



Planning Commission

Charter Township of Plymouth, MI

Wednesday, May 3, 2023

Special Meeting of the Planning Commission
7:00 PM · Township Municipal Offices

AGENDA

Meeting called to order at _____ PM

Remote Viewing
www.bit.ly/PlymouthLiveStreams
Sign up for Notifications
www.plymouthtp.org/enotify
Current Project Plans
www.plymouthtp.org/government/departments/community_development/current_projects.php



1. Roll Call:

- | | |
|--|-------------------|
| _____ Dennis Cebulski, Chairperson | _____ Tim Boyd |
| _____ Kendra Barberena, Vice-Chairperson | _____ James Berry |
| _____ Gail Grieger, Secretary | _____ John Itsell |
| _____ Bob Doroshewitz, Trustee | |

2. Approval of the Agenda: May 3, 2023

Moved by: _____ Supported by: _____
Action Taken: _____

3. Approval of the Minutes: None

4. Public Comment (for non-agenda items – maximum of three minutes per individual)

5. Public Hearing(s): None

6. New Business:

A.	PC# 2478	Northville Downs of Plymouth – PUD Development Plan
Applicant:	PEA Group, on behalf of Northville Downs	
Address:	Southwest corner of 5 Mile and Ridge Roads	
Tax ID(s):	R-78-001-99-0001-704, R-78-001-01-0001-000, R-78-001-01-0002-000, R-78-001-01-0003-000, R-78-001-01-0004-000, R-78-001-01-0005-000, R-78-001-01-0006-000, R-78-001-01-0007-000, and R-78-001-01-0008-000	
Zoning:	IND, Industrial District	
Action Requested:	-	
Motion:	Moved by:	
	Support by:	
	Action Taken:	

Commissioner Discussion Notes:

7. Unfinished Business: None

8. Miscellaneous Business / Communication: None

9. Commissioner Comments

10. Adjournment: Meeting adjourned at _____ PM

Moved by: _____ Supported by: _____
 Action Taken: _____

Next Meeting: May 17, 2023 at 7:00 PM

PLEASE TAKE NOTE: Plymouth Township will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at all Township meetings, to individuals with disabilities at the meetings/hearings upon two weeks’ notice to the Township by writing or calling the following: Human Resources, 9955 N. Haggerty Road, Plymouth, MI 48170; (734) 354-3202 TDD units: 1-800-649-3777 (MI Relay Services).

The public is invited and encouraged to attend all meetings of the Plymouth Planning Commission.



April 28, 2023

Planning Commission
Charter Township of Plymouth
9955 N. Haggerty Road
Plymouth, Michigan 48170

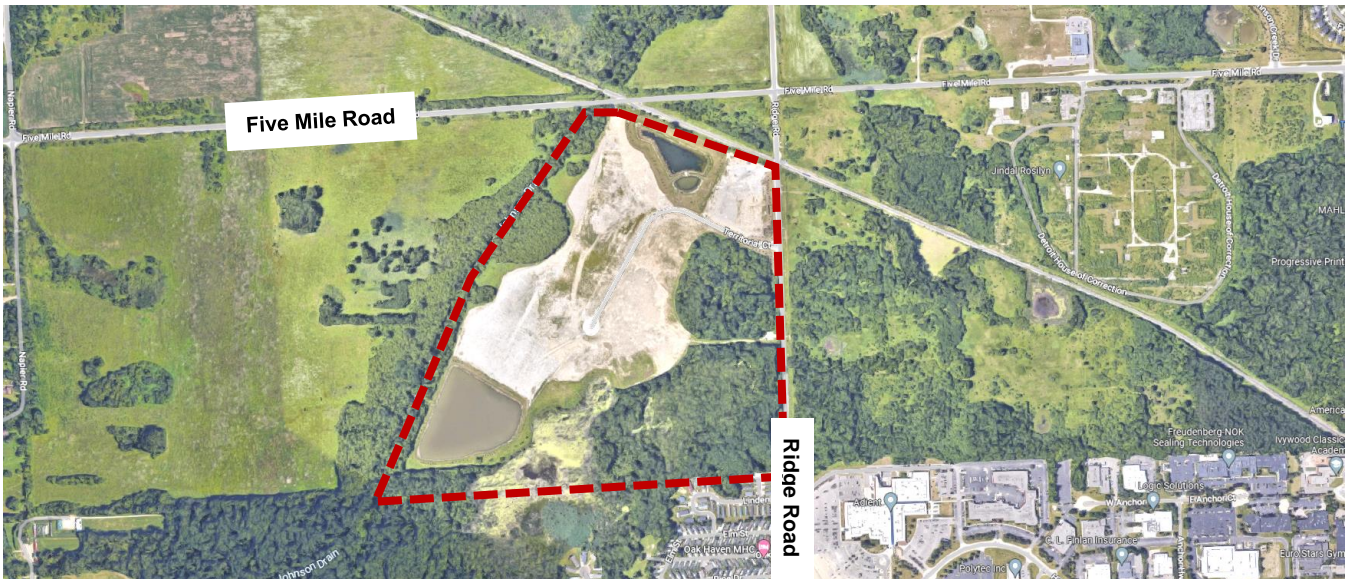
Subject: #2478 - Northville Downs of Plymouth: Planned Unit Development (PUD) Site Development Plan - Review #1

Parcel IDs: R-78-001-99-0001-704, R-78-001-01-0001-000, R-78-001-01-0002-000, R-78-001-01-0003-000, R-78-001-01-0004-000, R-78-001-01-0005-000, R-78-001-01-0006-000, R-78-001-01-0007-000, and R-78-001-01-0008-000

Dear Planning Commissioners,

We have reviewed the Planned Unit Development (PUD) Site Development Plan submitted by PEA Group Engineering and Northville Downs (the current property owner, "Applicant"). The proposed Project is for a new horseracing track facility and involves the relocation of the current Northville Downs racetrack (in the City of Northville) to the Plymouth community.

The proposed development ("Project") is located at the southwest corner of the Ridge Road and Five Mile Road intersection on approximately 125 acres (see Google aerial below) and is bordered to the north by the Chesapeake and Ohio Railroad (CSX) and to the west by the Johnson Drain. Previously, an industrial park called the Ridge 5 Corporate Park was planned for the site and the site was partially cleared, as shown below in the aerial – this project has since been withdrawn. The site is also part of the Michigan International Technology Center (MITC), which is a joint effort between Plymouth and Northville Townships (<https://www.mitc-usa.org/>).



HEADQUARTERS
235 East Main Street
Suite 105
Northville, Michigan 48167

☎ 248.596.0920
☎ 248.596.0930
MCKA.COM



Project Background and the PUD Process

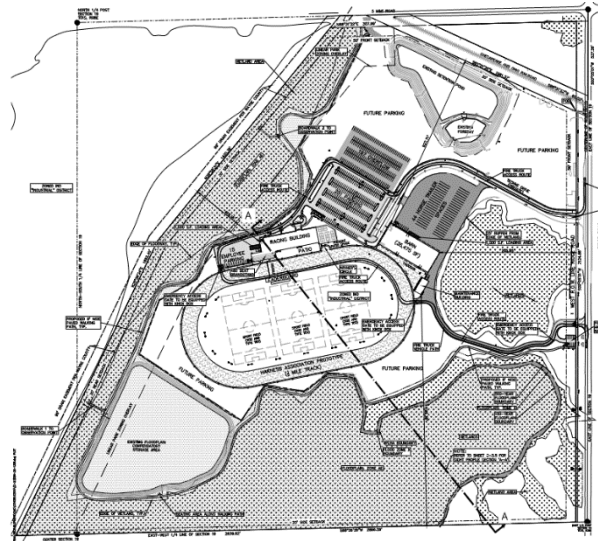
PROJECT HISTORY

The Carlo family (the Developer) has operated the current Northville Downs racetrack in the City of Northville since 1944, and now intends to relocate the racetrack to the Plymouth community and construct a new facility. In January of 2023, the Northville Downs of Plymouth Planned Unit Development (PUD) proposal was submitted to the Township for review.

PROJECT SUMMARY

The proposed Project includes the construction of a:

- ½ mile harness racetrack
- ±4,900 sq. ft. grandstand (±480 seats)
- ±23,000 sq. ft. racing building
- ±35,500 sq. ft. horse barn
- ±3,200 sq. ft. maintenance building
- parking and loading areas
- public walking path along Johnson Creek (with access from Ridge Road)



PUD PROCESS

Step #1: Planning Commission Consideration and Public Hearing

The first step for any proposed PUD is to apply for the PUD Option – in essence, the developer is asking the Township for the option to have a PUD on a given site. The PUD Option process precedes any formal site plan application and is an essential step in determining if a site is the appropriate location for a given PUD.

On February 15, 2023, the Planning Commission held a public hearing to discuss the proposal and hear public comment from residents and stakeholders. Following the public hearing on February 15, the Commission made a recommendation to the Board of Trustees for approval of the PUD Option, with conditions.

Step #2: Board of Trustees Consideration

The PUD Option was then considered by the Board of Trustees on February 28, 2023, after which the Board approved resolution #2023-02-28-14 to approve, with conditions, the PUD Option.

Approval of the PUD Option allowed the Developer 1-year to submit for site development plan approval. The site plan (aka “Development Plan”) has since been reviewed by Township staff. The Developer has also submitted a proposed PUD Contract, which is a document that sets forth any special conditions, restrictions, and agreements regarding the property. The PUD Contract is also reviewed by Township staff, including the Township attorney.



Step #3: Planning Commission Consideration for the Development Plan – Current Step

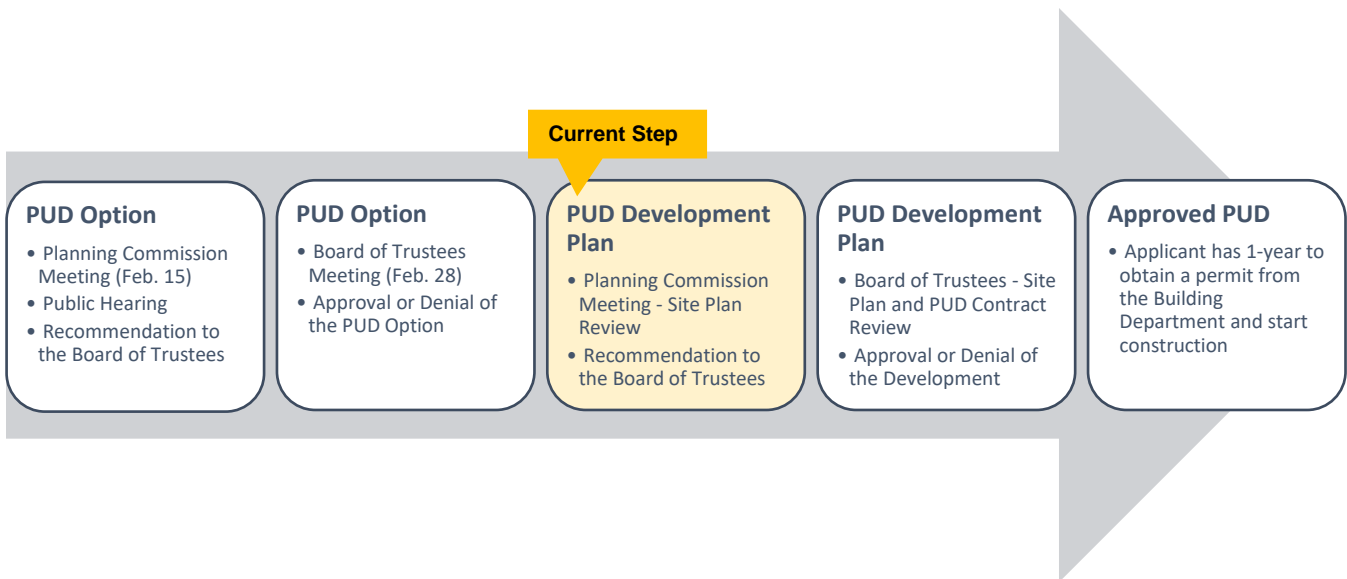
The Development Plan and PUD Contract will be presented to the Planning Commission on May 3, 2023, for consideration. then go before the Planning Commission, which would recommend either approval, approval with conditions, or denial to the Board of Trustees.

Step #4: Board of Trustees Consideration for the Final Development Plan and PUD Contract – TBD

Once the Planning Commission makes a recommendation, the final Development Plan and PUD Contract will be presented to the Board of Trustees. The Trustees would then vote to approve, approve with conditions, or deny the Development Plan and PUD Contract as submitted.

SUMMARY OF THE ENTIRE PUD PROCESS

The flow chart below provides a summary of the key steps in the PUD process; this project is currently at the third stage in the review process:





PUD Development Plan

The Development Plan (the proposed site plan) must meet the requirements for site plan approval (as set forth in section 29.8.2), as well as the specific standards of the Planned Unit Development (PUD) ordinance (section 23.9), which are outlined below:

SITE DESIGN (ZONING & USE)

The siting of all structures and all elements of the site design shall be harmoniously and efficiently organized in relation to topography, parcel configuration, adjacent properties, traffic operations, adjacent streets and driveways, pedestrian access, and the type and size of buildings. The site design shall ensure that adequate light and air are preserved so as not to be detrimental to the orderly and harmonious development of the Township.

Findings: Per the [Zoning Map](#), the subject site is zoned the Industrial (IND) District with a PUD overlay. A PUD is an alternative method of development that may be permitted only after a public hearing, review and recommendation by the Planning Commission, and approval by the Board of Trustees. The PUD Option was granted by the Board of Trustees in February of 2023 for the proposed horse racetrack facility.

The proposed project is entirely composed of recreational, sport, and entertainment uses, and does not include an industrial component. The location, height, bulk, and character of the proposed Project are generally in line with the Master Plan are not expected to disrupt the orderly development and functioning of adjacent properties. Further, the proposed use of the property is not expected to disrupt neighboring industrial developments in the MITC.

SITE APPEARANCE & COORDINATION

Site elements and the relationship between the various uses on the site shall be designed and located so that the proposed development is aesthetically pleasing and harmonious with adjacent existing and prospective development of contiguous properties and the general planning area. All site features, including vehicle and pedestrian circulation, building orientation, landscaping, lighting, utilities, recreation facilities, and open space shall be designed to coordinate with adjacent properties and uses.

Findings: The proposed footprint of the use fits within the existing land area that was improved (already graded and cleared) for development during the previously approved Ridge 5 Business Park. Under a PUD, the following dimensional standards apply. The project is in compliance with most dimensional standards, however, some dimensions need to be clarified on the site plan. The proposed dimensions are listed in the following table:

Dimensional Measurement	Required	Proposed	Comments
Min. Lot Area	None	±125 acres	n/a
Max. Lot Coverage	None	Total Impervious Area: 9.93 acres (7.91%) 1.53 acres (1.22%) building coverage 8.40 acres (6.69%) paved surfaces	n/a



Dimensional Measurement	Required	Proposed	Comments
Min. Distance Between Buildings	10-feet, plus +4-feet per story after 2-stories	n/a	Dimensions must be provided, appears to be in compliance.
Max. Building Height	9-stories	Grandstand Building: 3-stories (46-feet) Barn: 1-story (±22 feet) Maintenance Building: 1-story (±20 feet)	In compliance.
Min. Perimeter Yard Setbacks	25-feet	Front (North): ±927 Front (south): ±705 Side (east): ±412 Side (south): ±1,296	Complies. Must be corrected on sheet C-3.0; listed as 50-feet. Setbacks must be measured from the racetrack as well.
Min. Open Space	20% of total land area	Wetlands occupy 52.23 acres, 41.73% of the total site	Complies.

PRESERVATION OF SITE FEATURES

The site design shall, to the extent feasible, conserve natural, cultural, historical, and architectural site features, including but not limited to architecturally or historically significant buildings, archeological sites, wetlands, topography and wooded areas.

Findings: The PUD Option gives the Developer greater flexibility in conserving open space through sound site planning and reducing impervious surface area. The Project contains numerous protected wetlands and conservation of these natural features to the highest degree possible is desired.

The proposed Project dedicates ±52 acres (41.7%) of the total site to wetlands and woodlands. This is a greater quantity than is required under the Industrial (IND) zoning district, which has no maximum lot coverage percentage. The woodland/wetland area will be open to the public via the walking trail with parking located off Ridge Road, which represents an increase in the amount of recreation land and opportunities in the Township. Additionally, all future parking areas are proposed to be within the already-graded portions of the site. As such, no additional tree removals would occur at the time of construction.

The Project does not contain any manmade features that are historically, culturally, or otherwise significant. Please see additional comments under the Landscaping section.

IMPACT ON PUBLIC SERVICES

Utility services, including sanitary, water and storm runoff, shall not exceed the existing or planned capacity of such services, and shall be developed in the best interest of the public health, safety and welfare of the community. The proposed development shall be designed and located so that public services, including streets and sidewalks, police and fire protection, and public schools have sufficient capacity to properly serve the development, and so that such services will not be adversely affected by the proposed development.



Findings: The site is served by existing utilities from Ridge Road and already has existing underground infrastructure along Techne Drive. Approval of this standard is subject to the Township Fire Chief and Township Engineer; both departments have outstanding items that must be addressed on a revised plan.

VEHICULAR ACCESS & CIRCULATION

The vehicular circulation system planned for the proposed development shall be in the best interest of the public health, safety, and welfare in regard to on site circulation, onsite parking, the overall circulation of the neighborhood and community, egress/ingress to the site, vehicular turning movements related to parking areas, loading areas, street intersections, street gradient, site distance and potential hazards to the normal flow of traffic both on and off site.

Findings: The existing Techne Drive boulevard entrance, which is adequate in width to provide truck access to the site, will be maintained as the primary access to Ridge Road and the site. Overall, the circulation proposed under the Project site plan conforms to the Master Plan objective to “Reduce the potential for vehicular conflicts by keeping the number of curb cuts along major thoroughfares and collector roads to a minimum and encourage the use of shared access points.” A secondary entrance off Ridge Road is proposed for emergency access, as well as public access to the trailhead parking lot.

Final approval of the vehicular network is required by the Township Engineer and Fire Department

PEDESTRIAN ACCESS & CIRCULATION

The pedestrian circulation system planned for the proposed development shall be in the best interest of the public health, safety and welfare in regards to on site circulation and the overall pedestrian circulation of the neighborhood and community.

Findings: The Project includes sidewalks along the perimeter of the racing building, maintenance building, and barn. As a previous condition of approval, a sidewalk from the main entrance on Ridge Road is now provided to the main entrance of the facility. Sheets C-4.4 and C-4.5 show an 8-foot sidewalk along Ridge Road, which was a condition of approval by the PUD Option. The Ridge Road sidewalk should be connected directly to the walking path on-site; currently, a small 2-foot grass patch separates the two segments, presenting a barrier for accessibility.

The proposed walking path through the site's wetlands is a critical part of the pedestrian network in the northwest area of the Township. To make the path fully accessible to all users, both the parking lot and the path will now be paved (or a boardwalk, for approximately 100-feet of the trailway) and the path will be 8-feet in width. An ADA-accessible parking space has also been added to the parking lot. Three spurs to scenic areas of the Johnson Drain, and community signage for the parking lot and path, will also be provided.

EMERGENCY ACCESS & VULNERABILITY TO HAZARDS

All sites and buildings shall be designed to allow convenient and direct emergency access, and the emergency response needs of the proposed use(s) shall not exceed the Township's emergency response capabilities.

Findings: This item is subject to approval by the Township Fire Chief and Township Engineer.



LANDSCAPING, SCREENING & BUFFERING

Proposed landscaping, screening and buffer areas shall be appropriate and of such size, location, height and quantity to ensure that the proposed development will not be objectionable to nearby development or properties by reason of noise, fumes, flash of lights from automobiles or other lighting, interference with an adequate supply of light and air, an increase in the danger of fire, or other public safety hazard. Screening shall be provided in a manner that adequately buffers adjacent land uses and screens off-street parking, mechanical appurtenances, loading and unloading areas and storage areas from adjacent residential areas and public rights-of-way.

Findings: As a condition of the PUD Option, additional landscaping, beyond what is required by Ordinance must be provided. Specific recommendations are listed below:

Detention Basin Landscaping

The selected permanent plants for the emergent wetland seed mix and the stormwater seed mix are all native species appropriate for the soil type of the selected environments (respectively). However, the “temporary cover” includes Annual Rye, which is a European-originating short grass. We recommend that the temporary cover mix be modified to substitute Canada Wild Rye (native) for the Annual Rye. Further, we recommend that a small amount of white clover be included in the temporary mix; as a legume, clovers help restore soil health through carbon fixation and prepare sites for successful native plantings in the future. However, clover should not be the dominant seed if included in the mix, due to its short roots – a strong grass would still be needed for soil stabilization.

A minimum 25-foot buffer has been provided around both detention ponds.

Right-of-Way Landscaping

The right-of-way landscaping is absent along the gravel access drive. Given that people will be walking adjacent to this right-of-way as they use the multi-use path, shade trees should be provided at regular intervals.

No trees are proposed along the length of Ridge Road. Deciduous trees should be provided at regular intervals along the lawn extension fronting Ridge Road (with the understanding that Wayne County’s review may affect tree placement and number). Under conventional zoning, trees must be planted along the entire length of the site frontage, in an amount equal to a minimum of one street tree per 40-feet of site frontage, as measured at the street setback line.

Parking Lot Landscaping

The overflow parking area does not include any landscaped islands, trees, swales, or curbing on the east and west sides. These features should be included given that this is a permanent parking lot. The northern edge of the parking area is appropriate to leave un-curbed, given that future lot expansion may warrant connecting this edge to future parking (if constructed due to increased visitor demand).

The horse trailer parking area should include curbing along the entirety of the eastern edge to prevent contaminated sheet runoff from entering the wetland area. Even more preferable would be the establishment of a swale (or intermittent swales, separated by curb) along the western edge, which would capture runoff from the trailer area and infiltrate it before reaching the wetland.

Additional infiltration opportunities should be explored for the general parking areas – curb cuts leading into strategically placed swales along the parking lot perimeters swales could help further infiltrate stormwater. Although this would not eliminate the need for the detention basin, it would help improve overall water quality by limiting the distance rainwater travels across the land’s surface (during which time it collects particles and pollutants). Further,



the USGS Soil Survey indicates the site is predominately loamy soil, which typically has good or very good drainage. More engineering study would be required to determine where swales or other interventions would be feasible, and we highly encourage that this be examined.

The dimensions of the parking lot islands are missing and must be included. This is necessary to determine the number of trees that should be provided per island – under conventional zoning, a minimum of one deciduous shade tree shall be provided for each 80 square feet of planting area within the island.

General Landscaping

The landscape plan includes numerous occurrences of *Ulmus Frontier* (Frontier Elm), which is somewhat disease resistant compared to American Elm. However, it would be more desirable to use an alternative deciduous tree, preferably “Valley Forge” (the most disease resistant hybrid species) if the applicant wishes to remain in the Elm tree family.

The landscape plan includes the European Hornbeam, which would be more desirable if substituted with the American Hornbeam, which includes more vibrant fall colors and is a native species.

The proposed Rain Garden plantings are all native species of acceptable size and quantity.

There is a distinct lack of shrubs and ornamental plantings throughout the site interior – at present, the only landscaping is deciduous trees scattered throughout open lawn. The lawn areas surrounding the parking lot, roadways, and front entrance should be enhanced with flowering shrubs, grasses, and other ornamentals. In particular, a mix of perennials, annuals, and evergreen should be provided to ensure that landscaping is present year-round. Further, species should be drought-resistant in the non-irrigated lawn areas.

The plant materials are all uniform calipers – the Township typically requires a mix of tree heights and sizes to establish visual interest throughout a site.

The landscape plan indicates that all lawn areas shall have 3” of topsoil – a minimum of 4” is the standard for all other sites in the Township and is required.

There are two large lawn areas to the south of the racetrack that are not visible to the public – these areas should be plated with a drought-resistant native groundcover mix, rather than lawn, to ensure they are resilient and low-maintenance, but still accessible by emergency crews.

The grass species for the sod lawn and seed lawn, respectively, must be provided.

BUILDING DESIGN & ARCHITECTURE

Building design and architecture shall relate to and be harmonious with the surrounding neighborhood in terms of texture, scale, mass, proportion, materials, and color.

Findings: The proposed racing building and grandstand is designed using smooth-finish metal panels, brick, and split-face block. The proposed barn and maintenance building are designed using vertical ribbed metal siding and split-face block. The Applicant proposes a modernist architectural design for the racing building and a traditional design for the barn and maintenance building. As a PUD, the proposed building elevations, especially for the main grandstand facility, are underwhelming and do not represent the rendering illustrated in the PUD Option narrative provided by the Applicant. It is recommended that the Planning Commission provide direction on the building elevations and that revised plans are submitted for review to the Township.



We understand that the Applicant is finalizing colored building renders for the Commission's review and will provide them at the meeting on May 3, 2023.

Both the barn and maintenance building are single-story structures and no greater than 25-feet in height, which is shorter in height than a typical industrial building. The main grandstand building is proposed at 45-feet in height, which is similar to other industrial buildings and does not exceed the maximum allowable height of the PUD Option (9-stories).

Additionally, all proposed signs must comply with the requirements of Article 25: Sign Regulations.

EXTERIOR LIGHTING

All exterior lighting fixtures shall be designed, arranged, and shielded to minimize glare and light pollution, prevent night blindness, and vision impairments, and maximize security.

Findings: After relaying concerns that the initial lighting plan featured light poles that were too tall and bright, the Township received a revised lighting plan on Friday, April 28, 2023; due to the timing, review comments are not ready and will be provided by the May 3, 2023, meeting.

PUD CONTRACT

A PUD Contract is required, which complies with the requirements of section 23.8.

Findings: First, the draft PUD Contract must be found acceptable by the Township Attorney, it is our understanding that modifications will be required.

Second, from a planning perspective, there are concerns over the commitment proposed in the PUD Contract. This specifically includes the environmental provisions. During the PUD Option process, the Applicant proposed the following sustainability features, to be designed and located during the site development phase of the project (should the PUD Option be approved at that time). This included:

- Solar panel arrays
- Geothermal heating
- Light reduction measures

The proposed PUD Contract states the "*Owner will endeavor to include carbon neutral energy solutions, passive design techniques and other energy efficiency constructions strategies in the design of the Entertainment Facility*". The investigation of the feasibility of these amenities must be conducted prior to final approval of the Development Plan, as they were proposed to be a benefit for the granting of the PUD Option itself.

Additionally, as part of the PUD Option, one condition of approval was that the PUD Contract would define the maximum allowable decibel levels, which have not been addressed. It is recognized that the project will generate noise on sporting event days and likely generate odor on live-racing days.

ADDITIONAL COMMENTS

The following elements were discussed during the PUD Option and must be addressed prior to finalizing the Development Plan and PUD Contract. This includes:



Waste Management Plan

The proposed PUD Contract states that “*All horse manure generated during a racing day event will be collected and stored in approved containers within 24 hours after each event. The Owner will ensure that no manure or other waste is stored in a manner which is likely to result in the contamination of ground water. The containers in which manure and other waste is stored will be emptied on a weekly basis.*” However, the site’s proximity to open surface waters warrants additional attention to waste, and fallbacks should be provided the event owners fail to collect the waste. A waste management plan should be drafted and submitted to Wayne County for review and approval. This plan should follow the best practices outlined by the National Thoroughbred Racing Association’s 2021 guidelines for biosecurity, although it need not meet the requirements to be accredited by the NRTA Safety and Integrity Alliance.

Safety

There are several outstanding safety questions, these include:

1. Will there be periodic training for employees that interact with the horses, to ensure the animals are safe in the conduct of their regular duties? How regular will training be, if provided?
2. Do you have a safety committee of employees, stewards, horse racers, jockeys, etc.? If so, who composes the committee and how often do they meet?
3. Will any flammable solvents for stable cleaning be stored on site? How are these secured? Is there an outdoor smoking area for stable staff to prevent the possibility of fires beginning in the stables?

Specialty Traffic

Given the unique purpose of the site as a regional tourist destination, additional considerations should be made for specialty traffic. The PUD Contract (and/or the site plan) should specify plans to accommodate the following types of traffic:

1. Ride hailing pick-up and drop-off.
2. Bus and oversize vehicle parking.
3. Shuttle service from off-site (if the applicant plans to provide such a service).

Evacuation Plan

The proposed PUD Contract state that: “*An emergency evacuation plan will be developed in accordance with the requirements of the Plymouth Township Fire Department. Traffic management in an emergency situation will be in accordance with the Access Plan shown on the General Development Plan [site plan].*” However, evacuation plans should not be based solely on the requirements of the Plymouth Township Fire Department. A proper evacuation plan should incorporate the best practices set forth by the US Dept. or Homeland Security, which has specific guidelines for stadium evacuations. We recommend that language to this effect be incorporated in the PUD contract and that a specific time frame be established for the delivery of the complete evacuation plan (e.g., within 6 months of signing, before the Certificate of Occupancy, etc.).

Other

The proposed walking path is asphalt and maintenance standards should be included in the PUD Contract, given that asphalt has a life expectancy of asphalt is greatly affected by routine maintenance. Low-cost repairs add additional years of life to the pavement for a far lower annual cost than waiting for that segment to require reconstruction, and as such, maximize the volume of preventative maintenance performed each year while slowly ‘chipping away’ at high-cost rebuilds.



Recommendation

Based on the information submitted and the number of outstanding items in the Development Plan, PUD Contract (including outstanding items from the Township Engineer, Attorney, and Fire Department), it is recommended that the Planning Commission provide direction to the applicant on May 3, 2023, and table any further action until a revised plan set and PUD Contract is provided to the Township.

Please do not hesitate to contact us with any questions, thank you.

Respectfully submitted,

McKENNA

Laura E. Haw, AICP, NCI
Senior Principal Planner

Nani Wolf, AICP, CAPS
Associate Planner

CC: Township Clerk: Jerry Vorva, 9955 N. Haggerty Rd, Plymouth, MI 48170 (jvorva@plymouthtwp.org)

April 20, 2023

The Planning Commission
Plymouth Charter Township
9955 North Haggerty Road
Plymouth, Michigan 48170

Re: Northville Downs – Site Plan Review
Application No. 2478-0423
SDA Review No. PL23-104

Dear Planning Commission:

We have received the site plan submittal for the above referenced project prepared by PEA Group dated March 31, 2023 and were received by our office on March 31, 2023. The plans were reviewed in accordance with Plymouth Township Engineering Standards and the following comments are our observations.

A. General

The site is located on the southwest corner of 5 Mile Road and Ridge Road. The site is 125.16 acres total. The site is currently occupied by an existing 60' wide private road, Techne Drive, and the remaining of the site is vacant. The proposed project includes the removal of a part of the private road and construction of a racing building, maintenance building, barn, and half mile harness racing track with parking areas and horse trailer spaces along with drives connecting the site.

The proposed parcel legal description is within Parcel, Tax ID. 78-01-99-0001-704. This parcel was split/combined on 01/22/2021. A lot split for the existing Ridge 5 Corporate Park Condominium will be required prior to final site plan approval.

1. Revise the plans to indicate and label the existing gravel maintenance access drive on the northwest corner of the site.
2. The existing site is located within floodplain and wetlands areas. The current plans indicate that the wetland areas will be impacted and disturbed. EGLE Permits will be required for any proposed work within these areas.
3. No landscaping will be permitted within the watermain easement or sanitary sewer easement and will be separated from any proposed storm sewer by a minimum of 5-feet.
4. There are some regional utilities plan that will impact this development including water tower and water main. Coordination with Township and our office (SDA) will be required.
5. Provide a traffic impact assessment with historical vehicle data, during AM and PM peak hours and special events to determine the impact traffic to the corridor.
6. The revised layout of two fire access roads shall be reviewed and approved by the Plymouth Fire Marshall.

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are not required at this time for site plan approval:

1. Provide cost estimate with unit cost for construction of all the underground utilities and paving and grading to be installed with this project. The engineering review and construction inspection fees that we will compute based on the said estimate must be submitted to the Township prior to engineering plan review and approval.

B. Water Main

The plans show an existing 12" diameter water main located on the south side along Techne Drive that loop around the existing wetland to the south and connects to the existing water main along Ridge Road in two locations. The existing water main is captured within a 12-foot wide easement. The proposed watermain connects to existing 12" watermain at two locations by the proposed racetrack, and loops around the proposed racing building and it is captured within a proposed 12-foot-wide easement.

Based on this water main layout, we have the following site review comments:

1. Revise the plans to show the existing 12-foot wide water main easement and vacate the existing easement where the water main is being removed.
2. All proposed water main shall provide at least 20 feet clearance from centerline of watermain to outside edge of any building structure including the racing building. Engineering drawings shall reflect this change.
3. An EGLE permit for construction will be required for the proposed public watermain.

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are not required at this time for site plan approval:

1. All watermain shall have six (6) feet of cover from finished grade.
2. The Plymouth Fire Marshall shall review and approve the hydrant coverage for the site.
3. At engineering stage, coordination will be needed for the location of the proposed gate valve and well which is currently shown inside the racing track surface.

C. Sanitary Sewer

The plans show an existing 8" sanitary sewer located along the north side of Techne Drive and drains into a private pump station located approximately 500 feet west of the Ridge Road Right-of-Way and along the northern right-of-way of Techne Drive. There are existing 12-foot wide, and 22-foot wide private and a 20-foot wide public sanitary easements. There are two proposed leads connecting to the existing 8" sanitary sewer serving the proposed barn and racing building.

Based on this sanitary sewer layout, we have the following site review comment:

1. Revise the plans to show the existing sanitary sewer easements.

D. Storm Drainage/Grading

Storm water runoff is to be captured via catch basins along the proposed parking areas and Techne Drive and drain to the existing detention facility on the north side of the site with outlet to the Johnson Drain. Records and storm water management calculations provided indicate that the proposed site is accounted for in the Ridge Road Industrial Park detention basin calculations.

Based on this storm drainage and grading layout, we have the following site review comments:

1. Offsite surface runoff shall not be trapped along the development perimeter. If the existing runoff from adjacent properties pass onto the proposed site, the proposed storm sewer system must be sized to accommodate.
2. On-site drainage must be captured within the proposed development via the storm sewer network and will not be allowed to drain to adjacent properties.
3. Indicate how the stormwater run-off from proposed barn, paddock, racing track and any horse areas will be treated for storm water quality, including the interior and exterior perimeter of the racetrack.
4. Confirm that Wayne County Department of Public Services will not require additional detention capacity and stormwater pre-treatment on site.
5. All storm water design calculations are to follow Plymouth Township and Wayne County Department of Public Services standards and details.

These comments are to assist in plan preparation in anticipation of your engineering review submittal and are not required at this time for site plan approval:

1. Slope grades are to be provided on the grading plan.

E. Paving

The site is accessed by two driveways off Ridge Road, an existing 60' wide private road, Techne Drive, and a proposed commercial drive. The proposed plans include a racing building, maintenance building, barn, and half mile harness racing track, 251 parking areas, 197 overflow parking spaces, 15 employee parking spaces and 44 horse trailer spaces along with drives connecting the site. Sidewalk is proposed along the frontage of the site on the west side of Ridge Road and a proposed 8' paved bike path is proposed around the site with a wooden boardwalk overseeing the drain from the existing gravel maintenance access road and looping around the site to the proposed paved parking area.

Based on this proposed work, we have the following site review comments:

1. Identify on plans the type of existing pavement and curb.
2. Sheet C4.4: Consideration shall be provided along the proposed asphalt bike path near the steep proposed slopes along the wetland.

Permits Required

Based on those improvements depicted on the plans, the following permits may be required and will need to be provided to the Township once available. Any changes to the approved site plan from the following agencies that impact the design may require reapproval.

Plymouth Township:

1. All necessary easements including water main, and any vacated easements. Easements must be on Plymouth Township Standard Easement document and include a sketch. A current title policy for ownership verification shall be provided with all executed easement submittals.

2. Storm Water Agreement (for the stormwater system improvement on the site).
3. Maintenance bond and insurance for the water main to be dedicated to the township.

Wayne County:

1. Copy of Wayne County Department of Public Services approval and permit.
2. Copy of Soil Erosion and Sedimentation permit from Wayne County Department of Public Services, Land Resource Management Division.
3. Wayne County Permit for any work within the Ridge Road ROW, if applicable.

Michigan Department of Environment, Great Lakes, and Energy (EGLE):

1. NPDES Notice of Coverage Documentation.
2. EGLE Permit for all water main installation.
3. EGLE Permit for any proposed work in 100-year flood plain, if applicable.
4. EGLE Permit for Inland Lakes and Streams, if applicable.
5. A Letter of Map Revision must be requested through Federal Emergency Management Agency (FEMA) for the Flood Insurance Rate Map (FIRM) where portions of 100-year floodplain limit is proposed to be relocated, if applicable.
6. EGLE Permit for all proposed work within the state-regulated wetlands.

Please be aware that additional comments may arise with the submittal of the requested revisions and/or additional information.

RECOMMENDATION

We recommend approval of the Tentative and Final Site Plan, conditional upon all of the above comments being addressed to the satisfaction of the Planning Commission. Final engineering approval is not recommended at this time due to the number and nature of the comments.

The comments are not to be constructed as approvals and are not necessarily conclusive. The final engineering plans for this development are to be prepared in accordance with the Plymouth Township Engineering Design Standards and 2021 Plymouth Township Standard Details. Sanitary sewer and water benefit fees may be applicable for this project.

If you have any questions regarding this matter, please contact our office at your convenience.

Sincerely,

SPALDING DEDECKER



Adam Chludzinski
Project Engineer



Luisa Amici
Municipal Engineer

cc: Patrick Fellrath, Director of Public Utilities, Charter Township of Plymouth (via Email)
Carol Martin, Office Manager, Charter Township of Plymouth (via Email)



PLYMOUTH TOWNSHIP FIRE DEPARTMENT

9955 N. Haggerty Rd (734) 354-3219 Fax: (734) 354-9672
Plymouth, Michigan 48170-4673 Emergency - Dial 911

Occupant Name:	Vacant	Inspection Date:	4/26/2023
Address:	49500 S.W Five Mile - Ridge rd.	InspectionType:	Site Plan/Plan Review
Suite:		Inspected By:	Jeff Randall jrandall@plymouthtwp.org
Occ. Sq. Ft.:	0	Lockbox Location:	
Contacts:	-None-		

Insp. Result	Location	Code Set	Code
N/A	Floor 1	IFC 2012 Section 501 General	501.3 - Construction documents.
Fail	Floor 1	IFC 2012 Section 503 Fire Apparatus Access Roads	503.1 - Fire Access Roads
Inspector Comments: Secondary Fire Access Road will require ELECTRIC Knoxbox assessable gates. The use of the racetrack as a second access will require higher standards on gates. Racetrack must be able to handle 75,000 pounds of weight .			
N/A	Floor 1	IFC 2012 Section 503 Fire Apparatus Access Roads	503.1.1 - Buildings and facilities.

We thank you for providing us the time to inspect your business. We anticipate your cooperation in correcting the Fire Code hazards and violations cited.

Fire Department inspectors will return on or shortly after 5/9/2023 to ensure compliance.

Please note that a court appearance ticket may be issued for non-compliance. If you are the tenant and some of the violations listed above are the responsibilities of the owner, it is your responsibility to contact them for the code corrections.

ALL PLAN DEFICIENCIES MUST BE CORRECTED BEFORE PLANS ARE APPROVED.

To schedule additional plan reviews, please call Inspector Jeff Randall at 734-354-3219. Approval of plans does not remove the contractor or other responsible party from responsibility for adhering to all applicable codes and ordinances.

Inspector:


Signature valid only in mobile eye's documents
 Jeff Randall

FINAL SITE PLANS

NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP

49500 THROUGH 49900 TECHNE DRIVE
PLYMOUTH TOWNSHIP, WAYNE COUNTY, MICHIGAN

PERMIT / APPROVAL SUMMARY		
DATE SUBMITTED	DATE APPROVED	PERMIT / APPROVAL
		SITE PLAN APPROVAL
		TOWNSHIP ENGINEERING APPROVAL
		WAYNE COUNTY SESC PERMIT
		WAYNE COUNTY ENGINEERING
		NPDES PERMIT
		EGLE WATER MAIN PERMIT
		EGLE WETLANDS PERMIT

WAYNE COUNTY D.P.S. GENERAL NOTES:

- ALL WORK WITHIN THE WAYNE COUNTY ROAD RIGHT-OF-WAY (ROW) AND DRAIN EASEMENT SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND GENERAL SPECIFICATIONS, INCLUDING SOIL EROSION AND SEDIMENTATION CONTROL OF THE WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES AND MDOOT 2012 SPECIFICATIONS FOR CONSTRUCTION.
- THESE PLANS ARE NOT VALID WITHOUT ATTACHMENT OF THE WAYNE COUNTY PERMIT SPECIFICATIONS FOR CONSTRUCTION WITHIN THE ROAD RIGHT-OF-WAY, PARKS, DRAIN EASEMENT OR SANITARY SEWER UNDER JURISDICTION OF THE WAYNE COUNTY (07/01/93) REVISED 12/15/2004.
- CONTRACTOR SHALL CONTACT MISS DIG AT 811 TO IDENTIFY AND FLAG/MARK THE LOCATIONS OF ALL UNDERGROUND UTILITIES AT THE PROPOSED CONSTRUCTION AREAS PRIOR TO START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS AND ELEVATIONS OF ALL UNDERGROUND UTILITIES AND RESOLVE ANY CONFLICT BETWEEN THE PROPOSED WORK AND THE EXISTING UNDERGROUND OR ABOVE GROUND UTILITIES.
- CONTRACTOR SHALL MAINTAIN 18" MINIMUM VERTICAL CLEARANCE AND 3 FEET MINIMUM HORIZONTAL CLEARANCE BETWEEN THE PROPOSED AND EXISTING UTILITIES. ANY PROPOSED UTILITY PERMITTED TO CROSS UNDER THE ROAD OR DRAIN MUST BE PLACED A MINIMUM OF 7 FEET BELOW THE LOWEST POINT OF THE ROAD, OR 6 FEET BELOW THE DRAIN BOTTOM. OVERHEAD WIRES/CABLES MUST BE INSTALLED 18 FEET MINIMUM ABOVE THE ROAD CENTERLINE. TO RELOCATE ANY UTILITY WITHIN THE ROAD R.O.W., THE CONTRACTOR SHALL COORDINATE THE RELOCATION WITH THE UTILITY COMPANY AND AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
- ALL SURVEY MONUMENTS/CORNERS AND BENCH MARKS LOCATED WITHIN THE CONSTRUCTION AREA MUST BE PRESERVED IN ACCORDANCE WITH PUBLIC ACT 74 AS AMENDED (INCLUDING ACT 34, P.A. 2000) AND AS PER WAYNE COUNTY PERMIT RULE 1.5. THE PERMIT HOLDER AND CONTRACTOR SHALL COORDINATE THE WORK WITH A PROFESSIONAL SURVEYOR LICENSED IN THE STATE OF MICHIGAN DURING CONSTRUCTION ACTIVITIES FOR THE PURPOSE OF WITNESSING, PRESERVING OR REPLACING SURVEY MONUMENTS AND MONUMENT BOXES.
- EXPOSURE OF ANY UTILITIES UNDER THE PAVEMENT WILL NOT BE PERMITTED UNLESS APPROVED BY THE WAYNE COUNTY ENGINEER. PAVEMENT REMOVAL AND REPLACEMENT SHALL BE PERFORMED PER APPLICABLE WAYNE COUNTY STANDARD DETAILS AND AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
- CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS WITHIN THE WAYNE COUNTY ROAD RIGHT-OF-WAY AND DRAIN EASEMENT WITH 3" OF TOPSOIL, THM SEED MIX AND MULCH. SLOPES STEEPER THAN 1 ON 3 SHALL BE RESTORED BY PLACING SOD ON 2" OF TOPSOIL.
- ALL BACKFILLS UNDER OR WITHIN 3 FEET OF THE PROPOSED OR EXISTING PAVEMENT, CURB OR SIDEWALK SHALL CONFORM TO THE WAYNE COUNTY TRENCH 'B' BACKFILL REQUIREMENTS. TRENCH 'A' BACKFILL MAY BE USED WITHIN THE ROAD R.O.W. AREAS UNDER CONDITIONS OTHER THAN THOSE SPECIFIED FOR TRENCH 'B'.
- CONTRACTOR IS RESPONSIBLE FOR RESTORING OR REPLACING ALL DISTURBED LANDSCAPED AREAS, SPRINKLER SYSTEMS, FENCES, SIGNS, MAIL BOXES, ETC. WITHIN THE WAYNE COUNTY ROAD R.O.W. AND/OR AS DIRECTED BY THE COUNTY ENGINEER.
- CONTRACTOR SHALL MAINTAIN TWO-WAY TRAFFIC AT ALL TIMES, OTHERWISE, DETOURING TRAFFIC MUST BE PER APPROVED PLANS. ALL SIGNING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.
- MAINTAIN A SAFE AND ADEQUATE TRAVEL ROUTE FOR PEDESTRIANS AT ALL TIMES THROUGHOUT THE PROJECT DURATION.
- TUNNELING, BORING AND JACKING OPERATIONS SHALL BE IN ACCORDANCE WITH THE WAYNE COUNTY SPECIFICATIONS AND DETAILS. BORE PITS SHALL BE PLACED AT MINIMUM 10 FEET FROM THE BACK OF CURB OR EDGE OF PAVEMENT.
- REMOVE ALL ABANDONED CONDUITS FROM THE COUNTY ROAD R.O.W. OR AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
- CONTRACTOR SHALL PROVIDE COLD WEATHER PROTECTION FOR ALL PROPOSED CONCRETE WORK (PAVEMENTS, SIDEWALKS, DRIVE APPROACHES, ETC.) AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
- OVERNIGHT VEHICLE PARKING AND STORAGE OF CONSTRUCTION MATERIALS AND EQUIPMENT ARE NOT PERMITTED WITHIN THE WAYNE COUNTY ROADS R.O.W.
- CONTRACTOR SHOULD OBTAIN SOIL EROSION AND SEDIMENTATION CONTROL PERMIT FROM THE WAYNE COUNTY DPS-ESG. CONTACT THE WAYNE COUNTY SOIL EROSION OFFICE AT (734) 326-3936.
- CONTRACTOR SHALL NOTIFY THE WAYNE COUNTY TRAFFIC SIGNAL SHOP AT (734) 955-2154 AT LEAST 3 DAYS PRIOR TO START OF WORK AT/NEAR ANY SIGNALIZED INTERSECTIONS.
- CONTRACTOR SHALL NOTIFY WAYNE COUNTY 72 HOURS PRIOR TO THE START OF CONSTRUCTION. CONTACT THE PERMIT OFFICE AT (734) 595-6504 EXT. 2009

DESIGN TEAM

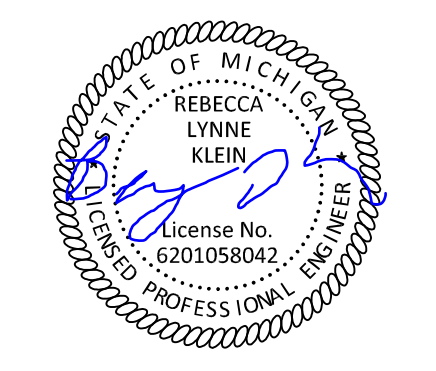
OWNER	DEVELOPER	CIVIL ENGINEER
NORTHVILLE DOWNS 301 S. CENTER STREET NORTHVILLE, MI 48167 CONTACT: JOHN CARLO PHONE: 513.520.8636 EMAIL: MOUSETRAP1@YAHOO.COM	MILITELLO PROPERTY GROUP 268 MAIN STREET, SUITE 301 BUFFALO, NY 14202 CONTACT: WILLIAM D. HIBBARD, PE, MBA ASSOCIATE BROKER PRINCIPAL PHONE: 716.856.2872 (MAIN) 716-316-6094 (CELL) EMAIL: BILL@MILITELLO.COM	PEA GROUP 58105 VAN DYKE RD. WASHINGTON TWP., MI 48094 CONTACT: BECKY KLEIN, PE, LEED AP BD+C PHONE: 844.813.2949 EMAIL: BKLEIN@PEAGROUP.COM
ARCHITECT	LANDSCAPE ARCHITECT	
G.A.V. ASSOCIATES, INC. 24001 ORCHARD LAKE ROAD, SUITE 180A FARMINGTON, MI 48336 CONTACT: AL VALENTINE PHONE: 248.985.9101 (MAIN) 248.752.1247 (CELL) EMAIL: AL@GAVASSOCIATES.COM	PEA GROUP 7927 NEMCO WAY, STE. 115 BRIGHTON, MI 48116 CONTACT: JANET EVANS, PLA PHONE: 844.813.2949 EMAIL: JEVANS@PEAGROUP.COM	



INDEX OF DRAWINGS	
SHEET NUMBER	SHEET TITLE
C-0.0	COVER SHEET
C-1.0	OVERALL TOPOGRAPHIC SURVEY
C-1.1	TOPOGRAPHIC SURVEY - 1
C-1.2	TOPOGRAPHIC SURVEY - 2
C-1.3	TOPOGRAPHIC SURVEY - 3
C-1.4	TOPOGRAPHIC SURVEY - 4
C-2.1	DEMOLITION PLAN - 1
C-2.2	DEMOLITION PLAN - 2
C-2.3	DEMOLITION PLAN - 3
C-3.0	OVERALL SITE PLAN
C-3.1	DIMENSION AND PAVING PLAN - 1
C-3.2	DIMENSION AND PAVING PLAN - 2
C-3.3	DIMENSION AND PAVING PLAN - 3
C-3.4	DIMENSION AND PAVING PLAN - 4
C-3.5	SIGHT PROFILE SECTION 'A-A'
C-3.6	STADIUM LIGHTING PLAN
C-3.7	STADIUM LIGHTING CONTROLS
23-10448 V3	PHOTOMETRIC PLAN
C-4.1	GRADING PLAN - SHEET 1
C-4.2	GRADING PLAN - SHEET 2
C-4.3	GRADING PLAN - SHEET 3
C-4.4	GRADING PLAN - SHEET 4
C-4.5	GRADING PLAN - SHEET 5
C-4.6	GRADING PLAN - SHEET 6
C-4.7	GRADING PLAN - SHEET 7
C-4.8	GRADING PLAN - SHEET 8
C-4.9	GRADING PLAN - SHEET 9
C-4.10	GRADING PLAN - SHEET 10
C-4.11	GRADING PLAN - SHEET 11
C-4.12	GRADING PLAN - SHEET 12
C-5.1	SESC PLAN - SHEET 1
C-5.2	SESC PLAN - SHEET 2
C-5.3	SESC PLAN - SHEET 3
C-5.4	SESC PLAN - SHEET 4
C-5.5	EROSION CONTROL DETAILS
C-6.0	OVERALL UTILITY PLAN
C-7.0	SANITARY SEWER PLAN
C-8.1	WATER MAIN PLAN AND PROFILE - SHEET 1
C-8.2	WATER MAIN PLAN AND PROFILE - SHEET 2
C-8.3	WATER MAIN PLAN AND PROFILE - SHEET 3
C-8.4	WATER MAIN PLAN AND PROFILE - SHEET 4
C-8.5	WATER MAIN PLAN - SHEET 5

C-9.1	STORM SEWER PLAN - SHEET 1
C-9.2	STORM SEWER PLAN - SHEET 2
C-9.3	STORM SEWER PLAN - SHEET 3
C-9.4	STORM SEWER PROFILES - SHEET 1
C-9.5	STORM SEWER PROFILES - SHEET 2
C-10.1	DRAINAGE PLAN
C-10.2	STORM CALCULATIONS
C-11.1	NOTES AND DETAILS - SHEET 1
C-11.2	NOTES AND DETAILS - SHEET 2
C-11.3	WAYNE COUNTY DETAILS - SHEET 1
C-11.4	WAYNE COUNTY DETAILS - SHEET 2
C-12.1	RIDGE ROAD RIGHT-OF-WAY PLAN - SHEET 1
C-12.2	RIDGE ROAD RIGHT-OF-WAY PLAN - SHEET 2
C-12.3	RIDGE ROAD RIGHT-OF-WAY PLAN - SHEET 3
L-1.0	PRELIMINARY OVERALL LANDSCAPE PLAN
L-1.1	LANDSCAPE PLAN - SHEET 1
L-1.2	LANDSCAPE PLAN - SHEET 2
L-1.3	LANDSCAPE PLAN - SHEET 3
L-1.4	LANDSCAPE PLAN - SHEET 4
L-1.5	LANDSCAPE DETAILS
L-2.1	LANDSCAPE SPECIFICATIONS
L-2.2	LANDSCAPE SPECIFICATIONS
	<u>ARCHITECTURAL PLANS</u>
A.101	FLOOR PLAN (GAMING/GRANDSTAND BLDG)
A.102	FLOOR PLAN (GAMING/GRANDSTAND BLDG)
A.103	FLOOR PLAN (GAMING/GRANDSTAND BLDG)
A.201	EXTERIOR ELEVATIONS (GAMING/GRANDSTAND BLDG)
A.101S	FLOOR PLAN (HORSE STABLE BLDG)
A.201S	EXTERIOR ELEVATIONS (HORSE STABLE BLDG)
A.101M	FLOOR PLAN (MAINTENANCE BUILDING)
	<u>PLYMOUTH TOWNSHIP STANDARD DETAILS</u>
W-1	STANDARD WATER MAIN DETAILS
W-2	STANDARD WATER MAIN DETAILS
W-S	STANDARD SANITARY SEWER AND WATER SERVICE DETAILS
S-1	STANDARD SANITARY SEWER DETAILS
S-2	STANDARD SANITARY SEWER DETAILS
GDS	GRADING, DRAINAGE, AND SURFACING STANDARD DETAILS

REVISIONS	
DESCRIPTION	DATE
ORIGINAL ISSUE DATE	3/31/2023



NOT FOR CONSTRUCTION

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. - 844.05

NORTHVILLE TOWNSHIP
ZONED ORT
"OFFICE, RESEARCH, AND
TECHNOLOGY" DISTRICT

ZONED IND
"INDUSTRIAL" DISTRICT

ZONED IND
"INDUSTRIAL" DISTRICT

ZONED IND
"INDUSTRIAL" DISTRICT

ZONED RM
"MOBILE HOME"
DISTRICT

LEGEND:

- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- - - - - EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- EX. MAILBOX, SIGN & LIGHTPOLE
- EX. FENCE
- EX. GUARD RAIL
- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND
- IRON FOUND / SET
- NAIL FOUND / NAIL & CAP SET
- BRASS PLUG SET
- MONUMENT FOUND / SET
- SECTION CORNER FOUND
- R M C RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:

WATER MAIN "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234

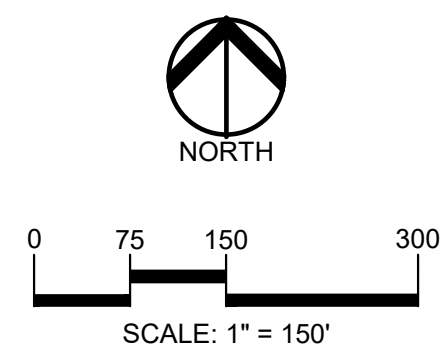
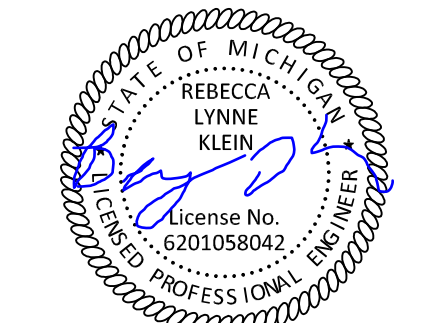
GAS "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234

FLOOD PLAIN FEMA F.I.R.M. MAP #26163C0020E, DATED 2-2-12

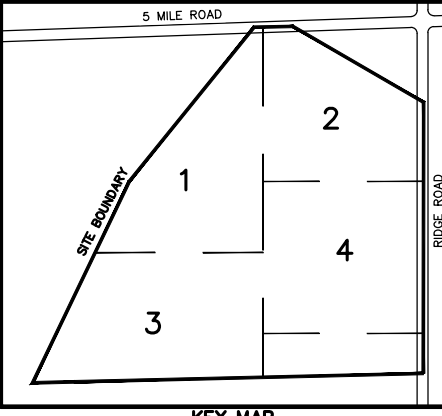
SURVEY "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234

SURVEY "HILLSIDE RIDGE CORP.-LOT 4", PEA GROUP, JOB NO. 2021-0634, DATED 12-22-21

PEA GROUP
t: 844.813.2949
www.peagroup.com



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE

OVERALL TOPOGRAPHIC SURVEY

PEA JOB NO.	2022-1338
P.M.	BL
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-1.0

LEGAL DESCRIPTION
(Per PEA)

PART OF THE NORTH 1/2 OF SECTION 19, TOWNSHIP 1 SOUTH, RANGE 8 EAST, PLYMOUTH TOWNSHIP, WAYNE COUNTY, MICHIGAN, DESCRIBED AS: COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 19; THENCE ALONG THE EAST LINE OF SAID SECTION 19, 500'05"01"W, 527.36 FEET; THENCE S88°31'32"W, 60.02 FEET TO THE WEST RIGHT-OF-WAY LINE OF RIDGE ROAD (120' WIDE); AND THE POINT-OF-BEGINNING; THENCE ALONG SAID LINE 500'05"01"W, 2124.86 FEET TO THE EAST-WEST 1/4 LINE OF SAID SECTION; THENCE ALONG SAID LINE S88°36'35"W, 2896.59 FEET PASSING THROUGH THE CENTER POST OF SAID SECTION; THENCE ALONG THE CENTERLINE OF JOHNSON CREEK THE FOLLOWING TWO (2) COURSES: N25°39'34"E, 1032.40 FEET; N38°58'31"E, 1420.36 FEET TO THE SOUTH RIGHT-OF-WAY LINE OF 5 MILE ROAD (120' WIDE); THENCE ALONG SAID LINE N88°19'22"E, 307.99 FEET TO THE SOUTHWESTERLY RIGHT-OF-WAY LINE OF CHESAPEAKE AND OHIO RAILROAD (99' WIDE); THENCE ALONG SAID LINE S65°21'35"E, 1061.37 FEET TO THE POINT-OF-BEGINNING. CONTAINING 125.16 ACRES OF LAND, MORE OR LESS.

