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www.oshtemo.org

**NOTICE  
OSHTEMO CHARTER TOWNSHIP  
PLANNING COMMISSION - REGULAR MEETING**

**MEETING WILL BE HELD IN PERSON  
AT OSHTEMO TOWNSHIP HALL  
7275 W MAIN STREET**

Masks Are Now Optional in Oshtemo Township Buildings

*(Meeting will be available for viewing through <https://www.publicmedianet.org/qavel-to-qavel/oshtemo-township>)*

**THURSDAY, MAY 26, 2022  
6:00 P.M.**

**AGENDA**

1. Call to Order
2. Pledge of Allegiance
3. Approval of Agenda
4. Public Comment on Non-Agenda Items
5. Approval of Minutes: May 12<sup>th</sup>, 2022
6. **Special Use and Site Plan Extension Request, 7-Eleven (previously known as Speedway)**  
On June 24, 2021 the Planning Commission reviewed and approved the Special Use and Site Plan request from Speedway LLC to construct a new 4,608 sqft convenience store with a ten dispenser auto fueling canopy at 1250 and 1300 S Drake Road. Oshtemo's period of approval is one year. The applicant is requesting an 18-month extension of their Special Use and Site Plan approval.
7. Other Updates and Business
8. Adjournment

**Policy for Public Comment  
Township Board Regular Meetings, Planning Commission & ZBA Meetings**

All public comment shall be received during one of the following portions of the Agenda of an open meeting:

a. Citizen Comment on Non-Agenda Items or Public Comment – while this is not intended to be a forum for dialogue and/or debate, if a citizen inquiry can be answered succinctly and briefly, it will be addressed or it may be delegated to the appropriate Township Official or staff member to respond at a later date. More complicated questions can be answered during Township business hours through web contact, phone calls, email ([oshtemo@oshtemo.org](mailto:oshtemo@oshtemo.org)), walk-in visits, or by appointment.

b. After an agenda item is presented by staff and/or an applicant, public comment will be invited. At the close of public comment there will be Board discussion prior to call for a motion. While comments that include questions are important, depending on the nature of the question, whether it can be answered without further research, and the relevance to the agenda item at hand, the questions may not be discussed during the Board deliberation which follows.

Anyone wishing to make a comment will be asked to come to the podium to facilitate the audio/visual capabilities of the meeting room. Speakers will be invited to provide their name, but it is not required.

All public comment offered during public hearings shall be directed, and relevant, to the item of business on which the public hearing is being conducted. Comment during the Public Comment Non-Agenda Items may be directed to any issue.

All public comment shall be limited to four (4) minutes in duration unless special permission has been granted in advance by the Supervisor or Chairperson of the meeting.

Public comment shall not be repetitive, slanderous, abusive, threatening, boisterous, or contrary to the orderly conduct of business. The Supervisor or Chairperson of the meeting shall terminate any public comment which does not follow these guidelines.

(adopted 5/9/2000)  
(revised 5/14/2013)  
(revised 1/8/2018)

Questions and concerns are welcome outside of public meetings during Township Office hours through phone calls, stopping in at the front desk, by email, and by appointment. The customer service counter is open from Monday-Thursday 8:00 am- 5:00 pm, and on Friday 8:00 am-1:00 pm. Additionally, questions and concerns are accepted at all hours through the website contact form found at [www.oshtemo.org](http://www.oshtemo.org), email, postal service, and voicemail. Staff and elected official contact information is provided below. If you do not have a specific person to contact, please direct your inquiry to [oshtemo@oshtemo.org](mailto:oshtemo@oshtemo.org) and it will be directed to the appropriate person.

Oshtemo Township Board of Trustees		
<b><u>Supervisor</u></b>		
Libby Heiny-Cogswell	216-5220	<a href="mailto:libbyhc@oshtemo.org">libbyhc@oshtemo.org</a>
<b><u>Clerk</u></b>		
Dusty Farmer	216-5224	<a href="mailto:dfarmer@oshtemo.org">dfarmer@oshtemo.org</a>
<b><u>Treasurer</u></b>		
Clare Buszka	216-5221	<a href="mailto:cbuszka@oshtemo.org">cbuszka@oshtemo.org</a>
<b><u>Trustees</u></b>		
Cheri L. Bell	372-2275	<a href="mailto:cbell@oshtemo.org">cbell@oshtemo.org</a>
Kristin Cole	375-4260	<a href="mailto:kcole@oshtemo.org">kcole@oshtemo.org</a>
Zak Ford	271-5513	<a href="mailto:zford@oshtemo.org">zford@oshtemo.org</a>
Kizzy Bradford	375-4260	<a href="mailto:kbradford@oshtemo.org">kbradford@oshtemo.org</a>

Township Department Information			
<b><u>Assessor:</u></b>			
Kristine Biddle	216-5225	<a href="mailto:assessor@oshtemo.org">assessor@oshtemo.org</a>	
<b><u>Fire Chief:</u></b>			
Mark Barnes	375-0487	<a href="mailto:mbarnes@oshtemo.org">mbarnes@oshtemo.org</a>	
<b><u>Ordinance Enf:</u></b>			
Rick Suwarsky	216-5227	<a href="mailto:rsuwarsky@oshtemo.org">rsuwarsky@oshtemo.org</a>	
<b><u>Parks Director:</u></b>			
Karen High	216-5233	<a href="mailto:khigh@oshtemo.org">khigh@oshtemo.org</a>	
Rental Info	216-5224	<a href="mailto:oshtemo@oshtemo.org">oshtemo@oshtemo.org</a>	
<b><u>Planning Director:</u></b>			
Iris Lubbert	216-5223	<a href="mailto:ilubbert@oshtemo.org">ilubbert@oshtemo.org</a>	
<b><u>Public Works:</u></b>			
Marc Elliott	216-5236	<a href="mailto:melliott@oshtemo.org">melliott@oshtemo.org</a>	

**OSHTEMO CHARTER TOWNSHIP  
PLANNING COMMISSION**

**DRAFT MINUTES OF A MEETING HELD MAY 12, 2022**

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**Agenda**

**PROJECT UPDATE AND DISCUSSION: 5G WIRELESS ODINANCE REVISIONS  
(MCKENNA)**

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A meeting of the Oshtemo Charter Township Planning Commission was held Thursday, May 12, 2022, commencing at approximately 6:00 p.m. at the Oshtemo Township Hall, 7275 West Main Street.

MEMBERS PRESENT:                    Bruce VanderWeele, Chair  
   Micki Maxwell, Vice Chair  
   Kizzy Bradford  
   Deb Everett  
   Alistair Smith  
   Anna Versalle  
MEMBER ABSENT:                    Chetan Vyas

Also present were Colten Hutson, Zoning Administrator, James Porter, Township Attorney, Martha Coash, Recording Secretary.

Three guests were also in attendance: Kyle Mucha and Paul Lippens of McKenna, and Curt Aardema of AVB.

**Call to Order and Pledge of Allegiance**

Chairperson VanderWeele called the meeting to order at approximately 6:00 p.m. and those in attendance joined in reciting the Pledge of Allegiance.

**Approval of Agenda**

The Chair asked if there were any changes to the agenda. Hearing none, he let the agenda stand as published.

**Approval of the Minutes of the Meeting of April 28, 2022**

Chairperson VanderWeele asked if there were additions, deletions, or corrections to the Minutes of the Meeting of April 28, 2022. Hearing none, he asked for a motion.

Ms. Versalle **made a motion** to approve the Minutes of the Meeting of April 28, 2022, as presented. Ms. Everett **seconded the motion**. The **motion was approved unanimously**.

### **PUBLIC COMMENT ON NON-AGENDA ITEMS**

The Chair asked if anyone cared to comment on a non-agenda item.

Mr. Curt Aardema of AVB said the time spent and support at the last meeting regarding the Maple Hill Sub Area Plan Overlay Zone process was appreciated. He reviewed the history of the project that began in 2017. AVB feels the process should be public and should involve the neighborhood as well as the Planning Commission. After the last meeting he reached out to the Planning staff who advised discussion at a public meeting, which is why he was attending this meeting.

He felt the document is 80% complete and that it addressed a lot of issues and components already discussed in depth as well as a lot of concerns expressed at last month's meeting. Tens of thousands of dollars have been spent to put the package together. He thanked the Commission for their time and help.

Chairperson VanderWeele said he appreciated the resolution the Commission passed at the last meeting to make completion of the Maple Hill Sub Area Overlay Zone the number one priority for the Planning Department. He noted the level of public concern over traffic expressed by members of the public, and felt a traffic study may need to be done.

Mr. Aardema said RS Engineering, a professional traffic consultant, is working with the Michigan Department of Transportation (MDOT) to guide that process and they want to do a traffic study when appropriate. He noted MDOT is working on the West Main corridor from Drake to 131 and that an access road to the Prairies would need to integrate with the MDOT plan.

Chairperson VanderWeele thanked Mr. Aardema for his comments and moved to the next agenda item.

### **PROJECT UPDATE AND DISCUSSION: 5G WIRELESS ORDINANCE REVISIONS (MCKENNA)**

Mr. Kyle Mucha and Mr. Christopher Khorey of McKenna provided a project update on the 5G Wireless Ordinance Revisions for consideration and discussion including how they were developed and shared analysis maps of wireless facilities and internet download speeds as well as proposed revisions to article 49. The next steps to be taken include a survey for the public. He described the draft survey to be sent to the community and how it would be distributed to Oshtemo residents. The survey will be set

to launch within days with a close date of June 17<sup>th</sup>. Following public response, a draft of the Wireless Ordinance and Broadband policy will be completed and made available for consideration by the Planning Commission.

They answered questions from Commissioners regarding 1) colocations which may be used for providers to share in order to diminish the visual impact of structures; 2) possible federal and state funding that may be available; 3) the size of distribution antenna systems (DSA) which will be incorporated into the ordinance and noted different aesthetics and standards for those vs. large cell towers. It was noted that towers 200 feet in height require a light on top, so most likely those utilized will be a maximum of 198 feet tall.

Attorney Porter noted PA 365 enacted recently provides very limited authority to local governmental units for control in Rights of Way, but we can plan ahead as much as possible. McKenna will try to incorporate some limitations for non-motorized pathways and sidewalks in the revised ordinance.

Mr. Mucha said the small DSAs will be utilized in addition to the larger towers to reduce demand on the larger towers. The survey will be used to identify how residents feel about their current service. Quality of service is the issue; speed drops in areas west and north in the Township. He indicated they would send/make surveys available in a number of ways to assure as much participation as possible to determine the quality of service residents feel they receive. He felt they would be hard pressed to find anyone who does not think they would like better service. Improved service has been ramped up especially after Covid has exposed such a lack of service. There is a federal push for broadband for rural areas.

Chairperson VanderWeele thanked Mr. Mucha and Mr. Khorey for their presentation and moved to the next agenda item.

## **OTHER UPDATES AND BUSINESS**

There were no updates or other business to consider.

## **ADJOURNMENT**

Chairperson VanderWeele adjourned the meeting at approximately 6:35 p.m.

Minutes prepared:  
May 13, 2022

Minutes approved:  
\_\_\_\_\_, 2022

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May 19, 2022

**Mtg Date:** May 26, 2022  
**To:** Planning Commission  
**From:** Iris Lubbert, AICP, Planning Director  
**Subject:** Special Use and Site Plan Extension Request, 7-Eleven (previously known as Speedway)

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Objective:

The Planning Commission is asked to approve or deny, with a formal motion, the 18-month Site Plan and Special Use extension request submitted by 7-Eleven (previously known as Speedway); see attached letter.

Background:

On June 24, 2021 the Planning Commission reviewed and approved the Special Use and Site Plan request from Speedway LLC to construct a new 4,608 sqft convenience store with a ten dispenser auto fueling canopy at 1250 and 1300 S Drake Road. An excerpt from the June 24<sup>th</sup> Minutes and the original staff report for this item are attached to this memo for reference.

Per Section 64.90 A and 65.60 of the Ordinance, if a property which was subject to a Special Use and/or Site Plan approval has not obtained a building permit and on-site development has not commenced within one year, Site Plan approval and/or Special Use approval becomes void. Extensions may be granted by the approving body if requested prior to the expiration of the one-year validity period. The one-year validity period ends on June 24, 2022; the applicant is requesting an 18-month extension.

The Planning Commission has the authority to grant an extension of a Special Use where the applicant satisfies any of the following existing circumstances:

1. The delay in commencement or completion of the project subject to the Special Use approval was beyond the control of the applicant and the applicant has in good faith attempted to meet the foregoing time schedule.
2. The project is in the process of being developed for the Special Use purpose and has reasonably progressed towards completion.
3. The complexity or size of the project requires additional time for either commencement or completion of construction, which commencement and completion appear feasible and probable if permitted. Under this circumstance, the Planning Commission shall have the authority to grant an initial longer period for commencement and/or completion at the time of approving the original Special Use.
4. Successive extensions of time may be granted by the Planning Commission for such periods of time as said Planning Commission determines to be reasonable and proper under the foregoing criteria.

5. Where a Special Use is terminated by lapse of time, any new application for a Special Use shall be heard and determined anew based upon circumstances then existing.

To date, the parcels in question have been combined and the car wash and dry-cleaning buildings have been demolished. Per the applicant's letter: "7-Eleven acquired Speedway in 2021 and with the acquisition multiple Speedway projects that were scheduled for construction in 2022 were placed on hold until all sites and numbers could be evaluated by 7-Eleven and new construction budgets and schedules could be prepared. With the new schedules the majority of Speedway sites that were supposed to be constructed in 2022 were moved to 2023". Based on the work completed to date and the details outlined in the applicant's letter, circumstances permitting the Planning Commission to grant an extension have been met. Staff recommends the Planning Commission grant the requested 18-month extension.

Attachments: Letter requesting extension from Applicant, excerpt from the 6/24/2021 Planning Commission meeting minutes, 6/24/2021 Speedway staff report and supplemental materials





May 17, 2022

Planning Commission  
Charter Township of Oshtemo  
7275 West Main Street  
Kalamazoo, MI 49009  
(269) 375-4260

RE: Site Plan and Special Use Approval Extension Request

Dear Planning Commission Members,

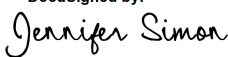
On 06/24/2021, the Oshtemo Township Planning Commission granted Site Plan and Special Use Approval to demolish the existing gas station, dry-cleaning, and car wash located at 1250 and 1300 S. Drake Road to construct a new 4,608 sf convenience store with a ten dispenser auto fueling canopy.

Since the date of the approval Speedway purchased the additional parcel and combined it with the original Speedway parcel. The car wash and dry-cleaning buildings have also been demolished.

7-Eleven acquired Speedway in 2021 and with the acquisition multiple Speedway projects that were scheduled for construction in 2022 were placed on hold until all sites and numbers could be evaluated by 7-Eleven and new construction budgets and schedules could be prepared. With the new schedules the majority of Speedway sites that were supposed to be constructed in 2022 were moved to 2023.

Therefore, 7-Eleven (Previously known as Speedway) is requesting an extension of 18 months for the site plan and special use approvals. If you have any questions please feel free to reach out to me.

Sincerely,

DocuSigned by:  
  
3FDA64034E214E2...

Jennifer Simon  
Development Project Manager of Entitlements  
937.405.7043 | [Jennifer.Simon@7-11.com](mailto:Jennifer.Simon@7-11.com)

**OSHTEMO CHARTER TOWNSHIP  
PLANNING COMMISSION**

**MINUTES OF A VIRTUAL MEETING HELD JUNE 24, 2021**

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**Agenda**

**PUBLIC HEARING: SPECIAL USE, 6480 TECHNOLOGY AVENUE**

Corrion 9<sup>th</sup> LLC was requesting Special Use and Site Plan approval to create two additional tenant spaces within a multi-tenant building located at 6480 Technology Ave. One of the proposed tenant spaces is for a martial arts studio.

**PUBLIC HEARING: SPECIAL USE, SPEEDWAY**

Speedway LLC was requesting Special Use and Site Plan approval to demolish the existing gas station, dry cleaners, and car wash at 1250 and 1300 S Drake Rd to construct a new 4,608 sq ft convenience store with a 10 dispenser auto fueling canopy.

**PUBLIC HEARING: Code Amendment, Nonmotorized**

Consideration of amendments to the Township Zoning Ordinance Section 57.90 Sidewalks, for recommendation to the Township Board.

**Emberly Acres II Expansion – Sidewalk SAD Request**

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A virtual meeting of the Oshtemo Charter Township Planning Commission was held Thursday, June 24, 2021, commencing at approximately 6:01 p.m.

ALL MEMBERS WERE PRESENT:		LOCATION
	Bruce VanderWeele, Chair	Oshtemo
	Micki Maxwell, Vice Chair	Oshtemo
	Kizzy Bradford	Kalamazoo
	Deb Everett	Oshtemo
	Alistair Smith	Oshtemo
	Anna VerSalle	Oshtemo
	Chetan Vyas	Oshtemo

Also present were Iris Lubbert, Planning Director, Colten Hutson, Zoning Administrator, James Porter, Township Attorney, and Martha Coash, Recording Secretary.

Guests present included Jim Rodbard, Attorney for Brian Corrion, Mandy Gauss, Engineer for Speedway LLC, Jennifer High, Speedway representative, and Paul Schramm, Prime Homes LLC.

deviation. A landscaping plan shall be submitted and approved by Township staff prior to issuing a certificate of occupancy.

- a. If the alternative landscaping is to be placed onto the neighboring basin, an agreement between the applicant and the owner of the stormwater retention basin for the tree plantings shall be executed with Township staff's oversight prior to issuing a certificate of occupancy or any temporary certificate of occupancy.
- 2) A revised site plan shall be submitted and approved by Township staff showing the correct minimum setbacks for all front, side, or rear yards prior to issuing a certificate of occupancy.
- 3) The applicant shall submit a sign permit application to be reviewed and approved by Township staff if the applicant wishes to add any type of signage to the site.

Ms. VerSalle **seconded the motion**. The **motion passed 6 – 1 by roll call vote, with Mr. Vyas voting No**.

Chairperson VanderWeele moved to the next agenda item and asked Ms. Lubbert for her presentation.

**PUBLIC HEARING: SPECIAL USE, SPEEDWAY**

**Speedway LLC was requesting Special Use and Site Plan approval to demolish the existing gas station, dry cleaning, and car wash located at 1250 and 1300 S Drake Road to construct a new 4,608 sq ft convenience store with a 10 dispenser auto fueling canopy.**

Ms. Lubbert said Speedway LLC was requesting Special Use and Site Plan approval to demolish the existing gas station, dry cleaning, and car wash located at 1250 and 1300 S Drake Road to construct a new 4,608 sq ft convenience store with a ten dispenser auto fueling canopy. The proposal entailed combining the two properties to create a 3.2 acre parcel; a land combination application was received.

Currently zoned C: Local Business District, 1250 and 1300 S Drake Road are located at the edge of Oshtemo's eastern boundary, directly south west of the S Drake Road and W KL Avenue intersection. The two properties abut an Amtrak rail line to the south and a National Mini Storage to the west. The properties adjacent to the north are zoned R-4: Residence District.

She indicated when reviewing this Special Use request, there are two sets of criteria that need to be considered: the general Special Use review criteria outlined in Section 65.30 and the general Site Plan review criteria outlined in Section 64. She provided an analysis (below) of the proposal against these two Sections and said overall, the requirements of Section 64 and Section 65.30 have been met.

## **Section 64: Site Plan Review**

### **General Zoning Compliance:**

*Zoning:* 1250 and 1300 S Drake Road are zoned C: Local Business District. Convenience stores are a permitted use by right within the C: Local Business District. Filling stations are permitted as a Special Use within the district. The proposed percentage of land on-site covered by buildings is 3% and 48% reserved for open space. All general zoning requirements have been met.

### **Access and Circulation**

*Access:* The two parcels currently have two access points each. Once the parcels are combined, two of the existing curb cuts will be closed; the two furthest from the intersection will remain to service the proposed use. To improve safety the applicant worked with the Road Commission of Kalamazoo County (RCKC) to shift the south eastern curb cut further south to line up with the access point on the other side of S Drake Road. Most circulation aisles within the proposed site plan are approximately 30 Ft wide and have safe turning radii. Fire engines and other vehicles have ample space and circulation if emergency response is needed. Oshtemo's Fire Marshal reviewed the proposed layout and has no concerns in terms of access and circulation. All driveways will need to be reviewed and approved by the RCKC. An approved driveway permit will need to be submitted prior to building permit issuance.

*Parking:* The proposed structure on this site will serve primarily as a convenience store. As a convenience store requires more parking than an automotive service station, the convenience store designation was used to calculate the necessary parking on site. Per Section 52.100 of the zoning ordinance a use of this nature requires one parking space for every 150 SF of net floor area. A 4,608 SF building is proposed, requiring 31 parking spaces. To minimize excessive areas of pavement which detract from the aesthetics of an area and contribute to high rates of storm water runoff, per ordinance no parking lot shall have parking spaces totaling more than 110% of the minimum parking space requirements. A maximum of 34 spaces are permitted on this site. The proposed site plan provides a total of 34 parking spaces, two of which are ADA. All parking requirements have been met.

*Shared Use Path:* The Township's Non-Motorized Transportation Plan does identify a 10 Ft wide Shared Use Path along the frontage of this property on S Drake Road. The applicant has shown this path on their plan and will be coordinating its design and installation with the Township's Public Works Department.

*Internal Sidewalk Network:* Per Section 57.90 Sidewalks of the ordinance an internal sidewalk network is required. The proposed site plan has sidewalk on all sides of the building abutting parking and includes a sidewalk connection from the building to South Drake Road. Although this connection is acceptable it would

be preferred that the sidewalk be located on the North side of the site. Staff anticipates most foot traffic will be coming from the multi-family housing developments to the north. These individuals and others coming from the north or east, will not walk to the south side of the site to access the proposed internal sidewalk network; it is anticipated pedestrians will cut through the site. Staff recommended the applicant and Planning Commission consider placing the internal sidewalk connection on the north side of the site. Public Works staff indicated if an internal northern sidewalk were constructed the currently proposed eastern internal sidewalk would not be required to be installed. It should also be noted a bike rack is proposed near the building entrance.

### **Building Design**

*Building Information:* The proposed 4,608 SF one story building will be just under 24 Ft tall. The exterior material for the proposed building is a heritage blend quik brik with estate grey asphalt shingles. The proposed dumpster enclosure is placed at the back of the site and will be made of the same material as the building with a brown wooden gate.

### Section 65.30: Special Use Review Criteria

**Master Plan/Zoning Ordinance: The proposed use will be consistent with the purpose and intent of the Master Plan and Zoning Ordinance, including the District in which the use is located.**

Ms. Lubbert explained the Township's Future Land Use Plan categorizes this area as *Local Commercial*. The intent of the *Local Commercial* designation is to provide low volume commercial businesses that mix well with a variety of land uses including residential, industrial, and general commercial.

This property is currently zoned C: Local Business District. Retail uses (including convenience stores) are permitted uses within the C: Local Business District and Filling Stations are permissible with Special Use approval from the Planning Commission.

From a zoning perspective, she said the proposed land use is consistent with the Future Land Use Map designation and the Township's Zoning Ordinance, 65.30 requirements have been met.

**Impacts: The proposed use would be compatible, harmonious and appropriate with the existing or planned character and uses of adjacent properties; meaning the proposed use can coexist with neighboring uses in a stable fashion over time such that no neighboring use is unduly negatively impacted.**

She explained established commercial uses already exist on-site: a gas station, dry cleaners and car wash. The proposal is to demolish these existing buildings/uses and construct a new convenience store and gas station. The

proposed use of a convenience store with a ten dispenser auto fueling canopy is comparable to the existing uses. Staff has no concerns that the proposal will negatively affect neighboring uses. It should be noted that with the residential development to the north the proposed convenience store is arguably more compatible and appropriate at this location than the existing uses onsite.

**Potentially adverse effects arising from the proposed use on adjacent properties would be minimized through the provision of adequate parking, the placement of buildings, structures and entrances, as well as the location of screening, fencing, landscaping, buffers or setbacks.**

Staff did not foresee a significant impact of the proposed use on neighboring properties. The proposal provides adequate parking, the placement of the building exceeds the minimum setbacks, and the number of curb cuts is being reduced and modified for safety.

**The proposed use would not be detrimental, hazardous, or disturbing to existing or future adjacent uses or to the public welfare by reason of excessive traffic, noise, smoke, odors, glare, or visual clutter.**

A gas station has occupied the site since the date of its construction in 1997. The laundromat and car wash, per the assessor's website, have been at this location for 35 years. In combining the two parcels to accommodate the proposal, two of the four existing curb cuts will be closed, which will be an improvement in traffic safety. The proposed use of a convenience store and filling station is comparable to the existing uses on site and is appropriate for this zoning designation. Staff anticipates that the proposed project will not generate negative impacts on adjacent properties.

**Recommendation:**

Ms. Lubbert recommended the Planning Commission approve the proposed Special Use and Site Plan for Speedway at 1250 and 1300 S Drake Road with the following conditions.

1. Approved driveway permits from the Road Commission of Kalamazoo County will need to be submitted prior to building permit issuance.
2. 1250 S Drake Road and 1300 S Drake Road shall be formally combined.
3. The internal sidewalk connection be moved to the north side of the site.
4. An updated signage plan shall be submitted and approved administratively OR a variance acquired prior to building permit issuance.
5. The stormwater system is within the City of Kalamazoo wellhead protection zone and the proposed stormwater is being discharged to the City of Kalamazoo system. An approved and signed storm water maintenance agreement with the City of Kalamazoo will need to be provided prior to building permit issuance

6. No SESC plan was provided. A SESC Permit will be required from the Kalamazoo County Drain Commission.

Chairperson VanderWeele asked if there were questions for Ms. Lubbert.

Ms. Everett asked about the landscaping requirement.

Ms. Lubbert noted that a landscaping plan had been submitted and said Ms. High, Parks Director, was satisfied it meets all requirements.

Attorney Porter said Ms. High was quite complimentary of the design.

The Chair commented this plan will be a big improvement to the corner. Hearing nothing further, he asked if the applicant wished to speak.

Ms. Mandy Gauss, Architect for the owner, said she felt Ms. Lubbert covered everything, but noted the left side of the drive shifts, and is wider for better access. She agreed with the assessment that the north side access would better serve residents and indicated it will be located there.

Chairperson VanderWeele asked if there were questions for the applicant. Hearing none, he moved to Public Hearing. There were no members of the public who wished to speak, so he moved to Board Deliberations.

Several members indicated they were happy with the plan, especially with the change to move the access sidewalk to the north.

The Chair asked for a motion.

Mr. Vyas made a **motion** to approve the Special Use and Site Plan as requested to demolish the existing gas station, dry cleaners and car wash, to construct a new 4,608 square foot convenience store and filling station at 1250 and 1300 S. Drake Road, with the following staff conditions:

1. Approved driveway permits from the Road Commission of Kalamazoo County will need to be submitted prior to building permit issuance.
2. 1250 S Drake Road and 1300 S Drake Road shall be formally combined.
3. The internal sidewalk connection be moved to the north side of the site.
4. An updated signage plan shall be submitted and approved administratively OR a variance acquired prior to building permit issuance.
5. The stormwater system is within the City of Kalamazoo wellhead protection zone and the proposed stormwater is being discharged to the City of Kalamazoo system. An approved and signed storm water maintenance agreement with the City of Kalamazoo will need to be provided prior to building permit issuance
6. A SESC Permit will be required from the Kalamazoo County Drain Commission.

Ms. Maxwell **seconded the motion**. The **motion passed unanimously** by roll call vote.

Chairperson VanderWeele moved to the next item on the agenda and asked Ms. Lubbert for her presentation.

**PUBLIC HEARING: Code Amendment, Nonmotorized  
Consideration of amendment to the Township Zoning Ordinance Section 57.90  
Sidewalks, for recommendation to the Township Board.**

Ms. Lubbert said as Oshtemo Township continues to grow and, simultaneously, the Township is hearing community requests for a quality of life that is connected by sidewalks and paths. Over the years the Township has adopted several policies and ordinances to establish a physical and cultural environment that supports and encourages safe, comfortable, and convenient ways for a diverse population of pedestrians and bicyclists to travel throughout the Township and into the surrounding communities. The most recent of which was through the *Go!Green Oshtemo – 5 Year Parks and Recreation Master Plan*. Part of the plan included an action strategy to continue to require provisions for nonmotorized transportation facilities with site plan reviews. The Zoning Ordinance language that continues to implement this action strategy is Section 57.90, language provided below.

“For those uses requiring Site Plan review under this ordinance, an internal sidewalk network (including connection to and establishment of a sidewalk in the right-of-way of any arterial, collector, or local road indicated on the Non-motorized Facilities Map abutting the site) shall be required within public street rights-of-way and/or private street easements unless the reviewing body grants a deviation from this provision. Deviation may be considered if the street is a cul-de-sac, or if there are constraints as the result of severe topography or natural features.” (57.90 Sidewalks)

In essence, she said, Section 57.90 does three things: 1) when a site plan is submitted to the Township, only the nonmotorized facilities shown on the adopted Nonmotorized Facilities Map need to be installed as part of the site plan review and approval process, 2) An internal sidewalk network is required within the site itself (including a connection from the proposed development to the adjacent nonmotorized path), and 3) the reviewing body can grant a deviation if warranted.

What exactly that deviation can be was not specified in the code. As such, the Township’s reviewing bodies have over the years waived the requirement to install sidewalk with different approaches. Most recently by requiring the applicant to sign a sidewalk SAD agreement. It has also become common practice that if the property in question cannot directly connect to an existing nonmotorized facility a deviation is granted so to avoid “sidewalks to nowhere”.

She indicated the Township Board discussed this section of the code and the



June 18, 2021



**Mtg Date:** June 24, 2021

**To:** Oshtemo Township Planning Commission

**From:** Iris Lubbert, AICP, Planning Director

**Applicant:** Jennifer High, Speedway LLC

**Owner:** Speedway LLC

**Property:** 1250 S Drake Rd, Parcel Number 05-24-480-020 and 1300 S Drake Rd, 05-24-480-016

**Zoning:** C: Local Business District

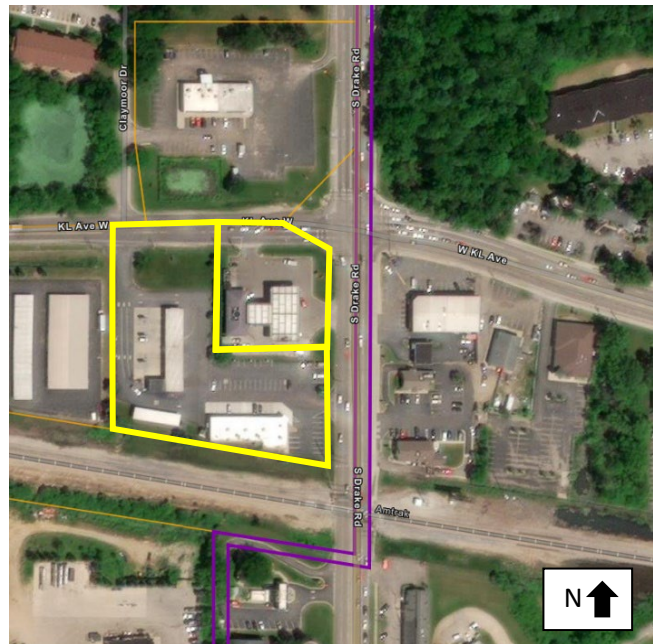
**Request:** Demolish existing gas station, dry cleaning, and car wash to construct a new 4,608 sqft convenience store and filling station

**Section(s):** Section 64: Site Plan Review  
Section 65: Special Uses

**PROJECT SUMMARY:**

Speedway LLC is requesting Special Use and Site Plan approval to demolish the existing gas station, dry cleaning, and car wash located at 1250 and 1300 S Drake Road to construct a new 4,608 sqft convenience store with a ten dispenser auto fueling canopy. The proposal entails combining the two properties to create a 3.2 acre parcel, a land combination application has been received. 1250 and 1300 S Drake Road are outlined in yellow on the map to the right.

Currently zoned C: Local Business District, 1250 and 1300 S Drake Road are located at the edge of Oshtemo’s eastern boundary, directly south west of the S Drake Road and W KL Avenue intersection. The two properties abut an Amtrak rail line to the south and a National Mini Storage to the west. The properties adjacent to the north are zoned R-4: Residence District. The City of Kalamazoo starts on the east side of S Drake Road with a commercial zoning designation (uses to the east include Drake Party Center, Drake Auto Service, Roma’s Pizza, and Shawarma King). The purple line in the image above indicates the boundary between Oshtemo Township and the City of Kalamazoo. A filling station is a special use within the C: Local Business District. Any proposed Special Use requires review and approval from the Planning Commission.



**ANALYSIS:**

When reviewing this Special Use request, there are two sets of criteria that need to be considered: the general Special Use review criteria outlined in Section 65.30 and the general Site Plan review criteria outlined in Section 64. Below is an analysis of the proposal against these two Sections. Overall, the requirements of Section 65.30 and Section 64 have been met.

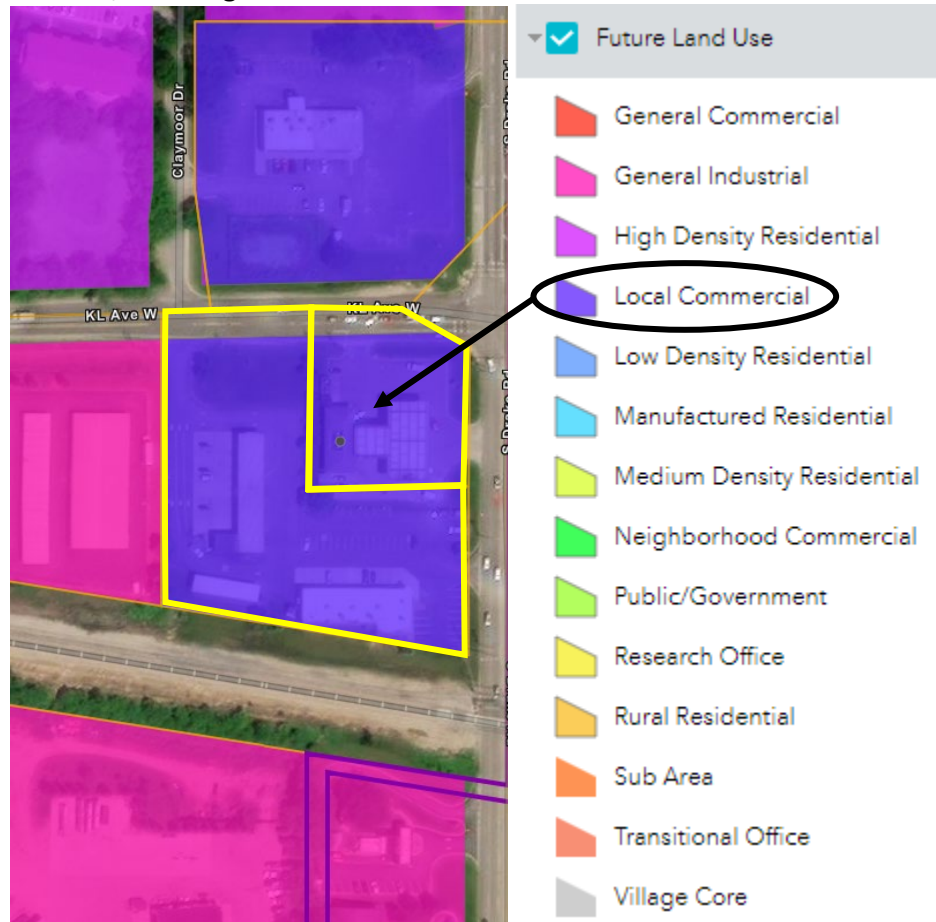
**Section 65.30: Special Use Review Criteria**

**A. Master Plan/Zoning Ordinance: The proposed use will be consistent with the purpose and intent of the Master Plan and Zoning Ordinance, including the District in which the use is located.**

The Township’s Future Land Use Plan categorizes this area as *Local Commercial*. The intent of the *Local Commercial* designation is to provide low volume commercial businesses that mix well with a variety of land uses including residential, industrial, and general commercial.

This property is currently zoned C: Local Business District. Retail uses (including convenience stores) are permitted uses within the C: Local Business District and Filling Stations are permissible with Special Use approval from the Planning Commission.

From a zoning perspective, the proposed land use is consistent with the Future Land Use Map designation and the Township’s Zoning Ordinance.



**B. Site Plan Review: The Site Plan Review Criteria of Section 64**

A site plan has been provided. See evaluation under Section 64: Site Plan Review.

**C. Impacts:**

**1. The proposed use would be compatible, harmonious and appropriate with the existing or planned character and uses of adjacent properties; meaning the proposed use can coexist with neighboring uses in a stable fashion over time such that no neighboring use is unduly negatively impacted.**

Established commercial uses already exist on-site: a gas station, dry cleaning, and car wash. The proposal is to demolish these existing buildings/uses and construct a new convenience store and gas station. The proposed use of a convenience store with a ten dispenser auto

fueling canopy is comparable to the existing uses. Staff has no concerns that the proposal will negatively affect neighboring uses. It should be noted that with the residential development to the north the proposed convenience store is arguably more compatible and appropriate at this location than the existing uses onsite.

**2. Potentially adverse effects arising from the proposed use on adjacent properties would be minimized through the provision of adequate parking, the placement of buildings, structures and entrances, as well as the location of screening, fencing, landscaping, buffers or setbacks.**

Staff does not foresee a significant impact of the proposed use on neighboring properties. The proposal provides adequate parking, the placement of the building exceeds the minimum setbacks, and the number of curb cuts is being reduced and modified for safety. Landscaping, fencing, screening, setbacks, and more will be discussed further in the Site Plan Review section of this staff report.

**3. The proposed use would not be detrimental, hazardous, or disturbing to existing or future adjacent uses or to the public welfare by reason of excessive traffic, noise, smoke, odors, glare, or visual clutter.**

A gas station has occupied the site since the date of its construction in 1997. The laundry mat and car wash, per the assessor's website, have been at this location for the past 35 years. In combining the two parcels to accommodate the proposal, two of the four existing curb cuts will be closed; which will be an improvement in traffic safety. The proposed use of a convenience store and filling station is comparable to the existing uses on site and is appropriate for this zoning designation. Staff anticipates that the proposed project will not generate such negative impacts on adjacent properties.

**D. Environment: The natural features of the subject property shall only be cleared or altered to the extent necessary to accommodate site design elements, particularly where the natural features assist in preserving the general character of the area.**

The majority of the site in question is already hard surfaced, there are no natural features.

**E. Public Facilities: Adequate public and/or private infrastructure and services already exist or would be provided, and will safeguard the health, safety, and general welfare of the public.**

Public water and sewer are available to 1250 and 1300 S Drake Road. Regarding the transportation network, the intersection of S Drake Road and W KL Avenue is well controlled by a traffic signal that already supports several commercial uses.

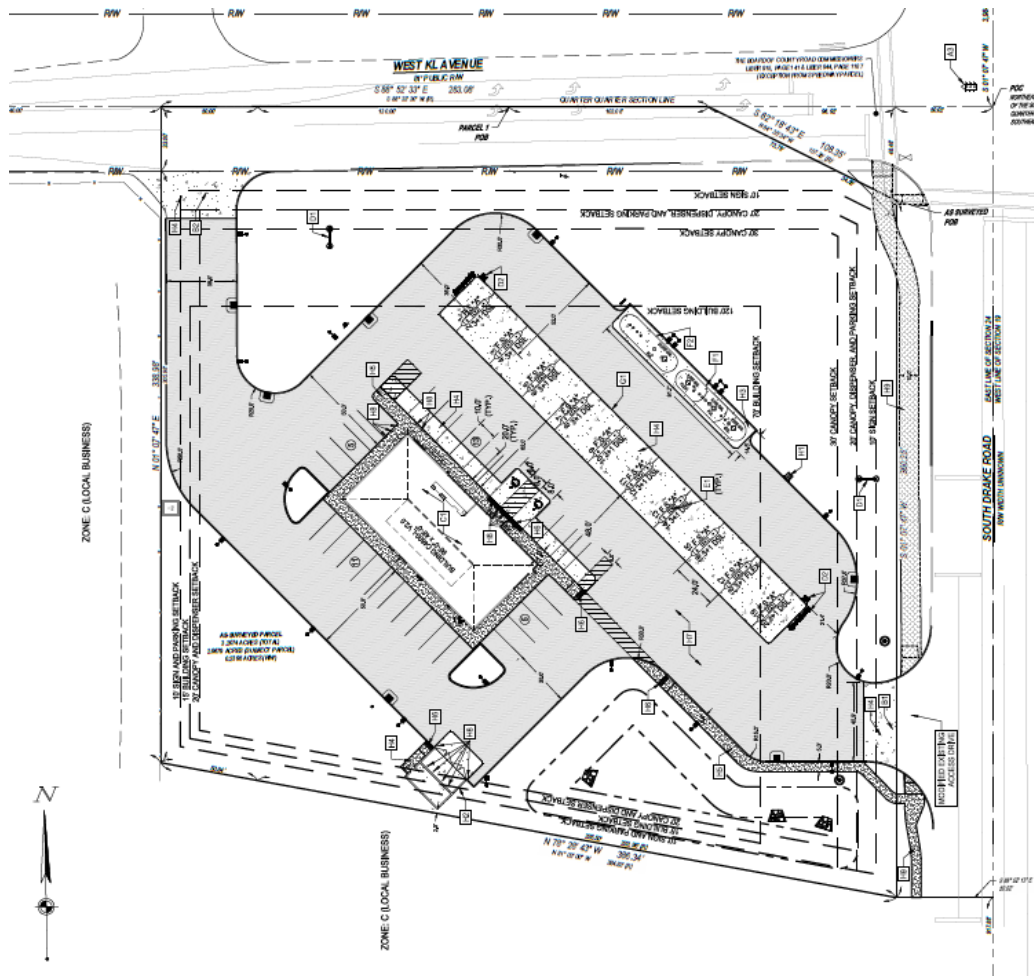
**F. Specific Use Requirements: The Special Use development requirements of Article 49.**

There are no specific development requirements for the use being considered.

Section 64: Site Plan Review

**General Zoning Compliance:**

*Zoning:* 1250 and 1300 S Drake Road are zoned C: Local Business District. Convenience stores are a permitted use by right within the C: Local Business District. Filling stations are permitted as a Special Use within the district. The proposed percentage of land on-site covered by buildings is 3% and 48% reserved for open space. All general zoning requirements have been met. A snapshot of the proposed site plan is provided on the next page.



**Parcel Dimensions:** The site under consideration, once 1250 and 1300 S Drake Road are combined, is about 3.2 acres and has frontage on two streets: approximately 380 Ft of frontage along both S Drake Road and W Kl Avenue. The parcel exceeds the minimum property area (50,000 SF) and minimum frontage (200 Ft) requirements within the C: Local Business District.

**Setbacks:** Generally, properties within the C: Local Commercial District must have a minimum front yard setback of 70 Ft; however, there are some exceptions. In this case, the ordinance requires a 120 Ft front yard setback from the centerline of Drake Road. The proposed building is located approximately 134 Ft from W Kl Avenue and 216 Ft from Drake Road. Per the ordinance the minimum setback distance between any building and any rear or interior side property line shall be 20 Ft or the height of the building, whichever is greater. The proposed building is just under 24 Ft tall. The proposed side and rear yard setbacks are both over 100 Ft. All setback requirements have been met.

It should be noted that service station equipment, the proposed ten dispenser auto fueling canopy, has its own setback requirement. Per Section 50.60.D. the minimum setback for detached gasoline pump canopies or other service station equipment shall be 20 Ft from the road right-of-way line and any rear or interior side property line. The proposed location of the fueling canopy is over 30 Ft from both the S Drake Road and W Kl Avenue road right-of-way.

