Permit Application Review

Permit No. 2023-001
Received complete: February 7, 2023

Applicant:	Tim Rybak; Bloomington Public Schools (ISD #271)
Consultant:	Matt Isakson; Bolton & Menk, Inc.
Project:	Normandale Hills Elementary School Chiller Addition
Location:	9501 Toledo Avenue South, Bloomington, MN
Applicable Rule(s):	4 and 5
Reviewer(s):	Josh Phillips and Louise Heffernan; Barr Engineering Co.

General Background & Comments

The applicant, Bloomington Public Schools (ISD #271), proposes construction of a chiller unit, access path and sidewalk improvements, the removal of an underground fuel tank, and interior school renovations that will require a temporary classroom structure at Normandale Hills Elementary School located at 9501 Toledo Avenue South in Bloomington. The 13.8-acre parcel is occupied by a school building, surface parking lots, athletic fields, and a playground. The project will include construction of a new rain garden to provide rate control, volume retention, and water quality management for the disturbed areas (approximately 14,000 square feet) on the site including the regulated new and reconstructed impervious surfaces.

A temporary classroom structure is proposed during construction and will be removed from the site once the interior renovations are complete. The area will be restored to greenspace following removal of the temporary classroom. The timeline for the temporary classrooms on site will be from approximately January 2023 through December 2023. Stormwater management is not required for temporary classroom structure.

Two permits have previously been issued by the NMCWD for work at the Normandale Hills Elementary School site. Relevant project site information is provided in the table below.

Site Information	2014-059	2018-016	2023-001 (Current)	Site Aggregate Total (Includes 3 Projects)
Total Site Area (acres)	13.83[1]	13.83	13.83	13.83
Existing Site Impervious Area (acres)	3.91[2]	3.94	3.95	3.99
Change (Increase/ Decrease) in Site Impervious Area (acres)	0.03	0.01	0.04	0.08
Percent Change (Increase/ Decrease) in Impervious Area (%)	1%	0%	1%	2%
Disturbed/Reconstructed Site Impervious Area (acres)	0	0	0	0
Percent Disturbance/Reconstruction of Existing Impervious Surface (%)	0	0	0	0

[1]Normandale Hills Elementary School includes one parcel under school district ownership.
[2]Pre-2014 project existing conditions

Exhibits Reviewed:

1. Permit Application dated January 3, 2023 (received January 5, 2023). Email correspondence dated January 26, 2023, outlining items required to complete the application. The application with the submittal items is complete.
2. Plans dated November 10, 2022, received on January 5, 2023, and February 7, 2023, with undated edits made in red to Sheets C1.2 and C1.3 between January 26 and February 7, prepared by Bolton & Menk, Inc.,
3. Stormwater Management Report dated January 5, 2023, and revised February 7, 2023, prepared by Bolton & Menk, Inc.
4. Electronic HydroCAD model received on January 12, 2023, revised February 7, 2023, prepared by Bolton & Menk, Inc.
5. Electronic MIDS Calculator model received on January 12, 2023, revised on February 7, 2023, prepared by Bolton & Menk, Inc.
6. Geotechnical Evaluation Report dated October 24, 2022, received January 3, 2023, prepared by Braun Intertec.

4.0 Stormwater Management

The district's requirements for stormwater management 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.

The NMCWD'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 on the project site. Because two projects have been permitted since Rule 4.2.5 took effect in 2008 (NMCWD Permits 2014-059 and 2018-016), the proposed work under the current application is considered in aggregate with activities subject to Rule 4.2.5 Common Scheme of Development.

The project activities under the current application (Permit 2023-001), considered in aggregate with the two previous projects permitted at the site, will result in a combined disturbance, less than 50% of the existing impervious at the site (0% disturbance), and will not increase the imperviousness at the site by more than 50% (2% combined increase). Therefore, stormwater management is required only for the 1,700 square feet of net new impervious surface and newly disturbed pervious areas (0.32 acres) under the current permit application.

Stormwater management for compliance with subsection 4.3.1 will be provided by a rain garden to provide rate control, volume retention and water quality management for the regulated areas of the current project.