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE - Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS
ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS
ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-1.0\TOPO-22-1338.dwg PLOT
DATE: 07/21/2023 4:11 PM BY: [redacted]

LEGEND:

- OH-ELEC-VV-O EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV EX. U.G. CABLE TV & PEDESTAL
- UG-COMM EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- EX. MAILBOX, SIGN & LIGHTPOLE
- EX. FENCE
- EX. GUARD RAIL
- EX. DEC. TREE, CONIFEROUS TREE & SHRUB
- EX. TREE TAG, & TREE LINE
- EX. SPOT ELEVATION
- EX. CONTOUR
- EX. WETLAND

REFERENCE DRAWINGS:

- WATER MAIN "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
- GAS "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
- FLOOD PLAN FEMA F.I.R.M. MAP #26163C0020E, DATED 2-2-12
- SURVEY "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
- SURVEY "HILLSIDE RIDGE CORP-LOT 4", PEA GROUP, JOB NO. 2021-0634, DATED 12-22-21

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE - Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

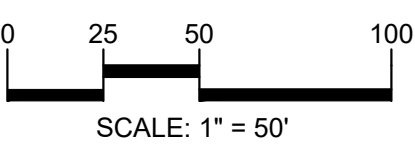
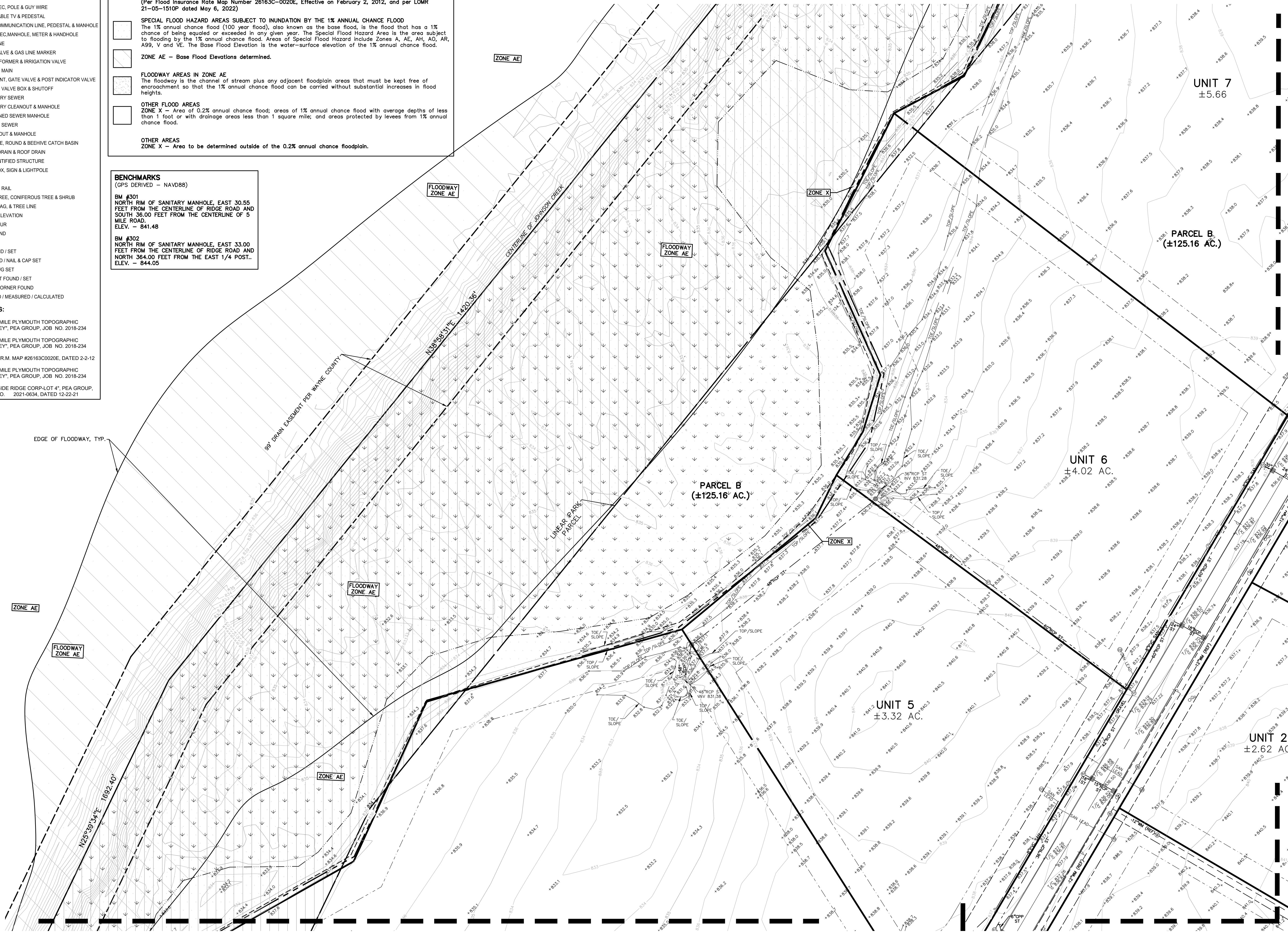
OTHER FLOOD AREAS
ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS
ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.

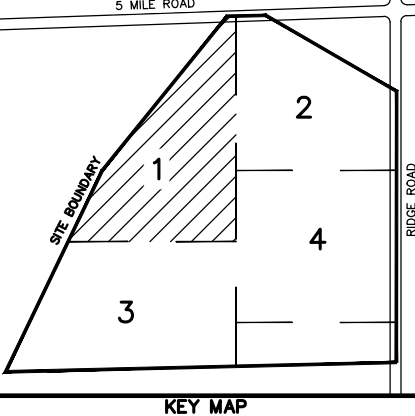
BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. - 844.05



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
TOPOGRAPHIC SURVEY - 1

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-1.0\TOPO-22-1338.dwg PLOT DATE: 3/31/2023 4:11 PM 50:00:00



LEGEND:

- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- - - EX. GAS LINE
- ⊙ EX. GAS VALVE & GAS LINE MARKER
- ⊞ EX. TRANSFORMER & IRRIGATION VALVE
- - - EX. WATER MAIN
- ⊕ EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- ⊕ EX. WATER VALVE BOX & SHUTOFF
- ⊕ EX. SANITARY SEWER
- ⊕ EX. SANITARY CLEANOUT & MANHOLE
- ⊕ EX. COMBINED SEWER MANHOLE
- - - EX. STORM SEWER
- ⊕ EX. CLEANOUT & MANHOLE
- ⊕ EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
- ⊕ EX. YARD DRAIN & ROOF DRAIN
- ⊕ EX. UNIDENTIFIED STRUCTURE
- ⊕ EX. MAILBOX, SIGN & LIGHTPOLE
- - - EX. FENCE
- ⊕ EX. GUARD RAIL
- ⊕ EX. DEC. TREE, CONIFEROUS TREE & SHRUB
- ⊕ EX. TREE TAG & TREE LINE
- ⊕ EX. SPOT ELEVATION
- ⊕ EX. CONTOUR
- ⊕ EX. WETLAND

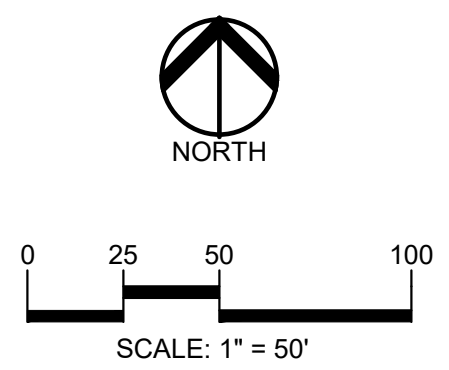
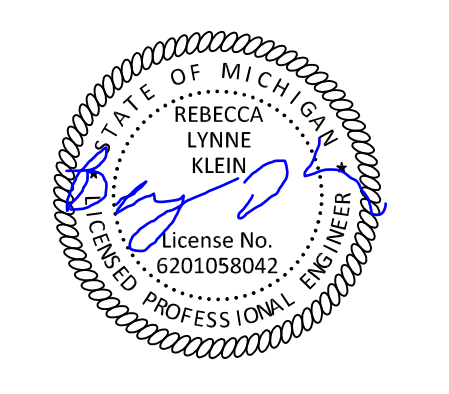
REFERENCE DRAWINGS:

- WATER MAIN "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
- GAS "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
- FLOOD PLAIN FEMA F.I.R.M. MAP #26163C0020E, DATED 2-2-12
- SURVEY "FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
- SURVEY "HILLSIDE RIDGE CORP-LOT 4", PEA GROUP, JOB NO. 2021-0634, DATED 12-22-21

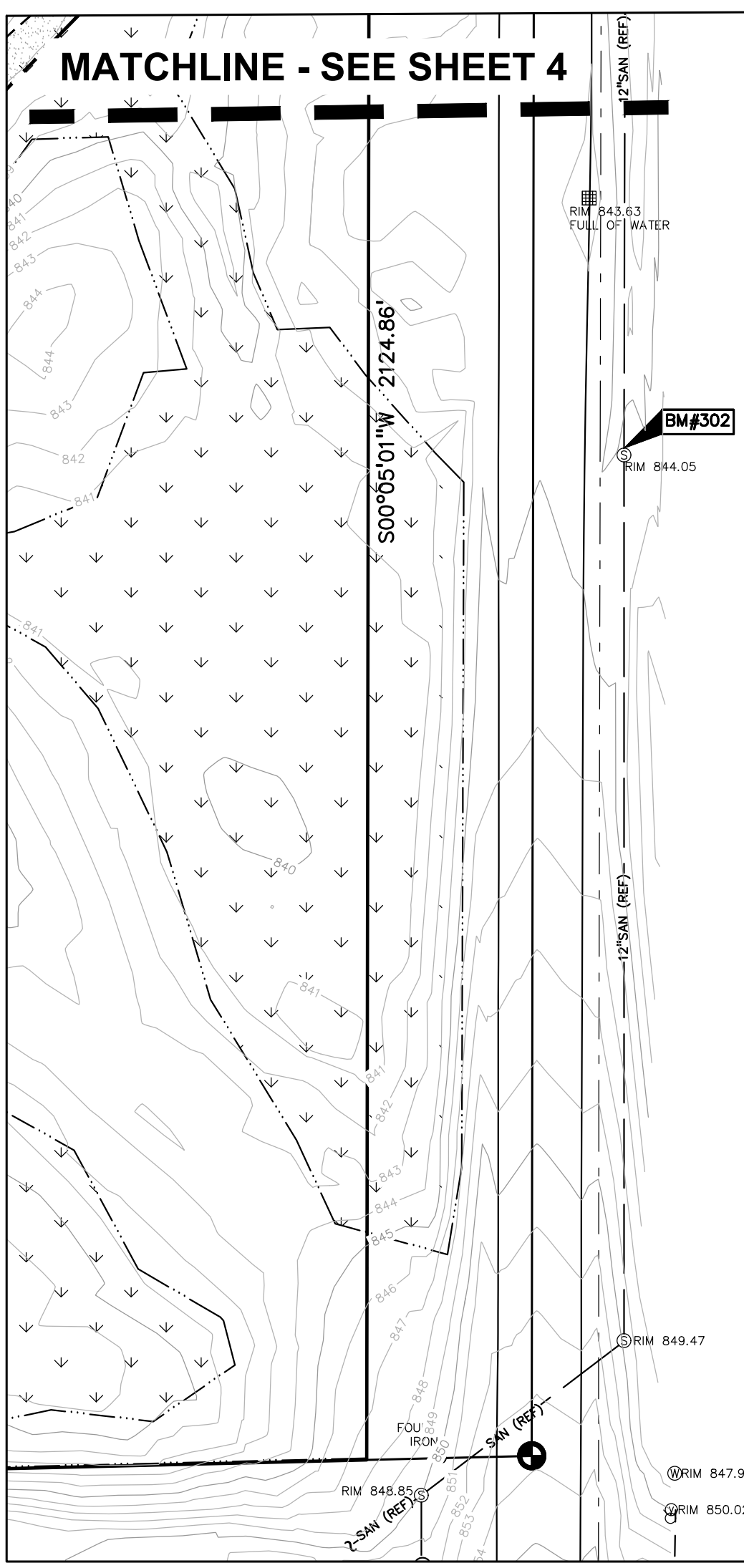
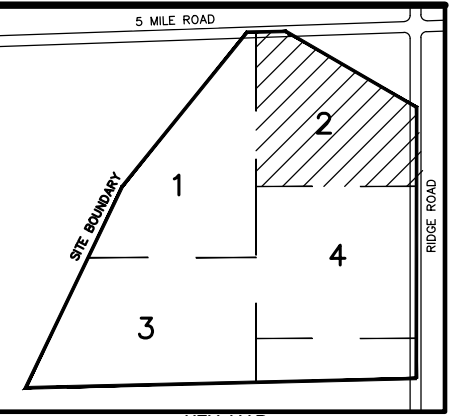
BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST..
ELEV. - 844.05



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, NY

REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
TOPOGRAPHIC SURVEY - 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-1.2

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE - Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

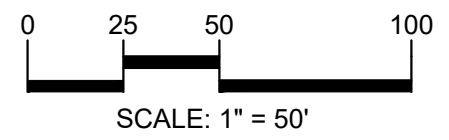
OTHER FLOOD AREAS
ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS
ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.

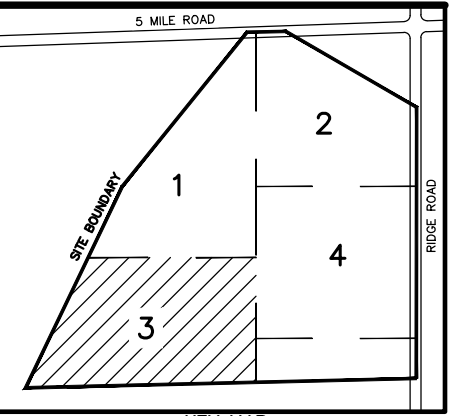
MATCHLINE - SEE SHEET 1

MATCHLINE - SEE SHEET 4

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\101\TOPO-22-1338.dwg PLOT DATE: 3/17/2023 4:11 PM D:\Temporary Files



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

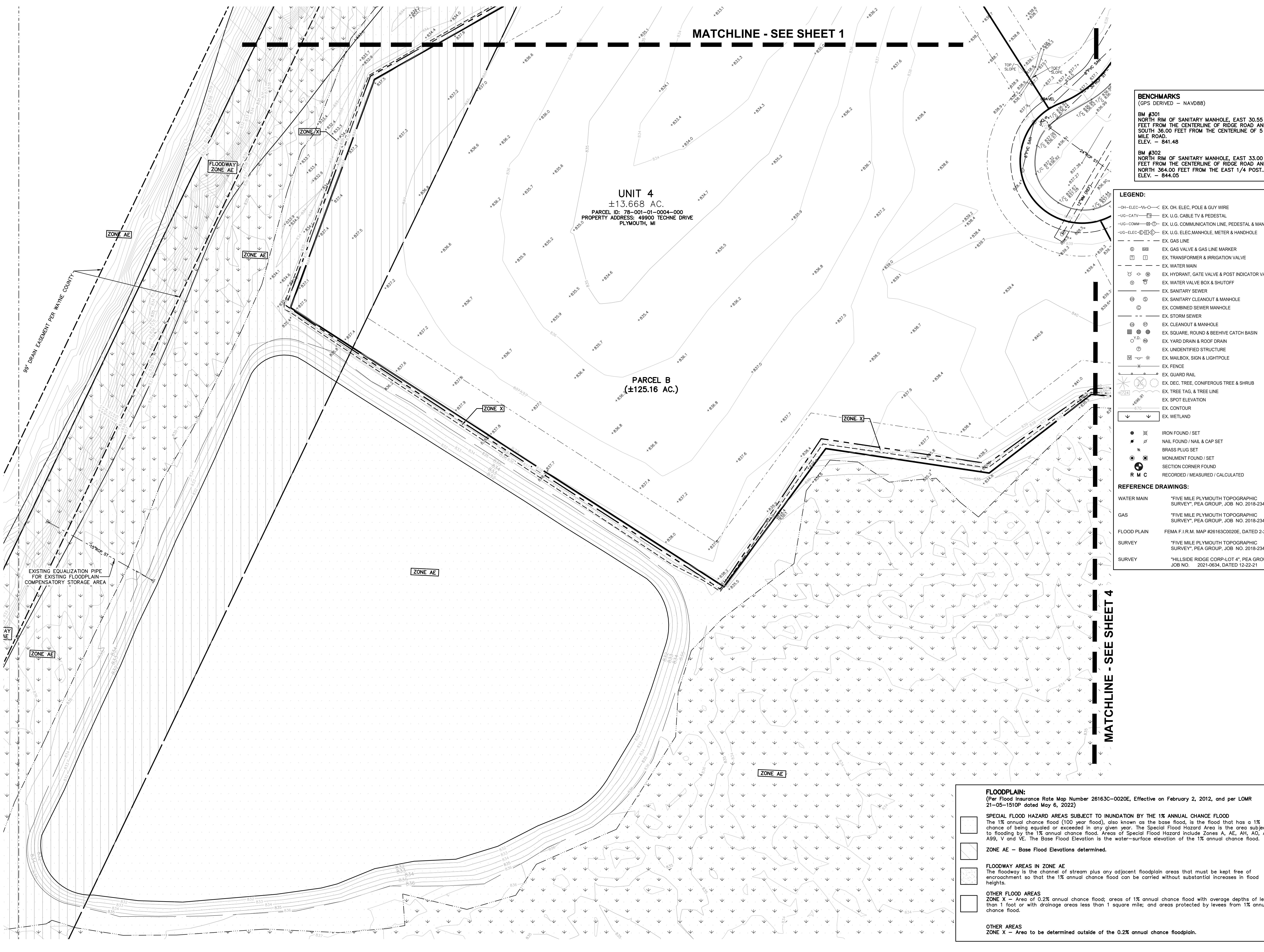
REVISIONS	

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
TOPOGRAPHIC SURVEY - 3

PEA JOB NO.	2022-1338
P.M.	BK
D.N.	BLA
DES.	BK

DRAWING NUMBER:
C-1.3



BENCHMARKS
(GPS DERIVED - NAVD88)
BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. = 841.48
BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. = 844.05

LEGEND:

-OH-ELEC-W-O	EX. OH. ELEC. POLE & GUY WIRE
-UG-CATV	EX. U.G. CABLE TV & PEDESTAL
-UG-COMM	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
-UG-ELEC-M	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
-GAS	EX. GAS LINE
⊗	EX. GAS VALVE & GAS LINE MARKER
⊠	EX. TRANSFORMER & IRRIGATION VALVE
-	EX. WATER MAIN
⊕	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
⊗	EX. WATER VALVE BOX & SHUTOFF
⊙	EX. SANITARY SEWER
⊗	EX. SANITARY CLEANOUT & MANHOLE
⊙	EX. COMBINED SEWER MANHOLE
⊙	EX. STORM SEWER
⊙	EX. CLEANOUT & MANHOLE
⊙	EX. SQUARE, ROUND & BEEHIVE CATCH BASIN
⊙	EX. YARD DRAIN & ROOF DRAIN
⊙	EX. UNIDENTIFIED STRUCTURE
⊙	EX. MAILBOX, SIGN & LIGHTPOLE
⊙	EX. FENCE
⊙	EX. GUARD RAIL
⊙	EX. DEC. TREE, CONIFEROUS TREE & SHRUB
⊙	EX. TREE TAG, & TREE LINE
⊙	EX. SPOT ELEVATION
⊙	EX. CONTOUR
⊙	EX. WETLAND
⊙	IRON FOUND / SET
⊙	NAIL FOUND / NAIL & CAP SET
⊙	BRASS PLUG SET
⊙	MONUMENT FOUND / SET
⊙	SECTION CORNER FOUND
R M C	RECORDED / MEASURED / CALCULATED

REFERENCE DRAWINGS:

WATER MAIN	"FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
GAS	"FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
FLOOD PLAIN	FEMA F.I.R.M. MAP #26163C0020E, DATED 2-2-12
SURVEY	"FIVE MILE PLYMOUTH TOPOGRAPHIC SURVEY", PEA GROUP, JOB NO. 2018-234
SURVEY	"HILLSIDE RIDGE CORP.-LOT 4", PEA GROUP, JOB NO. 2021-0634, DATED 12-22-21

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

	SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
	ZONE AE - Base Flood Elevations determined.
	FLOODWAY AREAS IN ZONE AE The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
	OTHER FLOOD AREAS ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
	OTHER AREAS ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.

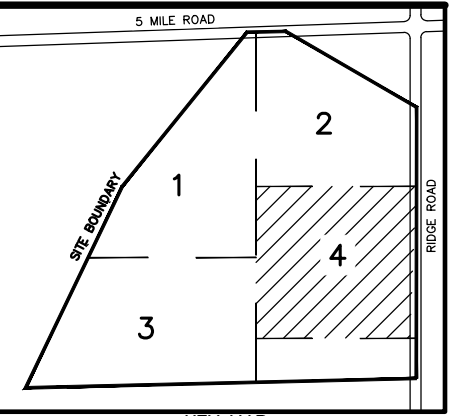
S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\CONSTRUCTION-C-101\TOPO-22-1338.dwg PLOT DATE: 3/31/2023 4:11 PM 10:07:59 AM



0 25 50 100
SCALE: 1" = 50'



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

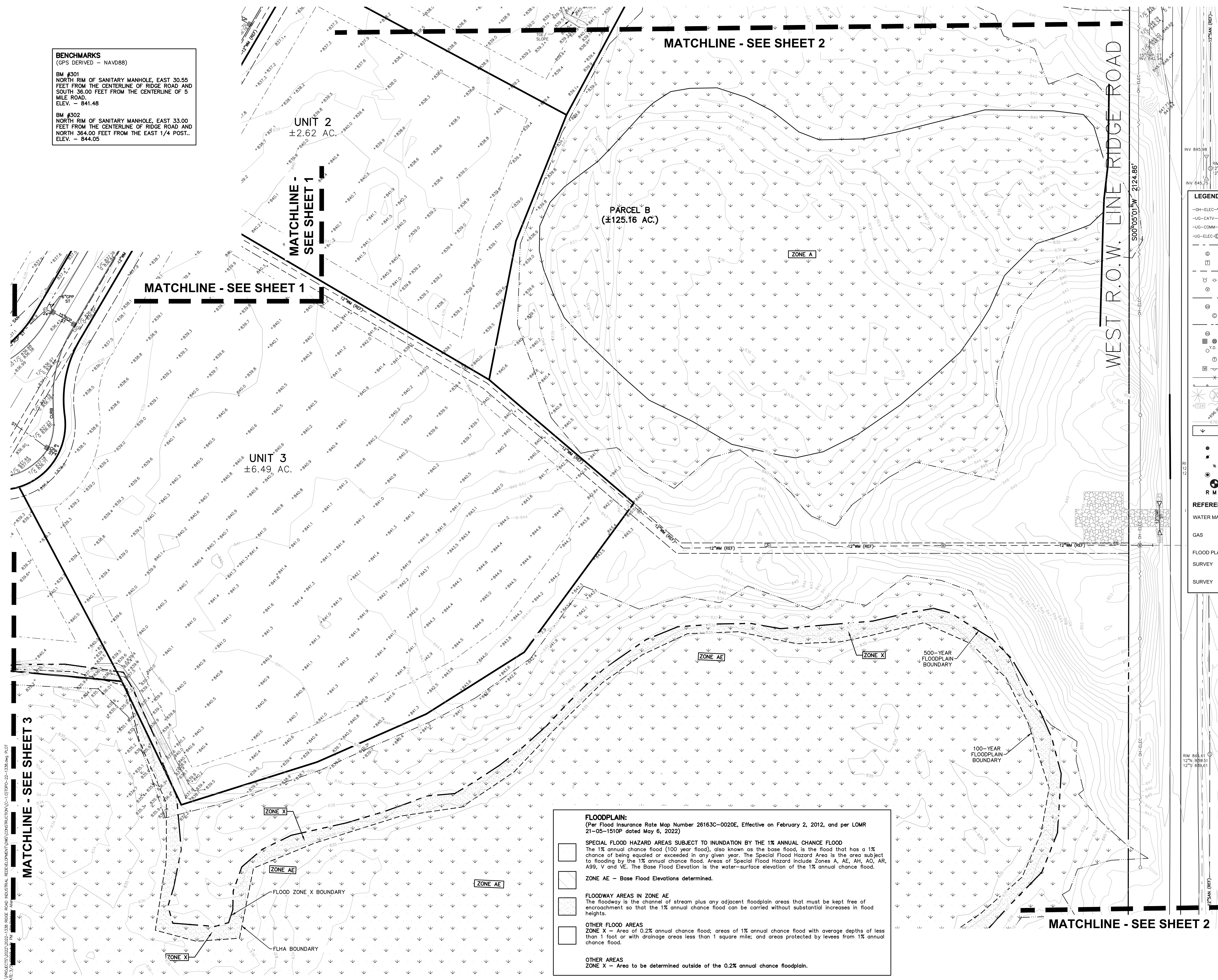
REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
TOPOGRAPHIC SURVEY - 4

PEA JOB NO. 2022-1338
P.M. BK
DN. BLA
DES. BK

DRAWING NUMBER:
C-1.4



BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST..
ELEV. - 841.05

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 1

WEST R.O.W. LINE RIDGE ROAD

MATCHLINE - SEE SHEET 3

MATCHLINE - SEE SHEET 2

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

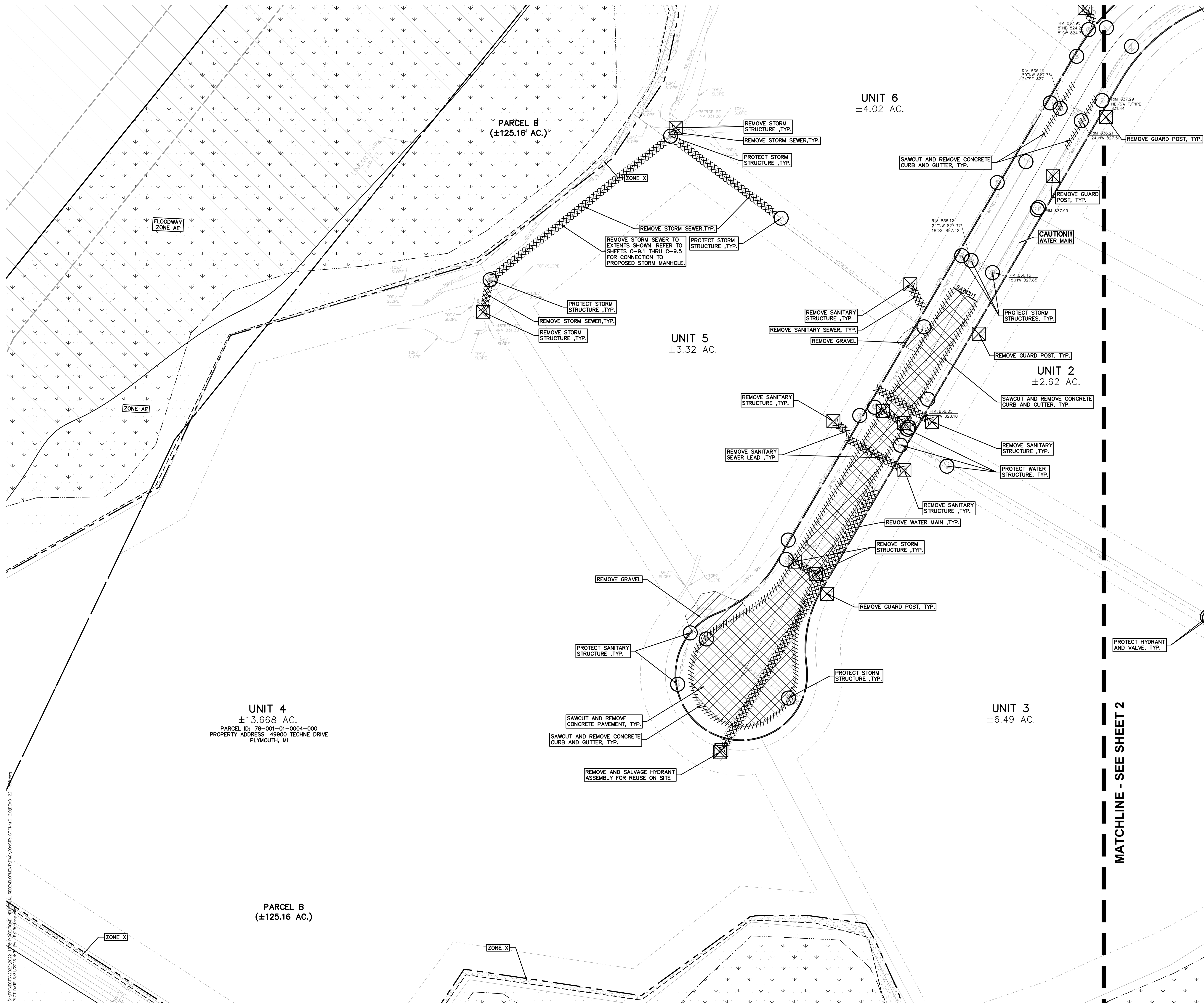
ZONE AE - Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS
ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS
ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.

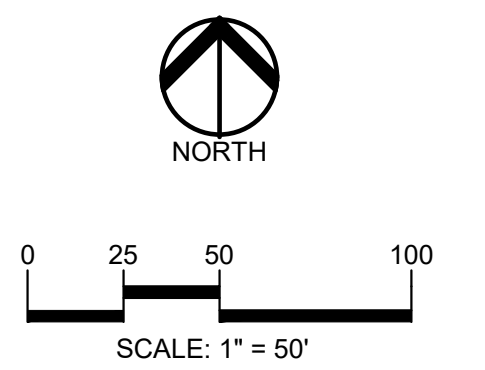
S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\CONSTRUCTION\10\TOPO-22-1338.dwg PLOT DATE: 11/15/2023 10:51:11 AM



- GENERAL DEMOLITION NOTES:**
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:
- ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
 - ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
 - STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
 - REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, TREES, ETC.
 - REFER TO SHEET L-1.5 FOR TREE PROTECTION DETAILS.
 - THE CONTRACTOR SHALL, AS A MINIMUM, PROVIDE TREE PROTECTION FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15 FEET OF CONSTRUCTION ACTIVITIES AND AS INDICATED IN THE PLANS OR PER LOCAL AGENCY REQUIREMENTS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
 - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 - THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION.
 - ALL BUILDING GAS LEADS, METERS AND ASSOCIATED EQUIPMENT SHALL BE REMOVED AS SHOWN ON THE PLANS. COORDINATE ALL ASSOCIATED WORK WITH THE APPROPRIATE UTILITY COMPANY.
 - REMOVE ALL OVERHEAD AND UNDERGROUND ELECTRICAL LINES WITHIN THE AREA OF CONSTRUCTION AS SHOWN ON THE PLANS. COORDINATE SHUTDOWNS AND REMOVALS WITH ELECTRICAL SERVICE PROVIDER OR THE APPROPRIATE UTILITY COMPANY. (NOTE: PHONE AND CABLE T.V. SERVICES MAY ALSO BE LOCATED ON OVERHEAD LINES.)
 - THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF SIGNS AND SUPPORTS WITHIN THE WORK AREA, AS NECESSARY TO FACILITATE CONSTRUCTION. SIGNS SHALL BE PROTECTED OR STOCKPILED FOR REUSE AS SPECIFIED IN THE PLANS OR AS REQUIRED BY THE AGENCY OF JURISDICTION. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SIGNS AND SUPPORTS AT NO ADDITIONAL COST TO THE OWNER.
 - THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

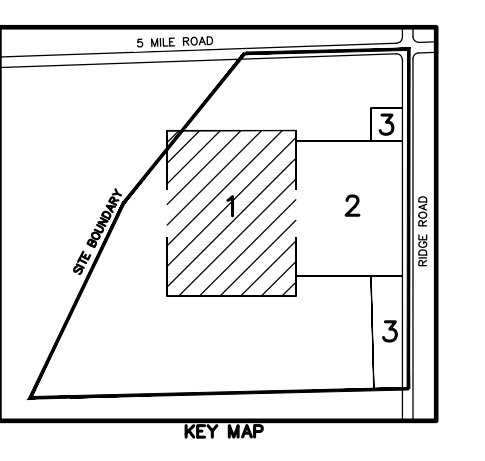
DEMOLITION LEGEND:

ITEM TO BE PROTECTED	
ITEM TO BE REMOVED	
CURB/FENCE REMOVAL	
CONCRETE PAVEMENT AND SIDEWALK REMOVAL	
AREA OR ITEMS TO BE REMOVED	
UTILITY REMOVAL	
ASPHALT REMOVAL	
TREE REMOVAL	
SAWCUT LINE	



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

CAUTION!!
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

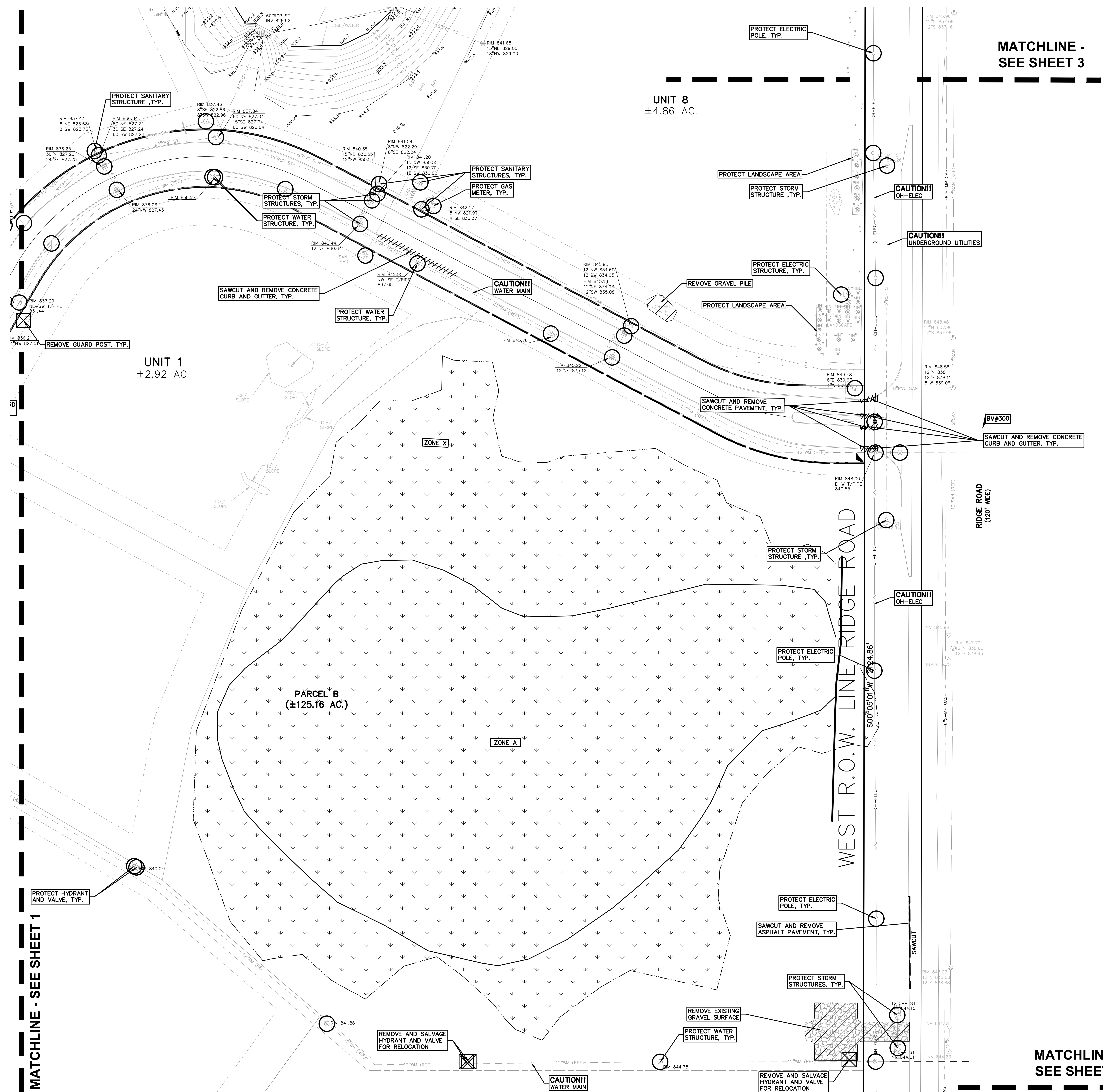
REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

DRAWING TITLE
DEMOLITION PLAN - 1

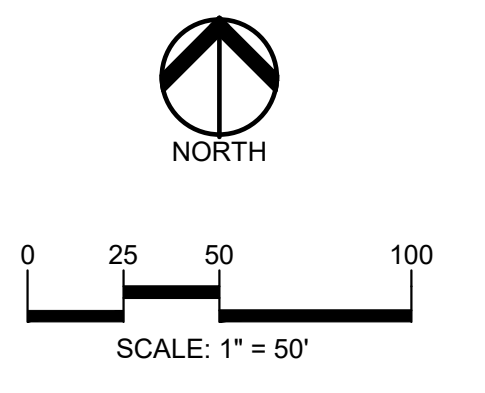
PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	C-2.1



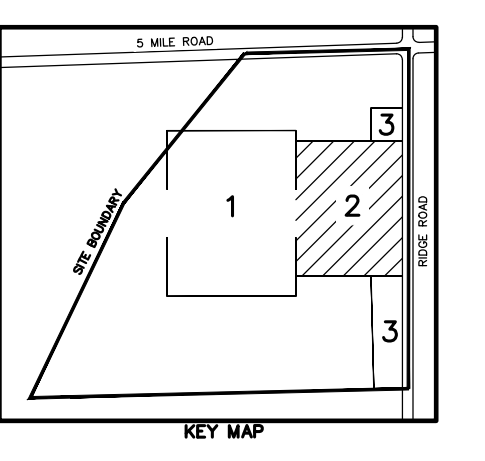
DEMOLITION LEGEND:

ITEM TO BE PROTECTED	
ITEM TO BE REMOVED	
CURB/FENCE REMOVAL	
CONCRETE PAVEMENT AND SIDEWALK REMOVAL	
AREA OR ITEMS TO BE REMOVED	
UTILITY REMOVAL	
ASPHALT REMOVAL	
TREE REMOVAL	
SAWCUT LINE	

PEA GROUP
 t: 844.813.2949
 www.peagroup.com



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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

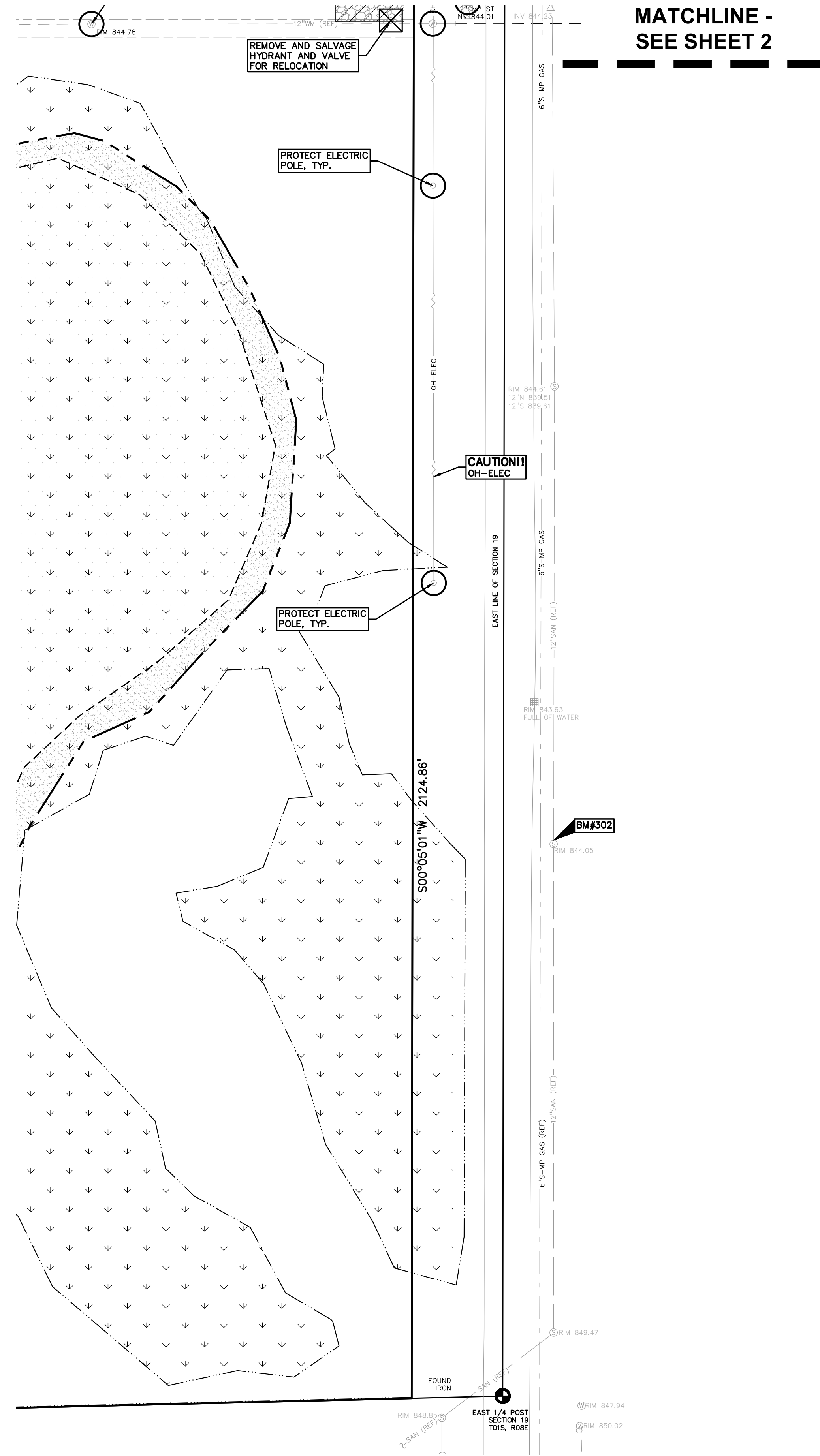
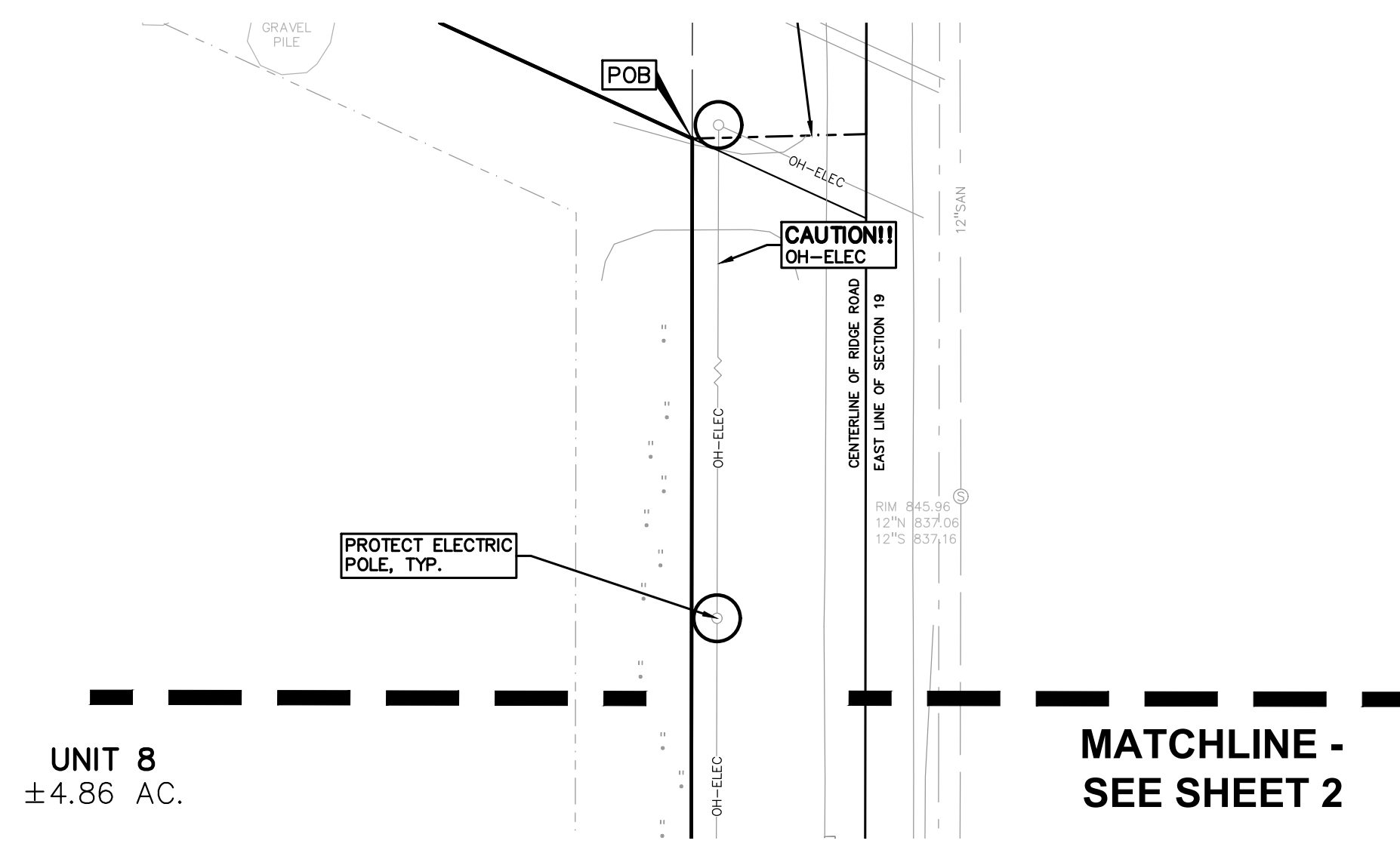
REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
DEMOLITION PLAN - 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-2.2

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-2.0\DMC-25-1338.dwg
 PLOT DATE: 3/31/2023 8:42:54 AM 01:01:00 PM



**MATCHLINE -
SEE SHEET 2**

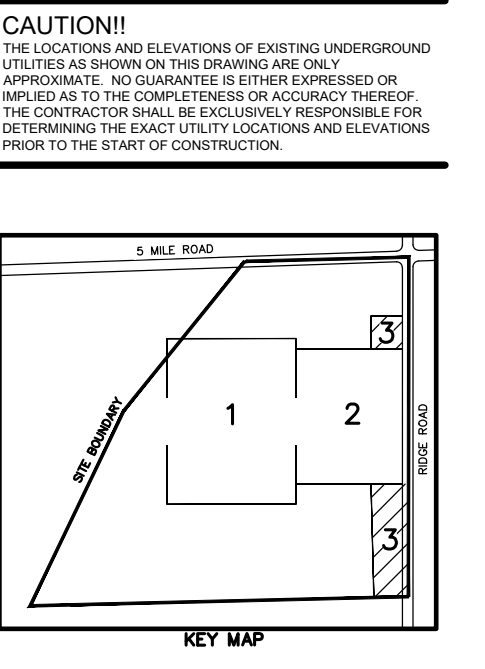
- GENERAL DEMOLITION NOTES:**
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT:
- ALL MATERIAL TO BE REMOVED, WHETHER SPECIFICALLY NOTED IN THE PLANS OR NOT, SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF OFF-SITE IN A LEGAL MANNER. NO ON-SITE BURY OR BURN PITS SHALL BE ALLOWED.
 - ALL DEMOLITION WORK SHALL CONFORM TO ALL LOCAL CODES AND ORDINANCES.
 - STAGING/PHASING OF DEMOLITION AND CONSTRUCTION IS TO BE COORDINATED WITH THE OWNER AND THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - SPECIFIC DEMOLITION ITEMS HAVE BEEN INDICATED ON THE PLANS AS A GUIDE TO THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT THAT THESE ITEMS SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR ABOVE AND BELOW GROUND, UNLESS SPECIFICALLY NOTED OTHERWISE, AND THAT DEMOLITION WILL INCLUDE BUT WILL NOT NECESSARILY BE LIMITED TO THESE ITEMS. CONTRACTOR SHALL VISIT SITE TO VERIFY EXISTING CONDITIONS AND EXTENTS OF THE DEMOLITION THAT WILL BE REQUIRED PRIOR TO SUBMITTING A BID.
 - REMOVE ALL STRUCTURES DESIGNATED FOR REMOVAL ACCORDING TO THE DEMOLITION PLAN. THIS INCLUDES FOUNDATIONS, FOOTINGS, FOUNDATION WALLS, FLOOR SLABS, UNDERGROUND UTILITIES, CONCRETE, ASPHALT, TREES, ETC.
 - REFER TO SHEET L-1.5 FOR TREE PROTECTION DETAILS.
 - THE CONTRACTOR SHALL, AS A MINIMUM, PROVIDE TREE PROTECTION FENCING AROUND EXISTING TREES TO BE SAVED THAT ARE WITHIN 15 FEET OF CONSTRUCTION ACTIVITIES AND AS INDICATED IN THE PLANS OR PER LOCAL AGENCY REQUIREMENTS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN UP, NOISE, DUST CONTROL, STREET SWEEPING AND HOURS OF OPERATION IN ACCORDANCE WITH THE LOCAL CODES.
 - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, MARKINGS, LIGHTS AND OTHER TRAFFIC CONTROL DEVICES TO PROTECT THE WORK ZONE AND SAFELY MAINTAIN TRAFFIC PER AGENCY REQUIREMENTS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
 - THE CONTRACTOR SHALL CONTACT THE APPROPRIATE UTILITY COMPANIES TO CONFIRM THAT UTILITY LEADS HAVE BEEN TAKEN OUT OF SERVICE PRIOR TO DEMOLITION.
 - ALL BUILDING GAS LEADS, METERS AND ASSOCIATED EQUIPMENT SHALL BE REMOVED AS SHOWN ON THE PLANS. COORDINATE ALL ASSOCIATED WORK WITH THE APPROPRIATE UTILITY COMPANY.
 - REMOVE ALL OVERHEAD AND UNDERGROUND ELECTRICAL LINES WITHIN THE AREA OF CONSTRUCTION AS SHOWN ON THE PLANS. COORDINATE SHUTDOWNS AND REMOVALS WITH ELECTRICAL SERVICE PROVIDER OR THE APPROPRIATE UTILITY COMPANY. (NOTE: PHONE AND CABLE T.V. SERVICES MAY ALSO BE LOCATED ON OVERHEAD LINES.)
 - THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL AND REPLACEMENT OF SIGNS AND SUPPORTS WITHIN THE WORK AREA. AS NECESSARY TO FACILITATE CONSTRUCTION, SIGNS SHALL BE PROTECTED OR STOCKPILED FOR REUSE AS SPECIFIED IN THE PLANS OR AS REQUIRED BY THE AGENCY OF JURISDICTION. THE CONTRACTOR SHALL REPLACE ANY DAMAGED SIGNS AND SUPPORTS AT NO ADDITIONAL COST TO THE OWNER.
 - THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 5 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

PEA GROUP
t: 844.813.2949
www.peagroup.com

NORTH

0 25 50 100
SCALE: 1" = 50'

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



DEMOLITION LEGEND:

ITEM TO BE PROTECTED	
ITEM TO BE REMOVED	
CURB/FENCE REMOVAL	
CONCRETE PAVEMENT AND SIDEWALK REMOVAL	
AREA OR ITEMS TO BE REMOVED	
UTILITY REMOVAL	
ASPHALT REMOVAL	
TREE REMOVAL	
SAWCUT LINE	

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

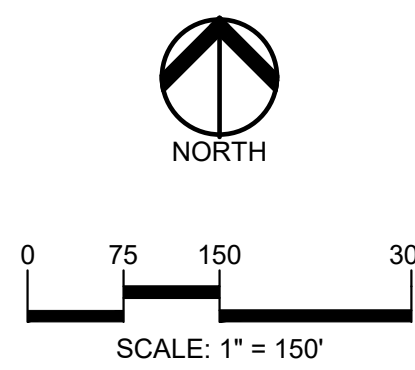
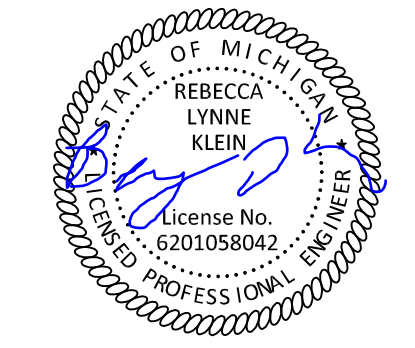
ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
DEMOLITION PLAN - 3

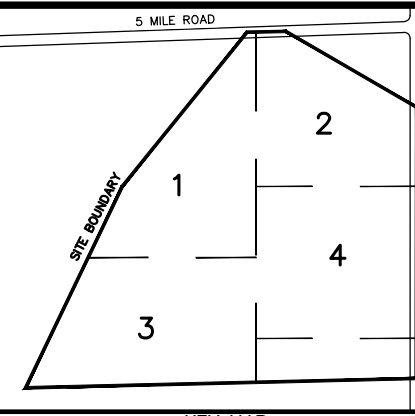
PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK

DRAWING NUMBER:
C-2.3

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-2.0304C-25-1338.dwg
PLOT DATE: 07/27/2023 4:42 PM Operator: jay



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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BLUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
OVERALL SITE PLAN

PEA JOB NO. 2022-1338

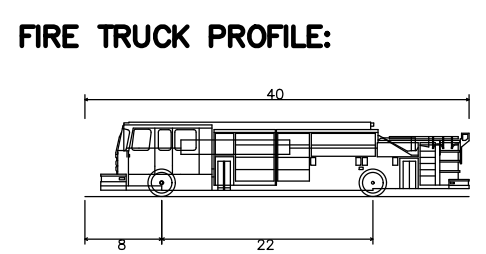
P.M. BK
DN. BLA
DES. BK

DRAWING NUMBER:

C-3.0

LEGEND:

[Symbol]	CONCRETE PAVEMENT
[Symbol]	ASPHALT PAVEMENT
[Symbol]	GRAVEL
[Symbol]	WETLAND
[Symbol]	CONCRETE CURB AND GUTTER
[Symbol]	REVERSE GUTTER PAN
[Symbol]	SETBACK LINE
[Symbol]	SIGN LIGHTPOLE
[Symbol]	FENCE
[Symbol]	GUARD RAIL



- GENERAL NOTES:**
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
 - NO PARKING-FIRE LANE SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
 - REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
 - REFER TO NOTES & DETAILS SHEET FOR ON-SITE SIDEWALK RAMP DETAILS.

- GENERAL NOTES:**
- THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.
- ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, WAYNE COUNTY AND MUNICIPALITY STANDARDS AND REGULATIONS.
 - THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
 - THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
 - ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL TOWNSHIP INSPECTION FEES.
 - THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
 - CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE OF THE CONTRACTOR.
 - ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGUN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
 - ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPAIRED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, TOWNSHIP AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
 - THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WELLS ETC.) WITHIN GRADED AND /OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

SITE DATA TABLE:

SITE AREA: 125.16 ACRES NET AND GROSS
PARCEL I.D.: 78-001-99-0001-702 (PT)
ZONING: IND - INDUSTRIAL
PROPOSED USE: PLANNED UNIT DEVELOPMENT

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 35 FT. (2 STORIES)

	AREA	HEIGHT	
GRANDSTAND/RACING	27,932 SF	3 STORIES	46 FT
BARN	35,475 SF	1 STORY	22.25 FT
MAINTENANCE BUILDING	3,200 SF	1 STORY	19.75 FT

TOTAL BUILDING AREA: 66,607 S.F. (1.53 AC) (1.21% OF TOTAL SITE)
TOTAL PAVED AREA: 365,946 S.F. (8.40 AC) (6.89% OF TOTAL SITE)
TOTAL IMPERVIOUS AREA: 432,553 S.F. (9.93 AC) (7.90% OF TOTAL SITE)

WETLAND AREA: 2,275,236 S.F. (52.23 AC) (41.73% OF TOTAL SITE)

ALLOWABLE LOT COVERAGE: N/A
BUILDING LOT COVERAGE = 1.22%

SETBACK REQUIREMENTS:

REQUIRED	PROPOSED
FRONT (NORTH)	50' / 927.71'
FRONT (EAST)	50' / 705.95'
SIDE (WEST)	20' / 412.15'
SIDE (SOUTH)	20' / 1196.28'

PARKING CALCULATIONS:
STADIUM PARKING: 1 SPACE PER EVERY 3 SEATS
REQUIRED PARKING SPACES: 480/3 = 160 SPACES
PROVIDED PARKING SPACES: 276 SPACES (INCLUDING 9 ADA) PLUS 197 SPECIAL EVENT OVERFLOW SPACES
BARN: 1 SPACE PER 3 PERSONS ALLOWED BY FIRE CODE.
REQUIRED PARKING SPACES: 80/3 = 27 SPACES
PROVIDED PARKING SPACES: 8 SPACES (INCLUDING 2 ADA) PLUS 44 CAR AND TRAILER PARKING SPACE

LOADING CALCULATIONS:
LOADING REQUIRED = 500 SF LOADING AREA PER EACH 20000 SF BUILDING AREA
LOADING PROVIDED = 2000 SF LOADING AREA REQUIRED
LOADING PROVIDED = 1000 SF AT RACING BUILDING, 1000 SF AT BARN

SITE SOILS INFORMATION:
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR WAYNE COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:

- BOYER LOAMY SAND, 0 TO 6 PERCENT SLOPES
- EDWARD MUCKS
- GILFORD SANDY LOAM
- GLYWOOD LOAM, 2 TO 6 PERCENT SLOPES
- HOUGHTON MUCK
- MORLEY LOAM, 6 TO 12 PERCENT SLOPES
- MORLEY LOAM, 12 TO 18 PERCENT SLOPES
- PELLA SILT LOAM
- PEWANO LOAM
- SPINKS LOAMY SAND, 0 TO 6 PERCENT SLOPES
- WASPER LOAMY SAND, 0 TO 2 PERCENT SLOPES

COMMUNITY AMENITIES:

SPORT FIELDS:
FLEX SPACE SUFFICIENT FOR 3 REGULATION SOCCER FIELDS (OR OTHER SPORTS)
TOTAL AREA PROVIDED = 6.08 ACRES (264,600 S.F.)

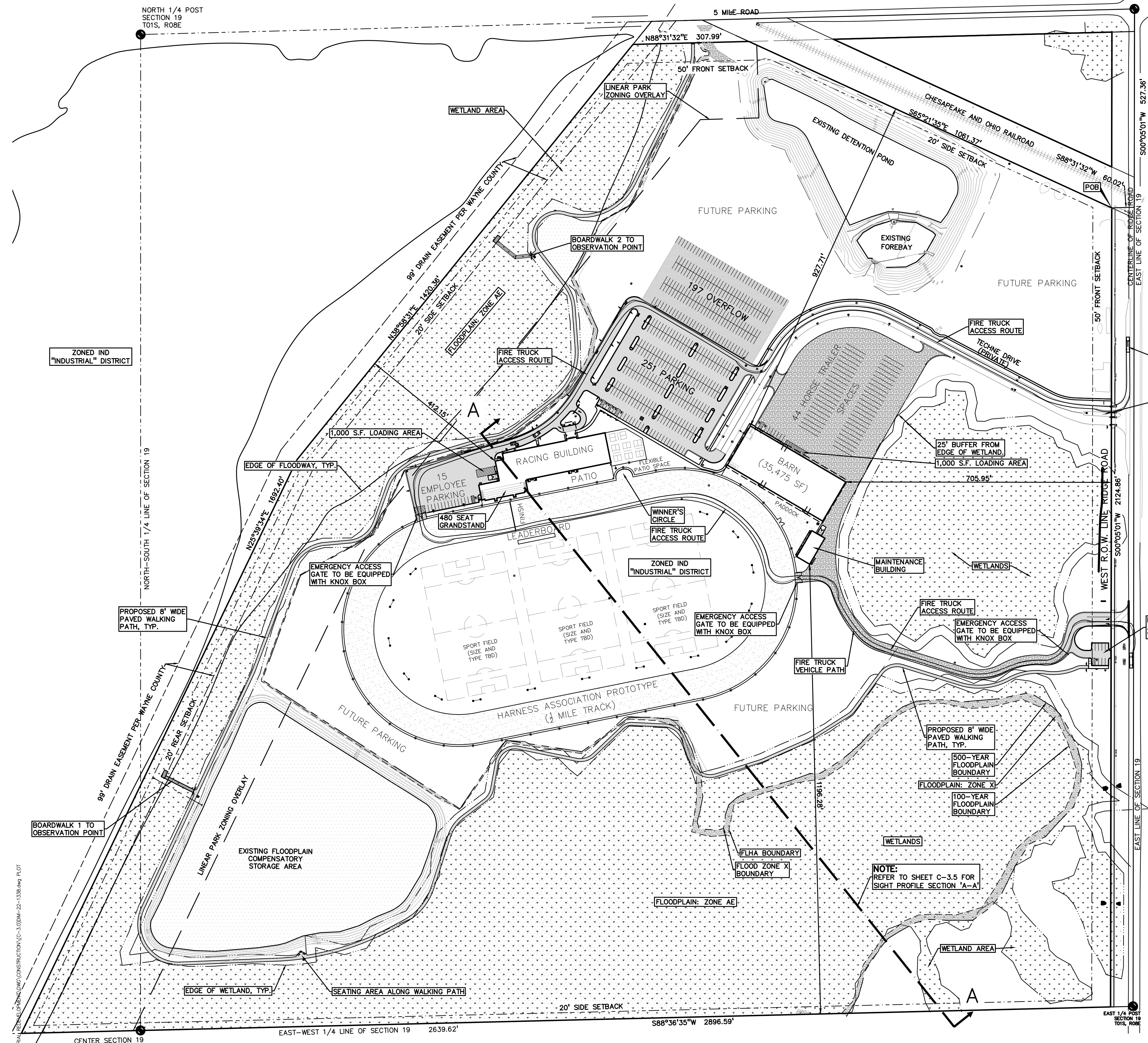
SPORT PATIO:
FENCED FLEX SPACE SUFFICIENT FOR 4 REGULATION PICKLEBALL COURTS (OR OTHER SPORTS)
TOTAL AREA PROVIDED = 7,950 S.F.

