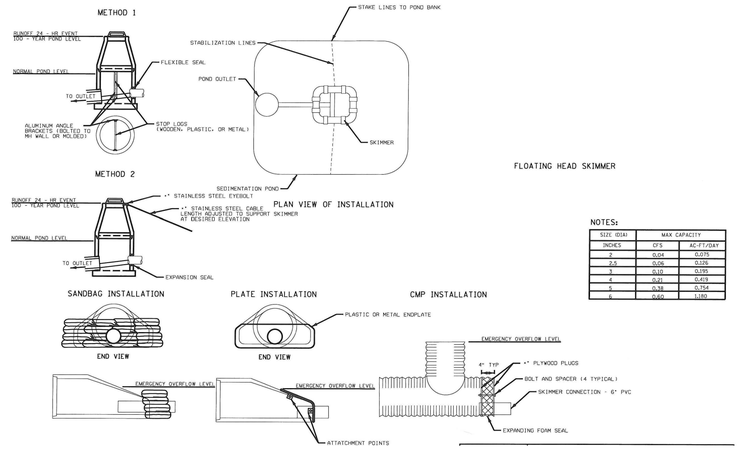


SECTION

ELEVATION

1 ROCK DIKE

NO SCALE



FLOATING HEAD SKIMMER

PLAN VIEW OF INSTALLATION

NOTES:

SIZE (DIA)	MAX CAPACITY	
INCHES	CFS	AC-FT/DAY
2	0.04	0.075
2.5	0.06	0.126
3	0.10	0.195
4	0.21	0.413
5	0.38	0.754
6	0.60	1.180

2 FLOATING HEAD SKIMMER

NO SCALE

3 RESERVED

NO SCALE

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PRELIMINARY NOT FOR CONSTRUCTION

I hereby certify that this plan 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.

Tom O. Meyer
License No: 42016 Date:

Signature shown is a digital reproduction of original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

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496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

ELECTRIC AUTO SALES & SERVICE

HUDSON BLVD N.
LAKE ELMO, MN 55042

AUG. 29, 2022	CITY SUBMITTAL
OCT. 26, 2022	REVIEW SET
JAN. 25, 2023	PRELIM BID SET
FEB. 13, 2023	CITY SUBMITTAL
MAR. 07, 2023	WATERSHED SUBMITTAL
MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

DRAWING TITLE

CIVIL CONSTRUCTION DETAILS

PROJECT NUMBER: DRS22002

SHEET NUMBER

C7.4

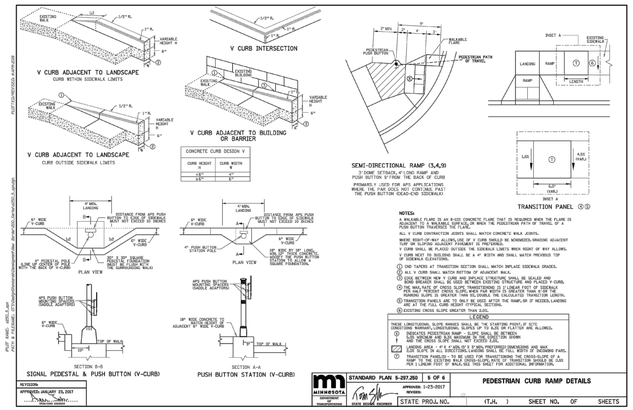
CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 5 OF 6

STANDARD DRAWING NO. 507E

LAKE ELMO



NOTES:
A WALKABLE FLARE IS AN 8 FOOT CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS LESS THAN 4 FEET FROM THE EDGE OF THE PATH OF TRAVEL OF A PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSED NOT FLARE.

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

THE MINIMUM ALLOWABLE WIDTH OF A WALKABLE RAMP IS 4 FEET. THE MAXIMUM ALLOWABLE WIDTH OF A WALKABLE RAMP IS 10 FEET.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN HEIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH TREATED TOP OF WALL ELEVATION.

1 END TAPERS AT TRANSITION SECTION SHALL MATCH INFLARE SIDEWALK GRADES.

2 ALL V CURB SHALL MATCH TOP OF ADJACENT WALK.

3 EDGE BETWEEN NEW V CURB AND INFLARE CONCRETE SHALL BE SEALED AND SHOW BREAKED SHALL BE USED TO MINIMIZE STRUCTURE AND PLACED V CURB.

4 NO WALL NOTE OF "MATCH SLOPE, TRANSITIONING TO 2 LINEAR FEET OF DISTANCE FROM CURB" SHALL BE USED ON PLANS. THE SLOPE OF THE WALK SHALL BE 2% MAX.

5 CURB TRANSITION SHALL BE USED FROM CURVING RAMP TO CHORD OF TRIANGULAR RAMP WHERE THE RADIUS OF THE CURVE IS LESS THAN 10 FEET.

6 EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINTS AT SITE CONDITIONS WARRANTS LONGITUDINAL SLOPES UP TO 5% FLATTER ARE ALLOWED.
INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
LANDING AREA - 4' X 4.00% OR 5' X 2.00% PREFERRED DIMENSIONS ARE MIN
INDICATES DETECTABLE WARNING SURFACE - SEE DETECTABLE WARNING PANEL.
TRANSITION PANELS - TO BE USED FOR TRANSITIONAL THE CROWN/SLOPE OF A WALKWAY TO THE EXISTING BACK CROSS-SLOPE PATH OF TRANSITION SHOULD BE <3%) FOR LONGER PORT OF WALK SEE TRAIL FOR ADDITIONAL INFORMATION.

REVISIONS
APPROVED: JANUARY 25, 2017
STATE ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD PLAN S-297.250 5 OF 6
APPROVED: 1-25-2017
REVISED:
STATE ENGINEER
STATE PROJ. NO. (TJL) SHEET NO. OF SHEETS

PEDESTRIAN CURB RAMP DETAILS

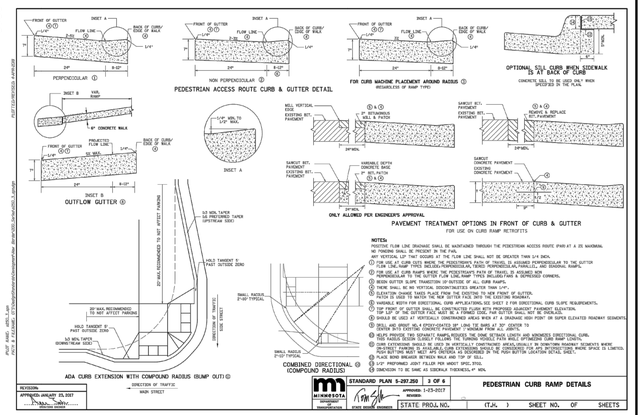
CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 3 OF 6

STANDARD DRAWING NO. 507C

LAKE ELMO



NOTES:
POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMAL.

NO TONGUING SHALL BE PRESENT IN THE PAR.

ANY VERTICAL LIP THAT SHOULD BE AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.

FOR USE BY CURB RAMP RETROFITS

1 FOR USE AT CURB CUTS WHERE THE PEDESTRIAN PATH OF TRAVEL IS ALREADY CONSTRUCTED TO THE CURB AND THE CURB RAMP IS PERPENDICULAR TO THE CUTTER

2 FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN PATH OF TRAVEL IS ADJACENT AND PARALLEL TO THE CURB RAMP AND THE CURB RAMP IS PERPENDICULAR

3 VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS, SEE SHEET 1 FOR DIRECTIONAL & DEPRESSED CORNERS.

4 TOP FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION.

5 SEE SHEET 1 FOR DETECTABLE WARNING SURFACE DIMENSIONS. DETECTABLE WARNING MAT BE INSTALLED.

6 SHALL BE USED AT VERTICALLY CONSTRUCTED AREAS WHERE A 2% MAXIMAL FLOW POINT ON SUPER ELEVATED ROADWAY SEGMENTS

7 SHALL BE USED AT VERTICALLY CONSTRUCTED AREAS WHERE A 2% MAXIMAL FLOW POINT ON SUPER ELEVATED ROADWAY SEGMENTS

8 HELPS PROVIDE TWO SEPARATE RAMPS REDUCES THE CURB RETRACTS LENGTH AND ADVANCES DIRECTIONAL CURB.

9 CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRUCTED AREAS,USUALLY IN DOWNTOWN PAVEMENT SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE.CURB EXTENSIONS SHOULD BE CONSIDERED FOR ANY INTERSECTIONS WHERE SPACE IS LIMITED, AND WHERE THEY WILL NOT INTERFERE WITH TRUCK TURNING MOVEMENTS OR THE PUSH BUTTON LOCATION DETAIL SHEET.

10 PLACE BOND BREAKER BETWEEN WALK AND TOP OF BELL.

11 1/2" PREFORMED JOINT FILLER FOR WIDEST SPEC.STEEL

12 DIMENSION TO BE SAME AS SIDEWALK THICKNESS,4" MIN.

LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINTS AT SITE CONDITIONS WARRANTS LONGITUDINAL SLOPES UP TO 5% FLATTER ARE ALLOWED.
INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
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INDICATES DETECTABLE WARNING SURFACE - SEE DETECTABLE WARNING PANEL.
TRANSITION PANELS - TO BE USED FOR TRANSITIONAL THE CROWN/SLOPE OF A WALKWAY TO THE EXISTING BACK CROSS-SLOPE PATH OF TRANSITION SHOULD BE <3%) FOR LONGER PORT OF WALK SEE TRAIL FOR ADDITIONAL INFORMATION.

REVISIONS
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MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD PLAN S-297.250 3 OF 6
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STATE ENGINEER
STATE PROJ. NO. (TJL) SHEET NO. OF SHEETS

PEDESTRIAN CURB RAMP DETAILS

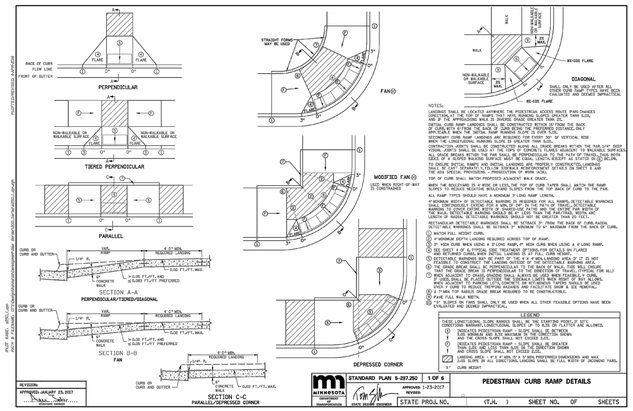
CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 1 OF 6

STANDARD DRAWING NO. 507A

LAKE ELMO



NOTES:
LANDING SHALL BE LOCATED APPROPRIATE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES LONGITUDINAL SLOPE. THE TOP OF RAMPS TWO (MAX) RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS SMOOTHER GRADED.

THE MINIMUM ALLOWABLE WIDTH OF A WALKWAY RAMP IS 4 FEET. THE MAXIMUM ALLOWABLE WIDTH OF A WALKWAY RAMP IS 10 FEET.

ALL CURB RAMPS SHALL BE CONSTRUCTED WITH RETURNS UP FROM THE BACK OF CURB AND FLARES FROM BACK OF WALK WHERE THE PEDESTRIAN ENTRANCE ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE CONSTRUCTED LIMITING THE CROSS SLOPE OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

CONSTRUCTION JOINTS SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE TRAPEZOIDAL CONSTRUCTED LANDINGS SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE WALKWAYS IS 4 FEET OR LESS THE TOP OF TURF TAPER SHALL MATCH THE RAMP. WHEN THE WALKWAY IS GREATER THAN 4 FEET THE TOP OF CURB TAPER SHALL MATCH THE WALK.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3'-LONG RAMP LENGTH.

A MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS.DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN.OF 24" TO THE PATH OF TRAVEL.DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE NEAREST THE STREET IS WITHIN 6" OF THE BACK OF CURB.DETECTABLE WARNINGS SHALL BE A MINIMUM 2' WIDE.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 2" FROM THE BACK OF CURB.RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 9" MINIMUM TO 24" MAXIMUM FROM THE BACK OF CURB.

1 WATCH FULL WIDTH CURB.

2 A MINIMUM OF 4 FEET IS REQUIRED ACROSS TOP OF RAMP.

3 4' MIN CURB RAMP WIDTH USING A 5' LONG RAMP.4' MIN CURB RAMP LENGTH USING A 4' LONG RAMP.

4 SEE SHEET 4 OF 6,TYPICAL SIDE TREATMENT OPTIONS FOR DETAILS ON FLARES

5 SEE SHEET 1 FOR DETECTABLE WARNING SURFACE DIMENSIONS.

6 DETECTABLE WARNINGS MAY BE THAT AT A 4 FOOT LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.

7 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

8 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

9 2' MIN TOP RADIUS CRUSH BREAK REQUIRED TO BE CONSTRUCTABLE.

10 TOP OF BELL MIN WIDTH.

11 1/4" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EXHAUSTED AND APPROVED BY ENGINEER.

LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINTS AT SITE CONDITIONS WARRANTS LONGITUDINAL SLOPES UP TO 5% FLATTER ARE ALLOWED.
INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
LANDING AREA - 4' X 4.00% OR 5' X 2.00% PREFERRED DIMENSIONS ARE MIN
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TRANSITION PANELS - TO BE USED FOR TRANSITIONAL THE CROWN/SLOPE OF A WALKWAY TO THE EXISTING BACK CROSS-SLOPE PATH OF TRANSITION SHOULD BE <3%) FOR LONGER PORT OF WALK SEE TRAIL FOR ADDITIONAL INFORMATION.

REVISIONS
APPROVED: JANUARY 25, 2017
STATE ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD PLAN S-297.250 1 OF 6
APPROVED: 1-25-2017
REVISED:
STATE ENGINEER
STATE PROJ. NO. (TJL) SHEET NO. OF SHEETS

PEDESTRIAN CURB RAMP DETAILS

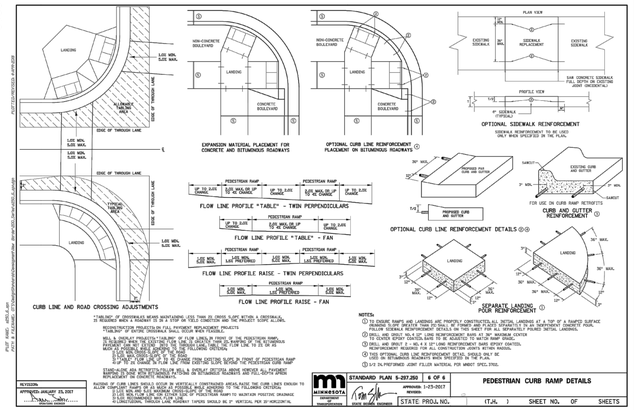
CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 6 OF 6

STANDARD DRAWING NO. 507F

LAKE ELMO



NOTES:
1 TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED,ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

2 SEALANT SHALL BE USED AT ALL EXPANSION JOINTS WHICH SPECIFIED IN THE PLAN.

3 1/2 IN.PREFORMED JOINT FILLER MATERIAL FOR WHICH SPEC.STEEL

4 SEE SHEET 1 FOR DETECTABLE WARNING SURFACE DIMENSIONS.

5 DETECTABLE WARNINGS MAY BE THAT AT A 4 FOOT LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.

6 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

7 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

8 2' MIN TOP RADIUS CRUSH BREAK REQUIRED TO BE CONSTRUCTABLE.

9 TOP OF BELL MIN WIDTH.

10 1/4" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EXHAUSTED AND APPROVED BY ENGINEER.

REVISIONS
APPROVED: JANUARY 25, 2017
STATE ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD PLAN S-297.250 6 OF 6
APPROVED: 1-25-2017
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PEDESTRIAN CURB RAMP DETAILS

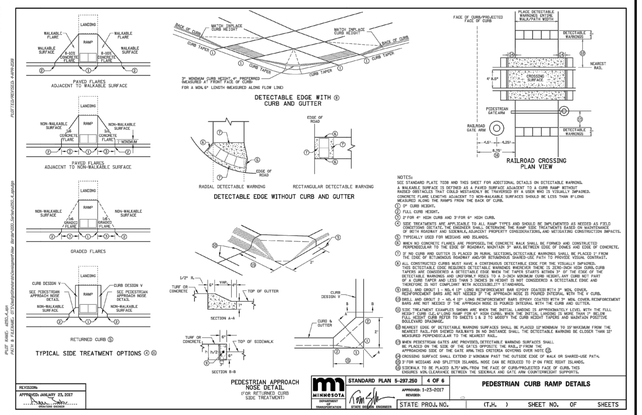
CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 4 OF 6

STANDARD DRAWING NO. 507D

LAKE ELMO



NOTES:
SEE STANDARD PLATE T208 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP BEYOND DETECTABLE WARNING THAT IS AT LEAST 4 FEET WIDE AND AT A GRADE NOT TO EXCEED 2% IN ANY DIRECTION. CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8'LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

1 BY CURB RADIUS.

2 FULL CURB RADIUS.

3 SEE SHEET 1 FOR CURB AND D FOR BY HIGH CURB.

4 SEE TREATMENTS ARE APPLICABLE TO ALL CURB TYPES AND SHOULD BE IMPLEMENTED AS NOTED AS FIELD CONDITIONS DETAILS. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE NEEDS, DRAINAGE, SNOW REMOVAL, PEDESTRIAN ACCESSIBILITY CONSIDERATIONS, AND NOTIFIED CONSTRUCTION IMPACTS.

5 TYPICALLY USED FOR MEDIANS AND ISLANDS.

6 WHEN NO CONNECTED FLARES ARE PROPOSED THE CONCRETE BACK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 2% MAX BETWEEN SIDE OF RAMPS AND EDGE OF CONCRETE.

7 IF NO CURB AND GUTTER IS PLACED IN TRAIL SECTIONS,DETECTABLE WARNING SHALL BE PLACED 2'FROM THE EDGE OF THE CONCRETE PAVEMENT.DETECTABLE WARNING SHALL BE PLACED PERPENDICULAR TO THE RAMP.

8 ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNING MARKERS SUCH AS STAND-BACK SIDE CURBS.CURB RAMPS WITHOUT FLARES,OR CURB EXTENSIONS.THE DETECTABLE EDGE SHALL BE LOCATED AT THE BOTTOM OF THE RAMP,CURB EXTENSION AND SHALL BE 2' WIDE AND CONTRASTING WITH ADJACENT SURFACES. THE DETECTABLE WARNINGS ARE NOT REQUIRED WHERE THE CURB RAMP OR CURB EXTENSION IS PERPENDICULAR TO THE ROADWAY AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.

9 HELPS PROVIDE TWO SEPARATE RAMPS REDUCES THE CURB RETRACTS LENGTH AND ADVANCES DIRECTIONAL CURB.

10 CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRUCTED AREAS,USUALLY IN DOWNTOWN PAVEMENT SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE.CURB EXTENSIONS SHOULD BE CONSIDERED FOR ANY INTERSECTIONS WHERE SPACE IS LIMITED, AND WHERE THEY WILL NOT INTERFERE WITH TRUCK TURNING MOVEMENTS OR THE PUSH BUTTON LOCATION DETAIL SHEET.

11 PLACE BOND BREAKER BETWEEN WALK AND TOP OF BELL.

12 1/2" PREFORMED JOINT FILLER FOR WIDEST SPEC.STEEL

13 DIMENSION TO BE SAME AS SIDEWALK THICKNESS,4" MIN.

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STATE ENGINEER

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STANDARD PLAN S-297.250 4 OF 6
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PEDESTRIAN CURB RAMP DETAILS

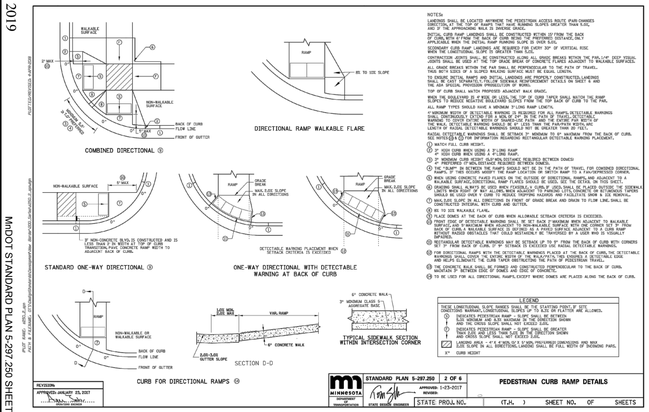
CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 2 OF 6

STANDARD DRAWING NO. 507B

LAKE ELMO



NOTES:
LANDING SHALL BE LOCATED APPROPRIATE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES LONGITUDINAL SLOPE. THE TOP OF RAMPS TWO (MAX) RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS SMOOTHER GRADED.

ALL CURB RAMPS SHALL BE CONSTRUCTED WITH RETURNS UP FROM THE BACK OF CURB AND FLARES FROM BACK OF WALK WHERE THE PEDESTRIAN ENTRANCE ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE TRAPEZOIDAL CONSTRUCTED LANDINGS SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

CONSTRUCTION JOINTS SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

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RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 2" FROM THE BACK OF CURB.RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 9" MINIMUM TO 24" MAXIMUM FROM THE BACK OF CURB.

1 WATCH FULL WIDTH CURB.

2 A MINIMUM OF 4 FEET IS REQUIRED ACROSS TOP OF RAMP.

3 4' MIN CURB RAMP WIDTH USING A 5' LONG RAMP.4' MIN CURB RAMP LENGTH USING A 4' LONG RAMP.

4 SEE SHEET 4 OF 6,TYPICAL SIDE TREATMENT OPTIONS FOR DETAILS ON FLARES

5 SEE SHEET 1 FOR DETECTABLE WARNING SURFACE DIMENSIONS.

6 DETECTABLE WARNINGS MAY BE THAT AT A 4 FOOT LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.

7 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

8 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

9 2' MIN TOP RADIUS CRUSH BREAK REQUIRED TO BE CONSTRUCTABLE.

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LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINTS AT SITE CONDITIONS WARRANTS LONGITUDINAL SLOPES UP TO 5% FLATTER ARE ALLOWED.
INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
LANDING AREA - 4' X 4.00% OR 5' X 2.00% PREFERRED DIMENSIONS ARE MIN
INDICATES DETECTABLE WARNING SURFACE - SEE DETECTABLE WARNING PANEL.
TRANSITION PANELS - TO BE USED FOR TRANSITIONAL THE CROWN/SLOPE OF A WALKWAY TO THE EXISTING BACK CROSS-SLOPE PATH OF TRANSITION SHOULD BE <3%) FOR LONGER PORT OF WALK SEE TRAIL FOR ADDITIONAL INFORMATION.

REVISIONS
APPROVED: JANUARY 25, 2017
STATE ENGINEER

MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD PLAN S-297.250 2 OF 6
APPROVED: 1-25-2017
REVISED:
STATE ENGINEER
STATE PROJ. NO. (TJL) SHEET NO. OF SHEETS

PEDESTRIAN CURB RAMP DETAILS

CITY OF LAKE ELMO

APRIL 2019

MnDOT STANDARD PLAN 5-297.250 SHEET 5 OF 6

STANDARD DRAWING NO. 507B

LAKE ELMO

NOTES:
LANDING SHALL BE LOCATED APPROPRIATE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES LONGITUDINAL SLOPE. THE TOP OF RAMPS TWO (MAX) RUNNING SLOPES GREATER THAN 5.0%, AND IF THE APPROACHING WALK IS SMOOTHER GRADED.

ALL CURB RAMPS SHALL BE CONSTRUCTED WITH RETURNS UP FROM THE BACK OF CURB AND FLARES FROM BACK OF WALK WHERE THE PEDESTRIAN ENTRANCE ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.0%

TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE TRAPEZOIDAL CONSTRUCTED LANDINGS SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE

TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

CONSTRUCTION JOINTS SHALL BE CONSTRUCTED DURING ALL RAMP BREAKS WITHIN THE PAR.3/4" JOINT FILLER SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.

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TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.

WHEN THE WALKWAYS IS 4 FEET OR LESS THE TOP OF TURF TAPER SHALL MATCH THE RAMP. WHEN THE WALKWAY IS GREATER THAN 4 FEET THE TOP OF CURB TAPER SHALL MATCH THE WALK.

ALL RAMP TYPES SHOULD HAVE A MINIMUM 3'-LONG RAMP LENGTH.

A MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS.DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN.OF 24" TO THE PATH OF TRAVEL.DETECTABLE WARNINGS SHALL BE LOCATED SO THAT THE EDGE NEAREST THE STREET IS WITHIN 6" OF THE BACK OF CURB.DETECTABLE WARNINGS SHALL BE A MINIMUM 2' WIDE.

RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 2" FROM THE BACK OF CURB.RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 9" MINIMUM TO 24" MAXIMUM FROM THE BACK OF CURB.

1 WATCH FULL WIDTH CURB.

2 A MINIMUM OF 4 FEET IS REQUIRED ACROSS TOP OF RAMP.

3 4' MIN CURB RAMP WIDTH USING A 5' LONG RAMP.4' MIN CURB RAMP LENGTH USING A 4' LONG RAMP.

4 SEE SHEET 4 OF 6,TYPICAL SIDE TREATMENT OPTIONS FOR DETAILS ON FLARES

5 SEE SHEET 1 FOR DETECTABLE WARNING SURFACE DIMENSIONS.

6 DETECTABLE WARNINGS MAY BE THAT AT A 4 FOOT LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.

7 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

8 WHEN ADJACENT TO GRADED SHOULDERS SHALL ALWAYS BE USED WHEN FEASIBLE.4' CURB RAMP LENGTH MAY BE USED WHEN A 5' LONG RAMP IS NOT FEASIBLE.

9 2' MIN TOP RADIUS CRUSH BREAK REQUIRED TO BE CONSTRUCTABLE.

10 TOP OF BELL MIN WIDTH.

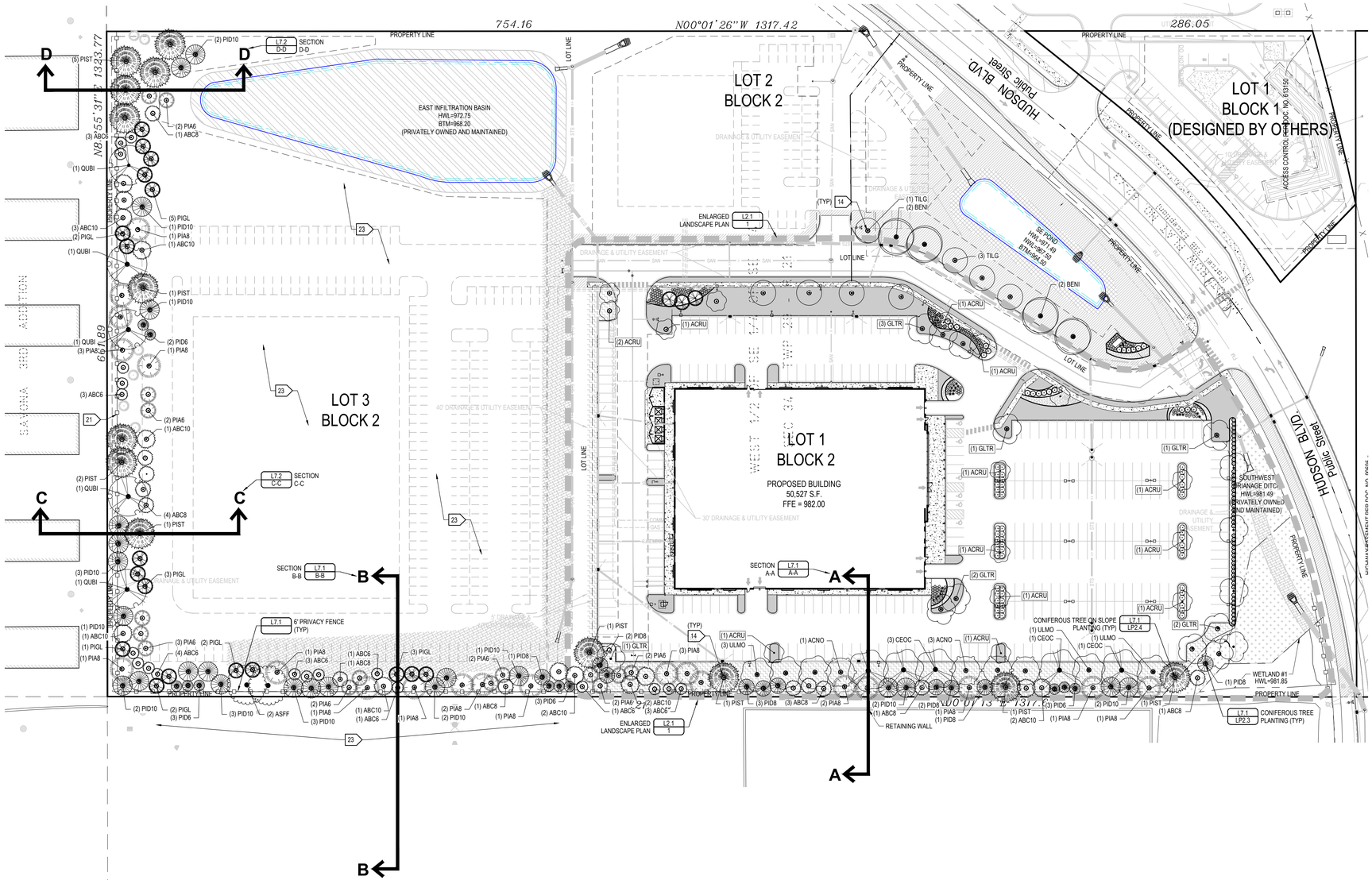
11 1/4" SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EXHAUSTED AND APPROVED BY ENGINEER.

LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINTS AT SITE CONDITIONS WARRANTS LONGITUDINAL SLOPES UP TO 5% FLATTER ARE ALLOWED.
INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
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MINNESOTA DEPARTMENT OF TRANSPORTATION
STANDARD PLAN S-297.250 2 OF 6
APPROVED: 1-25-2017
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STATE ENGINEER
STATE PROJ. NO. (TJL) SHEET NO. OF SHEETS

PEDESTRIAN C



GENERAL NOTES

1. For construction Staking and Surveying services contact Landform at 612.252.9070.

LANDSCAPE NOTES

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5. All existing deciduous/coniferous trees are to be trimmed of dead wood and pruned to a natural uniform shape.
6. Planting soil shall consist of 4 parts topsoil to 1 part peat humus, with 3 pounds of commercial fertilizer added per cubic yard.
7. Spread a minimum of 4 inches of topsoil and sod all turf areas disturbed by Construction.
8. Edge planting beds with 5-inch, 3/16" thick, black, commercial grade steel edging (Sur-Loc or approved equal) except where adjacent to curbing, walks or buildings.
9. Place plants according to layout with proper nominal spacing. For discrepancy between the number of plants on the Schedule and the number shown on the Drawing, the Drawing shall govern.
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15. Install 2 to 3 inch (nominal size) grey trap rock to a depth of 4 inches in all planting beds unless noted otherwise. Landscape fabric shall be installed under all areas of rock mulch. Secure all edges and seams of fabric with 6-inch landscape staples.
16. Irrigation is required for all turf, perennials, shrubs and trees. Irrigation shall be designed by irrigation contractor. Contractor shall submit design plan and all shop drawings and system components to Landscape Architect for review, prior to purchase and installation. Contractor shall follow all applicable codes and obtain all necessary permits from local jurisdiction.
17. Seed mixtures (MNDOT 25-131, MNDOT 33-261 and MNDOT 33-262) as defined in current MNDOT Seeding Manual. Seed mixture (BWSR Native Grass Waterway General) as defined by Minnesota Board of Water and Soil Resources. Native Seeds shall be of Minnesota origin and certified by the Minnesota Crop Improvement Association (MCIA). Provide verifying documentation to the Owner 30 days minimum prior to installation. Refer to Legend below.
18. Remainder of Lots 2 &3, Block 2 shall be seeded with MNDOT 21-112 (Winter Wheat Cover Crop). Seed at rate of 100.0 lbs/acre.
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21. Six (6') foot privacy fence. Trex or similar approved by Owner. Color: TBD. See Detail L7.0/6.
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23. Irrigation for Lot 3, Block 2 to be provided in phase one of construction and supply to come from Lot 1, Block 2. Contractor to provide all piping and valves necessary in phase one so that the supply for Lot 3, Block 2 can be disconnected from Lot 1, Block 2 and reconnected to the future Lot 3, Block 2 building.
24. See additional Landscape Notes on sheet L7.1.

CITY REQUIREMENTS

City of Lake Elmo Code - Overall development requirements (16 acres)

		Required	Provided
1.	Disturbed land = 5 trees per acre disturbed	81 trees	203 trees
2.	Existing tree replacements (Equivalent trees) See sheet C1.4 for calculations	153.5 inches (76 trees)	155.5 inches (77 trees)
3.	Street trees (837 l.f. street frontage)*	17 trees	17 trees

City of Lake Elmo Code - Lot 1 Block 1 requirements (6.2 acres)

		Required	Provided
1.	Interior parking area = min 5% shall be landscaped	6,967 s.f.	7,675 s.f.
2.	Parking area trees = 1 tree per 15 spaces	23 trees	23 trees
3.	Parking at public R.O.W. = 1 deciduous tree per 50 l.f.	5 trees	5 trees
4.	Screening adjacent to Residential District = 1 tree per 40 l.f.	31 trees	31 trees
5.	Disturbed land = 5 trees per acre disturbed	31 trees	59 trees

Notes and Additional Plantings

		Required	Provided
1.	Additional trees for screening on north and west	not required	86 trees

2. *Required street trees along Hudson Blvd are not proposed in lot frontage due to 10' min. separation from utility lines per City Code. Total quantities of required street trees provided elsewhere on site. Applicant has asked for PUD flexibility for this requirement.
3. Total required tree and shrub quantities are provided on-site.

OVERALL PLANT SCHEDULE

CONIFEROUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT CONDITION
	ABC10	13	Abies concolor	White Fir	40`H x 20`W	10` HT.	B & B
	ABC6	19	Abies concolor	White Fir	40`H x 20`W	6` HT.	B & B
	ABC8	12	Abies concolor	White Fir	40`H x 20`W	8` HT	B & B
	PIA6	15	Picea abies	Norway Spruce	50`H x 30`W	6` HT.	B & B
	PIA8	20	Picea abies	Norway Spruce	50`H x 30`W	8` HT	B & B
	PIGL	21	Picea glauca	White Spruce	50`H x 20`W	8` HT	B & B
	PID10	23	Picea glauca `Densata`	Black Hills Spruce	45`H x 20`W	10` HT.	B & B
	PID6	11	Picea glauca `Densata`	Black Hills Spruce	45`H x 20`W	6` HT.	B & B
	PID8	10	Picea glauca `Densata`	Black Hills Spruce	45`H x 20`W	8` HT	B & B
	PIST	13	Pinus strobus	Eastern White Pine	80`H x 40`W	8` HT	B & B

DECIDUOUS TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT CONDITION
	ACNO	4	Acer rubrum `Northwood`	Northwood Maple	50`H x 40`W	2.5"Cal	B & B
	CEOC	5	Celtis occidentalis	Common Hackberry	50`H x 50`W	2.5"Cal	B & B
	ULMO	5	Ulmus x `Morton Accolade` TM	American Elm `Accolade`	60`H x 40`W	2"Cal	B & B

DECIDUOUS SHADE TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT CONDITION
	ACRU	15	Acer rubrum `Autumn Spire`	Autumn Spire Maple	50`H x 25`W	2.5" Cal.	B & B
	ASFF	2	Acer saccharum `Fall Fiesta`	Fall Fiesta Sugar Maple	60`H x 50`W	2.5"Cal	B & B
	BENI	4	Betula nigra	River Birch	60`H x 50`W	2.5"Cal	B & B
	GLTR	15	Gleditsia triacanthos `Impcole` TM	Impcole Honeylocust	30`H x 35`W	2.5"Cal	B & B
	QUBI	5	Quercus bicolor	Swamp White Oak	55`H x 55`W	2.5"Cal	B & B
	TILG	8	Tilia cordata `Greenspire`	Greenspire Littleleaf Linden	60`H x 40`W	2.5"Cal	B & B

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT CONDITION
	JUHU	21	Juniperus horizontalis `Hughes`	Hughes Juniper	0.5`H x 7`W	5 GAL.	POT
	JUKA	13	Juniperus x pfitzeriana `Kallay`s Compact`	Kallay`s Compact Juniper	3`H x 5`W	5 GAL.	POT
	RAGL	54	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	2`H x 7`W	2 GAL.	POT
	TAXT	49	Taxus x media `Tauntonii`	Tauton Yew	4`H x 5`W	#5	POT

GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT CONDITION
	SCSB	14	Schizachyrium scoparium `Blue Heaven`	Blue Heaven Little Bluestem	2`H x 3`W	1 GAL.	POT
	SPHE	190	Sporobolus heterolepis	Prairie Dropseed	3`H x 3`W	#2	POT

PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	MATURE SIZE	PLANTING SIZE	ROOT CONDITION
	YUCI	24	Yucca filamentosa `Ivory Tower`	Ivory Tower Yucca	4`H x 4`W	1 GAL.	POT

LEGEND

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- Denotes Low Maintenance Turf seed mix (MNDOT 25-131)
- Denotes Shallow Rooted BMP seed mix (BWSR)
- Denotes Pollinator Plot Urban seed mix (BWSR 38-631)
- Denotes rock mulch
- Denotes Stormwater seed mix (MNDOT 33-261)
- Denotes Dry Swale/Pond seed mix (MNDOT 33-262)
- Denotes Cut Less seed mix (Ramy Turf Products or approved equal)
- Proposed fence
- Existing trees
- Easement line
- (X)CODE — Denotes trees counted for interior parking requirement
- Extents of Enlarged Landscape Plan

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I hereby certify that this plan 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

Joshua K. Popehn
License No: 44803 Date: 04/14/2023

Signature shown is a digital reproduction of original. Wet signed copy of this plan on file at Landform Professional Services, LLC office and is available upon request.

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ELECTRIC AUTO SALES & SERVICE

HUDSON BLVD N.
LAKE ELMO, MN 55042

ISSUE / REVISION

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APR. 14, 2023	CITY SUBMITTAL

DRAWING TITLE

OVERALL LANDSCAPE PLAN

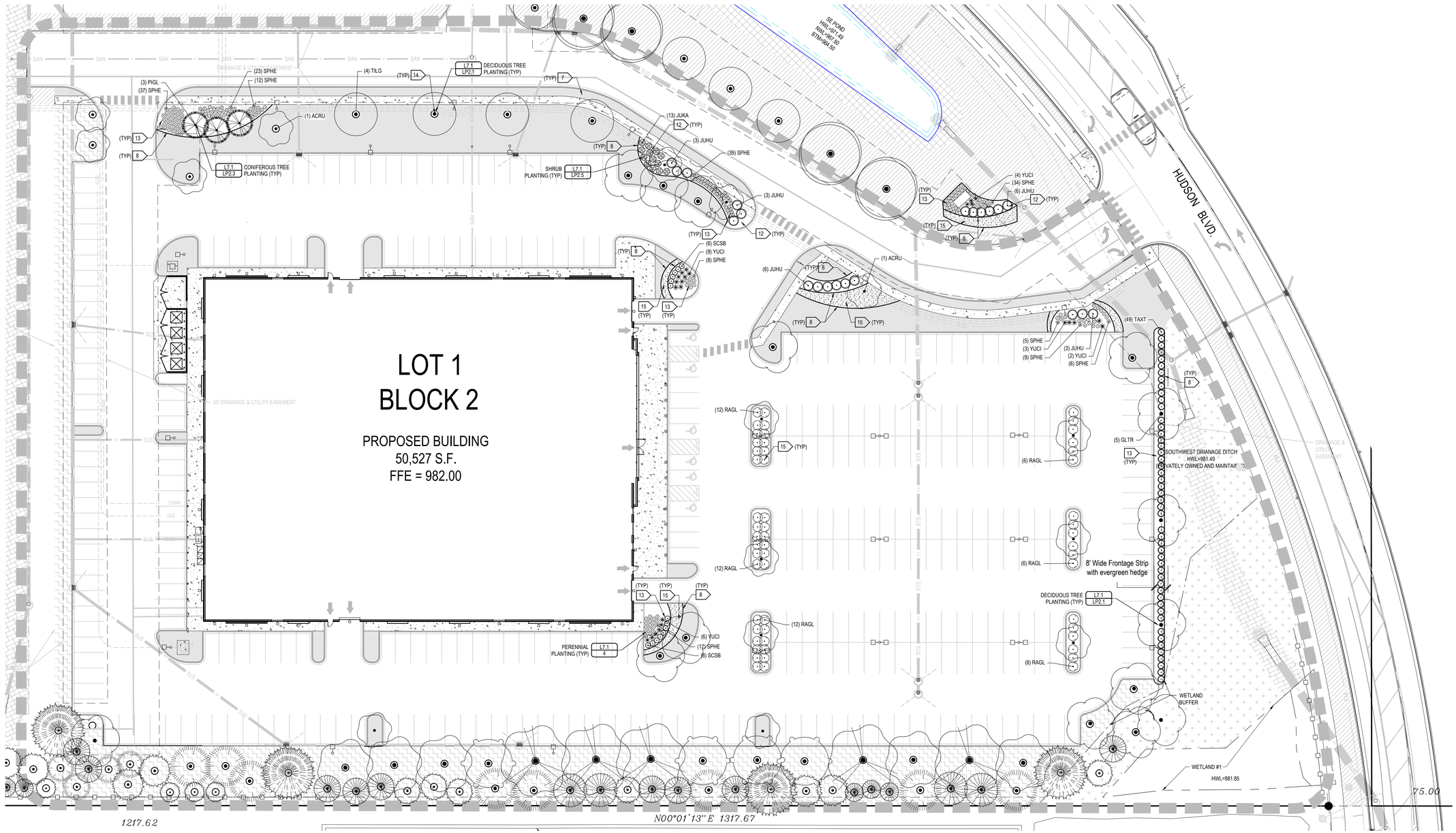
PROJECT NUMBER: DRS22002

SHEET NUMBER

L2.0

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

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License No: 44803 Date: 04/14/2023

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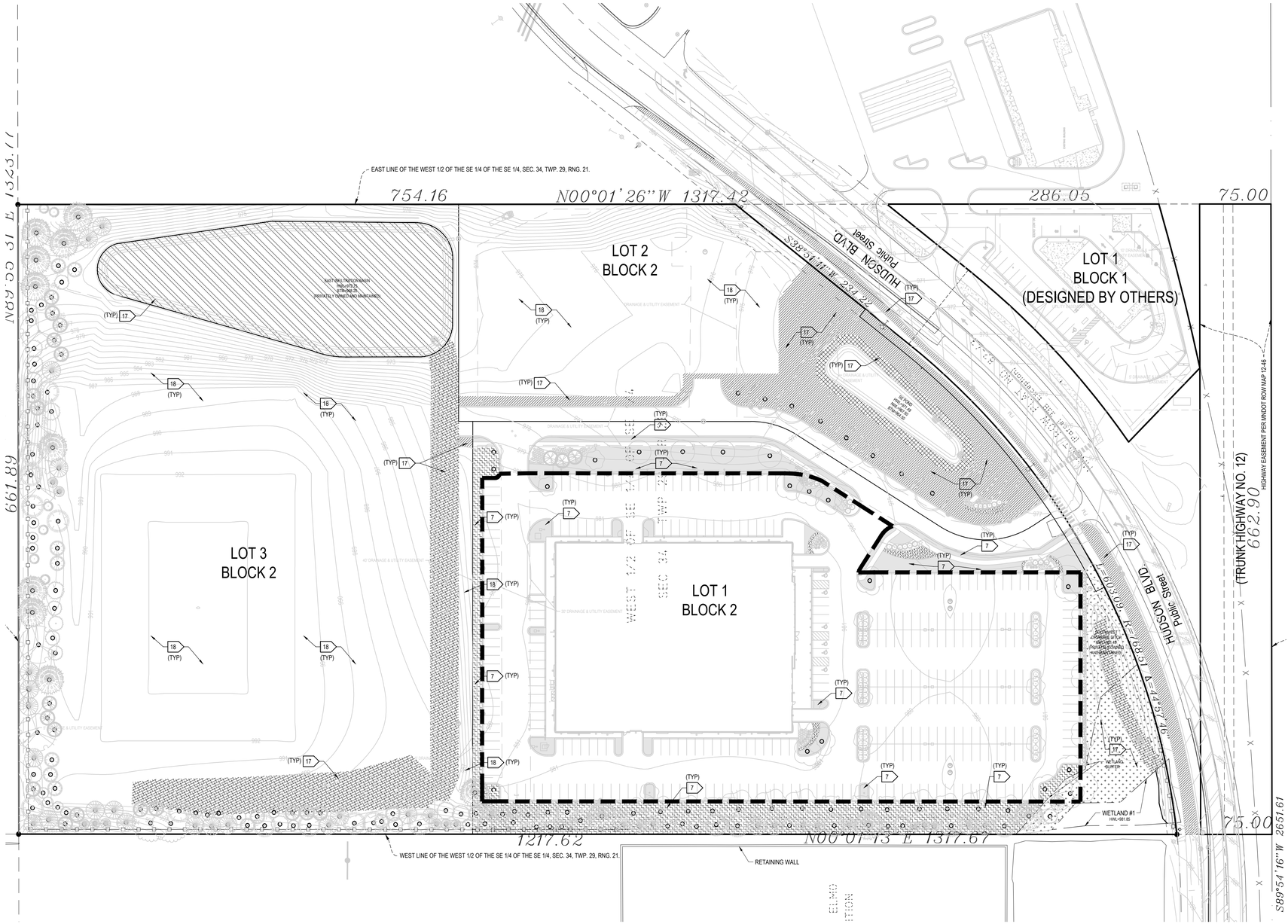
DRAWING TITLE

ENLARGED LANDSCAPE PLAN

PROJECT NUMBER: DRS22002

SHEET NUMBER

L2.1



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LEGEND

- Denotes area of sod
- Denotes Low Maintenance Turf seed mix (MNDOT 25-131) Seed at rate of 220 lbs/acre.
- Denotes Shallow Rooted BMP seed mix (BWSR) Seed at rate of 41.31 lbs/acre.
- Denotes Pollinator Plot Urban seed mix (BWSR 38-631) Seed at rate of 19.90 lbs/acre.
- Denotes rock mulch
- Denotes Stormwater seed mix (MNDOT 33-261) Seed at rate of 35 lbs/acre.
- Denotes Dry Swale/Pond seed mix (MNDOT 33-262) Seed at rate of 44.0 lbs/acre.
- Denotes Cut Less seed mix (Ramy Turf Products or approved equal) Seed at rate of 150.0 lbs/acre.
- Denotes extents of Parking Area (192,905 s.f.)

CITY REQUIREMENTS

Minimum 5% of interior Parking Area must be greenspace

			Required	Proposed
Parking Area	192,905 s.f.	Interior Parking Area greenspace	7,119 s.f.	9,618 s.f.
Building	50,527 s.f.			
Net Parking Area	142,378 s.f.			

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MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

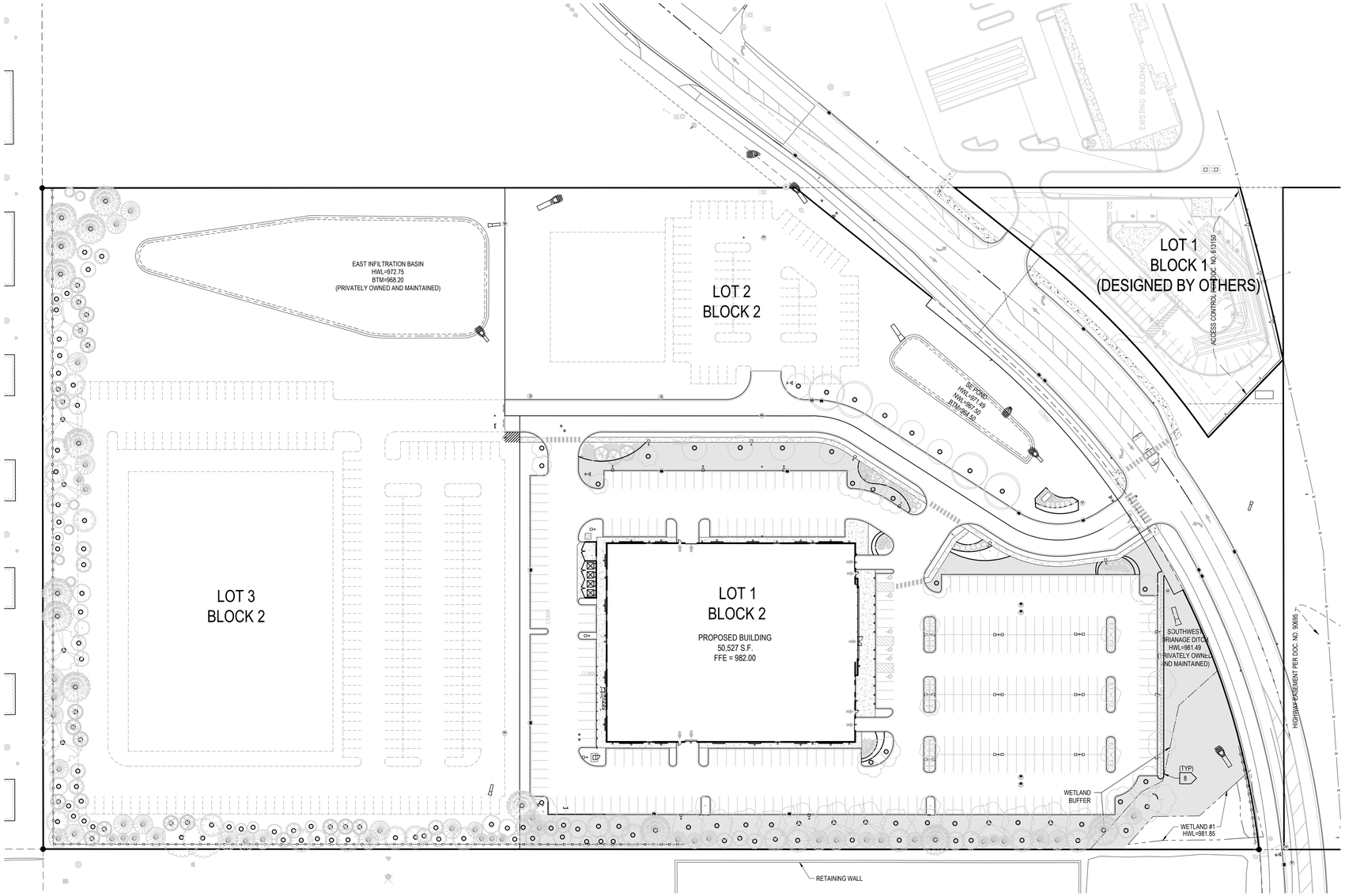
DRAWING TITLE

SEEDING AND TURF PLAN

PROJECT NUMBER: DRS22002

SHEET NUMBER

L2.2



GENERAL NOTES

1. For construction Staking and Surveying services contact Landform at 612.252.9070.

SOIL AMENDMENT NOTES

2. Contact Utility Service providers for field location of services 72 hours prior to beginning.
3. Coordinate installation with Contractors performing related work.
4. Soil amendments. Use MNDOT Grade 1 Compost. Till to a depth of four (4") inches.
5. Follow MNDOT Standard Specifications for tilling techniques and requirements for construction.
6. See sheet L2.0 for complete landscape plan.

CALCULATIONS

Areas of soil amendment: 50 % of total pervious area required to receive soil amendments.
Total pervious area, Lot 1, Block 2 - 69,723 s.f.

Soil amendment area
Required 34,862 s.f. (50 %)
Proposed 38,787 s.f. (56 %)

Lot 1, Block 1 soil amendment plan shall be provided by others.
Lot 2, Block 2 and Lot 3, Block 2 soil amendment plans shall be provided during future development phases.

LEGEND

Denotes areas of soil amendment

Know what's **Below.** **Call** before you dig.

NORTH

0 60 120

PRELIMINARY NOT FOR CONSTRUCTION

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Joshua K. Popehn

License No: 44803 Date: 04/14/2023

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AUG. 29, 2022	CITY SUBMITTAL
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MAR. 16, 2023	CITY SUBMITTAL
MAR. 30, 2023	CITY SUBMITTAL
APR. 14, 2023	CITY SUBMITTAL

DRAWING TITLE

SOIL AMENDMENT PLAN

PROJECT NUMBER: DRS22002

SHEET NUMBER

L3.0

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STANDARD PLAN NOTES

LANDSCAPE PLANS

1. Contractor must contact Gopher State One Call 811 (www.gopherstateonecall.org) prior to tree staking and planting operations to verify underground utilities. Where private utilities exist on-site the Contractor is required to have those located as well.
2. Plant materials shall meet American Standard for Nursery Stock: ANSI Z60.1, latest edition.
3. No plant substitutions shall be made without the prior written authorization from the City.
4. All tree locations to be field staked prior to installation. Contractor to coordinate field review of proposed tree locations with the City and Project Landscape Architect prior to any tree installation.
5. All plants shall be planted immediately upon arrival to project site. No plant material is to be left overnight on the project site without being installed unless written approval by City.
6. All trees, shrubs, perennials, turf lawn and native seeding to have a two-year warranty beginning upon written acceptance by the City. Defective plants as determined by the City shall be replaced within 30 days of notice during the growing season, and replacement materials shall receive the same two year warranty until plants are successfully established.
7. Contractor to protect and maintain all plantings and plant beds, including protection from wildlife, weeding, re-mulching, fertilization, irrigation and all other typical forms of horticultural care until the end of the warranty period as determined and approved by City.
8. All plants installed and maintained on City property shall be in accordance with City of Lake Elmo Bee-Safe Resolution No. 2015-13.
9. An irrigation system or other water supply adequate to support the specified plant materials shall be provided.

