

Applicant: Braj Agrawal: FamEP, LLC.
Consultant: Matthew Pavsek; Civil Site Group
Project: Exterior Improvements - Goddard School of Edina
Location: 7201 Washington Avenue: Edina
Rule(s): 4, 5, 11 and 12
Reviewer: BCO

General Background & Comments

The project proposes the removal of the existing parking lot at 7201 Washington Avenue with the reconstruction of a portion of the parking lot, construction of new sidewalks and two children's playground areas for the Goddard School of Edina. The site is located in the southeast quadrant of the intersection of Washington Avenue and Valley View Road. The existing building is to remain with no exterior improvements (additions) shown.

The project site information is:

- Site Area: 41,142 square feet
- Existing Impervious Area: 22,069 square feet
- Proposed Impervious Area: 18,664 square feet
- A net decrease of 3,405 square feet
- 15.4% reduction in the total site impervious area
- Disturbed site impervious area: 16,274 square feet
- 73.7% of the existing site impervious area will be disturbed
- Total disturbed area: 25,250 square feet

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 a parcel or will increase the imperviousness of the parcel by more than 50%, storm water management will apply to the entire project parcel. Otherwise, the storm water requirements will apply only to the disturbed areas and additional impervious area on the parcel. The project will disturb 73.7% (25,250 square feet) of the impervious surface on the property but decrease the existing impervious area by 3,405 square feet – a reduction of 15.4 %. The storm water criteria in Section 4.3.1 applies to the proposed 25,250 square feet of disturbed area of which 18,664 square feet is the proposed site impervious area.

The District's requirements for both storm water management and erosion and sediment control apply to the project because more than 50 cubic yards of material will be disturbed and more than 5000 square feet altered, Rules 4.2.1a and b and 5.2.1a and b.

Silt fence, inlet protection and a rock construction entrance are shown to be installed to provide for erosion control.

Exhibits

1. Permit Application dated September 4, 2019, received September 6, 2019.
2. Plan sheets dated July 3, 2019, latest revision October 16, 2019, prepared by Civil Site Group.
3. Storm water management computations dated October 16, 2019, prepared by Civil Site Group.
4. Soil boring logs dated September 30, 2019 prepared by American Engineering Testing, Inc.

4.0 Stormwater Management

Storm water management for compliance with Rule 4.3.1 is to be provided within an underground storm water management facility (UGSWMF) to be located beneath the parking lot on the south side of the site.

The existing and proposed 2, 10 and 100 year frequency discharges from the site are:

Frequency	Existing Discharge to Washington Avenue c.f.s.	Proposed Discharge to Washington Avenue c.f.s.
2 year	2.3	<1.0
10 year	4.2	2.9
100 year	8.7	7.5

Rule 4.3.1b is met.

A volume retention of 1,711 cubic feet is required for 1.1-inches of runoff from the 18,664 square feet of site impervious area. The UGSWMF will provide 1,766 cubic feet of volume retention. With the on-site underlying soils being classified as a sand (SP) in the area of the proposed UGSWMF, an infiltration rate of 0.8 inches/hour has been used based on the Minnesota Stormwater Manual. Using this infiltration rate, an area of 534 square feet at a maximum depth of 3.2 feet is required for the 1,711 cubic feet of volume retention to be drawn down within 48 hours. An area of 972 square feet is to be provided within the UGSWMF. Rule 4.3.1a is met.

The District's water quality criterion requires a 60% annual removal efficiency for phosphorus and 90% annual removal efficiency for total suspended solids. The results of a MIDS calculator indicate the UGSWMF will provide an annual removal efficiency of 97% for total

suspended solids (156 lbs.) and an annual removal efficiency of 97% for total phosphorus (0.89 lbs.). We are in agreement with the modeling results. Rule 4.3.1c is met.

District Rule 4.3.3c states that all new and reconstructed buildings must be constructed such that the low floor elevation is at least two feet above the 100-year high water elevation or one foot above the emergency overflow of a constructed facility. In addition, 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 or waterbody. The finished floor elevation of the existing building is 896.3 M.S.L. The calculated 100-year frequency high water elevation of the UGSWMF is 892.3 M.S.L. – a separation of 4.0 feet. The low opening, a door on the south side of the building shown on Sheet C 3.0 of the plans submitted, is 896.2 M.S.L., a separation of 3.9 feet. Rule 4.3.3c is met.

The soil boring logs indicate that groundwater was not encountered to a depth of 20 feet, approximately elevation 872.3 M.S.L. The bottom of the proposed UGSWMF is to be elevation 887.5 M.S.L., a separation of 15.2 feet. A minimum separation of 3 feet is required between the bottom of an infiltration facility and the elevation of groundwater.

