



2023 Development Review Application

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

1. Property Address for this application:

3401-3415 Douglas Drive North

2. Property Identification Number (PID):

20-118-21-11-0015; 20-118-21-11-0010

3. Applicant:

Name:	Hampton Companies		
Street:	1824 Buerkle Road	City:	White Bear Lake
		State:	MN
		Zip:	55110
Telephone:	651-295-2459		
Email:	Dan@hamptoncos.com		

4. Property Owner:

- Same as the Applicant (if so, you don't need to complete this section)
 Different from the Applicant (complete this section)

Name:	City of Crystal's Economic Development Authority (EDA)		
Street:	4141 Douglas Dr N	City:	Crystal
		State:	MN
		Zip:	55422
Telephone:	763-531-1142		
Email:	Dan.olson@crystalmn.gov		

5. Project name and description:

Rezone the properties from Medium Density Residential (R-2) to Planned Development; vacate existing easements; consolidate lots into one lot, so that two 4-unit townhome buildings can be constructed.

6. Project contact (the applicant shall designate one contact person for the application):

Name:	Dan Brown	Role in Project:	Project Contact	
Company:	Hampton Companies			
Street:	1824 Buerkle Road	City:	White Bear Lake	State: MN
				Zip: 55110
Business Telephone:	651-295-2459			
Email:	Dan@hamptoncos.com			

7. Additional design/engineering professional (if applicable):

Name:	Robbie Latta	Role in Project:	Civil Engineer	
Company:	Civil Site Group			
Street:	5000 Glenwood Ave	City:	Golden Vally	State: MN
				Zip:
Business Telephone:	952 250-2200			
Email:	rlatta@civilsitegroup.com			

8. Application type: **A complete development review application includes the following:**

- Completed and signed development review application form
- Completed and signed escrow form (if applicable - see list of application types below)
- Completed application checklist for each respective type of application (see list below)
- Payment of application fee for each respective type of application (see list below)

Type of application (check all that apply):	Application fee (nonrefundable): [1]
<input type="checkbox"/> Adjacent Parcel Land Conveyance	\$220 + \$220 escrow
<input type="checkbox"/> Administrative Appeal	\$220
<input type="checkbox"/> Comprehensive Plan Amendment	\$660 + \$660 escrow
<input type="checkbox"/> Conditional Use Permit	\$660 + \$660 escrow [2]
<input type="checkbox"/> Lot consolidation	\$440 + \$440 escrow
<input checked="" type="checkbox"/> Rezoning to Planned Development	\$1,320 + \$1,320 escrow
<input type="checkbox"/> Site Plan	\$660 + \$330 escrow
<input checked="" type="checkbox"/> Subdivision	\$660 + \$66 per lot over 2, + \$660 escrow
<input checked="" type="checkbox"/> Vacation of a public street or easement	\$550 + \$550 escrow
<input type="checkbox"/> Variance	\$550 + \$275 escrow
<input type="checkbox"/> Zoning Certificate	\$110 [2]
<input type="checkbox"/> Zoning Map or Text Amendment	\$660 + \$660 escrow
Total fee: \$ <u> </u> Fee paid by EDA	

[1]: The escrow fee will first be applied to cover County recording fees and legal fees related to the review of documents associated with the application. For telecommunication towers, the escrow fee will also be applied to engineering review expenses. The remaining escrow fee will be returned to the applicant.
 [2]: The fee for a telecommunication tower is \$2,000, plus a \$10,000 escrow

Notice: Review of a development application and the decision to approve, approve with modifications, or deny the application will be based on the standards and criteria found in the Crystal Comprehensive Plan, Unified Development Code and any other applicable governmental codes, guidelines, standards or policies necessary to safeguard public health, safety, aesthetics, and general welfare. Approval of this application does not absolve the applicant from obtaining all other applicable permits, such as stormwater or building permits.

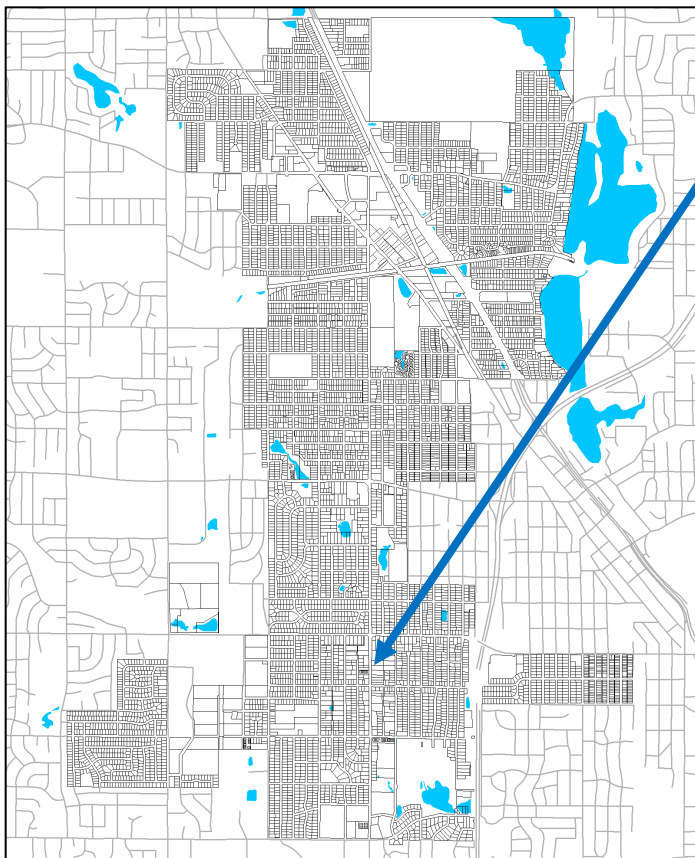
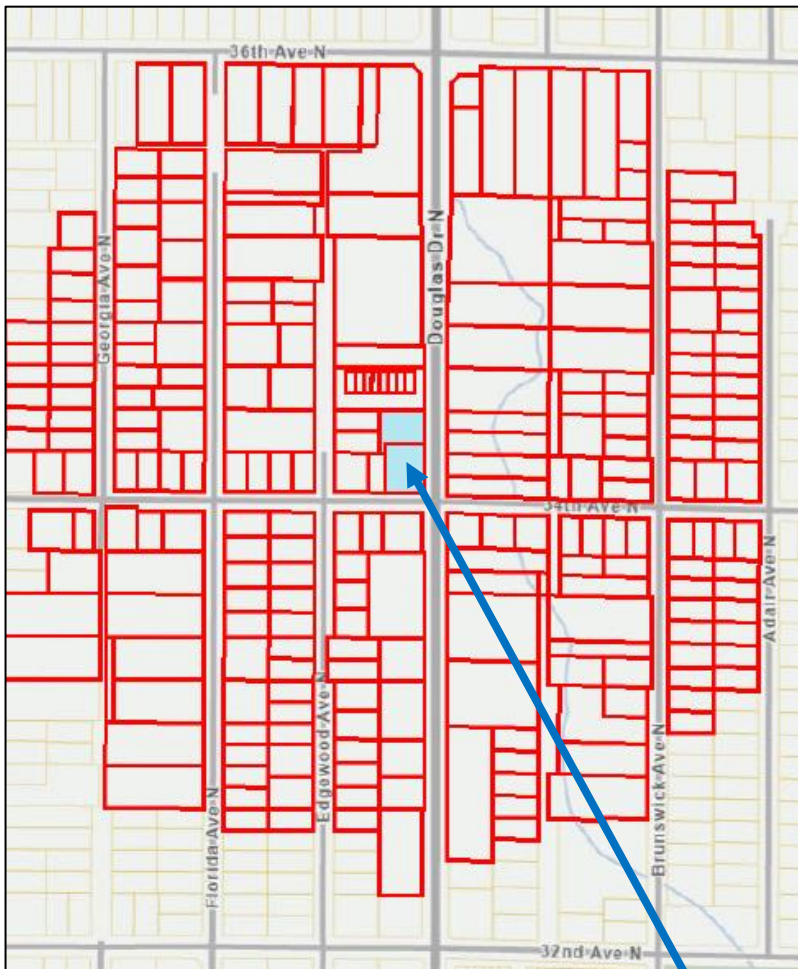
I (We) certify that I (we) have submitted all the required information to apply for consideration of a development review application and the information is factually correct and accurate.

Dan Brown Date: 3/14/2023
 Signature of Applicant

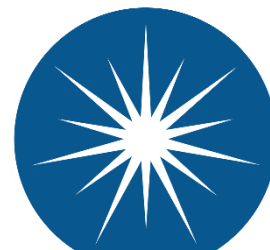
 Signature of Property Owner (if different from Applicant) Date: _____

FOR OFFICE USE ONLY: Application # 2023-03 Accounting # 0100.4418 Receipt # NA Date Received 3/14/2023
 Acknowledgement letter sent ___/___/___ If application incomplete, was 60-day rule language included? ___
 Plan Comm hearing ___/___/___ City Council action ___/___/___ Approved? Yes ___ No ___ Other ___
 NOTES: _____

Site Location and Public Hearing Notice Mailing Map



3401-3415 Douglas Dr N



CITY of CRYSTAL

**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

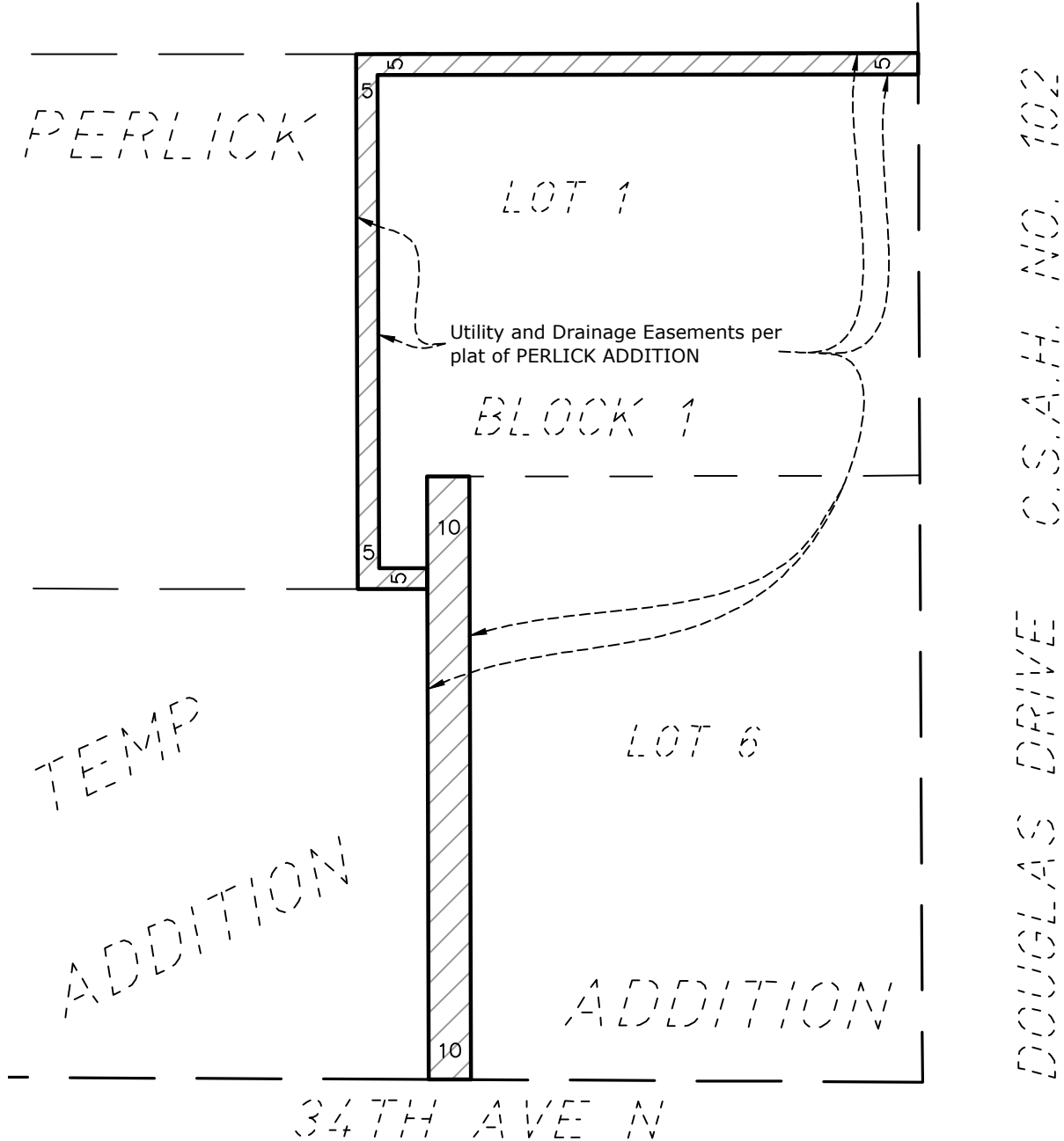
Utility and Drainage Easement Vacation Exhibit

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.