### **Access and Circulation**

*Access:* The two parcels currently have two access points each. Once the parcels are combined, two of the existing curb cuts will be closed; the two furthest from the intersection will remain to service the proposed use. To improve safety the applicant has worked with the Road Commission of Kalamazoo County to shift the south eastern curb cut further south to line up with the access point on the other side of S Drake Road. Most circulation aisles within the proposed site plan are approximately 30 Ft wide and have safe turning radii. Fire engines and other vehicles have ample space and circulation if emergency response is needed. Oshtemo’s Fire Marshal has reviewed the proposed layout and has no concerns in terms of access and circulation. It should be noted that all driveways will need to be reviewed and approved by the Road Commission of Kalamazoo County. An approved driveway permit will need to be submitted prior to building permit issuance.

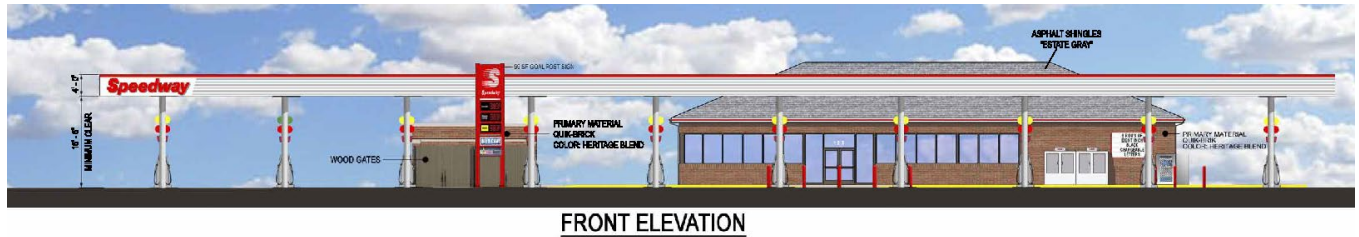
*Parking:* The proposed structure on this site will serve primarily as a convenience store. As a convenience store requires more parking than an automotive service station, the convenience store designation was used to calculate the necessary parking onsite. Per Section 52.100 of the zoning ordinance a use of this nature requires one parking space for every 150 SF of net floor area. A 4,608 SF building is proposed. As such, 31 parking spaces are required. To minimize excessive areas of pavement which detract from the aesthetics of an area and contribute to high rates of storm water runoff, per ordinance no parking lot shall have parking spaces totaling more than 110% of the minimum parking space requirements. A maximum of 34 spaces are permitted on this site. The proposed site plan provides a total of 34 parking spaces, two of which are ADA. All parking requirements have been met.

*Shared Use Path:* The Township’s Non-Motorized Transportation Plan does identify a 10 Ft wide Shared Use Path along the frontage of this property on S Drake Road. The applicant has shown this path on their plan and will be coordinating its design and installation with the Township’s Public Works Department.

*Internal Sidewalk Network:* Per section 57.90 Sidewalks of the ordinance an internal sidewalk network is required. The proposed site plan has sidewalk on all sides of the building abutting parking and includes a sidewalk connection from the building to South Drake Road. Although this connection is acceptable it would be preferred that the sidewalk be located on the North side of the site. Staff anticipates that most foot traffic will be coming from the multifamily housing developments to the north. These individuals, and others coming from the north or east, will not walk to the south side of the site to access the proposed internal sidewalk network; it is anticipated that pedestrians would just cut through the site. Staff recommends that the applicant and Planning Commission consider placing the internal sidewalk connection on the north side of the site. Public Work’s staff has indicated that if an internal northern sidewalk was constructed the currently proposed eastern internal sidewalk would not be required to be installed. It should also be noted that a bike rack is being proposed near the building entrance.

### **Building Design**

*Building Information:* The proposed 4,608 SF one story building will be just under 24 Ft tall. The exterior material for the proposed building is a heritage blend quik brik with estate grey asphalt shingles. The proposed dumpster enclosure is placed at the back of the site and will be made of the same material as the building with brown wooden gate. See image of the front elevation on the next page.



*Fencing:* No fencing is being proposed.

*Lighting:* A lighting and photometric plan has been provided. All lighting ordinance requirements have been met.

*Signs:* The applicant is proposing one reader board on the building, two free standing signs, and signage on the auto fueling canopy. The proposed free-standing signs do not meet code requirements. The applicant is aware of this and has submitted a variance request to be considered by the Zoning Board of Appeals. An updated signage plan will be needed or variance approval.

#### **Landscaping**

A landscaping plan has been submitted. All landscape ordinance requirements have been met.

#### **Engineering**

Prein & Newhof and the Oshtemo Public Works Department have reviewed the project site plan and have noted that all on-site engineering concerns have been addressed. However, there are a couple of standard items that will need to be addressed prior to building permit issuance which have been added as conditions of approval.

#### **Fire Department**

The Township Fire Marshal is satisfied with the overall design of the site. One fire hydrant is required to be placed on-site. The subject fire hydrant has been provided in the site plan.

#### **RECOMMENDATION:**

Planning Department staff recommend that the Planning Commission approve the proposed Special Use and Site Plan for Speedway at 1250 and 1300 S Drake Road with the following conditions.

1. Approved driveway permits from the Road Commission of Kalamazoo County will need to be submitted prior to building permit issuance.
2. 1250 S Drake Road and 1300 S Drake Road shall be formally combined.
3. The internal sidewalk connection be moved to the north side of the site.
4. An updated signage plan shall be submitted and approved administratively OR a variance acquired prior to building permit issuance.
5. The stormwater system is within the City of Kalamazoo wellhead protection zone and the proposed stormwater is being discharged to the City of Kalamazoo system. An approved and signed storm water maintenance agreement with the City of Kalamazoo will need to be provided prior to building permit issuance

6. No SESC plan was provided. A SESC Permit will be required from the Kalamazoo County Drain Commission.

Attachments: Application, Site Plan, Exterior Elevations



7275 W. Main Street, Kalamazoo, Michigan 49009-9334  
Phone: 269-216-5223 Fax: 269-375-7180

**PLEASE PRINT**

**PROJECT NAME & ADDRESS** 2360 Kalamazoo Speedway

**PLANNING & ZONING APPLICATION**

Applicant Name : Jennifer High  
Company Speedway LLC  
Address 8902 Vincennes Circle; Ste. E  
Indianapolis, IN 46268  
E-mail jenniferhigh@speedway.com  
Telephone 937-405-7043 Fax \_\_\_\_\_  
Interest in Property Owner

THIS  
SPACE  
FOR  
TOWNSHIP  
USE  
ONLY

Fee Amount \_\_\_\_\_  
Escrow Amount \_\_\_\_\_

**OWNER\*:**

Name Speedway LLC  
Address 500 Speedway Drive  
Enon, OH 45323  
Email jenniferhigh@speedway.com  
Phone & Fax 937-405-7043

**NATURE OF THE REQUEST:** (Please check the appropriate item(s))

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Planning Escrow-1042       | <input type="checkbox"/> Land Division-1090           |
| <input checked="" type="checkbox"/> Site Plan Review-1088      | <input type="checkbox"/> Subdivision Plat Review-1089 |
| <input type="checkbox"/> Administrative Site Plan Review-1086  | <input type="checkbox"/> Rezoning-1091                |
| <input checked="" type="checkbox"/> Special Exception Use-1085 | <input type="checkbox"/> Interpretation-1082          |
| <input type="checkbox"/> Zoning Variance-1092                  | <input type="checkbox"/> Text Amendment-1081          |
| <input type="checkbox"/> Site Condominium-1084                 | <input type="checkbox"/> Sign Deviation-1080          |
| <input type="checkbox"/> Accessory Building Review-1083        | <input type="checkbox"/> Other: _____                 |

**BRIEFLY DESCRIBE YOUR REQUEST** (Use Attachments if Necessary): \_\_\_\_\_

Demolish existing gas station, dry cleaning, and car wash in order to construct a new  
4608 sf convenience store with a ten dispenser auto fueling canopy.



**LEGAL DESCRIPTION OF PROPERTY** *(Use Attachments if Necessary):*

See attached ALTA survey which includes the legal descriptions.

**PARCEL NUMBER:** 3905- 05-24-480-020 and 05-24-480-016

**ADDRESS OF PROPERTY:** 1250 S. Drake Road

**PRESENT USE OF THE PROPERTY:** Speedway gas station, car wash, and dry cleaning

**PRESENT ZONING** C (Local Business) **SIZE OF PROPERTY** 3.2074 acres

**NAME(S) & ADDRESS(ES) OF ALL OTHER PERSONS, CORPORATIONS, OR FIRMS  
HAVING A LEGAL OR EQUITABLE INTEREST IN THE PROPERTY:**

Name(s)

Address(es)

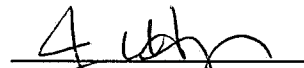
_____	_____
_____	_____

**SIGNATURES**

*I (we) the undersigned certify that the information contained on this application form and the required documents attached hereto are to the best of my (our) knowledge true and accurate. I (we) acknowledge that we have received the Township's Disclaimer Regarding Sewer and Water Infrastructure. By submitting this Planning & Zoning Application, I (we) grant permission for Oshtemo Township officials and agents to enter the subject property of the application as part of completing the reviews necessary to process the application.*

\_\_\_\_\_  
**Owner's Signature** (\* If different from Applicant)

\_\_\_\_\_  
**Date**

  
\_\_\_\_\_  
**Applicant's Signature**

4-12-2011  
**Date**

- Copies to:
- Planning -1
- Applicant -1
- Clerk -1
- Deputy Clerk -1
- Attorney-1
- Assessor -1
- Planning Secretary - Original

\*\*\*\*

**PLEASE ATTACH ALL REQUIRED DOCUMENTS**

# REBUILD STORE #2360

## C4600-LEFT HAND QUIK-BRIK V2.0 (FD)

### 1250 SOUTH DRAKE RD KALAMAZOO COUNTY KALAMAZOO, MI 49006

OWNER AND PROJECT MANAGEMENT:



500 SPEEDWAY DRIVE  
ENON, OH 45323  
937-864-3000

ENGINEERING:



WWW.CESOINC.COM

13060 US HIGHWAY 27  
SUITE D  
DEWITT, MICHIGAN 48820  
517-622-3000

**GOVERNING AGENCIES AND UTILITY COMPANIES:**

**SEWER:**  
OSHTEMO TOWNSHIP  
7275 W. MAIN STREET  
KALAMAZOO, MI 49009  
PHONE: (269) 216-5223

**GAS SERVICE:**  
CONSUMER'S ENERGY  
2500 EAST CORK STREET  
KALAMAZOO, MI 49001  
PHONE: (800) 477-5050

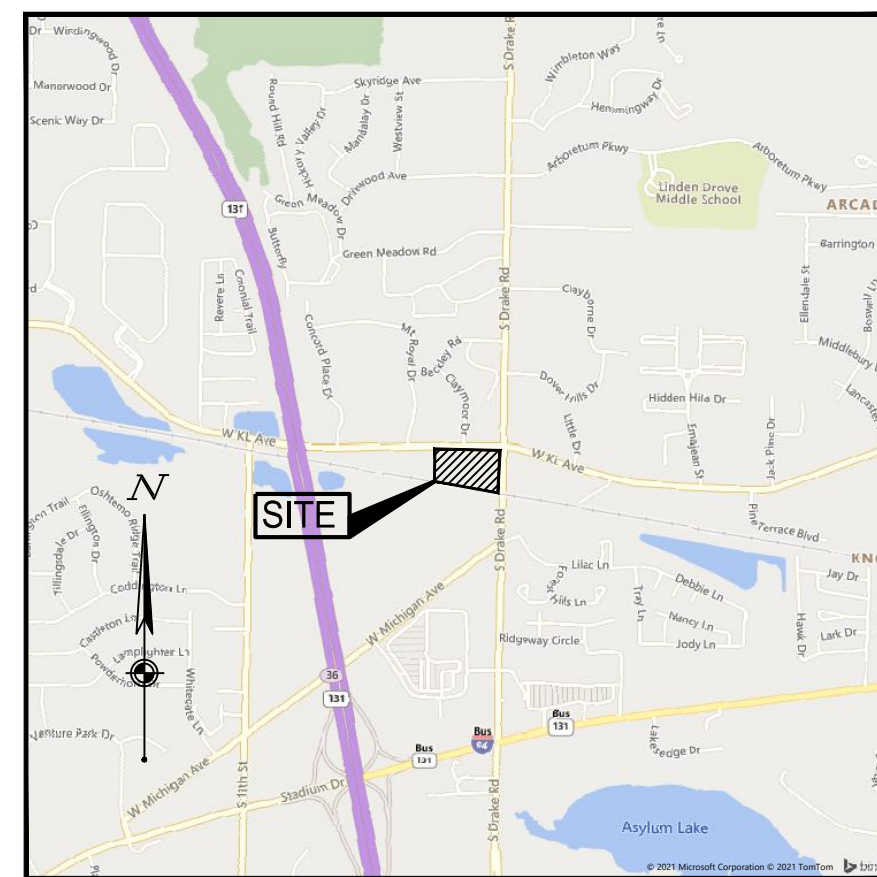
**WATER:**  
OSHTEMO TOWNSHIP  
7275 W. MAIN STREET  
KALAMAZOO, MI 49009  
PHONE: (269) 216-5223

**COMMUNICATIONS:**  
SPECTRUM  
5095 CENTURY AVE., SUITE A  
KALAMAZOO, MI 49006  
PHONE: (888) 406-7063

**STORMWATER:**  
OSHTEMO TOWNSHIP  
7275 W. MAIN STREET  
KALAMAZOO, MI 49009  
PHONE: (269) 216-5223

**ELECTRIC:**  
CONSUMER'S ENERGY  
2500 EAST CORK STREET  
KALAMAZOO, MI 49001  
PHONE: (800) 477-5050

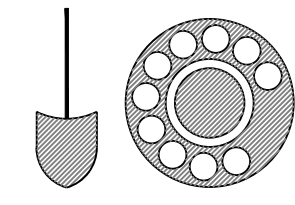
**ZONING:**  
OSHTEMO TOWNSHIP  
7275 W. MAIN STREET  
KALAMAZOO, MI 49009  
PHONE: (269) 216-5223



LOCATION MAP  
NOT TO SCALE

CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION, IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.

NOTE: AS AN AID TO THE CONTRACTOR VARIOUS UTILITIES AND UNDERGROUND STRUCTURES ARE SHOWN ON THESE PLANS AND PROFILES. ALL INFORMATION CONCERNING ALL UTILITIES SHOWN ON THE PLANS AND PROFILES IS TAKEN FROM FIELD TOPO AND/OR AVAILABLE RECORDS, BUT THE OWNER AND ENGINEER DOES NOT GUARANTEE THEIR LOCATION/ELEVATION, OR THAT ADDITIONAL UNDERGROUND STRUCTURES OR UTILITIES MAY NOT BE ENCOUNTERED. IF THE CONTRACTOR DOES ENCOUNTER A PREVIOUSLY UNIDENTIFIED UTILITY AND/OR STRUCTURE, OR DETERMINES THAT ONE OF THE UTILITIES/STRUCTURES SHOWN ON THESE PLANS IS INCORRECTLY LOCATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES. NOTIFY "MISS DIG" AT 1-800-482-7171, 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.



BEFORE YOU DIG  
CALL MISS DIG  
1-800-482-7171

SITE SPECIFIC		CIVIL SUPPORT	
CV	COVER SHEET	STD-CPC-1	PAVEMENT & CURBING DETAILS
CS	ZONING PLAN	STD-CUD-1	TYPICAL DRAINAGE & UTILITY DETAILS & SPECIFICATIONS
CG	PRELIMINARY GRADING PLAN	STD-CUD-2	DRAINAGE & UTILITY DETAILS & SPECIFICATIONS
CG1	PRE & POST DRAINAGE PLAN	STD-CYE-A	YARD EQUIPMENT INSTALLATION - AUTO
CF	CUT & FILL PLAN	STD-CIS-A	TYPICAL ISLAND AND CONCRETE SLAB DETAILS
CU	PIPING & UTILITIES PLAN		
LP	LANDSCAPE PLAN		
LP1	PLANTING DETAILS		
SS	SIGNAGE PLAN		
CR	CIRCULATION PLAN		

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THIRD PARTY ENGINEERING SUPPORT	
SURVEY PREPARED BY CESO, INC. (DATED 02/17/2020);	
UNIT #757535	ALTA/ACSM LAND TITLE SURVEY
PHOTOMETRIC PREPARED BY RED LEONARD ASSOCIATES (DATED 05/07/2021);	
RL-7297-S1-R1	LIGHTING PLAN (6 PAGES)
CANOPY DRAWINGS PREPARED BY MCGEE CORP (DATED XX/XX/XXXX);	
PXXXXX	AUTO FOUNDATION PLAN
PXXXXX-A	AUTO ROOF PLAN & DETAILS
PXXXXX-B	AUTO MISC. DETAILS
GEOTECHNICAL ENGINEERING SERVICES REPORT (DATED XX/XX/XXXX)	
PREPARED BY XXXXXX: XX PAGES	



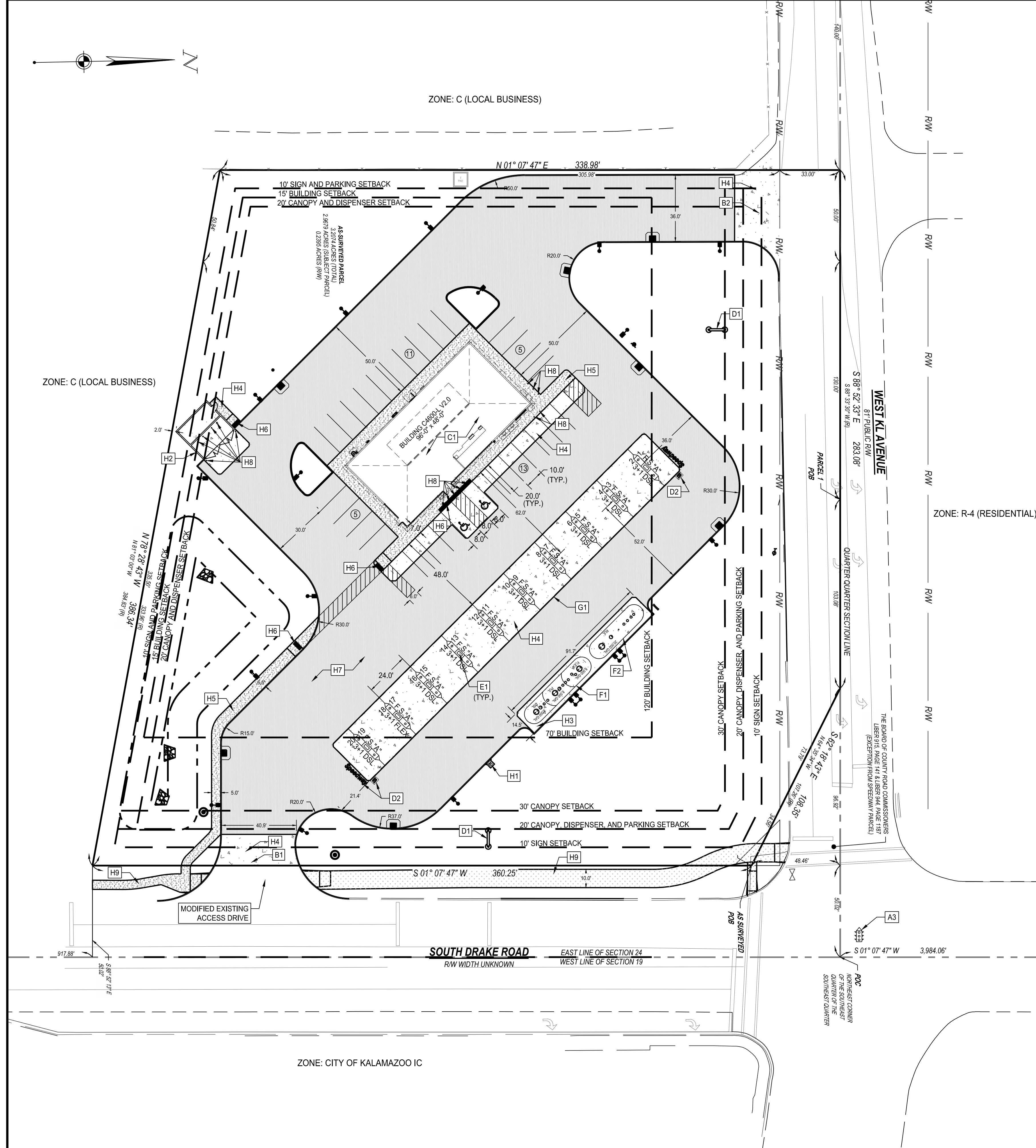
NOT FOR CONSTRUCTION



NO.	REVISIONS	DATE
1	CHANGED DRAWING TO REPERFORCATION	11/20/20
2	FEEDBACK INCORPORATED WITH CURRENT PROPOSED PLANS	JAN 2021
3	REBIDDED PLANS	02/17/2021

COVER SHEET  
REBUILD #2360  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	NO SCALE
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.VWR. R. PAPOTTO	11/23/20
DRWG. NO.	CV



**PROPERTY DATA:**

PARCEL ID: 05-24-480-020  
05-24-480-016

ADDRESS: 1250 SOUTH DRAKE ROAD,  
KALAMAZOO, MI 49006

PROPERTY AREA: 3.2074± ACRES (139,714 ± S.F.)

ZONING: C (LOCAL BUSINESS)

PROPOSED USE: SERVICE STATION / CONVENIENCE STORE

BUILDING SETBACKS: **REQUIRED:** **PROPOSED:**  
 FRONT (KL AVE.) BUILDING: 70' FROM ROW 134.4'  
 FRONT (DRAKE RD.) BUILDING: 120' FROM CENTER ROW 216.6'  
 SIDE/REAR BUILDING: 15' OR BLDG. HEIGHT (LARGER) 118.4' / 178.5'  
 FRONT (KL AVE.) PAVEMENT: 30' 22.0'  
 FRONT (DRAKE RD.) PAVEMENT: 30' 20.0'  
 SIDE/REAR PAVEMENT: 10' 2.0' / 2.5'

BUILDING AREA: 4,600± S.F. (3%)

IMPERVIOUS AREAS: 63,076 ± S.F. (49% OF PROPERTY)

OPEN SPACE AREA: 61,606 ± S.F. (48% OF PROPERTY)

FLOODPLAIN DESIGNATION: PARCEL IS LOCATED WITHIN "ZONE X" AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY-PANEL NUMBER 39057C0018D, EFFECTIVE DATE: MARCH 17, 2011; PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.



LOCATION MAP  
NOT TO SCALE

**OWNER/DEVELOPER:**  
SPEEDWAY, LLC  
500 SPEEDWAY DRIVE  
ENON, OHIO, 45323  
PHONE: (937) 864 3000

**ENGINEER:**  
CESO INC.  
13060 US HIGHWAY 27  
SUITE D  
DEWITT, MICHIGAN 48820  
PHONE: (517) 622-3000

- A. GENERAL NOTES**
- GENERAL SCOPE OF WORK INCLUDES: BUILDING, CANOPY, FUEL TANKS, PIPING AND DISPENSERS, AND PARKING.
  - REQUIRED PARKING: 1 STALL PER 300 SF OF NET FLOOR AREA: 16 SPACES  
  
PROVIDED PARKING: (PARKING DIMENSIONS: 10'W X 20'L)  
(2) ADA PARKING SPACES  
(32) STANDARD PARKING SPACES  
(34) TOTAL PARKING SPACES
  - THE ADJACENT INTERSECTION OF SOUTH DRAKE RD. AND WEST KL AVE. IS SIGNALIZED.

- B. SITE WORK**
- EXISTING CONCRETE APPROACH
  - PROPOSED CONCRETE DRIVE APPROACH

- C. BUILDING**
- STANDARD #4600-L V2.0 BUILDING (96'-0" X 48'-0") WITH SIDE DOOR OPTION

- D. EXTERIOR APPEARANCE & SIGNAGE**
- 99 SF GOAL POST SIGN (VARIANCE REQUIRED)
  - CANOPY SIGNAGE

- E. DISPENSERS**
- (10) 3+1 DISPENSERS, SUMPS, AND ISLANDS

- F. UNDERGROUND STORAGE TANKS**
- (1) 24,000 GALLON TANK FOR AUTO DIESEL, ETHANOL FLEX FUEL, AND PREMIUM.
  - (1) 20,000 GALLON TANK FOR UNLEADED.

- G. CANOPY**
- 28' X 241' CAR ISLAND CANOPY PER CURRENT STANDARDS.

- H. YARD**
- AIR ISLAND
  - TRASH ENCLOSURE
  - CONCRETE TANK SLAB
  - CONCRETE PAVEMENT
  - CONCRETE SIDEWALK
  - ADA ACCESSIBLE RAMP WITH DETECTABLE WARNING SURFACE
  - ASPHALT PAVEMENT
  - BOLLARDS
  - BIKE PATH

- NOTES:**
- LANDSCAPING REQUIREMENTS WILL BE COORDINATED DURING SITE PLAN APPROVAL.
  - PATHWAY DESIGN ALONG SOUTH DRAKE ROAD SHOWN AS PROVIDED BY OSHTEMO CHARTER TOWNSHIP.
  - CANOPY SIGNAGE WILL REQUIRE A VARIANCE.
  - GOAL POST SIGNS WILL REQUIRE A VARIANCE.

**LEGEND**

PROPOSED

	PROP. FUEL DISPENSER
	NORMAL STRENGTH CONCRETE PER SPEEDWAY STANDARDS
	NORMAL STRENGTH ASPHALT PAVEMENT PER SPEEDWAY STANDARDS
	CONCRETE SIDEWALK PER SPEEDWAY STANDARDS
	ASPHALT SIDEWALK PER SPEEDWAY STANDARDS

NOT FOR CONSTRUCTION

**Speedway**  
Prepared By: Speedway and Construction Dept.  
Enon, OH 45323

NO.	DATE	REVISIONS
1		CHANGED DRIVE TO RECTANGULAR
2		FEELERS REVIEWED WITH CURRENT PHOTOGRAPHIC PLANS
3		REMOVED FEELERS
4		REMOVED SHEET PER TOWNSHIP COMMENTS

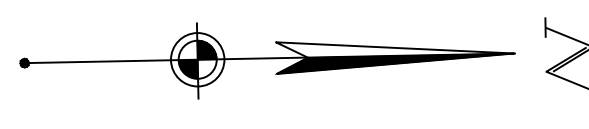
**PLOT PLAN**  
**REBUILD #2360**  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION, IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.

NOTE: AS AN AID TO THE CONTRACTOR VARIOUS UTILITIES AND UNDERGROUND STRUCTURES ARE SHOWN ON THESE PLANS AND PROFILES. ALL INFORMATION CONCERNING ALL UTILITIES SHOWN ON THE PLANS AND PROFILES IS TAKEN FROM FIELD TOP AND/OR AVAILABLE RECORDS. BUT THE OWNER AND ENGINEER DOES NOT GUARANTEE THEIR LOCATION/ELEVATION, OR THAT ADDITIONAL UNDERGROUND STRUCTURES OR UTILITIES MAY NOT BE ENCOUNTERED. IF THE CONTRACTOR DOES ENCOUNTER A PREVIOUSLY UNIDENTIFIED UTILITY AND/OR STRUCTURE, OR DETERMINES THAT ONE OF THE UTILITIES/STRUCTURES SHOWN ON THESE PLANS IS INCORRECTLY LOCATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES. NOTIFY "MISS DIG" AT 1-800-482-7171, 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.



BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 15 30 GRAPHIC SCALE IN FEET
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.VWR. R. PAPOTTO	11/23/20
DRWG. NO.	CS



LEGEND

- EXISTING ELEVATION
- NEW PAVEMENT ELEVATION (UNLESS NOTED OTHERWISE)
- EXISTING CONTOUR
- NEW CONTOUR
- NEW GRASS CONTOUR
- PAVEMENT CROWN LINE

CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF EXISTING ELEVATIONS AT CRITICAL POINTS SUCH AS APPROACHES, DRAINAGE STRUCTURES, CURBING, ETC. VERIFICATION SHALL BE PERFORMED DURING LAYOUT STAGES AND SIGNIFICANT DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

A. GENERAL NOTES

1. CONTRACTOR TO USE EXTREME CAUTION WHEN GRADING IN AND AROUND EXISTING UTILITIES. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH PRIOR TO START OF CONSTRUCTION.
2. EXCAVATE SOILS AS NECESSARY TO COMPLETE PROPOSED CONSTRUCTION. UNLESS OTHERWISE DIRECTED (REFER TO GEOTECHNICAL REPORT), USE ALL EXCAVATED SOILS AS FILL ON SITE. ANY SOILS THAT CANNOT BE UTILIZED ON SITE SHALL BE LOADED DIRECTLY ONTO TRANSPORT TRUCKS AND HAULED TO OWNER'S APPROVED LOCATION. ANY IMPACTED SOILS ENCOUNTERED SHALL BE LOADED SEPARATELY AND SHALL NOT BE COMINGLED WITH CLEAN SOILS. ANY EXCAVATED SOIL OR MATERIALS THAT LEAVE THE SITE MUST GO TO AN APPROVED LANDFILL LOCATION OR BE ACCOMPANIED BY AN APPROVED BILL OF SALE.
3. BID AS ALTERNATE A: IMPACTED SOILS SHALL BE PLACED ON MINIMUM 6 MIL. VISQUEEN AND COVERED WITH 40' X 100' SHEETS OF 4 MIL. VISQUEEN. A SAND BERM SHALL BE CONSTRUCTED AROUND ENTIRE PILE OF SOIL TO HOLD THE VISQUEEN DOWN. ALL SEAMS OR OVERLAP (6" MINIMUM) IN THE VISQUEEN COVERING SHALL BE SECURED WITH WEIGHTED MATERIAL.
4. BID AS ALTERNATE B: PROVIDE DEWATERING NECESSARY FOR ANY EXCAVATIONS AND TO PREVENT TANKS FROM FLOATING WHILE THE TANKS ARE NOT COVERED BY PROPER OVERBURDEN. DEWATERING SHALL CONSIST OF SUPPLYING EQUIPMENT AND LABOR TO MAINTAIN PUMPING ACTIVITIES AS NECESSARY. COORDINATE WITH OWNER'S REPRESENTATIVE TO DETERMINE WHERE WATER CAN BE PUMPED. IDENTIFY THIS COST AS A SPECIFIC LINE ITEM IN THE BID. DISPOSAL OF CONTAMINATED WATER SHALL BE THE OWNER'S RESPONSIBILITY.
5. THE ENVIRONMENTAL CONSULTANT AND THE CONTRACTOR SHALL USE THE "SOILS WORKSHEET" TO ACCOUNT FOR ALL EXCAVATED SOILS.
6. A REPORT OF THE SUBSURFACE INVESTIGATION IS MADE AVAILABLE TO THE CONTRACTOR AT TIME OF BIDDING. THE BARE BID SHALL INCLUDE LAND BALANCING ACTIVITIES BASED ON THE ASSUMPTION THAT EXCAVATED SOIL CAN BE REUSED AS NECESSARY FOR CONSTRUCTION. UPON REVIEWING THE SUBSURFACE INVESTIGATION, CONTRACTOR SHALL INCLUDE THE FOLLOWING AS ALTERNATE:
  - A. OVER-EXCAVATE AREAS OF UNSUITABLE SOILS AND STABILIZE AREAS PER THE SUBSURFACE INVESTIGATION. ESTIMATE QUANTITY OF OVER-EXCAVATED AREAS AND REPLACEMENT BACKFILL IN EACH AREA, ALONG WITH THE TYPE OF BACKFILL. ACTUAL QUANTITIES WILL BE VERIFIED DURING CONSTRUCTION PER THE DIRECTION OF THE GEOTECH CONSULTANT AND OWNER'S REPRESENTATIVE, WITH DETAILED CHANGE ORDERS SUBMITTED TO OWNER.
7. ANY DISCREPANCIES BETWEEN ELEVATIONS SHOULD BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE AND THE DESIGN ENGINEER.

**NOTE:**  
CONTRACTOR TO COORDINATE WITH GEOTECHNICAL ENGINEER AND SPEEDWAY PROJECT MANAGER TO VERIFY ABILITY TO REUSE EXISTING SOILS. ALL EXISTING SOILS TO BE REUSED ARE TO MEET THE STANDARDS AS NOTED IN THE GEOTECHNICAL REPORT PREPARED BY XXXXXXXX, DATED XXXXXXXX. ALL SOILS THAT ARE NOT SUITABLE FOR RE-USE ARE TO BE PROPERLY DISPOSED OF.

CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION, IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.

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NOT FOR CONSTRUCTION

**Speedway**  
Prepared By: Speedway  
Supervisory Engineer: R. Papotto  
and Construction Dept.  
Encl. CH 145329

NO.	REVISIONS	DATE
1	CHANGED DRAWING TO REPRESENT CURRENT	11/23/20
2	FEEDBACK INCORPORATED WITH CURRENT PROPOSED PLANS	JMS:MDR/11/23/20
3	REWORKED FEEDBACK	11/23/20

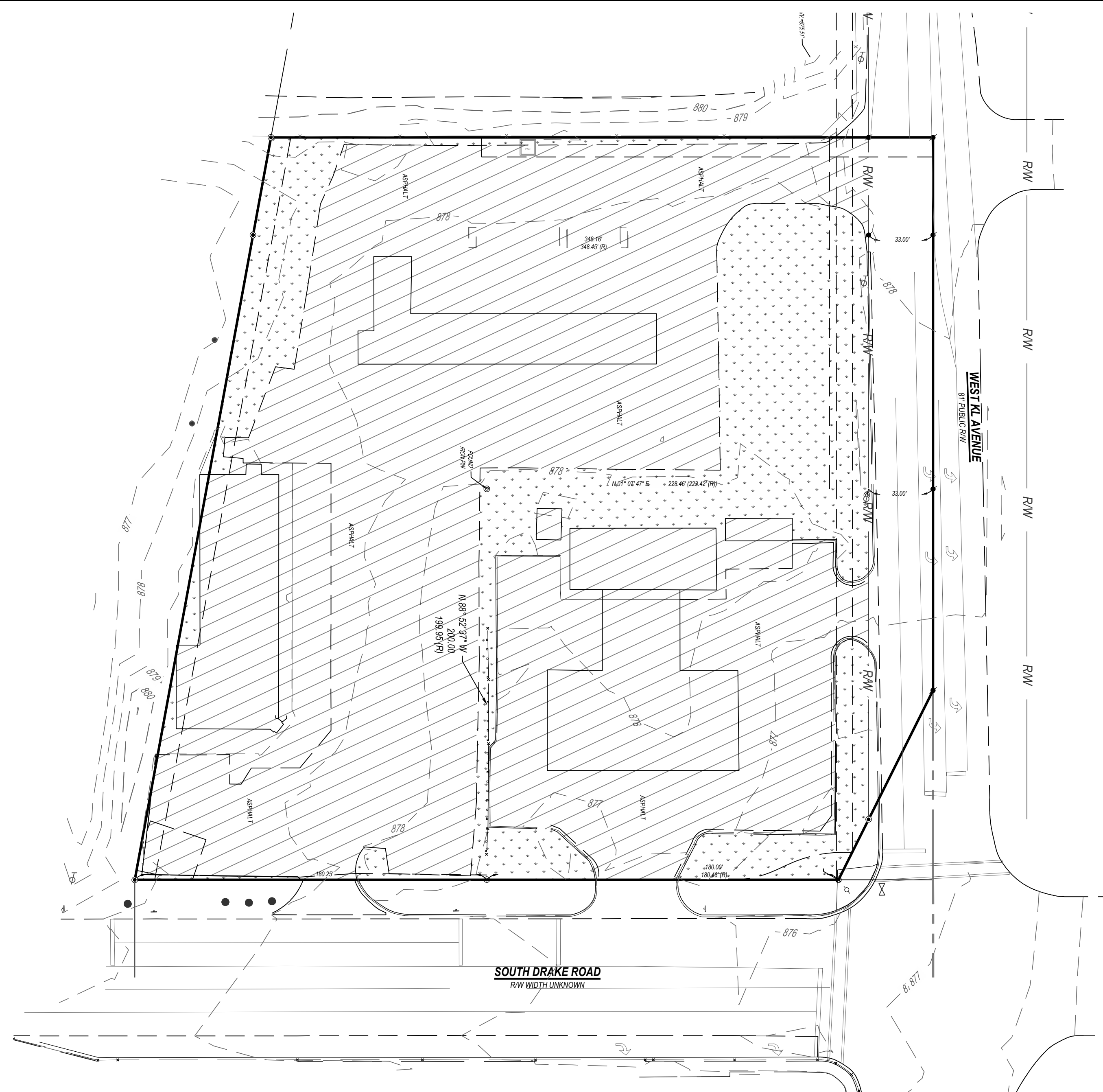
PRELIMINARY  
GRADING PLAN  
REBUILD #2360  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 15 30
GRAPHIC SCALE IN FEET	
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.VWR. R. PAPOTTO	11/23/20
DRWG. NO.	CG

NO.	REVISIONS	DATE
1	CHANGED DRAINAGE TO REPERFORATED	11/23/20
2	FEEDBACK ISSUED WITH CURRENT PROPOSED PLANS	JAN 2021
3	REWORKED PLANS	APR 2021

PRE & POST  
DRAINAGE PLAN  
REBUILD #2360  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 20 40 GRAPHIC SCALE IN FEET
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.VWR. R. PAPOTTO	11/23/20
DRWG. NO.	CG1



**PRE-DEVELOPED DRAINAGE**

**EXISTING CONDITIONS**

- PERVIOUS AREA = 28,360 S.F. (0.65 ACRES)
  - IMPERVIOUS AREA = 100,922 S.F. (2.32 ACRES)
- TOTAL DRAINAGE AREA = 129,282 S.F. (2.97 ACRES)

DETERMINATION OF RUNOFF COEFFICIENT			
DESCRIPTION	AREA (SQ. FT.)	AREA (ACRES)	RUNOFF COEFFICIENT
PERVIOUS SITE AREA	28,360	0.65	0.10
IMPERVIOUS SITE AREA	100,922	2.32	0.90
TOTAL SITE AREA	129,282	2.97	
COMPOSITE RUNOFF COEFFICIENT FOR UNDEVELOPED SITE			
$0.65(0.10)+2.32(0.90) = 2.15/2.97 = 0.72$			

**Hydrograph Return Period Recap**

Hydroflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)							Hydrograph Description	
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr		100-yr
1	SCS Runoff	---	---	3.411	---	4.992	6.335	8.776	10.94	13.27	PRE-DEVELOPED (TO DRAKE)
2	SCS Runoff	---	---	1.338	---	2.799	4.175	6.905	9.511	12.51	POST-DEVELOPED
3	Reservoir	2	---	0.198	---	0.343	0.432	0.572	1.850	3.244	WQ Basin

**POST-DEVELOPED DRAINAGE**

**PROPOSED CONDITIONS**

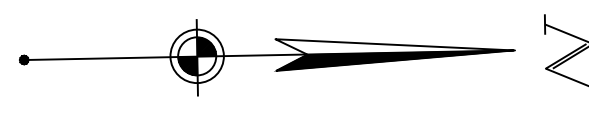
- PERVIOUS AREA = 61,606 S.F. (1.41 ACRES)
  - IMPERVIOUS AREA = 67,676 S.F. (1.56 ACRES)
- TOTAL DRAINAGE AREA = 129,282 S.F. (2.97 ACRES)

DETERMINATION OF RUNOFF COEFFICIENT			
DESCRIPTION	AREA (SQ. FT.)	AREA (ACRES)	RUNOFF COEFFICIENT
PERVIOUS SITE AREA	61,606	1.41	0.10
IMPERVIOUS SITE AREA	67,676	1.56	0.90
TOTAL SITE AREA	129,282	2.97	
COMPOSITE RUNOFF COEFFICIENT FOR DEVELOPED SITE			
$1.41(0.10)+1.56(0.90) = 1.55/2.97 = 0.52$			

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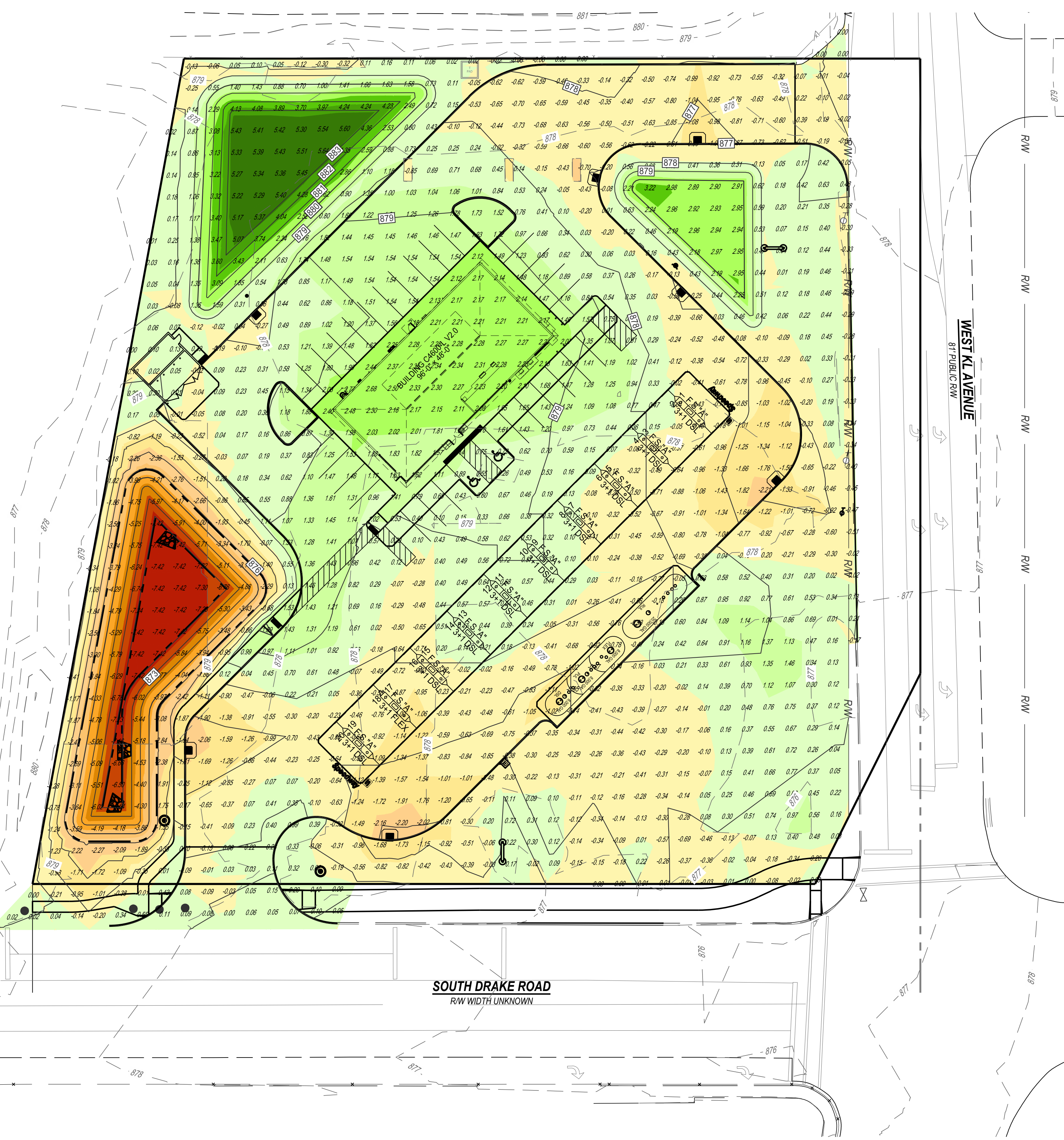


B-1

SOIL BORINGS			
BORING	TOPSOIL DEPTH	PAVEMENT DEPTH	AGGREGATE DEPTH
B-1			
B-2			
C-1			
C-2			
P-1			
P-2			
SN-1			
ST-1			

NOTE:  
 • SOIL BORINGS HAVE NOT YET BEEN COMPLETED

Elevations Table			
Number	Minimum Elevation	Maximum Elevation	Color
1	-8.000	-7.000	Red
2	-7.000	-6.000	Orange
3	-6.000	-5.000	Light Orange
4	-5.000	-4.000	Yellow-Orange
5	-4.000	-3.000	Yellow
6	-3.000	-2.000	Light Yellow
7	-2.000	-1.000	Yellow-Green
8	-1.000	0.000	Light Green
9	0.000	1.000	Green
10	1.000	2.000	Light Green
11	2.000	3.000	Green
12	3.000	4.000	Light Green
13	4.000	5.000	Green
14	5.000	6.000	Dark Green



CUT AND FILL SUMMARY			
Description	CUT	FILL	
<b>Total Volume (CY)</b>			
Structures	370	560	
UST System	1300	970	
Utilities	650	380	
Surface-to-Surface (Adjusted to subgrade, excludes unsuitable material mounding)	2850	3314	
Off-Site	0	0	
Other	0	0	
Undercut / Poor Soils	0	0	
Environmental Hauloff	670	670	
Structural fill in place of Topsoil		700	
Structural fill in place of Rock		0	
Demo Material (pavement asphalt/concrete, gravel, rock)	3870		
Demo Reuse quantity			
<b>Total</b>	<b>7300</b>	<b>6594</b>	
<b>Soil Net (CY)</b>	<b>CUT 706</b>	<b>No swell</b>	<b>PERCENT SOIL SWELL 25%</b>
	<b>880</b>	<b>Includes 25% Swell</b>	
<b>Assumptions / Limitations of balancing the site:</b>			
1	Geotechnical report not available at the time of design		
2	Mounding added to plans to balance excess cut		
3			
4			
5			
<b>Topsoil Net (CY)</b>	<b>IMPORT 760</b>	<b>No swell</b>	<b>PERCENT TOPSOIL SWELL 25%</b>
	<b>950</b>	<b>Includes 25% Swell</b>	
Excess TOPSOIL and POOR SOIL cut available for mounding in lieu of hauling off-site (CY)			
			0
<b>Proposed additional Surface-to-Surface FILL</b>			
via CAD, consisting only of non-structural material mounds			
			0
Excess TOPSOIL and POOR SOIL haul-off NET (CY)			
			0

Legend	
Structures	Foundations for site features: building, trash enclosure, storage sheds, canopies, signs, light poles, etc.
UST System	Fueling related items: tank cavities, product piping trenches, dispenser sumps, etc.
Utilities	Exterior underground utility items: gas, electric, cable/fiber, telephone, water, sanitary, transformer pad foundations, utility structures, storm piping/detention, etc.
Surface to Surface	Cut & fill between existing and proposed site elevations on the whole site.
Off-Site	Any soil work that is being completed off-site: roadway improvements, utility extensions, signal work, off-property regrading, shared detention, etc.
Other	Any unique items that do not fit in the above categories. Please list origin of soil in parenthesis next to "Other" in description.
Undercut / Poor Soils	Any soils deemed to be poor/unusable in Geotech report or by expert on-site.
Env. Hauloff	Any soils deemed to be contaminated in Environmental Report or by expert on-site.
Topsoil	Lists topsoil to be stripped and/or proposed on-site.
Demo Material	Pavement (asphalt or concrete), foundations, gravel, and rock to be hauled off.

