

**PLANNING AND DEVELOPMENT SERVICES STAFF REPORT**

**For Planning Commission Meeting of January 22, 2020**

**SUBJECT: Michigan Schools and Government Credit Union Special Exception Use and Landscape Modification for City Planning Commission Approval, and Zoning and Site Plan for City Council Approval  
(2151 West Stadium Boulevard)  
Project Nos. Z19-010, SEU19-003, and SP19-019**

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Michigan Schools and Government Credit Union Rezoning Petition to C3 (Fringe Commercial District) based on the proposed zoning and recommended commercial land use designation.

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission, after hearing all interested persons and reviewing all relevant information, finds the petition substantially meets the standards in Chapter 55 (Ann Arbor Unified Development Code), Section 5.29.5 (Special Exception Use), and therefore approves the Michigan Schools and Government Credit Union Special Exception Use for a maximum of three drive-through lanes as part of a financial services use. This approval is based on the following findings:

1. The proposed use will be consistent with the C3 Fringe Commercial District zoning district, which provides commercial activities accessed primarily by automobile.
2. The proposed use will not adversely impact traffic, pedestrians, bicyclists, circulation, or road intersections based on the location. West Stadium Boulevard provides access to the site, and the proposed use is consistent with other surrounding uses' traffic impact.

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby approves the proposed landscape modifications according to Chapter 55 Unified Development Code, Section 50.30.3.B.7, to require 0 square feet of bioretention area due to the condition of contaminated on-site soils.

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Michigan Schools and Government Credit Union Site Plan.

**STAFF RECOMMENDATION:**

Staff recommends that the **zoning petition** be **approved** because it is generally consistent with the Master Plan: Land Use Element and is compatible with the surrounding zoning designations and land uses. The Master Plan includes the site in the Stadium Boulevard Commercial Corridor, and recommends a future land use of commercial.

Staff recommends that the **special exception use** be **approved with conditions** subject to Planning Commission consideration because the proposed special exception use is of such location, size and character as to be compatible with the zoning district in which the site is situated; and the location and size of the proposed use, its nature and intensity, the site layout and access, and effect of the proposed use on public services would not be hazardous or inconvenient to the neighborhood nor unduly conflict with the normal traffic of the neighborhood.

Staff recommends that the **landscape modification** request be **approved** because the modifications are consistent with the intent of the ordinance.

Staff recommends that the **site plan** be **approved**, because the contemplated development would comply with all applicable state, local, and federal law, ordinances, standards and regulations; and the development would not cause a public or private nuisance, limits the disturbance of natural features to the minimum necessary to allow a reasonable use of the land, and would not have a detrimental effect on the public health, safety or welfare; and the modifications meet the required conditions.

**HISTORY:**

This petition was postponed at the December 3, 2019 City Planning Commission meeting. The CPC expressed concerns with the plan, such as the safety of pedestrians both using the ATM and accessing the site from the south, the appropriateness of drive-through lanes, interior circulation (including driveway safety and connectivity to neighboring sites), and the total amount of impervious surfaces proposed. The petitioner revised the plans, which were re-reviewed by all of the original city staff reviewers.

**CHANGES FROM PREVIOUS SUBMISSION  
SITE PLAN PETITION:**

The petitioners made the following revisions to the site plan set:

- Adjusted the landscaping and tree species adjacent to the entry drive and adjacent to the drive-up lane approach. Tree branches are now shown trimmed to a certain height.
- A drive running north/south has been clarified as 24' wide and connects to both adjacent sites.
- A sidewalk was added along part of the south edge of the site near the building.
- The loading zone was removed to reduce the impervious surface area.

- A walk-up ATM is provided outdoors on the front of the building, next to the main entrance.
- Up-lighting has been removed from the exterior of the building.
- Front setback measurements have been clarified.

**REZONING PETITION:**

No zoning changes from the previously reviewed petition are proposed.

**SPECIAL EXCEPTION USE PETITION:**

No changes to the special exception use petition are proposed.

**DEPARTMENT COMMENTS:**

Engineering: *(Repeat comment from previous staff report)* An easement will be necessary if the sanitary sewer lead is relocated. For the increase in sanitary sewer flow, flow equivalent to 1 GPM will need to be removed from the sanitary sewer system. Alternatively, a payment in lieu may be made.

Planning: The cross-access driveway is appreciated. If, at the time of construction, the adjacent property owner(s) do not authorize this vehicular access onto their property, MSGCU would install a straight curb across the opening. Before access is possible onto adjoining sites, a cross-access easement will be required.

Urban Forestry & Natural Resources: The petitioner has applied for a Landscape Modification to provide zero square feet of bioretention due to contaminated soils on site. Natural Resources staff support this modification request.

Prepared by Jill Thacher  
Reviewed by Brett Lenart  
01/15/20

Attachments: December 3, 2020 Staff Report with Zoning Map, Aerial Photo and Citizen Participation Report  
[Site Plan](#)

c: Petitioner: Steve Brewer, CFO  
MSGCU  
40400 Garfield Rd  
Clinton Twp, MI 48038

Petitioner's Agent: Michael Blaneck, AIA  
Stucky Vitale Architects, Inc.  
27172 Woodward Ave  
Royal Oak, MI 48067

Project No. SEU19-003, Z19-010, and SP19-019

**PLANNING AND DEVELOPMENT SERVICES STAFF REPORT**

**For Planning Commission Meeting of December 3, 2019**

**SUBJECT: Michigan Schools and Government Credit Union Special Exception Use for City Planning Commission Approval, and Zoning and Site Plan for City Council Approval  
(2151 West Stadium Boulevard)  
Project Nos. Z19-010, SEU19-003, and SP19-019**

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission, after hearing all interested persons and reviewing all relevant information, finds the petition substantially meets the standards in Chapter 55 (Zoning Ordinance), Section 5:104 (Special Exceptions), and therefore approves the Michigan Schools and Government Credit Union Special Exception Use for a maximum of three drive-through lanes as part of a financial services use.

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Michigan Schools and Government Credit Union Rezoning Petition to C3 (Fringe Commercial District) based on the proposed zoning and recommended commercial land use designation.

**PROPOSED CITY PLANNING COMMISSION MOTION**

The Ann Arbor City Planning Commission hereby recommends that the Mayor and City Council approve the Michigan Schools and Government Credit Union Site Plan.

**STAFF RECOMMENDATION:**

Staff recommends that the **zoning petition** be **approved** because it is generally consistent with the Master Plan: Land Use Element and is compatible with the surrounding zoning designations and land uses.

Staff recommends that the **special exception use** be **approved with conditions** subject to Planning Commission consideration because the proposed special exception use is of such location, size and character as to be compatible with the zoning district in which the site is situated; and the location and size of the proposed use, its nature and intensity, the site layout



and access, and effect of the proposed use on public services would not be hazardous or inconvenient to the neighborhood nor unduly conflict with the normal traffic of the neighborhood.

Staff recommends that the **site plan** be **approved**, because the contemplated development would comply with all applicable state, local, and federal law, ordinances, standards and regulations; and the development would not cause a public or private nuisance, limits the disturbance of natural features to the minimum necessary to allow a reasonable use of the land, and would not have a detrimental effect on the public health, safety or welfare; and the modifications meet the required conditions.

#### **LOCATION:**

This site is located on the west side of West Stadium Boulevard, south of West Liberty and north of Federal Boulevard. It is in the west planning area and the Allen Creek watershed.

#### **SUMMARY:**

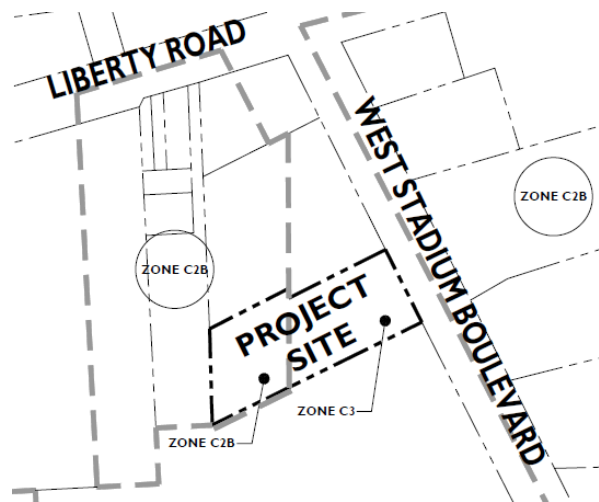
The petitioners seek approval to construct a new 3,803-square foot credit union building with three drive-through lanes. The site is 50,137 square feet and is zoned C3 Fringe Commercial on roughly the eastern half, and C2B Business Service on the remaining western half. The western half of the site is proposed to be rezoned to C3 for consistency. The drive-through lanes require special exception use approval from the City Planning Commission.

Attachments and information submitted for each project type may be found in the complete project application package in eTrakit at [www.a2gov.org/permits](http://www.a2gov.org/permits). Search under Projects by the address 2151 West Stadium.

#### **REZONING PETITION:**

Current Zoning – The western half (roughly) of the site is zoned C2B (Business Service District). Permitted principal uses allowed include restaurants, automobile sales and repair, restaurant, retail, personal services, office, and other uses. Drive-through facilities, fueling stations, and carwashes are allowed as a special exception use.

Proposed Zoning – The applicant requests rezoning the site from C2B to C3 (Fringe Commercial District). The permitted principal uses are the same as C2B, plus fueling stations and carwashes. Other special exception uses are the same as C212B.



#### **SPECIAL EXCEPTION USE PETITION:**

Three proposed drive-through lanes for tellers and/or ATM machines require special exception use approval from the City Planning Commission.

## **SITE PLAN PETITION:**

Existing Conditions – The site is vacant and cleared.

Proposed Development – The proposed [site plan](#) is for a 3,803 square foot, single-story credit union building with 21 surface parking spaces. The proposed floor area ratio is 7.5%.

Other development details include:

- **Building Placement** -- The building placement is near the southeast corner of the site, 10' from the West Stadium Boulevard right-of-way and 5.8' from the south property line.
- **Circulation** -- A driveway off West Stadium is to the north of the building. To the west, behind the building are three drive-through teller or ATM lanes. Drive-through traffic makes a loop behind the building before rejoining the driveway leading to the West Stadium curb cut. The maximum 21 vehicular parking spaces are proposed, and there are four class C bicycle parking spaces located convenient to the front door.
- **Natural Features/Landscape** -- There are no natural features or landmark trees on the site, which is vacant and recently cleared. Right-of-way screening and interior landscape islands are being provided as required.
- **Storm Water Management** -- The plan includes storm water treatment via a mechanical treatment unit, detained within an above-ground basin and outlet to the West Stadium Boulevard storm sewer. The above ground basin will have a thermoplastic liner to make sure there are no pathways for contamination from soil to get into the storm system.

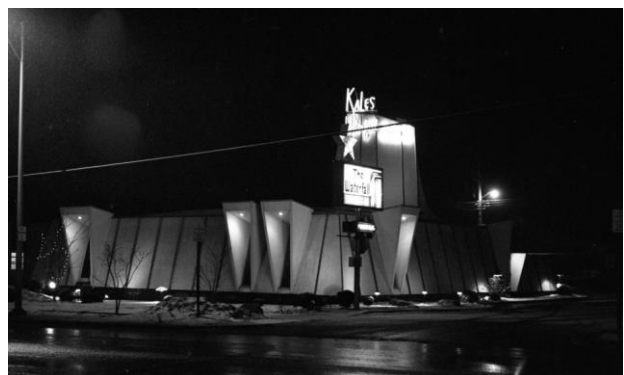
Planning Staff Comments: The petitioner has shown a driveway connection to the property to the south on their site plan. This is much appreciated, and though that landowner is not currently interested in making a physical connection, it preserves that potential for the future. Staff also suggested a connection to the north and that some parking spaces be deferred, which the petitioners declined due to their proposed site layout and perceived need for the maximum number of parking spaces.

## **CITIZEN PARTICIPATION:**

The petitioner held a Citizen Participation meeting on June 18, 2019. 417 property owners and persons within 1000 feet of the site were notified via postcard. Three people attended the meeting, and their questions are summarized in the Citizen Participation Report.

## **HISTORY:**

The northern half of the site contained a restaurant building that was constructed in 1962 for Kales Waterfall Supper Club, which featured a cave-like interior and waterfall with a 30 foot drop. From around 1982 to 2011 it was home to Sze-Chuan West. The building was demolished in 2012.



The Big M Car Wash and Citgo station were located on the south half of the site from 1961 until they were demolished in 2016.

Several site plans have been submitted for the site, with the most recent approval being Auto Zone in 2015. That project was not constructed, and the site plan expired.

**SITE PLAN DATA ANALYSIS:**

<b>TABLE OF LAND USE AND ZONING</b>			
<b>PARCEL ID: 09-09-30-318-028</b>			
<b>FRINGE COMMERCIAL DISTRICT (C3)</b>			
<b>PROPOSED USE</b>		<b>PERMITTED USE</b>	
CREDIT UNION DRIVE-THRU FACILITIES		SPECIAL EXCEPTION USE *	
<b>ZONING REQUIREMENT</b>	<b>EXISTING</b>	<b>PROPOSED</b>	<b>REQUIRED</b>
ZONING	C3 / C2B	C3	C3
MINIMUM LOT AREA	51,016 SF (1.17 AC)	51,016 SF (1.17 AC)	6,000 SF (0.14 AC)
MINIMUM LOT WIDTH	140.0 FT	140.0 FT	60 FT
MAXIMUM FLOOR AREA RATIO	N/A	7.5% (3,803 SF)	200%
MAXIMUM BUILDING HEIGHT	N/A	22.5 FT (1 STORY)	55 FT (4 STORIES)
MINIMUM FRONT YARD SETBACK	0.0 FT	10.0 FT	10 FT
MINIMUM SIDE YARD SETBACK (SOUTH)	0.0 FT	5.8 FT	0 FT
MINIMUM SIDE YARD SETBACK (NORTH)	0.0 FT	74.2 FT	0 FT
MINIMUM REAR YARD SETBACK	0.0 FT	209.5 FT	20 FT
PARKING - AUTOMOBILES (MINIMUM)	N/A	21 SPACES	18 SPACES MIN
PARKING - AUTOMOBILES (MAXIMUM)	N/A	21 SPACES	21 SPACES MAX
PARKING - BICYCLES	N/A	4 SPACES - CLASS C	2 SPACES - CLASS C

**LAND USE ANALYSIS (SURROUNDING LAND USES AND ZONING):**

	<b>LAND USE</b>	<b>ZONING</b>
NORTH	Retail (Bell's Diner/Stadium Hardware/etc)	C2B (Business Service District) and C3 (Fringe Commercial District)
EAST	Retail (CVS)	C2B (Business Service District)
SOUTH	Retail (Arbor Farms/etc)	C3 (Fringe Commercial District)
WEST	Commercial (Detroit Fudge Co)	C2B (Business Service District)

**CITY MASTER PLAN:**

City Master Plan – The Land Use Element (2009) recommends a future land use of Commercial for this site and surrounding properties.

### **SPECIAL EXCEPTION USE ANALYSIS:**

The Planning Commission, in arriving at its decision relative to any application for a special exception, shall apply the standards shown on the [special exception use petition](#).

Planning Staff Comments: The petitioner originally submitted a site plan showing a driveway circling the building and running between the sidewalk in the Stadium Boulevard right-of-way and the credit union building. Planning staff noted in the first round of review comments that the configuration of the driveway was unnecessarily hazardous to pedestrian by forcing all traffic on site (not just drive-through traffic) to circle the building via the front yard. Because of the large size of the lot and small building footprint, staff recommended that the drive be relocated behind the building to minimize the potential for pedestrian conflicts. The petitioner met with planning staff, then changed their site plan to the current configuration by moving the building closer to West Stadium Boulevard and creating a loop drive behind the building.

### **REZONING ANALYSIS:**

Changes to the text or map of the Zoning Ordinance (Chapter 55 of the Ann Arbor City Code) may be made pursuant to Sections 5:107 and 5:108. To assist the Planning Commission and City Council with their decision, applicants provide a [petition](#) with justifications in support of the request. The petition addresses:

1. The extent to which the rezoning is necessary.
2. How the rezoning will affect the public welfare and property rights of persons located in the vicinity.
3. How the rezoning will be advantageous to the City.
4. How this particular location will meet the convenience and service requirements of potential users and occupants.
5. Any changed or changing conditions in any particular area, or in the City generally, which may have bearing on the request.
6. Other circumstances and factors which further justify the request.

Planning Staff Comments: The C2B portion of the site is proposed to be rezoned to C3 for consistency within the parcel, at the request of Planning staff. C3 zoning is consistent with the adjacent parcel to the south, and half of the parcel to the north.

### **DEPARTMENT COMMENTS**

Engineering: An easement will be necessary if the sanitary sewer lead is relocated. For the increase in sanitary sewer flow, flow equivalent to 1 GPM will need to be removed from the sanitary sewer system. Alternatively, a payment in lieu may be made.

Prepared by Jill Thacher  
Reviewed by Brett Lenart  
12/3/19

Attachments: Zoning Map  
Aerial Photo

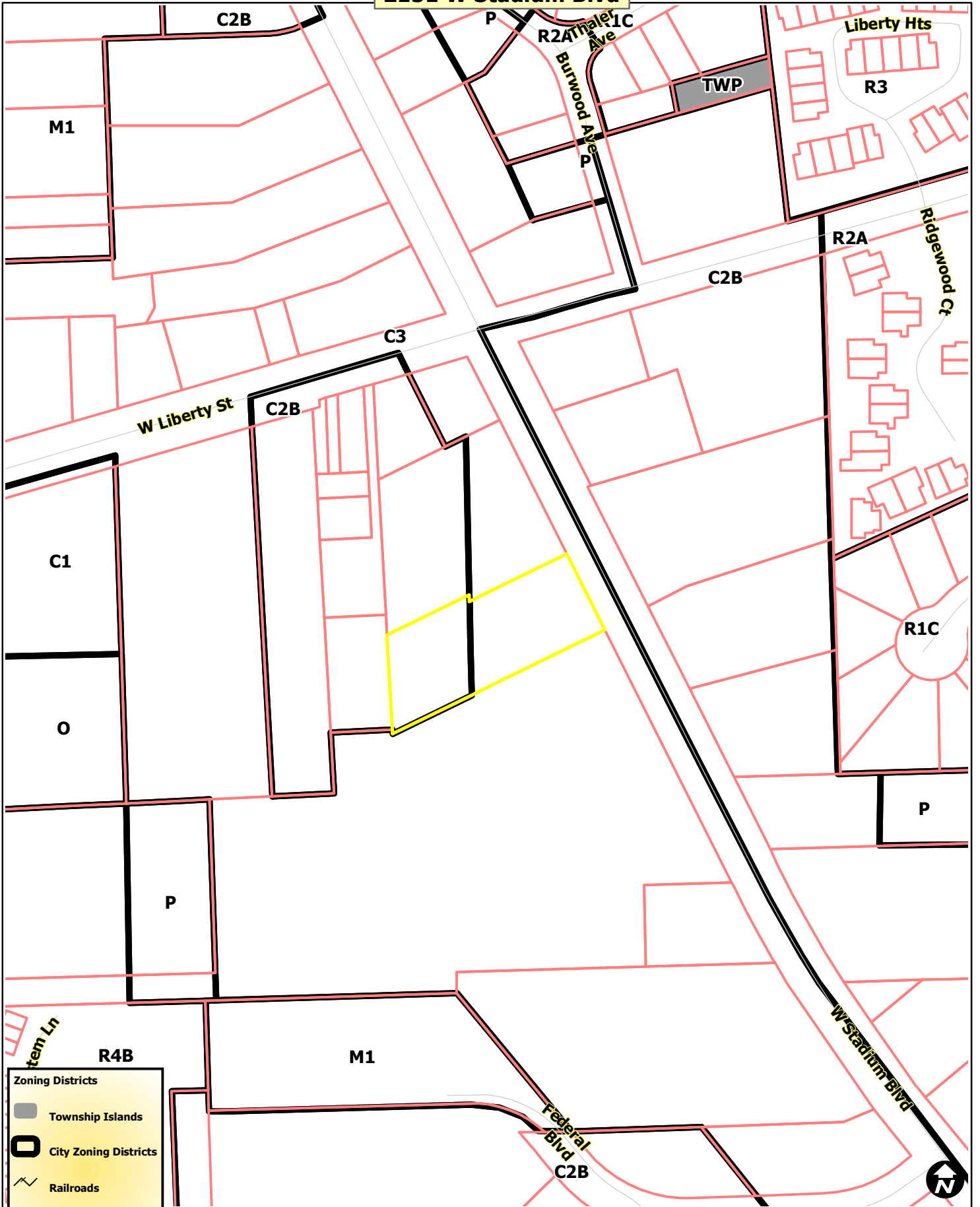
[Site Plan](#)  
[Citizen Participation Report](#)

c: Petitioner: Steve Brewer, CFO  
MSGCU  
40400 Garfield Rd  
Clinton Twp, MI 48038

Petitioner's Agent: Michael Blanek, AIA  
Stucky Vitale Architects, Inc.  
27172 Woodward Ave  
Royal Oak, MI 48067

Project No. SEU19-003, Z19-010, and SP19-019

2151 W Stadium Blvd



**Zoning Districts**

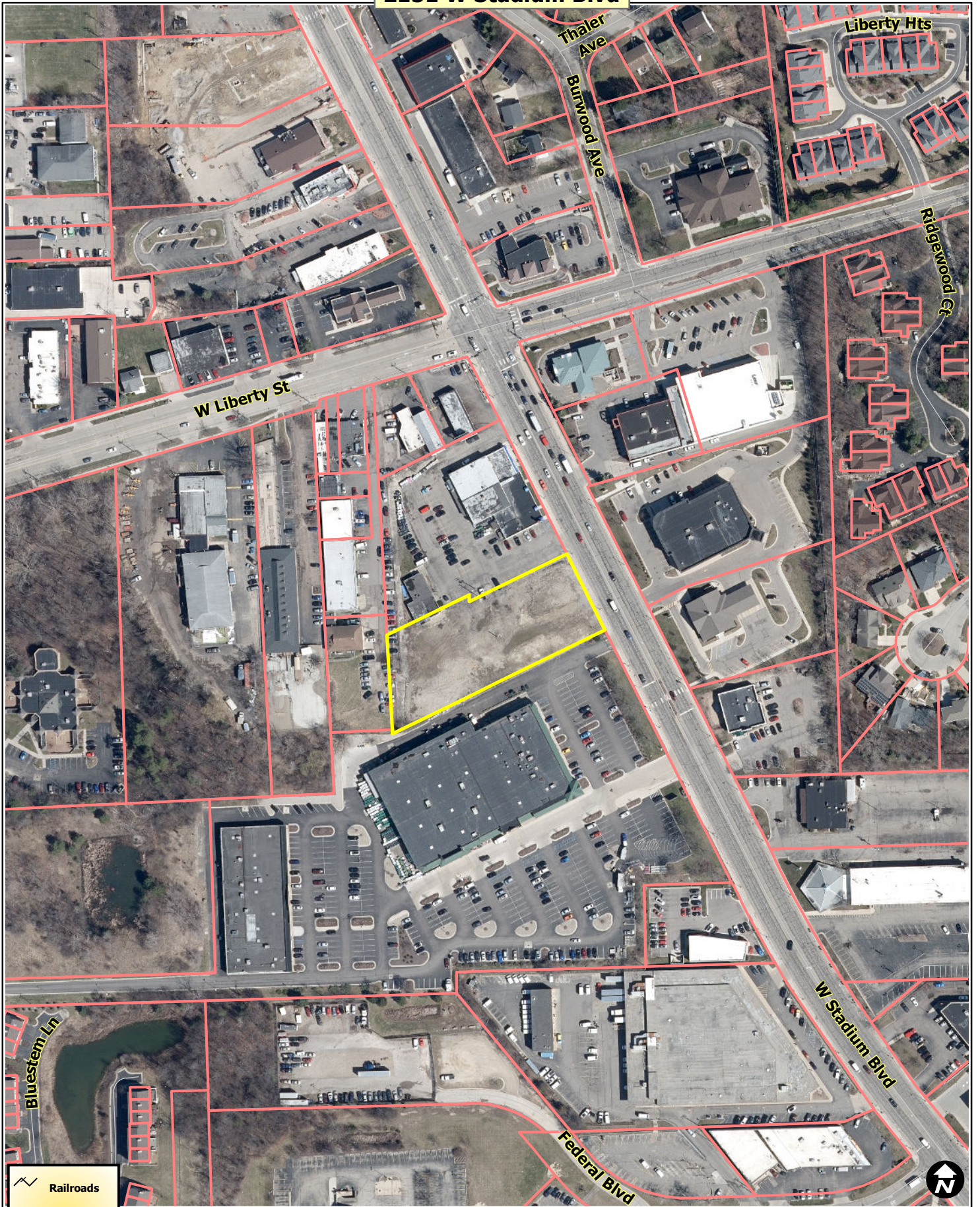
- Township Islands
- City Zoning Districts
- Railroads
- Huron River
- Tax Parcels






Map date: 5/30/2019  
Any aerial imagery is circa 2018 unless otherwise noted  
Terms of use: [www.a2gov.org/terms](http://www.a2gov.org/terms)



# 2151 W Stadium Blvd



-  Railroads
-  Huron River
-  Tax Parcels






Map date: 5/30/2019  
Any aerial imagery is circa 2018 unless otherwise noted  
Terms of use: [www.a2gov.org/terms](http://www.a2gov.org/terms)



2151 W Stadium Blvd



-  Railroads
-  Huron River
-  Tax Parcels



Map date: 5/30/2019  
Any aerial imagery is circa 2018  
unless otherwise noted  
Terms of use: [www.a2gov.org/terms](http://www.a2gov.org/terms)





Date: June 19, 2018

City of Ann Arbor Planning Services – City Hall  
301 E. Huron St.  
Ann Arbor, MI 48107

Re: MSGCU Ann Arbor  
Architects' Project No.: 2018.157

3 resident participants showed up to the meeting out of 417 post cards mailed. Comments are summarized below.

- 1A) Does not like the setback distance of 25'- 0" from the property line. Did indicate that the city zoning ordinance requires a minimum of 10' and maximum of 25 ft. This project is shown at the 25' – 0" setback distance. Did point out that the building was angled to minimize the impact of the 25' setback dimension. Also, will email resident PDF of our site plan. Since the residence concerns has to do with the required setback distance, no changes to the site plan are proposed.
- 1B) Resident requested planner's email address at the city with whom we are working with (Matthew Kowalski)
- 2) Looks like a good project for the site
- 3) Great use for the site

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael J. Blaneck", is written over a faint, light blue circular stamp or watermark.

Michael J. Blaneck, AIA

Enclosure: Sign – In Sheet from meeting  
Mailed post card notification



## **RESIDENT PARTICIPATION MEETING!**

A PUBLIC MEETING IS BEING HELD BY MICHIGAN SCHOOLS AND GOVERNMENT  
CREDIT UNION + STUCKY VITALE ARCHITECTS  
FOR A PROJECT AT  
2151 WEST STADIUM BOULEVARD  
ANN ARBOR, MICHIGAN 48103



### **MEETING INFORMATION**

Date: **JUNE 18, 2019** Time: **5 P.M. TO 8 P.M.**  
Place: **ANN ARBOR DISTRICT LIBRARY WESTGATE BRANCH  
WEST SIDE ROOM  
2503 JACKSON AVENUE ANN ARBOR MI 48103**  
Accommodations for individuals with disabilities can be arranged by contacting:

**EMILY HOWARD (734)327-8332**

In accordance with the City of Ann Arbor's Citizen Participation Ordinance, the Developer for the above project is notifying residents and property owners within 1,000 feet of the above address. If this project is placed on an agenda for the City Planning Commission, the City of Ann Arbor will notice residents and property owners within 300 ft. of the above address. If you would like to be notified if this project is placed on a City Planning Commission agenda, please contact City of Ann Arbor Planning Services at 734-794-6265 or [planning@a2gov.org](mailto:planning@a2gov.org).



STUCKY VITALE ARCHITECTS  
27172 WOODWARD AVENUE  
ROYAL OAK, MI 48067-0925

## **RESIDENT PARTICIPATION OPPORTUNITY!**

You are invited to attend a Resident Participation Meeting hosted by the Developer for a project near you. At this meeting you will have the opportunity to learn about the proposed project, ask questions, and submit comments. A report of the meeting will be prepared by the Developer and submitted to the City of Ann Arbor with their final application. The report will include attendance, a summary of the meeting, and any written correspondence received by the Developer.



# PROJECT #SP19-019

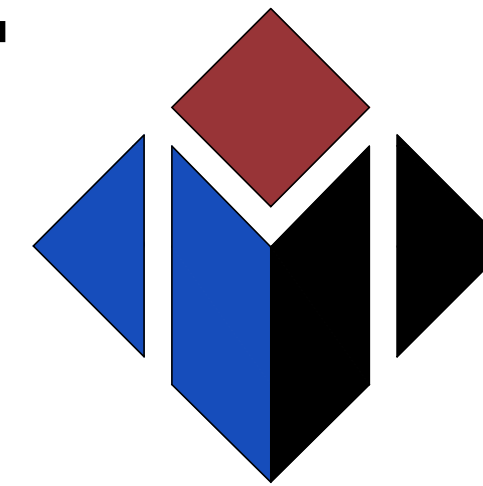
## SITE PLAN FOR CITY COUNCIL APPROVAL

### FOR

# MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION

PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES

PARCEL ID: 09-09-30-318-028  
 2151 WEST STADIUM BOULEVARD  
 CITY OF ANN ARBOR  
 WASHTENAW COUNTY, MICHIGAN



Know what's below  
 Call before you dig.

**APPLICANT**

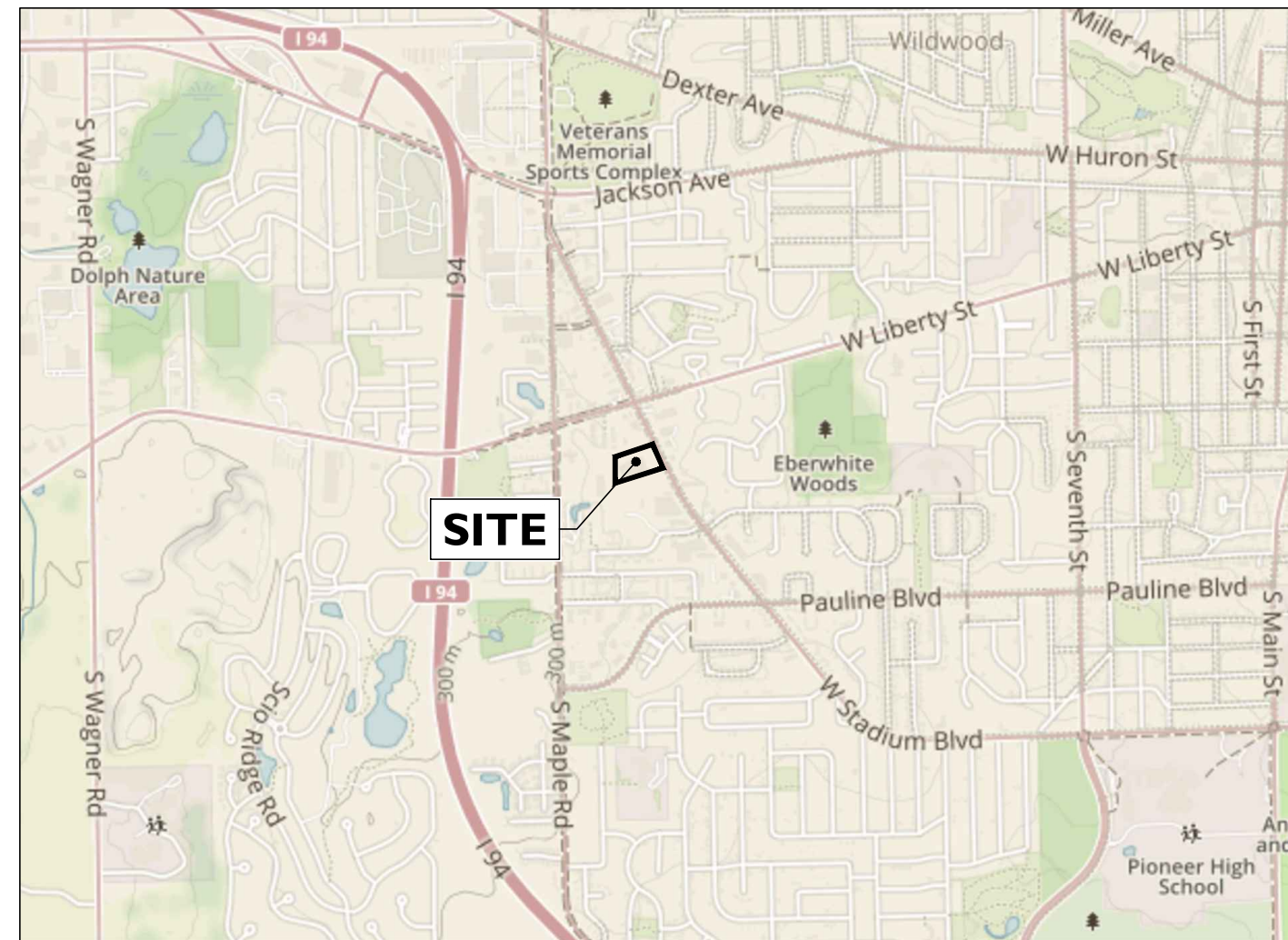
MICHIGAN SCHOOLS AND GOVERNMENT CREDIT UNION  
 40400 GARFIELD ROAD  
 CLINTON, MICHIGAN 48038  
 (586)-263-8800

**OWNER**

WEST STADIUM, LLC  
 P.O. BOX 1325  
 ANN ARBOR, MICHIGAN 48106

**PETITIONER'S AGENT**

MICHAEL BLANEK  
 MBLANEK@STUCKYVITALE.COM  
 27172 WOODWARD AVENUE  
 ROYAL OAK, MICHIGAN 48067  
 (248)-546-6700



**LOCATION MAP**

SCALE: 1" = 2,000'±

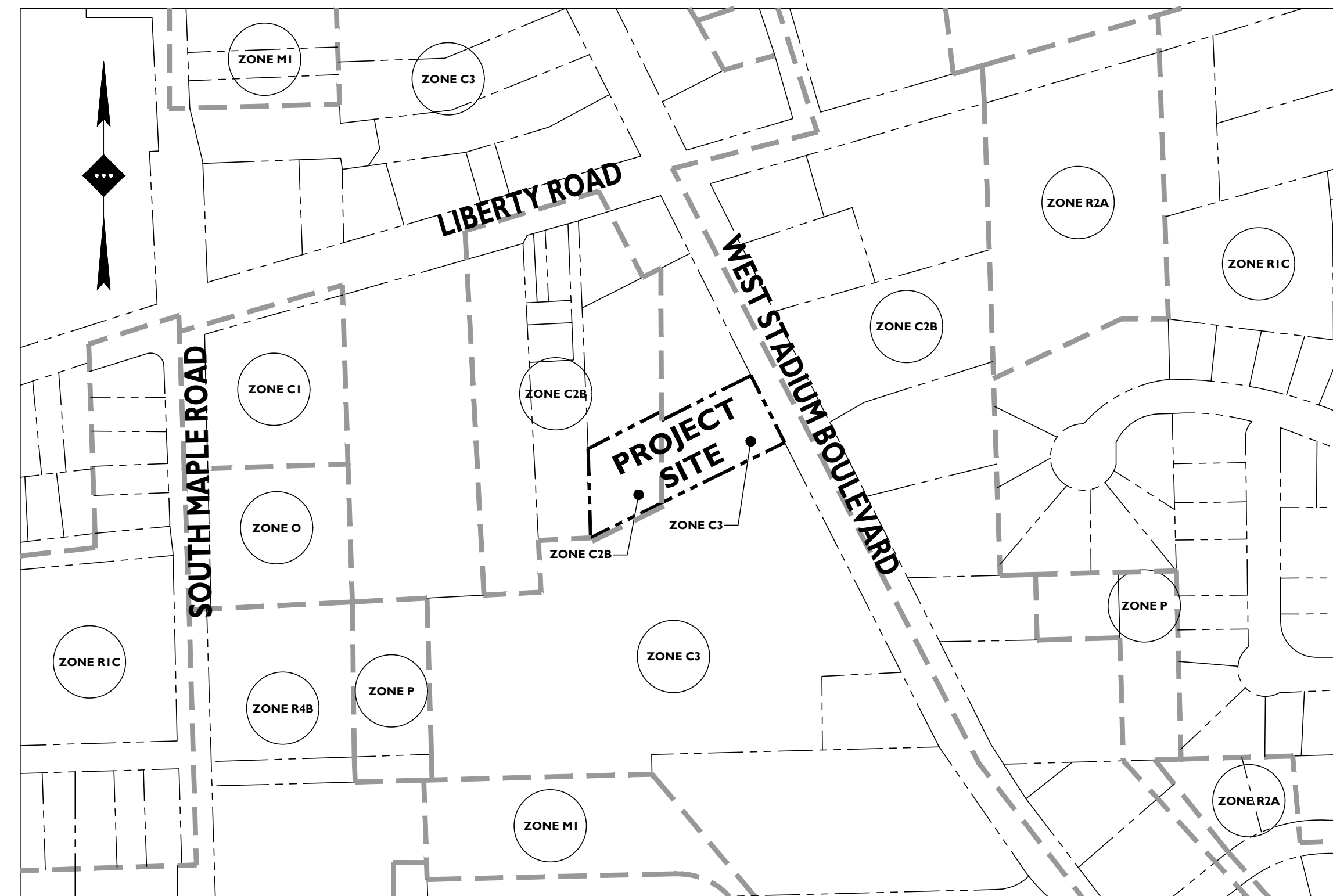
SOURCE: USGS ONLINE MAPS



**AERIAL MAP**

SCALE: 1" = 200'±

SOURCE: GOOGLE EARTH PRO



**ZONING MAP**

SCALE: 1" = 200'±

SOURCE: CITY OF ANN ARBOR ZONING MAP

**PROJECT SUMMARY**

A 3,803 SQUARE FOOT ONE-STORY STANDALONE CREDIT UNION IS BEING PROPOSED ON SITE. A DRIVE-THRU IS PROPOSED ALONG THE REAR OF THE BUILDING IN ACCORDANCE WITH THE SPECIAL USE STANDARDS FOR DRIVE-THRU FACILITIES. THE SITE IS LOCATED WITHIN BOTH THE C3 - FRINGE COMMERCIAL DISTRICT & THE C2B - BUSINESS SERVICE DISTRICT. C3 ZONING HAS BEEN ASSUMED FOR ALL ZONING REQUIREMENTS. PARKING IS PROPOSED ON SITE ALONG WITH ASSOCIATED BICYCLE PARKING IN ACCORDANCE WITH THE CURRENT REQUIREMENTS AND STANDARDS. STORMWATER WILL BE DETAINED AND RELEASED TO THE EXISTING STORM SEWER WITHIN THE WEST STADIUM BOULEVARD RIGHT-OF-WAY. PREVIOUSLY, AN AUTO ZONE WAS APPROVED ON THE PROPERTY. A SPECIAL EXCEPTION USE PETITION (SEU19-003) IS REQUIRED AS PART OF THIS PLAN. A ZONING PETITION (Z19-010) IS REQUIRED TO ZONE THE PROPERTY AS C-3.