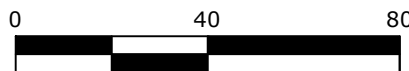
MINNESOTA CERTIFICATION

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. Synsteliën

Minnesota License No. 44565



SCALE IN FEET

CivilSite

GROUP

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 Rate Control
 - 3.3 Water Quality
 - 3.4 Volume Control
- 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

2.4 Stormwater Requirements Watershed District – (Bassett Creek Watershed Management Commission):

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:

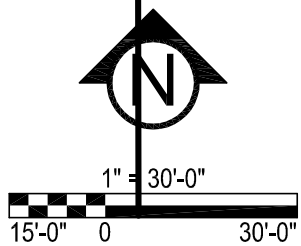
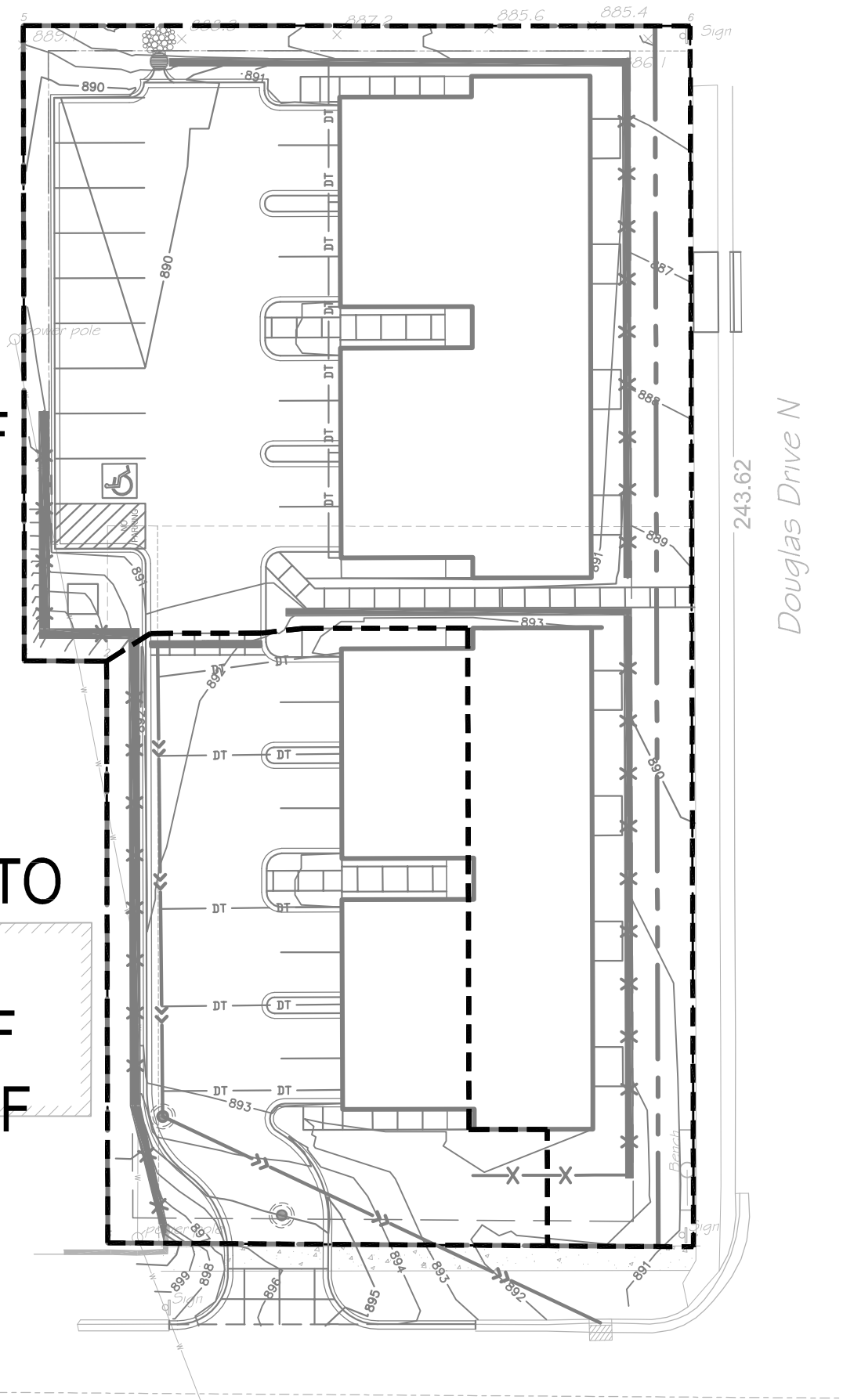
To the best of our knowledge, this project meets all State, City and Watershed District stormwater management requirements.

PR1 (SURFACE
DRAINS TO
DOUGLAS)

PR IMPV = 13,605 SF
PR PERV = 7,707 SF
TOTAL = 21,312 SF

PR2 (DISCHARGE TO
CATCH BASIN)

PR IMPV = 7,021 SF
PR PERV = 2,137 SF
TOTAL = 9,158 SF



3401-3415 DOUGLAS DRIVE



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

PROPOSED DRAINAGE MAP

Project Number: 23035

Issue Date: 03/14/23

Revision Number: .

Revision Date: .

DA2

**3401-3415 Douglas Drive
Civil Site Group - Stormwater Calculations**

Existing Conditions

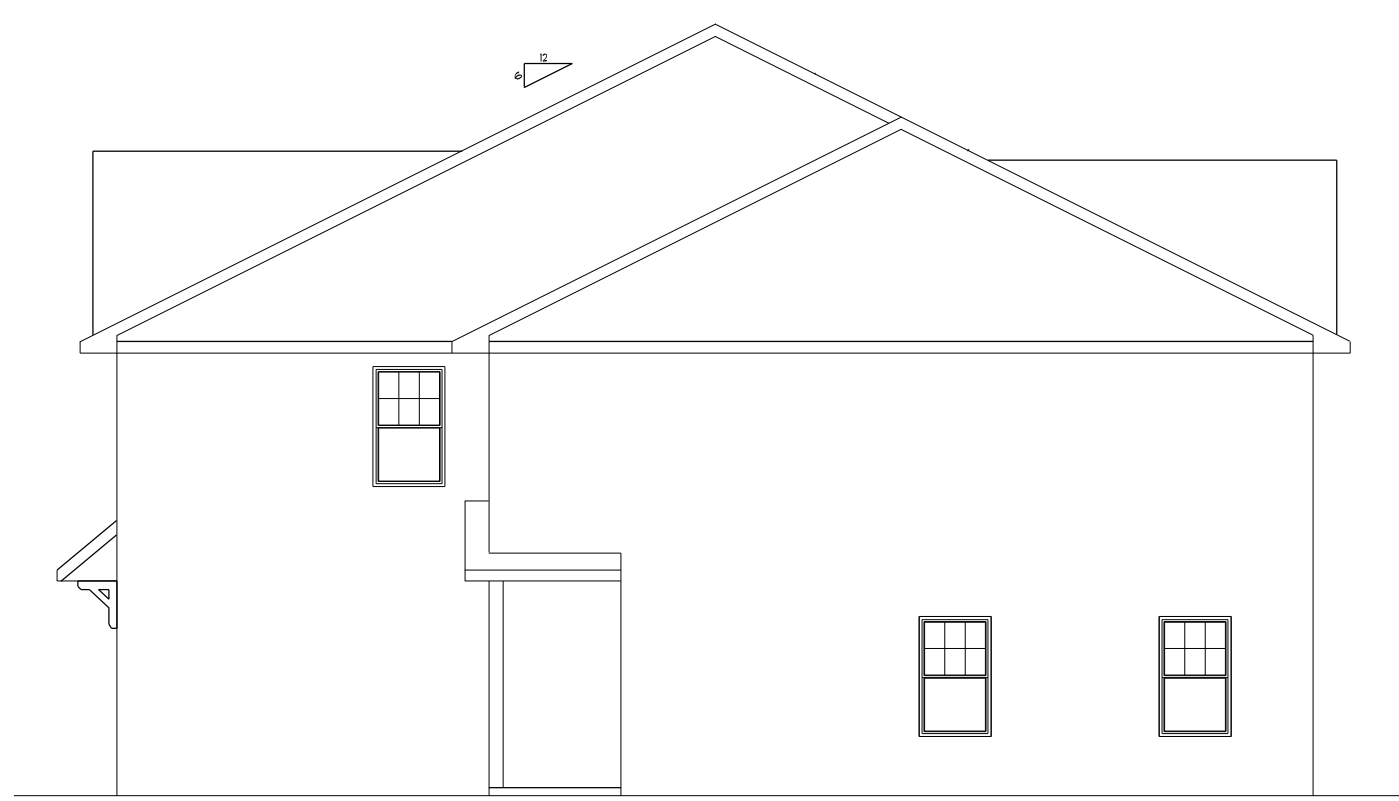
Drainage Area	Impervious Area		Pervious Area		Total Area	
	Area [SF]	CN Value	Area [SF]	CN Value	Area [SF]	CN Value
EX1 (SURFACE DRAINS TO DOUGLAS)	24872	98	5598	80	30470	95

Proposed Conditions

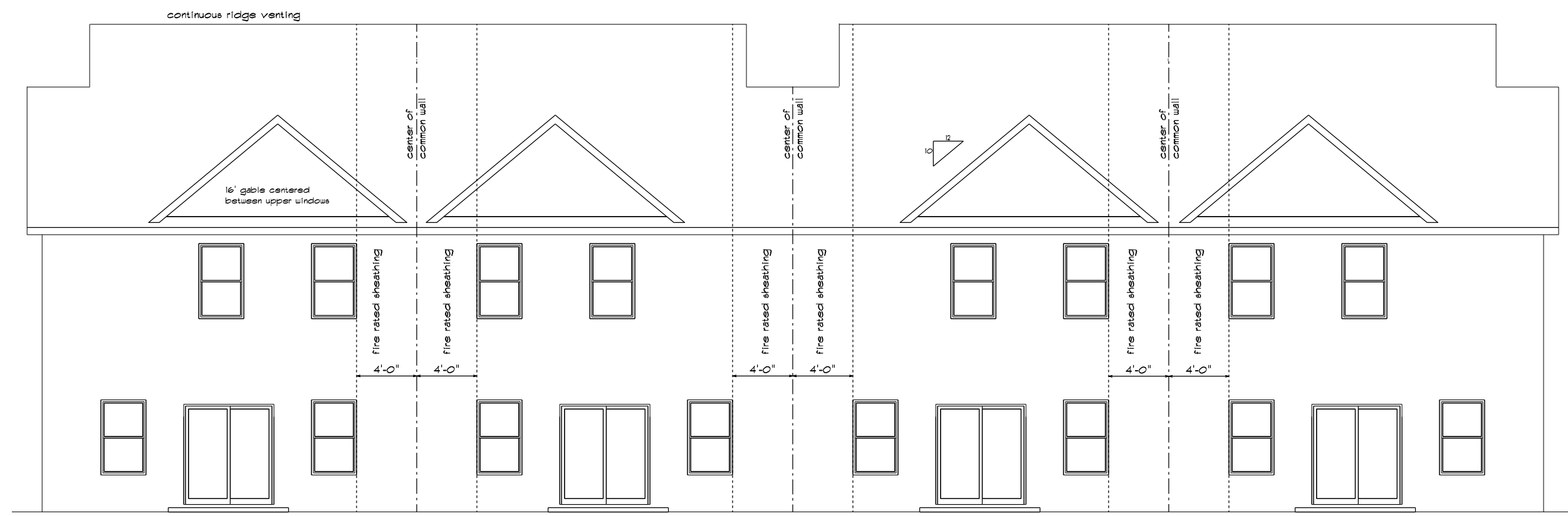
Drainage Area	Impervious Area		Pervious Area		Total Area	
	Area [SF]	CN Value	Area [SF]	CN Value	Area [SF]	CN Value
PR1 (SURFACE DRAINS TO DOUGLAS)	13605	98	7707	80	21312	91
PR2 (DISCHARGE TO CATCH BASIN)	7021	98	2137	80	9158	94