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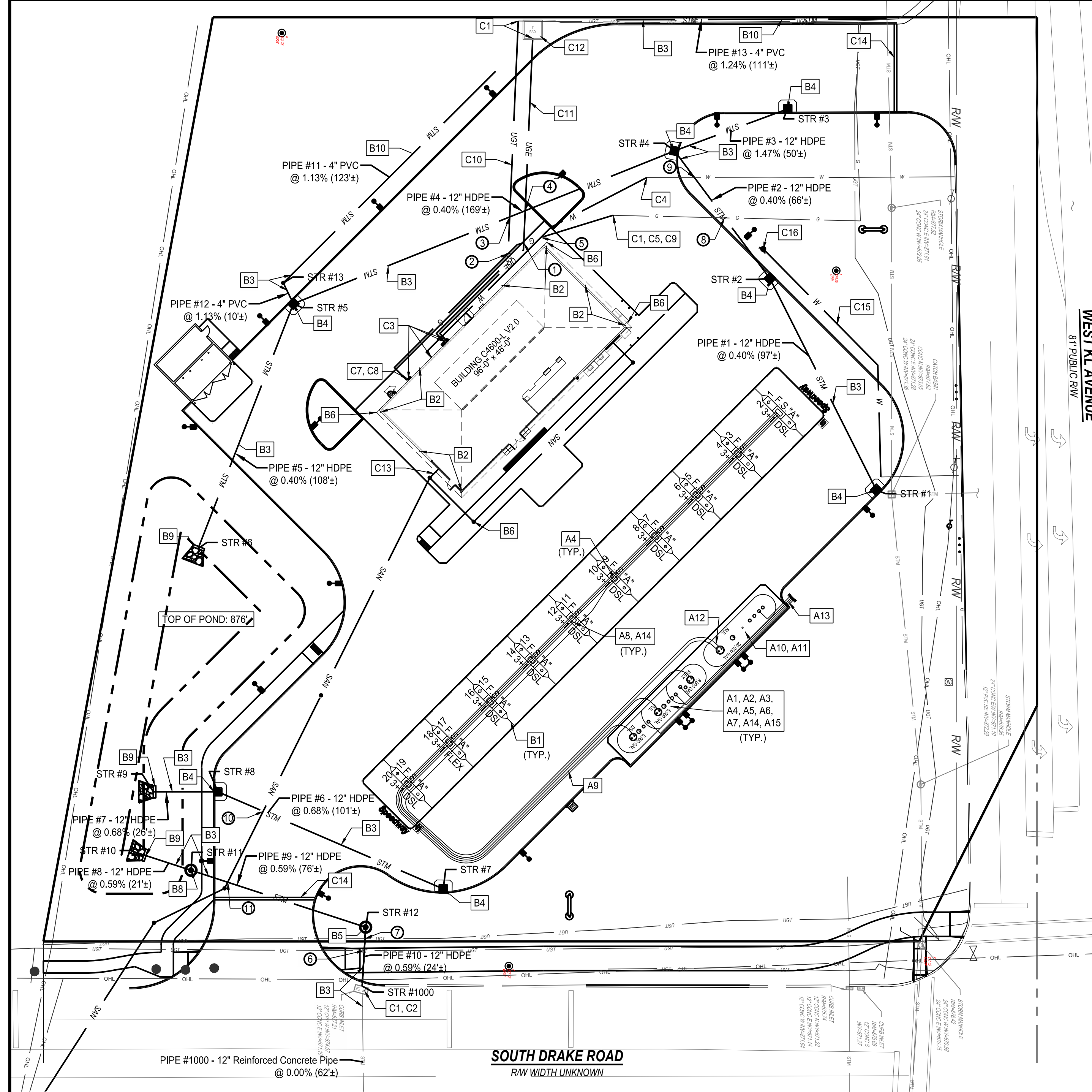


NOT FOR CONSTRUCTION

NO.	REVISIONS	DATE
1	CHANGED DRAWING TO REFLECT CURRENT PLAN	11/20/20
2	REVISED TO REFLECT CURRENT PLAN	11/20/20
3	REVISED TO REFLECT CURRENT PLAN	11/20/20

**CUT & FILL PLAN**  
**REBUILD #2360**  
 1250 SOUTH DRAKE RD  
 KALAMAZOO COUNTY  
 KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 15 30
GRAPHIC SCALE IN FEET	
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.VWR. R. PAPPOTTO	11/23/20
DRWG. NO.	



**PIPING & UTILITIES LEGEND**

- NEW PRODUCT PIPING
- NEW VENT PIPING
- STM — STORM SEWER
- SAN — SANITARY SEWER
- G — GAS LINE
- W — WATER LINE
- OHE — OVERHEAD ELECTRIC LINE
- UGE — UNDERGROUND ELECTRIC LINE
- OHT — OVERHEAD TELEPHONE LINE
- UGT — UNDERGROUND TELEPHONE LINE

**UTILITY CROSSING SCHEDULE**

NO.	UTILITY	ELEVATION	CLEARANCE
1	PR. GAS	B/PIPE = 873.65	1.50'
	PR. ELEC	T/PIPE = 872.12	
2	PR. GAS	B/PIPE = 873.65	1.50'
	PR. TELE	T/PIPE = 872.15	
3	PR. TELE	T/PIPE = 872.46	1.50'
	PR. STM	B/PIPE = 873.96	
4	PR. STM	B/PIPE = 873.92	1.50'
	PR. ELEC	T/PIPE = 872.42	
5	PR. GAS	B/PIPE = 873.65	1.50'
	PR. WATER	T/PIPE = 872.15	
6	PR. STM	T/PIPE = 872.25	1.50'
	EX. TELE	B/PIPE = 873.75	
7	PR. STM	T/PIPE = 872.28	1.50'
	EX. TELE	B/PIPE = 873.78	
8	EX. GAS	T/PIPE = 871.65	1.50'
	PR. STM	B/PIPE = 873.15	
9	PR. STM	B/PIPE = 873.06	1.50'
	EX. WATER	T/PIPE = 871.56	
10	PR. STM	B/PIPE = 872.72	1.50'
	PR. SAN	T/PIPE = 871.22	
11	PR. STM	B/PIPE = 871.69	1.50'
	PR. SAN	T/PIPE = 870.19	

**A. TANKS AND PRODUCT PIPING DETAILS**

- CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIAL AS INDICATED ON STD-PQ SERIES DRAWINGS.
- ALL NEW INSTALLATIONS AND MODIFICATIONS TO THE UNDERGROUND STORAGE TANK SYSTEM SHALL COMPLY WITH PEI RP100-05, PEI RP300-09, API RP1615 AND ALL FEDERAL, STATE AND LOCAL CODES AND ORDINANCES.
- TANKS SHALL BE ANCHORED PER STANDARD DRAWING STD-PQ-5.
- BALLAST TANKS TO 90% FULL WITH CLEAN WATER. AFTER THE TANKS HAVE BEEN PROPERLY COVERED BY OVERBURDEN AND BEFORE PRODUCT IS DELIVERED, THE CONTRACTOR SHALL REMOVE ALL WATER. COORDINATE WITH OWNER'S REPRESENTATIVE FOR DELIVERY OF PRODUCT. ANY WATER REMAINING IN TANKS AFTER PRODUCT DELIVERY SHALL BE REMOVED AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
- INSTALL TANK CONDUIT FROM TANK TO DISPENSER ELECTRICAL EQUIPMENT INSIDE BUILDING PER STD-PQ SERIES DRAWINGS AND MANUFACTURER'S INSTRUCTIONS.
- INSTALL EVO LINE LEAK DETECTION AND ATG SYSTEM, RELATED MANHOLES, CONDUITS, AND JUNCTION BOXES PER DRAWING STD-EVO-550 AND MANUFACTURER'S INSTRUCTIONS. INSTALL TANK INTERSTITIAL SENSORS FURNISHED BY OWNER.
- INSTALL TANK SUMP SENSORS FURNISHED BY OWNER.
- PRODUCT PIPING LINE-UP AND FRONT SIDE "A" (F.S. "A") OF DISPENSERS SHALL BE AS SHOWN. PIPING AND CONDUIT LOCATION AND SPACING UNDER DISPENSERS SHALL BE PER STD-PQ SERIES DRAWINGS.
- INSTALL 2" DIRECT-BURY SOLID WALL PRODUCT PIPING (UPP DOUBLE WALL) PER MANUFACTURER'S RECOMMENDATIONS AND SERIES STD-PQ DRAWINGS. THE PIPE, APPURTENANCES (INCLUDING BULKHEAD ENTRY FITTINGS), AND MISC. MATERIALS NECESSARY TO ASSEMBLE SYSTEM SHALL BE OWNER SUPPLIED.
- INSTALL SIPHON LINES PER DETAILS ON THE STD-PQ SERIES DRAWINGS.
- INSTALL MANIFOLD PER DETAILS ON THE STD-PQ SERIES DRAWINGS.
- INSTALL A SECOND FILL PIPE ON TANKS PER DETAILS ON THE STD-PQ SERIES DRAWINGS.
- SUPPLY AND INSTALL 2" SINGLEWALL FIBERGLASS VENT LINES AND RELATED EQUIPMENT. CONTRACTOR TO LOCATE VENT STACKS A MINIMUM OF 10' AWAY FROM ELECTRICAL EQUIPMENT AND EXISTING BUILDING STRUCTURES.
- FUTURE FUEL LINE TO BE RUN TO EACH DISPENSER. LINE IS TO BE CAPPED AT EACH DISPENSER WHERE THE LINE IS NOT BEING USED (AND IN FUTURE FUEL SUMP).
- CONTRACTOR SHALL BE RESPONSIBLE FOR EXISTING OBSERVATION WELLS THAT WILL REMAIN IN PLACE AFTER CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SUCH WELLS THAT ARE DAMAGED DURING CONSTRUCTION. IF DAMAGE TO AN EXISTING WELL IS INEVITABLE, CONTRACTOR SHALL INCLUDE COST TO REPAIR OR REPLACE IN BASE BID.

**B. STORM PIPING**

- A CLEANOUT SHALL BE INCLUDED AT EVERY CANOPY COLUMN WITH A DOWNSPOUT THAT IS CONNECTED TO THE STORM DRAINAGE SYSTEM AS INDICATED PER DRAWING STD-SCB-1.
- BUILDING DOWNSPOUTS SHALL BE CONNECTED TO STORM DRAINAGE SYSTEM AS INDICATED.
- SUPPLY AND INSTALL STORM DRAINAGE PIPING AS SHOWN PER STANDARD DRAWING SERIES STD-CUD.
- SUPPLY AND INSTALL (7) STANDARD DUTY CATCH BASINS, WITH SPIDER DRAINS, INCLUDING CONCRETE COLLAR IF IN ASPHALT PAVEMENT PER DRAWING STD-CUD-1.
- SUPPLY AND INSTALL (1) STANDARD DUTY MANHOLE, INCLUDING CONCRETE COLLAR IF IN ASPHALT PAVEMENT, PER DRAWING STD-CUD-1.
- SUPPLY AND INSTALL CLEAN OUTS AT LOCATIONS SHOWN PER DRAWING STD-CUD-1 AND STD-SCB-1.
- SUPPLY AND INSTALL RIP-RAP AS SHOWN PER DRAWING STD-CUD-2.
- SUPPLY AND INSTALL (1) OUTLET CONTROL STRUCTURE PER DETAIL AND PER STANDARD DRAWING STD-CUD-1.
- CONSTRUCT (3) HEADWALLS IN POND PER DRAWING STD-CUD-3.
- SUPPLY AND INSTALL SUBSURFACE DRAIN AS SHOWN PER DRAWING STD-CUD-2.

**C. UTILITIES**

- VERIFY ALL SERVICE UTILITY ROUTINGS WITH OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION. VERIFY ALL UTILITY CLEARANCES ARE MAINTAINED PER LOCAL CODE.
- ALL WORK WITHIN RIGHT-OF-WAY SHALL CONFORM TO GOVERNING STATE AND/OR LOCAL SPECIFICATIONS.
- SITE CONTRACTOR TO BRING UTILITIES WITHIN 5' OF BUILDING AT LOCATIONS SHOWN. COORDINATE ALL BUILDING UTILITY CONNECTIONS WITH BUILDING DRAWINGS.
- WATER COMPANY SHALL FURNISH AND INSTALL 2" COPPER WATER LINE FROM METER TO EXISTING 2" WATER LATERAL. LOCAL WATER COMPANY SHALL FURNISH AND INSTALL A 2" METER. CONTRACTOR SHALL INSTALL THE WATER LINE FROM THE METER TO THE BUILDING SERVICE PER THE BUILDING DRAWINGS. CONTRACTOR SHALL COORDINATE INSTALLATION WITH WATER COMPANY.
- CONTRACTOR SHALL FURNISH AND INSTALL 1.25" GAS LINE FROM METER TO NEW TAP. THE CONTRACTOR SHALL INSTALL THE GAS LINE FROM THE METER TO THE BUILDING SERVICE PER THE BUILDING DRAWINGS AND AT LEAST 36 INCHES BELOW FINISH GRADE. IF NATURAL-GAS PIPING IS INSTALLED LESS THAN 36 INCHES BELOW FINISH GRADE, INSTALL IT IN CONTAINMENT CONDUIT. CONTRACTOR SHALL COORDINATE INSTALLATION WITH GAS COMPANY.
- INSTALL UNDERGROUND, PE, NATURAL-GAS PIPING ACCORDING TO ASTM D2774.
- INSTALL SHUTOFF VALVE DOWN STREAM FROM GAS METER AND OUTSIDE OF BUILDING AT GAS SERVICE ENTRANCE.
- INSTALL SERVICE METERS TO COMPLY WITH GAS COMPANY REQUIREMENTS.
- UNDERGROUND, NATURAL-GAS PIPING SHALL BE PE PIPE AND FITTINGS JOINED BY HEAT FUSION OR MECHANICAL COUPLINGS; SERVICE-LINE RISERS WITH TRACER WIRE TERMINATED IN AN ACCESSIBLE LOCATION.
- CONTRACTOR SHALL FURNISH AND INSTALL (1) 2" PVC CONDUIT WITH PULL STRING FROM TELEPHONE SERVICE CONNECTION TO BUILDING.
- NEW UNDERGROUND 120/208V THREE PHASE ELECTRIC SERVICE SHALL BE INSTALLED PER BUILDING DRAWINGS. CONTRACTOR SHALL INSTALL CONDUITS AND CONDUCTORS FROM PAD MOUNTED TRANSFORMER TO BUILDING. CONTRACTOR SHALL SUPPLY AND INSTALL CONDUITS FOR PRIMARY POWER AS SPECIFIED BY LOCAL POWER COMPANY FROM POWER POLE TO TRANSFORMER. PRIMARY POWER CONDUCTORS SUPPLIED AND INSTALLED BY LOCAL POWER COMPANY.
- INSTALL CONCRETE TRANSFORMER PAD AT LOCATION INDICATED PER REQUIREMENTS OF LOCAL POWER COMPANY, INCLUDING ANY REQUIRED BOLLARDS.
- INSTALL 6" PVC SANITARY SEWER LINE FROM BUILDING TO APPROPRIATE SERVICE LATERAL PER FIELD CONDITIONS. MINIMUM SLOPE SHALL BE 1.0%. INSTALL CLEAN-OUTS EVERY 100' ALONG SEWER LINE.
- INSTALL 3" PVC SLEEVE FOR IRRIGATION LINES UNDER APPROACHES.
- SUPPLY AND INSTALL 6" DUCTILE IRON CLASS 54 WATER MAIN PER CITY OF KALAMAZOO STANDARDS.
- INSTALL FIRE HYDRANT PER CITY OF KALAMAZOO STANDARDS.

**STORM CHART**

#	STRUCTURE	RIM ELEV.	PIPE INV.
1	2X2 CB	876.16	873.66 (12") SW
2	2X2 CB	876.87	873.27 (12") NE 873.27 (12") SW
3	2X2 CB	876.74	873.74 (12") S
4	2X2 CB	876.97	873.01 (12") NE 873.01 (12") N 873.01 (12") S
5	2X2 CB	877.45	872.33 (12") N 875.12 (4") SW 872.33 (12") E
6	HEADWALL		871.90 (12") W
7	2X2 CB	875.77	873.27 (12") SW
8	2X2 CB	876.33	872.58 (12") NE 872.58 (12") S
9	HEADWALL		872.40 (12") N
10	HEADWALL		871.90 (12") N
11	OUTLET CONTROL STRUCTURE	876.83	871.78 (12") S 871.78 (12") N
12	48" MH	878.21	871.33 (12") S 871.33 (12") E
13	CLEANOUT	878.40	875.22 (4") NW 875.22 (4") NE
1000	EX. CURB INLET	877.43	871.19 (12") W 871.19 (12") E

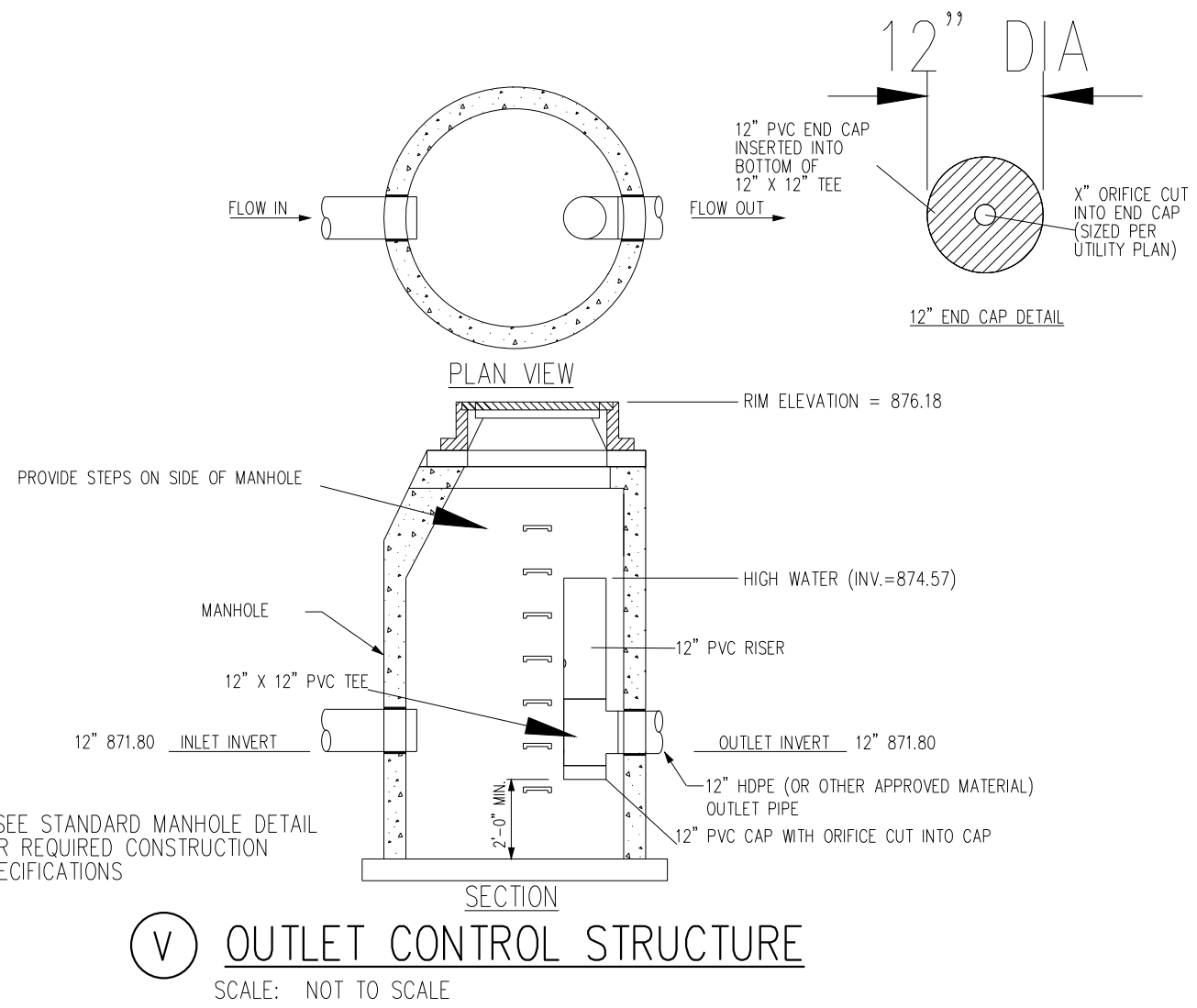
CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.

CONTRACTOR TO VIDEO THE EXISTING SANITARY LATERALS FROM THE SPEEDWAY LAUNDRYMAT, AND CAR WASH TO DETERMINE THE LOCATIONS AND INVERTS OF THE CONNECTIONS AT THE SANITARY MAIN. ONCE LOCATIONS AND INVERTS HAVE BEEN ESTABLISHED, THE VIABILITY OF THE REUSE OF THE LATERALS FOR THE PROPOSED DEVELOPMENT WILL BE DETERMINED.

CONTRACTOR SHALL VERIFY INVERT ELEVATIONS AND OTHER CRITICAL DIMENSIONS LISTED ON THESE DRAWINGS WHERE UTILITY TIE-INS ARE TO BE MADE. VERIFICATION SHALL BE COMPLETED PRIOR TO INSTALLATION OF NEW UTILITIES. ANY SIGNIFICANT DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.

NOTE: AS AN AID TO THE CONTRACTOR VARIOUS UTILITIES AND UNDERGROUND STRUCTURES ARE SHOWN ON THESE PLANS AND PROFILES. ALL INFORMATION CONCERNING ALL UTILITIES SHOWN ON THE PLANS AND PROFILES IS TAKEN FROM FIELD TOPO AND/OR AVAILABLE RECORDS, BUT THE OWNER AND ENGINEER DOES NOT GUARANTEE THEIR LOCATION/ELEVATION, OR THAT ADDITIONAL UNDERGROUND STRUCTURES OR UTILITIES MAY NOT BE ENCOUNTERED. IF THE CONTRACTOR DOES ENCOUNTER A PREVIOUSLY UNIDENTIFIED UTILITY AND/OR STRUCTURE, OR DETERMINES THAT ONE OF THE UTILITIES/STRUCTURES SHOWN ON THESE PLANS IS INCORRECTLY LOCATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES. NOTIFY "MISS DIG" AT 1-800-482-7171, 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.

**BEFORE YOU DIG  
CALL MISS DIG**  
1-800-482-7171



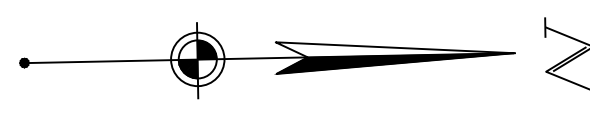
NOT FOR CONSTRUCTION

**Speedway**  
Prepared By: J. Steigerwald  
Checked By: R. Papotto  
Encl. CH 15329  
and Construction Dept.

NO.	REVISIONS	DATE
1	CHANGED DRAWING TO REFLECT CHANGES	11/20/21
2	FEEDBACK FROM CURRENT PROJECTING PLANS	JAN 2022
3	REVISIONS TO PLANS	APR 2022

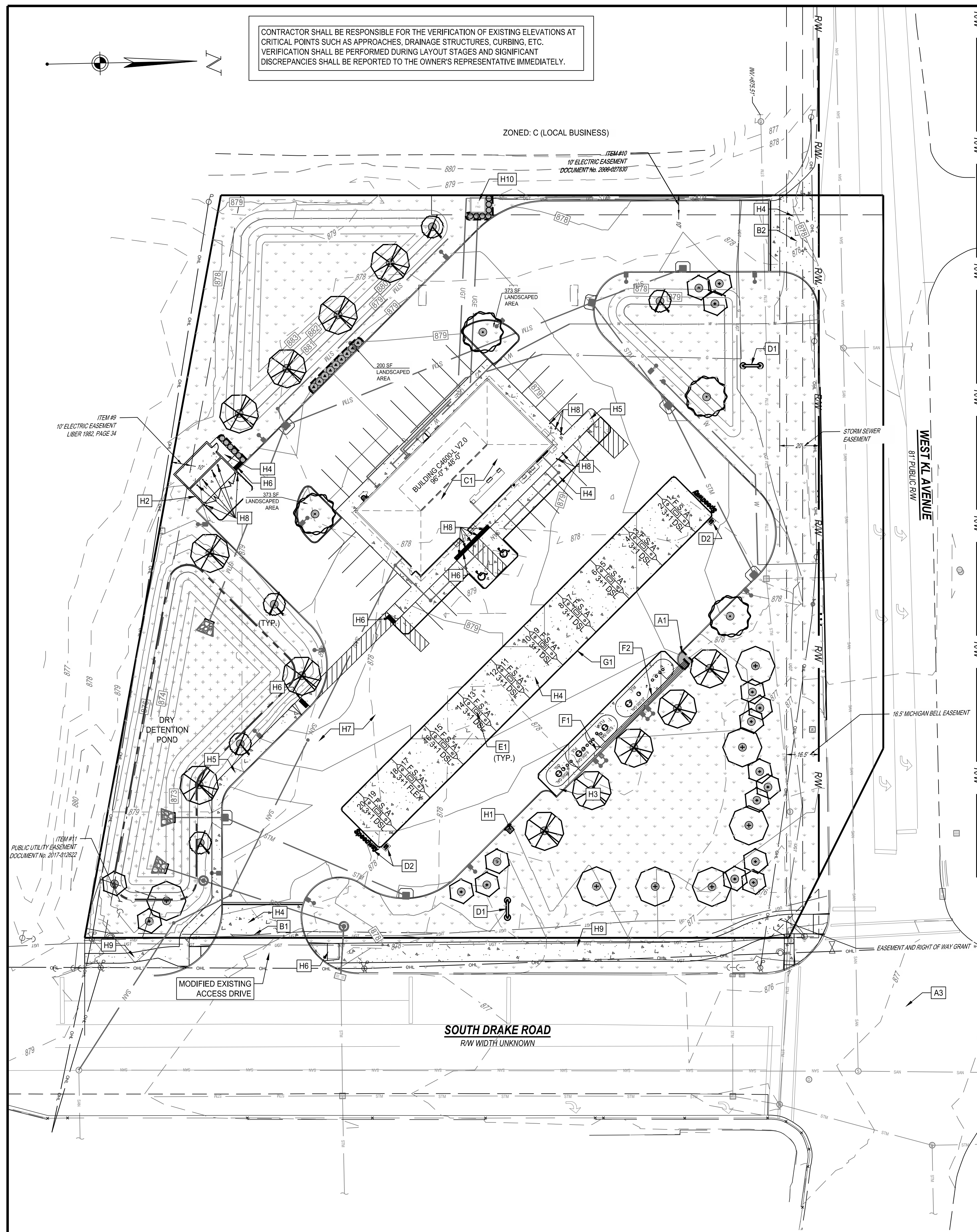
**PIPING & UTILITIES PLAN**  
**REBUILD #2360**  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 15 30 GRAPHIC SCALE IN FEET
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.VWR. R. PAPTOTO	11/23/20
DRWG. NO.	



CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF EXISTING ELEVATIONS AT CRITICAL POINTS SUCH AS APPROACHES, DRAINAGE STRUCTURES, CURBING, ETC. VERIFICATION SHALL BE PERFORMED DURING LAYOUT STAGES AND SIGNIFICANT DISCREPANCIES SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.

ZONED: C (LOCAL BUSINESS)



- A. GENERAL LANDSCAPE NOTES**
- CONTRACTOR TO INSTALL MULCH AROUND VENT PIPES AS SHOWN
- B. SITE WORK**
- EXISTING CONCRETE APPROACH
  - PROPOSED CONCRETE DRIVE APPROACH
- C. BUILDING**
- STANDARD BUILDING
- D. EXTERIOR APPEARANCE & SIGNAGE**
- GOAL POST SIGN
  - CANOPY SIGNAGE
- E. DISPENSERS**
- DISPENSERS, SUMPS, AND ISLANDS
- F. UNDERGROUND STORAGE TANKS**
- AUTO DIESEL, ETHANOL FLEX FUEL, AND PREMIUM TANK
  - UNLEADED TANK
- G. CANOPY**
- CAR ISLAND CANOPY
- H. YARD**
- AIR ISLAND
  - TRASH ENCLOSURE
  - CONCRETE TANK SLAB
  - CONCRETE PAVEMENT
  - CONCRETE SIDEWALK
  - ADA ACCESSIBLE RAMP
  - ASPHALT PAVEMENT
  - BOLLARDS
  - BIKE PATH
  - TRANSFORMER PAD

**LANDSCAPE PLANT MATERIAL SCHEDULE**

TREES	SIZE	SPACING	QTY
QUERCUS RUBRA NORTHERN RED OAK	2" CAL.	AS SHOWN	7
CARPINUS CAROLINIANA AMERICAN HORNBEAM	2" CAL.	AS SHOWN	4
GYMNOCLADUS DIOICUS KENTUCKY COFFEETREE	2" CAL.	AS SHOWN	12
AMELANCHIER LAEVIS SMOOTH SERVICEBERRY	1.5" CAL. 8'-10" HT.	AS SHOWN	5
CERCIS CANADENSIS EASTERN REDBUD	1.5" CAL. 8'-10" HT.	AS SHOWN	17

SHRUBS & ACCENTS	SIZE	SPACING	QTY
BUXUS MICROPHYLLA JAPONICA 'WINTERGREEN' WINTERGREEN BOXWOOD	18" HT.	3'-0" O.C.	13
CORNUS STOLONIFERA RED OSIER DOGWOOD	18" HT.	3'-0" O.C.	9

GROUNDCOVERS	SIZE	QTY
SOD PER LOCAL SPECIFICATIONS		56,425 SF
SEED PER LOCAL SPECIFICATIONS		7,768 SF

**MULCH**

- ALL PLANT BEDS SHALL CONTAIN A 3" LAYER OF SHREDDED HARDWOOD MULCH
- CONTRACTOR TO PLACE 4" DIAMETER MULCH RING AROUND ALL TREES IN LAWN

**LANDSCAPE REQUIREMENTS**

**STREET RIGHT OF WAY GREENBELT**

**SOUTH DRAKE ROAD (360 LF)**

REQUIRED WIDTH:	20 FT
PROPOSED WIDTH:	20 FT
REQUIRED CANOPY TREES:	4 (1 PER 100 LF)
PROPOSED CANOPY TREES:	4
REQUIRED ORNAMENTAL TREES:	8 (2 PER 100 LF)
PROPOSED ORNAMENTAL TREES:	8

**WEST KL AVENUE (390 LF)**

REQUIRED WIDTH:	20 FT
PROPOSED WIDTH:	20 FT
REQUIRED CANOPY TREES:	4 (1 PER 100 LF)
PROPOSED CANOPY TREES:	4
REQUIRED ORNAMENTAL TREES:	8 (2 PER 100 LF)
PROPOSED ORNAMENTAL TREES:	8

**PARKING LOT**

REQUIRED LANDSCAPED AREA:	850 SF (25 SF PER PARKING STALL)
PROPOSED LANDSCAPED AREA:	946 SF
REQUIRED CANOPY TREE:	5 (1 PER 200 SF OF REQUIRED LA AREA)
PROPOSED CANOPY TREE:	5
REQUIRED SHRUBS:	9 (2 PER 200 SF OF REQUIRED LA AREA)
PROPOSED SHRUBS:	9

**INTERIOR SITE LANDSCAPING**

REQUIRED LANDSCAPED AREA:	13,706 SF (10% OF DEVELOPED AREA)
PROPOSED LANDSCAPED AREA:	60,900 SF
REQUIRED CANOPY TREE:	10 (1 PER 1500 SF OF REQUIRED LA AREA)
PROPOSED CANOPY TREE:	10
REQUIRED UNDERSTORY TREE:	6 (1 PER 2500 SF OF REQUIRED LA AREA)
PROPOSED UNDERSTORY TREE:	6

**LEGEND**

—	PROP. CURB
- - -	PROP. SPADE EDGE
•••••	PROP. CONCRETE
-XXX-	EXISTING CONTOUR
XXX.X	NEW CONTOUR
STM	STORM SEWER
SAN	SANITARY SEWER
G	GAS LINE
W	WATER LINE
OHL	OVERHEAD ELECTRIC LINE
UGL	UNDERGROUND ELECTRIC LINE
OHT	OVERHEAD TELEPHONE LINE
UGT	UNDERGROUND TELEPHONE LINE
- - -	EASEMENT LINE
- - -	SOD LIMIT

CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION, IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.

NOTE: AS AN AID TO THE CONTRACTOR VARIOUS UTILITIES AND UNDERGROUND STRUCTURES ARE SHOWN ON THESE PLANS AND PROFILES. ALL INFORMATION CONCERNING ALL UTILITIES SHOWN ON THE PLANS AND PROFILES IS TAKEN FROM FIELD TOPO AND/OR AVAILABLE RECORDS; BUT THE OWNER AND ENGINEER DOES NOT GUARANTEE THEIR LOCATION/ELEVATION, OR THAT ADDITIONAL UNDERGROUND STRUCTURES OR UTILITIES MAY NOT BE ENCOUNTERED. IF THE CONTRACTOR DOES ENCOUNTER A PREVIOUSLY UNIDENTIFIED UTILITY AND/OR STRUCTURE, OR DETERMINES THAT ONE OF THE UTILITIES/STRUCTURES SHOWN ON THESE PLANS IS INCORRECTLY LOCATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES. NOTIFY "MISS DIG" AT 1-800-482-7171, 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.



NOT FOR CONSTRUCTION

**Speedway**  
Prepared By: Speedway  
1250 South Drake Rd  
Enon, OH 45329  
and Construction Dept.

NO.	REVISIONS	DATE
1	CHANGED DRIVE TO DEPTH/HEIGHT/OUT	11/23/20
2	FEEDBACK INCORPORATED WITH CURRENT PROPOSED PLANS	JMS/HRP/12/01/2021
3	REVISIONS TO PLANS	06/07/2021

**LANDSCAPE PLAN**  
**REBUILD #2360**  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 15 30
GRAPHIC SCALE IN FEET	
DESIGN TEAM	DATE
DGNR. M. SANTANA	11/23/20
P.MGR. E. LALONE	11/23/20
R.VWR. R. PAPOTTO	11/23/20
DRWG. NO.	LP

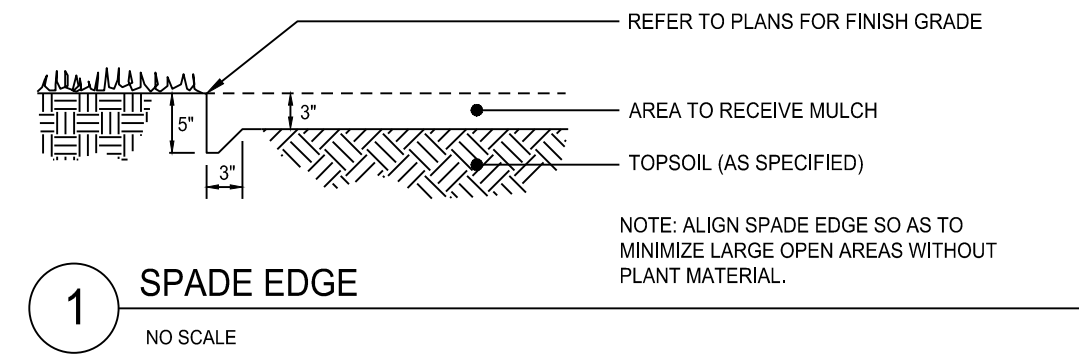


**A. GENERAL NOTES**

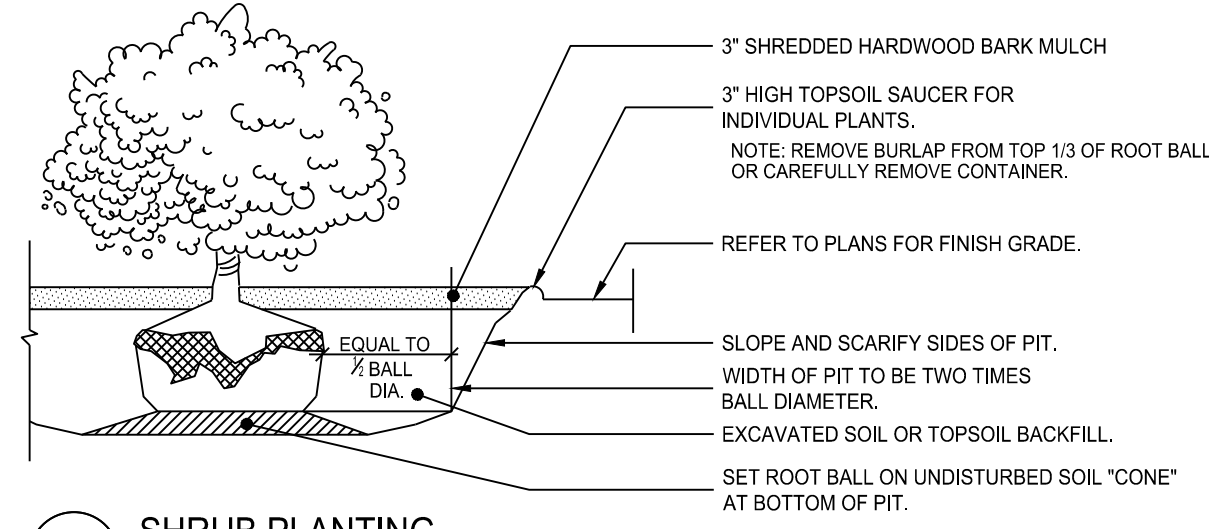
- THE CONTRACTOR SHALL LOCATE AND VERIFY THE EXISTENCE OF ALL UTILITIES PRIOR TO STARTING WORK.
- ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE CURRENT AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN OR EQUIVALENT. ALL MATERIAL SHALL ALSO CONFORM TO THE SPEEDWAY SPECIFICATIONS SECTION 32840 - PLANTING IRRIGATION, SECTION 329200 - TURF AND GRASSES, AND SECTION 329300 - PLANTS. FOR ANY SPECIFICATION CONFLICTS, THE AMERICAN STANDARD FOR NURSERY STOCK IS THE CONTROLLING SPECIFICATION.
- IF DISCREPANCIES BETWEEN THE PLAN AND THE PLANT LIST ARE FOUND, CONTACT THE OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS AND FEES THAT MAY BE REQUIRED FOR LANDSCAPE PORTION OF WORK.
- ALL NEW LANDSCAPE PLANTING SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FOLLOWING FINAL INSPECTION BY OWNER'S REPRESENTATIVE. AT THE END OF THIS PERIOD, PLANT MATERIAL DEEMED AS DEAD OR UNSATISFACTORY BY OWNER'S REPRESENTATIVE SHALL BE REPLACED AT NO ADDITIONAL CHARGE BY THE LANDSCAPE CONTRACTOR.
- CONTRACTOR SHALL NOTIFY OWNER'S REPRESENTATIVE IN WRITING PRIOR TO BID DATE OF ANY PLANTS THAT THEY FEEL MAY NOT SURVIVE IN LOCATIONS NOTED. RECOMMEND HARDIER AND SALT TOLERANT VEGETATION FOR COLD WEATHER REGIONS.
- PLANTS AND ALL OTHER MATERIALS TO BE STORED ON SITE WILL BE PLACED AND PROTECTED FROM DAMAGING WIND AND SUN, WATERED DAILY AND PLACED WHERE THEY WILL NOT CONFLICT WITH CONSTRUCTION OPERATIONS OR GET DAMAGED.
- NO SUBSTITUTIONS OF PLANT MATERIAL WILL BE ALLOWED. IF PLANTS SHOWN ARE UNAVAILABLE, THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO BID DATE IN WRITING. ALL PLANTS SHALL BE INSPECTED AND TAGGED WITH PROJECT IDENTIFICATION SHOWING GENUS, SPECIES, AND VARIETY AT NURSERY OR CONTRACTORS OPERATION PRIOR TO MOVING TO JOB SITE. PLANTS MAY ALSO BE INSPECTED AND APPROVED OR REJECTED ON THE JOB SITE.
- LOOSEN SUBGRADE TO A MINIMUM DEPTH OF 4 INCHES. REMOVE STONES LARGER THAN 1 INCH IN ANY DIMENSION AND STICKS, ROOTS, RUBBISH, AND OTHER EXTRANEIOUS MATTER AND LEGALLY DISPOSE OF THEM OFF OWNER'S PROPERTY. AFTER REMOVAL OF NOTED ITEMS AND LOOSENING OF SUBSOIL, AMEND EXISTING OR PURCHASED TOPSOIL TO PROVIDE A WELL-DRAINING PLANTING MEDIUM THAT MEETS THE OPTIMUM GROWING REQUIREMENTS OF THE SPECIFIED PLANTS. A FULL 4 INCH LAYER OF APPROVED SHREDDED FIBROUS PEAT MOSS MAY BE USED IN LIEU OF PLANTING MIX IN ALL PLANTING BEDS AND HEDGEROWS.
- ALL PLANTS, INCLUDING TREES, SHRUBS, GROUND COVER, AND FLOWERS, SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT TIME OF PLANTING. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS.
- GROUND COVER AND FLOWERS SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS TO ORIGINAL GRADE BEFORE DIGGING. TREES AND SHRUBS SHALL HAVE A FINISH GRADE OF +1 INCH MAXIMUM TO ORIGINAL GRADE. WHERE HEAVY POORLY DRAINING SOILS ARE ENCOUNTERED SEEK APPROVAL FROM OWNER'S REPRESENTATIVE TO PLANT THE MATERIAL HEIGHT THAN EXISTING GRADE TO AVOID DROWNING.
- SIZE OF VEGETATION DEPICTED ON DRAWING IS A MATURE-SIZED REPRESENTATION AND IS NOT INDICATIVE OF SIZE OF ITEM AT PLANTING.
- REFER TO PLAN CALLOUTS FOR ALL LANDSCAPE AREAS REQUIRING MULCH BEDDING. GRAVEL MULCH SHALL BE USED IN NARROW AREAS FOR LANDSCAPING BETWEEN THE BUILDING AND THE SIDEWALK, OR IN ANY MULCH BEDS ALONG SIDEWALKS OR PARKING SPACES. USE DARK BROWN, SHREDDED, HARDWOOD MULCH IN ALL OTHER LOCATIONS (UNLESS OTHERWISE DENOTED ON THE PLAN AND/OR REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION).
- TREES ARE TO BE A MINIMUM OF 3 FEET AWAY FROM ANY HARDSCAPE FEATURE SUCH AS CURBS, WALKS, ETC. TREES SHALL HAVE A ROOT BARRIER SYSTEM IF WITHIN 3-5 FEET OF ANY HARDSCAPE FEATURE.
- MAINTAIN 3 FEET MINIMUM FROM THE NEAREST DRIPLINE/ROOT BALL EDGE OF PLANTED TREES TO THE NEAREST EDGE OF ANY UTILITY LINES. THE LANDSCAPE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITY LINES PRIOR TO COMMENCING WORK AND PROVIDE A ROOT BARRIER SYSTEM FOR TREES WITHIN 3-5 FEET OF UTILITY LINES.
- ALL AREAS NOTED "GRADE AND TURF" AND "MULCHED PLANT BED" WILL RECEIVE TOP SOIL AS INDICATED IN SPEEDWAY SPECIFICATIONS. FOR NON-IRRIGATION SITES, WATER LAWN FOR 30 DAYS POST TURNOVER DATE.
- ALL VEGETATION AND LANDSCAPING PROPOSED WITHIN THE RIGHT-OF-WAY IS ONLY ALLOWED IF REQUIRED BY LOCAL JURISDICTION AGENCY.
- ALL PLANTS SHALL BE SPRAYED WITH AN ANTIDESSICANT PER MANUFACTURER'S RECOMMENDATIONS AND WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING.
- AN APPROVED PRE-EMERGENT HERBICIDE SHALL BE APPLIED IN ALL PLANTING AND GROUND COVER BEDS AT RATES SPECIFIED BY MANUFACTURER FOR EACH VARIETY OF PLANT.
- ALL STORM WATER DETENTION BASINS SHALL HAVE GRASS COVERAGE UNLESS LOCAL CODE DICTATES OTHER TYPE OF VEGETATION TREATMENT OR AS CALLED OUT ON THE LANDSCAPING PLAN.
- USE GRASSES FOR SEEDING BY SPECIES THAT ARE FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AOSA'S "JOURNAL OF SEED TECHNOLOGY"; RULES FOR TESTING SEEDS FOR PURITY AND GERMINATION TOLERANCES". ALSO, SEED SPECIES ARE TO BE SITE SPECIFIC STATE-CERTIFIED SEED OF GRASS SPECIES AS STATED ON DRAWINGS.
- 21A. WHEN SEEDING, EVENLY DISTRIBUTE SEED BY SOWING THE SPREADER OR SEEDING MACHINE IN TWO DIRECTIONS AT RIGHT ANGLES TO EACH OTHER PER SEEDING RATE LISTED ON DRAWINGS. RAKE SEED LIGHTLY INTO TOP 1/8 INCH OF TOPSOIL, ROLL LIGHTLY, AND WATER WITH A FINE SPRAY. PROTECT SEEDED AREAS BY SPREADING STRAW MULCH AT A RATE OF 2 TONS/ACRE WITH 1-1/2 INCHES IN LOOSE THICKNESS.
- 21B. WHEN SEEDING BY HYDROSEEDING MIX, PROVIDE SLOW-RELEASE FERTILIZER, AND FIBER MULCH IN WATER, USING EQUIPMENT SPECIFICALLY DESIGNED FOR HYDROSEED APPLICATION. UNIFORMLY BLEND INTO HOMOGENEOUS SLURRY. APPLY THE SLURRY UNIFORMLY AT A RATE SO THAT MULCH COMPONENT IS DEPOSITED AT NOT LESS THAN 150 LB/ACRE DRY WEIGHT, AND SEE COMPONENT IS DEPOSITED AT NOT LESS THAN THE SPECIFIED SEED-SOWING RATE.
- WHEN USING TRUFGRASS SOD THE QUALITY WILL COMPLY WITH "SPECIFICATIONS FOR TURFGRASS SOD MATERIALS" IN TPIS "GUIDELINE SPECIFICATIONS TO TURFGRASS SODDING".
- 22A. LAY SOD WITHIN 24 HOURS OF HARVESTING. LAY SOD WITH TIGHTLY FITTED JOINTS, OFFSETTING JOINTS IN ADJACENT COURSES; DO NOT STRETCH OR OVERLAP; TAMP AND ROLL LIGHTLY. FILL MINOR CRACKS BETWEEN PIECES OF SOD WITH SOIL OR SAND. LAY SOD ACROSS ANGLE OF SLOPES EXCEEDING 1:3. ANCHOR SOD ON SLOPES EXCEEDING 1:6 WITH WOOD PEGS OR STEEL STAPLES. SATURATE SOD WITH FINE WATER SPRAY WITHIN TWO HOURS OF PLANTING. DURING FIRST WEEK, WATER DAILY TO MAINTAIN MOIST SOIL TO A MINIMUM DEPTH OF 1-1/2 INCHES BELOW SOD.

