Applicant:	Brent Webb; Mortenson Company
Consultant:	David Bade; Westwood Professional Services, Inc.
Project:	70 th and France Redevelopment
Location:	7001 France Avenue South: Edina
Rule(s):	4, 5
Reviewer(s):	LLH/BCO

General Background & Comments

The project proposes the redevelopment of the 6.0-acre commercial site located at the southeast corner of the France Avenue South and West 70th Street intersection, 7001 France Avenue South, in Edina. The site is currently occupied by a multi-use commercial building with surface parking and associated amenities at two adjoining lots. The proposed work will extend onto City of Edina right-of-way to "tie-in" with the existing topography and for the construction of concrete sidewalks, a portion of the bituminous pavement entrance driveway, and associated site elements along the northern and western boundaries of the site.

Proposed work includes the following activities at four adjoining lots:

- demolition of the existing 24,700-square foot commercial building and associated site elements, including site clearing and grading
- demolition and removal of the existing concrete and bituminous pavement, including associated base materials
- Lot 1 construction a 51,600-square foot mixed-use (commercial, grocery and retail space) building with underground parking
- Lot 2 construction a 44,300-square foot multi-family housing building with retail and underground parking
- Lot 3 construction a 21,050-square foot senior housing building
- Lot 4 construction a 6,200-square foot financial institution building with surface parking
- construction of two underground stormwater management facilities
- construction of access drives, and site improvements including landscaping, retaining walls and utility improvements

The project site information is:

• Total Site Area: 5.98 acres

- Total Disturbed Area: 6.02 acres (including City of Edina right-of-way)
- Existing Site Impervious Area: 4.03 acres
- New Site Impervious Area: 4.75 acres
- An increase of 0.72 acres in site impervious area (17.9% increase)
- 100% of the existing site impervious area is to be disturbed

The Nine Mile Creek Watershed District's Rule for Redevelopment, Rule 4.2.3, states, if a proposed activity will disturb more than 50% of the existing impervious surface on the site or will increase the imperviousness of the site by more than 50%, stormwater management will apply to the entire project site. Otherwise, the stormwater requirements will apply only to the disturbed, replaced and net additional impervious surface. Since the project will disturb more than 50% of the existing impervious surface on the site and will increase the imperviousness of the site by more than 50%, applicable stormwater management criteria is required for the entire site, 5.98 acres, including the 4.75 acres of proposed impervious surface.

The District's requirements for both stormwater management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and 5,000 square feet or more of surface area is altered, Rules 4.2.1a and b and 5.2.1a and b.

Exhibits

- 1. Permit Application signed and dated October 22, 2020.
- 2. *70th and France Redevelopment* Plans dated February 26, 2021, prepared by Westwood Professional Services, Inc.
- 3. US Bank Edina Plans dated February 26, 2021, prepared by Westwood Professional Services, Inc.
- 4. Stormwater Management Report dated January 25, 2020, including the following exhibits prepared by Westwood Professional Services, Inc.:
 - a. Existing and proposed site drainage area maps
 - b. Existing and proposed HydroCAD reports printed January 22, 2021
 - c. P8 output report dated January 22, 2021
- 5. Geotechnical Evaluation Report dated October 14, 2020, prepared by Braun Intertec
- 6. Building Low Floor Analysis sent March 1, 2021, prepared by Westwood Professional Services, Inc.
- 7. Email correspondence with applicant's consultant including the following:
 - a. Email correspondence dated November 13, 2020 outlining ten items required for the application to be considered complete.
 - b. Comment Response Letter dated January 20, 2021, prepared by Westwood Professional Services, Inc.
 - c. Email correspondence dated February 24, 2021 outlining seven outstanding items required for the application to be considered complete.

d. Comment Responses sent March 1, 2021, prepared by Westwood Professional Services, Inc.

The application with the submittal items above is complete.

4.0 Stormwater Management

Stormwater management for compliance with Rule 4.3.1 will be provided by two underground stormwater management facilities (UGSWMFs). The northern UGSWMF is located beneath the access drive between the Lot 1 multi-use (commercial, grocery and retail) building and the Lot 2 multi-family housing and retail building. The southern UGSWMF is located beneath the surface parking area on Lot 4, between the proposed financial intuition and the senior housing buildings.