**STATEMENT OF INTEREST IN LAND**

DEVELOPER HAS ENTERED INTO A LAND CONTRACT WITH CURRENT PROPERTY OWNER. FINAL SALE OF PARCELS IS CONTINGENT ON SITE PLAN AND OTHER PROJECT APPROVALS.

**PARCEL AREA**

51,016± SQUARE FEET = 1.171± ACRES

**LEGAL DESCRIPTION**

THE LAND SITUATED IN THE CITY OF ANN ARBOR, COUNTY OF WASHTENAW, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SECTION 30, TOWN 2 SOUTH, RANGE 6 EAST; THENCE NORTH 85.471 FEET; THENCE NORTH 75 DEGREES 48 MINUTES 00 SECONDS EAST 743.10 FEET; THENCE SOUTH 01 DEGREES 56 MINUTES 00 SECONDS EAST 451.29 FEET FOR A POINT OF BEGINNING; THENCE NORTH 65 DEGREES 10 MINUTES 00 SECONDS EAST 150.49 FEET; THENCE SOUTH 03 MINUTES 00 SECONDS WEST 11.02 FEET; THENCE NORTH 65 DEGREES 10 MINUTES 00 SECONDS EAST 173.96 FEET; THENCE SOUTH 24 DEGREES 50 MINUTES 00 SECONDS EAST 140.00 FEET; THENCE SOUTH 65 DEGREES 10 MINUTES 00 SECONDS WEST 383.29 FEET; THENCE NORTH 01 DEGREES 56 MINUTES 00 SECONDS WEST 162.97 FEET TO THE POINT OF BEGINNING.

**PLANS PREPARED BY:**



Detroit, MI • New York, NY • Boston, MA  
 Princeton, NJ • Tampa, FL • Rutherford, NJ

www.stonefieldeng.com

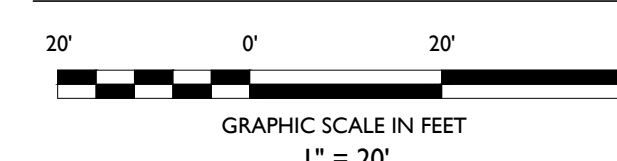
607 Shelby Suite 200, Detroit, MI 48226

Phone 248.247.1115

**PLAN REFERENCE MATERIALS:**

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
  - BOUNDARY / TOPOGRAPHIC SURVEY PREPARED BY KEM-TEC & ASSOCIATES DATED 12/13/2018; REVISED ARCHITECTURAL PLANS PREPARED BY STUCKY VITALE ARCHITECTS, DATED 12/16/2019
  - GEOTECHNICAL REPORT
  - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO
  - PHASE-I REPORT PREPARED BY PM ENVIRONMENTAL DATED 12/26/2018
  - ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

**DRAWING SCALE**



**SHEET INDEX**

DRAWING TITLE	SHEET #
COVER SHEET	C-1
ALTA / TOPOGRAPHIC SURVEY	1
DEMOLITION PLAN	C-2
SITE PLAN	C-3
GRADING PLAN	C-4
STORMWATER MANAGEMENT PLAN	C-5 & C-6
UTILITY PLAN	C-7
LIGHTING PLAN	C-8
LANDSCAPING PLAN	C-9
SOIL EROSION & SEDIMENT CONTROL PLAN	C-10
CONSTRUCTION DETAILS	C-11 THRU C-14

**ARCHITECTURAL SHEETS**

DRAWING TITLE	SHEETS
ARCHITECTURAL FLOOR PLAN	A1.1
EXTERIOR ELEVATION	A3.1
EXTERIOR ELEVATION	A3.2
EXTERIOR RENDERING	A3.3

REVISIONS PER 4TH PLANNING REVIEW COMMENTS	DATE	ISSUE	BY	DESCRIPTION
6	12-16-2019	KHL		
5	10-30-2019	KHL		
4	10-11-2019	ADG		
3	08-22-2019	ADG		
2	08-08-2019	ADG		
1	05-30-2019	ADG		

NOT APPROVED FOR CONSTRUCTION

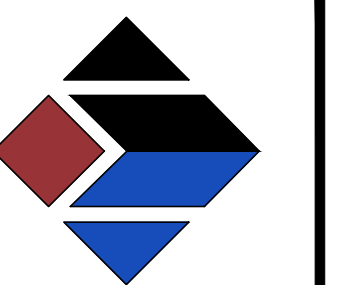
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 Phone 248.247.1115

**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**  
 PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES



PARCEL ID: 09-09-30-318-028  
 2151 WEST STADIUM BOULEVARD  
 CITY OF ANN ARBOR  
 WASHTENAW COUNTY, MICHIGAN



**STONEFIELD**  
 engineering & design

SCALE: AS SHOWN PROJECT ID: M-19060

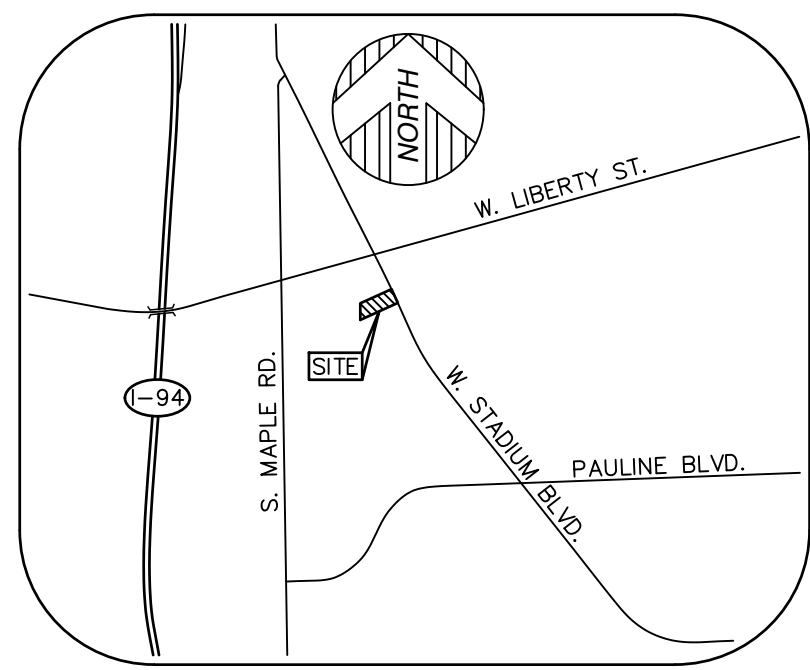
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

TITLE: **COVER SHEET**

DRAWING:

**C-1**





**VICINITY MAP**  
(NOT TO SCALE)

**PARCEL AREA**  
51,016± SQUARE FEET = 1.171± ACRES

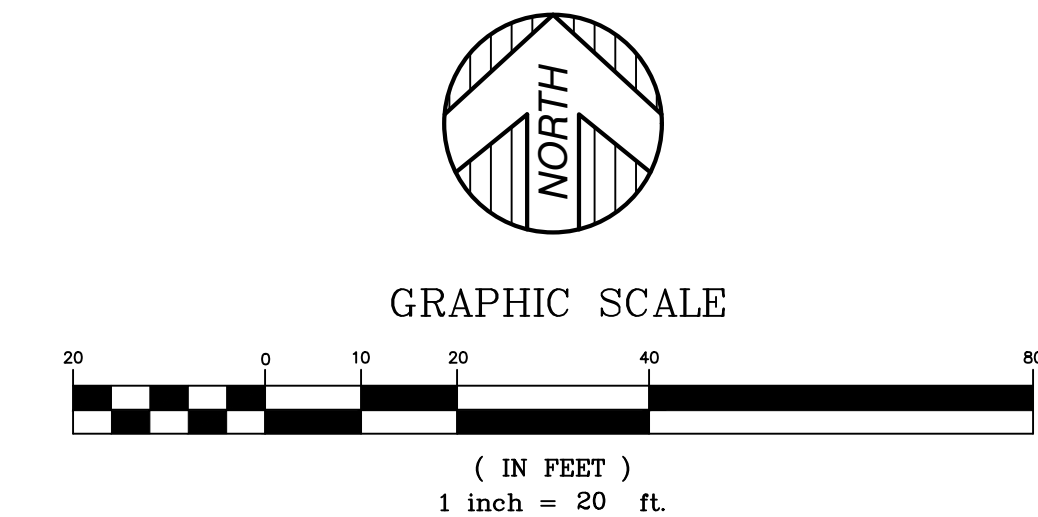
**BASIS OF BEARING**  
SOUTH 24°50'00" EAST, BEING THE WESTERLY RIGHT OF WAY LINE OF WEST STADIUM BOULEVARD, AS DESCRIBED.

**PARKING**  
NO MARKED PARKING ON SITE.

**BENCHMARK**  
**SITE BENCHMARK #1**  
SOUTHEAST CORNER OF CONCRETE STEP AT ENTRANCE OF QUALITY GROOMING, NORTH SIDE ON SUBJECT PROPERTY.  
ELEVATION = 937.60' (NAVD 88 DATUM)

**SITE BENCHMARK #2**  
ARROW OF HYDRANT IN FRONT OF SUBJECT PROPERTY ACROSS THE STREET IN THE NORTHERLY RIGHT OF WAY OF STADIUM BLVD.  
ELEVATION = 932.86' (NAVD 88 DATUM)

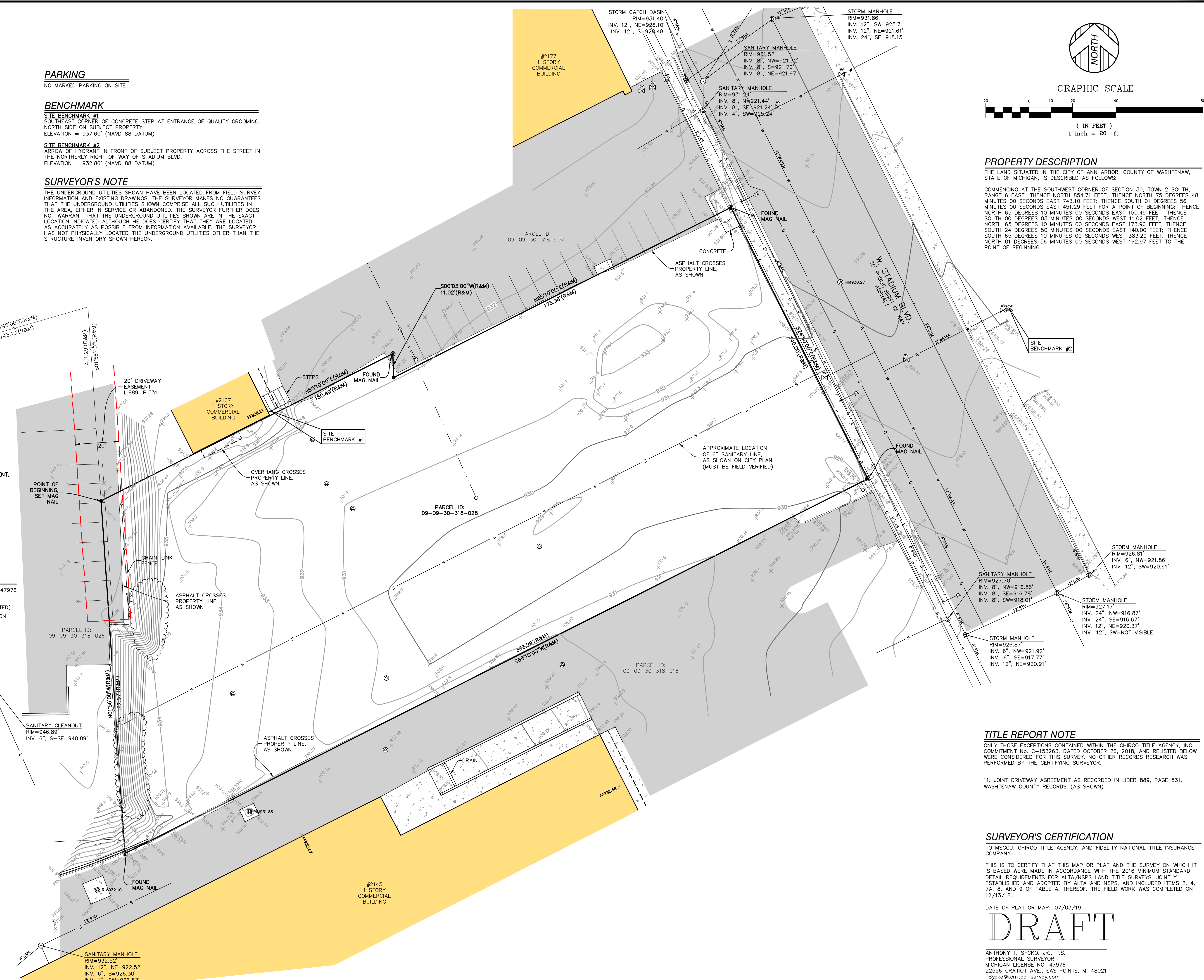
**SURVEYOR'S NOTE**  
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES OTHER THAN THE STRUCTURE INVENTORY SHOWN HEREON.



**PROPERTY DESCRIPTION**  
THE LAND SITUATED IN THE CITY OF ANN ARBOR, COUNTY OF WASHTENAW, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:  
COMMENCING AT THE SOUTHWEST CORNER OF SECTION 30, TOWN 2 SOUTH, RANGE 6 EAST; THENCE NORTH 854.71 FEET; THENCE NORTH 75 DEGREES 48 MINUTES 00 SECONDS EAST 743.10 FEET; THENCE SOUTH 01 DEGREES 56 MINUTES 00 SECONDS EAST 451.29 FEET FOR A POINT OF BEGINNING; THENCE NORTH 65 DEGREES 10 MINUTES 00 SECONDS EAST 150.49 FEET; THENCE SOUTH 00 DEGREES 03 MINUTES 00 SECONDS WEST 11.02 FEET; THENCE NORTH 65 DEGREES 10 MINUTES 00 SECONDS EAST 173.96 FEET; THENCE SOUTH 24 DEGREES 50 MINUTES 00 SECONDS EAST 140.00 FEET; THENCE SOUTH 65 DEGREES 10 MINUTES 00 SECONDS WEST 383.29 FEET; THENCE NORTH 07 DEGREES 56 MINUTES 00 SECONDS WEST 162.97 FEET TO THE POINT OF BEGINNING.

**LEGEND**

●	SET 1/2" REBAR WITH CAP P.S. 47976
○	FOUND MONUMENT (AS NOTED)
○	FOUND SECTION CORNER (AS NOTED)
(R&M)	RECORD AND MEASURED DIMENSION
(R)	RECORD DIMENSION
(M)	MEASURED DIMENSION
○	GROUND ELEVATION
○	UTILITY POLE
○	GAS METER
○	GAS VALVE
○	CLEANOUT
○	SANITARY MANHOLE
○	SQUARE CATCH BASIN
○	STORM DRAIN MANHOLE
○	WATER GATE MANHOLE
○	FIRE HYDRANT
○	WATER VALVE
○	MONITOR WELL
○	LIGHT POLE WITH STREET LAMP
○	LIGHTPOST/LAMP POST
---	PARCEL BOUNDARY LINE
---	ADJOINER PARCEL LINE
---	EASEMENT (AS NOTED)
---	BUILDING
---	BUILDING OVERHANG
---	CONCRETE CURB
---	PARKING
---	EDGE OF CONCRETE (CONC.)
---	EDGE OF ASPHALT (ASPH.)
G	GAS LINE
S	SANITARY LINE
r	STORM LINE
w	WATER LINE
e	ELECTRIC LINE
---	TREE / BRUSH LINE (AS NOTED)
---	FENCE (AS NOTED)
---	WALL (AS NOTED)
---	OVERHEAD UTILITY LINE
---	MINOR CONTOUR LINE
---	MAJOR CONTOUR LINE
---	BUILDING HATCH
---	ASPHALT HATCH
---	CONCRETE HATCH



**TITLE REPORT NOTE**  
ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE CHIRCO TITLE AGENCY, INC. COMMITMENT No. C-153263, DATED OCTOBER 26, 2018, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

11. JOINT DRIVEWAY AGREEMENT AS RECORDED IN LIBER 889, PAGE 531, WASHTENAW COUNTY RECORDS. (AS SHOWN)

**SURVEYOR'S CERTIFICATION**  
TO MSCO, CHIRCO TITLE AGENCY, AND FIDELITY NATIONAL TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDED ITEMS 2, 4, 7A, 8, AND 9 OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 12/13/18.

DATE OF PLAT OR MAP: 07/03/19  
**DRAFT**  
ANTHONY T. SYCKO, JR., P.S.  
PROFESSIONAL SURVEYOR  
MICHIGAN LICENSE NO. 47976  
22556 GRATIOT AVE., EASTPOINTE, MI 48021  
TSycko@kemttec-survey.com

**ALTA / NSPS LAND TITLE SURVEY**  
PREPARED FOR: STUCKY-VITALE ARCHITECTS  
2151-2161 W. STADIUM BLVD., ANN ARBOR MICHIGAN 48103,  
PART OF THE SOUTHWEST 1/4 OF SECTION 30,  
TOWN 2 SOUTH, RANGE 6 EAST

**KEM-TEC**  
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(734) 994-0888 (888) 884-0001  
www.kemttecgroupcompanies.com

DRAWN BY:	DLD/MRU	07/03/19
CHECKED BY:	ATS	07/03/19
DATE:	JULY 03, 2019	
PROJECT NO.:	18-04300	SCALE: 1" = 20'



ALL EXISTING GRASSES / SHRUBS / BRUSH ON SITE TO BE REMOVED. CONTRACTOR TO HYDROSEED AREAS AS NECESSARY.

SITE CONTAINS CONTAMINATED SOILS. CONTRACTOR TO FOLLOW GUIDELINES CONTAINED WITHIN THE DUE CARE PLAN.

ALL FEATURES WITHIN THE RIGHT-OF-WAY ARE TO REMAIN UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS.

ALL SITE FEATURES WITHIN THE LIMIT OF DISTURBANCE INDICATED ON THIS PLAN ARE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS

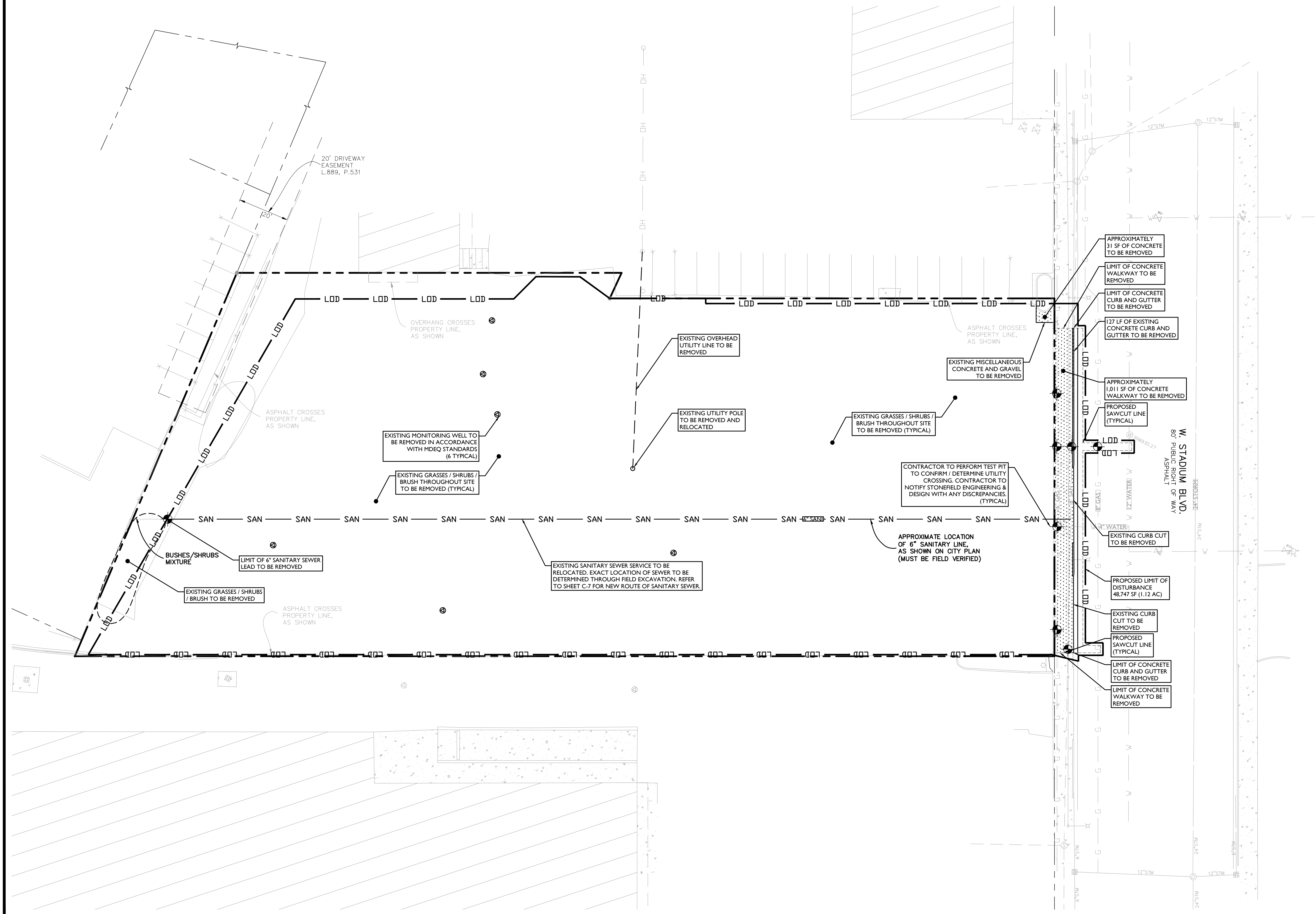
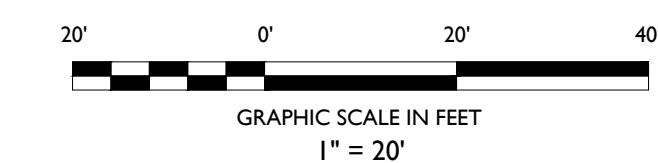
SYMBOL	DESCRIPTION
---	FEATURE TO BE REMOVED / DEMOLISHED
— LOD —	LIMIT OF DISTURBANCE
- - - - -	SAW CUT LINE / LIMIT OF MILLING
[Pattern]	CONCRETE REMOVAL
⊙	TEST PIT



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**DEMOLITION NOTES**

1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITIES' REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.
6. THE CONTRACTOR IS TO CONFIRM ALL EXISTING UTILITY CROSSINGS PROVIDE A MINIMUM SEPARATION DISTANCE OF 18 INCHES. IF SEPARATION IS NOT PROVIDED, THE CONTRACTOR IS TO NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING.
7. THE CONTRACTOR IS TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECORDED 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING.



ISSUE	DATE	BY	DESCRIPTION
6	12-16-2019	KHL	REVISIONS PER 4TH PLANNING REVIEW COMMENTS
5	10-28-2019	KHL	REVISIONS PER 3RD PLANNING REVIEW COMMENTS
4	10-11-2019	KHL	REVISIONS PER 2ND PLANNING REVIEW COMMENTS
3	08-22-2019	ADG	REVISIONS PER PLANNING REVIEW COMMENTS
2	08-08-2019	ADG	REVISIONS PER PLANNING REVIEW COMMENTS
1	05-30-2019	ADG	SUBMISSION FOR SITE PLAN APPROVAL

NOT APPROVED FOR CONSTRUCTION

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SITE PLAN FOR CITY COUNCIL APPROVAL

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES

PARCEL ID: 09-09-30-3-18-028  
2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN



**STONEFIELD**  
engineering & design

SCALE: 1" = 20' PROJECT ID: M-19060  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

TITLE: **DEMOLITION PLAN**

DRAWING:

**C-2**

VP190191-1906-STUCKY-WFAL12311 WEST STADIUM BOULEVARD, ANN ARBOR, MICHIGAN LOT 028, 029, 030, 031



### TABLE OF LAND USE AND ZONING

PARCEL ID: 09-09-30-318-028  
FRINGE COMMERCIAL DISTRICT (C3)

PROPOSED USE	CREDIT UNION	PERMITTED USE	SPECIAL EXCEPTION USE*
ZONING REQUIREMENT	EXISTING	PROPOSED	REQUIRED
ZONING	C3 / C2B	C3	C3
MINIMUM LOT AREA	51,016 SF (1.17 AC)	51,016 SF (1.17 AC)	6,000 SF (0.14 AC)
MINIMUM LOT WIDTH	140.0 FT	140.0 FT	60 FT
MAXIMUM FLOOR AREA RATIO	N/A	7.5% (3,803 SF)	200%
MAXIMUM BUILDING HEIGHT	N/A	22.5 FT (1 STORY)	55 FT (4 STORIES)
MINIMUM FRONT YARD SETBACK	0.0 FT	10.0 FT	10 FT
MINIMUM SIDE YARD SETBACK (SOUTH)	0.0 FT	5.8 FT	0 FT
MINIMUM SIDE YARD SETBACK (NORTH)	0.0 FT	72.2 FT	0 FT
MINIMUM REAR YARD SETBACK	0.0 FT	209.5 FT	20 FT
PARKING - AUTOMOBILES (MINIMUM)	N/A	21 SPACES	18 SPACES MIN
PARKING - AUTOMOBILES (MAXIMUM)	N/A	21 SPACES	21 SPACES MAX
PARKING - BICYCLES	N/A	4 SPACES - CLASS C	2 SPACES - CLASS C

\* SEE DRIVE-THRU NOTE FOR ADDITIONAL INFORMATION

### OFF-STREET PARKING REQUIREMENTS

CODE SECTION	REQUIRED	PROPOSED
§ 5:19-1	CREDIT UNION MINIMUM: 1 SPACE PER 220 SF OF FLOOR AREA (3,803 SF) / (1,220 SF) = 18 SPACES CREDIT UNION MAXIMUM: 1 SPACE PER 180 SF OF FLOOR AREA (3,803 SF) / (1,180 SF) = 21 SPACES	21 SPACES
§ 5:19-2	90° PARKING SPACES: 9 FT X 18 FT WITH 22 FT DRIVE AISLE (3,803 SF) / (1,180 SF) = 21 SPACES	9 FT X 18 FT WITH 24 FT DRIVE AISLE 4 CLASS C SPACES
§ 5:19-1	BICYCLE PARKING: 1 SPACE PER 2,000 SF OF FLOOR AREA (3,803 SF) / (1,200 SF) = 2 SPACES	

(\*) ONE-WAY DRIVE AISLE TO BE A MINIMUM 12 FT WIDE

### PROJECT INFORMATION AND ANALYSIS

**1. DEVELOPMENT PROGRAM:**  
A. DESCRIPTION: THE PROPOSED DEVELOPMENT IS LOCATED WITHIN BOTH THE C3 - FRINGE COMMERCIAL DISTRICT AND C2B - BUSINESS SERVICE DISTRICT. C3 ZONING HAS BEEN USED FOR ALL ZONING REQUIREMENTS. THE SITE IS CURRENTLY A VACANT LOT WITH 140 LINEAR FEET OF FRONTAGE ALONG WEST STADIUM BOULEVARD. PROPOSED ON SITE IS A 3,803 SQUARE FOOT CREDIT UNION WITH ASSOCIATED DRIVE-THRU FACILITIES. 21 PARKING SPACES ARE PROPOSED ON SITE WHERE 18 ARE REQUIRED. BICYCLE PARKING IS PROPOSED AS REQUIRED. A SINGLE CURB CUT IS BEING PROPOSED ALONG WEST STADIUM BOULEVARD. THIS PLAN REQUIRES NO VARIANCE AS DESIGNED THIS SITE CONTAINS CONTAMINATED SOILS WHICH WILL NOT ALLOW FOR INFILTRATION OF STORMWATER RUNOFF. STORMWATER WILL BE DETAINED AND ROUTED TO THE STORMWATER PIPE THAT RUNS ALONG WEST STADIUM BOULEVARD.  
B. CONSTRUCTION PHASING AND CONSTRUCTION COST:  
CONSTRUCTION WILL BE COMPLETED IN ONE PHASE BEGINNING IN APRIL OF 2020. CONSTRUCTION COST HAS NOT BEEN DETERMINED.  
ESTIMATED CONSTRUCTION COST: \$1,000,000

**2. COMMUNITY ANALYSIS:**  
A. IMPACT ON PUBLIC SCHOOLS:  
THE PROPOSED DEVELOPMENT WILL NOT HAVE A SIGNIFICANT IMPACT ON ANY SURROUNDING PUBLIC SCHOOLS.

**B. RELATIONSHIP OF INTENDED USE TO NEIGHBORING USES:**  
THIS DEVELOPMENT WILL FIT IN WITH THE CURRENT STYLE OF DESIGN ALONG WEST STADIUM BOULEVARD WHERE MANY BANKS AND FINANCIAL INSTITUTIONS ARE PRESENT.

**C. IMPACT OF ADJACENT USES ON PROPOSED DEVELOPMENT:**  
PATRONS AT SURROUNDING DEVELOPMENTS MAY USE THE PROPOSED CREDIT UNION AND ASSOCIATED ATM FOR FINANCIAL SERVICES.

**D. IMPACT ON AIR, WATER QUALITY, AND EXISTING NATURAL FEATURES:**  
THERE WILL BE NO SIGNIFICANT IMPACT ON THE AIR OR WATER QUALITY DUE TO THE DEVELOPMENT OF THIS SITE. THERE ARE NO LANDMARK TREES OF NATURAL FEATURES THAT ARE BEING DISTURBED ON SITE.

**E. IMPACT ON HISTORIC SITES OR STRUCTURES:**  
THERE ARE NO HISTORIC SITES OR STRUCTURES LOCATED WITHIN THE PROPOSED SCOPE OF THE DEVELOPMENT.

**F. NATURAL FEATURES GENERAL DESCRIPTIONS AND IMPACTS:**  
NO NATURAL FEATURES PRESENT ON SITE

**3. PUBLIC SIDEWALK MAINTENANCE STATEMENT:**  
ALL PUBLIC SIDEWALKS LOCATED WITHIN THE LIMIT OF DISTURBANCE SHOWN ARE TO BE PROTECTED AND REMAIN OPEN UNLESS OTHERWISE NOTED. CONTRACTOR IS TO ENSURE THAT SIDEWALKS ARE SAFE FOR USE BY PATRONS.

### TRAFFIC IMPACT ANALYSIS

Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition  
2151 W. Stadium Blvd.  
10/10/2019

Proposed Drive-Thru Credit Union  
Drive-In Bank - Land Use 912

3,803 SF	AM Peak Street Hour		PM Peak Street Hour	
	Enter	Exit	Enter	Exit
21	15	39	28	39

Existing Restaurant  
High Turnover (Sit-Down) Restaurant - Land Use 932

4,300 SF	AM Peak Street Hour		PM Peak Street Hour	
	Enter	Exit	Enter	Exit
21	24	19	26	16

Existing Gas Station  
Gasoline/Service Station - Land Use 944

4 Pumps	AM Peak Street Hour		PM Peak Street Hour	
	Enter	Exit	Enter	Exit
21	20	26	28	28

\*Description for Land Use 944 "Gasoline/Service Station" indicates that "A gasoline/service station may also have ancillary facilities for servicing and repairing motor vehicles and may have a car wash." As such, trip generation associated with the previous car wash use were included within the gasoline/service station component of the site.

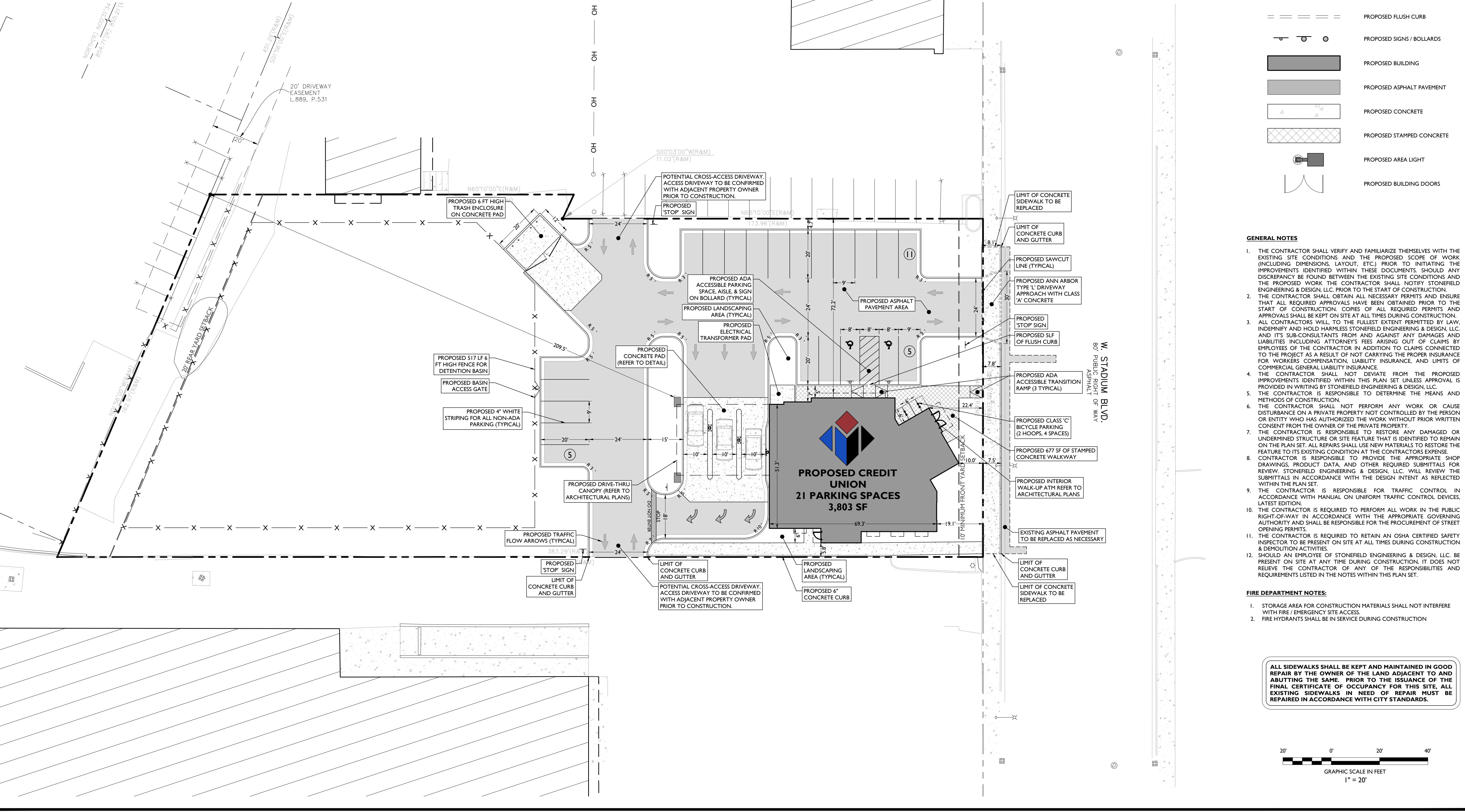
Total Trips	AM Peak Street Hour		PM Peak Street Hour	
	Enter	Exit	Enter	Exit
	Proposed	21	15	39

### SYMBOL DESCRIPTION

	PROPERTY LINE
	SETBACK LINE
	SAWCUT LINE
	PROPOSED CURB & GUTTER
	PROPOSED FLUSH CURB
	PROPOSED SIGNS / BOLLARDS
	PROPOSED BUILDING
	PROPOSED ASPHALT PAVEMENT
	PROPOSED CONCRETE
	PROPOSED STAMPED CONCRETE
	PROPOSED AREA LIGHT
	PROPOSED BUILDING DOORS

#### DRIVE-THRU NOTE

1. THE DRIVE-THROUGH FACILITIES MAY NOT BE LOCATED BETWEEN A STREET AND THE PRINCIPAL BUILDING, AND THE VEHICULAR CIRCULATION TO ENTER AND EXIT THE FACILITY MAY NOT IMPAIR THE GENERAL VEHICULAR CIRCULATION ON THE SITE OR THE PEDESTRIAN CIRCULATION ON AND OFF THE SITE.



