CHARTER TOWNSHIP OF ORION PLANNING COMMISSION REGULAR MEETING AGENDA WEDNESDAY, AUGUST 16, 2023 - 7:00 PM ORION TOWNSHIP MUNICIPAL COMPLEX BOARD ROOM 2323 JOSLYN ROAD LAKE ORION, MI 48360

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| A. PC-23-27 Black Cat Beanery Special Land Use for a cat cafe, located at 1192 S. Lapeer Rd. (parcel #09-14-201-025). | 16 |
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| #09-14-201-005, 09-14-201-006). | |
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| A. Public Hearing at 7:05 p.m. for PC-23-22 Yatooma Oil Gas Station and Drive-Thru, Special | 273 |
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| 14. CHAIRMAN'S COMMENTS | |
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In the spirit of compliance with the Americans with Disabilities Act, individuals with a disability should feel free to contact Penny S. Shults, Clerk, at (248) 391-0304, ext. 4001, at least seventy-two hours in advance of the meeting to request accommodations.

CHARTER TOWNSHIP OF ORION PLANNING COMMISSION * * * * * A G E N D A * * * * *

REGULAR MEETING – WEDNESDAY, AUGUST 16, 2023 - 7:00 P.M. ORION TOWNSHIP MUNICIPAL COMPLEX BOARD ROOM 2323 JOSLYN ROAD, LAKE ORION, MI 48360

Public Hearing at 7:05 p.m. for PC-23-22 Yatooma Oil Gas Station and Drive-Thru, Special Land Use request for a gas station, and a drive-thru restaurant, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015).

Public hearing (immediately following PC-23-22) PC-23-27, Black Cat Beanery, Special Land Use request for a cat café, located at 1192 S. Lapeer Rd. (parcel #09-14-201-025).

1. OPEN MEETING

2. ROLL CALL

3. MINUTES

- A. 7-19-23, Planning Commission Regular Meeting Minutes
- B. 8-2-23, Planning Commission Special Meeting/Workshop Minutes.

4. AGENDA REVIEW AND APPROVAL

5. BRIEF PUBLIC COMMENT - NON-AGENDA ITEMS ONLY

6. CONSENT AGENDA

7. NEW BUSINESS

- A. PC-23-27 Black Cat Beanery Special Land Use request for a cat cafe, located at 1192 S. Lapeer Rd. (parcel #09-14-201-025).
- B. PC-23-20 WhiteWater Car Wash Site Plan, located at 1112 and 1140 S Lapeer Rd. (parcels #09-14-201-005 and 09-14-201-006).
- C. PC-23-22 Yatooma Oil Gas Station and Drive-Thru Special Land Use and Site Plan, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015).

8. UNFINISHED BUSINESS

9. PUBLIC COMMENTS

10. COMMUNICATIONS

11. PLANNERS REPORT/EDUCATION

12. COMMITTEE REPORTS

13. FUTURE PUBLIC HEARINGS

- A. Public Hearing at 7:05 p.m. for PC-23-22 Yatooma Oil Gas Station and Drive-Thru, Special Land Use request for 24-Hour operation, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015).
- B. Public hearing (immediately following PC-23-22) PC-23-32, The Villages of Orion, request for a proposed amendment to a consent judgement and site plan, located at 823 N. Lapeer Rd. (parcel #09-02-126-020).

14. CHAIRMAN'S COMMENTS

15. COMMISSIONERS' COMMENTS

16. ADJOURNMENT

In the spirit of compliance with the Americans with Disabilities Act, individuals with a disability should feel free to contact the Township at least seventy-two hours in advance of the meeting when requesting accommodations.

CHARTER TOWNSHIP OF ORION PLANNING COMMISSION ****** MINUTES ****** REGULAR MEETING, WEDNESDAY, JULY 19, 2023

The Charter Township of Orion Planning Commission held a regular meeting on Wednesday, July 19, 2023, at 7:00 p.m. at the Orion Township Municipality Complex Board Room, 2323 Joslyn Road, Lake Orion, Michigan 48360.

PLANNING COMMISSION MEMBERS PRESENT:

Scott Reynolds, Chairman Don Gross, Vice-Chairman Joe St. Henry, Secretary Jessica Gingell, Commissioner James Cummins, Commissioner Don Walker, PC Rep to ZBA Kim Urbanowski, BOT Rep to PC

PLANNING COMMISSION MEMBERS ABSENT

None

1. OPEN MEETING

Chairman Reynolds opened the meeting at 7:00 p.m.

2. ROLL CALL

As noted.

CONSULTANTS PRESENT:

John Enos, (Township Planner) of Carlisle Wortman Associates, LLC Tammy Girling, Township Planning & Zoning Director

OTHERS PRESENT:

Tom Beauchamp

3. MINUTES

A. 7-5-23, Planning Commission Regular Meeting Minutes

Moved by Vice-Chairman Gross, seconded by Commissioner Cummins, to approve the minutes as presented. **Motion carried**.

4. AGENDA REVIEW AND APPROVAL

Moved by Vice-Chairman Gross, seconded by Liaison Urbanowski, to approve the agenda as presented. **Motion carried**.

5. BRIEF PUBLIC COMMENT - NON-AGENDA ITEMS ONLY

None.

6. CONSENT AGENDA

A. PC-21-90, Ridgewood Final PUD Plan, Plans Date Stamped 02-22-23 Approval of Destruction of Documents.

Moved by Vice-Chairman Gross, seconded by Secretary St. Henry, to approve the consent agenda as presented. **Motion carried.**

7. NEW BUSINESS

None

8. UNFINISHED BUSINESS

PC-23-21, Dutton East Retail Revised Landscape Plan, located at 4898 Bald Mountain Rd. (parcel 09-35-477-003).

Chairman Reynolds stated that this was a case that they have seen in the past. There was a response letter dated yesterday in front of them. He asked for an update on where they were from last time.

Mr. Tom Beauchamp at 4865 Brookfield Way stated that he was representing the ownership group and tenant at 4898 Bald Mountain Rd.

Mr. Beauchamp said that they did make a valiant effort to meet all of the requirements in any way that they could with the latest submission. He thought there would be two minor variances that they are looking at. They have tried to meet the requirements as far as the ordinance is concerned.

Planner Enos read through his review date stamped received July 11, 2023.

Chairman Reynolds stated that in their packets the revised landscape plans as submitted were brought forth to their engineer and their Fire Marshal. They did review the plans and there were no immediate concerns with anything as submitted.

Chairman Reynolds asked if the applicant had any additional comments.

Mr. Beauchamp said with regard to the item with the parking lot islands, he personally went out to verify and there are two of them that do not meet the requirement. He thought it was part of the letter that he gave them. The two southern parking lot islands towards the Bald Mountain entrance there are two little finger islands that come in, they are 9-ft. instead of 10-ft. He scaled off the drawing. He hates to say that they just put in what they had on the drawings but when the site work guy was out there doing the concrete, he did it off the drawings that they did have as approved and somebody on their end obviously missed it. He didn't know if tearing them out to get another foot is the right call on that so they are going to ask for a variance on that that those would be approved as installed.

Mr. Beauchamp stated he thought the other items kind of speak for themselves in that they are going to comply with all the ordinance requirements. If they do have the ability to submit to a tree fund for the 38 trees that they are not really able to get on site that would be preferred. He would look at the Dutton West property and Oakland Business Park which is on the other side of Premiere Drive if he had to find a place to plant trees. He thought the community would be better served if there were parks or different things that were going on. He lives off of Baldwin and Brown Roads, and they are doing stuff up and down that boulevard there to make that look nice. If there is stuff that makes the community look better, he was certainly open to funding that tree fund.

Planning & Zoning Director Girling said regarding the parking islands it appears that when the site plan was originally reviewed that it was not called out as an issue. They were granted site plan approval with that size. With the proposed waivers tonight if they are given those waivers then it trues it up for them on something that was missed.

Planning & Zoning Director Girling stated that on the tree fund she has researched and talked to the attorney and her recollection of needing to spend it in a very rapid timeframe. They said they are not aware of any regulations related to that. They can't have the money out there forever, never dipping into it or using it. Her recollection was incorrect and so she has had internal conversations to go ahead and create that fund. The Parks and Recs Director has said that he could use that for landscape throughout the Township. They would keep an eye on it if they found that he couldn't spend it as fast as they are granting this then perhaps other projects in the future. They all know that they are working on rewriting that section anyway so maybe

they can come up with some better language. Currently, she is working with accounting to go ahead and set up that fund, so it is an option.

Chairman Reynolds said he knew that Planning & Zoning Director Girling, staff, and himself have had some conversations over that leading up to some of these projects that they have had the last couple of months. Just as a note it is the discretion of the Planning Commission if they choose to allow the tree fund to be utilized. He thought that was one factor as it is written right now. Maybe moving forward there could be some language set forth of some parameters or something. He thought legally they needed to look at that and also some other tree ordinances on how they successfully utilize it. There are plenty of communities around them that do have tree funds. He thought it was important to balance out where the trees are going and whether they are just on public property.

Chairman Reynolds stated that he didn't see a major issue obviously with a small deviation and a landscape island. He appreciated the attempt to bring in some more landscaping and the deeper dive on really putting everything that was possible on the site within some of the restrictions. He appreciated the fact that there were some efforts made where there couldn't be trees planted and that there are plenty of shrubs and landscaping. He thought it was a much better compromise, collectively with the Township that they are going to proceed with starting the tree fund and essentially working with that. He thought what they saw was appropriate from his perspective.

Secretary St. Henry said he appreciated them going the extra mile to fill out the landscaping on the site. He knew it wasn't easy working with a tough site. Just looking through what you put together you listened, and they really appreciate it.

Vice-Chairman Gross stated it is nice to see somebody coming forward and saying that they can resolve this in other ways.

Moved by Vice-Chairman Gross, seconded by Commissioner Cummins, relative to the Landscape Open Space Tree Count Waiver (Ord. No. 78, Section 27.05A, 3, a ii) that in consideration of the overall design and impact of the revised landscape plan, that the Planning Commission approves a landscape open space tree county waiver on all boundaries for PC-23-21, Dutton East Reatial Revised landscape plan, located at 4898 Bald Mountain Road, parcel #09-35-477-003 for plans date stamped received June 28, 2023, based on that the applicant did demonstrate the landscaping is in keeping with the intent of section 27.05 of the ordinance: and has indicated in his applicant compliance letter of July 18, 2023, is consistent with the review and report of Carlisle Wortman and there review letter of July 11, 2023.

Roll call vote was as follows: Gross, yes; St. Henry, yes; Urbanowski, yes; Walker, yes; Gingell, yes; Cummins, yes; Reynolds, yes. **Motion carried 7-0.**

Moved by Secretary St. Henry, seconded by Liaison Urbanowski, that the Planning Commission **approve** an interior parking lot island width waiver for PC-23-21, Dutton East Retail Revised landscape plan, located at 4898 Bald Mountain Rd., parcel #09-35-477-003 for plans date stamped received June 28, 2023. This approval is granted because the applicant demonstrated that: they were simply following the original site plan that was approved earlier, and that all of the things considered this is a minor waiver of one foot to the parking lot island; there does not appear to be any issues with regard to traffic on the site because of this minor parking lot waiver.

Roll call vote was as follows: Walker, yes; St. Henry, yes; Gross, yes; Gingell, yes; Cummins, yes; Urbanowski, yes; Reynolds, yes. **Motion carried 7-0.**

Planning & Zoning Director Girling stated that this suggested motion was done prior to the determination to create the tree fund, there is not a waiver listed here allowing them to contribute to the tree fund. Chairman Reynolds asked under landscaping approval motion number #3 if the condition is that they are asking for a resolution for the 38 trees that could be a contribution to the tree fund, do they need additional items for the motion? Planning & Zoning Director Girling replied yes, she thought they should bring it into the equation also in the ordinance when it talks about allowing it, it also says it has been determined that there is no other feasible area on site that was within the Planner's review. Maybe within the motion in the findings of fact list that. She thought as long as they incorporated it, she felt it would take care of it.

Chairman Reynolds said they do findings of facts just to clarify the condition of why a deviation or variance is granted.

Moved by Vice-Chairman Gross, seconded by Secretary St. Henry, that the Planning Commission **grants** revised landscape plan approval for PC-23-21, Dutton East Retail Revised landscape plan, located at 4898 Bald Mountain Rd., parcel #09-35-477-003 for plans date stamped June 28, 2023, based on the following findings of facts: that the approval is based on the following conditions: the plans to show flattened berm that meets ordinance, that there is insufficient area on the site to accommodate the additional 38 trees, and that a contribution would be made to a tree fund to allow for additional trees to be planted elsewhere within the community.

Roll call vote was as follows: St. Henry, yes; Gingell, yes; Cummins, yes; Urbanowski yes; Walker, yes; Gross, yes; Reynolds, yes. **Motion carried 7-0.**

9. PUBLIC COMMENTS

None.

10. COMMUNICATIONS

None.

11. PLANNERS REPORTS

A. Discussion on Variances, Waivers, and Deviations

Planner Enos said what Planning & Zoning Director Girling and he have tried to do, and as he has learned the ordinance over the last five or six months, it seems like they always have a PUD on the agenda. One thing that he wants to do as he gets his reviews in a format that they are comfortable with is to better call out and ask for them to call out deviations and modifications. They have in the ordinance they have modifications or waivers for landscaping, parking, and other things. He will try to make sure that when they are requesting that or if they show that on a plan, they call that out so they as a Commission can read through that and say that makes sense or that doesn't make sense, they are not going to provide that waiver.

Planner Enos stated in regard to the PUD and the terms deviations what he has noticed in some of their recent PUD plans is that the applicant has not done a good job of either showing those deviations in the table that is required or when they ask for those deviations' layout to them as a Commission why they are asking that. They have had a lot of conversations over the first part of this year about the PUD is not meant to be a tool to get more density or closer to the property line. It is meant to be a negotiation to get a better project for Orion Township. He wanted to put the applicants' feet to the fire a little better, in saying, if they are asking for a deviation for whatever within the ordinance that typically they would have to get a variance, their PUD allows for deviations to give them a table and tell them why they need that deviation.

Planner Enos said the project tonight the applicant did a nice job of why they couldn't plant the number of trees where they needed them. He wants the applicants when they are coming into Orion, and they are putting together a PUD to give them the table of deviations and tell them why exactly they need that deviation. Then they as a Commission can decide if that makes sense, does it make for a better project or is it just because they want 19 units per acre instead the required 10 units per acre. This is just more his and Planning & Zoning Director Girling's job to push the applicants but also to give them that homework when they get the plans, and they see that deviation table. He will lay it out in his review. Once they are all gone this is the record of this plan and why was this deviation granted, so if they want to make minor or major modifications, they will be able to come back to that. Plus, it requires them to think deeper into the factors for approval of a PUD, and why they are requesting that PUD. They don't want it to be for more profit they want it to be for a better project.

Planner Enos stated that as they get reviews, they are going to be more careful regarding putting that required table in but also asking them as a Commission when they are looking at these deviations to say they agree or don't agree with that.

Chairman Reynolds said he thought that would be helpful on his side. As an architect submitting plans obviously, they don't always hit all of those factors. Various commissions will have different opinions on what is important, not that meeting the whole entire ordinance isn't important. Especially points of discussion, like trees, have been a frequent topic. He thought it would be useful to have a system in place whether it be bold or a couple of colors so when they are going through a review, they can easily flag those things. When they are looking at a PUD with multiple components and phases, and as the Chair it is sometimes hard to make sure that all of them have hit those key discussion points. A PUD talking about the setback variances they need to make sure they are clear on those, a landscaping requirement, hours of operation, and things like that.

Chairman Reynolds stated that it is one thing to point out a point of discussion that if they like the color pallet it is another thing to actually say, hey they really need to make sure this is a waiver, deviation, or be clear that it is a condition of the motion that it goes towards a variance in the future. He knows they can't catch everything but at least there is a system, whether that be a summary or through the report of those kinds of things if they were to thumb through it, they can highlight those items and make sure they discuss it as a Commission, or it is within a condition of the motion. So that it is very clear to not only them but to the applicant what they are expecting from them.

Planner Enos said if they were looking at a 22-page review, as he is writing a review, he might call on something on page 6 for them to take a look at, address, or revise. To get that on the last page whether it is a summary or however they end up doing it, that gives them a better idea to say I don't remember page 5, but it is right here in the summary, why was it in the summary, why is it a modification, and do they grant that modification. They will work on that, and he has some ideas, and he has had a couple of different review formats.

Chairman Reynolds thought the other comment of that was the findings of fact component. Why are they granting that deviation or is there a solid reason? When they attend some of these Planning seminars and they get to see municipalities that get into some gray area it is because they are not clear on why this was treated one way and the other was treated another. Those are important and support the long-term vision of their ordinance.

Planner Enos said he was just deposed on a case and the Planning Commission had just denied a use. The applicant was going through the minutes, and he had reviewed the Planning

Commission meeting, and he basically said what was their bases for denial and it was hard to answer that question because the Planning Commission in that case didn't give a good reason. In fact, they dug a hole by making some very subjective comments about the project. As a protection of the Township and themselves laying out those factors, if they ever get to that point, they will be able to say they didn't meet the ordinance or they didn't meet the ordinance based on these factors.

Chairman Reynolds said they are very good but there is definitely the opportunity to button their stuff up even further. There is always the ability to poke holes in stuff, it doesn't hurt to make sure they are very clear on their intentions and why they are acting the way they are.

Commissioner Cummins said the benefits to the community, sometimes it is nice to see exactly what they feel is the benefits that they are providing in the PUD that allows them to get something that someone else would not be getting. Where is the benefit to the community and how exactly is that being done?

Chairman Reynolds said his thoughts with this topic was they tend to have some applicants who are trying to deliver this amazing product and they are so passionate about it that they are missing those criteria on which they are acting upon. He thought they all get emotional no matter if it is in their backyard or just in their community, stick to the facts and saying they agree or not it doesn't meet the criteria. Something like the tree ordinance is not hitting their intentions they need to talk about that being an ordinance section they revise, versus steering away non subjectively on things that they have an ordinance to follow.

Planning & Zoning Director Girling said she knew that most of them take out the suggested motions when they are at that point after deliberation but keep in mind that when they formulate the suggested motions for them that they have pulled from the ordinance what they are supposed to be using. It would be a very good crutch as they are trying to listen to what they say and have them meet this criterion to look at that suggested motion because it is going to have bullet points on those things that they are supposed to be looking at. They can be gathering their thoughts on whether this impacts traffic or does it impact essential services, all of that is formulated in their suggested motions.

Planner Enos said the deviations for the PUD they will make sure they layout modifications like they did this evening for whether that is parking, special use, or simply a site plan, they still have some flexibility with landscaping and parking. They want to lay those out for them too to give them that flexibility or understanding that there is an easement he doesn't need to put landscaping in, or he doesn't need that much parking.

Planner Enos stated that if they can't give a deviation for a PUD, or a modification for a special use or site plan per the ordinance, then their option is the ZBA, they have to ask the ZBA for a variance, which is a change in the law of the ordinance.

Planner Enos said those are the three options, modifications for special use of the site plans, per the ordinance. PUD has a lot of flexibility for those deviations in almost everything if they can address them and support them. Variances and that is going to be up to the ZBA.

Planning & Zoning Director Girling said on the modifications realize that with waivers, PC is the only one that can give it. There have been some in the motions that are, it is a conditional approval, they think that the consultant can work and come up with something satisfactory. If it is a waver, they cannot give it, it has to be PC. If they want the consultants to work with them that may be some guidelines, work with the Planner and for example they are granting a waiver up to a 2% deviation in the number of trees. If they are truly working with the waiver, it cannot

be subjective like that it has to be something that they can show that they have met. Chairman

Reynolds said a deviation of a setback no greater a than 10-ft. or something like that.

12. COMMITTEE REPORTS

None.

13. FUTURE PUBLIC HEARINGS

None.

14. CHAIRMAN'S COMMENTS

None.

15. COMMISSIONERS' COMMENTS

Commissioner Cummins said he thought it was great how the applicant came back and addressed the problems they had at the last meeting.

Commissioner Walker thanked Planner Enos and Planning & Zoning Director Girling for the hard work they are putting into this very important project.

Planning & Zoning Director Girling said in the past when they talked about pre-app that they have asked them if they wanted to sit in on a pre-app. She is going to send an email to each one of them and they simply have to reply yes or no. If they say yes and they want to be involved in the pre-app process, then they will rotate through those who say yes, and they will then be scheduled to partake in a pre-app process.

Chairman Reynolds said a pre-application is something that the Township does for any applicant. It doesn't always mean that it will be a project that will proceed all the way to the Planning Commission, but everyone gets one initial meeting with the Township. Sometimes it is highly preliminary, sometimes there is a pretty well-thought-out plan, and they are engaging their consultants. Typically, a rep from Planning & Zoning is there, the fire department is there, the Planner, and also their engineer. They typically bring a member of the Planning Commission forth just as a point of reference. Today it was general discussions about PUDs echoed a lot of stuff that they have discussed in the Planning Commission during the Master Plan process. They are usually held on the day of their PC meetings, at 2, 3, and 4 p.m., so everyone gets an hour.

Planning & Zoning Director Girling said they would reach out to them about a week before. That is when they get the plan that they are going to be discussing. Keep in mind they are looking at the ordinance and how they are or not meeting the ordinance, and that is what they have to follow when they are talking to them.

Planner Enos said they get the plans a week before and sometimes they are protecting the applicant because he will tell them if they bring this plan to the Planning Commission they will not be pleased with the response. Whether it is an incredible amount of density or uses that don't fit. He thought they should see the early stages of how they start the process.

Chairman Reynolds said it is not meant to be any deliberation it is just an open discussion.

Planning & Zoning Director Girling said it is 100% confidential.

16. ADJOURNMENT

Moved by Chairman Reynolds, seconded by Liajson Urbanowski, to adjourn the meeting at 7:40 p.m. **Motion carried.**

Respectfully submitted,

Debra Walton PC/ZBA Clerk Charter Township of Orion

Planning Commission Approval Date



CHARTER TOWNSHIP OF ORION PLANNING COMMISSION ****** MINUTES ****** SPECIAL MEETING/WORKSHOP, WEDNESDAY, AUGUST 2, 2023

The Charter Township of Orion Planning Commission held a special meeting/workshop on Wednesday, August 2, 2023, at 7:00 p.m. at the Orion Township Municipality Complex Dragon Room, 2323 Joslyn Road, Lake Orion, Michigan 48360.

PLANNING COMMISSION MEMBERS PRESENT:

Scott Reynolds, Chairman Don Gross, Vice-Chairman Joe St. Henry, Secretary Jessica Gingell, Commissioner James Cummins, Commissioner Don Walker, PC Rep to ZBA Kim Urbanowski, BOT Rep to PC

PLANNING COMMISSION MEMBERS ABSENT

None.

1. OPEN MEETING

Chairman Reynolds opened the special meeting/workshop at 7:00 p.m.

2. ROLL CALL

As noted.

CONSULTANTS PRESENT:

John Enos, (Township Planner) of Carlisle Wortman Associates, LLC Mark Landis, (Township Engineer) of Orchard, Hiltz, and McCliment, Inc Tammy Girling, Township Planning & Zoning Director

OTHERS PRESENT:

Chris Nordstrom

3. MINUTES

None.

4. AGENDA REVIEW AND APPROVAL

All were in favor.

5. BRIEF PUBLIC COMMENT - NON-AGENDA ITEMS ONLY

None.

6. CONSENT AGENDA

None.

7. NEW BUSINESS

A. Parks and Recreation Master Plan.

Planner Enos introduced Chris Nordstrom from his office who is working on updating the Parks and Recreation Master Plan. Planner Enos explained how the Parks and Recreation Master Plan ties into discussions the Planning Commission is having on tree preservation.

Planner Nordstrom verbally presented an overview of the progress on the update to the Master Plan as well as the process itself.

B. Tree and Woodlands Preservation Ordinance Discussion.

Planner Enos started a discussion with the group on tree and woodland preservation and questions about how the group felt about it. He provided a handout with 3 questions for the group to discuss. The first question was: If you ignore the current Tree and Woodland

Preservation Ordinance (a section within the Zoning Ordinance #78), and were starting from scratch, what should a tree preservation ordinance accomplish? The handout gave the choices of a. Preserve only very large trees, b. Preserve as many trees as possible over a certain size, c. Preserve trees that are part of larger ecological systems, d. Allow tree removal on sites slated for more intense development, in exchange for contributions to an "environmental fund" or "tree mitigation bank".

Planner Enos explained the difference between a fund that is for environmental vs just trees.

Commissioner Gingell felt there should be a choice of preserving everything that was on a site. Commissioners St. Henry, Walker, Gross, Reynolds, and Cummins all agreed that preserving as many trees as possible over a certain size was most important. Commissioner Cummins commented that buildings should be proposed around groupings of trees in order to preserve them. Commissioner Walker stated we need to make the ordinance strong to ensure the goal is met. Liaison Urbanowski felt they should preserve trees that are part of larger ecological systems.

Secretary St. Henry commented that we need to preserve what we have. Chairman Reyolds added he felt tree replacement should be 1 for 1, but realistically the ordinance may need to contain tiers. The members discussed that the current ordinance language that protected trees within the building envelope and infrastructure don't need to be replaced needs to be removed from the ordinance. However, they realized that the ordinance should contain some flexibility when there are literally no other choices but to remove trees. Planner Enos stated that the ordinance needs to contain avenues that allow other options so a proposed development can work one way or another. Planner Nordstrom added that the ordinance should have a focus on ecological.

Chairman Reynolds mentioned the road frontage area that was discussed in the Master Plan and the importance of that and the preservation of trees in that area. He also mentioned the preservation of natural features within the PUD eligibility. Planner Enos added that an environmental plan would address woodlands, wetlands, natural slopes, etc. Chairman Reynolds expressed the need for definitions. Within the Zoning Ordinance could be an environmental section, not just tree preservation section, was proposed by Planner Enos.

Liaison Urbanowski then commented on the 3rd question on the handout <u>"if a replacement scheme a. Should trees planted to meet landscaping requirements also "count" toward mitigation of removed trees (i.e., "double count" trees planted toward both requirements), b. Should the applicant be able to use their tree mitigation "budget" on other ecological projects either on site, or on public property, such as invasive species removal, installation of native seed plantings (i.e. prairie plantings), wetland or streambank restoration projects, etc., c. Should the applicant be able to contribute to an "environmental fund" that could be used to conduct ecological projects on public property (such as Orion Township parks), d. Would the Township be interested in creating a "tree mitigation bank" where public property is allocated for creation of a woodland using contributions from tree removal on sites that are slated for more intense development" that answering this question is hard to say without seeing how something would look.</u>

Chairman Reynolds stated he felt we should not allow an applicant to double dip. Planner Enos stated perhaps if they go above and beyond. Director Girling stated they cannot use existing, nor landscape requirements found elsewhere in the ordinance, to replace removed trees. Commissioner Cummins stated he felt it should not be a 1 for 1 replacement, it should be based

on the size (inches) of the removed tree. The group agreed with this statement. Chairman Reynolds added it can be based on height also, not just DBH.

Chairman Reynolds said he was in favor of a contribution to an environmental fund but there needs to be factors and reasons provided for in the Ordinance that must be met before someone can do it.

Planner Enos and Commissioner Gingell mentioned allowing funds to be used to plant on private property. Commissioner Gingell said Rochester allows it. Commissioner Walker stated he was against use on private property; it can be a can of worms. Commissioner Gingell suggested researching Rochester's ordinance. Chairman Reynolds suggested we start with just allowing with public and including trees, wetlands, and native plantings and such; everyone agreed.

Director Girling asked if everyone felt the current ordinance requirement of replacement trees being any tree removed over 4" DBH is good; should it be higher or lower? Chairman Reynolds said we should look at what other communities do but was thinking 4" was good. He also stated we should have a minimum DBH replacement. Planner Nordstrom said some might be 2" and some 3". Chairman Reynolds stated we should look at that and have some standard language and a value determined. Planner Enos stated we should add it to our Fee Ordinance vs. the Zoning Ordinance.

Director Girling mentioned that she wants to be sure that the new ordinance still has language on the process for tree preservation for a project that is seeking site plan approval vs. someone who owns land just wanting to clearcut their property and are not seeking site plan approval.

C. Solar Power Ordinance Discussion.

Planner Enos explained his experience in other communities with solar ordinances. Chairman Reynolds mentioned restrictive solar array and standard language of being screened and not in the front yard. Planner Enos stated other communities have added it as uses allowed in Agricultural or Industrial districts, always as a special land use.

Director Girling stated she had attended several sessions on solar at the annual MTA conference and based on what she learned, we need to be proactive, not reactive. She stated she would compile the information she received at the sessions and work with Planner Enos to come up with a draft to discuss at a future meeting.

D. Discussion on other ideas.

Chairman Reynolds asked if there were any additional topics that anyone would like to discuss. Director Girling brought up that there was interest expressed at the annual joint meeting with the Board of Trustees, Zoning Board of Appeals, Planning Commission, and Corridor Improvement Authority, that a text amendment occurs related to the number of allowed chickens. Chairman Reynolds expressed that he did feel we were a bit stringent compared to other communities. Liaison Urbanowski thought that anyone having chickens should be required to obtain a yearly permit was a good idea. Chairman Reynolds agreed and Commissioners Cummins and Gingell disagreed. Director Girling stated the permit gives the Township the ability to keep an eye on those that might not be good "chicken keepers".

All of the Commissioners agreed that the ordinance needs to be amended to allow more chickens than it presently does. It was agreed that the minimum acreage to have chickens is 1 acre and at one acre 6 chickens are allowed. If the home is within a neighborhood with a homeowner's association, HOA approval will be gecessary. It was then discussed as the

acreage goes up how does the number of chickens allowed go up? It was determined that there should be some type of sliding scale.

Chairman Reynolds said that the coops need to meet some type of setbacks. All agreed that roosters should not be allowed. Chairman Reynolds also suggested no sales related to the chickens and that the chickens are not allowed in a residence, or on the porch or garage of a residence.

Director Girling and Planner Enos will work on language and bring it back to the Planning Commission for further discussion.

Director Girling then initiated discussion on EV charging stations. She suggested that any new development should be required to install conduit to be prepared if the need for more EV charging stations becomes necessary.

Chairman Reynolds said he is all for it if others are doing this and would like to see a sample ordinance.

Director Girling and Planner Enos will look for sample ordinances and bring them back to the Planning Commission for discussion.

Chairman Reynolds asked if there were any other items to be discussed. Being none, he closed the work session.

8. UNFINISHED BUSINESS

None.

9. PUBLIC COMMENTS

None.

10. COMMUNICATIONS

None.

11. PLANNERS REPORTS

None.

12. COMMITTEE REPORTS

None.

13. FUTURE PUBLIC HEARINGS

08-16-23 at 7:05 p.m., PC-23-22 Yatooma Oil Gas Station and Drive-Thru, Special Land Use request for a gas station, and a drive-thru restaurant, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015).

08-16-23 (immediately following PC-23-22 Public Hearing at 7:05 p.m.): PC-23-27, Black Cat Beanery, Special Land Use request for a cat café, located at 1192 S. Lapeer Rd.

14. CHAIRMAN'S COMMENTS

None.

15. COMMISSIONERS' COMMENTS

None.

16. ADJOURNMENT

Moved by Chairman Reynolds, seconded by Commissioner Walker to adjourn the meeting at 9:05 p.m. **Motion carried.**

Respectfully submitted,

Tammy Girling Planning & Zoning Director Charter Township of Orion

Planning Commission Approval Date



Planning & Zoning Department

Phone: (248) 391-0304, ext. 5000

TO: The Charter Township of Orion Planning Commission

FROM: Tammy Girling, Planning & Zoning Director

DATE: August 7, 2023

www.oriontownship.org

RE: PC-23-27, Black Cat Beanery Special Land Use

As requested, I am providing suggested motions for the abovementioned project. Please feel free to modify the language. The verbiage below could substantially change based upon the Planning Commissions' findings of facts for the project. Any additional findings of facts should be added to the motion below.

Special Land Use (Ord. No. 78, Section 30.02)

Motion 1: I move that the Planning Commission **approve/deny** PC-23-27, Black Cat Beanery Special Land Use Request for a cat café, located at 1192 S. Lapeer Rd. parcel #09-14-201-025 for plans date stamped received July 14, 2023. This approval/denial is based on the following finding of facts:

- a. Compatibility with Adjacent Uses (Insert any findings of facts),
- b. Compatibility with Master Plan (Insert findings of facts),
- c. Adequate Public Services (Insert findings of facts),
- d. Impact on Traffic (Insert findings of facts),
- e. Detrimental Effects (Insert findings of facts),
- f. Enhancement of Surrounding Environment (Insert findings of facts),
- g. Isolation of Existing Land Use (Insert findings of facts).

If Approved:

This approval is subject to the following conditions (insert any additional conditions such as hours of operation, times of year, etc.)

- (Motion maker to list any unresolved issues related to the Township Planner's review letter).
- (Motion maker to list any additional conditions).





117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: July 27, 2023

Special Land Use Review For Orion Township, Michigan

Applicant: David Tank

44378 Apple Blossom Drive Sterling Heights, MI 48314

Project Name: Black Cat Beanery Cat Cafe

Plan Date: July 12, 2023

Location: 1192 S. Lapeer Road

Orion Township MI

(In Orion Market Place shopping center, just south of W. Clarkston Rd.,

on west side of Lapeer Rd.)

Parcel #: 0-09-14-201-025

Lot Area: 6.8 acres (Entire shopping center)

1,580 s.f. (Tenant's unit)

Zoning: Restricted Business (RB)

Action Requested: Special Land Use Review

PROJECT AND SITE DESCRIPTION

The applicant is proposing to occupy one tenant space in the Orion Market Place shopping center. This shopping center, originally known as "Oaks of Orion" retail center, was approved and constructed in the late 1980's, early 1990's.

The applicant is proposing to locate a "cat café" in the tenant space. The café will be registered with the Michigan Department of Agriculture and Rural Development (MDARD) as an animal shelter. However, the tenant will also allow visitors to enjoy self-serve gourmet coffee and snacks, while visiting the cats that live in the shelter. All cats are obtained from a local rescue group, and will be available for adoption. The mission of the cat café is to facilitate more animal adoptions in the area.

An aerial photo and street view of the shopping center is provided on the next page.

Figure 1. Project Site



Source: Near Maps (Image capture June 10, 2023)

Figure 2. Orion Market Place



Source: Google Streetview

As mentioned above, the proposed use will occupy an existing tenant space in the shopping center. The applicant is not proposing to make any changes to the exterior of the building or the site. Therefore, a site plan review is not required.

At the July 5, 2023 Planning Commission meeting, the applicant presented this proposal to the Commissioners for a determination of use that is not otherwise included in a district. The Planning Commission moved: "...that the use, as described in the application for PC-23-23, Black Cat Beanery, is clearly similar in nature to the uses and is compatible with the listed or existing uses in the RB zoning district, the GB zoning district, the BIZ zoning district, and the LI and IP zoning districts, which allow for pet grooming, daycare, and overnight boarding as special uses to be reviewed in more detail upon submission by use in one of those districts."

The applicant has submitted a formal Special Land Use application for the following combination of uses:

- Animal shelter housing 10-15 cats on average; with the possibility of up to 20 cats on a temporary (emergency) basis.
- Cat adoption services.
- Café serving coffee and pre-packaged snacks; with the possibility of expanding into a full-service coffee shop. Maximum of 20 people on site at any one time.
- Accessory sales of branded merchandise.

SPECIAL LAND USE CONSIDERATIONS

The Planning Commission shall consider the special land use standards listed in Section 30.02.B of the Zoning Ordinance prior to special land use approval. The special use standards and our comments are summarized as follows:

Section 30.02 – Special Land Use Procedures and Standards

Standards for Granting Special Land Use Approval. The Planning Commission shall approve special land uses upon determination that the proposed use will comply with all applicable requirements of the Ordinance, applicable standards for specific uses, and the following general standards:

a. <u>Compatibility with Adjacent Uses</u>. The proposed special land use shall be designed, constructed, operated and maintained so as to be compatible with uses of adjacent land. The site design of the proposed special land use shall minimize the impact of site activity on surrounding properties.

CWA Comment: Regarding impacts to neighbors, we have considered both the other tenants of the shopping center, as well as the adjoining land uses beyond this site.

Regarding impacts to other tenants of the shopping center, the applicant states that the proposed animal shelter will be registered by MDARD, who requires (in general) the following:

- Buildings and grounds are kept clean and in good repair, which allow prescribed husbandry practices set forth in MDARD's rules.
- Housing for animals shall be kept free of excess water.
- Housing for animals must be structurally sound and in good repair.
- Interior building surfaces must be non-absorbent and of materials that may be readily sanitized.
- Indoor housing must be sufficiently ventilated to provide for the health and comfort of the animals.
- The number of animals shall not exceed the number which prevents proper ventilation and sanitation.

The MDARD requirements will, in our opinion, mitigate many of the possible effects of housing cats, such as odors and waste control.

- We recommend that any Special Land Use approval be conditioned upon the applicant receiving MDARD approval, and providing proof of this approval to the Township before the space is occupied.
- Regarding odor control, the application states that they will make odor control a priority to ensure that no noticeable odor from the Oats is detectable from the outside or inside of their

leased space. They have verified that more than adequate air flow from the existing HVAC system is available, and will be adding multiple exhaust fans and two dedicated HEPA filtration systems to the space. We ask if the filtration systems will eliminate odors before the air is exhausted outside.

- Will all of the cats coming to live at the café be spayed/neutered and vaccinated?
- Limiting the number of cats sheltered in this location will also help to minimize impacts to the neighbors. The Planning Commission may want to consider limiting the number of cats as part of the Special Land Use approval. We would suggest a conservative number of 15; this would give the applicant the ability to house their ideal number of 14, as well as one "emergency" case.
- We also ask the applicant to describe how the used litter is disposed of. Is this material, in the quantities generated, accepted by the shopping center's trash haulers?

Regarding impacts to adjoining property owners, this site is adjacent to an automobile service business to the south, a bar to the north (with outdoor seating), and open space to the west. The open space is associated with a residential development along Key West Drive. The use itself will be fully enclosed in the building, and will not have any outdoor storage. We don't consider the operation to negatively impact the adjoining properties, except for the possibility of odors coming from the building, or the used litter disposed in the dumpsters, which are located on the north property line.

b. <u>Compatibility with Master Plan</u>. The proposed special land use shall be compatible with and in accordance with the general principles and objectives of the Orion Township Master Plan and shall promote the intent and purpose of this Ordinance.

CWA COMMENT: The future land use of the site in the Master Plan is identified as General Commercial. This land use category: "... is planned along the Baldwin and Lapeer Road corridors and is intended for commercial uses that supply a larger and more diversified number of goods than those in the Neighborhood Commercial classification. The intended character of these areas is comparable to those permitted within the General Business (GB) zoning districts which includes a wide range of regional commercial uses such as large-format retail, supermarkets and drugstores, discount stores, department stores along with facilities such as automobile dealers, other vehicle related services, and commercial recreation." The proposed combination of uses involves a traditional coffee shop and the opportunity to meet (and potentially adopt) a cat. The applicant's plans for the future involve a full-time café, which is consistent with the future land use designation.

In addition, the proposed combination of uses is new to the Township. The Master Plan's goals encourage expansion of the Township's economy and tax base by encouraging entrepreneurship and attracting new businesses. Fostering entrepreneurship is also the first strategy in the Economic Development Plan. We would consider this an "entrepreneurial" business.

c. <u>Public Services.</u> The proposed special land use shall be located so as to be adequately served by essential public facilities and services, such as highways, streets, police and fire protection, drainage systems, water and sewage facilities, and schools.

CWA COMMENT: The shopping center is adequately served by essential public facilities and services.

d. <u>Impact of Traffic</u>. The location of the proposed special land use within the zoning district shall minimize the impact of the traffic generated by the proposed use on surrounding uses.

CWA COMMENT: The application materials state that the operators will limit the number of people in the leased space at one time to 20, to minimize impacts to the cats. This minimizes the number of trips generated by the use to well under what a typical coffee shop would generate.

The existing shopping center has more than 300 parking spaces. Given that the occupancy of the leased space will be limited to 20 at any one time, we consider the existing parking adequate to serve this new use.

e. <u>Detrimental Effects</u>. The proposed special land use shall not involve any activities, processes, materials, equipment, or conditions of operation, and shall not be so located or designed as to be detrimental to public health, safety, and welfare.

CWA COMMENT: As mentioned above, the applicant should confirm that air exhausted from the cat litter box area will be filtered before it is exhausted. Also, they should describe how used litter will be disposed of.

f. Enhancement of Surrounding Environment.

CWA COMMENT: The proposed use will offer a unique retail opportunity for visitors to the shopping center. The use itself will not change the external surroundings.

g. <u>Isolation of Existing Land Use</u>. The location of the proposed special land use shall not result in a small residential area being substantially surrounded by nonresidential development, and further, the location of the proposed special land use shall not result in a small non-residential area being substantially surrounded by incompatible uses.

CWA COMMENT: The proposed use will be located in an existing shopping center, and will not isolate residential areas.

RECOMMENDATIONS

The Planning Commission should evaluate the proposed cat cafe in accordance with the review criteria of Section 30.02. We would recommend approval of the Special Land Use once the following information has been supplied by the applicant that is satisfactory to the Planning Commission, with the suggested condition:

Questions for the Applicant:

- 1. Will the filtration system eliminate odors before the air is exhausted outside?
- 2. Will all of the cats coming to live at the café be spayed/neutered and vaccinated?
- 3. Describe how the used litter is disposed of? Is this material, in the quantities generated, accepted by the shopping center's trash haulers?

Suggested Conditions:

1. Condition approval on limiting the number of cats to 15; this would give the applicant the ability to house their ideal number of 14, as well as one "emergency" case.

2. Condition approval on the applicant receiving MDARD approval of the shelter at this location, and providing proof of MDARD's approval to the Township before the space is occupied.

CARLISLE WORTMAN ASSOCIATES, INC.

John L. Enos, AICP Vice President

RECEIVED
JULY 14, 2023
Orion Township
Planning & Zoning

Fire Department

Phone: (248) 391-0304, ext. 2000 Fax: (248) 309-6993

To: Planning Commission/Planning & Zoning Director

From: Jeff Williams, Fire Marshal

www.oriontownship.org

Re: PC-23-27, Black Cat Beanery SLU Review

Date: July 14, 2023

The Orion Township Fire Department has completed its review of Application PC-23-27 for the limited purpose of compliance with Charter Township of Orion Ordinance's, Michigan Building Code, and all applicable Fire Codes.

Based upon the application and documentation provided, the Fire Department has the following recommendation:

X Approved

Approved with Requirements (See below)

Not approved

Requirements: NONE

This approval is limited to the application and materials reviewed which at this time do not raise a specific concern with regard to location and/or impact on health and safety. However, the approval is conditioned upon the applicant providing sufficient additional information at time of building permit application that includes data or documents, confirming full compliance with all applicable building codes, fire codes and Township Ordinances.

If there are any questions, the Fire Department may be reached at 248-391-0304 ext. 2004.

Sincerely,

Jeff Williams, Fire Marshal

Jeffrey Williams

Orion Township Fire Department



Charter Township of Orion

2525 Joslyn • Lake Orion, Michigan 48360 • (248) 391-0304

To:

Tammy Girling

Planning & Zoning Director

From:

William Basigkow

Director, Department of Public Services

Date:

July 19, 2023

Re:

PC-23-27, Black Cat Beanery SLU Review

Dear Tammy,

The Department of Public Services has reviewed the above-mentioned project and has no further objections or concerns at this time.

If you have any questions, please contact me.

Respectfully Submitted,

William Basigkow Director Department of Public Services





JUL 1 3 2023

Orion Township Planning & Zoning

Checklist for Special Land Use Application

Applications must be submitted by noon on Wednesday, four (4) weeks prior to a scheduled meeting. Meetings are held on the first and third Wednesday of each month, unless otherwise specified.

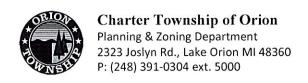
Pursuant to Zoning Ordinance 78, Section 30.02(B)(7), the applicant or a designated representative must be at Planning Commission meetings. Refer to Section 30.02(B)(13) for the criteria the Planning Commission will use to evaluate a special land use.

The following must accompany your completed application; incomplete submittals will not be accepted.

- · Complete application including original ink signatures of property owner and the applicant.
- The Special Land Use Review fees calculated using Ordinance No. 41.
- Proof of ownership. Acceptable forms of documentation include: Warranty Deed, Quit Claim Deed, Land Contract or Option to Purchase with a Copy of the Warranty Deed.
- Three (3) copies of the current site plan if no change is proposed to the site plan to the Township at the above address.
 - Please note, if changes are proposed to the site plan, an application for site plan approval may also be necessary. Please see separate Site Plan application for requirements.
- Three (3) sets of all supporting documents, reports, studies etc.
- PDF format copy of all information submitted (may be emailed or provided on a USB/flash drive).
- · Proof of submittal to outside agencies

The Township reserves the right to request additional copies of printed materials as necessary.

If you have any questions, please call the Planning & Zoning Department at (248) 391-0304, ext. 5000



Case #PC 23-27

Meeting Date: _

Charter Township of Orion Planning Commission **Special Land Use Approval Application**

30.02, A. Intent: Special land use procedures and standards are instituted to provide consistent and uniform guidelines for the Planning Commission to follow in arriving at any special land use decision over which it has jurisdiction. Special land uses are uses that may be permitted in a district, but only if certain specified conditions are met, and only after review and approval by the Planning Commission. The review procedures which are conditions for approval are intended to provide protection for adjacent uses and ensure full compliance with the standards contained within Zoning Ordinance 78 and other applicable local ordinances and State and Federal laws.

| Project | e:BLACK_CAT_BEANERY | |
|------------------------------|--|---|
| Name o | velopment/Business if applicable:BLACK_CAT_BEANERY | |
| | me:DAVID TANK | |
| cant | dress: 44378 APPLE BLOSSOM DRIVECity: STERLING HEI | GHTS State: MI Zip: 48314 |
| Applicant | ail:TANKTRONIC@GMAIL.COM | |
| | | |
| | me: | |
| *Property Owner(s) | dress: 28400 NORTHWESTERN HWY, 4TH FLOOR City: SOUTHFIELD | State: MI Zip: 48034 |
| | ail:MANARDO@FARBMAN.COM | |
| *Proper | the name on the deed does not match the name of the property owner on th ividual is the same as the company name must be provided. | is application, documentation showing the |
| | | |
| | me:David Tank | |
| Plan Preparer Firm/Person | dress: 44378 APPLE BLOSSOM DRIVECity: STERLING HEI | GHTS State: MI Zip: 48314 |
| an Pre rm/Pe | one: 248-635-6669 Cell: 248-635-6669 Fax: | |
| <u> </u> | ail:TANKTRONIC@GMAIL.COM | |
| | me: | |
| Project Contact Person | dress: 44378 APPLE BLOSSOM DRIVE | IGHTS State: MI Zip: 48314 |
| ject Con Person | ail:TANKTRONIC@GMAIL.COM | |
| Pro | | |

11 T 1 9

| l | Location or Address of Property: 1192 S. LAPEER ROA | AD | |
|------------------|--|---|--|
| | Side of Street: WESTNearest Intersection: | | |
| - S | Acreage: 0.036 Current Use of Property: | VACANT, PREVIOUSLY HOBBY SHOP | |
| | Is the complete legal description printed on the site plan? | Yes No (if no please attach to the application | |
| S | Subject Property Zoning:RBAdjacent Zo | oning: N. GB/OP S. GB E. OP W. R-1 | |
| 100000 | LOCATION WILL BE A "CAT CAFE", AN MDARD-REGISTERED ANIMAL SHELTER THAT ALLOWS VISITORS TO ENJOY SELF-SERVE GOURMET COFFEE AND SNACKS WHILE VISITING THE 10-15 CATS THAT LIVE IN THE SHELTER. ALL CATS WILL BE AVAILABLE FOR ADOPTION, AND THE OVERALL MISSION OF THE CAT CAFE TO FACILITATE MORE ANIMAL ADOPTIONS IN THE AREA. | | |
| - | | | |
| - F | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: Please provide the Township with | y of this application must be submitted to the each of | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy | y of this application must be submitted to the each of | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: Please provide the Township with | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: Please provide the Township with AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: <u>Please provide the Township with</u> AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. ATTENTION: NW Planning & Design | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department Building 34 East | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: Please provide the Township with AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. ATTENTION: NW Planning & Design 1970 Orchard Lake Rd. | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department Building 34 East 1200 N. Telegraph Rd. | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: <u>Please provide the Township with</u> AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. ATTENTION: NW Planning & Design | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department Building 34 East | |
| F t 25 P C A 1 S | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: Please provide the Township with AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. ATTENTION: NW Planning & Design 1970 Orchard Lake Rd. | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department Building 34 East 1200 N. Telegraph Rd. | |
| F t | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copy thefollowing agencies: Please provide the Township with AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. ATTENTION: NW Planning & Design 1970 Orchard Lake Rd. Sylvan Lake, MI 48320 | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department Building 34 East 1200 N. Telegraph Rd. Pontiac, MI 48341 Road Commission of Oakland County (if applicable) ssinkowski@rcoc.org | |
| | Pursuant to Zoning Ordinance 78, Section 30.02(B), a copyone the following agencies: Please provide the Township with AT&T 54 Mill St. Pontiac, MI 48342 DTE Energy Co. ATTENTION: NW Planning & Design 1970 Orchard Lake Rd. Sylvan Lake, MI 48320 Dakland County Water Resources Commission | y of this application must be submitted to the each of a copy of each transmittal and proof of delivery. Consumers Power Company 530 W. Willow Rd. Lansing, MI 48906 Oakland County Health Department Building 34 East 1200 N. Telegraph Rd. Pontiac, MI 48341 Road Commission of Oakland County (if applicable) | |

| | The proposed special land use shall be designed, constructed, operated, and maintained so as to be compatible with uses of adjacent land. The site design of the proposed special land use shall minimize the impact of site activity on surrounding | | |
|--|---|--|--|
| | properties. In determining whether this requirement has been met, please describe the consideration given to the following | | |
| Location and screening of vehicular circulation and parking areas in relation to surrounding development | | | |
| | | | |
| | AS A TENANT IN THE ORION MARKETPLACE SHOPPING CENTER OCCUPYING ONLY 3.1% OF THE TOTAL LEASEABLE AREA OF THE CENTER, WITH A LIMIT OF ~20 PERSONS ON SITE AT ANY ONE TIME, OUR IMPACT ON TRAFFIC AND PARKING BOTH IN AND OUTSIDE THE CENTER WILL BE NEGLIGIBLE. | | |
| | Location and screening of outdoor storage, outdoor activity or work areas and mechanical equipment, in relation to surrounding development | | |
| | The hours of operation of the proposed use | | |
| l | WEEK AND LIKELY NO LESS THAN 20 HOURS. TENTATIVE OPERATION HOURS AT OPENING WILL BE : | | |
| ١ | TUE, THU, FRI, SAT, SUN : OPEN 2PM-8PM | | |
| | NO NEW STRUCTURAL CONSTRUCTION IS TAKING PLACE - THE LOCATION IS ALREADY BUILT. ANY LEASEHOLD IMPROVEMENTS DONE TO FACILITATE OUR OPENING WILL BE DONE IN A MANNER THAT MINIMIZES DISRUPTION TO THE OTHER TENANTS AND GENERAL PUBLIC | | |
| | Describe how the proposed special land use is compatible with and in accordance with the general principles and objective of the Orion Township Master Plan and how it promotes the intent and purpose of Zoning Ordinance 78. LAND USE OF THIS NATURE, FOR A CAT CAFE, SERVES THE GREATER SPIRIT OF THE MASTER PLAN AND | | |
| | ZONING ORDINANCE 78 BY ADVANCING THE GOALS THEREIN: PROMOTING THE HEALTH, SAFETY, MORALS, COMFORT, AND CONVENIENCE OF THE COMMUNITY BY CREATING A POSITIVE, INTERACTIVE IN-PERSON EXPERIENCE FOR OUR VISITORS, EDUCATING THE PUBLIC ON ANIMAL WELFARE, AND REDUCING THE NUMBER OF HOMELESS ANIMALS IN THE COMMUNITY. | | |

| | The location of the proposed special land use within the zoning district shall minimize the impact of the traffic generated by the proposed use on surrounding uses. Describe the consideration given to the following: Provinity and access to major thoroughfores |
|---|--|
| | Proximity and access to majorthoroughfares USE WILL OCCUPY AN EXISTING SPACE, AND WILL HAVE NO NOTICEABLE IMPACT ON TRAFFIC VOLUME. ACCESS DIRECTLY FROM LAPEER ROAD CURRENTLY EXISTS FOR THE SPACE. |
| Impact on Traffic | Estimated traffic generated by the proposed use |
| | Proximity and relation to intersections <u>ALREADY CONSIDERED BY ORION MARKETPLACE WHEN IT WAS CONSTRUCTED</u> |
| | Adequacy of sight distances TAKEN INTO ACCOUNT WHEN ORION MARKETPLACE WAS CONSTRCUTED |
| | Location of and access to off-streetparking ALL PARKING WILL BE ON-PROPERTY OF ORION MARKETPLACE |
| | Required vehicular turning movements NOT APPLICABLE, AS WE ARE IN AN EXISTING STRIP MALL |
| | Provision for pedestrian traffic_NOT_APPLICABLE, AS WE ARE IN AN EXISTING STRIP MALL |
| Detrimental Effects | The proposed special land use shall not involve any activities, processes, materials, equipment or conditions of operation, and shall not be so located or designed, as to be detrimental to public health, safety, and welfare. Describe the consideration given to the production of traffic, noise, vibration, smoke, fumes, odors, dust, glare, and light. OF THE ABOVE CONSIDERATIONS, ONLY "ODORS" IS OF RELEVANCE TO OUR USE. AS SUCH, WE ARE MAKING IT A PRIORITY TO ENSURE NO NOTICEABLE ODOR FROM THE CATS IS DETECTABLE EITHER OUTSIDE OR INSIDE OUR LEASED SPACE. WE HAVE VERIFIED MORE THAN ADEQUATE AIR FLOW FROM OUR HVAC SYSTEM, AND WILL BE ADDING MULTIPLE EXHAUST FANS AND TWO DEDICATED HEPA FILTRATION SYSTEMS TO THE SPACE. |
| of Surrounding Iment | The proposed special land use shall provide the maximum feasible enhancement of the surrounding environment and shall not unreasonably interfere with or discourage the appropriate development and use of adjacent land and buildings or unreasonably affect their value. Describe how consideration was given to: Landscaping & other amenities NEGLIGIBLE, AS WE WILL BE OCCUPYING AN EXISTING INDOOR SPACE |
| Enhancement of Surrounding Environment | The bulk placement and materials of construction of proposed structures in relation to surrounding uses |

| Isolation of Existing Land Use | Explain how the location of the proposed special land use does not result in a small residential area being substantially surrounded by non-residential development, and further, the location of the proposed special land use does not result in a | | |
|-----------------------------------|--|---|--|
| xist | small non-residential area being substantially surrounded by incompa | | |
| ion of Exi Land Use | OUR OCCUPANCY IN THE EXISTING ORION MARKETPLACE | | |
| ou g | AREAS | WILL HAVE NO EFFECT ON ADJACENT RESIDENTIAL | |
| L, atic | | | |
| Sola | | | |
| | | | |
| Required Signage | Pursuant to Zoning Ordinance 78, Section 30.02(D) a sign indicating the parcel(s) no less than 15 days prior to the scheduled public hea I will install the sign(s) as required (see below for specifications). | ring. Please check one: | |
| equir | I would like to lease signage from the Township (including install | | |
| ~ | (Please complete attached Sign Request Form). | | |
| of Orio | he undersigned, do hereby submit this application for Special Land Us n Zoning Ordinance No. 78, Section 30.02 and applicable ordinance re vided. I hereby certify that the information provided is accurate and t | equirements. In support of this request the above facts | |
| | re of Applicant: | Date: 1/12/23 | |
| (must be | original ink signature) | Date: 1/2/23 | |
| Print Na | David Tank | | |
| Printin | ame | | |
| proper | ondence and to represent me at all meetings. I also grant permission by, without prior notification, as is deemed necessary. | to the Planning Commission members to visit the | |
| | re of Owner*: priginal ink signature) | Date:7-12-23 | |
| linustice | original lik signature) | | |
| Print Na | ame: Zack zarrilli Lisa MANANO - PROPERTY MAN. AS AGENT CAKE OPINS SHOPS, LLC | 1562 | |
| | | | |
| | deed of ownership does not show an individual, ie a corporation, partne vidual signing this application has signing rights for the entity. | rship, etc., documentation must be provided showing | |
| 1.5 | Ordinance 78, Section 30.02(D), Special Land Procedures and Standard d public hearing. Please see the Ordinance for additional specifications | | |
| The sign | n shall have the following wording: | | |
| | SPECIAL LAND USE PROPOSED | - (min 8" high letters) | |
| | For more information call: | - (min 3" high letters) | |
| | Charter Township of Orion | - (min 4" high letters) | |
| | Planning and Zoning Department | - (min 4" high letters) | |
| | 248-391-0304 ext. 5002 | - (min 4" high letters) | |
| | 240-331-0304 EXI. 3002 | - tum + mgmetters) | |
| | note, the Township does offer the ability to rent the required signage Department with any questions. | e (see attached form). Please contact the Planning and | |





Charter Township of Orion

Planning & Zoning Department 2323 Joslyn Rd., Lake Orion MI 48360 P: (248) 391-0304 ext. 5002

| Project NameBLACK_CAT_BEANERY | |
|---|---------------------------------------|
| PC#_2323 23 -27 One Parcel#(s) 0-09-14-201-1 | 025 |
| Please select an option below: | |
| Permission to Post on Web Site By signing below as applicant and on behalf of my cons above-named project, in which approval is being sough Board, to be posted on the Township website. | · · · · · · · · · · · · · · · · · · · |
| Signature of Applicant David Tank | 7/12/23 Date |
| Printed Name of Applicant | |

Do not want posted on Web Site



BLACK CAT BEANERY

PROPOSED CAT CAFÉ

SPECIAL LAND USE APPLICATION INFORMATION JULY 11TH, 2023

DAVE TANK

248-635-6669

TANKTRONIC@GMAIL.COM

INFO@BLACKCATBEANERY.COM



PROJECT STATUS [PC23-23]



- 6/14/23 Determination of use requested
- 6/16/23 Township Planner recommended approval as Special Land Use in GB/RB/BIZ zones
- 7/5/23 Planning Commission approval as SLU

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PROJECT LOCATION

- BLACK CAT
- We have a Lease Agreement to take possession of a 1,579 ft² space in the Orion Marketplace Center.
 - 1192 S. Lapeer Road
- This space is currently zoned RB
- The landlord has expressed excitement about bringing a unique attraction to his property.





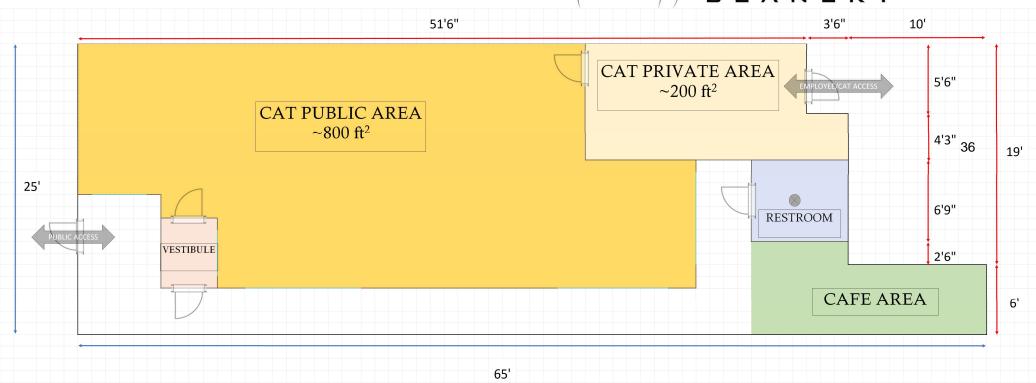
USE OVERVIEW



- Black Cat Beanery will be a "cat café", a state-licensed animal shelter where rescued cats will live until they are adopted out.
- All cats on site will be available for adoption. We will make gourmet coffee and snacks available for our guests to enjoy while spending time with the cats. The goal is to make an inviting, fun place environment that will attract more people and create more adoptions.
- The leased space at 1192 S. Lapeer Road (Orion Marketplace) will be divided into a "cat" area and "café" area, so the cats are separated from where the food/drink is available, and the public. Visitors wishing to enter the cat area will pass through a vestibule in order to keep cats contained on their side.

FLOORPLAN OVERVIEW

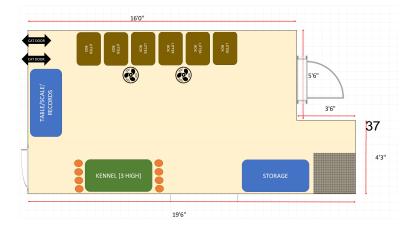


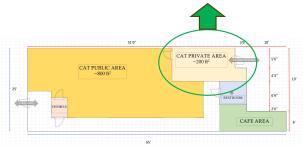


CAT PRIVATE AREA DETAIL

- Approximately 200 ft² will be dedicated to a "cat private area" where the public is not allowed this room will contain litter facilities, food, water, cages for new/nervous kitties, and storage of needed items.
- The litter boxes to support the 10-15 cat population will be situated at the back of the room, furthest from the public and nearest the back exit. Boxes will be cleaned hourly during open hours, and minimum once per day on closed days.
- We will be using a pine-based litter which has excellent odor prevention properties, and will install exhaust fans above the litter area. The cat area will also have two (2) HEPA filtration systems.







SPACE DESIGN



- In order to remain compliant with Regulation #151 as set forth by the Michigan Department of Agriculture, which is required to keep our Shelter in good standing, we must keep the space free of odor, debris, and any potential hazards or irritants to the animals.
- We are implementing non-porous surfaces for ease of sanitization on all floors (vinyl laminate), ceiling tiles (PVC), and walls (fiberglass reinforced panels up to 4 feet) in both cat areas.

| Item | Risk | Requirement and legal cite(s) | | |
|------|----------|---|--|--|
| 1 | Priority | All buildings and grounds included in the premises are kept clean and in good repair in order to protect the animals from injury and to facilitate the prescribed husbandry practices set forth in these rules. The premises shall remain free of an accumulation of debris. (R285.151.33(2)) | | |
| 2 | Priority | A suitable method is provided to eliminate excess water from the indoor housing facility. Drains are properly constructed and kept in good repair to avoid foul odors. Closed drainage systems are equipped with traps and so installed to prevent any backup on the floor of the room. [R285.151.22(5)] | | |
| 3 | Critical | The housing facilities (rooms/buildings/areas containing primary enclosures) for animals are structurally sound and maintained in good repair to protect the animals from injury, to contain the animals, and 38 restrict the entrance of other animals. [R285.151.21(1)] | | |
| 4 | Priority | The interior building surfaces of the indoor housing facilities are constructed of non-absorbent materials that may be readily sanitized. [R285.151.22(4)] NOTE: A community room is evaluated as both an indoor housing facility and a primary enclosure. | | |
| 5 | Priority | The indoor housing facilities for animals are sufficiently heated to protect the dogs and cats from cold and to provide for their health and comfort; ambient temperature shall not be allowed to fall below 50° F for dogs and cats. R285.151.23(1)] NOTE: May be dependent on the specific animals (Examples: cats versus dogs: Chihuahua versus Husky). | | |
| 6 | Critical | Indoor housing facilities for animals are adequately ventilated to provide for the health & comfort of the animals at all times. The facility provides fresh air, either by means of windows, doors, vents, or a conditioning and is ventilated so as to minimize drafts, odors, and moisture condensation. (R285.151.23(2)) NOTE: A community room is evaluated as both an indoor housing facility and a primary enclosure. Ventilation is a key part of air quality, as it affects the temperature and moisture content of the room, kennel, and cage. The facility must be provided with fresh air either by windows, doors, vents, or air conditioning. The facility must be ventilated so as to minimize drafts, odors and moisture condensation. Fresh air which needs to reach in the cages, kennels and rooms is essential for maintenance of good health and well-being as well as limiting the spread of infectious diseases, odors, and gases. | | |
| 7 | Priority | The number of animals in primary enclosures do not exceed a number which prevents proper ventilation and sanitation. [R285.151.25(6)] NOTE: A community room is evaluated as both a primary enclosure and | | |

LIMIT OF CATS ON-SITE



- While we will gladly honor any restriction on the number of cats set forth by the Township, we have our own methodology and reasons for limiting the number of cats on site.
- For the comfort of both our guests and the cats, we are planning to limit residency in the shelter to one cat per 64 ft² of cat space. With our current planned layout of 944 ft² for both public and private cat areas, that would equal **14 cats** as an ideal max population. We anticipate the number to fluctuate between 10-15 as adoptions and intake begin to take place.
 - Also, considering planned staffing, the time required for care and documentation of the cats on site limits us to this amount of cats, regardless of floor size.
- We would like to have approval for an absolute maximum of 20 cats (for a rescue emergency situation), and a maximum 15 cats as a daily average over any rolling four-week period.

PROJECTED HOURS OF OPERATION



- Our goal is to balance generating enough visits and revenue to make the Black Cat Beanery sustainable with keeping the residents comfortable and not over-stimulated by public interaction.
- The current plan is to be open 4 or 5 days per week (never more than 5), and between 20-30 hours per week total.
- We will likely be open Saturday and Sunday, and close two or three days during the week. The days we are closed would be based on public demand and staff availability.

RESCUE & VETERINARY CARE PARTNER



- All cats provided to the Black Cat Beanery will come from Pawsitive Cause, a local non-profit animal rescue
- Pawsitive Cause is partnered with Pawsitive Care, a full-service veterinarian committed to providing affordable pet care to the community
 - Pawsitive Care will provide medical care and treatment for all animals at Black Cat Beanery, including hosting any cats that are ill and need to be temporarily removed from the premises.
- All adoption fees collected at Black Cat Beanery are 100% passed through to Pawsitive Cause/Care



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THANK YOU

- I again want to thank the kind, knowledgeable, and patient team at Orion Township for working with us to make this dream of making more smiles and less homeless cats a reality.
- My business partner, Danielle Reyes, and I are available at any time to answer further questions or concerns!

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OAKLAND COUNTY CONDOMINIUM SUBDIVISION PLAN NUMBER 2267 EXHIBIT B TO THE MASTER DEED OF

RION MARKETPLACE CONDOMINIUM

TOWNSHIP OF ORION, OAKLAND COUNTY, MICHIGAN

LEGAL DESCRIPTION

LOTS 16, 17 AND 18, INCLUSIVE, OF SUPERVISOR'S PLAT NO. 13, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 58 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, BEING MORE PARTICULARLY DESCRIBED AS: BEGINNING AT THE NORTHEAST CORNER OF SAID LOT 16: THENCE 454.96 FEET ALONG THE ARC OF A CURVE TO THE LEFT ALONG THE WEST RIGHT-OF-WAY LINE OF LAPEER ROAD (150 FEET WIDE) RADIUS 4815.33 FEET, CENTRAL ANGLE 05 DEGREES 24 MINUTES 48 SECONDS, CHORD BEARS SOUTH 31 DEGREES 07 MINUTES 00 SECONDS WEST, 454.79 FEET; THENCE NORTH 88 DEGREES 21 MINUTES 16 SECONDS WEST, 656.35 FEET ALONG THE SOUTH LINE OF SAID LOT 18; THENCE NORTH 05 DEGREES 38 MINUTES 04 SECONDS EAST, 396.90 FEET; THENCE SOUTH 88 DEGREES 21 MINUTES 16 SECONDS EAST, 852.49 FEET TO THE POINT OF BEGINNING.

CONTAINING 297,074 SQUARE FEET OR 6.82 ACRES OF LAND.

ATTENTION: COUNTY REGISTER OF DEEDS

THE CONDOMINIUM SUBDIVISION PLAN NUMBER MUST BE ASSIGNED IN CONSECUTIVE SEQUENCE. WHEN A NUMBER HAS BEEN ASSIGNED TO THIS PROJECT, IT MUST BE PROPERLY SHOWN IN THE TITLE, SHEET I AND THE SURVEYOR'S CERTIFICATE, SHEET 2.

DEVELOPER

LAKE ORION MARKETPLACE LLC 34975 W. 12 MILE ROAD FARMINGTON HILLS, MI 48331

SURVEYOR

NOWAK AND FRAUS ENGINEERS 46777 WOODWARD AVE. PONTIAC, MICHIGAN 48342-5032 PHONE: (248) 332-7931 FAX: (248) 332-8257 WEB: WWW.NOWAKFRAUS.COM

INDEX

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1 COVER SHEET

2 SURVEY PLAIN PLAN

3 SITE PLAN

4 UNIT DETAIL PLAN

5 UTILITY PLAN

NOTE

THIS CONDOMINIUM SUBDIVISION PLAN IS NOT REQUIRED TO CONTAIN DETAILED PROJECT DESIGN PLANS PREPARED BY THE APPROPRIATE LICENSED DESIGN PROFESSIONAL. SUCH PROJECT DESIGN PLANS ARE FILED, AS PART OF THE CONSTRUCTION PERMIT APPLICATION, WITH THE ENFORCING AGENCY FOR THE STATE CONSTRUCTION CODE IN THE RELEVANT GOVERNMENTAL SUBDIVISION. THE ENFORCING AGENCY MAY BE A LOCAL BUILDING DEPARTMENT OR THE STATE DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS.

