Bloomington Fire Station #3

Owner Contacts:

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Project Description:

Proposed use is new fire station for the Bloomington Fire Department to replace the current fire station #3.

New two story 29,800 square foot fire station. The fire station includes six apparatus bays, hose tower, training and administration area, dorm/study rooms and day rooms. Exterior materials are to be brick, cast stone, glass, and metal panel.

The property is 3.73 acres with a required FAR of 0.25, providing a FAR of 0.18. No setbacks variances are required as designed.

The site access and egress for the emergency vehicles is to be off East 86th street. With a second access off East old Shakopee Road. Two drives are required to separate emergency egress from other site traffic. The parking quantities are required to support the fire fighter response.

Existing Property

City has previously completed platting of the property, which has assembled 7 previously purchased properties into one, and has accommodated public right-of-way expansion along Old Shakopee Road and East 86th Street. The Plat is indicated as the South Loop Fire Station and the parcel is approximately 3.7 acres. Adjacent properties to the site include, single family residents to the west and south, new hotel (under development) to the north, Evergreen Church to the southeast, and industrial to the east(SkyWater). The site generally is fairly flat with remnant trees from the previous single family residential lots, with adjacent properties lower on the east side. There are no visible structures, but may have buried foundations and decommissioned wells. Previous single family residential sanitary and water services will be removed and/or abandon. Existing driveways will be removed along Old Shakopee Road, along with many trees (select trees to remain). Other miscellaneous items to be relocated, such as the overhead utilities on 86th Street and signal traffic box.

Zoning

Existing and proposed zoning remains R-1(Residential), in which a fire station is an allowable use.

Building

Project involves a two-story Fire Station (with Mezzanine), totaling 30,165sf (1st floor=22,098sf and 2nd floor=8,067 w/ mezz), including a trash enclosure integral with the building. The building services fire trucks, training, and fire department personnel. The main door faces Old Shakopee Road, but has the address on 86th Street, along with six

fire truck bays with front and rear garage doors. The building is basically segmented into the office/training on one side and fire truck bay operations on the other.

Signage

All signage is scheduled to be on the building, with exception of an electronic message board facing the street intersection. No other monument signs are being proposed at this time. However, traffic or directional signage may be needed, if determined applicable.

Access and Old Shakopee Road Improvements

Fire trucks, and other traffic, will have an ingress and egress driveway access to 86th Street, where it is scheduled to have them drive around the building and enter the bay through the rear garage door. All existing residential driveways along Old Shakopee Road will be removed and a new fire station right-in/right-out driveway will be provided, however the new concrete median will allow for emergency personnel to have a restricted access for south bound traffic. City of Bloomington Public Works is planning street improvements involving Old Shakopee Road for 2019 construction, which includes a new turn-lane, intersection modifications, and a 10' trail(w/ 10' boulevard to accommodate the new Fire Station and Hotel(just north). This project is coordinating street improvements and is illustrating the latest curb and trail locations, for reference.

Site Plan

The site plan is generally laid out in the north portion of the site, with the southwest area left undeveloped for future placemaking(artistry) or other City function opportunities. The office/training portion of the building is on the west with the fire truck bays/trash enclosure to the east. Parking and circulation surrounds the fire station, however the fire trucks will primarily be accessing the site within the described concrete pavement on the east side. Parking provided totals 46 spaces, including 8 proof-of-parking to serve the 38 spaces needed by the fire station and 8 future spaces, as needed. The parking on the east is more for the fire fighters during a fire call. Old Shakopee Road improvements are scheduled for construction during a similar 2019 year, thus the site will coordinate the new street curbs and trail. However, a required 6' sidewalk, with 5' boulevard, along the south side of 86th Street will be installed as part of the site improvements. A connecting sidewalk from the building front door to the new Old Shakopee Trail will also be installed as improvements are available. A storm basin is located on the east side of the site. Site light locations are based on photometric plans accommodating the fire station needs and the City's lighting requirements.

Grading, Drainage and Erosion Control

The proposed site improvements are generally on the high part of the site, with most of the drainage to the perimeter of the parking lot, and draining to a new storm basin to the east, via an underground storm sewer system. The southwest area of the site is scheduled to have minimal disturbance and retain the existing drainage. The site is fairly flat, but has a noticeable driveway cross slope, to accommodate the existing 86th Street slope(down from west to east). Considerable evaluation has been given to appropriately design the driveway slopes for fire trucks, primarily on the east end. Erosion control of the site provided typical silt fence/biologs at perimeter and strategic areas, along with inlet protection at storm structures.