The UGSWMFs will provide rate control, volume retention and water quality management for the site runoff. A portion of stormwater runoff from the landscaping, sidewalk and site entrance driveways along the northern and western boundaries of the site will drain north towards West 70th Street and west towards France Avenue South, respectively, without entering the UGSWMFs. However, the stormwater management facilities have been sized to handle stormwater runoff generated by the entire site.

In existing conditions, the majority of the site is sloped westerly towards France Avenue. Currently, approximately 1.8 acres of the site drains to the US Bank drive-thru, a low-lying area on the west side of the existing multi-use commercial building. During storm events, stormwater is pumped from this depression at a controlled rate into the City storm sewer system along France Avenue. The remaining site runoff tributary to France Avenue South drains to catch basins throughout the parking lot that discharge directly to the City storm sewer system via gravity flow.

Rule 4.3.1b requires the 2-, 10-, and 100-year post development peak runoff rates be equal to or less than the existing discharge rates where stormwater leaves the site. The applicant used a HydroCAD hydrologic model to simulate runoff rates at all collection points where stormwater discharge leaves the site. The collection points include France Avenue and offsite area south of the project site in existing conditions, and France Avenue and 70th Street West in proposed conditions. The existing and proposed 2-, 10- and 100-year frequency discharges from the site are:

Existing Conditions			
Modeled Discharge Location	2 year (c.f.s.)	10 year (c.f.s.)	100 year (c.f.s.)
To France Ave	11.8	18.3	33.6
To South	<1	<1	<1
Total	11.9	18.5	34.3

Proposed Conditions			
Modeled Discharge Location	2 year (c.f.s.)	10 year (c.f.s.)	100 year (c.f.s.)
To France Ave	1.3	9.2	18.4
To 70th Street West	<1	1.0	1.7
Total	2.0	10.2	20.1

Rule 4.3.1b is met.

The Braun Intertec report dated October 14, 2020 indicates eight standard penetration test (SPT) borings were performed on September 26, 2020 and September 27, 2020, to nominal depths of 20 feet below grade across the site. Additionally, the geotechnical report includes previous geotechnical evaluation soil borings (six total) prepared by Braun Intertec in 2019. The borings completed in 2019 and 2020 observed sandy fill overlying glacial deposits throughout the site. The glacial deposits generally consisted of poorly graded sand and poorly graded sand with silt, occasionally intermixed with layers of lean clay and clayey sand.

The geotechnical evaluation identified the on-site underlying soil as poorly graded sand (SP) near the bottom of the proposed UGSWMF between the two northern buildings, as identified by ST-3. The geotechnical evaluation identified the on-site underlying soil as poorly graded sand with silt (SP-SM) near the bottom of the proposed UGSWMF between the two southern buildings, as identified by ST-107. A design infiltration rate of 0.5 inches per hour has been used for the two UGSWMFs, conforming with infiltration rates shown in the Minnesota Storm Water Manual.

An infiltration volume of 18,961 cubic feet is required from the proposed 4.75 acres of new impervious area, Rule 4.3.1a. The two UGSWMFs provide a volume of 24,119 cubic feet (18,961 cubic feet required) with an area of 13,884 square feet (9,480 square feet required). With the area provided (13,884 square feet) and using a design infiltration rate of 0.5 inches per hour, a retention volume in excess of 27,700 cubic feet (18,961 cubic feet required) can be drawn down within a 48-hour time period. Rule 4.3.1a is met.

The District's water quality criteria requires 60% annual removal efficiency for total phosphorus and 90% annual removal efficiency for total suspended solids. The results from the P8 Urban Catchment Model provided show that the UGSWMFs will provide an annual removal efficiency of 86.7% for total phosphorus (9.3 lbs.) and 90.1% for total suspended solids (2,996 lbs.). We are in agreement with the modeling results. Rule 4.3.1c is met.