#### GENERAL NOTES

- THE CONTRACTOR SHALL VERIFY AND FAMILIARIZE THEMSELVES WITH THE EXISTING SITE CONDITIONS AND THE PROPOSED SCOPE OF WORK (INCLUDING DIMENSIONS, LAYOUT, ETC.) PRIOR TO INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION.
- ALL CONTRACTORS WILL TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC, AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE.
- THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN, LLC. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE PROPERTY.
- THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS REFLECTED WITHIN THE PLAN SET.
- THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
- THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
- THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES.
- SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC, BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.

**FIRE DEPARTMENT NOTES:**

- STORAGE AREA FOR CONSTRUCTION MATERIALS SHALL NOT INTERFERE WITH FIRE / EMERGENCY SITE ACCESS.
- FIRE HYDRANTS SHALL BE IN SERVICE DURING CONSTRUCTION

ALL SIDEWALKS SHALL BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME, PRIOR TO THE ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE. ALL EXISTING SIDEWALKS IN NEED OF REPAIR MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

GRAPHIC SCALE IN FEET  
1" = 20'

REVISIONS PER 4TH PLANNING REVIEW COMMENTS	REVISIONS PER 3RD PLANNING REVIEW COMMENTS	REVISIONS PER 2ND PLANNING REVIEW COMMENTS	REVISIONS PER 1ST PLANNING REVIEW COMMENTS	ISSUE	DATE	BY	DESCRIPTION
6	5	4	3	2	1		

**NOT APPROVED FOR CONSTRUCTION**

## STONEFIELD

engineering & design

Detroit, MI · New York, NY · Boston, MA  
Princeton, NJ · Tampa, FL · Rutherford, NJ  
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226  
Phone 248.247.1115

### SITE PLAN FOR CITY COUNCIL APPROVAL

## MICHIGAN SCHOOLS & GOVERNMENT

### CREDIT UNION

### WITH DRIVE-THRU FACILITIES

PARCEL ID: 09-09-30-318-028  
2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
JAKE  
ROBERTSON  
6201088338  
MICHIGAN LICENSE No. 6201088338  
LICENSED PROFESSIONAL ENGINEER

## STONEFIELD

engineering & design

SCALE: 1" = 20' PROJECT ID: M-19060  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

TITLE:  
**SITE PLAN**

DRAWING:  
**C-3**

V:\SP19\1906\STUCKY\W\ALF1311 WEST STADIUM BOULEVARD ANN ARBOR, MICHIGAN\09-09-30-318-028.DWG

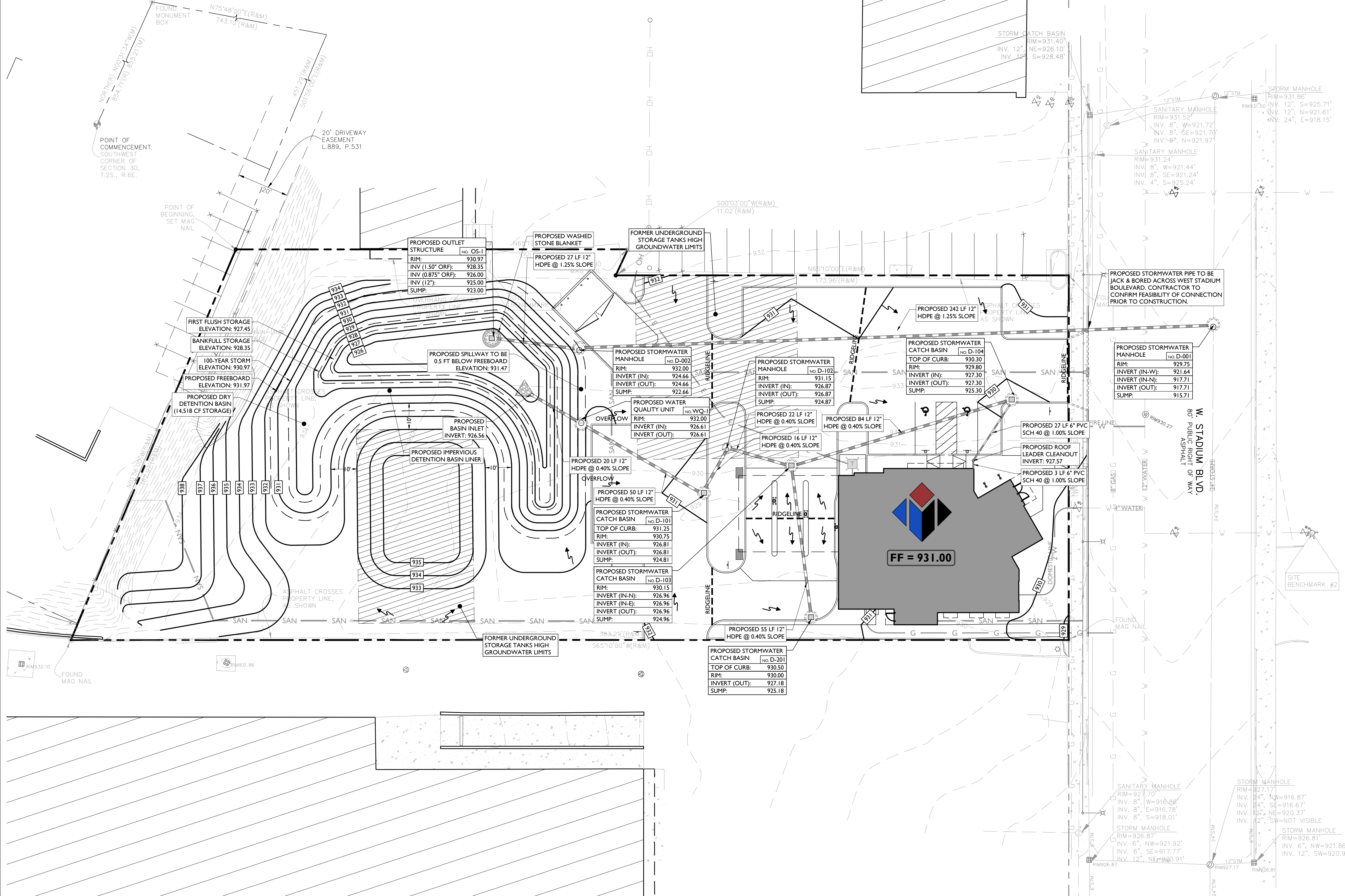






# STORM WATER NARRATIVE

A 3,803 SQUARE FOOT ONE-STORY STANDALONE CREDIT UNION IS BEING PROPOSED ON SITE. A DRIVE-THRU IS PROPOSED ALONG THE REAR OF THE BUILDING IN ACCORDANCE WITH THE SPECIAL USE STANDARDS FOR DRIVE-THRU FACILITIES. THE SITE STORMWATER WILL BE TREATED VIA A MECHANICAL TREATMENT UNIT, DETAINED WITHIN AN ABOVE GROUND BASIN AND OUTLET TO THE WEST STADIUM BOULEVARD STORMWATER SEWER. THE PROPOSED MEASURES WILL MEET ALL WASHTENAW COUNTY WATER RESOURCES COMMISSION REQUIREMENTS. THE REAR OF THE SITE WHERE THE PROPOSED ABOVE GROUND BASIN IS LOCATED CONTAINS CONTAMINATED SOILS. TO MAKE SURE THERE ARE NO PATHWAYS FOR CONTAMINATION TO GET INTO THE STORM SYSTEM, THE PROPOSED BASIN WILL HAVE A THERMOPLASTIC LINER. THE RECOMMENDED CONFIGURATION FOR THE LINER WOULD CONSIST OF A 30 MIL POLYVINYL CHLORIDE (PVC) WITH 8 OUNCE NON-WOVEN GEOTEXTILE UNDERLAYMENT AND OVERLAYMENT. PVC IS AN EFFECTIVE LINER MATERIAL AS IT OFFERS GREAT CHEMICAL RESISTANCE TO AREAS WITH HIGH CONTAMINANT CONCENTRATIONS. PROVIDES FLEXIBILITY AND VERSATILITY, AND CAN BE INSTALLED AND MAINTAINED BY A CONTRACTOR WITHOUT SPECIALTY CREWS NEEDING TO BE ON SITE. ENHANCED PUNCTURE RESISTANCE FROM AGGREGATE ON THE WATER SIDE AND PROTRUSIONS ON THE SOIL SIDE ARE ACHIEVED WITH THE PLACEMENT OF THE NON-WOVEN GEOTEXTILE ON EACH SIDE OF THE GEOMEMBRANE. SUFFICIENT TOPSOIL WILL BE PROVIDED ON TOP OF THE THERMOPLASTIC LINER THAT WILL ALLOW FOR PLANTINGS AND SEEDING TO BE PLACED ON TOP OF IT, THEREFORE THE BASIN WILL BE AESTHETICALLY PLEASING WHILE EFFECTIVE. THE CURRENT DESIGN WILL PROVIDE A 100% SEALED SYSTEM AND NO DIRECT CONNECTION FOR CONTAMINANTS TO ENTER THE CITY STORM SEWER AND ULTIMATELY THE HURON RIVER.



SYMBOL	DESCRIPTION
---	PROPERTY LINE
100	PROPOSED GRADING CONTOUR
---	PROPOSED GRADING RIDGELINE
⊠	PROPOSED STORMWATER STRUCTURES
---	PROPOSED STORMWATER PIPING
▨	HIGH GROUNDWATER LIMITS OF FORMER UNDERGROUND STORAGE TANKS

- ### DRAINAGE AND UTILITY NOTES
- THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
  - CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP GRADIENT.
  - THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
  - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

- ### EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES
- THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION. THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
  - THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
  - THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL SHORING DESIGNER. THESE SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC AND THE OWNER PRIOR TO THE START OF CONSTRUCTION.
  - THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS.
  - THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER DISPOSAL.

- ### STORMWATER INFILTRATION BMP CONSTRUCTION NOTES
- PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIOTRETENTION AREA, ETC.) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
  - THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
  - ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT (LESS THAN 8 PSI) APPLIED TO THE GROUND SURFACE IS RECOMMENDED WITHIN THE BASIN LIMITS.
  - THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING LIMITATIONS.
  - DURING THE FINAL GRADING OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED GEOTECHNICAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN. THE INFILTRATION RATES IN ACCORDANCE WITH APPENDIX E OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL, LATEST EDITION, IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION.
  - THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE IF WITNESS TESTING IS REQUIRED DURING INFILTRATION BASIN EXCAVATION AND/OR SOIL INFILTRATION TESTING.

REVISIONS PER 1TH PLANNING REVIEW COMMENTS	REVISIONS PER 2ND PLANNING REVIEW COMMENTS	REVISIONS PER 3RD PLANNING REVIEW COMMENTS	REVISIONS PER 4TH PLANNING REVIEW COMMENTS	REVISIONS PER 5TH PLANNING REVIEW COMMENTS	REVISIONS PER 6TH PLANNING REVIEW COMMENTS	REVISIONS PER 7TH PLANNING REVIEW COMMENTS	REVISIONS PER 8TH PLANNING REVIEW COMMENTS	REVISIONS PER 9TH PLANNING REVIEW COMMENTS	REVISIONS PER 10TH PLANNING REVIEW COMMENTS

NOT APPROVED FOR CONSTRUCTION

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www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226  
Phone 248.247.1115

**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

PARCEL ID: 09-09-30-3-18-028  
2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
JAKE WHEATON  
MICHIGAN LICENSE No. 6201068338  
LICENSED PROFESSIONAL ENGINEER

**STONEFIELD**  
engineering & design

SCALE: 1" = 20' PROJECT ID: M-19060  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
TITLE: **STORMWATER MANAGEMENT PLAN**  
DRAWING: **C-5**



**STORMWATER MANAGEMENT CALCULATIONS**

*(Based on Washtenaw County Stormwater Management Regulations)*

Project: **MSGCU Ann Arbor** Designer: **KML** Date: **12/16/19**

**RATIONAL METHOD VARIABLES**

Landcover	Area (SF)	C-Value*	Weighted Value
Building / Roof	4,928	0.90	4.435
Pavement / Hardscape	16,494	0.90	14.845
Open Space	29,594	0.20	5.919
<b>Subtotals</b>	<b>51,016</b>		<b>25.199</b>

\*C-values obtained from Washtenaw County Water Resources Commissioner

**Composite C Value, C:** 0.49

**FIRST FLUSH RUNOFF CALCULATION (V<sub>ff</sub>)**

$V_{ff} = (1 \text{ IN}) * (1 \text{ FT} / 12 \text{ IN}) * (43,560 \text{ SF}) * A * C$

Site Area, A: 1.17 AC  
**First Flush Runoff Volume, V<sub>ff</sub>:** 2.099.88 CF

**PRE-DEVELOPMENT BANKFULL RUNOFF CALCULATION (V<sub>df-pre</sub>)**

Rainfall Value (2 Year / 24 Hour Storm Event), P: 2.35 IN

$S = (1000 / CN) - 10$

Function of Watershed Soil & Conditions: 7.24 IN

$Q = (P - 0.2 * S)^2 / (P + 0.8 * S)$

Runoff, Q: 0.10 IN

\*Total Site Area: 51,016.00 SF

$V_{df-pre} = Q * (1/12) * \text{Area}$

**Pre-Development Bankfull Volume, V<sub>df-pre</sub>:** 424.50 CF

**POST-DEVELOPMENT PERVIOUS BANKFULL RUNOFF CALCULATION (V<sub>df-per-post</sub>)**

Rainfall Value (2 Year / 24 Hour Storm Event), P: 2.35 IN

$S = (1000 / CN) - 10$

Function of Watershed Soil & Conditions: 6.39 IN

$Q = (P - 0.2 * S)^2 / (P + 0.8 * S)$

Runoff, Q: 0.15 IN

Pervious Cover Area: 29,594 SF

$V_{df-per-post} = Q * (1/12) * \text{Area}$

**Pervious Cover Post Development Bankfull Volume, V<sub>df-per-post</sub>:** 379.17 CF

**POST-DEVELOPMENT IMPERVIOUS BANKFULL RUNOFF CALCULATION (V<sub>df-imp-post</sub>)**

Rainfall Value (2 Year / 24 Hour Storm Event), P: 2.35 IN

$S = (1000 / CN) - 10$

Function of Watershed Soil & Conditions: 0.20 IN

$Q = (P - 0.2 * S)^2 / (P + 0.8 * S)$

Runoff, Q: 2.12 IN

Impervious Cover Area: 21,422 SF

$V_{df-imp-post} = Q * (1/12) * \text{Area}$

**Impervious Cover Post Development Bankfull Volume, V<sub>df-imp-post</sub>:** 3,787.54 CF

**PERVIOUS COVER POST-DEVELOPMENT 100 YEAR STORM RUNOFF CALCULATION (V<sub>100-per-post</sub>)**

Rainfall Value (100 Year Storm Event), P: 5.11 IN

$S = (1000 / CN) - 10$

Function of Watershed Soil & Conditions: 6.39 IN

$Q_{100-per} = (P - 0.2 * S)^2 / (P + 0.8 * S)$

Runoff, Q<sub>100-per</sub>: 1.44 IN

Pervious Cover Area: 29,594 SF

$V_{100-per-post} = Q * (1/12) * \text{Area}$

**Pervious Cover Post Development 100-Year Volume, V<sub>100-per-post</sub>:** 3,540.50 CF

**IMPERVIOUS COVER POST-DEVELOPMENT 100 YEAR STORM RUNOFF CALCULATION (V<sub>100-imp-post</sub>)**

Rainfall Value (100 Year Storm Event), P: 5.11 IN

$S = (1000 / CN) - 10$

Function of Watershed Soil & Conditions: 0.20 IN

$Q_{100-imp} = (P - 0.2 * S)^2 / (P + 0.8 * S)$

Runoff, Q<sub>100-imp</sub>: 4.87 IN

Impervious Cover Area: 21,422 SF

$V_{100-imp-post} = Q * (1/12) * \text{Area}$

**Impervious Cover Post Development 100-Yr Vol, V<sub>100-imp-post</sub>:** 8,699.12 CF

**NRCS VARIABLES**

Cover Type (Pre-Development)	Soil Type	Area (SF)	Curve Number (CN)	Weighted Value
Meadow	B	51,016	58.0	2,958.928
<b>Subtotals</b>		<b>51,016</b>		<b>2,958.928</b>

Cover Type (Post-Development)	Soil Type	Area (SF)	Curve Number (CN)	Weighted Value
Fully Developed Urban Area (Good Condition)	B	29,594	61.0	1,805.234
<b>Subtotals</b>		<b>29,594</b>		<b>1,805.234</b>

Impervious Cover Type (Post-Development)	Soil Type	Area (SF)	Curve Number (CN)	Weighted Value
Paved Parking Lots, Roofs, Driveways	B	21,422	98.0	2,099.356
<b>Subtotals</b>		<b>21,422</b>		<b>2,099.356</b>

**Composite CN Value, CN:** 58.00

**Composite CN Value, CN:** 61.00

**Composite CN Value, CN:** 61.00

**Composite CN Value, CN:** 98.00

**TIME OF CONCENTRATION FOR APPLICABLE FLOW TYPES (T<sub>con</sub>)**

**Total Time of Concentration (T<sub>con</sub>):** 0.25 HR

**RUNOFF SUMMARY**

**First Flush Runoff Volume, V<sub>ff</sub>:** 2,099.88 CF

**Pre-Development Bankfull Volume, V<sub>df-pre</sub>:** 424.50 CF

**Pervious Cover Post Development Bankfull Volume, V<sub>df-per-post</sub>:** 379.17 CF

**Impervious Cover Post Development Bankfull Volume, V<sub>df-imp-post</sub>:** 3,787.54 CF

**Total Bankfull Volume (V<sub>df-post</sub>):** 4,166.72 CF

**Pervious Cover Post Development 100-Year Storm Volume, V<sub>100-per-post</sub>:** 3,540.50 CF

**Impervious Cover Post Development 100-Year Storm Volume, V<sub>100-imp-post</sub>:** 8,699.12 CF

**Total 100 Year Volume (V<sub>100</sub>):** 12,239.62 CF

**ONSITE INFILTRATION REQUIREMENTS**

$V_{df-inf} = V_{df-post} - V_{df-pre}$

**Bankfull Volume Difference, V<sub>df-inf</sub>:** - CF

\*Basin to include additional 20% volume if required infiltration is not provided

**Onsite Infiltration Requirement, V<sub>inf</sub>:** - CF

**DETENTION REQUIREMENTS**

$Q_p = 238.6 * T_c^{-0.82}$

\*Site Area Excluding "Self Crediting" BMPs

**\*Total Site Area:** 1.17 AC

$Q_{100} = Q_{100-per} + Q_{100-imp}$

**100 Year Storm Runoff, Q<sub>100</sub>:** 6.31 IN

$PF = (Q_p * Q_{100} * \text{Area}) / 640$

**Peak Flow, PF:** 8.58 CFS

$\Delta = PF - (0.15 * \text{Area})$

**Δ:** 8.41 CFS

$V_{det} = (\Delta / PF) * V_{100} - V_{inf}$

**Required Detention Volume, V<sub>det</sub>:** 11,989.15 CF

$V_{det} = ((\Delta / PF) * V_{100} - V_{inf}) * 1.2$

**Required Detention Volume W/Out Infiltration, V<sub>det</sub>:** 14,386.98 CF

**ABOVEGROUND BASIN VOLUME PROVIDED**

Elevation	Surface Area (SF)	Total Volume (CF)
926.00	875	0
927.00	1,546	1,211
928.00	2,377	3,172
929.00	3,277	5,999
930.00	4,246	9,761
931.00	5,269	14,518

**Basin Height, H:** 5.00 FT

Basin volume calculated based on a trapezoidal prism

**DETENTION STAGED STORAGE VOLUME PROPOSED**

<b>FIRST FLUSH:</b>	928.00 - 927.00	=	FF - 927.00	=	<b>927.45</b>
<b>X<sub>FF</sub></b>	3.172 - 1.176	=	2.100 - 1.176	=	
<b>BANKFULL:</b>	929.00 - 928.00	=	BF - 928.00	=	<b>928.35</b>
<b>X<sub>BF</sub></b>	5.999 - 3.172	=	4.167 - 3.172	=	
<b>100 YEAR:</b>	931.00 - 930.00	=	100yr - 930.00	=	<b>930.97</b>
<b>X<sub>100yr</sub></b>	14.518 - 9.761	=	14.387 - 9.761	=	

**ALLOWABLE RELEASE RATE**

$Q_{allow} = (0.15 \text{ cfs/acre})(A)$

$Q_{allow} = (0.15 \text{ cfs/acre})(1.17 \text{ Acres})$

**Q<sub>allow</sub> = 0.176 CFS**

**FIRST FLUSH REQUIRED CONTROL ORIFICE SIZE**

$H = (2/3)(X_{FF} - X_{BOT})$ : 0.97 FT

**Control Orifice Area, A<sub>orif</sub>:** 0.00496 FT<sup>2</sup>

$A_{ff} = Q_{ff} / (0.62 * (2 * 32.2 * H)^{0.5})$

**Control Orifice Diameter, D<sub>orif</sub>:** 0.079 FT

$D_{ff} = 2 * (A_{ff} / \pi)^{0.5}$

**Orifice Diameter Proposed:** 0.875 IN

$Maximum \#_{orif} = A_{ff} / A_{orif}$ : 1.03

**# Orifice Proposed:** 1

$Q_{ff} = (0.62)(\#_{orif})(A_{orif})(2 * 32.2 * H)^{0.5}$ : 0.0206 cfs

**Minimum Detention Time Criteria:** 24 HR

$T_{FF} = V_{FF} / Q_{FF}$ : 28.4 HR

**BANK FULL REQUIRED CONTROL ORIFICE SIZE**

$Maximum \#_{orif} = A_{BF} / A_{orif}$ : 0.07

**# Orifice Proposed:** 0

$Q_{BF}^{ACT} = (0.62)(\#_{orif})(A_{orif})(2 * 32.2 * H_{ave}^{BF})^{0.5}$ : - cfs

**Minimum Detention Time Criteria:** 36 - 48 HR

$T_{BF}^{ACT} = T_{FF} + V_{REH} / (Q_{FF} + Q_{BF}^{ACT})$ : 47.5 HR

**100 YEAR STORM REQUIRED CONTROL ORIFICE SIZE**

$Q_{FF} + Q_{BF} = 0.62(\#_{orif})(A_{orif})(2 * 32.2 * (X_{100} - X_{BOT})^{0.5}) + 0.62(\#_{orif})(A_{orif})(2 * 32.2 * (X_{100} - X_{FF})^{0.5})$ : 0.0466 cfs

$Q_{100}^{MAX} = Q_{allow} - (Q_{FF} + Q_{BF})$ : 0.1294 cfs

$A_{100}^{MAX} = Q_{100}^{MAX} / (0.62 * (2 * 32.2 * (X_{100} - X_{BOT})^{0.5})$ : 0.01607 sf

$Maximum \#_{orif} = A_{SF} / A_{orif}$ : 1.31

**# Orifice Proposed:** 1

$Q_{FF} + Q_{BF} + 0.62(\#_{orif})(A_{100})(2 * 32.2 * H_{TOT})^{0.5} < Q_{allow}$ : 0.091 cfs

$H_{all} = (2/3)(X_{100} - X_{BOT}) + (X_{BF} - X_{BOT})$ : 4.10 FT

**Q<sub>all</sub> = (0.62)(#<sub>orif</sub>)(A<sub>orif</sub>)(2 \* 32.2 \* H<sub>all</sub>)<sup>0.5</sup>**: 0.042 cfs

$H_{ave}^{BF} = (2/3)(X_{100} - X_{BOT}) + (X_{BF} - X_{FF})$ : 2.65 FT

**Q<sub>BF+100</sub> = (0.62)(#<sub>orif</sub>)(A<sub>orif</sub>)(2 \* 32.2 \* H<sub>ave</sub><sup>BF</sup>)<sup>0.5</sup>**: - cfs

$H_{ave}^{100} = (2/3)(X_{100} - X_{BOT})$ : 1.75 FT

**Q<sub>100-ave</sub> = (0.62)(#<sub>orif</sub>)(A<sub>100-ave</sub>)(2 \* 32.2 \* H<sub>ave</sub><sup>100</sup>)<sup>0.5</sup>**: 0.081 cfs

$V_{REH} = V_{100} - V_{BF}$ : 10,220 CF

**T<sub>100</sub> = T<sub>FF</sub> + V<sub>REH</sub> / (Q<sub>all</sub> + Q<sub>BF+100</sub> + Q<sub>100-ave</sub>)**: 67.28 HR

**Minimum Detention Time Criteria:** 72 HR

ISSUE	DATE	BY	DESCRIPTION
6	12-16-2019	KML	REVISIONS PER 4TH PLANNING REVIEW COMMENTS
5	10-30-2019	KML	REVISIONS PER 3RD PLANNING REVIEW COMMENTS
4	10-11-2019	ADG	REVISIONS PER 2ND PLANNING REVIEW COMMENTS
3	08-22-2019	ADG	REVISIONS PER PLANNING REVIEW COMMENTS
2	08-08-2019	ADG	REVISIONS PER PLANNING REVIEW COMMENTS
1	05-30-2019	ADG	SUBMISSION FOR SITE PLAN APPROVAL

**NOT APPROVED FOR CONSTRUCTION**

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**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

PARCEL ID: 09-09-303-18-028  
 2151 WEST STADIUM BOULEVARD  
 CITY OF ANN ARBOR  
 WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
 JAKE WILSON  
 6201088338  
 MICHIGAN LICENSE No. 6201088338  
 LICENSE PROFESSIONAL ENGINEER

**STONEFIELD**  
engineering & design

SCALE: AS SHOWN PROJECT ID: M-19060  
 CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
**TITLE: STORMWATER MANAGEMENT PLAN**  
 DRAWING:  
**C-6**

V:\SP19\1906\STORMWATER\1311 WEST STADIUM BOULEVARD ANN ARBOR, MICHIGAN\LOT\SP19-019.DWG



**SANITARY SEWER FLOW MITIGATION CALCULATIONS**  
(Based on City of Ann Arbor's Developer Offset-Mitigation Program Guidelines)

**DESIGN POPULATION**

2151 W. Stadium Blvd. will be a single story 3,803 SF Michigan Schools & Government Credit Union. Vehicular parking has been proposed as well as bicycle parking located near the front entrance.

**PROPOSED FLOW**

Based on the City of Ann Arbor's sanitary sewer flow evaluation Table 'A', the design dry weather flow rate for the development will be:

3,803 SF	Non-medical Office	0.06	gpd/gfa	=	228.18	gpd
Peak Flow =	228.18	x	4	x	1.2	= 1095.26 gpd
						= 0.76 gpm
						= 1.00 GPM

**FOOTING DRAIN DISCONNECT**

Mitigation peak flow =	0.76	gpm	/	4	=	0.19	FDD
						=	0 FDD

No mitigation required for flows <1.00 gpm. No footing drain disconnection required.

SYMBOL	DESCRIPTION
---	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E	PROPOSED ELECTRIC CONDUITS
G	PROPOSED GAS LINE
⊗	PROPOSED VALVE
⊕	PROPOSED FIRE HYDRANT
⊙	PROPOSED SANITARY MANHOLE / CLEANOUT
T	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS

**DRAINAGE AND UTILITY NOTES**

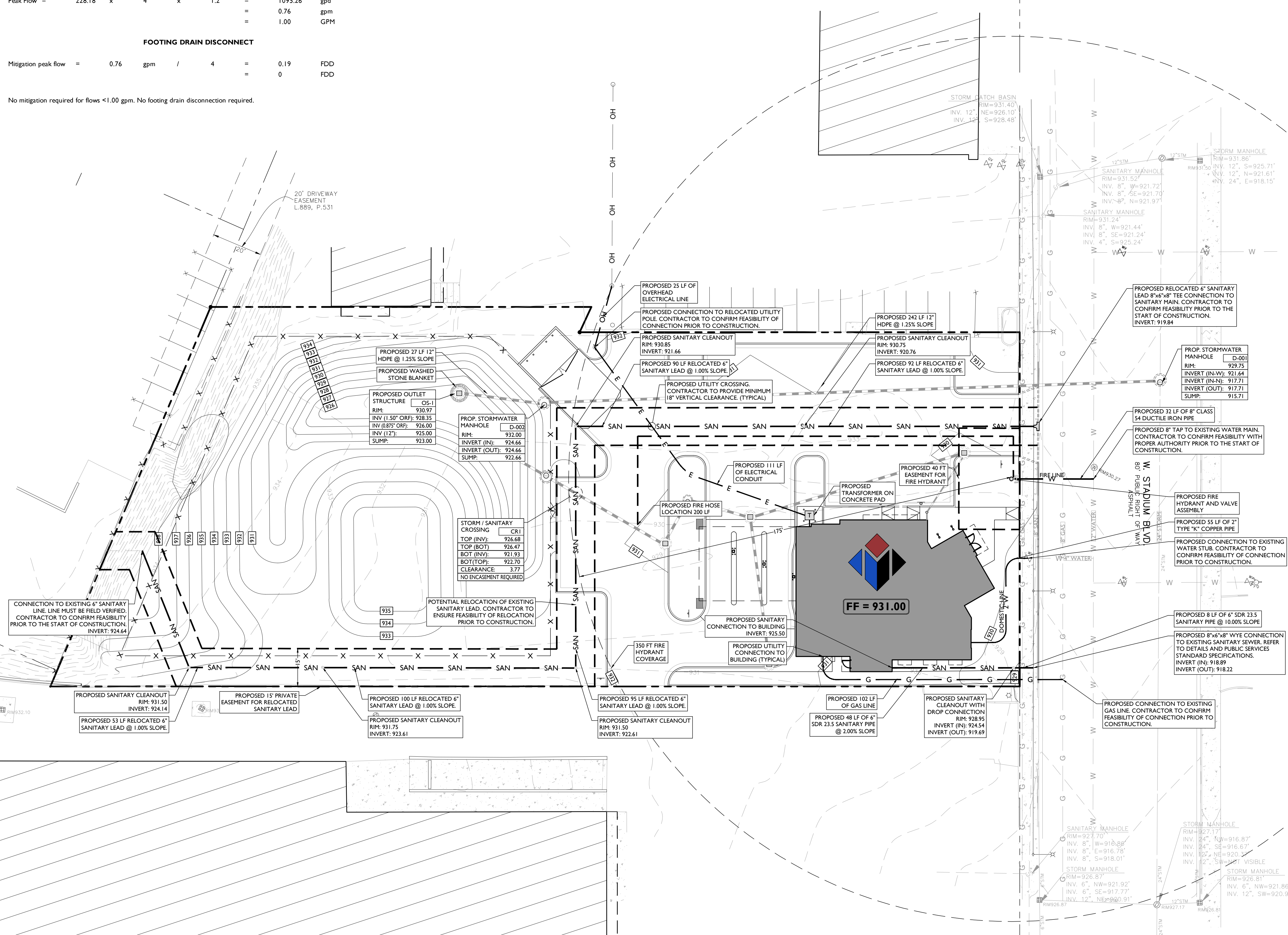
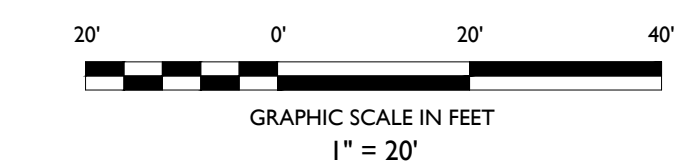
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
- THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
- A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
- ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASUREMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
- THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
- CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP GRADIENT.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DESTRUCTION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
- THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DISPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
- THE CONTRACTOR SHALL INSTALL THE FIRE HYDRANT WITH THE OUTLETS DIRECTED TOWARDS WEST STADIUM BOULEVARD.