Site Area Summary

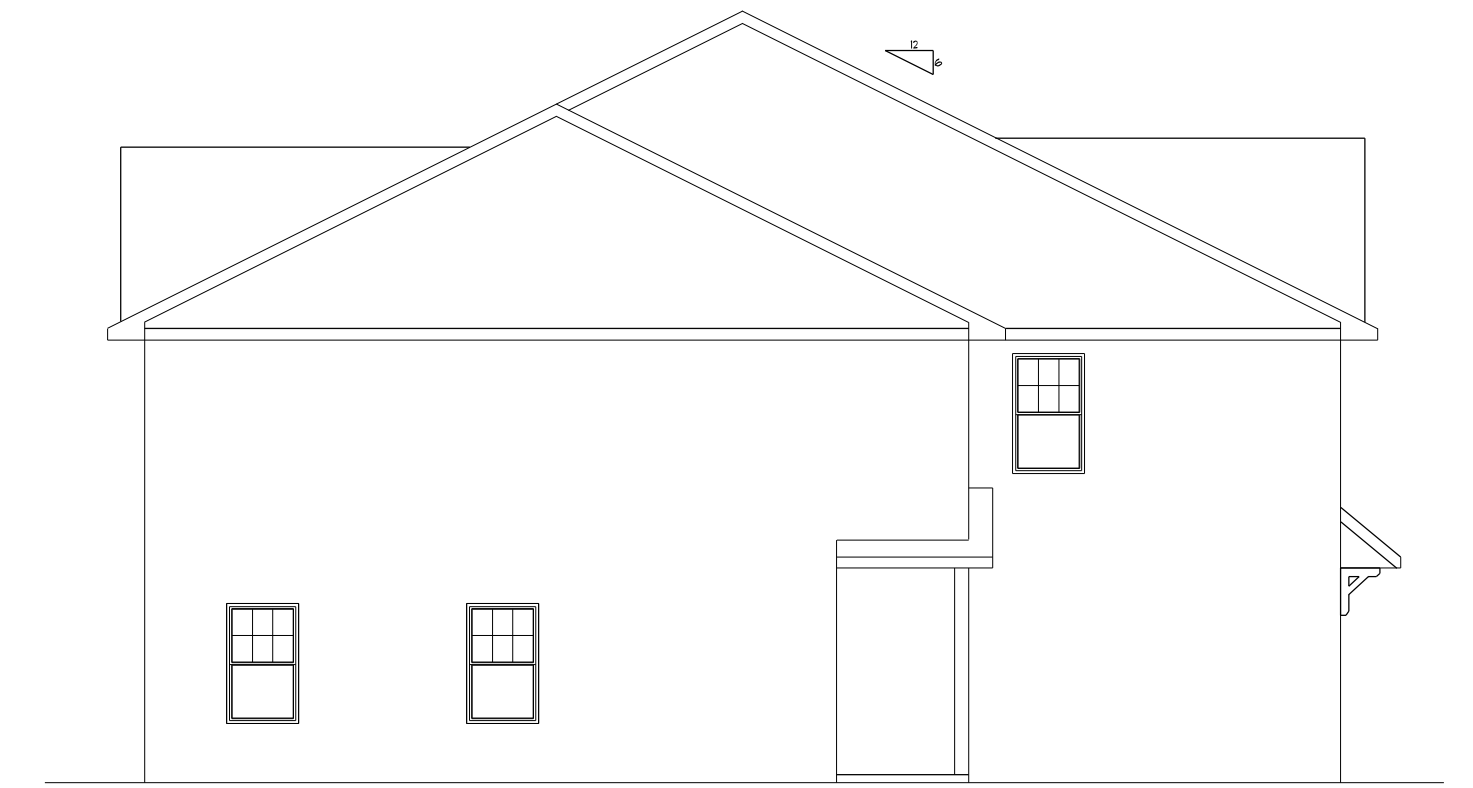
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Existing Site	24872	0.57	5598	0.13	30470	0.70
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RIGHT ELEVATION



REAR ELEVATION

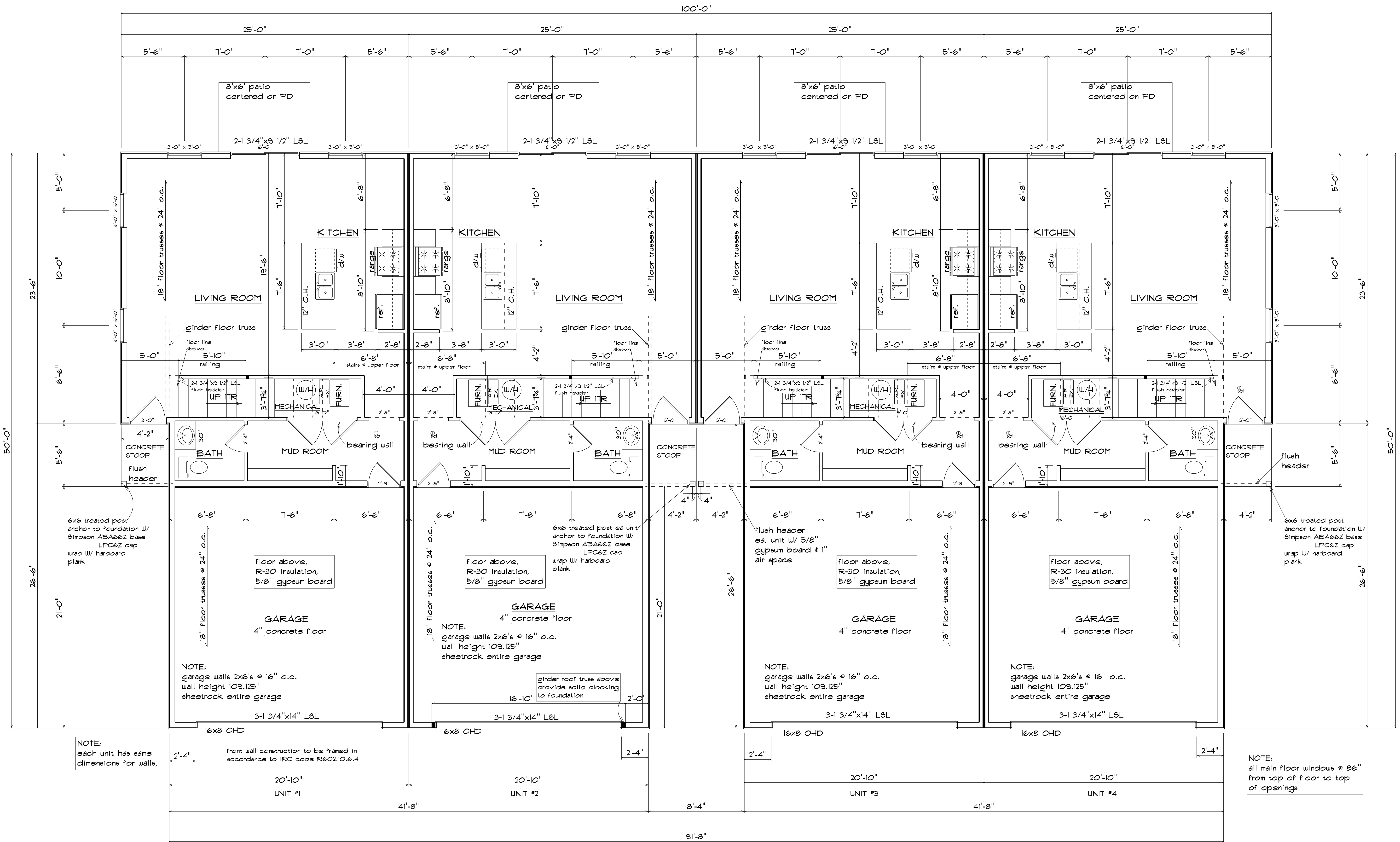


LEFT ELEVATION

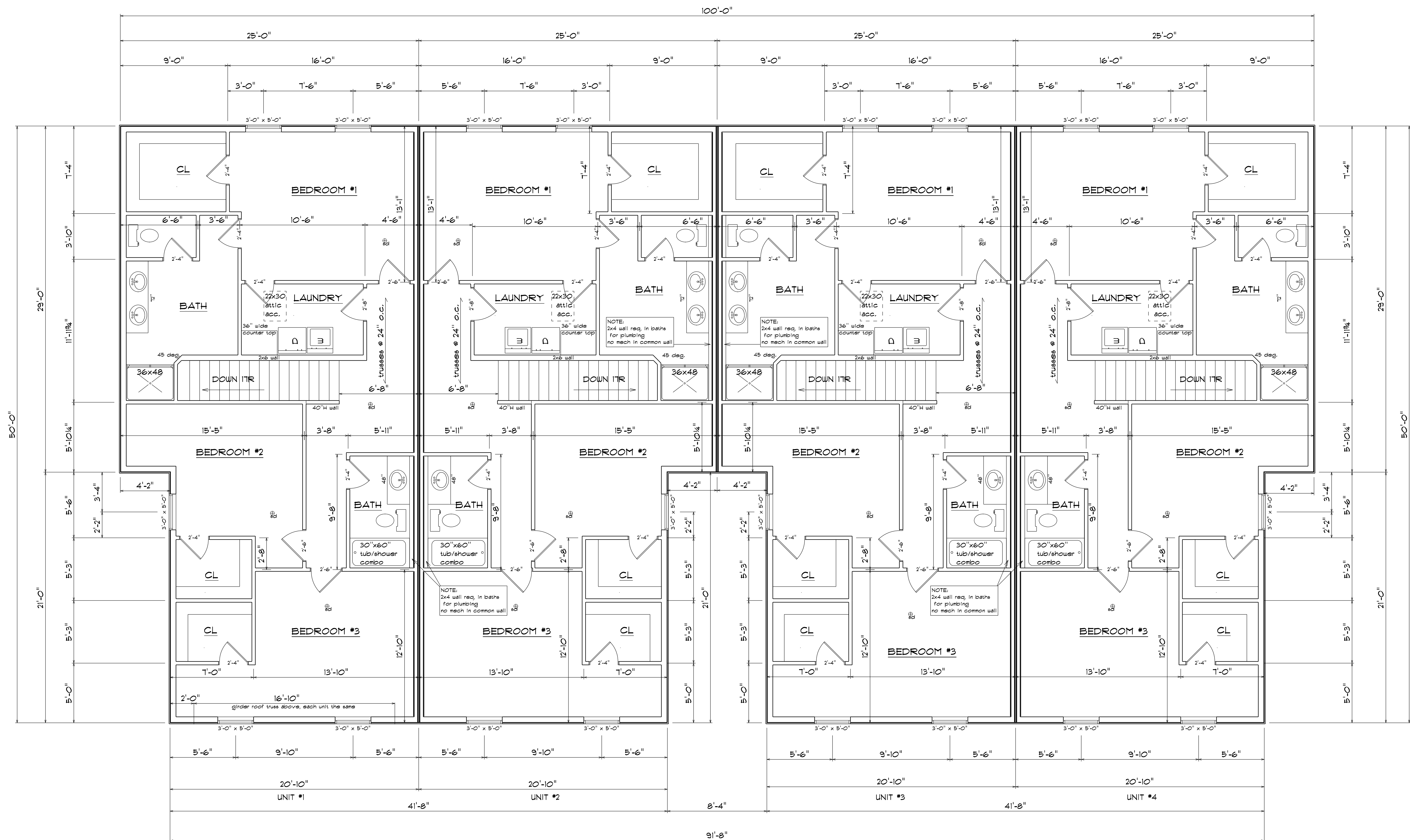


NOTE:
All openings to exterior must be detailed & framed. Flashing is req. where all roof vertical surfaces meet or where siding material changes.

FRONT ELEVATION
preliminary



MAIN FLOOR PLAN 102 sq.ft. ea. unit
 preliminary 109.125" wall height



UPPER FLOOR PLAN 1162 sq.ft. ea. unit
 preliminary 97.125' wall height

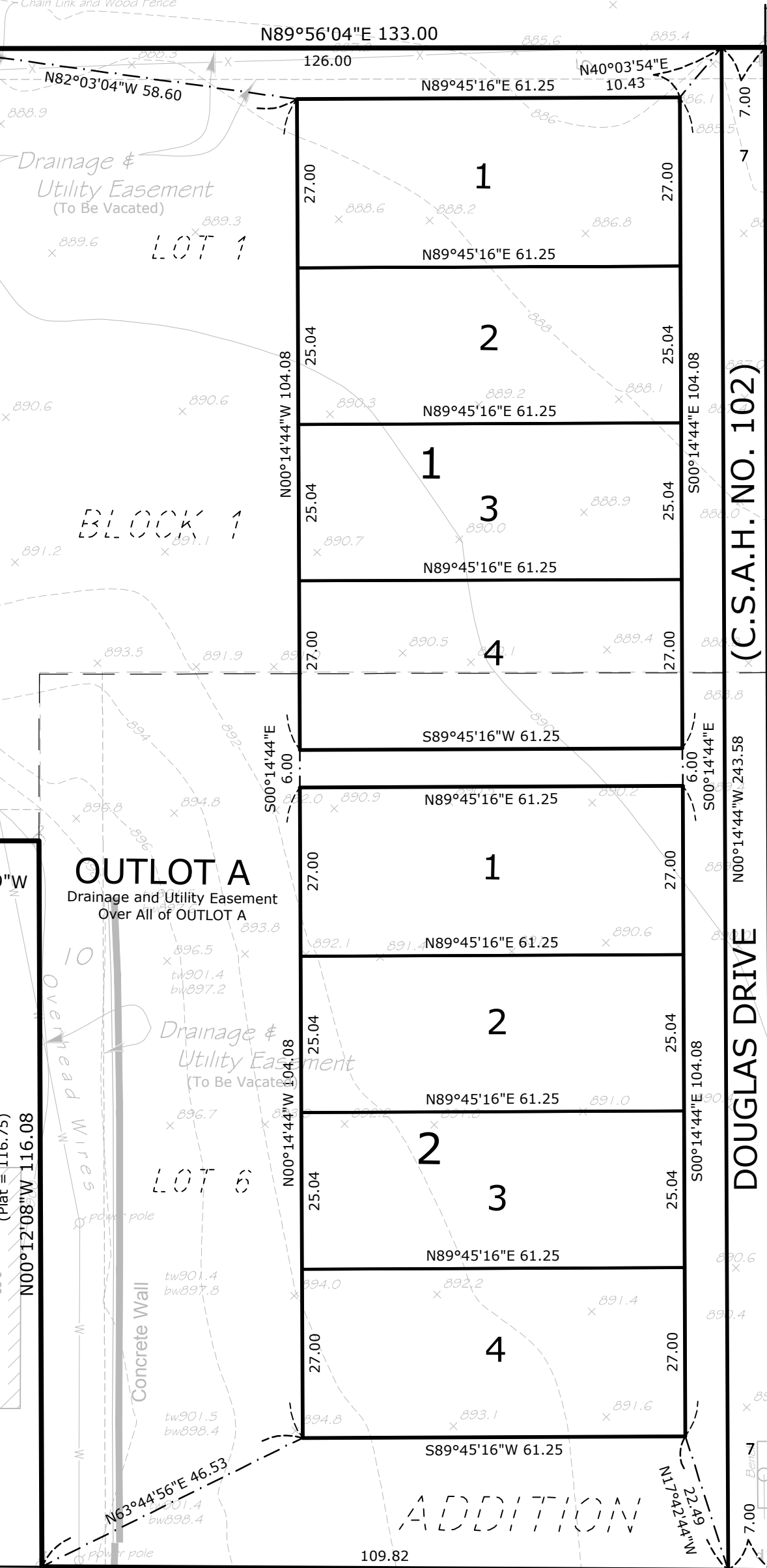
PRELIMINARY PLAT: HAMPTON ADDITION

DOUGLAS DRIVE TOWNHOMES

PERLICK

TEMP

ADDITION



(C.S.A.H. NO. 102)

