

Permit Application No.: 17-561

Rules: Erosion Control, Stormwater Management

Applicant: **Edina Public Schools**  
Project: **South View Middle School Addition and Bus Parking**  
Location: **4725 South View Lane, Edina**

Received: **10/17/2017**  
Complete: **11/27/2017**  
Noticed: **February 8, 2018**  
60-Day Extension: **1/19/18**

**Recommendation:**

Approval of MCWD permit application on the following conditions:

1. Submission of documentation of submission of NPDES permit application;
2. Submission of amendment to existing programmatic agreement to include maintenance for underground stormwater facilities.

**Background**

Edina Public Schools has applied for a Minnehaha Creek Watershed District permit for Erosion Control and Stormwater Management for the construction of a bus parking area and a small building addition at South View Middle School located at 4725 South View Lane in the City of Edina. The work is proposed for the same site as the Edina Community Center complex, which underwent a series of site improvements in 2016 that were permitted under the Erosion Control and Stormwater Management rules. The presently proposed project was evaluated in aggregate with the prior-permitted work under the common scheme of development framework in section 2 of the Stormwater Management Rule.

No variances from MCWD rule provisions are needed for approval of the permit. During the Public Notice period, a member of the public expressed concern that the proposed redevelopment will exacerbate the neighborhood's localized flooding issue which has been ongoing and is identified in the City of Edina's Surface Water Management Plan. Through correspondence with Staff, the resident requested that the permit be considered by the Board of Managers. The applicants have submitted all exhibits, plans, and materials necessary to analyze compliance with MCWD rules.

**District Rule Summary**

Erosion Control

The District exercises regulatory authority for erosion control in the City of Edina.

The Erosion Control rule is applicable for any project exceeding 5,000 square feet of land disturbance or 50 cubic yards of excavation or fill. The proposed project involves approximately 2 acres of land disturbance, therefore the Erosion Control rule is triggered.

The Applicant has submitted an erosion control plan which provides best management practices (BMPs) to achieve erosion and sediment control including a rock construction entrance, silt fence and inlet protection where necessary. A vegetative stabilization plan including the incorporation of six-inches of topsoil into underlying soils prior to final stabilization has also been provided. The Project's concrete washout will be handled off-site. A Minnesota Pollution Control Agency National Discharge Elimination System (NPDES)/State Disposal System (SDS) stormwater permit for construction activity will be obtained by the applicant prior to the start of construction as mentioned in the Conditions listed in this report.

Erosion control practices meet District requirements.

Stormwater Management

The District exercises regulatory authority for Stormwater Management in the City of Edina.

The Stormwater Management rule is applicable anytime there is new impervious surface or replacement of existing impervious surface. The regulatory framework in the rule provides that "the requirements applicable to [proposed land-disturbing] activity under this rule will be determined with respect to all development since January 2005. The 2016 work involved disturbance of 20 percent of the site and an increase of 3.7 acres of imperviousness from the then-existing 28.7 acres. No other permits were issued by the District since January 2005. The presently proposed work will involve disturbance of 5 percent of the site and will result in a 0.4-acre

increase of impervious surface, therefore the rule is triggered. The aggregate impacts of work since January 2005 on the site are shown in Table 1.

For sites undergoing redevelopment that are greater than one acre with less than 40% site disturbance and less than a 50% increase in impervious surface, volume control, rate control, and phosphorus control requirements apply to the additional impervious surfaces. As shown in Table 1, the additional disturbance proposed, when aggregated with prior disturbance, will amount to less than 40% site disturbance and an increase of impervious surface less than 50%, therefore the present project is required to treat only the 0.4 acres of additional impervious surface. The impervious area created in 2016 is treated through a series of filtration basins and rate control is provided through storage beneath an artificial turf field.

Table 1: Treatment Scope Summary

Size of Site (ac)	Site Drains To	Existing Impervious (ac)	Proposed Impervious (ac)	Disturbance Area (ac)
46.4	Minnehaha Creek through stormsewer	28.7	32.8	11.6

To meet the District’s volume control requirement, the applicant must abstract the first 1 inch of rainfall over the additional impervious area. To meet the District requirements, the project is required to provide 1,337 cf of abstraction. Per Appendix A of the Rule, filtration provides a 50% abstraction credit. To achieve this, the applicant is proposing to install an underground filtration system beneath the redeveloped bus parking area, providing 9,132 cf of filtration volume. The underground system will discharge to the stormsewer on South View Lane, which outlets to Minnehaha Creek. The underground system is designed to draw down within 48 hours. The building addition is being constructed on existing impervious area and is not required to provide volume control. The filtration practices satisfy the volume requirement. By providing the required volume abstraction via filtration, the District’s Phosphorus Control requirement is met according to Section 3(a)(2).

