

# ANN ARBOR PUBLIC SCHOOLS THURSTON ELEMENTARY SCHOOL 2300 PRAIRIE STREET ANN ARBOR, MICHIGAN

## REQUIRED STATEMENTS

### PROJECT DESCRIPTION

SITE WORK AS IT RELATES TO THE THURSTON ELEMENTARY SCHOOL INCLUDES THE FOLLOWING:

THE WORK ON THE SUBJECT SITE CONSISTS OF THE INSTALLATION OF (4) MODULAR UNITS THAT WHEN ASSEMBLED TOGETHER WILL CREATE A 4,844 SQUARE FOOT (4) CLASSROOM BUILDING WITH RESTROOMS, STEPS, RAMPS AND COVERED WALKWAYS. THE MODULAR BUILDING WILL BE TIED INTO EXISTING WATER, SEWER, AND ELECTRICAL. (REFER TO SHEET #4)

### NATURAL FEATURES IMPACT

#### WETLANDS, SOIL EROSION, AND FLOOD ZONE

NO WETLANDS, WOODLANDS, OR FLOOD-PLAIN WILL BE IMPACTED BY THE PROJECT. THE PROJECT DOES NOT CONTAIN STEEP SLOPES OR NEGATIVE IMPACT TO WATER RESOURCES.

#### LANDMARK TREES

TREES WITHIN THE FOOTPRINT OF THE MODULAR BUILDING WILL BE RELOCATED. NEW LOCATION WILL BE DETERMINED BY THE OWNER AT A LATER DATE.

#### POLLUTION OR CONTAMINATION ON SUBJECT SITE

THERE ARE NO KNOWN POLLUTION FOR CONTAMINATES ON THE SUBJECT SITE.

### SOIL EROSION AND SEDIMENTATION PLAN

THE STATE OF MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS BUREAU OF CONSTRUCTION CODES / PLAN REVIEW DIVISION DOES NOT REQUIRE SOIL EROSION AND SEDIMENTATION CONTROL, GENERALLY WHEN LESS THAN ONE ACRE IS DISTURBED. THE DISTURBED AREA WILL BE LESS THAN ONE ACRE.

### CONSTRUCTION STORM WATER PROGRAM

TO BE DETERMINED.

### PROJECT MANAGEMENT

#### TRAFFIC IMPACT

TO BE DETERMINED.

#### DRIVEWAYS

NO EXISTING DRIVEWAYS WILL BE IMPACTED ON THE SUBJECT SITE.

#### NOISE CONTROL

THE MAJORITY OF THE CONSTRUCTION ACTIVITIES ARE DONE OFF SITE AT THE MODULAR BUILDING MANUFACTURER'S LOCATION. THE EQUIPMENT USED ON THE SUBJECT SITE WILL CONSIST OF A BACK HOE, TRUCK, CONCRETE MIXER, GENERATOR, COMPRESSORS, POWER SAWS, AND ELECTRIC DRILLS. THE AVERAGE SOUND LEVEL WILL BE WILL BE LESS THAN THE OSHA (AT WORKERS EAR) LEVEL OF 90.

## LEGAL DESCRIPTION

BEG W 1/4 COR SEC 14, T2S R6E TH N 89 DEG 08 MIN 20 SEC E 660.75 FT TH S 1 DEG 12 MIN E 1591.32 FT TH S 89 DEG 08 MIN 20 SEC W 610.0 FT TH NLY 101.96 FT ALG ARC OF CIR CURVE CONCAVE SW R=6602.95 FT CHORD N 29 DEG 12 MIN 20 SEC W 101. 84 FT TH N 34 DEG 03 MIN W 5.62 FT TH N 1 DEG 11 MIN 40 SEC W 1496.99 FT TO POB PART W 1/2 SEC 14 T2S R6E ALSO OUTLOT C NORTH CAMPUS HEIGHTS ALSO LOTS 121 122 123 124 & 125 NORTH CAMPUS HEIGHTS NO 3 EXC BEG AT NW COR OF SD LOT 125 TH NE 144.09 FT TH S 106 FT TH WLY TO POB

### OWNER

ANN ARBOR PUBLIC SCHOOLS  
2555 S. STATE ST.  
ANN ARBOR, MI 48104  
734.995.2043  
ATTN: JENNIFER HEIN

### OWNER'S ARCHITECT

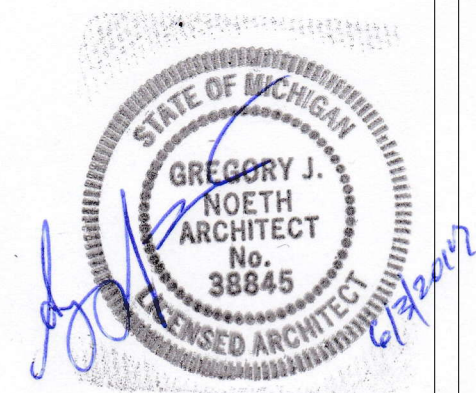
MITCHELL AND MOUAT ARCHITECTS  
113 S. FOURTH AVE.  
ANN ARBOR, MI 48104  
734.662.6070  
ATTN: KEVIN STANSBURY

### GENERAL CONTRACTORS ARCHITECT

GREGORY NOETH ARCHITECT  
1790 SARATOGA AVE.  
CLEVELAND, OH 44109  
216.789.2086  
ATTN: GREG NOETH

### GENERAL CONTRACTOR

INNOVATIVE MODULAR SOLUTION  
30803 OLD US HWY 33  
ELKHART, IN 46516  
574.830.8237  
ATTN: JASON SHANNON



### MICHIGAN DESIGN CODES:

2014 MICHIGAN ELECTRICAL CODE /2014 NEC  
2012 MICHIGAN BUILDING CODE (IBC)  
2012 MICHIGAN MECHANICAL CODE (IMC)  
2012 MICHIGAN PLUMBING CODE (IPC)  
2009 MICHIGAN UNIFORM ENERGY CODE 10A 2007 ASHRAE  
AMERICAN WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES  
MICHIGAN SCHOOL BULLETIN #412 (FOR CLASSROOMS ONLY)

