PLANNING AND DEVELOPMENT SERVICES STAFF REPORT

For Planning Commission Meeting of November 19, 2019

SUBJECT: 2385-A East Ellsworth Road Special Exception Use for Medical

Marijuana Provisioning Center/Marijuana Retailer with Site Plan for

Planning Commission Approval

File No. SEU18-034

PROPOSED CITY PLANNING COMMISSION MOTION

The Ann Arbor City Planning Commission, after hearing all interested persons and reviewing all relevant information, including an accompanying site plan, finds the petition substantially meet the standards in Chapter 55 (Unified Development Code), Section 5.29.5.D (Special Exceptions) and Section 5.16.3.G (Marijuana Facility), and therefore approves the 2385-A East Ellsworth Road Special Exception Use for a Medical Marijuana Provisioning Center/Marijuana Retailer. This approval is based on the following findings:

- 1. The proposed use will be consistent with the C1 (Local Business) District, which provides for commercial retail uses as well as office and residential uses.
- 2. The proposed use will not adversely impact traffic, pedestrians, bicyclists, circulation, or road intersections based on the location. East Ellsworth Road provides access to the site, and the proposed use is consistent with other surrounding uses' traffic impact.
- 3. A site plan documenting the existing and proposed conditions of the site has been submitted as part of this application.
- 4. Through documentation submitted by the petitioner regarding waste disposal, inventory tracking, security, and other methods of operation of the facility, the provisioning center will be operated in a manner that will not have an adverse impact on the neighboring properties or area, and will not have a detrimental impact on natural features.

This Special Exception Use approval is based on the following conditions:

- 1. A land division application to create an approximately 8,000-square foot lot is submitted and approved within one year of the City Planning Commission approval of this petition, and the special exception use shall only apply to that lot.
- 2. A Site Plan for City Council for an approximately 1,500-square foot, one story commercial building must be approved within one year of the City Planning

Commission approval of this petition, and the special exception use may only occupy the development approved on that site plan.

- 3. The petitioner obtaining and maintaining both a State of Michigan Marijuana License and a City of Ann Arbor Marijuana Permit, and providing documentation to Planning Services within three years of the City Planning Commission approval date of this petition.
- 4. The petitioner operating a marijuana business at this address within three years of the City Planning Commission approval date of this petition.

And that the Ann Arbor Planning Commission approves the attached Area Plan which demonstrates compliance with the applicable Special Exception Use standards.

SUMMARY:

A request for special exception use approval for a medical marijuana provisioning center to be located on a portion of a parcel at 2385 East Ellwsworth Road. If approved, a land division application will be made to split the existing parcel into two lots of approximately 11,000 and 8,000 square feet, and a site plan petition will be submitted for approval of a new, approximately 1,500-square foot commercial building to house the contemplated provisioning center on the smaller, southern lot. Site plan applications have been submitted but are currently considered area plans in support of the proposed special exception use.

STAFF RECOMMENDATION:

Staff recommends that the special exception use be **approved with conditions** subject to Planning Commission consideration because, with the proposed conditions, the contemplated 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.

LOCATION:

This site is located on the north side of East Ellsworth Road between Shadowood Drive and Jonathan Court, in the south planning area. Ward 3.

DESCRIPTION OF PETITION:

The petitioner seeks special exception use approval to operate a medical marijuana provisioning center/marijuana retailer in proposed 1,500-square foot building on proposed 8,000-square foot lot. The location is currently an 18,000-square foot lot, zoned C1, that cannot be assured is more than 1,000 feet from a school. The petitioner has submitted a land division application to create a lot that is more than 1,000 feet from

a school, and will proceed with the approval process for a new commercial building on the site if the requested special exception use approval is granted.

SURROUNDING LAND USES AND ZONING:

	LAND USE	ZONING
NORTH	Multiple-Family Residential Playground	C1 (Local Commercial)
EAST	Multiple-Family Residential	R4A (Multiple-Family Residential)
SOUTH	Municipal Services (Wheeler Center)	PL (Public Land)
WEST	Multiple-Family Residential Playground	C1

SPECIAL EXCEPTION USE STANDARDS:

The Planning Commission, in arriving at its decision relative to any application for a special exception, shall apply the standards shown on the attached <u>petition</u>.

In addition, the following information is required to be submitted for provisioning centers and marijuana retailers per 5.16.3.G Marijuana Facilities:

- an <u>operations statement</u> that describes the life cycle of marijuana on site, and general business operations;
- 2) a <u>safety and security plan</u> that addresses marijuana, customers, employees, and the neighborhood;
- 3) a description of methods to be used to contain all odors within the building:
- 4) a waste disposal plan for marijuana; and
- 5) hours of operation.

This required information is attached to this document as well as linked.

PLANNING STAFF COMMENTS:

The special exception use requirements as they are applied to this petition are broken down into general categories below.

<u>Master Plan:</u> (The <u>City Master Plan</u> includes 8 elements, adopted individually between 2009 and 2017, and together by resolution in 2015.) Together, the City Master Plan elements seek to guide the City towards sustainability, conservation, and increasing livability, affordability, transportation choices, and dense, mixed uses on vibrant, active, friendly streets. The <u>Land Use Element</u> recommends commercial use for this site.

<u>Compatibility with the general vicinity</u>: The use is compatible with other adjacent uses in the general vicinity.

<u>Consistent with the neighborhood and not detrimental</u>: General retail use is in compatible with the surrounding neighborhood, which includes multiple-family and single-family homes. Provisioning centers are proving to be similar to general retail uses in intensity and character. It should be noted that several residents have written to oppose the proposed use.

<u>Parking</u>: The site has enough space to accommodate a 1,500-square foot commercial building to host the proposed use, and all required development standards such as off-street parking.

<u>Pedestrian Safety:</u> Public sidewalks, in good condition, are present in front of this site on East Ellsworth Road. There are some gaps in the sidewalk system farter from this site.

<u>Vehicular movement and traffic:</u> The vehicle trips generated by a provisioning center are consistent with general retail uses found in commercial districts.

<u>Natural Features:</u> There are on natural features on this site. There is a landmark street tree whose critical root zone extends onto this site.

Additional required Marijuana Facility SEU information:

<u>Operations Plan:</u> The referenced <u>operation plan</u> describes the life cycle of product through the facility, storage, deliveries and cash handling.

<u>Safety & Security:</u> The state licensing process requires an extremely detailed and comprehensive security system. Staff does not ask for the particulars of provisioning centers' security plan since our documents are all public, unlike the state license permit application which is not. The applicant has provided an abbreviated <u>security plan</u> within the operations plan.

<u>Odor Control:</u> Lack of odor control is the most frequent complaint heard by staff about provisioning centers. The applicant has addressed <u>odor control</u> in their operations plan which includes air filtration methods and equipment.

<u>Waste Disposal</u>: The applicant has addressed <u>waste disposal</u> in their operations plan, stating that any marijuana waste will be reported, rendered unusable, and disposed of in a dupster for landfill disposal.

<u>Hours of Operations:</u> Normal <u>hours of operation</u> are provided in the operation plan. They are proposed to be 9:00am to 9:00pm Monday through Saturday and 10:00am to 6:00pm on Sunday.

MAP:

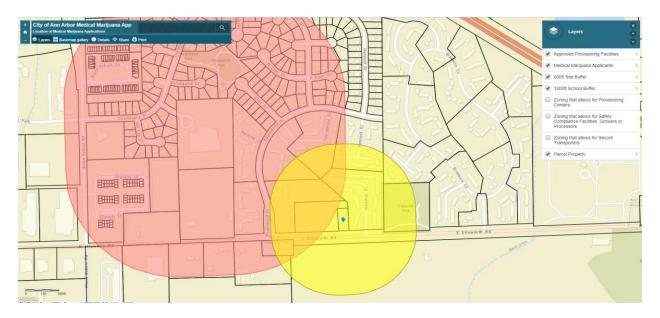


Figure 1: Marijuna Facility Buffer Map

DEPARTMENT COMMENTS:

Development review staff have reviewed the application. None offer any comments regarding the proposed land use. Several have noted comments about the pending site plan application which the applicant should be able to successfully resolve with revisions.

Prepared by Alexis DiLeo, City Planner Reviewed by Brett Lenart, Planning Manager 11/15/19

Attachments: Zoning/Parcel Maps

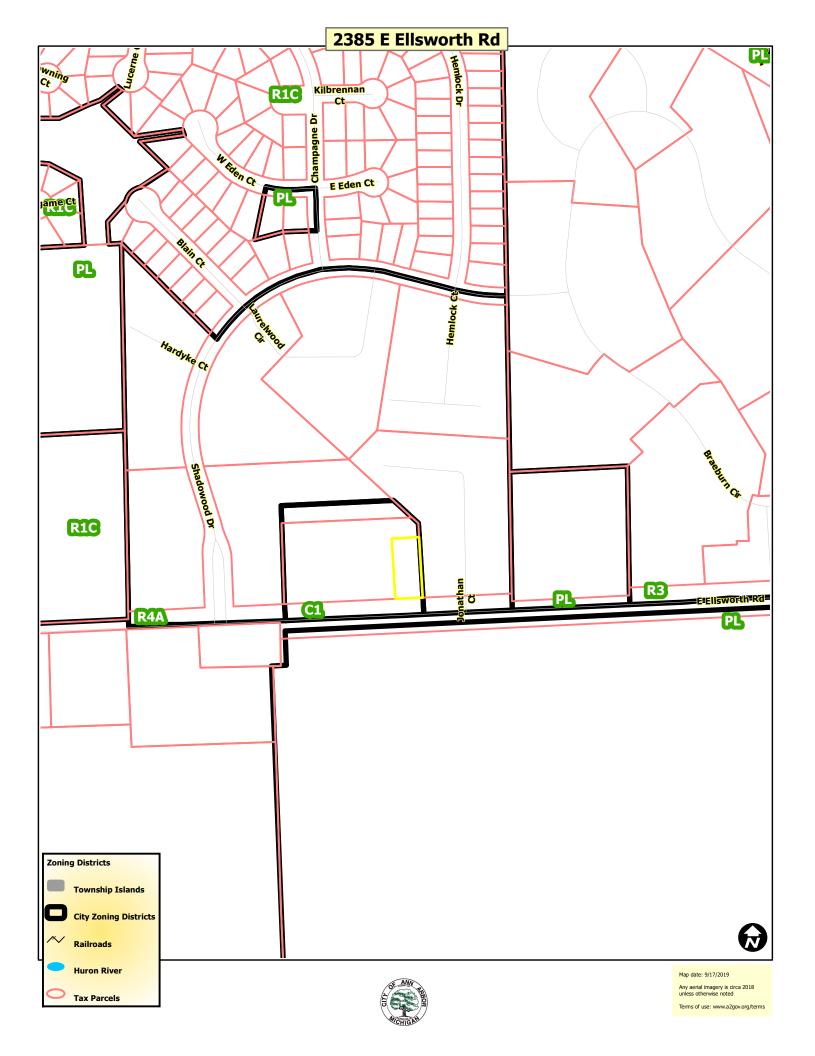
Aerial Photo

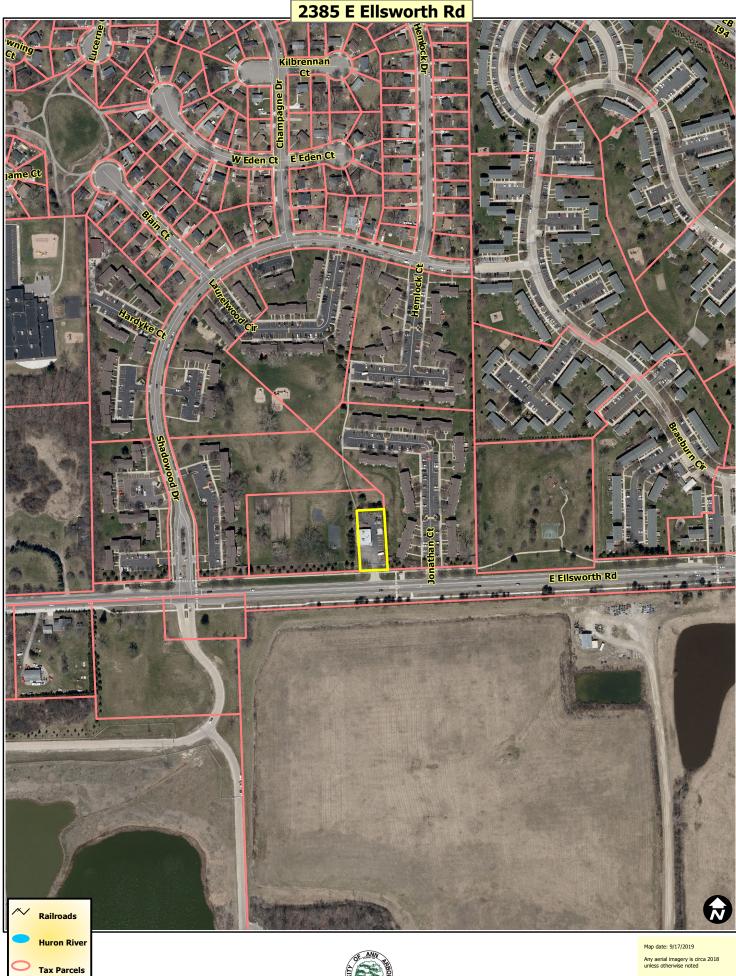
SEU Petition Application Site Plan, including Floor Plan

c: Petitioner – Comercial Services Property Management Inc. (28500 Franklin Rd., Southfield, MI 48322, stevemsoka@gmail.com)

Property Owner – 2385 E Ellsworth Road, LLC (28500 Franklin Rd., Southfield, MI 48322) Petitioner's Agent – Michigan Medical Cannabis Consulting, LLC (Brian Fenech, m2c2@gmail.com)

City Attorney's Office Systems Planning File No. SEU18-034





Damian Farrell Design Group

359 Metty Drive, #4A / Ann Arbor / Michigan 734.998.1331 / DFDGonline.com



2385 East Ellsworth SEU Application

2385 E Ellsworth Ann Arbor, MI 48105

For SEU Application -

05.04.18

Pre-submittal Meeting -

03.30.18

<u>Attachment B – Statements</u>

Operation Statement:

The applicant is committed to using industry best practices for all operational aspects of the proposed provisioning center. Complete compliance with the MMFLA and Ann Arbor Ordinances is a top priority. The Life-Cycle of products, including product purchasing, deliveries, storage and transfers of product and cash, as well as patient flow through the facility will all be conducted in a manner that reduces the risk of security issues, promotes patients safety with issues such as proper consumption consultation, and monitoring purchase amounts to assure compliance with the MMFLA and prevent diversion.