**B. IRRIGATION NOTES**

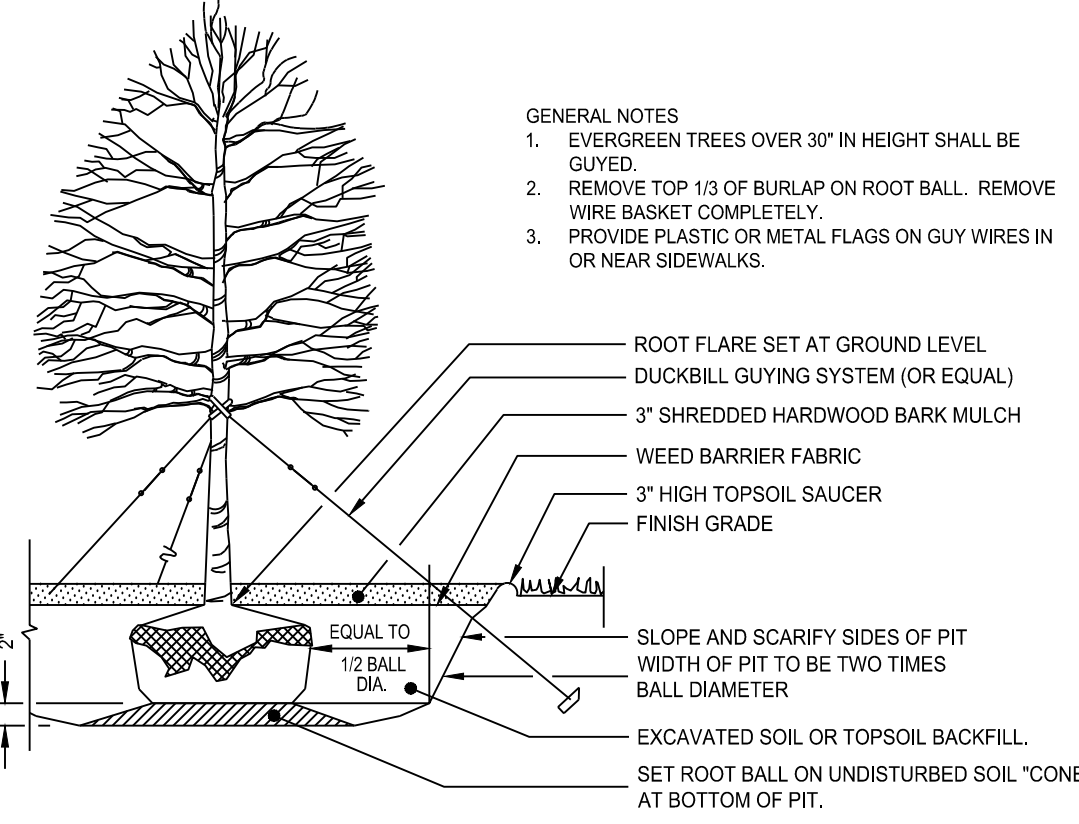
- CONTRACTOR SHALL DESIGN, SUPPLY, AND INSTALL IRRIGATION SYSTEM FOR ALL SODDED AND PLANTER AREAS AS SHOWN THIS SHEET. DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- THE IRRIGATION SYSTEM SHALL CONFORM TO SPEEDWAY SPECIFICATIONS SECTION 328400 - "PLANTING IRRIGATION".
- PROVIDE HYDRAULIC ANALYSIS OF CRITICAL FLOW RATE (GPM) AND STATIC PRESSURE REQUIRED FOR SYSTEM TO FUNCTION AS DESIGNED.
- CONFIRM EXISTING WATER SOURCE AVAILABLE FLOW RATE (GPM), STATIC PRESSURE AT POINT OF CONNECTION AND SERVICE LINE SIZE AT POINT OF CONNECTION. CONTRACTOR NOTE: NOTIFY SPEEDWAY IF WATER SOURCE DOES NOT COMPLY WITH HYDRAULIC ANALYSIS REQUIREMENTS.
- LOCATE AND IDENTIFY TYPE / SIZE OF DEDICATED WATER METER AND BACKFLOW PREVENTER ON PLANS.
- DESIGN SEPARATE ZONES FOR TURF AND MIXED LANDSCAPE (TREES, SHRUBS, PERENNIALS OR GROUNDCOVER).
- SHRUBS, GROUNDCOVER AND TREES SHOULD BE IRRIGATED WITH DRIP IRRIGATION.
- PROVIDE DRIP PLANT IRRIGATION, WITH A FLOW METER, FOR LANDSCAPED AREAS WHERE TYPICAL SPRAY IRRIGATION LINES CANNOT BE UTILIZED.
- TURF SHALL BE IRRIGATED WITH 6 INCH POP-UP SPRINKLERS.
- LIST OF SPRINKLER NOZZLES THAT ARE ACCEPTABLE TO SPEEDWAY: HUNTER MPROTATOR, RAIN BIRD HE-VAN SPRAY NOZZLE, AND TORO PRECISION SPRAY NOZZLE.
- PROVIDE A DETAIL SHEET OR MANUFACTURERS SPECIFICATIONS FOR CONTROLLER, VALVES, DRIPLINE, HEADS, AND PIPES.
- MINIMUM 2 YEAR MANUFACTURER WARRANTEE ON IRRIGATION PRODUCTS.
- CONTROLLER TYPE, SIZE AND LOCATION SHALL BE IDENTIFIED ON PLANS ALONG WITH POWER REQUIREMENTS AND CONNECTIONS.
- LOCATE ALL SLEEVING ON PLANS FOR HARD SURFACE CROSSINGS. SLEEVES SHOULD BE CALLED OUT AS 3 INCH PVC PIPE WITH 18" MIN COVER UNDER APPROACHES/PAVEMENT AND CAPPED ENDS AT 3' BEYOND BACK OF CURB. PIPE WILL BE UTILIZED FOR IRRIGATION LINES GOING UNDER PAVEMENT BETWEEN PLANTING BEDS.
- ALL IRRIGATION PIPE SHALL BE SIZED ON THE PLAN.
- SHOW ALL CONTROL VALVES, PRESSURE REDUCERS, QUICK COUPLERS AND IRRIGATION HEADS. VALVE BOXES TO BE LOCATED IN LAWN AREAS, INSTALL QUICK COUPLERS AND 90° INTERVALS AT PERIMETER OF PAVEMENTS AND CURBS.
- PROVIDE FLOW SENSOR ON EACH SYSTEM THAT WILL SHUT DOWN A ZONE OR MAINLINE IF A LEAK IS DETECTED.
- PROVIDE SMART CONTROL SYSTEM THAT EMPLOYS EITHER A CLIMATE SENSOR OR MOISTURE SENSOR TO AUTOMATICALLY ADJUST THE IRRIGATION OPERATIONAL PROGRAM TO MEET THE ACTUAL PLANT WATER REQUIREMENTS.
- PROVIDE A DETAIL AND OR NOTES THAT DEFINE PIPE DEPTHS, MAINLINE, LATERALS AND SLEEVES AND PIPE LOCATION RELATIVE TO CURBS AND HARDSCAPES.
- NO IRRIGATION HEADS, VALVES, LINES OR OTHER IRRIGATION FIXTURES AND IMPROVEMENTS TO BE WITHIN 36 INCHES FROM BACK OF CURB TO PROTECT SYSTEM FROM VEHICULAR DAMAGE. PUT THE IRRIGATION HEADS, VALVES OR LINES AT THE BACK OF NARROW LANDSCAPED AREAS. CONTRACTOR TO ADJUST SPRINKLER HEADS TO ACCOMMODATE 36 INCH MIN. STRIP OF GRASS BEHIND THE CURB. INSTALL IRRIGATION LINES WITH 12" MIN. COVER.
- PREVENT OVERSPRAY ONTO BUILDINGS, STRUCTURES, SIGNS, SIDEWALKS OR DRIVES.



**1 SPADE EDGE**  
NO SCALE



**2 SHRUB PLANTING**  
NO SCALE



**3 TREE PLANTING**  
NO SCALE

NOTE: AS AN AID TO THE CONTRACTOR VARIOUS UTILITIES AND UNDERGROUND STRUCTURES ARE SHOWN ON THESE PLANS AND PROFILES. ALL INFORMATION CONCERNING ALL UTILITIES SHOWN ON THE PLANS AND PROFILES IS TAKEN FROM FIELD TOPO AND/OR AVAILABLE RECORDS, BUT THE OWNER AND ENGINEER DOES NOT GUARANTEE THEIR LOCATION/ELEVATION, OR THAT ADDITIONAL UNDERGROUND STRUCTURES OR UTILITIES MAY NOT BE ENCOUNTERED. IF THE CONTRACTOR DOES ENCOUNTER A PREVIOUSLY UNIDENTIFIED UTILITY AND/OR STRUCTURE, OR DETERMINES THAT ONE OF THE UTILITIES/STRUCTURES SHOWN ON THESE PLANS IS INCORRECTLY LOCATED, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND ENGINEER FOR DIRECTION ON HOW TO PROCEED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGE TO EXISTING UTILITIES. NOTIFY "MISS DIG" AT 1-800-482-7171, 72 HOURS PRIOR TO THE START OF ANY CONSTRUCTION.



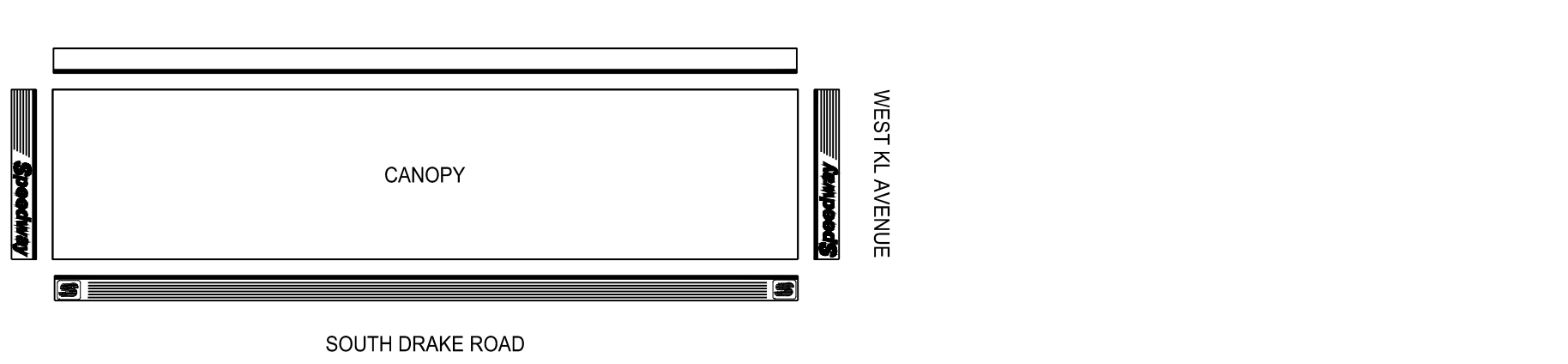
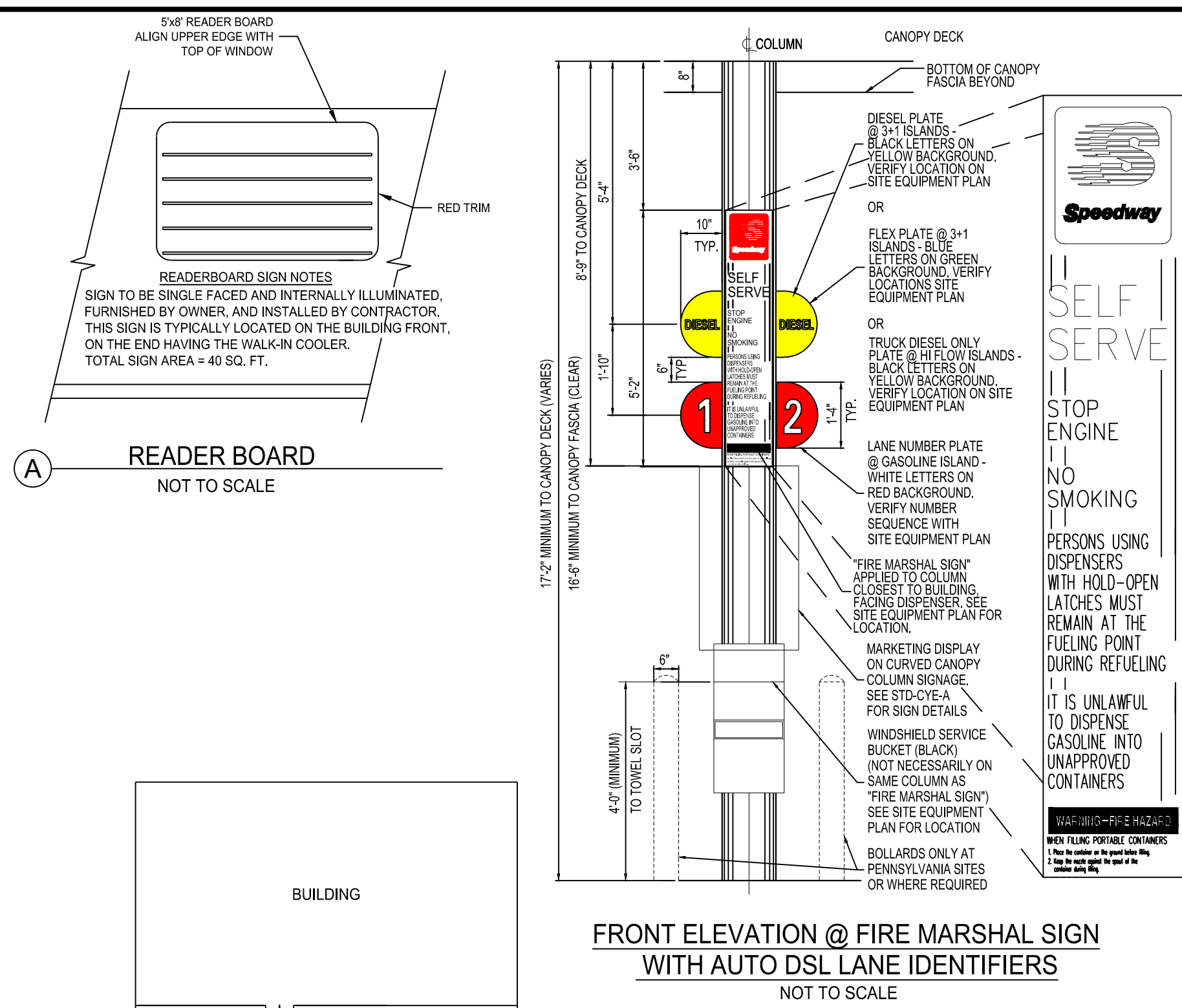
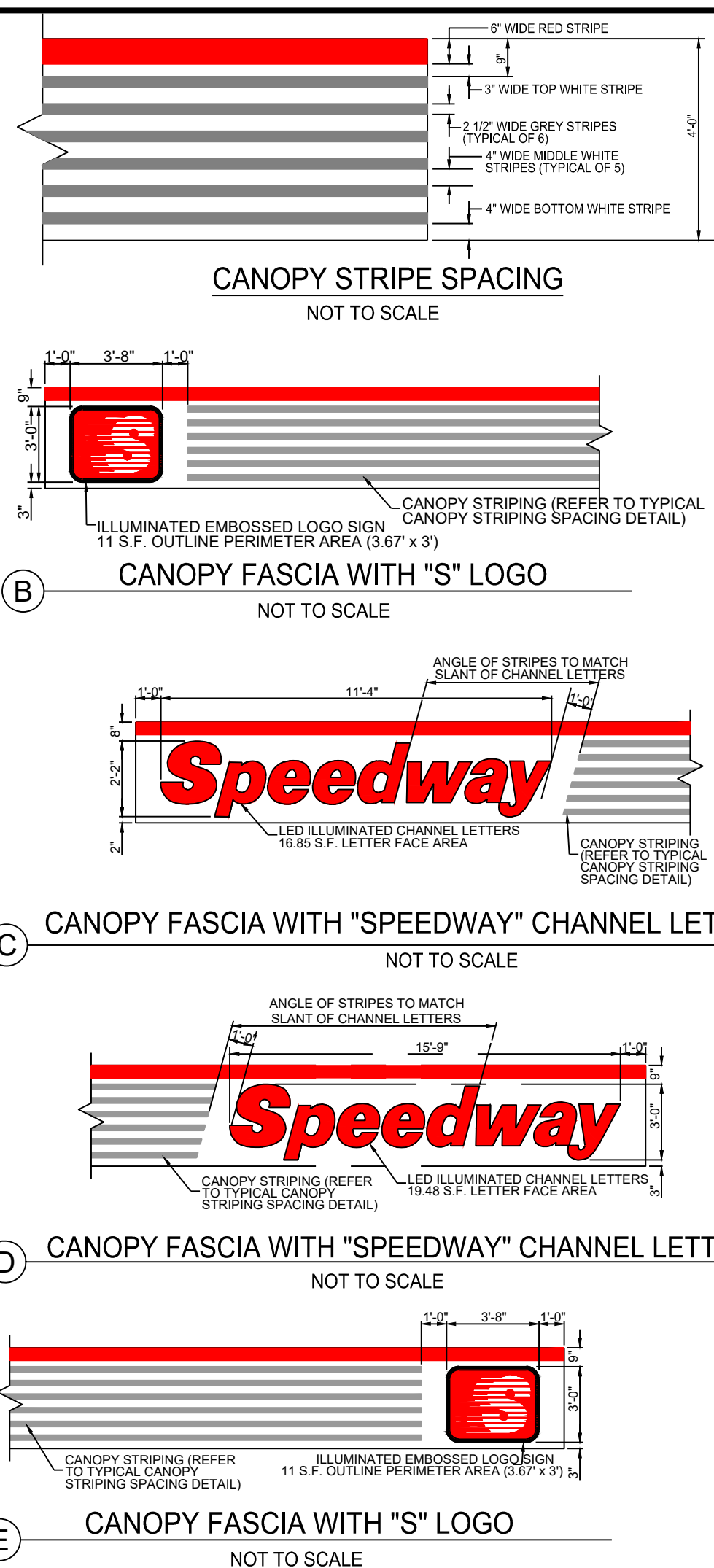
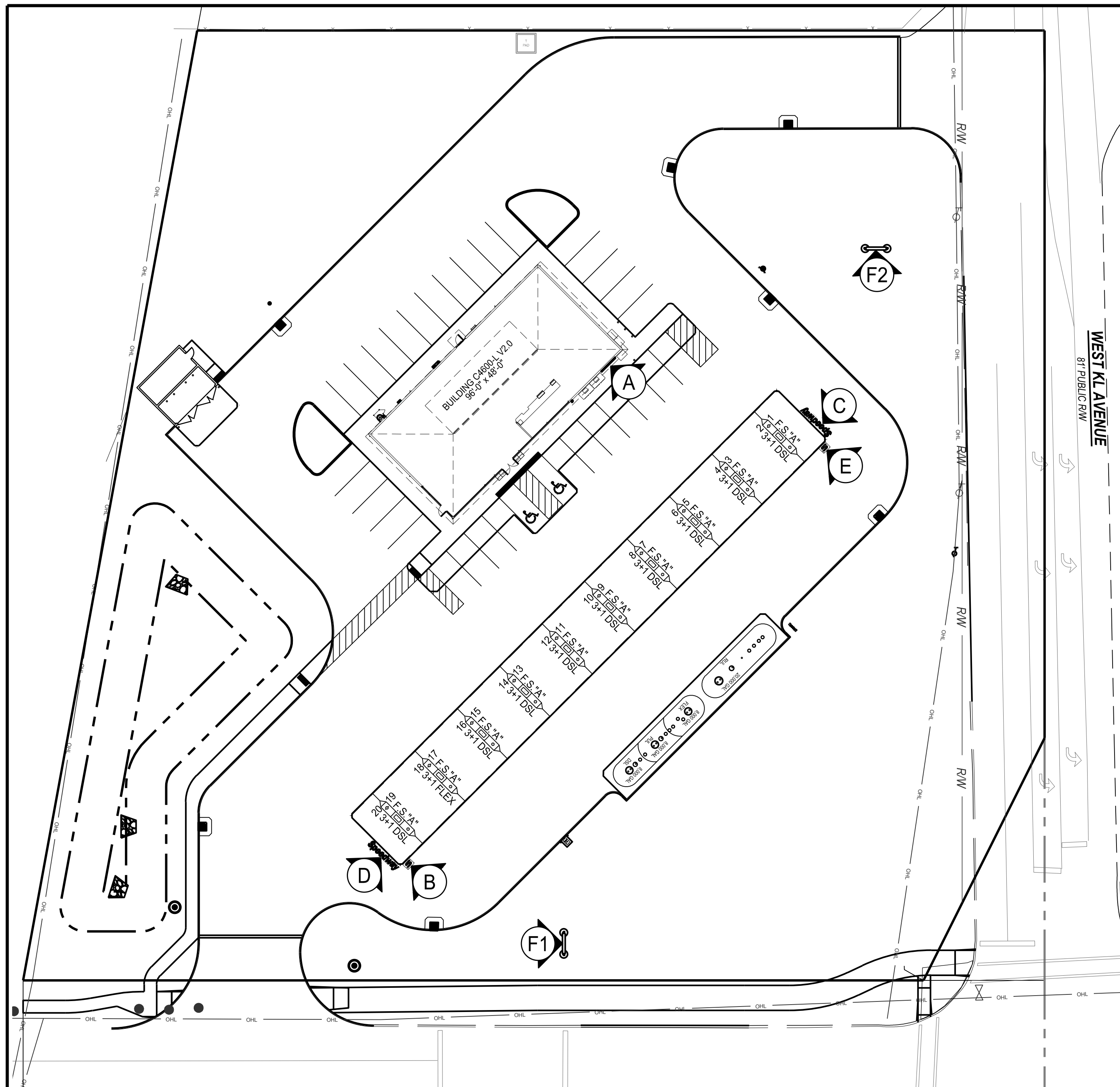
NOT FOR CONSTRUCTION

**Speedway**  
Prepared By: Speedway  
and Construction Dept.  
Encl. 01H 16328

NO.	REVISIONS	DATE	DESIGNER/PROJECT MANAGER	DATE
1	CHANGED DRAWING TO REPERKING/OUT	11/20/21	JAMES HENRI	
2	FEEDBACK RECEIVED WITH CURRENT PROPOSED PLANS			
3	REBIDDED PLANS	02/07/2021		

**PLANTING DETAILS**  
**REBUILD #2360**  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	NO SCALE
DESIGN TEAM	DATE
DGNR. M. SANTANIA	11/23/20
P.MGR. E. LALONE	11/23/20
R/WVR. R. PAPOTOTI	11/23/20
DRWG. NO.	LP1



**GRAPHICS - INSTALLATION**

ITEM	FURNISHED BY:	INSTALLED BY:	REMARKS
DISPENSER DECALS	V	V	
FIRE MARSHAL SIGN	O	C	SEE SITE EQUIPMENT PLAN
LANE NUMBER PLATES	O	C	SEE SITE EQUIPMENT PLAN
BUILDING READERBOARD	O	V	
CANOPY FASCIA SIGNS	V	V	ELECTRICAL BY CONTRACTOR
BUILDING ADDRESS NUMERALS	O	V	

O - OWNER V - OWNER'S VENDOR C - CONTRACTOR

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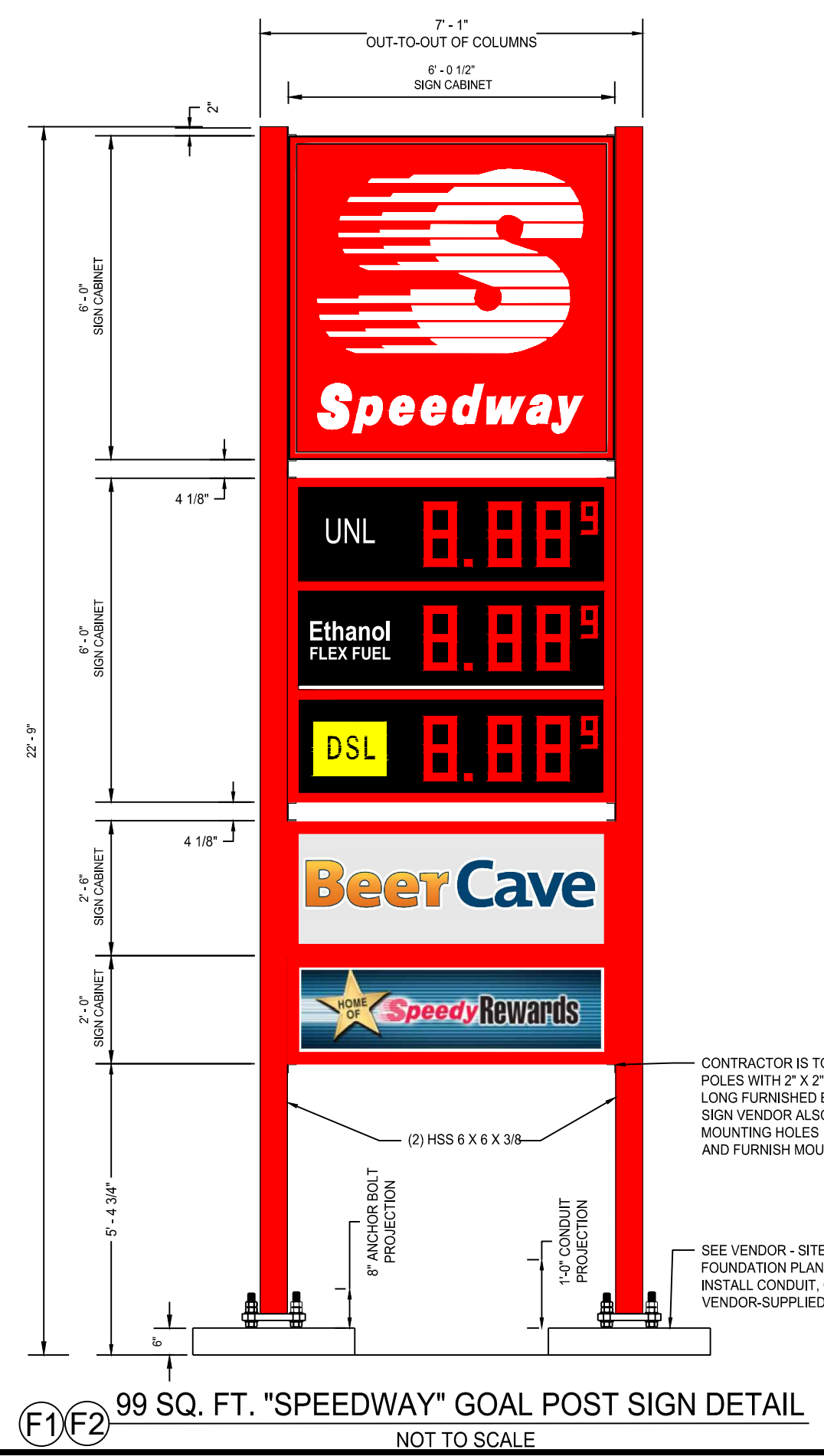


CONTRACTOR SHALL REVIEW THE COMPLETE DRAWING SET AND NOTIFY THE DESIGN PROFESSIONAL IN WRITING PRIOR TO CONSTRUCTION, IF ANY DISCREPANCIES ARE FOUND WITHIN THE DRAWINGS OR WITH ACTUAL FIELD CONDITIONS.

**SIGNAGE**

REF. LET.	LOCATION	MESSAGE	ILLUMINATION	DIMENSION	AREA
BUILDING - SEE GRAPHICS CONTROL DRAWING					
A	BUILDING WALL	READER BOARD	ILLUMINATED	5' x 8'	40.0 SF
CANOPY - SEE GRAPHICS CONTROL DRAWING					
B	LONG SIDE (E)	MOVING "S" LOGO	ILLUMINATED	3.66 x 3	11.0 SF
C	SHORT SIDE (N)	SPEEDWAY	ILLUMINATED	LETTER FACING	46.5 SF
D	SHORT SIDE (S)	SPEEDWAY	ILLUMINATED	LETTER FACING	46.5 SF
E	LONG SIDE (E)	MOVING "S" LOGO	ILLUMINATED	3.66 x 3	11.0 SF
CANOPY TOTAL					
115 SF					
GROUND MOUNT - SEE SIGN DRAWING					
F1	ALONG SOUTH DRAKE ROAD	TRADEMARK/PRICE	ILLUMINATED		99 SF
F2	ALONG WEST KL AVENUE	TRADEMARK/PRICE	ILLUMINATED		99 SF
GROUND MOUNT TOTAL					
198 SF					
SITE TOTAL					
353 SF					

- A. GENERAL NOTES**
- ALL SIGNAGE SHALL BE INSTALLED AT LEAST FOUR WEEKS PRIOR TO THE DAY OF "TURNOVER."



**SPEEDWAY PAINT SCHEDULE - REV. 11/27/2019**

NO.	REVISIONS	DESCRIPTION	DATE
1	1	CHANGED DRAWING TO REFLECT CURRENT PROPOSING PLANS	11/20/20
2	2	REMOVED PLANS	11/20/20
3	3	REMOVED PLANS	11/20/20

ITEM	DESCRIPTION	PRIMER	FINISH	THICKNESS	REMARKS
1	METAL BOLLARDS	PRO-CRYL, B66-310	SHER-CRYL, B66R300	2.0 - 4.0 MILS DFT	General Contractor
2	METAL SIGN POLES AND FRAMES	PRO-CRYL, B66-310	SHER-CRYL, B66R300	2.0 - 4.0 MILS DFT	Vendor Supplied
3	METAL AREA LIGHT POLES	DTM BONDING PRIMER B66A50	SHER-CRYL, CLEAR BASE COLOR: SATIN BRONZETONE	2.0 - 5.0 MILS DFT	Vendor Supplied
4	METAL STRUCTURAL CANOPY COLUMNS	DTM BONDING PRIMER B66A50	SHER-CRYL, B66M351 COLOR: SW2128 LIGHT GRAY	2.0 - 5.0 MILS DFT	General Contractor
4.1	GASOLINE ISLAND CANOPIES	DTM BONDING PRIMER B66A50	SHER-CRYL, B66M351 COLOR: SW2128 LIGHT GRAY	2.0 - 5.0 MILS DFT	Vendor Supplied
4.2	CANOPY GUTTERS	DTM BONDING PRIMER B66A50	SHER-CRYL, B66M351 COLOR: SW7006 EXTRA WHITE	2.0 - 5.0 MILS DFT	Vendor Supplied
5	ARRIVE ON SITE POWDER COATED	STANDARD C3900/C4600	DMI - BRITE RED		Vendor Supplied
6	DOWNSPROUTING	DTM BONDING PRIMER B66A50	SHER-CRYL, CLEAR BASE COLOR: SATIN BRONZETONE	2.0 - 5.0 MILS DFT	Vendor Supplied
7	METAL EXTERIOR DOORS	PRO-CRYL, B66-310	SHER-CRYL, CLEAR BASE COLOR: SATIN BRONZETONE	2.0 - 4.0 MILS DFT	General Contractor
8	CONCRETE ONLY	NOT REQUIRED	NOT REQUIRED		General Contractor
8	PARKING LOT STRIPING (ONLY WHEN BLUE IS REQUIRED)	NOT REQUIRED	NOT REQUIRED		General Contractor
8	PARKING LOT STRIPING (ONLY WHEN WHITE IS REQUIRED)	NOT REQUIRED	NOT REQUIRED		General Contractor
11	METAL CANOPY DECKING	DTM BONDING PRIMER B66A50	SHER-CRYL, B66M311 COLOR: SW7006 EXTRA WHITE	2.0 - 5.0 MILS DFT	Vendor Supplied

**Speedway**

WWW.CESOINC.COM

NOT FOR CONSTRUCTION

Prepared By: **Speedway** and Construction Dept. Encl. 01-15329

**SIGNAGE PLAN**

**REBUILD #2360**  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION: C4600-V2.0

PROJECT ID NO.: 65791

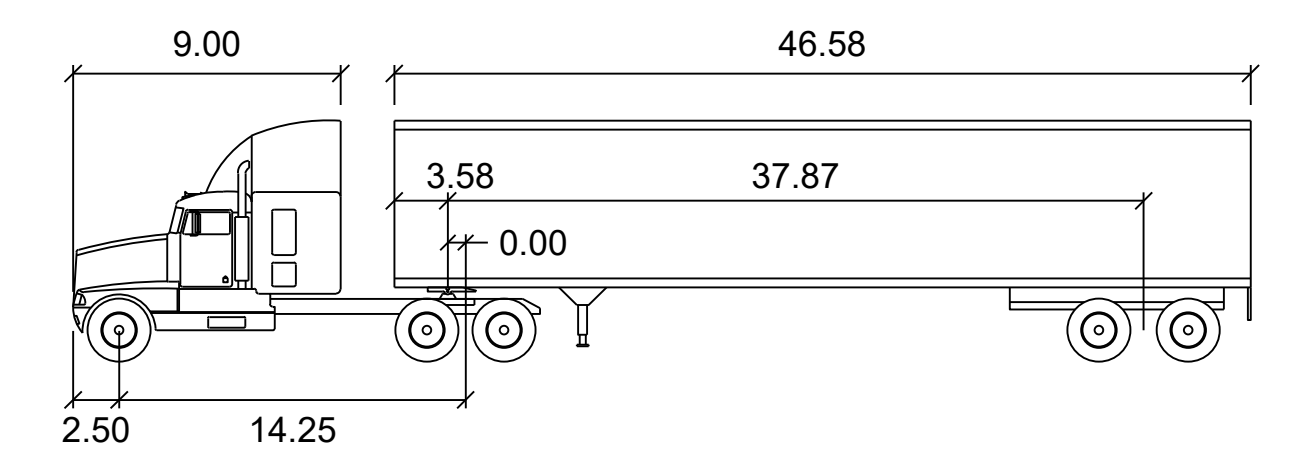
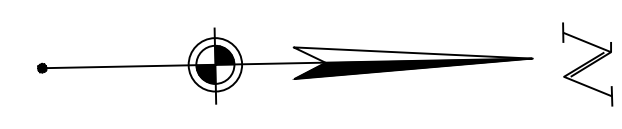
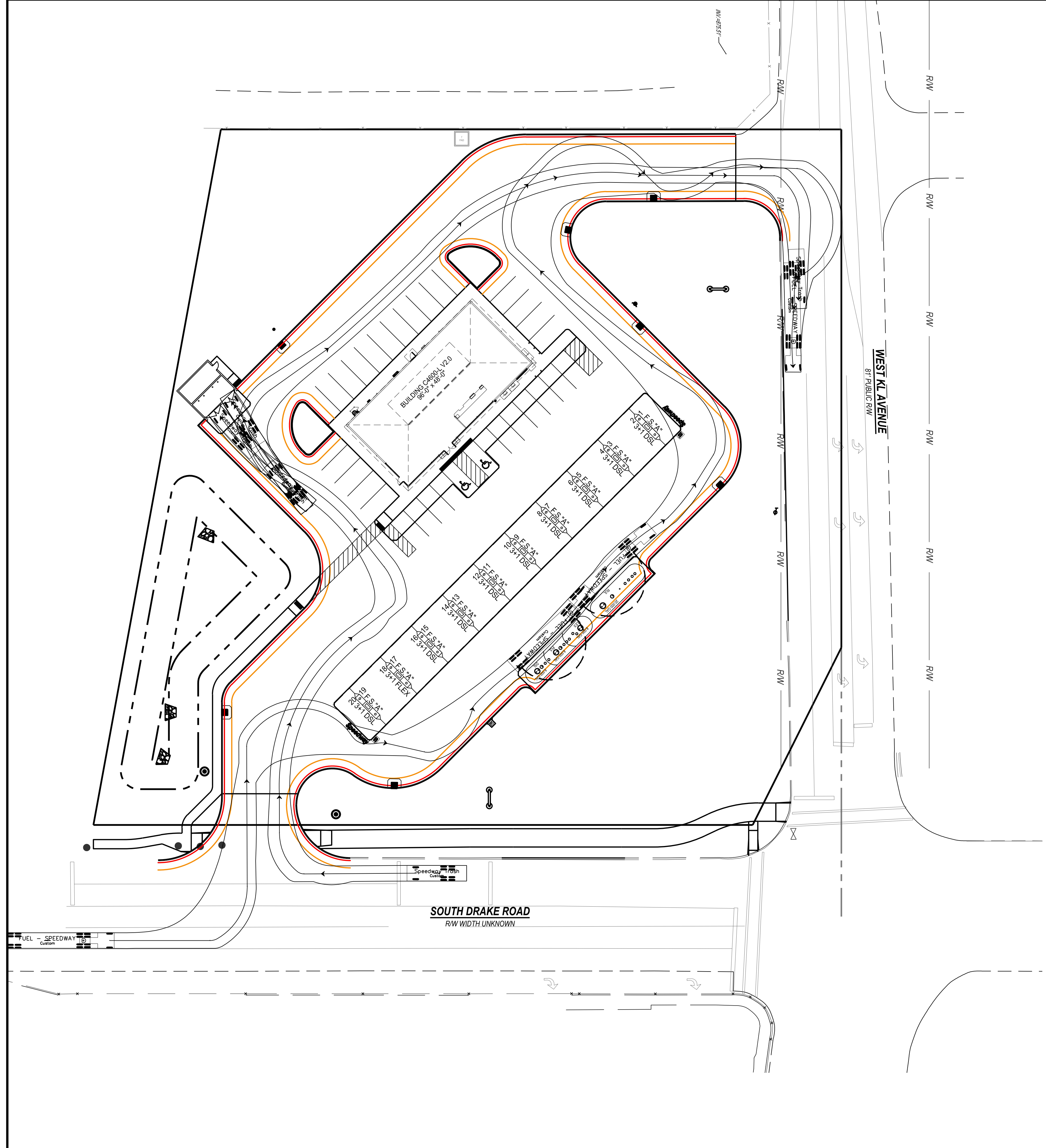
SCALE: 0 15 30

GRAPHIC SCALE IN FEET

DESIGN TEAM	DATE
DGNR, J. STEIGERWALD	11/23/20
P.MGR, J. HIGH	11/23/20
R.VWR, R. PAPOTTA	11/23/20

DRWG. NO. **SS**

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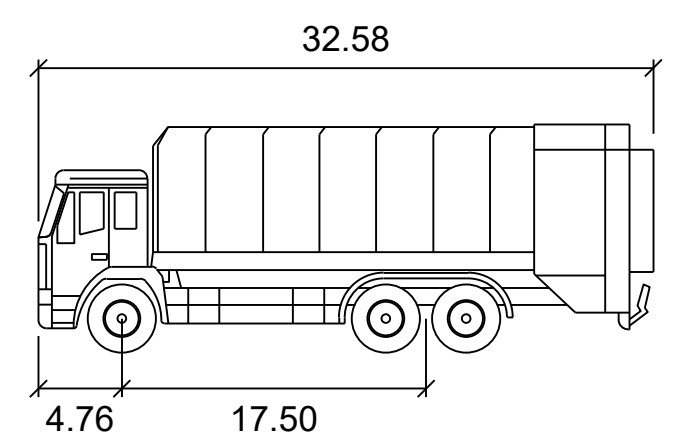


**FUEL - SPEEDWAY** feet

Tractor Width	: 8.50	Lock to Lock Time	: 6.0
Trailer Width	: 8.50	Steering Angle	: 26.0
Tractor Track	: 8.50	Articulating Angle	: 70.0
Trailer Track	: 8.50		

**LEGEND**

- 1 FT OFFSET FROM FACE OF CURB
- 5 FT OFFSET FROM FACE OF CURB



**Speedway Trash** feet

Width	: 8.50
Track	: 8.11
Lock to Lock Time	: 6.0
Steering Angle	: 38.3

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NOT FOR CONSTRUCTION

**Speedway**  
Prepared By: Speedway and Construction Dept.  
Ench. OH 45329

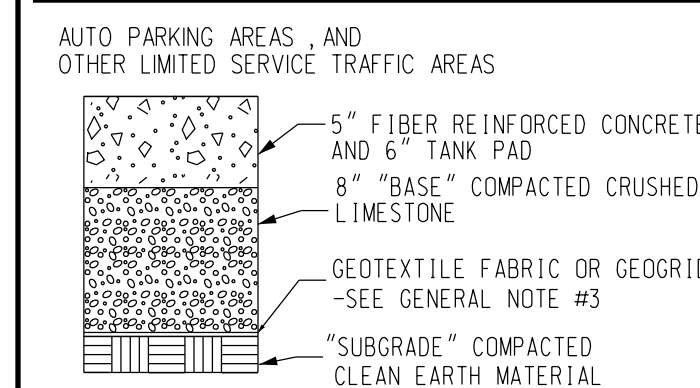
NO.	REVISIONS	DATE
1	CHANGED DRAWING TO REPERKING OUT	11/20/21
2	FEEDBACK REVISED WITH CURRENT PROPOSED PLANS	JAN 18/22
3	REBIDDED PLANS	APR 20/22

**CIRCULATION PLAN**  
**REBUILD #2360**  
1250 SOUTH DRAKE RD  
KALAMAZOO COUNTY  
KALAMAZOO, MI

BLDG TYPE & VERSION	C4600-V2.0
PROJECT ID NO.	65791
SCALE	0 15 30 GRAPHIC SCALE IN FEET
DESIGN TEAM	DATE
DGNR. J. STEIGERWALD	11/23/20
P.MGR. J. HIGH	11/23/20
R.WWR. R. PAPOTTO	11/23/20
DRWG. NO.	CR

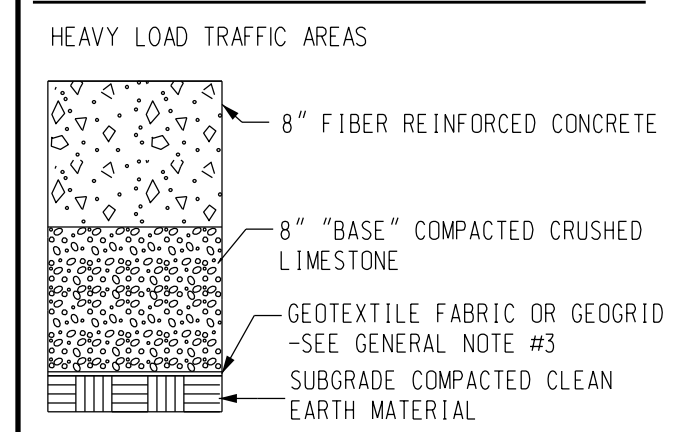
## CONCRETE PAVEMENT INSTALLATION AND MAINTENANCE

### NORMAL STRENGTH PAVEMENT DETAIL



- CONCRETE PAVING MAINTENANCE NOTES:**
1. CONTRACTOR SHALL REMOVE CONCRETE FROM FAILED AREA BY SAWCUTTING TO FULL DEPTH ORIGINAL SLAB AND REMOVING THE EXISTING CONCRETE. THE PATCH SHALL BE A MINIMUM OF 3' WIDE AND RECTANGULAR IN SHAPE. IT SHALL EXTEND TO THE NEXT JOINT IF WITHIN 3'.
  2. ANY JOINTS WHICH ARE REMOVED SHALL BE REPLACED IN THE SAME LOCATION AS THE OLD JOINTS - SEE JOINT DETAILS.
  3. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL DEBRIS PER LOCAL, STATE, AND FEDERAL REGULATIONS.
  4. SEE NORMAL STRENGTH PAVEMENT, HIGH STRENGTH PAVEMENT DETAILS FOR FULL DEPTH PATCH REQUIREMENTS.

