CITY OF HAM LAKE



15544 Central Avenue NE Ham Lake, Minnesota 55304 (763) 434-9555 Fax (763) 434-9599

CITY OF HAM LAKE PLANNING COMMISSION AGENDA MONDAY, JULY 10, 2023

CALL TO ORDER: 6:00 p.m.

PLEDGE OF ALLEGIANCE

APPROVAL OF MINUTES: June 26, 2023

PUBLIC HEARINGS:

6:01 p.m. None

NEW BUSINESS:

1. Josh Williams, Structural Buildings, requesting Commercial Site Plan approval to construct a 9,352 square foot office/warehouse building for H&H Contracting at 15454 Central Avenue NE

COMMISSION BUSINESS:

1. City Council Update

CITY OF HAM LAKE PLANNING COMMISSION MINUTES MONDAY, JUNE 26, 2023

The Ham Lake Planning Commission met for its regular meeting on Monday, June 26, 2023 in the Council Chambers at Ham Lake City Hall located at 15544 Central Avenue NE in Ham Lake, Minnesota.

MEMBERS PRESENT: Commissioners Brian Pogalz, Dave Ringler, Jeff Entsminger,

Jonathan Fisher and Erin Dixson

MEMBERS ABSENT: Commissioners Kyle Lejonvarn and Scott Heaton

OTHERS PRESENT: City Engineer Tom Collins, Building and Zoning Official Mark

Jones and Building and Zoning Clerk Jennifer Bohr

CALL TO ORDER: Chair Pogalz called the meeting to order at 6:00 p.m.

PLEDGE OF ALLEGIANCE:

The pledge of allegiance was recited by all in attendance.

APPROVAL OF MINUTES:

Motion by Fisher, seconded by Dixson, to approve the minutes of the June 12, 2023 Planning Commission meeting as written. All present in favor, motion carried.

Chair Pogalz stated the Commission would review New Business prior to holding the public hearings.

NEW BUSINESS:

Mitch Stone, Stone Construction, requesting Commercial Site Plan approval to construct a 12,992 square foot addition to Jam Hops at 1460 133rd Lane NE

Mr. Paul Stone and Mr. Mitch Stone were present. Mr. Mitch Stone spoke on behalf of Stone Construction. Mr. Stone stated Jam Hops has operated in Ham Lake for over 26 years. Mr. Stone stated Jam Hops offers various classes and programs to kids and adults such as gymnastics, Ninja, recreational dance classes, competitive dance classes, competitive boys' and girls' gymnastics teams and an academic preschool. Mr. Stone stated Jam Hops opened their current location in 2017 and have steadily grown their business; some classes have had wait lists for two years. Mr. Stone stated the project is a 12,992 square foot addition to the existing building, which will primarily be gym space, as well as a parking lot expansion. Commissioner Entsminger asked if the septic design issues have been resolved. Mr. Stone stated they are still working with the Building Official on that. Chair Pogalz asked Engineer Collins to comment on the project.

Engineer Collins stated the current screening, consisting of pine trees, were planted along the east side of the parcel and on the south side of 133rd Lane NE where the property abuts residential zoning when the Jam Hops building was constructed. Engineer Collins stated the stormwater treatment basin that was constructed with the building has adequate capacity for the proposed expansion. Engineer Collins stated Building Official Jones is working with the Building Official from the City of Wyoming on review of the septic design. Engineer Collins stated the State Fire Marshall's office will determine if the reserve water tank and pump capacity of the existing fire suppression system are sufficient for the new addition. Chair Pogalz asked if the screening that is currently in place will remain. Engineer Collins stated it would. Building Official Jones stated the current screening is insufficient and needs to be improved to meet the requirements of Article 11-1853.A. Commissioner Dixson completed the inspection; a copy which is on file. Commissioner Dixson stated the trees on the north side of the property have large gaps between them and no trees are currently in place on the east side of the property. Commissioner Dixson stated Building Official Jones has stated some residents to the north of Jam Hops have complained about headlights shining into their houses when vehicles are departing from Jam Hops in the evening. Chair Pogalz asked Commissioner Dixson if screening was discussed with the applicant. Commissioner Dixson stated she did discuss screening requirements with Mr. Mitch Stone. Mr. Mitch Stone and Mr. Paul Stone asked Building Official Jones to clarify what is needed for screening. Building Official Jones stated coniferous trees should be planted staggered in two rows so that they become intermingled as they grow; the trees that get planted must be conifers that are at least five feet high. Building Official Jones stated the applicant could also put up a fence on the east and north sides of the property; the fence height must be at least six feet high. Building Official Jones stated the screening plan will not hold up the issuance of a building permit but a screening plan must be provided. Chair Pogalz asked Building Official Jones if anything needed to be stated in the motion tonight about the septic design. Building Official Jones stated the motion should include that no building permit will be issued until the septic design has been approved by the City of Wyoming Building Official. Motion by Dixson, seconded by Pogalz, to recommend approval for Stone Construction to build a 12,992 square foot addition to the existing Jam Hops building located at 1460 133rd Lane NE subject to providing a screening plan that meets the approval of the Building Official, submitting a septic design that can accommodate the occupancy load as required by Minnesota Subsurface Sewage Treatment System Program (SSTS) rules (no building permit will be issued until the septic design has been approved by the City of Wyoming Building Official), meeting the requirements of the City Engineer and the Building Official and meeting all City, County and State requirements. All present in favor, motion carried. This application will be placed on the City Council's Wednesday, July 5, 2023 agenda.

PUBLIC HEARING:

Richard and Diane Sylvester requesting Preliminary and Final Plat approval and rezoning of a portion of land from R-A (Rural Single Family Residential) to R-1 (Single Family Residential) of Toby's Trails (3 single family residential lots) located in Section 15 Richard and Diane Sylvester were present. Mrs. Sylvester stated they are creating this subdivision to provide their daughters with lots to build houses on. Chair Pogalz asked

Engineer Collins to comment. Engineer Collins stated the property is currently zoned Residential Single Family (R-1) and Rural Residential Single Family (R-A); the entire plat will be rezoned to R-1. Engineer Collins stated this is a minor plat; it does not require the existing driveway for Lot 1 to be paved nor does the driveway have to outlet onto an improved road. Engineer Collins stated per Article 10-430E.2 of the City Code, the existing Lot 1 gravel driveway will have to be paved prior to approval of any future building permits. Engineer Collins stated future subdivision of Lot 1 is anticipated that could create up to four more lots; any future subdivision will require the upgrade of Naples Street NE from Constance Boulevard NE to the southeast plat border. Engineer Collins stated the existing septic system on Lot 1 requires a compliance inspection per Article 11-450.4.c. Engineer Collins stated easements along Constance Boulevard NE are larger than the standard ten-foot easement due to wetland buffers; an encroachment agreement is required for Lots 2 and 3. Engineer Collins stated a development agreement is not required as the plat will be utilizing existing infrastructure; a \$200 drainage fee and \$2500 parkland dedication fee will need to be paid for each lot. Engineer Collins stated the thoroughfare plan shows East Lake Netta Drive NE extending to the south of Constance Boulevard NE; the applicants have provided 33' of right-of-way in the northwest corner of the plat. Commissioner Entsminger completed the inspection; a copy which is on file. Commissioner Entsminger stated "it's land". Commissioner Entsminger spoke with the applicants about Engineer Collins memo; the applicants understand the requirements of the plat.

Chair Pogalz opened the public hearing at 6:18 p.m. and asked for public comment.

Kathy Johnson, 16130 Naples Street NE. Mrs. Johnson stated she would like information on the East Lake Netta Drive NE road extension to the south and southwest. Engineer Collins stated the City sees future development potential for the property directly west of the Sylvester's property. Engineer Collins stated Anoka County has specific intersection spacing guidelines and will want a future extension of East Lake Netta Drive NE to be aligned with the existing road to the north; the road will extend directly south of Constance Boulevard NE and will turn to the west. Mrs. Johnson asked if this was being pursed because the City doesn't want to improve Naples Street NE for Mr. Glen Haag. Engineer Collins stated the dedication of the right-of-way by the Sylvester's will end in a small culde-sac on the property directly west of the Sylvester property for anticipated future development. Engineer Collins provided additional explanation on the thoroughfare plan to Mrs. Johnson and stated any future development that would occur on the Haag property would be accessed via Naples Street NE.

Chair Pogalz closed the public hearing at 6:21 p.m.

Motion by Entsminger, seconded by Fisher, to recommend approval of the request of Richard and Diane Sylvester for Preliminary and Final Plat approval and rezoning of a portion of land from R-A (Rural Single Family Residential) to R-1 (Single Family Residential) of Toby's Trails (3 single family residential lots) located in Section 15 subject to removal/relocation of portions of the existing gravel driveway that encroaches into the ten-foot drainage and utility easement, having a compliance inspection performed on the existing septic system on Lot 1, signing an

encroachment agreement for Lot 2 and Lot 3 driveways encroaching into the drainage and utility easement adjacent to Constance Boulevard NE, paving the existing gravel driveway of Lot 1 before any future building permits are issued on that parcel, upgrading Naples Street NE from Constance Boulevard NE to the southeast plat border if the property is subdivided again in the future, meeting the requirements of the City Engineer, and meeting all City, State and County requirements. All present in favor, motion carried. This application will be placed on the City Council's Wednesday, July 5, 2023 agenda.

Jeff Stalberger, HFN Properties, LLC, requesting Preliminary Plat approval and rezoning of portions of land from R-A (Rural Single Family Residential) to R-1 (Single Family Residential) of Hidden Forest East Fourth Addition (22 Single Family Residential lots and 3 out-lots) in Sections 24 and 25

Mr. Jeff Stalberger, Sr. Mr. Jeff Stalberger, Jr. and Mr. Ryan Stalberger were present. Mr. Stalberger Sr. spoke on behalf of the project. Mr. Stalberger stated this plat will have 22 residential lots. Mr. Stalberger stated some cul-de-sacs have been pulled back from the temporary dead ends to minimize the impact to the wetlands and to avoid impacting septic areas or driveways of parcels near those areas. Mr. Stalberger stated there are three out-lots (A, B, C). Mr. Stalberger stated those out-lots were created with future development in mind; the northern most out-lot will be deeded to the property owner to the northeast so the land owner has a connection to future development and the other two out-lots will be deeded back to the Knoll family. Mr. Stalberger stated out-lot A from the Hidden Forest East Third Addition is included in the Hidden Forest East Fourth Addition: parkland was dedicated with the third addition so the three lots in the fourth addition, that are within former out-lot A of the third addition, will not be required to pay a parkland dedication fee; all other lots within the fourth addition will be required to pay a parkland dedication fee. Chair Pogalz asked Engineer Collins to comment on the plat. Engineer Collins stated parkland dedication fees will need to be paid. Engineer Collins stated the developer is considering another phase for this development in the future which would be adjacent to Lexington Avenue NE; the City will determine if additional parkland will be needed at that time. Engineer Collins stated an encroachment agreement will be needed for Lot 10, Block 1, due to a septic line crossing a drainage and utility easement and a FEMA Letter of Map Amendment will be required for Lots 1, 2, 3, 5, 6, 7 of Block 1. and Lot 2 and Lot 3 Block 3. Engineer Collins stated a rare species survey required by the DNR Natural Heritage Review found the presence of threatened black huckleberry plants; a takings permit will need to be obtained from the DNR to remove the black huckleberry plants. Engineer Collins stated the Coon Creek Watershed District (CCWD) has approved the project; the developer must provide proof of the NPDES/MPCA Construction Stormwater permit, submit verification of the Wetland Bank Credit Withdrawal and submit the DNR Takings Permit prior to obtaining the CCWD permit. Engineer Collins stated a temporary cul-de-sac right-of-way on Stutz Street NE is proposed to be vacated in the yard of Lot 1, Block 2; the vacation process must be completed and recorded before the plat is recorded. Commissioner Fisher completed the inspection; a copy which is on file. Commissioner Fisher stated the land the development will be on will compliment the existing developments well. Chair Pogalz asked what future phase will connect with Lexington Avenue NE as some residents in the existing developments have expressed concern about having only one street for ingress/egress.

Mr. Stalberger stated he hopes the next phase will include ingress/egress to Lexington Avenue NE.

Chair Pogalz opened the public hearing at 6:32 p.m. and asked for public comment; with there being none, he closed the public hearing at 6:32 p.m.

Motion by Fisher, seconded by Entsminger, to recommend approval of the request Jeff Stalberger, HFN Properties, LLC, for Preliminary Plat approval and rezoning of portions of land from R-A (Rural Single Family Residential) to R-1 (Single Family Residential) of Hidden Forest East 4th Addition (22 Single Family Residential lots and 3 out-lots) in Sections 24 and 25 subject to meeting the requirements of the City Engineer as noted in his June 22, 2023 memo, and meeting all City, State and County requirements. All present in favor, motion carried. This application will be placed on the City Council's Wednesday, July 5, 2023 agenda.

COMMISSION BUSINESS:

City Council Update

Chair Pogalz stated the City Council concurred with the recommendation to approve the Preliminary and Final Plat of the Hentges Addition. Commissioner Fisher will attend the July 5, 2023 City Council meeting.

ADJOURNMENT:

Motion by Dixson, seconded by Fisher, to adjourn the Planning Commission meeting at 6:36 p.m. All present in favor, motion carried.

Jennifer Bohr Building and Zoning Clerk

CITY OF HAM LAKE PLANNING COMMISSION REQUEST APPLICATION INSPECTION REPORT

MTG DATE: July 10, 2023

INSPECTION ISSUED TO: Kyle Lejonvarn					
APPLICANT/CONTACT: Structural Buildings, Josh Williams					
TELEPHONE NUMBER: 320-248-3870 or j.williams@structuralbuildings.com					
BUSINESS/PLAT NAME: H&H Contracting					
ADDRESS/LOCATION OF INSPECTION: 15454 Central Ave NE					
APPLICATION FOR: Commercial Site Plan					
RECOMMENDATION:					
·					
DATE:					
PLANNING COMMISSIONER SIGNATURE:					



PLANNING REQUEST

CITY OF HAM LAKE

15544 Central Avenue NE Ham Lake, MN 55304

PROPERTY TAXES CURRENT YES NO

REQUEST	/	Ham I	_ake, MN 55304
REQUEST 24 TH JA	Phone (763)	434-9555	Fax (763) 235-1697
Date of Application 21 April 20)23	_ Date of	Receipt <u> </u>
Meeting Appearance Dates: Planning Commission	on 1-10-23	City Counc	>il
Please check request(s): Metes & Bounds Cons Sketch Plan Preliminary Plat Apport Final Plat Approval Rezoning* Multiple Dog License	roval*	Certificate Home Occ Conditiona Conditiona Other	ol Building Site of Occupancy upation Permit I Use Permit (New)* I Use Permit (Renewal)
*NOTE: Advisory Signage is requir This application also requires a Pu	blic Hearing. Such	rations and futu iees shall be dec	re road connections. ducted from deposit.
Development/Business Name:	H&H Contractors		
Address/Location of property:	15454 Central Avenue I	NE Ham Lake, MN	
Legal Description of property:	Sec 20, Twsp 32, Rang	e 23	
PIN #_ 20-32-23-24-001	Current	Zoning CD-2	Proposed Zoning CD-2
Notes: Demo residential home & bui	ild a new warehouse/offi	ce facility for the H	kH Contractors' business operations.
Applicant's Name: Josh Williams	S		
Business Name: Structural Buildin			
Address 12926 First Street	1		
City Becker		State MN	Zip Code <u>55308</u>
Phone 763-296-5800	Cell Phone $320-24$	18-3870	Fax 763-296-5801
Email address j.williams@st	ructuralbuildings.com		•
You are advised that the 60-day renot begin to run until <u>all</u> of the red	eview period require	ed by Minnesota een received by	Statutes Chapter 15.99 does the City of Ham Lake.
SIGNATURE SCL	eleir	D	ATE 2/ April 2023
*************	- FOR STAFF US	SE ONLY -	

ACTION BY: Planning Commission _____

City Council _____

Attachment to Planning Request

April 21, 2023

Description of Request(s):

Project Name: H&H Facility (Shop/Office)

Nature of Proposed Use:

The Applicant intends to develop the previously residential property into a commercial use facility for its Landscaping & Snow Removal business. This would remove the existing residential structures to build a new shop & office facility with parking & ADA accessibility features.

The new facility would employ approximately 15 employees during regular business hours of Mon-Fri 7am to 5pm. The shop's intended use is for equipment maintenance & washing. The West yard is intended to provide storage of misc. equipment & trailers.

Seeking:

Commercial building site & development approval.

Reasons to Approve Request:

Landscaping Businesses and Office Warehouses are permitted uses in the CD-2 zoning district. References to this can be found in Article 9, Section 9-220.3.b. Article 9

Meeting Date: July 10, 2023

CITY OF HAM LAKE

STAFF REPORT

To: Members of the Planning Commission

From: Mark Jones, Building and Zoning Official

Subject: H&H Contractors requesting site plan approval to build a 9,352 square foot

office/warehouse building at 15454 Central Avenue NE

Introduction/Discussion:

H&H Contractors is a landscaping & snow removal business. H&H Contractors wants to build a 9,352 square foot office/warehouse building at 15454 Central Avenue NE. The main floor will have 6,400 square feet of warehouse space and 2,952 square feet of office space; the second floor will be 1,292 square feet and is intended to be used for storage. One bay in the warehouse will be used for equipment maintenance and to wash equipment and vehicles. The remaining space will be used for storage of equipment and landscaping materials. The west yard will have a Class 2 base and will be used for storage of equipment, trailers and miscellaneous items. Parking lots, drives and surfaces upon which the general public and employees shall have access shall be paved according to specifications to be established by the city's engineer per Articles 9-220.1.a and 11-1851. Fifteen employees will be working on-site. Business hours will be Monday – Friday, 7am to 5 pm.

The west side of the parcel has some deciduous trees which currently provide natural screening, but may not provide proper screening during fall and winter months. Per Article 11-1853, where property lines are adjacent to residential areas, a planting screen of conifers shall be required of sufficient size and proximity to provide an intermingled screen within five years. Also, per 11-1853, decorative trees shall be planted along the right of way lines of adjacent public roadways. The Code does not require a specific number of trees along the right of way lines of adjacent public roadways. The Planning Commission will need to determine the number of trees needed to provide adequate screening along the right of way line.

Recommendation:

I recommend site plan approval for H&H Contracting with the following conditions:

- 1) That parking spaces and the septic system meet the maximum occupancy load of 41.
- 2) Ground work cannot begin until a Coon Creek Watershed District permit and National Pollutant Discharge Elimination system (NPDES) permit have been issued.
- 3) All screening requirements proposed by the planning committee or City Council must be approved by the City Engineer and Building Official before a building permit will be issued.



Office (763) 862-8000 Fax (763) 862-8042

Memorandum

Date:

July 6, 2023

To:

Planning Commissioners

From:

David A. Krugler, City Engineer

Subject:

H&H Contractors

Introduction:

The proposed 9,352 square-foot H&H Contractors building is located on the 4.75-acre 15454 Central Avenue parcel. The parcel is zoned Commercial Development Tier 2 (CD-2). A 100-scale aerial photo, a 500-scale zoning map and a 400-scale half section map are attached.

Discussion:

The Storm Water Calculations and Report of Geotechnical Explorations received June 20th, Topo Survey, Site Plan, Standard Notes & Specifications, Standard Details, Grading Plan, SWPPP – Standard Notes, SWPPP – Plan View, Utility Plan and Photometrics Plan received June 29th and Retaining Wall Drawings received June 30th address prior review comments.

The attached Landscape Plan with a revision date of June 1st shows existing tree screening to remain to the west and southwest of the proposed building. Per the zoning map, the parcels to the west are zoned Single Family Residential (R-1). Landscaping in commercially zoned areas is to be per 11-1800 of City Code (attached). The Landscape Plan also shows two existing trees to remain and a rock garden and flag pole installed along Central Avenue. Per 11-1853(B) of the City code, decorative trees shall be planted along the right of way lines of adjacent public roadways. 11-1860 allows for case-by-case evaluation for landscape approval and "strict adherence to the remaining provisions of Article 11-1800 may be unnecessary where size, spatial relationships, topography or other physical features render a given landscaping plan aesthetically acceptable, and departures from the strict observance of the elements of Article 11-1800 shall not be considered variances requiring a showing of physical hardship. Conversely, an applicant shall be expected to meet the general spirit of this article in establishing an aesthetically pleasing landscaping plan". A determination needs to be made as to whether the proposed Landscaping is adequate where adjacent to R-1 zoning and the City Right-of-Way or if additional screening is required.

H&H Contractors was conditionally approved by the Coon Creek Watershed District (CCWD) Board of Managers at their June 12th meeting. The Notice of Application Status is attached. The execution of an Operation and Maintenance Agreement for the storm water treatment is required to obtain the CCWD Permit. A CCWD permit is required before grading operations can commence. A MPCA Construction Stormwater Permit is also required before grading operations can commence because the disturbed area is over one-acre.

There is a drainage and utility easement over the easterly portion of the parcel which extends beyond the typical 10-foot drainage and utility easement that was obtained during the construction of the streets within Bostrom's Addition and Fredrickson Addition. An Encroachment Agreement will be required for the driveway and retaining wall encroaching into the drainage and utility easement.

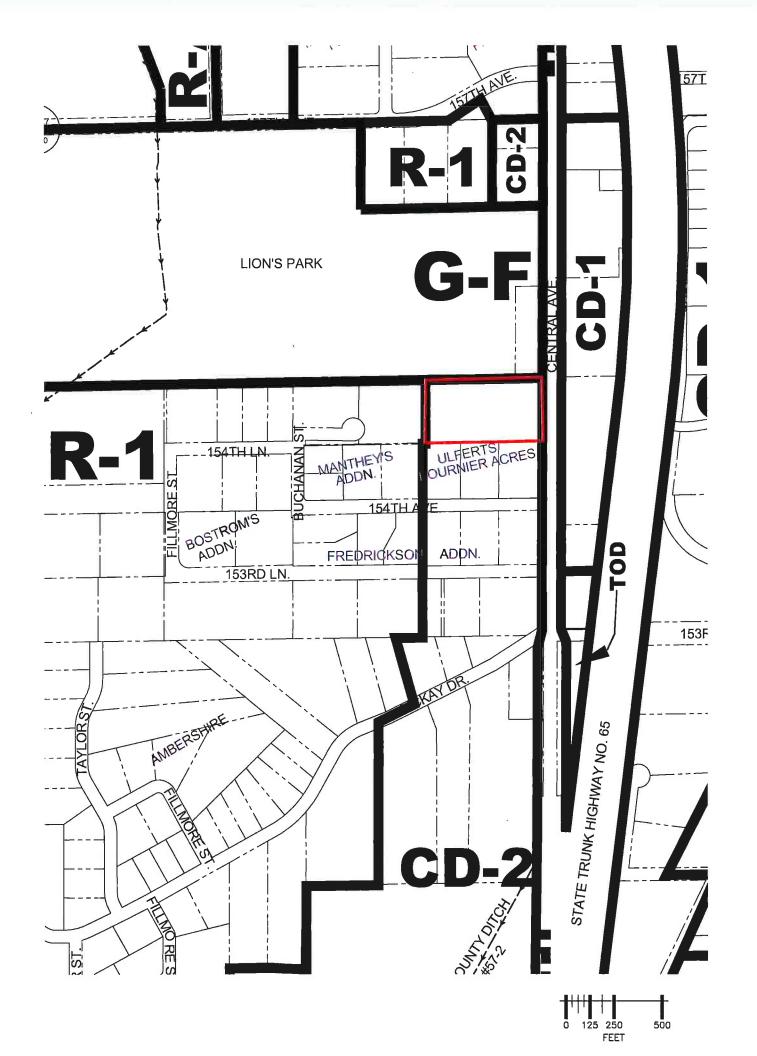
There is a Rural Cooperative Power Association (RCPA) easement over the northerly 70-feet of the property as shown on the attached Site Plan and half section map. Great Rivers Energy has jurisdiction over the easement. Per the attached Great River Energy Encroachment Application, encroachments shown on the site plan within their easement are approved.