WALKING PATH:
8 FOOT WIDE ADA-COMPLIANT ASPHALT PATH
TOTAL LENGTH = 1.2 MILES (6,230 L.F. / 49,840 S.F.)
POND SEATING AREA = 190 S.F.
BOARDWALK 1 = 95 L.F. (95 S.F.)
BOARDWALK 2 = 115 L.F. (1,030 S.F.)

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

[Symbol]	SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AP3, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.
[Symbol]	ZONE AE - Base Flood Elevations determined.
[Symbol]	FLOODWAY AREAS IN ZONE AE The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.
[Symbol]	OTHER FLOOD AREAS ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
[Symbol]	OTHER AREAS ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.



S:\PROJECTS\2022\2022-1338-INDUSTRIAL\INDUSTRIAL\CONSTRUCTION\C-3.020M-22-1338.dwg PLOT DATE: 10/17/2023 4:12:17 PM 10:00 AM

MATCHLINE - SEE SHEET 2

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN LIGHTPOLE
- FENCE
- GUARD RAIL

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP TYPE 'R'
- SIDEWALK RAMP TYPE 'P'
- CURB DROP ONLY

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- 'DO NOT ENTER' SIGN
- 'PATH ENDS' SIGN

PEA GROUP
t: 844.813.2949
www.peagroup.com

Professional Engineer Seal for Rebecca Lyne Klein, License No. 6201058042, State of Michigan.

North arrow and scale: 1" = 50'

811 logo with text: Know what's below. Call before you dig.

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

KEY MAP showing the project location within a larger site context.

CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

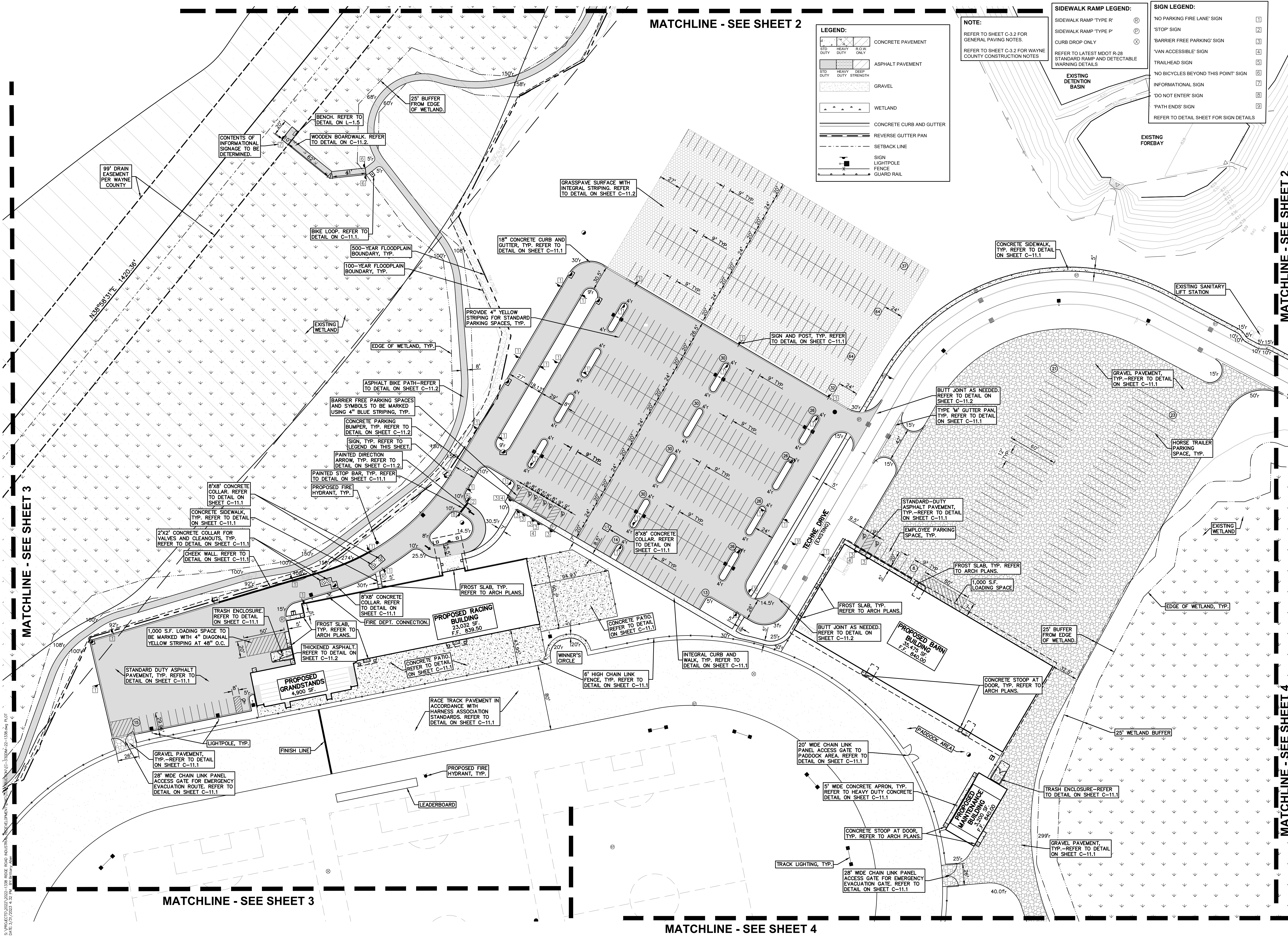
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE: MARCH 31, 2023
DRAWING TITLE: DIMENSION AND PAVING PLAN - 1

PEA JOB NO. 2022-1338
P.M. BK
DN. BLA
DES. BK

DRAWING NUMBER: C-3.1



MATCHLINE - SEE SHEET 3

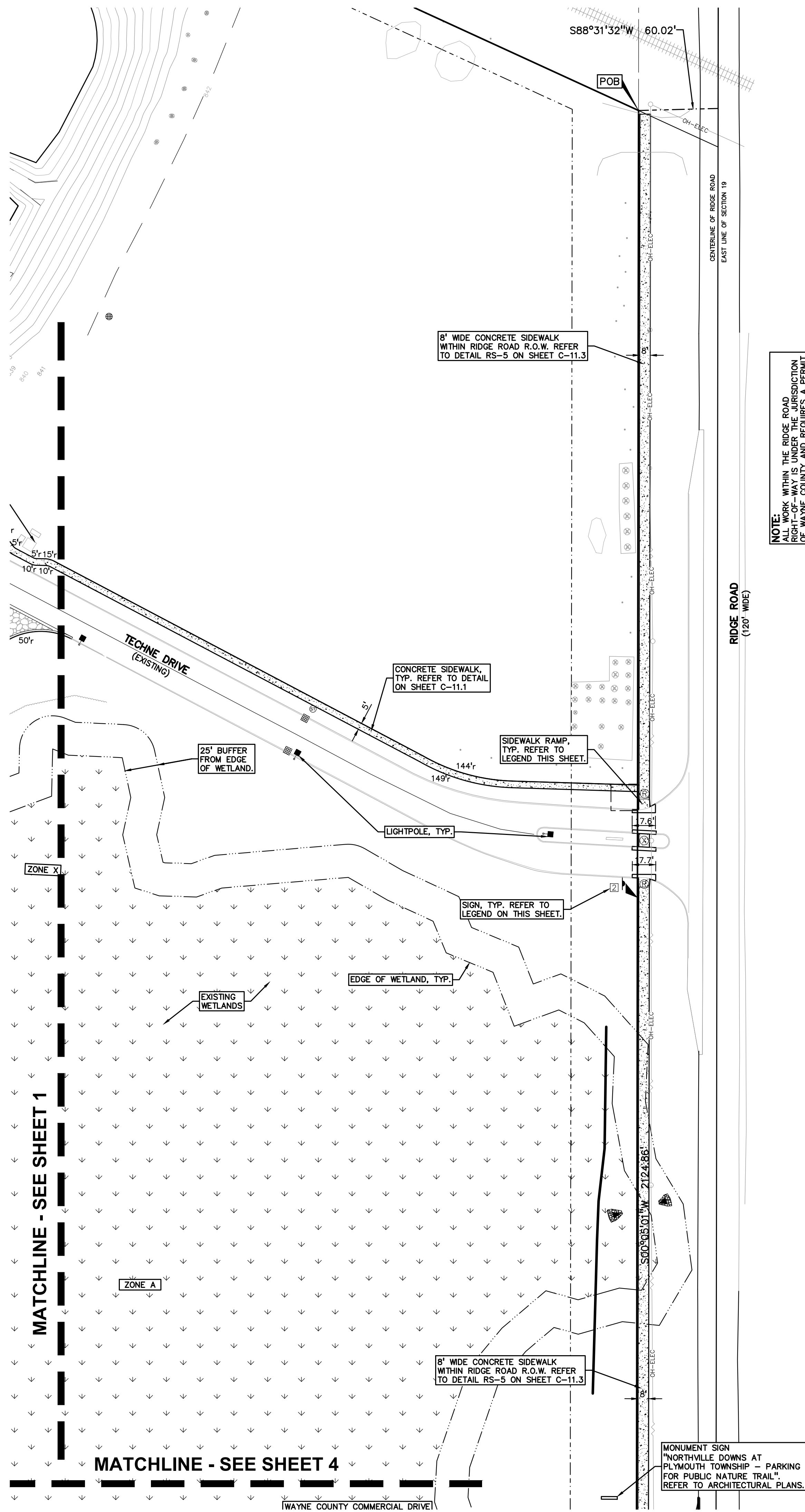
MATCHLINE - SEE SHEET 3

MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 4

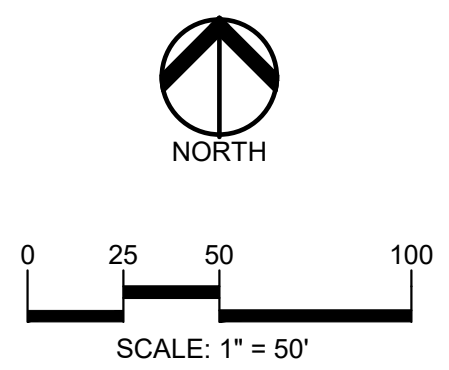
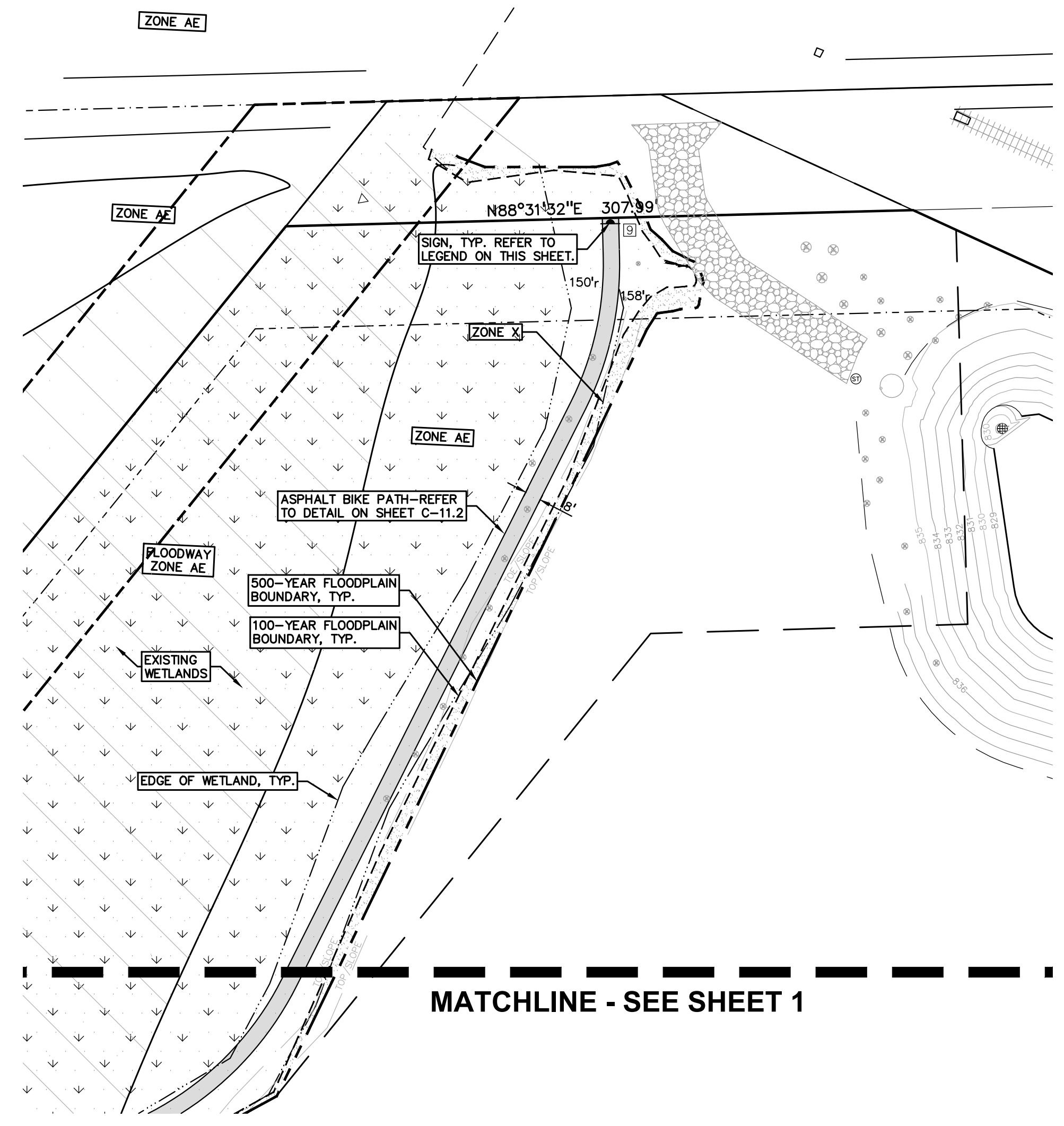
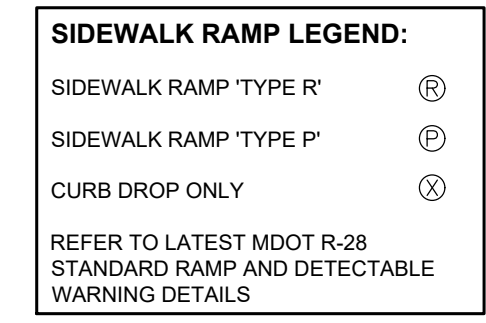
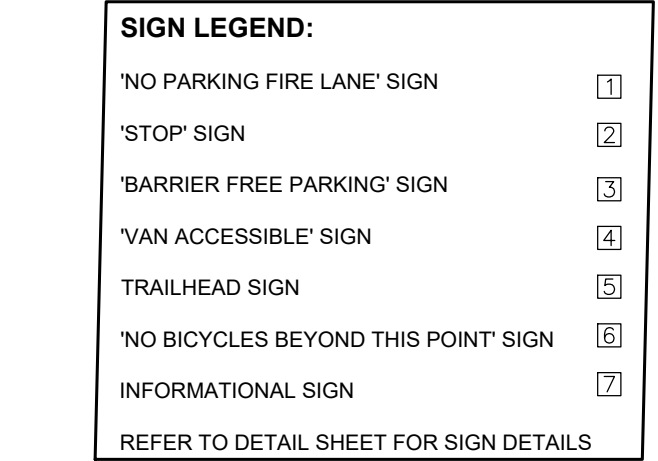
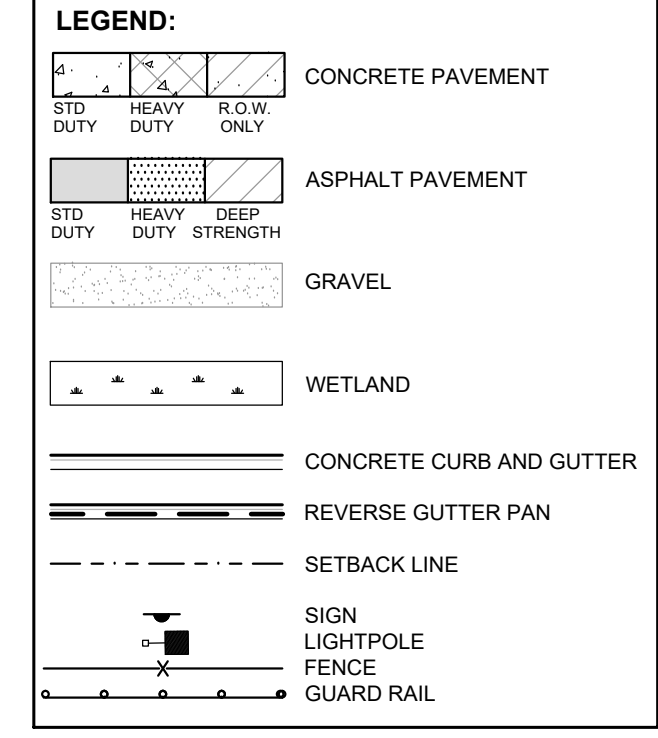
S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL DEVELOPMENT\DWG\2022-1338-01-01.DWG
 DATE: 03/31/2023 4:14:11 PM



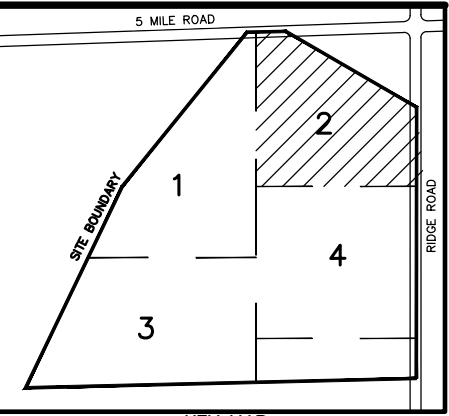
- WAYNE COUNTY CONSTRUCTION NOTES:**
1. SAWCUT FULL DEPTH THE EXISTING PAVEMENT TO THE NEAREST JOINT WITHIN WAYNE COUNTY ROAD RIGHT-OF-WAY AND REMOVE THE EXISTING PAVEMENT AND CURBS AS DIRECTED BY WAYNE COUNTY ENGINEER.
 2. CONSTRUCT WAYNE COUNTY ROAD PAVEMENT PER WAYNE COUNTY STANDARDS DETAIL "PR-1" OR "PR-2" AS APPLICABLE, OR AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
 3. PLACE 9" OF 21AA AGGREGATE COMPACTED TO MINIMUM 95% DENSITY OF MAXIMUM UNIT WEIGHT OR AS DIRECTED BY WAYNE COUNTY ENGINEER.
 4. CONSTRUCT WAYNE COUNTY ROAD PAVEMENT REPAIRS WITH MINIMUM OF 2.0" HMA TOP (T) ON MINIMUM 10" NON-REINFORCED CONCRETE WC 35 P MIX (3500 PSI AT 28 DAYS) AND INTEGRAL STRAIGHT CURB TYPE "4" AS PER WAYNE COUNTY STANDARD DETAIL "RS-3" OR AS DIRECTED BY WAYNE COUNTY ENGINEER.
 5. TIE THE NEW PAVEMENT TO THE EXISTING PAVEMENT WITH #5 EPOXY COATED BARS AT MAXIMUM 43-INCH ON CENTER LONGITUDINALLY AND AT 18-INCH ON CENTER TRANSVERSELY AS PER WAYNE COUNTY STANDARD DETAIL "RS-2" OR AS DIRECTED BY THE COUNTY ENGINEER.
 6. PLACE THE CONSTRUCTION JOINTS OF THE NEW PAVEMENT TO MATCH THE EXISTING PAVEMENT JOINTS OR AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
 7. REPLACE ANY DAMAGED CURBS AS A RESULT OF THIS PROJECT ACTIVITY AS PER WAYNE COUNTY STANDARD DETAIL "D-7" OR AS DIRECTED BY THE COUNTY ENGINEER.
 8. ANY DAMAGED UNDERDRAIN AS A RESULT OF THIS PROJECT ACTIVITY SHALL BE RECONSTRUCTED AS PER WAYNE COUNTY DETAIL "S-14" OR AS DIRECTED BY THE COUNTY ENGINEER.
 9. ANY DAMAGED SIDEWALK AS A RESULT OF THIS PROJECT ACTIVITY SHALL BE RECONSTRUCTED AS PER WAYNE COUNTY DETAIL "RS-5" OR AS DIRECTED BY THE COUNTY ENGINEER.
 10. MAINTAIN A MAXIMUM 2% TRANSVERSE SLOPE ON THE SIDEWALK.
 11. ANY DAMAGED SIDEWALK RAMPS SHOULD BE REPLACED TO MATCH THE ADA REQUIREMENTS AS PER MDT STANDARD DETAIL "R-28-1".
 12. STRUCTURE ADJUSTMENT SHALL BE DETERMINED AT THE SITE BY WAYNE COUNTY ENGINEER.
 13. RELOCATE, RESTORE, OR REPLACE ANY TRAFFIC SIGNS THAT ARE AFFECTED BY THIS CONSTRUCTION AS DIRECTED BY THE WAYNE COUNTY ENGINEER.
 14. RELOCATE ANY EXISTING UTILITY THAT IS IN CONFLICT WITH THE PROPOSED WORK AS DIRECTED BY THE COUNTY ENGINEER AND UTILITY COMPANY REPRESENTATIVE.

NOTE: WITHIN THE RIDGE ROAD RIGHT-OF-WAY IS UNDER THE JURISDICTION OF WAYNE COUNTY AND REQUIRES A PERMIT.

- PAVING NOTES:**
1. IN AREAS WHERE NEW PAVEMENTS ARE BEING CONSTRUCTED, THE TOPSOIL AND SOIL CONTAINING ORGANIC MATTER SHALL BE REMOVED PRIOR TO PAVEMENT CONSTRUCTION.
 2. REFER TO ARCHITECTURAL PLANS FOR DETAILS OF FROST SLAB AT EXTERIOR BUILDING DOORS.
 3. CONSTRUCTION TRAFFIC SHOULD BE MINIMIZED ON THE NEW PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, THE INITIAL LIFT THICKNESS COULD BE INCREASED AND PLACEMENT OF THE FINAL LIFT COULD BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED. THIS ACTION WILL ALLOW REPAIR OF LOCALIZED FAILURE, IF ANY DOES OCCUR, AS WELL AS REDUCE LOAD DAMAGE ON THE PAVEMENT SYSTEM.
 4. ALL EXPANSION JOINTS AND CONCRETE PAVEMENT JOINTS TO BE SEALED.
 5. CONCRETE CURBING JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - 5.1. JOINTS WHEN ADJACENT TO ASPHALT PAVEMENT
 - 5.1.1. PLACE CONTRACTION JOINTS AT 10' INTERVALS
 - 5.1.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
 - 5.1.3. PLACE 1" EXPANSION JOINT:
 - 5.1.3.1. AT SPRING POINTS OF INTERSECTIONS OR ONE OF THE END OF RADIUS LOCATIONS IN A CURVE
 - 5.1.3.2. AT 400' MAXIMUM INTERVALS ON STRAIGHT RUNS
 - 5.1.3.3. AT THE END OF RADIUS AT OPPOSITE ENDS IN A CURBED LANDSCAPE ISLAND
 - 5.2. JOINTS WHEN TIED TO CONCRETE PAVEMENT
 - 5.2.1. PLACE CONTRACTION JOINTS OPPOSITE ALL TRANSVERSE CONTRACTION JOINTS IN PAVEMENT
 - 5.2.2. PLACE 1/2" EXPANSION JOINT AT CATCH BASINS, EXISTING AND PROPOSED SIDEWALK OR EXISTING CURBING.
 - 5.2.3. PLACE 1" EXPANSION JOINT OPPOSITE ALL TRANSVERSE EXPANSION JOINTS IN PAVEMENT
 - 5.2.4. CURB AND GUTTER AND CONCRETE SHALL BE TIED TOGETHER SIMILAR TO A LONGITUDINAL LANE TIE JOINT (MDOT B1 JOINT)
 - 5.3. IN BETWEEN POURS OF PROPOSED CONCRETE CURBING (CONSTRUCTION JOINT):
 - 5.3.1. CARRY THE REBAR CONTINUOUSLY BETWEEN POURS
 - 5.3.2. IF THE REBAR IS NOT LONG ENOUGH TO CARRY CONTINUOUSLY, THEN TIE TWO PIECES OF REBAR PER THE LATEST MDT SPECIFICATIONS
 6. CONCRETE SIDEWALK JOINTING - UNLESS SHOWN OTHERWISE IN THE PLANS OR REQUIRED BY THE AUTHORITY HAVING JURISDICTION:
 - 6.1. PLACE TRANSVERSE CONTRACTION JOINTS EQUAL TO THE WIDTH OF THE WALK WHEN WIDTH IS LESS THAN 8'
 - 6.2. PLACE TRANSVERSE AND LONGITUDINAL CONTRACTION JOINTS EQUAL TO 1/2 THE WIDTH OF THE WALK WHEN WIDTH IS EQUAL TO OR GREATER THAN 8'
 - 6.3. PLACE 1" EXPANSION JOINT WHERE ABUTTING SIDEWALK RAMP AND/OR RADIUS IN INTERSECTION
 - 6.4. PLACE TRANSVERSE 1/2" EXPANSION JOINT AT MAXIMUM OF 100' SPACING
 - 6.5. PLACE 1/2" EXPANSION JOINT WHEN ABUTTING A FIXED STRUCTURE, OTHER PAVEMENT (CONCRETE PAVEMENT AND DRIVE APPROACHES), UTILITY STRUCTURES, LIGHT POLE BASES AND COLUMNS



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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

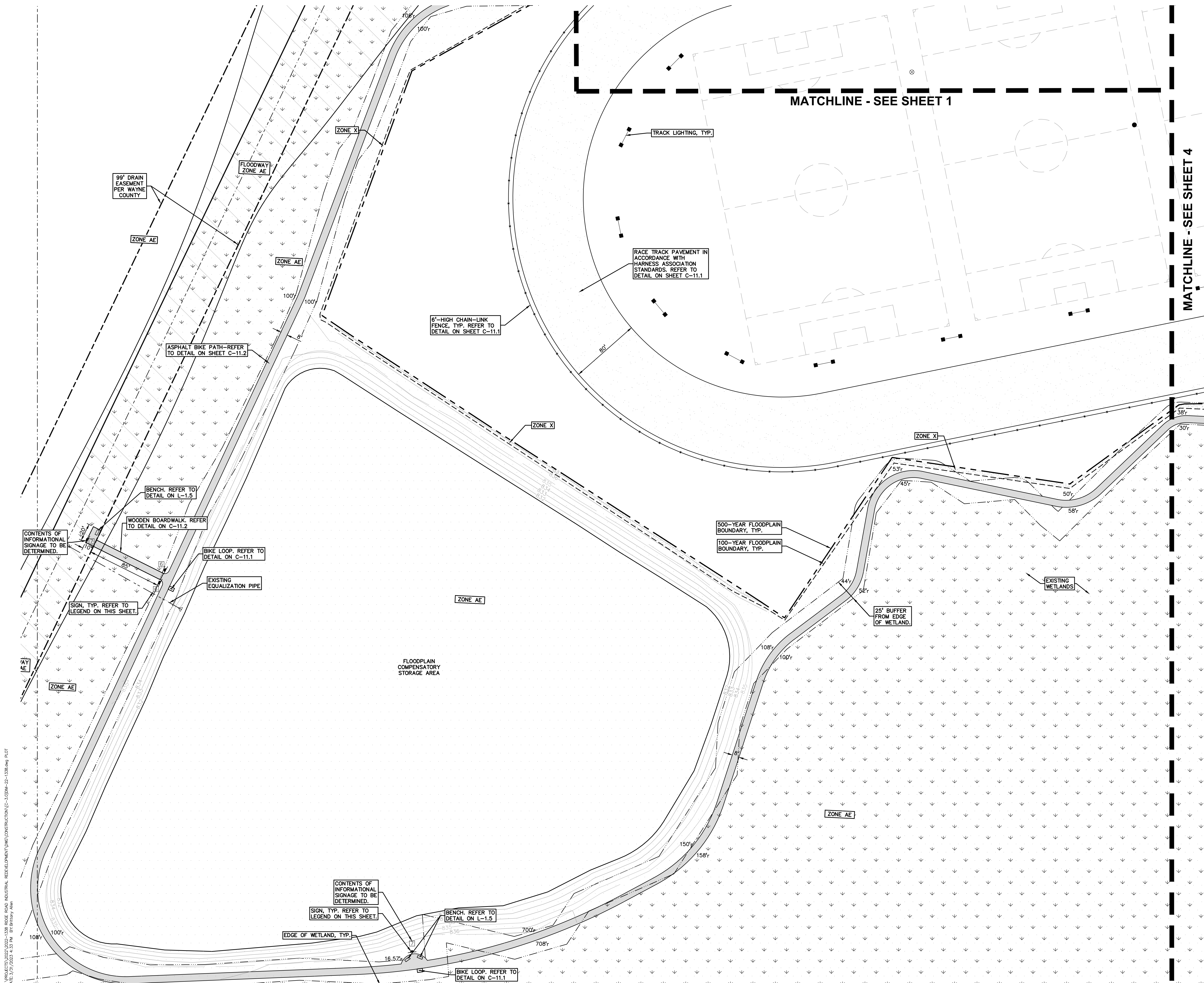
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, NY

REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
DIMENSION AND PAVING PLAN - 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	



LEGEND:

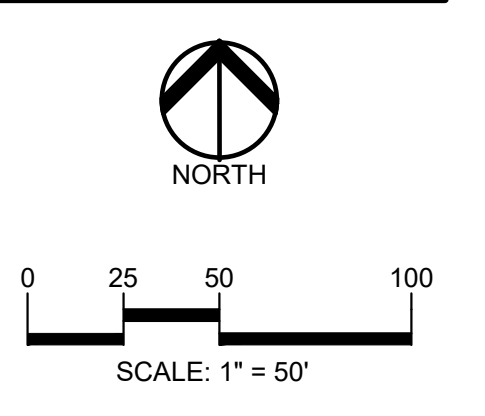
	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN LIGHTPOLE FENCE
	GUARD RAIL

SIGN LEGEND:

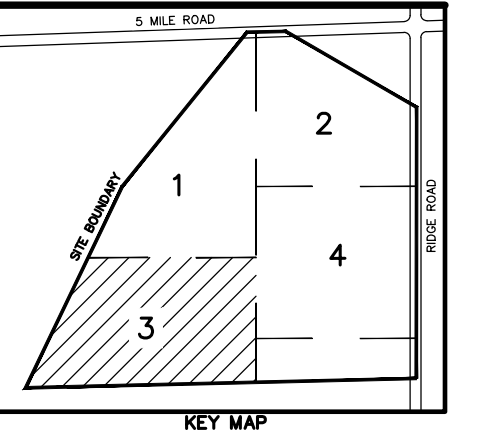
'NO PARKING FIRE LANE' SIGN	1
'STOP' SIGN	2
'BARRIER FREE PARKING' SIGN	3
'VAN ACCESSIBLE' SIGN	4
TRAILHEAD SIGN	5
'NO BICYCLES BEYOND THIS POINT' SIGN	6
INFORMATIONAL SIGN	7

REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
 REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
 REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES



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



CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

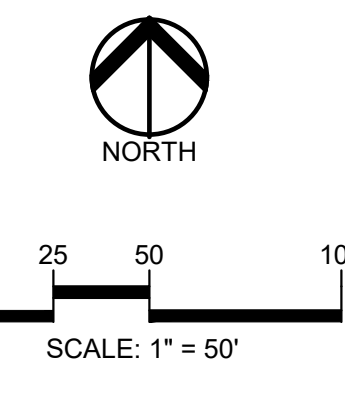
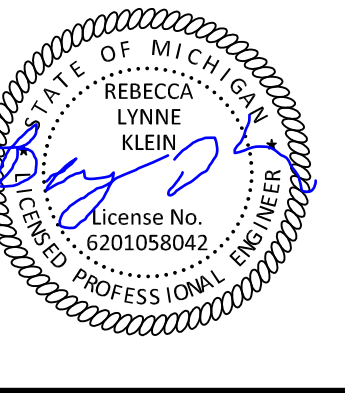
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

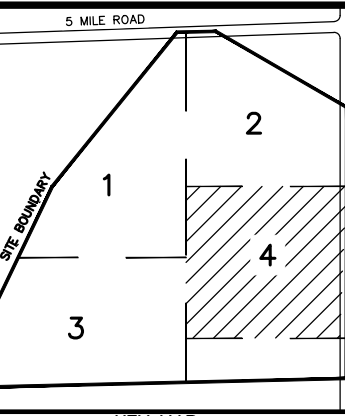
ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
DIMENSION AND PAVING PLAN - 3

PEA JOB NO.	2022-1338
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-3.03DM-22-1338.dwg PLOT
 DATE: 3/31/2023 4:10:14 PM 10: Binary data



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

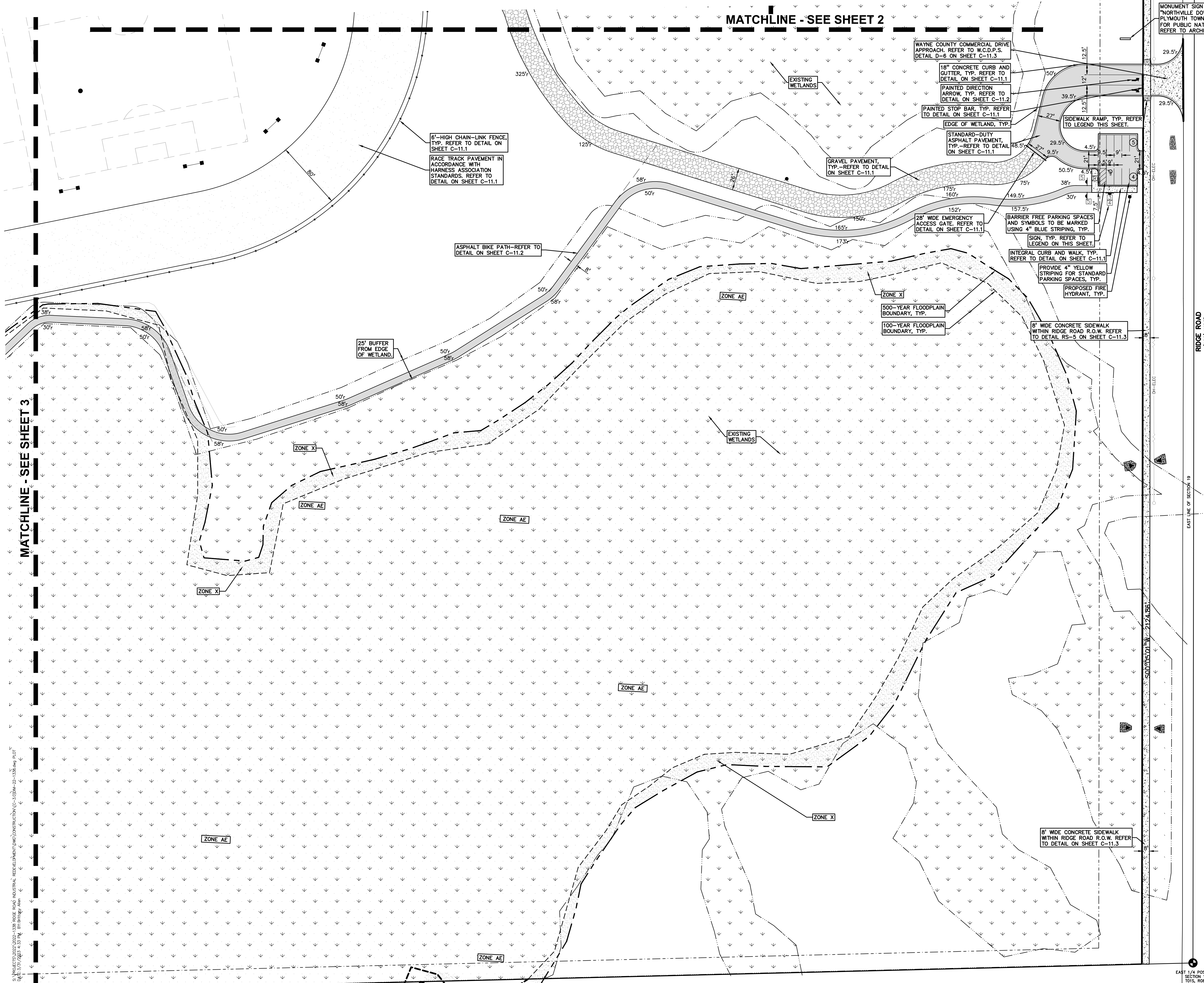
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

NO.	REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
DIMENSION AND PAVING PLAN - 4

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-3.4



MATCHLINE - SEE SHEET 3
 S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\CONSTRUCTION\CONSTRUCTION-C-3.034-22-1338.dwg PLOT
 10/12/2023 9:15 AM REBECCA.L.KLEIN

MATCHLINE - SEE SHEET 2

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

LEGEND:

- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

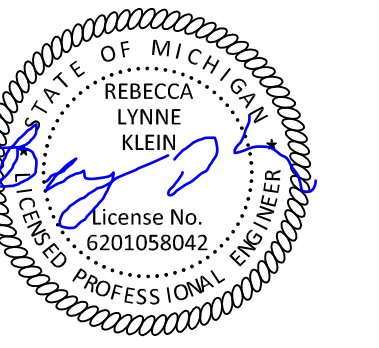
- SIDEWALK RAMP 'TYPE R'
- SIDEWALK RAMP 'TYPE P'
- CURB DROP ONLY
- REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

SIGN LEGEND:

- 'NO PARKING FIRE LANE' SIGN
- 'STOP' SIGN
- 'BARRIER FREE PARKING' SIGN
- 'VAN ACCESSIBLE' SIGN
- TRAILHEAD SIGN
- 'NO BICYCLES BEYOND THIS POINT' SIGN
- INFORMATIONAL SIGN
- REFER TO DETAIL SHEET FOR SIGN DETAILS

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES

NOTE:
ALL WORK WITHIN THE RIDGE ROAD (120' WIDE) CONSTRUCTION OF WAYNE COUNTY AND REQUIRES A PERMIT



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

CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

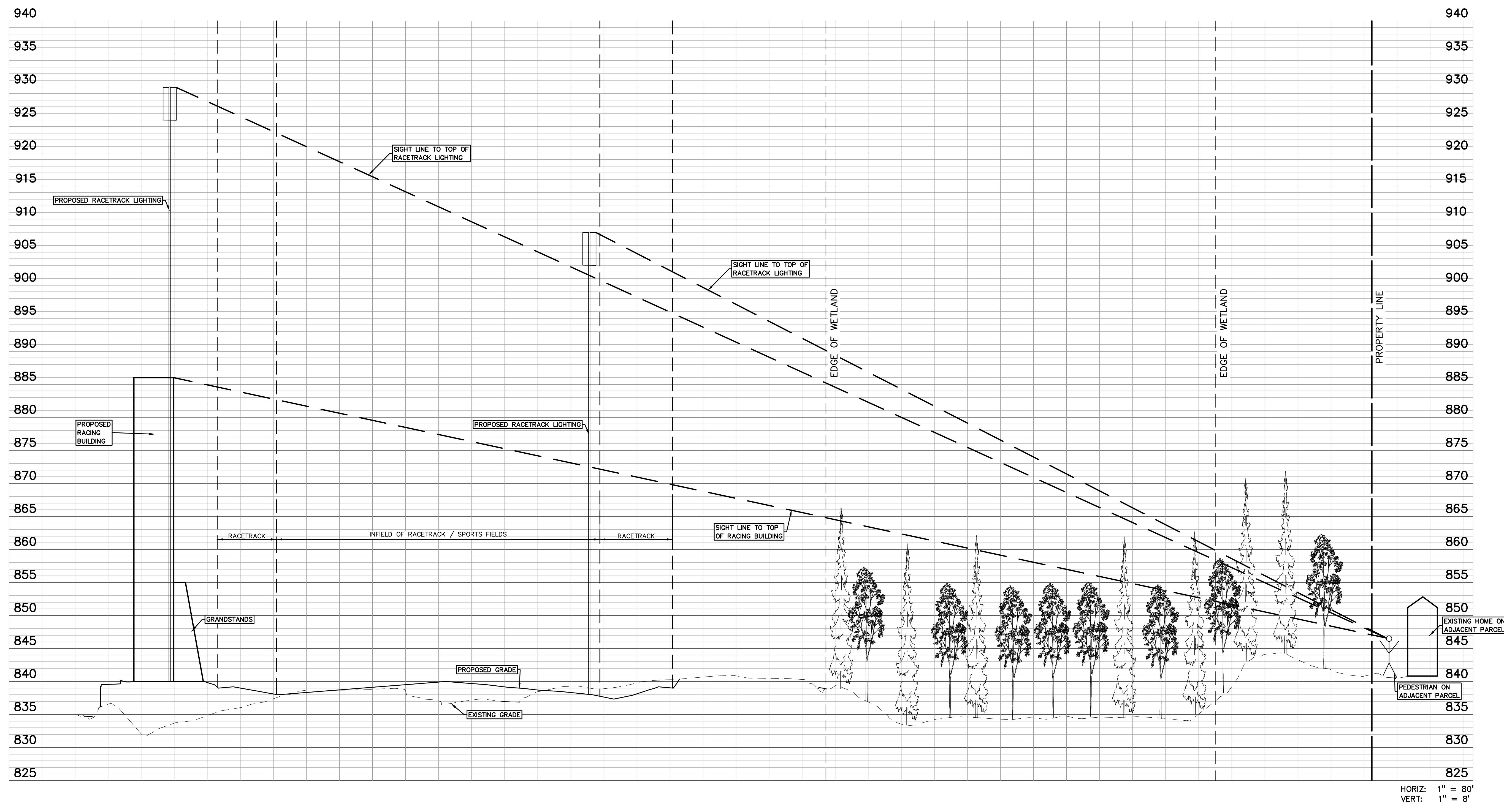
REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

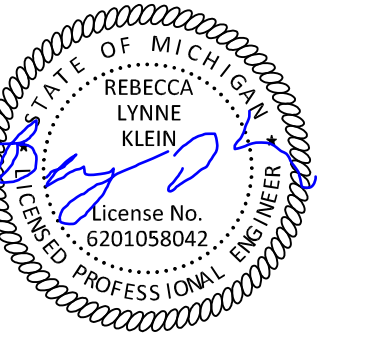
DRAWING TITLE
SIGHT PROFILE SECTION 'A-A'

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-3.5



S:\PROJECTS\2022\022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-3.5\DP1.dwg
 PLOT DATE: 03/31/2023 11:04:44 AM
 PLOT BY: JKL



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

Northville Downs
Horse Racing Track

01/27/2023
Job Number: 982287

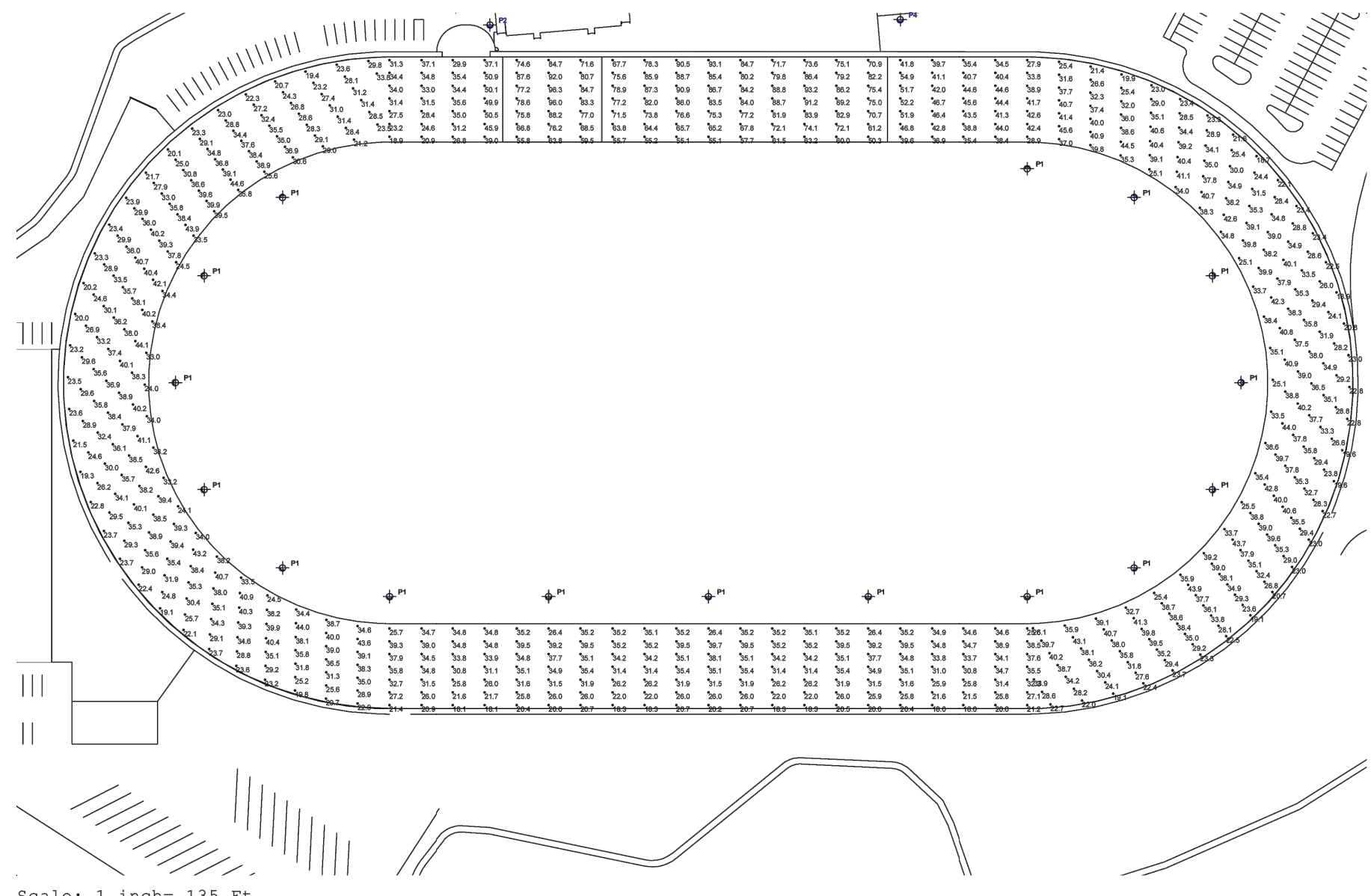
Prepared by: CO
Powered by Wisconsin Lighting Lab, Inc.

NOTES

*Lumen output is based on a Luminaire Engineering Society (LES) standard under simulated laboratory conditions. This data is based on information supplied by client and is subject to change. It is recommended that the contractor verify the luminaire output under actual conditions. All luminaire outputs should be based on a minimum of 10% over the stated output. All luminaire outputs should be based on a minimum of 10% over the stated output. All luminaire outputs should be based on a minimum of 10% over the stated output. All luminaire outputs should be based on a minimum of 10% over the stated output.

- General Electrical Requirements:
 - Suitable for use at service entrance
 - Service entrance supplied voltage to be within 5%
 - 120V/208V/240V/480V/600V service entrance
 - 2000 conductors at each pole base
- Suitable for use at service entrance
- 2000 conductors at each pole base
- Suitable for use at service entrance
- 2000 conductors at each pole base

Photometrics



Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54605
quote@willbrands.com | www.willbrands.com/80022



Calculations

Pole Schedule

Qty	Label	Description
1	P4	90' POLE, ACR6/ACR6/ACR2, PDH, RPC, 16 TOTAL K88 FIXTURES
1	P3	90' POLE, ACR6/ACR6/ACR6, PDH, RPC, 24 TOTAL K88 FIXTURES
1	P2	90' POLE, ACR6/ACR6/ACR2, PDH, RPC, 16 TOTAL K88 FIXTURES
16	P1	70' POLE, ACR6, PDH, RPC, 6 TOTAL K88 FIXTURES

Calculation Summary

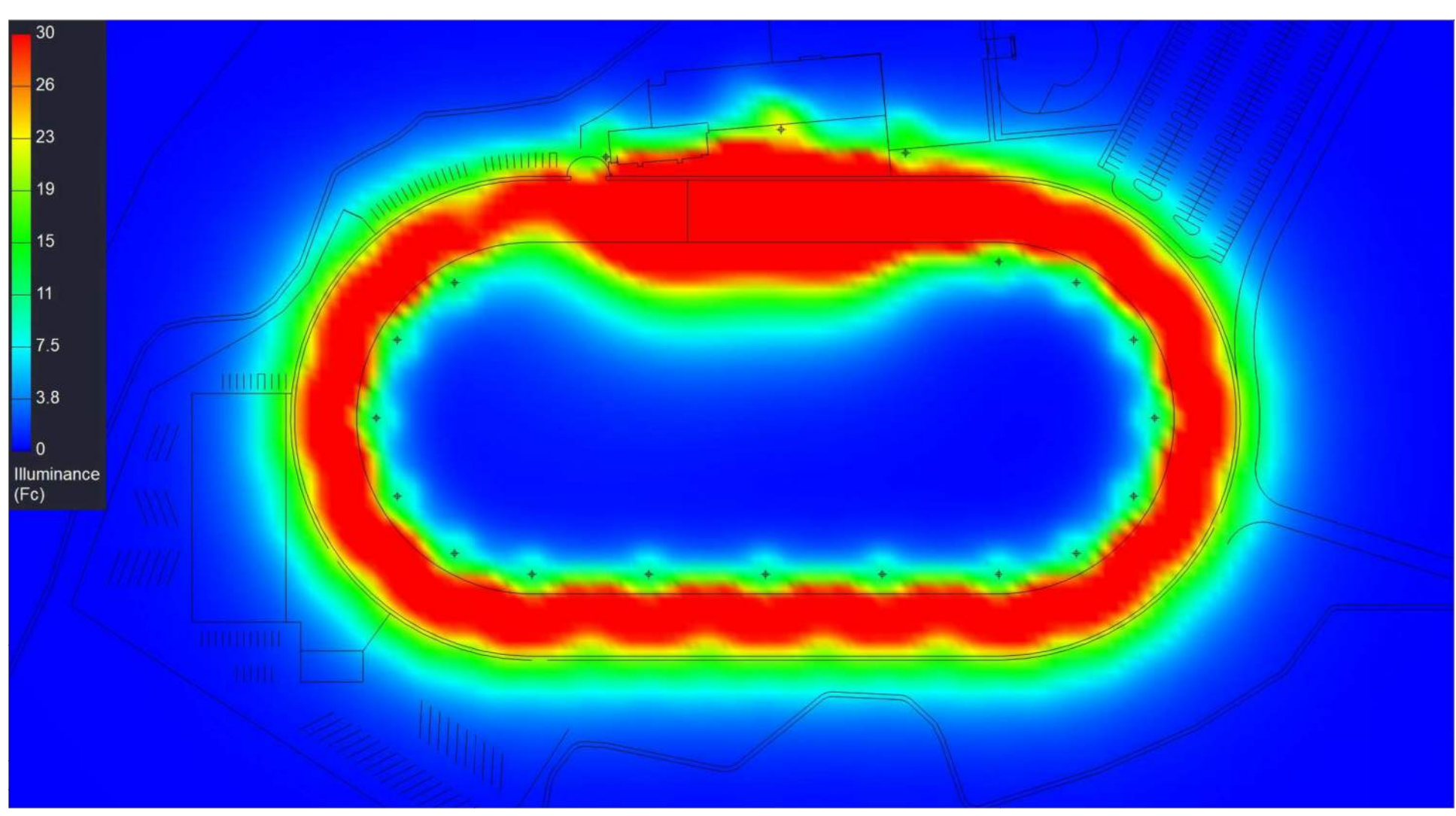
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Finish Line	Illuminance	Fc	76.55	96.3	50.3	1.52	1.91
Race Track	Illuminance	Fc	32.69	54.9	18.0	1.82	3.05

Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54605
quote@willbrands.com | www.willbrands.com/80022



Renderings

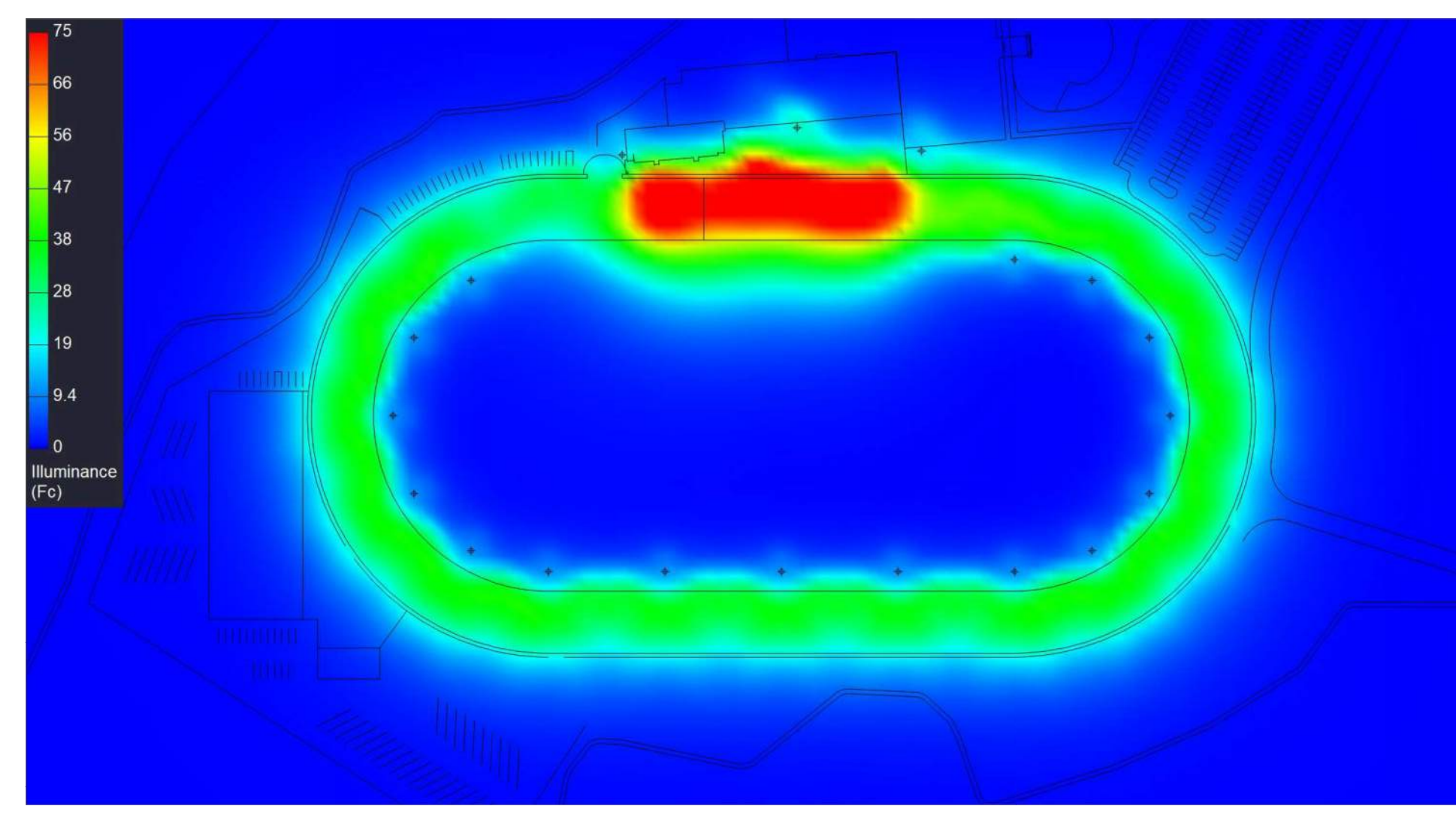


Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54605
quote@willbrands.com | www.willbrands.com/80022



Renderings



Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54605
quote@willbrands.com | www.willbrands.com/80022



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
STADIUM LIGHTING PLAN

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK

DRAWING NUMBER:
C-3.6

General Note

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

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

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

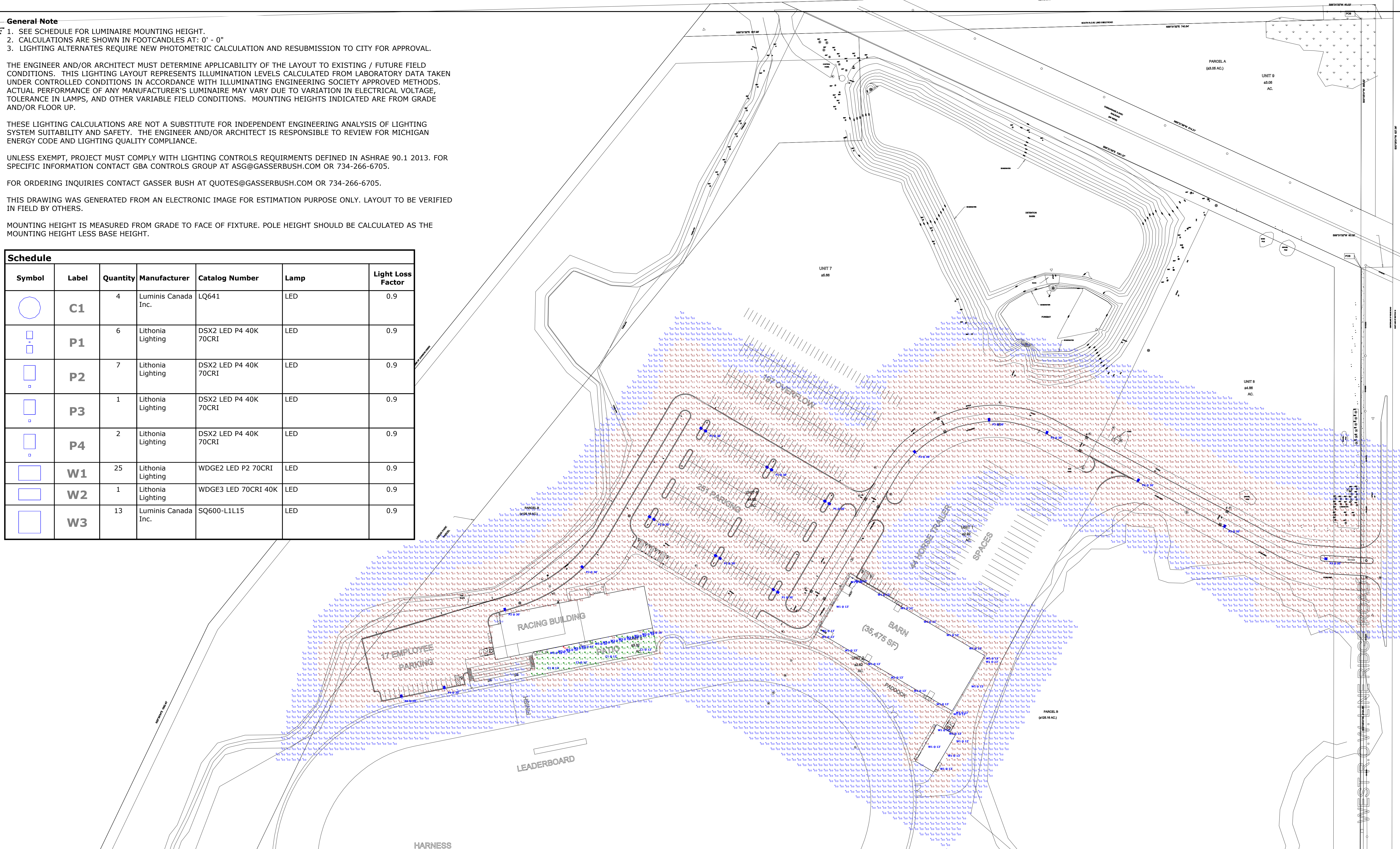
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

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

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

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

Symbol	Label	Quantity	Manufacturer	Catalog Number	Lamp	Light Loss Factor
	C1	4	Luminis Canada Inc.	LQ641	LED	0.9
	P1	6	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	P2	7	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	P3	1	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	P4	2	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	W1	25	Lithonia Lighting	WDGE2 LED P2 70CRI	LED	0.9
	W2	1	Lithonia Lighting	WDGE3 LED 70CRI 40K	LED	0.9
	W3	13	Luminis Canada Inc.	SQ600-L1L15	LED	0.9



Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Patio	✕	2.3 fc	20.7 fc	0.2 fc	103.5:1	11.5:1	0.1:1
Grade	+	0.7 fc	20.7 fc	0.0 fc	N/A	N/A	0.0:1



NORTHVILLE DOWNS
PHOTOMETRIC PLAN
PREPARED FOR: GAV ASSOCIATES
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Designer
DS
Date
02/10/2023
Scale
Not to Scale
Drawing No.
#23-10448 V3

GRADING LEGEND:

EXISTING SPOT ELEVATION
 PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
 EXISTING CONTOUR
 PROPOSED CONTOUR
 PROPOSED REVERSE GUTTER PAN
 PROPOSED RIDGE LINE
 PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB G = GUTTER GRADE
 T/P = TOP OF PAVEMENT F.G. = FINISH GRADE
 T/S = TOP OF SIDEWALK RIM = RIM ELEVATION
 T/W = TOP OF WALL BW = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
 (GPS DERIVED - NAVD88)

BM #301
 NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
 ELEV. - 841.48

BM #302
 NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 36.00 FEET FROM THE EAST 1/4 POST.
 ELEV. - 844.05

RETAINING WALL NOTE:

TOP OF WALL (T/W) AND BOTTOM OF WALL (BW) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

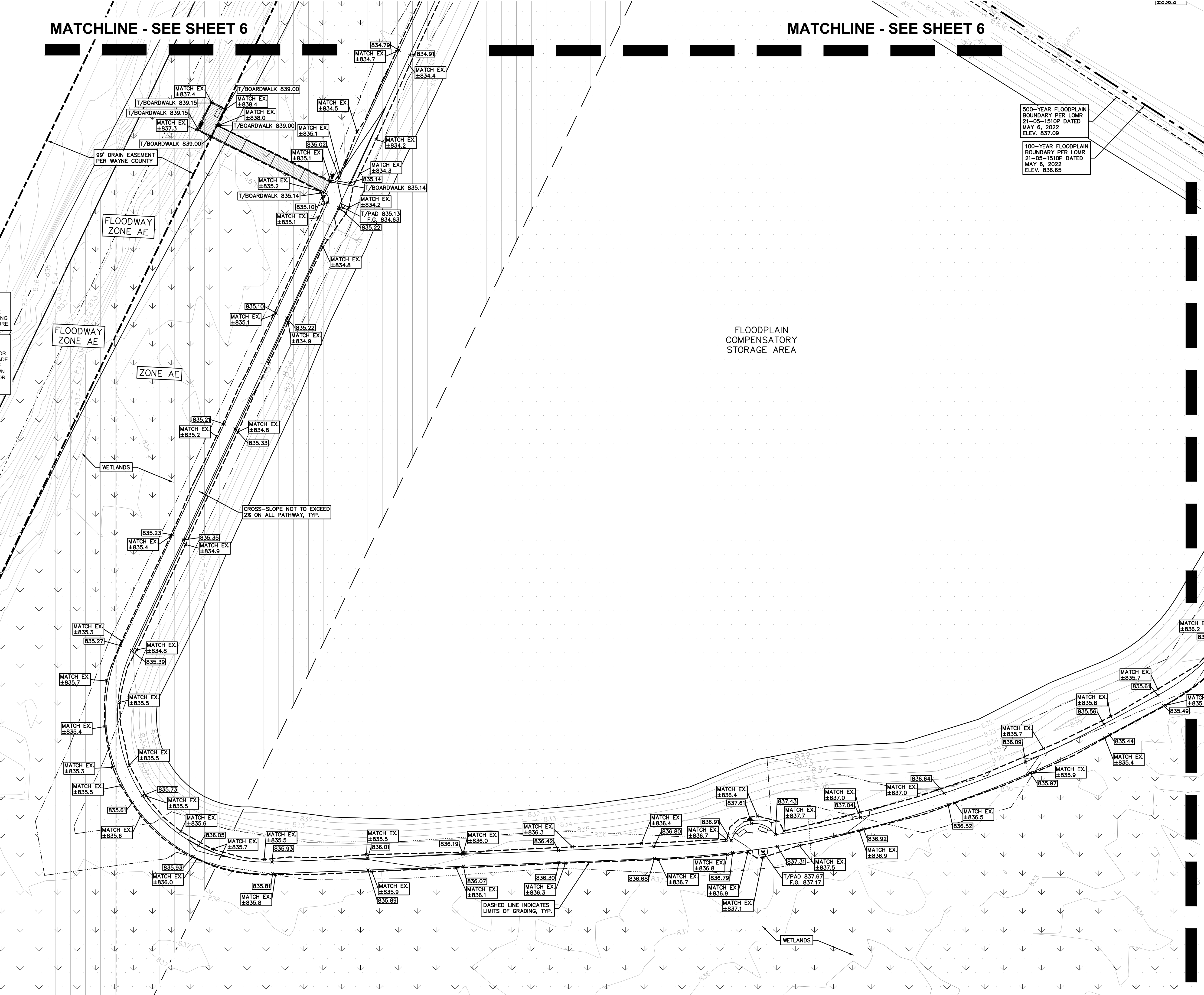
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

NOTE:

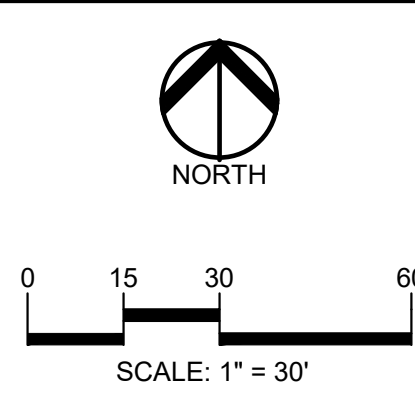
REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.

