MARSHALL CITY PLANNING COMMISSION Wednesday, January 13, 2021 at 7:00 p.m. Electronic Meeting Format

ZOOM LINK:

https://us02web.zoom.us/j/84137304205?pwd=cFpJOGdKVmRMVkk1UnJBN3c3c3ZmZz09 You may participate in the virtual meeting by using the link listed above or join by phone at 1-312-626-6799 Meeting ID: 841 3730 4205 Passcode: 974459

Call to Order

Roll Call

Approval of Agenda

Regular Meeting of the Planning Commission, January 13, 2021

Approval of Minutes

Minutes from December 9, 2020

Public Comments on Agenda Items

Public Hearings

1. Public Hearing on Planning Commission Draft Capital Improvements Plan 2021-2027

New Business

- 1. Recommendation on Planning Commission Draft Capital Improvements Plan 2021-2027
- 2. Receive Zoning Amendment Request #RZ21.01 from the Calhoun County Land Bank Authority to rezone 410 East Drive
- 3. Schedule a Public Hearing for February 10, 2021 for Zoning Amendment Request #RZ21.01 from the Calhoun County Land Bank Authority to rezone 410 East Drive from POSD (Professional Office Service District) to R-2 (Suburban Residential District)
- 4. Receive Special Land Use Request #SLU21.01 for 1717 Pratt Avenue from MPM-C Marshall LLC
- 5. Set Public Hearing for February 10, 2021 for Special Land Use Request #SLU21.01 for 1717 Pratt Avenue from MPM-C Marshall, LLC for the construction of Hoop Houses
- 6. Receive Site Plan application #SP21.01 for 1717 Pratt Avenue from MPM-C Marshall, LLC
- 7. Receive and consider Site Plan application #SP21.02 for 343 Mulberry Street, Delta One

Old Business

Public Comment on Non-Agenda Items

Reports

Adjournment

MINUTES MARSHALL CITY PLANNING COMMISSION WEDNESDAY, December 9, 2020

In a regular session, Wednesday, December 9, 2020 at 7:00 p.m. via Zoom the Marshall Planning Commission was called to order by Chair Banfield.

ROLL CALL

Members Present: Chair Banfield, Commissioners Burke Smith, Davis (late), Hall, McNiff, Schwartz, and C. Zuzga

Members Absent: Commissioners Reed and Zuck, and Council Liaison Metzger

Staff Present: Trisha Nelson, City Clerk & Planner Eric Zuzga, Director of Special Projects

AGENDA

MOTION by Hall, supported by Schwartz to accept the agenda for the Wednesday, December 9, 2020 as submitted. On a roll call vote; ayes- Burke Smith, Banfield, Davis, Hall, McNiff, Schwartz, C Zuzga; naysnone; MOTION CARRIED

MINUTES

MOTION by Rodgers, supported by Banfield, to accept the minutes from the November 11, 2020 regular meeting. On a roll call vote; ayes- Burke Smith, Banfield, Davis, Hall, McNiff, Schwartz, C Zuzga; naysnone; MOTION CARRIED

PUBLIC COMMENTS ON AGENDA ITEMS

None

PUBLIC HEARINGS

None

NEW BUSINESS

MOTION by Davis, supported by McNiff to receive the Planning Commission Draft Capital Improvements Plan 2021-2027 and set a Public Hearing for January 13, 2021.

Schwartz stated that if you look at the numbers for the itemized totals, they don't match the grand total. Nelson stated that she only pulled the items relevant to the Planning Commission in the packet, so the grand total reflects everything, not just what is in the packet. Banfield questioned if the they only reviewed priority 2 items and above. Nelson stated that was correct.

MOTION by Davis, supported by McNiff to receive the Planning Commission Draft Capital Improvements Plan 2021-2027 and set a Public Hearing for January 13, 2021. On a roll call vote; ayes- Burke Smith, Banfield, Davis, Hall, McNiff, Schwartz, C Zuzga; nays- none; MOTION CARRIED

OLD BUSINESS

None

PUBLIC COMMENTS NOT ON AGENDA

None

REPORTS

Nelson stated that MPM is working on their site plan and Special Land Use application for hoop houses. She believes they will submit both at the same time and that it will be at the January meeting.

Davis questioned if the City Council granted the extension for the Social District. E Zuzga stated that they expanded the area for the social district to include more area and also expanded the hours to be from noon-10 pm every day. He further stated that there is a proposal going before the DDA for outdoor seating in the area. McNiff questioned the purpose behind the social district. E Zuzga stated that it allows you to buy a drink from one of 5 establishments downtown and walk around downtown and stroll or window shop.

Hall stated that she moved to Marshall 3 years ago and is a nurse at Marshall Tender Care and a realtor at Real Estate One in Marshall as well.

Schwartz thanked everyone for what they had taught them while on the commission and stated that he is hoping for the Mayor to appoint him as the council liaison.

ADJOURN

Planning Commission adjourned at 7:18 p.m.

Submitted by,

Michelle Eubank



ADMINISTRATIVE REPORT January 13, 2021 – Planning Commission Meeting

TO:

Planning Commission Members

FROM:

Jon B. Bartlett, Finance Director

Trisha Nelson, City Clerk

SUBJECT:

Public Hearing for Adoption of the July 1, 2021 –

June 30, 2027 Capital Improvement Program

<u>BACKGROUND:</u> Each year the City of Marshall prepares a six-year Capital Improvement Program (CIP) that is formally adopted by City Council. This six-year CIP (spreadsheet attached) is the guide for future capital needs and resource allocation for the City of Marshall.

Beginning in September, staff began to update the previous CIP to address the changes impacting the six-year plan and add the latest fiscal year, 2026-27. The Director's Team assembles the data and analyzes the needs and the potential revenue resources.

Under the Michigan Planning Enabling Act (PA 33 of 2008) and Marshall City Charter, the Planning Commission is required to review the projects proposed in the Capital Improvement Plan that require site plan reviews and to set a public hearing to adopt the CIP for those projects.

RECOMMENDATION: After hearing comments at the public hearing, it is recommended that the Planning Commission approve the July 1, 2021 through June 30, 2027 Capital Improvement Program for those projects that require site plan review.

FISCAL EFFECTS:

None.

ALTERNATIVES:

As recommended

Respectfully submitted,

323 W. Michigan Ave.

Marshall, MI 49068

p 269.781.5183

f 269.781.3835

cityofmarshall.com

Jon B. Bartlett Trisha Nelson

Finance Director Planning & Zoning Administrator

Trisks Nelson

FUND	Department	Project Title	Priority Ranking	Estimated Useful Life	Source of Funding	Project Narrative/Purpose	2021-2022 Expenditure	2022-2023 Expenditure	2023-2024 Expenditure	2024-2025 Expenditure	2025-2026 Expenditure	2026-2027 Expenditure	City Expenditure	Other Funds or Grant Share	Total Expenditure	Council - C Planning Council PC
295	Airport	Land Acquistion	4	N/A	General Fund 5%, FAA Allocation 90%, State 5%	This project is to acquire approximately 29 acres of property in easement. The propoerty is located at the approach end of runway 28 and is needed for approach protection and future development of the RPZ control.		\$7,750					\$7,750	\$147,250	\$155,000	PC
711	Cemetery	Cemetery Expansion to Meet Future Demand	2	150	Cemetery Trust Fund	Cemetery has four sections left holding 600 spaces for purchase. The number available will shrink exponentially as families begin having trouble finding blocks of spaces available for family plots. This will drive many to seek alternate locations.	TBD						\$0		\$0	PC
207	MRLEC	Front Parking Lot Expansion	4	40	MRLEC Operations	The MRLEC Building was designed with a community training room that can hold 70 people. The current front parking lot is inadequate for this volume of people, especially during business hours. The preliminary plan would add approximately 20 more spaces along the existing driveway at an angle				\$70,000			\$70,000		\$70,000	PC
296	LDFA	Brooks Electric Substation	2	50	LDFA reserves and possible Bond	Engineer, design, and construct a new 100 MVA electric substation in the Brooks Industrial Park	\$2,750,000	\$2,750,000					\$5,500,000		\$5,500,000	PC
296	LDFA	Oliver Drive Extension	4	25	LDFA reserves and possible Bond	Extend Oliver Dr to Udell Property		\$400,000					\$400,000		\$400,000	PC
			•			TOTAL	\$2,750,000	\$3,150,000	\$0	\$0	\$0	\$0	\$5,900,000	\$0	\$5,900,000	
247	NE NIA	Land Bank Development Project	3	30	NIA TIF Capture	Extension of sewer, electric, fiber, and street to Land Bank owned property	TBD						\$0		\$0	PC
247	NE NIA	Forest St. Extension	3	30	NIA TIF Capture	Extension of sewer, electric, fiber, and street to connect Forest and O'Keefe	TBD						\$0		\$0	PC
						TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
248	S NIA	Phase 2	2	30	S NIA TIF Capture	Extension of sewer, electric, fiber, streets, etc. to add or create buildable lots	TBD						\$0		\$0	PC
248	S NIA	Post Phase 2 Work	4	30	S NIA TIF Capture	Extension of sewer, electric, fiber, streets, etc. to add or create buildable lots		TBD					\$0		\$0	PC
						TOTAL	\$0	\$0	\$0	\$0	\$0		\$0	\$0	\$0	
				<u>, </u>												,
582	Electric	Michigan Pure Med (MPM) Phase III	1	50	Electric Fund - Revenue Bond	Engineer, design, and construct a new 100 MVA electric substation in the industrial park for the phase 3 & 4 expansion of the MPM facility	\$2,000,000	\$3,000,000	\$500,000				\$5,500,000		\$5,500,000	PC
			•					1			1	1				
210	Farmer's Market	Farmer's Market Pavillion	4	25	Farmer's Market/Grants	Pavillion to cover a portion of the Farmer's Market area in the Green St. parking lot	\$0						\$0	\$150,000	\$150,000	PC
			•													
101	Fire	Fire Department Training Structure/Stairs	4	50	General Fund	of stairs on the outside of the hose tower. These stairs would enable firefighters the ability to train on rappelling, working with				\$100,000			\$100,000		\$100,000	PC
1			1	1		I renea and also usted training activities		L			L	L				
101	Parks	Phase V Riverwalk Design	4	30	Local Grants 100%	Design the next phase of Kalamazoo Riverwalk extending from Kalamazoo Ave. westerly to Pearl St .sub-station area.			\$0				\$0	\$37,500	\$37,500	PC
101	Parks	Ketchum Park Project 2 (Sidewalks & additional sitework)	2	40	Various Grants	Ketchum Park Project 2 (Sidewalks & additional sitework)							\$0	\$25,000	\$25,000	PC
101	Parks	Ketchum Park Project 3	3	40	Grants	Ketchum Park Project 3		\$0					\$0	\$150,000	\$150,000	PC

CAPITAL IMPROVEMENT PLAN FY2021-FY2027 Planning Commission																
FUND	Department	Project Title	Priority Ranking	Estimated Useful Life	ul Life Source of Funding Droject Narrative/Durnese		2021-2022 Expenditure	2022-2023 Expenditure	2023-2024 Expenditure	2024-2025 Expenditure	2025-2026 Expenditure	2026-2027 Expenditure	City Expenditure	Other Funds or Grant Share		Council - C Planning Council PC
						TOTAL	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$212,500	\$212,500	
																į
208	Recreation	Eaton Park Development	2	30	Recreation Fund/Local Grants	Erect 4-6 Pickleball Courts, 2 full size outdoor basketball courts, bathrooms, pavilion, and splashpad		\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$500,000		\$500,000	PC
208	Recreation	Recreation Athletic Facility	3	30	Grants/Fund Raising	Construction of a Recreation Center that would include 2 basketball courts, community room, etc					\$4,000,000		\$4,000,000		\$4,000,000	PC
						TOTAL	\$0	\$100,000	\$100,000	\$100,000	\$4,100,000	\$100,000	\$4,500,000	\$0	\$4,500,000	
											l			l	I	1
591	Water	New Water Treatment Plant	1	60	Water Fund Bond	Build new iron removal plant on the Northside of E. Green St, across from existing plant.			\$5,000,000				\$5,000,000		\$5,000,000	PC
591	Water	New 600k Water Tower	2	50	Water Fund -Bond	Install new 600,000 gallon water tower at the MRLEC site. Contingent on North Brewer St. Development	TBD						\$0		\$0	PC
						TOTAL	\$0	\$0	\$5,000,000	\$0	\$0	\$0	\$5,000,000	\$0	\$5,000,000	
								•	•	•	•	•		•	•	•
						GRAND TOTAL	\$4,750,000	\$6,257,750	\$5,600,000	\$270,000	\$8,200,000	\$200,000	\$25,277,750	\$509,750	\$25,787,500	

MARSHALL PLANNING COMMISSION

Staff report for January 13, 2021

To: Planning Commissioners

From: Trisha Nelson, Planning and Zoning Administrator

Subject: Rezoning Request #RZ21.01 – from the Calhoun County Land Bank

Authority to rezone 410 East Drive from POSD (Professional Office

Service District) to R-2 (Suburban Residential District)

SUMMARY

The Calhoun County Land Bank Authority (CCLBA) is seeking to rezone the 8.23-acre property located at 410 East Drive, the former State Farm site, from POSD (Professional Office Service District) to R-2 (Suburban Residential District).

BACKGROUND

The CCLBA is submitting the attached rezoning request for the first phase in reaching the long-term goal of creating much needed residential development in the City. This request is the first in a two-part rezoning request that will result in a PUD request based on the conceptual site plan attached. The CCLBA expects to approach the PUD process in phases and plans to develop the lots along East Drive this year while creating additional building sites for the future as the funding allows.



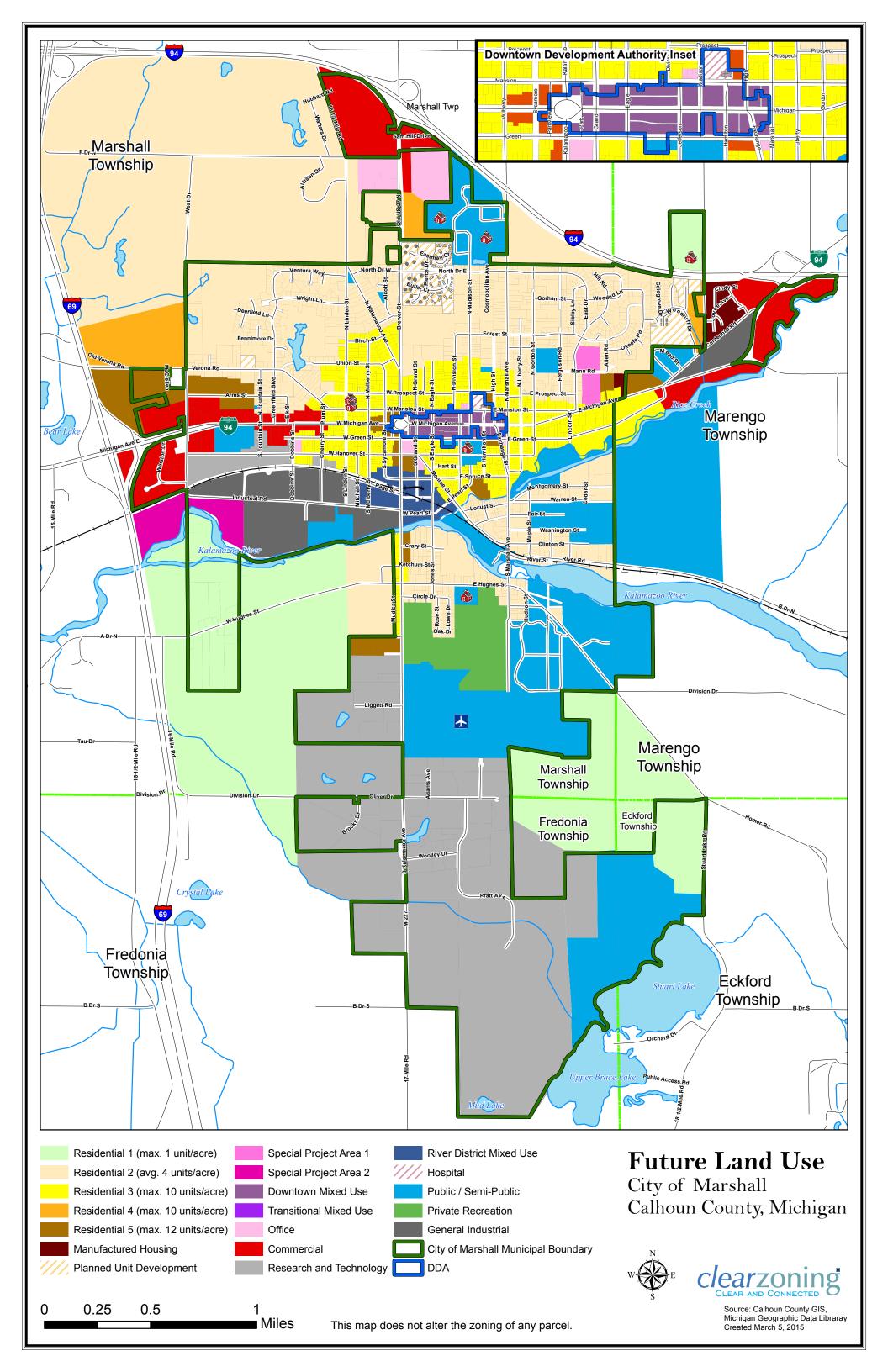
MASTER PLAN

It is important to consider the Master Plan when making rezoning decisions to ensure alignment. According to Section 4. Future Land Use of the Master Plan, 410 East Drive is listed as Special Project Area 1. The Master Plan identifies one of the potential uses of this area as single-family development and states a preference for a planned unit development to address the whole site. The rezoning request is solely for the property north of Mann Road, as the property south of Mann Road that is also identified as Special Project Area 1 has been purchased by Oaklawn Hospital. The rezoning of this

site would fit the vision set forth in the Master Plan and compliment the surrounding area.

RECOMMENDATION

It is recommended to schedule a public hearing for February 10, 2021 to give the community an opportunity to comment on this case. After receiving comment, the Planning Commission will be asked to consider recommending the rezoning to City Council. City Council will then receive the request and schedule a public hearing prior to final approval.



SPECIAL PROJECT AREA I

Former State Farm Michigan Operations Center

In 2004, State Farm Insurance closed its Michigan Operations Center on Marshall's east side, eliminating 569 jobs. At the time, the center was the City's third-largest employer, and its loss had economic ripple effects for the community and the county. Today, the former site of the operations center, now controlled by Golden Rule, remains vacant, and is the largest area of fully developed land not currently in use in the City.

The 2008 Master Plan designated this site as Special Project Area 1 on the Future Land Use map, and identified single family residential, senior housing, office, educational, and public or institutional development as potential uses if the site were to be redeveloped. The plan also stated a preference for a planned unit development to address the whole site in a planned and coherent manner. The City may need to be prepared to rezone the property in order to facilitate the type of redevelopment it would like to see. The City may also consider different uses north and south of Mann Road.

Given the cost of removing the existing buildings and impervious surfaces on the property, any major redevelopment of the site will likely take the form of a public/private partnership. External funding for site cleanup may help lend a spark to redevelopment. In the meantime, the City should consider the type of development it would like to see on the site; given its location in an otherwise residential neighborhood, primarily residential redevelopment may be most appropriate, perhaps with modest open space, commercial. office. οг public elements. **Important** considerations aside from use include height and density; the City must weigh demand and consider the level of density that would be required to make such a redevelopment project financially feasible.

Redevelopment of the property may potentially offer the City a way to address its emerging demographic challenges: an aging population, some of which is leaving the City as it ages. Providing a well-designed concentration of senior housing that addresses the needs of the population, from those that remain highly active to those who require enhanced services, could allow more seniors to remain in Marshall. Alternatively, the site could host a satellite university center that offers local access to higher education.

Regardless of future use, an available site of this size near the City center with no contamination issues is a potential asset.



The Golden Rule property (formerly the State Farm Michigan Operations Center) north of East Michigan Avenue occupy five separate parcels of land totaling 16.5 acres. The site is bisected by Mann Road. Much of the site is devoted to a very large parking lot.

- 1. Introduction
- 2. Context
- 3. Goals & Objectives
- 4. Future Land Use Plan
- 5. Implementation
- 6. Appendix

Contents

City of Marshall Master Plan Update 2015

clearzoning

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ZONING DISTRICT AMENDMENT APPLICATION

For Changing Zoning District Designation
Fee: \$200

PROPERTY OWNER NAME (Last, First): Calhoun County Land Bank Authority
ADDRESS (House Number and Street): 315 W Green Street
CITY, STATE, ZIP: Marshall, MI 49068
TELEPHONE: 269-339-8956 EMAIL ADDRESS: kedwards@calhouncoun
I would like to rezone my property from POSD to R2 because
the office building was demolished, and we would like to redevelop the property with a mixed residential development
ATTACH A LEGAL DESCRIPTION OF PROPERTY TO THIS FORM see attached
ADDRESS OF SUBJECT PROPERTY: 410 East Drive, Marshall, MI
EXISTING AND PROPOSED USE OF PROPERTY: currently vacant land, and future use is mixed residential
NAME, ADDRESS & PHONE NUMBER OF ALL OTHER PERSONS, FIRMS, etc. HAVING A LEGAL CONNECTION TO THE SUBJECT PROPERTY:
OWNER'S SIGNATURE: Ksista Leut Shrando DATE: 12.17.2020
-OFFICIAL USE- CASE # RZ 21.01 FILING DATE Complete 1/4/21 FEE PAID RCD BY 30 APPROVED FOR PC MEETING DATE 1/13/21

CCLBA rezoning request – 410 East Drive, Marshall, MI

Legal Description: MARSHALL CITY, PART OF SEC 24-2-6 BEG SE COR LOT 140 EAST DR PLAT NO. 5 W ALG N LI MANN RD TO EAST DR-NLY ALG E LI EAST DR TO S LI EAST DR PLAT NO. 2- ELY ALG S LI EAST DR PLAT NO. 2 & 4 TO W LI EAST DR PLAT NO. 5 S TO POB.

Parcel Number: 53-002-270-00



January 4, 2021

City of Marshall Attn: Trisha Nelson, City Clerk 323 Michigan Ave W Marshall, MI 49068

RE: Rezone request of 410 East Drive from POSD to R2 to create a residential development on this 8.23 acre property consisting of sixteen single-family houses, eight duplexes, and fourteen cottages.

Dear Ms. Nelson,

The Calhoun County Land Bank Authority (CCLBA) is seeking the rezoning of an 8.23-acre property located at 410 East Drive from POSD to R2 to support a residential development that would be consistent with surrounding uses and benefit the neighborhood. The property is the former site of the State Farm headquarters building, which went through the local property tax foreclosure process in 2016, after sitting vacant for more than a decade. At the time of the foreclosure, the County Treasurer's Office worked closely with the Marshall Area Economic Development Alliance (MAEDA) to find a developer interested in investing in and rehabilitating the site, when no developer materialized the site was deeded to the CCLBA by default at the end of the foreclosure process.

Based on the unsuccessful developer search and auction process, the CCLBA determined that the building was obsolete and in need of demolition. As such, the CCLBA used its grant funding from the Environmental Protection Agency (EPA) to complete the necessary environmental assessments to prepare the site for demolition. In addition, it sought, and was awarded, funding from the Michigan State Housing Development Authority to assist with the project and received additional monetary support from the County Treasurer to complete it; the demolition was finalized in 2019.

Throughout its ownership, and acting as a responsible property owner, the CCLBA has engaged residents in dialogue about the site's future through public meetings. In 2019, it received monetary support from the Michigan Economic Development Corporation to engage a consultant, Abonmarche, to assist with a residential site design and public input process. This process incorporated previous community input about density as well as the need to diversify the city's housing choices, and resulted in the site plan attached in Exhibit A. This site plan contains sixteen single family lots, eight duplex sites, and fourteen cottages all accessed by an interior road that joins Mann Road to the south.



CCLBA staff, along with the MEDC and Abonmarche, hosted a successful Showcase Event in February of 2020 for interested developers. Unfortunately, the COVID-19 pandemic interrupted the developer search and created uncertainty in the housing and development markets. The CCLBA was forced to delay its deadlines due to the statewide shutdown, and by the time the project came back online in the fall of 2020 the landscape had significantly changed. After interviewing developers and analyzing housing costs, the CCLBA is now seeking to rezone the site to R2 to set the stage for a rezone request to Planned Unit Development (PUD) for a future mixed residential housing development.

This request is the first in a two-part rezoning request that will result in a PUD request based on the site plan attached here. The proposed plan contains forty-six residential units ranging from single-family houses to duplexes to cottages. The development would be served from an entrance off Mann Road, and houses along East Drive would be served by a back entrance along an alley. The alley design is in part to reduce parking along the road, but also to all for narrow lots and more green space along East Drive. The CCLBA expects to approach the PUD process in phases and plans to develop the lots along East Drive this year while creating additional building sites in the future as funding allows.

The rezone request, a request to rezone the site from POSD to R2, is consistent with the surrounding zoning pattern of adjacent land and is in keeping with the many discussions held with the city and interested parties. The long-term goal is to create a residential development that compliments surrounding properties and benefits the community by providing much needed new housing.

Sincerely.

Krista Trout-Edwards

Kista Sent Swards

Executive Director

Enclosure: Site Plan

EDABONMARCHE



SITE DATA (ALL NUMBERS ARE PREJIMINARY AND APPROXIMATE):

1. SINGLE FAMILY HOME 1647-Lots Average Lot Size: 50' x 85' 2. DUPLEX 8 Buildings x 2 Units = 16 Housing Units

TOTAL HOUSING UNITS = 47

3. BUNGALOW HOMES 900 SFT. 14 Units











MARSHALL PLANNING COMMISSION

Staff report for January 13, 2021

To:

Planning Commissioners

From:

Trisha Nelson, Planning and Zoning Administrator

Subject:

Special Land Use Application #SLU21.01- MPM-C Marshall, 1717 Pratt

Avenue, Marshall, Parcel #53-003-002-00.

SUMMARY

MPM-C Marshall, LLC, is requesting a Special Land Use Permit for the construction of hoop houses at their property on 1717 Pratt Avenue. The property is zoned I-1 Research and Technical District, which under Section 3.1.12 C. has been amended to add "hoop houses" to the list of uses requiring a SLU permit. (A copy of the recently adopted Zoning Ordinance and City Ordinance are attached).



Planning Commission is being presented with the initial site plan for the construction project. The City Attorney is working with staff to develop a draft Special Use Permit Agreement to present to the Planning Commission at the February 10, 2021 meeting. The agreement will address all concerns from the City, Planning Commission and eventually City Council and spell out the requirements.

Planning Commission is being asked to receive the application and schedule the public hearing for the next regular meeting date of February 10, 2021 and instruct staff to notify the surrounding property owners of the public hearing.

RECOMMENDATION

It is recommended to receive the Special Land Use Application schedule a public hearing for February 10, 2021 to give the community an opportunity to comment on Special Land Use Application #RZ21.01 for 1717 Pratt Avenue. After receiving comment, the Planning Commission will be asked to consider recommending the approval of the application and agreement to City Council.

CITY OF MARSHALL, MICHIGAN ORDINANCE #2020-14

AN ORDINANCE TO AMEND CITY OF MARSHALL ZONING CODE, CHAPTER 2.0, DEFINITIONS, SECTION 2.2, AND CHAPTER 4.0 USE STANDARDS, SECTION 4.16, COMMERCIAL GREENHOUSES, NURSERIES AND GARDEN CENTERS.

THE CITY OF MARSHALL HEREBY ORDAINS:

Section 1. That Chapter 2.0, Definitions of the Marshall City Zoning Code, Section 2.2 "Definitions", is hereby amended to add the following terms or words as defined as follows:

Hoop House. A temporary structure used exclusively for the production and storage of live plants, with no permanent anchoring system or foundation; no storage, temporary or otherwise, of solvents, fertilizers, gases or other chemicals or flammable materials; built according to manufacturer recommendations; no more than 18 feet maximum height.

Commercial Greenhouse. A permanent structure that is constructed primarily of glass, glass-like or translucent material which is devoted to the protection or cultivation of plants, food or ornamental crops.

Section 2. That Chapter 3.0, Zoning Districts of the Marshall City Zoning Code, Section 3.1.12 "I-1 Research and Technical District", is hereby amended to add "hoop houses" to the following Special Land Uses as follows:

- v. Commercial greenhouses, hoop houses, nurseries, and garden centers.
- Section 3. That Chapter 4.0 Use Standards of the Marshall City Zoning Code, Section 4.16 "Commercial Greenhouses, Nurseries and Garden Centers", is hereby amended to add requirements for Hoop Houses and Commercial Greenhouses for marihuana cultivation as follows:

Hoop Houses and Commercial Greenhouses for marihuana cultivation are permitted as special land uses in the I-1 district with no limits on square footage.

- 1. Hoop House. The following shall apply:
 - A. Setbacks shall be 1500 feet from any residential structure, 250 feet from the road right-of-way centerline, and 50 feet from any rear or side property line.
 - B. Limited duration not to exceed three (3) years.

- C. If a Hoop House contains any device subject to the electrical code or any mechanical equipment subject to the mechanical code, a permit shall be required for the device, system or fixture only. If the hoop house is connected to a potable water system, a permit shall be required for the backflow prevention devices only.
- 2. Commercial Greenhouse. The following shall apply:
 - A. Setbacks shall be required under Section 3.1.12(D).
- 3. Hoop House and Commercial Greenhouse cultivation of marihuana. The following shall apply:
 - A. Comply with applicable LARA/MRA rules and regulations, City ordinances and City Zoning Ordinance.
 - B. Subject to a Special Land Use permit under Section 6.2, permit and for special conditions as may be necessary based upon the uniqueness of the property, subject to a public hearing, review and recommendation by the Planning Commission, and approval by the City Council in accordance with the procedures and conditions specified in Section 6.2. of the Zoning Ordinance. A Special land Use permit may be revoked or rescinded by the City Council for violation of the SUP, City ordinance, Zoning Ordinance, or state law and regulations, after notice to the SUP holder and hearing.
 - C. As permitted in this section, the area containing the cultivation of marihuana plants must be completely confined and enclosed in a Hoop House or Commercial Greenhouse made of durable construction to include metal framing materials and durable translucent material on all sides and top of a Hoop House, or glass, glass-like or translucent material on all sides and top of a Commercial Greenhouse. Hoop Houses and Commercial Greenhouses may not exceed 18 feet maximum height.
 - D. Hoop Houses and Commercial Greenhouses must be located on the parcel of the grower establishment or facility, fully enclosed by property security fencing. Security fencing must be at a minimum of eight (8) feet in height.
 - E. Site Plan approval. Hoop Houses and Commercial Greenhouses are subject to site plan review and must receive approval.
 - F. Screening shall comply with Section 5.15.8, and also include the means, including walls and plantings, to accomplish complete visual screening from the road right-of-way and adjacent property. Hoop Houses and Commercial Greenhouses must have greenbelt barriers that block outside visibility of the marihuana plants from the

public view, with no marihuana plants growing outside the top of the Hoop House or Commercial Greenhouse nor above the fence and barrier that is visible to the public eye and the fences must be secured and comply with the applicable security measures in City ordinances and LARA/MRA rules and regulations, including but not limited to, locked entries only accessible to authorized persons or emergency personnel.

- G. After the marihuana is harvested, all drying, trimming, curing, or packaging of marihuana must occur inside a permanent building meeting all the requirements of City ordinance, state statue, codes and LARA/MRA rules and regulations.
- H. Hoop Houses and Commercial Greenhouses must meet the security requirements and pass inspections required under City ordinance and LARA/MRA rules and regulations and any necessary building permit pursuant to City ordinance, state statute, code and LARA/MRA rules and regulations.
- Odor Control. A grower or a processor shall install and maintain in operable condition a system which precludes the emission of unreasonable marihuana odor from the property.

Section 4. Severability. It is the legislative intent of the City adopting this Ordinance that all provisions hereof shall be liberally construed to protect the public health, safety and general welfare of the inhabitants of the City and all other persons affected by this Ordinance. Consequently, should any provision of this Ordinance be held to be unconstitutional, invalid or of no effect, such holding shall not be construed as affecting the validity of any of the remaining provisions of this Ordinance or Zoning Code, it being the intent of the City Council that this Ordinance shall stand and remain in effect, notwithstanding the invalidity of any provision hereof.

Section 5. This Ordinance shall be published in a newspaper of general circulation in the City of Marshall qualified under state law to publish legal notices. This Ordinance shall be recorded in the Ordinance Book and such recording shall be authenticated by the signatures of the Mayor and the City Clerk.

Section 6. This Ordinance is declared to be effective seven (7) days after publication or as provided by law.

Adopted and signed this 7th day of December, 2020.

Joe Caron, MAYOR

Trisha Nelson, CITY CLERK

I, Trisha Nelson, being duly swom as the City Clerk for the City of Marshall, hereby certify that the foregoing is a true and complete copy of an ordinance approved by the City Council, City of Marshall, County of Calhoun, State of Michigan, at a regular meeting held on December 7, 2020, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available by said Act.