**KNOX BOX TO BE PROVIDED. LOCATION TO BE PROVIDED PER ARCHITECTURAL DRAWINGS AND APPROVED BY THE FIRE MARSHAL.**

**NO FIRE WALL IS REQUIRED AND WILL NOT BE PROVIDED WITHIN THE PROPOSED BUILDING**

**NO BOOSTER PUMP NEEDED FOR DOMESTIC WATER CONNECTION**

**NO FIRE SUPPRESSION SYSTEM REQUIRED**



REVISIONS PER 1TH PLANNING REVIEW COMMENTS	REVISIONS PER 2ND PLANNING REVIEW COMMENTS	REVISIONS PER 3RD PLANNING REVIEW COMMENTS	REVISIONS PER 4TH PLANNING REVIEW COMMENTS	REVISIONS PER 5TH PLANNING REVIEW COMMENTS	REVISIONS PER 6TH PLANNING REVIEW COMMENTS	REVISIONS PER 7TH PLANNING REVIEW COMMENTS	REVISIONS PER 8TH PLANNING REVIEW COMMENTS	REVISIONS PER 9TH PLANNING REVIEW COMMENTS	REVISIONS PER 10TH PLANNING REVIEW COMMENTS	REVISIONS PER 11TH PLANNING REVIEW COMMENTS	REVISIONS PER 12TH PLANNING REVIEW COMMENTS	REVISIONS PER 13TH PLANNING REVIEW COMMENTS	REVISIONS PER 14TH PLANNING REVIEW COMMENTS	REVISIONS PER 15TH PLANNING REVIEW COMMENTS	REVISIONS PER 16TH PLANNING REVIEW COMMENTS	REVISIONS PER 17TH PLANNING REVIEW COMMENTS	REVISIONS PER 18TH PLANNING REVIEW COMMENTS	REVISIONS PER 19TH PLANNING REVIEW COMMENTS	REVISIONS PER 20TH PLANNING REVIEW COMMENTS	

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**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

PARCEL ID: 09-095-30-3-18-028  
2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
JAKE ROBERTSON  
6201068338  
MICHIGAN LICENSE No. 6201068338  
LICENSED PROFESSIONAL ENGINEER

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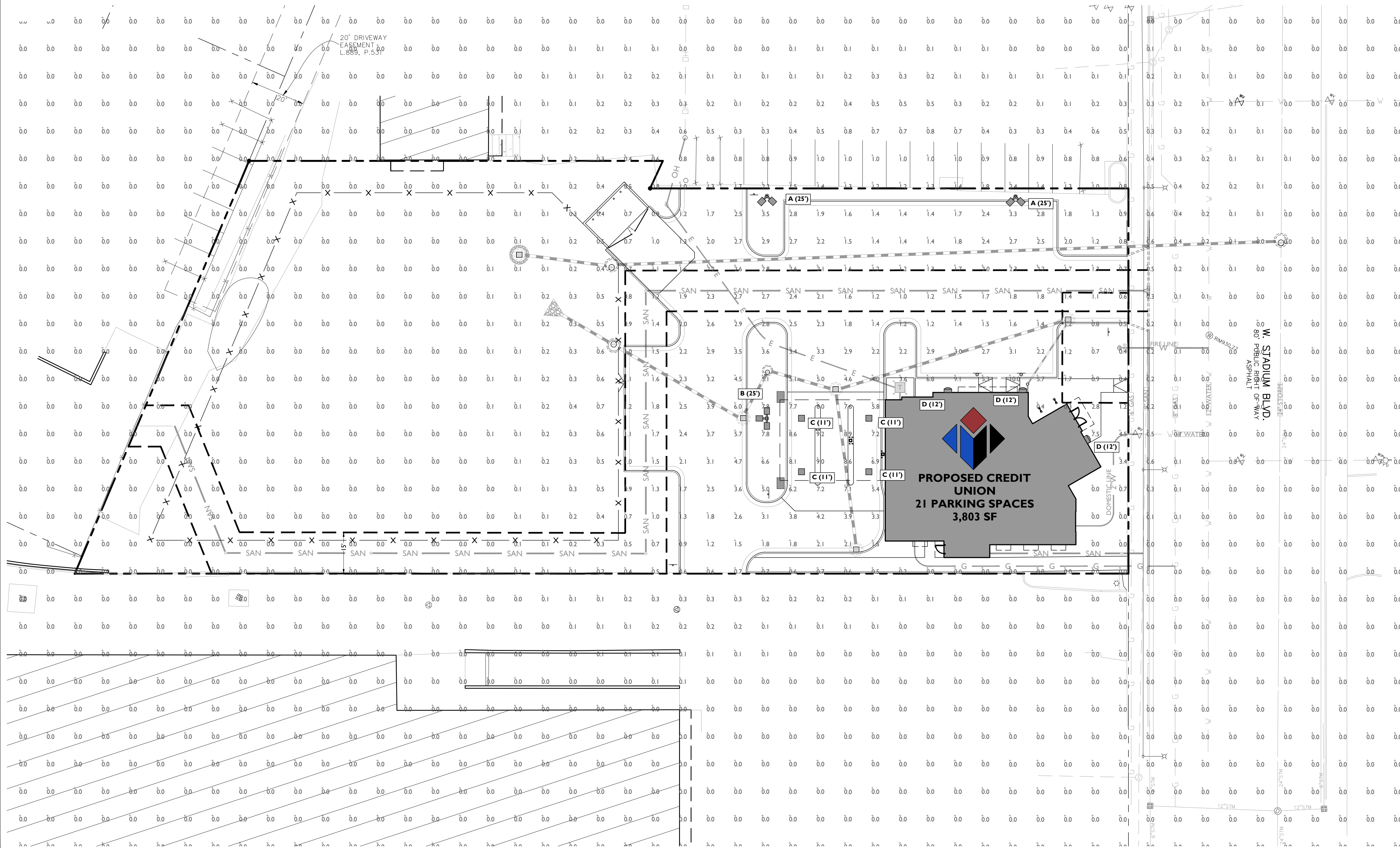
SCALE: 1" = 20' PROJECT ID: M-19060  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
TITLE: **UTILITY PLAN**  
DRAWING: **C-7**



PROPOSED LUMINARIES SCHEDULE								
SYMBOL	LABEL	QUANTITY	SECURITY LIGHTING	DISTRIBUTION	LLF	WATTS	MANUFACTURER	IES FILE
	A	2	D-SERIES SIZE I LED AREA LUMINAIRE	II	0.90	70	LITHONIA LIGHTING	DSX1_LED_P2_40K_T4M_MVOLT_HS
	B	1	D-SERIES SIZE I LED AREA LUMINAIRE	IV	0.90	70	LITHONIA LIGHTING	DSX1_LED_P2_40K_T4M_MVOLT_HS
	C	4	KACM LED SURFACE LUMINAIRE	V	0.90	46	LITHONIA LIGHTING	KACM_LED_20C_700_40K_R5_MVOLT
	D	3	WST LED ARCHITECTURAL WALL SCONCE	VW	0.90	30	LITHONIA LIGHTING	WST_LED_P2_40K_VW_MVOLT_VG

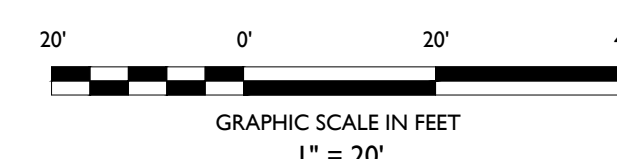
LIGHTING REQUIREMENTS		
CODE SECTION	REQUIRED	PROPOSED
§ 525.2	ALL EXTERIOR LIGHTING SHALL BE ADEQUATELY SHIELDED SO THAT LIGHT IS DIRECTED AWAY FROM PUBLIC RIGHT-OF-WAYS AND ADJACENT PROPERTIES.	COMPLIES
§ 524.3	MINIMUM ILLUMINATION LEVELS: PARKING LOTS - 0.6 FOOTCANDLES BICYCLE PARKING - 0.4 FOOTCANDLES MAX UNIFORMITY RATIO - 10:1	COMPLIES

SYMBOL	DESCRIPTION
---	PROPOSED CALCULATION AREA
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
+XX	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
	PROPOSED AREA LIGHT
	PROPOSED BUILDING MOUNTED LIGHT



**GENERAL LIGHTING NOTES**

- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
- WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
- UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
  - LIGHT EMITTING DIODES (LED): 0.90
  - HIGH PRESSURE SODIUM: 0.72
  - METAL HALIDE: 0.72
- THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.



REVISIONS PER 4TH PLANNING REVIEW COMMENTS	REVISIONS PER 3RD PLANNING REVIEW COMMENTS	REVISIONS PER 2ND PLANNING REVIEW COMMENTS	REVISIONS PER 1ST PLANNING REVIEW COMMENTS	ISSUE	DATE	BY	DESCRIPTION
				6	12-16-2019	KHL	
				5	10-30-2019	KHL	
				4	10-11-2019	ADG	
				3	08-22-2019	ADG	
				2	08-08-2019	ADG	
				1	05-30-2019	ADG	

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PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES

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2151 WEST STADIUM BOULEVARD  
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WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
JAKE WHITSTON  
MICHIGAN LICENSE No. 620108336  
LICENSED PROFESSIONAL ENGINEER

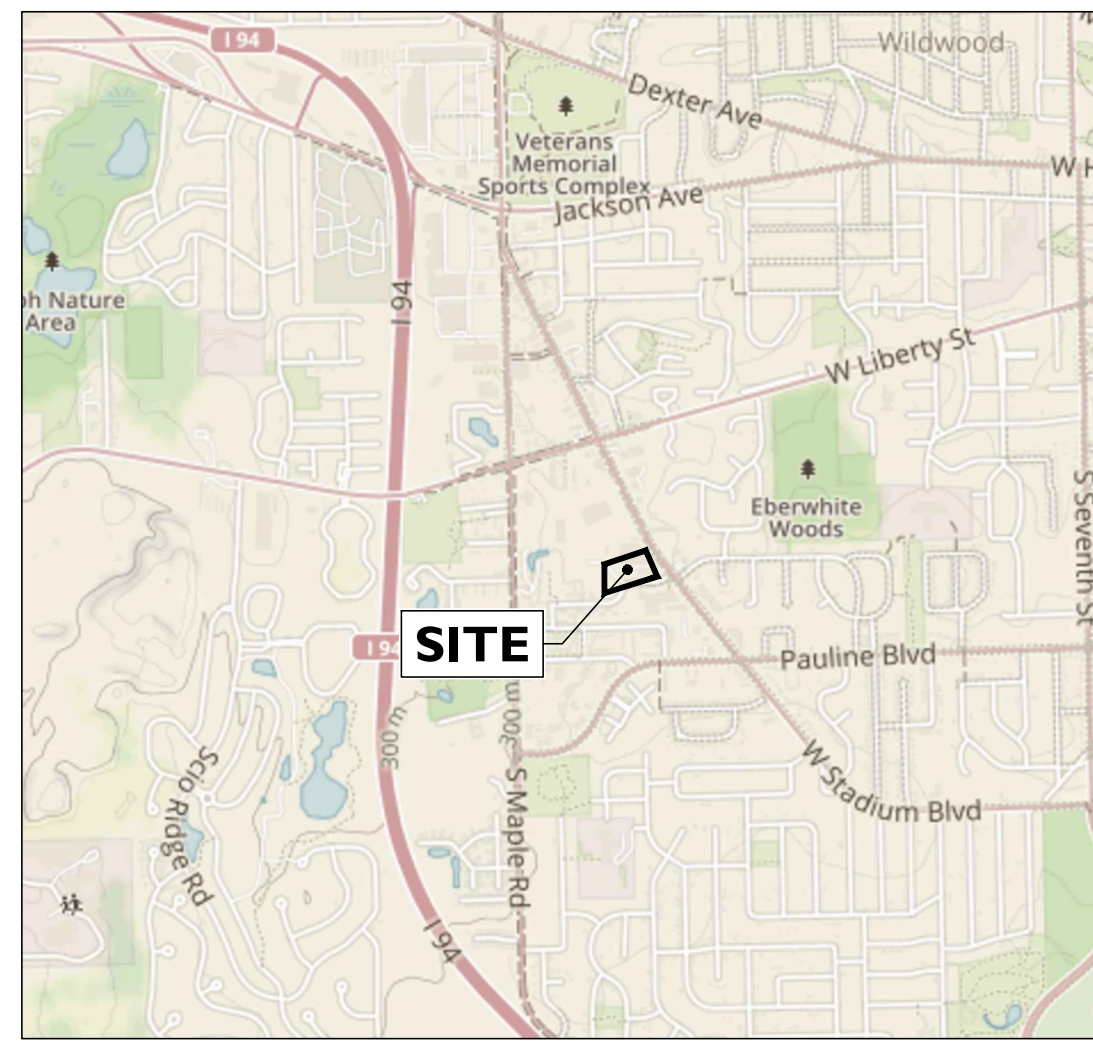
**STONEFIELD**  
engineering & design

SCALE: 1" = 20' PROJECT ID: M-19060  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
TITLE: LIGHTING PLAN  
DRAWING: C-8



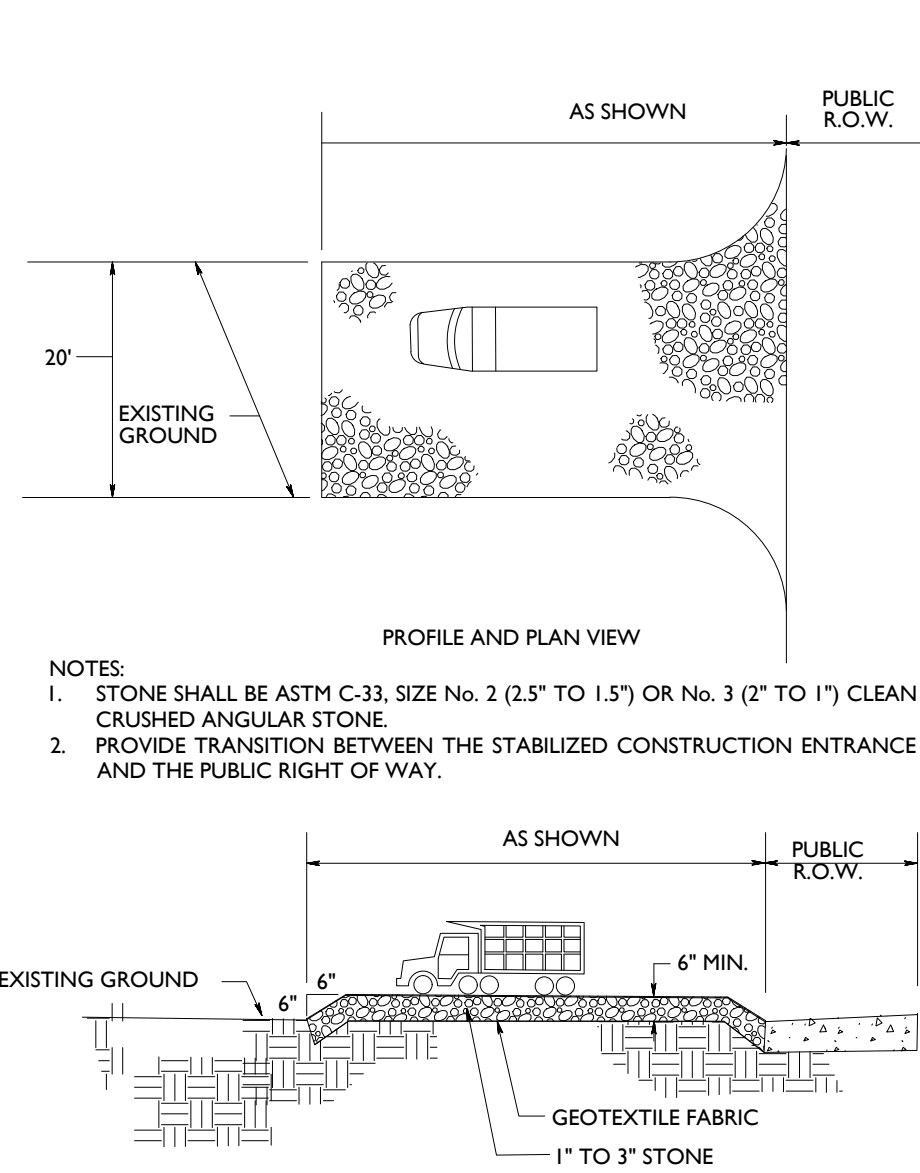






### LOCATION MAP

SCALE: 1" = 2,000'±

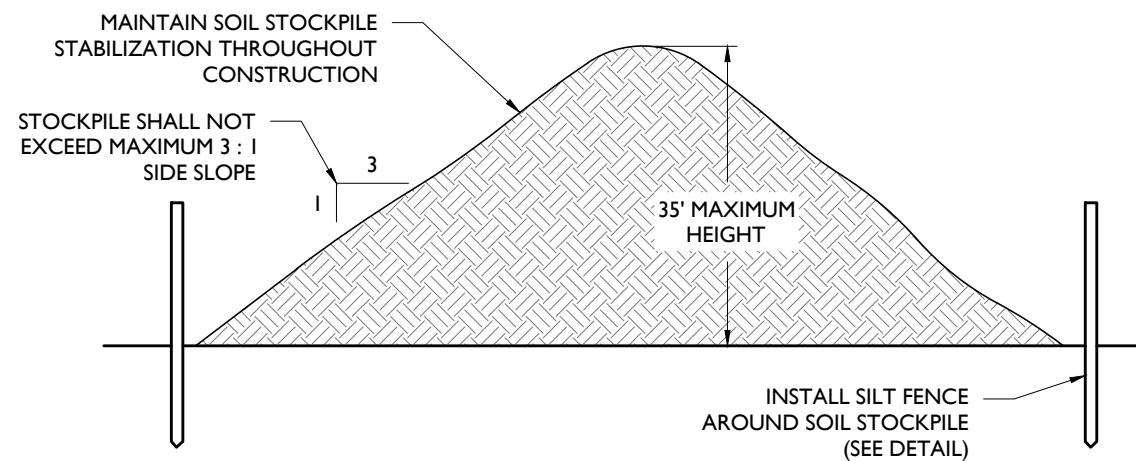


### STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

### PERMANENT MAINTENANCE TASKS AND SCHEDULE

	COMPONENTS						Schedule
	Streets	Storm Sewer System	Catch Basin Sumps	Catch Basin Inlets	Detention Basin	Outflow Control Structure	
Inspect for sediment accumulation	X	X	X		X	X	Annually
Removal of sediment accumulation		X	X		X	X	As needed
Inspect for floatables & debris		X	X	X	X	X	Annually
Cleaning of floatables & debris		X	X	X	X	X	Annually
Inspect for erosion					X		Annually
Re-establish permanent vegetation on eroded slopes					X		As needed
Clean streets	X						Semi-Annually



### SOIL STOCKPILE DETAIL

NOT TO SCALE

**SEQUENCE OF CONSTRUCTION**

1. INSTALL AND MAINTAIN SOIL EROSION CONTROL MEASURES AS REQUIRED (90 DAYS).
2. ROUGH GRADING AND TEMPORARY SEEDING (30 DAYS).
3. EXCAVATE AND INSTALL UTILITIES (30 DAYS).
4. CONSTRUCT RIGHT OF WAY IMPROVEMENTS (7 DAYS).
5. BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (120 DAYS).
6. LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (7 DAYS).
7. REMOVE SOIL EROSION MEASURES AND CLEANUP SITE (1 DAY).

**NOTE:** TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO TOWNSHIP AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.

**NOTE:** STORMWATER MANAGEMENT SYSTEM TO BE INSTALLED AND APPROVED PRIOR TO RELEASE OF BUILDING PERMIT.

### SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL AND COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION AS REQUIRED TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION.
4. THE CONTRACTOR SHALL NOT ALLOW BUILD-UP OF DIRT OR SEDIMENT ON WEST STADIUM BOULEVARD. THE CONTRACTOR SHALL PROVIDE SWEEPING OF THE ROADWAY ON WEST STADIUM BOULEVARD AS NECESSARY.
5. THE SOIL EROSION CONTROLS WILL BE MAINTAINED WEEKLY AND AFTER EVERY STORM EVENT BY THE CONTRACTOR.

### EARTHWORK ESTIMATE

THE EARTHWORK ESTIMATE ON SITE WILL CONSIST OF 16,000 CF OF EXCAVATION FOR THE DETENTION BASIN. ALL EXCAVATION SOILS WILL REMAIN ON SITE.

**SOIL CHARACTERISTICS CHART**

TYPE OF SOIL	WwabB - WAWASEE LOAM
PERCENT OF SITE COVERAGE	74.6%
HYDROLOGIC SOIL GROUP	B
DEPTH TO RESTRICTIVE LAYER	MORE THAN 80 INCHES
SOIL PERMEABILITY	0.60 TO 2.00 IN / HR
DEPTH TO WATER TABLE	MORE THAN 80 INCHES

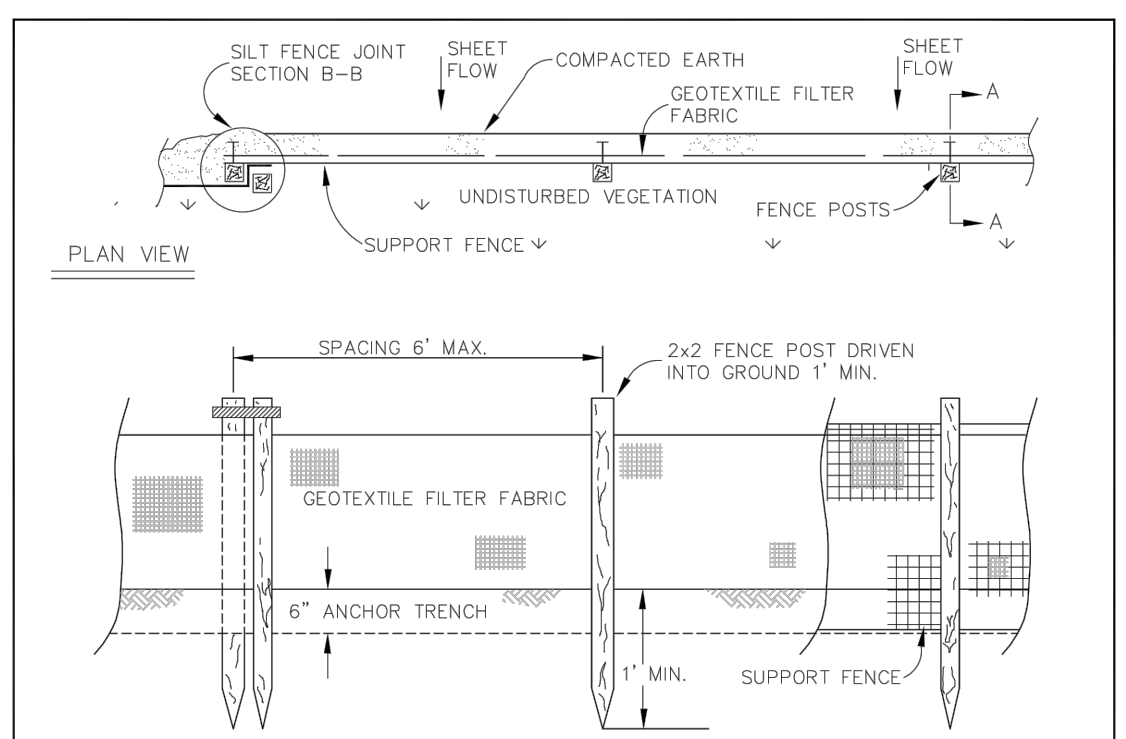
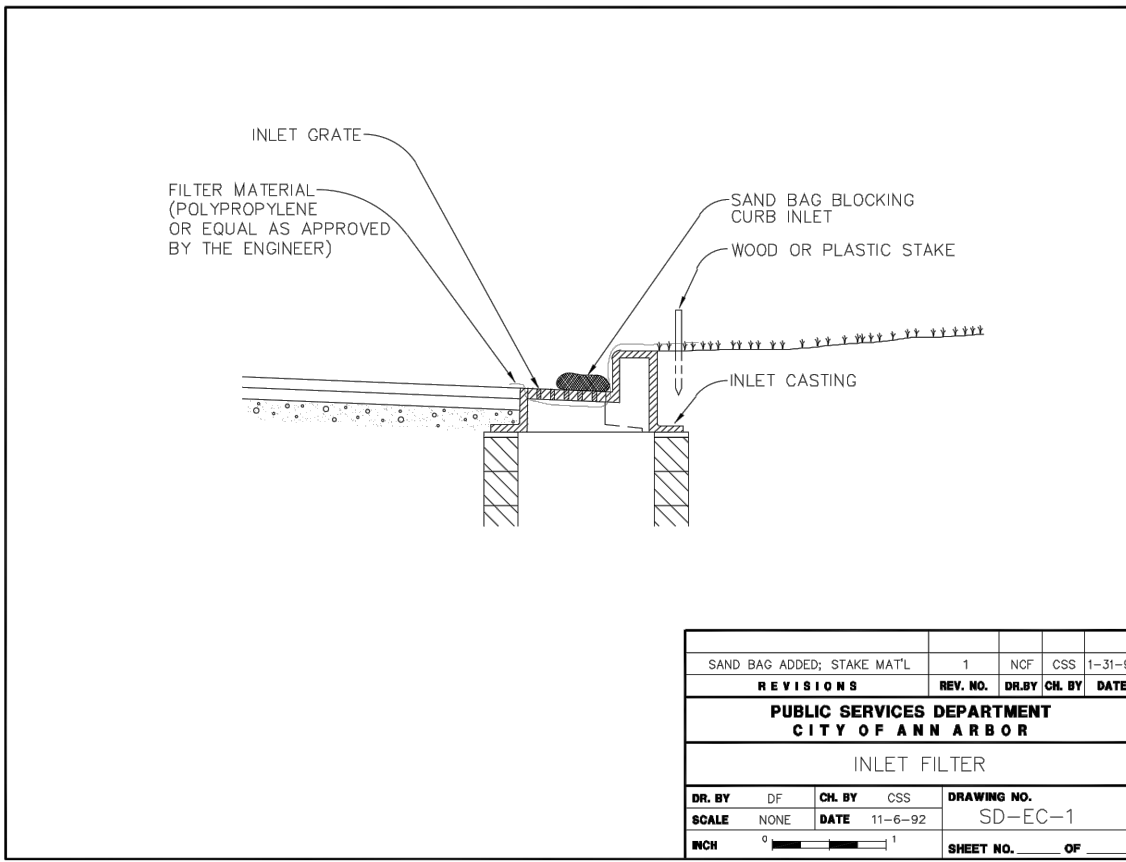
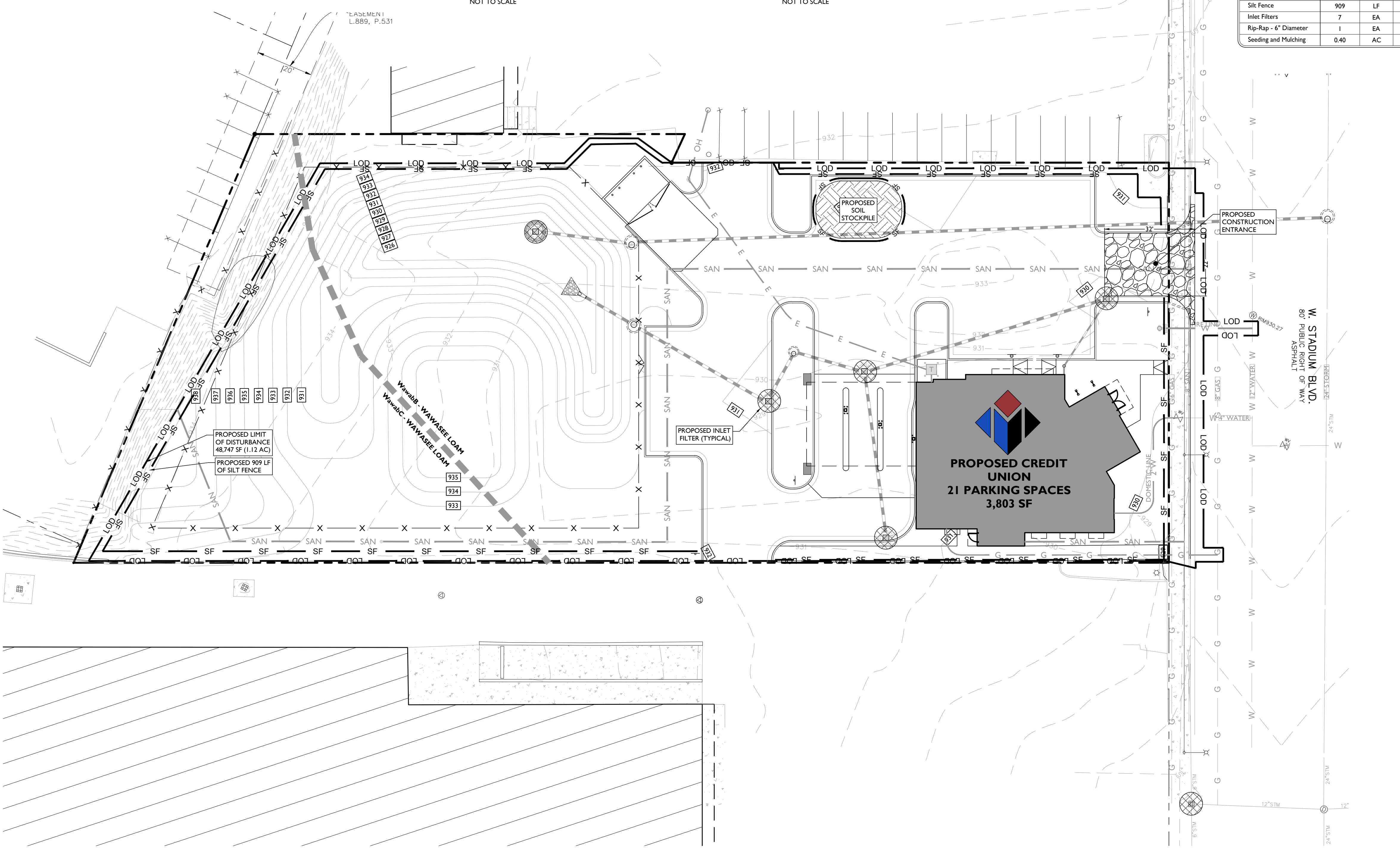
**SOIL CHARACTERISTICS CHART**

TYPE OF SOIL	WwabC - WAWASEE LOAM
PERCENT OF SITE COVERAGE	25.4%
HYDROLOGIC SOIL GROUP	B
DEPTH TO RESTRICTIVE LAYER	MORE THAN 80 INCHES
SOIL PERMEABILITY	0.60 TO 2.00 IN / HR
DEPTH TO WATER TABLE	MORE THAN 80 INCHES

### SOIL EROSION CONTROL COST ESTIMATE

Description	Quantity	Unit	Unit Price	Total
Silt Fence	909	LF	\$2.00	\$1,818
Inlet Filters	7	EA	\$150.00	\$1,050
Rip-Rap - 6" Diameter	1	EA	\$350.00	\$350
Seeding and Mulching	0.40	AC	\$3,500.00	\$1,400

SYMBOL	DESCRIPTION
---	PROPERTY BOUNDARY
- - - -	ADJACENT PROPERTY BOUNDARY
---	LOD
---	PROPOSED LIMIT OF DISTURBANCE
---	SF
---	PROPOSED SILT FENCE
---	PROPOSED STOCKPILE & EQUIPMENT STORAGE
---	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED INLET PROTECTION FILTER



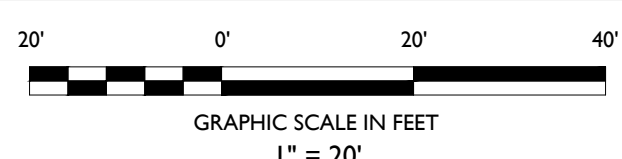
**REVISIONS**

REV. NO.	DATE	BY	CHK BY	DATE
1	11-6-92	SSJ	CSJ	11-6-92

**PUBLIC SERVICES DEPARTMENT  
CITY OF ANN ARBOR**

**SILT FENCE**

DR. BY	DF/JMJ	CHK. BY	CSJ/DF	DRAWING NO.	SD-EC-3
SCALE	NONE	DATE	11-6-92	SHEET	NO. OF
INCH	1" = 20'				



NO.	DATE	ISSUE	DESCRIPTION
6	12-16-2019	KPL	REVISIONS PER 1TH PLANNING REVIEW COMMENTS
5	10-30-2019	KPL	REVISIONS PER 2ND PLANNING REVIEW COMMENTS
4	10-11-2019	KPL	REVISIONS PER 2ND PLANNING REVIEW COMMENTS
3	08-22-2019	ADG	REVISIONS PER PLANNING REVIEW COMMENTS
2	08-08-2019	ADG	REVISIONS PER PLANNING REVIEW COMMENTS
1	05-30-2019	ADG	SUBMISSION FOR SITE PLAN APPROVAL

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**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

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2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
JAKE ROBERTSON  
6201068338  
MICHIGAN LICENSE NO. 6201068338  
LICENSED PROFESSIONAL ENGINEER

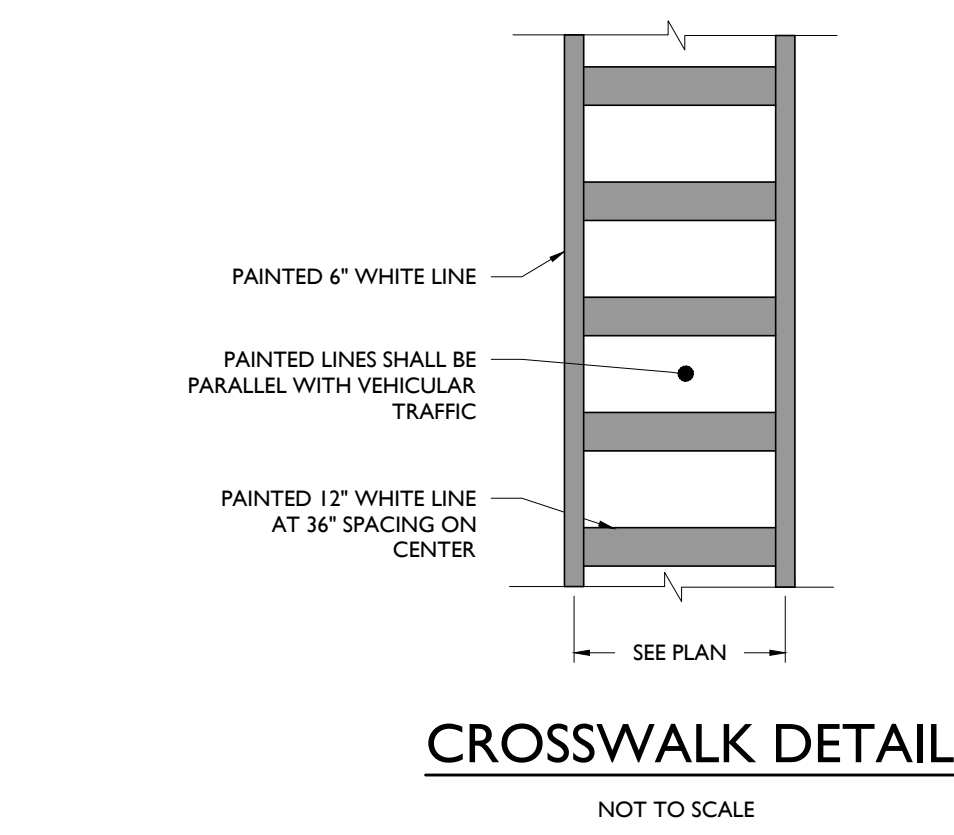
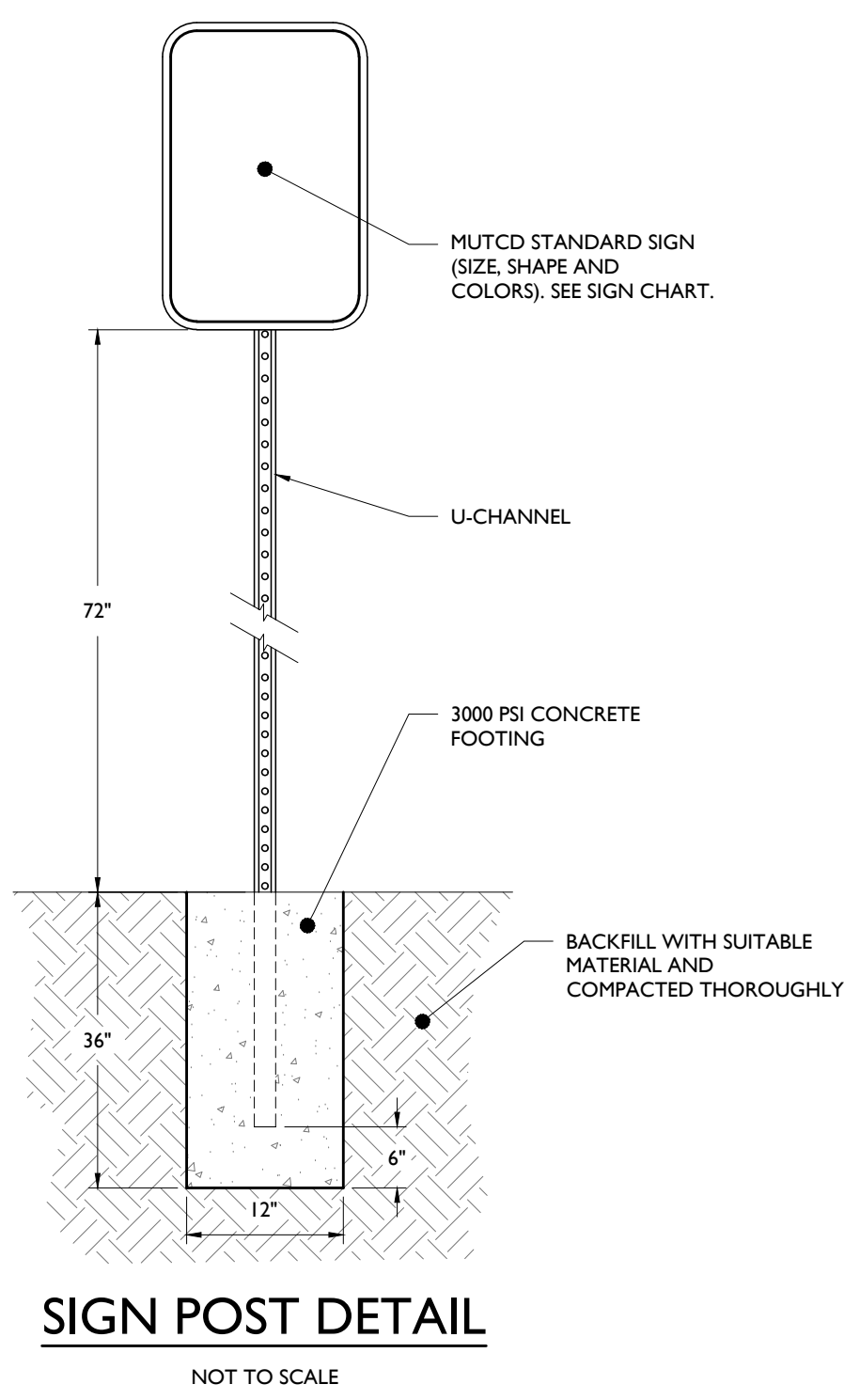
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SCALE: 1" = 20' PROJECT ID: M-19060  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