MATCHLINE - SEE SHEET 6

MATCHLINE - SEE SHEET 6

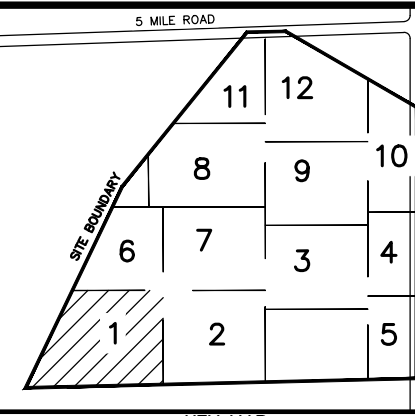


PEA GROUP
 t: 844.813.2949
 www.peagroup.com



CAUTION!!

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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

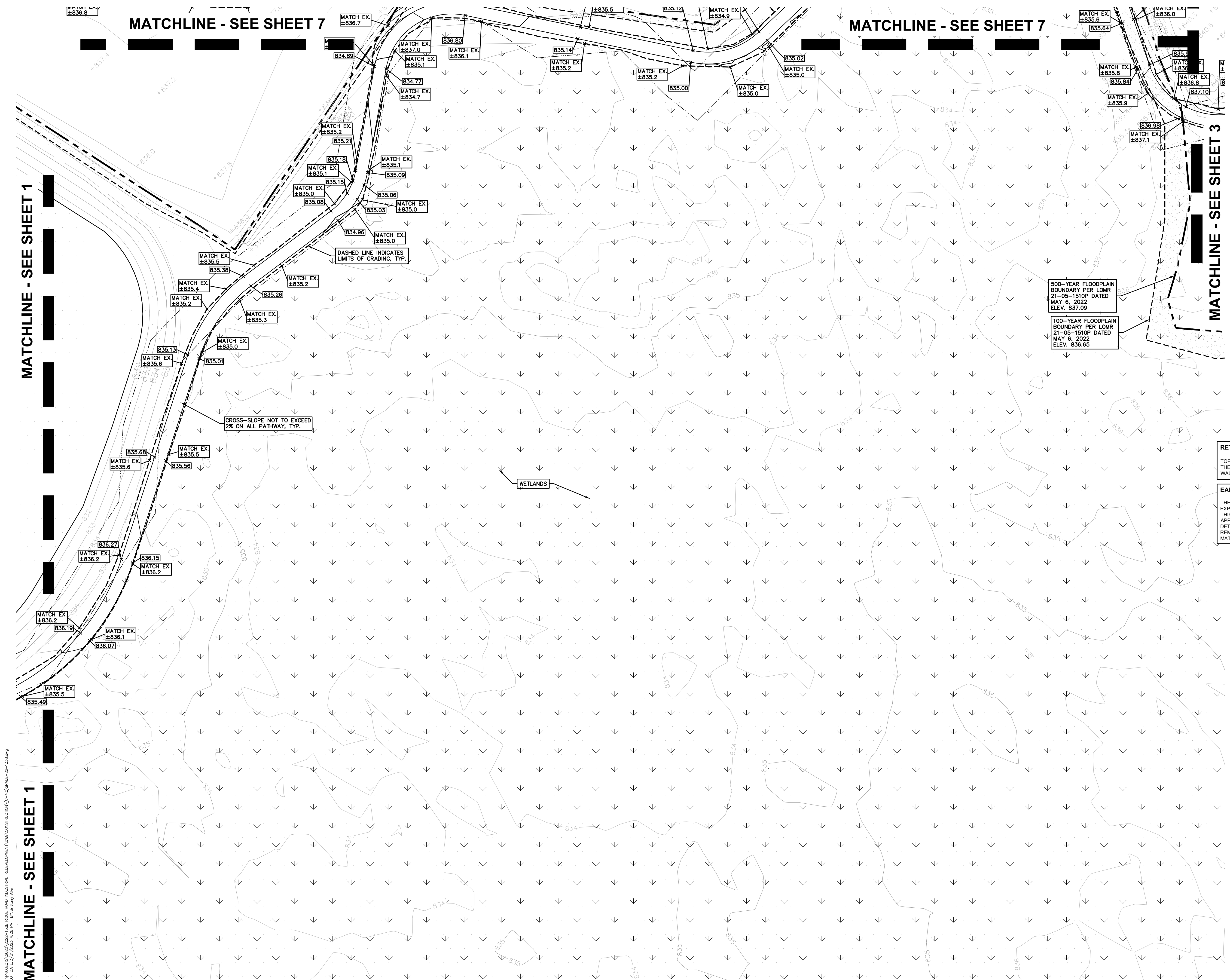
NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

DRAWING TITLE:
GRADING PLAN - SHEET 1

PEA JOB NO.	2022-1338
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	C-4.1

C-4.1



GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- G = GUTTER GRADE
- F.G. = FINISH GRADE
- RIM = RIM ELEVATION
- BW = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD. ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.. ELEV. - 844.05

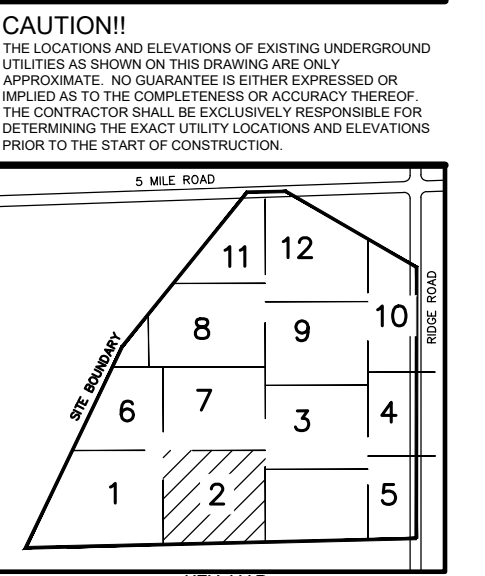
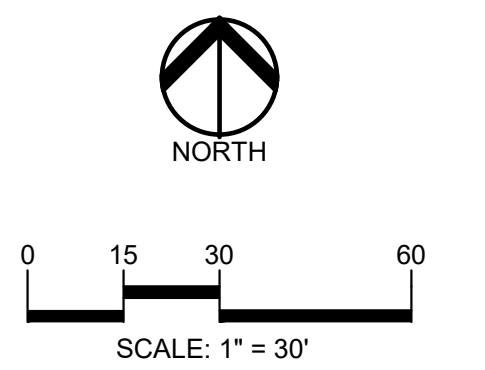
NOTE:
REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.

500-YEAR FLOODPLAIN BOUNDARY PER LOMR 21-05-1510P DATED MAY 6, 2022 ELEV. 837.09

100-YEAR FLOODPLAIN BOUNDARY PER LOMR 21-05-1510P DATED MAY 6, 2022 ELEV. 836.65

RETAINING WALL NOTE:
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

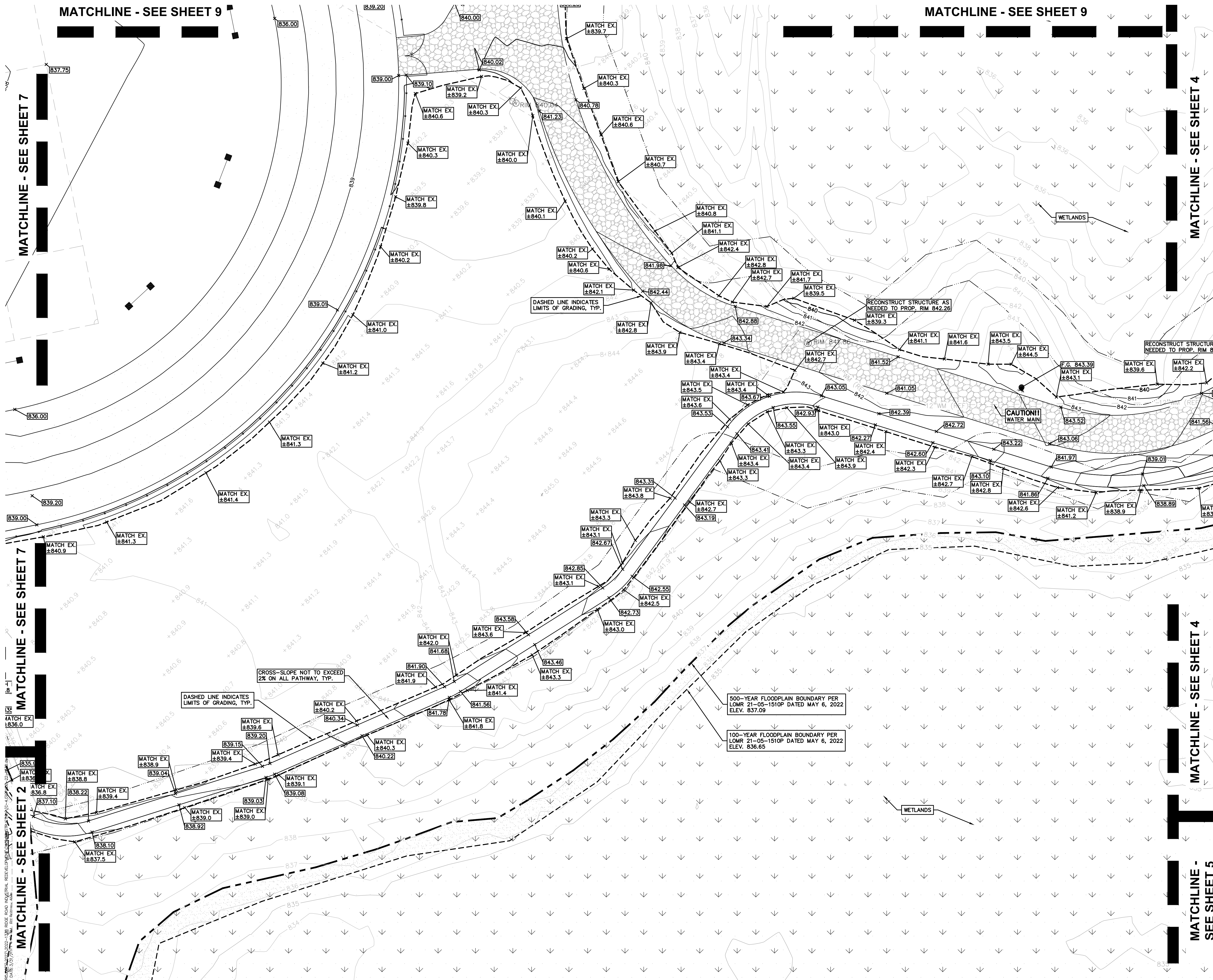
REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
GRADING PLAN - SHEET 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4\GRADE-22-1338.dwg
PLT: 10/13/2022 10:48 AM 0:00



GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- G = GUTTER GRADE
- F.G. = FINISH GRADE
- RM = RIM ELEVATION
- BW = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

RETAINING WALL NOTE:

TOP OF WALL (TW) AND BOTTOM OF WALL (BW) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

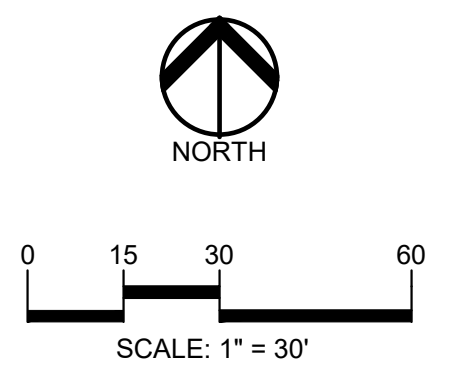
BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 38.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. - 844.05

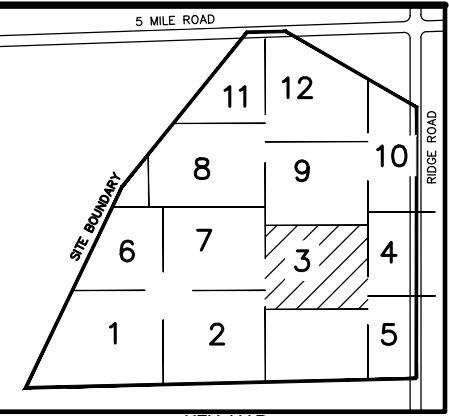
NOTE:

REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.



CAUTION!!

THE LOCATION AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. YOU GUARANTEE BY EITHER EXPRESSING OR IMPLYING AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT

JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE

NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, NY

REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

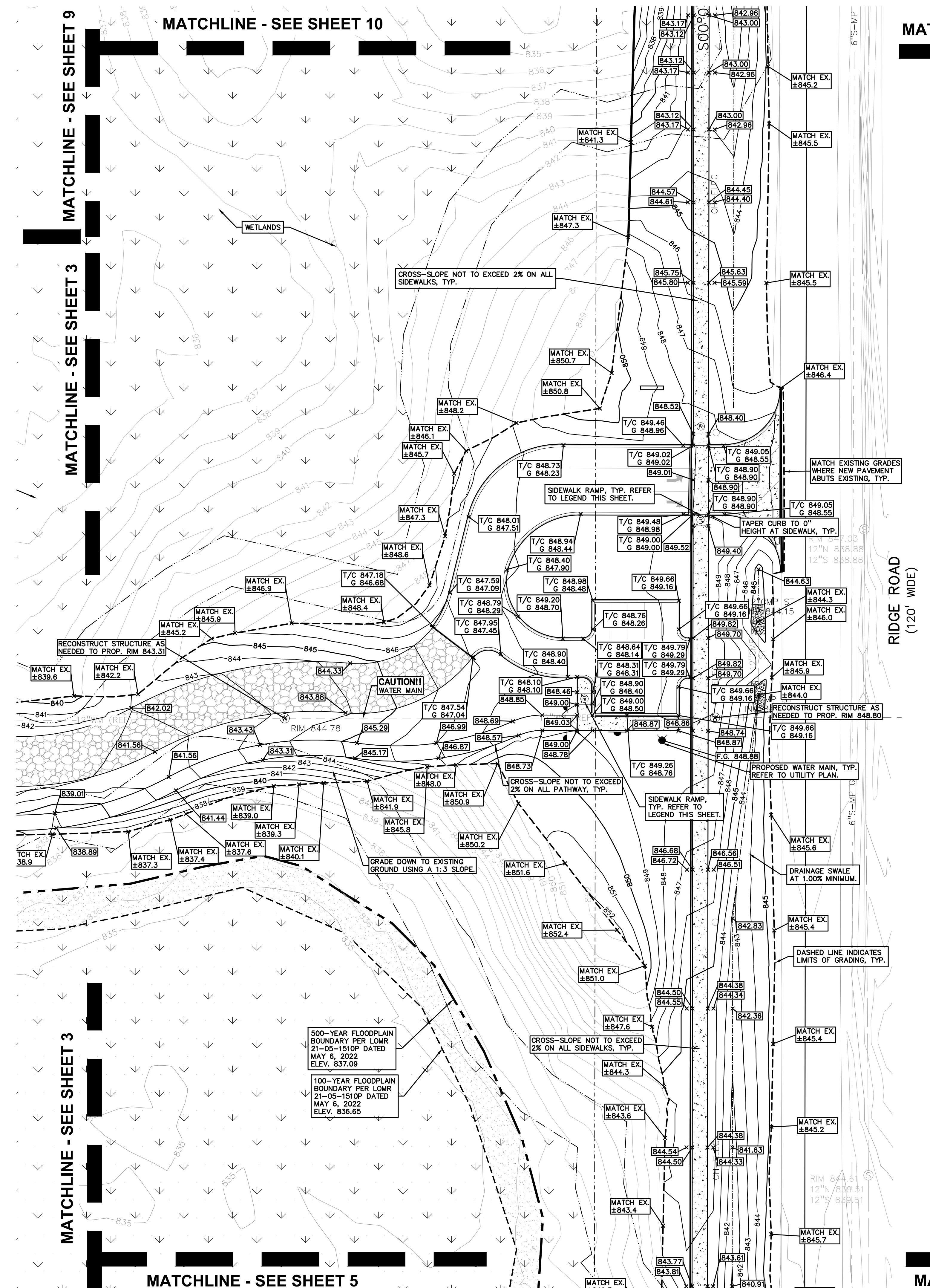
DRAWING TITLE
GRADING PLAN - SHEET 3

PEA JOB NO. 2022-1338

P.M.	BK
DN	BLA
DES.	BK

DRAWING NUMBER:

C-4.3



MATCHLINE - SEE SHEET 10

MATCHLINE - SEE SHEET 9

MATCHLINE - SEE SHEET 3

MATCHLINE - SEE SHEET 3

MATCHLINE - SEE SHEET 5

MATCHLINE - SEE SHEET 5

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- G = GUTTER GRADE
- F.G. = FINISH GRADE
- RM = RIM ELEVATION
- B/W = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

RETAINING WALL NOTE:

TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. = 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 36.00 FEET FROM THE EAST 1/4 POST.
ELEV. = 844.05

SIDEWALK RAMP LEGEND:

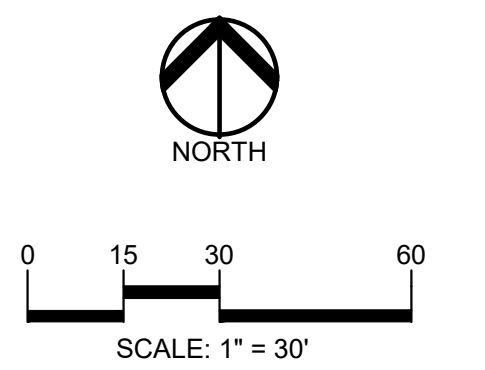
- SIDEWALK RAMP "TYPE R"
- SIDEWALK RAMP "TYPE P"
- CURB DROP ONLY

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

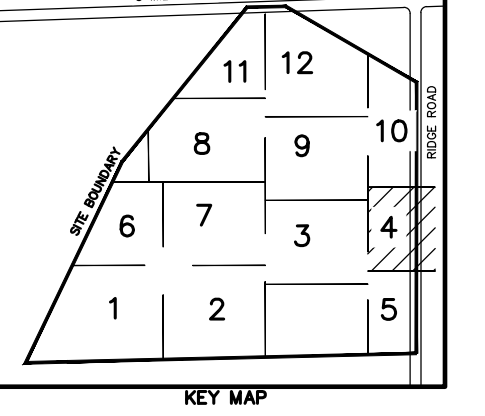
GENERAL GRADING AND EARTHWORK NOTES:

THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING TREES AND BRUSH AND REMOVE ALL THAT ARE NECESSARY TO GRADE SITE.
- ALL GRADES ARE TO TOP OF PAVEMENT UNLESS OTHERWISE NOTED.
- THE STAGING OF CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY WITHIN THE SITE BOUNDARIES. ANY CONSTRUCTION ACTIVITIES OUTSIDE OF THE SITE BOUNDARIES SHALL BE AT THE SOLE RESPONSIBILITY AND RISK OF THE CONTRACTOR.
- ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE AUTHORIZED PUBLIC AGENCY OF JURISDICTION. AN EROSION CONTROL PERMIT MUST BE SECURED FROM THE COUNTY PRIOR TO CONSTRUCTION.
- ALL EARTHWORK AND GRADING OPERATIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE SOILS INVESTIGATION AND REPORT.
- REFER TO SOIL EROSION CONTROL PLAN FOR ADDITIONAL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES AND NOTES.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED OR SOODED IN ACCORDANCE WITH THE LANDSCAPE PLANS. PROVIDE A MINIMUM OF 3" OF TOPSOIL IN THESE AREAS UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTE EXISTING UNDERGROUND UTILITIES WITHIN AND ADJACENT TO THE SITE. BACKFILL FOR EXISTING UTILITY TRENCHES SHALL BE EXAMINED CRITICALLY. ANY TRENCHES FOUND TO HAVE SOFT, UNSTABLE OR UNSUITABLE BACKFILL MATERIAL IN THE OPINION OF THE THIRD PARTY TESTING COMPANY, THAT ARE TO BE WITHIN THE ZONE OF INFLUENCE OF PROPOSED BUILDINGS OR PAVEMENT SHALL BE COMPLETELY EXCAVATED AND BACKFILLED WITH SUITABLE MATERIAL.
- ON-SITE FILL CAN BE USED IF THE SPECIFIED COMPACTION REQUIREMENTS CAN BE ACHIEVED. IF ON-SITE SOIL IS USED, IT SHOULD BE CLEAN AND FREE OF FROZEN SOIL, ORGANICS, OR OTHER DELETERIOUS MATERIALS.
- THE FINAL SUBGRADE/EXISTING AGGREGATE BASE SHOULD BE THOROUGHLY PROOFROLLED USING A FULLY LOADED TANDEM AXLE TRUCK OR FRONT END LOADER UNDER THE OBSERVATION OF A GEOTECHNICAL/PAVEMENT ENGINEER. LOOSE OR YIELDING AREAS THAT CANNOT BE MECHANICALLY STABILIZED SHOULD BE REINFORCED USING GEOGRIDS OR REMOVED AND REPLACED WITH ENGINEERED FILL OR AS DICTATED BY FIELD CONDITIONS.
- SUBGRADE UNDERCUTTING, INCLUDING BACKFILLING SHALL BE PERFORMED TO REPLACE MATERIALS SUSCEPTIBLE TO FROST HEAVING AND UNSTABLE SOIL CONDITIONS. ANY EXCAVATIONS THAT MAY BE REQUIRED BELOW THE TOPSOIL IN FILL AREAS OR BELOW SUBGRADE IN CUT AREAS WILL BE CLASSIFIED AS SUBGRADE UNDERCUTTING.
- SUBGRADE UNDERCUTTING SHALL BE PERFORMED WHERE NECESSARY AND THE EXCAVATED MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR. ANY SUBGRADE UNDERCUTTING SHALL BE BACKFILLED AS RECOMMENDED IN THE GEOTECHNICAL ENGINEERING REPORT FOR THE PROJECT.
- ANY SUB-GRADE WATERING REQUIRED TO ACHIEVE REQUIRED DENSITY SHALL BE CONSIDERED INCIDENTAL TO THE JOB.



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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DESCRIPTION

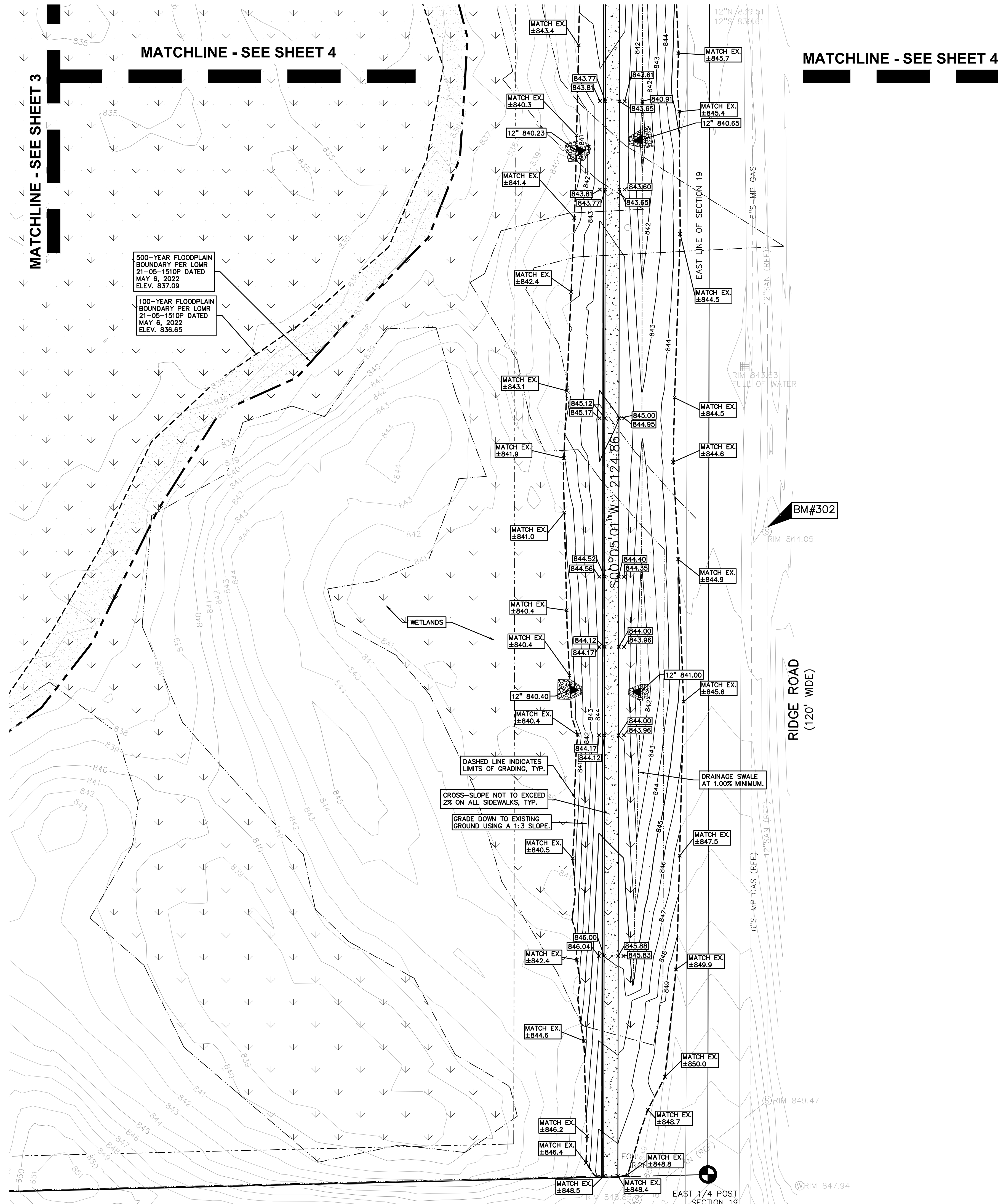
ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
GRADING PLAN - SHEET 4

PEA JOB NO.	2022-1338
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	

C-4.4

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4\GRADE-22-1338.rvt
PLT: 04/13/2023 9:43 AM 0:00
S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4\GRADE-22-1338.rvt

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4\GRADE-22-1338.dwg
PLT: DATE: 3/27/2023 4:58 PM
D: 3/27/2023 4:58 PM
B: 3/27/2023 4:58 PM



GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- G = GUTTER GRADE
- F.G. = FINISH GRADE
- RM = RIM ELEVATION
- BW = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

RETAINING WALL NOTE:

TOP OF WALL (TW) AND BOTTOM OF WALL (BW) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. - 844.05

NOTE:
REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.

PEA GROUP
t: 844.813.2949
www.peagroup.com

REBECCA LYNE KLEIN
License No. 620105804
PROFESSIONAL ENGINEER

NORTH

0 15 30 60
SCALE: 1" = 30'

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

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

KEY MAP

11	12
8	9
6	7
1	2
5	10
3	4

CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
GRADING PLAN - SHEET 5

PEA JOB NO. 2022-1338

P.M.	BK
DN	BLA
DES.	BK

DRAWING NUMBER:

C-4.5

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB G = GUTTER GRADE
 T/P = TOP OF PAVEMENT F.G. = FINISH GRADE
 T/S = TOP OF SIDEWALK RIM = RIM ELEVATION
 T/W = TOP OF WALL B/W = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
 (GPS DERIVED - NAVD88)

BM #301
 NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
 ELEV. - 841.48

BM #302
 NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST..
 ELEV. - 844.05

RETAINING WALL NOTE:

TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

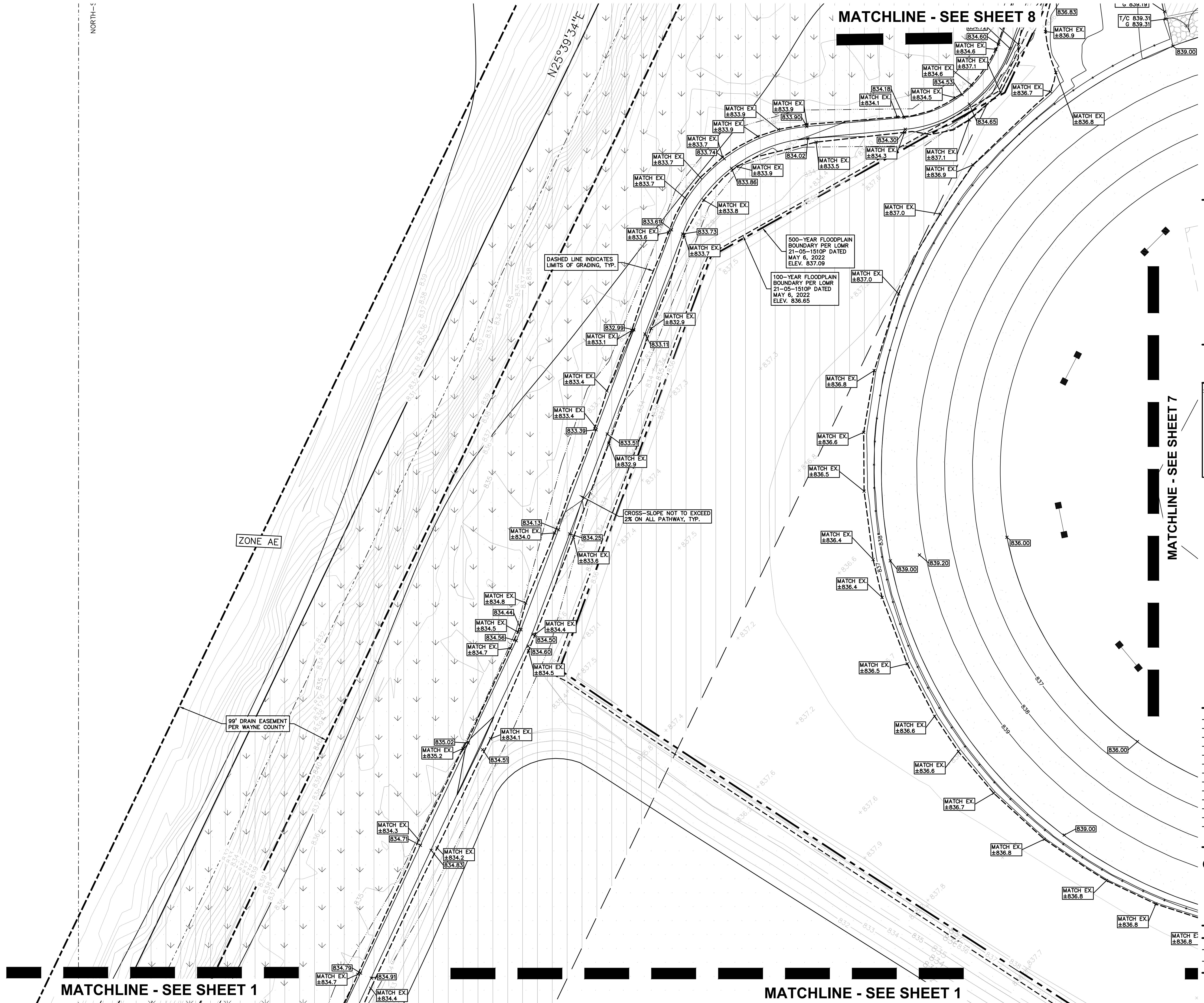
EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

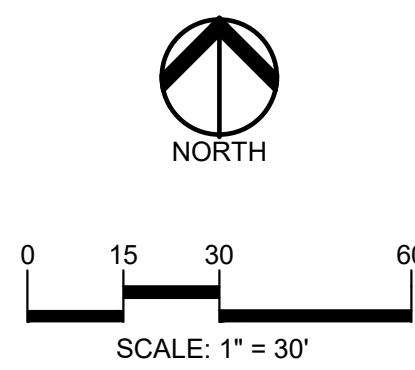
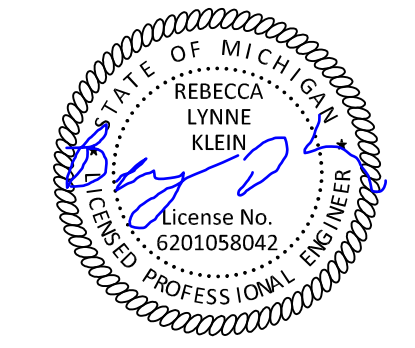
NOTE:

REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.

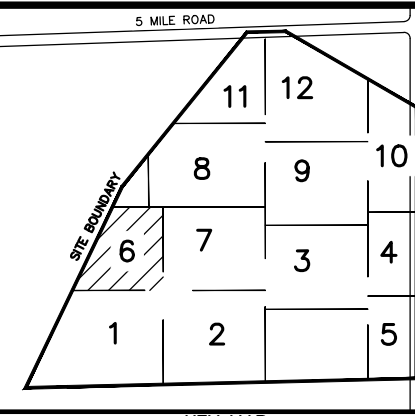
NORTH-S



PEA GROUP
 t: 844.813.2949
 www.peagroup.com



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



CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE:
GRADING PLAN - SHEET 6

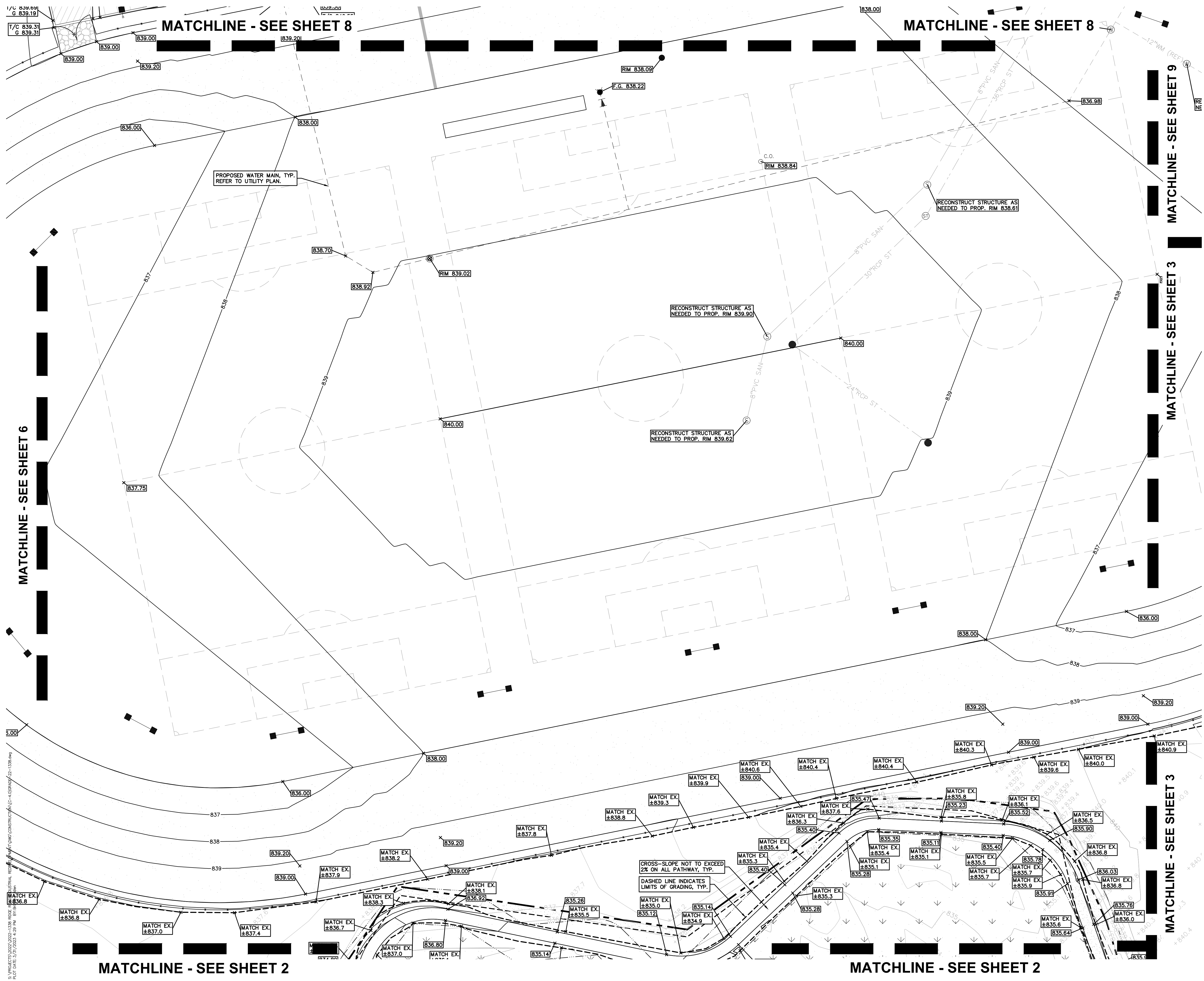
PEA JOB NO. 2022-1338

P.M.	BK
DN	BLA
DES.	BK

DRAWING NUMBER:

C-4.6

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4.0\GRADE-22-1338.dwg
 PLOT DATE: 03/31/2023 4:43 PM Operator: jay



GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB
 TIP = TOP OF PAVEMENT
 T/S = TOP OF SIDEWALK
 T/W = TOP OF WALL

G = GUTTER GRADE
 F.G. = FINISH GRADE
 RIM = RIM ELEVATION
 BW = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
 (GPS DERIVED - NAVD88)

BM #301
 NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
 ELEV. = 841.48

BM #302
 NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
 ELEV. = 844.05

RETAINING WALL NOTE:

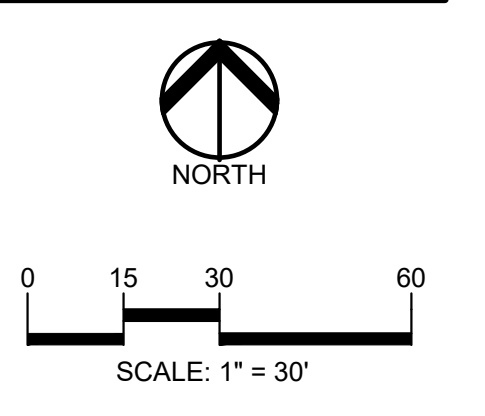
TOP OF WALL (TW) AND BOTTOM OF WALL (BW) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

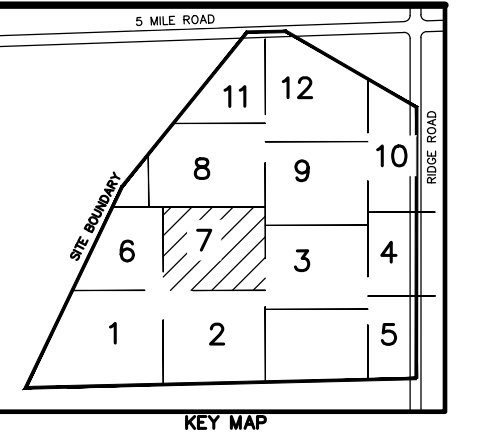
NOTE:

REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.



CAUTION!!

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



CLIENT

JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE

NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, NY

REVISIONS

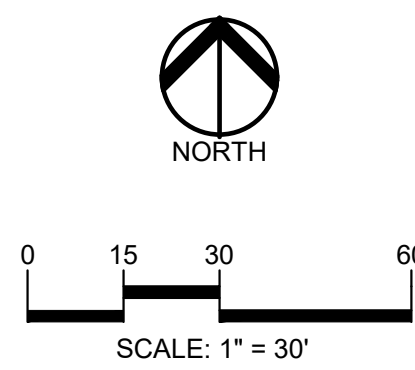
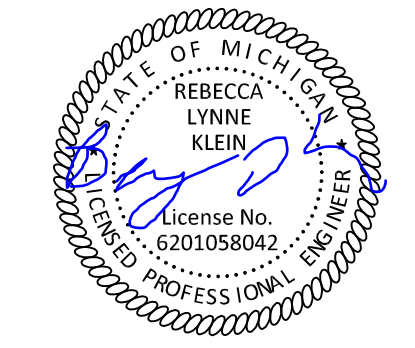
ORIGINAL ISSUE DATE:
 MARCH 31, 2023

DRAWING TITLE
GRADING PLAN - SHEET 7

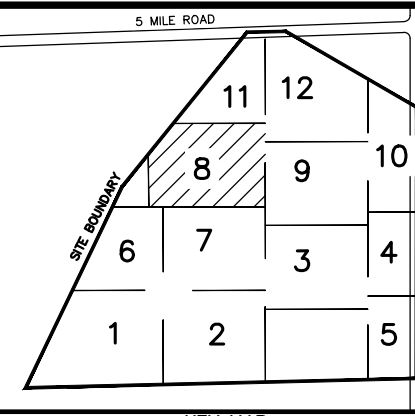
PEA JOB NO. 2022-1338

P.M.	BK
DN	BLA
DES.	BK

DRAWING NUMBER:



CAUTION!!
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, WI 53002

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, WI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
GRADING PLAN - SHEET 8

PEA JOB NO. 2022-1338
 P.M. BK
 DN. BLA
 DES. BK
 DRAWING NUMBER:

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION, TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- G = GUTTER GRADE
- TIP = TOP OF PAVEMENT
- F.G. = FINISH GRADE
- T/S = TOP OF SIDEWALK
- RIM = RIM ELEVATION
- T/W = TOP OF WALL
- B/W = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
 (GPS DERIVED - NAVD88)

BM #301
 NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
 ELEV. - 841.48

BM #302
 NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
 ELEV. - 844.05

RETAINING WALL NOTE:

TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

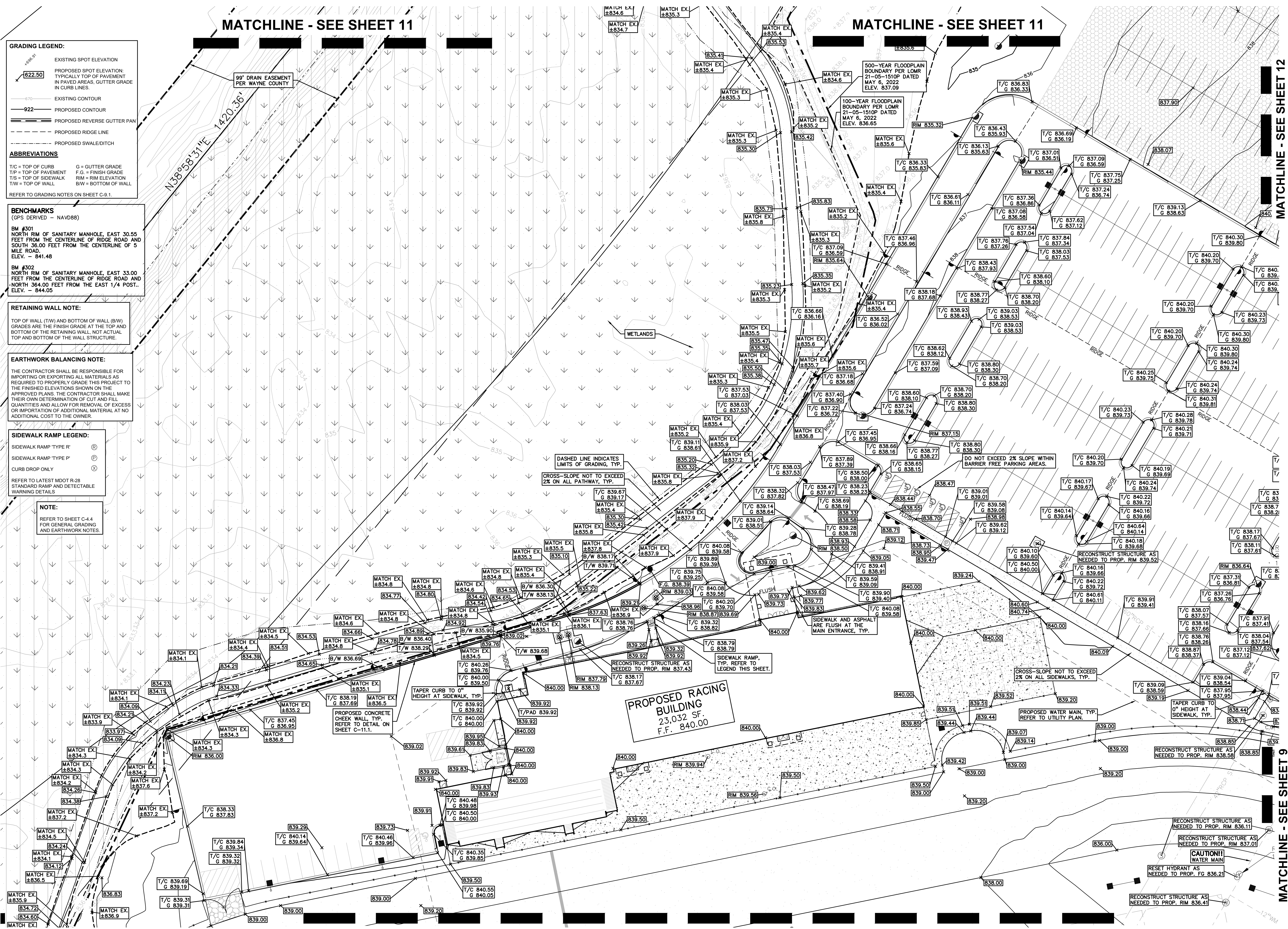
SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP TYPE 'R'
- SIDEWALK RAMP TYPE 'P'
- CURB DROP ONLY

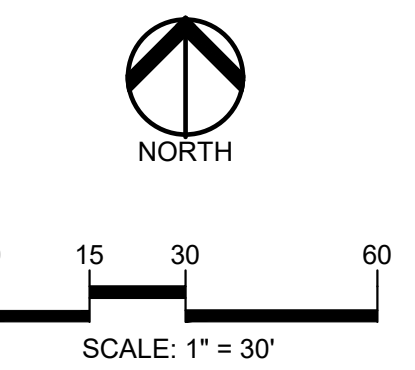
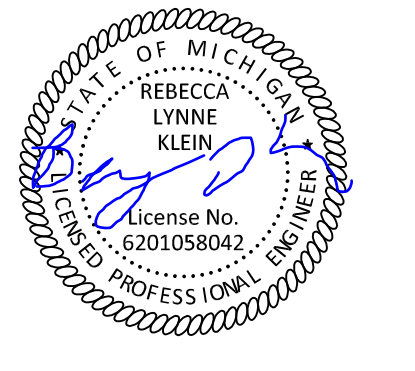
REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

NOTE:

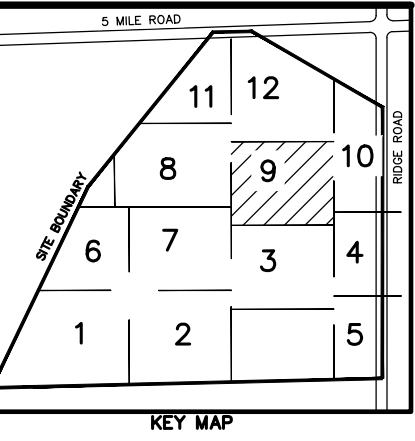
REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4.08\PEA-C-22-1338-8.dwg



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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

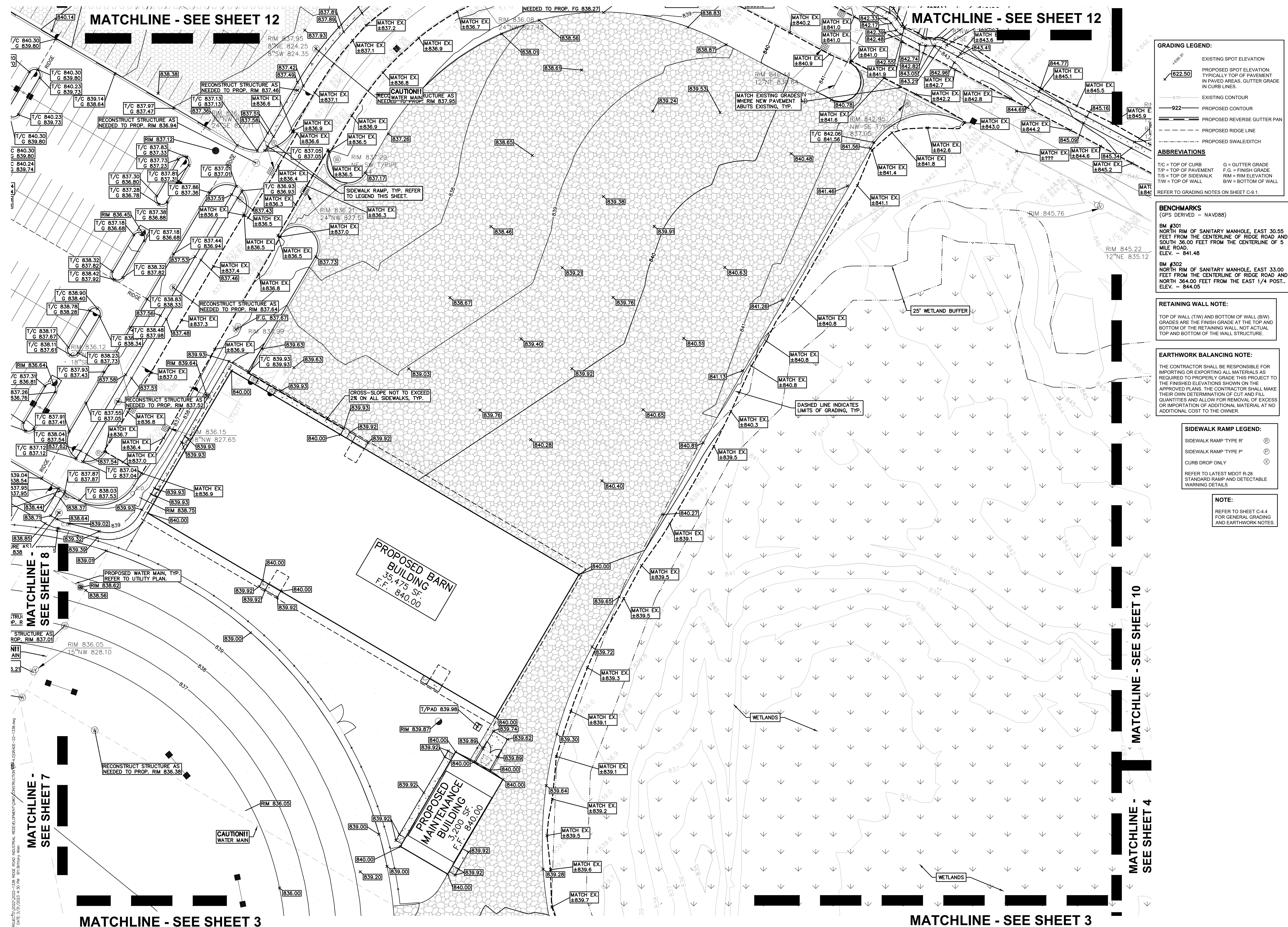
REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
GRADING PLAN - SHEET 9

PEA JOB NO. 2022-1338
P.M. BK
D.N. BLA
DES. BK
DRAWING NUMBER:



GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED SURFACE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

- T/C = TOP OF CURB
- T/P = TOP OF PAVEMENT
- T/S = TOP OF SIDEWALK
- T/W = TOP OF WALL
- G = GUTTER GRADE
- F.G. = FINISH GRADE
- RIM = RIM ELEVATION
- B.W. = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. - 844.05

RETAINING WALL NOTE:
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP TYPE R (Symbol: R in a circle)
- SIDEWALK RAMP TYPE P (Symbol: P in a circle)
- CURB DROP ONLY (Symbol: C in a circle)

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

NOTE:
REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.

