

952 250-2200

rlatta@civilsitegroup.com

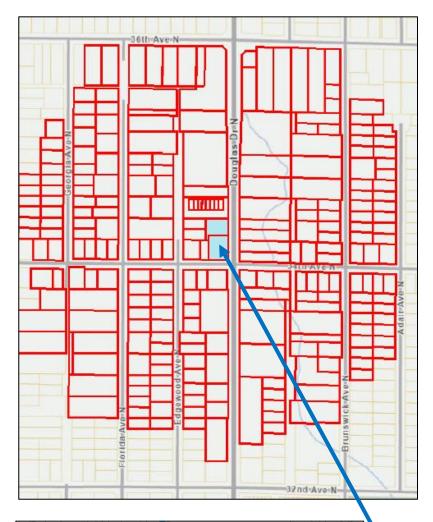
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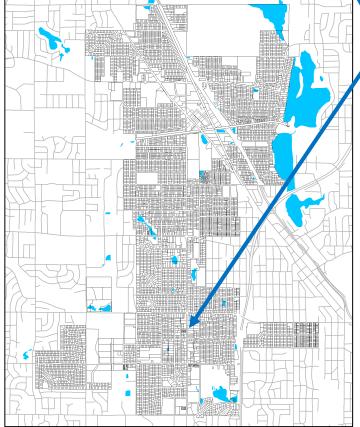
City staff contact: Dan Olson 763-531-1142 dan.olson@crystalmn.gov 4141 Douglas Dr N Crystal MN 55422 www.crystalmn.gov

						
Property Address for this application:	3401-3	3415 Douglas	Drive No	rth		
Property Identification Number (PID):	20-118	-21-11-0015;	20-118-	21-11	-0010	
Applicant:						
Name: Hampton Companies						
Street: 1824 Buerkle Road	City:	White Bear Lake	State:	MN	Zip:	55110
Telephone: 651-295-2459						
Email: Dan@hamptoncos.com						
☑ Different from the Applicant (complete t Name: City of Crystal's Economic Development A Street: 4141 Douglas Dr N		Crystal	State: _A	ΛN	Zip:	55422
Telephone: 763-531-1142						
Email: Dan.olson@crystalmn.gov						
Project contact (the applicant shall desi	gnate one c	•		olicatio	on):	
Name: Dan Brown		Role in Proj	ect: Proje	ect Cor	ntact	
Company: Hampton Companies Street: 1824 Buerkle Road	City	White Bear La	ko State:		Zip:	
1024 Ederkie Mad		vvnite Bear La	Ke Olale.	MN	∠ ıp.	55110
. 001 200 2 100						
Email: Dan@hamptoncos.com						
Additional design/engineering profession	nal (if appli	icable):				
Name: Robbie Latta		Role in Proj	ect: Civil E	inginee	er	<u> </u>
Company: Civil Site Group						
Street: 5000 Glenwood Ave	City:	Golden Vally	State:	MN	Zip:	
Business Telephone:						

	 □ Completed and signed developm □ Completed and signed escrow for a completed application checklist to the complete and signed development. 	application includes the following: nent review application form orm (if applicable - see list of application types below) for each respective type of application (see list below) ach respective type of application (see list below)
Type of a	application (check all that apply):	Application fee (nonrefundable): [1]
A A A A A A A A A A A A A A A A A	Adjacent Parcel Land Conveyance Administrative Appeal Comprehensive Plan Amendment Conditional Use Permit Lot consolidation Rezoning to Planned Development Site Plan Subdivision Vacation of a public street or easement Variance Coning Certificate Coning Map or Text Amendment	\$220 + \$220 escrow \$220 \$660 + \$660 escrow \$660 + \$660 escrow [2] \$440 + \$440 escrow \$1,320 + \$1,320 escrow \$660 + \$330 escrow \$660 + \$66 per lot over 2, + \$660 escrow \$550 + \$550 escrow \$110 [2] \$660 + \$660 escrow
	ments associated with the application. For	inty recording fees and legal fees related to the review of telecommunication towers, the escrow fee will also be
Notice: Review the application Development Co to safeguard pu	of a development application and the de will be based on the standards and criterode and any other applicable government blic health, safety, aesthetics, and general	emaining escrow fee will be returned to the applicant. O, plus a \$10,000 escrow cision to approve, approve with modifications, or deny ria found in the Crystal Comprehensive Plan, Unified intal codes, guidelines, standards or policies necessary ral welfare. Approval of this application does not absolve is, such as stormwater or building permits.
Applie [2]: The final street is applied to safeguard put the applicant from [1] (We) certify the applied to the	fee for a telecommunication tower is \$2,000 of a development application and the dewill be based on the standards and criterode and any other applicable government blic health, safety, aesthetics, and generom obtaining all other applicable permits that I (we) have submitted all the result of the submitted all the submitted	cision to approve, approve with modifications, or deny ria found in the Crystal Comprehensive Plan, Unified ntal codes, guidelines, standards or policies necessary ral welfare. Approval of this application does not absolve
Applie [2]: The final street [2]: The final	of a development application and the dewill be based on the standards and criterode and any other applicable governmentablic health, safety, aesthetics, and generom obtaining all other applicable permits that I (we) have submitted all the intreview application and the information.	cision to approve, approve with modifications, or deny ria found in the Crystal Comprehensive Plan, Unified ntal codes, guidelines, standards or policies necessary ral welfare. Approval of this application does not absolve s, such as stormwater or building permits. required information to apply for consideration or mation is factually correct and accurate.
Applie [2]: The to safeguard put the applicant from	of a development application and the dewill be based on the standards and criterode and any other applicable governmentalic health, safety, aesthetics, and generom obtaining all other applicable permits that I (we) have submitted all the intreview application and the information.	cision to approve, approve with modifications, or deny ria found in the Crystal Comprehensive Plan, Unified ntal codes, guidelines, standards or policies necessary ral welfare. Approval of this application does not absolve s, such as stormwater or building permits. required information to apply for consideration or mation is factually correct and accurate.
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Site Location and Public Hearing Notice Mailing Map





3401-3415 Douglas Dr N



4141 Douglas Dr. N. Crystal MN 55422

Hampton Companies, LLC 1824 Buerkle Road White Bear Lake, MN 55110

PROJECT PROPOSAL: To Crystal Planning Commission and City Council

PROJECT NAME: Hampton addition of Crystal

PROPERTY ADDRESS: 3401-3415 Douglas Drive

APPLICANT: Hampton Companies, LLC

1824 Buerkle Road

White Bear Lake, MN 55110

DESCRIPTION OF PROPOSED DEVELOPMENT:

Hampton Companies is proposing to develop an 8 unit townhome development. Each unit will have 3 bedrooms and 3 bathrooms. They will be 2 story units. Each will have its own 2 car garage with additional off-street parking provided. Each unit will have a rear patio.

Land use Description: Total Land Size: .7 Acres-Approx.

Building Size Each: 1,864 Sq. Ft.

Occupancy: (2) 4-unit townhome buildings

Architectural Design: The building will combine stone, LP Smartside siding materials, Gable roof

details and architectural shingles.

PROJECT REQUESTS:

Rezoning from R-2 to Planned Development Subdivision of lots Final Plat Vacate existing easements.

CONCLUSION:

Thank you for your time to review our proposal.

As we work thru the grading plan, special attention will be paid to the drainage and excavation plan to assure that the drainage of this site does not disturb the neighborhood.

By approving this project, the city is gaining an attractive, tax paying properties to the community in an otherwise idle property.

We look forward to continuing to work with the City staff, Planning Commission and City Council during the review and approval process for this application. Please contact me with any questions you have on any item as I would be more than happy to discuss it in further detail.

Sincerely,

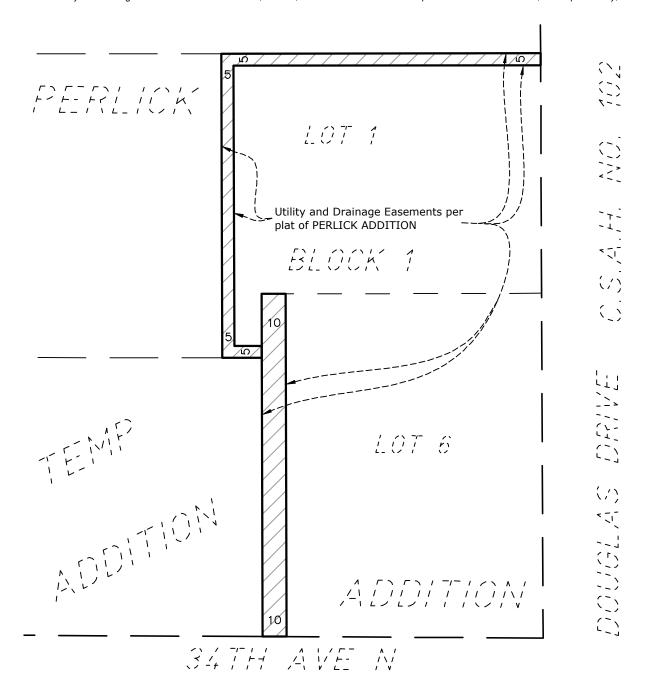
Dan Brown

Hampton Companies, LLC

Utility and Drainage Easement Vacation Exhibit Lots 1 and 6, Block 1, PERLICK ADDITION Crystal, Hennepin County, Minnesota

DESCRIPTION

All those utility and drainage easements in Lot 1 and Lot 6, Block 1, as dedicated in the recorded plat of PERLICK ADDITION, Hennepin County, Minnesota.

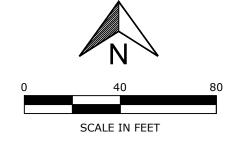


MINNESOTA CERTIFICATION

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

Dated this 14th day of March, 2023

Rory L. Synstelien Minnesota License No. 44565



CivilSite

5000 GLENWOOD AVENUE GOLDEN VALLEY, MN 55422 CivilSiteGroup.com

Drawn By: SIW

Project No. 23035 SHEET 1 OF 1



Stormwater Management Report

Owner:

Hampton Companies 1824 Buerkle Rd White Bear Lake, MN 55110

Project:

3401-3415 Douglas Drive Crystal, MN 55422

Engineer's Certification:

All plans and supporting Documentation contained in this report have been reviewed by me and it is hereby certified that to the best of my knowledge the plans comply with the requirements of the ordinance.

I hereby certify that this report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

Robert A. Latta P.E.

Registration Number: 59612

Date: 03/14/2023



Table of Contents:

- 1.0 Cover Sheet, Engineer's Certification
- 2.0 Summary Analysis / Narrative
 - 2.1 Introduction
 - 2.2 **Existing and Proposed Site Conditions**
 - 2.3 Stormwater Requirements - City
 - 2.4 Stormwater Requirements - Watershed District
 - 2.5 Stormwater Requirements – MPCA / NPDES
- 3.0 Stormwater Calculations
 - 3.1 Proposed Stormwater Management Strategy & Facilities Description
 - 3.2
 - 3.3 Water Quality
 - Volume Control 3.4
- 4.0 Conclusions

Figures:

Figure 1 – Existing Conditions Drainage Area map

Figure 2 – Proposed Conditions Drainage Area Map

Appendices:

Drainage Calculations Summary Table



2.0 Summary Analysis / Narrative:

2.1 Introduction:

This stormwater management report accompanies the Civil Engineering Plans prepared by Civil Site Group for the subject project dated 03/14/2023. This report includes a summary of the existing and proposed site conditions, the stormwater requirements of relevant regulatory agencies, and proposed design calculations and data to meet the requirements.

2.2 Existing and Proposed Site Conditions:

Site Description:

The existing site is two vacant parcels, formerly a gas station. The owner proposes to construct (2) four-unit townhome buildings along with surface parking, utility, and landscape improvements. Below are the existing and proposed site conditions. Site conditions from when the site was used as a gas station will be used as the existing conditions when compared to the proposed finished site.

Site Area Summary								
	Impervious [SF]	Impervious [AC]	Pervious [SF]	Pervious [AC]	Total [SF]	Total [AC]		
Existing Site	24872	0.57	5598	0.13	30470	0.70		
Proposed Site	20626	0.47	9844	0.23	30470	0.70		

Existing Soils:

A geotechnical exploration has not been completed for the site as of March, 2023. It is known from discussions with city staff that soils are clayey. A USDA web soil survey shows that site soils are clayey loam.

Groundwater:

Groundwater observations have not been taken.

2.3 Stormwater Requirements City (Crystal):

Requirement threshold - None Stated

Rate Control – Peak discharge rates during the two-year, ten-year, and 100-year storm events shall not increase above existing conditions.

Water Quality - n/a

Volume Control - n/a

<u>2.4 Stormwater Requirements Watershed District – (Bassett Creek Watershed Management Commission):</u>

No specific requirements as site is not over 1 acre in size.

2.5 Stormwater Requirements - Minnesota Pollution Control Agency - NPPDES permit (MPCA)

No specific requirements as site disturbance limits are not higher than 1-acre in area and new impervious area above 1-acre will not be created.

3.0 Stormwater Calculations:

3.1 Proposed Stormwater Management Strategy & Facilities Description

Stormwater draining towards the trench drain will be conveyed by pipe to the existing catch basin at the northwest corner of Douglas Drive and 34th Ave N. A rain guardian will be used for parking lot and roof runoff



at the north end of the site. This drainage will flow through a swale along the north property line and out to Douglas Drive.

3.2 Rate Control

Rate control is not necessary as the proposed conditions contain less impervious surface area than that which is being considered the existing conditions.

3.3 Water Quality

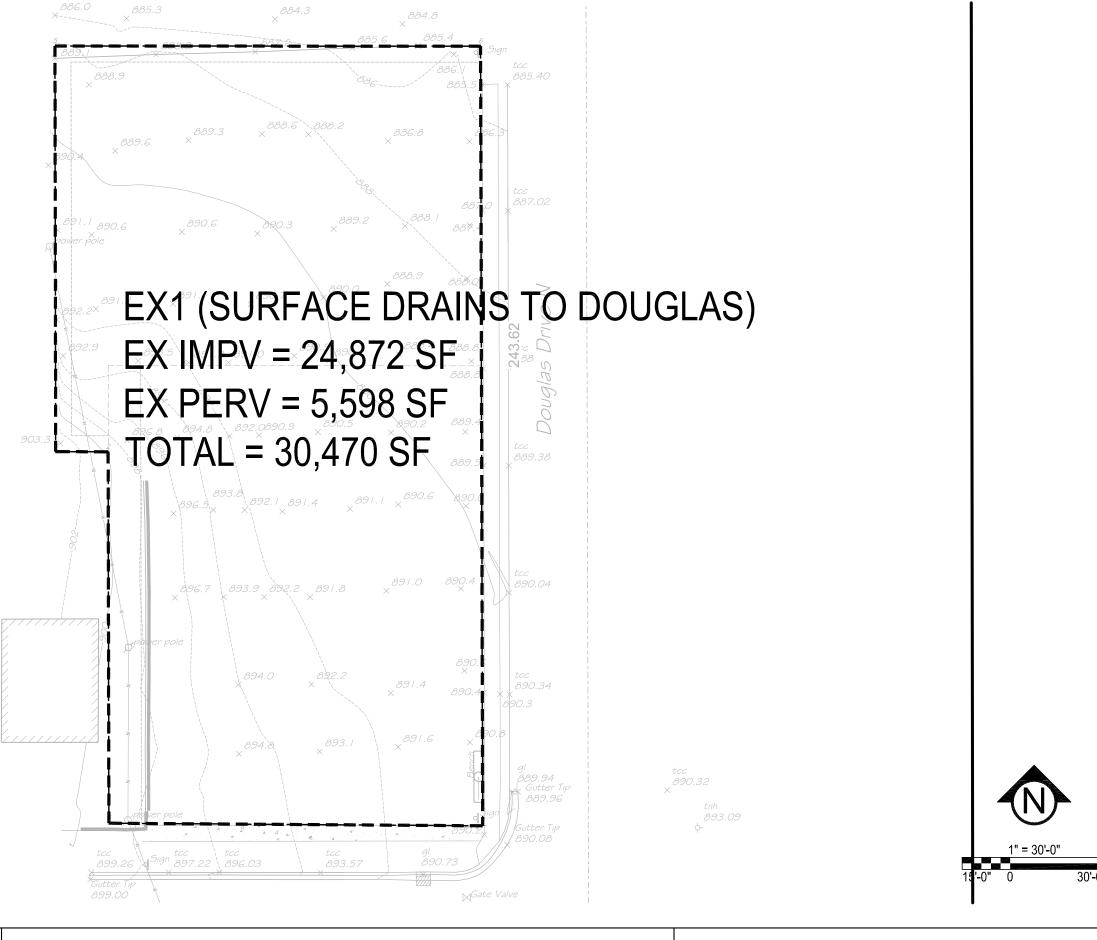
Though there are no specific water quality requirements, the proposed preserver to be installed in structure STMH 1 will provide pre-treatment for stormwater runoff prior to discharge into the city storm sewer. The rain guardian turret proposed at the north end of the driveway will provide pretreatment for runoff prior to discharge into the swale and out to Douglas Drive.

3.4 Volume Control

Volume control is not applicable as infiltration is infeasible on site and not required as the site does not propose greater than 1 acre of new impervious surface.

4.0 Conclusions:

To the best of our knowledge, this project meets all State, City and Watershed District stormwater management requirements.



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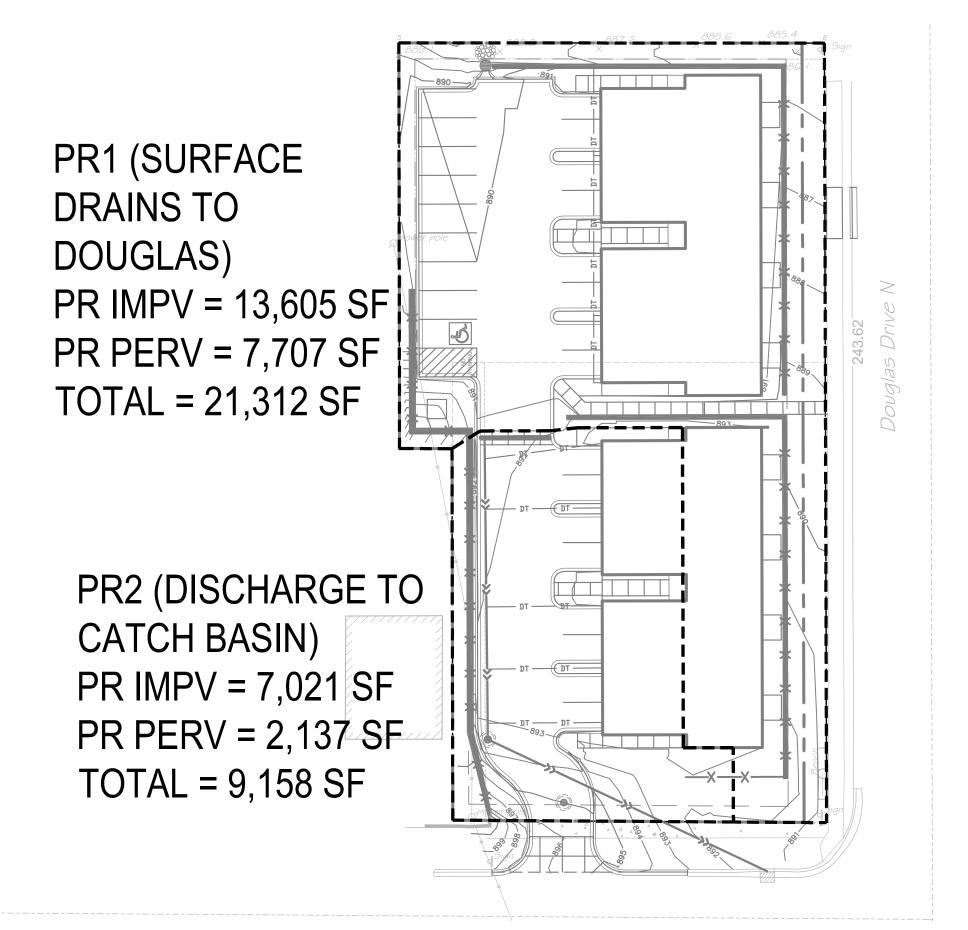
3401-3415 DOUGLAS DRIVE

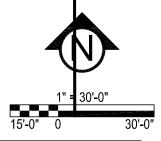
5000 GLENWOOD AVENUE GOLDEN VALLEY, MN 55422 612-615-0060 www. CivilSiteGroup.com

Project Number:

23035 Revision Number: 03/14/23 Revision Date:

DA1





3401-3415 Douglas Drive Civil Site Group - Stormwater Calculations

Existing Conditions

Drainage Area	Impervious Area		Perviou	us Area	Total Area	
	Area [SF]	CN Value	Area [SF]	CN Value	Area [SF]	CN Value
EX1 (SURFACE DRAINS TO						
DOUGLAS)	24872	98	5598	80	30470	95