The rate control requirement mandates that there can be no net increase in the peak runoff rates for the 1, 10, and 100 year events. Runoff from the site is directed to the stormsewers in South View Lane and Concord Avenue, which are the downgradient property site boundaries for the purposes of rate control analysis. The peak runoff rates for all storm events decrease to both stormsewer inlets. As shown in Table 2, the peak runoff rates are shown to decrease for both inlets. The District’s rate control requirement is met.

Table 2: Run off rates (cubic feet per second)

	1 year event		10 year event		100 year event	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
South View Lane	11.9	11.0	23.1	21.0	42.9	38.5
Concord Avenue	40.9	40.7	84.9	84.6	167.5	166.8
Total	47.1	46.4	97.2	95.5	192.1	189.2

The high water elevation section requires two vertical feet of separation between the low openings of structures and the 100-year high water elevations of stormwater BMPs. The high water elevation for the underground system is 882.3 and the low opening to the building is 886. Therefore, the high water elevation section of the rule is met.

The impacts to downstream waterbodies regulates new point sources to waterbodies and the allowable bounce and inundation for downstream waterbodies. The project does not propose a new point source. The downstream waterbody is Minnehaha Creek, which is not subject to the bounce and inundation requirements in Table 1 of the rule.

The maintenance requirement of the rule requires public entities to provide maintenance agreements for all stormwater facilities. Edina Public Schools entered into an ongoing cooperative agreement with the District on May 12, 2016 for maintenance of stormwater facilities under existing and future permits. To meet the maintenance requirement of the rule, the cooperative agreement will need to be amended to include the proposed BMPs.

The proposed stormwater management plan meets the requirements of the District's Stormwater Management Rule.

Resident Concern

As mentioned in the introduction, a member of the public expressed concern regarding flooding in the area around proposed project. While the District may not require applicants to incorporate additional treatment criteria, staff and the District Engineer evaluated the proposal for impacts to localized flooding. Substantial flooding occurs upstream and downstream from the proposed new impervious area. The City of Edina has identified flooding in the 10 and 100 year events due to undersized storm sewers in the residential area north of the school (Area A) and at the intersection of Concord Avenue and 58<sup>th</sup> Street to the east of the school (Area B) as shown in Attachment 4. The total runoff volume for the site into the stormsewer will be maintained or reduced at all storm events, see Table 3 below. The proposed project will therefore maintain or reduce runoff rates and volumes to the downstream stormsewers lacking capacity.

Table 3: Run off volumes (acre feet)

	1 year event		10 year event		100 year event	
	Existing	Proposed	Existing	Proposed	Existing	Proposed
South View Lane	0.8	0.8	1.6	1.5	3.0	3.0
Concord Avenue	4.4	4.4	9.7	9.7	20.0	20.0
Total	5.2	5.2	11.3	11.2	23.1	23.0

Summary:

Edina Public Schools is proposing a building addition and bus parking area that will trigger the District's Erosion Control and Stormwater Management rules. The project as proposed meets the applicable requirements under each of these District rules. Staff recommends approval of the MCWD permit application with the conditions provided above.

Attachments:

1. Permit Application
2. Site Location
3. Site Plan
4. Flooding Exhibit
5. Previously Permitted Work

17-561

**WATER RESOURCE PERMIT APPLICATION FORM**

Use this form to notify/apply to the Minnehaha Creek Watershed District (MCWD) of a proposed project or work which may fall within their jurisdiction. Fill out this form completely and submit with your site plan, maps, etc. to the MCWD at:  
15320 Minnetonka Blvd. Minnetonka, MN 55345.

Keep a copy for your records.