Trisha Nelson, CITY CLERK

CITY OF MARSHALL, MICHIGAN

Ordinance No. 2020-15

PREAMBLE

AN ORDINANCE TO AMEND ORDINANCE NO. 2019-06 TO PERMIT THE OUTDOOR CULTIVATION OF MARIHUANA IN COMMERCIAL GREENHOUSES AND HOOP HOUSES CONSISTENT WITH THIS ORDINANCE, STATE LAW AND REGULATION; TO AMEND SECTIONS "DEFINITIONS", "LOCATION AND ELIGIBILITY", AND "MARIHUANA CULTIVATION"; TO AMEND ANY SECTIONS INCONSISTENT WITH ORDINANCE NO. 2019-06; AND TO ESTABLISH AN EFFECTIVE DATE AS PROVIDED BY LAW.

The City of Marshall, Michigan Ordains:

That Ordinance 2019-06 and the Code of Ordinances of the City of Marshall, Title XI Business Regulations, Chapter 121, Commercial Marihuana, as amended, to read as follows:

§ DEFINITIONS.

Section "DEFINITIONS" is hereby amended to add following words, terms and phrases in Ordinance No. 2019-06, and shall have the meanings ascribed to them, except where the context clearly indicates otherwise:

COMMERCIAL GREENHOUSE. A permanent structure that is constructed primarily of glass, glass-like or translucent material which is devoted to the protection or cultivation of plants, food or ornamental crops.

HOOP HOUSE. A temporary structure used exclusively for the production and storage of live plants, with no permanent anchoring system or foundation; no storage, temporary or otherwise, of solvents, fertilizers, gases or other chemicals or flammable materials; built according to manufacturer recommendations; no more than 18 feet maximum height.

§ LOCATION AND ELIGIBILITY.

Section "LOCATION AND ELIGIBILITY" is hereby amended to add following words, terms and regulations in Ordinance No. 2019-06:

(D) Marihuana Establishment licenses permitted under this Ordinance are governed by type and location requirements, as follows:

(1) Marihuana Grower License:

- b. All grower establishments and operations must be within an enclosed, secured structure, and cultivation of marihuana may occur in an outdoor area confined to a "commercial greenhouse" or "hoop house" that must meet all the following conditions:
 - i. Comply with applicable state law, rules and regulations, and City ordinances and City Zoning Ordinance.
 - ii. Cultivation of marihuana in a commercial greenhouse or hoop house is only permitted and subject to a Special Land Use for special conditions (special land uses) in the identified Industrial District subject to the provisions of the City's Zoning Ordinance. A Special land Use permit may be revoked or rescinded by the City Council for violation of the Special Land Use permit, City ordinance, Zoning Ordinance, or state law and regulations, after notice to the permit holder and hearing.
 - iii. Cultivation of marihuana in a commercial greenhouse or hoop house must be concealed from public view and must be completely confined and enclosed in a commercial greenhouse or hoop house made of durable translucent material on all sides and top of a hoop house, or glass, glass-like or translucent material on all sides and top of a commercial greenhouse. Hoop houses and commercial greenhouses may not exceed 18 feet maximum height.
 - iv. Commercial greenhouses and hoop houses must be located on the parcel of the licensed grower facility/establishment, fully enclosed by security fencing and barriers that block outside visibility of the commercial greenhouse, hoop house, and marihuana plants from the public view to accomplish complete screening from the road right-of-way and adjacent property. No marihuana plants may grow outside the top of the commercial greenhouse or hoop house and must not be visible above the fence and barrier that is visible to public view.

Fencing must comply with the applicable security measures and fencing requirements under city ordinance and LARA/MRA rules, including but not limited to, locked entries only accessible to authorized persons or emergency personnel. Security fencing must be at a minimum of eight (8) feet in height.

- v. After the marihuana is harvested, all drying, trimming, curing, or packaging of marihuana must occur inside a permanent building meeting all the requirements of City ordinance, state statue, codes and LARA/MRA rules and regulations.
- vi. Greenhouses and hoop houses must meet the security requirements and pass the inspections in this ordinance and LARA/MRA rules and any required building and electrical permit pursuant to City ordinance, state statute and LARA/MRA rules.
- vii. Commercial greenhouses and hoop houses shall meet setback requirements of the City's Zoning Ordinance.
- viii. Odor Control. A grower or a processor shall install and maintain in operable condition a system which precludes the emission of unreasonable marihuana odor from the property.

i. All buildings, commercial greenhouses, hoop houses, and structures shall be subject to inspection at any time by the City Fire Department to insure compliance with all applicable statutes, codes and ordinances.

§ MARIHUANA CULTIVATION.

Section "MARIHUANA CULTIVATION" is hereby amended to add following words, terms and regulations in Ordinance No. 2019-06:

- (A) Cultivation, generally.
 - (1) Marihuana cultivation shall be conducted consistent with this Ordinance, the MRTMA, including but not limited to MCL 333.27961, and any LARA rules, within an enclosed, secured structure, and as permitted in a commercial greenhouse or hoop house under city ordinances and Special Land Use permit; and

§ SEVERABILITY

The provisions of this Ordinance are hereby declared to be severable. If any clause, sentence, word, section or provision is hereafter declared void or unenforceable for any reason by a court of competent jurisdiction, it shall not affect the remainder of such ordinance which shall continue in full force and effect. The provisions herein shall be construed as not interfering or conflicting with the statutory regulations for licensing recreational (adult use) marihuana establishments pursuant to Initiated Law 1 of 2018, as amended.

§ EFFECTIVE DATE.

This Ordinance shall become on 30 days after publication and recording as required by law.

This Ordinance shall be published in a newspaper of general circulation in the City of Marshall qualified under state law to publish legal notices. This Ordinance shall be recorded in the Ordinance Book and such recording shall be authenticated by the signatures of the Mayor and the City Clerk.

Adopted and signed this 7th day of December, 2020.

Joe Caron, Mayor

Trisha Nelson, City Clerk

I, Trisha Nelson, being duly sworn as the Clerk for the City of Marshall, hereby certify that the foregoing is a true and complete copy of an ordinance approved by the City Council, City of Marshall, County of Calhoun, State of Michigan, at a regular meeting held on December 7, 2020, and that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available by said Act.

Trisha Nelson, City Clerk

SPECIAL LAND USE APPLICATION

MPM-C Marshall, page 1 City of Marshall Fee \$250.00

Section 6.2 of the Marshall City Zoning Ordinance gives citizens the opportunity to file for a Special Land Use Permit when it is required by zoning district.

Use Permit when it is required by zoning district.
<u>Process</u>
 Application, fee, and all required materials are submitted by due date. Once found to be complete, the application is placed on the Planning Commission agenda for acceptance. Planning Commission meeting #1: At this meeting, a public hearing is scheduled for the following month. Neighbors within 300 feet of the property seeking special land use are notified of the public hearing. Planning Commission meeting #2: Public hearing is held and discussion takes place. A recommendation on the application is given for City Council. City Council meeting: Item is placed on the agenda, a staff report and Planning Commission comments are offered for review and City Council grants final approval, disapproval, or approval with conditions.
Address of subject property1717 Pratt Avenue, Marshall, Michigan_49068
Applicant's name MPM-C Marshall, LLC Phone 269-789-5500
Applicant's address 11300 17 Mile Road City Marshall Zip 49068
Owner's Name Great Lakes Farms Properties, LP Phone 269-789-5500
Owner's Address 11300 17 Mile Road City Marshall Zip 49068
Explain need for a Special Land Use permit at the subject property (attach more if necessary):
Please see second page of application
ricase see second page of application
Applicant's Signature
The following items MUST be submitted for the application to be complete:
A plot plan showing property boundaries and legal description
Existing structures, uses and zoning on subject and adjacent properties
Location of all abutting streets, easements, and similar public areas
Proposed compliance plan (if applicable) including hours, signs, parking, etc.

SPECIAL LAND USE APPLICATION

MPM-C Marshall, page 2 City of Marshall Fee \$250.00

Section 6.2 of the Marshall City Zoning Ordinance gives citizens the opportunity to file for a Special Land Use Permit when it is required by zoning district.

_		
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	Planning Commission meeting #1: At this meeting, a public hearing is scheduled for the following month.			
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Addre	ss of subject property1717 Pratt Avenue, Marshall, Michigan_49068			
Applic	ant's name MPM-C Marshall, LLC Phone 269-789-5500			
Applic	ant's address 11300 17 Mile Road City Marshall Zip 49068			
Owne	r's Name Great Lakes Farms Properties, LP Phone 269-789-5500			
Owner	r's Address 11300 17 Mile Road City Marshall Zip 49068			
Explai	n need for a Special Land Use permit at the subject property (attach more if necessary):			

Pursuant to Marshall Ordinance #2020-14 amending the Marshall Zoning Code a Special Land Use permit is required for Hoop Houses.

Great Lakes Farms Properties, LP is requesting a three (3) year Special Land Use permit to allow construction of a Hoop House facility on the subject property.

This project, when completed, will be a state of the art agricultural facility and bring 40 new direct jobs to Marshall with a projection of up to an additional 100 indirect jobs for the area along with increased property tax revenue and paid utility usage for the City of Marshall.

"ATE OF MICHIGAN, COUNTY OF CALHOUN 1215/17

GREBY CERTIFY THAT THERE ARE NO TAX LIENS ON TITLES HELD BY THE STATE ON THE LANDS DESCRIBED ITHE WITHIN INSTRUMENT. AND THAT THERE ARE NO TAX LIENS OR TITLES HELD BY INDIVIDUALS ON SAID LANDS FOR THE FIVE YEAR PRECEDING THE DATE OF THIS INSTRUMENT, AS APPEARS IN MAY OFFICE THIS CERTIFICATE DOES NOT APPLY ON TAXES, IF ANY, NOW IN PROCESS OF COLLECTION

Brian W. Wansouse.



STATE OF MICHIGAN - CALHOUN COUNTY RECORDED 12/15/2017 11-56:13 AM ANNE B. NOFLANDER - CLERK/PROSTER OF DEEDS

\$30.00 DEED TAX CERTIFICATION



LEER 4195

PACE 1

WARRANTY DEED

The City of Marshall Local Development Finance Authority, whose address is 323 West Michigan Avenue, Marshall, MI 49068, conveys and warrants to Great Lakes Farms Properties, LP, a Delaware Limited Partnership, whose address is P.O. Box 794, Birmingham, MI 48012 (Grantee), the real property commonly known as 1717 Pratt Road, in the City of Marshall, Calhoun County, Michigan, as described and shown in the Sketch of Survey and the Property Description shown on Page 2 of the attached Exhibit A, consisting of approximately 26.44 acres, more or less, (the "Property"):

Tax Identification Number: Part of 53-003-002-00

for One Dollar (\$1.00) and other valuable consideration,

subject to any easements and building and use restrictions of record and the lien of taxes not yet due and payable.

Grantor grants to Grantee the right to make all divisions Grantor may have, if any, under Section 108 of the Land Division Act, Act No. 288 of the Public Acts of 1967. Grantor gives no warranty concerning the availability of any divisions, as provided in the Real Estate Sales Agreement of the parties.

This Property may be located within the vicinity of farmland or a farm operation. Generally accepted agricultural and management practices which may generate noise, dust, odors, and other associated conditions may be used and are protected by the Michigan Right to Farm Act.

This deed is exempt from state and county property transfer taxes as the grantor is a municipal entity of the State of Michigan; per MCL 207.526 (i) and MCL 207.505 (h) (i).

The City of Marshall Local Development

Finance Authority

Dated: 12-15-17

By: Jason LaForge

Its: Chairperson

STATE OF MICHIGAN) CALHOUN COUNTY)

The foregoing instrument was acknowledged before me on <u>December 15, 2017</u> by Jason LaForge the Chairperson of the City of Marshall Local Development Finance Authority.

Trisha Nelson

Notary Public, State of Michigan, County of Calhoun.

My commission expires 10/06/2020.

TRISHA NELSON
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF CALHOUN
My Commission Expires 10/6/2020
Arting in the County of Cathoun

323 West Michigan Avenue, Marshall, MI 49068

Send subsequent tax bills to: Grantee, at the address indicated above.

Drafted by (without opinion as to title):

James L. Dyer (P23544)
Johnson, Rosati, Schultz and Joppich, P.C.
822 Centennial Road, Suite 270
Lansing, MI 48917
(517) 886-3800

SKETCH OF SURVEY

LEER 4195 PAGE 3

DESCRIPTION:

A PARCEL OF LAND LOCATED IN THE SOUTHEAST 1/4 OF SECTION 1, TOWN 3 SOUTH, RANGE 6 WEST, CITY OF MARSHALL, CALHOUN COUNTY, MICHIGAN, BEING MORE PARTICULARY DESCRIBED AS:

BEGINNING AT THE SOUTH 1/4 CORNER OF SECTION 1, TOWN 3 SOUTH, RANGE 6 WEST, CITY OF MARSHALL, CALHOUN COUNTY, MICHIGAN, THENCE SOUTH 89°27'27" EAST ALONG THE SOUTH LINE OF SAID SECTION. A DISTANCE OF 742.66 FEET; THENCE NORTH 00*07*05" WEST, PARALLEL WITH THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 1, A DISTANCE OF 1525.00 FEET; THENCE NORTH 89°27'27" WEST, PARALLEL WITH SAID SOUTH LINE OF SAID SECTION, A DISTANCE OF 835.02 FEET TO THE WESTERLY RIGHT-DF-WAY OF PRATT AVENUE; THENCE ALONG SAID RIGHT-DF-WAY 30.72 FEET ALONG THE ARC OF A CURVE TO LEFT WHOSE RADIUS IS 57.00 FEET AND WHOSE CHORD BEARS SOUTH 04"33"17" EAST, 30.35 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY. 72.03 FEET ALONG THE ARC OF A CURVE TO THE RIGHT WHOSE RADIUS IS 98.00 FEET AND WHOSE CHORD BEARS SOUTH 01°00'44" WEST, 70.42 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY, 74.29 FEET ALONG THE ARC OF A CURVE TO THE LEFT WHOSE RADIUS IS 57.00 FEET AND WHOSE CHORD BEARS SOUTH 15"16"09" EAST, 69.14 FEET; THENCE SOUTH 37"23"39" WEST ALONG SAID RIGHT-OF-WAY, A DISTANCE OF 60.00 FEET; THENCE NORTH 89"52'55" EAST, 109.30 FEET TO THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 1; THENCE SOUTH 00*07'05" EAST ALONG SAID 1/4 LINE. A DISTANCE OF 1311.31 FEET TO THE PLACE OF BEGINNING. CONTAINING 26.44 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO ANY EASEMENTS, RESTRICTIONS, OR CONDITIONS OF RECORD.

Client: MARSHALL AREA ECONOMIC DEVELOPMENT ALLIANCE

Drawn by: AJP Surveyed by: MPP Scale: 1° = 200'

Job No.: 41101 Dole: 05/10/2017 Revised:

This survey is made on the basis of the legal descriptions furnished to CLS. No investigation has been made for easements, encumbrances, sunership title evidence, or any other facts that may be disclosed by an accurate and current title search. Declaration is made to the original purchaser of this survey, it is not transferable to additional institutions or subsequent owners. This drawing is valid only if it contains the surveyor's original signature and embossed seal.

業

CRANE LAND SURVEYING, P.C.

14250 BEADLE LAKE ROAD
SUITE 130

BATTLE CREEK, MICHIGAN 49014
ph: (289) 963-7977 • fee: (289) 963-7008

MICHAEL P. PRATT, PS #43067

34 Home 41101

MC-03

ph: (260) 963-7977 · fas: (269) 963-7008

were the become

V **458**



This drawing is valid only if it contains the surveyor's original signature and embossed seal.

MARSHALL PLANNING COMMISSION

Staff report for January 13, 2021

To:

Planning Commissioners

From:

Trisha Nelson, Planning and Zoning Administrator

Subject:

Site Plan #SP21.01 MPM Marshall at 1717 Pratt Avenue for the

construction of Hoop Houses

Case #:

Site Plan #SP21.01

Zoning District:

I-1 Research and Technology

Adjacent Zoning: Surrounded by B-4, except R-2 to the North property line.

Parcel:

53-003-002-20

SUMMARY

Staff received an initial site plan and special land use application for hoop house construction at 1717 Pratt Avenue on December 22, 2020. With COVID restrictions. the plans were emailed out to city staff for review and to obtain comments. The following comments were received from staff and answers obtained are in red:

- Concern with water supply. The physical location of the site raises concerns of water supply to the furthest points. There is a fire hydrant at the cul-de-sac, confirmation needed if it looped or a dead end. The existing hydrant at the end of the cul-de-sac on Pratt is not looped at this time. It is scheduled to be looped to South 27 during the MEC project.
- Any fence or gate preventing access to the site shall include an access device in a knox box for FD use.
- Use standards for hoop houses in the I-1 District are permitted with a special land use with the following setbacks: Setbacks shall be 1500 feet from any residential structure, 250 feet from the road right-of-way centerline, and 50 feet from any rear or side property line and a limited duration not to exceed three (3) years. Staff is working with MPM on the setback issue and working with City Attorney David Revore to develop a Special Land Use Permit agreement. The SLU permit agreement will contain the duration and any stipulations. The final site plan and the SLU agreement will be at the February 10th PC meeting.
- No photometric plan. Staff is working with Tim Storey to obtain a photometric plan and will be provided for the February 10th meeting. MPM had no intentions of lighting but that will be a discussion with the Director of Public Safety because of the requirements for the Security Plan.

The Local Development Finance Authority heard a presentation from MPM at their meeting held on December 17, 2020. At that meeting, MPM discussed the plan to obtain a Special Land Use permit for the construction of hoop houses and a conceptual site plan was presented. The only change the LDFA wanted to see was the paving of the parking area around the 12,375 square foot building since it is a permanent structure on the parcel. Consensus of the board was drive ways to the hoop houses are sufficient as gravel since they will only be allowed for a period of 3 years. The action taken by the LDFA was to support the submittal of the Special Land Use and Site Plan to the Planning Commission.



RECOMMENDATION

The Planning Commission is being asked to receive the initial site plan for consideration at the February 10, 2021 regularly scheduled Planning Commission meeting.

At that meeting all issues should be resolved and should there be a motion of approval it should be contingent upon approval of the Special Land Use Permit application.

City of Marshall Application for Site Plan Review

Attn: Planning and Zoning Administrator 323 W Michigan Ave. Marshall, Michigan, 49068

The following application is made to the City of Marshall Planning Commission in accordance with the provisions of the Planning and Zoning Department.

1.	Applicant Information	Applicant Information							
	Address of property being developed:								
	1717 Pratt Avenue, Marshall, Michigan 49068								
	Owner of property being developed:								
	Great Lakes Farms Properties, LP								
	Owner's Address:								
	11300 17 Mile Road, Marshall, Mic	chigan 49068							
	City	State	Zip						
	Owner's Phone Number:								
	269-789-5500								
2.	Owner's Agent if working for property ov	wner.							
	Name and Title:								
	N/A								
	Address:								
	City	State	Zip						
	Phone Number:		9						

City of Marshall Application for Site Plan Review

3. Brief description of proposed project

nal 100 indirect job	os for the area along with
	os for the area along with
e for the City of Ma	
	arshall. Per Marshall
a Special Land Us	e Permit and includes the
ilding on 26 44 per	es of land owned by
iding on 20.44 aci	es of land owned by
Pratt Avenue. The	project does not impact
e Marshall LDFA o	n December 17, 2020.
NO	
YES	
1,151,582	
12,375	
24,889	
0	
YES	
YES	
· ·	
unanimously on De	ecember 17, 2020
12	
	NO YES 1,151,582 12,375 24,889 0 YES

City of Marshall Application for Site Plan Review

5. Authorization (Must be signed by the owner of the property)

I am the owner of record for this property for which this application is being filed and as such, I am familiar with the development being proposed to be carried out on my property.

I hereby, give permission for this application to be filed with the full understanding that certain restriction may be placed on the property relative to the approval of the proposed work.

I further certify that under penalties of perjury, I am to sign this application.

Name (Please Print) Joseph Jarvis	
Title: Managing Partner	Date: December 21, 2020
Signature:	

Note: If there are multiple owners of the property or you are representing a group, corporation, or other organization attach a copy of a certified letter authorizing you to sign this application for the proposed development.

LAND USE AND DEVELOPMENT FEES	
PLATS	
Up to 30 Lots	\$450.00
Over 30 Lots	\$650.00
SITE CONDOMINIMUMS	
Up to 30 Lots	\$350.00
Over 30 Lots	\$550.00
SITE PLANS	
	\$250.00 < 30
Commercial and	acres
Institutional	\$250.00
Special Land Use	\$250.00
Planned Unit Development	\$350.00
Amend a PUD	\$150.00
Multiple Family Developments (Apartment &	\$50 plus \$5.00 per unit or lot
Additions to existing Site Plans if Planning Commission Review is required	\$100.00
Extending Site Plan with Planning Commission	\$150.00

CITY OF MARSHALL

Site Plan Review Checklist for General Development

Date:				
Zoning District 1-	-1 (Research and Manufact	uring)		
Proposed Use: <u></u>	loop House project for seas	onal cann	abis cult	ivation
Is this a Permitted If yes list s	Use? 📈 ection number:	Yes	□ No	
Is the property in the	he Well Head Protection Area?	□ Yes	⊠ No	□ NA
Property Address:	1717 Pratt Avenue			
Information of	Responsible Party that pr	enared n	lane	
iniormation of	Responsible Faity that pr	epared p	ialis	
Name:	Tim Storey, PE	Brand	on Sundber	g, VP
Company Name: _	Storey Engineering Group, LLC	Integra	ated Design	Solutions
Company Address	s: 48264 Manchester	1441 V	Vest Long L	ake, Suite 200
	Macomb, MI 48044	Troy,	MI 48098	

SITE PLAN DRAWINGS FOR

MPM Pratt Road Cultivation Facility

LEGAL DESCRIPTION (AS PROVIDED)

A PARCEL OF LAND LOCATED IN THE SOUTHEAST 114 OF SECTION 1, TOWN 3 SOUTH, RANGE 6 WES CITY OF MARSHALL, CALHOUN COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE SOUTH 114 CORNER OF SECTION 1, TOWN 3 SOUTH, RANGE 6 WEST, CITY OF MARSHALL, CALHOUN COUNTY, MICHIGAN; THENCE SOUTH 89°27'27" EAST ALONG THE SOUTH LINI OF SAID SECTION, A DISTANCE OF 742.66 FEET; THENCE NORTH 00°07'05" WEST, PARALLEL WITH THE NORTH AND SOUTH 114 LINE OF SAID SECTION 1, A DISTANCE OF 1525.00 FEET; THENCE NORTH 89°27'27" WEST. PARALLEL WITH THE SOUTH LINE OF SAID SECTION, A DISTANCE OF 834.66 FEET TO HE EASTERLY RIGHT -OF-WAY OF PRATT A VENUE; THENCE 30.28 FEET ALONG SAID RIGHT -OF-WAY 04°51'25" EAST, 29.92 FEET; THENCE CONTINUING ALONG SAID RIGHT -OF-WAY,72.24 FEET ALONG THE ARC OF A CURVE TO THE RIGHT WHOSE RADIUS IS 98.00 FEET AND WHOSE CHORD BEARS SOUTH 00°57'05" WEST, 70.61 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY, 74.29 FEET ALONG THE ARC OF A CURVE TO THE LEFT WHOSE RADIUS IS 57.00 FEET AND WHOSE CHORD BEARS SOUTH 15°16'09" EAST, 69.14 FEET: THENCE SOUTH 37°23'39" WEST ALONG SAID RIGHT-OF-WAY, A DISTANCE OF 60.00 FEET; THENCE NORTH 89°52'55" EAST,109.30 FEET TO THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 1; THENCE SOUTH 00°07'05" EAST ALONG SAID 114 LINE, A DISTANCE OF 1311.31 FEET TO THE PLACE OF BEGINNING. CONTAINING 26.44 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO ANY EASEMENTS, RESTRICTIONS, OR CONDITIONS OF RECORD.

BOUNDARY NOTE

THE BOUNDARY WAS NOT PERFORMED DURING THIS SURVEY.

BEARING REFERENCE

Bearings are based on Survey performed by: Crane Land Surveying, P.C., Job No.: 41101, Dated:

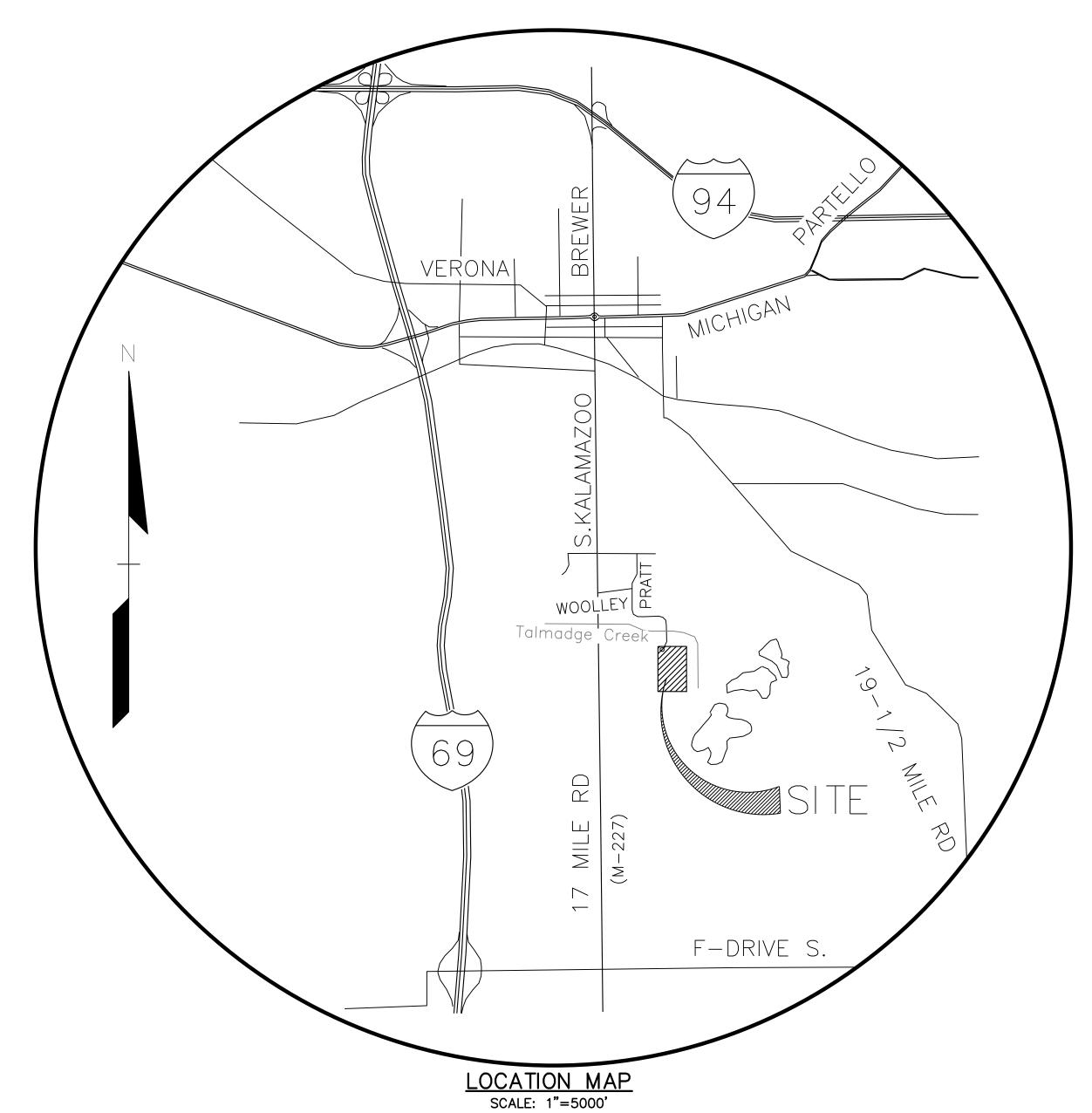
BENCHMARKS

REFERENCE CORS STATION USED TO ESTABLISH BASE CONTROL ONSITE: RTCM0015

ARROW ON HYDRANT, 335'± NORTH OF SUBJECT'S NORTH PROPERTY LINE & 34'± EAST OF PRATT ELEV = 929.49

ARROW ON HYDRANT, 187'± WEST OF CUL-DE-SAC OF PRATT AVENUE.

PRATT ROAD MARSHALL, MICHIGAN



INDEX OF DRAWINGS:

PROPOSED SITE PLAN

C-0.0 COVER SHEET

C-1.0 OVERALL SURVEY

C-1.1 TOPOGRAPHIC SURVEY NORTHEAST

C-1.2 TOPOGRAPHIC SURVEY SOUTHEAST

C-3.1 SITE PLAN NORTHEAST

C-3.2 SITE PLAN SOUTHEAST

C-4.1 GRADING PLAN NORTHEAST

C-4.2 GRADING PLAN SOUTHEAST

C-5.1 UTILITY PLAN NORTHEAST

C-5.2 UTILITY PLAN SOUTHEAST

C-6.0 NOTES + DETAILS

C-7.2 DRAINAGE PLAN SOUTHEAST

LS-1 LANDSCAPE PLAN

LS-2 LANDSCAPE PLAN

EXTERIOR RENDERING

EXTERIOR RENDERING

C-3.0 OVERALL SITE PLAN

C-6.1 DETAILS

C-7.0 DRAINAGE CALCULATIONS

DRAINAGE PLAN NORTHEAST

FIRST FLOOR NEW WORK PLAN

EXTERIOR ELEVATIONS

EXTERIOR RENDERING

EXTERIOR RENDERING

EXTERIOR RENDERING

INTEGRATED DESIGN SOLUTIONS 1441 WEST LONG LAKE RD, SUITE 200 TROY, MI 48098

PHONE: (248) 823-2100 CONTACT: BRANDON SUNDBERG, AIA

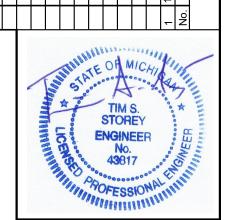
ARCHITECT:

ENGINEER:

STOREY ENGINEERING GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044 PHONE: (586) 216-1043 CONTACT: TIM S. STOREY, PE

DEVELOPER:

MPM COMPANIES, LP 1001 WOODWARD AVE SUITE 500, UNIT 6A121 DETROIT, MI 48226 PHONE: (248) 804-8400 CONTACT: JOÉ JARVIS





1-800-482-7171 www.missdig.net



STOREY ENGINEERING GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044 (586) 216-1043

www.storeyengineering.com

COVER SHEET

ORIGINAL ISSUE DATE: 12/16/2020 Project No. 2017-013.M3

DRAWING NUMBER:

C-0.0

LEGAL DESCRIPTION (AS PROVIDED)

A PARCEL OF LAND LOCATED IN THE SOUTHEAST 114 OF SECTION 1, TOWN 3 SOUTH, RANGE 6 WEST, CITY OF MARSHALL, CALHOUN COUNTY, MICHIGAN, BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE SOUTH 114 CORNER OF SECTION 1, TOWN 3 SOUTH, RANGE 6 WEST, CITY OF MARSHALL, CALHOUN COUNTY, MICHIGAN; THENCE SOUTH 89°27'27" ÉAST ALONG THÉ SOUTH LINE OF SAID SECTION, A DISTANCE OF 742.66 FEET; THENCE NORTH 00°07'05" WEST, PARALLEL WITH THE NORTH AND SOUTH 114 LINE OF SAID SECTION 1, A DISTANCE OF 1525.00 FEET; THENCE NORTH 89°27'27" WEST. PARALLEL WITH THE SOUTH LINE OF SAID SECTION, A DISTANCE OF 834.66 FEET TO THE EASTERLY RIGHT -OF-WAY OF PRATT A VENUE; THENCE 30.28 FEET ALONG SAID RIGHT -OF-WAY AND THE ARC OF A CURVE TO LEFT WHOSE RADIUS IS 57.00 FEET AND WHOSE CHORD BEARS SOUTH 04°51'25" EAST, 29.92 FEET; THENCE CONTINUING ALONG SAID RIGHT -OF-WAY,72.24 FEET ALONG THE ARC OF A CURVE TO THE RIGHT WHOSE RADIUS IS 98.00 FEET AND WHOSE CHORD BEARS SOUTH 00°57'05" WEST, 70.61 FEET; THENCE CONTINUING ALONG SAID RIGHT-OF-WAY, 74.29 FEET ALONG THE ARC OF A CURVE TO THE LEFT WHOSE RADIUS IS 57.00 FEET AND WHOSE CHORD BEARS SOUTH 15°16'09" EAST, 69.14 FEET; THENCE SOUTH 37°23'39" WEST ALONG SAID RIGHT-OF-WAY. A DISTANCE OF 60.00 FEET; THENCE NORTH 89°52'55" EAST,109.30 FEET TO THE NORTH AND SOUTH 1/4 LINE OF SAID SECTION 1; THENCE SOUTH 00°07'05" EAST ALONG SAID 114 LINE, A DISTANCE OF 1311.31 FEET TO THE PLACE OF BEGINNING. CONTAINING 26.44 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO ANY EASEMENTS, RESTRICTIONS, OR CONDITIONS OF RECORD.