**SOIL EROSION & SEDIMENT CONTROL PLAN**

DRAWING:  
**C-10**

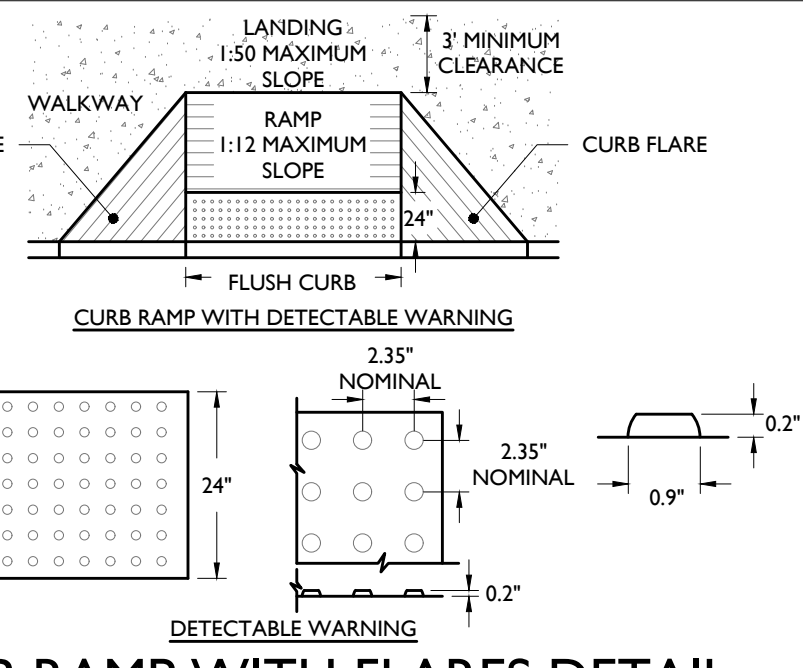
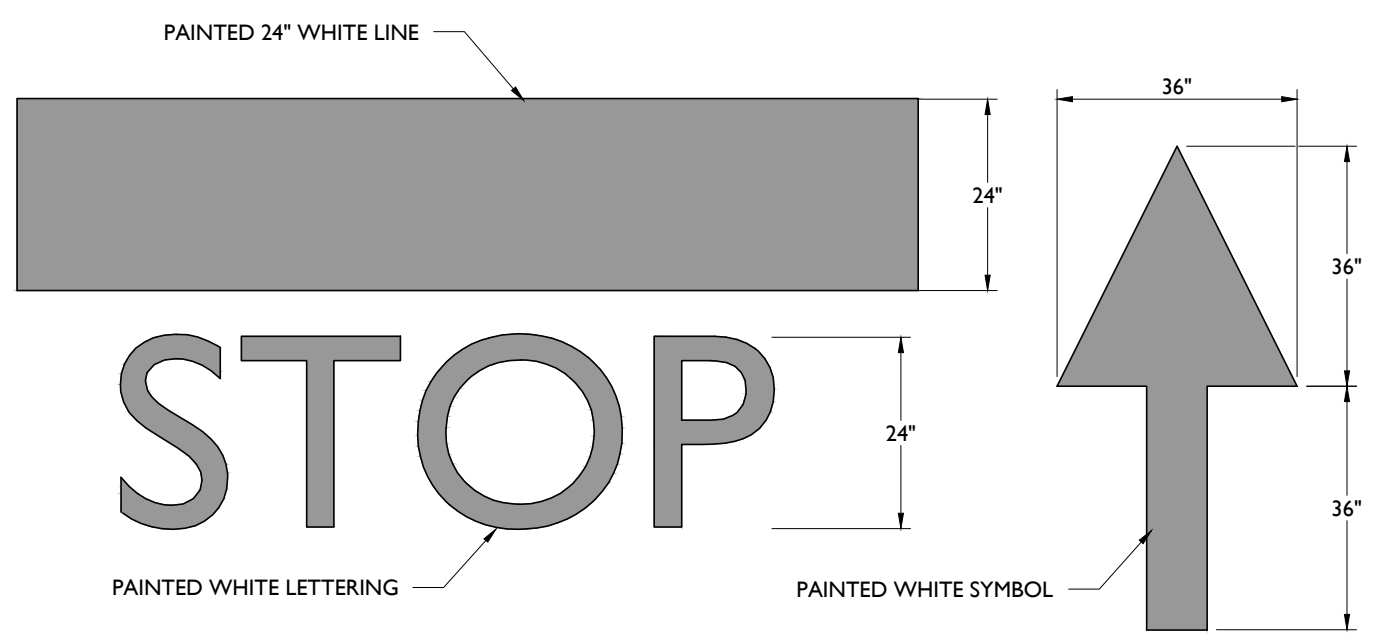




M.U.T.C.D. NUMBER	TEXT	COLOR		SIZE OF SIGN (WIDTH X HEIGHT)	TYPE OF MOUNT
		LEGEND	BACKGROUND		
DO NOT ENTER (R5-1)		RED	WHITE	30"x30"	GROUND
STOP SIGN (R1-1)		RED	WHITE	36"x36"	GROUND
PEDESTRIAN TRAFFIC (W11-2)		BLACK	YELLOW	30"x30"	GROUND

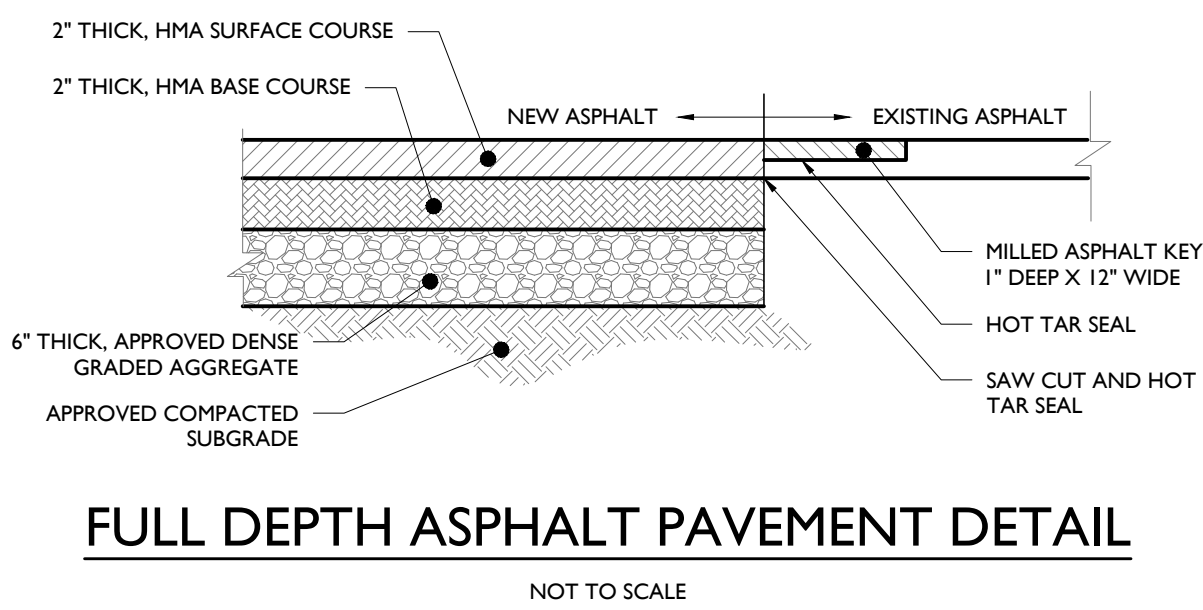
NOTE:  
 1. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), EXCEPT AS NOTED.  
 2. ALL SIGNS SHALL BE MOUNTED AS TO NOT OBSTRUCT THE SHAPE OF "STOP" (R1-1) AND "YIELD" (R1-2) SIGNS.

**SIGN DATA TABLE**  
NOT TO SCALE



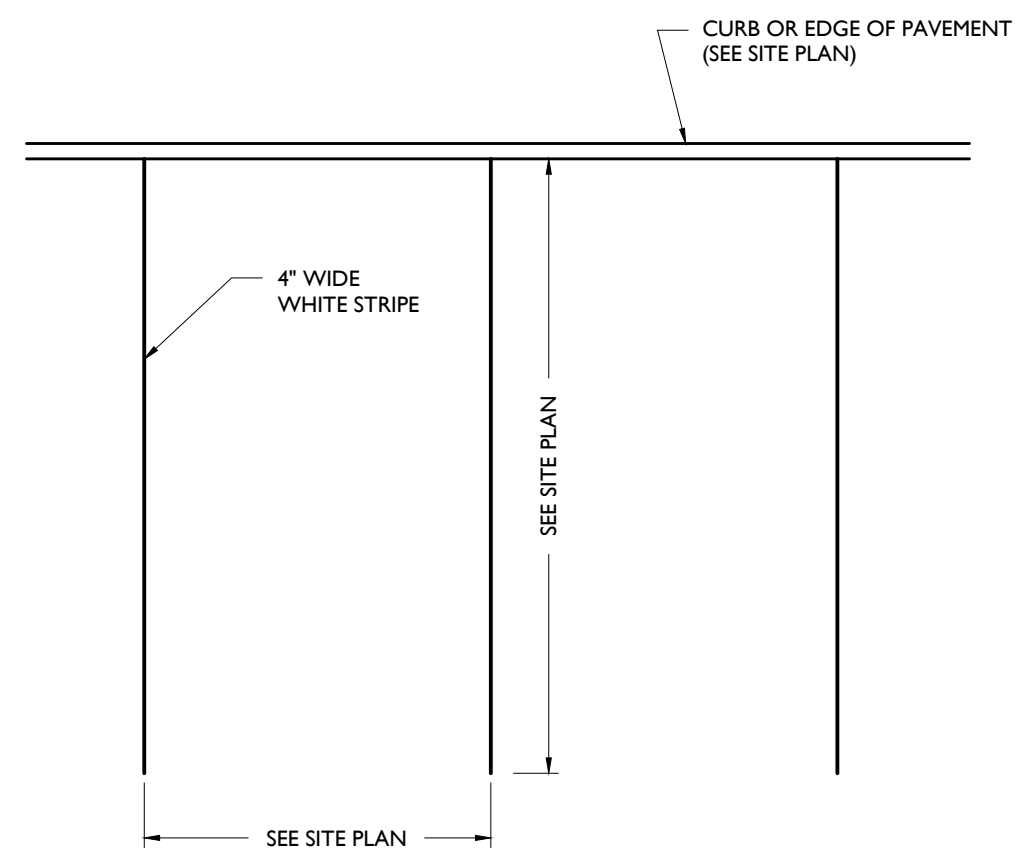
NOTE:  
 1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 1:50 SLOPE.  
 2. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE DOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.  
 3. VISUAL CONTRAST: THERE SHALL BE A MINIMUM OF 70% CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE.  
 4. DETECTABLE WARNING STRIP REQUIRED WHERE RAMP DIRECTS PEDESTRIAN TRAFFIC TOWARDS VEHICLE TRAVEL WAY. WARNING STRIP SHALL BE CAST-IN-PLACE.  
 5. WHERE A 60" X 60" LANDING EXISTS AT THE TOP OF RAMP, RAMP FLARE SHALL NOT EXCEED 1:10 SLOPE.  
 6. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.  
 7. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.

**CURB RAMP WITH FLARES DETAIL**  
NOT TO SCALE

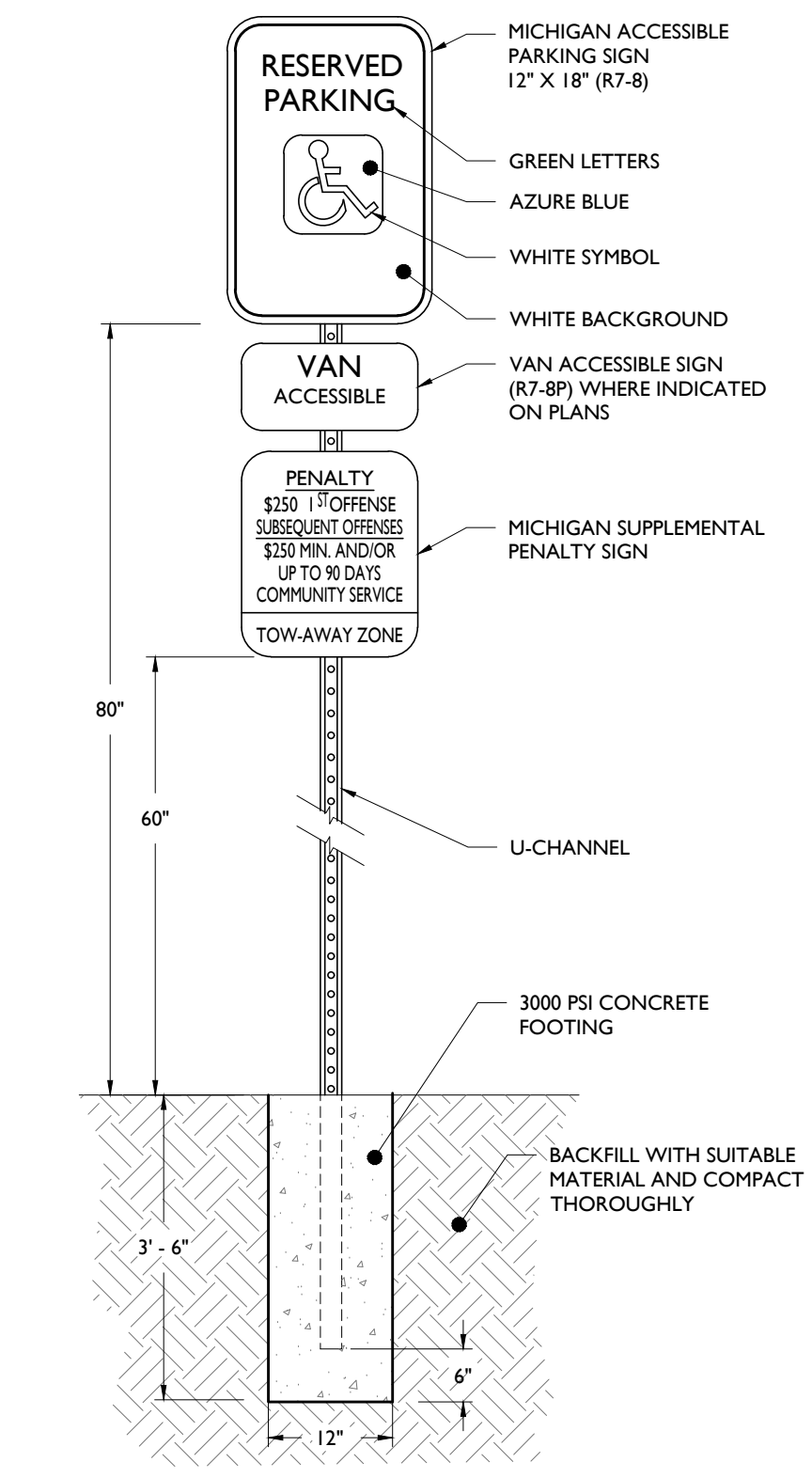


NOTE:  
 1. HMA MIX AND DENSE GRADED AGGREGATE SHALL CONFORM TO STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.  
 2. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT PRIOR TO CONSTRUCTION.

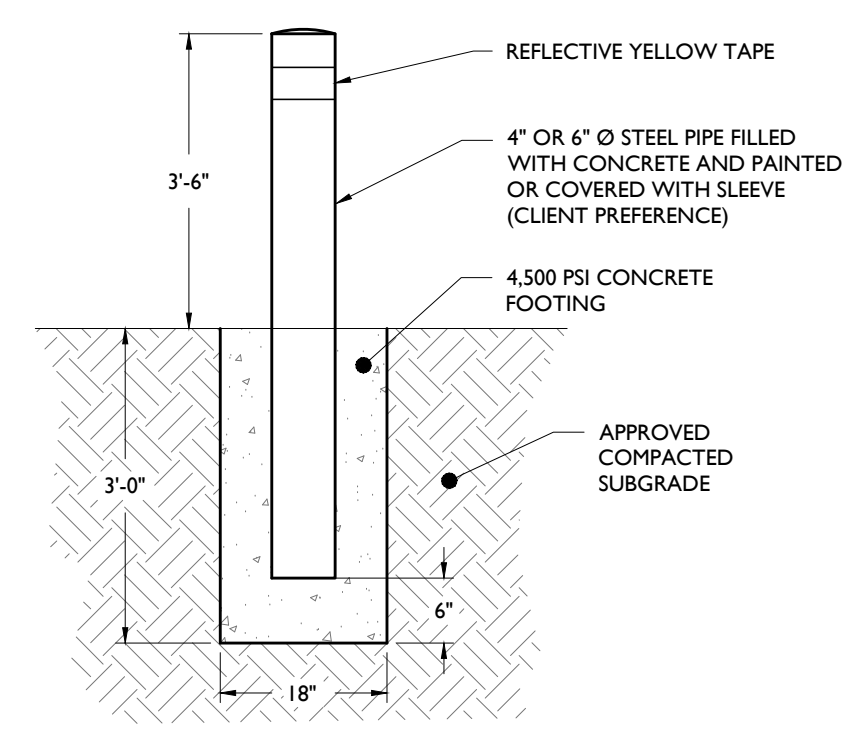
**FULL DEPTH ASPHALT PAVEMENT DETAIL**  
NOT TO SCALE



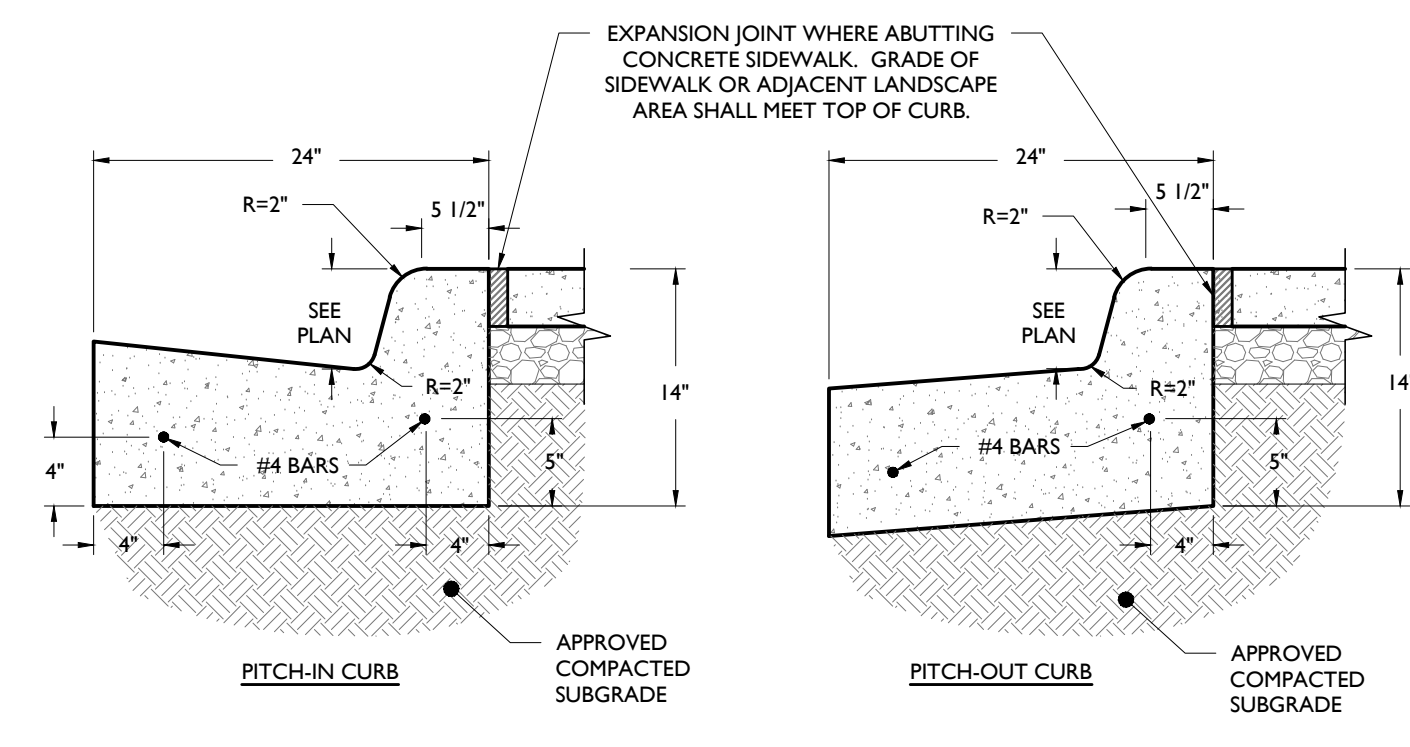
**PARKING STALL MARKINGS**  
NOT TO SCALE



**ACCESSIBLE PARKING SIGN DETAIL**  
NOT TO SCALE



**CONCRETE BOLLARD DETAIL**  
NOT TO SCALE

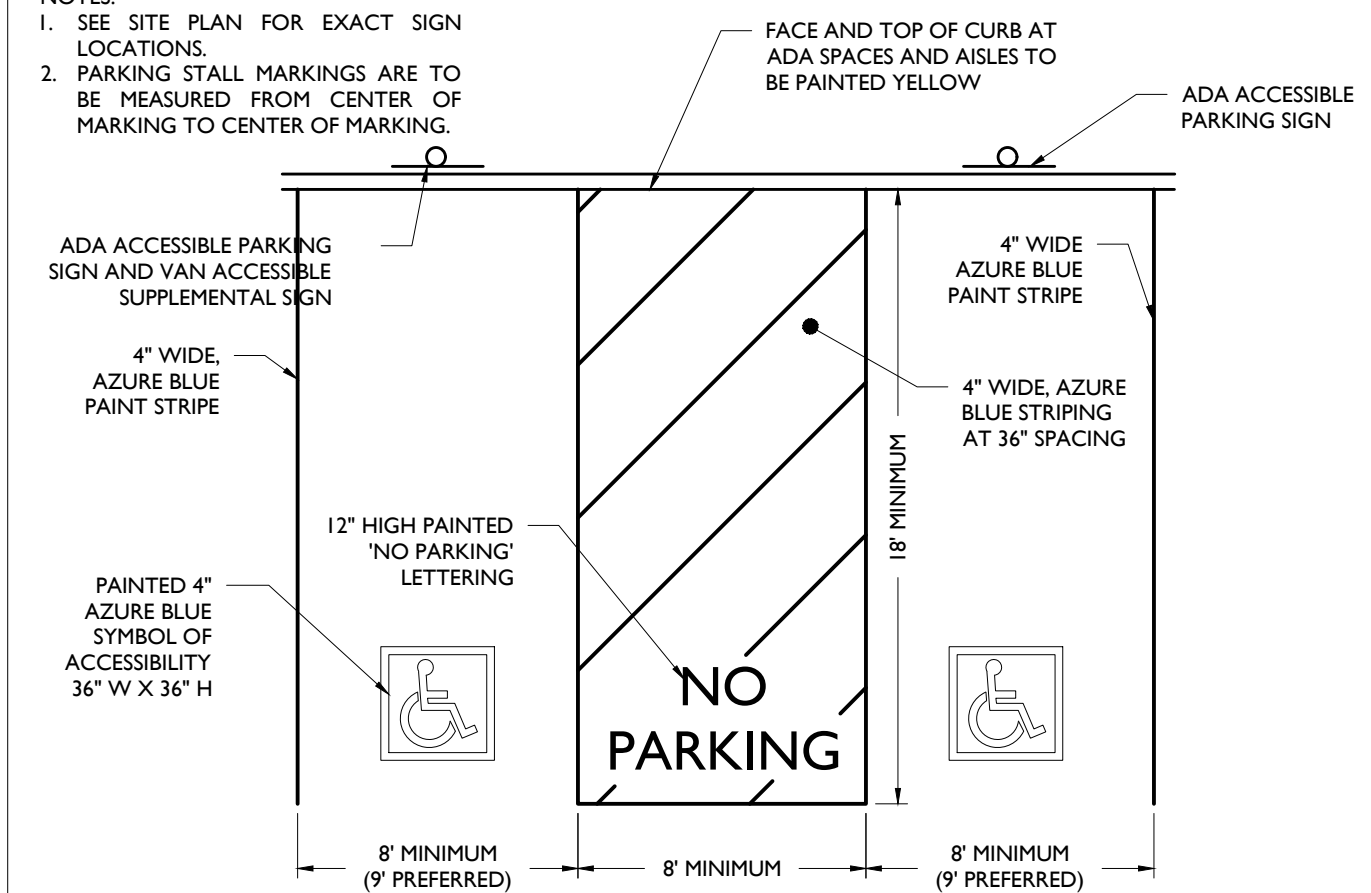


NOTE:  
 1. CONCRETE SHALL BE 3500 PSI AT 28 DAYS, AIR-ENTRAINED.  
 2. TRANSVERSE EXPANSION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM SURFACE.  
 3. HALF DEPTH CONTRACTION JOINTS SHALL BE PROVIDED AT 10 FOOT INTERVALS.  
 4. 14" CURB DEPTH SHALL BE MAINTAINED AT DEPRESSED OR FLUSH CURBED AREAS.

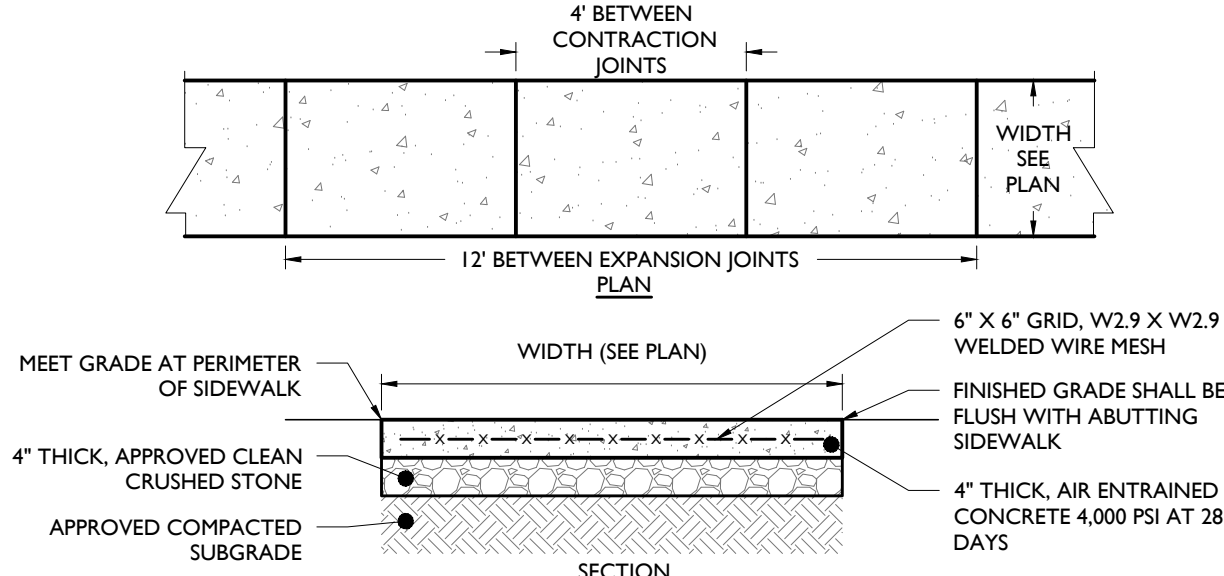
**CONCRETE CURB AND GUTTER DETAIL**  
NOT TO SCALE

- PAVEMENT STRIPING & MARKINGS NOTES:  
 1. ALL SIGNING AND STRIPING IN EXISTING CONDITION IN CONFLICT WITH THE PROPOSED DESIGN PLAN SHALL BE REMOVED.  
 2. ALL PROPOSED SIGNING AND STRIPING SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.  
 3. PAVEMENT STRIPING AND MARKINGS SHALL BE INSTALLED IN CONFORMANCE WITH ALL APPLICABLE LOCAL, COUNTY AND STATE REQUIREMENTS.  
 4. UNLESS OTHERWISE SPECIFIED, ALL STRIPING AND MARKINGS IN THE PUBLIC RIGHT-OF-WAY SHALL BE OF THERMOPLASTIC PAINT OR PERFORMED THERMOPLASTIC MARKINGS.  
 5. UNLESS OTHERWISE SPECIFIED, ON SITE PARKING STALL STRIPING, FIRE LANE STRIPING AND DIRECTIONAL ARROWS SHALL BE EPOXY PAINT. ON SITE STOP BARS, "DO NOT ENTER" BARS, AND ASSOCIATED LETTERING SHALL BE THERMOPLASTIC PAINT OR PERFORMED THERMOPLASTIC MARKINGS.

- NOTES:  
 1. SEE SITE PLAN FOR EXACT SIGN LOCATIONS.  
 2. PARKING STALL MARKINGS ARE TO BE MEASURED FROM CENTER OF MARKING TO CENTER OF MARKING.

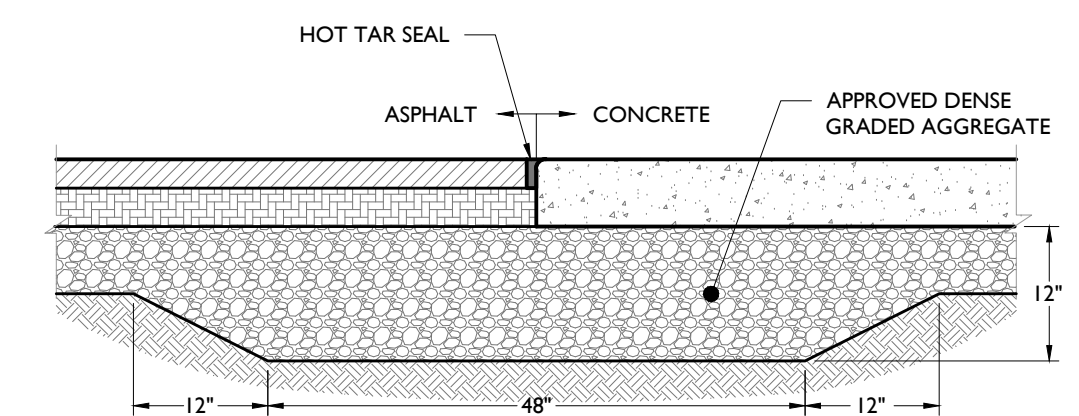


**ACCESSIBLE PARKING STALL MARKINGS**  
NOT TO SCALE

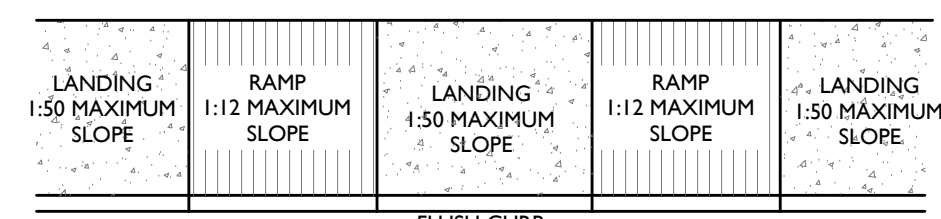


**REINFORCED CONCRETE WALKWAY DETAIL**  
NOT TO SCALE

NOTE:  
 1. MAXIMUM CROSS SLOPE SHALL BE 1/2" PER FOOT.  
 2. 1/2" EXPANSION JOINTS SHALL BE PROVIDED AT 12' INTERVALS WITH PRE-MOLDED, BITUMINOUS JOINT FILLER, RECESSED 1/2" FROM THE SURFACE.  
 3. 1" DEEP BY 1/2" WIDE, TOOLED CONTRACTION JOINTS SHALL BE PROVIDED AT 4' INTERVALS.  
 4. EXPANSION JOINT SHALL BE PROVIDED WHERE ADJACENT TO A BUILDING.



**CONCRETE TO ASPHALT TRANSITION DETAIL**  
NOT TO SCALE



**TRANSITION RAMP DETAIL**  
NOT TO SCALE

NOTE:  
 1. CROSS SLOPE ON RAMP SHALL NOT EXCEED 2%  
 2. A FLUSH CURB SHALL HAVE A MINIMUM WIDTH OF 36". SEE PLAN FOR EXACT WIDTH.  
 3. RAMP SHALL HAVE A MAXIMUM RISE OF 6" WITHOUT A HANDRAIL.