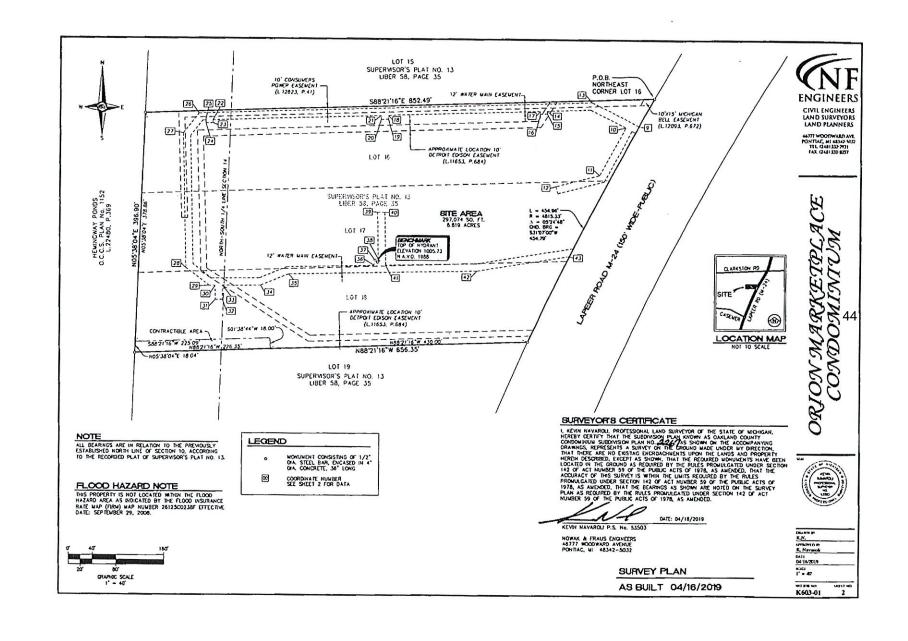
COVER SHEET

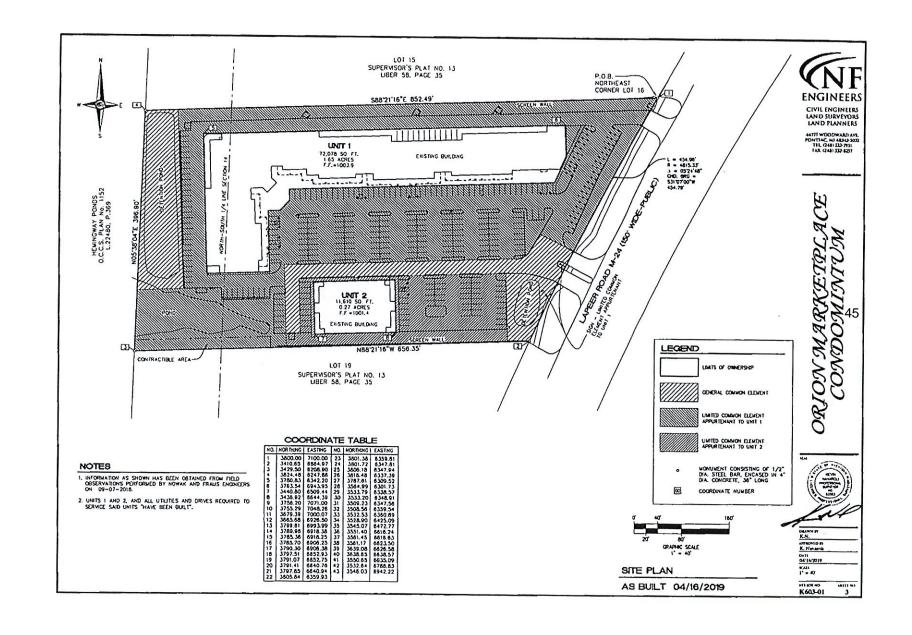
AS BUILT 04/16/2019

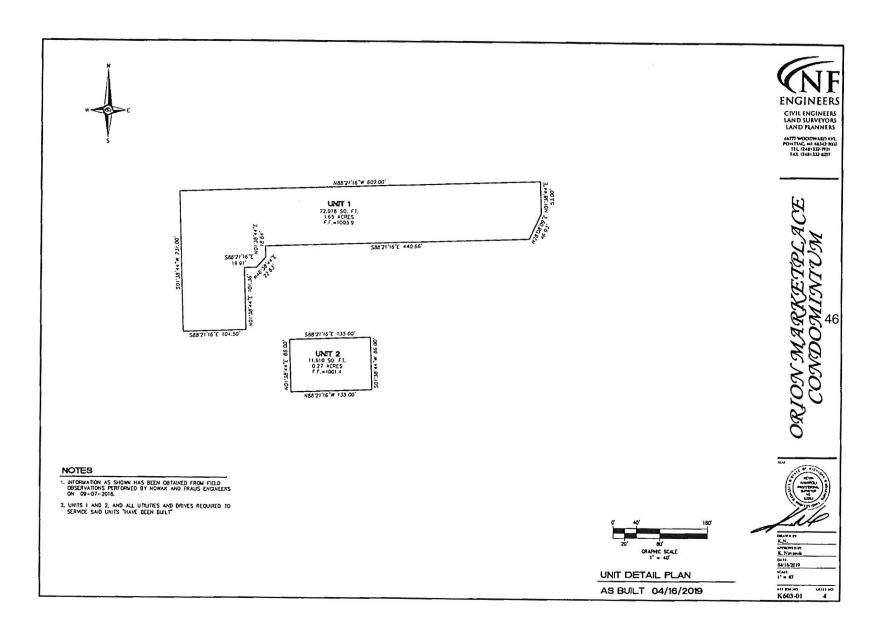


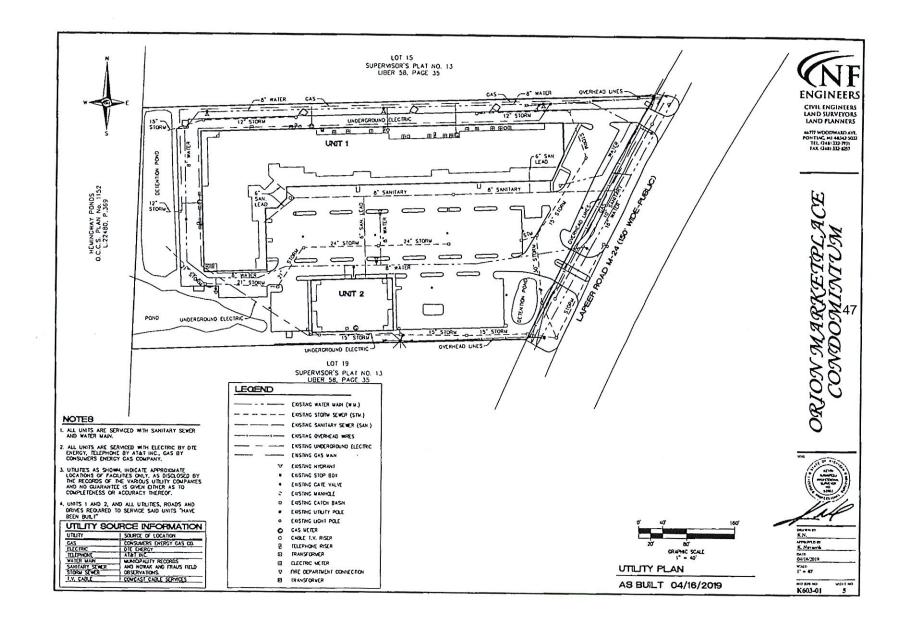
JOB No. K603-01

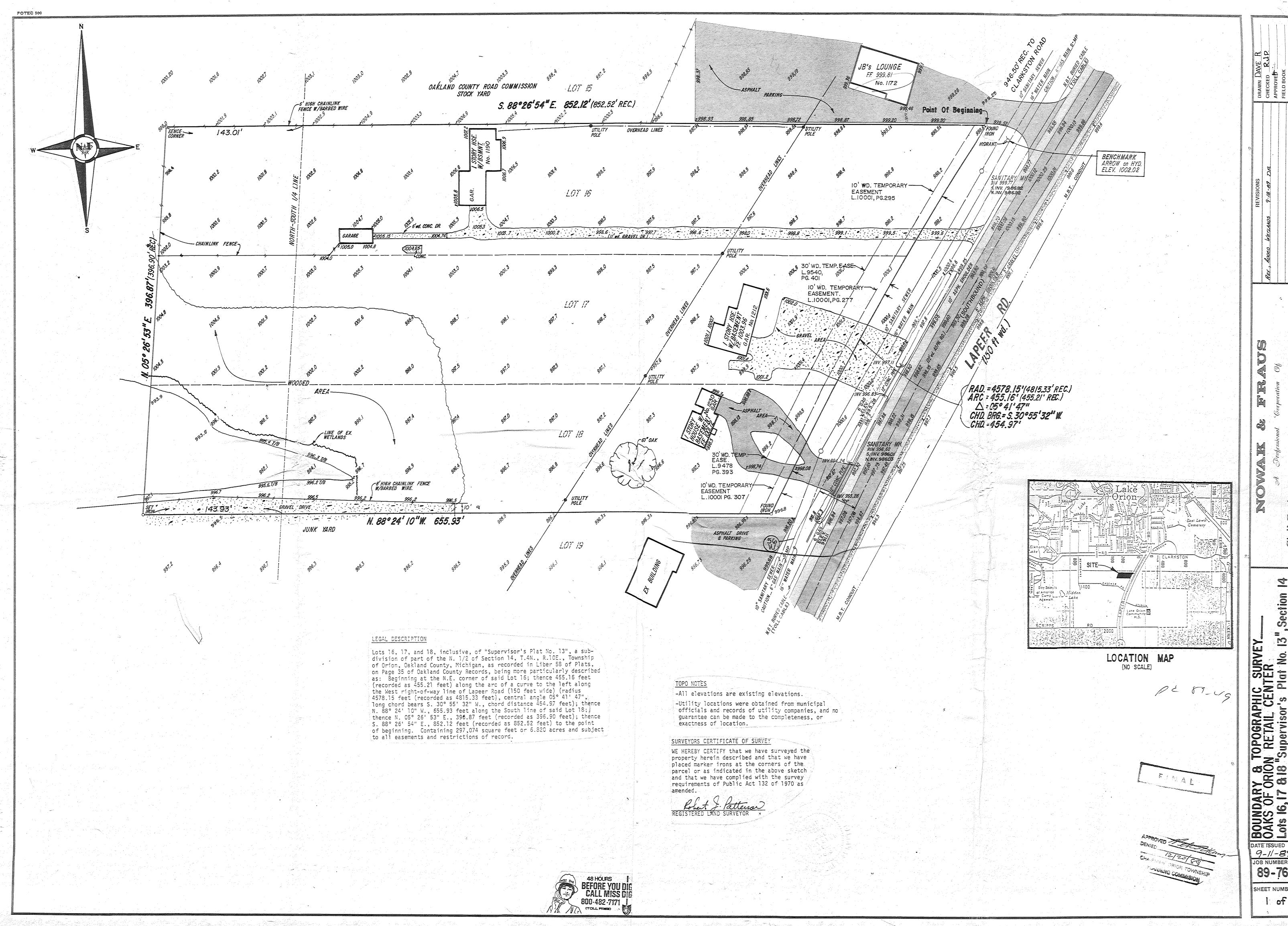
SHEET No. 1







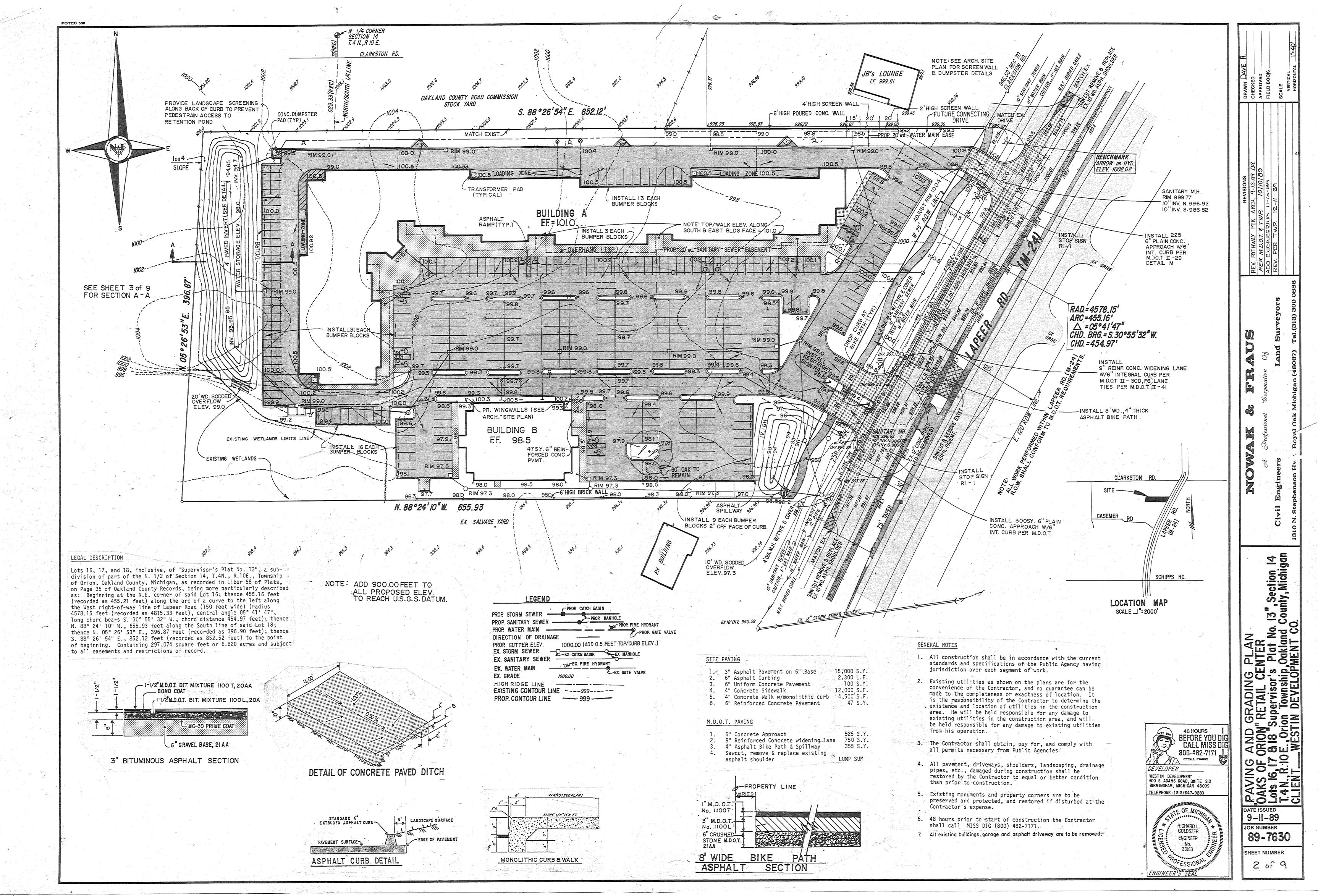


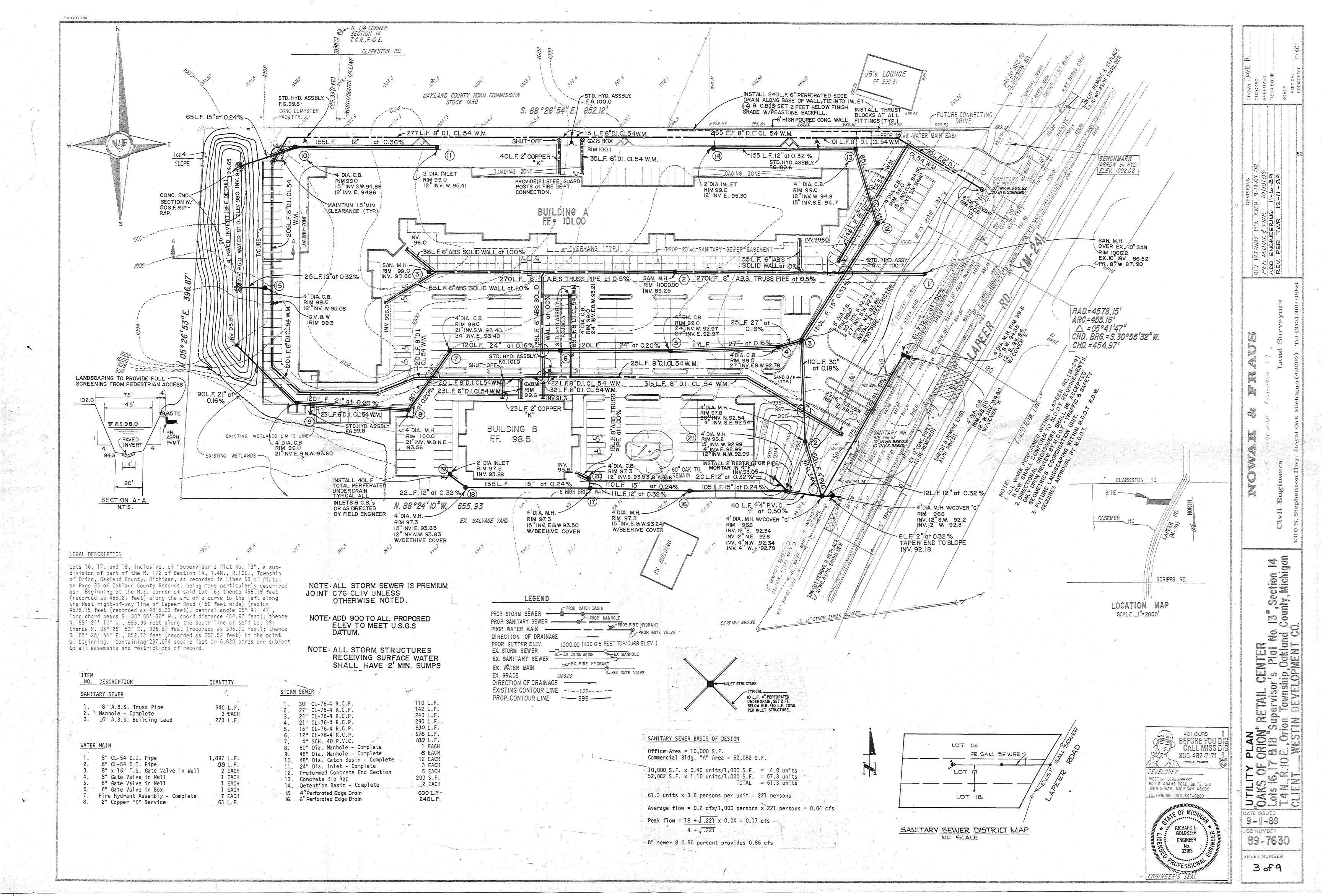


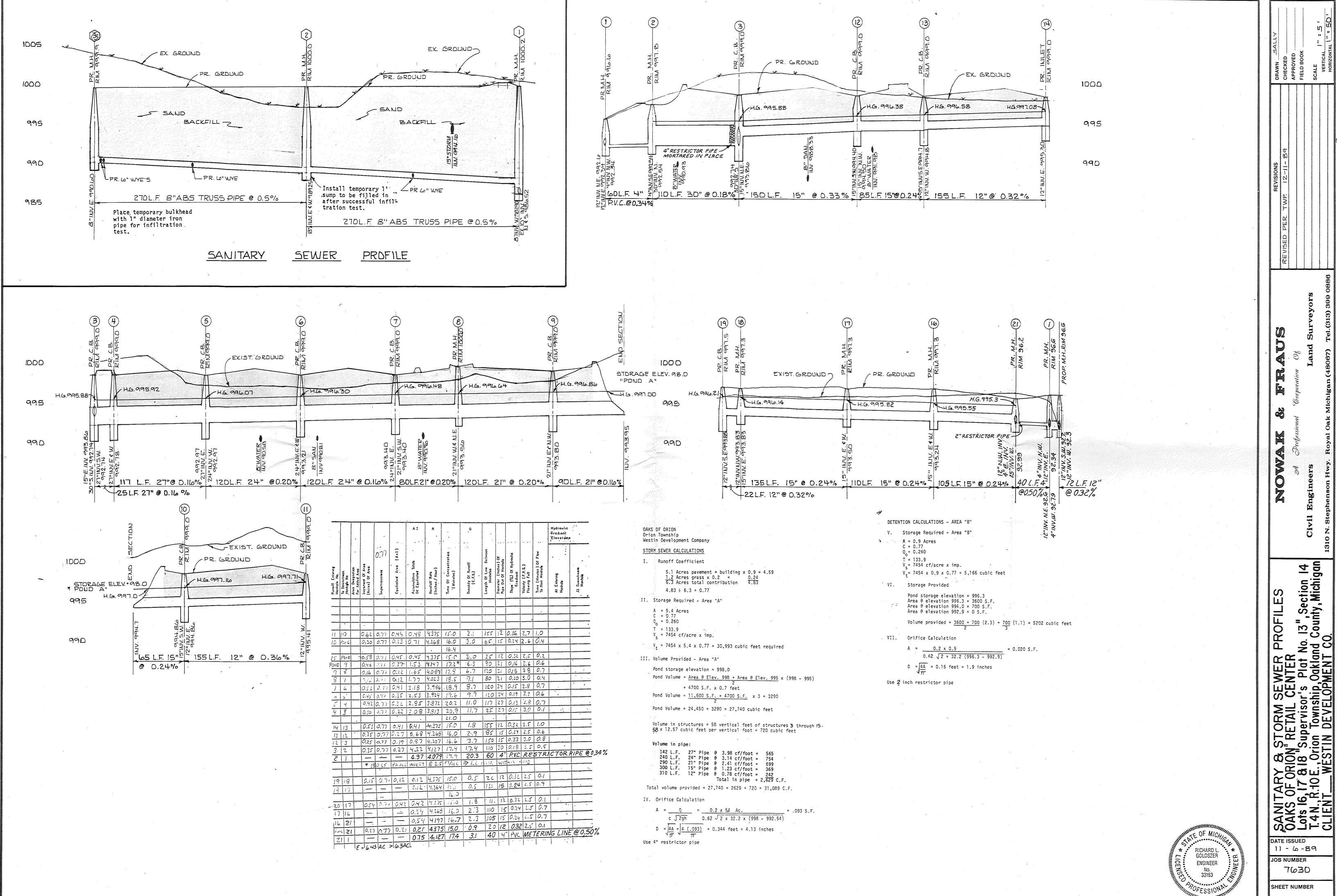
BOUNDARY & TOPOGRAPHIC SURVEY—
OAKS OF ORION RETAIL CENTER
Lots 16, 17 & 18 "Supervisor's Plat No. 13", Section 14
T.4 N., R. 10 E., Orion Township, Oakland County, Michigan
CLIENT WESTIN DEVELOPMENT CO.

9-11-89 JOB NUMBER 89-7630

SHEET NUMBER of 9





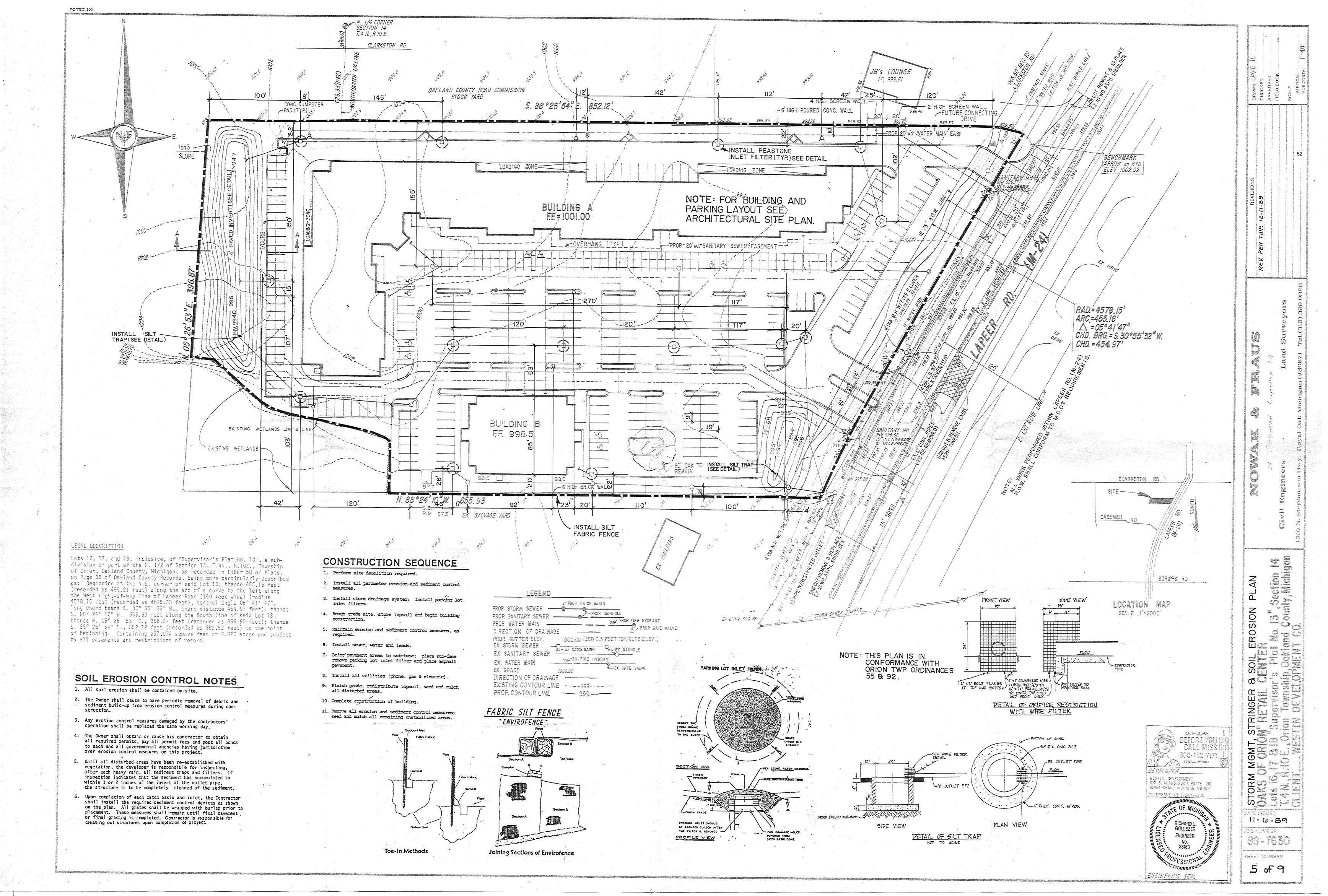


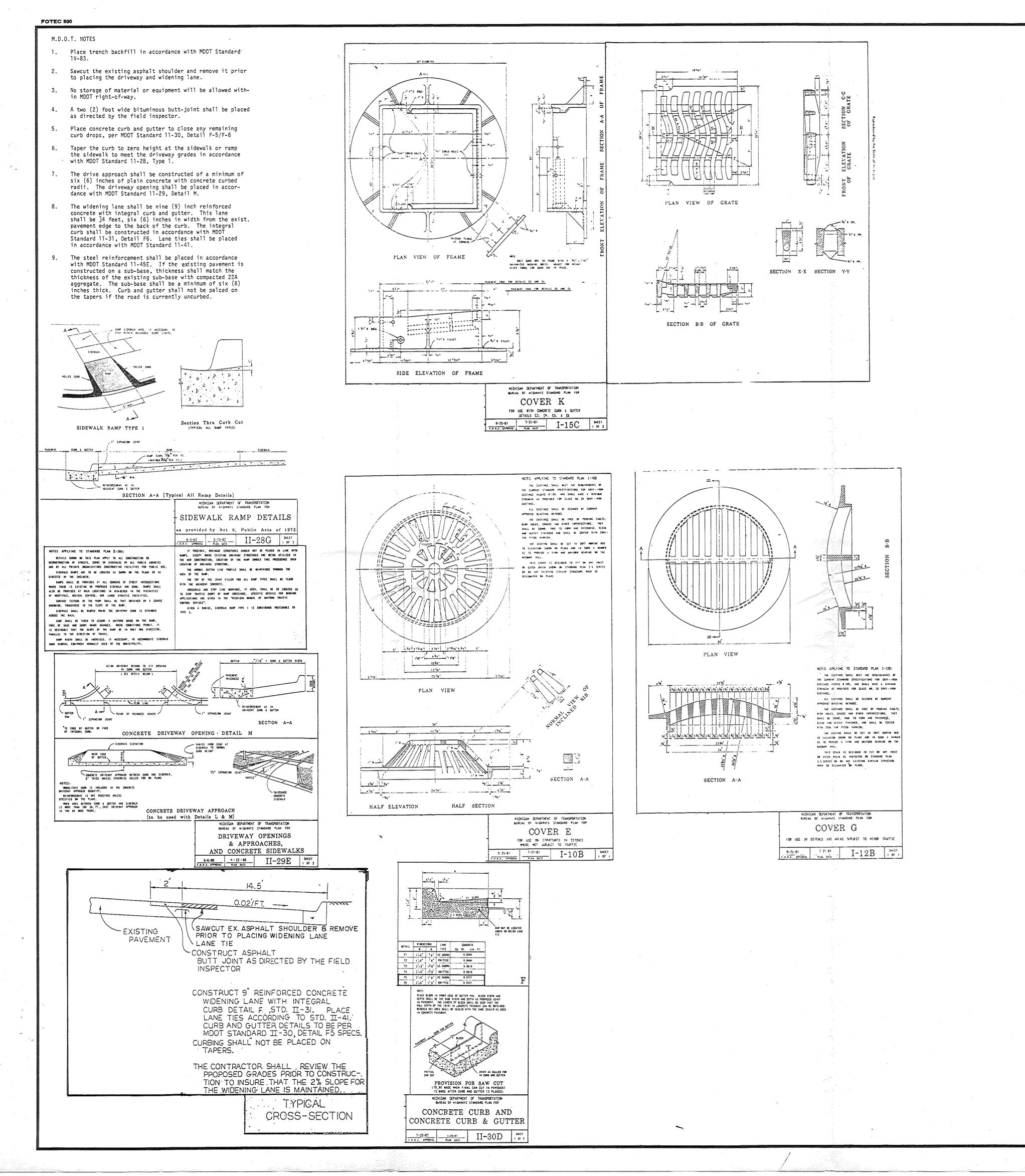
FOTEC 500

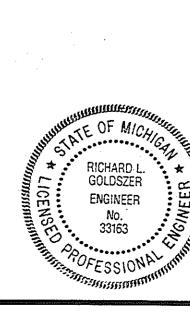
11 - 6 -89

DATE ISSUED JOB NUMBER 7630

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A Professional Corporation Of

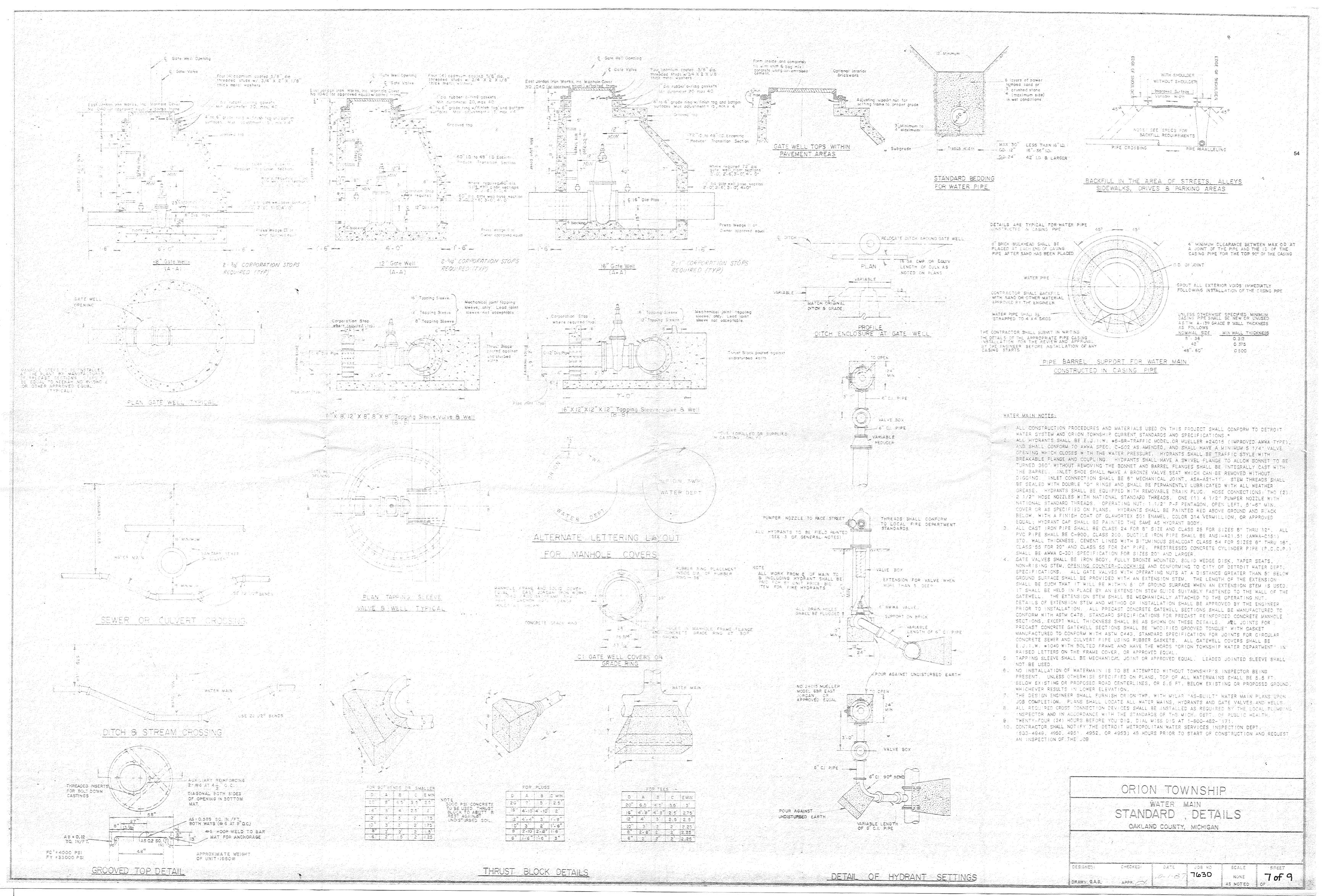
NOTES & DETAILS
ORION" RETAIL CENTER

F & 18 "Supervisor's Plat No. 13", Section 14
OE., Orion Township, Oakland County, Michigan
WESTIN DEVELOPMENT CO.

DATE ISSUED 11-6-89 JOB NUMBER 89-7630

MD.O.T. NOAKS OF OLIENT

SHEET NUMBER



MATERIALS AND CERTIFICATIONS

PVC Pipe and Fittings shall be as described under ASTM Designation D 3034-81, Standard Specification for Polyvinyl Chloride Sewer Pipe and Fittings. Minimum wall thickness shall be SDR 35.

All pipe shall be certified by the manufacturer to meet the applicable ASTM specification. requirements. Certification forms together with a report of the test results shall be prowided the construction inspector with pipe deliveries and copies shall be forwarded to the Engineer or the Owner. Certification forms shall include project name, location, Contractor, and test lot number. Lot sizes shall be acceptable to the Engineer.

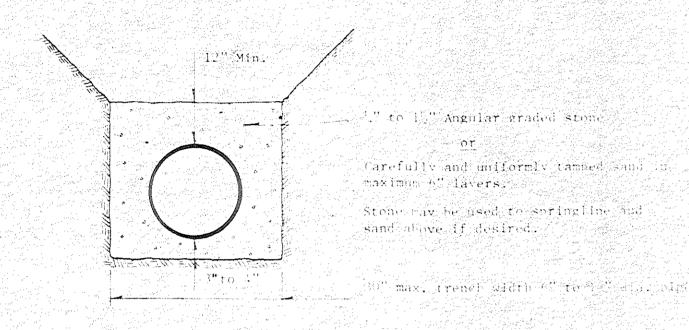
All pipe and fittings shall be suitably marked to provide manufacturer's name or trademark, lot or production number, ASTM designation, PVC cell classification, SDR number, and nominal diameter. Fittings, however, need not contain lot number, cell classification, or SDE number. Pipe shall have a "home" mark.

BEDDING

NWE 6669 3M 1 82 4270P

Bedding for PVC pipe shall be in accordance with ASTM D 2321-74, except (1) only Class T and Class IT materials having a maximum particle size of 15" may be used. (2) embedment shall extend to minimum 12" above top of pipe, and (3) flooding or puddling shall not be used. It is essential that it be recognized that the successful use of flexible pipe requires bedding that provides unvielding side support and complete bedding contact under ploe naunches. Redding material must be properly placed and compacted to provide lateral restraint against leflection in the pipe diameter. Pipe must be bedded to true line and grade throughout its length. Bell holes shall be provided where required.

PVC PIPE BEDDING DETAIL



Where unstable bottoms are encountered, it is some actor shall broader a government bear selections. of an approved graded processed about ar at the or gravel to act as an appoint our vent migration or vertical movement of our table soils or bedding materials. Where rear sheeting, places, or a trench bet are used due to severe ground about tones at a life of the side and below the top of the place caused as the Sheeting chartes of box with again was be completed y filled or the supports left in place below the topies the place is

Concrete cradie bedding shall not be used speril a bown to read with the same we diteu (of concrete challe hedding standarf pings safting shows shall be be the state of the second width between and istarbed tranciowalls or is langt in 2.5 % by diameracing the field in the the pine.

Due to potential damage to exterior walks of classic pipe; carrifollarly on the law and wellconditions, if rocks, frozen material or darge bolegts strike the pipe, the Contract to state Tarefully avoid dumping any materials other tion approved hedding sand or stone on the gipe until 12" cover is placed on it. Pine walls and joints shall also be protected from about ision and damage during handling, and whatting fully inspected post perfor a collective to

Care shall be taken during bedding compaction to acoust distortion the the change of the change of the "damaging its wall." Mobile equipment shall not reposed over the programment will are cover has been placed.

House couners long shall be made to were or the first ows. Building for Souse Connection was a shall be equal to that of the main sower to fitting. Biser's to deep and any rable from the Should be hedded in Class I dangular scenedo gavaba secolement, Three feet shall be he well Cor bedding of End caps for place shall be braced or land three with with standing a fire the week the week. Caps or plugs shall not be chemically welled in place. If

Joints for pine and fittings shall be of the elastomeric masket posh-on fype. Sally serves Ishall conflorm to ASTM Designation of 3017-81, and the pine manufacturer shall be the west than "Oakland County D. P.W. Ja Chry of Certifie! test results of its jointing system jester believe?" "Gasket joints shall be installed in accordance with procedures specified by the bilg-consul-[facturer. Care shall be taken to insure all inints being no shell to the fall "bolle" and gingand held tightly in the "home" position during any grade or dine allaste of all

CUTTING AND BANDLING

Cutting of pipe lengths, where required, shall be sectioned by the age of tooks for groupment othat will provide a heat, perpendicular out without damage to the blastic, and before grain the removed by the use of a file, knife, or abrusive paper. Soight ends to beat have that the Theveled similar to factory beveling to present gashat damage.

Bowing or warning of plactic pine can occur with temperature fluctuations. The want lover ushall store and protect the rine to minimize Mowing. Nominal ripe decaths of the "ball's" . or 20' having deviations from straight greater than I" shall not be used.

SPECIAL CONDITIONS

The completed installation shall at no point have put-of-round olde deflections are discovered 73%. The Engineer shall have the option of requiring deflectometer or go hands are inglest. frum prior to acceptance on pipelines where bigh deflections are suspected.

All standard Oakland County D. P.W. specifications and details shall apply to the the second agreed where covered otherwise by these supplemental specifications. "Oakland County ByPik Jair test requirements shall be met. D.P.W. approved flexible manhole soints shall be ased. To maintain theoflexibility of the ploe materials, concrete encasement of drop monning (one small not be used. Where adapters to other naterials are required, and approved adapters and objects cmay be used. Where connections are made to existing manuales, a rubber waterstoolship had ane. sused around the pipe.

As-built plans shall be provided the Oakland County D.P.W. by the Engineer or the South antiof government and as-built plans shall specifically designite where Pyth sewar Arabic installed.

SPECIFICATIONS FOR TRUSS PIPE SANITARY SEWERS

MATERIALS AND CERTIFICATIONS

Armoo Truss Pipe and Fittings shall be as described under ASIM Designation D2580-80. Stan-Hard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Composite Sewer Pipine, Appendix XI of said specification shall be as modified by the hedding requirements outlined

Solid wall ABS ofne for 6" house connection sewers shall be SDR 35 or SDR 23.5, conforming to ASTM Designation D 2051-89 Standard Specification for Acrylonitrile-Butadiene-Styrene (ABS) Sewer Pipe and Fittings. Solid wall pipe shall be installed in accordance with bed-monufacture Place of 16 C to Ca ding requirements outlined helow.

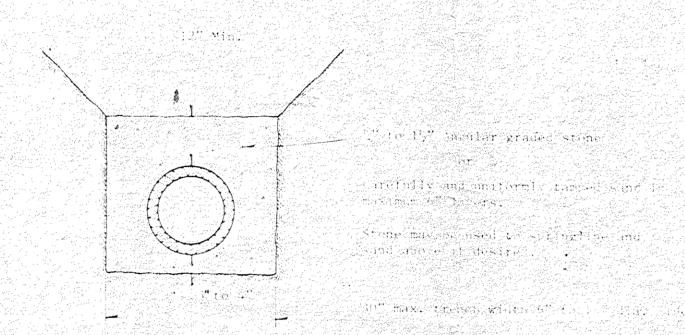
All pipe shall be certified by the manufacturer to meet the applicable ASTM specification requirement. Certification forms, together with a report of the test results, shall be ASTM C478 Riser Sections with provided the inspector with pipe deliveries and angles shall be forwarded to the Engineer Modified Groove Tongue Joints or the Owner. Certification forms shall include project name location, Contractor, and "test lot number. Lot sizes shall be acceptable to the Engineer:

All pine and fittings shall be suitably marked to provide manufacturer's name, lot or production number. ASTY designation, ASS, nominal drameter, and SDR number, where applicable. Fittings, however, need not contain for or production number. Pipe shall have a "home" mark. Tross Pipe with an absence of filter material at the ends greater than 1/4" deer shall he subject to rejection or acceptable repairs

SEDDING

Bedding for Trusk Pine and ABS solid wall pine shall be in accordance with ASTM D2321-74. except, (1) only Class Fand Diass I materials may be used (2) embedment shall extend ormin must 2" above too of sipe, and it flooding or pudding shall not becased. It is "ssential that if be te ovoized that the sum essel use of liexible and semi-freelble pine sequires hedding that or wides unvielding side support and consider hedding contact under

truss and Solid wall-Pipe Bedding Material



Where and this parties are encountered, the restrance results results are supplied to the same and the second of an approved academ and processed anythan stand or orable to be as as as a section of prevent his satism or very brat mavenest of the talk a said and hedding material as the section sheeting, plates, by a trench box are asel for the series of book conditions, it was a respective completers the education appropriate and complete the state of the state of the complete

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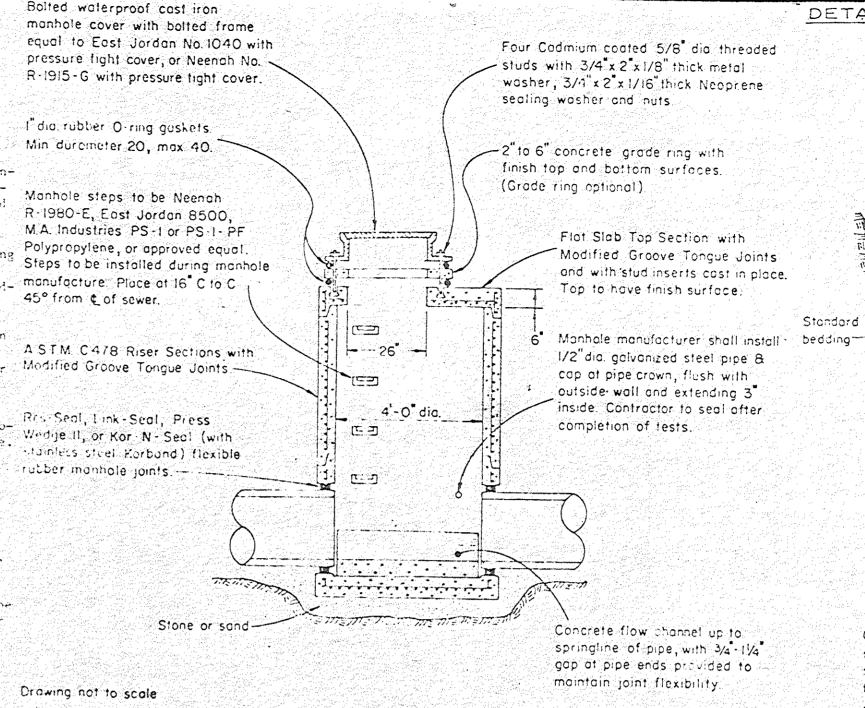
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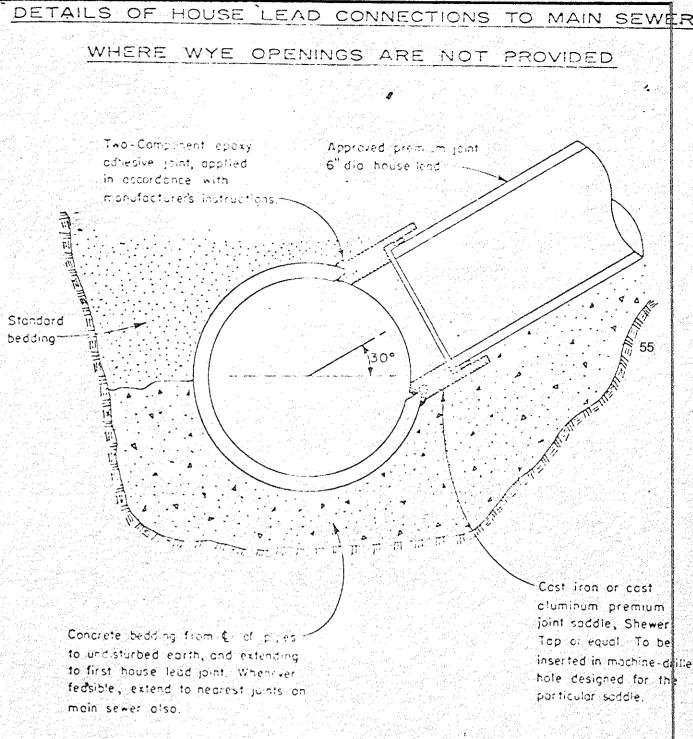
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As-built plans whall be provided the Oakland bounty D.P. Withe Engineer or the local unit of those ment and as-bills plans what I specifically designate where ABS sewer pipe was lat-



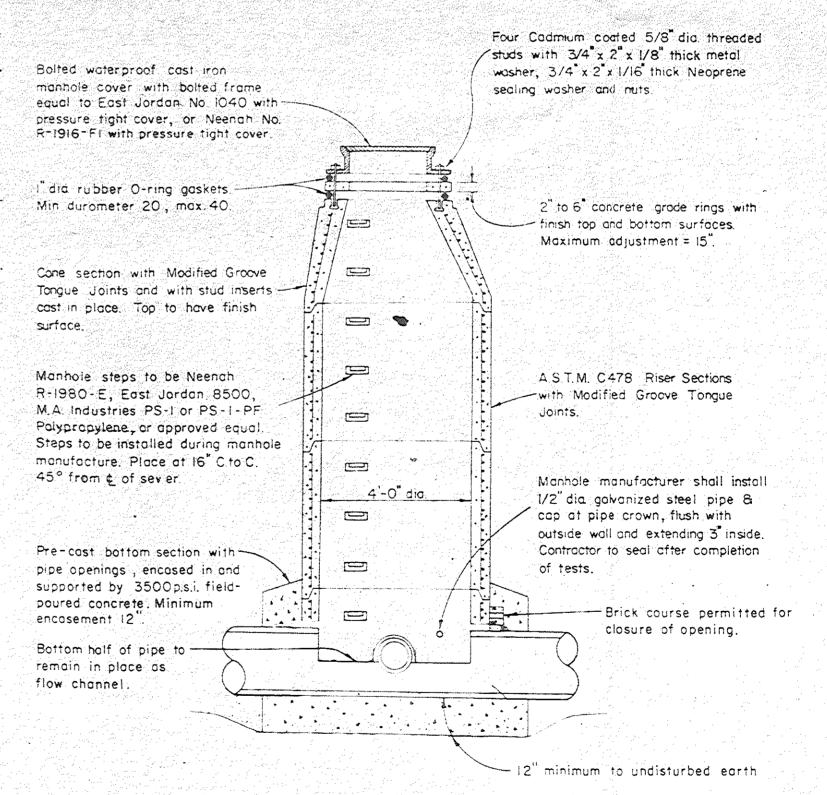
FLAT TOP MANHOLE

SHALLOW MANHOLE INSTALLATIONS



Note: Surfaces of main sewer shall be cleared with an absolve grinder prior to epoxy emplication. Thee to war at an of setting time of equipment of the forter and a to be the extra one por

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SKETCH OF MINIMUM MANHOLE REQUIREMENTS

for

ON MANHOLES CONSTRUCTED OVER EXISTING SEWERS

LOCAL SANITARY SEWER EXTENSIONS

Connecting directly or indirectly to DAKE AND COUNTY DEPARTMENT OF PUBLIC WORKS SYSTEMS

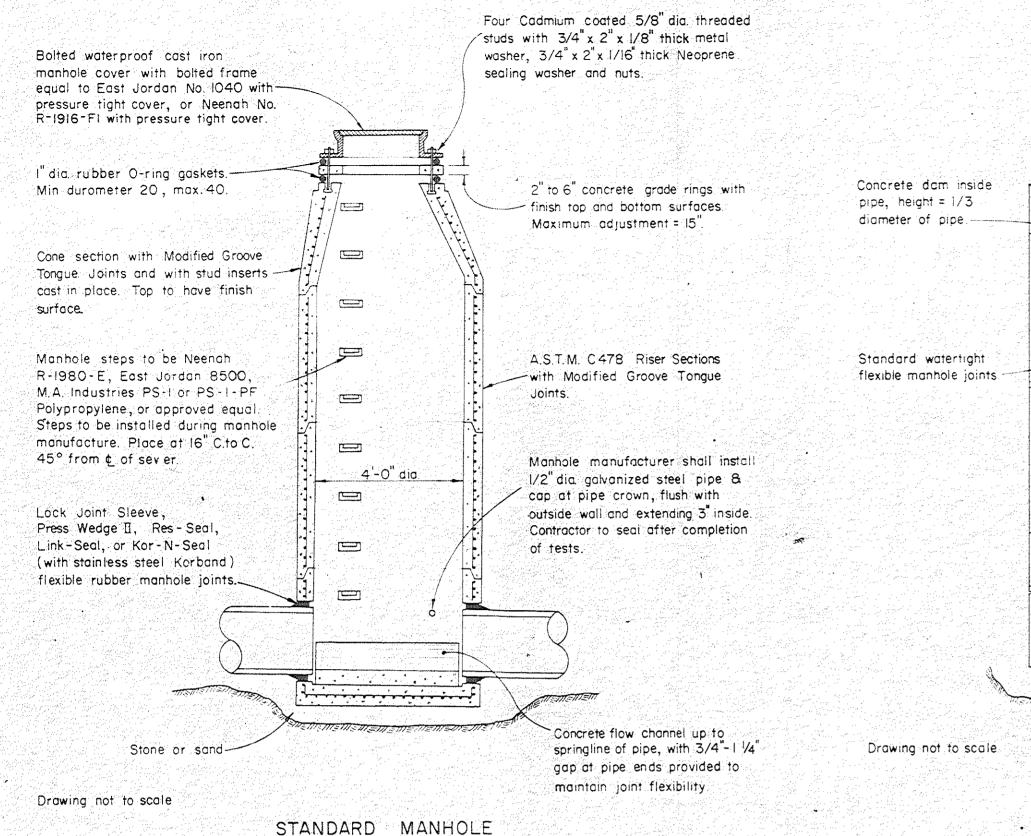
DRAWN BY OCDPW. DATE: 4-82 REVISED

- 00DPW - 4-831

J.N. 7630

DRAWING NUMBER

8 4 9



ON 8" THROUGH 24" DIAMETER SEWERS

HOUSE LEAD DETAIL

Drawing not to scale

34"-1"4" gap to be provided to maintain joint flexibility. ____ Concrete encasement to Tee joint خست channels in concrete fill. -Drop connection to be 8" diameter pipe (minimum) See Standard Manhole drawing for unless otherwise noted on other manhole details All drop connection pipe to be premium joint Flexible manhole joints. Encase in a minimum of 6 of concrete poured against undisturbed ground. (Standard plastic pipe bedding to be used in place of concrete on plastic pipe drops.) See Standard Manhole drawing for Drawing not to scale Concrete fill in sump other manhole details. after completion of acceptance tests. . DROP MANHOLE CONNECTION

SUMP MANHOLE

for

TESTING, CLEANING AND DEWATERING

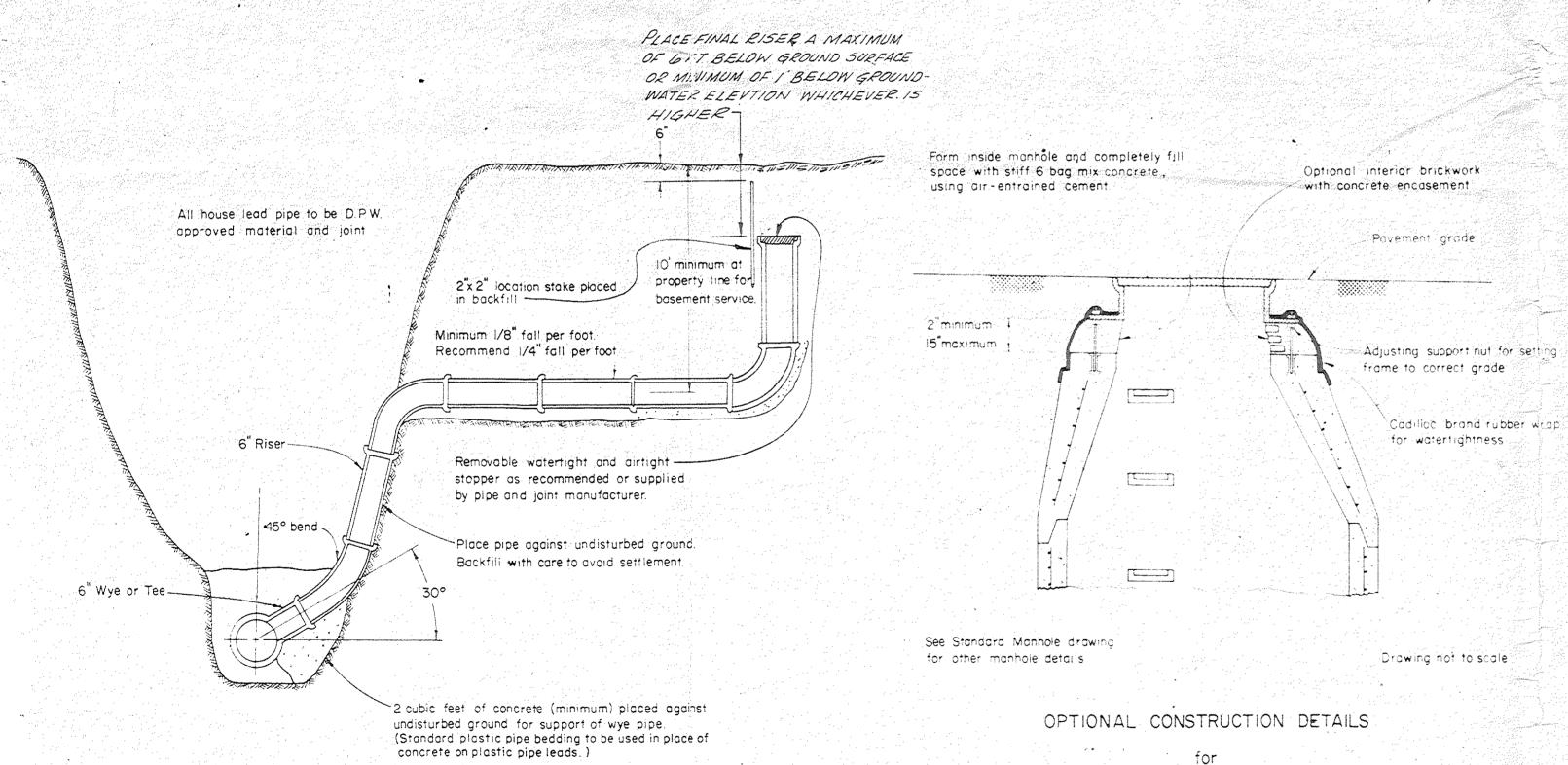
12" minimum-

STANDARD BEDDING (Class B. for rigid pipe)

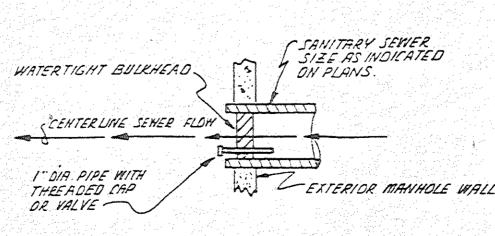
6" Layers of carefully compacted sand

(Max 30" 4" 12" 1D OD + 12" 15" - 36" 1D OD + 24" 42" 1D & larger

Drawing not to scale.



MANHOLE TOPS WITHIN PAVEMENT AREAS



Note Approval may be given to alternate

(Class, B beidding

imaterials and methods to achieve

BULKHEAD WITH PIPE TAP

At all connections to an existing O.C.D.P.W. sewer or to extensions thereto a water-tight bulkhead with a capped I inch diameter pipe to permit measuring infiltration shall be provided. A temporary 12 inch deep sump shall also be provided in the first manhole above the connection which will be filled in after successfull completion of any infiltration test up to the standard fillet provided for the flow channel.

SANITARY SEWER CONSTRUCTION NOTES

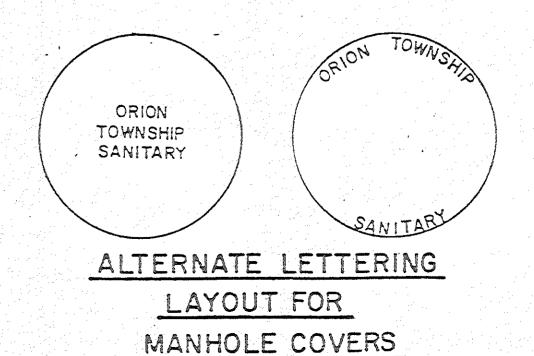
- I All construction shall conform to the current standards and specifications of the local unit of government and the Oakland County Department of Public Works. All sanitary sewer construction shall have full time inspection, directed by a professional engineer provided by or caused to be provided by the local unit of government.
- 2. At all connections to Oakland County Department of Public Works sewers or to extensions thereto, and before the start of construction, the Contractor must request and have in his possession an approved connection permit issued by the Oakland County Department of Public Works. Request for application for permit must be accompanied by a \$150.00 inspection fee for each connection plus \$15.00 for each new manhole constructed. The Contractor shall also have posted with the Oakland County Department of Public Works a \$5,000.00 surety bond and \$500.00 cash deposit. The Contractor shall notify the local unit of government and the Oakland County Department of Public Works 24 hours prior to the beginning of any construction.
- No sewer installation shall have an infiltration exceeding 250 gallons per inch diameter per mile of pipe per 24 hour period and no single run of sewer between manholes shall exceed 500 gallons per inch diameter per mile. Air tests in lieu of infiltration tests shall be as specified in D.P.W. "Acceptance Tests", dated September 1972. Only Modified Groove Tongue, ASTM C 425, ASTM C 443, O-Ring, Uniloc, Amvit, Nobel, Ring-Tite, Fluid-Tite or equal, as approved by the Oakland County Department of Public Works may be used for sewer joints. All joints shall meet requirements of ASTM C 425 or C 443.
- 4 At all connections to an existing O.C.D.P.W. sewer or to extensions thereto a water-tight bulkhead with a capped I inch diameter pipe to permit measuring infiltration shall be provided. A temporary 12 inch deep sump shall also be provided in the first manhole above the connection which will be filled in after successfull completion of any infiltration test up to the standard fillet provided for the flow channel.
- 5 All building leads and risers shall be 6 inch diameter, N.C.P.I. ER 4-67 Extra Strength vitrified clay pipe with type of joint material allowed in Note No.3 above, or an approved equal pipe and joint. Sewer pipe wye or tee openings shall contain factory installed premium joint material of the type identical to that of the building lead pipe used. Building leads to be furnished with removable air-tight and water-tight stoppers.
- 6. All sewer pipe shall be installed in Class "B" bedding or better.
- 7 All new manholes shall have D.P.W. approved flexible, water-tight seals where pipes pass through walls.

 Manholes shall be of precast sections with modified groove tongue and rubber gasket type joints.

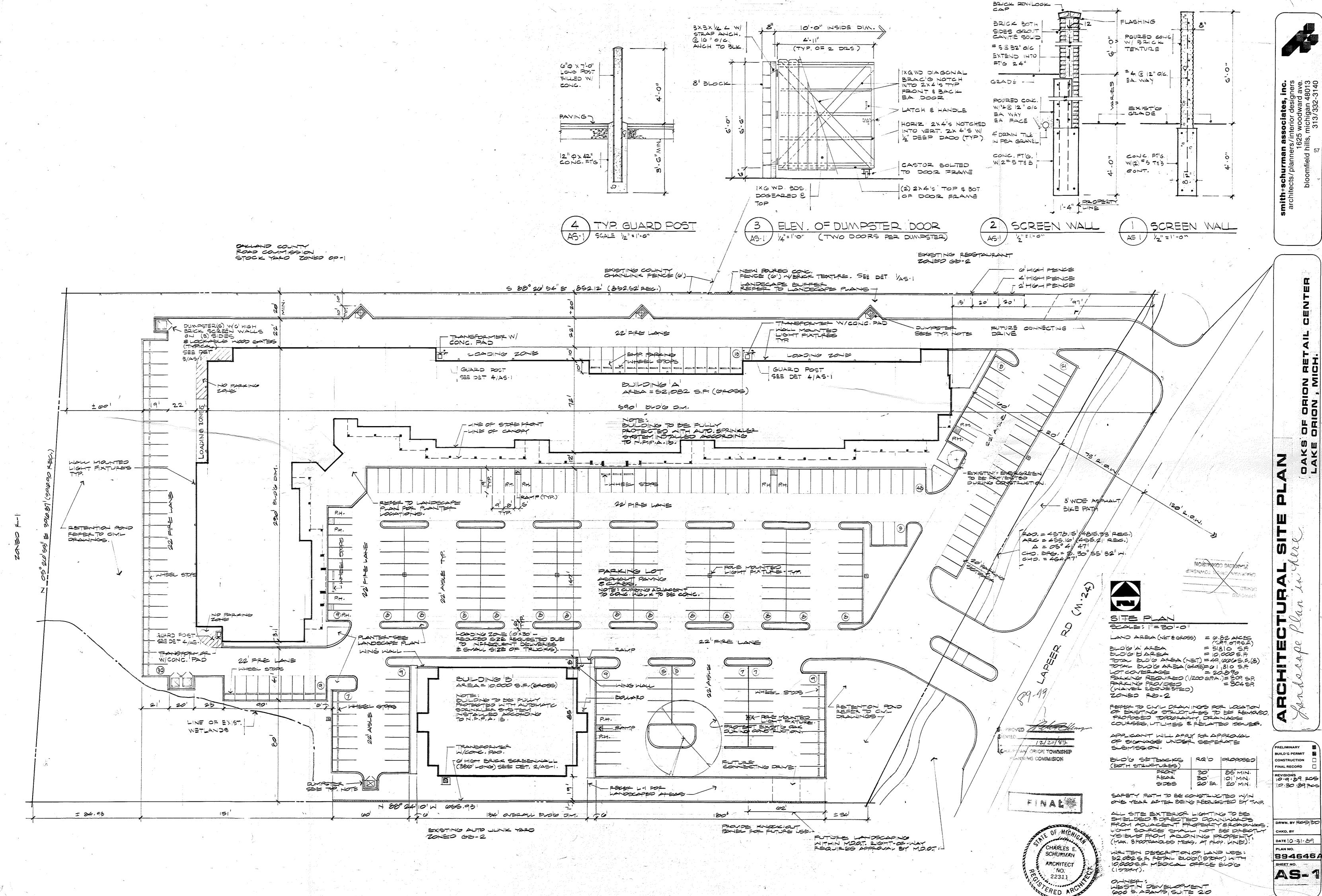
 Precast manhole cone sections shall be Oakland County Department of Public Works approved modified eccentric cone type. All manholes shall be provided with bolted, water-tight covers.
- 8. At all connections to manholes on Oakland County Department of Public Works sewers or extensions thereto drop connections will be required when the difference in invert elevations exceeds 18 inches. Outside drop connections only will be approved.
- 9 Wherever existing manholes or sewer pipe are to be tapped, holes shall be drilled at 4 inch center to center around periphery of opening to create a plane of weakness before breaking out section.

 Non-shrink grout shall be used to seal the opening and a concrete collar shall be poured 12 inches thick around the pipe and extended 12 inches beyond the opening.
- 10 New manholes constructed directly on Oakland County Department of Public Works sewers shall be provided with covers reading "Oakland County D.P.W. Sanitary" in raised letters. New manholes built over any existing sanitary sewers shall have monolithic poured bottoms.
- 11 No ground water, storm water, construction water, downspout drainage or weep tile drainage shall be allowed to enter any sanitary sewer installation.
- Prior to any excavation, the Contractor shall telephone MISS DIG (647-7344) for the location of underground gas and cable facilities, and shall also notify representatives of other utilities located
- 13 Where plastic sewer pipe is used, standard OCDPW specifications for laying plastic pipe shall appear on project plans
- 14 18" minimum vertical separation must be maintained between sanitary sewer and watermain.
- 15. The sanitary sewer contractor shall notify the inspection section of the Detroit Water & Sewerage.

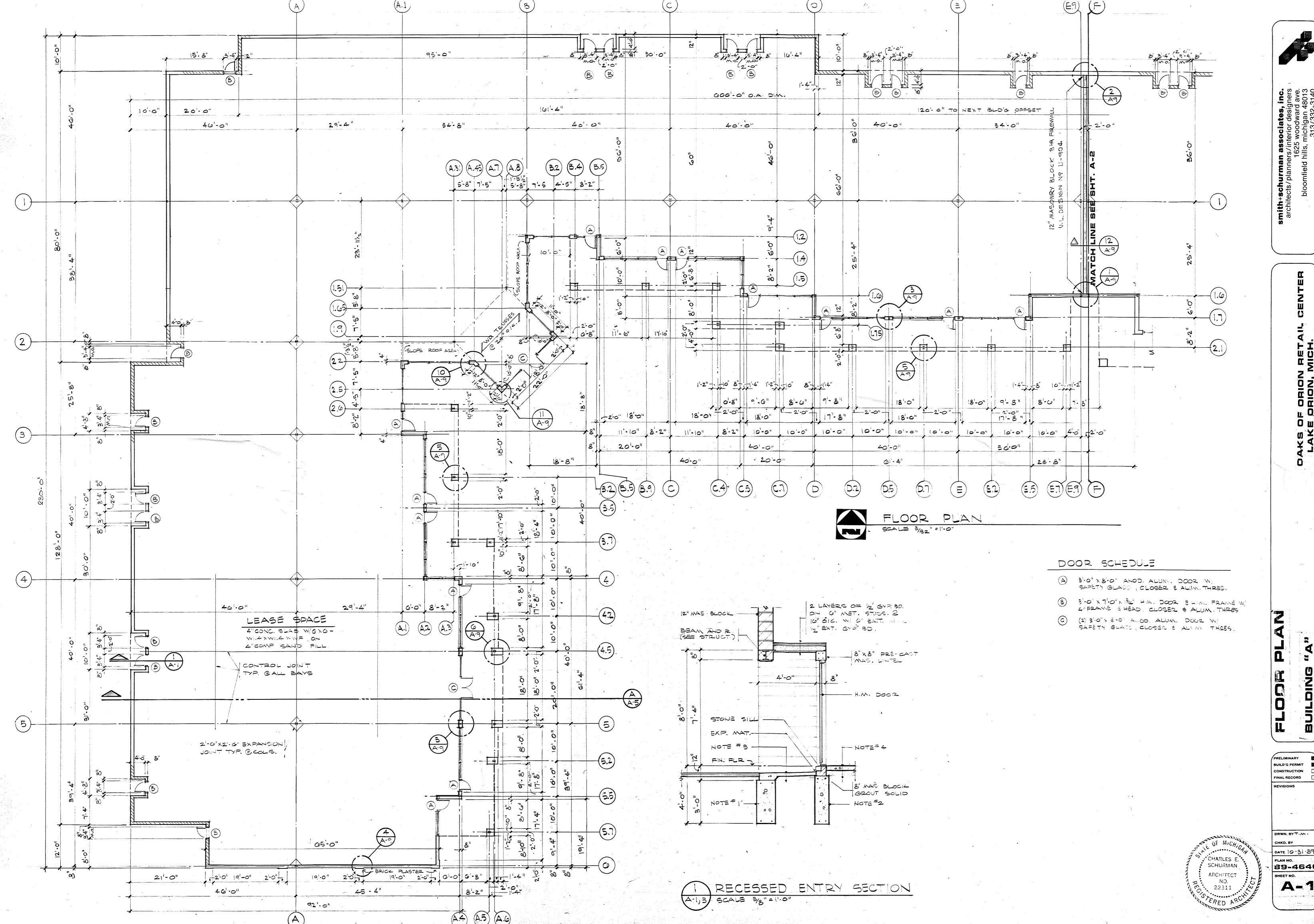
 Department at 833-4949 at least 48 hours prior to beginning of construction.



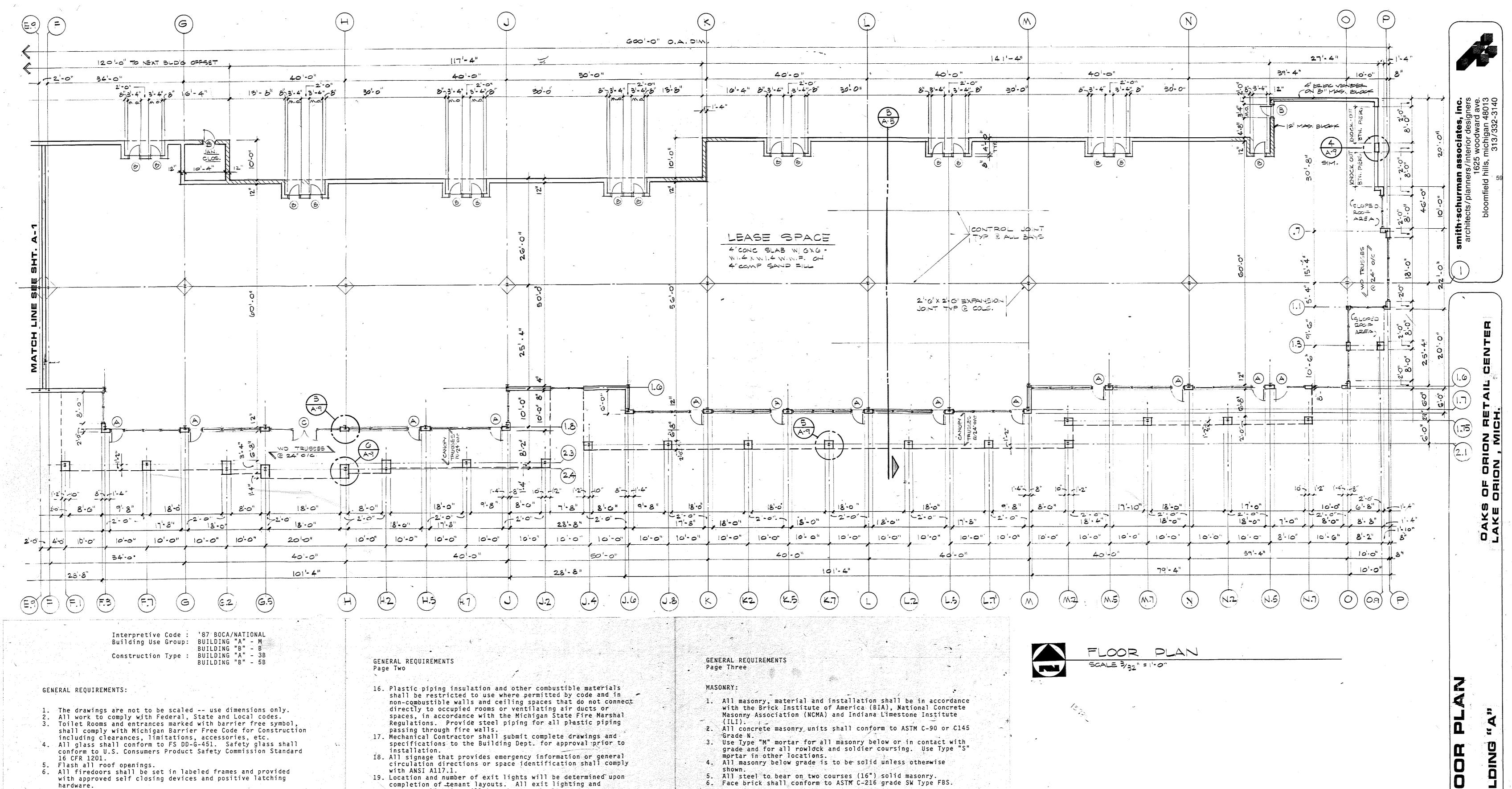
9 of 9 OEUR. N.



BRYINGHAM, MI. 48007



BUILD'G PERMIT CONSTRUCTION FINAL RECORD DRWN. BYT.M. CHKD. BY DATE 10.31.89 PLAN NO. 89-4646



- Contractor shall verify locations of all mechanical and electrical work before casting foundations and provide sleeves, lower foundations or cast protection around work as required.
- 8. Do not backfill against walls unless floor slab is in place or unless walls are adequately braced.
- 9. Contractor shall adequately brace all walls and out trusses of building until the roof diaphram and roof anchorages are
- 10. Contractor to verify mechanical equipment loads and locations, if not indicated on plan, and report to Architect prior to erection.
- 11. Office Building: Additional toilet rooms and fixture counts to be provided in tenant suites. Retail Building: Confirm toilet room layout and fixture counts with Owner per tenant requirements. Tenant requirements to be submitted to Building Dept. for review.
- 12. All designated exit doors shall be equipped with non-locking against egress hardware. 13. Doors leading to mechanical rooms, electrical rooms and other dangerous areas shall be equipped with knurled knobs in
- accordance with ANSI All7.1. 14. Retail and Office Buildings to have fire suppression sprinkler system. General Contractor shall submit shop, drawing of fire suppression sprinkler system to Building Dept. for their review prior to installation.
- 15. Fire protection system shall be installed in accordance with NFPA 13 and all local and state codes.

- emergency lighting will have battery back-up power.
- 20. Tenant layout drawings shall be submitted to the Building Dept. prior to installation. 21. Required plumbing fixtures shall be shown with tenant improvement drawing. Drawing to be submitted by General
- 22. Verify all finishes and color selections with Architect. All interior finishes shall comply with BOCA Article 9, Section 922.0, Table 922.5 and 922.7.
- 23. Provide heat and smoke detectors on return side of HVAC
- 24. All materials in ceiling plenum shall not exceed the maximum allowable flame and smoke ratings. Insulation shall be Class

CONCRETE:

- 1. All concrete, material and installation shall be in
- accordance with ACI Standards and Recommendations. 2. All concrete shall have min. compressive strengths at 28 days Interior = 3000 psi
- Exterior = 4000 psi air entrained 3. All reinforced steel shall be ASTM A615 - Grade 60, deformed in accordance with ASTM A305 - welded wire fabric shall conform to ASTM A-185 with a minimum side and end lap of 8"
- 4. All concrete footings required to be lowered or raised shall be done at a 2 to 1 ratio. 5. Prior to pouring all slabs on grade, compacted sand fill
- shall be recompacted. _ 6. All footings shall bear on undisturbed soil of 3000 psf soil bearing capacity. If soils of this capacity can not be found at designated depths, the Contractor is to notify the Architect for alternate solutions.

- 1. All structural steel shall conform to ASTM A36 or ASTM A572 -
- 2. All pipe columns shall conform to ASTM A501 or ASTM A53
- Type E or S Grade B. Structural tubing columns shall conform to ASTM A500-Grade B. Temporary guying or bracing of the structure shall be the responsibility of the erector.
 Design of structural steel connections shall be the responsi-
- bility of the structural steel fabricator. 6. Steel joists shall be manufactured and erected in accordance with the Steel Joist Institute (SJI).
- 7. Steel decking shall conform to AISC Specification for the design of cold-formed steel structural members; AWS -Structural Welding Code; SDI - Design Manual for Floor and Roof Decks.

CARPENTRY:

- All structural lumber shall have min. stress values of: f = 1,050 psi
- E = 1,300,000 psi2. All rough lumber shall have a moisture content of 19% or
- 3. All finish lumber shall have a moisture content of 9% or
- 4. All lumber required to be fire treated shall bear the UL FR-S

STRUCTURAL LOADS:

Roof: L.L. = 30 P.S.F.

75 MPH

D.L. = 30 P.S.F.

(Loading per '87 BOCA)

Total = 60 P.S.F.

(+ Snow Drifting per '87 BOCA)

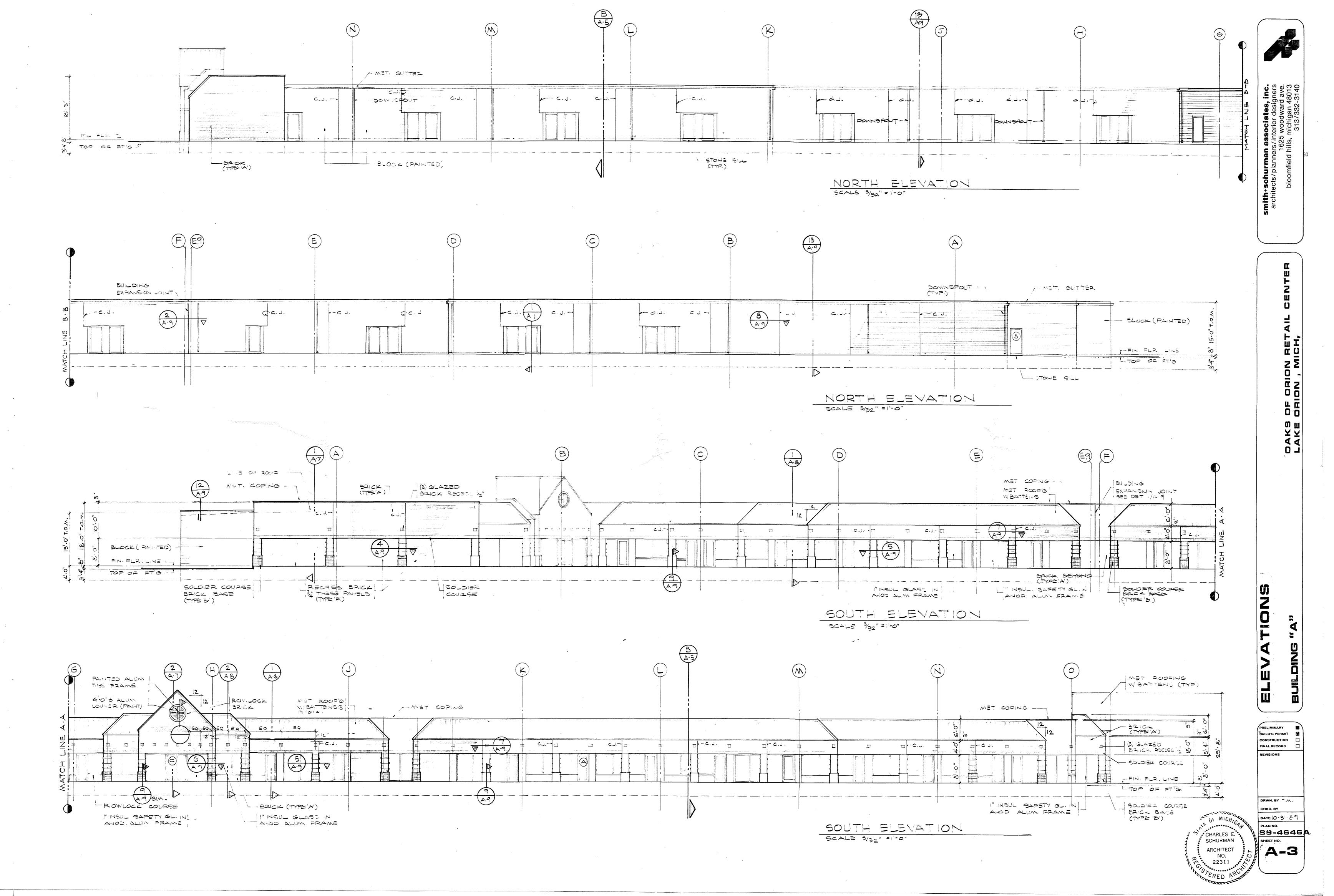
5. All stud walls are to be firestopped at ceilings.

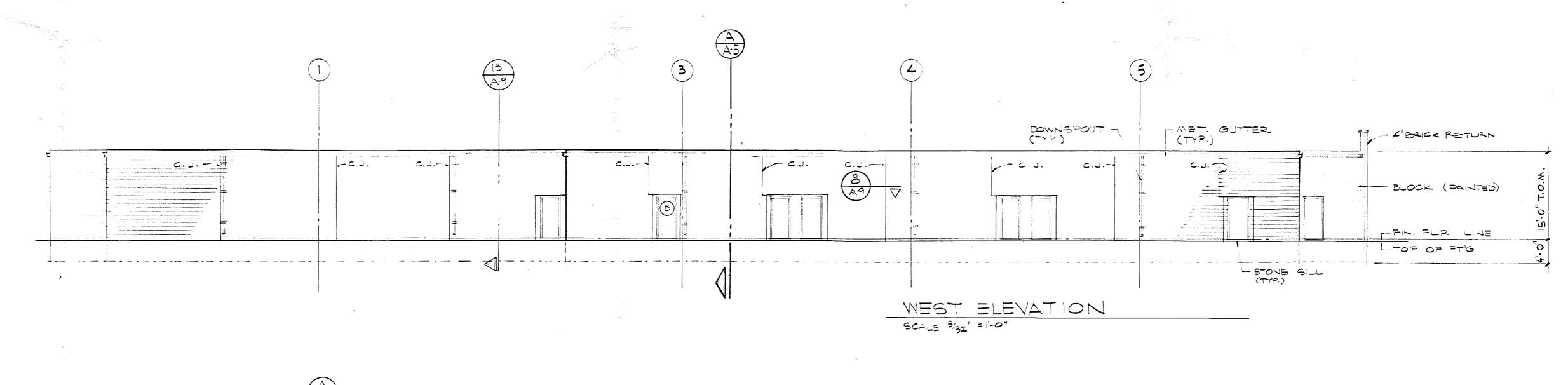
BUILD'G PERMIT CONSTRUCTION FINAL RECORD

> DRWN. BY T.M. DATE 10 -31-89

CHARLES E **SCHURMAN** ARCH!TECT NO.