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 for the collection points. The applicant used a HydroCAD hydrologic model to simulate runoff rates. The existing and proposed 2-, 10- and

100-year frequency discharge rates from the disturbed area are summarized in the table below.

Rate Control Summary

	2- year (c.f.s.)	10- year (c.f.s.)	100- year (c.f.s.)
Existing Conditions	<1.0	<1.0	<1.0
Proposed Conditions	<1.0	<1.0	<1.0

The proposed stormwater management plan provides rate control in compliance with the NMCWD requirements for the 2-, 10-, and 100-year events. Rule 4.3.1b is met.

A retention volume of 156 cubic feet is required from the proposed 1,700 square feet of regulated impervious surface. The Braun Intertec geotechnical report identifies the underlying soil within the area of the proposed rain garden as silty sand (SM) fill, clayey sand (SC), and poorly graded sand with silt (SP-SM). The plans indicate that soils with low permeability in area of the proposed rain garden will be excavated to the depth of the SP-SM soils (approximately elevation 912.0 M.S.L.), removed, and backfilled with material suitable for infiltration. An infiltration rate of 0.45 inches per hour has been used for design, using infiltration rates for silty sand identified in the Minnesota Storm Water Manual.

The table below summarizes the volume retention required and volume retention achieved. The proposed project is in conformance with subsection 4.3.1a.

Volume Retention Summary

Required Volume Retention Depth (inches)	Required Volume (cubic feet)	Provided Volume (cubic feet)
1.1	156	453

With an infiltration area of 200 square feet to be provided (87 square feet required), the required 156 cubic feet of volume retention is drawn down within the required 48-hours, complying with Rule 4.3.1a (ii).

Rule 4.5.4d (i) requires at least three feet of separation between the bottom of a stormwater management facility and groundwater. The borings taken by Braun Intertec did not encounter groundwater to the bottom of the boring(s), elevation 907.0 M.S.L. The bottom elevation of the rain garden is 918.5 feet M.S.L., providing a separation of 11.5 feet. Rule 4.5.4d (i) is met.

NMCWD's water quality criterion requires 60% annual removal efficiency for total phosphorus (TP) and 90% annual removal efficiency for total suspended solids (TSS) from the regulated site runoff. A MIDS model was used to evaluate the proposed rain garden's annual removal efficiencies. The results of the MIDS modeling are summarized in the table below. We agree with the modeling results and the project is in conformance with Rule 4.3.1c criteria.

Annual TSS and TP Removal Summary

Pollutant of Interest	Regulated Site Loading (lbs./year)	Required Load Removal (lbs./year)	Provided Load Reduction (lbs./year)
Total Suspended Solids (TSS)	19.2	17.3 (90%)	19.0 (99%)
Total Phosphorus (TP)	0.11	0.06 (60%)	0.11 (99%)

Rule 4.3.3 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, Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high-water elevation of an adjacent facility.

Rule 4.3.3 also states that a stormwater management facility must be constructed at an elevation that ensures no adjacent habitable building will be brought into noncompliance with a standard in subsection 4.3.3. The low floor and low opening elevation of the proposed enclosure adjacent to the facility is 922.0 M.S.L., 2.4 feet above the rain garden's modeled 100-year high-water elevation (919.6 M.S.L.). The low floor and low opening elevation of the proposed temporary structure adjacent to the facility is 923.0 M.S.L., 3.4 feet above the rain garden's modeled 100-year high-water elevation (919.6 M.S.L.). Emergency overflow, should it occur, is located at elevation 919.5 M.S.L. towards the existing parking lot. To comply with Rule 4.3.3, the low floor and low opening elevations of the existing school building must be provided, and the applicant must demonstrate compliance with Rule 4.3.3 criteria relative to the 100-year high-water elevation of the proposed rain garden.

If not previously submitted in the calendar year of closeout, 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.

Subsection 4.3.5 requires the submission of a maintenance plan. All stormwater management structures and facilities must be designed for maintenance access and properly maintained in perpetuity to assure that they continue to function as designed. The applicant, being a public entity, must provide an agreement signed by an official with authority assuming the obligations for the operation and maintenance of the stormwater management facility.