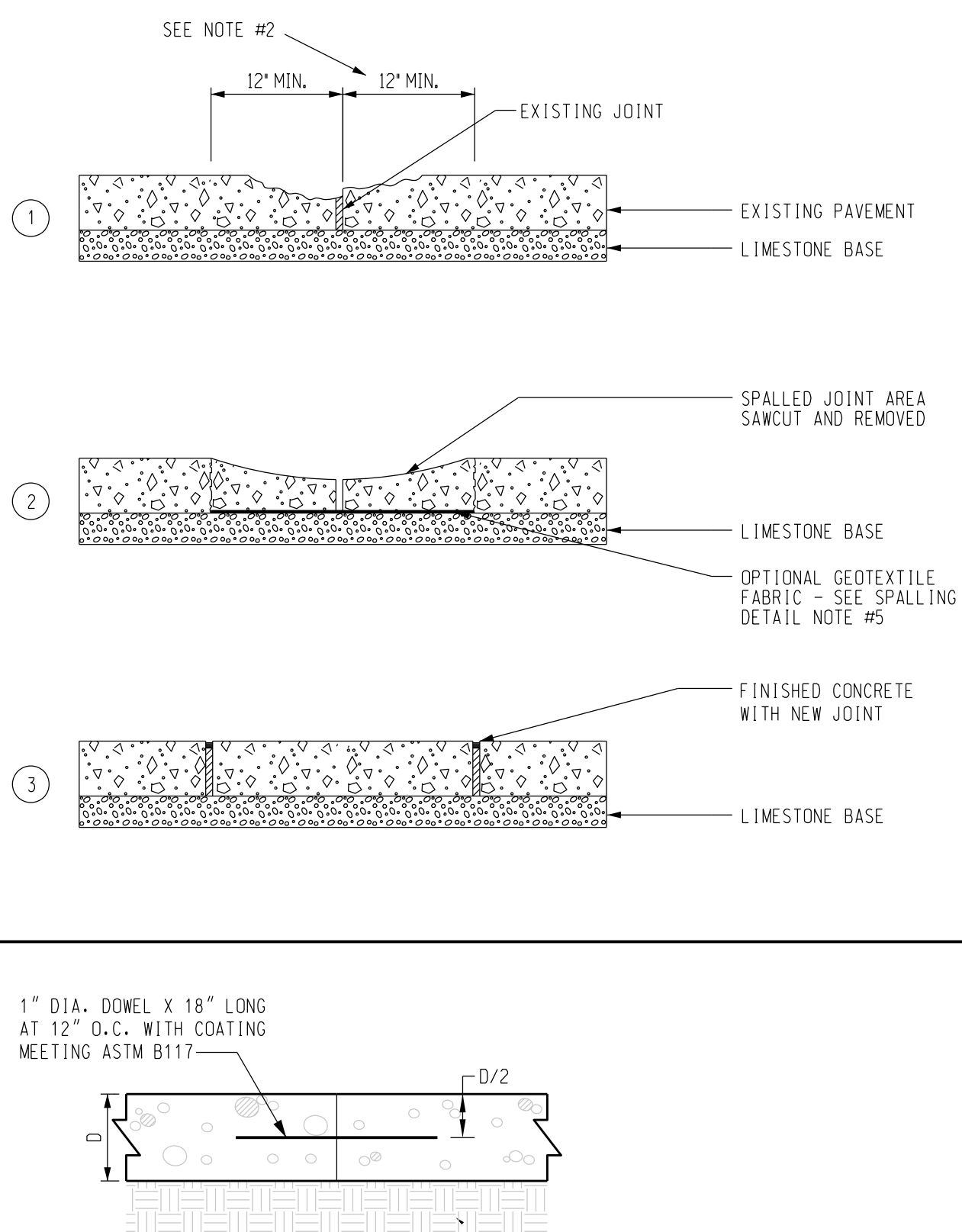
### HIGH STRENGTH PAVEMENT DETAIL



- PAVING EXECUTION NOTES:**
1. LOCATE AND INSTALL CONSTRUCTION, ISOLATION, AND EXPANSION JOINTS AS INDICATED OR REQUIRED.
  2. PLACE CONCRETE IN A CONTINUOUS OPERATION WITHIN PLANNED JOINTS OR SECTIONS. DO NOT ADD WATER TO ADJUST SLUMP.
  3. FLOAT SURFACES TO TRUE PLANES WITHIN A TOLERANCE OF 1/4 INCH IN 10 FEET.
  4. TOOL EDGES AND JOINTS TO A RADIUS OF 1/4 INCH FOR SIDEWALKS.
  5. ALLOW CONCRETE PAVING TO CURE FOR A MINIMUM OF 28 DAYS AND DRY BEFORE STARTING PAVEMENT MARKING.
  6. APPLY TRAFFIC PAINT WITH MECHANICAL EQUIPMENT TO A MINIMUM WET FILM THICKNESS OF 15 MILS.
  7. PROTECT CONCRETE PAVING FROM DAMAGE. EXCLUDE TRAFFIC FROM PAVING FOR AT LEAST 14 DAYS.

### SPALLING DETAIL

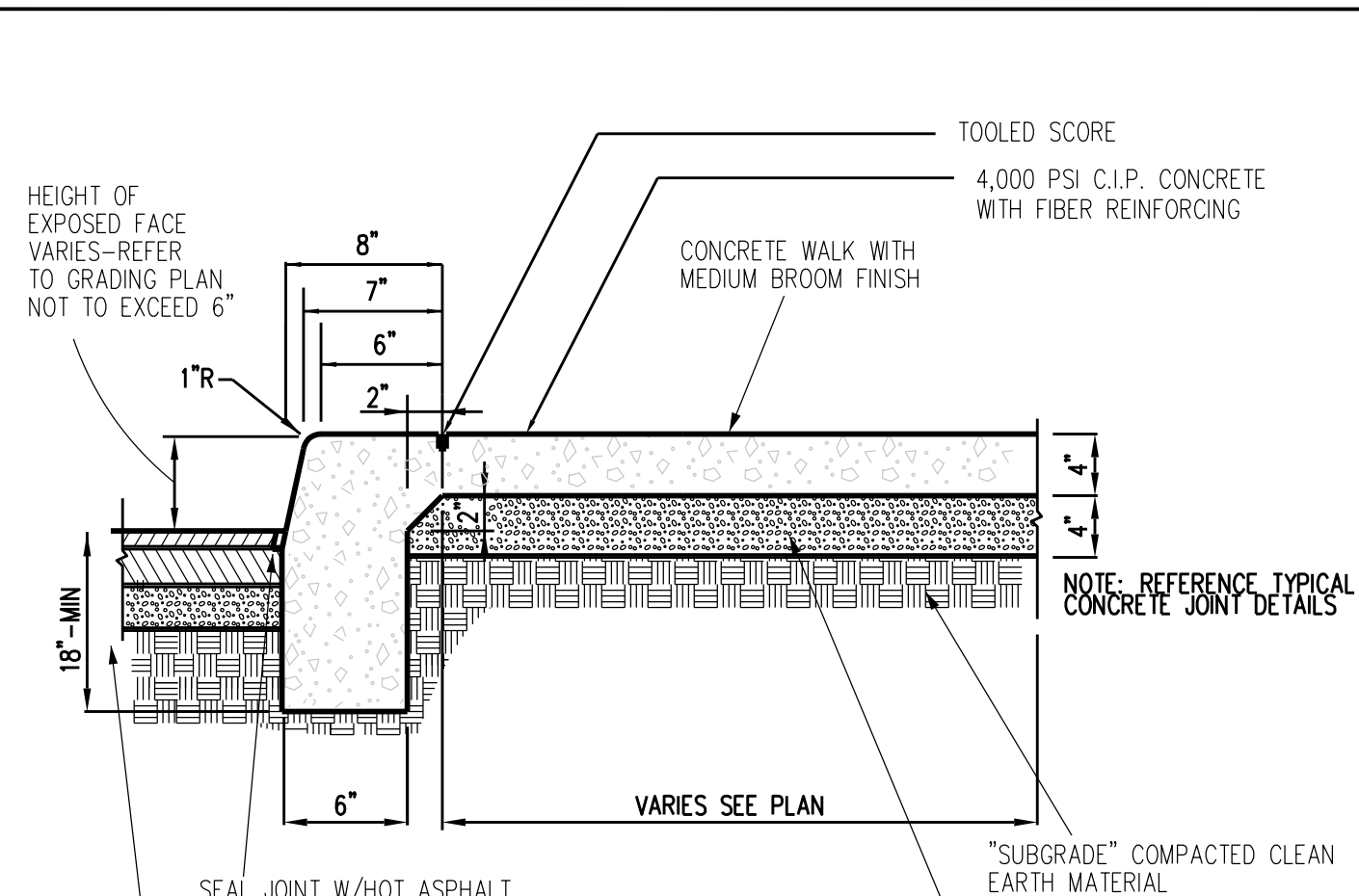
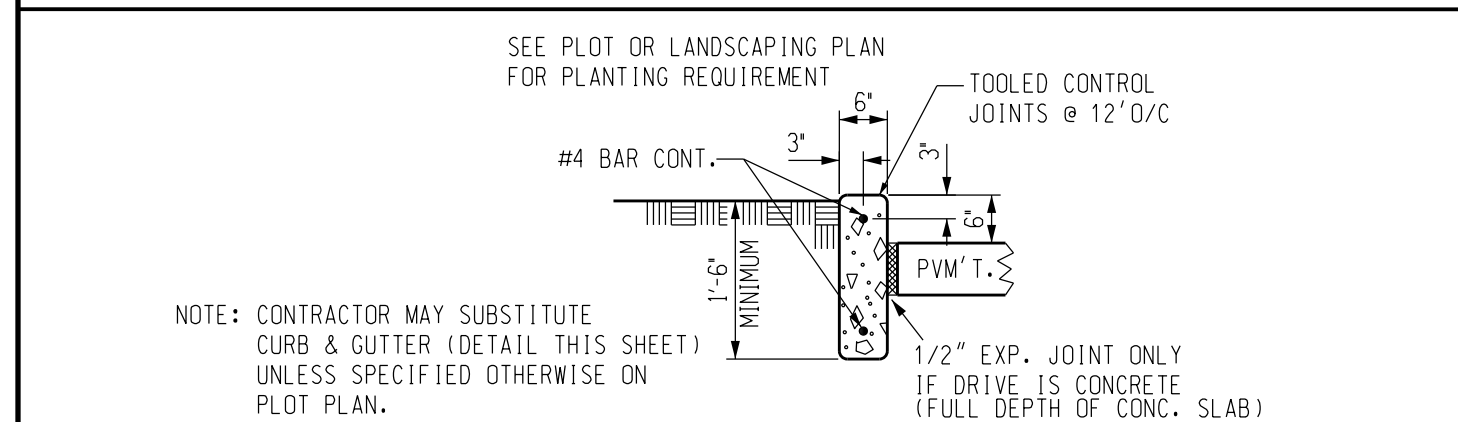
- SPALLING DETAIL NOTES:**
1. SPALLING ALONG JOINTS SHALL BE TREATED WITH REPAIR SIMILAR TO THAT OF A FULL DEPTH PATCH.
  2. SPALLED CONCRETE SHALL BE REMOVED IN AN AREA NO LESS THAN ONE FOOT FROM THE JOINT BUT LARGE ENOUGH TO REMOVE ALL UNSOUND CONCRETE AND REMOVED TO A DEPTH GREAT ENOUGH TO REACH SUITABLE SUBGRADE.
  3. THE CONCRETE SHALL BE REPLACED PER THE FULL DEPTH PATCH DETAIL AND LOCAL AGENCY HAVING JURISDICTION.
  4. THE JOINT SHALL BE REPLACED PER THE JOINT DETAIL TO COINCIDE WITH THE LOCATION OF THE OLD JOINT. THE JOINT SHALL EXTEND THE FULL DEPTH OF THE NEW PATCH.
  5. GEOTEXTILE FABRIC (NEEDS TO BE DETERMINED BY OWNER'S REPRESENTATIVE) 8 OZ/SQ YD NEEDLE PUNCHED NON WOVEN, NEEDLE PUNCHED FABRIC



### CONCRETE PAVEMENT JOINT DETAILS

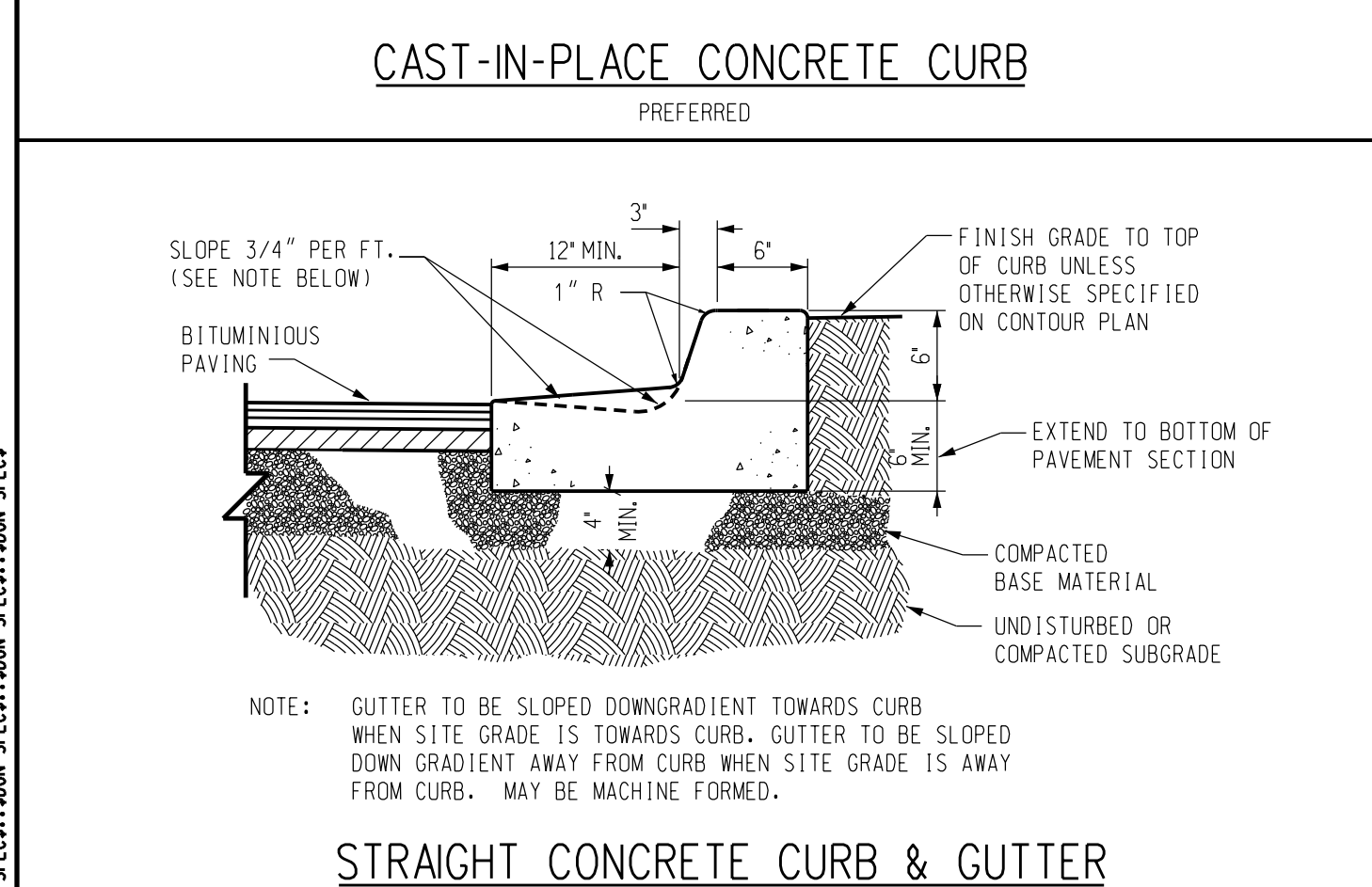
TYPE OF JOINT	USE DESCRIPTION	DETAIL
A. CONTROL JOINT 1. SAWN 2. PREMOULD STRIP 3. HAND FORMED AND SAWN AT CRITICAL JOINTS	USE SPECIFICATION ACI 360R-06 TO PLACE CONTROL JOINTS SO AS TO UNIFORMLY DIVIDE SLABS INTO NOMINAL 12' x 12' (NORMAL STRENGTH) OR 16' x 16' (HIGH STRENGTH) SECTIONS. (SEAL CONTROL JOINTS ONLY IF SPECIFIED ON DRAWINGS OR BY OWNER'S REPRESENTATIVE.)	
B. EXPANSION JOINT (ISOLATION JOINT)	PLACE AGAINST CONCRETE TANK SLAB, ADJUTING ROADWAY PAVEMENTS AND STRUCTURES (BUILDINGS, CANOPY COLUMNS, CATCH BASINS, ETC.)	
C. CONSTRUCTION JOINT	CONSTRUCTION JOINTS MUST BE APPROVED BY OWNER'S REPRESENTATIVE. PLACE WHEN CONTINUOUS POUR OPERATIONS ARE SUSPENDED FOR MORE THAN 30 MINUTES.	

### CONCRETE CURBS



**INTEGRAL CURB AND WALK**  
NOTE: EXPOSED FACE OF CURB AND 4" WIDE STRIPE ATOP OF CURB ARE TO BE PAINTED WARNING YELLOW

### STRAIGHT CONCRETE CURB & GUTTER



## ASPHALT PAVEMENT INSTALLATION AND MAINTENANCE

### ASPHALT SEALING

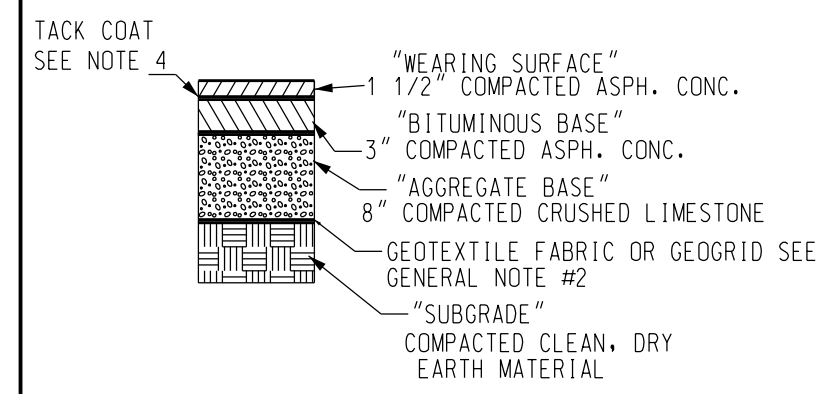
1. SURFACE CLEANING:  
THE SURFACE TO BE SEALED SHALL BE FREE FROM DIRT AND OTHER FOREIGN MATTER. ANY ACCUMULATIONS OF OIL OR GREASE SHALL BE CLEANED OFF THE PAVEMENT WITH DETERGENT SOLUTION. THE RESIDUE OF WHICH SHALL BE THOROUGHLY WASHED AWAY WITH CLEAN WATER BEFORE SEALANT IS APPLIED.
2. SEALING:  
THE SEAL COATING MATERIAL SHALL BE COMPRISED OF A RUBBERIZED COAL-TAR PITCH EMULSION AND SHALL MEET OR EXCEED FEDERAL SPECIFICATION R-47-355B. SUPPLIED IN CONCENTRATED FORM, IT SHALL BE DILUTED A MINIMUM OF 15% AND A MAXIMUM OF 25% WITH FRESH, CLEAN WATER. THE SEALANT MATERIAL SHALL CONTAIN 5-6 LBS. PER GALLON OF FINE, CLEAN, DRY SILICA SAND MEETING THE FOLLOWING GRADATION:

SIEVE SIZE	% PASSING
#16	100
#30	80-100
#50	10-60
#100	0-5

THE SEALANT SHALL BE APPLIED TO THE PAVEMENT IN TWO COATS AT THE RATE OF 0.08 TO 0.12 GALLONS PER SQUARE YARD. A LATEX ADDITIVE MAY ALSO BE ADDED TO THE SEALANT TO ALLOW FOR QUICKER DRYING TIME IN THOSE AREAS SPECIFIED BY OWNER'S REPRESENTATIVE.

### NORMAL STRENGTH PAVEMENT

PARKING AREAS, AND OTHER LIMITED SERVICE TRAFFIC AREAS  
GRANULAR BASE (PREFERRED)



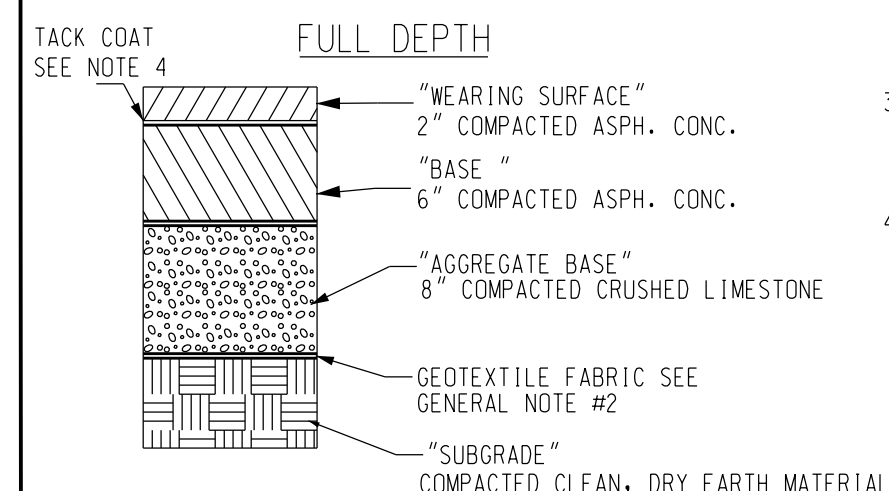
- ASPHALT PAVEMENT GENERAL NOTES:**
1. ALL WORK SHALL BE IN CONFORMANCE WITH OWNER'S SPECIFICATIONS FOR ASPHALTIC CONCRETE PAVING.
  2. A GEOTEXTILE FABRIC OR GEOGRID IS ONLY NEEDED WHEN THE GEOTECHNICAL REPORT AND/OR A GEOTECH EXPERT REQUIRES IT FOR THE SPECIFIC SITE'S SOIL CONDITIONS.
  3. FOR SUBSURFACE DRAINAGE OR STABILITY ISSUES DURING CONSTRUCTION (UNDER DIRECTION BY GEOTECH EXPERT):  
A. SUBSURFACE DRAINAGE ISSUE - REFER TO GUIDELINES FOR DRAINAGE ISSUES TO DERIVE ACCEPTABLE OPTIONS.  
B. SUBSURFACE STABILITY ISSUE - INSTALL GEOGRID PER GEOTECH EXPERT RECOMMENDATION.

### ASPHALT PAVEMENT MAINTENANCE NOTES:

1. CONTRACTOR SHALL REMOVE ASPHALT FROM FAILED AREA BY SAWCUTTING A RECTANGULAR SHAPE AT LEAST 3' BEYOND THE DAMAGED AREA. TWO OF THE EDGES MUST BE AT RIGHT ANGLES TO THE DIRECTION OF TRAFFIC.
2. SUBGRADE MUST BE REMOVED TO SOLID GROUND AND REPLACED IN ACCORDANCE WITH THE FULL DEPTH PATCH DETAIL AND OWNER'S SPECIFICATIONS.
3. CONTRACTOR IS RESPONSIBLE FOR DISPOSAL OF ALL DEBRIS PER LOCAL, STATE, AND FEDERAL REGULATIONS.
4. TACK COAT REQUIRED IF INSTALLING SEPARATE PLACEMENTS. SEE SPEEDWAY SPECIFICATIONS FOR TIMING AND TEMPERATURE GUIDELINES.

### HIGH STRENGTH PAVEMENT

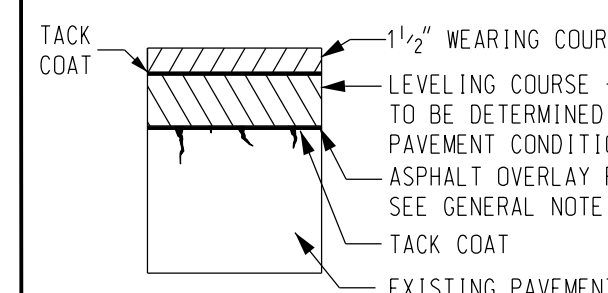
HEAVY LOAD TRAFFIC AREAS



- \* CONTRACTOR MUST REFER TO THE GEOTECH REPORT FOR PAVEMENT AND FOUNDATION DESIGN AND CONSTRUCTION RECOMMENDATIONS

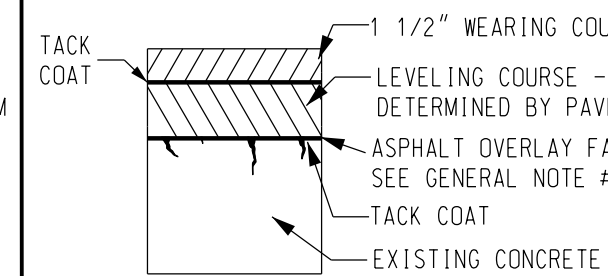
### ASPHALT OVERLAY DETAIL

#### ASPHALT SUBBASE

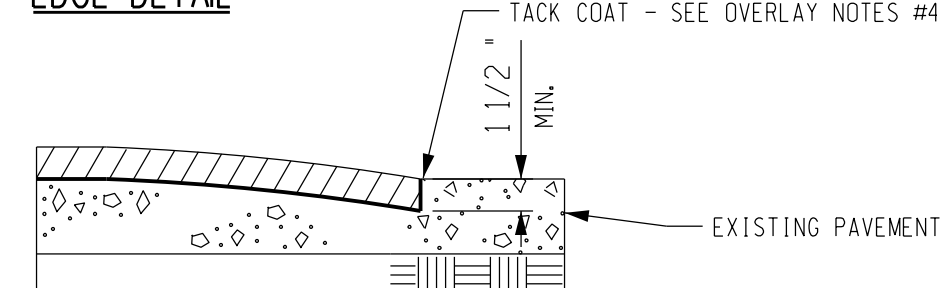


- OVERLAY DETAIL NOTES:**
1. THE OVERLAY SHALL BE PLACED IN ACCORDANCE WITH OWNER'S SPECIFICATIONS.
  2. ALL FAILED AREAS SHALL BE REPAIRED WITH PROPER PATCHES BEFORE OVERLAY IS PLACED.
  3. IF THE SURFACE IS DISTORTED, THE CONTRACTOR SHALL CONSTRUCT LEVELING COURSES TO RESTORE PROPER LINE AND CROSS SECTION.
  4. THE PAVEMENT SHALL BE THOROUGHLY CLEANED AND A TACK COAT OF ASPHALT SHALL BE APPLIED BEFORE THE OVERLAY IS PLACED.
  5. ALL VERTICAL SURFACES COMING IN CONTACT WITH THE OVERLAY SHALL BE SPRAYED OR PAINTED WITH A UNIFORM COATING OF EMULSIFIED ASPHALT IMMEDIATELY PRIOR TO PAVEMENT CONSTRUCTION.
  6. CONTRACTOR IS RESPONSIBLE FOR ENSURING PROPER SURFACE DRAINAGE. PONDING OR PUDDLING OF WATER ON THE FINAL SURFACE WILL BE UNACCEPTABLE.
  7. REPLACE IN KIND ANY EXISTING TRAFFIC LIPS AND/OR RELATED SENSOR EQUIPMENT THAT IS REMOVED OR DAMAGED DUE TO PAVEMENT MILLING ACTIVITY

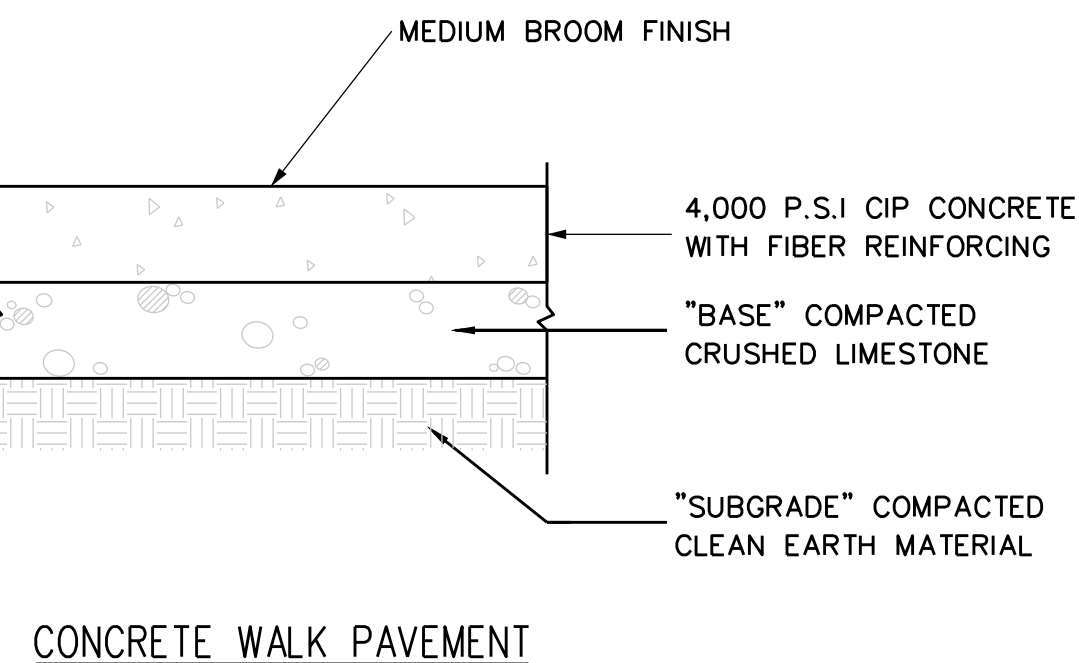
#### CONCRETE SUBBASE



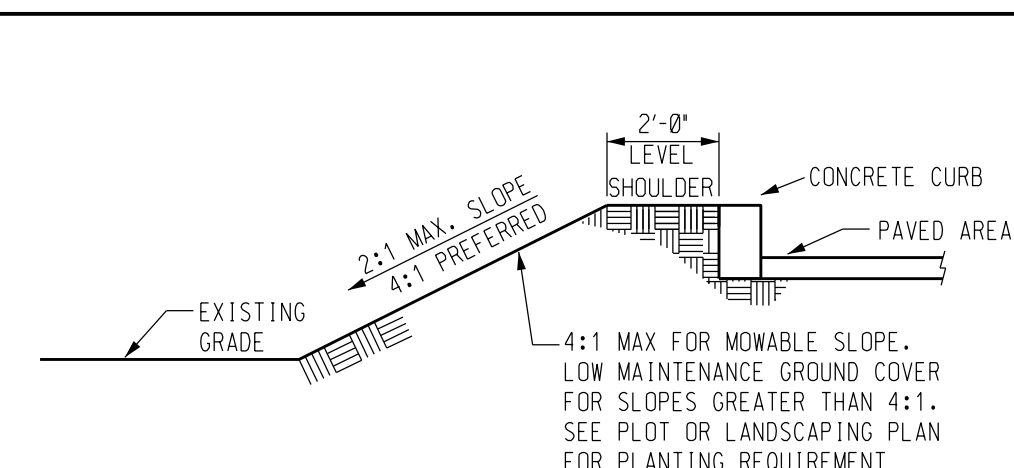
#### EDGE DETAIL



WHERE OVERLAY IS NOT SPECIFIED FOR ENTIRE EXISTING SURFACE, THE INTERFACE BETWEEN THE NEW OVERLAY AND THE OLD PAVEMENT SURFACE SHALL BE PER THE ABOVE DETAIL. FEATHERING OF THE ASPHALT TO MEET THE EXISTING PAVEMENT WILL NOT BE ACCEPTABLE.

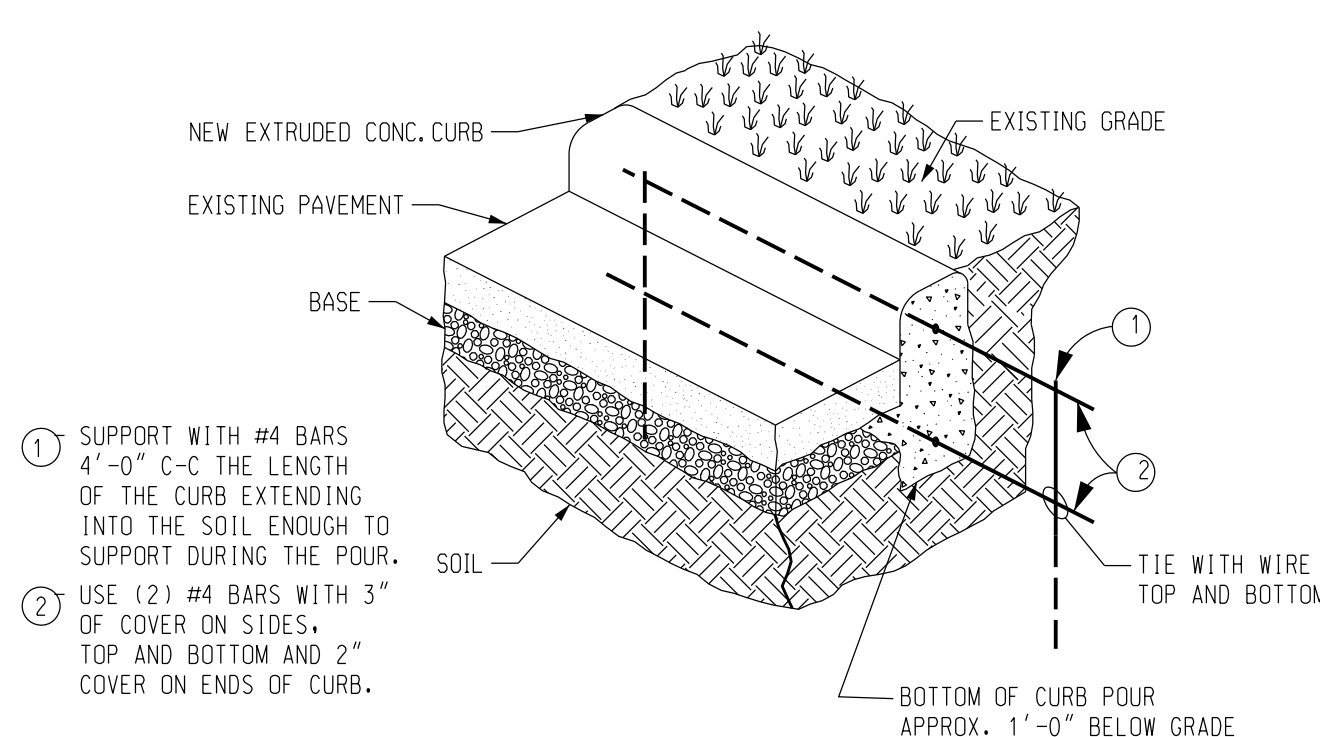


### CONCRETE WALK PAVEMENT



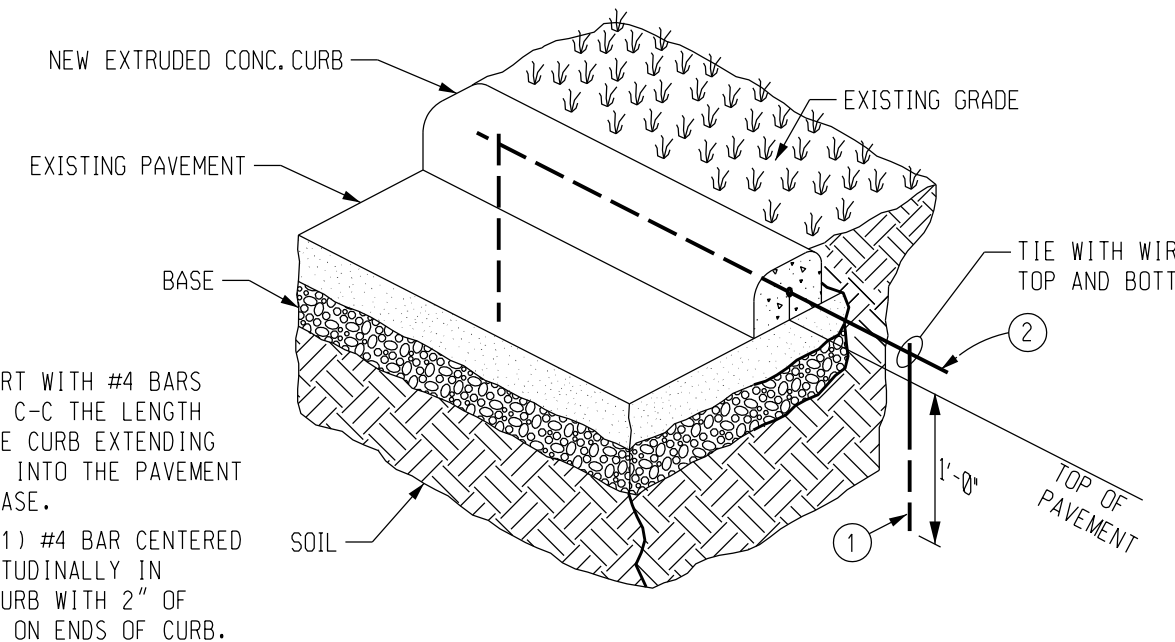
### PAVEMENT BERM

#### PREFERRED METHOD



1. SUPPORT WITH #4 BARS 4'-0" C-C THE LENGTH OF THE CURB EXTENDING INTO THE SOIL ENOUGH TO SUPPORT DURING THE POUR.
2. USE (2) #4 BARS WITH 3" OF COVER ON SIDES, TOP AND BOTTOM AND 2" COVER ON ENDS OF CURB.

#### ALTERNATE METHOD



1. SUPPORT WITH #4 BARS 4'-0" C-C THE LENGTH OF THE CURB EXTENDING 1'-0" INTO THE PAVEMENT AND BASE.
2. USE (1) #4 BAR CENTERED LONGITUDINALLY IN THE CURB WITH 2" OF COVER ON ENDS OF CURB.

#### COLD WEATHER CURB INSTALLATION

FOR USE WHEN COLD WEATHER CONDITIONS CAUSE ASPHALT PAVEMENT TO BE PLACED BEFORE THE CONCRETE CURB.