Pretreatment of storm water as required by Rule 4.3.1a (i) is not shown to be provided. Compliance will be a condition of a permit issued by the District for the project.

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 submitted erosion and sediment control plan includes silt fence at the limits of construction, inlet protection and a rock construction entrance at the entryway onto the site. The project contact is Jamie Szurek, Terra Construction.

11.0 Permit Fees

Fees for the project are:

Rules 2.0-6.0	\$1,500
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12.0 Financial Assurances

Financial Assurances for the project are:

Rule 4.0 Volume Retention: 534 sq. ft. x \$12/sq. ft. = \$6,408	\$6,408
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Chloride Management:	\$5000
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Rule 5: Silt fence: 420 L.F. x \$2.50/L.F. = \$1,050	
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Inlet Protection: 2 x \$100/each = \$200	
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Site restoration: 0.6 acres x \$2500/ acre = \$1,500	\$2,750
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Contingency and Administration	\$3,942
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Findings

The proposed project includes the information necessary, plan sheets and erosion control plan, for review.

1. Rules 4 and 5 are met.

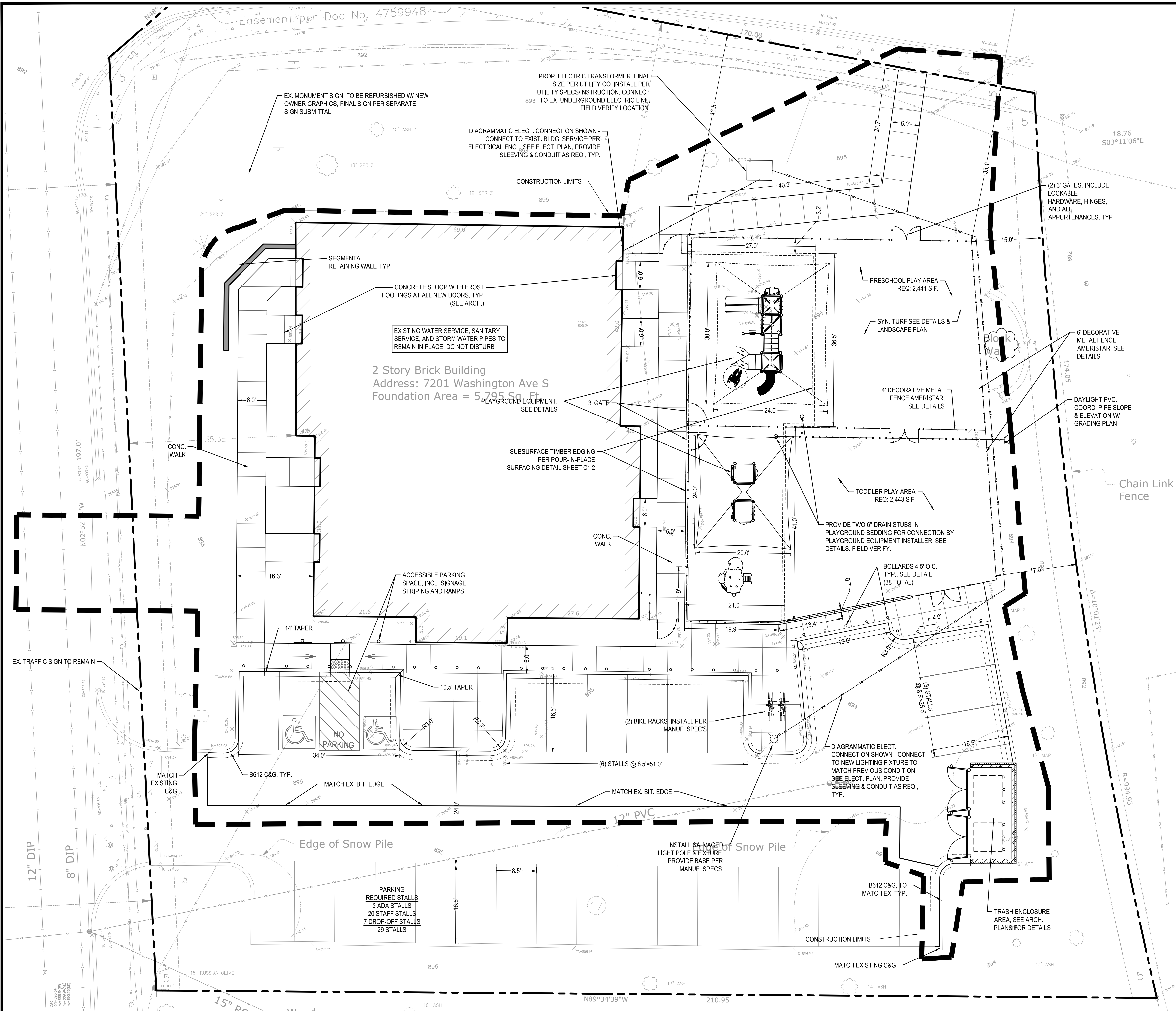
Recommendation

Approval, contingent upon:

1. General Conditions
2. Financial Assurance in the amount of \$18,100 - \$13,100 for storm water management, erosion control and site restoration and \$5,000 for compliance with the chloride management requirements.
3. Submission of documentation that a drainage easement over the storm water-management facility has been submitted to Edina (4.5.4i), if such easements are required by the city.
4. A receipt showing recordation of a maintenance declaration for the on-site storm water management facility. A draft of the declaration must be approved by the District prior to recordation.
5. Submission of a revised plan showing pre-treatment of surface runoff prior to an infiltration facility (UGSWMF) as required by Rule 4.3.1a (i).

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

1. Per Rule 4.5.6, an as-built drawing of the storm water facility, including a stage-volume relationship in tabular form for the underground storm water management facility, conforming to the design specifications as approved by the District must be submitted.
2. 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.
3. For the release of the \$13,100 financial assurance required in Recommendation #2, Rule 12.4.1b requires demonstration and confirmation that the storm water management facilities have been constructed or installed and are functioning as designed and permitted. Verification, through daily observation logs and photographs, must be provided showing the storm water facilities used for volume retention have drawn down within 48 hours from the completion of two 1-inch (approximate) separate rainfall events.



CITY OF EDINA SITE SPECIFIC NOTES:

1. FENCE POSTS ARE TO BE INSTALLED PRIOR TO THE INSTALLATION OF THE POUR-IN-PLACE AND ARTIFICIAL TURF.

OWNER INFORMATION

OWNER: TERRA CONSTRUCTION
21025 COMMERCE BOULEVARD, SUITE 100
RODGERS, MN, 55374

OPERATIONAL NOTES:

SNOW REMOVAL:
ALL SNOW SHALL OCCUR: IN LANDSCAPE AREAS

TRASH REMOVAL:
TRASH REMOVAL SHALL OCCUR: REMOVED FROM
DUMPSTER ON TRASH COLLECTION DAYS.

DELIVERIES:
DELIVERIES SHALL OCCUR: AT BUILDING FRONT
ENTRY. COORDINATE INDOOR PACKAGE STORAGE
W/ PROPERTY OWNER.

SITE LAYOUT NOTES:

1. CONTRACTOR SHALL VERIFY LOCATIONS AND LAYOUT OF ALL SITE ELEMENTS PRIOR TO BEGINNING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO, LOCATIONS OF EXISTING AND PROPOSED PROPERTY LINES, EASEMENTS, SETBACKS, UTILITIES, BUILDINGS AND PAVEMENTS. CONTRACTOR IS RESPONSIBLE FOR FINAL LOCATIONS OF ALL ELEMENTS FOR THE SITE. ANY REVISIONS REQUIRED AFTER COMMENCEMENT OF CONSTRUCTION, DUE TO LOCAL ADJUSTMENTS SHALL BE CORRECTED AT NO ADDITIONAL COST TO OWNER. ADJUSTMENTS TO THE LAYOUT SHALL BE APPROVED BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF MATERIALS. STAKE LAYOUT FOR APPROVAL.
2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, INCLUDING A RIGHT-OF-WAY AND STREET OPENING PERMIT.
3. THE CONTRACTOR SHALL VERIFY RECOMMENDATIONS NOTED IN THE GEO TECHNICAL REPORT PRIOR TO INSTALLATION OF SITE IMPROVEMENT MATERIALS.
4. CONTRACTOR SHALL FIELD VERIFY COORDINATES AND LOCATION DIMENSIONS OF THE BUILDING AND STAKE FOR REVIEW AND APPROVAL BY THE OWNERS REPRESENTATIVE PRIOR TO INSTALLATION OF FOOTING MATERIALS.
5. LOCATIONS OF STRUCTURES, ROADWAY PAVEMENTS, CURBS AND GUTTERS, BOLLARDS, AND WALKS ARE APPROXIMATE AND SHALL BE STAKED IN THE FIELD, PRIOR TO INSTALLATION, FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT.
6. CURB DIMENSIONS SHOWN ARE TO FACE OF CURB. BUILDING DIMENSIONS ARE TO FACE OF CONCRETE FOUNDATION. LOCATION OF BUILDING IS TO BUILDING FOUNDATION AND SHALL BE AS SHOWN ON THE DRAWINGS.
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OR SAMPLES AS SPECIFIED FOR REVIEW AND APPROVAL BY THE ENGINEER/LANDSCAPE ARCHITECT PRIOR TO FABRICATION FOR ALL PREFABRICATED SITE IMPROVEMENT MATERIALS SUCH AS, BUT NOT LIMITED TO THE FOLLOWING, FURNISHINGS, PAVEMENTS, WALLS, RAILINGS, BENCHES, FLAGPOLES, LANDING PADS FOR CURB RAMPS, AND LIGHT AND POLES. THE OWNER RESERVES THE RIGHT TO REJECT INSTALLED MATERIALS NOT PREVIOUSLY APPROVED.
8. PEDESTRIAN CURB RAMPS SHALL BE CONSTRUCTED WITH TRUNCATED DOME LANDING AREAS IN ACCORDANCE WITH A.D.A. REQUIREMENTS-SEE DETAIL.
9. CROSSWALK STRIPING SHALL BE 24" WIDE WHITE PAINTED LINE, SPACED 48" ON CENTER PERPENDICULAR TO THE FLOW OF TRAFFIC. WIDTH OF CROSSWALK SHALL BE 5' WIDE. ALL OTHER PAVEMENT MARKINGS SHALL BE WHITE IN COLOR UNLESS OTHERWISE NOTED OR REQUIRED BY ADA OR LOCAL GOVERNING BODIES.
10. SEE SITE PLAN FOR CURB AND GUTTER TYPE. TAPER BETWEEN CURB TYPES-SEE DETAIL.
11. ALL CURB RADI ARE MINIMUM 3' UNLESS OTHERWISE NOTED.
12. CONTRACTOR SHALL REFER TO FINAL PLAT FOR LOT BOUNDARIES, NUMBERS, AREAS AND DIMENSIONS PRIOR TO SITE IMPROVEMENTS.
13. FIELD VERIFY ALL EXISTING SITE CONDITIONS, DIMENSIONS.
14. PARKING IS TO BE SET PARALLEL OR PERPENDICULAR TO EXISTING BUILDING UNLESS NOTED OTHERWISE.
15. ALL PARKING LOT PAINT STRIPPING TO BE WHITE, 4" WIDE TYP.
16. BITUMINOUS PAVING TO BE "LIGHT DUTY" UNLESS OTHERWISE NOTED. SEE DETAIL SHEETS FOR PAVEMENT SECTIONS.
17. ALL TREES THAT ARE TO REMAIN ARE TO BE PROTECTED FROM DAMAGE WITH A CONSTRUCTION FENCE AT THE DRIP LINE. SEE LANDSCAPE DOCUMENTS.