89-4646A A-2





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- SOLD BR COURSE

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ROWLOCK BRICK

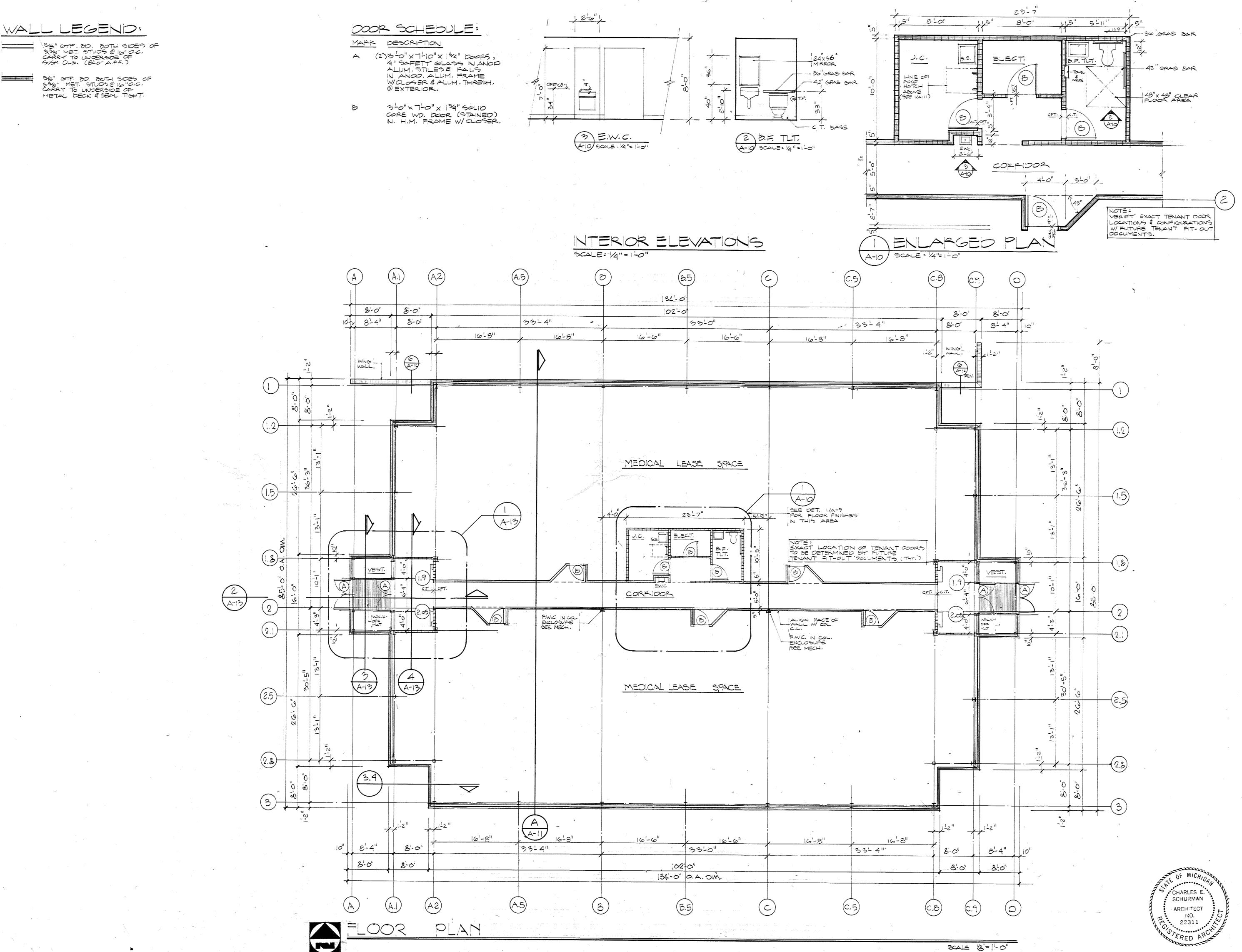
EAST ELEVATION

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PRELIMINARY

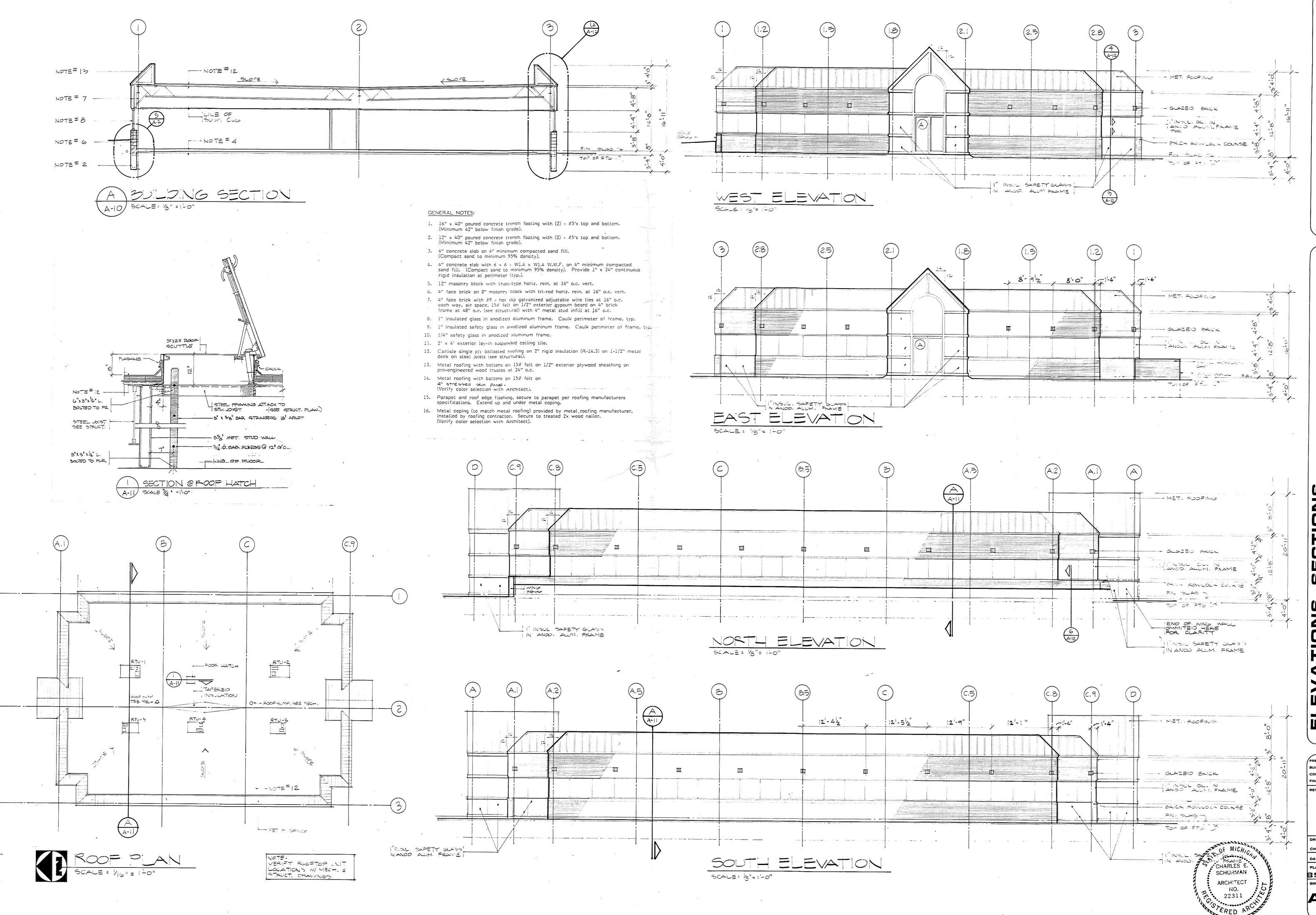
DRWN. BY T.M. DATE 10.31.89 CHARLES E. SCHURMAN 89-4646A SHEET NO. ARCHITECT NO. 22311 A-4



smith+schurman associates, inc. architects/planners/interior designers 1625 woodward ave. bloomfield hills, michigan 48013

OF ORION RETAIL AKE ORION, MICH.

BUILD'G PERMIT CONSTRUCTION FINAL RECORD DRWN. BY 55 DATE 10-31-89 PLAN NO. 89-4646A

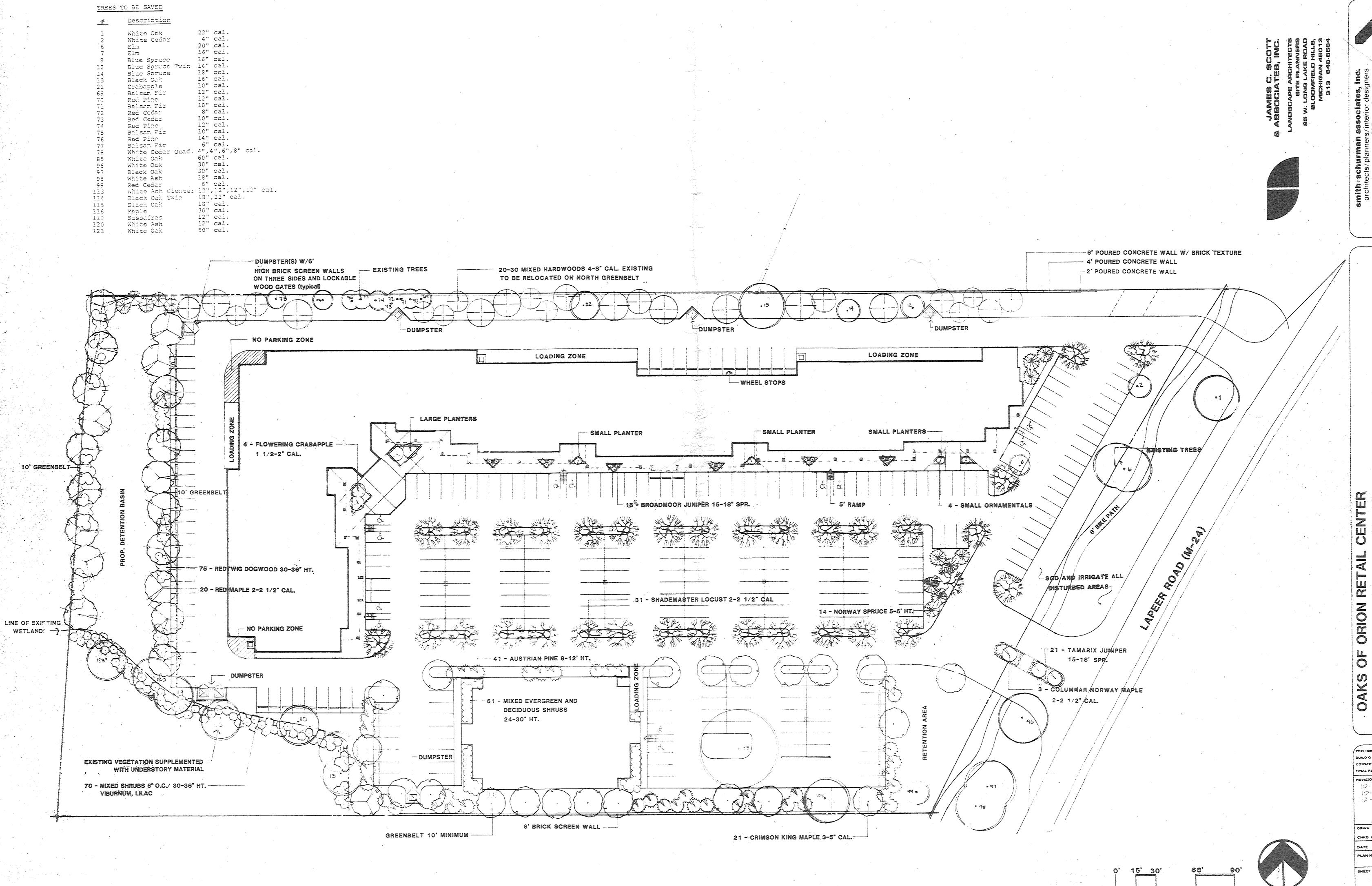


22 ATIOI F PLAI ELEV/ ROOF BUILDIN

PRELIMINARY BUILD'G PERMIT CONSTRUCTION FINAL RECORD REVISIONS

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AUILO'G PERMIT FINAL RECORD REVISIONS

10-30-89 10-31-87

DAME ST PHIP CHKO. WY

SCALE 1": 30"



Planning & Zoning Department

Phone: (248) 391-0304, ext. 5000

TO: The Charter Township of Orion Planning Commission

FROM: Tammy Girling, Planning & Zoning Director

DATE: August 7, 2023

www.oriontownship.org

RE: PC-23-20 WhiteWater Car Wash Site Plan

As requested, I am providing suggested motions for the abovementioned project. Please feel free to modify the language. The verbiage below could substantially change based upon the Planning Commissions' findings of facts for the project. Any additional findings of facts should be added to the motion below.

Loading Berth Waiver (Ord. No. 78, Section 27.04 B, 3, b)

Motion 1: I move that the Planning Commission **approve/deny** a loading berth waiver for PC-23-20, WhiteWater Car Wash Site Plan, located at 1112 S. Lapeer Rd. and 1140 S. Lapeer Rd., (Sidwell #09-14-201-005 and Sidwell #09-14-201-006), for plans date stamped received July 14, 2023, because the applicant **did/did not** show that the proposed use will require infrequent deliveries and/or deliveries will usually be made by automobile, van or small truck: (motion maker insert findings of facts).

Site Plan (Ord. No. 78, Section 30.01)

Motion 2: I move that the Planning Commission grants site plan **approval** for PC-23-20, WhiteWater Car Wash Site Plan, located at 1112 S. Lapeer Rd. and 1140 S. Lapeer Rd., (Sidwell #09-14-201-005 and Sidwell #09-14-201-006) for plans date stamped received July 14, 2023, based on the following findings of facts (**motion make to insert findings of facts**).

This **approval** is based on the following conditions:

- Combination of 2 parcels to 1 parcel
- Removal of sign detail, less notation of ground sign location
- (Motion maker to list any unresolved issues related to the Township Planner's review letter).
- (Motion maker to list any unresolved issues related to the Township Engineer's review letter).
- (Motion maker to list any unresolved issues related to the Fire Marshall's review letter).
- (Motion maker to list any additional conditions).

Or

I move that the Planning Commission **denies** site plan approval PC-23-20, WhiteWater Car Wash Site Plan, located at 1112 S. Lapeer Rd. and 1140 S. Lapeer Rd., (Sidwell

#09-14-201-005 and Sidwell #09-14-201-006) for plans date stamped received July 14, 2023. This **denial** is based on the following reasons (insert findings of facts).

Or

I move that the Planning Commission **postpones** site plan approval for PC-23-20, WhiteWater Car Wash Site Plan, located at 1112 S. Lapeer Rd. and 1140 S. Lapeer Rd., (Sidwell #09-14-201-005 and Sidwell #09-14-201-006) for plans date stamped received July 14, 2023, for the following reasons (motion maker to indicate outstanding items to be addressed from the Planner's, Fire Marshall's, or Engineer's review letter(s)).





> Date: June 28, 2023 Rev.: July 26, 2023

Site Plan Review For Orion Township, Michigan

File No.: PC-23-20

Applicant: EROP LLC (Jeff Justice)

Project Name: WhiteWater Car Wash

Plan Date: March 21, 2023

Latest Revision: July 11, 2023

Location: 1112 and 1140 S. Lapeer Rd.

Current Zoning: GB General Business

Action Requested: Site Plan Approval

Required Information: As noted in the review.

PROJECT AND SITE DESCRIPTION

The applicant is proposing to demolish two existing buildings and replace them with a new 3,756 s.f. car wash building on this 1.27-acre site. The building will be accessed via one driveway off of S. Lapeer Rd. The site will contain three stacking lanes and pay kiosks, sixteen (16) vacuum stations, and five (5) employee parking spaces.

Automobile wash establishments are a permitted use in the GB General Business District, as long as the use is in an enclosed building, the site provides sufficient space for vehicles to wait, and sanitary sewers are available. The plans show an enclosed wash building, significant waiting lanes, and connections to an existing sanitary sewer that runs along the west side of S. Lapeer Rd.

An aerial photo (Figure 1) of the subject site is provided on the next page. A photo of the existing buildings that will be demolished (Figure 2) is also provided. The applicant has revised the plans, and resubmitted them along with a response memo (July 12, 2023). This review evaluates the revised plans.

Figure 1: Subject Site Location



Source: Near Maps

Figure 2: Existing Buildings to be Demolished.



Source: Google Street View

AREA, WIDTH, HEIGHT, SETBACKS

The proposed project appears to meet the requirements for the GB Zoning District, as shown in the table below:

Table 1. Bulk Requirements for GB Zoning District

| | Required | <u>Provided</u> |
|--|------------------|--|
| Min. Lot Area | 12,000 s.f. | 55,533 s.f. (1.27 ac.) |
| Min. Lot Width | N/A | 188 ft. |
| Min. Setbacks | | |
| Front* | 30 ft. | 61 ft. |
| Each Side** | 20 ft. each side | 20 ft. & 130.8 ft. (if lots are combined) |
| Rear | 30 ft. | 117.1 |
| Max. Lot Coverage (% of lot) | 30% | 7% |
| Max. Building Height | 25 ft. | 18 ft. |
| Max. Clear Space Around Structures (ft.) | 20 ft. | 20 ft. |

^{*}Sec. 2.01, Definitions, states that the placement of a structure on a lot shall be measured from the "future" right-of-way line as provided in the map of *Road Right-of-Way Widths* in the Charter Township of Orion Master Plan (Pg. 125), or from the acquired highway easement, whichever is greater. The Master Plan indicates that Lapeer Rd. is a state trunkline under MDOT's jurisdiction. The map in the Master Plan indicates that Lapeer Rd. has a variable right-of-way. The plans show that the Lapeer Rd. right-of-way width in front of the subject site is 200 feet. The applicant has provided plans to MDOT, and is deferring the "future" right-of-way to MDOT; therefore, its unknown at this time if there is a "future" right-of-way on this part of Lapeer Rd.

Items to be Addressed: 1) Location of "future" right-of-way unknown at this time. 2) Recommend conditioning approval on parcels combined into one parcel to meet side setback requirements.

NATURAL RESOURCES

Topography – The site is flat at S. Lapeer Rd., and has a slight slope (approx. 2%) down from the roadway to the southwest corner. This shouldn't cause any significant issues for developing the site.

Wetlands – There are no wetlands on the site.

Woodlands – The rear of the property contains vegetation and trees. Sheet C-2 provides a tree survey, and symbols showing tree removal, and trees to remain (in tree-protective fencing). This sheet also shows a "building site," indicating development within 15-feet of the proposed building. The ordinance exempts sites that are less than five (5) acres from regignization for tree removal for activities within the

^{**}The site is comprised of two parcels that share a common side property line. To meet the side setback requirements, the parcels will need to be combined into one parcel. The applicant has acknowledged that this will occur once the applicant purchases the parcels. We would recommend conditioning any approval of the site plan on the parcel combination.

building envelope or building site. Many of the trees slated for removal outside of the building site are in poor condition, and don't qualify as a "protected tree." However, the plans show removal of four trees that meet the definition, and will require planting four new trees. See comments on the replacement trees under the Landscaping section of this review.

Items to be Addressed: None.

BUILDING LOCATION AND SITE ARRANGEMENT

The building is located on the south side of the site. It is accessed via three (3) drive/stacking lanes, and three (3) pay kiosks at the west end of the site. The plan also shows sixteen (16) vacuum stations, with concrete pads for a towel cart to the north of the vacuums, and a mat cleaner to the west of the vacuums. The vacuums are operated by two, 7' x 15' central vacuums, enclosed with a six-foot tall masonry wall. A dumpster enclosure is proposed at the north boundary of the property.

In our previous review, we considered the three (3) stacking lanes, and 16 vacuum stations excessive. We had this opinion because we referenced the Institute of Transportation Engineers *Trip Generation Manual* (11th Edition) for automated car wash businesses. Per the manual, these operations generate 41 trips (46% entering, 54% existing) per wash tunnel during their peak hour on a Saturday. That is approximately 20 vehicles visiting the car wash over their peak hour on a Saturday. Other times will generate fewer trips. We asked the applicant to explain why they needed so many stacking lanes and vacuum stations.

The applicant's response memo states that they can serve up to 50 cars per hour on a busy day, and that 50-75% of their customers use the vacuum stations after they get their car washed (or 25-38 customers). The memo states that each customer takes 25 minutes to vacuum their car, and that the 16 vacuum stations can serve 38 customers per hour (since each station can be used twice within an hour). The 16 stations will accommodate the maximum number of customers who typically vacuum their car during the busiest times.

The applicant's response memo also described the use of three (3) stacking lanes. One lane is dedicated to monthly subscribers ("fast pass" members), and the other two lanes are for customers purchasing a car wash using the kiosk. The third "fast pass" lane adds about 1,400 s.f. of impervious surface (or approx. 4% of all of the impervious surface) to the project. The wash building can only accommodate so many vehicles. With three (3) lanes, there is enough space for 25 waiting vehicles (not counting the vehicles that have passed through the pay stations).

In our previous review, we also asked where garbage is placed when people are cleaning out the interior of their cars. The applicant's memo explains that each vacuum has a garbage can. The plans have been updated to show the garbage cans. The memo also states that they don't anticipate that people will be throwing away larger items (that don't fit into the vacuum station bins), so easy access to the dumpster by customers is not necessary.

The memo also states that the induction loop pads are in the concrete, and they operate the gates at the pay stations. The purpose of the license plate reader is to open the pay station gate for "fast pass" members.

Items to be Addressed: None.

PARKING AND LOADING

Number of Parking Spaces

Sec. 14.03 regulates the number of required parking spaces for uses permitted in the General Business zoning district. This section also allows the Planning Commission to modify the numerical requirements for off-street parking, based on evidence provided by the applicant that indicates another standard would be more reasonable because of the level of current or future employees and/or current or future customer traffic.

The ordinance requires one (1) parking space per two-hundred (200) square feet of gross floor area. The proposed car wash building is 3,756 s.f., requiring nineteen (19) parking spaces. The plans show five (5) employee parking spaces, and sixteen (16) vacuum stations, for a total of 21 spaces. The applicant's response memo states that this business will have five (5) employees on site during the busiest shift.

Location of Parking Spaces

Sec. 14.03 requires a 20-foot distance between a property line and parking area/driveway. The plans show this 20-foot distance.

The employee spaces are located about 70-feet away from the building. In our previous memo, we noted the need for a barrier-free space for employees; however, the space is far from the building, and there is no barrier-free travel way to get from these spaces to the building. Another issue is employees must back into the main entrance lane to exit the site. One possibility to consider is to re-orient the employee parking so that these spaces are located just to the south of the bay of six (6) vacuum stations (on the west side of the landscape island). This will place the barrier-free space closer to the building, allow a person in a wheelchair to traverse the pavement and access the building, and eliminate backing-out movements in the main driveway.

Size of Parking Spaces and Maneuvering Lanes

General parking spaces are required to be 9-feet wide by 19-feet long. The employee spaces meet this requirement. The vacuum stations are the minimum length, but are proposed at four (4) feet wider than the minimum requirement. This is logical, as people will have their doors open to vacuum the vehicle. All parking spaces abut an integral curb abutting a sidewalk. The size of the barrier-free spaces also meets dimensional requirements.

The proposed entrance/exit to the site meets the 25-foot minimum width requirement if the curbs are taken into account. The maneuvering lanes that accommodate two-way movements are 24-25-feet wide, exceeding the minimum 22-foot requirement. The stacking lanes approaching the pay stations (accommodating one-way movements) are 12-feet wide, meeting this requirement. However, the widths of these lanes shrink to 9-feet wide when the third stacking lane is introduced next to the pay stations (and between the islands dividing the lanes). We defer evaluation of the 9-foot stacking lane widths to the Township Engineer to determine if they are adequate.

Loading/Unloading Space

Sec. 27.04 requires a business establishment to have one (1) loading/unloading berth, accessible by motor vehicle, on site. In response to our questions, the applicant's memo states that the business will have weekly deliveries by a large box truck or small semi-truck that backs up to the mechanical room overhead door (easterly overhead door on south end of building) and unloads chemicals used in the car wash. They also receive weekly UPS/Amazon deliveries.

There is no loading/unloading space shown on the site plan. The Planning Commission may modify or waive this requirement upon finding that the proposed use will require infrequent deliveries and/or if deliveries will usually be made by automobile, van, or small truck. Sheet C-9 shows access routes and turning radiuses for a Township Pumper Truck, with a wheelbase of almost 18-feet. A large box truck, UPS, and Amazon truck typically has this size wheelbase or smaller, and will most likely be able to traverse the site. However, we defer evaluation of the ability for a small semi-truck to maneuver the site to the Township Engineer.

Items to be Addressed: 1) Consider re-orienting employee parking spaces to the south side of the bay of six vacuum stations (west side of landscape island), to place spaces closer to the building and eliminate the need to back out into main driveway. 2) Defer adequacy of 9-foot wide stacking lanes to Township Engineer. 3) Defer evaluation to Township Engineer of ability for small semi-truck to maneuver the site to reach the loading/unloading space.

SITE ACCESS AND CIRCULATION

The circulation pattern for car wash customers to enter the site and reach the pay kiosk is logical. Regarding circulation throughout the rest of the site, we have the following comments:

1. **Emergency Bypass Lane**. Our previous review observed that once vehicles enter the stacking spaces cordoned off with curbs on each side, they will not be able to escape these lanes until the car in front of them goes through the pay kiosk and enters the wash building. We suggested that some type of emergency bypass for all lanes should be available. The applicant's response memo states that someone wanting to exit the stacking lanes will need to be assisted by an employee. The Planning Commission should discuss the need for an emergency bypass lane in this area.

Once a vehicle passes through the pay kiosk, they can access an emergency bypass lane into the vacuum station area, and exit the site. The revised plans have placed a "Do Not Enter" sign on this lane, facing the vacuum stations, and specified that this lane is one-way, going east.

The plans show a proposed "fire lane" with a mountable curb off the stacking lanes (Sheet C-9). There is no gate, and that will allow free access to the interior of the site. We assume that the fire lane will be signed to prohibit general access by vehicles. Otherwise, any vehicle could use the fire lane to enter the vacuum station area.

2. **Vacuum Stations**. As requested, the applicant's memo explains that the vacuum area is only accessible to people who purchase a car wash, and after the vehicle has exited the car wash building.

A "car mat cleaner" is identified on the plans. The applicant's memo explains that customers walk up to the map cleaning station (vs. drive up).

3. **Main Driveway**. With the employee parking spaces in their current location, the main driveway changes from two-way traffic to one-way traffic at the west end of the employee parking spaces. Our previous review suggested a physical taper be added to the driveway to indicate this change in direction. However, the applicant's response memo explains that driveway width was needed for fire access and turning clearance. Another option would be a small curb "bump-out" to encourage

entering vehicles to stay to the right until they pass by the employee spaces. Per Sheets C-9 and C-10, a small bump-out wouldn't interfere with fire or garbage truck access.

We also stated that if the employee parking spaces remain in their current location, enough space should be provided to allow vehicles to back out of the spaces. In response, the stacking lane striping has been shortened by about 15-feet. We think a better solution is to move employee parking to the west side of the landscape island, as suggested above.

As requested, the plans (Sheet C-10) show how a garbage truck will access the trash enclosure, and then turn around using the fire lane to exit the site.

4. **Automatic Gate.** The site shows a gate across the easterly maneuvering lane to allow cars exiting the wash building and vacuum stations to leave the site. This gate is equipped with a Knox Box to allow emergency vehicles to enter. As requested, the response memo explains that the purpose of the gate is to prevent customers from entering the vacuum station area without paying for a car wash. We question why locate a gate here, and not across the fire lane as well?

We defer evaluation of the Traffic Impact Study, and its conclusions about the location of the driveway onto S. Lapeer Rd., to the Township Engineer.

Items to be Addressed: 1) Planning Commission to discuss need for emergency bypass lane for vehicles waiting in pay station stacking lanes. 2) Will fire lane be signed to prohibit entry by customers into the vacuum station area? 3) Planning Commission to consider small curb "bump-out" at west end of employe parking spaces to delineate change in direction in main entry driveway; or consider option to relocate employee parking spaces to south side of landscape island. 4) Why gate the easterly lane, and not the fire lane? 5) Defer evaluation of Traffic Impact Study, and location of driveway onto S. Lapeer Rd., to Township Engineer.

SAFETY PATHS/SIDEWALKS

Sec. 14.03, *Required Conditions*, requires construction of a safety path for pedestrian and non-motorized use in conjunction with development of all parcels in the GB, General Business District, and comply with Sec. 74-06, *Streets, Roads, and Other Means of Access*.

The project proposes an 8-foot wide, asphalt safety path within the right-of-way of S. Lapeer Rd. The safety path has been redesigned to be in compliance with the ordinance (one (1) foot from the property line). The pathway also connects to existing pathways on either side of the site. Most of the pathway meets the 8-foot width requirement, except for one segment next to an overhead pole guy-wire. The pathway needs to be widened in this area, and it may require relocation of the guy-wire.

The plans have been revised to widen the sidewalk along the six (6) northern vacuum stations. Adding the trash bins to the vacuums along the building façade makes the clear distance between the bin and the wall slightly narrower than the required 5-feet. (Note: This distance is dimensioned 5-feet, but it doesn't quite scale 5-feet.) This walkway needs to be widened to provide a clear five-foot width to meet barrier-free requirements.

Items to be Addressed: 1) Widen safety path segment from 5-feet wide to 8-feet wide. 2) Widen the sidewalk next to the building so that garbage bins are clearly five-feet from the building wall.

LANDSCAPING

Tree and Woodlands Protection

As described under the "Natural Features" section of this review, tree removal on this site will require planting four (4) new trees. The Landscape Plan shows four (4) new trees, meeting the minimum size requirements, in the southwest corner of the site to replace the removed trees.

Site Perimeter Landscaping

Table 2. Site Perimeter Landscaping

| Property Line Location | Greenbelt | General Landscaping | Parking Lot Landscaping Adjacent to Public Road |
|----------------------------|---|--|--|
| | Sec. 14.03 Requires 20-foot wide landscaped greenbelt along entire perimeter of GB District when abutting commercial/office or industrially zoned district. | A. Mixture of deciduous and evergreen trees. B. One (1) tree/3,000 s.f. landscaped open area. C. Underground irrigation or water available | A. 20-foot greenbelt along ROW. B. One (1) tree/30 l.f. between ROW & parking. C. 30-inch tall wall, fence, hedge, berm along ROW. D. Sight distance. |
| North East (Lapeer Rd.) | Provided | A. See Note 1 below. B. See Note 2 below. C. See Note 3 below | N/A A. Provided. B. 7 trees required/ 7 provided. See Note 4 below. C. Provided. D. No plant material proposed in sight distance triangle. |
| South West | | | N/A N/A |

- Note 1. **Mixture of Deciduous/Evergreen Trees.** As requested, the proposed evergreen tree has been changed to one that is hardy in Michigan. Note also that the dumpster location has shifted on the site plan, and the proposed plantings need to be adjusted around the dumpster screen on the Landscaping Plan.
- Note 2. **Greenbelt Trees.** The plans indicate that there is 21,205 s.f. of landscaped area, which will require eight (8) trees (21,205 s.f. / 3,000 s.f. = 8 trees). The plans propose to use the existing trees that will remain after the site is developed. We referenced the Tree Survey shown on Sheet C-1, *Demolition Plan*, and identified the following existing trees that are at least 2.5" caliper, of "fair" or better condition, and that can be counted toward this requirement:
 - Tree #2554
 - Tree #2558
 - Tree #2567
 - Tree #2568
 - Tree #2569
 - Tree #2570
 - Tree #2577
 - Tree #2581

As requested, a tree protection fencing symbol and identifying text has been added around the trees to remain on Sheet C-2, *Demolition Plan*, and Sheet C-4, *Grading Plan*. Also, these sheets now contain a note stating: "No vehicle, other construction equipment, or construction materials or debris shall be parked or stored within the dripline of any tree or plant material intended to be saved." A construction detail illustrating the tree protection fencing was added to Sheet C-2, *Demolition Plan*.

- Note 3. **Irrigation**. Sheet C-6 provides a note to an irrigation contractor clearly illustrating that all lawn and landscape beds will be irrigated.
- Note 4. **Lapeer Rd. ROW**. In our previous review, we noted several proposed plant species along this frontage that wouldn't tolerate road salt spray or salt in the planting media. The plans have been updated to include salt-tolerant plant species.

Interior Parking Lot Landscaping

- 1. Parking lots with more than 20 spaces shall contain a minimum of 20 square feet of interior landscaping per parking space, and one (1) tree per 200 s.f. of interior landscaping. The project proposes 21 parking spaces, requiring 420 s.f. of interior parking lot landscaping. Sheet C-6, Landscaping Plan, indicates that the interior parking lot islands occupy 3,904 s.f. Also, three (3) trees are required, and three are proposed in parking lot landscape islands.
- 2. We have the following comments regarding the landscape islands.
 - a. All parking lot islands are proposed to be covered in lawn.
 - b. Not all parking lot islands meet the minimum dimension of 10-feet; however, the total amount of interior parking lot landscaping exceeds the minimum required, and the three parking lot islands that are 10-feet wide far exceed the minimum size requirements. Since the larger islands meet the requirement for interior landscaping, it is acceptable to have extra islands that are smaller than the 10-foot minimum. Also, the three islands that contain trees meet the minimum size requirement, which will help ensure that the tree has enough space in the root zone to grow.

Material Standards and Specifications

- 1. The proposed plant material meets the minimum size requirements.
- 2. As requested, a note describing the required maintenance of landscaping (from Sec. 27.05(D)) has been added to the Landscaping Plan.

Trash Receptacle and Screen

Sec. 14.03 requires that a trash receptacle screen shall be provided in the rear yard of the building or principal use structure. The proposed receptacle/screen isn't behind the building, but on the opposite side of the property. The Planning Commission may consider this alternative location. Sheet C-11, Construction Details, shows an illustration of the proposed, six-foot tall trash receptacle screen wall and opaque gate. The wall material is proposed to coordinate with the wall material of the building.

Items to be Addressed. 1) Adjust plantings shown on Landscaping Plan to accommodate new location of dumpster screen. 2) Planning Commission to consider proposed trash receptacle location.

LIGHTING

Sheet C-7, Lighting Plan, shows three types of proposed light fixtures on site:

1. **Pole-mounted luminaires**. The plans show that these fixtures are downward directed, and can be shielded if necessary. These fixtures are proposed at 18-feet tall. The ordinance limits the height of fixtures to 20-feet or the height of the building, whichever is shorter. The proposed building is 18-feet tall. The pole-mounted fixtures meet the maximum permitted height.

Regarding lighting levels, these fixtures meet the minimum footcandles required on site, and the maximum footcandles along the property lines. 75

2. **Building-mounted wall sconces**. These sconces are downward facing, and "full cut off," which directs light to the ground.

The Eleven (11) wall sconces will be installed along the west, north, and east building facades, creating the most well-lit part of the site, with light levels between 13-20 footcandles along the sidewalk/vacuum stations. The vacuum stations will also have a "linear luminaire" adding even more light to these areas. In our opinion, so much lighting along the building is intended to attract attention to the use, and not strictly designed for security purposes. This approach to lighting is prohibited by Sec. 27.11, *Lighting Regulations*. The applicant stated in the response memo that the higher light levels along the building provide adequate light for customers using the vacuum stations after dark. They have also increased the light levels in the vicinity of the six (6) vacuum stations north of the parking lot. In our opinion, the project should reduce the number of wall sconces to not attract attention to the building; the Planning Commission may want to discuss this with the applicant.

3. **Linear luminaire.** We researched this luminaire on-line, and found an illustration of the proposed fixture on the manufacturer's website:



Source: G&G Industrial Lighting (ggled.net)

The applicant's response memo confirms that the photo above illustrates the proposed application of this luminaire on the car wash site. These fixtures are mounted on the vacuum arm 9-feet above grade. In our opinion, given all of the other proposed lighting, the linear luminaires are not necessary to provide adequate site lighting; the Planning Commission may want to discuss this.

In our previous review, we asked the applicant to supply the proposed hours of operation. They replied, stating that the business will operate from 8:00am to 8:00pm. We assume this is 7-days per week. The business does not meet the definition of an "extended hours use," and therefore doesn't require special land use review.

Also, except where used for security purposes, as approved in advance by the Planning Commission, all outdoor light fixtures shall be turned off, or reduced in lighting intensity, between 11pm and sunrise,

Whitewater Car Wash – Site Plan Review July 26, 2023

except where such use continues after 11pm, but only for so long as such use continues. Sheet C-7 includes this ordinance provision as a note.

Items to be Addressed: 1) Planning Commission to discuss reducing number of wall sconces to meet ordinance requirement to not attract attention to the building. 2) Planning Commission discuss necessity of vacuum-mounted linear luminaire.

SIGNS

Sheet C-3 shows the location of one (1) proposed free-standing pylon sign on the west side of the interior maneuvering lane. Sheet A-2, and the color building renderings, show two (2) wall signs on the building parapet. Review of signs is handled administratively.

Items to be Addressed: None.

FLOOR PLANS AND ELEVATIONS

Elevations and floor plans have been provided.

The floor plans show one car wash tunnel on the south side of the building, with an office, restroom, storage area, and equipment area on the north side of the building.

Elevations are comprised of the following material:

- Architectural concrete brick in two colors, divided by pre-cast concrete sill (All elevations)
- Pillar details (All)
- Parapet detail (Northeast corner) with decorative metal panels below and EFIS cornice above. Parapet detail contains wall signs on north and east elevations.
- Aluminum canopies over windows (South) and as an architectural detail (North). The windows will be visible from S. Lapeer Rd., breaking up the expanse of this wall.
- Storefront glazing, and metal canopies, for office at rear of building.

Colors have been provided on graphic elevations and colored renderings.

Items to be Addressed: None.

RECOMMENDATIONS

The revised plans have addressed many of the comments in our previous review. The following comments should be addressed by the applicant, to the satisfaction of the Planning Commission, before granting site plan approval:

Area, Width, Height Setback:

- 1) Location of "future" right-of-way unknown at this time.
- 2) Recommend conditioning approval on parcels combined into one parcel to meet side setback requirements.

Parking and Loading:

- 1) Consider re-orienting employee parking spaces to the south side of the bay of six vacuum stations (west side of landscape island), to place spaces closer to the building and eliminate the need to back out into main driveway.
- 2) Defer adequacy of 9-foot wide stacking lanes to Township Engineer.
- 3) Defer evaluation to Township Engineer of ability for small semi-truck to maneuver the site to reach the loading/unloading space.

Site Access and Circulation

- 1) Planning Commission to discuss need for emergency bypass lane for vehicles waiting in pay station stacking lanes.
- 2) Will fire lane be signed to prohibit entry by customers into the vacuum station area?
- 3) Planning Commission to consider small curb "bump-out" at west end of employe parking spaces to delineate change in direction in main entry driveway; or consider option to re-locate employee parking spaces to south side of landscape island.
- 4) Why gate the easterly lane, and not the fire lane?
- 5) Defer evaluation of Traffic Impact Study, and location of driveway onto S. Lapeer Rd., to Township Engineer.

Safety Paths/Sidewalks

- 1) Widen safety path segment from 5-feet wide to 8-feet wide.
- 2) Widen the sidewalk next to the building so that garbage bins are clearly five-feet from the building wall.

Landscaping

- 1) Adjust plantings shown on Landscaping Plan to accommodate new location of dumpster screen.
- 2) Planning Commission to consider proposed trash receptacle location.

Lighting

- 1) Planning Commission to discuss reducing the number of wall sconces to meet ordinance requirement to not attract attention to the building.
- 2) Planning Commission discuss necessity of vacuum-mounted linear luminaire.

CARLISLE WORTMAN ASSOCIATES, INC.

John L. Enos, AICP Vice President



July 19, 2023

Scott Reynolds, Planning Commission Chairperson CHARTER TOWNSHIP OF ORION 2323 Joslyn Road Lake Orion, MI 48360

RE:

Whitewater Express Car Wash PC-23-20

Site Plan Review #2

Received:

July 14, 2023 by Orion Township

Dear Mr. Reynolds:

We have completed our review of the Whitewater Express Car Wash plan set. The plans were prepared by Stonefield Engineering & Design and were reviewed with respect to the Township's Zoning Ordinance, No. 78, Stormwater Management and Soil Erosion & Sedimentation Control Ordinance, No. 139, and the Township's Engineering Standards.

EXISTING SITE CONDITIONS:

The site is located on the west side of M-24 south of Clarkston Rd. within the northeast quadrant of Section 14 of the Charter Township of Orion. The site is zoned General Business (GB) and is bound by parcels to the north and west zoned Office and Professional (OP) and parcels to the south and east zoned General Business. A legal description was provided for parcels 1 & 2, and the applicant is planning to submit a Land Combination Application once the purchase is complete.

The current site has two one-story buildings on the east side of the property and a small garage and shed to the north. The site is otherwise undeveloped but is directly adjacent to multiple developed sites. The applicant is proposing to demolish the existing buildings on the property and build a new 3,756 square foot car wash with 5 parking spaces and 16 vacuum stalls.

There are existing overhead electrical lines throughout the site that are proposed for relocation. The applicant should verify that no easement currently exists for the overhead lines.

WATER MAIN AND SANITARY SEWER:

There is an existing 16-inch water main that runs along the west side of M-24. The existing water service lead is shown on the utility plan from the 16-inch water main along M-24 and will remain to serve as a connection point for the new development.

A proposed FDC and fire suppression line were not shown on the Site Plan and the nearest hydrants are approximately 120 feet north and 150 feet south of the site. The applicant should consider extending public main on site to provide additionally hydrant coverage. We defer further comment on the FDC, hydrant coverage and fire suppression requirements to the Orion Township Fire Department.

Whitewater Express Car Wash, PC-23-20 Site Plan Review #2 July 19, 2023 Page 2 of 4



There is an existing 10-inch sanitary sewer that runs along the west side of M-24. The sewer leads to the existing buildings were not shown on the plans. The applicant should review provided sewer lead sheets to utilize existing sewer leads in lieu of a new tap. There are three 2,000-gallon water reclamation tanks proposed to treat and recycle water for the car wash.

A Preliminary Basis of Design for water and sanitary usage was included in the plans but was based on the old 1998 WRC study. The REU factor needs to be revised to reflect the recent July 2018 REU Study. Additionally, the population factor needs to be adjusted to 3.5 persons/REU per Orion Township Standards.

STORMWATER MANAGEMENT:

The existing site stormwater management consists of several catch basins within the parking lot to the east. Water is drained towards the existing 15-inch storm sewer along the western side of M-24 which flows north. Catch basins and associated sewers will be removed as part of the building and parking lot demo. The existing catch basins and associated pipes along the west side of M-24 are proposed to remain. The remaining catch basin to the north will act as the ultimate outlet of the proposed detention system.

The applicant is proposing catch basins within the site that will connect to a proposed underground detention system. This includes downspout connections from the proposed car wash building. The header of these downspout connections is below the 8-inch minimum diameter required by Township Standards and should be upsized during Engineering.

Preliminary detention calculations were provided but do not follow Orion Township Engineering Standards. The current detention calculations shown appear to follow MDOT Standards which is not acceptable. Additionally, NJDEP certified stormwater treatment devices placed before the inlets to the underground detention system are required at Site Plan.

The geotechnical report shows that the infiltration rate is less than 0.24 inches/hour and therefore the soils are not suitable for infiltration. Therefore, the CPVC requirement is waived; however, other volume reducing LID practices must be implemented to the maximum extent practicable. The plan will need to be revised accordingly.

PAVING/GRADING:

Preliminary pavement slopes appear acceptable but will need to be verified at Engineering. Pavement throughout the site is proposed to be concrete. Concrete slopes are to remain between 0.4% and 6% for drive areas, and between 0.4% and 4% for parking areas. Existing grading is indicated on the survey plan with spot grades and 1-foot contours. Proposed grading is indicated on the grading plan with spot grades and 1-foot contours. The applicant is matching the existing grade at the extent of the work area, which appears to be consistent around the property line.

The applicant is proposing to remove the existing asphalt parking lot and concrete sidewalk at the frontage of the property. These will be replaced by a proposed concrete approach at the northeast corner of the site and an asphalt safety path along M-24. The provided cross section for the concrete drive/parking lot does not reflect Orion Township Standards and must be changed to 7-inch concrete on an approved aggregate base.

A section of the proposed safety path north of the proposed approach shall be widened to 8 feet. Additionally, there are guidewires interfering with this section of safety path. DTE should be contacted to relocate these guidewires to accommodate the pathway widening.

TRAFFIC & CIRCULATION:

A Traffic Impact Assessment was provided for the proposed development. The assessment mainly focused on the proposed driveway onto M-24. The assessment states a conservative background growth rate of 1% per year was used. The study notes that the proposed site will generate 53 incoming trips in both AM and PM peak hours and

Whitewater Express Car Wash, PC-23-20 Site Plan Review #2 July 19, 2023 Page 3 of 4



52 outgoing trips in both AM and PM peak hours, which compared to the background traffic volumes appears minor. The proposed driveway intersection will operate at LOS C during the AM peak hour and at LOS B during the PM peak hour. An assessment for a right-hand turn lane was included in the study. Based on anticipated traffic and MDOT criteria, a right turn lane is warranted. However, the existing 3rd outside SB lane transitions to a right-hand turn lane approximately 200 feet south of the site. The study notes the difficulties involved with constructing a right-turn lane due to conflicts with existing pathway and utilities. Cost should not be a reason to not construct the lane should it be required. However, the addition of a right turn lane immediately adjacent to an existing through lane that transitions to a right turn only lane could add potential conflicts and driver confusion. The right-hand turn lane assessment will be reviewed by MDOT, which will ultimately determine the need for an additional lane or to allow the existing outer lane to transition further north.

The existing site has 3 approaches which all immediately lead into the asphalt parking lot. The applicant is proposing to remove all approaches along with the parking lot and have one approach near the northeast corner of the site. Any work within the right-of-way on M-24 will require a permit and approval from MDOT.

It is our understanding that the OTFD Pumper Truck turning template was approved for this site by the Fire Marshall; however, the template still has issues turning onto the proposed fire lane, particularly at the northeast corner. The width of the fire lane must be revised to ensure that the Pumper Truck can easily make the necessary turns without going off the pavement.

LANDSCAPING:

A landscaping plan was included in the plan set. The proposed plantings are located outside of water and sewer easements.

NATURAL FEATURES:

Wetlands:

No wetlands are present on or adjacent to this site. An SESC plan will be required at Engineering.

Woodlands:

The plan set does not include a tree survey. It is our understanding that a tree survey is required at Site Plan.

CONCLUSION:

In our opinion, the Site Plan as submitted is in substantial compliance with the Township's Ordinances and Engineering Standards. We ask that any approval include the following:

- 1. Preliminary detention calculations must follow Orion Township Engineering Standards.
- 2. Approval and permitting of the development's off-site traffic mitigation by MDOT with concurrence by the Township.
- 3. Since the site is not suitable for infiltration, the plan shall incorporate other stormwater runoff volume reducing/low impact design practices.
- 4. Revise the proposed fire lane to fully accommodate the OTFD Pumper Truck turning template.
- 5. Widen the proposed 5-foot-wide section of safety path at the north end of the site to the Township standard 8-feet-wide.
- 6. Revise the proposed on-site paving cross section to be a minimum of 7-inches of concrete over an approved aggregate base.
- Include NJDEP certified stormwater treatment devices before the inlets to the underground detention system.
- 8. Revise the Preliminary Basis of Design for water and sanitary to reflect the recent July 2018 REU Study by WRC. Additionally, adjust the population factor to 3.5 persons/REU per Orion Township Standards.

Whitewater Express Car Wash, PC-23-20 Site Plan Review #2 July 19, 2023 Page 4 of 4



9. The engineering plan, designed in accordance with Zoning Ordinance No. 78, Stormwater Management and Soil Erosion & Sedimentation Control Ordinance No. 139, and the Township's Engineering Standards shall be submitted to the Township for review and approval prior to construction. A detailed cost estimate for the improvements shall be submitted with the plans signed and sealed by the design engineer.

The applicant should note the Township may require performance bonds, fees, and/or escrows for a preconstruction meeting and necessary inspections. Please feel free to contact us with any questions at (248) 751-3100 or mark.landis@ohm-advisors.com.

Sincerely,

OHM Advisors

Jonathan Mahut

Jonathan Mahut Engineer Mark Landis, P.E. Project Manager

cc: Chris Barnett, Township Supervisor
David Goodloe, Building Official
Bill Basigkow, Director of Public Services
Tammy Girling, Director of Planning and Zoning
Lynn Harrison, Planning and Zoning Coordinator
Tiffany Sanders, Planning and Zoning Coordinator
Jeff Williams, Township Fire Marshal
Vince Sinacola, Water and Sewer Superintendent
John Enos, Carlisle Wortman, Township Planner
Jeff Justice, EROP LLC
Erin McMachen, Stonefield Engineering & Design

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Fire Department

Phone: (248) 391-0304, ext. 2000 Fax: (248) 309-6993

To: Planning Commission/Planning & Zoning Director

Jeff Williams, Fire Marshal From:

www.oriontownship.org

PC-23-20 White Water Car Wash 1112 and 1140 S. Lapeer Rd. Site Plan Review Letter Re:

Date: July 25, 2023

The Orion Township Fire Department has completed its review of Application PC-23-20 for the limited purpose of compliance with Charter Township of Orion Ordinance's, Michigan Building Code, and all applicable Fire Codes.

Based upon the application and documentation provided, the Fire Department has the following recommendation:

Approved

X Approved with Requirements (See below)

Not approved

Requirements:

The turning radius for the emergency apparatus road shall be in accordance with the Orion Township Fire Department turning performance analysis template. Overlays of the template show areas of concern where the apparatus does not circulate the site.

This approval is limited to the application and materials reviewed which at this time do not raise a specific concern with regard to location and/or impact on health and safety. However, the approval is conditioned upon the applicant providing sufficient additional information at time of building permit application that includes data or documents, confirming full compliance with all applicable building codes, fire codes and Township Ordinances.

If there are any questions, the Fire Department may be reached at 248-391-0304 ext. 2004.

Sincerely,

Jeff Williams, Fire Marshal Orion Township Fire Department

Jeffrey Williams



RECEIVED

JUN 9 2023

Orion Township Planning & Zoning

June 9, 2023

Tiffany Sanders Orion Township Planning & Zoning 2323 Joslyn Road Lake Orion, MI 48360

Reference: White Water Car Wash – CAMS #202300419

Part of the NE 1/4 of Section 14, Orion Township

Dear Ms. Sanders,

This office has received one set of plans for the White Water Car Wash Project to be developed in the Northeast ¼ of Section 14, Orion Township.

Our <u>stormwater system</u> review indicates that the proposed project has no direct involvement with any legally established County Drain under the jurisdiction of this office. Therefore, a storm drainage permit will not be required from this office.

<u>The water system</u> is operated and maintained by Orion Township and plans must be submitted to Orion Township for review.

<u>The sanitary sewer</u> is within the Clinton-Oakland Sewage Disposal System. Any proposed sewers of 8" or larger may require a permit through this office.

Please note that all applicable permits and approvals from federal, state or local authorities, public utilities and private property owners must be obtained.

Any related earth disruption must conform to applicable requirements of Part 91, Soil Erosion and Sedimentation Control of the Natural Resource and Environmental Protection Act, Act 451 of the Public Acts of 1994. An application should be made to Orion Township for the required soil erosion permit.

If there are any questions regarding this matter, please contact Dan Butkus at 248-897-2744.

Sincerely,

Brian Bennett, P.E. Assistant Chief Engineer





STONEFIELD

July 12, 2023

Charter Township of Orion Planning & Zoning Department 2323 Joslyn Road Lake Orion, MI 48360

RE: Site Plan Review
Proposed Car Wash
Parcel ID: 09-14-2001-005, 09-14-201-006
1112 South Lapeer Road (M-24)
Orion Township, Oakland County, Michigan

To whom it may concern:

Our office is submitting documents on behalf of the Applicant to address the comments contained within the Site Plan Review by Carlisle Wortman Associates, Inc dated June 28, 2023 and the Site Plan Review by OHM dated June 9, 2023. Please find the following items enclosed:

| ITEM DESCRIPTION | DATED | COPIES | PREPARED BY |
|---------------------------|------------|--------|--|
| Site Development Plans | 07-11-2023 | 3 | Stonefield Engineering & Design / REB Architects |
| Traffic Impact Assessment | 07-10-2023 | I | |

The following is an itemized response to the comments contained within the Site Plan Review Letter by Carlisle Wortman Associates Inc dated June 28, 2023:

Area, Width, Height, Setbacks

1. Applicant to provide future right-of-way width, if any, for S. Lapeer Rd. on the plans.

We defer to MDOT for future right of way width of S Lapeer Road. Plans have been submitted to MDOT 7/12/2023 for preliminary review. MDOT review comments to be provided once received.

2. Parcels combined into one parcel to meet side setback requirements.

Land Combination Application to be submitted once applicant purchases the parcels.

Building Location and Site Arrangement

1. Provide information documenting the need for sixteen (16) vacuum stations.

On busy days, WhiteWater can serve up to 50 cars per hour. On average, 50%-75% of customers utilize vacuums after the wash. Customers also utilize the provided mat cleaning station and detailing cart while parked at the vacuum spaces. If each customer takes 25 minutes, then 16 vacuums can service up to 38 customers in an hour.



2. Provide information documenting the need for three (3) stacking lanes.

Three (3) paystations are standard for WhiteWater Car Wash. One lane is dedicated to monthly fast pass members. The remaining two (2) lanes are open to customers purchasing a single wash or to fast pass members.

3. Show location of garbage containers at vacuum stations.

Each vacuum station is equipped with a garbage can. The site plan has been revised to visually show the trash containers.

4. Describe how customers will dispose of larger items when dumpster is so far from vacuum stations.

There is a garbage container mounted at each vacuum station for customers to dispose of trash. It is not anticipated that customers will have trash items larger than these provided bins.

5. Provide information about the proposed induction loop pads, their purpose, and amount of space they occupy on site.

The induction loops pads are installed within the concrete. The loop pads sense the vehicle exiting, and the gate automatically lifts, allowing the customer to exit. The gate then automatically closes to prevent incoming traffic - to prevent use of the vacuums without first purchasing a wash.

6. Provide information about the need/purpose of license plate reader.

WhiteWater offers a monthly fast pass program that allows customers to bypass the pay station after their license plate is read and the gate automatically opens allowing entry to wash.

Parking and Loading

 Planning Commission consider reducing the number of required parking spaces to accommodate proposed number of employees and documented need for number of vacuum stations. Land banked spaces may also be considered.

Five (5) employee spaces are proposed for the maximum of five (5) employees on the maximum shift. On busy days, WhiteWater can serve up to 50 cars per hour. On average, 50%-75% of customers utilize vacuums after the wash. Customers also utilize the provided mat cleaning station and detailing cart while parked at the vacuum spaces. If each customer takes 25 minutes, then 16 vacuums can service up to 38 customers in an hour.

2. Planning Commission considers eliminating employee spaces in the current location, and re-locating them to replace some vacuum stations.

WhiteWater typically has 20 or more vacuum spaces. Per feedback at the pre-application meeting, vacuum spaces were already reduced from 20 spaces to 16 spaces. On busy days, WhiteWater can serve up to 50 cars per hour. On average, 50%-75% of customers utilize vacuums after the wash. Customers also utilize the provided mat cleaning station and detailing cart while parked at the vacuum spaces. If each customer takes 25 minutes, then 16 vacuums can service up to 38 customers in an hour.



3. Provide barrier-free space for employees.

Barrier-free employee space has been proposed.

4. Widen van-accessible parking aisle to 8-feet wide.

Van-accessible parking aisle has been increased to 8-feet wide.

5. Defer adequacy of 9-foot wide stacking lanes to Township Engineer.

Noted.

6. Applicant to describe number of anticipated deliveries, and type of truck used for deliveries; Planning Commission may modify/waive loading space requirement if deliveries are infrequent or conducted by automobile, van, or small truck.

On a weekly basis, WhiteWater Car Wash has either a large box truck or a small semi truck which backs up to the mechanical room overhead door, and then using a lift gate at the back of the truck the chemicals are unloaded to ground level and then carried in in hand by hand to the areas in which chemicals are stacked and stored. They also receive a UPS / Amazon delivery on a weekly basis including items like towels and bag liners.

Site Access and Circulation

1. Integrate emergency bypass lane into all areas of site design.

The emergency bypass lane is a one-way lane. This lane is used in the event of a power failure in the tunnel, vehicles can reverse from the tunnel, and exit the site through the emergency bypass lane. If a customer gets to the paystation and decides they do not want to purchase a wash, an employee can assist with lifting the gate and allowing the customer to exit the site using the emergency bypass lane. This design is typical all of WhiteWater locations (over 100 car washes).

2. Widen proposed emergency bypass lane next to vacuum stations if for two-way traffic; add traffic control signage.

The emergency bypass lane is a one-way lane. Traffic control signage has been added indicating this.

3. Describe full use of "fire lane," and if it will have some type of barrier or be open.

Use of the fire lane can be seen on the Fire Truck Turning Exhibit on Sheet C-9. There is proposed mountable curb along this fire lane area allowing the fire truck to easily maneuver through the fire lane and circulate the site.

4. Do customers typically use the vacuums after they exit the car wash building?

Yes, customers first enter the car wash tunnel and utilize vacuums after exiting the wash.

5. Do customers pay for the use of vacuums at a pay kiosk? If not, how do they access vacuum stations?

No – vacuums are free to customers. Customers first purchase a wash or have the license plate reader recognize their fast pass membership at the paystations, they then enter the car wash tunnel, and utilize vacuums after exiting the wash.



6. Is car mat cleaning area meant to be accessed by foot, or do they need to wait until the parking space next to the area is available? If the latter, will this interfere with traffic in the vacuum station area?

The mat cleaning station is accessed by foot. Customers bring their mats to the station to clean their mats, then return to their vehicle.

7. Main drive aisle should be tapered to delineate change from two-way traffic to one-way traffic.

Main drive aisle is to remain 24 FT wide for fire access and proper turning clearance for vehicles to turn into the paystations.

8. If employee parking spaces remain in the current location, enough space should be provided to allow vehicles to back out of the spaces.

Queuing lane striping delineation has been slightly reduced to ensure adequate space for employees to back out of spaces and exit the site.

9. Explain how a garbage truck will access the trash enclosure, and turn around to exit the site.

The trash truck will back up into the fire lane to turn around and exit the site. A Trash Truck Turning analysis has been added to the plan set. See Sheet C-10 of the attached Site Development Plans.

10. Explain the purpose of the automatic gate.

The automatic gate prevents vehicles from entering the vacuum area when they have not yet paid for a car wash.

11. Consider a secondary access drive to S. Lapeer Rd., with limitations such as "Right Turn Only" to address issues with main driveway/employee parking/garbage truck.

Secondary access is not feasible as MDOT only permits one (I) curb cut.

12. Defer evaluation of Traffic Impact Study, and location of driveway onto S. Lapeer Rd., to Township Engineer.

See attached revised <u>Traffic Impact Study</u> per comment received from OHM.

Safety Paths/Sidewalks

I. Location of safety path further from right-of-way line than one-foot; Planning Commission can modify/waive requirement, while considering pathway user safety.

Safety path has been relocated I FT from right-of-way line.

2. Increase width of sidewalks next to vacuum stations to provide minimum of 5-foot clear width to meet barrier-free requirements.

Sidewalk has been increased to provide 5 FT clear width behind vacuum station and trash can.



Landscaping

1. Substitute proposed Holly with evergreen tree hardy to Michigan, such as a Green Giant Arborvitae.

Holly has been substituted with Green Giant Arborvitae.

2. Provide tree survey describing species, size (DBH), and condition of trees to remain.

Tree survey has been completed and added to Sheet C-2 of the attached Site Development Plans.

3. Add tree protection fencing symbol around trees to remain to Demolition Plan and Grading Plan; add symbol to legend on these sheets; add note to these sheets that states: "No vehicle, other construction equipment, or construction materials or debris shall be parked or stored within the dripline of any tree or plant material intended to be saved."

Tree protection fencing and note have been added to the Demolition Plan and Grading Plan. See Sheets C-2 and C-6 of the attached <u>Site Development Plans.</u>

4. Add construction detail illustrating tree protection fencing to Construction Detail sheet.

Tree Protection Fence Detail has been added to Sheet C-2 of the Site Development Plans.

5. Clarify that all site landscaping (beds and turf) will receive an underground irrigation system.

See Irrigation Note on Sheet C-6 of the attached Site Development Plans.

6. Substitute Little Leaf Linden and Serviceberry with salt-tolerant trees.

Littleleaf Linden has been substituted with October Glory Red Maple and European Chestnut, Serviceberry has been substituted with Japanese Lilac Tree.

7. Move third "interior" parking lot tree to landscape island in parking lot.

Tree has been relocated to parking lot island.

8. Increase proposed shrub sizes to a minimum of 24-inches in height.

Shrubs have been increased to 24" - 30" height.

9. Add maintenance note from Sec. 27.05(D) to Landscaping plan.

Orion Township Landscape Maintenance Notes have been added to Landscaping Plan on Sheet C-6 of the attached <u>Site Development Plans.</u>

10. Planning Commission to consider proposed trash receptacle location.

Noted. See Trash Truck Turning Analysis on Sheet C-10 of the attached Site Development Plans.

11. Applicant to confirm that trash receptacle is shorter than six-foot tall screen wall.

Confirmed, typical trash receptacle is 6 FT tall or shorter.



Lighting

1. Lower the 20-foot tall pole-mounted fixtures to 18-feet (height of building).

All pole mounted light fixtures have been lowered to 18 FT mounting height. Light pole detail has also been updated accordingly.

2. Applicant to confirm that building-mounted wall sconces can accept shields, as required.

The building-mounted lights are full cutoff, directed downwards, produce zero-uplight and are International Dark Sky Association (IDA) compliant. Maximum spillover is 1.0 fc as required by the ordinance.

3. Consider reducing number of wall sconces to create uniform lighting levels across the site.

Wall scones specified are the lowest output available – light levels are higher at the vacuum light locations to provide adequate light levels for customers after dark.

4. Applicant to confirm illustration showing linear luminaire is same application for this site.

Confirmed. Linear LED is mounted on the vacuum arm 9.0 FT above grade.

5. Applicant to provide scheduled business operating hours per day, to determine application of "extended hour uses" provisions, including special land use approval.

Car wash hours are 8AM – 8PM therefore Special Land Use approval for extended hours is not required. Hours of operation have been added to the site plan on Sheet C-3.

OHM Engineering Review Comments

1. Preliminary detention calculations shall be included in the plans. Additionally, infiltration results must be provided to show that the site is not capable of infiltrating.

MDOT form 2484 (preliminary) has been added to the plans and submitted to MDOT for preliminary review. Complete underground detention basin design to be provided with final engineering plans. See Sheet C-5.

2. Pavement dimensions must be revised to ensure that the firetruck can easily make the necessary turning motions along the proposed fire lane.

The fire lane is provided with mountable curb. The Orion Fire Truck specifications were used in the truck turning analysis showing the truck is able to make the U-turn to access the center of the site. An alternate path has also been provided. Plans have also been submitted to the Fire Department for review. See Sheet C-9 for Fire Truck Turning Analysis.

3. The TIS was not submitted in time for comments to be included in this review. Comments may need to be addressed based on pending review.

Comments received June 10, 2023. See attached revised <u>Traffic Impact Analysis</u>.



4. The safety path shall be moved to I foot off the property right-of-way so that the pathway and approach crossing is farther away from M-24. Additionally, new ADA compliant ramps with detectable warning surfaces need to be provided for the approach.

Safety path has been relocated I FT from the property right-of-way line. ADA ramps with detectable warning surfaces have been proposed at the approach.

5. Sidewalk adjacent parking stalls shall be widened to 7-feet wide to ensure a minimum walking area width of 5 feet. Particularly the adjacent sidewalk north of the six vacuum stalls.

The sidewalk has been increased to 7 FT width to provide proper 5 FT clearance.

6. Proposed slopes near the southwest corner of the site exceed the township maximum recommended slope of 1:4 and will need to be revised.

Slopes have been revised to 1:4. See grading plan on Sheet C-4.

7. A NJDEP certified stormwater treatment device shall be placed before the inlets to the underground detention system.

Noted. An approved mechanical water quality unit will be specified in the final engineering plan set.

8. A Preliminary Basis of Design for water and sanitary usage shall be included in the plans.

Basis of design for both water and sanitary has been added to the Utility Plan on Sheet C-6.

9. Add a private monitoring manhole over the proposed sanitary sewer lead.

Private monitoring manhole (S-100) has been proposed, see Utility Plan on Sheet C-6. Inverts to be provided in final engineering plan set.

10. The sidewalk and pathway do not have any grades shown and must be included in the Site Plan.

Grade spots for the proposed pathway have been added to the plans. See Sheet C-4.

11. Provide proposed cross sections for the asphalt safety path and concrete drive/parking lot per township standards.

Asphalt pavement walkway section, concrete driveway, and site concrete pavement sections have been added to the Construction Details. See Sheet C-12.

12. Revise the proposed 6-inch reinforced concrete dumpster pad to be a minimum of 8-inch concrete section required by township standards.

Concrete pavement section for trash enclosure apron and transformer pad has been updated to 8-inch thick. See Detail #4 on Sheet C-12.

13. Revise the mountable curb detail to more resemble an MDOT standard detail.

Mountable curb detail has been updated to better reflect MDOT standards. See Detail #1 on Sheet C-12.



14. Floor plans and architectural elevations were provided separate from the plans and must be included within the overall plan set and sheet index.

Plans have been combined into one package. See attached Site Development Plans.

15. The proposed emergency bypass lane should be marked as a one-way. If it is planned to be a two-way drive isle the width must be increased to at least 22 feet exclusive of curb and gutter.

"Do Not Enter" traffic control signage has been added to the plans to clarify it is a one-way drive.

16. A legal description of the site must be included with the property description.

An updated legal description will be provided upon combination of the two (2) parcels. Applicant will submit Land Combination Application once the purchase is complete, and they are the legal landowner.

17. The sewer leads to the existing buildings were not shown on the plans. The applicant should coordinate with the Township to research the locations and viability of utilizing in lieu of a new tap.

Township did not have information available on the existing sewer lead. Utility plan notes that the contractor shall attempt to identify the existing lead location during demolition to determine the feasibility of re-use.

There are no other changes than those listed above. Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Best regards,

Erin McMachen

emcmachen@stonefieldeng.com

Stonefield Engineering and Design, LLC

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July 10, 2023

Scott Reynolds, Planning Commission Chairperson CHARTER TOWNSHIP OF ORION 2323 Joslyn Road Lake Orion, MI 48360

RE: Whitewater Express Car Wash PC-23-20

Traffic Impact Assessment Review #1

Received: June 12, 2023 by Orion Township

Dear Mr. Reynolds:

We have completed our review of the Traffic Impact Assessment supplemental to the Whitewater Express Car Wash Site Plan. The study was conducted by Fleis and VandenBrink and was reviewed with respect to the Township's Zoning Ordinance No. 78 and the Township's Engineering Standards.

TRAFFIC & CIRCULATION:

A Traffic Impact Assessment was provided for the proposed development. The assessment mainly focused on the proposed driveway onto M-24. The assessment states a conservative background growth rate of 1% per year was used. However, in reviewing Figure 2 of their study, a background growth rate of only 0.5% per year was used and will need to be revised. The study notes that the proposed site will generate 52 incoming trips in both AM and PM peak hours and 53 outgoing trips in both AM and PM peak hours, which compared to the background traffic volumes appears minor. The proposed driveway intersection will operate at LOS C during the AM peak hour and at LOS B during the PM peak hour. An assessment for a right-hand turn lane was included in the study. Based on anticipated traffic and MDOT criteria, a right turn lane is warranted. However, the existing 3rd outside SB lane transitions to a right-hand turn lane approximately 200 feet south of the site. The study notes the difficulties and expense involved with constructing a right-turn lane due to conflicts with existing pathway and utilities. Cost should not be a reason to construct the lane should it be required. However, the addition of a right turn lane immediately adjacent to an existing through lane that transitions to a right turn only lane could add potential conflicts and driver confusion. The right-hand turn lane assessment will be reviewed by MDOT, which will ultimately determine the need for an additional lane or to allow the existing outer lane to transition further north.

CONCLUSION:

In our opinion, the Traffic Impact Assessment as submitted is in substantial compliance with the Township's ordinances and engineering standards. We ask that any approval include the following:

- 1. Approval and permitting of the development's off-site traffic mitigation by MDOT with concurrence by the Township.
- 2. The study states a conservative background growth rate of 1% per year was used. However, in reviewing Figure 2 of their study, a background growth rate of only 0.5% per year was used and will need to be revised.

Whitewater Express Car Wash, PC-23-20 Traffic Impact Assessment Review #1 July 10, 2023 Page 2 of 2



The applicant should note the Township may require performance bonds, fees, and/or escrows for a preconstruction meeting and necessary inspections. Please feel free to contact us with any questions at (248) 751-3100 or mark.landis@ohm-advisors.com.

Sincerely,

OHM Advisors

Jonathan Mahut Jonathan Mahut

Engineer

Mark Landis, P.E. Project Manager

cc: Chris Barnett, Township Supervisor

David Goodloe, Building Official
Bill Basigkow, Director of Public Services
Tammy Girling, Director of Planning and Zoning
Lynn Harrison, Planning and Zoning Coordinator
Tiffany Sanders, Planning and Zoning Coordinator
Jeff Williams, Township Fire Marshal
Vince Sinacola, Water and Sewer Superintendent

Vince Sinacola, Water and Sewer Superintendent John Enos, Carlisle Wortman, Township Planner Jeff Justice, EROP LLC

Erin McMachen, Stonefield Engineering & Design

File



MEMO

VIA EMAIL emcmachen@stonefieldng.com

To:

EROP, LLC

From:

Traffic Services Group

Fleis & VandenBrink Engineering

Date:

July 10, 2023

Re:

Whitewater Express Car Wash Orion Township, Michigan

Traffic Impact Assessment

1 INTRODUCTION

This memorandum presents the results of the Traffic Impact Assessment (TIA) for the proposed Whitewater Express Car Wash in Orion Township, Michigan. The project site is located at 1112 South Lapeer Road (M-24), generally in the southwest quadrant of the South Lapeer Road (M-24) & Clarkston Road intersection, as shown on the attached **Figure 1**. The proposed development includes the construction of an automatic car wash on property that is currently occupied by a commercial business development, which will be razed with the proposed development project.

Site Location

FIGURE 1: SITE LOCATION MAP

The scope of the study was developed based on Fleis & VandenBrink's (F&V) understanding of the development program, accepted traffic engineering practice, and methodologies published by the Institute of Transportation Engineers (ITE). Additionally, Orion Township and the Michigan Department of Transportation provided input on the scope of work included herein. The study analyses were completed using Synchro/SimTraffic (Version 11) traffic analysis software. Sources of data for this study include F&V subconsultant Quality Counts (QC), Orion Township, the Southeast Michigan Council of Governments (SEMCOG), and ITE.

2 BACKGROUND DATA

2.1 EXISTING ROAD NETWORK

Vehicle transportation for the study area is provided via South Lapeer Road (M-24). The study roadways are further described below. For the purposes of this study the site driveway was assumed to have an operating speed of 25 miles per hour (mph).

The existing site access for this property includes three (3) driveways on South Lapeer Road (M-24) and the proposed development will close these driveways and construct one (1) new access driveway to service the proposed development. South Lapeer Road (M-24) is under the jurisdiction of the Michigan Department of Transportation (MDOT) and Clarkston Road is under the jurisdiction of the Road Commission for Oakland County (RCOC). Information on the study roadways is summarized in **Table 1**. For the purposes of this TIS, site driveways and median U-turns (crossovers) were assumed to have an operating speed of 25 miles per hour (mph), unless otherwise noted.

| Roadway | Lapeer Road (M-24) |
|------------------------------------|----------------------------------|
| Number of Lanes | 5 lanes (3 lanes SB, 2 lanes NB) |
| National Functional Classification | Other Principal Arterial |
| Roadway Jurisdiction | MDOT |
| Speed Limit | 55 mph |
| AADT | 41,000 vpd (MDOT 2022) |

TABLE 1: ROADWAY INFORMATION

2.2 EXISTING TRAFFIC VOLUMES

F&V subconsultant QC collected weekday AM (7:00 AM-9:00 AM) and PM (4:00 PM-6:00 PM) peak hour traffic volume data. The data collection was performed on South Lapeer Road (M-24), in the vicinity of the proposed site driveway, on Wednesday, May 17th, 2023, during the PM peak periods and on Thursday May 18th, 2023, during the AM peak periods, on typical weekdays while Lake Orion Schools were in session.

During collection, Peak Hour Factors (PHFs) and commercial truck percentages were recorded for use in the traffic analysis. The AM and PM peak hours for the study roadway network were observed to generally occur on weekdays between 7:00 AM to 8:00 AM and 4:00 PM to 5:00 PM, respectively. The existing 2023 peak hour traffic volumes are shown on the attached **Figure 2**. All applicable background data referenced in this memorandum is attached.

2.3 BACKGROUND GROWTH

Population and economic growth profile data was obtained for Orion Township from the Southeast Michigan Council of Governments (SEMCOG) database, in order to calculate a background growth rate to project the existing 2023 traffic volumes to the site buildout year traffic of 2024. Population and employment projections from 2020 to 2050 were reviewed and showed an average annual growth of 0.52% and 0.63%, respectively. Therefore, a conservative annual background growth rate of **1.00%** per year was utilized.

In addition to background traffic growth, it is important to account for traffic that will be generated by developments within the vicinity of the study area that are currently under construction or will be constructed prior to the site buildout year. At the time of this study, no background developments were identified by the Township, within the vicinity of the project site to include as background traffic in this study.

Therefore, the background 2024 peak hour traffic volumes shown on **Figure 2** were calculated based applying the 1.0% annual growth rate to the existing peak hour traffic volumes.

3 SITE TRIP GENERATION AND DISTRIBUTION

The proposed development includes the construction of an automatic car wash. The number of weekday peak hour (AM and PM) and daily vehicle trips that would be generated by the proposed development were forecast based on data published by ITE in the *Trip Generation Manual*, 11th Edition. The ITE trip generation does not provide trip generation data for the AM peak hour; therefore, the PM peak hour data was applied to the AM peak hour for purposes of this analysis.



The ITE trip generation dataset used in this study are <u>not</u> statistically significant; therefore, per the Orion Township Zoning Ordinance, "the maximum value of the data set shall be used". Although pass-by trips are expected for a car wash use; however, consistent with Orion Township requirements, pass-by trip reductions were not applied. The trip generation utilized for this study is summarized in **Table 1**.

The vehicular trips generated by the proposed development were assigned to the site driveway intersection which allows only right-in/right-out only traffic. The site generated traffic volumes are shown on Figure 2.

TABLE 2: TRIP GENERATION SUMMARY

| Land Use | ITE | Amount | Unito | Weekday Average | Peak | Hour | (vph) |
|--------------------|------|--------|--------|---------------------|------|------|-------|
| Land USE | Code | Amount | Units | Daily Traffic (vpd) | ln | Out | Total |
| Automated Car Wash | 948 | 1 | Tunnel | 1,050 | 53 | 52 | 105 |

4 FUTURE (2024) CONDITIONS

The background traffic volumes were added to the site generated traffic volumes to calculate the Future 2024 traffic volumes with the proposed development. All of the traffic volumes used in this analysis are shown on **Figure 2**.

The future peak hour vehicle delays and LOS with the proposed development were calculated as the proposed site driveway intersection based upon the methodologies presented in the HCM6. The upstream signalized intersection at Clarkston Road is located approximately 800-feet north of the proposed site. Therefore, this intersection was included in the analysis for vehicle progression and to was considered in the operational analysis for the site driveway intersection. The results of the future conditions analysis are attached and summarized in Table 3.

TABLE 3: FUTURE INTERSECTION OPERATIONS

| Intersection | Control | Approach | Fu | iture Co | onditions | |
|--------------------------|---------|----------|------------------|----------|------------------|--------|
| ilitersection | Control | Арргоасп | AM Peak | Hour | PM Peal | (Hour |
| | | | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| South Lapeer Road (M-24) | Stop | EB | 15.5 | С | 11.6 | В |
| & Site Drive | (Minor) | CD | 95% Queue | Veh | 95% Queue) | Veh |
| | | | 50-ft | 2 | 47-ft | 2 |

The results of the future conditions analysis indicates that proposed site driveway is expected to operate well at LOS C during the AM peak hour and LOS B during the PM peak hour. Further review of the intersection operation showed that the adjacent signalized intersection at Clarkston Road created gaps in traffic to allow for the site driveway to operate acceptably. Additionally, review of SimTraffic network simulations indicates vehicles were able to find adequate gaps within the through traffic along South Lapeer Road (M-24), without experiencing significant delays or excessive vehicle queuing.

5 ACCESS MANAGEMENT

5.1 DRIVEWAY SPACING

The MDOT Geometric Design Guidance (Section 1.2.2) was utilized to evaluate the location of the proposed Site Drive, in relation to the adjacent crossovers and existing driveways within 450 feet for the proposed site driveway. The desirable unsignalized access spacing and intersection corner clearance criteria were evaluated for the 55-mph section of SB Lapeer Road (M-24). The distance of the proposed Site Drive from nearby access points and the warranting criteria are summarized in **Table 4** and displayed in **Exhibit 1**.

The results of the driveway spacing analysis indicates that the proposed Site Drive location is not expected to meet the desirable MDOT access management criteria. Alternatives shared access was reviewed and was not feasible for this development to share access with the adjacent property to the south. The adjacent property to the north is owned by the Road Commission for Oakland County (RCOC) which has access restricted to RCOC vehicles only. The proposed development plans include closing two (2) of the existing



three (3) access driveways currently on this site. The proposed site driveway is located just south of the southbound to northbound crossover, thereby maximizing the distance between the adjacent northbound to the southbound crossover. Additionally, there is limited frontage for this site location; therefore, the driveway has been located to provide the safest access possible given the site constraints.

TABLE 4: DESIRABLE CORNER CLEARANCE SUMMARY

| Adjacent E |)rivewa | ays & Intersections | Distance | Criteria (55 mph) | Meets |
|------------|---------|---------------------|----------|-------------------|-------|
| Site Drive | To | Gas Station Drive | 350 feet | 455 feet | NO |
| Site Drive | То | NB-to-SB Crossover | 97 feet | 170 feet | NO |
| Site Drive | To | Retail Drive | 217 feet | 455 feet | NO |

EXHIBIT 1: DRIVEWAY SPACING



5.2 AUXILIARY LANE ANALYSIS

South Lapeer Road (M-24) is under the jurisdiction of the MDOT; therefore, MDOT warranting threshold guidelines were utilized in order to determine the need for auxiliary turn lanes at the proposed site driveways. The proposed site driveway will operate as a Right-In/Right-Out (RIRO) driveway; therefore, left-turn lane warrants were not evaluated at this location. The result of the analyses shown on the attached MDOT warrant charts and are summarized in **Table 4**.

TABLE 4: RIGHT-TURN TREATMENT SUMMARY

| Intersection | AM Peak Hour | PM Peak Hour | Recommendation |
|---------------------------------|-----------------|-----------------|-----------------|
| Lapeer Road (M-24) & Site Drive | Right-Turn Lane | Right-Turn Lane | Right-Turn Lane |

The results of the right-turn treatment evaluation indicates that a southbound right-turn lane deceleration lane is recommended, pursuant to the MDOT criteria.

Review of the driveway location shows an existing 8-ft wide paved and curbed shoulder with an adjacent shared use path. The addition of a right-turn lane at the proposed site driveway would impact the shared use path and require significant utility relocation. Additionally, the right lane adjacent to the project site transitions into a dedicated right-turn through a lane drop, approximately 200-feet south of the site driveway; therefore, the right lane at this location operates as a de-facto right-turn lane and no additional right-turn lane treatment is recommended for this development.