## DRAWING INDEX

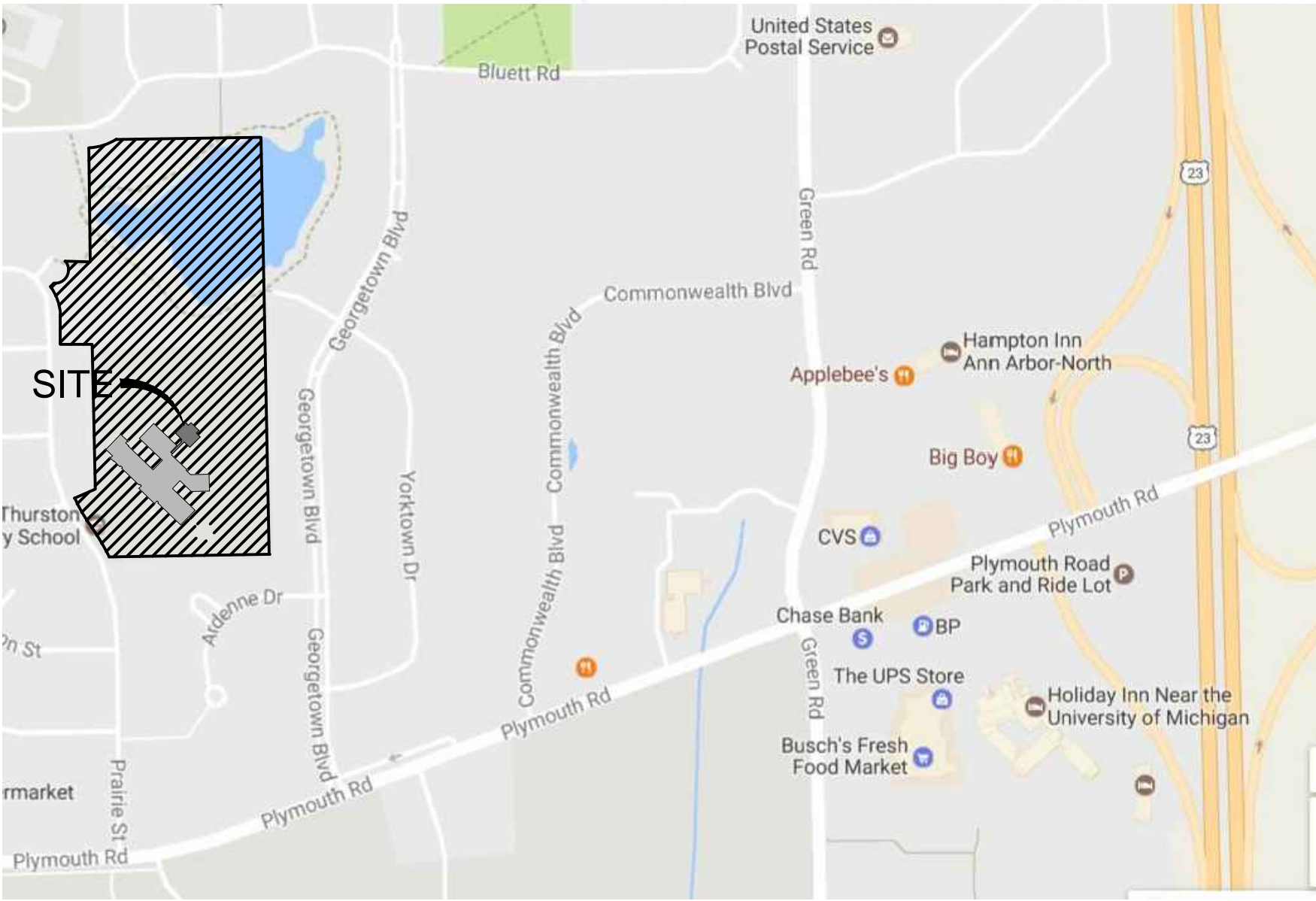
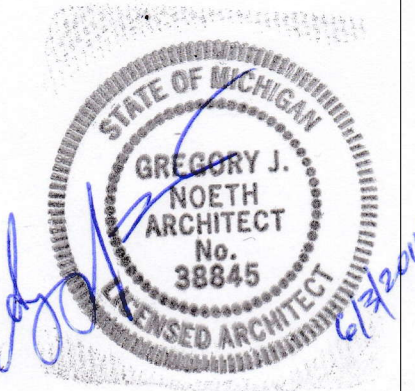
SHEET #	DESCRIPTION
1.	COVER SHEET
2.	OVERALL SITE PLAN
3.	EXISTING CONDITIONS & REMOVAL PLAN
4.	OVERALL UTILITY PLAN
5.	EROSION CONTROL PLAN
6.	EROSION CONTROL NOTES & DETAILS
7.	PROJECT LANDSCAPE PLAN
8.	FIRE PROTECTION PLAN
9.	BOUNDARY SURVEY

Local Governmental Agency to Complete This Section					
ENVIRONMENTAL CONTROL APPROVALS					
	REQUIRED?	APPROVED	DATE	NUMBER	BY
A - Zoning	<input type="checkbox"/> Yes <input type="checkbox"/> No				
B - Fire District - (Refer to Fire Prevention Plan Sheet # 8)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
C - Pollution Control - (Refer to Notes on Cover Sheet # 1)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
D - Noise Control - (Refer to Cover Notes on Sheet # 1)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
E - Soil Erosion - (Refer to Erosion Control Plan Sheets # 5 & 6)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
F - Flood Zone - (Refer to Cover Notes on Sheet # 1)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
G - Water Supply - (Refer to Utility Plan Sheet # 4)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
H - Sewer - (Refer to Cover Notes on Sheet # 4)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
I - Variance Granted	<input type="checkbox"/> Yes <input type="checkbox"/> No				
J - Other	<input type="checkbox"/> Yes <input type="checkbox"/> No				

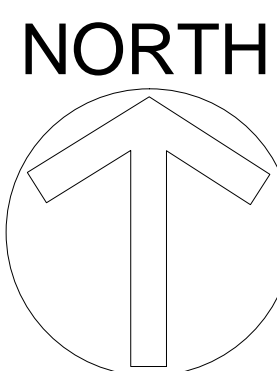
# COVER SHEET

SCALE:NONE





VICINITY MAP



# OVERALL SITE PLAN

SCALE: 1"=80'-0"







Midwestern Consulting L.L.C. 30803 Old US-33 Elkhardt, IN 46516 (734) 995-0200 • www.midwesternconsulting.com • Municipal Land Development • Land Survey • Institutional • Municipal Wireless Communications • Transportation • Landfill Services

## LEGEND

U.P.	EXIST. UTILITY POLE
GP	EXIST. GUY POLE
GW	GUY WIRE
EH	ELEC. TRANSFORMER
OH	EXIST. OVERHEAD UTILITY LINE
*	EXIST. LIGHT POLE
*	PROP. LIGHT POLE
T	PROP. BUILDING LIGHT
t	EXIST. TELEPHONE LINE
T	PROP. TELEPHONE LINE
e	EXIST. ELECTRIC LINE
E	PROP. ELECTRIC LINE
g	EXIST. GAS LINE
G	PROP. GAS LINE
g	EXIST. GAS VALVE
f.o.	EXIST. FIBER OPTIC LINE
F.O.	PROP. FIBER OPTIC LINE
w	EXIST. WATER MAIN
W	PROP. WATER MAIN
H	EXIST. HYDRANT
H	PROP. HYDRANT
B	EXIST. GATE VALVE IN BOX
B	PROP. GATE VALVE IN BOX
B	EXIST. GATE VALVE IN WELL
B	PROP. GATE VALVE IN WELL
X	EXIST. CURB STOP & BOX
X	PROP. CURB STOP & BOX
r	EXIST. STORM SEWER
R	PROP. STORM SEWER
I	EXIST. CATCH BASIN OR INLET
I	PROP. CATCH BASIN OR INLET
RD	PROP. ROOF DRAIN
RD	END SECTION
ds	CULVERT
ds	EXIST. DOWNSPOUT
ds	PROP. DOWNSPOUT
S	EXIST. SANITARY SEWER
S	PROP. SANITARY SEWER
C	EXIST. CLEANOUT
C	PROP. CLEANOUT
st	TELEPHONE RISER
catv	CABLE TELEVISION RISER
sa	ELECTRIC METER
sa	WATER METER
gm	GAS METER
sa	GAS LINE MARKER
fiber	FIBER OPTIC MARKER