REVISIONS PER 1ST PLANNING REVIEW COMMENTS	REVISIONS PER 2ND PLANNING REVIEW COMMENTS	REVISIONS PER 3RD PLANNING REVIEW COMMENTS	REVISIONS PER 4TH PLANNING REVIEW COMMENTS	REVISIONS PER 5TH PLANNING REVIEW COMMENTS	REVISIONS PER 6TH PLANNING REVIEW COMMENTS	REVISIONS PER 7TH PLANNING REVIEW COMMENTS	REVISIONS PER 8TH PLANNING REVIEW COMMENTS	REVISIONS PER 9TH PLANNING REVIEW COMMENTS	REVISIONS PER 10TH PLANNING REVIEW COMMENTS	REVISIONS PER 11TH PLANNING REVIEW COMMENTS	REVISIONS PER 12TH PLANNING REVIEW COMMENTS	REVISIONS PER 13TH PLANNING REVIEW COMMENTS	REVISIONS PER 14TH PLANNING REVIEW COMMENTS	REVISIONS PER 15TH PLANNING REVIEW COMMENTS	REVISIONS PER 16TH PLANNING REVIEW COMMENTS	REVISIONS PER 17TH PLANNING REVIEW COMMENTS	REVISIONS PER 18TH PLANNING REVIEW COMMENTS	REVISIONS PER 19TH PLANNING REVIEW COMMENTS	REVISIONS PER 20TH PLANNING REVIEW COMMENTS	

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 Princeton, NJ • Tampa, FL • Rutherford, NJ  
 www.stonefielddesign.com  
 607 Shelby Suite 200, Detroit, MI 48226  
 Phone 248.247.1115

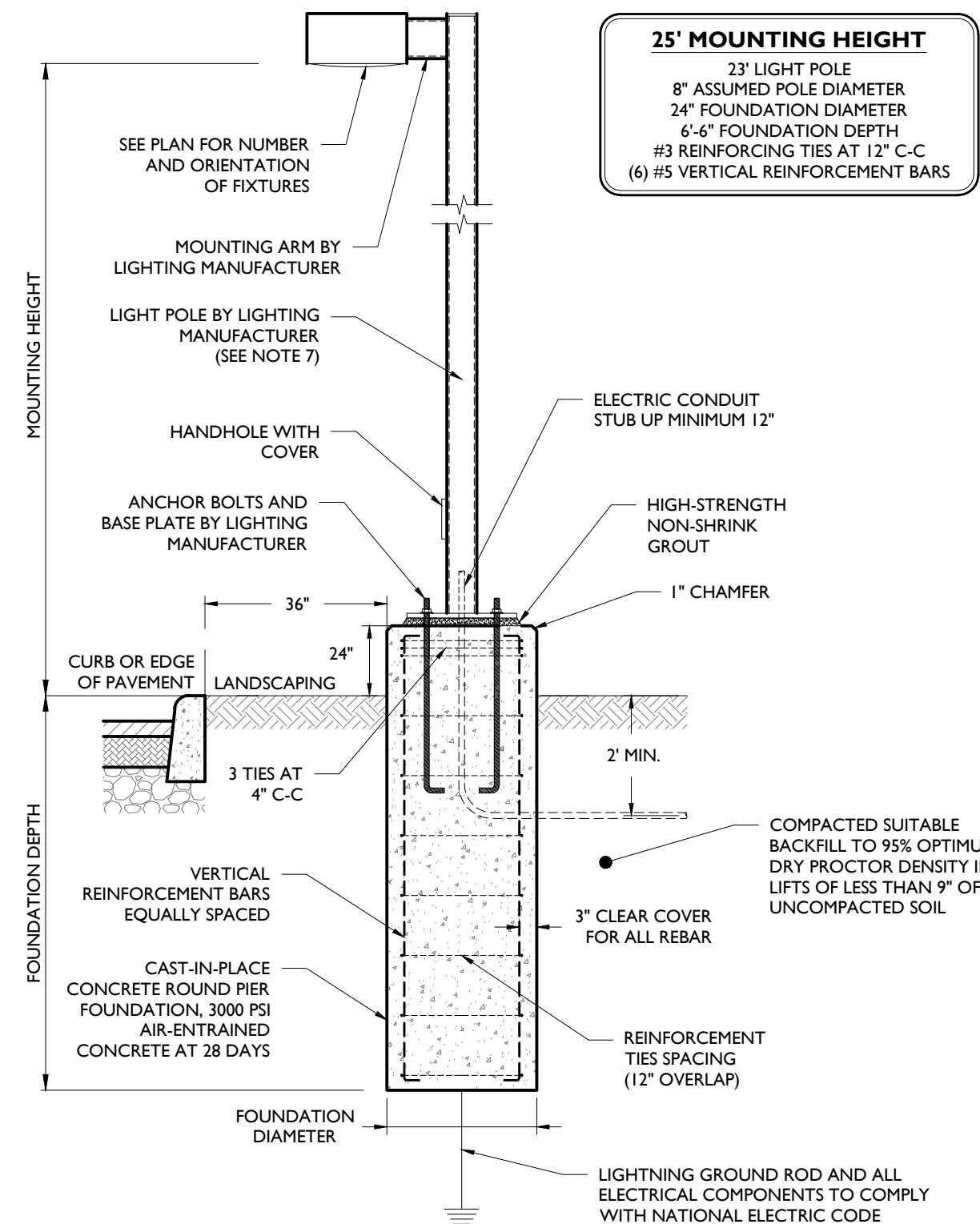
**SITE PLAN FOR CITY COUNCIL APPROVAL**  
**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**  
**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**  
 PARCEL ID: 09-09-36-318-028  
 2151 WEST STADIUM BOULEVARD  
 CITY OF ANN ARBOR  
 WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
 JAKE WHEATON  
 620108336  
 MICHIGAN LICENSE No. 620108336  
 LICENSED PROFESSIONAL ENGINEER

**STONEFIELD**  
engineering & design  
 SCALE: AS SHOWN PROJECT ID: M-19060  
 CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
 TITLE: CONSTRUCTION DETAILS

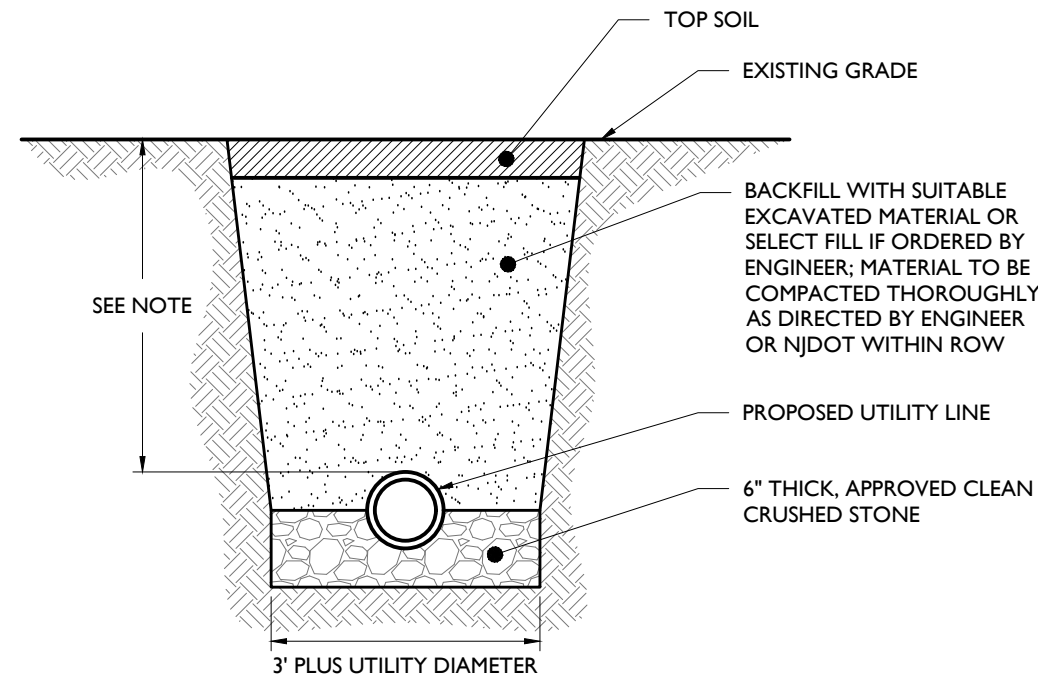
DRAWING: **C-11**





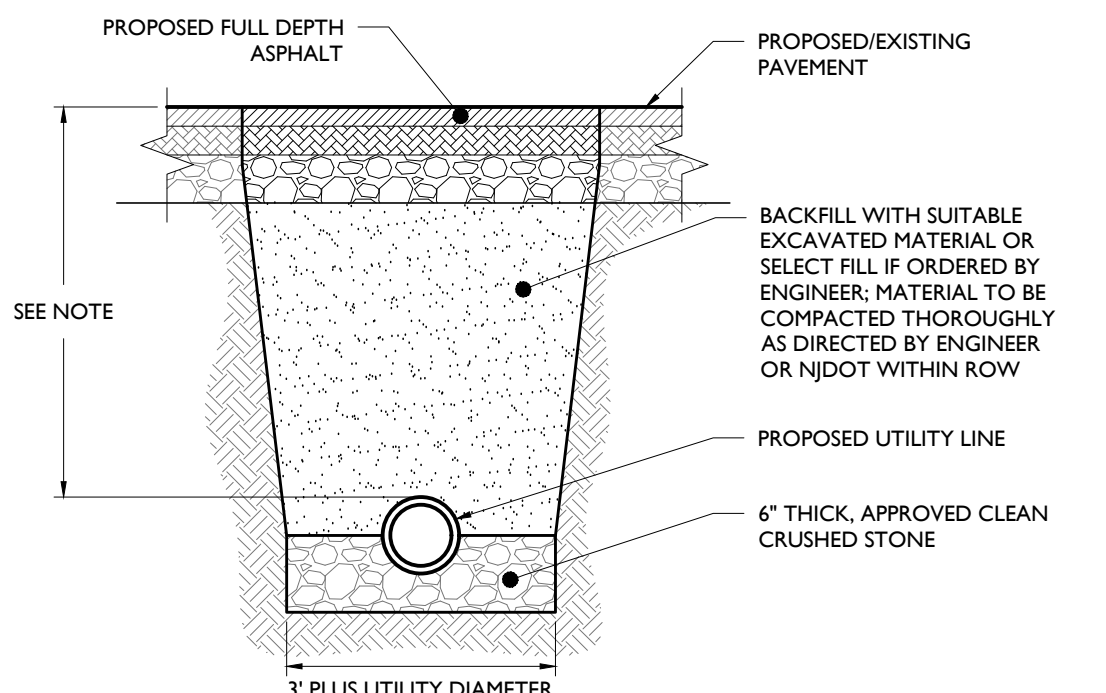
**LIGHT POLE INSTALLATION DETAIL**

- NOTES:
- MINIMUM SOIL BEARING PRESSURE OF 1500 PSF, SOIL FRICTION ANGLE OF 30 DEGREES, AND SOIL DRY UNIT WEIGHT OF 120 PCF SHALL BE CONFIRMED IN THE FIELD BY A QUALIFIED PROFESSIONAL.
  - CAST-IN-PLACE CONCRETE SHALL BE CONSOLIDATED USING VIBRATOR.
  - ALL REBAR TO BE NEW GRADE 60 STEEL.
  - PRE-CAST PIERS ACCEPTABLE UPON WRITTEN APPROVAL OF SHOP DRAWING BY ENGINEER.
  - CONCRETE TO BE INSTALLED A MINIMUM OF 7 DAYS PRIOR TO INSTALLING LIGHT POLE. POURED CONCRETE MIX REQUIRED TO OBTAIN 80% OF DESIGN STRENGTH PRIOR TO INSTALLING LIGHT POLE. CONCRETE SHALL HAVE A MAXIMUM SLUMP OF 4" (WITHIN 1" TOLERANCE).
  - POLE SHALL BE RATED FOR 10 MPH HIGHER THAN MAXIMUM WIND SPEED 33FT ABOVE GROUND FOR THE AREA BASED ON ANSICANCE 7-93.
  - FOUR TO BE TERMINATED AT A FORM.
  - WORK SHALL CONFORM TO ACI BEST PRACTICES FOR APPROPRIATE TEMPERATURE AND WEATHER CONDITIONS. CONTRACTOR TO TEMPORARILY SUPPORT ADJACENT SOIL AND STRUCTURES DURING EXCAVATION IF REQUIRED.



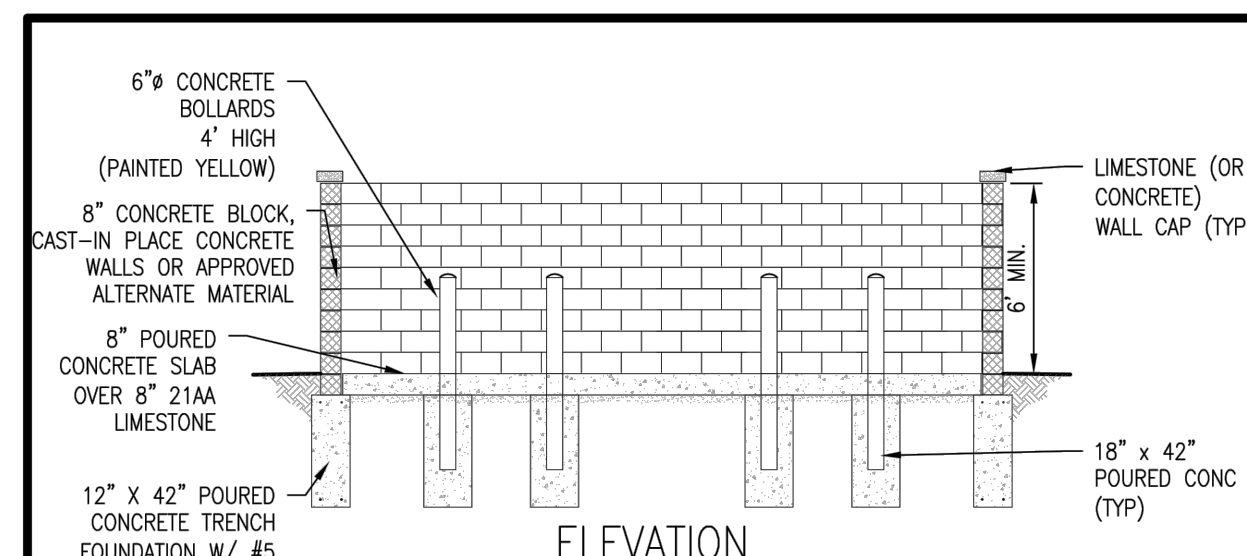
**UTILITY TRENCH DETAIL (LANDSCAPED AREA)**

- NOTE:
- MINIMUM PIPE COVER SHALL BE AS FOLLOWS:
- WATER - 48" MIN.
  - STORM DRAIN - SEE DRAINAGE PLAN

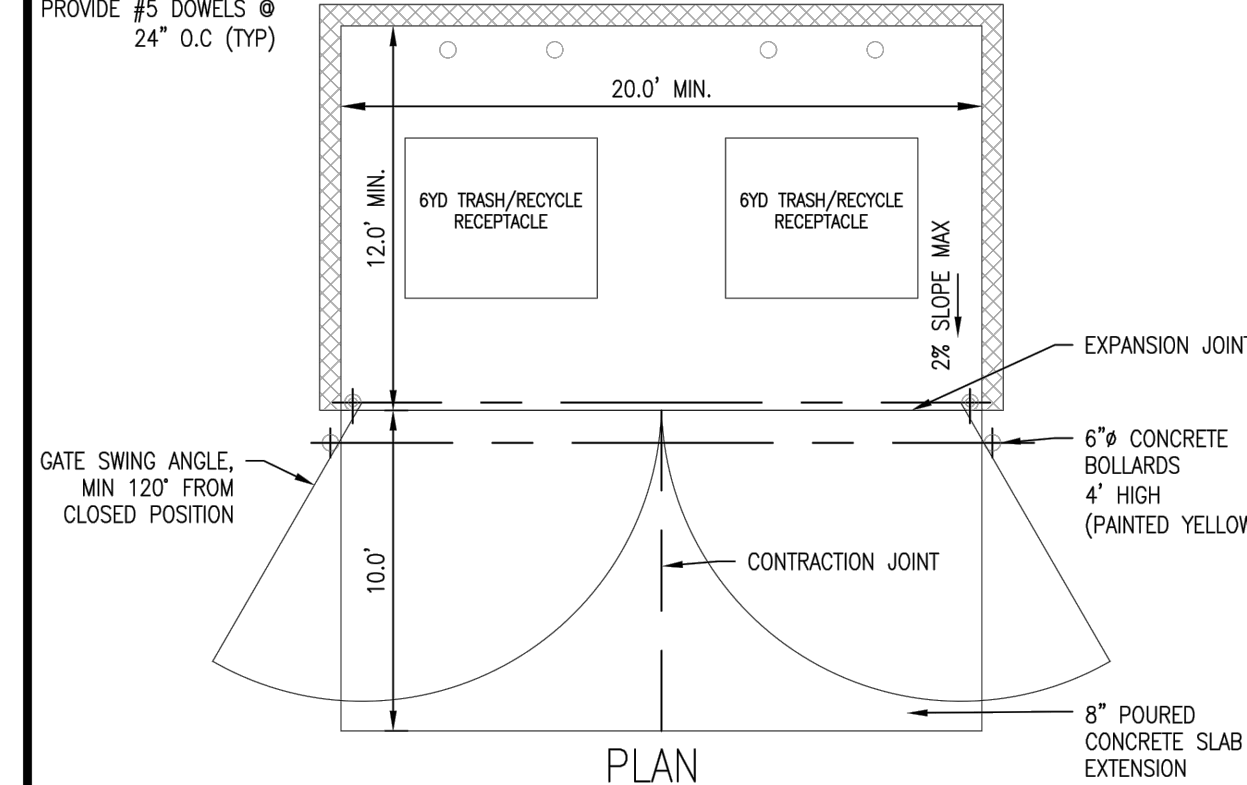


**UTILITY TRENCH DETAIL (PAVED AREA)**

- NOTE:
- MINIMUM PIPE COVER SHALL BE AS FOLLOWS:
- WATER - 48" MIN.
  - STORM DRAIN - SEE DRAINAGE PLAN



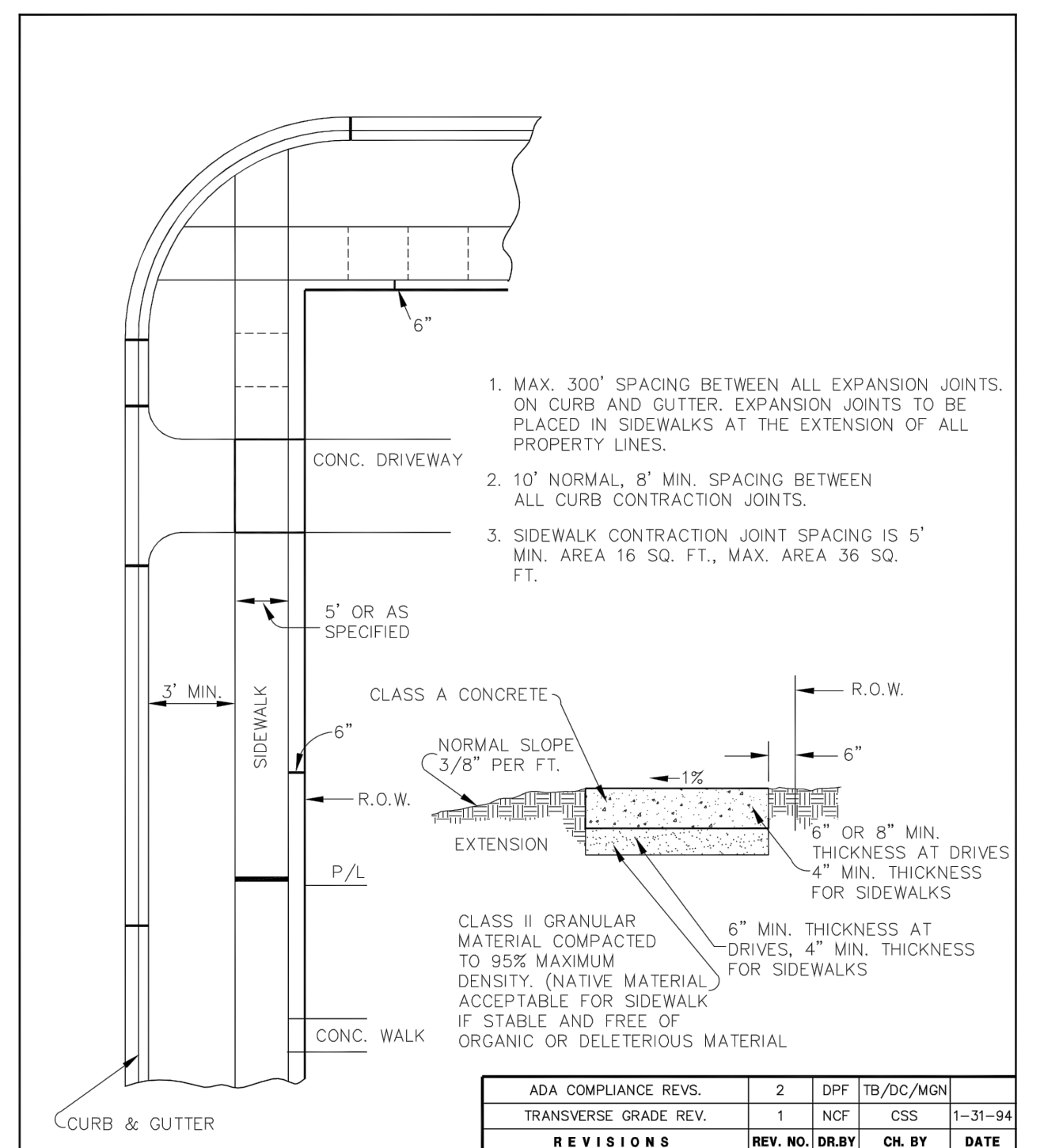
**ELEVATION**



**PLAN**

**DOUBLE BIN ENCLOSURE DETAIL**

CITY OF ANN ARBOR PUBLIC SERVICES 301 EAST HURON STREET P.O. BOX 8647 ANN ARBOR, MI 48107-8647 734-734-6410 www.a2gov.org		REV. NO.	DATE	DRAWN BY	CHECKED BY
<b>SOLID WASTE STANDARD DETAILS</b>					
DR. OHM	CH. CJE	DATE	12/29/15	DRAWING NO.	PAGE 2
SCALE	N.T.S.				

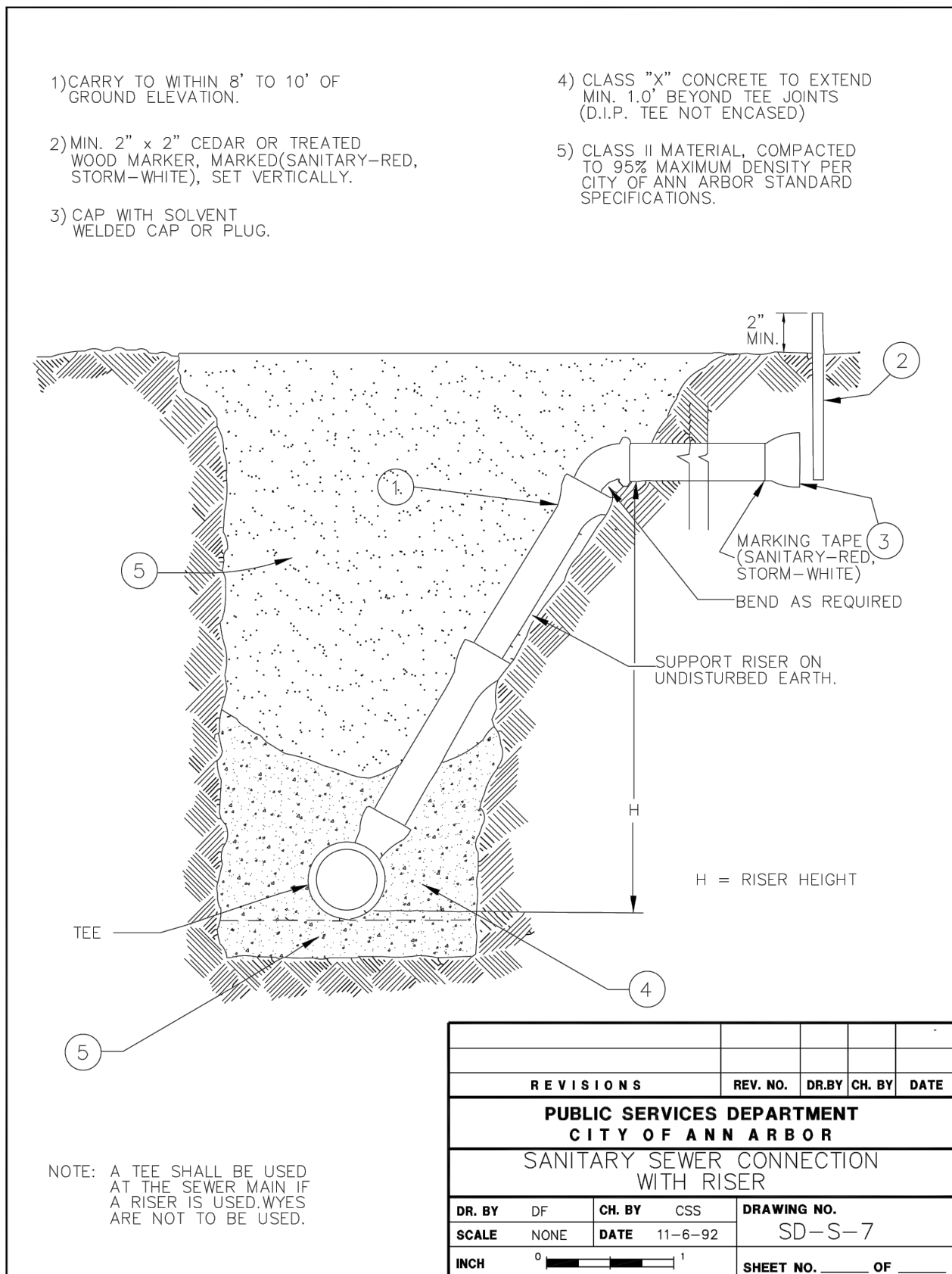


- MAX. 300" SPACING BETWEEN ALL EXPANSION JOINTS. ON CURB AND GUTTER, EXPANSION JOINTS TO BE PLACED IN SIDEWALKS AT THE EXTENSION OF ALL PROPERTY LINES.
- 10' NORMAL, 8' MIN. SPACING BETWEEN ALL CURB CONTRACTION JOINTS.
- SIDEWALK CONTRACTION JOINT SPACING IS 5' MIN. AREA 16 SQ. FT., MAX. AREA 36 SQ. FT.

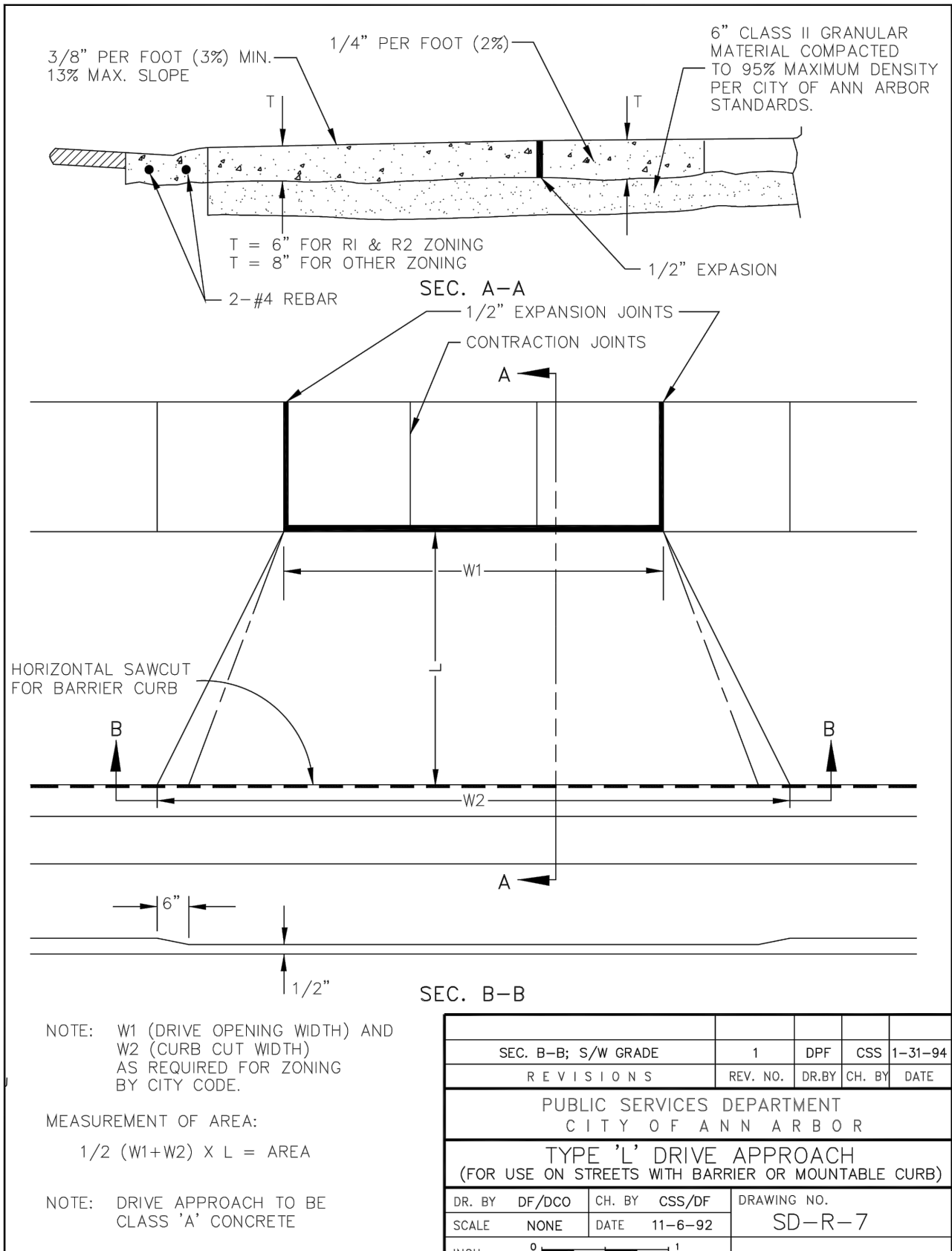
**LEGEND:**

- CONTRACTION JOINTS - - - - -
- 1/2" EXPANSION JOINTS - - - - -
- 3/4" EXPANSION JOINTS - - - - -

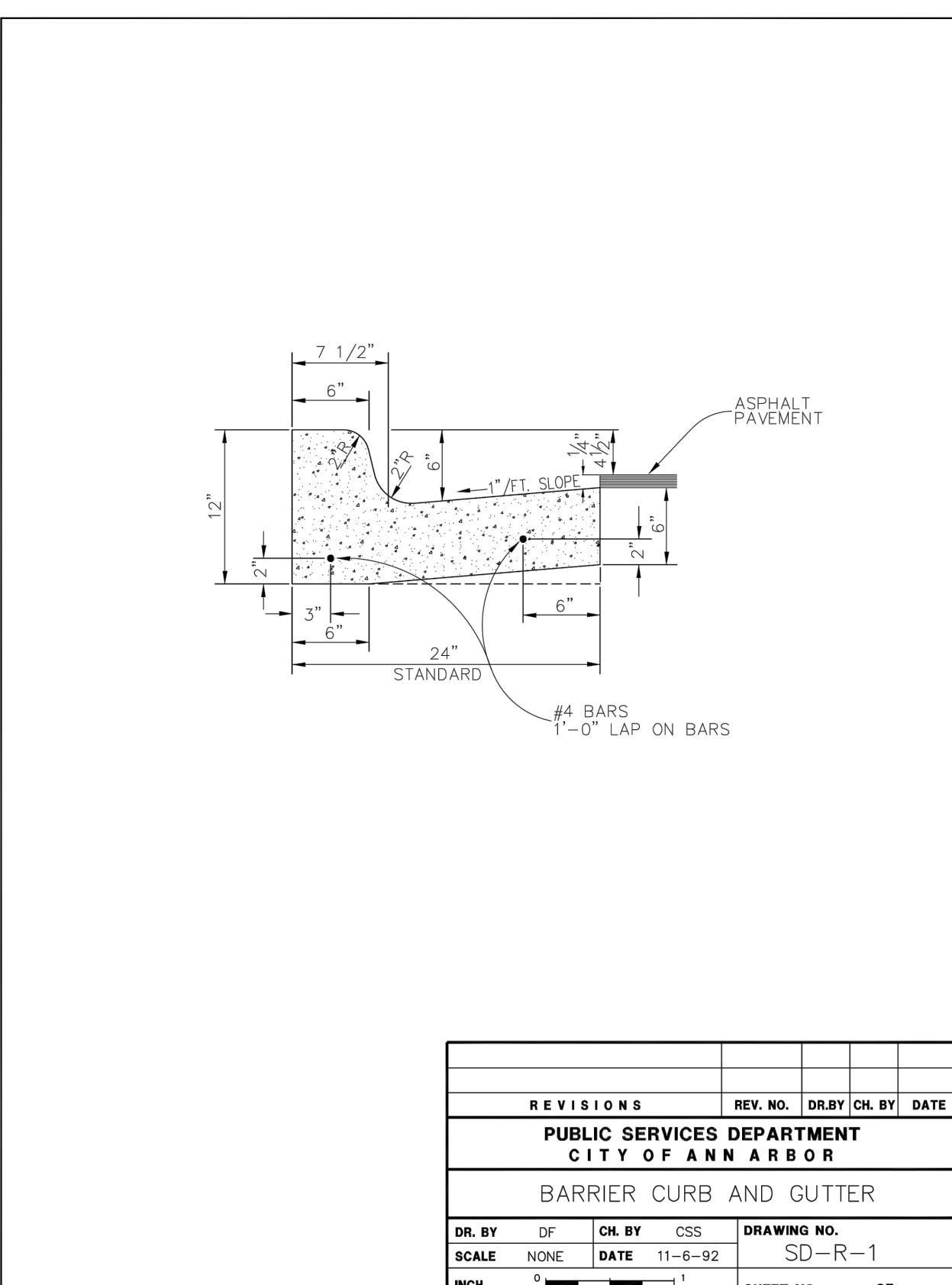
ADA COMPLIANCE REVS.	2	DPF	TB/DC/AM/N	
TRANSVERSE GRADE REV.	1	NSF	CSS	11-31-84
REVISIONS	REV. NO.	DR BY	CHK BY	DATE
<b>PUBLIC SERVICES AREA CITY OF ANN ARBOR</b>				
<b>SIDEWALK &amp; CURB &amp; GUTTER JOINTS</b>				
DR. BY	DPF	CHK BY	CSS	DRAWING NO.
SCALE	NONE	DATE	11-6-92	SD-R-9
NCH	1"	SHEET NO. 1 OF 1		



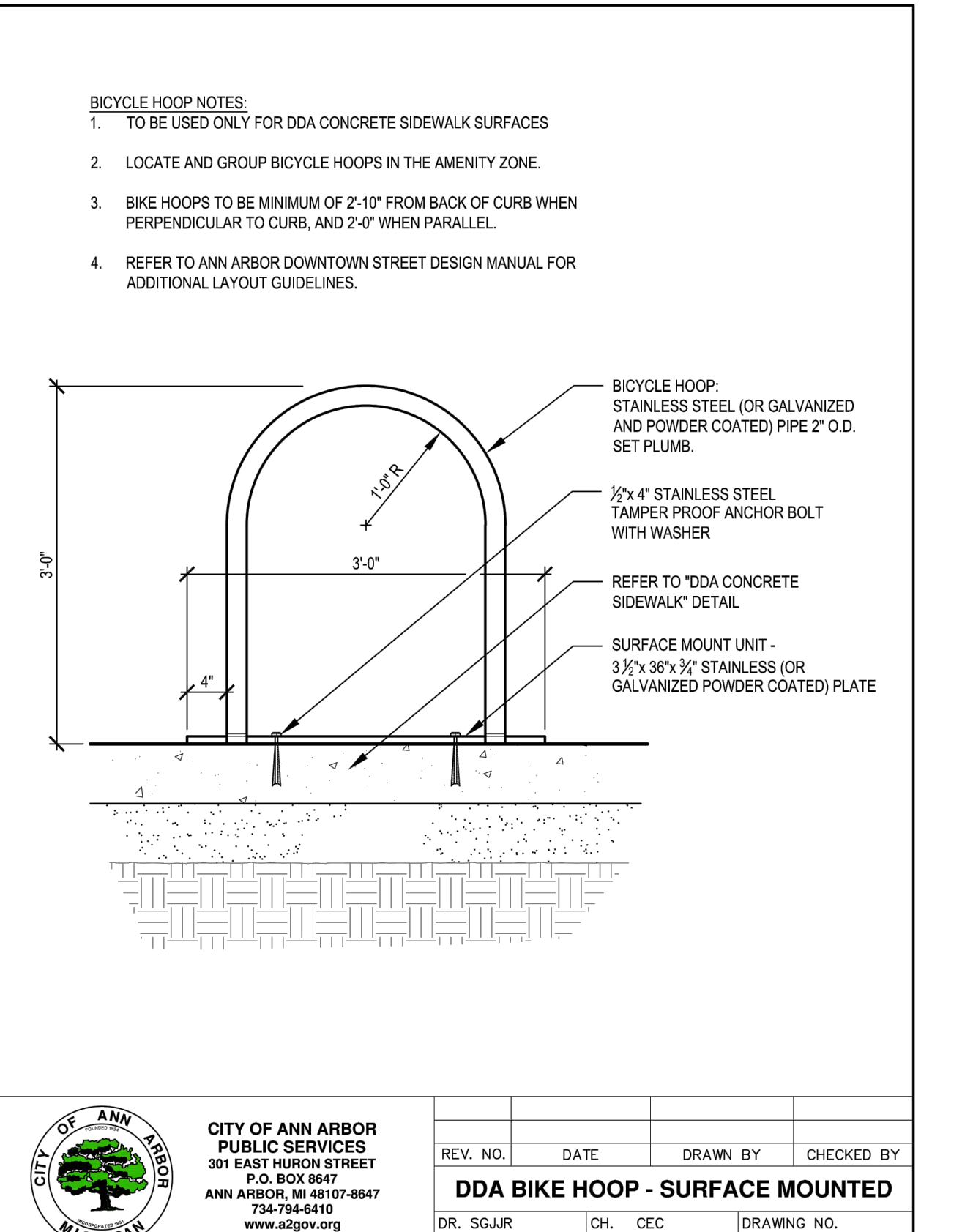
REVISIONS				
REV. NO.	DR BY	CHK BY	DATE	
<b>PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR</b>				
<b>SANITARY SEWER CONNECTION WITH RISER</b>				
DR. BY	DPF	CHK BY	CSS	DRAWING NO.
SCALE	NONE	DATE	11-6-92	SD-S-7
NCH	1"	SHEET NO. 1 OF 1		



REVISIONS				
REV. NO.	DR BY	CHK BY	DATE	
<b>PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR</b>				
<b>TYPE 'L' DRIVE APPROACH (FOR USE ON STREETS WITH BARRIER OR MOUNTABLE CURB)</b>				
DR. BY	DPF/DCD	CHK BY	CSS/DF	DRAWING NO.
SCALE	NONE	DATE	11-6-92	SD-R-7
NCH	1"	SHEET NO. 1 OF 1		



REVISIONS				
REV. NO.	DR BY	CHK BY	DATE	
<b>PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR</b>				
<b>BARRIER CURB AND GUTTER</b>				
DR. BY	DPF	CHK BY	CSS	DRAWING NO.
SCALE	NONE	DATE	11-6-92	SD-R-1
NCH	1"	SHEET NO. 1 OF 1		



REVISIONS				
REV. NO.	DATE	DRAWN BY	CHECKED BY	
<b>PUBLIC SERVICES DEPARTMENT CITY OF ANN ARBOR</b>				
<b>DDA BIKE HOOP - SURFACE MOUNTED</b>				
DR. SGJR	CH. CEC	DATE	10/28/15	DRAWING NO. SD-DDA-9
SCALE	N.T.S.			