Patient Intake:

All patients, caregivers and guests will be greeted at the reception desk and will have to present valid state ID to verify that they are 18 or over or accompanied by a parent or guardian. No person other than a valid patient or caregiver may enter the consultation area. Any returning patient or caregiver will have their Michigan Medical Marihuana Program card to verify its validity and their information will be cross-referenced in the METRC system to determine whether their daily purchase allowance has been exceeded. If the patient or caregiver's MMMP card is valid and they have not exceeded daily purchase allowances they will them be escorted through the secure reception area door and led into the waiting area until a provisioning center consultant escorts them to the consulting room.

New patients and caregivers will be required to present a valid state ID as well as a valid MMMP card and upon verification will be presented with a membership agreement which describes the provisioning center's policies and procedures as well as discloses the risks associated with the use and possession of medical cannabis. Once a new member has executed their membership agreement they will follow the same procedures as existing provisioning center patients.

No patient, caregiver or guest will be allowed entry into the facility if they are showing signs of intoxication or impairment or if they have violated the provisioning center's policies in the past. Any patient, caregiver or guest that violates policy or procedures

risks the possibility of having their membership revoked and permanent banning from the property.

Product Life-Cycle:

Purchases will be made by the provisioning center manager. All product will be purchased from licensed vendors as identified through the state's list of approved cultivators and processors. All deliveries will be made by licensed secured transporters to a secure, non-public area of the provisioning center that is under 24hr video surveillance. All product deliveries will be made at scheduled times during business hours. All product deliveries and cash leaving the provisioning center will be scanned into the state approved METRC seed to sale tracking system.

Upon receipt, all inventory will be cross checked to the purchase order for accuracy and inspected for issues such as contamination, improper labeling, improper testing, damage, and improper quality control. Once a delivery is approved all items will be scanned into the provisioning center's inventory system which will be linked to the state's METRC system. Once scanned into inventory all product will be stored in a safe in a secured area of the provisioning center which will be under 24hr surveillance. Only the amount and variety of product necessary for a particular shift will be removed from the secured storage area to the provisioning center's consultation area.

After a patient has made their selections from the consultation area, the product will be packaged in appropriate packaging and scanned out of inventory via the POS system and the inventory data will be adjusted accordingly internally and with METRC.

Safety & Security Plan:

The safety and security of the proposed provisioning center's patients, staff, and neighbors are a top priority. The proposed provisioning center will employ best practices when it comes to security. Beyond just satisfying all requirements of the MMFLA, the proposed provisioning center will utilize 3 layers of security for the property itself. Along with exterior lighting, HD cameras will provide 360 degree coverage of the exterior of the property. The building itself will have HD cameras at the exterior and interior at all points of entry and egress. The Interior of the provisioning center will have complete camera coverage for all patient areas of the facility as well as additional cameras positioned to capture all activity in the cash and cannabis storage areas of the facility. All video captured will be stored for a period of 30 days with the exception of cash and cannabis storage areas which will be preserved for a minimum of 3 years. All cameras will have a real-time feed to the Ann Arbor Police department, and the facility will be contracting with a security monitoring company that will monitor the provisioning center 24hrs a day for break-ins, and hold-up/robbery remotes and door alarms will be accessible to all staff. All staff and patients will enter through a Meter 6M multi-purpose, multi-zone metal detector/body scanner.

Odor Mitigation:

4 11 6

The highest industry standards for odor mitigation will be used. A commercial grade HEPA air filtration system will be installed, and charcoal filters will be used throughout the provisioning center and in close proximity to exterior doors and areas where any onsite preparation of cannabis products, such as packaging of medical marihuana flowers, will be conducted. All filters will be cleaned and changed on a regular schedule and all products will be stored in airtight containers.

Waste Disposal:

All non-marihuana waste will be disposed of in city provided containers outside of the provisioning center with anticipated pickup twice per week.

Any and all medical marihuana related waste will be stored in locked containers marked as medical marihuana waste" and stored in a locked area inside of the provisioning center until it is removed from the facility by an employee and taken to an appropriate waste disposal site for composting.

Hours of Operation:

We intend to have the following hours of operation:

Monday – Saturday:

9am-9pm

Sunday:

10am-6pm

Closed certain Holidays including Thanksgiving and Christmas.

SOUTH PARCEL A CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN SITE PLAN

OWNER

2385 E ELLSWORTH ROAD LLC 28500 FRANKLIN ROAD SOUTHFIELD, MI 48304 PH (248) 231-6016 ATTN: STEVE SOKA

ARCHITECH

DAMIEN FARREL DESIGN GROUP 359 METTY DRIVE, SUITE 4A ANN ARBOR, MI 48103 PH (734) 998-1331 ATTN: KYLE GONZALEZ

LEGAL DESCRIPTIONS - PROPOSED SOUTH PARCEL

PROPOSED PARCEL OF LAND LOCATED IN THE SW 1/4 OF SECTION 10, T3S, R6E, CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN.

Commencing at the SE corner of Lot 122, Arbor Oaks Subdivision No. 1, also being the POINT

thence S87°54'33"W 95.00 feet along the North right—of—way line of E. Ellsworth Rd.

(120' wide); thence N02°05'35"W 87.19 feet;

thence N87°54'25"E 95.00 feet;

thence S02°05'35"E 87.19 feet along the East line of said Lot 122 of Arbor Oaks Subdivision No.1 to the POINT OF BEGINNING. Being part of Lot 122 of Arbor Oaks Subdivision No.1 and also part of SW 1/4 of Section 10, T3S, R6E, City of Ann Arbor, Washtenaw County, Michigan, and containing 0.19 acres of land more or less. Being subject to easements and restrictions of record, if any.

SUBJECT TO the following variable width access and public utility easement described as the

Commencing at the SE corner of Lot 122, Arbor Oaks Subdivision No. 1, as recorded in Liber 19 of Plats, Pages 67-71, Washtenaw County Records; thence S87°54'33"W 6.00 feet along the North right-of-way line of E. Ellsworth Rd. (120' wide) to the POINT OF BEGINNING;

thence continuing S87°54'33"W 55.80 feet along said North right-of-way line;

thence N02°05'27"W 71.69 feet;

thence S88°04'57"W 27.75 feet; thence N02°05'57"W 15.41 feet;

thence N87°54'25"E 83.55 feet;

thence S02°05'35"E 87.20 feet to the POINT OF BEGINNING. Being part of Lot 122 of Arbor Oaks Subdivision No.1 and also part of SW 1/4 of Section 10, T3S, R6E, City of Ann

LEGAL DESCRIPTIONS - PROPOSED NORTH PARCEL

PROPOSED PARCEL OF LAND LOCATED IN THE SW 1/4 OF SECTION 10, T3S, R6E, CITY OF ANN ARBOR, WASHTENAW COUNTY, MICHIGAN.

Commencing at the SE corner of Lot 122, Arbor Oaks Subdivision No. 1, NO2°05'35"W 87.19

along the East line of said Lot 122 of Arbor Oaks Subdivision No.1 feet to the POINT OF thence S87°54'25"W 95.00 feet;

thence N02°05'35"W 122.81 feet:

thence N87°54'33"E 95.00 feet;

thence S02°05'35"E 122.81 feet along said East line of Lot 122 to the POINT OF BEGINNING. Being part of Lot 122 of Arbor Oaks Subdivision No.1 and also part of SW 1/4 of Section 10, T3S, R6E, City of Ann Arbor, Washtenaw County, Michigan, and containing 0.27 acres of land more or less. Being subject to easements and restrictions of record, if any.

TOGETHER WITH the following variable width access and public utility easement described as

Commencing at the SE corner of Lot 122, Arbor Oaks Subdivision No. 1, as recorded in Liber 19 of Plats, Pages 67-71, Washtenaw County Records; thence S87°54'33"W 6.00 feet along the North right-of-way line of E. Ellsworth Rd. (120' wide) to the POINT OF BEGINNING;

thence continuing S87°54'33"W 55.80 feet along said North right-of-way line; thence N02°05'27"W 71.69 feet;

thence S88°04'57"W 27.75 feet;

thence N02°05'57"W 15.41 feet: thence N87°54'25"E 83.55 feet;

thence S02°05'35"E 87.20 feet to the POINT OF BEGINNING. Being part of Lot 122 of Arbor Oaks Subdivision No.1 and also part of SW 1/4 of Section 10, T3S, R6E, City of Ann Arbor, Washtenaw County, Michigan. Being subject to easements and restrictions of record, if

NATURAL FEATURES IMPACT STATEMENTS

TREE IMPACTS - NO LANDMARK TREES ARE LOCATED ON THE SITE.

<u>WOODLANDS</u> - NO WOODLANDS ARE LOCATED ON THE SITE.

FLOODPLAINS/WATERCOURSES - NO FLOODPLAINS OR WATERCOUSES ARE LOCATED ON THE SITE.

WETLANDS - NO WETLANDS ON THE SITE.

STEEPSLOPES - NO STEEP SLOPES ARE LOCATED ON THE SITE.

SURVEYOR/CIVIL ENGINEER

MIDWESTERN CONSULTING, LLC 3815 PLAZA DR. ANN ARBOR, MI 48108 PH. (734) 995-0200 ATTN: HEATH HARTT, PE





LAND DIVISION ZONING COMPARISON CHART

* 30' where abutting Residential Zoned Land, otherwise none

+1ft per building ht ft over 30 ft

	Existing	Parcel B	Parcel A			
LAND DIVISION	Parent Parcel	Faicei B	Talocia			
ZONING COMPARISON	Do guiro d/					
ZONING COMPARISON	Required/ Permitted	Proposed	Proposed			
Zoning:	C1	C1	C1			
Building Height	35 ft	O I	01			
Max Stories	3	1	1			
Minimum Lot Area	2,000 sq ft	11,666sf	8,283sf			
Minimum Width	20 ft	95ft	95ft			
FAR	100% max.	22%	19%			
Floor Area per Non-Residential Use	8000sf max.	2,487sf	1,532sf			
Setbacks Front	10 ft min/ 25 ft max	10 ft	14 ft			
Side - West	0/30*	0 ft existing	3 ft			
Side - East	0/30*	44 ft existing	62 ft			
Rear	0/30*	62 ft existing	20 ft			
Vehicular Parking	Min 1 per 310 sf	8 min, 9 max required	5 min/ 6 max required			
	Max 1 per 265 sf	9 provided	6 provided			
Bicycle Parking	1 per 3,000 sf Floor	1 space required	1 space required			
	Area (50% B/C)	0 provided - shared	2 provided - shared			
Traffic			Total: 404 Trips			
			AM Peak: 33 Trips			
			PM Peak:48 Trips			

DEVELOPMENT PROGRAM

2385 E. ELLSWORTH ROAD LLC CURRENTLY OWNS THE RIGHTS TO THE PROPERTY AT 2385 E ELLSWORTH ROAD, ANN ARBOR. THE PROPOSED PROJECT CONSISTS OF A LOT SPLIT AND THE CONSTRUCTION OF A NEW SINGLE STORY BUILDING TO BE USED AS A MEDICAL MARIJUANA DISPENSARY. THE EXISTING BUILDING WILL REMAIN AS THE CURRENT USE AND IS LOCATED ON THE REMAINDER PARCEL. CONSTRUCTION WILL OCCUR AS A SINGLE PHASE, WITH WORK STARTING IN THE SPRING OF 2020.

COMMUNITY ANALYSIS

THE PROPOSED DEVELOPMENT IS LOCATED WITHIN C1 COMMERCIAL ZONING AND NOT LOCATED WITHIN A RESIDENTIAL DISTRICT AND NOT WITHIN A HISTORICAL DISTRICT. NO IMPACT TO SCHOOL CAPACITY IS ANTICIPATED.

GENERAL NOTES:

1. PER CHAPTER 49, SECTION 4:58 OF THE CITY CODE, "ALL SIDEWALKS ARE TO BE KEPT AND MAINTAINED IN GOOD REPAIR BY THE OWNER OF THE LAND ADJACENT TO AND ABUTTING THE SAME." PRIOR TO ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR THIS SITE, ALL EXISTING SIDEWALKS MUST BE REPAIRED IN ACCORDANCE WITH CITY STANDARDS.

- 2. "THE CONSTRUCTION COVERED BY THESE PLANS SHALL CONFORM TO THE CITY OF ANN ARBOR PUBLIC SERVICES DEPARTMENT STANDARD SPECIFICATIONS WHICH ARE INCLUDED BY REFERENCE."
- 3. "THE OMISSION OF ANY STANDARD DETAILS DOES NOT RELIEVE THE CONTRACTORS OF THEIR OBLIGATION TO CONSTRUCT ITEMS IN COMPLETE ACCORDANCE WITH PUBLIC SERVICES DEPARTMENT STANDARD
- 4. WORK IN THE ELLSWORTH RIGHT-OF-WAY REQUIRE A CITY RIGHT-OF-WAY PERMIT(S). PROJECT MANAGEMENT SHALL INSPECT ALL WORK IN THE RIGHT-OF-WAY INCLUDING BUT NOT LIMITED TO DRIVE APPROACHES. SIDEWALKS, CURB & GUTTER, UTILITIES, RELOCATION OF STREET LIGHTS, ETC.
- 5. PUBLIC STREET LIGHT RELOCATION REQUIRED REVIEW AND APPROVAL OF THE CITY TRAFFIC ENGINEER. THE PROJECT OWNER WILL BE RESPONSIBLE FOR ALL ASSOCIATED COSTS OF THE RELOCATION.