There is a Minnesota Pipeline Company easement over the southerly portion of the property ranging from 33-feet wide on the east side to 44-feet wide on the west side of the property as shown on the attached Site Plan and half section map. Koch Pipeline has jurisdiction over the easement. No work is proposed within this easement so Koch Pipeline approval is not required.

Recommendation:

It is recommended that the H&H Contractors plans be recommended for approval, including the determination if the proposed screening is adequate.





33 | 34 | 43 | 44

EXAMPLE OF PIN NUMBER: 20-32-23-13-0010

NEW BUILDING FOR: H & H FACILITY 15454 CENTRAL AVE NE HAM LAKE, MN 55304

PROJECT TEAM

GENERAL CONTRACTOR:

STRUCTURAL BUILDINGS, INC. 12924 FIRST STREET BECKER, MN 55308 PHONE: (763) 261-4150

ARCHITECT:

COLE GROUP ARCHITECTS 216 PARK AVENUE SOUTH SUITE 102

ST. CLOUD, MN 54301 PHONE: (320) 454-4510

STRUCTURAL ENGINEERING:

DUFFY ENGINEERING & ASSOCIATES 350 HIGHWAY 10 SOUTH ST. CLOUD, MN. 56304 PHONE: (320) 259-6515

CIVIL ENGINEERING: SCHULTZ ENGINEERING & SITE DESIGN 18 SOUTH RIVERSIDE AVENUE SUITE 230

SARTELL, MN 56311 PHONE: (320) 339-0669

ACCESSIBLE CLEAR ANCES SC NAME OF THE PROPERTY OF THE PROPERT

CODE SUMMARY

BUILDING DESCRIPTION:

A NEW ONE STORY 1,048 GROSS S.F. STORAGE WAREHOUSE WITH 4,608 GROSS S.F. TWO STORY OFFICE BUILDING.

CODE SUMMARY:

2020 MINNESOTA STATE BUILDING CODE AND RELATED CODES

A. OCCUPANCIES (MNBC CHAPTER 3): S-I WAREHOUSE (SECTION 3II.2) B BUSINESS (SECTION 304)

B. OCCUPANCY SEPARATION (MNBC CHAPTER 5): NO SEPARATION REQUIRED

C. ALLOWABLE AREA PER FLOOR (MNBC CHAPTER 5 TABLE 508.4):
BASIC ALLOWABLE AREA PER FLOOR = 9,000 S.F.
FRONTAGE INCREASE =9,000 S.F. X (.15)= 6,150 S.F.
(SECTION 506.2)

TOTAL ALLOWED FLOOR AREA = 15,750 S.F.
TOTAL ACTUAL BUILDING FLOOR AREA = 9,352 S.F.

D. ALLOWABLE HEIGHT (MABC CHAPTER 5 TABLE 504.3 1 504.4):
S-I OCCUPANCY = I STORY / 40'-0"
S-I OCCUPANCY = ACTUAL HEIGHT I STORY - 24'-9"
B OCCUPANCY = 2 STORIES / 40'-0"
B OCCUPANCY = ACTUAL HEIGHT 2 STORIES - 22'-0"

E. TYPE OF CONSTRUCTION (MNBC CHAPTER 6): TYPE V-B (NOT RATED)

F. FIRE SPRINKLERS (MNBC CHAPTER 9):

NOT REQUIRED PER THE FOLLOWING:

• S-I FIRE AREA LESS THAN 12,000 SF (ACTUAL 9,349 SF)

• S-I FIRE AREA NOT LOCATED MORE THAN 3-STORIES ABOVE GRADE (ACTUAL: I-STORY)

• COMBINED S-I FIRE AREA LESS THAN 24,000 SF (ACTUAL: 14,54 SF)

● COMBINED S-I FIRE AREA LESS THAN 24,000 SF (ACTUAL: II) ● TENANTS NOT STORING COMMERCIAL MOTOR VEHICLES ● TENANTS DO NOT CLASSIEY AS A REPAIR GARAGE

TEMANTS NOT STORING MORE THAN 20,000 CUBIC FEET OF TIRES (COMBINED)
 TEMANTS NOT STORING MORE THAN 2,500 SF OF UPHOLSTERED FURNITURE OR MATTRESSES (COMBINED)

H. MEANS OF EGRESS (I.B.C. CHAPTER IO):

WASHBAY (5-I OCCUPANCY)
GRADE FLOOR: I,121 S.F. (TABLE 1004.5)
I,121 S.F. / 500 S.F. PER OCC. = 4
2 EXITS REQ'D - 2 PROVIDED (TABLE 1006.2.1)
MAXIMUM EXIT ACCESS TRAYEL DISTANCE
LESS THAN 100-0" (TABLE 1006.2.1)

WAREHOUSE (S-I OCCUPANCY)
GRADE FLOOR: 5,322 S.F. (TABLE 1004.5)
5,322 S.F. / 500 S.F. PER OCC. = II
2 EXITS REQ'D - 2 PROVIDED (TABLE 1006.2.I)
HAXIMUM EXIT ACCESS TRAYEL DISTANCE
LESS THAN 100'-0" (TABLE 1006.2.I)

BUSINESS (B OCCUPANCY)
GRADE FLOOR: 2,304 S.F. (TABLE 1004.5)
2,304 S.F. / 150 S.F. PER OCC. = 16
2 EXITS REQ'ID - 2 PROVIDED (TABLE 1006.2.1)
MAXIMUM EXIT ACCESS TRAYEL DISTANCE
LESS THAN 100'-0" (TABLE 1006.2.1)

SECOND FLOOR: 1,292 S.F. (TABLE 1004.5)
1,292 S.F. / 150 S.F. PER OCC. = 9
2 EXITS REQ'D - 2 PROVIDED (TABLE 1006.2.1)
MAXIMUM EXIT ACCESS TRAVEL DISTANCE
LESS THAN 15'-0" (TABLE 1006.3.3(2))

MEZZANINE: 220 S.F. (TABLE 1004.5)
200 S.F. / 300 S.F. PER OCC. = 1
1 EXIT REQ'D - 1 PROVIDED (TABLE 1006.2.1)
MAXIMUM EXIT ACCESS TRAVEL DISTANCE
LESS THAN 100'-0" (TABLE 1006.2.1)
TOTAL
41 OCCUPANTS

S-I OCC. (WAREHOUSE - AREAS) IS OCCUPANTS I PER IOO = I5/IOO = 0.08 UNISEX

J. PLUMBING FIXTURES: (CHAPTER 29 TABLE 2902.I)

PLUMBING FIXTURES - WATER CLOSETS

UNISEX - I TOILET PROVIDED

B OCC. (BUSINESS - AREAS)
26 OCCUPANTS/2 = 13 EA M#W

I PER 25 = 13/25 = 0.52 MEN I PER 25 = 13/25 = 0.52 WOMEN

O.52 = (I) MEN REQUIRED O.52 = (I) WOMEN REQUIRED MEN - I TOILET PROVIDED WOMEN - I TOILET PROVIDED

PLUMBING FIXTURES - LAVATORIES S-I OCC. (WAREHOUSE - AREAS)

IS OCCUPANTS

I PER IOO = I5/IOO = O.08 UNISEX UNISEX - I LAVATORY PROVIDED B OCC. (BUSINESS - AREAS)

26 OCCUPANTS/2 = 13 EA M#W

| PER 40 = 13/40 = 0.325 MEN
| PER 40 = 13/40 = 0.325 WOMEN

PER 40 = 13/40 = 0.325 WOMEN

0.325 = (i) WOMEN REQUIRED
MEN - I LAVATORY PROVIDED

WOMEN - I LAVATORY PROVIDED
PLUMBING FIXTURES - SERVICE SINKS

I REQUIRED FOR THE ENTIRE BUILDING I PROVIDED

PLUMBING FIXTURES - DRINKING FOUNTAINS
S-I OCC. (WAREHOUSE - AREAS)

IS OCCUPANTS

I PER 1,000 = 15/1,000 = 0.015 B OCC. (BUSINESS - AREAS)

26 OCCUPANTS

I PER 100 = 26/100 = 0.26

0.015 + 0.26 = (1) REQUIRED

SHEET INDEX

ARCHITECTURAL:

I PROVIDED

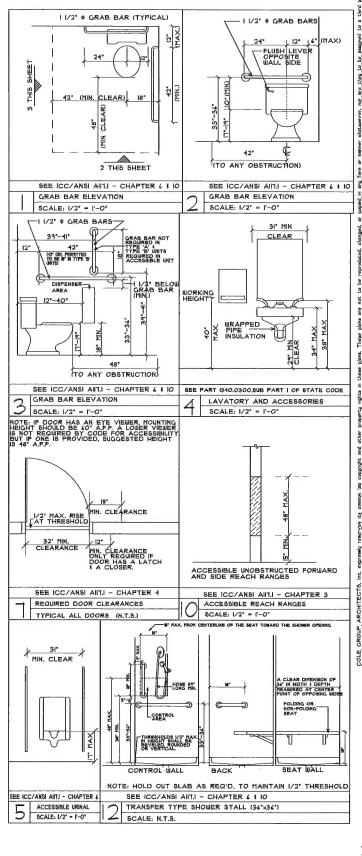
AOOI CODE INFO \$ ADA DETAILS AIOI FIRST FLOOR PLAN

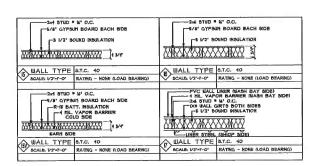
A102 SECOND FLOOR PLAN
A401 FINISH PLAN & SCHEDULES

A501 ELEVATIONS

ATOI CROSS SECTIONS

A801 DETAILS



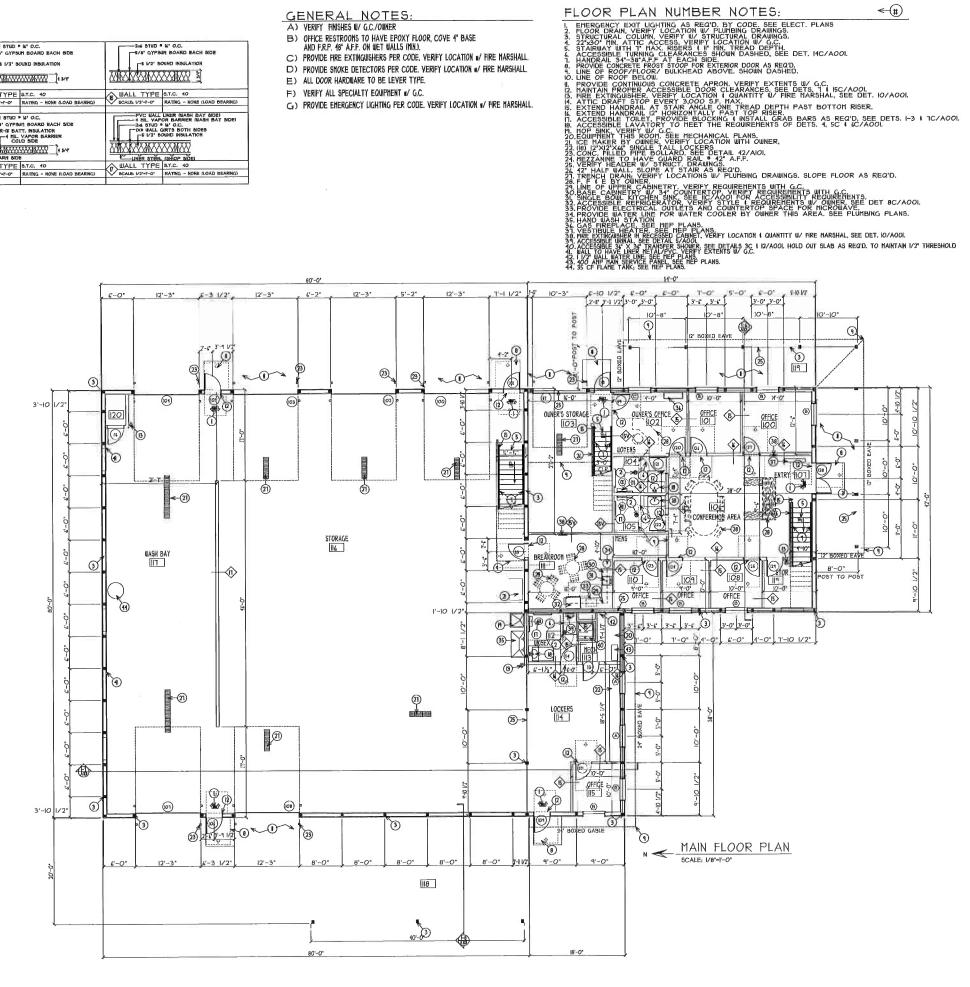


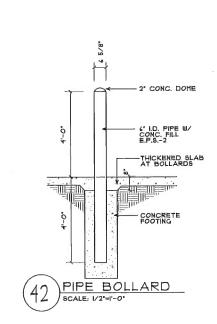
GENERAL NOTES: A) VERIFY FINISHES U/ G.C./OUNER

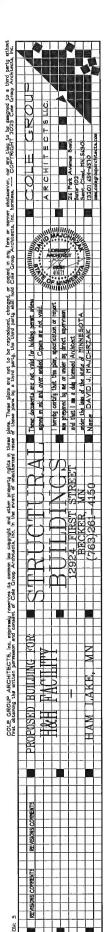
- B) OFFICE RESTROOMS TO HAVE EPOXY FLOOR, COVE 4' BASE AND F.R.P. 48" A.F.F. ON WET WALLS (MIN.).
- C) PROVIDE FIRE EXTINGUISHERS PER CODE, VERIFY LOCATION w/ FIRE MARSHALL.
- D) PROVIDE SHOKE DETECTORS PER CODE, VERIFY LOCATION #/ FIRE MARSHALL.
- E) ALL DOOR HARDWARE TO BE LEVER TYPE.
- F) VERIFY ALL SPECIALTY EQUIPMENT #/ G.C. G) PROVIDE EMERGENCY LIGHTING PER CODE. VERIFY LOCATION #/ FIRE MARSHALL.

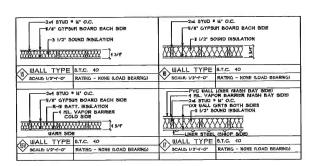
FLOOR PLAN NUMBER NOTES:

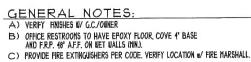
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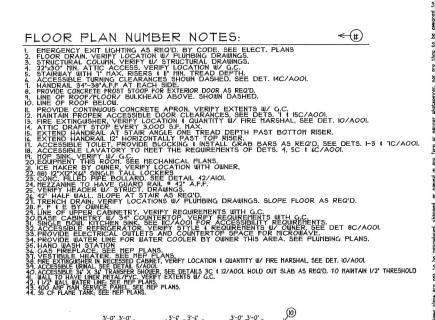








- D) PROVIDE SHOKE DETECTORS PER CODE. VERIFY LOCATION of FIRE MARSHALL.
- E) ALL DOOR HARDWARE TO BE LEVER TYPE.
- F) VERIFY ALL SPECIALTY EQUIPMENT of G.C.
- G) PROVIDE EMERGENCY LIGHTING PER CODE. YERIFY LOCATION #/ FIRE MARSHALL.



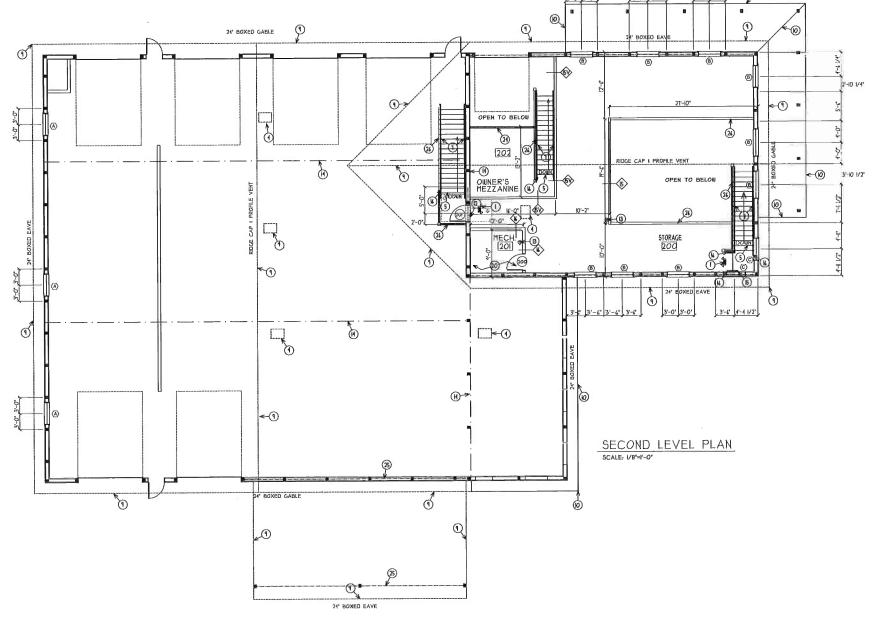
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PROPOSED BUILDING FOR

Project No.
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Issue Date:
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Document Set:
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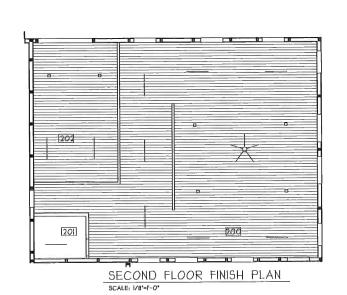


					DOOR	SCHEDULE				
ABEL	QTY.	MFG / MODEL	SIZE	ROUGH OPEN	SLAB MAT.	FRAME MAT.	COLOR	SWING	HARDWARE	REMARKS
(100)	_	TO BE DETERMINED	12X14	12'-0" X 14'-0"	STEEL	STEEL	-	-	-	2 LITE, I-3/4" (R-ILIB)
(101)	1	TO BE DETERMINED, FLUSH	3048	-	STEEL	STEEL	-	RHOS	DB, LL	-
(102)	1	TO BE DETERMINED	12XI4	12'-0' X 14'-0'	STEEL.	STEEL	-	-	-	2 LITE, I-3/4' (R-ILIB)
(63))	TO BE DETERMINED	12X14	12'-0" X 14'-0"	STEEL	STEEL	-	-	-	2 LITE, 1-3/4" (R-148)
(04)	1	TO BE DETERMINED	12XI1	12'-0" × 14'-0"	STEEL	STEEL	-	-	-	2 LITE, 1-3/4" (R-1418)
(105)	1	TO BE DETERMINED, FLUSH	3068	-	-	-	-	LHOS	DB, LL	-
(10)	1	TO BE DETERMINED, FLUSH	3048	-	-	-	-	LHOS	DB, LL	-
(101)	1	TO BE DETERMINED	12X14	12'-0" X H'-0"	STEEL	STEEL	-	-	-	2 LITE, 1-3/4" (R-14!8)
(60)	1	TO BE DETERMINED	12XI4	12'-0" X 14'-0"	STEEL	STEEL	-		-	2 LITE, I-3/4" (R-ILIB)
(109)	1	TO BE DETERMINED, FLUSH	3068	-	STEEL	STEEL	-	LHO5	DB, LL	
(10)	1	OPENING	17X14	17'-0" X 14'-0"	-	-	-	-	-	
(i)	-	OPENING	17×14	17'-0" X 14'-0"	-	-	-	-	-	-
(112)	1	TO BE DETERMINED, SOLID 6 PANEL	3068	-	MOOD	WOOD	-	LHIS	-	-
(13)	_	TO BE DETERMINED, SOLID & PANEL	3068	-	MOOD	1100D	-	LHI5	-	-
(H)	1	TO BE DETERMINED, SOLID 6 PANEL	3068		EOOD	UQQD	-	RHIS	LL, PRIVATE	-
(15)	1	TO BE DETERMINED, FLUSH	3069	-	STEEL	STEEL	-	RHOS	DB, LL	FIRE RATED
(II)	1	TO BE DETERMINED	3068	-	STEEL	STEEL	-	RHOS	_	-
(II)	1	TO BE DETERMINED	IOXIO	10'-0" X 10'-0"	STEEL	STEEL	-		-	NO WINDOWS
(118)	1	TO BE DETERMINED, FLUSH	3068		STEEL	STEEL	-	THOS	DB, LL	-
(119)	1	TO BE DETERMINED, FLUSH	3048	-	-	-	-	RHIS	-	FIRE RATED
(120)	1	TO BE DETERMINED, I/2 GLASS	3048		STEEL	MOOD	-	RHIS	-	1/2 GLASS W/ RAISE LOWER TILT BLINDS
(121)	1	TO BE DETERMINED, SOLID & PANEL	3048	-	WOOD	MOOD	-	RHIS	LL, PRIVATE	-
(22)	1	TO BE DETERMINED, SOLID & PANEL	3068	-	WOOD	MOOD	-	LHIS	LL, PRIVATE	-
(123)	1_	TO BE DETERMINED, SOLID & PANEL	3048	1-	MOOD	ДООВ	-	LHIS	-	-
(124)	1	TO BE DETERMINED, SOLID & PANEL	3068	-	MOOD	MOOD	-	RHIS	-	-
(125)	1	TO BE DETERMINED, SOLID & PANEL	30 6 8	-	MOOD	MOOD	-	LHIS	-	-
(126)	1	TO BE DETERMINED, I/2 GLASS	3048	-	STEEL	MOOD	-	LHIS	-	1/2 GLASS W/ RAISE LOWER TILT BLINDS
(121)	1	TO BE DETERMINED, I/2 GLASS	3048	-	STEEL	MOOD	-	LHIS	-	1/2 GLASS W/ RAISE LOWER TILT BLINDS
(128)	1	TO BE DETERMINED, FULL GLASS	6010	-	ALUMINUM	ALUMINUM	-	RHA	DB, LL	
(29)	1	TO BE DETERMINED, SOLID & PANEL	3068		шоор	MOOD	-	RHIS	-	-
(00)	i -	TO BE DETERMINED, FLUSH	3048	-	STEEL	STEEL		LHIS	-	FIRE RATED
601)	1	TO BE DETERMINED, FLUSH	3048	-	STEEL	STEEL	-	LHOS	-	-

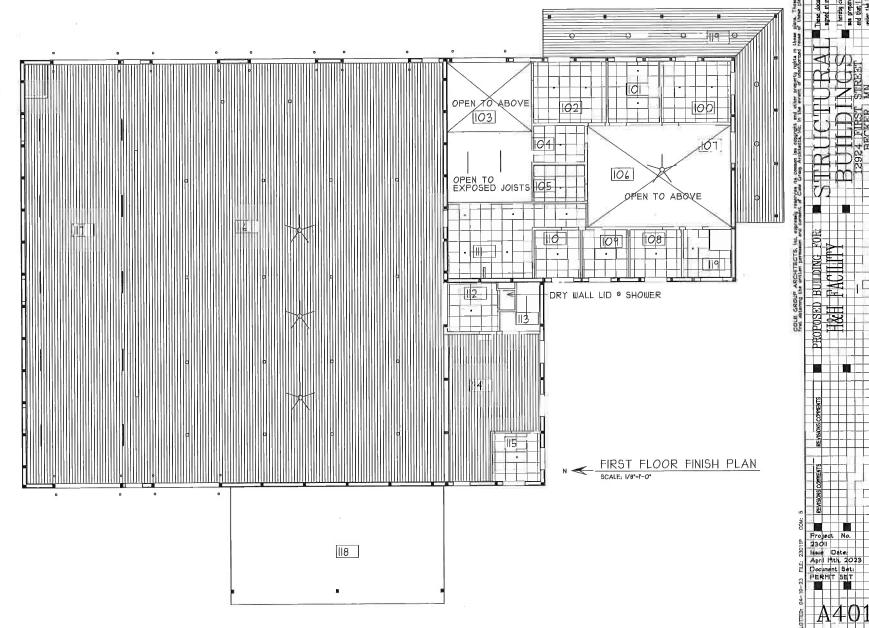
					WIND	OW SCHEDULE		
LABEL	QTY.	MFG / MODEL	SIZE	ROUGH OPEN	MATERIAL	JAMB FINISH	COLOR	REMARKS
(A)	5	-	48X24	48-1/4" X 24-1/4"	-	-	-	-
⑧	18	-	48X36	48-1/4° × 36-1/4°	-	-	-	-
0	3	-	48X36	48-1/4" × 36-1/4"	-	-	-	TEMPERED GLASS
0	-	-	-	-	-	-	-	•

	LIGHT SCHEDULE
0	RECESSED & CAN LIGHT FIXTURE
*	CEILING FAN FIXTURE W/ 2' DOWNROD
٥	2X4 LED LAY-IN LIGHT FIXTURE
0	2X2 LED LAY-IN LIGHT FIXTURE
	WET LOCATINO LED LIGHT FIXTURE
	LED STRIP LIGHT FIXTURE

KEY	·
	STEEL CEILING LINER VERIFY STYLE WITH G.C.
	2'x2' ACOUSTIC CEILING TILE VERIFY STYLE WITH G.C.