(C.S.A.H. NO. 102)

DOUGLAS DRIVE

34TH AVENUE NORTH

PRELIMINARY PLAT GENERAL NOTES

PROPERTY DESCRIPTION:

Lot 1, Block 1, PERLICK ADDITION, Hennepin County, Minnesota.
AND
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 Companies
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
Proposed Lot 1 = 1,654 +/- Sq. Ft. or 0.038 +/- Acres
Proposed Lot 2 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres
Proposed Lot 3 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres
Proposed Lot 4 = 1,654 +/- Sq. Ft. or 0.038 +/- Acres

Block 2
Proposed Lot 1 = 1,654 +/- Sq. Ft. or 0.038 +/- Acres
Proposed Lot 2 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres
Proposed Lot 3 = 1,534 +/- Sq. Ft. or 0.035 +/- Acres
Proposed Lot 4 = 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

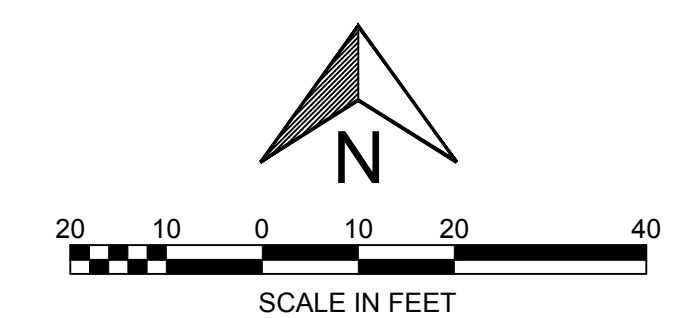
Total Property Area = 30,470 +/- Sq. Ft. or 0.700 Acres

FLOOD ZONE:

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.

Rory L. Synsteliën
rory@civilsitegroup.com

Minnesota License No. 44565



Linetype & Symbol Legend

—E—E—	ELECTRIC LINE	⊠	AIR CONDITIONER	⊠	UTILITY VAULT
- - -E - - -	ELECTRIC LINE (RECORD)	⊠	CABLE TV BOX	⊠	UTILITY MANHOLE
- - -F - - -	FIBER/COMM. LINE	⊠	ELECTRIC MANHOLE	⊠	ELECTRICAL OUTLET
- - -F - - -	FIBER/COMM. LINE (RECORD)	⊠	ELECTRIC TRANSFORMER	⊠	HAND HOLE
- - -G - - -	GASMAIN	⊠	ELECTRIC METER	⊠	BOLLARD
- - -G - - -	GASMAIN (RECORD)	⊠	FIBER/COMM. MANHOLE	⊠	FLAG POLE
- - -OH - - -	OVERHEAD UTILITIES	⊠	POWER POLE	⊠	FUEL TANK
- - -S - - -	SANITARY SEWER	⊠	GUY WIRE	⊠	HANDICAP SYMBOL
- - -S - - -	SANITARY SEWER (RECORD)	⊠	GAS METER	⊠	LIGHT POLE
- - -SS - - -	STORM SEWER	⊠	GAS MANHOLE	⊠	MAIL BOX
- - -SS - - -	STORM SEWER (RECORD)	⊠	GAS VALVE	⊠	SIGN
- - -T - - -	TELEPHONE LINE	⊠	ROOF DRAIN	⊠	CONIFEROUS TREE
- - -T - - -	TELEPHONE LINE (RECORD)	⊠	SEWER CLEAN OUT	⊠	DECIDUOUS TREE
- - -W - - -	WATERMAIN	⊠	SANITARY MANHOLE	⊠	SOIL BORING
- - -W - - -	WATERMAIN (RECORD)	⊠	STORM MANHOLE	⊠	FOUND IRON MONUMENT
- - -X - - -	CHAINLINK FENCELINE	⊠	CATCH BASIN	⊠	SET IRON MONUMENT
- - -O - - -	WOODEN FENCELINE	⊠	FLARED END SECTION	⊠	CAST IRON MONUMENT
- - -O - - -	GUARDRAIL	⊠	TELEPHONE BOX	⊠	
- - -Δ - - -	ACCESS RESTRICTION	⊠	TELEPHONE MANHOLE	⊠	
▒	CONCRETE SURFACE	⊠	TRAFFIC SIGNAL	⊠	
▒	PAVER SURFACE	⊠	HYDRANT	⊠	
▒	BITUMINOUS SURFACE	⊠	FIRE CONNECTION	⊠	
▒	GRAVEL/LANDSCAPE SURFACE	⊠	POST INDICATOR VALVE	⊠	
		⊠	WATER MANHOLE	⊠	
		⊠	WATER VALVE	⊠	
		⊠	WELL	⊠	

PROJECT
Hampton Addition
3401-3415 Douglas Drive, Crystal, Hennepin County, Minnesota 55422

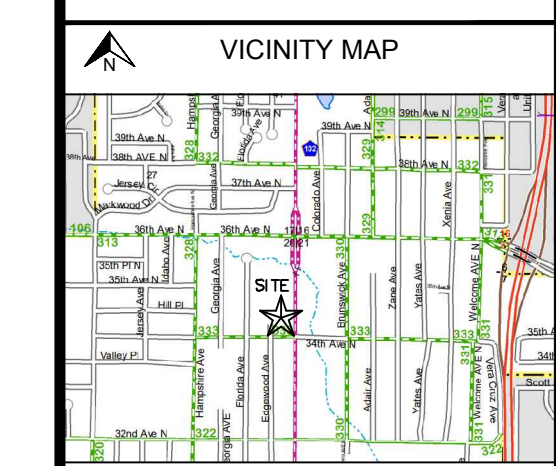
CLIENT
Hampton Companies
1824 Buerkle Rd, White Bear Lake, MN 55110

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.

RORY L. SYNSTELIËN
DATE 3-14-2023 LICENSE NO. 44565

QA/QC

FIELD CREW	
DRAWN BY	SW
REVIEWED BY	CJ
UPDATED BY	



REVISION SUMMARY

DATE	DESCRIPTION

PROJECT NO.: 23035

PRELIMINARY PLAT

V2.0

© COPYRIGHT 2023 CIVIL SITE GROUP INC.

DOUGLAS DRIVE TOWNHOMES

CRYSTAL, MINNESOTA

ISSUED FOR: CITY SUBMITTAL

PRELIMINARY:
NOT FOR
CONSTRUCTION



PROJECT
DOUGLAS DRIVE TOWNHOMES

3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422

HAMPTON COMPANIES
1824 BUERKLE RD, WHITE BEAR LAKE 55110

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
03/14/2023	CITY SUBMITTAL

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

REVISION SUMMARY

DATE	DESCRIPTION

TITLE SHEET

C0.0

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.



Know what's below.
Call before you dig.

SHEET INDEX

SHEET NUMBER	SHEET TITLE
C0.0	TITLE SHEET
C1.0	REMOVALS PLAN
C2.0	SITE PLAN
C3.0	GRADING PLAN
C4.0	UTILITY PLAN
C5.0	CIVIL DETAILS
C5.1	CIVIL DETAILS
C5.2	CIVIL DETAILS
L1.0	LANDSCAPE PLAN NOTES & DETAILS
SW1.0	SWPPP - EXISTING CONDITIONS
SW1.1	SWPPP - PROPOSED CONDITIONS
SW1.2	SWPPP - DETAILS
SW1.3	SWPPP - NARRATIVE

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
1824 BUERKLE RD, WHITE BEAR LAKE 55110

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PROJECT NUMBER: 23035

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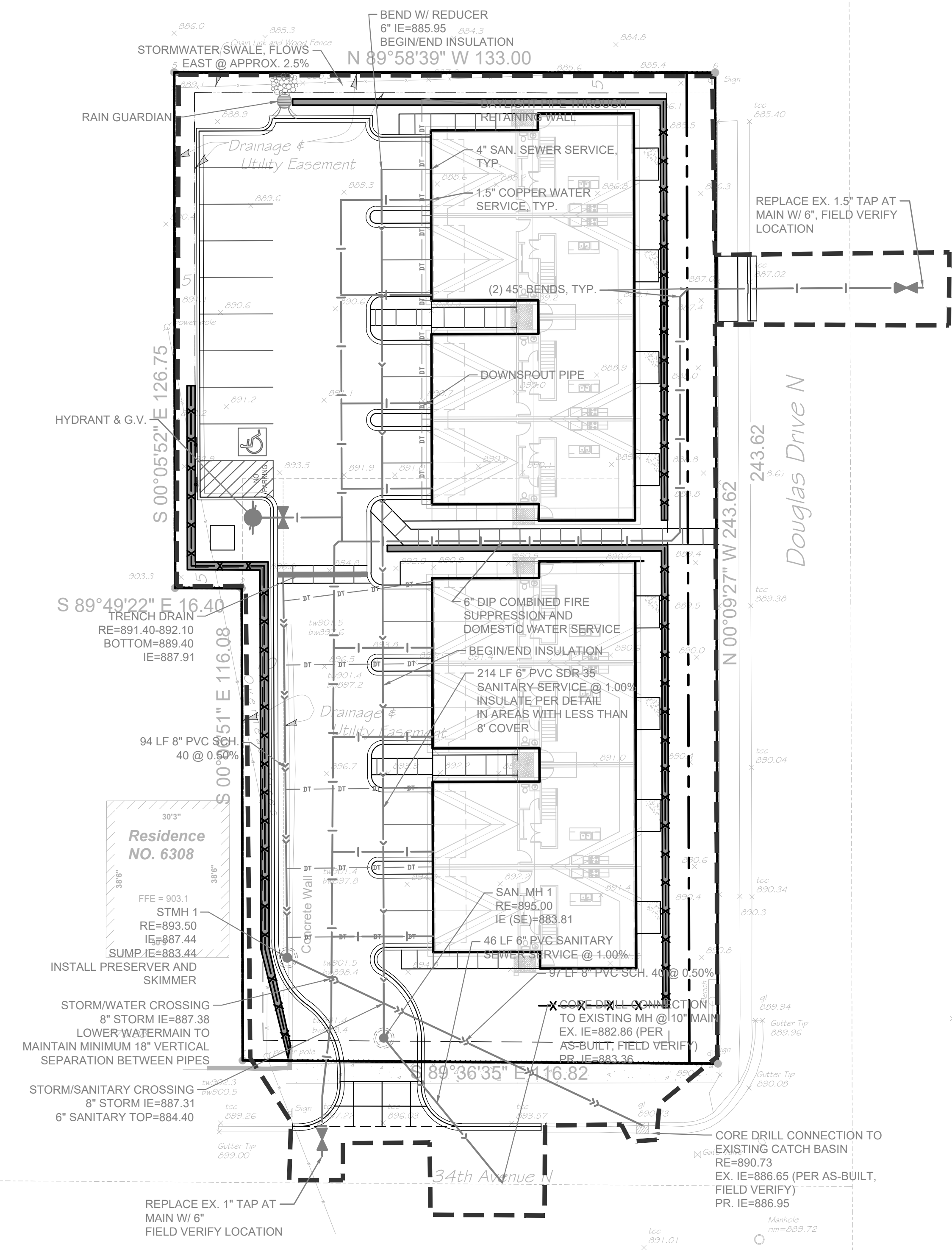
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PROJECT NUMBER: 23035