## GENERAL NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH CITY OF ANN ARBOR DETAILS AND SPECIFICATIONS.
- CONTRACTOR TO VERIFY AND CONFIRM ALL UTILITY LOCATIONS AND DEPTHS PRIOR TO CONSTRUCTION AND SHALL NOTIFY ENGINEER OF THE RESULTS.
- CONTRACTOR SHALL NOTIFY ENGINEER OF ANY POTENTIAL UTILITY CONFLICTS IMMEDIATELY.
- MAINTAIN A MINIMUM 18" VERTICAL CLEARANCE BETWEEN ALL UTILITIES UNLESS OTHERWISE NOTED.
- ENSURE POSITIVE DRAINAGE TO ALL STORM SEWER STRUCTURES. ANY AREAS WHICH APPEAR TO HAVE POTENTIAL FOR PONDING WATER SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- NO FDC ARE PROPOSED.

## UTILITY NOTES

- ALL SANITARY SEWER SHALL BE SDR-26 PVC OR APPROVED EQUAL UNLESS OTHERWISE NOTED.
- ALL WATER MAIN SHALL BE CL. 50 D.I.P. OR APPROVED EQUAL UNLESS OTHERWISE NOTED.

## SANITARY SEWER MITIGATION CALCS

ONE ADDITION IS PROPOSED TO BE CONSTRUCTED AT THE EXISTING SCHOOL WHICH WILL HANDLE THE EXPECTED INCREASE OF 50 STUDENTS. SANITARY SEWER FLOW MITIGATION IS CALCULATED USING THE APPENDIX B, TABLE A VALUES PROVIDED BY THE CITY OF ANN ARBOR USING THE FACTOR FOR "SCHOOLS, NURSERY AND ELEMENTARY". USING 10 GPD/STUDENT AND APPLYING THE RECOVERY FACTOR OF 1.1 AND PEAKING FACTOR OF 4, THE CALCULATIONS ARE AS FOLLOWS:

$$\text{PEAK FLOW} = 50 \text{ STUDENTS} \times 10 \text{ GPD/STUDENT} \times 1.1 \times 4 = 2,200 \text{ GPD}$$

$$2,200 \text{ GPD} \times 1 \text{ DAY/24 HR} \times 1 \text{ HR/60 MIN} = 1.53 \text{ GPM}$$

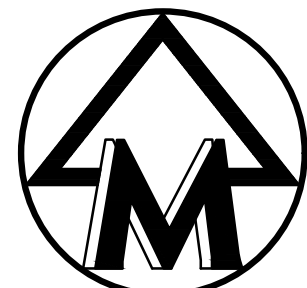
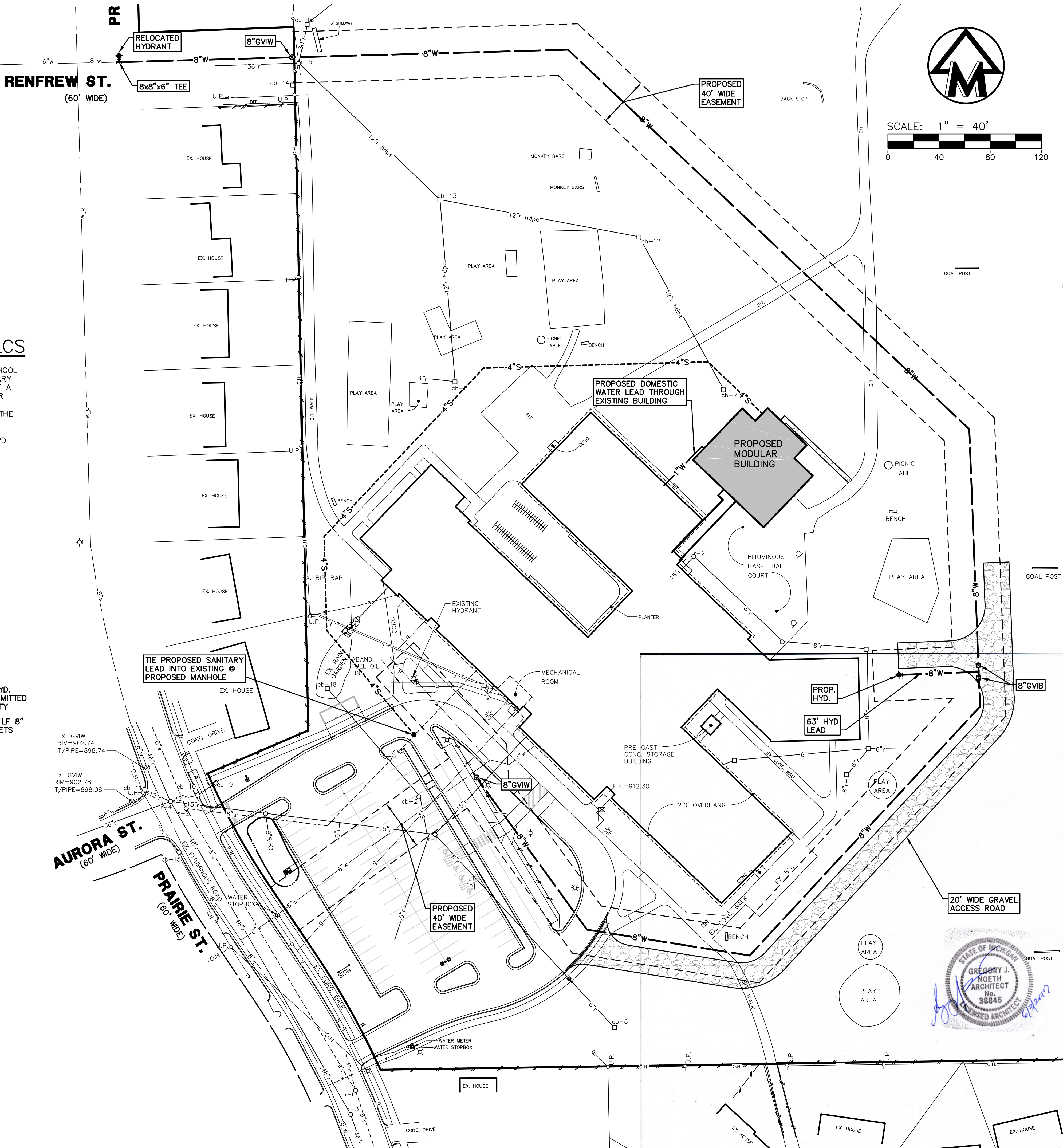
## FDD NOTES

- VERIFICATION OF EXISTING FOOTING DRAINS WILL NOT BE REQUIRED SINCE IT IS KNOWN THERE ARE NO EXISTING FOOTING DRAINS FOR THE BUILDING.