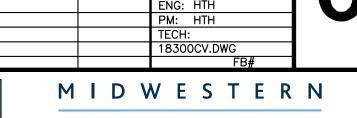
SITE



Shee	et Index
#	SHEET TITLE
01	COVER
02	EXISTING CONDITIONS & ALTA SURVEY
03	REMOVALS
04	DIMENSIONAL SITE PLAN
05	GRADING AND SOIL EROSION CONTROL PLAN
06	UTILITY PLAN
07	STORMWATER MANAGEMENT PLAN
80	LANDSCAPE PLAN
09	FIRE PROTECTION AND REFUSE PLAN
10	SITE DETAILS
11	PHOTOMETRIC PLAN
A0.00	PERSPECTIVE & STREETWALL
A1.00	FLOOR PLAN & SECTION
A4.00	ELEVATIONS

2385 E ELLSWORTH

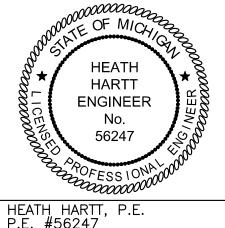
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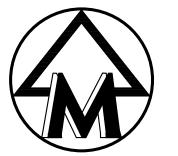


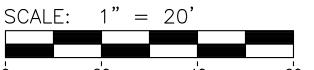


CONSULTING 3815 Plaza Drive Ann Arbor, Michigan 48108 (734) 995-0200 • www.midwesternconsulting.com Land Development • Land Survey • Institutional • Municipal Wireless Communications • Transportation • Landfill Services

RELEASED FOR: DATE









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EXIST. CONTOUR

EXIST. SPOT ELEVATION

EXIST. UTILITY POLE

ELEC. TRANSFORMER

EXIST. TELEPHONE LINE

EXIST. FIBER OPTIC LINE

EXIST. GATE VALVE IN BOX

EXIST. GATE VALVE IN WELL

EXIST. CATCH BASIN OR INLET

PEDESTRIAN CROSSING SIGNAL

EXIST. WATER MAIN

EXIST. STORM SEWER

EXIST. CLEANOUT

TELEPHONE RISER

ELECTRIC METER

WATER METER

GAS METER

SINGLE TREE

TREE OR BRUSH LIMIT

EXIST. BOULDER

FOUND IRON PIPE

FOUND MONUMENT

FOUND IRON ROD

COTTONWOOD

BENCHMARK

BM#1: SPIKE IN EAST FACE OF 15" COTTONWOOD

BM#2: SPIKE IN WEST FACE OF UTILITY POLE EAST

BM#3: NORTH FACE TOP STEAMER OF FIRE

HYDRANT WEST OF ENTRANCE

ELEV=841.18 (NAVD 88 DATUM)

ELEV=844.11 (NAVD 88 DATUM)

OF ENTRANCE

ELEV=845.55 (NAVD 88 DATUM)

±28" NORTH OF NW BLDG. CORNER

POST

FENCE

TREE LEGEND

ELM

LOCUST

MAPLE

SIGN

MAILBOX

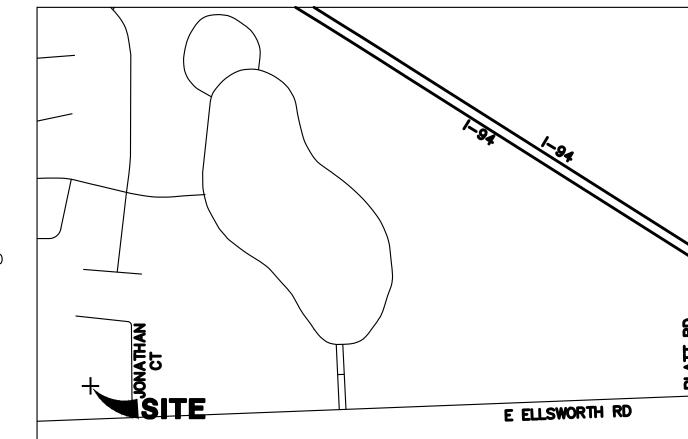
EXIST. SANITARY SEWER

EXIST. ELECTRIC LINE

EXIST. GAS LINE

EXIST. HYDRANT

EXIST. OVERHEAD UTILITY LINE





LEGAL DESCRIPTION

(from Absolute Title, Inc., File No.: 85004 Rev. 1, with Effective Date of July 19, 2019)

The Easterly 95 feet of the Southerly 210 feet of Lot 122, Arbor Oaks Subdivision No. 1, as recorded in Liber 19 of Plats, Pages 67 through 71, Washtenaw County Records.

Being more particularly described as the following: Commencing at the SE corner of Lot 122, Arbor Oaks Subdivision No. 1, as recorded in Liber 19 of Plats, pages 67 through 71, Washtenaw County records, also being the POINT OF BEGINNING;

thence S87°54'33"W 95.00 feet along the North right-of-way line of E. Ellsworth Rd. (120' wide);

thence N02°05'35"W 210.00 feet; thence N87°54'33"E 95.00 feet;

Washtenaw County Records. (PLOTTED)

thence S02°05'35"E 210.00 feet along the East line of said Lot 122 of Arbor Oaks Subdivision No.1 to the POINT OF BEGINNING. Being part of Lot 122 of Arbor Oaks Subdivision No.1 and also part of SW 1/4 of Section 10, T3S, R6E, City of Ann Arbor, Washtenaw County, Michigan, and containing 0.46 acres of land more or less. Being subject to easements and restrictions of record, if any.

EXCEPTIONS

- 4. Building and use restrictions contained in instrument recorded in Liber 1326, Page 239, and in Liber 1688, Page 939, Washtenaw County Records, which are not accompanied by a right of reverter, but omitting any such covenant or restrictions based on race, color, religion, sex, handicap, familial status, or national origin. (NOT PLOTTABLE)
- 5. Easement Grant and Declaration of Restrictions in favor of The Detroit Edison Company and Michigan Bell Telephone Company, as recorded in Liber 1306, Page 476, Washtenaw County Records, and Agreement pertaining thereto, as recorded in Liber 1309, Page 87, Washtenaw County records. (PLOTTED)
- Easement for public utilities and drainage facilities, as shown on the recorded plat, and as disclosed by instrument recorded in Liber 1326, Page 239, Washtenaw County Records.
- 7. Easements, covenants and restrictions recorded in Liber 1344, Page 193, Washtenaw County Records. (NOT PLOTTABLE)
- Right of Way in favor of The Detroit Edison Company, as recorded in Liber 1739, Page 156,

NOTES

- 1) THIS SURVEY WAS PREPARED USING ABSOLUTE TITLE, INC. FILE No. 85004 REV. 1 WITH AN EFFECTIVE DATE OF JULY 19, 2019.
- 2) THE LEGAL DESCRIPTION DESCRIBES THE SAME PROPERTY AS INSURED IN THE TITLE COMMITMENT AND ANY EXCEPTIONS HAVE BEEN NOTED HEREIN.
- 3) BEARINGS ARE BASED ON THE EAST LINE OF LOT 22 OF ARBOR OAKS SUBDIVISION NO. 1, AS RECORDED IN LIBER 19 OF PLATS, PAGES 67 THROUGH 71, WASHTENAW COUNTY RECORDS.
- 4) SAID DESCRIBED PROPERTY IS NOT LOCATED WITHIN A 100-YEAR FLOOD PLAIN ZONE PER FLOOD INSURANCE RATE MAP NO. 26161C0402E WITH AN EFFECTIVE DATE OF APRIL 3, 2012, FOR COMMUNITY NUMBER 260213 AND 260623, IN WASHTENAW COUNTY, STATE OF MICHIGAN, WHICH IS THE CURRENT FLOOD INSURANCE RATE MAP FOR THE COMMUNITY IN WHICH SAID PROPERTY IS SITUATED.
- 5) THERE IS NO EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS.
- 6) THERE IS NO OBSERVED EVIDENCE OF THIS BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.
- 7) THERE IS NO OBSERVED EVIDENCE INDICATING ANY CEMETERIES ARE LOCATED ON THE PARCEL HEREIN DESCRIBED.
- 8) SITE ADDRESS: 2385 E. ELLSWORTH, ANN ARBOR MI

SURVEYORS CERTIFICATE

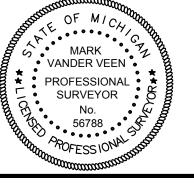
To: 2385 East Ellsworth Road, LLC, a Michigan limited liability company, Absolute Title, Inc.:

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 includes Items 1, 2, 3, 4, 5, 8, 11, 13, and 16 of Table A thereof. The fieldwork was completed on November 11, 2018.

MIDWESTERN CONSULTING, LLC



Date: September 11, 2019



CLIENT
STEVE SOKA
28500 FRANKLIN ROAE
SOUTHFIELD, MI, 4830.

ORTH OALTA

ELLS WO
SITE PLAN
CONDITIONS AND A

2385 E

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BATE: 9/26/19

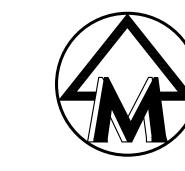
SHEET 2 OF 14

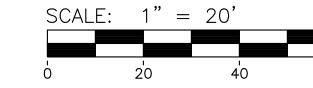
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VISIONS:

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

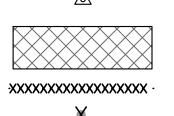






LEGEND

838	EXIST. CONTOUR
×836.2	EXIST. SPOT ELEVATION
-o− U.P.	EXIST. UTILITY POLE
€	GUY WIRE
OH	EXIST. OVERHEAD UTILITY LIN
e	EXIST. ELECTRIC LINE
g	EXIST. GAS LINE
f.o.	EXIST. FIBER OPTIC LINE
w	EXIST. WATER MAIN
ф — —	EXIST. HYDRANT
—— <u> </u>	EXIST. GATE VALVE IN BOX
r	EXIST. STORM SEWER
	EXIST. CATCH BASIN OR INLE
s 0	EXIST. SANITARY SEWER
þ	SIGN
⊠PED	PEDESTRIAN CROSSING SIGNA
MAIL	MAILBOX
⊠ ^t	TELEPHONE RISER
e	ELECTRIC METER
⊠ ^g	GAS METER
•	POST
-////	FENCE
•	SINGLE TREE
-	SECTION CORNER
O F	FOUND IRON PIPE



REMOVALS

CONTROL PT.

FOUND IRON ROD

TREE LEGEND

CO COTTONWOOD

E ELM

L LOCUST

MAPLE

NOTE:

1. ALL DISTURBED AREAS (IN ADDITION TO THOSE SHOWN) ARE TO BE RESTORED AND STABILIZED IN KIND.

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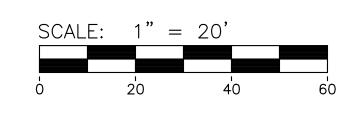
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DAIL: 3/20/13	SHEET 3 OF 14	440	CADD:	ENG: HTH	1 :Wd	TECH:	18300RM.dwg	
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LEGEND

NUMBER OF STANDARD PARKING

NUMBER OF SMALL CAR PARKING SPACES IN ROW

NUMBER OF BARRIER FREE PARKING SPACES IN ROW

BARRIER FREE PARKING SIGN

PROP. BITUMINOUS PAVEMENT

PROP. CONCRETE PAVEMENT

- ALL GOVERNMENTAL, STATE AND MUNICIPAL CODES AND ORDINANCES.
- 2. ACCESSIBLE PARKING SPACES AND REQUIRED BARRIER FREE SIGNAGE SHALL BE PROVIDED IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE.
- UNLESS OTHERWISE NOTED. DRIVE AISLE DIMENSIONS ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED. ISLAND DIMENSIONS ARE TO BACK OF CURB. SIDEWALK DIMENSIONS ARE TO BACK OF CURB OR EDGE OF WALK.

SPACES IN ROW

BARRIER FREE VAN PARKING SIGN

COMPACT CAR ONLY SIGN

PROP. CURB & GUTTER

PROP. HEAVY DUTY CONCRETE

1. ALL WORK TO BE PERFORMED SHALL COMPLY WITH

3. CURB RADIAL DIMENSIONS ARE TO BACK OF CURB,

CLIENT
STEVE SOKA
28500 FRANKLIN
SOUTHFIELD, MI, 4

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SHEET 4 OF 14	CADD:	ENG: HTH	PM: HTH	TECH:	18300SP.dwg	FB#
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PROGRAM PROPOSAL

THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPLACEMENT, IF NECESSARY, OF ANY AND ALL OF THE PERMANENT SOIL EROSION CONTROL FEATURES ASSOCIATED WITH SEDIMENT AND SOIL EROSION CONTROL WITHIN THE DEVELOPMENT. THE FINANCIAL IMPLICATION OF SAID MAINTENANCE WILL BE THE RESPONSIBILITY OF THE OWNER.