**YOU MUST OBTAIN ALL REQUIRED AUTHORIZATIONS BEFORE BEGINNING WORK.**

1. Name of each property owner: Edina Public Schools  
Mailing Address: 5701 Normandale Road City: Edina State: MN Zip: 55424  
Email Address: eric.hamilton@edinaschools.org Phone: 612-247-5683 Fax: \_\_\_\_\_

2. Property Owner Representative Information (not required) (licensed contractor, architect, engineer, etc...)  
Business Name: Anderson-Johnson Associates Representative Name: Jared Lee  
Business Address: 7575 Golden Valley Road - Suite 200 City: Minneapolis State: MN Zip: 55427  
Email Address: jared@ajainc.net Phone: 763.544.7129 Fax: \_\_\_\_\_

3. Project Address: 4725 South View Lane City: Edina  
State: MN Zip: 55424 Qtr Section(s): \_\_\_\_\_ Section(s): \_\_\_\_\_ Township(s): \_\_\_\_\_ Range(s): \_\_\_\_\_  
Lot: \_\_\_\_\_ Block: \_\_\_\_\_ Subdivision: \_\_\_\_\_ PID: 1902824230001

4. Size of project parcel (square feet or acres): 46.137  
Area of disturbance (square feet): 85,464 Volume of excavation/fill (cubic yards): 13,036 cy  
Area of existing impervious surface: 1,315,544 Area of proposed impervious surface: 2,009,740  
Length of shoreline affected (feet): \_\_\_\_\_ Waterbody (& bay if applicable): \_\_\_\_\_

5. Type of permit being applied for (Check all that apply):  
 EROSION CONTROL  WATERBODY CROSSINGS/STRUCTURES  
 FLOODPLAIN ALTERATION  STORMWATER MANAGEMENT  
 WETLAND PROTECTION  APPROPRIATIONS  
 DREDGING  ILLICIT DISCHARGE  
 SHORELINE/STREAMBANK STABILIZATION

6. Project purpose (Check all that apply):  
 SINGLE FAMILY HOME  MULTI FAMILY RESIDENTIAL (apartments)  
 ROAD CONSTRUCTION  COMMERCIAL or INSTITUTIONAL  
 UTILITIES  SUBDIVISIONS (include number of lots)  
 DREDGING  LANDSCAPING (pools, berms, etc.)  
 SHORELINE/STREAMBANK STABILIZATION  OTHER (DESCRIBE): \_\_\_\_\_

7. NPDES/SDS General Stormwater Permit Number (if applicable): \_\_\_\_\_

8. Waterbody receiving runoff from site: \_\_\_\_\_

9. Project Timeline: Start Date: 4/2018 Completion Date: 9/2018

Permits have been applied for: City  County  MN Pollution Control Agency  DNR  COE   
Permits have been received: City  County  MN Pollution Control Agency  DNR  COE

By signing below, I hereby request a permit to authorize the activities described herein. I certify that I am familiar with MCWD Rules and that the proposed activity will be conducted in compliance with these Rules. I am familiar with the information contained in this application and, to the best of my knowledge and belief, all information is true, complete and accurate. I understand that proceeding with work before all required authorizations are obtained may be subject to federal, state and/or local administrative, civil and/or criminal penalties.