APRIL 2017

CITY OF LAKE ELMO | STANDARD DRAWING NO. LP2.0 LAKE ELMO

7 City of Lake Elmo Standard Notes

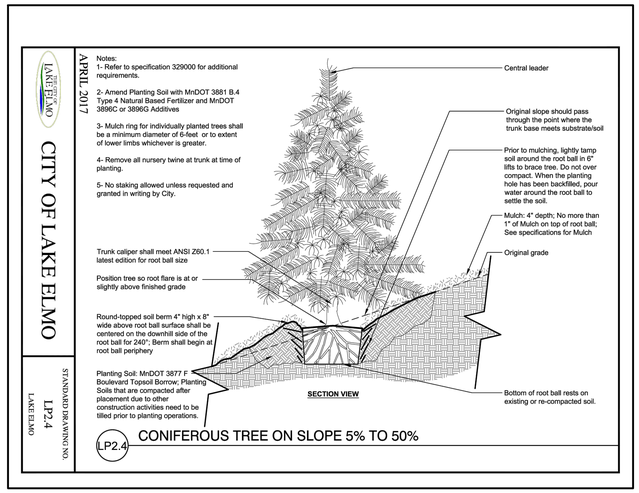
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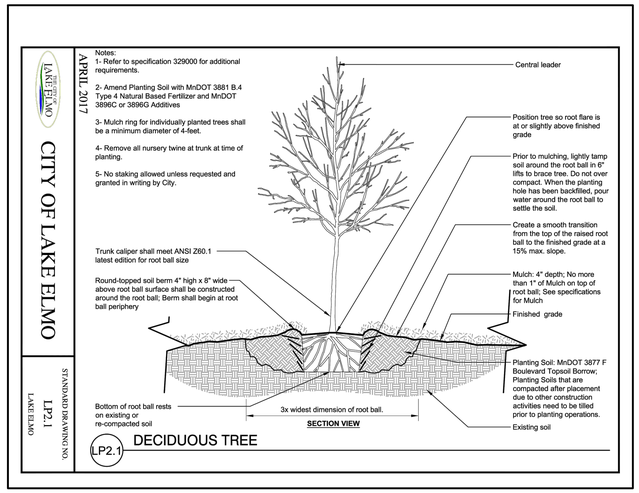
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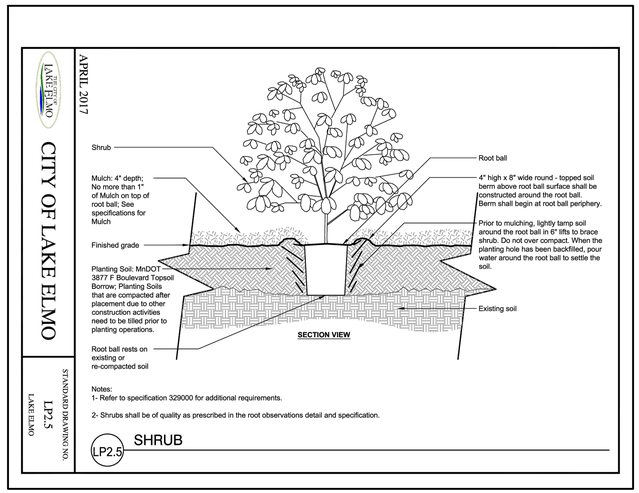
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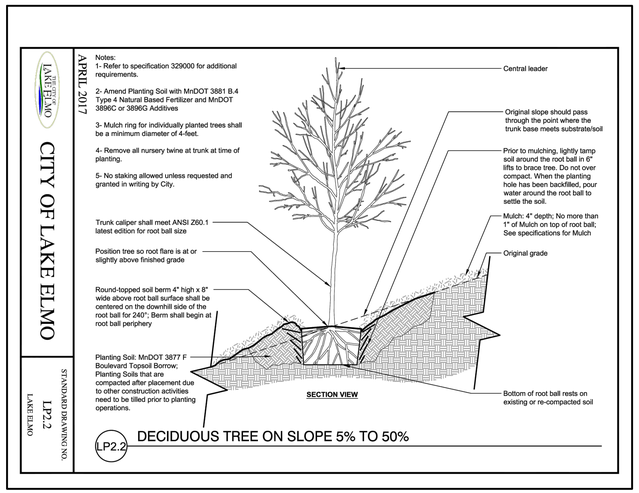
811 Know what's Below. Call before you dig.

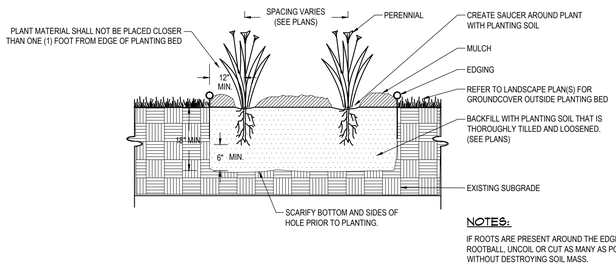
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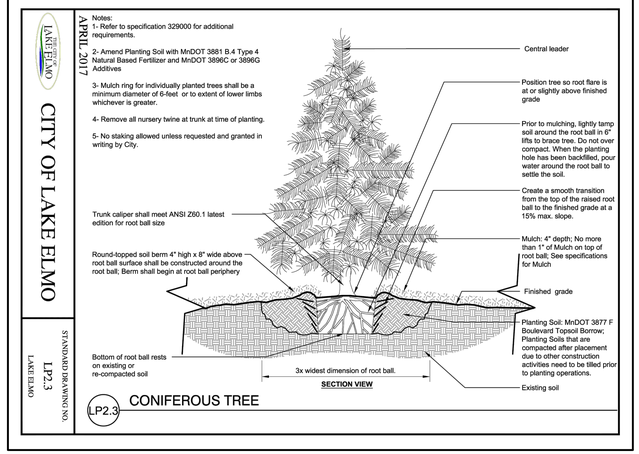






4 PERENNIAL PLANTING

NO SCALE



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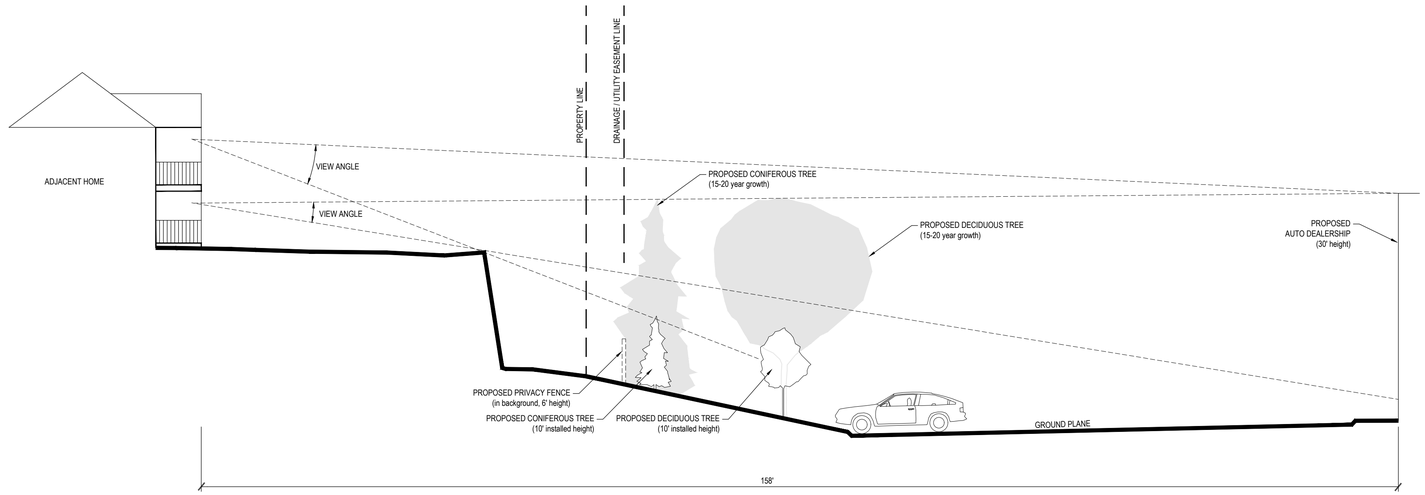
DRAWING TITLE

LANDSCAPE DETAILS

PROJECT NUMBER: DRS22002

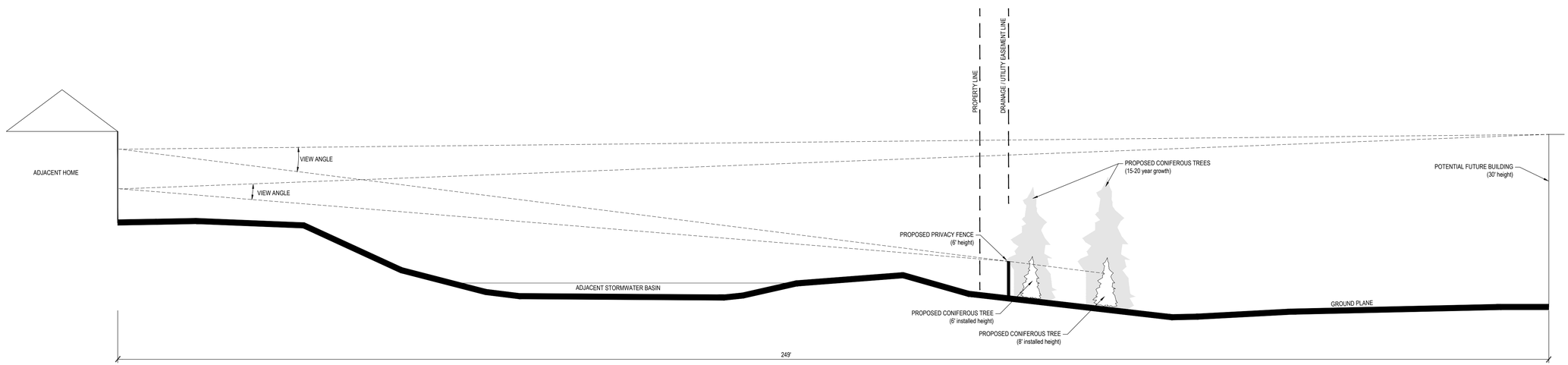
SHEET NUMBER

L7.0



SECTION A-A

SCALE 1"=10'



SECTION B-B

SCALE 1"=10'

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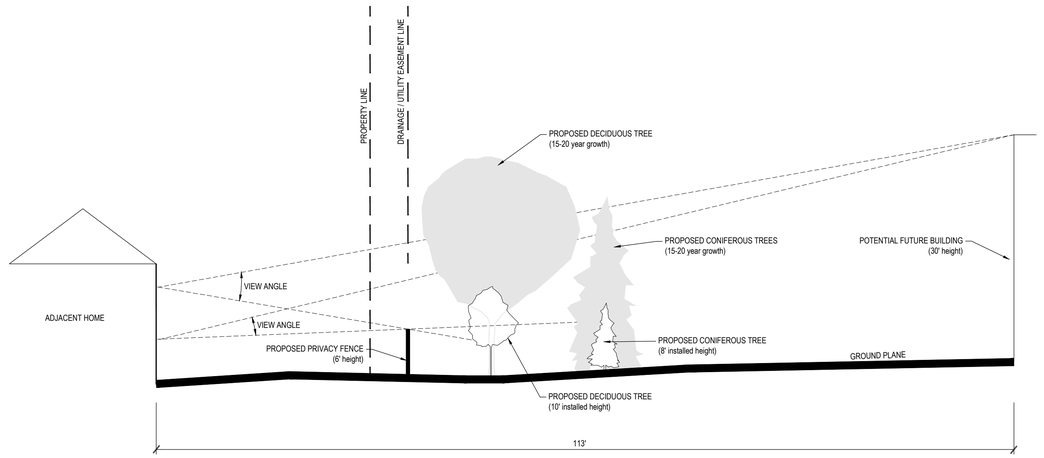
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SECTIONS

PROJECT NUMBER: DRS22002

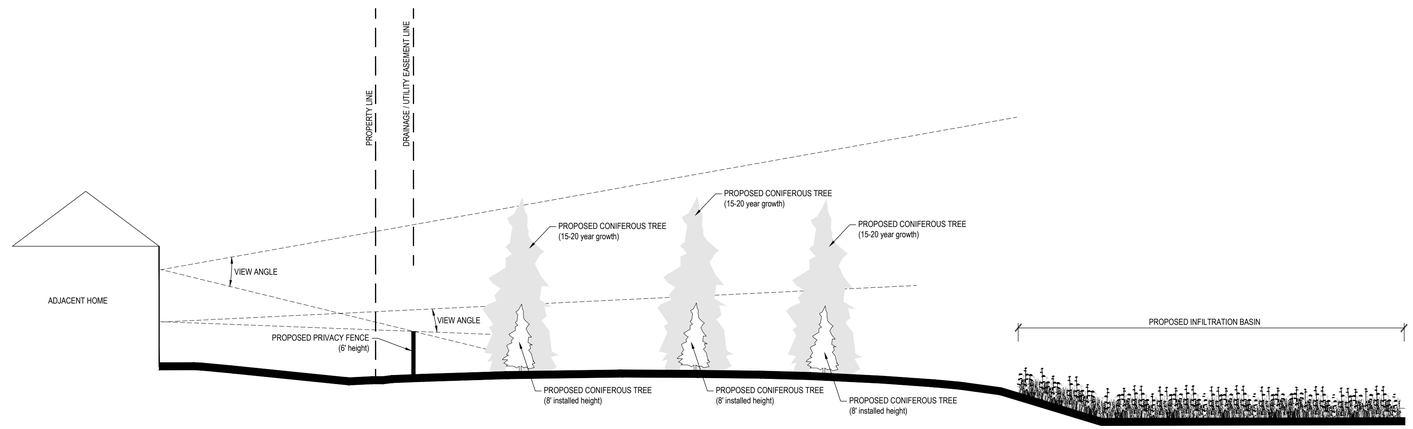
SHEET NUMBER

L7.1



SECTION C-C

SCALE 1"=10'



SECTION D-D

SCALE 1"=10'

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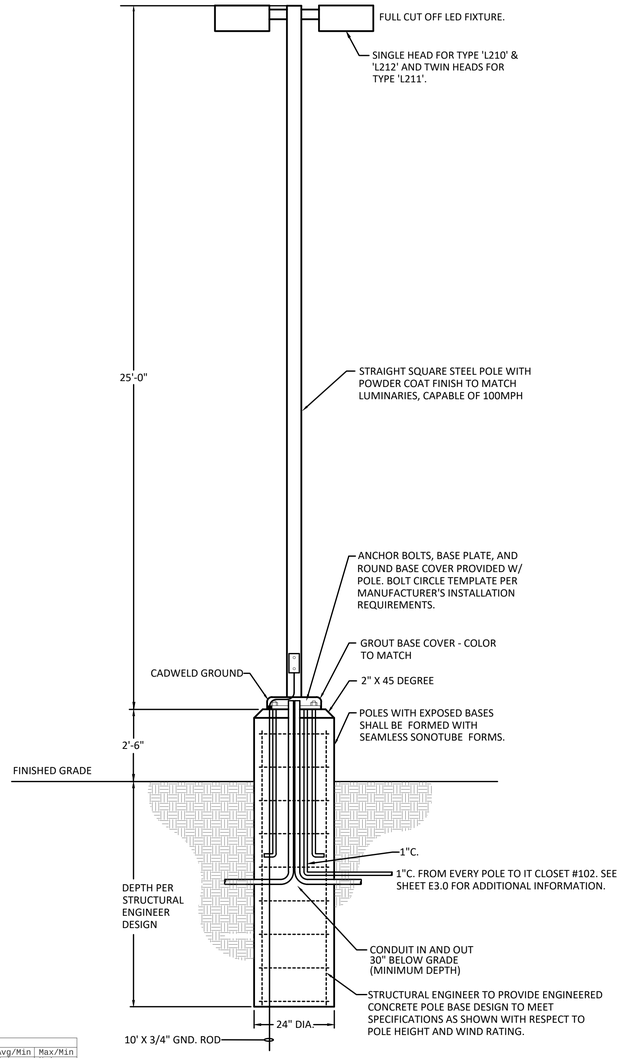
DRAWING TITLE

SECTIONS

PROJECT NUMBER: DRS22002

SHEET NUMBER

L7.2



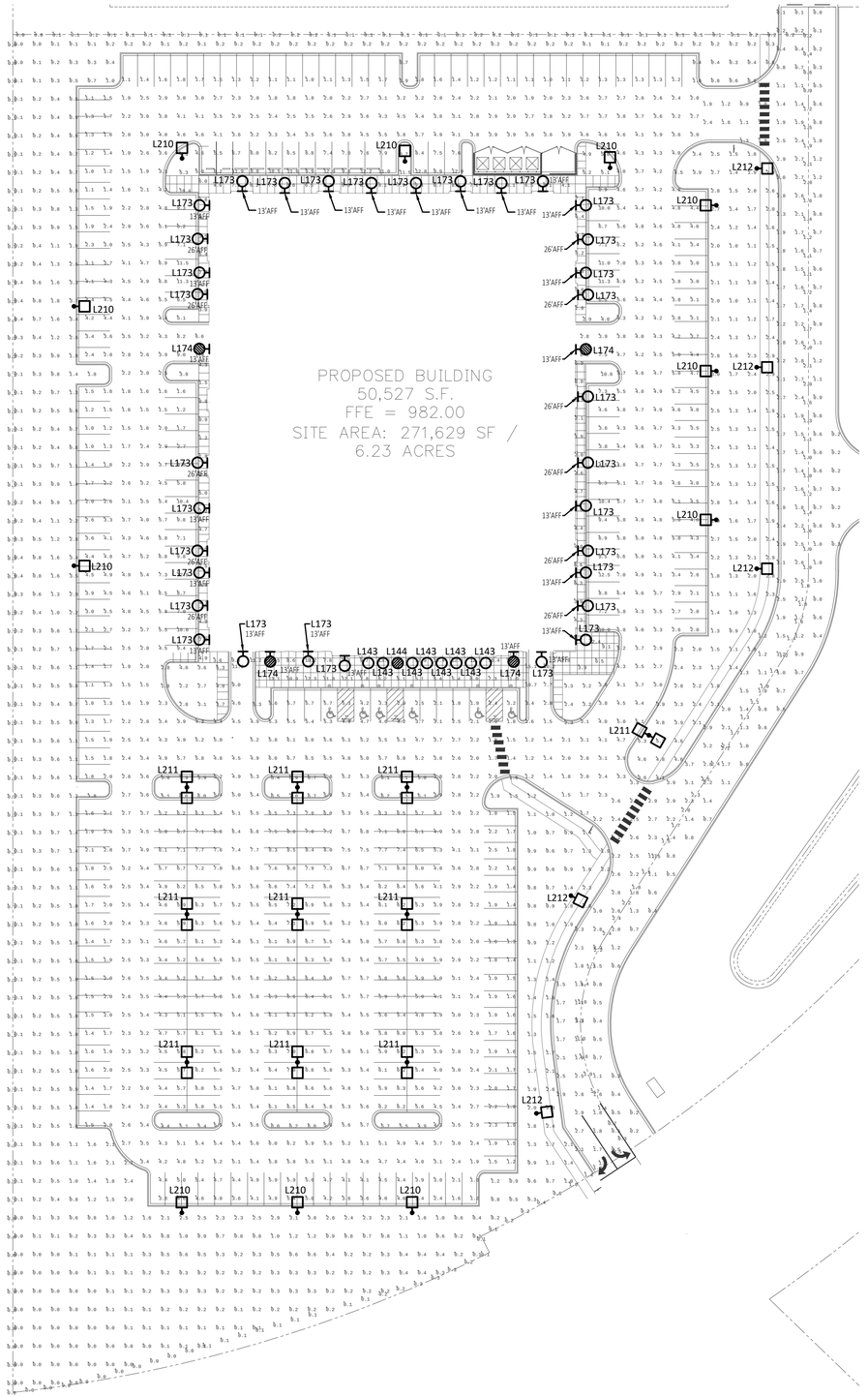
TYPE 'L210', 'L211', & 'L212' POLE BASE DETAIL - ELEVATED BASE

NOT TO SCALE

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Landscape & Sidewalk	Illuminance	Fc	1.26	11.5	0.0	N.A.	N.A.
Parking Lot	Illuminance	Fc	4.31	15.1	1.0	4.31	15.10
Property Line	Illuminance	Fc	0.54	2.5	0.0	N.A.	N.A.
Sidewalk Around Building E	Illuminance	Fc	5.21	12.4	1.9	2.74	6.53
Sidewalk Around Building N	Illuminance	Fc	7.38	9.4	4.0	1.85	2.35
Sidewalk Around Building S	Illuminance	Fc	9.34	13.4	2.8	3.34	4.79
Sidewalk Around Building W	Illuminance	Fc	4.49	7.7	0.8	5.61	9.63
Street	Illuminance	Fc	1.55	3.9	0.0	N.A.	N.A.

Light Fixture Schedule

Designation	Lamps		Fixture Characteristics	Fixture Mounting				Fixture Specification		
	# of lamps	Lamp Type	Description	Finish	Method	Ceiling Type	Recess Depth	Manufacturer	Catalog #	Voltage
L143	--	LED - 1,500 Lumens, 18W (3500K)	LED Downlight with 6" Aperature	Black	Recessed	Metal Panel	6-3/16"	Green Creative	LEM9035DIM010UNVMD-ADR6BL	277
L144	--	LED - 1,500 Lumens, 18W (3500K)	Same as 'L143' with 90 Minute Emergency Egress Battery Back-up	Black	Recessed	Metal Panel	6-3/16"	Green Creative	LEM9035DIM010UNVMDEM-ADR6BL	277
L173	--	LED - 6,615 Lumens, 51 Watts (4000K)	LED Wall Sconce	Natural Aluminum	Wall: See This Sheet	--	--	Lithonia Lighting	ARC2LED-P5-40K-MVOLT-DNAXD	277
L174	--	LED - 6,615 Lumens, 51 Watts (4000K)	Same as Type 'L173' with 90 Minute Emergency Egress Battery Back-up	Natural Aluminum	Wall: See This Sheet	--	--	Lithonia Lighting	ARC2LED-P5-40K-MVOLT-E8WC-DNAXD	277
L210	1	LED - 16,729 Lumens, 100 Watts (4000K)	LED Pole Mounted Fixture with Type III Distribution	Black	Pole: Overall Height 27'-6" AFF	--	--	LinmoreLED	LL-SL1-SM-100WD-40K-T3-UNV-G2-BLK-SA	277
L211	2	LED - 16,729 Lumens, 100 Watts (4000K)	LED Pole Mounted Fixture with Type III Distribution	Black	Pole: Overall Height 27'-6" AFF	--	--	LinmoreLED	LL-SL1-SM-100WD-40K-T3-UNV-G2-BLK-SA	277
L212	1	LED - 16,729 Lumens, 100 Watts (4000K)	LED Pole Mounted Fixture with Type II Distribution	Black	Pole: Overall Height 27'-6" AFF	--	--	LinmoreLED	LL-SL1-SM-50WD-40K-T2-UNV-G2-BLK-SA	277



1 SITE LIGHTING PLAN

SCALE: 1"=40'-0"

TESLA

ROSSI ENGINEERING INC.
5376 S. GIBRALTAR CT.
CENTENNIAL, CO 80015
303.720.9827
VROSSI@ROSSIENGINEERING.NET

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Tel. 303.905.7567

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MOTOR PARTNERS LE, LLC
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TEL. 303.825.6200
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ISSUE / REVISION

FEB. 09, 2023	CITY SUBMITTAL
MAR. 15, 2023	CITY RESUBMITTAL

DRAWING TITLE

ELECTRICAL SITE PLAN

SCALE: AS NOTED
PROJECT NUMBER: 23-001

SHEET NUMBER

E1.00

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ARC2 LED
Architectural Wall Luminaire

Catalog Number

Notes

Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1): 9.25"
Depth (D2): 7.5"
Height: 5"
Width: 14"
Weight: (without options) 11 lbs



Introduction

The Lithonia Lighting ARC LED wall-mounted luminaires provide both architectural styling and visually comfortable illumination while providing the high energy savings and low initial costs for quick financial payback.

ARC2 delivers up to 6,500 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. It offers integrated emergency battery backup options, including an 8W cold temperature option, making it suitable for pedestrian scale applications in any environment.

ARC LED Family Overview

Luminaire	Standard Emt, 0°C	Cold EML -20°C	Approximate Lumens (4000K)				
			P1	P2	P3	P4	P5
ARC1 LED	4W	--	1,500	2,000	3,000	--	--
ARC2 LED	4W	8W	1,500	2,000	3,000	4,000	6,500

Ordering Information

EXAMPLE: ARC2 LED P2 40K MVOLT PE DDBXD

Series	Package	Color Temperature	Voltage	Options	Finish
ARC2 LED	P1 1,500 Lumens P2 2,000 Lumens P3 3,000 Lumens P4 4,000 Lumens P5 6,500 Lumens	30K 3000K 40K 4000K 50K 5000K	MVOLT 347[1]	E4WH Emergency battery backup, CEC compliant (4W, 0°C min)[1] E8WC Emergency battery backup, CEC compliant (8W, -20°C min)[1] PE Button type photocell for dusk-to-dawn operation DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[2] SPDMOV 6kV surge protection[1] FAO Field adjustable light output device. Allows for easy adjustment to the desired light levels, from 20% to 100%[1]	DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DSSXD Sandstone DDBTXD Textured dark bronze DBLBXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white DSSTXD Textured sandstone

Accessories
Ordered and shipped separately.
WSBWM DDBXD U Surface - mounted back box (specify finish)

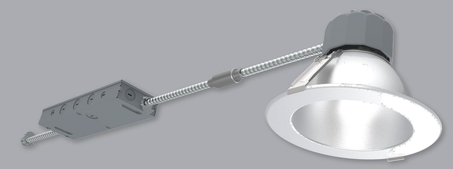
NOTES
1 347V not available with E4WH, E8WC and SPDMOV.
2 FAO not available with DMG.

LITHONIA LIGHTING. COMMERCIAL OUTDOOR One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com
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ARC2 LED Rev. 03/22/22

Project: Part#: Type:

SPECFIT 6"
Retrofit Downlight

GREENCREATIVE



Mechanical – SPECFIT retrofits existing commercial housings. Spring action clips to accommodate ½" to 2" ceiling thicknesses. Fixture with remote driver installs and is accessible from below the ceiling.
Electrical – Universal 120-277V, 50/60 Hz driver. Three selectable lumen outputs using SelectDrive technology. 0-10V dimmable to 5% with low end cutoff. 12V auxiliary port with stand by power functionality for additional dimming and shut-off of field installed sensors and control systems.
Optical – Self flanged spun aluminum reflector. 45° optical cutoff. Field interchangeable optical lenses. Four beam distributions. Wall wash field installed accessory. COB technology ensures 3-step SDCM color uniformity in 2700K, 3000K, 3500K or 4000K CCT. Minimum 90 CRI. 97 CRI available in 3000K only.
Thermal – Die cast heat sink. L70 lifetime of 100,000 hours. Ambient temperature rated from -13°F to +95°F (-25°C to 35°C).
Compliance and Warranty – ETL Classified and Listed for damp locations. 5 year parts warranty for complete fixture.

SPECFIT 6" SELECT DRIVE

PRODUCT ORDERING INFORMATION

Light Engine and Driver							Options[4]	Reflector	
Series	Light Engine	CRI	CCT	Driver	Voltage	Optical Distribution		Reflector Shape	Finish
AD6 Specfit 6"	LES 500-700-1000lm	90 90+ CRI	27 2700K	DIM010[1] 0-10V Dim to 5%	UNV 120-277, 50/60Hz	MD[2] Medium	SD347 347V Transformer	ADR6 6" Round Reflector	CC Clear Diffuse Trim and Flange
	LEM 1500-2000-2500lm	97[3] 3000K only	30 3000K			VN Very Narrow	SD480 480V Transformer		CW Clear Diffuse Trim, White Flange
	LEL 3000-4000-5000lm		35 3500K			NR Narrow	EM[4] Emergency Backup		WH Matte White Trim and Flange
			40 4000K			WD Wide			BL Matte Black Trim and Flange

[1] Dims to 5% with low end cutoff. Dimmer compatibility available on website / [2] Medium Lens Optic comes standard, if other optic distribution selected the lens will ship separately and require field installation / [3] CRI97 is made to order in 3000K only and is not Energy Star listed / [4] Options are factory installed and come with the Light Engine and Driver / [4] EM cannot be combined with SD347 or SD480 option

Selection*

Ex: AD6-LES-9040-DIM010-UNV-MD-ADR6-CC

AD6				DIM010	UNV			ADR6	

* A complete fixture consists of one light engine and driver and one reflector

LinmoreLED ULTRA PERFORMANCE LIGHTING

PROJECT NAME		DATE	
CAT. NUMBER			
NOTES			

SPEC SHEET

Site Lighter (SL1)
EXTERIOR LED FIXTURE

BUY AMERICA ACT COMPLIANT



Linmore LED ULTRALINK CONTROLS REIMAGINED Ready

cULus FC ETL Intertek DLC PREMIUM

KEY FEATURES

- Up to 174 LPW
- 8,500 to 62,000 lumens
- Up to 55°C
- 200-480V high-voltage driver (optional)
- Dimmable 0-10V
- Calculated L70 > 189,000 hours
- Patented Rapid Mount Bracket (optional)
- Turtle-friendly lighting option available

10 YEAR LIMITED WARRANTY L70

Guaranteed Performance
Performance of the light fixture is guaranteed for 10 years, including lumen output (L70), color temperature, and LED driver.

Superior Heat Dissipation
Extruded aluminum body is exceptional at moving thermal energy. Plus, the aesthetics are modern and attractive.

Controls and Sensors
Linmore LED driver with 0-10V dimming. Plus motion and dimming sensors, photocell and wireless controls available.

ORDERING

SERIES MODEL	HOUSING SIZE	WATTAGE (WD)	KELVIN	OPTIC	VOLTS
LL-SL1-	**SM** Small 50WD, 75WD, 100WD **MD** Medium 125WD, 150WD, 200WD **LD*** Large 250WD, 300WD **XL*** Extra Large 400WD	**50WD** **75WD** **100WD** **125WD** **150WD** **200WD** **250WD** **300WD** **400WD** WD = wattage dimming	**22K*** 2200K **28K*** 2800K (turtle-friendly) **30K*** 3000K **35K** 3500K **40K** 4000K **50K** 5000K	**T2** Type 2 **T3** Type 3 **T4** Type 4 **T5** Type 5 **FR** Front Row Right **FL** Front Row Left **F35** Flood 35 degrees **F60** Flood 60 degrees	**UNV** 120-277V 0-10V dimming **HV** 200-480V 0-10V dimming

GENERATION	HOUSING COLOR	MOUNTING	OPTIONS
G2 Generation 2	**BRN** Bronze **BLK** Black **WH** White **CUS*** Custom (special order)	**RMB** Rapid Mount Bracket **SF** Slip Fitter Bracket **SA*** Standard Arm Bracket **TM** Trunnion Mount Bracket * For more information about mounting download our Outdoor Lighting Guide >	**PC** Photocell, button, mounted in side plate, 120-480V **PC-TL** Photocell, Twist Lock, 120-480V, depending on model **SSP** 20kA Surge Suppressor, 120-277V **SSPH** 20kA Surge Suppressor, 480V **GSB**** Glare Shield Back, contact factory **GSS**** Glare Shield Side, contact factory **FSP-201** Wattstopper 0-10V dimming sensor, 12V **FSP-211** Wattstopper 0-10V dimming sensor, 120-277V **LL-QBM-WFC-12V-SIL**** Linmore Bluetooth Wireless Fixture Controller, 12V Input, Silvair Firmware **ULTRAHGA**** Linmore Bluetooth Wireless Fixture Controller, 12V Input, Silvair Firmware, Includes 2.4GHz Omni Directional High Gain Antenna. **ULTRADIM20**** UltraLink Wireless Fixture Controller with Sensor, PIR, 20FT, BLE **ULTRADIM40**** UltraLink Wireless Fixture Controller with Sensor, PIR, 40FT, BLE

ORDERING EXAMPLES

Standard: LL-SL1-MD-150WD-50K-T3-UNV-G2-BRN-SA
With Options: LL-SL1-MD-150WD-50K-T3-UNV-G2-BRN-SA-**ULTRADIM20-GSB**

© 2023 Linmore LED Labs, Inc.

1 T□PE 'L173' □ 'L174'
C□T SHEETS
SCALE: NOT SET SCALE

2 T□PE 'L143' □ 'L144'
C□T SHEETS
SCALE: NOT SET SCALE

3 T□PE 'L210', 'L211' □ 'L212'
C□T SHEETS
SCALE: NOT SET SCALE

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TESLA

ROSSI ENGINEERING INC.
5376 S. GIBRALTAR CT.
CENTENNIAL, CO 80015
303.720.9827
VROSSI@ROSSIENGINEERING.NET

npama partners llc
Architecture . Interior Design. Planning. Graphics
2287 Pinto Trail, Elizabeth, CO
Tel. 303.905.7567

DRA□E
MOTOR PARTNERS LE, LLC
496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

SER□ICE CENTER
LA□E ELMO, MN

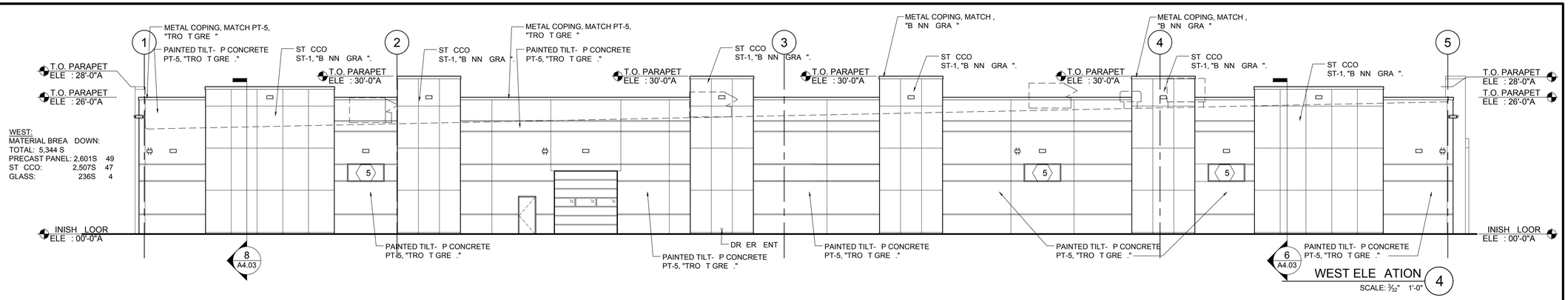
ISS□E □RE□ISION
□EB. 09, 2023 CIT□ S□BMITTAL
MAR. 15, 2023 CIT□ RES□BMITTAL

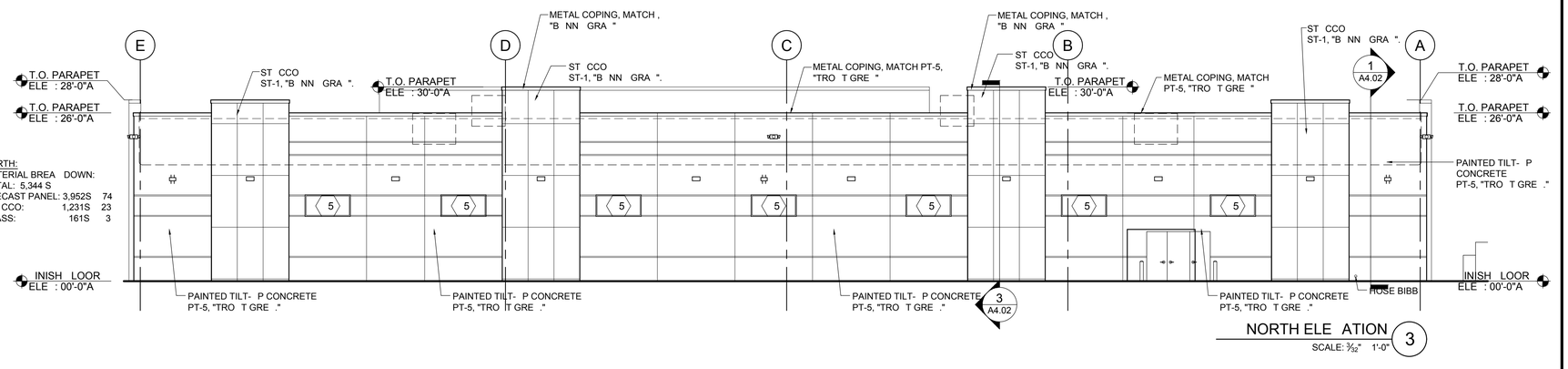
DRAWING TITLE

ELECTRICAL
CUT SHEETS

SCALE: AS NOTED
PRO□ECT N□MBER: 23-001

SHEET N□MBER
E2.00





LEGEND:

PAINT: COLORS B BEN AMIN MOORE
- PT-5, "TRO T GRE "
- PT-8, "B NN GRE "

METAL WALL PANEL: AL COBOND
- MWP-1, COLOR: "NEON RED"
- MWP-2, COLOR: "CLEAR ANODIZED"
- MWP-8, COLOR: "B NN GRE "

ST CCO: COLORS B BEN AMIN MOORE
- ST-1, "B NN GRE " SANDED INISH

STORE RONT:
- S -1 CLEAR ANODIZED 14 AWNEER WITH CLEAR GLAZING

COPING LASHING:
- TO MATCH AD ACENT COLOR

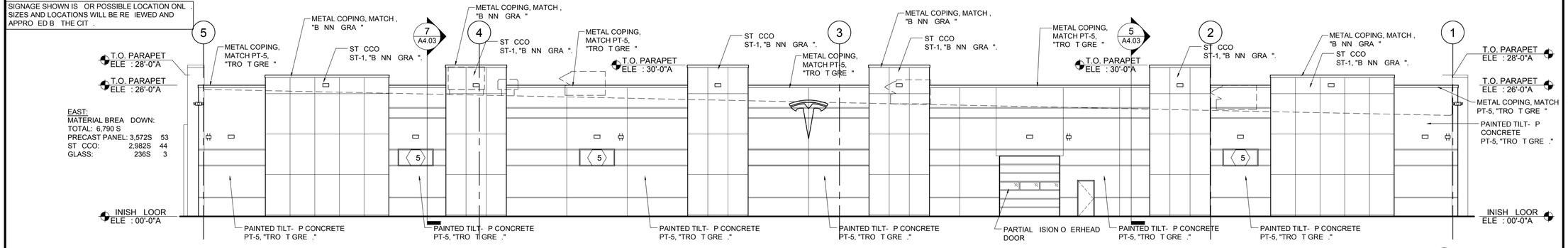
DOORS:
- TO MATCH AD ACENT COLOR

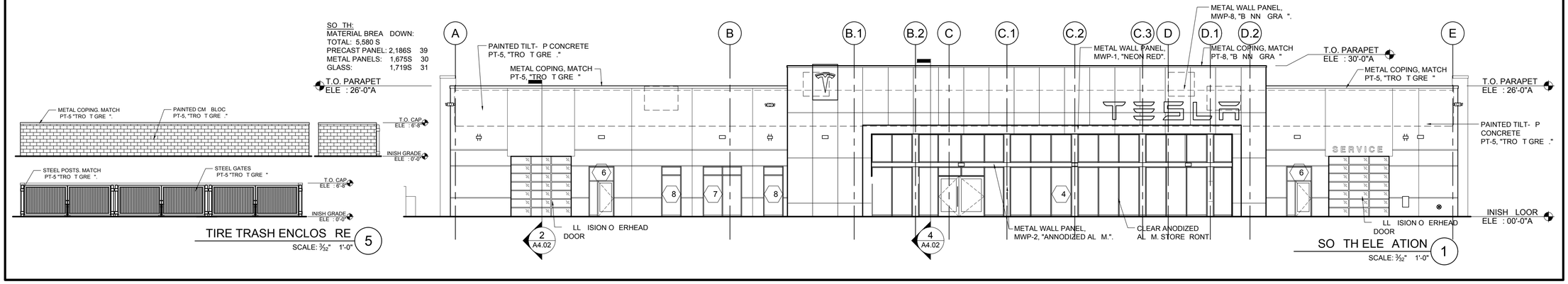
SEC RIT CAMERA

EXTERIOR WIRELESS ACCESS POINT

LIGHT IXT RE

SIGNAGE SHOWN IS OR POSSIBLE LOCATION ONL . SIZES AND LOCATIONS WILL BE RE IEWED AND APPRO ED B THE CIT .





TIRE TRASH ENCLOS RE
SCALE: 3/32" 1'-0"
5

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ARCHITECT:
npnama partners llc
Architecture . Interior Design. Planning. Graphics
2287 Pinto Trail, Elizabeth, CO
Tel. 303.905.7567

DRA E
MOTOR PARTNERS LE, LLC
496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

SER ICE CENTER
9800 H DSON BL D. N.
LA E ELMO, MN

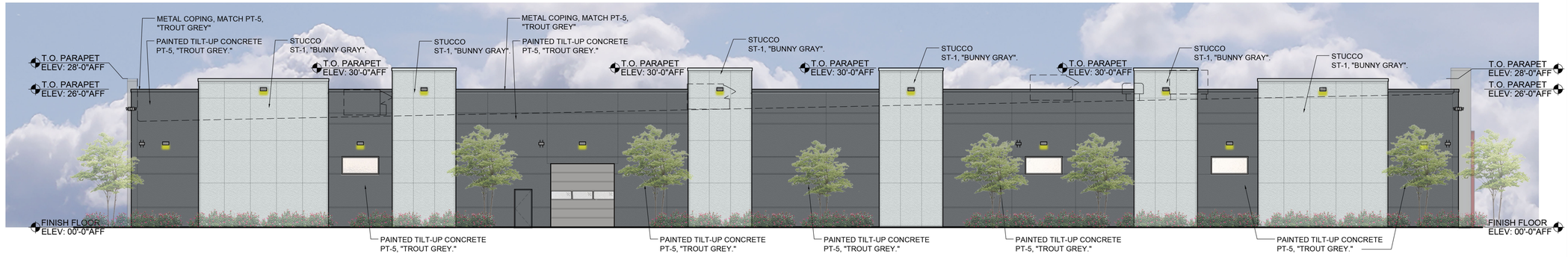
TRD ID: 27755

AN. 20, 2023	CHEC SET
AN. 26, 2023	BID SET
March 22, 2023	CIT S BMITTAL

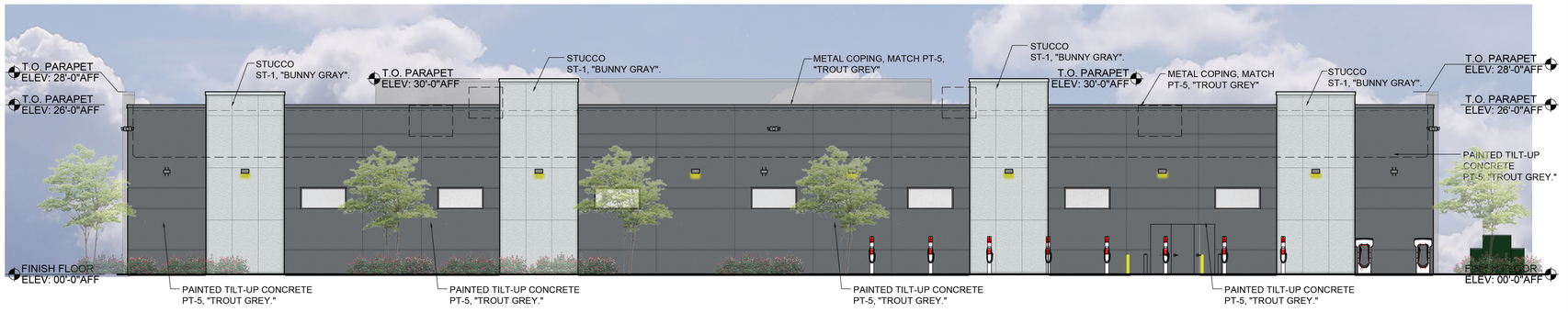
DRAWING TITLE

EXTERIOR ELE ATIONS

A4.10



WEST ELEVATION 4
SCALE: 3/32" = 1'-0"



NORTH ELEVATION 3
SCALE: 3/32" = 1'-0"

LEGEND:

PAINT: (COLORS BY BENJAMIN MOORE)
- PT-5, "TROUT GREY"
- PT-8, "BUNNY GREY"

METAL WALL PANEL: (ALUCOBOND)
- MWP-1, COLOR: "NEON RED"
- MWP-2, COLOR: "CLEAR ANODIZED"
- MWP-8, COLOR: "BUNNY GREY"

STUCCO: (COLORS BY BENJAMIN MOORE)
- ST-1, "BUNNY GREY" SANDED FINISH

STOREFRONT:
- SF-1 CLEAR ANODIZED #14 (KAWNEER) WITH CLEAR GLAZING

COPING / FLASHING:
- TO MATCH ADJACENT COLOR

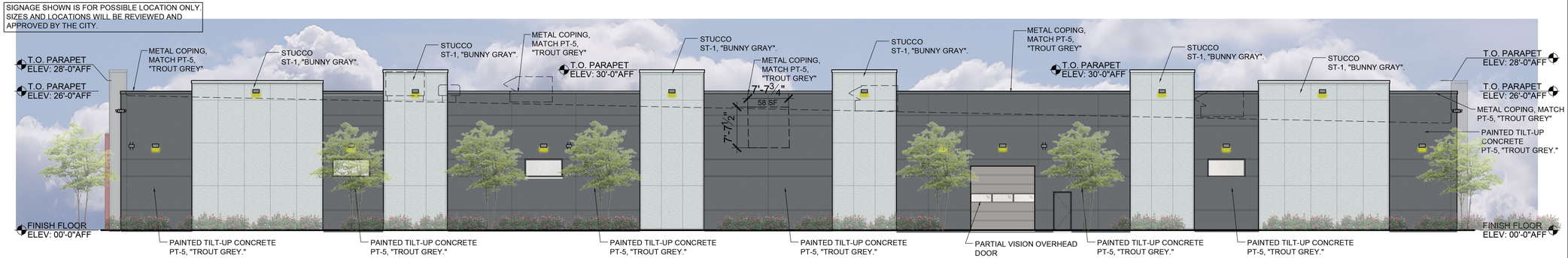
DOORS:
- TO MATCH ADJACENT COLOR

SECURITY CAMERA

EXTERIOR WIRELESS ACCESS POINT

LIGHT FIXTURE

SIGNAGE SHOWN IS FOR POSSIBLE LOCATION ONLY. SIZES AND LOCATIONS WILL BE REVIEWED AND APPROVED BY THE CITY.



EAST ELEVATION 2
SCALE: 3/32" = 1'-0"



TIRE/TRASH ENCLOSURE 5
SCALE: 3/32" = 1'-0"

SOUTH ELEVATION 1
SCALE: 3/32" = 1'-0"

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HERBERT DONALD CASNER
LICENSED ARCHITECT
No. 60761
03/13/23
STATE OF MINNESOTA

ARCHITECT
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of Minnesota.
Signature:
Typed or Printed Name: Herbert Donald Casner
Date: 01/13/23 License Number: 60761

ARCHITECT:
nama partners llc
Architecture . Interior Design. Planning. Graphics
2287 Pinto Trail, Elizabeth, CO
Tel. 303.905.7567

DRAKE
MOTOR PARTNERS LE, LLC
496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

SERVICE CENTER
9800 HUDSON BLVD. N.
LAKE ELMO, MN

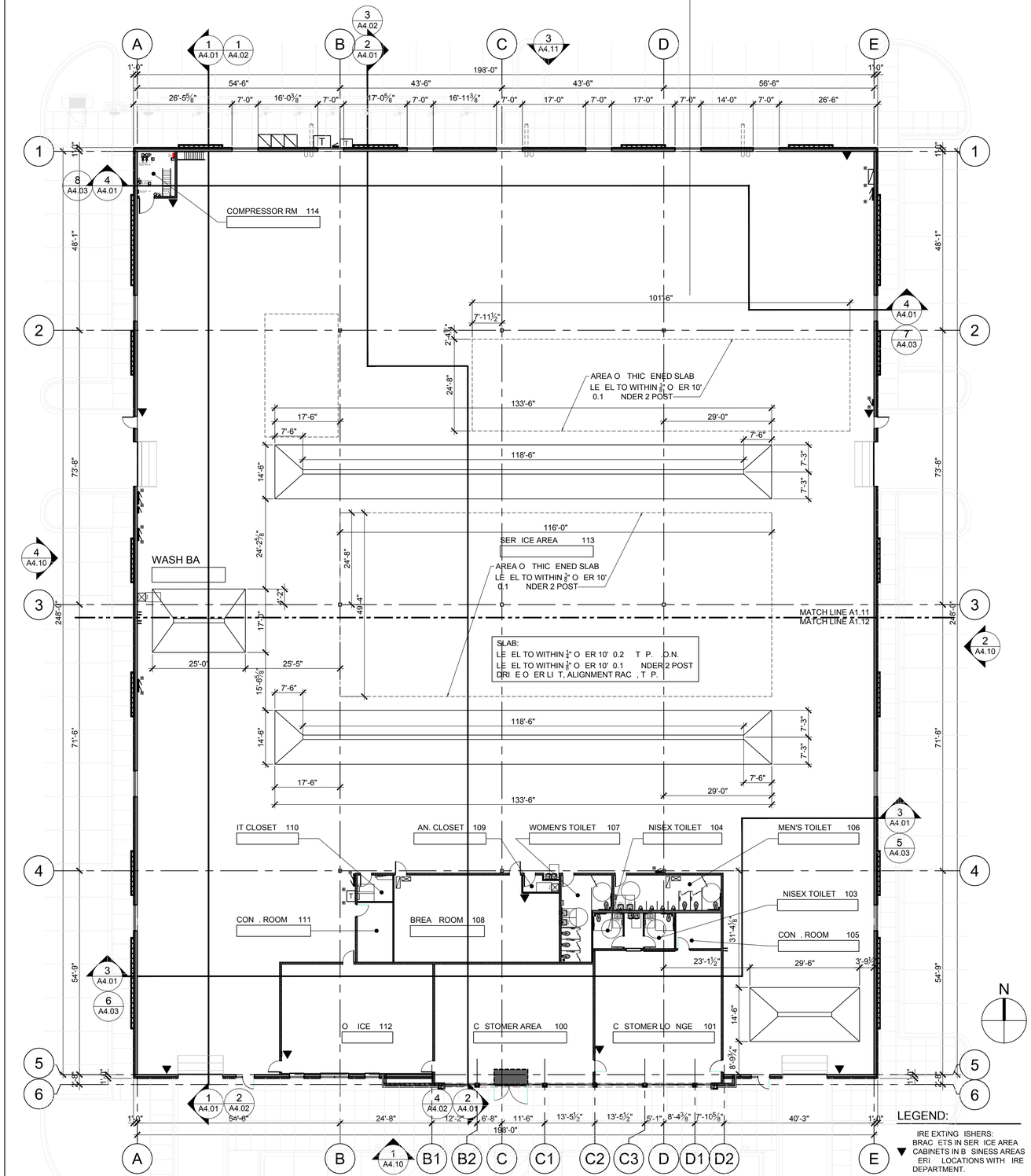
TRD ID: 27755

JAN. 20, 2023	CHECK SET
JAN. 26, 2023	BID SET
March 22, 2023	CITY SUBMITTAL

DRAWING TITLE

RENDERED EXTERIOR ELEVATIONS

A4.11



O ERALL LOOR PLAN | SCALE: 1/8" 1'-0" | 1

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HERBERT DONALD CASNER
LICENSED ARCHITECT
No. 60761
03/13/23
STATE OF MINNESOTA

ARCHITECT
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Architect under the laws of the state of Minnesota.
Signature:
Typed or Printed Name: Herbert Donald Casner
Date: 01/13/23 License Number: 60761

ARCHITECT:
npnama partners llc
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TRD ID: 27755

ISS E	RE ISION
AN. 20, 2023	CHEC SET
AN. 26, 2023	BID SET
March 22, 2023	CIT S BMITTAL

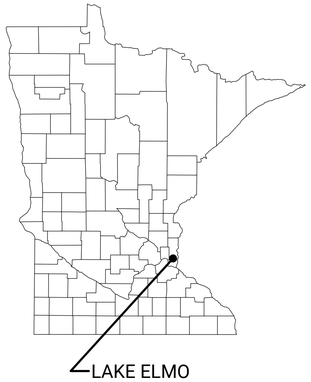
DRAWING TITLE

O ERALL
LOOR PLAN

SCALE: AS NOTED
PRO ECT N MBER:

SHEET N MBER

A1.10



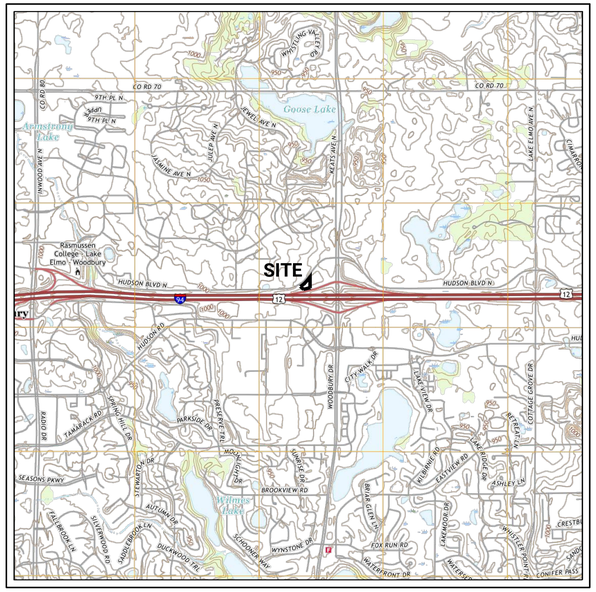
SITE CONSTRUCTION PLANS

FOR

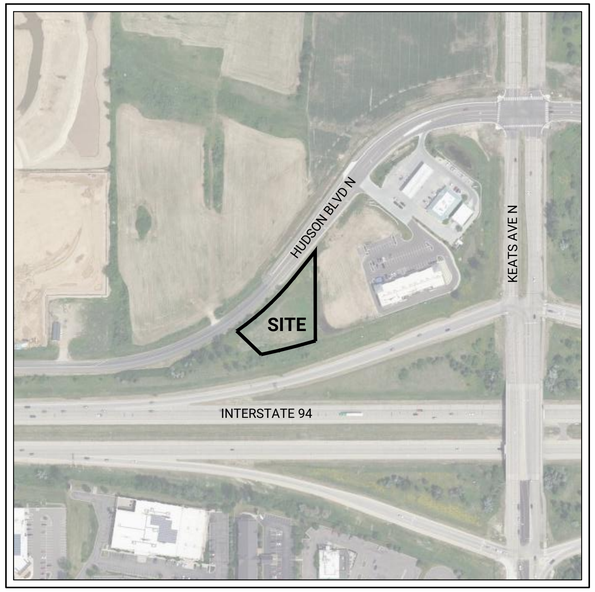
DAIRY QUEEN STORE #70891

LAKE ELMO, MN

SITE LOCATION MAP



AERIAL MAP



SHEET INDEX

C0.0	TITLE SHEET
V1.1	ALTA/NSPS LAND TITLE SURVEY
C1.1	EXISTING CONDITIONS & REMOVALS PLAN
C2.1	SITE PLAN
C3.1	UTILITY PLAN
C4.1	GRADING AND DRAINAGE PLAN
C5.1	EROSION CONTROL PLAN, PHASE I
C5.2	EROSION CONTROL PLAN, PHASE II
C5.3	SWPPP NARRATIVE
C6.1	DETAILS
C6.2	DETAILS
C6.3	DETAILS
C6.4	DETAILS
C6.5	DETAILS
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE PLAN
E1.1	PHOTOMETRIC PLAN

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE

SIGNATURE:

DATE: 06/10/22 LIC #: 45889

REVISIONS	ISSUE DATE: 06/10/22	BY: JTR
1.	02/13/23 PUD SUBMITTAL	
2.	04/14/23 FINAL PLAT SUBMITTAL	
3.		
4.		
5.		
6.		
7.		