Chart Relating to Maximum Hydrant Lead Lengths/Dead-End Main Lengths*				
Looping Connecting Main Size	Hyd. Lead/Dead-End Main Size From Looping Main	Low Density (Residential)	Medium Density	High Density (8" Lead 6" Hydrant Valve Opening)
6"	6"	60'	10'	N.P.
8"	6"	230'	80'	N.P.
	8"	600'	325'	100'
10"	6"	270'	120'	N.P.
	8"	600'	475'	250'
12"	6"	600'	500'	500'
	8"	600'	500'	290'
	10"	600'	500'	500'
16"	6"	300'	140'	N.P.
	8"	600'	500'	300'
	10"	600'	500'	500'
	12"	600'	500'	500'

N.P. = Not Permitted

\*Dead-end mains must be approved in writing by the Public Services Director and Utilities Director. All dead-end mains shall terminate with a fire hydrant.



SCALE: 1" = 40'

MIDWESTERN CONSULTING



CLIENT  
INNOVATIVE MODULAR SOLUTIONS  
30803 OLD US-33  
ELKHART, IN 46516  
JOHN CATALANO  
574-584-3726

THURSTON ELEMENTARY  
MODULAR BUILDING  
OVERALL UTILITY PLAN

4

DATE: 06-14-2017  
SHEET: 4 OF 9  
CADD: TPH  
ENG: TPH  
PM: RCW  
1714201.dwg

17142

JOB No.

REVISIONS:

The underground utilities shown have been located from field survey information and existing records. The surveyor makes no guarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated. Although the surveyor does certify that they are located as accurately as possible from the information available.



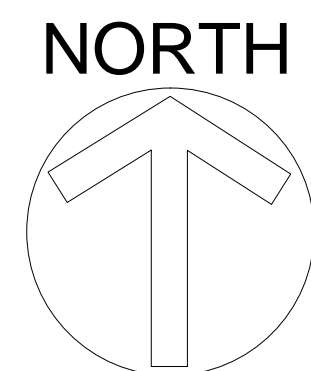
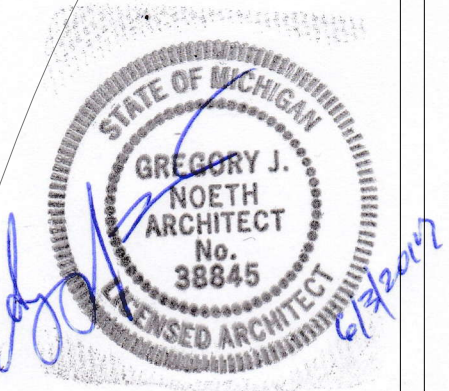
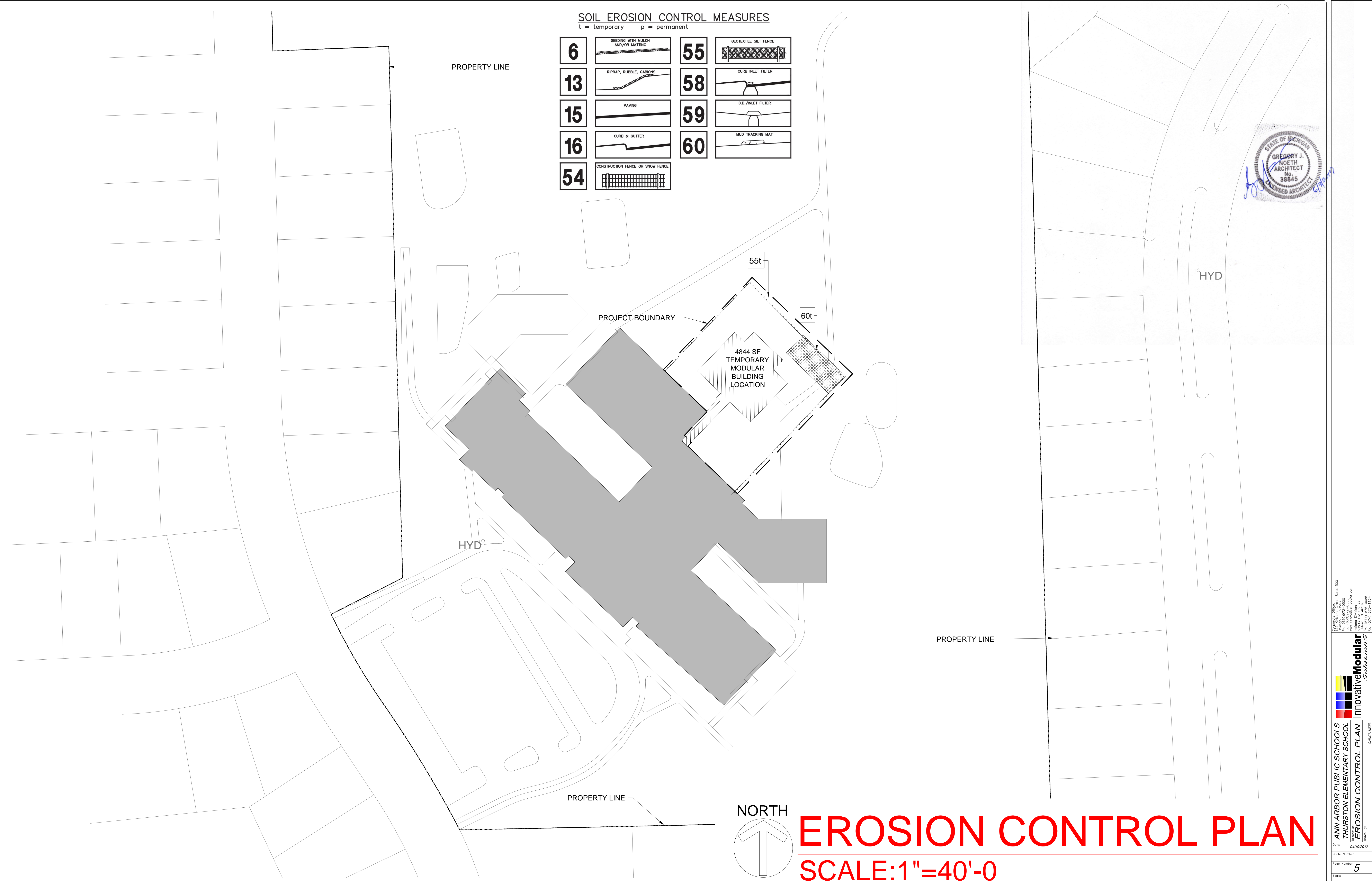
Know what's below.  
Call before you dig.