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PROJECT NUMBER: 23035

GENERAL UTILITY NOTES:

- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. CONTACT "GOPHER STATE ONE CALL" (651-454-0002 OR 800-252-1186) FOR UTILITY LOCATIONS, 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL REPAIR OR REPLACE ANY UTILITIES THAT ARE DAMAGED DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE SITE PLAN FOR HORIZONTAL DIMENSIONS AND LAYOUT.
- CONTRACTOR SHALL FIELD VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES AND TOPOGRAPHIC FEATURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF DISCREPANCIES OR VARIATIONS FROM THE PLANS.
- 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.
- CASTINGS SHALL BE SALVAGED FROM STRUCTURE REMOVALS AND RE-USED OR PLACED AT THE DIRECTION OF THE OWNER.
- ALL WATER PIPE SHALL BE CLASS S2 DUCTILE IRON PIPE (DIP) AWWA C151, ASME B16.4, AWWA C110, AWWA C153 UNLESS OTHERWISE NOTED.
- 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.
- ALL STORM SEWER PIPE SHALL BE HDPE ASTM F714 & F2306 WITH ASTM D3212 SPEC FITTINGS UNLESS OTHERWISE NOTED.
- PIPE LENGTHS SHOWN ARE FROM CENTER TO CENTER OF STRUCTURE OR TO END OF FLARED END SECTION.
- 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.
- CATCH BASINS AND MANHOLES IN PAVED AREAS SHALL BE SUMPED 0.04 FEET. ALL CATCH BASINS IN GUTTERS SHALL BE SUMPED 0.15 FEET PER DETAILS. RIM ELEVATIONS SHOWN ON THIS PLAN DO NOT REFLECT SUMPED ELEVATIONS.
- ALL FIRE HYDRANTS SHALL BE LOCATED 5 FEET BEHIND BACK OF CURB UNLESS OTHERWISE NOTED.
- HYDRANT TYPE, VALVE, AND CONNECTION SHALL BE IN ACCORDANCE WITH CITY REQUIREMENTS. HYDRANT EXTENSIONS ARE INCIDENTAL.
- A MINIMUM OF 8 FEET OF COVER IS REQUIRED OVER ALL WATERMAIN, UNLESS OTHERWISE NOTED. EXTRA DEPTH MAY BE REQUIRED TO MAINTAIN A MINIMUM OF 18" VERTICAL SEPARATION TO SANITARY OR STORM SEWER LINES. EXTRA DEPTH WATERMAIN IS INCIDENTAL.
- A MINIMUM OF 18 INCHES OF VERTICAL SEPARATION AND 10 FEET OF HORIZONTAL SEPARATION IS REQUIRED FOR ALL UTILITIES, UNLESS OTHERWISE NOTED.
- ALL CONNECTIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH CITY STANDARDS AND COORDINATED WITH THE CITY PRIOR TO CONSTRUCTION.
- CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE-DRILLED.
- COORDINATE LOCATIONS AND SIZES OF SERVICE CONNECTIONS WITH THE MECHANICAL DRAWINGS.
- COORDINATE INSTALLATION AND SCHEDULING OF THE INSTALLATION OF UTILITIES WITH ADJACENT CONTRACTORS AND CITY STAFF.
- ALL STREET REPAIRS AND PATCHING SHALL BE PERFORMED PER THE REQUIREMENTS OF THE CITY. ALL PAVEMENT CONNECTIONS SHALL BE SAWCUT. ALL TRAFFIC CONTROLS SHALL BE PROVIDED BY THE CONTRACTOR AND SHALL BE ESTABLISHED PER THE REQUIREMENTS OF THE MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MMUTCD) AND THE CITY. THIS SHALL INCLUDE BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FLASHERS, AND FLAGGERS AS NEEDED. ALL PUBLIC STREETS SHALL BE OPEN TO TRAFFIC AT ALL TIMES. NO ROAD CLOSURES SHALL BE PERMITTED WITHOUT APPROVAL BY THE CITY.
- ALL STRUCTURES, PUBLIC AND PRIVATE, SHALL BE ADJUSTED TO PROPOSED GRADES WHERE REQUIRED. THE REQUIREMENTS OF ALL OWNERS MUST BE COMPLIED WITH. STRUCTURES BEING RESET TO PAVED AREAS MUST MEET OWNERS REQUIREMENTS FOR TRAFFIC LOADING.
- CONTRACTOR SHALL COORDINATE ALL WORK WITH PRIVATE UTILITY COMPANIES.
- CONTRACTOR SHALL COORDINATE CONNECTION OF IRRIGATION SERVICE TO UTILITIES. COORDINATE THE INSTALLATION OF IRRIGATION SLEEVES NECESSARY AS TO NOT IMPACT INSTALLATION OF UTILITIES.
- CONTRACTOR SHALL MAINTAIN AS-BUILT PLANS THROUGHOUT CONSTRUCTION AND SUBMIT THESE PLANS TO ENGINEER UPON COMPLETION OF WORK.
- 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.
- 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.
- 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.



CITY OF CRYSTAL UTILITY NOTES:

- RESERVED FOR CITY SPECIFIC UTILITY NOTES.

UTILITY LEGEND:

- MANHOLE
- CATCH BASIN
- GATE VALVE AND VALVE BOX
- PROPOSED FIRE HYDRANT
- WATER MAIN
- SANITARY SEWER
- STORM SEWER
- FES AND RIP RAP



Know what's below. Call before you dig.

UTILITY PLAN

C4.0

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
1824 BUERKE RD, WHITE BEAR LAKE 55110

PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
1824 BUERKE RD, WHITE BEAR LAKE 55110