MATCHLINE - SEE SHEET 12

MATCHLINE - SEE SHEET 12

MATCHLINE - SEE SHEET 8

MATCHLINE - SEE SHEET 10

MATCHLINE - SEE SHEET 7

MATCHLINE - SEE SHEET 4

MATCHLINE - SEE SHEET 3

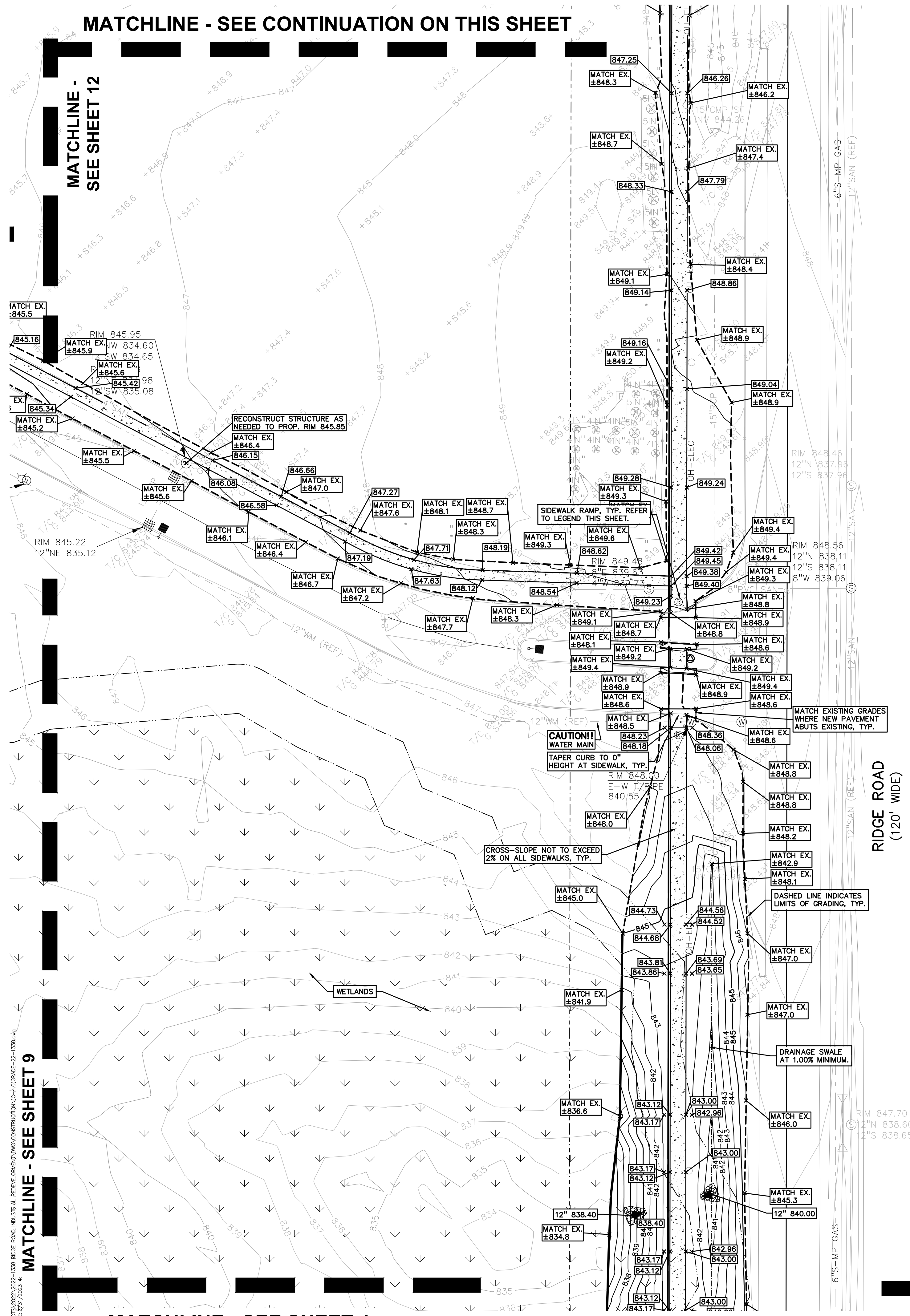
MATCHLINE - SEE SHEET 3

PROPOSED BARN BUILDING
35,475 SF.
F.F. 840.00

PROPOSED MAINTENANCE BUILDING
3,200 SF.
F.F. 840.00

5: N:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\CONSTRUCTION\DRAWING\01\PEA-C-4.9-23-1338.dwg
PLT: 04/10/2023 10:24:54 AM

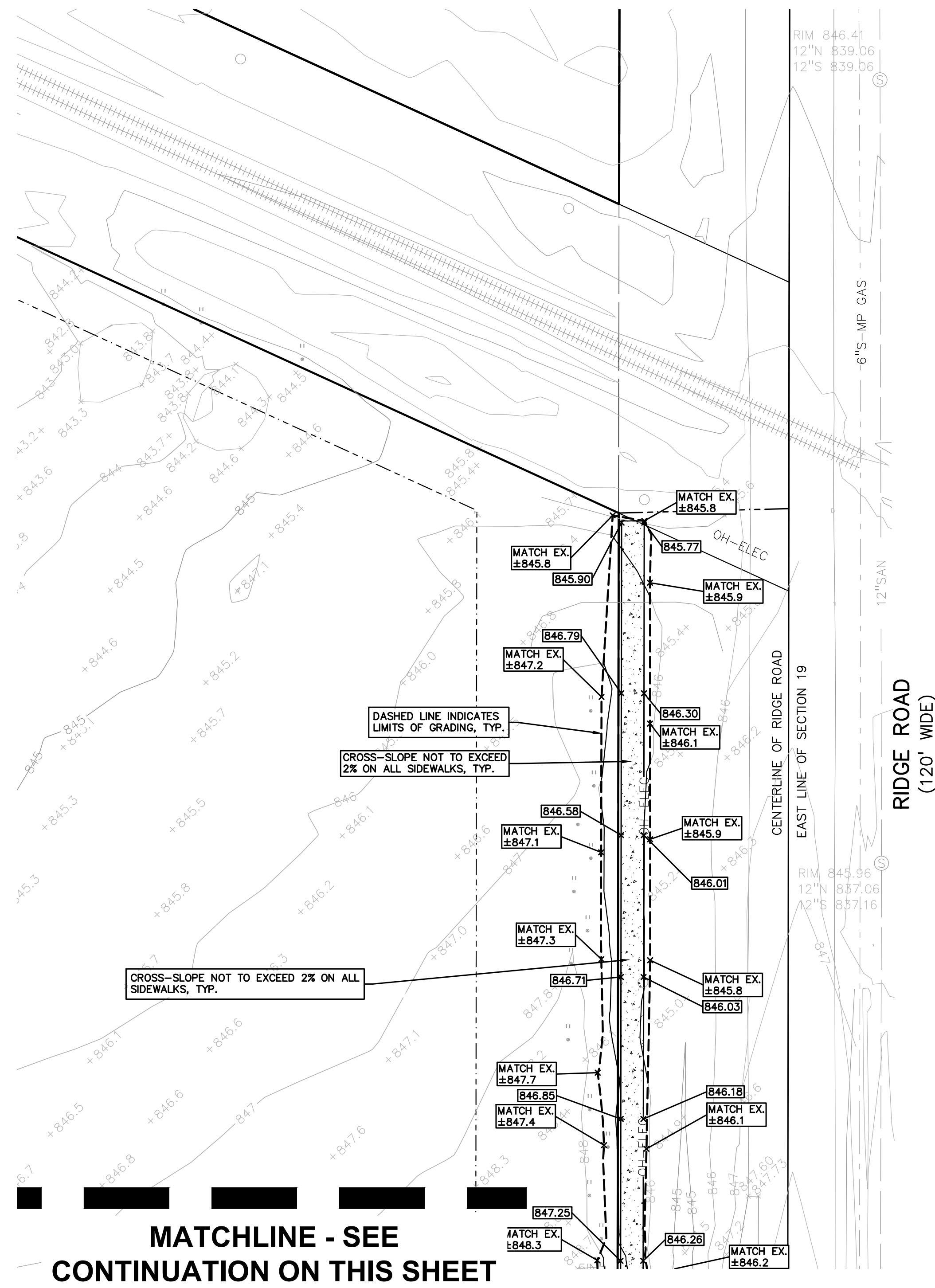
MATCHLINE - SEE CONTINUATION ON THIS SHEET



MATCHLINE - SEE SHEET 9

MATCHLINE - SEE SHEET 4

RIDGE ROAD (120' WIDE)



MATCHLINE - SEE CONTINUATION ON THIS SHEET

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB G = GUTTER GRADE
 T/P = TOP OF PAVEMENT F.G. = FINISH GRADE
 T/S = TOP OF SIDEWALK RIM = RIM ELEVATION
 T/W = TOP OF WALL B/W = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

NOTE:
 REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.

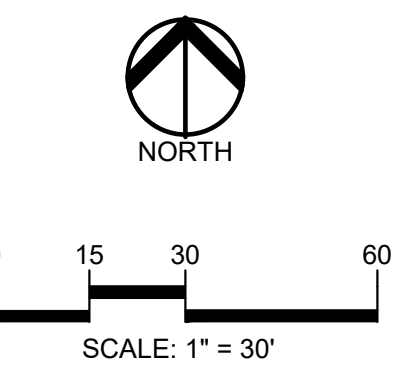
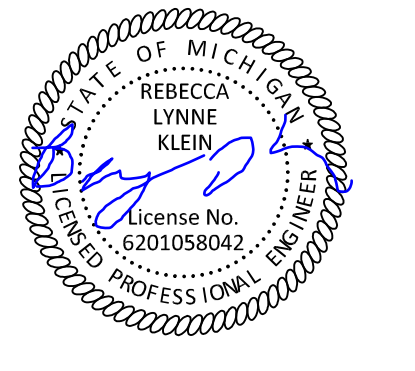
SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP "TYPE R"
- SIDEWALK RAMP "TYPE P"
- CURB DROP ONLY

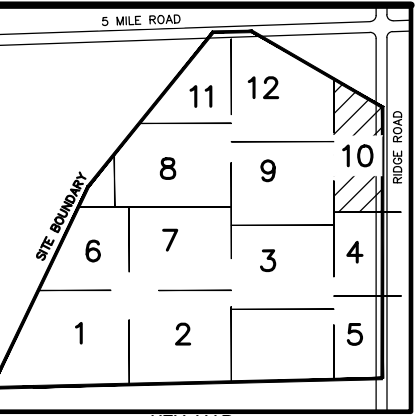
REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

RETAINING WALL NOTE:
 TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:
 THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.



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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE:
GRADING PLAN - SHEET 10

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION: TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB G = GUTTER GRADE
 T/P = TOP OF PAVEMENT F.G. = FINISH GRADE
 T/S = TOP OF SIDEWALK RIM = RIM ELEVATION
 T/W = TOP OF WALL B/W = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
 (GPS DERIVED - NAVD88)

BM #301
 NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD. ELEV. - 841.48

BM #302
 NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.. ELEV. - 844.05

RETAINING WALL NOTE:

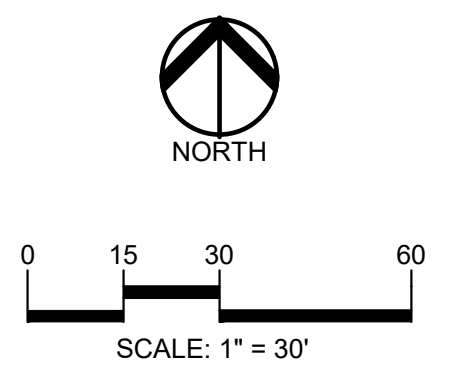
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL, NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:

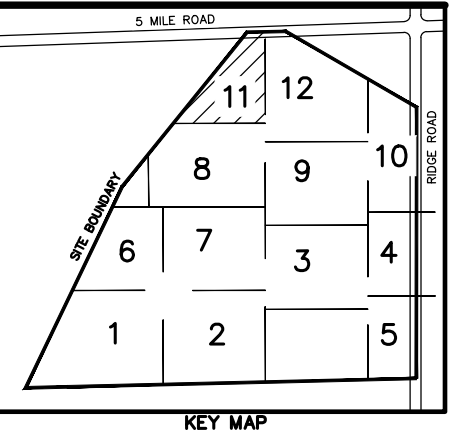
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

NOTE:

REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.



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



CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

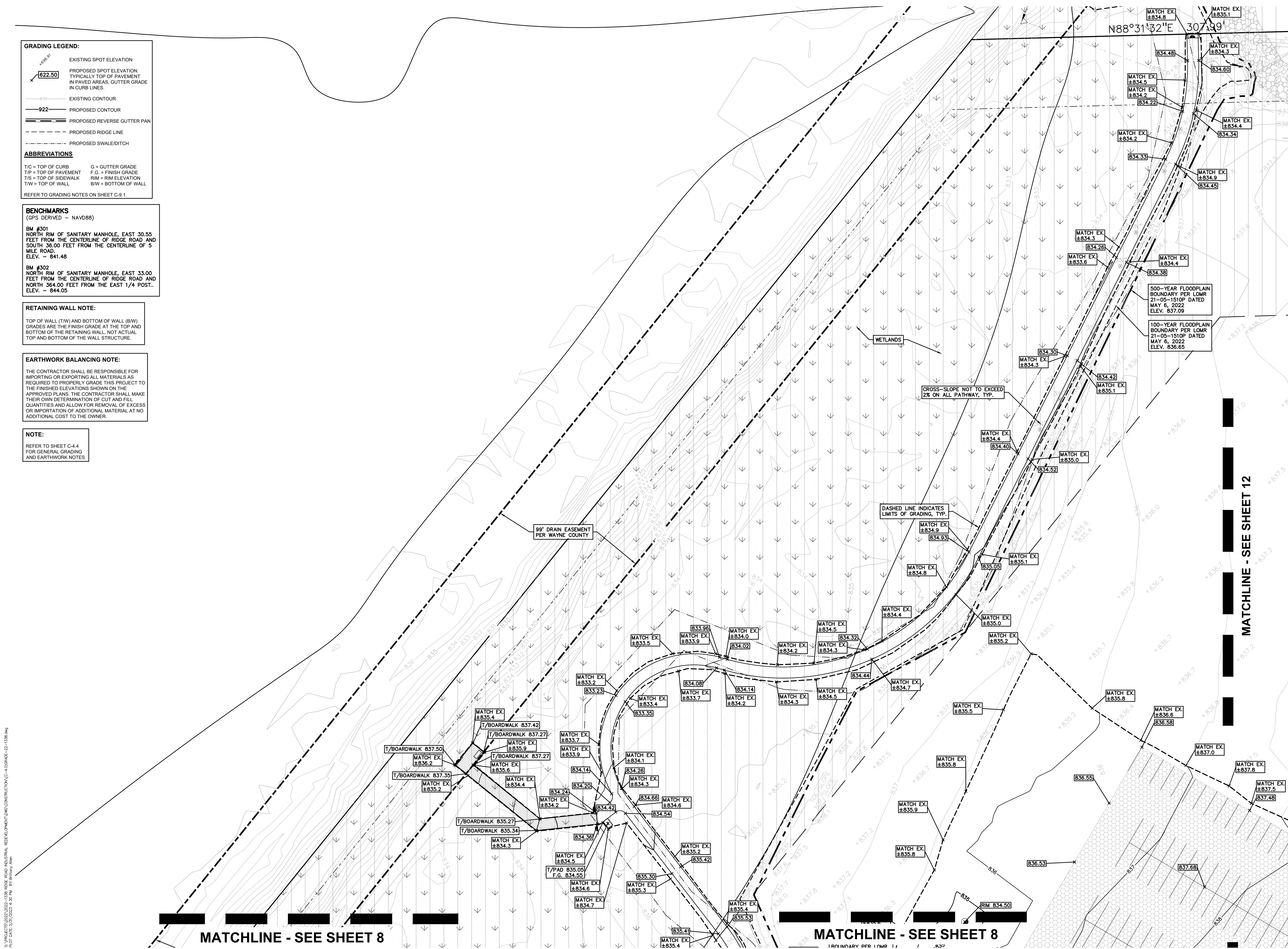
NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

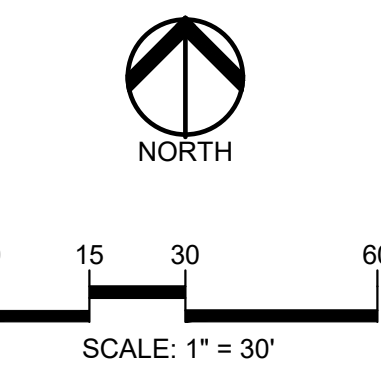
DRAWING TITLE
GRADING PLAN - SHEET 11

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

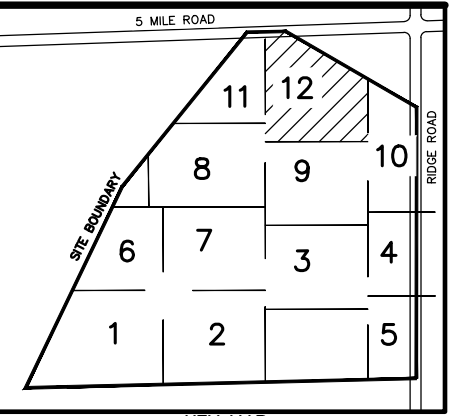
C-4.11



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4\GRADE-22-1338.dwg
 PLOT DATE: 07/27/2023 09:53 AM 010:00:00



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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS	

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
GRADING PLAN - SHEET 12

PEA JOB NO. 2022-1338	
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	

GRADING LEGEND:

- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION - TYPICALLY TOP OF PAVEMENT IN PAVED AREAS, GUTTER GRADE IN CURB LINES.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED REVERSE GUTTER PAN
- PROPOSED RIDGE LINE
- PROPOSED SWALE/DITCH

ABBREVIATIONS

T/C = TOP OF CURB	G = GUTTER GRADE
T/P = TOP OF PAVEMENT	F.G. = FINISH GRADE
T/S = TOP OF SIDEWALK	RIM = RIM ELEVATION
T/W = TOP OF WALL	BW = BOTTOM OF WALL

REFER TO GRADING NOTES ON SHEET C-9.1.

BENCHMARKS
(GPS DERIVED - NAVD88)

BM #301
NORTH RIM OF SANITARY MANHOLE, EAST 30.55 FEET FROM THE CENTERLINE OF RIDGE ROAD AND SOUTH 36.00 FEET FROM THE CENTERLINE OF 5 MILE ROAD.
ELEV. - 841.48

BM #302
NORTH RIM OF SANITARY MANHOLE, EAST 33.00 FEET FROM THE CENTERLINE OF RIDGE ROAD AND NORTH 364.00 FEET FROM THE EAST 1/4 POST.
ELEV. - 844.05

RETAINING WALL NOTE:
TOP OF WALL (T/W) AND BOTTOM OF WALL (B/W) GRADES ARE THE FINISH GRADE AT THE TOP AND BOTTOM OF THE RETAINING WALL. NOT ACTUAL TOP AND BOTTOM OF THE WALL STRUCTURE.

EARTHWORK BALANCING NOTE:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING OR EXPORTING ALL MATERIALS AS REQUIRED TO PROPERLY GRADE THIS PROJECT TO THE FINISHED ELEVATIONS SHOWN ON THE APPROVED PLANS. THE CONTRACTOR SHALL MAKE THEIR OWN DETERMINATION OF CUT AND FILL QUANTITIES AND ALLOW FOR REMOVAL OF EXCESS OR IMPORTATION OF ADDITIONAL MATERIAL AT NO ADDITIONAL COST TO THE OWNER.

NOTE:
REFER TO SHEET C-4.4 FOR GENERAL GRADING AND EARTHWORK NOTES.



MATCHLINE - SEE SHEET 11

MATCHLINE - SEE SHEET 9

MATCHLINE - SEE SHEET 10

MATCHLINE - SEE SHEET 9

DASHED LINE INDICATES LIMITS OF GRADING, TYP.

CROSS-SLOPE NOT TO EXCEED 2% ON ALL SIDEWALKS, TYP.

CAUTION!! WATER MAIN

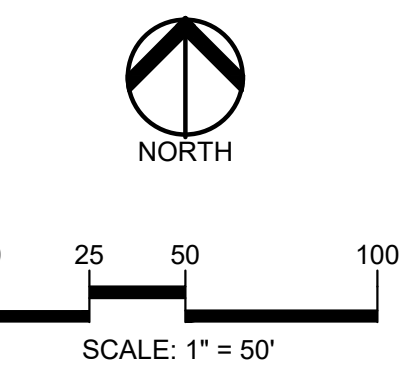
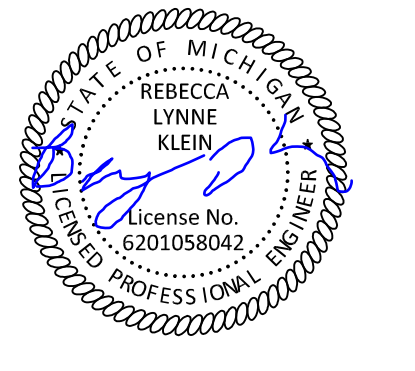
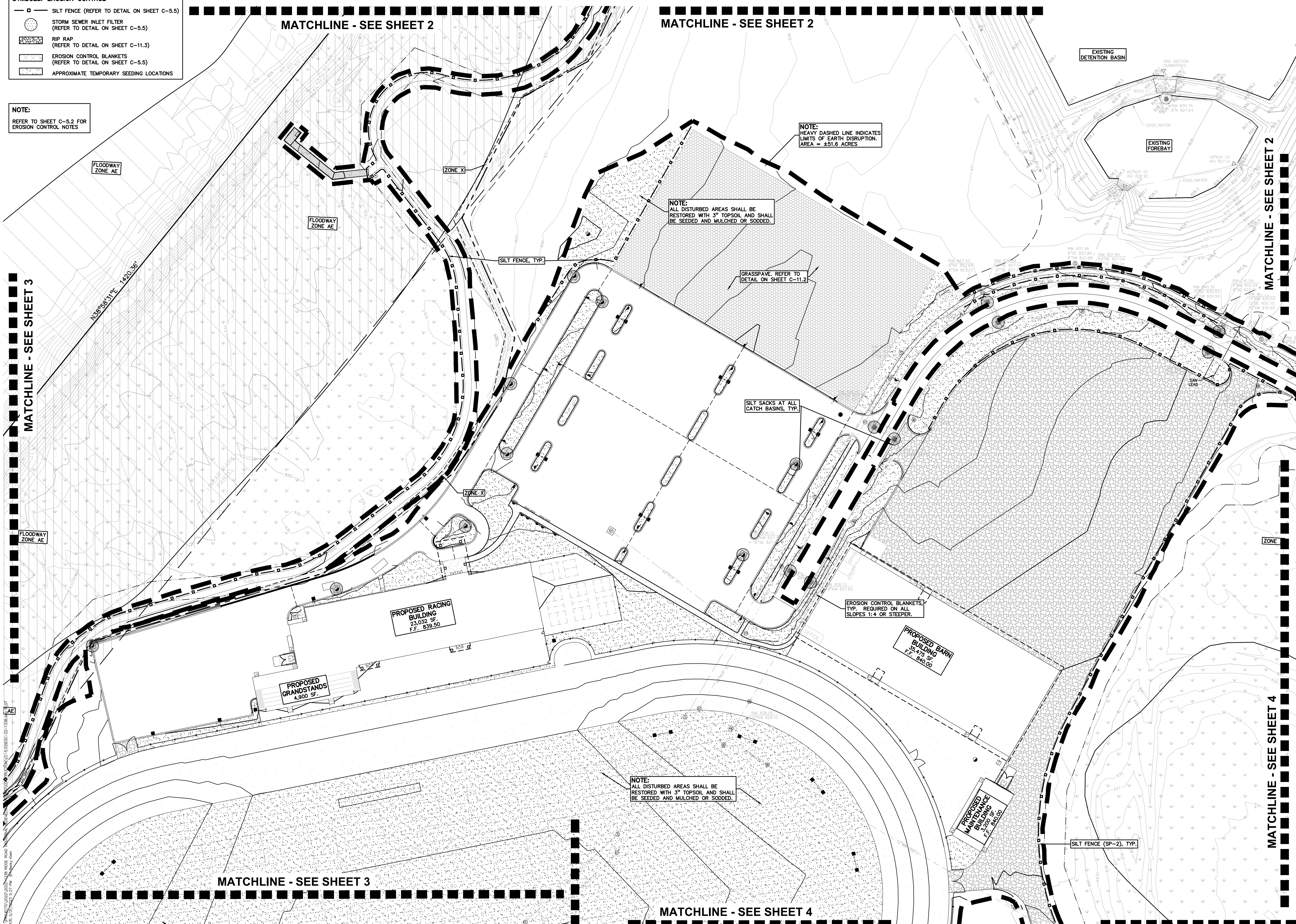
RESET HYDRANT AS NEEDED TO PROP. FG 838.27

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-4\GRADE-12-1338.dwg
DATE: 10/26/2023 10:53:10 AM
DRAWN BY: JLD
CHECKED BY: JLD
PLOT DATE: 11/16/2023 10:53:10 AM
SCALE: 1" = 30'

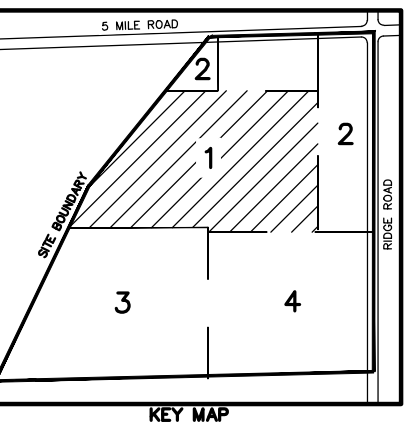
SYMBOLS: EROSION CONTROL

	SILT FENCE (REFER TO DETAIL ON SHEET C-5.5)
	STORM SEWER INLET FILTER (REFER TO DETAIL ON SHEET C-5.5)
	RIP RAP (REFER TO DETAIL ON SHEET C-11.3)
	EROSION CONTROL BLANKETS (REFER TO DETAIL ON SHEET C-5.5)
	APPROXIMATE TEMPORARY SEEDING LOCATIONS

NOTE:
REFER TO SHEET C-5.2 FOR EROSION CONTROL NOTES



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

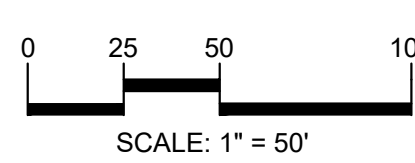
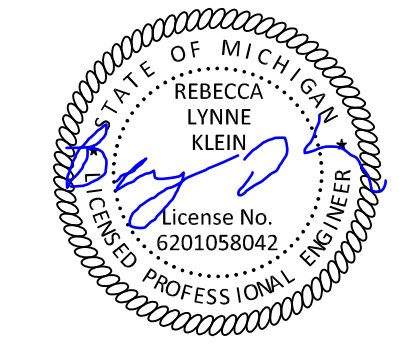
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

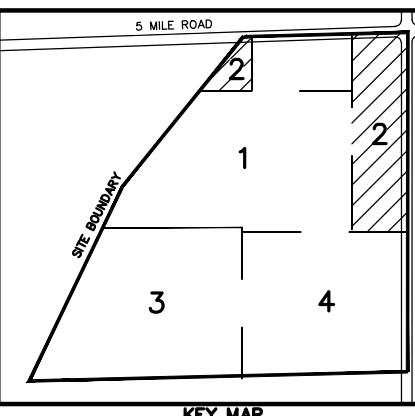
ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
SESC PLAN - SHEET 1

PEA JOB NO.	2022-1338
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
SESC PLAN - SHEET 2

PEA JOB NO.	2022-1338
P.M.	BLK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-5.2

SYMBOLS: EROSION CONTROL

- SILT FENCE (REFER TO DETAIL ON SHEET C-5.5)
- STORM SEWER INLET FILTER (REFER TO DETAIL ON SHEET C-5.5)
- RIP RAP (REFER TO DETAIL ON SHEET C-11.3)
- EROSION CONTROL BLANKETS (REFER TO DETAIL ON SHEET C-5.5)
- APPROXIMATE TEMPORARY SEEDING LOCATIONS

- FINAL INSPECTION AND CERTIFICATE OF COMPLETION REQUIREMENTS:**
- ALL ITEMS ON APPROVED SESC PLAN AND PERMIT MUST BE COMPLETED.
 - ALL DISTURBED EARTH MUST BE PERMANENTLY STABILIZED WITH VEGETATION OR HARD SURFACE.
 - ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE ENTIRE STORM SEWER SYSTEM.
 - ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE SEDIMENTATION BASIN.
 - ALL TEMPORARY SESC DEVICES MAY BE REMOVED AFTER CERTIFICATE OF COMPLETION.

EROSION CONTROL QUANTITIES:

SILT FENCE	8,829 LF
INLET FILTERS	17 EA.
TEMPORARY CONSTRUCTION ACCESS DRIVE	3 EA.
EROSION CONTROL BLANKETS	1,437 S.Y.
TEMPORARY SEEDING	67,671 S.Y.

SEQUENCE OF CONSTRUCTION:

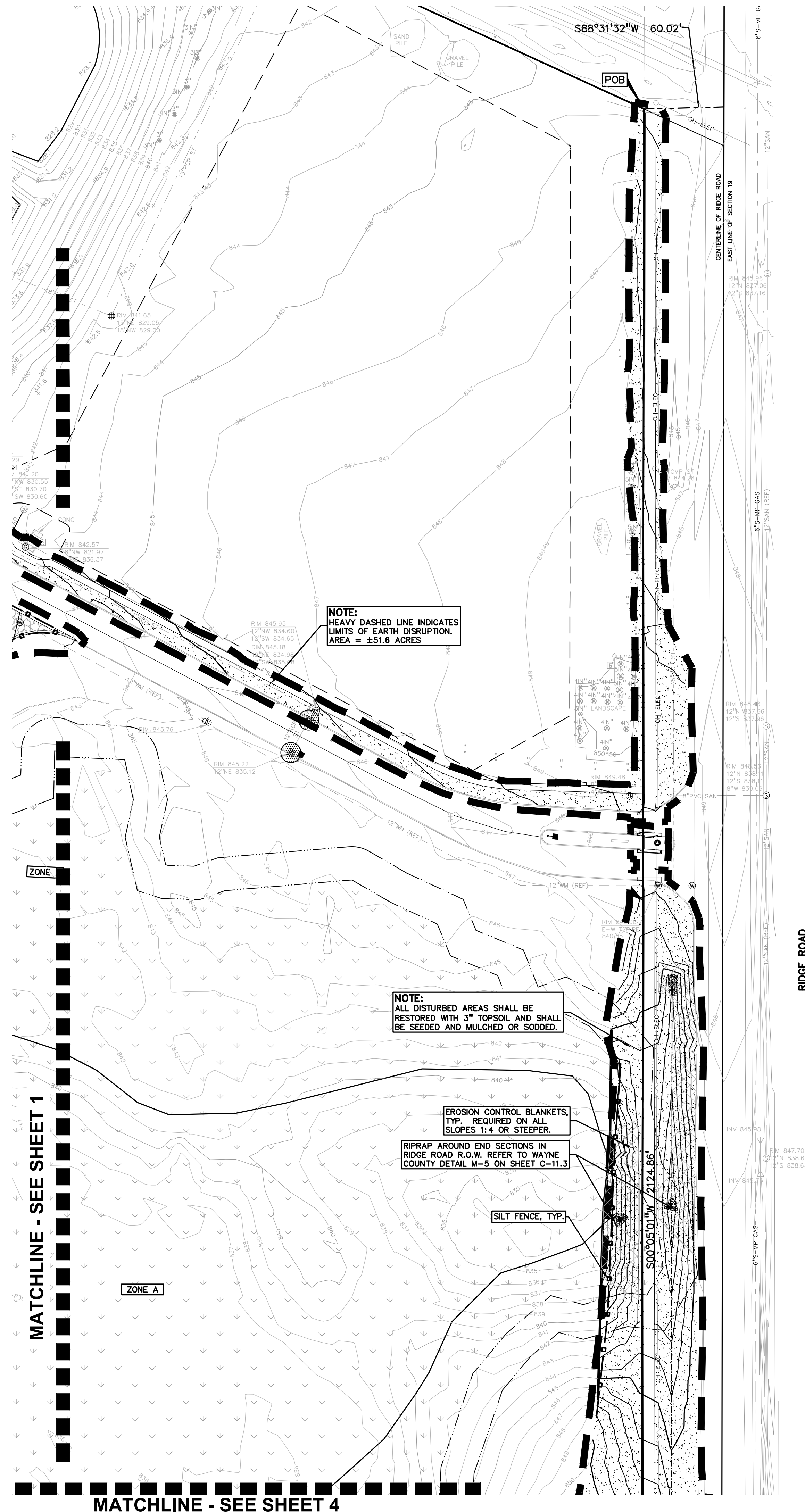
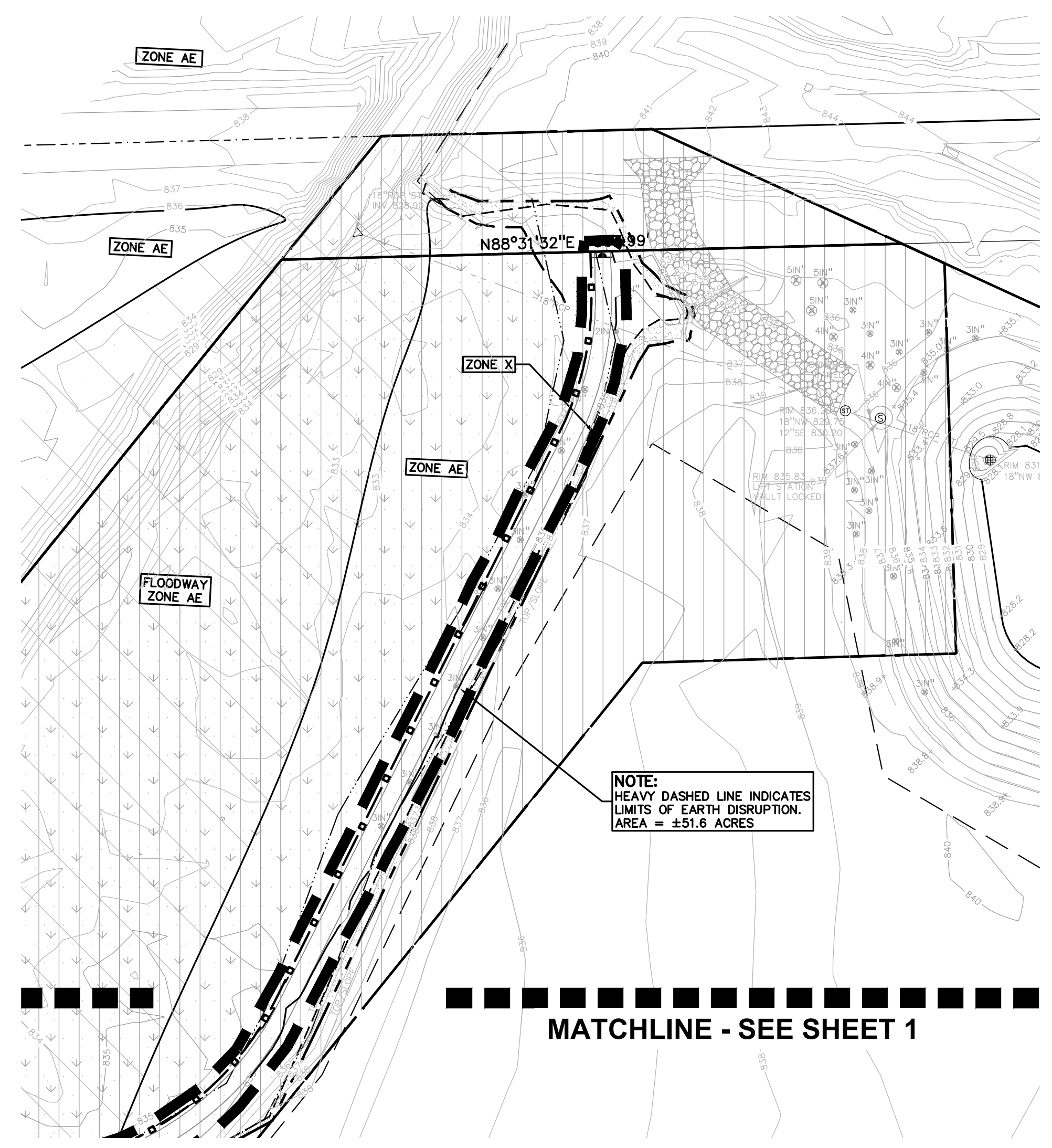
START DAY	END DAY	DESCRIPTION
1	120	INSTALL CRUSHED CONCRETE ACCESS APPROACH AT SITE ROAD APPROACH.
1	120	INSTALL TEMPORARY SOIL EROSION CONTROL MEASURES, SILT FENCES, INLET PROTECTION, ETC. AS NECESSARY.
1	180	MAINTAIN A 25' BUFFER OF VEGETATION AROUND PERIMETER OF SITE WHERE POSSIBLE.
1	20	REMOVE ALL VEGETATION, TREES AND BRUSH FROM THE PROPOSED CONSTRUCTION AREA UNLESS MARKED TO REMAIN. STRIP AND STOCKPILE TOPSOIL AS REQUIRED RESTORATION. ALL STOCKPILES MUST BE GRADED AND SEEDED.
8	19	REMOVE ALL PAVEMENT, CURB, UTILITIES, ETC. AS REQUIRED TO INSTALL THE PROPOSED WORK AS SHOWN ON THE TOPOGRAPHIC SURVEY AND DEMOLITION PLAN.
8	19	DISPOSE OF ALL EXCESS/UNSUITABLE MATERIALS OFF SITE IN A LEGAL MANNER. NO ON-SITE BURN OR BURY PITS ALLOWED.
19	40	ROUGH GRADE SITE. SEED AND MULCH BLANKETS MUST BE INSTALLED AS SHOWN WITHIN 5 DAYS OF FINAL GRADE. REPAIR AND/OR RE-INSTALL ANY TEMPORARY SOIL EROSION CONTROL MEASURES THAT WERE DAMAGED DURING GRADING OPERATIONS.
40	80	INSTALL SITE UTILITIES (STORM SEWER, SANITARY SEWER, WATER MAIN ETC.). INSTALL INLET PROTECTION AT ALL PROPOSED CATCH BASINS.
40	80	TEMPORARY SEEDING MUST BE PROVIDED IN AREAS NOT TO BE WORKED ON FOR 15 DAYS OR LONGER.
40	110	BEGIN CONSTRUCTION OF BUILDING.
65	90	FINE GRADE SITE AND PREPARE FOR SITE PAVING OPERATIONS.
85	110	INSTALL ALL PAVEMENT, SIDEWALKS, CURBING AS PROPOSED. IF PERMANENT LANDSCAPING IS NOT TO BE INSTALLED SOON AFTER PAVING IS COMPLETE, ALL AREAS WITHIN 20 FEET OF CURB MUST BE TEMPORARILY SEEDED. REPAIR INLET PROTECTION, SILT FENCE AND ANY OTHER DAMAGED SOIL EROSION CONTROL MEASURES AS NECESSARY.
120	153	FINAL GRADE, REDISTRIBUTE STOCKPILED TOPSOIL, ESTABLISH VEGETATION AND INSTALL ALL PERMANENT LANDSCAPING IN ALL DISTURBED AREAS NOT BUILT.
152	180	CLEAN PAVEMENT AND REMOVE ALL TEMPORARY SOIL EROSION CONTROL MEASURES. RE-ESTABLISH VEGETATION AS REQUIRED.
180	180	REMOVE SEDIMENTATION CONTROLS ONCE ENTIRE SITE HAS BEEN PERMANENTLY STABILIZED.

- GENERAL SITE CONDITIONS:**
- ACCORDING TO THE GEOTECHNICAL INVESTIGATION PERFORMED BY SME DATED AUGUST 4, 2006 THE SITE CONSISTS OF SURFICIAL TOPSOIL OVERLYING NATURAL SANDS AND CLAYS.
 - TOTAL DISTURBED AREA = ±51.6 ACRES
- SOIL EROSION CONTROL NOTES:**
- ALL EROSION AND SEDIMENT CONTROL WORK SHALL CONFORM TO STANDARDS AND SPECIFICATIONS OF WAYNE COUNTY.
 - DAILY INSPECTIONS SHALL BE MADE BY THE CONTRACTOR FOR EFFECTIVENESS OF EROSION AND SEDIMENTATION CONTROL MEASURES, AND ANY REPAIRS SHALL BE PERFORMED WITHOUT DELAY.
 - EROSION AND ANY SEDIMENTATION FROM WORK ON THIS SITE SHALL BE CONTAINED ON THE SITE AND NOT ALLOWED TO COLLECT ON ANY OFF-SITE AREAS OR IN WATERWAYS. WATERWAYS INCLUDE BOTH NATURAL AND MAN-MADE OPEN DITCHES, STREAMS, STORM DRAINS, LAKES AND PONDS.
 - CONTRACTOR SHALL APPLY TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES WHEN REQUIRED AND AS DIRECTED ON THESE PLANS. REMOVE TEMPORARY MEASURES AS SOON AS PERMANENT STABILIZATION OF SLOPES, DITCHES, AND OTHER EARTH CHANGES HAVE BEEN ACCOMPLISHED AND A CERTIFICATE OF COMPLETION HAS BEEN ISSUED BY THE COUNTY FOR THE SESC PERMIT.
 - STAGING THE WORK SHALL BE DONE BY THE CONTRACTOR AS DIRECTED IN THESE PLANS AND AS REQUIRED TO ENSURE PROGRESSIVE STABILIZATION OF DISTURBED EARTH.
 - SOIL EROSION CONTROL PRACTICES SHALL BE ESTABLISHED IN EARLY STAGES OF CONSTRUCTION BY THE CONTRACTOR. SEDIMENT CONTROL PRACTICES SHALL BE APPLIED AS A PERIMETER DEFENSE AGAINST ANY TRANSPORTING OF SILT OFF THE SITE.

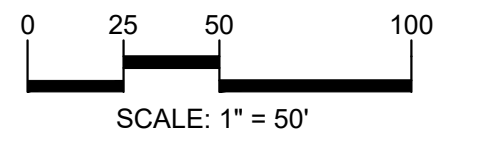
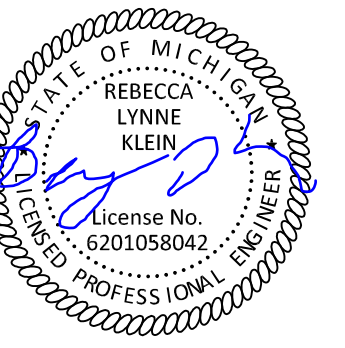
STREET CLEANING SCHEDULE

	SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
SCRAPE STREETS		X	X	X	X	X	X
SWEEP STREETS			X				

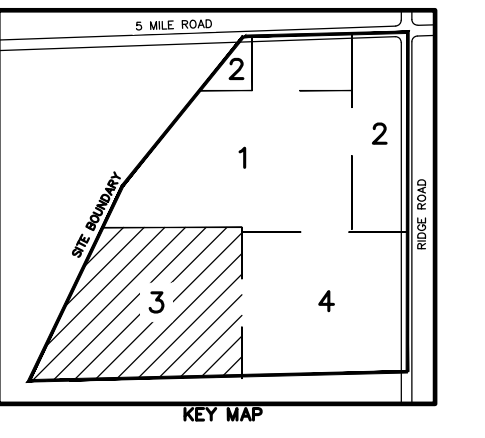
- SOIL EROSION MAINTENANCE SCHEDULE AND NOTES:**
- THE CONTRACTOR SHALL INSPECT THE SOIL EROSION AND SEDIMENTATION CONTROL DEVICES ONCE EACH WEEK AND/OR WITHIN 24 HOURS OF A RAINFALL EVENT WHICH RESULTS IN A STORM WATER DISCHARGE FROM THE SITE. THE FOLLOWING STEPS SHALL BE IMPLEMENTED IF ANY DAMAGE HAS OCCURRED.
- ANY DEBRIS OR DIRT ON ANY PAVED AREA RESULTING FROM CONSTRUCTION TRAFFIC SHALL BE CLEANED IN A PROMPT MANNER BY THE CONTRACTOR. THE CONSTRUCTION DRIVE SHALL BE CLEANED AT THE END OF EACH DAY.
 - ALL DIRT AND MUD TRACKED ONTO PAVED AREAS SHALL BE REMOVED DAILY BY SCRAPING. STREET SWEEPING IS REQUIRED WEEKLY.
 - SILT FENCE MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY BUILT UP SEDIMENT WHEN THE SEDIMENT HEIGHT ACCUMULATES TO 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. THE CONTRACTOR IS RESPONSIBLE TO REMOVE, REPLACE, RETRENCH OR REBACKFILL THE SILTATION FENCE SHOULD IT FALL OR BE DAMAGED DURING CONSTRUCTION.
 - INLET FILTER MAINTENANCE SHALL INCLUDE THE REMOVAL OF ANY ACCUMULATED SILT OR OTHER DEBRIS. THE REMOVAL OF SILT SHOULD BE WITH THE USE OF A STIFF BRISTLE BROOM OR SQUARE POINT SHOVEL. IF INLET FILTERS CAN NOT BE CLEANED OR ARE DAMAGED, THEN THE FABRIC MUST BE REPLACED.
 - A WATER TRUCK SHALL BE AVAILABLE TO WATER DOWN THE SITE ON A DAILY BASIS AS REQUIRED TO MAINTAIN DUST CONTROL.



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-5.0\SESC-22-1338.dwg PLOT DATE: 3/31/2023 3:04 PM BY: BARRY ADAM



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



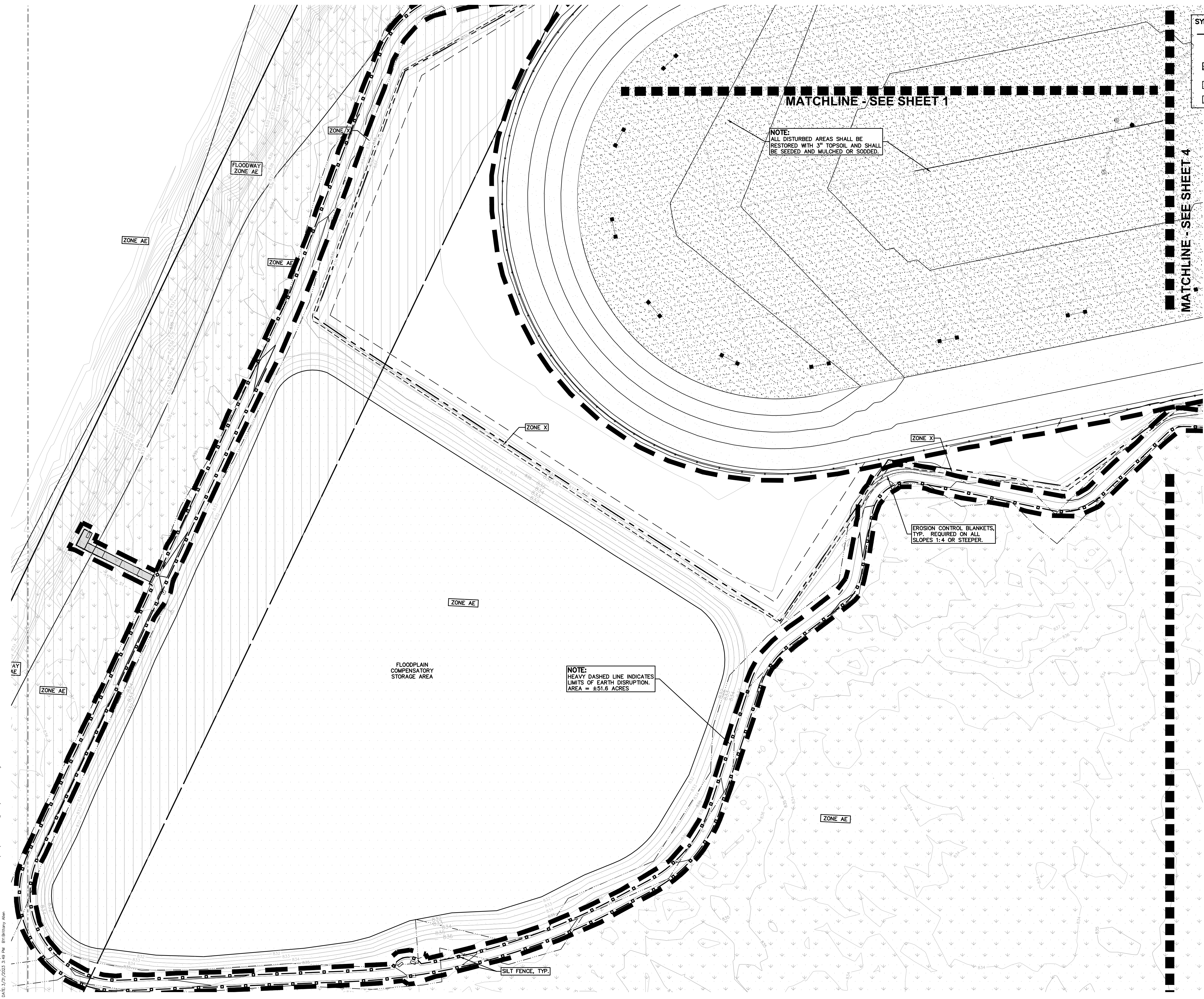
CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
SESC PLAN - SHEET 3

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	C-5.3



SYMBOLS: EROSION CONTROL

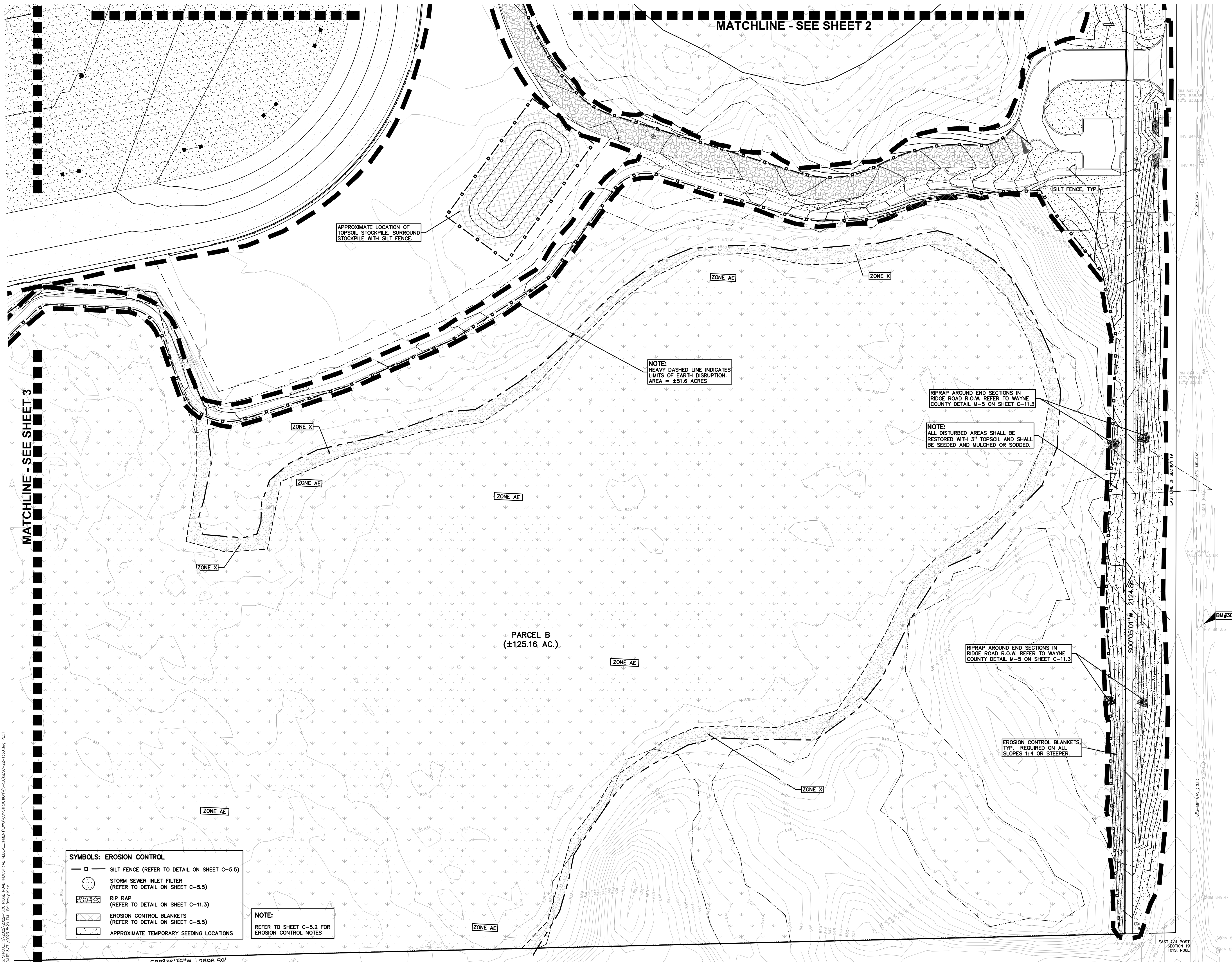
- SILT FENCE (REFER TO DETAIL ON SHEET C-5.5)
- STORM SEWER INLET FILTER (REFER TO DETAIL ON SHEET C-5.5)
- RIP RAP (REFER TO DETAIL ON SHEET C-11.3)
- EROSION CONTROL BLANKETS (REFER TO DETAIL ON SHEET C-5.5)
- APPROXIMATE TEMPORARY SEEDING LOCATIONS

NOTE:
 REFER TO SHEET C-5.2 FOR EROSION CONTROL NOTES

NOTE:
 ALL DISTURBED AREAS SHALL BE RESTORED WITH 3" TOPSOIL AND SHALL BE SEEDED AND MULCHED OR SODDED.

NOTE:
 HEAVY DASHED LINE INDICATES LIMITS OF EARTH DISRUPTION. AREA = ±51.6 ACRES

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-5.0\SESC-22-1338.dwg PLOT
 DATE: 3/31/2023 3:46 PM 10:00 AM



MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3

APPROXIMATE LOCATION OF TOPSOIL STOCKPILE, SURROUND STOCKPILE WITH SILT FENCE.

NOTE: HEAVY DASHED LINE INDICATES LIMITS OF EARTH DISRUPTION. AREA = ±51.6 ACRES

RIPRAP AROUND END SECTIONS IN RIDGE ROAD R.O.W. REFER TO WAYNE COUNTY DETAIL M-5 ON SHEET C-11.3

NOTE: ALL DISTURBED AREAS SHALL BE RESTORED WITH 3" TOPSOIL AND SHALL BE SEEDED AND MULCHED OR SODDED.

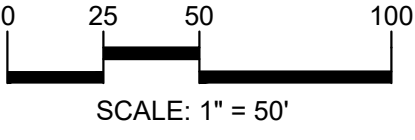
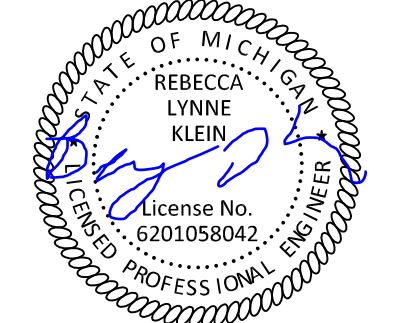
RIPRAP AROUND END SECTIONS IN RIDGE ROAD R.O.W. REFER TO WAYNE COUNTY DETAIL M-5 ON SHEET C-11.3

EROSION CONTROL BLANKETS, TYP. REQUIRED ON ALL SLOPES 1:4 OR STEEPER.

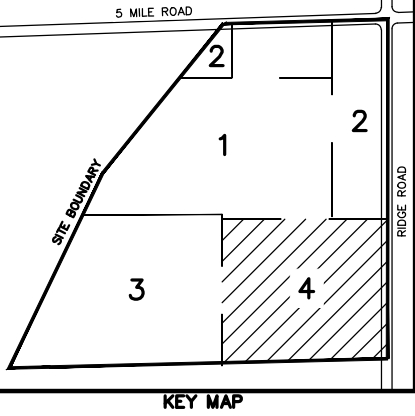
PARCEL B (±125.16 AC.)