In accordance with Rule 4.3.1a (i), where infiltration or filtration facilities, practices or systems are proposed, pre-treatment of runoff must be provided. Pretreatment will be provided by grassed filter strips and shallow swales, complying with Rule 4.3.1a (i).

5.0 Erosion and Sediment Control

The district's requirements for 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 5.2.1a and b.

The erosion control plan prepared by Bolton & Menk, Inc. includes installation of silt fence, biorolls, a rock construction entrance, and storm sewer inlet protection. The contractor for the project will need to designate a contact who will remain liable to the district for performance

under the district's Erosion and Sediment Control Rule 5.0 from the time the permitted activities commence until vegetative cover is established, in accordance with subsection 5.4.1e. NMCWD must be notified if the responsible individual changes during the permit term.

11.0 Fees

Because the property owner is a public entity, no fees are charged.

Rules 4.0 and 5.0 $0

12.0 Financial Assurances

Because the property owner is a public entity, the district's financial assurance requirements do not apply.

Sureties for the project are: $0

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 with the fulfilment of the conditions identified below.
3. The proposed stormwater management facility will provide rate control, volume retention and water quality management in accordance with subsections 4.3.1a-c criteria.
4. In accordance with NMCWD Rule 4.3.5, the applicant must provide an agreement that assumes the obligations for the maintenance, inspection and operations the stormwater management facility.

Recommendation

Approval, contingent upon:

Compliance with the General Provisions (attached).

The applicant providing a name and contact information for the individual responsible for the erosion and sediment control at the site. NMCWD must be notified if the responsible individual changes during the permit term.

Per Rules 4.3.5 and 3.4.7, it is required to execute an agreement for the operation and maintenance of the stormwater management facility. A draft of the agreement must be approved by the district. A public entity assuming the maintenance obligation may do so by filing with the district a document signed by an official with authority.

Rule 4.3.3 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, Rule 4.3.3 states that all new and reconstructed buildings must be constructed such that no opening where surface flow can enter the structure is less than two feet above the 100-year high-water elevation of an adjacent facility. Alternatively, Appendix 4a analysis may be used to demonstrate compliance with low floor criteria. To comply with Rule 4.3.3, the following is required:

- The low floor and low opening elevations of the existing school building, proposed chiller enclosure, and temporary classroom structure must be shown on the plans. The applicant must demonstrate compliance with Rule 4.3.3 criteria relative to the 100-year high-water elevation of the proposed rain garden.