Eric Hamilton  
Signature of Each Property Owner

10-17-17  
Date

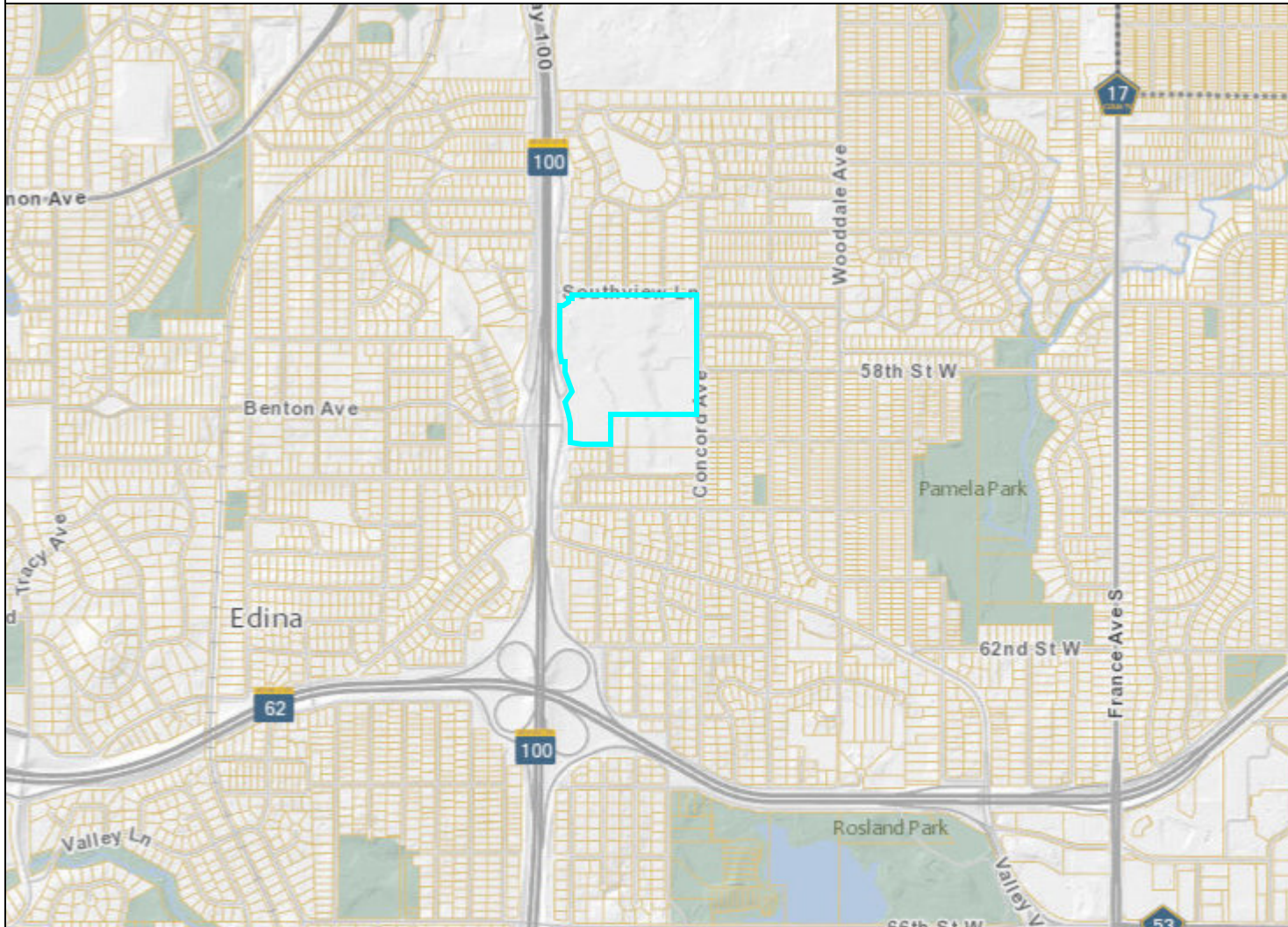




# Hennepin County Natural Resources Map

## Legend

Date: 2/20/2018



PID: 1902824230001  
Address: 5701 NORMANDALE RD,  
EDINA  
Owner Name: SCHOOL DIST NO 273  
Acres: 35.42

Comments:

1 inch = 1,600 feet



This data (i) is furnished 'AS IS' with no representation as to completeness or accuracy; (ii) is furnished with no warranty of any kind; and (iii) is not suitable for legal, engineering or surveying purposes. Hennepin County shall not be liable for any damage, injury or loss resulting from this data.