OWNER

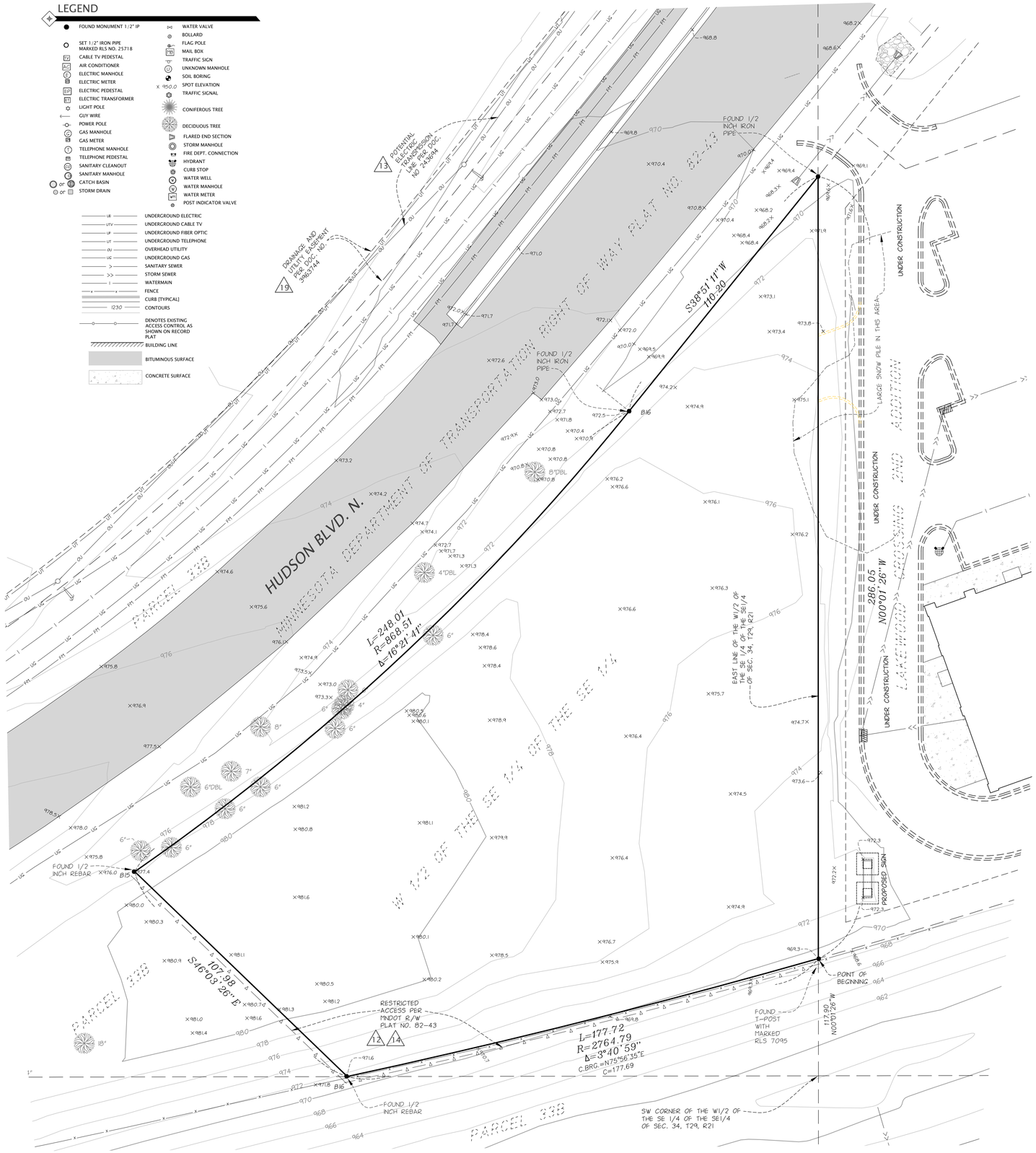
LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

TITLE SHEET

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C0.0

04/11/23 c:\users\contour civil\dropbox\pc\desktop\contour_jobs\23002 - lake elmo dq\cad\23002_cover.dwg



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) 221081552. 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

SURVEY NOTES:

1. BEARINGS ARE BASED ON THE WASHINGTON COUNTY COORDINATE SYSTEM NAD 1983. BEARINGS/AZIMUTHS SHOWN ARE DIFFERENT THAN SHOWN ON THE MNDOT RECORDED PLAT. ALL INTERIOR ANGLES MATCH THE RECORDED MNDOT PLAT ANGLES .
2. UNDERGROUND UTILITIES SHOWN PER GOPHER ONE LOCATES AND AS-BUILTS PLANS PROVIDED BY THE CITY OF LAKE ELMO ENGINEERING DEPARTMENT.
3. THERE MAY SOME UNDERGROUND UTILITIES, GAS, ELECTRIC, ETC. NOT SHOWN OR LOCATED.
4. SURVEY INFORMATION SHOWN FROM FIELD COLLECTED DATED ON 3-7-22 AND 4-29-22
5. EXISTING ICE AND SNOW AT THE TIME OF THE SURVEY MAY HAVE HINDERED OUR ABILITY TO LOCATE OBVIOUS IMPROVEMENTS.

EXISTING PARKING:

THERE ARE NO VISIBLE PARKING STALLS DESIGNATED ON THIS PARCEL INCLUDING 0 HANDICAP STALLS.

FLOOD INFORMATION:

THIS PROPERTY LIES WITHIN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP NUMBER 27163C335E HAVING AN EFFECTIVE DATE OF FEBRUARY 3RD, 2010.

AREA:

TOTAL AREA AS SHOWN = 40,681 SQ.FT.

CERTIFICATION:

To: FSA Title Services, First American Title Insurance Company and BKJ RE LLC:

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7, 8, 9, 11, 16, 18, and 19 of Table A thereof. The field work was completed on April 29th, 2022.

CORNERSTONE LAND SURVEYING, INC.
Dated: 5-18-22
Revised:

By :
Daniel L. Thurmes
Minnesota License No. 25718

The FSA Title Services, as agent for First American Title Insurance Company Title Commitment No. 220241, dated March 28th, 2022, as listed on this survey was relied upon for matters of record. Other easements may exist that were not shown in this commitment and are not shown on this survey. (COVERS ADDITIONAL PROPERTY)

TABLE A NOTES:

8. SUBSTANTIAL FEATURES OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK ARE SHOWN ON THE SURVEY.
16. THERE IS OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK ON THIS SITE.
18. NO MARKERS OF WETLANDS DELINEATED BY A QUALIFIED SPECIALIST WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
19. PLOTTABLE OFFSITE EASEMENTS OR SERVITUDES ARE SHOWN ON THE SURVEY.

PROPOSED LEGAL DESCRIPTION:

(THE FOLLOWING LEGAL DESCRIPTION WILL BE A RESULT OF AN ADMINISTRATIVE LOT DIVISION OF THE OVERLALL PARCEL FOR PID# 3402921440004 AND 3402921440004 (WALTER EBERTZ PARCEL) (NOT RECORDED)

That part of the West Half of the Southeast Quarter of the Southeast Quarter of Section 34, Township 29, Range 21, Washington County, Minnesota, described as follows: BEGINNING at a point on the east line of said West Half of the Southeast Quarter of the Southeast Quarter of Section 34, distant 117.90 feet north of the southwest corner thereof, said point also being on the boundary of Parcel 338, Minnesota Department of Transportation Right of Way Plat Numbered 82-43, according to the recorded plats thereof; thence North 00 degrees 01 minutes 26 seconds West, assumed bearing, along said east line 286.05 feet to said Parcel 338 boundary; thence South 38 degrees 51 minutes 11 seconds West, along said boundary, 110.20 feet a point designated as B16 on said plat; thence southwesterly 248.01 feet along said boundary, being a tangential curve concave to the northwest having a radius of 868.51 feet and a central angle of 16 degrees 21 minutes 41 seconds to a point designated as B15 on said plat; thence South 46 degrees 03 minutes 26 seconds East, along said boundary, 107.98 feet to a point designated as B14 on said plat; thence northeasterly 177.72 feet along said boundary, being a tangential curve concave to the northwest having a radius of 2764.79 feet, a central angle of 03 degrees 40 minutes 59 seconds and a chord which bears North 75 degrees 56 minutes 35 seconds East to the POINT OF BEGINNING.

EASEMENT NOTES:

The following survey related easements and encubrances appear on the FSA Title Services, as agent for First American Title Insurance Company Title Commitment No. 220241, dated March 28th, 2022.

12 Easement for highway purposes together with the right to construct and maintain temporary snow fences on lands adjacent thereto, as evidenced by Final Certificate, recorded as Document No. 200753, in Book 220 of Deeds, page 11. (AFFECTS SUBJECT PROPERTY, NOT SHOWN)

13 Easement for electric transmission line purposes per Document No. 243694, in Book 277 of Deeds, page 553. Assigned to Xcell Energy Inc. per Document No. 3145752. (APPEARS TO LIE NORTH OF SUBJECT PROPERTY)

14 Minnesota Department of Transportation Right of Way Plat No. 82-43, recorded as Document No. 429592. Right of access from the Land to N. Frontage Rd (aka Hudson Blvd. N.) is restricted, amended and conveyed to the City of Lake Elmo, as shown by Quit Claim Deed dated 11/13/2013, recorded 12/30/2013, as Document No. 3975938. (RESTRICTED ACCESS SHOWN)

Assessments, covenants, conditions, terms, restrictions, easements, and obligations contained per Document No. 3963742. (AFFECTS SUBJECT PROPERTY, NOT SHOWN)

Assessments, covenants, conditions, terms, restrictions, easements, and obligations contained per Document No. 3963743. (AFFECTS SUBJECT PROPERTY, NOT SHOWN)

19 Covenants, conditions, terms, restrictions, and easements contained in PERMANENT PUBLIC DRAINAGE & UTILITY EASEMENT AND AGREEMENT, per Document No. 3963744. (LIES NORTH OF SUBJECT PROPERTY)

BENCHMARKS

ELEVATIONS SHOWN ARE BASED ON GPS DERIVED VALUES FOR NAVD 88.

CONTACT:

LYNSKEY AND CLARK CO.
Mick Lynskey
PO Box 36, 118 S. Main Street
Stillwater, MN 55082
Office: 651-439-1412
Cell: 651-210-0075
Fax: 651-439-8071
E-mail: mick@lynskeyclark.com

COUNTY/CITY:

WASHINGTON COUNTY
CITY OF LAKE ELMO

NORTH
0 20 40

REVISIONS:

DATE	REVISION
5-18-22	INITIAL ISSUE

PROJECT LOCATION:

9XXX
HUDSON BLVD. N.
PART OF PID#3402921440004
PART OF PID#3402921440006

CORNERSTONE
LAND SURVEYING, INC.
Suite #200
1970 Northwestern Ave.
Stillwater, MN 55082
Phone 651.275.8969
dan@cssurvey.net

FILE NAME SURVLC83
PROJECT NO. LC22083

BOUNDARY/TOPOGRAPHY SURVEY

LEGEND

EXISTING	REMOVALS	
		PROPERTY LINE
		EASEMENT LINE
		BITUMINOUS PAVEMENT
		CONCRETE PAVEMENT
		CURB LINE
	AS NOTED	SANITARY SEWER
		WATER MAIN
		STORM SEWER
OU		OVERHEAD UTILITY
UE		UNDERGROUND ELECTRIC
UG		UNDERGROUND GAS
UF		UNDERGROUND FIBER OPTIC
UT		UNDERGROUND TELEPHONE
UTV		UNDERGROUND CABLE TV
x x		FENCE
SEE SURVEY		STORM CATCH BASIN
		STORM MANHOLE
		STORM FLARED END SECTION
		HYDRANT
		GATE VALVE
SEE SURVEY		OTHER SYMBOLS
970		10' CONTOUR
968		2' CONTOUR

REMOVAL PLAN NOTES

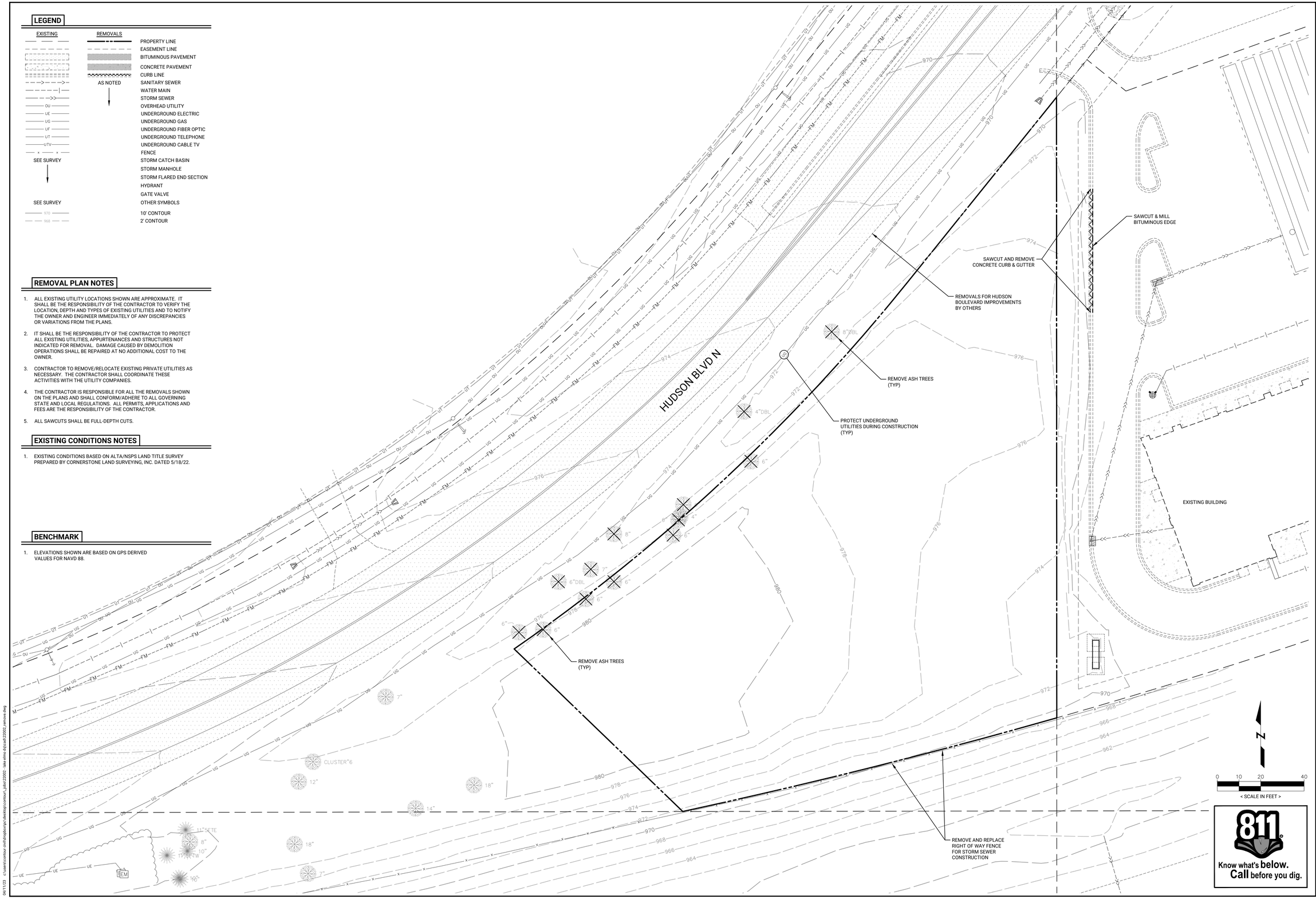
1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION, DEPTH AND TYPES OF EXISTING UTILITIES AND TO NOTIFY THE OWNER AND ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR VARIATIONS FROM THE PLANS.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES, APPURTENANCES AND STRUCTURES NOT INDICATED FOR REMOVAL. DAMAGE CAUSED BY DEMOLITION OPERATIONS SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
3. CONTRACTOR TO REMOVE/RELOCATE EXISTING PRIVATE UTILITIES AS NECESSARY. THE CONTRACTOR SHALL COORDINATE THESE ACTIVITIES WITH THE UTILITY COMPANIES.
4. THE CONTRACTOR IS RESPONSIBLE FOR ALL THE REMOVALS SHOWN ON THE PLANS AND SHALL CONFORM/ADHERE TO ALL GOVERNING STATE AND LOCAL REGULATIONS. ALL PERMITS, APPLICATIONS AND FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL SAWCUTS SHALL BE FULL-DEPTH CUTS.

EXISTING CONDITIONS NOTES

1. EXISTING CONDITIONS BASED ON ALTA/NSPS LAND TITLE SURVEY PREPARED BY CORNERSTONE LAND SURVEYING, INC. DATED 5/18/22.

BENCHMARK

1. ELEVATIONS SHOWN ARE BASED ON GPS DERIVED VALUES FOR NAVD 88.



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

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE

SIGNATURE:

DATE: 06/10/22 LIC #: 45889

REVISIONS	ISSUE DATE: 06/10/22	BY: JTR
1. 02/13/23	PUD SUBMITTAL	
2. 04/14/23	FINAL PLAT SUBMITTAL	
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7.		

OWNER

LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

EXISTING CONDITIONS & REMOVALS PLAN

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C1.1

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LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		BITUMINOUS PAVEMENT
		POROUS ASPHALT
		CONCRETE PAVEMENT
		CURB LINE
		SANITARY SEWER
		WATER MAIN
		STORM SEWER
OU		OVERHEAD UTILITY
UE		UNDERGROUND ELECTRIC
UG		UNDERGROUND GAS
UF		UNDERGROUND FIBER OPTIC
UT		UNDERGROUND TELEPHONE
UTV		UNDERGROUND CABLE TV
x x		FENCE
SEE SURVEY		STORM CATCH BASIN
		STORM MANHOLE
		STORM FLARED END SECTION
		HYDRANT
		GATE VALVE
SEE SURVEY		OTHER SYMBOLS

SITE PLAN NOTES

1. ALL DIMENSIONS ARE TO FACE OF CURB AND OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER SHALL BE B612 UNLESS OTHERWISE NOTED.
3. TYPICAL PARKING STALLS ARE 9' X 18'. HANDICAP PARKING STALLS ARE 9' X 18'.
4. ALL PEDESTRIAN RAMPS SHALL MEET CURRENT ADA STANDARDS.
5. UNLESS OTHERWISE SHOWN IN THE PLANS, CONTRACTOR SHALL PROVIDE CONTROL JOINTS AND EXPANSION JOINTS IN SLAB ON GRADE, SIDEWALKS, AND DRIVES PER THE FOLLOWING REQUIREMENTS:

   CONTROL JOINTS: WALKS @ 8' SPACING; OTHERS @ 10' SPACING

   SAWCUT CONTROL JOINTS MINIMUM ¼ CONCRETE THICKNESS.

   EXPANSION JOINTS: WALKS @ 24' SPACING; OTHERS @ 40' SPACING

   PROVIDE EXPANSION JOINT AT ALL POINTS WHERE A CHANGE IN PAVEMENT THICKNESS OCCURS AND WHERE NEW PAVEMENT WILL MATCH EXISTING PAVEMENT.

   DOWEL ALL EXPANSION JOINTS AT 24' SPACING MAX.

SIGNAGE AND PAVEMENT MARKING NOTES

1. ALL SIGNS SHALL BE PLACED 18" MINIMUM BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
2. SIGNS SHALL INCLUDE HARDWARE, POST, FOOTING, CASING, AND ALL APPURTENANCES REQUIRED FOR TYPICAL INSTALLATION.
3. PARKING LOT STRIPING AND PAVEMENT MARKINGS SHALL BE 4" SOLID WHITE PAINT. ALL PAVEMENT LETTERING SHALL BE 12" HEIGHT.
4. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE PER THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).

SIGN SCHEDULE

A.	STOP SIGN:	R1-1 (24" X 24")
B.	HANDICAP PARKING SIGN:	R7-8m W/R7-8b (12" X 18")
C.	NO PARKING SIGN:	R8-3a (12" X 18")
D.	TENANT SIGNAGE:	PER TENANT SPECIFICATIONS

KEYNOTES

1. LANDSCAPE AREA. SEE LANDSCAPE PLAN.
2. MATCH EXISTING CURB/SIDEWALK/PAVEMENT.
3. CONCRETE WALK/PATIO.
4. CONCRETE PAVEMENT/APRON.
5. PEDESTRIAN CURB RAMP.
6. 6" CONCRETE FILLED PIPE BOLLARD.
7. MONUMENT SIGN (BY OTHERS).
8. TRASH ENCLOSURE.
9. 4" SOLID WHITE LINE.
10. CROSS-WALK PAVEMENT MARKINGS, SOLID WHITE.
11. SOLID WHITE PAVEMENT MARKING.
12. TRANSFORM PAD (TBD).
13. LIGHT POLE AND BASE.
14. TENANT EQUIPMENT, FINAL DESIGN PENDING.
15. PROPOSED DRAINAGE AND UTILITY EASEMENT, TYP.

SITE DATA

EXISTING ZONING:	C, COMMERCIAL
PROPOSED ZONING:	PUD
PARCEL AREA:	40,681 SF
IMPERVIOUS AREA:	
BUILDING 1:	3,270 SF 8%
PAVEMENTS:	22,880 SF 56%
TOTAL:	26,150 SF 64%
PERVIOUS AREA:	14,531 SF 36%

PARKING SUMMARY

PARKING REQUIRED

1 SPACE PER THREE SEATS OR EACH 100 SF OF INTERIOR SPACE PLUS ONE SPACE PER 200 SF OF EXTERIOR SEATING AREA

47 SEATS	~~15.7~~
2,875 SF INTERIOR SPACE	28.8
520 SF EXTERIOR SPACE	2.6
	31

PARKING PROVIDED

STANDARD STALLS:	29
HANDICAP STALLS:	2
TOTAL STALLS:	31

HUDSON BLVD N

HUDSON BOULEVARD IMPROVEMENTS BY OTHERS

15 FT. PARKING SETBACK

30 FT. BUILDING SETBACK

25 FT. BUILDING SETBACK

10 FT. PARKING SETBACK

PROPOSED BUILDING

DO NOT ENTER

10 FT. BUILDING SETBACK

EXISTING BUILDING

30 FT. BUILDING SETBACK

10 FT. PARKING SETBACK

0 10 20 40

< SCALE IN FEET >

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OWNER

LYNSKEY & CLARK
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STILLWATER, MN 55082

SITE PLAN

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C2.1

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LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		BITUMINOUS PAVEMENT
		CONCRETE PAVEMENT
		CURB LINE
		SANITARY SEWER
		WATER MAIN
		STORM SEWER
OU		OVERHEAD UTILITY
UE		UNDERGROUND ELECTRIC
UG		UNDERGROUND GAS
UF		UNDERGROUND FIBER OPTIC
UT		UNDERGROUND TELEPHONE
UTV		UNDERGROUND CABLE TV
x x x		FENCE
SEE SURVEY		STORM CATCH BASIN
		STORM MANHOLE
		STORM FLARED END SECTION
		HYDRANT
		GATE VALVE
SEE SURVEY		OTHER SYMBOLS

GOVERNING SPECIFICATIONS

1. ALL WORK SHALL CONFORM TO THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS. WHERE CITY SPECIFICATION DOES NOT COVER THE WORK, THE LATEST EDITIONS OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION 'STANDARD SPECIFICATIONS FOR CONSTRUCTION', THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATION, AND THE MINNESOTA PLUMBING CODE SHALL APPLY.
2. THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).

UTILITY NOTES

1. SEE SHEET C6.2 FOR CITY STANDARD UTILITY NOTES.
2. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF GRADING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF DISCREPANCIES OR VARIATIONS FROM THE PLAN.
3. FINAL BUILDING UTILITY SERVICES AND DOWNSPOUT LOCATIONS SHALL BE VERIFIED WITH THE ARCHITECTURAL AND PLUMBING PLANS .
4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN 7 CALENDARS DAYS AFTER LAND-DISTURBING WORK HAS TEMPORARILY OR PERMANENTLY CEASED.

KEYNOTES

1. GREASE TRAP PER TENANT REQUIREMENTS.
2. LOWER WATER BELOW SANITARY SEWER TO PROVIDE 24" MIN. SEPARATION.

UTILITY CROSSINGS

1. TOP 8" WATER: 959.0
   BTM 6" SANITARY : 961.0
   SEPARATION: 2.0
2. TOP 8" WATER: 962.0
   BTM 12" STORM: 965.8
   SEPARATION: 3.8

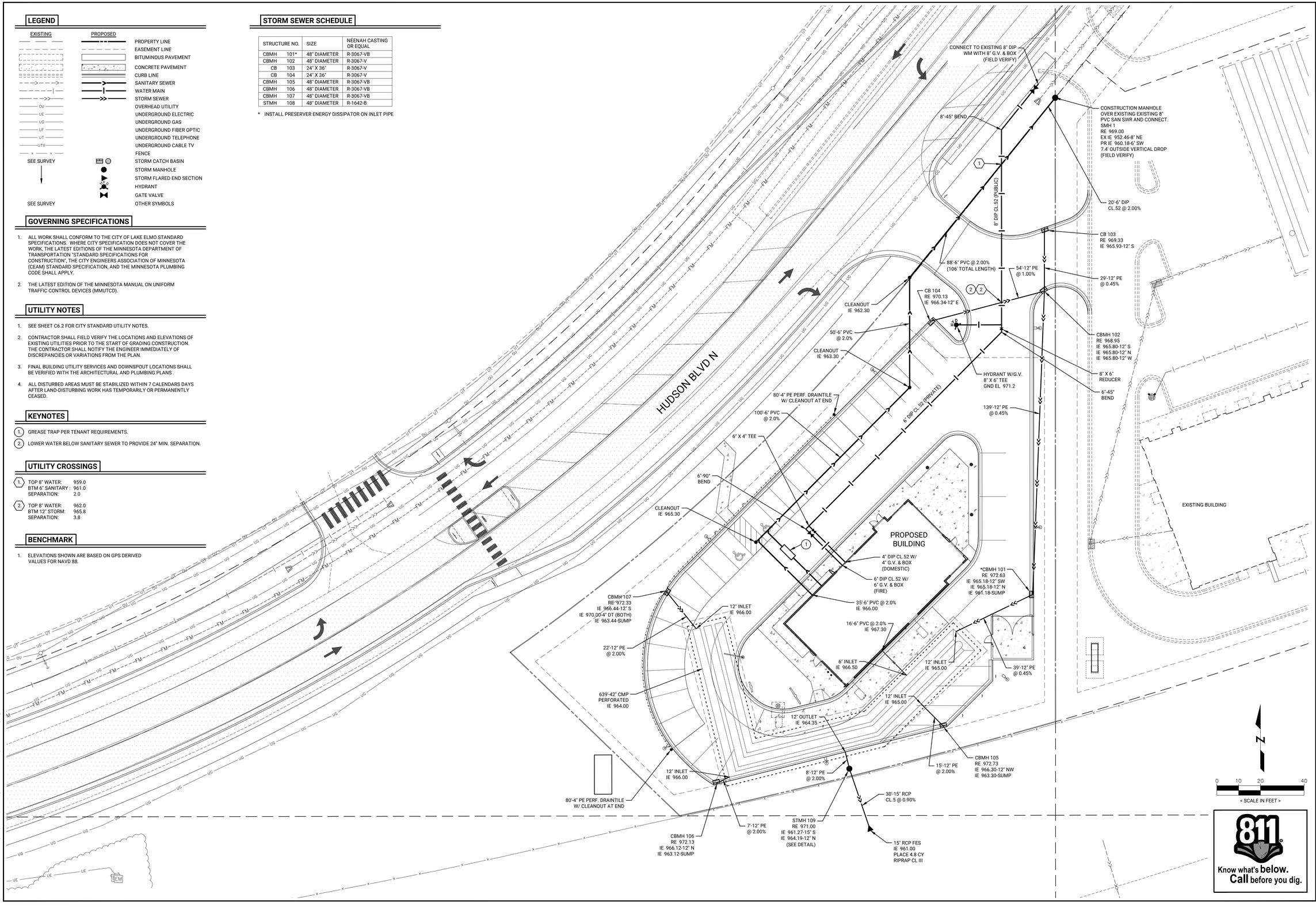
BENCHMARK

1. ELEVATIONS SHOWN ARE BASED ON GPS DERIVED VALUES FOR NAVD 88.

STORM SEWER SCHEDULE

STRUCTURE NO.		SIZE	NEENAH CASTING OR EQUAL
CBMH	101*	48" DIAMETER	R-3067-VB
CBMH	102	48" DIAMETER	R-3067-V
CB	103	24" X 36"	R-3067-V
CB	104	24" X 36"	R-3067-V
CBMH	105	48" DIAMETER	R-3067-VB
CBMH	106	48" DIAMETER	R-3067-VB
CBMH	107	48" DIAMETER	R-3067-VB
STMH	108	48" DIAMETER	R-1642-B

* INSTALL PRESERVER ENERGY DISSIPATOR ON INLET PIPE



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OWNER

LYNSKEY & CLARK
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STILLWATER, MN 55082

UTILITY PLAN

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C3.1

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LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		BITUMINOUS PAVEMENT
		CONCRETE PAVEMENT
		CURB LINE
		SANITARY SEWER
		WATER MAIN
		STORM SEWER
OU		OVERHEAD UTILITY
UE		UNDERGROUND ELECTRIC
UG		UNDERGROUND GAS
UF		UNDERGROUND FIBER OPTIC
UT		UNDERGROUND TELEPHONE
UTV		UNDERGROUND CABLE TV
x x x		FENCE
SEE SURVEY		STORM CATCH BASIN
		STORM MANHOLE
		STORM FLARED END SECTION
		HYDRANT
		GATE VALVE
SEE SURVEY		OTHER SYMBOLS
970	970	10' CONTOUR
968	968	2' CONTOUR
000.0	00.0	SPOT ELEVATION (CURB ELEVATIONS ARE TO GUTTER LINE)
		SILT FENCE
		RIPRAP

GOVERNING SPECIFICATIONS

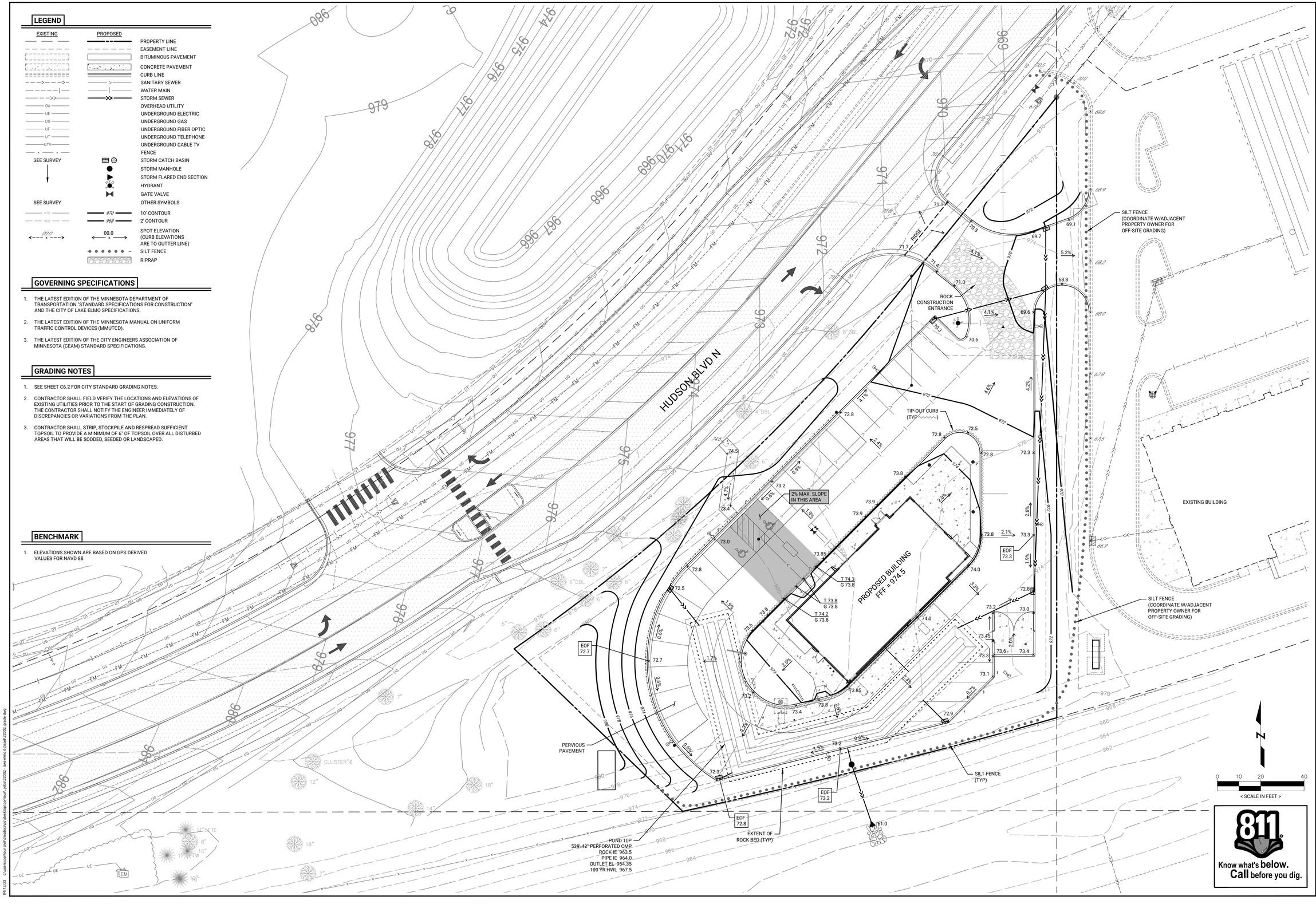
1. THE LATEST EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE CITY OF LAKE ELMO SPECIFICATIONS.
2. THE LATEST EDITION OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD).
3. THE LATEST EDITION OF THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM) STANDARD SPECIFICATIONS.

GRADING NOTES

1. SEE SHEET C6.2 FOR CITY STANDARD GRADING NOTES.
2. CONTRACTOR SHALL FIELD VERIFY THE LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO THE START OF GRADING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF DISCREPANCIES OR VARIATIONS FROM THE PLAN.
3. CONTRACTOR SHALL STRIP, STOCKPILE AND RESPREAD SUFFICIENT TOPSOIL TO PROVIDE A MINIMUM OF 6" OF TOPSOIL OVER ALL DISTURBED AREAS THAT WILL BE SODDED, SEEDED OR LANDSCAPED.

BENCHMARK

1. ELEVATIONS SHOWN ARE BASED ON GPS DERIVED VALUES FOR NAVD 88.



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GRADING AND DRAINAGE PLAN

DAIRY QUEEN STORE #70891

LAKE ELMO, MINNESOTA

SHEET NUMBER

C4.1

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LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		BITUMINOUS PAVEMENT
		CONCRETE PAVEMENT
		CURB LINE
		SANITARY SEWER
		WATER MAIN
		STORM SEWER
OU		OVERHEAD UTILITY
UE		UNDERGROUND ELECTRIC
UG		UNDERGROUND GAS
UF		UNDERGROUND FIBER OPTIC
UT		UNDERGROUND TELEPHONE
UTV		UNDERGROUND CABLE TV
		FENCE
SEE SURVEY		STORM CATCH BASIN
		STORM MANHOLE
		STORM FLARED END SECTION
		HYDRANT
		GATE VALVE
SEE SURVEY		OTHER SYMBOLS
970	970	10' CONTOUR
968	968	2' CONTOUR
000	00.0	SPOT ELEVATION (CURB ELEVATIONS ARE TO GUTTER LINE)
		SILT FENCE
		ROCK ENTRANCE

INSTALL INLET PROTECTION

INSTALL SILT FENCE PERIMETER CONTROL

INSTALL INLET PROTECTION

SWPPP REQUIREMENTS FOR HUDSON BLVD IMPROVEMENTS BY OTHERS

INSTALL ROCK TRACKING PAD

INSTALL INLET PROTECTION

INSTALL SILT FENCE PERIMETER CONTROL

N

0 10 20 40

< SCALE IN FEET >

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EROSION CONTROL PLAN PHASE I

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C5.1

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LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT LINE
		BITUMINOUS PAVEMENT
		CONCRETE PAVEMENT
		CURB LINE
		SANITARY SEWER
		WATER MAIN
		STORM SEWER
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		HYDRANT
		GATE VALVE
SEE SURVEY		OTHER SYMBOLS
970	970	10' CONTOUR
968	968	2' CONTOUR
000	00.0	SPOT ELEVATION (CURB ELEVATIONS ARE TO GUTTER LINE)
		SILT FENCE
		EROSION CONTROL BLANKET
		ROCK ENTRANCE

MAINTAIN VEHICLE TRACKING PAD. SWEEP STREET AS NEEDED.

MAINTAIN SILT FENCE PERIMETER CONTROL

SWPPP REQUIREMENTS FOR HUDSON BLVD IMPROVEMENTS BY OTHERS

MAINTAIN INLET PROTECTION ON EXISTING INLET, TYP

PROPOSED BUILDING FFF = 974.5

STABILIZE ALL AREAS DRAINING TO PERVIOUS PAVEMENT WITH SOD OR EROSION CONTROL BLANKET AND SEED PRIOR TO CONSTRUCTING PERVIOUS PAVEMENT

PROTECT UNDERGROUND INFILTRATION SYSTEM FROM SEDIMENTATION AND COMPACTION DURING CONSTRUCTION. KEEP SYSTEM OFFLINE UNTIL FINAL STABILIZATION.

INSTALL AND MAINTAIN INLET PROTECTION IMMEDIATELY AFTER CONSTRUCTION, TYP

MAINTAIN SILT FENCE PERIMETER CONTROL

INSTALL RIPRAP ENERGY DISSIPATION ON OUTFALL IMMEDIATELY AFTER CONSTRUCTION

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EROSION CONTROL PLAN PHASE II

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C5.2

04/13/23 C:\Users\tradach\Documents\Revit\Architectural_central_tradach.rvt - Sheet - Erosion Control Plan Phase II

PROJECT INFORMATION

PROJECT NAME:	DAIRY QUEEN STORE #70891
STREET ADDRESS:	UNASSIGNED, HUDSON BOULEVARD NORTH
CITY:	LAKE ELMO
COUNTY:	WASHINGTON
STATE:	MINNESOTA
ZIP CODE:	55042
LAT/LONG:	44.9496, -92.9063
PARCEL AREA:	0.934 ACRES
DRAINAGE BOUNDARY AREA:	1.062 ACRES
EXISTING IMPERVIOUS:	0.000 ACRES
PROPOSED IMPERVIOUS:	0.620 ACRES
NET NEW IMPERVIOUS:	0.620 ACRES
DISTURBED AREA:	1.70 ACRES
OWNER:	LYNSKEY AND CLARK

RESPONSIBLE PARTIES

SWPPP DESIGN:	JOSEPH RADACH PE
TRAINING:	DESIGN OF CONSTRUCTION SWPPP, U OF MN (5/23 EXPIRATION)
SITE MANAGER:	_____
TRAINING:	_____
LONG TERM O&M:	LYSNKEY AND CLARK

SWPPP CONTENT

THE SWPPP CONTAINS ALL SHEETS WITHIN THE CONSTRUCTION PLAN SET AND INCLUDES THE STORMWATER MANAGEMENT PLAN, INCORPORATED HEREIN BY REFERENCE. IN DEVELOPING THIS SWPPP, THE TEMPORARY AND PERMANENT BMPS WERE DESIGNED BASED ON EXPECTED RAINFALLS OF 3 INCHES IN 24 HOURS DURING CONSTRUCTION, WITH EXTREME EVENTS RANGING FROM 5 TO 7 INCHES IN 24 HOURS.

EXISTING CONDITIONS

THE SITE IS LOCATED APPROXIMATELY 900 FEET SOUTHWEST OF THE INTERSECTION OF HUDSON BOULEVARD AND KEATS AVENUE IN LAKE ELMO, WASHINGTON COUNTY, MINNESOTA. THE SITE IS BOUNDED ON THE NORTH AND WEST BY HUDSON BOULEVARD, ON THE SOUTH BY INTERSTATE 94, AND ON THE EAST BY EXISTING COMMERCIAL/RETAIL DEVELOPMENT. THE SITE IS CURRENTLY UNDEVELOPED GRASSLAND.

THE SITE BOUNDARY CONSISTS OF 0.934 ACRES, OF WHICH THERE ARE NO IMPERVIOUS SURFACES. THE DRAINAGE BOUNDARY BEING CONSIDERED FOR THE DRAINAGE ANALYSIS IS 1.792 ACRES, WHICH INCLUDES RUNON AREAS TO THE WEST AND NORTH. THE DRAINAGE BOUNDARY CONTAINS 0.253 ACRES OF IMPERVIOUS SURFACE, WHICH INCLUDES THE PORTIONS OF HUDSON BOULEVARD DRAINING TO THE SITE.

THE SITE HAS A SLOPED TOPOGRAPHY, WITH ELEVATIONS RANGING FROM 982 IN THE WEST DOWN TO ABOUT 970 IN THE NORTHEAST AND SOUTHEAST. STORMWATER FROM THE SITE EITHER DRAINS EAST AND NORTH TO THE HUDSON BOULEVARD DITCH OR EAST AND SOUTH TO THE INTERSTATE 94 DITCH. ALL STORMWATER FROM THE SITE ULTIMATELY DRAINS EAST TO MNDOT DRAINAGE PONDS.

PROPOSED CONDITIONS

LYNSKEY AND CLARK PLANS ON DEVELOPING THE SITE INTO A DAIRY QUEEN RESTAURANT, WITH ASSOCIATED PARKING AND DRIVE AREAS. DURING CONSTRUCTION, APPROXIMATELY 1.7 ACRES WILL BE DISTURBED. AFTER CONSTRUCTION, THE SITE BOUNDARY WILL CONTAIN 0.600 ACRES OF IMPERVIOUS SURFACE, AND THE DRAINAGE BOUNDARY WILL CONTAIN 0.620 ACRES OF IMPERVIOUS SURFACE, FOR A NET INCREASE OF 0.620 ACRES.

STORM SEWER WILL BE USED TO COLLECT STORMWATER FROM THE SITE. THE STORM SEWER WILL BE ROUTED TO AN UNDERGROUND CMP INFILTRATION SYSTEM FOR WATER QUALITY TREATMENT, VOLUME REDUCTION, AND RATE CONTROL. PERVIOUS PAVEMENT WILL ALSO BE USED IN THE PARKING AREAS OF THE SITE TO PROVIDE ADDITIONAL VOLUME REDUCTION. THE CMP UNDERGROUND SYSTEM WILL DISCHARGE TO THE SOUTH TO THE INTERSTATE 94 DITCH. DRAINAGE PATTERNS OUTSIDE OF THE PROPOSED DEVELOPED AREAS WILL GENERALLY BE MAINTAINED TO EXISTING CONDITIONS.

SOIL INFORMATION

IN MAY OF 2022, HAUGO GEOTECHNICAL SERVICES DRILL TWO SOIL BORINGS TO CHARACTERIZE ONSITE SOILS. THE BORINGS SHOW A SOIL PROFILE GENERALLY CONSISTING OF VARIABLE DEPTHS OF TOPSOIL OVER CLAYEY SAND AND SILTY CLAYEY SAND. NO GROUNDWATER WAS OBSERVED IN THE BORINGS. THESE SOILS ARE PRIMARILY IN THE HYDROLOGIC SOIL GROUP (HSG) C. ACCORDING TO THE NRCS WEB SOIL SURVEY, ONSITE SOILS CONSIST OF SILT LOAM IN THE HSG B.

SITE CONTAMINATION

THE SITE OR ADJACENT SITES ARE NOT KNOWN TO BE CONTAMINATED. A REVIEW OF THE MPCA'S "WHAT'S IN MY NEIGHBORHOOD" DID NOT SHOW ANY ONSITE OR NEARBY CONTAMINATION SOURCES.

STORMWATER RECEIVING WATERS

ALL STORMWATER WILL DRAIN TO MNDOT DRAINAGE PONDS LOCATED EAST OF SITE.

SPECIAL OR IMPAIRED WATERS

MARKGRAFS LAKE IS LOCATED 4,000 FEET SOUTHWEST OF THE SITE AND IS LISTED AS AN IMPAIRED WATER WITH A CONSTRUCTION RELATED PARAMETER. ADDITIONAL BMPS ARE REQUIRED TO BE IMPLEMENTED AT THE SITE AND ARE AS FOLLOWS:

- PERMITTEES MUST IMMEDIATELY INITIATE STABILIZATION OF EXPOSED SOIL AREAS, INCLUDING SOIL STOCKPILES, AND COMPLETE THE STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES.
- PERMITTEES MUST PROVIDE A TEMPORARY SEDIMENT BASIN FOR COMMON DRAINAGE LOCATIONS THAT SERVE AN AREA WITH FIVE (5) OR MORE ACRES DISTURBED AT ONE TIME.

WETLAND CONSIDERATIONS

THERE ARE NO KNOWN WETLANDS ONSITE.

PERMANENT STORMWATER MANAGEMENT SYSTEM

THE MPCA CONSTRUCTION STORMWATER GENERAL PERMIT REQUIRES SITES TO PROVIDE A WATER QUALITY VOLUME EQUAL TO ONE INCH OF RUNOFF OVER NEWLY CREATED IMPERVIOUS SURFACES. THE VALLEY BRANCH WATERSHED DISTRICT (VBWD) REQUIRES SITES TO PROVIDE VOLUME ABSTRACTION OF 1.1 INCHES OVER THE NET INCREASE OF IMPERVIOUS SURFACE. THE PROPOSED PLAN OF DEVELOPMENT HAS A NET INCREASE OF IMPERVIOUS SURFACE OF 0.620 ACRES, WHICH REQUIRES A VOLUME ABSTRACTION OF 0.057 ACRE FEET.

AN UNDERGROUND CMP INFILTRATION SYSTEM AND PERVIOUS PAVEMENT WILL BE USED TO PROVIDE VOLUME ABSTRACTION AND RATE CONTROL FOR THE SITE. THE CMP SYSTEM WILL CONSIST OF APPROXIMATELY 539 FEET OF 42-INCH PERFORATED CMP PIPE PLACED IN AND ON A ROCK BED. THE ROCK BED WILL EXTEND 6 INCHES BELOW AND ABOVE THE CMP PIPES, AND 24 INCHES ALONG THE SIDES. THE INVERT OF THE CMP SYSTEM IS PROPOSED TO BE 964.0 WITH THE SYSTEM OUTLET AT 964.35. THE VOLUME OF THE CMP SYSTEM BELOW THE OUTLET ELEVATION IS 0.030 ACRE FEET. THE SURFACE AREA OF THE ROCK BED IS 0.078 ACRE FEET. THE EQUIVALENT DEPTH (VOLUME DIVIDED BY AREA) OF THE CMP INFILTRATION SYSTEM IS 0.385 FEET. BASED ON THE CLAYEY SAND SUBSOILS, AN INFILTRATION RATE OF 0.2 INCHES PER HOUR IS APPROPRIATE. PER VBWD, THE INFILTRATION RATE FOR UNDERGROUND SYSTEMS IS REQUIRED TO BE REDUCED IN HALF, WHICH SETS THE ASSUMED INFILTRATION RATE AT 0.1 INCHES PER HOUR. WITH AN EQUIVALENT DEPTH OF 0.385 FEET AND AN INFILTRATION RATE OF 0.1 INCHES PER HOUR, THE SYSTEM WILL DRAWDOWN IN APPROXIMATELY 46 HOURS. PRETREATMENT FOR THE CMP INFILTRATION SYSTEM WILL BE PROVIDED BY SUMP STRUCTURES AND A PRESERVER ENERGY DISSIPATOR.

THE PERVIOUS PAVEMENT WILL BE LOCATED IN THE NORTHWESTERLY PARKING STALLS AND WILL INCLUDE AN AREA OF 0.068 ACRES. THE PERVIOUS PAVEMENT WILL BE UNDERLAIN BY 18 INCHES OF ROCK BACKFILL AND A DRAINTILE WILL BE PLACED AT THE TOP PORTION OF THE ROCK TO PROVIDE OVERFLOW DRAINAGE. THERE WILL BE 12 INCHES OF ROCK BELOW THE DRAINTILE. THE TOTAL VOLUME OF ROCK WILL BE 0.068 ACRE FEET. THE VOID SPACE IN THE ROCK IS ASSUMED TO BE 40%, WHICH EQUATES TO A TOTAL WATER STORAGE VOLUME OF 0.027 ACRE FEET. THE EQUIVALENT DEPTH OF THE ROCK STORAGE (VOLUME DIVIDED BY AREA) IS 0.397 FEET. WITH AN ASSUMED INFILTRATION RATE OF 0.1 INCHES PER HOUR, THE SYSTEM WILL DRAWDOWN IN APPROXIMATELY 48 HOURS.

THE TOTAL VOLUME ABSTRACTION PROVIDED BY THE TWO PRACTICES IS 0.057 ACRE FEET, WHICH MEETS THE VOLUME ABSTRACTION REQUIREMENT. THE RUNOFF MODELING PREDICTS THAT PROPOSED RUNOFF RATES WILL BE EQUAL TO OR LESS THAN EXISTING RUNOFF RATES FOR ALL DESIGN STORM EVENTS.

BMP IMPLEMENTATION SCHEDULE

PRIOR TO CONSTRUCTION, IMPLEMENT THE FOLLOWING BMPS:

- VEHICLE TRACKING PAD
- PERIMETER CONTROL
- STORM DRAIN INLET PROTECTION

DURING CONSTRUCTION, IMPLEMENT THE FOLLOWING BMPS:

- PHASED GRADING
- STREET SWEEPING
- STABILIZATION OF EXPOSED SOILS
- STABILIZATION OF DITCHES OR SWALES
- STOCKPILE PERIMETER CONTROL & STABILIZATION
- MINIMIZATION OF SOIL COMPACTION AND PRESERVATION OF TOPSOIL
- CONCRETE WASHOUT AREA
- STORM DRAIN INLET PROTECTION

EROSION AND SEDIMENT CONTROL ESTIMATED QUANTITIES

VEHICLE TRACKING PAD	1 EA
SILT FENCE	500 LF
INLET PROTECTION	9 EA
EROSION CONTROL BLANKET	AS NEEDED
TURF ESTABLISHMENT	1.0 AC

PERMIT REQUIREMENTS & SWPPP IMPLEMENTATION

THE FOLLOWING SECTIONS WERE TAKEN FROM THE MPCA CONSTRUCTION STORMWATER GENERAL PERMIT. IT IS THE RESPONSIBILITY OF THE PERMITTEE TO FOLLOW ALL REQUIREMENTS OF THE MPCA CONSTRUCTION STORMWATER GENERAL PERMIT.

3.1 APPLICATION AND COVERAGE EFFECTIVE DATE. [MINN. R. 7090]

3.2 THE OWNER AND OPERATOR MUST SUBMIT A COMPLETE AND ACCURATE ON-LINE APPLICATION WITH THE APPROPRIATE FEE TO THE MPCA FOR EACH PROJECT THAT DISTURBS ONE (1) OR MORE ACRES OF LAND OR FOR A COMMON PLAN OF DEVELOPMENT OR SALE THAT WILL ULTIMATELY DISTURB ONE (1) OR MORE ACRES. [MINN. R. 7090]

3.3 FOR PROJECTS OR COMMON PLANS OF DEVELOPMENT OR SALE THAT DISTURB LESS THAN 50 ACRES OR DO NOT DISCHARGE STORMWATER WITHIN 1 MILE (AERIAL RADIUS MEASUREMENT) OF A SPECIAL OR IMPAIRED WATER, PERMITTEES DO NOT NEED TO SUBMIT THE SWPPP WITH THE APPLICATION. PERMIT COVERAGE FOR THESE PROJECTS IS EFFECTIVE UPON APPLICATION AND COMPLETING THE PAYMENT PROCESS. [MINN. R. 7090]

3.4 FOR CERTAIN PROJECTS OR COMMON PLANS OF DEVELOPMENT OR SALE DISTURBING 50 ACRES OR MORE, THE COMPLETE SWPPP MUST BE INCLUDED WITH THE APPLICATION AND SUBMITTED AT LEAST 30 DAYS BEFORE THE START OF CONSTRUCTION ACTIVITY. THIS APPLIES IF THERE IS A DISCHARGE POINT ON THE PROJECT WITHIN ONE MILE (AERIAL RADIUS MEASUREMENT) OF, AND FLOWS TO, A SPECIAL WATER LISTED IN ITEM 23.3 THROUGH 23.6 OR AN IMPAIRED WATER AS DESCRIBED IN ITEM 23.7. PERMIT COVERAGE FOR THESE PROJECTS IS EFFECTIVE UPON SUBMITTING THE APPLICATION AND COMPLETE SWPPP, COMPLETING THE PAYMENT PROCESS AND RECEIVING A DETERMINATION FROM THE MPCA THAT THE REVIEW OF THE SWPPP IS COMPLETE. THE DETERMINATION MAY TAKE LONGER THAN 30 DAYS IF THE SWPPP IS INCOMPLETE. IF THE MPCA FAILS TO CONTACT THE PERMITTEES WITHIN 30 DAYS OF APPLICATION RECEIPT, COVERAGE IS EFFECTIVE 30 DAYS AFTER COMPLETING THE PAYMENT PROCESS. [MINN. R. 7090]

3.5 THE APPLICATION REQUIRES LISTING ALL PERSONS MEETING THE DEFINITION OF OWNER AND OPERATOR AS PERMITTEES. THE OWNER IS RESPONSIBLE FOR COMPLIANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT. THE OPERATOR IS RESPONSIBLE FOR COMPLIANCE WITH SECTIONS 3, 4, 6-22, 24 AND APPLICABLE REQUIREMENTS FOR CONSTRUCTION ACTIVITY IN SECTION 23. [MINN. R. 7090]

3.6 PERMITTEES WILL RECEIVE COVERAGE NOTIFICATION IN A MANNER DETERMINED BY THE MPCA. [MINN. R. 7090]

3.7 FOR CONSTRUCTION PROJECTS WHERE THE OWNER OR OPERATOR CHANGES (E.G., AN ORIGINAL DEVELOPER SELLS PORTIONS OF THE PROPERTY TO VARIOUS HOMEBUILDERS OR SELLS THE ENTIRE SITE TO A NEW OWNER), THE CURRENT OWNER AND THE NEW OWNER OR OPERATOR MUST SUBMIT A COMPLETE PERMIT MODIFICATION FORM PROVIDED BY THE MPCA. THE CURRENT OWNER AND THE NEW OWNER OR OPERATOR MUST SUBMIT THE FORM PRIOR TO THE NEW OWNER OR OPERATOR COMMENCING CONSTRUCTION ACTIVITY OR NO LATER THAN 30 DAYS AFTER TAKING OWNERSHIP OF THE PROPERTY. [MINN. R. 7090]

3.8 FOR CONSTRUCTION PROJECTS WHERE THE OWNER OR OPERATOR CHANGES, THE CURRENT OWNER MUST PROVIDE A SWPPP TO THE NEW OWNER AND OPERATOR THAT SPECIFICALLY ADDRESSES THE REMAINING CONSTRUCTION ACTIVITY. THE NEW OWNER OR OPERATOR CAN IMPLEMENT THE ORIGINAL SWPPP, MODIFY THE SWPPP, OR DEVELOP A NEW SWPPP. PERMITTEES MUST ENSURE THEIR ACTIVITIES DO NOT RENDER ANOTHER PARTY'S EROSION PREVENTION AND SEDIMENT CONTROL BMPS INEFFECTIVE. [MINN. R. 7090]

4.1 TERMINATION OF COVERAGE. [MINN. R. 7090]

4.2 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE. [MINN. R. 7090]

4.3 PERMITTEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER SELLING OR OTHERWISE LEGALLY TRANSFERRING THE ENTIRE SITE, INCLUDING PERMIT RESPONSIBILITY FOR ROADS (E.G., STREET SWEEPING) AND STORMWATER INFRASTRUCTURE FINAL CLEAN OUT, OR TRANSFERRING PORTIONS OF A SITE TO ANOTHER PARTY. THE PERMITTEES' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT. [MINN. R. 7090]

4.4 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 ITEM 13.3 THROUGH 13.7.