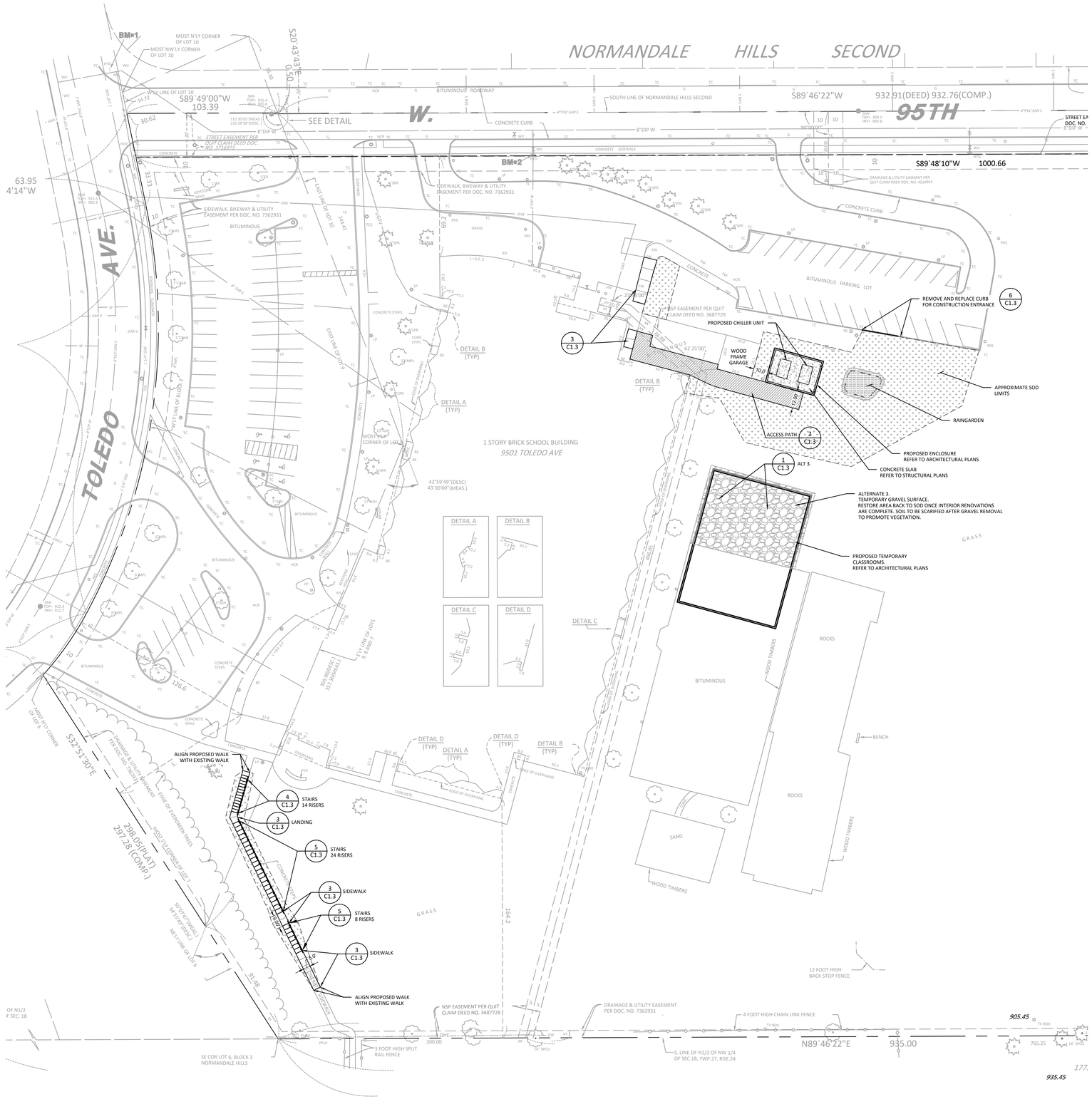
By accepting the permit, when issued, the applicant agrees to the following stipulations for closeout of the permit:

The work for the Normandale Hills Elementary School chiller addition project under the terms of Permit 2023-001, if issued, must have an impervious surface area, stormwater infrastructure design, and grading plans consistent with the approved plans. Design that differs materially from the approved plans will need to be the subject of a request for a permit modification or new permit, which will be subject to review for compliance with all applicable regulatory requirements.

If not previously submitted in the calendar year of closeout, 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.

Per Rule 4.5.6, an as-built drawing of the stormwater management facility conforming to the design specifications, including a stage volume relationship in tabular form for the rain garden basin, as approved by the district, must be provided.

Per Rule 12.4.1b, demonstration and confirmation that the stormwater management facility has been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the stormwater management facility used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.



LEGEND

- 1 C1.3 — REFERENCE KEY TO SITE DETAILS: DETAIL I.D NUMBER (TOP), DETAIL SHEET NUMBER (BOTTOM)
- PROPOSED CONCRETE WALK — 3 C1.3
- PROPOSED CONCRETE SLAB - REFER TO STRUCTURAL
- TEMPORARY GRAVEL SURFACE — 1 C1.3
- PROPOSED BITUMINOUS PAVEMENT — 2 C1.3
- APPROXIMATE SOD LIMITS
- PROPERTY LINE

NOTES:

1. REFER TO SHEET C1.2, GRADING AND EROSION CONTROL PLAN, FOR GENERAL NOTES.
2. MINIMIZE DISTURBANCE TO SITE AND PROTECT EXISTING VEGETATION AND SITE FEATURES (CURBS, WALKS, PAVEMENTS, OVERHEAD AND UNDERGROUND UTILITIES, SIGNAGE, FENCING, ROADWAYS, ETC.) WHICH ARE TO REMAIN.
3. REPAIR OR REPLACE EXISTING PROPERTY AND SITE FEATURES, INCLUDING GRASS AND VEGETATION, WHICH IS TO REMAIN THAT IS DAMAGED BY THE WORK, TO OWNER'S SATISFACTION AND AT NO ADDITIONAL COST TO THE OWNER.
4. VISIT THE SITE PRIOR TO BIDDING; BE FAMILIAR WITH ACTUAL CONDITIONS IN THE FIELD. EXTRA COMPENSATION WILL NOT BE ALLOWED FOR CONDITIONS WHICH COULD HAVE BEEN DETERMINED OR ANTICIPATED BY EXAMINATION OF THE SITE, THE CONTRACT DRAWINGS AND THE INFORMATION AVAILABLE PERTAINING TO EXISTING SOILS, UTILITIES AND OTHER SITE CHARACTERISTICS.
5. THE CONTRACTOR SHALL HIRE THE SERVICES OF A UTILITY LOCATOR COMPANY TO LOCATE ALL PRIVATELY OWNED UTILITIES THAT MAY BE DISTURBED BY CONSTRUCTION OPERATIONS.
6. TOPOGRAPHIC SURVEY COMPLETED BY SUNDE LAND SURVEYING, ON 01/15/2014

Normandale Hills Elementary School Renovations

9501 TOLEDO AVE S,
BLOOMINGTON, MN 55437

BLOOMINGTON PUBLIC SCHOOLS DISTRICT #271

1350 W 106TH ST,
BLOOMINGTON, MN 55431

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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**

DAVID A. REY
Registration Number **40110** Date **10/24/2022**

Revisions		
Description	Date	Num
ADDENDUM 2	11/04/2022	2
ADDENDUM 3	11/10/2022	3

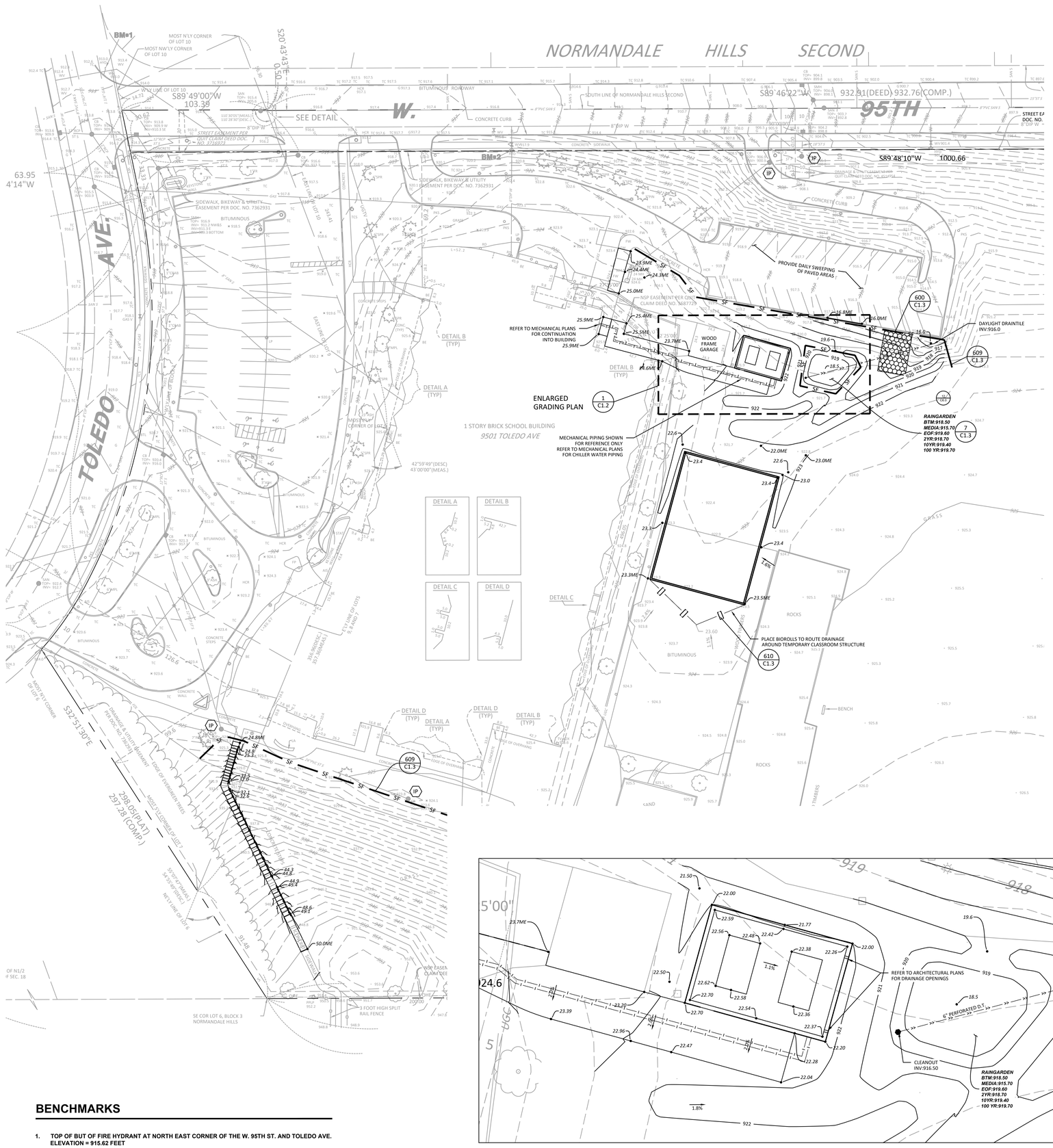
Comm: **222084**
Date: **10/24/2022**
Drawn: **MJI**
Check: **DAR**