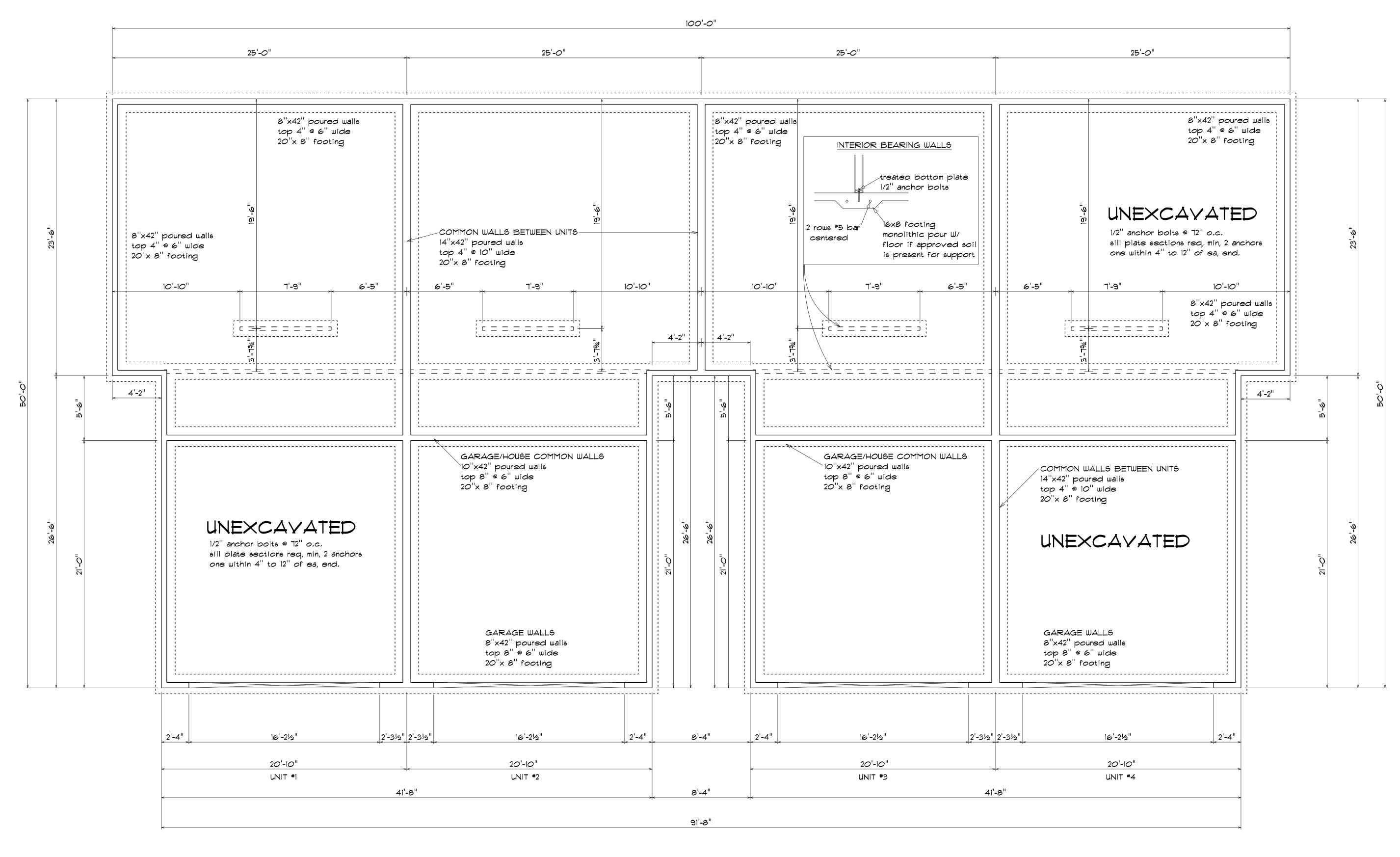
Proposed Conditions

Drainage Area	Impervious Area		Pervio	us Area	Total Area		
	Area [SF]	CN Value	Area [SF]	CN Value	Area [SF]	CN Value	
PR1 (SURFACE DRAINS TO							
DOUGLAS)	13605	98	7707	80	21312	91	
PR2 (DISCHARGE TO CATCH							
BASIN)	7021	98	2137	80	9158	94	

Site Area Summary

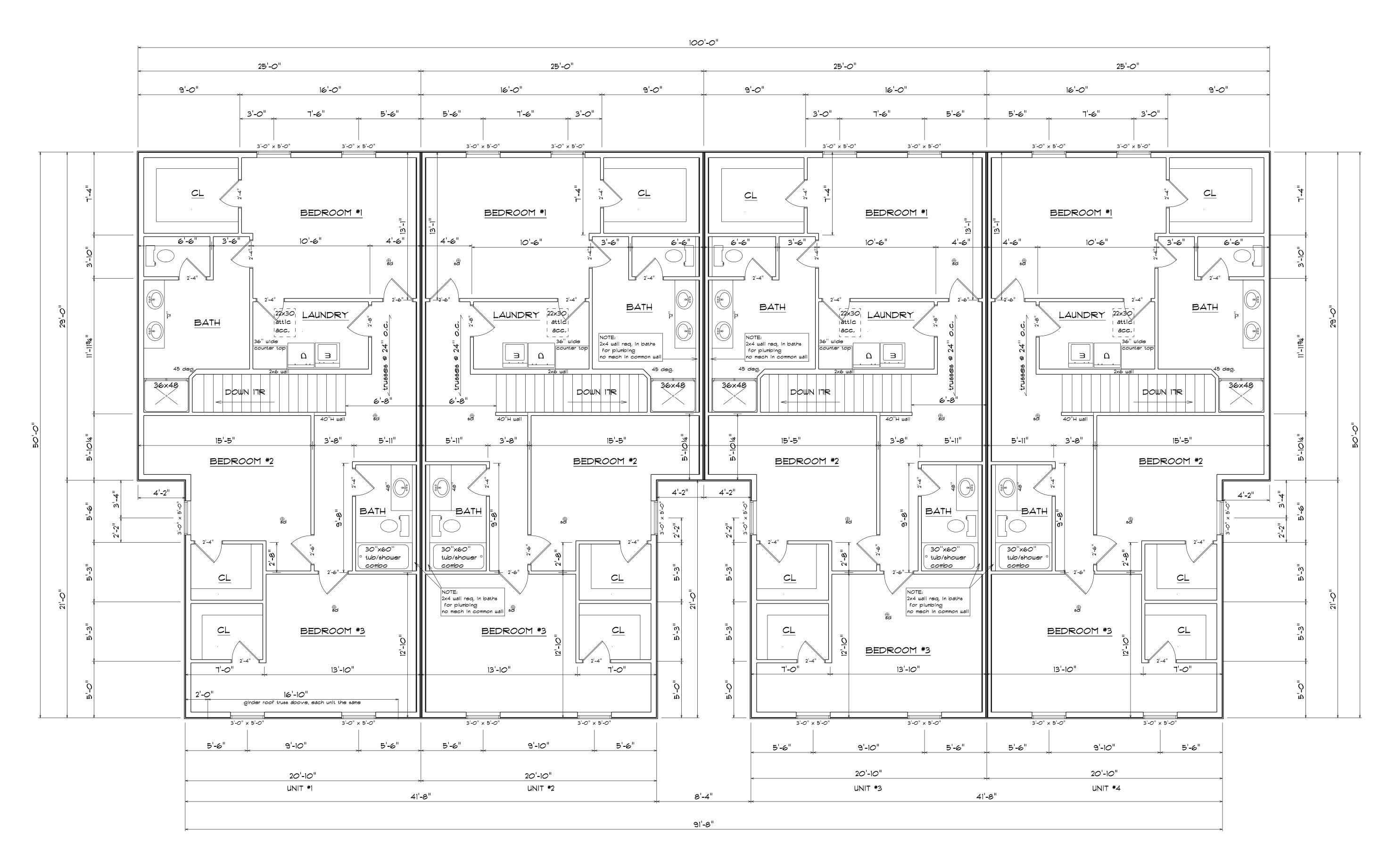
	Impervious [SF]	Impervious [AC]	Pervious [SF]	Pervious [AC]	Total [SF]	Total [AC]
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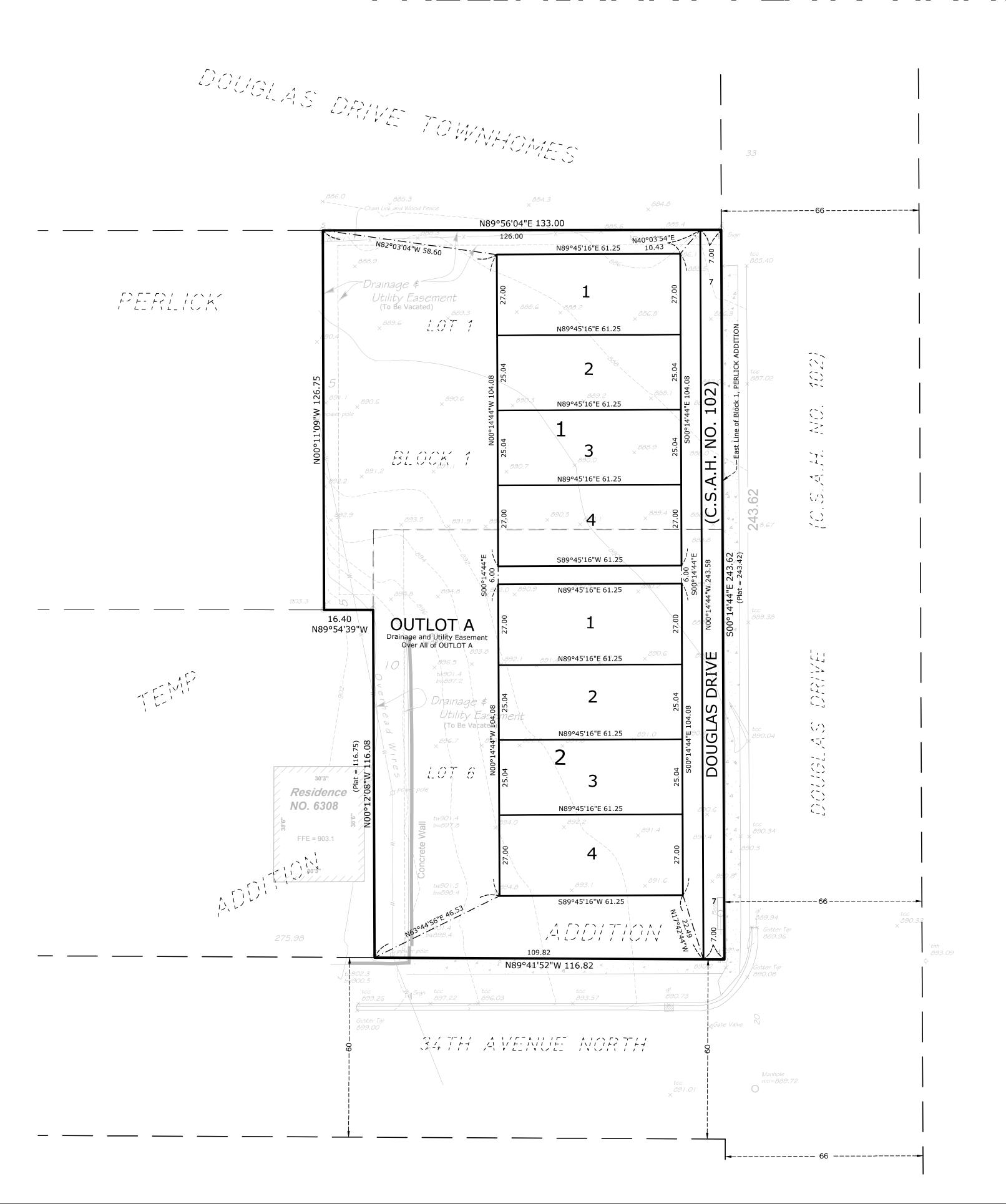


FOUNDATION PLAN

preliminary



PRELIMINARY PLAT: HAMPTON ADDITION



PRELIMINARY PLAT GENERAL NOTES

PROPERTY DESCRIPTION:

Lot 1, Block 1, PERLICK ADDITION, Hennepin County, Minnesota.

Lot 6, Block 1, PERLICK ADDITION, Hennepin County, Minnesota.

Please note that this Preliminary Plat was prepared without the benefit of a commitment for title insurance. The description above is per Surveyors Certificate of Existing Conditions prepared by Demarc Land Surveying and Engineering, dated April 21, 2021, provided to us by the client. There may be easements or other matters of record we are unaware of and thus not shown hereon.

DATE OF PREPARATION:

03-14-2023

Please note that the background survey information, including the benchmark, is per Surveyors Certificate of Existing Conditions prepared by Demarc Land Surveying and Engineering, dated April 21, 2021, provided to us by the client.

APPLICANT:

Hampton Comapnies

Dan Brown 651-295-2459

1824 Buerkle Rd, White Bear Lake, MN 55110

BENCHMARKS:

The benchmark is the top nut of a fire hydrant located in the northwest quadrant of the intersection of Douglas Drive N and 34th Avenue N.

Elevation=893.09 Feet (Datum not provided)

AREAS:

Block 1 = 1,654 +/- Sq. Ft. or 0.038 +/- Acres Proposed Lot 1 Proposed Lot 2 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres Proposed Lot 3 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres = 1,654 +/- Sq. Ft. or 0.038 +/- Acres

Block 2

Proposed Lot 1 = 1,654 +/- Sq. Ft. or 0.038 +/- Acres = 1,534 +/- Sq. Ft. or 0.035 +/- Acres Proposed Lot 2 Proposed Lot 3 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres = 1,654 +/- Sq. Ft. or 0.038 +/- Acres

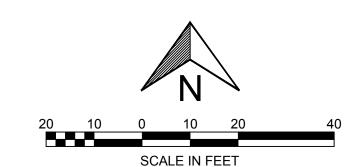
Proposed OUTLOT A = 16,013 +/- Sq. Ft. or 0.368 +/- Acres Proposed Dedicated Right of Way = 1,705 +/- Sq. Ft. or 0.039 +/- Acres

Total Property Area = 30,470+/- Sq. Ft. or 0.700 Acres

rory@civilsitegroup.com

This property is contained in Zone X (area determined to be outside the 0.2% annual chance floodplain) per Flood Insurance Rate Map, Community Panel No. 27053C0213F, effective date of November 4, 2016.

Minnesota License No. 44565



Linetype & Symbol Legend

——— E ———	ELECTRIC LINE	Α	AIR CO
EE	ELECTRIC LINE (RECORD)	C	CABLE
——— F ———	FIBER/COMM. LINE	©	ELECTR
FF	FIBER/COMM. LINE (RECORD)	ET	ELECTR
G	GASMAIN	©	ELECTR
GG	GASMAIN (RECORD)	(Ē)	FIBER/C
—— ОН ———	OVERHEAD UTILITIES	Ø	POWER
>	SANITARY SEWER	\downarrow	GUY WI
>	SANITARY SEWER (RECORD)	© ©	GAS ME
>>	STORM SEWER	<u>⊌</u> ⊠	GAS MA
>>	STORM SEWER (RECORD)	R	ROOF D
T	TELEPHONE LINE	69	SEWER
TT	TELEPHONE LINE (RECORD)	Ś	SANITA
——— w———	WATERMAIN	§T)	STORM
ww	WATERMAIN (RECORD)		
x	CHAINLINK FENCELINE	\bigoplus_{1}	CATCH
	WOODEN FENCELINE	◁	FLARED
 0	GUARDRAIL		TELEPH
Δ	ACCESS RESTRICTION	\bigcirc	TELEPH
4 4		8	TRAFFI
Δ Δ Δ Δ	CONCRETE SURFACE	V	HYDRAN
		\wedge	FIRE CO
	PAVER SURFACE	Ø	POST IN
		W	WATER
	BITUMINOUS SURFACE	X	WATER
	GRAVEL/LANDSCAPE SURFACE	(W)	WELL

AIR CONDITIONER C CABLE TV BOX ELECTRIC MANHOLE ELECTRIC TRANSFORMER ELECTRICAL METER

FIBER/COMM. MANHOLE

GUY WIRE GAS METER GAS MANHOLE GAS VALVE ROOF DRAIN SEWER CLEAN OUT SANITARY MANHOLE STORM MANHOLE CATCH BASIN FLARED END SECTION

> HYDRANT ← FIRE CONNECTION POST INDICATOR VALVE W WATER MANHOLE WATER VALVE

TELEPHONE BOX TELEPHONE MANHOLE

 UTILITY MANHOLE ⑤ ELECTRICAL OUTLET BOLLARD

FT FUEL TANK HANDICAP SYMBOL MAIL BOX

CONIFEROUS TREE

DECIDUOUS TREE

FOUND IRON MONUMENT

O SET IRON MONUMENT O CAST IRON MONUMENT

PRELIMINARY PLAT

Golden Valley, MN 55422

civilsitegroup.com

diti

Companies

Hampton

PLAN, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED LAND SURVEYOR UNDER THE LAWS OF THE

STATE OF MINNESQTA.

DATE 3-14-2023 LICENSE NO. 44565

VICINITY MAP

REVISION SUMMARY

DATE DESCRIPTION

FIELD CREW DRAWN BY

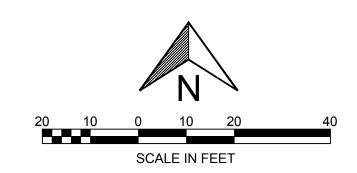
REVIEWED BY UPDATED BY

HAMPTON ADDITION

R.T. DOC. NO _

		N89°56'	'04"E 133.00	<u> </u>	66
		N82°03'04"W 58.60		10.43 10.43	
F		7. () 7	1	7 7 7	
			N89°45'16"E 61.25	04 ICK ADDITIO	
	W 126.75	H"W 104.08	N89°45'16"E 61.25	25.04 44"E 104.08 102) Block 1, PERLICK ADDITION	
	N00°11'09"W 126.75	N00°14'v	1 3	25.04 S00°14 NO.	
			N89°45'16"E 61.25		
			4		
		S00°14'44"E	S89°45'16"W 61.25 N89°45'16"E 61.25	27.00 5.00 \(\) 6.00 \(\) 800°14'44"E 800°14'44"E 243.58 S00°14'44"E 243.62	
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	_	N 27.00	4	27.00	
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		N63° 44'56"E 46.53	109.82	00.Z <	
		N	89°41'52"W 116.82		

KNOW ALL PERSONS BY THESE PRESENTS:	That Hampton Companies, LLC, a Minnesota limited liability company, fee owner of the following described property:
Lot 1, Block 1, PERLICK ADDITION, F	Hennepin County, Minnesota.
AND Lot 6, Block 1, PERLICK ADDITION, F	Hennepin County, Minnesota.
Has caused the same to be surveyed and platted	d as HAMPTON ADDITION and does hereby dedicate to the public for public use the drainage and utility easements as created by this plat.
In witness whereof said Hampton Companies, LL	LC, a Minnesota limited liability company, has caused these presents to be signed by its proper officer thisday of, 20
SIGNED: Hampton Companies, LLC	
Ву:	Its:
STATE OF, COUNT	
This instrument was acknowledged before me th	hisday of, 20, by, its
of Hampton Companies, LLC, a Minnesota limite	ed liability comapny, on behalf of the company. My Commission Expires:
Notary Public, Signature	Notary Public, Printed Name
Notary PublicCounty,	, <u> </u>
SURVEYORS CERTIFICATE	
I Rory L. Synstelien do hereby certify that this p	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 re correctly designated on this plat; that all monuments depicted on this plat have been or will be set within one year; that all water boundaries and wet lands, as defined in Minnesot
Statutes, Section 505.01, Subd. 3, as of the dat	te of this certificate are shown and labeled on this plat; and all public ways are shown and labeled on this plat.
Dated thisday of	, 20 <u></u> .
Rory L. Synstelien, Licensed Land Surveyor	
Minnesota License No. 44565	
STATE OF MINNESOTA, COUNTY OF	
This instrument was acknowledged before me th	hisday of, 20, by Rory L. Synstelien.
	My Commission Expires:
Notary Public, Signature	Notary Public, Printed Name
Notary PublicCounty,	
CITY COUNCIL, CITY OF CRYSTAL, MINNES	ОТА
This plat of HAMPTON ADDITION was approved with the provisions of Minnesota Statutes, Section	and accepted by the City Council of Crystal, Minnesota at a regular meeting thereof held thisday of
City Council, City of Crystal, Minnesota	
By:	, Mayor By:
RESIDENT AND REAL ESTATE SERVICES, He	
Daniel Rogan, County Auditor	and prior years have been paid for land described on this plat, dated thisday of
Ву:	Deputy
Dy	, Deputy
SURVEY DIVISION, Hennepin County, Minneso	
Pursuant to Minnesota Statutes Section 383B.56 Chris F. Mavis, County Surveyor	55 (1969), this plat has been approved this day of, 20
Ву:	
REGISTRAR OF TITLES, Hennepin County, Min	nesota
I hereby certify that the within plat of HAMPTON	N ADDITION was filed in this office this day of, 20, atO'ClockM.
Amber Bougie, Registrar of Titles	
Ву:	, Deputy



Bearings are based on the East line of Block 1, PERLICK ADDITION having an assumed bearing of S $00^{\circ}14'44"$ E

Found Iron Monument (see map for type)

1/2 inch by 14 inch Iron Rebar Set Marked "RLS 44565"

(Plat=) Denotes a Record Dimension per the plat of PERLICK ADDITION



DOUGLAS DRIVE TOWNHOMES

CRYSTAL, MINNESOTA
ISSUED FOR: CITY SUBMITTAL



ARCHITECT:

THE ADKINS ASSOCIATION INC. ARCHITECTS 2586 SEVENTH AVE EAST SAINT PAUL, MN 55109 CONTACT: MICHAEL W. OSTLIE 651-224-1358

DEVELOPER / PROPERTY OWNER:

HAMPTON COMPANIES 1824 BUERKLE RD WHITE BEAR LAKE, MN 55110 CONTACT: DAN BROWN 651-295-2459

ENGINEER / LANDSCAPE ARCHITECT:

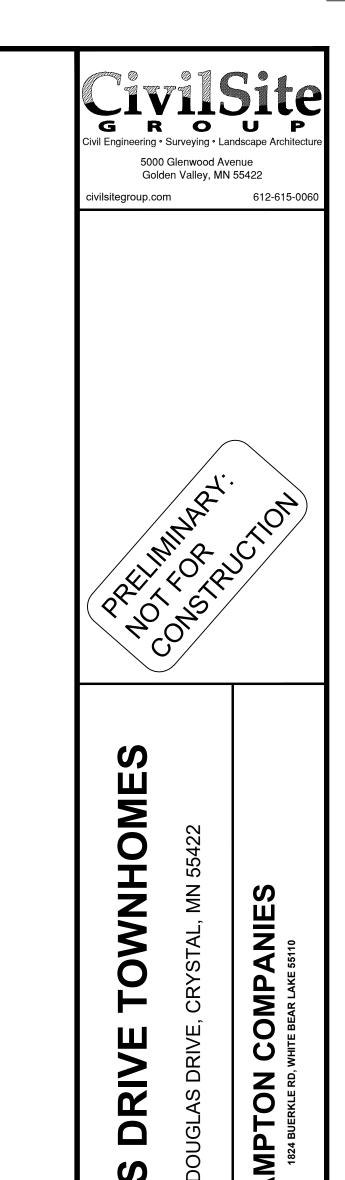
CIVIL SITE GROUP 5000 GLENWOOD AVE GOLDEN VALLEY, MN 55422 CONTACT: ROBBIE LATTA 952-250-2200

SURVEYOR:

DEMARC
LAND SURVEYING & ENGINEERING
7601 73RD AVE N
MINNEAPOLIS, MN 55428
CONTACT: GREGORY R PRASCH
763-560-3093

ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.