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 ACTIVITIES OF ONE (1) OR MORE ACRES IN SIZE. [MINN. R. 7090]

4.5 PERMITTEES MAY TERMINATE COVERAGE UPON MPCA APPROVAL AFTER SUBMITTING INFORMATION DOCUMENTING THE OWNER CANCELLED THE PROJECT. [MINN. R. 7090]

6.1 SWPPP AMENDMENTS. [MINN. R. 7090]

6.2 ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS. [MINN. R. 7090]

6.3 PERMITTEES MUST AMEND THE SWPPP 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. [MINN. R. 7090]

6.4 PERMITTEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMPS AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MPCA OFFICIALS INDICATE THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER OR THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES (E.G., NUISANCE CONDITIONS AS DEFINED IN MINN. R. 7050.0210, SUBP. 2) OR THE SWPPP IS NOT CONSISTENT WITH THE OBJECTIVES OF A USEPA APPROVED TMDL. [MINN. R. 7050.0210]

7.1 BMP SELECTION AND INSTALLATION. [MINN. R. 7090]

7.2 PERMITTEES MUST SELECT, INSTALL, AND MAINTAIN THE BMPS IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES. [MINN. R. 7090]

8.1 EROSION PREVENTION PRACTICES. [MINN. R. 7090]

8.2 BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. [MINN. R. 7090]

8.3 PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING). [MINN. R. 7090]

8.4 PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE. [MINN. R. 7090]

8.5 FOR PUBLIC WATERS THAT THE MINNESOTA DNR HAS PROMULGATED "WORK IN WATER RESTRICTIONS" DURING SPECIFIED FISH SPAWNING TIME FRAMES, PERMITTEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATER'S EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD. [MINN. R. 7090]

8.6 PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE. PERMITTEES MUST COMPLETE STABILIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES. [MINN. R. 7090]

8.7 TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES. [MINN. R. 7090]

8.8 PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT. [MINN. R. 7090]

8.9 PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM. [MINN. R. 7090]

8.10 PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11. [MINN. R. 7090]

9.1 SEDIMENT CONTROL PRACTICES. [MINN. R. 7090]

9.2 PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPS ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES. PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER. [MINN. R. 7090]

9.3 IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN ITEM 6.3. [MINN. R. 7090]

9.4 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. [MINN. R. 7090]

9.5 A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPLAND PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER. [MINN. R. 7090]

9.6 PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE. [MINN. R. 7090]

9.7 PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET. [MINN. R. 7090]

9.8 PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITTEES OR THE JURISDICTIONAL AUTHORITY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITTEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP. [MINN. R. 7090]

9.9 PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER. [MINN. R. 7090]

9.10 PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER. [MINN. R. 7090]

9.11 PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. [MINN. R. 7090]

9.12 PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET. [MINN. R. 7090]

9.13 PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14. [MINN. R. 7090]

9.14 IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION. [MINN. R. 7090]

9.15 PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE. [MINN. R. 7090]

9.16 PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE. [MINN. R. 7090]

9.17 PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE. NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER. [MINN. R. 7090]

9.18 PERMITTEES MUST USE POLYMERS, FLOCCULANTS, OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE. [MINN. R. 7090]

10.1 DEWATERING AND BASIN DRAINING. [MINN. R. 7090]

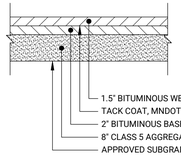
10.2 PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-LADEN WATERS RELATED TO DEWATERING OR BASIN DRAINING (E.G., PUMPED DISCHARGES, TRENCH/DITCH CUTS FOR DRAINAGE) TO A TEMPORARY OR PERMANENT SEDIMENT BASIN ON THE PROJECT SITE UNLESS INFEASIBLE. PERMITTEES MAY DEWATER TO SURFACE WATERS IF THEY VISUALLY CHECK TO ENSURE ADEQUATE TREATMENT HAS BEEN OBTAINED AND NUISANCE CONDITIONS (SEE MINN. R. 7050.0210, SUBP. 2) WILL NOT RESULT FROM THE DISCHARGE. IF PERMITTEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITTEES MUST TREAT IT WITH APPROPRIATE BMPS SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES. [MINN. R. 7050.0210]

10.3 IF PERMITTEES MUST DISCHARGE WATER CONTAINING OIL OR GREASE, THEY MUST USE AN OIL-WATER SEPARATOR OR SUITABLE FILTRATION DEVICE (E.G., CARTRIDGE FILTERS, ABSORBENTS PADS) PRIOR TO DISCHARGE. [MINN. R. 7090]

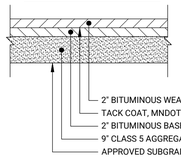
10.4 PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. [MINN. R. 7090]

10.5 IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER T

LIGHT DUTY - PARKING AREAS



HEAVY DUTY - DRIVE AREAS



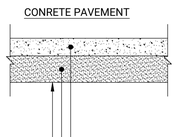
NOTES

1. FINAL PAVEMENT SECTIONS AND SUBGRADE COMPACTION REQUIREMENTS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER OF RECORD

1 FLEXIBLE PAVEMENT SECTIONS

NO SCALE

CONRETE WALK



CONRETE PAVEMENT

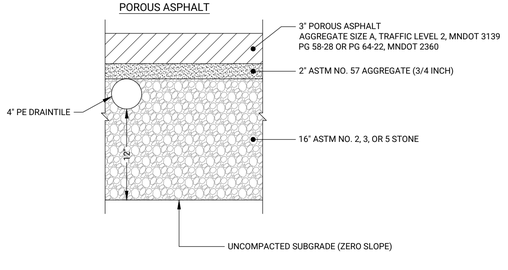
NOTES

1. FINAL PAVEMENT SECTIONS AND SUBGRADE COMPACTION REQUIREMENTS TO BE CONFIRMED BY GEOTECHNICAL ENGINEER OF RECORD

2 RIGID PAVEMENT SECTIONS

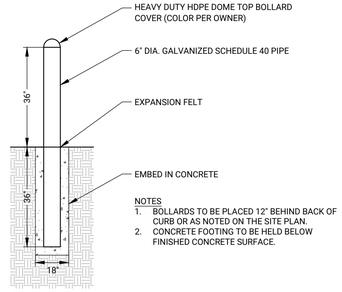
NO SCALE

POROUS ASPHALT



3 POROUS ASPHALT PAVEMENT

NO SCALE

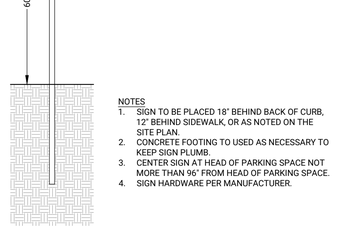


NOTES

1. BOLLARDS TO BE PLACED 12" BEHIND BACK OF CURB OR AS NOTED ON THE SITE PLAN.
2. CONCRETE FOOTING TO BE HELD BELOW FINISHED CONCRETE SURFACE.

4 6" CONCRETE FILLED PIPE BOLLARD

NO SCALE

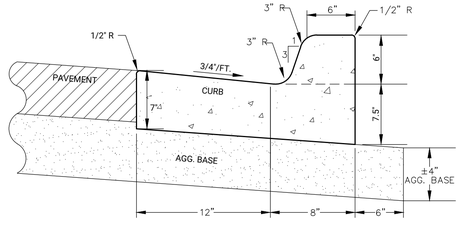


NOTES

1. SIGN TO BE PLACED 18" BEHIND BACK OF CURB, 12" BEHIND SIDEWALK, OR AS NOTED ON THE SITE PLAN.
2. CONCRETE FOOTING TO USED AS NECESSARY TO KEEP SIGN PLUMB.
3. CENTER SIGN AT HEAD OF PARKING SPACE NOT MORE THAN 96" FROM HEAD OF PARKING SPACE.
4. SIGN HARDWARE PER MANUFACTURER.

5 HANDICAP PARKING SIGN

NO SCALE

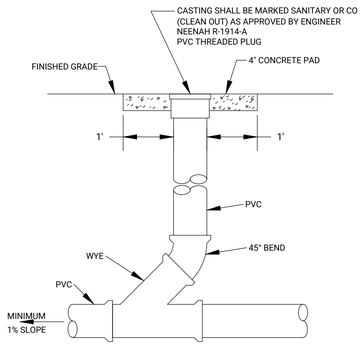


NOTES:

1. TIPOUT CURB SHALL SLOPE OUT AT 3/4" PER FOOT.
2. WHERE CURB MEETS CONCRETE PAVEMENT, INSTALL 24" NO.4 DOWELS SPACED 36" ON CENTER.

6 CONCRETE CURB & GUTTER

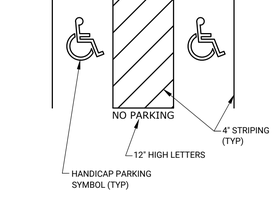
NO SCALE



NOTES:
- ALL JOINTS SHALL BE SOLVENT WELD EXCEPT AS NOTED.
- CLEAN OUTS ARE REQUIRED AT 100' SPACING AND AT CHANGE OF DIRECTION.
- ALL CLEAN OUTS SHALL BE EQUIPPED WITH A FROST SLEEVE.

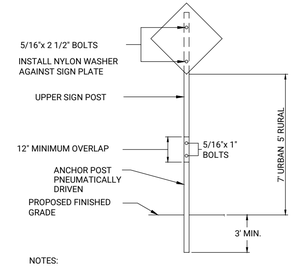
7 CLEANOUT

NO SCALE



8 HANDICAP PARKING SPACE PAVEMENT MARKINGS

NO SCALE



NOTES:

1. MATERIALS AND INSTALLATION SHALL BE IN ACCORDANCE WITH CITY SPECIFICATIONS.
2. SIGN PANELS-REFLECTIVE SHEETING, VIP DIAMOND GRADE.
3. BOLTS SHALL BE TAMPER PROOF.
4. FLANGED CHANNEL SIGN POSTS SHALL BE PAINTED GREEN, 3 LB./L.F. AND 7' LONG.
5. SIGNS INSTALLED IN CONCRETE SHALL HAVE AN APPROVED BREAK-AWAY DEVICE.
6. EDGE OF SIGN SHALL BE MINIMUM 18" FROM BACK OF CURB.

9 TYPICAL SIGN

NO SCALE

STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE.

TEMPORARY SEEDING SHALL BE IN ACCORDANCE WITH MNDOT 2575 AND SHALL BE AS FOLLOWS:

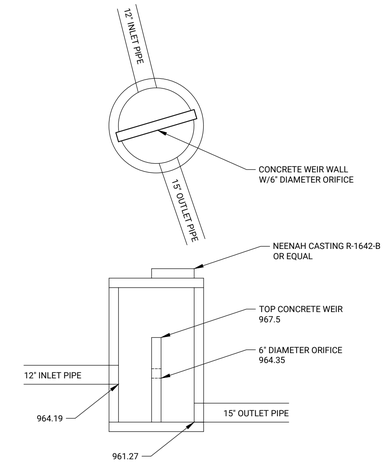
SEED: 21-111 AT 100 LBS PER ACRE OR 21-112 AT 100 LBS PER ACRE
MULCH: TYPE 1 AT 2 TONS PER ACRE
FERTILIZER: 10-20-20 AT 300 LBS PER ACRE

PERMANENT SEEDING SHALL BE IN ACCORDANCE WITH MNDOT 2575 AND SHALL BE AS FOLLOWS, UNLESS SHOWN OTHERWISE ON THE PLANS:

SEED: 25-131 AT 220 LBS PER ACRE OR 25-141 AT 59 LBS PER ACRE
MULCH: TYPE 1 AT 2 TONS PER ACRE
FERTILIZER: 10-10-10 AT 200 LBS PER ACRE

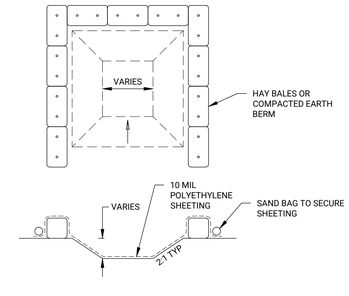
10 TURF ESTABLISHMENT

NO SCALE



11 STMH 108

NO SCALE



NOTES

1. THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
2. LIQUID AND SOLID WASHOUT WASTE SHALL NOT CONTACT THE GROUND.
3. LIQUID AND SOLID WASHOUT WASTE SHALL BE DISPOSED OF IN COMPLIANCE WITH MPCA RULES.
4. A SIGN SHALL BE INSTALLED INDICATING THE LOCATION OF THE WASHOUT FACILITY.

12 CONCRETE WASHOUT

NO SCALE

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE
SIGNATURE:
DATE: 06/10/22 LIC #: 45889

REVISIONS	ISSUE DATE: 06/10/22	BY: JTR
1. 02/13/23	PUD SUBMITTAL	
2. 04/14/23	FINAL PLAT SUBMITTAL	
3.		
4.		
5.		
6.		
7.		

OWNER

LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

DETAILS

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C6.1

04/13/23 c:\users\contour civil\dropbox\pc\desktop\contour_jobs\23002 - lake elmo dq\civil\23002_details.dwg

1. ALL WATERMAIN AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. MANIPULATION OF EXISTING VALVES SHALL BE PERFORMED ONLY BY CITY PERSONNEL.
3. WATERMAIN SHALL BE DUCTILE IRON PIPE, ENCASED IN POLYETHYLENE, CLASS-52.
4. ALL FITTINGS SHALL COMPLY WITH CEAM SPEC. 2611.2.A1. ALL FITTINGS SHALL BE DUCTILE IRON PIPE WITH POLYETHYLENE ENCASEMENT. ALL CONNECTIONS SHALL BE INSTALLED UTILIZING COR-BLUE NUTS & BOLTS.
5. USE GATE VALVES FOR ALL APPLICATIONS UP THROUGH 12 INCHES.
6. GATE VALVES SHALL BE RESILIENT WEDGE AMERICAN FLOW CONTROL SERIES 2500 OR APPROVED EQUAL. GATE VALVES MUST COMPLY WITH CEAM SPEC 2611.2.C.2.
7. USE BUTTERFLY VALVES FOR ALL APPLICATIONS GREATER THAN 12 INCHES.
8. BUTTERFLY VALVES SHALL BE MUELLER LINESEAL III, OR APPROVED EQUAL. BUTTERFLY VALVES SHALL COMPLY WITH CEAM SPEC. 2611.2.C.3.
9. BOLTS AND NUTS ON ALL VALVES AND HYDRANTS SHALL BE STAINLESS STEEL.
10. ALL HYDRANTS SHALL BE INSTALLED 5.0 FEET BACK OF CURB.
11. HYDRANTS SHALL BE WATEROUS "PACER," MODEL WB-67 OR APPROVED EQUAL, FITTED WITH FH 800 SERIES FLEX STAKE AND PAINTED RED.
12. HYDRANTS SHALL HAVE TWO OUTLET NOZZLES FOR 2-1/2 (I.D.) HOSE CONNECTIONS AND ONE 4" STORZ NOZZLE (MODEL WB-67) AND PENTAGON NUT END CAP.
13. THE CURB STOP SERVICE ASSEMBLY SHALL HAVE A MINIMUM 1-FT ADJUSTMENT RANGE AND SHALL EXTEND 6 INCHES ABOVE FINISHED GRADE FULLY EXTENDED.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING WATER TO HOMES AND BUSINESSES WHOSE WATER SUPPLY IS DISRUPTED DURING THE COURSE OF THE PROJECT.
15. THE CONTRACTOR MUST PROVIDE THE FOLLOWING WATER SYSTEM SUPPLIES TO THE CITY:
    1. ONE EXTRA NEW SIX-INCH HYDRANT EXTENSION PER PROJECT.
    2. ONE EXTRA HYDRANT FLEX STAKE MARKER FOR EACH 10 HYDRANTS, MINIMUM ONE PER PROJECT.
    3. ONE HYDRANT STORZ WRENCH OR REPAIR KIT PER PROJECT.
    4. ONE 12-FOOT GATE VALVE KEY PER PROJECT.

STANDARD PLAN NOTES
WATERMAIN PLANS

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 200A LAKE ELMO

1. ALL SANITARY SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. ALL SANITARY SEWER PVC PIPE SHALL BE INSTALLED ACCORDING TO CITY STANDARD DRAWING 103 "GRANULAR MATERIAL BEDDING METHOD (FOR PVC SANITARY SEWER PIPE).
3. UNLESS NOTED OTHERWISE, ALL SMOOTH WALLED SANITARY SEWER PVC PIPE AND FITTINGS SHALL BE SDR 35 WITH ELASTOMERIC GASKETED JOINTS.
4. ALL SANITARY SEWER SERVICES SHALL BE 4-INCH PVC, SCH. 40.
5. SMOOTH WALLED PVC PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF ASTM D-3034 FOR THE SIZE, STANDARD DIMENSION RATIO (SDR), AND STRENGTH REQUIREMENTS INDICATED ON THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
6. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
7. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL SANITARY SEWER MANHOLES. ADDITIONALLY, A BITUMASTIC SEAL STRIP SHALL BE PLACED AT ALL MANHOLE RISER JOINTS
8. SANITARY SEWER INLET AND OUTLET PIPES SHALL BE JOINED TO THE MANHOLE WITH A GASKETED, FLEXIBLE, WATERTIGHT CONNECTION TO ALLOW DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE TO TAKE PLACE.
9. A 1'-0" TO 1'-6" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
10. ALL SERVICE LINE STUBS MUST HAVE A 2"x2" HARDWOOD MARKER WITH METAL SPIKE RUNNING FROM THE END OF PIPE TO FINISHED GRADE ELEVATION.
11. UPON MAKING A CONNECTION TO AN EXISTING SANITARY SEWER STUB OR MANHOLE, DIRT AND DEBRIS SHALL BE PREVENTED FROM ENTERING THE EXISTING SEWER BY IMMEDIATELY INSTALLING WATERTIGHT PLUGS AS NEEDED IN THE EXISTING MANHOLE.
12. ALL MAINLINE SANITARY SEWER AND SERVICES SHALL HAVE TRACER WIRE PER CITY SPECIFICATIONS AND DETAILS.
13. ALL NEW SANITARY SEWER PIPE SHALL BE FLUSHED AND TELEVISED PRIOR TO SUBSTANTIAL COMPLETION – SEE SPECIFICATION SECTION 1700 – CLOSEOUT REQUIREMENTS.

STANDARD PLAN NOTES
SANITARY SEWER PLANS

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 300A LAKE ELMO

1. ALL STORM SEWER AND ACCESSORIES MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF LAKE ELMO STANDARD SPECIFICATIONS AND DETAILS.
2. REINFORCED CONCRETE PIPE AND FITTINGS SHALL CONFORM WITH THE REQUIREMENTS OF MnDOT SPEC 3236 (REINFORCED CONCRETE PIPE) FOR THE TYPE, SIZE, AND STRENGTH CLASS SPECIFIED HEREIN.
3. PRECAST CONCRETE MANHOLE AND CATCH BASIN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-477.
4. A 1'-0" TO 1'-6" MANHOLE SECTION SHALL BE INSTALLED UNDER THE CONE SECTION TO ALLOW FOR HEIGHT ADJUSTMENT WHENEVER POSSIBLE.
5. JOINTS OF MANHOLE RISER SECTIONS SHALL BE TONGUE AND GROOVE WITH RUBBER "O" RING JOINTS PROVIDED ON ALL STORM SEWER MANHOLES. A BITUMASTIC SEAL STRIP SHALL BE PLACED AT ALL MANHOLE RISER JOINTS
6. RIP-RAP SHALL BE HAND-PLACED OVER GEOTEXTILE FABRIC AND CONFORM TO MnDOT SPEC. 3601, CLASS III, OR AS SPECIFIED HEREIN.
7. THE GEOTEXTILE FABRIC USED UNDER RIP-RAP SHALL EXTEND 3 FT UNDER THE APRON.
8. FURNISH & INSTALL TRASH GUARDS ON ALL FLARED END SECTIONS.
9. ALL SILT SHALL BE CLEANED OUT FROM THE RIP-RAP AT THE END OF THE PROJECT.
10. STORM SEWER STRUCTURES WITHIN 10 FT OF WATERMAIN ARE TO HAVE WATER TIGHT CONNECTIONS PER MDH REQUIREMENTS.
11. ALL NEW STORM SEWER PIPE SHALL BE FLUSHED AND TELEVISED PRIOR TO SUBSTANTIAL COMPLETION – SEE SPECIFICATION SECTION 1700 – CLOSEOUT REQUIREMENTS.

STANDARD PLAN NOTES
STORM SEWER PLANS

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 400A LAKE ELMO

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND IMPLEMENT MINNESOTA POLLUTION CONTROL AGENCY (MPCA) BEST MANAGEMENT PRACTICES (BMP) TO CONTROL SITE SILTATION AND EROSION INTO DRAINAGE WAYS. THE CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS AND COMPLETION DATES RELATIVE TO ALL PERMITS ISSUED FOR THE WORK TO BE COMPLETED. THE ENGINEER MAY ISSUE A STOP WORK ORDER FOR ALL DEVELOPMENT WORK AND BUILDING CONSTRUCTION FOR NONCOMPLIANCE WITH THESE MEASURES.
2. SEQUENCING. ALL SILT FENCE AND OTHER EROSION CONTROL MEASURES SHALL BE IN PLACE AND APPROVED BY ENGINEER PRIOR TO ANY REMOVALS, EXCAVATION OR CONSTRUCTION AND SHALL BE MAINTAINED UNTIL VIABLE TURF OR GROUND COVER HAS BEEN ESTABLISHED AND APPROVED BY THE ENGINEER.
3. SILT FENCE. THE CONTRACTOR SHALL INSTALL SILT FENCE AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE CITY STANDARD DETAILS. SILT FENCE DAMS AND INTERIM SUMPS SHALL BE PLACED TO INTERCEPT SILT FROM CONCENTRATED RUNOFF FROM OPEN GRADED AREAS. ADDITIONAL SILT FENCE SHALL BE REQUIRED AS DIRECTED BY THE ENGINEER.
4. STOCKPILES. ALL STOCKPILE AREAS SHALL HAVE SILT FENCE OR SEDIMENT TRAPPING SYSTEMS PLACED AROUND THE ENTIRE PERIMETER.
5. INLET PROTECTION. THE CONTRACTOR SHALL INSTALL INLET PROTECTION ON ALL EXISTING STORM SEWER INLETS IN ACCORDANCE WITH THE CITY STANDARD DETAILS. INLET PROTECTION SHALL ALSO BE PROVIDED ON ALL PROPOSED STORM SEWER INLETS IMMEDIATELY FOLLOWING CONSTRUCTION OF THE INLET. INLET PROTECTION MUST BE INSTALLED IN A MANNER THAT WILL NOT IMPOUND WATER FOR EXTENDED PERIODS OF TIME OR IN A MANNER THAT PRESENTS A HAZARD TO VEHICULAR OR PEDESTRIAN TRAFFIC.
6. TEMPORARY SEDIMENT BASINS. THE CONTRACTOR SHALL INCORPORATE TEMPORARY SEDIMENT BASINS THROUGHOUT THE CONSTRUCTION SITE TO CAPTURE RUNOFF AND SLOW THE FLOW OF WATER AND ALLOW SEDIMENT TO SETTLE OUT. TEMPORARY SEDIMENT BASINS SHALL BE INSTALLED AS DIRECTED BY THE CITY ENGINEER.
7. ROCK CONSTRUCTION ENTRANCE. A ROCK ENTRANCE SHALL BE CONSTRUCTED AND MAINTAINED AS SHOWN ON THE PLAN TO REDUCE TRACKING OF SILT AND DIRT ONTO THE PUBLIC STREETS. A GEOTEXTILE FABRIC SHALL BE PLACED UNDERNEATH THE ROCK. THE ROCK SHALL BE PERIODICALLY REPLENISHED TO MAINTAIN THE INTENDED PERFORMANCE. MUD AND DEBRIS SHALL BE REMOVED OR SCRAPED FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.
8. STREET SWEEPING. ALL STREETS USED FOR ACCESS TO THE SITE AND HAUL ROUTES USED FOR CONSTRUCTION EQUIPMENT AND MATERIAL SUPPLIES SHALL BE CLEANED AT THE END OF EACH WORKING DAY. THE CITY OR ENGINEER MAY ORDER ADDITIONAL SWEEPING OF THE STREETS AS DEEMED REQUIRED AT DEVELOPER/CONTRACTOR EXPENSE.

STANDARD PLAN NOTES
GRADING AND EROSION CONTROL PLANS

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600A LAKE ELMO

9. DEWATERING. EACH EXCAVATION SHALL BE KEPT DRY DURING THE COURSE OF ALL WORK HEREIN, INCLUDING SUBGRADE CORRECTION, PIPE INSTALLATION, STRUCTURE CONSTRUCTION AND BACKFILLING, TO THE EXTENT THAT NO DAMAGE FROM HYDROSTATIC PRESSURE, FLOATATION OR OTHER DAMAGE RESULTS. ALL EXCAVATIONS SHALL BE DEWATERED TO A DEPTH OF AT LEAST 3 INCHES BELOW THE BOTTOM OF THE CONCRETE SLAB OR PIPE TO BE INSTALLED THEREIN. THE CONTRACTOR MAY USE ANY METHOD OR COMBINATION OF METHODS FOR FOR DEWATERING HE CHOOSES; HOWEVER, ALL DEWATERING METHODS AND EQUIPMENT WHICH IN THE OPINION OF THE ENGINEER, ARE INEFFECTIVE SHALL BE ABANDONED, IMPROVED, REPLACED OR THERWISE ALTERED TO OBTAIN EFFECTIVE DEWATERING. THE CONTRACTOR SHALL PROVIDE ALL POWER, PUMPS, MATERIALS AND APPARATUS NECESSARY, AND SHALL BE RESPONSIBLE FOR DISPOSING OF THE WATER PUMPED FROM THE EXCAVATION IN A MANNER WHICH WILL NOT INTERFERE WITH OTHER WORK WITHIN THE AREA AND NOT TO DAMAGE PUBLIC OR PRIVATE PROPERTY. THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE CONDITION OF ANY PIPE, CONDUIT, DITCH, CHANNEL OR NATURAL WATERCOURSE UTILIZED FOR DRAINAGE PURPOSES, AND ALL EROSION, SEDIMENT OR OTHER ADVERSE RESULTS OF THEIR USE SHALL BE REPAIRED.
10. POSITIVE DRAINAGE AND PROTECTION. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE THROUGHOUT THE SITE AT ALL TIMES. LOW POINTS WITHIN AND ALONG ROADWAYS ARE EXPRESSLY PROHIBITED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DITCHES, PIPING OR OTHER MEANS TO FACILITATE PROPER DRAINAGE DURING CONSTRUCTION. TO PROTECT PREVIOUSLY GRADED AREAS FROM EROSION, WOOD FIBER BLANKET SHALL BE PLACED IMMEDIATELY ON STEEP SLOPES (1:3 OR GREATER) AND EMBANKMENTS, PERMANENT AND TEMPORARY PONDS, AND OUTLETS AND OVERFLOWS TO PROTECT THE COMPLETED GRADE AND MINIMIZE SILT IN THE RUNOFF.
11. DRAINAGE DITCHES. THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, MUST BE STABILIZED WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER. STABILIZATION OF THE LAST 200 LINEAL FEET MUST BE COMPLETED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES MUST BE COMPLETE WITHIN 14 DAYS AFTER CONNECTING TO A SURFACE WATER AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT DITCHES OR SWALES THAT ARE BEING USED AS A SEDIMENT CONTAINMENT SYSTEM (WITH PROPERLY DESIGNED ROCK DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. THESE AREAS MUST BE STABILIZED WITHIN 24 HOURS AFTER NO LONGER BEING USED AS A SEDIMENT CONTAINMENT SYSTEM.
12. TURF ESTABLISHMENT. ALL EXPOSED SOIL AREAS MUST BE STABILIZED AS SOON AS POSSIBLE TO LIMIT SOIL EROSION BUT IN NO CASE LATER THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600B LAKE ELMO

13. MAINTENANCE AND INSPECTION. EROSION CONTROL MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION AND UNTIL SATISFACTORY ESTABLISHMENT OF PERMANENT GROUND COVER IS OBTAINED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES, AND STORMWATER OUTFALLS MUST BE INSPECTED WEEKLY, AND WITHIN 24 HOURS OF THE SITE RECEIVING 0.5 INCHES OF RAIN. REPAIRS MUST BE MADE ON THE SAME DAY OR FOLLOWING DAY OF THE INSPECTION. UNSATISFACTORY CONDITIONS NOT REPAIRED OR CLEANED UP WITHIN 48-HOURS OF NOTIFICATION SHALL RESULT IN A STOP WORK ORDER, AND/OR SAID WORK SHALL BE COMPLETED AT CONTRACTOR'S EXPENSE.
14. REMOVAL. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL TEMPORARY EROSION CONTROL MEASURES, STRUCTURES AND DEVICES ONLY AFTER RECEIVING ENGINEER APPROVAL. ALL DEBRIS, STAKES, AND SILTS ALONG SILT FENCES SHALL BE REMOVED AND DISPOSED OFF SITE. THE CONTRACTOR SHALL HAND RAKE SILTED AREAS ALONG THE FENCE LOCATIONS TO PROVIDE A SMOOTH FINAL GRADE AND SHALL RESTORE THE GROUND SURFACE WITH SEED OR SOD, AS REQUIRED, TO MATCH THE FINISHED GRADE TO THE ADJACENT AREA.
15. FINAL STORM SEWER SYSTEM. AT THE COMPLETION OF THE WORK AND BEFORE THE FINAL WALK THROUGH, THE CONTRACTOR SHALL REMOVE STORM SEWER INLET PROTECTION MEASURES AND THOROUGHLY FLUSH THE STORM SEWER SYSTEM. SEDIMENT AND DEBRIS SHALL BE COMPLETELY REMOVED AND CLEANED AT THE INLETS, OUTLETS, AND DOWNSTREAM OF EACH OUTLET. RIPRAP AND GEOTEXTILE FABRIC MAY REQUIRE REPLACEMENT AS DIRECTED BY THE ENGINEER TO OBTAIN A LIKE NEW INSTALLATION ACCEPTABLE TO THE CITY.
16. DITCH CHECK (BIOROLL BLANKET SYSTEM). BIOROLL AND BLANKET SYSTEMS SHALL BE BE INSTALLED AS DITCH CHECKS ONLY IN SPECIFIED LOCATIONS AS APPROVED BY THE CITY ENGINEER. BIOROLLS ARE NOT TO BE UTILIZED IN AREAS WHERE VEHICLE AND CONSTRUCTION TRAFFIC OCCUR.
17. FLOTATION SILT CURTAIN. FLOTATION SILT CURTAIN SHALL BE UTILIZED WHEN CONSTRUCTION ACTIVITIES OCCUR DIRECTLY ADJACENT TO LAKES, STREAMS OR WETLANDS IN ORDER TO CONTAIN SEDIMENTS NEAR THE BANKS OF WORKING AREAS. THE INSTALLATION OF FLOTATION SILT CURTAINS WILL BE REQUIRED AS DIRECTED BY THE CITY ENGINEER.
18. CONCRETE WASHOUT ONSITE. ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS MUST BE CONTAINED IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER. A COMPACTED CLAY LINER THAT DOES NOT ALLOW WASHOUT LIQUIDS TO ENTER GROUND WATER IS CONSIDERED AN IMPERMEABLE LINER. THE LIQUID AND SOLID WASTES MUST NOT CONTACT THE GROUND, AND THERE MUST NOT BE RUNOFF FROM THE CONCRETE WASHOUT OPERATIONS OR AREAS. LIQUID AND SOLID WASTES MUST BE DISPOSED OF PROPERLY AND IN COMPLIANCE WITH MPCA REGULATIONS. A SIGN MUST BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES.

STANDARD PLAN NOTES
GRADING AND EROSION CONTOL PLANS

JANUARY 2022

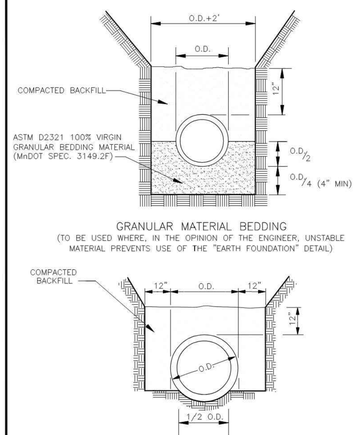
CITY OF LAKE ELMO | STANDARD DRAWING NO. 600C LAKE ELMO

1. RESTORE ALL DISTURBED AREAS WITH 6 INCHES OF TOPSOIL CONFORMING TO MNDOT 3877.
2. PROTECT ALL STORM SEWER INLETS AS SPECIFIED HEREIN AND MAINTAIN UNTIL STREET CONSTRUCTION IS COMPLETED.
3. MAINTAIN ALL SILT FENCE AND REPAIR OR REPLACE AS NEEDED OR REQUIRED UNTIL TURF HAS BEEN ESTABLISHED.
4. RESTORATION WORK SHALL BEGIN WITHIN 7 DAYS OF FINAL GRADING.
5. BOULEVARD AND DITCH RESTORATION INCLUDES FINE GRADING, WHICH INCLUDES THE REMOVAL OF ROCKS, DEBRIS AND SOIL CHUNKS, WHILE MAINTAINING POSITIVE DRAINAGE.

STANDARD PLAN NOTES
SITE RESTORATION PLANS

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 600D LAKE ELMO



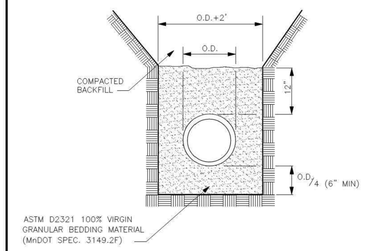
GRANULAR MATERIAL BEDDING
(TO BE USED WHERE, IN THE OPINION OF THE ENGINEER, UNSTABLE MATERIAL PREVENTS USE OF THE "EARTH FOUNDATION" DETAIL)

EARTH FOUNDATION
(EXCEPT SANITARY SEWER)

PIPE FOUNDATION DETAILS

JANUARY 2022

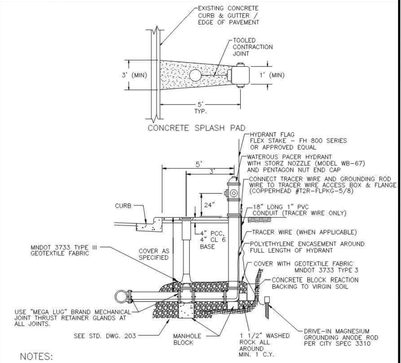
CITY OF LAKE ELMO | STANDARD DRAWING NO. 101 LAKE ELMO



GRANULAR MATERIAL BEDDING METHOD
(FOR PVC SANITARY SEWER PIPE)

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 103 LAKE ELMO



NOTES:
1. USE MEGA LUGS ON ALL JOINTS. PROVIDE CONCRETE BLOCKING BEHIND HYDRANT AND TEE.
2. USE COR-BLUE T BOLTS ON ALL FITTINGS.
3. PLUG WEEP HOLES IF GROUNDWATER IS PRESENT.
4. IF WEEP HOLES ARE PLUGGED, PUMPER NOZZLE CAP MUST BE PAINTED GREEN AND A TAG SHALL BE ATTACHED TO THE HYDRANT STATING "DRAIN HOLES PLUGGED".
5. SUPPLY 1 EXTRA FLEX STAKE FOR EVERY 10 HYDRANTS INSTALLED, MINIMUM ONE PER PROJECT.
6. SUPPLY 1 HYDRANT STORZ WRENCH OR REPAIR KIT PER PROJECT.
7. SUPPLY 1 6" HYDRANT EXTENSION AS DIRECTED BY THE ENGINEER.
8. ALL HYDRANTS NOT IN SERVICE SHALL BE COVERED WITH BLACK POLY PLASTIC.
9. CONCRETE SPLASH PAD SURFACE SHALL HAVE BROOMED FINISH.
**EXTRA STAKES AND REPAIR KITS ARE TO BE DELIVERED TO THE PUBLIC WORKS BUILDING.

TYPICAL HYDRANT LAYOUT
(VALVE IN BOULEVARD)

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 201 LAKE ELMO

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE
SIGNATURE:
DATE: 06/10/22 LIC #: 45889

REVISIONS	ISSUE DATE: 06/10/22	BY: JTR
1. 02/13/23 PUD SUBMITTAL		
2. 04/14/23 FINAL PLAT SUBMITTAL		
3.		
4.		
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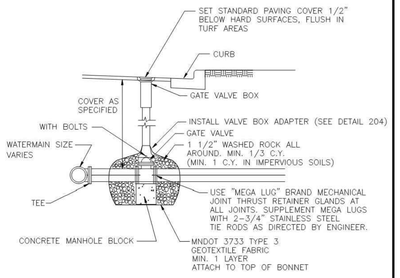
OWNER
LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

DETAILS

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C6.2

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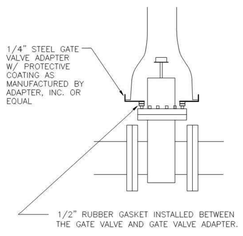


NOTES:
1. SUPPLY ONE GATE VALVE KEY PER PROJECT, AS DIRECTED BY THE ENGINEER. EXTRA KEYS SHALL BE DELIVERED TO THE PUBLIC WORKS BUILDING.
2. MAXIMUM DEPTH OF OPERATING NUT ON VALVE TO BE 10 FT.

GATE VALVE INSTALLATION

JANUARY 2022

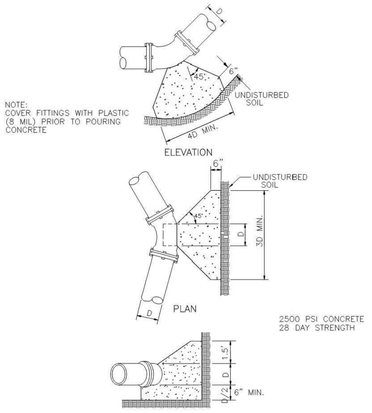
CITY OF LAKE ELMO | STANDARD DRAWING NO. 203 LAKE ELMO



GATE VALVE ADAPTER

JANUARY 2022

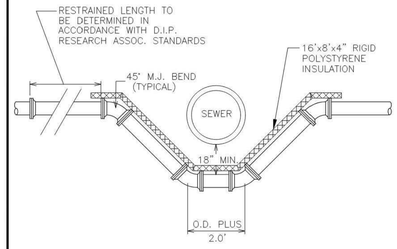
CITY OF LAKE ELMO | STANDARD DRAWING NO. 204 LAKE ELMO



CONCRETE REACTION BACKING
(FOR BENDS)

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 206 LAKE ELMO

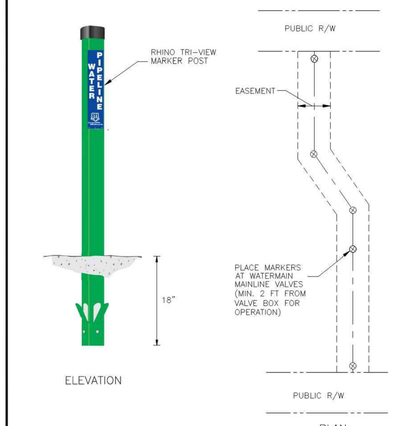


NOTE: FITTINGS SHALL BE RESTRAINED WITH THE USE OF APPROVED MECHANICAL JOINT RESTRAINING GLANDS.

WATERMAIN OFFSET

JANUARY 2022

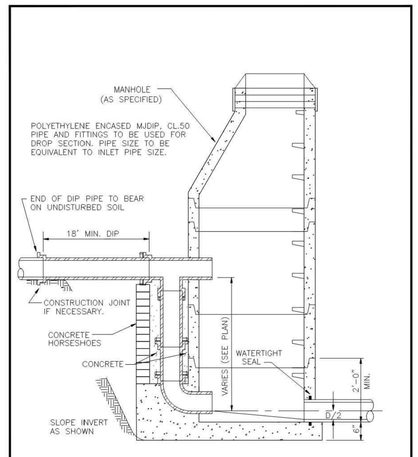
CITY OF LAKE ELMO | STANDARD DRAWING NO. 210 LAKE ELMO



WATERMAIN OFFROAD STRUCTURE MARKER
(AS DIRECTED BY ENGINEER)

JANUARY 2022

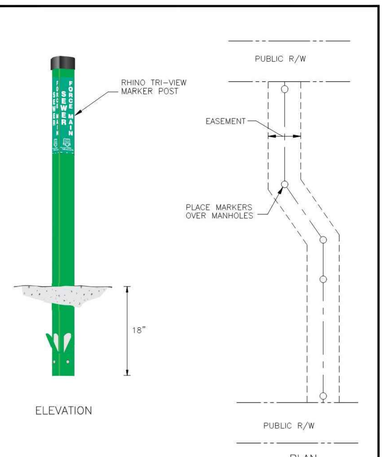
CITY OF LAKE ELMO | STANDARD DRAWING NO. 211 LAKE ELMO



SANITARY SEWER OUTSIDE DROP

JANUARY 2022

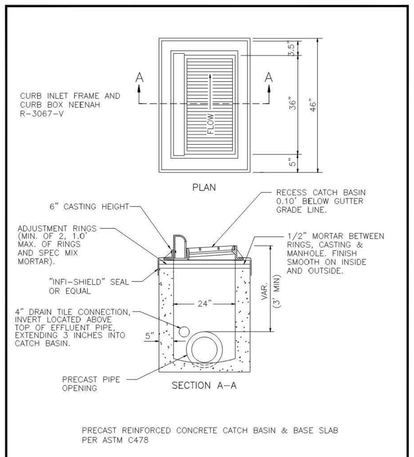
CITY OF LAKE ELMO | STANDARD DRAWING NO. 306 LAKE ELMO



SANITARY SEWER OFFROAD STRUCTURE MARKER
(AS DIRECTED BY ENGINEER)

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 311 LAKE ELMO

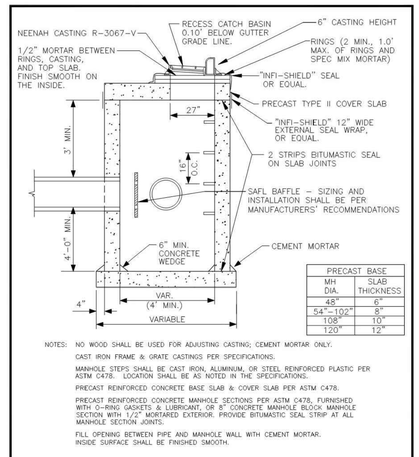


PRECAST REINFORCED CONCRETE CATCH BASIN & BASE SLAB PER ASTM C478

CATCH BASIN, TYPE 404

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 404 LAKE ELMO



PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NOTES: NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON FRAME & GRATE CASTINGS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM, OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478.

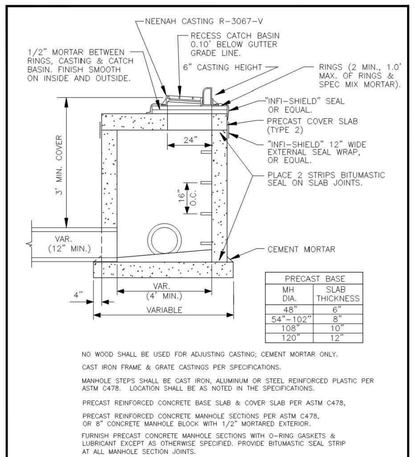
PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, FURNISHED WITH O-RING GASKETS & LUBRICANT, OR 8" CONCRETE MANHOLE BLOCK MANHOLE SECTION WITH 1/2" MORTARED EXTERIOR. PROVIDE BITUMASTIC SEAL STRIP AT ALL MANHOLE SECTION JOINTS.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN/MANHOLE WITH SUMP, TYPE 405

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 405 LAKE ELMO



PRECAST BASE	
MH DIA.	SLAB THICKNESS
48"	6"
54"-102"	8"
108"	10"
120"	12"

NO WOOD SHALL BE USED FOR ADJUSTING CASTING; CEMENT MORTAR ONLY.

CAST IRON FRAME & GRATE CASTINGS PER SPECIFICATIONS.

MANHOLE STEPS SHALL BE CAST IRON, ALUMINUM OR STEEL REINFORCED PLASTIC PER ASTM C478. LOCATION SHALL BE AS NOTED IN THE SPECIFICATIONS.

PRECAST REINFORCED CONCRETE BASE SLAB & COVER SLAB PER ASTM C478,

PRECAST REINFORCED CONCRETE MANHOLE SECTIONS PER ASTM C478, OR 8" CONCRETE MANHOLE BLOCK WITH 1/2" MORTARED EXTERIOR.

FURNISH PRECAST CONCRETE MANHOLE SECTIONS WITH O-RING GASKETS & LUBRICANT EXCEPT AS OTHERWISE SPECIFIED. PROVIDE BITUMASTIC SEAL STRIP AT ALL MANHOLE SECTION JOINTS.

FILL OPENING BETWEEN PIPE AND MANHOLE WALL WITH CEMENT MORTAR. INSIDE SURFACE SHALL BE FINISHED SMOOTH.

CATCH BASIN/MANHOLE, TYPE 406

JANUARY 2022

CITY OF LAKE ELMO | STANDARD DRAWING NO. 406 LAKE ELMO

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE

SIGNATURE:

DATE: 06/10/22 LIC #: 45889

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OWNER

LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

DETAILS

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C6.3

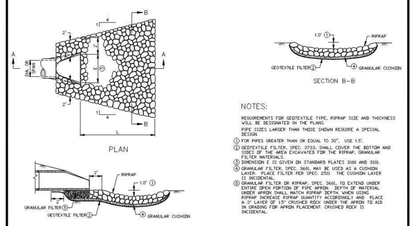
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TABLE OF QUANTITIES
RIPRAP AT RCP OUTLETS

DIA OF ROUND PIPE (IN.)	L (FT.)	CLASS II d_{50} = 6" GEO-TEXTILE FILTER (SQ.YD.)	CLASS II d_{50} = 6" GRANULAR FILTER UNDER APRON (CU.YD.)	CLASS II d_{50} = 6" 12" DEPTH RIPRAP (CU.YD.)	CLASS III d_{50} = 9" GEO-TEXTILE FILTER (SQ.YD.)	CLASS III d_{50} = 9" GRANULAR FILTER UNDER APRON (CU.YD.)	CLASS III d_{50} = 9" 18" DEPTH RIPRAP (CU.YD.)	CLASS IV d_{50} = 12" GEO-TEXTILE FILTER (SQ.YD.)	CLASS IV d_{50} = 12" GRANULAR FILTER UNDER APRON (CU.YD.)	CLASS IV d_{50} = 12" 24" DEPTH RIPRAP (CU.YD.)
12	8	16.9	0.2	3.0	19.4	0.3	4.4	22.6	0.3	5.9
15	8	18.0	0.3	3.2	20.8	0.3	4.8	23.9	0.4	6.4
18	10	23.1	0.3	4.1	26.6	0.4	6.1	30.6	0.5	8.1
21	10	24.1	0.4	4.7	27.4	0.6	7.1	30.9	0.7	9.4
24	12	29.7	0.5	6.2	33.4	0.8	9.2	37.3	1.0	12.3
27	12	31.4	0.6	6.6	35.2	0.9	9.9	39.2	1.2	13.2
30	14	37.4	0.8	8.2	41.6	1.1	12.3	46.0	1.5	16.4
36	16	45.9	1.1	10.6	50.5	1.6	15.8	55.4	2.1	21.1
42	18	52.8	1.2	12.5	57.8	1.7	18.7	63.0	2.3	24.9
48	20	61.1	1.5	14.8	66.5	2.2	22.2	72.0	2.9	29.6

TABLE OF QUANTITIES
RIPRAP AT RCP-A OUTLETS

SPAN OF PIPE ARCH (IN.)	L (FT.)	CLASS II d_{50} = 6" GEO-TEXTILE FILTER (SQ.YD.)	CLASS II d_{50} = 6" GRANUL FILTER UNDER APRON (CU.YD.)	CLASS II d_{50} = 6" 12" DEPTH RIPRAP (CU.YD.)	CLASS III d_{50} = 9" GEO-TEXTILE FILTER (SQ.YD.)	CLASS III d_{50} = 9" GRANUL FILTER UNDER APRON (CU.YD.)	CLASS III d_{50} = 9" 18" DEPTH RIPRAP (CU.YD.)	CLASS IV d_{50} = 12" GEO-TEXTILE FILTER (SQ.YD.)	CLASS IV d_{50} = 12" GRANUL FILTER UNDER APRON (CU.YD.)	CLASS IV d_{50} = 12" 24" DEPTH RIPRAP (CU.YD.)
22	10	25.4	0.3	4.1	25.6	0.4	6.1	29.0	0.5	8.1
28	12	33.2	0.5	5.7	33.2	0.7	8.5	37.1	0.9	11.3
36	14	37.3	0.8	7.5	41.5	1.1	11.3	45.8	1.5	14.9
43	16	45.8	1.1	9.5	50.6	1.6	14.3	55.3	2.1	19.0
51	18	50.9	1.2	11.3	57.5	1.7	16.9	62.7	2.3	22.5
58	20	59.7	1.5	13.2	65.4	1.9	19.8	70.7	2.6	26.4

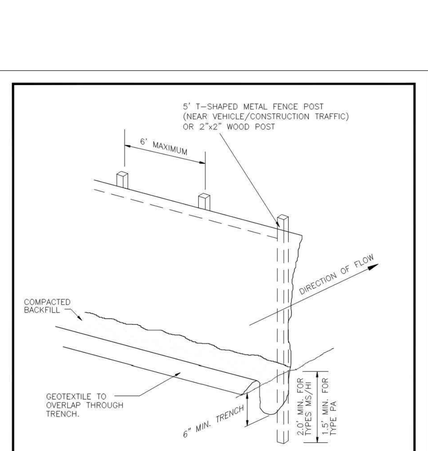


NOTES:
REQUIREMENTS FOR GEOTEXTILE TYPE, RIPRAP SIZE AND THICKNESS WILL BE DESIGNATED IN THE PLANS.
PIPE SIZES LARGER THAN THOSE SHOWN REQUIRE A SPECIAL DESIGN.
① FOR PIPES GREATER THAN OR EQUAL TO 30", USE 18" DEPTH RIPRAP.
② GEOTEXTILE FILTER SHALL BE PLACED ON THE SIDE SLOPES, BOTTOM AND ENDS OF THE AREA EXCAVATED FOR THE RIPRAP, GRANULAR FILTER MATERIALS.
③ DIMENSION E IS GIVEN ON STANDARD PLATES 3100 AND 3101.
④ GRANULAR FILTER, SPEC. 3601, MAY BE USED AS A CUSHION FOR GEOTEXTILE FILTER PER SPEC 3733. THE CUSHION LAYER IS INCIDENTAL.
⑤ GRANULAR FILTER OR RIPRAP, SPEC. 3601, TO EXTEND UNDER APRON AS SHOWN ON THE STANDARD PLATES. THE TOP OF THE APRON UNDER APRON SHALL MATCH RIPRAP DEPTH. WHEN USING RIPRAP INCREASE RIPRAP QUANTITY ACCORDINGLY AND PLACE RIPRAP ON A 1:1 SLOPE. EXCAVATION AND BACKFILL TO AID IN GRADING FOR APRON PLACEMENT CONSIDER NON ① INCIDENTAL.

JANUARY 2022

RIPRAP AT RCP OUTLETS

CITY OF LAKE ELMO | STANDARD DRAWING NO. 411 LAKE ELMO

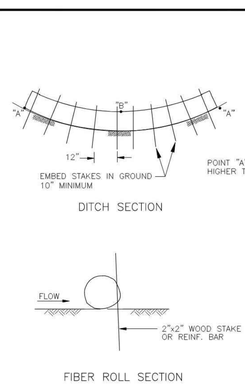


NOTE : -SILT FENCE INSTALLATION SHALL CONFORM TO MNDOT2573.3, TYPE MS/HI NEAR VEHICLE/CONSTRUCTION TRAFFIC, TYPE PA AT ALL OTHER LOCATIONS.
-MATERIALS SHALL CONFORM TO MNDOT 3886.

JANUARY 2022

SILT FENCE

CITY OF LAKE ELMO | STANDARD DRAWING NO. 601 LAKE ELMO



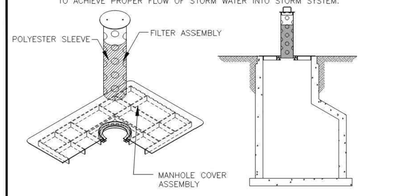
NOTE:
STAKE TO BE INSTALLED AT AN ANGLE OF APPROXIMATELY 45° ON THE DOWNSTREAM SIDE OF THE FIBER ROLL. ENSURE THAT STAKE DOES NOT PUSH DOWN THE FIBER ROLL FROM ITS FULL HEIGHT.

JANUARY 2022

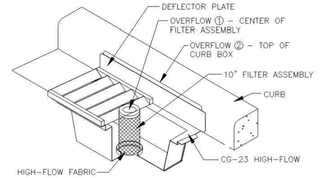
DITCH CHECK (FIBER ROLL)

CITY OF LAKE ELMO | STANDARD DRAWING NO. 603 LAKE ELMO

NOTE: MAINTAIN AND CLEAN OUT DEVICES AS NECESSARY TO ACHIEVE PROPER FLOW OF STORM WATER INTO STORM SYSTEM.



