

January 8, 2025

Submitted via Email: [lyndy.logan@state.mn.us](mailto:lyndy.logan@state.mn.us)

Ms. Lyndy Logan  
Minnesota Department of Labor and Industry.  
443 Lafayette Road North  
St. Paul, Minnesota 55155

Re: Request for Minnesota Plumbing Code Variance  
Xcel Energy St. Paul Service Center  
TKDA Project No. 0014963.067

Dear Ms. Logan:

TKDA, on behalf of Xcel Energy, is requesting a variance to the Minnesota Plumbing Code for the proposed St. Paul Service Center. This letter is a petition for a variance and contains the information below as required by 2024 Minnesota Statutes 14.056.

- Mr. Leigh Stoakes, Xcel Energy Senior Project Engineer, is the owner requesting the variance. Mr. Stoakes' address is:

Leigh Stoakes  
414 Nicollet Mall, Mezzanine  
Minneapolis, MN 55401

- TKDA, on behalf of, Xcel Energy is requesting a variance to the 2020 Minnesota Plumbing Code, Section 310.5, Obstruction of Flow. In the case of the site stormwater, the code applies to stormwater surcharging storm sewer pipe. The original design of the storm sewer pipe and stormwater filtration chamber system for this project met the code. No water surcharged any storm pipes for the water quality event (2-inch rainfall). However, during construction of the stormwater chambers the contractor encountered an unforeseen and unexpected condition. The groundwater level is at an elevation higher than expected. The ground water elevation is 3.5 feet above the bottom of the chamber system. It is not feasible to construction the filtration chamber system below the groundwater level. Therefore, the chamber system needs to be revised by raising it above the groundwater level, a vertical distance of 3.75 feet. This revision will result in temporary surcharging pipe upstream of the chamber system to structure CB 166 (reference attached Pipe Surge Exhibit) during the water quality event (2-inch rainfall).
- This variance is justified because the surcharged pipe is temporary. The stormwater filtration chamber system will draw down in 48 hours, through filtration, and drain the water in the surcharged pipe. The surcharging is limited to approximately 415 feet of pipes directly upstream of the chamber system. No water will surcharge any pipes at the proposed building in any rain event up to and including the 100-year event. The surcharging is a temporary condition. However, the request for a variance is permanent.
- Xcel Energy has no knowledge of previously requesting a variance from the Department of Labor and Industry (DLI).
- Per discussions with Mike Westemeir at the DLI, he is not aware of any previously approved variances for similar cases.
- No other persons or facilities will be adversely affected if this variance is approved.