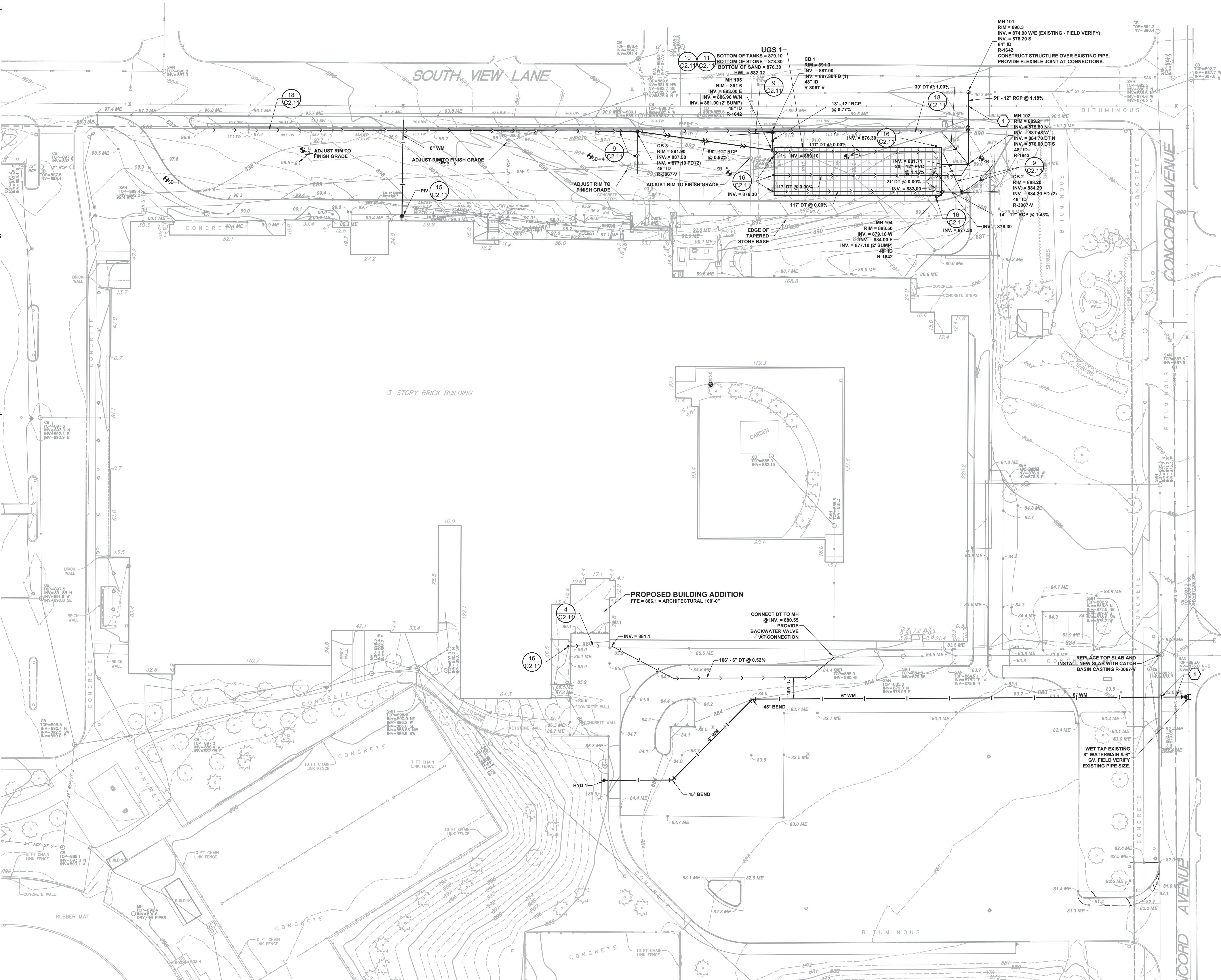
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**NOTES**

- REFER TO SHEET C1.41, GRADING PLAN, FOR GENERAL NOTES.
- ALL WATERMAIN PIPE SHALL BE DIP, CLASS 52. ALL WATERMAIN SHALL HAVE MINIMUM 8'-0" BURY (TOP OF PIPE TO FINISH GRADE). DIP SHALL BE ENCASED WITH POLYETHYLENE FILM CONFORMING TO ASTM D 1248-88B.
- ALL STORM SEWER PIPE SHALL BE RCP, CLASS III (MIN.), WITH FLEXIBLE WATERTIGHT JOINTS IN ACCORDANCE WITH ASTM C361 OR PVC PIPE (ASTM D3034, SDR 35) INSTALLED IN ACCORDANCE WITH ASTM D2321, UNLESS OTHERWISE NOTED.
- FLEXIBLE JOINTS AT STORM SEWER PIPE CONNECTIONS TO STRUCTURES:
  - IN ACCORDANCE WITH MINNESOTA PLUMBING CODE, PROVIDE FLEXIBLE JOINTS AT ALL PIPE CONNECTIONS TO ALL STORM SEWER STRUCTURES.
  - ACCEPTABLE MANUFACTURERS / PRODUCTS:
    - FERNCO, "CONCRETE MANHOLE ADAPTORS" OR "LARGE-DIAMETER WATERSTOPS"
    - PRESS-SEAL, WATERSTOP GROUTING RINGS
    - OR APPROVED EQUAL.
- WATERMAIN SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY MANHOLE, CATCH BASIN, STORM SEWER, SANITARY SEWER, DRAINTILE OR OTHER POTENTIAL SOURCE FOR CONTAMINATION PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
- ANY MANHOLE, CATCH BASIN, STORM SEWER, SANITARY SEWER, DRAINTILE OR OTHER POTENTIAL SOURCE FOR CONTAMINATION SHALL BE INSTALLED AT LEAST 10 FEET HORIZONTALLY FROM ANY WATERMAIN PER MINNESOTA PLUMBING CODE. THIS ISOLATION DISTANCE SHALL BE MEASURED FROM THE OUTER EDGE OF THE PIPE TO THE OUTER EDGE OF THE CONTAMINATION SOURCE (OUTER EDGE OF STRUCTURES OR PIPING OR SIMILAR).
- LOCATE ALL EXISTING UTILITIES, VERIFY LOCATION, SIZE AND INVERT ELEVATION OF ALL EXISTING UTILITIES. VERIFY LOCATIONS, SIZES AND ELEVATIONS OF SAME BEFORE BEGINNING CONSTRUCTION.
- PRIOR TO CONSTRUCTION OF PROPOSED BUILDING UTILITY SERVICES (STORM, SANITARY SEWER, WATERMAIN), VERIFY ALL PROPOSED BUILDING UTILITY SERVICE PIPE SIZES, LOCATIONS AND ELEVATIONS WITH MECHANICAL PLANS. COORDINATE CONSTRUCTION AND CONNECTIONS WITH MECHANICAL CONTRACTOR.
- CONTRACTOR SHALL STAKE LIMITS OF WALKS AND CURBING PRIOR TO INSTALLATION OF GATE VALVES, CATCH BASINS AND MANHOLES. GATE VALVE AND MANHOLE LOCATIONS SHALL BE ADJUSTED TO AVOID PLACEMENT OF THESE STRUCTURES IN WALKS AND CURB AND GUTTER. CURB AND GUTTER SHALL BE STAKED TO ALLOW LOW CURB INLET TYPE CATCH BASINS TO BE PROPERLY LOCATED IN LINE WITH CURBING.