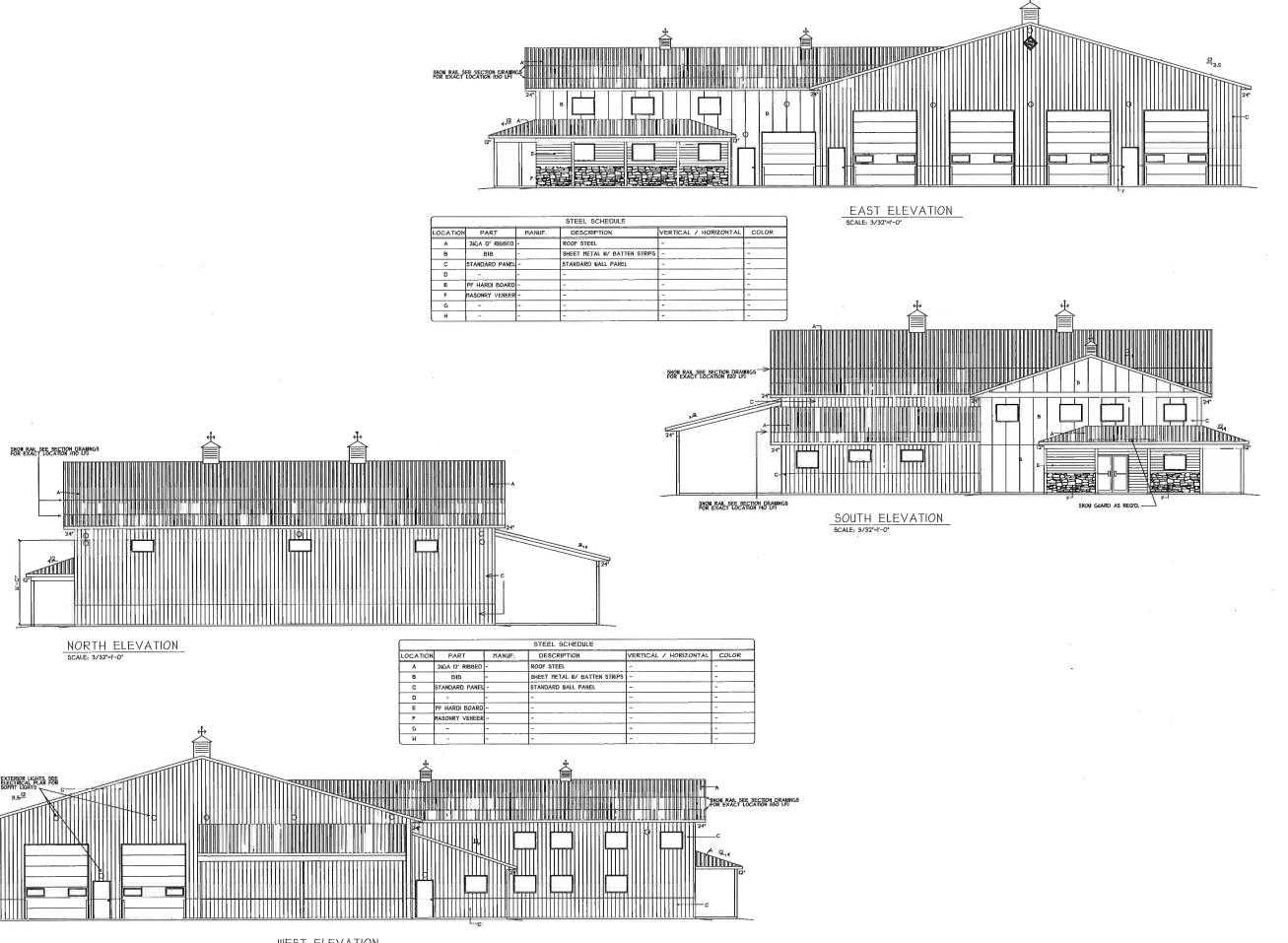


	ROOM SCHEDULE							
ROOM #	ROOM NAME	FLOOR	BASE	WALLS	CEILING	CEILING HT	REMARKS	
100	OFFICE	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	1'-8 L/6°		
IOI	OFFICE	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	1'-8 1/8"	-	
02	OWNERS OFFICE	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	7'-8 1/8"	-	
103	OWNERS GARAGE	CONCRETE	4" RUBBER BASE	STEEL	STEEL	16'-0"	-	
104	BATHROOM	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-2	1'-8 1/8'	EPOXY PAINT WALLS	
IOS	BATHROOM	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-2	1'-8 1/6"	EPOXY PAINT WALLS	
104	CONFERENCE AREA	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	STEEL	18'-O"	OPEN TO ABOVE	
101	ENTRY	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	STEEL	[8'-O*	OPEN TO ABOVE	
[08]	OFFICE	PARTIAL FLAKE EPOXY	4" RUBBER BASE	SHEETROCK	ACT-I	7'-8 1/8"	-	
109	OFFICE	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	1'-8 1/8'	-	
IO	OFFICE	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	1'-8 1/8'	-	
	BREAKROOM	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	9'-1 1/8"	n	
12	BATHROOM	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-2	9'-1 1/8"	EPOXY PAINT WALLS	
113	MECHANICAL	CONCRETE	4" RUBBER BASE	SHEETROCK	-	9'-1 1/8'	-	
[]4.]	LOCKERS	CONCRETE	STEEL	STEEL	5TEEL	9'-1 I/B*	-	
115	OFFICE	PARTIAL FLAKE EPOXY	4' RUBBER BASE	SHEETROCK	ACT-I	9'-1 1/8"	-	
16.	GARAGE	CONCRETE	STEEL	STEEL	STEEL	(B*−O*	-	
	WASH BAY	CONCRETE	STEEL	STEEL	STEEL	18'-0"		
118	LEAN TO	CONCRETE	-	-	-	12'-0"	-	
II9. I	STORAGE	CONCRETE	4" RUBBER BASE	SHEETROCK	ACT-I	7'-8 1/8'	-	
120	COMPRESSOR UNIT	CONCRETE	-	STEEL	STEEL	8'-1 1/8"	-	
200	STORAGE	3/4" TIG 05B	STEEL	STEEL	STEEL	1'-10 1/8"	-	
201	MECHANICAL	3/4" TIG 05B	STEEL	STEEL	_	1'-10 1/8"	•	
202	OWNERS MEZZANINE	3/4' CDX	STEEL	STEEL	STEEL	7'-10 1/8"	-	
203	-	-	-	-	-	-	-	
204	-	-	-	-	-		-	



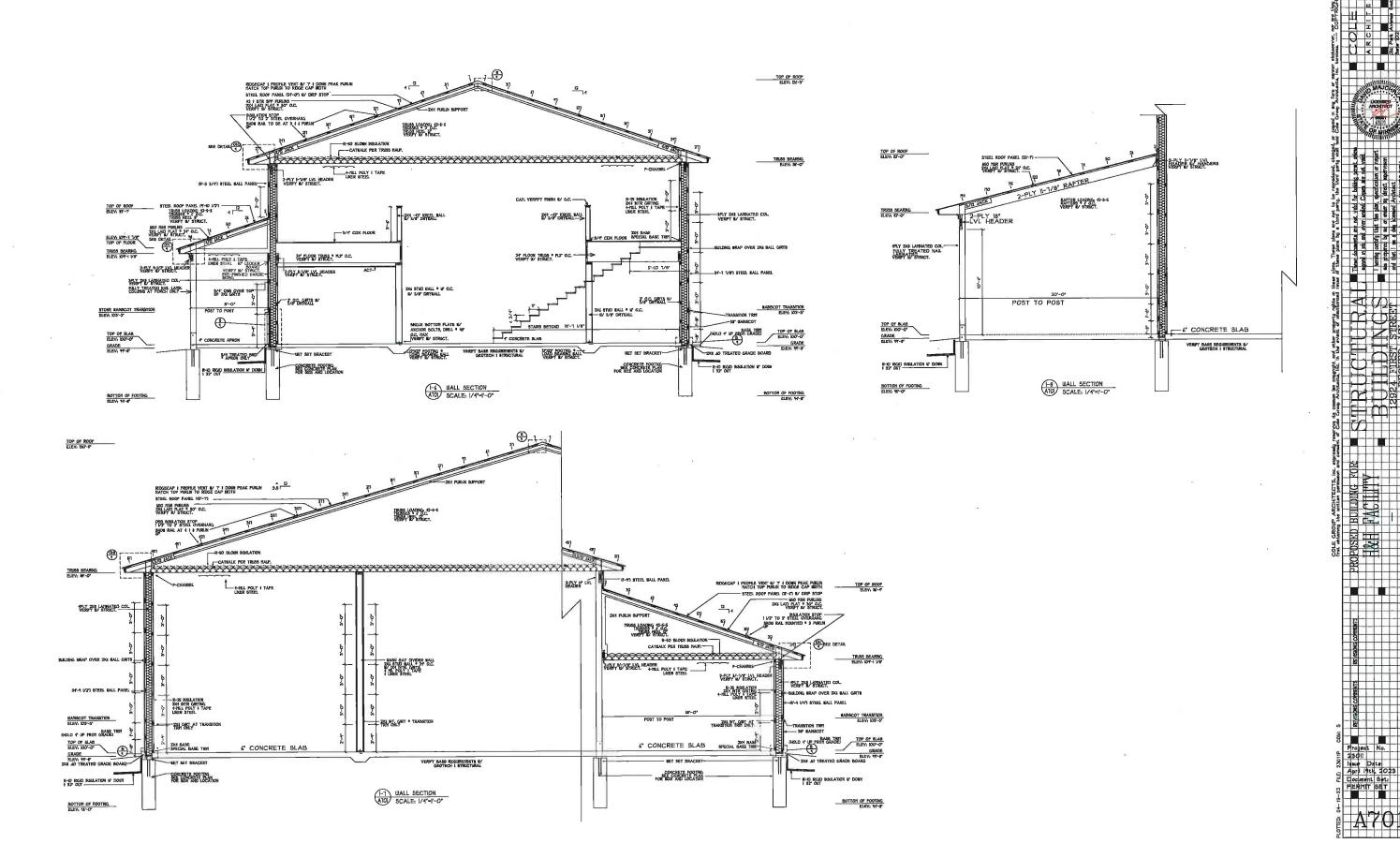
HAM LAKE, MN

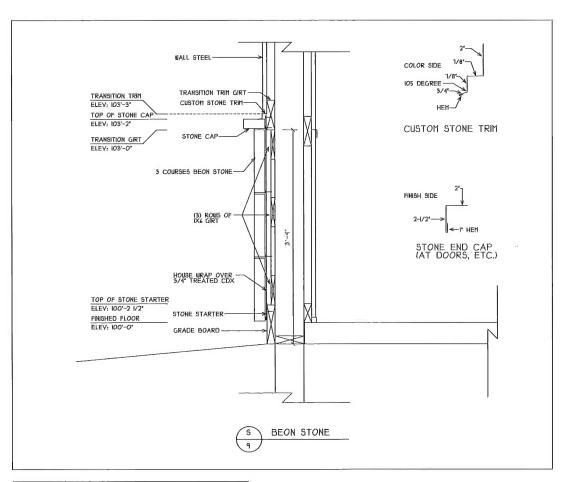
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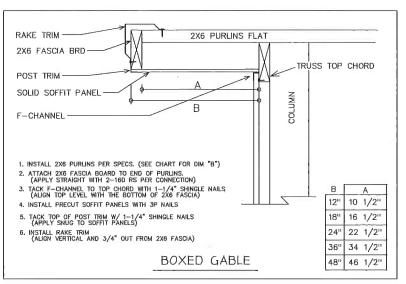


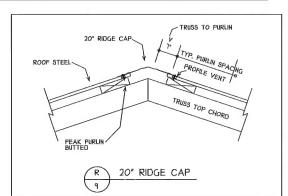
WEST ELEVATION

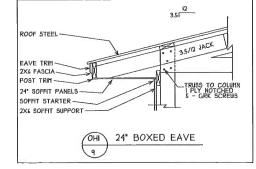
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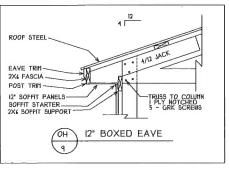


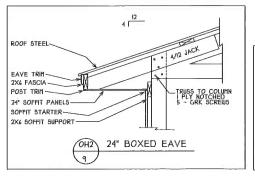


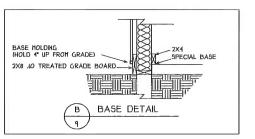




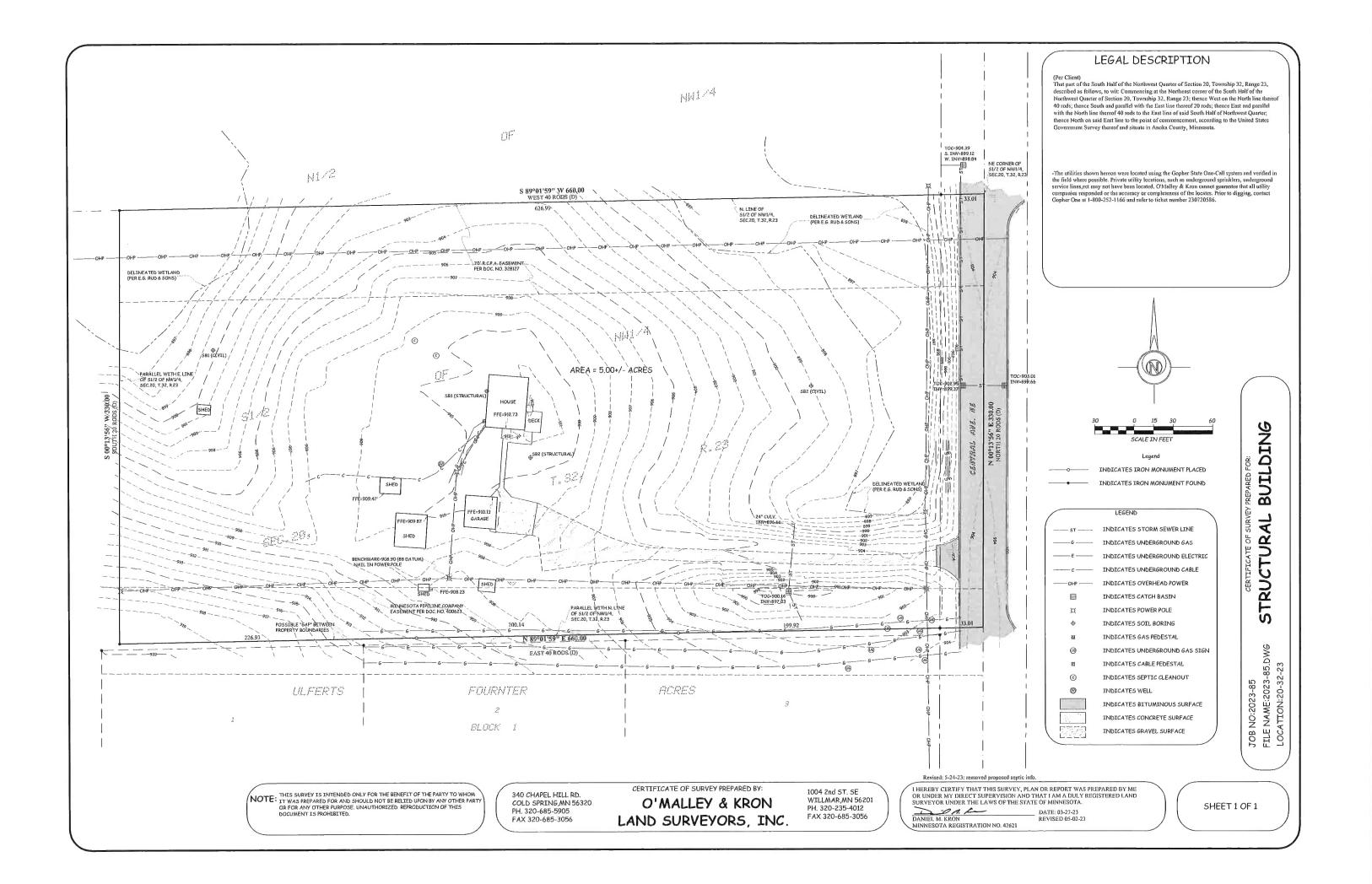


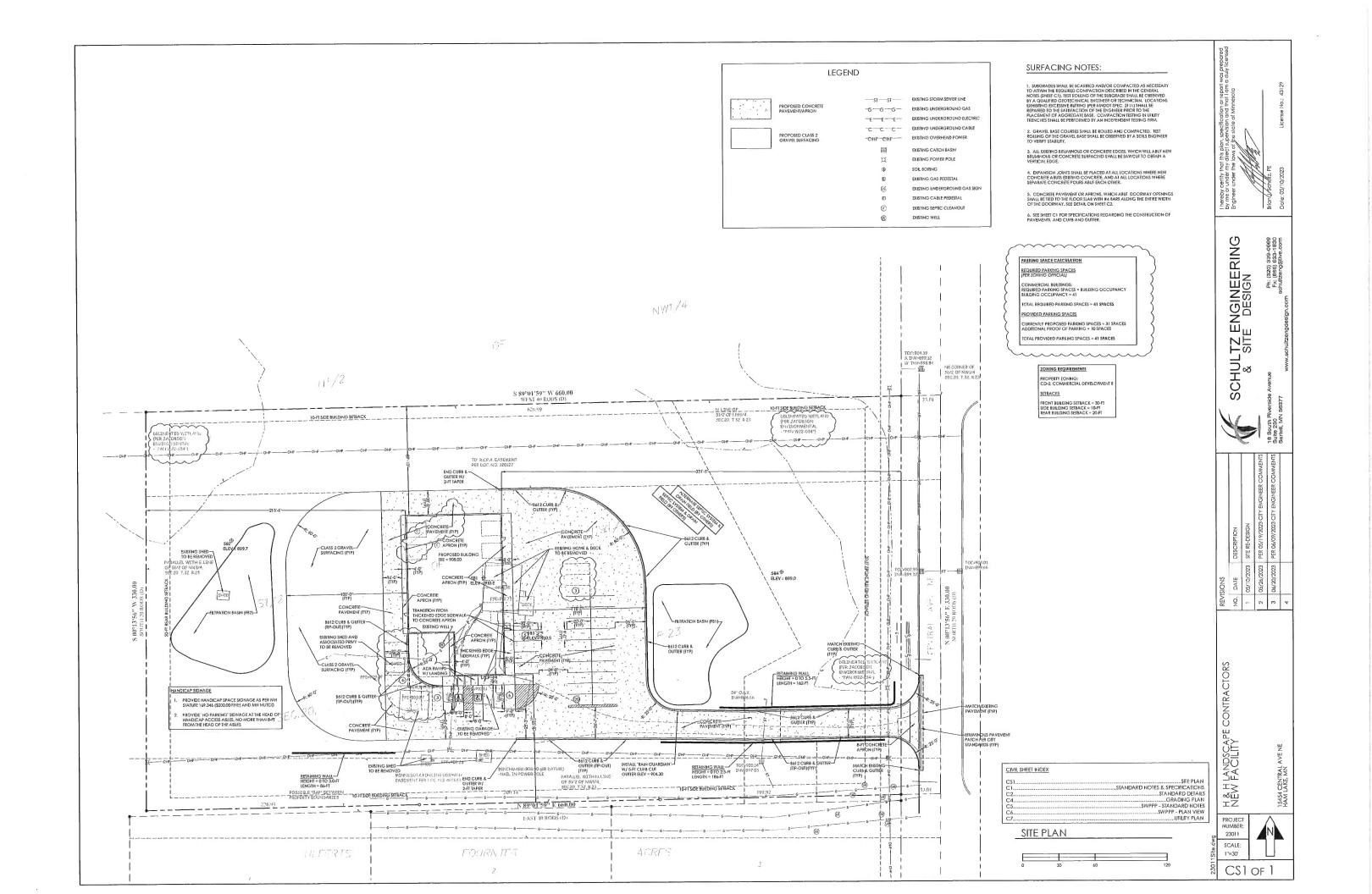






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STANDARDS AND REFERENCES

Molerials and construction methods specified in the plans reference the Minnerota Department of Transportation (IMNDDI) Standard Specifications for Construction. The Contraction shall beliat a current copy of MNDDI's Standard Specifications for Construction and review the specification sections applicable to the plans.

It is mandatory that the Contractor be knowledgable of the applicable MNDO1 specification sections during a No additional compensation will be paid to the Contractor for additional work due to unfamiliarity with the ap specification sections.

EARTHWORK NOTES

1) The Contractor shall mointain all benchmarks, monuments and other reference points. If any are disturbed or destroyed, they shall be replaced at the Contractor's expense.

The Contractor shall contact the Engineer immediately if any unknown functioning underground utilities are discovered during the course of the project, which may interfere with construction. The Contractor shall wait for

3) The Contractor shall be responsible for any damage to functioning underground or overhead utility lines.

Damaged utilities shall be repaired immediately and service restored at no additional cost to the Owner.

4) The Contractor shall provide barricades, shoring and other safety measures required by OSHA.

5) The Contractor shall protect all adjacent existing lacibities from damage, including, but not limited to settlement due to excavations, erosion, etc. The Contractor shall be responsible for the repair of such damages.

PROJECT CONDITIONS

The Contractor shall become familiar with the project site, and compare actual conditions in the field with those shown on the project idrawings. The Contractor shall contact the Enginese immediately if any inconsistencies are found between the existing conditions and the project drawings.

2) No extra compensation will be allowed due to unusual conditions which could have reasonably been determined or anticipated by examination of the project site and project drawings.

PLAN GRADES

1) Bevallons shown on the project drawings are finished grade elevolions, unless noted athemise. Elevallons not specifically indicated that be determined by interpolation of uniform stop between spot alevations and/or control or between such points and eaking elevations. Adequate stops shall be constituted to provide politive drawings. oway from structure

2) It inconsistencies exist on the plans between contours and spot elevations, the spot elevations shall govern

TOPSOIL

1) Adequate imported and/or stockpiled salvageable topsoil shall be utilized for this project

2) Topsoil shall be free of clay lumps, roots, brush, large stones, and debris, and shall have a minimum organic content of 5 percent.

3) Remove topsol to its entire depth from areas, which are to be disturbed by new construction work. Editing from areas, which are not in the proposed construction areas) shall remain in place. The Contractor shall feld verify lopsol depths between any sol borings, and enrowed to greater depths than indicated in the soils report if such conditions are encountered. Solvaged topsoil shall be maintained in stockples.

Stockpiled topsoil shall only be used for finish grading of new lawn areas. Excess topsoil shall be removed from the site by the Contractor.