BOUNDARY NOTE

THE BOUNDARY WAS NOT PERFORMED DURING THIS SURVEY.

BEARING REFERENCE

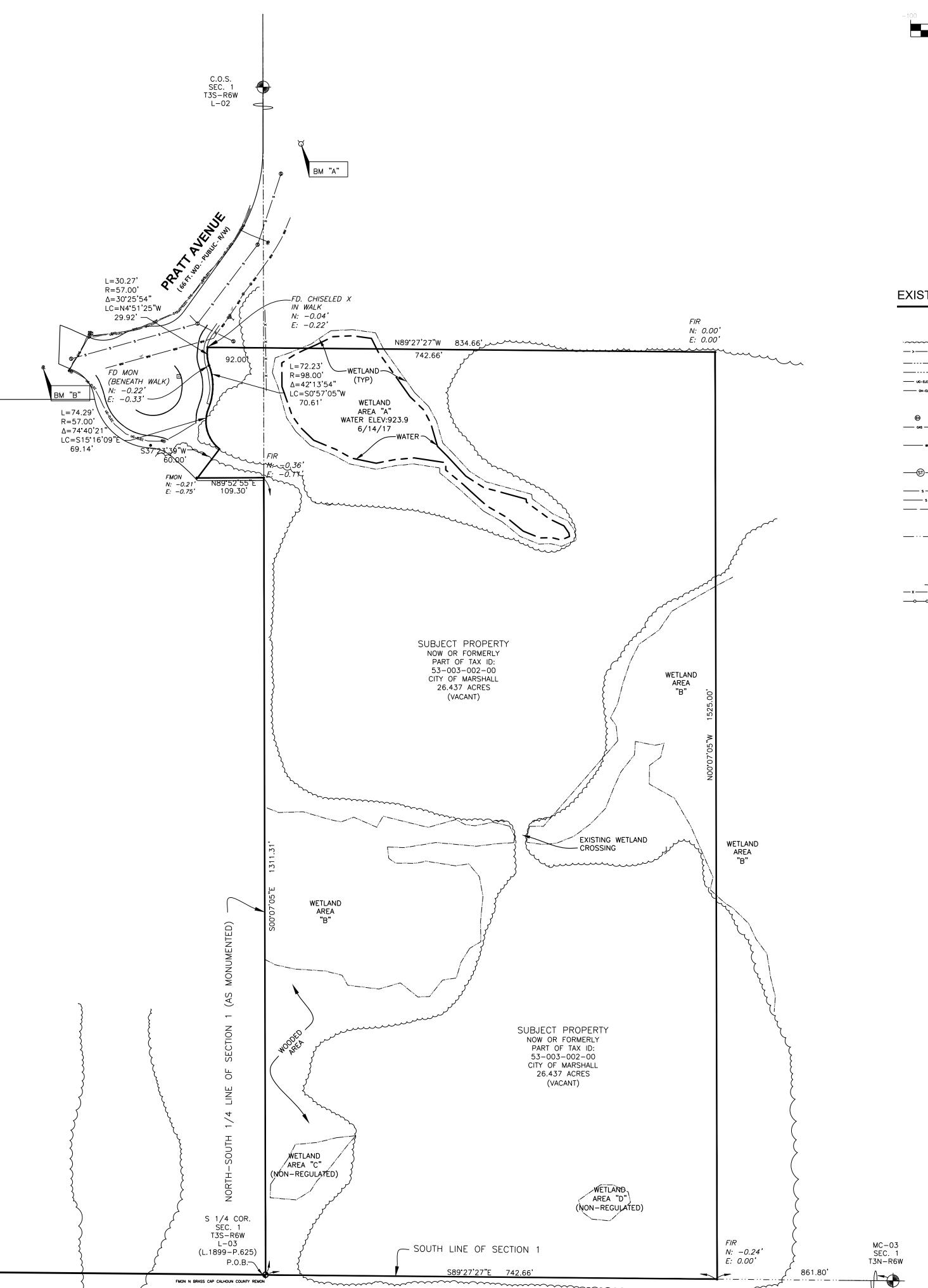
Bearings are based on Survey performed by: Crane Land Surveying, P.C., Job No.: 41101, Dated: 06/01/2017.

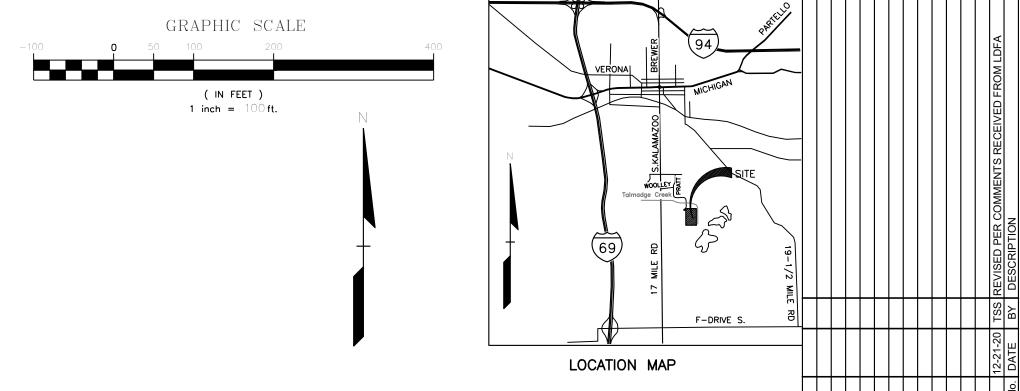
BENCHMARKS

REFERENCE CORS STATION USED TO ESTABLISH BASE CONTROL ONSITE: RTCM0015

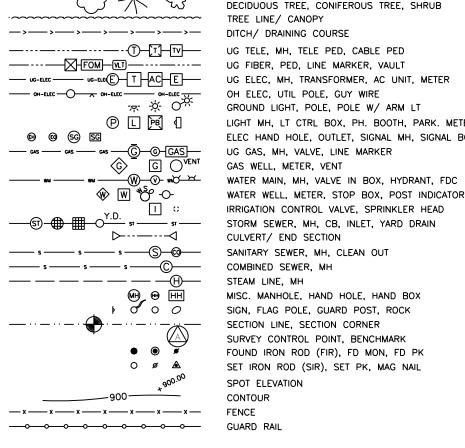
ARROW ON HYDRANT, 335'± NORTH OF SUBJECT'S NORTH PROPERTY LINE & 34'± EAST OF PRATT AVENUE. ELEV = 929.49

ARROW ON HYDRANT, 187'± WEST OF CUL-DE-SAC OF PRATT AVENUE. ELEV = 935.39





EXISTING LEGEND



DECIDUOUS TREE, CONIFEROUS TREE, SHRUB TREE LINE/ CANOPY GROUND LIGHT, POLE, POLE W/ ARM LT LIGHT MH, LT CTRL BOX, PH. BOOTH, PARK. METER ELEC HAND HOLE, OUTLET, SIGNAL MH, SIGNAL BOX UG GAS, MH, VALVE, LINE MARKER GAS WELL, METER, VENT WATER WELL, METER, STOP BOX, POST INDICATOR VALVE IRRIGATION CONTROL VALVE, SPRINKLER HEAD STORM SEWER, MH, CB, INLET, YARD DRAIN CULVERT/ END SECTION SANITARY SEWER, MH, CLEAN OUT COMBINED SEWER, MH STEAM LINE, MH MISC. MANHOLE, HAND HOLE, HAND BOX SIGN, FLAG POLE, GUARD POST, ROCK SECTION LINE, SECTION CORNER SURVEY CONTROL POINT, BENCHMARK FOUND IRON ROD (FIR), FD MON, FD PK O Ø 📤 SET IRON ROD (SIR), SET PK, MAG NAIL SPOT ELEVATION CONTOUR FENCE



CAUTION!! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE I EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AN ELEVATIONS PRIOR TO THE START OF CONSTRUCTION

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3 FULL WORKING DAYS BEFORE YOU DIG CALL

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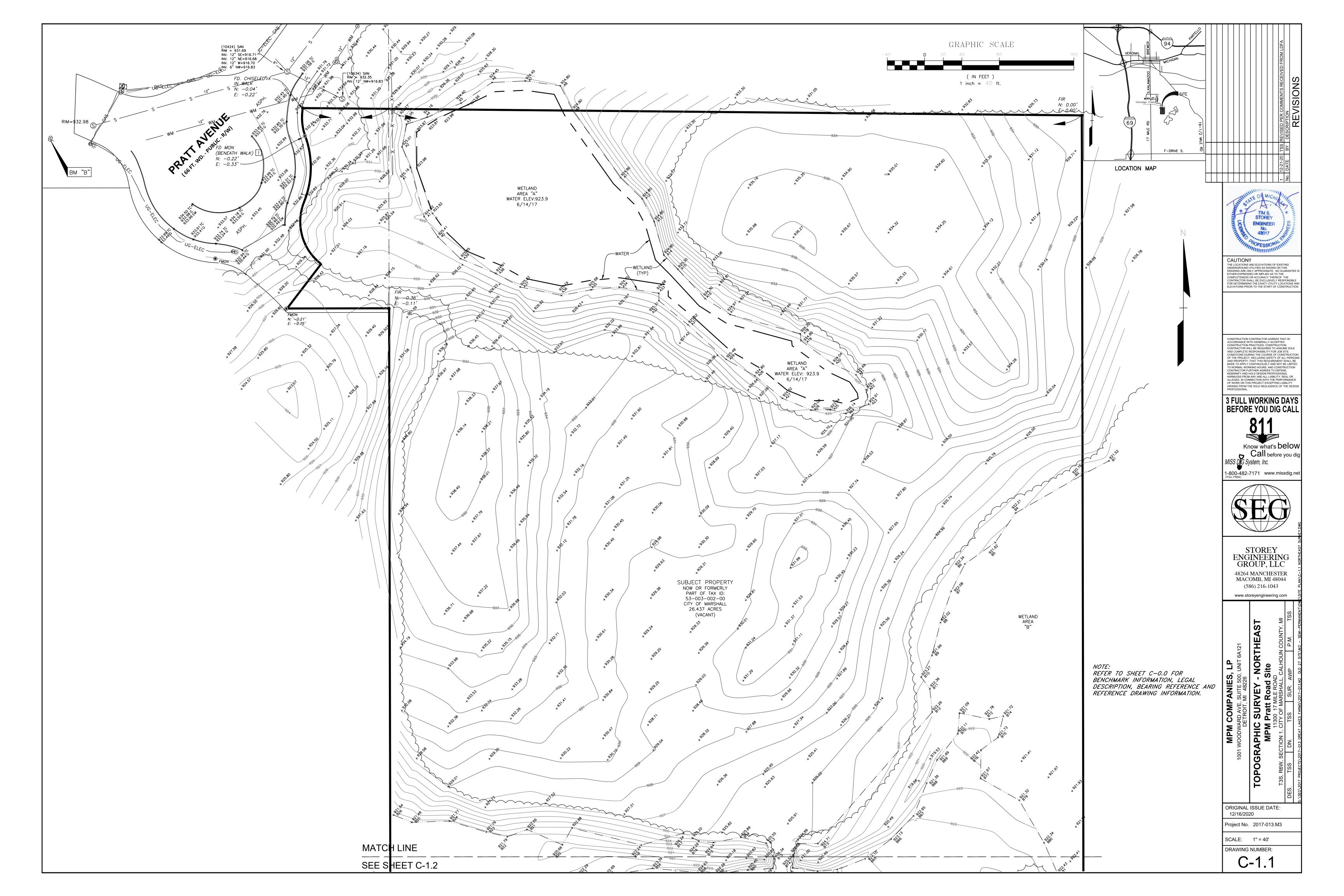
STOREY ENGINEERING GROUP, LLC

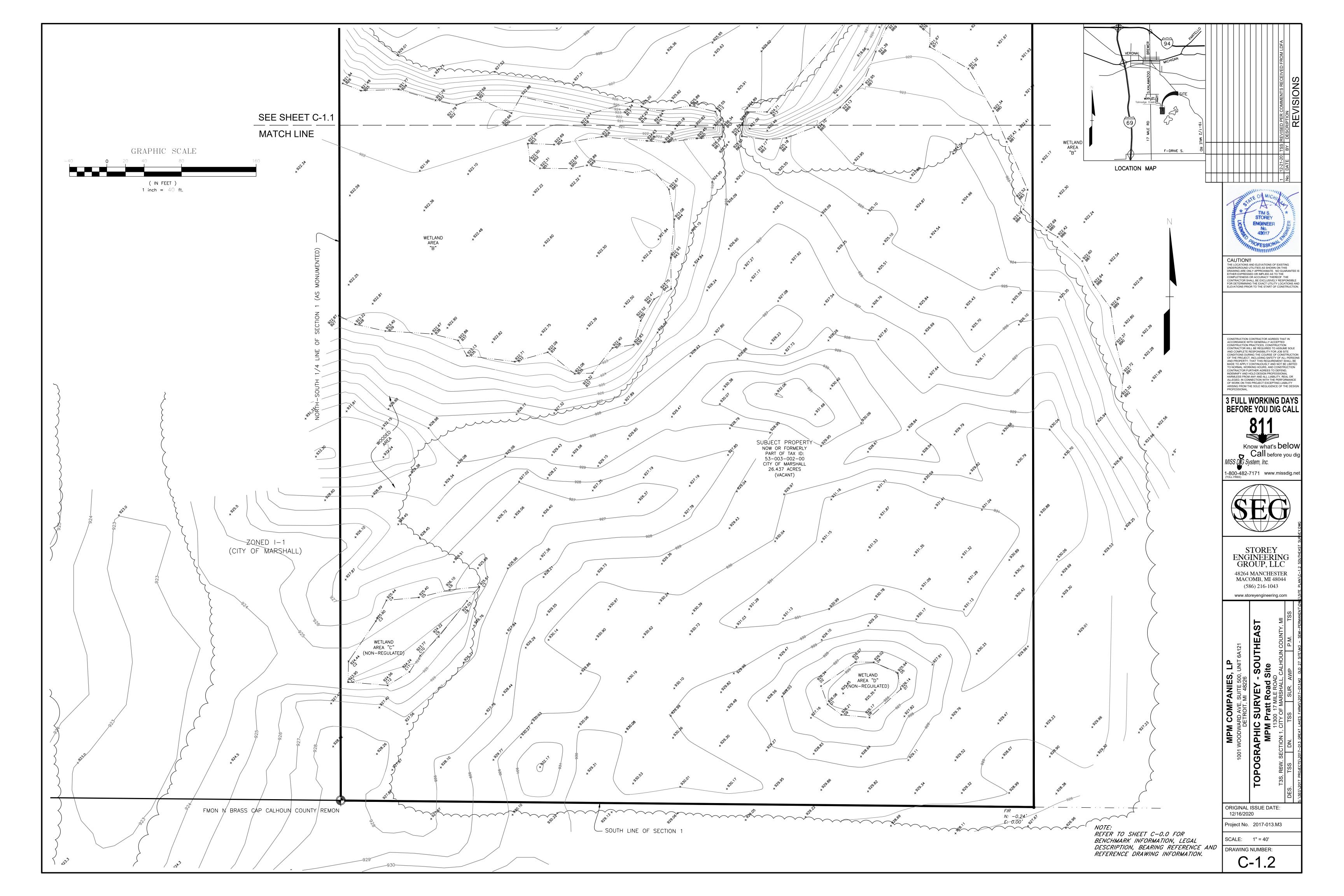
48264 MANCHESTER MACOMB, MI 48044 (586) 216-1043 www.storeyengineering.com

ORIGINAL ISSUE DATE: 12/16/2020 Project No. 2017-013.M3

SCALE: 1" = 100' DRAWING NUMBER:

C-1.0





LEGAL DESCRIPTION (AS PROVIDED)

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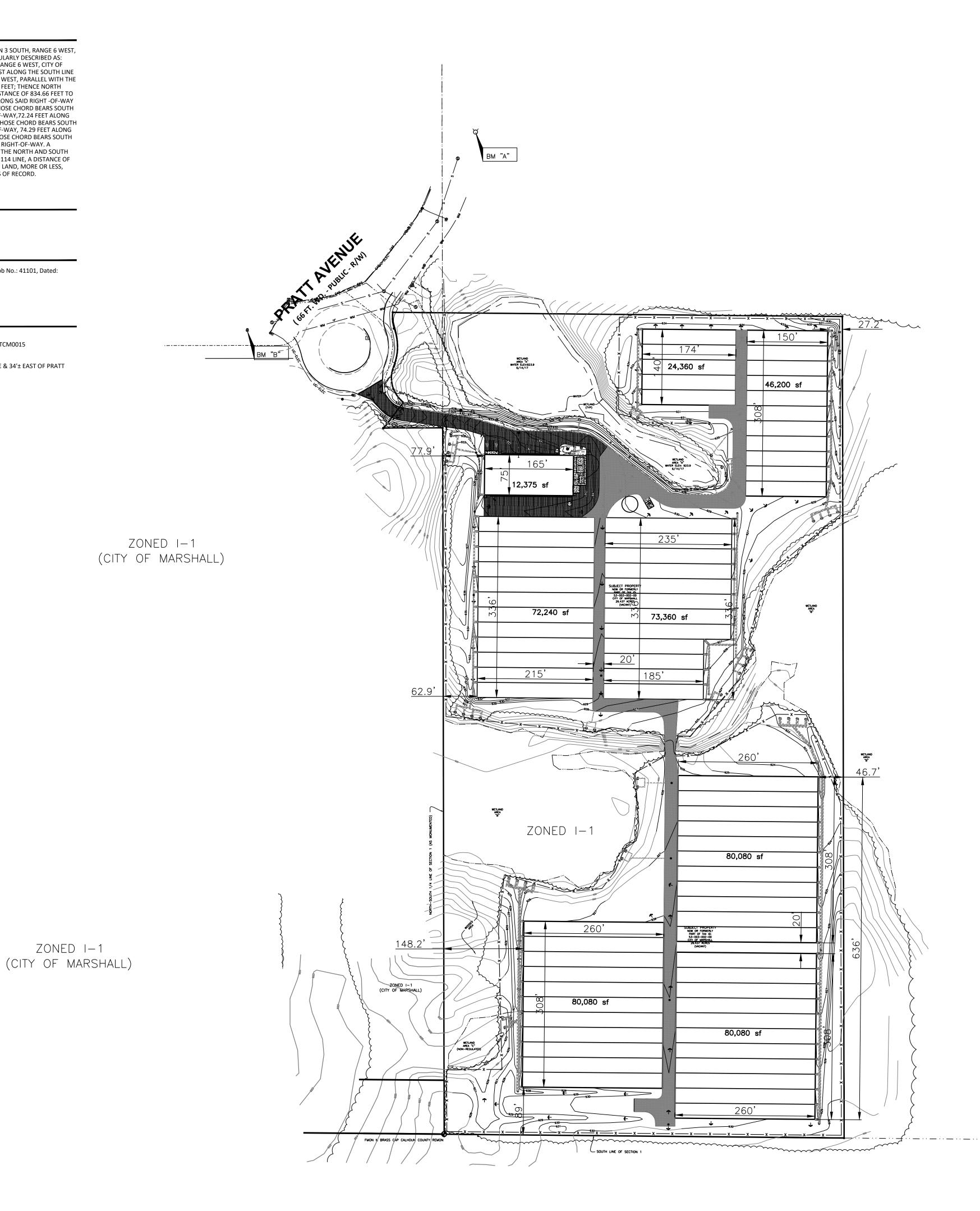
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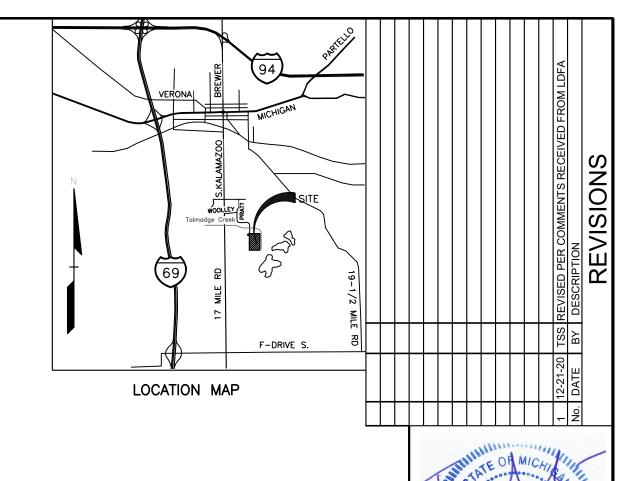
BENCHMARKS

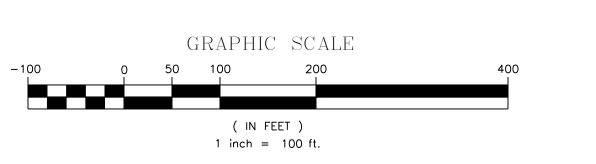
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ARROW ON HYDRANT, 187'± WEST OF CUL-DE-SAC OF PRATT AVENUE. ELEV = 935.39







SITE INFORMATION:

The zoning classification of the property is I-1 (RESEARCH & MANUFACTURING). The proposed use is a Greenhouse with on-site drying. Processing & packaging will be accommodated at the owners adjacent 17 Mile Road facility. The use is an allowable use.

2. The facility does not operate after dark. Therefore the only lighting proposed will be building—mounted security lighting and will not exceed maximum City lighting levels. Exterior lighting shall be shielded down and shall be directed away from off—site areas (1.0 foot candle maximum at

3. Any signs shall meet the requirements of the zoning Ordinance for the City of Marshall. Separate permits are required for sign installation and shall be applied for separately.

4. All roof and ground mounted mechanical equipment shall be screened from adjacent roads and properties.

5. The building shall be designed & constructed in accordance with all applicable fire codes. REFER TO ARCHITECTURAL FOR FIRE SAFETY/CODE REQUIREMENTS. A KNOX BOX WILL BE PROVIDED AT THE

GATE FOR USE BY THE FIRE DEPARTMENT IN CASE OF EMERGENCY TO ACCESS THE SITE AND BUILDING. 6. Fire lanes shall be designated by the Fire Code Official, and shall be conspicuously posted on

both sides of the fire lane, with fire lane signs spaced not more than 100 feet apart, and in conformance with the MMUTCD. 7. Hours of operation will be during daylight hours only, 6am to 8pm, 7 days a week during the

summer growing season only. The facility will be closed during the winter months (November through March). For security reasons there will be no access allowed by the general public. Only employees, delivery and security personnel will be allowed on the property. 8. THERE WILL BE NO COMPOSTING ON SITE. COMPOSTABLE MATERIALS WILL BE PICKED UP BY A

WASTE RECYCLING COMPANY.

9. Maximum allowable Building height is 45'. Maximum proposed Building height is 18'.

10. PROPOSED BUILDING AREA = 12,375 SF.

11. GROSS PARCEL AREA = 26.44 AC = 1,151,582 SF 12. Proposed % lot coverage by all buildings is 12,375 / 1,151,582 = 1.10%

13. All pedestrian walkways and required egress doors shall comply with Michigan Barrier Free Design criteria.

14. Parking Required (per City of Marshall Ordinance) = 5 plus 1 space/employee in largest shift = 5 + 20 Employees = 25 (25 spaces required).

15. Parking Provided: 29 - 9' x 20' Spaces

2 - 8' x 20' Barrier Free Spaces

31 Total Parking Spaces provided

17. Storm water is to be infiltrated into the ground in infiltration trenches/drain tile distributed throughout the property with overflows to the low areas of the property, which is intended to mimic undeveloped conditions.

18. Required setbacks (per City of Marshall Ordinance): Front Building Setback = 50 feet

16. Max Number of Employees in any one shift = 20

Side Yard Building Setback = 20 feet (50 feet total of two) Rear Building Setback = 25 feet

19. Locations of all ground signs are indicated on sheet C-3.1 (none are proposed).

20. Open burning is not permitted including the burning of trash, debris or land clearing materials.

21. SITE SHALL BE PROVIDED WITH SECURITY CAMERAS MONITORED 24 HOURS A DAY CONTINUOUSLY.

22. TEMPORARY ELECTRICAL SERVICE DROP DURING CONSTRUCTION WILL BE NEEDED.



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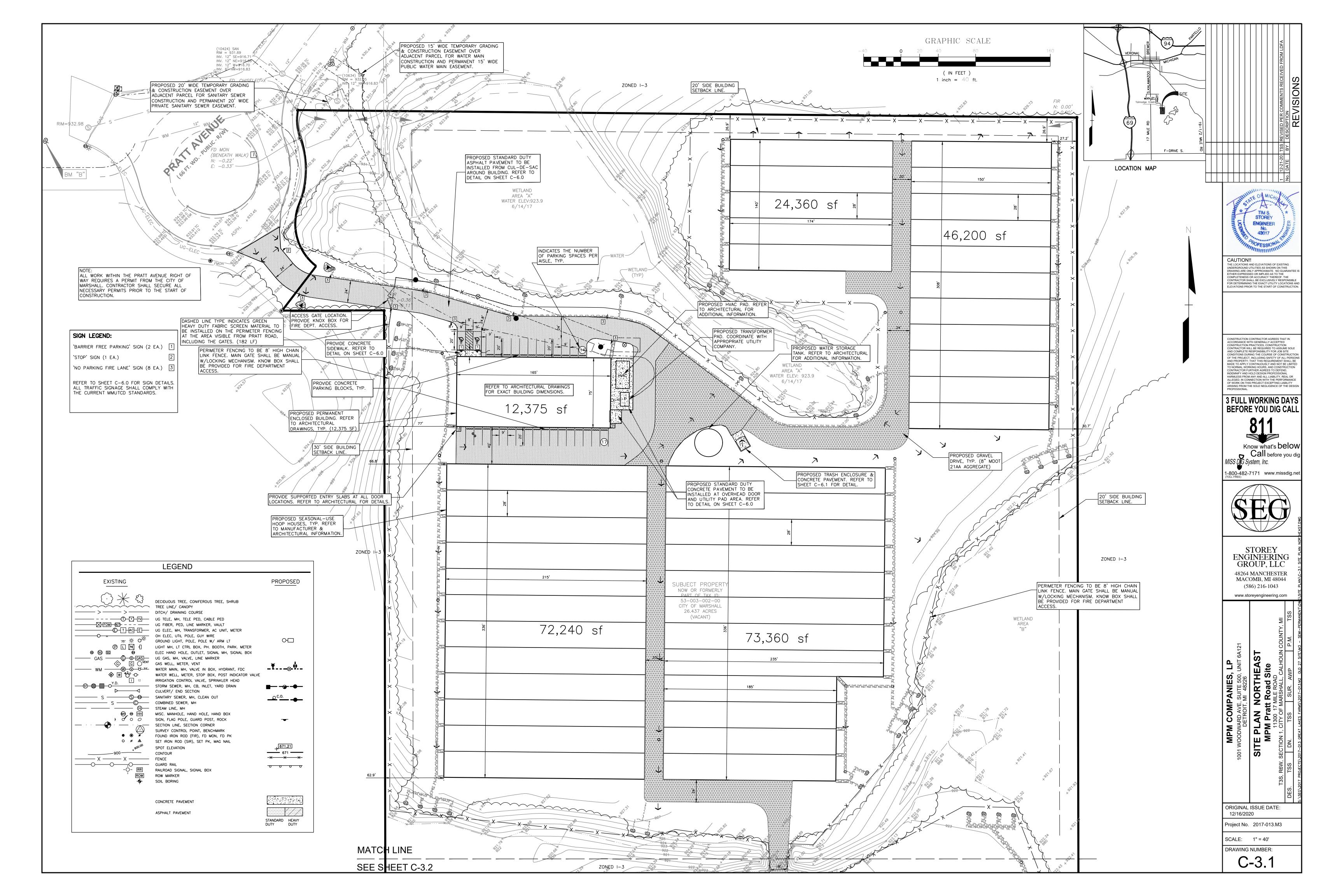
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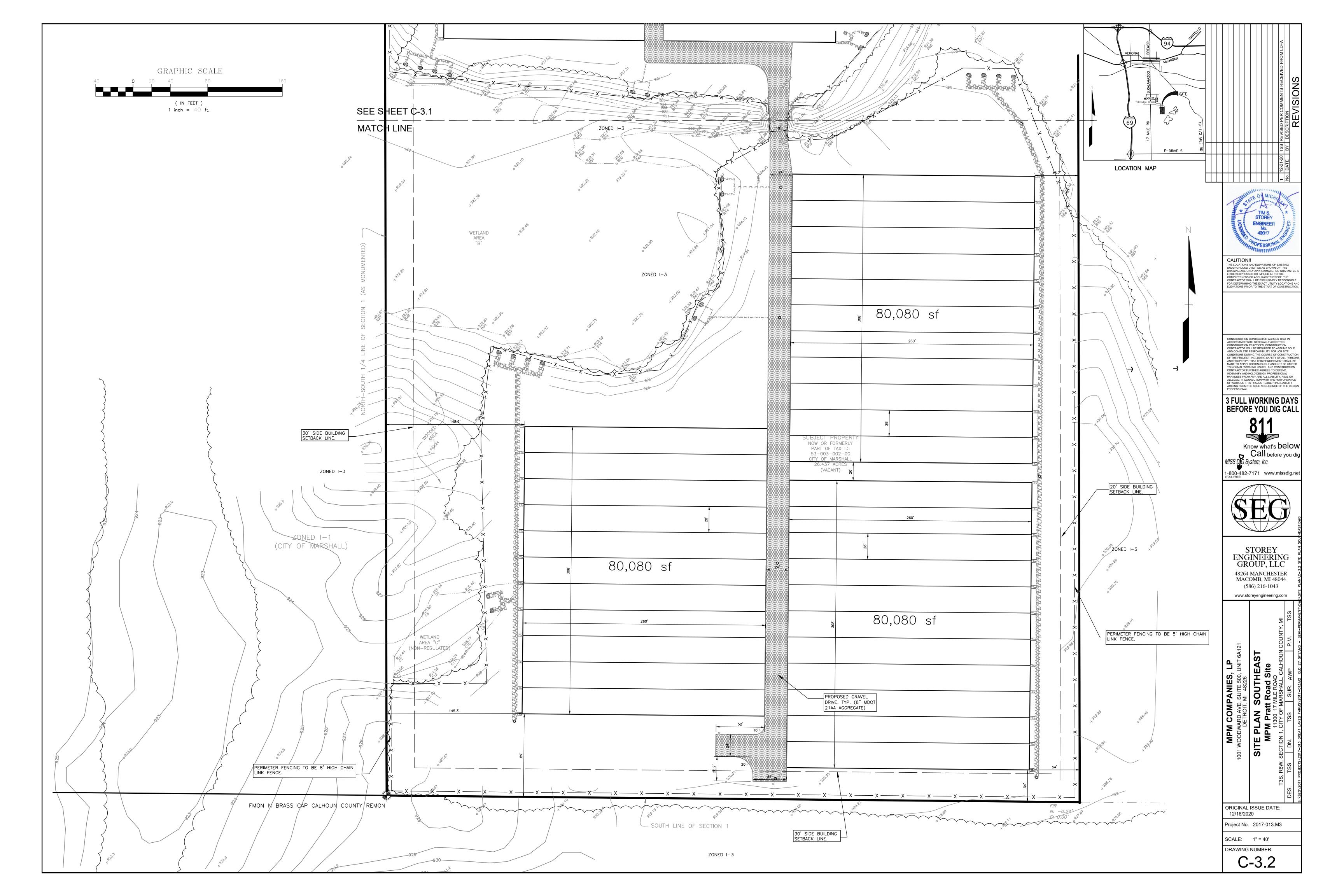
MPM COMPANIES, LP