**LEGEND**

- REFERENCE KEY TO SITE DETAILS  
DETAIL ID NUMBER (TOP)  
DETAIL SHEET NUMBER (BOTTOM)
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION  
ME = MATCH EXISTING  
EOF = EMERGENCY OVERFLOW  
TW = FINISH GRADE AT HIGH SIDE OF WALL  
BW = FINISH GRADE AT LOW SIDE OF WALL
- PROPOSED GRADING LIMITS
- PROPOSED STORM SEWER
- PROPOSED WATERMAIN
- PROPOSED DRAINTILE / FINGER DRAIN
- PROPOSED MANHOLE (MH)
- PROPOSED CATCH BASIN (CB)
- PROPOSED UNDERGROUND STORAGE UNITS
- PROPOSED HYDRANT (HYD)
- PROPOSED GATE VALVE (GV)
- PROPOSED POST INDICATOR VALVE (PIV)
- PROVIDE MINIMUM 18" VERTICAL SEPARATION AT CROSSING - PROVIDE VERTICAL BENDS IN WATERMAIN AS REQUIRED TO ACCOMPLISH
- PROPOSED BUILDING STOOP - REFER TO ARCHITECTURAL PLANS
- PROPERTY LINE



**SOUTH VIEW MIDDLE SCHOOL SITE IMPROVEMENTS**

**EDINA PUBLIC SCHOOLS**  
4725 South View Ln.  
Edina, Minnesota 55424



**WOLD ARCHITECTS AND ENGINEERS**  
332 Minnesota Street, Suite W2000  
Saint Paul, MN 55101

ANDERSON-JOHNSON ASSOCIATES, INC. **AJA**  
LANDSCAPE ARCHITECTURE • SITE PLANNING • CIVIL ENGINEERING  
700 GARDEN ROAD • SUITE 200 • MINNEAPOLIS, MN 55415  
FAX: 763-444-8811