SITE AREA TABLE:

SITE AREA CALCULATIONS	EXISTING CONDITION	PROPOSED CONDITION
BUILDING COVERAGE	5,790 SF 14.1%	5,747 SF 14.0%
ALL PAVEMENTS	16,279 SF 39.6%	12,917 SF 31.4%
ALL NON-PAVEMENTS	19,073 SF 46.4%	22,478 SF 54.6%
TOTAL SITE AREA	41,142 SF 100.0%	41,142 SF 100.0%
IMPERVIOUS SURFACE		
EXISTING CONDITION	22,069 SF 53.6%	
PROPOSED CONDITION	18,664 SF 45.4%	
DIFFERENCE (EX. VS PROP.)	-3,405 SF -8.3%	

SITE PLAN LEGEND:

- BITUMINOUS PAVEMENT. SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & WEAR COURSE DEPTH, SEE DETAIL.
- CONCRETE PAVEMENT AS SPECIFIED (PAD OR WALK) SEE GEOTECHNICAL REPORT FOR AGGREGATE BASE & CONCRETE DEPTHS, SEE DETAIL.
- PROPERTY LINE
- CONSTRUCTION LIMITS
- CURB AND GUTTER-SEE NOTES (T.O.) TIP OUT GUTTER WHERE APPLICABLE-SEE PLAN
- TRAFFIC DIRECTIONAL ARROW PAVEMENT MARKINGS
- SIGN AND POST ASSEMBLY. SHOP DRAWINGS REQUIRED.
NP = ACCESSIBLE SIGN
NP = NO PARKING FIRE LANE
ST = STOP
CP = COMPACT CAR PARKING ONLY



THE GODDARD SCHOOL

7201 WASHINGTON AVE. EDINA, MN, 55439

TERRA CONSTRUCTION

21025 COMMERCE BOULEVARD, SUITE 100

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.

Matthew R. Pavlek
DATE: 07/03/19 LICENSE NO. 44263

ISSUE/SUBMITTAL SUMMARY
DATE DESCRIPTION
7/3/19 CONSTRUCTION DOCUMENTS
7/8/19 CITY SUBMITTAL
8/4/19 CITY RESUBMITTAL
10/16/19 WATERSHED SUBMITTAL

DRAWN BY: WB REVIEWED BY: RJB
PROJECT NUMBER: 19046

REVISION SUMMARY
DATE DESCRIPTION

SITE PLAN

C2.0

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