Stormwater

To adhere to the storm water requirements for water quality/rate/quantity, the site is proposing a storm basin in the east side of the side to accommodate. The Geotech report indicates fast draining sands, in which the infiltration/filtration system design is incorporating soil amendments to slow this rate down. Originally, there was thought of having a second storm basin in the southwest area, but upon further review, only one basin was required. The site's storm water traverses to the east storm basin via underground storm pipe system, and exists the site in the northeast corner, connecting to an existing storm structure, near the cul-de-sac of 86th Street. The existing public storm sewer system basically takes it easterly to the Minnesota River.

Utilities

The site will be serviced for water through new looped watermain connections into 86th Street and Old Shakopee Road, with the on-site watermain traversing around three sides of the building, to provide required hydrant locations for fire protection and a building service connection on the north. The Fire Department Connection is required along 86th Street(address side) and is generally located near the building service connection location. Sanitary sewer building service connection will be on the north side of the building and connected directly to the public sanitary sewer system in 86th Street. Other utilities will be connected, as coordinated with other utility providers, however it is worth noting that the overhead utility lines on the south side of 86th Street will need to be relocated, and have also indicated undergrounding a segment under the fire truck driveway so as not to create a conflict with fire truck operations.

Trees

City Planning staff as indicated that a tree preservation/mitigation is not required for this project, however if existing trees saved are going to get credit, they need to be documented with species, caliper inch size, and location. The removal plan has the existing tree summary and the landscape plan indicates the trees being saved. In general, there have been efforts made to save some of the trees, but many others are to be removed due to the site's development/grading/utility impacts.

Landscape

Project provides the required landscaping, as illustrated on the Landscape Plan. This primarily addresses the numerous required trees/shrubs on site and within the parking area, based on development criteria. Proposed and existing trees have been located to provide diversity and buffer, as appropriate. Most of the shrubs/perennials are located at the building foundation and parking islands, along with some strategic bed locations at parking and service areas. The bio-filtration(rain-garden) east storm basin is scheduled for appropriate seed and erosion control, as described on the landscape plan. Sod will be installed for most of the developed parcel area, and seed in other locations. The undisturbed south area may remain in its currently conditions, which is mostly lawn grass. An irrigation system is to be installed for most of the developed area, and may have a future connection option for the undisturbed south area.

Building Statistics:

Square Footage:

First Floor 22,098 SF
Second Floor 8,067 SF

Tallest point on building: 38'-4"

Schedule:

- Design phase complete –January 2019
- Bidding – February 2019
- Start of Construction – Spring 2019
- Substantial completion of construction – Spring 2020

CASE FILE #PL201800344

Memorandum

SRF No.10931.00

To: Nick Johnson – City Planner, City of Bloomington

From: Paul Schroeder – SRF Project Manager

Date: October 3, 2018

Subject: Response to Informal Development Review Committee Comments – Bloomington Fire Station No. 3, Bloomington, MN

Civil and Landscape Plan Review Response

As requested, SRF, on behalf of the design team(lead by Wendel Architects), is providing civil/landscape responses to the Informal DRC comments(dated Sept 11, 2018, to this project, involving our submittal documents. The following provides original comment, followed by SRF comment in bold.

City Informal Development Review Committee Comments (Dated Sept 11, 2018)

Planning Review - Pre-App Contact: Nick Johnson at nmjohnson@B1oomingtonMN.gov, (952) 563-8925

1. Will the existing residential driveway curb cuts be abandoned and restored? **RESPONSE – Existing driveways to be removed on both site and street projects.**
2. A private sidewalk link to the primary building entrance must be provided (Sec. 21.301.04(b)(2)(A)). **RESPONSE – Sidewalk connection link to street trail, both built in 2019.**
3. Parking islands must have eight feet in internal width and be three feet shorter than the adjacent parking stall (Sec. 21.301.06(c)(2)(H)). **RESPONSE – Site plan revised to accommodate island dimensions.**
4. Sidewalks perpendicular to 90 degree parking must be seven feet in width to account for vehicle overhang. **RESPONSE – Site plan revised to provide 7' wide sidewalk at parking overhang condition.**
5. Stormwater management ponds are not allowed within the required landscape yards (20 feet along streets, 5 feet rear and side yards - Sec. 19.52(c)(4)). **RESPONSE – Storm pond revised to be outside of required landscape yards.**
6. The maximum building height allowed per the Height Limits Map (Sec. 21.301.10(b)(1)(A)) is 40 feet. **RESPONSE – Building height adjusted to be under 40 feet.**
7. Metal panels must comply with the City's Exterior Materials and Finished Policies and Procedures Guide. Specifications and other pertinent information must be submitted

to document gauge, composition, durability, finish, warranty, and other information. Staff will provide the policy guide to the architect. **RESPONSE – Materials and info revised to meet guide.**