Maintenance Plan Budget

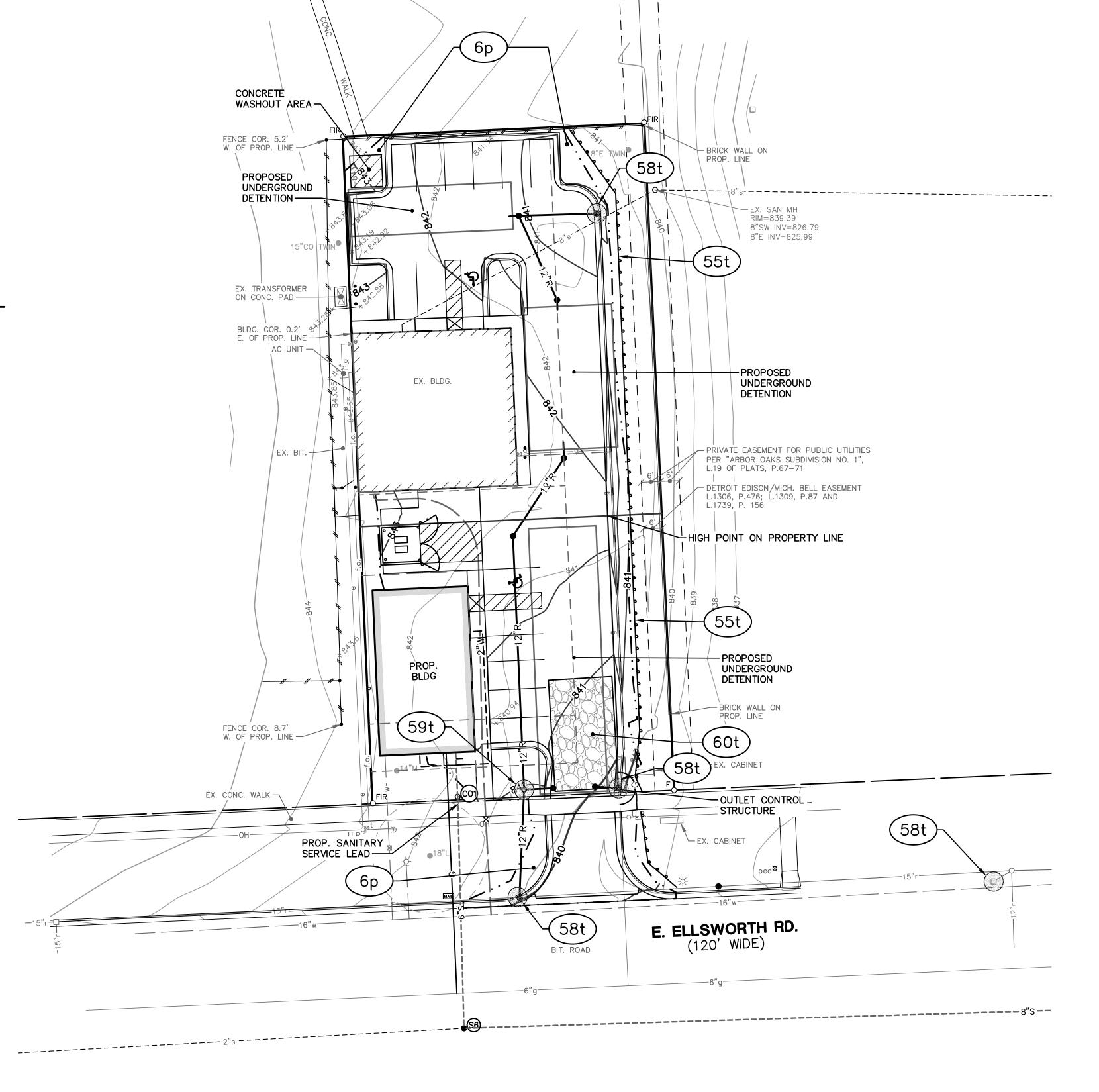
Responsible Party - Property Owner	
Annual inspection for sediment accumulation	\$100.00
Removal of sediment accumulation every year as needed	\$750.00
Inspect for floatables and debris annually and after major storms	\$100.00
Removal of floatables and debris annually and after major storms	\$150.00
Inspect system for erosion annually and after major storms	\$100.00
Re-establish permanent vegetation on eroded slopes as needed	\$350.00
Replacement of stone	\$100.00
Mowing 0-2 times per year	\$400.00
Inspect structural elements during wet weather and compare to as-	
built plans every 2 years	\$150.00
Make structural adjustments or replacements as determined by	
inspection as needed	\$400.00
Have a professional engineer carry out emergency inspections	
upon identification of severe problems	\$200.00
Total Annual Budget	\$2,800.00

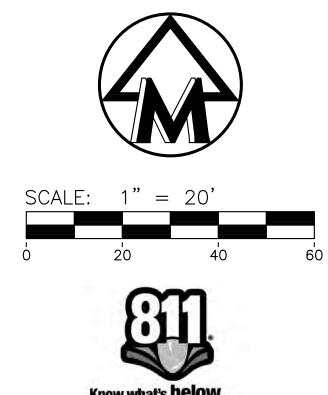
PERMANENT MAINTENANCE TASKS AND SCHEDULE

			Compone	nts				
		Storm		Catch Basin			Outflow	
		Sew er	Catch Basin	Inlet	Underground	Parking	Control	
	Streets	System	Sumps	Castings	Detention	Areas	Structure	Schedule
Inspect for sediment accumulation	Х	Х	Х		Х		Х	annually
Removal of sediment accumulation		×	×		x		×	every year, as needed
Inspect for floatables and debris		Х	Х	Χ	Х			annually
Cleaning of floatables and debris		Х	Х	Χ	Х			annually, as needed
Inspection for erosion						Χ		annually
Re-establish permanent vegetation on eroded slopes						Х		as needed
Clean streets	Х							semi-annually
Mowing						Х		semi-annually, as needed

CONSTRUCTION SEQUENCE	OPERATION TIME SCHEDULE - BEGINNING MARCH 2020																		
CONSTRUCTION SEQUENCE	М	IAR	СН	ΑF	PRIL	Ι	MA	Υ	J	INE	Jl	JLY	AUG		\Box	SEPT		00	
INSTALL AND MAINTAIN SOIL EROSION CONTROL MEASURES AS REQUIRED																			
SITE REMOVALS																			
UNDERGROUND DETENTION CONSTRUCTION																			
SITE GRADING						Ī											П		
CONSTRUCT UTILITIES						ļ													
PARKING LOT PAVING, CURBS, WALKS																			
INSTALL PARKING LOT STRIPING																			
CONSTRUCT NEW BUILDING, CONSTRUCT REFUSE ENCLÓSURE															Ţ		\prod		
PLACE LANDSCAPING, TOPSOIL, AND LAWNS						T								T	T			Ī	П

SCHEDULING NOTED IN THE CHART ABOVE IS BASED ON A MARCH 1ST CONSTRUCTION START DATE. THE TIMELINE WOULD BE SHIFTED ACCORDINGLY IF CONSTRUCTION STARTS AT A DIFFERENT DATE. INCLEMENT WEATHER COULD ALSO AFFECT THE SCHEDULE LISTED.





Call before you dig.

SESC NOTES.

- 1. ALL SILT FENCE SHALL BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT. IF AT ANY TIME THE DEPTH OF SILT AND SEDIMENT COMES TO WITHIN 12" OF THE TOP OF ANY SILT FENCE, ALL SILT AND SEDIMENT SHALL BE REMOVED TO ORIGINAL GRADE.
- 2. ALL TEMPORARY GRAVEL FILTERS SHOULD BE ADJUSTED AS TO LOCATION PER ACTUAL FIELD CONDITIONS. THE REMOVAL OF TRAPPED SEDIMENT AND THE CLEANOUT OR REPLACEMENT OF CLOGGED STONE MAY BE NECESSARY AFTER EACH STORM EVENT DURING THE PROJECT.
- 3. ONLY UPON STABILIZATION OF ALL DISTURBED AREAS MAY THE SILT FENCE, AND TEMPORARY GRAVEL FILTERS BE REMOVED. ALSO, ALL STORM SEWERS MUST BE CLEANED OF ALL SEDIMENT.
- 4. ESTIMATED COST TO STABILIZE SITE SHOULD CONSTRUCTION CEASE: $0.5ac \times $10,500/ac = $5,250$
- 5. ESTIMATED SOIL MOVEMENTS ON SITE:

250 C.Y CUT; 50 C.Y. FILL

- 6. PERMANENT SOIL EROSION CONTROLS ARE REQUIRED TO BE INSTALLED WITHIN FIVE (5) DAYS AFTER FINAL GRADING.
- 7. AFTER SITE GRADING ALL DISTURBED AREAS NOT IMMEDIATELY UNDER CONSTRUCTION ARE TO BE STABILIZED.

LEGEND

838	EXIST. CONTOUR
838	PROP. CONTOUR
×836.2	EXIST. SPOT ELEVATION
<u>36.60</u>	PROP. SPOT ELEVATION
• • • • • • • • • • • • • • • • • • • •	EXIST. UTILITY POLE
-O- U.P.	
-&- U.P.	EXIST. UTILITY POLE W/ TRANS.
	GUY WIRE
	ELEC. TRANSFORMER
——— OH ———	EXIST. OVERHEAD UTILITY LINE
*	EXIST. LIGHT POLE
*	PROP. LIGHT POLE
t	EXIST. TELEPHONE LINE
e	EXIST. ELECTRIC LINE
g	EXIST. GAS LINE
g	EXIST. GAS VALVE
f.o.	EXIST. FIBER OPTIC LINE
— w — —	
	PROP. WATER MAIN
	EXIST. HYDRANT
—	PROP. HYDRANT
——————————————————————————————————————	
	EXIST. GATE VALVE IN BOX
	PROP. GATE VALVE IN BOX
	EXIST. GATE VALVE IN WELL
<u> </u>	PROP. GATE VALVE IN WELL
X	EXIST. CURB STOP & BOX
×	PROP. CURB STOP & BOX
ro	EXIST. STORM SEWER
——R——	PROP. STORM SEWER
	EXIST. CATCH BASIN OR INLET
	PROP. CATCH BASIN OR INLET
	EXIST. BEEHIVE INLET
	PROP. BEEHIVE INLET
	END SECTION
	HEAD WALL
	CULVERT
ods	EXIST. DOWNSPOUT
•DS	PROP. DOWNSPOUT
so	EXIST. SANITARY SEWER
S	PROP. SANITARY SEWER
⊙ ⊚	EXIST. CLEANOUT
⊚	PROP. CLEANOUT
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	C/L OF DITCH
þ	SIGN
•	SINGLE TREE
/	TREE OR RRIICH LIMIT

LIMITS OF DISTURBANCE



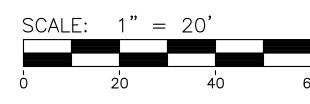
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LEGEND

- ○ - U.P.	EXIST. UTILITY POLE
- % − U.P.	EXIST. UTILITY POLE W/ TRAN
~ GP	EXIST. GUY POLE
((GUY WIRE
\mathbb{Z}	ELEC. TRANSFORMER
——————————————————————————————————————	EXIST. OVERHEAD UTILITY LINE
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 T	PROP. TELEPHONE LINE
e	EXIST. ELECTRIC LINE
	PROP. ELECTRIC LINE
	EXIST. GAS LINE
	PROP. GAS LINE
g	EXIST. GAS VALVE
	EXIST. FIBER OPTIC LINE
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	EXIST. WATER MAIN
——W——	PROP. WATER MAIN
ф — —	EXIST. HYDRANT
	PROP. HYDRANT
——————————————————————————————————————	EXIST. GATE VALVE IN BOX
—— <u>—</u> ——	PROP. GATE VALVE IN BOX
——————————————————————————————————————	EXIST. GATE VALVE IN WELL
<u> </u>	PROP. GATE VALVE IN WELL
×	EXIST. CURB STOP & BOX
—— <u>×</u> ——	PROP. CURB STOP & BOX
	REDUCER
↔ —	EXIST. BLOW—OFF PROP. BLOW—OFF
P.I.V.	POST INDICATOR VALVE
	THRUST BLOCK
_KB	PROP. KNOXBOX
r_ _ _	EXIST. STORM SEWER
——R——	PROP. STORM SEWER
	EXIST. CATCH BASIN OR INLET
	PROP. CATCH BASIN OR INLET
	EXIST. BEEHIVE INLET
	PROP. BEEHIVE INLET
	PROP. ROOF DRAIN END SECTION
<u> </u>	HEAD WALL
, 	CULVERT
ods	
-	EXIST. DOWNSPOUT
•DS	PROP. DOWNSPOUT
sO	EXIST. SANITARY SEWER
S- 	PROP. SANITARY SEWER
©	EXIST. CLEANOUT
©	PROP. CLEANOUT
⊠ ^t	TELEPHONE RISER
⊠catv	CABLE TELEVISION RISER
⊠ ^e	ELECTRIC METER
⊠ ^W	WATER METER
_scb	CDDINICI ED CONTROL DOV

UTILITY NOTES

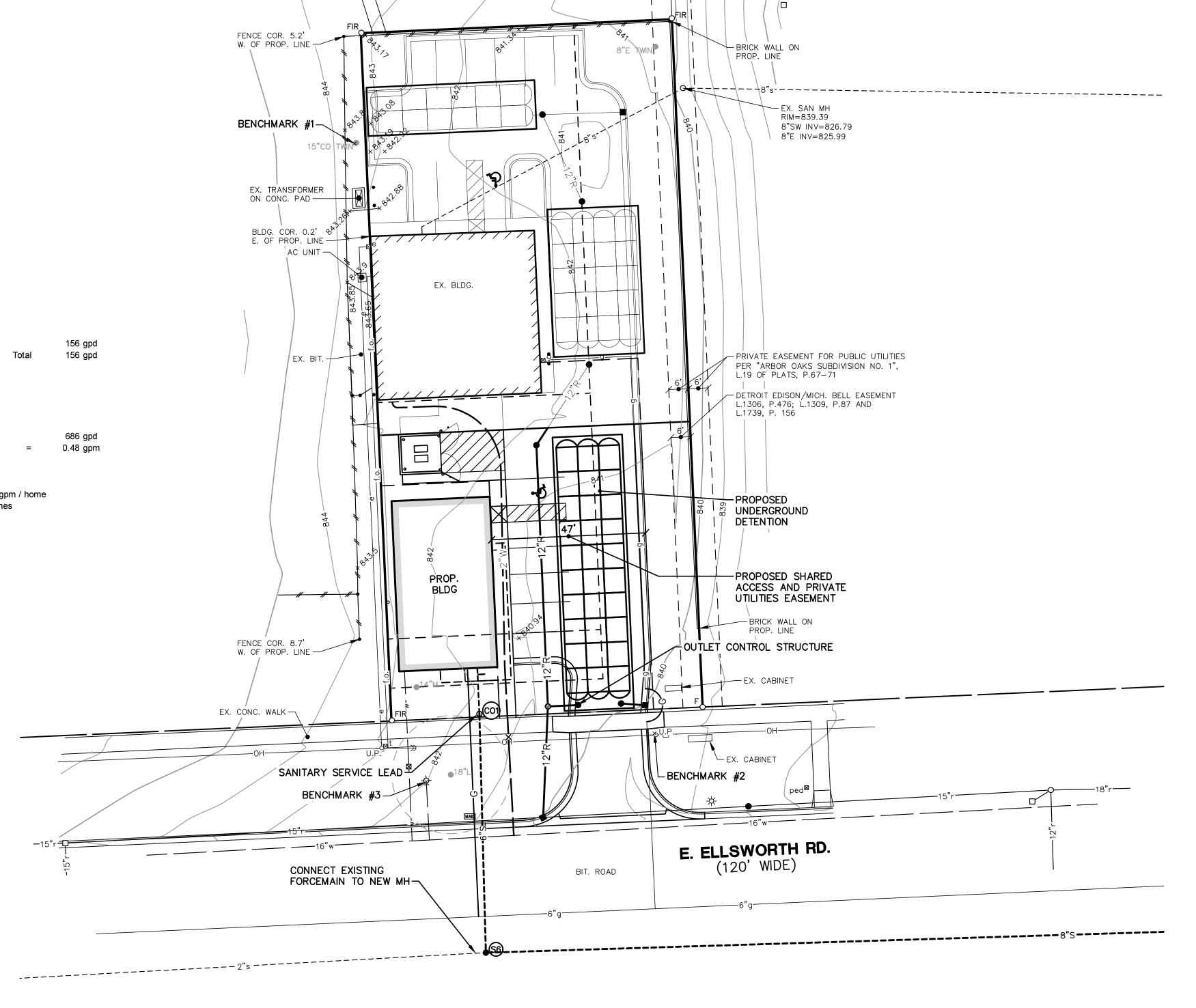
ALL PUBLIC UTILITY INSTALLATION SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF ANN ARBOR STANDARD SPECIFICATIONS, CURRENT EDITION. THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT.