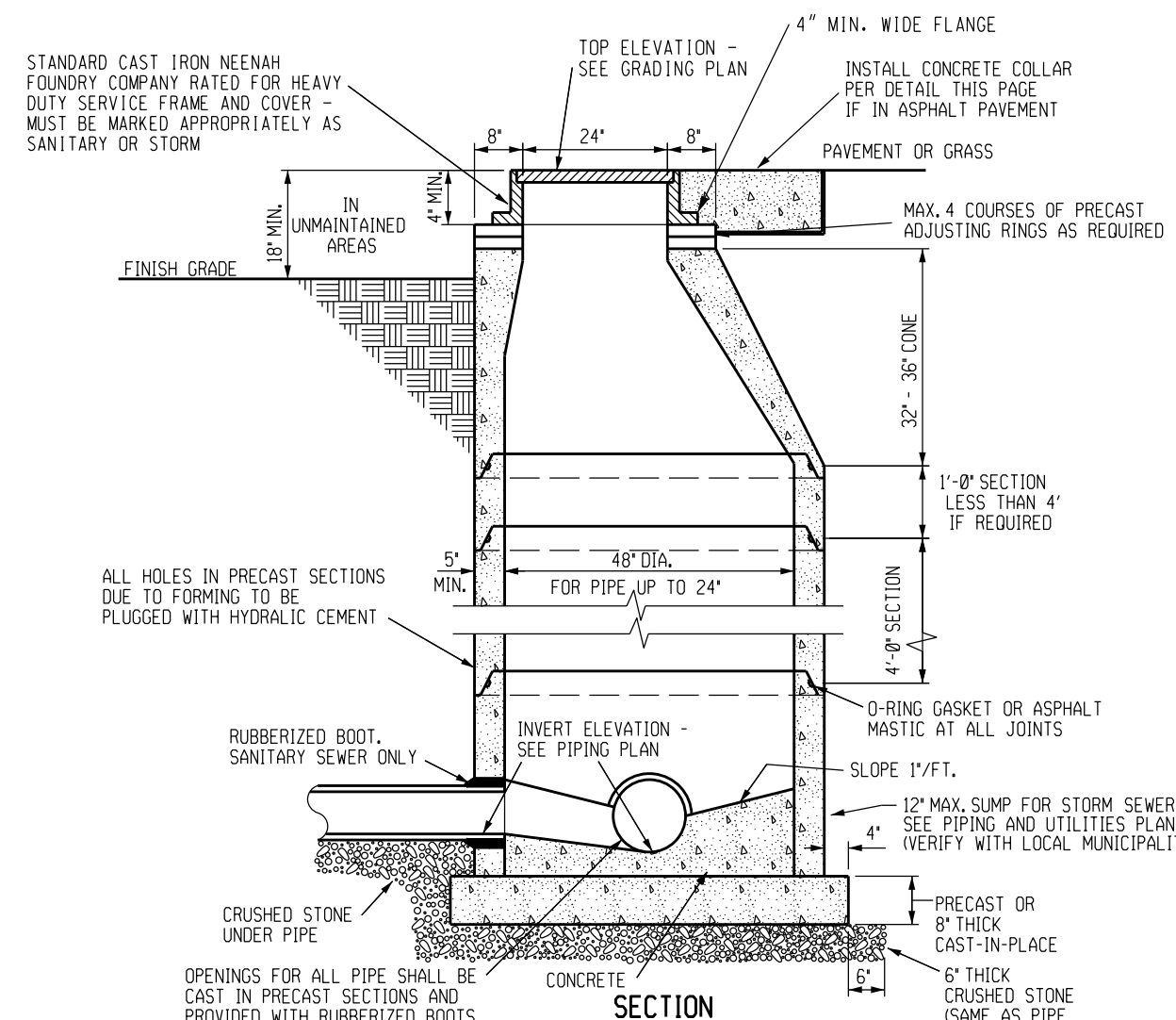
**Speedway®**  
Prepared By:  
Enron Engineering and Construction Dept.  
Enron, OH 45323

**PAVEMENT & CURBING DETAILS**

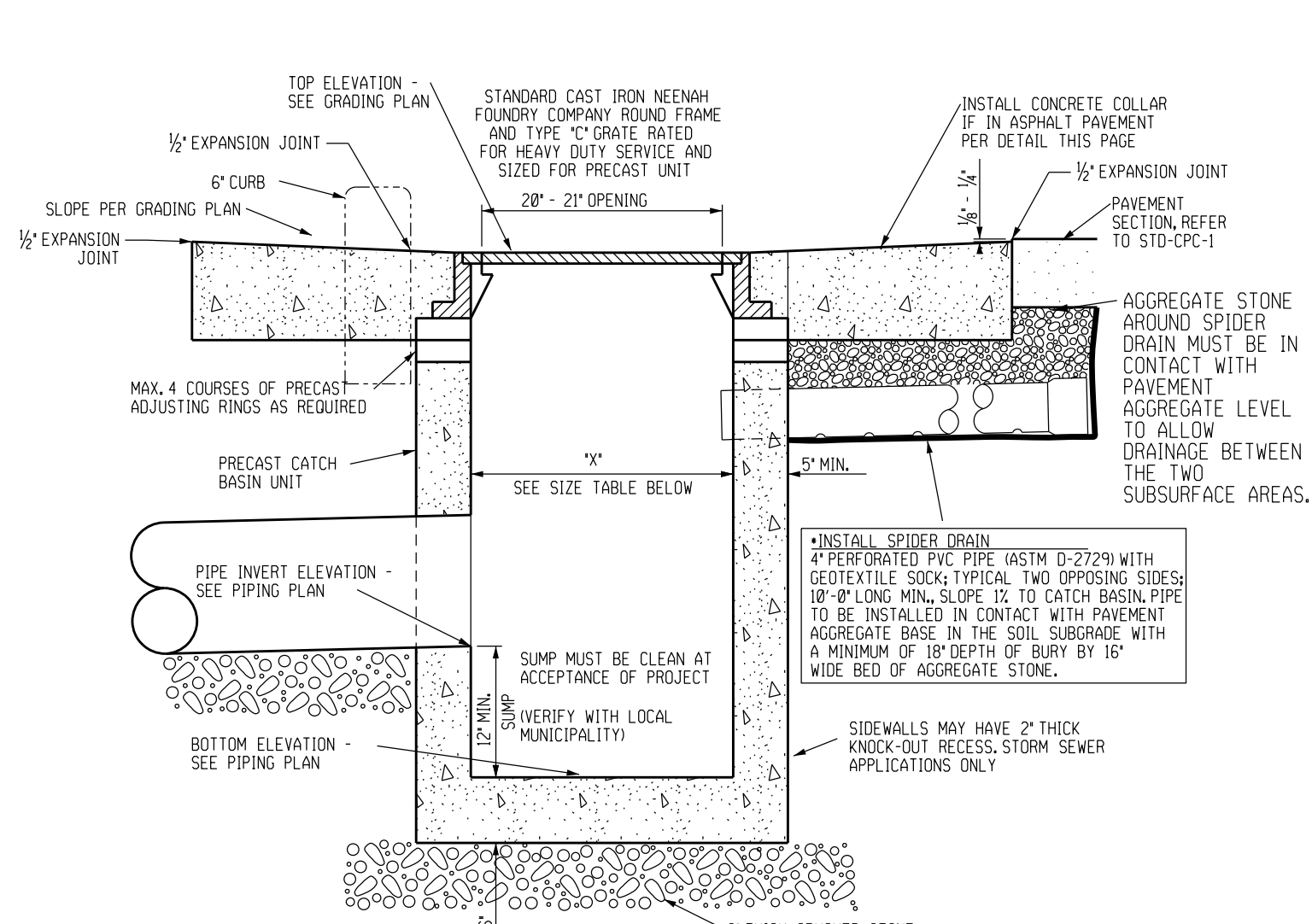
DESIGN/TEAM	DATE
DGMR. E.NICHOLAS	02-01-16
PMGR. J.FRYE	02-01-16
RWR. B.BAIRD	02-01-16

DRWG. NO. **STD-CPC-1**

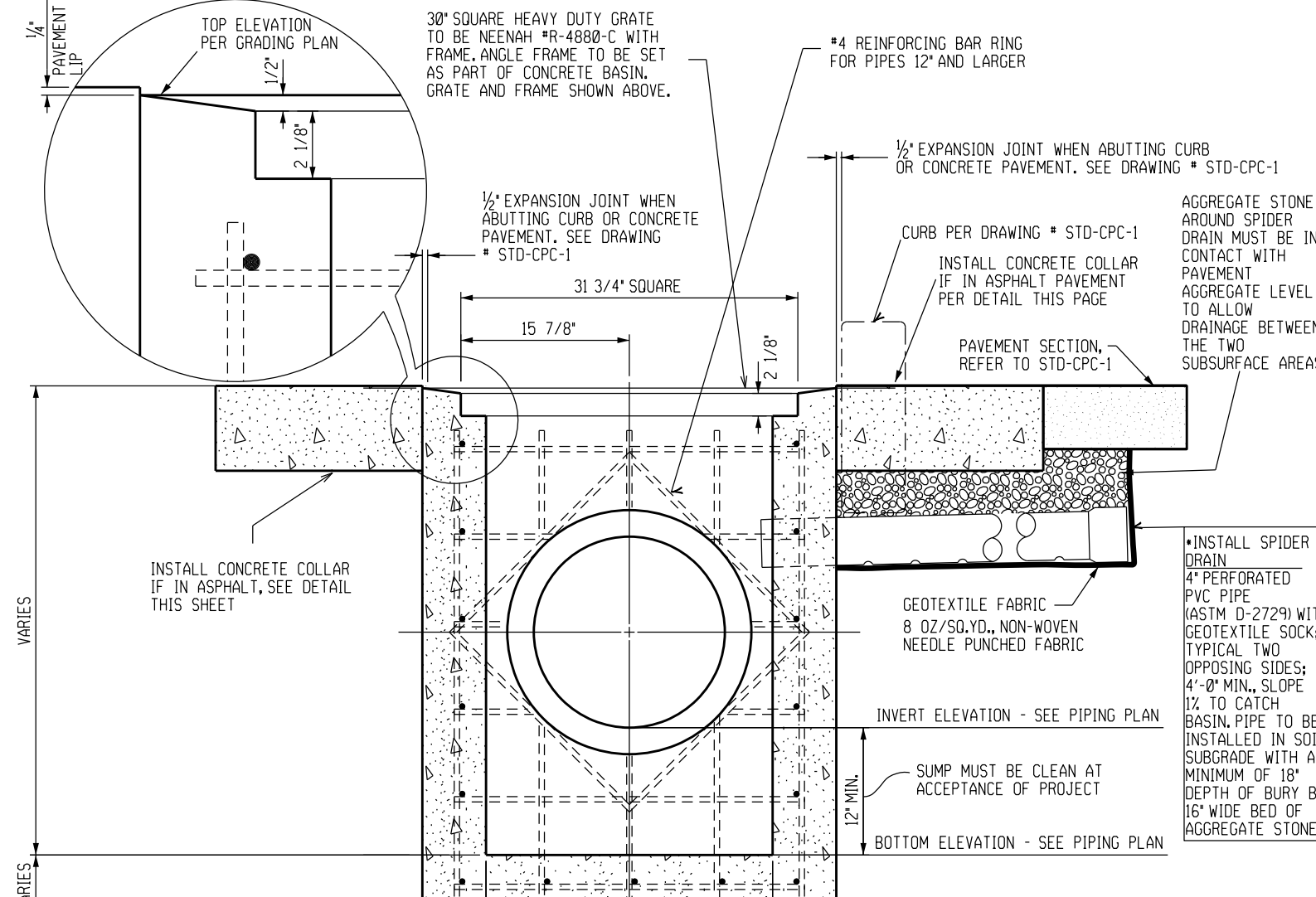
DRAINAGE & UTILITY DETAILS & SPECIFICATIONS



A STANDARD MANHOLE SCALE: NOT TO SCALE



B STANDARD DUTY CATCH BASIN TO BE USED IN NORMAL STRENGTH PAVEMENT AREAS ONLY



C HEAVY DUTY CATCH BASIN FOR OUTLETS UP TO 18\" R.C.P. TO BE USED IN HIGH STRENGTH PAVEMENT AREAS

- THE PRECAST CATCH BASIN UNIT SHALL CONFORM TO THE APPLICABLE STANDARD STATE D.O.T. SPECIFICATIONS AND ASTM C933. THE UNIT SHALL BE PROPERLY REINFORCED TO PREVENT DAMAGE DURING TRANSPORT AND INSTALLATION.
SEE GRADING AND/OR PIPING PLAN FOR TOP, INVERT, AND BOTTOM ELEVATIONS, SIZE, AND ARRANGEMENT OF INLET/OUTLET PIPING.
MORTAR ALL INLET, OUTLET PIPE OPENINGS WITH HYDRAULIC CEMENT GROUT.
ADDITIONAL MASONRY BRICK OR BLOCK WORK IS NOT PERMITTED TO MEET SURFACE ELEVATION.

SIZE TABLE. Table with columns for Largest Pipe Dia., Square C.B., and Round C.B. with values ranging from 21 to 60.

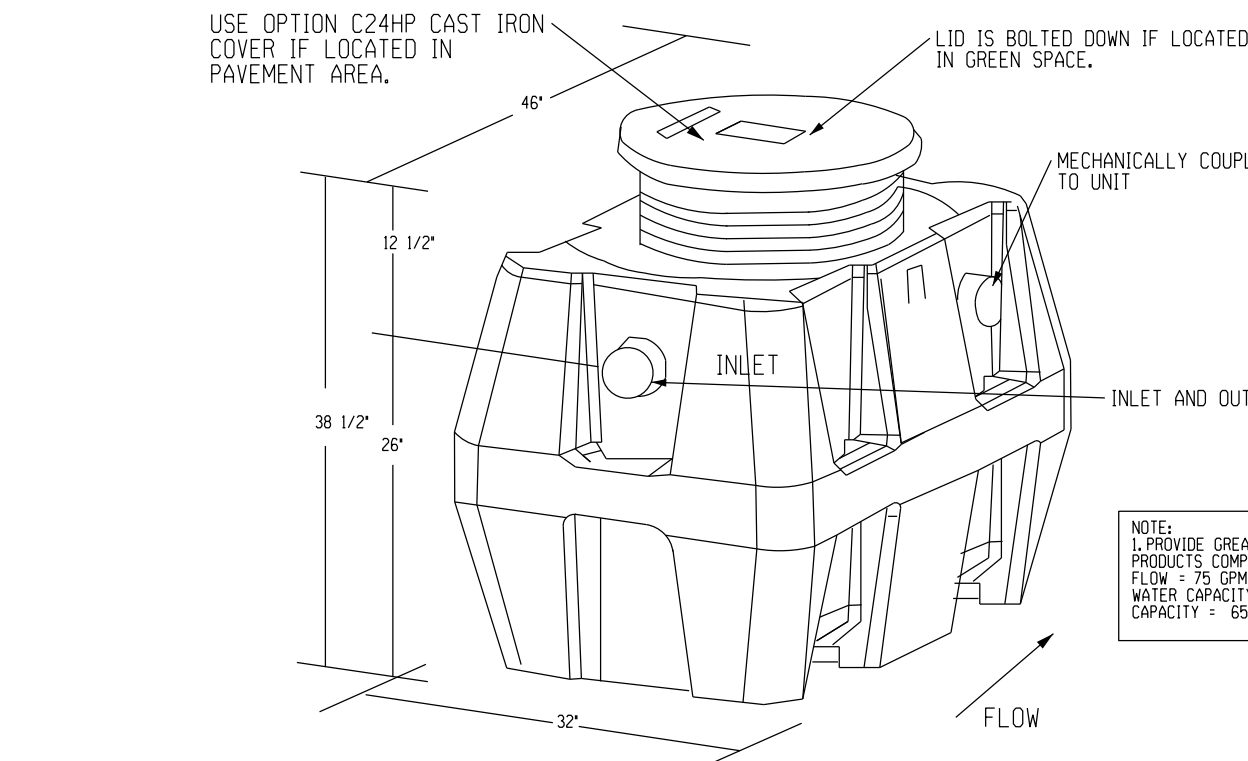
NOTE: TRAFFIC RATED REINFORCED PRECAST CONCRETE UNITS TO BE USED WITH LARGER CATCH BASINS. VERIFY STRUCTURE SIZE IS ADEQUATE FOR MULTIPLE PIPES AND PIPE ANGLES.

- GENERAL NOTES:
1. ALL STORM AND SANITARY PIPING SHALL BE THE SIZE AND TYPE SHOWN ON THE GRADING OR PIPING PLAN AND SHALL CONFORM TO THE ASTM AND AASHTO STANDARD SPECIFICATIONS LISTED HEREUNLESS OTHERWISE REQUIRED BY GOVERNING AUTHORITIES.
2. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF DIVISION 15 OF SPEEDWAY'S STANDARD SPECIFICATIONS.
3. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO STARTING ANY BELOW GRADE WORK TO LOCATE UNDERGROUND FACILITIES.
4. ALL SANITARY SEWERS SHALL HAVE 'PREMIUM' SEALED JOINTS. STORM SEWERS WITHIN 20' OF HYDROCARBON PRODUCT PIPING OR UNDERGROUND TANKS SHALL HAVE 'PREMIUM' SEALED JOINTS.
5. THE PIPE INVERT SHALL BE STRAIGHT LINE GRADED BETWEEN ELEVATIONS SHOWN ON THE PLAN.
6. PIPE SHALL BE LAID FROM THE LOWER ELEVATION TO THE HIGHER ELEVATION.
7. CONTRACTOR SHALL VERIFY EXISTING ELEVATIONS PRIOR TO BEGINNING WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE.
8. PIPING TO BE MIN. 12\" BELOW TOP OF RIGID PAVEMENT, BOTTOM OF FLEXIBLE PAVEMENT, OR FINISHED GRADE IN NON-TRAFFIC AREAS, APPLICABLE AASHTO OR AUSTI GUIDELINES SHALL OVERRIDE AND GOVERN MINIMUM COVER HEIGHTS WHEN GREATER THAN STATED ABOVE.
9. SEE DRAWING STD-SCB-1 FOR CANOPY DOWNSPOUT DRAIN DETAILS.

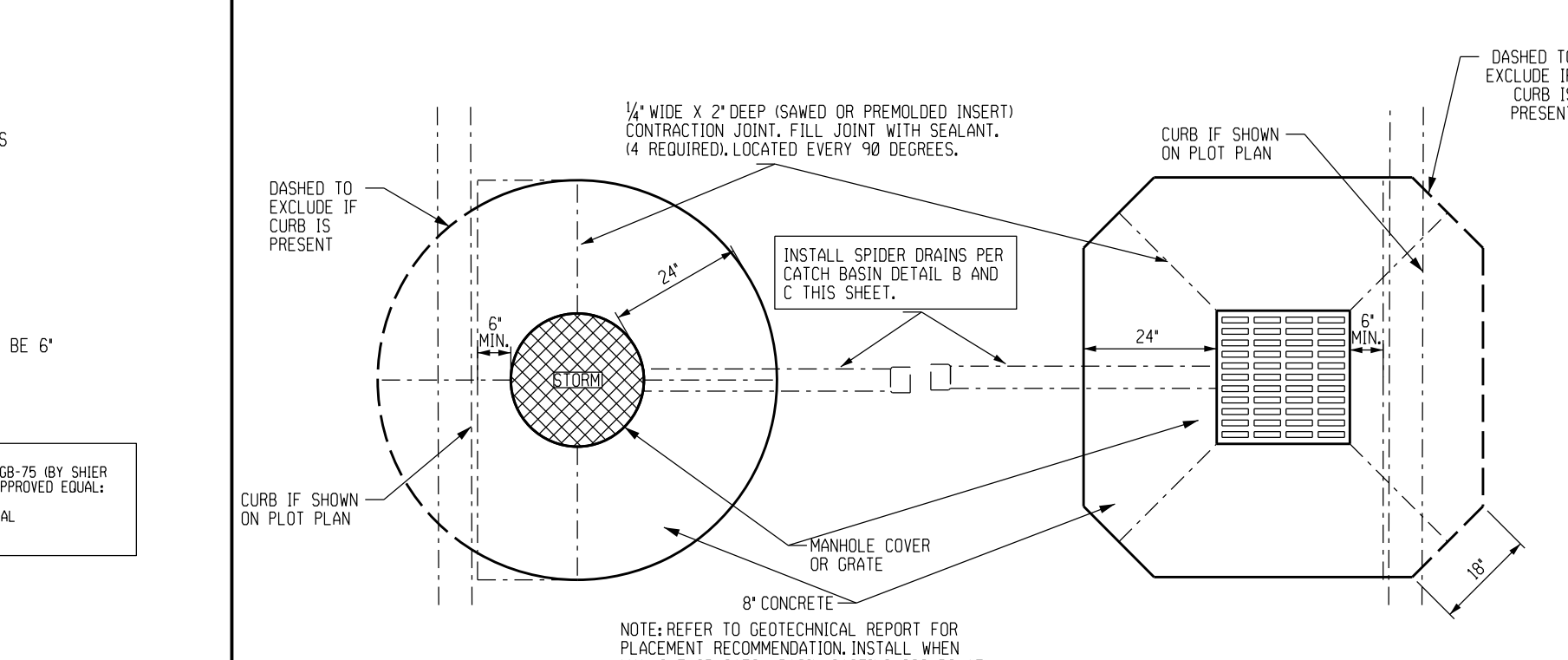
MINIMUM DEPTH OF BURY: Table with columns for Pipe Type (PVC, RCP, HDPE) and Depth values (18, 12, 18).

PIPE SLOPES: Table with columns for Minimum and Maximum Pipe Slopes (%) for various pipe types and diameters.

Table with columns for Pipe Diameter (inches) and various pipe types (POLY-VNYL CHLORIDE, SMOOTH LINED CORRUGATED HDPE, REINFORCED CONCRETE, CORRUGATED METAL PIPE, etc.) with corresponding values.

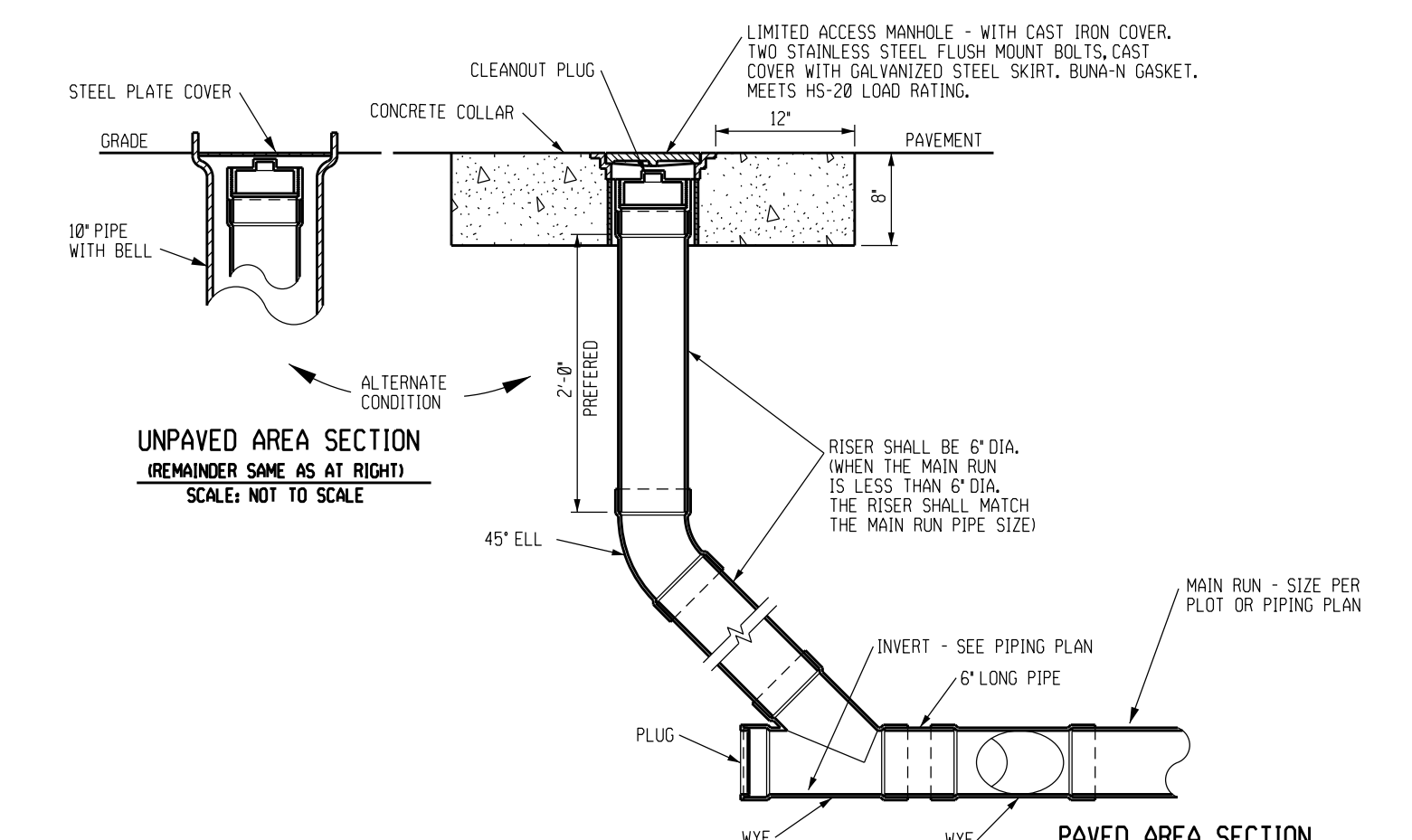


E EXTERIOR GREASE INTERCEPTOR SCALE: NOT TO SCALE

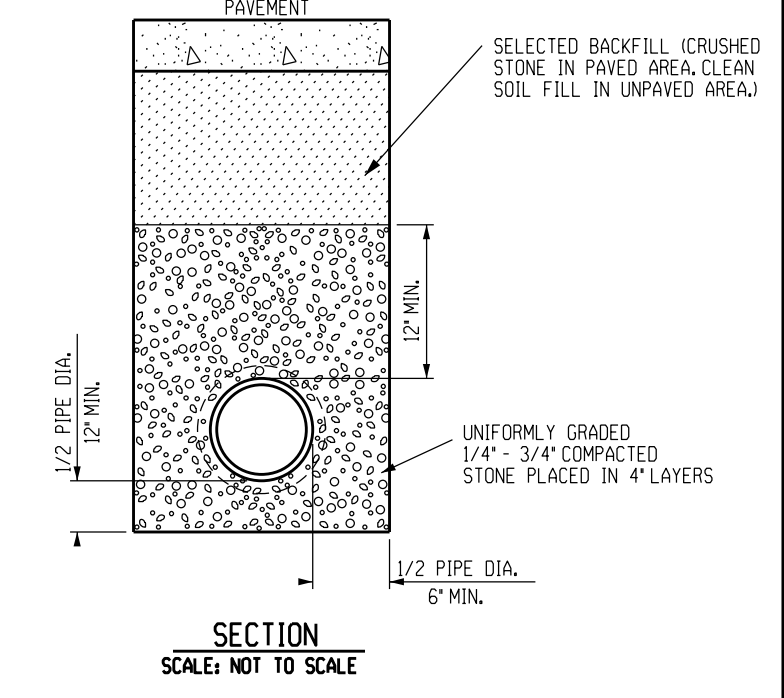


F CONCRETE COLLAR - ROUND GRATE & FRAME SCALE: NOT TO SCALE

CONCRETE COLLAR - SQUARE GRATE & FRAME SCALE: NOT TO SCALE



G UTILITIES PIPE CLEAN-OUT SCALE: NOT TO SCALE



H PIPE BEDDING SCALE: NOT TO SCALE

PIPE SPECIFICATIONS

Table with columns for Type of Pipe, W Values, Sizes Permitted, Service and Use, Pipe Specification, Installation Specification, Joint Specification, and Premium Joints. Lists various pipe materials and their applications.

REVISIONS table with columns for No., Description, and Date. Lists updates to the drawing.

SERVICE STATION DRAINAGE & UTILITY DETAIL & SPECIFICATIONS STORE NUMBER - STREET CITY, STATE

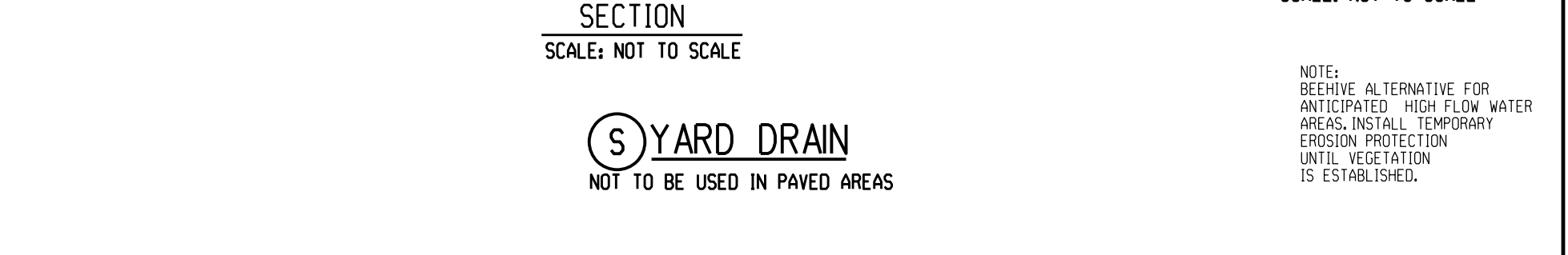
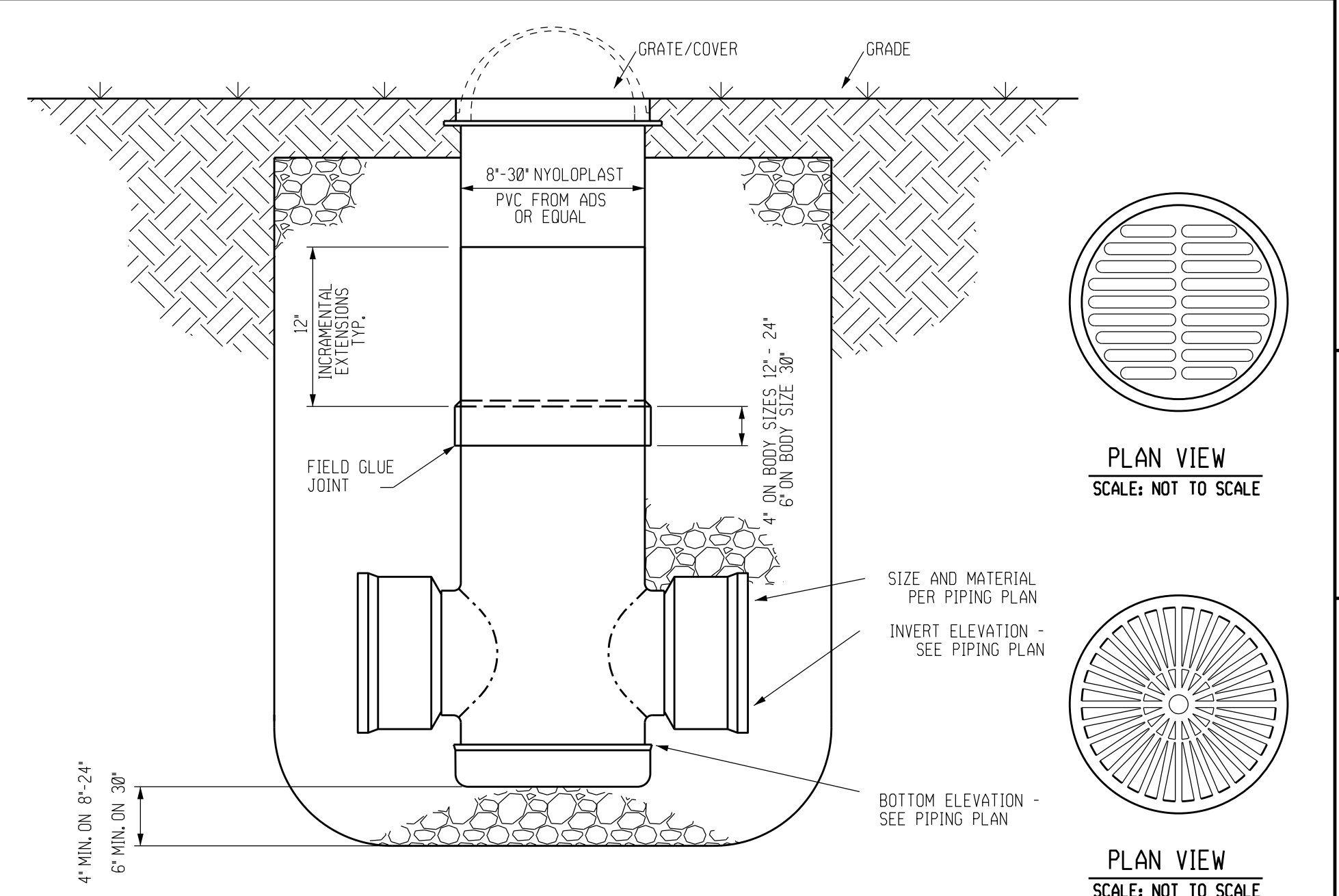
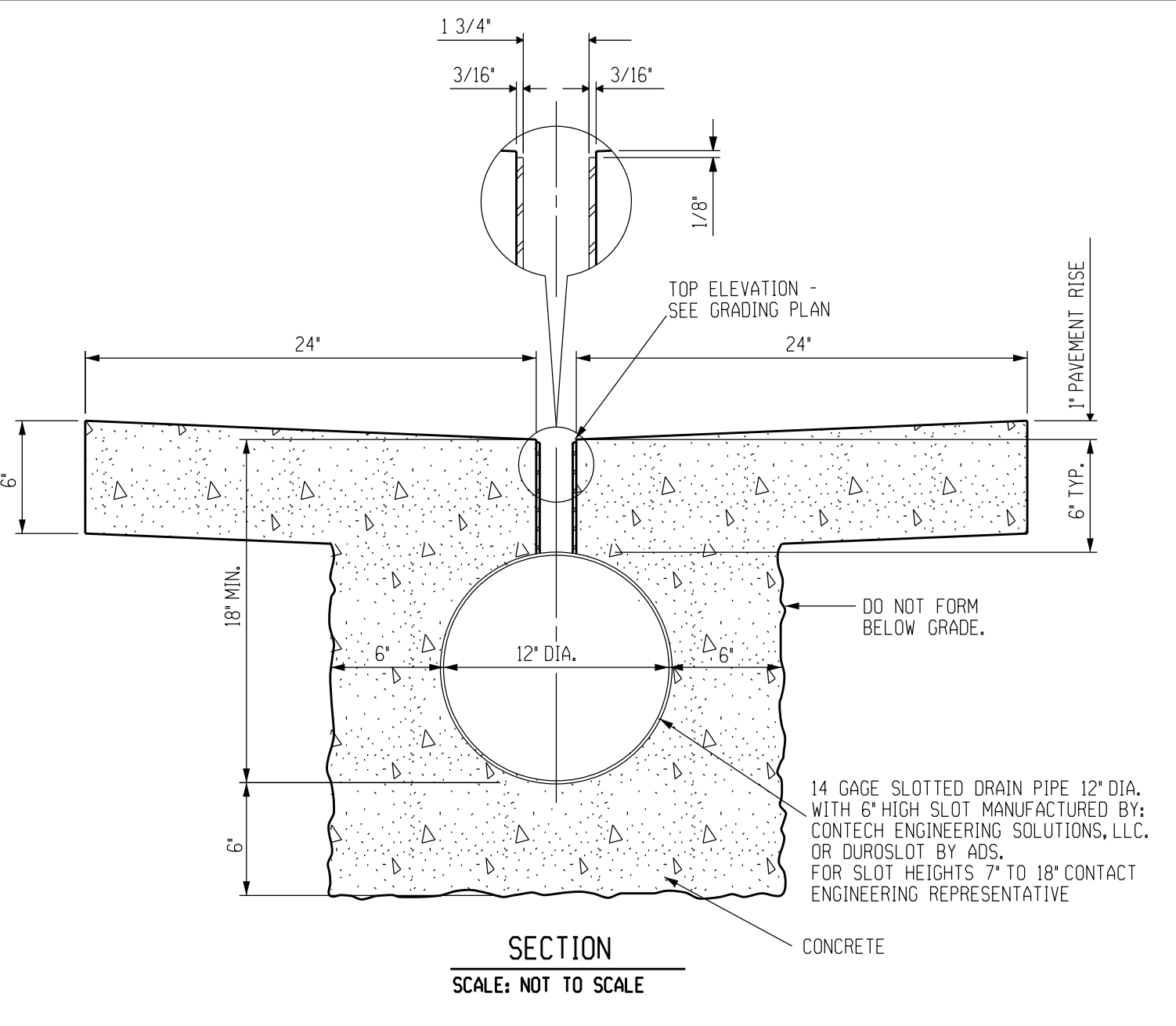
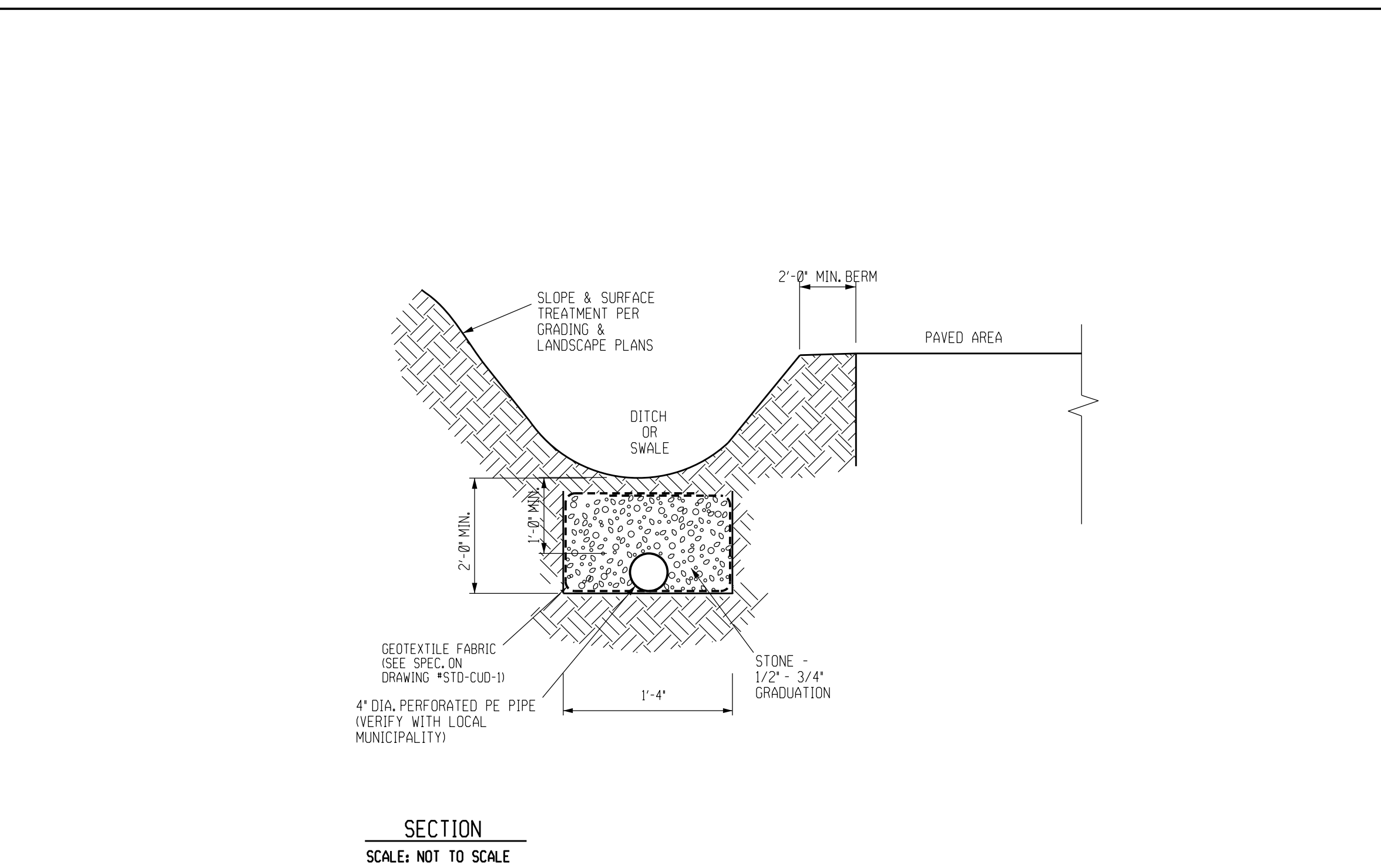
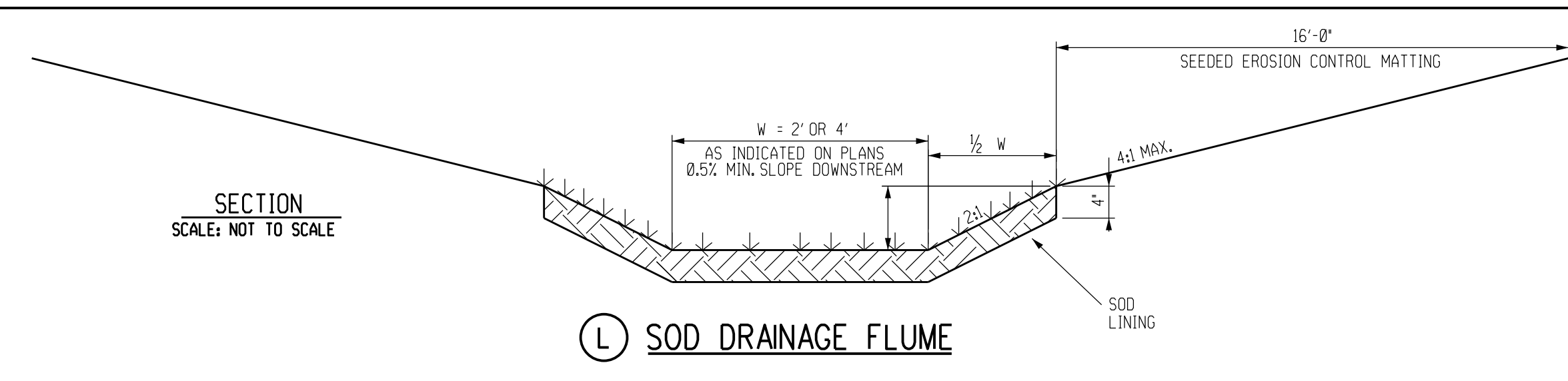
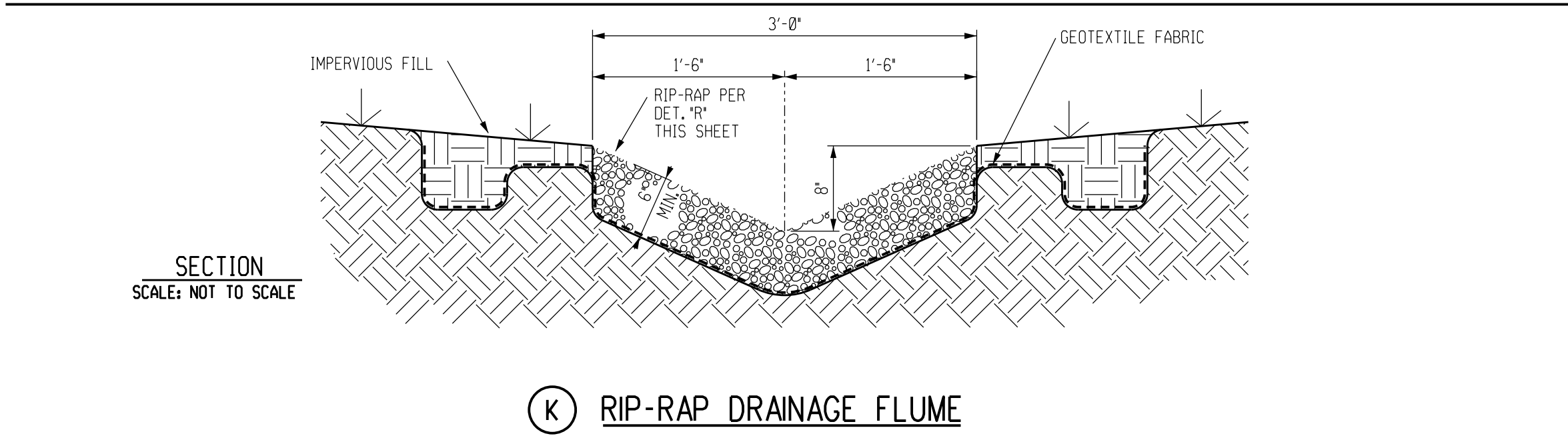
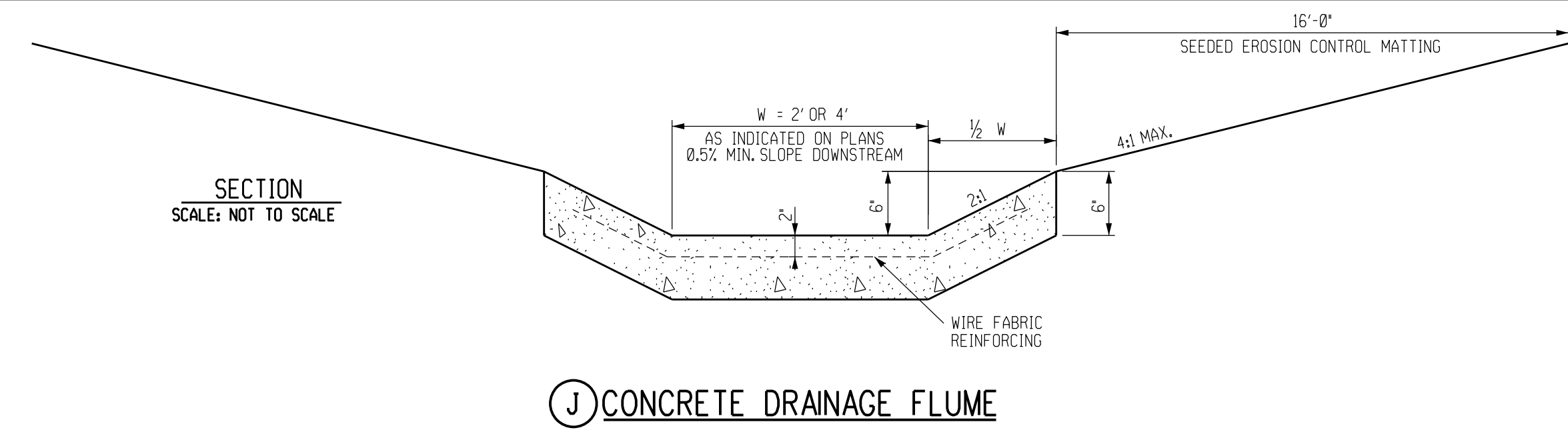
SCALE 0 AS SHOWN, DESIGN TEAM, DATE, and other project information.