SHEET INDEX

SHEET NUMBER SHEET TITLE

C0.0 TITLE SHEET

C2.0 SITE PLAN

C1.0 REMOVALS PLAN

C3.0 GRADING PLAN
C4.0 UTILITY PLAN
C5.0 CIVIL DETAILS

C5.1 CIVIL DETAILS

C5.2 CIVIL DETAILS

SW1.2 SWPPP - DETAILS

SW1.3 SWPPP - NARRATIVE

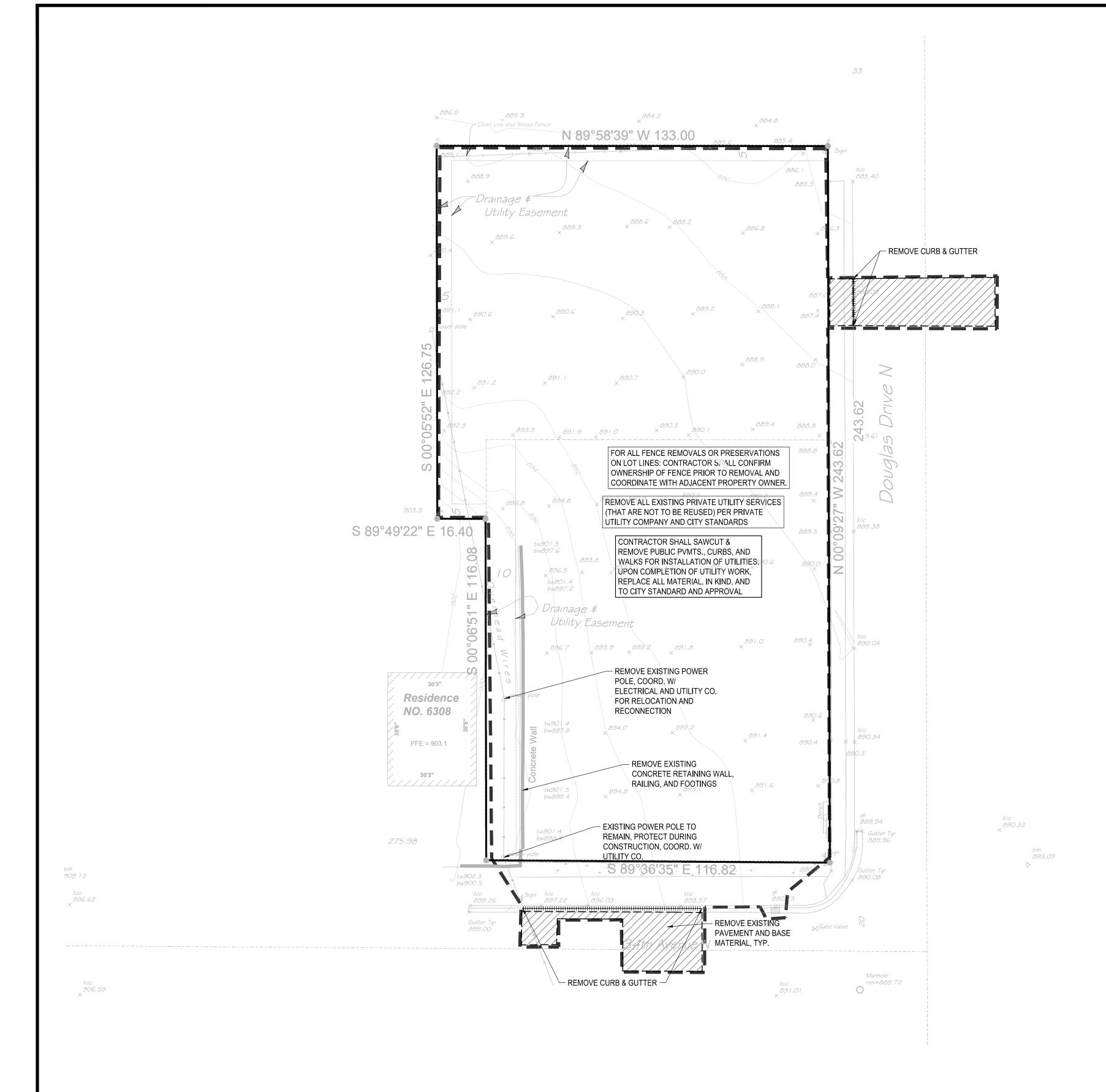
L1.0 LANDSCAPE PLAN NOTES & DETAILS

SW1.0 SWPPP - EXISTING CONDITIONS

SW1.1 SWPPP - PROPOSED CONDITIONS

OUGL

TITLE SHEET



CITY OF CRYSTAL REMOVAL NOTES:

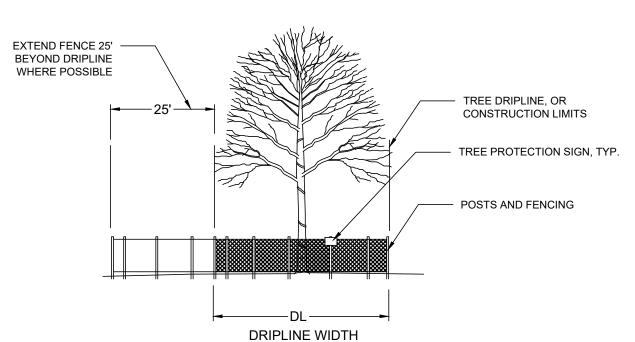
RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

EROSION CONTROL NOTES:

SEE SWPPP ON SHEETS SW1.0 - SW1.5

REMOVAL NOTES:

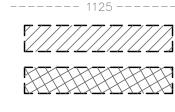
- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 2. SEE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



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



REMOVALS LEGEND:



REMOVAL OF STRUCTURE INCLUDING ALL FOOTINGS AND FOUNDATIONS.

REMOVE CURB AND GUTTER. IF IN RIGHT-OF-WAY, COORDINATE WITH LOCAL GOVERNING UNIT.

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TREE REMOVAL - INCLUDING ROOTS AND STUMPS

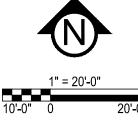
TREE PROTECTION

EX. 1' CONTOUR ELEVATION INTERVAL

REMOVAL OF PAVEMENT AND ALL BASE MATERIAL,

INCLUDING BIT., CONC., AND GRAVEL PVMTS.



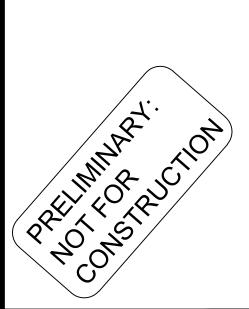


CIVIL SITE

Civil Engineering • Surveying • Landscape Architecture

5000 Glenwood Avenue

5000 Glenwood Avenue Golden Valley, MN 55422 civilsitegroup.com 612-615-0060



AS DRIVE TOWNHOM
415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES

ISSUE/SUBMITTAL SUMMARY

DATE DESCRIPTION

ONG

WN RY'MD NH REVIEWED BY:

PROJECT NUMBER: 23035

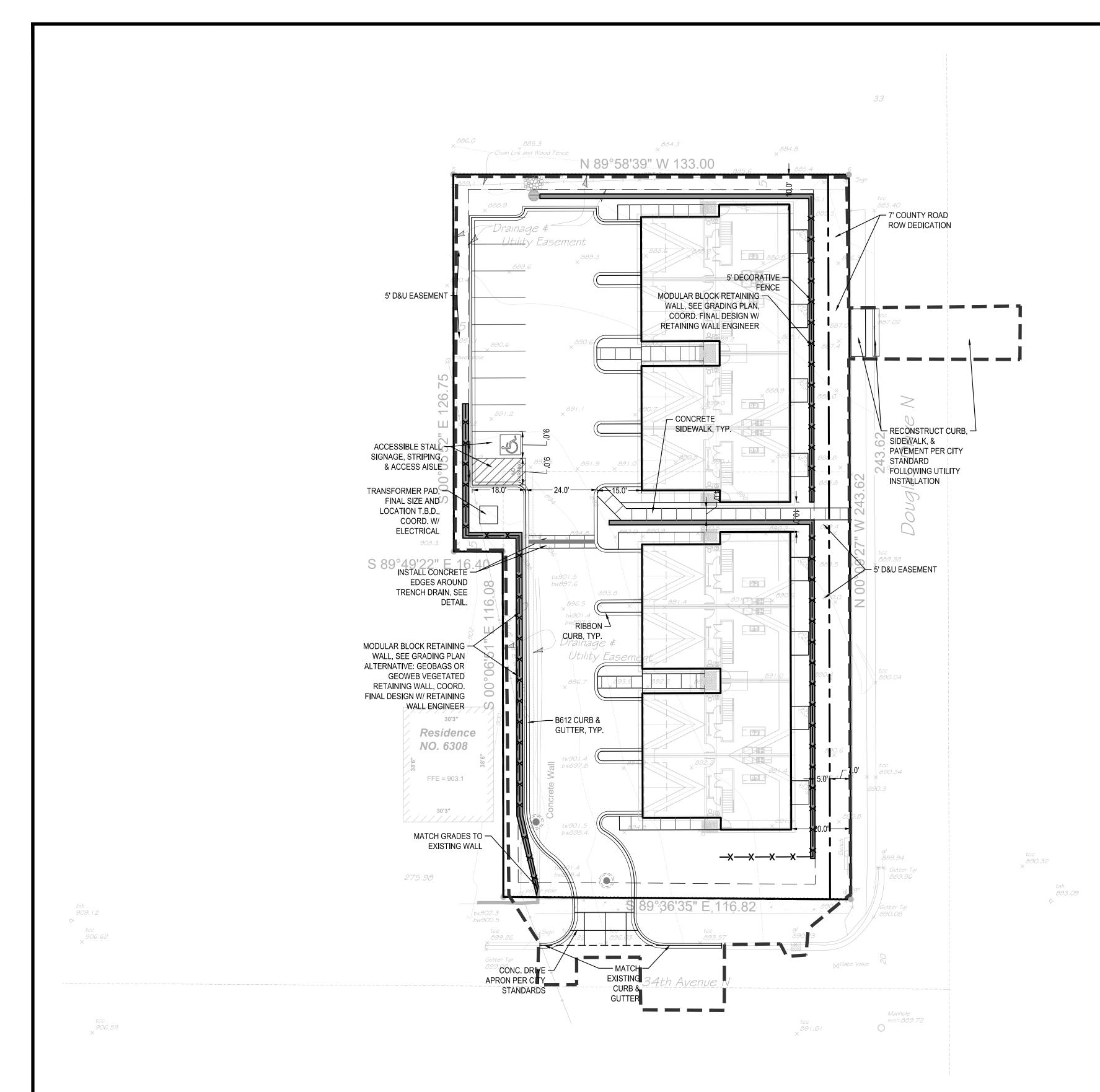
REVISION SUMMARY

DATE DESCRIPTION
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REMOVALS PLAN

= 20'-0"

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CITY OF CRYSTAL SITE SPECIFIC NOTES:

RESERVED FOR CITY SPECIFIC REMOVAL NOTES.

OPERATIONAL NOTES:

SNOW REMOVAL	ALL SNOW SHALL BE STORED ON-SITE OUTSIDE PARKING LOT. WHEN FULL, REMOVAL CO. SHALL REMOVE EXCESS OF-SITE
TRASH REMOVAL:	TRASH SHALL BE PLACED IN EXTERIOR TRASH AREA AND REMOVED BY COMMERCIAL CO. WEEKLY.
DELIVERIES:	DELIVERIES SHALL OCCUR AT THE FRONT DOOR VIA STANDARD COMMERCIAL DELIVERY

VEHICLES (UPS, FED-EX, USPS).

IMPERVIOUS SURFACE EXISTING CONDITION 0 SF 0.0% PROPOSED CONDITION 20,626 SF 67.7% DIFFERENCE (EX. VS PROP.) 20,626 SF 67.7%

EXISTING CONDITION

0 SF 0.0%

0 SF 0.0%

30,470 SF 100.0%

30,470 SF 100.0%

PROPOSED CONDITION

1,705 SF

9, 129 SF 31.79

11,497 SF 40.0%

8, 139 SF 28.3%

28,765 SF 100.0%

SITE AREA TABLE:

SITE AREA CALCULATIONS

BUILDING COVERAGE

ALL NON-PAVEMENTS

ALL PAVEMENTS

ROW DEDICATION

TOTAL SITE AREA

SITE LAYOUT NOTES:

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

SITE PLAN LEGEND:

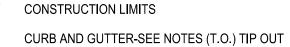
LIGHT DUTY BITUMINOUS PAVEMENT (IF APPLICABLE).

SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE

& WEAR COURSE DEPTH, SEE DETAIL.



CONCRETE PAVEMENT (IF APPLICABLE) AS SPECIFIED (PAD OR WALK) SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTHS, WITHIN ROW SEE CITY DETAIL, WITHIN PRIVATE PROPERTY SEE CSG DETAIL PROPERTY LINE



GUTTER WHERE APPLICABLE-SEE PLAN



TRAFFIC DIRECTIONAL ARROW PAVEMENT MARKINGS



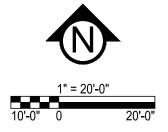
SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED. HC = ACCESSIBLE SIGN NP = NO PARKING FIRE LANE ST = STOP



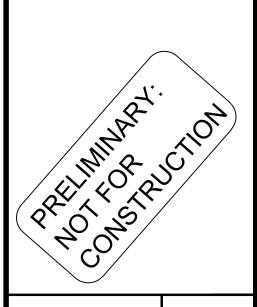
CP = COMPACT CAR PARKING ONLY

ACCESSIBILITY ARROW (IF APPLICABLE) DO NOT









15 DOUGLAS DRIVE, CRYSTAL, MN 58

14 AMPTON COMPANIES

NHOME

OUGL

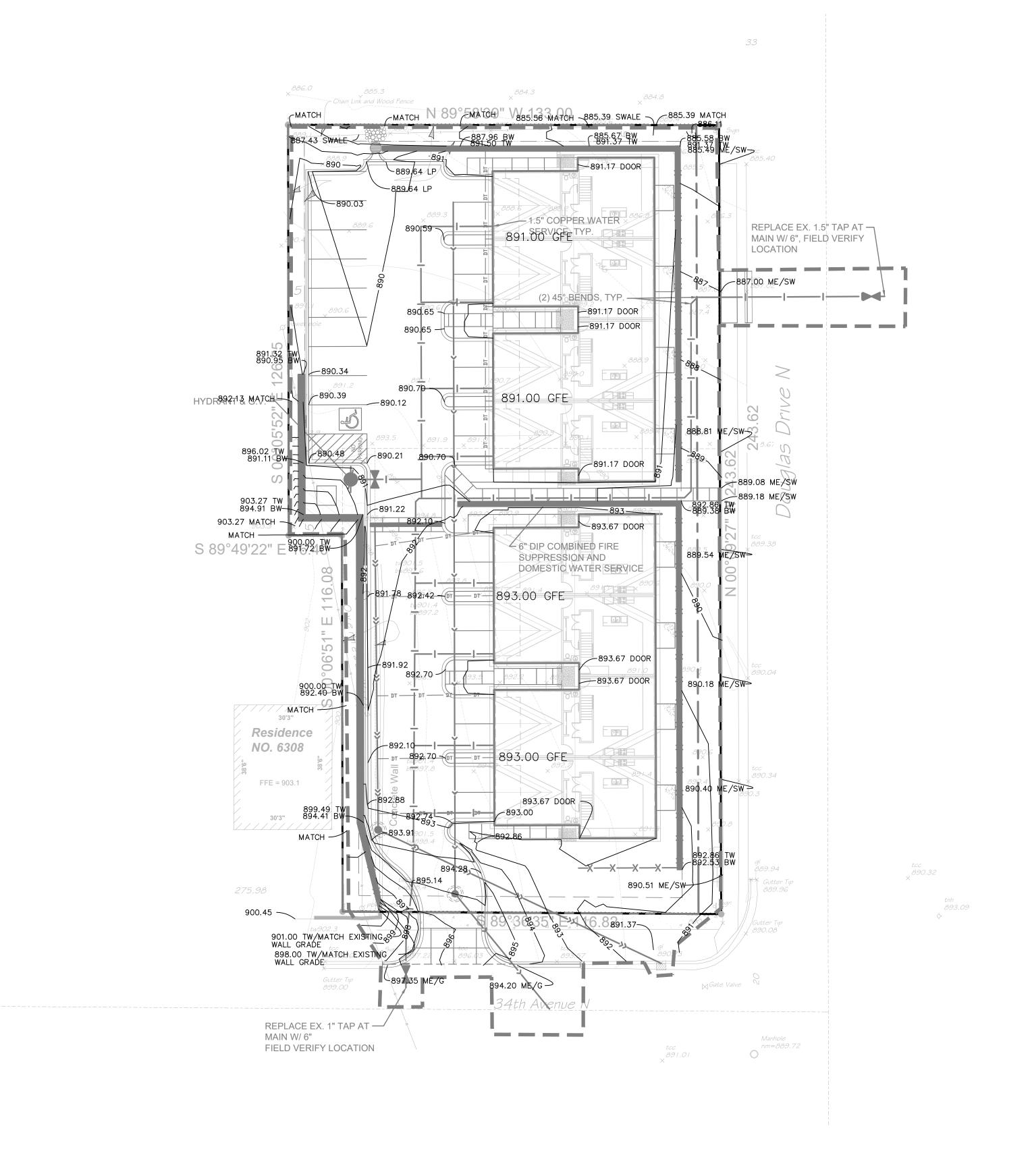
ISSUE/SUBMITTAL SUMMAR

ISSUE/SUBMITTAL SUMMARY				
DATE	DESCRIPTION			
03/14/2023	CITY SUBMITTAL			
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DRAWN BY:MI	D, NH REVIEWED BY: RL, JL			

PRAWN BY:MD, NH REVIEWED BY: RL, JORAWN BY:MD, NH REVIEWED BY: RL, JORAWN BY: RL,

SITE PLAN

C2.0
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CITY OF CRYSTAL GRADING NOTES:

1. RESERVED FOR CITY SPECIFIC GRADING NOTES.

EROSION CONTROL NOTES:

SEE SWPPP ON SHEETS SW1.0 - SW1.5

GROUNDWATER INFORMATION:

PER GEOTECHNICAL REPORT BY XXXXX, INC., DATED XX-XX-XX GROUNDWATER WAS OBSERVED AT ELEVATIONS RANGING FROM XXX.XX TO XXX.XX

THE BORINGS & GROUNDWATER ARE AS FOLLOWS:

XXX.XX SB-2 XXX.XX SB-3 XXX.XX

XXX.XX

SB-4

PROPOSED FOOTING DRAIN TILE INVERT ELEVATION = XXX.XX

GENERAL GRADING NOTES:



CONTRACTOR SHALL VERIFY ALL BUILDING ELEVATIONS, (FFE, LFE, GFE), PRIOR TO CONSTRUCTION BY CROSS CHECKING WITH ARCHITECTURA STRUCTURAL AND CIVIL ELEVATIONS FOR EQUIVALENT "100" ELEVATIONS. THIS MUST BE DONE PRIOR TO EXCAVATION AND INSTALLATION OF A FOOTING MATERIALS. VERIFICATION OF THIS COORDINATION SHALL BE CONFIRMED IN WRITING BY CIVIL, SURVEYOR, ARCHITECTURAL, STRUCTURAL AND CONTRACTOR PRIOR TO CONSTRUCTION.

2. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILIT LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.