WIMCO RD-23 OR APPROVED EQUAL

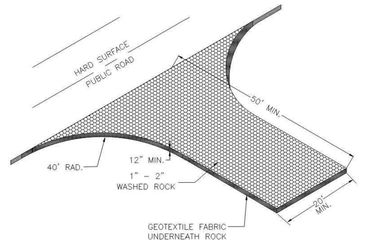


WIMCO CG-23 HIGH-FLOW OR APPROVED EQUAL

JANUARY 2022

SEDIMENT CONTROL AROUND STORM SEWER INLET

CITY OF LAKE ELMO | STANDARD DRAWING NO. 604 LAKE ELMO

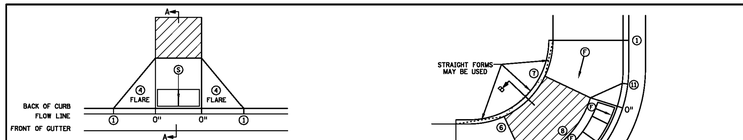


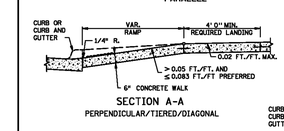
NOTES:
① MAXIMUM WIDTH OF CONSTRUCTION ENTRANCE IS 24 FEET.
② A MNDOT 3733 TYPE V GEOTEXTILE FABRIC SHALL BE USED UNDER THE ROCK TO PREVENT MIGRATION OF THE UNDERLYING SOIL INTO THE STONE.
③ CONSTRUCTION ENTRANCE IS REQUIRED FOR ALL NEW HOME CONSTRUCTION AND NEW STREET CONSTRUCTION.
④ CONSTRUCTION ENTRANCE SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO ROADWAYS THAT ADJOIN THE PROJECT. THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL ROCK OR REMOVAL AND REINSTALLATION OF THE ROCK ENTRANCE.
⑤ REMOVE MUD AND DEBRIS FROM TIRES AND VEHICLE UNDERCARRIAGE PRIOR TO LEAVING THE SITE.

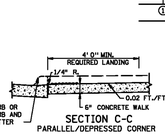
JANUARY 2022

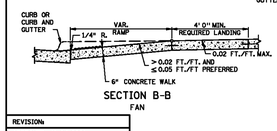
ROCK CONSTRUCTION ENTRANCE

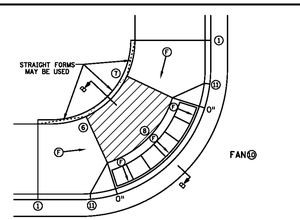
CITY OF LAKE ELMO | STANDARD DRAWING NO. 605 LAKE ELMO

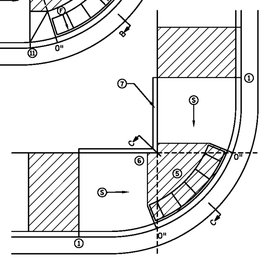


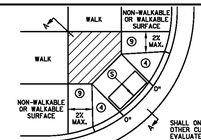












SHALL ONLY BE USED AFTER ALL OTHER CURB RAMP TYPES HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL

NOTES:
LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.00%, AND AT THE APPROACHING WALK IS INVERSE GRADE GREATER THAN 2%.
INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 8' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.00%.
SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL RUNNING SLOPE IS GREATER THAN 5.00%.
CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOPS OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.
ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH. (EXCEPT AS STATED IN ⑥ BELOW.
TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF CURB RAMP SHALL BE CONSTRUCTED WITH A MINIMUM 4" THICK CONCRETE SLAB WITH WELDED WIRE FABRIC IN AN INDEPENDENTLY CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 OF 6 FOR ALL SEPARATELY POURED INITIAL LANDINGS.
WHEN SIDEWALK IS AT BACK OF CURB, TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE. MAINTAIN POSITIVE BOULEVARD DRAINAGE TO TOP OF CURB.
ALL RAMP TYPES SHOULD HAVE A MINIMUM 3'-LONG RAMP LENGTH.
4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER THE ENTIRE PAR WIDTH OF SIDEWALK/PATH AND THE ENTIRE PAR WIDTH OF THE WALK WITH THE EXCEPTION OF A MAXIMUM ON EACH OUTSIDE SIDE, WHICH ENSURES THE DETECTABLE WARNING IS PLACED ON CONCRETE WHEN ADJACENT TO CURB, WHEN ADJACENT TO CONCRETE FLARES 0" - 3" OFFSET IS ALLOWED.
WHEN DESIGNING OR ORDERING RECTANGULAR DETECTABLE WARNING SURFACES SHOULD BE 6" LESS THAN THE INCOMING PAR. ARC LENGTH OF THE RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.
RECTANGULAR DETECTABLE WARNINGS SHALL BE SETBACK 3" FROM THE BACK OF CURB. RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB.

① MATCH FULL HEIGHT CURB.
② 4' MINIMUM DEPTH LANDING REQUIRED ACROSS TOP OF RAMP.
③ 3" HIGH CURB WHEN USING A 3'-LONG RAMP, 4" HIGH CURB WHEN USING A 4'-LONG RAMP.
④ SEE SHEET 4 OF 6, TYPICAL SIDE TREATMENT OPTIONS, FOR DETAILS ON FLARES AND RETURNED CURBS.
⑤ DETECTABLE WARNINGS MAY BE PART OF THE 4'X 4' MIN. LANDING AREA IF IT IS NOT FEASIBLE TO CONSTRUCT THE LANDING OUTSIDE OF THE DETECTABLE WARNING AREA.
⑥ THE GRADE BREAK SHALL BE PERPENDICULAR TO THE BACK OF WALK. THIS WILL ENSURE THAT THE GRADE BREAK IS PERPENDICULAR TO THE DIRECTION OF TRAVEL. (TYPICAL FOR ALL)
⑦ WHEN ADJACENT TO GRASS, GRADING SHALL ALWAYS BE USED WHEN FEASIBLE. V CURB, C CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS CONCRETE OR BITUMINOUS TAPERS LESS THAN 5% RUNNING SLOPE SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.
⑧ A 7' MIN TOP RADIUS GRADE BREAK IS REQUIRED TO BE CONSTRUCTIBLE.
⑨ PAVE FULL WALK WIDTH.
⑩ 7:5% SLOPES ON FANS SHALL ONLY BE USED WHEN ALL OTHER FEASIBLE OPTIONS HAVE BEEN EVALUATED AND DEEMED IMPRACTICAL.
⑪ INTERMEDIATE CURB HEIGHTS TAPER SHALL RISE AT 8-10% TO A MINIMUM 3" CURB HEIGHT. REDUCE INTERMEDIATE CURB HEIGHT TO 2" INCHES IF NECESSARY TO MATCH ADJACENT BOULEVARD OR SIDEWALK GRADES.

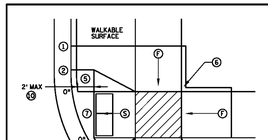
LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.
Ⓢ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.00% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.00%.
Ⓒ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.00% AND LESS THAN 5.00% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.00%.
LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.00% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
X" CURB HEIGHT

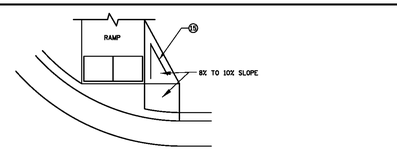
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APPROVED: 11-04-2021	
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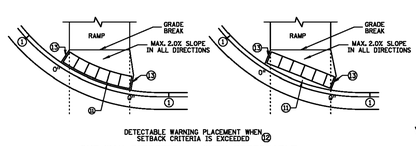
MINNESOTA DEPARTMENT OF TRANSPORTATION | STANDARD PLAN 5-297.250 | 1 OF 6 | APPROVED: 11-04-2021 | REVISED: | Tom Styrbicki, STATE DESIGN ENGINEER

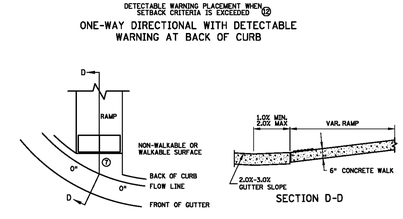
PEDESTRIAN CURB RAMP DETAILS

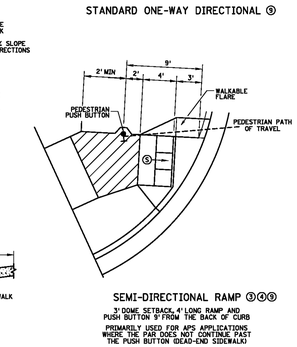
STATE PROJ. NO. (TH) SHEET NO. OF SHEETS











3' DOME SETBACK, 4' LONG RAMP AND PUSH BUTTON 5' FROM THE BACK OF CURB

PRIMARILY USED FOR APS APPLICATIONS WHERE THE PAR DOES NOT CONTINUE PAST THE PUSH BUTTON (DEAD-END SIDEWALK)

NOTES:
LANDINGS SHALL BE LOCATED ANYWHERE THE PEDESTRIAN ACCESS ROUTE (PAR) CHANGES DIRECTION, AT THE TOP OF RAMPS THAT HAVE RUNNING SLOPES GREATER THAN 5.00%, AND AT THE APPROACHING WALK IS INVERSE GRADE.
INITIAL CURB RAMP LANDINGS SHALL BE CONSTRUCTED WITHIN 15' FROM THE BACK OF CURB, WITH 8' FROM THE BACK OF CURB BEING THE PREFERRED DISTANCE, ONLY APPLICABLE WHEN THE INITIAL RAMP RUNNING SLOPE IS OVER 5.00%.
SECONDARY CURB RAMP LANDINGS ARE REQUIRED FOR EVERY 30" OF VERTICAL RISE WHEN THE LONGITUDINAL SLOPE IS GREATER THAN 5.00%.
CONTRACTION JOINTS SHALL BE CONSTRUCTED ALONG ALL GRADE BREAKS WITHIN THE PAR. 1/4" DEEP VISUAL JOINTS SHALL BE USED AT THE TOP GRADE BREAK OF CONCRETE FLARES ADJACENT TO WALKABLE SURFACES.
ALL GRADE BREAKS WITHIN THE PAR SHALL BE PERPENDICULAR TO THE PATH OF TRAVEL. THUS BOTH SIDES OF A SLOPED WALKING SURFACE MUST BE EQUAL LENGTH.
TO ENSURE INITIAL RAMPS AND INITIAL LANDINGS ARE PROPERLY CONSTRUCTED LANDINGS SHALL BE CAST SEPARATELY FOLLOW SIDEWALK REINFORCEMENT DETAILS ON SHEET 6 AND THE ADA SPECIAL PROVISION SPECIFICATION OF WORKS.
TOP OF CURB SHALL MATCH PROPOSED ADJACENT WALK GRADE.
WHEN THE BOULEVARD IS 4' WIDE OR LESS, THE TOP OF CURB TAPER SHALL MATCH THE RAMP SLOPES TO REDUCE NEGATIVE BOULEVARD SLOPES FROM THE TOP BACK OF CURB TO THE PAR.
ALL RAMP TYPES SHOULD HAVE A MINIMUM 3'-LONG RAMP LENGTH.
4' MINIMUM WIDTH OF DETECTABLE WARNING IS REQUIRED FOR ALL RAMPS. DETECTABLE WARNINGS SHALL CONTINUOUSLY EXTEND FOR A MIN. OF 24" IN THE PATH OF TRAVEL. DETECTABLE WARNING TO COVER THE ENTIRE PAR WIDTH OF SIDEWALK/PATH AND THE ENTIRE PAR WIDTH OF THE WALK WITH THE EXCEPTION OF A MAXIMUM ON EACH OUTSIDE SIDE, WHICH ENSURES THE DETECTABLE WARNING IS PLACED ON CONCRETE WHEN ADJACENT TO CURB, WHEN ADJACENT TO CONCRETE FLARES 0" - 3" OFFSET IS ALLOWED.
WHEN DESIGNING OR ORDERING RECTANGULAR DETECTABLE WARNING SURFACES SHOULD BE 6" LESS THAN THE INCOMING PAR. ARC LENGTH OF THE RADIAL DETECTABLE WARNINGS SHOULD NOT BE GREATER THAN 20 FEET.
RADIAL DETECTABLE WARNINGS SHALL BE SETBACK 3" MINIMUM TO 6" MAXIMUM FROM THE BACK OF CURB. SEE NOTES ⑨ & ⑩ FOR INFORMATION REGARDING RECTANGULAR DETECTABLE WARNING PLACEMENT.

① MATCH FULL CURB HEIGHT.
② 3" HIGH CURB WHEN USING A 3'-LONG RAMP.
③ HIGH CURB WHEN USING A 4'-LONG RAMP.
④ 3" MINIMUM CURB HEIGHT (5.0% MIN. DISTANCE REQUIRED BETWEEN DOMES)
⑤ 4" PREFERRED TRANSITION DISTANCE REQUIRED BETWEEN DOMES.
⑥ THE "RAMP" IN BETWEEN THE RAMPS SHOULD NOT BE IN THE PATH OF TRAVEL FOR COMBINED DIRECTIONAL RAMPS. IF THIS OCCURS MODIFY THE RAMP LOCATION OR SWITCH RAMP TO A "FAN/DEPRESSED CORNER.
⑦ WHEN USING CONCRETE PAVED FLARES ON OUTSIDE OF DIRECTIONAL RAMPS, AND ADJACENT TO A WALKABLE SURFACE, DIRECTIONAL RAMP FLARES SHALL BE USED. SEE THE DETAIL ON THIS SHEET.
⑧ CONCRETE SHALL NOT BE USED WHEN FEASIBLE V CURB IF USED, SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS. WHEN ADJACENT TO PARKING LOTS CONCRETE OR BITUMINOUS TAPERS SHOULD BE USED OVER V CURB TO REDUCE TRIPPING HAZARDS AND FACILITATE SNOW & ICE REMOVAL.
⑨ MAX 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK AND DRAIN TO FLOW LINE. SHALL BE CONSTRUCTED INTEGRAL WITH CURB AND GUTTER.
⑩ 8% TO 10% WALKABLE FLARE.
⑪ PLACE DOMES AT THE BACK OF CURB WHEN ALLOWABLE SETBACK CRITERIA IS EXCEEDED.
⑫ FRONT EDGE OF DETECTABLE WARNING SHALL BE SET BACK 2" MAXIMUM WHEN ADJACENT TO WALKABLE SURFACE AND 5" MAXIMUM WHEN ADJACENT TO NON-WALKABLE SURFACE WITH ONE CORNER SET 3" FROM BACK OF CURB. A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBJECTS THAT MISTAKENLY MAY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.
⑬ RECTANGULAR DETECTABLE WARNINGS MAY BE SETBACK UP TO 9" FROM THE BACK OF CURB WITH CORNERS SET 3" FROM BACK OF CURB. IF 9" SETBACK IS EXCEEDED USE RADIAL DETECTABLE WARNINGS.
⑭ FOR DIRECTIONAL RAMPS WITH THE DETECTABLE WARNINGS PLACED AT THE BACK OF CURB, THE DETECTABLE WARNINGS SHALL COVER THE CENTER WIDTH OF THE WALK/PATH. THIS ENSURES A DETECTABLE EDGE AND HELPS ELIMINATE THE CURB TAPER OBSTRUCTING THE PATH OF PEDESTRIAN TRAVEL.
⑮ THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE BACK OF CURB. MAINTAIN 3" BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.
⑯ TO BE USED FOR ALL DIRECTIONAL RAMPS, EXCEPT WHERE DOMES ARE PLACED ALONG THE BACK OF CURB.
⑰ PLACE 2 NO. 4 BARS 4 INCHES FROM SIDE FLARE WITH A MINIMUM 2 INCHES OF CONCRETE COVER ALONG EACH SIDE OF FLARE (INCIDENTAL).

LEGEND
THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.
Ⓢ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.00% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.00%.
Ⓒ INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE GREATER THAN 2.00% AND LESS THAN 5.00% IN THE DIRECTION SHOWN AND CROSS SLOPE SHALL NOT EXCEED 2.00%.
LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.00% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
X" CURB HEIGHT

REVISIONS	
APPROVED: 11-04-2021	
Jeffrey J. Peterson, OPERATIONS DIVISION	

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PEDESTRIAN CURB RAMP DETAILS

STATE PROJ. NO. (T.H.) SHEET NO. OF SHEETS

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE
SIGNATURE:
DATE: 06/10/22 LIC #: 45889

REVISIONS	ISSUE DATE: 06/10/22	BY: JTR
1.	02/13/23	PUD SUBMITTAL
2.	04/14/23	FINAL PLAT SUBMITTAL
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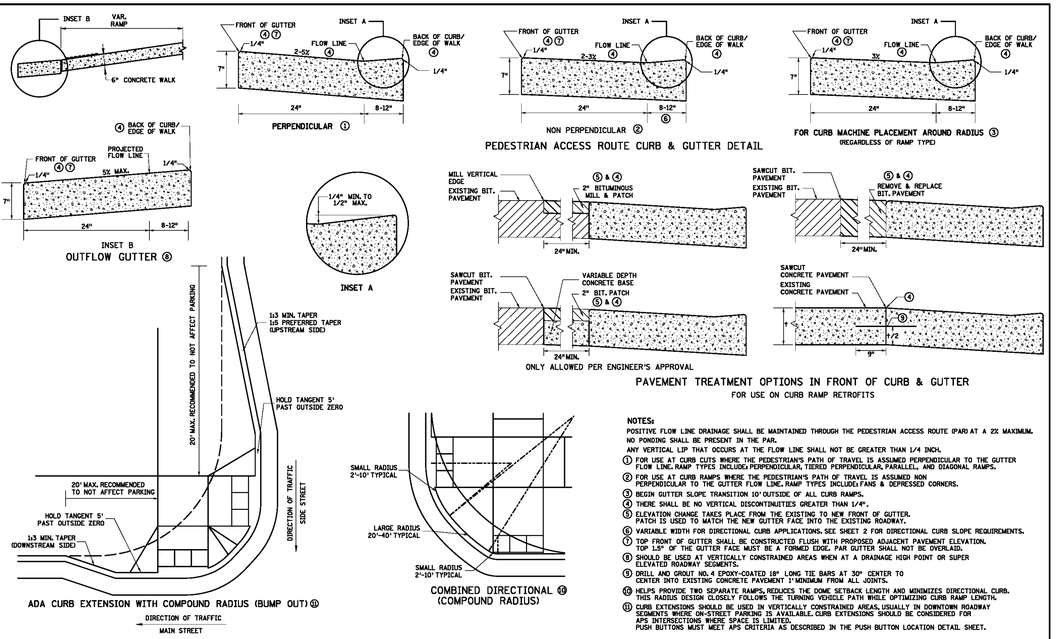
OWNER
LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

DETAILS

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C6.4

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NOTES:

POSITIVE FLOW LINE DRAINAGE SHALL BE MAINTAINED THROUGH THE PEDESTRIAN ACCESS ROUTE (PAR) AT A 2% MAXIMUM. NO PONDING SHALL BE PRESENT IN THE PAR.

ANY VERTICAL LIP THAT OCCURS AT THE FLOW LINE SHALL NOT BE GREATER THAN 1/4 INCH.

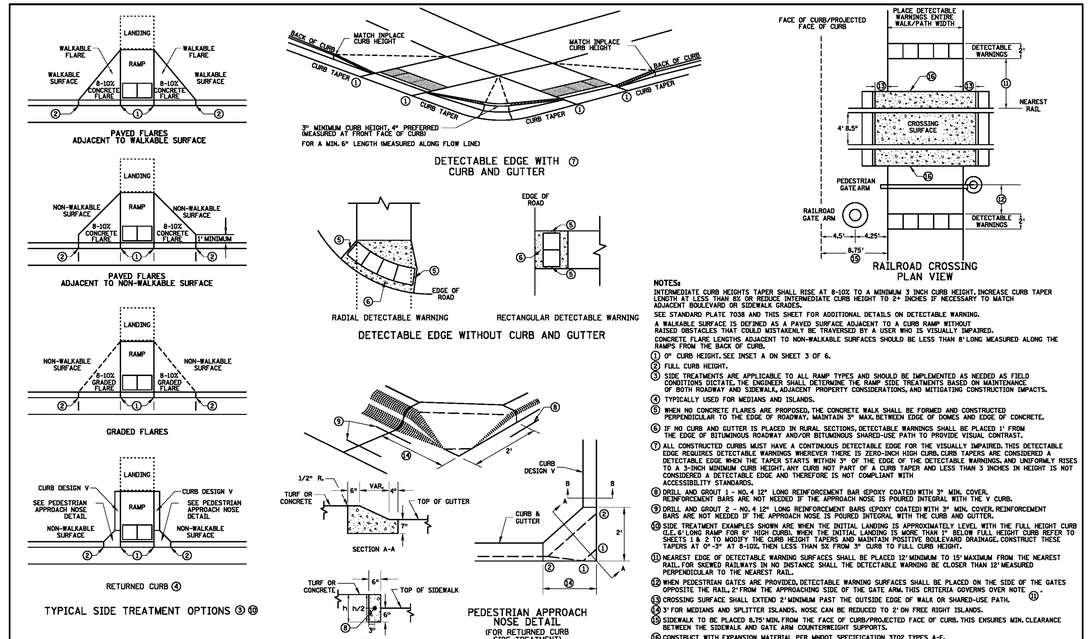
1. FOR USE AT CURB CUTS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: PERPENDICULAR, TIERED PERPENDICULAR, PARALLEL, AND DIAGONAL RAMPS.
2. FOR USE AT CURB RAMPS WHERE THE PEDESTRIAN'S PATH OF TRAVEL IS ASSUMED NON PERPENDICULAR TO THE GUTTER FLOW LINE. RAMP TYPES INCLUDE: FANS & DEPRESSED CORNERS.
3. BEGIN GUTTER SLOPE TRANSITION 10' OUTSIDE OF ALL CURB RAMPS.
4. THERE SHALL BE NO VERTICAL DISCONTINUITIES GREATER THAN 1/4".
5. ELEVATION CHANGE TAKES PLACE FROM THE EXISTING TO NEW FRONT OF GUTTER. PATCH IS USED TO MATCH THE NEW GUTTER FACE INTO THE EXISTING ROADWAY.
6. VARIABLE WIDTH FOR DIRECTIONAL CURB APPLICATIONS. SEE SHEET 2 FOR DIRECTIONAL CURB SLOPE REQUIREMENTS.
7. FRONT OF GUTTER SHALL BE CONSTRUCTED FLUSH WITH PROPOSED ADJACENT PAVEMENT ELEVATION. TOP 1.5" OF THE GUTTER FACE MUST BE A FORMED EDGE. PAR GUTTER SHALL NOT BE OVERLAID.
8. SHOULD BE USED AT VERTICALLY CONSTRAINED AREAS WHEN AT A DRAINAGE HIGH POINT OR SUPER ELEVATED ROADWAY SEGMENTS.
9. DRILL AND GROUT NO. 4 EPOXY-COATED 18" LONG TIE BARS AT 30" CENTER TO CENTER INTO EXISTING CONCRETE PAVEMENT 1" MINIMUM FROM ALL JOINTS.
10. HELPS PROVIDE TWO SEPARATE RAMPS, REDUCES THE DOME SETBACK LENGTH AND MINIMIZES DIRECTIONAL CURB. THIS RADIUS DESIGN CLOSELY FOLLOWS THE TURNING VEHICLE PATH WHILE OPTIMIZING CURB RAMP LENGTH.
11. CURB EXTENSIONS SHOULD BE USED IN VERTICALLY CONSTRAINED AREAS, USUALLY IN DOWNTOWN ROADWAY SEGMENTS WHERE ON-STREET PARKING IS AVAILABLE. CURB EXTENSIONS SHOULD BE CONSIDERED FOR APS INTERSECTIONS WHERE SPACE IS LIMITED. PUSH BUTTONS MUST MEET APS CRITERIA AS DESCRIBED IN THE PUSH BUTTON LOCATION DETAIL SHEET.

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APPROVED: 11-04-2021	OPERATIONS DIVISION

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STATE PROJ. NO.	(TH) SHEET NO. OF SHEETS

MINNESOTA DEPARTMENT OF TRANSPORTATION — THOMAS SORENSON, STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS



NOTES:

INTERMEDIATE CURB HEIGHTS TAPER SHALL RISE AT 8-10% TO A MINIMUM 3 INCH CURB HEIGHT. INCREASE CURB TAPER LENGTH AT LESS THAN 8% OR REDUCE INTERMEDIATE CURB HEIGHT TO 2" INCHES IF NECESSARY TO MATCH ADJACENT BOULEVARD OR SIDEWALK GRADES.

SEE STANDARD PLATE 7038 AND THIS SHEET FOR ADDITIONAL DETAILS ON DETECTABLE WARNING.

A WALKABLE SURFACE IS DEFINED AS A PAVED SURFACE ADJACENT TO A CURB RAMP WITHOUT RAISED OBSTACLES THAT COULD MISTAKENLY BE TRAVERSED BY A USER WHO IS VISUALLY IMPAIRED.

CONCRETE FLARE LENGTHS ADJACENT TO NON-WALKABLE SURFACES SHOULD BE LESS THAN 8' LONG MEASURED ALONG THE RAMPS FROM THE BACK OF CURB.

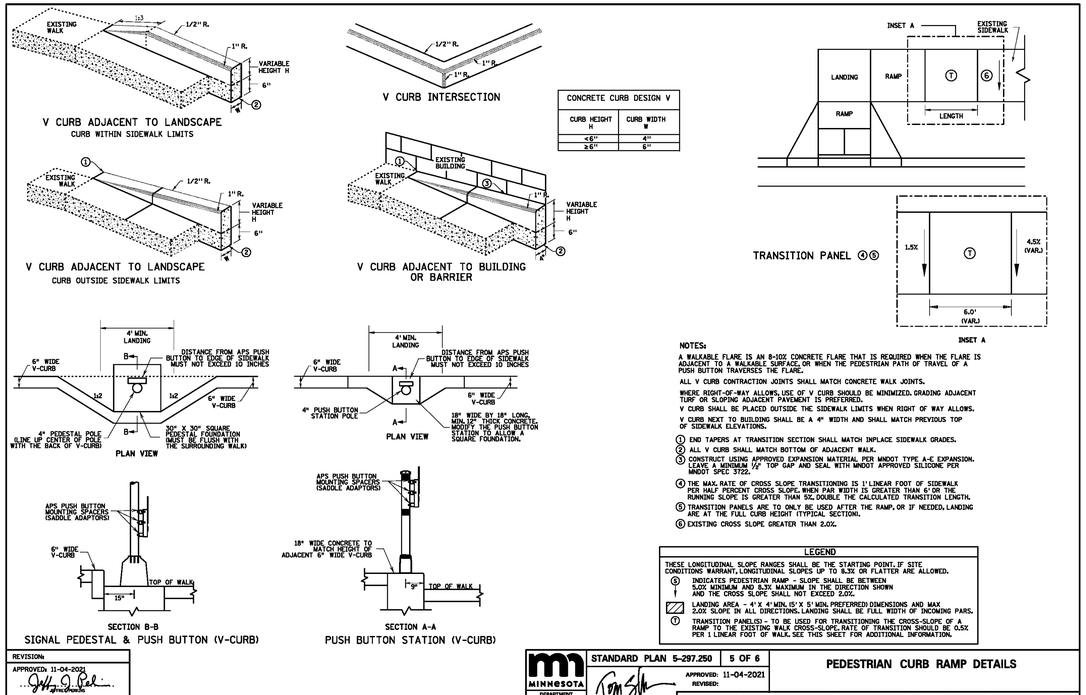
1. 0" CURB HEIGHT. SEE INSET A ON SHEET 3 OF 6.
2. FULL CURB HEIGHT.
3. SIDE TREATMENTS ARE APPLICABLE TO ALL RAMP TYPES AND SHOULD BE IMPLEMENTED AS NEEDED AS FIELD CONDITIONS DICTATE. THE ENGINEER SHALL DETERMINE THE RAMP SIDE TREATMENTS BASED ON MAINTENANCE OF BOTH ROADWAY AND SIDEWALK, ADJACENT PROPERTY CONSIDERATIONS, AND MITIGATING CONSTRUCTION IMPACTS.
4. TYPICALLY USED FOR MEDIANS AND ISLANDS.
5. WHEN NO CONCRETE FLARES ARE PROPOSED, THE CONCRETE WALK SHALL BE FORMED AND CONSTRUCTED PERPENDICULAR TO THE EDGE OF ROADWAY. MAINTAIN 3" MAX. BETWEEN EDGE OF DOMES AND EDGE OF CONCRETE.
6. IF NO CURB AND GUTTER IS PLACED IN RURAL SECTIONS, DETECTABLE WARNINGS SHALL BE PLACED 1' FROM THE EDGE OF BITUMINOUS ROADWAY AND/OR BITUMINOUS SHARED-USE PATH TO PROVIDE VISUAL CONTRAST.
7. ALL CONSTRUCTED CURBS MUST HAVE A CONTINUOUS DETECTABLE EDGE FOR THE VISUALLY IMPAIRED. THIS DETECTABLE EDGE REQUIRES DETECTABLE WARNINGS WHERE/VER THERE IS ZERO-INCH HIGH CURB. CURB TAPERS ARE CONSIDERED A DETECTABLE EDGE WHEN THE TAPER STARTS WITHIN 3" OF THE EDGE OF THE DETECTABLE WARNINGS, AND ORDINAL RISES TO A 3-INCH MINIMUM CURB HEIGHT. ANY CURB NOT PART OF A CURB TAPER AND LESS THAN 3 INCHES IN HEIGHT IS NOT CONSIDERED A DETECTABLE EDGE AND THEREFORE IS NOT COMPLIANT WITH ACCESSIBILITY STANDARDS.
8. DRILL AND GROUT 1 - NO. 4 12" LONG REINFORCEMENT BAR (EPOXY COATED) WITH 3" MIN. COVER. REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE 'V' CURB.
9. DRILL AND GROUT 2 - NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) WITH 3" MIN. COVER; REINFORCEMENT BARS ARE NOT NEEDED IF THE APPROACH NOSE IS POURED INTEGRAL WITH THE CURB AND GUTTER.
10. SIDE TREATMENT EXAMPLES SHOWN ARE WHEN THE INITIAL LANDING IS APPROXIMATELY LEVEL WITH THE FULL HEIGHT CURB (I.E. 6' LONG RAMP FOR 6" HIGH CURB). WHEN THE INITIAL LANDING IS MORE THAN 1" BELOW FULL HEIGHT CURB REFER TO SHEETS 1 & 2 TO MODIFY THE CURB HEIGHT TAPERS AND MAINTAIN POSITIVE BOULEVARD DRAINAGE. CONSTRUCT THESE TAPERS AT 0"-2" AT 5-10%, THEN LESS THAN 5% FROM 3" CURB TO FULL CURB HEIGHT.
11. NEAREST EDGE OF DETECTABLE WARNING SURFACES SHALL BE PLACED 12' MINIMUM TO 15' MAXIMUM FROM THE NEAREST RAIL. FOR SKEWED RAILWAYS IN NO INSTANCE SHALL THE DETECTABLE WARNING BE CLOSER THAN 12' MEASURED PERPENDICULAR TO THE NEAREST RAIL.
12. WHEN PEDESTRIAN GATES ARE PROVIDED, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE SIDE OF THE GATES OPPOSITE THE RAIL. 2' FROM THE APPROACHING SIDE OF THE GATE ARM. THIS CRITERIA GOVERNS OVER NOTE 11.
13. CROSSING SURFACE SHALL EXTEND 2' MINIMUM PAST THE OUTSIDE EDGE OF WALK OR SHARED-USE PATH.
14. 3' FOR MEDIANS AND SPLITTER ISLANDS. NOSE CAN BE REDUCED TO 2' ON FREE RIGHT ISLANDS.
15. SIDEWALK TO BE PLACED 8.75' MIN. FROM THE FACE OF CURB/PROJECTED FACE OF CURB. THIS ENSURES MIN. CLEARANCE BETWEEN THE SIDEWALK AND GATE ARM COUNTERWEIGHT SUPPORTS.
16. CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.

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MINNESOTA DEPARTMENT OF TRANSPORTATION — THOMAS SORENSON, STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS



CONCRETE CURB DESIGN V	
CURB HEIGHT H	CURB WIDTH W
<6"	4"
≥6"	6"

NOTES:

A WALKABLE FLARE IS AN 8-10% CONCRETE FLARE THAT IS REQUIRED WHEN THE FLARE IS ADJACENT TO A WALKABLE SURFACE, OR WHEN THE PEDESTRIAN PATH OF TRAVEL OF A PUSH BUTTON TRAVERSES THE FLARE.

ALL V CURB CONTRACTION JOINTS SHALL MATCH CONCRETE WALK JOINTS.

WHERE RIGHT-OF-WAY ALLOWS, USE OF V CURB SHOULD BE MINIMIZED. GRADING ADJACENT TURF OR SLOPING ADJACENT PAVEMENT IS PREFERRED.

V CURB SHALL BE PLACED OUTSIDE THE SIDEWALK LIMITS WHEN RIGHT OF WAY ALLOWS.

V CURB NEXT TO BUILDING SHALL BE A 4" WIDTH AND SHALL MATCH PREVIOUS TOP OF SIDEWALK ELEVATIONS.

1. END TAPERS AT TRANSITION SECTION SHALL MATCH INPLACE SIDEWALK GRADES.
2. ALL V CURB SHALL MATCH BOTTOM OF ADJACENT WALK.
3. CONSTRUCT USING APPROVED EXPANSION MATERIAL PER MNDOT TYPE A-E EXPANSION. LEAVE A MINIMUM ½" TOP GAP AND SEAL WITH MNDOT APPROVED SILICONE PER MNDOT SPEC 3722.
4. THE MAX. RATE OF CROSS SLOPE TRANSITIONING IS 1' LINEAR FOOT OF SIDEWALK PER HALF PERCENT CROSS SLOPE. WHEN PAR WIDTH IS GREATER THAN 6' OR THE RUNNING SLOPE IS GREATER THAN 5%, DOUBLE THE CALCULATED TRANSITION LENGTH.
5. TRANSITION PANELS ARE TO ONLY BE USED AFTER THE RAMP, OR 3' IF NEEDED, LANDING ARE AT THE FULL CURB HEIGHT (TYPICAL SECTION).
6. EXISTING CROSS SLOPE GREATER THAN 2.0%.

LEGEND

THESE LONGITUDINAL SLOPE RANGES SHALL BE THE STARTING POINT. IF SITE CONDITIONS WARRANT, LONGITUDINAL SLOPES UP TO 8.3% OR FLATTER ARE ALLOWED.

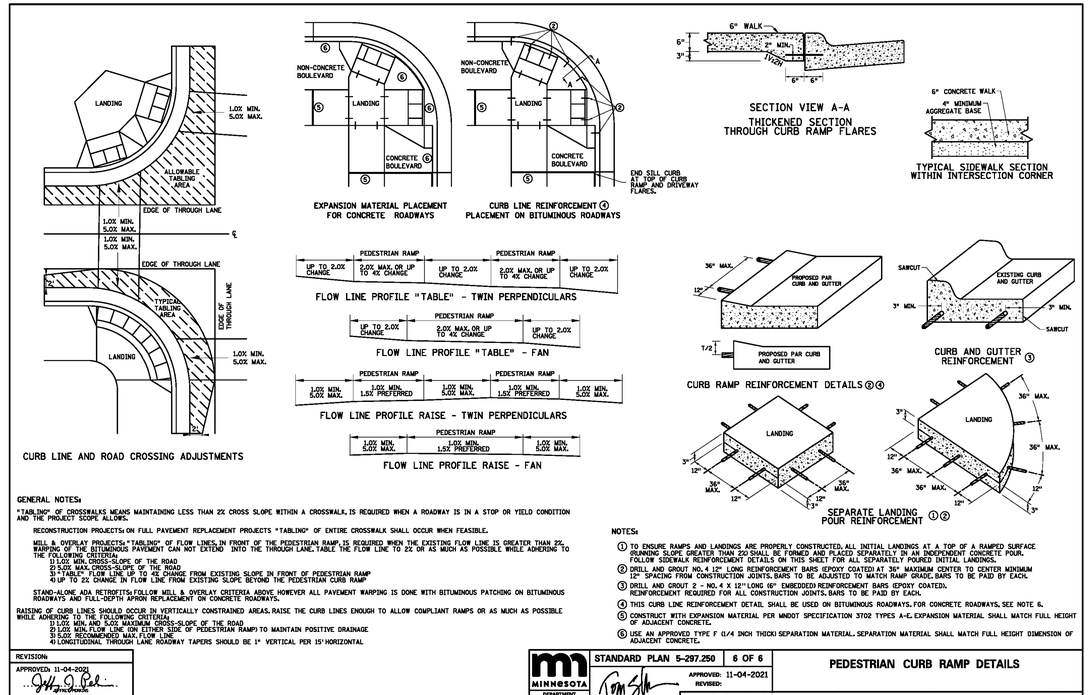
- 5 — INDICATES PEDESTRIAN RAMP - SLOPE SHALL BE BETWEEN 5.0% MINIMUM AND 8.3% MAXIMUM IN THE DIRECTION SHOWN AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.
- LANDING AREA - 4' X 4' MIN. (5' X 5' MIN. PREFERRED) DIMENSIONS AND MAX 2.0% SLOPE IN ALL DIRECTIONS. LANDING SHALL BE FULL WIDTH OF INCOMING PARS.
- 4 — TRANSITION PANELS - TO BE USED FOR TRANSITIONING THE CROSS-SLOPE OF A RAMP TO THE EXISTING WALK CROSS-SLOPE. RATE OF TRANSITION SHOULD BE 0.5% PER 1 LINEAR FOOT OF WALK. SEE THIS SHEET FOR ADDITIONAL INFORMATION.

REVISIONS	
APPROVED: 11-04-2021	OPERATIONS DIVISION

STANDARD PLAN 5-297.250	5 OF 6
APPROVED: 11-04-2021	REVISED:
STATE PROJ. NO.	(TH) SHEET NO. OF SHEETS

MINNESOTA DEPARTMENT OF TRANSPORTATION — THOMAS SORENSON, STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS



GENERAL NOTES:

TABLING AT CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK. IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS.

RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS *TABLING* OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: *TABLING* OF FLOW LINES IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2%. WARPING OF THE BITUMINOUS PAVEMENT CAN NOT EXTEND INTO THE THROUGH LANE. TABLE THE FLOW LINE TO 2% OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

1) 5.0% MAX. CROSS-SLOPE OF THE ROAD
2) 5.0% MAX. CROSS-SLOPE OF THE ROAD
3) *TABLE* FLOW LINE UP TO 4% CHANGE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
4) UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN CURB RAMP

STAND-ALONE ADA RETROFITS: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT WARPING IS DONE WITH BITUMINOUS PATCHING ON BITUMINOUS ROADWAYS AND FULL-DEPTH APRON REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO ALLOW COMPLIANT RAMPS OR AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

1) 5.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
2) 1.0% MIN. FLOW LINE 10N EITHER SIDE OF PEDESTRIAN RAMP) TO MAINTAIN POSITIVE DRAINAGE
3) 5.0% RECOMMENDED MAX. FLOW LINE
4) LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

NOTES:

1. TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.
2. DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS (EPOXY COATED) AT 36" MAXIMUM CENTER TO CENTER MINIMUM 12" SPACING FROM CONSTRUCTION JOINTS. BARS TO BE ADJUSTED TO MATCH RAMP GRADE. BARS TO BE PAID BY EACH.
3. DRILL AND GROUT 2 - NO. 4 X 12" LONG 16" EMBEDDED REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS. BARS TO BE PAID BY EACH.
4. THIS CURB LINE REINFORCEMENT DETAIL SHALL BE USED ON BITUMINOUS ROADWAYS. FOR CONCRETE ROADWAYS, SEE NOTE 6.
5. CONSTRUCT WITH EXPANSION MATERIAL PER MNDOT SPECIFICATION 3702 TYPES A-E. EXPANSION MATERIAL SHALL MATCH FULL HEIGHT OF ADJACENT CONCRETE.
6. USE AN APPROVED TYPE F (1/4 INCH THICK) SEPARATION MATERIAL. SEPARATION MATERIAL SHALL MATCH FULL HEIGHT DIMENSION OF ADJACENT CONCRETE.

REVISIONS	
APPROVED: 11-04-2021	OPERATIONS DIVISION

STANDARD PLAN 5-297.250	6 OF 6
APPROVED: 11-04-2021	REVISED:
STATE PROJ. NO.	(TH) SHEET NO. OF SHEETS

MINNESOTA DEPARTMENT OF TRANSPORTATION — THOMAS SORENSON, STATE DESIGN ENGINEER

PEDESTRIAN CURB RAMP DETAILS

CONTOUR CIVIL DESIGN
8195 VERNON STREET, ROCKFORD, MN 55373
TEL: 612.730.2265 | WWW.CONTOURCD.COM

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

NAME: JOSEPH T RADACH PE

SIGNATURE:

DATE: 06/10/22 LIC #: 45889

REVISIONS	ISSUE DATE:	BY:
1. 02/13/23	PUD SUBMITTAL	JTR
2. 04/14/23	FINAL PLAT SUBMITTAL	JTR
3.		
4.		
5.		
6.		
7.		

OWNER

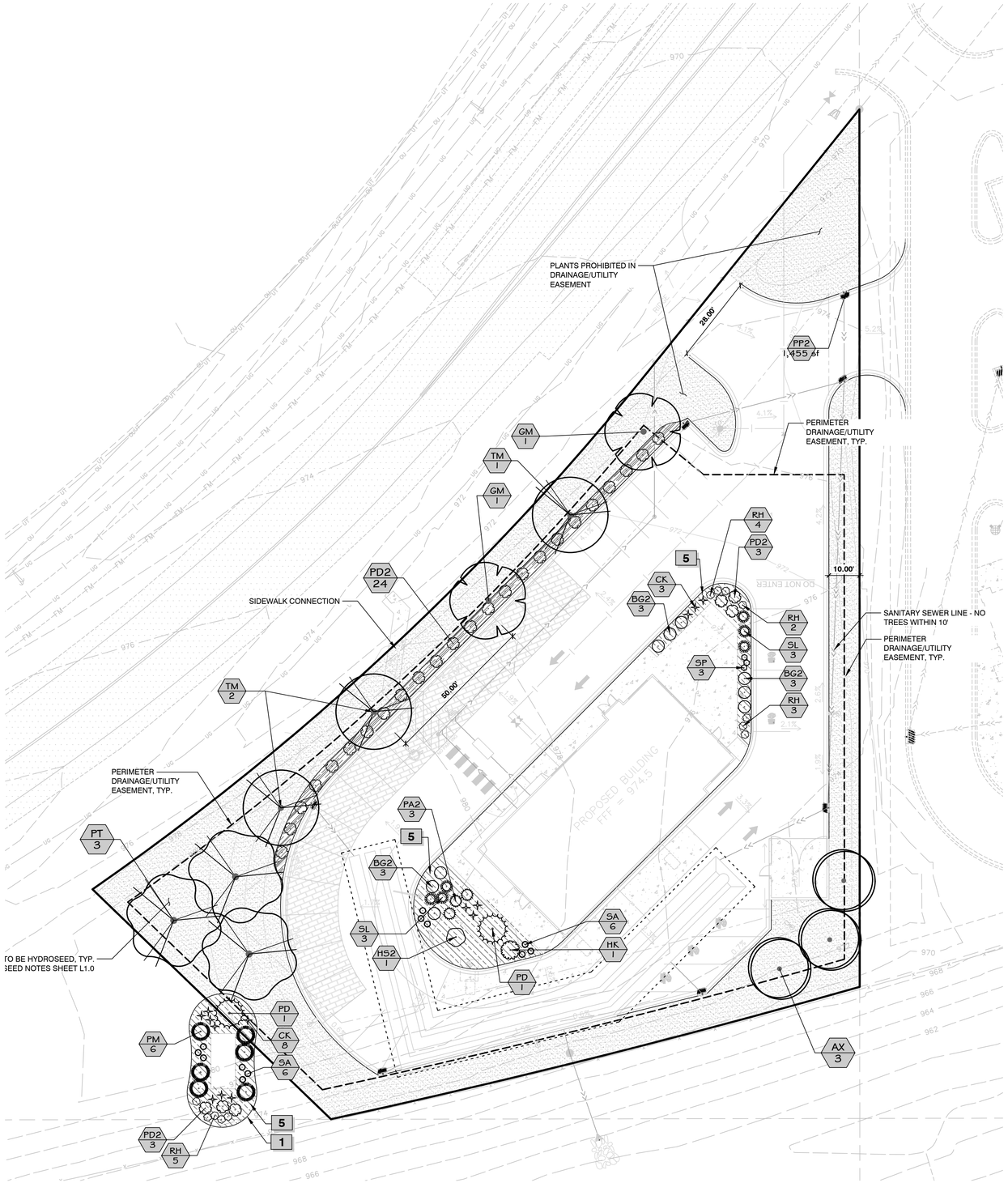
LYNSKEY & CLARK
PO BOX 36, 118 S. MAIN STREET
STILLWATER, MN 55082

DETAILS

DAIRY QUEEN STORE #70891
LAKE ELMO, MINNESOTA

SHEET NUMBER
C6.5

04/11/23 c:\users\contour civil\dropbox\jon ideshop\contour_jobs\23002 - lake elmo dq\cad\23002_details.dwg



PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	
AX	Amelanchier x grandiflora `Autumn Brilliance` / `Autumn Brilliance` Serviceberry	-		3	
GM	Ginkgo biloba 'Magyar' / Magyar Maidenhair Tree	2.5" Cal.	B&B	2	
PT	Populus tremuloides / Quaking Aspen	2.5" Cal.	B&B	3	
TM	Tilia mongolica `Harvest Gold` / Harvest Gold Linden	-		3	
CONIFERS	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	
PM	Pinus mugo `Compacta` / Dwarf Mugo Pine	#7		6	
SHRUBS	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	
BG2	Buxus microphylla `Green Borders` / Green Borders Boxwood	#5		9	
PA2	Perovskia atriplicifolia / Russian Sage	#5		3	
PD2	Physocarpus opulifolius 'Donna May' TM / Little Devil Dwarf Ninebark	#5		30	
PD	Physocarpus opulifolius 'Monlo' TM / Diabolo Purple Ninebark	#5		2	
GRASSES	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	
CK	Calamagrostis x acutiflora 'Karl Foerster' / Karl Foerster Feather Reed Grass	#2		14	
SL	Schizachyrium scoparium / Little Bluestem	#2		6	
ANNUALS/PERENNIALS	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	
HS2	Hosta sieboldiana `Elegans` / Elegans Hosta	#5		1	
HK	Hosta x 'Krossa Regal' / Krossa Regal Hosta	#5		1	
RH	Rudbeckia hirta / Black-eyed Susan	#3		12	
SA	Sedum x 'Autumn Joy' / Autumn Joy Sedum	#3		12	
SP	Sedum x 'Purple Emperor' / Purple Emperor Stonecrop	#3		3	
GROUND COVERS	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY
	PP2	Poa pratensis / Kentucky Bluegrass	Hydroseed		10,907 sf

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION	QTY
1	Border Concept Commercial Grade Steel Edging Color: Black	323 lf
4	Shredded Hardwood Mulch Color: To be chosen by homeowner	7.29 cy
5	3" Rock Mulch - Color: To be determined by owner	18.22 cy

STANDARD PLANTING NOTES:

1. CONTRACTOR M ST CONTACT GOPHER STATE ONE CALL 811 PRIOR TO TREE STA ING AND PLANTING OPERATIONS TO ERI NDERGRO ND TILITIES. WHERE PRI ATE TILITIES EXIST ON-SITE THE CONTRACTOR IS REQ IRED TO HA E THOSE LOCATED AS WELL.
2. PLANT MATERIALS SHALL MEET AMERICAN STANDARD OR N RSER STOC : ANSI Z60.1, LATEST EDITION.
3. NOT PLANT S BSTIT TIONS SHALL BE MADE WITHO T THE PRIOR WRITTEN A THORIZATION ROM THE CIT .
4. ALL TREE LOCATIONS TO BE IELD STA ED PRIOR TO INSTALLATION. CONTRACTOR TO COORDINATE ILED RE IEW O PROPOSED TREE LOCATIONS WITH THE CIT AND PRO ECT LANDSCAPE ARCHITECT PRIOR TO AN TREE INSTALLATION.
5. ALL PLANTS SHALL BE PLANTED IMMEDIATEL PON ARRI AL TO PRO ECT SITE. NO PLANT MATERIAL IS TO BE LE T O ERNIGHT ON THE PRO ECT SITE WITHO T BEING INSTALLED NLESS WRITTEN APPRO AL B CIT .
6. ALL TREES, SHR BS, PERENNIALS, T R LAWN AND NATI E SEEDING TO HA E A TWO- EAR WARRANT BEGINNING PON WRITTEN ACCEPTANCE B THE CIT . DE ECTI E PLANTS AS DETERMINED B THE CIT SHALL BE REPLACED WITHIN 30 DA S O NOTICE D RING THE GROWING SEASON, AND REPLACEMENT MATERIALS SHALL RECEI E THE SAME TWO EAR WARRANT NTIL PLANTS ARE S CCESS LL ESTABLISHED.
7. CONTRACTOR TO PROTECT AND MAINTAIN ALL PLANTINGS AND PLANT BEDS, INCL DING PROTECTION ROM WILDLI E, WEEDING, RE-M LCHING, ERTILIZATION, IRRIGATION AND ALL OTHER T PICAL ORMS O HORTIC LT RAL CARE NTIL THE END O THE WARRANT PERIOD AS DETERMINED AND APPRO ED B CIT .
8. ALL PLANTS INSTALLED AND MAINTAINED ON CIT PROPERT SHALL BE IN ACCORDANCE WITH CIT O LA E ELMO BEE-SA E RESOL TION NO. 2015-13.
9. AN IRRIGATION S STEM OR OTHER WATER S PPL ADEQ ATE TO S PPORT THE SPECI IED PLANT MATERIAL SHALL BE PRO IDED DESIGN-B ILD B THE CONTRACTOR.

SEED:

1. THE GRASS SEED MIXT RES SHALL MEET MNDOT SPECI ICATION 3876, OR THE APPLICABLE AREA TO BE RESTORED. NLESS OTHERWISE CALLED OR ON THE PLANS, THE GRASS SEED SHALL MEET MNDOT SPECI ICATION 3876

CIT O LA E ELMO M NICIPAL CODE SECTION 105.12.480 LANDSCAPE REQ IREMENTS

- PROVIDE DETAILS AND CROSS SECTION OF ALL REQUIRED SCREENING - SCREENING REQUIRED ALONG FRONTAGE STRIP ON HUDSON AVE. SECTION PROVIDED - SEE SHEET L1.1.
- INTERIOR PARKING LOT LANDSCAPING
  - AT LEAST FIVE PERCENT OF THE INTERIOR AREA OF PARKING LOTS WITH MORE THAN 30 SPACES SHALL BE DEVOTED TO LANDSCAPE PLANTING AREAS. AREAS MAY CONSIST OF ISLANDS OR CORNER PLANTING BEDS.
  - CURRENT 32 SPACES - MINIMUM TREE PLANTING REQUIRED = 1 TREE PER 10 SPACES
  - TOTAL TREES REQUIRED = 3
  - TOTAL TREES PROVIDED = 3 IN ADDITION TO FRONTAGE REQUIREMENTS
- PERIMETER PARKING LOT LANDSCAPING
  - STREET FRONTAGE TREES - A MINIMUM OF ONE TREE FOR EVERY 50 FEET OF STREET FOOTAGE SHALL BE PLANTED AT THE TIME OF DEVELOPMENT
  - 361 LINEAR FEET OF FRONTAGE ON HUDSON AVE
  - TOTAL REQUIRED = 8
  - TOTAL PROVIDED = 8
  - LANDSCAPE FRONTAGE STRIP REQUIREMENT - FRONTAGE ON HUDSON AVE ONLY
  - WITHIN THE FRONTAGE STRIP, SCREENING SHALL CONSIST OF EITHER A MASONRY WALL, FENCE, BERM, OR HEDGE OR COMBINATION THAT FORMS A SCREEN A MINIMUM OF 3 1/2 AND A MAXIMUM OF FOUR FEET IN HEIGHT, AND NOT LESS THAN 50 PERCENT OPAQUE ON A YEAR-ROUND BASIS. SEE SECTION ON L1.1.
  - TREES SHALL BE PLANTED AT A MINIMUM OF ONE DECIDUOUS TREE PER 50 LINEAR FEET WITHIN THE FRONTAGE STRIP.
- RESIDENTIAL BUFFER STRIP REQUIREMENT NOT MET - DOES NOT APPLY
  - ALONGSIDE AND REAR PROPERTY LINES ABUTTING RESIDENTIAL PROPERTIES OR DISTRICTS, SCREENING SHALL BE PROVIDED, CONSISTING OF EITHER A MASONRY WALL, FENCE OR BERM IN COMBINATION WITH LANDSCAPE MATERIAL THAT FORMS A SCREEN A MINIMUM OF FOUR FEET IN HEIGHT, A MAXIMUM OF SIX FEET IN HEIGHT, AND NOT LESS THAN 90 PERCENT OPAQUE ON A YEAR-ROUND BASIS. LANDSCAPE MATERIAL SHALL INCLUDE TREES, PLANTED AT A MINIMUM OF ONE DECIDUOUS OR CONIFEROUS TREE PER 40 LINEAR FEET ALONG THE PROPERTY LINE.

1.

I HEREB CERTI THAT THIS PLAN WAS PREPARED B ME OR NDER M DIRECT S PER ISION, AND THAT I AM A D L LICENSED PRO ESSIONAL LANDSCAPE ARCHITECT NDER THE LAWS O THE STATE O MINNESOTA.

SIGNAT RE:

T PED OR PRINTED NAME: ILLIAN E. REINER

DATE: 4 12 23 LICENSE N MBER: 55038

N

DBA: JILLIAN REINER

Professional Landscape Architect
1003 Bay Ln NE
Alexandria, MN 56308
phone 320.815.4580

DAIRY QUEEN STORE #70891
LAKE ELMO, MN

LANDSCAPE PLAN

DESIGN PHASE
- ☐ CONCEPTUAL PHASE
- ■ CONSTRUCTION DRAWING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE
1	PUD SUBMITTAL	2/13/23
2	PUD SUBMITTAL	4/14/23

DATE: 06/10/22

DRAWN BY:

CHECKED BY:

APPROVED BY:

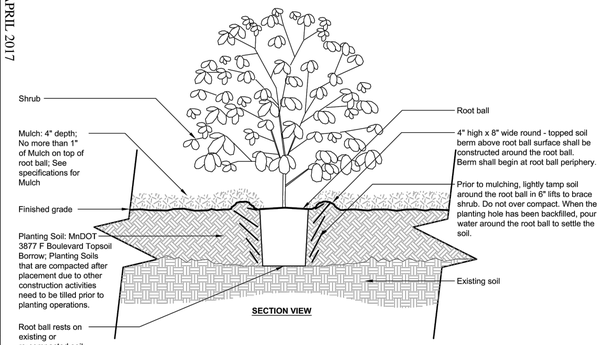
SCALE: 1" = 20'

SHEET NO.: L1.0

PROJECT NO.: 22-23

APRIL 2017

CITY OF LAKE ELMO



Notes:
1- Refer to specification 329000 for additional requirements.