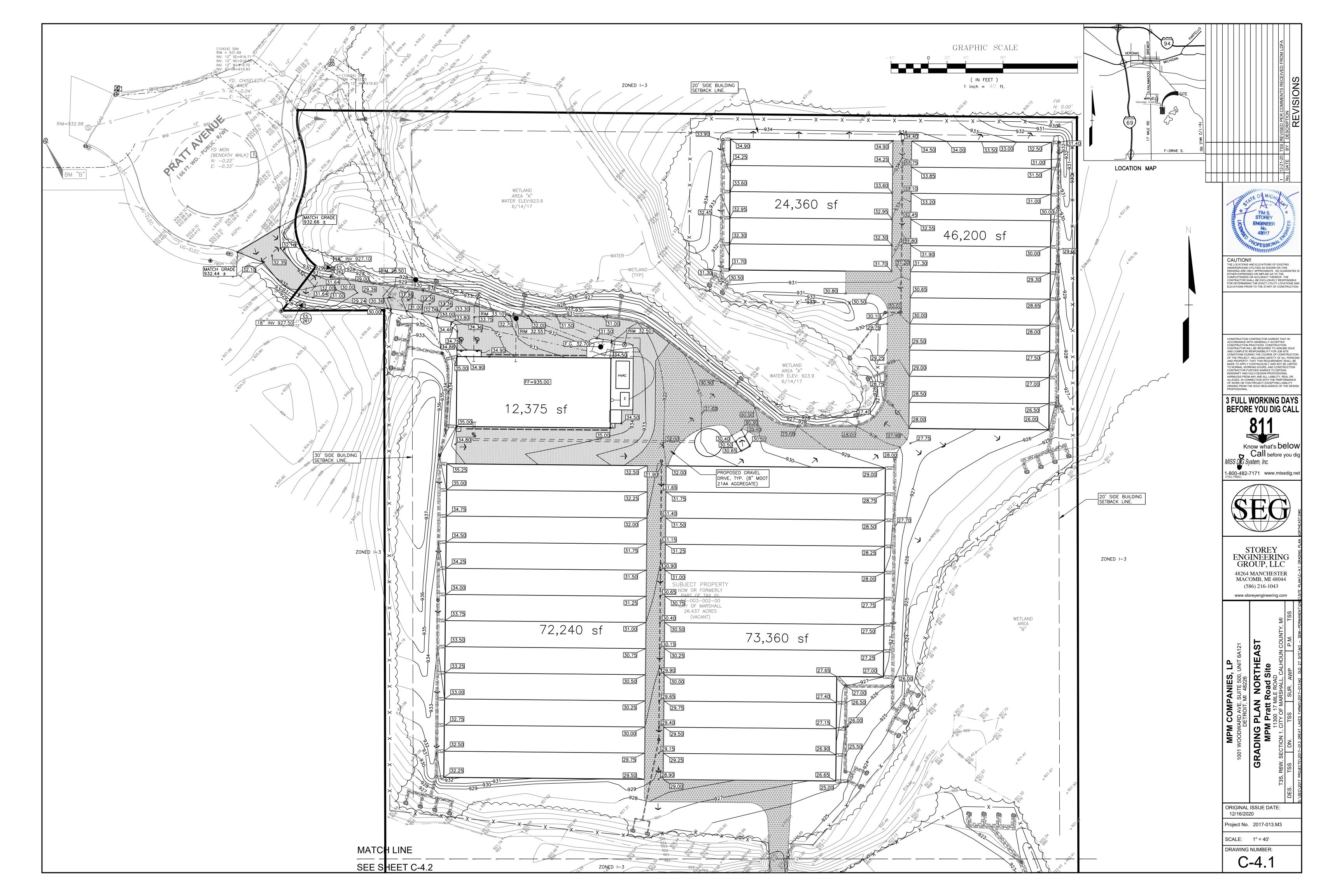
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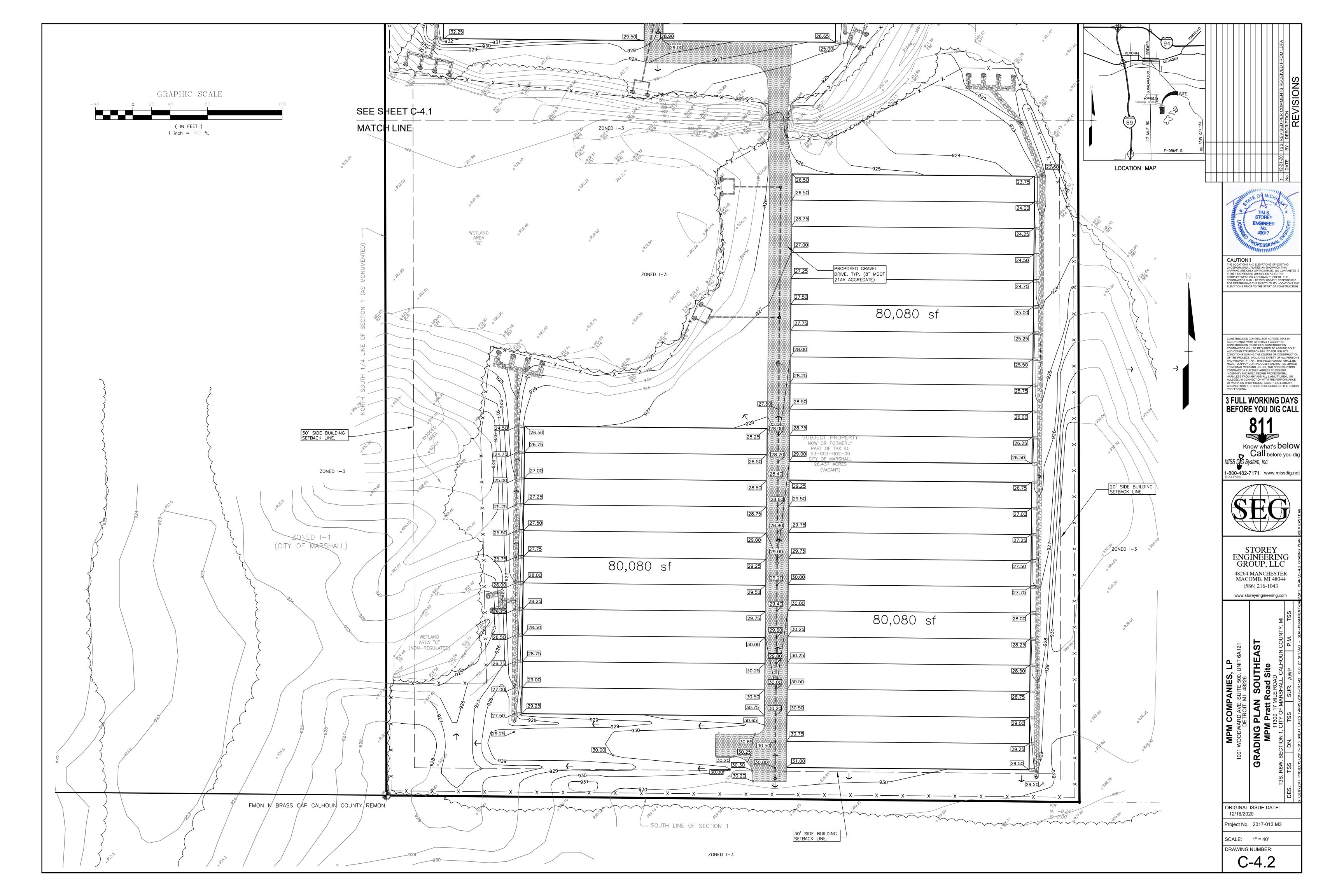
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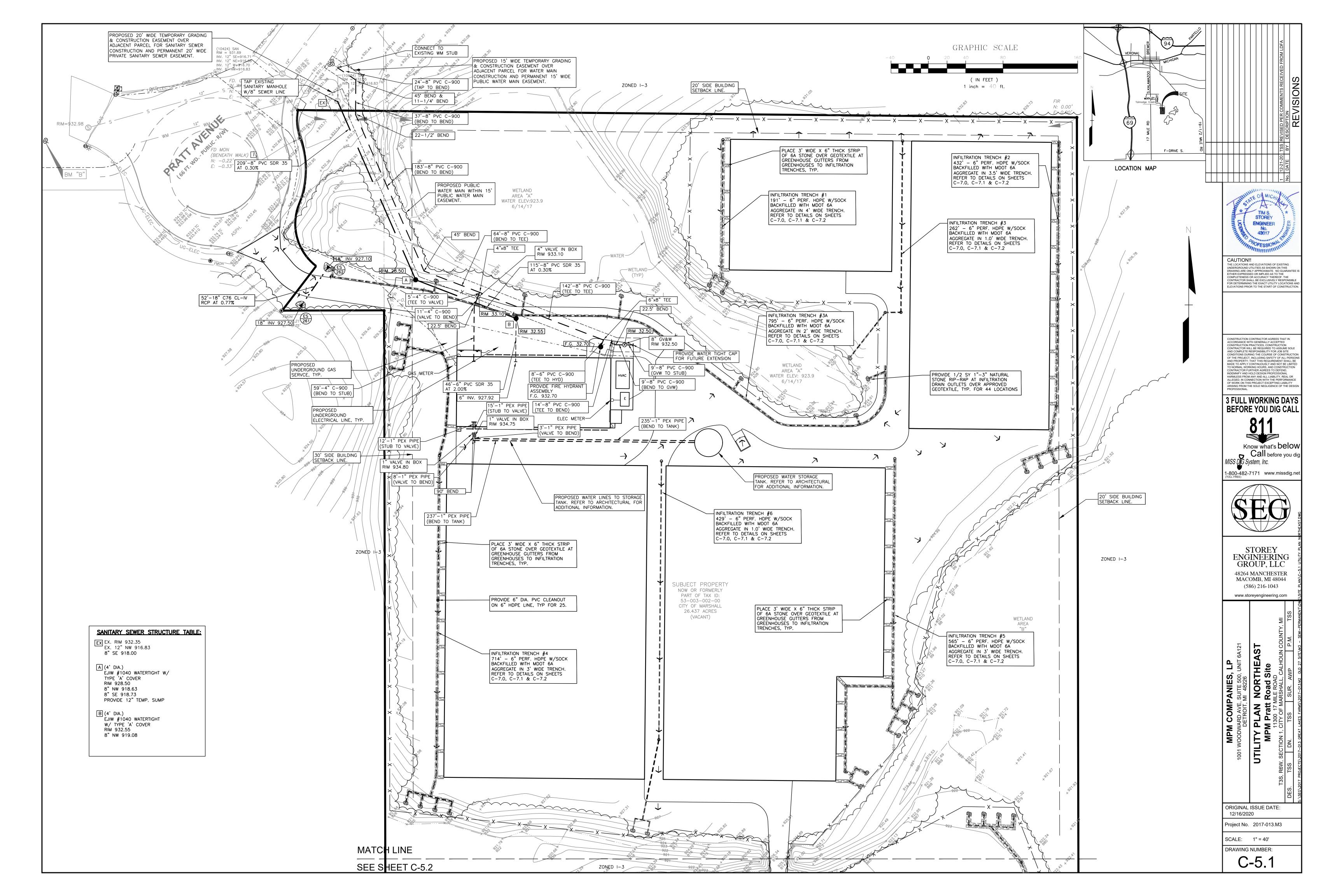
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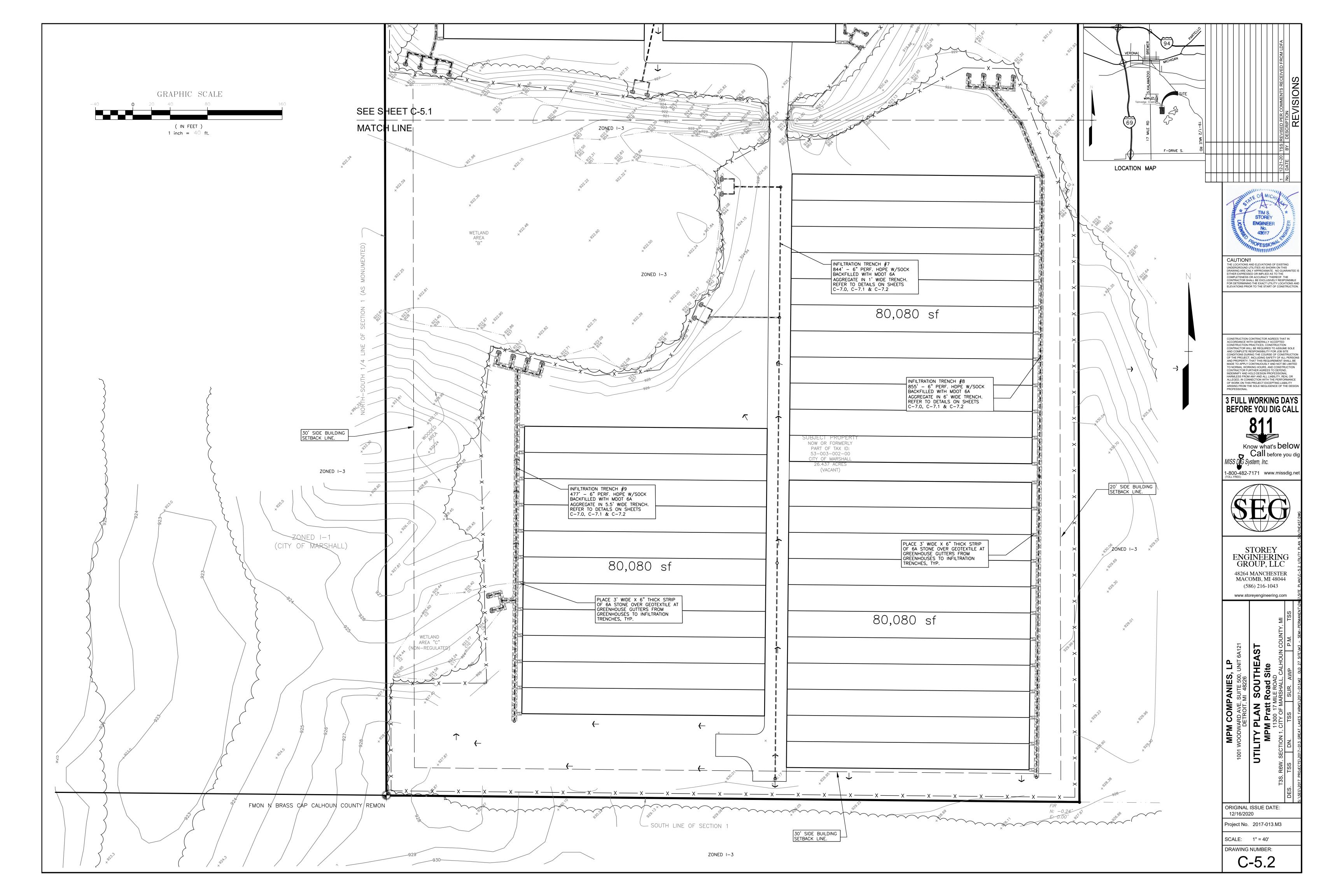




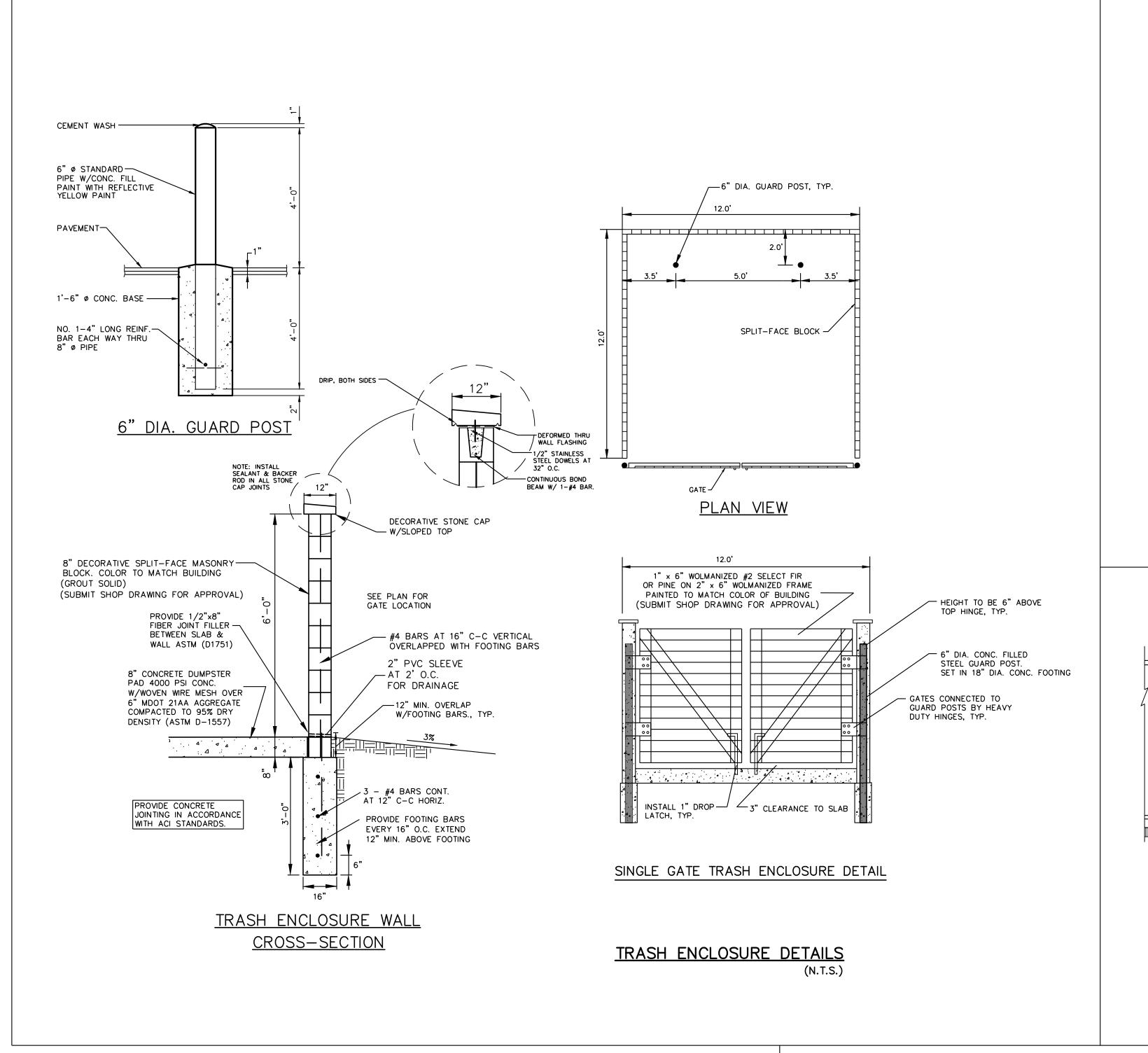


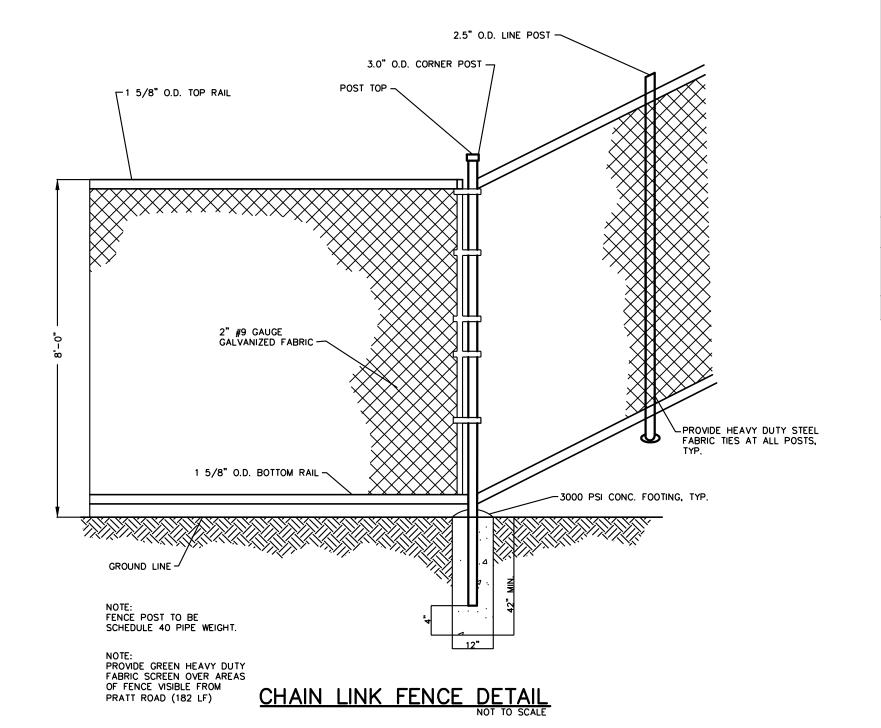


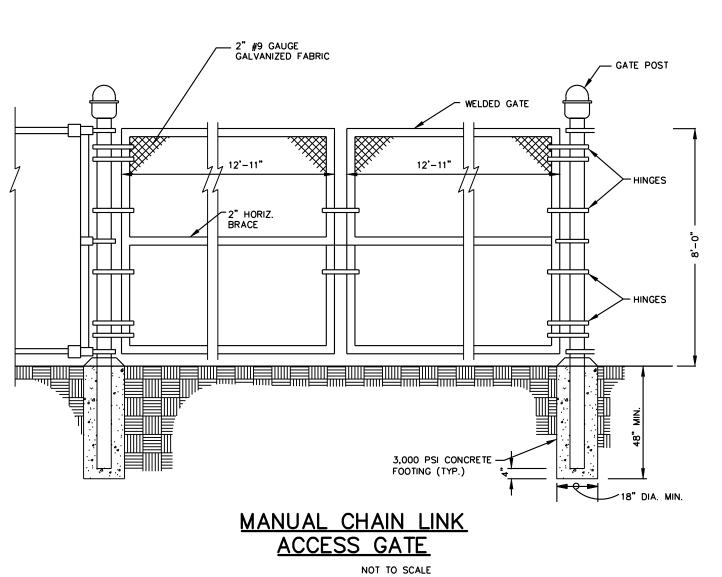


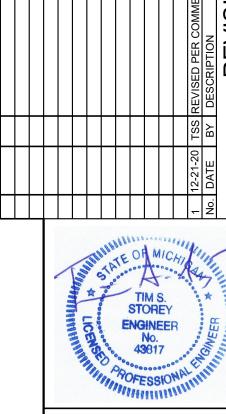


GENERAL NOTES: PROVIDE DOMED-ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS CEMENT WASH AND SPECIFICATIONS OF THE CITY OF MARSHALL & CALHOUN COUNTY WATER RESOURCE ALUMINUM .08" THICK MIN. 2. ALL NECESSARY PERMITS, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE SHAPE AND SIZE VARIES - 3" WIDE WHITE PROVIDE 6" PROVIDE 6"x6" CONTRACTOR. THE OWNER SHALL PAY FOR ALL MUNICIPAL INSPECTION FEES. " WIDE WHITE PAINT ----PAINTED SYMBOL ON DIAMETER, ASTM STRIPED BORDER W1.4xW1.4 W.W.F. BLUE BACKGROUND GRADE B 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF 3/8" DRILLED HOLES BOLLARD POST. CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THE JOB. PAINTED BACKGROUND PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG — 8" M.D.O.T. 35Р, 6АА. (1-800-482-7171) TO VERIFY THE LOCATION OF ANY EXISTING UNDERGROUND PAVEMENT-UTILITIES AND SHALL NOTIFY OTHER REPRESENTATIVES OF OTHER UTILITIES IN THE SIGN POST VICINITY OF THE WORK GALVANIZED STEEL CHANNEL POST ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR. MANHOLE, CATCH BASIN, GATE VALVES AND HYDRANT FINISH GRADES MUST BE 1'-6" Ø CONC. BASE -CLOSELY CHECKED AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS NO. 1-4" LONG REINF.-CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OR BAR EACH WAY THRU TOP OF CURB OTHER UNWANTED DEBRIS AT THE OWNER'S DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND GRADE 8" ø PIPE FLOORS. BURNING OF TRASH, STUMPS OR OTHER DEBRIS SHALL NOT BE PERMITTED. 8" MDOT 21AA AGGREGATE — BOLLARDS ALONG FRONT OF 8. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, LIGHTS AND TRAFFIC CONTROL -SUBGRADE COMPACTED BASE COURSE COMPACTED BUILDING SHALL BE PROVIDED WITH DEVICES TO PROTECT THE WORK AND SAFELY CONTAIN TRAFFIC IN ACCORDANCE WITH "MMUTCD". TO 95% MAXIMUM TO 95% MAXIMUM DRY DENSITY DECORATIVE CONCRETE BUMPER ASTM D-1557 (MODIFIED PROCTOR) DENSITY ASTM D-1557 (MODIFIED PROCTOR) ALL EXCAVATIONS SHALL BE SLOPED, SHORED OR BRACED IN ACCORDANCE WITH MI-OSHA REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATELY CONSTRUCTED AND BRACED POST SLEEVE OVER POST, REFER 24" TO ARCHITECTURAL FOR ADDITIONAL' INFORMATION. SHORING SYSTEM FOR EMPLOYEES WORKING IN AN EXCAVATION THAT MAY EXPOSE EMPLOYEES TO **HEAVY DUTY CONCRETE** THE DANGER OF MOVING GROUND. BOLLARDS IN TRASH ENCLOSURE SHALL BE PAINTED 10. ALL REFERENCES TO M.D.O.T. SPECIFICATIONS ARE TO BE IN ACCORDANCE WITH THE LATEST **DETAIL** SIGN AND POST INSTALLATION WITH REFLECTIVE YELLOW PAINT OR PROVIDED WITH EDITION OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. PARKING SPACE YELLOW LDPE BUMPER POST SLEEVE. IN LANDSCAPED AREAS **PAVING NOTES:** 6" DIA. BOLLARD DETAIL ENGINEER STANDARD BARRIER FREE SYMBOL 1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL AND MDOT, WHERE APPLICABLE. NOTE: RIP-RAP MATERIALS SHALL CONSIST OF FOR PARKING SPACE MIN. 6" DIAMETER SOUND, TOUGH, DURABLE FRACTURED ROCK, FREE FROM DECOMPRESSED IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING END SECTION ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION. STONES OR OTHER DEFECTS IMPAIRING IT'S 0.5x PIPE DIA. DURABILITY. BROKEN CONC. OR ROUNDED STONES ARE NOT ACCEPTABLE. RIP-RAP SHALL BE **CAUTION!!** SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE OR DETERMINANC THE EXACT LITTLY LOCATIONS A (1' MIN.) 6" PLACED ON WOVEN GEOTEXTILE FABRIC. R7-8 (12"x18") THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL SECTIONS OR BELOW SUBGRADE IN CUT GEOTEXTILE FABRIC (WOVEN) SECTIONS, WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING. BEND #6 REBAR AS SHOWN 2 REQ'D R DETERMINING THE EXACT UTILITY LOCATIONS EVATIONS PRIOR TO THE START OF CONSTRUC SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SECTION A-A - 3'-#6 REBAR W/EYE LOOP -RIP-RAP, EXTEND 3x PIPE DIA. SHALL BE BACKFILLED WITH SAND OR OTHER SIMILAR APPROVED MATERIAL. BACKFILL SHALL BE **VARIES** GROUND ANCHOR 2 REQUIRED COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D-1557) UNLESS OTHERWISE BORDER - RED END VIEW 5. BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS. 6. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED BACKGROUND - WHITE-REFLECTORIZED INCIDENTAL TO THE JOB. 17 | | | | | | | | PROFILE VIEW CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. 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BOTH WAYS, WELDED EXTEND 3" (BOTH SIDES) BEYOND OPENING AND BEND TO FIT SIDES GRAVEL DRIVEWAY DETAIL 3. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF PLAN VIEW INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) BAR GRATE DETAIL 3 FULL WORKING DAYS RED ON WHITE REFLECTORIZED PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED 7'-0" MOUNTING HEIGHT fc = 3500 PSI (28 DAYS) TO 90% OR BETTER. ACCESSIBLE SECTION B-B R7-2 (MODIFIED) **BEFORE YOU DIG CALL** 4. WHENEVER EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER NO PARKING SIGN DETAIL PLACE 1/2" EXPANSION JOINTS AT END SECTION WITH FOOTING & RIP-RAP TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE 40' INTERVALS (MAX.) GREEN LETTERING & BORDER -PROVIDE 6"x6" ON WHITE REFLECTORIZED BACKGROUND 5. EXACT GRADES AND DEPTHS OF UTILITIES ARE TO BE CHECKED CLOSELY WITH THE FIELD 4" CONCRETE W1.4xW1.4 W.W.F. (7'-0" MOUNTING HEIGHT) ENGINEER PRIOR TO INSTALLATION. — MDOT 35P, 3500 PSI CONC. Know what's **below** VARIES - SEE PLAN STORM SEWER NOTES: Call before you dig BARRIER FREE PARKING — 6" M.D.O.T. 35Р, 6АА. 1. ALL STORM SEWER SHALL BE INSTALLED ON STANDARD BEDDING OR BETTER. SIGN DETAIL MIN. 1% MAX 2% CROSS SLOPE 2. JOINTS FOR ALL STORM SEWER 12" AND LARGER SHALL BE PREMIUM JOINT TONGUE AND NOT TO SCALE 1-800-482-7171 www.missdig.net GROOVE WITH RUBBER GASKETS, UNLESS SPECIFIED OTHERWISE. 3. ALL STORM SEWER 12" AND LARGER SHALL BE RCP CLASS IV OR HDPE ADS N-12 OR APPROVED EQUAL, UNLESS OTHERWISE NOTED. 4. CULVERTS SHALL BE ALUMINIZED TYPE II CSP (OR HDPE ADS N-12) WITH BANDED JOINTS MEETING MANUFACTURERS SPECS - SUBGRADE COMPACTED TO 4" MIN. COMPACTED — 95% MAXIMUM DENSITY SAND BASE 5. STORM LEADS SHALL BE PVC SCH 40 WITH GLUED JOINTS BEDDED ON SAND OR STONE AGGREGATE. PLACE 1/4" CONTRACTION JOINTS AT 6' INTERVALS 2.0" M.D.O.T. #13A 6" MDOT 21AA AGGREGATE — **WATER MAIN NOTES:** BITUMINOUS WEARING COURSE SUBGRADE COMPACTED BASE COURSE COMPACTED ON-SITE CONCRETE SIDEWALK BOND COAT -TO 95% MAXIMUM TO 95% MAXIMUM DRY DENSITY . ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6.0' BELOW FINISH DENSITY ASTM D-1557 (MODIFIED PROCTOR) **STOREY** 2.0" M.D.O.T. #13A ASTM D-1557 (MODIFIED PROCTOR) GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR **ENGINEERING** BITUMINOUS LÉVELING COURSE SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5°) STANDARD DUTY CONCRETE GROUP, LLC DEGREE BENDS, PROPERLY ANCHORED. MAINTAIN MIN. 18" VERTICAL SEPARATION WHITE ON RED REFLECTORIZED BETWEEN WATER AND SEWER LINES. 48264 MANCHESTER 7'-0" MOUNTING HEIGHT **DETAIL** MACOMB, MI 48044 2. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT 6" MDOT 21AA AGGREGATE BASE COURSE (586) 216-1043 COMPACTED IN TWO (2) LIFTS. BASE COURSE SHALL BE COMPACTED TO 95% MAX DENSITY STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL. 2 STOP SIGN DETAIL www.storeyengineering.com 3. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE (ASTM D-1557) ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER COMPACT UPPER 10" OF --TRENCHES TO BE COMPACTED TO 90% OR BETTER. EXIST. SUBGRADE OR FILL TO MIN 95% DRY DENSITY 4. ALL TEE'S, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB. (ASTM D-1557) 5. PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER AS INDICATED ON PLANS MAINS UNTIL TESTING IS SATISFACTORILY COMPLETED. 6. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATER MAIN AND -3500 P.S.I. CONC. STANDARD DUTY ASPHALT ANY SANITARY SEWER OR STRUCTURE. ASPHALT PAVING CONTRACTION 7. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 52 OR PVC C-900. JOINT CONT. **PAVEMENT SECTION** 8. REFER TO THE CITY OF MARSHALL STANDARD SPECIFICATIONS AND DETAILS FOR WATER MAIN CONSTRUCTION FOR ADDITIONAL INFORMATION. 6 x 6 x 1.4 x 1.4 — WELDED WIRE MESH SANITARY SEWER NOTES: $\Box_{\sigma} O_{\sigma} \Box$. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL AND CALHOUN COUNTY. MIN. 4" COMPACTED — SAND OTE PM 2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH MIGHT AFFECT THIS JOB. 3. ALL TRENCHES UNDER OR WITHIN THE 45° ZONE OF INFLUENCE LINE OR 5 FEET OF EXISTING AND/OR PROPOSED PAVEMENT SHALL BE BACKFILLED WITH SAND AND 2 - #4 RE-ROD — CONTINUOUS COMPACTED TO 95% OF MAXIMUM DENSITY PER ASTM D-1557. 4. ALL SEWERS SHALL BE PLACED ON MIN. 4" SAND OR GRAVEL BEDDING WHICH SHALL UNDISTURBED |-EXTEND TO MIN. 12" OVER TOP OF THE PIPE AND SHALL BE COMPACTED IN MIN. 6" 5. A MINIMUM OF 18" OF CLEARANCE MUST BE MAINTAINED AT ALL CROSSINGS CONTRACTION JOINTS TO BE 2 1/2" DEEP. TRANSVERSE CONTRACTION JOINTS SPACED AT 5' INTERVALS (TOOLED). EXPANSION JOINTS TO BE BETWEEN SANITARY, WATER MAIN AND STORM SEWER, UNLESS PROVIDED WITH A CONCRETE CRADLE 1/2" PREMOLDED FILLER, SPACED A MAXIMUM OF 30' APART. ORIGINAL ISSUE DATE: 6. NO SANITARY SEWER INSTALLATION OR PORTION THEREOF SHALL HAVE INFILTRATION EXCEEDING 200 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOUR INTEGRAL CURB AND WALK 12/16/2020 PERIOD. JOINTS FOR P.V.C. SOLID WALL OR TRUSS PIPE SHALL BE ELASTOMETRIC (RUBBER GASKET) MEETING A.S.T.M. D-3212. Project No. 2017-013.M3 7. SANITARY SEWER MAIN AND LEADS 8" DIAMATER & SMALLER SHALL BE CONSTRUCTED SCALE: 1" = 30' OF P.V.C. SOLID WALL PIPE CONFORMING TO ASTM D-3034, SDR 35. 8. SEE CITY OF MARSHALL STANDARD SPECIFICATIONS & DETAILS FOR ADDITIONAL DRAWING NUMBER: INFORMATION. C-6.0









CAUTION!!

THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS BEFORE YOU DIG CALL

Know what's below Call before you dig MISS DG System, Inc.

1-800-482-7171 www.missdig.net



STOREY ENGINEERING GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044 (586) 216-1043

MPM COMPANIES, LP

1001 WOODWARD AVE, SUITE 500, UNIT 6A121
DETROIT, MI 48226

DETAILS

MPM Pratt Road Site

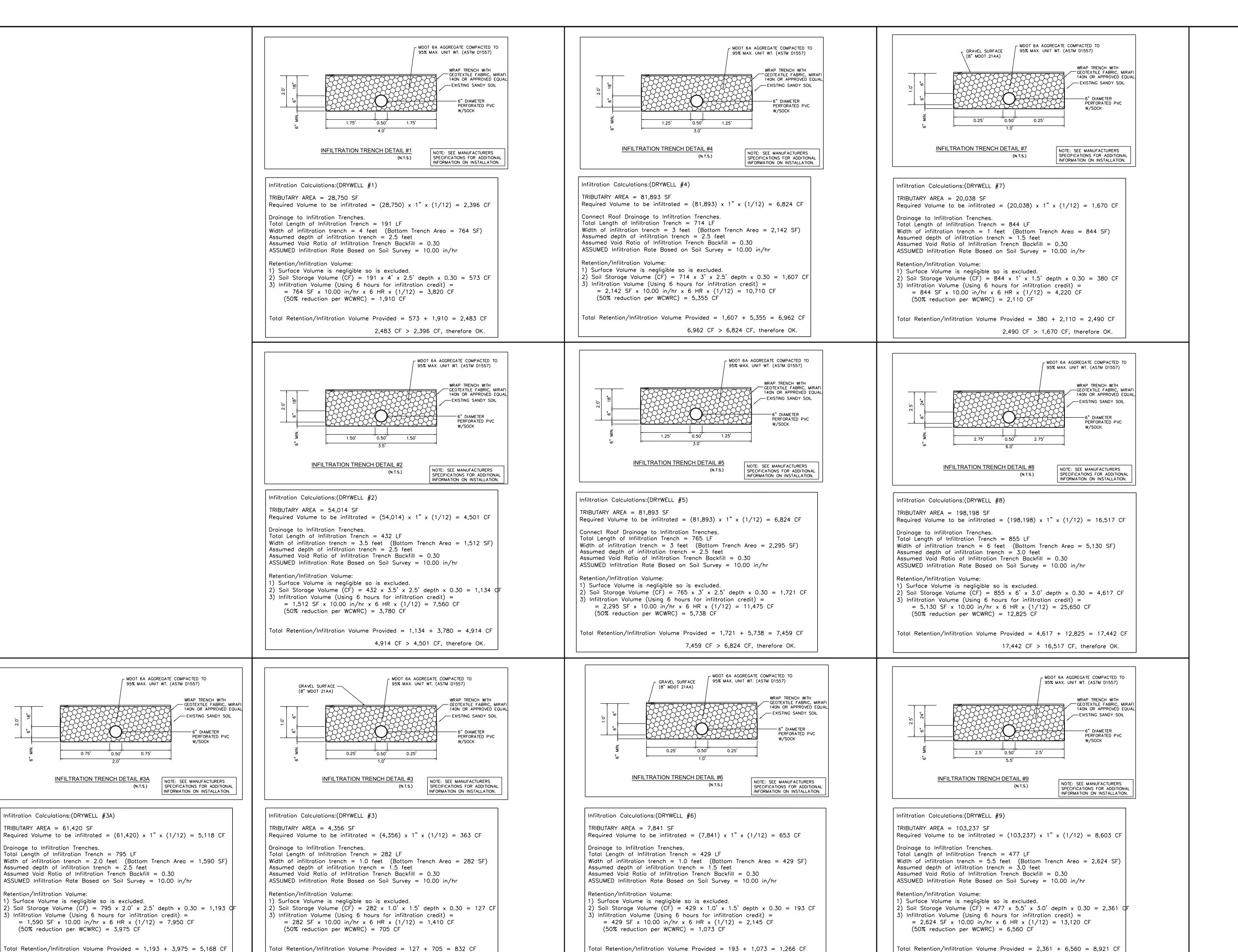
11300 17 MILE ROAD

6W, SECTION 1, CITY OF MARSHALL, CALHOUN COUNTY, MI

ORIGINAL ISSUE DATE: 12/16/2020
Project No. 2017-013.M3

SCALE: 1" = 30'
DRAWING NUMBER:

C-6.1



1,266 CF > 653 CF, therefore OK.

INFILTRATION TRENCH DETAIL #3A

Infiltration Calculations:(DRYWELL #3A)

Total Length of Infiltration Trench = 795 LF

Assumed depth of infiltration trench = 2.5 feet

1) Surface Volume is negligible so is excluded.

(50% reduction per WCWRC) = 3,975 CF

5,168 CF > 5,118 CF, therefore OK.

832 CF > 363 CF, therefore OK.

Assumed Void Ratio of Infiltration Trench Backfill = 0.30

TRIBUTARY AREA = 61,420 SF

Drainage to Infiltration Trenches.

Retention/Infiltration Volume:



CAUTION!! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS UNDERGROUND UTILITIES AS SHOWN ON THIS DEFINED AS A SHOWN ON THIS DEFINED AS A SHOWN ON THIS DEFINED AS A SHOWN OF THE COMPLETENESS OR ACCURACY THEREOF. THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION

NSTRUCTION CONTRACTOR AGREES THAT IN CONSTRUCTION CONTRACTOR AGREES THAT IN ACCOPPADNCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSON AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL

3 FULL WORKING DAYS **BEFORE YOU DIG CALL**

Know what's **below** Call before you diç MISS DIG System, Inc.

1-800-482-7171 www.missdig.ne



STOREY ENGINEERING GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044

(586) 216-1043 www.storeyengineering.com

CALCULATIONS ratt Road Site

DRAINAGE MPM Pr

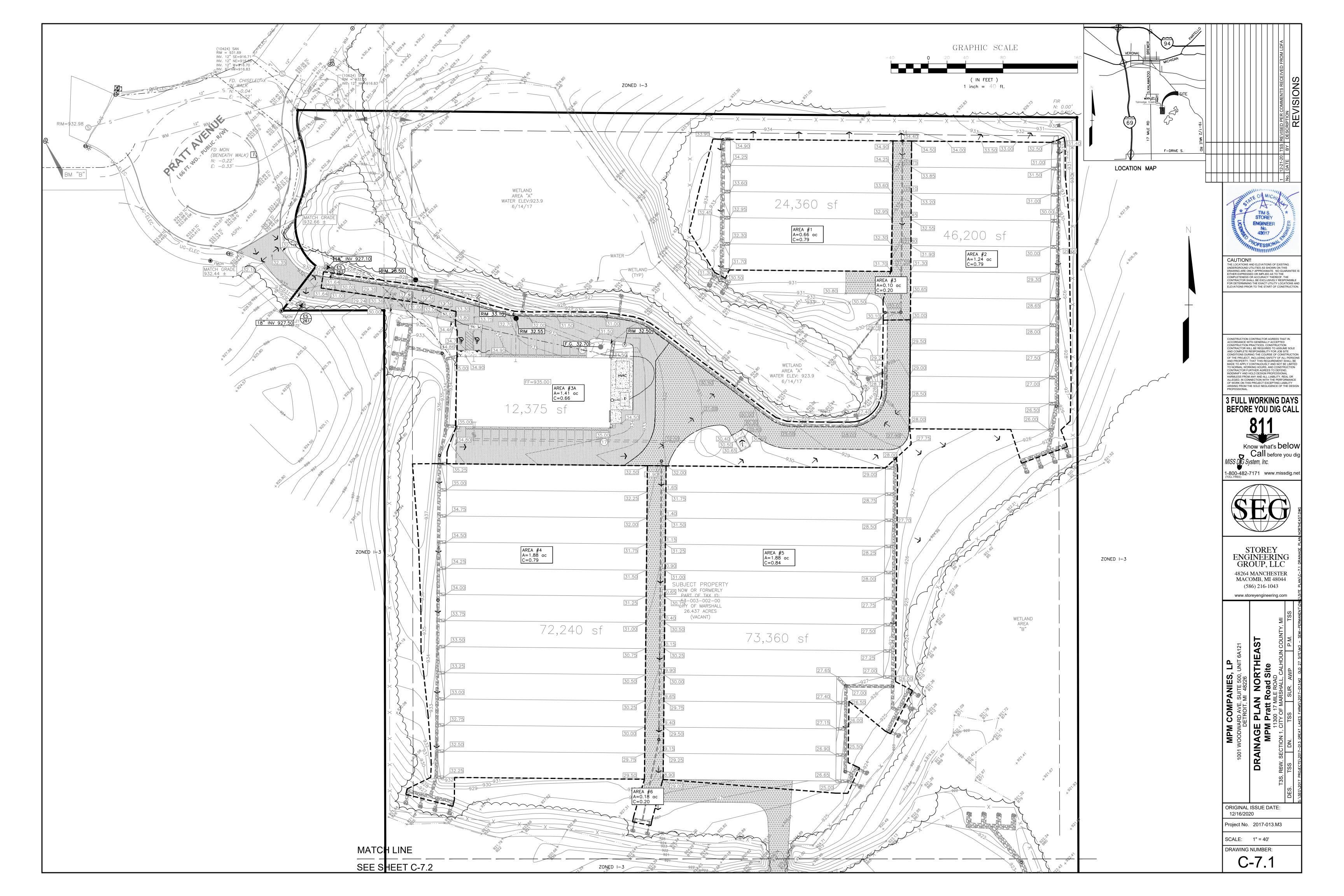
ORIGINAL ISSUE DATE: 12/16/2020

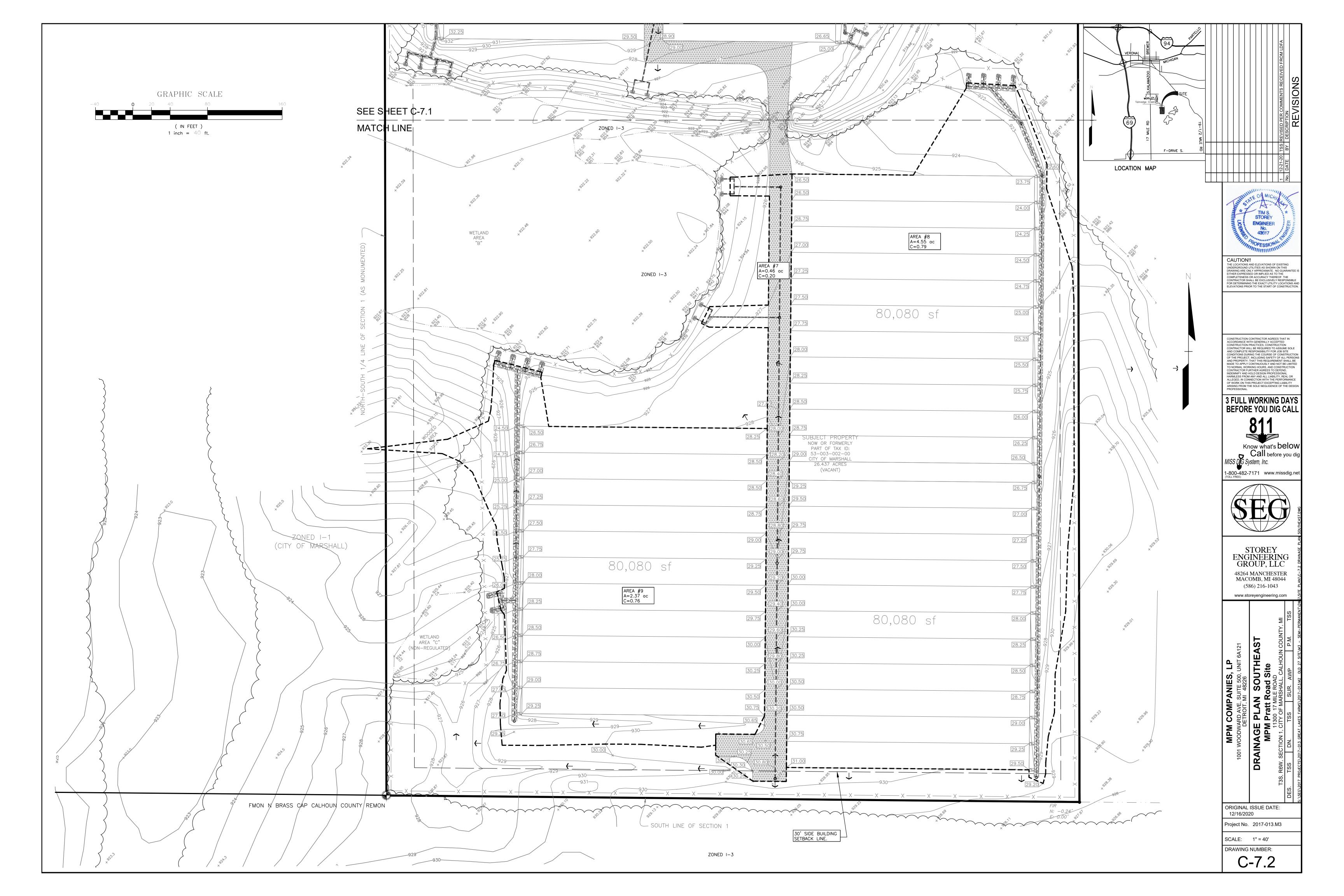
Project No. 2017-013.M3

SCALE: 1" = 40' DRAWING NUMBER:

C-7.0

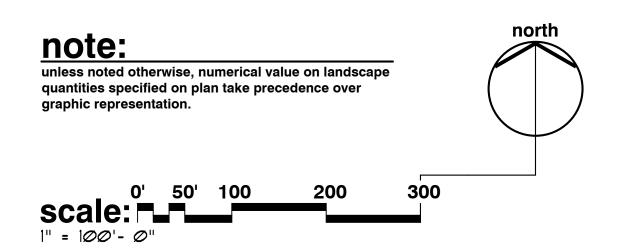
8,921 CF > 8,603 CF, therefore OK.





landscape plan for:

MPM Pratt Road Cultivation Facility City of Marshall, Michigan



general landscape notes:

1. LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISITING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK. CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE CONDITIONS.

2. PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES. GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER PRIOR TO COMMENCING

3. NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION. VERIFY ANY CONCERN-DISCREPANCY WITH LANDSCAPE ARCHITECT.

4. ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON SITE IF NECESSARY

5. ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE APPROVED BY CITY OF MARSHALL AND LANDSCAPE ARCHITECT

6. ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND WRAPPED AS DETAILED, SHOWN ON PLAN.

1. PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARDBARK MULCH.

8. DIG SHRUB PITS I' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALL. BACK FILL WITH ONE PART TOP SOIL AND ONE PART SOIL FROM EXCAVATED PLANTING HOLE.

9. NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED FOR ALL PLANTINGS.

10. REMOVE ALL TWINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH

CIRCLE WITH 3" PULLED AWAY FROM TRUNK . 4" THICK BARK MULCH FOR SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS.

11. PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH

BALLS, AND FROM TREE TRUNKS. 4" THICK BARK MULCH FOR TREES IN 4' DIA.

STANDARDS.

12. PROVIDE PEAT SOD FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS

THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE

NOTED OTHERWISE.

13. ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES

14. PLANT TREES AND SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:

3) SHADE TREES 5 ET

AND FERTILIZER BEFORE PLANT INSTALLATION.

15. NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE ENGINEERING PLANS FOR LOCATION AND DETAILS.

16. WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.

17. ALL TREE PITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPRIATE DRAINAGE SYSTEM AS REQUIRED IF THE TREE PIT DOES NOT DRAIN SUFFICIENTLY.

18. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF (2) TWO YEARS BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLTION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.

landscape maintenance notes:

LANDSCAPE MAINTENANCE PROCEDURES AND FREQUENCIES TO BE FOLLOWED SHALL BE SPECIFIED ON THE LANDSCAPE PLAN, ALONG WITH THE MANNER IN WHICH THE EFFECTIVENESS, HEALTH AND INTENDED FUNCTIONS OF THE VARIOUS LANDSCAPE AREAS ON THE SITE WILL BE ENSURED.

1. LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.

2. PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES. SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.

3. ALL DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST. THE PLANTING SEASON FOR DECIDUOUS PLANTS SHALL BE BETWEEN MARCH IS AND NOVEMBER IS OR UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH I AND JUNE I. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE.

4. THE APPROVED LANDSCAPE PLAN SHALL BE CONSIDERED A PERMANENT RECORD AND INTEGRAL PART OF THE SITE PLAN APPROVAL. UNLESS OTHERWISE APPROVED IN ACCORDANCE WITH THE AFOREMENTIONED PROCEDURES, ANY REVISIONS TO, OR REMOVAL OF, PLANT MATERIALS WILL PLACE THE PARCEL IN NON-CONFORMITY WITH THE APPROVED LANDSCAPE PLAN, AND SHALL BE VIEWED AS A VIOLATION OF THIS ORDINANCE AND THE AGREED UPON TERMS OF THE FINAL SITE PLAN APPROVAL.

landscape requirements:

greenbelt landscape	R	EQUIRED	PROVIDED
TOTAL LF. OF GREENBELT FRONTAGE (17 Mile Road)	1,381		
ONE (1) DECIDUOUS or EVERGREEN TREE PER 40 LF. (176 LF / 40 LF = 4.4×1 = 4 TREES)		4	7
FOUR (4) SHRUBS PER 40 LF. (176 LF / 40 LF = 4.4 x 4 = 17.6 SHRUBS)		18	18
parking	R	EQUIRED	PROVIDED
TOTAL NO. OF PARKING SPACES PROVIDED	3		
ONE (I) DECIDUOUS TREE PER 10-SPACES (31 / 10 SPACES =3.1 TREES)		3	3
interior landscape	R	EQUIRED	PROVIDED
TOTAL SQ.FT. OF PROPERTY (North Property) TAKE 5% OF PROPERTY FOR INTERIOR LANDSCAPE (26.44 × 5% = 1.32 ac × 43,560=57,586 sq.ft.)	26.4	4 <u>+</u>	
ONE (1) DECIDUOUS/ORNAMENTAL/EVERGREEN TREE PER 400 SQFT. (57,586 SQFT. / 400 SQFT. = 143.9	TREES) 144	'A'
ONE (I) SHRUB PER 250 SQFT.		230	'A'

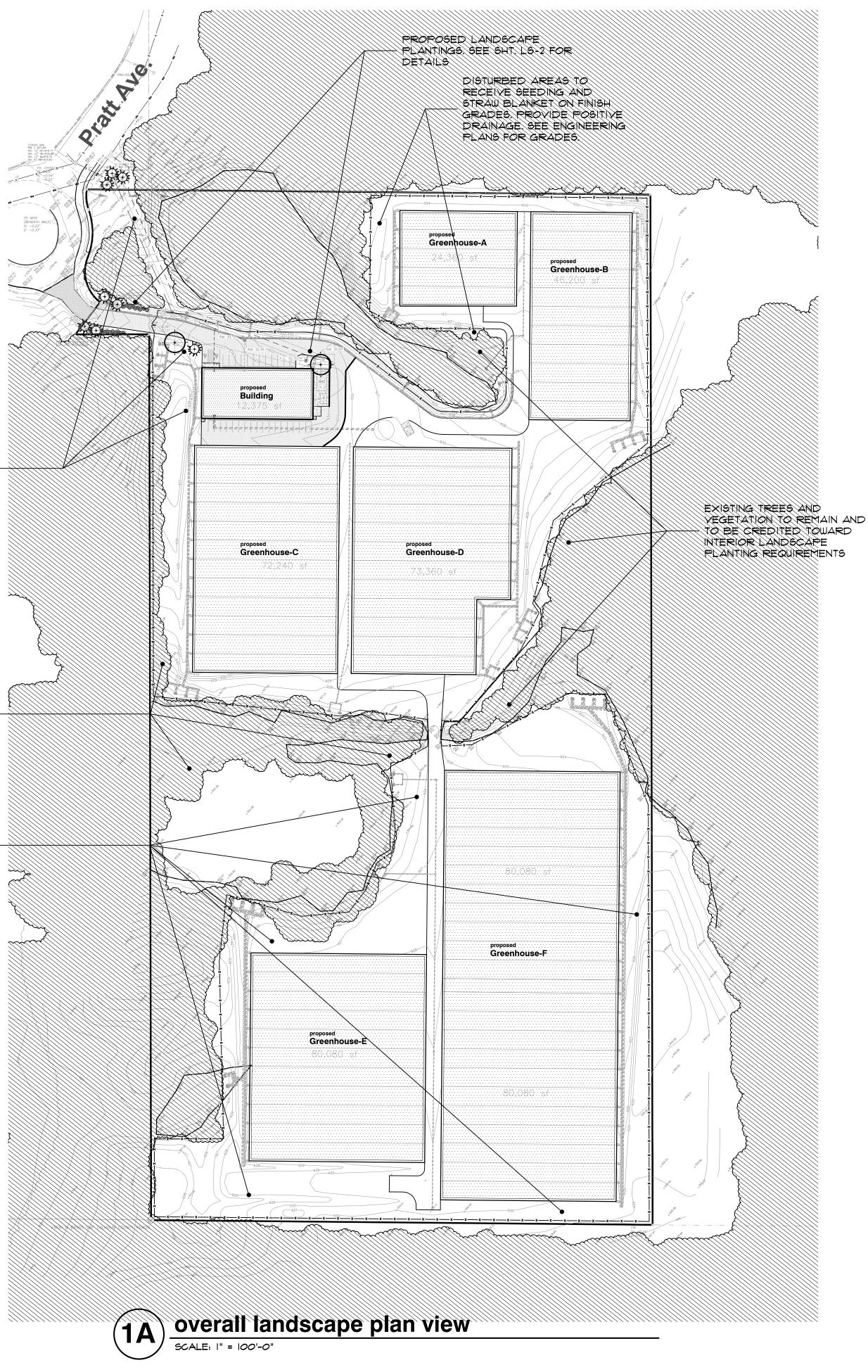
FOOT NOTE:

'A' EXISTING TREES AND VEGETATION TO BE CREDIT TOWARD REQUIRED LANDSCAPE PLANTINGS

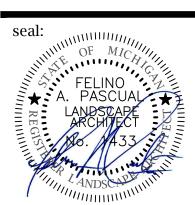
DISTURBED AREAS TO RECEIVE SEEDING AND STRAW BLANKET ON FINISH GRADES, PROVIDE POSITIVE DRAINAGE, SEE ENGINEERING PLANS FOR GRADES.

EXISTING TREES AND
VEGETATION TO REMAIN AND
TO BE CREDITED TOWARD
INTERIOR LANDSCAPE
PLANTING REQUIREMENTS

DISTURBED AREAS TO RECEIVE SEEDING AND STRAW BLANKET ON FINISH GRADES. PROVIDE POSITIVE DRAINAGE. SEE ENGINEERING PLANS FOR GRADES.







client:

MPM Companies,
I.P

1001 Woodward Ave, Suite 500, Unit 6A121 Detroit, Michigan 48226

MPM Pratt Road Cultivation Facility

project location:
City of Marshall,
Michigan
11300 17 Mile Road

sheet title:

landscape planting detail

job no./issue/revision date:

LS20.105.12 SPA 12/21/2020

drawn by:

checked by:

date: 12-11-2020

notice:
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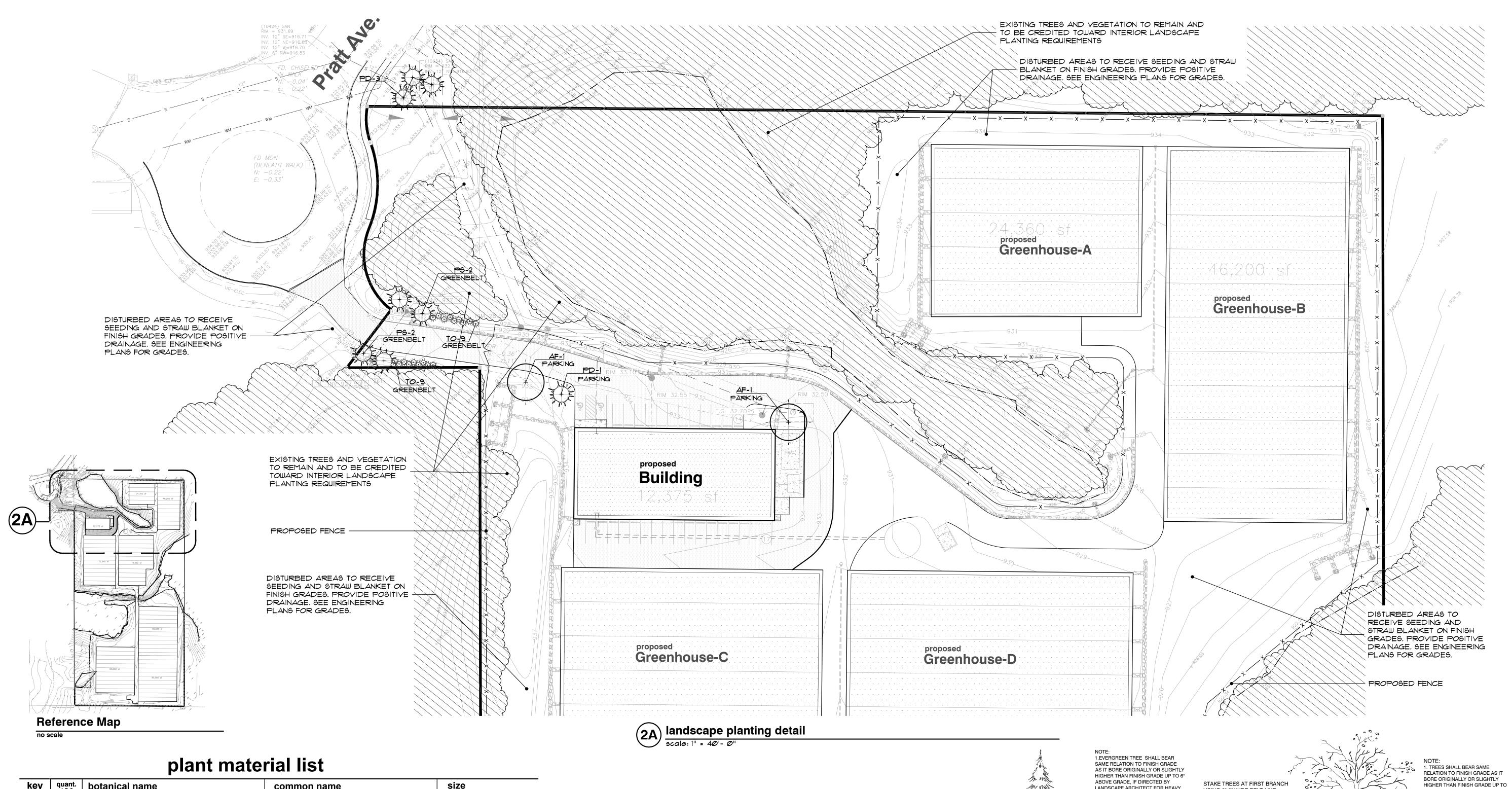


The location and elevations of existing underground utilities as shown on this drawing are only approximate. no guarantee is either expressed or implied as to the completeness of accuracy. contractor shall be exclusively responsible for determining the exact location and elevation prior to the start of construction

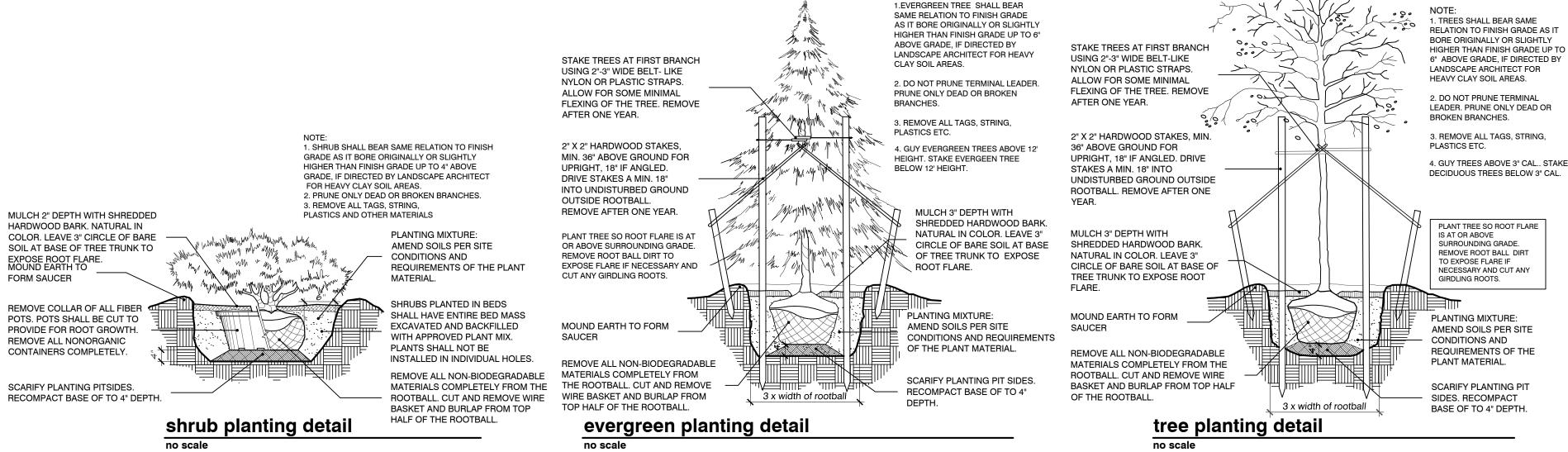
project no: LS20.105.12

sheet no:

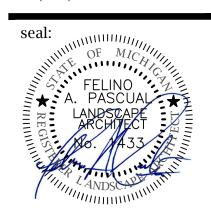
LS-1 of 2



key	quant. LS-2	botanical name	common name	size
AF	2	ACER X FREEMANII 'JEFFERSRED'	AUTUMN BLAZE RED MAPLE	3" BB
PS	4	PINUS STROBUS	EASTERN WHITE PINE	8' BB
PD	4	PICEA GLAUCA 'DENSATA	BLACK HILLS SPRUCE	8' BB
TO	18	THUJA OOCCIDENTALIS 'WOODWARDII'	WOODWARDII'S GLODE ARBORVITAE	24" BB







client:
MPM Companies,
I P

1001 Woodward Ave, Suite 500, Unit 6A121 Detroit, Michigan 48226

MPM Pratt Road Cultivation Facility

project location:
City of Marshall,
Michigan
11300 17 Mile Road

sheet title:

landscape planting detail

job no./issue/revision date:

<u>LS20.105.12 SPA 12/21/202</u>0

drawn by: **JP,KM**

checked by: **FP**

12-11-2020 notice:

3. REMOVE ALL TAGS, STRING, PLASTICS ETC.

4. GUY TREES ABOVE 3" CAL.. STAKE DECIDUOUS TREES BELOW 3" CAL.

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BEFORE YOU DIG CALL MISS DIG 1-800-482-717 For free location of public utility lines

The location and elevations of existing underground utilities as shown on this drawing are only approximate. no guarantee is either expressed or implied as to the completeness of accuracy. contractor shall be exclusively responsible for determining the exact location and elevation prior to the start of construction

project no:

LS20.105.12

LS-2 of 2

MARSHALL PLANNING COMMISSION

Staff report for January 13, 2021

To: Planning Commissioners

From: Trisha Nelson, Planning and Zoning Administrator

Subject: Delta-One, 343 S. Muiberry

Case #: Site Plan #SP21.02

Zoning District: I-1 Research and Technical District

Proposed Use: Marihuana Grow Facility

Staff received an initial site plan for the Delta-One site at 343 S. Mulberry in June 2020 and the new updated site plan December 21, 2020. With many delays in the project, Delta-One is ready to continue with the development of the site as previously discussed. With COVID restrictions, the plans were emailed out to city staff and responses were received for review. There were not many changes from the original submitted plans, but comments were received and answers obtained. A few of the suggested revisions included:

- The parking area to the west side of the building requires pavement
- Odor control needs to be seriously addressed. City Staff will address the odor control with abatement measures as part of the Marihuana licensing requirements.
- Screening for the residential district directly to the north of the property, according to section 5.15.9 (A). An 8' high wooden screen fence has been added to the plans. The remainder of the property will have 8' chain link fencing.
- Is there a new water service being installed to the building? Existing water and sewer services will be reused. There are no new services being proposed.
- Clarification needed on gated entrance on Mulberry Street. Explanation needed on access. All gates except for the Spruce Street entrance will be closed 24 hours, 7 days a week except when they must be used for a delivery or emergency access. Also, a knox box will be provided at every gate for emergency access. The Spruce gate will be closed and locked only after business hours and accessed via Old 27 through the 420 Spruce Street property.