GAS METER

GAS LINE MARKER FIBER OPTIC MARKER

SPRINKLER CONTROL BOX

- 2. CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY LOCATIONS, DEPTHS AND ELEVATIONS PRIOR TO CONSTRUCTION.
- 3. CONTRACTOR SHALL PROTECT EXISTING UTILITES DURING CONSTRUCTION.
- 4. STORM WATER MANAGEMENT IS PROVIDED PER THE CURRENT WASHTENAW COUNTY WATER RESOURCES COMMISSION REQUIREMENTS.
- 5. ANY EXISTING UTILITY LEADS NOT TO BE RE-USED ARE TO BE ABANDONED IN ACCORDANCE WITH THE CURRENT CITY OF ANN ARBOR STANDARDS.
- 6. TWO WAY TRAFFIC SHALL BE MAINTAINED DURING CONSTRUCTION AT ALL TIMES UNLESS APPROPRIATE APPROVALS ARE RECEIVED FROM THE CITY OF ANN ARBOR.



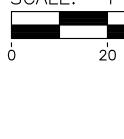


ELLSWORTH ROAD UTILITY PLAN

1" = 60'

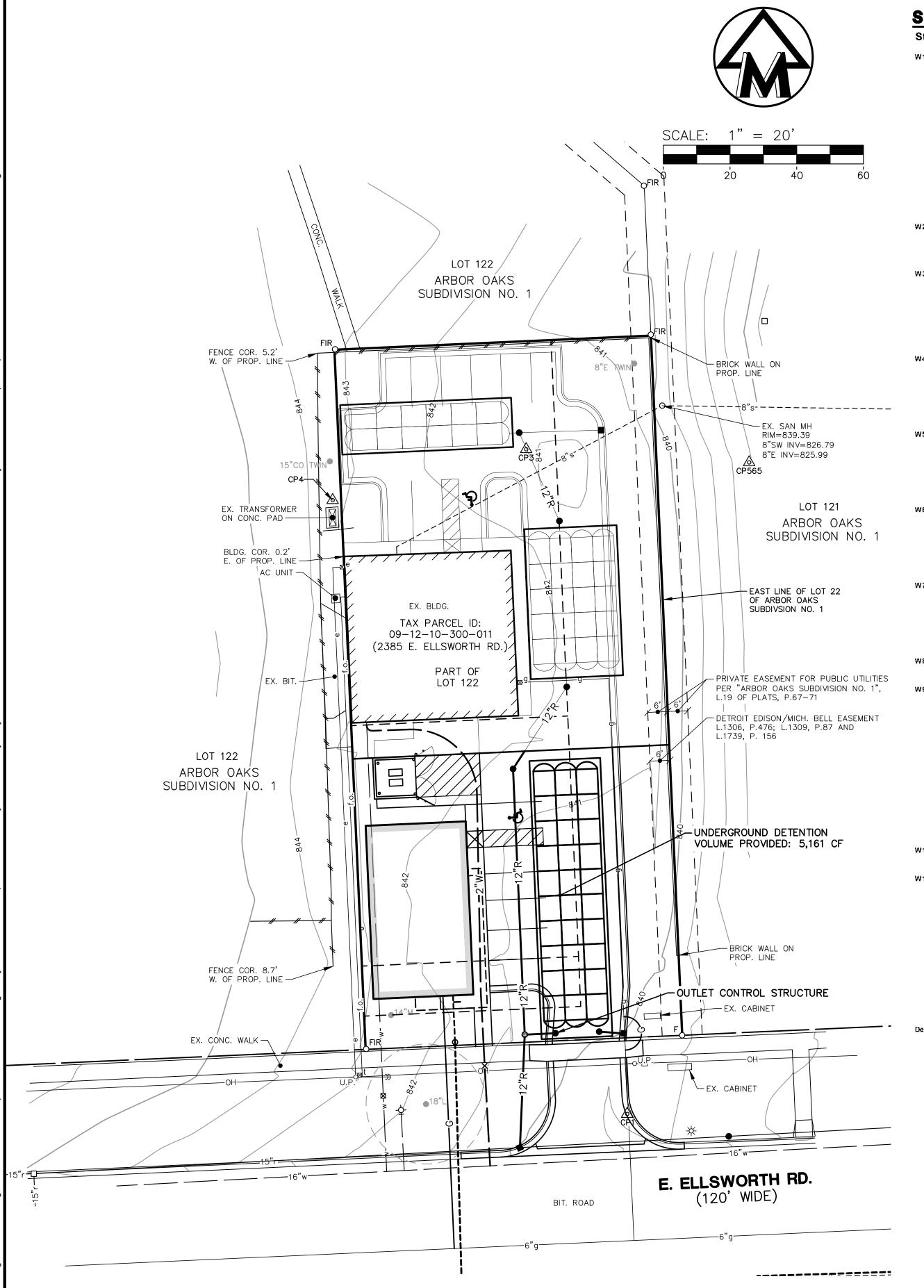


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STORMWATER VOLUME CALCULATIONS

Stormwater Calculations REV 11/26/2018 - Determining Post-Development Cover Types, Areas, Curve Numbers, and Runoff Coefficients

Rational Method Variables Area (sft) Area (ac) Runoff Coeff. (C) (C) x (Area) Building/Pavement Weighted C = (Sum(C)x(Area))/(Area Total)= NRCS Variables (Pervious) 0.06 Weighted CN = (Sum(CN)x(Area))/(Area Total)= NCRS Variables (Impervious) Building/Pavement

Weighted CN = (Sum(CN)x(Area))/(Area Total)=

	W2	-	W2 - First Flush Runoff Calculations (Vff)						
			Vff = 1" x 1/12" x 43560 sft/ac x A x C	,	where A=	0.25	and	d where C=	0.
			$V_{ff} = 1" \times 1/12" \times 43560 \text{ sft/ac } x$	0.25	Х	0.84	=	750	cf
	W3		W3 - Pre-Development Bankfull Runoff Calcu	lations (V	bf-pre)				
			2 year / 24 hour storm event:				P=	2.35	in
		8.	Pre-Development CN						
			(Good Cover Woods, Type D Soils)				CN=	79	
			S = (1000 / CN) - 10				S=	2.658	
			$Q = [(P-0.2S)^2] / [P+0.8S]$				Q=	0.739	
			Total Site Area excluding "Self-Crediting" BMPs					10,721	
		F.	Vbf-pre = $Q \times (1/12) \times Area$				Vbf-pre =	660	cf
	W4	-	Pervious Cover Post-Development Bankfull R	unoff Cal	culations (Va	f-per-post)			
		Α.	2 year / 24 hour storm event:				P=	2.35	in
		В.	Pervious Cover CN From Worksheet 1				CN=	84	
		C.	S = (1000 / CN) - 10				S=	1.905	in
		D.	$Q = [(P-0.2S)^2] / [P+0.8S]$				Q=	1.001	in
_		E.	Pervious Cover Area from Worksheet 1					2,438	sf
		F.	Vbf -per-post = $Q \times (1/12) \times Area$			Vbf-	per-post =	203	cf
	W5	_	W5 - Impervious Cover Post-Development Ba	nkfull Rur	noff Calculat	ons (Vbf-im	p-post)		
			2 year / 24 hour storm event:			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	P=	2.35	in
			Impervious Cover CN From Worksheet 1				CN=	98	
			S = (1000 / CN) - 10				S=	0.204	
			$Q = [(P-0.2S)^2] / [P+0.8S]$				Q=	2.122	
			Impervious Cover Area from Worksheet 1				~	8,283	
			Vbf -imp-post = $Q \times (1/12) \times Area$			Vbf-i	mp-post =	1,464	
			INC. Designa Cours Dest Development 400 V	raad Doora	# Calaulatia	(1/100	.1		
	W6		W6 - Pervious Cover Post-Development 100-Y 100 year / 24 hour storm event:	ear Runo	ii Calculatio	15 (V 100-per	-post) P=	5.11	in
			Pervious Cover CN From Worksheet 1				CN=	84	
							\$=		
			S = (1000 / CN) - 10					1.905	
			Q = [(P-0.2S)^2] / [P+0.8S]				Q=	3.371	
			Pervious Cover Area from Worksheet 1 V100-per-post = Q x (1/12) x Area			V100-	per-post =	2,438 685	
			,			,			
	W7		W7 - Impervious Cover Post-Development 100	0-Year Rui	noff Calculat	ions (V100-ii		- 44	
			2 year / 24 hour storm event:				P=	5.11	
			Impervious Cover CN From Worksheet 1				CN=	98	
			S = (1000 / CN) - 10				S=	0.204	
			$Q = [(P-0.2S)^2] / [P+0.8S]$				Q=	4.873	
			Impervious Cover Area from Worksheet 1			14.4		8,283	
		۲.	Vbf-imp-post = Q x (1/12) x Area			V bf-i	mp-post =	3,364	ÇI
	W8		Time of Concentration (Tc-hrs)						
		Α.	Assume 15-minute minimum time of concentration	n	Tc=	0.25	hr		
	W9	-	Runoff Summary & On-Site Infiltration Requir	rement					
		Α.	Summary from Previous Worksheets						
			First Flush Volume (Vff)					750	cf
			Pre-Development Bankfull Runoff Volume (V	bf-pre}				660	¢f
			Pervious Cover Post-Development Bankfull Volur	ne (Vbf-pe	er-post)			203	cf
			Impervious Cover Post-Development Bankfull Vo.	lume (Vbf-	-imp-post)			1,464	cf
			Total BF Volume (Vbf-post)					1,668	Cf
			Pervious Cover Post-Development 100-Year Volu	me (V100-	-per-post)			685	cf
			Impervious Cover Post-Development 100-Year Vo	olume (V10	00-imp-post)			3,364	cf
			Total 100-Year Volume (V100)					4,049	cf
		В.	Determine Onsite Infiltration Requirement						
			Subtract the Pre-Development Bankfull from the F	Post-Develo	opment Bankf	uli Volume			
			Total Post-Development Bankfull Volume (Vbf-pos	st)				1,668	¢f
			Pre-Development Bankfull Runoff Volume (Vbf-pre	e)				660	¢f
			Bankfull Volume Difference					1,008	ci
			Infiltration Requirement (Vinf)					1,008	cf

- Natural Features Inventory There are no natural features located on this site due to it being an existing built out urban site. W13 - Site Summary of Infiltration & Detention A. Stormwater Management Summary Min Infiltration Requirement (Vinf) 1,008 cft Designed/Provided Infiltration Volume 0 cft % Minimum Required Infiltration Provided 0 % 3,985 cft Total Calculated Detention Volume, Vdet Net Required Detention Volume 3,985 cft

(Vdet - Designed/Provided Infiltration Volume) B. Detention Volume Increase for sites where the required infiltration volume cannot be achieved. % Required Infiltration NOT Provided (100% - % Minimum Required Infiltration Provided) Net % Penalty (20% x % Required Infiltration NOT Provided) 20.0 % Total Required Detention Volume, including penalty 4,782 cft [(100% + Net % Penalty) x Net Required Detention Volume)]

Detention Outlet Calculcations A. Required Detention Volumes (Reduced by 6-hour infiltration)

torm Event	Req'd Volum	ne le	ess	Infil. Credit	=	Final Vo	lume
irst Flush	750 c	ft -		0 cft	=	750	cft
ankfull	1,668 c	ft -		0 cft	=	1,668	cft
00 -year	3,985 c	ft -		0 c f t	=	3,985	cft
00-year + Reg'd Penalty	4,782 c	ft -		0 cft	=	4,782	cft
orebay Volume Required (5% of 100-yr)					=	199	cft

STORMWATER VOLUME PROVIDED

System Requirements System Sizing Number of Chambers Required 30 each Imperial 5000 CF Number of End Caps Required Required Storage Volume each Stone Porosity (Industry Standard = 40%) Bed Size (including perimeter stone) 1,755 square feet Stone Above Chambers (12 inch min.) Stone Required (including perimeter stone) 322 tons Stone Foundation Depth (9 inch min.) Volume of Excavation 423 cubic yards Average Cover over Chambers (24 inch min.) 24 inches Non-woven Filter Fabric Required (20% Safety Factor) 603 square yards LENGTH Bed size controlled by WIDTH or LENGTH? 62.1 feet Length of Isolator Row 63 feet Limiting WIDTH or LENGTH dimension Non-woven Isolator Row Fabric (20% Safety Factor) 108 square yards 137 square yards Woven Isolator Row Fabric (20% Safety Factor) 161.6 CF Storage Volume per Chamber 39.1 CF Installed Storage Volume 5,161 cubic feet Storage Volume per End Cap