2- Shrubs shall be of quality as prescribed in the root observations detail and specification.

LP2.5 SHRUB

STANDARD DRAWING NO. LP2.5 LAKE ELMO

APRIL 2017

CITY OF LAKE ELMO

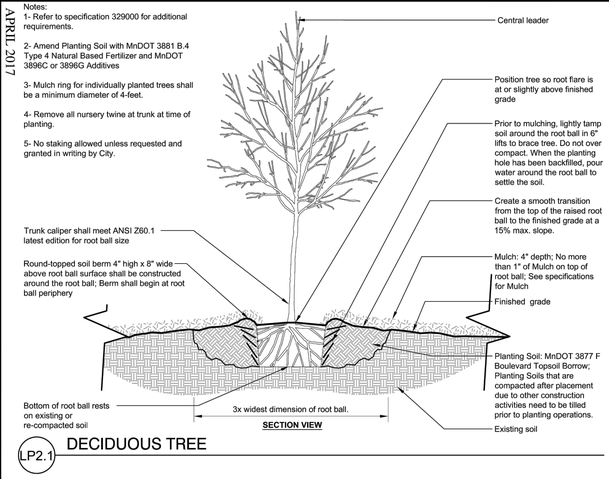
Notes:
1- Refer to specification 329000 for additional requirements.

2- Amend Planting Soil with MnDOT 3881 B.4 Type 4 Natural Based Fertilizer and MnDOT 3896C or 3896G Additives

3- Mulch ring for individually planted trees shall be a minimum diameter of 4-feet.

4- Remove all nursery twine at trunk at time of planting.

5- No staking allowed unless requested and granted in writing by City.



LP2.1 DECIDUOUS TREE

STANDARD DRAWING NO. LP2.1 LAKE ELMO

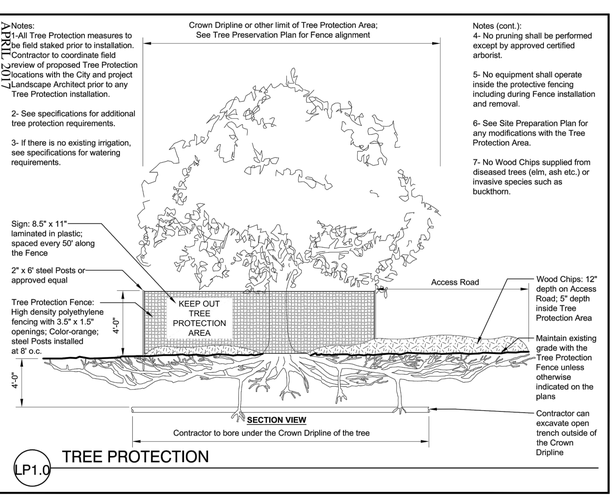
APRIL 2017

CITY OF LAKE ELMO

Notes:
1-All Tree Protection measures to be field staked prior to installation. Contractor to coordinate field review of proposed Tree Protection locations with the City and project Landscape Architect prior to any Tree Protection installation.

2- See specifications for additional tree protection requirements.

3- If there is no existing irrigation, see specifications for watering requirements.



Notes (cont.):
4- No pruning shall be performed except by approved certified arborist.

5- No equipment shall operate inside the protective fencing including during Fence installation and removal.

6- See Site Preparation Plan for any modifications with the Tree Protection Area.

7- No Wood Chips supplied from diseased trees (elm, ash etc.) or invasive species such as buckthorn.

LP1.0 TREE PROTECTION

STANDARD DRAWING NO. LP1.0 LAKE ELMO

STANDARD PLAN NOTES

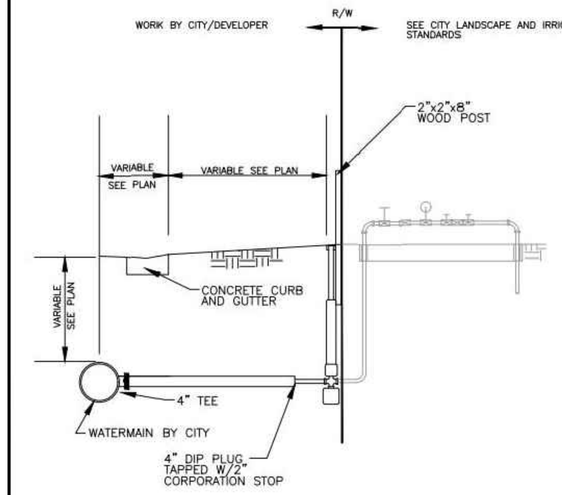
LANDSCAPE PLANS

1. Contractor must contact Gopher State One Call 811 (www.gopherstateonecall.org) prior to tree staking and planting operations to verify underground utilities. Where private utilities exist on-site the Contractor is required to have those located as well.
2. Plant materials shall meet American Standard for Nursery Stock: ANSI Z60.1, latest edition.
3. No plant substitutions shall be made without the prior written authorization from the City.
4. All tree locations to be field staked prior to installation. Contractor to coordinate field review of proposed tree locations with the City and Project Landscape Architect prior to any tree installation.
5. All plants shall be planted immediately upon arrival to project site. No plant material is to be left overnight on the project site without being installed unless written approval by City.
6. All trees, shrubs, perennials, turf lawn and native seeding to have a two-year warranty beginning upon written acceptance by the City. Defective plants as determined by the City shall be replaced within 30 days of notice during the growing season, and replacement materials shall receive the same two year warranty until plants are successfully established.
7. Contractor to protect and maintain all plantings and plant beds, including protection from wildlife, weeding, re-mulching, fertilization, irrigation and all other typical forms of horticultural care until the end of the warranty period as determined and approved by City.
8. All plants installed and maintained on City property shall be in accordance with City of Lake Elmo Bee-Safe Resolution No. 2015-13.
9. An irrigation system or other water supply adequate to support the specified plant materials shall be provided.

APRIL 2017

CITY OF LAKE ELMO

STANDARD DRAWING NO. LP2.0 LAKE ELMO

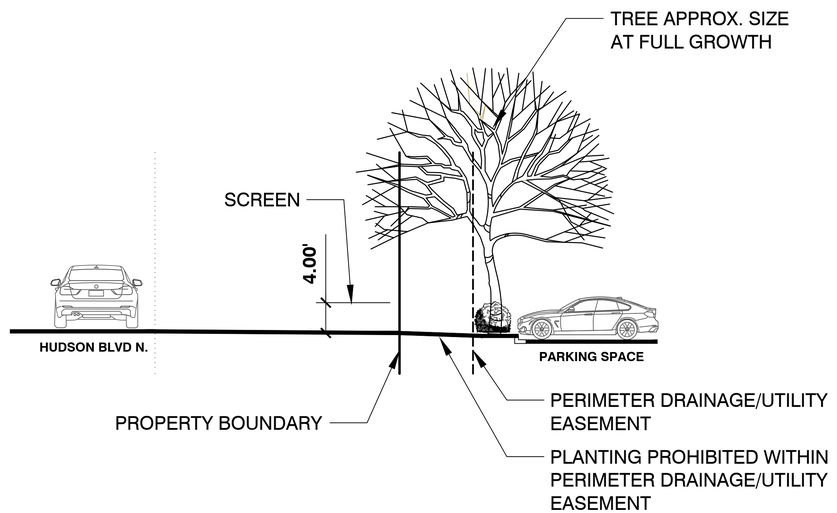


IRRIGATION SERVICE

APRIL 2019

CITY OF LAKE ELMO

STANDARD DRAWING NO. 208 LAKE ELMO



PARKING LOT LANDSCAPE SCREENING SECTION
SCALE 1" = 10'

DBA: JILLIAN REINER

Professional Landscape Architect
1003 Bay Ln NE
Alexandria, MN 56308
phone 320.815.4580

DAIRY QUEEN STORE #70891

LAKE ELMO, MN

LANDSCAPE DETAILS

DESIGN PHASE
- ☐ CONCEPTUAL PHASE
- ■ PRELIMINARY CONSTRUCTION DRAWING

REVISION SCHEDULE

NO.	DESCRIPTION	DATE
1	PUD SUBMITTAL	2/13/23
2	PUD SUBMITTAL	4/14/23

DATE
06/10/22

DRAWN BY:

CHECKED BY:

APPROVED BY:

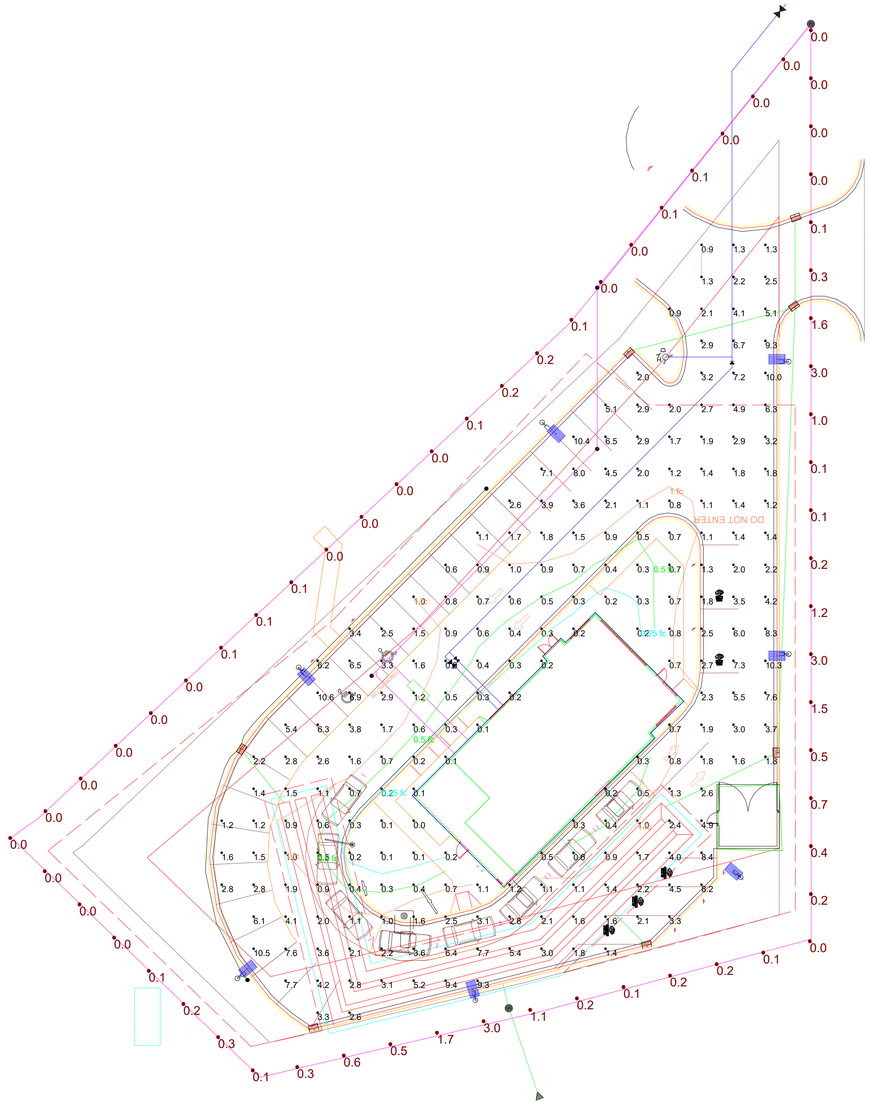
SCALE

SHEET NO.
L1.1

PROJECT NO.
22-23

Luminaire Schedule						
Symbol	Qty	Label	Mounting Height	Lum. Watts	LLF	Description
	7	AA3	17	100	0.900	EX-LITE 100W T3 40K MOUNT ON 15FT POLE WITH 2FT BASE

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Lot	Fc	2.50	10.6	0.0	N.A.	N.A.
Property Line 6' Above Grade	Fc	0.38	3.0	0.0	N.A.	N.A.





DISCLAIMER: Based on the information provided, all dimensions and luminaire locations shown represent recommended positions. Actual performance of any manufacturer's luminaires may vary due to changes in electrical voltage, tolerance in LEDs and other variable field conditions. Calculations do not include obstructions such as buildings, curbs, landscaping or any other architectural elements unless noted.

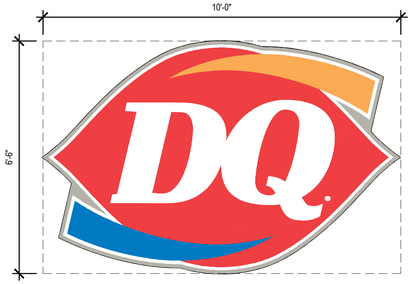
Fixture nomenclature to be finalized by engineer and/or architect. This drawings is for photometric evaluation purposes only and should not be used as a construction document or as a final document for ordering product.

Illuminated Design Service

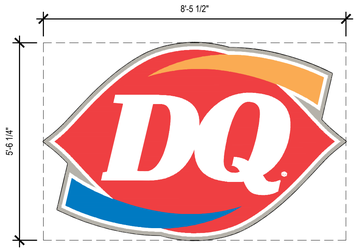
PULSE never ordinary

Designed By: K. Tomczak
Checked By: Trent Shore
Date:4/13/2023
Scale:

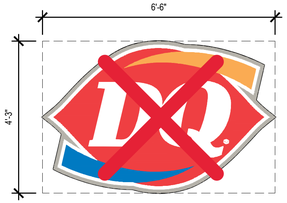
Dairy Queen Lake Elmo



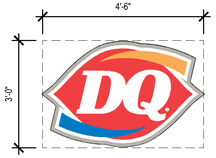
A DAIRY QUEEN LOGO (ILLUM.)
PROFILE = 46.4 SF RECTANGULAR = 65.3 SF



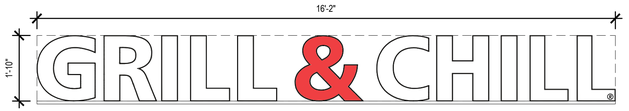
B DAIRY QUEEN LOGO (ILLUM.)
PROFILE = 33.1 SF RECTANGULAR = 46.7 SF



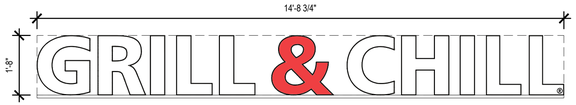
C DAIRY QUEEN LOGO (ILLUM.)
PROFILE = 19.6 SF RECTANGULAR = 27.6 SF



D DAIRY QUEEN LOGO (ILLUM.)
PROFILE = 9.3 SF RECTANGULAR = 13.5 SF



101 1'-10" H. CHANNEL LETTERS
INTERNALLY ILLUMINATED
PROFILE AREA: 14.78 SF RECTANGULAR AREA: 29.64 SF



102 1'-8" H. CHANNEL LETTERS
INTERNALLY ILLUMINATED
PROFILE AREA: 12.22 SF RECTANGULAR AREA: 24.55 SF



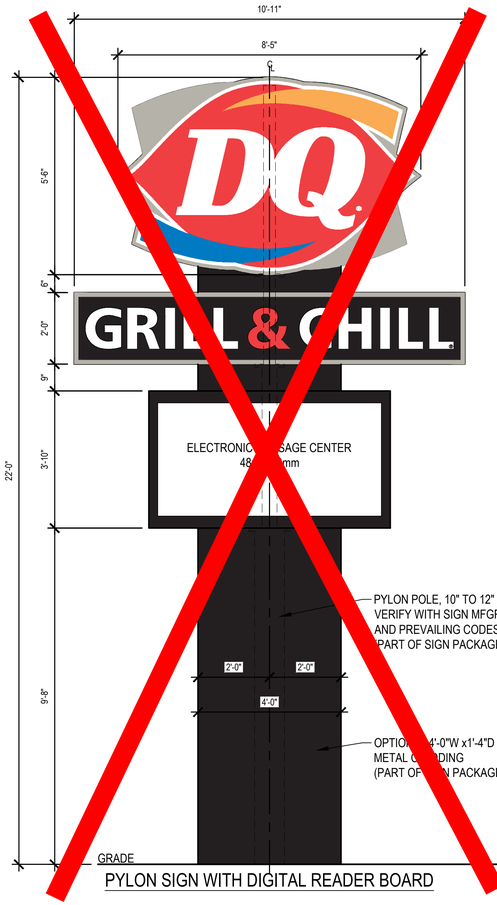
103 1'-6" H. CHANNEL LETTERS
INTERNALLY ILLUMINATED
PROFILE AREA: 9.90 SF RECTANGULAR AREA: 19.88 SF



104 1'-6" H. CHANNEL LETTERS
INTERNALLY ILLUMINATED
PROFILE AREA: 5.99 SF RECTANGULAR AREA: 12.03 SF

2 A3.3 BUILDING SIGNAGE

SCALE: 1/2" = 1'-0"



PYLON SIGN WITH DIGITAL READER BOARD

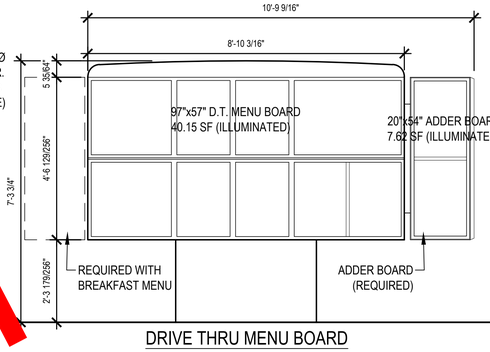


PYLON SIGN WITH READER BOARD

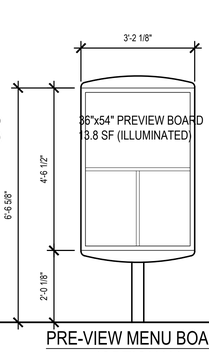
H 5'-6"x8'-5" (NOMINAL)
DAIRY QUEEN LOGO DOUBLE SIDED
INTERNALLY ILLUMINATED
PROFILE = 33.1 SF
RECTANGULAR = 46.7 SF

33 PYLON BOWTIE SIGNAGE
IS OPTIONAL COORD.
WITH FRANCHISEE

82 50" X 73" READER BD. (ILLUM.)
PROFILE = 24.46 SF
RECTANGULAR = 25.0 SF



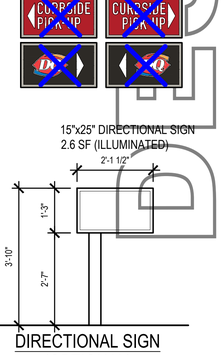
DRIVE THRU MENU BOARD



PRE-VIEW MENU BOARD
(OPTIONAL)



WALL MOUNTED
EXTERIOR PROMO BOARD



DIRECTIONAL SIGN
(OPTIONAL)

1 A3.3 SITE SIGNAGE

SCALE: 1/2" = 1'-0"

7'-3 1/2"
1'-4"
GRILL & CHILL
33 16" DOUBLE SIDED SIGN BOX
INTERNALLY ILLUMINATED
AREA = 9.72 SF

9'-1"
1'-8"
GRILL & CHILL
32 20" DOUBLE SIDED SIGN BOX
INTERNALLY ILLUMINATED
AREA = 15.14 SF

10'-11"
2'-0"
GRILL & CHILL
31 24" DOUBLE SIDED SIGN BOX
INTERNALLY ILLUMINATED
AREA = 21.83 SF

13'-9 1/4"
2'-4"
GRILL & CHILL
30 28" DOUBLE SIDED SIGN BOX
INTERNALLY ILLUMINATED
AREA = 32.13 SF

ENTER
EXIT
DRIVE THRU
DRIVE THRU
DRIVE THRU
DO NOT ENTER
WELCOME
THANK YOU
ENTER ONLY
EXIT ONLY
CURBSIDE PICK-UP
CURBSIDE PICK-UP

PRELIMINARY NOT FOR CONSTRUCTION

MAIN STREET
TOWN SQUARE
ANY TOWN, USA.

GRILL & CHILL®

AMERICAN DAIRY QUEEN
MINNEAPOLIS, MN U.S.A.

*REGISTERED U.S. PATENT OFFICE. AMERICAN DAIRY QUEEN CORPORATION. THIS DRAWING, IT'S DESIGN DETAIL AND INVENTION ARE THE PROPERTY OF AMERICAN DAIRY QUEEN INC. (ADQ) AND SHALL NOT BE COPIED IN ANY MANNER NOR DISCLOSED TO ANY OUTSIDE PARTY WITHOUT ADQ CONSENT.

BUILDING TYPE:
DAIRY QUEEN GRILL & CHILL
CORE46

DRAWN, CHECKED, & APPROVED BY: ADQ
DESIGN-ARCHITECTURE-CONSTRUCTION (DAC)
DEPARTMENT

NORTH

THIS IS "PLAN" NORTH FOR ACTUAL BUILDING ORIENTATION REFER TO SITE PLAN (BY OTHERS)

ISSUE DATE: 6-19-2020

REVISION DATE:

7-30-2020	1	PLAN REVISION BULLETIN #1
12-16-2020	2	PLAN REVISION BULLETIN #2
7-16-2021	3	PLAN REVISION BULLETIN #3
11-30-2021	4	PLAN REVISION BULLETIN #4
7-5-2022	5	PLAN REVISION BULLETIN #5
1-6-2023	6	PLAN REVISION BULLETIN #6

SIGNAGE MATRIX

SHEET NUMBER:

A3.3





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PLAN FOR SITE PLAN APPROVAL

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1050 BROADWAY ST., WRIGHTSTOWN, WI 54180

PROFESSIONAL SEAL:

REVISIONS		
#	STAGE	DATE

PLAN START DATE:	7/14/2022
APPROVED FOR BID	
APPROVED FOR REVIEW	
APPROVED FOR CONSTRUCTION	

PROJECT INFO:
22-039
PLAN FOR SITE PLAN APPROVAL
DAIRY QUEEN
LAKE ELMO
WASHINGTON COUNTY, MN

CURRENT AS OF: 2/13/2023 12:16:26 PM

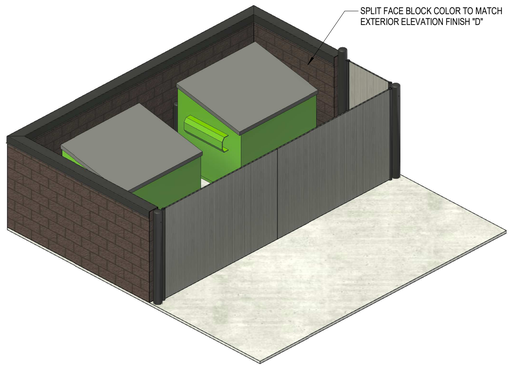
DRAWN BY: O.R.V.

SCALE:

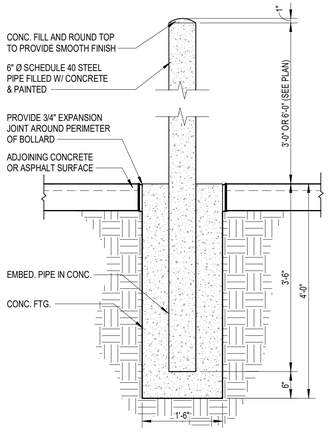
SHEET NAME:

PERSPECTIVES

008

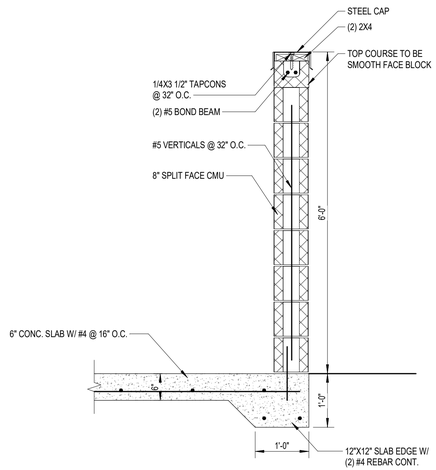


DUMPSTER ENCLOSURE
9 3D VIEW

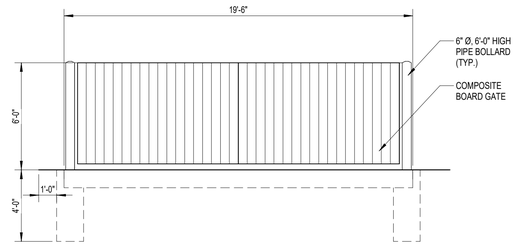


SECTION

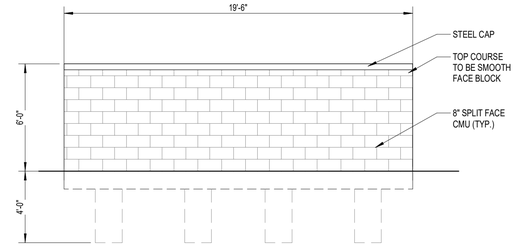
DUMPSTER ENCLOSURE
8 6" PIPE BOLLARD DETAIL
3/4" = 1'-0"



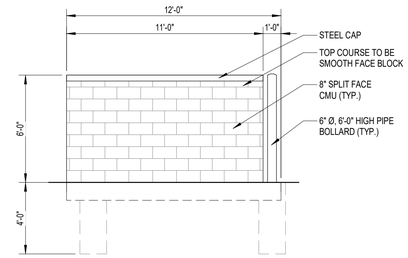
DUMPSTER ENCLOSURE
7 WALL SECTION
3/4" = 1'-0"



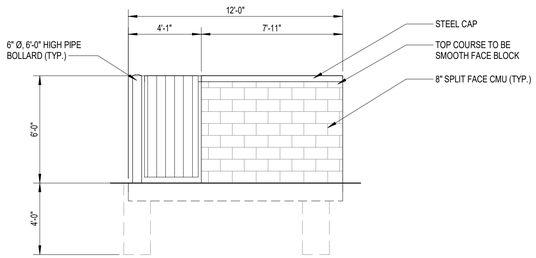
DUMPSTER ENCLOSURE
3 FRONT ELEVATION
1/4" = 1'-0"



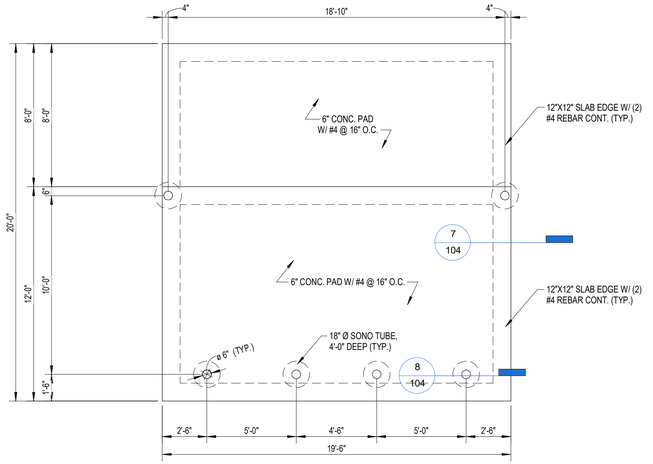
DUMPSTER ENCLOSURE
4 REAR ELEVATION
1/4" = 1'-0"



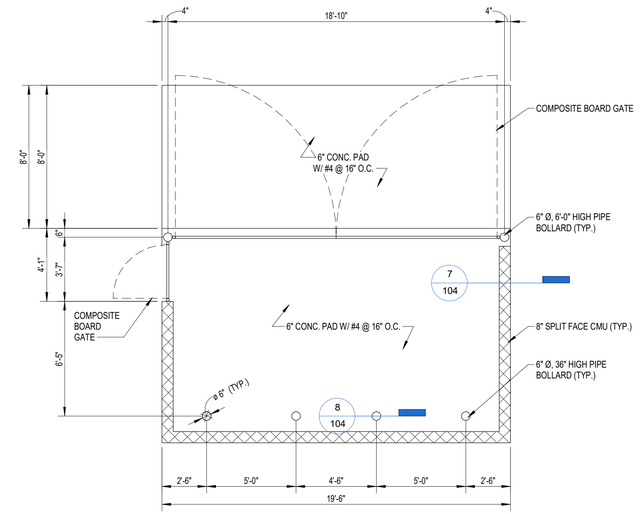
DUMPSTER ENCLOSURE
5 SIDE ELEVATION
1/4" = 1'-0"



DUMPSTER ENCLOSURE
6 SIDE ELEVATION w/ GATE
1/4" = 1'-0"



DUMPSTER ENCLOSURE
1 FOUNDATION
1/4" = 1'-0"



DUMPSTER ENCLOSURE
2 FLOOR PLAN
1/4" = 1'-0"

PLAN FOR SITE PLAN APPROVAL

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#	STAGE	DATE

PLAN START DATE: 7/14/2022
APPROVED FOR BID
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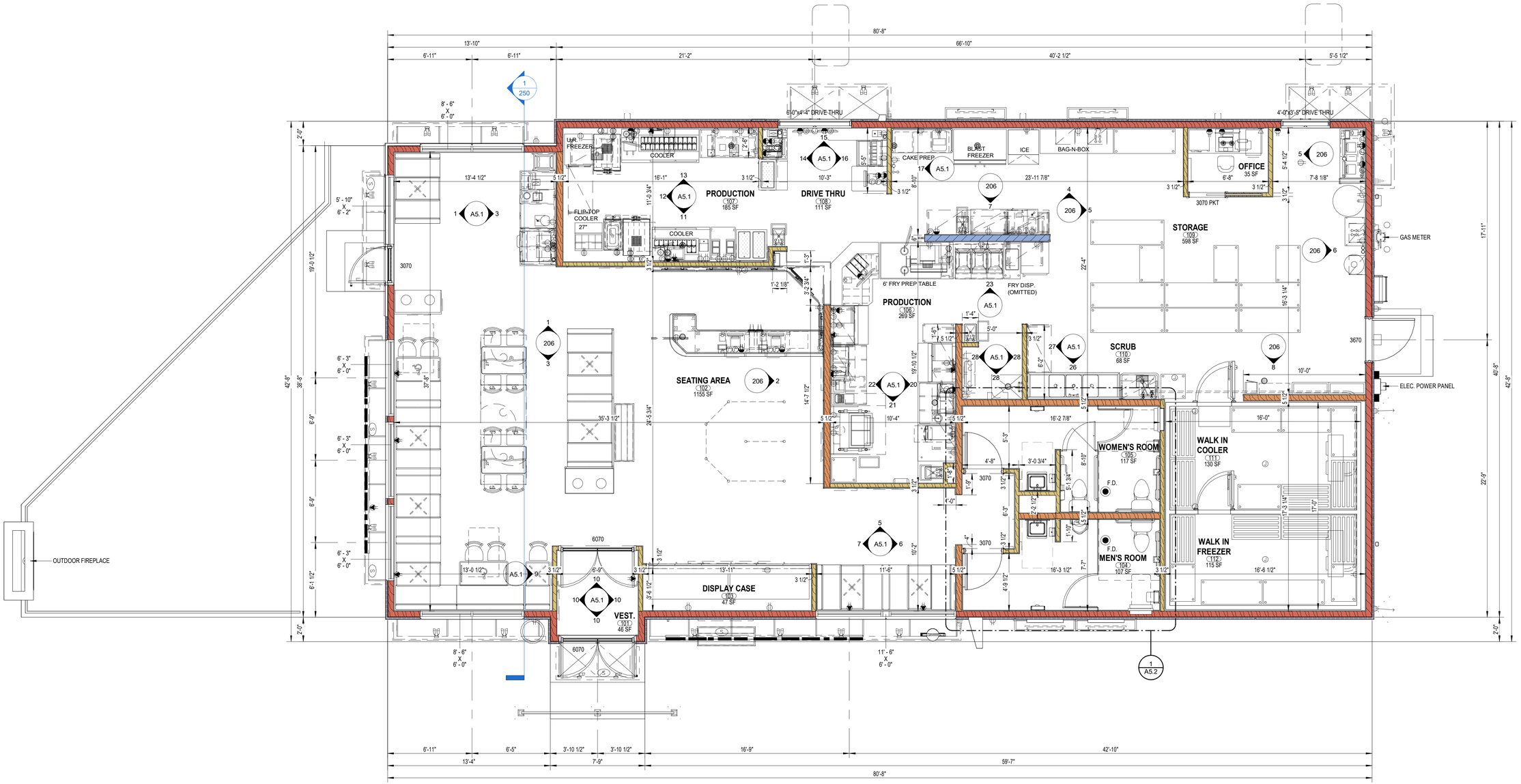
PROJECT INFO:
22-039
PLAN FOR SITE PLAN APPROVAL
DAIRY QUEEN
LAKE ELMO
WASHINGTON COUNTY, MN

CURRENT AS OF: 2/13/2023 12:16:29 PM
DRAWN BY: O.R.V.
SCALE: As indicated

SHEET NAME:
DUMPSTER ENCLOSURE DETAILS

104

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1 FLOOR PLAN
1/4" = 1'-0"

PLAN FOR SITE PLAN APPROVAL

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1050 BROADWAY ST., WRIGHTSTOWN, WI 54180

PROFESSIONAL SEAL:

#	REVISIONS	
#	STAGE	DATE

PLAN START DATE:	7/14/2022
APPROVED FOR BID	
APPROVED FOR REVIEW	
APPROVED FOR CONSTRUCTION	

PROJECT INFO:
22-039
PLAN FOR SITE PLAN APPROVAL
DAIRY QUEEN
LAKE ELMO
WASHINGTON COUNTY, MN

CURRENT AS OF:	2/13/2023 12:16:31 PM
DRAWN BY:	BB
SCALE:	1/4" = 1'-0"

SHEET NAME:
FLOOR PLAN

200

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FRONT ELEVATION - TOTAL AREA: 857 SF

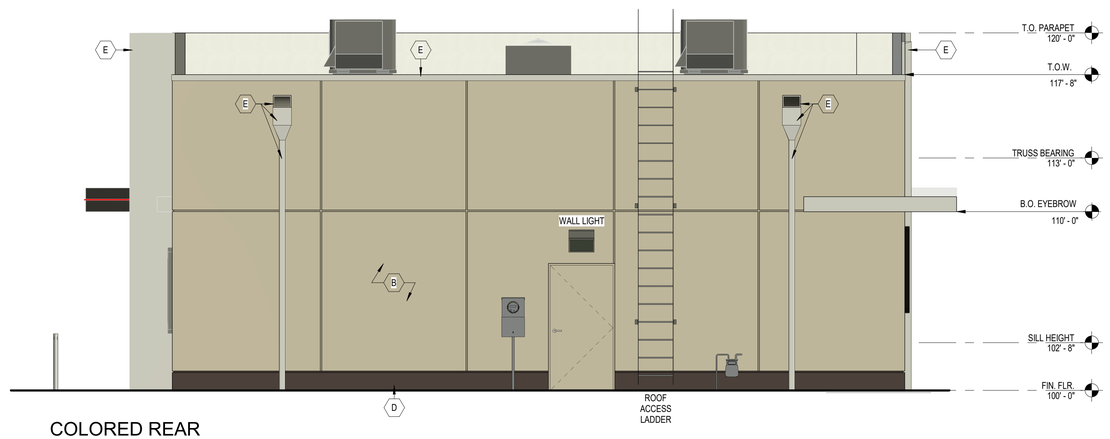
• MATERIAL 'B' - EIFS: 67 SF	= 7.8%
• MATERIAL 'D' - EIFS: 322 SF	= 37.6%
• MATERIAL 'E' - METAL COPING & SCUPPERS: 48 SF	= 5.6%
• MATERIAL 'F' - METAL PANEL: 147 SF	= 17.2%
• MATERIAL 'G' - METAL EYEBROWS, OUTRIGGERS, & FLASHINGS: 46 SF	= 5.4%
• MATERIAL 'K' - STOREFRONT: 185 SF	= 21.6%
• MATERIAL 'M' - CORRUGATED METAL: 42 SF	= 4.8%
• METAL MATERIALS:	= 33%
• OTHER MATERIALS:	= 67%



1 COLORED FRONT ELEVATION
1/4" = 1'-0"

REAR ELEVATION - TOTAL AREA: 724 SF

• MATERIAL 'B' - EIFS: 639 SF	= 88.3%
• MATERIAL 'D' - EIFS: 40 SF	= 5.5%
• MATERIAL 'E' - METAL COPING & SCUPPERS: 45 SF	= 6.2%
• METAL MATERIALS:	= 6.2%
• OTHER MATERIALS:	= 93.8%



2 COLORED REAR ELEVATION
1/4" = 1'-0"

EXTERIOR ELEVATION KEYNOTES:

NOTE: THIS IS A PROTOTYPICAL SCHEDULE, ALL FINISHES MAY NOT BE USED.

A STONE:
MFGR: BORAL STONE PRODUCTS LLC
STYLE: PRO-FIT® LEDGESTONE, DRY STACK
COLOR: PLATINUM
NOTE: CAPSTONE: ELDORADO STONE - CHISELED EDGE COLUMN CAP, COLOR: SMOKE

B EIFS: (LIGHT)
MFGR: STO CORPORATION
COLOR: NA19-0021 (MATCHES BENJAMIN MOORE, TEMPORAL SPIRIT 965)
FINISH: 310 STO (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

C EIFS: (RED)
MFGR: STO CORPORATION
COLOR: NA19-0022 (MATCHES BENJAMIN MOORE, CALIENTE AF-290)
FINISH: 130D STOLIT 1.0D (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

D EIFS: (DARK)
MFGR: STO CORPORATION
COLOR: NA19-0023 (MATCHES BENJAMIN MOORE, DEEP CREEK 1477)
FINISH: 130D STOLIT 1.0D (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

E COPING & SCUPPERS:
MFGR: FIRESTONE UNA-CLAD
MATL: 24 GA. STEEL
COLOR: SILVER METALLIC
FINISH: KYNAR 500
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

E.1 PAINT PATIO RAILING, LIGHTS, PERGOLA COLUMNS:
MFGR: BENJAMIN MOORE
COLOR: P28 COBBLESTONE PATH 1606
PRODUCT: ULTRA SPEC HP DTM ACRYLIC SEMI-GLOSS ENAMEL HP28
PRIMER: ULTRA SPEC HP DTM ACRYLIC METAL PRIMER HP04

F METAL PANEL:
MFGR: ALPOLIC
STYLE: 4MM
COLOR: SHIMMER DQS MAROON GOLD
NOTE: MUST BE INSTALLED HORIZONTALLY. REFERENCE ARROWS ON BACK OF PANEL MUST BE ALIGNED IN THE SAME DIRECTION.
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

G METAL EYEBROW, OUTRIGGERS, & FLASHINGS:
MFGR: FIRESTONE UNA-CLAD
MATL: .040 ALUMINUM
COLOR: EXTRA DARK BRONZE
FINISH: KYNAR 500
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

H EIFS: (BLUE)
MFGR: STO CORPORATION
COLOR: NA19-0024 (MATCHES BENJAMIN MOORE, BIG COUNTRY BLUE #2066-30)
FINISH: 130D STOLIT 1.0 (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

K STOREFRONT:
STYLE: 2"x4 1/2"
FINISH: DARK BRONZE
GLAZING: CLEAR, 1" INSULATED, LOW E

L EIFS: (MEDIUM)
MFGR: STO CORPORATION
COLOR: NA20-0019 (MATCHES BENJAMIN MOORE, WILLOW CREEK #1468)
FINISH: 310 STO (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

M CORRUGATED METAL:
MFGR: METAL SALES MANUFACTURING CORPORATION
MATL: 7/8" CORRUGATED 24 GA. STEEL
COLOR: ACRYLIC COATED GALVALUME
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

N METAL EYEBROW, OUTRIGGERS, & FLASHINGS:
MFGR: FIRESTONE UNA-CLAD
MATL: .040 ALUMINUM
COLOR: CLEAR ANODIZED
FINISH: SATIN
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

P PAINT:
MFGR: BENJAMIN MOORE
COLOR: TEMPORAL SPIRIT 965
PRODUCT: AURA EXTERIOR PAINT, EGG SHELL LOW LUSTRE #634
PRIMER: FIRST COAT - AURA EXTERIOR PAINT

Q TRASH ENCLOSURE SOLID COLOR STAIN:
MFGR: BENJAMIN MOORE
COLOR: DEEP CREEK 1477
PRODUCT: ARBORCOAT WATERBORNE SOLID DECK & SIDING STAIN #640
PRIMER: SELF PRIMING ON MOST SURFACES (SEE TECH. DATA SHEET FOR DETAILS)

Q.1 TRASH ENCLOSURE PAINT:
MFGR: BENJAMIN MOORE
COLOR: DEEP CREEK 1477
PRODUCT: AURA EXTERIOR PAINT, EGG SHELL LOW LUSTRE #634
PRIMER: FIRST COAT - AURA EXTERIOR PAINT

R METAL PANEL:
MFGR: ALPOLIC
STYLE: 3MM
COLOR: TBX SILVER
NOTE: MUST BE INSTALLED HORIZONTALLY. REFERENCE ARROWS ON BACK OF PANEL MUST BE ALIGNED IN THE SAME DIRECTION.
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

T AWNING:
MFGR: SUNBRELLA
COLOR: CHARCOAL TWEED 6007-000
VENDOR: SIGN SOURCE

W PERGOLA SOLID COLOR STAIN:
MFGR: BENJAMIN MOORE
COLOR: COBBLESTONE PATH 1606
PRODUCT: ARBORCOAT WATERBORNE SOLID DECK & SIDING STAIN #640
PRIMER: SELF PRIMING ON MOST SURFACES (SEE TECH. DATA SHEET FOR DETAILS)

X WALKIN COOLER/FREEZER:
MFGR: KOLPAK
COLOR: FACTORY FINISH
VENDOR: WASSERSTROM
NOTE: SEE EQUIPMENT SCHEDULE FOR DETAILS

PLAN FOR SITE APPROVAL

Alliance CONSTRUCTION & DESIGN
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PHONE: (920)-336-3400 FAX: (920)-336-3401
1050 BROADWAY ST., WRIGHTSTOWN, WI 54180

PROFESSIONAL SEAL:

REVISIONS		
#	STAGE	DATE
1	for review/construction/bid	--/--/2021

PLAN START DATE: 7/14/2022
APPROVED FOR BID
APPROVED FOR REVIEW
APPROVED FOR CONSTRUCTION

PROJECT INFO:
22-039
PLAN FOR SITE APPROVAL
DAIRY QUEEN
LAKE ELMO
WASHINGTON COUNTY, MN

CURRENT AS OF: 4/14/2023 10:35:20 AM
DRAWN BY: O.R.V.
SCALE: 1/4" = 1'-0"
SHEET NAME:
ELEVATIONS

240

P:\22-039 DQ Lake Elmo MN\Design Revit\22-039 DQ Lake Elmo.rvt



ENTRANCE ELEVATION - TOTAL AREA: 1,546 SF

• MATERIAL 'B' - EIFS: 425 SF	= 27.5%
• MATERIAL 'C' - EIFS: 88 SF	= 5.7%
• MATERIAL 'D' - EIFS: 491 SF	= 31.8%
• MATERIAL 'E' - METAL COPING & SCUPPERS: 94 SF	= 6.1%
• MATERIAL 'G' - METAL EYEBROWS, OUTRIGGERS, & FLASHINGS: 60 SF	= 3.9%
• MATERIAL 'H' - EIFS: 62 SF	= 4%
• MATERIAL 'K' - STOREFRONT: 183 SF	= 11.8%
• MATERIAL 'L' - EIFS: 82 SF	= 5.3%
• MATERIAL 'M' - CORRUGATED METAL: 61 SF	= 3.9%
• METAL MATERIALS:	= 25.7%
• OTHER MATERIALS:	= 74.3%

1 COLORED ENTRANCE ELEVATION

1/4" = 1'-0"



ENTRANCE ELEVATION - TOTAL AREA: 1,546 SF

• MATERIAL 'B' - EIFS: 812 SF	= 52.5%
• MATERIAL 'C' - EIFS: 182 SF	= 11.8%
• MATERIAL 'D' - EIFS: 110 SF	= 7.1%
• MATERIAL 'E' - METAL COPING & SCUPPERS: 81 SF	= 5.2%
• MATERIAL 'F' - METAL PANEL: 144 SF	= 9.3%
• MATERIAL 'G' - METAL EYEBROWS, OUTRIGGERS, & FLASHINGS: 22 SF	= 1.4%
• MATERIAL 'K' - STOREFRONT: 91 SF	= 5.9%
• MATERIAL 'M' - CORRUGATED METAL: 58 SF	= 3.8%
• MATERIAL 'R' - METAL PANEL: 46 SF	= 3%
• METAL MATERIALS: 351 SF	= 22.7%
• OTHER MATERIALS:	= 77.3%

2 COLORED DRIVE-THRU ELEVATION

1/4" = 1'-0"

EXTERIOR ELEVATION KEYNOTES:

NOTE: THIS IS A PROTOTYPICAL SCHEDULE, ALL FINISHES MAY NOT BE USED.

(A) STONE:
MFGR: BORAL STONE PRODUCTS LLC
STYLE: PRO-FIT® LEDGESTONE, DRY STACK
COLOR: PLATINUM
NOTE: CAPSTONE: ELDORADO STONE - CHISELED EDGE COLUMN CAP, COLOR: SMOKE

(B) EIFS: (LIGHT)
MFGR: STO CORPORATION
COLOR: NA19-0021 (MATCHES BENJAMIN MOORE, TEMPORAL SPIRIT 965)
FINISH: 310 STO (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

(C) EIFS: (RED)
MFGR: STO CORPORATION
COLOR: NA19-0022 (MATCHES BENJAMIN MOORE, CALIENTE AF-290)
FINISH: 130D STOLIT 1.0D (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

(D) EIFS: (DARK)
MFGR: STO CORPORATION
COLOR: NA19-0023 (MATCHES BENJAMIN MOORE, DEEP CREEK 1477)
FINISH: 130D STOLIT 1.0D (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

(E) COPING & SCUPPERS:
MFGR: FIRESTONE UNA-CLAD
MATL: 24 GA. STEEL
COLOR: SILVER METALLIC
FINISH: KYNAR 500
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

(E.1) PAINT PATIO RAILING, LIGHTS, PERGOLA COLUMNS:
MFGR: BENJAMIN MOORE
COLOR: P28 COBBLESTONE PATH 1606
PRODUCT: ULTRA SPEC HP DTM ACRYLIC SEMI-GLOSS ENAMEL HP28
PRIMER: ULTRA SPEC HP DTM ACRYLIC METAL PRIMER HP04

(F) METAL PANEL:
MFGR: ALPOLIC
STYLE: 4MM
COLOR: SHIMMER DQS MAROON GOLD
NOTE: MUST BE INSTALLED HORIZONTALLY. REFERENCE ARROWS ON BACK OF PANEL MUST BE ALIGNED IN THE SAME DIRECTION.
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

(G) METAL EYEBROW, OUTRIGGERS, & FLASHINGS:
MFGR: FIRESTONE UNA-CLAD
MATL: .040 ALUMINUM
COLOR: EXTRA DARK BRONZE
FINISH: KYNAR 500
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

(H) EIFS: (BLUE)
MFGR: STO CORPORATION
COLOR: NA19-0024 (MATCHES BENJAMIN MOORE, BIG COUNTRY BLUE #2066-30)
FINISH: 130D STOLIT 1.0 (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

(K) STOREFRONT:
STYLE: 2"x4 1/2"
FINISH: DARK BRONZE
GLAZING: CLEAR, 1" INSULATED, LOW E

(L) EIFS: (MEDIUM)
MFGR: STO CORPORATION
COLOR: NA20-0019 (MATCHES BENJAMIN MOORE, WILLOW CREEK #1468)
FINISH: 310 STO (FINE SAND)
NOTE: PROVIDE HIGH IMPACT EIFS FROM GRADE TO 3'-0" A.F.F.

(M) CORRUGATED METAL:
MFGR: METAL SALES MANUFACTURING CORPORATION
MATL: 7/8" CORRUGATED 24 GA. STEEL
COLOR: ACRYLIC COATED GALVALUME
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

(N) METAL EYEBROW, OUTRIGGERS, & FLASHINGS:
MFGR: FIRESTONE UNA-CLAD
MATL: .040 ALUMINUM
COLOR: CLEAR ANODIZED
FINISH: SATIN
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

(P) PAINT:
MFGR: BENJAMIN MOORE
COLOR: TEMPORAL SPIRIT 965
PRODUCT: AURA EXTERIOR PAINT, EGG SHELL LOW LUSTRE #634
PRIMER: FIRST COAT - AURA EXTERIOR PAINT

(Q) TRASH ENCLOSURE SOLID COLOR STAIN:
MFGR: BENJAMIN MOORE
COLOR: DEEP CREEK 1477
PRODUCT: ARBORCOAT WATERBORNE SOLID DECK & SIDING STAIN #640
PRIMER: SELF PRIMING ON MOST SURFACES (SEE TECH. DATA SHEET FOR DETAILS)

(Q.1) TRASH ENCLOSURE PAINT:
MFGR: BENJAMIN MOORE
COLOR: DEEP CREEK 1477
PRODUCT: AURA EXTERIOR PAINT, EGG SHELL LOW LUSTRE #634
PRIMER: FIRST COAT - AURA EXTERIOR PAINT

(R) METAL PANEL:
MFGR: ALPOLIC
STYLE: 3MM
COLOR: TBX SILVER
NOTE: MUST BE INSTALLED HORIZONTALLY. REFERENCE ARROWS ON BACK OF PANEL MUST BE ALIGNED IN THE SAME DIRECTION.
VENDOR: ARCHITECTURAL METALS, SEE NATIONAL VENDORS LIST

(T) AWNING:
MFGR: SUNBRELLA
COLOR: CHARCOAL TWEED 6007-000
VENDOR: SIGN SOURCE

(W) PERGOLA SOLID COLOR STAIN:
MFGR: BENJAMIN MOORE
COLOR: COBBLESTONE PATH 1606
PRODUCT: ARBORCOAT WATERBORNE SOLID DECK & SIDING STAIN #640
PRIMER: SELF PRIMING ON MOST SURFACES (SEE TECH. DATA SHEET FOR DETAILS)

(X) WALKIN COOLER/FREEZER:
MFGR: KOLPAK
COLOR: FACTORY FINISH
VENDOR: WASSERSTROM
NOTE: SEE EQUIPMENT SCHEDULE FOR DETAILS

PLAN FOR SITE APPROVAL

Alliance CONSTRUCTION & DESIGN
WWW.ALLIANCEBUILDS.COM
PHONE: (920)-336-3400 FAX: (920)-336-3401
1050 BROADWAY ST., WRIGHTSTOWN, WI 54180

PROFESSIONAL SEAL:

REVISIONS

#	STAGE	DATE

PLAN START DATE: 7/14/2022
APPROVED FOR BID
APPROVED FOR REVIEW
APPROVED FOR CONSTRUCTION

PROJECT INFO:
22-039
PLAN FOR SITE APPROVAL
DAIRY QUEEN
LAKE ELMO
WASHINGTON COUNTY, MN

CURRENT AS OF: 4/14/2023 10:35:27 AM
DRAWN BY: O.R.V.
SCALE: 1/4" = 1'-0"
SHEET NAME:
ELEVATIONS

242

P:\22-039 DQ Lake Elmo MN\Design Files\#22-039 DQ Lake Elmo.rvt

LANDFORM
From Site to Finish

Comprehensive Sign Plan Narrative

Lake Elmo, MN

Prepared for:

Drake Real Estate Services

DRAKE
REAL ESTATE SERVICES

May 4, 2023



SUBMITTED TO
Lake Elmo Planning & Zoning
3880 Laverne Avenue N
Lake Elmo, MN 55042

CREATING MEMORABLE PLACES
25 YEARS

PREPARED BY
Landform Professional Services, LLC
105 5th Ave S, Suite 513
Minneapolis, MN 55401

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Wall Sign Standards 2
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Comprehensive Sign Plan

This narrative provides a summary of the Comprehensive Sign Plan as requested as part of the PUD.

The *italicized text* below indicates sign standards from Section 105.12.430 of the Zoning Ordinance. This text has been included to highlight where flexibility from sign standards has been provided.

Ground Sign Standards

Two ground signs are permitted for the development; one ground sign will be located on Lot 1, Block 1 and another on Lot 2, Block 2. Tenants in the development will be allocated a certain amount of sign area for each ground sign. The total permitted area for ground signs shall be in addition to the permitted wall sign area.

The following is a summary of the permitted ground signage in the PUD:

Lot	**Ground Signs Allowed**	**Maximum Permitted Area** (*Each Side*)	**Maximum Height Allowed**	**Maximum Height Allowed**
Lot 1, Block 1	1	565 sq. ft.	30 ft.	50 ft.
Lot 1, Block 2	0	N/A	30 ft.	N/A
Lot 2, Block 2	1	250 sq. ft.	30 ft.	30 ft.
Lot 3, Block 2	0	N/A	30 ft.	N/A
TOTAL	2	815 sq. ft.		

Block 1 Ground Sign Standards

The following standards are proposed for the ground sign on Block 1:

1. One ground sign is permitted for Lot 1, Block 1 with a maximum height of 50 feet and sign area of 565 square feet.
    a. *Section 105.12.430(h.2) permits one ground sign with a maximum height of 30 feet and up to 250 square feet in area.*
2. An electronic variable message sign displaying multi-colored copy is allowed and shall not exceed 20% of the permitted sign area. Electronic variable message sign area will be included with the maximum aggregate sign area allowed.
    a. *Section 105.12.430(h.4) of the Zoning Ordinance permits electronic variable message signs up to 40 square feet in area.*
    b. *Section 105.12.430(h.4) limits electronic variable message signs to one color only, with light copy on a dark background.*
3. The total permitted ground sign area is in addition to the permitted wall sign area.
4. Sign illumination shall conform with the sign illumination standards in the Zoning Ordinance.
5. Ground signs shall be landscaped in compliance with Section 105.12.43(h.2.f):
    a. Perennial plantings, grass or other landscaping features shall be incorporated around the base of all ground signs.

A revision from the preliminary approvals is requested to locate the 50-foot ground sign in the right-of-way. The City will provide an encroachment agreement to the applicant to allow the sign to be located in the right-of-way as shown on the plans. The applicant will provide the City with an easement area over Lot 1, Block 1 adjacent to Hudson Boulevard in exchange for the encroachment agreement. In lieu of an encroachment agreement and easement area, the City and applicant may conduct a land swap and exchange ownership or provide a fee title for the subject areas.

Block 2 Ground Sign Standards

The following standards are proposed for the ground sign on Block 2:

1. One ground sign is permitted for Block 2 and shall be located on Lot 2, Block 2 with a maximum height of 30 feet and up to 250 square feet.
    a. *Section 105.12.430(h.2) permits one ground sign with a maximum height of 30 feet and up to 250 square feet in area for each lot.* The Zoning Ordinance would allow for three ground signs (one on each lot in Block 2).
2. An electronic variable message sign is not proposed for the ground sign on Block 2.
3. Sign illumination shall conform with the sign illumination standards in the Zoning Ordinance.
4. Ground signs shall be landscaped in compliance with Section 105.12.43(h.2.f):
    a. Perennial plantings, grass or other landscaping features shall be incorporated around the base of all ground signs.