The entrance point from Mulberry Street has been a concern from staff to minimize impact to the neighboring residential properties and any impact to the local street. It has been stated there may be use of the Mulberry Street entrance for occasional deliveries. Planner Nelson suggested a representative from Delta-One provide explanation to the Planning Commission regarding their intent. Concerns have been received from surrounding property owners regarding truck traffic.

Below Section 3.19 of the Zoning Ordinance addresses I-1 Development Requirements:

3.19 I-1 DEVELOPMENT REQUIREMENTS

To ensure compatibility with the intent and purpose of the I-1 (Research and Manufacturing) district, all uses and principal and accessory buildings and structures in the district shall be subject to the following development requirements:

- 1. Screening. The Planning Commission may require use areas or facilities permitted in the I-1 district to be screened from street rights-of-way or abutting residential districts or uses in accordance with Section 5.15.8.
- 2. Parking and loading. All parking, loading and maneuvering space shall be contained within the site. Special consideration shall be given to any potential loading and unloading nuisances on surrounding uses.
- 3. Access. Vehicular access for employees, delivery vehicles, and trucks shall be coordinated or shared with adjoining uses where feasible and shall be designed to minimize impacts on public streets and surrounding uses.

The current building is being utilized on the site and will be renovated to required standards with no changes to the building setbacks. The size of the building footprint is 15,091 sq. ft. The property is zoned I-1, which permits the proposed use of a Marihuana grow facility in the City.

The applicant has worked with the City and incorporated and/or clarified comments and concerns by staff. The site shall meet all the requirements from the Department of Public Safety as they work through the security plan process and the site shall be provided with security cameras and 8' perimeter fencing.

According to Section 6.3.12, Standards for Site Plan Approval, the Planning Commission shall consider the following standards during review:

- A. Adequacy of Information.
- B. Site Appearance and Preservation.
- C. Pedestrian Access.
- D. Vehicular Circulation.
- E. Parking and Loading.
- F. Building Composition.
- G. Screening.
- H. Exterior Lighting.
- I. Impact upon Public Services.

RECOMMENDATION

The Planning Commission is being asked to receive and consider approving site plan #SP21.02 for 343 Mulberry Street.

City of Marshall Application for Site Plan Review

Attn: Planning and Zoning Administrator 323 W Michigan Ave.
Marshall, Michigan, 49068

The following application is made to the City of Marshall Planning Commission in accordance with the provisions of the Planning and Zoning Department.

1. Applicant Information

Address of property being developed:

	343	MULBER	124,	MAR	SHALL	PU1.	49068
Owner of p	roperty bei	na developed:	L				
VELO	CITU	Busean	e A	PROFU	n. 1	1.0	
					7,		
Owner's Ad	dress:		4.				
343	MUL	BERRY.	Mons	HIDLL	M,	4900	68
City		/	State			² Zip	
Owner's Ph	none Numb	er:					
(298)	736	5 9 3 6 6					
2. Owner's A	gent if wo	rking for propert	y owner.				
Name and	Title:		/		3		
Dans	- 5	court	- 6	RED			
000	9		+	1 100	/		
Address:				1			
1120	IMD	UST RIBL	Y	lunsly	IAL L	M1 4	9068
City			State			Zip	
Phone Nur	nber:						
(248)	-73	5-9866					

City of Marshall Application for Site Plan Review

5. Authorization (Must be signed by the owner of the property)

I am the owner of record for this property for which this application is being filed and as such, I am familiar with the development being proposed to be carried out on my property.

I hereby, give permission for this application to be filed with the full understanding that certain restriction may be placed on the property relative to the approval of the proposed work.

I further certify that under penalties of perjury, I am to sign this application.

Name (Please Print) J.WILUAM	FREL	ITAG.	
Title MANAGED	Date:	4-29-2020	
Signature: Cuttoria Magrid			
		4*	

Note: If there are multiple owners of the property or you are representing a group, corporation, or other organization attach a copy of a certified letter authorizing you to sign this application for the proposed development.

LAND USE AND DEVELOPMENT FEES	
PLATS Up to 30 Lots	\$450.00
Over 30 Lots	\$650.00
SITE CONDOMINIMUMS	
Up to 30 Lots	\$350.00
Over 30 Lots	\$550.00
SITE PLANS	\$250.00 < 30
Commercial and	acres
Institutional	\$250.00
Special Land Use	\$250.00
Planned Unit Development	\$350.00
Amend a PUD	\$150.00
Multiple Family Developments (Apartment &	\$50 plus \$5.00 per unit or lot
Additions to existing Site Plans if Planning Commission Review is required	\$100.00
Extending Site Plan with Planning Commission	\$150.00

City of Marshall Application for Site Plan Review

_ KEMODEL THE - EXIS	TIME DHILDING
REMODEL PRE-EXIS	censers Misking
GROW FACILITY.	
4. Property Information	
Is this property located in a floodplain?	No
Is this property located in a wetland?	NO
Land area in square feet?	
Proposed building area in square feet?	15, 186 5/-
Proposed paved area in square feet?	
Existing paved area in square feet?	
Lake or stream within 500 feet?	NO
Any other agencies contacted for	
approvals? If so, please list:	yes
BFS-	
13730	

CITY OF MARSHALL

Site Plan Review Checklist for General Development

Zoning District				
Proposed Use: 6	ROW - MARJUM	UN FISCI.	114	MEDI
s this a Permitted U If yes list sec	se? ction number:	□ Yes	A) No	
ls the property in the	Well Head Protection A	rea? 🗆 Yes	No No	□NA
Property Address: _		But Internal		
Information of R	desponsible Party th	at prepared	plans	
		at prepared	plans	
Name: Tim ,	STOREY			
Name: Tim ,				
Name: 11 m .	STOREY ENS.	Meening		
Name: 11 m .	STOREY	Meening Mone CALST	er_	

PROPOSED SITE PLAN DRAWINGS

DELTA ONE - 343 MULBERRY - MARSHALL

LEGAL DESCRIPTIONS (AS PROVIDED)

SUBJECT PARCEL 1 ADDRESS: 322 S. SYCAMORE STREET

TAX ID: 53-000-690-01

(PER TAX DESCRIPTION) MARSHALL CITY, LOWER VILL BLK 32 S 16.5' OF LOT 8 N 49.5' OF LOT 10.

(WARRANTY DEED, L.1194, P.130, DATED 11/08/1979 PROVIDES DESCRIPTIONS THAT COVER THIS PARCEL AND PORTIONS OF OTHER PARCELS)

ADDRESS: 324 S. SYCAMORE STREET

TAX ID: 53-000-690-00 (PER TAX DESCRIPTION)

MARSHALL CITY, LOWER VILL BLK 32 S 82.5' LOT 10.

(WARRANTY DEED, L.1194, P.130, DATED 11/08/1979 PROVIDES DESCRIPTIONS THAT COVER THIS PARCEL AND PORTIONS OF OTHER PARCELS)

ADDRESS: 501 W. SPRUCE STREET

TAX ID: 53-002-568-00 (PER QUIT-CLAIM DEED, L.939, P.653, DATED 01/05/1970.)

Commencing at a point where the East line of Sycamore Street intersects the South line of the Plat of the old or first Village of Marshall aforesaid, thence South to the North line of the Michigan Central Railroad, thence Westerly along the North line of said railroad until it intersects the South line of said old Village Plat, thence East along the South line of said old Village Plat to place of beginning containing one acre, more or less, of land.

ADDRESS: 343 S. MULBERRY STREET

TAX ID: 53-000-689-01 (PER QUIT-CLAIM DEED, L.1133, P.775, DATED 11/10/1977.

(PER QUIT-CLAIM DEED, L.1413, P.789, DATED 04/07/1987.) (PER QUIT-CLAIM DEED, L.2106, P.600, DATED 03/02/1999.)

(PER QUIT-CLAIM DEED, L.2196, P.766, DATED 02/04/2000.) (PER QUIT-CLAIM DEED, L.2454, P.264, DATED 05/03/2002.)

Northerly line of said lot, to the place of beginning.

The Northerly 115.5 feet of Lot 9, Block 32 of the City of Marshall, Calhoun County, Michigan more particularly described as follows: Commencing at the Northwesterly corner of said Lot 9, Block 32, running thence Southerly along the Westerly line of said lot, 115.5 feet, thence East at right angles and parallel with the North line of said lot, to the Easterly line of said lot, thence Northerly along the Easterly line of said lot to the Northeasterly corner of said lot; thence Westerly along the

Commencing at the Southest corner of Lot 9 of Block 32 of the City of Marshall, running thence South, on the continuation of the East line of said lot to the Northerly line of the righ of way of the Michigan Central Railway Company; thence in a Westerly and Northerly direction, along the Northerly line of said right of way, and along the land owned by said Michigan Central Railway Company, to the East line of Mulberry Street; thence North on the East line of Mulberry Street to the Southwesterly corner of said Lot 9, Blok 32 to the place of beginning.

Also Lot 9 of Block 32 of the City of Marshall, Michigan, excepting the Northerly 115.5 feet thereof, said excepted parcel being more particularly described as follows: Commencing at the Northwesterly corner of said Lot 9, Block 32, running thence Southerly along the Westerly line of said lot, 115.5 feet, thence East at right angles and parallel with the North line of lot; thence Westerly along the Northerly line of said lot, to the place of beginning. All in the City of Marshall, Calhoun County,

Also beginning at the intersection of the Easterly line of Mulberry Street with the East and West one quarter line of Section 26, Town 2 South, Range 6 West, thence Easterly along said quarter section line 97 feet; thence Southerly at an angle to the right of 89 degrees 22 minutes 37.38 feet to a point on the Northerly right of way line of Michigan Central Railroad Company, said point being 75 feet Northerly measured at right angles from the centerline of the Michigan Central Railroad Company's Westbound Main Track; thence Westerly parallel to and 75 feet distant from said centerline, 103 feet to the easterly line of Mulberry Street; thence Northerly along said Easterly street line 4 feet, to the point of beginning, and containing and area of 2007 square feet of land more or less.

Parcel III

Beginning at a point on the Easterly line of Mulberry Street, 4 feet Southerly, measured along said Easterly line, from its intersection with the East and West 1/4 line of Section 26, Town 2 South, Range 6 West; thence Easterly along a line parallel to and 75 feet Northerly of the centerline of the Michigan Central Railroad Company's Westbound Mainline track, a distance of 165 feet; thence Southerly, parallel to the Easterly line of Mulberry Street, a distance of 30 feet to a point 6 feet, from the near rail of the Michigan Central Railroad Company's most Northerly side track, thence Westerly a distance of 165 feet to the Easterly line of Mulberry Street, a distance of 30 feet to the place of beginning, and containing 4,620 square feet more or less. City of Marshall, Calhoun County, Michigan.

LEGAL DESCRIPTIONS (AS SURVEYED)

Part of the Northeast 1/4 of Section 26, T2S-R6W, City of Marshall, Calhoun County, Michigan being more particularly described as follows: the South 16.50' feet of Lot 8 and the North 49.50' feet of Lot 10 of Block 32, Plat of the Village of Marshall, as recorded in Liber 2 of Plats, Page 23, Containing 0.250 acres.

Part of the Northeast 1/4 of Section 26, T2S-R6W, City of Marshall, Calhoun County, Michigan being more particularly described as follows: the South 82.50' feet of Lot 10 of Block 32, Plat of the Village of Marshall, as recorded in Liber 2 of Plats, Page 23, Containing 0.312 acres.

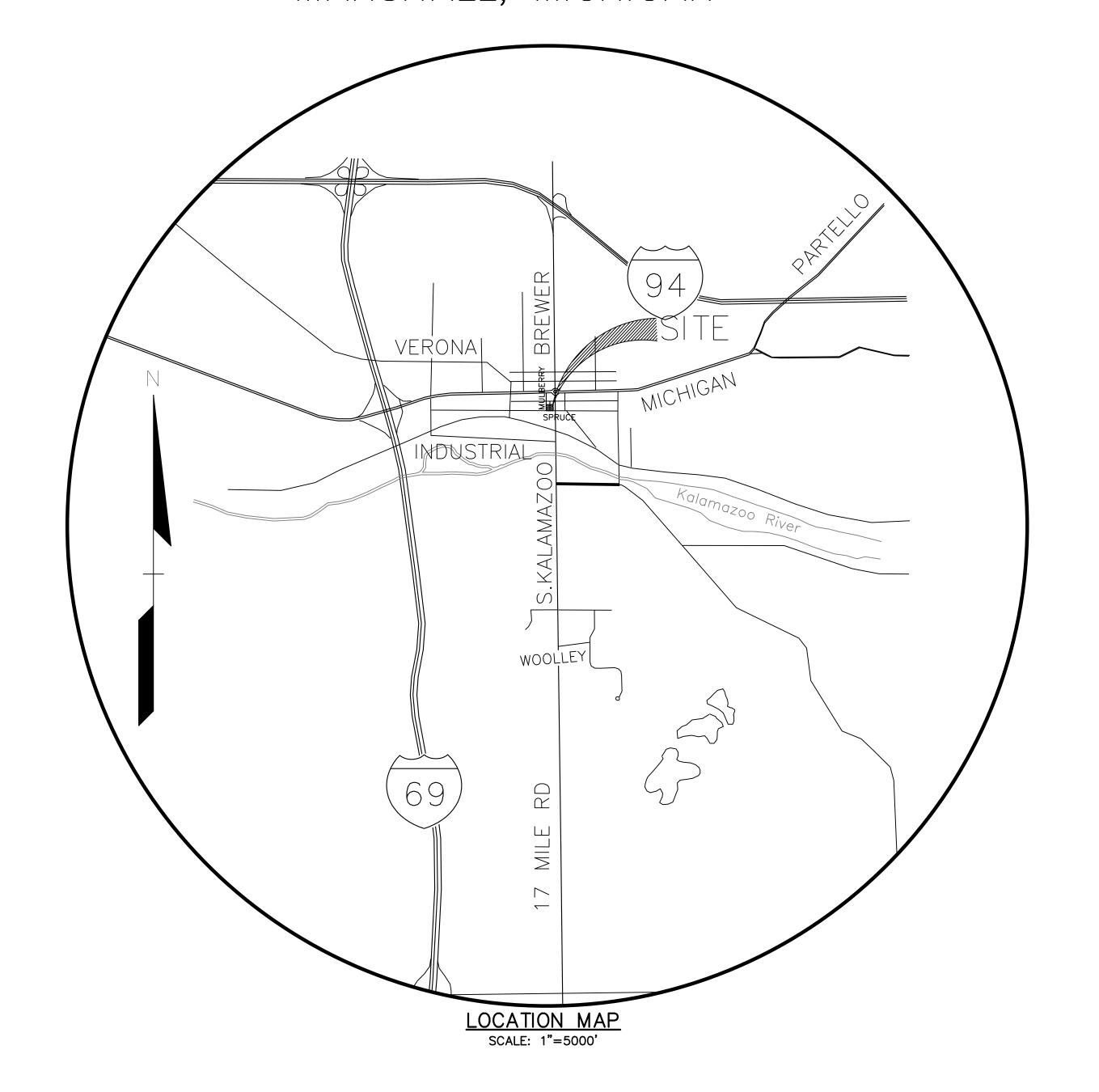
Part of the Southeast 1/4 of Section 26, T2S-R6W, City of Marshall, Calhoun County, Michigan being more particularly described as follows: Commencing at a point where the East line of Sycamore Street (82.5 foot wide Right of Way) intersects the South line of the Plat of Village of Marshall, said point also being on the East-West 1/4 line (as monumented) of said Section 26, being distant N89°45'15"W, 346.35 feet from the East 1/4 corner of Section 26; thence along the extension of said East line of Sycamore Street, S00°36'21"E, 144.89 feet to a point on the Northerly right of way line of Michigan Department of Transportation Railroad, said point being 75 feet Northerly as measured at right angles from the former centerline of the Michigan Central Railroad Company's Westbound Main Track; thence Westerly parallel to and 75 feet distant from said centerline along said North line of the railroad, N70°50'45"W, 447.07 feet to a point where the North line of said railroad intersects the South line of Plat of Village of Marshall and the East-West 1/4 line, thence along said South line and 1/4 line, S89°45'15"E, 420.79 feet to the Point of Beginning, Containing 0.700 acres.

Part of the East 1/2 of Section 26, T2S-R6W, City of Marshall, Calhoun County, Michigan being more particularly described as follows: Lot 9 of Block 32, Plat of the Village of Marshall, as recorded in Liber 2 of Plats, Page 23; also beginning at the Southeast corner of said Lot 9, thence S00°36'21"E, 59.66 feet to a point on the Northerly right of way line of Michigan Department of Transportation Railroad, said point being 75 feet Northerly as measured at right angles from the former centerline of the Michigan Central Railroad Company's Westbound Main Track; thence Westerly parallel to and 75 feet distant from said centerline, N70°50'45"W, 10.31 feet; thence leaving said Right of Way line, S00°36'21"E, 30.81 feet to the extension of the South building face of an existing building; thence along said South building face, N70°41'58"W, 165.15 feet to the East line of Mulberry Street extended (66 foot wide Right of Way); thence along said extension of the East line of Mulberry N00°36'21"W, 33.21 feet to the Southwest corner of Lot 9 and East-West 1/4 line (as monumented) of Section 26; thence along said South line and 1/4 line, S89°45'15'E, 165.00 feet to the Point of Beginning, Containing 0.725 acres.

BEARING REFERENCE

BEARINGS ARE BASED ON PROJECT COORDINATE SYSTEM: MICHIGAN STATE PLANE COORDINATE SYSTEM, NAD83 (CONUS) (MOL) (GRS80), SOUTH ZONE 2113, INTERNATIONAL FEET, GRID.

343 MULBERRY STREET MARSHALL, MICHIGAN



INDEX OF DRAWINGS:

PROPOSED SITE PLAN

C-0.0 COVER SHEET

C-1.0 TOPOGRAPHIC + BOUNDARY SURVEY

C-3.0 PROPOSED GRADING PLAN

C-4.0 PROPOSED UTILITY PLAN

C-5.0 PROPOSED DRAINAGE PLAN

PHOTOMETRIC SITE PLAN

LANDSCAPE PLAN

C-2.0 PROPOSED SITE PLAN

C-6.1 NOTES + DETAILS

C-6.2 DETAILS-2

ARCHITECTURAL FLOOR PLAN

STOREY ENGINEERING

-800-482-7171 www.missdig.ne

3 FULL WORKING DAYS

BEFORE YOU DIG CAL

GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044 (586) 216-1043 www.storeyengineering.com

COVER SHEE MULBERRY - DEL

ORIGINAL ISSUE DATE: Project No. 2020-003

DRAWING NUMBER:

C-0.0

LANDSCAPE ARCHITECT:

FELINO A. PASCUAL + ASSOCIATES, RLA 24333 ORCHARD LAKE ROAD, STE G FARMINGTON HILLS, MI 48336 PHONE: (248) 557-5588 CONTACT: FELINO PASCUAL (JOEL), RLA

ARCHITECTURAL DESIGNER:

ZACK OSTROFF & ASSOCIATES 2640 WATER OAKS DRIVE WEST BLOOMFIELD, MI 48324 PHONE: (248) 425-4190 CONTACT: ZACK OSTROFF

STRUCTURAL ENGINEER:

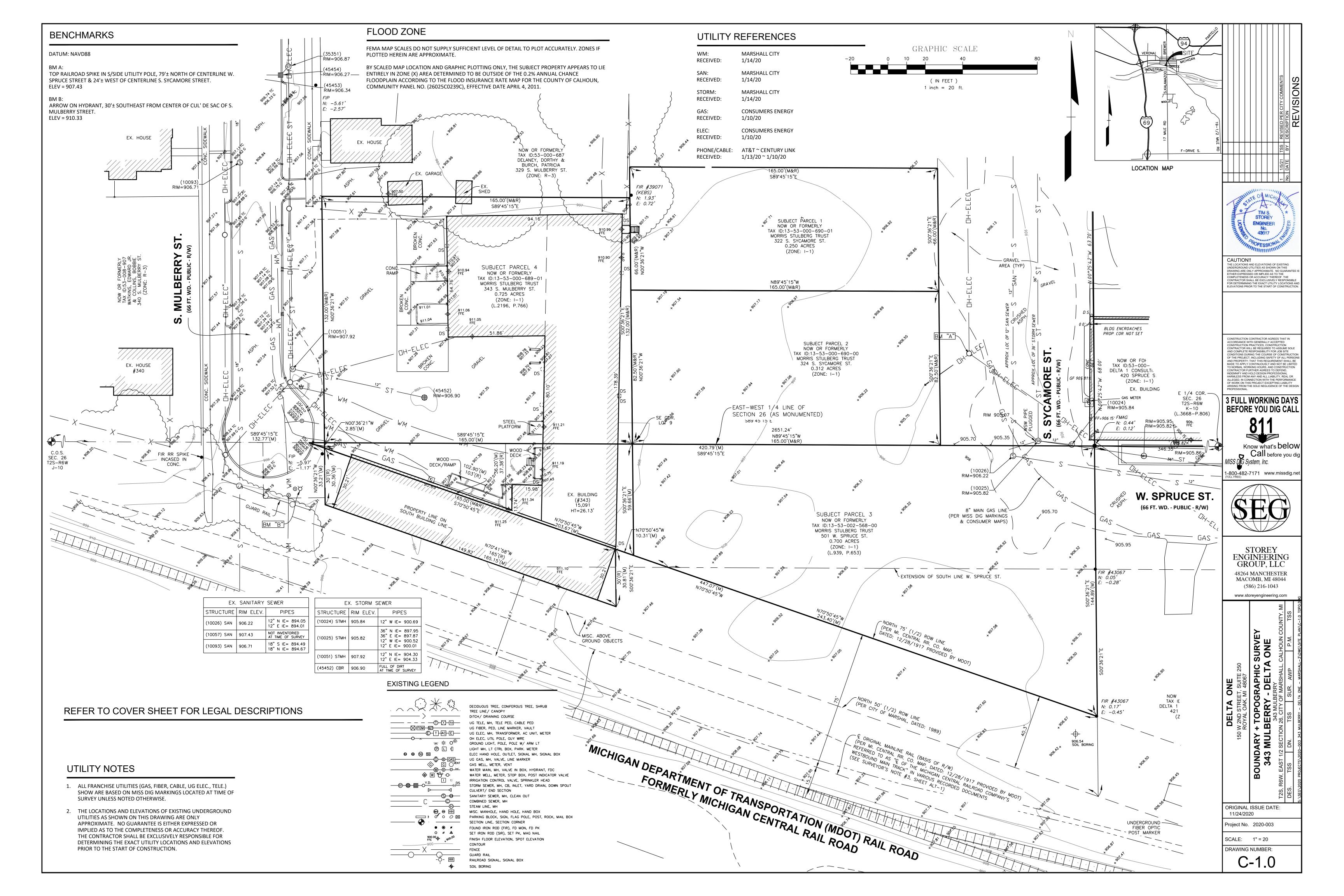
FAIRWAY ENGINEERING 28525 BECK ROAD, STE 124 WIXOM, MI 48393 PHONE: (248) 214-5913 CONTACT: MARK MAHAJAN. PE

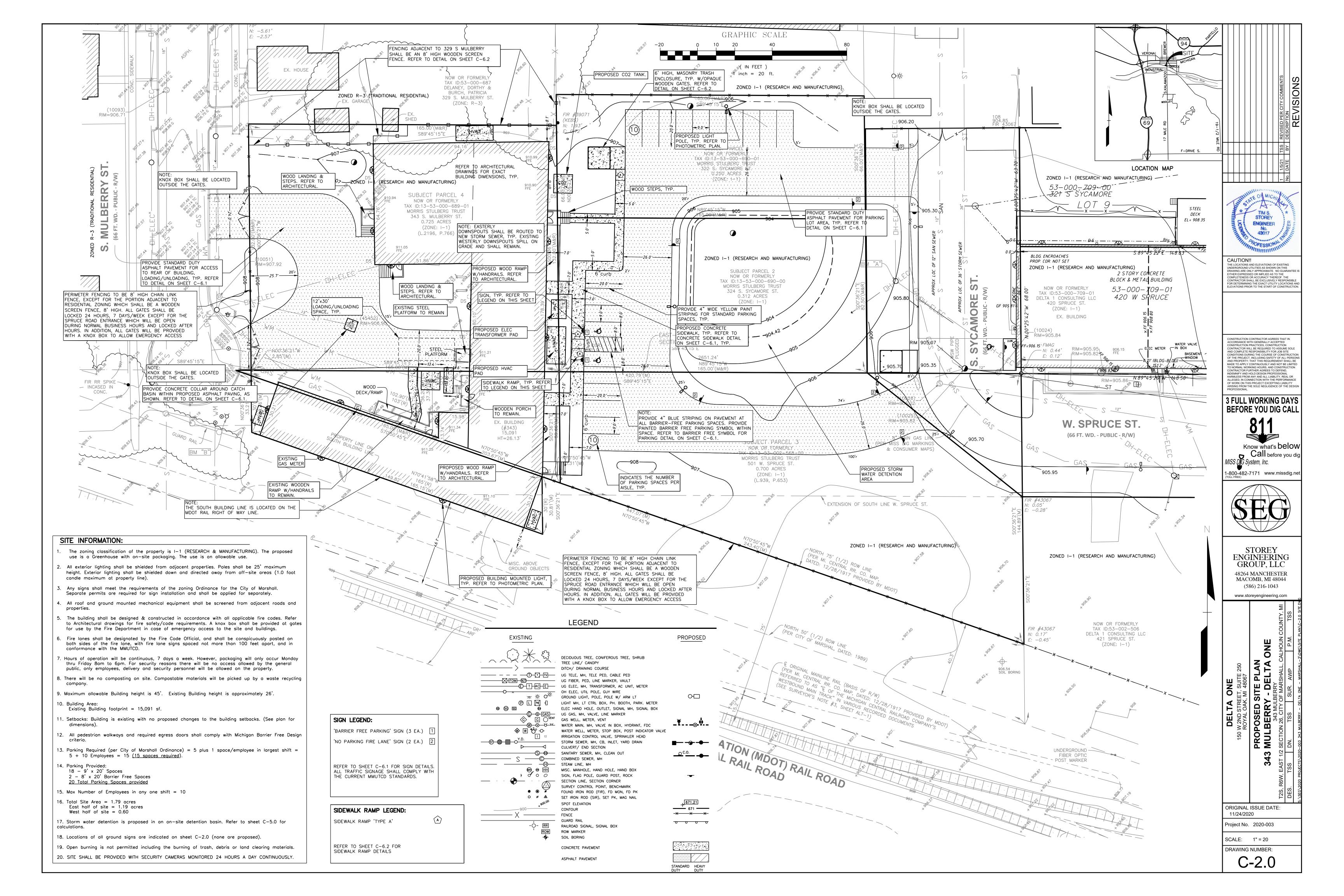
CIVIL ENGINEER:

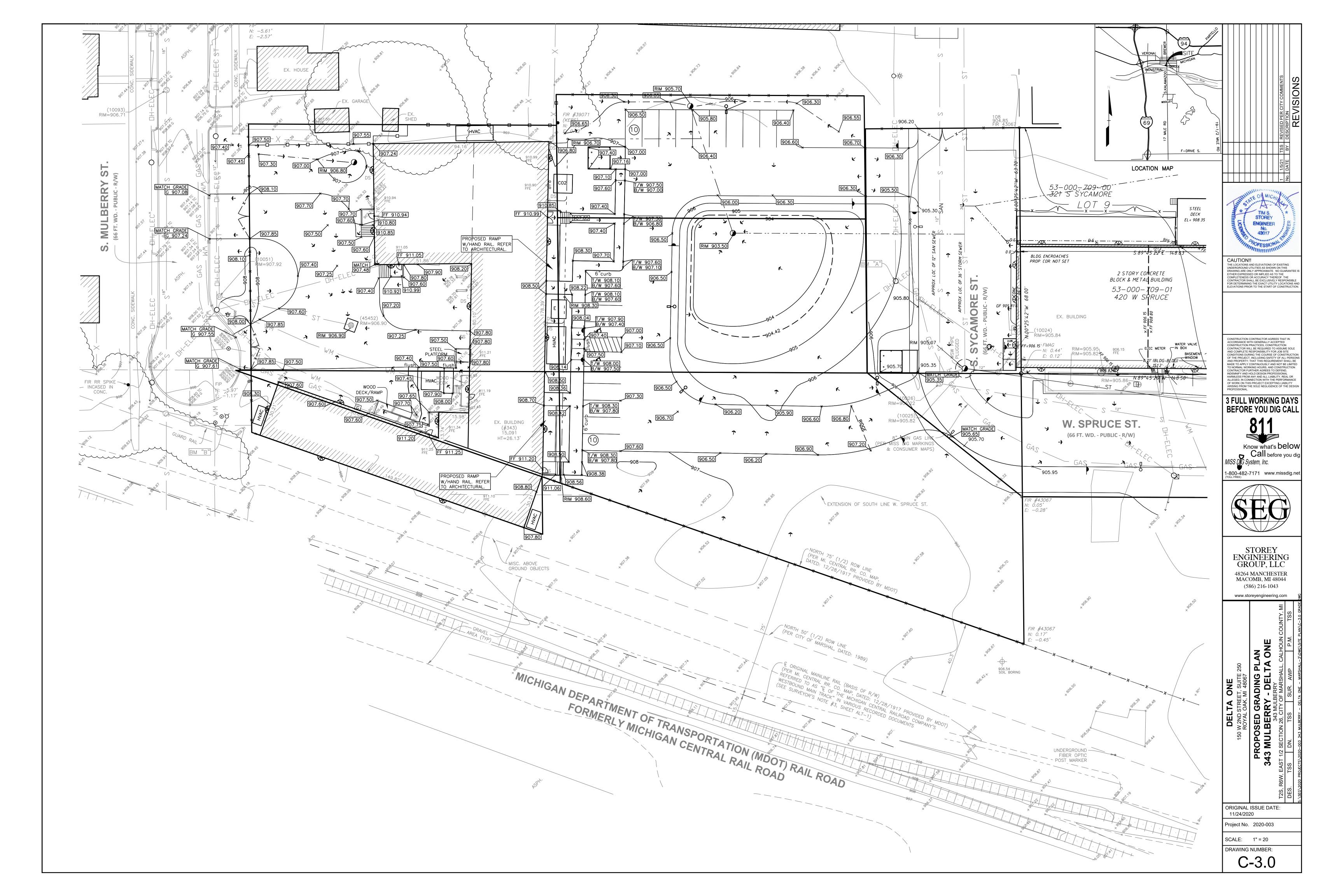
STOREY ENGINEERING GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044 PHONE: (586) 216-1043 CONTACT: TIM S. STOREY, PE

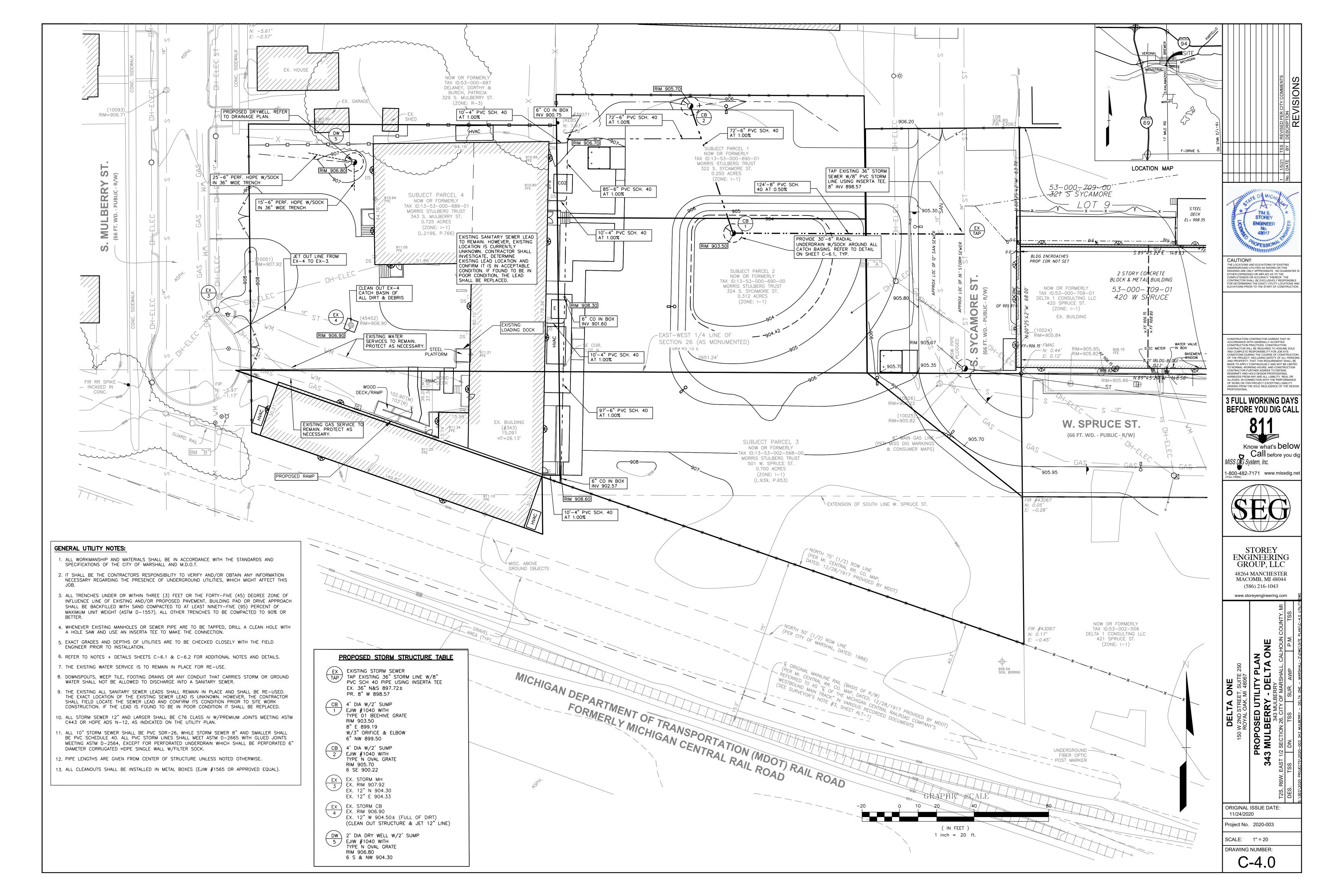
DEVELOPER:

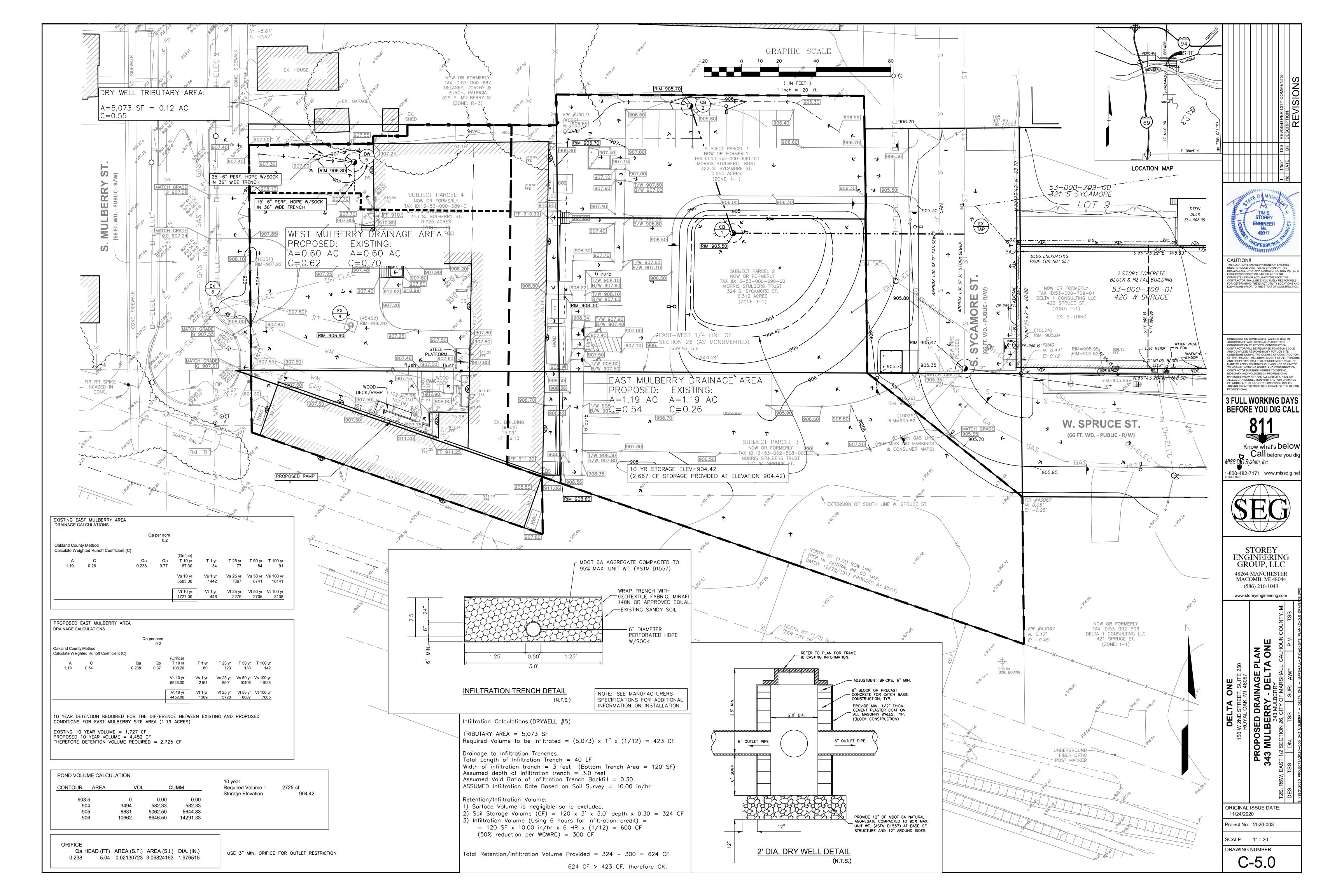
DELTA ONE 150 W 2ND STREET, SUITE 250 ROYAL OAK, MI 48067 PHONE: (248) 793-9866 CONTACT: DOUG STEWART











GENERAL NOTES: ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL AND CALHOUN COUNTY. ALL NECESSARY PERMITS, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL MUNICIPAL INSPECTION FEES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL DURING THE PERIODS OF CONSTRUCTION. THIS SHALL BE CONSIDERED INCIDENTAL TO THE JOB. PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT MISS DIG (1-800-482-7171) TO VERIFY THE LOCATION OF ANY EXISTING UNDERGROUND ÙTILITIES AND SHALL NOTIFY OTHER REPRESENTATIVES OF OTHER UTILITIES IN THE ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPLACED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR. MANHOLE, CATCH BASIN, GATE VALVES AND HYDRANT FINISH GRADES MUST BE CLOSELY CHECKED AND APPROVED BY THE ENGINEER BEFORE THE CONTRACTOR'S WORK IS CONSIDERED COMPLETE. CONTRACTOR SHALL REMOVE AND DISPOSE OF OFF-SITE ANY TREES, BRUSH, STUMPS, TRASH OF OTHER UNWANTED DEBRIS AT THE OWNER'S DIRECTION, INCLUDING OLD BUILDING FOUNDATIONS AND FLOORS. BURNING OF TRASH, STUMPS OR OTHER DEBRIS SHALL NOT BE PERMITTED. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY CONTAIN TRAFFIC IN ACCORDANCE WITH "MMUTCD" ALL EXCAVATIONS SHALL BE SLOPED, SHORED OR BRACED IN ACCORDANCE WITH MI-OSHA REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE AN ADEQUATELY CONSTRUCTED AND BRACED SHORING SYSTEM FOR EMPLOYEES WORKING IN AN EXCAVATION THAT MAY EXPOSE EMPLOYEES TO THE DANGER OF MOVING GROUND. 10. ALL REFERENCES TO M.D.O.T. SPECIFICATIONS ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION. PAVING NOTES:

AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND MDOT, WHERE

SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED

6. ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND

. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY INFORMATION

. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF

APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95)

INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE

5. EXACT GRADES AND DEPTHS OF UTILITIES ARE TO BE CHECKED CLOSELY WITH THE FIELD

2. JOINTS FOR ALL STORM SEWER 12" AND LARGER SHALL BE PREMIUM JOINT TONGUE AND

3. ALL STORM SEWER 12" AND LARGER SHALL BE RCP CLASS IV OR HDPE ADS N-12 OR

4. CULVERTS SHALL BE ALUMINIZED TYPE II CSP (OR HDPE ADS N-12) WITH BANDED JOINTS

STORM LINES 8" TO 10" SHALL BE PVC SDR-26 WITH PREMIUM GASKET JOINTS BEDDED ON

ALL WATER MAIN SHALL BE INSTALLED WITH A MINIMUM COVER OF 6.0' BELOW FINISH

LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5°) DEGREE BENDS,

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT

3. ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE

DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER

4. ALL TEE'S, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.

7. ALL WATER MAIN SHALL BE DUCTILE IRON CLASS 52 OR PVC C-900.

COMPACTED TO 95% OF MAXIMUM DENSITY PER ASTM D-1557.

P.V.C. SOLID WALL PIPE CONFORMING TO ASTM D-3034, SDR 35.

8. SEE CITY OF MARSHALL STANDARD SPECIFICATIONS & DETAILS FOR ADDITIONAL

6. MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATER MAIN AND ANY

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS

INFORMATION NECESSARY REGARDING THE PRESENCE OF UNDERGROUND UTILITIES WHICH

AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND MDEQ.

2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND/OR OBTAIN ANY

3. ALL TRENCHES UNDER OR WITHIN THE 45° ZONE OF INFLUENCE LINE OR 5 FEET OF

EXISTING AND/OR PROPOSED PAVEMENT SHALL BE BACKFILLED WITH SAND AND

4. ALL SEWERS SHALL BE PLACED ON MIN. 4" SAND OR GRAVEL BEDDING WHICH SHALL EXTEND TO MIN. 12" OVER TOP OF THE PIPE AND SHALL BE COMPACTED IN MIN. 6"

5. A MINIMUM OF 18" OF CLEARANCE MUST BE MAINTAINED AT ALL CROSSINGS BETWEEN

6. NO SANITARY SEWER INSTALLATION OR PORTION THEREOF SHALL HAVE INFILTRATION

JOINTS FOR P.V.C. SOLID WALL OR TRUSS PIPE SHALL BE ELASTOMETRIC (RUBBER

SANITARY, WATER MAIN AND STORM SEWER, UNLESS PROVIDED WITH A CONCRETE CRADLE.

EXCEEDING 200 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER 24 HOUR PERIOD.

SANITARY SEWER MAIN AND LEADS 8" DIAMATER & SMALLER SHALL BE CONSTRUCTED OF

TRENCHES TO BE COMPACTED TO 90% OR BETTER.

UNTIL TESTING IS SATISFACTORILY COMPLETED.

CONSTRUCTION FOR ADDITIONAL INFORMATION.

SANITARY SEWER OR STRUCTURE.

SANITARY SEWER NOTES:

MIGHT AFFECT THIS JOB.

GASKET) MEETING A.S.T.M. D-3212.

LAYERS.

INFORMATION.

STANDARDS AND SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND

PROPERLY ANCHORED. MAINTAIN MIN. 18" VERTICAL SEPARATION BETWEEN WATER AND

GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY

SPECIFICATIONS OF THE CITY OF MARSHALL, CALHOUN COUNTY AND M.D.O.T.

COMPACTED TO 95% OF THE MAXIMUM UNIT WEIGHT (PER ASTM D-1557) UNLESS OTHERWISE

ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.

5. BACKFILL UNDER PAVED AREAS SHALL BE AS SPECIFIED ON DETAILS.

A HOLE SAW AND USE AN INSERTA TEE TO MAKE THE CONNECTION.

GROOVE WITH RUBBER GASKETS, UNLESS SPECIFIED OTHERWISE.

APPROVED EQUAL, UNLESS OTHERWISE NOTED.

ALL STORM SEWER SHALL BE INSTALLED ON STANDARD BEDDING OR BETTER.

BE CLASSIFIED AS SUBGRADE UNDERCUTTING.

INCIDENTAL TO THE JOB.

TO 90% OR BETTER.

ENGINEER PRIOR TO INSTALLATION.

MEETING MANUFACTURERS SPECS

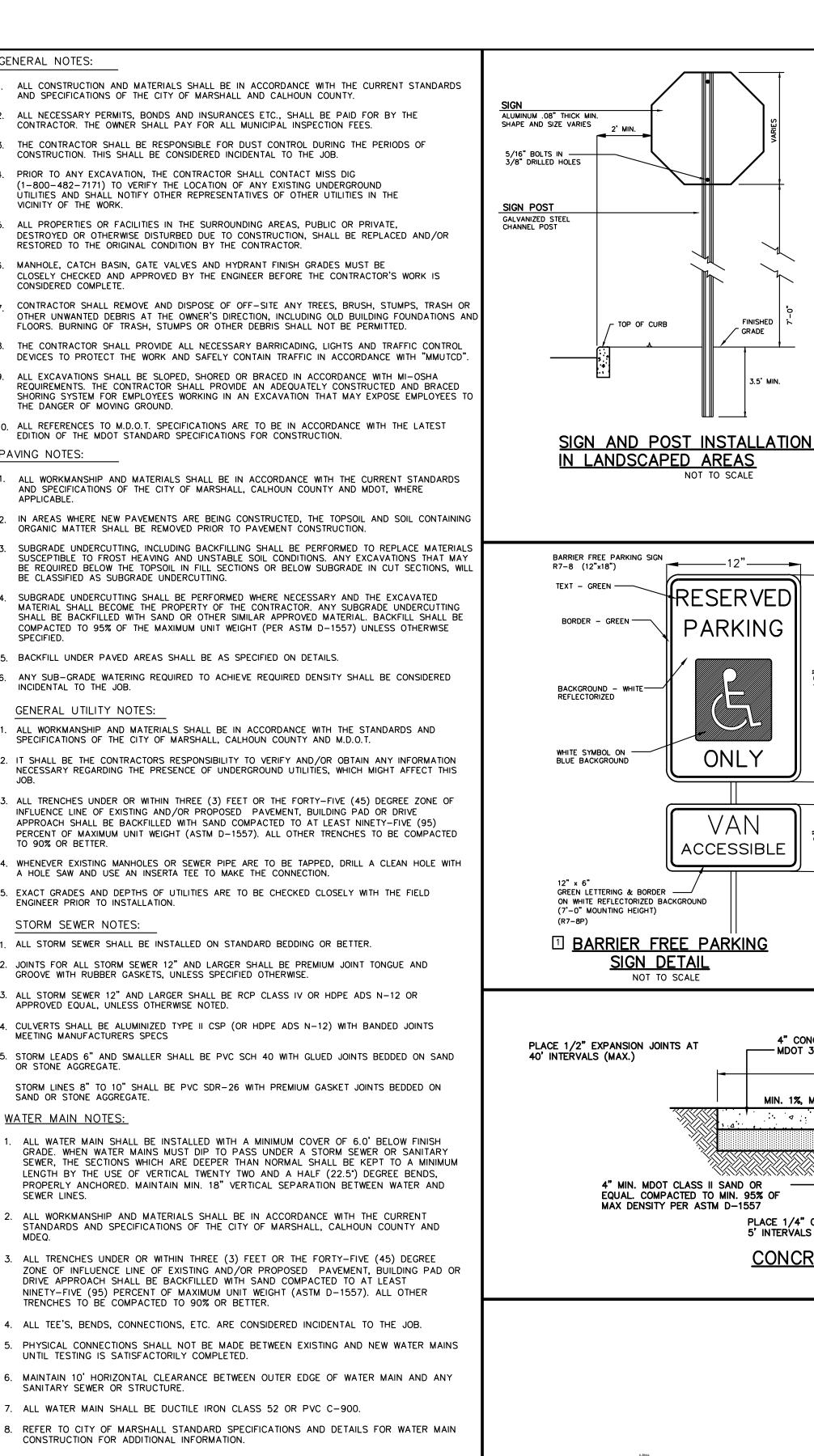
SAND OR STONE AGGREGATE.

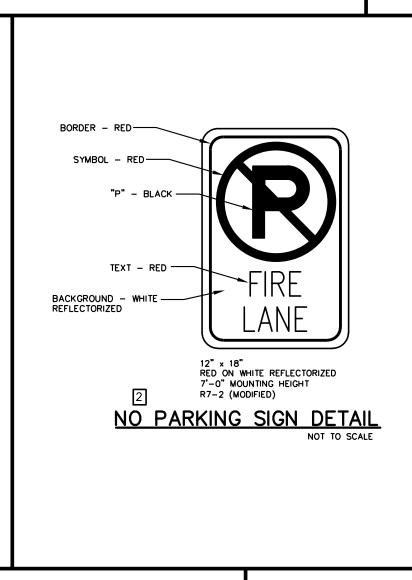
OR STONE AGGREGATE.

WATER MAIN NOTES:

STORM SEWER NOTES:

GENERAL UTILITY NOTES:





24"

STANDARD BARRIER FREE SYMBOL

FOR PARKING SPACE

PARKING SPACE

- 3" WIDE WHITE

PAINTED SYMBOL OF

BLUE BACKGROUND

-PROVIDE BLUE

PAINTED BACKGROUND

" WIDE WHITE PAINT ----

STRIPED BORDER

PROVIDE DOMED-

DIAMETER, ASTM

BOLLARD POST.

PAVEMENT-

8" Ø PIPE

BOLLARDS ALONG FRONT OF

1'-6" Ø CONC. BASE -

NO. 1-4" LONG REINF.

BAR EACH WAY THRU

BUILDING SHALL BE PROVIDED WITH

DECORATIVE CONCRETE BUMPER

POST SLEEVE OVER POST. REFER

TO ARCHITECTURAL FOR ADDITIONAL

YELLOW LDPE BUMPER POST SLEEVE.

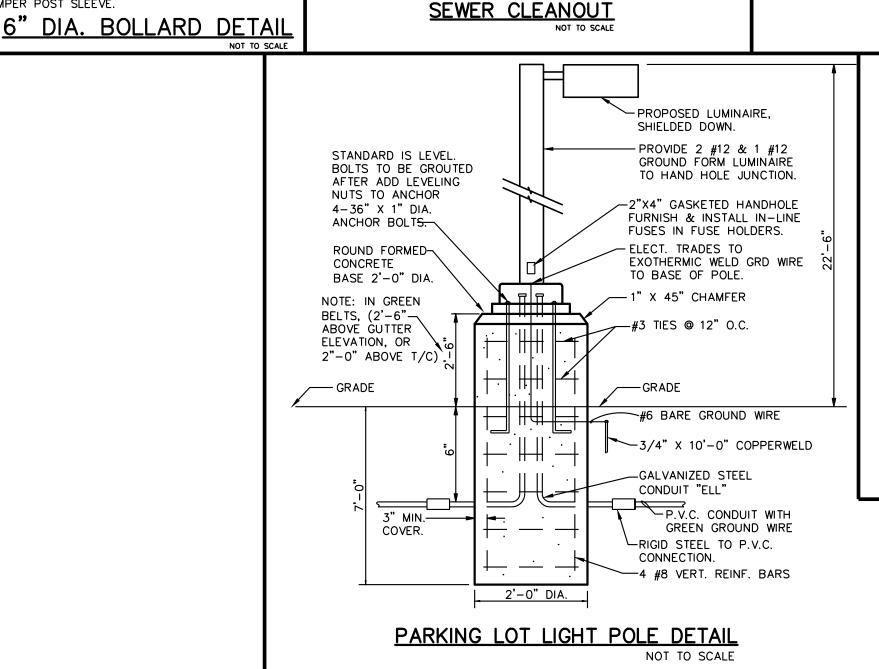
BOLLARDS IN TRASH ENCLOSURE SHALL BE PAINTED

WITH REFLECTIVE YELLOW PAINT OR PROVIDED WITH

CEMENT WASH

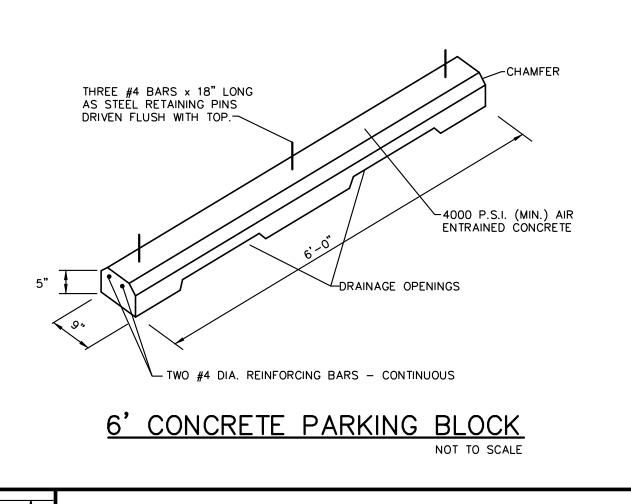
PROVIDE 6'

GRADE B



OR TOP ELEV.

(IN ASPHALT PAVEMENT)



VARIES

6" MDOT 21AA AGGREGATE —

TO 95% MAXIMUM DRY DENSITY

ASTM D-1557 (MODIFIED PROCTOR)

BASE COURSE COMPACTED

8" MDOT 21AA AGGREGATE BASE

95% MAX DENSITY (ASTM D-1557)

COURSE COMPACTED IN TWO (2) LIFTS.

BASE COURSE SHALL BE COMPACTED TO ---:

PROVIDE 6"x6"

W1.4xW1.4 W.W.F

— 6" M.D.O.T. 35Р, 6АА.

SUBGRADE COMPACTED

DENSITY ASTM D-1557 (MODIFIED PROCTOR)

TO 95% MAXIMUM

HEAVY DUTY CONCRETE

DETAIL

BITUMINOUS WEARING COURSE

BITUMINOUS LËVELING COURSE

2.0" M.D.O.T. #13A

2.0" M.D.O.T. #13C

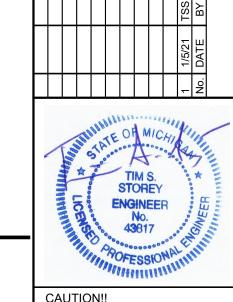
BOND COAT -

COMPACT UPPER 10" OF --

EXIST. SUBGRADE OR FILL

(ASTM D-1557)

TO MIN 95% DRY DENSITY



CAUTION!! HE LOCATIONS AND ELEVATIONS OF EXISTING INDERGROUND UTILITIES AS SHOWN ON THIS RAWING ARE ONLY APPROXIMATE. NO GUARANTEE INTHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE OR DETERMINING THE EXACT LITTLY LOCATIONS A R DETERMINING THE EXACT UTILITY LOCATIONS EVATIONS PRIOR TO THE START OF CONSTRUCT

CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

3 FULL WORKING DAYS

BEFORE YOU DIG CALL Know what's **Delow** Call before you dig



STANDARD DUTY ASPHALT

STOREY ENGINEERING GROUP, LLC 48264 MANCHESTER MACOMB, MI 48044 (586) 216-1043 www.storeyengineering.com

O

AILS ELTA

DET, Y - D

| + K

AS INDICATED ON PLANS —3500 P.S.I. CONC. ASPHALT PAVING -CONTRACTION JOINT CONT. **RADIUS** ∴, · o O · o · MIN. 4" COMPACTED -2 - #4 RE-ROD -CONTINUOUS UNDISTURBED -

1/2" PREMOLDED FILLER, SPACED A MAXIMUM OF 30' APART.

INTEGRAL CURB AND WALK

6 x 6 x 1.4 x 1.4 -WELDED WIRE MESH CONTRACTION JOINTS TO BE 2 1/2" DEEP. TRANSVERSE CONTRACTION JOINTS SPACED AT 5' INTERVALS (TOOLED). EXPANSION JOINTS TO BE

NOTES -DEL 3 ORIGINAL ISSUE DATE:

11/24/2020 Project No. 2020-003

SCALE: 1" = 30' DRAWING NUMBER: C-6.

1. TREE PROTECTION WILL BE ERECTED PRIOR TO START OF CONSTRUCTION ACTIVITIES, AND SHALL REMAIN IN PLACE

2. NO PERSON MAY CONDUCT ANY ACTIVITY WITHIN THE DRIP LINE OF ANY TREE DESIGNATED TO REMAIN; INCLUDING, BUT NOT LIMITED TO PLACING SOLVENTS, BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS WITHIN DRIP LINES.

6. IF TREE PROTECTION CANNOT BE MAINTAINED FOR A TREE THROUGHOUT THE CONSTRUCTION PERIOD,

MUST BE PROTECTED.

UNTIL CONSTRUCTION IS COMPLETE.

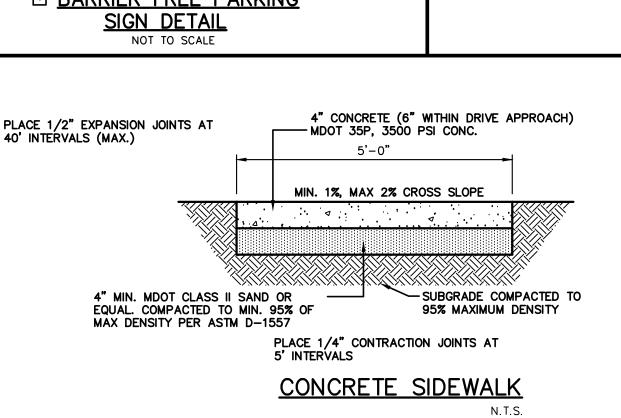
3. GRADE CHANGES MAY NOT OCCUR WITHIN THE DRIP LINE OF PROTECTED TREES.

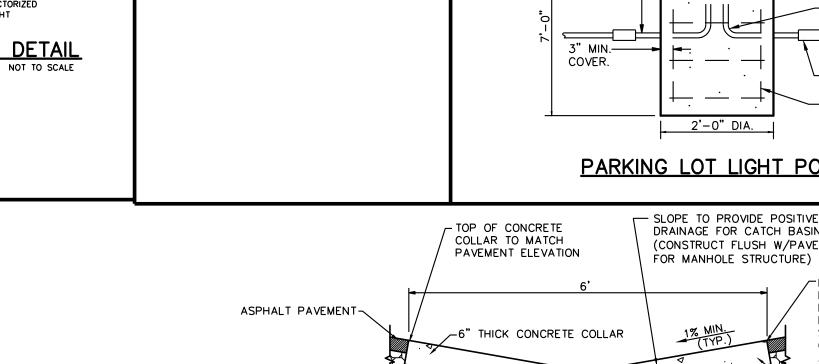
4. DURING CONSTRUCTION, NO PERSON SHALL ATTACH ANY DEVICE OR WIRE TO ANY REMAINING TREE.

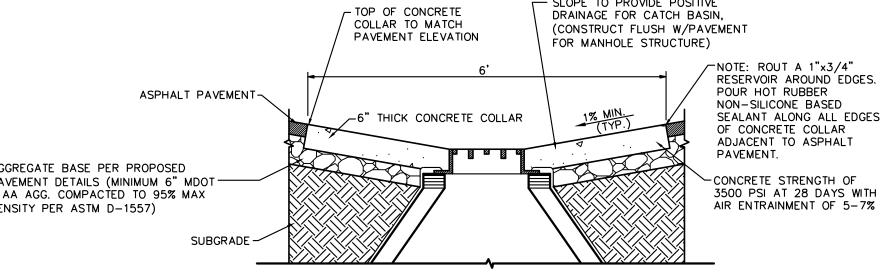
MUST BE AVOIDED. ALL TRENCHING SHALL OCCUR OUTSIDE OF THE PROTECTIVE FENCING.

7. REGULATED TREES LOCATED ON ADJACENT PROPERTY

-MINERAL SOIL TREE PROTECTION FENCE DETAIL







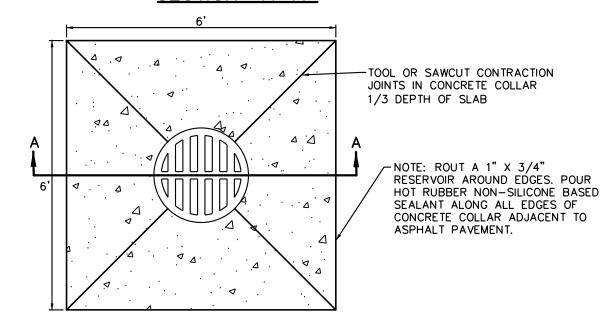
SECURED COVER E.J.I.W. #1565 OR

RECESSED CLEANOUT-

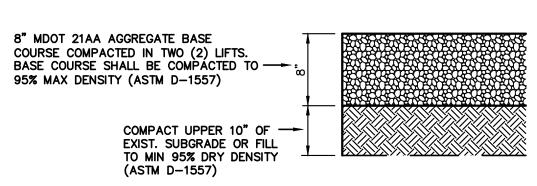
ADJACENT SEWER

4"-45" BEND

APPROVËD EQUAL :

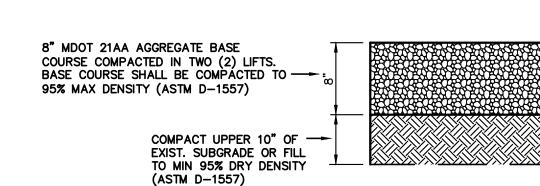


CONCRETE COLLAR AT CATCH BASIN DETAIL



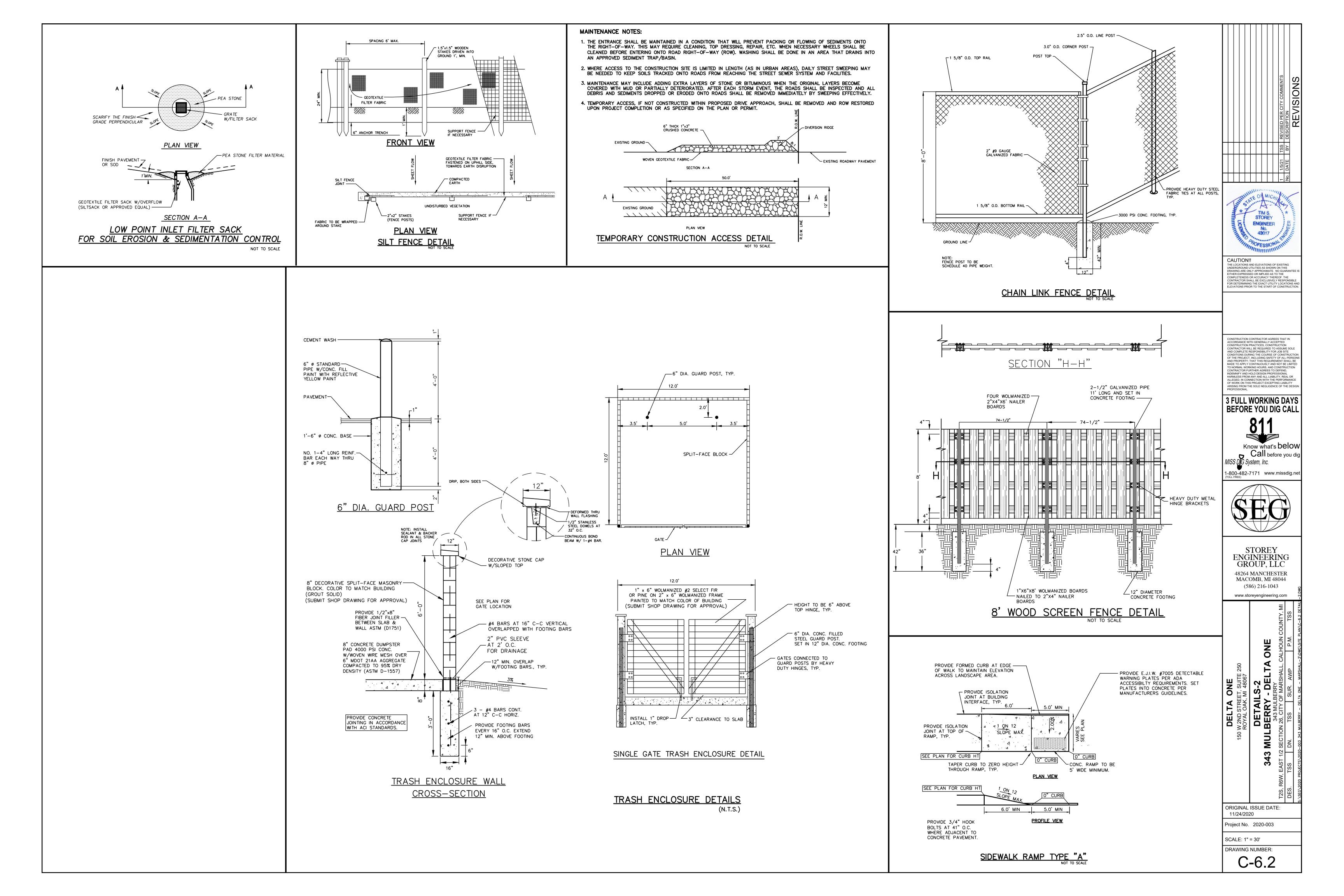
GRAVEL DRIVEWAY DETAIL NOT TO SCALE

AGGREGATE BASE PER PROPOSED PAVEMENT DETAILS (MINIMUM 6" MDOT-21AA AGG. COMPACTED TO 95% MAX DENSITY PER ASTM D-1557) SECTION "A-A"



5. ALL UTILITY SERVICE REQUEST MUST INCLUDE NOTIFICATION TO THE INSTALLER THAT PROTECTED TREES ~PLASTIC MESH PROTECTIVE FENCE ∠ORGANIC LAYER

REPLACEMENT OF THAT TREE MAY BE REQUIRED PRIOR TO THE ISSUANCE OF THE "CERTIFICATE OF OCCUPANCY. THAT MAY BE AFFECTED BY CONSTRUCTION ACTIVITIES