Sincerely,



Brent D. Paulsen, PE  
Civil Group Manager, Facilities Division  
TKDA



Leigh W. Stoakes, PE  
Senior Project Engineer  
Xcel Energy

Attachments: Pipe Surcharge Exhibit

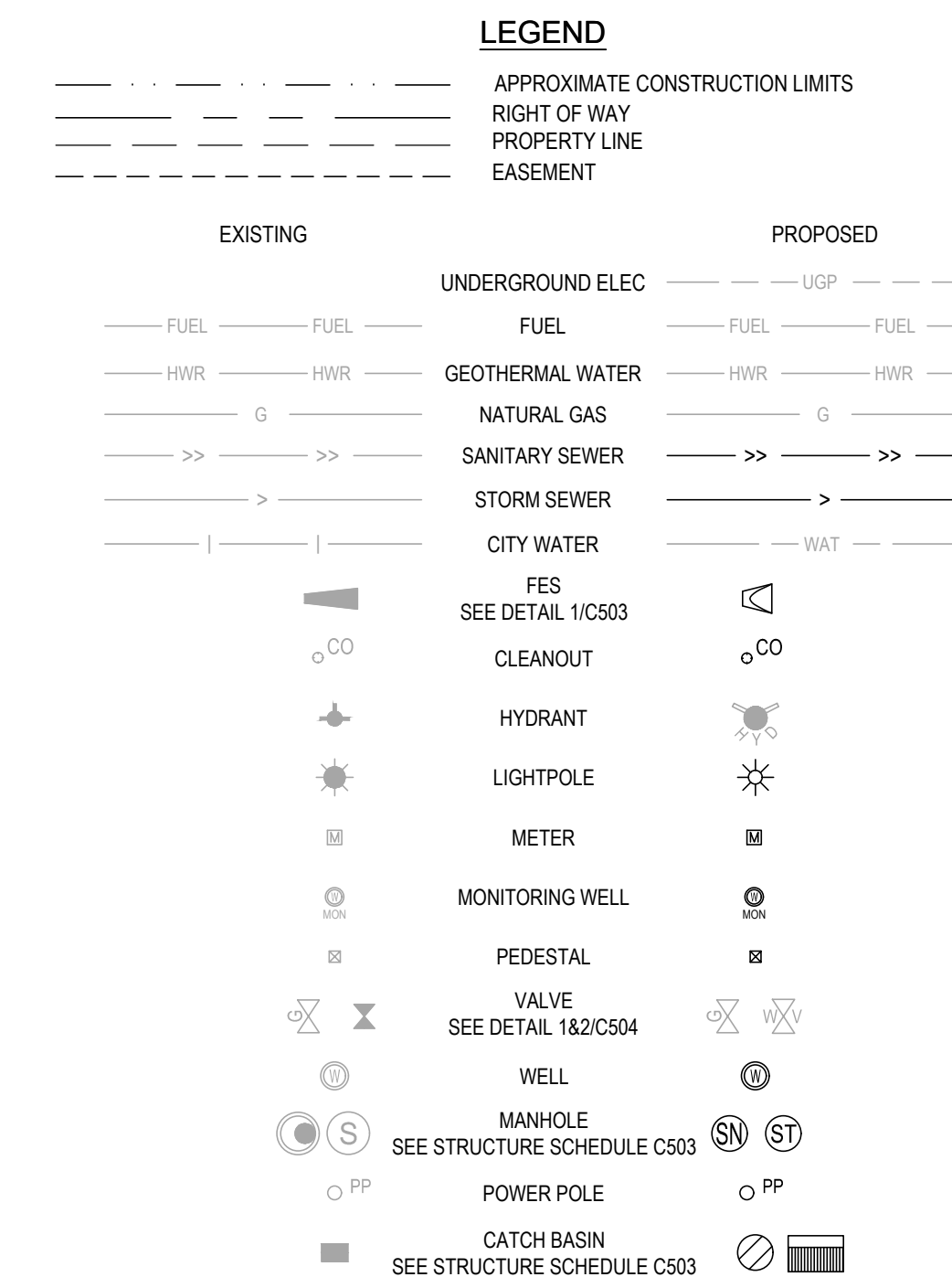
c: Craig Coil – TKDA  
Andy Koshire – TKDA