Rule 4.5.4d (i) requires at least three feet of separation between the bottom of a stormwater management facility and groundwater. As previously stated, Braun Intertec performed 14 standard penetration test (SPT) borings in 2019 and 2020. Groundwater was encountered at depths ranging from approximately 848.5 M.S.L. to 857.5 M.S.L. while drilling or sampling in the borings. ST-3 was taken near the location of the north UGSWMF and groundwater was not

encountered in the boring to a depth of 31 feet, elevation 840.1 M.S.L. The bottom of the north UGSWMF is 855.5 M.S.L., providing a separation of 15.4 feet – the bottom of the boring where groundwater was not encountered. ST-107 was taken near the location of the south UGSWMF and groundwater was not encountered in the boring to a depth of 21 feet, elevation 845.1 M.S.L. The bottom of the south UGSWMF is 854.3 M.S.L., providing a separation of 9.2 feet to the bottom of the boring where groundwater was not encountered was not encountered. In accordance with Rule 4.5.4d, the required three feet of separation between the bottom of an infiltration area and groundwater is provided at the two UGSWMFs.

Rule 4.3.3c states that all new and reconstructed buildings must be constructed such that the low floor is at least two feet above the 100-year high water elevation or one foot above the emergency overflow of a constructed facility. Additionally, a separation of at least two feet must be provided between the 100-year high-water elevation of the stormwater management facilities and the elevation where surface water could enter the structures.

Proposed Building	Low Floor Elevation (feet)	Adjacent Stormwater Management Facility	100-year Event Flood Elevation (feet)	Freeboard (feet)
Mixed-use Commercial (Lot 1)	856.0	North UGSWMF	863.4	-7.4
Multi-family Housing (Lot 2)	858.5	North UGSWMF	863.4	-4.9
Senior Housing (Lot 3)	866.3	South UGSWMF	862.9	3.4
Financial Institution (Lot 4)	866.0	South UGSWMF	862.9	3.1

The low floor elevations of the structures and adjacent proposed stormwater management systems are summarized below.

With proposed low floor elevations of the proposed buildings on Lots 1 and 2 ranging from approximately 856-858.5 M.S.L. and a calculated 100-year frequency flood elevation of 863.4 M.S.L. for the northern facility, the plots in Appendix 4a as described in Rule 4.3.3a were used to determine compliance with Rule 4.3.3. The Appendix 4a analysis for the proposed buildings at Lots 1 and 2 is summarized below.

Proposed Building	Low Floor Elevation (feet)	North UGSWMF Pond Increases	Distance from UGSWMF to Building LFE (feet)	Groundwater Elevation at LFE (feet)	Depth to Water Table from LFE (feet)	Plot 4 Minimum Permissible Depth to Water Table (feet)
Mixed-use Commercial (Lot 1)	856.0	4.9 feet	14	853.4	2.6	0.43
Multi-family Housing (Lot 2)	858.5	4.9 feet	14	853.5	5	0.43

Additionally, since there are no direct pipe connections between the low floor of the structures and the UGSWMF's, potential impacts from water level within the UGSWMF's affecting the structures are eliminated. The project conforms to NMCWD Rule 4.3.3.

In accordance with Rule 4.3.1a (i), where infiltration facilities, practices or systems are proposed, pre-treatment of runoff must be provided. Sump manholes will provide pretreatment for runoff entering the UGSWMFs. Rule 4.3.1a (i) is met.

In accordance with Rule 4.3.4, a post-project chloride management plan must be provided that will, 1) designate an individual authorized to implement the chloride-use plan and 2) designate a MPCA certified salt applicator engaged in the implementation of the chloride-use plan for the site.

5.0 Erosion and Sediment Control

The requirements of Rule 5.0 - Erosion and Sediment Control are applicable to the project since land-disturbing activities will involve excavation of more than 50 cubic yards of material and will disturb 5,000 square feet of more of surface area or vegetation, Rules 5.2.1a and b. Erosion control measures include silt fence at the construction limits, a stabilized rock construction entrance and storm drain inlet protection. Permanent stabilization methods include installation of erosion control blanket and turf reinforcement mat.

The project contact is Dave Knaeble, Civil Site Group.

11.0 Fees

Fees for the project are:	
Rules 4.0 and 5.0	\$2,000
<u>12.0 Financial Assurances</u> Financial Assurances for the project are:	
Rule 4: Volume Retention: 9,480 sq. ft. x \$12/sq. ft. = \$113,760	\$113,760
Chloride Management:	\$5,000
Rule 5: Perimeter control: 1,850 L.F. x \$2.50/L.F.= \$4,625	
Inlet Control: 15 x \$100/each = \$1,500	
Site restoration: 6.0 acres x \$2,500/acre = \$15,000	\$21,125
Contingency and Administration	\$58,015
Findings	

- 1. The proposed project includes the information necessary, plan sheets and erosion control plan for review.
- 2. The proposed project will conform to Rules 4 and 5 if the conditions listed below are met.
- 3. The proposed stormwater management facilities will provide volume retention, rate control and water quality management in accordance with Rules 4.3.1 a, b and c, respectively. In accordance with NMCWD Rule 4.3.5, the applicant must provide a maintenance and

inspection plan that identifies and protects the design, capacity and functionality of the stormwater management facility.