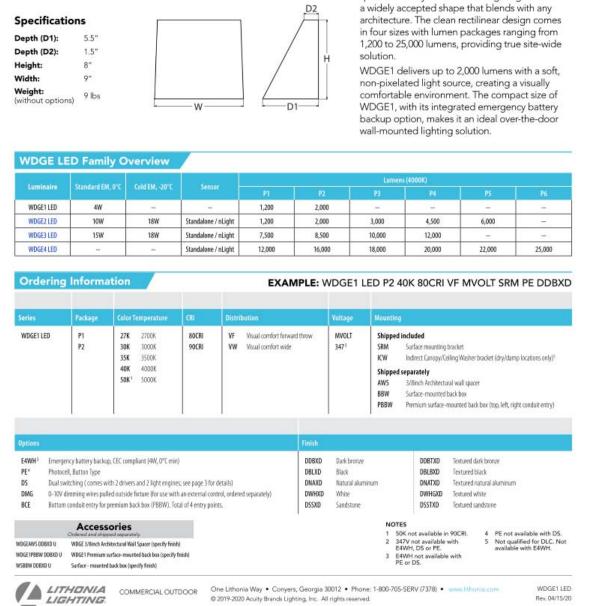
Height H2:

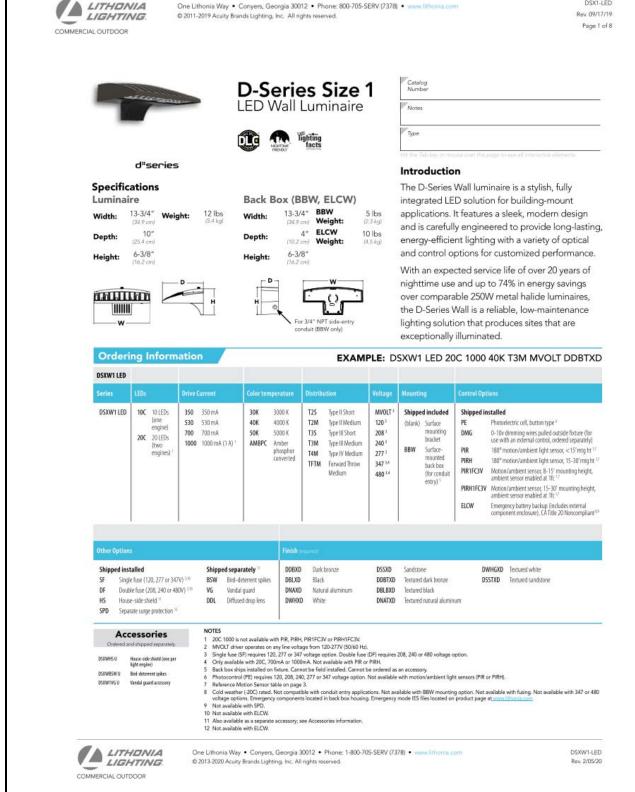
27 lbs

Weight (max):



Orde	ring Information			EXAMPLE:	: DSX1 LED P7 40	K T3M N	IVOLT SPA NLT	TAIR2 PI	RHN DDE
DSX1 LE)								
Series		Color temperature	Distril	ution		Voltage	Mounting		
DSX1 LED	Poward optics	30K 3000 K 40K 4000 K 50K 5000 K	T1S T2S T2M T3S T3M T4M TFTM	Type II short Type II medium Type III short Type III medium Type IV medium	TSVS Type V very short TSS Type V short TSM Type V medium TSW Type V medium TSW Type V mide BLC Backlight control ² LCCO Left corner cutoff ² RCCO Right corner cutoff ²	MVOLT ³ 120 ⁴ 208 ⁴ 240 ⁴ 277 ⁴ 347 ⁴ 480 ⁴	RPA Roun WBA Wall I SPUMBA Squar	d pole universal	g I mounting adapto mounting adaptor
		ļ	ł					cify finish) ^s	
Control op	ions		ļ.			Other opti	(spec		unai.
Control op	98000 20000		PIR	High/low, motion/ambie	ent sensor, 8-15'mounting height,	Other option	(spec	offy finish) *	Dark bronze
	98000 20000	sensor ⁸	PIR PIRH	High/low, motion/ambie ambient sensor enabled d High/low, motion/ambie	at 5fc 1374 ent sensor, 15-30/mounting height.	Shipped ii HS Hoo	(spec	ify finish) * Finish mea	
Shipped i	nstalled nLight AIR generation 2 enabled [†]	ontrols ordered separate) *		High/low, motion/ambie ambient sensor enabled i High/low, motion/ambie ambient sensor enabled i	at 5fc ^{11,16} ent sensor, 15-30/mounting height, at 5fc ^{11,16} ent sensor, 8-15/mounting height.	Shipped ii HS Hoo SF Sind DF Doo	(spec ons nstalled use-side shield ¹⁹	Finish mass DDBXD DBLXD	Dark bronze Black
Shipped ii NLTAIR2 PIRHN PER PERS PER7	nstalled nLight AIR generation 2 enabled * Network, high/low motion/ambient NEMA twist-lock receptacle only (co five-pin receptacle only (controls or Seven-pin receptacle only (controls	ontrols ordered separate) * dered separate) ** ordered separate) *** ordered separate) ***	PIRH	High/low, motion/ambie ambient sensor enabled. High/low, motion/ambie ambient sensor enabled. High/low, motion/ambie ambient sensor enabled.	at Sfc ^{10,00} ent sensor, 15-30' mounting height, at Sfc ^{10,00} ent sensor, 8-15' mounting height, at 1fc ^{10,00} t sensor, 15-30' mounting height,	Shipped ii HS Hou SF Sine DF Dou L90 Left R90 Rig	(special special speci	Finish occur DDBXD DBXD DBXD DNAXD DWHXD DDBTXD DBLBXD	Dark bronze Black Natural aluminur White Textured dark bro Textured black
Shipped ii NLTAIR2 PIRHN PER PERS	nstalled nLight AIR generation 2 enabled ¹ Network, high/low motion/ambient NEMA twist-lock receptacle only (co five-pin receptacle only (controls or	ontrols ordered separate) * dered separate) ** ordered separate) ** ordered separate) ** official for use with an	PIRH PIR1FC3V	High/low, motion/ambie ambient sensor enabled : High/low, motion/ambie ambient sensor enabled : High/low, motion/ambie ambient sensor enabled :	at Sfc ^{10,16} ent sensor, 15-30'mounting height, at Sfc ^{10,16} at 1fc ^{10,16} t sensor, 15-30'mounting height, at 1fc ^{10,16}	Shipped ii HS Hou SF Sine DF Dou L90 Left R90 Rig Shipped s	(special special speci	Finish occur DDBXD DBXD DBXD DNAXD DWHXD DDBTXD	Dark bronze Black Natural aluminu White Textured dark bro





Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
PARKING AND DRIVES	Ж	1.2 fc	2.7 fc	0.4 fc	6.8:1	3.0:1	0.4:1
SITE	+	0.2 fc	2.8 fc	0.0 fc	N/A	N/A	0.1:1

General Note

- 1. SEE SCHEDULE FOR LUMINAIRE MOUNTING HEIGHT.
- 2. CALCULATIONS ARE SHOWN IN FOOTCANDLES AT: 0' 0"
- 3. LIGHTING ALTERNATES REQUIRE NEW PHOTOMETRIC CALCULATION AND RESUBMISSION TO CITY FOR APPROVAL.

THE ENGINEER AND/OR ARCHITECT MUST DETERMINE APPLICABILITY OF THE LAYOUT TO EXISTING / FUTURE FIELD CONDITIONS. THIS LIGHTING LAYOUT REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRE MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS. MOUNTING HEIGHTS INDICATED ARE FROM GRADE AND/OR FLOOR UP.

THESE LIGHTING CALCULATIONS ARE NOT A SUBSTITUTE FOR INDEPENDENT ENGINEERING ANALYSIS OF LIGHTING SYSTEM SUITABILITY AND SAFETY. THE ENGINEER AND/OR ARCHITECT IS RESPONSIBLE TO REVIEW FOR MICHIGAN ENERGY CODE AND LIGHTING QUALITY COMPLIANCE.

UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

FOR ORDERING INQUIRIES CONTACT GASSER BUSH AT QUOTES@GASSERBUSH.COM OR 734-266-6705.

THIS DRAWING WAS GENERATED FROM AN ELECTRONIC IMAGE FOR ESTIMATION PURPOSE ONLY. LAYOUT TO BE VERIFIED IN FIELD BY OTHERS.

MOUNTING HEIGHT IS MEASURED FROM GRADE TO FACE OF FIXTURE. POLE HEIGHT SHOULD BE CALCULATED AS THE MOUNTING HEIGHT LESS BASE HEIGHT.

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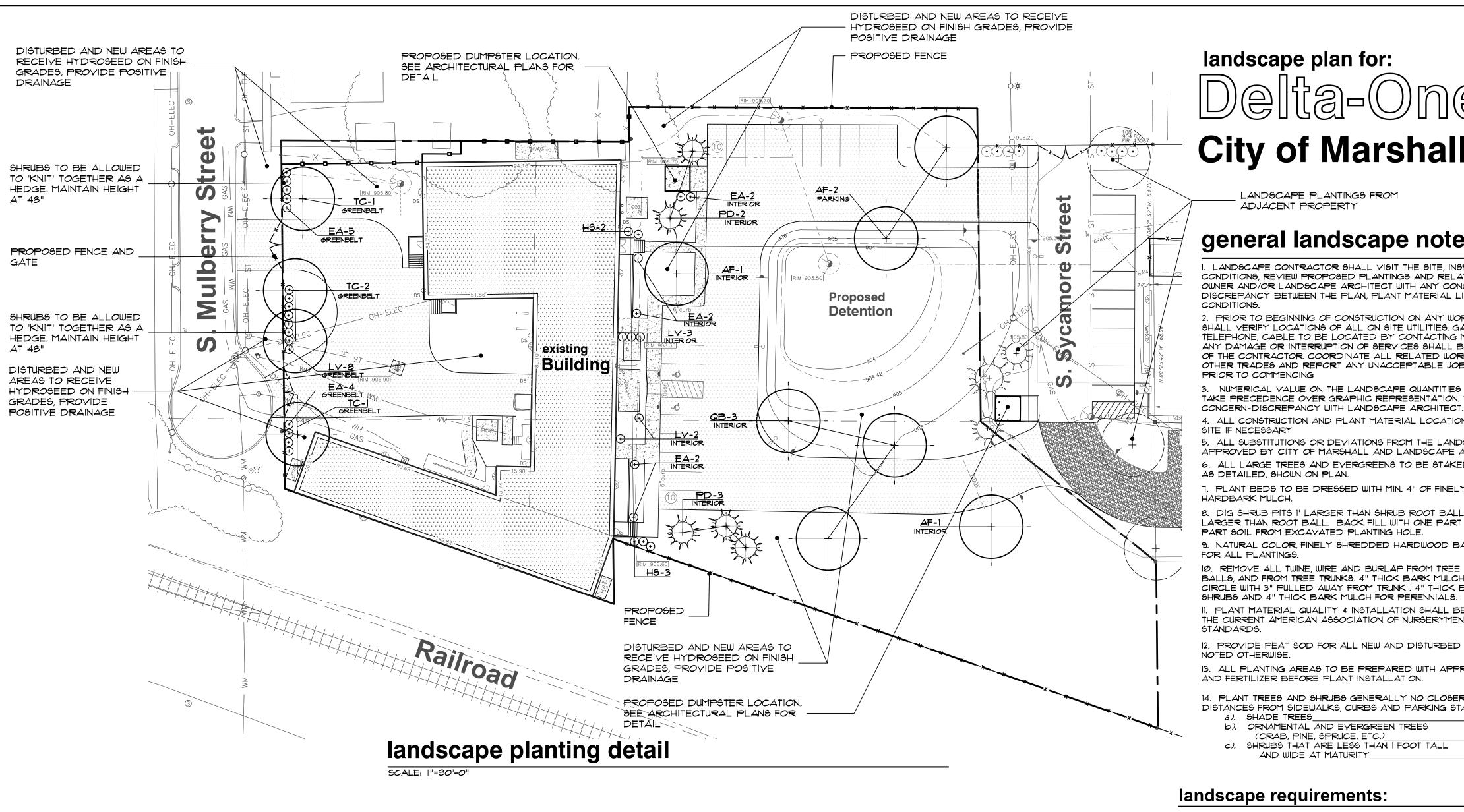
 † 0.0 †

Schedule	•			•		1	ı
Symbol	Label	QTY	Manufacturer	Description	Lamp	Wattage	МН
	ASIN G	4	Lithonia Lighting	DSX1 LED	LED	70	18' ON 2' BASE
	В	13	Lithonia Lighting	WDGE1	LED	10.0002	15'

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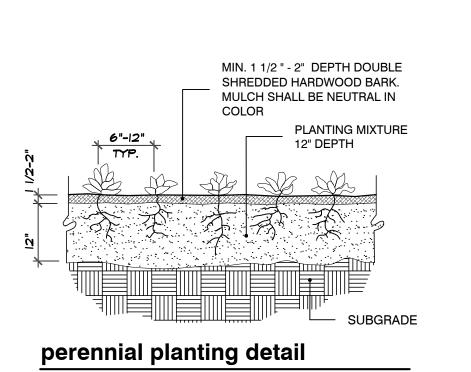
Designer
nae
Date
11/18/2020
REV. 11/24/20
Scale
Not to Scale
Drawing No.
#20-55874 V2
1 of 2

5



plant material list

					T
key	quant. LS-1	botanical name	common name	size	comments
		TREES			
TC	4	TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LINDEN	2 1/2" BB	GREENBELT
AF	3	ACER X FREEMANII 'JEFFERGRED'	AUTUMN BLAZE RED MAPLE	2 1/2" BB	INTERIOR/PARKING
QB	3	QUERUS BI-COLOR	WHITE SWAMP OAK	2 1/2" BB	INTERIOR
PD	5	PICEA GLAUCA 'DENSATA'	BLACKHILLS SPRUCE	8' BB	INTERIOR
		SHRUBS			
EA	15	EUONYMUS ALATA COMPACTA	DWARF WINGED BURNING BUSH	#5 CONT.	GREENBELT
LY	13	LIGUSTRUM X VICARYI	GOLDEN VICARY PRIVET	#5 CONT.	INTERIOR
HS	5	HIBISCUS SYRIACUS 'APHRODITE'	APHRODITE ROSE OF SHARON	#5 CONT.	INTERIOR
				_	



3. REMOVE ALL TAGS, STRING, PLASTICS AND OTHER MATERIALS MULCH 4" DEPTH WITH SHREDDED HARDWOOD BARK. NATURAL IN COLOR. LEAVE 3" CIRCLE OF BARE SOIL AT BASE OF TREE TRUNK TO EXPOSE ROOT FLARE. MOUND EARTH TO FORM SAUCER REMOVE COLLAR OF ALL FIBER POTS. POTS SHALL BE CUT TO PROVIDE FOR ROOT GROWTH. REMOVE ALL NONORGANIC CONTAINERS COMPLETELY. MATERIALS COMPLETELY FROM THE SCARIFY PLANTING PITSIDES. RECOMPACT BASE OF TO 4" DEPTH.

shrub planting detail

PLANTING MIXTURE: AMEND SOILS PER SITE CONDITIONS AND REQUIREMENTS OF THE PLANT MATERIAL. SHRUBS PLANTED IN BEDS SHALL HAVE ENTIRE BED MASS EXCAVATED AND BACKFILLED WITH APPROVED PLANT MIX. PLANTS SHALL NOT BE INSTALLED IN INDIVIDUAL HOLES. REMOVE ALL NON-BIODEGRADABLE

1. SHRUB SHALL BEAR SAME RELATION TO FINISH

GRADE, IF DIRECTED BY LANDSCAPE ARCHITECT

GRADE AS IT BORE ORIGINALLY OR SLIGHTLY

HIGHER THAN FINISH GRADE UP TO 4" ABOVE

2. PRUNE ONLY DEAD OR BROKEN BRANCHES.

FOR HEAVY CLAY SOIL AREAS.

WIRE BASKET AND BURLAP FROM ROOTBALL. CUT AND REMOVE WIRE TOP HALF OF THE ROOTBALL BASKET AND BURLAP FROM TOP HALF OF THE ROOTBALL. evergreen planting detail

landscape plan for:

Delta-One Mulberry St. City of Marshall, Michigan

REQUIRED PROVIDED

REQUIRED | PROVIDED

1.EVERGREEN TREE SHALL BEAR SAME RELATION TO FINISH GRADE

ABOVE GRADE, IF DIRECTED BY

CLAY SOIL AREAS.

BRANCHES.

PLASTICS ETC.

BELOW 12' HEIGHT.

ROOT FLARE.

PLANTING MIXTURE:

AMEND SOILS PER SITE

OF THE PLANT MATERIAL.

SCARIFY PLANTING PIT SIDES.

RECOMPACT BASE OF TO 4"

AS IT BORE ORIGINALLY OR SLIGHTLY

HIGHER THAN FINISH GRADE UP TO 6"

LANDSCAPE ARCHITECT FOR HEAVY

2. DO NOT PRUNE TERMINAL LEADER.

4. GUY EVERGREEN TREES ABOVE 12'

MULCH 4" DEPTH WITH

SHREDDED HARDWOOD BARK.

NATURAL IN COLOR. LEAVE 3"

OF TREE TRUNK TO EXPOSE

CIRCLE OF BARE SOIL AT BASE

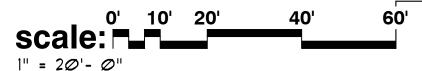
CONDITIONS AND REQUIREMENTS

HEIGHT. STAKE EVERGEEN TREE

PRUNE ONLY DEAD OR BROKEN

3. REMOVE ALL TAGS, STRING,

LANDSCAPE PLANTINGS FROM ADJACENT PROPERTY



ENGINEERING PLANS FOR LOCATION AND DETAILS.

general landscape notes:

LANDSCAPE CONTRACTOR SHALL VISIT THE SITE, INSPECT EXISITING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK. CONTACT THE OWNER AND/OR LANDSCAPE ARCHITECT WITH ANY CONCERNS OR DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SITE

2. PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES, GAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTACTING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, COORDINATE ALL RELATED WORK ACTIVITIES WITH OTHER TRADES AND REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER

NUMERICAL VALUE ON THE LANDSCAPE QUANTITIES SPECIFIED ON THE PLAN TAKE PRECEDENCE OVER GRAPHIC REPRESENTATION, VERIFY ANY

4. ALL CONSTRUCTION AND PLANT MATERIAL LOCATION TO BE ADJUSTED ON 5. ALL SUBSTITUTIONS OR DEVIATIONS FROM THE LANDSCAPE PLAN MUST BE

APPROVED BY CITY OF MARSHALL AND LANDSCAPE ARCHITECT 6. ALL LARGE TREES AND EVERGREENS TO BE STAKED, GUYED AND WRAPPED AS DETAILED, SHOWN ON PLAN.

1. PLANT BEDS TO BE DRESSED WITH MIN. 4" OF FINELY DOUBLE SHREDDED HARDBARK MULCH.

8. DIG SHRUB PITS I' LARGER THAN SHRUB ROOT BALLS AND TREE PITS 2' LARGER THAN ROOT BALL. BACK FILL WITH ONE PART TOP SOIL AND ONE

PART SOIL FROM EXCAYATED PLANTING HOLE. 9. NATURAL COLOR, FINELY SHREDDED HARDWOOD BARK MULCH REQUIRED

FOR ALL PLANTINGS. 10. REMOVE ALL TWINE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH BALLS, AND FROM TREE TRUNKS, 4" THICK BARK MULCH FOR TREES IN 4' DIA. CIRCLE WITH 3" PULLED AWAY FROM TRUNK . 4" THICK BARK MULCH FOR

SHRUBS AND 4" THICK BARK MULCH FOR PERENNIALS. II. PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN LANDSCAPE

12. PROVIDE PEAT SOD FOR ALL NEW AND DISTURBED LAWN AREAS UNLESS NOTED OTHERWISE.

13. ALL PLANTING AREAS TO BE PREPARED WITH APPROPRIATE SOIL MIXTURES AND FERTILIZER BEFORE PLANT INSTALLATION.

14. PLANT TREES AND SHRUBS GENERALLY NO CLOSER THAN THE FOLLOWING DISTANCES FROM SIDEWALKS, CURBS AND PARKING STALLS:

ioranoco incomo cipemacino, cuindo and i anning oracco:							
a). SHADE TREES	5 FT.						
b). ORNAMENTAL AND EVERGREEN TREES							
(CRAB, PINE, SPRUCE, ETC.)	1Ø FT.						
c). SHRUBS THAT ARE LESS THAN I FOOT TALL							
AND WIDE AT MATURITY	2 FT.						

greenbelt landscape

FOUR (4) SHRUBS PER 40 LF.

parking

STAKE TREES AT FIRST BRANCH

FLEXING OF THE TREE. REMOVE

USING 2"-3" WIDE BELT- LIKE

NYLON OR PLASTIC STRAPS.

ALLOW FOR SOME MINIMAL

2" X 2" HARDWOOD STAKES,

UPRIGHT, 18" IF ANGLED.

OUTSIDE ROOTBALL. REMOVE AFTER ONE YEAR.

DRIVE STAKES A MIN. 18"

MIN. 36" ABOVE GROUND FOR

INTO UNDISTURBED GROUND

PLANT TREE SO ROOT FLARE IS AT

OR ABOVE SURROUNDING GRADE.

EXPOSE FLARE IF NECESSARY AND

REMOVE ALL NON-BIODEGRADABLE

THE ROOTBALL. CUT AND REMOVE

MATERIALS COMPLETELY FROM

REMOVE ROOT BALL DIRT TO

CUT ANY GIRDLING ROOTS.

MOUND EARTH TO FORM

SAUCER

AFTER ONE YEAR.

TOTAL LF. OF S. MULLBERRY ST. FRONTAGE

(168 LF. / 40 LF. = 4.2 TREES)

TOTAL NO. OF PARKING SPACES PROVIDED

ONE (I) DECIDUOUS TREE PER IO-SPACES

(20 SPACES / IO-SPACES = 2 TREES)

3 x width of rootball

ONE (I) DECIDUOUS OR EVERGREEN TREE PER 40 LF.

 $(168 LF. / 40 LF. = 4.2 \times 4 = 16.8 SHRUBS)$

15. NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOWN ON THE OVERALL LANDSCAPE PLAN. SEE

16. ALL LAWN AREAS AND LANDSCAPE BEDS TO BE FULLY IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM. IRRIGATION SYSTEM TO HAVE SEPARTE ZONES FOR LAWN AREAS, PARKING ISLANDS, AND SHRUB BEDS WITH DIFFERENT CONTROL MOISTURE LEVEL ADJUSTMENT PER ZONE AS REQUIRED

17. UNLESS NOTED OTHERWISE, LANDSCAPE BEDS ADJACENT TO LAWN TO RECIEVE EDGING. EDGING SHALL BE 4" X 1/8" METAL (FINISH BLACK OR GREEN) OR APPROVED EQUAL AND TO BE INSTALLED WITH HORIZONTAL METAL STAKES AT 32" O.C. OR PER MANUFACTERER'S SPECIFICATION.

IS. ALL NEW PARKING ISLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOILS A MIN. OF 16"-18" DEPTH. BACK FILL WITH GOOD, MEDIUM TEXTURED PLANTING SOILS, ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE. PROVIDE POSITIVE DRAINAGE.

19. WATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MULCHING WITHIN 24 HOURS AFTER INSTALLATION.

20. ALL TREE PITS TO BE TESTED FOR PROPER DRAINAGE PRIOR TO TREE PLANTING. PROVIDE APPROPRIATE DRAINAGE SYSTEM AS REQUIRED IF THE TREE PIT DOES NOT DRAIN SUFFICIENTLY.

21. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION INSTALLATION FOR A PERIOD OF TWO YEAR BEGINNING AFTER THE COMPLETION OF LANDSCAPE INSTALLTION DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE END OF THE GUARANTEE PERIOD, ANY DEAD OR UNACCEPTABLE PLANTS, AS DETERMINED BY THE TOWNSHIP OR LANDSCAPE ARCHITECT, WITHOUT COST TO THE OWNER.

landscape maintenance notes:

THE OWNER OF THE PROPERTY SHALL BE RESPONSIBLE FOR ALL MAINTENANCE OF SITE LANDSCAPING, AS FOLLOWS:

I. LANDSCAPE MAINTENANCE PROCEDURES AND FREQUENCIES TO BE FOLLOWED SHALL BE SPECIFIED ON THE LANDSCAPE PLAN, ALONG WITH THE MANNER IN WHICH THE EFFECTIVENESS, HEALTH AND INTENDED FUNCTIONS OF THE VARIOUS LANDSCAPE AREAS ON THE SITE WILL BE ENSURED.

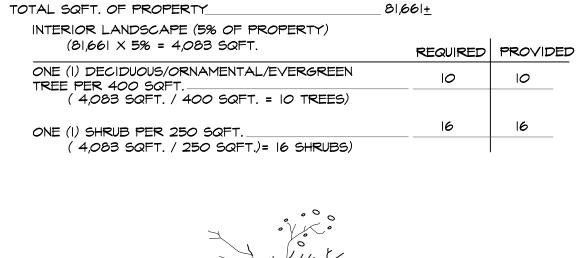
2. LANDSCAPING SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE FROM DEBRIS AND REFUSE.

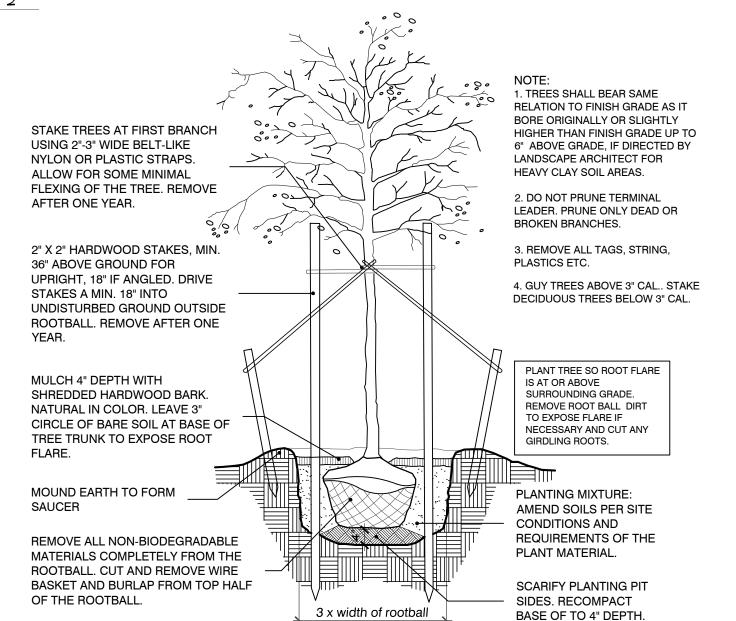
3. PRUNING SHALL BE MINIMAL AT THE TIME OF INSTALLATION, ONLY TO REMOVE DEAD OR DISEASED BRANCHES, SUBSEQUENT PRUNING SHALL ASSURE PROPER MATURATION OF PLANTS TO ACHIEVE THEIR APPROVED PURPOSE.

4. ALL DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED AND REPLACED WITHIN SIX (6) MONTHS AFTER IT DIES OR IN THE NEXT PLANTING SEASON, WHICHEVER OCCURS FIRST, THE PLANTING SEASON FOR

DECIDUOUS PLANTS SHALL BE BETWEEN MARCH I AND JUNE I AND FROM OCTOBER UNTIL THE PREPARED SOIL BECOMES FROZEN. THE PLANTING SEASON FOR EVERGREEN PLANTS SHALL BE BETWEEN MARCH I AND JUNE 1. PLANT MATERIAL INSTALLED TO REPLACE DEAD OR DISEASED MATERIAL SHALL BE AS CLOSE AS PRACTICAL TO THE SIZE OF THE MATERIAL IT IS INTENDED TO REPLACE.

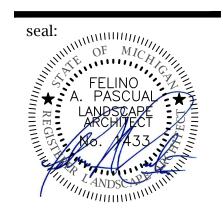
interior landscape TOTAL SQFT. OF PROPERTY 81,661± INTERIOR LANDSCAPE (5% OF PROPERTY) $(81,661 \times 5\% = 4,083 \text{ SQFT}.$ ONE (I) DECIDUOUS/ORNAMENTAL/EVERGREEN 10 TREE PER 400 SQFT (4,083 SQFT. / 400 SQFT. = 10 TREES)





tree planting detail

and ASSOCIATES Community Land Planner and registered Landscape Architect 24333 Orchard Lake Rd, Suite G Farmington Hills, MI 48336 ph. (248) 557-5588 fax. (248) 557-5416



DELTA ONE

150 W. 2nd Street Suite 250 Royal Oak, Michigan

project:

DELTA ONE 343 MULBERRY

project location:

343 Mulberry City of Marshall, Michigan

sheet title:

LANDSCAPE PLAN

job no./issue/revision date:

LS20.095.11 SPA 11/24/2020 LS20.095.12 CITY 1/5/2021 COMMENTS

JP, PH checked by:

date: 11-27-2020

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and Associates Do Not scale drawings. Use figured dimensions only

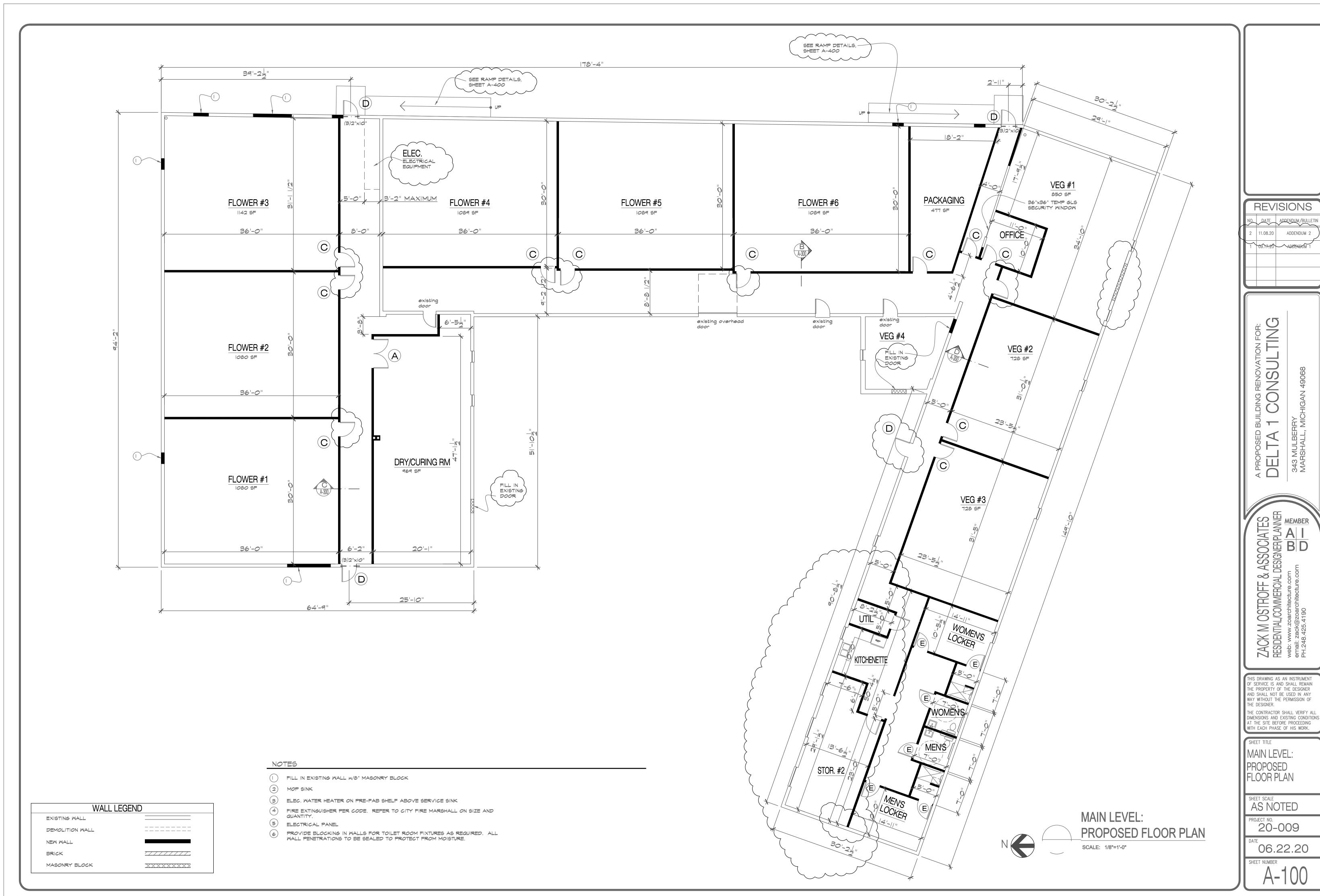


he location and elevations of existing nderground utilities as shown on this is either expressed or implied as to the completeness of accuracy, contractor shall be exclusively responsible for determining the exact location and elevation prior to the start of construction

project no: LS20.095.1

sheet no:

LS-J



RELEASED FOR CONSTRUCTION