V:\P\1911-1986-STUCKY-WALKS\311 WEST STADIUM BOULEVARD, ANN ARBOR, MICHIGAN\DOT\SDP-11-HDR.DWG

REVISIONS PER 4TH PLANNING REVIEW COMMENTS	ADD	05-20-2015	ADD	SUBMISSION FOR SITE PLAN APPROVAL
REVISIONS PER 3RD PLANNING REVIEW COMMENTS	ADD	08-22-2015	ADD	REVISIONS PER PLANNING REVIEW COMMENTS
REVISIONS PER 2ND PLANNING REVIEW COMMENTS	ADD	10-11-2015	ADD	REVISIONS PER PLANNING REVIEW COMMENTS
REVISIONS PER 1ST PLANNING REVIEW COMMENTS	ADD	10-30-2015	ADD	REVISIONS PER PLANNING REVIEW COMMENTS
REVISIONS PER 1ST PLANNING REVIEW COMMENTS	ADD	12-16-2015	ADD	REVISIONS PER 1ST PLANNING REVIEW COMMENTS
BY	DATE	ISSUE	DESCRIPTION	

**NOT APPROVED FOR CONSTRUCTION**

**STONEFIELD**  
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Detroit, MI • New York, NY • Boston, MA  
Princeton, NJ • Tampa, FL • Rutherford, NJ  
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226  
Phone 248.247.1115

**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

PARCEL ID: 09-09-306-318-028  
2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN



**STONEFIELD**  
engineering & design

SCALE: AS SHOWN PROJECT ID: M-1960  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
TITLE: **CONSTRUCTION DETAILS**  
DRAWING: **C-12**



## D-Series Size 1 LED Area Luminaire

**Specifications**

EPA: 1.01 ft<sup>2</sup> (0.94 m<sup>2</sup>)

Length: 33" (83.8 cm)

Width: 13" (33.0 cm)

Height H1: 7-1/2" (19.0 cm)

Height H2: 3-1/2" (9.1 cm)

Weight (max): 27 lbs (12.2 kg)

**Introduction**

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: DSX1 LED P7 40K T3M MVLDT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature	Distribution	Voltage	Mounting	Shipped included
DSX1 LED	<b>Forward optics</b> P1 P4 P7 P2 P5 P8 P3 P6 P9	30K 3000K 40K 4000K 50K 5000K	T15 Type I short T25 Type I short T2M Type II medium T3M Type II medium T3S Type II short T3W Type V wide T3M Type II medium T4M Type IV medium T7TM Forward throw medium	MVOLT <sup>1</sup> 120 <sup>2</sup> 208 <sup>3</sup> 240 <sup>4</sup> 277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>7</sup>	SPA RPA WBA SPUMBA RPUMBA KMAA DDBXD U	Square pole mounting Round pole mounting Wall bracket Square pole universal mounting adaptor <sup>8</sup> Round pole universal mounting adaptor <sup>9</sup> Must arm mounting bracket adaptor (specify finish) <sup>7</sup>

Control options	Other options	Finish (optional)
<b>Shipped installed</b> NLTAIR2 rLight AIR generation 2 enabled <sup>1</sup> PIRHN Network, high-flow motion/ambient sensor <sup>8</sup> PER NEMA twist-lock receptacle only (controls ordered separately) <sup>10</sup> PER5 Five-pin receptacle only (controls ordered separately) <sup>11</sup> PER7 Seven-pin receptacle only (controls ordered separately) <sup>12</sup> DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>13</sup> DS Dual switching <sup>14,15</sup>	PR High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRH High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRHFCV High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRHFCVH High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>16</sup> FAO Field adjustable output <sup>17</sup>	DBBK Dark bronze DBLK Dark Black DNAXD Natural aluminum DWHWD White DBRBD Textured dark bronze DBRBD Textured black DNATD Textured natural aluminum DWHGD Textured white

CONTRACTOR TO CONFIRM

**PROPOSED SPECIFICATION FOR LIGHT FIXTURE 'A'**

## D-Series Size 1 LED Area Luminaire

**Specifications**

EPA: 1.01 ft<sup>2</sup> (0.94 m<sup>2</sup>)

Length: 33" (83.8 cm)

Width: 13" (33.0 cm)

Height H1: 7-1/2" (19.0 cm)

Height H2: 3-1/2" (9.1 cm)

Weight (max): 27 lbs (12.2 kg)

**Introduction**

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: DSX1 LED P7 40K T3M MVLDT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature	Distribution	Voltage	Mounting	Shipped included
DSX1 LED	<b>Forward optics</b> P1 P4 P7 P2 P5 P8 P3 P6 P9	30K 3000K 40K 4000K 50K 5000K	T15 Type I short T25 Type I short T2M Type II medium T3M Type II medium T3S Type II short T3W Type V wide T3M Type II medium T4M Type IV medium T7TM Forward throw medium	MVOLT <sup>1</sup> 120 <sup>2</sup> 208 <sup>3</sup> 240 <sup>4</sup> 277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>7</sup>	SPA RPA WBA SPUMBA RPUMBA KMAA DDBXD U	Square pole mounting Round pole mounting Wall bracket Square pole universal mounting adaptor <sup>8</sup> Round pole universal mounting adaptor <sup>9</sup> Must arm mounting bracket adaptor (specify finish) <sup>7</sup>

Control options	Other options	Finish (optional)
<b>Shipped installed</b> NLTAIR2 rLight AIR generation 2 enabled <sup>1</sup> PIRHN Network, high-flow motion/ambient sensor <sup>8</sup> PER NEMA twist-lock receptacle only (controls ordered separately) <sup>10</sup> PER5 Five-pin receptacle only (controls ordered separately) <sup>11</sup> PER7 Seven-pin receptacle only (controls ordered separately) <sup>12</sup> DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>13</sup> DS Dual switching <sup>14,15</sup>	PR High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRH High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRHFCV High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRHFCVH High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>16</sup> FAO Field adjustable output <sup>17</sup>	DBBK Dark bronze DBLK Dark Black DNAXD Natural aluminum DWHWD White DBRBD Textured dark bronze DBRBD Textured black DNATD Textured natural aluminum DWHGD Textured white

CONTRACTOR TO CONFIRM

**PROPOSED SPECIFICATION FOR LIGHT FIXTURE 'B'**

## D-Series Size 1 LED Area Luminaire

**Specifications**

EPA: 1.01 ft<sup>2</sup> (0.94 m<sup>2</sup>)

Length: 33" (83.8 cm)

Width: 13" (33.0 cm)

Height H1: 7-1/2" (19.0 cm)

Height H2: 3-1/2" (9.1 cm)

Weight (max): 27 lbs (12.2 kg)

**Introduction**

The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: DSX1 LED P7 40K T3M MVLDT SPA NLTAIR2 PIRHN DDBXD

Series	LEDs	Color temperature	Distribution	Voltage	Mounting	Shipped included
DSX1 LED	<b>Forward optics</b> P1 P4 P7 P2 P5 P8 P3 P6 P9	30K 3000K 40K 4000K 50K 5000K	T15 Type I short T25 Type I short T2M Type II medium T3M Type II medium T3S Type II short T3W Type V wide T3M Type II medium T4M Type IV medium T7TM Forward throw medium	MVOLT <sup>1</sup> 120 <sup>2</sup> 208 <sup>3</sup> 240 <sup>4</sup> 277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>7</sup>	SPA RPA WBA SPUMBA RPUMBA KMAA DDBXD U	Square pole mounting Round pole mounting Wall bracket Square pole universal mounting adaptor <sup>8</sup> Round pole universal mounting adaptor <sup>9</sup> Must arm mounting bracket adaptor (specify finish) <sup>7</sup>

Control options	Other options	Finish (optional)
<b>Shipped installed</b> NLTAIR2 rLight AIR generation 2 enabled <sup>1</sup> PIRHN Network, high-flow motion/ambient sensor <sup>8</sup> PER NEMA twist-lock receptacle only (controls ordered separately) <sup>10</sup> PER5 Five-pin receptacle only (controls ordered separately) <sup>11</sup> PER7 Seven-pin receptacle only (controls ordered separately) <sup>12</sup> DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>13</sup> DS Dual switching <sup>14,15</sup>	PR High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRH High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRHFCV High-flow, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>16</sup> PRHFCVH High-flow, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>16</sup> FAO Field adjustable output <sup>17</sup>	DBBK Dark bronze DBLK Dark Black DNAXD Natural aluminum DWHWD White DBRBD Textured dark bronze DBRBD Textured black DNATD Textured natural aluminum DWHGD Textured white

CONTRACTOR TO CONFIRM

**PROPOSED SPECIFICATION FOR LIGHT FIXTURE 'C'**

## WST LED Architectural Wall Sconce

**Specifications**

Length: 17-1/2" (44.5 cm)

Width: 7-1/8" (18.1 cm)

Height: 3-1/2" (9.1 cm)

Weight (max): 36 lbs (16.4 kg)

**Introduction**

The Contour® Series luminaires offer traditional square dayforms with softened edges for a versatile look that complements many applications.

The KACM LED combines the latest in LED technology with the familiar aesthetic of the Contour® Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-400W metal halide in surface/canopy lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

Series	Performance Package	Color temperature	Distribution	Voltage	Mounting	Shipped included
WST LED	P1 1,500 Lumen package P2 3,000 Lumen package P3 6,000 Lumen package	27K 2700K 30K 3000K 40K 4000K 50K 5000K	VF Visual comfort forward throw VW Visual comfort wide	MVOLT <sup>1</sup> 120 <sup>2</sup> 208 <sup>3</sup> 240 <sup>4</sup>	277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>7</sup>	Shipped included (Blank) Surface mounting bracket Shipped separately BBW Surface-mounted back box <sup>8</sup> PBBW Premium surface-mounted back box <sup>9</sup>

Options	Finish (optional)
NLTAIR2 PIR rLight AIR Wireless enabled motion/ambient sensor for 8-15' mounting heights <sup>10</sup> NLTAIR2 PIRH rLight AIR Wireless enabled motion/ambient sensor for 15-30' mounting heights <sup>11</sup> PE Photocell, cell, button type <sup>1</sup> PER NEMA twist-lock receptacle only (controls ordered separately) <sup>10</sup> PER5 Five-wire receptacle only (controls ordered separately) <sup>11</sup> PER7 Seven-wire receptacle only (controls ordered separately) <sup>12</sup> PR Motion/Ambient Light Sensor, 8-15' mounting height <sup>13</sup> PRH Motion/Ambient Light Sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>14</sup> PRHFCV Motion/Ambient Light Sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>14</sup> PRHFCVH Motion/Ambient Light Sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>14</sup> SF Single fuse (120, 277, 347V) <sup>15</sup> DF Double fuse (208, 240, 480V) <sup>16</sup> DS Dual switching <sup>17</sup> E7WH Energy battery backup, Non-CEC compliant (7W) <sup>18</sup>	DBBK Dark bronze DBLK Black DNAXD Natural aluminum DWHWD White DSSD Sandstone DBRBD Textured dark bronze DBRBD Textured black DNATD Textured natural aluminum DWHGD Textured white DSSTD Textured sandstone

CONTRACTOR TO CONFIRM

**PROPOSED SPECIFICATION FOR LIGHT FIXTURE 'D'**

## WST LED Architectural Wall Sconce

**Specifications**

Length: 17-1/2" (44.5 cm)

Width: 7-1/8" (18.1 cm)

Height: 3-1/2" (9.1 cm)

Weight (max): 36 lbs (16.4 kg)

**Introduction**

The Contour® Series luminaires offer traditional square dayforms with softened edges for a versatile look that complements many applications.

The KACM LED combines the latest in LED technology with the familiar aesthetic of the Contour® Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-400W metal halide in surface/canopy lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: WST LED P1 40K VF MVOLT DDBTXD

Series	Performance Package	Color temperature	Distribution	Voltage	Mounting	Shipped included
WST LED	P1 1,500 Lumen package P2 3,000 Lumen package P3 6,000 Lumen package	27K 2700K 30K 3000K 40K 4000K 50K 5000K	VF Visual comfort forward throw VW Visual comfort wide	MVOLT <sup>1</sup> 120 <sup>2</sup> 208 <sup>3</sup> 240 <sup>4</sup>	277 <sup>5</sup> 347 <sup>6</sup> 480 <sup>7</sup>	Shipped included (Blank) Surface mounting bracket Shipped separately BBW Surface-mounted back box <sup>8</sup> PBBW Premium surface-mounted back box <sup>9</sup>

Options	Finish (optional)
NLTAIR2 PIR rLight AIR Wireless enabled motion/ambient sensor for 8-15' mounting heights <sup>10</sup> NLTAIR2 PIRH rLight AIR Wireless enabled motion/ambient sensor for 15-30' mounting heights <sup>11</sup> PE Photocell, cell, button type <sup>1</sup> PER NEMA twist-lock receptacle only (controls ordered separately) <sup>10</sup> PER5 Five-wire receptacle only (controls ordered separately) <sup>11</sup> PER7 Seven-wire receptacle only (controls ordered separately) <sup>12</sup> PR Motion/Ambient Light Sensor, 8-15' mounting height <sup>13</sup> PRH Motion/Ambient Light Sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>14</sup> PRHFCV Motion/Ambient Light Sensor, 8-15' mounting height, ambient sensor enabled at 36" <sup>14</sup> PRHFCVH Motion/Ambient Light Sensor, 15-30' mounting height, ambient sensor enabled at 36" <sup>14</sup> SF Single fuse (120, 277, 347V) <sup>15</sup> DF Double fuse (208, 240, 480V) <sup>16</sup> DS Dual switching <sup>17</sup> E7WH Energy battery backup, Non-CEC compliant (7W) <sup>18</sup>	DBBK Dark bronze DBLK Black DNAXD Natural aluminum DWHWD White DSSD Sandstone DBRBD Textured dark bronze DBRBD Textured black DNATD Textured natural aluminum DWHGD Textured white DSSTD Textured sandstone

CONTRACTOR TO CONFIRM

**PROPOSED SPECIFICATION FOR LIGHT FIXTURE 'E'**

## KACM LED LED Surface Luminaire

**Specifications**

Length: 17-1/2" (44.5 cm)

Width: 7-1/8" (18.1 cm)

Height: 3-1/2" (9.1 cm)

Weight (max): 36 lbs (16.4 kg)

**Introduction**

The Contour® Series luminaires offer traditional square dayforms with softened edges for a versatile look that complements many applications.

The KACM LED combines the latest in LED technology with the familiar aesthetic of the Contour® Series for stylish, high-performance illumination that lasts. It is ideal for replacing 100-400W metal halide in surface/canopy lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**Ordering Information** EXAMPLE: KACM LED 60C 700 50K RS MVOLT SRM DDBXD

Series	LEDs	Drive current	Color Temp	Distribution	Voltage	Mounting	Shipped included	Shipped separately <sup>8</sup>
KACM LED	20C <sup>1</sup> 30C <sup>2</sup> 40C 60C	530 <sup>3</sup> 530mA 700 700mA	30K 3000K 40K 4000K 50K 5000K	R2 Type II R3 Type II R4 Type IV R5 Type V RSVS Type V very short	MVOLT <sup>1,2</sup> 120 <sup>2,3</sup> 208 <sup>3,4</sup> 240 <sup>2,3</sup> 480 <sup>2,3</sup>	SRM Surface mount YK Through-wire conductive (Provided by other)	Shipped installed SRM Surface mount YK Through-wire conductive	DBBK Dark bronze DBLK Black DNAXD Natural aluminum DWHWD White DBRBD Textured dark bronze DBRBD Textured black DNATD Textured natural aluminum DWHGD Textured white

CONTRACTOR TO CONFIRM

**PROPOSED SPECIFICATION FOR LIGHT FIXTURE 'F'**

REVISIONS PER 1TH PLANNING REVIEW COMMENTS	REVISIONS PER 2ND PLANNING REVIEW COMMENTS	REVISIONS PER 3RD PLANNING REVIEW COMMENTS	REVISIONS PER 4TH PLANNING REVIEW COMMENTS	REVISIONS PER 5TH PLANNING REVIEW COMMENTS	REVISIONS PER 6TH PLANNING REVIEW COMMENTS	REVISIONS PER 7TH PLANNING REVIEW COMMENTS	REVISIONS PER 8TH PLANNING REVIEW COMMENTS	REVISIONS PER 9TH PLANNING REVIEW COMMENTS	REVISIONS PER 10TH PLANNING REVIEW COMMENTS

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**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

PARCEL ID: 09-09-30-318-028  
2151 WEST STADIUM BOULEVARD  
CITY OF ANN ARBOR  
WASHTENAW COUNTY, MICHIGAN

STATE OF MICHIGAN  
JAKE JOHNSON  
MICHIGAN LICENSE NO. 620063336  
LICENSED PROFESSIONAL ENGINEER

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SCALE: AS SHOWN PROJECT ID: M-1960

CITY OF ANN ARBOR PROJECT NUMBER: SP19-019

TITLE: **CONSTRUCTION DETAILS**

DRAWING: **C-13**



**GENERAL TREE PLANTING NOTES:**

- FOR CONTAINER GROWN TREES USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL. THEN CUT OR PULL APART ANY ROOT CIRCLING THE PERIMETER OF THE CONTAINER.
- INCORPORATE COMMERCIALY PREPARED MYCORRHIZAE SPORES AND FERTILIZER TABLETS IN THE SOIL IMMEDIATELY AROUND THE ROOT BALL AT RATE SPECIFIED BY THE MANUFACTURER.
- THOROUGHLY SOAK THE ROOT BALL AND THE ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO GROWING SEASONS. WHEN IRRIGATION IS NOT PROVIDED SPECIFICALLY FOR THE TREE, IT IS RECOMMENDED THAT GATOR BAGS BE USED TO HELP FACILITATE THE PROPER AMOUNT AND RATE OF WATER ARE ACHIEVED. GATOR BAGS SHALL BE INSTALLED AT THE BEGINNING OF EACH GROWING SEASON AND REMOVED EACH FALL. THIS WILL ALLOW FOR THE AREA BENEATH THE GATOR BAG TO DRY OUT REDUCING THE GROWTH OF FUNGI AND REMOVE POSSIBLE HIDING SPOTS FOR RODENTS. THE GATOR BAGS WILL BE REMOVED AT THE END OF THE SECOND GROWING SEASON UNLESS OTHERWISE ADVISED.
- PRIOR TO DIGGING HOLE, REMOVE ALL EXCESS SOIL FROM ROOT FLARE TO DETERMINE DEPTH OF HOLE. REFER TO THE ROOT FLARE DETAIL.
- WHEN PLANTING IN WINTER OR ON WINDY SITES APPLY ANTI-DESSICANT AS PER MANUFACTURER'S SPECIFICATIONS.

**PLANT MATERIAL SELECTION AND HANDLING NOTES:**

- PLANTS WITH UNDERSIZED OR BROKEN ROOT BALLS, EXCESSIVE CURLING AND/OR GIRDLING OF ROOTS, INJURY FROM ROUGH TREATMENT, OR DROUGHT STRESS WILL BE REJECTED.
- IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO GUARANTEE THAT THE ROOT BALLS ARE PROPERLY SIZED. PLEASE BE AWARE THAT FOR PROPER SIZING, UNSUITABLE SOIL MATERIAL SHALL BE REMOVED PRIOR TO DIGGING. REFER TO THE TREE ROOT FLARE DETAIL.
- ROOT BALLS SHALL BE KEPT MOIST AT ALL TIMES.
- PLANTS SHALL BE COVERED DURING TRANSPORT TO PREVENT EXCESSIVE DRYING FROM WIND. IN WARM WEATHER PLANTS SHALL BE COVERED JUST PRIOR TO TRAVEL AND UNCOVERED IMMEDIATELY UPON REACHING DESTINATION TO AVOID HEAT BUILD UP UNDER THE TARP. PLANT MATERIAL SHALL NOT BE LEFT IN DIRECT SUNLIGHT OR ON HIGH HEAT ABSORPTION MATERIALS, SUCH AS BUT NOT LIMITED TO, ASPHALT AND/OR METAL TRUCK BEDS TO PREVENT THE WILTING OF MATERIAL.
- TREES SHALL BE MOVED BY THEIR ROOT BALL NOT THEIR TRUNK. TREES LARGER THAN 6" SHALL BE MOVED WITH PROPER STRAPPING SECURING ROOT BALL TO EQUIPMENT. WEAVE STRAPPING THROUGH THE LACING, NOT AROUND THE TRUNK. TREE TRUNK SHALL BE PROTECTED AT ALL TIME FROM COMPRESSION AND SEARING.
- IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN:
  - PLACE IN PARTIAL SHADE WHEN POSSIBLE.
  - COVER ROOT BALL WITH MOISTENED MULCH OR AGED WOODCHIPS.
  - SUPPLY PROPER IRRIGATION AS NOT TO ALLOW THE ROOT BALL TO DRY OUT.
  - UNTIE PLANT MATERIAL AND ALLOW PROPER SPACING OF PLANTS FOR AIR CIRCULATION TO PREVENT DISEASE, WILTING, LEAF LOSS AND GENERAL HEATH OF PLANTS.

**BARE ROOT TREE PLANTING NOTES:**

- SUBMERGE ROOTS IN ROOT DIP GEL. BARE ROOT PLANTING AID WITH MYCORRHIZA OR APPROVED EQUAL.
 

MIXING DIRECTIONS:

  - EMPTY THE CONTENTS OF THIS PACKAGE IN FOUR GALLONS OF WATER.
  - LET MIX STAND FOR TEN MINUTES, STIRRING OCCASIONALLY. THE PRODUCT WILL FORM A SLURRY OR THICK MIXTURE, SO THE ACTIVE INGREDIENTS WILL ADHERE TO THE ROOTS.
  - DIP EACH PLANT FOR ABOUT 5 SECONDS. PLANT IMMEDIATELY. THERE IS NO HARM IN LEAVING THE PLANT IN THE MIX. FOUR GALLONS OF MIX WILL TREAT 100-500 PLANTS. THE NUMBER OF PLANTS DEPENDS ON ROOT MASS AND HOW MUCH OF THE MIXTURE THE ROOTS OF YOUR PLANTS ABSORB. THE ENDO AND ECTOMYCORRHIZA WILL BE USEFUL ON ALMOST ALL PLANTS. THE MAJOR EXCEPTIONS ARE RHODODENDRONS AND AZALEAS BUT THE ROOTS28 BIOSTIMULANT AND THE WATER HOLDING GEL WILL STILL BE BENEFICIAL.
- CUT OFF ALL BROKEN ROOTS.
- MAKE FRESH CUTS AT ENDS OF ROOTS.
- DIG PLANT HOLES AT LEAST 3 X THE WIDTH AND DEPTH OF THE ROOT MASS.
- PLANT ROOT FLARE AT GRADE OR GRAFT JUST ABOVE GRADE.
- BACK FILL ALL HOLES WITH PLANTING MIX APPROVED BY THE ENGINEER.

**PLANT MATERIAL GUARANTEE NOTES:**

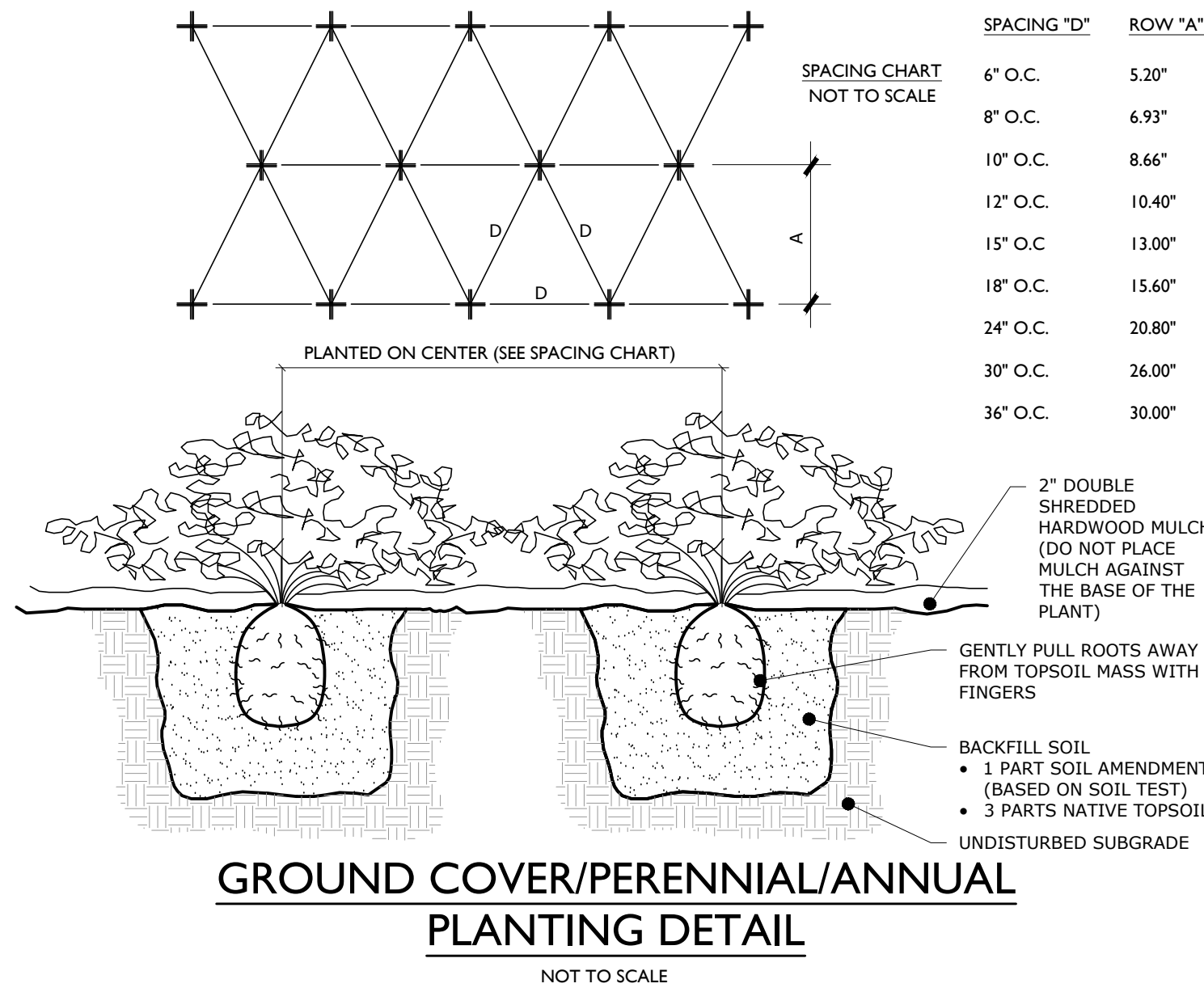
- LANDSCAPE CONTRACTOR SHALL SUPPLY A TWO YEAR PLANT MATERIAL GUARANTEE.
- CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE PLANTINGS IF OWNER FAILS TO PROVIDE PROPER CARE AND WATERING AS INSTRUCTED BY THE LANDSCAPE CONTRACTOR DURING GUARANTEE PERIOD.
- CONTRACTOR SHALL INSTRUCT OWNER AS TO PROPER CARE OF MATERIAL.
- THE LANDSCAPE PLAN DRAWING SET SHALL BE CONSIDERED AN INTEGRAL PART OF THE SITE PLAN APPROVAL AND SHALL BE MAINTAINED IN PERPETUITY.

**SOIL PREPARATION NOTES:**

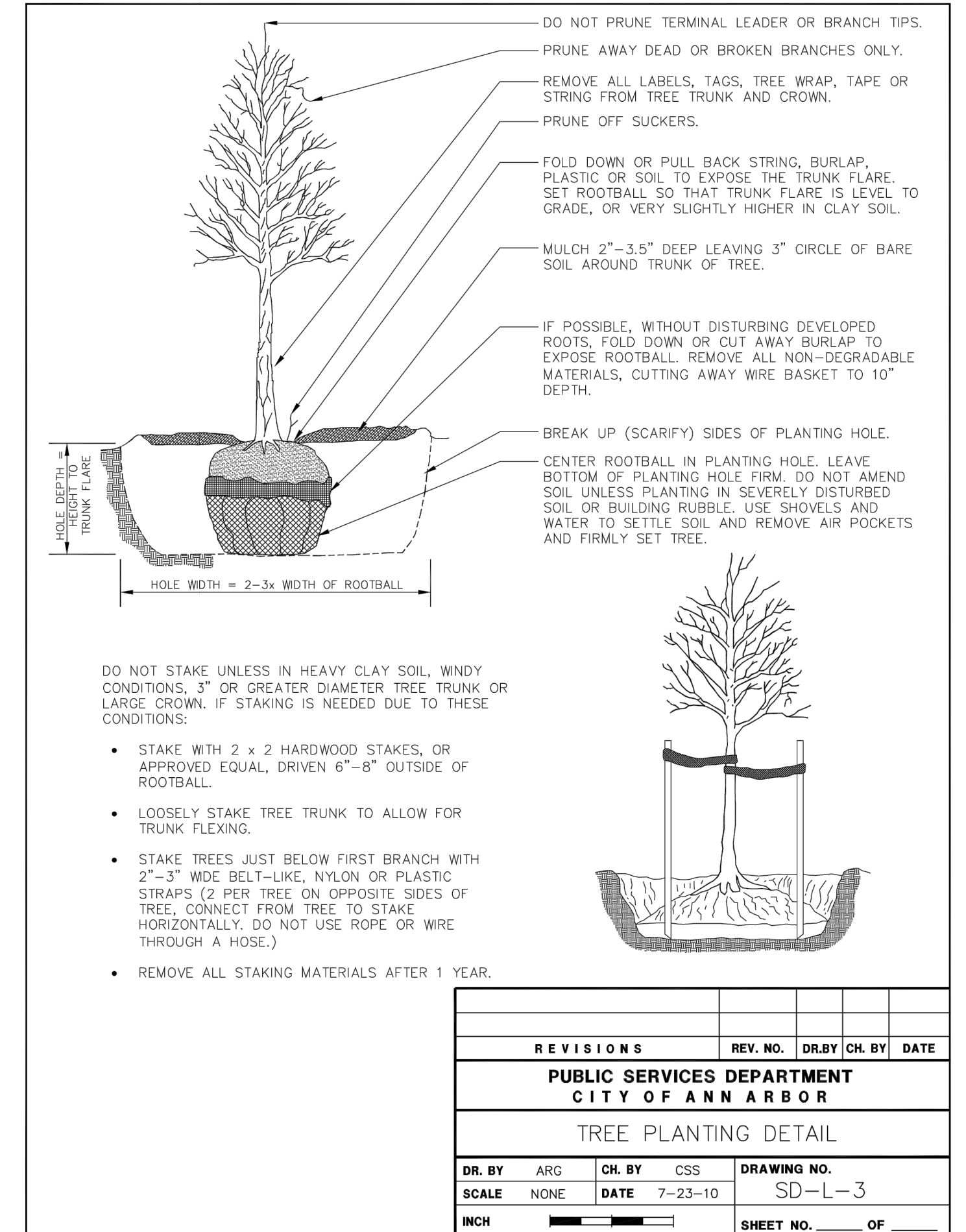
- THE QUALITY OF SOIL AVAILABLE FOR PLANTING VARIES WIDELY FROM SITE TO SITE, ESPECIALLY AFTER CONSTRUCTION ACTIVITY HAS OCCURRED. THE NATURE OF CONSTRUCTION RESULTS IN COMPACTION, FILLING, CONTAMINATION, AND GRADING OF THE ORIGINAL SOIL ON A SITE, RAPIDLY MAKING IT USELESS FOR PLANTING. PREVIOUS HUMAN ACTIVITY AT A SITE CAN ALSO AFFECT THE ABILITY OF THE SOIL TO SUPPORT PLANTS.
- WHENEVER POSSIBLE THE SOIL IMPROVEMENT AREA SHOULD BE CONNECTED FROM TREE TO TREE.
- ALWAYS TEST SOIL FOR PH, NUTRIENT LEVELS, AND TEXTURAL CLASS AND ADJUST THESE AS REQUIRED. SUBMIT TEST RESULTS TO THE ENGINEER PRIOR TO PLANTING ALONG WITH SOIL IMPROVEMENT SUGGESTIONS. SOIL TESTS CAN BE ACQUIRED FROM YOUR LOCAL COUNTY AGRICULTURAL EXTENSION OR AT RUTGERS COOPERATIVE EXTENSION 732-932-9295.
- LOOSEN SOIL WITH A BACK HOE OR OTHER LARGE COARSE-TILING EQUIPMENT WHEN POSSIBLE. THIS SHOULD NOT BE PERFORMED WHEN SOIL IS FROZEN OR EXCESSIVELY WET. TILING THAT PRODUCES LARGE, COARSE CHUNKS OF SOIL IS PREFERABLE TO TILING THAT RESULTS IN FINE GRAINS UNIFORM IN TEXTURE. AFTER AREA IS LOOSEN IT SHALL NOT BE DRIVEN BY ANY VEHICLE.
- ANY OVER BY APPLY PRE-EMERGENT WEED CONTROL TO ALL PLANT BEDS PRIOR TO MULCHING. ENSURE COMPATIBILITY BETWEEN PRODUCT AND PLANT MATERIAL.
- PLANT BED/TREE PIT DRAINAGE: LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO INSTALLATION OF PLANTS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO PLANTING.
- ALL PLANTING SOIL SHALL BE AMENDED WITH THE FOLLOWING:
  - MYCORB® TREE SAVER® IS A DRY GRANULAR MYCORRHIZAL FUNGI INOCULANT THAT IS MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IT CONTAINS SPORES OF BOTH ECTOMYCORRHIZAL AND VA MYCORRHIZAL FUNGI (VAM), BENEFICIAL RHIZOSPHERE BACTERIA, TERRA-SORB SUPERABSORBENT HYDROGEL TO REDUCE WATER LEACHING, AND SELECTED ORGANIC MICROBIAL NUTRIENTS. DIRECTIONS FOR USE: USE 3-OZ PER EACH FOOT DIAMETER OF THE ROOT BALL OR 3-OZ PER INCH CALIPER. MIX INTO THE BACKFILL WHEN RAN PLANTING TREES AND SHRUBS: MIX PRODUCT IN A RING-SHAPED VOLUME OF SOIL AROUND THE UPPER PORTION OF THE ROOT BALL, EXTENDING FROM THE SOIL SURFACE TO A DEPTH OF ABOUT 8-INCHES (20-CM), AND EXTENDING OUT FROM THE ROOT BALL ABOUT 8-INCHES (20-CM) INTO THE BACKFILL. APPLY WATER TO SOIL SATURATION. COMPATIBILITY: SPECIES: MYCORB® TREE SAVER® IS EFFECTIVE FOR ALL TREE AND SHRUB SPECIES EXCEPT RHODODENDRONS, AZALEAS, AND MOUNTAIN LAUREL, WHICH REQUIRE ERICOID MYCORRHIZAE. USE OF TREE SAVER® WITH THESE SPECIES WILL NOT HARM THEM. SOIL PH: THE FUNGI IN THIS PRODUCT WERE CHOSEN BASED ON THEIR ABILITY TO SURVIVE AND COLONIZE PLANT ROOTS IN A PH RANGE OF 3 TO 9. FUNGICIDES: THE USE OF CERTAIN FUNGICIDES CAN HAVE A DETRIMENTAL EFFECT ON YOUR INOCULATION PROGRAM. SOIL APPLICATION OF ANY FUNGICIDE IS NOT RECOMMENDED FOR TWO WEEKS AFTER APPLICATION. OTHER PESTICIDES: HERBICIDES AND INSECTICIDES DO NOT NORMALLY INTERFERE WITH MYCORRHIZAL FUNGAL DEVELOPMENT, BUT MAY INHIBIT THE GROWTH OF SOME TREE AND SHRUB SPECIES IF NOT USED PROPERLY.
  - HEALTHY START MACRO TABS 12-8-8 FERTILIZER TABLETS ARE PLACED IN THE UPPER 4 INCHES OF BACKFILL SOIL WHEN PLANTING TREES AND SHRUBS. TABLETS ARE FORMULATED FOR LONG-TERM RELEASE BY SLOW BIODEGRADATION, AND LAST UP TO 2 YEARS AFTER PLANTING. TABLETS CONTAIN 12-8-8 NPK FERTILIZER, AS WELL AS A MINIMUM OF SEVEN PERCENT (7%) HUMIC ACID BY WEIGHT, MICROBIAL NUTRIENTS DERIVED FROM SEA KELP, PROTEIN BYPRODUCTS, AND YUCCA SCHIDIGERA AND A COMPLEMENT OF BENEFICIAL RHIZOSPHERE BACTERIA. THE STANDARD 21 GRAM TABLET IS SPECIFIED HERE. DIRECTIONS FOR USE FOR PLANTING BALLED & BURLAPPED (BAB) TREES AND SHRUBS: MEASURE THE THICKNESS OF THE TRUNK, AND USE ABOUT 1 TABLET (21-G) PER HALF-INCH. PLACE THE TABLETS DIRECTLY NEXT TO THE ROOT BALL, EVENLY DISTRIBUTED AROUND ITS PERIMETER, AT A DEPTH OF ABOUT 4 INCHES. PROOF OF COMPLIANCE WITH SPECIFICATIONS: THE CONTRACTOR WILL DEMONSTRATE COMPLIANCE BY SHOWING INVOICES TO PROVE PURCHASE OF PRODUCT IN SUFFICIENT QUANTITY TO COVER THE PROJECT AT THE RATES RECOMMENDED BY THE MANUFACTURER, INCLUDE PROJECT NAME, DATE OF PURCHASE OF PRODUCT, AND NAME OF CONTACT.