3. SEE SITE PLAN FOR HORIZONTAL LAYOUT & GENERAL GRADING NOTES.

- 4. THE CONTRACTOR SHALL COMPLETE THE SITE GRADING CONSTRUCTION (INCLUDING BUT NOT LIMITED TO SITE PREPARATION, SOIL CORRECTION) EXCAVATION, EMBANKMENT, ETC.) IN ACCORDANCE WITH THE REQUIREMENTS OF THE OWNER'S SOILS ENGINEER. ALL SOIL TESTING SHALL BE COMPLETED BY THE OWNER'S SOILS ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL REQUIRED SOIL TESTS AN INSPECTIONS WITH THE SOILS ENGINEER.
- 5. ANY ELEMENTS OF AN EARTH RETENTION SYSTEM AND RELATED EXCAVATIONS THAT FALL WITHIN THE PUBLIC RIGHT OF WAY WILL REQUIRE A "REGHT OF WAY EXCAVATION PERMIT". CONTRACTOR IS RESPONSIBLE FOR AQUIRING THIS PERMIT PRIOR TO CONSTRUCTION IF APPLICABLE
- 6. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- GRADING AND EXCAVATION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTE (NPDES) PERMIT REQUIREMENTS & PERMIT REQUIREMENTS OF THE CITY.
- 4. PROPOSED SPOT GRADES ARE FLOW-LINE FINISHED GRADE ELEVATIONS, UNLESS OTHERWISE NOTED.
- 5. GRADES OF WALKS SHALL BE INSTALLED WITH 5% MAX. LONGITUDINAL SLOPE AND 1% MIN. AND 2% MAX. CROSS SLOPE, UNLESS OTHERWISE N
- 6. PROPOSED SLOPES SHALL NOT EXCEED 3:1 UNLESS INDICATED OTHERWISE ON THE DRAWINGS. MAXIMUM SLOPES IN MAINTAINED AREAS IS 4:
- PROPOSED RETAINING WALLS, FREESTANDING WALLS, OR COMBINATION OF WALL TYPES GREATER THAN 4' IN HEIGHT SHALL BE DESIGNED AN ENGINEERED BY A REGISTERED RETAINING WALL ENGINEER. DESIGN DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF GRADE STAKES THROUGHOUT THE DURATION OF CONSTRUCTION TO ESTABLIS PROPER GRADES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR A FINAL FIELD CHECK OF FINISHED GRADES ACCEPTABLE TO THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO TOPSOIL AND SODDING ACTIVITIES.
- 9. IF EXCESS OR SHORTAGE OF SOIL MATERIAL EXISTS, THE CONTRACTOR SHALL TRANSPORT ALL EXCESS SOIL MATERIAL OFF THE SITE TO AN ARE SELECTED BY THE CONTRACTOR, OR IMPORT SUITABLE MATERIAL TO THE SITE.
- 10. EXCAVATE TOPSOIL FROM AREAS TO BE FURTHER EXCAVATED OR REGRADED AND STOCKPILE IN AREAS DESIGNATED ON THE SITE. THE CONTRACTOR SHALL SALVAGE ENOUGH TOPSOIL FOR RESPREADING ON THE SITE AS SPECIFIED. EXCESS TOPSOIL SHALL BE PLACED IN EMBANKMENT AREAS, OUTSIDE OF BUILDING PADS, ROADWAYS AND PARKING AREAS. THE CONTRACTOR SHALL SUBCUT CUT AREAS, WHERE TO TO BE ESTABLISHED, TO A DEPTH OF 6 INCHES. RESPREAD TOPSOIL IN AREAS WHERE TURF IS TO BE ESTABLISHED TO A MINIMUM DEPTH OF 6 INCHES
- 11. FINISHED GRADING SHALL BE COMPLETED. THE CONTRACTOR SHALL UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING, INCLUDING ADJACI TRANSITION AREAS. PROVIDE A SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCES, WITH UNIFORM LEVELS OR SLOPES BETWEEN POIL WHERE ELEVATIONS ARE SHOWN, OR BETWEEN SUCH POINTS AND EXISTING GRADES. AREAS THAT HAVE BEEN FINISH GRADED SHALL BE PROTECTED FROM SUBSEQUENT CONSTRUCTION OPERATIONS, TRAFFIC AND EROSION. REPAIR ALL AREAS THAT HAVE BECOME RUTTED BY $^\circ$ OR ERODED BY WATER OR HAS SETTLED BELOW THE CORRECT GRADE. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BI RESTORED TO EQUAL OR BETTER THAN ORIGINAL CONDITION OR TO THE REQUIREMENTS OF THE NEW WORK.
- 12. PRIOR TO PLACEMENT OF THE AGGREGATE BASE, A TEST ROLL WILL BE REQUIRED ON THE STREET AND/OR PARKING AREA SUBGRADE. THE CONTRACTOR SHALL PROVIDE A LOADED TANDEM AXLE TRUCK WITH A GROSS WEIGHT OF 25 TONS. THE TEST ROLLING SHALL BE AT THE DIREC OF THE SOILS ENGINEER AND SHALL BE COMPLETED IN AREAS AS DIRECTED BY THE SOILS ENGINEER. THE SOILS ENGINEER SHALL DETERMINE WHICH SECTIONS OF THE STREET OR PARKING AREA ARE UNSTABLE. CORRECTION OF THE SUBGRADE SOILS SHALL BE COMPLETED IN ACCORD WITH THE REQUIREMENTS OF THE SOILS ENGINEER. NO TEST ROLL SHALL OCCUR WITHIN 10' OF ANY UNDERGROUND STORM RETENTION/DETENT SYSTEMS.
- 13. TOLERANCES
- 13.1. THE BUILDING SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.30 FOOT ABOVE, OR 0.30 FOOT BELOW, THE PRESCRIBED ELEVATION AT ANY POINT WHERE MEASUREMENT IS MADE.
- 13.2. THE STREET OR PARKING AREA SUBGRADE FINISHED SURFACE ELEVATION SHALL NOT VARY BY MORE THAN 0.05 FOOT ABOVE, OR 0.10 FOO BELOW, THE PRESCRIBED ELEVATION OF ANY POINT WHERE MEASUREMENT IS MADE.
- 13.3. AREAS WHICH ARE TO RECEIVE TOPSOIL SHALL BE GRADED TO WITHIN 0.30 FOOT ABOVE OR BELOW THE REQUIRED ELEVATION, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
- 13.4. TOPSOIL SHALL BE GRADED TO PLUS OR MINUS 1/2 INCH OF THE SPECIFIED THICKNESS.
- 14. MAINTENANCE
- 14.1. THE CONTRACTOR SHALL PROTECT NEWLY GRADED AREAS FROM TRAFFIC AND EROSION, AND KEEP AREA FREE OF TRASH AND DEBRIS.
- 14.2. CONTRACTOR SHALL REPAIR AND REESTABLISH GRADES IN SETTLED, ERODED AND RUTTED AREAS TO SPECIFIED TOLERANCES. DURING TI CONSTRUCTION, IF REQUIRED, AND DURING THE WARRANTY PERIOD, ERODED AREAS WHERE TURF IS TO BE ESTABLISHED SHALL BE RESEEDED
- 14.3. WHERE COMPLETED COMPACTED AREAS ARE DISTURBED BY SUBSEQUENT CONSTRUCTION OPERATIONS OR ADVERSE WEATHER, CONTRACTOR SHALL SCARIFY, SURFACE, RESHAPE, AND COMPACT TO REQUIRED DENSITY PRIOR TO FURTHER CONSTRUCTION.

ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION 03/14/2023 CITY SUBMITTAL

GRADING PLAN LEGEND:

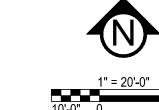
EX. 1' CONTOUR ELEVATION INTERVAL 1.0' CONTOUR ELEVATION INTERVAL SPOT GRADE ELEVATION (GUTTER/FLOW LINE UNLESS OTHERWISE NOTED) 891.00 G SPOT GRADE ELEVATION GUTTER 891.00 TC SPOT GRADE ELEVATION TOP OF CURB 891.00 BS/TS SPOT GRADE ELEVATION BOTTOM OF STAIRS/TOP OF STAIRS SPOT GRADE ELEVATION MATCH EXISTING 891.00 ME **GRADE BREAK - HIGH POINTS**

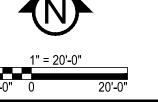


Know what's below. Call before you dig.

EMERGENCY OVERFLOW

CURB AND GUTTER (T.O = TIP OUT)

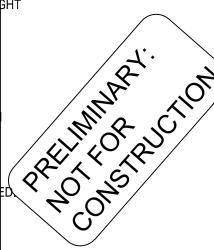




5000 Glenwood Avenue

civilsitegroup.com

Golden Valley, MN 55422



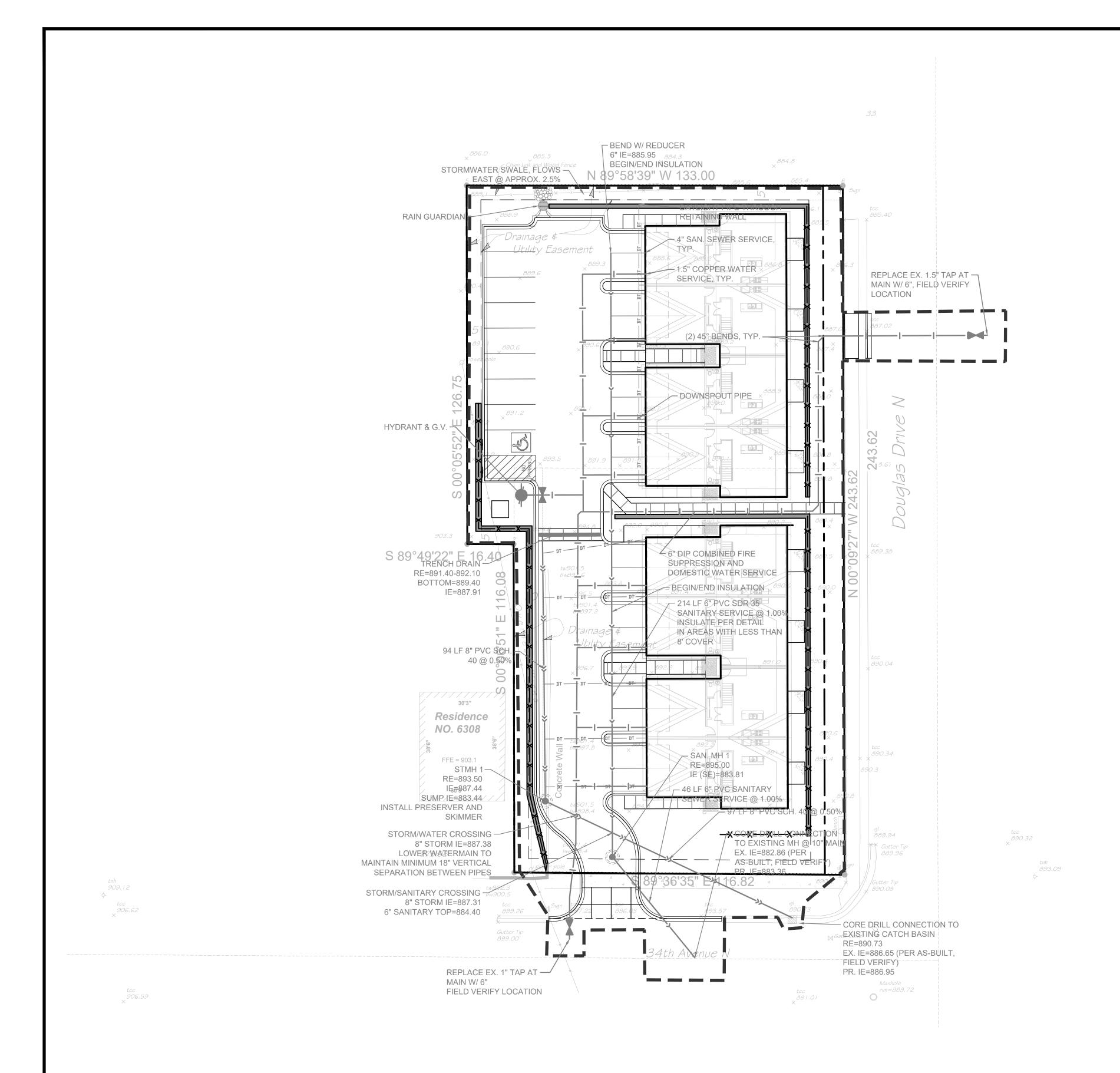
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DRAWN BY:MD. NH REVIEWED BY: RL. PROJECT NUMBER: 23035

REVISION SUMMARY DATE DESCRIPTION

GRADING PLAN



CITY OF CRYSTAL UTILITY NOTES:

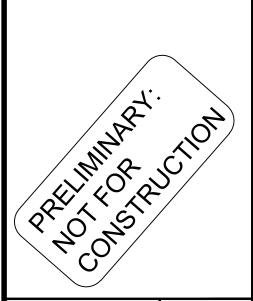
1. RESERVED FOR CITY SPECIFIC UTILITY NOTES.

GENERAL UTILITY NOTES:

- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 2. SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
- 3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS
- 4. UTILITY INSTALLATION SHALL CONFORM TO THE CURRENT EDITION OF "STANDARD SPECIFICATIONS FOR WATER MAIN AND SERVICE LINE INSTALLATION" AND "SANITARY SEWER AND STORM SEWER INSTALLATION" AS PREPARED BY THE CITY ENGINEERS ASSOCIATION OF MINNESOTA (CEAM), AND SHALL CONFORM WITH THE REQUIREMENTS OF THE CITY AND THE PROJECT SPECIFICATIONS.
- 5. CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND RE-USED OR PLACED AT THE DIRECTION OF THE OWNER.
- 6. ALL WATER PIPE SHALL BE CLASS 52 DUCTILE IRON PIPE (DIP) AWWA C151, ASME B16.4, AWWA C110, AWWA C153 UNLESS OTHERWISE NOTED.
- 7. ALL SANITARY SEWER SHALL BE SDR 26 POLYVINYL CHLORIDE (PVC) ASTM D3034 & F679, OR SCH 40 ASTM D1785, 2665, ASTM F794, 1866) UNLESS OTHERWISE NOTED.
- 8. ALL STORM SEWER PIPE SHALL BE HDPE ASTM F714 & F2306 WITH ASTM D3212 SPEC FITTINGS UNLESS OTHERWISE NOTED.
- 9. PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
- 10. UTILITIES ON THE PLAN ARE SHOWN TO WITHIN 5' OF THE BUILDING FOOTPRINT. THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR THE FINAL CONNECTION TO BUILDING LINES. COORDINATE WITH ARCHITECTURAL AND MECHANICAL PLANS.
- 11. CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.15 FEET PER DETAILS. RIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT SUMPED ELEVATIONS.
- 12. ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
- 13. HYDRANT TYPE, VALVE, AND CONNECTION SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. HYDRANT EXTENSIONS ARE INCIDENTAL.
- 14. A MINIMUM OF 8 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
- 15. A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS
- 16. ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
- 17. CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
- 18. COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
- 19. COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
- 20. ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- 21. ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC
- 22. 2CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
- 23. CONTRACTOR SHALL COORDINATE CONNECTION OF IRRIGATION SERVICE TO UTILITIES. COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES NECESSARY AS TO NOT IMPACT INSTALLATION OF UTILITIES.
- 24. CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION
- 25. ALL JOINTS AND CONNECTIONS IN STORM SEWER SYSTEM SHALL BE GASTIGHT OR WATERTIGHT. APPROVED RESILIENT RUBBER JOINTS MUST BE USED TO MAKE WATERTIGHT CONNECTIONS TO MANHOLES, CATCHBASINS, OR OTHER STRUCTURES.
- 26. ALL PORTIONS OF THE STORM SEWER SYSTEM LOCATED WITHIN 10 FEET OF THE BUILDING OR WATER SERVICE LINE MUST BE TESTED IN ACCORDANCE WITH MN RULES, CHAPTER 4714, SECTION 1109.0.
- 27. FOR ALL SITES LOCATED IN CLAY SOIL AREAS, DRAIN TILE MUST BE INSTALLED AT ALL LOW POINT CATCH BASINS 25' IN EACH DIRECTION. SEE PLAN AND DETAIL. INSTALL LOW POINT DRAIN TILE PER PLANS AND GEOTECHNICAL REPORT RECOMMENDATIONS AND REQUIREMENTS.

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DATE DESCRIPTION 03/14/2023 CITY SUBMITTAL

ISSUE/SUBMITTAL SUMMARY

OUG

DRAWN BY:MD, NH REVIEWED BY: RL, PROJECT NUMBER: 23035

UTILITY PLAN

PROPOSED FIRE HYDRANT REVISION SUMMARY DATE DESCRIPTION

STORM SEWER FES AND RIP RAP

SANITARY SEWER

MANHOLE

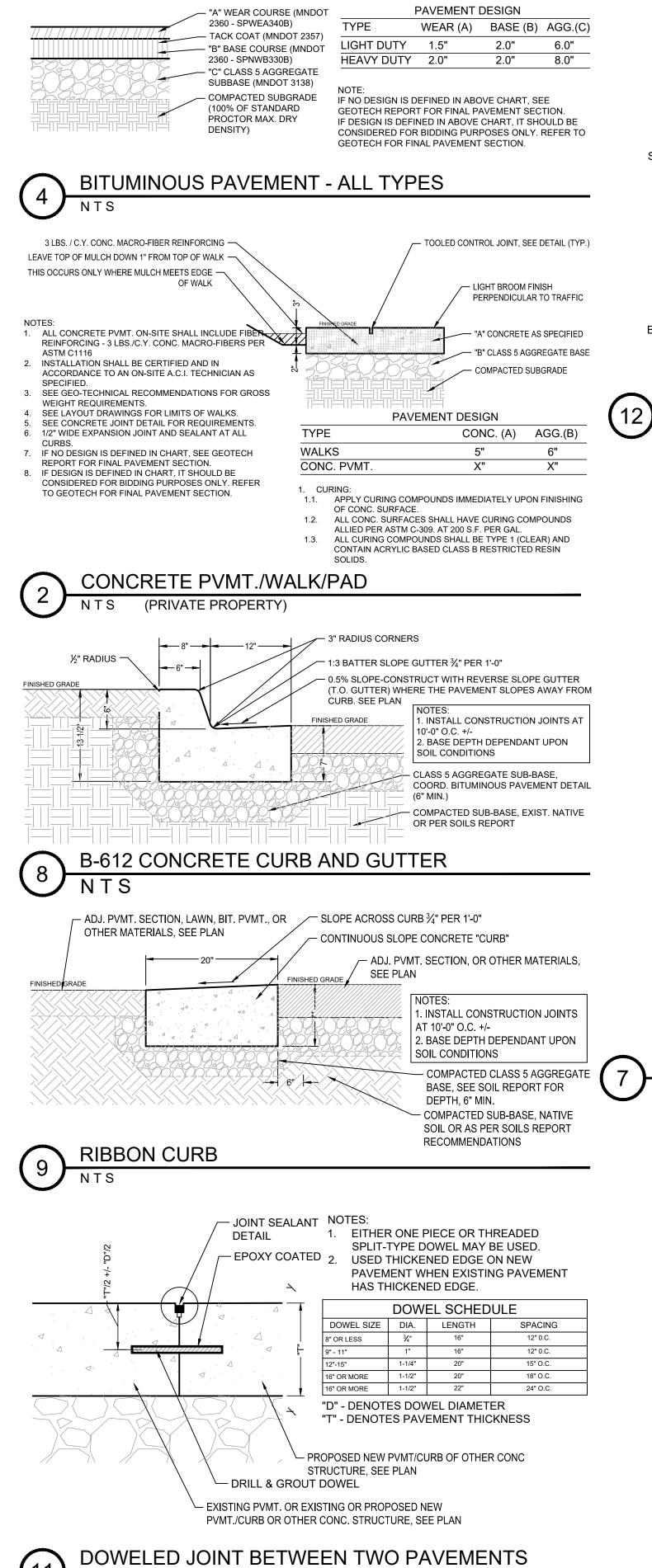
CATCH BASIN

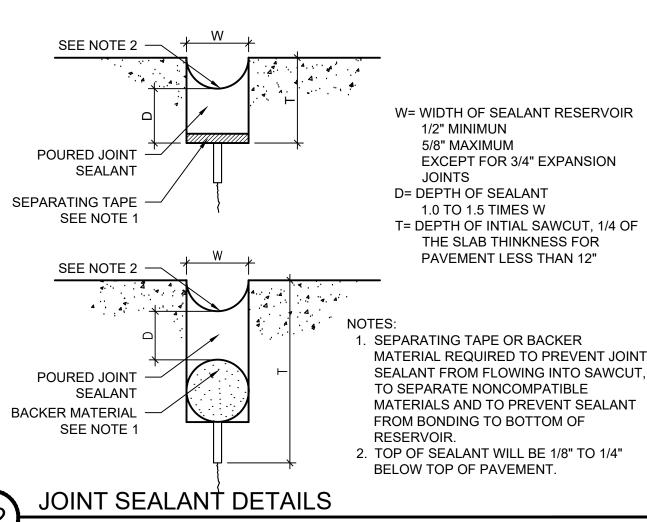
WATER MAIN

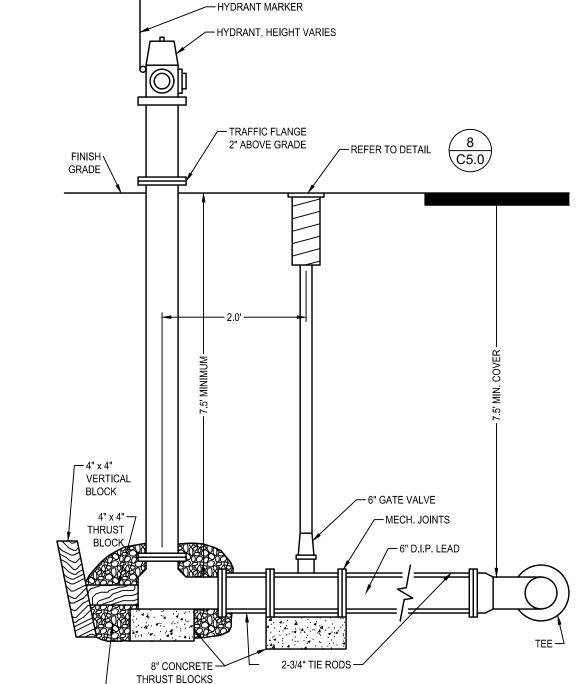
GATE VALVE AND VALVE BOX

UTILITY LEGEND:

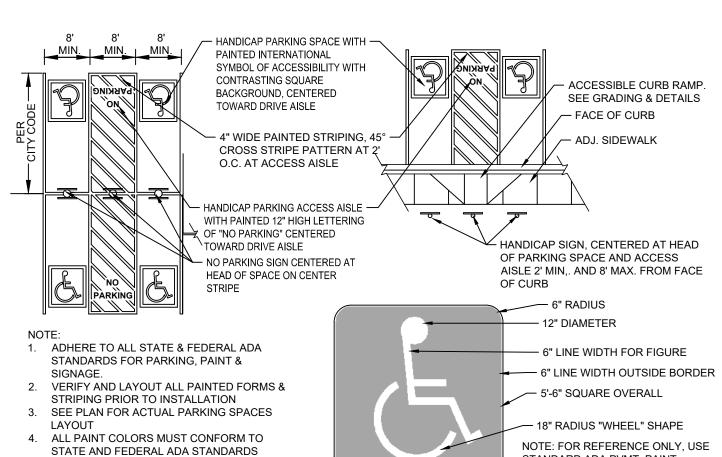
Know what's below. Call before you dig.







FIRE HYDRANT

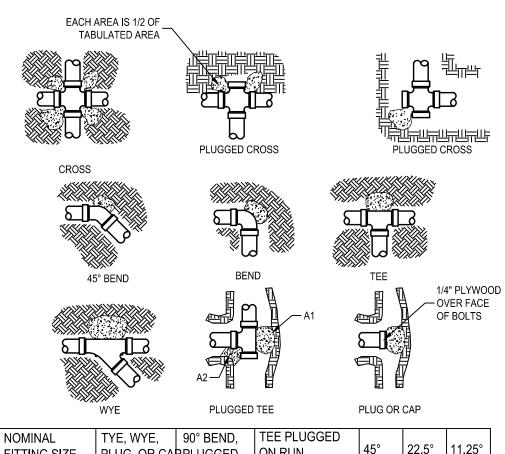


ACCESSIBLE PARKING PAVEMENT MARKING

STANDARD ADA PVMT. PAINT

TEMPLATE

PAINTED SYMBOL DIAGRAM



NOMINAL FITTING SIZE	TYE, WYE, PLUG, OR CA		TEE PLUGGED ON RUN		45°	22.5°	11.25°
(INCHES)		CROSS	A1	A2	BEND	BEND	BEND
4	1.0	1.4	1.9	1.4	1.0	-	-
6	2.1	3.0	4.3	3.0	1.6	1.0	-
6	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.6	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.6
20	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8
OTEO.				•			

NOTES:
1. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.

CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDI
 KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.

2. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
3. IF NOT SHOWN ON PLANS, REQUIRED BEARING AT FITTING SHALL BE AS INDICATED ABOVE, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S) AND ALLOWABLE SOIL BEARING STRESS(ES).
4. BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS

AND BLOCKING DETAILS SHOWN THIS STANDARD DETAIL.