5.3 SITE CIRCULATION VEHICLE QUEUEING ANALYSIS

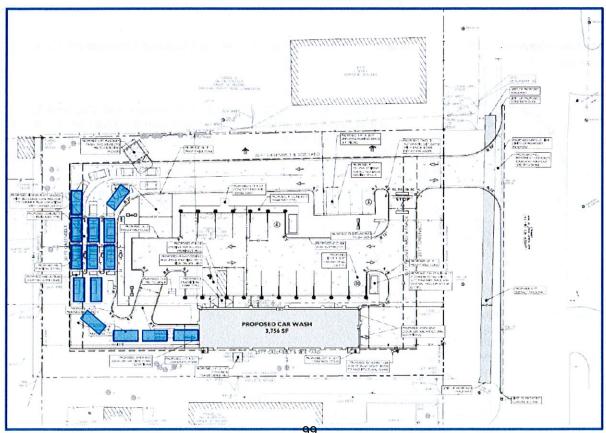
The projected car wash vehicle queuing was reviewed to determine if the proposed on-site queue length for the car wash is adequate to accommodate the projected operations. The proposed site includes three (3) drive-through lanes: Cash/Credit Card Payment (2 lanes) and the Unlimited Speed Club (1 lane). The typical service rate for a Whitewater Car Wash is 60 vehicles per hour, but they can process up to 90 vehicles per hour, as need. For analysis purposes, it was assumed that the average Cash payment service rate is 60 seconds per vehicle and Speed Club payment is 30 seconds per vehicle. Once paid, the vehicles enter the queue for the car wash tunnel which has a service rate of 18 seconds per vehicle. Additionally, it was assumed that the arriving vehicles were distributed equally among the three payment lanes.

Since the service rates for the site are higher than the projected demand for this site, a Poisson distribution analysis was performed to determine the projected queuing associated with random arrivals. The projected peak vehicle queue lengths are summarized in **Table 6** and shown on **Exhibit 2**. The projected vehicle queuing analysis shows that the maximum anticipated arrivals can be adequately accommodated within the available queue length and will not impact South Lapeer Road (M-24).

| CAR WASH STACKING SPACE CASH/CREDIT | ES | CAR WASH STACKING SPACES SPEED CLUB | | CAR WASH STACKING SPACE TUNNEL | S |
|--|-----|-------------------------------------|----|-----------------------------------|-----|
| Number of Arrivals | 35 | Number of Arrivals | 18 | Number of Arrivals | 39 |
| Time per Vehicle (s) | 60 | Time per Vehicle (s) | 30 | Time per Vehicle (s) | 18 |
| Service Rate (veh/hr) | 60 | Service Rate (veh/hr) | 60 | Service Rate (veh/hr) | 60 |
| Peak Arrival (veh) | 5 | Peak Arrival (veh) | 3 | Peak Arrival (veh) | 6 |
| Vehicle Length | 25 | Vehicle Length | 25 | Vehicle Length | 25 |
| TOTAL QUEUE (ft) | 125 | TOTAL QUEUE (ft) | 75 | TOTAL QUEUE (ft) | 150 |

TABLE 6: VEHICLE QUEUING ANALYSIS







6 CRASH ANALYSIS

A crash analysis was conducted in the vicinity of the proposed site driveway location. F&V obtained the crash data used in the analysis from the Michigan Traffic Crash Facts (MTCF) historical crash database, for the most recent three (3) years (January 1, 2019, to December 31, 2021) of available data. The results of the crash analysis indicate zero (0) reported crashes.

7 CONCLUSIONS

The conclusions of this TIA are as follows:

- The results of the future conditions analysis indicates that all the study intersection approaches and
 movements are expected to operate acceptably, at LOS D or better during both peak periods.
 Additionally, review of SimTraffic microsimulations also indicated acceptable operations throughout
 the study roadway network during both peak periods, with minimal vehicle queueing observed.
- The results of the auxiliary right-turn treatment evaluation indicates that a right-turn lane is recommended pursuant to the MDOT criteria.
 - A constructability review of a right-turn lane at this location shows impacts to the shared use path, curbed shoulder, and would require significant utility relocation. This section of South Lapeer Road (M-24) has three (3) southbound lanes, with the outside lane transitioning into a dedicated right-turn approximately 200-feet south of the site driveway. Therefore, the existing right lane currently operates as a de-facto right-turn lane and no additional right-turn lane treatment is recommended for this development.
- The results of the driveway spacing analysis indicates that the proposed Site Drive location is not
 expected to meet the desirable MDOT access management criteria. Alternative site access was
 reviewed and determined that with the limited frontage for this site location the proposed driveway
 has been located to provide the safest access possible given the site constraints.
- The proposed site plan can adequately accommodate the maximum anticipated arrivals within the available queue length on site and will not impact Lapeer Road (M-24).

Jacob Swanson

Any questions related to this memorandum, study, analysis, and results should be addressed to Fleis & VandenBrink.



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Michigan.

Digitally signed by Jacob Swanson

Date: 2023.07.10

17:11:05 -04'00'

Attached:

Figure 2

Proposed Site Plan Traffic Volume Data SEMCOG Data

Synchro / SimTraffic Results Auxiliary Turn Lane Warrants



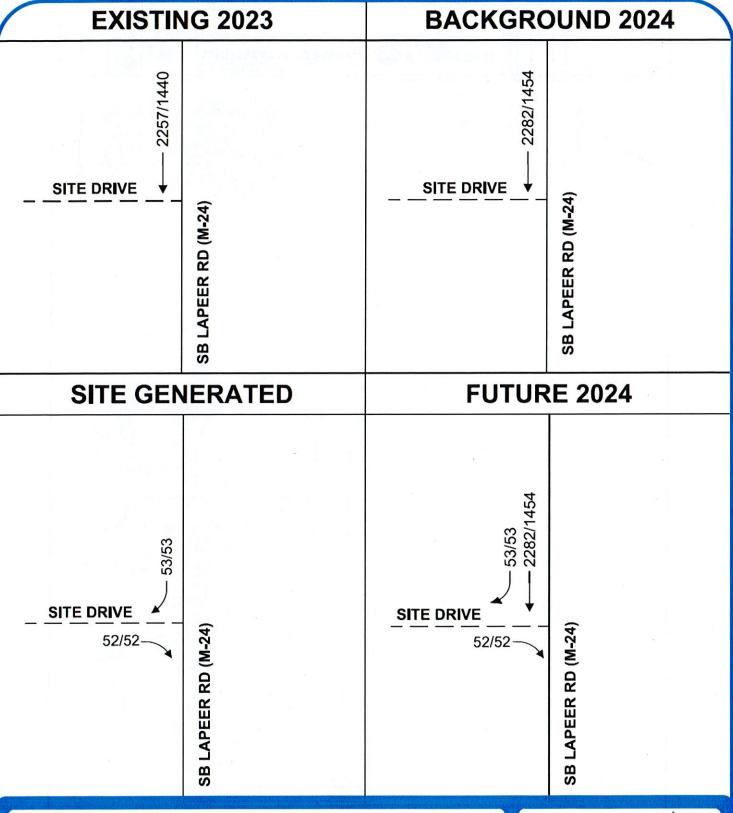
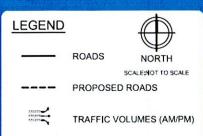
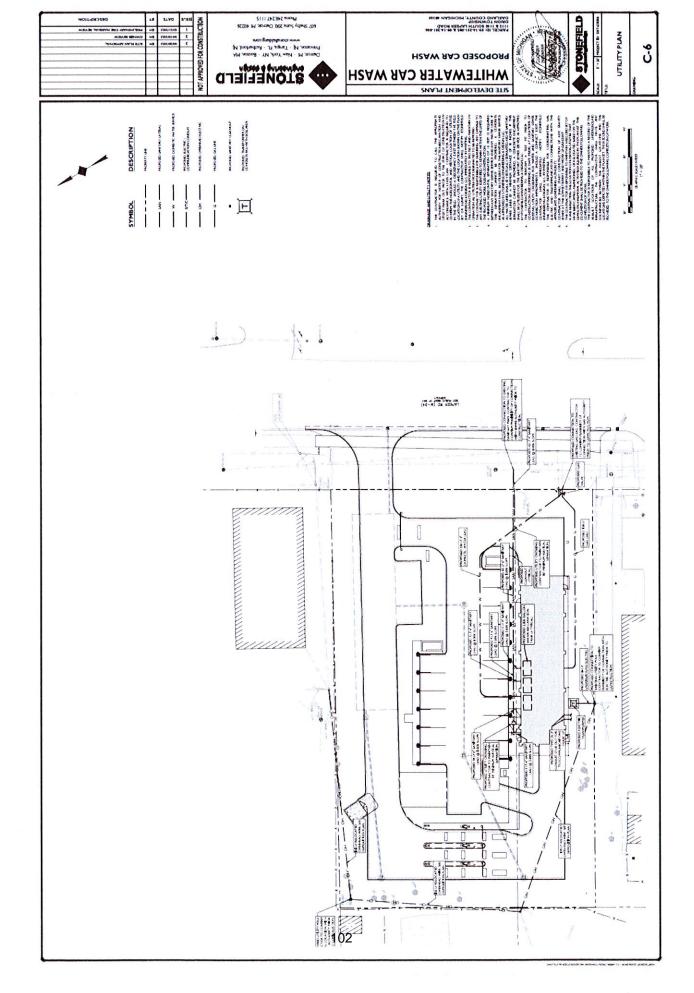




FIGURE 2 TRAFFIC VOLUMES

WHITEWATER EXPRES CAR WASH ORION TOWNSHIP, MICHIGAN







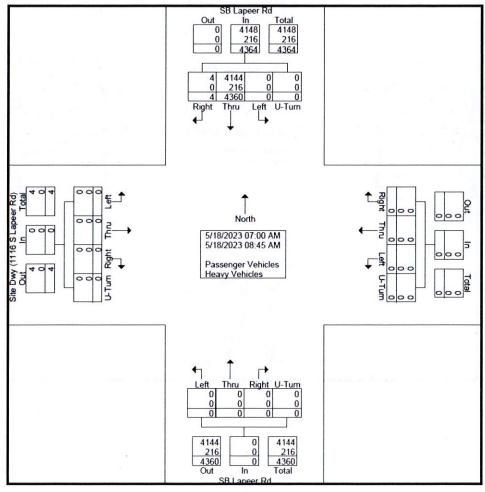
File Name: 16210901 - SB Lapeer Rd -- Site Dwy (1116 S Lapeer Rd)

Site Code : 16210901 Start Date : 5/18/2023

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles

| | 0.1 | | | 00000000 | D.13 | | Toups | Time | 4 1 43 | senger | VOITION | | | | , | | | | - n - | | ĭ |
|----------------------|------|------|--------|----------|------------|----------------|-------|--------|--------|------------|---------|------|--------|--------|------------|------|------|--------|--------|------------|------------|
| | Site | | | Lapee | er Rd) | | | | | | | | Lapee | | | | | Lapee | | | 10 year |
| | | E | astbou | ınd | | | W | estbou | und | | | No | orthbo | und | | | Sc | outhbo | und | | |
| Start Time | Left | Thru | Right | U-Tum | App. Total | Left Thru Righ | | | U-Turn | App. Total | Left | Thru | Right | U-Turn | App. Total | Left | Thru | Right | U-Turn | App. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 638 | 1 | 0 | 639 | 639 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 538 | 0 | 0 | 538 | 538 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 496 | 0 | 0 | 496 | 496 |
| 07:45 AM | 0 | 0 | . 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 585 | 1 | 0 | 586 | 586 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2257 | 2 | 0 | 2259 | 2259 |
| | | | | | | | | | | | | | | | 1 2 | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | . 0 | 525 | 0 | 0 | 525 | 525 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 494 | 0 | 0 | 494 | 494 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 558 | 2 | .0 | 560 | 560 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 526 | 0 | 0 | 526 | 526 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2103 | 2 | 0 | 2105 | 2105 |
| | | | | | | | | | | | | | | | | | | | | | |
| Grand Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4360 | 4 | 0 | 4364 | 4364 |
| Apprch % | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 99.9 | 0.1 | 0 | | |
| Total % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 99.9 | 0.1 | 0 | 100 | |
| Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4144 | 4 | 0 | 4148 | 4148 |
| % Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 100 | 0 | 95.1 | 95.1 |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 216 | 0 | 0 | 216 | 216 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 4.9 | 4.9 |



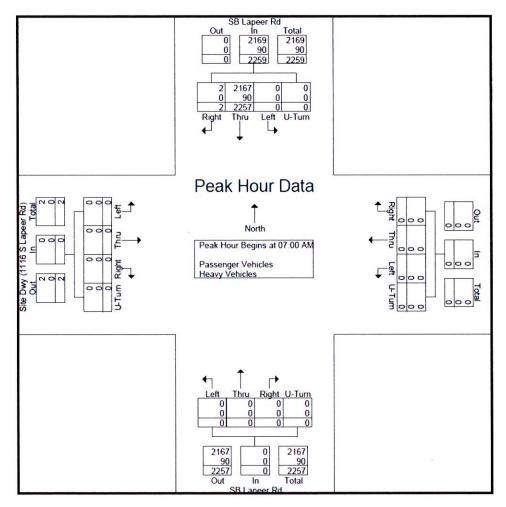


File Name: 16210901 - SB Lapeer Rd -- Site Dwy (1116 S Lapeer Rd)

Site Code : 16210901 Start Date : 5/18/2023

Page No : 2

| | Site I | Dwy (1 | 116 S | Lapee | r Rd) | | 11111 | | | | | SB | Lapee | r Rd | | | SB | Lapee | r Rd | | |
|----------------------|-----------|---------|---------|---------|------------|---------|-----------|-------|-------|------------|------|--------|-------|--------|------------|------|------|-------|-------|------------|------------|
| | | E | astbou | nd | | | Westbound | | | | No | orthbo | und | | Southbound | | | | | | |
| Start Time | Left | Thru | Right | U-Tum | App. Total | Left | Thru | Right | U-Tum | App. Total | Left | Thru | Right | U-Turn | App. Total | Left | Thru | Right | U-Tum | App. Total | Int. Total |
| Peak Hour A | nalysis | From | 07:00 | AM to | 08:45 / | AM - Pe | eak 1 | of 1 | | | | | | | | | | | | | |
| Peak Hour fo | or Entire | e Inter | section | n Begin | s at 07 | :00 AN | 1 | | | | | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 638 | 1 | 0 | 639 | 639 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 538 | 0 | 0 | 538 | 538 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 496 | 0 | 0 | 496 | 496 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 585 | 1 | 0 | 586 | 586 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2257 | 2 | 0 | 2259 | 2259 |
| % App. Total | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 99.9 | 0.1 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .884 | .500 | .000 | .884 | .884 |
| Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2167 | 2 | 0 | 2169 | 2169 |
| % Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96.0 | 100 | 0 | 96.0 | 96.0 |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 0 | 90 | 90 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0 | 0 | 4.0 | 4.0 |





Total %

Passenger Vehicles

6 Passenger Vehicle

Heavy Vehicles

% Heavy Vehicles

File Name: 16210902 - SB Lapeer Rd -- Site Dwy (1116 S Lapeer Rd)

96.5

3.5

96.5

3.5

Site Code : 16210902 Start Date : 5/17/2023

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles Site Dwy (1116 S Lapeer Rd) SB Lapeer Rd SB Lapeer Rd Southbound Eastbound Westbound Northbound Left Left Left Start Time Left Thru Right U-Turn Thru Right U-Turn App. Total Thru Right U-Turn App. Total Thru Right U-Turn App. Total Int. Total 04:00 PM 04:15 PM 04:30 PM 04:45 PM Total 05:00 PM 05:15 PM 05:30 PM 05:45 PM Total **Grand Total** 99.9 0.1 Apprch %

99.9

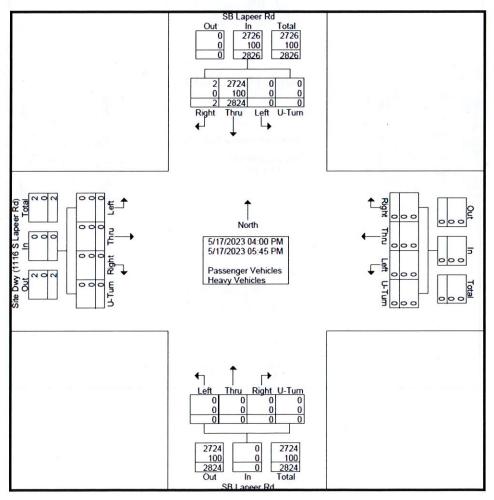
96.5

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0 2724

0 100

0.1



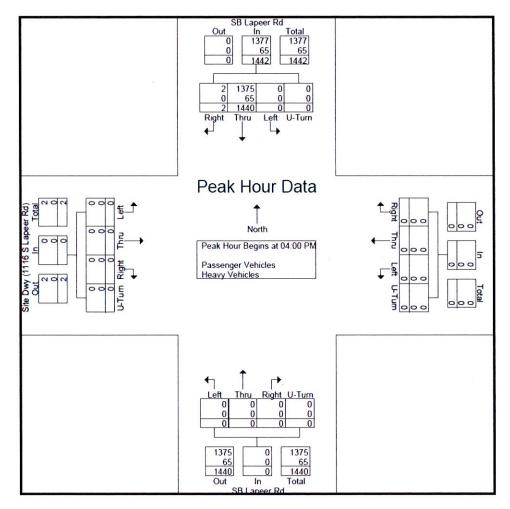


File Name: 16210902 - SB Lapeer Rd -- Site Dwy (1116 S Lapeer Rd)

Site Code : 16210902 Start Date : 5/17/2023

Page No : 2

| | Site I | | 116 S | Lapee | r Rd) | | Westbound | | | | | SB Lapeer Rd Northbound | | | | | SB Lapeer Rd Southbound | | | | |
|----------------------|-----------|---------|---------|---------|------------|--------|-----------|-------|--------|------------|------|----------------------------|------|------|------------|------|----------------------------|-------|--------|------------|------------|
| Start Time | Left | Thru | | | App. Total | Left | Thru | Right | U-Turn | App. Total | Left | | | | App. Total | Left | Thru | Right | U-Turn | App. Total | Int. Total |
| Peak Hour A | | | | | 05:45 F | PM - P | eak 1 | of 1 | | | | | | | | | | | | | |
| Peak Hour fo | or Entire | e Inter | section | n Begin | is at 04 | :00 PN | 1 | | | | | | | | 11 | | | | | | |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 400 | 0 | 0 | 400 | 400 |
| 04:15 PM | 0 | 0 | . 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 343 | 1 | 0 | 344 | 344 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 360 | 1 | 0 | 361 | 361 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 337 | 0 | 0 | 337 | 337 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1440 | 2 | 0 | 1442 | 1442 |
| % App. Total | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 0 | 0 | 0 | | 0 | 99.9 | 0.1 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .900 | .500 | .000 | .901 | .901 |
| Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1375 | 2 | 0 | 1377 | 1377 |
| % Passenger Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95.5 | 100 | 0 | 95.5 | 95.5 |
| Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 65 | 0 | 0 | 65 | 65 |
| % Heavy Vehicles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.5 | 0 | 0 | 4.5 | 4.5 |



Crash and Road Data

Road Segment Report

Lapeer Rd, (PR Number 616604)

From:

Waldon Rd 3.933 BMP

To:

Clarkston Rd W 6.206 EMP

Jurisdiction:

State

FALINK ID:

323

Community:

Orion Township

County:

Oakland

Functional Class:

3 - Other Principal Arterial

Direction:

1 Way

Length:

2.273 miles

Number of Lanes:

Posted Speed:

55 (source: TCO)

Route Classification:

Not a route

Annual Crash Average 2017-43

2021:

Traffic Volume (2016)*:

20,800 (Observed AADT)

Pavement Type (2021):

Asphalt

Pavement Rating (2021):

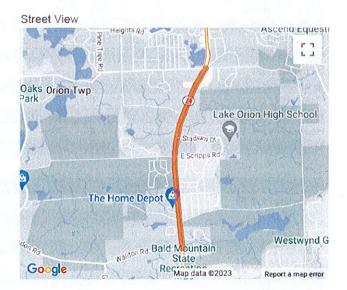
Fair

Short Range (TIP) Projects: No TIP projects for this

segment.

Long Range (RTP) Projects: No long-range projects for this

segment.



^{*} AADT values are derived from Traffic Counts

| Intersection | | | | | | | | |
|---|--------------|--|------------------|--|--------------------|------------------------|--|-------------|
| Int Delay, s/veh | 0.2 | | | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | | |
| Lane Configurations | | 7 | | ^ ^ | 11 | | | |
| Traffic Vol, veh/h | 0 | 52 | 0 | 975 | 2282 | 53 | | |
| Future Vol, veh/h | 0 | 52 | 0 | 975 | 2282 | 53 | | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Sign Control | Stop | Stop | Free | Free | Free | Free | | |
| RT Channelized | - | None | - | None | | None | | |
| Storage Length | - | 0 | - | - | - | 2 | | |
| Veh in Median Storage, | # 0 | 1.00 | 9.4 | 0 | 0 | 34.32 | | |
| Grade, % | 0 | 1111 4 | - | 0 | 0 | - 19 | | |
| Peak Hour Factor | 92 | 88 | 92 | 88 | 88 | 88 | | |
| Heavy Vehicles, % | 2 | 0 | 2 | 4 | 4 | 0 | | |
| Mvmt Flow | 0 | 59 | 0 | 1108 | 2593 | 60 | | |
| | | | | | | | | |
| Major/Minor M | linor2 | | Major1 | | Major2 | | | |
| Conflicting Flow All | - | 1327 | ichina Indolenza | 0 | hilihad Balkinsali | 0 | | |
| Stage 1 | | | | | | | | |
| Stage 2 | | - | | ERCUTAN | _ | - | ALZERO KON SELET EKANGAN KA ' | |
| Critical Hdwy | 976 <u>-</u> | 7.1 | | | | _ | | |
| Critical Hdwy Stg 1 | | | estediser - | | - PRESENTAL | | AND AND AND LOSS PARTY OF THE | |
| Critical Hdwy Stg 2 | | | | | | | | |
| Follow-up Hdwy | _ | 3.9 | - | | | _ | | |
| Pot Cap-1 Maneuver | 0 | *402 | 0 | | | <u></u> | | |
| Stage 1 | 0 | - | 0 | - | E SELECTION OF | - | | |
| Stage 2 | 0 | | 0 | | | | | |
| Platoon blocked, % | • | 1 | | - | | | | |
| Mov Cap-1 Maneuver | | *402 | | | | | | |
| Mov Cap-2 Maneuver | | 402 | | | RESERVATION - | | | |
| Stage 1 | | | | Berts | | MANA. | | |
| Stage 2 | Gildren | | | | | | | |
| Glugo Z | | | | | - | | | |
| Name of the Party | | Name of the last o | | | | | | |
| Approach | EB | | NB | | SB | | | |
| HCM Control Delay, s | 15.5 | | 0 | | 0 | | | |
| HCM LOS | С | ACCIONE ACRES O | data vivo estado | NAME AND ADDRESS OF THE PARTY O | esegratury ook | official factories has | MODERNICH PLANTS CHARLES | |
| | | | | | | | | |
| Minor Lane/Major Mvml | | NBT | EBLn1 | SBT | SBR | | | |
| Capacity (veh/h) | | · · | 402 | _ | | | | |
| HCM Lane V/C Ratio | | - | 0.147 | - | - - | | (BITTE CONTROL OF THE WAR AND AN ADDRESS OF THE STATE OF | |
| HCM Control Delay (s) | | <u>.</u> | 15.5 | | | | | |
| HCM Lane LOS | | | С | - | - | | PRODUCED STREET TRACE STREET AND THE SERVICE STREET | |
| HCM 95th %tile Q(veh) | | - | 0.5 | - | - | | | |
| Notes | CHEST | | | el estatu | | | | |
| | | 6. D | 1 | | 00- | . 0 | outs East Not Defect | *. AP |
| ~: Volume exceeds cap | acity | \$: De | elay exc | ceeds 3 | UUS | +: Com | outation Not Defined | *: All majo |

Intersection: 1: Lapeer Road (M-24) & Site Drive

| Movement | EB | |
|-----------------------|-----|---|
| Directions Served | R | SO Acres Agentie |
| Maximum Queue (ft) | 55 | |
| Average Queue (ft) | 26 | |
| 95th Queue (ft) | 50 | |
| Link Distance (ft) | 301 | |
| Upstream Blk Time (%) | | |
| Queuing Penalty (veh) | | |
| Storage Bay Dist (ft) | | and the control of the control of the property of the control of the control of the control of the control of |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

| Intersection | | | | | | | | |
|---|---------------------|------------------------|----------------|---------------------|-------------------|---------------------------------|--|--|
| Int Delay, s/veh | 0.2 | | | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR | | |
| Lane Configurations | | 7 | | ተተተ | ተተጐ | | | |
| Traffic Vol, veh/h | 0 | 52 | 0 | 2175 | 1454 | 53 | | |
| Future Vol, veh/h | 0 | 52 | 0 | 2175 | 1454 | 53 | | |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Sign Control | Stop | Stop | Free | Free | Free | Free | | |
| RT Channelized | - | None | - | None | - | None | | |
| Storage Length | - | 0 | - | - | - | - | | |
| Veh in Median Storage | ,# 0 | | | 0 | 0 | | | |
| Grade, % | 0 | _ | - | 0 | 0 | - | | |
| Peak Hour Factor | 92 | 90 | 90 | 90 | 90 | 90 | | |
| Heavy Vehicles, % | 2 | 0 | 2 | 4 | 4 | 0 | A STATE OF THE PARTY OF THE PAR | |
| Mvmt Flow | 0 | 58 | 0 | 2417 | 1616 | 59 | | |
| mysessan australia propinsi di Paragonia (1920) | | | | | | | | |
| Major/Minor N | Minor2 | N | Major1 | 15.25 (E. S.) | Major2 | (GEVASE) | | |
| Conflicting Flow All | milOIZ | 838 | viajoi i | 0 | Majorz | 0 | | |
| Stage 1 | | - | | - | | - | | |
| Stage 2 | | | | - | | - | | |
| Critical Hdwy | | 7.1 | | | | | | 1859 330 100 100 |
| Critical Hdwy Stg 1 | | | analia k | | | sidendisi | | |
| Critical Hdwy Stg 2 | | | - | | - Paratistis | | | |
| Follow-up Hdwy | | 3.9 | | 3 | - | | | |
| Pot Cap-1 Maneuver | 0 | *601 | 0 | - EUROPERINSEN | | | | |
| Stage 1 | 0 | DECISE OF THE PARTY OF | 0 | | | tiotole [*] i | | |
| | 0 | | 0 | | | - | | |
| Stage 2 | U | 4 | U | | | 1.9762 A. | | |
| Platoon blocked, % | | 1 *004 | | anestra. | - PULLET STATE | THE PROPERTY OF | | |
| Mov Cap-1 Maneuver | ÷ | *601 | 1 | | 7 | - | | |
| Mov Cap-2 Maneuver | - Guardenses | - | - | | - SAMONATES | | | |
| Stage 1 | - | - | - | - | - | - | | |
| Stage 2 | - 126.03234.0343 | encommuser | - HERITANIA | | | - | | |
| | | | | | | | | |
| Approach | EB | | NB | | SB | | | |
| HCM Control Delay, s | 11.6 | | 0 | | 0 | | | |
| HCM LOS | В | | | | | | | |
| | | | | | | | | |
| Minor Lane/Major Mvm | t | NBTI | EBLn1 | SBT | SBR | | | |
| Capacity (veh/h) | | | 601 | | | | | |
| HCM Lane V/C Ratio | | - | 0.096 | 6/2000(\$H11467.50) | - | | The second secon | AND THE RESERVE AS A SECOND SE |
| HCM Control Delay (s) | | - | 11.6 | - | - | | | |
| HCM Lane LOS | | - | В | - | - | AND DESCRIPTION OF THE PARTY OF | | |
| HCM 95th %tile Q(veh) | | - | 0.3 | - | - | | | |
| Notes | | | | | | | | |
| ~: Volume exceeds cap | nacity | \$: De | elav ev | ceeds 3 | 00s | +: Com | utation Not Defined | *: All major volume |
| . Volume exceeds cal | racity | ψ. Δθ | ay ex | occus o | uua | r. Cuili | diadon Not Delined | . All major voiding |

Intersection: 1: Lapeer Road (M-24) & Site Drive

| Movement | EB | SB | SB |
|-----------------------|-----|---------------------|-----|
| Directions Served | R | T | T |
| Maximum Queue (ft) | 55 | 11 | 149 |
| Average Queue (ft) | 26 | 0 | 8 |
| 95th Queue (ft) | 50 | 8 | 100 |
| Link Distance (ft) | 301 | 586 | 586 |
| Upstream Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | CONTRACTOR DECEMBER | |
| Queuing Penalty (veh) | | | |

Tommy's Car Wash-Cash Lane 95th Percentile Probability - Drive Through Queue Length (# of Vehicles)

| | | | 6 | Σvolume | 0 | 20 | 31 | 34 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 |
|--|-------------------------|----------|---|--|--------|--------|--------|--------|--------|---------|---------|---------|----------|---------|---------|----------|
| | | | ∞ | Volume in Cycle (1*6) | 0 | 20 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 7 | Σ Cycles in 6 | 33 | 23 | 11 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| | | | 9 | P* # Cycle containing Volume in 1 | 33 | 20 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | S | ΣP | 55.80% | 88.36% | 97.85% | 99.70% | 99.97% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| שלחוו לפוניוופ בו סממטוונץ - חוואפ ווווסמפון למכמכ בכוופנון (ד טו אכוווניבא) | | | 4 | $P = (e^{A}(-\lambda))(\lambda^{A}x)/X!$ | 25.80% | 32.55% | 9.49% | 1.85% | 0.27% | 0.03% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| ישניו מתבתב דב | | | 8 | × | Н | 1 | 2 | 9 | 24 | 120 | 720 | 5040 | 40320 | 362880 | 3628800 | 39916800 |
| 5 = = | h h/hr | | 2 | | 0 | 1 | 7 | 3 | 4 | 2 | 9 | 7 | ∞ | 6 | 10 | 11 |
| opapiiicy - Oils | 35 vph 60 veh/h | 0.583333 | ч | No Veh in Cycle | 0 | 1 | 2 | ĸ | 4 | 5 | 9 | 7 | ∞ | 6 | 10 | 11 |
| מו בפורפוות בי | Volume = service rate = | γ= | | × | 1.0000 | 0.5833 | 0.3403 | 0.1985 | 0.1158 | 0.0675 | 0.0394 | 0.0230 | 0.0134 | 0.0078 | 0.0046 | 0.0027 |
| 2 | | | | λλ | | | | | 112 | 2 | | | | | | |

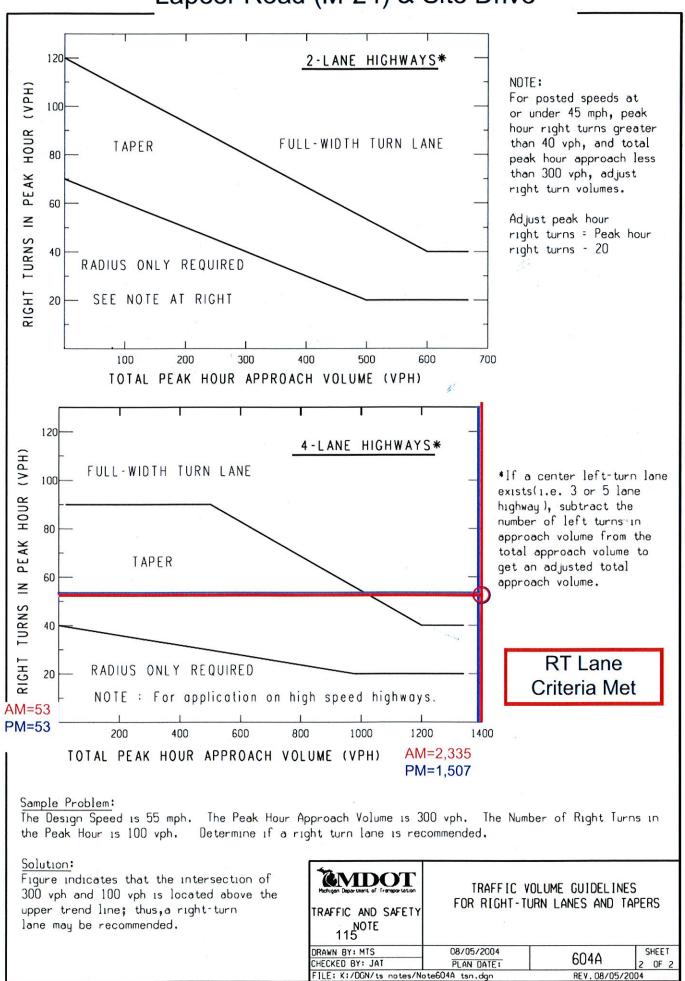
Tommy's Car Wash-Cash Lane 95th Percentile Probability - Drive Through Queue Length (# of Vehicles)

| | თ | Σvolume | 0 | 15 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 | 18 |
|-----------------------------------|---|--|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| | ∞ | Volume in Cycle (1*6) | 0 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 7 | Σ Cycles in 6 | 103 | 119 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| | 9 | P* # Cycle containing Volume in 1 | 103 | 15 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | S | ΣP | 86.07% | 86.86 | 99.95% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | 4 | $P = (e^{\Lambda}(-\lambda))(\lambda^{\Lambda}x)/X!$ | 86.07% | 12.91% | 0.97% | 0.05% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | %00.0 |
| e. | 8 | × | 1 | 1 | 2 | 9 | 24 | 120 | 720 | 5040 | 40320 | 362880 | 3628800 | 39916800 |
| oh eh/hr | 7 | | 0 | Н | 7 | 3 | 4 | 2 | 9 | 7 | ∞ | 6 | 10 | 11 |
| 18 vph 120 veh/hr 0.15 | 1 | No Veh in Cycle | 0 | 1 | 2 | 3 | 4 | 2 | 9 | 7 | ∞ | 6 | 10 | 11 |
| Volume = service rate = λ | | | 1.0000 | 0.1500 | 0.0225 | 0.0034 | | 0.0001 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |

Tommy's Car Wash-Cash Lane 95th Percentile Probability - Drive Through Queue Length (# of Vehicles)

| | | | 6 | Σvolume | 0 | 22 | 41 | 20 | 52 | 53 | 53 | 53 | 23 | 23 | 53 | 53 |
|----------|----------------|----------|---|--|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|----------|
| | | | ∞ | Volume in Cycle 2 (1*6) | 0 | 22 | 19 | 6 | m | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 7 | Σ Cycles in 6 | 25 | 47 | 11 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| | | | 9 | P* # Cycle containing Volume in 1 | 25 | 22 | 10 | ĸ | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 5 | ΣP | 41.34% | 77.86% | 93.99% | 98.73% | 88.66 | %26.66 | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | | | 4 | $P = (e^{\wedge}(-\lambda))(\lambda^{\wedge}x)/X!$ | 41.34% | 36.52% | 16.13% | 4.75% | 1.05% | 0.19% | 0.03% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | | | ю | × | Н | н | 2 | 9 | 24 | 120 | 720 | 5040 | 40320 | 362880 | 3628800 | 39916800 |
| ح | /eh/hr | | 7 | | 0 | ٦ | 7 | æ | 4 | 2 | 9 | 7 | ∞ | 6 | 10 | 11 |
| 53 vph | ۷ 09 | 0.883333 | 1 | No Veh in Cycle | 0 | 1 | 2 | 8 | 4 | 2 | 9 | 7 | 80 | 6 | 10 | 11 |
| Volume = | service rate = | γ= | | | 1.0000 | 0.8833 | 0.7803 | 0.6892 | 0.6088 | 0.5378 | 0.4751 | 0.4196 | 0.3707 | 0.3274 | 0.2892 | 0.2555 |
| | | | | λ^ x | | | | | 114 | 1 | | | | | | |

Lapeer Road (M-24) & Site Drive



Site Walk conducted on July 21, 2023.

A site walk was conducted on July 21, 2023 for PC 23-20 for property located at 1112 and 1140 Lapeer Road. The property is located on the west side of Lapeer Road south of Clarkston Road. The property abuts the Oakland County Road Commission (OCRC) property on the south.

The property consists of two unoccupied, non-conforming, commercial buildings with parking in the front. There is an overhead utility line which services and separates the two buildings. The OCRC building to the north is located on the Lapeer Road property line. There is a pedestrian path to the north and south of the subject property. There is an overgrowth of tress in the rear of the properties.

Since these are older buildings there is no landscaping separating the front parking from Lapeer Road. The property to the south is a commercial building with a Sherwin Williams store and other retail uses which has a substantial setback from Lapeer Road.

This area of Lapeer Road has experienced some building improvements and landscaping recently including the Speedway gas station and convenience store, Meijer store and shopping center renovations, Oakland Dental office, Citizens Bank, and others proposed in the near future.

Respectfully submitted,

Donald Gross. Planning Commissioner

RECEIVED

JUL 2 4 2023

Orion Township Planning & Zoning



JUL 1 4 2023

Orion Township Planning & Zoning

Checklist for Site Plan Approval Application

Applications must be submitted by noon on Wednesday, three (3) weeks prior to a scheduled meeting. Meetings are held on the first and third Wednesday of each month, unless otherwise specified.

Pursuant to Zoning Ordinance 78, Section 30.01(C)(8) the applicant or a designated representative must be at all scheduled review meetings. Refer to Section 30.01(F) for the criteria the Planning Commission will use to evaluate a site plan.

The following must accompany your completed application; incomplete submittals will not be accepted.

- Complete application including original ink signatures of property owner and the applicant.
- The Site Plan Review fees calculated using Ordinance No. 41.
- Proof of ownership. Acceptable forms of documentation include: Warranty Deed, Quit Claim Deed, Land Contract, or Option to Purchase with a Copy of the Warranty Deed.
- Traffic Study if applicable.
- Wetlands Permit application ifapplicable.
- Three (3) sets of signed and sealed 24" x 36" detailed site plans containing all elements within Zoning Ordinance No. 78, Section 30.01(E) need to be delivered to the Township to the above address.
- Three (3) sets of all supporting documents, reports, studies etc.
- PDF format copy of all information submitted (may be emailed or provided on a USB/flash drive).
- Proof of submittal to outside agencies

The Township reserves the right to request additional copies of printed materials as necessary.

If you have any questions, please call the Planning & Zoning Director at (248) 391-0304 ext. 5000.

Version 12/16/22



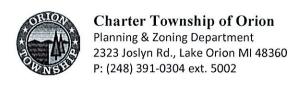


Charter Township of Orion Planning Commission Site Plan Approval Application

30.1, **A.** Intent: The site plan review procedures and standards are intended to provide an opportunity for consultation and cooperation between the applicant and the Planning Commission so as to achieve maximum utilization of land with minimum adverse effects on adjoining property. Furthermore, it is the intent of these procedures and standards to allow for review of site plans by the Planning Commission, to provide a consistent and uniform method of review, and to ensure full compliance with the standards contained within Zoning Ordinance 78, and other applicable local ordinances and State and Federal laws.

| Project | t Name: 1112 S Lapeer Road | |
|------------------------------|--|---------------|
| | of Development ifapplicable: WhiteWater Car Wash - Orion Twp | |
| | Name: EROP LLC (Jeff Justice) | |
| ant | Address: 3130 North Kandy Lane City: Decatur State: IL Z | 62526 Lip: |
| Applicant | Phone:Cell: 217-972-4296Fax: | |
| | Email: jeffj@hypershinecw.com | |
| | Name: | |
| ner(s | Address: 29500 Telegraph Rd Ste 250 City: Southfield State: Z | 2ip:48034 |
| *Property Owner(s) | Phone: <u>248-43/3677</u> Cell:Fax: | |
| roper | Email: Marvin@karanalaw.com | |
| | * If the name on the deed does not match the name of the property owner on this application, documentation sh individual is the same as the company name must be provided. | nowing the |
| | Name: Stonefield Engineering & Design | |
| parer | Address: 607 Shelby St Suite 200 City: Detroit State: MI Z | 48823 Zip: |
| Plan Preparer Firm/Person | Phone: 248-247-1115 Cell:Fax: | |
| ₽ ₽ | Email: emcmachen@stonefieldeng.com | |
| | Name: Stonefield Engineering & Design | |
| Project Contact Person | 607 Shelby St Suite 200 Detroit MI | 48823 Zip: |
| ject Con Person | Phone: 248-247-1115 Cell: Fax: Fax: Fax: Fax: Cell: Cell: Cell: Fax: Cell: Fax: Cell: Cell | |
| S. | Email: emcmachen@stonefieldeng.com | |
| 38 39 | | |

| | Sidwell Number(s): 09-14-201-005, 09-14-201-00 | 06 |
|--|--|--|
| Property Description | Location or Address of Property: 1112 & 1140 S La | |
| escri | | |
| g Ay | Acreage: 1.27 Current Use of Property: | |
| Jrope | SIGN STORY OF STREET CONTROL OF STREET STORY OF STREET STORY STREET STORY STREET STREE | |
| | Is the complete legal description printed on the site plan | ? Yes No (if no please attach to theapplication) |
| | Subject Property Zoning: GBAdjacent | Zoning: N. OP S. OP & GB E. GB W. GB |
| rtion Tion | List any known variances needed (subject to change base | ed on Township consultant's review) |
| Project Information | None. | |
| E t | Give a detailed description of the proposed developmen | t, including the number and size of the buildings or units being |
| Proje | | cuum stalls for customers, 5 parking spaces for employees, or infrastructure, lighting and landscaping improvements. |
| | | py of this application and two copies of the site plan must be provide the Township with a copy of each transmittal as proof |
| Tales | AT&T | Consumers Power Company 530 W. Willow St. |
| Ager | 54 Mill St. Pontiac, MI 48342 | Lansing, MI 48906 |
| tside | DTE Energy Co. ATTENTION: NW Planning & Design | Oakland County Health Department Building 34 East |
| no o | 1970 Orchard Lake Rd. Sylvan Lake, MI 48320 | 1200 N. Telegraph Rd. Pontiac, MI 48341 |
| Submittal to Outside Agencies | Michigan Department of Transportation (if applicable) To Be Submitted by the Township | Road Commission of Oakland County (if applicable) ssintkowski@rcoc.org (electronic submittal only) |
| 3 | Oakland County Water Resources To Be Submitted by the Township | (ciecu ome submetar omy) |
| Township the about the provide Signatu | hip of Orion Zoning Ordinance; No. 78, Section 30.01, and | Parte: 4/13/2023 |
| Print Na | EPOPLIC (lot locido) | |
| corresp | | sted above to act as my agent in submitting applications, t permission to the Planning Commission members to visit the |
| | ure of Owner (if the deed of ownership does not show an vided showing the individual signing this application has | 5-12-27 |
| (must be | original ink signature) UCE | |
| Print No. | ame: _KN West LLC by Darren Naimi, member 1 4/21/22 | owner of 1112 Lapeer Page 2 of 3 |



Do not want plans posted on Web Site

| r Road |
|--|
| Parcel#(s) 09-14-201-005, 09-14-201-006 |
| |
| cant and on behalf of my consultants, we agree to allow the plans for the which approval is being sought by the Planning Commission and/or Townshine Township website. |
| <u>N</u> li |

LOCATION

SOURCE: USGS MAPPING SYSTEM

SCALE: $1'' = 2,000' \pm$

SITE DEVELOPMENT PLANS

FOR



PROPOSED CAR WASH

PID: 09-14-201-005, 09-14-201-006 1112 SOUTH LAPEER ROAD (M-24) ORION TOWNSHIP, OAKLAND COUNTY MICHIGAN

SOURCE: GOOGLE EARTH PRO **AERIAL MAP**

SCALE: 1" = 100'±

SITE **ZONING MAP ZONING KEY**

PROPERTY DESCRIPTION:

THE LAND IS SITUATED IN THE TOWNSHIP OF ORION, COUNTY OF OAKLAND, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

PART OF LOT 15 OF SUPERVISOR'S PLAT NO. 13 ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 58 PLATS, PAGE 35 OF OAKLAND COUNTY RECORDS, BEGINNING AT THE MOST EASTERLY LOT CORNER, THENCE NORTHWESTERLY ALONG THE SOUTHWESTERLY LINE OF LOT 14, 300 FEET, THENCE SOUTH 33 DEGREES 47 MINUTES 00 SECONDS WEST 56 FEET, THENCE SOUTHEASTERLY 300 FEET, THENCE NORTH 33 DEGREES 48 MINUTES 00 SECONDS EAST ALONG THE LOT LINE 56 FEET TO THE POINT OF BEGINNING.

PART OF LOT 14 OF SUPERVISOR'S PLAT NO. 13 ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 58 PLATS, PAGE 35 OF OAKLAND COUNTY RECORDS, EXCEPT THAT PART DEEDED TO BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF OAKLAND, STATE OF MICHIGAN, A PUBLIC BODY CORPORATE DESCRIBED AS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 14; THENCE SOUTHEASTERLY ALONG THE NORTH LINE OF SAID LOT 14, A DISTANCE OF 415.24 FEET; THENCE SOUTHWESTERLY TO A POINT IN THE SOUTH LINE OF SAID LOT 14, SAID POINT LYING SOUTHEASTERLY 344.36 FEET FROM THE SOUTHWESTERLY CORNER OF SAID LOT 14; THENCE NORTHWESTERLY, ALONG THE SOUTH LINE OF SAID LOT 14, A DISTANCE OF 344.36 FEET TO THE SOUTHWEST CORNER OF SAID LOT 14; THENCE NORTHERLY, ALONG THE WEST LINE OF SAID LOT 14, A DISTANCE OF 149.29 FEET TO THE POINT OF BEGINNING.

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

STONEFIELD engineering & design

PLANS PREPARED BY:

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

607 Shelby Suite 200, Detroit MI 48226 Phone 248.247.1115

PLAN REFERENCE MATERIALS:

1. THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:

SCALE: 1" = 100'±

 ALTA/NSPS LAND TITLE SURVEY PREPARED BY KEM-TEC DATED 02/06/2023 ARCHITECTURAL PLANS PREPARED BY REB ARCHITECTS

JULY 14, 2023 Orion Township Planning & Zoning

- GEOTECHNICAL REPORT PREPARED BY G2 CONSULTING **GROUP DATED 03/15/2023**
- AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO LOCATION MAP OBTAINED FROM USGS MAP
- 2. ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.

| SHEET INDE | X |
|----------------------------|-----------------|
| DRAWING TITLE | SHEET # |
| COVER SHEET | C-1 |
| DEMOLITION PLAN | C-2 |
| SITE PLAN | C-3 |
| GRADING PLAN | C-4 |
| STORMWATER MANAGEMENT PLAN | C-5 |
| UTILITY PLAN | C-6 |
| LIGHTING PLAN | C-7 |
| LANDSCAPING PLAN | C-8 |
| TRUCK TURNING ANALYSIS | C-9 TO C-10 |
| CONSTRUCTION DETAILS | C-11 TO C-13 |

| ADDITIONAL SHEETS | | | | | | |
|-------------------|--|--|--|--|--|--|
| SHEET # | | | | | | |
| 1 OF 1 | | | | | | |
| A-1 | | | | | | |
| A-2 | | | | | | |
| | | | | | | |

APPLICAN

3130 NORTH KANDY LANE JEFFJ@HYPERSHINECW.COM

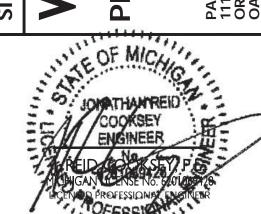
OWNER

KN WEST LLC

ARCHITECT

REB ARCHITECTS 103 WINDAHAVEN DRIVE, SUITE 191 BBAUM@REBARCH.COM

NOT APPROVED FOR CONSTRUCTION





SCALE: AS SHOWN PROJECT ID: DET-230006

COVER SHEET

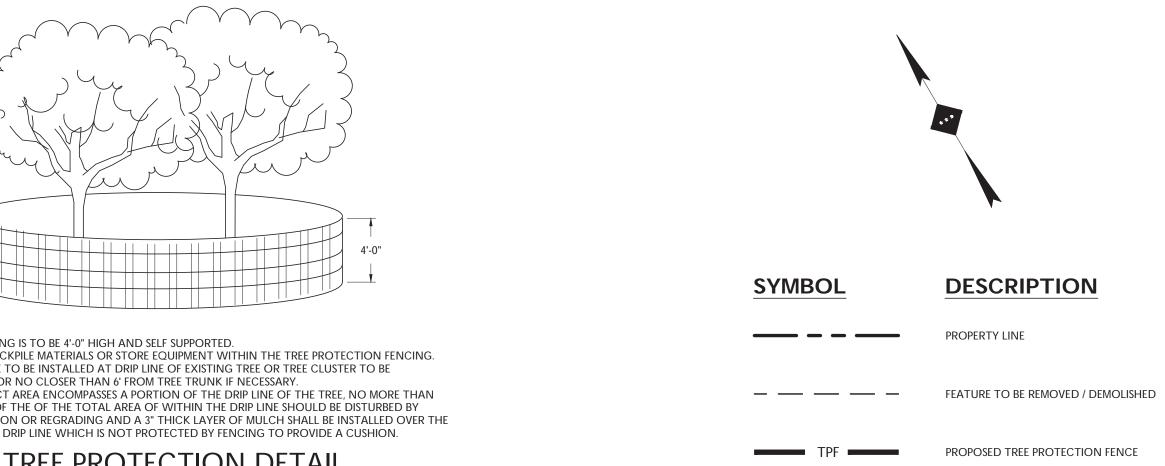
DRAWING:

C-1

G-B - GENERAL BUSINESS

O-P - OFFICE & PROFESSIONAL





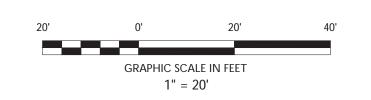
NO VEHICLE, OTHER CONSTRUCTION **EQUIPMENT, OR CONSTRUCTION MATERIALS OR** DEBRIS SHALL BE PARKED OR STORED WITHIN THE DRIPLINE OF ANY TREE OR PLANT MATERIAL INTENDED TO BE SAVED.

ALL SITE FEATURES WITHIN THE PROPERTY LINES INDICATED ON THIS PLAN ARE TO BE DEMOLISHED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD **ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS** PLAN AND FIELD CONDITIONS.

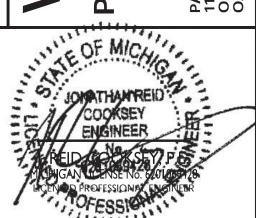


DEMOLITION NOTES

- 1. THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE
- SITE IMPROVEMENTS. 2. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND
- METHODS OF DEMOLITION ACTIVITIES. 3. EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED. BEFORE THE START OF ANY EXPLOSIVE PROGRAM, THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY
- DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES. 4. ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
- 5. DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.



NOT APPROVED FOR CONSTRUCTION



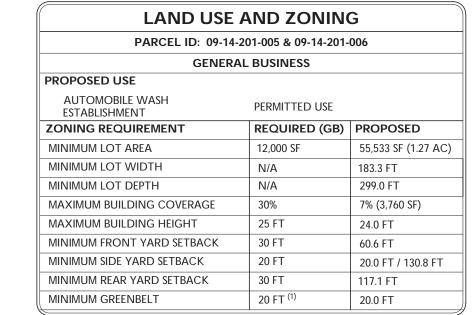


I" = 20' PROJECT ID: DET-230006

DEMOLITION PLAN

DRAWING:

C-2



| 1 | $\overline{}$ | |
|---|---------------|--|
| | (1) | MAY BE REDUCED OR WAIVED BY THE PLANNING COMMISSION WH |
| | | THE PARCEL ADD 13 COMMERCIAL / OFFICE |

PROPOSED EMPLOYEE -

PROPOSED 4" CONCRETE 8'-8'-9'-

20 FT GREENBELT & SIDE YARD

WALKWAY (TYP.)

PROPOSED 4" BLUE

PARKING STALLS

SIGN ON BOLLARD

PROPOSED

TRANSITION

STRIPING FOR ALL ADA

PROPOSED VAN-ACCESSIBLE

PROPOSED CAR WASH

3,756 SF

ADA SPACE AND AISLE WITH

PARKING SPACE

(5 TYP.)

PARCEL ID: 09-14-201-023

OWNER OF RECORD: OAKLAND COUNTY ROAD COMMISSION

> PROPOSED 6 FT X 6 FT CONCRETE PAD FOR

PROPOSED 54 LF

MOUNTABLE CURB

PROPOSED CAR

MAT CLEANER

| OFF-STF | REET PARKING REQUI | REMENTS |
|--------------|-------------------------------------|--------------------------------|
| CODE SECTION | REQUIRED | PROPOSED |
| § 14.03.C.3. | 1 SPACE PER 200 SF GFA | 5 EMPLOYEE |
| | (3,760 SF)(1/200) = 19 SPACES | +16 VACUUM |
| | | 21 SPACES |
| § 27.04.3. | DIMENSIONAL REQUIREMENTS: | |
| | 90°: 9 FT X 19 FT W/ 22 FT AISLE | 9 FT X 19 FT W/ 24 FT AISLE |

#1110 1 STORY

MUNICIPAL BUILDING

PROPOSED 4"

PROPOSED FREESTANDING

PROPOSED 6" CURB

AND GUTTER (TYP.)

CONCRETE STOOP

PROPOSED -

(16 TYP.)

13 FT X 20 FT

VACUUM STALL

PYLON SIGN

PROPOSED 12" SONO TUBE

FOR STOP-GO LIGHT (REFER

TO ARCHITECTURAL PLANS)

YELLOW STRIPING FOR ALL NON-ADA

PARKING STALLS

(RIM1001.50

PROPOSED CONNECTION TO EXISTING WALKWAY. CONTRACTOR TO PROVIDE

SMOOTH TRANSITION

PROPOSED CURB RAMP

WITH DETECTABLE WARNING (2 TYPICAL)

PROPOSED 8 FT

ASPHALT WALKWAY

CONTRACTOR TO

COORDINATE RELOCATION

OF EXISTING GUY WIRES FOR

SIDEWALK CONSTRUCTION

BETWEEN EXISTING AND PROPOSED PAVEMENT.

PROPOSED TWO (2)

WITH KNOX BOXES &

PROPOSED 47 LF

PROPOSED OVERHEAD

ELEVATIONS)

DOOR (SEE ARCHITECTURAL

123

MOUNTABLE CURB

PROPOSED 7.33 FT X 15.33 FT

6" CONCRETE PAD WITH

6 FT MASONRY WALL FOR

CENTRAL VACUUM SYSTEM

INDUCTION LOOPS

DO NOT ENTER

AUTOMATIC EXIT GATES

| SIGN | AGE REQUIREM | ENTS |
|--------------|------------------------------------|-----------------------|
| CODE SECTION | REQUIRED | PROPOSED |
| § 153-7 | ONE (1) GROUND SIGN | ONE (1) PYLON SIGN |
| § 153-7 | MINIMUM HEIGHT: 6 FT FROM GRADE | 6 FT |
| § 153-7 | MAXIMUM HEIGHT: 8 FT | 8 FT |
| § 153-7 | MAXIMUM AREA: 40 SF PER SIDE | 40 SF PER SIDE |
| § 153-7 | ROW SETBACK: 30 FT | 43.6 FT |

BENCHMARK #2

LIMIT OF PROPOSED

CONCRETE CURB

PROPOSED SAWCUT LINE /

MOVEMENT CONCRETE

LIMITS OF PROPOSED

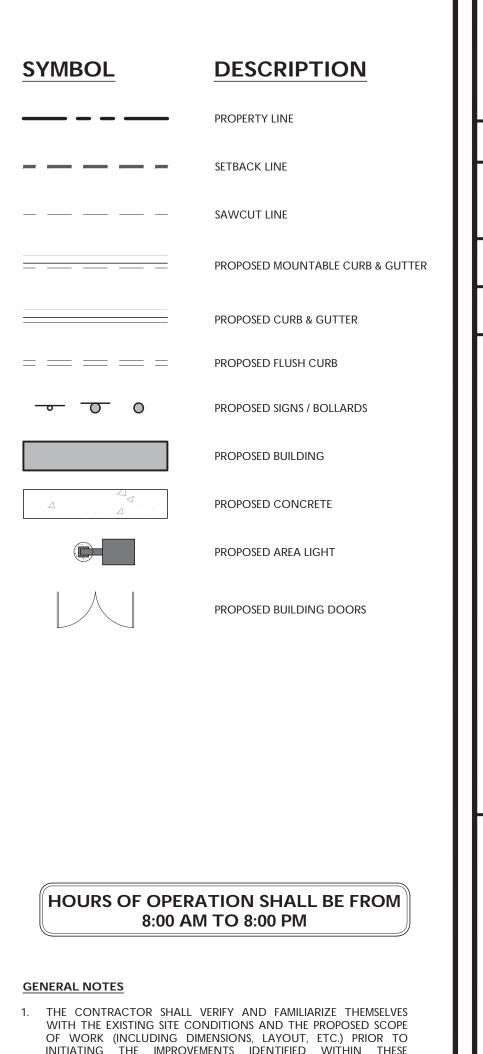
PROPOSED FULL

SPECIFICATIONS

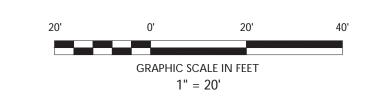
PAVEMENT

RIM1001.70





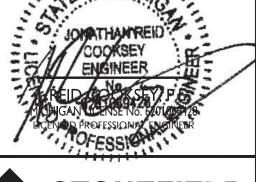
- INITIATING THE IMPROVEMENTS IDENTIFIED WITHIN THESE DOCUMENTS. SHOULD ANY DISCREPANCY BE FOUND BETWEEN THE EXISTING SITE CONDITIONS AND THE PROPOSED WORK THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. PRIOR TO THE START OF CONSTRUCTION. 2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND
- ENSURE THAT ALL REQUIRED APPROVALS HAVE BEEN OBTAINED PRIOR TO THE START OF CONSTRUCTION. COPIES OF ALL REQUIRED PERMITS AND APPROVALS SHALL BE KEPT ON SITE AT ALL TIMES DURING CONSTRUCTION. 3. ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY
- LAW, INDEMNIFY AND HOLD HARMLESS STONEFIELD ENGINEERING & DESIGN, LLC. AND IT'S SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES AND LIABILITIES INCLUDING ATTORNEY'S FEES ARISING OUT OF CLAIMS BY EMPLOYEES OF THE CONTRACTOR IN ADDITION TO CLAIMS CONNECTED TO THE PROJECT AS A RESULT OF NOT CARRYING THE PROPER INSURANCE FOR WORKERS COMPENSATION, LIABILITY INSURANCE, AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE. 4. THE CONTRACTOR SHALL NOT DEVIATE FROM THE PROPOSED
- IMPROVEMENTS IDENTIFIED WITHIN THIS PLAN SET UNLESS APPROVAL IS PROVIDED IN WRITING BY STONEFIELD ENGINEERING & DESIGN,
- 5. THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF CONSTRUCTION. 6. THE CONTRACTOR SHALL NOT PERFORM ANY WORK OR CAUSE DISTURBANCE ON A PRIVATE PROPERTY NOT CONTROLLED BY THE
- PERSON OR ENTITY WHO HAS AUTHORIZED THE WORK WITHOUT PRIOR WRITTEN CONSENT FROM THE OWNER OF THE PRIVATE 7. THE CONTRACTOR IS RESPONSIBLE TO RESTORE ANY DAMAGED OR UNDERMINED STRUCTURE OR SITE FEATURE THAT IS IDENTIFIED TO
- REMAIN ON THE PLAN SET. ALL REPAIRS SHALL USE NEW MATERIALS TO RESTORE THE FEATURE TO ITS EXISTING CONDITION AT THE CONTRACTORS EXPENSE. 8. CONTRACTOR IS RESPONSIBLE TO PROVIDE THE APPROPRIATE SHOP DRAWINGS, PRODUCT DATA, AND OTHER REQUIRED SUBMITTALS FOR REVIEW. STONEFIELD ENGINEERING & DESIGN, LLC. WILL REVIEW THE SUBMITTALS IN ACCORDANCE WITH THE DESIGN INTENT AS
- REFLECTED WITHIN THE PLAN SET. 9. THE CONTRACTOR IS RESPONSIBLE FOR TRAFFIC CONTROL IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL
- DEVICES, LATEST EDITION. 10. THE CONTRACTOR IS REQUIRED TO PERFORM ALL WORK IN THE PUBLIC RIGHT-OF-WAY IN ACCORDANCE WITH THE APPROPRIATE GOVERNING AUTHORITY AND SHALL BE RESPONSIBLE FOR THE PROCUREMENT OF STREET OPENING PERMITS.
- 11. THE CONTRACTOR IS REQUIRED TO RETAIN AN OSHA CERTIFIED SAFETY INSPECTOR TO BE PRESENT ON SITE AT ALL TIMES DURING CONSTRUCTION & DEMOLITION ACTIVITIES. 12. SHOULD AN EMPLOYEE OF STONEFIELD ENGINEERING & DESIGN, LLC.
- BE PRESENT ON SITE AT ANY TIME DURING CONSTRUCTION, IT DOES NOT RELIEVE THE CONTRACTOR OF ANY OF THE RESPONSIBILITIES AND REQUIREMENTS LISTED IN THE NOTES WITHIN THIS PLAN SET.



NOT APPROVED FOR CONSTRUCTION

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I" = 20' PROJECT ID: DET-230006

DRAWING:

SITE PLAN

LIMIT OF PROPOSED PROPOSED CONNECTION TO #702 CONCRETE CURB EXISTING WALKWAY. CONTRACTOR TO PROVIDE SMOOTH TRANSITION BETWEEN EXISTING AND PROPOSED PAVEMENT.

OWNER OF RECORD:

PROPOSED OVERHEAD

DOOR (SEE ARCHITECTURAL

PROPOSED 6 FT MASONRY TRASH ENCLOSURE (TO MATCH BUILDING

PROPOSED 34 LF MOUNTABLE CURB <

PROPOSED 6"

PAVEMENT (TYP.)

PROPOSED LICENSE PLATE READER WITH BOLLARDS. CONTRACTOR

EXCEPTED PART OF LOT 14 7:

GUY POLE-

TO CONFIRM FINAL LOCATION

WITH OWNER (3 TYP.)

PROPOSED CONCRETE

CURB ISLAND (TYP.)

PROPOSED PAY

STATION (3 TYP.)

PROPOSED INDUCTION

LOOP PAD (4 PER LANE)

PROPOSED 😽

FIRE LANE

PROPOSED 25 LF

NOT ENTER'

SIGN (2 TYP.)

EMERGENCY

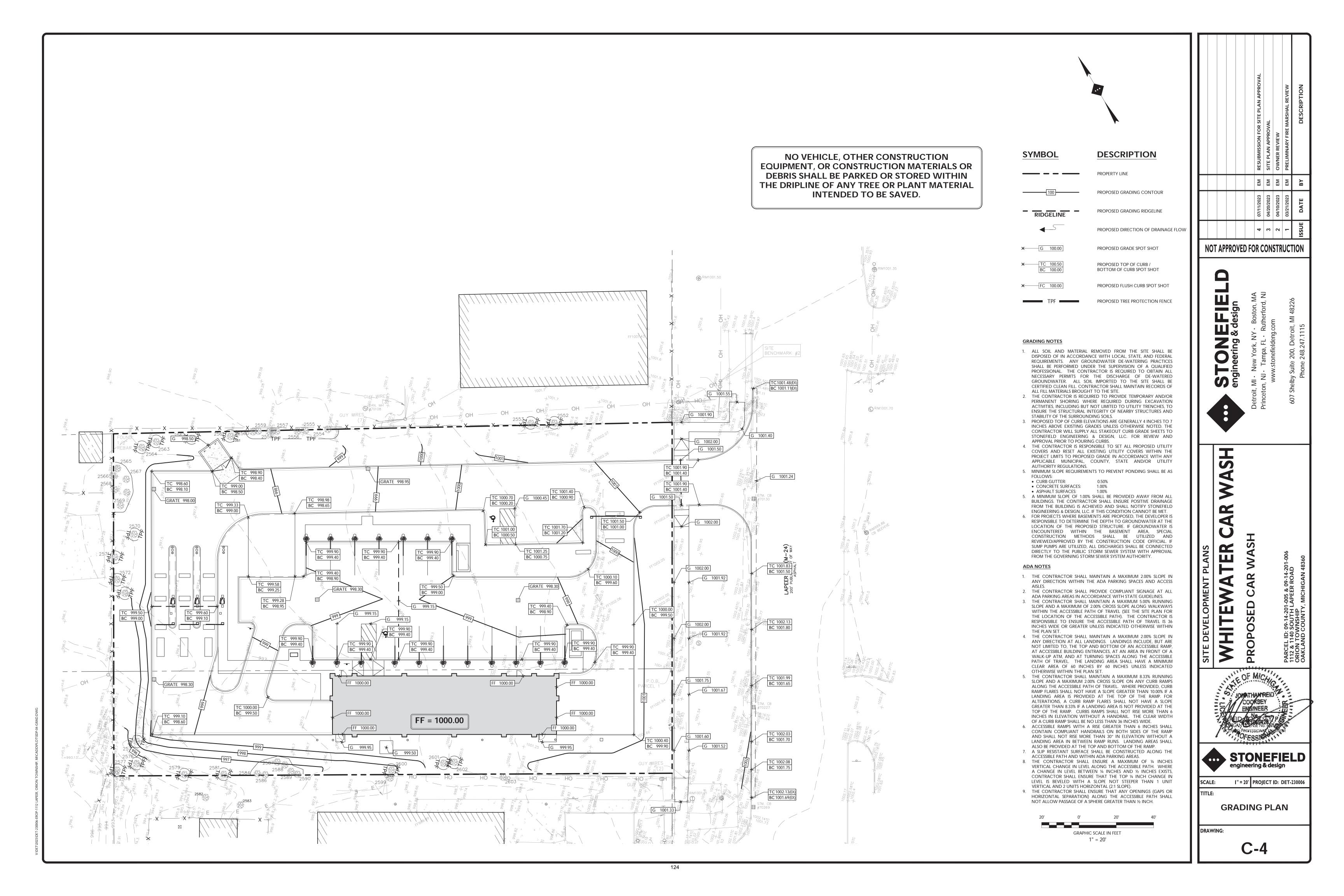
BYPASS LANE

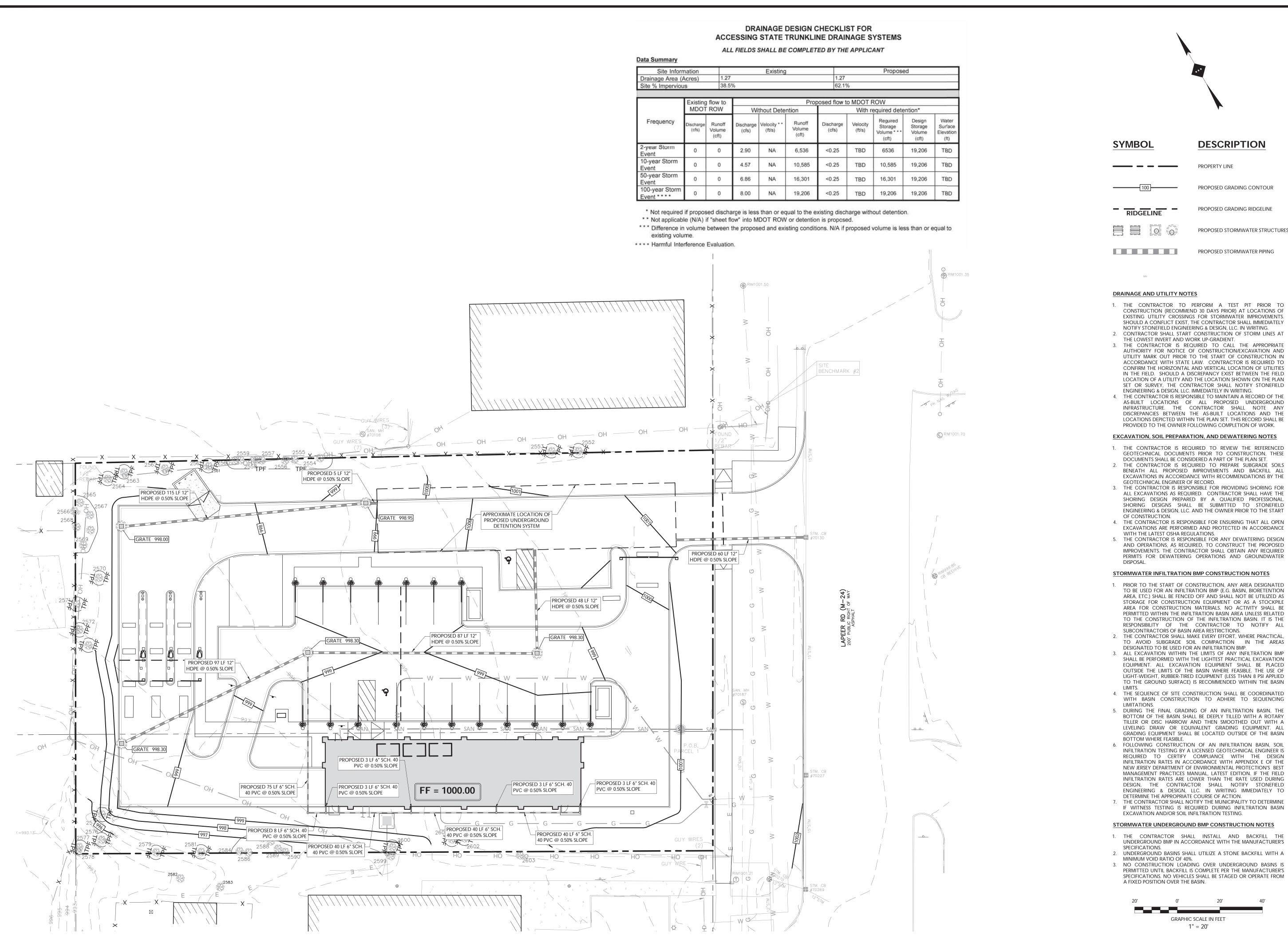
PROPOSED 5 FT X 5 FT

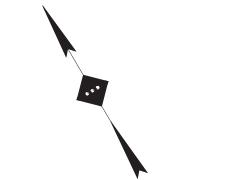
CONCRETE STOOP

CONCRETE

MOUNTABLE CURB







DESCRIPTION PROPERTY LINE

PROPOSED GRADING CONTOUR

PROPOSED GRADING RIDGELINE PROPOSED STORMWATER STRUCTURES

PROPOSED STORMWATER PIPING

- 1. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING. 2. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT
- 3. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IMMEDIATELY IN WRITING.
- 4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.

EXCAVATION, SOIL PREPARATION, AND DEWATERING NOTES

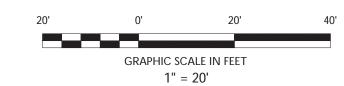
- 1. THE CONTRACTOR IS REQUIRED TO REVIEW THE REFERENCED GEOTECHNICAL DOCUMENTS PRIOR TO CONSTRUCTION, THESE DOCUMENTS SHALL BE CONSIDERED A PART OF THE PLAN SET.
- 2. THE CONTRACTOR IS REQUIRED TO PREPARE SUBGRADE SOILS BENEATH ALL PROPOSED IMPROVEMENTS AND BACKFILL ALL EXCAVATIONS IN ACCORDANCE WITH RECOMMENDATIONS BY THE GEOTECHNICAL ENGINEER OF RECORD.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING SHORING FOR ALL EXCAVATIONS AS REQUIRED. CONTRACTOR SHALL HAVE THE SHORING DESIGN PREPARED BY A QUALIFIED PROFESSIONAL. SHORING DESIGNS SHALL BE SUBMITTED TO STONEFIELD ENGINEERING & DESIGN, LLC. AND THE OWNER PRIOR TO THE START
- OF CONSTRUCTION. 4. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL OPEN EXCAVATIONS ARE PERFORMED AND PROTECTED IN ACCORDANCE WITH THE LATEST OSHA REGULATIONS
- 5. THE CONTRACTOR IS RESPONSIBLE FOR ANY DEWATERING DESIGN AND OPERATIONS, AS REQUIRED, TO CONSTRUCT THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL OBTAIN ANY REQUIRED PERMITS FOR DEWATERING OPERATIONS AND GROUNDWATER

STORMWATER INFILTRATION BMP CONSTRUCTION NOTES

- 1. PRIOR TO THE START OF CONSTRUCTION, ANY AREA DESIGNATED TO BE USED FOR AN INFILTRATION BMP (E.G. BASIN, BIORETENTION AREA, ETC.) SHALL BE FENCED OFF AND SHALL NOT BE UTILIZED AS STORAGE FOR CONSTRUCTION EQUIPMENT OR AS A STOCKPILE AREA FOR CONSTRUCTION MATERIALS. NO ACTIVITY SHALL BE PERMITTED WITHIN THE INFILTRATION BASIN AREA UNLESS RELATED TO THE CONSTRUCTION OF THE INFILTRATION BASIN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL SUBCONTRACTORS OF BASIN AREA RESTRICTIONS.
- 2. THE CONTRACTOR SHALL MAKE EVERY EFFORT, WHERE PRACTICAL, TO AVOID SUBGRADE SOIL COMPACTION IN THE AREAS DESIGNATED TO BE USED FOR AN INFILTRATION BMP.
- 3. ALL EXCAVATION WITHIN THE LIMITS OF ANY INFILTRATION BMP SHALL BE PERFORMED WITH THE LIGHTEST PRACTICAL EXCAVATION EQUIPMENT. ALL EXCAVATION EQUIPMENT SHALL BE PLACED OUTSIDE THE LIMITS OF THE BASIN WHERE FEASIBLE. THE USE OF LIGHT-WEIGHT, RUBBER-TIRED EQUIPMENT (LESS THAN 8 PSI APPLIED TO THE GROUND SURFACE) IS RECOMMENDED WITHIN THE BASIN
- 4. THE SEQUENCE OF SITE CONSTRUCTION SHALL BE COORDINATED WITH BASIN CONSTRUCTION TO ADHERE TO SEQUENCING
- 5. DURING THE FINAL GRADING OF AN INFILTRATION BASIN, THE BOTTOM OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND THEN SMOOTHED OUT WITH A LEVELING DRAW OR EQUIVALENT GRADING EQUIPMENT. ALL GRADING EQUIPMENT SHALL BE LOCATED OUTSIDE OF THE BASIN
- 6. FOLLOWING CONSTRUCTION OF AN INFILTRATION BASIN, SOIL INFILTRATION TESTING BY A LICENSED GEOTECHNICAL ENGINEER IS REQUIRED TO CERTIFY COMPLIANCE WITH THE DESIGN INFILTRATION RATES IN ACCORDANCE WITH APPENDIX E OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL, LATEST EDITION. IF THE FIELD INFILTRATION RATES ARE LOWER THAN THE RATE USED DURING DESIGN, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING IMMEDIATELY TO DETERMINE THE APPROPRIATE COURSE OF ACTION. 7. THE CONTRACTOR SHALL NOTIFY THE MUNICIPALITY TO DETERMINE
- EXCAVATION AND/OR SOIL INFILTRATION TESTING.