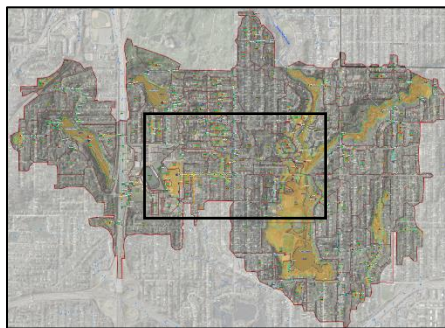
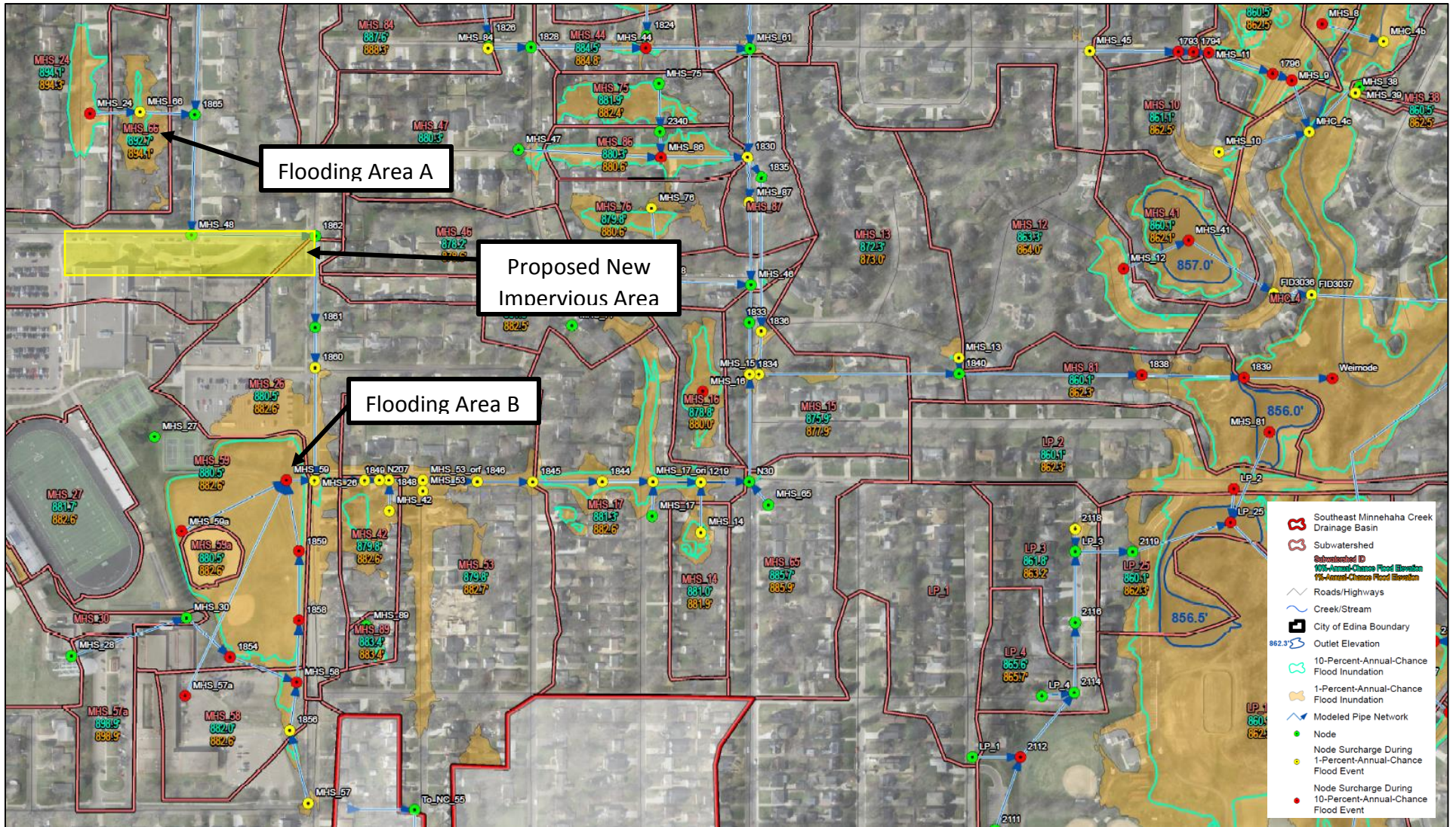
I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly licensed PROFESSIONAL ENGINEER MINNESOTA

*David A. Rey*  
DAVID A. REY  
Registration Number 40180 Date 09/28/17

Revisions	Date	Num
ADDENDUM 2	October 12, 2017	1
ADDENDUM 3	October 18, 2017	2

Comm: 152130A  
Date: 09/28/2017  
Drawn: JCL  
Check: DAR

**UTILITY PLAN**



Flooding Areas in the South Minnehaha Creek Subwatershed  
 Excerpt from Edina Surface Water Management Plan (2018 DRAFT)

**EDINA COMMUNITY CENTER  
OVERALL 2016 SITE  
IMPROVEMENTS**

5701 Normandale Road  
Edina, MN 55424

Independent School  
District #273  
5701 Normandale Road  
Edina, Minnesota 55424

**WOLD**  
architects  
engineers  
www.woldae.com

332 Minnesota Street  
Suite W Two Thousand  
Saint Paul, MN 55101

tel 651 227 7773  
fax 651 223 5649  
mail@woldae.com

ANDERSON-JOHNSON  
ASSOCIATES,  
P.C.