- SYMBOLS: EROSION CONTROL**
- □ — SILT FENCE (REFER TO DETAIL ON SHEET C-5.5)
 - STORM SEWER INLET FILTER (REFER TO DETAIL ON SHEET C-5.5)
 - ▨ RIP RAP (REFER TO DETAIL ON SHEET C-11.3)
 - ▩ EROSION CONTROL BLANKETS (REFER TO DETAIL ON SHEET C-5.5)
 - ▧ APPROXIMATE TEMPORARY SEEDING LOCATIONS

NOTE: REFER TO SHEET C-5.2 FOR EROSION CONTROL NOTES



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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS	

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
SESC PLAN - SHEET 4

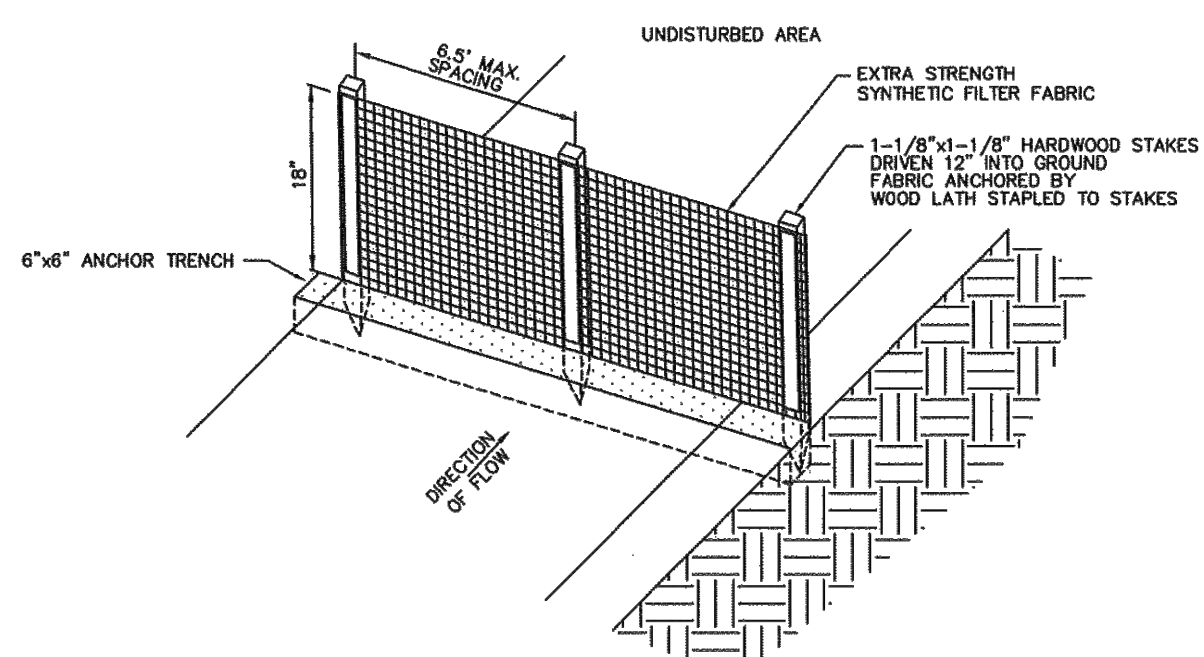
PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-5.4

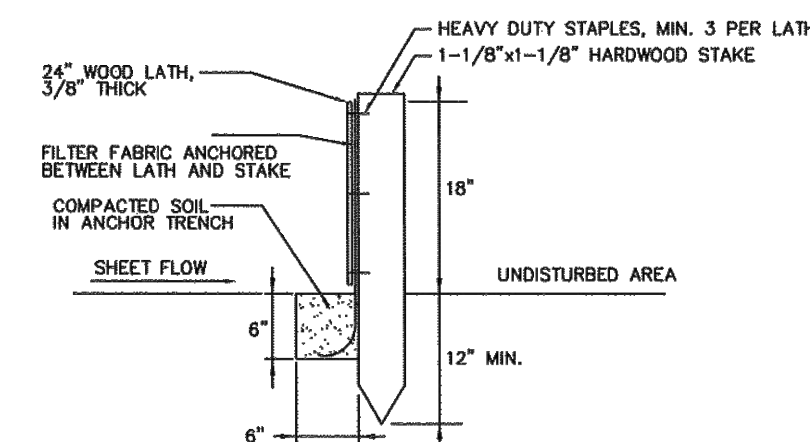
S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\CONSTRUCTION-C-5.0\SESC-22-1338.dwg PLOT DATE: 3/31/2023 3:24 PM BY: BARRY ADAM

CSIGeoturf®

Highland • Byron Center • Traverse City
 (800) 621-7007 • (888) 208-5772 • (888) 208-5772 • (231) 943-4002
 www.geoturf.com

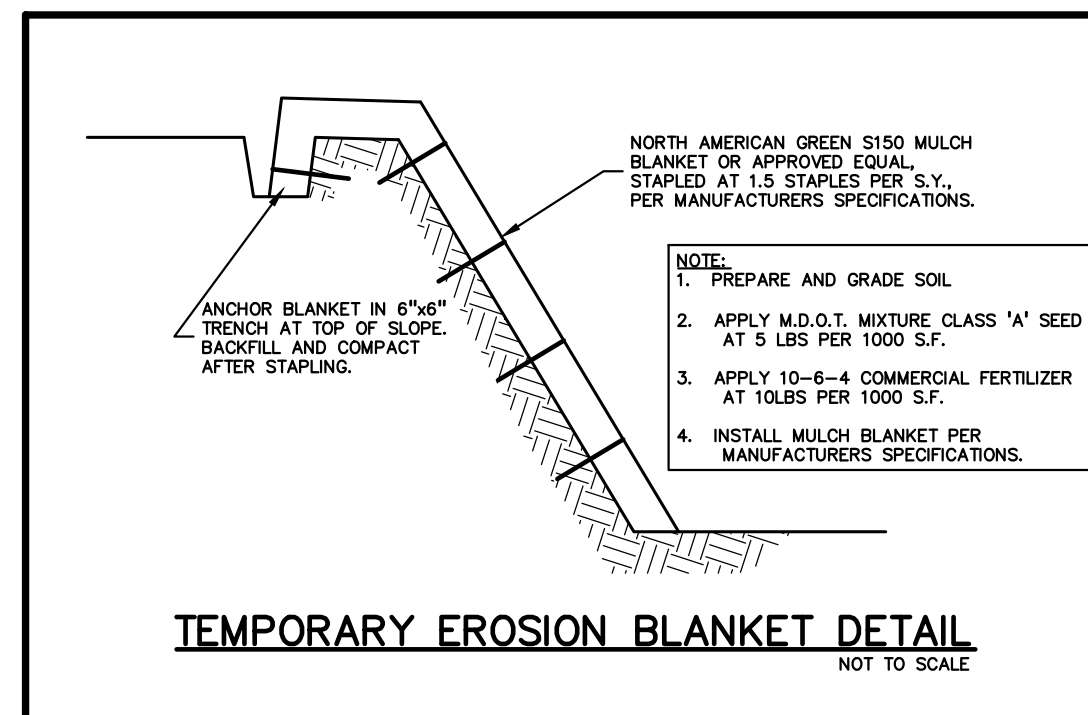


SILT FENCE - PLAN VIEW



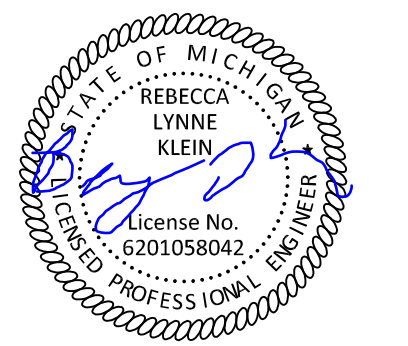
SILT FENCE - SECTIONAL VIEW

GEOTURF™
 24" SILT FENCE
 6.5 FT. POST SPACING
 PROVIDED BY
 CSIGEOTURF, INC.
 1500 ALLOY PARKWAY
 HIGHLAND, MI 49327
 DRAWN BY DATE
 DATE 8-2-2008
 SHEET 1
 OF 1
 NOT TO SCALE



PEA GROUP

t: 844.813.2949
 www.peagroup.com



0 25 50 100
 SCALE: 1" = 50'



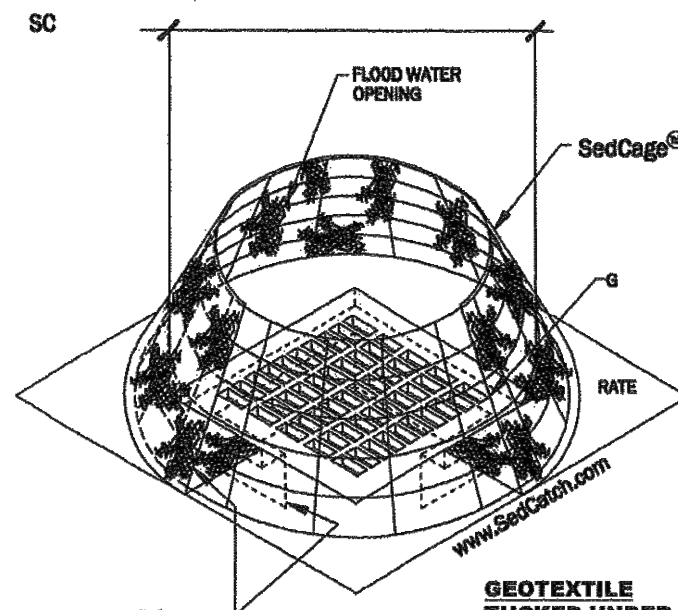
CAUTION!!
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS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

REARYARD INLET FILTER

SedCatch® SedCage® Yard Inlet Protection

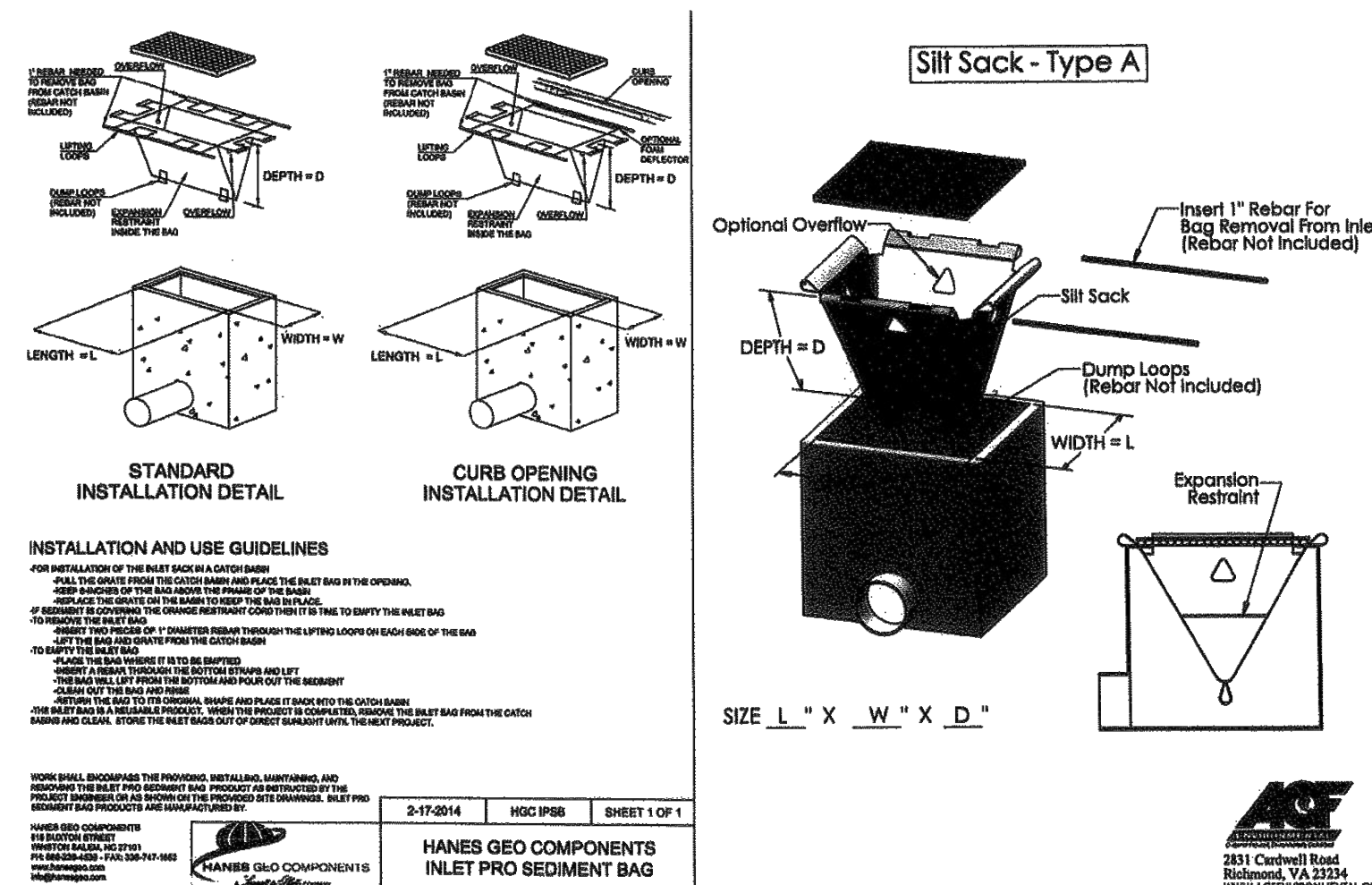
SIZING INSTRUCTIONS:
 MEASURE THE DIAGONAL DIMENSION OF THE GRATE. SELECT A CAGE THAT IS AT LEAST 1" LARGER.

COMPATIBLE GRATES:
 A SedCage® IS COMPATIBLE WITH ALL GRATES IN WHICH THE EDGES OF THE GRATE ARE SUPPORTED BY A LEDGE.



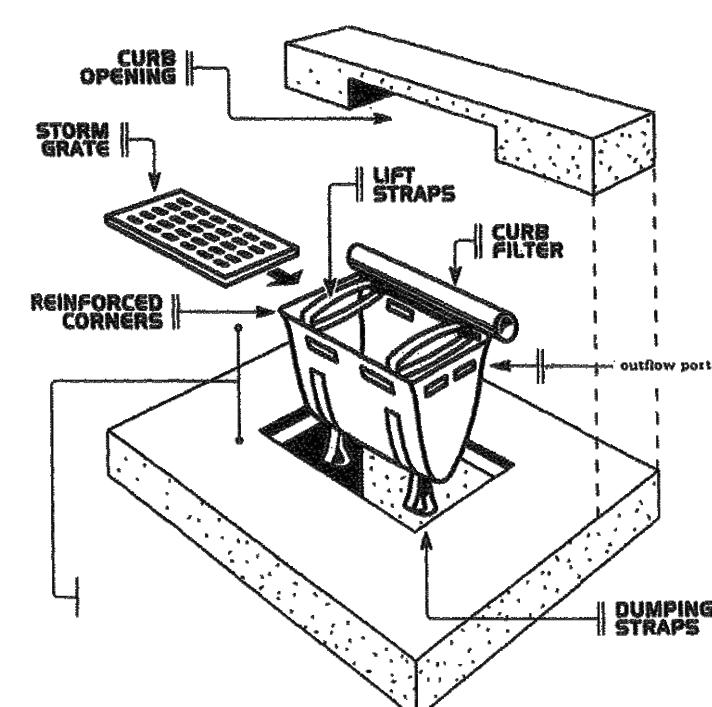
- SIZES:**
- 32" SedCage®: FITS SQUARE GRATES FROM 12" X 12" THROUGH 22" X 22"; FITS ROUND GRATES FROM 8" DIA. THROUGH 24" DIA.; FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 17" AND 31" ($c^2 = b^2 + a^2$)
 - 42" SedCage®: FITS SQUARE GRATES FROM 19" X 19" THROUGH 29" X 29"; FITS ROUND GRATES FROM 19" DIA. THROUGH 30" DIA.; FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 28" AND 41" ($c^2 = b^2 + a^2$)
 - 54" SedCage®: FITS SQUARE GRATES FROM 24" X 24" THROUGH 36" X 36"; FITS ROUND GRATES FROM 24" DIA. THROUGH 40" DIA.; FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 32" AND 52" ($c^2 = b^2 + a^2$)
 - 62" SedCage®: FITS SQUARE GRATES FROM 27" X 27" THROUGH 42" X 42"; FITS ROUND GRATES FROM 28" DIA. THROUGH 48" DIA.; FITS RECTANGULAR GRATES WITH A DIAGONAL BETWEEN 44" AND 61" ($c^2 = b^2 + a^2$)
- CUSTOM SIZES AVAILABLE

GEOTEXTILE TUCKED UNDER ALL FOUR SIDES OF GRATE.



PAVED STORM SEWER INLET FILTER

HIGH FLOW - SACKTYPE FILTER WITH OVERFLOW



CSIGeoturf®

Down to Earth Solutions

Professional Construction, Turf, and Landscape Supplies
 • CIVIL SITE IMPROVEMENTS • EROSION & SEDIMENT CONTROL • STORMWATER MANAGEMENT • LANDSCAPE ENHANCEMENTS

Geoturf® Filter Bag

Whenever accumulated water on a construction site must be pumped, utilize filter bags to ensure the water is properly filtered of silt and sediment prior to discharge into receiving bodies. Filter bags are constructed of strong, high quality nonwoven geotextile filter fabric with a fill port to accommodate a pump discharge hose. The filter bags permit a controlled outflow of water, while retaining harmful pollutants.

Size 15' x 20' x 8"
 Snout Size 8"
 Holding Capacity 15 Cubic Yds.

Meets the requirements of MDOT Item 208
 Erosion Control Filter Bag



CLIENT

JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE

NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

DRAWING TITLE

EROSION CONTROL DETAILS

PEA JOB NO. 2022-1338

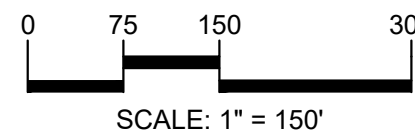
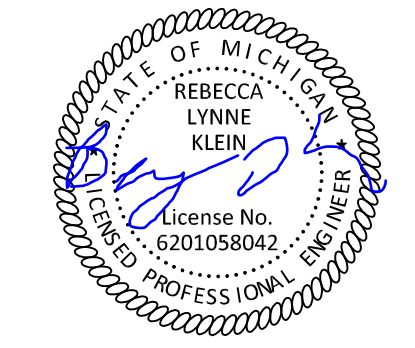
P.M. BK

DN. BLA

DES. BK

DRAWING NUMBER:

C-5.5



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

CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, WI 53002

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, WI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
OVERALL UTILITY PLAN

PEA JOB NO. 2022-1338
P.M. BK
DN. BLA
DES. BK

DRAWING NUMBER:
C-6.0

UTILITY LEGEND:

—OH-ELEC-W—	EX. OH. ELEC. POLE & GUY WIRE
—UG-CATV—	EX. U.G. CABLE TV & PEDESTAL
—UG-COMM—	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
—UG-ELEC—	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
—	EX. GAS LINE
—	EX. GAS VALVE & GAS LINE MARKER
—	EX. TRANSFORMER & IRRIGATION VALVE
—	EX. WATER MAIN
—	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
—	EX. WATER VALVE BOX & SHUTOFF
—	EX. SANITARY SEWER
—	EX. SANITARY CLEANOUT & MANHOLE
—	EX. COMBINED SEWER MANHOLE
—	EX. STORM SEWER
—	EX. CLEANOUT & MANHOLE
—	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
—	EX. YARD DRAIN & ROOF DRAIN
—	EX. UNIDENTIFIED STRUCTURE
—	PROPOSED WATER MAIN
—	PROPOSED HYDRANT AND GATE VALVE
—	PROPOSED TAPPING SLEEVE, VALVE & WELL
—	PROPOSED POST INDICATOR VALVE
—	PROPOSED SANITARY SEWER
—	PROPOSED SANITARY CLEANOUT & MANHOLE
—	PROPOSED STORM SEWER
—	PROPOSED STORM SEWER CLEANOUT & MANHOLE
—	PROPOSED CATCH BASIN, INLET & YARD DRAIN

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45' LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

CHARTER TOWNSHIP OF PLYMOUTH STORM SEWER FRAME AND COVER NOTES

CATCH BASIN - PAVEMENT	FRAME: EJ 1040Z COVER: TYPE "M1"
CATCH BASIN - CURB	FRAME: EJ 5080Z COVER: TYPE "M2"
CATCH BASIN/INLET - YARD	COVER: EJ 6508
MANHOLE - SANITARY	FRAME: EJ 1040ZPT COVER: 1040APT
MANHOLE - WATER	FRAME: EJ 1040Z COVER: 1040C

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

WAYNE COUNTY INSPECTION NOTES:

- THE WAYNE COUNTY PERMIT ENGINEER MUST OBSERVE CONSTRUCTION AND INSTALLATION OF THE SITE STORM WATER MANAGEMENT SYSTEM COMPONENTS (MANUFACTURED TREATMENT SYSTEM, UNDERGROUND DETENTION SYSTEM, OUTLET CONTROL STRUCTURE, AND OUTLET PIPES).
- CONTRACTOR SHALL NOTIFY THE WAYNE COUNTY PERMIT OFFICE AT (734) 858-2674 AT LEAST 3 WORKING DAYS PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTION DURING CONSTRUCTION.

STORM SEWER QUANTITIES:

6" HDPE UNDERDRAIN WITH SOCK	6,062 LF
12" RCP CL-IV PIPE	110 LF
15" RCP CL-IV PIPE	398 LF
24" RCP CL-IV PIPE	551 LF
36" RCP CL-IV PIPE	156 LF
12" HDPE PIPE	100 LF
12" CMP PIPE	118 LF
12" CMP END SECTION	6 EA.
4" DIA. CATCH BASIN	8 EA.
4" DIA. MANHOLE	1 EA.
TAP EXISTING MANHOLE	5 EA.

SANITARY SEWER QUANTITIES:

6" PVC SDR 23.5 PIPE	440 LF
CLEANOUT AND BOX	5 EA.
4" DIA. MANHOLE	1 EA.

WATER MAIN QUANTITIES:

2" COPPER "K" WATER LEAD	38 LF
4" D.I.W.M. CLASS 54	27 LF
6" D.I.W.M. CLASS 54	54 LF
12" D.I.W.M. CLASS 54	1,617 LF
2" VALVE AND BOX	2 EA.
4" VALVE AND BOX	1 EA.
6" GATE VALVE AND WELL	1 EA.
12" GATE VALVE AND WELL	3 EA.
HYDRANT ASSEMBLY	2 EA.
RELOCATE EXISTING HYDRANT	2 EA.

NOTE:
CONTRACTOR TO VERIFY ALL QUANTITIES. ANY DEVIATIONS TO THE PLAN QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF PEA GROUP FOR VERIFICATION, PRIOR TO BIDDING.

GENERAL UTILITY NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE TOWNSHIP
- ALL TRENCHES UNDER OR WITHIN THREE (3) FEET OR THE FORTY-FIVE (45) DEGREE ZONE OF INFLUENCE LINE OF EXISTING AND/OR PROPOSED PAVEMENT, BUILDING PAD OR DRIVE APPROACH SHALL BE BACKFILLED WITH SAND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF MAXIMUM UNIT WEIGHT (ASTM D-1557). ALL OTHER TRENCHES TO BE COMPACTED TO 90% OR BETTER.
- WHERE EXISTING MANHOLES OR SEWER PIPE ARE TO BE TAPPED, DRILL HOLES 4" CENTER TO CENTER, AROUND PERIPHERY OF OPENING TO CREATE A PLANE OF WEAKNESS JOINT BEFORE BREAKING SECTION OFF.
- THE LOCATIONS AND DIMENSIONS SHOWN ON THE PLANS FOR EXISTING UTILITIES ARE IN ACCORDANCE WITH AVAILABLE INFORMATION WITHOUT UNCOVERING AND MEASURING. THE DESIGN ENGINEER DOES NOT GUARANTEE THE ACCURACY OF THIS INFORMATION OR THAT ALL EXISTING UNDERGROUND FACILITIES ARE SHOWN. CONTRACTOR SHALL FIELD VERIFY UTILITIES.
- THE CONTRACTOR SHALL COORDINATE TO ENSURE ALL REQUIRED PIPES, CONDUITS, CABLES AND SLEEVES ARE PROPERLY PLACED FOR THE INSTALLATION OF GAS, ELECTRIC, PHONE, CABLE, IRRIGATION, ETC. IN SUCH A MANNER THAT WILL FACILITATE THEIR PROPER INSTALLATION PRIOR TO THE PLACEMENT OF THE PROPOSED PAVEMENT AND LANDSCAPING.
- PIPE LENGTHS INDICATED ARE FROM CENTER OF STRUCTURE AND TO END OF FLARED END SECTION UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL INSPECT ALL EXISTING PUBLIC STORM SEWER, SANITARY SEWER AND WATER MAIN STRUCTURES WITHIN THE LIMITS OF CONSTRUCTION AND WITH THE GOVERNING AGENCY INSPECTOR PRIOR TO ESTABLISHING FINAL GRADE. NOTIFY THE ENGINEER, OWNER/DEVELOPER, AND GOVERNING AGENCY IF STRUCTURE IS DEEMED TO BE STRUCTURALLY UNSOUND AND/OR IN NEED OF REPAIR.

STORM SEWER NOTES:

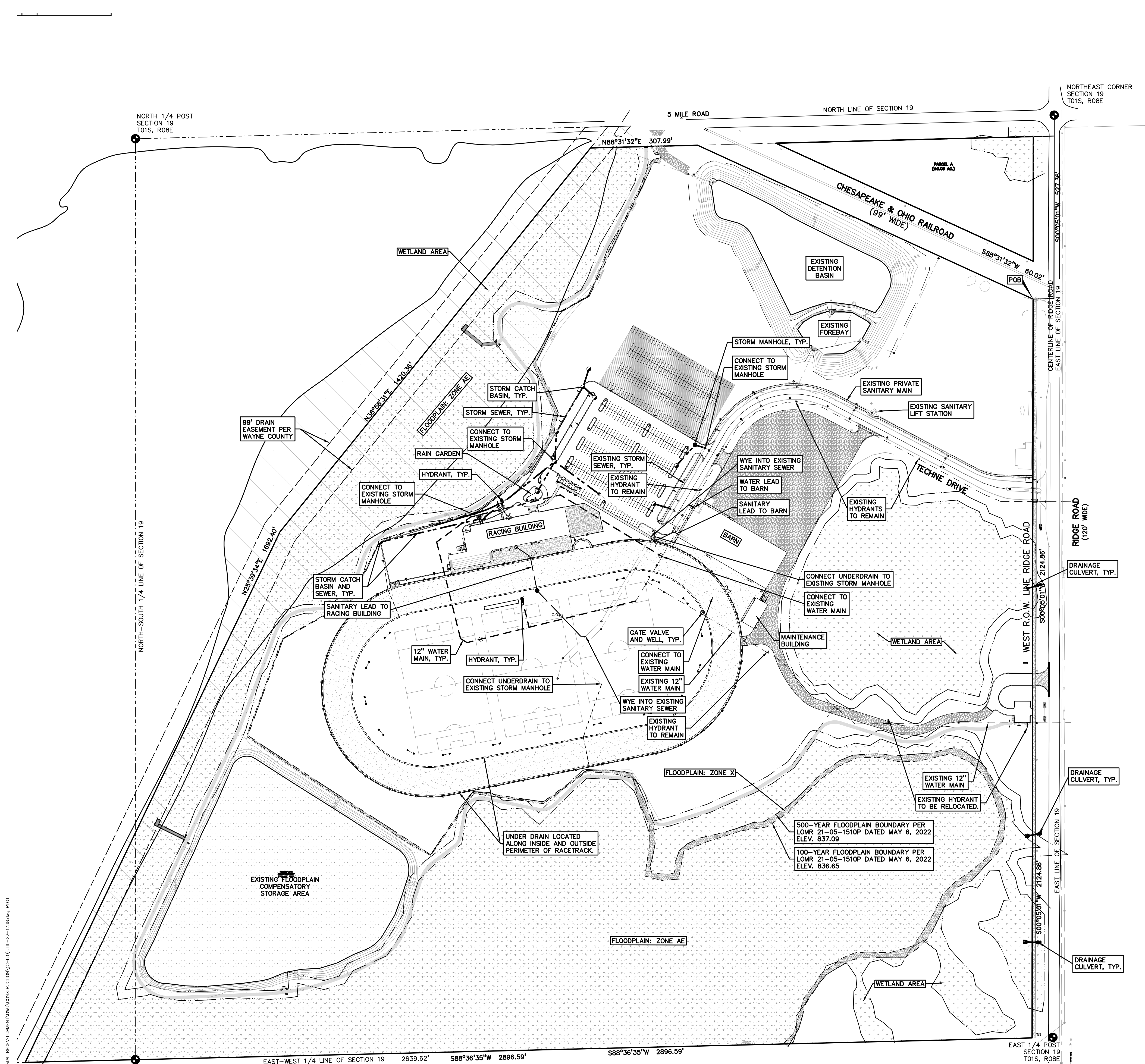
- ALL STORM SEWER 12" DIAMETER OR LARGER SHALL BE REINFORCED CONCRETE PIPE (RCP C-76) CLASS IV WITH MODIFIED TONGUE AND GROOVE JOINT WITH RUBBER GASKETS UNLESS SPECIFIED OTHERWISE (ASTM C-443).
- ALL STORM SEWER LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
- ALL STORM SEWER 10" OR LESS AND/OR LEADS SHALL BE SDR 26.
- JOINTS FOR P.V.C. PIPE SHALL BE ELASTOMERIC (RUBBER GASKET) AS SPECIFIED IN A.S.T.M. DESIGNATION D-3212.

WATER MAIN NOTES:

- ALL WATER MAIN WITHIN WAYNE COUNTY R.O.W. SHALL BE INSTALLED WITH A MINIMUM COVER OF 7.0' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5") DEGREE BENDS, PROPERLY ANCHORED.
- ALL WATER MAIN NOT LOCATED WITHIN WAYNE COUNTY R.O.W. SHALL BE INSTALLED WITH A MINIMUM COVER OF 6.0' BELOW FINISH GRADE. WHEN WATER MAINS MUST DIP TO PASS UNDER A STORM SEWER OR SANITARY SEWER, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH BY THE USE OF VERTICAL TWENTY TWO AND A HALF (22.5") DEGREE BENDS, PROPERLY ANCHORED.
- ALL TEES, BENDS, CONNECTIONS, ETC. ARE CONSIDERED INCIDENTAL TO THE JOB.
- PHYSICAL CONNECTIONS SHALL NOT BE MADE BETWEEN EXISTING AND NEW WATER MAINS UNTIL REQUIRED TESTING IS SATISFACTORILY COMPLETED.
- MAINTAIN 10' HORIZONTAL CLEARANCE BETWEEN OUTER EDGE OF WATERMAIN AND ANY SANITARY/STORM SEWER OR STRUCTURE.
- NO PHYSICAL CONNECTION TO THE EXISTING WATER MAIN CAN BE MADE UNTIL ALL NEW WATER MAIN PASSES PRESSURE AND BACTERIOLOGICAL TESTS TO THE SATISFACTION OF THE TOWNSHIP.
- ALL WATER MAIN AND FITTINGS (3" DIAMETER AND LARGER) SHALL BE DUCTILE IRON, CLASS 54.
- WATER MAIN SERVICE LEADS SHALL BE TYPE "K" ANNEALED SEAMLESS COPPER WITH FLARED FITTINGS, UNLESS OTHERWISE NOTED.
- ALL FIRE HYDRANTS SHALL BE E.I.W. #58R MODEL #250 PER TOWNSHIP STANDARDS.
- ALL HYDRANTS TO BE A MINIMUM OF 5' FROM BACK OF CURB, TYP.
- ALL NECESSARY FITTINGS, THRUST BLOCKS, RESTRAINING GLANDS, BLOW OFFS, ETC. FOR WATER MAIN ARE CONSIDERED INCIDENTAL TO THIS PROJECT. THE CONTRACTOR SHALL INSTALL THESE ITEMS AS NECESSARY AND AS REQUIRED BY THE TOWNSHIP.
- THE WATER MAIN CONTRACTOR SHALL NOTIFY THE INSPECTION SECTION OF PLYMOUTH TOWNSHIP AT LEAST THREE WORKING DAYS IN ADVANCE OF STARTING CONSTRUCTION.

SANITARY SEWER NOTES:

- DOWNSPOUTS, WEEP TILE, FOOTING DRAINS OR ANY CONDUIT THAT CARRIES STORM OR GROUND WATER SHALL NOT BE ALLOWED TO DISCHARGE INTO A SANITARY SEWER.
- ALL SANITARY LEADS SHALL BE CONSTRUCTED AT 1.00% MINIMUM SLOPE.
- ALL SANITARY SEWER 8" OR LARGER SHALL BE P.V.C. TRUSS PIPE (ASTM D2680) AND FITTINGS, WITH ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
- ALL SANITARY SEWER LEADS SHALL BE POLYVINYL CHLORIDE (PVC) SDR 23.5 PIPE AND FITTINGS. ALL JOINTS TO BE ELASTOMERIC GASKET JOINTS PER ASTM D3212 UNLESS OTHERWISE NOTED.
- SANITARY LEADS SHALL BE PROVIDED WITH CLEANOUTS EVERY 100 FEET AND AT EVERY BEND AS SHOWN. ALL CLEANOUTS TO BE PROVIDED WITH E.J.I.W. #1565 BOX OR EQUAL.



5: \PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-6.0\UTIL-22-1338.dwg PLOT DATE: 10/17/2023 9:51 AM BY: JEFFREY ADER

PARCEL B
(±125.16 AC.)

500-YEAR FLOODPLAIN
BOUNDARY PER LOMR
21-05-1510P DATED
MAY 6, 2022
ELEV. 837.09

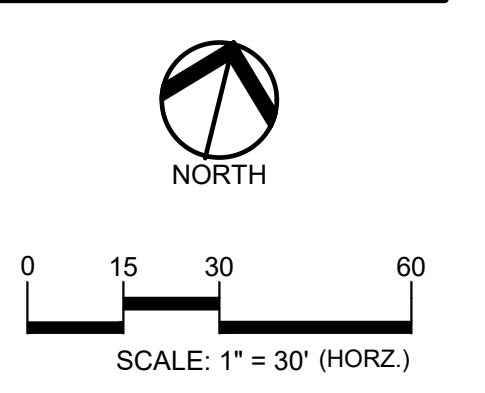
100-YEAR FLOODPLAIN
BOUNDARY PER LOMR
21-05-1510P DATED
MAY 6, 2022
ELEV. 836.65

UTILITY LEGEND:

- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAINS SHALL BE LOCATED IN A 12' WIDE EASEMENT.

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45' LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.I.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).



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

SANITARY CLEANOUTS

A2	C.O. IN BOX RIM = 837.85 INV. 834.23
B1	C.O. IN BOX RIM = 836.83 INV. 830.03
A1	C.O. IN BOX RIM = 838.87 INV. 831.71
B3	C.O. IN BOX RIM = 839.56 INV. 833.22
B4	C.O. IN BOX RIM = 839.94 INV. 834.29

SANITARY STRUCTURES

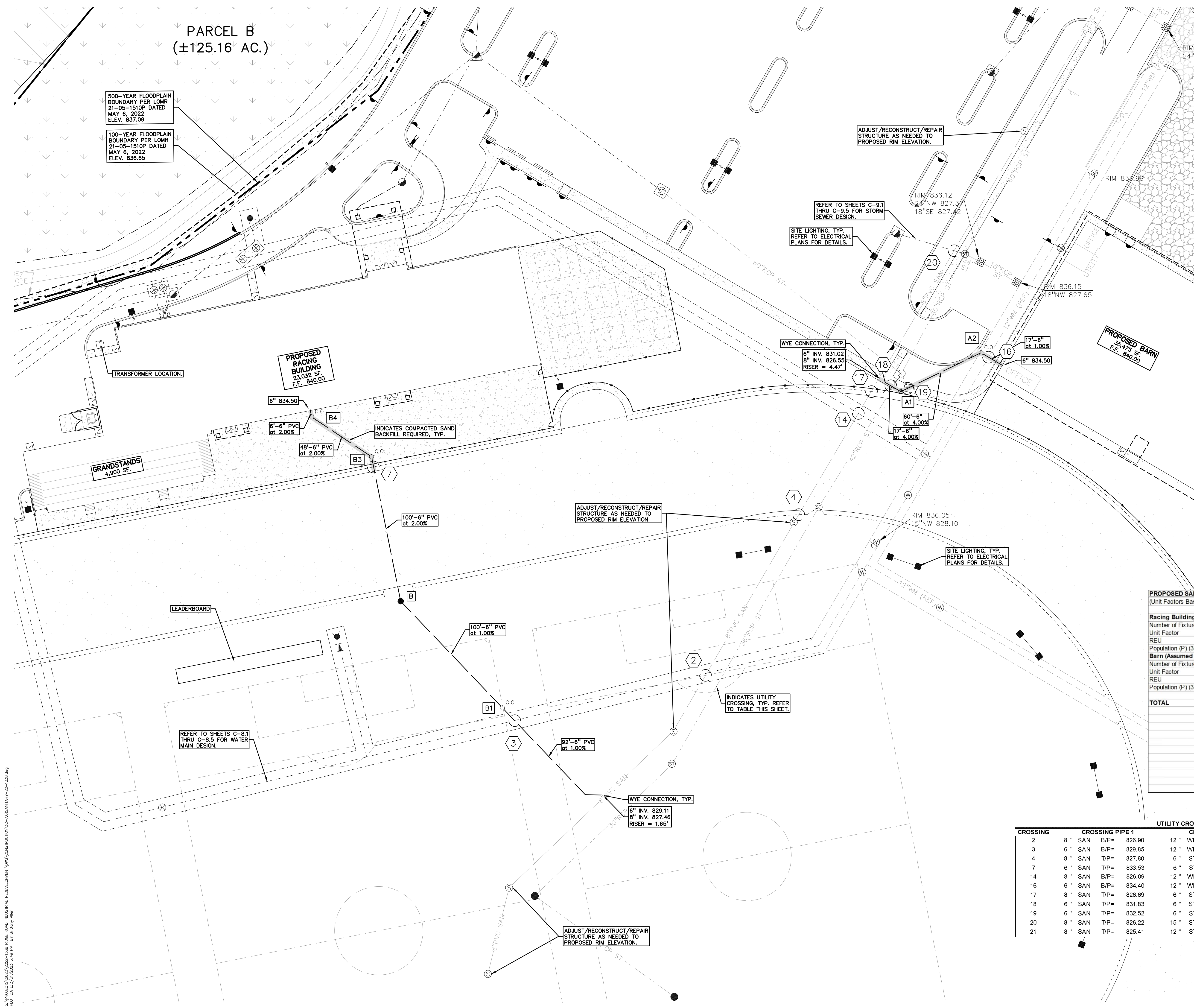
B	MH (4' DIA.) RIM = 838.09 6" N 831.23 6" SE 831.13
---	---

PROPOSED SANITARY SEWER BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)

Racing Building (Assumed Restaurant w/ Liquor for Oakland County REU Factor)	
Number of Fixtures	67
Unit Factor	0.35 per 1,000 s.f.
REU	23.5
Population (P) (3.5 PEOPLE/EDU)	82.1 People
Barn (Assumed Pet Care Kennels for Oakland County REU Factor)	
Number of Fixtures	4
Unit Factor	0.63 per fixture
REU	2.5
Population (P) (3.5 PEOPLE/EDU)	8.8 People
TOTAL	REU 26.0
Average Flow (100 GPCPD)	91 People 9,100 G.P.D. 0.014 C.F.S.
P (1000s)	0.091
Peaking Factor (PF)	4.25
PF = (18+sqrt(P))/(4+sqrt(P))	
Peak Flow (G.D.P.)	38,716 G.P.D.
Peak Flow (C.F.S.)	0.060 C.F.S.
8" Pipe Capacity Provided	1,432 C.F.S.

UTILITY CROSSING TABLE

CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES
2	8" SAN B/P= 826.90	12" WM T/P= 825.40	1.50	DIP WATER MAIN
3	6" SAN B/P= 829.85	12" WM T/P= 828.35	1.50	
4	8" SAN T/P= 827.80	6" ST B/P= 833.10	5.30	
7	6" SAN T/P= 833.53	6" ST T/P= 835.13	1.60	
14	8" SAN B/P= 826.09	12" WM T/P= 824.55	5.37	
16	6" SAN B/P= 834.40	12" WM T/P= 830.80	3.60	
17	8" SAN T/P= 826.69	6" ST B/P= 833.41	6.72	
18	6" SAN T/P= 831.83	6" ST B/P= 833.33	1.50	
19	6" SAN T/P= 832.52	6" ST B/P= 835.08	2.56	
20	8" SAN T/P= 826.22	15" ST B/P= 830.50	4.28	
21	8" SAN T/P= 825.41	12" ST B/P= 830.37	4.96	



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

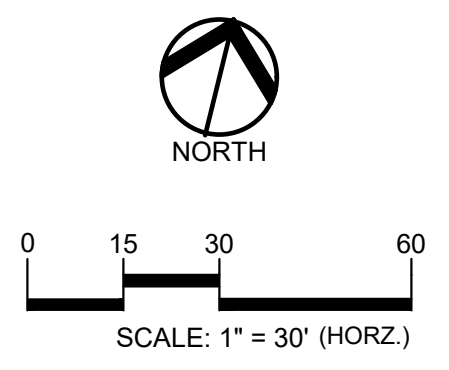
DRAWING TITLE
SANITARY SEWER PLAN

PEA JOB NO. 2022-1338

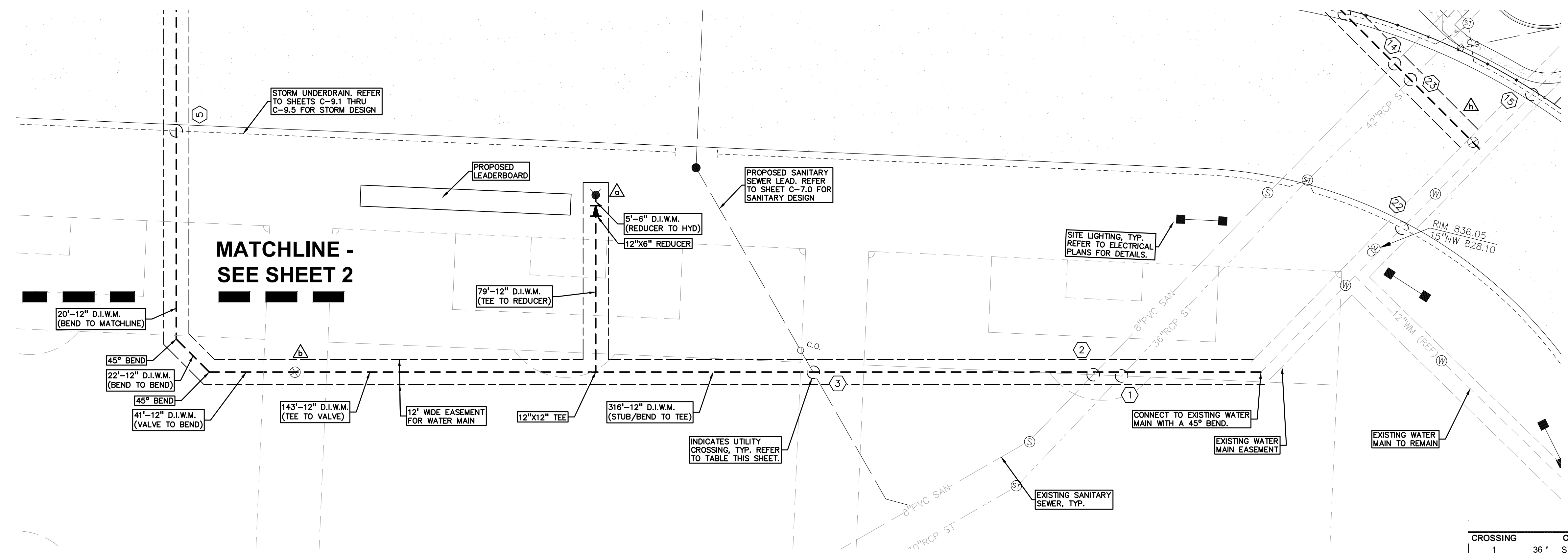
P.M.	BL
DN.	BK
DES.	BK

DRAWING NUMBER:
C-7.0

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-7.0 SANITARY-22-1338.dwg
PLT: 04/13/2023 09:49 AM 01:Sanitary.dwg



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



HYDRANTS

a	HYDRANT ASSEMBLY F.G. = 838.22
---	-----------------------------------

WATER MAIN STRUCTURES

b	12" GV IN WELL RIM = 839.02
---	--------------------------------

UTILITY LEGEND:

- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- ⊕ EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- ⊕ EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- - - PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

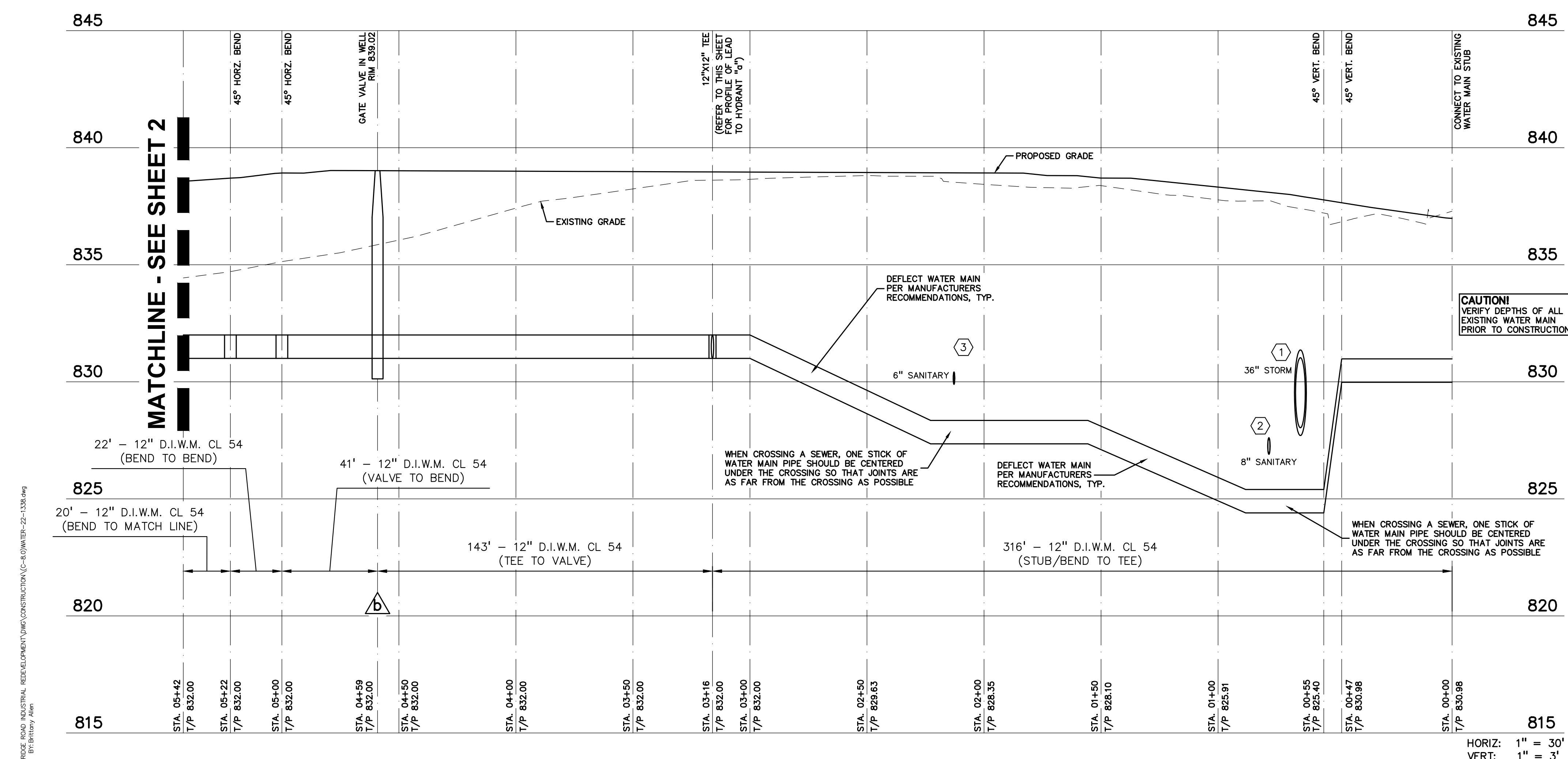
PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

UTILITY CROSSING TABLE

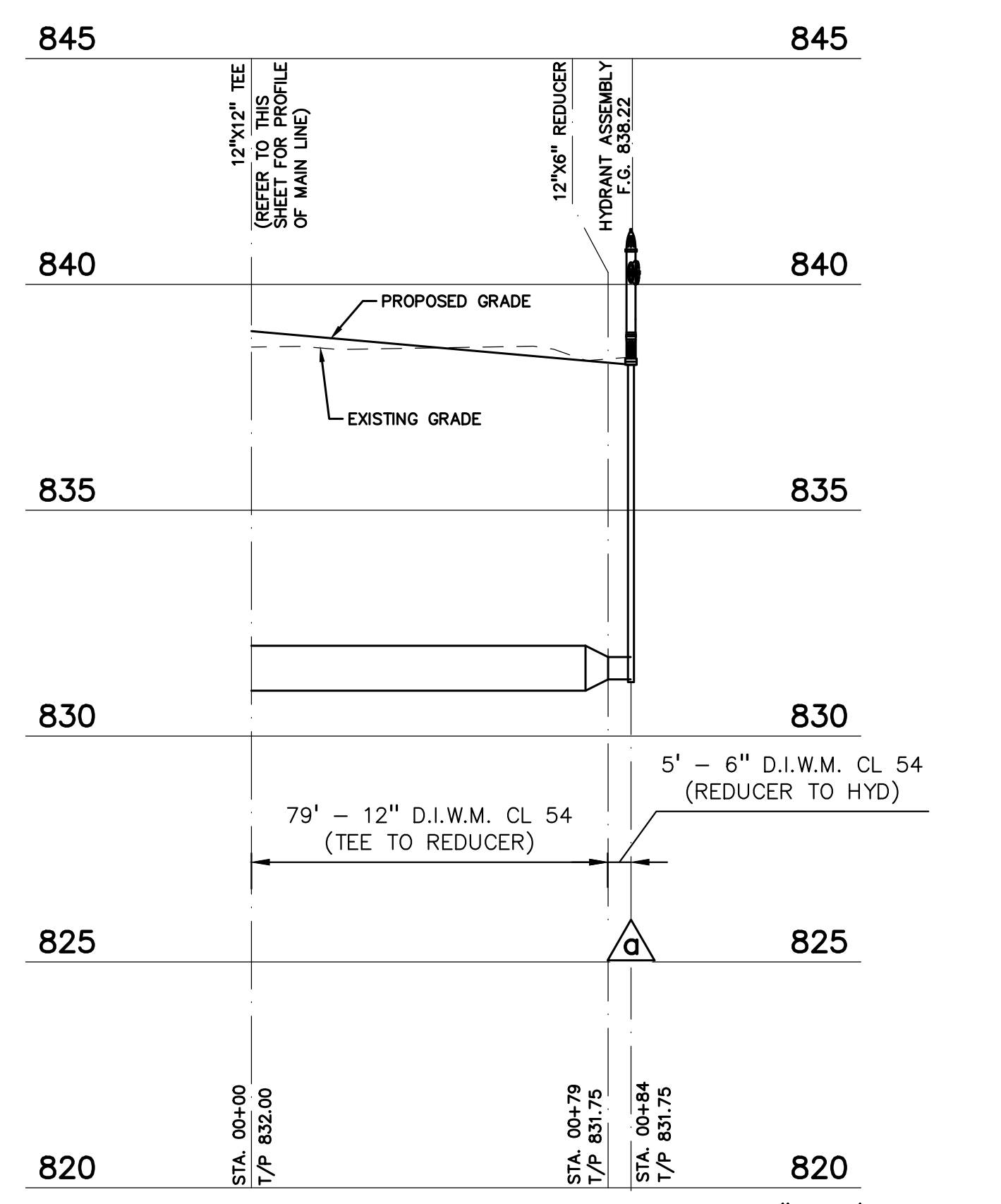
CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES
1	36" ST B/P= 827.70	12" WM T/P= 825.40	2.30	
2	8" SAN B/P= 826.90	12" WM T/P= 825.40	1.50	DIP WATER MAIN
3	6" SAN B/P= 829.85	12" WM T/P= 828.35	1.50	

NOTE:
REFER TO SHEET C-8.2 FOR WATER MAIN BASIS OF DESIGN.



CAUTION!
VERIFY DEPTHS OF ALL EXISTING WATER MAIN PRIOR TO CONSTRUCTION.

HORIZ: 1" = 30'
VERT: 1" = 3'



HORIZ: 1" = 30'
VERT: 1" = 3'

CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

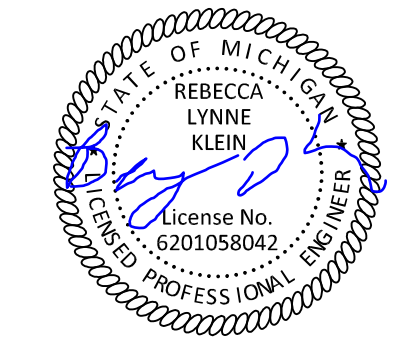
DRAWING TITLE
WATER MAIN PLAN AND PROFILE - SHEET 1

PEA JOB NO. 2022-1338

P.M.	BK
DN	BLA
DES.	BK

DRAWING NUMBER:
C-8.1

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-8.01 WATER-22-1338.dwg
PLT: 04/13/2023 10:53 AM 0:00
Author: JLD



0 15 30 60
SCALE: 1" = 30' (HORZ.)



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

UTILITY LEGEND:

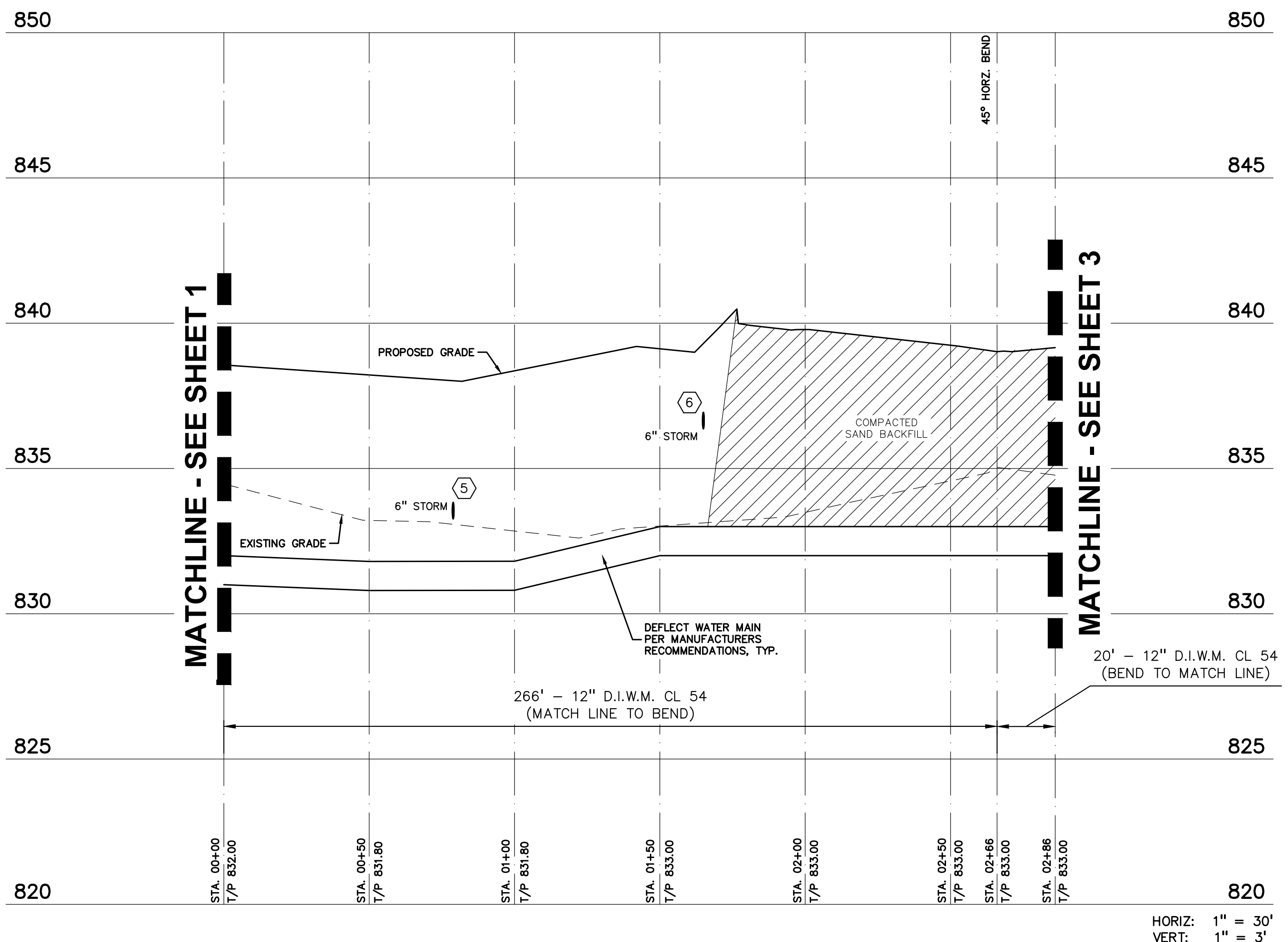
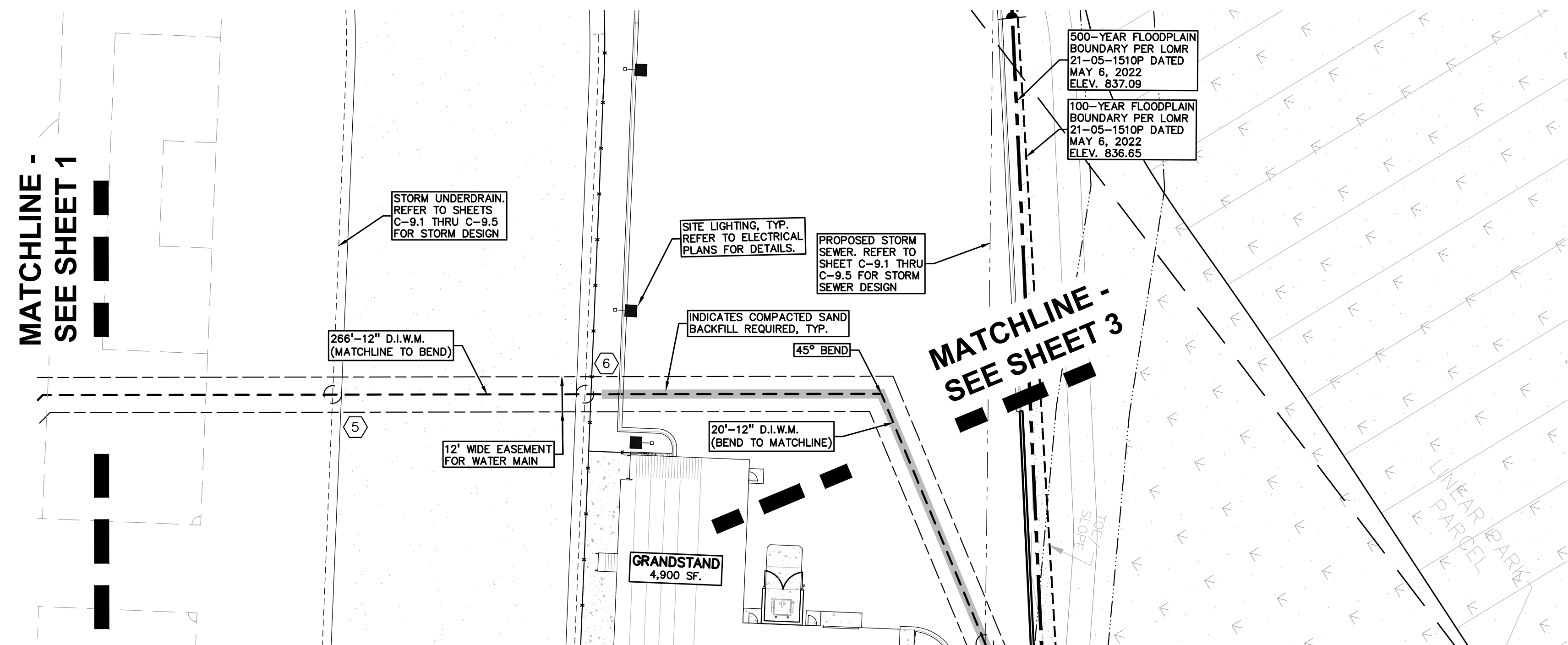
- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- - - - - EX. GAS LINE
- ⊙ EX. GAS VALVE & GAS LINE MARKER
- ⊠ EX. TRANSFORMER & IRRIGATION VALVE
- - - - - EX. WATER MAIN
- ⊕ EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- ⊙ EX. WATER VALVE BOX & SHUTOFF
- ⊙ EX. SANITARY SEWER
- ⊙ EX. SANITARY CLEANOUT & MANHOLE
- ⊙ EX. COMBINED SEWER MANHOLE
- ⊙ EX. STORM SEWER
- ⊙ EX. CLEANOUT & MANHOLE
- ⊙ EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- ⊙ EX. YARD DRAIN & ROOF DRAIN
- ⊙ EX. UNIDENTIFIED STRUCTURE
- - - - - PROPOSED WATER MAIN
- ⊕ PROPOSED HYDRANT AND GATE VALVE
- ⊕ PROPOSED TAPPING SLEEVE, VALVE & WELL
- ⊕ PROPOSED POST INDICATOR VALVE
- - - - - PROPOSED SANITARY SEWER
- ⊕ PROPOSED SANITARY CLEANOUT & MANHOLE
- - - - - PROPOSED STORM SEWER
- ⊕ PROPOSED STORM SEWER CLEANOUT & MANHOLE
- ⊕ PROPOSED CATCH BASIN, INLET & YARD DRAIN

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

UTILITY CROSSING TABLE

CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES
5	6" ST B/P= 833.30	12" WM B/P= 831.80	1.50	DIP WATER MAIN
6	6" ST B/P= 836.39	12" WM T/P= 833.00	3.39	



WATER MAIN BASIS OF DESIGN:
(Unit Factors Based on Oakland County Unit Assignment Factors)

Racing Building (Assumed Restaurant w/ Liquor for Oakland County REU Factor)	
Number of Fixtures	67
Unit Factor	0.35 per 1,000 s.f.
REU	23.5
Population (P) (3.5 PEOPLE/EDU)	82.1 People
Barn (Assumed Pet Care Kennels for Oakland County REU Factor)	
Number of Fixtures	4
Unit Factor	0.63 per fixture
REU	2.5
Population (P) (3.5 PEOPLE/EDU)	8.8 People
TOTAL	REU 26.0
	91 People
Average Flow (150 GPCPD)	13,650 G.P.D.
	0.021 C.F.S.
	0.014 M.G.D.
Design Max. Flow = (2*avg)	27300.00 G.P.D.
	0.042 C.F.S.
	0.027 M.G.D.
Building Type =	IIB
Required Fire Flow =	3,250,000 g.p.m.

CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
PLYMOUTH, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

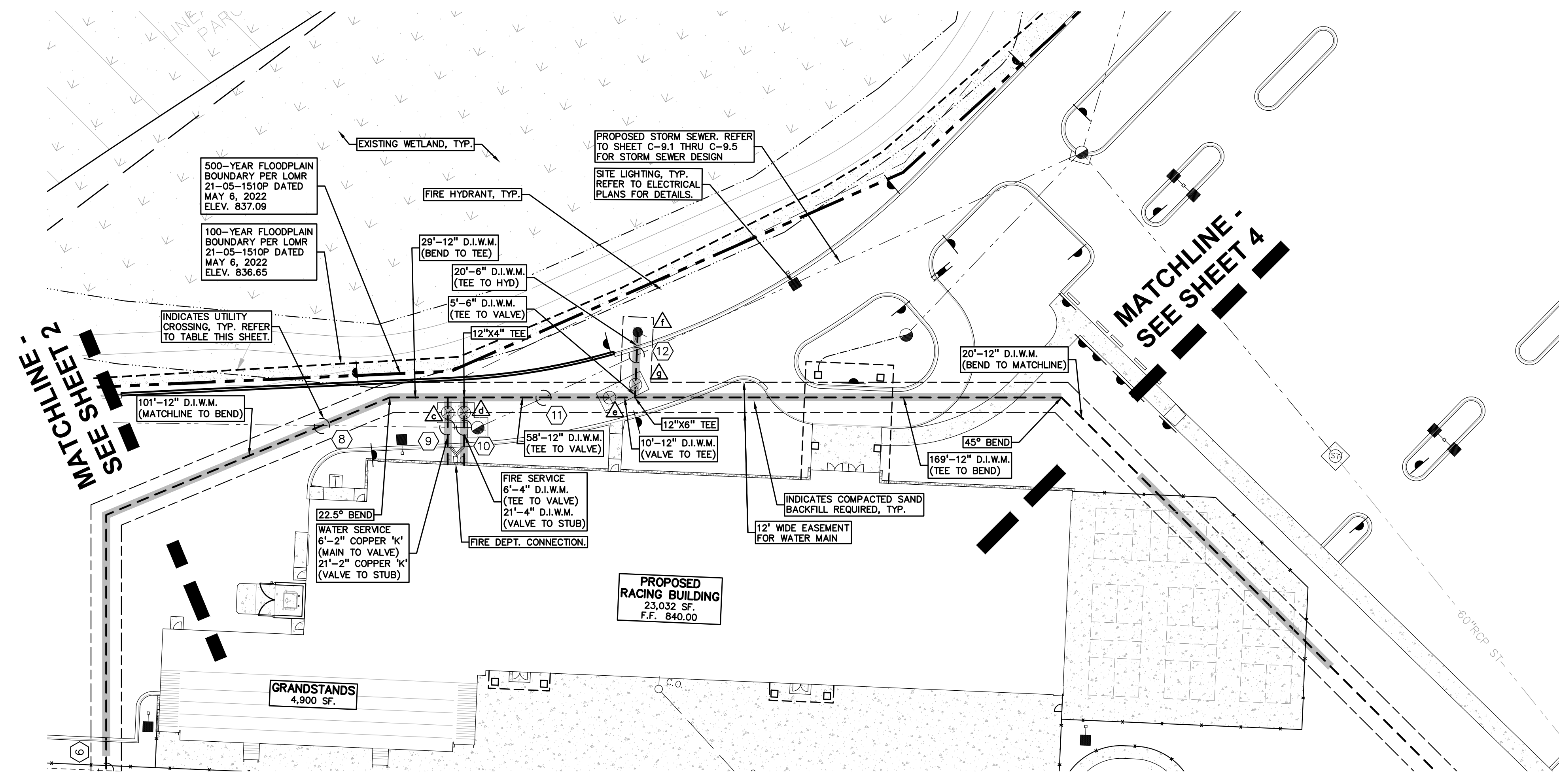
ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
WATER MAIN PLAN AND PROFILE - SHEET 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK

DRAWING NUMBER:
C-8.2

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-8.01\WATER-22-1338.dwg
PLT: 04/13/2023 10:53 AM 01.dwg



HYDRANTS

f	HYDRANT ASSEMBLY F.G. = 838.42
---	-----------------------------------

WATER MAIN STRUCTURES

c	2" VALVE IN BOX RIM = 838.13
d	4" VALVE IN BOX RIM = 837.79
e	12" GV IN WELL RIM = 838.87
g	6" GV IN WELL RIM = 839.03

UTILITY LEGEND:

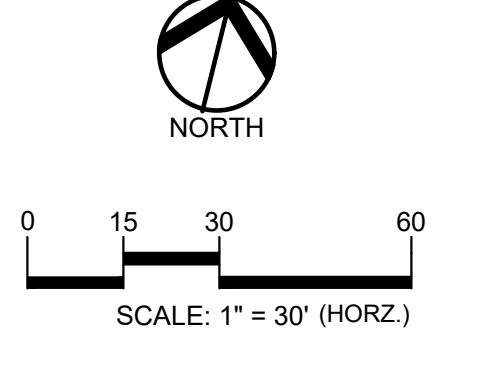
-OH-ELEC-W-O-	EX. OH. ELEC. POLE & GUY WIRE
-UG-CATV-	EX. U.G. CABLE TV & PEDESTAL
-UG-COMM-□-□-	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
-UG-ELEC-□-□-	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
-	EX. GAS LINE
○	EX. GAS VALVE & GAS LINE MARKER
□	EX. TRANSFORMER & IRRIGATION VALVE
-	EX. WATER MAIN
○	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
○	EX. WATER VALVE BOX & SHUTOFF
○	EX. SANITARY SEWER
○	EX. SANITARY CLEANOUT & MANHOLE
○	EX. COMBINED SEWER MANHOLE
○	EX. STORM SEWER
○	EX. CLEANOUT & MANHOLE
○	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
○	EX. YARD DRAIN & ROOF DRAIN
○	EX. UNIDENTIFIED STRUCTURE
-	PROPOSED WATER MAIN
●	PROPOSED HYDRANT AND GATE VALVE
●	PROPOSED TAPPING SLEEVE, VALVE & WELL
●	PROPOSED POST INDICATOR VALVE
○	PROPOSED SANITARY SEWER
○	PROPOSED SANITARY CLEANOUT & MANHOLE
○	PROPOSED STORM SEWER
○	PROPOSED STORM SEWER CLEANOUT & MANHOLE
○	PROPOSED CATCH BASIN, INLET & YARD DRAIN

UTILITY CROSSING TABLE

CROSSING	CROSSING PIPE 1		CROSSING PIPE 2		CLEARANCE	NOTES
	SIZE	B/P	SIZE	T/P		
8	15" ST	B/P= 830.35	12" WM	T/P= 827.90	2.45	
9	15" ST	B/P= 830.21	2" WM	T/P= 827.90	2.31	
10	15" ST	B/P= 830.19	4" WM	T/P= 827.90	2.29	
11	24" ST	B/P= 829.47	12" WM	T/P= 827.90	1.57	
12	24" ST	B/P= 829.41	6" WM	T/P= 827.90	1.51	

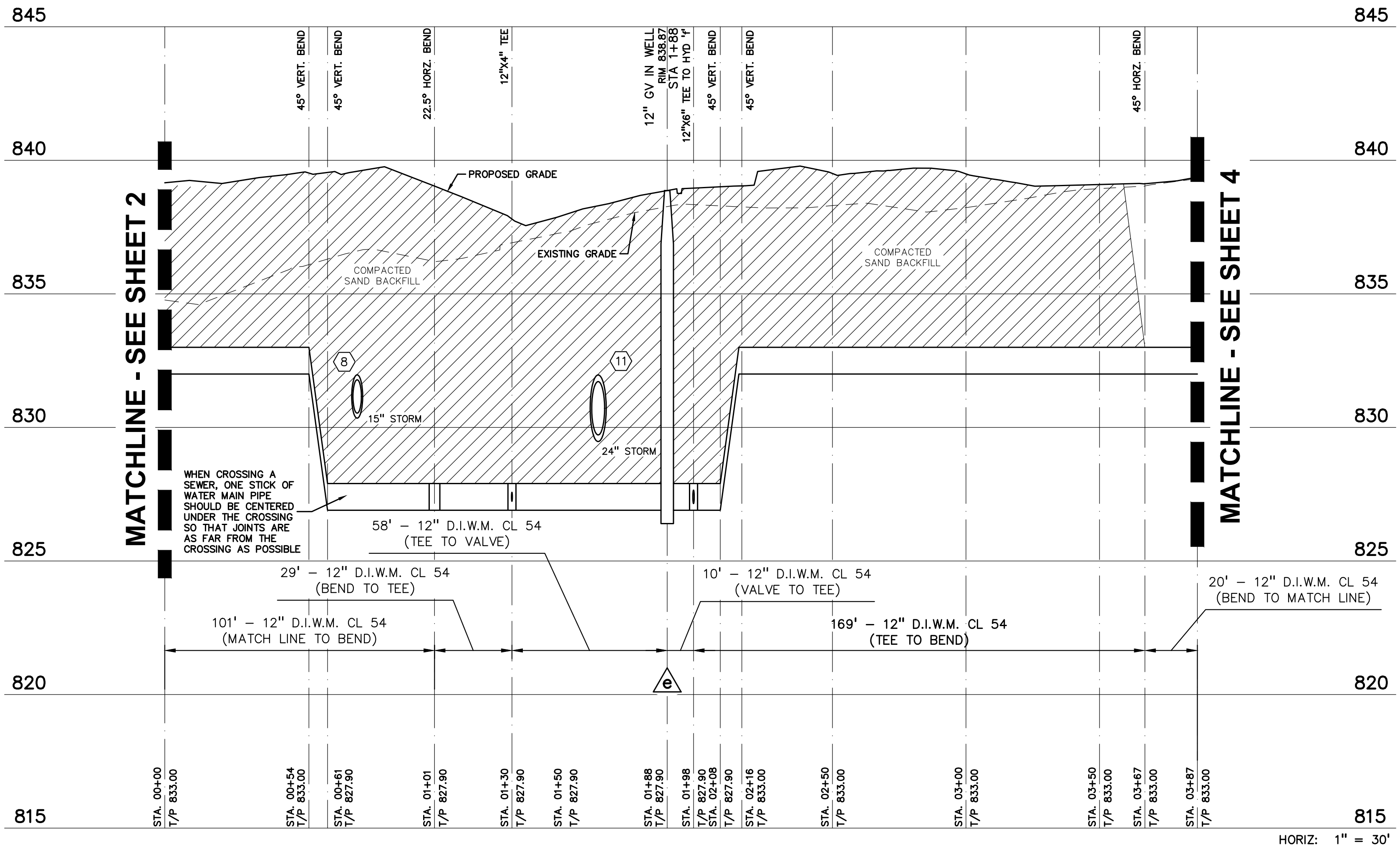
NOTE:
REFER TO SHEET C-8.2 FOR WATER MAIN BASIS OF DESIGN.

PEA GROUP
t: 844.813.2949
www.peagroup.com



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

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



HORIZ: 1" = 30'
VERT: 1" = 3'

CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DATE	DESCRIPTION

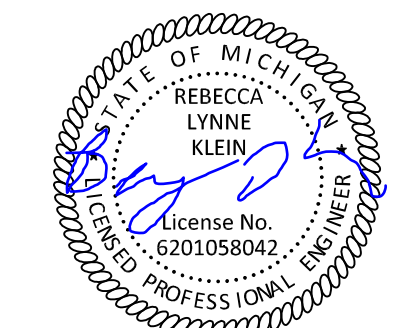
DRAWING TITLE
WATER MAIN PLAN AND PROFILE - SHEET 3

ORIGINAL ISSUE DATE:
MARCH 31, 2023

PEA JOB NO.	2022-1338
P.N.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	C-8.3

C-8.3

S:\PROJECTS\2022\2022-1338\ROAD\INDUSTRIAL_REDEVELOPMENT\DWG\CONSTRUCTION\C-8.0\WATER-22-1338.dwg
PLOT DATE: 3/27/2023 8:53 AM (3/27/2023 8:53 AM)



0 15 30 60
SCALE: 1" = 30' (HORZ.)



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

UTILITY LEGEND:

- OH-ELEC-W-O- EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV-O- EX. U.G. CABLE TV & PEDESTAL
- UG-COMM-O- EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC-O- EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX- GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX- WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- - - PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- - - PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- - - PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

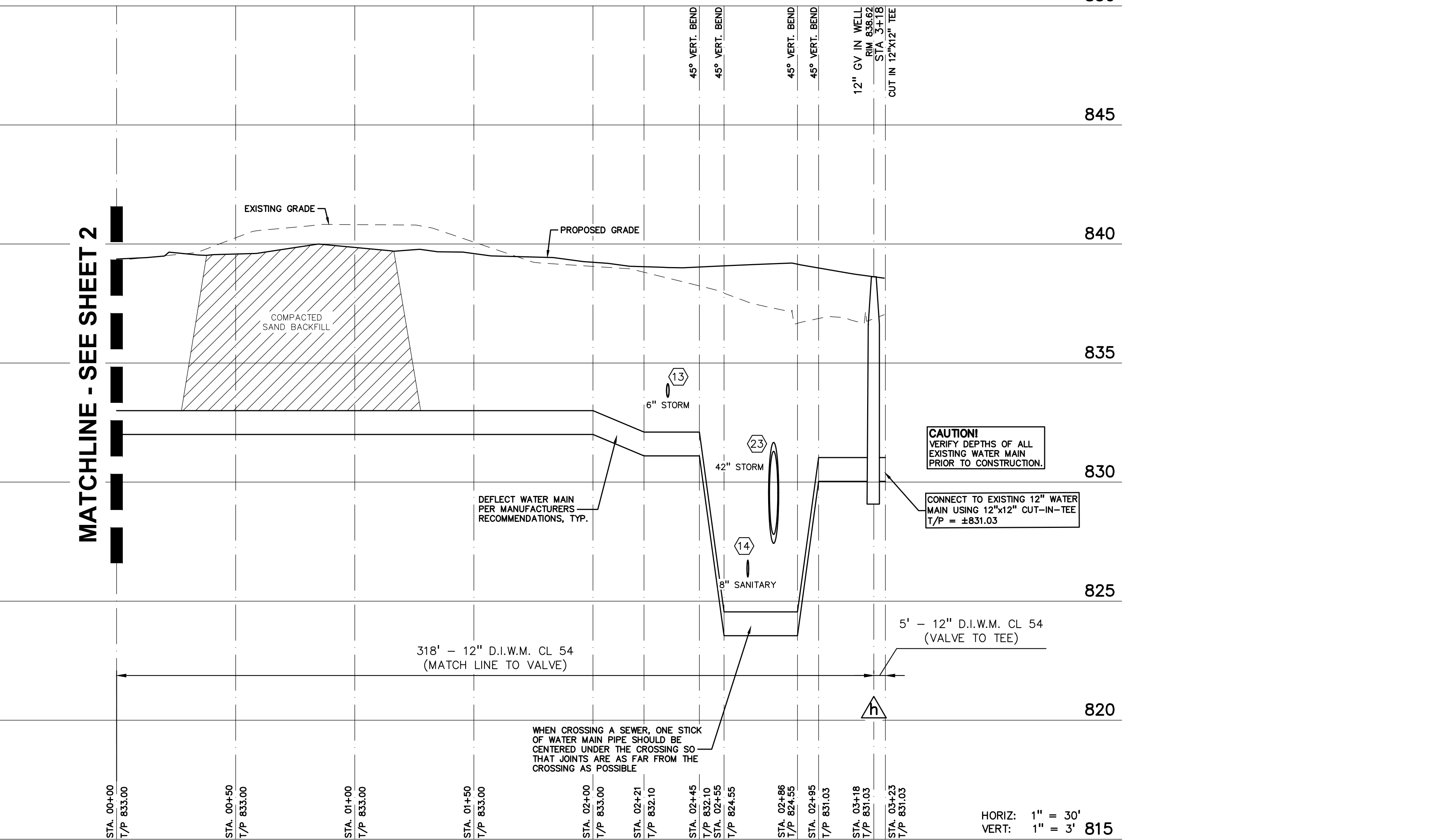
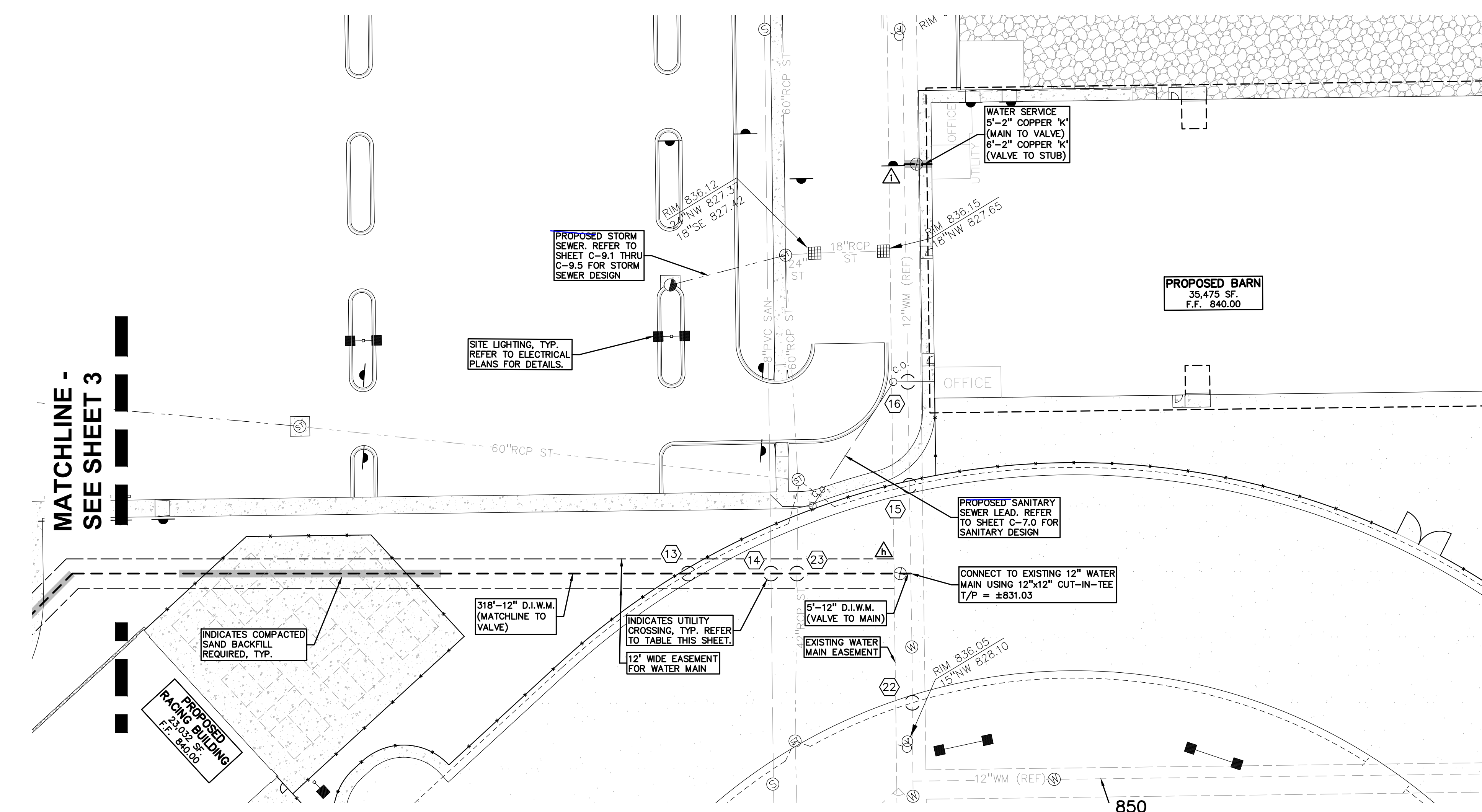
PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

UTILITY CROSSING TABLE

CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES
13	6" ST B/P= 833.60	12" WM T/P= 832.10	1.50	DIP WATER MAIN
14	8" SAN B/P= 826.09	12" WM T/P= 824.55	5.37	
15	6" ST B/P= 835.28	12" WM T/P= 832.09	3.19	
16	6" SAN B/P= 834.40	12" WM T/P= 830.80	3.60	
22	6" ST B/P= 833.04	12" WM T/P= 830.88	2.16	
23	42" ST B/P= 827.42	12" WM T/P= 824.55	2.87	

NOTE:
REFER TO SHEET C-8.2 FOR WATER MAIN BASIS OF DESIGN.



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-8.0\WATER-22-1338.dwg
DATE: 03/27/2023 10:54 AM 01:00:00

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
WATER MAIN PLAN AND PROFILE - SHEET 4

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK

DRAWING NUMBER:
C-8.4



0 15 30 60
 SCALE: 1" = 30'



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

RIDGE ROAD
 (120' WIDE)

RIM 84
 12"N 8
 12"S 8

CLIENT

JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

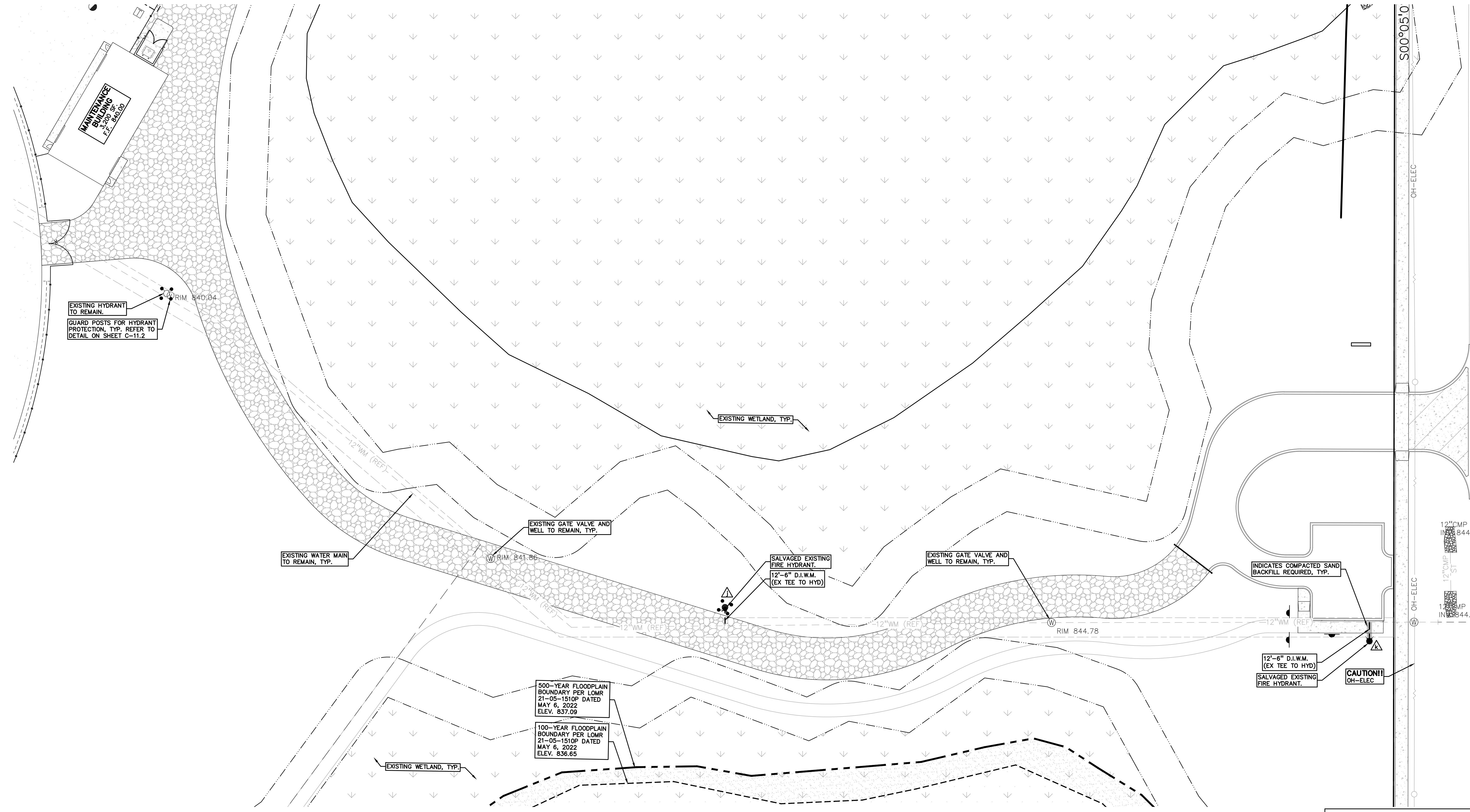
DRAWING TITLE
WATER MAIN PLAN - SHEET 5

PEA JOB NO. 2022-1338

P.M. BK
 DN. BLA
 DES. BK

DRAWING NUMBER:

C-8.5



NOTE:
 REFER TO SHEET C-8.2 FOR WATER MAIN BASIS OF DESIGN.

HYDRANTS	
j	HYDRANT ASSEMBLY F.G. = 843.32
k	HYDRANT ASSEMBLY F.G. = 848.88

PUBLIC UTILITY EASEMENTS:
 ALL SANITARY SEWERS 12" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAINS SHALL BE LOCATED IN A 12' WIDE EASEMENT.

PREMIUM TRENCH BACKFILL NOTE:
 ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45' LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

UTILITY LEGEND:

—OH-ELEC—V—O—	EX. OH. ELEC. POLE & GUY WIRE
—UG-CATV—	EX. U.G. CABLE TV & PEDESTAL
—UG-COMM—	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
—UG-ELEC—	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
—	EX. GAS LINE
⊗	EX. GAS VALVE & GAS LINE MARKER
⊠	EX. TRANSFORMER & IRRIGATION VALVE
—	EX. WATER MAIN
⊕	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
⊖	EX. WATER VALVE BOX & SHUTOFF
⊙	EX. SANITARY SEWER
⊗	EX. SANITARY CLEANOUT & MANHOLE
⊕	EX. COMBINED SEWER MANHOLE
⊖	EX. STORM SEWER
⊗	EX. CLEANOUT & MANHOLE
⊕	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
⊖	EX. YARD DRAIN & ROOF DRAIN
⊗	EX. UNIDENTIFIED STRUCTURE
—	PROPOSED WATER MAIN
⊕	PROPOSED HYDRANT AND GATE VALVE
⊖	PROPOSED TAPPING SLEEVE, VALVE & WELL
⊗	PROPOSED POST INDICATOR VALVE
⊕	PROPOSED SANITARY SEWER
⊖	PROPOSED SANITARY CLEANOUT & MANHOLE
⊗	PROPOSED STORM SEWER
⊕	PROPOSED STORM SEWER CLEANOUT & MANHOLE
⊖	PROPOSED CATCH BASIN, INLET & YARD DRAIN



0 25 50 100
 SCALE: 1" = 50'

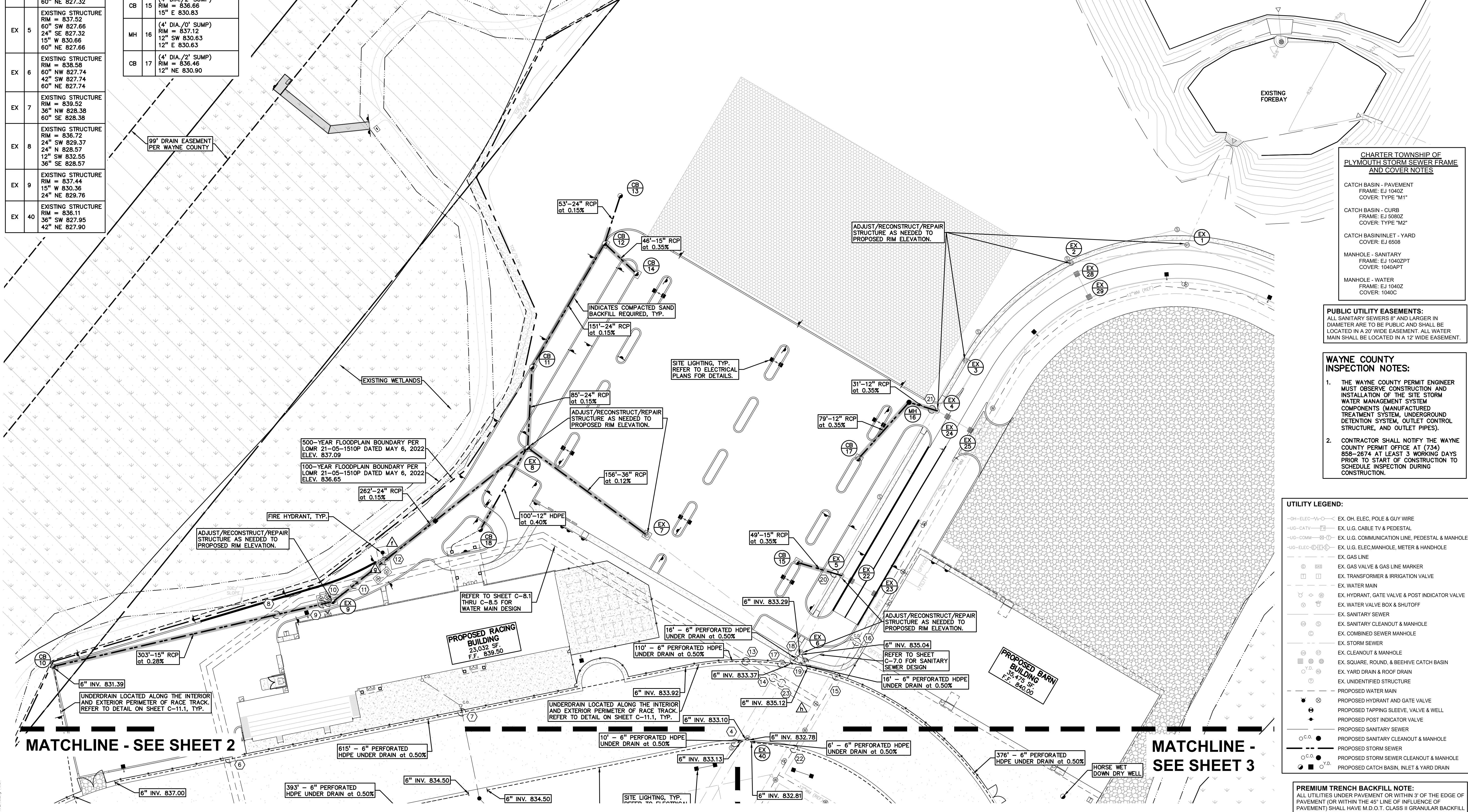


CAUTION!
 THE LOCATION AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND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

EXISTING STORM STRUCTURES	
EX 1	EXISTING STRUCTURE RIM = 838.12 54" W 826.64 60" NE 827.04 60" E 827.04
EX 2	EXISTING STRUCTURE RIM = 836.85 60" SW 827.24 30" SE -1.05 54" E 827.24
EX 3	EXISTING STRUCTURE RIM = 837.46 60" SW 827.30 60" NE 827.30
EX 4	EXISTING STRUCTURE RIM = 836.94 12" W 830.52 60" SW 827.37 30" SE 827.32 60" NE 827.32
EX 5	EXISTING STRUCTURE RIM = 837.52 60" SW 827.66 24" SE 827.32 15" W 830.66 60" NE 827.66
EX 6	EXISTING STRUCTURE RIM = 838.58 60" NW 827.74 42" SW 827.74 60" NE 827.74
EX 7	EXISTING STRUCTURE RIM = 839.52 36" NW 828.38 60" SE 828.38
EX 8	EXISTING STRUCTURE RIM = 836.72 24" SW 829.37 24" N 828.57 12" SW 832.55 36" SE 828.57
EX 9	EXISTING STRUCTURE RIM = 837.44 15" W 830.36 24" NE 829.76
EX 40	EXISTING STRUCTURE RIM = 836.11 36" SW 827.95 42" NE 827.90

STORM STRUCTURES	
CB 10	(4' DIA./2' SUMP) RIM = 838.05 15" E 831.21
CB 11	(4' DIA./2' SUMP) RIM = 835.66 24" NE 828.80 24" S 828.70
CB 12	(4' DIA./2' SUMP) RIM = 835.30 24" N 829.12 15" SE 829.62 24" SW 829.02
CB 13	(4' DIA./2' SUMP) RIM = 834.50 24" S 829.20
CB 14	(4' DIA./2' SUMP) RIM = 835.48 15" NW 829.79
CB 15	(4' DIA./2' SUMP) RIM = 836.66 15" E 830.83
MH 16	(4' DIA./0' SUMP) RIM = 837.12 12" SW 830.63 12" E 830.63
CB 17	(4' DIA./2' SUMP) RIM = 836.46 12" NE 830.90

UTILITY CROSSING TABLE					
CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES	
7	6" SAN T/P= 833.53	6" ST T/P= 835.13	1.60		
8	15" ST B/P= 830.35	12" WM T/P= 827.90	2.45		
9	15" ST B/P= 830.21	2" WM T/P= 827.90	2.31		
10	15" ST B/P= 830.19	4" WM T/P= 827.90	2.29		
11	24" ST B/P= 829.47	12" WM T/P= 827.90	1.57		
12	24" ST B/P= 829.41	6" WM T/P= 827.90	1.51		
13	6" ST B/P= 833.60	12" WM T/P= 832.10	1.50		
14	8" SAN B/P= 826.09	12" WM T/P= 824.55	5.37		
15	6" ST B/P= 835.28	12" WM T/P= 832.09	3.19		
16	6" SAN B/P= 834.40	12" WM T/P= 830.80	3.60		
17	8" SAN T/P= 826.69	6" ST B/P= 833.41	6.72		
18	6" SAN T/P= 831.83	6" ST B/P= 833.33	1.50		
19	6" SAN T/P= 832.52	6" ST B/P= 835.08	2.56		
20	8" SAN T/P= 826.22	15" ST B/P= 830.50	4.28		
21	8" SAN T/P= 825.41	12" ST B/P= 830.37	4.96		
23	42" ST B/P= 827.42	12" WM T/P= 824.55	2.87		



CHARTER TOWNSHIP OF PLYMOUTH STORM SEWER FRAME AND COVER NOTES

CATCH BASIN - PAVEMENT
 FRAME: EJ 1040Z
 COVER: TYPE "M1"

CATCH BASIN - CURB
 FRAME: EJ 5080Z
 COVER: TYPE "M2"

CATCH BASIN/INLET - YARD
 COVER: EJ 6508

MANHOLE - SANITARY
 FRAME: EJ 1040ZPT
 COVER: 1040APT

MANHOLE - WATER
 FRAME: EJ 1040Z
 COVER: 1040G

PUBLIC UTILITY EASEMENTS:
 ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

- WAYNE COUNTY INSPECTION NOTES:**
- THE WAYNE COUNTY PERMIT ENGINEER MUST OBSERVE CONSTRUCTION AND INSTALLATION OF THE SITE STORM WATER MANAGEMENT SYSTEM COMPONENTS (MANUFACTURED TREATMENT SYSTEM, UNDERGROUND DETENTION SYSTEM, OUTLET CONTROL STRUCTURE, AND OUTLET PIPES).
 - CONTRACTOR SHALL NOTIFY THE WAYNE COUNTY PERMIT OFFICE AT (734) 858-2674 AT LEAST 3 WORKING DAYS PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTION DURING CONSTRUCTION.

UTILITY LEGEND:

- OH-ELEC-W G EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV G EX. U.G. CABLE TV & PEDESTAL
- UG-COMM G EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC G EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

PREMIUM TRENCH BACKFILL NOTE:
 ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45' LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.O.D.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

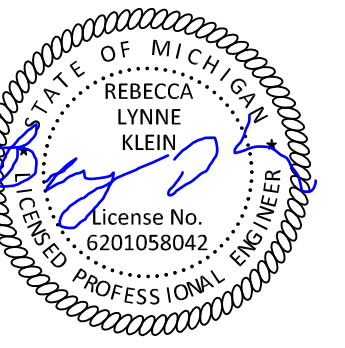
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

DRAWING TITLE
STORM SEWER PLAN - SHEET 1

PEA JOB NO.	2022-1338
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	



0 25 50 100
SCALE: 1" = 50'



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

UTILITY LEGEND:

—○—	EX. OH. ELEC. POLE & GUY WIRE
—□—	EX. U.G. CABLE TV & PEDESTAL
—◇—	EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
—○—	EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
—	EX. GAS LINE
⊗	EX. GAS VALVE & GAS LINE MARKER
⊠	EX. TRANSFORMER & IRRIGATION VALVE
—	EX. WATER MAIN
⊕	EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
⊖	EX. WATER VALVE BOX & SHUTOFF
⊙	EX. SANITARY SEWER
⊚	EX. SANITARY CLEANOUT & MANHOLE
⊛	EX. COMBINED SEWER MANHOLE
⊜	EX. STORM SEWER
⊝	EX. CLEANOUT & MANHOLE
⊞	EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
⊟	EX. YARD DRAIN & ROOF DRAIN
⊠	EX. UNIDENTIFIED STRUCTURE
—	PROPOSED WATER MAIN
⊕	PROPOSED HYDRANT AND GATE VALVE
⊖	PROPOSED TAPPING SLEEVE, VALVE & WELL
⊗	PROPOSED POST INDICATOR VALVE
⊘	PROPOSED SANITARY SEWER
⊙	PROPOSED SANITARY CLEANOUT & MANHOLE
⊚	PROPOSED STORM SEWER
⊛	PROPOSED STORM SEWER CLEANOUT & MANHOLE
⊜	PROPOSED CATCH BASIN, INLET & YARD DRAIN

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.O.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

CHARTER TOWNSHIP OF PLYMOUTH STORM SEWER FRAME AND COVER NOTES

- CATCH BASIN - PAVEMENT
FRAME: EJ 1040Z
COVER: TYPE "M1"
- CATCH BASIN - CURB
FRAME: EJ 5080Z
COVER: TYPE "M2"
- CATCH BASIN/INLET - YARD
COVER: EJ 6508
- MANHOLE - SANITARY
FRAME: EJ 1040ZPT
COVER: 1040APT
- MANHOLE - WATER
FRAME: EJ 1040Z
COVER: 1040C

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAINS SHALL BE LOCATED IN A 12' WIDE EASEMENT.

WAYNE COUNTY INSPECTION NOTES:

- THE WAYNE COUNTY PERMIT ENGINEER MUST OBSERVE CONSTRUCTION AND INSTALLATION OF THE SITE STORM WATER MANAGEMENT SYSTEM COMPONENTS (MANUFACTURED TREATMENT SYSTEM, UNDERGROUND DETENTION SYSTEM, OUTLET CONTROL STRUCTURE, AND OUTLET PIPES).
- CONTRACTOR SHALL NOTIFY THE WAYNE COUNTY PERMIT OFFICE AT (734) 858-2674 AT LEAST 3 WORKING DAYS PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTION DURING CONSTRUCTION.

EXISTING STORM STRUCTURES

EX	NO	EXISTING STRUCTURE
EX 40		EXISTING STRUCTURE RM = 836.11 36" SW 827.95 42" NE 827.90
EX 41		EXISTING STRUCTURE RM = 838.80 30" SW 828.18 36" NE 828.08
EX 42		EXISTING STRUCTURE RM = 839.98 24" SE 828.39 30" NE 828.34
EX 43		EXISTING STRUCTURE RM = 838.98 24" NW 828.72

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

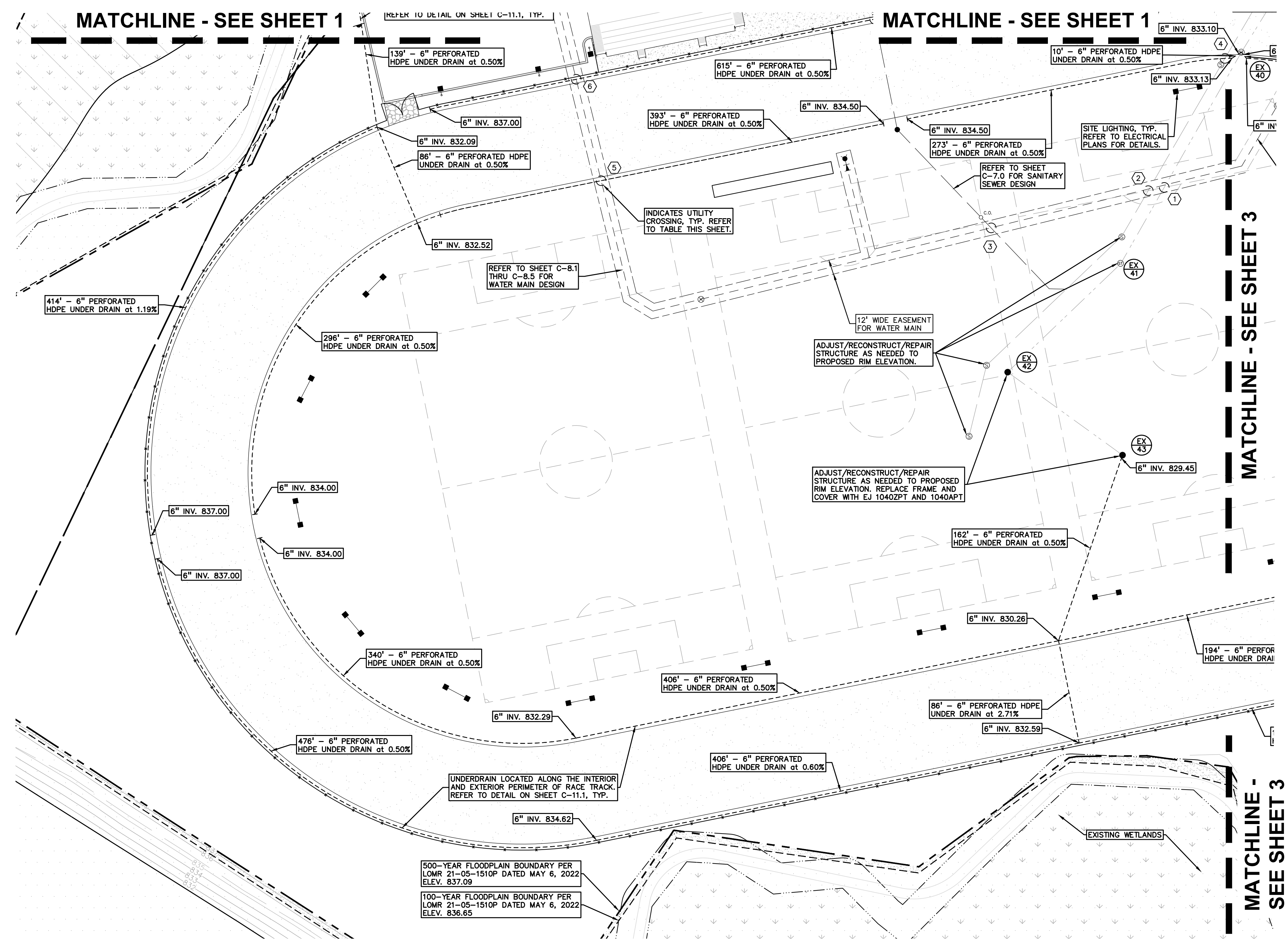
REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
STORM SEWER PLAN - SHEET 2

PEA JOB NO. 2022-1338
P.M. BK
DN. BLA
DES. BK
DRAWING NUMBER:

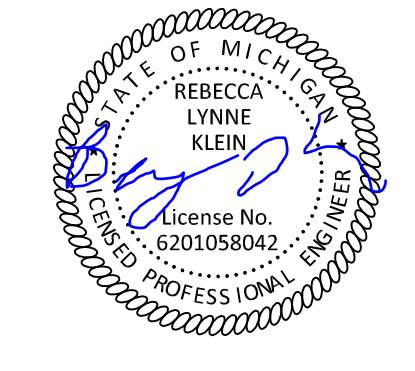
C-9.2



UTILITY CROSSING TABLE

CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES
1	36" ST B/P= 827.70	12" WM T/P= 825.40	2.30	
2	8" SAN B/P= 826.90	12" WM T/P= 825.40	1.50	DIP WATER MAIN
3	6" SAN B/P= 829.85	12" WM T/P= 828.35	1.50	
4	8" SAN T/P= 827.80	6" ST B/P= 833.10	5.30	
5	6" ST B/P= 833.30	12" WM B/P= 831.80	1.50	DIP WATER MAIN
6	6" ST B/P= 836.39	12" WM T/P= 833.00	3.39	

S:\PROJECTS\2022\2022-1338\ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-9.02\STORM-22-1338.dwg
 PLOT DATE: 07/26/23 10:14 AM
 PLOT BY: J. J. J. J.



0 25 50 100
SCALE: 1" = 50'



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

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
STORM SEWER PLAN - SHEET 3

PEA JOB NO. 2022-1338
P.M. BK
DN. BLA
DES. BK
DRAWING NUMBER:

UTILITY LEGEND:

- OH-ELEC-WV ○ EX. OH. ELEC. POLE & GUY WIRE
- UG-CATV □ EX. U.G. CABLE TV & PEDESTAL
- UG-COMM □ EX. U.G. COMMUNICATION LINE, PEDESTAL & MANHOLE
- UG-ELEC ○ EX. U.G. ELEC. MANHOLE, METER & HANDHOLE
- EX. GAS LINE
- EX. GAS VALVE & GAS LINE MARKER
- EX. TRANSFORMER & IRRIGATION VALVE
- EX. WATER MAIN
- EX. HYDRANT, GATE VALVE & POST INDICATOR VALVE
- EX. WATER VALVE BOX & SHUTOFF
- EX. SANITARY SEWER
- EX. SANITARY CLEANOUT & MANHOLE
- EX. COMBINED SEWER MANHOLE
- EX. STORM SEWER
- EX. CLEANOUT & MANHOLE
- EX. SQUARE, ROUND, & BEEHIVE CATCH BASIN
- EX. YARD DRAIN & ROOF DRAIN
- EX. UNIDENTIFIED STRUCTURE
- PROPOSED WATER MAIN
- PROPOSED HYDRANT AND GATE VALVE
- PROPOSED TAPPING SLEEVE, VALVE & WELL
- PROPOSED POST INDICATOR VALVE
- PROPOSED SANITARY SEWER
- PROPOSED SANITARY CLEANOUT & MANHOLE
- PROPOSED STORM SEWER
- PROPOSED STORM SEWER CLEANOUT & MANHOLE
- PROPOSED CATCH BASIN, INLET & YARD DRAIN

PREMIUM TRENCH BACKFILL NOTE:
ALL UTILITIES UNDER PAVEMENT OR WITHIN 3' OF THE EDGE OF PAVEMENT (OR WITHIN THE 45° LINE OF INFLUENCE OF PAVEMENT) SHALL HAVE M.D.T. CLASS II GRANULAR BACKFILL COMPACTED TO 95% MAX. DRY DENSITY (ASTM D-1557).

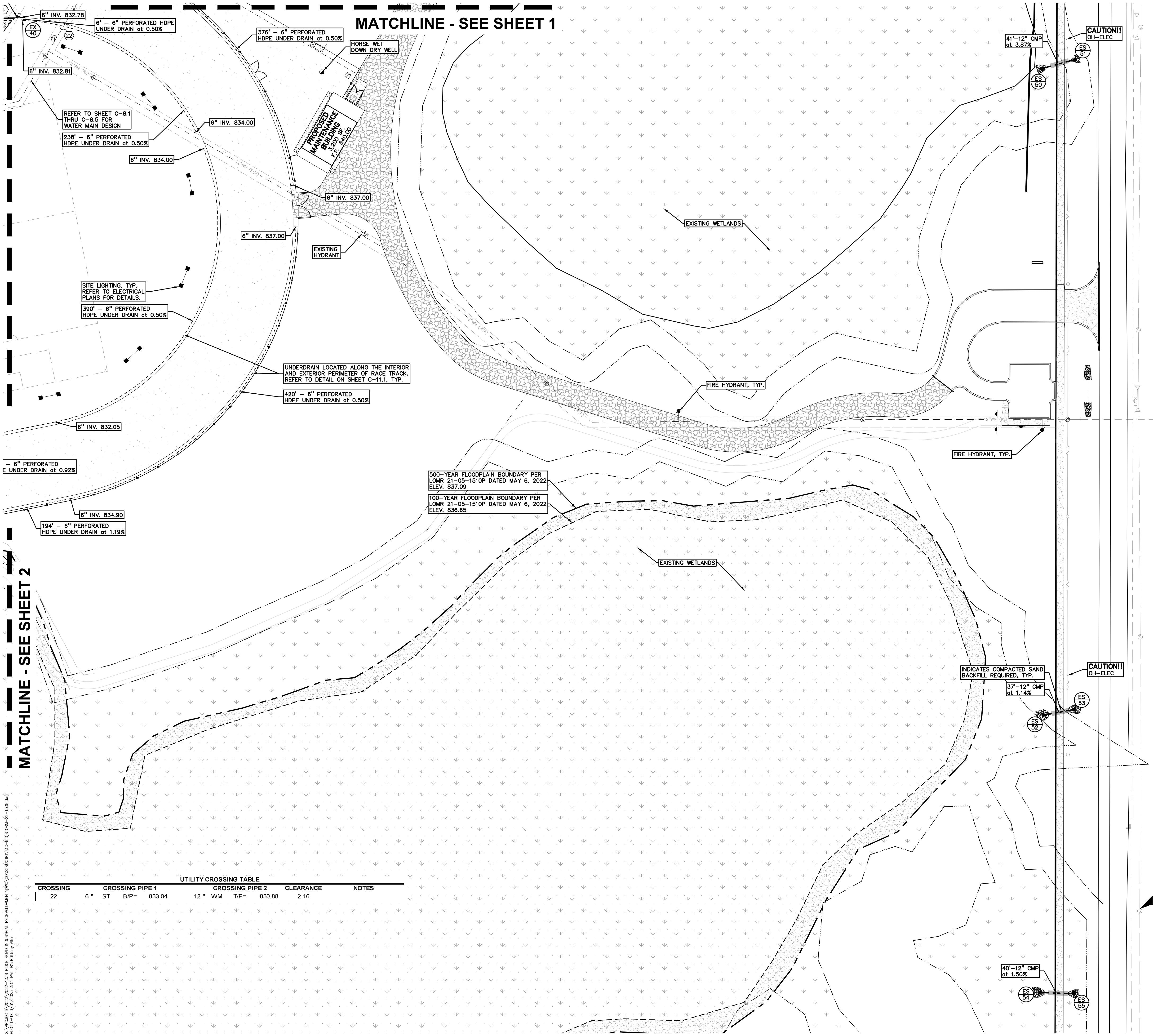
CHARTER TOWNSHIP OF PLYMOUTH STORM SEWER FRAME AND COVER NOTES

CATCH BASIN - PAVEMENT
FRAME: EJ 1040Z
COVER: TYPE "M1"
CATCH BASIN - CURB
FRAME: EJ 5080Z
COVER: TYPE "M2"
CATCH BASIN/INLET - YARD
COVER: EJ 6508
MANHOLE - SANITARY
FRAME: EJ 1040ZPT
COVER: 1040APT
MANHOLE - WATER
FRAME: EJ 1040Z
COVER: 1040C

PUBLIC UTILITY EASEMENTS:
ALL SANITARY SEWERS 8" AND LARGER IN DIAMETER ARE TO BE PUBLIC AND SHALL BE LOCATED IN A 20' WIDE EASEMENT. ALL WATER MAIN SHALL BE LOCATED IN A 12' WIDE EASEMENT.

- WAYNE COUNTY INSPECTION NOTES:**
- THE WAYNE COUNTY PERMIT ENGINEER MUST OBSERVE CONSTRUCTION AND INSTALLATION OF THE SITE STORM WATER MANAGEMENT SYSTEM COMPONENTS (MANUFACTURED TREATMENT SYSTEM, UNDERGROUND DETENTION SYSTEM, OUTLET CONTROL STRUCTURE, AND OUTLET PIPES).
 - CONTRACTOR SHALL NOTIFY THE WAYNE COUNTY PERMIT OFFICE AT (734) 658-2674 AT LEAST 3 WORKING DAYS PRIOR TO START OF CONSTRUCTION TO SCHEDULE INSPECTION DURING CONSTRUCTION.