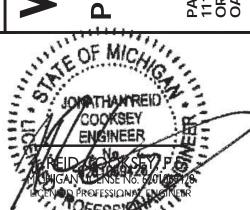
STORMWATER UNDERGROUND BMP CONSTRUCTION NOTES

- 1. THE CONTRACTOR SHALL INSTALL AND BACKFILL THE UNDERGROUND BMP IN ACCORDANCE WITH THE MANUFACTURER'S
- 2. UNDERGROUND BASINS SHALL UTILIZE A STONE BACKFILL WITH A MINIMUM VOID RATIO OF 40%. 3. NO CONSTRUCTION LOADING OVER UNDERGROUND BASINS IS PERMITTED UNTIL BACKFILL IS COMPLETE PER THE MANUFACTURER'S SPECIFICATIONS. NO VEHICLES SHALL BE STAGED OR OPERATE FROM



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I" = 20' PROJECT ID: DET-230006

STORMWATER

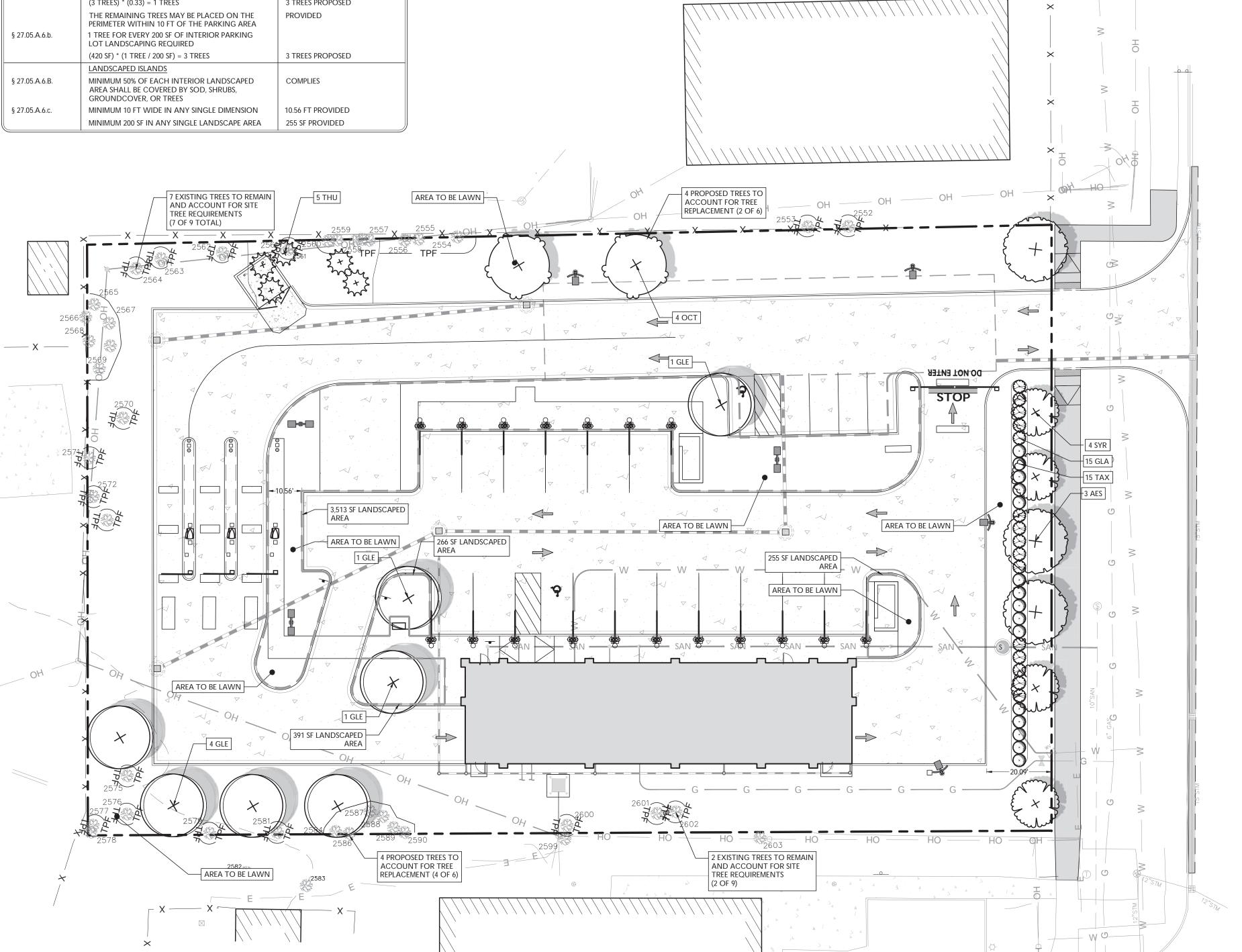
MANAGEMENT PLAN

DRAWING:

| CODE SECTION | REQUIRED | PROPOSED |
|-------------------|---|--------------------------|
| CODE SECTION | | PROPOSED |
| § 27.05.A.3.a.i. | LANDSCAPING REQUIREMENTS ALL PORTIONS OF LANDSCAPED AREAS SHALL BE PLANTED WITH GRASS, GROUNDCOVER, SHRUBBERY, OR OTHER PLANT MATERIAL | COMPLIES |
| § 27.05.A.3.a.ii. | A MIXTURE OF EVERGREEN AND DECIDUOUS TREES SHALL BE PLANTED THROUGHOUT THE LANDSCAPED AREAS | COMPLIES |
| | 1 Tree for every 3,000 SF of Landscaped Area | |
| | (21,205 SF) * (1 TREE / 3,000 SF) = 8 TREES | 9 EXISTING TREES TO REMA |
| | PARKING LOT LANDSCAPING | |
| § 27.05.A.4. | A GREENBELT SEPARATION AREA IS REQUIRED BETWEEN THE RIGHT OF WAY PROPERTY LINE AND THE NEAREST PORTION OF ANY OFF-STREET PARKING AREA FOR PARCELS FRONTING ROADS | COMPLIES |
| | MINIMUM WIDTH: 20 FT | 20.09 FT PROVIDED |
| § 27.05.A.4.a. | 1 TREE FOR EVERY 30 LF OF FRONTAGE | |
| | LAPEER ROAD: 188 FT | |
| | (188 FT) * (1 TREE / 30 FT FRONTAGE) = 7 TREES | 7 TREES PROPOSED |
| § 27.05.A.4.b. | A HEDGE, WALL, DECORATIVE METAL FENCE, BERM, OR OTHER LANDSCAPE ELEMENTS WITH A MINIMUM HEIGHT OF 30 INCHES SHALL BE REQUIRED TO REDUCE THE VISUAL EFFECT OF PARKED CARS | HEDGE PROVIDED |
| § 27.05.A.4.c. | THE REMAINDER OF THE REQUIRED LANDSCAPE AREA SHALL BE PLANTED WITH GRASS, GROUNDCOVER, OR OTHER LANDSCAPE MATERIAL | COMPLIES |
| § 27.05.A.4.e. | AREAS ADJACENT TO REQUIRED LANDSCAPED AREAS AND GREENBELTS SHALL BE PLANTED WITH GRASS OR OTHER SUITABLE GROUNDCOVER | COMPLIES |
| | INTERIOR PARKING LOT LANDSCAPING | |
| § 27.05.A.6.a. | OFF-STREET PARKING AREAS WITH MORE THAN 20 PARKING SPACES SHALL PROVIDE MINIMUM 20 SF OF INTERIOR LANDSCAPING PER PARKING SPACE | |
| | (21 SPACES) * (20 SF) = 420 SF | 3,904 SF PROVIDED |
| | MINIMUM 33% OF THE TREES REQUIRED FOR SCREENING SHALL BE PLACED ON THE INTERIOR OF THE PARKING AREA | |
| | (3 TREES) * (0.33) = 1 TREES | 3 TREES PROPOSED |
| 0.07.05.4.4.1 | THE REMAINING TREES MAY BE PLACED ON THE PERIMETER WITHIN 10 FT OF THE PARKING AREA | PROVIDED |
| § 27.05.A.6.b. | 1 TREE FOR EVERY 200 SF OF INTERIOR PARKING LOT LANDSCAPING REQUIRED | |
| | (420 SF) * (1 TREE / 200 SF) = 3 TREES | 3 TREES PROPOSED |
| | LANDSCAPED ISLANDS | |
| § 27.05.A.6.B. | MINIMUM 50% OF EACH INTERIOR LANDSCAPED AREA SHALL BE COVERED BY SOD, SHRUBS, GROUNDCOVER, OR TREES | COMPLIES |
| § 27.05.A.6.c. | MINIMUM 10 FT WIDE IN ANY SINGLE DIMENSION | 10.56 FT PROVIDED |
| | MINIMUM 200 SF IN ANY SINGLE LANDSCAPE AREA | 255 SF PROVIDED |

| | | | PLANT SCHEDU | LE | | |
|------------------|------|-----|---|--------------------------|---------------|-----------|
| DECIDUOUS TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE | CONTAINER |
| + | ОСТ | 2 | ACER RUBRUM `OCTOBER GLORY` | OCTOBER GLORY RED MAPLE | 2" - 2.5" CAL | B&B |
| X | AES | 3 | AESCULUS HIPPOCASTANUM | EUROPEAN HORSECHESTNUT | 2" - 2.5" CAL | B&B |
| + | GLE | 7 | GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' | SHADEMASTER HONEY LOCUST | 2" - 2.5" CAL | B&B |
| EVERGREEN TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE | CONTAINER |
| 37+4 4 | THU | 5 | THUJA STANDISHII X PLICATA `GREEN GIANT` | GREEN GIANT ARBORVITAE | 7` - 8` HT | B&B |
| FLOWERING TREES | CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE | CONTAINER |
| (+) | SYR | 4 | SYRINGA RETICULATA | JAPANESE TREE LILAC | 1.5" - 2" CAL | B&B |
| EVERGREEN SHRUBS | CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE | CONTAINER |
| 0 | GLA | 15 | ILEX GLABRA `COMPACTA` | COMPACT INKBERRY | 24" - 30" | POT |
| <u> </u> | TAX | 15 | TAXUS X MEDIA 'DENSIFORMIS' | DENSE ANGLO-JAPANESE YEW | 24" - 30" | POT |

NOTE: IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN ON THE LANDSCAPE PLAN AND WITHIN THE PLANT LIST, THE PLAN SHALL DICTATE.





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

ORION TOWNSHIP LANDSCAPE MAINTENANCE NOTE:

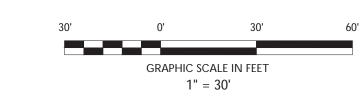
- INSTALLATION. LANDSCAPING SHALL BE INSTALLED IN A SOUND, WORKMAN-LIKE MANNER AND ACCORDING TO ACCEPTED GOOD PLANNING PROCEDURES, WITH THE QUALITY OF PLANT MATERIALS AS HEREINAFTER DESCRIBED. LANDSCAPED AREAS SHALL BE PROTECTED FROM VEHICULAR ENCROACHMENT BY USE OF WHEEL STOPS OR SOME OTHER MEANS. LANDSCAPED AREAS SHALL BE ELEVATED ABOVE THE PAVEMENT TO A HEIGHT ADEQUATE TO PROTECT PLANT MATERIALS FROM SNOW REMOVAL OPERATIONS, SALT, AND OTHER HAZARDS. IF BUILDING OR PAVING CONSTRUCTION IS COMPLETED IN AN OFF-PLANTING SEASON, A TEMPORARY CERTIFICATE OF OCCUPANCY MAY BE ISSUED ONLY AFTER THE OWNER PROVIDES A PERFORMANCE GUARANTEE TO ENSURE INSTALLATION OF REQUIRED LANDSCAPING IN THE NEXT PLANTING SEASON.
- 2. MAINTENANCE. THE OWNER OF LANDSCAPING REQUIRED BY THIS ORDINANCE SHALL MAINTAIN THE LANDSCAPING IN A HEALTHY, NEAT, AND ORDERLY APPEARANCE, FREE FROM REFUSE AND DEBRIS. ALL UNHEALTHY AND DEAD PLANT MATERIAL SHALL BE REPLACED IN THE NEXT APPROPRIATE PLANTING PERIOD. MAINTENANCE OF LANDSCAPED AREAS IN PUBLIC RIGHTS-OF-WAY ADJACENT TO REQUIRED LANDSCAPE AREAS SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE ADJACENT PRIVATE PROPERTY,

IRRIGATION NOTE:

1. IRRIGATION LIMITS TO INCLUDE ALL MAINTAINED LAWN AND LANDSCAPE BEDDING AREAS. IRRIGATION CONTRACTOR TO PROVIDE A DESIGN FOR AN IRRIGATION SYSTEM SEPARATING PLANTING BEDS FROM LAWN AREA. PRIOR TO CONSTRUCTION, DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE DESIGNER FOR REVIEW AND APPROVAL. WHERE POSSIBLE, DRIP IRRIGATION AND OTHER WATER CONSERVATION TECHNIQUES SUCH AS RAIN SENSORS SHALL BE IMPLEMENTED. CONTRACTOR TO VERIFY MAXIMUM ON SITE DYNAMIC WATER PRESSURE AVAILABLE MEASURED IN PSI. PRESSURE REDUCING DEVICES OR BOOSTER PUMPS SHALL BE PROVIDED TO MEET SYSTEM PRESSURE REQUIREMENTS. DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, CONTROLLERS, AND SLEEVES WITHIN HARDSCAPE AREAS.

LANDSCAPING NOTES

- 1. THE CONTRACTOR SHALL RESTORE ALL DISTURBED GRASS AND LANDSCAPED AREAS TO MATCH EXISTING CONDITIONS UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET.
- 2. THE CONTRACTOR SHALL RESTORE ALL DISTURBED LAWN AREAS WITH A MINIMUM 4 INCH LAYER OF TOPSOIL AND SEED. 3. THE CONTRACTOR SHALL RESTORE MULCH AREAS WITH A MINIMUM
- 3 INCH LAYER OF MULCH . 4. THE MAXIMUM SLOPE ALLOWABLE IN LANDSCAPE RESTORATION AREAS SHALL BE 3 FEET HORIZONTAL TO 1 FOOT VERTICAL (3:1
- SLOPE) UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. 5. THE CONTRACTOR IS REQUIRED TO LOCATE ALL SPRINKLER HEADS IN AREA OF LANDSCAPING DISTURBANCE PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL RELOCATE SPRINKLER HEADS AND LINES IN ACCORDANCE WITH OWNER'S DIRECTION WITHIN AREAS OF DISTURBANCE.
- 6. THE CONTRACTOR SHALL ENSURE THAT ALL DISTURBED LANDSCAPED AREAS ARE GRADED TO MEET FLUSH AT THE ELEVATION OF WALKWAYS AND TOP OF CURB ELEVATIONS EXCEPT UNLESS INDICATED OTHERWISE WITHIN THE PLAN SET. NO ABRUPT CHANGES IN GRADE ARE PERMITTED IN DISTURBED LANDSCAPING

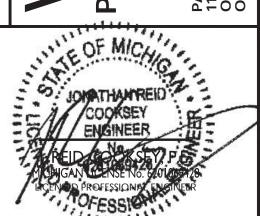


| 4 07/11/2023 EM RESUBMISSION FOR SITE PLAN APPROVAL 3 04/20/2023 EM SITE PLAN APPROVAL 2 04/10/2023 EM OWNER REVIEW 1 03/21/2023 EM PRELIMINARY FIRE MARSHAL REVIEW ISSUE DATE BY DESCRIPTION |
|---|
| 07/11/2023 EM 04/20/2023 EM 04/10/2023 EM 03/21/2023 EM |
| |
| RESUBMISSION FOR SITE PLAN APPROVAL SITE PLAN APPROVAL OWNER REVIEW PRELIMINARY FIRE MARSHAL REVIEW DESCRIPTION |
| |

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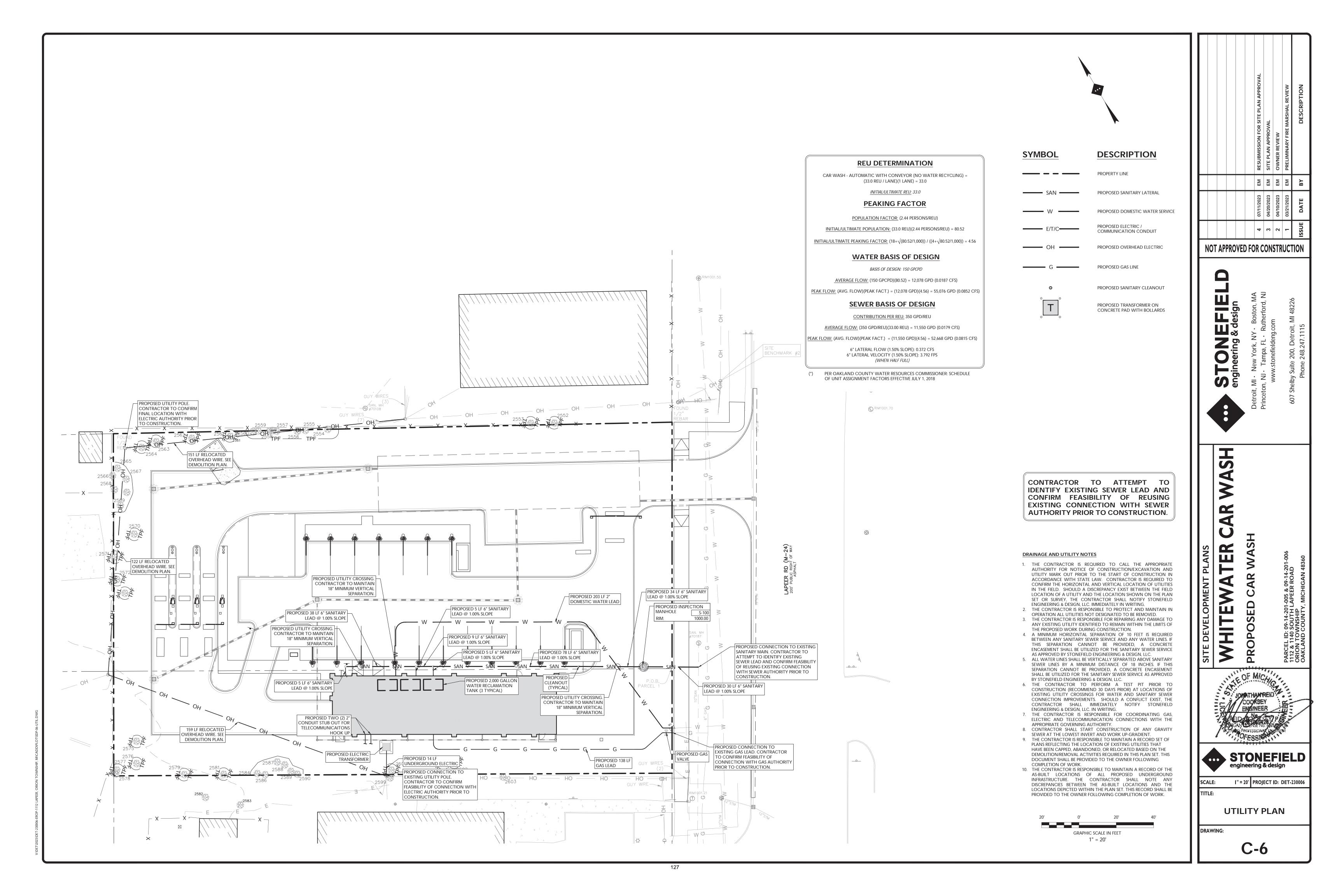




I" = 30' PROJECT ID: DET-230006

LANDSCAPING PLAN

DRAWING:



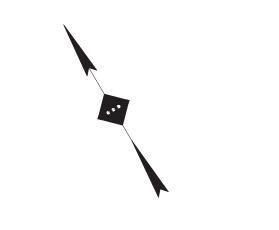




| ′ | | | PROPOSED LUMINAIRE | SCHEDULE | | | |
|--------|-------|----------|--|--------------|------|---------------------------------|----------------------------|
| SYMBOL | LABEL | QUANTITY | SECURITY LIGHTING | DISTRIBUTION | LLF | MANUFACTURER | IES FILE |
| | А | 4 | MIRADA MEDIUM LED AREA LIGHT 24L LUMEN PACKAGE W/ HOUSE-SIDE SHIELD - SINGLE | FT | 0.90 | LSI INDUSTRIES | MRM-LED-24L-SIL-FT-40-70CR |
| | В | 3 | MIRADA MEDIUM LED AREA LIGHT 24L LUMEN PACKAGE W/ HOUSE-SIDE SHIELD - DOUBLE @180° | FT | 0.90 | LSI INDUSTRIES | MRM-LED-24L-SIL-FT-40-70CR |
| | С | 18 | LOW-PROFILE, DRIVERLESS LINKABLE IP67 LED LINEAR LUMINAIRE | N/A | 0.90 | G & G INDUSTRIAL LIGHTING | GPX6-SO |
| | D | 11 | MIRADA OUTDOOR LED WALL SCONCE 3L LUMEN PACKAGE | FT | 0.90 | LSI INDUSTRIES | XWM-FT-LED-03L-30 |
| | E | 2 | MIRADA OUTDOOR LED WALL SCONCE 8L LUMEN PACKAGE (* SECURITY LIGHTING) | FT | 0.90 | LSI INDUSTRIES | XWM-FT-LED-08L-30 |

MOTION ACTIVATED SECURITY LIGHITNG NOT INCLUDED WITHIN LIGHTING CALCUALTIONS

| | LIGHTING S | TATISTICS | STICS | | | | | | |
|----------------|------------|-----------|---------|--|--|--|--|--|--|
| DESCRIPTION | AVERAGE | MINIMUM | MAXIMUM | | | | | | |
| OVERALL PARCEL | 3.64 FC | 0.0 FC | 20.0 FC | | | | | | |
| PROPERTY LINE | 0.17 FC | 0.0 FC | 1.0 FC | | | | | | |



| YMBOL | DESCRIPTIO |
|-------|------------|
| _ | • |

PROPOSED LIGHTING FIXTURE

PROPERTY LINE

A (XX') (MOUNTING HEIGHT)

> PROPOSED LIGHTING INTENSITY (FOOTCANDLES)

| LIGHTING REQUIREMENTS | | | | |
|-----------------------|---|----------|--|--|
| CODE SECTION | REQUIRED | PROPOSED | | |
| § 27.11.E.1. | EXTERIOR LIGHTING SHALL BE FULLY SHIELDED AND DIRECTED DOWNWARD TO PREVENT OFF-SITE GLARE | COMPLIES | | |
| § 27.11.E.1.a. | MAXIMUM PROPERTY LINE (RESIDENTIAL): | N/A | | |
| | 0.3 FC | | | |
| § 27.11.E.1.a. | MAXIMUM PROPERTY LINE (NON-RESIDENTIAL): | 1.0 FC | | |
| | 1.0 FC | | | |
| § 27.11.E.1.a. | MINIMUM ILLUMINATION OF LIGHTED AREAS: | 1.0 FC | | |
| | 0.3 FC | | | |
| § 27.11.E.1.a. | MINIMUM AVERAGE (11-99 SPACES): | 3.64 FC | | |
| | 0.6 FC | | | |
| § 27.11.E.1.d. | MAXIMUM HEIGHT: | 18 FT | | |
| | 20 FT OR BUILDING HEIGHT, WHICHEVER IS LESS | | | |
| § 27.11.E.2.a. | MAXIMUM INTENSITY: | 20.0 FC | | |
| | 20.0 FC | | | |

| SECURITY CAMERAS TO BE MOUNTED ON EACH POLE 10 FT ABOVE GRADE | | |
|---|----------------------|-------------------------|
| POLE LABEL | NUMBER OF CAMERAS | DIRECTION OF CAMERAS |
| A-1 | | |
| A-2 | | |
| A-3 | | |
| A-4 | | |
| B-1 | | |
| B-2 | | |
| B-3 | | |

EXCEPT WHERE USED FOR SECURITY OR SAFETY PURPOSES, AS APPROVED IN ADVANCE BY THE PLANNING COMMISSION, ALL OUTDOOR LIGHTING FIXTURES, EXISTING OR HEREAFTER INSTALLED AND MAINTAINED UPON PRIVATE PROPERTY WITHIN COMMERCIAL, INDUSTRIAL AND OFFICE ZONING DISTRICTS, SHALL BE TURNED OFF OR REDUCED IN LIGHTING INTENSITY BETWEEN 11:00 P.M. AND SUNRISE, EXCEPT WHEN USED FOR COMMERCIAL AND INDUSTRIAL USES, SUCH AS IN SALES, ASSEMBLY, AND REPAIR AREAS, WHERE SUCH USE CONTINUES AFTER 11:00 P.M., BUT ONLY FOR SO LONG AS SUCH USE CONTINUES.

GENERAL LIGHTING NOTES

ENGINEERING & DESIGN, LLC.

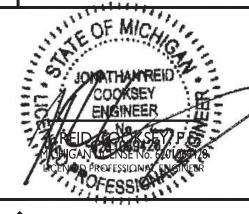
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH ARE WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
- 2. WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
- 3. UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS: • LIGHT EMITTING DIODES (LED): 0.90 HIGH PRESSURE SODIUM:
- METAL HALIDE: 4. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IN WRITING, PRIOR TO THE START OF CONSTRUCTION,
- OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING/ PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS. 5. THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD



GRAPHIC SCALE IN FEET 1" = 20'

NOT APPROVED FOR CONSTRUCTION

ATER





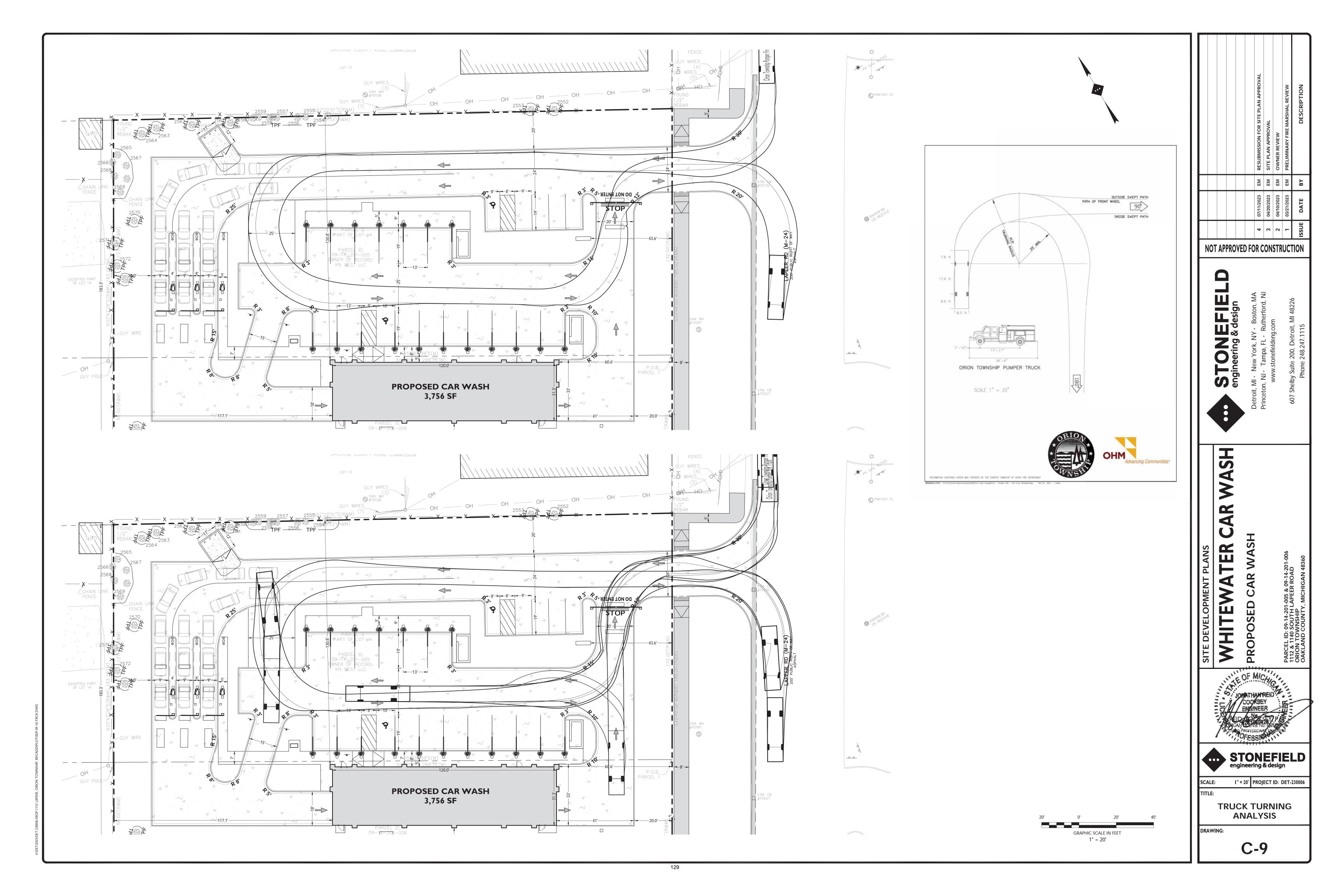
I" = 20' PROJECT ID: DET-230006

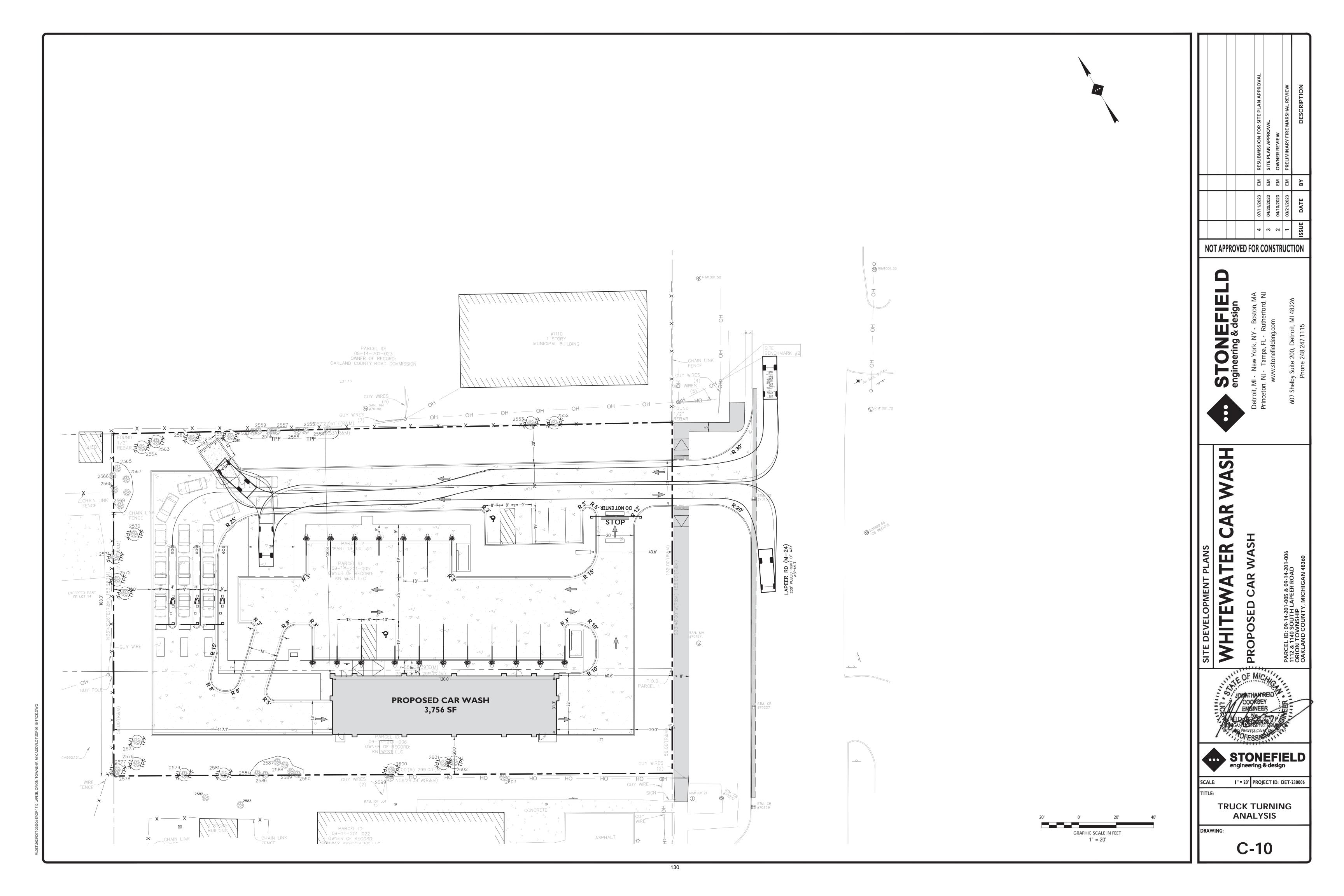
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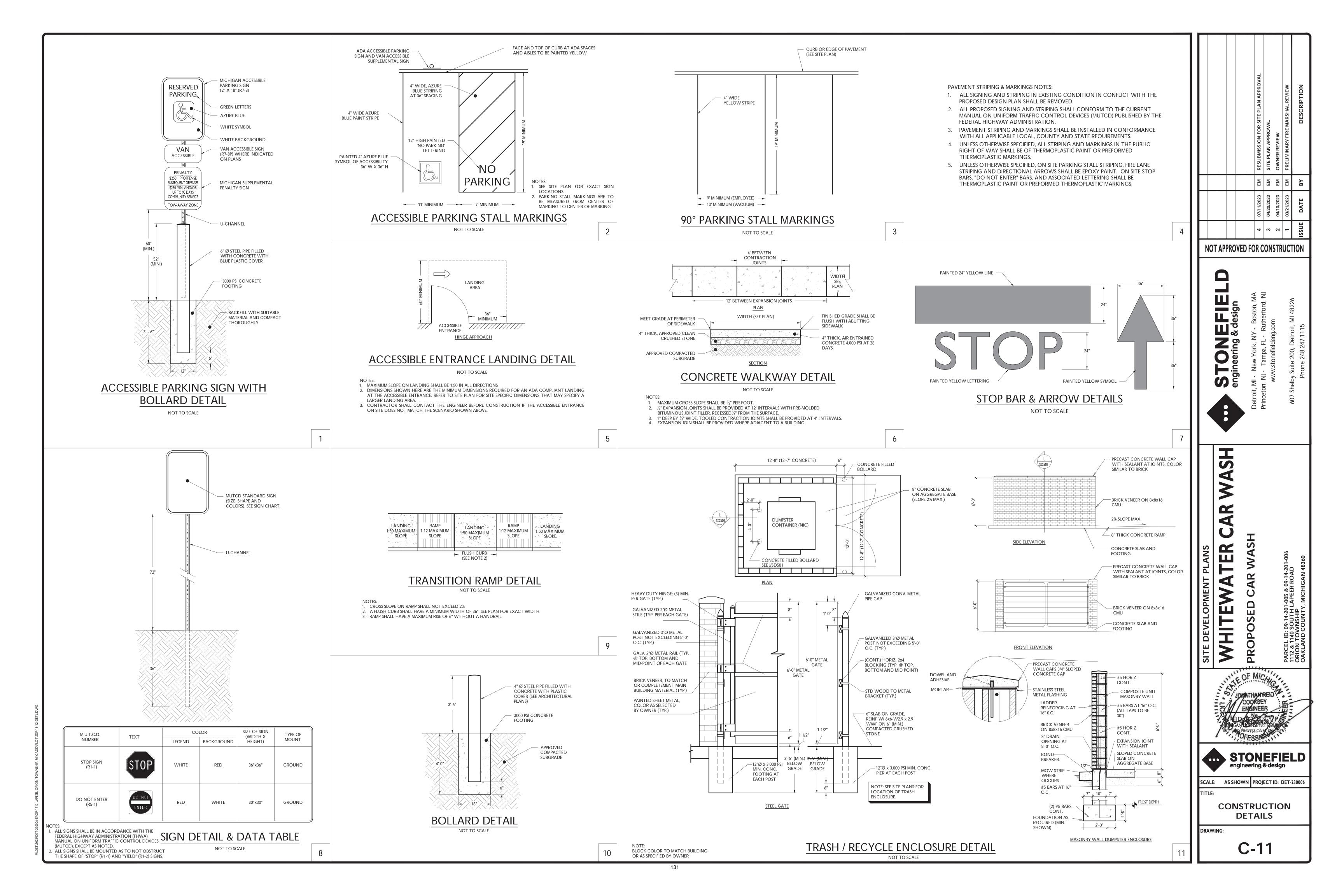
LIGHTING PLAN

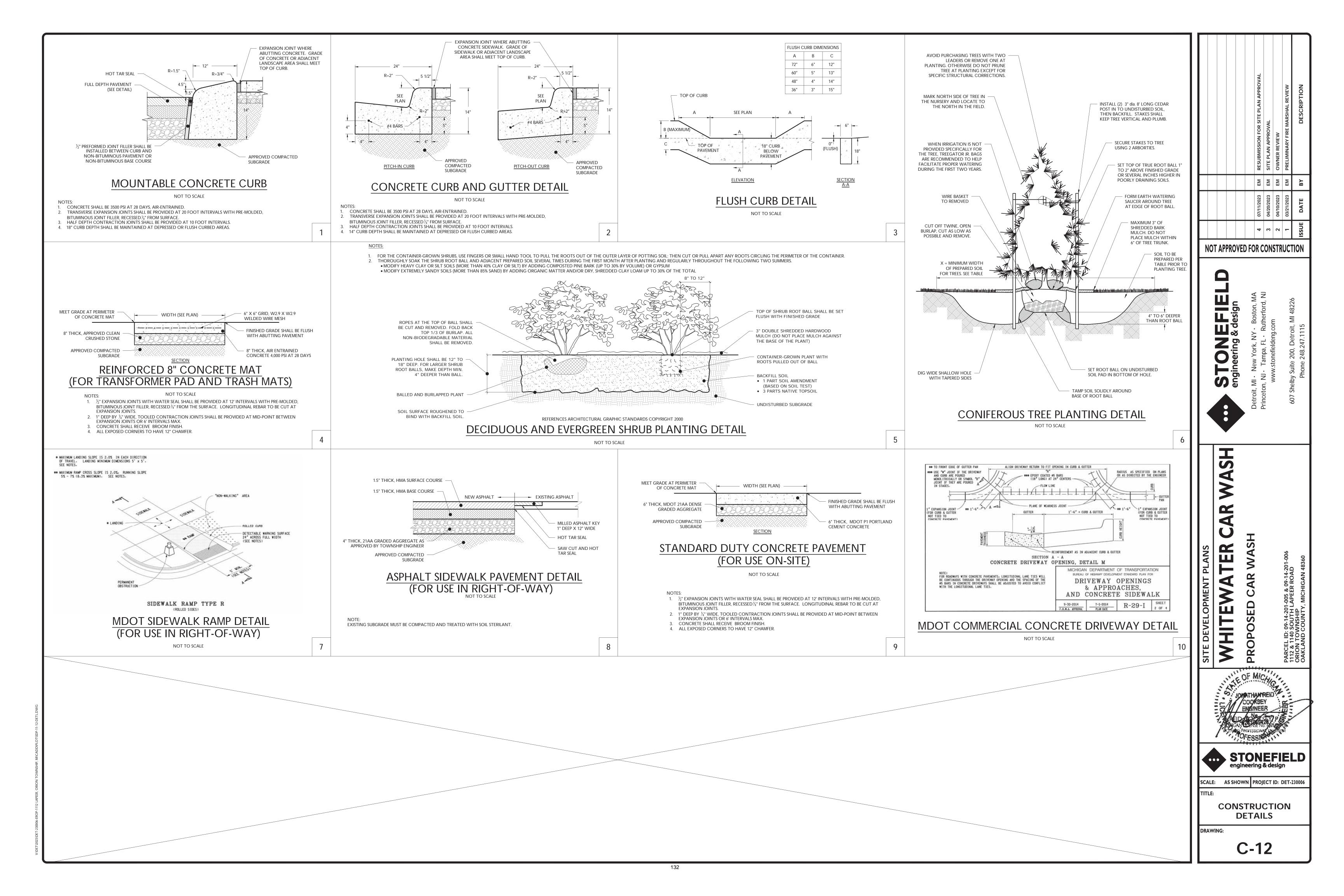
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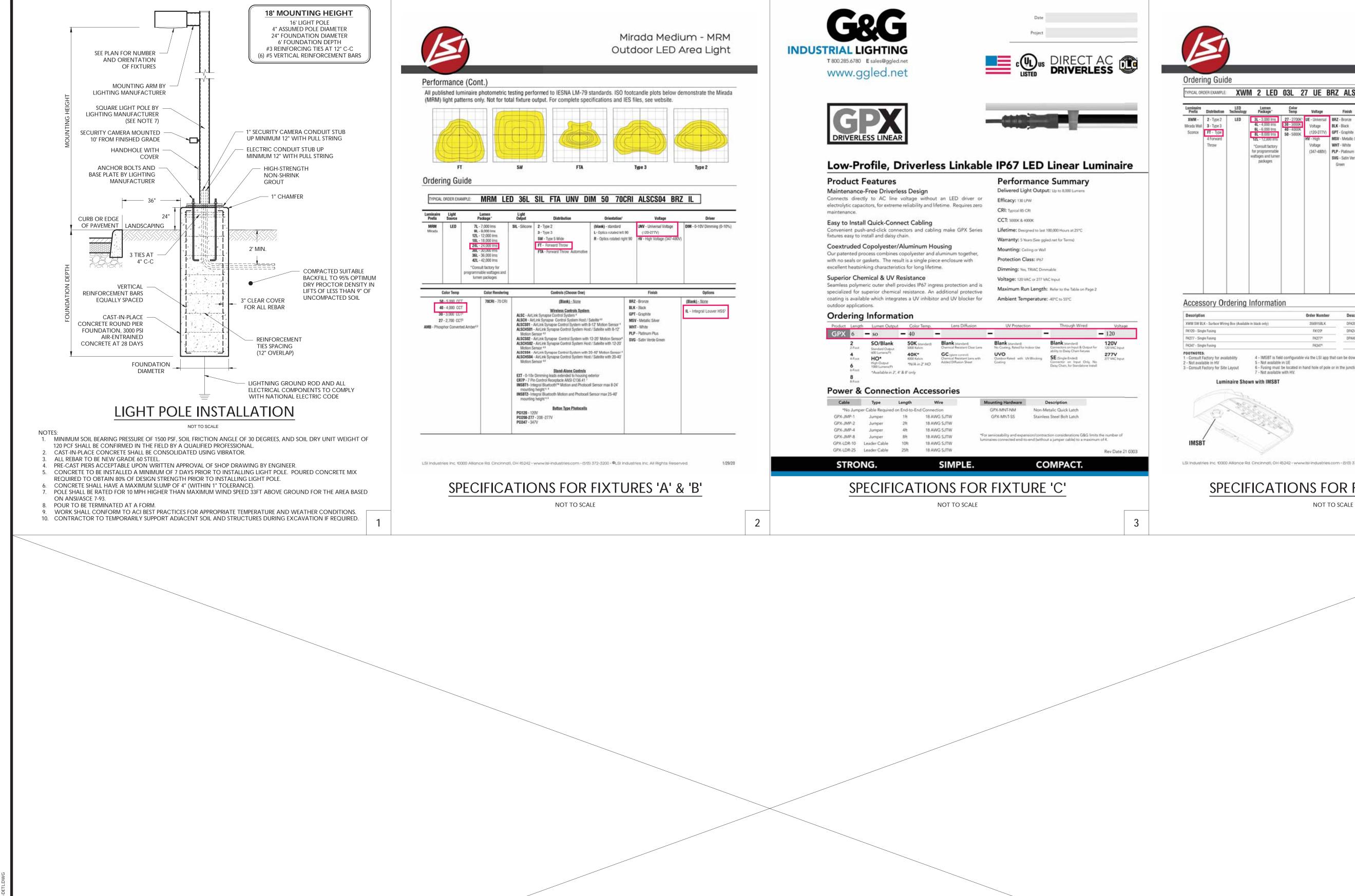
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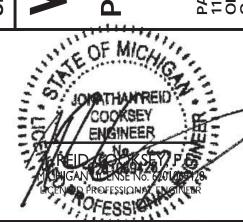
Mirada Wall Sconce - XWM Outdoor LED Wall Sconce TYPICAL ORDER EXAMPLE: XWM 2 LED 03L 27 UE BRZ ALSC Luminaire LED Lumen Color Prefix Distribution Technology Package Temp Voltage Wireless Controls B8 - Battery Back-up CWBB - Cold Weather Battery ALSC - Airlink Synapse Control System? (120-277V) GPT - Graphite ALSCS01 - AirLink Synapse Control System with XPMA - Pole Mounting Bracket Voltage WHT - White ALSCS02 - AirLink Synapse Control System with (347-480V) PLP - Platinum Plus 12-20' Motion Sensor 2 SVG - Satin Verde Standalone Controls DIM - 0-10v Dimming (from external signal) IMSBT1- Integral Bluetooth™ Motion and Photocell Sensor max 8-24" mounting height 1-4

IMSBT2- Integral Bluetooth Motion and Photocell
Sensor max 25-40" mounting height 1-4 Button Type Photocells PCI120 - 120V PCI208-277 - 208 -277V PCI347 - 347V **Lutron Limelight Controls** LLC - LimeLight Integral Wireless Radio Control by Lutron*

LLCS1 – Limelight Integral Wireless Radio Control and PIR Motion/Daylight Sensor by Lutron 8-15* mt height!

LLCS2 – Limelight Integral Wireless Radio Control
and PIR Motion/Daylight Sensor by Lutron 16-30' and PIR Motion/Daylight Sensor by Lutron 31-40' mt height² Order Number Order Number DFK208 - Double Fusing DFK240 - Double Fusing DFK240* DFK480 - Double Fusing DFK480* 4 - IMSBT is field configurable via the LSI app that can be downloaded from your smartphone's native app store. 5 - Not available in UE
6 - Fusing must be located in hand hole of pole or in the junction box.
7 - Not available with HV. LSI industries Inc. 10000 Alfance Rd. Cincinnati, 0H (5242 - www.isi-industries.com - (513) 372-3200 - ©LSI Industries Inc. All Rights Reserved. SPECIFICATIONS FOR FIXTURE 'D' & 'E'

NOT APPROVED FOR CONSTRUCTION



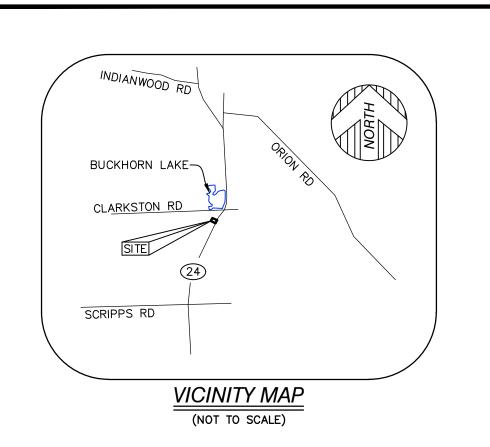


SCALE: AS SHOWN PROJECT ID: DET-230006

CONSTRUCTION **DETAILS**

DRAWING:

C-13



PARKING

STANDARD PARKING = 8 STALLS HANDICAP PARKING = 1 STALL (PARKING IS OFFSITE)

PARCEL AREA

 $16,747\pm$ SQUARE FEET = $0.38\pm$ ACRES

PARCEL 2 38,786± SQUARE FEET = 0.89± ACRES

BASIS OF BEARING

SOUTH 33°48'00" WEST, BEING THE WESTERLY LINE OF (M-24) SOUTH LAPEER RD, AS PLATTED.

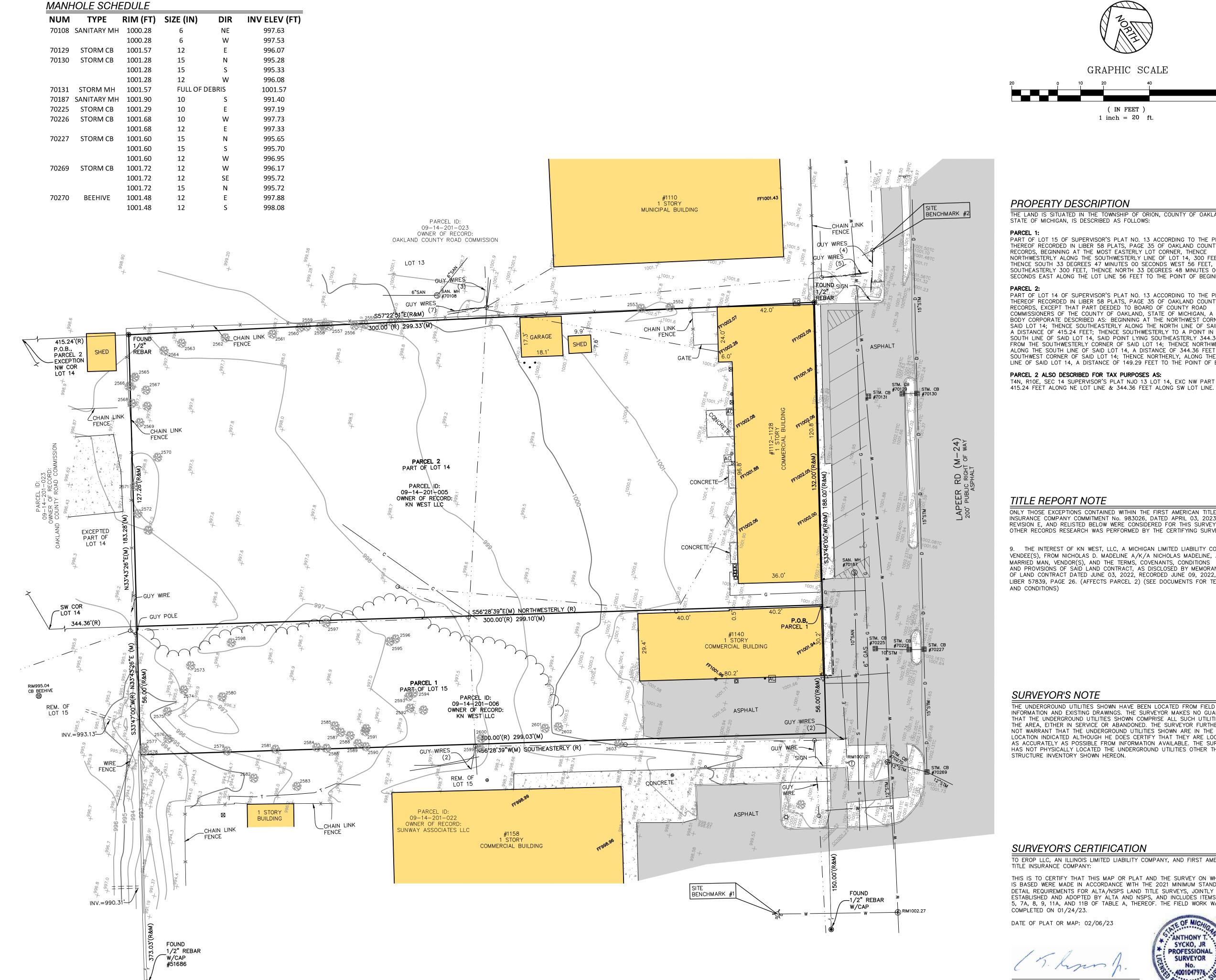
BENCHMARK

SITE BENCHMARK #1
ARROW ON HYDRANT SOUTH OF SITE IN PARKING LOT BLDG #1158. ELEVATION = 1002.66' (NAVD 88)

SITE BENCHMARK #2 MAG NAIL IN SOUTH SIDE OF UTILITY POLE AT NE CORNER OF SITE. ELEVATION = 1002.73' (NAVD 88)

LEGEND

| LEGEND | |
|--------------------|-------------------------------|
| • | FOUND MONUMENT (AS NOTED) |
| (R&M) | RECORD AND MEASURED DIMENSION |
| (R) | RECORD DIMENSION |
| (M) | MEASURED DIMENSION |
| ×0.00 | GROUND ELEVATION |
| © | ELECTRIC MANHOLE |
| | ELECTRIC METER |
| 0 | UTILITY POLE |
| | GAS METER |
| ① | TELEPHONE MANHOLE |
| $^{\circledR}$ | TRAFFIC SIGNAL MANHOLE |
| ⊗ | CLEANOUT |
| S | SANITARY MANHOLE |
| # | ROUND CATCH BASIN |
| = | SQUARE CATCH BASIN |
| \not | FIRE HYDRANT |
| (W) | WATER GATE MANHOLE |
| (W) (AC) | AIR CONDITIONING UNIT |
| • | BOLLARD |
| | SINGLE POST SIGN |
| - 0 0 - | DOUBLE POST SIGN |
| ** | DECIDUOUS TREE (AS NOTED) |
| 444 | PARCEL BOUNDARY LINE |
| | PLATTED LOT LINE |
| | BUILDING |
| | BUILDING OVERHANG |
| | CONCRETE CURB |
| | RAISED CONCRETE |
| | PARKING |
| | EDGE OF CONCRETE (CONC.) |
| | EDGE OF ASPHALT (ASPH.) |
| X | FENCE (AS NOTED) |
| | OVERHEAD UTILITY LINE |
| — Е — | |
| c | |
| T | COMMUNICATION LINE |
| | GAS LINE |
| D | SANITARY LINE STORM LINE |
| | - · - · · · · · - · · - |
| W | MINOR CONTOUR LINE |
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| | BUILDING AREA |
| | |





GRAPHIC SCALE

(IN FEET) 1 inch = 20 ft.

PROPERTY DESCRIPTION

THE LAND IS SITUATED IN THE TOWNSHIP OF ORION, COUNTY OF OAKLAND, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

PARCEL 1:

PART OF LOT 15 OF SUPERVISOR'S PLAT NO. 13 ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 58 PLATS, PAGE 35 OF OAKLAND COUNTY RECORDS, BEGINNING AT THE MOST EASTERLY LOT CORNER, THENCE NORTHWESTERLY ALONG THE SOUTHWESTERLY LINE OF LOT 14, 300 FEET, THENCE SOUTH 33 DEGREES 47 MINUTES 00 SECONDS WEST 56 FEET, THENCE SOUTHEASTERLY 300 FEET, THENCE NORTH 33 DEGREES 48 MINUTES 00 SECONDS EAST ALONG THE LOT LINE 56 FEET TO THE POINT OF BEGINNING.

PART OF LOT 14 OF SUPERVISOR'S PLAT NO. 13 ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 58 PLATS, PAGE 35 OF OAKLAND COUNTY RECORDS. EXCEPT THAT PART DEEDED TO BOARD OF COUNTY ROAD COMMISSIONERS OF THE COUNTY OF OAKLAND, STATE OF MICHIGAN, A PUBLIC BODY CORPORATE DESCRIBED AS: BEGINNING AT THE NORTHWEST CORNER OF SAID LOT 14; THENCE SOUTHEASTERLY ALONG THE NORTH LINE OF SAID LOT 14, A DISTANCE OF 415.24 FEET; THENCE SOUTHWESTERLY TO A POINT IN THE SOUTH LINE OF SAID LOT 14, SAID POINT LYING SOUTHEASTERLY 344.36 FEET FROM THE SOUTHWESTERLY CORNER OF SAID LOT 14; THENCE NORTHWESTERLY, ALONG THE SOUTH LINE OF SAID LOT 14, A DISTANCE OF 344.36 FEET TO THE SOUTHWEST CORNER OF SAID LOT 14; THENCE NORTHERLY, ALONG THE WEST LINE OF SAID LOT 14, A DISTANCE OF 149.29 FEET TO THE POINT OF BEGINNING.

PARCEL 2 ALSO DESCRIBED FOR TAX PURPOSES AS: T4N, R10E, SEC 14 SUPERVISOR'S PLAT NJO 13 LOT 14, EXC NW PART MEAS

TITLE REPORT NOTE

ONLY THOSE EXCEPTIONS CONTAINED WITHIN THE FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT No. 983026, DATED APRIL 03, 2023 REVISION E, AND RELISTED BELOW WERE CONSIDERED FOR THIS SURVEY. NO OTHER RECORDS RESEARCH WAS PERFORMED BY THE CERTIFYING SURVEYOR.

9. THE INTEREST OF KN WEST, LLC, A MICHIGAN LIMITED LIABILITY COMPANY, VENDEE(S), FROM NICHOLAS D. MADELINE A/K/A NICHOLAS MADELINE, A MARRIED MAN, VENDOR(S), AND THE TERMS, COVENANTS, CONDITIONS AND PROVISIONS OF SAID LAND CONTRACT, AS DISCLOSED BY MEMORANDUM OF LAND CONTRACT DATED JUNE 03, 2022, RECORDED JUNE 09, 2022, IN LIBER 57839, PAGE 26. (AFFECTS PARCEL 2) (SEE DOCUMENTS FOR TERMS AND CONDITIONS)

SURVEYOR'S NOTE

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

SURVEYOR'S CERTIFICATION

TO EROP LLC, AN ILLINOIS LIMITED LIABILITY COMPANY, AND FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 4, 5, 7A, 8, 9, 11A, AND 11B OF TABLE A, THEREOF. THE FIELD WORK WAS COMPLETED ON 01/24/23.

DATE OF PLAT OR MAP: 02/06/23

ANTHONY T. SYCKO, JR., P.S. PROFESSIONAL SURVEYOR MICHIGAN LICENSE NO. 47976 22556 GRATIOT AVE., EASTPOINTE, MI 48021 TSycko@kemtec-survey.com



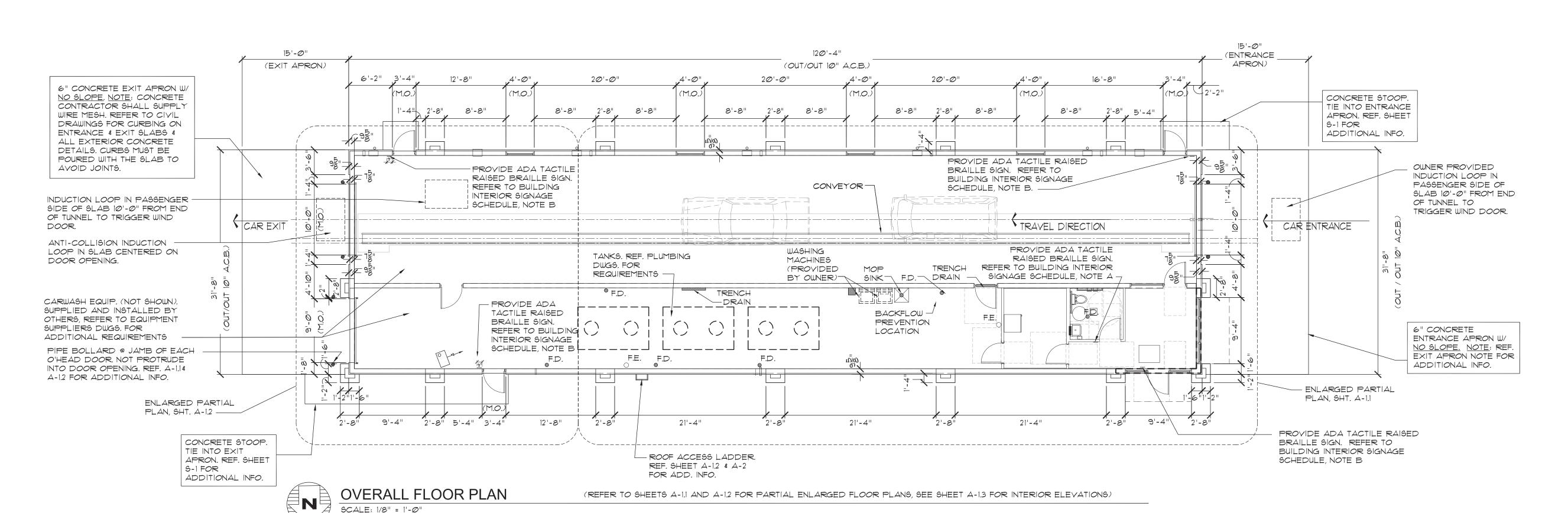
1 OF 1 SHEETS

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NSPS FOR: STON SOUTH LA

134



GENERAL FLOOR PLAN NOTES:

ALL DIMENSIONS ARE TAKEN TO FACE OF A.C.B. (ARCHITECTURAL CONCRETE BRICK), CMU, OR STUD UNLESS NOTED OTHERWISE.

- 2. CONTRACTOR SHALL LOCATE ALL CUT A.C.B.'s (ARCHITECTURAL CONCRETE BRICKS) BEHIND PILASTERS TO ALLOW FOR APPROPRIATE ALIGNMENT OF THE 8" AND 10" A.C.B.'s
- 3. CONTRACTOR SHALL PROVIDE AND INSTALL FIRE TREATED WOOD SUPPORT BLOCKING OR 16 GA. STEEL PLATE BLOCKING IN ALL WALLS RECEIVING ANCHORS OF CASEWORK, SHELVING, GRAB BARS AND THE LIKE. REFER TO PLANS AND COORDINATE W/OWNER PRIOR TO CONCEALING WALLS. ADDITIONALLY, COORDINATE WITH ALL OTHER TRADES TO DETERMINE LOCATIONS OF ADDITIONAL STEEL STUDS.
- 3. NEW TOILET ROOM SHALL BE CONSTRUCTED IN ACCORDANCE WITH 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN (ADAAG) INCLUDING BUT NOT LIMITED TO GRAB BARS, FIXTURE HEIGHTS, CLEAR FLOOR ACCESS, AND 60" DIAMETER TURN AROUND.
- 4. CONTRACTOR SHALL INSTALL NEW GYPSUM BOARD INSTALLATIONS IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS FOR LOCATING GYPSUM BOARD CONTROL AND EXPANSION JOINTS, EXPANSION JOINTS SHALL NOT EXCEED 30'-0" O.C.
- 5. ALL INTERIOR WALLS (EXCEPT PLUMBING WALLS) SHALL BE ASSUMED TO BE 3 5/8" STEEL STUDS (NON COMBUSTIBLE) @ 16" O.C. WITH 5/8" WATER RESISTANT GYP. BD. EACH SIDE UNLESS OTHERWISE NOTED. PLUMBING WALLS SHALL BE 6" STEEL STUDS.
- 6. ALL DOORS SHALL BE EQUIPPED WITH LEVER STYLE LATCH (UNLESS NOTED OTHERWISE) IN ACCORDANCE WITH ADAAG (ACCESSIBILITY) GUIDELINES. ALL LOCK SETS SHALL BE PUSH BUTTON TYPE LOCKING MECHANISMS OR EQUIVALENT. INTERIOR KEYED LOCKS ARE NOT ALLOWED.
- 7. CONTRACTORS SHALL COORDINATE THEIR RESPECTIVE WORK WITH OTHER TRADES AND SHALL PROVIDE REQUIRED SUB SLAB PIPING, CONDUIT, PLUMBING, PIPE SLEEVES, FLOOR DRAINS AND THE LIKE AS REQUIRED PRIOR TO POURING NEW INTERIOR CONCRETE SLAB.
- 8. ALL WOOD BLOCKING AND/OR PLYWOOD/OSB INSTALLED IN CONCEALED PLACES SHALL BE OF THE FRTW TYPE (FIRE TREATED).
- 9. ALL NEW INSULATION SHALL HAVE A MAXIMUM FLAME SPREAD OF 25. SMOKE DEVELOPMENT RATINGS FOR ALL NEW INSULATION SHALL NOT EXCEED 450 (TYP.).
- 10. TENANT SHALL FURNISH BOTTLED WATER IN LIEU OF A WATER COOLER.

II. FIRE EXTINGUISHERS:

- A. PORTABLE FIRE EXTINGUISHERS SHALL BE PROVIDED ON SITE FOR THE DURATION OF CONSTRUCTION. EXTINGUISHERS SHALL BEAR THE LABEL OF AN APPROVED AGENCY.
- B. PERMANENT FIRE EXTINQUISHER (F.E.): PORTABLE FIRE EXTINGUISHER(S) SHALL BE PROVIDED ON SITE ON A PERMANENT BASIS, BEARING THE LABEL OF AN APPROVED AGENCY. EXTINGUISHER(S) SHALL BE WALL HUNG: W/ MFR'S STANDARD WALL BRACKET. LOCATIONS INDICATED ON PLANS ARE SCHEMATIC AND SUBJECT TO CHANGE PER LOCAL AUTHORITY'S REQUIREMENTS/DIRECTION.
- C. THE MAXIMUM TRAVEL DISTANCE TO A PERMANENT FIRE EXTINGUISHER SHALL NOT EXCEED 15 FEET.

 ADDITIONALLY, FIRE EXTINGUISHERS SHALL BE LOCATED WHERE THEY WILL BE READILY ACCESSIBLE

 AND IMMEDIATELY AVAILABLE FOR USE AND SHALL NOT BE OBSTRUCTED OR OBSCURED FROM VIEW.

 THESE LOCATIONS SHALL BE AMONG NORMAL PATHS OF TRAVEL.
- 12. TEMPERED SAFETY GLAZING SHALL BE PROVIDED IN ACCORDANCE WITH CODE INCLUDING BUT NOT LIMITED
- TO THE FOLLOWING:
- B. IN ANY GLASS PANEL THAT IS 18 INCHES OR LESS ABOVE AN ADJACENT WALKING SURFACE AND IS (9)

A. WITHIN 24 INCH ARC ALONG THE VERTICAL EDGE OF A DOOR.

- SQUARE FEET OR LARGER IN AREA.

 13. ANY TRANSACTION AND/OR SERVICE COUNTERS USED FOR TRANSACTION OF SELLING MERCHANDISE, MAKING PAYMENTS OR OTHER SIMILAR TYPES OF TRANSACTIONS SHALL HAVE A 3'-0" (MINIMUM) SECTION OF SAID
- 14. ALL INTERIOR FINISHES SHALL COMPLY WITH THE MICHIGAN BUILDING CODE (MBC) FOR FLAME SPREAD AND SMOKE DEVELOPMENT RATINGS FOR (B) BUSINESS USE GROUP AS FOLLOWS:
 - A. CORRIDORS = "B" + FLAME SPREAD OF 26-75+ SMOKE DEVELOPMENT = 0-450

COUNTER NOT EXCEEDING 2'-10" A.F.F. FOR USE BY THE PHYSICALLY DISABLED.

- B. ENCLOSED ROOMS/SPACES = "C"± FLAME SPREAD OF 16-200± SMOKE DEVELOPMENT = 0-450
- 15. ALL CAR WASH EQUIPMENT SHOWN IN ARCHITECTURAL PLANS AND/OR NOTED IN WASH BAY AND MECHANICAL ROOM SHOULD BE CONSIDERED SCHEMATIC AND ONLY FOR REFERENCE. CONTRACTOR SHALL REFER TO AND COORDINATE WITH CAR WASH EQUIPMENT DRAWINGS FURNISHED BY OTHERS FOR FINAL EQUIPMENT LAYOUT.

BUILDING INTERIOR SIGNAGE SCHEDULE:

PROVIDE THE FOLLOWING INTERIOR SIGNAGE:

- A. TOILET ROOM: PROVIDE ADA TACTILE RAISED BRAILLE UNISEX RESTROOM SIGN, ADJACENT TO DOOR. REFER TO
- DETAIL ON SHEET G-2.

 B. BUILDING EGRESS (EXIT) DOORS:
 PROVIDE ADA TACTILE RAISED BRAILLE
 SIGN STATING "EXIT" AND COMPLYING WITH
 ICC AIIT.I ADJACENT TO EACH BUILDING
 EXIT DOOR. REFER DETAIL ON SHEET G-2.

ROBERT E BYRGE

No.
1301070219



103 WIND HAVEN DR, STE 101 NICHOLASVILLE KY 40356 859.523.1500



PROJECT NUMBER

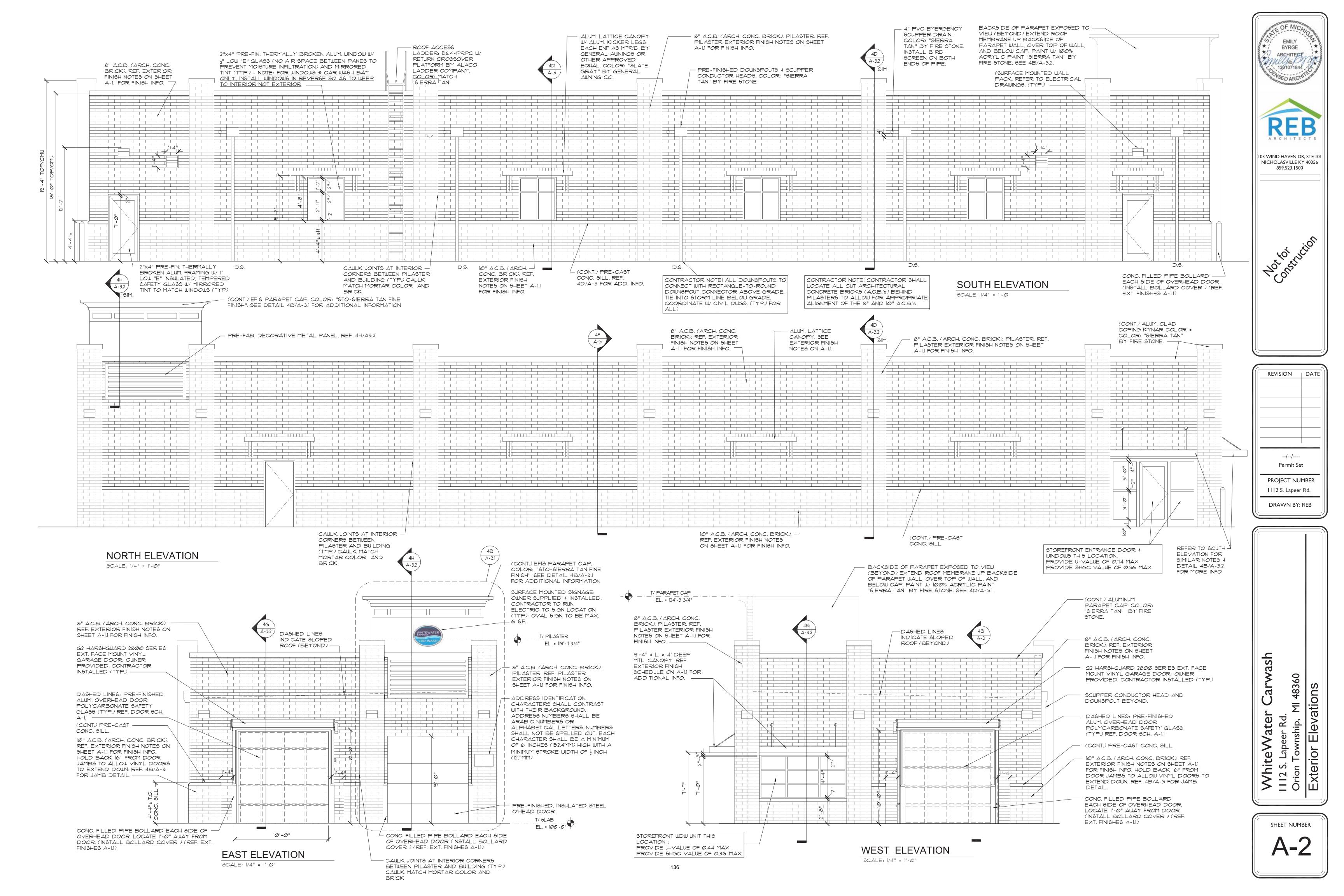
1112 S. Lapeer Rd.

DRAWN BY: REB

WhiteWater Carwash

SHEET NUMBER

483









2323 Joslyn Rd., Lake Orion MI 48360 www.oriontownship.org

Planning & Zoning Department

Phone: (248) 391-0304, ext. 5000

TO: The Charter Township of Orion Planning Commission

FROM: Tammy Girling, Planning & Zoning Director

DATE: August 7, 2023

RE: PC-23-22 Yatooma Oil Gas Station and Drive-Thru SLU & Site Plan

As requested, I am providing suggested motions for the abovementioned project. Please feel free to modify the language. The verbiage below could substantially change based upon the Planning Commissions' findings of facts for the project. Any additional findings of facts should be added to the motion below.

Gas Station Special Land Use (Ord. No. 78, Section 30.02)

Motion 1: I move that the Planning Commission **approve/deny** PC-23-22, Yatooma Oil Gas Station and Drive-Thru, Special Land Use request for a gas station, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015), for plans date stamped received July 26, 2023. This **approval/denial** is based on the following finding of facts:

- a. Compatibility with Adjacent Uses (Insert any findings of facts),
- b. Compatibility with Master Plan (Insert findings of facts),
- c. Adequate Public Services (Insert findings of facts),
- d. Impact on Traffic (Insert findings of facts),
- e. Detrimental Effects (Insert findings of facts),
- f. Enhancement of Surrounding Environment (Insert findings of facts),
- g. Isolation of Existing Land Use (Insert findings of facts).

If Approved:

This approval is subject to the following conditions (insert any additional conditions such as hours of operation, times of year, etc.)

Drive-Thru Special Land Use (Ord. No. 78, Section 30.02)

Motion 2: I move that the Planning Commission **approve/deny** PC-23-22, Yatooma Oil Gas Station and Drive-Thru, Special Land Use request for a drive-thru, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015), for plans date stamped received July 26, 2023. This **approval/denial** is based on the following finding of facts:

- a. Compatibility with Adjacent Uses (Insert any findings of facts),
- b. Compatibility with Master Plan (Insert findings of facts),
- c. Adequate Public Services (Insert flindings of facts),

- d. Impact on Traffic (Insert findings of facts),
- e. Detrimental Effects (Insert findings of facts),
- f. Enhancement of Surrounding Environment (Insert findings of facts),
- g. Isolation of Existing Land Use (Insert findings of facts).

If Approved:

This approval is subject to the following conditions (insert any additional conditions such as hours of operation, times of year, etc.)

Site Plan (Ord. No. 78, Section 30.01)

Motion 3: I move that the Planning Commission grants site plan **approval** for PC-23-22, Yatooma Oil Gas Station and Drive-Thru Site Plan, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015), for plans date stamped received July 26, 2023, based on the following findings of facts (**motion make to insert findings of facts**).

This **approval** is based on the following conditions:

- Remove any mention of "24 hour" hours of operation
- Removal of outdoor sales detail
- Addition of 1 barrier free parking space
- (Motion maker to list any unresolved issues related to the Township Planner's review letter).
- (Motion maker to list any unresolved issues related to the Township Engineer's review letter).
- (Motion maker to list any unresolved issues related to the Fire Marshall's review letter)
- (Motion maker to list any additional conditions).

Or

I move that the Planning Commission **denies** site plan approval for PC-23-22, Yatooma Oil Gas Station and Drive-Thru Site Plan, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015), for plans date stamped received July 26, 2023. This **denial** is based on the following reasons (insert findings of facts).

Or

I move that the Planning Commission **postpones** site plan approval for PC-23-22, Yatooma Oil Gas Station and Drive-Thru Site Plan, located on a vacant parcel at the northwest corner of Lapeer Rd. and Silverbell Rd. (parcel #09-26-300-015), for plans date stamped received July 26, 2023, for the following reasons (motion maker to indicate outstanding items to be addressed from the Planner's, Fire Marshall's, or Engineer's review letter(s)).





117 NORTH FIRST STREET SUITE 70 ANN ARBOR, MI 48104 734.662.2200 734.662.1935 FAX

Date: June 26, 2023 Rev.: August 1, 2023

Special Land Use and Site Plan Review Charter Township of Orion, Michigan

File No.:

PC-23-22

Applicant:

Pampalona Companies

850 W. University Drive, Suite D

Rochester, MI 48307

Project Name:

Yatooma Oil Orion Township Gas

Plan Date:

June 7, 2023

Latest Revision:

July 17, 2023

Location:

Northwest corner of S. Lapeer Rd. and W. Silverbell Rd.

Parcel #:

09-26-300-015

Lot Area:

3.46 Acres

Zoning:

GB, General Business District and Lapeer Rd. Overlay District

Action Requested:

Special Land Use and Site Plan Review

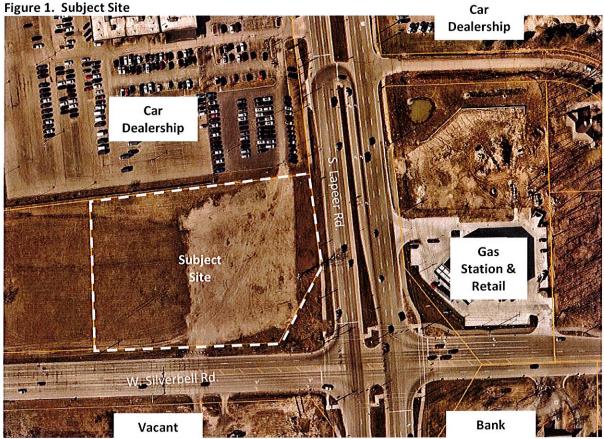
Required Information:

As noted in the review.

PROJECT AND SITE DESCRIPTION

The applicant is proposing to construct a gas station with 15 pumps (accommodating 30 vehicles), a 7,500 square foot convenience store with food service (Saroki's Crispy Chicken and Pizza), and a second, 1,500 square foot fast-food restaurant with drive-thru window on this 3.46-acre site in the GB General Business District and Lapeer Rd. Overlay District. Gasoline Stations and restaurants with drive-thru facilities are

classified as special uses in the General Business District and Lapeer Rd. Overlay District. The subject site is depicted in Figure 1, below.



Source: Near Map

As depicted in Figure 1, the subject property is currently vacant. Vehicles will access the development via two driveways, one on S. Lapeer Rd. (right-in/right-out), and one on W. Silverbell Rd. The site will contain 44 parking spaces, a restaurant drive-thru lane, a patio, bike racks, and landscaping.

We have prepared a review of this proposal against the special land use criteria and have also evaluated the Site Plan for conformance with the Zoning Ordinance.

SPECIAL LAND USE STANDARDS

Section 30.02 - Special Land Use Procedures and Standards

Standards for Granting Special Land Use Approval. The Planning Commission shall approve special land uses upon determination that the proposed use will comply with all applicable requirements of the Ordinance, applicable standards for specific uses, and the following general standards. The standards and our comments are summarized as follows:

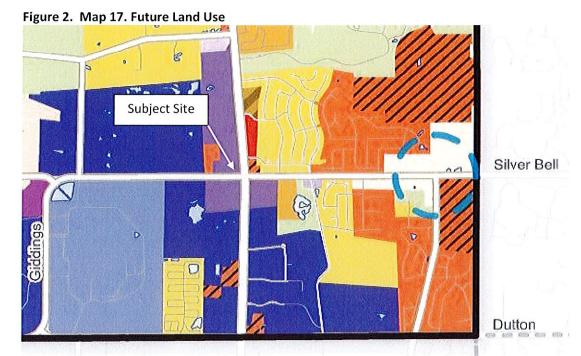
a. <u>Compatibility with Adjacent Uses</u>. The proposed special land use shall be designed, constructed, operated and maintained so as to be compatible with uses of adjacent land. The site design of the proposed special land use shall minimize the impact of site activity on surrounding properties.

CWA Comment:

- a. Road Network. This site is located at the intersection of a Principal Arterial Road (S. Lapeer Rd.), and a Minor Arterial Road (Silverbell Rd.). The primary function of a Principal Arterial Road is to carry vehicles relatively long distances. The function of a Minor Arterial Road is to accommodate slightly shorter trips and provide intra-community connectivity. These types of roads offer access to adjacent land uses, but do not penetrate neighborhoods. A gas station, convenience store, and fast-food restaurant, all on extended hours, on this corner would be compatible with the large number of vehicles traveling on both roads.
- b. Existing Land Uses. The proposed uses would also be compatible with existing adjacent land uses in the vicinity (auto dealerships, fueling station, bank), which are also vehicle oriented.
 - The adjacent parcel to the west is vacant, and is zoned for industrial uses (IP, Industrial Park District). The properties to the south (across Silverbell Rd.) are also vacant. They are zoned for general business uses (GB, General Business District), and industrial uses (IP, Industrial Park District). Uses permitted in these districts typically are vehicle oriented, and of a similar nature or more intense nature, than the proposed uses.
- c. Activity. The three uses on this site (vehicle fueling, convenience store, fast-food restaurant) will primarily serve the motoring public, as do the adjacent land uses, and uses across both streets. Our previous review requested the hours of operation for the proposed uses. Sheet C-4 states that the uses will operate 24 hours per day, 7 days per week. These uses are defined as "extended hours uses" in the ordinance, and this characteristic of the proposal is also considered a special land use. We have listed the special land use regulations for extended hour uses (and drive-thrus) below, followed by our comments after each.
- d. Screening of Vehicular Circulation. The previous plan set showed significant landscaping along the road frontages that included shade trees and shrubs. However, the north and west boundaries of the project are clearly visible from both roads given the vacant status of the parcel to the west, and the expanse of pavement on the parcel to the north. Our previous review suggested that additional landscaping be provided on the west and north boundaries of the site to screen it from the road. One (1) evergreen and one (1) deciduous tree have been added to the west boundary. Two (2) large shade trees, two (2) evergreen trees, and two (2) smaller deciduous trees have been added to the east boundary. Regarding the western boundary, because three evergreen trees were shifted from their previous position along Silverbell Rd. to the west property line, the large expanse of pavement at the rear of the site can now be seen through the deciduous trees from Silverbell; we suggest leaving the three (3) evergreen trees along the Silverbell frontage, and add three (3) more evergreens along the west property line. With this change, the site should be adequately screened from both road frontages. An evaluation of compliance with the landscaping requirements is provided later in this review.

b. <u>Compatibility with Master Plan</u>. The proposed special land use shall be compatible with and in accordance with the general principles and objectives of the Orion Township Master Plan and shall promote the intent and purpose of this Ordinance.