**AJA**

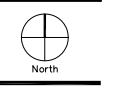
LANDSCAPE ARCHITECTURE • SITE PLANNING • CIVIL ENGINEERING  
275 HUNTER STREET, SUITE 200 • ST. PAUL, MN 55103 • 651.766.1129

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.

DAYVID A. REY  
Registration Number 40160 Date 02/14/2016

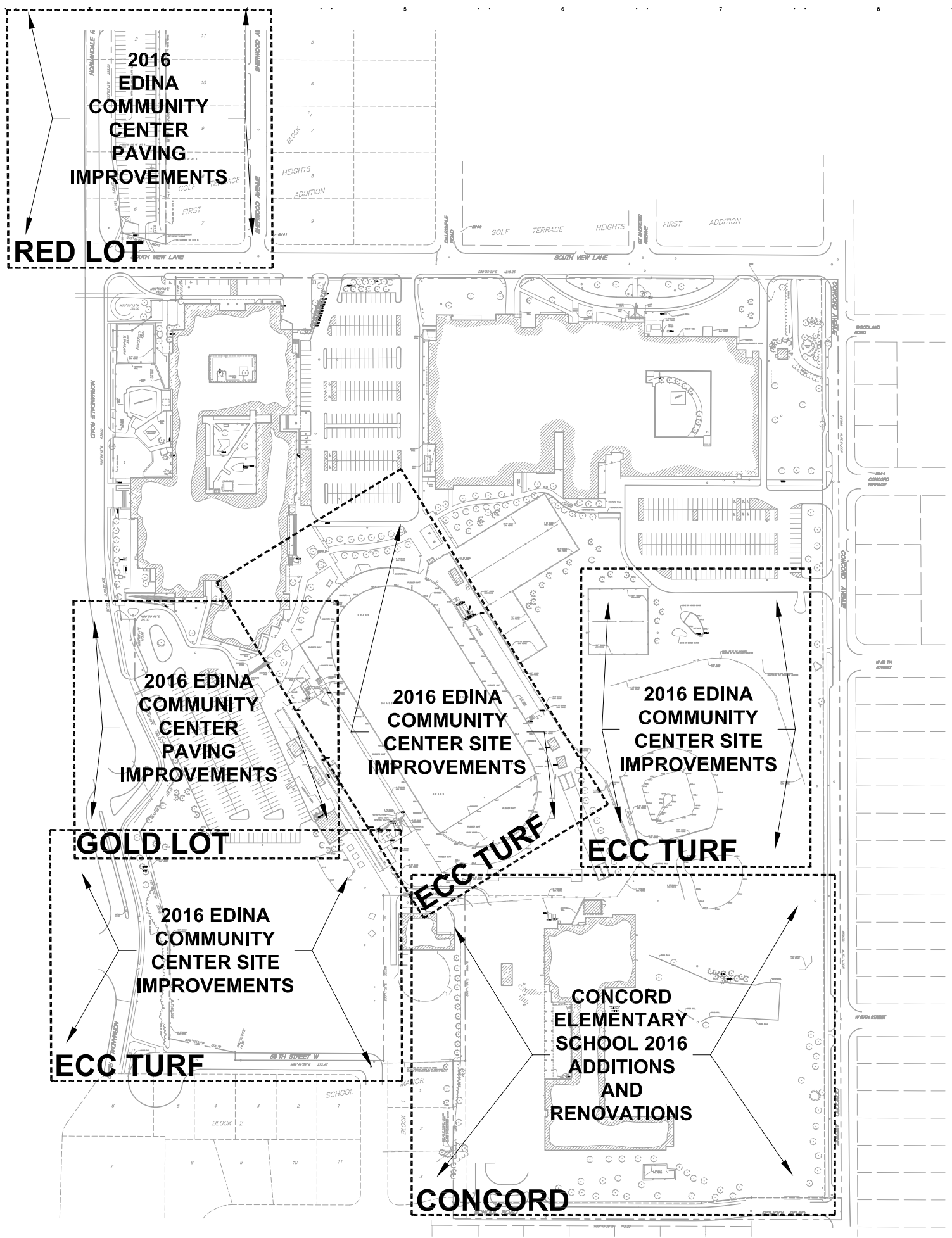
Description	Revisions	Date	Num

Comm: 152132  
Date: 2/12/2016  
Drawn: JDL  
Check: DAR



**OVERALL  
SITE/ PROJECT  
LEGEND**

Scale: 1"=80'



MN

A