5. ABOVE BEARING AREAS BASED ON TEST PRESSURE OF 150 P.S.I. AND AN ALLOWABLE SOIL BEARING STRESS OF 2000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) X (200/SOIL BEARING

8

THRUST BLOCK

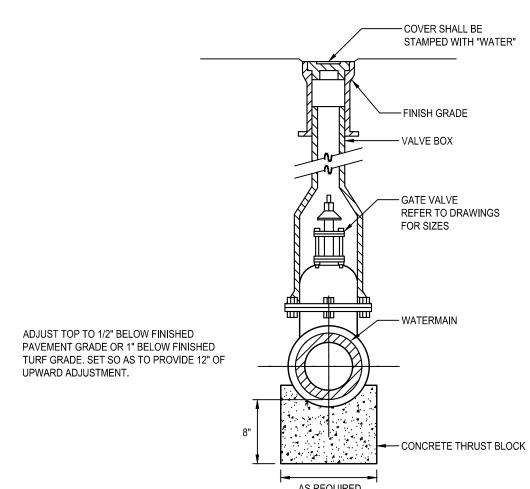
GENERAL DETAILS NOTES:

STRESS) X (TABLE VALUE).

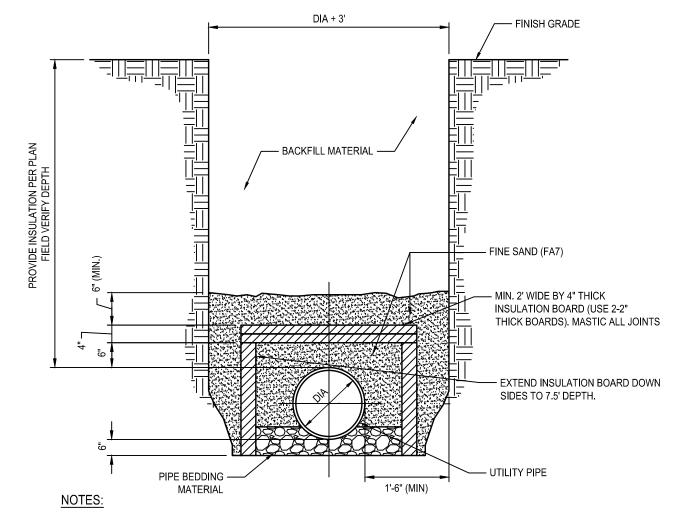
ALL CONCRETE CURBS & ADJACENT CONCRETE FLAT WORK SHALL BE DOWELED PER DETAIL

ALL CONCRETE FLAT WORK SHALL HAVE WELDED WIRE MESH

CONTRACTOR SHALL REVIEW ALL CIVIL AND ARCHITECTURAL DETAILS PRIOR TO WORK. ANY REDUNDANT, CONTRADICTORY OR CONFLICTING INFORMATION PRESENTED IN ANY PLAN OR DETAIL THROUGHOUT THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT AND CIVIL ENGINEER AND RESOLVED PRIOR TO WORK COMMENCING.



GATE VALVE BOX

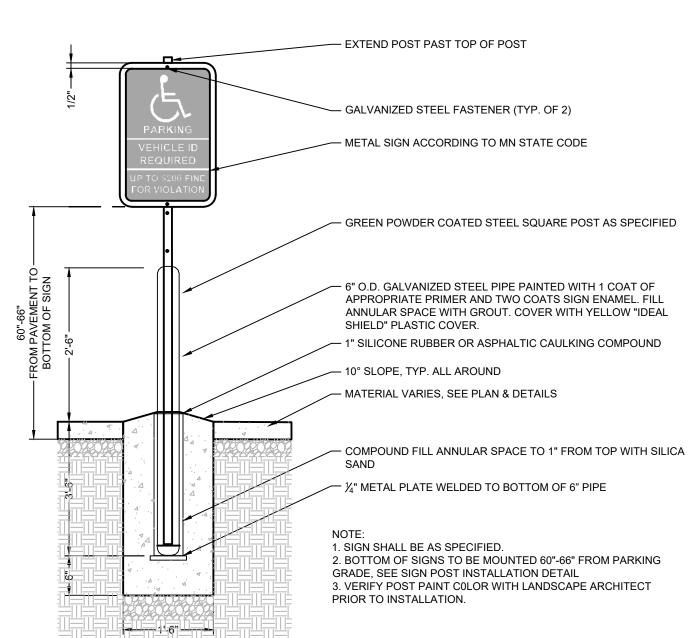


1. INSULATION BOARD TO BE CLOSED CELL. EXTRUDED POLYSTYRENE FOAM MEETING ASTM 578, TYPE VI, 40PSI COMPRESSING STRENGTH (ASTM D1621) 0.1%MAX. WATER ABSORPTION (ASTM C272).

2. BACKFILL MATERIAL AROUND INSULATION MUST BE FINE SAND FREE FROM ROOT, ORGANIC MATERIAL, OR OTHER INJURIOUS MATERIALS.

3. OVERLAP ALL INSULATION BOARD JOINTS.





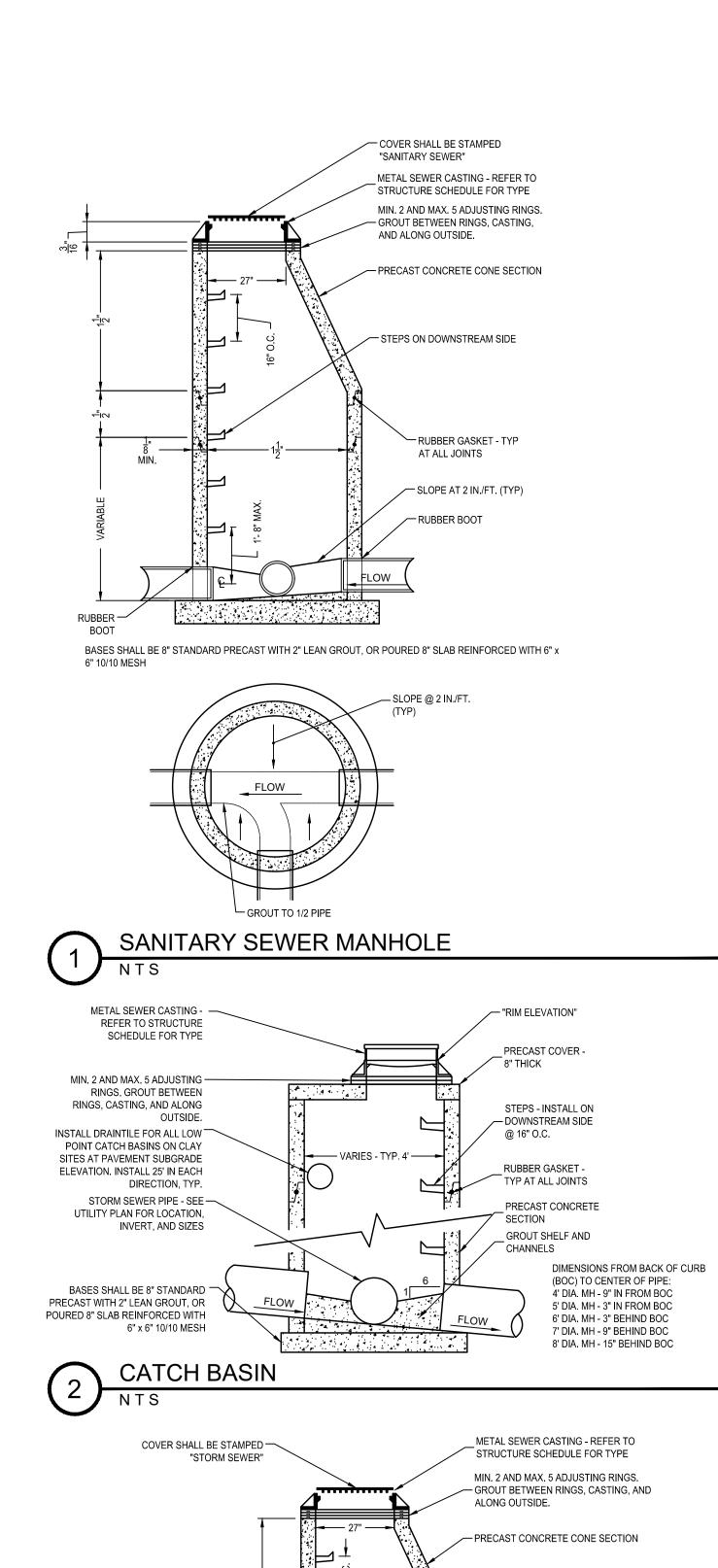
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AMPT



DIMENSIONS FROM BACK OF CURB (BOC) TO CENTER OF PIPE: 4' DIÁ. MH - 9" IN FROM BOC 5' DIA. MH - 3" IN FROM BOC 6' DIA. MH - 3" BEHIND BOC 7' DIA. MH - 9" BEHIND BOC

STORM MANHOLE

8' DIA, MH - 15" BEHIND BOC

TSTEPS ON DOWNSTREAM SIDE

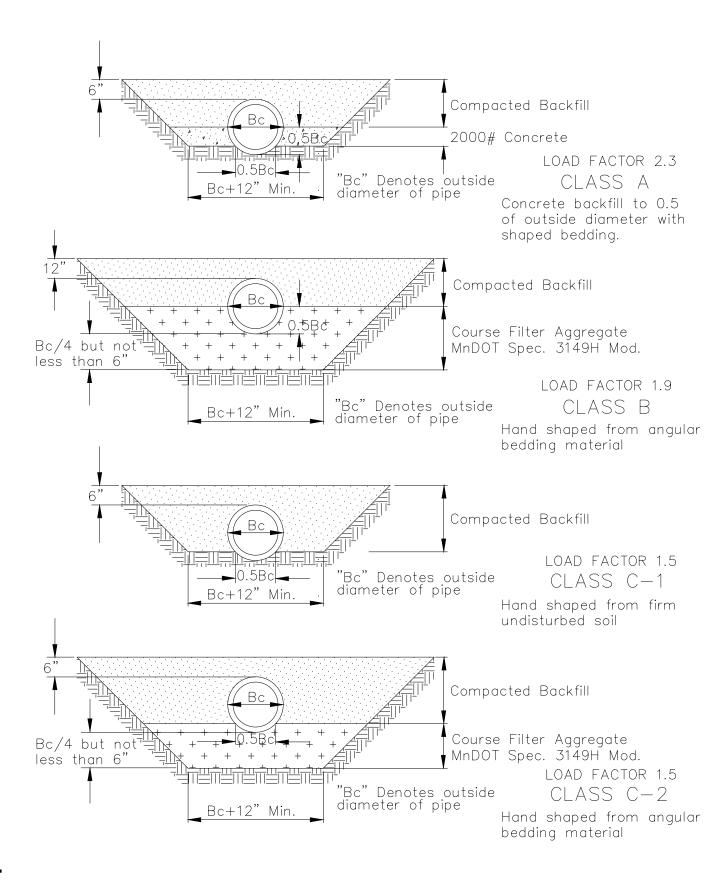
GROUT SHELF AND CHANNELS

BASES SHALL BE 8" STANDARD PRECAST

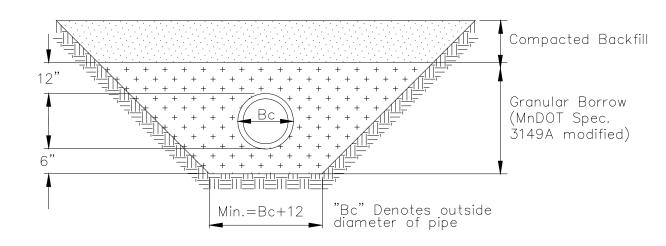
WITH 2" LEAN GROUT, OR POURED 8"

SLAB REINFORCED WITH 6" x 6" 10/10

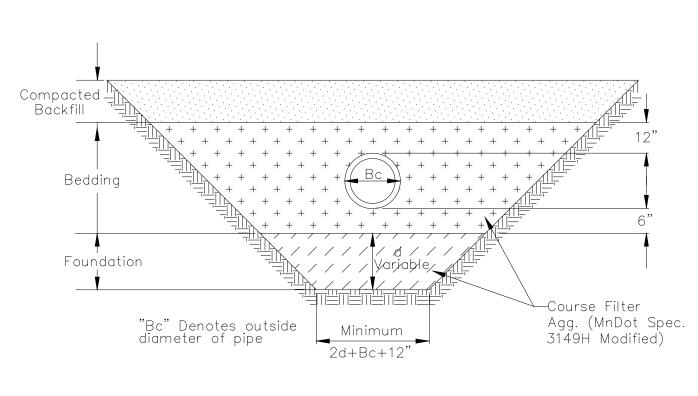
VARIABLE





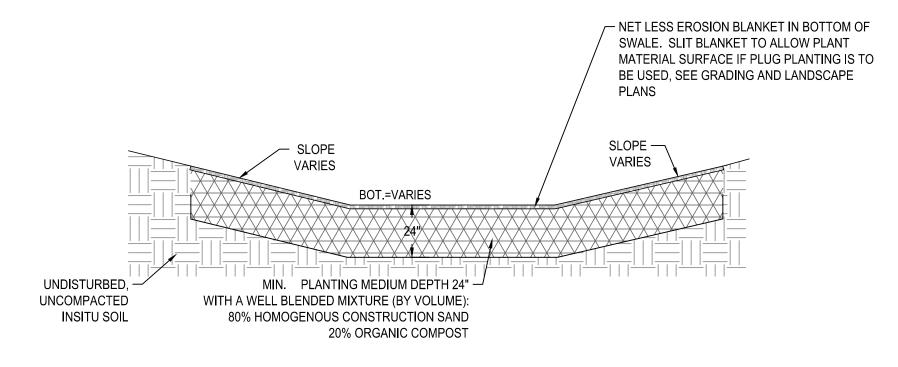


PIPE FOUNDATION & BEDDING IN GOOD SOILS

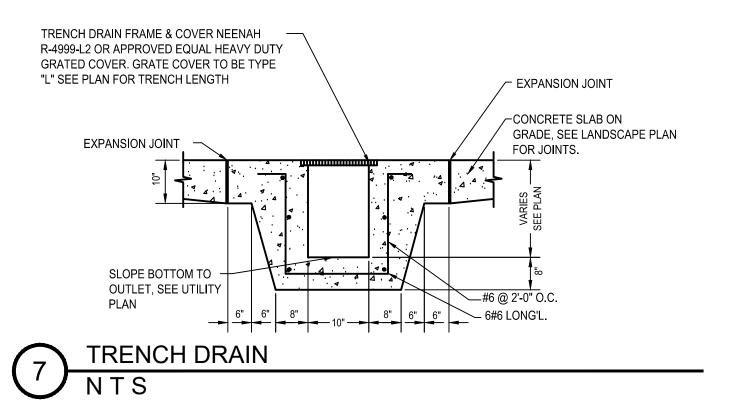


PIPE FOUNDATION & BEDDING IN POOR SOILS





SWALE - CROSS SECTION

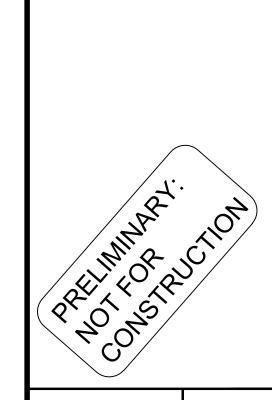


GENERAL DETAILS NOTES:

ALL CONCRETE CURBS & ADJACENT CONCRETE FLAT WORK SHALL BE DOWELED PER DETAIL

ALL CONCRETE FLAT WORK SHALL HAVE WELDED WIRE MESH

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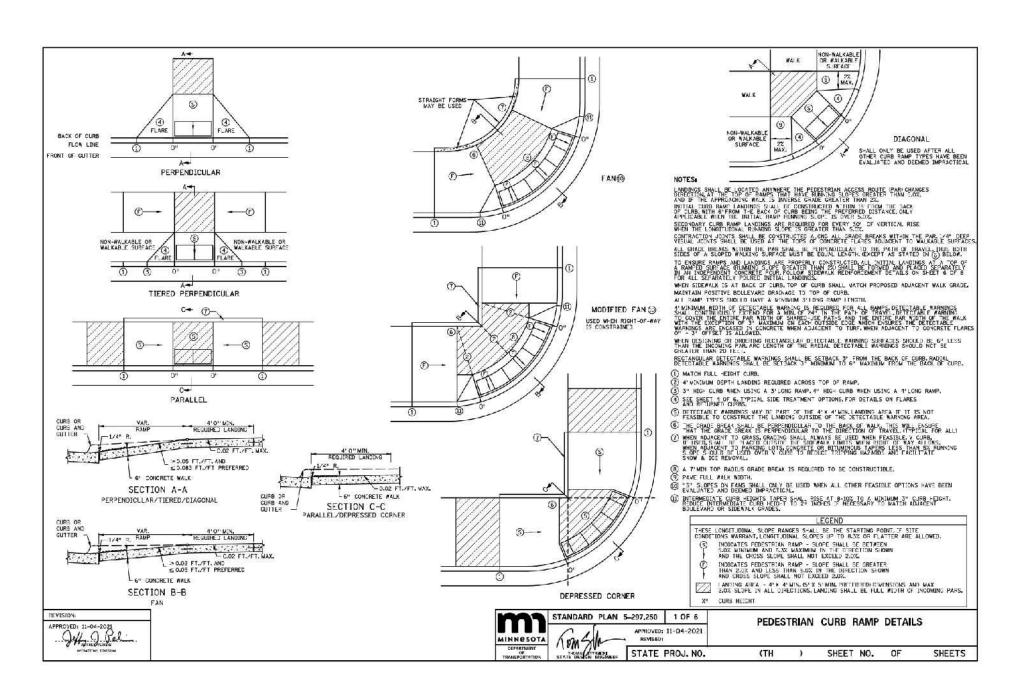
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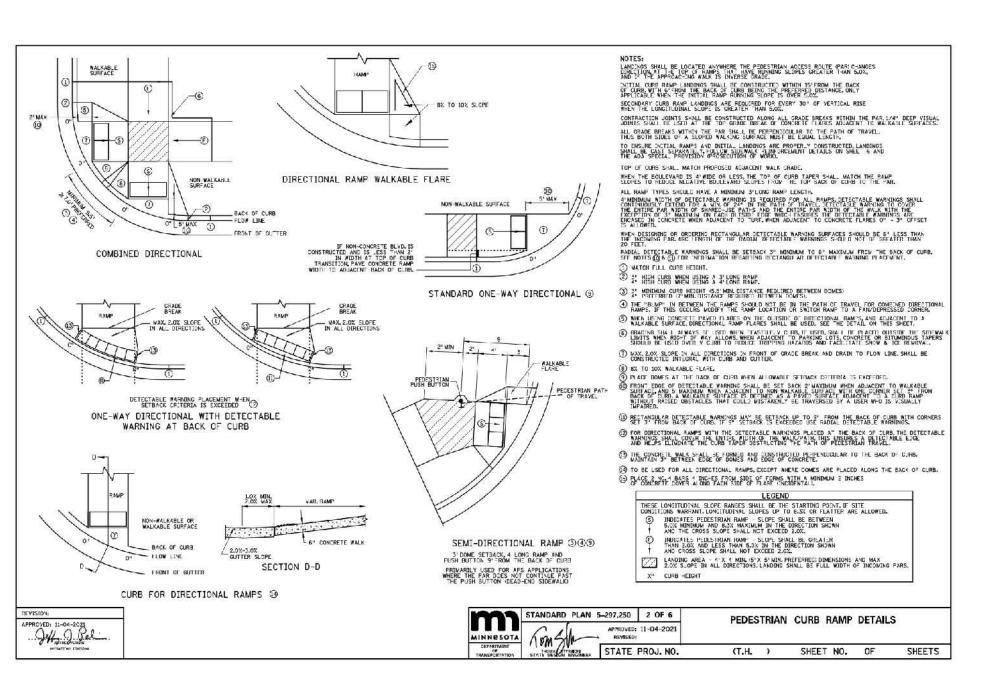
AMPTON

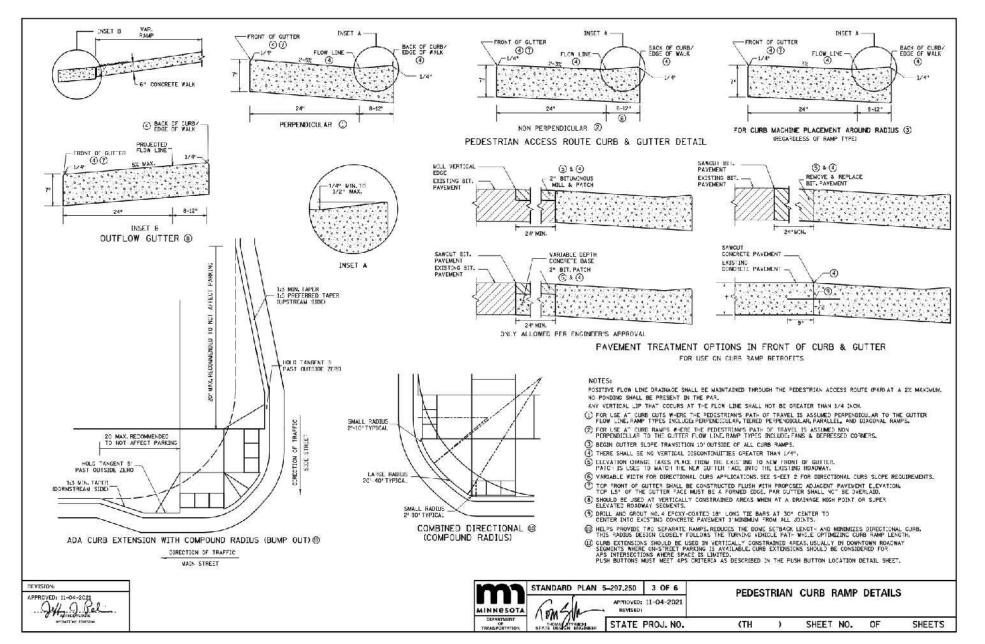
ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION 03/14/2023 CITY SUBMITTAL