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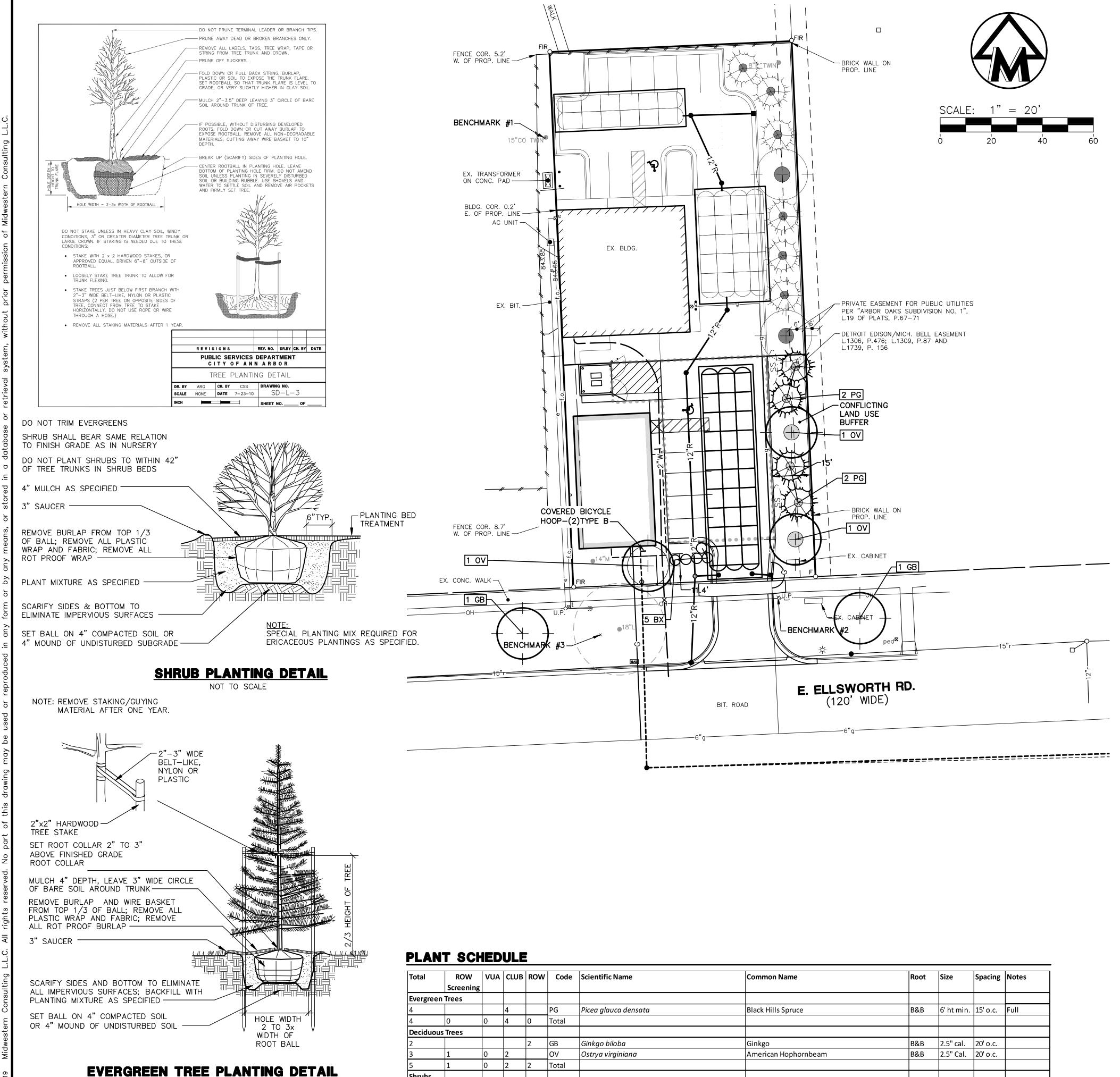
ROAD 48304 SOKA FRANKLIN FIELD, MI,

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



0 0 BX Buxus x 'Green Mountain'

LANDSCAPE LEGEND

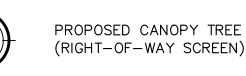
PROPOSED CANOPY TREE (STREET TREE)

PROPOSED CANOPY TREE

(CONFLICTING LAND USE BUFFER)

(CONFLICTING LAND USE BUFFER)

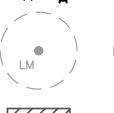
PROPOSED EVERGREEN TREE



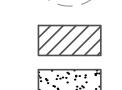


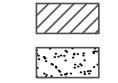
PROPOSED EVERGREEN SHRUBS

PROPOSED DECIDUOUS SHRUBS



EXISTING TREE TO REMAIN





PROPOSED GROUND COVER



PROPOSED LAWN AREA



PROPOSED EDGING • • • • • • • • • VEHICULAR USE AREA LIMITS

SNOW STORAGE AREA

LANDSCAPE NOTES

- 1. For any plant quantity discrepancies between the plan view and the plant schedules, the plant
- schedule shall take precedence.
- 2. Plant materials shall be selected and installed in accordance with standards established by City of
- 3. In-ground automatic irrigation shall be provided for all landscaped areas except for the detention basin and naturalized wetland buffer or water outlets shall be provided within 150 feet of all
- 4. All diseased, damaged or dead material shown on the site plan as proposed plantings shall be replaced by the end of the following growing season.
- Restore disturbed areas with a minimum of six (6) inches of topsoil and then seed/fertilize/mulch. 6. All disturbed areas shall be seeded with lawn seed mix. Fertilizer for the initial installation of lawns shall provide not less than one (1) pound of actual nitrogen per 1,000 sq ft of lawn area and shall contain not less than two percent (2%) potassium and four percent (4%) phosphoric acid. Lawn (turfgrass) seed mix shall consist of:
 - 15% Rugby Kentucky Bluegrass
 - 10% Park Kentucky Bluegrass
 - 40% Ruby Creeping Red Fescue 15% Pennifine Perennial Ryegrass
 - 20% Scaldis Hard Fescue
- Seed shall be applied at a rate of five pounds (5 lbs) per 1000 sq ft. Mulch within 24 hours with two (2) tons of straw per acre, or 71 bales of excelsior mulch per acre. Anchor straw mulch with spray coating of adhesive material applied at the rate of 150 gals. / acre.
- 7. After the first growing season, only fertilizers that contain NO phosphorus shall be used on the
- 8. All seeded areas with slopes less than 1:3 (one vertical foot for every 3 horizontal feet) shall be mulched with straw mulch at the rate of two (2) bales per 1,000 square feet. All seeded areas with slopes greater than 1:3 shall be seeded and biodegradable erosion control blanket North American Green SC150, or equivalent, shall be applied with biodegradable stakes.
- 9. Deciduous plants shall be planted between March 1 and May 15 and from October 1 until the prepared soil becomes frozen. Evergreen plants shall be planted between March 1 and June 1 and from August 15 to September 15.
- 10. All planting beds are to receive four (4) inches of shredded bark mulch.
- 11. All trees to be located a minimum of 10 feet from public utilities.
- 12. All single trunk, deciduous trees shall have a straight and a symmetrical crown with a central leader. One sided trees or those with thin or open crowns shall not be accepted.
- 13. All evergreen trees shall be branched fully to the ground, symmetrical in shape and have not been
- sheared in the last three (3) growing seasons. 14. All compacted subgrade soils in proposed landscape areas shall be tilled to a minimum 12-inch
- depth prior to placement of topsoil, geotextile fabric, or other planting media as specified.
- 15. Proposed trees will be planted a minimum of 15 feet apart.
- 16. Planting Soil: Existing, in-place or stockpiled topsoil. Supplement with imported topsoil as needed. Verify suitability of existing surface soil to produce viable planting soil. Remove stones, roots, plants, sod, clods, clay lumps, pockets of coarse sand, concrete slurry, concrete layers or chunks, cement, plaster, building debris, and other extraneous materials harmful to plant growth. Mix surface soil with the following soil amendments to produce planting soil:
 - a. Ratio of Loose Compost to Topsoil by Volume: 1:4.
 - b. Weight of Lime per 1000 Sq. Ft.: Amend with lime only on recommendation of soil
 - c. Weight of Sulfur or Aluminum Sulfate per 1,000 Sq. Ft.: Amend with sulfur or
 - aluminum sulfate only on recommendation of soil test to adjust soil pH.
 - d. Volume of Sand: Amend with sand only on recommendation of Landscape Architect
- 17. Weight of Slow-Release Fertilizer per 1,000 Sq. Ft.: Amend with fertilizer only on recommendation of soil test to adjust soil fertility.

LANDSCAPE REQUIREMENTS

	Allowed/ Required	Proposed Dispensary - South Lot
ROW		
Street Trees	1 tree per 45 lienar feet frontage	95 / 45 = 3 trees required
		1 existing tree to remain, 2 trees provided
		with ROW adjacent to site due to utility and
		existing cabinet conflicts
Street Tree Escrow	\$1.30 per linear foot road frontage	95lf - 45lf (1 existing tree) = 50lf x \$1.30 =
		\$65.00
Vehicle Use Area		
Front Greenbelt	10ft, 1 tree per 30lf, 30" ht screening	42If frongage = 2 trees required
	hedge/berm/wall	11.4 ft min. provided, 1 trees provided , 1
		existing tree to remain, 5 shrubs provided
Interior islands	>3,300sf and <50,000sf VUA = 1:20 ratio	3,260sf VUA - Not applicable
	50% bioretention required of >750sf	
Interior island trees	1 tree per 250sf of required island	Not Applicable
Street trees (internal)		
	1 tree per 30lf	Not Applicable
Outdoor refuse		
	screening wall, trash and recycling	1 trash enclosure provided (shared with
	dumpsters each	northern parcel)
Conflicting Land Use buffer		
	15 ft landscape buffer, 1 tree per 15 ft	87 If / 15 = 6 trees required,
	with 50% evergreen, 4ft screening	6 trees provided (66% evergreen),
		existing wall to remain
Tree Mitigation		
	50% removed DBH - LM/woodland	Not applicable

STREET TREE ESCROW

#5 Cont | 18-24" ht. | 4' o.c.

Green Mountain Boxwood

STREET TREE ESCROW OF \$65.00 WILL BE PROVIDED PRIOR TO ISSUING BUILDING PERMITS AND WILL BE REFUNDED AFTER CITY STAFF INSPECTION SHOWS LONG TERM SURVIVAL OF THE PROPOSED STREET TREES.

Know what's below. Call before you dig.

Λ M,

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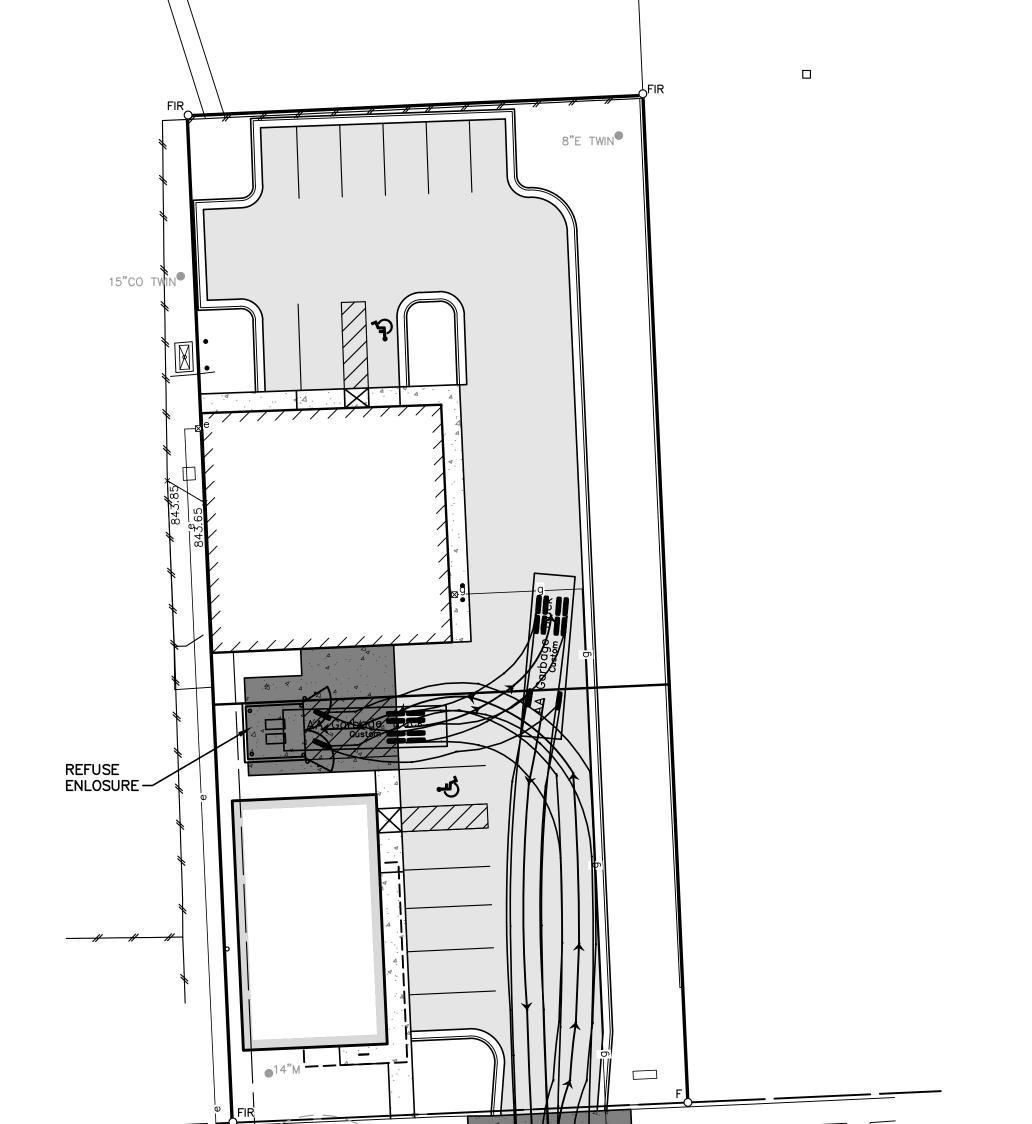
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EVERGREEN TREE PLANTING DETAIL The underground utilities shown have been located from field survey information and existing records. The surveyor makes no quarantees that the underground utilities shown comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground

located as accurately as possible from the information available.