STD-CUD-1

Speedway logo and contact information for Engineering and Construction Dept. in Enon, OH 45323.

VERTICAL text on the left edge of the page.

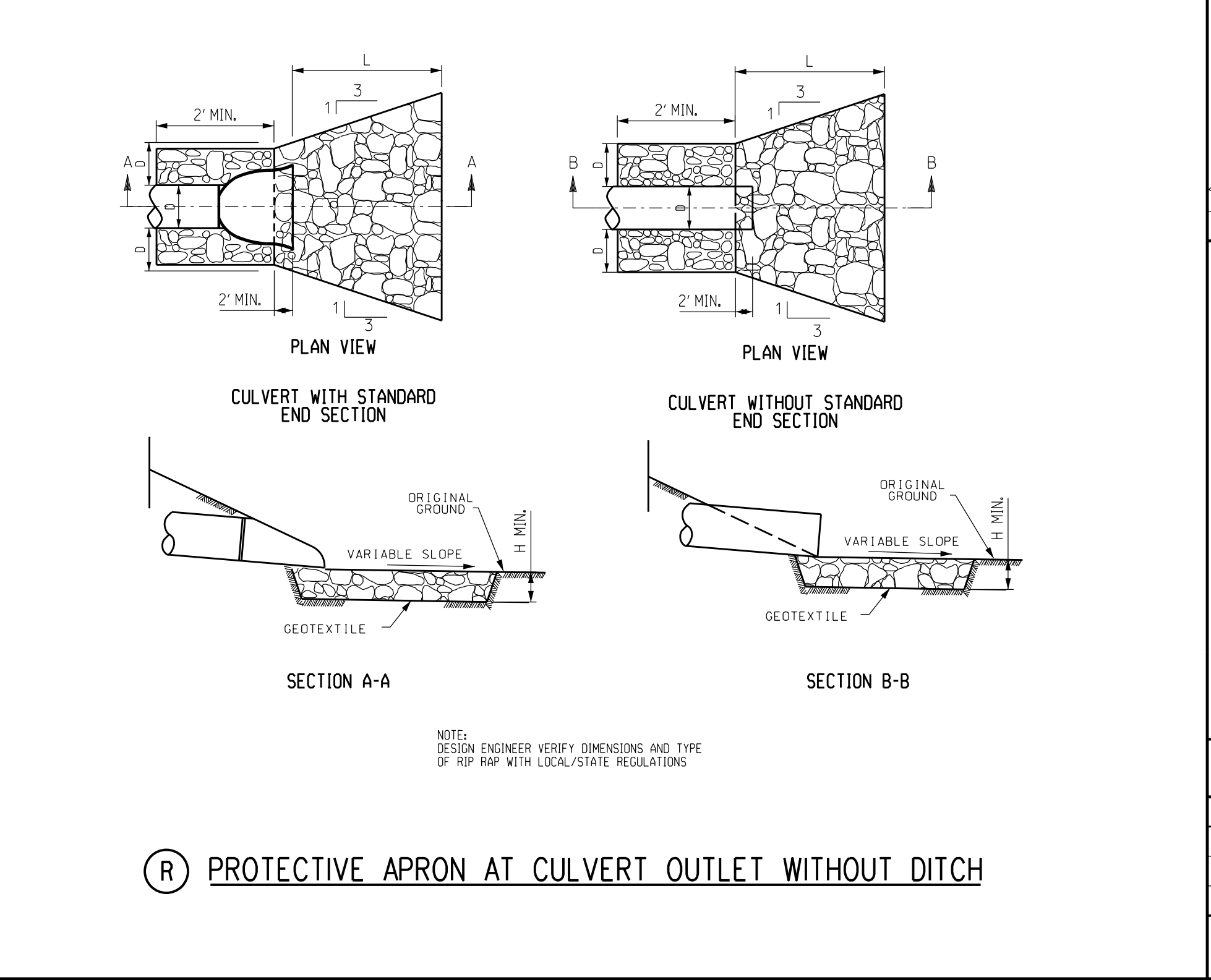
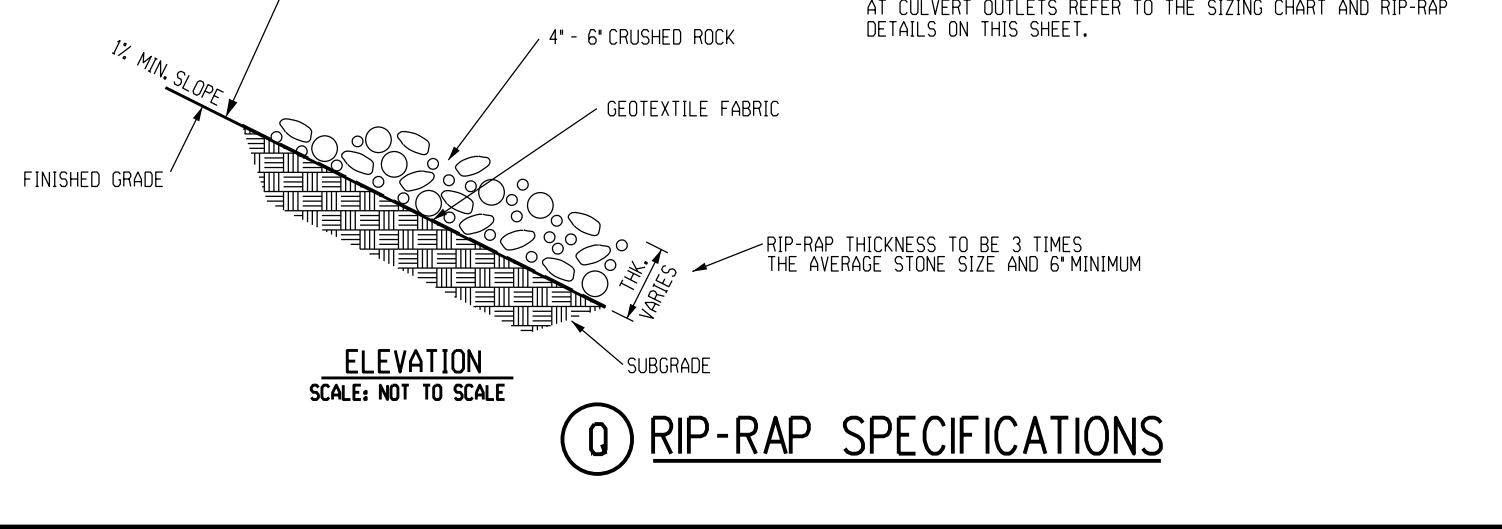
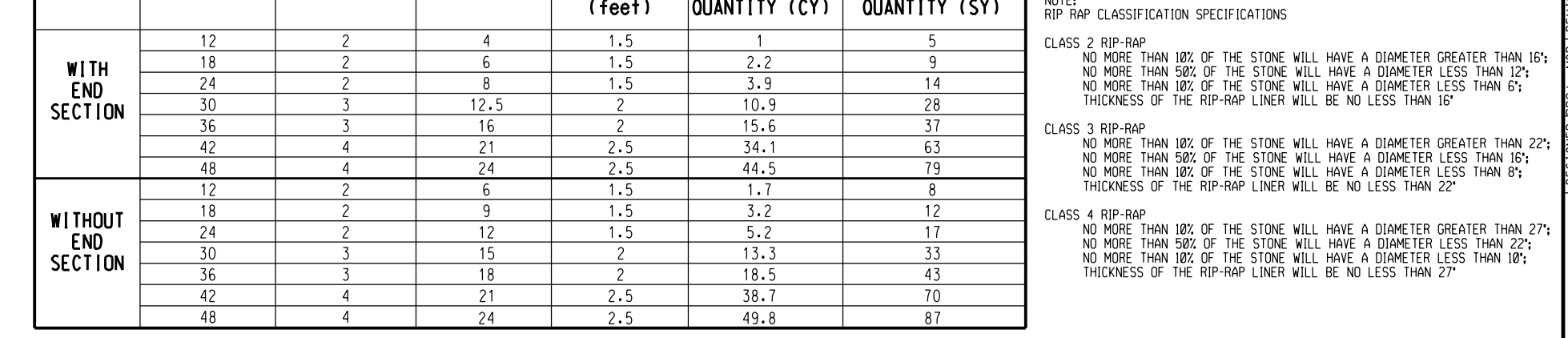
DRAINAGE & UTILITY DETAILS & SPECIFICATIONS



**PROTECTIVE APRON DIMENSIONS AND ESTIMATED QUANTITIES**

	CULVERT SIZE D (in)	RIPRAP CLASS	LENGTH OF APRON L (ft)	DEPTH OF APRON H (feet)	ESTIMATED RIPRAP QUANTITY (CY)	ESTIMATED GEOTEXTILE QUANTITY (SY)
WITH END SECTION	12	2	4	1.5	1	5
	18	2	6	1.5	2.2	9
	24	2	9	1.5	3.9	14
	30	3	12.5	2	10.9	28
	36	3	16	2	15.6	37
WITHOUT END SECTION	42	4	21	2.5	34.1	63
	48	4	24	2.5	44.5	79
	12	2	6	1.5	1.7	8
	18	2	9	1.5	3.2	12
	24	2	12	1.5	5.2	17
	30	3	15	2	13.3	33
	36	3	18	2	18.5	43
	42	4	21	2.5	38.7	70
	48	4	24	2.5	49.8	87

NOTE: RIP RAP CLASSIFICATION SPECIFICATIONS:  
 CLASS 2 RIP-RAP: NO MORE THAN 10% OF THE STONE WILL HAVE A DIAMETER GREATER THAN 10"; NO MORE THAN 50% OF THE STONE WILL HAVE A DIAMETER LESS THAN 12"; NO MORE THAN 10% OF THE STONE WILL HAVE A DIAMETER LESS THAN 6"; THICKNESS OF THE RIP-RAP LINER WILL BE NO LESS THAN 10".  
 CLASS 3 RIP-RAP: NO MORE THAN 10% OF THE STONE WILL HAVE A DIAMETER GREATER THAN 20"; NO MORE THAN 50% OF THE STONE WILL HAVE A DIAMETER LESS THAN 10"; NO MORE THAN 10% OF THE STONE WILL HAVE A DIAMETER LESS THAN 6"; THICKNESS OF THE RIP-RAP LINER WILL BE NO LESS THAN 2".  
 CLASS 4 RIP-RAP: NO MORE THAN 10% OF THE STONE WILL HAVE A DIAMETER GREATER THAN 27"; NO MORE THAN 50% OF THE STONE WILL HAVE A DIAMETER LESS THAN 22"; NO MORE THAN 10% OF THE STONE WILL HAVE A DIAMETER LESS THAN 10"; THICKNESS OF THE RIP-RAP LINER WILL BE NO LESS THAN 2".



**Speedway**  
 Prepared By: **Engineering and Construction Dept.**  
 Enon, OH 45323

REVISIONS

NO.	DATE	DESCRIPTION
1.	11-26-15	ADDED NEW TRENCH DRAIN

**SUPPLEMENTAL SERVICE STATION**  
 DRAINAGE & UTILITY DETAILS & SPECIFICATIONS

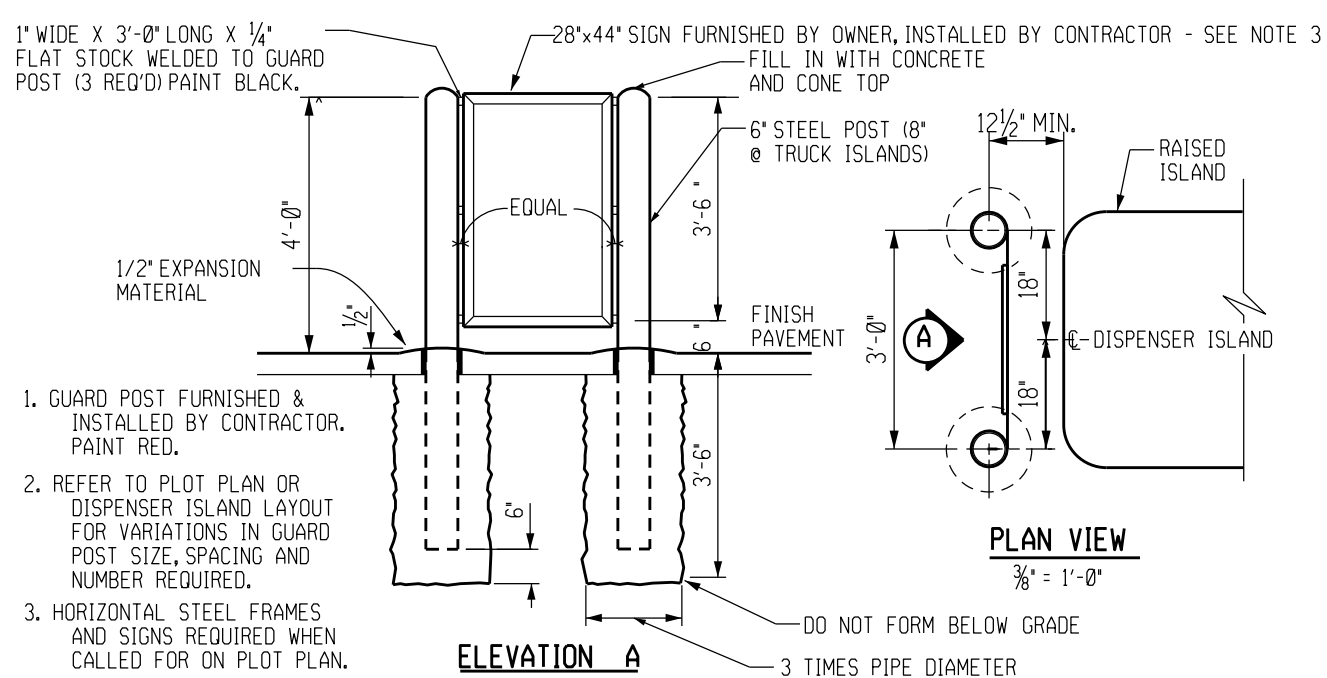
SCALE: 0 AS SHOWN

DESIGN TEAM	DATE
DCMR: E.NICHOLAS	02-01-16
P.MGR: J.FRYE	02-01-16
RWR: B.BAIRD	02-01-16

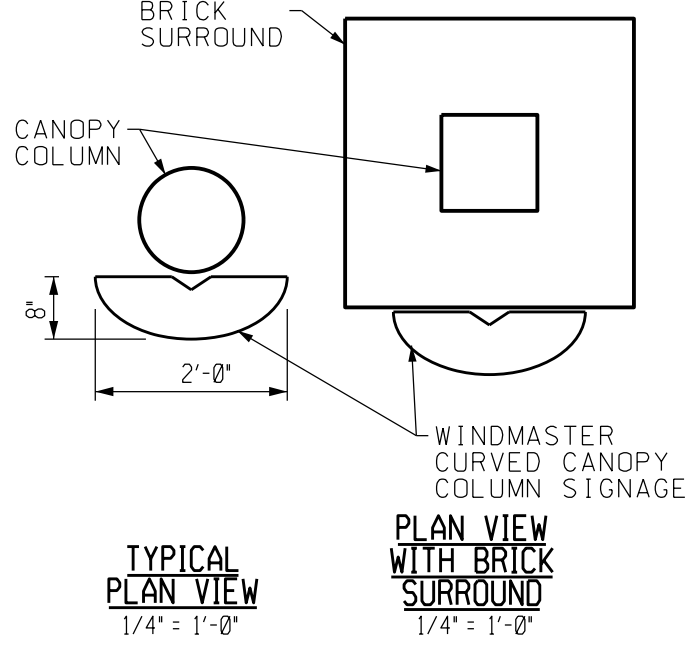
DRWG. NO. **STD-CUD-2**

8571165, 4537846, 4537847, 4537848, 4537849, 4537850, 4537851, 4537852, 4537853, 4537854, 4537855, 4537856, 4537857, 4537858, 4537859, 4537860, 4537861, 4537862, 4537863, 4537864, 4537865, 4537866, 4537867, 4537868, 4537869, 4537870, 4537871, 4537872, 4537873, 4537874, 4537875, 4537876, 4537877, 4537878, 4537879, 4537880, 4537881, 4537882, 4537883, 4537884, 4537885, 4537886, 4537887, 4537888, 4537889, 4537890, 4537891, 4537892, 4537893, 4537894, 4537895, 4537896, 4537897, 4537898, 4537899, 4537900, 4537901, 4537902, 4537903, 4537904, 4537905, 4537906, 4537907, 4537908, 4537909, 4537910, 4537911, 4537912, 4537913, 4537914, 4537915, 4537916, 4537917, 4537918, 4537919, 4537920, 4537921, 4537922, 4537923, 4537924, 4537925, 4537926, 4537927, 4537928, 4537929, 4537930, 4537931, 4537932, 4537933, 4537934, 4537935, 4537936, 4537937, 4537938, 4537939, 4537940, 4537941, 4537942, 4537943, 4537944, 4537945, 4537946, 4537947, 4537948, 4537949, 4537950, 4537951, 4537952, 4537953, 4537954, 4537955, 4537956, 4537957, 4537958, 4537959, 4537960, 4537961, 4537962, 4537963, 4537964, 4537965, 4537966, 4537967, 4537968, 4537969, 4537970, 4537971, 4537972, 4537973, 4537974, 4537975, 4537976, 4537977, 4537978, 4537979, 4537980, 4537981, 4537982, 4537983, 4537984, 4537985, 4537986, 4537987, 4537988, 4537989, 4537990, 4537991, 4537992, 4537993, 4537994, 4537995, 4537996, 4537997, 4537998, 4537999, 4538000

### AREA YARD SIGN DETAILS



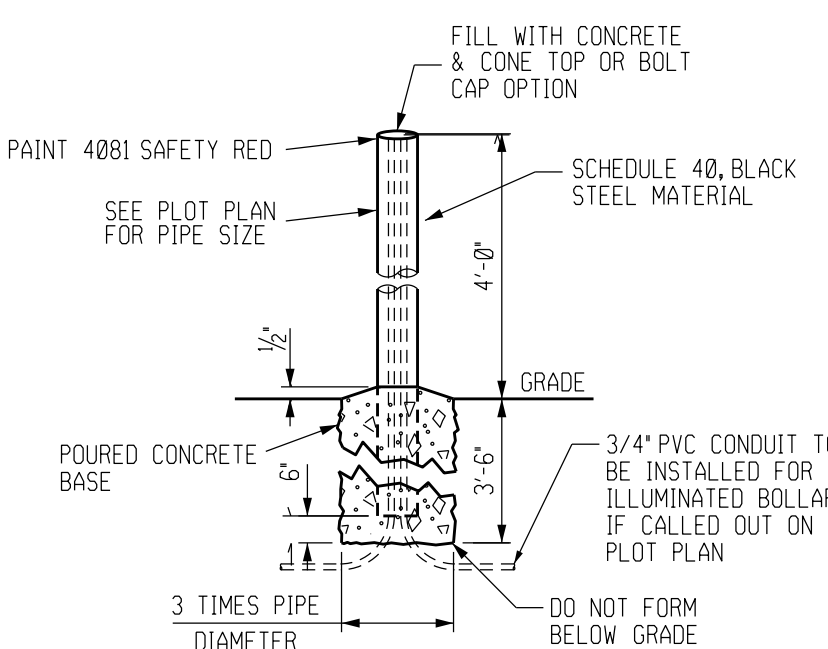
ISLAND GUARD POST & SIGN INSTALLATION



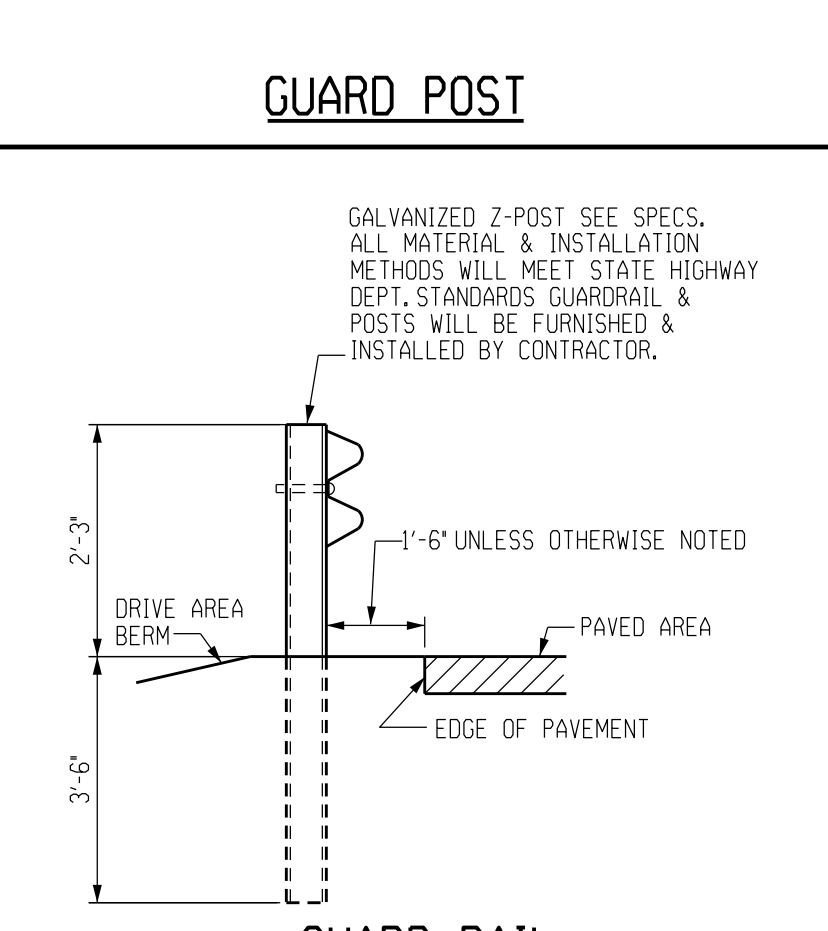
FRONT ELEVATION

CURVED CANOPY SIGN OPTION

### AREA YARD GUARDS

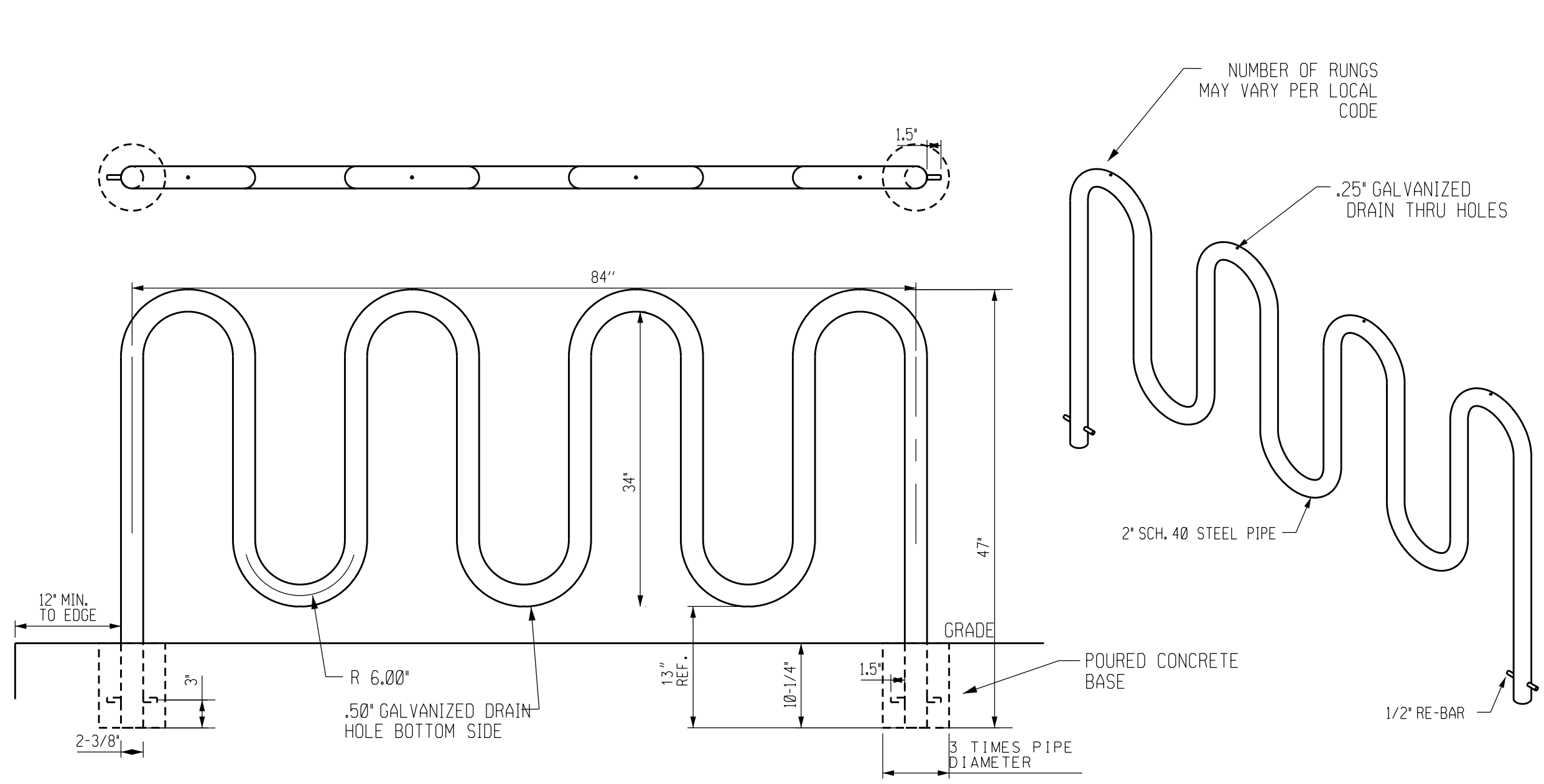


GUARD POST

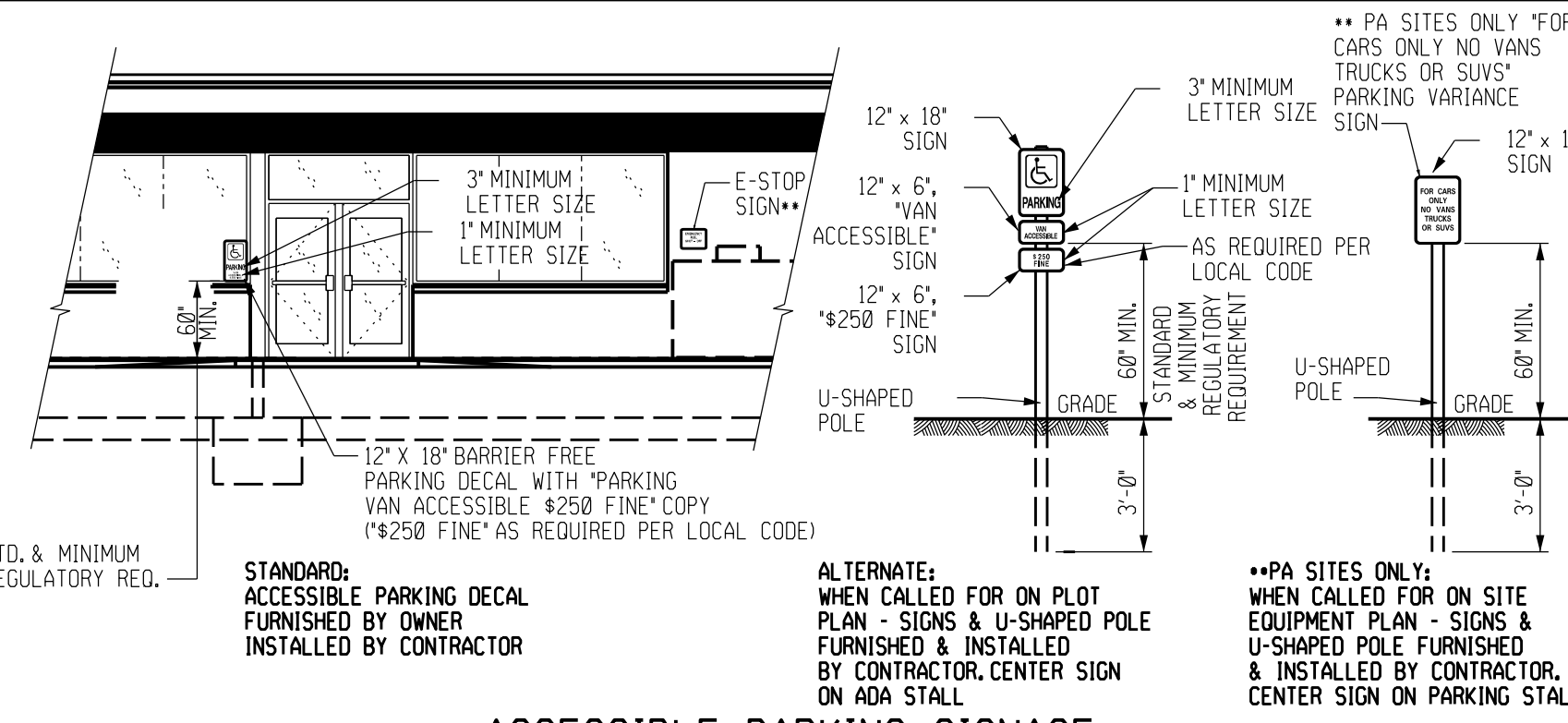


GUARD RAIL

### MISCELLANEOUS SITE FEATURES

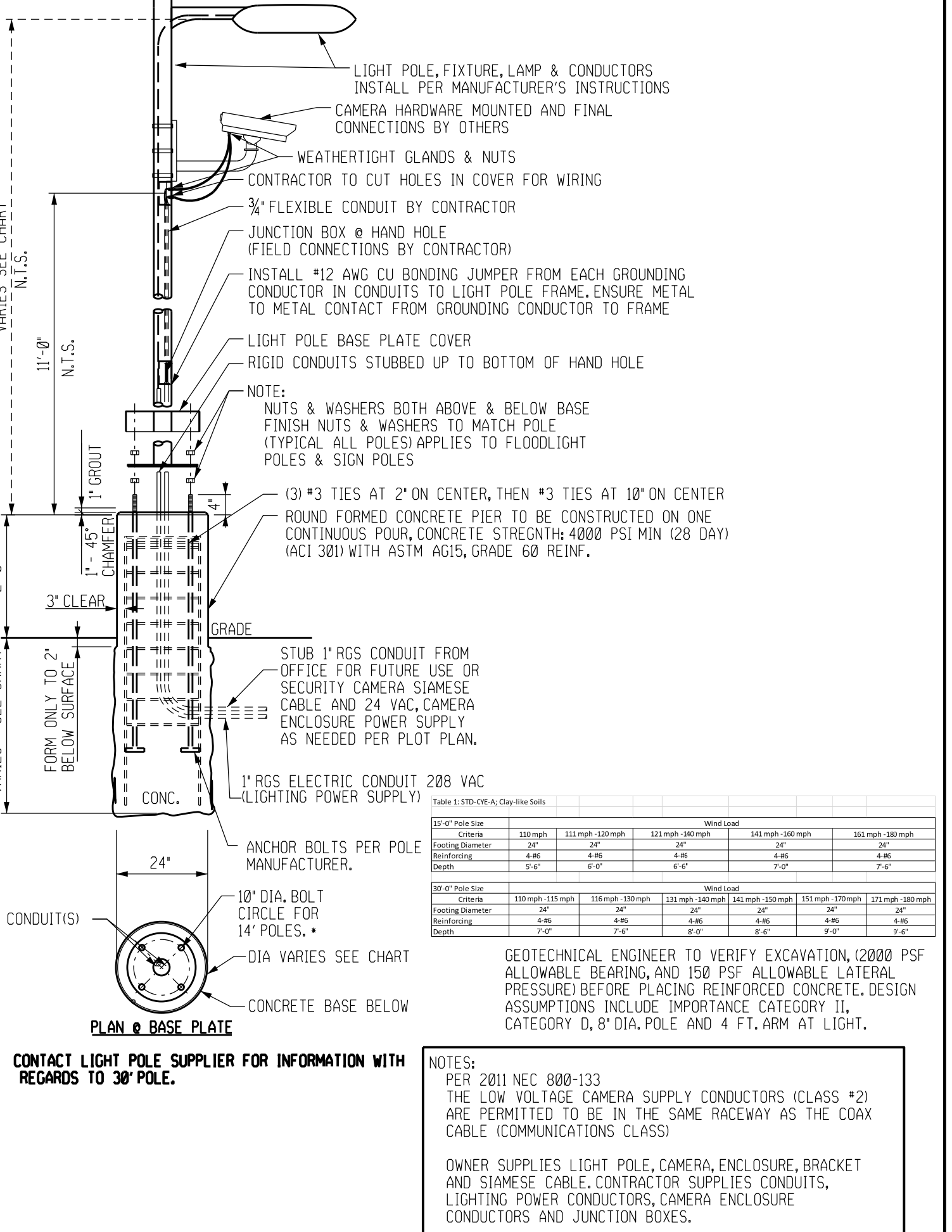


TYPICAL BIKE RACK DETAIL

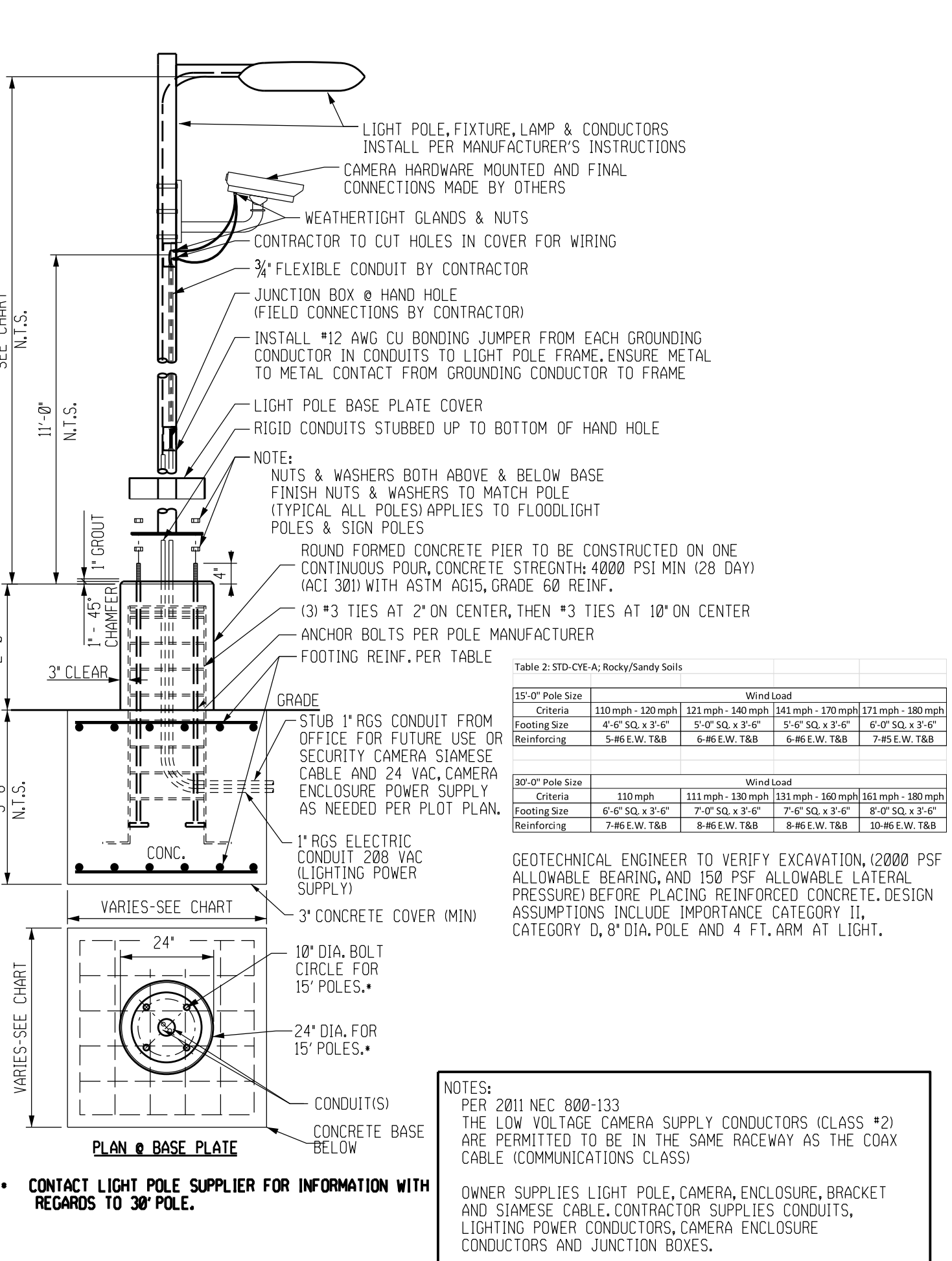


ACCESSIBLE PARKING SIGNAGE

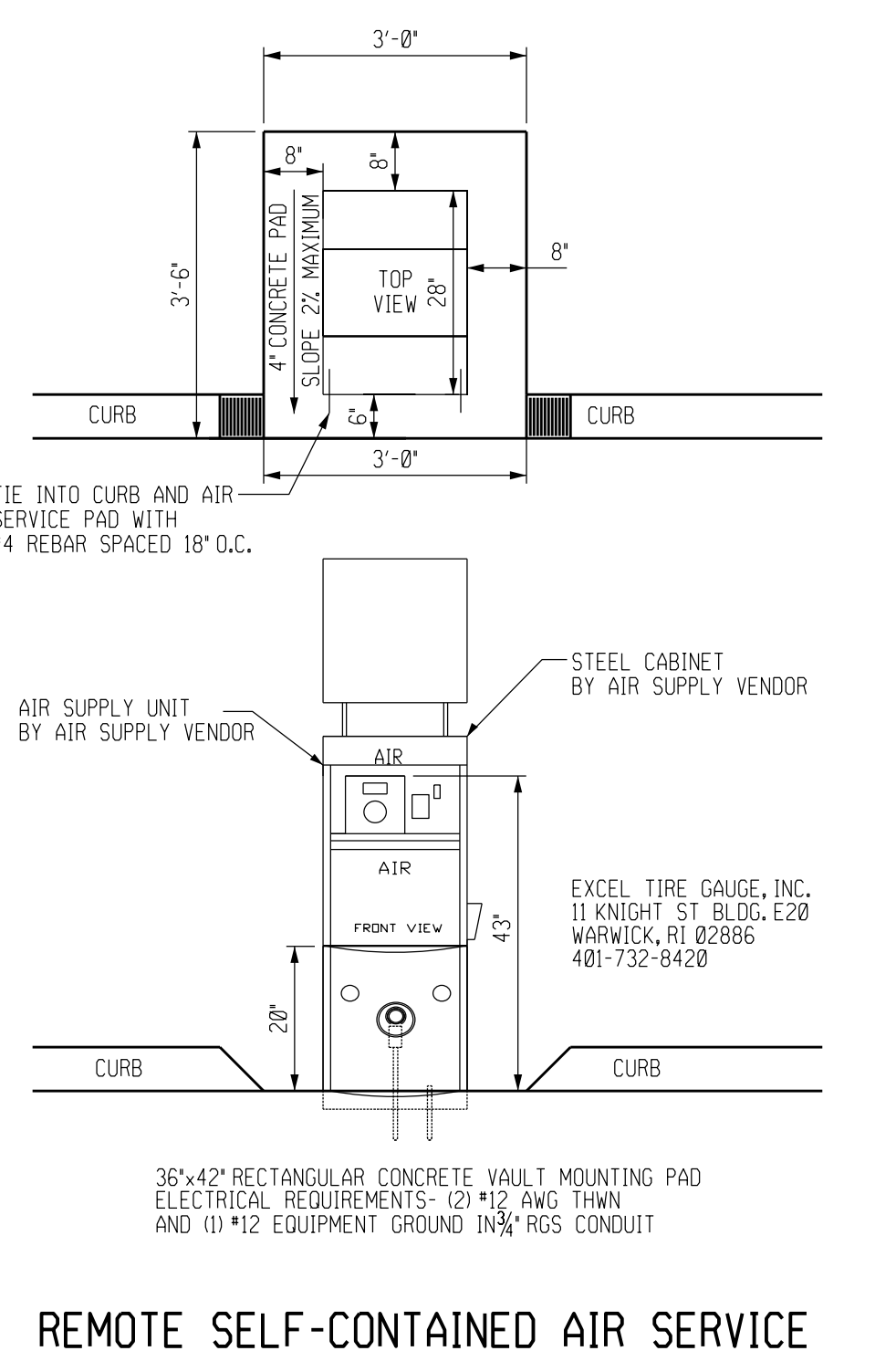
### AREA LIGHT POLE FOUNDATION DETAILS



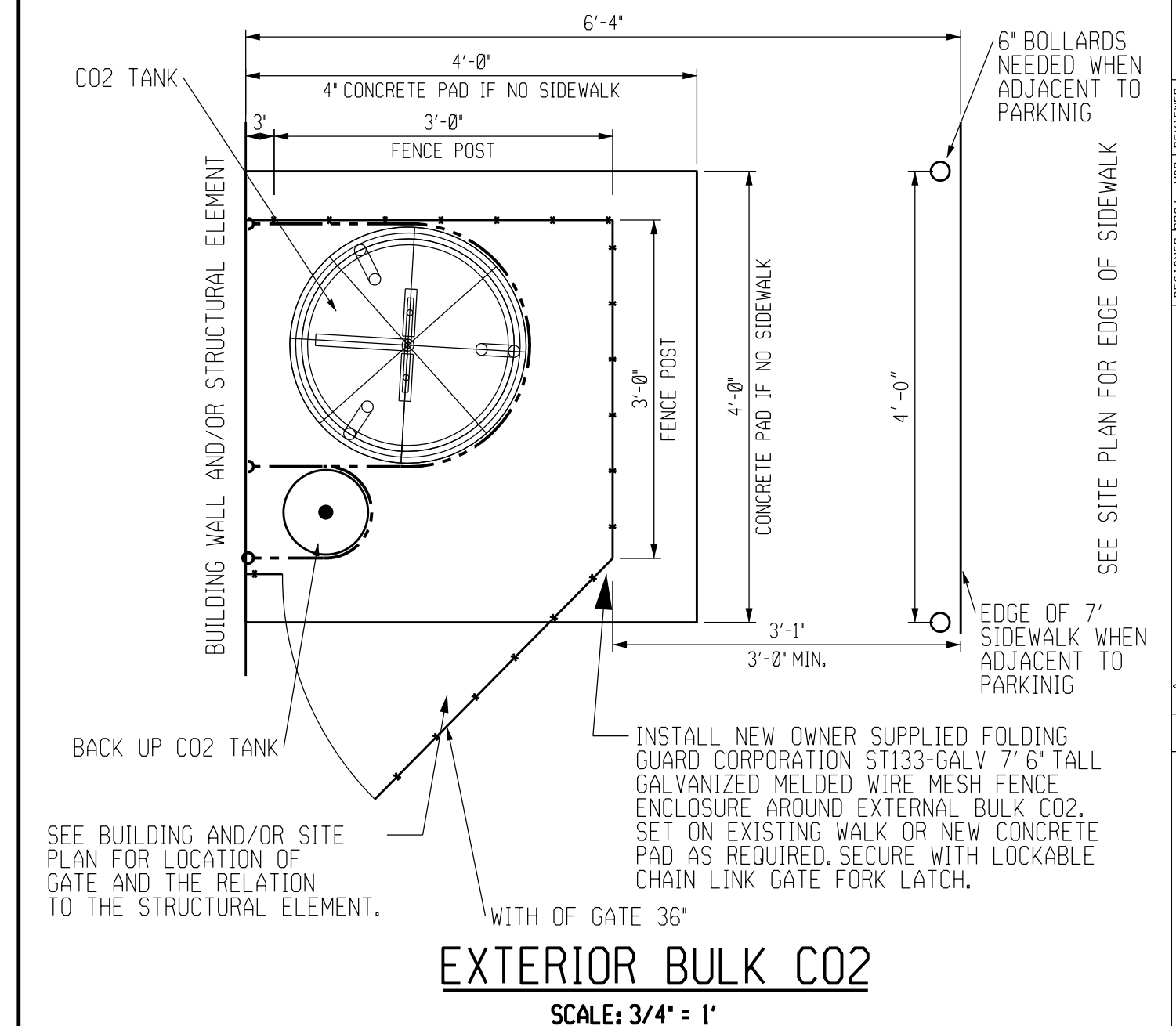
CLAY-LIKE SOIL CONDITIONS



ROCKY/SANDY SOIL CONDITIONS



REMOTE SELF-CONTAINED AIR SERVICE

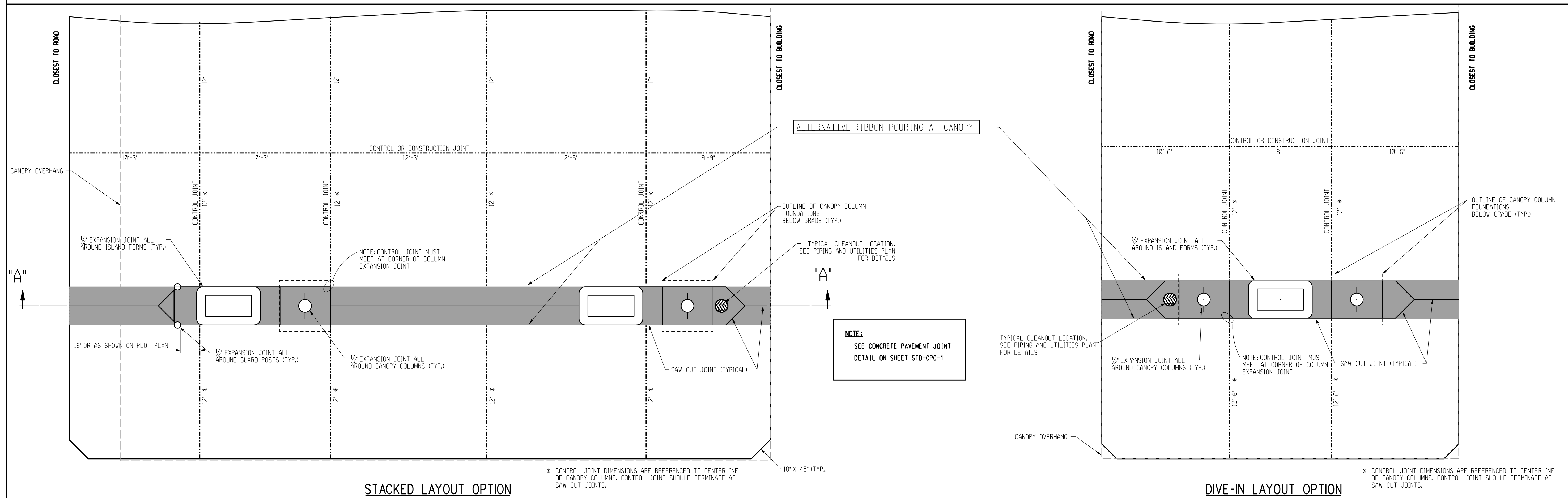


EXTERIOR BULK CO2  
SCALE: 3/4" = 1'