# SOIL EROSION CONTROL MEASURES

t = temporary    p = permanent

<b>6</b>	SEEDING WITH MULCH AND/OR MATING	<b>55</b>	GEOTEXTILE SILT FENCE
<b>13</b>	RIPRAP, RUBBLE, GABIONS	<b>58</b>	CURB INLET FILTER
<b>15</b>	PAVING	<b>59</b>	C.B./INLET FILTER
<b>16</b>	CURB & GUTTER	<b>60</b>	MUD TRACKING MAT
<b>54</b>	CONSTRUCTION FENCE OR SNOW FENCE		



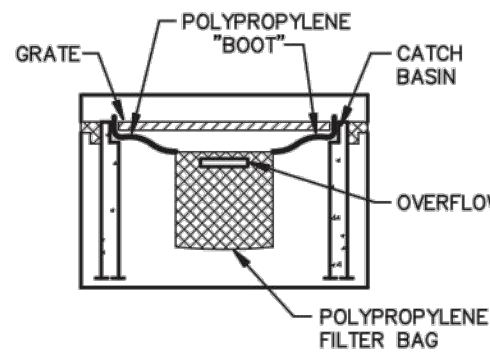
# EROSION CONTROL PLAN

## SCALE: 1"=40'-0"

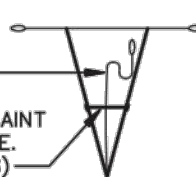




CONCRETE FLARED END SECTION  
NOT TO SCALE

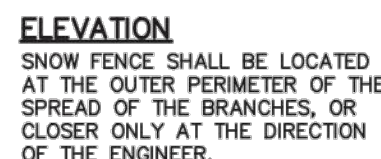


**NOTE:** TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS MANUFACTURED BY STORMWATER SERVICES CORPORATION (206-767-0441) OR "SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC.; (800-448-3636). CLEAN FILTER AS NEEDED.



### INSTALLATION DETAIL

### BAG DETAIL



**TREE PROTECTION DETAIL**  
NOT TO SCALE

(54t)

**PROTECTION**  
NOT TO SCALE

### PERMANENT MAINTENANCE TASKS AND SCHEDULE

	Components						
	Permeant Areas	Storm Sewer System	Catch Basin Surplus	Catch Basin Inlet Castings	Detention Basin	Swales	Outflow Control Structure
Inspect for sediment accumulation	X	X	X		X	X	Schedule annually
Removal of sediment accumulation		X	X		X	X	every 2 years, as needed
Inspect for floatables and debris		X	X	X	X	X	annually
Cleaning of floatables and debris		X	X	X	X	X	annually
Inspection for erosion					X	X	annually
Re-establish permanent vegetation on eroded slopes					X	X	as needed
Clean streets	X						semi-annually



1. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON THIS PROJECT.
2. SIGNS SHALL BE PLACED AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT.
3. THE CONCRETE WASHOUT AREA WILL BE REPLACED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTE CONCRETE AND OTHER WASTE.
4. WASHOUT RESIDUE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
5. DO NOT MIX EXCESS AMOUNTS OF FRESH CONCRETE OR CEMENT ON-SITE.
6. DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINAGE SYSTEMS, STREETS, OR STREAMS.
7. AVOID DUMPING EXCESS CONCRETE IN NON-DESIGNATED DUMPING AREAS.
8. LOCATE WASHOUT AREA AT LEAST 50 (FIFTY) FEET FROM STORM DRAINS, OPEN DITCHES, OR WATERBODIES.
9. WASH OUT WASTES INTO THE OUTPACK WASHOUT AS SHOWN WHERE THE CONCRETE CAN BE, BROKEN UP, AND THEN

OR APPROVED EQUAL  
CONCRETE WASHOUT SYSTEM  
NOT TO SCALE



## STORM WATER MANAGEMENT SYSTEM MAINTENANCE PLAN

1. Responsibility for Maintenance:
  - (a) During construction, it is the contractor's responsibility to perform the maintenance.
  - (b) Following construction, it will be the responsibility of the Ann Arbor Public School's facility staff to perform the maintenance.
2. Maintenance Tasks and Schedule
  - (a) See the chart on this sheet. The chart describes maintenance tasks to be performed by the Ann Arbor Public School's facility staff.
  - (b) Following construction, the contractor will have the stormwater management system inspected by an engineer to verify grades of the detention and filtration areas and to make recommendations for any necessary sediment removal.

SOIL EROSION AND SEDIMENTATION CONSTRUCTION NOTES:

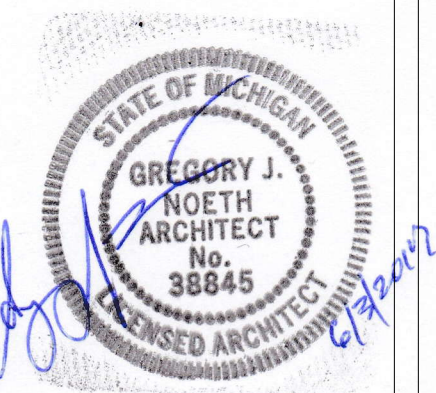
1. ALL SOIL EROSION CONTROL MEASURES SHALL COMPLY WITH THE CURRENT CITY OF ANN ARBOR ORDINANCES, WASHTENAW COUNTY STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, AND STATE OF MICHIGAN "SOIL EROSION AND SEDIMENTATION CONTROL ACT" (ACT NO. 347).
2. PRIOR TO COMMENCING EARTHMOVING OPERATIONS, THE GRADING CONTRACTOR SHALL INSTALL THE MUD TRACKING MAT, THE SILT FENCE AND TREE PROTECTION FENCES AS SHOWN ON THE PLANS.
3. THE ACTUAL LOCATION OF THE MUD TRACKING MATS MAY BE ADJUSTED BY THE CONTRACTOR TO MATCH CONTRACTOR'S OPERATIONS AND FIELD CONDITIONS BUT ONLY IF APPROVED BY THE ENGINEER.
4. ANY LAWN AREA WHICH WILL HAVE A SLOPE OF 3:1 OR STEEPER (3 FT MEASURED HORIZONTALLY AND 1 FT MEASURED VERTICALLY) SHALL BE SODDED AND PEGGED OR SEEDED AND MULCHED USING A SOIL EROSION CONTROL FABRIC OR BLANKET. HYDROSEEDING MAY BE USED IN LIEU OF SEED AND MULCH OR SOD WHERE SLOPES ARE FLATTER THAN 3:1.
5. ALL DISTURBED AREAS, EVEN WHERE FUTURE PAVEMENT AND BUILDINGS ARE PROPOSED, ARE TO BE RE-VEGETATED PER COUNTY STANDARDS FOR TEMPORARY SEEDING.
6. ALL RIPRAP SHALL BE PLACED OVER NON-WOVEN FILTER FABRIC.
7. ALL EXISTING AND/OR PROPOSED INLETS AND CATCH BASINS WITHIN THE PROJECT WILL HAVE POSITIVE COLLECTION SEDIMENT FILTERS INSTALLED. THESE FILTERS WILL BE "UNWASHED", ALL DISTURBED AREAS ARE STABILIZED, 'SILTSACK', AS MANUFACTURED BY ACF ENVIRONMENTAL (OR APPROVED EQUAL) MAY BE USED.
8. ALL UNPAVED DISTURBED AREAS IN BACK OF CURB LINES WILL BE TOPSOILED, SEEDED, AND MULCHED. SLOPES THAT ARE 3:1 OR STEEPER WILL BE SODDED OR SEEDED AND MATTED WITHIN 5 DAYS OF ESTABLISHING THE FINAL GRADES.
9. THE CONTRACTOR WILL MAINTAIN ALL NECESSARY SOIL EROSION CONTROL DEVICES UNTIL SOIL STABILIZATION HAS OCCURRED.
10. APPROPRIATE EMERGENCY ACCESS WILL BE PROVIDED AND DOCUMENTED PRIOR TO CONSTRUCTION.
11. THE CONTRACTOR WILL BE RESPONSIBLE FOR BALANCING THE EARTHWORK AND FOR TRUCKING OFF AND LEGALLY DISPOSING OF ALL EXCESS SOIL MATERIAL.
12. SEE THE SOIL EROSION CONTROL PLANS AND LANDSCAPE PLANS FOR LOCATIONS AND TYPES OF SEED AND MATTING, OR SEED.
13. SOD MAY BE USED WHEREVER SEEDING IS INDICATED EXCEPT IN AREAS REQUIRING SPECIAL SEED MIXES.
14. DRAINAGE FROM ALL PAVEMENT AND ROOFS WILL BE DIRECTED TO THE ON-SITE STORM SEWER SYSTEM.
15. THE ESTIMATED COST TO STABILIZE THE AREA OF DISTURBANCE IS \$3,000.00.

## SOIL EROSION AND SEDIMENTATION PLAN

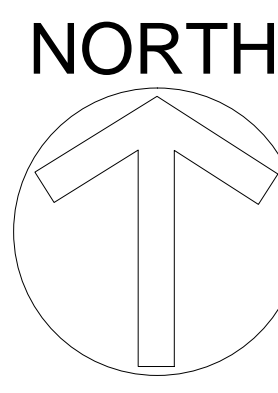
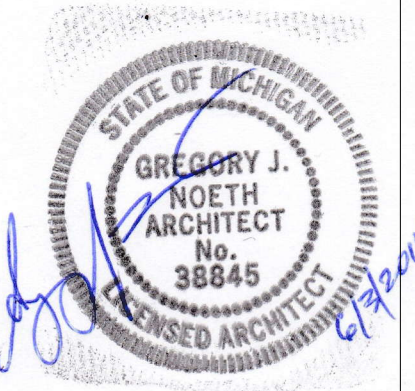
THE STATE OF MICHIGAN DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS BUREAU OF CONSTRUCTION CODES / PLAN REVIEW DIVISION DOES NOT REQUIRE SOIL EROSION AND SEDIMENTATION CONTROL, GENERALLY WHEN LESS THAN ONE ACRE IS DISTURBED. THE DISTURBED AREA WILL BE LESS THAN ONE ACRE.

## MAINTENANCE REQUIREMENTS

1. ALL SILT FENCES SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. IF THE DEPTH OF SILT AND SEDIMENT COMES TO WITHIN 12 INCHES OF THE TOP OF ANY SILT FENCE AT ANY TIME, ALL SILT AND SEDIMENT SHALL BE REMOVED TO ORIGINAL GRADE.
2. ALL TEMPORARY GRAVEL FILTERS SHOULD BE ADJUSTED AS TO LOCATION PER ACTUAL FIELD CONDITIONS. THE REMOVAL OF TRAPPED SEDIMENT AND CLEANOUT OR REPLACEMENT OF CLOGGED STONE MAY BE NECESSARY AFTER EACH STORM EVENT DURING THE PROJECT.
3. ONLY UPON STABILIZATION OF ALL DISTURBED AREAS MAY THE SILT FENCE, AND TEMPORARY GRAVEL FILTERS BE REMOVED. ALL SEDIMENT MUST ALSO BE CLEANED OUT OF THE STORM SEWERS.
4. PAVED AREAS MUST BE CLEANED OF ANY TRACKED MUD IMMEDIATELY FOLLOWING EACH MUD-TRACKING OCCURRENCE.
5. AN NPDES/NOC PERMIT FROM THE STATE OF MICHIGAN IS NOT REQUIRED DUE TO THE DISTURBED AREA BEING LESS THAN 5 ACRES.







# PROJECT LANDSCAPE PLAN

SCALE: 1"=40'-0"