5) Protect all existing lawn areas, plantings, and other landscaping to remain in place. Any damaged areas shall be replaced at the Contractor's expense.

The Engineer shall be contacted immediately if any unforeseen major obstacles are encountered during excarolion, such as abandoned wells, abandoned or functioning uffilies, subsurface streams or rack, etc., which would add significant expense to the Conflictory.

The Contractor shall still be responsible for completing all work required for this project where encountered
conditions may be responsibly determined from a solis/geotechnical report and review of the project site and
contract for projects.

1) Surface drainage shall be provided during construction in a manner so as not to create a nuisance to

2) All excavations shall be free of water during construction within the excavations. Dewatering shall be accomplished by pumping or trenching, and shall be conducted regardless of the cause, source, or nature of

3) Berms, collerdams, or piling shall be provided as necessary to protect excavations.

4) Excavations shall be sloped to drain, and necessary pumps, hoses and other equipment shall be provided to keep excavation free at water.

5) All temporary equipment used for dewalering shall be removed from the site when no longer necessary.

1) Rough grading of all areas within the construction finits, including adjacent transition areas shall be reasonably smooth and compacted. The rough graded subgrade surface generably shall not be more than a linches above a below the established subgrade elevations. All cliches, swales, and guites shall be proded to a drain adequately. The subgrade shall be every is loped to provide drainage away term building with in a of directions at a minimum slope of 1%. The Contractor shall provide rounded transitions at top and bottom of banks and other breaks in grade.

2) Fill and backfill materials shall be inorganic solls free of roots, rocks, boulders, and debris

3) Bedding malerial or granular back/fil larget than 2' in its largest dimension shall not be allowed within 2 feet of new underground pipes. Malerial larger than 3' in its largest dimension shall not be allowed within 1 foot of subgrade elevation.

4) Imported compacted fill material shall have a maximum of 12 percent passing the #200 sieve, by weight The proposed fill material shall be tested by an independent testing lob for suitability as compacted fill for this project. The Contractor shall pay for the testing services and provide a copy of the test results to the Engineer.

5) The Contractor shall fill and grade as necessary to bring surface to required elevations, and provide oil materials necessary, whether obtained on or off the project site.

6) The Contractor shall place compacted material in uniform horizontal litts not exceeding 8° in depth for clay soils, and 12° in depth for sandy soils, and compact as required to achieve specified density.

7) Compaction shall be obtained with in the use of vibriday rollen or rammens. During compaction, (if material shall contain moisture content, or necessary, for the required compaction an indicated by an independent lesting toborday. The moisture shall be uniform throughout each filt. If the material is too day, water shall be added with approved equipment and methods, which will not want util montained. If the monterial is to extra it shall be died by harawing, disking, blading, or other approved methods recommended by the independent testing laboratory.

8) Areas designated for povement in excavated (cut) areas shall be scarified to a depth of 1 foot. The Contractor shall bring the subgrade material to optimum moisture content as indicated by the independent testing laboratory, and compact the subgrade to the specified density is fixed below for sols undernachin povements.

9) The Contractor shell not place III material when either the III material, or the material on which it is to be placed, it hazen. Any soft or yielding areas appearing in the III resulting from frost, rain, or any other results whatever shall be scallfied, removed, recompacted and/or otherwise rectified to the satisfaction of the Engineers before any new III is placed.

COMPACTION TESTS

I) Jüliy Tierch Beck IV. Pro Control for independent sold technicism and approved testing laboratory shall period in Spice as drailly and makines test and condom depths in tench backfill of 10 follar intervals to lacellon hiereal. Compaction of tranches shall be a minimum of 95% of the maximum dry density (as determined by the independent testing laboratory) in lawn areas, and at depths greater than 3 feet below areas designated for powerment. Compaction of tenches at depths within 3 feet of powed surfaces state be a minimum of 100% of the maximum dry density.

2) Compacted Fill Under Payements: Compaction tests shall not be required beneath new payements. Adequate compaction of materials under payements shall be determined by lest rolling the subgrade, and checking for excessive utiling. Test rolling shall be performed as per MNDOT Spec. 2(11).

3) Areas exhibiting a failed compaction test shall be re-compacted and re-tested to the satisfaction of the Engineer.

4) Copies of all compaction testing and test roll observation reports shall be provided to the Engineer

Optimum moliture-density relationship will be determined by testing laboratory in accordance with ASTM 0598 and maximum density determination made by Method D of ASTM 0598 unless otherwise noted in these specifications.

SUBGRADE PREPARATION

1) Finished subgrade elevations shall be as follows:

b) Cancrete pavement: 8" below linish grade c) Concrete opron: 12' below finish grade.

d) Concrete sidewalk: 8" below finish grade (plus thickened edge).

IJ Planting areas: See Londscaping Plans/Details

2) The tolerance for areas to be paved shall not exceed 0.15 feet above or below plan subgrade.

3) The Contractor shall protect newly graded areas from erosion. Settlement or washing that occurs prior to acceptance of the Work shall be repaired and grades re-established.

DISPOSAL OF EXCESS WASTE MATERIALS

The Contractor shall remove excess excovated material, debris, and waste materials, from the Owner's property and legally dispose of it in accordance with all governing codes.

SPREADING TOPSOIL AND FINISH GRADING

1) Scarify subgrade to depth of 3" prior to placing topsoil. Spread topsoil evenly over complete subgrade as follows:

at Lawn Areas on Private Property: Spread 4" Eahthy compacted layer of topsoil.

c) Planting Areas: See Landscape Plan/Defail

2) Finish grade accurately within 0.15 feet of finish grades shown on the project drawings, less the thickness of any sod where it is to be installed. Slope all grades away from buildings to provide positive drainage,

3) Prepare topsoil suitable to receive seed and/or sod. Grading of areas designated for topsoil shall be reason smooth and even, and in accordance with MMDOT Spec, 2105.3G and 2574.344. All debits and stones exec. 3" in dameter shall be removed from the sal suitable of these crees prior to seeding. Aceas composted by v or storage of materials shall be plowed, daked and harrowed to motch lexture of other links graded areas.

4) Grass seed shall be in accordance with MnDOT Spec. 3876, seed mix No. 25-131, applied at the rate of 220 pounds per acre or as indicated on the landscape plans. Mulch shall be applied and alsoanchored to all s areas and shall meet the requirements of MnDOT Spec. 3882. Type 3 or as otherwise indicated by the Engin

UTILITY NOTES

STANDARD SPECIFICATIONS

1) The following standard specifications shall apply to this project:

of Minnesota Rhmbing Code - MM Rules Chapter 4714 (MM Dept. of Lobor and Industry-MMDU) b) Uniform Rhmbing Code, latest edition (IIIPC) c) "That you need to know doot utility service connections in the 2015 Minnesota Plumbing Code" https://www.di.mn.gov/CCID/PDF/ps_usc.pdd d) City Enginese Association of Minnesota (CEAM) Standard Specifications e) Annoticen Society for Testing Materials (ASIM) [1] American Material Standard in Hallite (IASIM)

3) Certifications of all utility materials, as well as shop drawings, shall be submitted to the Engineer for review POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS - SANITARY

Smooth walled polyvinyl chloride pipe and fittings shall consist of SDR 26 or SDR 35 pipe, unless noted althorises, and meet the requirements of ASTM 03034 and Section 2621.2A5 of the CEAM Standard Specifications

2) All pipe and littings shall be SDR 35 for depths of up to 20 feet, and SDR 26 for depths exceeding 20.

3) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAMStandard Specifications.

DUCTILE IRON [DIP] PIPE AND FITTINGS - WATER

1) Ducitie iron pipe and fittings shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2A1 of the CEAM Standard Specifications

2) Pipe joints shall meet the requirements of Section 605.5 of the UPC, and Section 2611.38 of the CEAM Standard Specifications. Stainless steet tasteness shall be prohibited.

3) 6" pipe shall be Class 52. 8" and larger pipe shall be Class 50.

POLYVINYL CHLORIDE (C900 PVC) PIPE AND FITTINGS - WATER

1) Polyvinyl chloride pressure pipe and fittings shall meet the requirements of Table 604.1 of the UPC, and Section 2611.2A3 of the CEAMStandard Specifications

2) Pipe joints that meet the requirements of Section 605.4 of the UPC, and Section 2611.38 of the CEAM

GATE VALVES - WATER

1) Gate valves shall meet the requirements of Sections 2611.2C and 2611.3D of the CEAM Standard Specifications

1) Hydrants shall meet the requirements of Sections 2611, 28 and 2611, 30 of the CEAMStandard Specifications

BLOCKING AND ANCHORING - WATER

1) Water main blocking and anchoring shall meet the requirements of Section 2611.3A4 of the CEAMStandard Specifications

2) Provide thrust reaction blocking consisting of concrete with a minimum 28 day compressive strength of 2000 psi. Place between undisturbed ground and the fitting to be anchored. Place thrust blocking so that the pipe and fitting joints are accessible for repair.

4) Mega-Lugs may be used in lieu of thrust block if allowed by local utility

WATER SERVICE PIPE AND CURB STOPS

1) Copper tubing for water services shall meet the requirements of Table 604.1 of the UPC, and Section 2611.20 of the CEAM Standard Specifications

2) HDPE pressure pipe for water services shall meet the requirements of ASTM D2239, ASTM D2737, ASTM D3035, AVTWA C901. CSA B137.1. and Section 2611.20 of the CEAMStandard Specifications

3) Curb stops for water services Section 2611.2D of the CEAMStandard Specifications

HIGH DENSITY POLYETHYLENE PIPE (HDPE) AND FITTINGS - STORM

1) HDPE pipe and fittings shall meet the requirements of ASTM F2306, and Section 2621,2A8 of the CEAM Standard

2) Pipe joints shall meet the requirements Section 2621.3A3 of the CEAMStandard Specification

3) Winimum wall thickness shall be 0.035 inches for 12 and 15 inch diameter pipe, and shall be 0.05 inches for 16 and 24 inch diameter pipe.

POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS - STORM

PVC storm sewer pipe and fittings within 10-ft of a building and/or water pipe crossing, at when specified
on the plans, shall constal of Schadule 40 PVC, and meet the requirement of ASTM D1765. ASTM D2665, and
ASTM F794. and Section 2621, 23-56 of the CEAN Standards Openifications.

2) If further than 10-ft from a building and/or water pipe crossing. PVC storm sever pipe and littings may consist of SDR 26 or SDR 35 pipe, unless noted otherwise, and meet the (equirements of ASTM 03034 and Saction 262).2AS of the CAEAM Monday for professions.

3) All pipe and littings shall be SDR 35 for depths of up to 20 feet, and SDR 26 for depths exa 4) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAMStandard Specifications. REINFORCED CONCRETE SEWER PIPE (RCP) AND FITTINGS - STORM

1) RCP pipe and littings shall meet the requirements of ASTM C76, and Section 2621.2A3 of the CEAMStandard Specifications.

2) Pipe joints shall meet the requirements of Section 2621.3A3 of the CEAM Standard Specific

3) The ASTM strength class of pipe shall be Class III unless otherwise shown on the Plans.

4) The pipe shall be drawn together by some approved method of jacking or winching. This pressure must be maintained until sufficient backfill is placed to keep the joint from opening.

1) End sections shall be provided at all pipe inlets and outlets.

2) The end sections shall consist of material matching the material of the pipe, which it is being connected to. Materials and joints shall be as per the specifications described above for the applicable pipe material.

3) The last 3 joints of RCP shall be fied, and the end section shall be provided with an approved trash guard.

MANHOLES AND CATCH BASINS - SANITARY AND STORM

Unless otherwise noted, manhole and colich basin structures shall consist of precast concrete, and meet the requirements of Section 719.6 of the UFC (sonitary only), and Sections 2621.2C and 2621.3D of the CEAM Standard Section 5.

2) Catch basins shall be provided with the following castings:

a) Along curbline: 27" Structure: Neemah R-3075-L 48" (or larger) Structure: Neemah R-3067-L

c) bolated (in vegetated area): Neenah R-2560-EA w/ type "C grate

3) Manhales shall be provided with the following castings a) Sanitary: Neenah R-1733 w/ conceated pick hole

b) Storm: Neenah R-1733 lettered "STORM", center pick hole

INSTALLATION

END SECTIONS - STORM

IJ Unless otherwise noted, installation at all water and sewer pipe, fittings, and appurtenances shall be as per the CEAM Standard Specifications. TESTING REQUIREMENTS

Water and sewer pipe, fittings, and appurtances shall be inspected and tested as perSections 2611.3E-2611.3H and 2621.3F-2621.3H of the CEAA Standard Specifications.

2) In the event of discrepancies between the testing requirements of the MN Plumbing Code and the CEAM Standard Specifications, the most stringent will govern.

STANDARDS

1) Minnesota Standard Specifications for Highway Construction, most recent edition.

GRANULAR BASE AND SURFACE COURSES

5) Place in layers not exceeding 4" thickness (loose).

6) Compact with pneumotic or vibrating steel drum rollers

1) Compacted thickness of finished gravel courses: Class 5 base - 9" Class 2 surfacing - 3"

2) Process material for aggregate bose shall meet the requirements of MNDOT Spec. 3138, Class 5. Process material for aggregate surfacing shall meet the requirements of MNDOT Spec. 3138. Class 2.

After base course has been graded and compacted, thoroughly wet and stush roll with roller until all aggregates are thoroughly embedded.

3) The subgrade shall be tested and observed to the satisfaction of the Engineer prior to placement of aggregate base material. Install base material as required to accommodate new plan grades. 4) Wel base material to approximate optimum moisture content either prior to delivery to job site or as soon a practical offer being placed on subgrade.

CONCRETE PAVEMENT, CURB & GUTTER, AND SIDEWALK

1] ACI 318, ACI 315, CRSI, ACI 301, lafest adoptions

2) Minnesota Standard Specifications for Construction, most recent edition

GRANULAR BASE CASA.

1) Compacted thickness of finished base:
3' Concrete Povement
6' - Concrete Aprons
4' - Concrete Sidewc

2] Base material of concrete aprons and sidewalk shall consist of MNDOT 3149.282 Select Granular Borrow 3) Base material of concrete povement shall consist of MNDOT Class 5 Aggregate Base

1) Coarse: MnDOT Spec. 3137.

2) Fine: MnDOY Spec. 3126.

1) Clean, Iresh and potable, MnDOT Spec, 3906. AIR ENTRAINING ADMIXTURES

2) Provide entrainment of 4 - 7 percent by volume

PORTLAND CEMENT

1) ASIM C150. Type I plus an approved air entraining agent, or Type IA air-entraining Portland cement,

OTHER ADMIXTURES 1) MnDOT Spec. 3113.

1) Concrete Classification

antaining chlorides or nitrates shall not be allowed.

PROPORTIONING AND DESIGN OF MIXES

o) Curb and gutter, sfp-formed concrete: MNDOT Spec, 2461, Mix Design 3F32

b) Sidewalk, aprons, incidental concrete, manual curb & gutter; MNDOT Spec. 2461, Mix Design 3F52

d) Repair concrete, fast strength concrete: MNDOT Spec. 2301. No Design 3A41 H

a) 3F32: ½ - 3" slump, 4500 psi, 5-8% air

b) 3F52: 2 - 5' slump. 4500 psi. 5-8% alr c) 3A41: 2 - 5" slump, 4500 psi, 5-8% ai

d) Temperatures of all concrete during placement shall be 50-deg F to 90-deg F

 Place concrete or soon or possible after mixing. Place before initial set has occurred, and in no event after it has contained its water content for more than one hour. Avoid overworking concrete or allowing concrete to fall unrestricted for exce situations which can cause segregation of the aggregates.

3) Concrete payements shall be placed in accordance with applicable portions of MnDOT 2301.

4) Sidewalks shall be placed in accordance with MnDOT 2521

5) Curb and gutter shall be placed in accordance with MnDOT 2531 PROTECTION

1) Provide adequate protection against rain, steet and snow before and during placement and finishing of concrete 2) Protect concrete from premature drying. Provide temporary covering as required. Keep concrete continuously moist for 7 days.

3) Treat concrete with membrane curing compound in accordance with MnDOT 2531.3G.

COLD WEATHER CONCRETE

 Do not place concrete when the almospheric temperature is below 40 degrees F, or when the concrete is fixely
to be subjected to Iressing temperatures within 24 hours after it has been deposited unless adequate
temperary healing it provided. 2) Maintain concrete temperature of 40 to 90 degrees F. for 3 days. Protect from freezing for the following 5 days

No frazen materials may be used in the concrete. Chemicals may not be used to prevent freezing unless
approved by the Engineer.

4) Perform all cold weather concreting in accord with ACI 306.

HOT WEATHER CONCRETE

2) Maintain concrete temperature of 40 to 90 degrees F. for 3 days. Protect from temperatures over 90 degrees for the following 5 days.

4) Water reducing admixtures with retarding properties are required for all concrete placed when the temperature exceeds 80 degrees F.

QUALITY CONTROL

FINISHING 11 Provide a broomed linish on exterior sidewalks and ramps unless noted otherwise

1) The Contractor shall thre on independent testing firm to provide the following tests: a) The independent testing technician shall perform random field testing of the fresh concrete including stump, or content, and temperature. (ASTM C143, C173, C231 and C138). One series of the oforementioned tests shall be performed on the first load of concrete.

b) The independent lesting technicion shall cost a set of four compression test cyfinders for the first load of concrete as well as 1 set for every 100 cubic yards, or footion hereof, of concrete hereafter. Compression lests shall be performed on one lest cyfinder of 2 days and two lest cyfinders of 28 days. The fourth test cyfinders shall be retained in the event of falling compression lests on the 28-day lest cyfinders.

STANDARD NOTES & SPECIFICATIONS

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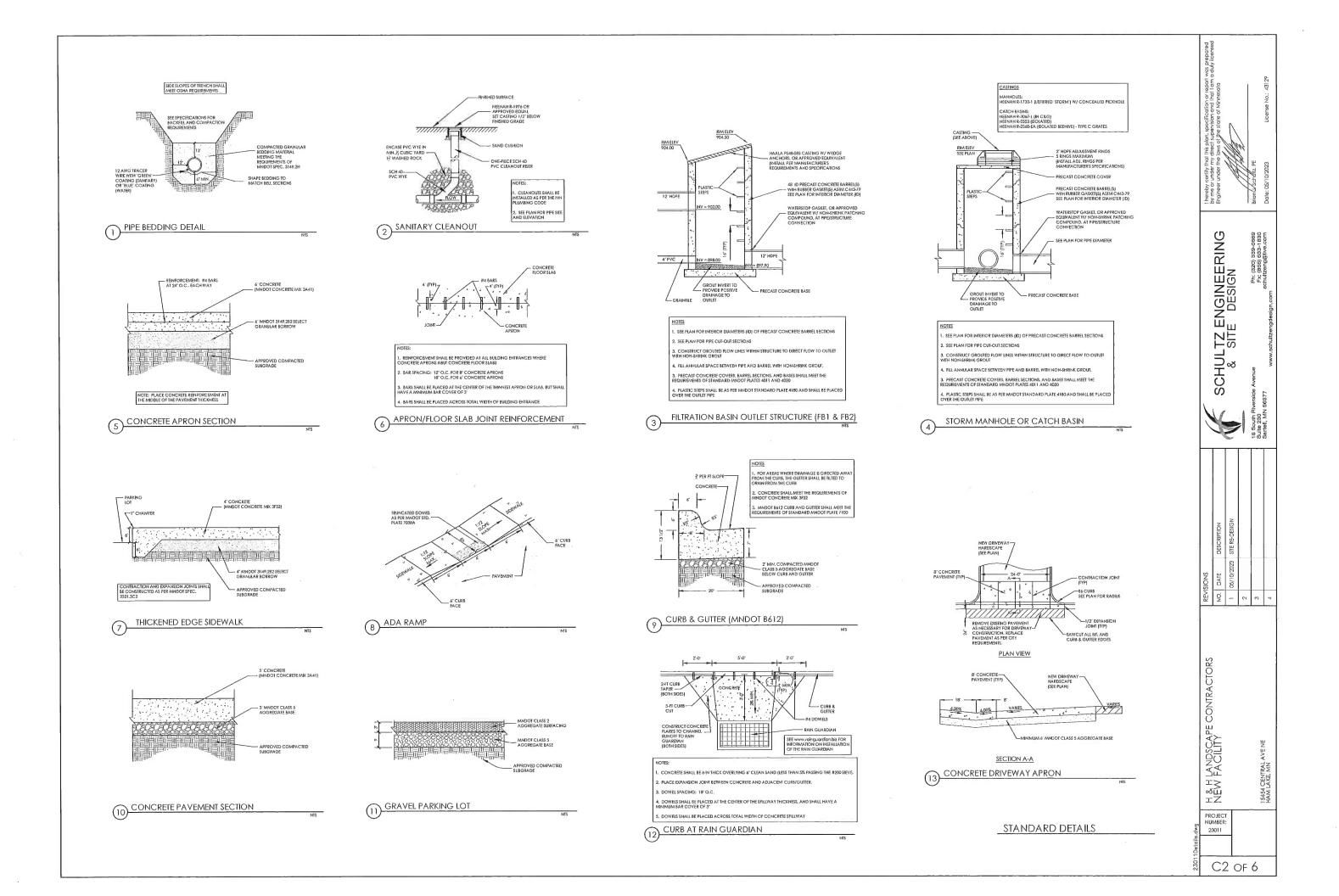
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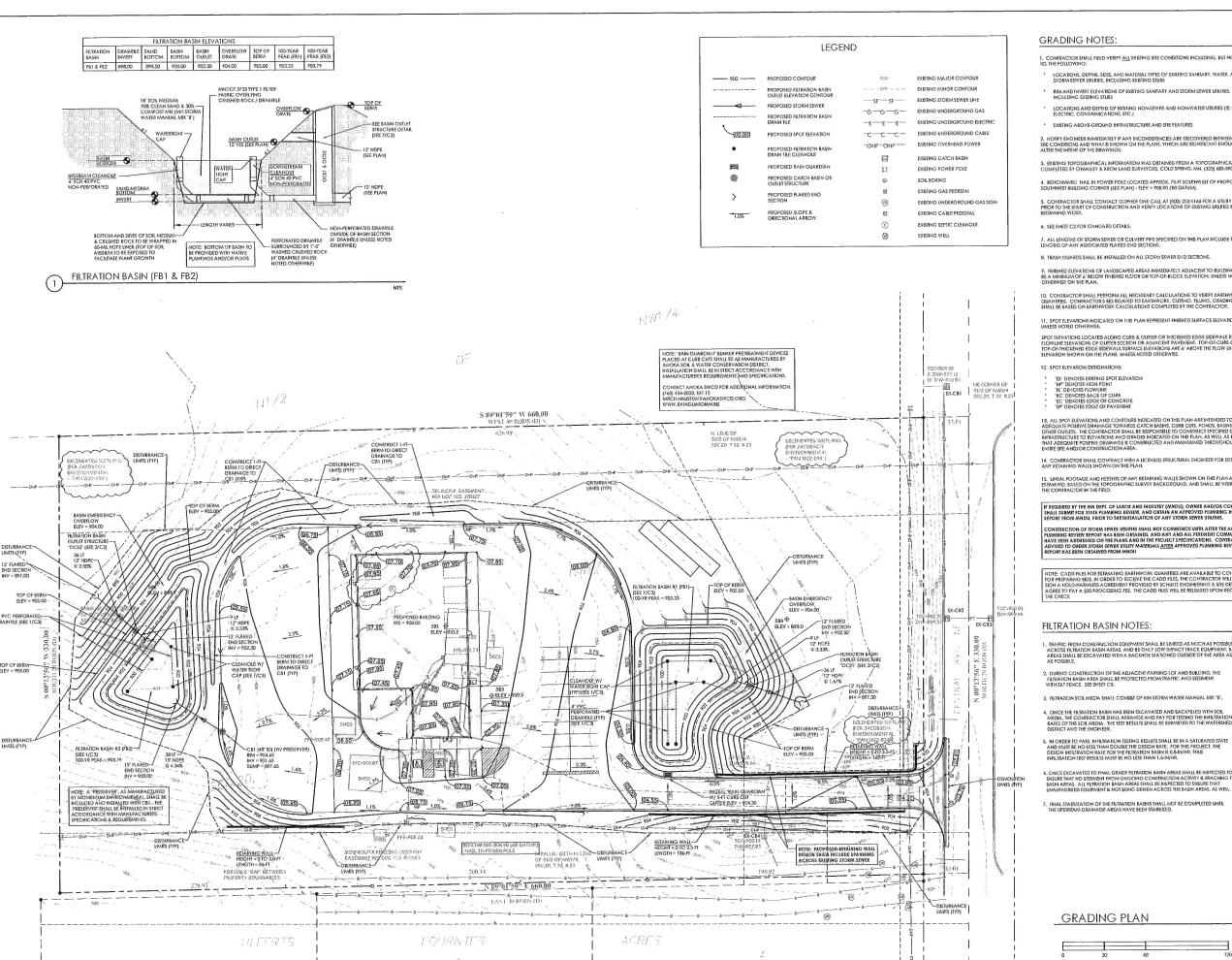
PROJECT NUMBER: 23011

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15454 CENTRAL HAM LAKE, MN

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CONTRACTOR SHALL FIELD VERIFY <u>ALL</u> EXISTING STIE CONDITIONS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

- LOCATIONS, DEPTHS, SIZES, AND MATERIAL TYPES OF EXISTING SANITARY, WATER, AND STORMSEWER UTILITIES, INCLUDING EXISTING STUBS

- LOCATIONS AND DEPTHS OF EXISTING NON-SEIVER AND NON-WATER UTILITIES (IE; GAS. ELECTRIC, COMMUNICATIONS, ETC.)
- 2. NOTIFY ENGINEER IMMEDIATELY IF ANY INCONSISTENCIES ARE DISCOVERED BETWEEN ACTUA SITE CONDITIONS AND WHAT IS SHOWN ON THE PLANS, WHICH ARE SKINIFICANT ENDUGH TO ALTER THE INTENT OF THE DRAWINGS.