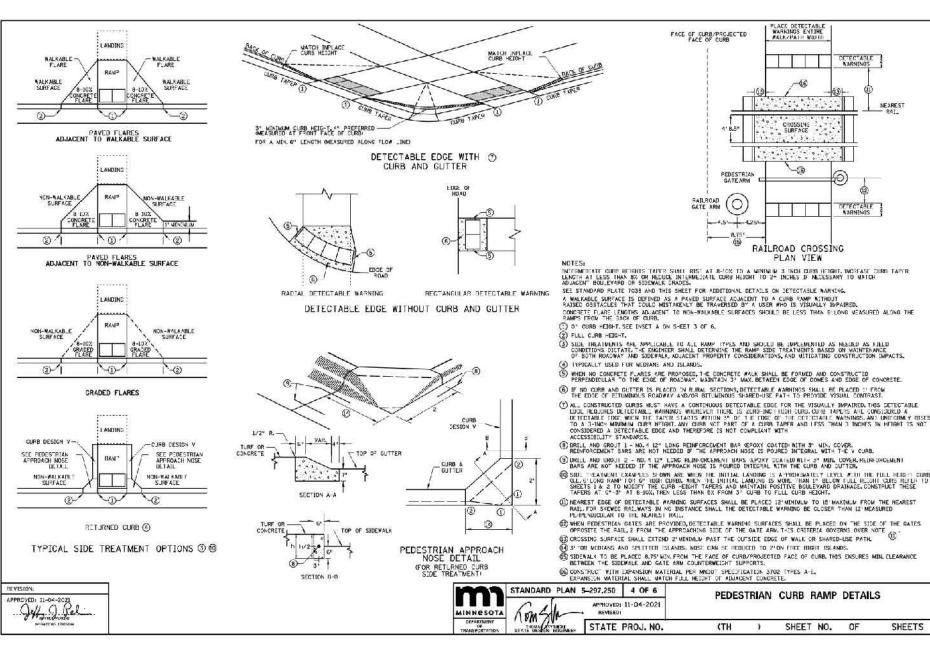
DRAWN BY:MD, NH REVIEWED BY: RL, PROJECT NUMBER: 23035 **REVISION SUMMARY** DATE DESCRIPTION

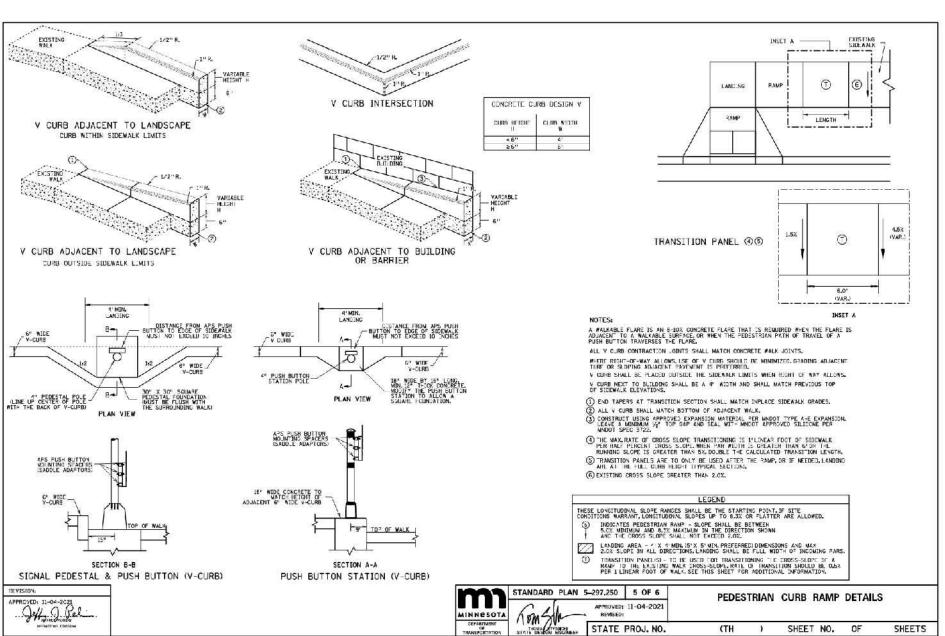
CIVIL DETAILS

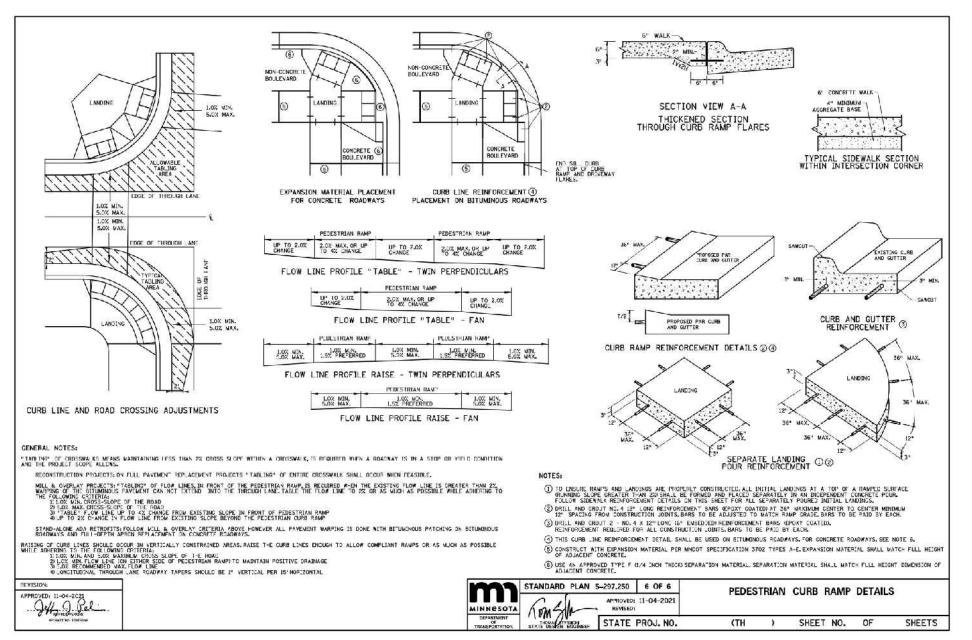












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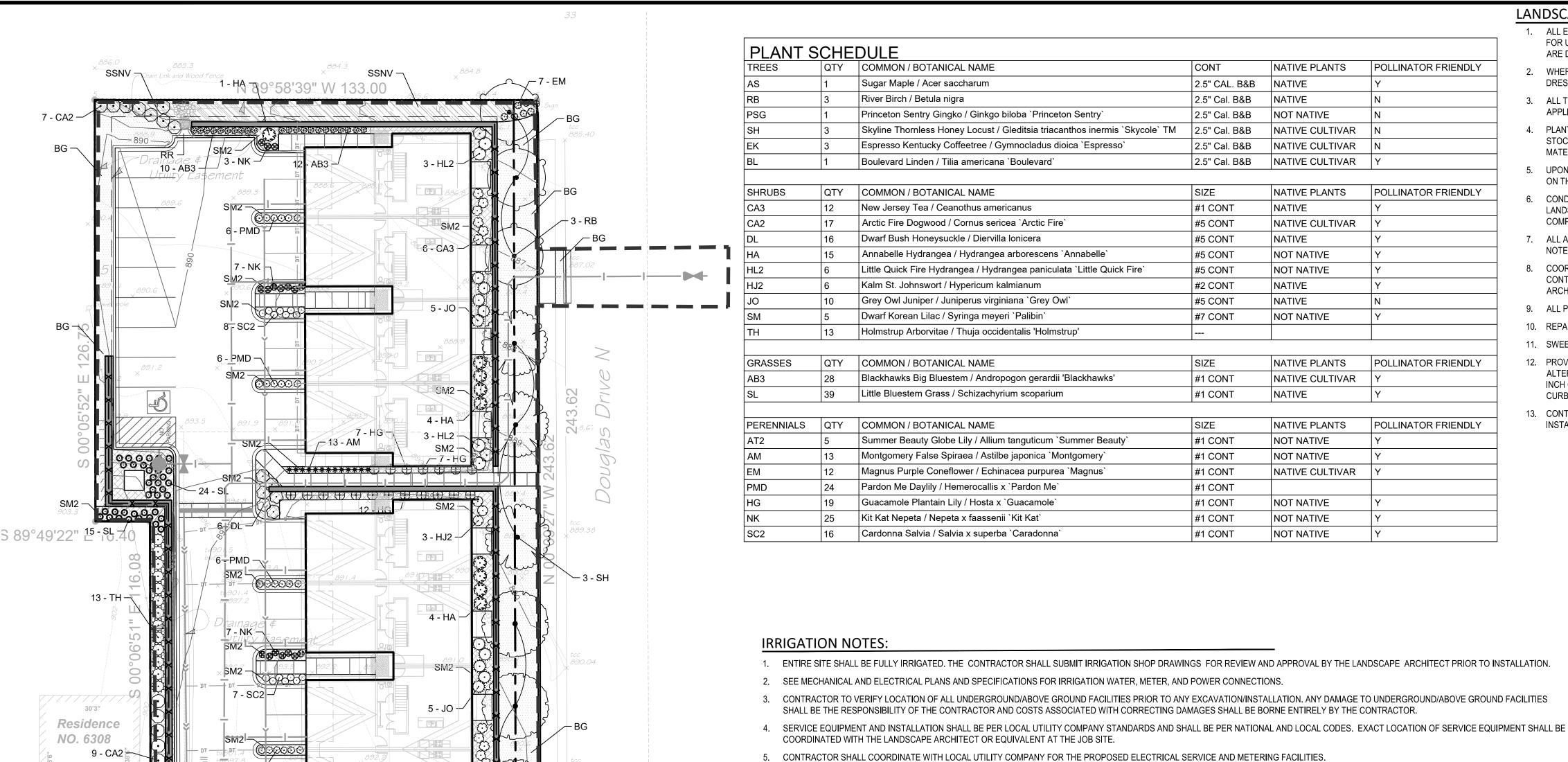
DOUGLAS DRIVE, 3401-3415 DOUGLAS DRIVE,

CIVIL DETAILS

REVISION SUMMARY

DATE DESCRIPTION

C5.2



- PMD -

6 - CA3

Street Frontage Trees Required Trees Provided

EDGING

NO

YES

NA

FABRIC

REMARKS

SEE DETAIL SHT. L1.1

MULCH SCHEDULE

NOTE: COORDINATE ALL MULCH AND PLANTING BED MATERIAL PRIOR TO INSTALLATION, PROVIDE SAMPLES AND SHOP DRAWINGS/PHOTOS/DATA SHEETS OF ALL

MULCH TYPE

4" DEPTH, SHREDDED CEDAR

4" DEPTH, SHREDDED CEDAR

2 SIDED NAT. NET STRAW BLANKET

FFE = 903.1

Require d Landscape

TREE RINGS

MATERIALS

PLANTING BEDS

NATIVE SEED AREAS

1 Overstory Tree/30' of lot frontage

AREA

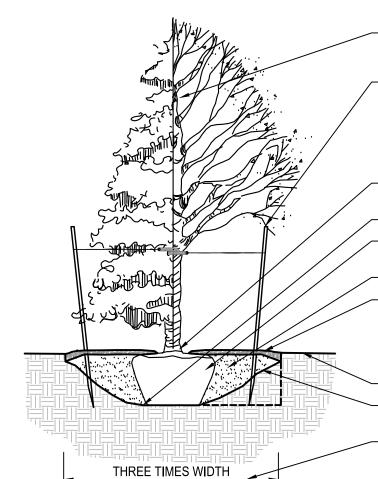
Shrubs along building foundation, when visable to a public street.

SEE SHEET L1.1 FOR PLANTING SCHEDULE

10 - DL —

LANDSCAPE NOTES:

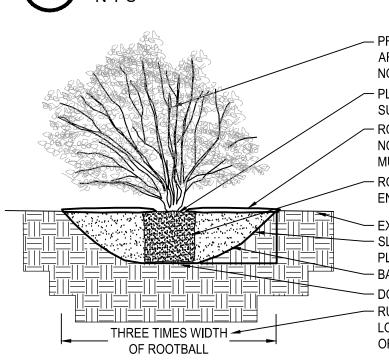
- 1. ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1166) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- 2. WHERE SHOWN, SHRUB & PERENNIAL BEDS SHALL BE MULCHED WITH 4" DEPTH (MINIMUM AFTER INSTALLATION AND/OR TOP DRESSING OPERATIONS) OF SHREDDED CEDAR MULCH.
- 3. ALL TREES SHALL BE MULCHED WITH SHREDDED CEDAR MULCH TO OUTER EDGE OF SAUCER OR TO EDGE OF PLANTING BED, IF APPLICABLE. ALL MULCH SHALL BE KEPT WITHIN A MINIMUM OF 2" FROM TREE TRUNK.
- 4. PLANT MATERIALS SHALL CONFORM WITH THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS AND SHALL BE OF HARDY STOCK, FREE FROM DISEASE, DAMAGE AND DISFIGURATION. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING PLUMPNESS OF PLANT MATERIAL FOR DURATION OF ACCEPTANCE PERIOD.
- 5. UPON DISCOVERY OF A DISCREPANCY BETWEEN THE QUANTITY OF PLANTS SHOWN ON THE SCHEDULE AND THE QUANTITY SHOWN ON THE PLAN, THE PLAN SHALL GOVERN.
- CONDITION OF VEGETATION SHALL BE MONITORED BY THE LANDSCAPE ARCHITECT THROUGHOUT THE DURATION OF THE CONTRACT LANDSCAPE MATERIALS PART OF THE CONTRACT SHALL BE WARRANTED FOR TWO (2) FULL GROWING SEASONS FROM SUBSTANTIAL
- 7. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES SHALL RECEIVE 6" LAYER TOPSOIL AND SOD AS SPECIFIED UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 8. COORDINATE LOCATION OF VEGETATION WITH UNDERGROUND AND OVERHEAD UTILITIES, LIGHTING FIXTURES, DOORS AND WINDOWS CONTRACTOR SHALL STAKE IN THE FIELD FINAL LOCATION OF TREES AND SHRUBS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 9. ALL PLANT MATERIALS SHALL BE WATERED AND MAINTAINED UNTIL ACCEPTANCE.
- REPAIR AT NO COST TO OWNER ALL DAMAGE RESULTING FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
- 11. SWEEP AND MAINTAIN ALL PAVED SURFACES FREE OF DEBRIS GENERATED FROM LANDSCAPE CONTRACTOR'S ACTIVITIES.
- 12. PROVIDE SITE WIDE IRRIGATION SYSTEM DESIGN AND INSTALLATION. SYSTEM SHALL BE FULLY PROGRAMMABLE AND CAPABLE OF ALTERNATE DATE WATERING. THE SYSTEM SHALL PROVIDE HEAD TO HEAD OR DRIP COVERAGE AND BE CAPABLE OF DELIVERING O INCH OF PRECIPITATION PER WEEK. SYSTEM SHALL EXTEND INTO THE PUBLIC RIGHT-OF-WAY TO THE EDGE OF PAVEMENT/BACK OF
- 13. CONTRACTOR SHALL SECURE APPROVAL OF PROPOSED IRRIGATION SYSTEM INLCUDING PRICING FROM OWNER, PRIOR TO INSTALLATION.



- PRUNE AS FIELD DIRECTED BY THE LANDSCAPE ARCHITECT TO IMPROVE APPEARANCE (RETAIN NORMAL TREE SHAPE)

- THREE 2"X4"X8' WOODEN STAKES, STAINED BROWN WITH TWO STRANDS OF WIRE TWISTED TOGETHER. STAKES SHALL BE PLACED AT 120° TO ONE ANOTHER. WIRE SHALL BE THREADED THROUGH NYLON STRAPPING WITH GROMMETS. ALTERNATE STABILIZIN METHODS MAY BE PROPOSED BY CONTRACTOR. TRUNK FLARE JUNCTION: PLANT TREE 1"-2" ABOVE
- EXISTING GRADE COMPACT BOTTOM OF PIT, TYP. - CUT AND REMOVE BURLAP FROM TOP 1/3 OF ROOT
- BALL. IF NON-BIODEGRADABLE, REMOVE COMPLETELY MULCH TO OUTER EDGE OF SAUCER OR TO EDGE OF
- PLANTING BED, IF APPLICABLE. ROCK OR ORGANIC MULCH, SEE GENERAL LANDSCAPE NOTES AND PLAN NOTES FOR MULCH TYPE. KEEP MULCH MIN. 2" FROM PLANT TRUNK
- SLOPE SIDES OF HOLE OR VERTICAL SIDES AT EDGE O
- RULE OF THUMB MODIFY EXCAVATION BASED ON LOCATION OF PLANT MATERIAL AND DESIGN OF BEDS

DECIDUOUS & CONIFEROUS TREE PLANTING



- PRUNE AS FIELD DIRECTED BY THE LANDSCAPE ARCHITECT TO IMPROVE APPEARANCE (RETAIN NORMAL SHAPE FOR SPECIES) - PLANT TOP OF ROOTBALL 1-2" ABOVE ABOVE

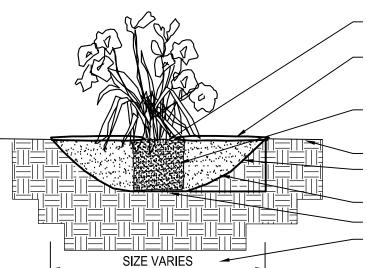
SURROUNDING GRADE ROCK OR ORGANIC MULCH, SEE GENERAL LANDSCAPE NOTES AND PLAN NOTES FOR MULCH TYPE. KEEP MULCH MIN. 2" FROM PLANT TRUNK ROOTS AT OUTER EDGE OF ROOTBALL LOOSENED TO

- SLOPE SIDES OF HOLE OR VERTICAL SIDES AT EDGE OF PLANTING BED

- BACKFILL AS PER SPECIFICATION DO NOT EXCAVATE BELOW ROOTBALL

- RULE OF THUMB - MODIFY EXCAVATION BASED ON LOCATION OF PLANT MATERIAL AND DESIGN OF BEDS OR OVERALL PLANT PLACEMENT

DECIDUOUS & CONIFEROUS SHRUB PLANTING



- PLANT TOP OF ROOTBALL 1-2" ABOVE ABOVE SURROUNDING GRADE

MULCH MIN. 2" FROM PLANT STEM - ROOTS AT OUTER EDGE OF ROOTBALL LOOSENED TO

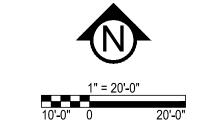
ENSURE PROPER BACKFILL-TO-ROOT CONTACT

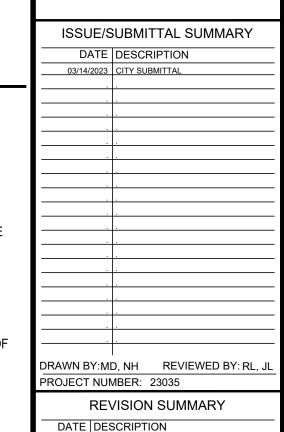
PLANTING BED

DO NOT EXCAVATE BELOW ROOTBALL

SEE LANDSCAPE PLAN PERENNIAL BED PLANTING







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LANDSCAPE PLAN

PLANTING BED OR OVERALL PLANT PLACEMENT

ENSURE PROPER BACKFILL-TO-ROOT CONTACT - EXISTING GRADE

ROCK OR ORGANIC MULCH, SEE GENERAL LANDSCAPE NOTES AND PLAN NOTES FOR MULCH TYPE. KEEP

- SLOPE SIDES OF HOLE OR VERTICAL SIDES AT EDGE OF

- BACKFILL AS PER SPECIFICATION

- MODIFY EXCAVATION BASED ON LOCATION OF PLANT MATERIAL AND DESIGN OF BEDS OR OVERALL PLANT



GROUND COVERS | CODE | COMMON / BOTANICAL NAME SIZE MN SEED MIX #34-262 WET PRAIRIE / LOWER BASIN SEED MIX MN SEED MIX #34-262 WET PRAIRIE, PER MNDOT SEEDING Seed Mix MANUAL SPECIFICATIONS (2014) SEEDING RATE: 14.5 LB/ACRE (128.4 SEEDS/SF) 4"-6" DIA. RIP RAP SIZED ROCK/STONE / RIP RAP ROCK MULCH RIP RAP SIZED 4-6" ON GEOTEXTILE FABRIC. SHREDDED CEDAR MULCH 3" DEEP / SHREDDED CEDAR MULCH DOUBLE SHREDDED CEDAR MULCH INSTALLED 4" DEEP ON GRADED AND PREPARED SOIL. PROVIDE EDGING AS REQ. ON LANDSCAPE PLAN. BLUE GRASS SOD / SOD BLUE GRASS SOD WITH IMPROVED VARIATIES, INSTALLED ON PREPARED SOIL, CONTAINING 6" OF TOPSOIL W/MINIMUM 4%

ROLL PREFERRED FOR LARGER AREAS.

PROPOSED EVERGREEN TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

PROPOSED CANOPY TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

6. IRRIGATION WATER LINE CONNECTION SIZE IS 1-½" AT BUILDING. VERIFY WITH MECHANICAL PLANS.COVAGE.

16. IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.

21. A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.

24. THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.

15. GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE

10. CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT

12. FABRICATE ALL PIPE TO MANUFACTURE'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF

17. CONTROL WIRES: 14 GAUGE DIRECT BURIAL, SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN

18. AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.

PLANT SCHEDULE

23. ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTENT 3" BEYOND PERIMETER OF VALVE

SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER. LABEL OR COLOR CODE ALL WIRES.

11. CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.

7. ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.

CONNECTION.

20. USE SCREENS ON ALL HEADS.

8. ALL LATERAL LINES SHALL BE 12" BELLOW FINISHED GRADE. 9. ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.

14. ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.

BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.

19. ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.

22. ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.