CWA COMMENT: The subject site is planned for "Industrial / Commercial / Residential Mixed Use."



Source: 2022 Orion Township Master Plan

The intent of this future land use designation is to create a mix of industrial, residential, commercial, medical and office uses, and ancillary commercial uses within a well-planned business setting. The proposed uses on this site, in our opinion, provide ancillary commercial uses for other businesses in the vicinity. They will also provide more commercial services to the residents located to the east of this property. This this site is a 10-minute bike ride away from N. Squirrel Road (and the Decker Hamlet) via a completed safety path along Silverbell Rd. The site plan proposes bike parking, as well as completing the safety paths along their Lapeer and Silverbell frontages. We consider these characteristics of the use and the site plan to be consistent with the Master Plan objectives.

c. <u>Public Services</u>. The proposed special land use shall be located so as to be adequately served by essential public facilities and services, such as highways, streets, police and fire protection, drainage systems, water and sewage facilities, and schools.

CWA COMMENT: The site is served by municipal sewer and water and should not have a negative impact on either of these utilities. In addition, the subject property's location will also be adequately served by existing highways, streets, police and fire protection, and drainage systems.

d. <u>Impact of Traffic</u>. The location of the proposed special land use within the zoning district shall minimize the impact of the traffic generated by the proposed use on surrounding uses.

CWA COMMENT: The submittal includes a Traffic Impact Study (TIS) (dated June 5, 2023, and updated on June 29, 2023) that has evaluated the impacts this proposal may have on the adjacent roadway system. The conclusions of the study indicate:

- 1. The Lapeer Rd./ Silverbell Rd. intersection is expected to continue to operate acceptably, at a level of service (LOS) of D or better during both AM and PM peak hours. However, the report states that this intersection has a greater number of crashes than SEMCOG averages for similar types of intersections.
- 2. The driveway into the site from Lapeer Rd. will be blocked by cars who are waiting for the light at Silverbell Rd. in the morning peak hour. The study expects site visitors will re-distribute in the site and use the driveway to Silverbell Rd.
- 3. The driveway into the site from Lapeer Rd. is located as far as possible from the Lapeer/Silverbell intersection; this distance provides adequate spacing from this intersection. However, the location of this driveway doesn't meet the desirable MDOT spacing criteria from a signalized crossover intersection. The study expects that conflicts between this site driveway and the adjacent driveway to the car dealership to the north would be metered by the signalized intersection operations.

We defer evaluation of the Traffic Impact Study to the Township Engineer and cannot comment on whether the proposal meets this criterion.

e. <u>Detrimental Effects</u>. The proposed special land use shall not involve any activities, processes, materials, equipment, or conditions of operation, and shall not be so located or designed as to be detrimental to public health, safety, and welfare.

CWA COMMENT: We don't expect that any of the proposed uses will generate noise, vibration, smoke, fumes, odors, dust, glare and light, as the proposal will be required to meet the ordinance provisions regulating these characteristics. As mentioned above, whether the amount of traffic generated by this use, or the proposed design of the site and access drives onto adjacent streets, causes any detrimental effects, we defer evaluation of traffic to the Township Engineer.

f. Enhancement of Surrounding Environment. The proposed special land use shall provide the maximum feasible enhancement of the surrounding environment and shall not unreasonably interfere with or discourage the appropriate development and use of adjacent land and buildings or unreasonably affect their value.

CWA COMMENT: We have the following comments:

- The proposal offers substantial landscaping along the road frontage. As suggested earlier, adding landscaping to the west and north property lines will provide better screening of this site from angled road views.
- 2. The site plan and architectural plans show a 4-foot-tall wall on both sides of the front entry door. The applicant's response memo states that these areas will be used for outdoor display and sales. Outdoor display and sales are handled through a separate, annual permit, which the applicant will need to obtain.

- 3. We don't think this proposal will unreasonably interfere with or discourage the appropriate development and use of adjacent lands, or unreasonably affect their value. The architectural renderings of the proposed building use quality materials (brick and stone), with roof details over the entryway.
- g. <u>Isolation of Existing Land Use.</u> The location of the proposed special land use shall not result in a small residential area being substantially surrounded by nonresidential development, and further, the location of the proposed special land use shall not result in a small non-residential area being substantially surrounded by incompatible uses.

CWA COMMENT: The proposal is located along a busy commercial corridor and away from any existing or proposed residential uses. It will not isolate any residential areas. This location is also within a concentration of commercial and potential industrial sites and will not itself be isolated.

Extended Hour/Drive-Thru Special Land Use Standards

Footnotes A and I, in Sec. 14.02, *Footnotes to the Use Matrix*, includes the following requirements for extended hour uses and drive-thrus in the GB District. We have provided comments after each.

- Setback. All buildings, drive-thru canopies or speaker boxes shall be set back no less than one hundred (100) feet from the lot line of a single-family or multi-family zoned and/or used parcel. Associated parking lots, maneuvering lanes, drive-thru lanes (if applicable) shall be set back no less than fifty (50) feet from the lot line of single-family or multi-family zoned and/or used parcels.
 - **CWA COMMENT:** The subject site is not adjacent to any residentially-zoned or used parcels. Therefore, this criterion doesn't apply to this project.
- 2. <u>Buffering</u>. All parcel perimeters which abut a single family zoned and/or used parcel shall have no less than a six (6) foot continuous buffer. The buffer may consist of a solid fence or wall, a double staggered row of evergreens and/or a combination of each.
 - **CWA COMMENT**: As mentioned above, the abutting parcels are not zoned or used for residential purposes. Therefore, this criterion doesn't apply to this project.
- 3. <u>Noise.</u> Any noise associated with an extended hour use shall not exceed sixty (60) decibels when measured at the property line. The noise shall also not be intermittent in nature, high frequency, or that which causes vibration.
 - **CWA COMMENT:** This standard will be applied to the businesses on this site throughout their operating years. If noise becomes an issue, the Township will work with the business and property owner to resolve it and meet the ordinance requirements.
- 4. <u>Lighting</u>. Any operation or activity which produces glare shall not cause illumination in excess of 0.3 footcandles when measured along the lot line of a single family zoned and/or used parcel.

Between dusk and dawn, the light levels shall be further reduced to 0.0 foot-candles when measured at the same property lines.

CWA COMMENT: This site is not adjacent to any residentially-zoned or used properties.

5. Drive thru facilities as permitted in this Section shall be subject to the landscaping and screening wall requirements of Section 27.05.

CWA COMMENT: Sec. 27.05 requires a landscaped greenbelt buffer, berm, or obscuring wall or combination of these methods to screen a non-residential use that abuts a single-family or multifamily residential use. Since this site does not abut a residentially-zoned or used property, this criterion does not apply.

The Planning Commission should evaluate the proposed gas station, convenience store, drive-thru restaurant, and extended hours, in accordance with the review criteria of Sec. 30.02.

Items to be Addressed: 1) To screen the expanse of pavement at the rear of the site, suggest leaving three (3) evergreen trees in their current location along Silverbell, and adding three (3) more evergreens along the west property line. 2) Defer evaluation to the Township Engineer of the Traffic Impact Study, and impact of amount of traffic generated by the use and site design on area traffic. 3) Applicant to obtain outdoor display and sales annual permit. 4) Planning Commission to evaluate proposed uses in accordance with review criteria of Sec. 30.02.

SITE PLAN REVIEW

AREA, WIDTH, HEIGHT, SETBACKS

The proposed project appears to meet the requirements for the GB Zoning District, as shown in the table below.

Table 1. Bulk Requirements for GB Zoning District

| | <u>Required</u> | <u>Provided</u> |
|--|-----------------|---|
| Min. Lot Area | 12,000 s.f. | 150,717 s.f. (3.46 ac.) |
| Min. Lot Width | N/A | 234 ft. (Lapeer Rd.) 404 ft. (Silverbell Rd.) |
| Min. Setbacks | | |
| Front* | 30 ft. | Lapeer Rd.: 194 ft. (Building) 54 ft. & 90 ft. (Canopy) Silverbell Rd.: 98 Ft. (Building) 92 ft. & 145 ft. (Canopy) |
| Each Side | 20 ft. | North Property Line: 109 ft. (Building) 77 ft. & 146 ft. (Canopy) |
| Rear | 30 ft. | Opposite Lapeer Rd.: 201 ft. (Building) 45 ft. (Canopy) |
| Max. Lot Coverage (% of lot)** | 30% | 19,270 s.f. / 150,717 s.f. = 13% |
| Max. Building Height | 25 ft. | 25 ft. |
| Max. Canopy Height (ft.) | 25 ft. | 20 ft.** |
| Max. Clear Space Around Structures (ft.) | 20 ft. | 20 ft. |

^{*}Sec. 2.01, Definitions, states that the placement of a structure on a lot shall be measured from the "future" right-of-way line as provided in the map of *Road Right-of-Way Widths* in the Charter Township of Orion Master Plan (Pg. 125), or from the acquired highway easement, whichever is greater. The Master Plan indicates that Lapeer Rd. is a state trunkline under MDOT's jurisdiction. The map in the Master Plan indicates that Lapeer Rd. has a variable right-of-way, and Silverbell has a 120-foot-wide right-of-way. The plans show that the Lapeer Rd. right-of-way width in front of the subject site is 180 feet. The applicant states in their response memo that the right-of-way shown on the plans is the "existing" right of way. MDOT will be reviewing the plans for work within their jurisdiction; therefore, its unknown at this time if there is a "future" right-of-way on this part of Lapeer Rd.

**We consider the gas pump canopies to be "accessory structures," which are included in the calculation of lot coverage. As requested, an elevation of the canopies was provided. The height of the ceiling is 16-feet from grade, and the height of the roof structure is an additional 4-feet.

Items to be Addressed: Location of "future" right-of-way unknown at this time.

NATURAL RESOURCES

On-site existing natural features are very limited and include two (2) deciduous trees that were identified by a certified arborist. The balance of the site has been cleared and is covered by gravel and scrubby herbaceous plants. The site as it exists is best described as flat. There are no water features located on the parcel.

Trees to Remain

The plans indicate that the two existing trees along Lapeer Rd. will remain. We consider this a positive aspect of the plan. In our previous review, we asked that the plans show how the trees will be protected. In response, the plans have been revised to add a symbol for Tree Protective Fencing around the dripline of the trees on most sheets, and the symbol has been added to the legend. A note was also added to most sheets in the set, stating that "No vehicle, other construction equipment, or construction materials or debris shall be parked or stored within the dripline of any tree or plant material intended to be saved." A construction detail illustrating the tree protection fencing is shown on Sheet C9, SESC Plan, and Sheet LS101, Landscape Details.

Also as requested, grading has been moved to almost outside of the tree protective fencing, and the dripline of the trees. We are satisfied that the tree protective fencing will be installed at the dripline of the trees per the detail, and grading will be adjusted in the field to be outside of the fencing.

The Landscaping Plan was also modified to show the existing trees, tree-protective fencing, and landscaping designed around the trees.

Stormwater Impacts to Nearby Stream/Wetlands

A small stream corridor exists to the west of this site. Sheet C9, SESC Plan, indicates that Trout Creek is approximately 6,700 feet from the northwest corner of this property. Wetlands also exist to the north. The proposed stormwater system is discharging water into an existing stormwater pipe that leads off to the west. Per the Township Engineer's review, the existing storm sewer ultimately outlets into the Milosch's Palace detention system. We defer evaluation of the proposed stormwater system to the Township Engineer.

Regarding the extensive amount of pavement proposed for this use, we would offer an observation. The orientation of the gas pumps at the rear of the site could be rotated 90-degrees so that the pumps and canopy are parallel to the building, as they are at the front of the site. This could greatly reduce the amount of pavement (impervious surface) at the rear of the building, and therefore allow for more open space in this vicinity, improving stormwater infiltration and the quality of stormwater runoff. Unnecessary asphalt also adds to air pollution from vapors off of the asphalt during hot sunny days. The applicant's response memo states that the canopy orientation is to accommodate efficient truck circulation, as shown

on Sheet C5, *Truck Turning Plan*. On this sheet, the only truck that uses the pavement at the western edge is the Orion Township Fire Truck. If the fire truck can't go under the canopy, there is space available to locate the canopy far enough from the building to allow the fire truck to pass by. We recommend the Planning Commission discuss this with the applicant.

Items to be Addressed: Planning Commission to discuss rotating gas pumps/canopy at rear of building to minimize pavement in this area.

BUILDING LOCATION AND SITE ARRANGEMENT

The proposed location of the convenience store building is in the middle of the site and positioned to face S. Lapeer Rd., as required by the Lapeer Rd. Overlay District requirements. The building is surrounded by maneuvering lanes and parking. The gas pump canopy along Lapeer Rd. is oriented parallel to the building. The gas pump canopy orientation at the rear of the building requires extensive pavement to access the pumps. As mentioned above, the orientation of the rear gas pumps/canopy could be rotated to be parallel to the building and significantly reduce the amount of impervious surface on the property, while still accommodating truck turning movements.

The project will include a drive-thru restaurant. As requested, a floor plan of the restaurant has been provided and shows 250 s.f. of space available for customer seating (or about 17% of the total restaurant floor area). Building elevations show a pedestrian door into this space.

The project also offers an outdoor patio of approximately 1,100 s.f., which could be a beneficial feature of this project. However, a customer can't reach it from inside the building due to the location of the coolers along the north wall of the building. The patio is also on the opposite side of the building from the drive-thru restaurant, and the indoor food service counter. The north side of the building also doesn't contain any windows for passive supervision of the patio area. In our previous review, we suggested that if this feature is offered, it be relocated to be close to the drive-thru restaurant, and the main front doors (or a secondary entrance) of the building. The applicant's response stated that it had not been relocated to maintain a distance from the roads and drive-thru lane. Has the applicant considered reconfiguring the interior of the convenience store to provide a door and window on the patio side of the building? The Planning Commission may want to discuss this with the applicant.

The drive-thru lane traverses the west, and south sides of the building. Pedestrians walking from the rear gas pumps to the building need to cross the drive-thru lane to reach the back door. The drive-thru lane has been revised, and a mountable curb added along the west side. We consider this a positive change, as the curb will help delineate the lane, but still allow a vehicle to "escape" the drive-thru lane if necessary.

The Lapeer Rd. Overlay District requires that loading docks, outdoor storage, trash collection and other "service" functions be positioned on site so that they are not visible from Lapeer Rd. The trash receptacle and transformer are located on the north side of the building, but will be screened with vegetation, achieving this goal.

Underground gas storage tank vent stacks are located directly in front of the building along the Lapeer Rd. entry drive. The stack location is shown on the site plan, and a graphic shown on Sheet C11, but it doesn't

indicate how tall the stacks are. In our experience, they are more than 2-feet tall, which is the height of the proposed shrubs next to the vent stacks. The applicant should provide an image of the vent stacks, with the proposed height, and appropriate landscaping along Lapeer Rd. to screen the stacks.

Items to be Addressed: 1) Planning Commission consider discussing adding door/window on north building façade to allow access from inside the building to the patio, and passive supervision of the patio. 2) Provide image of gas vents, with proposed height, and add landscaping to screen stacks from Lapeer Rd.

PARKING AND LOADING

The parking requirements for this site are provided in Sec. 14.03 of the GB General Business District. Other requirements for the configuration of parking are provided in Sec. 27.04, and in the Lapeer Rd. Overlay District. How the proposal meets these standards is provided in the table below:

Table 2. Parking

| Parking /Loading Requirements | Required | Provided | | |
|---|---|--|--|--|
| General retail use: 1 space per 200 s.f. gross floor area | Gross floor area = 7,500 s.f. Required 7,500/200 = 38 spaces | 44 spaces | | |
| Restaurant use: 1 space per 100 sq. ft. gross floor area | Gross floor area = 1,500 s.f. Required 1,500/200 = 15 spaces | (See below) | | |
| Barrier Free: included in total | 3 | 2 | | |
| Stacking spaces for drive-thru | Adequate per Traffic Impact Study (See below) | 10 | | |
| Parking location: Max. 50% in front yard. | Max. 26 spaces allowed in front yard, based on required number of spaces | 23 spaces | | |
| Size of Spaces 90° | 9′ x 19′ | 9' x 19' | | |
| Size of Barrier Free Spaces | Accessible: 8' space + 5' aisle x 19' Van Accessible: 8' space + 8' aisle x 19' | Van Accessible provided: 8' space + 8' aisle x 19' | | |
| Incline for Barrier Free wheelchair access | One (1) foot in twelve (12) feet and a width of not less than four (4) feet shall be provided for wheelchair access. | (See below) | | |
| Loading | Adequate Access | 1 space in front yard (See below) | | |
| Surface: Parking and Access Drives | Concrete/Asphalt | Existing points of entry and exit will be concrete. The balance of site, aisles and parking will be asphalt. | | |
| Min. width of entry driveways | 25′ | 35' | | |
| Min. aisle width for parallel spaces: Fire Access in front of building | 22' 12' | 22' 22' (See below) | | |

Number of Parking Spaces. Per the ordinance standards, the proposal is required to provide 53 parking spaces. The site plan shows 44 parking spaces, two (2) of which are barrier-free spaces. However, parking at each gas pump is available, adding another 30 spaces. The Planning Commission may modify the numerical requirements for off-street parking, based on evidence provided by the applicant that indicates that another standard would be more reasonable because of the level of employment and/or the level of customer traffic.

Four (4) of the proposed spaces accommodate electric vehicle charging stations. They are a permitted accessory use. Details of the charging stations have been provided on Sheet A103. Sec. 27.04.A(1)(f) provides requirements for electric vehicle (EV) charging stations. The charging stations meet all ordinance requirements except for signage, identifying the space to be used only for electric vehicle charging purposes. This can be addressed administratively.

Stacking Spaces. Sec. 27.14, *Access Management*, requires that the adequacy of the queuing (stacking) area for a drive-thru facility is provided. The applicant has updated their Traffic Impact Study (TIS), dated June 29, 2023, to include this information. The results of the queuing evaluation indicate there could be a maximum of three (3) queued vehicles in the drive-thru lane during the peak am hour. The study also states that each vehicle occupies 25-feet in length. The site plan shows queuing vehicles occupying 20-feet in length. If the 25-foot dimension were used, the site plan would provide enough space for eight (8) queued vehicles.

Barrier-Free Ramps. As requested, the plans were modified to show ramps from the parking lot onto the adjoining sidewalks.

Loading/Unloading Space. Adequate facilities, accessible by motor vehicles, need to be provided on a site with a building 10,000 s.f. or less in size. The site plan shows one 10' x 50' loading space at the extreme west boundary of the site. This location is compliant with the Lapeer Road Overlay District requirements but seems a bit impractical. We would suggest locating the space on the west side of the mountable curb next to the drive-thru lane. This is most likely where a vehicle would park to deliver products to the convenience store/restaurant.

Fire Access in Front of Building. A 22-foot-wide maneuvering lane is provided in front of the building; however, except for the barrier-free aisle, a line of parked cars blocks access between this lane and the building. We defer evaluation of this site characteristic to the Township Engineer.

In addition, we asked the applicant to provide information regarding:

- 1. Anticipated types/sizes of delivery vehicles for the convenience store and restaurants.
- 2. Identify the area where the tanker truck will park to refill the underground fuel storage tanks.

Sheet C5, *Truck Turning Plan*, shows a variety of vehicle types expected to visit the site, and how they will traverse the site:

- 1. Semi-Tractor Trailer (Approx. length 73 feet)
- 2. Oil Tanker Truck (Approx. length 56 feet)
- 3. Fire Truck (Approx. length 49 feet)
- 4. Single-Unit (Box) Truck (Approx. length 40 feet)

5. Garbage Truck (Approx. length 35 feet)

The underground gasoline storage tanks are located in the front of the site (along Lapeer Rd), and the rear of the site. Sheet C5 also shows where the Oil Tanker Truck will park to refuel the underground storage tanks. The oil tanker parking space in the front of the site (along Lapeer Rd.) is outside of the main travel lane. The oil tanker parking in the rear of the site occupies the 22-foot-wide travel lane between the canopy structure and the edge of the pavement. If the canopy were re-oriented to be parallel with the building, this lane could be larger so that the 22-foot-wide travel lane wouldn't be occupied by the oil tanker truck.

Items to be Addressed: 1) Planning Commission to consider proposed number of parking spaces. 2) Signage for electric vehicle charging stations handled administratively. 3) Consider loading/unloading space location closer to rear of convenience store/restaurant. 4) Township Engineer evaluation of fire lane. 5) Oil tanker truck occupying 22-foot-wide travel lane between canopy and west edge of pavement; consider re-orienting canopy parallel to building to widen this lane.

SITE ACCESS AND CIRCULATION

The site is accessed from the roadway system with two driveways. The driveway from Lapeer Rd. will only allow right-in/right-out turning movements, while the driveway from Silverbell Rd. will allow all turning movements. Sec. 27.14, Access Management, limits the number of driveways into a single site to the minimum necessary, and generally one. However, the Planning Commission may determine that additional driveways are justified due to the amount of traffic generated by the use, and based on the Traffic Impact Study. We defer evaluation of the access driveways to the Township Engineer.

The site features are accessible via two-way maneuvering lanes throughout the entire site. (Note our comments above regarding the oil tanker occupying the westerly maneuvering lane between the canopy and edge of pavement.) The only one-way lane is the restaurant drive-thru lane. As mentioned above, adding the mountable curb along the drive-thru lane provides queued vehicles direction, but also allows them to leave the lane if necessary. In our previous review, we also shared our opinion that the large expanse of pavement at the rear of the site contributes to possible driver confusion because there are very few clues as to how a vehicle should move through the area. The Planning Commission may want to discuss the free flow of vehicles across the rear of the site with the Township's traffic consultants.

Item to be Addressed: 1) Defer evaluation of location and number of access driveways to Township Engineer. 2) Planning Commission may want to discuss potential for driver confusion traversing the large expanse of un-programed pavement at the rear of the site with Township traffic consultant.

INFRASTRUCTURE

Water and Sewer – Sanitary sewer and water are currently available. The adequacy of these services as well as the on-site connections will be reviewed by the Township Engineer.

Stormwater – Stormwater will be directed off-site to the west, as discussed in the "Natural Resources" section of this review (Pg. 9).

Items to be Addressed: Township Engineer input regarding water, sewer and stormwater detention/discharge.

SAFETY PATHS/SIDEWALKS

The site plan proposes safety paths along the Lapeer Rd. frontage and Silverbell Rd. frontage. Internal sidewalks are also provided on the east, north, and west building facades. The south side of the building is served by a sidewalk on the south side of the drive-thru lane. All sidewalks meet the minimum five-foot clear width.

The GB General Business District and the Lapeer Rd. Overlay District require safety paths along road frontages in conjunction with the development of all parcels in these districts. The proposed safety paths meet most of these requirements, except at the intersection where the new path connects with the existing safety path. The new pathway heading north on Lapeer Rd. is narrower than required. The new pathway should be curved to provide 8-feet of width around the existing pole. There appears to be enough space between the existing pole and utility cabinet to the west for this adjustment. The Planning Commission may want to consider this alternative.

We assume that the parking spaces to the south of the drive-thru window/aisle are provided so drive-thru customers can wait in their car for their order. Pedestrians crossing this aisle to approach the pickup window on foot should be discouraged.

Items to be Addressed: 1) Planning Commission to consider curved safety path to widen proposed path around existing utility structures. 2) Include signage discouraging fast-food restaurant customers from approaching the drive-up window on foot.

LANDSCAPING

The following evaluates the proposed landscaping in light of the requirements in the GB General Business District, Sec. 27.05, *Landscaping, Fences, and Walls*, and the Lapeer Rd. Overlay District.

Table 3. Site Perimeter Landscaping

| Property Line Location | Greenbelt/ Parking Lot Setback | General Landscaping | Parking Lot Landscaping Adjacent to Public Road |
|---|--|---|--|
| | Sec. 14.03 Requires a 20-foot-wide landscaped greenbelt along entire perimeter of GB District when abutting commercial/office or industrially zoned district. No parking area or driveway shall be closer than 20 feet to the adjacent property lines. | A. Mixture of deciduous and evergreen trees. B. One (1) tree/3,000 s.f. landscaped open space area. C. Underground irrigation or water available. | A. 20-foot greenbelt along ROW. B. One (1) tree/30 l.f. between ROW & parking. C. 30-inch-tall wall, fence, hedge, berm along ROW. D. Sight distance. |
| East (Lapeer Rd.) South (Silverbell Rd.) | Provided. | A. Provided. B. Provided. C. Provided. | N/A A. Provided. B. 23 trees required/ 23 provided. C. Provided. D. No plant material proposed in sight distance triangle. E. Provided. |
| West | | | N/A |

Interior Parking Lot Landscaping

- 1. Parking lots with more than 20 spaces shall contain a minimum of 20 square feet of interior landscaping per parking space, and one (1) tree per 200 s.f. of interior landscaping. The project proposes 44 parking spaces, and 30 spaces at gas pumps, requiring 1,480 s.f. of interior parking lot landscaping. Sheet LS100, *Landscape Plan*, indicates that the interior parking lot islands occupy 1,533 s.f. Also, seven (7) trees are required, and eight (8) are proposed.
- 2. We have the following comments regarding the landscape islands.
 - a. Parking lot islands are planted with the required trees and groundcover. However, we would suggest a different treatment of the long/narrow parking lot island parallel to the drive-thru lane and window (south side of building). Rather than turf grass, we suggest that this area be planted in a 2-3-foot-tall shrub (such as Gro Low Sumac), or other tough shrub that is salt tolerant. This will provide a screen between the drive-thru lane and parking spaces to the south. Shrubs will also require less maintenance.
 - b. All parking lot islands meet the minimum dimension of 10-feet.

Material Standards and Specifications

Trash Receptacle and Screen

Sec. 14.03 requires that a trash receptacle screen shall be provided in the rear yard of the building or principal use structure. Our previous review observed that the proposed receptacle/screen was located behind, but very far from the building. The revised plans have moved the trash receptacle location and brought it closer to the building. Sheet A006, *Trash Enclosure Details*, shows an illustration of the proposed, six-foot tall trash receptacle screen wall and opaque gates. The wall material is proposed to coordinate with the wall material of the building.

Landscape Notes

Our previous review listed small adjustments to the notes on the Landscaping Plans; these adjustments have been made.

Items to be Addressed. Consider planting low-growing shrubs in the long/narrow landscape island between the drive-thru lane and parking spaces (south side of building).

LIGHTING

Lighting standards are contained within Sec. 27.11 of the Zoning Ordinance. A Photometric Plan (Sheet PH100), and Light Fixture Cutsheets (Sheet PH101) have been submitted.

The lighting information shows proposed pole-mounted parking lot lighting, recessed light fixtures under the gas pump canopies, goose-neck fixtures mounted on the front and south side of the building, and wall-mounted fixtures on the other two facades of the building. The building elevations on Sheet A200 is consistent with the Photometric Plan. However, Sheet A201 shows additional light fixtures above the pedestrian doors on the west building façade, but these fixtures are not shown on the Photometric Plan. Also, the type of fixture above the pedestrian doors is not identified. Could they be modified gooseneck fixtures? The applicant should clarify the type of fixture, and they should be added to the Photometric Plan.

All proposed fixtures are downward facing. The D-Series can accept a house-side shield if needed. The other two fixtures (canopy & gooseneck) don't specifically accept shields; however, because the light source is within the canopy/fixture cover, a shield may not be necessary.

The height of the pole-mounted lights is 20-feet, which complies with the ordinance.

Proposed light levels along the property lines and under the pole-mounted fixtures in the parking lot meet the ordinance requirements. The light levels under the gas pump canopy along Lapeer Rd. are reasonable (max. approximately 13 footcandles). However, the light levels under the gas pumps to the rear of the building are bright (max. approximately 19 footcandles), compared to the rest of the site, and the low light levels of the adjacent roadway. The bright light will hinder drivers' vision because of the contrast

with much lower light levels over the rest of the site, and the adjoining roadways. The Planning Commission may want to discuss this with the applicant.

Items to be Addressed: 1) Clarify type of fixtures directly above rear building entry doors; provide fixture detail; add to Photometric Plan. 2) Planning Commission to discuss bright light levels under rear gas pump canopy, in comparison to the rest of the site and adjoining roadways.

SIGNS

The Site Plan and Landscape Plan show the location of a monument sign at each driveway entrance into the site. The signs are outside of the required sight distance triangle. Review of the signs is handled administratively.

Items to be Addressed: None.

FLOOR PLANS AND ELEVATIONS

Building Elevations

A rendered building elevation of the front and side façades of the building has been provided, in addition to line drawings. The proposed building will feature a brick façade in various neutral colors, with wood paneling accents over the front windows and the fast-food restaurant pedestrian door. The facades without windows have brick pillars to break up the expanse of the façade. The main front door of the convenience store is highlighted with a peaked roof feature. The front façade also has small canopies over the outdoor sales area next to the front door.

As requested, elevations of the proposed gas pump canopies have been provided.

Floor Plans

Rendered floor plans and line drawings are also provided and include illustrations of how the convenience store/food service space will be designed. The convenience store will have two walls of coolers, general merchandise space, coffee/beverage bar, and a food service counter for a Saroki's Crispy Chicken and Pizza.

A floor plan for the fast-food restaurant space has also been provided. As noted above, this space will offer approximately 250 square feet of indoor seating.

Items to be Addressed: None.

CONCLUSION

The Planning Commission shall consider the special land use prior to considering the site plan. As proposed, the Planning Commission will need to make a substantial number of decisions where the ordinance allows for flexibility. The following items should be addressed to the satisfaction of the Planning Commission prior to special land use/site plan approval:

1) Special Land Use Standards:

- 1) To screen the expanse of pavement at the rear of the site, suggest leaving three (3) evergreen trees in their current location along Silverbell, and adding three (3) more evergreens along the west property line.
- 2) Defer evaluation to the Township Engineer of the Traffic Impact Study, and impact of amount of traffic generated by the use and site design on area traffic.
- 3) Applicant to obtain outdoor display and sales annual permit.
- 4) Planning Commission to evaluate proposed uses in accordance with review criteria of Sec. 30.02.

2) Area, Width, Height, Setbacks:

1) Location of "future" right-of-way unknown at this time.

3) Natural Resources:

1) Planning Commission to discuss rotating gas pumps/canopy at rear of building to minimize pavement in this area.

4) **Building Location and Site Arrangement:**

- 1) Planning Commission consider discussing adding door/window on the north building façade to allow access from inside the building to the patio, and passive supervision of the patio.
- 2) Provide image of gas vents, with proposed height, and add landscaping to screen stacks from Lapeer Rd.

5) Parking and Loading:

- 1) Planning Commission to consider proposed number of parking spaces.
- 2) Signage for electric vehicle charging stations handled administratively.
- Consider loading/unloading space location closer to rear of convenience store/restaurant.
- 4) Township Engineer evaluation of fire lane.
- 5) Oil tanker truck occupying 22-foot-wide travel lane between canopy and west edge of pavement; consider re-orienting canopy parallel to building to widen this lane.

6) Site Access and Circulation:

- 1) Defer evaluation of location and number of access driveways to Township Engineer.
- 2) Planning Commission to discuss potential for driver confusion traversing the large expanse of unprogramed pavement at the rear of the site with Township traffic consultant.
- 7) Infrastructure. Township Engineer input regarding water, sewer and stormwater detention/discharge.

8) Safety Paths and Sidewalks:

- 1) Planning Commission to consider curved safety path to widen proposed path around existing utility structures.
- 2) Include signage discouraging fast-food restaurant customers from approaching the drive-up window on foot.

9) Landscaping:

1) Consider planting low-growing shrubs in the long/narrow landscape island between the drive-thru lane and parking spaces (south side of building).

10) Lighting:

- 1) Clarify type of light fixtures directly above rear building entry doors; provide fixture detail; add to Photometric Plan.
- 2) Planning Commission to discuss bright light levels under rear gas pump canopy, in comparison to the rest of the site and adjoining roadways.



July 26, 2023

Scott Reynolds, Planning Commission Chairperson CHARTER TOWNSHIP OF ORION 2323 Joslyn Road Lake Orion, MI 48360

RE:

Yatooma Oil Gas Station PC-23-22

Site Plan Review #2

Received:

July 17, 2023 by Orion Township

Dear Mr. Reynolds:

We have completed our review of the Yatooma Oil Gas Station plan set. The plans were prepared by The Umlor Group and were reviewed with respect to the Township's Zoning Ordinance, No. 78, Stormwater Management and Soil Erosion & Sedimentation Control Ordinance, No. 139, and the Township's Engineering Standards.

EXISTING SITE CONDITIONS:

The site is located on the northwest corner of M-24 and Silverbell Rd. within the southwest quadrant of Section 26 of the Charter Township of Orion. The site is zoned General Business (GB) and is bound by parcels to the north and south zoned General Business, a parcel to the west zoned Industrial Park (IP), and a parcel to the east zoned Planned Unit Development (PUD).

The current site is undeveloped but is directly adjacent to developed sites to the north and east. The applicant is proposing to build a gas station with 20 gas pumps, 6 diesel pumps, 4 electric vehicle stations, and 40 additional parking spaces. A 7,500 square-foot convenience store with an adjoined 1,500 square-foot drive-thru restaurant on the south side and 739 square-foot patio on the north side are also proposed.

WATER MAIN AND SANITARY SEWER:

There is an existing 12-inch water main that runs along the north side of Silverbell Rd. and an existing 12-inch water main along the west side of M-24. The applicant is proposing to extend a new 2-inch domestic service from the main along Silverbell Rd to service the site.

A fire suppression line and FDC were not shown on the Site Plan. There are 2 proposed hydrants and 2 existing hydrants that appear adequately spaced for coverage. We defer further comment on the need for fire suppression and hydrant coverage requirements to the Orion Township Fire Department.

There is an existing 15-inch sanitary sewer that runs along the west side of M-24 and a 10-inch sanitary sewer along the south side of Silverbell Rd. The applicant is proposing the extend a new 6-inch sewer lead including an external grease trap and monitoring manhole from the sewer along M-24 to service the development.

There is a catch basin proposed along the east side of the Silverbell Rd. drive approach that is shown on top of the existing water main. The catch basin will need to be moved during Engineering.

Yatooma Oil Gas Station, PC-23-22 Site Plan Review #2 July 19, 2023 Page 2 of 4



Preliminary Basis of Design calculations were provided but need to be corrected. The REU calculation should be based on Auto Service/Convenience Stations using 0.21 REU/pump and Quick Service Restaurants without restrooms, since they are included with the convenience station, using 1.0 REU per restaurant. Based on 26 pumps, the total REU count would be 6.46.

Township models indicate that there is sufficient water main and sanitary sewer capacity to serve the development.

STORMWATER MANAGEMENT:

The applicant is proposing to drain the site by connecting to an existing storm sewer at the northwest corner of the site. The existing storm sewer ultimately outlets into the Milosch's Palace detention system which was originally sized to accommodate the proposed development. Roof conductors will need to be connected to the storm sewer at Engineering. Note, if they are connected to the proposed 6-inch perforated pipe under the patio it will need to be upsized to at least an 8-inch diameter.

Preliminary detention calculations were provided and are acceptable. A KSI Stormwater Treatment Chamber is proposed before the outlet into the existing storm sewer but is not NJDEP certified and does not appear to have an oil/water separation device. Since the site will have gasoline and potentially oil, the storm management system should include a method of oil/water separation prior to entering the existing storm system.

PAVING/GRADING:

Pavement is proposed to be mostly asphalt except for the areas surrounding the fuel pumps. Asphalt slopes are to remain between 1% and 6% for drive areas, and between 1% and 4% for parking areas. Concrete slopes are to remain between 0.4% and 6% for drive areas, and between 0.4% and 4% for parking areas. Existing grading is indicated on the topographic survey and demolition plan with spot grades and 1-foot contours. Proposed grading is indicated on the grading plan with spot grades and 1-foot contours. The applicant is matching the existing grade at the extent of the work area, which appears to be consistent around the property line. Preliminary pavement slopes appear acceptable.

The current 7-inch concrete slab used for the trash enclosure is unacceptable and must be changed to a minimum of 8-inch concrete section.

TRAFFIC & CIRCULATION:

A Traffic Impact Study was provided for the proposed development. The study focused on impacts to the intersection of M-24 and Silverbell Road, the NB to SB cross over on M-24, the SB to NB cross over on M-24 and the proposed site driveways. Given the nature of the proposed business, we allowed for the study to include a partial reduction for pass-by trips. The study forecasted the traffic on the road network based on average growth and included known developments, GM Plant Expansion, and the redevelopment of the former Palace of Auburn Hills site, which were summarized as the Background Condition. The trip generation from the proposed development was added to the Background Condition to generate the Future Condition. When comparing these conditions, there were insignificant increases in delay at the studied intersections. The TIS concluded with recommended mitigation to include a right-hand turn lane and taper for SB M-24 and a right-hand taper for WB Silverbell Rd. Overall, we found the study to be in substantial compliance with the Township's Ordinances and Engineering Standards.

As mentioned, a right-turn lane and right-turn taper were warranted at the M-24 approach and a right-hand taper for WB Silverbell Rd per the TIS and are now shown on the plans. Final approval will be subject to MDOT and RCOC review.

Yatooma Oil Gas Station, PC-23-22 Site Plan Review #2 July 19, 2023 Page 3 of 4



There is a cross-access drive proposed at the northeast corner of the site connecting the development to Milosch's Palace to the north. A cross-access easement will also be required at Engineering. Additionally, any work within the right-of-way on M-24 and Silverbell Rd. will require a permit from MDOT and RCOC, respectively.

LANDSCAPING:

A landscaping plan was included in the plan set. Plantings are placed outside of proposed water and sewer easements as required.

NATURAL FEATURES:

Wetlands:

No wetlands are present on or adjacent to this site. A preliminary SESC plan was provided with the submittal and appears acceptable.

Woodlands:

There are woodlands located on the adjacent parcel to the west. The plan set does not include a tree survey. It is our understanding that a tree survey is required at Site Plan.

CONCLUSION:

In our opinion, the Site Plan as submitted is in substantial compliance with the Township's Ordinances and Engineering Standards. We ask that any approval include the following:

- 1. The mechanical pretreatment structure needs to be replaced with a NJDEP approved structure. In addition, an oil/water separator still needs to be provided.
- 2. Correct the preliminary water and sanitary sewer Basis of Designs per WRC and Orion Township standards.
- 3. The current 7-inch concrete slab used for the trash enclosure needs to be increased to a minimum of 8-inch concrete section.
- 4. The engineering plan, designed in accordance with Zoning Ordinance No. 78, Stormwater Management and Soil Erosion & Sedimentation Control Ordinance No. 139, and the Township's Engineering Standards shall be submitted to the Township for review and approval prior to construction. A detailed cost estimate for the improvements shall be submitted with the plans signed and sealed by the design engineer.

The applicant should note the Township may require performance bonds, fees, and/or escrows for a preconstruction meeting and necessary inspections. Please feel free to contact us with any questions at (248) 751-3100 or mark.landis@ohm-advisors.com.

Please feel free to contact us with any questions at (248) 751-3100 or mark.landis@ohm-advisors.com.

Sincerely, **OHM Advisors**

Yonothan Mahut

Jonathan Mahut Engineer Mark Landis, P.E. Project Manager Yatooma Oil Gas Station, PC-23-22 Site Plan Review #1 July 26, 2023 Page 4 of 4



cc: Chris Barnett, Township Supervisor
David Goodloe, Building Official
Bill Basigkow, Director of Public Services
Tammy Girling, Director of Planning and Zoning
Lynn Harrison, Planning and Zoning Coordinator
Tiffany Sanders, Planning and Zoning Coordinator
Jeff Williams, Township Fire Marshal
Vince Sinacola, Water and Sewer Superintendent
John Enos, Carlisle Wortman, Township Planner
Michael Yatooma, Yatooma Oil
Vito Pampalona, Pampalona Companies
Jason Fleis, The Umlor Group

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Charter Township of Orion

2525 Joslyn • Lake Orion, Michigan 48360 • (248) 391-0304

To: Tammy Girling

Planning & Zoning Director

From: William Basigkow

Director, Department of Public Services

Date: August 10, 2023

Re: PC-23-22, Yatooma Oil SLU Gas Station with Drive-Thru and Site Plan Review 2nd Submittal

Dear Tammy,

The Department of Public Services has reviewed the above-mentioned project and has no further objections or concerns at this time.

If you have any questions, please contact me.

Respectfully Submitted,

William Basigkow Director Department of Public Services





Fire Department Phone: (248) 391-0304, ext. 2000

Fax: (248) 309-6993

To: Planning Commission/Planning & Zoning Director

From: Jeff Williams, Fire Marshal

www.oriontownship.org

PC-23-22 Yatooma Oil SLU Gas Station with Drive-Thru and Site Plan Review 2nd Submittal Re:

Date: July 26, 2023

The Orion Township Fire Department has completed its review of Application PC-23-22 for the limited purpose of compliance with Charter Township of Orion Ordinance's, Michigan Building Code, and all applicable Fire Codes.

Based upon the application and documentation provided, the Fire Department has the following recommendation:

X Approved

Approved with Requirements (See below)

Not approved

Requirements: NONE

This approval is limited to the application and materials reviewed which at this time do not raise a specific concern with regard to location and/or impact on health and safety. However, the approval is conditioned upon the applicant providing sufficient additional information at time of building permit application that includes data or documents, confirming full compliance with all applicable building codes, fire codes and Township Ordinances.

If there are any questions, the Fire Department may be reached at 248-391-0304 ext. 2004.

Sincerely,

Jeff Williams, Fire Marshal

Jeffrey Williams

Orion Township Fire Department





June 29, 2023

VIA EMAIL vito@pampalonaco.com

Vito Pampalona Pampalona Co. 850 W. University, Suite D Rochester, MI 48307

RE: Proposed Commercial Development

Orion Township, Michigan

Dear Vito:

Fleis & VandenBrink (F&V) staff has completed this letter as a supplement to the attached Traffic Impact Study (TIS), dated June 5, 2023, that was completed for the proposed Pamplona development. F&V previously completed a TIS for the Pampalona site in June, in order to provide an operational analysis of the site driveways and adjacent off-site intersections. Therefore, this supplemental analysis was prepared to provide a drive through queuing evaluation for the proposed drive-through facility.

The peak trip generation for the "Fast-Food Restaurant with Drive-Through" land use is expected to occur during the morning (AM) peak hour; therefore, the projected drive-through vehicle queuing was reviewed to determine if the proposed on-site queue length provided for the drive-through facility is adequate to accommodate the projected peak period operations. Fast-food restaurants with drive-through typically service approximately 70% of the customers through a drive-through. Therefore, of the total 22 vehicles generated by the proposed restaurant during the AM peak hour, it is estimated that approximately 15 vehicles will use the drive-through and the remaining 7 vehicles will park and walk-in to the restaurant. A queuing evaluation was performed to determine the maximum projected queue length for the site.

The service rate for the proposed development is greater than the projected arrival rate; therefore, the required queuing for the drive-through is based on the maximum potential for the random arrivals of vehicles during the peak hour. A Poisson Distribution calculation was performed to determine the probability of random arrivals and the results indicate that a potential maximum of 3 vehicles arriving simultaneously at any given time; the Poisson Distribution calculations are attached for reference.

The results of the analysis show a projected maximum queue length of 75 feet as summarized in **Table 1**. Therefore, review of the proposed site plan layout indicates that there is adequate on-site storage lengths to accommodate the peak projected demand for this development.

Table 1: Vehicle Queuing Analysis

| DRIVE-THROUGH STACKING SPACE | CALCULATOR |
|------------------------------|------------|
| Number of Arrivals | 15 |
| Time per Vehicle (s) | 40 |
| Service Rate (veh/hr) | 90 |
| Peak Arrival (veh) | 3 |
| Vehicle Length | 25 |
| TOTAL QUEUE (ft) | 75 |

Summary

- The potential maximum queue length for the proposed fast-food restaurant with drive-through is projected to be approximately 75-feet (~3 vehicles).
 - Therefore, the proposed site plan can adequately accommodate the projected drive-through queue length, without impacting the internal circulation or adjacent off-site operations.

If you have any questions or concerns, please contact our office.

Sincerely,

FLEIS & VANDENBRINK ENGINEERING, INC.

facol Swanson

Jacob Swanson, PE Traffic Engineer

Attached:

Queueing Analysis Traffic Impact Study



Volume = 15 vph service rate = 90 veh/hr λ = 0.166667

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--------|--------------------|----|----------|--------------------------------------|---------|---|-----------------------------------|----------------------------|---------------|
| λ^x | No Veh in Cycle | | Χ! | $P = (e^{-\lambda})(\lambda^{x})/X!$ | ΣΡ | P* # Cycle containing Volume in 1 | $\boldsymbol{\Sigma}$ Cycles in 6 | Volume i Cycle (1*6) | n Σ volume |
| 1.0000 | 0 | 0 | 1 | 84.65% | 84.65% | 76 | 76 | 0 | 0 |
| 0.1667 | 1 | 1 | 1 | 14.11% | 98.76% | 13 | 89 | 13 | 13 |
| 0.0278 | 2 | 2 | 2 | 1.18% | 99.93% | 1 | 11 | 2 | 15 |
| 0.0046 | 3 | 3 | 6 | 0.07% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0008 | 4 | 4 | 24 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0001 | 5 | 5 | 120 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0000 | 6 | 6 | 720 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0000 | 7 | 7 | 5040 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0000 | 8 | 8 | 40320 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0000 | 9 | 9 | 362880 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |
| 0.0000 | 10 | 10 | 3628800 | 0.00% | 100.00% | О | 11 | 0 | 15 |
| 0.0000 | 11 | 11 | 39916800 | 0.00% | 100.00% | 0 | 11 | 0 | 15 |



MEMO

| | VIA EMAIL: vito@pampalonaco.com |
|-------|---|
| То: | Vito Pampalona Pamplona Co. |
| From: | Jacob Swanson, PE Mary Ollis, EIT Fleis & VandenBrink |
| Date: | June 5, 2023 |
| Re: | Proposed Commercial Development Orion Township, Michigan Traffic Impact Study |
| | |

1 INTRODUCTION

This memorandum presents the results of a Traffic Impact Study (TIS) for the proposed commercial development in Orion Township, Michigan. The project site is located in the northwest quadrant of the Lapeer Road (M-24) & Silverbell Road intersection, as shown on the attached Figure 1. The proposed development includes the construction of a convenience store with fuel and an attached fast-food restaurant with drive-through, on property that is currently vacant. Site access to the project site is proposed via one (1) Right-In/Right-Out (RIRO) driveway on SB Lapeer Road (M-24) and one (1) full-access driveway on Silverbell Road. Lapeer Road (M-24) is under the jurisdiction of the Michigan Department of Transportation (MDOT) and Silverbell Road is under the jurisdiction of the Road Commission for Oakland County (RCOC). Information on the study roadways is summarized in Table 1. For the purposes of this TIS, site driveways and median U-turns (crossovers) were assumed to have an operating speed of 25 miles per hour (mph), unless otherwise noted.

TABLE 1: ROADWAY INFORMATION

| Roadway | Lapeer Road (M-24) | Silverbell Road | | | |
|------------------------------------|--|--|--|--|--|
| Number of Lanes | 6 lanes (3 lanes each direction, median divided) | 5 lanes (2 lanes each direction and a center two-way left-turn lane) | | | |
| National Functional Classification | Other Principal Arterial | Minor Arterial | | | |
| Roadway Jurisdiction | MDOT | RCOC | | | |
| Speed Limit | 55 mph | 50 mph | | | |
| AADT | 45,600 vpd (SEMCOG 2019) | 7,200 (SEMCOG 2018) | | | |

The scope of the study was developed based on Fleis & VandenBrink's (F&V) understanding of the development program, accepted traffic engineering practice, and methodologies published by the Institute of Transportation Engineers (ITE). In addition, Orion Township and MDOT provided input regarding the scope of work. The study analyses were completed using Synchro/SimTraffic (Version 11) traffic analysis software. Sources of data for this study include F&V subconsultant Quality Counts, LLC. (QC), information published by the Institute of Transportation Engineers (ITE), RCOC, Orion Township, and MDOT.

2 DATA COLLECTION

F&V subconsultant QC collected existing Turning Movement Count (TMC) data on Tuesday May 9th, 2022, during a typical weekday when Lake Orion Schools were in session. The peak period data collection was performed during the AM (7:00 AM to 9:00 AM) and PM (4:00 PM to 6:00 PM) peak periods, at the following study intersections:

- Lapeer Road (M-24) & Silverbell Road
- SB Lapeer Road (M-24) & NB-to-SB Crossover, North of Silverbell Road
- NB Lapeer Road (M-24) & SB-to-NB Crossover, South of Silverbell Road

During collection of the turning movement counts, Peak Hour Factors (PHFs), pedestrian and bike volumes, and commercial truck percentages were recorded for use in the traffic analysis. The AM and PM peak hours for the adjacent roadway network were generally observed to occur on weekdays between 7:30 AM to 8:30 AM and 4:15 PM to 5:15 PM, respectively. F&V collected an inventory of existing lane use and traffic controls, as shown on the attached **Figure 2**.

Additionally, F&V obtained the current signal timing permits from MDOT for the signalized study intersections along Lapeer Road (M-24). The raw traffic volumes shown on the attached data collection summaries were balanced upward at the site driveways. The existing 2023 peak hour traffic volumes used in the analysis are shown on the attached **Figure 3**. All applicable background data referenced in this memorandum is attached.

3 EXISTING CONDITIONS

Existing peak hour vehicle delays and Levels of Service (LOS) were calculated at the study intersections using Synchro (Version 11) traffic analysis software. The study analyses were based on the existing lane use and traffic control shown on the attached **Figure 2**, the existing peak hour traffic volumes shown on the attached **Figure 3**, and the methodologies presented in the *Highway Capacity Manual 6th*, *Edition* (HCM6). Descriptions of LOS "A" through "F" as defined in the HCM6, are attached. Typically, LOS D is considered acceptable, with LOS A representing minimal delay, and LOS F indicating failing conditions. Additionally, SimTraffic network simulations were reviewed to evaluate network operations and vehicle queues.

All of the signalized study intersections operate on the Sydney Coordinated Adaptive Traffic System (SCATS) network; as a result, the signals will perform real time optimizations to accommodate the traffic volumes observed by the approach lane detectors. Therefore, base timings were input for the signalized intersections and the study network was optimized for each scenario, in order to reflect the true signal operations. The results for the existing conditions analysis are attached and shown in **Table 2**.

TABLE 2: EXISTING INTERSECTION OPERATIONS

| | | | | Exis | ting C | ondition | s |
|---------|-----------------|------------|----------|------------------|--------|------------------|-----|
| | Intersection | Control | Approach | AM Pe | ak | PM Pe | ak |
| | | | | Delay (s/veh) | LOS | Delay (s/veh) | Los |
| 10 | Lapeer Road | | WBL | 53.3 | D | 51.2 | D |
| & | & | Signalized | SBT | 9.5 | Α | 3.7 | Α |
| 11 | NB-to-SB X/O | | Overall | 15.9 | В | 11.1 | В |
| | | | EBT | 51.3 | D | 41.7 | D |
| | | | EBTR | 51.3 | D | 42.7 | D |
| | | | EBR | 50.1 | D | 42.7 | D |
| 00 | Lapeer Road | | WBT | 47.8 | D | 32.5 | С |
| 20 & | (M-24) | Cianolized | WBR | 54.6 | D | 35.3 | D |
| 21 | & | Signalized | NBT | 9.4 | Α | 26.7 | С |
| | Silverbell Road | | NBR | 31.4 | С | 27.0 | С |
| | | | SBT | 17.0 | В | 20.6 | С |
| | | | SBR | 18.7 | В | 24.5 | С |
| | | | Overall | 26.4 | С | 26.3 | С |



| Intersection | | | Existing Conditions | | | | | | |
|--------------|--------------|------------|---------------------|------------------|-----|------------------|-----|--|--|
| | | Control | Approach | AM Pe | ak | PM Peak | | | |
| | | | | Delay (s/veh) | LOS | Delay (s/veh) | LOS | | |
| 30 | Lapeer Road | | EBL | 47.0 | D | 51.4 | D | | |
| & | . & | Signalized | NB | 2.7 | Α | 8.1 | Α | | |
| 31 | SB-to-NB X/O | | Overall | 11.9 | В | 14.5 | В | | |

The results of the existing conditions analysis indicates that all approaches and movements and study intersections are currently operating acceptably, at LOS D or better, during both the AM and the PM peak hours.

Review of SimTraffic network simulations indicates acceptable operations during both peak periods. The majority of vehicles were observed to be processed through the signalized study intersections along Lapeer Road (M-24) within each cycle length, leaving minimal residual queueing.

4 BACKGROUND (2024) CONDITIONS

4.1 BACKGROUND GROWTH

Population and economic growth profile data was obtained for Orion Township from the Southeast Michigan Council of Governments (SEMCOG) database, in order to calculate a background growth rate to project the existing 2023 traffic volumes to the site buildout year traffic of 2024. Population and employment projections from 2020 to 2050 were reviewed and showed an average annual growth of 0.52% and 0.63%, respectively. Therefore, a conservative annual background growth rate of **1.00**% per year was utilized for this study.

Additionally, it is important to account for developments within the study network, which will be constructed prior to the site buildout year of 2024. The following developments were identified by Orion Township to include in this study as background traffic. These projects are currently in the site plan approval process with both the Township and Auburn Hills and will have an impact on traffic volumes within the study network.

- GM Orion Plant expansion
- "The Palace" site redevelopment

F&V obtained information regarding the projected trip generation for each of these development projects as provided in the respective traffic studies; the TIS excerpts from both studies are attached. The 1.0% annual growth rate was applied to the existing 2023 traffic volumes and then the background development trips were added to determine the background 2024 traffic volumes *without the proposed development*, as shown on the attached **Figure 4**.

4.2 BACKGROUND CONDITIONS ANALYSIS

The background peak hour vehicle delays and Levels of Service (LOS) were calculated at the study intersection based on the existing lane use and traffic control shown on the attached **Figure 2**, the background peak hour traffic volumes shown on the attached **Figure 4**, and the methodologies presented in HCM6. The results of the background conditions analysis are attached and summarized in **Table 3**.

The results of the background conditions analysis indicates that all study intersection approaches and movements are expected to continue operating acceptably, in a manner similar to the existing conditions analysis, with only minor increases in delay and vehicle queueing.

TABLE 3: BACKGROUND INTERSECTION OPERATIONS

| | | | | Existing Conditions | | | | Background Conditions | | | | Difference | | | |
|--------------|-----------------|---------|----------|---------------------|-----|------------------|-----|-----------------------|-----|------------------|-----|------------------|-----|------------------|-----|
| Intersection | | Control | Approach | AM Peak | | PM Peak | | AM Peak | | PM Peak | | AM Peak | | PM Peak | |
| | | | | Delay (s/veh) | Los | Delay (s/veh) | Los | Delay (s/veh) | LOS | Delay (s/veh) | Los | Delay (s/veh) | LOS | Delay (s/veh) | LOS |
| 10 | Lapeer Road | | WBL | 53.3 | D | 51.2 | D | 51.9 | D | 48.6 | D | -1.4 | - | -2.6 | - |
| & | . & | Signal | SBT | 9.5 | Α | 3.7 | Α | 12.9 | В | 4.4 | Α | 3.4 | А→В | 0.7 | - |
| 11 | 11 NB-to-SB X/O | | Overall | 15.9 | В | 11.1 | В | 19.6 | В | 11.8 | В | 3.7 | - | 0.7 | - |



| | | | | Exis | ting C | ondition | s | Backg | round | Condition | ons | | Diffe | rence | |
|---------|-----------------|-------------------|----------|------------------|---------|------------------|-----|------------------|-------|------------------|-----|------------------|-------|------------------|-------------|
| 1 | ntersection | Control | Approach | AM Pe | AM Peak | | eak | AM Peak | | PM Peak | | AM Peak | | PM Peak | |
| | | | | Delay (s/veh) | Los | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | Los | Delay (s/veh) | Los | Delay (s/veh) | LOS |
| | | | EBT | 51.3 | D | 41.7 | D | 45.2 | D | 42.2 | D | -6.1 | - | 0.5 | - |
| | | Signal | EBTR | 51.3 | D | 42.7 | D | 45.2 | D | 44.7 | D | -6.1 | - | 2.0 | - |
| | | | EBR | 50.1 | D | 42.7 | D | 44.7 | D | 44.7 | D | -5.4 | - | 2.0 | - |
| | Lapeer Road | | WBT | 47.8 | D | 32.5 | С | 42.6 | D | 30.9 | С | -5.2 | - | -1.6 | - |
| 20 | (M-24) | | WBR | 54.6 | D | 35.3 | D | 53.0 | D | 33.9 | С | -1.6 | - | -1.4 | D→C |
| & 21 | & Silverbell | | NBT | 9.4 | Α | 26.7 | С | 14.5 | В | 30.5 | С | 5.1 | А→В | 3.8 | - |
| | Road | | NBR | 31.4 | С | 27.0 | С | 47.2 | D | 29.3 | С | 15.8 | C→D | 2.3 | - |
| | | | SBT | 17.0 | В | 20.6 | С | 28.2 | С | 22.3 | С | 11.2 | в→с | 1.7 | _ |
| | | | SBR | 18.7 | В | 24.5 | С | 24.5 | С | 30.3 | С | 5.8 | в→с | 5.8 | _ |
| | | entalis. Kalik | Overall | 26.4 | С | 26.3 | С | 30.8 | С | 28.6 | С | 4.4 | | 2.3 | _ |
| 30 | & & | | EBL | 47.0 | D | 51.4 | D | 42.3 | D | 50.8 | D | -4.7 | - | -0.6 | - |
| & | | Signal | NB | 2.7 | Α | 8.1 | Α | 3.1 | Α | 9.5 | Α | 0.4 | - | 1.4 | - |
| 31 | SB-to-NB X/O | | Overall | 11.9 | В | 14.5 | В | 11.6 | В | 15.9 | В | -0.3 | - | 1.4 | :: - |

5 SITE TRIP GENERATION

The proposed development includes the construction of a gas station with convenience store and fast-food restaurant with drive-through. The number of weekday peak hour (AM and PM) and daily vehicle trips that would be generated by the proposed development were forecast based on data published by ITE in the *Trip Generation Manual*, 11th Edition. The ITE trip generation datasets used in this study are statistically significant; therefore, per the Orion Township Zoning Ordinance, "a value one standard deviation above the average value of the dataset shall be used". The trip generation utilized for this study is summarized in **Table 4**.

TABLE 4: SITE TRIP GENERATION

| Land Use | ITE | Amount | nount Units | Average Daily Traffic (vpd) | AM P | eak Hou | ır (vph) | PM Peak Hour (vph) | | |
|---------------------------------------|----------|-----------|-------------|--------------------------------|------|---------|----------|--------------------|-----|-------|
| Land Use | Code | Amount | | | In | Out | Total | In | Out | Total |
| Gas Station with Convenience Market | 945 | 20 | VFP | 6,293 | 369 | 369 | 738 | 313 | 312 | 625 |
| Pass | % PM) | 4,751 | 280 | 280 | 560 | 234 | 234 | 468 | | |
| | | Ne | w Trips | 1,542 | 89 | 89 | 178 | 79 | 78 | 157 |
| Fast Food Restaurant w/ Drive-Through | 934 | 600 | SF | 424 | 22 | 21 | 43 | 16 | 14 | 30 |
| Pass | s-By (50 | 0% AM, 55 | % PM) | 151 | 11 | 11 | 22 | 9 | 9 | 18 |
| | | Ne | w Trips | 273 | 11 | 10 | 21 | 7 | 5 | 12 |
| | | Tota | l Trips | 6,717 | 391 | 390 | 781 | 329 | 326 | 655 |
| | 4,902 | 291 | 291 | 582 | 243 | 243 | 486 | | | |
| | | Total Nev | v Trips | 1,815 | 100 | 99 | 199 | 86 | 83 | 169 |

As is typical of commercial developments, a portion of the trips generated by the development are from vehicles already on the adjacent roadway network that will pass the site on their way from an origin to their ultimate destination. Therefore, not all traffic at the site driveways is necessarily new traffic added to the street system. This percentage of the trips generated by the development are considered "pass-by" trips and do not add new traffic to the adjacent street system. These trips are reduced from the total external trips generated by a study site. The percentage of pass-by trips used in this analysis was determined based on the rates published by ITE in the *Trip Generation Manual*, 11th Edition. Through discussion with the Township Engineer, trip reduction for pass-by trips is permitted for this proposed development plan.



6 SITE TRIP DISTRIBUTION

The vehicular trips that would be generated by the proposed development were assigned to the study roadway network based on the proposed site access plan and driveway configurations, the existing peak hour traffic patterns in the adjacent roadway network, and the methodologies published by ITE. The ITE trip distribution methodology assumes that new trips will enter the network and access the development, then leave the development and return to their direction of origin, whereas pass-by trips will enter and exit the development, then continue on their original direction of travel. The site trip distributions utilized in this analysis are summarized in **Table 5**.

| To/From | Via | New Trips | | Gas Stati | on Pass-By | Restaura | Pass-By | |
|---------|--------------------|-----------|------|-----------|------------|----------|---------|------------|
| | | AM | PM | AM | PM | AM | PM | Direction |
| North | Lapeer Road (M-24) | 53% | 27% | N/A1 | N/A¹ | 24% | 43% | Northbound |
| South | Lapeer Road (M-24) | 23% | 45% | 79% | 57% | 60% | 32% | Southbound |
| East | Silverbell Road | 16% | 13% | 10% | 28% | 8% | 16% | Eastbound |
| West | Silverbell Road | 8% | 15% | 11% | 15% | 8% | 9% | Westbound |
| | Total | 100% | 100% | 100% | 100% | 100% | 100% | Total |

TABLE 5: SITE TRIP DISTRIBUTION

The vehicular traffic volumes shown in **Table 4** were distributed to the study network according to the distribution shown in **Table 5**. The site-generated trips shown on the attached **Figure 5** were added to the background peak hour traffic volumes shown on the attached **Figure 4**, in order to calculate the future peak hour traffic volumes with the addition of the proposed development. Future peak hour traffic volumes are shown on the attached **Figure 6**.

7 FUTURE (2024) CONDITIONS

The future peak hour vehicle delays and LOS with the proposed development were calculated based on the future lane use and traffic control shown on the attached Figure 2, the proposed site access, the future traffic volumes shown on the attached Figure 6, and the methodologies presented in the HCM6. The results of the future conditions analysis are attached and summarized in Table 6.

Background Conditions Future Conditions Difference AM Peak PM Peak AM Peak PM Peak AM Peak PM Peak Intersection Control Approach Delay Delay Delay Delay Delay Delay LOS LOS LOS LOS LOS LOS (s/veh) (s/veh) (s/veh) (s/veh) (s/veh) (s/veh) **WBL** 51.9 D 48.6 D 50.6 D 46.8 D -1.3-1.810 Lapeer Road В Signal SBT 12.9 4.4 Α 14.1 В Α 1.2 0.7 5.1 NB-to-SB X/C 11 В 19.6 11.8 В C В Overall 20.5 12.9 0.9 $B \rightarrow C$ 1.1 -**EBT** 45.2 D 42.2 D 49.2 D 44.1 D 4.0 1.9 **EBTR** 45.2 D 44.7 49.2 D 46.9 D 4.0 2.2 D -_ **EBR** 44.7 D 44.7 D 48.7 D 46.9 D 4.0 _ 2.2 . Lapeer Road D C C **WBT** 42.6 30.9 42.5 D 30.1 -0.1-0.820 (M-24)**WBR** 53.0 D 33.9 C 53.7 D 32.8 C 0.7 -1.1 _ & & Signal В C **NBT** 14.5 30.5 C 16.4 В 32.9 1.9 2.4 21 Silverbell 47.2 C **NBR** D 29.3 C 52.4 D 30.3 5.2 -1.0 _ Road SBT 28.2 C 22.3 C 28.0 C 23.3 C -0.21.0 SBR 24.5 C 30.3 C 24.6 C 29.0 C 0.1 -1.3-C C Overall 30.8 28.6 31.9 C 30.1 C 1.1 1.5

TABLE 6: FUTURE INTERSECTION OPERATIONS

¹ No pass-by trips for the gas station were applied in the northbound direction, as these vehicles would pass directly by another gas station, in order to divert trips to the proposed development. Therefore, for purposes of this analysis, northbound pass-by trips (diverted link) were not considered for the gas station land use.



| | | | | Background Conditions | | | Future Conditions | | | | Difference | | | | |
|----|--------------------|-----------------|----------|-----------------------|-----|------------------|-------------------|------------------|------|------------------|------------|------------------|-----|------------------|-----|
| I | ntersection | Control | Approach | AM Peak | | PM Peak | | AM Peak | | PM Peak | | AM Peak | | PM Peak | |
| | | | | Delay (s/veh) | Los | Delay (s/veh) | LOS | Delay (s/veh) | LOS | Delay (s/veh) | Los | Delay (s/veh) | Los | Delay (s/veh) | LOS |
| 30 | Lapeer Road | | EBL | 42.3 | D | 50.8 | D | 44.1 | D | 51.7 | D | 1.8 | - | 0.9 | - |
| & | | Signal | NB | 3.1 | Α | 9.5 | Α | 3.8 | Α | 10.3 | В | 0.7 | - | 0.8 | А→В |
| 31 | SB-to-NB X/O | | Overall | 11.6 | В | 15.9 | В | 13.6 | В | 17.0 | В | 2.0 | - | 1.1 | - |
| 40 | Lapeer Road | Stop EBR | | NVA | | | 850.5 | F | 53.2 | F | | | | | |
| 40 | & E. Site Drive | (Minor) | SBR | N/A | | | Free | | Free | | - N/A | | | | |
| | Silverbell Rd. | Stop (Minor) | EBL | N/A | | | 7.7 | Α | 7.9 | Α | | | | | |
| 50 | & | | WBR | | | | Free | | Free | | N/A | | | | |
| | S. Site Drive | (IVIIIIVI) | SB | 70000000 | | | | 12.3 | В | 16.3 | С | | | | |

The results of the future conditions analysis, with the addition of the site generated traffic, indicates that the study intersections are expected to continue operating acceptably, at LOS D or better during both peak periods, in a manner similar to the background conditions analysis, with the following exception.

Review of SimTraffic network simulations for the remainder of the study network during both the AM and PM peak hours indicates acceptable operations, with the majority of vehicle queues observed to be serviced within each cycle length, similar to those observations made during background conditions.

(INT #40) - SB Lapeer Road (M-24) & E. Site Drive

<u>During both peak hours</u>: The eastbound (egress) right-turn movement is expected to operate at LOS F.

Review of SimTraffic network simulations indicates generally acceptable operations during the PM peak hour; however, long vehicle queues were observed for the egress movements during the AM peak hour. These vehicle queues are the result of the high volume of traffic on SB Lapeer Road (M-24) during the AM peak period.

The majority of traffic is anticipated to utilized Lapeer Road; however, if the delays at the E. Site Drive are too long, it is anticipated that vehicles will redistribute within the site to increase the utilization at the S. Site Drive on Silverbell Road, which has sufficient capacity to accommodate increased vehicle demand.

8 CRASH ANALYSIS

A crash analysis was conducted at the study intersections and roadway segments. F&V obtained the crash data used in the analysis from the Michigan Traffic Crash Facts (MTCF) historical crash database, for the most recent **three years** (January 1, 2019, to December 31, 2021) of available data. The results of the crash analysis are summarized in **Table 7** and further discussed below.

<u>SB Lapeer Road (M-24) & NB-to-SB Crossover:</u> There were 12 crashes reported at this intersection between 2019 and 2021. The majority of crashes (10 reports) at the study intersection were Angle (58%) and Rear-End (25%) crashes; the remaining two (2) crashes were Sideswipe (8%) and Other/Unknown (8%) crash types.

The majority of crashes at this intersection are a result of vehicles traversing from Lapeer Road (M-24) to the northbound-to-southbound crossover. The majority of the angle crashes were miscoded and are actually sideswipe crashes, caused by vehicles being struck by larger vehicles and trailers while making the turn from the crossover to southbound Lapeer Road (M-24). The Rear-End crashes can be attributed to distracted drivers and back-ups within the crossover storage lanes. One (1) Type-B injury crash was reported; no fatal or Type-A injury crashes were reported within the most recent three (3) years of available data.

SB Lapeer Road (M-24) Segment from NB-to-SB Crossover to Silverbell Road: There were 30 crashes reported within this road segment between 2019 and 2021. The majority of crashes (23 reports) within the road segment were Sideswipe (53%) and Rear-End (Straight) (23%); the remaining seven crashes (23%) were Single Motor Vehicle (13%), Angle (7%), and Rear-End Left-Turn (3%).



The majority of the sideswipe crashes within this road segment are the result of vehicles improperly changing lanes. The Rear-End crashes were the result of backed up traffic on the road and distracted drivers. The Single Motor Vehicle crashes were the result of vehicles going too fast for conditions. Two (2) Type-B and One (1) Type-C injury crashes were reported; no fatal or Type-A injury crashes were reported.

<u>Lapeer Road (M-24) & Silverbell Road:</u> There were 90 crashes reported at the intersection between 2019 and 2021. The majority of crashes (81 reports) at the intersection were Rear-End (Straight), (43%), Sideswipe (21%), Angle (14%), and Rear-End (Right-Turn) (11%); the remaining nine crashes (9%) were Single Motor Vehicle (8%) and Rear-End (Left-Turn) (1%).

The majority of the Rear-End crashes at the intersection are the result of stop-and-go traffic and inattentive drivers. The Sideswipe crashes are primarily a results of vehicles improperly changing lanes. The Angle crashes are primarily the result of red light running. The Rear-End (Right Turns) are the result of vehicles stopped in the right-turn lanes waiting to turn right. Two (2) Type-A, seven (7) Type-B, and seven (7) Type-C injury crashes were reported; no fatal injury crashes were reported. Both crashes with Type-A injuries were Angle crashes due to red light running.

NB Lapeer Road (M-24) Segment from SB-to-NB Crossover to Silverbell Road: There were 17 crashes reported within this road segment between 2019 and 2021. The majority of crashes (16 reports) within the road segment were Sideswipe (41%), Rear-End (Straight) (29%), and Single Motor Vehicle (24%); the remaining crash (6%) was a Backing crash.

The majority of the sideswipe crashes within this road segment are the result of vehicles improperly changing lanes. The Rear-End crashes were the result of stop-and-go traffic and inattentive drivers. The Single Motor Vehicle crashes were the result of vehicles going too fast for conditions. Three (3) Type-C injury crashes were reported; no fatal or Type-A injury crashes were reported.

NB Lapeer Road (M-24) & SB-to-NB Crossover: Zero (0) crashes were reported at this intersection.

Lapeer Road SB Lapeer Road Lapeer Road (M-24) Lapeer Road (M-24) (M-24)Segment -(M-24)Segment -Silverbell Road to Silverbell Road to Description NB-to-SB X/O NB-to-SB X/O SB-to-NB X/O Silverbell Road Total Total Total Total % % % % Crashes Crashes Crashes Crashes Single Motor Vehicle Crash 0 0% 4 13% 7 4 24% 8% 0 0% 0 0% 0 0% 1 6% Backing 0 0% 0 0% 0% Head On 1 1% 0 Head On Left-Turn 0 0% 0 0% 0 0% 0 0% 7 58% 2 7% 13 14% 0 0% Angle 7 Rear-End (Straight) 3 25% 23% 39 43% 5 29% 0 Rear-End (Left-Turn) 0% 1 3% 1 1% 0 0% 0 0 Rear-End (Right-Turn) 0% 0% 10 11% 0 0% Sideswipe-Same 1 8% 16 53% 19 21% 7 41% 0 0% 0 0% 0 0% 0 0% Sideswipe-Opposite Other/Unknown 1 8% 0 0% 0 0% 0 0% Total 12 100% 30 100% 90 100% 17 100%

TABLE 7: CRASH ANALYSIS SUMMARY

The <u>SEMCOG Crash Analysis Process</u> Regional Critical Intersection Crash Rates, Frequencies, and Casualty Ratios: By Presence or Absence of Signalization was used to compare the actual crash rates and frequencies to the regional rates for similar intersection operations. Using methodology from the SEMCOG Crash Analysis Process, the intersections were further analyzed and compared to the SEMCOG regional crash frequency for signalized and unsignalized intersections. The results of this analysis are summarized in **Table 8**. The results



of the SEMCOG crash analysis comparison indicates that the crash rates and frequencies for the study intersection of Lapeer Road (M-24) & Silverbell Road is greater than the SEMCOG averages for similar types of intersections; all other study intersections are below the SEMCOG averages for SE Michigan.

TABLE 8: STUDY NETWORK INTERSECTION CRASH ANALYSIS SUMMARY

| | | | ash Frequer Crashes/yea | | Crash Rate (Crashes per MV) | | |
|--------------------------------------|---|--|---|------------|--------------------------------|------------------------------|------------|
| Intersection | Average ADT (Entering Volume vpd) | Intersection Annual Crash Frequency | SEMCOG Average Annual Crash Frequency | Difference | Intersection Crash Rate | SEMCOG Average Crash Rate | Difference |
| Lapeer Road (M-24) & Silverbell Road | 55,675 | 30.00 | 26.72 | 3.28 | 1.48 | 1.35 | 0.13 |
| Lapeer Road (M-24) & NB-to-SB X/O | 22,455 | 7.67 | 8.77 | -1.10 | 0.94 | 0.96 | -0.02 |
| Lapeer Road (M-24) & SB-to-NB X/O | 20,395 | 0.00 | 8.77 | -8.77 | 0.00 | 0.96 | -0.96 |

9 ACCESS MANAGEMENT

9.1 AUXILIARY LANES

The MDOT and RCOC right-turn treatment criteria were evaluated at the proposed site driveways. Left-turn lane warranting criteria were not evaluate; since the proposed E. Site Drive is located on Lapeer Road (M-24), which is a median divided roadway and the proposed S. Site Drive is located on Silverbell Road, which currently provides an existing center left-turn lane adjacent to the site driveway. This analysis was based on the future peak hour traffic volumes shown on the attached **Figure 6**. The results of the analysis are shown on the respective attached MDOT and RCOC charts and summarized in **Table 9**.

TABLE 9: AUXILIARY TURN LANE SUMMARY

| Intersection | AM Peak | PM Peak | Recommendation | | |
|---------------------------------------|------------------|------------------|------------------|--|--|
| SB Lapeer Road (M-24) & E. Site Drive | Right-Turn Lane | Right-Turn Lane | Right-Turn Lane | | |
| Silverbell Road & S. Site Drive | Right-Turn Taper | Right-Turn Taper | Right-Turn Taper | | |

The results of the MDOT and RCOC right-turn treatment criteria indicates that a right-turn deceleration lane is recommended on SB Lapeer Road (M-24) at the proposed E. Site Drive and a right-turn deceleration taper is recommended on Silverbell Road at the proposed S. Site Drive.

9.2 DRIVEWAY SPACING

The MDOT Geometric Design Guidance (Section 1.2.2) was utilized to evaluate the location of the proposed E. Site Drive, in relation to nearby intersections and driveways within close proximity to the project site. The desirable unsignalized access spacing and intersection corner clearance criteria were evaluated for the 55-mph section of SB Lapeer Road (M-24). The distance of the proposed E. Site Drive from nearby access points and the warranting criteria are summarized in **Table 10** and displayed in **Exhibit 1**.

TABLE 10: DESIRABLE CORNER CLEARANCE SUMMARY

| Adjacent D | rivewa | ays & Intersections | Distance | Criteria (55 mph) | Meets |
|---------------|--------|----------------------|----------|-------------------|-------|
| E. Site Drive | To | Car Dealership Drive | 380 feet | 455 feet | NO |
| E. Site Drive | То | NB-to-SB Crossover | 240 feet | 460 feet | NO |
| E. Site Drive | То | Silverbell Road | 280 feet | 230 feet | YES |





Exhibit 1: Driveway Spacing

The results of the driveway spacing analysis indicates that the proposed E. Site Drive location is expected to meet the desirable corner clearance criteria, in relation to Silverbell Road. However, the proposed E. Site Drive is not expected to meet the corner clearance and driveway spacing criteria, in relation to the NB-to-SB median crossover and the Car Dealership Driveway.

Review of the study area indicates that there is not sufficient spacing between Silverbell Road and the NB-to-SB crossover to meet the recommended driveway corner clearance. Additionally, the proposed driveway is located as far north along the site frontage as possible, which is recommended, in order to provide sufficient spacing from the signal operations at Silverbell Road. Furthermore, the existing car dealership driveway is located north of the signalized crossover; therefore, any potential conflicts between the adjacent access points would be metered by the signalized intersection operations.



10 CONCLUSIONS

The conclusions of this TIS are as follows:

EXISTING CONDITIONS (2023)

 The results of the existing conditions analysis indicates that all approaches and movements at the study intersections are currently operate acceptably, at LOS D or better during both the AM and PM peak periods.