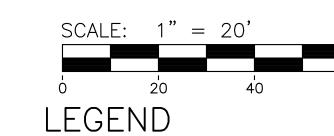
utilities shown are in the exact location indicated. Although the surveyor does certify that they are









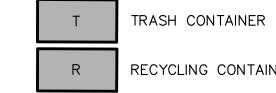


EXIST. UTILITY POLE GUY WIRE ->--> 50' >--> FIRE HOSE LAY LENGTHS

ELEC. TRANSFORMER EXIST. OVERHEAD UTILITY LINE EXIST. LIGHT POLE PROP. LIGHT POLE PROP. BUILDING LIGHT CONCRETE SURFACE

EXIST. BOLLARD PROP. BOLLARD

_ _ _ _ FIRE HYDRANT 250' COVERAGE RADIUS



RECYCLING CONTAINER

FIRE PROTECTION NOTES.

1. BUILDINGS SHALL NOT BE SPRINKLERED

2. CONSTRUCTION SEQUENCE:

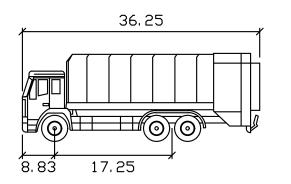
A. HYDRANTS SHALL BE IN SERVICE PRIOR TO VERTICAL BUILDING CONSTRUCTION.

HYDRANTS PROVIDING COVERAGE FOR BUILDINGS SHALL BE IN SERVICE BEFORE COMBUSTIBLE MATERIALS ARE PLACED.

C. STORAGE AREAS FOR CONSTRUCTION MATERIAL MUST BE SO AS NOT TO INTERFERE WITH EMERGENCY SITE ACCESS

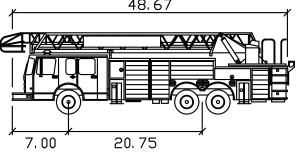
3. NO FIRE WALLS WILL BE CONSTRUCTED WITHIN BUILDINGS

STUDY TRUCKS



REFUSE VEH.

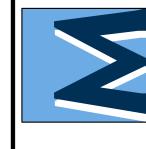
Track '8.00 Lock to Lock Time 6.0 Steering Angle 31.8



FIRE TRUCK feet

Width : 10.00
Track : 8.00
Lock to Lock Time: 6.0
Steering Angle : 29.1

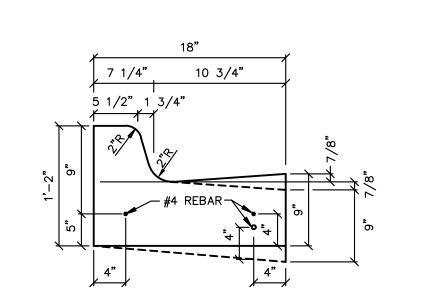
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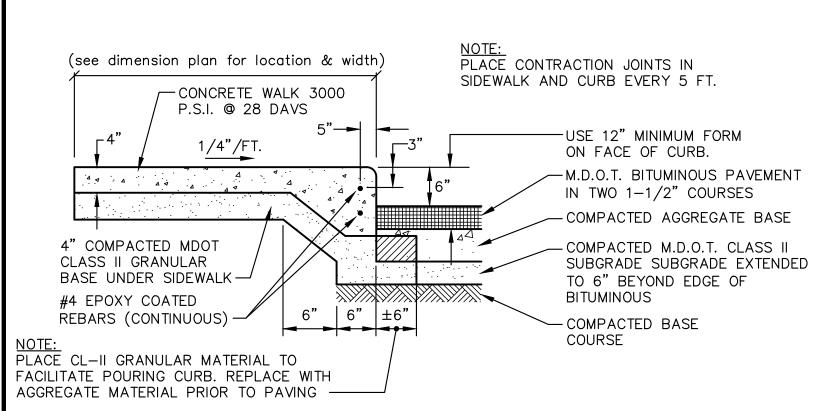
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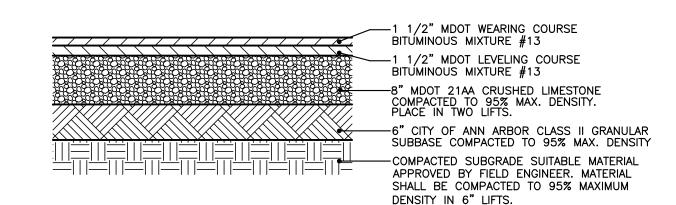


MDOT F-2 CURB AND GUTTER MDOT F-2 CURB W/SPILLOUT GUTTER

NOT TO SCALE

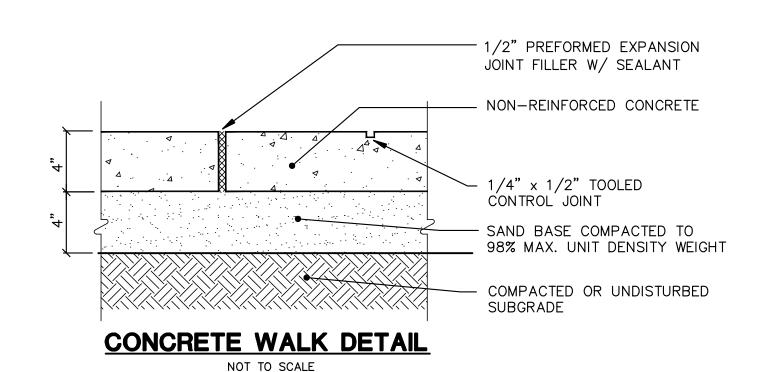


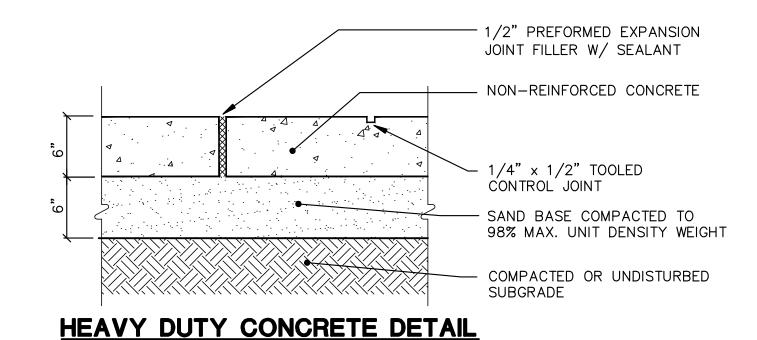
TYPICAL INTEGRAL WALK AND CURB



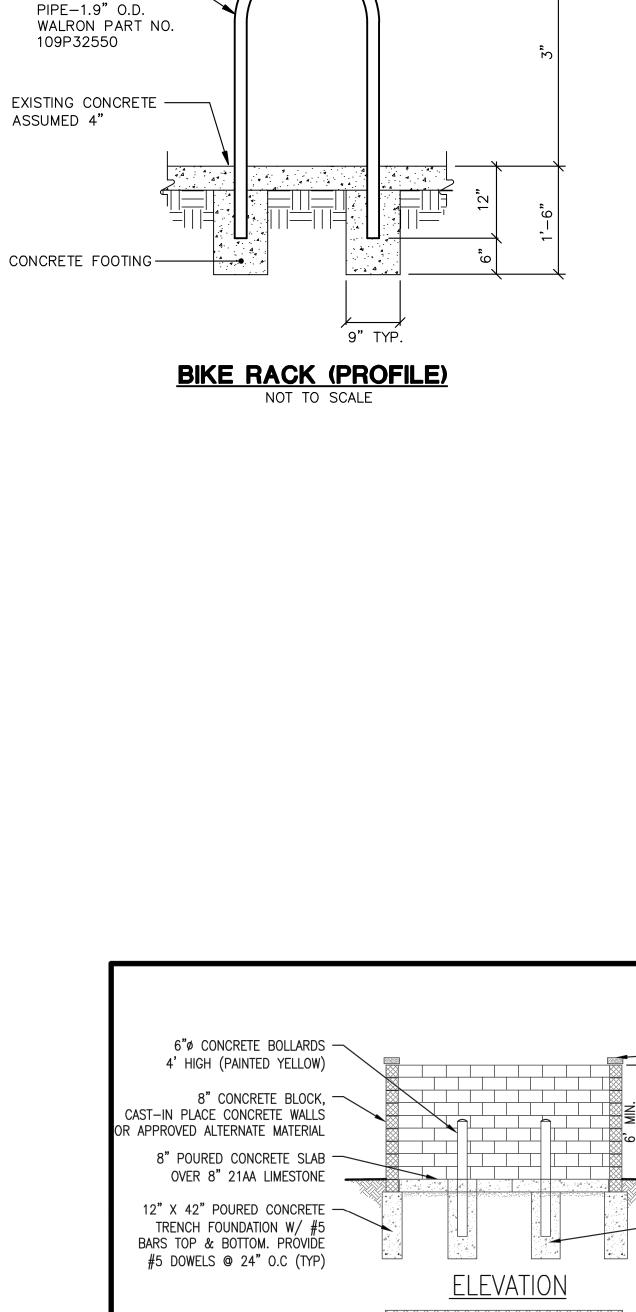
BITUMINUOUS PAVEMENT DETAIL

NO SCALE

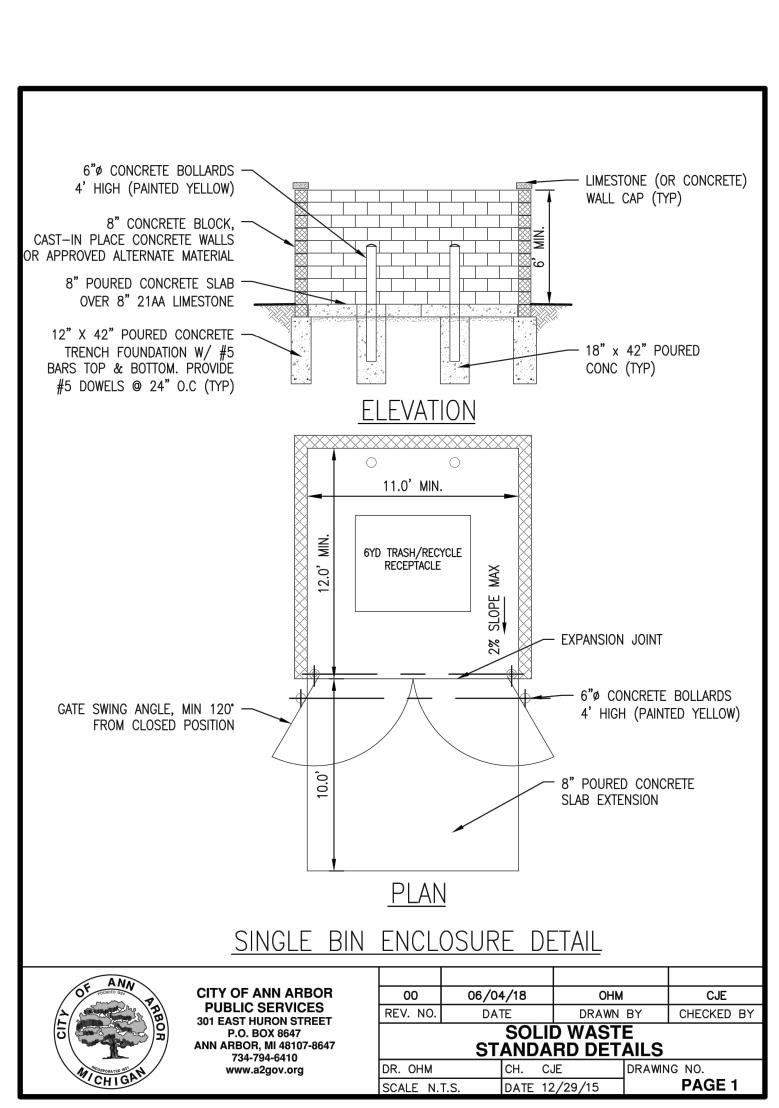


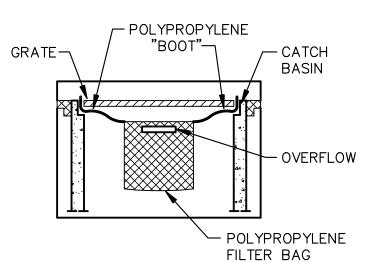


NOT TO SCALE

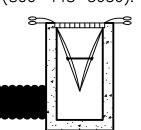


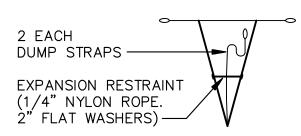
PVC COATED NON— GALVANIZED STEEL

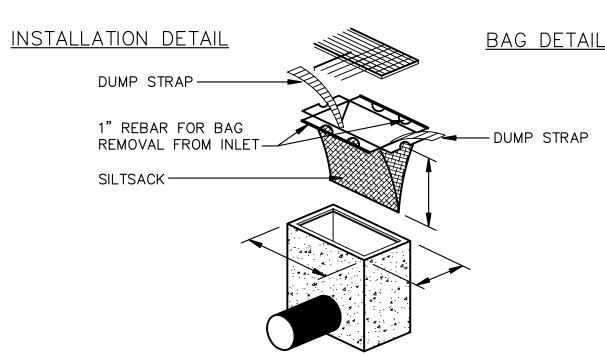




NOTE:
TEMPORARY INLET SEDIMENT FILTER TO BE INSTALLED ON ALL PAVED CATCH
BASINS OR STORM INLETS. INLET FILTER TO BE SIMILAR TO "STREAMGUARD" AS
MANUFACTURED BY STORMWATER SERVICES CORPORATION (206–767–0441) OR
"SILTSACK" AS MANUFACTURED BY ATLANTIC CONSTRUCTION FABRICS, INC.;
(800–448–3636). CLEAN FILTER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