- 4. The existing and proposed HydroCAD stormwater modeling include the City Atlas 14 tailwater condition at France Avenue. Additionally, the discharge rate of pumped water from the low-lying area at the US Bank drive-thru has been incorporated into the existing conditions HydroCAD model. The City has reviewed the existing and proposed stormwater modeling, and has approved the preliminary development plans for the project, including the two underground stormwater management facilities that convey stormwater runoff from the site to the France Avenue storm sewer system.
- 5. The District's floodplain management and drainage alterations rule (Rule 2) does not apply to the project; however, a portion of the site is inundated during high water conditions in relation to the City of Edina's Atlas 14 inundation areas. The 100-year high water inundation area onsite is not regulated by NMCWD since the inundation area is not a natural waterbody or constructed facility.
- 6. Per the geotechnical evaluation, the soil borings taken at the locations of the proposed stormwater management facilities identify poorly graded sand (SP) at the bottom of the facilities. The geotechnical assessment identifies a layer of clayey sand (SC) approximately 3-4 feet below the proposed bottom of the UGSWMFs. Should clayey sand material be encountered during construction, the existing clayey sand must be removed and replaced with material having an infiltration rate comparable with the poorly graded sand (0.5 inches per hour) located at the bottom of the facilities. The grading plan dated February 26, 2021 has been revised to include a soil replacement note.

Recommendation

Approval, contingent upon:

- 1. General Conditions
- 2. Financial Assurance in the amount of \$197,900, \$192,900 for stormwater management, erosion control and site restoration, and \$5,000 for compliance with the chloride management requirements.
- 3. A receipt showing recordation of a maintenance declaration for the on-site stormwater management facilities. A draft of the declaration must be approved by the District prior to recordation.
- 4. The plans must be revised to identify the lowest floor elevation (underground parking garage or basement slab, as applicable) and the lowest opening elevation (underground parking garage entrance, as applicable) at each of the four proposed buildings. The March 1, 2021 narrative indicates both the low floor elevations of the Lot 1 multi-use commercial building and the Lot 2 multi-family residential building comply with the associated Rule 4.3.3a low floor analysis as determined by Appendix 4a. However, the low floor elevations (LFE) and low opening elevations (LOE) of all buildings must also be identified on the plans.
- 5. The stormwater management report narrative indicates the senior housing facility building includes an underground parking garage. However, the plans do not appear to include the underground parking garage slab elevation. Following identification of low floor and low