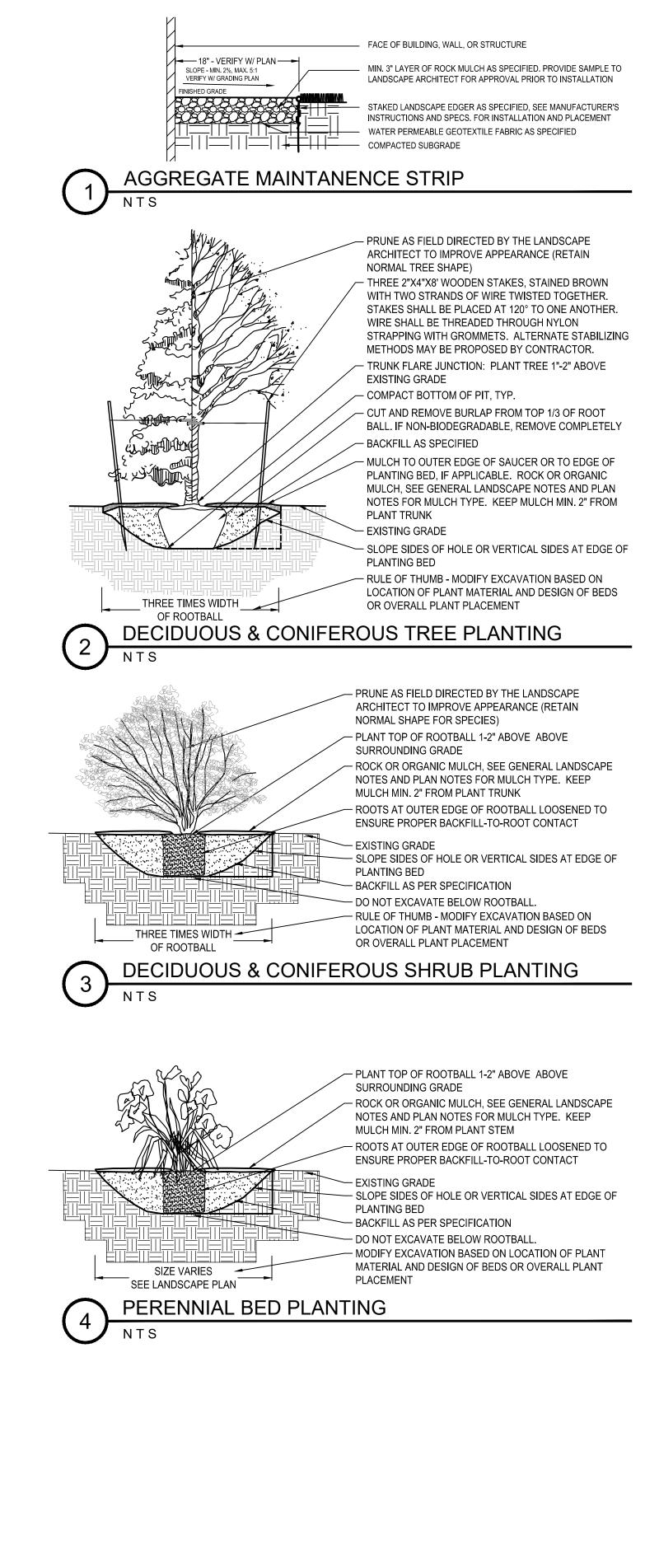
PROPOSED ORNAMENTAL TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

> PROPOSED DECIDUOUS AND EVERGREEN SHRUB SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES EDGING - SHALL BE COMMERCIAL GRADE, 4" DEPTH ALUMINUM, BLACK OR DARK GREEN IN COLOR, INCLUDE ALL CONNECTORS, STAKES, & ALL APPURTENANCES PER MANUF. INSTALL PER MANUF. INSTRUC./SPECS.

PROPOSED PERENNIAL PLANT SYMBOLS - SEE PLANT

ORGANICS BY WEIGHT. SCARIFIED AND EVENLY GRADED. BIG



IRRIGATION NOTES:

METERING FACILITIES.

- 1. ENTIRE SITE SHALL BE FULLY IRRIGATED. THE CONTRACTOR SHALL SUBMIT IRRIGATION SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
- 2. SEE MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS FOR IRRIGATION WATER, METER, AND POWER CONNECTIONS.
 - 3. CONTRACTOR TO VERIFY LOCATION OF ALL UNDERGROUND/ABOVE GROUND FACILITIES PRIOR TO ANY EXCAVATION/INSTALLATION. ANY DAMAGE TO UNDERGROUND/ABOVE GROUND FACILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND COSTS ASSOCIATED WITH CORRECTING DAMAGES SHALL BE BORNE ENTIRELY BY THE CONTRACTOR.
- 4. SERVICE EQUIPMENT AND INSTALLATION SHALL BE PER LOCAL UTILITY COMPANY STANDARDS AND SHALL BE PER NATIONAL AND LOCAL CODES. EXACT LOCATION OF SERVICE EQUIPMENT SHALL BE COORDINATED WITH THE LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.
- LANDSCAPE ARCHITECT OR EQUIVALENT AT THE JOB SITE.

 CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY COMPANY FOR THE PROPOSED ELECTRICAL SERVICE AND
- 6. IRRIGATION WATER LINE CONNECTION SIZE IS 1-½" AT BUILDING. VERIFY WITH MECHANICAL PLANS.COVAGE.
- 7. ALL MAIN LINES SHALL BE 18" BELOW FINISHED GRADE.
- 8. ALL LATERAL LINES SHALL BE 12" BELLOW FINISHED GRADE.
- 9. ALL EXPOSED PVC RISERS, IF ANY, SHALL BE GRAY IN COLOR.
- 10. CONTRACTOR SHALL LAY ALL SLEEVES AND CONDUIT AT 2'-0" BELOW THE FINISHED GRADE OF THE TOP OF PAVEMENT. EXTEND SLEEVES TO 2'-0" BEYOND PAVEMENT.
- 11. CONTRACTOR SHALL MARK THE LOCATION OF ALL SLEEVES AND CONDUIT WITH THE SLEEVING MATERIAL "ELLED" TO 2'-0" ABOVE FINISHED GRADE AND CAPPED.
- 12. FABRICATE ALL PIPE TO MANUFACTURE'S SPECIFICATIONS WITH CLEAN AND SQUARE CUT JOINTS. USE QUALITY GRADE PRIMER AND SOLVENT CEMENT FORMULATED FOR INTENDED TYPE OF CONNECTION.
- 13. BACKFILL ALL TRENCHES WITH SOIL FREE OF SHARP OBJECTS AND DEBRIS.
- 14. ALL VALVE BOXES AND COVERS SHALL BE BLACK IN COLOR.
- 15. GROUP VALVE BOXES TOGETHER FOR EASE WHEN SERVICE IS REQUIRED. LOCATE IN PLANT BED AREAS WHENEVER POSSIBLE
- 16. IRRIGATION CONTROLLER LOCATION SHALL BE VERIFIED ON-SITE WITH OWNER'S REPRESENTATIVE.
- 17. CONTROL WIRES: 14 GAUGE DIRECT BURIAL, SOLID COPPER IRRIGATION WIRE. RUN UNDER MAIN LINE. USE MOISTURE-PROOF SPLICES AND SPLICE ONLY AT VALVES OR PULL BOXES. RUN SEPARATE HOT AND COMMON WIRE TO EACH VALVE AND ONE (1) SPARE WIRE AND GROUND TO FURTHEST VALVE FROM CONTROLLER. LABEL OR COLOR CODE ALL WIRES.
- 18. AVOID OVER SPRAY ON BUILDINGS, PAVEMENT, WALLS AND ROADWAYS BY INDIVIDUALLY ADJUSTING RADIUS OR ARC ON SPRINKLER HEADS AND FLOW CONTROL ON AUTOMATIC VALVE.
- 19. ADJUST PRESSURE REGULATING VALVES FOR OPTIMUM PRESSURE ON SITE.
- 20. USE SCREENS ON ALL HEADS.
- 21. A SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ON-SITE AT ALL TIMES IN AN UPDATED CONDITION.
- 22. ALL PIPE 3" AND OVER SHALL HAVE THRUST BLOCKING AT EACH TURN.
- 23. ALL AUTOMATIC REMOTE CONTROL VALVES WILL HAVE 3" MINIMUM DEPTH OF 3/4" WASHED GRAVEL UNDERNEATH VALVE AND VALVE BOX. GRAVEL SHALL EXTENT 3" BEYOND PERIMETER OF VALVE BOX.
- 24. THERE SHALL BE 3" MINIMUM SPACE BETWEEN BOTTOM OF VALVE BOX COVER AND TOP OF VALVE STRUCTURE.

DOUGLAS DRIVE TOWNH
3401-3415 DOUGLAS DRIVE, CRYSTAL, MIN 55

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MP

GROUP

5000 Glenwood Avenue

SELINITIAN.

civilsitegroup.com

Golden Valley, MN 55422

612-615-0060

GEND	
	SHREDDED CYPRESS MULCH, SAMPLES REQUIRE PROVIDE EDGING AS SHOWN ON PLAN
	ROCK MULCH/RIP-RAP, SAMPLES REQUIRED PROVIDE EDGING AS SHOWN ON PLAN
	LAWAL COD

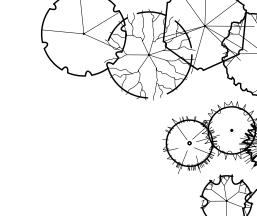
SEED TYPE 1 - MNDOT 34-262 WET PRAIRIE, PER MNDOT SEEDING MANUAL SPECIFICATIONS (2014)

SEED TYPE 2 - MNDOT 35-221 DRY PRAIRIE, PER

MNDOT SEEDING MANUAL SPECIFICATIONS (2014)

1" DIA. ROCK MAINTENANCE STRIP OVER FILTER FABRIC,
SAMPLES REQUIRED. PROVIDE EDGING AS SHOWN ON PLAN

GEOTEXTILE (ADD TO SEED MIX HATCH)



PROPOSED EVERGREEN TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

PROPOSED ORNAMENTAL TREE SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

PROPOSED CANOPY TREE SYMBOLS - SEE PLANT SCHEDULE

AND PLAN FOR SPECIES AND PLANTING SIZES

PROPOSED DECIDUOUS AND EVERGREEN SHRUB SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

PROPOSED PERENNIAL PLANT SYMBOLS - SEE PLANT SCHEDULE AND PLAN FOR SPECIES AND PLANTING SIZES

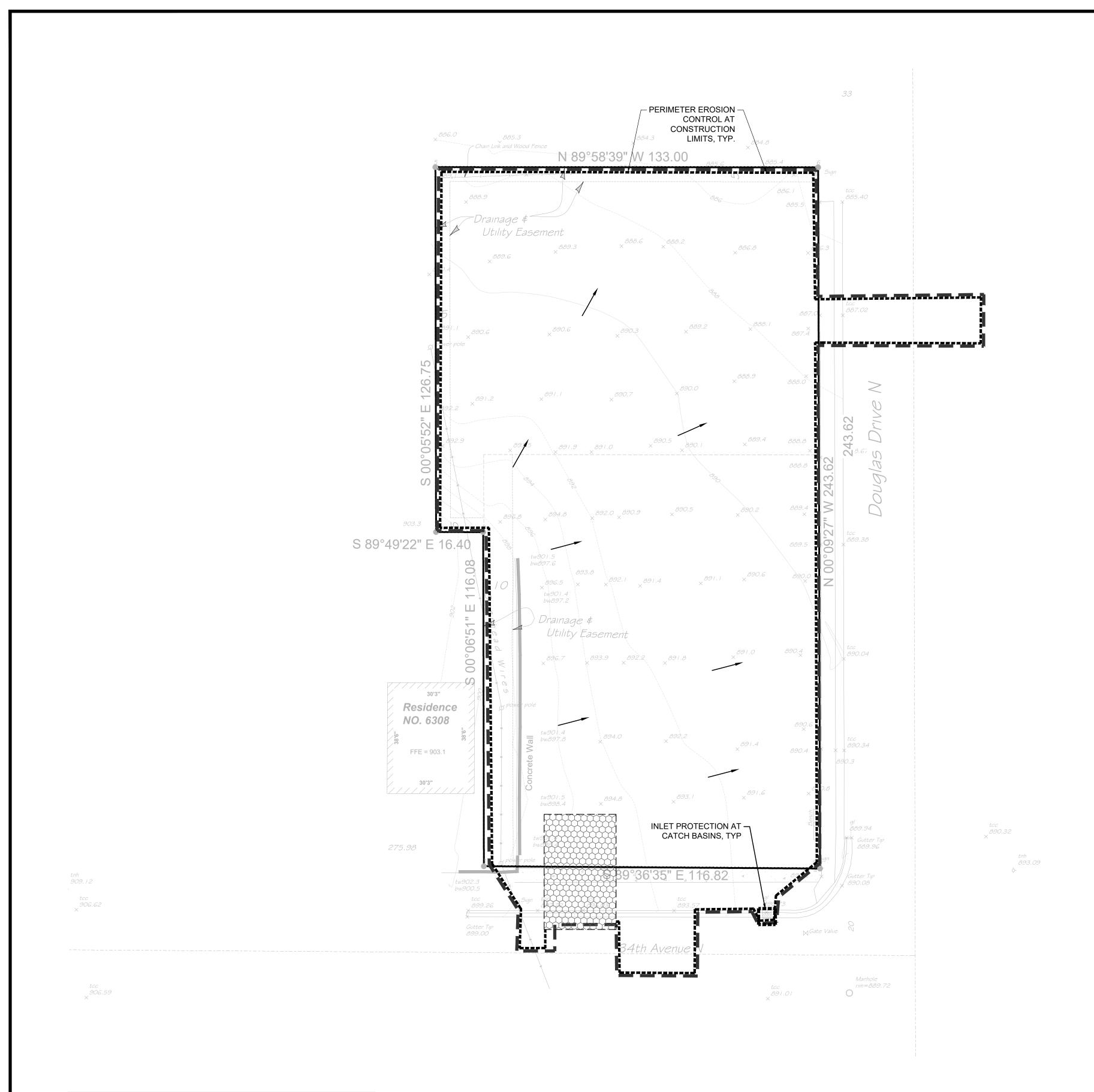
FDGING

DECORATIVE BOULDERS (ROUNDED & BLOCK STYLE), 18"-30" DIA.



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LANDSCAPE PLAN NOTES & DETAILS



CITY OF CRYSTAL EROSION CONTROL NOTES:

1. RESERVED FOR CITY SPECIFIC EROSION CONTROL NOTES.

SWPPP NOTES:

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

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



TOWNHOME IAMPTON

ISSUE/SUBMITTAL SUMMARY

DRAWN BY:MD, NH REVIEWED BY: RL, .

REVISION SUMMARY

PROJECT NUMBER: 23035

DATE DESCRIPTION

DATE DESCRIPTION 03/14/2023 CITY SUBMITTAL

OUGL

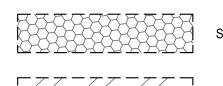
LEGEND:

EX. 1' CONTOUR ELEVATION INTERVAL 1.0' CONTOUR ELEVATION INTERVAL

DRAINAGE ARROW

INLET PROTECTION

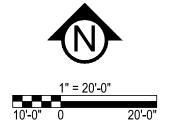
SILT FENCE / BIOROLL - GRADING LIMIT



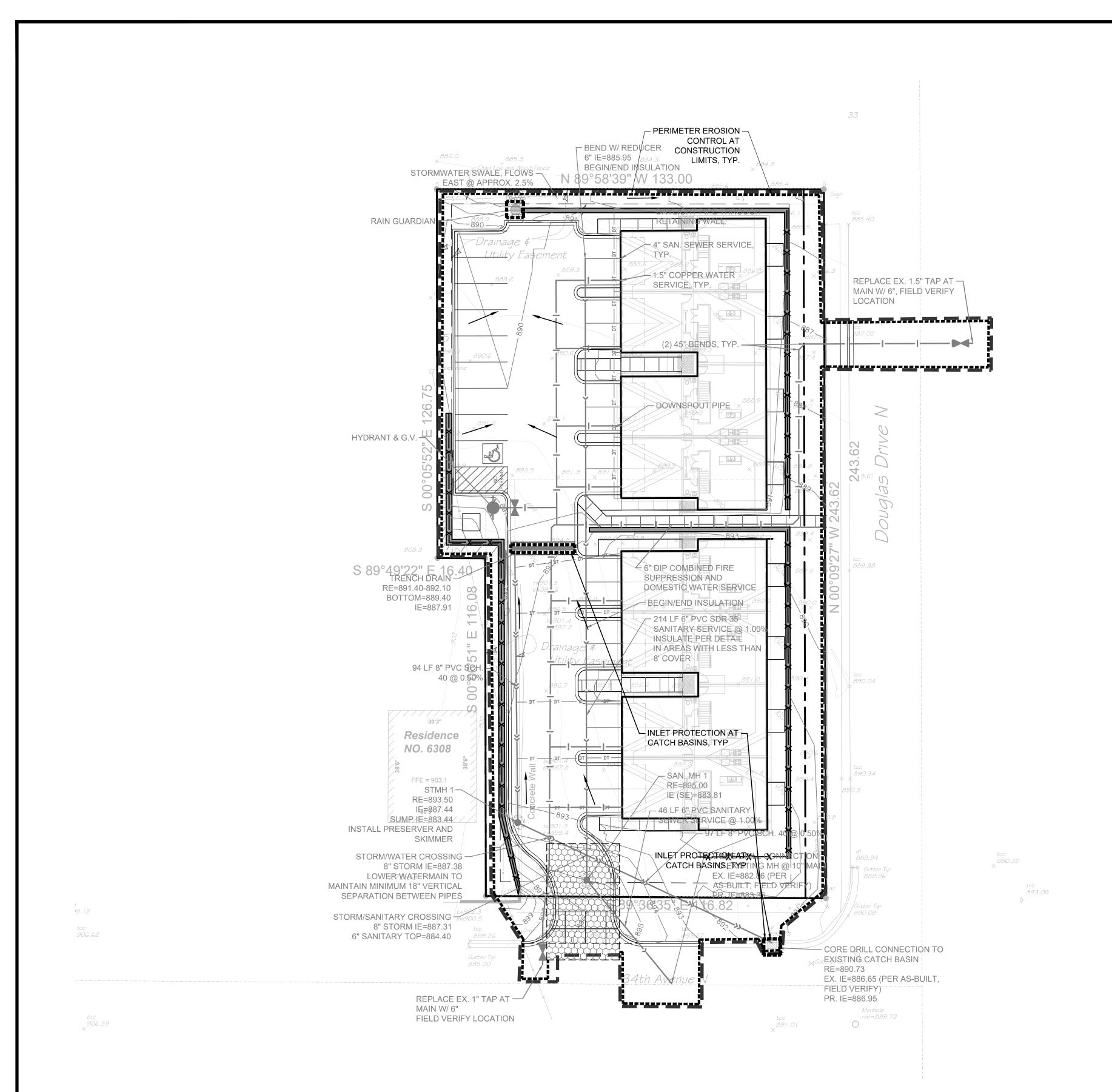
STABILIZED CONSTRUCTION ENTRANCE







SWPPP - EXISTING CONDITIONS



CITY OF CRYSTAL EROSION CONTROL NOTES:

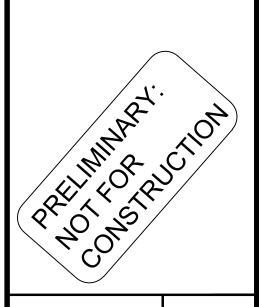
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5000 Glenwood Avenue Golden Valley, MN 55422 civilsitegroup.com 612-615-0060



OWNHOME OMPANIE IAMPTON

ISSUE/SUBMITTAL SUMMARY

DRAWN BY:MD, NH REVIEWED BY: RL, .

REVISION SUMMARY

PROJECT NUMBER: 23035

DATE DESCRIPTION

DATE DESCRIPTION

03/14/2023 CITY SUBMITTAL

ONGE

LEGEND:

EX. 1' CONTOUR ELEVATION INTERVAL 1.0' CONTOUR ELEVATION INTERVAL DRAINAGE ARROW

SILT FENCE / BIOROLL - GRADING LIMIT



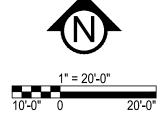
INLET PROTECTION

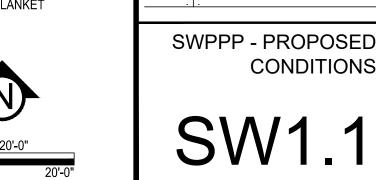


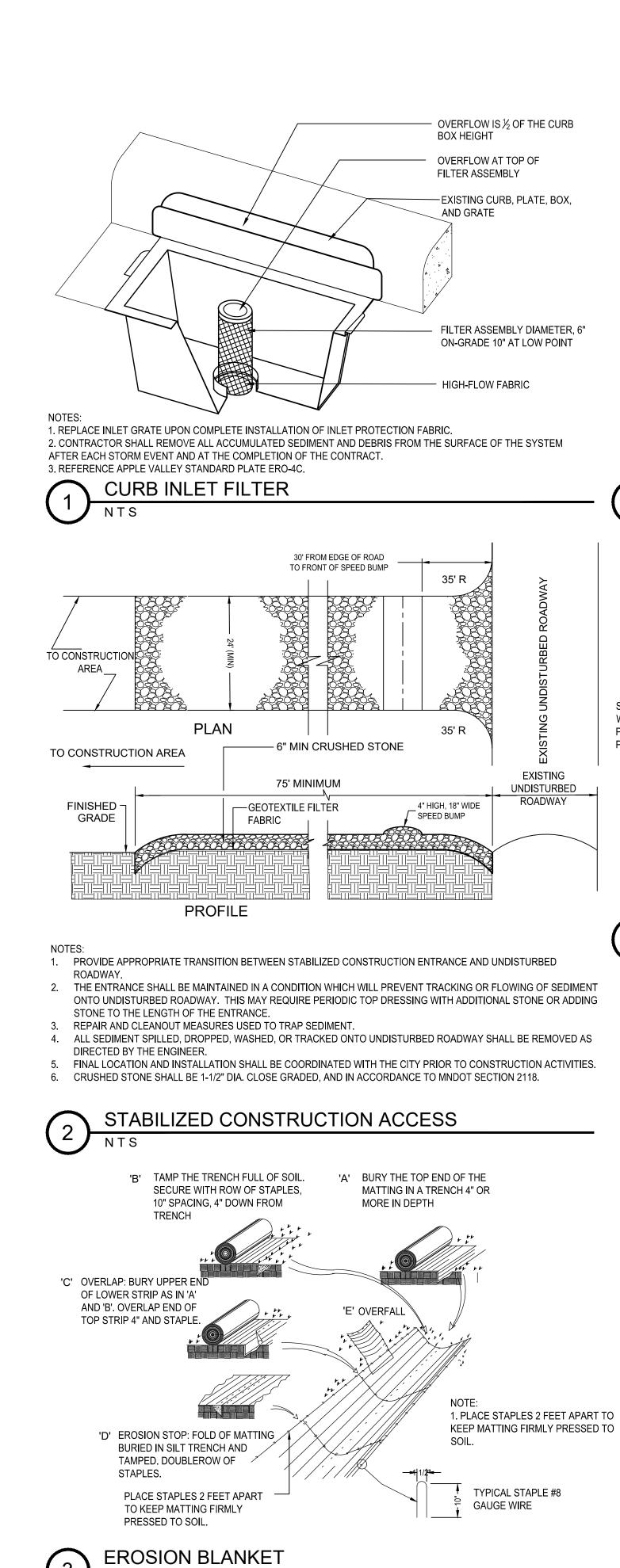
STABILIZED CONSTRUCTION ENTRANCE

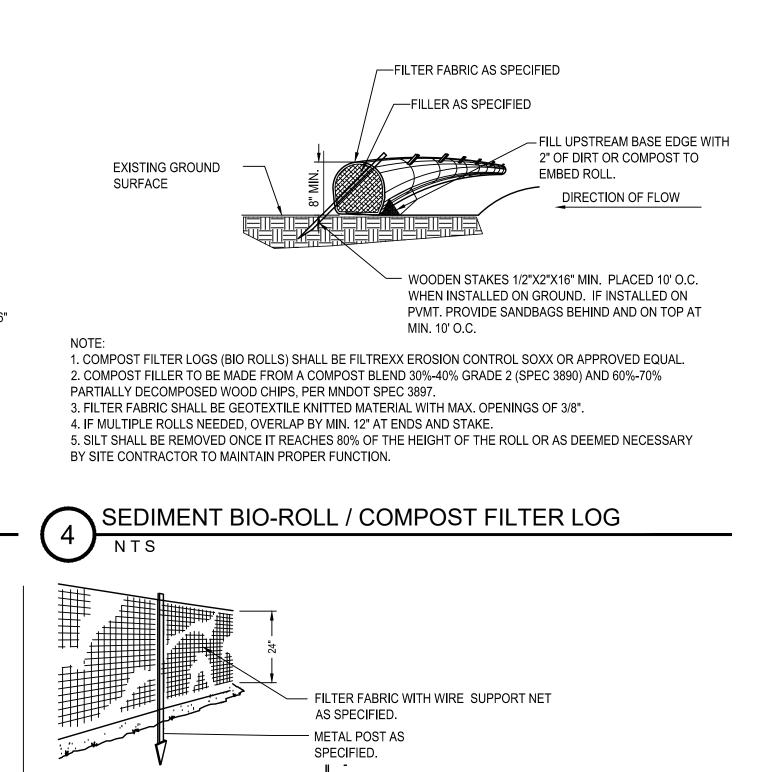
EROSION CONTROL BLANKET











SUPPORT NET: 12 GAUGE 4" x 4"

EXISTING GROUND

CARRY WIRE SUPPORT NET -

SEDIMENT FENCE NTS

DOWN INTO TRENCH

WIRE HOOKED ONTO

EXISTING

UNDISTURBED

ROADWAY

PREFORMED CHANNELS ON POSTS AS SPECIFIED.