- CONTRACTOR SHALL CONTACT GOPHER ONE CALL AT (800) 252-1166 FOR A UTILITY LOCATE PRIOR TO THE START OF CONSTRUCTION AND VERIFY LOCATIONS OF EXSTING UTILITIES BEFORE REGINNING WORK.
- 7. ALL LENGTHS OF STORM SEWER OR CULVERT PIPE SPECIFIED ON THIS PLAN INCLUDE THE LENGTHS OF ANY ASSOCIATED FLARED END SECTIONS.
- FINISHED ELEVATIONS OF LANDSCAPED AREAS INVMEDIATELY ADJACENT TO BUILDINGS SHALL BE A MINIMUM OF 6' BELOW RINSHED FLOOK OR TOP-OF-BLOCK ELEVATION, UNLESS NOTED OTHERWISE OF THE PLAN.
- 10. CONTRACTOR SHALL PERFORM ALL NECESSARY CALCULATIONS TO YERIFY EARTHY/ORK QUANTIFIES. CONTRACTORS BID RELATED TO EARTHY/ORK. CUTTING. FILLING, GRADING. ETC. SHALL BE EASED ON EARTHY/ORK CALCULATIONS COMPRETED BY THE CONTRACTOR.
- SPOT ELEVATIONS INDICATED ON THIS PLAN REPRESENT FINISHED SURFACE ELEVATIONS, UNLESS NOTED OTHERWISE.
- SPOT ELEVATIONS LOCATED ALONG CURS & GUITER OR THICKENED EDGE SIDEWALK REPRESENT FLOWINE ELEVATIONS OF GUITER SECTION OR ADJACENT PAVEMENT. TOP-OF-CURS OR TOP-OF-INCENDE DGGE SIDEWALK SUBPACE LEVATIONS ARE 6' ABOVE THE FLOW LINE SPOT ELEVATION SHOWN ON THE PLANS. UNLESS NOTED OTHERWISE.
- 13. ALS POT ELEVATIONS AND CONFOLISS INVICATED ON THE FLAM AGE INTENDED TO PROVID ADEQUATE POSITIVE DENANCE TOWNADE CACH MARINS, CLIBBE CLIST, FONDES, BASINS AND DENASTRICULES OF THE PROVIDED TO THE PROVIDED TO THE PROVIDED TO THE PROVIDED TO THE INFASTRICULES OF ELEVATIONS AND GRADES INCIDENTED ON THE PROVIDED TO THE THAT ADEQUATE POSITIVE DRAINAGE IS CONSTRUCTED AND MAINTAINED THROUGHOUT THE ENTRE STEE AND/OR CONSTRUCTION AREA.
- 14. CONTRACTOR SHALL CONTRACT WITH A LICENSED STRUCTURAL ENGINEER FOR DESIGN OF ANY RETAINING WALLS SHOWN ON THIS PLAN.
- 15. LINEAL FOOTAGE AND HEIGHTS OF ANY RETAINING WALLS SHOWN ON THIS PLAN ARE ESTIMATED, BASED ON THE TOPOGRAPHIC SURVEY BACKGROUND, AND SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD.

REQUIRED BY THE MIN DEPT. OF LABOR AND INDUSTRY (MINDLI), OWNER AND/OR CONTRACTOR HALL SUBMIT FOR STATE FLUMBING REVIEW, AND OBTAIN AN APPROYED PLUMBING REVIEW EPORT FROM MINDLI, PRIOR TO THE INSTALLATION OF ANY STORM SEWER UTILITIES.

CONSTRUCTION OF STORM, SEWER UTILITIES SHALL NOT COMMENCE UNTIL AFTER THE APPROVED PRUMAING REVIEW REPORT HAS BEEN OSTAINED, AND ANY AND ALL PERITIRENT COMMENTS HAVE BEEN ADDRESSED ON THE PLANS AND IN THE PROJECT STEPCHICATIONS. CONTRACTIOR IS ADVISED TO ORDER STORM SEWER UTILITY MATERIALS <u>AFTER</u> APPROVED PLUMBING REVIEW REPORT HAS BEEN OSTAINED TROOM MIND!

NOTE: CADD FILES FOR ESTIMATING EARTHWORK QUANTITIES ARE AVAILABLE TO CONTRACTORS FOR PREPARISH BILD, IN ORDER TO RECEIVE THE CADD FILES, THE CONTRACTOR WILL NEED TO SIGN A HOLD-MARMLESS AGREEWEN PROVIDED BY SCHUIZT EXPIDERING & SITE DESIGN, AND AGREET O PAY A \$50 PROCESSING FEE. THE CADD FILES WILL BE RELEASED UPON RECEIPT OF

- TRAFFIC FROM CONSTRUCTION EQUIPMENT SHALL BE LIMBED AS MUCH AS POSSIBLE
 ACROSS FRIRATION BASIN AREAS, AND BE ONLY LOW IMPACT RINCK EQUIPMENT, BASIN
 AREAS SHALL BE EXCAVATED WITH A BACKHOE STATIONED OUTSIDE OF THE AREA AS MUCH
 AS POSSIBLE.
- DURING CONSTRUCTION OF THE ADJACENT PARKING LOT AND BUILDING, THE FILTRATION BASIN AREA SHALL BE PROTECTED FROM TRAFFIC AND SEDIMENT WITH SILT FENCE. SEE SHEET CS.
- 4. ONCE THE FILITATION BASIN HAS BEEN EXCAVATED AND BACKFILLED WITH SOIL MEDIA, THE CONTRACTOR SHALL ARRANGE AND PAY FOR TESTING THE INFERTATION RATES OF HE SOIL MEDIA. THE TEST RESULTS SHALL BE SUBMITTED TO THE WATERSHED DISTRICT AND THE ENGINEER.
- 5. IN ORDER TO PASS, INFILTRATION TESTING RESULTS SHALL BE IN A SATURATED STA AND MUST BE NO LESS THAN DOUBLE THE DESIGN RATE. FOR THIS PROJECT, THE DESIGN INFILTRATION RATE FOR THE FRITATION BASIN IS OB-IN-HR. THUS INFILTRATION TEST RESULTS MUST BE NO LESS THAN 1.6-By-IR.
- . ONCE EXCAVATED TO FINAL GRADE FILIBATION BASIN AREAS SHALL BE INSPECTED TO ENSURETHAT NO SEDIMENT FROM ONGOING CONSTRUCTION ACTIVITY & REACHING THE BASIN AREAS, ALL RITRATION BASIN AREAS SHALL BE INSPECTED TO ENSURE THAT UNAUTHORIZED COUPLINENT & NOT BEING DRIVEN ACROSS THE BASIN AREAS. AS WELL.

NGINEEF DESIGN

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CHULTZ & SITE

LANDSCAPE FACILITY

15454 CENTI HAM LAKE, I

Z N E X T X PROJECT NUMBER: 23011 SCALE: 1"=30"

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PROJECT INFORMATION

This project will consist of the construction of a new commercial building with an approximate footprint of 9,400 st. as well as parking lot & driveway areas, and sidewalk. Storm water management for the project will consist of two filtration basins.

<u>Disturbed Area & Impervious Surface Tobulation</u> (within proposed construction area)

Anticipated Disturbed Area	2.6 acres
Existing Impervious Area	0.2 ocres
Proposed Impervious Area	1.4 ocres
Net Impervious Area Increase	1.2 acres

Permanent Site Drainage

Site droinage will be routed to one of two infiltration basins via stam sewer and surface drainage. The infiltration basis been designed to treat of admange from 1.1" of runal fall new impervious surfaces as per NPCA NPDES permit requirem largue events. The basins and associated outlets have been designed to find discharges such find overall post development unant rates about the control post development unant rates are the control post development unant rates are the control post development.

Draw Down Time

FILTRATION BASIN (FB1) CALCULATIONS

ofal proposed impervious surfacing = 62,000 SF Required water quality volume = 62,000 sf x 1.1-in = 5,690 cl

Provided filtration volume: 181 < 0,148 acre-tl = 6,440 ct [See HydroCad model] 182 = 0,125 acre-tl = 5,440 ct [See HydroCad model] Total = 11,880 ct

med seasonal high groundwater elevation: 898.50 id on geotechnical report)

Maximum time of infiltration = 48 hrs. 0 min Design time of infiltration = 27.6 in (2.3-ft) / 0.80 ln/hr = 34 hrs, 30 min (assuming full system to basin outlet)

Assumed underlying solls: Poorly graded sands (SP) (MN Storm Water Manual Mix "B")

Receiving Surface Waters

The following surface waters could receive storm water runoff from this project, and are within 1 mile at the project site:

Surface Water	Type of Surface Water	Impaired Waler?	Special Water?	USEPA Approved TMDL for Impaired Water?	Comments
Nearby Wetlands	Welland	No	No		Distance = 0.1 miles
Ham Lake	Lake	No	No		Distance = 0.5 miles
County Ditch \$8	Ditch	No	No		Distance = 0.6 miles

SEDIMENT AND OTHER POLLUTANTS

This SWPPP has been designed moinly to provide eration and sediment control of naturally occurring soils of this site (ie: sands, laams, and clays). Although this SWPPP does address pollution prevention of other man-mode materials, it is assumed that the manifestick will consist at debt in the sating structures and powements to be demotished, or debts and chemicals (ie: fuels, new paints, etc...) testilling from new construction.

n solid wastes or hazordous materials bufied below grade at this site. If such wastes or hazord materials are construction, the SWPP Coordinator (described below) will be repossible for notifying the Engineer. This revised to address he presence and disposal of these additional pollutaris.

EROSION PREVENTION AND SEDIMENT CONTROL RESPONSIBILITIES

Design Engineer	Brian J. Schullz, PE
Training Course	Design of SWPPP Recert.
Training Entity	University of Minnesota
Instructor	John Chapman
Dates of Training Course	Spring 2023 (Online Course
Total Training Hours	7.0

*"Design of SWPPP" is a recertification course offered by the University of Minnesota. The Engineer's certification for "Design of SWPPP" is current, and will expire May 31, 2026. Certification documentation is on file of the Engineer's office and a copy can be provided upon

The Contractor shall provide on individual who shall serve as the SWPPP Coordinator for this project. The SWPPP coordinator shall oversee the implementation of this SWPPP, as well as the necessory inspections (described blody) of erosion prevention and sectiment control BMPs. The SWPPP Coordinator shall also exceed the installation, maintenence, and report of the BMPs be completed in accordance with this SWPPP. The SWPPP Coordinator shall be responsible to the liams tated above during a period than the SWPPP coordinator of the SWPPP Coordinator. The SWPPP Coordinator of the SWPPP Coordinator of the SWPPP Coordinator of the SWPPP Coordinator.

It shall be the Contractor's responsibility to complete the table below, which will identify the SWPPP Coordinator and that person's qualifications. This person that all activated into the state been assigned to sever as SWPPP Coordinator and will be overseing the items lated in this section, by providing their signature in the space below. Please note that this SWPPP will not be considered complete if the table below in not lifted in.

* Typically, the identity of the SWPPP Coordinator is unknown until the project is awarded. The SWPPP Coordinator may be identified of the project's Preconstruction Conference.

SWPPP Coordinator	
Company Name	(Printed Name)
Office Phone #	acknowledge that I will be serving as SWPPP
Cell Phone #	Coordinator for this project and will be responsible for overseeing the items identified in
Training Course	this section.
Training Entity	
Instructor	(Signoture)
Dates of Training Course	
Total Training Hours	(Date)

The SWPPP Coordinator may assign other personnel to supervise or perform the duties listed above. However, in completing the duties listed above, at least one person shall be trained in erasion prevention and sediment control as related to that navious port of the SWPPP.

It he SWPPP Coordinator chaoses to delegate some of the duties and responsibilities isted above to other personnel, a flat of the personnel, as well as their qualifications, shall be kept with and shall become port of this SWPPP. The qualifications shall be documented in a monner similar to the bottle shown above. A copy of this slight the provided to the trajitation

Once the project has been completed and accepted by the Owner, and find Statilization has been established and "Notice of Termination" submitted to the MPCA, the Owner assumes responsibility for the long term maintenance of the statm water responsibility that the MPCA.

The SWPPP Coordinator shall be responsible for ensuring that the Contractor properly disposes of the temporary es sediments control measures within 30 days after site stabilization is achieved or after the temporary measures are needed.

Record Retention

The SWPPP and associated records shall be stated and maintained by an employee or representative of the Owner for 3 years after the submission of the Notice of Termination (NOT). Responsibility for overseeing the records will be transferred to another employee or representative should the cutrent personnel become univolved with the project or Owner. These records shall include the following

1). The final SWPPP

- 2). Any other stormwater related permits required for the project
- 3). Records of all inspection and maintenance conducted during construction
- . All permanent operation and maintenance ogreements that have been implemented, including all right-ol-way, contracts, covenants and other binding requirements regarding perpetual maintenance
- 5). Altrequired colculations for design of the temporary and permanent Stormwater Mana-

BMP INSPECTIONS

The SWPPP Coordinater shall inspect, or designate someone else who is qualified to inspect (see above), the construction site erosion prevention and sediment control BMPs per the following time frames:

1). Once every 7 days

2). Within 24 hours of a rain event {1/2' or greater over 24 hours}

2). Where construction sites have permanent cover on all exposed soil areas and no construction activity is occurring anywhere on he site, the site must be inspected for a period of 12 months (inspections may be suspended during fracer ground conditions). Following the 12 inmenth of permanent cover within one construction activity, inspections may be terminated until construction activity is not again initiated as sooner if notified in writing by the MPCA.

Where work has been suspended due to frozen ground conditions, the required inspections and mainte begin within 24 hours after runoff occurs at the site or prior to resuming construction, whichever occurs first

Inspection Records

The SWPPP Coordinater shall mointain inspection records during construction. These must be recorded in writing within 24 hours of the inspection and/or maintenance activity. The inspection records shall include the following:

- 3). Findings of inspections, including recon rmendations for corrective actions
- 4). Corrective actions taken (including dates, times, and party completing maintenance activities)
- 5). Date and amount of any rainfall events greater than 1/2' in 24 hours
 a). The Contractor shall install and mainfain a rain gauge at the construction site in order to verify rainfall amounts.
- discharge must be made, and the discharge shall be described (i.e., color, odor, floating, settled, or suspended solds, foam oil sheen, and other obvious indicators of pollutants) and photographed.
- 7). Occumentation of any changes to the SWPPP made during construction a). If the SWPPP coordinate observes that a BMP talk on a regular basis and believes that it is ineffective, it shall be his/her responsibility to notify the Engineer of such deficiencies. The Engineer may then amend the SWPPP [see "Amending the SWPPP].

Note: Copies of all inspection records shall be submitted to the Engineer.

AMENDING THE SWPPP

During the construction of this project it may become necessary to amend this SWPPP. Should the responsibility of installing, respecting and maintaining the etasion and sedment control devices and techniques described in this SWPPP be transferred from the current Controllar to another controllar to a controllar t

Should if be determined, during construction, by the SWPPP Coordinator, Engineer, or Regulatory Officials that deficiencies SWPPP exist, or it significant changes are made to the design/scope of this project that Impact erosion prevention and sed control. The Engineer shall be notified immediately. The Engineer will then review potential deficiencies and/or significant changes to project design/scope, and make necessary changes to the SWPPP.

After changes are made to like SWPPP, the Engineer will issue the necessary documentation, reflecting the changes to the owner and to the SWPPP Coordinater. The SWPPP Coordinater shall be responsible to make sure that this documentation is added to the on-site SWPPP copy and that the changes described in the documentation is implemented on-site.

EROSION PREVENTION AND SEDIMENT CONTROL BMPS

Moterials and construction methods of all BMPs included in this SWPPP shall be as per the Minnesota Department of Transportation (MNDOT) Standard Specifications for Construction, latest edition. The Contractor and SWPPP Coordinator sho bolding a current copy of MNDOT's Standard Specifications for Construction and terminative themselves with the specification sections applicable to this SWPPP, as there are several BMPs that specifically reference these sections.

The Contractor and SWPPP Coordinates shall be expected to be familiar with the applicable NNDOT specification sections during construction. No additional compensation will be paid to the Contractor for additional work due to unfamiliarily with these specification sections.

Undisturbed Areas

If shown on the plan, the Confractor shall defined a creat that are not to be disturbed on the site. This may be done with flags, stakes, signs, sill lence, etc., and shall be completed prior to the start of any grading operations. Reparaless of the defined in method the Contractor chooses to use. The Contractor must communicate to his/ther personnel and subcontractors that these areas are not to be disturbed and construction equipment (including trucks and personal vehicles) shall not be allowed in these areas.

The Contractor shall minimize composition and preserve topsoil as much as possible at the sitle. In pervious ("green") areas that are not essential to the construction of the project, the Contractor shall avoid construction traffic and maintain the existing condition of these areas.

Temporary and Permanent Stabilization

<u>Ismporory on a Permanent Algobration</u>

All exported to learn light part (local pile) shall be provided with temporary or permanent cover within 7 days of construction callify temporary or permanent desirage fall expected to the provided with temporary or permanent desirage disches or swoles, which adds all allies or to a surface water, and are within 200 lineal test of a large part shall be provided with temporary or permanent cover within 24 hours of construction. Placement of temporary or permanent cover shall be individed immediately upon suspension or completion of excervation of percentage.

Temporary Cover:

If the Contractor chaoses to half grading operations in a portion of the sile (or the whole sile) for a period exceeding 7 days, and grading operations (rough or finish grading) in the affected area has not yet been completed. Lemporary cover shall be placed. Affected area consisting of adminage clashes a raviales connected to, and within 200 freat leaf of a poperly face or surface water shall be provided with temporary cover within 24 hours of connection. Depending on the Contractor's checklet the temporary cover shall consist of an oet the following 80/Mz:

a). Disconchared mulch may be used in an area of the sile (or the whole sile) if the Contractor's halling grading operation for a period that is relatively sharl, but exceeds 7 days.

- b). The mulch shall be Type 3 per MNDOT Spec. 3882 d). Mulch shall be placed as per MNDOT 2575.3C.
- e). All mulch shall be disc anchored as per MNDOT 2575.3D. Prior to the placement and discanchoring of the mulch, the soils shall be loosened and the area smooth-rough graded per MNDOT 2574.
- Any areas that are exposed as a result of wind action after the initial mulch placement shall be covered with additional mulch to maintain 90% coverage.

21. Temporary Seeding with Mulch

- Temporary seeding with mulch may be used in areas of the site (or the whole site) if the Controctor is halling grading operations for a period that is retailively long. Although mulch still needs to be applied as described above, once the temporary seeding/full is established, the mulch will no longer need to be maintained. The temporary seeding/full will require very fill immittenance.
- c). Contractor shall utilize Seed Mixes 21-111, 21-112, or 21-113 per MNDOT Spec, 3876 for temporary seeding.
- d). Temporary seeding shall be sown per MNDOT Spec, 2575.38.

Upon completion of finish grading and/or placement of lopsal, initiation of the placement of permanent cover shall be immediately over all exposed areas. This includes areas designated for impervious surfacing (lee buildings, powernatly) bases, sidewoks, e.e., I. Where the construction schedule with not allow of the placement of the permanent impervious within 7 days of the completion of finish grading, temporary cover shall be provided in these areas, as described above permanent impervious surfacing con be constructed. Affected areas consisting of dianage distinct or swell exconnect within, 200 incol feet of a property fine or surface water, shall be provided with permanent cover within 24 hours of conturl establishment shall be provided with one or more of the following BMPs (see p)

- a). Unless otherwise noted on the plans, all areas designated for turl establishment shall be provided with permanent seeding.
- b), in addition to the plan included as part of this SWPPP, the Contractor shall verify if a Landscaping Plan has been included in the plans by the Architect, if a Landscape Architect has specified higher qualify permanent a rower (ies said, hydroseeding, etc.), the Contractor shall provide this permanent over in fise of the permanent seeding specified in this SWPPP.
- c). Prior to the sowing of permanent seed, the soils shall be loosened and the area smooth-rough graded per MNDOT 2574
- di. Contractor shall utilize Seed Mix 25-131 per MNDOT Spec, 3876 for permanent seeding.

- a). Erosion control blankel shall be placed in areas as shown on the plan included in this SWPPP. These areas shall still be provided with permanent seeding, as described above, beneath the erosion control blanket.
- b), Erosion control blanket shall meet the requirements indicated in MNDOT Spec. 3885. See plan for category(s) of erosion control blanket.
- c). Erosion control blanket shall be installed as per MNDOT Spec, 2575.3G2.
- d). Erosion control blanket specified in drainage aftches and swales connected to, and within 200 fined feet, of a property fine
 or surface water shall be installed within 24 hours of the completion of finish grading fincluding permanent seeding).
- a). Riprap shall be placed in areas as shown on the plan included in this SWPPP.
- b). All riprop shall be underlain with Type 4 geotestile fabric. The fabric shall meet the requirements of MNDOT Spec. 3733 and shall be installed as per MNDOT Spec. 2511.382.
- c), Riprop materials shall meet the requirements of MNDOT Spec. 3601, and shall be Class 3, unless noted otherwise on the
- e). Although it is permitted for the riprop to be placed with machinery, it will be necessary for the Contractor to hand place some of the riprop in order to provide a dense, well-keyed layer of stones with the least practical quantity of void space.
- f). The minimum thickness of the riprop shall be 18 inches, unless otherwise noted on the plan
- g). Riprop designated at the end of pipe outlets shall be placed within 24 hours of installation of the pipe outlet end section
- h). Riprop specified in drainage ditches and swales connected to, and within 200 fineal feet, of a property line or surface water shall be installed within 24 hours of the completion of finish grading.