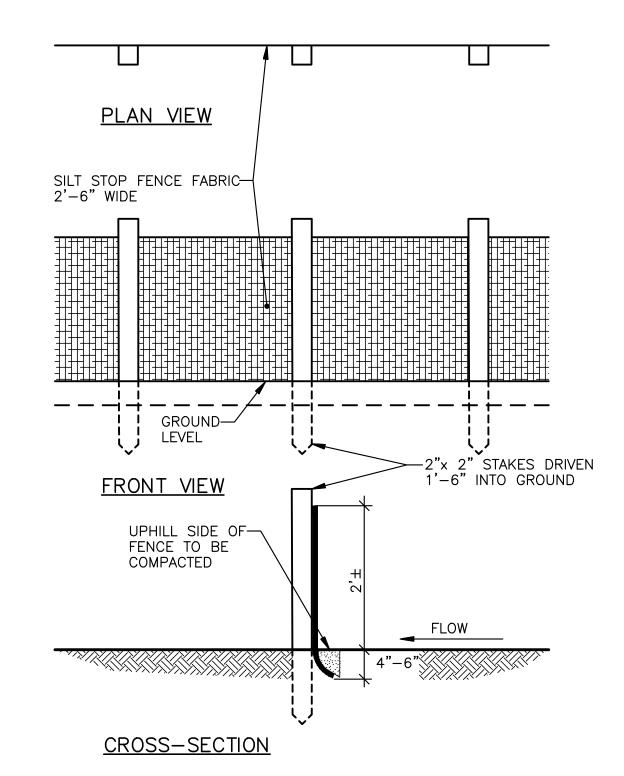






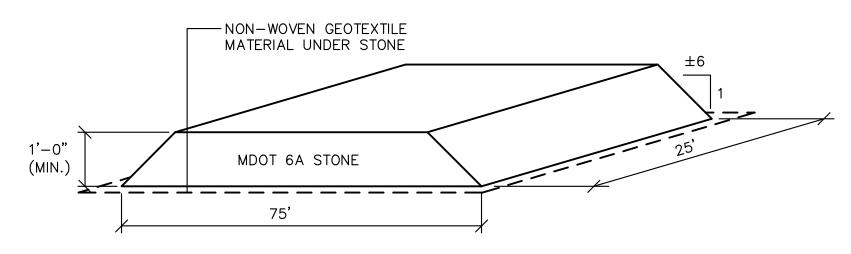
SILT SACK DETAIL

NO SCALE



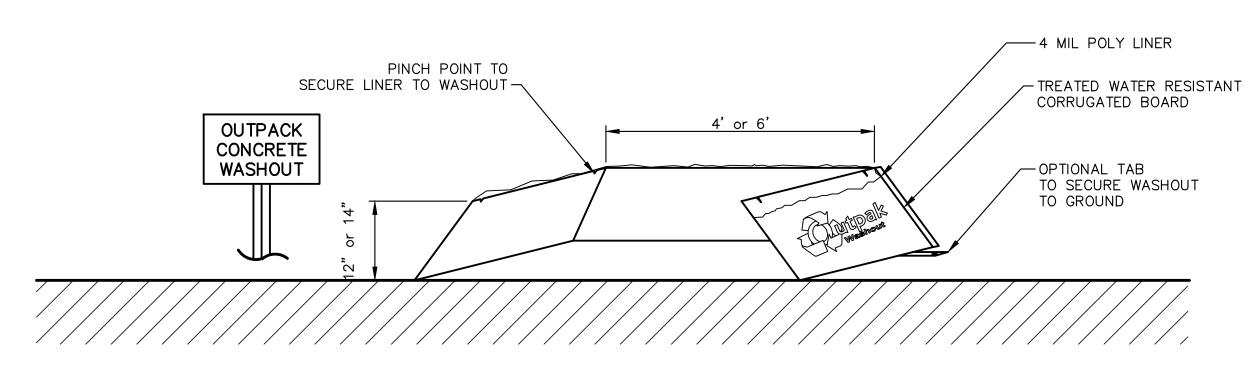
SILT FENCE DETAIL

NO SCALE



GRAVEL MUD TRACKING MAT

NOT TO SCALE



NOTES:

- 1. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON THIS PROJECT.
- 2. SIGNS SHALL BE PLACED AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT.
- 3. THE CONCRETE WASHOUT AREA WILL BE REPLACED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTE CONCRETE AND OTHER LIQUID WASTE.
- 4. WASHOUT RESIDUE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
- 5. DO NOT MIX EXCESS AMOUNTS OF FRESH CONCRETE OR CEMENT ON-SITE.
- 6. DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.
- 7. AVOID DUMPING EXCESS CONCRETE IN NON-DESIGNATED DUMPING AREAS.
- 8. LOCATE WASHOUT AREA AT LEAST 50' (15 METERS) FROM STORM DRAINS, OPEN DITCHES, OR WATERBODIES.
- 9. WASH OUT WASTES INTO THE OUTPACK WASHOUT AS SHOWN WHERE THE CONCRETE CAN SET, BE BROKEN UP, AND THEN DISPOSED OF PROPERLY.

OUTPACK CONCRETE WASHOUT DETAIL

NOT TO SCALE

M I D W E S T E R N

C O N S U L T I N G

3815 Plaza Drive Ann Arbor, Michigan 48108
(734) 995-0200 • www.midwesternconsulting.cor



EVE SOKA S500 FRANKLIN ROAD JUTHFIELD, MI, 48304

CLIE STEVE 2850C SOUTH SOUTH

ELLS WO SITE PLAN TE DETAILS

SITE P

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DATE: 9/26/19

SHEET 10 OF 14

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ENG: HTH

PM: HTH

TECH:
183000T

18300

VISIONS:







D A M I A N F A R R E L L D E S I G N GROUP

359 METTY DRIVE, SUITE 4A ANN ARBOR, MI 48103 tel: 734.998.1331

DATE

DESCRIPTION SITE PLAN APPROVAL

DESIGN Designer
DRAWN Author
PROJECT NO. 180208_05_07

PERSPECTIVE & STREETWALL

A0.00

PROPOSED METAL COPING TYP. —

WAITING ROOM

124

VESTIBULE

125

STORAGE

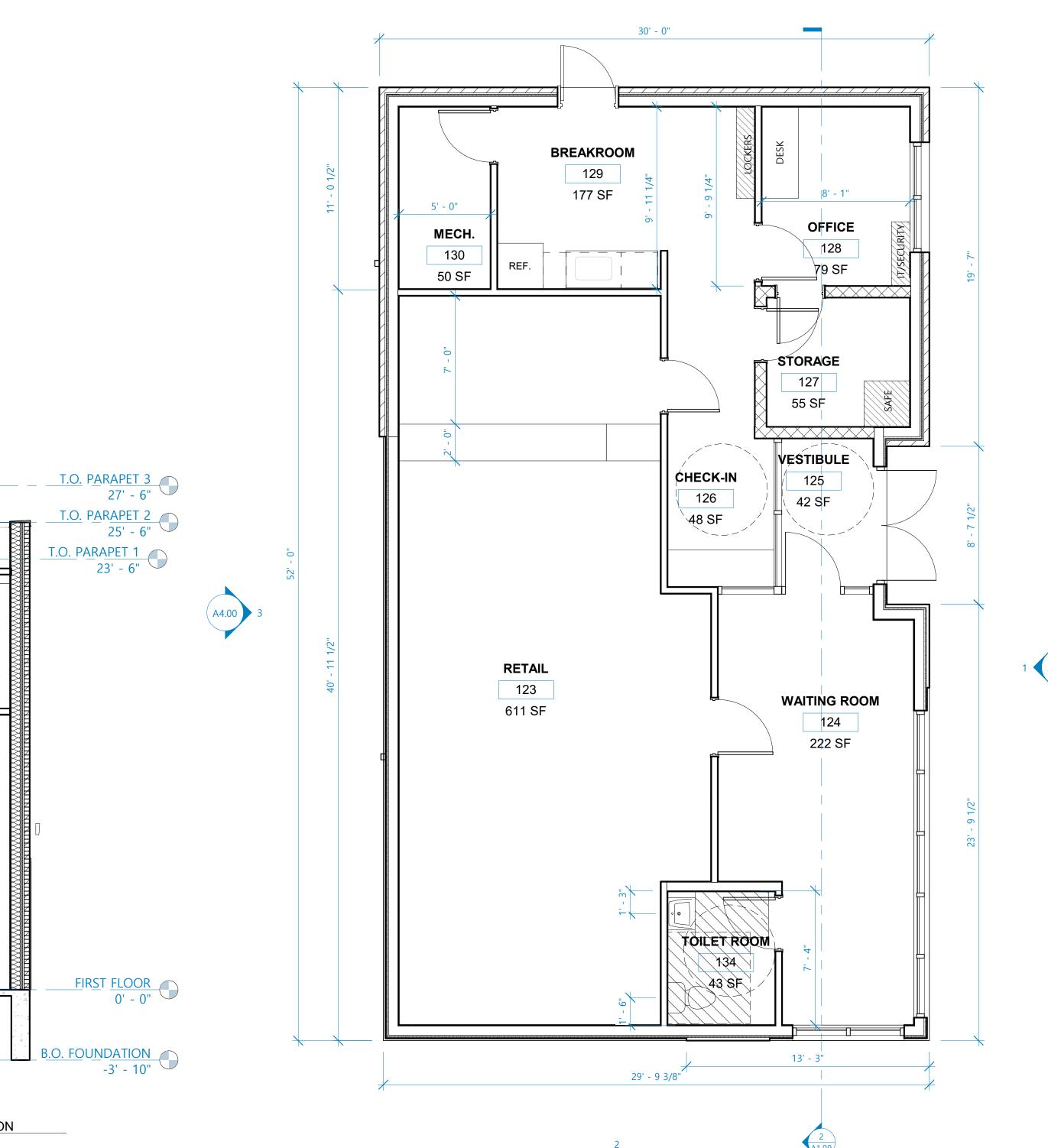
127

OFFICE

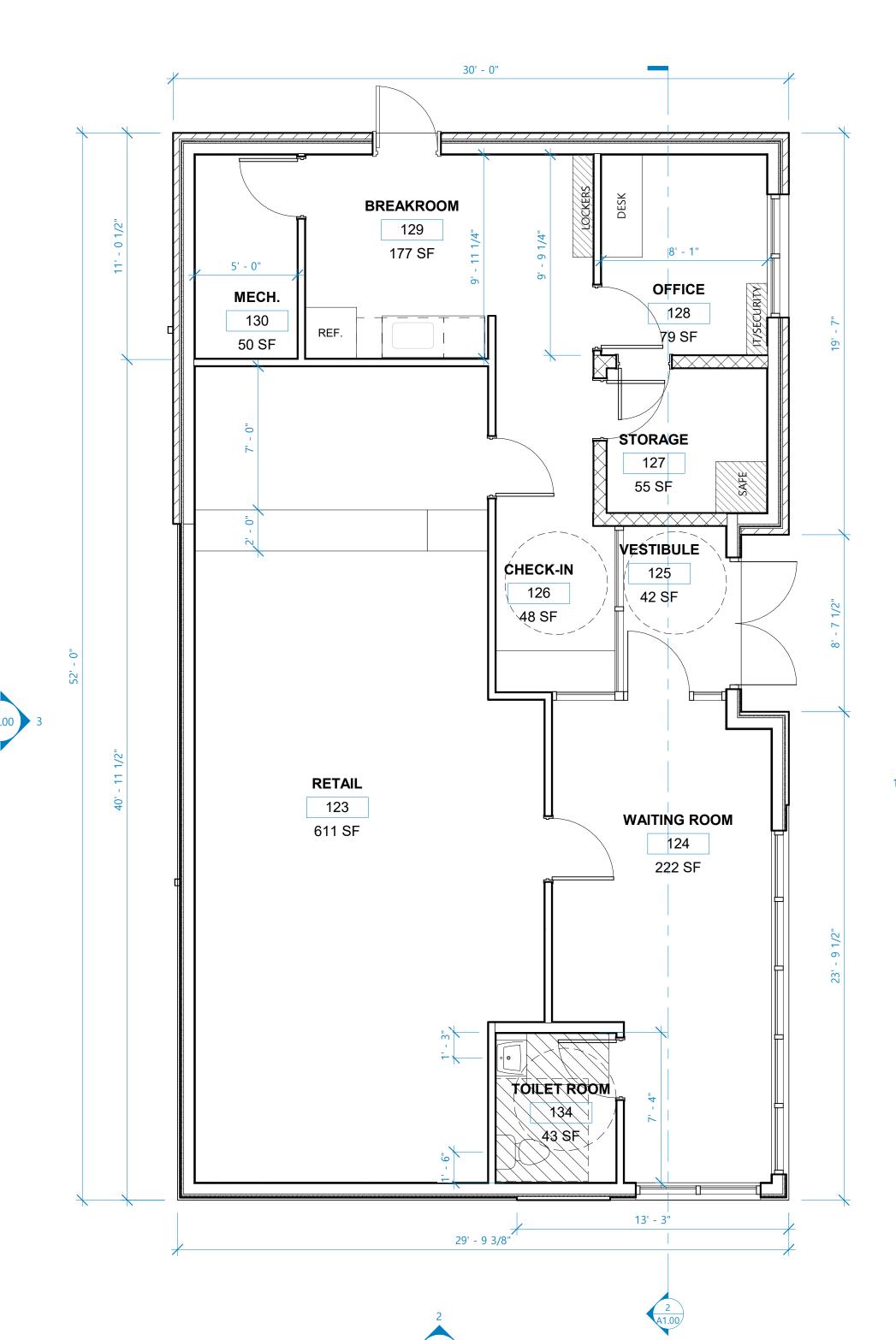
128

PROPOSED BUILDING SECTION

1/4" = 1'-0"



T.O. PARAPET 1 23' - 6"



D A M I A N F A R R E L L D E S I G N GROUP

359 METTY DRIVE, SUITE 4A ANN ARBOR, MI 48103 tel: 734.998.1331

2385 E ELLSWORTH
2385 E ELLSWORTH ROAD
ANN ARBOR, MI 48108

DESCRIPTION DATE

SITE PLAN APPROVAL

DESIGN Designer

SECTION

DRAWN Author **PROJECT NO.** 180208_05_07 FLOOR PLAN &

1 NEW BUILDING FLOOR PLAN 1/4" = 1'-0"

D A M I A N F A R R E L L DESIGN GROUP

359 METTY DRIVE, SUITE 4A ANN ARBOR, MI 48103 tel: 734.998.1331

4 ROV 0 SITE

DATE

DESCRIPTION SITE PLAN APPROVAL

ELLSWORTH

2385 E ELLSWOF 2385 E ELLSWORTH ROA ANN ARBOR, MI 48108

DESIGN Designer **DRAWN** Author **PROJECT NO.** 180208_05_07

ELEVATIONS