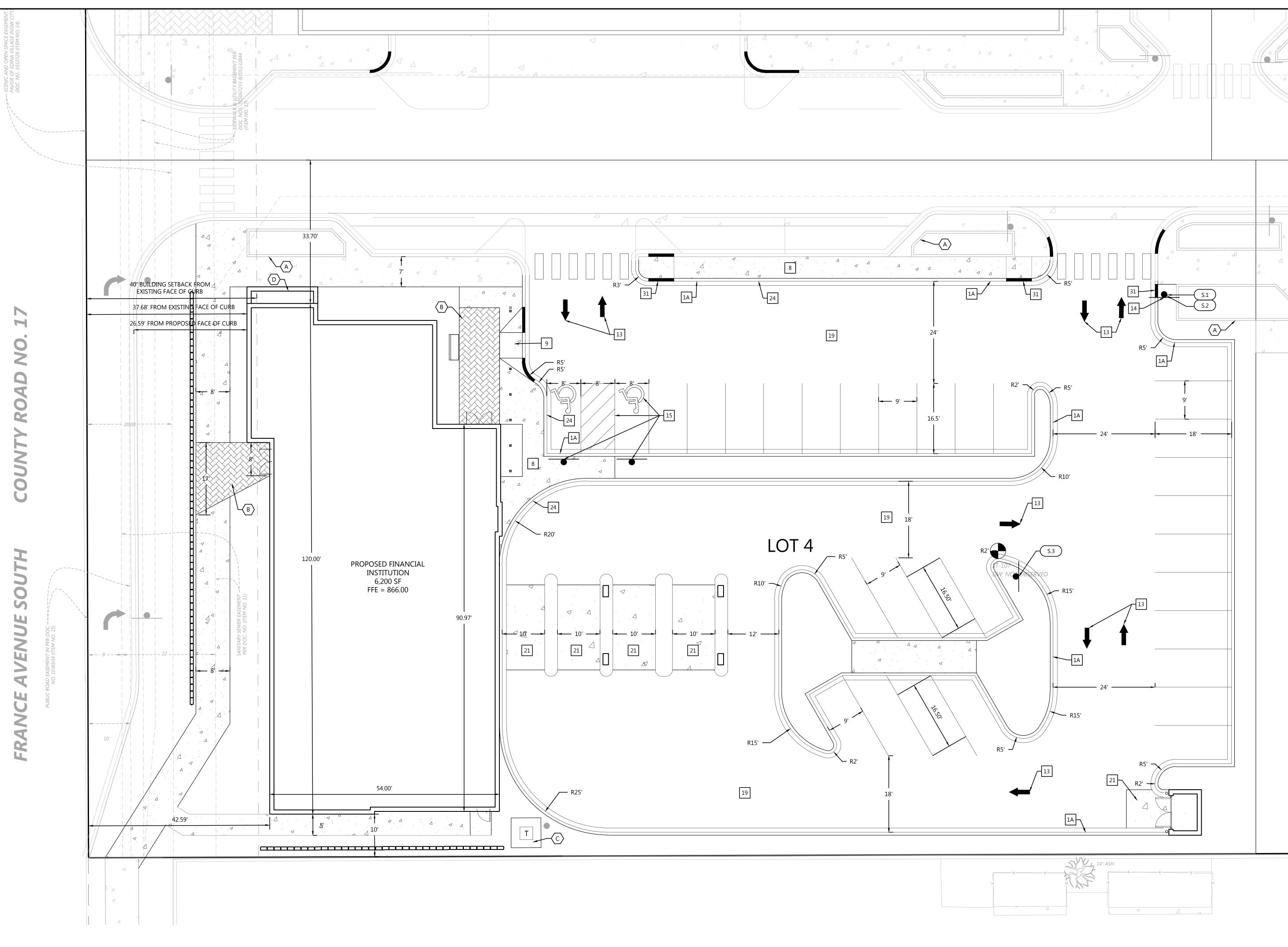
opening elevations on the plans (Condition 4), Appendix 4a analysis must be completed for the Lot 3 senior housing building and adjacent stormwater management facility, as necessary.

6. The plans must include a detail for the southern underground stormwater management facility outlet control structure, including identification of the weir elevation, Rule 4.5.4e.

By accepting the permit, when issued, the applicant agrees to the following stipulations:

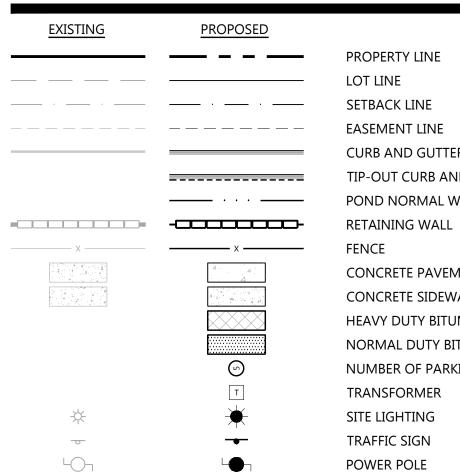
- The existing HydroCAD model dated January 22, 2021, prepared by Westwood Professional Services, Inc. includes an estimated pumped rate (1 cubic feet per second) to France Avenue for stormwater runoff pooled within the US Bank drive-thru, based on discussions with the City. The applicant has indicated that the City has reviewed the existing and proposed stormwater modeling, and has approved the preliminary development plans for the project. Should modeling updates be required, the applicant is required to submit revised modeling to the District for review.
- 2. Per the geotechnical evaluation, the soil borings taken at the locations of the proposed stormwater management facilities identify poorly graded sand (SP) at the bottom of the facilities. The geotechnical assessment identifies a layer of clayey sand (SC) approximately 3-4 feet below the proposed bottom of the UGSWMFs. Should clayey sand material be encountered during construction, the existing clayey sand must be removed and replaced with material having an infiltration rate comparable with the poorly graded sand (0.5 inches per hour) located at the bottom of the facilities.
- 3. Per Rule 4.5.8, an as-built drawing of the stormwater management facilities conforming to the design specifications, including a stage volume relationship in tabular form for the UGSWMFs.
- 4. Submission of a plan for post-project management of Chloride use on the site. The plan must include 1) the designation of an individual authorized to implement the chloride use plan and 2) the designation of a Minnesota Pollution Control Agency certified salt applicator engaged in the implementation of the chloride-use plan for the site. The release of the \$5,000 of the financial assurance required for the chloride-management plan requires that chloride-management plan has been provided and approved by the District's Administrator.
- 5. For the release of the \$192,900 financial assurance required, Rule 12.4.1b requires demonstration and confirmation that the stormwater management facilities have been constructed or installed and is functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the stormwater facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.