SURFACE

FILTER FABRIC AS SPECIFIED SECURE

- ANCHOR FABRIC WITH

SOIL, TAMP BACKFILL

DIRECTION OF FLOW

METAL POSTS 8'-0" O.C.

CLIPS 12"O.C.

TO WIRE SUPPORT NET WITH METAL

OWNHOME MPANIE O C AMPT OUGL ISSUE/SUBMITTAL SUMMARY DATE DESCRIPTION 03/14/2023 CITY SUBMITTAL DRAWN BY:MD, NH REVIEWED BY: RL, PROJECT NUMBER: 23035 REVISION SUMMARY DATE DESCRIPTION SWPPP - DETAILS

5000 Glenwood Avenue Golden Valley, MN 55422

612-615-0060

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THE CONTRACTOR AND ALL SUBCONTRACTORS INVOLVED WITH A CONSTRUCTION ACTIVITY THAT DISTURBS SITE SOIL OR WHO IMPLEMENT A POLLUTANT CONTROL MEASURE IDENTIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MUST COMPLY WITH THE REQUIREMENTS OF THE NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT (DATED AUGUST 1, 2018 # MNR100001) AND ANY LOCAL GOVERNING AGENCY HAVING JURISDICTION CONCERNING EROSION AND SEDIMENTATION

STORMWATER DISCHARGE DESIGN REQUIREMENTS

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

THE INTENDED SEQUENCING OF MAJOR CONSTRUCTION ACTIVITIES IS AS FOLLOWS:

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

RECORDS RETENTION:

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

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

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

SWPPP IMPLEMENTATION RESPONSIBILITIES:

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

CONSTRUCTION ACTIVITY REQUIREMENTS

SWPPP AMENDMENTS (SECTION 6):

- 1. ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS.
- 2. PERMITTEES MUST 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
- 3. 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.

BMP SELECTION AND INSTALLATION (SECTION 7):

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

EROSION PREVENTION (SECTION 8):

- 1. BEFORE WORK BEGINS, PERMITTEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED. 2. PERMITTEES MUST MINIMIZE THE NEED FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITTEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING).
- 3. PERMITTEES MUST STABILIZE ALL EXPOSED SOIL AREAS, INCLUDING STOCKPILES. STABILIZATION MUST BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHEN CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. STABILIZATION MUST BE COMPLETED NO LATER THAN 14 CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY HAS CEASED. STABILIZATION IS NOT REQUIRED ON CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS AND SIMILAR SURFACES. STABILIZATION IS NOT REQUIRED ON TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE
- STOCKPILES, SAND STOCKPILES) BUT PERMITTEES MUST PROVIDE SEDIMENT CONTROLS AT THE BASE OF THE STOCKPILE. 4. FOR 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. 5. PERMITTEES MUST STABILIZE THE NORMAL WETTED PERIMETER OF THE LAST 200 LINEAR FEET OF TEMPORARY OR PERMANENT DRAINAGE DITCHES OR SWALES THAT DRAIN WATER FROM THE SITE WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE. PERMITTEES MUST COMPLETE STABILIZATION OF REMAINING PORTIONS OF TEMPORARY OR PERMANENT DITCHES OR SWALES WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH TEMPORARILY OR PERMANENTLY CEASES.
- 6. TEMPORARY OR PERMANENT DITCHES OR SWALES BEING USED AS A SEDIMENT CONTAINMENT SYSTEM DURING CONSTRUCTION (WITH PROPERLY DESIGNED ROCK-DITCH CHECKS, BIO ROLLS, SILT DIKES, ETC.) DO NOT NEED TO BE STABILIZED. PERMITTEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES
- 7. PERMITTEES MUST NOT USE MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE OR SIMILAR EROSION PREVENTION PRACTICES WITHIN ANY PORTION OF THE NORMAL WETTED PERIMETER OF A TEMPORARY OR PERMANENT DRAINAGE DITCH OR SWALE SECTION WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT.
- 8. PERMITTEES MUST PROVIDE TEMPORARY OR PERMANENT ENERGY DISSIPATION AT ALL PIPE OUTLETS WITHIN 24 HOURS AFTER CONNECTION TO A SURFACE WATER OR PERMANENT STORMWATER TREATMENT SYSTEM.
- 9. PERMITTEES MUST NOT DISTURB MORE LAND (I.E., PHASING) THAN CAN BE EFFECTIVELY INSPECTED AND MAINTAINED IN ACCORDANCE WITH SECTION 11.

SEDIMENT CONTROL (SECTION 9):

- 1. PERMITTEES MUST ESTABLISH SEDIMENT CONTROL BMPS ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITTEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES, PERMITTEES MUST INSTALL SEDIMENT CONTROL PRACTICES BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGIN AND MUST KEEP THE SEDIMENT CONTROL PRACTICES
- IN PLACE UNTIL THEY ESTABLISH PERMANENT COVER. 2, IF DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED, BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENTS, PERMITTEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO

ELIMINATE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES AS REQUIRED IN ITEM 6.3.

- 3. TEMPORARY OR PERMANENT DRAINAGE DITCHES AND SEDIMENT BASINS DESIGNED AS PART OF A SEDIMENT CONTAINMENT SYSTEM (E.G., DITCHES WITH ROCK-CHECK DAMS) REQUIRE SEDIMENT CONTROL PRACTICES ONLY AS APPROPRIATE FOR SITE
- CONDITIONS 4. A FLOATING SILT CURTAIN PLACED IN THE WATER IS NOT A SEDIMENT CONTROL BMP TO SATISFY ITEM 9.2 EXCEPT WHEN WORKING ON A SHORELINE OR BELOW THE WATERLINE. IMMEDIATELY AFTER THE SHORT TERM CONSTRUCTION ACTIVITY (E.G., INSTALLATION OF RIP RAP ALONG THE SHORELINE) IN THAT AREA IS COMPLETE, PERMITTEES MUST INSTALL AN UPLAND
- PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER. 5. PERMITTEES MUST RE-INSTALL ALL SEDIMENT CONTROL PRACTICES ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES SUCH AS CLEARING OR GRUBBING, OR PASSAGE OF VEHICLES, IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY IS COMPLETED. PERMITTEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
- 6. PERMITTEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMPS DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGING TO THE INLET.
- 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

7. PERMITTEES MAY REMOVE INLET PROTECTION FOR A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET

- FOR REMOVAL IN THE SWPPF 8. PERMITTEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER
- 9. PERMITTEES MUST LOCATE STOCKPILES OUTSIDE OF NATURAL BUFFERS OR SURFACE WATERS, INCLUDING STORMWATER CONVEYANCES SUCH AS CURB AND GUTTER SYSTEMS UNLESS THERE IS A BYPASS IN PLACE FOR THE STORMWATER.
- 10. PERMITTEES MUST INSTALL A VEHICLE TRACKING BMP TO MINIMIZE THE TRACK OUT OF SEDIMENT FROM THE CONSTRUCTION SITE OR ONTO PAVED ROADS WITHIN THE SITE. 11. PERMITTEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING
- ONTO THE STREET. 12. PERMITTEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14.
- 13. IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITTEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION.
- 14. PERMITTEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE. 15. PERMITTEES MUST DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS UNLESS INFEASIBLE.
- 16. PERMITTEES MUST PRESERVE A 50 FOOT NATURAL BUFFER OR, IF A BUFFER IS INFEASIBLE ON THE SITE, PROVIDE REDUNDANT (DOUBLE) PERIMETER SEDIMENT CONTROLS WHEN A SURFACE WATER IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER. PERMITTEES MUST INSTALL PERIMETER SEDIMENT CONTROLS AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE, NATURAL BUFFERS ARE NOT REQUIRED ADJACENT TO ROAD DITCHES, JUDICIAL DITCHES, COUNTY DITCHES, STORMWATER CONVEYANCE CHANNELS, STORM DRAIN INLETS, AND SEDIMENT BASINS. IF PRESERVING THE BUFFER IS INFEASIBLE, PERMITTEES MUST DOCUMENT THE REASONS IN THE
- SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER. 17. PERMITTEES MUST USE POLYMERS. FLOCCULANTS. OR OTHER SEDIMENTATION TREATMENT CHEMICALS IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES, DOSING SPECIFICATIONS AND SEDIMENT REMOVAL DESIGN SPECIFICATIONS PROVIDED BY THE MANUFACTURER OR SUPPLIER. THE PERMITTEES MUST USE CONVENTIONAL EROSION AND SEDIMENT CONTROLS PRIOR TO CHEMICAL ADDITION AND MUST DIRECT TREATED STORMWATER TO A SEDIMENT CONTROL SYSTEM FOR FILTRATION OR SETTLEMENT OF THE FLOC PRIOR TO DISCHARGE.

DEWATERING AND BASIN DRAINING (SECTION 10):

- 1. PERMITTEES MUST DISCHARGE TURBID OR SEDIMENT-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.
- 2. 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. 3. PERMITTEES MUST DISCHARGE ALL WATER FROM DEWATERING OR BASIN-DRAINING ACTIVITIES IN A MANNER THAT DOES NOT CAUSE EROSION OR SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS OR INUNDATION OF WETLANDS IN THE IMMEDIATE
- VICINITY OF DISCHARGE POINTS THAT CAUSES SIGNIFICANT ADVERSE IMPACT TO THE WETLAND. 4. IF PERMITTEES USE FILTERS WITH BACKWASH WATER, THEY MUST HAUL THE BACKWASH WATER AWAY FOR DISPOSAL, RETURN THE BACKWASH WATER TO THE BEGINNING OF THE TREATMENT PROCESS, OR INCORPORATE THE BACKWASH WATER INTO THE SITE IN A MANNER THAT DOES NOT CAUSE EROSION.

INSPECTIONS AND MAINTENANCE (SECTION 11):

- 1. PERMITTEES MUST ENSURE A TRAINED PERSON, AS IDENTIFIED IN ITEM 21,2,B. WILL INSPECT THE ENTIRE CONSTRUCTION SITE AT LEAST ONCE EVERY SEVEN (7) DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 1/2 INCH IN 24 HOURS
- 2. PERMITTEES MUST INSPECT AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMPS. 3. PERMITTEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS, PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMPS WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.6. PERMITTEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT
- ACCESS TO THE AREA. 4. DURING EACH INSPECTION, PERMITTEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITTEES MUST REMOVE ALL DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER RAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL, PERMITTEES MU: COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITTEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITTEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS.
- MUST REMOVE SEDIMENT FROM ALL PAVED SURFACES WITHIN ONE (1) CALENDAR DAY OF DISCOVERY OR, IF APPLICABLE, WITHIN A SHORTER TIME TO AVOID A SAFETY HAZARD TO USERS OF PUBLIC STREETS. 6. PERMITTEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE.

5. PERMITTEES MUST INSPECT CONSTRUCTION SITE VEHICLE EXIT LOCATIONS, STREETS AND CURB AND GUTTER SYSTEMS WITHIN

AND ADJACENT TO THE PROJECT FOR SEDIMENTATION FROM EROSION OR TRACKED SEDIMENT FROM VEHICLES. PERMITTEES

- 7. PERMITTEES MUST DRAIN TEMPORARY AND PERMANENT SEDIMENTATION BASINS AND REMOVE THE SEDIMENT WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME.
- 8. PERMITTEES MUST ENSURE THAT AT LEAST ONE INDIVIDUAL PRESENT ON THE SITE (OR AVAILABLE TO THE PROJECT SITE IN THREE (3) CALENDAR DAYS) IS TRAINED IN THE JOB DUTIES DESCRIBED IN ITEM 21.2.B.
- 9. PERMITTEES MAY ADJUST THE INSPECTION SCHEDULE DESCRIBED IN ITEM 11.2 AS FOLLOWS:
- a. INSPECTIONS OF AREAS WITH PERMANENT COVER CAN BE REDUCED TO ONCE PER MONTH, EVEN IF CONSTRUCTION ACTIVITY CONTINUES ON OTHER PORTIONS OF THE SITE; OR
- b. WHERE SITES HAVE PERMANENT COVER ON ALL EXPOSED SOIL AND NO CONSTRUCTION ACTIVITY IS OCCURRING ANYWHERE ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES. THE MPCA MAY REQUIRE INSPECTIONS TO RESUME IF CONDITIONS WARRANT: OR
- c. WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS, INSPECTIONS MAY BE SUSPENDED. INSPECTIONS MUST RESUME WITHIN 24 HOURS OF RUNOFF OCCURRING, OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST
- 10. PERMITTEES MUST RECORD ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. THESE RECORDS MUST INCLUDE:

a. DATE AND TIME OF INSPECTIONS; AND

- b. NAME OF PERSONS CONDUCTING INSPECTIONS; AND
- c. ACCURATE FINDINGS OF INSPECTIONS, INCLUDING THE SPECIFIC LOCATION WHERE CORRECTIVE ACTIONS ARE NEEDED; AND d. CORRECTIVE ACTIONS TAKEN (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND e. DATE OF ALL RAINFALL EVENTS GREATER THAN 1/2 INCHES IN 24 HOURS, AND THE AMOUNT OF RAINFALL FOR EACH EVENT.
- PERMITTEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION THAT IS WITHIN ONE (1) MILE OF YOUR LOCATION, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES; AND f. IF PERMITTEES OBSERVE A DISCHARGE DURING THE INSPECTION, THEY MUST RECORD AND SHOULD PHOTOGRAPH AND
- DESCRIBE THE LOCATION OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS); AND g. ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION MUST BE DOCUMENTED AS REQUIRED IN
- SECTION 6 WITHIN SEVEN (7) CALENDAR DAYS.

POLLUTION PREVENTION MANAGEMENT (SECTION 12):

- 1. PERMITTEES MUST PLACE BUILDING PRODUCTS AND LANDSCAPE MATERIALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER. PERMITTEES ARE NOT REQUIRED TO COVER OR PROTECT PRODUCTS WHICH ARE EITHER NOT A SOURCE OF CONTAMINATION TO STORMWATER OR ARE DESIGNED TO BE EXPOSED TO STORMWATER.
- 2. PERMITTEES MUST PLACE PESTICIDES, FERTILIZERS AND TREATMENT CHEMICALS UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) OR PROTECT THEM BY SIMILARLY EFFECTIVE MEANS DESIGNED TO MINIMIZE CONTACT WITH STORMWATER.
- 3. PERMITTEES MUST STORE HAZARDOUS MATERIALS AND TOXIC WASTE, (INCLUDING OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS OR OTHER DISCHARGE. STORAGE AND DISPOSAL OF HAZARDOUS WASTE MATERIALS MUST BE IN COMPLIANCE WITH MINN. R. CH. 7045 INCLUDING SECONDARY CONTAINMENT AS APPLICABLE. 4. PERMITTEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035.
- MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041. 6. PERMITTEES MUST TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE, PERMITTEES MUST ENSURE ADEQUATE SUPPLIES ARE AVAILABLE AT ALL TIMES TO CLEAN UP DISCHARGED MATERIALS AND THAT AN APPROPRIATE DISPOSAL METHOD IS AVAILABLE FOR RECOVERED SPILLED MATERIALS.

5. PERMITTEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. PERMITTEES

PERMITTEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN, STAT. 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE 7. PERMITTEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITTEES MUST

- CONTAIN RUNOFF FROM THE WASHING AREA IN A SEDIMENT BASIN OR OTHER SIMILARLY EFFECTIVE CONTROLS AND MUST DISPOSE WASTE FROM THE WASHING ACTIVITY PROPERLY, PERMITTEES MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS.
- 8. PERMITTEES MUST PROVIDE EFFECTIVE CONTAINMENT FOR ALL LIQUID AND SOLID WASTES GENERATED BY WASHOUT OPERATIONS (E.G., CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS) RELATED TO THE CONSTRUCTION ACTIVITY. PERMITTEES MUST PREVENT LIQUID AND SOLID WASHOUT WASTES FROM CONTACTING THE GROUND AND MUST DESIGN THE CONTAINMENT SO IT DOES NOT RESULT IN RUNOFF FROM THE WASHOUT OPERATIONS OR AREAS. PERMITTEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MPCA RULES. PERMITTEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY.

PERMIT TERMINATION (SECTION 4 AND SECTION 13):

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

SEED NOTES:

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

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

TEMPORARY EROSION CONTROL SEEDING, MULCHING & BLANKET.

- TEMPORARY SEED SHALL BE MNDOT SEED MIX 21-112 (WINTER WHEAT COVER CROP) FOR WINTER AND 21-111 (OATS COVER CROP) FOR SPRING/SUMMER APPLICATIONS. BOTH SEED MIXES SHALL BE APPLIED AT A SEEDING RATE OF 100 LBS/ACRE.
- IMMEDIATELY AFTER SEEDING, WITHIN 24 HOURS, MNDOT TYPE 1 MULCH SHOULD BE APPLIED TO PROTECT AND ENHANCE SEED GERMINATION. MULCH SHALL BE APPLIED AT 90% COVERAGE (2 TONS PER ACRE OF STRAW MULCH)

- 3:1 (HORIZ/VERT.) OR FLATTER MUCH SHALL BE COVERED WITH MULCH
- SLOPES STEEPER THAN 3:1 OR DITCH BOTTOMS SHALL BE COVERED WITH EROSION CONTROL BLANKET. SEE PLAN FOR MORE DETAILED DITCH AND STEEP SLOPE EROSION CONTROL TREATMENTS.

TRAINING SECTION 21

AREAS AND QUANTITIES

DESIGN ENGINEER: MATTHEW R. PAVEK P.E. TRAINING COURSE: DESIGN OF SWPPP TRAINING ENTITY: UNIVERSITY OF MINNESOTA INSTRUCTOR: JOHN CHAPMAN

DATES OF TRAINING COURSE: 5/15/2011 - 5/16/2011 TOTAL TRAINING HOURS: 12

RE-CERTIFICATION: 2/27/2020 (8 HOURS), EXP. 5/31/2023

SITE AREA CALCULATIONS					
	EXISTING COI	EXISTING CONDITION		PROPOSED CONDITION	
BUILDING COVERAGE	0 SF	0.0%	9,129 SF	31.79	
ALL PAVEMENTS	0 SF	0.0%	11,497 SF	40.09	
ALL NON-PAVEMENTS	30,470 SF	100.0%	8,139 SF	28.39	
ROW DEDICATION			1,705 SF		
TOTAL SITE AREA	30,470 SF	100.0%	28,765 SF	100.09	

IMPERVIOUS SURFACE		
EXISTING CONDITION	0 SF	0.0%
PROPOSED CONDITION	20,626 SF	67.7%
DIFFERENCE (EX. VS PROP.)	20,626 SF	67.7%
2.11 2.11 2.1 (2.1. 13 1 11G1 .)	20,020 01	0,,,,

EROSION CONTROL QUANTITIES	
DISTURBED AREA	33,517 SF
SILT FENCE/BIO-ROLL	850 LF
EROSION CONTROL BLANKET	0 SF
INLET PROTECTION DEVICES	3 EA

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

SWPPP CONTACT PERSON

CONTRACTOR:

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

OWNER INFORMATION

WHITE BEAR LAKE, MN 55110

HAMPTON COMPANIES

CONTACT: DAN BROWN

1824 BUERKLE RD

651-295-2459

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

PERMANENT STORMWATER MANAGEMENT IS NOT REQUIRED AS PART OF THIS PROJECT TO MEET NPDES PERMIT REQUIREMENTS AS LESS THAN 1 ACRE OF NEW IMPERVIOUS IS PROPOSED.

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

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

SUPPLEMENTARY SITE SPECIFIC EROSION CONTROL NOTES: THESE NOTES SUPERCEDE ANY GENERAL SWPPP NOTES.

THIS PROJECT IS LESS THAN 1.0 ACRES SO AN NPDES PERMIT IS NOT REQUIRED.

PROJECT NARRATIVE:

PROJECT IS A REDEVELOPMENT OF A A VACANT SITE INTO (2) FOUR-UNIT TOWNHOME BUILDINGS WITH PARKING, UTILITY, AND LANDSCAPE

SPECIAL TMDL BMP REQUIREMENTS SITE SPECIFIC (IF REQUIRED):

NOT REQUIRED

PERMANENT STABILIZATION NOTES SITE SPECIFIC:

PERMANENT SEED MIX

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

5000 Glenwood Avenue Golden Valley, MN 55422 civilsitegroup.com 612-615-006

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ISSUE/SUBMITTAL SUMMARY

DATE DESCRIPTION

03/14/2023 CITY SUBMITTAL DRAWN BY:MD. NH REVIEWED BY: RL. ROJECT NUMBER: 23035

REVISION SUMMARY

DATE DESCRIPTION

SWPPP - NARRATIVE