Wall Sign Standards

The following is a summary of the proposed wall signage in the PUD:

Lot	Wall Signs Permitted per Façade*	Ancillary Wall Signs Permitted per Façade*	Maximum Area Permitted per Façade*
Lot 1, Block 1	3	1	150 sq. ft.
Lot 1, Block 2	2	2	300 sq. ft.
Lot 2, Block 2	3	2	300 sq. ft.
Lot 3, Block 2	2	2	300 sq. ft.
TOTAL	10	7	

* *Restrictions on which façades may display wall signs are described in the standards listed below.*

Block 1 Wall Sign Standards

The following standards are proposed for wall signs on Block 1:

1. No building occupant shall display more than one wall sign per building façade except as provided for below:
    a. Signage will be allowed on three façades of each building.
        i. Section 105.12.430(h.1) permits one wall sign per street frontage.
    b. Up to one ancillary sign will be allowed. Any ancillary sign shall not exceed 50% of the net area of the largest permitted wall sign displayed on that façade.
        i. Section 105.12.430(h.1) permits up to three (3) ancillary wall signs on buildings measuring at least 100 feet in length along the front property line.
    c. The aggregate area of the principal and ancillary signs shall not exceed 150 square feet per façade.
2. No individual wall sign shall exceed 100 square feet in area.
3. The total permitted wall sign area for a building shall be in addition to the permitted ground sign area.
4. Sign illumination shall conform with the sign illumination standards in the Zoning Ordinance.

Proposed Lot 1, Block 1 Signage

1. One 65 square foot logo sign is proposed on the west building frontage.

2. One 47 square foot logo sign and 30 square feet of channel lettering is proposed on the north façade (frontage on Hudson Boulevard).
    a. A total of 77 square feet of signage is proposed on the north façade.
3. One 13.5 square foot logo sign and 24.5 square feet of channel lettering is proposed on the east façade.
    a. A total of 38 square feet of signage is proposed on the east façade.
4. Three directional signs are proposed for the site. Each sign is 2.6 square feet in area.
    a. Two directional signs at the driveway marking the entrance and exit lanes.
    b. One "do not enter" sign at the exit of the drive-through lane.
5. Menu signs are proposed for the drive-through.

Block 2 Wall Sign Standards

The following standards are proposed for wall signs on Block 2:

1. No building occupant shall display more than one wall sign per building façade except as provided for below:
    a. Signage is permitted on the east and south building façades on Lot 1, Block 2.
    b. Signage is permitted on the east, south and west building façades on Lot 2, Block 2.
    c. Signage is permitted on the east and south building façades on Lot 3, Block 2.
        i. Section 105.12.430(h.1) permits one wall sign per street frontage.
    d. Up to two ancillary sign may be displayed on buildings. Any ancillary sign shall not exceed 50% of the net area of the largest permitted wall sign displayed on that façade.
        i. Section 105.12.430(h.1) permits up to three (3) ancillary wall signs on buildings measuring at least 100 feet in length along the front property line.
    e. The aggregate area of the principal and ancillary signs sign shall not exceed 300 square feet per façade.
2. No individual wall sign shall exceed 150 square feet in area.
    a. Section 105.12.430(h.1) of the Zoning Ordinance restricts that no individual wall sign shall exceed 100 square feet in area.
3. The total permitted wall sign area for a building shall be in addition to the permitted ground sign area.
4. Sign illumination shall conform with the sign illumination standards in the Zoning Ordinance.
5. No new wall signs are permitted to face residential.

Proposed Lot 1, Block 2 Signage

1. A total 300 square feet of signage is proposed on the south façade.
    a. One 150 square foot principal sign.
    b. Two 75 square foot ancillary signs.
2. A total of 300 square feet of signage is proposed on the east façade.
    a. One 150 square foot principal sign.
    b. Two 75 square foot ancillary signs.

Other Signage

Directional Signage

Directional signage within the development will comply with the directional sign standards in Section 105.12.430(h.0).

1. No more than three directional signs are permitted per lot, not including a maximum of one directional sign allowed per driveway entrance/exit.
2. Directional signage shall not serve an additional advertising purpose.
3. Surface area per sign shall not exceed three feet.
4. Logos shall not exceed two square feet per sign.
5. Sign height shall not exceed five feet above the ground elevation at the base of the sign.

Menu Signs

The following standards are proposed for menu signs:

1. A menu sign up to 7 feet, 5 inches is permitted for Block 1, Lot 1.
2. All other menu signs within the development shall comply with the menu sign standards in Section 105.12.430(k.12):
    a. Menu signs up to 55 square feet in area and six feet in height, provided they are located within 15 feet of the commercial building with which they are associated or advertise and in a manner such that the copy is not readily viewable from the public right-of-way or a residential occupancy on an adjacent lot.

Contact Information

This document was prepared by:

Nicholas Ouellette
Landform
105 South Fifth Avenue, Suite 513
Minneapolis, MN 55401

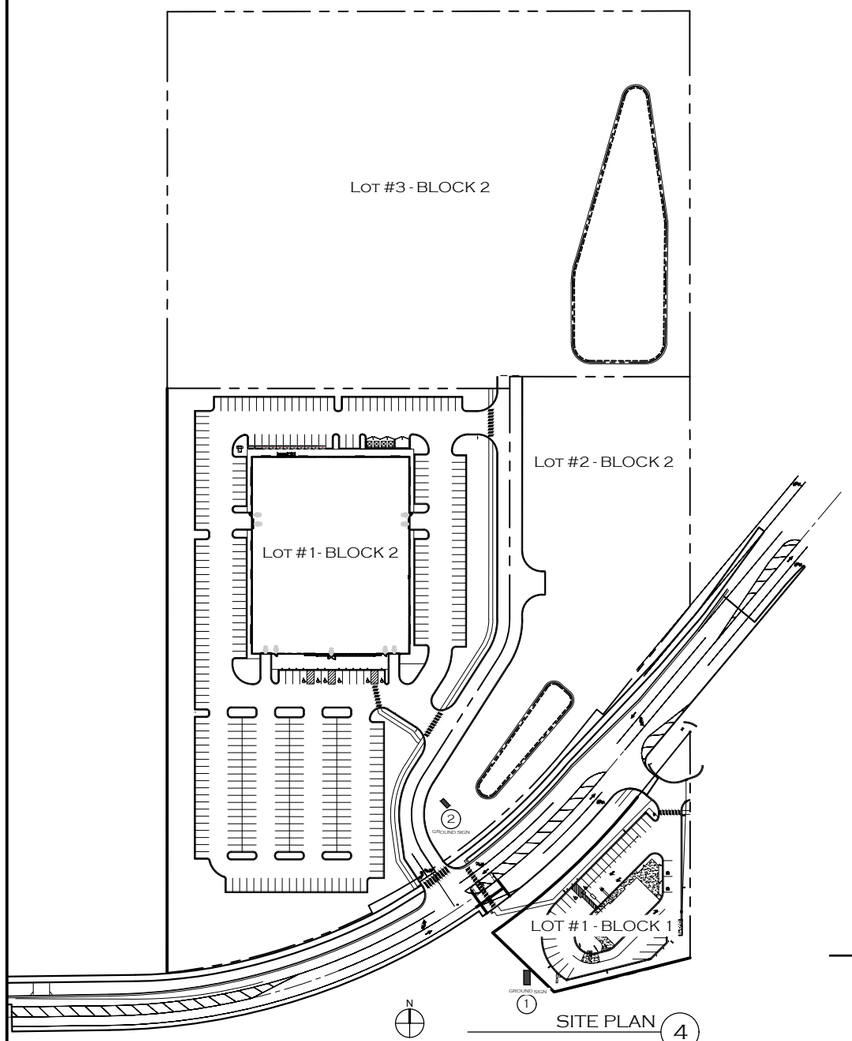
Any additional questions regarding this application can be directed to Tom Meyer at tmeyer@landform.net or 612.638.0241.

LAKE ELMO COMMONS
AN OFFICIAL SIGN DEVELOPMENT PLAN
CITY OF LAKE ELMO, COUNTY OF WASHINGTON, STATE OF MINNESOTA

LAKE ELMO COMMONS - GROUND SIGNAGE SUMMARY:

LOT #:	MAX ALLOWED:	PROPOSED:	MAX. AREA (SF)	PROPOSED SIGN AREA (SF)	MAX. HEIGHT (FT)	PROPOSED HEIGHT (FT)
LOT 1 - BLOCK 1	1	1	250	565 (EACH SIDE)	30	50
LOT 2 - BLOCK 2	1	1	250	250 (EACH SIDE)	30	30
TOTAL:	2	2	500	815 (EACH SIDE)		

SIGN SIZE JUSTIFICATION:
1. VERTICAL SIGNS HAVE A SMALLER FOOTPRINT AND ALLOW MORE LANDSCAPING AND FIT IN SMALLER AREAS.
2. PANEL SIZE: PANELS TO BE EQUAL IN SIZE BUT LARGE ENOUGH FOR TENANT BRANDING.
3. "LAKE ELMO COMMONS" WILL BE ON EACH SIGN, LETTERS MOUNTED HIGH ENOUGH TO AVOID BEING COVERED BY LANDSCAPING.
4. MULTI-TENANT SIGNS MAY PROVIDE SIGNAGE FOR TENANTS FOR ANY LOT.
5. SIGN DESIGN IS FOR EASY PANEL RECONFIGURATION.
6. FREESTANDING SIGNS MAY BE CHANGED OR UPDATED WITHOUT MASTER SIGN PLAN CHANGES.



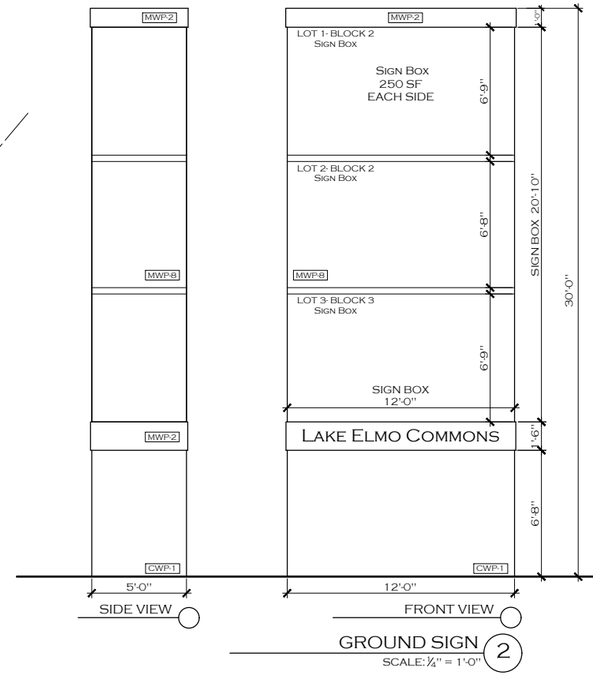
SITE PLAN 4

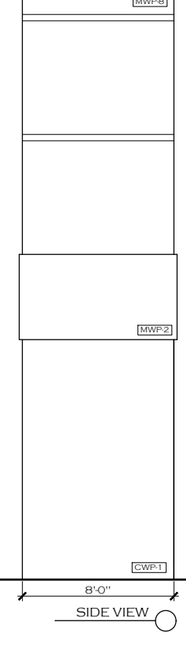
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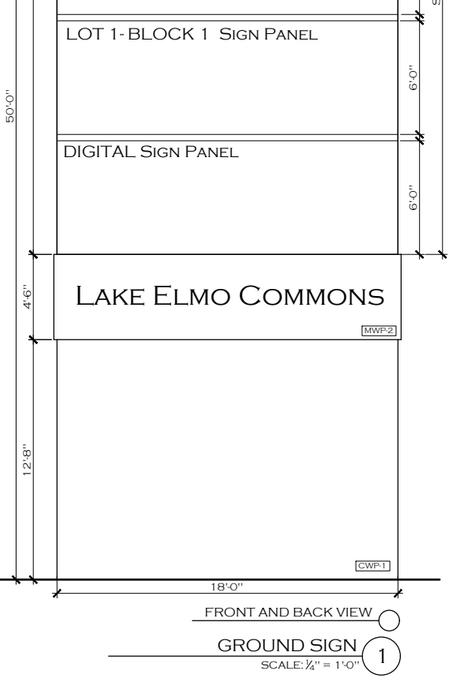
PAINT: (COLORS BY BENJAMIN MOORE)
- PT-5, "TROUT GREY"

METAL WALL PANEL: (ALUCOBOND)
- MWP-2, COLOR: "CLEAR ANODIZED"
- MWP-8, COLOR: "BUNNY GREY"

CONCRETE WALL PANEL:
- CWP-1, COLOR: "TROUT GREY"







npnama partners llc
Architecture . Interior Design. Planning. Graphics
2287 Pinto Trail, Elizabeth, CO
Tel. 303.905.7567

DRAKE
MOTOR PARTNERS LE, LLC
496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

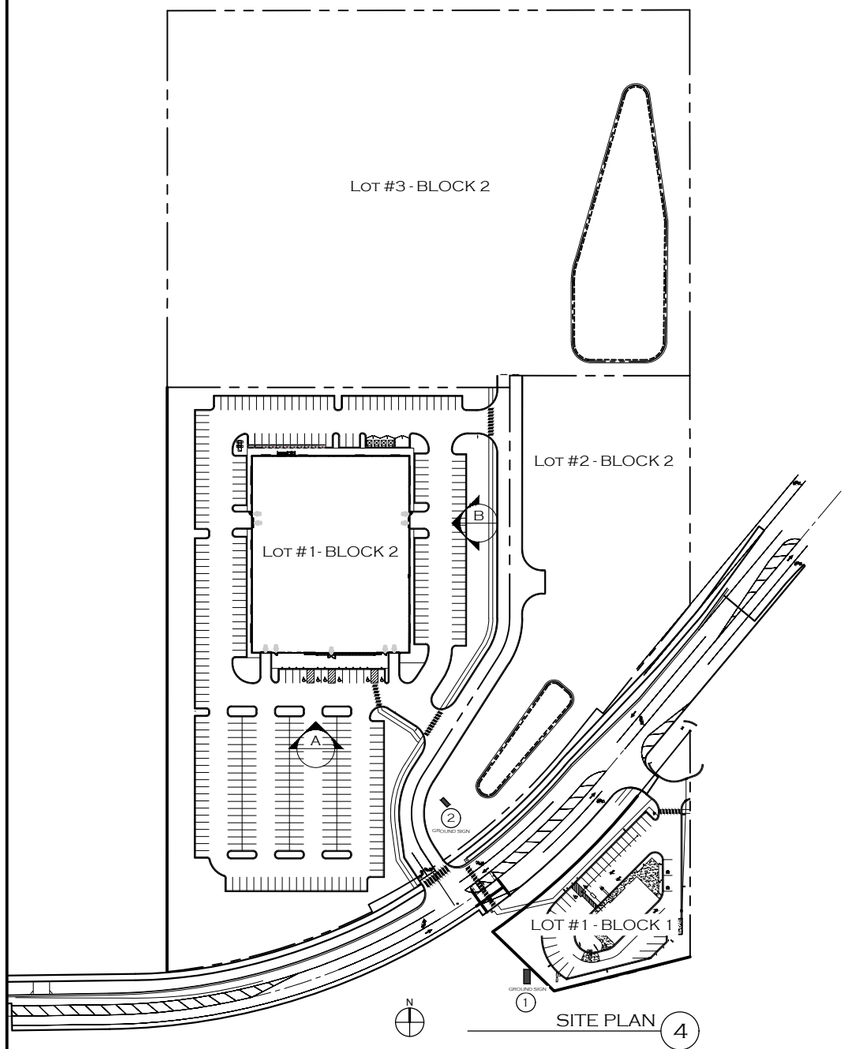
LAKE ELMO COMMONS

LAKE ELMO, MN

DRAWING TITLE

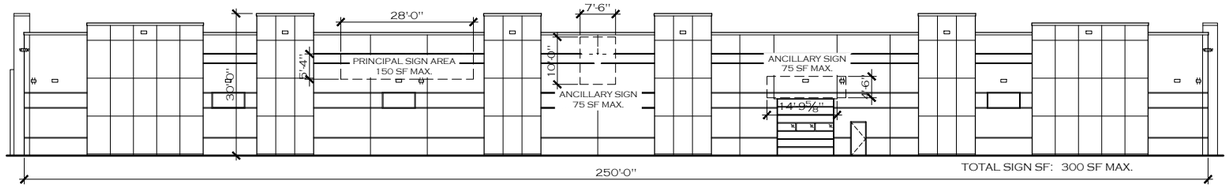
SIGN DESIGN STANDARDS

LAKE ELMO COMMONS
AN OFFICIAL SIGN DEVELOPMENT PLAN
CITY OF LAKE ELMO, COUNTY OF WASHINGTON, STATE OF MINNESOTA

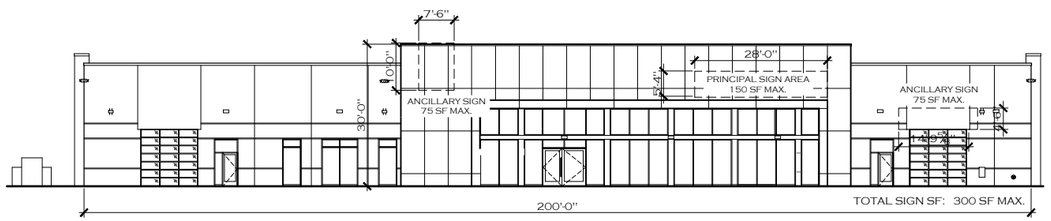


SITE PLAN 4

BUILDING SIGNAGE EXAMPLES



EAST ELEVATION B
SCALE: ⅛" = 1'-0"



SOUTH ELEVATION A
SCALE: ⅛" = 1'-0"

nama partners llc
Architecture . Interior Design. Planning. Graphics
2287 Pinto Trail, Elizabeth, CO
Tel. 303.905.7567

DRAKE
MOTOR PARTNERS LE, LLC
496 S. BROADWAY
DENVER, CO 80209
TEL. 303.825.6200
WWW.DRAKERES.COM

LAKE ELMO COMMONS

LAKE ELMO, MN

DRAWING TITLE

SIGN DESIGN STANDARDS

EXISTING DESCRIPTIONS:

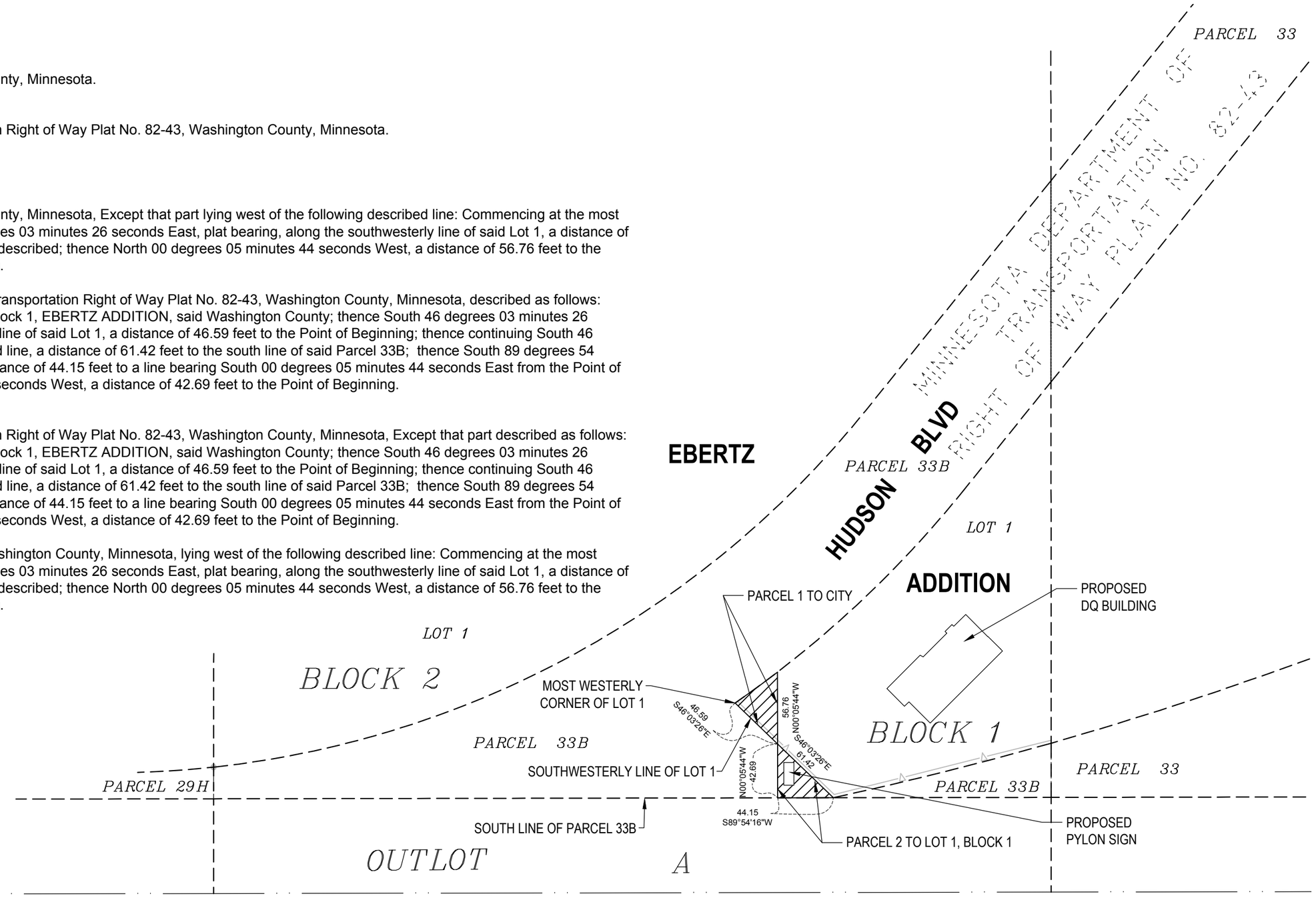
Dairy Queen
Lot 1, Block1, EBERTZ ADDITION, Washington County, Minnesota.

City of Lake Elmo
Parcel 33B, Minnesota Department of Transportation Right of Way Plat No. 82-43, Washington County, Minnesota.

PROPOSED DESCRIPTIONS:

Proposed Dairy Queen
Lot 1, Block1, EBERTZ ADDITION, Washington County, Minnesota, Except that part lying west of the following described line: Commencing at the most westerly corner of said Lot 1, thence South 46 degrees 03 minutes 26 seconds East, plat bearing, along the southwesterly line of said Lot 1, a distance of 46.59 feet to the Point of Beginning of the line to be described; thence North 00 degrees 05 minutes 44 seconds West, a distance of 56.76 feet to the northwesterly line of said Lot 1 and there terminating.
And
That part of Parcel 33B, Minnesota Department of Transportation Right of Way Plat No. 82-43, Washington County, Minnesota, described as follows: Commencing at the most westerly corner of Lot 1, Block 1, EBERTZ ADDITION, said Washington County; thence South 46 degrees 03 minutes 26 seconds East, plat bearing, along the southwesterly line of said Lot 1, a distance of 46.59 feet to the Point of Beginning; thence continuing South 46 degrees 03 minutes 26 seconds East, along last said line, a distance of 61.42 feet to the south line of said Parcel 33B; thence South 89 degrees 54 minutes 66 seconds West, along last said line, a distance of 44.15 feet to a line bearing South 00 degrees 05 minutes 44 seconds East from the Point of Beginning; thence North 00 degrees 05 minutes 44 seconds West, a distance of 42.69 feet to the Point of Beginning.

Proposed Lake Elmo
Parcel 33B, Minnesota Department of Transportation Right of Way Plat No. 82-43, Washington County, Minnesota, Except that part described as follows: Commencing at the most westerly corner of Lot 1, Block 1, EBERTZ ADDITION, said Washington County; thence South 46 degrees 03 minutes 26 seconds East, plat bearing, along the southwesterly line of said Lot 1, a distance of 46.59 feet to the Point of Beginning; thence continuing South 46 degrees 03 minutes 26 seconds East, along last said line, a distance of 61.42 feet to the south line of said Parcel 33B; thence South 89 degrees 54 minutes 66 seconds West, along last said line, a distance of 44.15 feet to a line bearing South 00 degrees 05 minutes 44 seconds East from the Point of Beginning; thence North 00 degrees 05 minutes 44 seconds West, a distance of 42.69 feet to the Point of Beginning.
And
That part of Lot 1, Block 1, EBERTZ ADDITION, Washington County, Minnesota, lying west of the following described line: Commencing at the most westerly corner of said Lot 1, thence South 46 degrees 03 minutes 26 seconds East, plat bearing, along the southwesterly line of said Lot 1, a distance of 46.59 feet to the Point of Beginning of the line to be described; thence North 00 degrees 05 minutes 44 seconds West, a distance of 56.76 feet to the northwesterly line of said Lot 1 and there terminating.



LANDFORM
From Site to Finish

NORTH
0
80

Property Line Adjustment

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• 05.08.2023

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Lake Elmo Fire Department

Memorandum

To: Sophia Jensen, City Planner
From: Dustin Kalis, Fire Chief
Date: 4/17/23
Re: Final Plat / PUD: Drake Motor Partners, LE LLC

The Lake Elmo Fire Department has completed a Preliminary Plat / PUD review for Drake Motor Partners, LE LLC based on submittals dated 4/14/23 with the following comments and responses:

Lot 1, Block 1 & Block 2, Lots 1, 2, 3:

1) All roads and drive lanes shall meet the Lake Elmo Fire Department requirements for widths and turning radiuses. *The turning radius plan overlay has been provided and is accepted by the fire department.*

2) An approved signage and marking plan shall be determined for all "No Parking and Fire Lane" access roads. *Fire department, along with city engineering and public works, will work with project engineer to identify the No Parking and Fire Lane plan.*

3) Fire hydrants shall be provided in approved locations following review by Engineering and Public Works. *Hydrant plan has been reviewed and approved by engineering and public works.*

4) Building address numbers shall be plainly visible from the street fronting the property and shall contrasting color from the background. Size and placement of address numbers shall be approved by the fire and planning departments. *Will be reviewed with final construction documents and plans.*

5) A Fire Department approved lock box (KNOX) is required for emergency access to buildings at an approved location. Provide keys for emergency access into and throughout the occupancies as required. *Will be reviewed with final construction documents and plans.*

6) The fire sprinkler system shall be installed compliant with provisions of "2016 NFPA Standard 13, Installation of Sprinkler Systems" and the Minnesota State Fire Code. City permit required prior to initiation of work. *Will be reviewed with final construction documents and plans.*

7) Fire Department sprinkler connection locations to be approved prior to installation. *Proposed location on current plans is acceptable to the fire department. Will confirm with final construction documents and plans.*

8) The fire alarm system shall be installed compliant with provisions of "2016 NFPA Standard 72, National Fire Alarm Code" and the Minnesota State Fire Code. City permit required prior to initiation of work. *Will be reviewed with final construction documents and plans.*

9) The sprinkler system shall be properly monitored by a qualified monitoring company. *Will be reviewed with final construction documents and plans.*

10) Install emergency egress illumination in the means of egress including exit discharge compliant with 2020 MSFC. *Will be reviewed with final construction documents and plans.*

11) Install compliant exit signage as required by the 2020 MSFC. *Will be reviewed with final construction documents and plans.*

12) Provide and install dry chemical fire extinguishers certified for service and tagged as required. Service classification rating shall be a minimum 2A classification rating and maximum travel distance of 75 feet to extinguishers. The minimum classification rating may be upgraded for special or extra hazard areas within the occupancy. *Will be reviewed with final construction documents and plans.*

13) Rooms containing controls for air-conditioning systems, roof access, elevator equipment, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. Approved signs required to identify fire protection equipment and equipment location, shall be constructed of durable materials, permanently installed and readily visible. *Will be reviewed with final construction documents and plans.*

Lot 1, Block 1

14) All parking areas shall be capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds. Area of underground storm water storage shall also meet this requirement. *Provide the Fire Department and City Engineer with loading calculations.*

15) Commercial kitchens will require a review of fire suppression, ventilation and fuel source systems. Type I hood and duct systems shall be in compliance with code. *Will be reviewed with final construction documents and plans.*

16) The hood and duct wet chemical extinguishing system(s) shall be installed compliant with provisions of 2016 NFPA Standard 17A, Installation of Standard for Wet Chemical Extinguishing Systems. City permit required prior to initiation of work. *Will be reviewed with final construction documents and plans.*

17) A minimum of one Class K extinguisher shall be installed in the commercial kitchen at an approved location. The minimum classification rating may be upgraded for special or extra hazard areas within the occupancy. *Will be reviewed with final construction documents and plans.*

Block 2, Lots 1,2,3:

18) The gross building area of Lots 1, 2, and 3 of Block 2 shall not exceed 124,000 square feet unless an approved secondary access road is provided. *Applicant has acknowledged this requirement in their memo dated 4/14/23.*

19) A review of hazardous/flammable/combustible liquids, battery and parts storage layout including commodities, quantities and rack construction and heights is required. The developer and architect shall provide the fire department a detailed plan for all storage, storage systems, racks and fluids management within the building. *Will be reviewed with final construction documents and plans.*

20) The fire department will review operations with the developer and tenant to address specific emergency response and fire department training needs related to the service, storage and

replacement of battery packs and power cells and any other emergency hazards related to their automobiles and energy systems. *Will be reviewed with final construction documents and plans.*

Codes and Standards Used for this Review

This review is based on the following codes and standards as adopted and in effect in the State of Minnesota at the time of plan submittal.

- 2020 Minnesota State Fire Code
- Lake Elmo Fire Department Fire Code Policy
- NFPA 72, 2016 edition
- NFPA 13, 2016 edition
- NFPA 17A, 2016 edition

MEMORANDUM

FOCUS ENGINEERING, inc.

Cara Geheren, P.E.	**651.300.4261**
Jack Griffin, P.E.	**651.300.4264**
Ryan Stempski, P.E.	**651.300.4267**
Chad Isakson, P.E.	**651.300.4285**

Date: May 9, 2023

To: Sophia Jensen, City Planner
Cc: Jenni Faulkner, Planning Director
Marty Powers, Public Works Director
Chad Isakson, PE, Assistant City Engineer
From: Jack Griffin, PE, City Engineer

Re: Ebertz (Drake-Electric Auto Sales & DQ)
PID 3402921440004 and 3402921440006
Final PUD Plat/Plans

Engineering has reviewed the Ebertz (Drake-Electric Auto Sales and Dairy Queen) Final PUD Plat/Plans received on May 2, 2023. The review consisted of the following documentation:

- Final Plat and Final PUD Narrative dated April 14, 2023.
- Final Plat Written Statements April 14, 2023.
- Ebertz Addition Final Plat received May 2, 2023.
- Civil Site Plans for Electric Auto Sales and Service dated May 2, 2023.
- Project Manual for Electric Auto Sales and Service dated April, 2023.
- Stormwater Management Plan for Electric Auto Sales and Service dated May 2, 2023.
- Site Construction Plans for Dairy Queen Store dated April 14, 2023.
- Stormwater Management Plan for Dairy Queen Store dated April 14, 2023.

STATUS/FINDINGS: Engineering review comments have been provided in two separate memos; one for Final PUD/Plat approval, and one to assist with the completion of the Final Construction Plans. Please see the following review comments relating to the Final PUD/Plat application.

FINAL PLAT AND EASEMENTS

1. The Final Plat shall not be recorded until the City Engineer approves the Final Construction Plans.
2. All easements as required by the City Engineer and Public Works Director shall be documented on the Final Plat prior to the release of the Final Plat for recording. Revisions to the Final Plat, Outlot boundaries and easements may be necessary as the Construction Plans are reviewed and finalized.
3. All easement areas must be free from all encroachments other than those approved by the City Engineer and upon execution of an easement encroachment agreement. Prohibited encroachments include, but are not limited to trees, landscaping, fences, retaining walls, and building structures.
4. Final Plat approval must be contingent upon the dedication of Hudson Boulevard right-of-way as shown on the Preliminary Plat, Sheet C1.2, dated May 2, 2023 and the Final Plat received May 2, 2023; including Outlot A to be deeded to the City of Lake Elmo following the recording of the Final Plat.
5. Outlot A is proposed as part of the Final Plat over the MnDOT trunk highway easement area (Highway Easement Document No. 90695). Final Plat approval must be contingent upon the developer providing to the city all necessary legal descriptions and easement exhibits for the city's application to MnDOT to turnback the area of highway easement over Hudson Boulevard as shown on the Preliminary Plat, Sheet C1.2, dated May 2, 2023.
6. Drainage and utility easements are shown to be dedicated on the Final Plat along all lot lines as required.

7. Dedicated drainage and utility easements, minimum 10-feet wide, are required along all Hudson Boulevard public roadway frontage, including along Lot 1, Block 1; and Lots 1 and 2, Block 2. Easements have been shown on the Final Plat as required. The drainage and utility easements must be dedicated for use by small/dry utilities and therefore must be free from any encroachments and must maintain grades that do not exceed 4:1.
8. Dedicated utility easements will be required over all public watermain and sanitary sewer as determined by the City Engineer and Public Works Director. Drainage and utility easements must be a minimum width of 15 feet in each direction from centerline of pipe, hydrant or manhole structure. Easements have been provided on the Final Plat and construction plans as required.
9. Drainage and utility easements are required over all wetlands, wetland buffers, and stormwater BMPs, including the 100-year high water level areas, maintenance access roadways and maintenance benches; and to protect all emergency overflow pathways.
10. The storm water pond, infiltration basin and underground storm water BMP will remain privately owned and maintained. A Storm Water Maintenance and Easement Agreement in the city's standard form of agreement must be executed and recorded with the Final Plat for all privately owned stormwater facilities.
11. All off-site permanent and temporary easements, if necessary to construct the proposed subdivision improvements, must be acquired and provided to the city prior to the approval of the Final Construction Plans. Each easement, if needed, must be provided in the city standard form of easement agreement.

FINAL CONSTRUCTION PLANS & SPECIFICATIONS

1. Final Construction Plans and Specifications must be prepared in accordance with the latest version of the City Engineering Design Standards Manual dated January 2022, using City standard details, plan notes and specifications and meeting City Engineering Design Guidelines, unless approved otherwise by the City Engineer.
2. Final Construction Plans and Specifications must be revised in accordance with the Construction Plan engineering review memorandum dated May 9, 2023. Separate construction plan review memos have been prepared for the Eclectic Auto Sales and Service Plans, and Dairy Queen Plans.
3. Site Access and Access Management. Access to Lots 1-3, Block 2 will be provided from a private shared commercial drive that extends north from Hudson Boulevard through the center of the site. The private driveway is proposed at the approved Hudson Boulevard access location for the north parcels. Access to Lot 1, Block 1 will extend south directly from Hudson Boulevard at the approved Hudson Boulevard access location for the south parcel. Per agreement with the property owners, the south access location can only be permitted in connection with the closure of the adjacent temporary Lakewood Crossing access.
4. The scope of the subdivision and Hudson Boulevard improvements (and development agreement for the subdivision) must include the removal/phasing of the adjacent Lakewood Crossing strip mall entrance. The proposed new access to Lot 1, Block 1 (Dairy Queen Site) cannot be opened for public use until the adjacent access is permanently closed.
5. Secondary Access. No secondary access is proposed for any lot within this subdivision. As a condition of Final Plat approval, the future uses and build-out for Lots 2 and 3, Block 2 must be limited to developments not requiring secondary access per the State Fire Code.
6. Final Plat approval must be contingent upon the applicant completing improvements to Hudson Boulevard as part of the subdivision improvements. The Hudson Boulevard Improvements must be completed in conformance with the Hudson Boulevard Design Standards, with an Urban section on both the north and south boulevards with a bituminous trail along the north side across the full frontage of the development parcel, and a sidewalk or trail along the south side extending from the proposed pedestrian cross walk to the Lakewood Crossing development. Revisions to the Hudson Boulevard construction plans will be required as directed and approved by the City Engineer.
7. Pedestrian Crossing. A mid-block cross walk must be provided as shown on the Construction Plans.
8. The subdivision improvements are subject to a storm water management plan (SWMP) meeting State, Valley Branch Watershed District (VBWD) and city rules. Storm water facilities proposed as part of the development to meet State and watershed permitting requirements must be constructed in accordance

with the City Engineering Design Standards Manual dated January 2022, whether the facilities are public or privately owned and maintained.

9. The SWMP will be required to accommodate all site improvements and all public improvements needed to support the development of the property, including the required Hudson Boulevard Improvements. Stormwater Management must be constructed to serve each proposed lot.
10. Public watermain and sanitary sewer are available to serve the subdivision with existing utilities located in the Hudson Boulevard right-of-way. The developer will be responsible for all costs to extend utilities within and throughout the subdivision to fully serve each proposed lot. Hydrant locations and system valves must be placed internal to the site as directed by the Lake Elmo Public Works and Fire Departments. All internal site hydrants, and watermains feeding any hydrant, will remain city owned and operated. No utility pipe oversize costs are anticipated for this development.
11. The Final Construction Plans must include a construction parking and staging plan internal to the development site. No parking or any construction staging, including the loading and unloading of materials and equipment will be allowed at any time on Hudson Boulevard during the construction of the site improvements and buildings, unless specifically allowed through right-of-way permit or during city approved roadway closures. All street, curb and boulevard damage caused by the construction activities must be repaired or replaced by the developer(s) at no cost to the city and must meet city design standards and specifications.
12. No construction on the Project may begin until the applicant has received City Engineer approval for the Final Construction Plans; the applicant has obtained and submitted to the City all applicable permits, easements and permissions needed for the project; and a preconstruction meeting has been held by the City's engineering department.

Hoisington Koegler Group Inc.

Creating Places that Enrich People's Lives

MEMORANDUM

TO: Sophia Jensen

FROM: Tim Solomonson, PLA

DATE: 05/02/2023

RE: Final Plat and PUD – Ebertz (Drake Motor Partners & DQ)

Ebertz (Drake Motor Partners & DQ) – Hudson Blvd

Submittals

The Preliminary Plat and PUD dated 4/14/23

Review History

- Initial Sketch Plat landscape review on 9/20/2022.
- PUD Pre-Application and plan documents dated 10/26/2022.
- The Preliminary Plat and PUD dated 2/13/23.

Location: HUDSON BLVD N. LAKE ELMO, MN 55042 (PID 34.029.21.44.0004 & 34.029.21.44.0006)

Current Land Use Category: Commercial (C)

Adjacent and Surrounding Land Use: Medium Density Residential PUD (MDR PUD) to the north and west, High Density Residential PUD (HDR PUD) to the west, Public ROW to the south, and Commercial (C) to the east.

Special Landscape Provisions in addition to the zoning code: none

Tree Preservation: *105. 12. 470*

- A tree preservation plan has been submitted that does not meet all Code requirements.
  - Tree preservation plan covers both DQ and Drake sites.
    - No signification trees removed from DQ site (no table)
  - Tree removals for DQ site are all non-specimen trees and allowed by code.
  - The tree preservation plan meets the required tree replacement calculations:
    - Tree replacement is required because more than thirty (30) percent of the diameter inches of significant coniferous/evergreen trees surveyed will be removed.

Hoisington Koegler Group Inc.
800 Washington Ave. N., Suite 103
Minneapolis, Minnesota 55401
(612) 338-0800 www.hkgi.com

Total Caliper Inches of Significant Trees On-Site:	307	Cal Inches
Common Trees	0	
Conifer/Evergreen Trees	301	
Hardwood Trees	6	
Nuisance Trees	n/a	
Significant Inches Removed On-Site:	248	Cal Inches
Common Trees	0	
Conifer/Evergreen Trees	242	
Hardwood Trees	6	
Nuisance Trees	n/a	
30% Tree Removal Limits (Cal. Inches)	Allowed	Proposed
Subtract Common Tree Removals	0	
Subtract Conifer/Evergreen Tree Removals	90	
Subtract Hardwood Tree Removals	6	0
Removals in excess of 30% allowances		Cal Inches
Common Removals in Excess of 30% Allowance	0.0	
Conifer Removals in Excess of 30% Allowance	152	
Hardwood Removals in Excess of 30% Allowance	0.0	
Common Tree Replacement Needed (1/4 the dia inches removed)	0.0	Cal Inches
Conifer Tree Replacement Needed (1/2 the dia inches removed)	76	Cal Inches
Hardwood Tree Replacement Needed (1/2 the dia inches removed)	0.0	Cal Inches
Common Tree Replacement Required @ 2.5" per Tree	0	**# Trees**
Conifer Tree Replacement Required @ 2.5" per 8' Tall Tree	19	**# Trees**
Hardwood Tree Replacement Required @ 2.5" per Tree	0	**# Trees**

- Conditions for the release of final plat recording related to tree preservation are:
  - The named East Infiltration Basin location and grading shall be redesigned to maximize tree preservation of specimen conifers along the east property line, if soil conditions permit it.
  - Developer shall evaluate the feasibility of a basin sited as close to Lot 3's (dashed) east parking area.
    - Slopes not great than 3:1
    - No retaining wall requested
    - No reduction in Lot3 size
    - Additional soil borings will be required to test soil capacity for infiltration.
    - Basin design must first satisfy all Watershed and City Engineer review requirements.

Landscape Requirements: *105. 12. 480*

DRAKE SUBMITTAL:

- A landscape plan has been submitted and does not meet all requirements.
  - Landscape frontage strip requirements:
    - 12' buffer strip dimension not met (currently 8')
      - Taunton Yew is a slow growing species, replace with an evergreen shrub that has a medium to fast growth rate and meets year round opacity and size requirements
      - Plant away from parking lot to provide enough distance to allow for snow storage, bumper overhang, and protection from salt at mature size.
- The landscape plan meets the required tree quantities.

	Site Measurement	Code Required	Proposed
Street Frontage (LF)	837	*Hudson Blvd N*	
Required Street Frontage Trees (1 per 50 LF)		**17**	**21**
Development or Disturbed Area (Acres)	16		
Required Development Trees (5 per Acre)		**81**	**203**
Interior Parking Lot Spaces (Commercial Lot)	114		
Required Parking Lot Trees (1 per 15 Spaces)		**8**	**8**
Perimeter Parking Lot Frontage (Street) (LF)	250	*East & south perimeter of commercial parking lot*	

***Required Perimeter Lot Frontage Trees (1 per 50 LF)**	**5**	****Already counted within Required Street Frontage Trees***	
Screening Perimeter between Land Uses (LF)	1240		
Required Perimeter Lot Frontage Trees (1 per 40 LF)		**31**	**171**
Required Mitigation Trees		**76**	**220**
Required Number of Trees		**137**	**220**

- The landscape plans meet the minimum composition of required trees:

Master Plan	Qty	% Composition	
Deciduous Shade Trees	63	29%	>25% required
Coniferous Trees	157	71%	>25% required
Ornamental Trees	0	0%	<15% required
Tree Count	**220**		

DQ SUBMITTAL:

- A landscape plan has been submitted and does not meet all requirements.
    - Plant schedule should include: (a)(3) *height and spread of each plant type at the time of planting and at the time of maturity*
    - Irrigation requirement meet
    - Planting plan does not reflect City standard tree planting detail requirement for mulch ring.
    - Landscape frontage strip requirements:
        - 8' buffer strip dimension met
        - Front yard tree placement at parking should align with parking spot striping to avoid vehicle bumper conflicts.
        - Shrub species and spacing does not meet the (e)(1)(a) *not less than 50 percent opaque on a year-round basis* code requirement.
            - Shrub drip line location should be as close to easement line as is allowed to provide enough distance for snow storage, bumper overhang, and protection from salt at mature size.
                - (b)(2) *Landscaped areas should be of adequate size to allow for healthy plant growth, to a typical mature size without impeding on roads, walks, trails, buildings or other areas needed for service access*

or public safety. Planting areas should provide adequate areas for plant maintenance.

- The landscape plan does not meet the required tree quantities.

	Site Measurement	Code Required	Proposed
Street Frontage (LF)	361	*Hudson Blvd N*	
Required Street Frontage Trees (1 per 50 LF)		**8**	**8**
Development or Disturbed Area (Acres)	0.93		
Required Development Trees (5 per Acre)		**5**	**3**
Interior Parking Lot Spaces (Commercial Lot)	n/a		n/a
Required Parking Lot Trees		**n/a**	**n/a**
Perimeter Parking Lot Frontage (Street) (LF)	361		
***Required Perimeter Lot Frontage Trees (1 per 50 LF)**	**8**	***Already counted within Required Street Frontage Trees***	
Screening Perimeter between Land Uses (LF)	n/a		
Required Perimeter Lot Frontage Trees (1 per 40 LF)		**n/a**	**n/a**
Required Mitigation Trees		**0**	**0**
Required Number of Trees		**13**	**11**

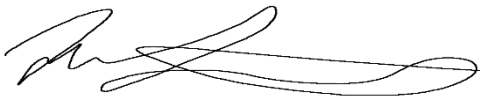
- The landscape plan does not meet the minimum composition of required trees:

Master Plan	Qty	% Composition	
Deciduous Shade Trees	8	73%	>25% required
Coniferous Trees	0	0%	>25% required
Ornamental Trees	3	27%	<15% required
Tree Count	**11**		

Recommendation:

- Landscape and tree preservation plans are complete but do not meet all of the code requirements for compliance.
- It is recommended that the landscape and tree preservation plans be approved with the condition that the above requirements are meet before the final plat is released for recording.

Hoisington Koegler Group, Inc.



Tim Solomonson, PLA (MN)

City of Lake Elmo Municipal Landscape Architect
P: (612) 802-0142
E: tim@hkgi.com

Metropolitan District
Waters Edge Building
1500 County Road B2 West
Roseville, MN 55113

May 4, 2023

Sophia Jensen
City Planner
City of Lake Elmo
3800 Laverne Avenue North
Lake Elmo, MN 55042

SUBJECT: MnDOT Review # **P23-005A**
Drake Final Plat & PUD
NW Quad I-94 and Keats Avenue North
Lake Elmo, Washington County

Dear Ms. Jensen:

Thank you for the opportunity to review plat and associated plans for the Drake Final Plat & PUD development. MnDOT has reviewed the documents and has the following comments:

MnDOT recommends that all sidewalks maintain a pedestrian access route of at least of at least four (4) feet and that pedestrian crossings meet ADA standards. ADA facility standards can be found at this link: https://www.dot.state.mn.us/ada/design.html . The existing sidewalk on the northside and proposed sidewalk on southside of the Hudson Blvd will attract customers walking and bicycling who will be competing with vehicle traffic. Curb ramps should be installed at both ends of the crosswalk. MnDOT suggests parking lot signage or a crossing for vehicles to watch for pedestrians crossing from the sidewalk into the building. MnDOT recommends the developer consider sloping the development's driveway upward so that the sidewalk along Hudson can maintain the same level. Continued coordination with the City of Lake Elmo is also advisable to ensure that the sidewalk connection along Hudson is completed by the city to complement the development.

For questions regarding these comments, contact Sara Dunlap, Metro Multimodal, at 651-234-7725 or sara.dunlap@state.mn.us.

Water Resources:
A drainage permit may be required. The applicant will need to demonstrate that there is no increase in discharge rates to the MnDOT (Right-Of-Way) ROW as part of the development for the 2, 10, and 100 year events. Submittal of stormwater calculations will be required.

The following information must be submitted with the drainage permit application:

1) A grading plan showing existing and proposed contours.

2) Drainage area maps for the proposed project showing existing and proposed drainage areas. Any off-site areas that drain to the project area should also be included in the drainage area maps. The direction of flow for each drainage area must be indicated by arrows.
3) Drainage computations for pre and post construction conditions during the 2, 10, 50 and 100 year rain events.
4) Time of concentration calculations.
5) An electronic copy of any computer modeling used for the drainage computations.
6) See also the attached Drainage Permits Checklist for more information.

The applicant will need to provide the actual drainage models and not just the summary printouts.

Once a drainage permit application is submitted, a thorough review will be completed, and additional information may be requested.

For questions regards these comments, contact Jason Swenson, Metro Water Resources, at jason.swenson@state.mn.us or 651-234-7539.

Permits:
In addition to the drainage permit mentioned above, a permit will be required for the trenching in the MnDOT ROW. Also, any other use of, or work within or affecting, MnDOT ROW will require a permit.

Permits can be applied for at this site: https://olpa.dot.state.mn.us/OLPA/. Please upload a copy of this letter when applying for any permits.

Please direct questions regarding permit requirements to Buck Craig of MnDOT's Metro Permits Section at Buck.Craig@state.mn.us or 651-234-7911.

Review Submittal Options
MnDOT's goal is to complete reviews within 30 calendar days. Review materials received electronically can be processed more rapidly. Do not submit files via a cloud service or SharePoint link. In order of preference, review materials may be submitted as:

1. Email documents and plans in PDF format to metrodevreviews.dot@state.mn.us. Attachments may not exceed 20 megabytes per email. Documents can be zipped as well. If multiple emails are necessary, number each message.

2. PDF file(s) uploaded to MnDOT's external shared internet workspace site at: https://mft.dot.state.mn.us. Contact MnDOT Planning development review staff at metrodevreviews.dot@state.mn.us for uploading instructions, and send an email listing the file name(s) after the document(s) has/have been uploaded.

If you have any questions concerning this review, please contact me at (651) 234-7797.

Sincerely,



Cameron Muhic
Senior Planner

Copy sent via E-Mail:

Buck Craig, Permits
Jason Swenson, Water Resources
Adam Josephson, Area Manager
Michael Lynch, Right-of-Way
Sara Dunlap, Multimodal
Kimberly Zlimen, Transit
Lance Schowalter, Design
Kaare Festvog, Traffic
Ryan Coddington, Area Engineer
Casey Crisp, Surveys
Michael Kowski, Maintenance
Joseph Widing, Metropolitan Council

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

ORDINANCE NO. 2023-011

AN ORDINANCE AMENDING CHAPTER 105 OF THE LAKE ELMO CITY CODE OF ORDINANCES BY REZONING ALL PROPERTY AT PID's 34.029.21.44.0006 and 34.029.21.44.0004 FROM C (COMMERIAL) TO C-PUD (COMMERCIAL PLANNED UNIT DEVELOPMENT)

SECTION 1. Zoning Map Amendment. The following property is hereby rezoned from C- Commercial, to C-PUD Commercial Planned Unit Development:

The West One-half of the Southeast Quarter of the Southeast Quarter of Section 34, Township 29, Range 21, EXCEPT that part depicted as Parcel 33B on Minnesota Department of Transportation Right of Way Plat No. 82-43 filed March 22, 1982, as Document No. 429592, which was taken by the State of Minnesota in Final Certificate dated October 4, 1989, filed October 24, 1989, as Document No. 613150.

To be platted as:

Lot 1, Block 1 and Lots 1-3, Block 2, Ebertz Addition, according to the recorded plat thereof, County of Washington, State of Minnesota.

SECTION 2. PUD District Regulations. Permitted uses and regulations acceptable to the PUD are hereby established as follows:

1. Land Use – Uses permitted, conditional, interim uses within this PUD shall be: All of the permitted, conditional, interim uses respectively within the C- Commercial zoning district; except the following shall be permitted:

    a. All the auto dealer uses as in the proposed plans

    b. Fast-food uses as in the proposed plans (DQ)

    c. Indoor recreation facility

    d. Daycare

2. Accessory Uses - Accessory uses shall be incidental to the principal uses of the property and as allowed in the C- Commercial zoning district.

3. Design and Performance Standards – Unless a PUD deviation has been granted or

conditions imposed, the standards for this property shall be those found in the C-Commercial zoning district, Article XV of the Zoning Ordinance. The following deviations are granted as proposed:

1. Block 2 lots to have sole access from private driveway.
2. Lot 3, Block 2 to be created without street frontage.
3. Shared access is allowed between Lot 1, Block 1 and the adjacent commercial development.
4. 41-foot driveway width for combined Lots 1 & 2, Block 2.
5. A deviation to allow compatible, but not the same materials for trash enclosures.
6. Consider the longer front lot line of Lot 1 Block 1 the front (it's a corner lot).
7. Required screening from residential to not have a 6-foot-tall fence along the westerly lot line of Lot 1 Block 2 in front of the retaining existing adjacent retaining wall.
8. Deviation to not meet the one tree per 50 feet of frontage along north side of Hudson Boulevard and parking lot screening due to existing utilities and overhead powerlines that will remain in the boulevard area and proposed sidewalk/trail.
9. Lighting to exceed 0.4-foot candles at the property line between Lots 1-2, Block 2 and on Lot 1, Block 1.
10. Comprehensive Sign Plan to allow off-premises signs for entire PUD; multi-colored digital sign; digital sign exceeding 40 sq. feet; freestanding sign height of 50'; consider the private driveway to be street frontage; increase in number of wall signs; increase in size of wall signs; decreased ground sign setback; and increase in square footage allowed for ground sign and wall signs.
11. Deviations to design guidelines for Lot 1, Block1 including allowing more than 60% parking frontage on a public street and allow primary colors for exterior materials.

4. Comprehensive Sign Plan- A Comprehensive Sign Plan as approved by the Lake Elmo City Council with deviations is also incorporated into this PUD.

SECTION 3. Zoning Map. The zoning map of the City of Lake Elmo shall be republished in the ordinary course to show the aforesaid zoning, and in the interim the Clerk shall appropriately mark the zoning map on file in the Clerk's Office for the purpose of indicating the rezoning hereinabove provided for in this ordinance, and all of the notations, references, and other information shown thereon are hereby incorporated by reference and made a part of this ordinance.

SECTION 4. Effective Date. This ordinance shall become effective immediately upon adoption and publication in the official newspaper of the City of Lake Elmo.

SECTION 5. Adoption Date. This Ordinance 2023-011 was adopted on this 16th day of May, 2023, by a vote of ___ Ayes and ___ Nays.

LAKE ELMO CITY COUNCIL

_____
Charles Cadenhead, Mayor

ATTEST:

_____
Julie Johnson, City Clerk

This Ordinance 2023-011 was published on the _____ day of _____, 2023

CITY OF LAKE ELMO
COUNTY OF WASHINGTON
STATE OF MINNESOTA

RESOLUTION NO. 2023-048

RESOLUTION AUTHORIZING PUBLICATION OF A SUMMARY OF ORDINANCE 2023-011

WHEREAS, the Lake Elmo City Council has adopted Ordinance No. 2023-011, an ordinance that amends the City's Zoning Code Chapter 105 of the Lake Elmo City Code by rezoning all property at PID's 34.029.21.44.0006 and 34.029.21.44.0004 from C (Commercial) To C-PUD (Commercial Planned Unit Development)

WHEREAS, the ordinance is lengthy; and

WHEREAS, Minnesota Statutes, section 412.191, subd. 4, allows publication by title and summary in the case of lengthy ordinances or those containing charts or maps; and

WHEREAS, the City Council believes that the following summary would clearly inform the public of the intent and effect of the ordinance.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Lake Elmo that the City Clerk shall cause the following summary of Ordinance No. 2023-011 to be published in the official newspaper in lieu of the entire ordinance:

Public Notice

The City Council of the City of Lake Elmo has adopted Ordinance No. 2023-011, an ordinance that amends the Zoning Ordinance Code by rezoning all property at rezoning all property at PID's 34.029.21.44.0006 and 34.029.21.44.0004 from C (Commercial) To C-PUD (Commercial Planned Unit Development). This ordinance creates land use standards consistent with the requested Planned Unit Development for the Ebertz site by Drake Motor Partners for an automobile dealership and fast-food restaurant and two vacant lots which was approved by the Lake Elmo City Council on May 16, 2023.