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
03/14/2023	CITY SUBMITTAL

REVISION SUMMARY

DATE	DESCRIPTION

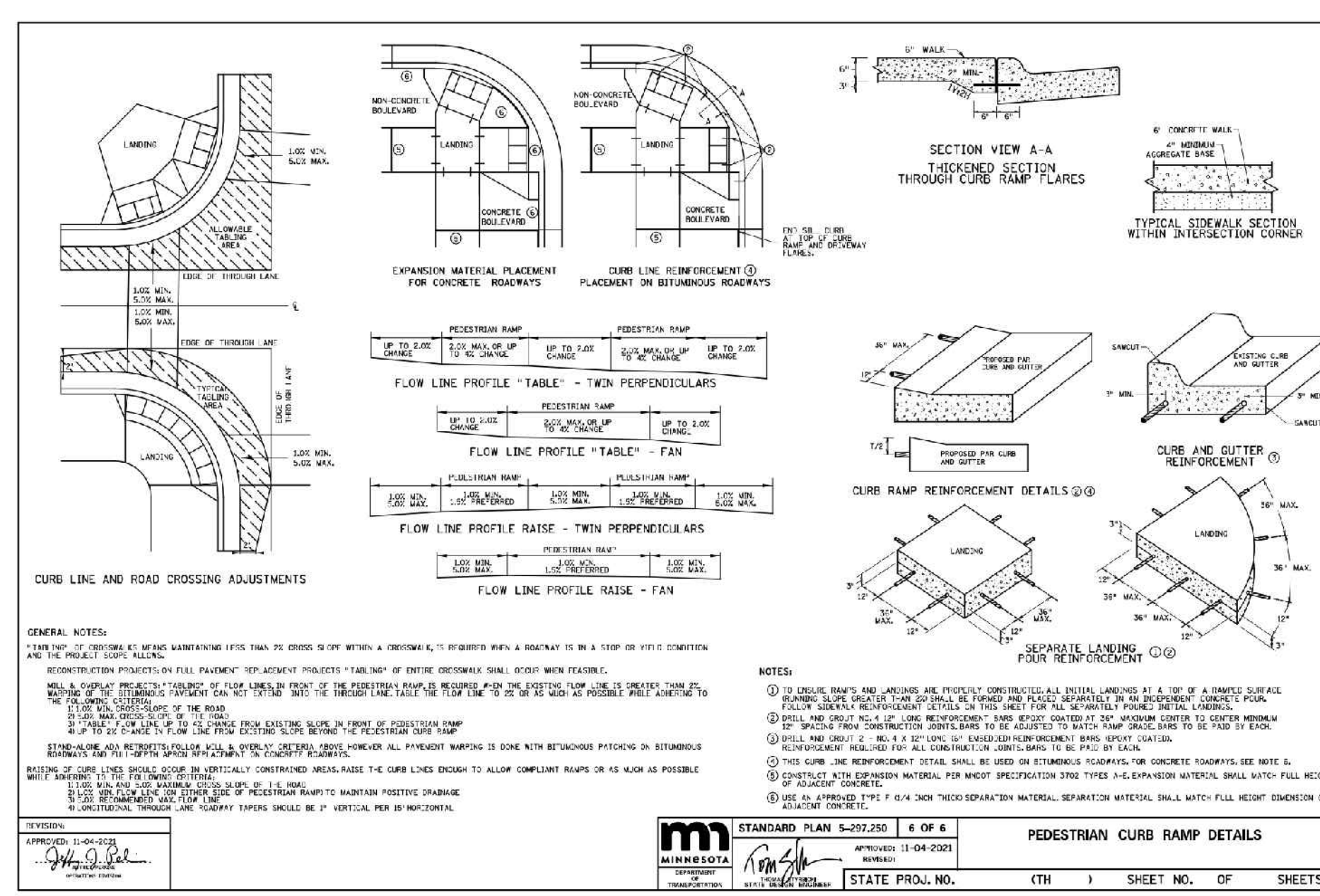
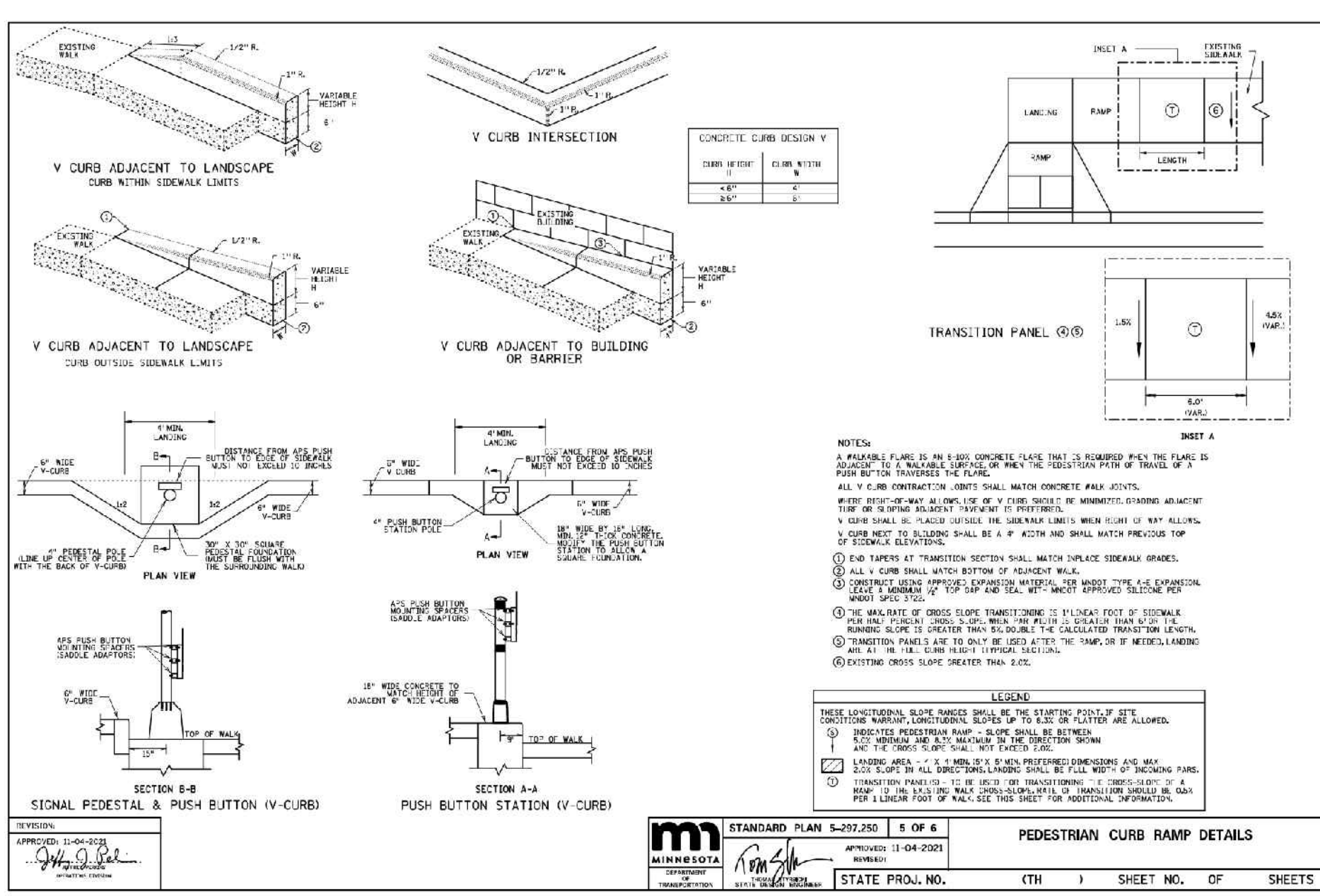
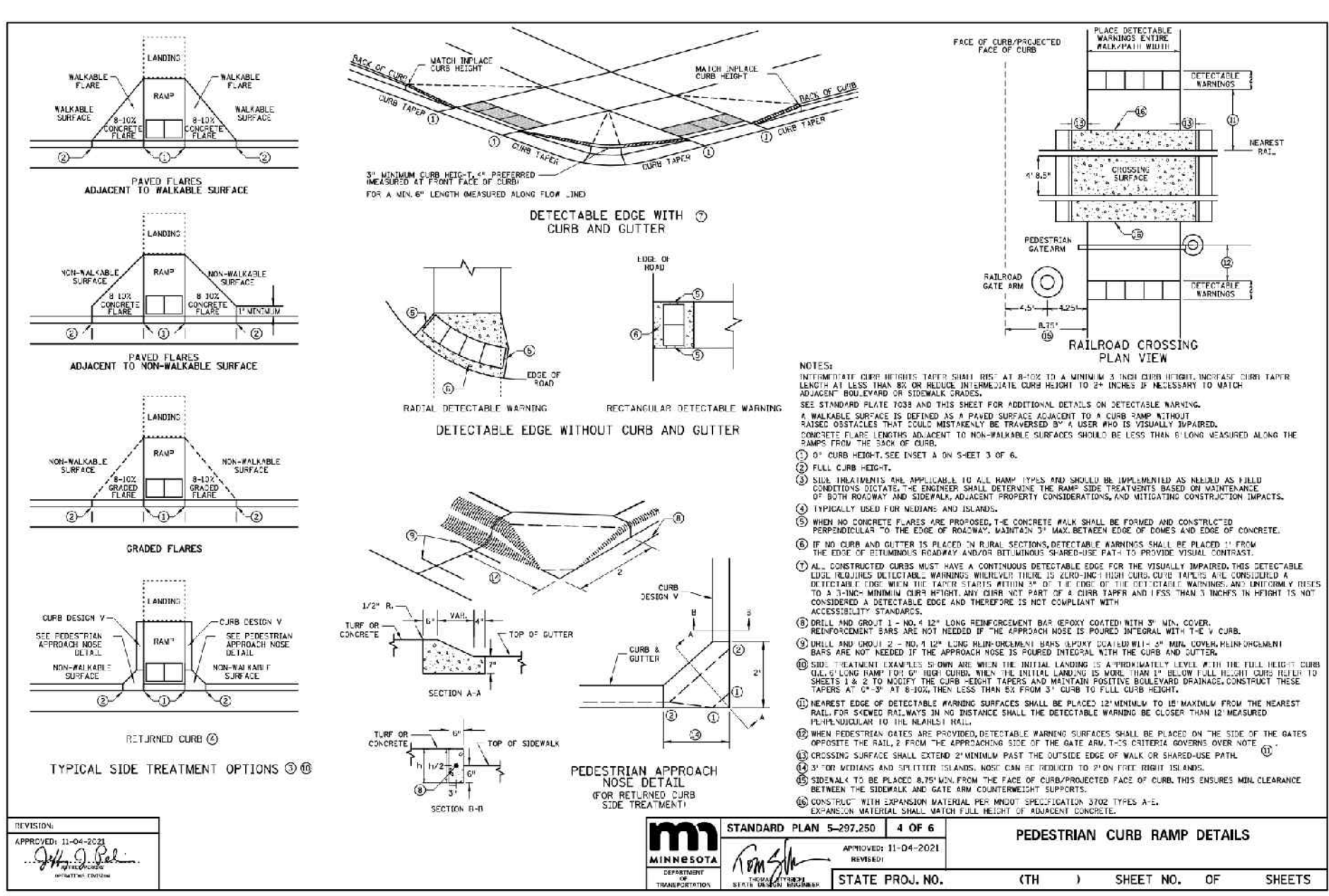
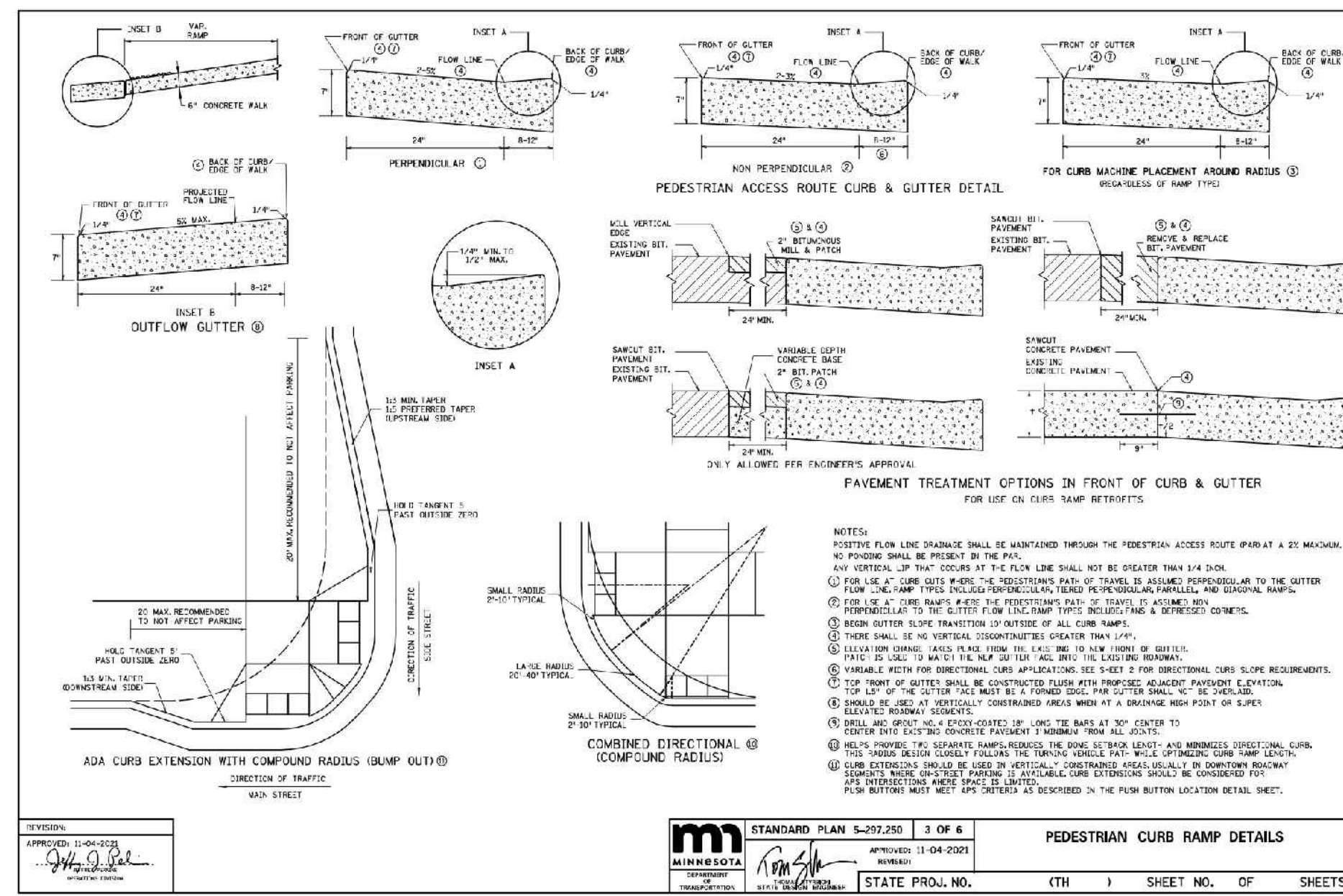
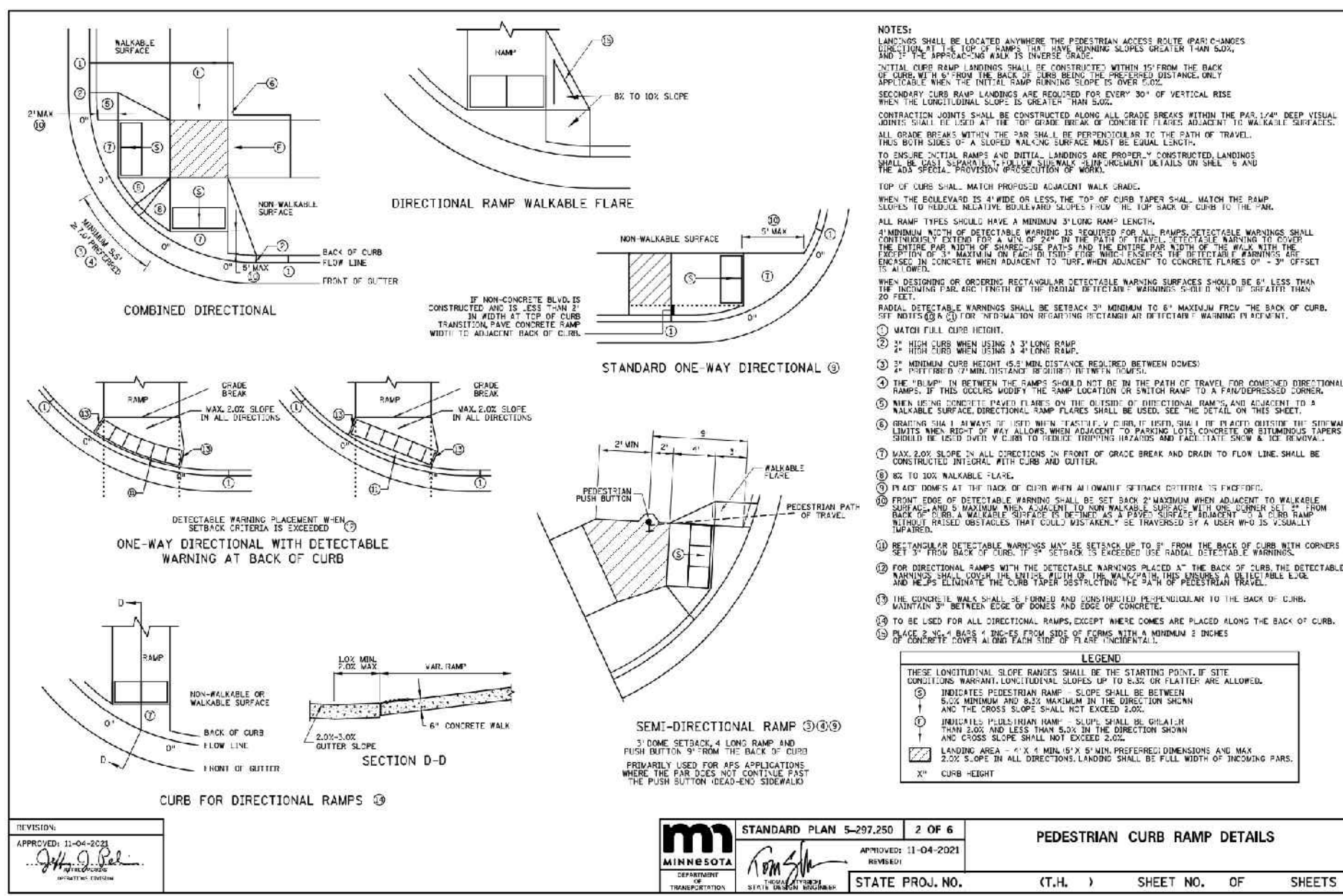
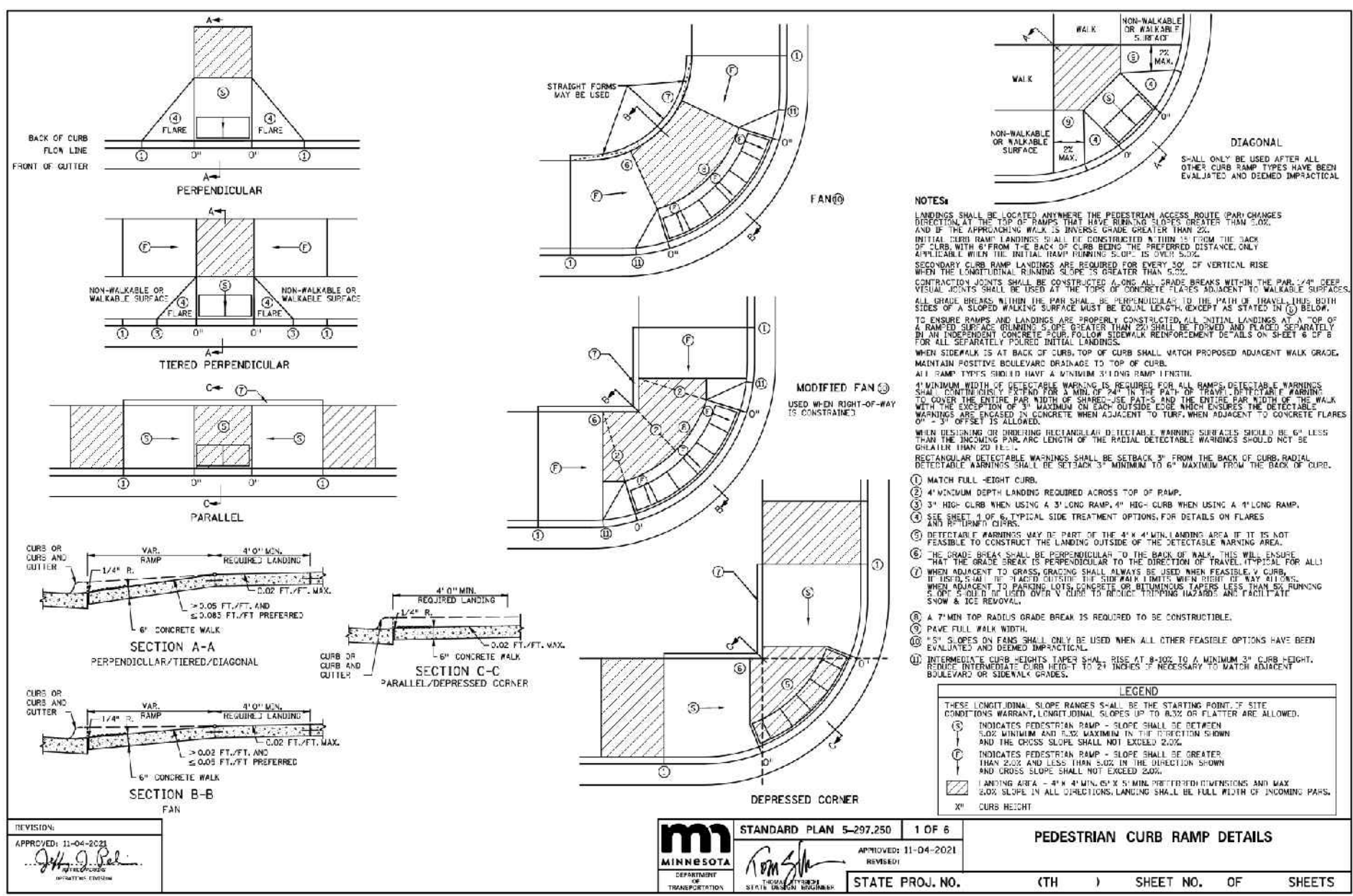
DRAWN BY: MD, NH REVIEWED BY: RL, JL
PROJECT NUMBER: 23035