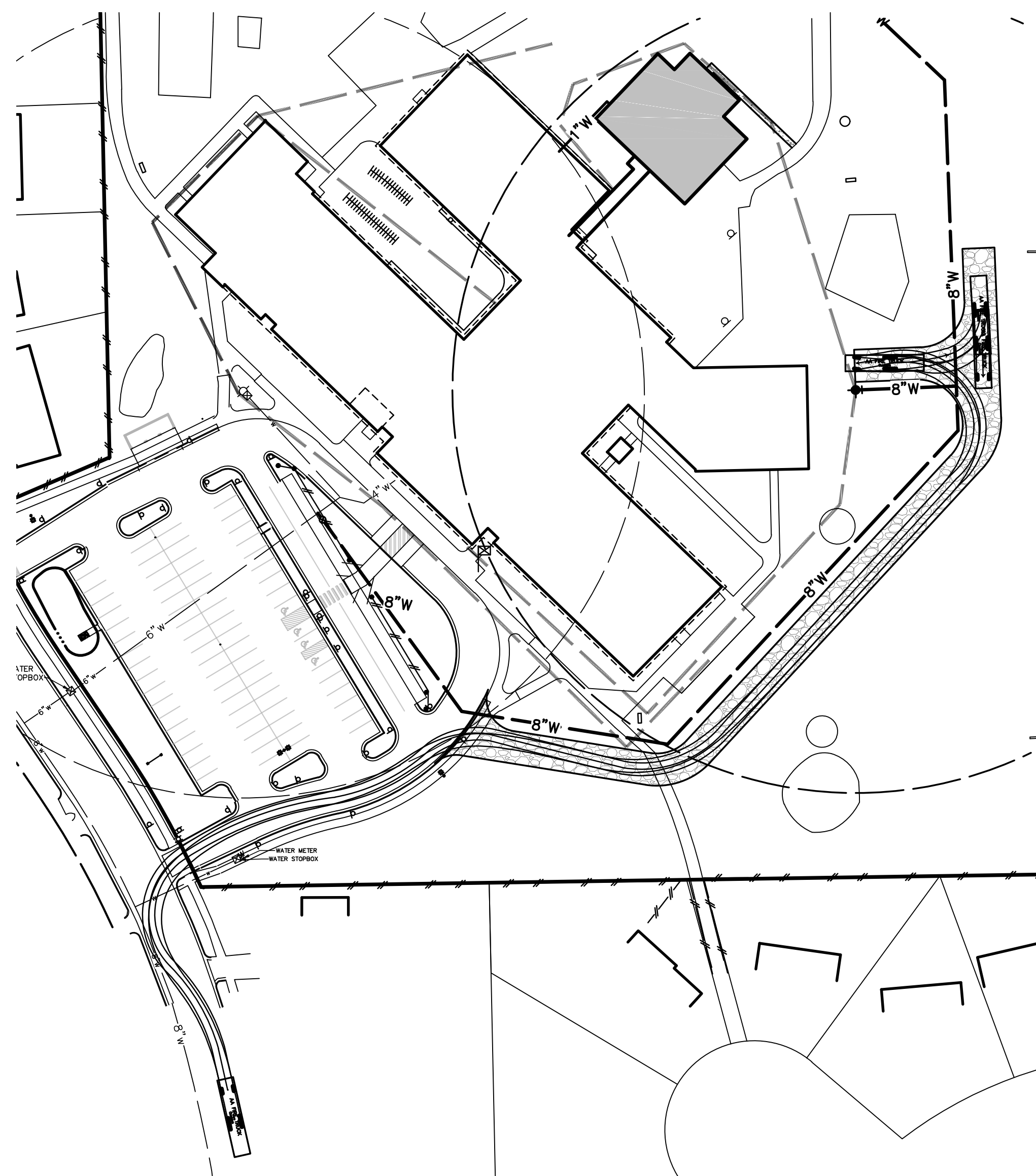
EXIST. WATER MAIN  
PROP. WATER MAIN  
EXIST. HYDRANT  
PROP. HYDRANT  
EXIST. GATE VALVE IN BOX  
PROP. GATE VALVE IN BOX  
EXIST. GATE VALVE IN WELL  
PROP. GATE VALVE IN WELL  
EXIST. CURB STOP & BOX  
PROP. CURB STOP & BOX  
PROP. 400' HOSE LAY

1. NO FDC ARE PROPOSED.
2. STORAGE AREA FOR CONSTRUCTION MATERIALS SHALL NOT INTERFERE WITH FIRE/EMERGENCY SITE ACCESS.

Chart Relating to Maximum Hydrant Lead Lengths/Dead-End Main Lengths*				
Looping Connecting Main Size	Hyd. Lead/ Dead-End Main Size From Looping Main	Low Density (Residential)	Medium Density	High Density (8" Lead 6" Hydrant Valve Opening)
6"	6"	60'	10'	N.P.
8"	6"	230'	80'	N.P.
	8"	600'	325'	100'
10"	6"	270'	120'	N.P.
	8"	600'	475'	250'
	10"	600'	500'	500'
12"	6"	280'	130'	N.P.
	8"	600'	500'	290'
	10"	600'	500'	500'
16"	6"	300'	140'	N.P.
	8"	600'	500'	300'
	10"	600'	500'	500'
	12"	600'	500'	500'

N.P. = Not Permitted

\*Dead-end mains must be approved in writing by the Public Services Director and Utilities Director. All dead-end mains shall terminate with a fire hydrant.