Sediment Contro

The following sediment control BMPs shall be implemented as part of this project:

11. Sill Fence

- c), Sill fence shall be installed as per MNDOT Spec. 2573.382.
- d). Silf fence shall be installed prior to any upgradient grading operations, and shall remain in place and maintained adequately until upgradient areas achieve Final Stabilization (see below) within 24 hours of discovery.
- i). Portions of sit fence may be removed to accommodate short-term activities, such as vehicle passage. Short-term activities I, rations or stitletice may be tempored accommodes anotherm occumes, such as versue passage, standard commes shall be completed as quickly as possible, and new sill tence intalled firmedabley after completion of the shart-term activity. It sainfalls imminent or lorscated in the next future, new sill shall be intaffed at agrades of if the shart term activity has been completed or not. The Controlors is advised to schedule shart term activities during day weather as much as practicable. No additional compensation will be paid due to additional sill fence associated with shart-term activities.
-). Temporery rel alectrolle shall be placed on the site in orace upgradent from all flence. When the Contract or closuss to place i temporary out alectripe to studied estignated at its freed orace. It is refueption that be surrounded by oddfilland all flences, under no circumstances shall improvay soil stockpies be placed over surface waters, curb and guiller, catch basine cutter tields for coultes, or dichast.
- 2). Colch Basin Protection
- a). WIMCO Road Drain protection devices, as manufactured by WIMCO, shall be used for catch basin protection on this
 project. WIMCO can be contacted at (952)-233-3055, and their web page is www.roaddrain.com.
- j. "Road Drain Top Skô" devices shall be installed at all catch basin locations immediately after placement of the catch basis structures. "Road Drain Top Skôt" devices shall remain in place and be adequately maintained until permonent jurfacing is constructed face usb and gutter, powerents, and/or growed sulfacing, in areas designated for furl establishment," Road Drain Top Skot" devices shall remain in place until Final Stabilization at all upgradient areas is established.
- d). The contractor shall install and maintain the catch basin protection devices as per the manufacturer's instructions and specifications.
- 31. Culvert Inlet Protection
- a). Culvert inlet protection shall be provided at all culvert inlet locations immediately after construction at the culvert. See plan
 included in this SWPPP for culvert inlet locations.
- b). Culvert inlet protection shall consist of the SedJacket, as monufactured by SedCatch Environmental Products. SedCatch
 Environmental Products can be contacted at (937)-435-5075, and their web page is https://sedcatch.com/collections/sedjacket.
- c). The culvert inlet protection shall remain in place and adequately maintained until Final Stabilization of all upgradient areas has been established. ci). Cutvert intel protection shall be repaired or replaced if domaged during, or after ratio events, or if accumulated seafment reaches 1/2 of line height of the Sedlacket device tabric. Repair or replacement of cutvert intel protection shall be completed within 24 hours of discovery.

- a). Temporary rock construction entrances shall be installed at the locations shown on the plan included in this SV/PPP. See detail for temporary rock entrance design.
- c). Temporary tock entrance shall be constructed prior to the start of grading operations, and shall remain in place and be adequately maintained until final Stabilization has been established.
- e). The Contractor has the option to place Type 4 geolexille fobric beneath the temporary rock entrance. The lobric may extend the life of the entrance as it will reduce rock 'sinking' into the underlying soils. If the Contractor chooses to use lobric, if should meet the requirement of WNOOT Spec. 233 and shall be intalled any per MOOT Spec. 231.332.
- Il sediment tracking from the sile is discovered on adjacent streets, the sediment shall be removed with a street sweeper or other approved method within 24 hours of discovery. This shall be done throughout construction of the project. This sediment may be returned and graded over exposed across of the site, or disposed of of site or PM PCA requirements.
- The City may order street sweeping to be performed at the Contraptor's or Owner's expense if City staff find that co activities are resulting in sealment or debris being tracked onto City streets.
- 5). Eller Logs
- b). Filter logs shall consist of Type Wood Fiber biorolls and meet the requirements of MNDOT Spec. 3897 c). Filter logs shall be installed as per MNDOT Spec. 2573.3F.
- e). Filter logs shall remain in place for the life of the project, and shall be allowed to degrade naturally

If dewatering of sandy subsolis is required for this project, the pump discharge shall be incated prior to discharge off-life or into a surface water. Treatment of discharge shall be achieved with the use of a "Dandy Devatering Sag" (or approved equivalent), a monufactured by Dandy Productis. Dandy Products, the can be contacted at [877] 307-0141, and their web page is www.dandyproducts.com. The "Dandy Devatering Sag" shall be installed, utilized, and maintained per line manufacturers

Once dewaleting water has been frealed, it may be discharged oil-life or to a surface water. The discharge shall be visually checked to ensure that it is relatively cleen and not visibly different from any receiving waters. If discharge is noticeably "diffy, the Engineer shall be contacted ar additional teatment methods may be necessary.

Adequate eration control shall be provided at the point of discharge if it is located in an area with suppred sails or established full this eration control may consist of temporary placed for one, or other approved energy dislipation measures. The type of eration control measures shall be at the Controlary discretion, depending on the location of the devaleting discharge and the unique sit characteristics. The erosion control measures shall be effective and shall be maintained adequately such that no erosion occurs a the point of discharge.

ESTIMATED QUANTITIES

ESTIMATED BMP QUANTITIES		
TEM	QUANTITY	
emporary Seeding & Mulch	2.6 Acres	
Permanent Seeding & Mulch	1.2 Acres	
ili Fence/Sediment Control Log	2.600 LF	
emporary Rock Constr. Enfrance	1 EA	
Class #I Rip Rap	118 CY	
Category 20 ECB	4.100 SY	

Note: Estimated quantities shown above indicate one application of the associated SMP. Additional quantity of BMP over what is indicated above may be required for maintenance of each SMP. Good housekeeping by the Contractor wilkly result in less younfly required.

Sofid waste accumulated during construction, including collected sediment, construction materials, floating debris, construction debris, paper, plastics, and other solid wastes shall be disposed of in accordance with MPCA disposal requirements;

- 2). Pesticides, herbicides, insecticides, fertilizers, treatment chemicals, and landscape materials shall be maintained under co (e.g., plastic sheeling or temporary roots) to prevent the discharge of pollutants or protected by similarly effective means designed to minimize control with stammacter.
- 3). Hazardous malerios, toxic waste, (including a), diesel fuel, gasoline, hydraulia likids, paint solvents, petroleum-based products, wood preservatives, additives, curing compounds, and acids) shall be properly stored in sealed containers to prevent splits, leaks or other discharge. Restricted access stronge acreas shall be provided to prevent randism. Storage and disposat of hazardous waste or hazardous malerials shall be in compliance with Minn. R. ch. 7045 including secondary containment as applicable.
- 4). Solid waste shall be stored, callected and alsposed of properly in compliance with Minn, R. ch. 7035.
- Portable toilets shall be positioned so that they are secure and will not be tipped or knocked over. Sanitary waste must be disposed of properly in accordance with Minn. R. ch. 7041. The Contractor that links steps to preven the discharge of pilled or texted chemicals, including fuel, from any once where chemicals in the link of the step of the velocidar chemicals or the links to less that once the chemicals of the links to less that of the chemicals of the contract fuel in the contract to the links that contract fueling in a contract of each with the contract of the links to clean up discharged motivation and that on appropriate absorber method is excelled for recovered spliced methods. The contractor is the contractor of the links to clean up discharged motivation and that on appropriate discharged motivation and that on appropriate discharged in the discharged motivation and that on appropriate discharged in the discharged motivation and that on appropriate discharged in the discharged motivation and that on appropriate discharged in the discharged motivation and that on appropriate discharged in the discharged motivation and th

clean up discharged materials and that an appropriate disposal method is available for recovered spilled materials. The Co shall report and clean up spills immediately as required by Minn. Stat. § 115.061, using dry clean up measures where possible If the Contractor washes the exterior of vehicles or equipment on the project life, washing shall be limited to a defined area of the site. Runoff from the washing area shall be contribued in a sediment basin or other similarly effective controls and waste from the washing activity, show be properly proposed of. The Contractor shall properly use and store soaps, delergents, or solvents. No engine degreening shall be allowed on site.

The Contractor shall provide effective containment for all fiquid and solid wastes generated by washout operations (concrete, stucce, point, four release als, auring compounds and other construction materials) related to the construction activity. The liquid and sold washout wastes shall not contact the ground, and the containment shall be designed as that if all does not result in most from the washout operations or areas. Liquid and solid wastes shall be disposed of properly and in compliance with MPCA rules, A sign must be infailed adjacent to each washout locally that requires the personnel or Utilize the proper facilities for disposal collisies for disposal collisies for disposal collisies for disposal collisies.

FINAL STABILIZATION

Final Stabilization shall be considered established once the following requirements have been achieved

- 2). The permanent storm water management system is constructed, and is operating as designed. Temporary or permanent sedimentation basis that are to be used as permanent water quality management basis have been cleaned of any occumulated sediment. All sed-finent has been emoved from conveyance systems and affiches or is obtained with permanent cover.
- 3). All temporary synthetic and structural erosion prevention and sediment control BMPs have been removed from the project site. BMPs designed to decompose on site may be left in place.

ADDITIONAL COMMENTS

Besides the NPDE permit (MPCA General Storm Water Permit), the Contractor and/or Owner shall also be responsible to obtain necessary local government permits related to storm water management, and erasion and sediment control, if applicable (let-Watershad Diffici. (In); MMDO: 1400.

This SWPPP is inlended to provide a plan for addressing the erosion prevention and storm water management issues associates project. It is to be used in conjunction with the project plans, specifications, and the MPCA. General Storm Water Pormit, in and the SWPPP, the Owner, Confrictor, and SWPPP Confrictor that formitise thermsters with the actual requirements indicated MPCA General Storm Water Permit stell and are responsible for compliance with the permit's terms, requirements, and conditions are considered as the permit stell and are responsible for compliance with the permit's terms, requirements, and conditions are considered as the permit stell and are responsible for compliance with the permit's terms, requirements, and conditions are considered as the permit stell and the permit stell an

SWPPP - STANDARD NOTES

830

FACILITY

PROJECT NUMBER: 23011

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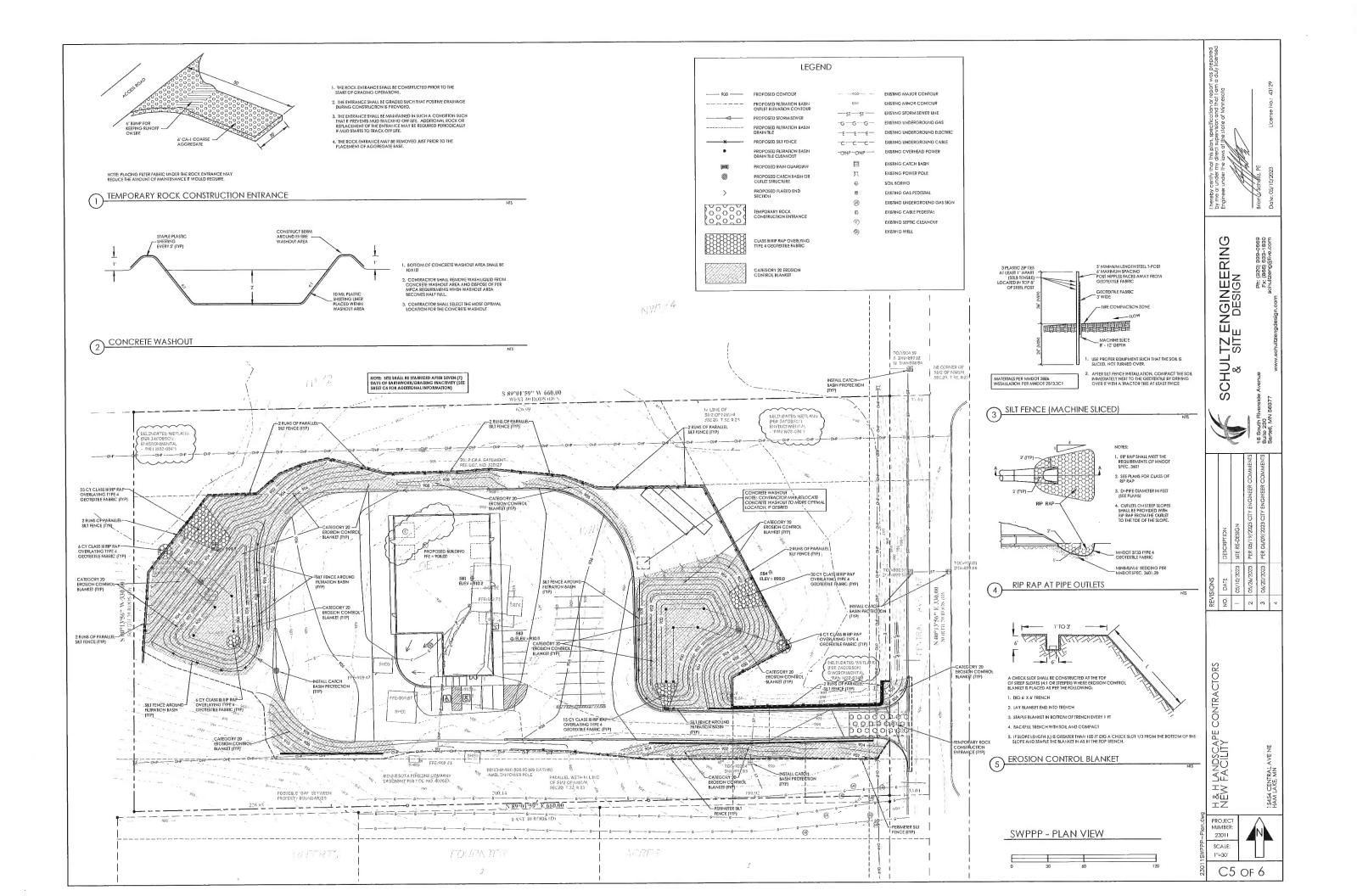
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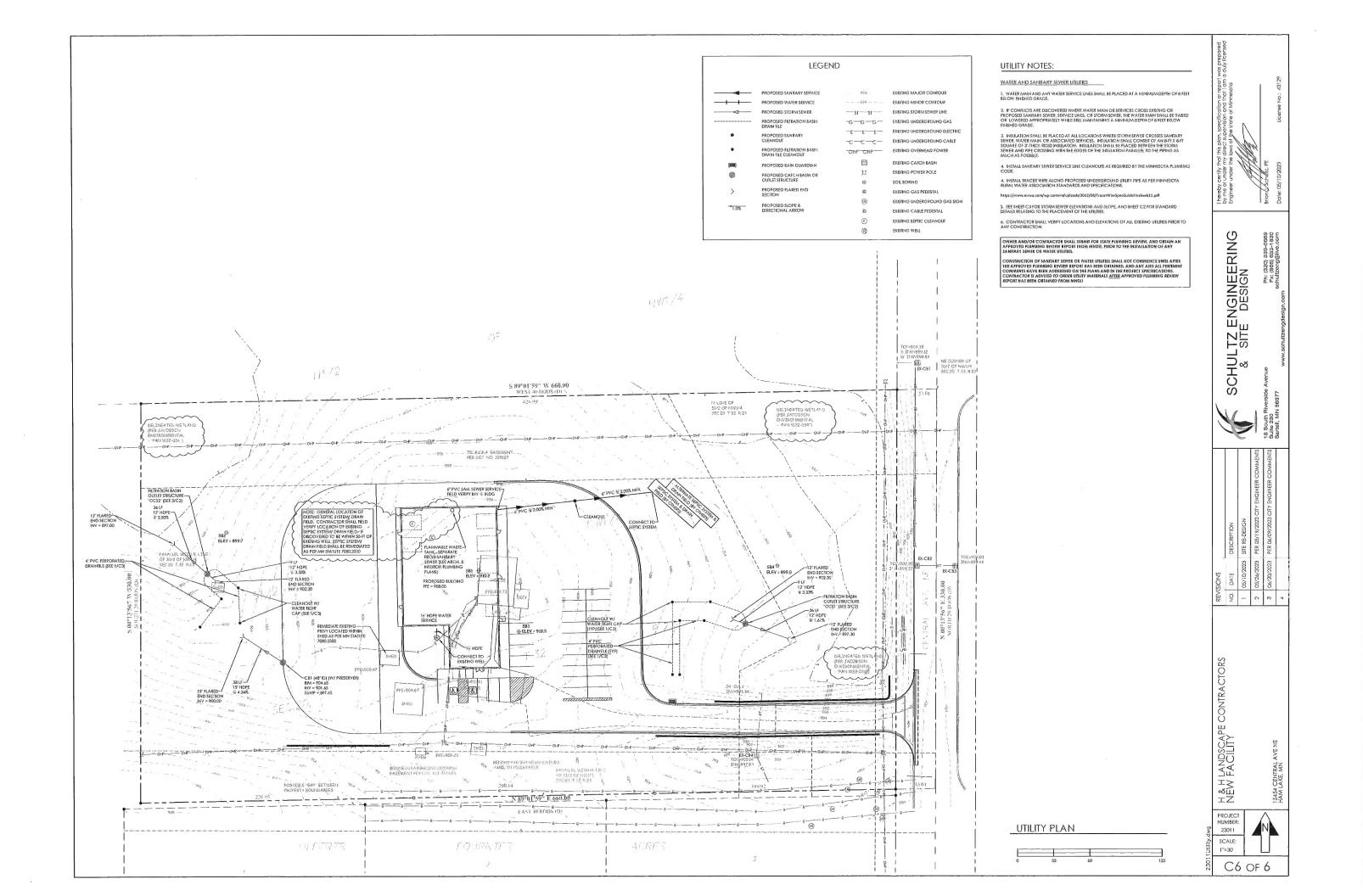
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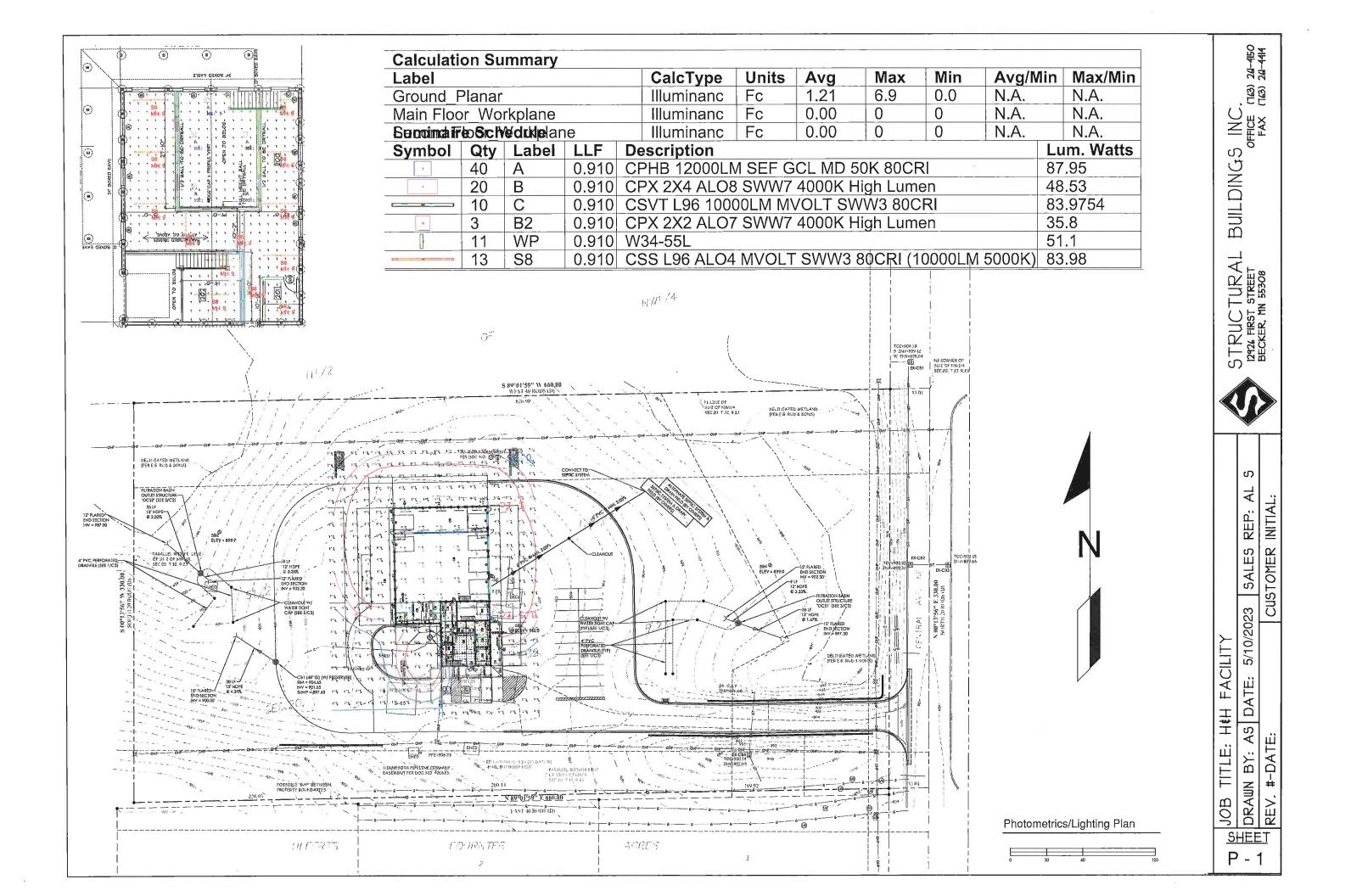
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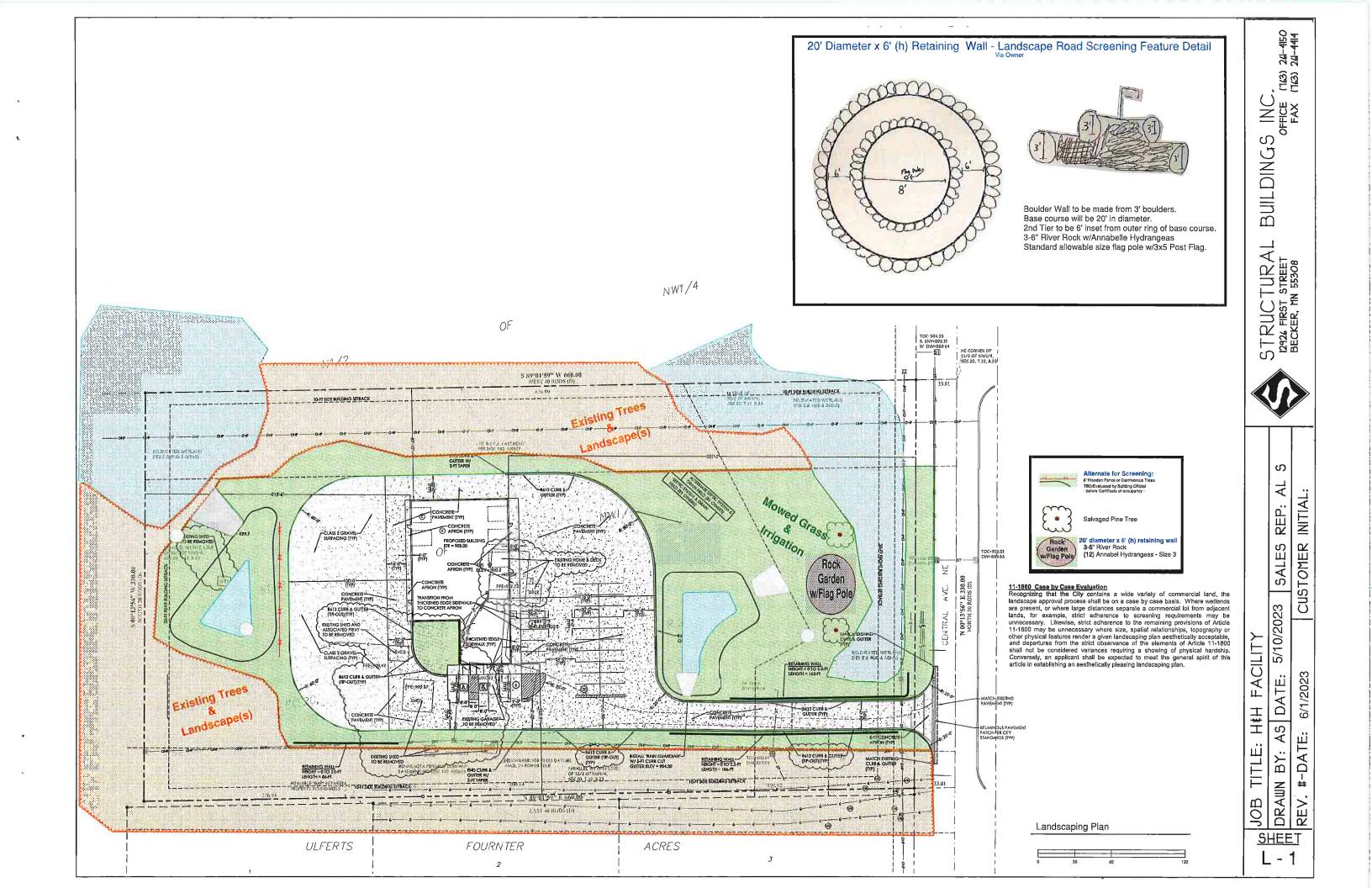
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C4 OF 6