8. When factoring internal capture, the 38 parking stalls proposed meets the Code-required quantity of parking. However, planning staff recommends that six to eight proof of parking stalls be considered along the southern drive aisle southwest of the building. **RESPONSE – Eight proof-of-parking added to the site plan.**
9. Parking islands must have a minimum of one deciduous tree. **RESPONSE – Landscape plan is updated to provide one tree per island.**
10. Trees within the right-of-way may not count towards the landscaping requirement. The species of existing trees on-site to be counted towards the landscaping requirement must be identified. Trees on the City's prohibited species list (Sc. 18.03) may not be counted towards required landscaping. Existing tree must also be healthy and a minimum of four caliper inches in diameter (deciduous) or six feet in height (evergreen). **RESPONSE – Removals Plan shows tree summary table(species, size, location) and what trees to be saved and removed. Landscape Plan updated to reflect required trees, including existing qualifying trees.**
11. Foundation plantings should be considered to meet supplemental landscaping policy (50% of building foundations visible to public street must be landscaped). **RESPONSE – The north, west, and partial south sides are visible to the street, and the 50% building foundations landscape is provided.**
12. Crosswalks must have twice the illumination of the surrounding area. **RESPONSE – Lighting/Photometric plan updated to accommodate.**
13. The maximum illumination along the internal property lines is 0.5 foot-candles. **RESPONSE – Lighting/Photometric plan updated to accommodate.**
14. Light levels and areas of lighting exceed Code in a number of areas. It is possible that greater efficiencies in design may be achieved. Contact Londell Pease in Planning at 952- 563-8926 for staff suggestions or ideas. **RESPONSE – Lighting/Photometric plan updated to accommodate.**

Building Department Review - Pre-App Contact: Duke Johnson at djohnson@B1oomingtonMN.gov, (952) 563-8959

1. Must meet current MN State Building Code. **RESPONSE – On going, addressed either at entitlements or building permit stage of the projet.**
2. Must meet MN Accessibility Code. **RESPONSE – On going, addressed either at entitlements or building permit stage of the projet.**
3. SAC review by MET council will be required. **RESPONSE – On going, addressed either at entitlements or building permit stage of the projet.**
4. Must meet MN Accessibility Code. **RESPONSE – On going, addressed either at entitlements or building permit stage of the projet.**
5. Must meet MN Accessibility Code. **RESPONSE – On going, addressed either at**

entitlements or building permit stage of the projet.

6. Bathroom and Shower Must meet MN Accessibility Code. **RESPONSE – On going, addressed either at entitlements or building permit stage of the projet.**

Fire Department Review - Pre-App Contact: Laura McCarthy at 1mccarthy@B1oomingtonMN.gov, (952) 563-8965

1. There is a conflict with the existing Hydrant here. Keep the storm lines 10' away. **RESPONSE – Storm line adjusted to minimize impact to hydrant.**
2. Keep the storm lines 10' away from the water line. **RESPONSE – Parallel lines to maintain a 10' clear, crossings do not required separation.**
3. There is a conflict with the proposed Hydrant here. Do not cross the hydrant lead with the new storm. **RESPONSE – Parallel lines to maintain a 10' clear, crossings do not required separation.**

Public Works Review - Pre-App Contact: Brian Hansen at bhansen@B1oomingtonMN.gov, (952) 563-4543

Construction/Infrastructure Review - Pre-App Contact: Brian Hansen at bhansen@BloomingtonMN.gov, (952)563-4543

1. This may be moved to another quadrant of this intersection. Will need to be discussed further between Xcel Energy and Bloomington staff. **RESPONSE – It is our understanding, as well, that this moves to the west side of Old Shakopee Road, thus no effort to retain the existing traffic cabinet.**
2. Install Standard Non-Res Driveway Approach w/ sidewalk, include City of Bloomington Detail. **RESPONSE – Plan and details provide the Non-Res Driveway Approach with sidewalk.**
3. Bloomington Engineering and Fire staff are discussing options for curbing and signage at this location to be done as part of the 86th St/Old Shakopee Rd street reconfiguration. **RESPONSE – Further coordination with Bloomington Engineering and Fire Staff involving final details.**
4. Engineering staff discussed this, and there needs to be sidewalk along E. 86th Street. **RESPONSE – Per recent meeting with Bloomington Engineering Staff, a 6' sidewalk and 5' boulevard will be provided on the south side of 86th Street.**
5. Do not plant trees in easement areas. **RESPONSE - Proposed trees are located outside of easement areas.**
6. Include typical sections for light duty, heavy duty pavement and concrete. **RESPONSE – Pavement sections are provided in the Civil Detail plan sheets.**