North

SITE PLAN

Scale: 1" = 30'

C1.1



LEGEND

- 1 / C1.3 — REFERENCE KEY TO SITE DETAILS: DETAIL I.D NUMBER (TOP), DETAIL SHEET NUMBER (BOTTOM)
- 1045 — EXISTING CONTOUR
- 923 — PROPOSED CONTOUR
- 23.0 — PROPOSED SPOT ELEVATION: ME = MATCH EXISTING
- PROPOSED GRADING LIMITS
- SF — PROPOSED SILT FENCE
- [] — PROPOSED BIOROLL
- PROPOSED ROCK CONSTRUCTION ENTRANCE
- IP — INLET PROTECTION DEVICE AT STORM SEWER INLET
- PROPERTY LINE

GENERAL NOTES

1. ALL CONSTRUCTION MUST COMPLY WITH APPLICABLE STATE AND LOCAL ORDINANCES.
2. THE CONTRACTOR WILL BE RESPONSIBLE FOR AND SHALL PAY FOR ALL CONSTRUCTION STAKING / LAYOUT.
3. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL RELATED CONSTRUCTION PERMITS. SUBMIT A COPY OF ALL PERMITS TO THE CITY.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL SIGNAGE (CONSTRUCTION ZONES) NECESSARY TO CONSTRUCT PROPOSED IMPROVEMENTS. ALL SIGNAGE LAYOUTS MUST BE DESIGNED BY THE CONTRACTOR AND APPROVED BY LOCAL AUTHORITIES.
5. INSTALL CONTROL FENCING AND BARRICADING AS NECESSARY TO PROTECT THE PUBLIC.
6. INSPECT SITE AND REVIEW SOIL BORINGS TO DETERMINE EXTENT OF WORK AND NATURE OF MATERIALS TO BE HANDLED.
7. REFER TO SPECIFICATIONS FOR DEWATERING REQUIREMENTS.
8. CHECK ALL PLAN AND DETAIL DIMENSIONS AND VERIFY SAME BEFORE FIELD LAYOUT.
9. REFER TO ARCHITECTURAL PLANS FOR BUILDING AND STOOP DIMENSIONS AND LAYOUT.
11. MAINTAIN ADJACENT PROPERTY AND PUBLIC STREETS CLEAN FROM CONSTRUCTION CAUSED DIRT AND DEBRIS ON A DAILY BASIS. PROTECT DRAINAGE SYSTEMS FROM SEDIMENTATION AS A RESULT OF CONSTRUCTION RELATED DIRT AND DEBRIS.
12. MAINTAIN DUST CONTROL DURING GRADING OPERATIONS.
13. ALL EROSION CONTROL METHODS SHALL COMPLY WITH MPCA AND LOCAL REGULATIONS.
14. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO SITE AND PROTECT EXISTING SITE FEATURES (INCLUDING TURF AND VEGETATION) WHICH ARE TO REMAIN.
15. PROPOSED CONTOURS AND SPOT ELEVATIONS ARE SHOWN TO FINISH GRADE UNLESS OTHERWISE NOTED.
16. PROPOSED ELEVATIONS SHOWN TYPICALLY AS 23.2 OR 23.0 SHALL BE UNDERSTOOD TO MEAN 923.2 OR 923.0.