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SITE LEGEND



GENERAL SITE NOTES

- 1. BACKGROUND INFORMATION FOR THIS PROJECT PROVIDED BY WESTWOOD PROFESSIONAL SERVICES, MINNETONKA, MN, 2020.
- LOCATIONS AND ELEVATIONS OF EXISTING TOPOGRAPHY AND UTILITIES AS SHOWN ON THIS PLAN ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY SITE CONDITIONS AND UTILITY LOCATIONS PRIOR TO EXCAVATION/CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY.
- 3. REFER TO BOUNDARY SURVEY FOR LOT BEARINGS, DIMENSIONS AND AREAS.
- 4. ALL DIMENSIONS ARE TO FACE OF CURB OR EXTERIOR FACE OF BUILDING UNLESS OTHERWISE NOTED.
- 5. REFER TO ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND LOCATIONS OF EXITS, RAMPS, AND TRUCK DOCKS.
- 6. ALL CURB RADII ARE SHALL BE 5.0 FEET (TO FACE OF CURB) UNLESS OTHERWISE NOTED.
- 7. ALL CURB AND GUTTER SHALL BE B612 UNLESS OTHERWISE NOTED.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING TRAFFIC CONTROL DEVICES SUCH AS BARRICADES, WARNING SIGNS, DIRECTIONAL SIGNS, FLAGGERS AND LIGHTS TO CONTROL THE MOVEMENT OF TRAFFIC WHERE NECESSARY. PLACEMENT OF THESE DEVICES SHALL BE APPROVED BY THE CITY AND ENGINEER PRIOR TO PLACEMENT.
- 9. BITUMINOUS PAVEMENT AND CONCRETE SECTIONS TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER.
- 10. CONTRACTOR SHALL MAINTAIN FULL ACCESS TO ADJACENT PROPERTIES DURING
- ADJACENT PROPERTIES.

- SITE DEVELOPMENT SUMMARY • EXISTING ZONING: PROPOSED ZONING: • PARCEL DESCRIPTION: PROPERTY AREA: PERVIOUS SURFACE: • IMPERVIOUS SURFACE(RATIO):
- FLOOR-AREA-RATIO(FAR):
- BUILDING SETBACK PER CODE:

I SITE DETAILS (SI-0XX)

- 1A B612 CURB AND GUTTER
- 1B B618 CURB AND GUTTER 8 PRIVATE CONCRETE SIDEWALK
- 9 PRIVATE PEDESTRIAN CURB RAMP
- 13 TRAFFIC ARROW 14 SIGN INSTALLATION
- 15 HANDICAP ACCESSIBLE SIGNAGE AND STRIPING
- 19 PAVEMENT SECTIONS
- 21 HEAVY DUTY CONCRETE SECTION 24 CONCRETE CURB AT SIDEWALK

SITE KEYNOTES

- A. PLANTER CURB (TYP.)
- B. CONCRETE PAVERS SEE LANDSCAPE PLAN
- C. TRANSFORMER LOCATION D. LIMESTONE BLOCK WALL - SEE LANDSCAPE PLAN
- **SID SIGN LEGEND**

REFERENCE

- S.1 STOP SIGN
- S.2 PEDESTRIAN CROSSING
- S.3 DO NOT ENTER