Construction/Infrastructure Review - Pre-App Contact: Brian Hansen at bhansen@BloomingtonMN.gov, (952)563-4543

1. It's hard to clearly see the proposed utility lines on this sheet. The priority on this page should be Proposed Utility Lines so those symbols should be bolder than the lot lines and building lines to make the proposed work stand out. **RESPONSE – Proposed utilities will be darker, if not already provided.**
2. There may be a conflict with the existing Hydrant here. Keep the storm lines 10' away. **RESPONSE – Design has been updated to minimize conflict.**
3. Keep the storm lines 10' away from the water line. **RESPONSE – Parallel lines to maintain a 10' clear, crossings do not required separation.**
4. There is a conflict with the proposed Hydrant here. Do not cross the hydrant lead with the new storm. **RESPONSE – Parallel lines to maintain a 10' clear, crossings do not required separation.**
5. Showing a 10" water service off of an 8" main. Also 10" is an uncommon size in Bloomington use 8" or 12". **RESPONSE – Watermain size is revised to be 8".**
6. The building water service must be connected with the proposed new private looped water system. **RESPONSE – Building water service connection is revised to be proposed private looped water system.**
7. Show the water and sewer services into the building and see notes regarding testing. **RESPONSE – Civil site utility connection are provided at standard 5' from the building.**
8. Make sure there is at least 18" between outsides of pipe at crossings. **RESPONSES – Pipe crossings to be 18" clear, if not already provided in the design.**
9. 8' of cover required. **Response – 8' of cover for Watermain to be provided, if not already in the design.**
10. Add a valve somewhere in this area so that there is no more than 400' valve spacing. **RESPONSE – A watermain valve has been added about halfway around the building.**
11. A Minnesota licensed civil engineer must design and sign all civil plans. **RESPONSE – A MN licensed civil engineer to sign all civil construction plans, preliminary plans not signed.**
12. Utility as-builts must be provided prior to issuance of Certificate of Occupancy. **RESPONSE – Utility as-builts to be provided prior to Certificate of Occupancy.**
13. Contractor shall obtain a Public Works permit for underground work within the right-of-way. Permit is required prior to removals or installation. Contact Utilities (952-563-4568) for permit information. **RESPONSE – Contractor to obtain permit prior to start of removals and utility improvements.**
14. Use updated city standard details for driveways, utilities, erosion control, etc. found on the website at www.bloomingtonmn.gov/information-sheets-and-handouts-

engineering- division. **RESPONSE – City Details, in linework form, provided on plans.**

15. Utility permits are required for connections to the public storm, sanitary, and water system. Contact Utilities (952-563-8777) for permit information. **RESPONSE – Contractor to obtain permit prior to start of removals and utility improvements.**
16. All unused water services must be properly abandoned at the main. All unused sanitary sewer services must be properly abandoned at the property line. There are 8 unused water services that must be abandoned. **RESPONSE – Existing residential sanitary sewer and water service connections are added to the existing conditions and notes indicating proper removals have been added to the Removal Plan.**
17. Contact Met Council (651-602-1378) for Sewer Availability Charge (SAC) determination. **RESPONSES – City representative and other design team members are assisting in determining SAC charges.**
18. A minimum 10-foot horizontal separation and 18-inch vertical separation is required between watermain and sewers. - Add this note to the plans. **RESPONSE – Notes are added.**
19. Loop water system (supply from two points) to provide increased reliability of service and reduction of head loss. Make sure the service is also connected to this loop. **RESPONSE – Watermain design and service connection revised per comment.**
20. Provide valves for system isolation (longest interval cannot exceed 400 feet) and for building isolation without shutting down supply to hydrants. **RESPONSE – A valve is provide halfway around the building.**
21. Provide a minimum of 8-feet and a maximum of 10-feet of cover over all water lines, valves, services, etc. **RESPONSE – Watermain cover is provided.**
22. Use Class 52 DIP water main for pipe 12-inches in diameter and smaller. A minimum 8 mil polywrap is required on all DIP. **RESPONSE – Watermain type and details updated on plans.**
23. Minnesota Department of Health (MDH) water permit/review may be required. Provide a copy of MDH approval letter or written confirmation from MDH that no permit/approval is required. **RESPONSE – Further communication with the MDH is required to determine if applicable.**
24. Minnesota Pollution Control Agency (MPCA) sanitary sewer permit/review may be required. Provide a copy of MPCA approval letter or written confirmation from MPCA that no permit/approval is required. **RESPONSE – Further communication with the MPCA Sanitary is required to determine if applicable.**
25. An inspection manhole is required on all commercial sewer services. **RESPONSE – A sanitary sewer manhole is provide in 86th Street at the connection.**
26. Use standard short cone manholes without steps. **RESPONSE – Detail provide for**

short cone manhole without steps.