INDEX OF SHEETS SHEET NO. TITLE W1 COVER SHEET/DESIGN INFORMATION W2-W4 WALL ELEVATION VIEW(S) W5 SECTIONS AND DETAILS

DESIGN PARAMETERS AND PROVISIONS

DESIGN PROVISIONS:

- 1. REFER TO BLOCK MANUFACTURER'S STANDARD SPECIFICATIONS AND DETAILS AS THEY ARE INTEGRAL TO THIS PLAN
- 2. THE DESIGN OF THIS RETAINING WALL SYSTEM WAS BASED UPON THE EFFECTIVE STRENGTH PARAMETERS SHOWN ON THE "SOIL VALUES" TABLE. UNLESS OTHERWISE NOTED, NO FORMAL SOIL INFORMATION WAS PROVIDED BY THE OWNER OR OWNER'S REPRESENTATIVE. IF SOIL CONDITIONS VARY AT TIME OF CONSTRUCTION, WALL ENGINEER MUST BE CONTACTED TO DETERMINE IF A REVISED DESIGN IS NEEDED.
- 3. THE WALL DESIGN WAS BASED ON THE INFORMATION NOTED IN THE KEY PLAN. 4. REFER TO WALL CALCULATIONS FOR BEARING CAPACITY REQUIREMENTS.
- 5. NO PRODUCT/MATERIAL SUBSTITUTIONS WILL BE ALLOWED WITHOUT PRIOR WRITTEN PERMISSION OF CRITERIUM-SCHIMNOWSKI ENGINEERS.
- 6. FINAL SITE GRADES AND ROOF DRAINS SHALL DIRECT RUNOFF AWAY FROM ANY RETAINING WALL(S). UNLESS OTHERWISE NOTED, THE WALL(S) HAS NOT BEEN DESIGNED FOR HYDROSTATIC SURCHARGE LOADING.
- 7. THE WALL DESIGN WAS PERFORMED USING DESIGN GUIDELINES PRESENTED IN THE THIRD EDITION OF THE "DESIGN MANUAL FOR SEGMENTAL RETAINING WALLS" PUBLISHED BY NCMA AND FHWA ROCKERY DESIGN AND CONSTRUCTION GUIDELINES

DESIGN LIMITATIONS

- 1. THE INFORMATION PROVIDED WITHIN THESE DOCUMENTS IS FOR THE STRUCTURAL DESIGN OF THE PROPOSED RETAINING WALL(S) ONLY. THE REQUIREMENTS FOR AND/OR WORK RELATED TO HANDRAILS, GUARDRAILS, OR OTHER LIFE/SAFETY ISSUES ARE EXCLUDED FROM THESE DOCUMENTS AND ARE TO BE PROVIDED BY OTHERS.
- 2. SITE LAYOUT AND GRADING DESIGN ARE NOT INCLUDED IN WALL DESIGN SERVICES. THOSE SERVICE ARE THE RESPONSIBILITY OF THE SITE CIVIL ENGINEER.
- 3. INTERNAL COMPOUND STABILITY (ICS) HAS BEEN CALCULATED FOR THIS PROJECT BY CRITERIUM. HOWEVER, ICS IS NOT A SUBSTITUTE FOR A GLOBAL STABILITY ANALYSIS WHICH SHOULD BE PERFORMED BY A QUALIFIED GEOTECHNICAL ENGINEER. ADDITIONAL SUBSURFACE EXPLORATION MAY BE REQUIRED.

SUGGESTED QUALITY ASSURANCE REQUIREMENTS:

- 1. A QUALIFIED ENGINEER OR TECHNICIAN SHALL SUPERVISE THE WALL CONSTRUCTION TO VERIFY SITE SOIL CONDITIONS. IF THE PROJECT GEOTECHNICAL ENGINEER DOES NOT PERFORM THIS WORK, A QUALIFIED GEOTECHNICAL ENGINEER/TECHNICIAN SHALL BE HIRED TO ASSURE THE RETAINING WALL IS CONSTRUCTED WITH PROPER SOIL PARAMETERS.
- A QUALIFIED GEOTECHNICAL ENGINEER SHALL BE CONSULTED TO VERIFY THE SUITABILITY OF DESIGN ASSUMPTIONS MADE BY CRITERIUM.
- 3. WALL EXCAVATION AND SOILS SHALL BE INSPECTED FOR GROUNDWATER CONDITIONS. THE GEOTECHNICAL ENGINEER SHALL DETERMINE ADDITIONAL DRAINAGE PROVISIONS TO BE INCORORATED INTO THE WALL DESIGN.
- 4. THE WALL DESIGN ENGINEER SHALL BE HIRED TO PERFORM A PRE-CONSTRUCTION SITE VISIT.
- 5. THE WALL DESIGN ENGINEER CAN BE HIRED FOR CONSTRUCTION OBSERVATION SERVICES
- 6, THE WALL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING QUALITY CONTROL FOR THE CONSTRUCTION OF THE WALL IN ACCORDANCE WITH CONTRACT REQUIREMENTS. SEE PROJECT CONTRACT DOCUMENTS FOR SPECIFIC DETAILS ON THE SCOPE OF WORK THAT WILL BE PROVIDED BY ALL PARTIES.

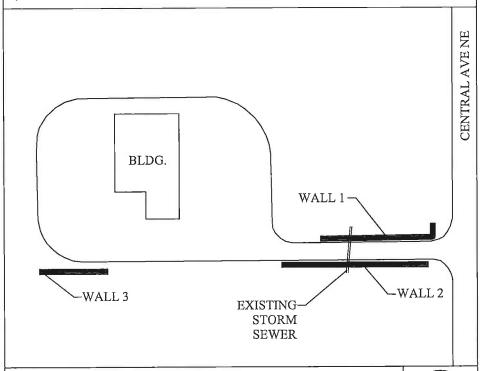
RETAINING WALL DRAWINGS FOR 15454 CENTRAL AVENUE NE HAM LAKE, MINNESOTA

WALL FACE* 1521 SQ. FT. 431 LIN. FT. FIELDSTONE BOULDERS GEO-GRID* 0 SQ. YDS. --- NOT REQUIRED

*ACTUAL QUANTITIES MAY VARY AND SHOULD BE FIELD VERIFIED BY CONTRACTOR

RETAINING WALL LAYOUT KEY PLAN

(NOT TO SCALE - REFER TO PROJECT PLANS FOR ACTUAL LOCATION)



KEY PLAN BASED ON THE FOLLOWING INFORMATION: PARTIAL CONSTRUCTION PLANS PREPARED BY SCHULTZ ENGINEERING AND SITE DESIGN DATED MAY 26, 2023



DOCUMENT ISSUE RECORD

ISSUE	DATE	DESCRIPTION		
#1	6-30-2023	CONSTRUCTION DOCUMENTS		
#2	6-30-2023	REVIEW COMMENTS (6-30-2023)		

TYPICAL ANGLES OF INTERNAL FRICTION & UNIT WEIGHTS OF SOILS

TYPE OF SOIL*	FRICTION ANGLE (DEGREES)	UNIT WEIGHT (lb/ft^3)
COARSE TO MEDIUM SAND	37-42	140
FINE/SILTY SAND	33-40	130
CLAYEY SAND	28-35	130
SILT/CLAY	25-32	120

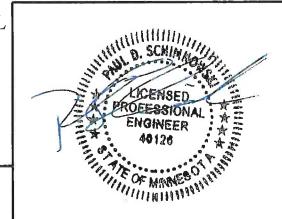
*REFER TO THE UNIFIED SOIL CLASSIFICATION SYSTEM FOR ADDITIONAL INFORMATION.

SOIL VALUES USED IN THE DESIGN OF THIS PROJECT

FRICTION ANGLE (DEGREES)	UNIT WEIGHT (lb/ft^3)			
30	120			
30	120			
	(DEGREES) 30			

REQUIRED SOIL BEARING CAPACITY: 1,500 PSF

IMPORTANT: WALL
CONTRACTOR TO
CONTACT WALL
ENGINEER PRIOR
TO BLOCK
PLACEMENT.



PLANS CREATED BY:



Criterium-Schimnowski Engineers 161 Dunbar Way Mahtomedi, MN 55115 Phone: 651-779-7700 CriteriumMN.com PREPARED FOR:

H&H LANDSCAPE CONTRACTORS 15454 CENTRAL AVE NE HAM LAKE, MN PHONE: 612-382-4081 OJECT NAME

15454 CENTRAL AVE NE

PROJECT LOCATION
HAM LAKE, MINNESOTA

COVER SHEET/ DESIGN INFORMATION

SHEET: W1 OF 5

SCALE: AS NOTED

DRAWN BY: PDS

DATE: 6/30/2023

23-7225

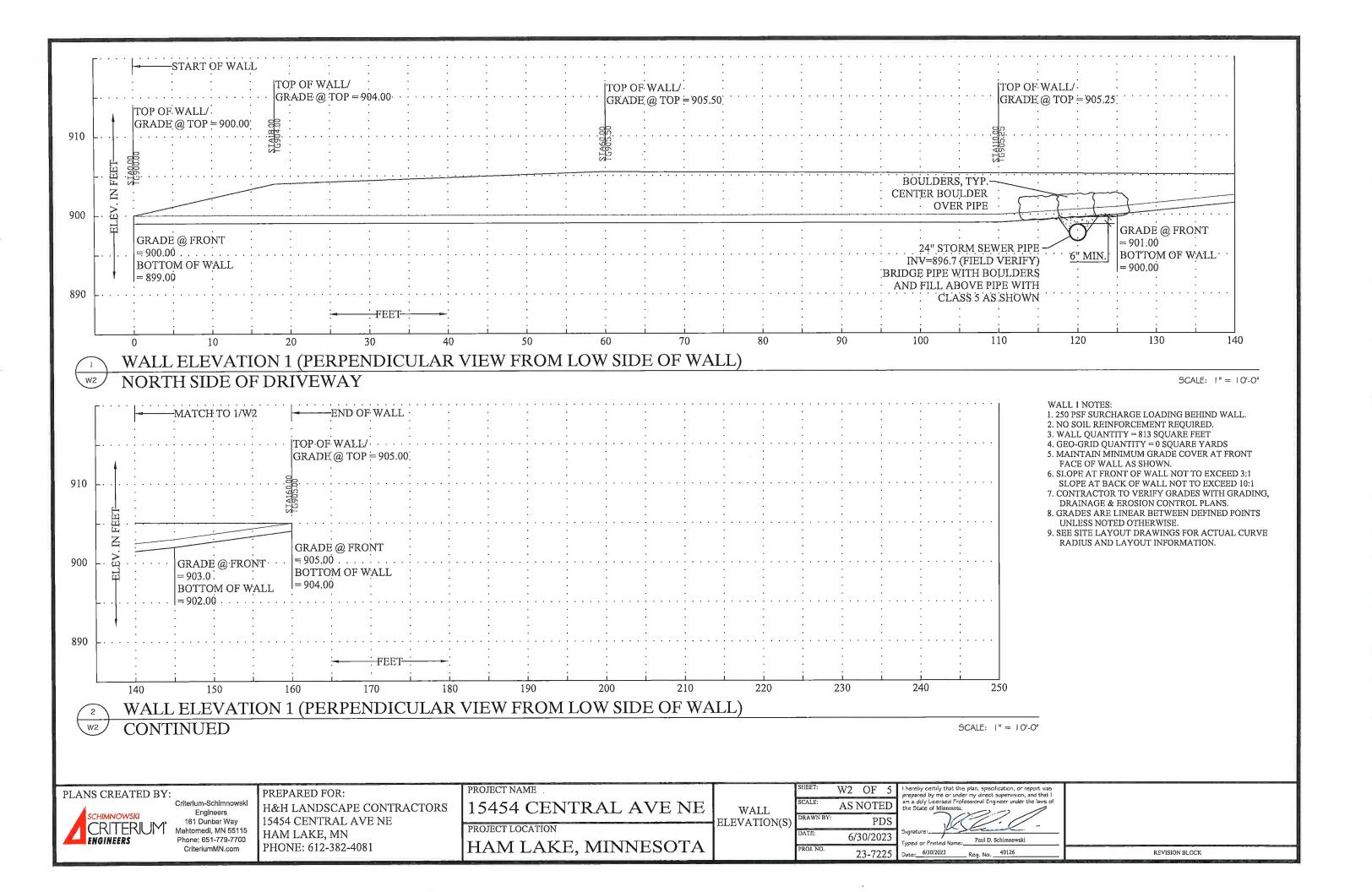
I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that am a duly Licensed Professional Engineer under the laws of the State of Minnesota.

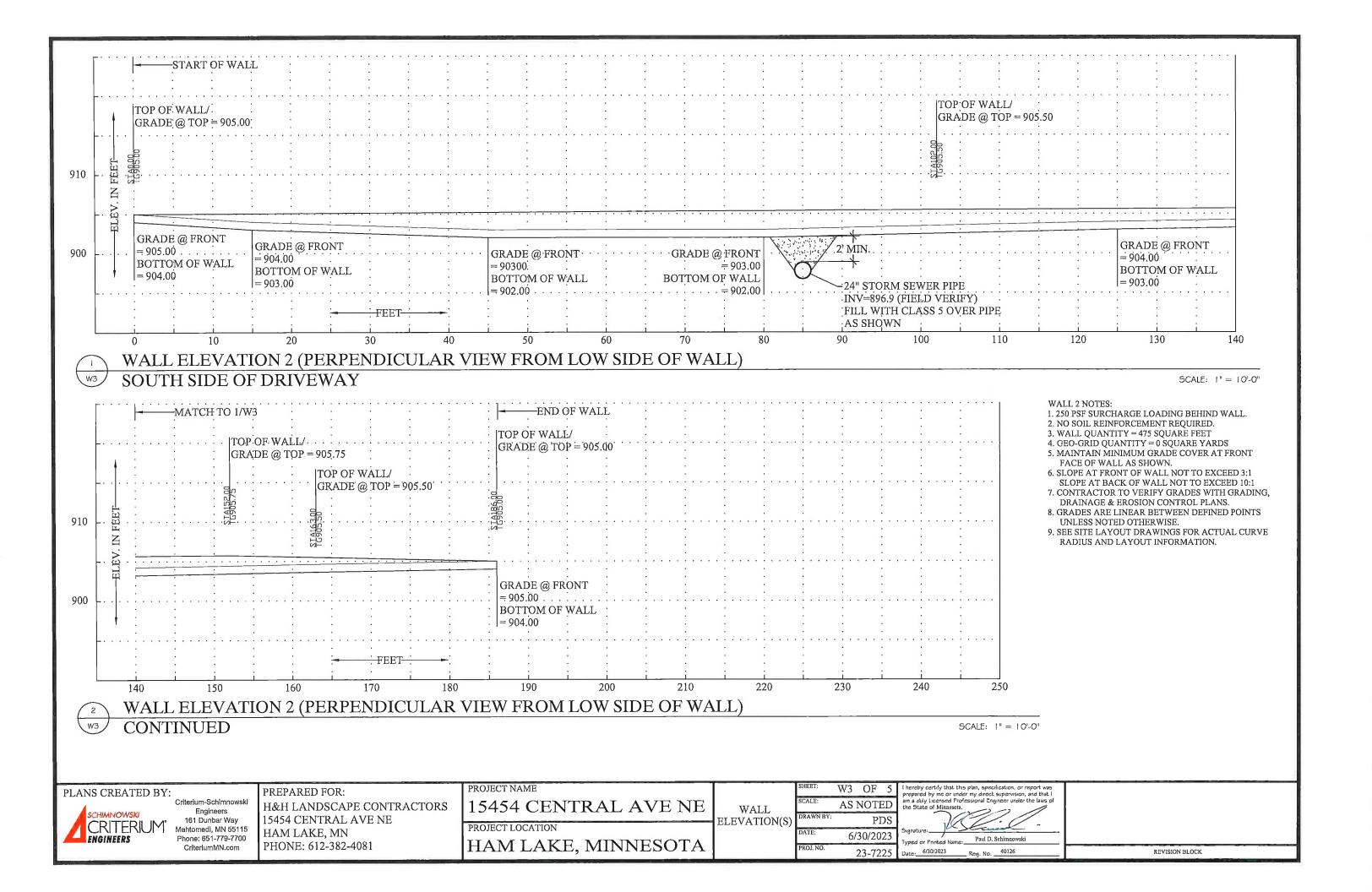
Signature:

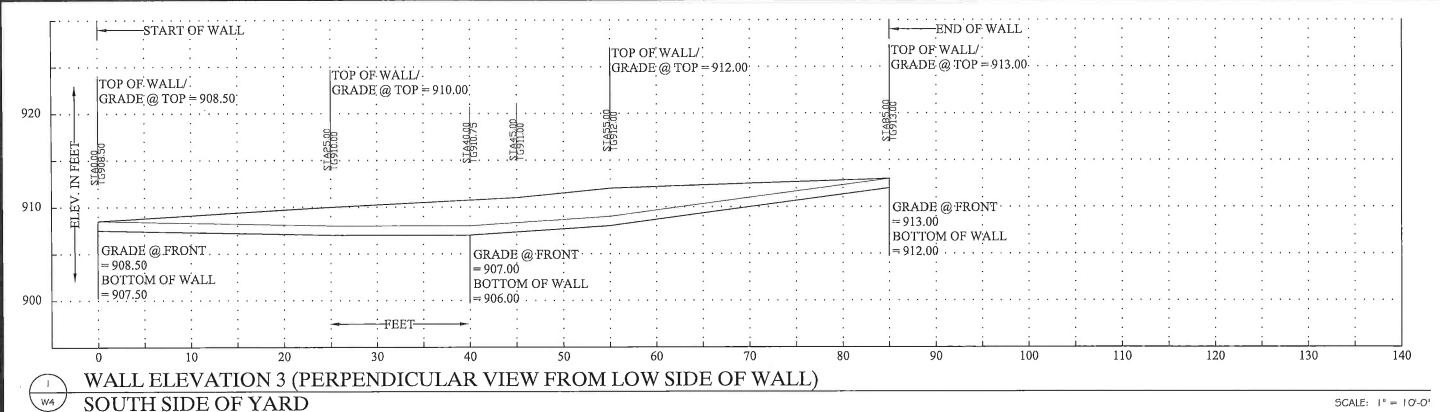
Typed or Printed Name: Paul D. Schimnowski

Date: 6/30/2023 Reg. No. 40126

CERTIFICATION BLOCK







WALL 3 NOTES:

1. NO SURCHARGE LOADING BEHIND WALL.

2. NO SOIL REINFORCEMENT REQUIRED.

3. WALL QUANTITY = 233 SQUARE FEET

4. GEO-GRID QUANTITY = 0 SQUARE YARDS

5. MAINTAIN MINIMUM GRADE COVER AT FRONT FACE OF WALL AS SHOWN.

6. SLOPE AT FRONT OF WALL NOT TO EXCEED 3:1 SLOPE AT BACK OF WALL NOT TO EXCEED 5:1

7. CONTRACTOR TO VERIFY GRADES WITH GRADING, DRAINAGE & EROSION CONTROL PLANS.

8. GRADES ARE LINEAR BETWEEN DEFINED POINTS UNLESS NOTED OTHERWISE.

9. SEE SITE LAYOUT DRAWINGS FOR ACTUAL CURVE RADIUS AND LAYOUT INFORMATION.

PLANS CREATED BY:

CHIMNOWSKI CRITERIUM ENGINEERS

Phone: 651-779-7700

CriteriumMN.com

PREPARED FOR: Criterium-Schimnowski H&H LANDSCAPE CONTRACTORS Engineers 15454 CENTRAL AVE NE 161 Dunbar Way Mahtomedi, MN 55115 HAM LAKE, MN

PHONE: 612-382-4081

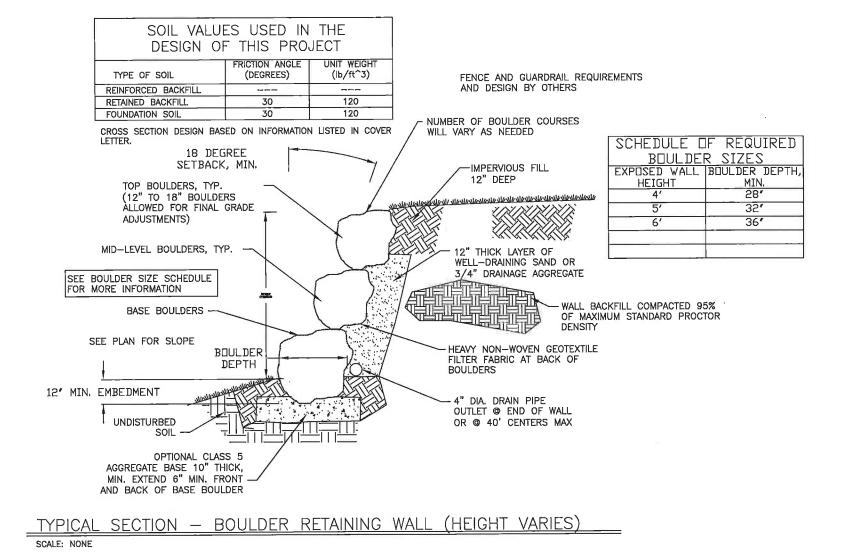
PROJECT NAME 15454 CENTRAL AVE NE

PROJECT LOCATION HAM LAKE, MINNESOTA

W4 OF AS NOTED WALL PDS ELEVATION(S) 6/30/2023 23-7225 I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision, and that I Paul D. Schimnowski Pate: 6/30/2023 _Reg. No. __40126

REVISION BLOCK





PLANS CREATED BY:

SCHIMNOWSKI CRITERIUM' ENGINEERS

Criterlum-Schimnowski Engineers 161 Dunbar Way Mahtomedi, MN 55115 Phone: 651-779-7700 CriteriumMN.com

PREPARED FOR:

H&H LANDSCAPE CONTRACTORS 15454 CENTRAL AVE NE HAM LAKE, MN PHONE: 612-382-4081 PROJECT NAME

15454 CENTRAL AVE NE

PROJECT LOCATION

HAM LAKE, MINNESOTA

SECTIONS & DETAILS

SHEET: W5 OF 5

SCALE: AS NOTED

DRAWN BY: PDS

DATE: 6/30/2023

23-7225

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

Signature:

Typed or Printed Name:

Paul D, Schimnowski

Date: 6/30/2023

Rea, No. 40126

REVISION BLOCK

Excerpt from Article 9 of the Ham Lake City Code

9-220 Mercantile Districts The land uses described in Article 9-220 are intended to be applicable to developments which utilize subsurface sewage treatment systems (SSTS), and to developments which use approved combined sewage treatment systems. All building permits and Certificates of Occupancy in the Mercantile Districts shall require the review and approval of the City Council, after review and recommendation by the Planning Commission, excepting building permits and/or certificates of occupancy being issued for an alteration to an existing structure under circumstances in which the land use will be unchanged, and in which the alteration will not materially affect parking requirements, stormwater runoff, traffic, sewage treatment needs or aesthetics.