BDP:LS:slp

MATCHLINE - SEE SHEET C151 FOR CONTINUATION

MATCHLINE - SEE SHEET C152 FOR CONTINUATION

PROPOSED SERVICE CENTER  
LEVEL 0 FFE = 1017.00  
LEVEL 1 FFE = 1021.00  
LEVEL 2 FFE = 1041.00



- UTILITY NOTES:**
- UTILITIES SHOWN ON PLAN ARE DEPICTED TO ASCE 38-02 QUALITY LEVEL D.
  - THERE IS NO GUARANTEE THAT ALL UNDERGROUND UTILITIES IN SERVICE OR ABANDONED ARE SHOWN.
  - THE CONTRACTOR SHALL VERIFY THE LOCATION OF PUBLIC UNDERGROUND UTILITIES THROUGH GOPHER STATE ONE CALL PRIOR TO COMMENCING DEMOLITION OR CONSTRUCTION ACTIVITIES.
  - THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PRIVATE UTILITY LOCATES. CONTRACTOR SHALL HIRE A PRIVATE LOCATOR TO ASSIST WITH LOCATES. COST FOR LOCATES & REPAIR OF ANY DAMAGED UTILITIES SHALL BE INCURRED BY THE CONTRACTOR.
  - ALL EXISTING UTILITIES SHALL REMAIN IN SERVICE THROUGHOUT CONSTRUCTION, AND BE PROTECTED FROM CONSTRUCTION ACTIVITY. CONTRACTOR MUST ADEQUATELY SUPPORT THE UTILITIES DURING EXCAVATION.
  - ALL EXISTING AND PROPOSED SURFACE UTILITY FEATURES INCLUDING, BUT NOT LIMITED TO MANHOLE CASTINGS, HYDRANTS, PVS, LIGHTPOLES, HANDHOLES, CLEANOUTS AND VALVE BOXES SHALL BE PROTECTED AND ADJUSTED TO PROPOSED FINISH GRADE.
  - DURING THE COURSE OF THE UTILITY INSTALLATION THE CONTRACTOR SHALL COORDINATE THE AS-BUILT SURVEY OF ALL PROPOSED UTILITIES AND ALL EXISTING UTILITIES EXPOSED DURING EXCAVATION. THE AS-BUILT SURVEY WILL BE COMPLETED BY THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL COMMUNICATION AND COORDINATION WITH THE OWNER TO ENSURE THAT THE AS-BUILT SURVEY IS COMPLETED. THE CONTRACTOR SHALL INCLUDE THE AS-BUILT SURVEY TASK AS A REGULAR AGENDA ITEM DURING THE WEEKLY CONSTRUCTION MEETINGS. ITEMS TO BE RECORDED IN THE AS-BUILT SURVEY INCLUDE, BUT ARE NOT LIMITED TO, HORIZONTAL OR VERTICAL CHANGES IN PIPE ALIGNMENT, FLANGED CONNECTIONS, REDUCERS, DISSIMILAR MATERIAL CONNECTIONS, VALVES, PVS, STORMWATER CHAMBER SYSTEMS, AND ALL EXISTING UTILITIES EXPOSED DURING EXCAVATION.
  - PVC STORM PIPE SHALL BE SCH. 40. WHERE STORM SEWER CROSSES OVER WATER PIPE SHALL BE PVC AND THE PIPE SHALL BE CENTERED OVER THE WATERMAIN.
  - SANITARY SEWER PIPE SHALL BE SCH. 40 PVC.
  - PLUMBING CONTRACTOR TO OBTAIN REMOVAL PERMITS FROM PUBLIC WORKS TO CUT OFF EXISTING SEWER CONNECTIONS SERVICES TO THE PROPERTY. CALL ST PAUL PUBLIC WORKS PERMIT DESK (651-266-6234) FOR INFORMATION ON OBTAINING THIS PERMIT.
  - LICENSE HOUSE DRAIN CONTRACTOR TO OBTAIN (SEWER CONNECTION PERMIT) TO CONSTRUCT NEW SANITARY AND STORM CONNECTION IN STREET FROM MAIN TO THE PROPERTY. CALL ST PAUL PUBLIC WORKS PERMIT DESK (651-266-6234) FOR INFORMATION ON OBTAINING THIS PERMIT.
  - ALL STORM WATER PIPING SYSTEMS LOCATED BETWEEN THE BUILDING AND THE STORM WATER INFILTRATION SYSTEM SHALL BE INSPECTED AND TESTED PRIOR TO BACKFILLING. CONTACT THE DEPARTMENT OF SAFETY AND INSPECTIONS AT 651-266-9006 TO SCHEDULE AN INSPECTION WITH THE AREA PLUMBING INSPECTOR.
  - STORM WATER RETENTION/INFILTRATION SYSTEMS: PRESSURE TESTING OF UNDERGROUND FACILITIES WITHIN 10 FEET OF THE BUILDING TO ENSURE PROPER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING: MPC 4714.1107.2.1 WATER TEST, MPC 4714.1107.2.2 AIR TEST, MPC 4714.1107.2.3 HYDROSTATIC TEST METHOD FROM THE CITY ENGINEERS ASSOCIATION OF MINNESOTA. MPC 4714.712.4 CONCRETE MANHOLES AND SEWER LINES SHALL BE TESTED BY NEGATIVE PRESSURE TEST IN ACCORDANCE WITH ASTM STANDARDS C1214-19 AND C1244-17 OR THE HYDROSTATIC TEST METHOD IN SECTION 1107.2.3(B).

**Xcel Energy**  
CORPORATE # C-44 MCCOLET MALL, MPLS, MN  
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CONSULTANT NAME: LOGO  
CONSULTANT PROJECT NO: 14693.907

**TKDA**

STAMP:  
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: AMANDA M. KIEFFER  
LICENSE NO: 56216 DATE: 11.22.2024

**SAINT PAUL SERVICE CENTER**  
SERVICE CENTER  
1470 HOWARD STREET NORTH & 2255 ARLINGTON AVENUE E  
SAINT PAUL, MN

KEY PLAN

XCEL ENERGY PROJECT #  
100035539107

DATE:  
07.10.2024

SITE PLAN REVIEW/PERMIT

REV	DATE ENDED	DESCRIPTION
1	07.10.2024	SITE PLAN REVIEW/PERMIT
2	08.28.2024	WATERHELD COMMENT RESPONSE
3	09.19.2024	REV. 2
4	11.22.2024	REV. 3
5	11.22.2024	REV. 10
6	12.03.2024	REV. 13

SHEET TITLE:  
SURCHARGE EXHIBIT

SHEET NUMBER:  
**C153**