27. Install interior chimney seals on all sanitary sewer manholes. **RESPONSE – Detail provide for chimney seal.**
28. Taps of live water mains are done by City forces and paid for and coordinated with the Contractor. - Add this note to the plans. **RESPONSE – Note added to the plans.**
29. Utility and mechanical contractors must coordinate the installation of all water and sewer service pipes into the building to accommodate city inspection and testing. - Add this note to the plans. **RESPONSE – Note added to the plans.**
30. Sanitary sewer mainline, clean-outs, manholes, and services must be designed with adequate depth of cover or install high-density polystyrene insulation to prevent freezing. **RESPONSE – Sanitary Sewer should be deep enough to not require insulation.**
31. Use schedule 40, SDR 26, or better for PVC sewer services. **RESPONSE – Plans revised to provide sanitary pipe type.**
32. Combination fire and domestic services must terminate with a thread on flange or an MJ to flange adapter. - Add this note to the plans. **RESPONSE – Note added to the plans.**
33. All components of the water system, up to the water meter or fire service equipment must utilize protective internal coatings meeting current ANSI/AWWA standards for cement mortar lining or special coatings. The use of unlined or uncoated pipe is not allowed. - Add this note to the plans. **RESPONSE – Note added to the plans.**

Traffic Review - Pre-App Contact: Tom Bowlin at tbow1in@BloomingtonMN.gov, (952) 563- 4914

Water Resources Review - Pre-App Contact: Steve Segar at ssegar@BloomingtonMN.gov, (952) 563- 4533

1. Rate and volume not to exceed existing conditions to this discharge location. **RESPONSE – Stormwater report and design indicates rate and volume not to exceed existing conditions discharge.**
2. Rate and volume must be controlled to not exceed the previously developed condition to E. 86th St. The downstream pond is on private property and we can't route additional water to the pond. **RESPONSE – Stormwater report and design indicates rate and volume not to exceed existing conditions discharge. This includes 10% additional impervious surface for future "placemaking". Any additional impervious surface increases beyond this may not comply, and would need further evaluation.**
3. Utility as-builts must be provided prior to issuance of Certificate of Occupancy. **RESPONSES – To be provided at the end of construction.**

4. Use updated city standard details for driveways, utilities, erosion control, etc. found on the website at www.b1oomingtonmn.gov/information-sheets-and-handouts-engineering- division. **RESPONSES – Civil Detail sheets have been updated and includes updated city standard details.**
5. Provide stormwater management plan meeting the requirements of Bloomington Comprehensive Surface Water Management Plan. Note rate and volume control to E. 86th St. Ok to use previously developed conditions for pre-construction calculations. **RESPONSE – Stormwater Report provides design and data that indicates meeting storm requirements, including using pre-construction of residential houses/garages/driveways.**
6. A maintenance agreement must be signed by the property owner and recorded at Hennepin County. **RESPONSE – To be provided prior to project completion.**
7. A National Pollutant Discharge Elimination System (NPDES) construction site permit and Storm Water Pollution Prevention Plan (SWPPP) must be provided. **RESPONSE – To be provided prior to the project's construction start.**
8. An erosion control bond is required. **RESPONSE – To be provided prior to the project's construction start.**
9. Show erosion control BMP locations on the plan. **RESPONSE – BMPs(silt fence, biologs, inlet protection) are added to the Grading Drainage and Erosion Control Plan and Civil Details.**
10. List erosion control maintenance notes on the plan. Notes may need revisions as plans progress. **RESPONSE – Maintenance notes added to plans, addition notes may be required.**
11. Utility permits are required for connections to the public storm, sanitary, and water system. Contact Utilities (952-563-8777) for permit information. **RESPONSE – Utility permits will be obtained before start of utility construction.**
12. After staff approval of stormwater management plans, provide an extra set of plans for staff to submit to Lower Minnesota River Watershed District. **RESPONSE – An extra set of the plans will be provide at submittal.**

PW Admin Review - Pre-App Contact: Brian Hansen at bhansen@BloomingtonMN.gov, (952)563-4543

1. No pond in easement area. **RESPONSE – Pond HWL is revised to not occur in easement areas.**