**NOTES:**

- THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
- SOIL AMENDMENTS:
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX
- ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT PER MANUFACTURER'S SPECIFICATIONS



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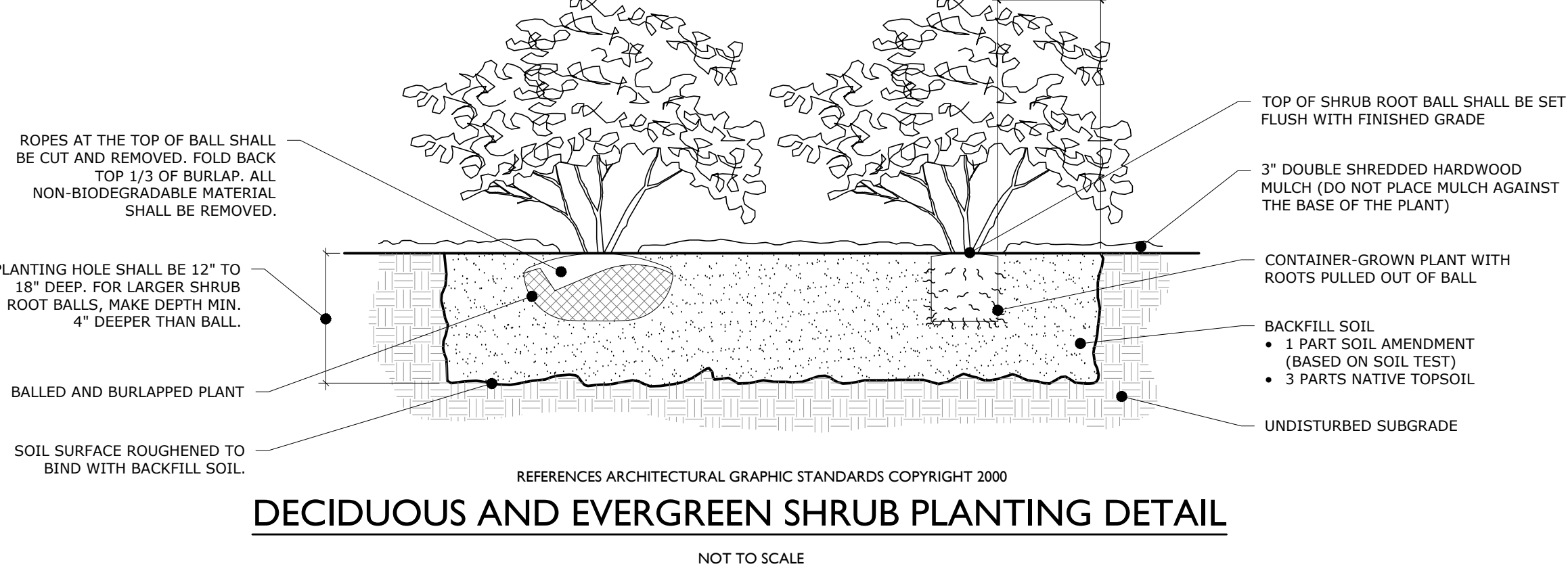


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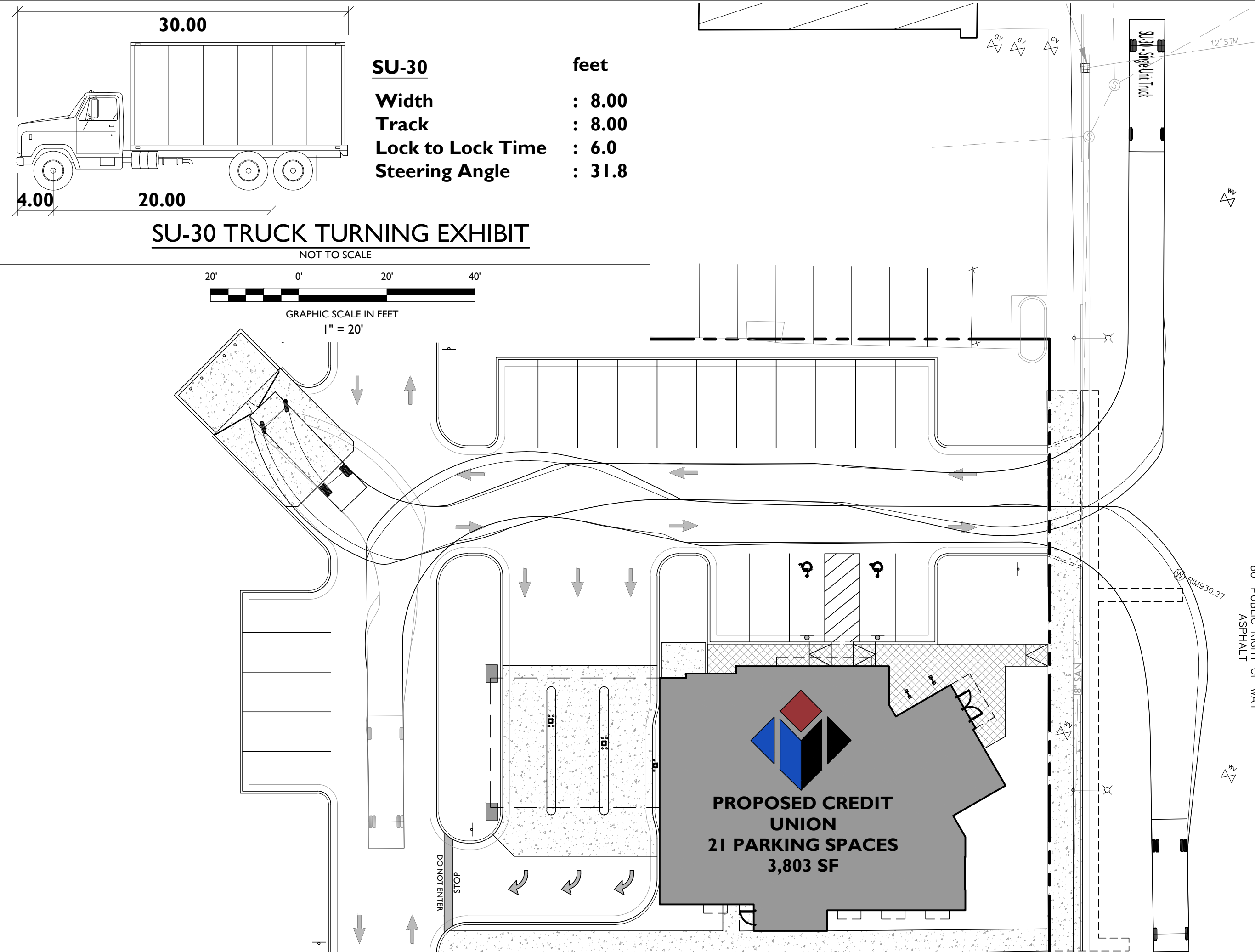
GENERAL SOIL PREPARATION REQUIREMENTS TABLE		
SOIL CONDITION	MIN. WIDTH OF PREPARED SOIL (X)	TYPE OF PREPARATION
GOOD SOIL (NOT PREVIOUSLY GRADED OR COMPACTED, TOPSOIL LAYER INTACT)	6 FT. OR TWICE THE WIDTH OF THE ROOT BALL, WHICHEVER IS GREATER.	LOOSEN THE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN ON PLANTING DETAILS.
COMPACTED SOIL (NOT PREVIOUSLY GRADED, TOPSOIL LAYER DISTURBED BUT NOT ELIMINATED)	15 FT.	LOOSEN THE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN ON PLANTING DETAILS. ADD COMPOSTED ORGANIC MATTER TO BRING THE CONTENT UP TO 5% DRY WEIGHT.
GRADED SUBSOILS AND CLEAN FILLS WITH CLAY CONTENT BETWEEN 5 AND 35 %	20 FT.	MINIMUM TREATMENT: LOOSEN EXISTING SOILS TO WIDTHS AND DEPTHS SHOWN. ADD COMPOSTED ORGANIC MATTER TO BRING ORGANIC CONTENT UP TO 5 % DRY WEIGHT. OPTIMUM TREATMENT: REMOVE TOP 8 TO 10 IN. OR THE EXISTING MATERIAL. LOOSEN EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN IN THE PLANTING DETAILS, ADD 8 -10 IN. OF LOAM TOPSOIL.
POOR QUALITY FILLS, HEAVY CLAY SOILS, SOILS CONTAMINATED WITH RUBBLE OR TOXIC MATERIAL	20 FT.	REMOVE EXISTING SOILS TO THE WIDTHS AND DEPTHS SHOWN, REPLACE WITH LOAM AND TOPSOIL.

**NOTES:**

- FOR THE CONTAINER-GROWN SHRUBS, USE FINGERS OR SMALL HAND TOOL TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
- THOROUGHLY SOAK THE SHRUB ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
  - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
  - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL



5



3

4

5

REVISIONS	DATE	ISSUE	BY	DESCRIPTION
6	12-16-2019		KHL	REVISIONS PER 1TH PLANNING REVIEW COMMENTS
5	10-30-2019		KHL	REVISIONS PER 2ND PLANNING REVIEW COMMENTS
4	10-11-2019		ADG	REVISIONS PER 2ND PLANNING REVIEW COMMENTS
3	08-22-2019		ADG	REVISIONS PER 1TH PLANNING REVIEW COMMENTS
2	08-08-2019		ADG	REVISIONS PER 1TH PLANNING REVIEW COMMENTS
1	05-30-2019		ADG	SUBMISSION FOR SITE PLAN APPROVAL

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**SITE PLAN FOR CITY COUNCIL APPROVAL**

**MICHIGAN SCHOOLS & GOVERNMENT CREDIT UNION**

**PROPOSED CREDIT UNION WITH DRIVE-THRU FACILITIES**

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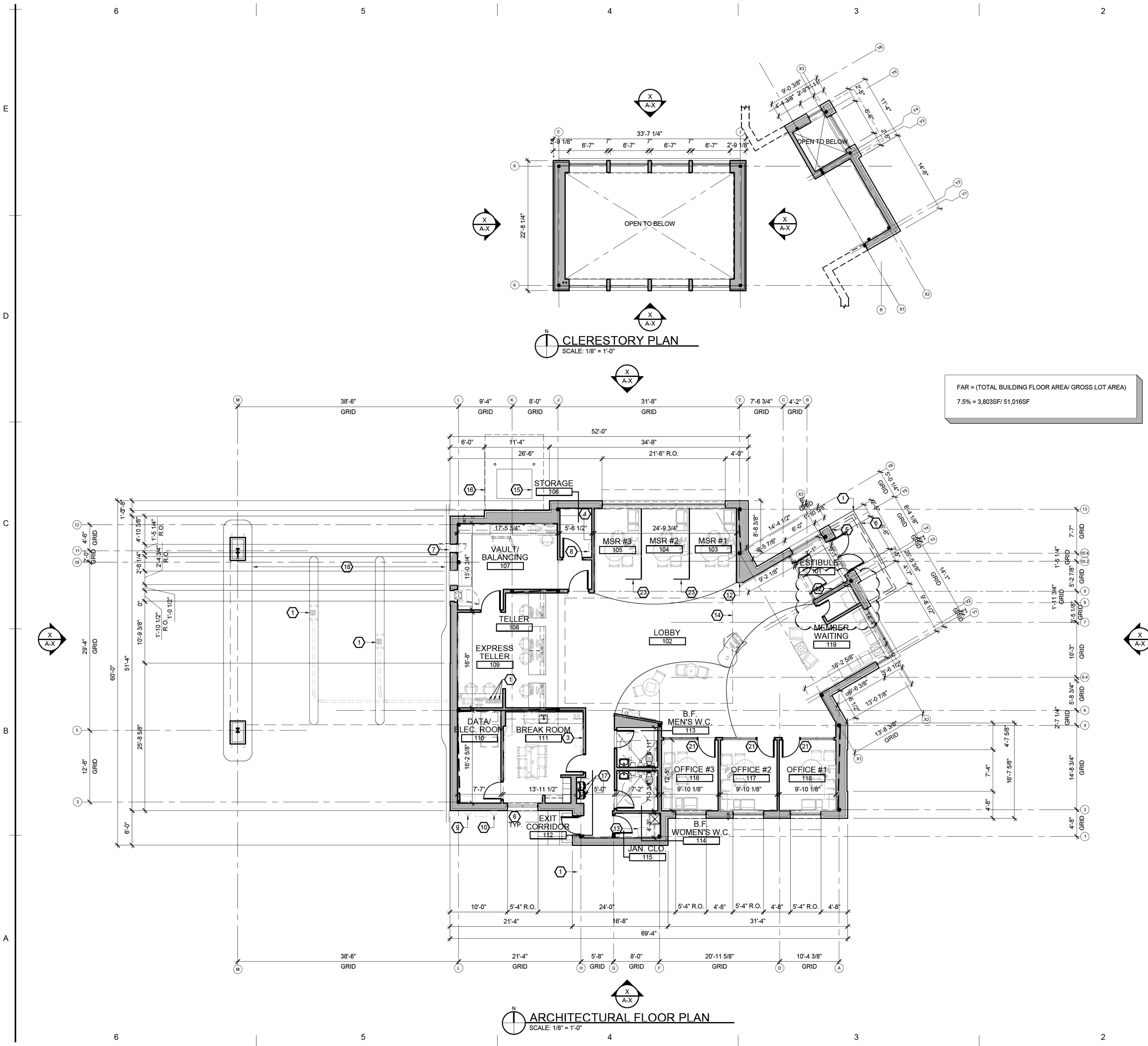
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SCALE: AS SHOWN PROJECT ID: M-1960  
CITY OF ANN ARBOR PROJECT NUMBER: SP19-019  
TITLE: **CONSTRUCTION DETAILS**  
DRAWING: **C-14**

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**CLERESTORY PLAN**  
SCALE: 1/8" = 1'-0"

**ARCHITECTURAL FLOOR PLAN**  
SCALE: 1/8" = 1'-0"

FAR = (TOTAL BUILDING FLOOR AREA/ GROSS LOT AREA)  
7.5% = 3,803SF/ 51,016SF

**GENERAL FLOOR PLAN NOTES:**

- THIS DRAWING IS DIAGRAMMATIC AND SHOULD BE USED TO DETERMINE THE DESIGN INTENT. THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE SET OF WORK AS INDICATED AND SHALL FIELD VERIFY ALL WORK, COORDINATE ALL DRAWINGS / NEW WORK AND SHALL NOTIFY ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES IN THE DOCUMENTS BEFORE PROCEEDING. FAILURE TO DO SO WILL RESULT IN THE CONTRACTOR TAKING FULL RESPONSIBILITY AND LIABILITY FOR SAID DISCREPANCIES.
- ALL DIMENSIONS ARE SHOWN FROM FINISH FACE TO FINISH FACE OF PARTITION UNLESS OTHERWISE NOTED.
- WALL THICKNESS' ARE NOMINAL NOT ACTUAL DIMENSIONS. SEE WALL SCHEDULE FOR ACTUAL DIMENSIONS.
- ALL WOOD, INCLUDING BLOCKING, USED ON THE PROJECT SHALL BE FIRE RETARDANT TREATED.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL LOCAL, STATE, COUNTY CODE REGULATIONS, O.S.H.A., AND THE AMERICAN WITH DISABILITIES ACT (ADA). REFER TO THE CODE PLAN FOR MORE INFORMATION.
- PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE CONDITION.
- PROVIDE TRANSITION STRIPS AT EACH CHANGE IN FLOOR FINISH MATERIALS.
- REINFORCE WALL AND PROVIDE BLOCKING AS REQUIRED TO SUPPORT WALL CABINETS AND COUNTERTOPS.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL WALL REINFORCING FOR INSTALLATION OF ACCESSORIES, COAT RACKS, CHART RACKS, CASEWORK, AND OTHER WALL MOUNTED ITEMS.
- ALL EXPOSED PIPES, DUCTS, AND CONDUIT TO BE PAINTED TO MATCH EXISTING.
- PROVIDE CONTROL JOINTS IN GYPSUM BOARD PARTITIONS AT 30'-0" O.C. MAXIMUM AND AS INDICATED IN THE CONTRACT DOCUMENTS.
- COORDINATE WITH OWNER'S EQUIPMENT SUPPLIER FOR INSTALLATION REQUIREMENTS / LOCATIONS OF FLOOR / WALL / CEILING MOUNTED ITEMS; IE. CAMERAS, TV'S, SPEAKERS, SENSORS, SECURITY WIRING, VAULTS, ATMS.
- CONTRACTOR SHALL CONDUCT A ROUGH ELECTRICAL INSPECTION WITH OWNER, PRIOR TO ENCLOSING WALLS, FOR THE PURPOSE OF CONFIRMING ALL J-BOX LOCATIONS FOR POWER, DATA, VOICE, SWITCH, THERMOSTAT, ETC.
- CONTRACTOR TO FILL ANY AND ALL EQUIPMENT PENETRATIONS OR DEPRESSIONS INTO OR THROUGH THE EXISTING SLAB THAT WILL NOT BE UTILIZED TO FEED NEW EQUIPMENT (I.E. ABANDONED FLOOR CORES, IMPRESSION FROM PREVIOUS EQUIPMENT FLOOR PLATE REMOVAL). PENETRATIONS SHALL BE FILLED WITH NON-SHRINK GROUT. THE SIDES OF ANY EXISTING OPENINGS SHALL BE MODIFIED/TAPERED SO THAT THEY ARE WIDER AT THE TOP THAN AT THE BOTTOM. FOR LARGE OPENINGS, PROVIDE ONE (1) #5 BAR 2" UP FROM BOTTOM OF HOLE.
- A TACTILE SIGN STATING 'EXIT' AND COMPLYING WITH ICC-A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN 'AREA OF REFUGE', AN EXTERIOR AREA FOR ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY, AND THE EXIT DISCHARGE.

**FLOOR PLAN KEY NOTES:**

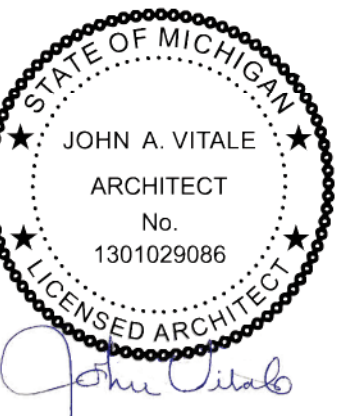
- (TYPICAL THIS SHEET ONLY)
- 6'-8" WIDE SUPPORTED CONC. STOOP
  - VACUUM AIR TUBE SYSTEM; COOR UNIT LOCATIONS WITH LAYOUT OF ROOF STRUCTURE.
  - TACK BOARDS
  - PROVIDE FIVE (5) 1-1/2" THICK SHELVES; 18" DEEP W/ WHITE P LAM FINISH, VERT. K.V. STANDARDS & BRACKETS FL TO CEILING @ 16" O.C. HORIZ.
  - SECURITY KEY BOX - VERIFY WITH FIRE MARSHAL EXACT PRODUCT REQUIRED (MANUF - KNOX BOX).
  - SUNSHADE CANOPY ABOVE WINDOWS ONLY. SEE ROOF PLAN FOR ADDITIONAL INFORMATION.
  - ATM DRIVE-UP KIOSK WITH VALANCE AND POINT-TO POINT VAT SYSTEM BY OWNER'S BANK EQUIPMENT VENDOR; CONTRACTOR TO COORDINATE INSTALLATION.
  - STEEL ROOF LADDER.
  - ELECTRICAL METER AND CT CABINET; PAINT TO MATCH MASONRY COLOR.
  - GAS METER; GAS PIPING TO BE RUN IN WALL CAVITY.
  - ELECTRICAL / DATA OUTLETS TO BE CENTERED BETWEEN WINDOWS; COOR W/ FURNITURE.
  - AUTOMATIC DOOR OPERATOR BARRIER FREE PUSH-BUTTON
  - WATER HEATER ON OVERHEAD PLATFORM. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
  - OUTLINE OF CLERESTORY / SOFFIT ABOVE.
  - TRANSFORMER ON CONCRETE PAD; COORDINATE WITH ELECTRICAL TRADES.
  - TRANSFORMER CLEARANCE; COORDINATE WITH ELECTRICAL TRADES.
  - BARRIER FREE COMPLIANT HI / LOW DRINKING FOUNTAIN.
  - REFER TO SITE DRAWINGS FOR ADDITIONAL DRIVE-THRU PAVING REQUIREMENTS.
  - PROVIDE 3/4" PLYWOOD BACKER FOR WALL MOUNTED BINDER BINS. COORDINATE EXACT LOCATIONS WITH FURNITURE LAYOUT.
  - ALL ELECTRICAL/LOW VOLTAGE INSTALLED SERVICE OUTLETS TO BE RUN UNDERGROUND/UNDERFLOOR (SEE ELECTRICAL ENGINEERING DRAWINGS).
  - 1/2" THICK GLASS IN ANODIZED ALUMINUM FRAMES FOR OFFICE WALLS AS ILLUSTRATED.
  - PROVIDE CUSTOM PL-1 LAMINATE PASS-THRU TRIM (BOTH SIDES AND SOFFIT ABOVE) AT OPENING AS ILLUSTRATED. OVERLAP TRIM 2" ON ALL SIDES TO MATCH DOOR FRAME SIMILAR WIDTH. REFER TO MILLWORK DETAILS FOR FURTHER INFORMATION.
  - PRE-MANUFACTURE DECORATIVE FURNITURE WALL PARTITION SYSTEM. WALL TO HAVE 42" HIGH FABRIC WALL COVERING WITH 15" HIGH GLASS PARTITION BEARING ON WALL. COORDINATE WITH FURNITURE MANUFACTURE.



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Consultants:



Project:  
**MICHIGAN SCHOOLS + GOVERNMENT CREDIT UNION - NEW BUILD**  
2151 W. STADIUM BLVD.  
ANN ARBOR, MI

Issued for:

SITE PLAN APPROVAL	05.30.19
SITE PLAN APPROVAL REVISIONS	08.15.19
SITE PLAN APPROVAL REVISIONS	10.11.19
REVISIONS PER 3RD PLAN'S COMMENTS	10.28.19
PLANNING MEETING	12.03.19
REVISIONS PER PLANNING COMMISSION COMMENTS	12.16.19

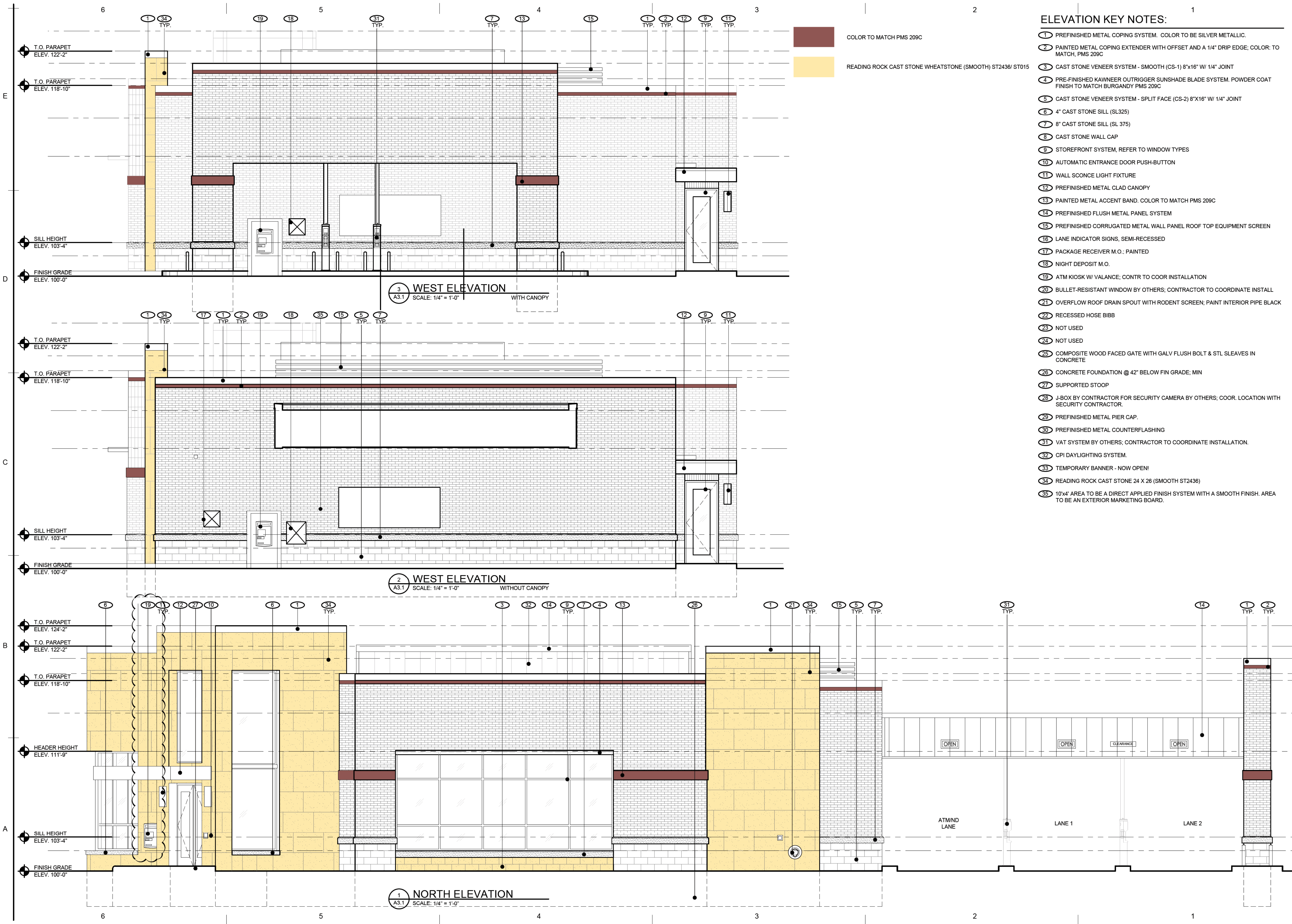
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RBG  
Checked by:  
MJB  
Sheet Title:  
**ARCHITECTURAL FLOOR PLAN**

Project No.:  
**2018.157**

Sheet No.:  
**A1.1**

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**ELEVATION KEY NOTES:**

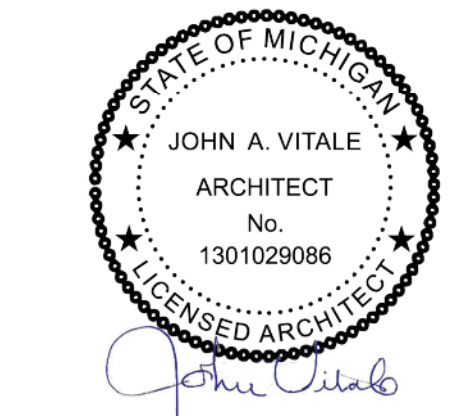
- 1 PREFINISHED METAL COPING SYSTEM. COLOR TO BE SILVER METALLIC.
- 2 PAINTED METAL COPING EXTENDER WITH OFFSET AND A 1/4" DRIP EDGE; COLOR TO MATCH, PMS 209C
- 3 CAST STONE VENEER SYSTEM - SMOOTH (CS-1) 8"x16" W/ 1/4" JOINT
- 4 PRE-FINISHED KAWNEER OUTRIGGER SUNSHADE BLADE SYSTEM. POWDER COAT FINISH TO MATCH BURGANDY PMS 209C
- 5 CAST STONE VENEER SYSTEM - SPLIT FACE (CS-2) 8"x16" W/ 1/4" JOINT
- 6 4" CAST STONE SILL (SL325)
- 7 8" CAST STONE SILL (SL 375)
- 8 CAST STONE WALL CAP
- 9 STOREFRONT SYSTEM, REFER TO WINDOW TYPES
- 10 AUTOMATIC ENTRANCE DOOR PUSH-BUTTON
- 11 WALL SCONCE LIGHT FIXTURE
- 12 PREFINISHED METAL CLAD CANOPY
- 13 PAINTED METAL ACCENT BAND. COLOR TO MATCH PMS 209C
- 14 PREFINISHED FLUSH METAL PANEL SYSTEM
- 15 PREFINISHED CORRUGATED METAL WALL PANEL ROOF TOP EQUIPMENT SCREEN
- 16 LANE INDICATOR SIGNS, SEMI-RECESSED
- 17 PACKAGE RECEIVER M.O.; PAINTED
- 18 NIGHT DEPOSIT M.O.
- 19 ATM KIOSK W/ VALANCE; CONTR TO COOR INSTALLATION
- 20 BULLET-RESISTANT WINDOW BY OTHERS; CONTRACTOR TO COORDINATE INSTALL
- 21 OVERFLOW ROOF DRAIN SPOUT WITH RODENT SCREEN; PAINT INTERIOR PIPE BLACK
- 22 RECESSED HOSE BIBB
- 23 NOT USED
- 24 NOT USED
- 25 COMPOSITE WOOD FACED GATE WITH GALV FLUSH BOLT & STL SLEAVES IN CONCRETE
- 26 CONCRETE FOUNDATION @ 42" BELOW FIN GRADE; MIN
- 27 SUPPORTED STOOP
- 28 J-BOX BY CONTRACTOR FOR SECURITY CAMERA BY OTHERS; COOR. LOCATION WITH SECURITY CONTRACTOR.
- 29 PREFINISHED METAL PIER CAP.
- 30 PREFINISHED METAL COUNTERFLASHING
- 31 VAT SYSTEM BY OTHERS; CONTRACTOR TO COORDINATE INSTALLATION.
- 32 CPI DAYLIGHTING SYSTEM.
- 33 TEMPORARY BANNER - NOW OPEN!
- 34 READING ROCK CAST STONE 24 X 26 (SMOOTH ST2436)
- 35 10'x4' AREA TO BE A DIRECT APPLIED FINISH SYSTEM WITH A SMOOTH FINISH. AREA TO BE AN EXTERIOR MARKETING BOARD.



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Consultants:



Project:  
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 + GOVERNMENT CREDIT  
 UNION - NEW BUILD  
 2151 W. STADIUM BLVD.  
 ANN ARBOR, MI

Issued for:  
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 APPROVAL 05.30.19  
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 REVISIONS 10.11.19  
 REVISIONS PER 3RD PLAN'G  
 COMMENTS 10.2819  
 REVISIONS PER  
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 Checked by:  
 MJB

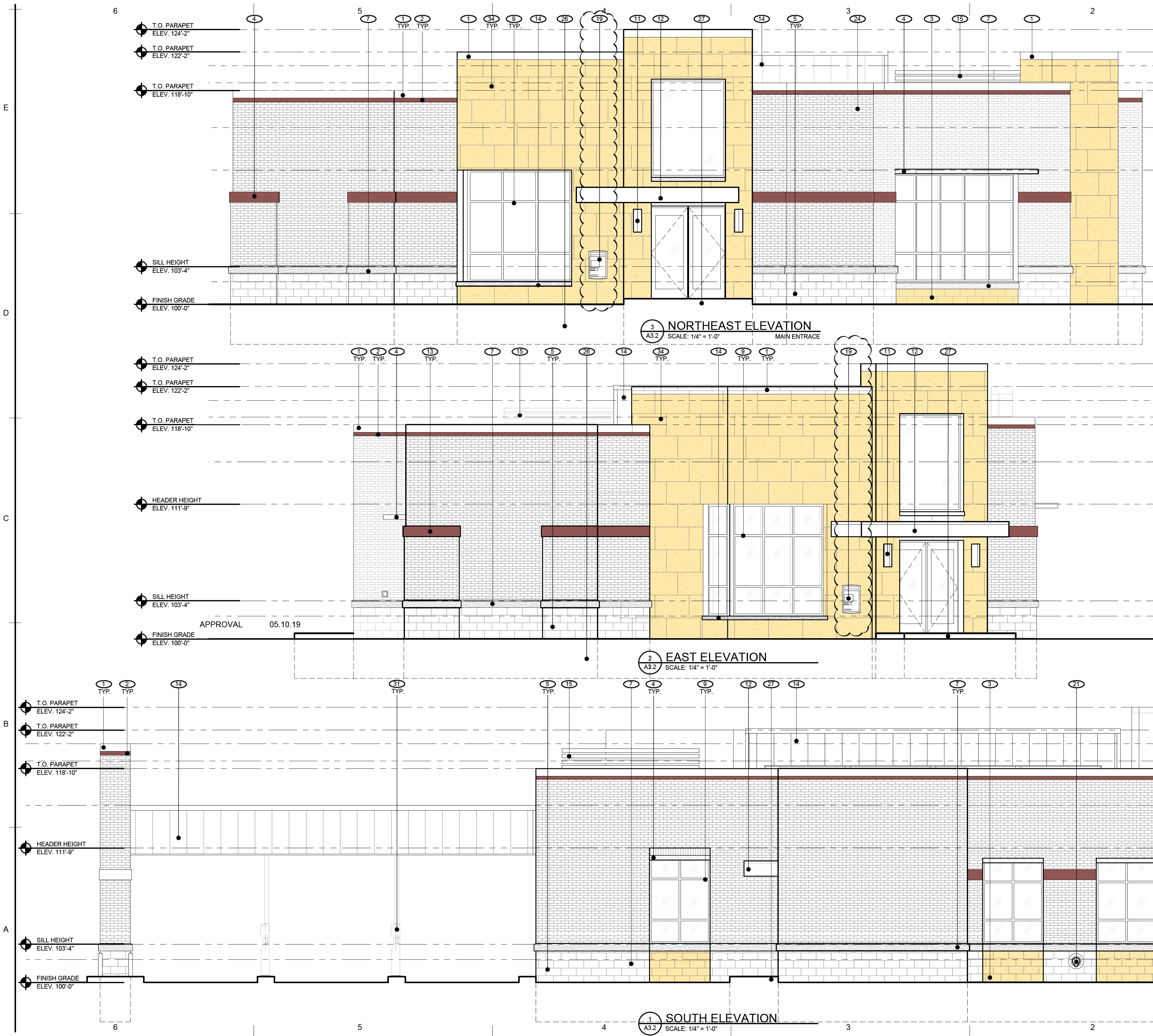
Sheet Title:  
 EXTERIOR  
 ELEVATIONS

Project No. :  
 2018.157

Sheet No. :  
**A3.1**

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**ELEVATION KEY NOTES:**

- 1 PREFINISHED METAL COPING SYSTEM. COLOR TO BE SILVER METALLIC.
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- 19 ATM KIOSK W/ VALANCE; CONTR TO COOR INSTALLATION
- 20 BULLET-RESISTANT WINDOW BY OTHERS; CONTRACTOR TO COORDINATE INSTALL
- 21 OVERFLOW ROOF DRAIN SPOUT WITH RODENT SCREEN; PAINT INTERIOR PIPE BLACK
- 22 RECESSED HOSE BIBB
- 23 WALL SIGN - SEE 11/A2.1 FOR DIMENSIONS
- 24 8" PIN MOUNTED BUILDING ADDRESS
- 25 COMPOSITE WOOD FACED GATE WITH GALV FLUSH BOLT & STL SLEAVES IN CONCRETE
- 26 CONCRETE FOUNDATION @ 42" BELOW FIN GRADE; MIN
- 27 SUPPORTED STOOP
- 28 J-BOX BY CONTRACTOR FOR SECURITY CAMERA BY OTHERS; COOR. LOCATION WITH SECURITY CONTRACTOR.
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**3 NORTHEAST ELEVATION**  
A3.2 SCALE: 1/4" = 1'-0"  
MAIN ENTRANCE

**2 EAST ELEVATION**  
A3.2 SCALE: 1/4" = 1'-0"

**1 SOUTH ELEVATION**  
A3.2 SCALE: 1/4" = 1'-0"

APPROVAL 05.10.19



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REVISIONS PER	
PLANNING COMMISSION	
COMMENTS	12.16.19

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Checked by:  
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MEETING	12.03.19
REVISIONS PER	
PLANNING COMMISSION	
COMMENTS	12.16.19

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 Checked by :  
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 EXTERIOR RENDERING

Project No. :  
 2018.157

Sheet No. :  
 A3.3



2018.157 - MSGCU ANN ARBOR - CONCEPTUAL DESIGN RENDERING - DECEMBER 16TH, 2019  
 RENDERING BY ROB GURCHE - STUCKY VITALE ARCHITECTS

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