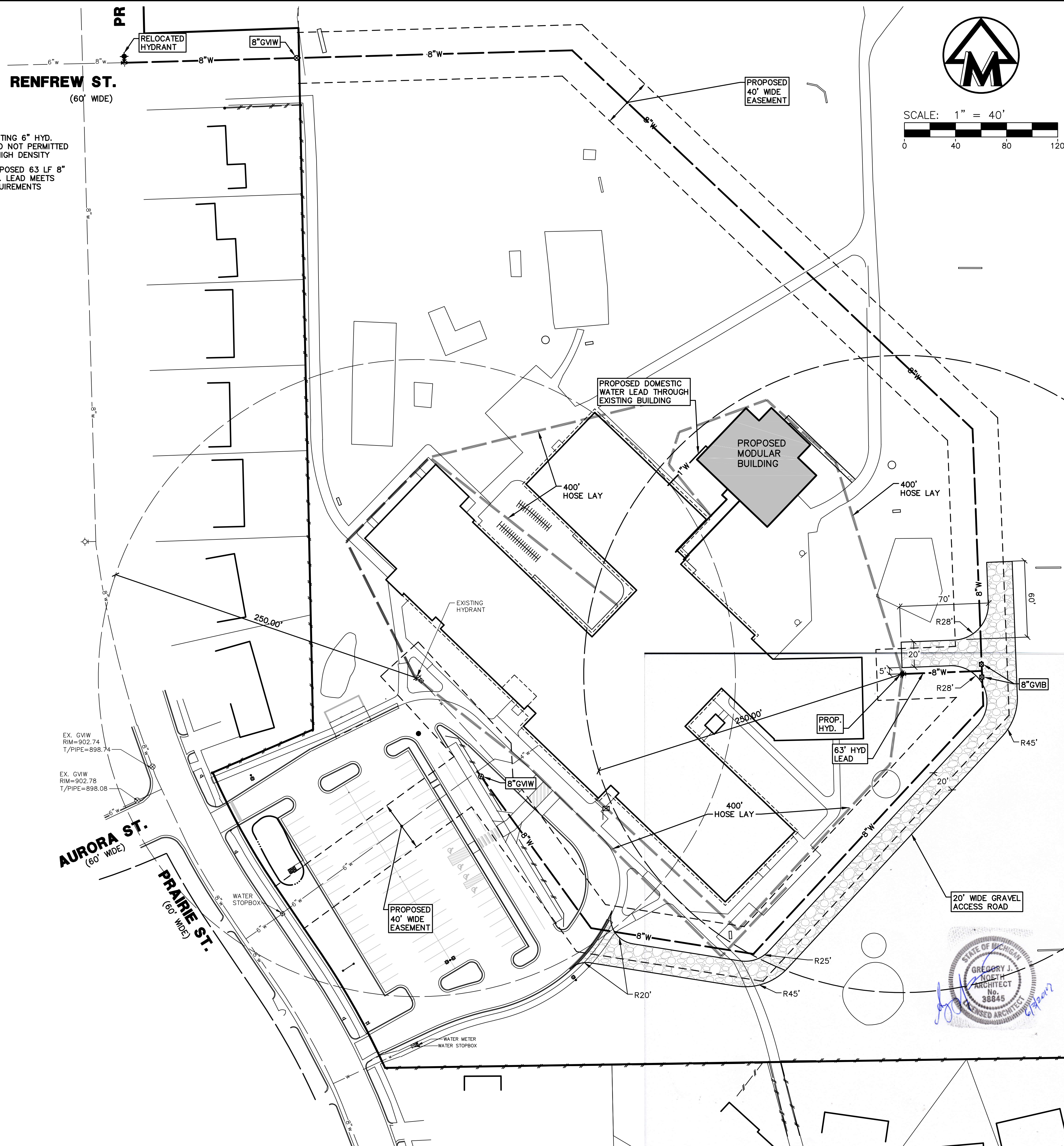


CITY OF ANN ARBOR FIRE TRUCK MANEUVERING

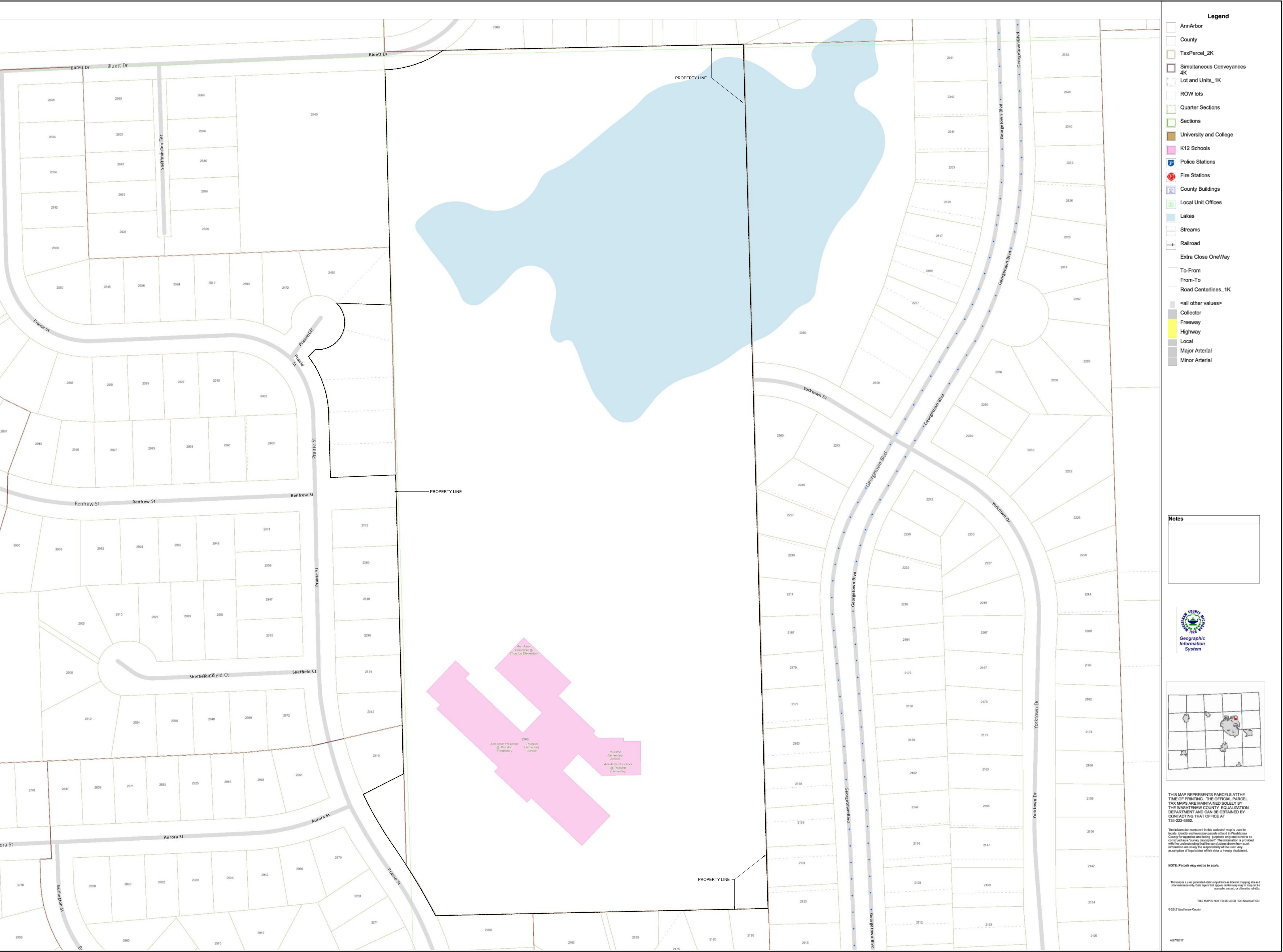
SCALE: 1"=60'



Know what's **below**.  
**Call** before you dig

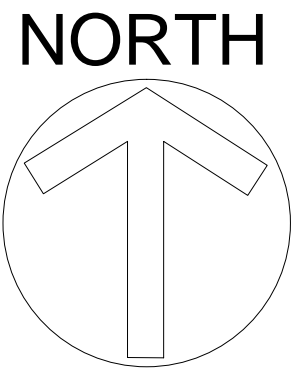
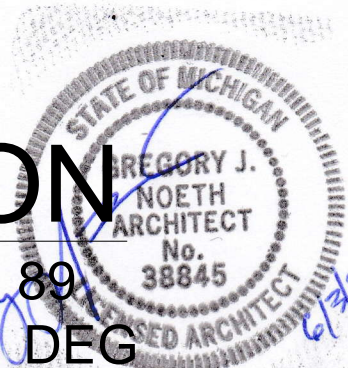






LEGAL DESCRIPTION

BEG W 1/4 COR SEC 14, T2S R6E TH N 89 DEG 08 MIN 20 SEC E 660.75 FT TH S 1 DEG 12 MIN E 1591.32 FT TH S 89 DEG 08 MIN 20 SEC W 610.0 FT TH NLY 101.96 FT ALG ARC OF CIR CURVE CONCAVE SW R=6602.95 FT CHORD N 29 DEG 12 MIN 20 SEC W 101.84 FT TH N 34 DEG 03 MIN W 5.62 FT TH N 1 DEG 11 MIN 40 SEC W 1496.99 FT TO POB PART W 1/2 SEC 14 T2S R6E ALSO OUTLOT C NORTH CAMPUS HEIGHTS ALSO LOTS 121 122 123 124 & 125 NORTH CAMPUS HEIGHTS NO 3 EXC BEG AT NW COR OF SD LOT 125 TH NE 144.09 FT TH S 106 FT TH WLY TO POB



BOUNDARY SURVEY  
SCALE: 1"=100'-0"