REVISION SUMMARY

DATE	DESCRIPTION

CIVIL DETAILS

C5.2



CIVIL DETAILS

C5.2

**PRELIMINARY:
NOT FOR
CONSTRUCTION**

PROJECT
DOUGLAS DRIVE TOWNHOMES
3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422
HAMPTON COMPANIES
1824 BUERKLE RD, WHITE BEAR LAKE 55110

ISSUE/SUBMITTAL SUMMARY

DATE	DESCRIPTION
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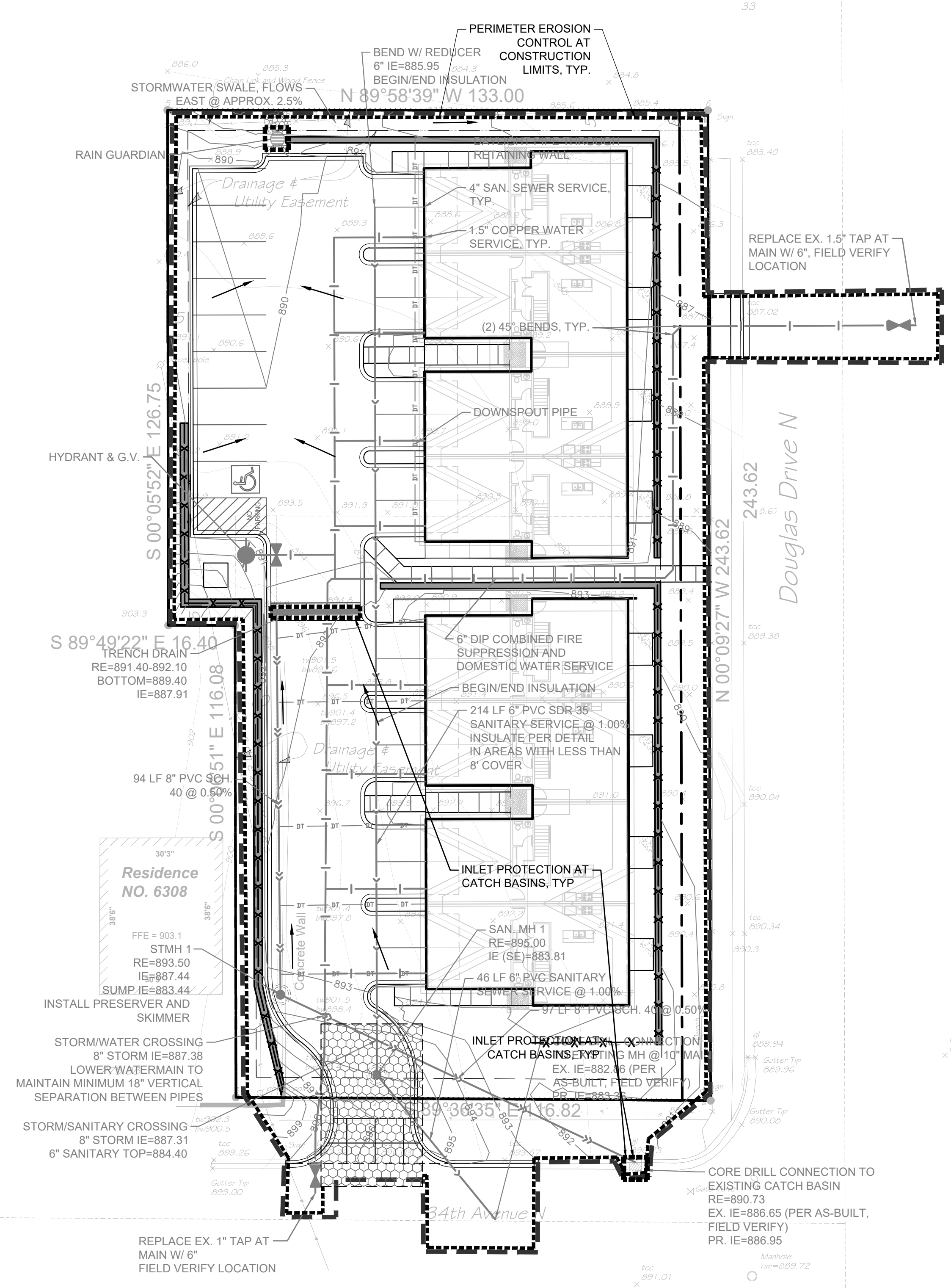
DRAWN BY: MD, NH REVIEWED BY: RL, JL
PROJECT NUMBER: 23035

REVISION SUMMARY

DATE	DESCRIPTION

SWPPP - PROPOSED CONDITIONS

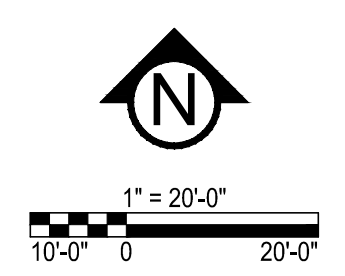
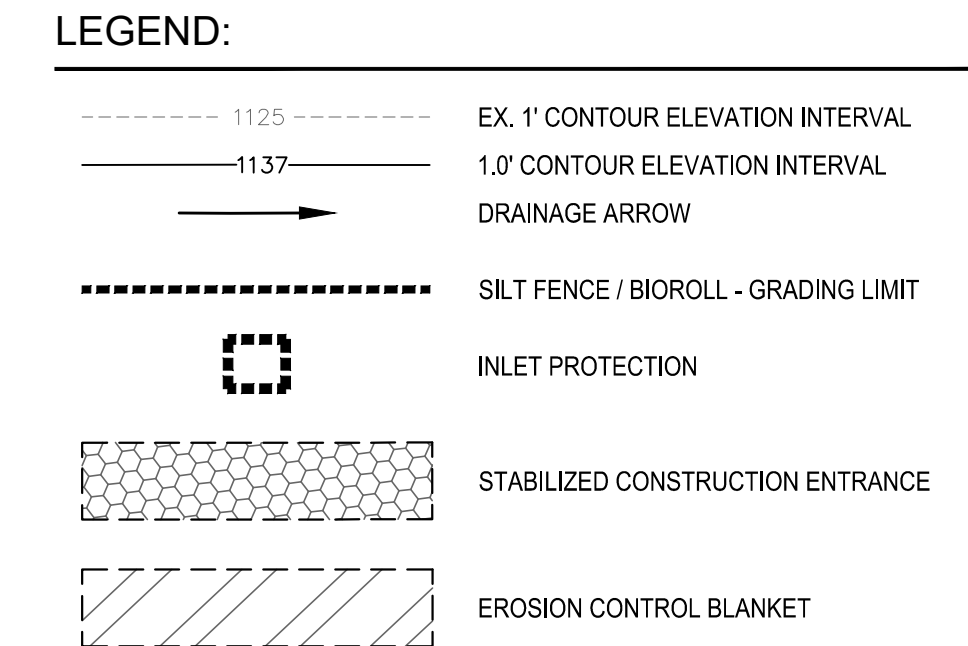
SW1.1



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.
 - 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.
 - SEE SHEETS SW1.0 - SW1.5 FOR ALL EROSION CONTROL NOTES, DESCRIPTIONS, AND PRACTICES.
 - SEE GRADING PLAN FOR ADDITIONAL GRADING AND EROSION CONTROL NOTES.
 - 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.



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 #MR10001) AND ANY LOCAL GOVERNING AGENCY HAVING JURISDICTION CONCERNING EROSION AND SEDIMENTATION CONTROL.

STORMWATER DISCHARGE DESIGN REQUIREMENTS

SWPPP

THE NATURE OF THIS PROJECT WILL BE CONSISTENT WITH WHAT IS REPRESENTED IN THIS SET OF CONSTRUCTION PLANS AND SPECIFICATIONS. SEE THE SWPPP PLAN SHEETS AND SWPPP NARRATIVE (ATTACHMENT A CONSTRUCTION SWPPP TEMPLATE) FOR ADDITIONAL SITE SPECIFIC SWPPP INFORMATION. THE PLANS SHOW LOCATIONS AND TYPES OF ALL TEMPORARY AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL 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 CBS
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 PERMITEE WHO HAS OPERATIONAL CONTROL OF THAT PORTION OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER THE FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS.

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

1. THE FINAL SWPPP
2. ANY OTHER STORMWATER RELATED PERMITS REQUIRED FOR THE PROJECT;
3. RECORDS OF ALL INSPECTION AND MAINTENANCE CONDUCTED DURING CONSTRUCTION (SEE SECTION 11, INSPECTIONS AND MAINTENANCE);
4. ALL PERMIT 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 PERMITEE(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) KNOWN/GEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMP'S TO OVERSEE ALL INSTALLATION AND MAINTENANCE OF BMP'S AND IMPLEMENTATION OF THE SWPPP.
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 BMP'S IN ACCORDANCE WITH THE REQUIREMENTS OF THE PERMIT. ONE OF THESE INDIVIDUAL(S) MUST BE AVAILABLE FOR AN ON-SITE INSPECTION WITHIN 72 HOURS UPON REQUEST BY MP/CA. 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 THE PERMIT.
 - 4.2. DATES OF TRAINING AND NAME OF INSTRUCTOR AND ENTITY PROVIDING TRAINING.
 - 4.3. CONTENT OF TRAINING COURSE OR WORKSHOP INCLUDING THE NUMBER OF HOURS OF TRAINING.
5. FOLLOWING FINAL STABILIZATION AND THE TERMINATION OF COVERAGE FOR THE NPDES PERMIT, THE OWNER IS EXPECTED TO FURNISH LONG TERM OPERATION AND MAINTENANCE (O & M) OF THE PERMANENT STORM WATER MANAGEMENT SYSTEM.

CONSTRUCTION ACTIVITY REQUIREMENTS

SWPPP AMENDMENTS (SECTION 6):

1. ONE OF THE INDIVIDUALS DESCRIBED IN ITEM 21.2.A OR ITEM 21.2.B OR ANOTHER QUALIFIED INDIVIDUAL MUST COMPLETE ALL SWPPP CHANGES. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP MUST INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS.
2. PERMITEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMP'S AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER OR SEASONAL CONDITIONS HAVING A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER.
3. PERMITEES MUST AMEND THE SWPPP TO INCLUDE ADDITIONAL OR MODIFIED BMP'S AS NECESSARY TO CORRECT PROBLEMS IDENTIFIED OR ADDRESS SITUATIONS WHENEVER INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER OR OPERATOR, USEPA OR MP/CA 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. PERMITEES MUST SELECT, INSTALL, AND MAINTAIN THE BMP'S IDENTIFIED IN THE SWPPP AND IN THIS PERMIT IN AN APPROPRIATE AND FUNCTIONAL MANNER AND IN ACCORDANCE WITH RELEVANT MANUFACTURER SPECIFICATIONS AND ACCEPTED ENGINEERING PRACTICES.