9-220.1 Standards Common to All Mercantile Districts

The following standards shall apply to all of the mercantile districts as listed in Article 9-220.

- a) Paving All parking lots, drives and surfaces upon which the general public and employees shall have access shall be paved according to specifications to be established by the city's engineer;
- **b) Drainage** Surface water drainage and ponding needs shall be implemented in the manner directed by the city's engineer;
- **c) Landscaping** Landscaping shall be implemented in the manner provided in Article 11-1800;
- d) Setbacks for Paved Areas There shall be a ten-foot setback between any lot line and the back of curb of any parking lot or driveway, and a six-foot setback between the back of curb of any parking lot and any building;
- e) Buffering When any mercantile land use is located adjacent to a residential area, it shall be screened by opaque fencing, vegetation, or both:
- f) Refuse Containers Refuse containers shall be stored in locations which are completely screened from outside view; hazardous materials shall be stored and disposed of in the manner provided by law;
- g) Parking Lots and Lighting Off-street parking shall be provided for the general public and employees. The Zoning Officer shall maintain a schedule of parking requirements, to be ratified from time to time by resolution of the City Council, to serve as the general guideline for the establishment of parking requirements, subject to modification by the City Council where merited. Security lighting shall be permitted, and may be required on review of site plans, but shall be

directed away from adjacent properties. No light or combination of lights that cast light upon a Residential Land Use shall exceed 4-foot candle meter reading as measured at the residential property line. All measurements shall be made after dark at the property line or edge of roadway.

- h) Off-Street Loading All deliveries and bulk pickups of merchandise, inventory and supplies shall be made to loading facilities preferably located in the rear of the building, which loading facilities shall be sufficient to enable the prompt and safe transfer of goods.
- i) Signage All signage shall conform to the provisions of Article 11-300.
- j) Special Considerations Notwithstanding the limitations as to building styles, construction types and exterior treatments, the City Council, after Planning Commission review, may depart from strict adherence to the standards found in Article 9-220, where special conditions merit such departure, and where certain standards are met. Such special conditions and standards may include, without limitation, the following items.
 - i) The departure is not being requested for purely economic reasons;
 - ii) The nature of the business is such that it requires a specific type of building construction in order to improve the business function, such as requirements for sunlight, specialty equipment, interior lighting or the like;
 - **iii)** The business is a permitted or conditional use in the zoning district;
 - iv) The applicant proposes the usage of special aesthetic treatments which provide a superior exterior view, such as landscaping, vegetation screening, berming, or the like;
 - The property contains unusual topography, mature vegetation or other features which can be preserved or enhanced to produce an overall superior appearance;
 - vi) The property contains unusual accessibility problems to or from adjacent roadways;
 - vii) The applicant offers to implement more stringent design limitations in certain site plan features than would normally be required, in exchange for being

permitted less stringent design limitations in other site plan features.

k) Outside Storage Outside storage and activities for areas zoned CD-3, CD-4, Industrial Park (I-P) and Light Industrial (I-1) shall be as specifically detailed in the Code Sections dealing with those land uses (Articles 9-220.4 through 9-220.7). For areas zoned CD-1 and CD-2, the following provisions shall apply to outside storage, excepting Fireworks sales and storage, which are governed by the provisions of Article 9-330.6. Unless specifically permitted by this Article 220.1(k), no Outside Storage shall be allowed in any area zoned CD-1 or CD-2.

1) Definitions

- aa) Outside Storage personal property (not fixtures) that are located within the Approved Property Lines of any parcel bearing a CD zoning classification, but which are found outside of an enclosed, roofed building (including temporary structures). Outside Storage does not include Refuse Containers, customer vehicles, employee vehicles parked while the employee is on duty, delivery vehicles while in the process of delivery or pickup, construction materials or vehicles being used in an active construction project on the parcel, legal signs or banners, or legal temporary structures. Except where specifically excepted, Outside Storage does include inventory of the business occupying the parcel.
- bb) Inventory goods, except Vehicle Inventory, that are offered for sale in the ordinary course of business of any business occupying the parcel. For auto repair shops, inventory shall also be deemed to mean passenger vehicles or pickup trucks awaiting repair services.
- **Inventory** Automobiles, Vehicle Trucks, cc) Manufactured Homes, Recreational Vehicles, Campers, Camper Tops, Truck Toppers, Boats or other wheeled conveyances that are offered for retail sale at a legal business location whose primary business is the retail sale of one or more of the above items. Rental equipment that may be offered for sale is not Vehicle Inventory. Vehicle Inventory that bears obvious signs that the vehicle is not presently capable of being legally operated or conveyed on a public road is not Vehicle Inventory, including, but not limited to vehicles lacking wheels or inflated tires, operable drive train components, broken windows or lights, required current vehicle registration, missing body parts, such as fenders, doors, hood lids, trunk lids, bumpers, lights or trim.

- dd) Aesthetically Screened Outside Storage Inventory or Vehicle Inventory behind an opaque barrier constructed of masonry or brick, attached to and matching or complementary to the main building, and of sufficient height and design so as to give the appearance that the barrier is a part of the main building. No object shall be stored inside of such a barrier if the object protrudes above the height of the barrier. Any gates through the barrier shall be opaque and of aesthetic design.
- ee) Limited Outdoor Displays Temporary displays of merchandise which are normally sold or displayed from within an enclosed retail store location, but which are temporarily placed not more than ten feet from an outside wall of the main retail sales building during business hours, and then returned to inside storage during non-business hours."
- **ff) Improvement Stores** Businesses that have as their primary source of revenue the retail sale of plants, seeds, landscaping supplies, produce, or yard statuary.
- gg) 24-Hour Convenience Stores Businesses that sell gasoline at retail, and, from the same store location, also sell groceries, auto supplies, sundries, over-the-counter medications and personal products, sundries and other items for human consumption, and which remain open for business at all times of every day.
- **hh)** Approved Property Lines Are the outside perimeter of the real estate parcel or parcels which were shown on the site plan used for the initial municipal approval of a certificate of occupancy or conditional use permit for a particular operation.
- ii) Pool Stores retail stores that engage in the retail sales of above ground or below ground recreational swimming pools that contain electric filtration devices providing water circulation and filtration in the pool, and under conditions where an inventory of above ground or in ground swimming pools is maintained, connected by water and electricity to a source originating in a permanent retail building located on the same parcel. A Pool Store shall not be considered a retail store for the purposes of determining permitted uses under Article 9-220.2 (b) or 9-220.3(b).
- jj) Screened Outside Storage is Inventory or Vehicle Inventory behind an opaque barrier constructed of wood, metal, plastic, masonry, brick or earthen berm, or which is behind an opaque barrier composed of existing buildings or other structures on the property, or which is behind a semi-opaque barrier of vegetation that substantially conceals the storage from outside view.

2) Permitted Outside Storage

- vehicle Inventory is permitted Outside Storage on any CD-1 or CD-2 parcel in connection with a business that is legally permitted to sell Vehicle Inventory. If specifically permitted by the conditions of any Conditional Use Permit or Temporary Conditional Use Permit for any such parcel, vehicles that do not meet the definition of Vehicle Inventory may also be permitted Outside Storage.
- bb) Aesthetically Screened Outside Storage is permitted outside storage if used as a condition of approval of any site plan, Conditional Use Permit or Temporary Conditional Use Permit on any CD-1 or CD-2 parcel in connection with the new construction of a main commercial building on the parcel.
- cc) Limited Outdoor Displays are permitted Outside Storage in both the CD-1 and CD-2 districts. If the business is a 24-Hour Convenience Store, the Limited Outdoor Display need not be moved indoors, but the business shall at all times maintain a clear pedestrian path on sidewalks that is at least 36 inches in width.
- dd) Inventory is permitted Outside Storage for Improvement Stores and Manufactured/Prefabricated Structure Sales but must be separately identified on the initial site plan submitted with the initial request for certificate of occupancy or conditional use permit, and must be stored only in conformance with that site plan. Bins or containers housing the Inventory shall also be permitted Outside Storage for Improvement Stores and Manufactured/Prefabricated Structure Sales as shall be other items necessarily incident to the storage, maintenance or protection of the Inventory.
- **ee)** No Outside Storage shall be permitted for any business unless the storage is within the Approved Property Lines.
- ff) Pool Stores may display above ground or below ground swimming pools as Permitted Outside Storage only on property under conditional use permit, subject to conditions to be established by the City Council, which must include, at a minimum, the following:
 - 1) Pool water must be maintained in a sanitary condition;
 - Below ground pools must be surrounded by codecompliant fencing;
 - Above ground pools must be constructed in a codecompliant method relative to either fencing or sufficient elevation to prevent accidental entry into the pool;
 - Adequate security fencing around the storage display area must be installed to discourage after-hours entry into the pool storage area;

- 5) Reasonable screening from outside view shall be installed:
- 6) All sources of water and electricity shall be connected to the pools in a code-compliant manner;
- 7) Only pools that are intended for use with circulating filters shall be permitted outside; no "kiddy pools", wading pools or inflatable pools shall be permitted to be displayed outside.
- Winter storage of outside pools shall be done in a manner that covers the pool surface and prevents the accidental entry into the pool;
- gg) Screened Outside Storage is permitted outside storage if used as a condition of approval of any site plan, Conditional Use Permit or Temporary Conditional Use Permit on any CD-1 or CD-2 parcel involving pre-existing main buildings or structures that:
 - 1) Historically utilized outside storage in connection with business operating on the property, and which uses were never abandoned;
 - 2) Do not involve replacement or major remodeling of the existing structures, but utilizes the existing structures for the business to be operated;

Approval of Screened Outside Storage is discretionary with the City Council.

- **hh)** Revocation All permits and certificates of occupancy issued in the mercantile districts are subject to revocation under the provisions of Article 9-240.
- 3) Office/Warehouses Office/Warehouse is a term given to a structure that is designed to have office space in front, behind which is situated an open bay or bays, with the office and bay space to be occupied by a single business. The office space and the bay space may also include area for retail sales. The bay space may also be used for manufacturing, other industrial activity, or warehousing. Building Permits may be issued for Office/Warehouses in any Mercantile District as found in Article 9-220. However, specific uses within each Office/Warehouse are subject to the Permitted Use, Conditional Use and Temporary Conditional Use restrictions for the given zoning district in which the Office/Warehouse is constructed. The issuance of a building permit for an Office/Warehouse does not confer upon the property owner the right to use any portion of the structure in a manner inconsistent with the use restrictions for the zoning district in which the structure is located. All new tenants or occupants of any Office/Warehouse must observe the same conditions for site plan or other approval, as would any other occupant. Further, if the zoning district in which the

Office/Warehouse is to be constructed contains restrictions on building materials or design, those restrictions must be followed. No outside storage unless permitted by Conditional Use Permit, Temporary Conditional Use Permit, or by the given zoning district in which the Office/Warehouse is constructed.

9-220.2 Commercial Development I (CD-1)

The CD-1 zone is intended to apply to certain commercial uses on lands abutting the city's only major thoroughfare, Trunk Highway 65. In that these lands have high visibility to the traveling public, it is considered important to the preservation of land values in general, as well as important to the continuing ability of the city to generate the establishment of quality commercial development and the concomitant tax and employment base, that structures in the CD-1 zones observe specific construction and aesthetic standards, which are listed below. No usage shall be permitted in the CD-1 zone which does not observe the standards found in Article 9-220.2 (a) below.

b) <u>Permitted Uses (Including uses that are ancillary to the main use)</u>

- Clubs and Lodges
- Medical Facilities
 - Assisted Living Facilities
 - Chiropractic
 - Clinics of all medical disciplines
 - Dental
 - Diagnostic Facilities
 - Hospitals
 - Laboratories
 - Nursing Homes
 - Residential Treatment Centers
 - o. Treatment Rooms and Centers
 - Veterinary Clinics
- Hotels, Motels and Lodging Houses under Article 11-1100
- Light Manufacturing, defined as follows: The fabrication or processing of goods for sale to retailers, wholesalers, other manufacturers or at retail that takes place entirely within an enclosed building and that meets the following criteria:
 - a) The business does not generate any noise, odor or vibration detectable from adjoining properties, other than that which occurs in the normal course of business during shipping and receiving activities;

- b) There is no outside storage of any item except Aesthetically Screened Outside Storage as defined in Article 9-220(k)(1)(dd) of this Code.
- c) No outside cranes or booms are located on the site;
- d) Retail sales of the business products can occur on the premises if the commodities are the commodities manufactured on site.
- Offices and Office Buildings
- Office Warehouses

9-220.3 Commercial Development II (CD-2)

The CD-2 Districts are located adjacent to the CD-1 Districts, and constitute a second tier of commercial activities along the T.H. 65 corridor. These districts also have importance in presenting a visually pleasing image to the traveling public, but are less visible from the T.H. 65 roadway than the CD-1 districts.

a) Standards for Site and Building Construction

- i) Metal or pole-type buildings shall be permitted if surfaces meet the requirements of ii below, and, provided that no galvanized surface may appear, all roofs shall be colored and incorporate a minimum 18-inch soffit on eave edges, 12-inch overhang on gable ends, and 6-inch fascia.
- ii) Metal panel with exposed fasteners or architectural metal panel with hidden fasteners may be used for roof surfaces. All wall surfaces may be composed of metal panel, brick, decorative masonry, stone, precast panel, architectural concrete, glass, stucco or wood framed with horizontal lap siding. The exterior wall surface facing or with the most exposure to a public street or right-of-way, shall have a wainscot at least 42-inches in height which is composed of a contrasting color or material.

b) <u>Permitted Uses (Including uses that are ancillary to the main</u> use)

All Permitted Uses in the CD-1 District

approval of the City Council, after review by the Planning Commission, of a landscaping plan meeting the requirements of this code.

<u>11-1820 Installation Required</u> No certificate of occupancy shall be issued for any construction which required a landscaping plan unless the applicant has installed all of the elements of the landscaping plan, or unless the applicant has posted security acceptable to the City to guarantee timely installation of all landscaping.

<u>11-1830 Time for Submission</u> The landscaping plan shall be submitted, whenever possible, at the time of site plan approval. If the landscaping plan is not submitted at the time of site plan approval, it must be separately reviewed by the Planning Commission and approved by the City Council prior to the issuance of any building permits.

11-1840 Contents and Specifications

The landscaping plan shall be a quality document prepared at a scale of one-inch equals thirty feet, showing all relevant dimensions. Fifteen copies of the plan shall be submitted by the applicant. The following data shall be displayed on the plan, legibly labeled:

- A. Perimeter of all buildings, signs or other structures;
- B. Parking lots and walkways, identifying pavement material;
- **C.** Areas of decorative rock, identifying type of rock;
- D. Areas of lawn;
- **E.** Other areas where other than natural wooded vegetation is to be used as ground cover, identifying the ground cover to be used;
- **F.** Locations, trunk size, height and species of all trees to be planted;
- **G**. Locations where existing natural wooded vegetation will remain undisturbed;
- **H.** All other landscaping features to be used.

11-1850 MINIMUM LANDSCAPING REQUIREMENTS

<u>11-1851 Paved Surfaces</u> All surfaces upon which motor vehicles will be parked or driven, and all areas in which pedestrians will be walking from point to point shall be surfaced with asphalt or concrete, to specifications established by the City's engineer.

11-1852 Ground Cover On any side of a lot which abuts a public road, the area from the road right-of-way to the nearest building side shall be entirely covered with ground cover consisting of pavement, decorative rock bordered with edging, lawn grass intended for regular mowing, mulch, bark, wood chips or other commonly used landscaping ground cover. Shingles, aggregate and clay mixtures such as Class V material, recycled concrete or asphalt, and other non-conventional ground covers shall not be permitted. Loose ground cover shall be installed to a depth of

at least three inches. Any area which is covered by landscaping ground cover (not lawn or pavement) shall also include one decorative shrub for each ten square feet of ground cover.

Side yards and rear yards which do not contain existing natural wooded vegetation shall either be covered with ground cover in the manner stated above for front yards, or shall be planted so as to encourage the emergence of natural wooded vegetation, through the planting of tree species expected to reach a height of at least twenty five feet. Areas so prepared shall not be required to have mown lawn areas, but may be allowed to return to a natural state.

11-1853 Tree Plantings Trees which are planted outside of areas intended to return to a natural wooded state shall be of a variety indigenous to the local climate. Deciduous trees shall, when planted, have a trunk size of at least one and one half inches at a height of four feet from ground level. Conifers shall have a height of at least five feet. Tree locations are subject to review and approval of the City in the landscaping plan review process, and while no specific number of trees are required, the following general principles shall be observed;

- **A.** Where property lines are adjacent to residential areas, a planting screen of conifers shall be required, of sufficient size and proximity to provide an intermingled screen within five years;
- **B.** Decorative trees shall be planted along the right of way lines of adjacent public roadways;
- **C.** The use of conifers shall be encouraged and preferred.
- **D.** Whenever possible, an attempt will be made to preserve stands of existing vegetation, particularly treed or wooded areas.

11-1860 Case by Case Evaluation

Recognizing that the City contains a wide variety of commercial land, the landscape approval process shall be on a case by case basis. Where wetlands are present, or where large distances separate a commercial lot from adjacent lands, for example, strict adherence to screening requirements may be unnecessary. Likewise, strict adherence to the remaining provisions of Article 11-1800 may be unnecessary where size, spatial relationships, topography or other physical features render a given landscaping plan aesthetically acceptable, and departures from the strict observance of the elements of Article 11-1800 shall not be considered variances requiring a showing of physical hardship. Conversely, an applicant shall be expected to meet the general spirit of this article in establishing an aesthetically pleasing landscaping plan.

11-1900 ILLICIT DISCHARGES AND CONNECTIONS TO STORM DRAINAGE SYSTEM

The purpose of this ordinance is to provide for the health, safety, and general welfare of the citizens of Ham Lake through the regulation of non-



NOTICE OF PERMIT APPLICATION STATUS

Project:

H&H Facility

Date:

June 13, 2023

Applicant:

H&H Contractors Attn: Eric Hagen 1327 153rd Lane NE Ham Lake, MN 55304

Permit Application#:

P-23-039

Purpose:

Construction of a new commercial business shop and office

Location:

15454 Central Avenue NE, Ham Lake

At their meeting on June 12, 2023, the Board of Managers of the Coon Creek Watershed District approved the above referenced project with 6 conditions and 2 stipulations. **This is NOT a permit.**

Prior to permit issuance, the following conditions must be fulfilled. Please respond to each of these items in writing when resubmitting application materials to the District.

Conditions:

- 1. Submittal of a performance escrow in the amount of \$3,300.00
- 2. Label Wetland 1 and Wetland 2 on the drainage maps.
- 3. The 12" flared end section outlet invert elevation for FitIration Basin #2 appears to be mislabeled on the grading and utility plan. Update to reflect the correct elevation.
- 4. Provide complete P8 results, as there appears to be pages missing from the provided data. Also, update P8 model to be consistent with HydroCAD model:
 - a. Update watershed area for DA1 to be consistent with proposed HydroCAd model.
 - b. Update the Particle Class Filtration Efficiency to align with the MPCA's recommendation for filtration efficiency, found on the MPCA website (25% for Particle Class P10%).
 - c. It is unclear if the proposed underdrain was added to the model. Update the proposed model to include an underdrain pipe outlet.
- 5. Provide proof of recording of a fully executed Operations and Maintenance Agreement for the perpetual inspection and maintenance of all proposed stormwater management practices after review and approval by the District.
- 6. Provide a note on the erosion and sediment control plan to stabilize soils and soil stockpiles within 7 days of inactivity.

After issuance, the permit will include the following stipulations that need to be fulfilled before permit closeout:

- 1. Submittal of as-builts for the stormwater management practices and associated structures listed in Tables 2 and 3, including volume, critical elevations and proof of installation for hydrodynamic separators.
- 2. Completion of post construction infiltration tests on Filtration Basin #1 and Filtration Basin #2 by filling the basin to a minimum depth of 6 inches with water and monitoring the time necessary to drain, or multiple double ring infiltration tests to ASTM standards. The Coon Creek Watershed District shall be notified prior to the test to witness the results.

Please be advised that **this is NOT a permit**, and that work without a permit is a violation of the terms of the Coon Creek Watershed District Rules. If you have any questions, please call 763-755-0975.

Sincerely,

Erin Edison

Watershed Development Coordinator

nin Edwar

cc: File P-23-039

Brady Schmitz, Stantec Danielle Tourtillott, Stantec Tom Collins, Ham Lake



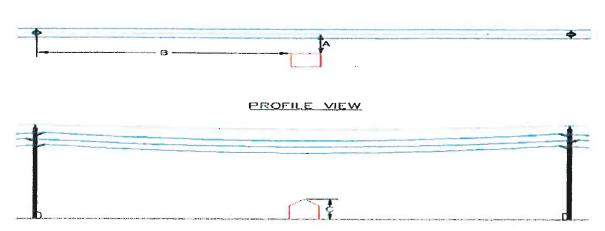
12300 Elm Creek Blvd • Maple Grove, Minnesota 55369-4718 • 763-445-5000 • Fax 763-445-5050

RIGHT OF WAY VARIANCE AND ENCROACHMENT APPLICATION

Street address of subject property:	15454 Central Ave NE Ham Lake, MN 55304
Legal description of subject property:	Northwest quarter of Section 20, Twsp 32, Range 23
Applicant: Name: Josh Williams - Project M	anager (Structural Buildings) Phone #: O-763-296-5800 / C-320-248-38
Mailing Address: 12926 1st Stree	
	ot of Way Variance Request within Great River Energy's right of way (description of South side of GRE ROW/Easement to accommodate site improvement
I hereby affirm that I am the fee title the owner to pursue the described act	e owner of the above described property or that I have written authorization from tion.
If you are not the fee owner, attach a your authorization to pursue this action	another copy of this form which has been completed by the fee owner or a copy of on.
If a joint venture or partnership is th joint venture or partnership.	ne fee owner, attach a copy of agreement authorizing this action on behalf of the
Mukel	Lec 2 18 APRIL 2023
Annlicant Signature	Date

RESIDENTIAL OR COMMERCIAL ENCROACHMENT

PLAN VIEW



Provide the following measurements (refer to above diagram):

- A. Distance from nearest point of proposed encroachment to the transmission centerline: No Structure(s) Grading & Temp. Sill Fence ONLY
- B. Distance from encroachment to nearest structure as measured along centerline: No Structure(s) Grading & Temp. Slit Fence ONLY
- C. Height of proposed encroachment: 0'-0"
- D. Number on structure (Example: EO 125): No Structure(s) Grading & Temp. Silt Fence ONLY

As of August 1, 2015, Great River Energy has implemented the following fees for Right of Way Variance and Encroachment Requests. These fees cover Great River Energy's costs to research, analyze and thoroughly evaluate requests and process the appropriate documents.

Residential Encroachments:

Raising/lowering grade more than 0.5 ft.	\$150*
Building roof overhang only into Right of Way	\$150*
Deck, Pool, Landscaping	\$250*
Small Shed (under 140 Sq. Ft.)	\$250*
Large Garage/Pole Building (over 140 Sq. Ft.)	\$350*

Commercial Encroachments:

Raising/lowering grade more than 0.5 ft.	\$200
Building Roof overhang only into Right of Way	\$250*
Drive/Parking Areas, Landscaping, Grading and/or Ponds	\$250*
Lighting and/or Signs	\$500*
Buildings	\$500*
Full Plans including all above elements	Up to \$7,000 for Engineering Determination*

*Any encroachment resulting in the need for land survey will be charged an hourly rate for such survey. An estimate of survey cost will be prepared and requestor will be required to pay the estimated cost in advance of any survey work being scheduled.