17. SPOT ELEVATIONS SHOWN IN PARKING LOTS, DRIVES AND ROADS INDICATE GUTTER GRADES, UNLESS NOTED OTHERWISE. SPOT ELEVATIONS WITH LABELS OUTSIDE THE BUILDING PERIMETER INDICATE PROPOSED GRADES OUTSIDE THE BUILDING. SPOT ELEVATIONS WITH LABELS INSIDE THE BUILDING PERIMETER INDICATE PROPOSED FINISH FLOOR ELEVATIONS.
18. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DETERMINING QUANTITIES OF CUT, FILL AND WASTE MATERIALS TO BE HANDLED, AND FOR AMOUNT OF GRADING TO BE DONE IN ORDER TO COMPLETELY PERFORM ALL WORK INDICATED ON THE DRAWINGS. IMPORT SUITABLE MATERIAL AND EXPORT UNSUITABLE / EXCESS / WASTE MATERIAL AS REQUIRED. ALL COSTS ASSOCIATED WITH IMPORTING AND EXPORTING MATERIALS SHALL BE INCIDENTAL TO THE CONTRACT.
19. NO FINISHED SLOPES SHALL EXCEED 4' HORIZONTAL TO 1' VERTICAL (4:1), UNLESS OTHERWISE NOTED.
20. ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD WHICH ARE NOT DESIGNATED TO BE PAVED, SHALL RECEIVE AT LEAST 6" OF TOPSOIL AND SHALL BE SODDED. REFER TO SHEET C1.1, SITE PLAN, FOR SOD LOCATIONS.
21. WHERE NEW SOD MEETS EXISTING SOD, EXISTING SOD EDGE SHALL BE CUT TO ALLOW FOR A CONSISTENT, UNIFORM STRAIGHT EDGE. JAGGED OR UNEVEN EDGES WILL NOT BE ACCEPTABLE. REMOVE TOPSOIL AT JOINT BETWEEN EXISTING AND NEW AS REQUIRED TO ALLOW NEW SOD SURFACE TO BE FLUSH WITH EXISTING.
22. FAILURE OF TURF DEVELOPMENT: IN THE EVENT THE CONTRACTOR FAILS TO PROVIDE AN ACCEPTABLE TURF, THE CONTRACTOR SHALL RE-SEED OR RE-SOD ALL APPLICABLE AREAS, AT NO ADDITIONAL COST TO THE OWNER, TO THE SATISFACTION OF THE ENGINEER.
29. LOCATE ALL EXISTING UTILITIES, VERIFY LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES. VERIFY LOCATIONS, SIZES AND ELEVATIONS OF SAME BEFORE BEGINNING CONSTRUCTION.
31. CONTRACTOR SHALL MAINTAIN DRAINAGE FROM EXISTING BUILDING AT ALL TIMES. PROVIDE TEMPORARY STORM SEWER (INCLUDING, BUT NOT LIMITED TO, CATCH BASINS, MANHOLES, PIPING, ETC.) AS REQUIRED. EXISTING STORM SEWER SHALL NOT BE REMOVED UNTIL TEMPORARY OR PERMANENT STORM SEWER IS INSTALLED AND FUNCTIONAL. COORDINATE ALL REMOVALS WITH APPROPRIATE TRADES (SITE UTILITY CONTRACTOR, MECHANICAL CONTRACTOR, ETC.) AS REQUIRED.
33. DEVELOPER/OWNER IS RESPONSIBLE FOR REMOVING TEMPORARY EROSION CONTROL MEASURES UPON ESTABLISHMENT OF PERMANENT VEGETATION.
34. SITE IS LOCATED WITHIN THE BOUNDARY OF THE NINE MILE CREEK WATERSHED DISTRICT