BACKGROUND CONDITIONS (2024)

The results of the background conditions analysis indicate that all study intersections are expected to
continue to operate acceptably, at LOS D or better during both peak periods, in a manner similar to the
existing conditions analysis. Review of SimTraffic network simulations also indicates acceptable
operations, similar to those observed under existing conditions.

FUTURE CONDITIONS (2024)

- The results of the future conditions analysis indicates that the study intersections are expected to continue
 operating acceptably, at LOS D or better during both peak periods, in a manner similar to the background
 conditions analysis, with the following exceptions.
 - (INT #40) SB Lapeer Road (M-24) & E. Site Drive: The eastbound right-turn movement is expected
 to operate at LOS F during both the AM and PM peak periods.

Review of SimTraffic network simulations indicates generally acceptable operations during the PM peak hour; however, long vehicle queues were observed for the egress movements during the AM peak hour. These vehicle queues are the result of the high volume of traffic on SB Lapeer Road (M-24) during the AM peak period.

The majority of traffic is anticipated to utilized Lapeer Road (M-24); however, if the delays at the proposed E. Site Drive are too long, it is anticipated that vehicles will redistribute within the site to increase the utilization at the S. Site Drive on Silverbell Road, which has sufficient capacity to accommodate increased vehicle demand.

 Review of SimTraffic network simulations for the remainder of the study network during both the AM and PM peak hours indicates acceptable operations, with the majority of vehicle queues observed to be serviced within each cycle length, similar to those observations made during background conditions.

CRASH ANALYSIS

 The results of the SEMCOG crash analysis comparison indicates that the crash rates and frequencies for the study intersection of Lapeer Road (M-24) & Silverbell Road is greater than the SEMCOG averages for similar types of intersections. All other study intersections are below the SEMCOG averages for SE Michigan.

ACCESS MANAGEMENT

- The results of the auxiliary turn lane evaluation indicates that a right-turn deceleration lane is recommended on SB Lapeer Road (M-24) at the proposed E. Site Drive and a right-turn deceleration taper is recommended on Silverbell Road at the proposed S. Site Drive.
- The results of the driveway spacing evaluation indicates that the location of the proposed E. Site Drive is not expected to meet the desirable MDOT spacing criteria from the signalized crossover intersection. Further review of the proposed driveway location showed:
 - It is located as far north along the site frontage as possible, in order to provide adequate spacing from the signalized intersection of Lapeer Road (M-24) & Silverbell Road.
 - The existing car dealership driveway is located north of the signalized crossover; therefore, any
 potential conflicts between the adjacent access points would be metered by the signalized
 intersection operations.



11 RECOMMENDATIONS

The recommendations of this TIS are summarized as follows:

Recommended Improvements

(INT #40) - SB Lapeer Road (M-24) & E. Site Drive

Construct a southbound right-turn deceleration lane on SB Lapeer Road at the proposed E. Site Drive.

(INT #50) - Silverbell Road & S. Site Drive

Construct a westbound right-turn deceleration taper on Silverbell Road at the proposed S. Site Drive.

Any questions related to this memorandum, study, analysis, and results should be addressed to Fleis & VandenBrink.



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Michigan.

Digitally signed by Jacob Swanson
Date: 2023.06.05

Date: 2023.06.05 12:25:20 -04'00'

Attached:

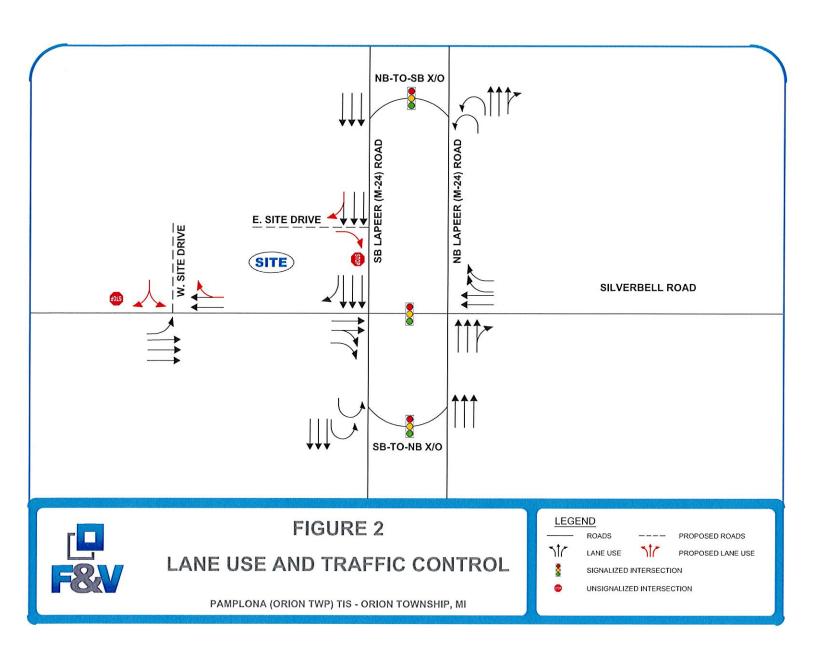
Figures 1-6

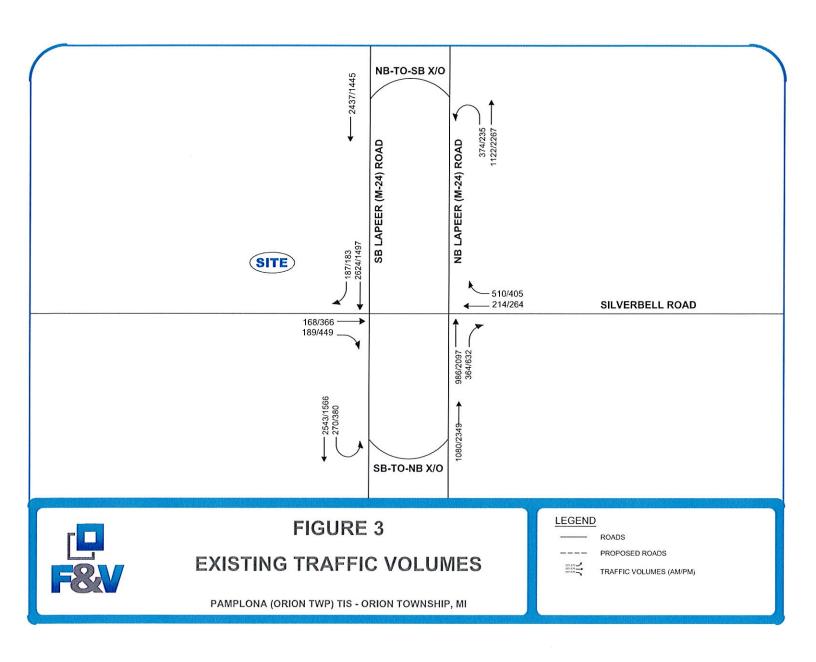
Proposed Site Plan Traffic Volume Data SEMCOG Data

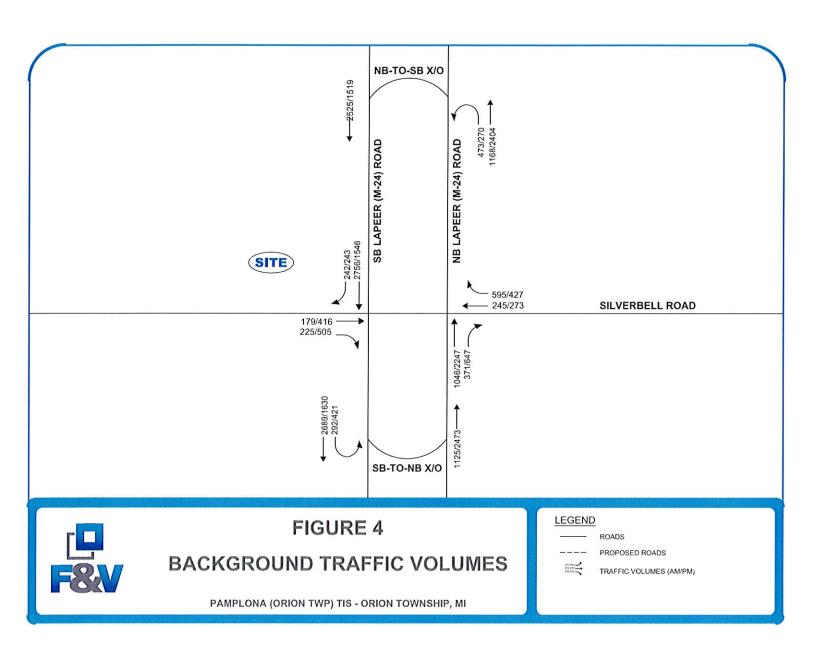
Synchro / SimTraffic Results Auxiliary Turn Lane Warrants

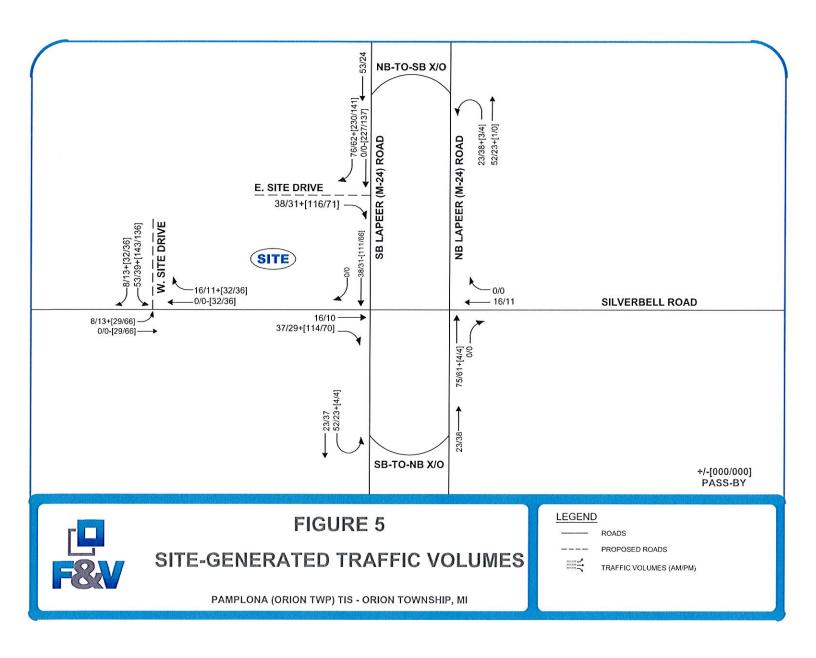


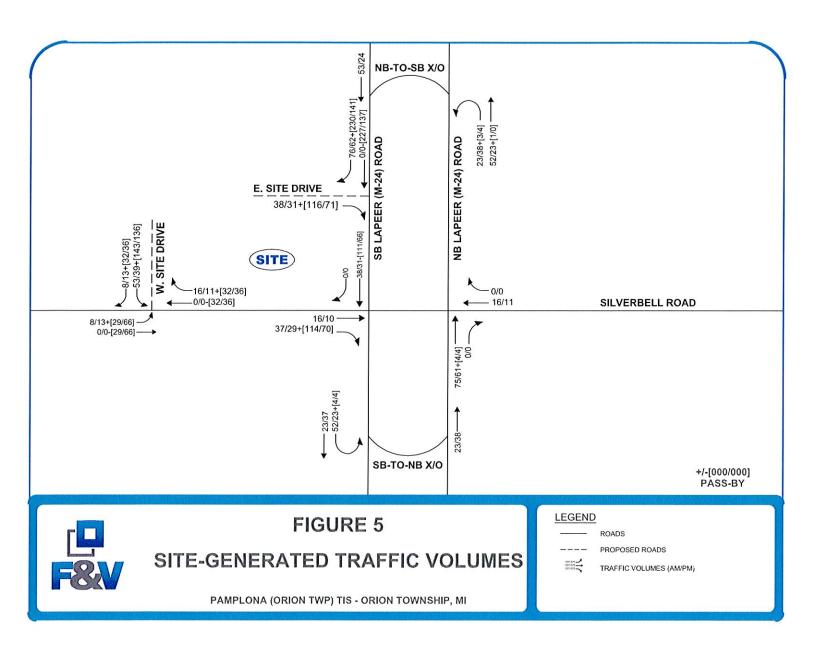














July 17, 2023

Carlisle | Wortman Associates, Inc.

117 North First St., Ste. 70 Ann Arbor, MI 48104

Regarding: Yatooma Oil Orion Township Gas PC-23-22

Special Land Use and Site Plan Review

Dear Carlisle | Wortman Associates, Inc.:

Attached please find revised plans for the above referenced Yatooma Oil Orion Gas project. We are in receipt of review comments from Carlisle | Wortman Associates., Inc., OHM Advisors, Orion Township Fire Department, and Orion Township Department of Public Services in their letters dated June 26, 2023, June 20, 2023, June 21, 2023, and June 21, 2013, respectively. Below are the comments from the review letters as well as our responses and any corrective actions taken shown in **red** as necessary.

Carlisle | Wortman Associates, Inc. Comments:

1) Special Land Use Standards:

1) Provide proposed hours of operation.

Proposed hours of operation are 24 hours/day as seen on Sheet C4 Site Plan.

2) Planning Commission to consider additional landscape screening at the west and north site boundaries.

Additional landscape screening has been provided along the west and north boundaries. Refer to LS100.

3) Defer evaluation to the Township Engineer of the Traffic Impact Study, and impact of amount of traffic generated by the use and site design on area traffic.

Noted. Township Engineer comments have been replied to and included in this letter. An updated Traffic Impact Study has been included with this resubmittal including drive-thru projections located on page 2.

4) If the screened area at front doors is intended for outdoor storage, the area needs to be relocated into a rear yard.

The screened area at front doors is not intended for outdoor storage.

5) If the screened area at front doors is intended for outdoor display/sales, the information may be removed from the site plan; it will be addressed through a separate, annual permit.

The screened area at front doors is intended for outdoor display/sales. All notes have been removed. Owner shall apply for separate, annual permit as required.

6) The Planning Commission to review proposal against the special land use criteria (Section 30.02). Noted. Special land use criteria in Section 30.02 has been adhered to including location and screening of vehicular circulation as seen on Sheet C5 Truck Turning Plan, hours of operation as seen on Sheet C4 Site Plan, and the location and screening of outdoor activities and mechanical equipment. The project is compatible with the adjacent uses and master plan. The project will not adversely impact the traffic and utilities. The project will provide a need for diesel and vehicle fueling for the area, which has a significant amount of truck traffic for General Motors, shipping companies, landfill, etc.

2) Area, Width, Height, Setbacks:

1) Confirm if Lapeer Rd. right-of-way shown on the plans is an existing right-of-way width, or a future right-of-way width.

The Lapeer Rd. right-of-way is an existing right-of-way as seen on Sheet C3.



2) Provide elevations of proposed gas pump canopies to confirm height meets ordinance requirements. Gas canopy plans and elevations are provided on Sheets A202 and A203. The under-canopy height for both canopies is 16'-0".

3) Natural Resources:

1) Modify plan set as described to preserve the existing tree on site. Plan set has been modified to preserve the existing trees on site. The tree survey can be found on Sheet

2) Consider rotating gas pumps/canopy at rear of building to minimize pavement in this area. The gas pumps/canopy at rear of building has not been rotated to accommodate efficient truck circulation. Truck circulation can be found on Sheet C5 Truck Turning Plan.

4) Building Location and Site Arrangement:

1) Confirm that drive-thru restaurant will/will not have indoor seating for its patrons.

The drive-thru restaurant will have limited indoor seating. Refer to Sheet A100.

2) Location of patio relative to drive-thru restaurant and indoor food service counter. The patio has not been relocated to maintain distance from M-24, Silverbell Rd, and the drive-thru lane. It can also be used to accommodate patrons charging electric vehicles.

3) Illustrate gas vent stacks.

Gas vent stacks are illustrated on plan view on Sheet C4 Site Plan with a detail shown on Sheet C11 Details.

5) Parking and Loading:

1) Planning Commission to consider proposed number of parking spaces.

Noted. Significantly more parking spaces are provided than the typical Red Barn standard. The majority of patrons will utilize the proposed gas pump stalls for parking and entering the establishments. Additional parking calculations can be found on Sheet C4 Site Plan.

- 2) Provide details of electric vehicle charging station equipment to confirm ordinance compliance. The EV charging area is detailed on Sheet A103. The equipment shall conform to the zoning ordinance requirements.
- 3) Update Traffic Impact Study with an evaluation of the adequacy of the stacking area.

The Traffic Impact Study has been updated to include an evaluation of the drive-thru stacking area on page 2, stating that the potential maximum queue is projected to be approximately 75-feet (~3 vehicles). 10 stacking spaces (20' in length) can be seen on Sheet C4 Site Plan with an additional 200' of stacking length beyond the 10 spaces.

4) Provide detail for wheelchair access/inclined sidewalk.

A sidewalk ramp detail can be found on Sheet C11 Details. The pavement for the barrier-free parking spaces match the top of sidewalk elevations at cross hatch and integral sidewalk with curb transitions to 6" curb not exceeding 2% slope in paved surfaces.

5) Relocate loading/unloading area out of the front yard.

The loading/unloading area has been relocated out of the front yard.

6) Township Engineer evaluation of fire lane.

Noted.

7) Provide anticipated types/sizes of delivery vehicle for convenience store and restaurants.

Anticipated types/sizes of vehicles utilizing the site are represented on Sheet C5 Truck Turning Plan.

8) Identify area where tanker truck will park to re-fill underground fuel storage tanks.

Area where tanker truck will park to re-fill underground fuel storage tanks can be found on Sheet C5 Truck Turning Plan.



6) Site Access and Circulation:

- 1) Defer evaluation of locations and number of access driveways to Township Engineer. Noted.
- 2) Planning Commission may want to discuss potential for driver confusion traversing the site with Township traffic consultant.

Noted. Additional signage and mountable curb and gutter provided to alleviate confusion.

3) Address potential for cars, who are waiting in drive-thru lane, to block vehicle parked in spaced on north side of site.

The anticipated drive-thru stacking queue length can be found in the provided Traffic Impact Study on page 2. The projected queue length is 75' (~3 vehicles), therefore, blocking spaces is not an issue.

7) <u>Infrastructure.</u> Township Engineer input regarding water, sewer and stormwater detention/discharge. Noted.

8) Safety Paths and Sidewalks:

1) Planning Commission to consider curved safety path to widen proposed path around existing utility structures.

Noted. The proposed safety path has been updated to curve around existing utility structures. The street sign shall be relocated as seen on Sheet C4 Site Plan.

2) Widen sidewalks on north and east side of building to accommodate vehicle overhang. Sidewalks have been widened to accommodate vehicle overhang.

9) **Landscaping:**

- 1) Add existing tree to remain to Landscape Plan; design landscaping to ensure preservation of tree. The existing trees to remain are shown on landscape plan LS100.
- 2) Replace invasive species with non-invasive species in the Plant Material List. Invasive species have been replaced with non-invasive species. Refer schedule on LS100.
- 3) Add tree to west end of patio and increase size of planting bed and plant material to the north of patio to better screen patio users from vehicles to the north.

The plant material to the north has been increased. Adding a tree to the west is not possible due to utilities.

- 4) Planning Commission to discuss practicality of trash receptacle locations so far from the building. Noted. The trash receptacle has been relocated closer to the building.
- 5) Explain intent of "perennial and wildflower list" on Sheet LS100.

The list has been removed from plan.

6) Correct Notes 5, 7 and 10 on Sheet LS101.

Notes are corrected on Sheet LS101.

10) Lighting:

- 1) Confirm lighting proposal on PH100, Photometric Plan, or on Sheet A201, Exterior Elevations. Light fixtures on Sheets A200 and A201 have been corrected to match PH100.
- 2) Provide legible manufacturer sheets for D-series fixtures.

Sheet PH101 added to provide more legible fixture cut sheets.

3) Planning Commission to discuss bright light levels under rear gas pump canopy, in comparison to the rest of the site and adjoining roadways.

Lighting levels for the canopy are consistent with industry standards. Light fixtures are fully recessed.



11) Floor Plans and Elevations:

1) Provide elevation of proposed gas pump canopy.

Gas and Diesel Canopy elevations have been provided on Sheets A202 and A203.

2) Provide floor plan for fast-food restaurant space, including proposed indoor seating if any. A floor plan has been provided on Sheet A100.

OHM Comments:

- 1. Adjust the cross-access drive by angling slightly west to provide stacking for 2 vehicles turning from M-24 into the site and for an aligned intersection with the gas pump isle.

 The cross-access drive has been angled slightly to the west to allow for 2 vehicles turning from M-24 into the site. Stacking spaces can be seen on Sheet C4 Site Plan.
- 2. The plans need to be revised to include the right-turn lane and right-turn taper for the approach off M-24 as recommended in the TIS subject to MDOT approval.

 The existing right turn lane has been extended beyond the approach off M-24 subject to MDOT approval. An entrance plan has been added to clarify the extension of the right turn lane as Sheet C6 Lapeer Road (M-24) Entrance Enlargement.
- 3. The proposed drive-thru is 7 feet wide exclusive of curb or gutter, which is exceedingly narrow. The width should be increased to 11 feet to provide a more navigable drive-thru. The proposed drive-thru width is 11 feet.
- 4. The sidewalk connecting the safety path on M-24 has a diagonal crossing that is not acceptable. It is recommended that the northern parking spaces are shifted west to allow for a perpendicular sidewalk crossing towards the gas station building.
 The sidewalk connecting to the safety path on M-24 has been updated to connect perpendicularly.
- 5. Sidewalk adjacent parking stalls shall be widened to 7 feet wide to ensure a minimum walking area width of 5 feet. Particularly the adjacent sidewalks on the north and west sides of the gas station building.
 - Sidewalk adjacent to parking stalls have been widened to 7 feet wide.
- 6. The asphalt safety path narrows to 5 feet as it nears the intersection of M-24 and Silverbell Rd, which is below the 8-foot minimum width required by Township. It is recommended the proposed pathway is realigned to connect to the existing pathway on M-24 diagonally. The asphalt safety path has been updated to maintain 8-foot minimum width.
- 7. The proposed drive aisle west of the diesel pumps should be marked with one-way signage. If it is planned to be a two-way drive aisle the width must be increased to at least 22 feet exclusive of curb and gutter.
 - The proposed drive aisle west of the diesel pumps has been increased to 22 feet.
- 8. The gas and diesel pump canopy overhang should be outlined, and the vertical clearance dimensioned to verify no interference with the OTFD access.

 Gas and Diesel Canopy plans and elevations have been provided on Sheets A202 and A203. The canopy height for both canopies is 16'-0".
- Proposed slopes near the northwest and southwest corners of the site exceed the Township maximum recommended slope of 1:4 and will need to be revised.
 Proposed slopes near the northwest and southwest corners of the site have been updated to maintain a maximum slope of 1:4.
- 10. An oil/water separation device shall be included in the storm management plan.

 An oil/water separation device has been included in the storm management plan as structure 301.

 Details can be found on Sheet C10 Storm Details.
- 11. ADA compliant ramps with detectable warning surfaces need to be provided for the approach.

 ADA compliant ramps with detectable warning surfaces have been provided for both approaches.

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- 12. Correct the preliminary sanitary sewer basis of design per OCWRC standards and Orion Township's use of 3.5 people/REU. Include a preliminary Basis of Design for water usage. The sanitary sewer basis of design has been updated per OCWRC standards and Orion Township's use of 3.5 people/REU. A basis of design has been provided for water usage on Sheet C7 Utility Plan.
- 13. Add a private monitoring manhole over the proposed sanitary sewer lead.

 A private monitoring manhole has been provided for the sanitary sewer lead.
- 14. Provide proposed cross-sections for both the concrete and asphalt drive and parking lot per Township standards. Additionally, a transition ramp detail was not provided and shall be included with the plans.
 - Proposed cross-sections for on-site and right-of-way concrete and on-site asphalt can be found on Sheet C4 Site Plan. A transition ramp detail can be found on Sheet C11 Details.
- 15. The unloading area east of the gas pumps needs to be a concrete pad instead of the proposed asphalt pavement. Additionally, the current 7-inch concrete slab used is unacceptable and must be changed to a minimum of 8-inch concrete section.

 The unloading area has been updated to be a concrete pad. An 8-inch concrete section has also been provided.
- 16. Add the missing existing water main south of the water valve near the corner of M-24 and Silverbell

Rd.

The missing existing water main south of the water valve near the corner of M-24 and Silverbell Rd. has been added.

- 17. Add the missing hydrant lead between the existing hydrants and the main. Increase the hydrant lead size to an 8-inch for the northern hydrant since it exceeds 50 feet in length The northern hydrant lead has been increased to an 8-inch.
- 18. Add the missing existing sanitary sewer south of the existing manhole near the corner of M-24 and

Silverbell Rd.

The missing existing sanitary sewer south of the existing manhole near the corner of M-24 and Silverbell Rd. has been added.

19. The utilities should be shown on the landscaping plan to avoid conflicts. Utilities are shown on the Landscape Plan.

Orion Township Fire Department Comments:

- Fire apparatus access roads shall have an unobstructed width of not less than 20 feet exclusive of shoulder and an unobstructed vertical clearance of 13 feet of 6 inches. Canopy heights shall be shown on the revised drawings.

Gas and Diesel Canopy plans and elevations have been provided on Sheets A202 and A203. The canopy height for both canopies is 16'-0" in height.

Orion Township Department of Public Services Comments:

The Department of Public Services has reviewed the above-mentioned project and has no further objections or concerns at this time.

Noted.



We hope you find the revised plans along with this response agreeable and respectfully request your confirmation that the remaining site plan comments have been addressed.

If you have questions or require anything further, please do not hesitate to contact our office.

Sincerely,

THE UMLOR GROUP

Jason Fleis, PE

Engineering Manager

Site Walk Conducted.

A site walk was conducted on July 21, 2023 for PC 23-22, Yatooma Oil for property located at the northwest corner of Lapeer Road and Silverbell Road. The site is vacant with no trees on the site and is immediately south of the Milosch car dealership.. The property to the south (southwest corner) is also vacant but has recently been cleared in anticipation of a future development which has not been approved. There is a Mobil gas station and convenience store on the northeast corner of Lapeer and Silverbell Road that was recently rebuilt.

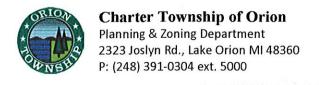
Respectfully submitted

Donald Gross, Planning Commissioner

RECEIVED

JUL 2 4 2023

Orion Township Planning & Zoning





Checklist for Site Plan Approval Application

Applications must be submitted by noon on Wednesday, three (3) weeks prior to a scheduled meeting. Meetings are held on the first and third Wednesday of each month, unless otherwise specified.

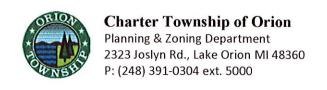
Pursuant to Zoning Ordinance 78, Section 30.01(C)(8) the applicant or a designated representative must be at all scheduled review meetings. Refer to Section 30.01(F) for the criteria the Planning Commission will use to evaluate a site plan.

The following must accompany your completed application; incomplete submittals will not be accepted.

- Complete application including original ink signatures of property owner and the applicant.
- The Site Plan Review fees calculated using Ordinance No. 41.
- Proof of ownership. Acceptable forms of documentation include: Warranty Deed, Quit Claim Deed, Land Contract, or Option to Purchase with a Copy of the Warranty Deed.
- Traffic Study if applicable.
- Wetlands Permit application ifapplicable.
- Three (3) sets of signed and sealed 24" x 36" detailed site plans containing all elements within Zoning Ordinance No. 78, Section 30.01(E) need to be delivered to the Township to the above address.
- Three (3) sets of all supporting documents, reports, studies etc.
- PDF format copy of all information submitted (may be emailed or provided on a USB/flash drive).
- Proof of submittal to outside agencies

The Township reserves the right to request additional copies of printed materials as necessary.

If you have any questions, please call the Planning & Zoning Director at (248) 391-0304 ext. 5000.



Charter Township of Orion Planning Commission Site Plan Approval Application

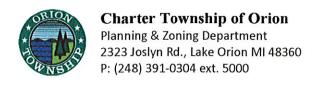
30.1, **A. Intent:** The site plan review procedures and standards are intended to provide an opportunity for consultation and cooperation between the applicant and the Planning Commission so as to achieve maximum utilization of land with minimum adverse effects on adjoining property. Furthermore, it is the intent of these procedures and standards to allow for review of site plans by the Planning Commission, to provide a consistent and uniform method of review, and to ensure full compliance with the standards contained within Zoning Ordinance 78, and other applicable local ordinances and State and Federal laws.

| Project | Name: Yatooma Oil - Orion Township Gas |
|------------------------------|---|
| Name o | f Development ifapplicable: |
| | Name: Pampalona Companies |
| caut | Address: 850 W. University Dr. Ste D city: Rochester State: Ml Zip: 4830 |
| Applicant | Phone: (248) 710-3444 Cell: Fax: |
| | Email: Vitu @ pampalonaco.com |
| 100 | Name:_Michael Yatooma |
| *Property Owner(s) | Address: 51300 Danview Technology Ct City: Shelby Twp State: MI Zip: 48315 |
| δ 1 | Phone: (586) 327-1100 |
| roper | Email:michael@yatoomaoil.com |
| ф* | * If the name on the deed does not match the name of the property owner on this application, documentation showing the individual is the same as the company name must be provided. |
| | Name:Umlor Group / Jason Fleis |
| pare | Address: 49287 West RdCity: _WixomState: _MlZip: _48393 |
| Plan Preparer Firm/Person | Phone: (248) 773-7656 |
| P. FI | Email: jfleis@umlorgroup.com |
| t d | Name:Pampalona Companies / Vito Pampalona |
| Conta | Address: 850 W University Dr, Suite D City: Rochester State: MI Zip: 48307 |
| Project Contact Person | Phone: (248) 710-3444 |
| Pro | Email: Vitto @pampalona.com |

| _ | Sidwell Number(s):0926300015 | | | | |
|---|--|--|--|--|--|
| ption | Location or Address of Property: NWC Lapeer Rd (N | VI-24) and Silverbell Rd | | | |
| Property Description | | Lapeer Rd (M-24) & Silverbell Rd | | | |
| operty | Acreage: 3.45 Current Use of Property: | Undeveloped | | | |
| Pr | Is the complete legal description printed on the site plan | n? X Yes No (if no please attach to theapplication) | | | |
| | Subject Property Zoning: GB General BusinessAdjacent | t Zoning: N. GB S. IP E. GB W. GB | | | |
| Project Information | List any known variances needed (subject to change bas Special Use Permit for Gas Station & drive-thru resta | aurant | | | |
| Project In | | nt, including the number and size of the buildings or units being e-thru Restaurant - One 9,000 sf gfa building with separate entrances for the | | | |
| gencies | | ppy of this application and two copies of the site plan must be provide the Township with a copy of each transmittal as proof Consumers Power Company 530 W. Willow St. | | | |
| Submittal to Outside Agencies | DTE Energy Co. ATTENTION: NW Planning & Design 1970 Orchard Lake Rd. Sylvan Lake, MI 48320 Michigan Department of Transportation (if applicable) To Be Submitted by the Township Oakland County Water Resources To Be Submitted by the Township | Lansing, MI 48906 Oakland County Health Department Building 34 East 1200 N. Telegraph Rd. Pontiac, MI 48341 Road Commission of Oakland County (if applicable) ssintkowski@rcoc.org (electronic submittal only) | | | |
| Townsh the abo provide Signatu | nip of Orion Zoning Ordinance; No. 78, Section 30.01, and ove facts are provided. I hereby certify that the information of is complete. The of Applicant: The original ink signature) | e Plan Approval, pursuant to the provisions of the Charter applicable ordinance requirements. In support of this request on provided is accurate and the application that has been Date: 572473 | | | |
| I, the <u>pi</u> corresp | roperty owner, hereby give permission to the applicant lis | sted above to act as my agent in submitting applications, t permission to the Planning Commission members to visit the | | | |
| | re of Owner (if the deed of ownership does not show an ided showing the individual signing this application has s | individual, ie is a corporation, partnership, etc., documentation must signing rights for the entity): | | | |
| (must be | priginal ink signature) | Date: <u>5.25.23</u> | | | |
| Print Na Version | me: 4/21/22 Michael Valicali | 195 Page 2 of 3 | | | |

| Project Name <u>4atroma</u> | Oil - Orion Township | Gas | |
|-----------------------------|---|--|--|
| PC# | Parcel#(s) <u>0974</u> 3 | 300015 | |
| Please select an option be | low: | | |
| above-named proje | s applicant and on behalf of my co ect, in which approval is being sou d on the Township website. | onsultants, we agree to allow the pught by the Planning Commission and SI24123 Date | |

Do not want plans posted on Web Site





Checklist for Special Land Use Application

Applications must be submitted by noon on Wednesday, four (4) weeks prior to a scheduled meeting. Meetings are held on the first and third Wednesday of each month, unless otherwise specified.

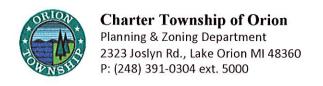
Pursuant to Zoning Ordinance 78, Section 30.02(B)(7), the applicant or a designated representative must be at Planning Commission meetings. Refer to Section 30.02(B)(13) for the criteria the Planning Commission will use to evaluate a special land use.

The following must accompany your completed application; incomplete submittals will not be accepted.

- Complete application including original ink signatures of property owner and the applicant,
- The Special Land Use Review fees calculated using Ordinance No. 41.
- Proof of ownership. Acceptable forms of documentation include: Warranty Deed, Quit Claim Deed, Land Contract or Option to Purchase with a Copy of the Warranty Deed.
- Three (3) copies of the current site plan if no change is proposed to the site plan to the Township at the above address.
 - Please note, if changes are proposed to the site plan, an application for site plan approval may also be necessary. Please see separate Site Plan application for requirements.
- Three (3) sets of all supporting documents, reports, studies etc.
- PDF format copy of all information submitted (may be emailed or provided on a USB/flash drive).
- Proof of submittal to outside agencies

The Township reserves the right to request additional copies of printed materials as necessary.

If you have any questions, please call the Planning & Zoning Department at (248) 391-0304, ext. 5000



Case #
Meeting Date: _

Charter Township of Orion Planning Commission Special Land Use Approval Application

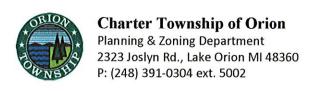
30.02, A. Intent: Special land use procedures and standards are instituted to provide consistent and uniform guidelines for the Planning Commission to follow in arriving at any special land use decision over which it has jurisdiction. Special land uses are uses that may be permitted in a district, but only if certain specified conditions are met, and only after review and approval by the Planning Commission. The review procedures which are conditions for approval are intended to provide protection for adjacent uses and ensure full compliance with the standards contained within Zoning Ordinance 78 and other applicable local ordinances and State and Federal laws.

| Project | Name: | Yatooma Oil - Orion Township Gas | | | | | | |
|------------------------------|-------------------|--|-----------|-------------------------------|----------|--|--------|--------|
| Name o | fDevelop | oment/Business if applicable: | | | | ************************************** | | |
| / nodes | Name:_ | Pampalona Companies | | | | | | |
| Applicant | Address | vito e pampalona com | | | State:_ | MI | _Zip:_ | 4830 |
| Ap | Email:_ | VIII C pampaiona con | | | | | | |
|) | Name:_ | Michael Yatooma | | | | | | |
| /ner(s | Address | 51300 Danview Technology Ct | City:_ | Shelby Twp | State:_ | МІ | _Zip:_ | 48315 |
| ty Ow | Email:_ | michael@yatoomaoil.com | | | | | | |
| *Property Owner(s) | | name on the deed does not match the name of the p ial is the same as the company name must be provide | | rty owner on this application | , docume | ntation | showi | ng the |
| | Name:_ | Umlor Group / Jason Fleis | | | | | | |
| sparer erson | Address | :_ 49287 West Rd | City:_ | Wixom | State:_ | МІ | _Zip:_ | 48393 |
| Plan Preparer Firm/Person | Phone:_ Email: | (248) 773-7656 Cell: (248) 981- | 428 | Fax: | | | | |
| | Eman:_ | Julio & dimorgroup. dom | | | | | | |
| act | Name:_ | Pampalona Companies / Vito Pampalona | | | | | | |
| ect Conta Person | Address | 850 W University Dr, Suite D | City:_ | Rochester | State:_ | MI | _Zip:_ | 48307 |
| Project Contact Person | Email: | Vi to pampalona.com | ********* | | | | | |
| ۵ | | 100 | | | | | | |

| | The proposed special land use shall be designed, constructed, operated, and maintained so as to be compatible with uses of adjacent land. The site design of the proposed special land use shall minimize the impact of site activity on surrounding properties. In determining whether this requirement has been met, please describe the consideration given to the following: Location and screening of vehicular circulation and parking areas in relation to surrounding development Connection to adjacent parcel to North (Milosch's Palace Chrysler Dodge Jeep Ram) West parcel undeveloped |
|--------------------------------|---|
| | Lapeer Road to the East, Silverbell Road to the south. Screening provided on Landscape plans. |
| Adjacent Uses | Location and screening of outdoor storage, outdoor activity or work areas and mechanical equipment, in relation to surrounding development See landscape plans. |
| Compatibility of Adjacent Uses | The hours of operation of the proposed use |
| and making or the | The bulk, placement, and materials of construction of the proposed use in relation to surrounding uses |
| ility with r Plan | Describe how the proposed special land use is compatible with and in accordance with the general principles and objectives of the Orion Township Master Plan and how it promotes the intent and purpose of Zoning Ordinance 78. |
| Public Services Master | Describe how the proposed special land use is located so as to be adequately served by essential public facilities and services, such as highways, streets, police and fire protection, drainage systems, water and sewage facilities, and schools. Sanitary and water main have capacity for additional use. (2) hydrants proposed for coverage to proposed project. |
| Pub | |

| | Proximity and access to major thorough fares Traffic Impact Study (TIS) to be provided under seperate cover as required Orion Township and MDOT. | |
|--------------------------------------|---|--|
| | Estimated traffic generated by the proposed use | |
| | Proximity and relation to intersections | |
| | Adequacy of sight distances | |
| | Location of and access to off-streetparking | |
| Required vehicular turning movements | | |
| | Provision for pedestrian traffic | |
| | The proposed special land use shall not involve any activities, processes, materials, equipment or conditions of oper and shall not be so located or designed, as to be detrimental to public health, safety, and welfare. Describe the consideration given to the production of traffic, noise, vibration, smoke, fumes, odors, dust, glare, and light | |
| | The proposed special land use shall provide the maximum feasible enhancement of the surrounding environment ar not unreasonably interfere with or discourage the appropriate development and use of adjacent land and buildings unreasonably affect their value. Describe how consideration was given to: Landscaping & other amenities | |
| | | |

| Isolation of Existing Land Use | | es not result in a small residential area being substantially e location of the proposed special land use does not result in a ncompatible uses: No residential properties adjacent to developmen |
|-----------------------------------|--|---|
| Required Signage | Pursuant to Zoning Ordinance 78, Section 30.02(D) a sign income the parcel(s) no less than 15 days prior to the scheduled pulse. I will install the sign(s) as required (see below for specific would like to lease signage from the Township (including (Please complete attached Sign Request Form). | olic hearing. Please check one: |
| of Orion are prov | re of Applicant: original ink signature) | Land Use, pursuant to the provisions of the Charter Township nance requirements. In support of this request the above facts the and the application that has been provided is complete. Date: 574123 |
| correspo propert Signatu | operty owner, hereby give permission to the applicant listed ondence and to represent me at all meetings. I also grant per y, without prior notification, as is deemed necessary. The of Owner*: The of Owner in the signature of | |
| the indiv | leed of ownership does not show an individual, ie a corporation vidual signing this application has signing rights for the entity. | |
| | Ordinance 78, Section 30.02(D), Special Land Procedures and St I public hearing. Please see the Ordinance for additional specif | |
| The sign | shall have the following wording: | |
| | SPECIAL LAND USE PROPOSE For more information call: Charter Township of Orion Planning and Zoning Departmer 248-391-0304 ext. 5002 | - (min 3" high letters) - (min 4" high letters) |
| | note, the Township does offer the ability to rent the required Department with any questions. | signage (see attached form). Please contact the Planning and |



| Project Name | Matroma Oil-Orion Towns | ship Gas | |
|--|-------------------------|--|--|
| PC# | Parcel#(s)_ <i> </i> | 26 3000 15 | |
| Please select ar | n option below: | | |
| By signir above-n Board, to Signature | | of my consultants, we agree to allow the plans eing sought by the Planning Commission and/oe. S124123 Date | |

Do not want posted on Web Site

ENGINEER/SURVEYOR

THE UMLOR GROUP 49287 WEST ROAD WIXOM, MI 48393 FAX: (866) 690-4307 WEB: www.umlorgroup.com

JASON M. FLEIS, P.E. PHONE: (248) 773-7656 EMAIL: ifleis@umlorgroup.e

ROBERT Q. MAYNES, P.E., P.S. PHONE: (248) 773-7656 EMAIL: bmaynes@umlorgroup.com

DEVELOPER/APPLICANT

PAMPALONA COMPANIES 850 W. UMIVERSITY DR., SUITE D ROCHESTER, MICHIGAN 48307 PHONE: (248) 710 – 3444 EMAIL: info@pampalona.com WEB: www.pampalonaco.com

REQUIRED PERMITS

PAMPALONA

ORION TOWNSHIP SESC MDDT ROW CONSTRUCTION PERMIT ROW CONSTRUCTION PERMIT ROAD COMMISSION FOR OAKLAND COUNTY (RCOC) ROW OAKLAND COUNTY WATER RESOURCES COMMISSION WATER CONNECTION EQLE PERMIT FOR WAITES UPPLY SYSTEMS

NOTE: ORION TOWNSHIP WETLANDS PROTECTION ORDINANCE NO. 107 IS NOT APPLICABLE TO THIS PROJECT.



SITE PLAN YATOOMA OIL ORION TOWNSHIP GAS MALON ROAD

SECTION 26, TOWN 4 NORTH, RANGE 10 EAST

ORION TOWNSHIP, OAKLAND COUNTY, MICHIGAN

ZONING ORION TOWNSHIP ZONING MAP & LEGEND

00000000

SITE MAP

SHEET INDEX

TOPOGRAPHIC SURVEY, DEMOLITION PLAN, AND TREE SURVEY

SILVERBELL ROAD

SITE'

VICINITY MAP

TRUCK TURNING PLAN

LAPEER ROAD (M-24) ENTRANCE ENLARGEMENT

UTILITY PLAN

GRADING PLAN & STORMWATE MANAGEMENT PLAN

STORM DETAILS

DETAILS

ENCES
LANDSCAPE PLAN
LANDSCAPE DETAILS
PHOTOMETRIC PLAN
LIGHT FIXTURE CUT SHEETS

ARCHITECTURAL RENDERING TRASH ENCLOSURE DETAILS

FLOOR PLAN INTERIOR RENDERINGS EV CHARGING STATIONS

EXTERIOR ELEVATIONS
EXTERIOR ELEVATIONS

GAS CANOPY PLAN AND ELEVATIONS

July 18, 2023

Orion Township Planning & Zoning

LEGAL DESCRIPTION

BENCHMARKS:

(NAVD 88 DATUM)

6M #317

BM #474



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UMLOR
Group
LOPMENT SERVICES

DATE: 5/17/2023 6/7/2023 7/17/2023

YATOOMA OIL ORION TOWNSHIP G.
PAMPALONA COMPANIES
850 M. INMESTY. SUIT D
ROCHESTER MOHENA 48307

C1

(AS PROVIDED IN SCHEDULE "C" OF "COMMITMENT FOR TITLE INSURANCE", ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NO. BT-10815, DATED FEBRUARY 7, 2023 AT 8:00 AM)

BASIS OF BEARING NOTE
MEASURED BEARINGS SHOWN HEREON ARE BASED ON THE MICHIGAN STATE
PLANE COORDINATE SYSTEM, AND 83, SOUTH ZONE, INTERNATIONAL FOOT.

FLOODPLAIN DATA

ACCORDING TO THE NATIONAL FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER 2612200376F, DARIED SEPTEMBER 29, 2006, THE SUBJECT PROPERTY IS LOCATED IN ZONE $^{\rm TC}$ WHICH IS DEPINED AS AREAS EXTERNANCE TO BE CUTSING OF THE C2X ANNAUL OWINGE FLOOD.

ZONING

PER CURRENT TOWNSHIP ZONING ORDINANCE & ZONING WAP ZONNO CLASSIFICATION = "CR" (CENERAL PLISNESS)*

BUILDING SETBACK REQUIREMENTS: FRONT = 30' MIN. REAR = 30' MIN. SIDES = 20' MIN. EACH SIDE

MIN. LOT AREA = 12,000 SQ FT MAX. LOT COVERACE = 300f MAX. HEIGHTS OF ALL STRUCTURES = 25 FT MAX. CLEAR SPACE AROUND ALL STRUCTURES = 20 FT

Subject parcel is part of lapeer road overlay district. Additional zoning requirements may apply, specific to said district.

UTILITY LOCATION NOTE

OTHER TO CONTROL NEWS AND LOCAL SET IS SOME TO ALL SERVICE FREE A TRUE IT SOME TO ALL SERVICE FREE A TRUE IT SOME TO ALL SERVICE FREE AT THE SERVICE SERVICE OF THESE RESIDENCE OF ALL TO EXCLUDE A WIN OF THE MERSINGH UNITES FORCE, LOONE OF DEVANDARY IS EXCUSED A CONTROL OF A CON

SITE ACCESS NOTE SITE FRONTS 2 PUBLIC ROADS: LAPER ROAD (M-24) AND W. SLVERBELL ROAD.

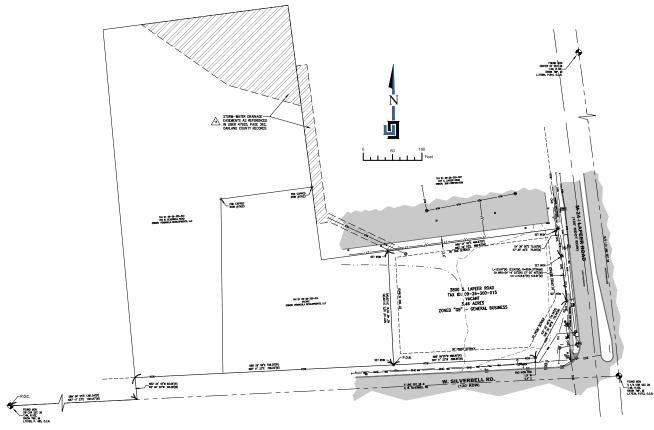
SURVEY NOTES

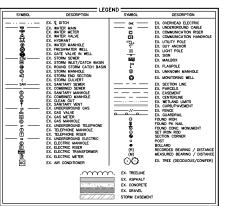
ZONING ADRESMENT DESCRIBES ENTINE PARENT PARCEL, ONLY A PORTION OF THE PARENT PARCEL WAS PROPOSED TO BE REZONED. SUBJECT PROPERTY DOES NOT APPEAR TO BE WITHIN THE AREA TO BE REZONED.

DENTIFIED TRANSFER OF INTEREST IN EXISTING EASEMENTS, DESCRIPTION COVERS ENTIRE PARENT PARCEL, NO ADDITIONAL EXSORPTIS ARE DESCRIBED IN THE RECORDED DOCUMENTS.

EXCEPTIONS
As INCRED IN SCHEDULE 'SP. PART 'TO "EXCEPTIONS", OF "COMMETTERN" FOR TITLE
RESERVANCE, EXALD OF FORLITY NATIONAL, TITLE INSURANCE COMPANY, COMMITMENT NO
RT-16915, DATED TERRUMY' 7, 2023 AT 8.00 AM

| TITLE COMMTWENT REFERENCE NUMBER | DESCRIPTION | STATUS ON PLAT | AFFECT ON SUBJECT PROPERTY |
|---|--|--------------------|--|
| Λ | ANY DETECT, LIBH, ENCAMBRANCE, ADVERSE CLAM, OR OTHER MATTER THAT APPEARS FOR THE RIST THE N THE PUBLIC RECORDS OR IS ORACLED, ATTACHES, OR IS DISCLOSED BETWEEN N WHICH ALLOF THE SCHEDULE R, PART I-PROJUMENTS AND THE ATT | | HOT A SURVEY MATTER |
| <u>^2</u> | RIGHTS OR CLAMS OF PARTIES IN POSSESSION NOT SHOWN BY THE PUBLIC RECORDS. | NOT SHOWN | NOT A SURVEY MATTER |
| Ś | ANY DIGROMANIENT, DICLIMBRANCE, WOLATION, VARIATION, OR ADVIESE CIRCLESTANCE AFFECTING THE TILLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE SURVEY OF THE LAND. | NOT SHOWN | DOES NOT AFFECT THE SURVEYED PROPERTY |
| A | EASEMENTS OR CLAMS OF EASEMENTS NOT SHOWN BY THE PUBLIC RECORDS AND EXISTING WATER, MINERAL, OIL AND EXPLORATION MIGHTS. | NOT SHOWN | NOT A SURVEY MATTER |
| Ś | ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR, OR MATERIAL, HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND HOT SHOWN BY PUBLIC RECORDS. | NOT SHOWN | HOT A SURVEY MATTER |
| ▲ | ANY AND ALL OIL GAS, MINERAL, MINING RIGHTS AND/OR RESERVATIONS THEREOF. | NOT SHOWN | NOT A SURVEY MATTER |
| A | TAVES OR SPECIAL ASSESSMENTS WHICH ARE NOT SHOWN AS EXISTING LIENS BY THE PUBLIC RECORDS. | NOT SHOWN | NOT A SURVEY MATTER |
| Â | TAXES AND ASSESSMENTS WHICH RECORD DUE AND PAYMENT ON WISCOUND A TURN AND PAYMENT ON WISCOUND A TURN AND PAYMENT ON WISCOUND A TURN METHOD TO THE THE TO THE TO THE THE TO THE | NOT SHOWN | HOT A SURVEY MATTER |
| <u> </u> | RIGHTS OF THE PUBLIC AND OF ANY GOVERNMENTAL UNIT IN ANY PART OF THE LAND TAXEN, USED OR DEEDED FOR STREET, ROAD OR HIGHWAY PURPOSES. | NOT SHOWN | DOES NOT AFFECT THE SURVEYED PROPERTY |
| ҈ѩ | ANY PROVISIONS CONTAINED IN ANY INSTRUMENTS OF RECORD WHICH PROVISIONS PERTAIN TO THE TRANSFER OF DIVISIONS UNDER SECTION 100(3) OF THE SUBMISSION CONTROL ACT OF 1947, AS AMENDED. | NOT SHOWN | HOT A SURVEY MATTER |
| ₼ | TERMS, CONDITIONS AND PROVISIONS OF STORN—MATER DRAINAGE EASEMENTS AS REFERENCED IN LIBER 47925, PAGE 382, CARLAND COUNTY RECORDS | EASEMENTS SHOWN | AFFECTS THE SURVEYED PROPERTY |
| 12 | TERMS, CONDITIONS AND PROVISIONS OF A CONDITIONAL REZONNIC AGREEMENT FOR PROPERTY LOCATED IN ORIGIN CHARTER TOWNSHIP AS REPERBUSED IN LIBER 53811, PAGE 413, OAKLAND COUNTY RECORDS | NOT SHOWN | SEE SURVEY NOTES ABOVE |
| Δŝ | TERMS, CONDITIONS AND PROVISIONS OF A QUIT CLAIM DEED REFERENCING TRANSFERABLE EASEMENTS IN LIBER 43832, PAGE 33 AND 43832, PAGE 31, OAKLAND COUNTY RECORDS | EASEMENTS SHOWN | NOT A SURVEY MATTER |







SURVEYOR'S CERTIFICATION

DATE: 04-27-2023 SIGNED: ROBERT O. MAYNES, P.S. P.S.#4001066210



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The UMLOR Group

NTE: 5/17/2023

6/7/2023 7/17/2023

YATOOMA OIL ORION TOWNSHIP G.

THAN: PAMPALONA COMPANIES

800 M. WHORSTY, SUIT D

ROCHESTER, MOHENH 48307

C2 SHEET C2 OF C11

TREE LIST:

INDI CAPPED

| TAG# | SCIENTIFIC NAME | COMMON NAME | DBH | CONDITION | SAVE/REMOV |
|------|-------------------|-------------|-----|-----------|------------|
| 5944 | Populus deltoides | COTTONWOOD | 28" | GOOD | SAVE |
| 5945 | Ulmus spp. | ELM | 5" | GOOD | SAVE |

SUBJECT PARCEL

(VACANT) TAX ID: 09-26-300-015 3800 S. LAPEER ROAD, LAKE ORION APPROX. 3.454C

W. SILVERBELL RD.

SOIL MAP UNIT LEGEND:

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|-----------------------------|---|--------------|----------------|
| 108 | Marlette sandy loam, 1 to 6 percent slopes | 2.2 | 64.29 |
| 118 | Capac sandy loam, 0 to 4 percent slopes | 1.0 | 29.1% |
| 138 | Oshtemo-Boyer loamy sands, 0 to 6 percent slopes | 0.2 | 6.7% |
| Totals for Area of Interest | | 3.5 | 100,0% |

LEGAL DESCRIPTION

(AS PROVIDED IN SCHEDULE C OF "COMMITMENT FOR TITLE INSURANCE", ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT NO. 8T-10815, DATED FEBRUARY 7, 2023 AT 8:00 AM)

BASIS OF BEARING NOTE
MEASURED BEARINGS SHOWN HEREON ARE BASED ON THE MICHIGAN STATE
PLANE COORDINATE SYSTEM, NAD 83, SOUTH ZONE, INTERNATIONAL FOOT.

FLOODPLAIN DATA

WETLAND NOTE

NO WETLAND DELINEATION PERFORMED AS PART OF THIS SURVEY. NO WETLAND IDENTIFIED IN STATE AND PEDERAL DATABASES.

| | BENCHMA |
|---------------------------------------|----------------|
| ZONING | NAVD 88 DATUM) |
| PER CURRENT TOWNSHIP ZONING ORDINANCE | 6U 4317 |

ZONING CLASSIFICATION = "GB" (GENERAL BUSINESS Building Setback requirements: Front = 30' Min. REAR = 30' Min. SIDES = 20' Min. EACH SIDE

MIN. LOT AREA = 12,000 SQ FT
MAX. LOT COVERAGE = 30%
MAX. HEIGHTS OF ALL STRUCTURES = 25 FT
MAX. CLAR SPACE AROUND ALL STRUCTURES = 20 FT
MAX. BULLIONG SIZE = 55,000 SF

BM 8474

EX. PUBLIC LIGHTING MH
EX. PUBLIC LIGHTING ELEC
EX. STEAM MANHOLE
EX. STEAM PIPE
EX. UNKNOWN UNDERGROUN
EX. UNDERGROUND FIBER
EX. OVERHEAD ELECTRIC
EX. UNDERGROUND CABLE
EX. COMMINICATION. RISSER EX. SPOT ELEVATION EX. CONTOUR EX. & DITCH DE. CONTOUR

DE. CONTOUR

C. WATER MAN

DE. WATER METER

C. WATER MAN

DE. WATER

DE. WA EX. UNDERGROUND CABLE
EX. COMMUNICATION RISE
EX. COMMUNICATION HAN
EX. UTILITY POLE
EX. GUY ANCHOR
EX. LIGHT POLE
EX. SIGN
EX. MALBOX
EX. FLAGPOLE
EX. UNKNOWN MANHOLE
EX. MONITORING WELL EX. MONTORING WEL
EX. SECTION LIME
EX. PARCELS
EX. EASEMENT
EX. CENTERLINE
EX. WELTAND LIMITS
EX. CURRI/PAVEMENT
EX. FENCE
EX. GUARDRAIL
FOUND INON
FOUND PX. NAIL
FOUND CONN.
FOUND CORN.
BOUND CORNER
BOLLARD
RECORDED BEARING
MEASURED BEARING
MEASURED BEARING
MEASURED BEARING
EX. TIESE (CENTIME) EX. AIR CONDITIONER EX. AIR CONDITIONER
EX. WATER MARKER
EX. GAS MARKER
EX. ELEC. MARKER
EX. TELE. MARKER
EX. SAN. MARKER
TREE PROTECTION FENCE EX. TREE (DECIDUOUS/ EX. TREELINE









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The UMLOR Group Group STOPMENT SERVICES

DATE: 5/17/2023

6/7/2023 7/17/2023

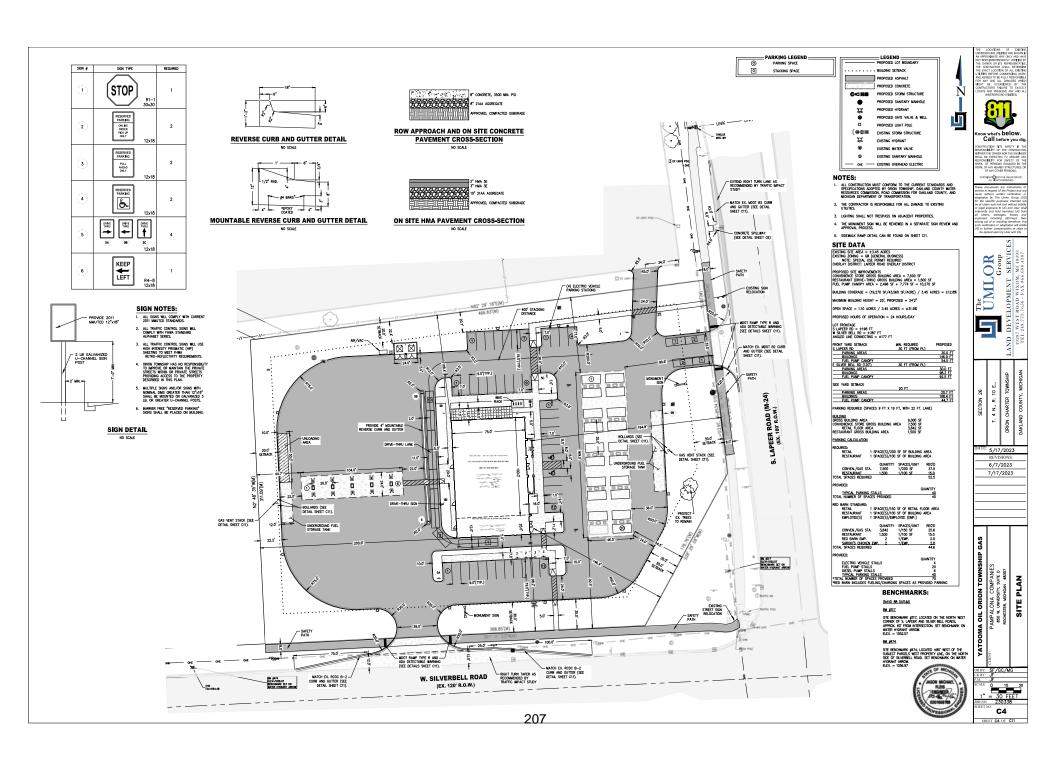
YATOOMA OIL ORION TOWNSHIP

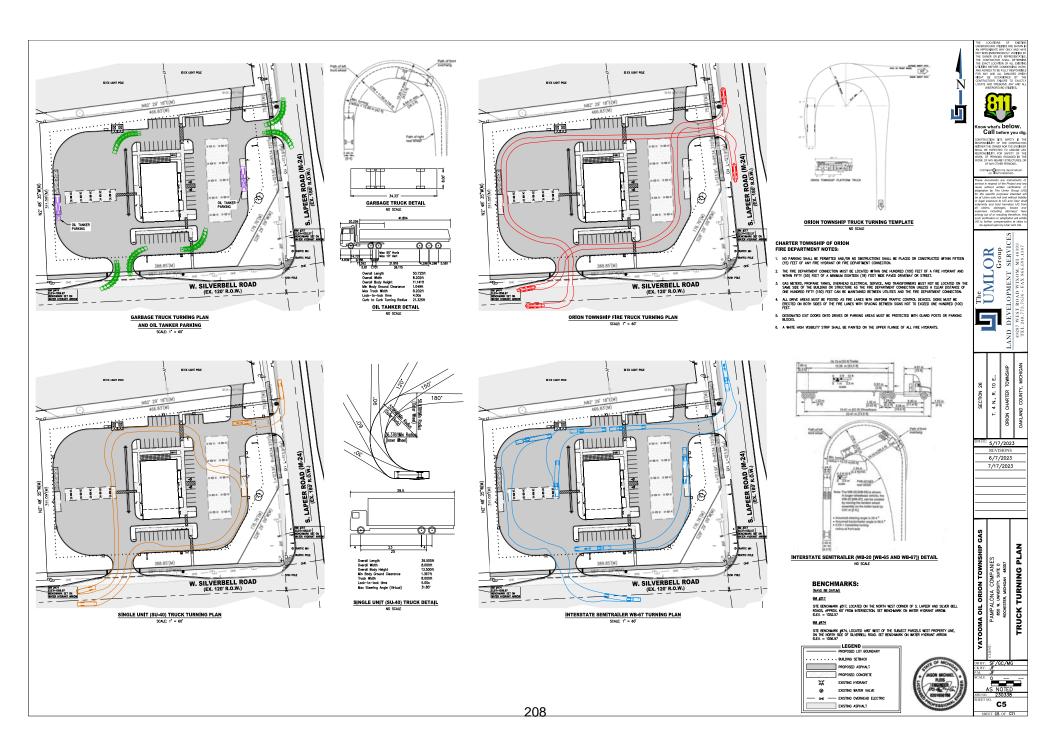
C3

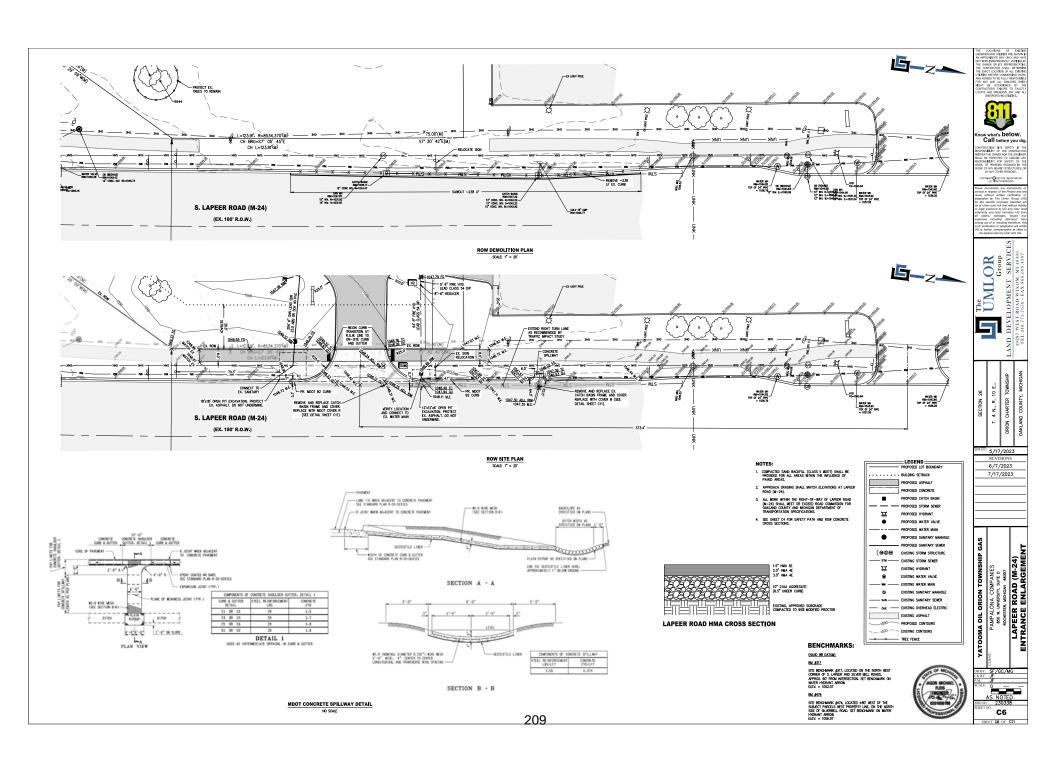
SHEET C3 OF C11

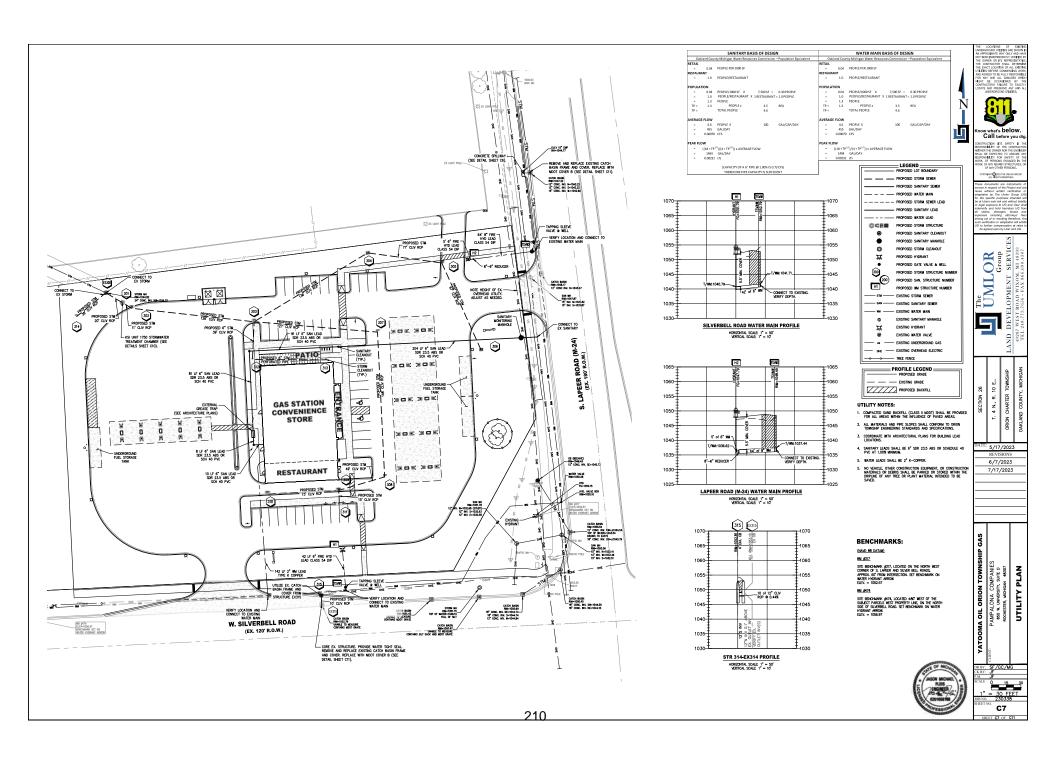
206

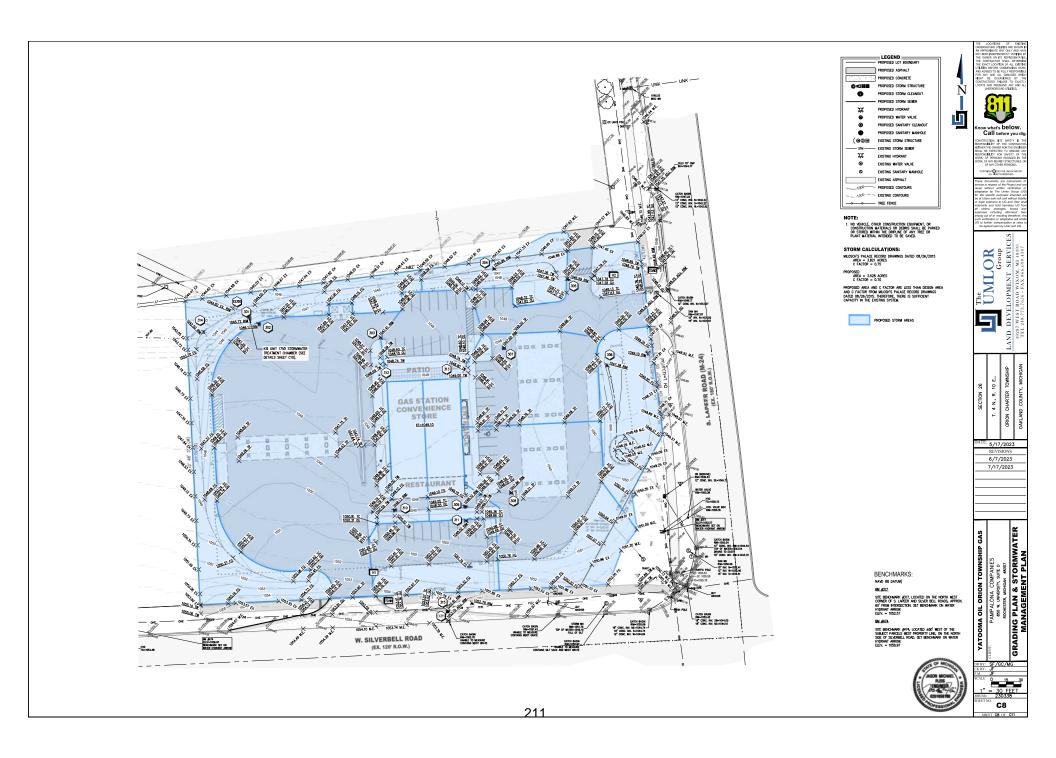
11B

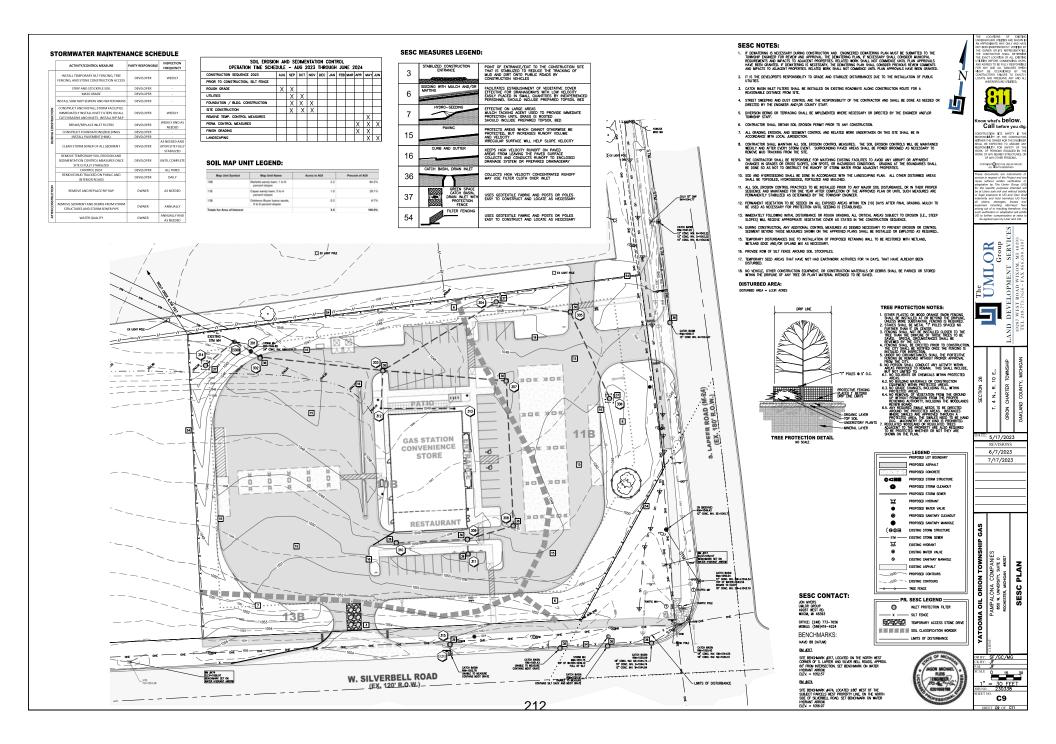












KSI Storm Water Treatment Chamber (SWTC) Sizing Chart

(80% annual TSS removal based on particle size) August 2019

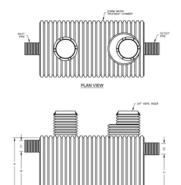
| KSI | FLOW RATES | | | | | | |
|-------|------------------------|-----------|------------|--|--|--|--|
| MODEL | WAYNE CO. 75 MICRON | 75 MICRON | 110 MICRON | | | | |
| 350 | 1.8 CFS | 2.2 CFS | 2.3 CFS | | | | |
| 500 | 2.3 CFS | 2.9 CFS | 3.0 CFS | | | | |
| 750 | 3.3 CFS | 4.1 CFS | 4.2 CFS | | | | |
| 1000 | 4.1 CFS | 5.1 CFS | 5.3 CFS | | | | |
| 1250 | 5.0 CFS | 6.3 CFS | 6.5 CFS | | | | |
| 1500 | 6.2 CFS | 7.8 CFS | 8.1 CFS | | | | |
| 1750 | 7.4 CFS | 9.2 CFS | 9.5 CFS | | | | |
| 2000 | 8.3 CFS | 10.4 CFS | 10.7 CFS | | | | |
| 2500 | 9.8 CFS | 12.3 CFS | 12.6 CFS | | | | |
| 3000 | 11.3 CFS | 14.1 CFS | 14.5 CFS | | | | |
| 3500 | 13.8 CFS | 17.2 CFS | 17.7 CFS | | | | |
| 3750 | 16.3 CFS | 20.4 CFS | 21.0 CFS | | | | |
| 4000 | 18.8 CFS | 23.5 CFS | 24.3 CFS | | | | |
| 4500 | 20.0 CFS | 25.2 CFS | 25.8 CFS | | | | |
| 5000 | 22.0 CFS | 27.5 CFS | 28.4 CFS | | | | |
| 5500 | 24.0 CFS | 30.0 CFS | 31.0 CFS | | | | |
| 6000 | 30.5 CFS | 38.1 CFS | 39.3 CFS | | | | |

Please call KSI at 800-899-4046 for design assistance. Details and specifications are available

The peak flow rate of an off-line system treats approximately on quarter to one third of the peak storm event

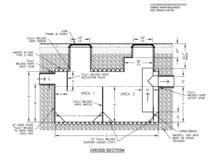
These flow rates boscody recrement 90% to 95% of the total annual runoff volume.

These models will remove greater than 90% of the free floating oils at the above design flow rates



SIDE VIEW

STORM WATER TREATMENT CHAMBER KSI SERIES 1750 HDPE CHAMBER



STORM WATER TREATMENT CHAMBER DIMENSIONS AND CAPACITIES

| MODEL NO. | A | В | C | D | ε | F1 | F2 | G | н | J | AREA 1 | AREA 2 |
|------------|-----|-----|-----|------|-----|-----|-----|-----|-----|---|---------|--------|
| 1750-60-24 | 60" | 33" | 32" | 221" | 32" | 24" | 24" | 24" | 30" | | 97.9 CF | 212 CF |

STORM WATER TREATMENT CHAMBER INSTALLATION AND MAINTENANCE GUIDELINES

INSTALLATION GUIDELINES

1. EXCAVATE AREA FOR KSI SWTC AND PREPARE TRENCH BOTTOM PER ASTM 02321, SECTIONS 6 & 7.

INSTALL KSI SWTC UNIT, HIGH FLOW BYPASS LINE (F APPLICABLE), DIVERSION STRUCTURE AND EXTING STRUCTURE AT ELEVATIONS INDICATED ON SITE PLAN. COUPLE INLET AND OUTLET HOPE SPLIT COUPLERS TO CONVEYANCE PIPE.

BACKFILL UNIT WITH MOOT 6A CRUSHED STONE MATERIALS PER ASTM 02321. BACKFILL SHALL BE COMPACTED TO 95% PROCTOR DENSITY.

6. KSI RECOMMENDS FILLING THE UNIT WITH WATER UPON COMPLETION OF INSTALLATION UP TO THE BAFFLE HEIGHT.

MAINTENANCE GUIDELINES

ALL STORM WATER TREATMENT CHAMBERS WILL REQUIRE PERIODIC MAINTENANCE DEPENDING ON SPECIFIC SITE CONDITIONS.

KSI RECOMMENDS CLEANING THE SWTC QUARTERLY AND AFTER HEAVY RAIN STORMS SEDMENT IS EASIER TO REMOVE WHEN IT IS REMOVED ON A REQULAR BASIS.

DISPOSAL OF MATERIAL FROM THE KSI SWITC ARE SIMILAR TO THAT OF ANY OTHER EST MANAGEMENT PRACTICES (BMP), LOCAL QUIDELINES SHOULD BE CONSULTED DISPOSAL OF THE SIMILO CONTENTS. PETROLEUM WASTE PRODUCTS SHOULD BE DISPOSED BY A LICENSED WASTE WARAGEMENT COMPANY.

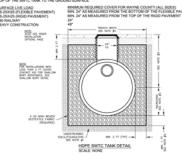
WHITE = NEW GRAY = WORKING BLACK = SPENT - NEEDS REPLACEMENT - CONTACT KSI FOR REPLACEMENT PARTS BLACK = SPENT - NEEDS REPLACEMENT - CONTACT KSI FOR REPLACEMENT PARTS

5. AFTER CLEANING THE UNIT - KSI RECOMMENDS REFILLING THE UNIT WITH WATER

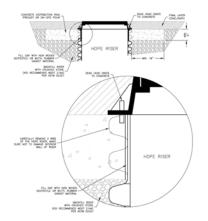
STORM WATER TREATMENT CHAMBER TRENCH DETAIL

EN INCH (10°) LIFTS. TRENCH WIDTHS ARE AS FOLLOWS.