The full text of Ordinance 2023-011 is available for inspection at Lake Elmo City Offices during regular business hours.

BE IT FURTHER RESOLVED by the City Council of the City of Lake Elmo that the City Administrator keep a copy of the ordinance at City Hall for public inspection and that a full copy of the ordinance be placed in a public location within the City.

Dated: May 16, 2023

_____
Charles Cadenhead, Mayor

ATTEST:

_____

Julie Johnson, City Clerk

(SEAL)

CITY OF LAKE ELMO
WASHINGTON COUNTY
STATE OF MINNESOTA

RESOLUTION NO. 2023-047

RESOLUTION APPROVING THE FINAL PLAT AND FINAL PUD PLAN FOR JON HAUSER, DRAKE MOTOR PARTNERS LE LLC, FOR THE EBERTZ SITE (PID 34.029.21.44.0006 AND 34.029.21.44.0004)

WHEREAS, the City of Lake Elmo is a municipal corporation organized and existing under the laws of the State of Minnesota; and

WHEREAS, the City of Lake Elmo has established a Comprehensive Plan that includes background data, policy statements, standards, and maps that help to guide the future physical, social, and economic development of the City; and

WHEREAS, Jon Hauser, Drake Motor Partners LE LLC, has submitted application to the City of Lake Elmo (City) for a Preliminary Plat and Preliminary PUD Plan for four lot subdivision with one lot proposed as an auto dealership, one lot as a fast food restaurant, and two vacant lots located on the north and south sides of Hudson Blvd, west of Keats Avenue, a copy of which is on file in the City of Lake Elmo Planning Department; and

WHEREAS, through Resolution 2023-023, the City of Lake Elmo approved a Preliminary Plat and PUD, for a four-lot subdivision with one lot proposed as an auto dealership, one lot as a fast food restaurant, and two vacant lots; and

WHEREAS, the Applicant, Jon Hauser, Drake Motor Partners LE LLC, has requested a Final Plat and PUD with the plans submitted to the City on April 14, 2023, along with subsequent revisions; and

WHEREAS, the applications for Final Plat and PUD were not found by the city to be complete until May 2, 2023; and

WHEREAS, notice was published, mailed and posted pursuant to the Lake Elmo Zoning Ordinance, Section 105.12.250; and

WHEREAS, the Lake Elmo City Council held a public hearing on May 16th, 2023 and heard from those interested;

WHEREAS, the Lake Elmo City Council reviewed the Final Plat and PUD requests as its meeting held on May 16, 2023 and voted to approve the item with the following findings of fact:

1. That the final plat and Final PUD Plan is consistent with the preliminary plat and Preliminary PUD Plan approval.
2. That the Final PUD Plan would be consistent with the intent of the 2040 Lake Elmo Comprehensive Plan and the 2040 Land Use Map for this area.

3. That the Final PUD Plan complies with the general intent of the C- Commercial zoning district with PUD modifications.
4. That the Final PUD Plan generally complies with the Lake Elmo Design Guidelines and Standards Manual.
5. That the final plat generally complies with the City's Subdivision regulations.
6. That the final plat generally complies with the City's design standards.
7. That the final plat generally complies with the City's Zoning Code with the exceptions provided for in the PUD.
8. That the final plat and PUD Plan must be revised to address the comments noted in the City Engineer's memorandum.
9. That the final PUD Plan must be revised to be consistent with City's landscape plan and tree replacement standards pursuant to the Landscape Architects memo.
10. That the final plat and PUD Plan must be revised to address the comments noted in the Fire Department memo.
11. That the final PUD Plan meets the minimum requirements for a PUD.
12. That the final PUD Plan meets items a, c, d, and i from the identified PUD objectives identified in Section 105.12.1130. Planned unit developments should not be allowed simply for the purpose of increasing overall density or allowing development that otherwise could not be approved.

    a) Innovation in land development techniques that may be more suitable for a given parcel than conventional approaches. ***The shared access drive and stormwater ponding areas allow for more efficient use of land.***
    c) Establishment of appropriate transitions between differing land uses. ***This overall PUD provides a buffer between the interstate highway and residential uses. There are significant site specific plantings proposed to buffer the adjacent residential uses and to the most reasonable extent possible, existing trees are being preserved within the buffer area.***
    d) Provision of more adequate, usable, and suitably located open space, recreational amenities, natural resource protection and other public facilities than would otherwise be provided under conventional land development techniques. ***This is achieved with shared stormwater ponding.***
    i) Creation of more efficient provision of public utilities and services, lessened demand on transportation, and/or the promotion of energy resource conservation. ***With the proposed private access drive, there will be less demand on public services.***

13. That the site will be served by public utilities, not have a detrimental impact on traffic, supply adequate off-street parking.

14. That the proposed land uses will be compatible both in terms of internal site plans, and with regard to adjacent land uses.

15. That the site complies with wetland, stormwater management requirements.

16. That the use will maintain standards of architectural design and building quality consistent with the uniform building code and all other applicable city codes,

17. That the proposed use will not create fiscal problems for the city or adversely impact the health, safety, or welfare of the city.

18. That the applicant has proposed significant mitigating efforts to buffer the proposed commercial uses on Block 2 form the adjacent residential uses including no wall signs facing north or west, additional landscaping, and higher quality fencing materials.

19. That the proposed uses will bring commerce and employment to the city.

NOW, THEREFORE, BE IT RESOLVED THAT the City Council does hereby approve Jon Hauser, Drake Motor Partners LE LLC Final Plat, and PUD requests subject to the following conditions:

1. The Final Plat/Final PUD approval is conditioned upon the applicant meeting all City standards and design requirements unless specifically addressed otherwise in these conditions.
2. Prior to the City releasing the final plat, the applicant shall address all comments in the City Engineer's memo dated May 9, 2023, to the satisfaction of the City Engineer.
3. Prior to the City releasing the final plat the applicant shall revise the landscape plan and tree preservation plan in accordance with the City Landscape Architect's memo dated May 2, 2023 to the satisfaction of the City Landscape Architect.
4. Prior to the City releasing the final plat, the applicant shall demonstrate compliance with the items listed in the April 17, 2023, memo from the Fire Department to the satisfaction of the Fire Chief.
5. All public improvements constructed to support the development must be designed and constructed in accordance with the City Engineering Design Standards Manual dated January 2022, unless approved otherwise by the City Engineer.
6. The applicant shall verify compliance with Valley Branch Watershed (VBWD) comments and that the applicant provide the City evidence that all conditions attached to a VBWD permit will be met before the starting any grading activity on the site.
7. The applicant shall verify compliance with Minnesota Department of Transportation (MnDOT) comments (dated May 4, 2023) and permitting, and that the applicant provide the City evidence that all conditions attached to a MnDOT permit will be met before the starting any grading activity on the site.
8. That the applicant shall obtain all necessary permits including but not limited to all applicable City permits (building, grading, wetland, sign, etc.), NPDES/SWPPP permits and Valley Branch Watershed District approval before starting any grading or construction activities.
9. A wetland permit is required for the proposed wetland filling. Required wetland mitigation shall be provided for at the time of permit.
10. The applicant/developer is responsible, at their own expense, for installing all required right of way improvements. Improvements in Hudson Boulevard shall be consistent with Washington County and city standards.
11. Park dedication in the amount of $102,360.00 shall be paid prior to paid prior to recording of the final plat.
12. The developer shall provide the City with legal description and drawing for the City to work with MnDOT on a turnback request for portions of an existing MnDOT Highway Easement

(located within Outlot A) and provide $10,000 in escrow funds to cover the city's costs to go through MnDOT's process.

13. A storm water maintenance and easement agreement in a form acceptable to the City shall be executed and recorded with the final plat.

14. A landscape and irrigation license agreement in a form acceptable to the City shall be executed and recorded with the final plat.

15. The finalization, adoption, and publication of an overlay district ordinance shall occur before the recording of the final plat.

16. Before the execution and recording of a final plat for the development, the developer or applicant shall enter into a Developer's Agreement with the City. Such an Agreement must be approved by the City Attorney and by the City Council. The Agreement shall delineate who is responsible for the design, construction and payment for the required improvements with financial guarantees therefore. The Agreement shall outline any approved phasing plan.

17. The Developer shall pay all outstanding taxes and assessments at the time of recording the final plat.

18. The Developer shall provide the City with a copy of final title insurance policy at the time of recording the final plat.

19. Upon recording the final plat, the developer shall convey Outlot A to the City prior to the building permit being issued.

20. The future owner of Lot 1, Block 1 (the DQ) shall enter into a Site Work Agreement prior to any permit being issued for said lot. This will require separate securities for code compliance.
21. For Lot 1,Block 1, the drive aisle widths shall be modified to meet City Code minimum requirements prior to issuance of a permit.
22. The applicant or developer shall enter into a separate grading agreement with the City before starting any grading activity in advance of final plat/ PUD approval. The City Engineer shall review any grading plan that is submitted in advance of a final plat or final PUD, and said plan shall document the extent of any proposed grading on the site.
23. If necessary, the applicant shall provide the City with a copy of written permission for any off-site grading work and storm sewer discharges to adjacent properties before starting any site work, grading and as part of any final plat or final PUD application.
24. The land exchange for the 50-foot-tall ground sign shall be completed prior to issuance of said sign permit. If the land exchange is technically not feasible, then the developer may grant the city an easement and the city may grant the developer an Encroachment Agreement to achieve the same purpose.
25. Approval of the final plat expires if not recorded within 180 days of the approval date. Extensions may be granted per City Code 103.00.100(b)(7).

Passed and duly adopted this16th day of May, 2023 by the Lake Elmo Minnesota City Council.

_____

Charles Cadenhead, Mayor

ATTEST:

_____

Julie Johnson, City Clerk

CITY OF LAKE ELMO
WASHINGTON COUNTY
STATE OF MINNESOTA

RESOLUTION NO. 2023-046

A RESOLUTION APPROVING THE DEVELOPMENT AGREEMENT FOR EBERTZ ADDITION

WHEREAS, the City of Lake Elmo (the "City") is a municipal corporation organized and existing under the laws of the State of Minnesota; and

WHEREAS, Drake Motor Partners LE LLC, a Colorado limited liability company (the "Applicant") previously submitted an application to the City for a final plat and final PUD plan for Ebertz Addition; and

WHEREAS, the Lake Elmo City Council adopted Resolution No. 2023-047 on May 16, 2023 approving the final plat and final PUD plan for EBERTZ Addition; and

WHEREAS, the conditions of approval of the final plat and final PUD plan in the Resolution No 2023-047 included a requirement that the Applicant enter into a development agreement acceptable to the City Attorney and approved by the City Council that delineates who is responsible for the design, construction, and payment of the required improvements with financial guarantees therefore; and

NOW, THEREFORE, the City Council of the City of Lake Elmo hereby:

1. Approves the Development Agreement for EBERTZ Addition and authorizes the Mayor and City Clerk to execute it. The City Attorney is authorized to insert a list of the plan documents approved by the City Engineer in Exhibit B and insert the cost estimates for securities as approved by the City Engineer in Exhibit C of the Development Agreement.

Passed and duly adopted this 16th day of May, 2023 by the City Council of the City of Lake Elmo, Minnesota.

_____
Charles Cadenhead, Mayor

ATTEST:

_____
Julie Johnson, City Clerk

(reserved for recording information)

DEVELOPMENT AGREEMENT

EBERTZ Addition

THIS DEVELOPMENT AGREEMENT is dated _____, 2023, by and between the **CITY OF LAKE ELMO,** a Minnesota municipal corporation (the "City") and **DRAKE MOTOR PARTNERS LE LLC,** a Colorado limited liability company (the "Developer").

1. REQUEST FOR PLAT APPROVAL. The Developer has asked the City to approve a plat for EBERTZ Addition (referred to in this Agreement as the "Subdivision"). The property being platted is situated in the County of Washington, State of Minnesota, and is legally described on **Exhibit A**.

2. CONDITIONS OF PLAT APPROVAL. The City hereby approves the Subdivision on the condition that the Developer enter into this Agreement, furnish the security required by it, and record the plat with the County Recorder or the Registrar of Titles within 180 days after the City Council approves the final plat.

3. RIGHT TO PROCEED. This Agreement is intended to regulate the development of the Subdivision property and the construction therein of certain public and private improvements. Unless separate written approval has been given by the City for a grading permit or other approvals within the plat or land to be platted, the Developer may not construct public or private

Subdivision Improvements or any buildings on the Subdivision Property until all the following conditions precedent have been satisfied:

A. the Developer has executed and recorded with Washington County all drainage and utility easements required for the Subdivision by the City Engineer and Public Works Director in the City's standard form or the easements have been dedicated to the City in the plat;

B. this Agreement has been executed by the Developer and the City;

C. the required Security (as hereinafter defined) have been received by the City from or on behalf of the Developer;

D. final construction plans and specifications and final landscape plans have been submitted by the Developer and approved by the City Engineer, Fire Chief, and the City's Landscape Architect;

E. the Developer has paid the City for all of its legal, engineering, and administrative expenses incurred by the City regarding the City approvals and has given the City the additional City Engineering Administrative Escrow required by this Agreement;

F. the Developer has paid any outstanding assessments and taxes for the Subdivision property;

G. the Developer has fulfilled any park dedication requirements as specified under this Agreement;

H. the Developer has received all necessary permits from the MPCA, MDH, DNR, MNDOT, applicable watershed, Washington County, and any other agency having jurisdiction over the Subdivision;

I. the Developer has provided the City with a certificate of insurance required by this Agreement;

J. the Developer, the Developer's engineer, and the Developer's contractor(s) have initiated and attended a preconstruction meeting with the City Engineer, and City staff;

K. the final plat has been recorded with Washington County;

L. a title insurance policy has been issued in the amount of $100,000 in favor of the City insuring the City's interests as they appear on the plat;

M. the Developer has executed a stormwater maintenance and easement agreement in the City's standard form;

N. the City has issued a written notice that all above conditions have been satisfied and that the Developer may proceed.

4. CHANGES IN OFFICIAL CONTROLS. For five years from the date of this Agreement, no amendments to the City's Comprehensive Plan or official controls shall apply to or affect the use, development density, lot size, lot layout, or dedications of the approved final plat unless required by state or federal law or agreed to in writing by the City and the Developer. Thereafter, notwithstanding anything in this Agreement to the contrary, to the full extent permitted by state law, the City may require compliance with any changes to the City's Comprehensive Plan, official controls, platting, or dedication requirements enacted after the date of this Agreement.

5. DEVELOPMENT PLANS. The Developer agrees to develop the Subdivision in accordance with the City approvals, including the terms and conditions of approval of the final plat as detailed in City Council Resolution No. XXX, to construct all improvements in accordance with the approved construction plans and specifications (collectively, the "Plans") prepared by a professional engineer licensed in the State of Minnesota at its sole expense. All terms and conditions of the City approvals are hereby incorporated by reference into this Agreement. The documents which constitute the Plans are those on file with and approved by the City and are listed on **Exhibit B** attached hereto. The Plans may not be modified by the Developer without the prior written approval of the City.

6. IMPROVEMENTS. In developing the Subdivision in accordance with the Plans, the Developer shall make or install at its sole expense, the following public and private improvements (collectively, the "Subdivision Improvements"):

A. Grading and erosion control;
B. Sanitary sewer;
C. Water system improvements;
D. Stormwater improvements (storm sewer pipe, control structures, ponds, BMPs, etc.)
E. Hudson Boulevard street and storm sewer improvements;
F. Trails and sidewalks;
G. Underground private utilities;
H. Landscaping and screening;
I. Street lighting and signage;
J. Tree preservation and reforestation;
K. Monuments required by Minnesota Statutes.

All improvements shall be installed in accordance with the approved Plans, the City approvals, the City Code, the City's Engineering Design and Construction Standards Manual, and the City's Landscape and Irrigation Standards. The Developer shall instruct its engineer to provide adequate field inspection personnel to assure an acceptable level of quality control to the extent that the Developer's engineer will be able to certify that the construction work meets the approved Plans, the City approvals, the City Code, the City's Engineering Design and Construction Standards Manual, and the City's Landscape and Irrigation Standards as a condition of City acceptance. In addition, the City may, at the City's discretion and at the Developer's expense, have one or more City inspectors or a soil engineer inspect the Developer's work on a full or part-time basis. The Developer's engineer shall provide for on-site project management. The Developer's engineer is responsible for design changes and contract administration between the Developer and the Developer's contractor.

7. CITY ADMINISTRATION AND CONSTRUCTION OBSERVATION. At the time of the

City's approval of the final plat for the Subdivision, the Developer shall submit to the City an amount to be escrowed by the City for City administration and construction observation costs in an amount provided under paragraph 31 of this Agreement - Summary of Cash Requirements. Thereafter, the Developer shall reimburse the City each month, within 30 days of receiving an invoice, following submission of an invoice to the Developer, for all administration and construction observation costs incurred by the City during the construction of the Subdivision Improvements by the City's engineering, public works, planning, and landscape architecture staff and consultants. After 30 days of the invoice, the City may draw upon the escrow and stop work on the site until the escrow has been replenished in its full amount. City administration and oversight will include monitoring of construction progress and construction observation, consultation with the Developer and the Developer's professionals on status or problems regarding the project, coordination for testing, final inspection and acceptance, project monitoring during the warranty period, and processing of requests for reduction in the Security. Construction observation shall include, at the discretion of the City, part- or full-time inspection of proposed public utilities and street construction. The City will bill for the services on an hourly basis.

The direction and review provided by the City through the inspection of the Subdivision Improvements should not be considered a substitute for the Developer-required management of the construction of the Subdivision Improvements. The Developer must require the Developer's contractor(s) to furnish the City with a schedule of proposed operations at least five days prior to the commencement of construction for each type of Subdivision Improvement. The City shall inspect all Developer-installed Subdivision Improvements during and after construction for compliance with the Plans, the City approvals, the City Code, the City's Engineering Design and Construction Standards Manual, and the City's Landscape and Irrigation Standards. The Developer will notify the City at such times during construction as the City requires for inspection purposes based on a schedule established for this purpose. Such inspection is pursuant to the

City's governmental authority, and no agency or joint venture relationship between the City and the Developer is thereby created.

8. CONTRACTORS/SUBCONTRACTORS. City Council members, City employees, and City Planning Commission members, and corporations, partnerships, and other entities in which such individuals have greater than a 25 percent ownership interest or in which they are an officer or director may not act as contractors or subcontractors for the Subdivision Improvements identified in paragraph 6 above.

9. TIME OF PERFORMANCE. Subject to unavoidable delays including adverse weather conditions, the Developer shall install all required Subdivision Improvements by October 31, 2024. The Developer may, however, request an extension of time from the City, and the City agrees to grant a reasonable extension for delays. Such extension will not be the basis for placing the Developer in default based on the schedule of improvements. If the City grants the time extension, it shall be conditioned upon updating the Security or escrow posted by the Developer to reflect cost increases, if any, and amending this Agreement to reflect the extended completion date.

10. MAINTENANCE DURING CONSTRUCTION. The Developer shall be responsible for all maintenance of the Subdivision Improvements until the Subdivision Improvements are accepted by the City in writing. The Developer and its contractors must adhere to the City's weight restrictions for all streets both inside and outside of the Subdivision, regardless of whether said streets are included in the City's map of streets with weight restrictions and regardless of whether said streets are fully constructed. The Developer also is responsible to perform Gopher State One utility locates for all underground utilities until the Subdivision Improvements are accepted in writing by the City. Warning signs shall be placed by the Developer when hazards develop in streets to prevent the public from traveling on same and to direct attention to detours. If and when streets become impassable, such streets shall be barricaded and closed by the Developer. The

Developer and its contractors working on building or site improvements internal to the site must keep Hudson Boulevard North open to traffic at all times unless a right-of-way obstruction permit is obtained from the City. The Developer shall be responsible for keeping streets within and outside of the Subdivision clean and clear of dirt and debris that may spill, track, or wash onto the street from the Developer's operations. The Developer shall contract for street cleaning for streets within and immediately adjacent to the Subdivision until the Subdivision Improvements have been accepted by the City. At a minimum, scraping and sweeping shall take place on a weekly basis and on a daily basis during heavy tracking days.

11. LICENSE. The Developer hereby grants the City, its agents, employees, officials, and contractors a license to enter the Subdivision to perform all work and inspections deemed appropriate by the City in conjunction with the development of the Subdivision and this Agreement.

12. CONSTRUCTION ACCESS AND PARKING. Construction traffic access and egress for all building construction and internal site work is restricted to access via Hudson Boulevard North at the existing and approved new driveway locations and designated rock construction entrances along Hudson Boulevard North per the approved erosion control plans. No construction traffic is permitted on other adjacent streets or at any other location along Hudson Boulevard North. The Developer must maintain adequate access for emergency vehicles that is acceptable to the City in its sole discretion at all times during construction.

All construction parking and staging, including the loading and unloading of equipment and supplies during the construction of the building construction and internal site work must be completed interior to the project site and is not allowed to occur on a public street or within any public right-of-way, including, but not limited to Hudson Boulevard. The Developer and contractors shall be responsible for the repair and restoration of any damage to the street, curb, trail, sidewalk, and boulevard caused by the construction activities. Such work shall meet all City

standards and specifications.

13. CONSTRUCTION SEQUENCE AND COMPLIANCE. The City will require the Developer to construct the Subdivision Improvements in a sequence that will allow progress and compliance points to be measured and evaluated. The Developer and the Developer's representatives are required to supervise and coordinate all construction activities for all Subdivision Improvements and must notify the City in writing stating when the work is ready for the inspection at each of the measurable points defined in the following paragraphs. The Developer may utilize temporary stormwater treatment methods for the Subdivision until the stormwater basins on the site are constructed by the Developer within the Subdivision. If the City Engineer determines that the Developer's temporary treatment of stormwater for the Subdivision is not being managed properly by the Developer, then the City may issue a stop work order.

14. EROSION CONTROL. All construction regarding the Subdivision Improvements shall be completed in a manner designed to control erosion and in compliance with the City Code, the City's Engineering Design and Construction Standards Manual, all watershed district permits, the Minnesota Pollution Control Agency's best management practices, and other requirements including the City's permit with the Minnesota Pollution Control Agency for the municipal separate storm sewer system program. Before initiating any work on the site, the Developer must implement an erosion control plan and have the City inspect and approve the erosion control measures. The Developer shall coordinate and install erosion and sediment control measures with the various stages of development. The City may impose additional erosion control requirements at any stage in development as deemed necessary to maintain a compliant site. The Developer shall promptly reseed all areas disturbed for Subdivision Improvements after the work in the area is complete unless construction of the next stage of the Subdivision Improvements will begin in that area within seven days. The parties recognize that time is of the essence in controlling erosion.

If the Developer does not comply with the erosion control plan and schedule or

supplementary instructions received from the City, the City may take such action as it deems appropriate to control erosion. The City will endeavor to notify the Developer in advance of any proposed action, but failure of the City to do so will not affect the Developer's and City's rights or obligations hereunder. If the Developer does not reimburse the City for any cost the City incurred for such work within 10 days, the City may draw on the Security to pay any costs. The City will not allow any development or site work, utility, or street construction and the City will not issue any building permits unless the Subdivision is in full compliance with the approved erosion control plan.

15. SITE GRADING. In order to construct the Subdivision Improvements and otherwise prepare the site for development, it will be necessary for the Developer to grade the Subdivision property. All grading must be done in compliance with this Agreement and the grading plans on file with the City. Within 30 days after completion of the grading, the Developer shall provide the City with an "as built" grading plan and a certification by a registered land surveyor or engineer as required in the City's Engineering Design and Construction Standards Manual. The City will not accept the site grading or release the related security until the grading as-built plans have been received and documents that all construction tolerances have been achieved.

16. STREET AND UTILITY IMPROVEMENTS. All storm sewers, sanitary sewers, watermain, and streets, including any turn lane or intersection improvements, shall be installed in accordance with the approved Plans, the City approvals, the City Code, and the City's Engineering Design and Construction Standards Manual. Curb and gutter, the first lift of the bituminous streets, trails, boulevards graded, street signs installed, and all restoration work on the site shall be completed in accordance with the approved Plans. Once the work is completed, the Developer or the Developer's representative shall submit a written request to the City asking for an inspection of the initial improvements. The City will then schedule a walk- through to create a punch list of outstanding items to be completed. Upon receipt of the written punch list provided

by the City, the punch list items must be completed by the Developer and the City notified to re-inspect the improvements. Before the placement of the final bituminous wear course, the Developer shall repair or replace all broken or failing curbs, trails and damaged or settled streets as determined by the City from a pre-wear course walk through inspection.

17. LANDSCAPING AND TREE REPLACEMENT IMPROVEMENTS.

A. The Developer agrees to install or cause to be installed landscaping in accordance with the approved Plans, the City approvals, the City Code, the City's Engineering Design and Construction Standards Manual, and the City's Landscape and Irrigation Standards. All landscaping materials such as trees, shrubs, grasses, or other vegetation installed by the Developer must be warrantied and maintained for a period of two years. The two-year warranty period shall be deemed to start once all required landscaping identified as responsibility of the Developer in the approved Plans has received acceptance by the City. The Developer agrees to have the installer complete an inspection 30 days prior to the end of the two-year warranty period and provide the City with a written report identifying the condition of all landscaping. In the event any landscaping installed by the Developer is deemed to be in poor condition or dead, the Developer is to replace the landscaping with like kind materials or as otherwise approved by the City.

B. The Developer shall be responsible for maintaining regular watering, fertilizing, and over-seeding necessary to establish final lawns and yards as identified in the approved Plans for outlots, public rights-of-way, and any disturbed areas outside the Subdivision boundaries according to a landscape maintenance plan approved by the City. The Developer agrees to achieve "substantial performance" on all seeded or sodded lawns and yards disturbed during the construction of Subdivision Improvements. For the purpose of this Agreement "substantial performance" shall be defined for areas seeded or sodded with a turf or lawn mix as "square foot turf

areas with an average blade height of three inches free of eroded, bare, or dead spots and free from perennial weeds or unwanted grasses with no visible surface soil." For areas seeded with a native grass or flower mix "substantial performance" shall be defined as "square foot native grass or flower areas with an average height of eight inches free of eroded, bare, or dead spots and no visible surface soil."

18. SIGNAGE, STREET LIGHTING AND OTHER UTILITIES. The Developer agrees to install street signs, traffic and parking signs, and pavement markings within the Subdivision all in accordance with the approved Plans and the City Engineering Design Standards Manual. Street and traffic sign details shall be submitted by the Developer to the City for approval before their installation. In addition, the Developer shall be responsible for the cost and all coordination work to extend private utilities along with street lighting within the Subdivision all in accordance with the approved plans and right-of-way permits.

19. OWNERSHIP OF IMPROVEMENTS. Upon completion of the work and construction required by this Agreement, the Subdivision Improvements lying within public easements shall become City property. Prior to acceptance of the public Subdivision Improvements by the City, the Developer must furnish the City with a complete set of reproducible "record" plans and an electronic file of the "record" plans in accordance with the City's Engineering Design and Construction Standards Manual together with the following affidavits:

- Developer/Developer Engineer's Certificate
- Land Surveyor's Certificate

certifying that all construction has been completed in accordance with the terms of this Agreement. All necessary forms will be furnished by the City. Upon receipt of "record plans" and affidavits, and upon review and verification by the City Engineer that the public Subdivision Improvements have been completed in accordance with the terms of this Agreement, the City Engineer will accept the completed public Subdivision Improvements**.**

20. PARK DEDICATION. The Developer shall pay a cash contribution of $102,360 in

satisfaction of the City's park dedication requirements. The City requires a cash contribution in lieu of dedication of land in the amount of $6,000 per acre. The amount of the cash contribution was calculated as follows: 17.06 acres x $6.000 = $102,360. The park dedication fee shall be paid by the Developer before the final plat is released to the Developer for recording.

21. SANITARY SEWER AND WATER UTILITY AVAILABILITY CHARGES (SAC AND WAC). The Developer shall be responsible for the payment of all sewer availability charges (SAC) and all water availability charges (WAC) with respect to the Subdivision Improvements required by the City and any state or metropolitan government agency.

The sewer availability charge (SAC) in the amount of $3,000.00 per Residential Equivalent Charge ("REC") shall be paid by the Developer or the Developer's contractor on behalf of the Developer to the City at the time the City issues a building permit for each building with the development.

The water availability charge (WAC) in the amount of $3,000.00 per REC shall be paid by the Developer or the Developer's contractor on behalf of the Developer at the time the City issues a building permit for each building within the development.

In addition, a sewer connection charge in the amount of $1,000.00 per REC, a Metropolitan Council sewer availability charge in the amount of $2,485.00 per REC, and a water connection charge in the amount of $1,000.00 per REC will be payable by the Developer and collected by the City at the time the City issues a building permit for each building with the development.

22. WETLAND MITIGATION. The Developer shall complete wetland mitigation/restoration in accordance with the approved Plans and in accordance with any applicable Watershed or agency permits. If the mitigation work is found to be incomplete or restoration is unsuccessful, the City may draw down the Security at any time during the warranty period to perform the work if the Developer fails to take corrective measures after being provided reasonable notice by the

City.

23. BUILDING PERMITS/CERTIFICATES OF OCCUPANCY.

A. The City will issue building permits for all buildings within the entire Subdivision provided that the final plat has been recorded with Washington County.

B. The City will issue a certificate of occupancy for the building that is to be constructed on Lot 1, Block 1 (fast-food restaurant) provided that all Subdivision Improvements have been installed by the Developer and have been accepted by the City. The City will not accept any Subdivision Improvements until as-built record drawings for the applicable Phase are submitted for review and are approved by the City verifying that the Subdivision Improvements within such Phase have been installed in accordance with the approved Plans.

C. The City will issue a certificate of occupancy for the building that is to be constructed on Lot 1, Block 2 (automobile dealer) provided that all Subdivisions Improvements have been installed by the Developer and are accepted by the City. The City will not accept any Subdivision Improvements until as-built record drawings for the applicable Phase are submitted for review and are approved by the City verifying that the Subdivision Improvements within such Phase have been installed in accordance with the approved Plans.

D. No building permit shall be issued for Lot 2 and Lot 3, Block 2 until such time that all Subdivision Improvements have been installed by the Developer and have been accepted by the City.

E. Breach of the terms of this Agreement by the Developer beyond any applicable notice and cure periods including nonpayment of billings from the City, shall be grounds for denial of building permits, certificates of occupancy, and withholding of other permits, inspections, or actions and the halting of all work in the Subdivision.

F. If the City issues building permits before the acceptance of the Subdivision Improvements by the City, the Developer assumes all liability and costs resulting in delays in completion of the Subdivision Improvements and damage to the Subdivision Improvements caused by the City, the Developer, the Developer's contractors, subcontractors, materialmen, employees, agents, or any third parties.

24. RESPONSIBILITY FOR COSTS.

A. In the event that the City receives claims from labor, materialmen, or others alleging that work required by this Agreement has been performed and the amounts due to them have not been paid, and the laborers, materialmen, or others are seeking payment from the City, the Developer hereby authorizes the City to commence an Interpleader action pursuant to Rule 22, Minnesota Rules of Civil Procedure for the District Courts, to draw upon the Security in an amount up to 125 percent of the claim(s) and deposit the funds in compliance with the Rule, and upon such deposit, the Developer shall release, discharge, and dismiss the City from any further proceedings as it pertains to the funds deposited with the District Court, except that the Court shall retain jurisdiction to determine attorneys' fees pursuant to this Agreement.

B. Except as otherwise specified herein, the Developer shall pay all actual costs incurred by it or the City in conjunction with the development of the Subdivision, including but not limited to legal, planning, engineering, and inspection expenses incurred in connection with the City's approval and acceptance of the plat and the Subdivision, the preparation of this Agreement, the City's review of construction plans and documents, and all costs and expenses incurred by the City in monitoring and inspecting development of the Subdivision. All amounts incurred and due to the City at the time of the recording of the final plat must be fully paid

by the Developer prior to the City executing and releasing the final plat for recording.

C. The Developer shall hold the City and its officials, employees, and agents harmless from claims made by itself and third parties for damages sustained or costs incurred resulting from the City's approval of the plat and the development of the Subdivision unless caused by the negligence, action, or inaction of the City. The Developer shall indemnify and defend the City and its officials, employees, and agents for all costs, damages, or expenses that the City may pay or incur in consequence of such claims, including attorneys' fees.

D. The Developer shall reimburse the City for costs incurred in the enforcement of this Agreement, including reasonable engineering and attorneys' fees.

E. The Developer shall pay, or cause to be paid when due, and in any event before any penalty is attached, all special assessments referred to in this Agreement. This is a personal obligation of the Developer and shall continue in full force and effect even if the Developer sells one or more lots, the entire Subdivision, or any portion of it.

F. The Developer shall pay in full all bills submitted to it by the City through the established escrow for obligations incurred under this Agreement within 30 days after receipt. Bills not paid by the Developer within 30 days shall be assessed a late fee per the City adopted fee schedule. Upon request, the City will provide copies of detailed invoices of the work performed by the City and its consultants.

25. SPECIAL PROVISIONS. The following special provisions shall apply to the Subdivision and include the Conditions of Approval of the Final Plat and Final PUD Plans that are contained in City Council Resolution No. _____:

A. That publication of the PUD ordinance shall be required before the recording of the approved final plat.

B. The Developer has deeded Outlot A to the City.

C. The Developer has provided the City with the legal description and drawing and $10,000 escrow for the city to initiate a turnback request with MNDOT for portions of MNDOT Highway easement in Outlot A.

D. All storm water facilities internal to the Subdivision shall be privately owned and maintained. A storm water maintenance and easement agreement in the City's standard form must be executed by the Developer and recorded with the final plat.

E. If applicable, the Developer shall provide the City with a copy of written permission from adjacent property owners for any off-site grading work or storm sewer discharges to adjacent properties before starting any work on the Property.

F. Before the installation or construction of any signs within the Subdivision, the Developer shall submit sign plans to the City for review and obtain sign permits from the City.

G. A landscape maintenance agreement and landscape and irrigation license in the City's standard form must be executed by the Developer and recorded with the final plat.

H. The land exchange for the 50-foot tall ground sign on Lot 1 Block 1 shall be completed prior to the issuance of said sign permit. If the land exchange is technically unfeasible, then the Developer may grant the City an easement and the City may grant the Developer an Encroachment Agreement for same said land.

26. MISCELLANEOUS.

A. The Developer may not assign this Agreement without the written permission of the City Council. The Developer's obligations hereunder shall continue in full force and effect even if the Developer sells the Subdivision or any portion of it.

B. Retaining walls that require a building permit shall be constructed in accordance with

plans and specifications prepared by a professional engineer licensed by the State of Minnesota. Following construction, a certification signed by the design engineer shall be filed with the City Engineer evidencing that the retaining wall was constructed in accordance with the approved Plans. All retaining walls identified on the Plans or by special conditions referred to in this Agreement shall be constructed before any other building permit is issued for a lot on which a retaining wall is required to be built.

C. The Developer shall take out and maintain or cause to be taken out and maintained until six months after the City has accepted the public Subdivision Improvements, public liability and property damage insurance covering personal injury, including death, and claims for property damage which may arise out of Developer's work or the work of its subcontractors or by one directly or indirectly employed by any of them.

Limits for bodily injury and death shall be not less than $500,000 for one person and $1,500,000 for each occurrence; limits for property damage shall be not less than $200,000 for each occurrence; or a combination single limit policy of $1,500,000 or more. The City shall be named as an additional insured on the policy, and the Developer shall file with the City a certificate of insurance evidencing coverage prior to the City signing this Agreement. The certificate shall provide that the City must be given 30 days' advance written notice of the cancellation of the insurance.

D. Third parties shall have no recourse against the City under this Agreement.

E. If any portion, section, subsection, sentence, clause, paragraph, or phrase of this Agreement is for any reason held invalid, such decision shall not affect the validity of the remaining portions of this Agreement.

F. The action or inaction of the City shall not constitute a waiver or amendment to the

provisions of this Agreement. To be binding, amendments or waivers shall be in writing, signed by the parties and approved by written resolution of the City Council. The City's failure to promptly take legal action to enforce this Agreement shall not be a waiver or release.

G. This Agreement shall run with the land and may be recorded against the title to the Subdivision property at the Developer's expense. The Developer covenants with the City, its successors and assigns, that it is the fee owner of the Subdivision and has obtained consents to this Agreement, in the form attached hereto, from all parties who have an interest in the Subdivision property, including, but not limited to, mortgagees; that there are no unrecorded interests in the Subdivision property being final platted; and the Developer will indemnify, defend, and hold the City harmless for any breach of the foregoing covenant. Notwithstanding the foregoing, following Developer's completion of the requirements under this Agreement, at the Developer's written request, the City will execute and deliver to the Developer a release of this Agreement, in recordable form.

H. Each right, power, or remedy herein conferred upon the City is cumulative and in addition to every other right, power, or remedy, express or implied, now or hereafter arising, available to City, at law or in equity, or under any other agreement, and each and every right, power, and remedy herein set forth or otherwise so existing may be exercised from time to time as often and in such order as may be deemed expedient by the City and shall not be a waiver of the right to exercise at any time thereafter any other right, power, or remedy.

I. The Developer represents to the City that the Subdivision and the Subdivision Improvements comply or will comply with all City, County, metropolitan, state, and federal laws and regulations, including but not limited to subdivision ordinances, zoning ordinances, and environmental regulations. If the City determines that the

Subdivision is not in compliance, the City may, at its option following written notice and a reasonable opportunity to cure, refuse to allow construction work on the Subdivision until it is brought into compliance. "Reasonable" shall be defined for these purposes as the City's estimate as to the amount of time it would take the Developer to bring the Subdivision into compliance. Upon the City's demand, the Developer shall cease work until there is compliance.

27. EVENTS OF DEFAULT. The following shall be "Events of Default" under this Agreement and the term "Event of Default" shall mean, whenever it is used in this Agreement, any one or more of the following events:

A. Subject to unavoidable delays, and following written notice and an opportunity to cure, failure by the Developer to commence and complete construction of the Subdivision Improvements pursuant to the terms, conditions, and limitations of this Agreement.

B. Failure by the Developer, following written notice and an opportunity to cure, to substantially observe or perform any material covenant, condition, obligation, or agreement on its part to be observed or performed under this Agreement.

28. REMEDIES ON DEFAULT. Whenever any Event of Default occurs, the City, subject to any rights of third parties agreed to by the City pursuant to this Agreement, or otherwise by written, executed instrument of the City, may take any one or more of the following:

A. The City may suspend its performance under the Agreement until it receives assurances from the Developer, deemed adequate by the City that the Developer will cure its default and continue its performance under the Agreement. Suspension of performance includes the right of the City to withhold permits, including, but not limited to, building permits and certificates of occupancy.

B. The City may initiate such action, including legal or administrative action, as is

necessary for the City to secure performance of any provision of this Agreement or recover any amounts due under this Agreement from the Developer, or immediately draw on the Security, as set forth in this Agreement.

29. ENFORCEMENT BY CITY; DAMAGES. The Developer acknowledges the right of the City to enforce the terms of this Agreement against the Developer, by action for specific performance or damages, or both, or by any other legally authorized means. In the event of a default by the Developer as to construction or repair of any of the Subdivision Improvements or any other work or undertaking required by this Agreement, the City may, at its option and following written notice and an opportunity to cure, perform the work and the Developer shall promptly reimburse the City for any expense incurred by the City. This Agreement is a license for the City to act, and it shall not be necessary for the City to seek an order from any court for permission to enter the Subdivision for such purposes. If the City does such work, the City may, in addition to its other remedies, levy special assessments against the land within the Subdivision to recover the costs thereof. For this purpose, the Developer, for itself and its successors and assigns, expressly waives any and all procedural and substantive objections to the special assessments, including, but not limited to, hearing requirements, and any claim that the assessments exceed the benefit to the land so assessed. The Developer, for itself and its successors and assigns, also waives any appeal rights otherwise available pursuant to Minnesota Statutes Section 429.081.

The Developer also acknowledges that its failure to perform any or all of the Developer's obligations under this Agreement may result in substantial damages to the City; that in the event of default by the Developer, the City may commence legal action to recover all damages, losses and expenses sustained by the City; and that such expenses may include, but are not limited to, the reasonable fees of legal counsel employed with respect to the enforcement of this Agreement.

30. WARRANTY. During the warranty period, the Developer warrants that all Subdivision

Improvements will be free from defects and that they will continue to meet all technical specifications and standards. During the warranty period, the Developer agrees to repair or replace any Subdivision Improvement, or any portion or element thereof, which shows signs of failure, normal wear and tear excepted. If the Developer fails to repair or replace a defective Subdivision Improvement during the warranty period, the City may repair or replace the defective portion and may draw upon the Security to reimburse itself for such costs. The Developer agrees to reimburse the City fully for the cost of all Subdivision Improvement repair or replacement if the cost thereof exceeds the remaining amount of the Security. Such reimbursement must be made within 45 days of the date upon which the City notifies the Developer of the cost due under this paragraph. The Developer hereby agrees to permit the City to specially assess any unreimbursed costs against the Subdivision if the Developer fails to make required payments to the City. The Developer, on behalf of itself and its successors and assigns, acknowledges the benefit to the Subdivision of the repair or replacement of the Subdivision Improvements and hereby consents to such assessment and waives the right to a hearing or notice of hearing or any appeal thereon under Minnesota Statutes, Chapter 429.

A. The required warranty period for all work relating to the public sewer and water shall be two years from the date of final written City acceptance of the work.

B. The required warranty period for all work relating to public street construction, including the improvements and turn lanes on Hudson Boulevard North, the concrete curb and gutter, trails and sidewalks, materials and equipment shall be one year from the date of final written City acceptance of the work.

C. The required warranty period for sod, trees, and landscaping is two years from the date of final written City acceptance of the installation.

31. SUMMARY OF SECURITY REQUIREMENTS. To guarantee compliance with the terms of this Agreement, payment of special assessments, payment of the costs of all public

Subdivision Improvements, and construction of all public Subdivision Improvements, the Developer shall furnish the City with an irrevocable letter of credit or cash escrow or a combination of a cash escrow and a letter of credit (the "Security") in the amount of $XXXXXX. The bank originating the letter of credit shall be determined by the City to be solvent and creditworthy. The letter of credit shall substantially be in the form attached to this Agreement and must be approved by the City. The amount of the Security was calculated as itemized on **Exhibit C**. If at any time the City reasonably determines that the bank issuing the letter of credit no longer satisfies the City's requirements regarding solvency and creditworthiness, the City shall notify the Developer and the Developer shall provide to the City within 45 days a substitute for the letter of credit from another bank meeting the City's requirements. If the Developer fails to provide the City within 45 days with a substitute letter of credit from an issuing bank satisfactory to the City, the City may draw under the existing letter of credit.

This breakdown is for historical reference; it is not a restriction on the use of the Security. The City may draw upon the Security, without notice, for any violation of the terms of this Agreement or if the Security is allowed to lapse prior to the end of the required term. If the required Subdivision Improvements are not completed at least 30 days prior to the expiration of the Security, the City may also draw upon it. If the Security is drawn upon, the proceeds shall be used by the City to cure the default.

32. REDUCTION OF SECURITY. Upon written request by the Developer and upon receipt of proof satisfactory to the City Engineer that work has been completed in accordance with the approved Plans and the terms of this Agreement and that all financial obligations to the City have been satisfied, the City Engineer may approve reductions in the Security in the following instances:

A. Upon completion of grading operations, including temporary site restoration. The Developer must submit an as-built grading survey to the City that at a minimum establishes the as-built grades at all lot corners and downstream drainage

conveyance systems and storm water ponds. Upon inspection of the site and approval of the as-built survey by the City, 100 percent, or $XXXXXX of the Security associated with grading may be released. This Security reduction does not include amounts related to erosion and sedimentation control.

B. Up to 75 percent of the Security associated with the itemization on **Exhibit C** may be released upon completion of the following key milestones of the project as determined by the City Engineer:

1. Construction Categories 2 and 3: The amount of $XXXXXX may be released when all sanitary sewer and watermain utilities have been installed, all testing and televising has been successfully completed, sanitary sewer as-built inverts have been verified, and the utilities are considered ready for use by the City Engineer.

2. Construction Categories 4 and 5: The amount of $XXXXXX may be released when all streets, sidewalks, trails, and storm sewer have been installed and tested, and have been found to be complete to the satisfaction of the City Engineer including all corrective work for any identified punch list items and including verification of storm sewer as-built inverts, but not including the final wear course.

3. Construction Categories 6-10 and 14-17: The amount of $XXXXXX may be released when all remaining Developer's obligations under this Agreement have been completed including: (1) bituminous wear course; (2) street lighting and private utilities; (3) bio retention facilities; (4) iron monuments for lot corners have been installed; (5) all financial obligations to the City satisfied; (6) the required "record" plans in the form of the City standards have been received and approved by the City; and (7) the public Subdivision Improvements are accepted by the City Engineer and the City

Council.

C. Twenty-five percent of the original Security amount, excluding grading and landscaping improvements shall be retained until: (1) all Subdivision Improvements have been fully completed and accepted by the City, including all corrective work and warranty punch list items; (2) all financial obligations to the City have been satisfied; and (3) the warranty period has expired.

D. Twenty-five percent of the original Security amount associated with Landscaping Improvements shall be retained by the City until: (1) all Landscaping Improvements have been fully completed and accepted by the City, including all corrective work and warranty punch list items being completed by the Developer; (2) all financial obligations to the City have been satisfied; and (3) the warranty period has expired.

33. SUMMARY OF CASH REQUIREMENTS. The following is a summary of the cash requirements under this Agreement which must be paid to the City prior to the execution of this Agreement by the City:

Park Dedication:	$102,360
City Engineering Administration Escrow:	$50,000
MNDOT Turnback Escrow	$10,000
TOTAL CASH REQUIREMENTS:	**$162,360**

34. NOTICES. Required notices to the Developer shall be in writing, and shall be either hand delivered to the Developer, their employees or agents or mailed to the Developer by certified mail at the following addresses: Drake Motor Partners LE, LLC, 496 S. Broadway, Denver, CO 80209 Attn: Jon Hauser (hauser@drakeres.com). Notices also may be delivered to the Developer via email to the above email addresses, provided that a hard copy of the notice is also delivered by certified mail or hand delivery. Notices to the City shall be in writing and shall be either hand delivered to the City Administrator or mailed to the City by certified mail in care of the City

Administrator Kristina Handt (khandt@lakeelmo.org) at the following address: Lake Elmo City Hall, 3800 Laverne Avenue N, Lake Elmo, Minnesota 55042. Notices may also be delivered to the City via email to the above email address, provided that a hard copy of the notice is also delivered by certified mail or hand delivery.

35. EVIDENCE OF TITLE. The Developer shall furnish the City with evidence of fee ownership of the Subdivision property being platted by way of a title insurance policy dated not earlier than 30 days prior to the execution of the plat.

36. COMPLIANCE WITH LAWS. The Developer agrees to comply with all laws, ordinances, regulations, and directives of the state of Minnesota and the City applicable to the Subdivision property. This Agreement shall be construed according to the laws of the state of Minnesota.

37. SEVERABILITY. In the event that any provision of this Agreement shall be held invalid, illegal, or unenforceable by any court of competent jurisdiction, such holding shall pertain only to such section and shall not invalidate or render unenforceable any other provision of this Agreement.

38. NON-WAIVER. Each right, power, or remedy conferred upon the City by this Agreement is cumulative and in addition to every other right, power, or remedy, express or implied, now or hereafter arising, or available to the City at law or in equity, or under any other agreement. Each and every right, power, and remedy herein set forth or otherwise so existing may be exercised from time to time as often and in such order as may be deemed expedient by the City and shall not be a waiver of the right to exercise at any time thereafter any other right, power, or remedy. If either party waives in writing any default or nonperformance by the other party, such waiver shall be deemed to apply only to such event and shall not waive any other prior or subsequent default.

39. MUTUAL COOPERATION. Notwithstanding anything to the contrary in this Agreement,

the City and the Developer each agree to use reasonable efforts to cooperate with each other to carry out the purposes of this Agreement and to avoid unreasonable delays in the performance of this Agreement; provided, however, the Developer acknowledges that the foregoing is not a waiver of any of the City's discretion, rights or remedies under this Agreement.

40. COUNTERPARTS. This Agreement may be executed simultaneously in any number of counterparts, each of which shall be an original and shall constitute one and the same Agreement.

CITY OF LAKE ELMO

By: _____
Charles Cadenhead
Its: Mayor

By: _____
Julie Johnson
Its: City Clerk

STATE OF MINNESOTA)
) ss.
COUNTY OF WASHINGTON)

The foregoing instrument was acknowledged before me this ___ day of _____, 20323, by Charles Cadenhead and Julie Johnson, the Mayor and City Clerk, respectively, of the City of Lake Elmo, a Minnesota municipal corporation, on behalf of the corporation and pursuant to the authority granted by its City Council.

_____
NOTARY PUBLIC

DRAKE MOTOR PARTNERS LE LLC

By: Drake Development LLC, Manager
By: Drake Real Estate Services, Inc., Manager

BY: Jon Hauser

ITS: General Manager

STATE OF _____)
) ss.
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 2023, by Jon Hauser as General Manager of Drake Development LLC and Drake Real Estate Services Inc., the managers of Drake Motor Partners LE LLC, a Colorado limited liability company, on behalf of the company.

_____
NOTARY PUBLIC

DRAFTED BY:
City of Lake Elmo
3880 Laverne Avenue North
Lake Elmo, MN 55042
(651) 747-3901

MORTGAGEE CONSENT TO DEVELOPMENT AGREEMENT

NOTE- only need if there is mortgage holder at time of recording development agreement

_____, which holds a mortgage on the Property, the development of which is governed by the foregoing Development Agreement, agrees that the Development Agreement shall remain in full force and effect even if it forecloses on its mortgage.

Dated this_____day of_____, 2023.

_____

_____

STATE OF _____)
) ss.
COUNTY OF_____)

The foregoing instrument was acknowledged before me this ___ day of _____, 2023, by _____.

_____
NOTARY PUBLIC

DRAFTED BY:
City of Lake Elmo
3880 Laverne Avenue North
Lake Elmo, MN 55042
(651) 747-3901

EXHIBIT A TO
DEVELOPMENT AGREEMENT

Legal Description of the Property

Lot 1, Block 1 and Lots 1-3, Block 2, Ebertz Addition, according to the recorded plat thereof, County of Washington, State of Minnesota.

EXHIBIT B TO
DEVELOPMENT AGREEMENT
NOTE- we will fill this in as final plat review gets underway

List of Plan Documents

The following documents prepared by XXXXXXXXXXX constitute the Plans:

SHEET NUMBER	TITLE	REVISION DATE

EXHIBIT C TO
DEVELOPMENT AGREEMENT
NOTE: Developer to provide professional cost estimates

Subdivision Improvements Cost/Security Amount Estimate

CONSTRUCTION CATEGORY	COST	125 percent
1 Grading		
2 Sanitary Sewer		
3 Watermain		
4 Storm Sewer *(includes pond structures and outfall pipes)*		
5 Street and Sidewalks		
6 Trails		
7 Surface Water Facilities *(ponds, infiltration basins, other BMPs)*		
8 Street Lighting		
9 Street and Traffic Signs		
10 Private Utilities *(electricity, natural gas, telephone, and cable)*		
11 Landscaping Improvements		
12 Tree Preservation and Restoration		
13 Wetland Mitigation and Buffers		
14 Monuments		
15 Erosion and Sedimentation Control		
17 Developer's Record Drawings		
TOTALS		

FORM OF IRREVOCABLE LETTER OF CREDIT

No._____
Date: _____

TO: City of Lake Elmo

Dear Sir or Madam:

We hereby issue, for the account of (Name of Developer) and in your favor, our Irrevocable Letter of Credit in the amount of $_____ available to you by your draft drawn on sight on the undersigned bank.

The draft must:

a) Bear the clause, "Drawn under Letter of Credit No._____, dated _____, 20___, of (Name of Bank)";

b) Be signed by the Mayor or City Administrator of the City of Lake Elmo.

c) Be presented for payment at (Address of Bank), on or before 4:00 p.m. on November 30, 20___.

We hereby agree that all sight drafts drawn under and in conformity with the terms of this Letter of Credit will be duly honored if drawn and presented for payment together with the documents required herein to [INSERT NAME AND ADDRESS OF BANK AND CONTACT PERSON] if presented before _____p.m. on or before the expiration date. Presentations may be made by certified mail, return receipt requested, or by Federal Express or any other recognized courier company.

This Letter of Credit shall automatically renew for successive one-year terms unless, at least forty-five (45) days prior to the next annual renewal date (which shall be November 30 of each year), the Bank delivers written notice to the Lake Elmo City Administrator that it intends to modify the terms of, or cancel, this Letter of Credit. Written notice is effective if sent by certified mail, postage prepaid, and deposited in the U.S. Mail, at least forty-five (45) days prior to the next annual renewal date addressed as follows: City Administrator, City Hall, 3800 Laverne Ave. N., Lake Elmo Minnesota 55042 and is actually received by the City Administrator at least thirty (30) days prior to the renewal date.

This Letter of Credit sets forth in full our understanding which shall not in any way be modified, amended, amplified, or limited by reference to any document, instrument, or agreement, whether or not referred to herein.

This Letter of Credit is not assignable. This is not a Notation Letter of Credit. More than one draw may be made under this Letter of Credit.

This Letter of Credit shall be governed by the most recent revision of the Uniform Customs and Practice for Documentary Credits, International Chamber of Commerce Publication No. 500.

We hereby agree that a draft drawn under and in compliance with this Letter of Credit shall be duly honored upon presentation.

BY: _____

Its _____

Sophia Jensen

From: Patrick Carlson <carlson2442@gmail.com>
Sent: Wednesday, May 10, 2023 10:20 PM
To: Sophia Jensen
Subject: Feedback on Final PUD Application

You don't often get email from carlson2442@gmail.com. Learn why this is important

Caution: This email originated outside our organization; please use caution.

Hello Sophia,

The following is feedback based on a request for comments from residents on an upcoming PUD Application in the area northwest of Keats Drive and Interstate 94 (PIDs: 3402921440004 and 340292144006). As commercially zoned areas, I recognize that this is important for raising money for the city of Lake Elmo. If possible, I would prefer the commercial development to be some type of entity that primarily revolves around daytime professional operations (e.g. dentist, doctor, lawyer, etc.). As contrasted to a commercial development that sees a wider range of operations into the night (restaurant, fast-food, etc.) which brings with it noise, light, smells, etc. Given the small plot of land, I suspect this will be one or two levels not large scale commercial. I would also appreciate it if the design used trees to try to separate the commercial space from the residential space.

I appreciate your consideration and thank you for sending out the mailer with details.

Patrick Carlson
213 Junco Road N
Lake Elmo MN 55042