EROSION PREVENTION (SECTION 8):

1. BEFORE WORK BEGINS, PERMITEES MUST DELINEATE THE LOCATION OF AREAS NOT TO BE DISTURBED.
2. PERMITEES MUST MINIMIZE THE RISK FOR DISTURBANCE OF PORTIONS OF THE PROJECT WITH STEEP SLOPES. WHEN STEEP SLOPES MUST BE DISTURBED, PERMITEES MUST USE TECHNIQUES SUCH AS PHASING AND STABILIZATION PRACTICES DESIGNED FOR STEEP SLOPES (E.G., SLOPE DRAINING AND TERRACING).
3. PERMITEES 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 PERMITEES 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, PERMITEES MUST COMPLETE STABILIZATION OF ALL EXPOSED SOIL AREAS WITHIN 200 FEET OF THE WATERS EDGE, AND THAT DRAIN TO THESE WATERS, WITHIN 24 HOURS DURING THE RESTRICTION PERIOD.
5. PERMITEES 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. PERMITEES 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. PERMITEES MUST STABILIZE THESE AREAS WITHIN 24 HOURS AFTER THEIR USE AS A SEDIMENT CONTAINMENT SYSTEM CEASES.
7. PERMITEES 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. PERMITEES 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. PERMITEES 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. PERMITEES MUST ESTABLISH SEDIMENT CONTROL BMP'S ON ALL DOWNGRADIENT PERIMETERS OF THE SITE AND DOWNGRADIENT AREAS OF THE SITE THAT DRAIN TO ANY SURFACE WATER, INCLUDING CURB AND GUTTER SYSTEMS. PERMITEES MUST LOCATE SEDIMENT CONTROL PRACTICES UPGRADIENT OF ANY BUFFER ZONES. PERMITEES 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, PERMITEES MUST INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMP'S 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, PERMITEES MUST INSTALL AN UPWARD PERIMETER CONTROL PRACTICE IF EXPOSED SOILS STILL DRAIN TO A SURFACE WATER.
5. PERMITEES 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, PERMITEES MUST RE-INSTALL SEDIMENT CONTROL PRACTICES BEFORE THE NEXT PRECIPITATION EVENT EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE.
6. PERMITEES MUST PROTECT ALL STORM DRAIN INLETS USING APPROPRIATE BMP'S DURING CONSTRUCTION UNTIL THEY ESTABLISH PERMANENT COVER ON ALL AREAS WITH POTENTIAL FOR DISCHARGES TO THE INLET.
7. PERMITEES MAY REMOVE INLET PROTECTION TO INSTALL A PARTICULAR INLET IF A SPECIFIC SAFETY CONCERN (E.G. STREET FLOODING/FREEZING) IS IDENTIFIED BY THE PERMITEES OR THE JURISDICTIONAL AGENCY (E.G., CITY/COUNTY/TOWNSHIP/MINNESOTA DEPARTMENT OF TRANSPORTATION ENGINEER). PERMITEES MUST DOCUMENT THE NEED FOR REMOVAL IN THE SWPPP.
8. PERMITEES MUST PROVIDE SILT FENCE OR OTHER EFFECTIVE SEDIMENT CONTROLS AT THE BASE OF STOCKPILES ON THE DOWNGRADIENT PERIMETER.
9. PERMITEES 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. PERMITEES 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. PERMITEES MUST USE STREET SWEEPING IF VEHICLE TRACKING BMP'S ARE NOT ADEQUATE TO PREVENT SEDIMENT TRACKING ONTO THE STREET.
12. PERMITEES MUST INSTALL TEMPORARY SEDIMENT BASINS AS REQUIRED IN SECTION 14.
13. IN ANY AREAS OF THE SITE WHERE FINAL VEGETATIVE STABILIZATION WILL OCCUR, PERMITEES MUST RESTRICT VEHICLE AND EQUIPMENT USE TO MINIMIZE SOIL COMPACTION.
14. PERMITEES MUST PRESERVE TOPSOIL ON THE SITE, UNLESS INFEASIBLE.
15. PERMITEES MUST DIRECT DISCHARGES FROM BMP'S TO VEGETATED AREAS UNLESS INFEASIBLE.
16. PERMITEES 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. PERMITEES 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, PERMITEES MUST DOCUMENT THE REASONS IN THE SWPPP. SHEET PILING IS A REDUNDANT PERIMETER CONTROL IF INSTALLED IN A MANNER THAT RETAINS ALL STORMWATER.
17. PERMITEES 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 PERMITEES 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. PERMITEES 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. PERMITEES 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 PERMITEES CANNOT DISCHARGE THE WATER TO A SEDIMENTATION BASIN PRIOR TO ENTERING A SURFACE WATER, PERMITEES MUST TREAT IT WITH APPROPRIATE BMP'S SUCH THAT THE DISCHARGE DOES NOT ADVERSELY AFFECT THE SURFACE WATER OR DOWNSTREAM PROPERTIES.
2. IF PERMITEES 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. PERMITEES 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 PERMITEES 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. PERMITEES 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. TRAINING MUST BE OBTAINED AND MAINTAIN ALL PERMANENT STORMWATER TREATMENT BMP'S.
3. PERMITEES MUST INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMP'S AND POLLUTION PREVENTION MANAGEMENT MEASURES TO ENSURE INTEGRITY AND EFFECTIVENESS. PERMITEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL NONFUNCTIONAL BMP'S WITH FUNCTIONAL BMP'S BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY UNLESS ANOTHER TIME FRAME IS SPECIFIED IN ITEM 11.5 OR 11.8. PERMITEES MAY TAKE ADDITIONAL TIME IF FIELD CONDITIONS PREVENT ACCESS TO THE AREA.
4. DURING EACH INSPECTION, PERMITEES MUST INSPECT SURFACE WATERS, INCLUDING DRAINAGE DITCHES AND CONVEYANCE SYSTEMS BUT NOT CURB AND GUTTER SYSTEMS, FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION. PERMITEES MUST REMOVE ALL DEBRIS AND SEDIMENT DEPOSITED IN SURFACE WATERS, INCLUDING DRAINAGE WAYS, CATCH BASINS, AND OTHER DRAINAGE SYSTEMS AND RESTABILIZE THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL. PERMITEES MUST COMPLETE REMOVAL AND STABILIZATION WITHIN SEVEN (7) CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. PERMITEES MUST USE ALL REASONABLE EFFORTS TO OBTAIN ACCESS. IF PRECLUDED, REMOVAL AND STABILIZATION MUST TAKE PLACE WITHIN SEVEN (7) DAYS OF OBTAINING ACCESS. PERMITEES ARE RESPONSIBLE FOR CONTACTING ALL LOCAL, REGIONAL, STATE AND FEDERAL AUTHORITIES AND RECEIVING ANY APPLICABLE PERMITS, PRIOR TO CONDUCTING ANY WORK IN SURFACE WATERS.
5. PERMITEES 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. PERMITEES MUST REMOVE SEDIMENT FROM VEHICLE EXITS 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. PERMITEES MUST REPAIR, REPLACE OR SUPPLEMENT ALL PERIMETER CONTROL DEVICES WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE.
7. PERMITEES 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. PERMITEES 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. PERMITEES 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 MP/CA 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. PERMITEES 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. PERMITEES MUST OBTAIN RAINFALL AMOUNTS BY EITHER A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ON-SITE, 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 PERMITEES 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. PERMITEES 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. PERMITEES 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. PERMITEES 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. PERMITEES 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. PERMITEES MUST PROPERLY STORE, COLLECT AND DISPOSE SOLID WASTE IN COMPLIANCE WITH MINN. R. CH. 7035.
5. PERMITEES MUST POSITION PORTABLE TOILETS SO THEY ARE SECURE AND WILL NOT TIP OR BE KNOCKED OVER. PERMITEES MUST PROPERLY DISPOSE SANITARY WASTE IN ACCORDANCE WITH MINN. R. CH. 7041.
6. PERMITEES 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. PERMITEES 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. PERMITEES MUST REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINN. STAT. 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE.
7. PERMITEES MUST LIMIT VEHICLE EXTERIOR WASHING AND EQUIPMENT TO A DEFINED AREA OF THE SITE. PERMITEES 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. PERMITEES MUST PROPERLY USE AND STORE SOAPS, DETERGENTS, OR SOLVENTS.

8. PERMITEES 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. PERMITEES 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. PERMITEES MUST PROPERLY DISPOSE LIQUID AND SOLID WASTES IN COMPLIANCE WITH MP/CA RULES. PERMITEES MUST INSTALL A SIGN INDICATING THE LOCATION OF THE WASHOUT FACILITY.

PERMIT TERMINATION (SECTION 4 AND SECTION 13):

1. PERMITEES MUST SUBMIT A NOT WITHIN 30 DAYS AFTER ALL TERMINATION CONDITIONS LISTED IN SECTION 13 ARE COMPLETE.
2. PERMITEES 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 PERMITEES' COVERAGE UNDER THIS PERMIT TERMINATES AT MIDNIGHT ON THE SUBMISSION DATE OF THE NOT.
3. PERMITEES 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. PERMITEES MUST CLEAN THE PERMANENT STORMWATER TREATMENT SYSTEM OF ANY ACCUMULATED SEDIMENT AND MUST ENSURE THE SYSTEM MEETS ALL APPLICABLE REQUIREMENTS IN SECTION 15 THROUGH 18 AND IS OPERATING AS DESIGNED.
5. PERMITEES MUST REMOVE ALL SEDIMENT FROM CONVEYANCE SYSTEMS PRIOR TO SUBMITTING THE NOT.
6. PERMITEES MUST REMOVE ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMP'S PRIOR TO SUBMITTING THE NOT. PERMITEES MAY LEAVE BMP'S 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 PERMITEE DISTRIBUTES THE MP/CA'S 'HOMEOWNER FACT SHEET' TO THE HOMEOWNER.
8. FOR CONSTRUCTION PROJECTS ON AGRICULTURAL LAND (E.G., PIPELINES ACROSS CROPLAND), PERMITEES MUST RETURN THE DISTURBED LAND TO ITS PRECONSTRUCTION AGRICULTURAL USE PRIOR TO SUBMITTING THE NOT.

SEED NOTES:

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

GENERAL RECOMMENDATIONS:

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

TEMPORARY EROSION CONTROL SEEDING, MULCHING & BLANKET.

SEED

- TEMPORARY SEED SHALL BE MNDOT SEED MIX 21-112 (WINTER WHEAT COVER CROP) FOR WINTER AND 21-111 (OATS COVER CROP) FOR SPRING/SUMMER APPLICATIONS. BOTH SEED MIXES SHALL BE APPLIED AT A SEEDING RATE OF 100 LBS/ACRE.

MULCH

- IMMEDIATELY AFTER SEEDING, WITHIN 24 HOURS, MNDOT TYPE 1 MULCH SHOULD BE APPLIED TO PROTECT AND ENHANCE SEED GERMINATION. MULCH SHALL BE APPLIED AT 90% COVERAGE (2 TONS PER ACRE OF STRAW MULCH)

SLOPES

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

TRAINING SECTION 21

DESIGN ENGINEER: MATTHEW R. PAVES 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

AREAS AND QUANTITIES:

SITE AREA CALCULATIONS	EXISTING CONDITION	PROPOSED CONDITION
BUILDING COVERAGE	0 SF 0.0%	9,129 SF 31.7%
ALL PAVEMENTS	0 SF 0.0%	11,497 SF 40.0%
ALL NON-PAVEMENTS	30,470 SF 100.0%	8,139 SF 28.3%
ROW DEDICATION		1,705 SF
TOTAL SITE AREA	30,470 SF 100.0%	28,765 SF 100.0%

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

EROSION CONTROL QUANTITIES	EXISTING CONDITION	PROPOSED CONDITION
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

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 VACANT SITE INTO (2) FOUR-UNIT TOWNHOME BUILDINGS WITH PARKING, UTILITY, AND LANDSCAPE IMPROVMENTS.

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 ACRE.
 - DRY AREAS MNDOT SEED MIX 35-221 (DRY PRAIRIE GENERAL) AT 40 LBS PER ACRE.
 - MAINTENANCE SHALL BE IN ACCORDANCE TO THE MNDOT SEEDING MANUAL.

PRELIMINARY:
NOT FOR
CONSTRUCTION

PROJECT
DOUGLAS DRIVE TOWNHOMES

3401-3415 DOUGLAS DRIVE, CRYSTAL, MN 55422

HAMPTON COMPANIES
1824 BUERKLE RD, WHITE BEAR LAKE 55110

ISSUE/SUBMITTAL SUMMARY

DATE DESCRIPTION

03/14/2023 CITY SUBMITTAL