EROSION CONTROL NOTES

1. MAINTAIN ADJACENT PROPERTY AND PUBLIC STREETS CLEAN FROM CONSTRUCTION CAUSED DIRT AND DEBRIS ON A DAILY BASIS. PROTECT DRAINAGE SYSTEMS FROM SEDIMENTATION AS A RESULT OF CONSTRUCTION RELATED DIRT AND DEBRIS.
2. MAINTAIN DUST CONTROL DURING GRADING OPERATIONS.
5. ALL EROSION CONTROL METHODS SHALL COMPLY WITH MPCA AND OTHER LOCAL REGULATIONS.
6. IF EROSION AND SEDIMENT CONTROL MEASURES TAKEN ARE NOT ADEQUATE AND RESULT IN DOWNSTREAM SEDIMENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING OUT DOWNSTREAM STORM SEWERS AS NECESSARY, INCLUDING ASSOCIATED RESTORATION.
8. PRIOR TO CONSTRUCTION, DELINEATE TURF AND VEGETATED AREAS NOT TO BE DISTURBED WITH ORANGE SNOW FENCE. NO CONSTRUCTION TRAFFIC, EQUIPMENT OR MATERIALS SHALL BE PERMITTED TO UTILIZE, ACCESS, OR OTHERWISE ENTER THE AREAS DESIGNATED NOT TO BE DISTURBED. MINIMIZE SOIL COMPACTION AND DISRUPTION OF TOPSOIL IN AREAS OUTSIDE THE CONSTRUCTION LIMITS TO COMPLY WITH MN CONSTRUCTION STORMWATER GENERAL PERMIT.
9. DEVELOPER IS RESPONSIBLE FOR REMOVING EROSION CONTROL FEATURES UPON ESTABLISHMENT OF PERMANENT EROSION CONTROL. NOTE ON PLAN TO PROVIDE SITE STABILIZATION, INCLUDING ON STOCKPILES, WITHIN 7 DAYS OF GRADING COMPLETION OR INACTIVITY.
10. INLET PROTECTION SHALL BE REMOVED BY CONTRACTOR PRIOR TO WINTER FREEZE AND REPLACE IN SPRING IF SITE STABILIZATION IS NOT ACHIEVED, OR AT DIRECTION OF THE CITY ENGINEER.

BENCHMARKS

1. TOP OF BUT OF FIRE HYDRANT AT NORTH EAST CORNER OF THE W. 95TH ST. AND TOLEDO AVE. ELEVATION = 915.62 FEET
2. TOP OF TOP NUT OF FIRE HYDRANT ON SOUTH SIDE OF W. 95TH ST., FIRST EAST OF TOLEDO AVE. ELEVATION = 920.46 FEET

1 / C1.2 ENLARGED CHILLER AND RAIN GARDEN GRADING PLAN

Normandale Hills Elementary School Renovations

9501 TOLEDO AVE S,
BLOOMINGTON, MN 55437

BLOOMINGTON PUBLIC SCHOOLS DISTRICT #271

1350 W 106TH ST,
BLOOMINGTON, MN 55431

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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

DAVID A. REY
Registration Number: 40110 Date: 10/24/2022

Revisions		
Description	Date	Num
ADDENDUM 2	11/04/2022	2
ADDENDUM 3	11/10/2022	3

Comm: 222084
Date: 10/24/2022
Drawn: MJI
Check: DAR

North

GRADING AND EROSION CONTROL PLAN

Scale: 1" = 30'

C1.2