NO.	REVISIONS	DATE	BY	APP'D.
1	DESIGN	10/20/20	J.FRYE	J.FRYE
2	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
3	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
4	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
5	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
6	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
7	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
8	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
9	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
10	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE
11	REVISED PER COMMENTS	10/20/20	J.FRYE	J.FRYE

SCALE	DATE
AS SHOWN	
DESIGN TEAM	
DNDR: E. NICHOLAS	02-01-16
P.MGR.: J. FRYE	02-01-16
RWRW: B. BAIRD	02-01-16
DRWG. NO.	
STD-CYE-A	

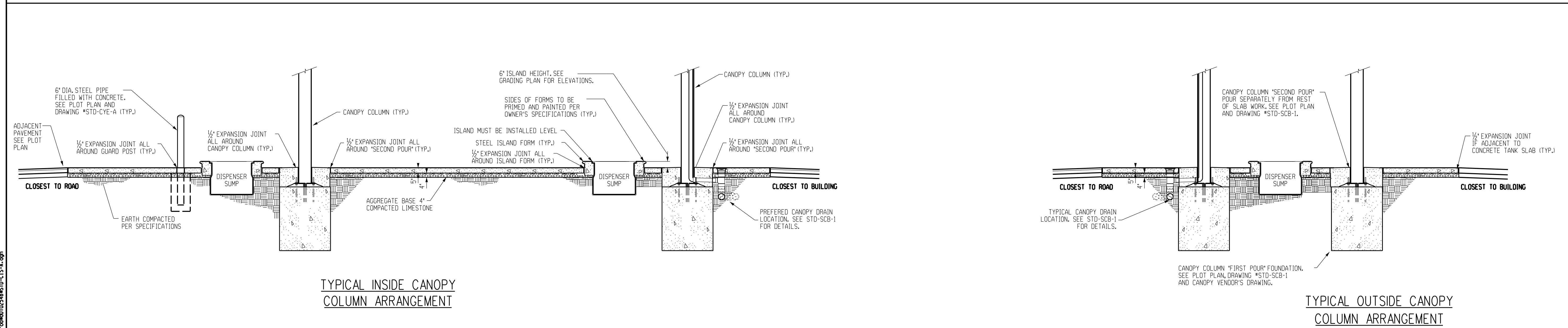
PLAN VIEWS



STACKED LAYOUT OPTION

DIVE-IN LAYOUT OPTION

NOTES AND DETAILS



TYPICAL INSIDE CANOPY COLUMN ARRANGEMENT

TYPICAL OUTSIDE CANOPY COLUMN ARRANGEMENT

**NOTE:**  
THIS ISLAND/COLUMN CONFIGURATION IS ONLY A REPRESENTATIVE ARRANGEMENT TO SHOW TYPICAL DETAILS TO BE USED FOR ALL ISLAND INSTALLATIONS. REFER TO PLOT PLAN FOR ACTUAL SIZE AND LOCATION OF ISLANDS, CANOPY COLUMNS, GUARD POSTS, AND LIMITATIONS OF CONCRETE WORK REQUIRED.

- GENERAL CONSTRUCTION NOTES**
1. ALL EXPANSION JOINT MATERIAL TO BE FULL DEPTH, RECESSED 3/4" AND SEALED PER SPECIFICATIONS AND DRAWING \*STD-CPC-1.
  2. SAWED CONTROL JOINTS TO BE 1/3 THE DEPTH OF CONCRETE AND SHOULD UNIFORMLY DIVIDE THE SLAB INTO NOMINAL 12'-6" X 12'-6" (MAX.) SECTIONS.
  3. CONSTRUCTION JOINTS SHALL REPLACE OR LINE UP WITH INTENDED CONTROL JOINTS.
  4. SEE DRAWING \*STD-CPC-1 FOR JOINT DETAILS.



NO.	REVISIONS	DATE
1	1. RIBBON POURING ALTERNATIVE AT CANOPY ISLAND	02-01-16
2	2. WAYNE DISPENSER UPDATES	02-01-16

TYPICAL ISLAND AND CONCRETE SLAB DETAILS

SCALE 0 14" = 1'-0"

DESIGN TEAM	DATE
DCMR: E. NICHOLAS	02-01-16
P.MGR.: J. FRYE	02-01-16
RWR: B. BAIRD	02-01-16

DRWG. NO. **STD-CIS-A**

1/19/2016 9:03:08 AM c:\documents and settings\jfr\my documents\11\proj\11\std-cis-a.dgn



**SPEEDWAY PARCEL - EXHIBIT "A" LEGAL DESCRIPTION**

(FROM TITLE COMMITMENT, SEE SURVEYOR'S NOTES FOR DETAILS)

TAX ID NUMBER(S): 05-24-480-020

COMMENCING AT THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST; THENCE SOUTH 88° 33' 30" WEST 50.02 FEET ALONG THE NORTH LINE OF SAID SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER TO THE PLACE OF BEGINNING; THENCE SOUTH 228.45 FEET PARALLEL WITH THE EAST LINE OF SAID SECTION 24, THENCE WEST 199.95 FEET; THENCE NORTH 223.42 FEET TO SAID NORTH LINE; THENCE NORTH 88° 33' 30" EAST 200.00 FEET ALONG SAID NORTH LINE TO THE PLACE OF BEGINNING.

EXCEPT:

COMMENCING AT THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 24, T2S, R12W, THENCE SOUTH 88° 33' 30" WEST 50.02 FEET ALONG THE NORTH LINE OF SAID SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER TO THE PLACE OF BEGINNING; THENCE SOUTH 48.46 FEET PARALLEL WITH THE EAST LINE OF SAID SECTION 24, THENCE NORTH 54° 53' 34" WEST 107.26 FEET TO SAID NORTH LINE; THENCE NORTH 88° 33' 30" EAST 96.92 FEET ALONG SAID NORTH LINE TO THE PLACE OF BEGINNING.

CLIENT REFERENCE: 1250 SOUTH DRAKE ROAD, KALAMAZOO, MI 49006

**⚡ SPEEDWAY PARCEL - SCHEDULE BII ITEMS:**

ITEMS 1-6, 8 AND 11-15 ARE NOT SURVEY RELATED.

SCHEDULE BII ITEMS:

ITEM #7. RIGHT OF WAY IN FAVOR OF MICHIGAN BELL TELEPHONE COMPANY, A MICHIGAN CORPORATION, RECORDED MAY 4, 1970 IN LIBER 849, PAGE 1314.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HERE.

ITEM #9. WATER MAIN EASEMENT IN FAVOR OF THE CHARTER TOWNSHIP OF OSHTEMO, KALAMAZOO COUNTY, MICHIGAN, A MUNICIPAL CORPORATION, RECORDED AUGUST 15, 1993 IN LIBER 1175, PAGE 1457.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

ITEM #10. EASEMENT AND RIGHT OF WAY GRANT IN FAVOR OF THE CHARTER TOWNSHIP OF OSHTEMO, A MICHIGAN MUNICIPAL CORPORATION, RECORDED MAY 4, 2016 IN DOCUMENT NO. 2016-014793.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

**PURCHASE PARCEL - EXHIBIT "A" LEGAL DESCRIPTION**

(FROM TITLE COMMITMENT, SEE SURVEYOR'S NOTES FOR DETAILS)

TAX ID NUMBER(S): 05-24-480-016

LAND SITUATED IN THE CITY OF KALAMAZOO, IN THE COUNTY OF KALAMAZOO, IN THE STATE OF MICHIGAN PARCEL 1: A PARCEL OF LAND IN THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST; THENCE SOUTH 89 DEGREES 33 MINUTES 30 SECONDS WEST 250.02 FEET ALONG THE NORTH LINE OF SAID SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24, THENCE SOUTH 223.42 FEET; THENCE EAST 199.95 FEET TO THE WEST LINE OF DRAKE ROAD; THENCE SOUTH 180.25 FEET ALONG SAID WEST LINE TO THE NORTH LINE OR THE RAILROAD; THENCE NORTH 81 DEGREES 03 MINUTES WEST 333.96 FEET ALONG SAID RAILROAD; THENCE NORTH 348.45 FEET TO THE NORTH LINE OF SAID SOUTHEAST 1/4 OF SECTION 24; THENCE NORTH 88 DEGREES 33 MINUTES 30 SECONDS EAST 130.00 FEET ALONG SAID NORTH LINE TO THE PLACE OF BEGINNING.

PARCEL 2: A PARCEL OF LAND IN THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: THE EAST 150 FEET OF THE FOLLOWING: COMMENCING AT THE NORTHEAST CORNER OF THE SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST; THENCE SOUTH 88 DEGREES 33 MINUTES 30 SECONDS WEST 380.02 FEET ALONG THE NORTH LINE OF SAID SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24; THENCE SOUTH 348.45 FEET TO THE NORTH LINE OF THE RAILROAD; THENCE NORTH 81 DEGREES 03 MINUTES WEST 192.38 FEET ALONG SAID RAILROAD; THENCE NORTH 313.75 FEET TO THE NORTH LINE OF SAID SOUTHEAST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 24; THENCE NORTH 88 DEGREES 33 MINUTES 30 SECONDS EAST 190.00 FEET ALONG SAID NORTH LINE TO THE PLACE OF BEGINNING.

CLIENT REFERENCE: 1300 SOUTH DRAKE ROAD, KALAMAZOO, MI 49006

**🏠 PURCHASE PARCEL - SCHEDULE BII ITEMS:**

ITEMS 1-6 AND 13-18 ARE NOT SURVEY RELATED.

SCHEDULE BII ITEMS:

ITEM #7. RIGHT OF WAY IN FAVOR OF THE MICHIGAN BELL TELEPHONE COMPANY, A MICHIGAN CORPORATION, RECORDED MAY 4, 1970 IN LIBER 849, PAGE 1314.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

ITEM #8. STORM SEWER EASEMENT IN FAVOR OF THE CHARTER TOWNSHIP OF OSHTEMO, KALAMAZOO COUNTY, MICHIGAN, A MUNICIPAL CORPORATION, RECORDED JANUARY 3, 1989 IN LIBER 1397, PAGE 283.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

ITEM #9. EASEMENT FOR ELECTRIC LINE IN FAVOR OF CONSUMERS ENERGY COMPANY, A MICHIGAN CORPORATION, RECORDED DECEMBER 10, 1997 IN LIBER 1982, PAGE 34.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

ITEM #10. EASEMENT FOR UNDERGROUND ELECTRIC LINE IN FAVOR OF CONSUMERS ENERGY COMPANY, A MICHIGAN CORPORATION, RECORDED JUNE 21, 2006 IN DOCUMENT NO. 2006-027830.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

ITEM #11. PUBLIC UTILITY EASEMENT IN FAVOR OF CHARTER TOWNSHIP OF OSHTEMO, A MICHIGAN MUNICIPAL CORPORATION, RECORDED APRIL 14, 2017 IN DOCUMENT NO. 2017-012622.

EASEMENT IS ON SUBJECT PARCEL AND SHOWN HEREON.

ITEM #12. TEMPORARY PERMIT IN FAVOR OF THE CHARTER TOWNSHIP OF OSHTEMO RECORDED APRIL 14, 2017 IN DOCUMENT NO. 2017-012623.

TEMPORARY PERMIT IS ON SUBJECT PARCEL AND SHOWN HEREON.

**SURVEYORS NOTES:**

THIS SURVEY DOES NOT CONSTITUTE A TITLE SEARCH BY THE SURVEYOR. ALL INFORMATION REGARDING RECORD EASEMENTS AND OTHER DOCUMENTS THAT MIGHT AFFECT THE QUALITY OF TITLE TO THE PARCEL SHOWN HEREON WERE OBTAINED THROUGH TWO TITLE COMMITMENT CONDUCTED.

THE TITLE COMMITMENT FOR THE SPEEDWAY PARCEL WAS PROVIDED BY AMROCK, INC., ORDER NO. C000122188-1 WITH AN EFFECTIVE DATE OF DECEMBER 16, 2019, 8:00 AM.

THE TITLE COMMITMENT FOR THE PURCHASE PARCEL WAS PROVIDED BY AMROCK, INC. AND FIRST AMERICAN TITLE INSURANCE COMPANY, ORDER NO. C000122188 WITH AN EFFECTIVE DATE OF DECEMBER 11, 2019, 8:00 AM

ALL DATA SOURCES, DOCUMENTS AND RECORDS SHOWN HEREON ARE ON FILE IN THE KALAMAZOO COUNTY REGISTER OF DEEDS OFFICE LOCATED IN KALAMAZOO, MICHIGAN.

OCCUPATION IN GENERAL MATCHED THE SURVEY

MONUMENTS FOUND ARE IN GOOD CONDITION UNLESS NOTED OTHERWISE

THIS IS NOT A RECORDABLE DOCUMENT FOR TRANSFER OF TITLE

BASIS OF BEARINGS FOR RECORD INFORMATION BASED ON INSTRUMENT NUMBER 2008-001540

HORIZONTAL DATUM AND BASIS OF BEARINGS FOR SURVEY INFORMATION: U.S. STATE PLANE, NAD83 MICHIGAN SOUTH, ESTABLISHED FROM A STATION OBSERVATION AND POST PROCESSED UTILIZING NSS OPUS SOLUTION USING BASE STATIONS DHT131 MPP, DHO09 MIBC, DHI83 MCV, COORDINATES TAKEN TO GROUND AT LATITUDE N42°16'40.380"U, LONGITUDE W85°38'58.1403"U, PROJECT HEIGHT 789.832' GROUND SCALE FACTOR 1.00007417264513.

SOURCE DOCUMENTS USED:  
ROAD COMMISSION OF KALAMAZOO COUNTY, KL AVENUE IMPROVEMENTS PROJECT, 11TH STREET TO DRAKE ROAD

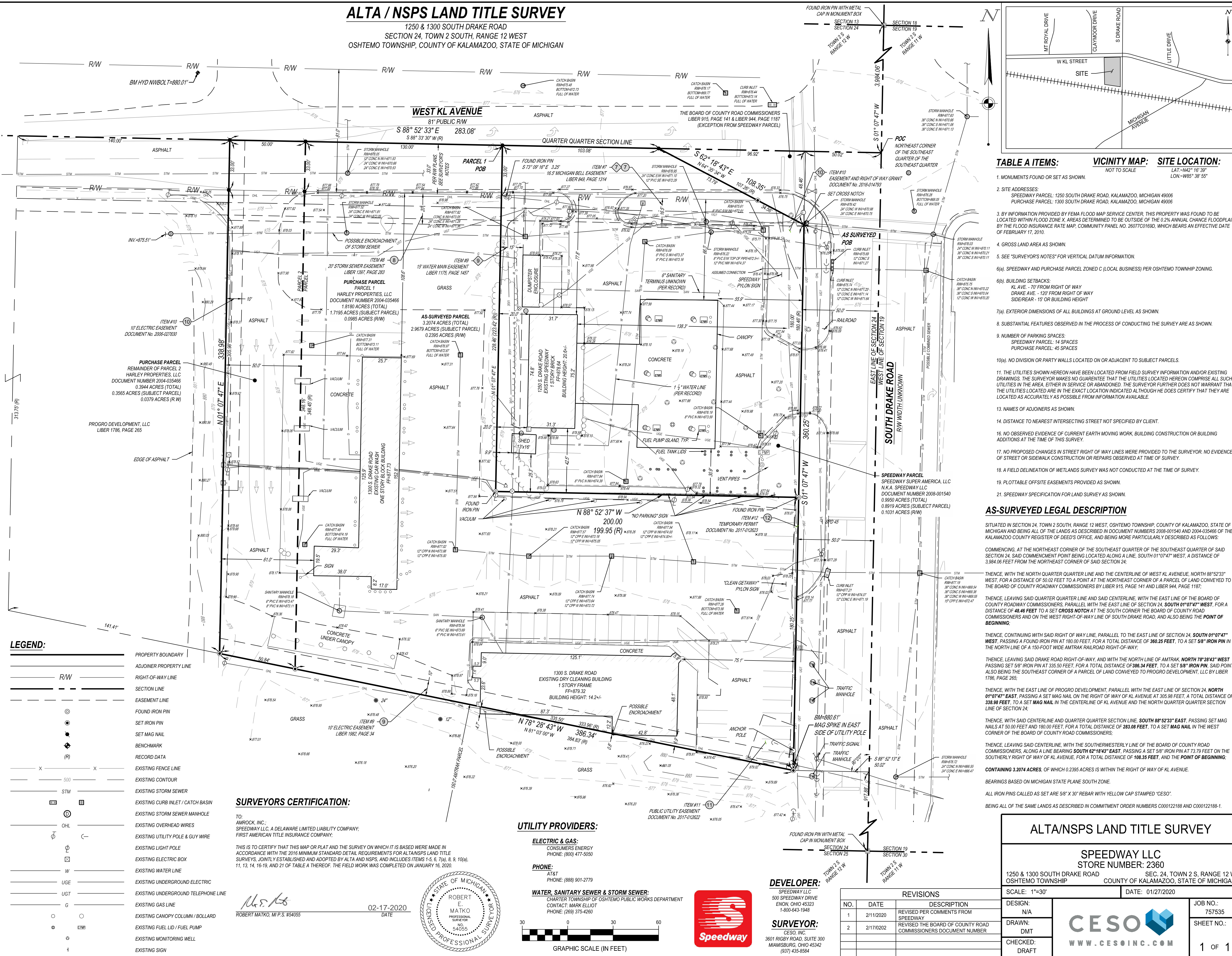
VERTICAL DATUM - NAVD83 COMPUTED USING GEOID 12B

**UTILITY DISCLAIMER:**

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

**ALTA / NSPS LAND TITLE SURVEY**

1250 & 1300 SOUTH DRAKE ROAD  
SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST  
OSHTEMO TOWNSHIP, COUNTY OF KALAMAZOO, STATE OF MICHIGAN



**TABLE A ITEMS:**

- MONUMENTS FOUND OR SET AS SHOWN.
- SITE ADDRESSES:  
SPEEDWAY PARCEL: 1250 SOUTH DRAKE ROAD, KALAMAZOO, MICHIGAN 49006  
PURCHASE PARCEL: 1300 SOUTH DRAKE ROAD, KALAMAZOO, MICHIGAN 49006
- BY INFORMATION PROVIDED BY FEMA FLOOD MAP SERVICE CENTER, THIS PROPERTY WAS FOUND TO BE LOCATED WITHIN FLOOD ZONE X. AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, BY THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 26077C0169D, WHICH BEARS AN EFFECTIVE DATE OF FEBRUARY 17, 2010.
- GROSS LAND AREA AS SHOWN.
- SEE "SURVEYOR'S NOTES" FOR VERTICAL DATUM INFORMATION.
- (a) SPEEDWAY AND PURCHASE PARCEL ZONED C (LOCAL BUSINESS) PER OSHTEMO TOWNSHIP ZONING.
- (b) BUILDING SETBACKS:  
KL AVE - 10' FROM RIGHT OF WAY  
DRAKE AVE - 120' FROM RIGHT OF WAY  
SIDE/REAR - 15' OR BUILDING HEIGHT
- (c) EXTERIOR DIMENSIONS OF ALL BUILDINGS AT GROUND LEVEL AS SHOWN.
- SUBSTANTIAL FEATURES OBSERVED IN THE PROCESS OF CONDUCTING THE SURVEY ARE AS SHOWN.
- NUMBER OF PARKING SPACES:  
SPEEDWAY PARCEL: 14 SPACES  
PURCHASE PARCEL: 45 SPACES
- (e) NO DIVISION OR PARTY WALLS LOCATED ON OR ADJACENT TO SUBJECT PARCELS.
- THE UTILITIES SHOWN HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND/OR EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES LOCATED HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES LOCATED ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE.
- NAMES OF ADJOINERS AS SHOWN.
- DISTANCE TO NEAREST INTERSECTING STREET NOT SPECIFIED BY CLIENT.
- NO OBSERVED EVIDENCE OF CURRENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS AT THE TIME OF THIS SURVEY.
- NO PROPOSED CHANGES IN STREET RIGHT OF WAY LINES WERE PROVIDED TO THE SURVEYOR. NO EVIDENCE OF STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OBSERVED AT TIME OF SURVEY.
- A FIELD DELINEATION OF WETLANDS SURVEY WAS NOT CONDUCTED AT THE TIME OF SURVEY.
- PLOTTABLE OFFSITE EASEMENTS PROVIDED AS SHOWN.
- SPEEDWAY SPECIFICATION FOR LAND SURVEY AS SHOWN.

**AS-SURVEYED LEGAL DESCRIPTION**

SITUATED IN SECTION 24, TOWN 2 SOUTH, RANGE 12 WEST, OSHTEMO TOWNSHIP, COUNTY OF KALAMAZOO, STATE OF MICHIGAN AND BEING ALL OF THE LANDS AS DESCRIBED IN DOCUMENT NUMBERS 2008-001540 AND 2004-035466 OF THE KALAMAZOO COUNTY REGISTER OF DEEDS OFFICE, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 24, SAID COMMENCEMENT POINT BEING LOCATED ALONG A LINE, SOUTH 01°07'47" WEST, A DISTANCE OF 3.984.06 FEET FROM THE NORTHEAST CORNER OF SAID SECTION 24;

THENCE WITH THE NORTH QUARTER QUARTER LINE AND THE CENTERLINE OF WEST KL AVENUE, NORTH 88°52'33" WEST, FOR A DISTANCE OF 50.02 FEET TO A POINT AT THE NORTHEAST CORNER OF A PARCEL OF LAND CONVEYED TO THE BOARD OF COUNTY ROADWAY COMMISSIONERS BY LIBER 915, PAGE 141 AND LIBER 944, PAGE 1187;

THENCE LEAVING SAID QUARTER QUARTER LINE AND SAID CENTERLINE, WITH THE EAST LINE OF THE BOARD OF COUNTY ROADWAY COMMISSIONERS, PARALLEL WITH THE EAST LINE OF SECTION 24, SOUTH 01°07'47" WEST, FOR A DISTANCE OF 48.46 FEET TO A SET CROSS NOTCH AT THE SOUTHWEST CORNER OF THE BOARD OF COUNTY ROADWAY COMMISSIONERS AND ON THE WEST RIGHT-OF-WAY LINE OF SOUTH DRAKE ROAD, AND ALSO BEING THE POINT OF BEGINNING;

THENCE CONTINUING WITH SAID RIGHT OF WAY LINE, PARALLEL TO THE EAST LINE OF SECTION 24, SOUTH 01°07'47" WEST, PASSING A FOUND IRON PIN AT 180.00 FEET, FOR A TOTAL DISTANCE OF 360.25 FEET, TO A SET 5/8" IRON PIN IN THE NORTH LINE OF A 150-FOOT WIDE AMTRAK RAILROAD RIGHT-OF-WAY;

THENCE LEAVING SAID QUARTER QUARTER LINE AND SAID CENTERLINE, WITH THE NORTH LINE OF AMTRAK, NORTH 78°28'43" WEST, PASSING SET 5/8" IRON PIN AT 335.50 FEET, FOR A TOTAL DISTANCE OF 386.34 FEET, TO A SET 5/8" IRON PIN, SAID POINT ALSO BEING THE SOUTHEAST CORNER OF A PARCEL OF LAND CONVEYED TO PROGR0 DEVELOPMENT, LLC BY LIBER 1786, PAGE 265;

THENCE WITH THE EAST LINE OF PROGR0 DEVELOPMENT, PARALLEL WITH THE EAST LINE OF SECTION 24, NORTH 01°07'47" EAST, PASSING A SET MAG NAIL ON THE RIGHT OF WAY OF KL AVENUE AT 305.98 FEET, A TOTAL DISTANCE OF 338.98 FEET, TO A SET MAG NAIL IN THE CENTERLINE OF KL AVENUE AND THE NORTH QUARTER QUARTER SECTION LINE OF SECTION 24;

THENCE WITH SAID CENTERLINE AND QUARTER QUARTER SECTION LINE, SOUTH 88°52'33" EAST, PASSING SET MAG NAILS AT 50.00 FEET AND 180.00 FEET, FOR A TOTAL DISTANCE OF 283.08 FEET, TO A SET MAG NAIL IN THE WEST CORNER OF THE BOARD OF COUNTY ROADWAY COMMISSIONERS;

THENCE LEAVING SAID CENTERLINE, WITH THE SOUTHWESTERLY LINE OF THE BOARD OF COUNTY ROADWAY COMMISSIONERS, ALONG A LINE BEARING SOUTH 62°18'43" EAST, PASSING A SET 5/8" IRON PIN AT 73.79 FEET ON THE SOUTHERLY RIGHT OF WAY OF KL AVENUE, FOR A TOTAL DISTANCE OF 108.35 FEET, AND THE POINT OF BEGINNING;

CONTAINING 3.2074 ACRES, OF WHICH 0.2395 ACRES IS WITHIN THE RIGHT OF WAY OF KL AVENUE.

BEARINGS BASED ON MICHIGAN STATE PLANE SOUTH ZONE.

ALL IRON PINS CALLED AS SET ARE 5/8" X 30" REBAR WITH YELLOW CAP STAMPED "CESO".

BEING ALL OF THE SAME LANDS AS DESCRIBED IN COMMITMENT ORDER NUMBERS C000122188 AND C000122188-1.

**ALTA/NSPS LAND TITLE SURVEY**

**SPEEDWAY LLC**  
STORE NUMBER: 2360  
1250 & 1300 SOUTH DRAKE ROAD  
OSHTEMO TOWNSHIP  
SEC. 24, TOWN 2 S, RANGE 12 W  
COUNTY OF KALAMAZOO, STATE OF MICHIGAN

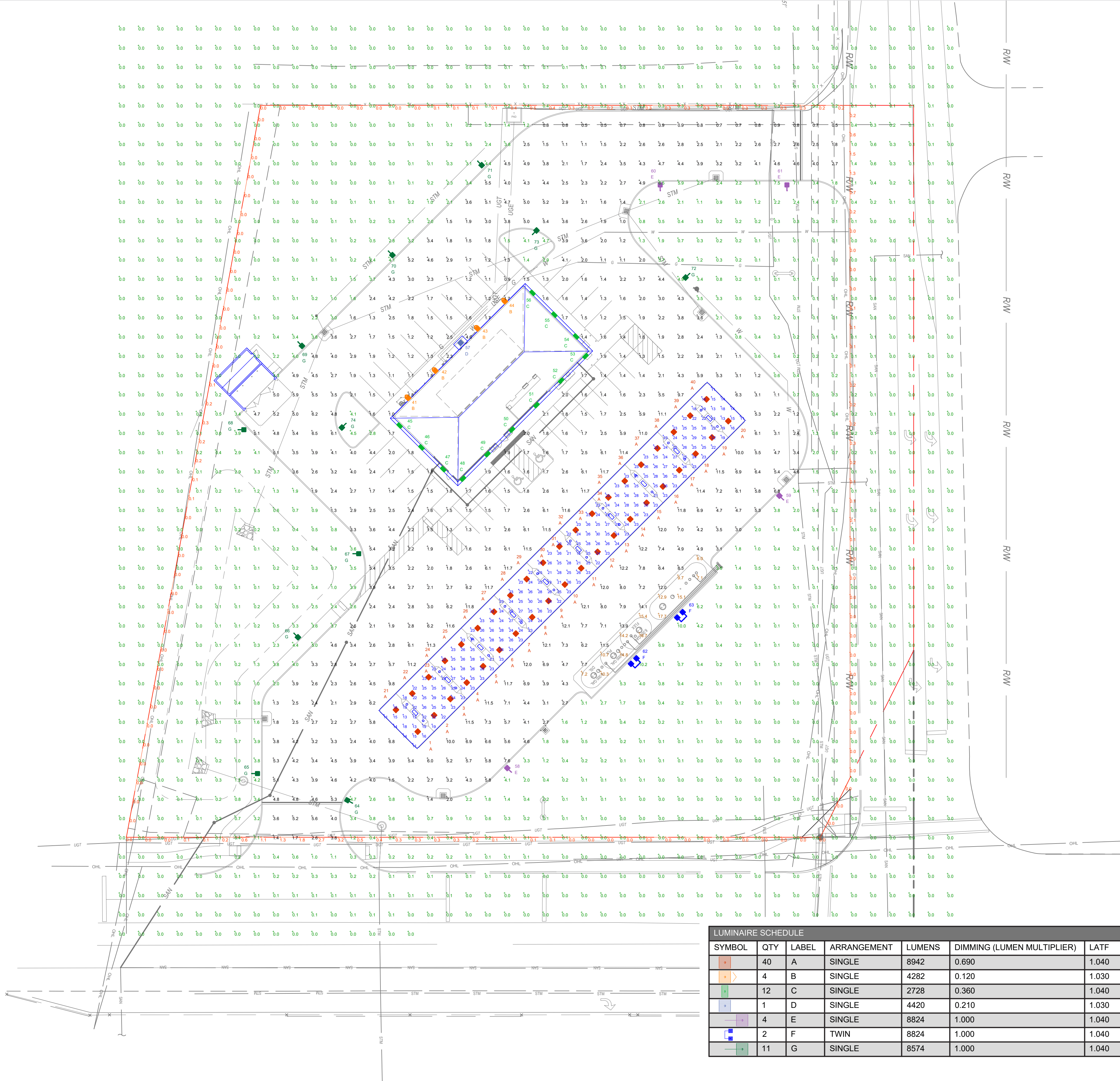
SCALE: 1"=30'  
DATE: 01/27/2020

NO.	DATE	DESCRIPTION
1	2/11/2020	REVISED PER COMMENTS FROM SPEEDWAY
2	2/17/2020	REVISED THE BOARD OF COUNTY ROAD COMMISSIONERS DOCUMENT NUMBER

DESIGN: N/A  
DRAWN: DMT  
CHECKED: DRAFT

JOB NO.: 757535  
SHEET NO.: 1 OF 1

WWW.CESOINC.COM



NOTES:  
 - ALL AREA LIGHTS ON NEW 15 FT. POLE MOUNTED ON 2 FT. CONCRETE BASE  
 - THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES

LUMINAIRE LOCATION SUMMARY		
LUM NO.	LABEL	MTG. HT.
1 - 40	A	16.5
41 - 44	B	10.5
45 - 56	C	12
57	D	8.67
58 - 61	E	17
62 - 63	F	17
64 - 74	G	17

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PROPERTY LINES	0.19	3.2	0.0	N.A.	N.A.
SITE PAVED AREA	3.79	14.1	0.5	7.58	28.20
TANK PAD	12.14	17.7	6.0	2.02	2.95
UNDEFINED	0.36	10.2	0.0	N.A.	N.A.
UNDER CANOPY	23.21	30	11	2.11	2.73

LUMINAIRE SCHEDULE												
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	DIMMING (LUMEN MULTIPLIER)	LATF	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	40	A	SINGLE	8942	0.690	1.040	0.718	B3-U0-G1	55.46	2218.4	CREE, INC.	CAN-304-SL-RS-04-E-UL-XX-700-40K-DIM (SET TO 5.1V)
	4	B	SINGLE	4282	0.120	1.030	0.124	B1-U0-G1	6	24	CREE, INC.	XSPW-B-WM-3ME-4L-40K-UL-XX-DIM (SET TO 1.0V)
	12	C	SINGLE	2728	0.360	1.040	0.374	B2-U0-G1	11	132	CREE, INC.	SFT-228-5M-RM-03-E-12-XX-350-40K-DIM (SET TO 1.6V) NON-IC RATED
	1	D	SINGLE	4420	0.210	1.030	0.216	B2-U0-G1	8	8	CREE, INC.	CPY250-B-DM-F-C-UL-XX-40K-DIM (SET TO 1.3V)
	4	E	SINGLE	8824	1.000	1.040	1.040	B1-U0-G2	72	288	CREE, INC.	OSQ-ML-B-DA-XX + OSQM-B-11L-40K7-3M-UL-NM-XX-w_OSQ-BLSMF
	2	F	TWIN	8824	1.000	1.040	1.040	B1-U0-G2	72	288	CREE, INC.	OSQ-ML-B-DA-XX + OSQM-B-11L-40K7-3M-UL-NM-XX-w_OSQ-BLSMF
	11	G	SINGLE	8574	1.000	1.040	1.040	B1-U0-G2	72	792	CREE, INC.	OSQ-ML-B-DA-XX + OSQM-B-11L-40K7-4M-UL-NM-XX-w_OSQ-BLSMF

DISCLAIMER

ANY SITE PLAN(S), FLOOR PLAN(S), RENDERING(S), LIGHTING LAYOUT(S) AND PHOTOMETRIC PLAN(S) INCLUDING BUT NOT LIMITED TO ANY PROJECT(S) CREATED/PRODUCED BY RED LEONARD ASSOCIATES INC., ARE ONLY INTENDED FOR ILLUSTRATION AND QUOTING PURPOSES ONLY. RED LEONARD ASSOCIATES HAS THE RIGHT TO USE THIRD PARTY LASERS, SCANNERS, AND CAMERAS BUT ACTUAL PROJECT CONDITIONS, DIMENSIONS, AND ACCURACY OF MEASUREMENTS MAY DIFFER FROM THESE OR ANY PARAMETERS. RED LEONARD ASSOCIATES INC. ASSUMES NO LIABILITY FOR WHAT IS CREATED/PRODUCED IN THESE RECREATIONS. THIS INCLUDES BUT IS NOT LIMITED TO THE USE OF, INSTALLATION OF AND/OR INTEGRITY OF EXISTING BUILDING(S), SURROUNDING AREA FOR PRODUCT(S) SUCH AS EXISTING POLES, BASE(S), ARCHITECTURAL AND SIGNAGE STRUCTURE(S), LANDSCAPING PLAN(S), LIGHTING PLAN(S), FIXTURE SELECTION(S) AND PLACEMENT, MATERIAL(S), COLOR ACCURACY, TEXTURE(S), AND ANYTHING ATTRIBUTED TO PHOTO REALISM THAT IS CREATED. FURTHERMORE, RED LEONARD ASSOCIATES INC. DOES NOT ASSUME LIABILITY WHATSOEVER FOR ANY PURCHASES MADE BY CLIENT BEFORE, DURING, OR AT THE CONCLUSION OF THE PUBLISHED WORK. THE CUSTOMER, ITS RELATIVE AFFILIATES, AS WELL AS ANY OTHER PERSON(S) IN VIEWING OF THIS PRODUCT IS RESPONSIBLE FOR VERIFYING COMPLIANCE WITH ANY BUT NOT LIMITED TO ALL CODES, PERMITS, RESTRICTIONS, INSTRUCTIONS, PURCHASES, AND INSTALLATIONS OF OBJECTS VIEWED WITHIN THIS DOCUMENT(S) OR PROJECT(S). SYMBOLS ARE NOT DRAWN TO SCALE. SIZE IS FOR CLARITY PURPOSES ONLY. SIZES AND DIMENSIONS ARE APPROXIMATE. ACTUAL MEASUREMENTS MAY VARY. DRAWINGS ARE NOT INTENDED FOR ENGINEERING OR CONSTRUCTION USE. THIS DOCUMENT, ANY RED LEONARD DRAWING(S), OR PROJECT(S) IS NOT TO BE USED AND/OR INTENDED FOR ENGINEERING OR CONSTRUCTION PURPOSES, BUT FOR ILLUSTRATIVE PURPOSES ONLY. ANY LOCATIONS OF EMERGENCY LIGHTING SHOWN WERE PROVIDED BY OTHERS. RED LEONARD ASSOCIATES IS NOT RESPONSIBLE FOR INSUFFICIENT LIGHTING DURING AN EMERGENCY EVENT. ANY USE OF THIS DOCUMENTATION AND/OR OTHER ARTICLES PRODUCED BY RED LEONARD WITHOUT WRITTEN AUTHORIZATION FROM JAYNE J. LEONARD IS STRICTLY PROHIBITED.

**REDLEONARD ASSOCIATES**  
 1340 Kemper Meadow Dr. Forest Park, OH 45240  
 513-574-9500 | redleonard.com

REV.	BY	DATE	DESCRIPTION
R1	RCF	05/07/2021	DIMMED ALL SOFFIT FIXTURES AND WALL PACKS TO MEET CITY ORDINANCE. ALSO CHANGED SOFFIT FIXTURES TO NON-IC RATED FOR DIMMING PURPOSES

SCALE: 1" = 30'  
 DWG SIZE: D

LAYOUT BY: DAR  
 DATE: 4/9/21

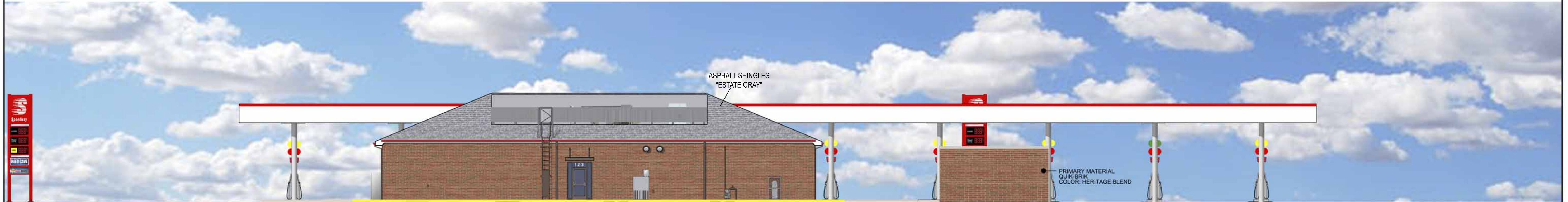
PROJECT NAME:  
**SPEEDWAY #2360**  
 KALAMAZOO, MI  
 DRAWING NUMBER:  
**RL-7297-S1-R1**







FRONT ELEVATION



REAR ELEVATION



LEFT ELEVATION



RIGHT ELEVATION

**Speedway®**  
 Prepared By:  
 Speedway and Construction Dept.  
 10000 State Rd.  
 Ellettsville, OH 45523

NO.	DESCRIPTION	DATE

**BUILDING ELEVATION**  
 NEW BUILD  
 1250 SOUTH DRAKE ROAD  
 KALAMAZOO MI  
 KALAMAZOO COUNTY

STORE OR BLDG NO.	2360
VERSION OR PROJECT ID	106941
SCALE	0 16' = 1'-0"
DESIGN TEAM	DATE
DGMR. J. THORNBURG	5/7/2021
P. MGR.	
RYMR. R. ROSEN	5/7/2021
DRWG. NO.	ELEV