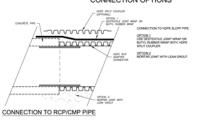
OPTION 2 SCHEMATIC EJIW / RISER INSTALLATION



STORM WATER TREATMENT CHAMBER CONNECTION OPTIONS



STORM WATER TREATMENT CHAMBER CONNECTION OPTIONS







TRUCTION SITE SAFETY IS TO ONSIMILITY OF THE CONTRACTO

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UMLOR Group LOPMENT SERVICES

DATE: 5/17/2023 6/7/2023 7/17/2023

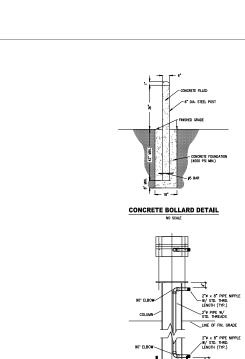
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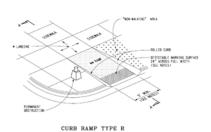
PAMPALONA COMPANIES

BOO M. UNKERTY. SAITE D

ROCHESTER, MOHIONA 48507 STORM DETAILS

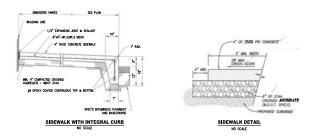
SHEET C10 OF C11

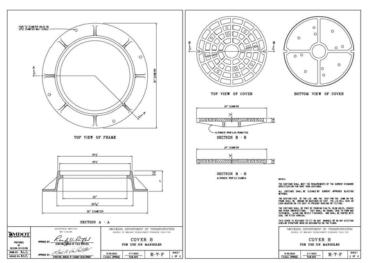




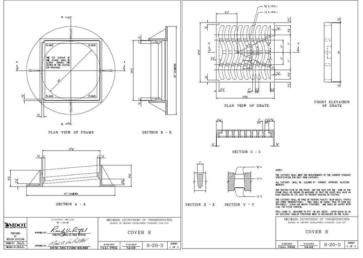
GAS VENT STACK DETAIL NO SCALE

MDOT CURB RAMP TYPE R DETAIL NO SCALE

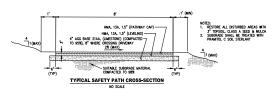


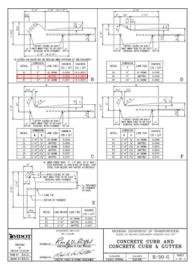


MDOT MANHOLE COVER B DETAIL



MDOT CATCH BASIN COVER R DETAIL NO SCALE

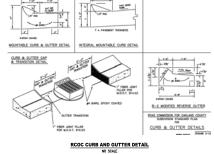




MDOT B2 CURB AND GUTTER DETAIL



DETECTABLE WARNING DETAIL (MDOT R-28-J)





TRUCTION SITE SAFETY IS TONSIBILITY OF THE CONTRACT

OPYPISHT COXXX THE LIMLOR ALL FIGHTS RESERVED.

UMLOR Group LOPMENT SERVICES

DATE: 5/17/2023 6/7/2023

7/17/2023

GAS YATOOMA OIL ORION TOWNSHIP G.
PAMPALONA COMPANIES
BOO M. UNKESTY. SAITE D
ROCHESTER, MONGON 48307 DETAILS

C11

SHEET C11 OF C11

| plant material list | | | | | | | | | |
|---------------------|----------|--|----------------------------|-----------|---------|-----------------|--|--|--|
| key | quant. | botanical name | common name | size | root | comments | | | |
| CANOP | Y TREES | | | | | | | | |
| AF | 4 | ACER X FREEMANII 'JEFFERSRED' | AUTUMN BLAZE RED MAPLE | 3º CAL. | B. & B. | | | | |
| APC | 12 | ACER PSEUDOPLATANUS 'REGAL PETTICOAT' | REGAL PETTICOAT MAPLE | 3" CAL. | B. & B. | | | | |
| AP | 3 | PLATANUS x ACERFOLIA 'EXCLAMATION' | EXCLAMATION SYCAMORE | 3" CAL. | B. & B. | | | | |
| ARA | 3 | ACER R. 'ARMSTRONG' | ARMSTRONG RED MAPLE | 3" CAL. | B. & B. | | | | |
| GL | 1 | GLEDITSIA TRIACANTHOS f. INERMIS 'SKYCOLE' | SKYLINE LOCUST | 2" CAL. | B. & B. | | | | |
| PC | 4 | SYRINGA RETICULATA 'IVORY SILK' | JAPANESE TREE LILAC | 2" CAL. | B. & B. | | | | |
| QB | 2 | QUERCUS 'BICOLOR' | SWAMP WHITE OAK | 3" CAL. | B. & B. | | | | |
| TC | 3 | TILIA CORDATA 'GREENSPIRE' | GREENSPIRE LINDEN | 2" CAL. | B. & B. | | | | |
| VERG | REEN TRE | ES | | | | | | | |
| AW | 5 | ABIES CONCOLOR | CONCOLOR WHITE FIR | 6'-8' HT. | B. & B. | | | | |
| PA | 11 | PICA ABIES | NORWAY SPRUCE | 6'-8' HT. | B. & B. | | | | |
| SHRUE | ss_ | | | | | | | | |
| BuV | 32 | BUXUX M 'GREEN VELVET' | GREEN VELVET BOXWOOD | 24" HT. | B. & B. | 24" O.C. SPACIN | | | |
| BuX | 101 | BUXUX X 'GREEN MOUNTAIN' | GREEN MOUNTAIN BOXWOOD | 24" HT. | B. & B. | 24" O.C. SPACIN | | | |
| CoA | 10 | CORNUS ALBA 'ARGENTEO-MARGINATA' | VARIEGATED REDTWIG DOGWOOD | 24" HT. | B. & B. | 24" O.C. SPACIN | | | |
| НуА | 4 | HYDRANGEA 'ANNABELLE' | ANNABELLE HYDRANGEA | #5 CONT. | | | | | |
| JuH | 25 | JUNIPERUS HORIZONTALIS 'BLUE CHIP' | BLUE CHIP JUNIPER | #5 CONT. | | | | | |
| LiV | 12 | ARONIA MELANOCARPA | BLACK CHOKEBERRY | 36" HT. | B. & B. | | | | |
| RoN | 12 | ROSA 'NOARE' | RED FLOWER CARPET ROSE | #3 CONT. | | | | | |
| SpH | 4 | FOTHERGILLA GARDENII | DWARF FOTHERGILLA | #3 CONT. | | | | | |
| SyP | 2 | SYRINGA PUBESCENS 'MISS KIM' | MISS KIM LILAC | #3 CONT. | | | | | |
| TaS | 21 | TAXUS xm 'SEBIAN' | SEBIAN YEW | 36" HT. | B. & B. | 36" O.C. SPACIN | | | |
| ThO | 15 | THUJA OCCIDENTALIS | AMERICAN ARORVITAE | 6' HT. | B. & B. | | | | |
| PEREN | NIALS AN | D ORNAMENTAL GRASSES | | | | | | | |
| Ca | 9 | CALAMAGROSTIS x ACUTIFLORA | KARL FOERSTER GRASS | #3 CONT. | | | | | |
| Mi | 8 | SPOROBOLUS HETEROLEPIS | PRAIRIE DROPSEED | #3 CONT. | | | | | |
| Pa | 32 | PANICM VIRGATUM | SWITCH GRASS | #3 CONT. | | | | | |
| Pe | 24 | PENNISETUM ALOPECUROIDES | LITTLE BUNNY GRASS | #3 CONT. | | | | | |
| NeP | 12 | NEPATA X. FAASSENII WALKERS LOW | WALKER'S LOW NEPETA | #1 CONT. | | | | | |

ADJACENT SITES ARE ZONED GB (GENERAL BUSINESS) AND IP (INDUSTRIAL PARK).

GENERAL LANDSCAPING REQUIREMENTS

REQUIRED: 1 TREE FOR EACH 3,000 SF OF LANDSCAPED OPEN-SPACE AREA 22,700 SF / 3,000 SF/TREE = 8 TREES PROVIDED: 12 TREES

INTERIOR PARKING LOT LANDSCAPING

CURBED LANDSCAPE ISLAND AREA REQUIRED AREA: 200 SF AND NO LESS THAN 10 FEET IN ANY DIRECTION.

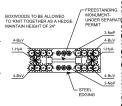
CLIRRED LANDSCAPE ISLAND SHALL BE PLANTED WITH SHRUBS AND

REQUIRED TREES: 1 TREE PER EVERY 200 SF OF INTERIOR PARKING LOT LANDSCAPING 1,533 SF x 200 SF/TREE = 8 TREES PROVIDED TREES: 10 TREES
A MINIMUM OF 1/3 OF THE TREES SHALL BE PLACED ON THE INTERIOR OF THE PARKING AREA AND THE REMAINING MAY BE PLACED SURROUNDING THE PERIMETER WITHIN 10 FEET.

TREES REQUIRED: 1 TREE FOR EVERY 30 LINEAL FEET OF FRONTAGE (399.85'+176.75'+123.91')= 689.51' / 30' = 23 TREES PROVIDED: 19 TREES PLUS 2 EXISTING TREES

PROVIDED: 19 TRESS PLUS 2 EXISTING TREES IN A PROVIDED: 19 TRESS PLUS 2 EXISTING TREES IN A PROVIDED THE METAL FENCE OR BERM, OR OTHER LANGSCAPE ELEMENTS WITH A VERTICAL RISE OF AT LEAST THIRTY OR INCHES SHALL BE DEVELOPED WITHIN SAMD SEPROTOR OF ZOOLE THE WAS A PROVIDED TO THE WAS A PROVIDED TO PROVIDE THE WAS AND THE WAS A PROVIDED TO PROVIDE THE WAS AND THE WAS A PROVIDED TO PROVIDE THE WAS AND THE WAS A PROVIDED THE WAS AND TH

THE REMAINDER OF THE REQUIRED LANDSCAPE SEPARATION AREA SHALL BE LANDSCAPED WITH GRASS, GROUND COVER OR OTHER LANDSCAPE TREATMENT. EXCLUDING PAVING SUCH AS CONCRETE OR ASPHALT. THIS SHALL NOT BE CONSTRUED TO PROHIBIT DECORATIVE BRICK PAVING.



2/LS100 enlarged signage landscape plan

tree list

| ξ | | TAG # | SCIENTIFIC NAME | COMMON NAME | DBH | CONDITION | SAVE/REMOVE |
|---|---|-------|-------------------|-------------|-----|-----------|-------------|
| ł | Г | 5944 | Populus deltoides | COTTONWOOD | 28" | GOOD | SAVE |
| ζ | Г | 5945 | Ulmus spp. | ELM | 5" | 600D | SAVE |
| ۶ | | | | | | | |

INSTALLATION AND MAINTENANCE

10 St 18 O.

....

NOTE: PLACE EDGE OF ALL SHRUBS MIN. 2-0" FROM CURB (TYPICAL)

MULCH [(TYPICAL ALL BEDS)]

OE 30

:08: 35C

- REPAIR ALL DISTURBED AREAS (TYPICAL)

STEEL EDGING AT ALL BEDS (TYP.)

3" SHREDDED

•ძ

MANTEUMNE THE OWNER OF LANGE-CAPINE REQUIRED BY THIS DEFINANCE SHALL MANTAIN THE LANGE-CAPINE ON A PEALTHY HERE A MOD ORDERLY APPEARANCE, FREE FROM REFUSE AND DEBRIS ALL UNREALTHY AND DEAD PLANT MATERIAL SHALL BE REPULACED IN THE NEXT AMPOPRIATE PLANTING ADJACEN TO REQUIRED LANGE-CAPE AND ADDITIONAL OF THE AND ADDITIONAL ADJACEN TO REQUIRED LANGE-CAPE SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE ADJACENT FRANTE FROMERTY.

1

3-APC



location map

24) VISION TRIANGLE

١ξ

ROAD (

 α

APEL SAFETY

TO REMAIN REF. TREE SURVEY

REPAIR ALL DISTURBED AREAS (TYPICAL)

MONUMENT-SEPARATE PERMIT REQUIRED RE. 2/LS100

PLANNING, L + SIGN + DE? Road 446 BmK 54048 Mound F

DESIGN+PLANNING , LLC 48316 nkdp.com

Yatooma Oil Retail Campus Convenience Store Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

Pampalona

Companies, LLC 850 W. University Suite D Rochester, MI 48307



LANDSCAPE PLAN

2023-108 KMB

LS100

Permit No.:

1/LS100 landscape plan

IRRIGATION: ALL LANDSCAPED, ROW AND SODDED AREAS TO BE IRRIGATED BY AN AUTOMATIC SPRINKLER SYSTEM.

UTILITIES: UTILITIES:
COORDINATE ALL PLANTING AREAS W
PLANNING AND ENGINEERING
DEPARTMENTS TO AVOID CONFLICTS WITH
UTILITIES AND EASEMENTS. CONTRACTOR'S NOTE

215

MINIMUM DISTANCE TO LISTED ITEMS:

THE PLANTING OF TREES OR SHRUBS IS NOT PERMITTED WITHIN THE RIGHT-OF-WAY.

LARGE DECIDUOUS TREES SHALL BE PLANTED A MINIMUM OF 20 FEET AND A MAXIMUM OF 30 FEET APART.

EVERGREEN TREES SHALL BE PLANTED A MINIMUM OF 10 FEET AND A MAXIMUM OF 21 FEET APART. SMALL DECIDUOUS TREES SHALL BE PLANTED A MINIMUM OF 8 FEET APART AND A MAXIMUM OF 15 FEET APART.

IT POLE

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MINIMUM DISTANCE 4 FEET

MONUMENT

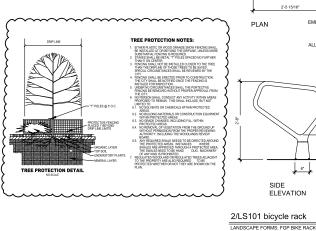
DRIVE-THRU CALL BOX (TO BE DETERMINED)

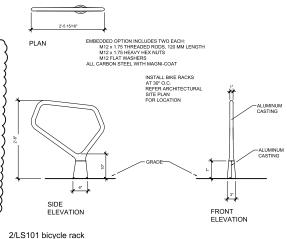
PATIO AREA 739 SF

CONVENIENCE STORE

DRIVE-THRU TENANT

SILVERBELL ROAD





general landscape notes:

L LANDSCAPE CONTRACTOR SHALL VISIT THE SHE, INSPECT EXISITING CONDITIONS, REVIEW PROPOSED PLANTINGS AND RELATED WORK CONTACT THE OWNER AND CALL AND SCAPE ACCURETED WHITH ANY CONCERNS ON DISCREPANCY BETWEEN THE PLAN, PLANT MATERIAL LIST, AND/OR SHE CONDITIONS.

CONDITIONS.

2. PRIOR TO BEGINNING OF CONSTRUCTION ON ANY WORK, CONTRACTORS SHALL VERRITY LOCATIONS OF ALL ON SITE UTILITIES CAS, ELECTRIC, TELEPHONE, CABLE TO BE LOCATED BY CONTRACTING MISS DIG 1-569-469-1711. ANY DAYAGE ON INTERPREPARATION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE PROPERTY OF THE PROPERTY OF THE TRACTED AND REPORT WY INACCESTRUCEL VOS CONDITIONS TO OWNER FRICOR TO CONTRICTORY VINACCESTRUCEL VOS CONDITIONS TO OWNER PRIOR TO CONTRICTORY VINACCESTRUCEL VOS CONDITIONS TO WHEN PRIOR TO CONTRICTORY VINACESTRUCEL VOS CONDITIONS TO WHEN PRIOR TO CONTRICTORY VINACESTRUCEL VOS CONDITIONS TO WHEN PRIOR TO CONTRICTORY VINACESTRUCEL VINACESTRUCE VINACESTRUCEL VINACESTRUCEL VINACESTR

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

PLANT BEDS TO BE DRESSED WITH MIN. 3" OF FINELY DOUBLE SHREDDED HARDBARK MILCH.

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 PROM EXCAVITED PLANTING HOLE.

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

FOR ALL PLANINGS.

IN REPOYSE LL TUNE, WIRE AND BURLAP FROM TREE AND SHRUB EARTH
BALLS, AND FROM TREES TRUNKS, 3" THICK BARK MULCH FOR TREES IN 4" DIA.
CIRCLE WITH 3" PULLED AWAY FROM TRUNK, 4" THICK BARK MULCH FOR
SHRUBS AND 3" THICK BARK MULCH FOR FERENVIALS.

II. PLANT MATERIAL QUALITY & INSTALLATION SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERTMEN LANDSCAPE STANDARDS.

12. PROVIDE PEAT 60D 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.

IA. PLANT TREES AND SHALES GENERALLY NO CLOSES THAN THE POLLOWING DISPACES REPORT DISEBLANCS, CURREN AND FRANKING STATE.

5 FT.

5 FT.

5 FT.

6 HAUSE THAT ANY LESS THAN I FOOT TALL

AND USE AT HAVE LESS THAN I FOOT TALL

2 FT.

IB. NO TREES OR EVERGREENS TO BE INSTALLED OVER ANY PROPOSED OR EXISTING UTILITY LINES AS SHOUN ON THE OVERALL LANDSCAPE PLAN, SEE ENSINEERING PLANS FOR LOCATION AND DETAILS.

16. ALL LAUN AREAS AND LANDSCAPE BEDS TO BE FILLY IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM IRRIGATION SYSTEM TO HAVE SEPARTE ZONES FOR LAUN AREAS, PARKING 164, AND, AND SHAUB BEDS WITH DIFFERENT CONTROL MOISTURE LEVEL ADJUSTMENT PER ZONE AS REQUIRED

II. ALL NEW PARKING IBLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE EXCAVATED OF ALL BUILDING MATERIALS AND POOR SOULS A HIN OF 16-16" DEPITH BACK FILL WITH GOOD, MEDUM TEXTURED PLANTING SOILS, ADD A MIN. 4" OF TOPSOIL OVERFILL TO FINISH GRADE, PROVIDE POSITIVE DRAINAGE.

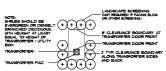
18. ALL NEW PARKING IBLANDS AND LANDSCAPE BEDS ADJACENT AND NEXT TO BUILDING SHALL BE ENCAVATED OF ALL BUILDING MATERIALS AND POOR SOLIS A HIN 6 16-18? DEPIN BOCK FILL WITH ACCOUNT MEDITATIVED PLANTING SOLIS, ADD A HIN 4" OF TOPSOLI OVERFILL. TO FINISH GRADE, PROVIDE PORTIVE DRAINING.

19. MATERING OF ALL PLANTS AND TREES TO BE PROVIDED IMMEDIATELY AND MACHING WITHIN 24 HOURS AFER NOTALLATION.

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.

THEE FIT DOES NOT DRAIN SUPPLICIBILITY.

2. THE LANDSCAPE CONTRACTOR SHALL GIJARANTEE ALL LANDSCAPE PLANT MATERIALS AND IRRIGATION NOTALLATION FOR A PERIOD OF TWO YEARS DEGINING AFTER THE COPPLETION OF LANDSCAPE INSTALL TOOL DATE APPROVED BY THE CITY OR LANDSCAPE ARCHITECT. THE CONTRACTOR SHALL REPLACE DURING AND AT THE BIO OF THE GUINACTIES PLANTS ANY DEAD OR INACCEPTABLE PLANTS, AS DETERMINED BY THE YOUNGHIP OR LANDSCAPE ARCHITECT, WHICH OF THE GUINACTIES PLANTS.



typical transformer pad planting detail

SEE ENGINEERING PLANS FOR PROPOSED LOCATIONS, TOTAL NUMBER OF TRANSPORTERS AND FINAL LOCATION FER DETROIT EDISON REQUIREMENT

final transformer landscape screening to be determined after locations of transformers have been worked out with DTE.

DESIGN+PLANNING , LLC - 48316 nkdp.com PLANNING, ownship - Michigan . kmb@bml + SIGN + DE? Road 446 BmK 54048 Mound F

> Yatooma Oil Retail Campus Convenience Store Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307



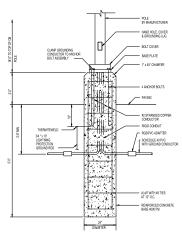


KMB LS101

Permit No.:

REMOVE ALL NON-BIODEGRADABLE MATERIALS COMPLETELY FROM THE ROOTBALL, CUT AND REMOVE WIRE BASKET AND BUILD PROW TOP tree planting detail perennial planting detail tree staking detail shrub planting detail evergreen planting detail 1/LS101 planting details 216

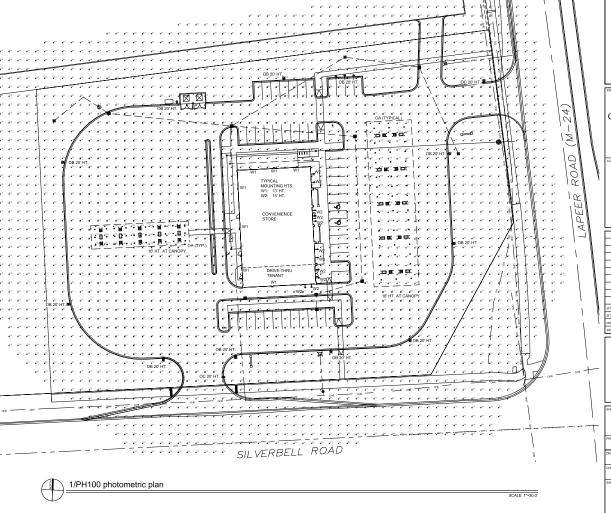
| Statistics | | | | | | | |
|--------------------|--------|---------|---------|--------|---------|---------|--|
| Description | Symbol | Avg | Max | Min | Avg/Min | Max/Min | |
| Gas Canopy | + | 9.9 fc | 13.7 fc | 4.7 fc | 2.1:1 | 2.9:1 | |
| Overall | + | 1.0 fc | 12.7 fc | 0.0 fc | N/A | N/A | |
| Parking and Drives | ж | 2.4 fc | 12.7 fc | 0.4 fc | 6.0:1 | 31.8:1 | |
| Property Line @ 5' | + | 0.2 fc | 0.7 fc | 0.0 fc | N/A | N/A | |
| Diesel Canopy | + | 15.0 fc | 19.7 fc | 9.0 fc | 1.7:1 | 2.2:1 | |



2/PH100 light pole detail

SCALE: NONE

| | Lighting Fixture Schedule | | | | | | | | | |
|--------|---------------------------|-----|-------------------|--|---|-----------------------|--------------------|---------|------|----------|
| Symbol | Label | QTY | Manufacturer | Catalog Number | Description | Number of Lamps | Lumens per Lamp | Wattage | Lamp | Height |
| 0 | OA | 72 | Écolite | ECO-RKOP-GS-199W-RC WT | LED GAS / DIESEL RECESS MOUNT FULL OUT-OFF | ' | 12722 | 94.15 | LED | 16' |
| 음 | ОВ | 11 | Lithonia Lighting | BLC MVOLT DOBNO | POLE MOUNTED AREA LUMINAIRE 4000K, FORWARD THROW 20'HT. 90LARE POLE MOUNTING | 1 | 18017 | 138 | LED | 27 |
| ନ୍ଧ | ос | 2 | Lithonia Lighting | BLC MVOLT DOBNO | POLE MOUNTED AREA LUMINAIRE 20' HT., 4000K, EXTREME BACKLIGHT CONTROL, LEFT CORNER CUTOFF SQUARE POLE MOUNTING | 1 | 12940 | 138 | LED | 19 |
| | W1 | 7 | Lithonia Lighting | DSXW1 LED 20C 530 40K T4M MVOLT | WALL MOUNTED LUMINAIRE 15' HT., 4000K, MEDIUM THROW | 1 | 4201 | 34.9 | LED | 17 to 17 |
| φ | W2 | -11 | Spectrum Lighting | WIS1611GV 55L 46K PA32 MOUNTING ARM | WAREHOUSE SHADE 16" NOW, DIAM x 11" H, DAMP LOCATION 15" MOUNTING HT., 32" MOUNTING ARM | 324 | 4394 | 39 | LED | 15' |



BmK DESIGN+PLANNING

BmK DESIGN + PLANNING, LLC 54048 Mound Road - Sheby Township - Michigan - 48316 pr 245.303.1446

Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307

| ITE PLAN SUBMITTAL 2 | 07/14/2023 |
|------------------------|------------|
| ITE PLAN SUBMITTAL 1 | 05/17/2023 |
| RE-SITE PLAN SUBMITTAL | 03/23/2023 |
| ESCRIPTION | DATE |
| | |
| | |
| | |

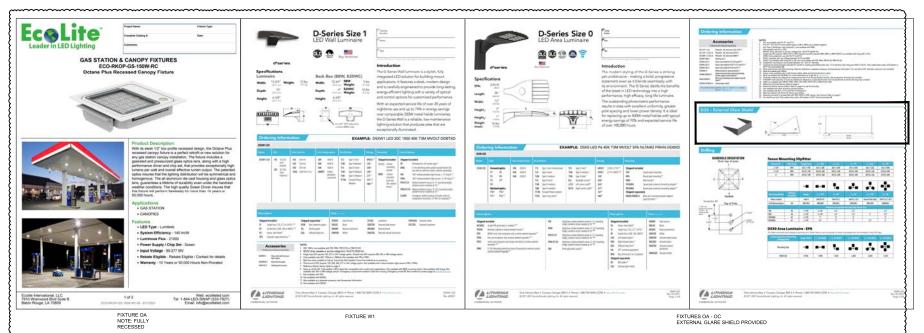
PHOTOMETRIC PLAN

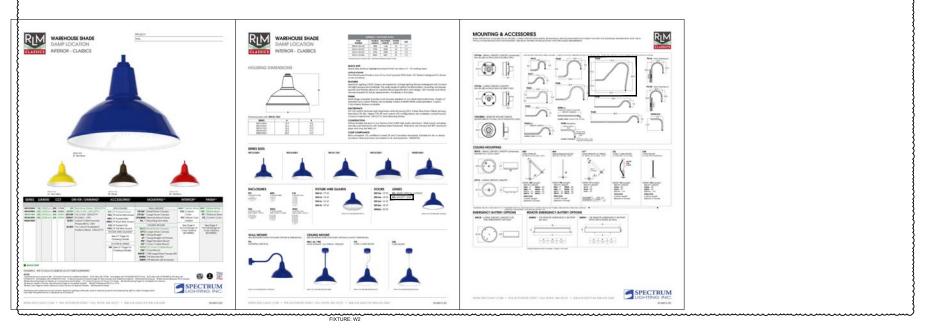
2023-108

KMB

PH100 Permit No.:

217 DRIVE-THRU -LANE





BmK DESIGN + PLANNING, LLC 54048 Mound Road - Sheby Township - Michigan - 48316 Ph 248.303.1446 Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant 09-26-300-015 S. Lapeer Road Orion Township, MI 48360 Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307 SITE PLAN SUBMITTAL 1 PRE-SITE PLAN SUBMITTAL LIGHT FIXTURE CUT SHEETS

BmK [

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CHANGE BY:

PHIOTO

Permit No.:

2023-108



rendering view of gas station convenience store



Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

CLIENT:

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307

| SITE PLAN SUBMITTAL | 05/17/20 |
|-------------------------|----------|
| PRE-SITE PLAN SUBMITTAL | 03/23/20 |
| DESCRIPTION | DATE |

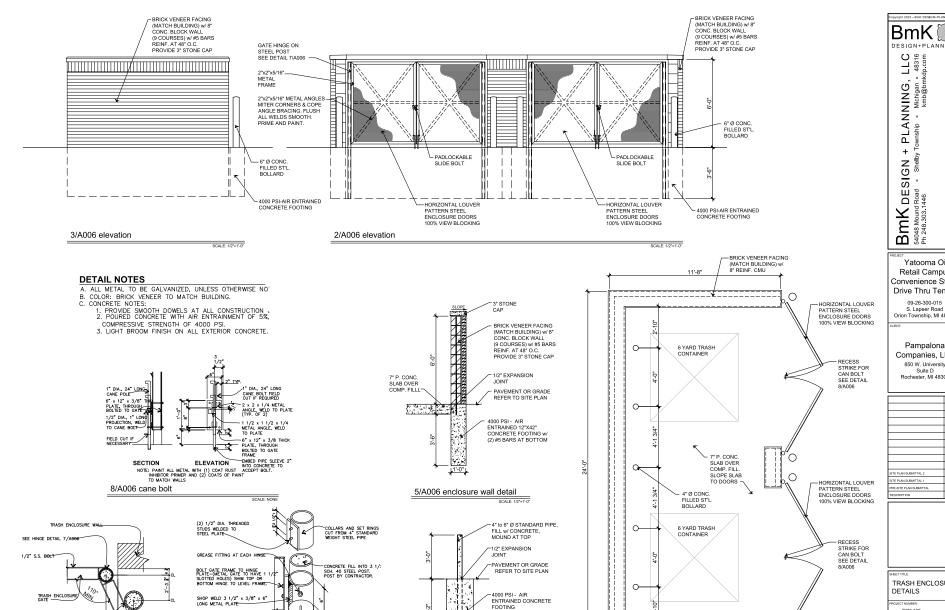
ARCHITECTURAL RENDERING

PROJECT NUMBER: 2023-108

2023-108 DRAWN BY:

SHEET NUMBER:

A001



1'-10"

4/A006 single bollard detail

220

SCALE: NONE

1/2" DIA. X 5" BOLT THRU METAL.

SHOP WELD RING AT BOTTO

7/A006 hinge detail

SCALE: NONE

6" DIA. STD. PIPE. FILL WHI CONCRETE MOUND AT TOP.

SET TO ALLOW 110 GATE SWING, PIPES BY CONTRACTOR

GATE FLANGE DETAIL

6/A006 gate flange detail

DESIGN+PLANNING Yatooma Oil Retail Campus Convenience Store Drive Thru Tenant S. Lapeer Road Orion Township, MI 48360 Pampalona Companies, LLC 850 W. University Rochester, MI 48307 TRASH ENCLOSURE 2023-108 KMB

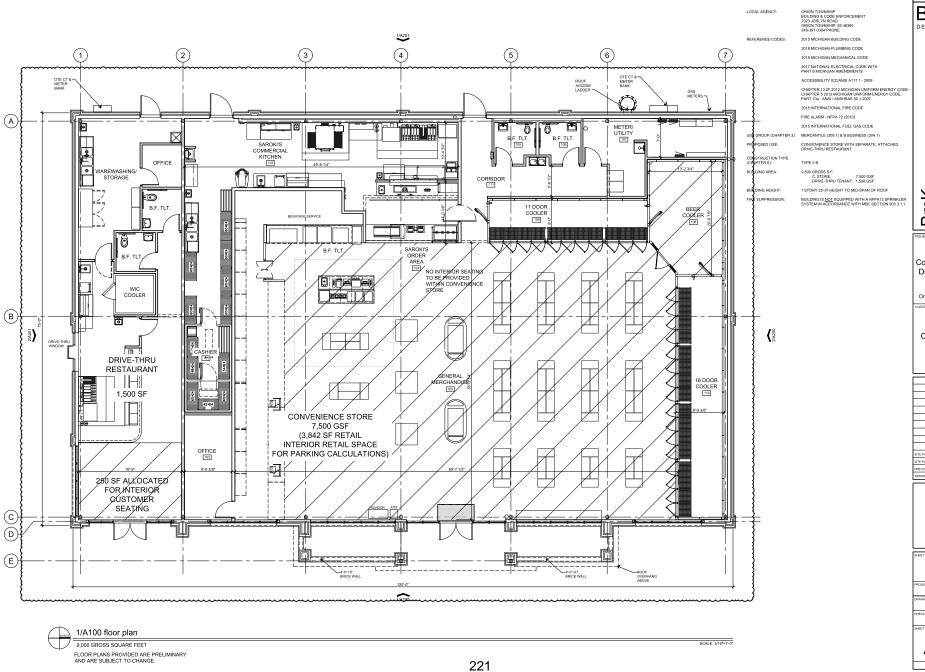
A006

Permit No.:

6" Ø CONC

BOLLARD

1/A006 trash enclosure plan



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> Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307

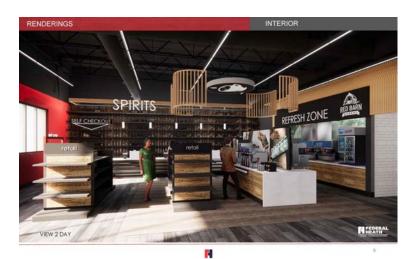
SITE PLAN SUBMITTAL 1 PRE-SITE PLAN SUBMITTAL

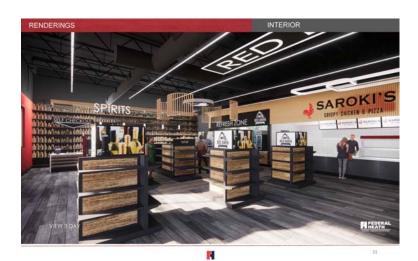
FLOOR PLAN

2023-108 KMB

A100 Permit No.:









Pampalona

Page Road

Pampalona

Page Road

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Companies, LLC 850 W. University Suite D Rochester, MI 48307

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INTERIOR
RENDERINGS
PROJECT MANUSER
2023-108
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KMB
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--SHEET MANUSER
A 102
Permit No.:



EV charging station cut sheets

ChargePoint, Inc. | Copyright © 2023



f. Electric Vehicle Charging Stations. (added 09.21.09, amended 01.03.16)

Permitted Locations. When accessory to a principal permitted use, electric vehicle charging stations are permitted in all zoning districts. When constructed as a standalone commercial for-profit business, electric vehicle charging stations shall only be permitted in districts that otherwise permit automobile

- Parking

 a. Electric vehicle charging stations located within parking lots or garages may be included in the calculation of minimum required off-street

 b. Public electric vehicle. Early vehicles may be parked in any space designated for public garking, subject to the restrictions that would anyly be any off-which the whole the public electric vehicles. Electric vehicles may be parked in any space designated for public garking, subject to the restrictions that would apply be any off-which which will would push in that space.

 C. Electric vehicle charging stations shall be sized the same as a standard parking garked are required in the Grover Perking Chart heren.
- Lighting. Site lighting shall be provided where an electric vehicle charging station is installed, unless charging is for daytime purposes only. Site lighting shall comply with Section 27.11.

- Equipment Standards and Protection.

 a. Electric whiche charging station outlets and connector devices shall be no less than twenty six (20) inches and no higher than forty sight (48) inches from the surface where mounted. Equipment mounted on pedestals, lighting posts, boilards, or other devices shall be designed and located as to not impede pedestrian travel or create it in brazard or
- sale obeliete as o the impleed precision in averal or Lead up in accordance. Adequate facilities which charging station protection, such as a Concrete-filled steel bollards, shall be used. Curbing may be used in lied of bollards, if the vehicle charging station is setback a minimum of twenty four CPI inhorise from the face of the curb.
- Signage and Notification. Each electric vehicle charging station space shall be posted with signage indicating that the space is only for electric vehicle charging purposes. Additionally, notification shall be place on the unit to identify vottage and amperage levels, hours of operation, fees, safety information and other perfinent information.

Installation and Maintenance.

a. All necessary electrical permits must be obtained.
b. Electric weider charging stations shall be maintained in all respects, including the functioning of the equipment. A phone number or other contact information shall be growded nor the equipment for reporting when it is not functioning or for when other problems are encountered.

-EV CHARGING PARKING STATION-DUAL CHARGER 80A, TYPE 2 CABLE LENGTH: 23'

EV CHARGING STATIONS

SITE PLAN SUBMITTAL 1 PRE-SITE PLAN SUBMITTAL

BmK [

PLANNING, LLC
Township - Michigan - 48316
kmb@bmkdp.com

BmK DESIGN + 54048 Mound Road - Shelby Tc Ph 248.303.1446

Yatooma Oil Retail Campus

Convenience Store/

Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

Pampalona

Companies, LLC 850 W. University Suite D Rochester, MI 48307

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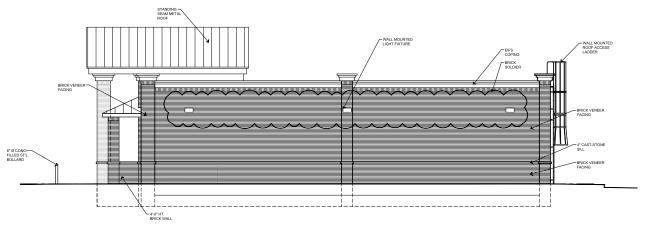
2023-108

KMB

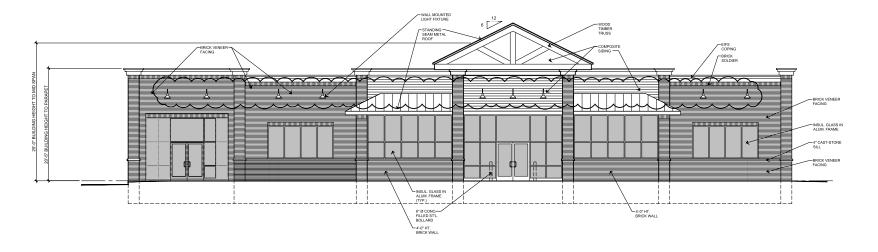
A103 Permit No.:

Screening of roof-mounted appliances

ROOF MOUNTED APPLIANCES AND FIXTURES SHALL BE EFFECTIVELY SCREENED ON ALL SIDES BY THE ROOF LINE SO AS NOT TO BE VISIBLE FROM OFF THE SITE.



2/A200 north (right) elevation



1/A200 east (s. lapeer road) elevation

SCALE: 3/16"=1'-0"

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WE WAS A STATE OF THE STATE

BmK DESIGN + PLANNING, LLC 84048 Mound Road - Shelby Township - Michigan - 48316 Pp. 248.303.1446

Yatooma Oil
Retail Campus
Convenience Store/
Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

CLIENT:

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307



SHEETTITLE:

EXTERIOR

ELEVATIONS

PROJECT NUMBER:

PROJECT NUMBER: 2023-108 DRAWN BY: KMB

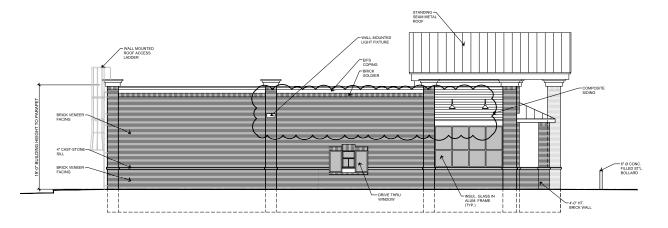
SHEET NUMBER:

A200

Screening of roof-mounted appliances

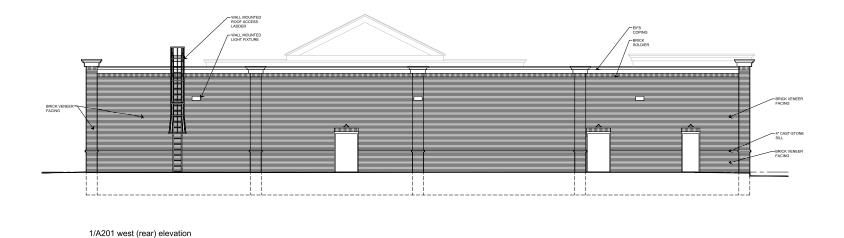
SCALE: 3/16"=1'-0"

ROOF MOUNTED APPLIANCES AND FIXTURES SHALL BE EFFECTIVELY SCREENED ON ALL SIDES BY THE ROOF LINE SO AS NOT TO BE VISIBLE FROM OFF THE SITE.



2/A201 south (w. silver bell road) elevation

SCALE: 3/16*=1'-0"



BmK DESIGN+PLANNING

BmK DESIGN + PLANNING, LLC 54048 Mound Read - Sheby Township - Michigan - 48316 Ph 248.303.1446 kmb@bmkdp.com

Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

CLIENT:

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307



SHEET TILE

EXTERIOR

ELEVATIONS

PROJECT NAMBER

2023-108

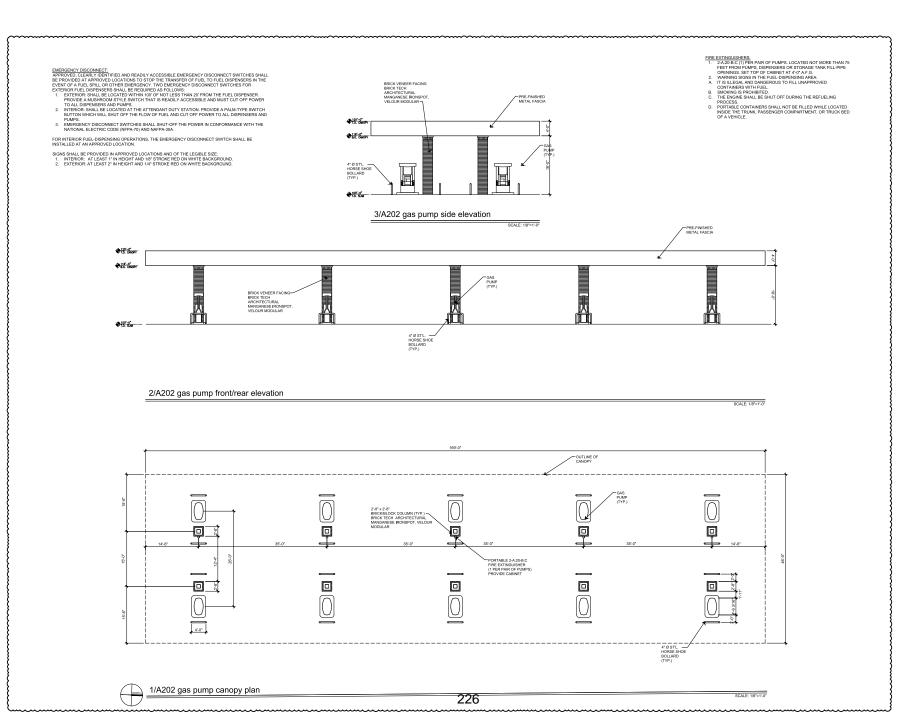
DRAWN BY

KMB

CHECKED BY

A201

Permit No.:





+ PLANNING, LLC

BmK DESIGN + PI 54048 Mound Road - Sheby Towns Ph 248.303.1446

Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant

09-26-300-015 S. Lapeer Road Orion Township, MI 48360

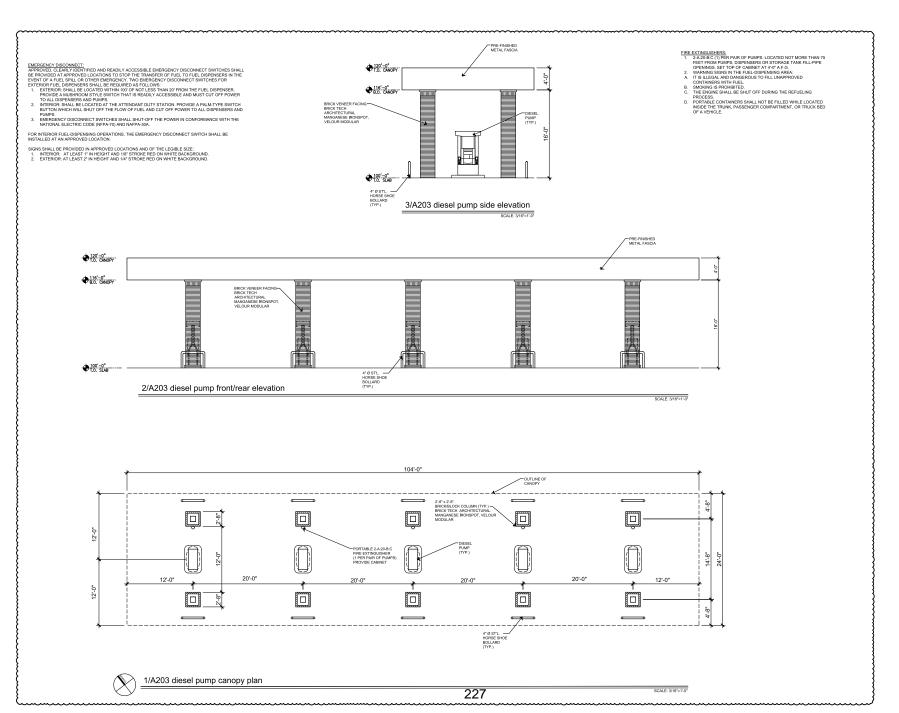
CLIENT:

Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307

| SITE PLAN SUBMITTAL 2 | 07/14/2023 |
|-------------------------|------------|
| SITE PLAN SUBMITTAL 1 | 05/17/2023 |
| PRE-SITE PLAN SUBMITTAL | 03/23/2023 |
| DESCRIPTION | DATE |
| | |

GAS CANOPY
PLAN AND
ELEVATIONS
PROJECT NUMBER
2023-108
SHAWAN BY:
KMB

A202



BmK [DESIGN+PLANNING

+ PLANNING, LLC

BmK DESIGN + 54048 Mound Road - Shelby To Ph 248.303.1446 +

Yatooma Oil Retail Campus Convenience Store/ Drive Thru Tenant

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Pampalona Companies, LLC 850 W. University Suite D Rochester, MI 48307



DIESEL CANOPY PLAN AND **ELEVATIONS**

2023-108

KMB

A203 Permit No.:



August 10, 2023

Scott Reynolds, Planning Commission Chairperson Charter Township of Orion 2323 Joslyn Road Lake Orion, MI 48360 August 10, 2023
Orion Township
Planning & Zoning

Regarding:

Yatooma Oil Orion Township Gas PC-23-22 Special Land Use and Site Plan Review

Dear Mr. Reynolds:

Attached please find revised plans for the above referenced Yatooma Oil Orion Gas project. We are in receipt of review letters from Carlisle|Wortman Associates., Inc. (CWA), OHM Advisors, and Orion Township Fire Department dated August 1, 2023, July 17, 2023, and July 26th, 2023 respectively. Below are the comments from the review letters as well as our responses and any corrective actions taken shown in **red** as necessary.

CWA Comments:

1) Special Land Use Standards:

- 1) To screen the expanse of pavement at the rear of the site, suggest leaving three (3) evergreen trees in their current location along Silverbell, and adding three (3) more evergreens along the west property line.
- (3) evergreen trees will be added to the west property line.
- 2) Defer evaluation to the Township Engineer of the Traffic Impact Study, and impact of amount of traffic generated by the use and site design on area traffic.

Noted.

3) Applicant to obtain outdoor display and sales annual permit.

Noted.

4) Planning Commission to evaluate proposed uses in accordance with review criteria of Sec. 30.02. Noted.

2) Area, Width, Height, Setbacks:

1) Location of "future" right-of-way unknown at this time. Noted.

3) Natural Resources:

Planning Commission to discuss rotating gas pumps/canopy at the rear of building to minimize pavement in this area.

Noted. A Truck Exhibit is provided to indicate truck movements throughout the site if the diesel pump canopy is rotated parallel to the building. (2) additional turning movements would be required for a truck to turn into the parallel pump. The pavement to the west of the building would increase beyond the property to the west with parallel pump alignment.

4) **Building Location and Site Arrangement:**

1) Planning Commission consider discussing adding door/window on the north building façade to allow access from inside the building to the patio, and passive supervision of the patio.

A door or window is not practical for north side as the coolers are situated on this side. A CCTV and recording system monitored by employees can be installed if required.



2) Provide image of gas vents, with proposed height, and add landscaping to screen stacks from Lapeer Rd.

Detail will be provided, and appropriate screening provided as requested.

5) Parking and Loading:

1) Planning Commission to consider proposed number of parking spaces.

Noted.

2) Signage for electric vehicle charging stations handled administratively.

Noted.

3) Consider loading/unloading space location closer to rear of convenience store/restaurant. Loading/unloading space location to remain as located.

4) Township Engineer evaluation of fire lane.

The Orion Township Fire Department has approved the site layout in their review letter dated July 26, 2023.

5) Oil tanker truck occupying 22-foot-wide travel lane between canopy and west edge of pavement; consider re-orienting canopy parallel to building to widen this lane.

A drive lane is not required for the west edge of the property, ample space provided for vehicle movement. A Truck Exhibit is provided to indicate truck movements throughout the site if the diesel pump canopy is rotated parallel to the building. (2) additional turning movements would be required for a truck to turn into the parallel pump. The pavement to the west of the building would increase beyond the property to the west with parallel pump alignment.

6) Site Access and Circulation:

1) Defer evaluation of location and number of access driveways to Township Engineer. Noted.

2) Planning Commission to discuss potential for driver confusion traversing the large expanse of unprogramed pavement at the rear of the site with Township traffic consultant.

Noted. Rotating the pumps to be parallel with the building will increase the amount of pavement and create logistical issues.

7) <u>Infrastructure.</u> Township Engineer input regarding water, sewer and stormwater detention/discharge. Noted.

8) Safety Paths and Sidewalks:

1) Planning Commission to consider curved safety path to widen proposed path around existing utility structures.

Noted.

2) Include signage discouraging fast-food restaurant customers from approaching the drive-up window on foot.

Will provide as requested.

9) Landscaping:

1) Consider planting low-grading shrubs in the long/narrow landscape island between the drive-thru lane and parking spaces (south side of building).

This will be done. The island will be increased to 3'-0" wide to allow for planting of shrubs.



10) Lighting:

1) Clarify type of light fixtures directly above rear building entry doors; provide fixture detail; add to Photometric Plan.

These light fixtures are emergency remote lights tied to the exit lights. They will only light up when activated during an emergency or power outage situation.

2) Planning Commission to discuss bright light levels under rear gas pump canopy, in comparison to the rest of the site and adjoining roadways.

A light will be eliminated from each row for the rear diesel canopy.

OHM Comments:

- 1. The mechanical pretreatment structure needs to be replaced with a NJDEP approved structure. In addition, an oil/water separator still needs to be provided.
 - Will provide as requested.
- 2. Correct the preliminary water and sanitary sewer Basis of Designs per WRC and Orion Township standards.
 - The preliminary water and sanitary sewer Basis of Designs will be updated per WRC and Orion Township standards as requested.
- 3. The current 7-inch concrete slab used for the trash enclosure needs to be increased to a minimum of 8-inch concrete section.
 - The concrete slab used for the trash enclosure will be increased to a minimum of an 8-inch concrete section as requested.
- 4. The engineering plan, designed in accordance with Zoning Ordinance No. 78, Stormwater Management and Soil Erosion & Sedimentation Control Ordinance No. 139, and the Township's Engineering Standards shall be submitted to the Township for review and approval prior to construction. A detailed cost estimate for the improvements shall be submitted with the plans signed and sealed by the design engineer.

Will provide as requested.

Orion Township Fire Department Comments:

Approved. Requirements: NONE.
 Noted.

We hope you find the original plans, Truck Exhibit, along with this response agreeable and respectfully request your approval of the site plan and special land use.

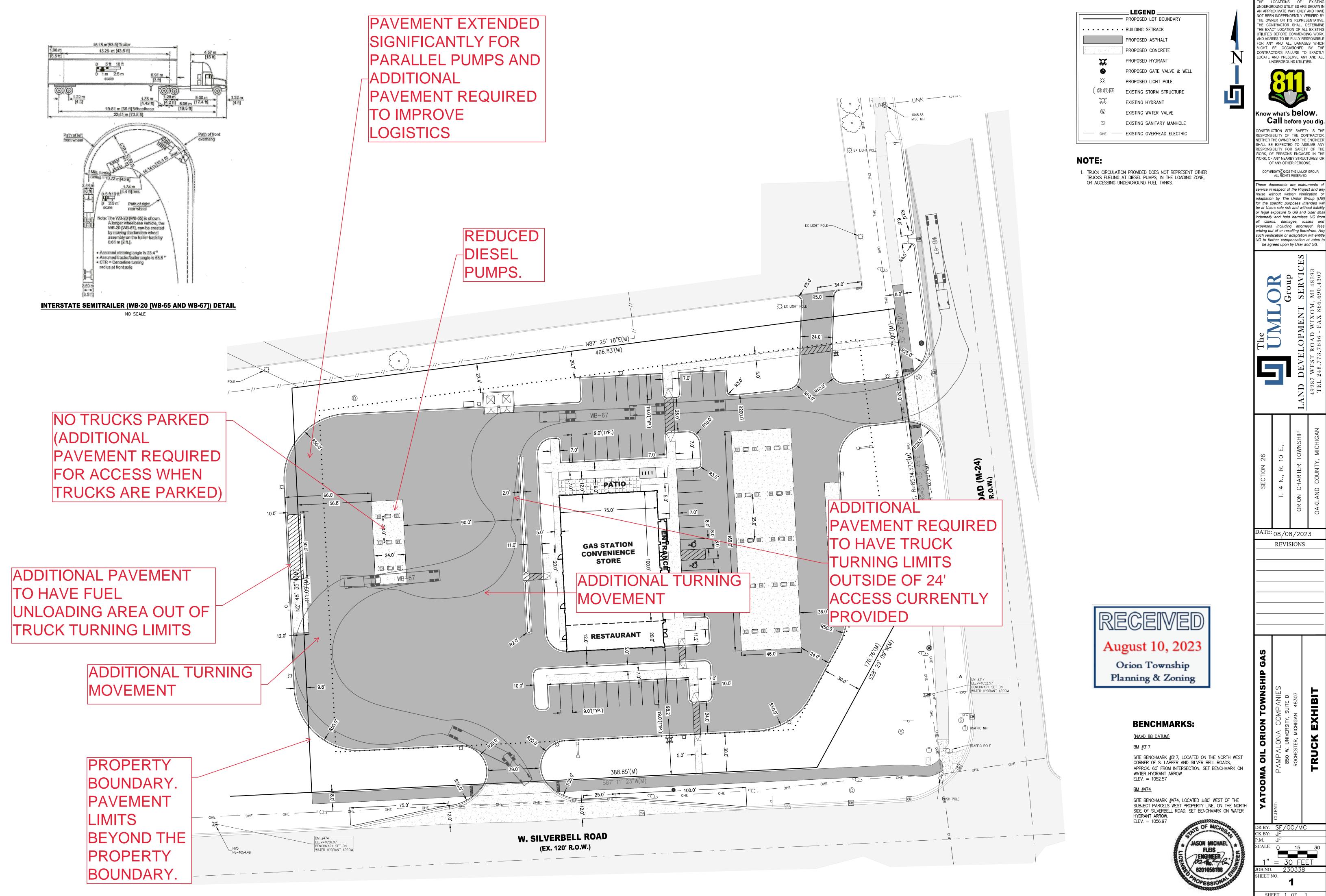
If you have questions or require anything further, please do not hesitate to contact our office.

Sincerely,

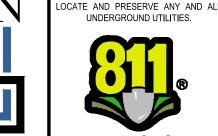
THE UMLOR GROUP

Jason Fleis, PE

Engineering Manager



INDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH CONTRACTOR'S FAILURE TO EXACTLY



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

WORK, OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

These documents are instruments of euse without written verification o

adaptation by The Umlor Group (UG for the specific purposes intended wi be at Users sole risk and without liability all claims, damages, losses and expenses including attorneys' fee arising out of or resulting therefrom. Any G to further compensation at rates to be agreed upon by User and UG.

DATE: 08/08/2023

" = 30 FEET SHEET 1 OF 1

AUG 1 6 2023

* * * * * NOTICE OF PUBLIC HEARING * * * * * WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M

Orion Township Planning & Zoning

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, August 16, 2023, at 7:05 p.m., at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Lake Orion, MI 48360 on the following matter:

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| (parcel #09-26-300-015). | u 1 | |
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| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ★ SLapper Rd W Silverbell Rd | |
| Are you a Township of Lake Orion resider Special Land Use request? | nt who resides near the subject property seeking the | □ NO ⊉YES |
| Do you believe the township should DENY at this location? | Y the Special Land Use request for another gas station | ⊠∕no □ yes |
| Do you plan to attend the hearing on Wedi | nesday, August 16, 2023, at 7:05 PM? | INO □ YES |
| Additional Comments: | | |
| Please note any additional comments you | would like the Planning Commission to consider, inc | luding other |
| business uses for the property you believe | are better suited for the community other than anoth 19 19 Way to World | er gas station? |
| | | |
| Name: Mah L W. Address: | Bay Phone: 248 69 Par (Blvd Lake C Signature: Muhl 9 | 3 1563 Driver 48362 |
| Date: 8 - 11 - 23 | Signature: Muhl 8 | 1/1301 |

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AUG 1 6 2023

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| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ★ SLapper Rd W Silverball Rd N | | |
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| Do you believe the township should DENY at this location? | Y the Special Land Use request for another gas station | ⊠ NO | □ YES |
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| Additional Comments: | | | |
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Signature: Thy to No.

Date: 8-11-73

AUG 1 6 2023

Orion Township

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| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | W Silverbell | l Rd | № | | |
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| Do you believe the township should DEN nt this location? | IY the Special Land | Use request for a | nother gas station | NO DY | ES |
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| business uses for the property you believ | | | | | |
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| Coffee OP | 'tion! | | | | |
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| A CONTRACTOR OF THE PROPERTY O | W. C. | | | | |
| Name: Alaina B | 10001 | Phone: | Lus-75 | 1-4873 | , |

Address: 177 Day was Drive

Date: 06/11/2023 Signature: a Signature:

AUG 1 6 2023

Orion Township

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Address: 3847 Red Root, (ale Occor My 44369

Date: 8-10-2023 Signature: 1868 Negrans

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* * * * * NOTICE OF PUBLIC HEARING * * * * * WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M

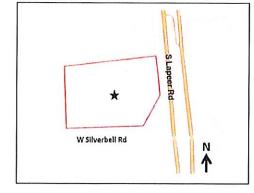
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Scott Reynolds Planning Commission

Penny S. Shults Township Clerk



| Are you a Township of Lake Orion resident who resides near the subject property seeking the Special Land Use request? | □NO | Ş . ∀ES |
|---|------------|---|
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? | □NO | YES |
| Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? | □NO | □ YES X |
| Additional Comments: | | |
| Please note any additional comments you would like the Planning Commission to consider, incl | luding ot | her |
| business uses for the property you believe are better suited for the community other than another | er gas sta | tion? |
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| Address: 4689 Tanglewood Ln Lake Dri | M | 48359 |
| Date: 8/10/23 Signature: KRUMUL | | |

AUG 1 6 2023

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| Additional Comments: |
| Please note any additional comments you would like the Planning Commission to consider, including other |
| there is not a head for another gas station? There is not a head for another gas station? All Station right across the street From another, Better use would be a restaurant or other food option. |
| Name: Name: Name: Phone: Address: 3047 Red Root Rol Lake Orion Date: 8-10-2-3 Signature: Description |

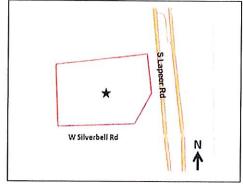
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Scott Reynolds Planning Commission

Penny S. Shults Township Clerk



| Special Land Use request? | \square NO | Y YES |
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* * * * * NOTICE OF PUBLIC HEARING * * * * * * WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M

AUG 1 6 2023

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| | are better suited for the community other than another he Surrounding areas a | er gas stat NA | ion? The |
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| Name: Anthony Bype | Phone: | | |
| Address: 37.5 W. | Silverbell ZI StE Z | 50 | |

Signature: __

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Date: 8/80/23

AUG 1 6 2023

Orion Township Planning & Zoning

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| Name: Name: Wey W | 465h Phone: (Z49) 44 g brook Signature: | 4 -8439 |
| Date: 8/11/23 | Signature: | |

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Signature:

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AUG 1 6 2023

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Scott Reynolds **Planning Commission**

Penny S. Shults Township Clerk



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| Name: 6-(A6040 MONA60 Phone: 248-8783 | 3408 | |
| Name: GALONO MONA CO Phone: 248-8783 Address: 4200 BANDURY DRIVE LANG ORION | | |
| Date: 08/1 (20 2) Signature: | | |

AUG 1 6 2023

Orion Township

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Signature:

AUG 1 6 2023

Orion Township Planning & Zoning

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| business uses for the property you believe | are better suited for the community other than another gas station? |
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Signature:

AUG 1 6 2023

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| Please note any additional comments you would like the Planning Commission to consider, including other | | | |
| business uses for the property you believe are better suited for the community other than another gas station? | | | |
| To many gas stations, we need something else | | | |
| | | | |
| | Phone: <u>586 252 48</u> | 389 | |
| Address: 4797 carrington dr | | | |

Date: 8/14/23

AUG 1 6 2023

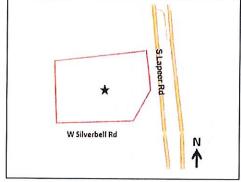
Orion Township Planning & Zoning

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, August 16, 2023, at 7:05 p.m., at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Lake Orion, MI 48360 on the following matter:

PC-23-22, Yatooma Oil Gas Station and Drive Thru, Special Land Use requests for: a gas station, and a drive-thru restaurant, located on a vacant parcel at the northwest corner of Lapeer Rd. & Silverbell Rd. (parcel #09-26-300-015).

Scott Reynolds Planning Commission

Penny S. Shults Township Clerk



| Are you a Township of Lake Orion resident who resides near the subject property seeking the Special Land Use request? | □NO | □ YES |
|---|-------------|-------------|
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? | | TYES |
| Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? | ₽NO | □ YES |
| Additional Comments: | | |
| Please note any additional comments you would like the Planning Commission to consider, inc | luding otl | 'ier |
| business uses for the property you believe are better suited for the community other than another Maybe a Plotavant | er gas stat | ion? |
| | | |
| | | |
| | | |
| Name: Star Hubov Phone: 947-957 | -895 | W_ |
| Address: 45 Sparrow Hill Orion Tunship | | |
| Date: August 11, 2023 Signature: Star Hulf | | |
| 247 | | |

AUG 1 6 2023

* * * * * NOTICE OF PUBLIC HEARING * * * * * WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M

Orion Township Planning & Zoning

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Address:

Date: <u>\$ -11 - 2 3</u>

Signature: 2

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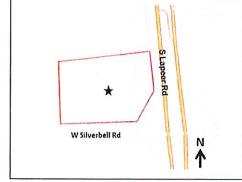
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Scott Reynolds **Planning Commission**

Penny S. Shults Township Clerk



| Special Land Use request? | □ NO □YES |
|--|--|
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? | □ NO ∕□ YES |
| Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? | NO □ YES |
| Additional Comments: | |
| Please note any additional comments you would like the Planning Commission to consider, inc. | luding other |
| business uses for the property you believe are better suited for the community other than another | er gas station? |
| | |
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| | |
| | Name and the second |
| Name: Dan Steek Phone: 248 761 | 1136 |
| Address: 369 W Greenshald Rd | |
| Date: 8 (1/23 Signature: Mul) | |
| 249 | |

AUG 1 6 2023

Orion Township Planning & Zoning

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| Orion, MI 48360 on the following matter | r: | red, Dake | |
|---|---|------------------------|--------------|
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| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ₩ Silverbell Rd | | |
| Are you a Township of Lake Orion residen Special Land Use request? | t who resides near the subject property seeking the | □ NO | ∀YES |
| Do you believe the township should DENY at this location? | the Special Land Use request for another gas station | □NO | □ YES |
| Do you plan to attend the hearing on Wedn | esday, August 16, 2023, at 7:05 PM? | ⊡∕NO | □ YES |
| Additional Comments: | | | |
| Please note any additional comments you | would like the Planning Commission to consider, inc | luding otl | ier |
| business uses for the property you believe | are better suited for the community other than another secretary food Slove | er gas stat | ion? |
| | | | |
| Name: <u>David Legel</u> | Phone:3(3-715 \ | 1546 | |
| Address: 2093 Ock Kr | ido Ct | | |

Signature:

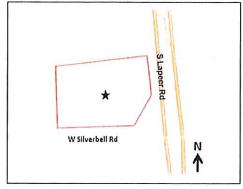
Date: 8/11/23

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Scott Reynolds Planning Commission

Penny S. Shults Township Clerk



| Are you a Township of Lake Orion resident who resides near the subject property seeking the Special Land Use request? | □ NO YES |
|---|--------------|
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? | □ NO XYES |
| Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? | □ NO XYES |
| Additional Comments: | |
| Please note any additional comments you would like the Planning Commission to consider, inc | luding other |
| business uses for the property you believe are better suited for the community other than another | |
| No Gas Station. | |
| | |
| | |
| | |
| | |
| Name: Teffoy T. Olind Phone: | |
| Address: 1126 Cark St | |
| Date: 8/11/23 Signature: 199 | |
| 251 | |

AUG 1 6 2023

Orion Township Planning & Zoning

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|--|---|--|--|
| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ₩ Silverbell Rd | | |
| Special Land Use request? | at who resides near the subject property seeking the | | |
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? Additional Comments: | | | |
| Please note any additional comments you | would like the Planning Commission to consider, including other are better suited for the community other than another gas station? | | |
| | | | |
| Name: Mable WAN | Phone: 248-796-054 | | |

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* * * * * NOTICE OF PUBLIC HEARING * * * * * WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M

Orion Township Planning & Zoning

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Signature: ____

Date: 8-11-27

AUG 1 6 2023 * * * * * NOTICE OF PUBLIC HEARING * * * * * **WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M** Orion Township Planning & Zoning

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|---|--|
| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | * W Silverbell Rd |
| Are you a Township of Lake Orion res Special Land Use request? | ident who resides near the subject property seeking the |
| Do you believe the township should DI at this location? | ENY the Special Land Use request for another gas station |
| Do you plan to attend the hearing on W | ednesday, August 16, 2023, at 7:05 PM? ☐ YES |
| Additional Comments: | |
| Please note any additional comments y | you would like the Planning Commission to consider, including other |
| business uses for the property you beli | ieve are better suited for the community other than another gas station? |
| | |
| | |
| | |
| | |
| Name: | Phone: 176-506-358 L Signature: |
| Address: 3545 / | lingspala 1510 |
| Date: \$/// /23 | Signature: |

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AUG 1 6 2023

Orion Township Funning & Zoning

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Date: 6-12-23 Signature: Edd's About

Address: 199 E SILVER BELL OKION TOWN SHIP

Orion Township Planning & Zoning

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(parcel #09-26-300-015).

| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ★ N Silverbell Rd N | | |
|---|--|-------------|---|
| Are you a Township of Lake Orion residen Special Land Use request? | nt who resides near the subject property seeking the | □NO | ₩ XES |
| Do you believe the township should DENY at this location? | the Special Land Use request for another gas station | □ NO | □ YES |
| Do you plan to attend the hearing on Wedn | nesday, August 16, 2023, at 7:05 PM? | □ NO | YES |
| Additional Comments: | | | |
| Please note any additional comments you | would like the Planning Commission to consider, inc | luding oth | ier |
| business uses for the property you believe | are better suited for the community other than anothe | er gas stat | ion. |
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| | | | *************************************** |
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| | | | |
| Name: Jerry Hollag | Phone: 248,90 | 52, | 4499 |
| Address: 3640 Trempo | nte C. N Lake Croxu | | |
| Date: 6,17,00 | Signature: Land la | Hage. | |

AUG 1 6 2023

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Name: <u>Naord Ram</u>
Phone: <u>248-804-0424</u>

Address: <u>3664 Bold at RD lake orion m:</u>

Date: <u>alg-12-23</u> Signature: <u>Mold Rour</u>

AUG 1 6 2023

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Signature:

Address:

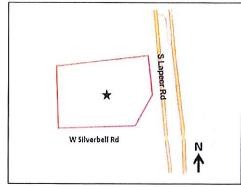
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Scott Reynolds Planning Commission



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|---|---|-------|
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? | □ NO | ☑ YES |
| Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? | □∕NO | □ YES |
| Additional Comments: | | |
| Please note any additional comments you would like the Planning Commission to consider, incl | luding oth | ier |
| business uses for the property you believe are better suited for the community other than another | er gas stat | ion. |
| We don't need anymore gas stations | | |
| | *************************************** | |
| | | |
| | | |
| | | |
| Name: Joe Spina Phone: 2.390 643 | / | |
| Name: Joe Spina Phone: 2.390 643, Address: 554 Atwater St Lake Orion | 4834 | 52 |
| Date: 08.12.23 Signature: 262 | | |

AUG 1 6 2023

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Date: 8/12/23

Signature: €

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Orion Township

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| Orion, MI 48360, on the following matter | er: | Ka, Lake |
|---|---|-----------------|
| | Drive Thru, Special Land Use requests for: a gas static parcel at the northwest corner of Lapeer Rd. & Silver | |
| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | SLapper Rd W Silverbell Rd N | |
| Are you a Township of Lake Orion residen Special Land Use request? | nt who resides near the subject property seeking the | □ NO XYES |
| Do you believe the township should DENY nt this location? | the Special Land Use request for another gas station | □ NO 🂢 YES |
| Do you plan to attend the hearing on Wedn | nesday, August 16, 2023, at 7:05 PM? | □ NO YES |
| Additional Comments: | | |
| Please note any additional comments you | would like the Planning Commission to consider, inc | luding other |
| business uses for the property you believe | are better suited for the community other than another | er gas station. |
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| 0. 11 10 | | |

Name: Yelley Cogi

Phone: 242 760-236

Address:

1- 00

Signature:

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Orion Township Planning & Zoning

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| Scott Reynolds Planning Commission |
| Penny S. Shults Township Clerk WSilverbell Rd |
| N A |
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| Additional Comments: |
| Please note any additional comments you would like the Planning Commission to consider, including other |
| business uses for the property you believe are better suited for the community other than another gas station. |
| No gas Station needed - Restaurant |
| |
| |
| |
| |
| Name: Carric McEvers Phone: 248-770-621/ |
| Address: 1149 Ferguson, Lake Orion M1 48362 |
| Name: Carric McEvers Phone: 248-770-621/ Address: 1149 Ferguson, Lake Orton M1 48362 Date: 8-15-2023 Signature: Can 7 |

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> _____ Signature: ____ 266

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Orion Toversip
Planning & 2 = 09

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Scott Reynolds Planning Commission



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|---|-------------|-------|
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| business uses for the property you believe are better suited for the community other than another | er gas stat | ion. |
| Low the preces | | |
| | | |
| Name: Jarm Collen Phone: 606-88 | 27 | > |
| Address: 155 Stantlers habe over | <u> </u> | |
| Date: 8-14-23 Signature: | | |
| Name: Jarm Collen Phone: 606-88 Address: 153 Start Ross Lake Overhe Date: 8-14-23 Signature: | | > |

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PC-23-22, Yatooma Oil Gas Station and Drive Thru, Special Land Use requests for: a gas station, and a drive-thru restaurant located on a vacant parcel at the northwest corner of Lapeer Rd. & Silverbell Rd. (parcel #09-26-300-015). Scott Reynolds **Planning Commission** Penny S. Shults Township Clerk W Silverbell Rd Are you a Township of Lake Orion resident who resides near the subject property seeking the Special Land Use request? □ NO ØYES Do you believe the township should DENY the Special Land Use request for another gas station at this location? \square NO Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? □ NO XYES Additional Comments: Please note any additional comments you would like the Planning Commission to consider, including other business uses for the property you believe are better suited for the community other than another gas station. (BM munit ON 900

AUG 1 6 2023

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, August 16, 2023, at 7:05 p.m., at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Dake Township Orion, MI 48360, on the following matter:

Planning & Zoning

PC-23-22, Yatooma Oil Gas Station and Drive Thru, Special Land Use requests for: a gas station, and a drive-thru restaurant located on a vacant parcel at the northwest corner of Lapeer Rd. & Silverbell Rd. (parcel #09-26-300-015).

Scott Reynolds Planning Commission



| Are you a Township of Lake Orion resident who resides near the subject property seeking the Special Land Use request? | □ NO \YES |
|---|-----------------|
| Do you believe the township should DENY the Special Land Use request for another gas station at this location? | □ NO \ YES |
| Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? | □ NO ¥ YES |
| Additional Comments: | |
| Please note any additional comments you would like the Planning Commission to consider, inc | luding other |
| business uses for the property you believe are better suited for the community other than anoth | er gas station. |
| TOO much Traffic | |
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| | |
| Name: Troy Dunchez Phone: 248 860- | 3379 |
| Name: Troy Sunchez Phone: 248 860- Address: 3700 Wingtip of large or in M | 1 48360 |
| Date: 08/75/23 Signature: 269 | ~ |
| 269 | 8 |

* * * * * NOTICE OF PUBLIC HEARING * * * * * * AUG 1 6 2023 WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M. Orion Township

Planning & Zoning

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, August 16, 2023, at 7:05 p.m., at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Lake Orion, MI 48360, on the following matter:

| | Drive Thru, Special Land Use requests for: a gas station parcel at the northwest corner of Lapeer Rd. & Silver | |
|---|--|------------|
| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ★ Slappen Rd N | |
| | " " • | |
| Are you a Township of Lake Orion residen Special Land Use request? | t who resides near the subject property seeking the | □ NO ØYES |
| Do you believe the township should DENY at this location? | the Special Land Use request for another gas station | □ NO ØYES |
| Do you plan to attend the hearing on Wedn | esday, August 16, 2023, at 7:05 PM? | □ NO □ YES |
| Additional Comments: | | |
| - | would like the Planning Commission to consider, inc are better suited for the community other than anoth | |
| | | |
| | | |
| | | |
| | | |
| Name: JASON LARSEN | Phone: 248-343- | -2577 |
| Address: 4087 BANG | | |

Signature: _

* * * * * NOTICE OF PUBLIC HEARING * * * * * WEDNESDAY, AUGUST 16, 2023, AT 7:05 P.M. Planning & Zoning

Orion Township

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, August

| Orion, MI 48360, on the following matter | nship Municipal Complex Board Room, 2323 Joslyn l er: | Rd, Lake | |
|--|---|-------------|--------------|
| | Drive Thru, Special Land Use requests for: a gas static parcel at the northwest corner of Lapeer Rd. & Silver | | |
| Scott Reynolds Planning Commission Penny S. Shults Township Clerk | ₩ Silverbell Rd | | |
| Are you a Township of Lake Orion resider Special Land Use request? | nt who resides near the subject property seeking the | □ NO | ☑ YES |
| Do you believe the township should DENY at this location? | Y the Special Land Use request for another gas station | □NO | ✓ YES |
| Do you plan to attend the hearing on Wedn | nesday, August 16, 2023, at 7:05 PM? | NO | ☐ YES |
| Additional Comments: | | | |
| Please note any additional comments you | would like the Planning Commission to consider, inc. | luding otl | ier |
| business uses for the property you believe | are better suited for the community other than another | er gas stat | ion. |
| too much tragg | \(\frac{1}{2}\) | | |
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| | | | |
| | | | |
| Name: Matt Elean | Phone: 551 - 747 - 1 | 4 5 C) C) | |

Address: 3C42 Hi U. 11 a Dr. Lake Over M. Signature: 271

Alig 1 6 2023

Chon Township
Forming & Zoning

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, August 16, 2023, at 7:05 p.m., at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Lake Orion, MI 48360, on the following matter:

PC-23-22, Yatooma Oil Gas Station and Drive Thru, Special Land Use requests for: a gas station, and a drive-thru restaurant located on a vacant parcel at the northwest corner of Lapeer Rd. & Silverbell Rd. (parcel #09-26-300-015). Scott Reynolds Planning Commission Penny S. Shults Township Clerk W Silverbell Rd Are you a Township of Lake Orion resident who resides near the subject property seeking the □ NO \(\tilde{\text{YES}}\) Special Land Use request? Do you believe the township should DENY the Special Land Use request for another gas station at this location? Do you plan to attend the hearing on Wednesday, August 16, 2023, at 7:05 PM? DNO □ YES Additional Comments: Please note any additional comments you would like the Planning Commission to consider, including other business uses for the property you believe are better suited for the community other than another gas station. need another Coas Station Mristy Schatz- 4,994 Phone: 248-882-6890 3333 mc Connell St., (.O. m. 48359

15/2023 Signature: Church Schut

* * * * * NOTICE OF PUBLIC HEARING * * * * *

The Charter Township of Orion Planning Commission will hold a public hearing on Wednesday, September 6, 2023, at 7:05 p.m., at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Lake Orion, MI 48360 on the following matter:

PC-23-22, Yatooma Oil Gas Station and Drive Thru, Special Land Use request for 24-hour operation, located on a vacant parcel at the northwest corner of Lapeer Rd. & Silverbell Rd. (parcel #09-26-300-015).

If you are not able to attend, send correspondence to Orion Township Hall, 2323 Joslyn Rd. addressed to the Planning Commission to express your concerns and comments. A copy of the proposed Special Land Use is on file in the Planning & Zoning Department office and the Township Clerk's office and may be examined during normal business hours, 8:30 a.m. to 4:30 p.m., Monday through Friday until the date of the public hearing.

Orion Township will provide necessary and reasonable auxiliary aids, and services for individuals with disabilities at the public hearing upon advance notice by writing or calling Penny S. Shults, Township Clerk, 2323 Joslyn Road, Lake Orion, Michigan 48360; 248-391-0304, ext. 4001. Please contact the Clerk's office at least 72 hours in advance of the public hearing.

Scott Reynolds Planning Commission



* * * * * NOTICE OF PUBLIC HEARING * * * * *

The Charter Township of Orion Planning Commission will hold a Public Hearing on Wednesday, September 6, 2023 (immediately following PC-23-22 Public Hearing at 7:05 p.m.), at the Orion Township Municipal Complex Board Room, 2323 Joslyn Rd, Lake Orion, MI 48360 on the following matter:

PC-23-32, The Villages of Orion, request for a proposed amendment to a Consent Judgement and site plan, located at 823 N. Lapeer Rd. (parcel #09-02-126-020).

If you are not able to attend, send correspondence to Orion Township Hall, 2323 Joslyn Rd. addressed to the Planning Commission to express your concerns and comments. A copy of the proposed request is on file in the Planning & Zoning Department office and the Township Clerk's office and may be examined during normal business hours, 8:30 a.m. to 4:30 p.m., Monday through Friday until the date of the public hearing.

Orion Township will provide necessary and reasonable auxiliary aids, and services for individuals with disabilities at the public hearing upon advance notice by writing or calling Penny S. Shults, Township Clerk, 2323 Joslyn Road, Lake Orion, Michigan 48360; 248-391-0304, ext. 4001. Please contact the Clerk's office at least 72 hours in advance of the public hearing.

Scott Reynolds Planning Commission