END SECTIONS	
50	END SECTION 12" 838.40
51	END SECTION 12" 840.00
52	END SECTION 12" 840.23
53	END SECTION 12" 840.65
54	END SECTION 12" 840.40
55	END SECTION 12" 841.00



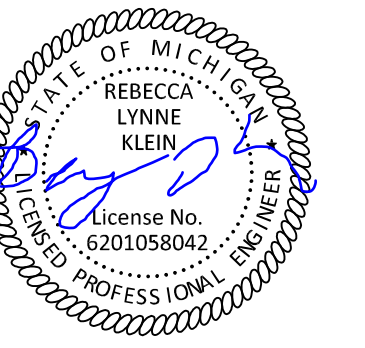
UTILITY CROSSING TABLE

CROSSING	CROSSING PIPE 1	CROSSING PIPE 2	CLEARANCE	NOTES
22	6" ST B/P= 833.04	12" WM T/P= 830.88	2.16	

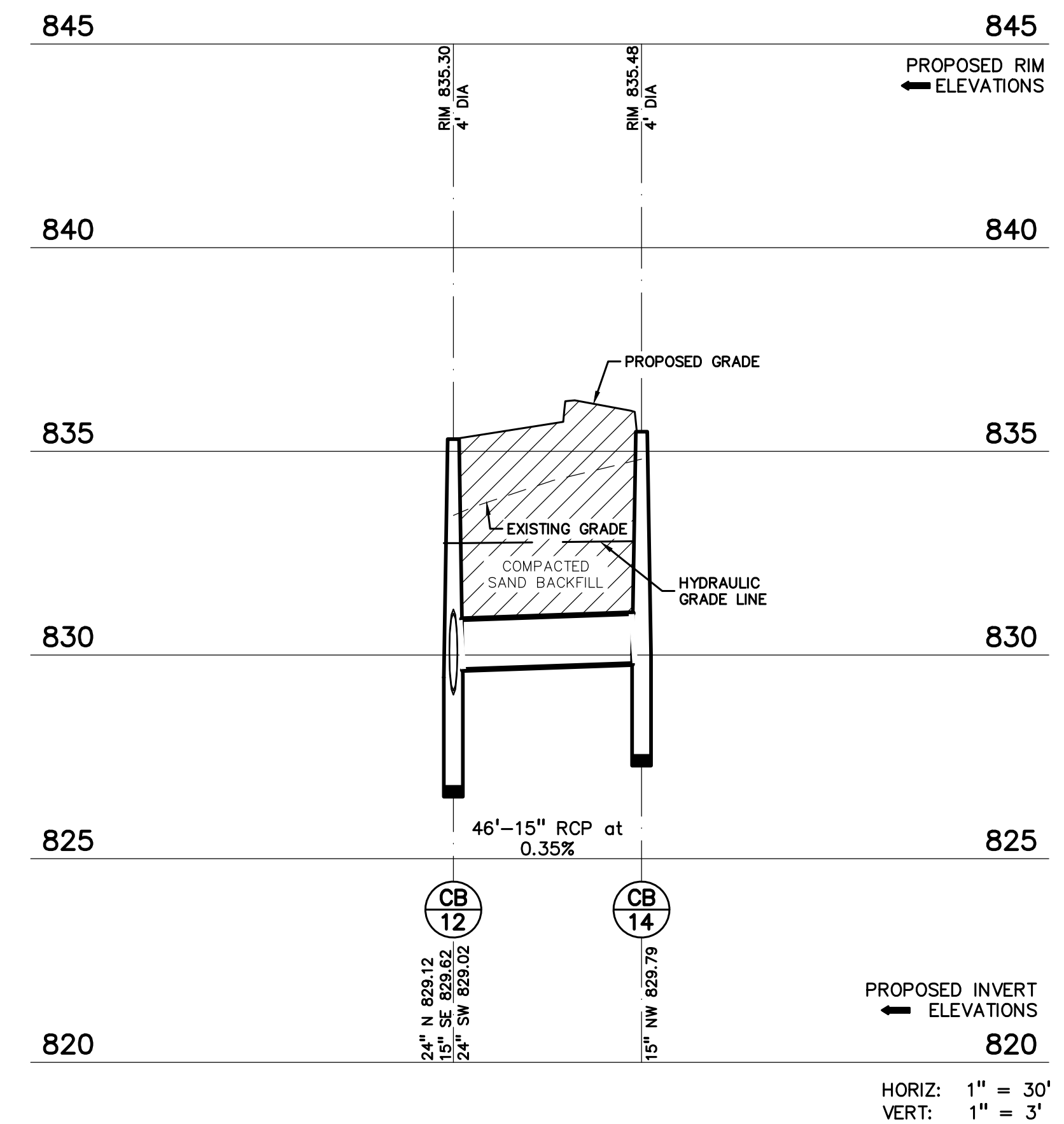
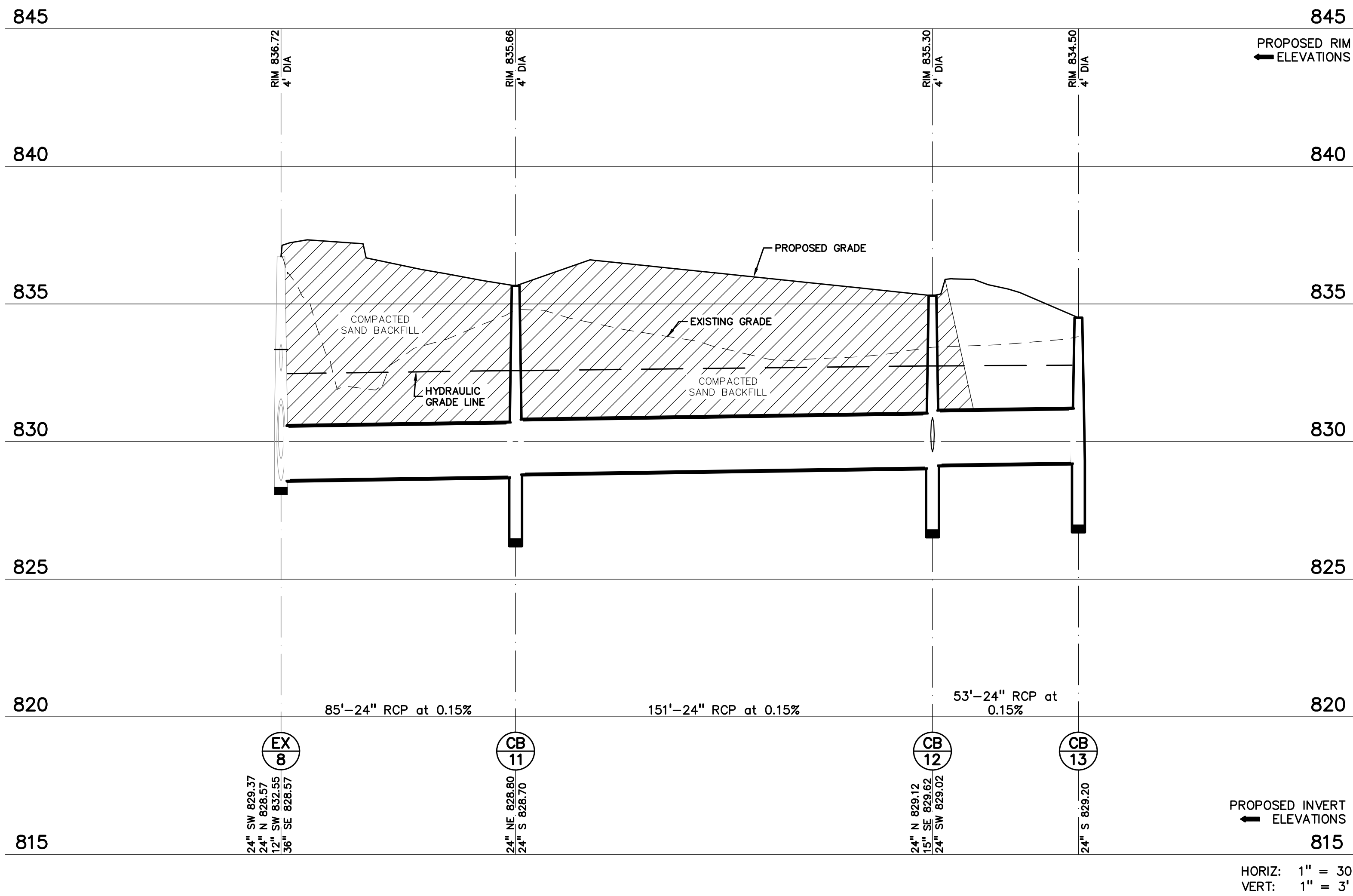
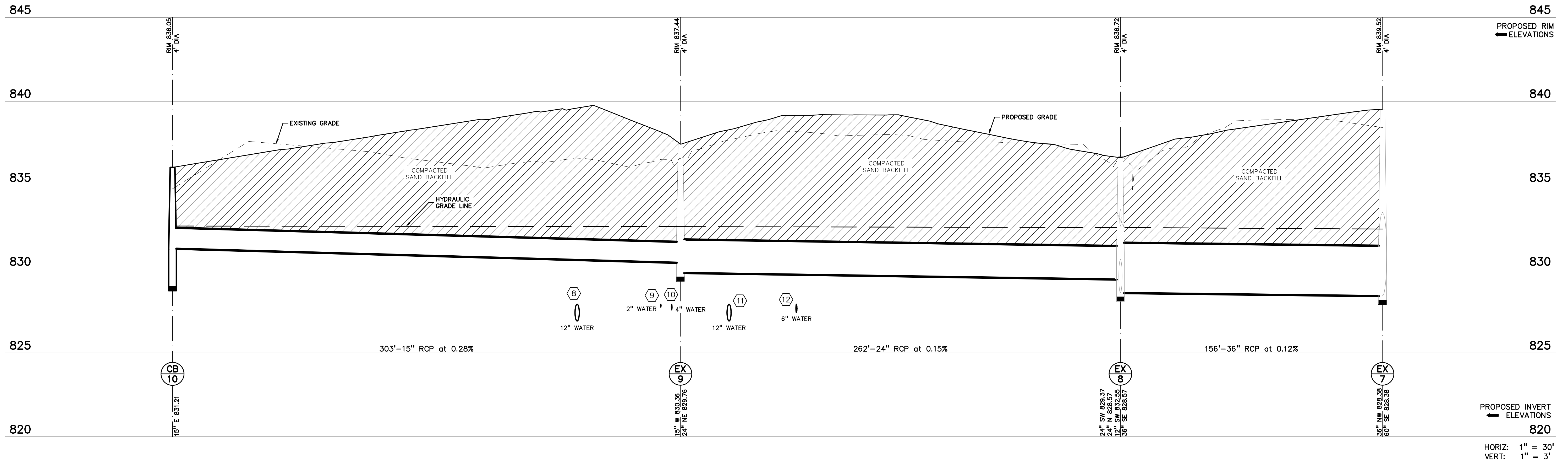
MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 1

S:\PROJECTS\2022\2022-1338\ROAD INDUSTRIAL REDEVELOPMENT\CONSTRUCTION\C-9\01STORM-22-1338.dwg
PLT: 10/27/2023 10:51:14 AM
C:\Users\jguy\OneDrive\Desktop



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

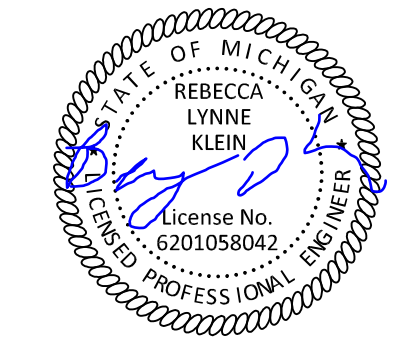
ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
STORM SEWER PROFILES - SHEET 1

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK

DRAWING NUMBER:
C-9.4

S:\PROJECTS\2022\2022-1338_BROOK ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\CB-9\PROP-22-1338.dwg PLOT
DATE: 3/31/2023 3:31 PM 8018999.dwg



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

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

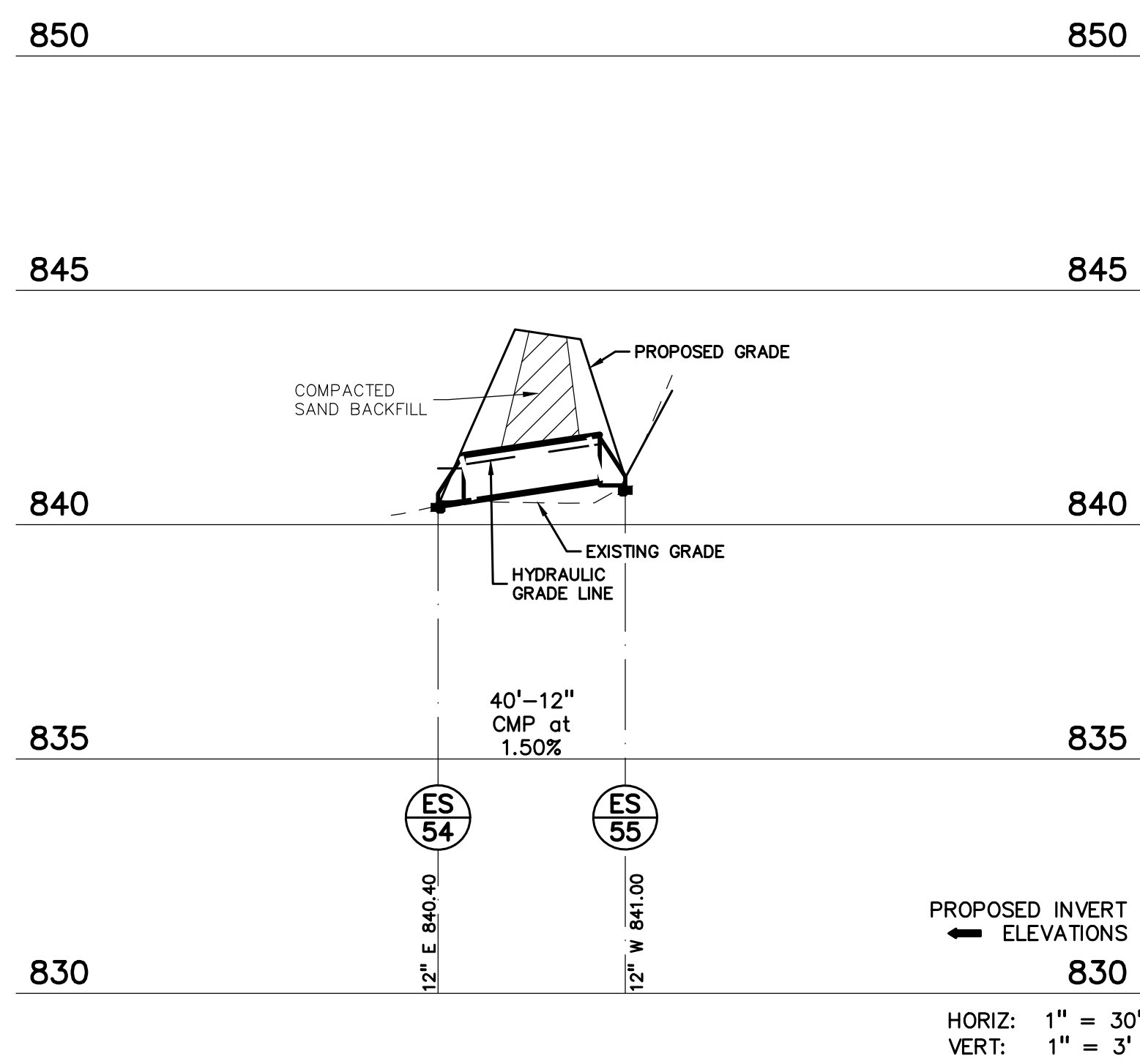
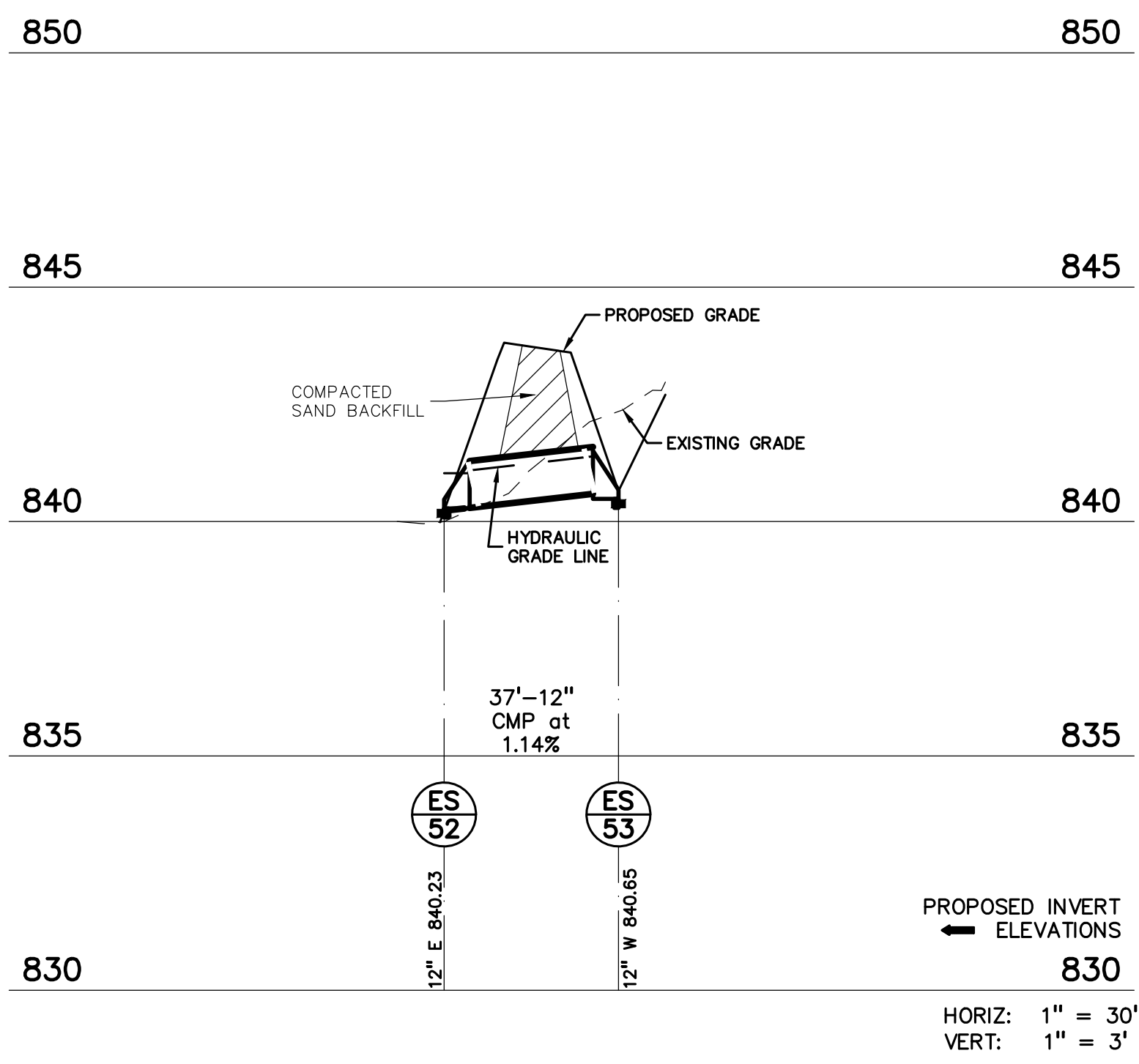
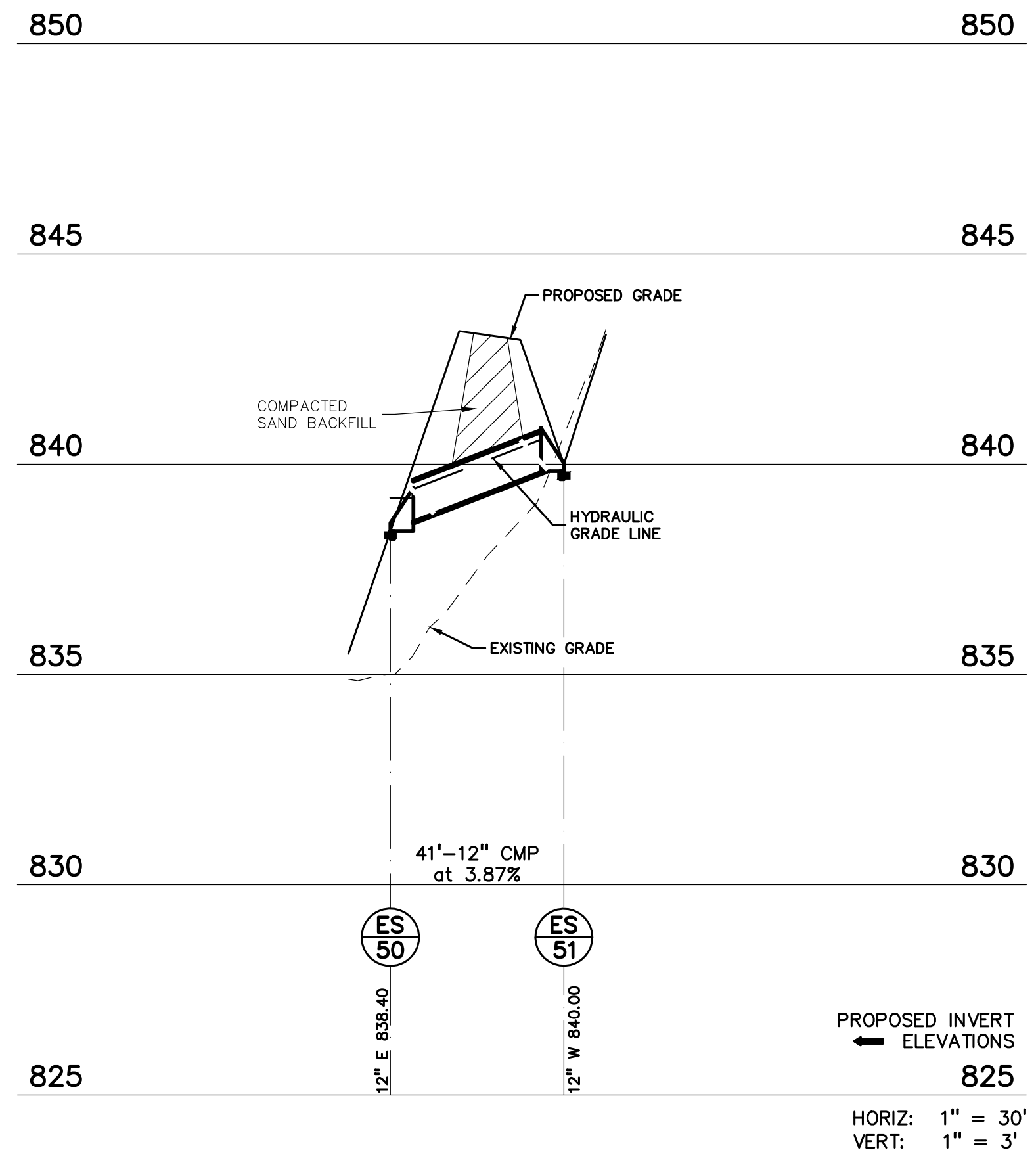
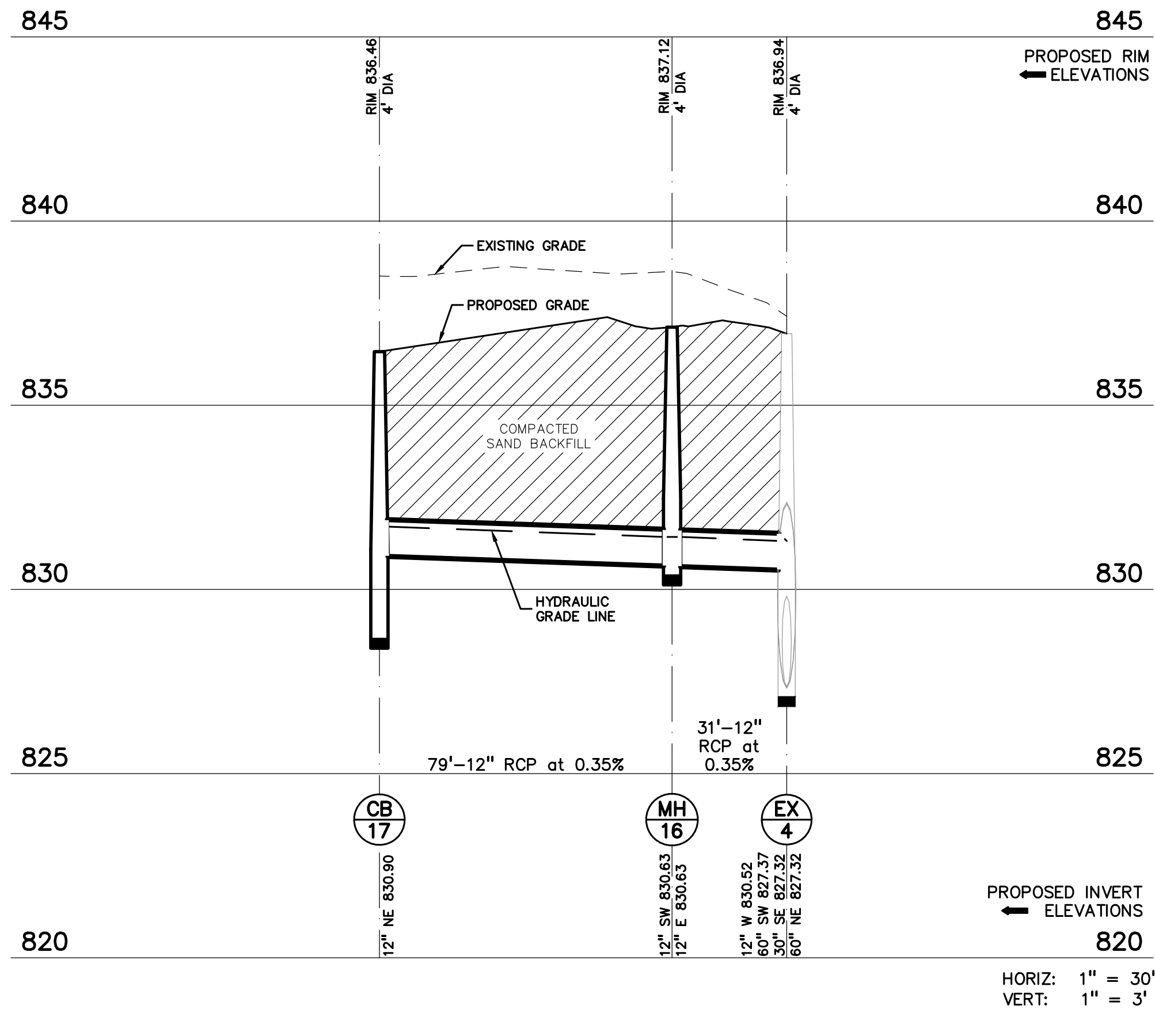
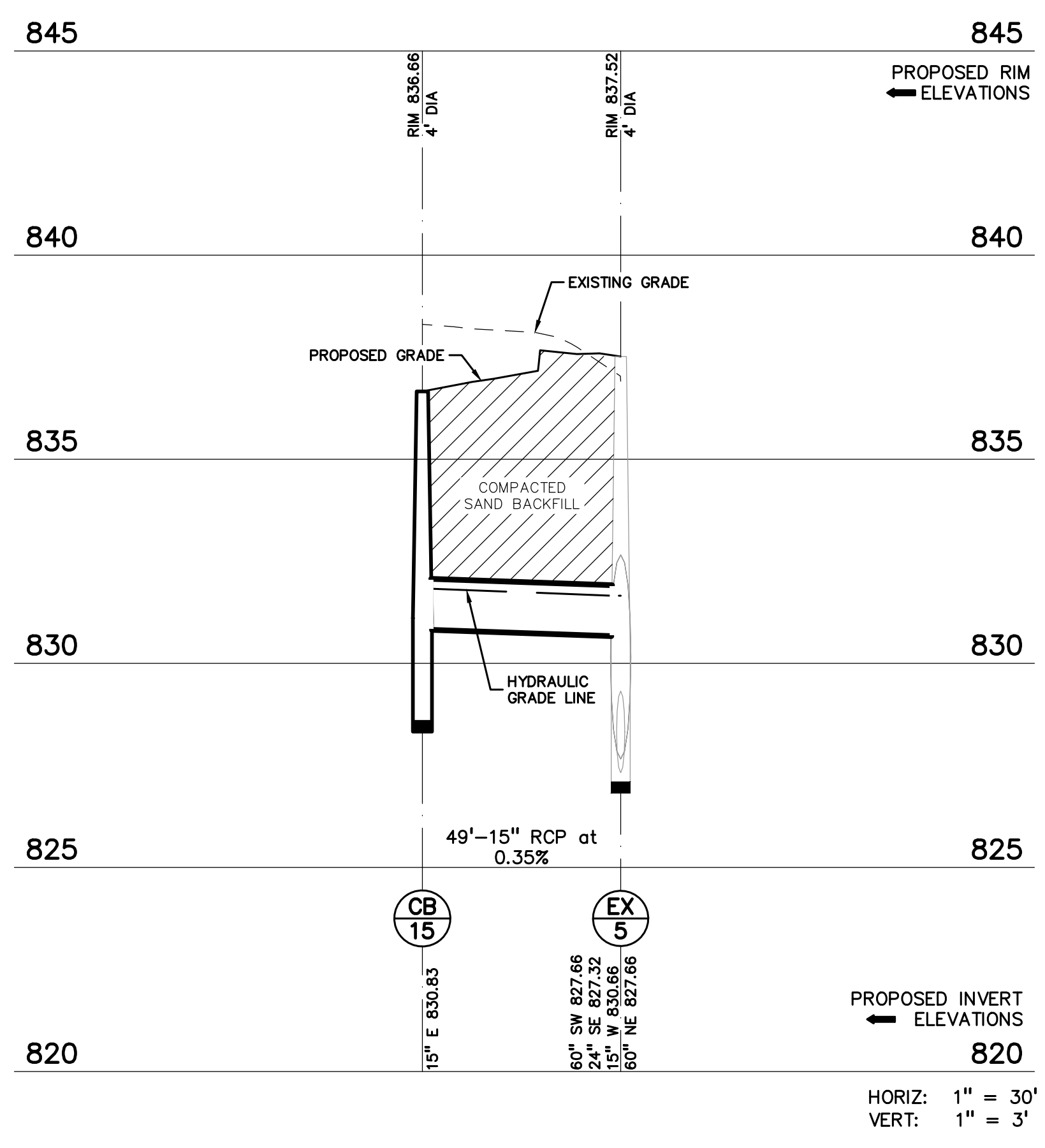
REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

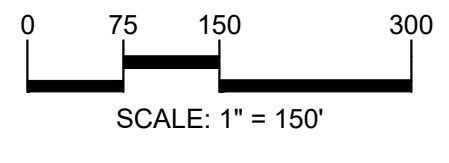
DRAWING TITLE
STORM SEWER PROFILES - SHEET 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

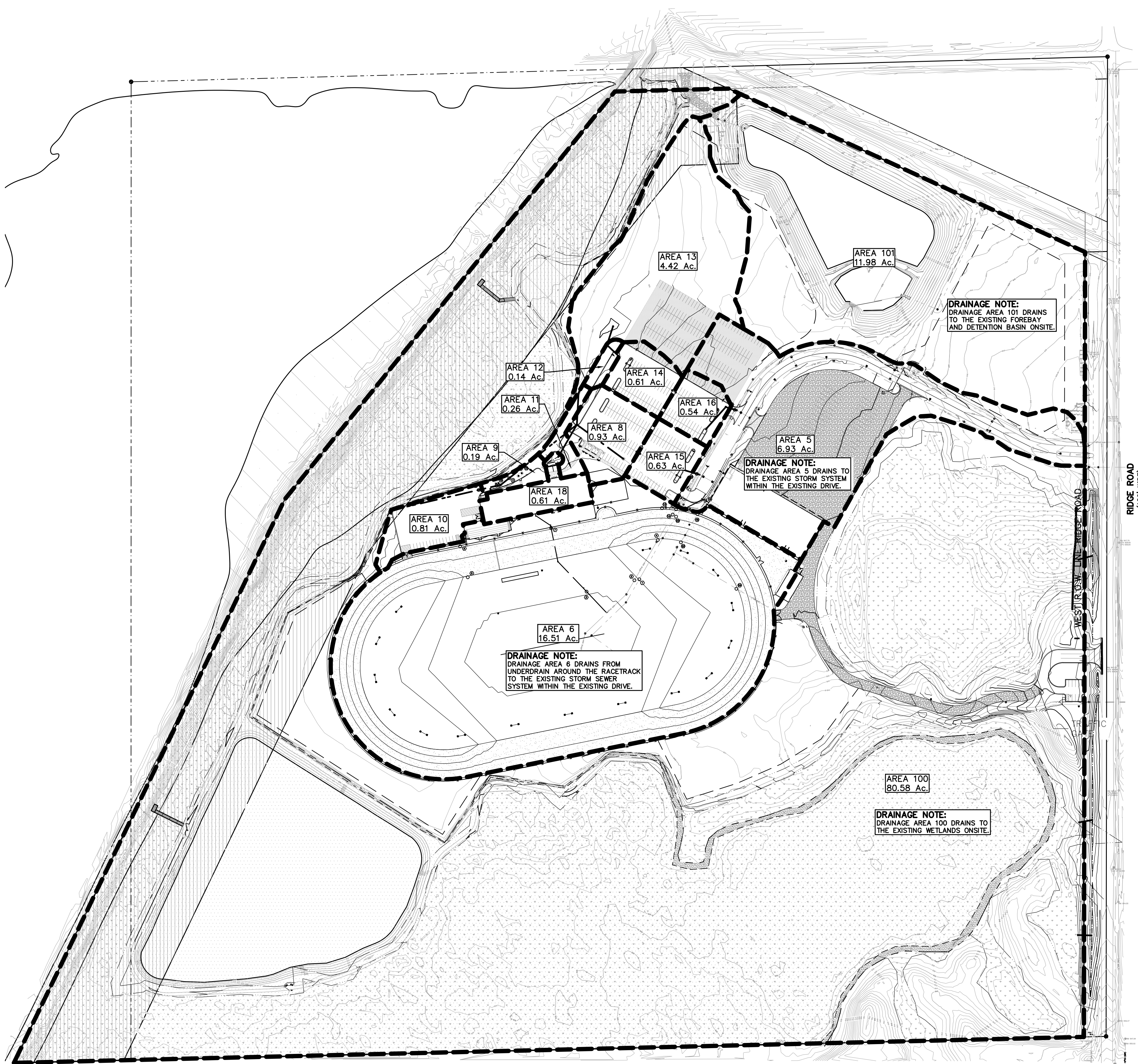
C-9.5



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-9\PROP-22-1338.rwg PLOT DATE: 3/17/2023 3:31 PM 30 February 2023



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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
DRAINAGE PLAN

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-10.1

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-10.DRW (12/22/2022 10:00 AM) - 1338.RVT
 PLOT DATE: 03/31/2023 10:47 AM 8/1/2023

EXISTING DETENTION CALCS/DETENTION BASIN DESIGN

(FROM RECORD DRAWINGS PREPARED BY PEA GROUP DATED DECEMBER 20, 2021)

Detention Calculations
Wayne County Method (2/2007 Design Standards)

PEA Project No. = 2018-234
BY: JWJ

Sedimentation Forebay Design

Table with columns for drainage area, runoff coefficient, volume required for first flush, elevation, volume provided, and riser outlet pipe area.

Table for riser outlet pipe slope, check velocity at full pipe flow, outlet weir design, and storm sewer system design.

DETENTION BASIN CALCULATIONS

PEA Project No. = 2018-234
BY: JWJ

Note: Basin has a pumped outlet

Detention Basin Design

Main calculation table for detention basin design, including tributary area, maximum outflow, actual maximum release rate, and riser outlet pipe details.

STORM SEWER SYSTEM DESIGN

Summary table for storm sewer system design with columns for I, C, T, Pipe 'n' Value, B, D, E.

Riser Outlet Pipe and Flood Control Flow Restrictor

Table for riser outlet pipe and flood control flow restrictor, showing diameter, flow rates, and pipe slope.

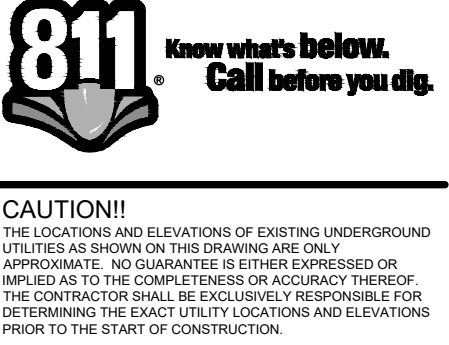
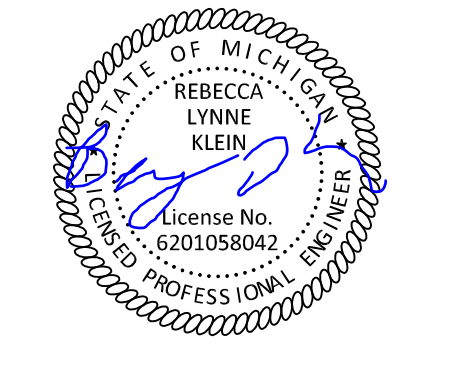
STORM WATER NARRATIVE: PREVIOUSLY THE DEVELOPMENT SITE WAS DESIGNED AND CONSTRUCTED TO BE A CONDO DEVELOPMENT FOR 8 INDUSTRIAL UNITS...

DETENTION CALCULATIONS PER UPDATED WAYNE COUNTY STANDARDS

Table for site drainage data, showing existing and proposed areas for natural greenspace, wooded area, and impervious area.

Table for rainfall intensity, CPVC channel protection volume control volume, and water quality control calculations.

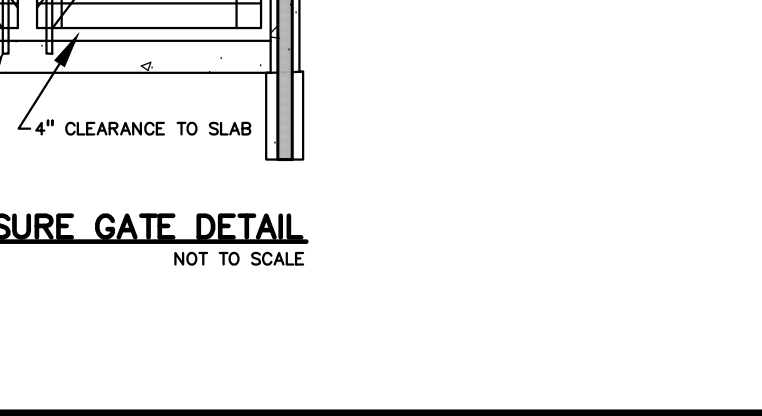
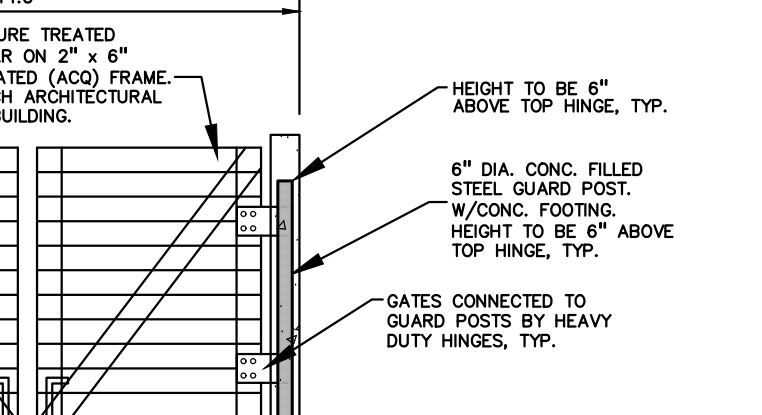
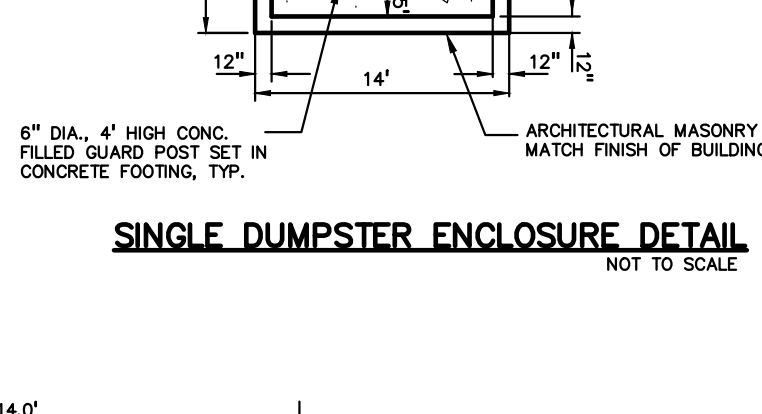
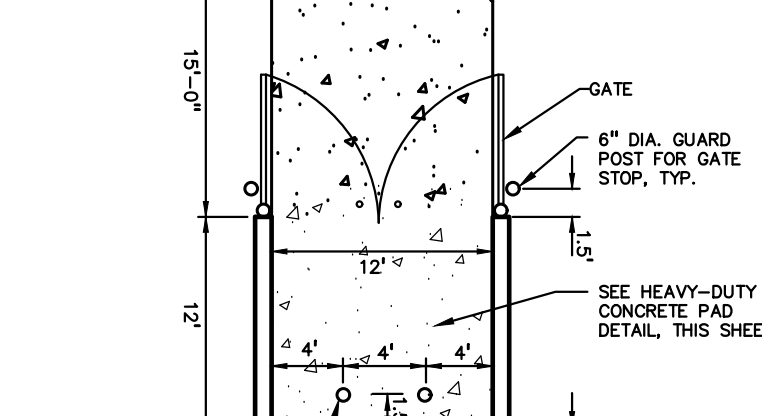
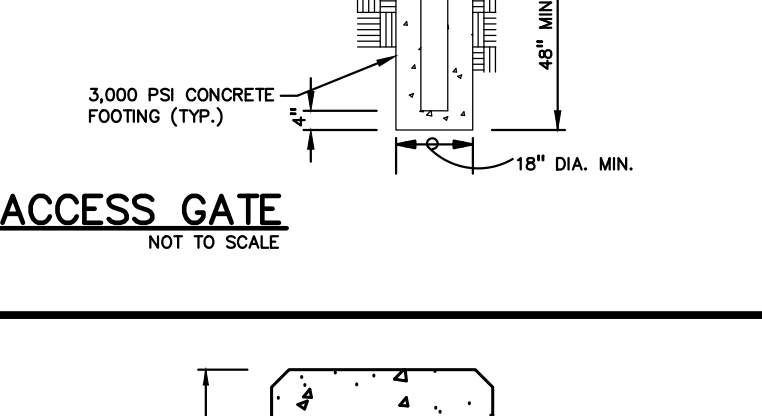
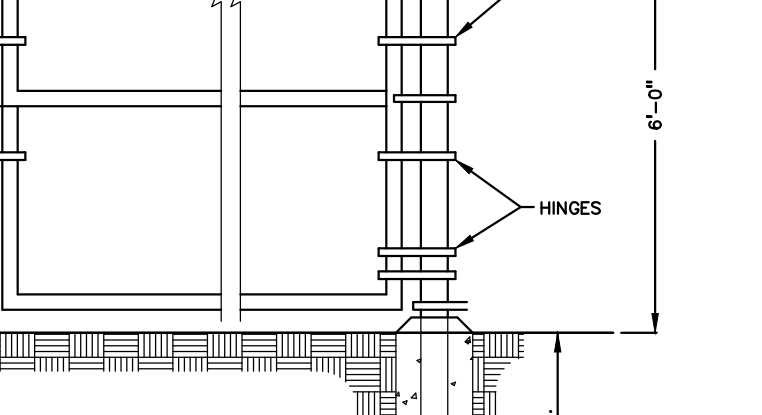
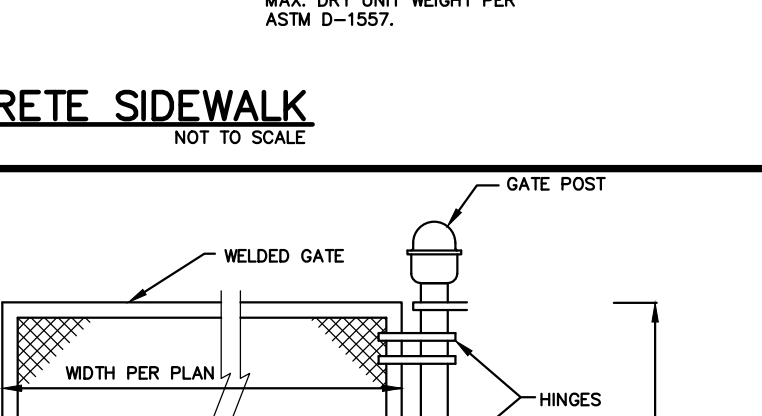
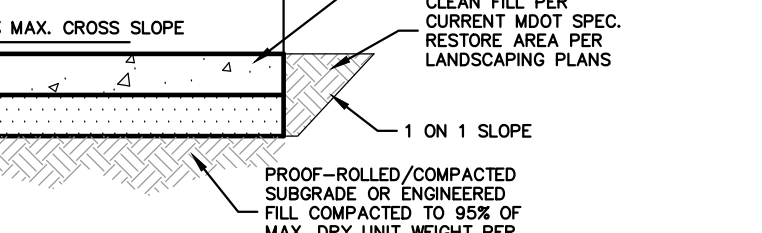
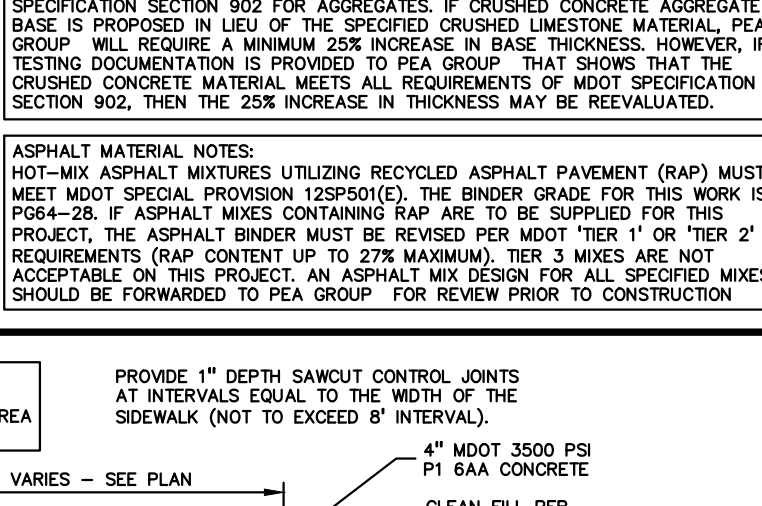
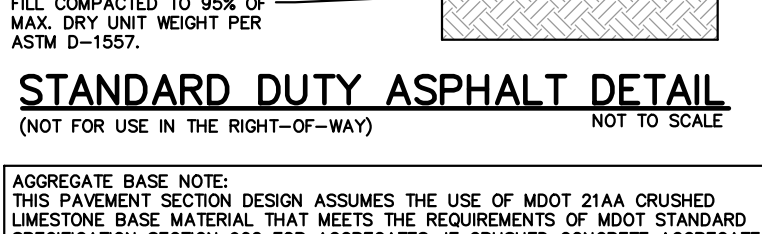
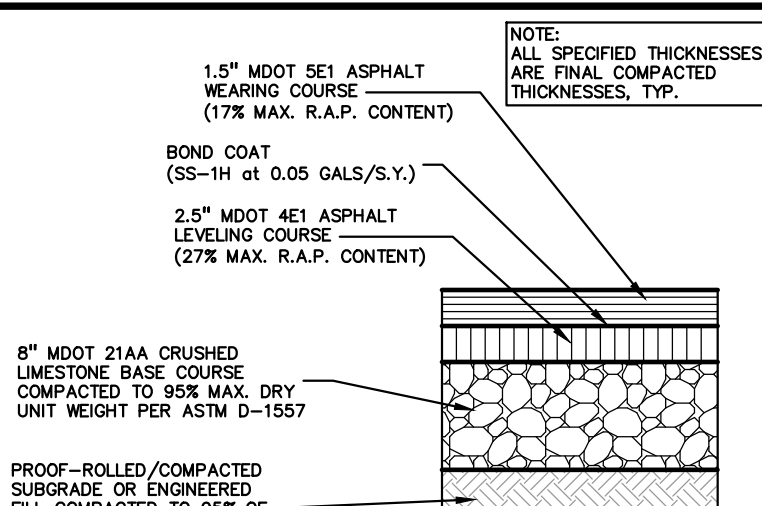
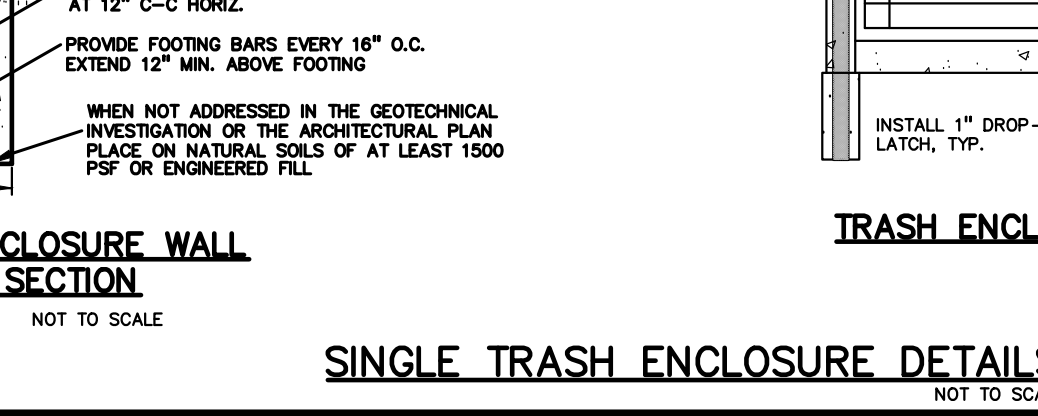
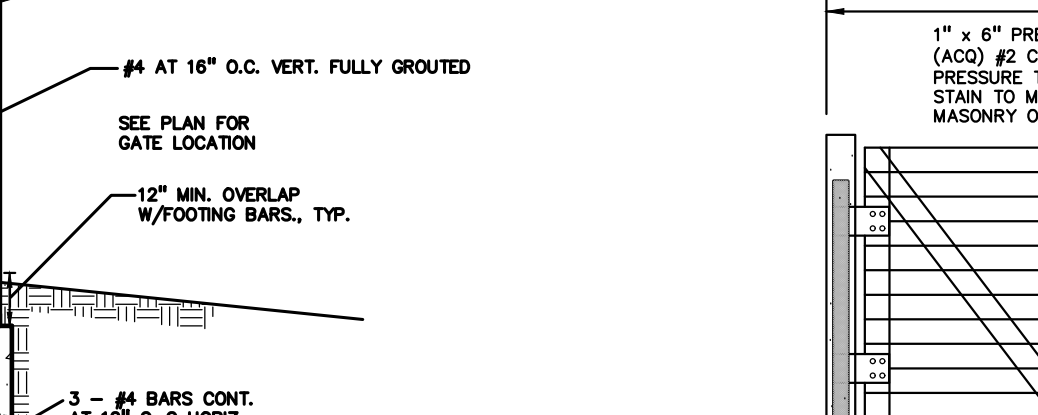
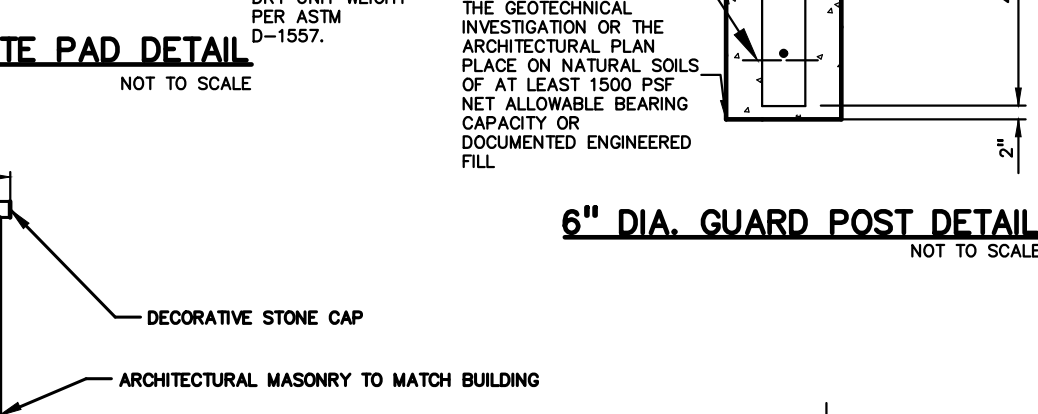
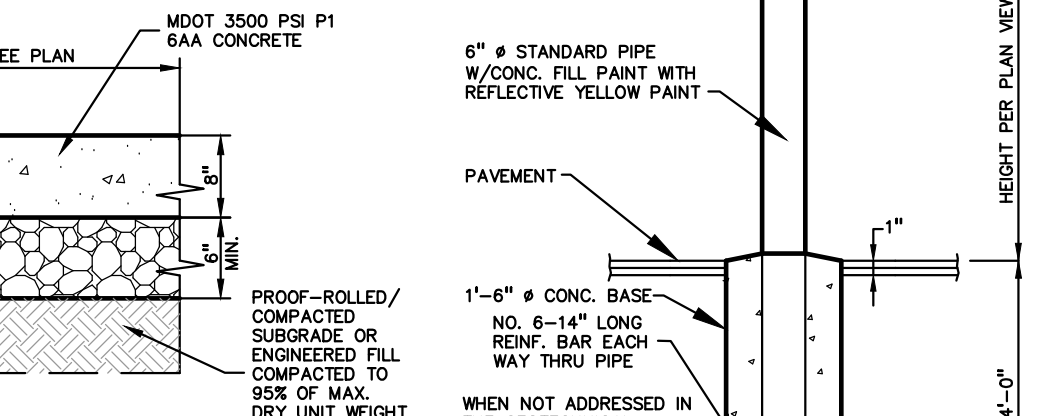
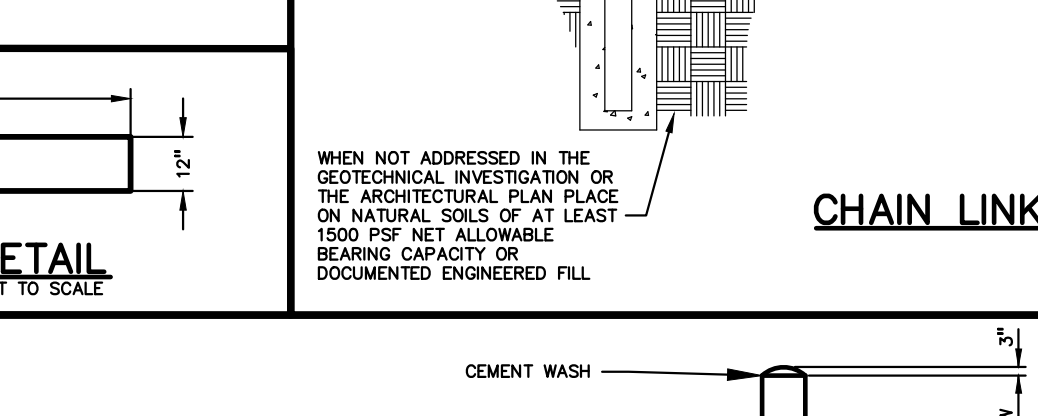
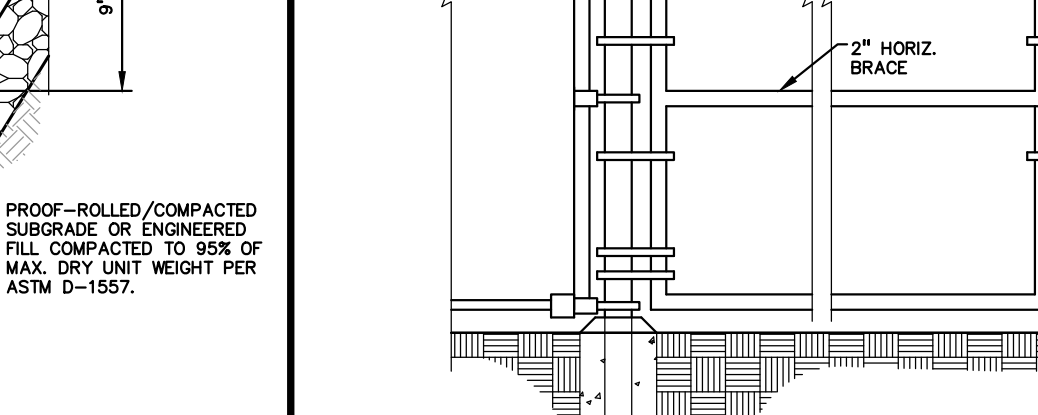
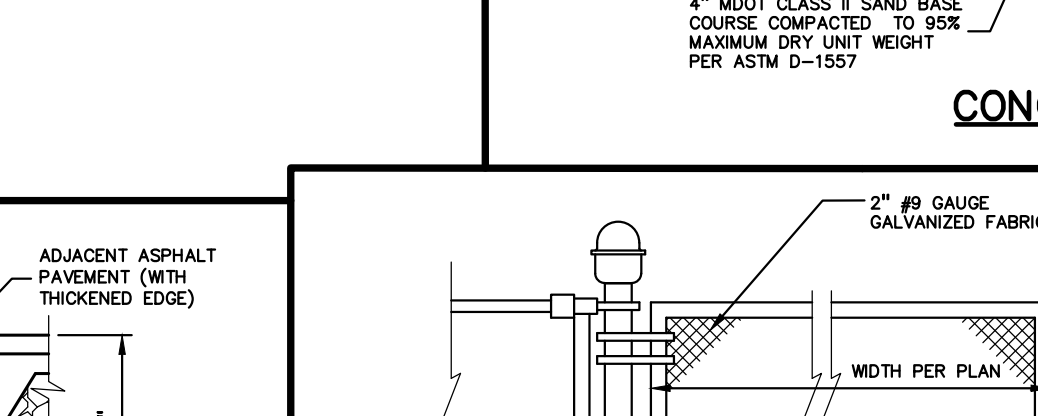
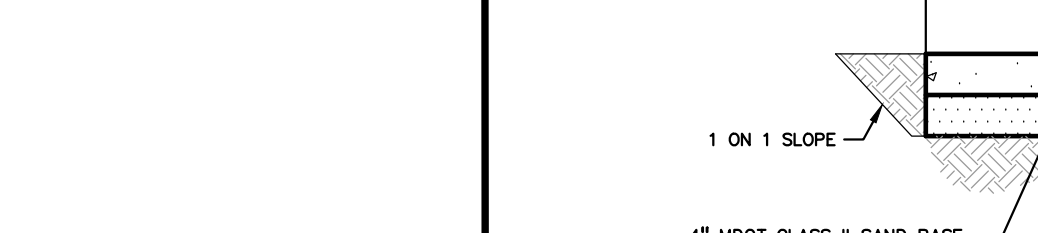
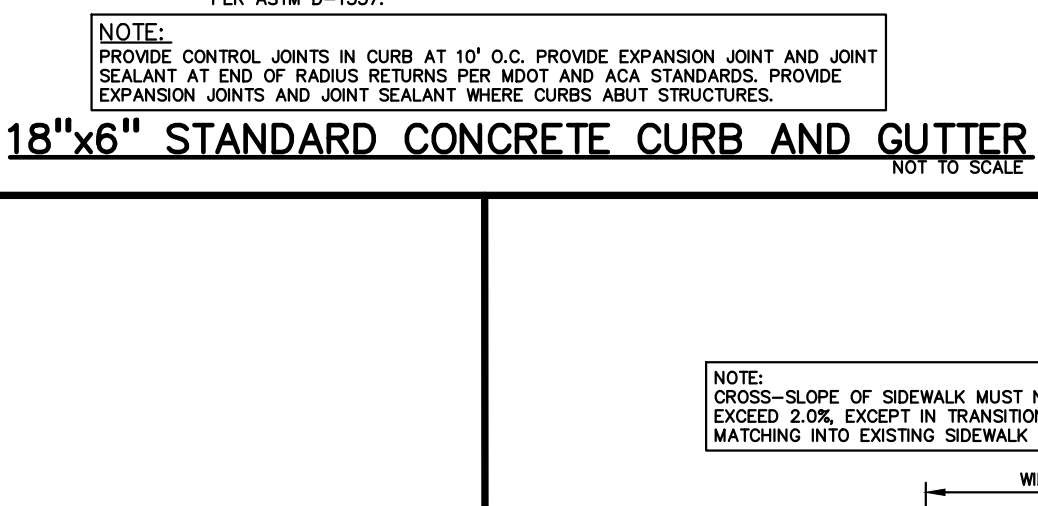
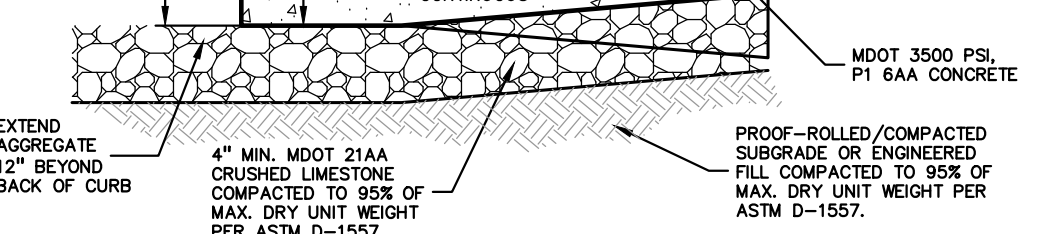
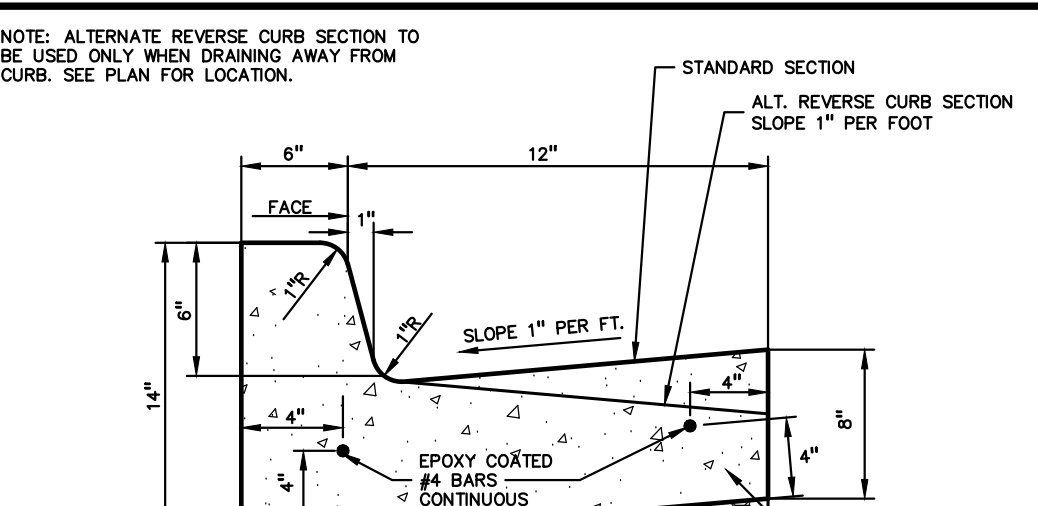
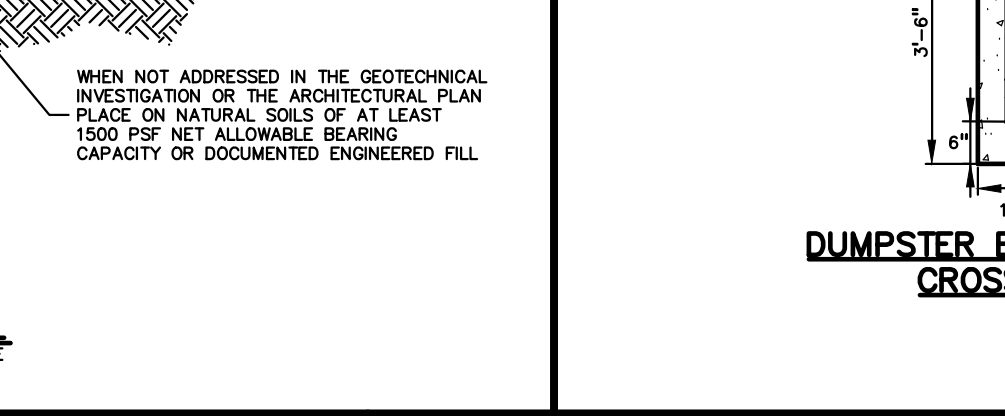
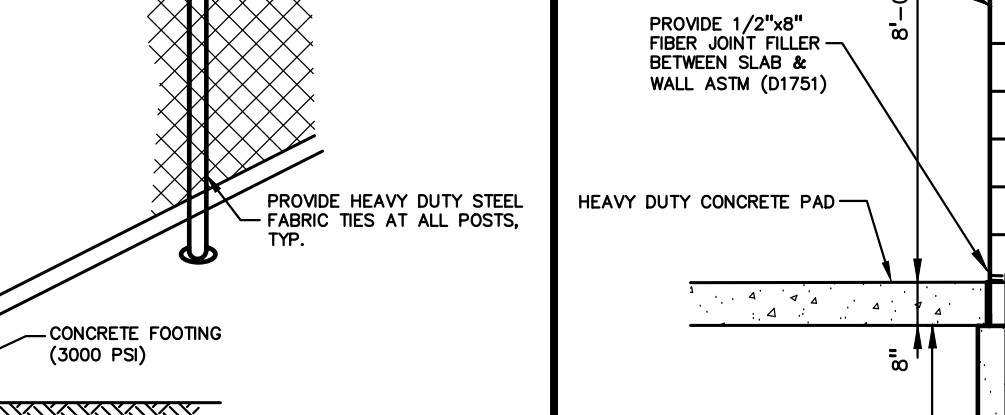
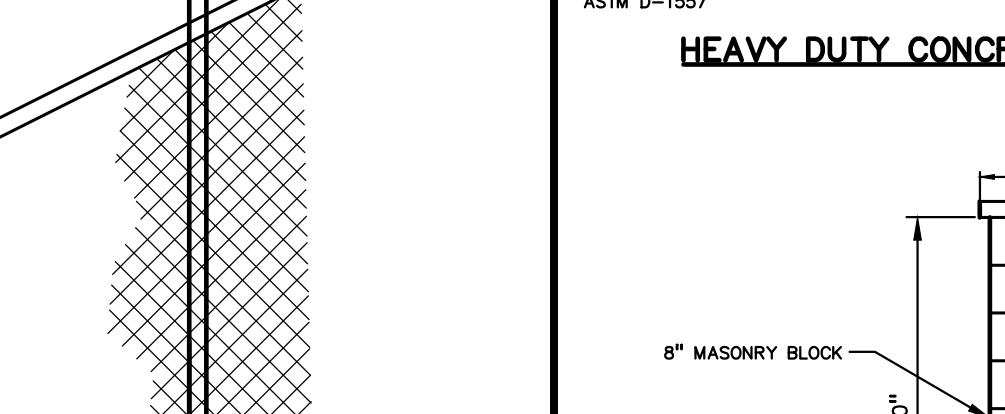
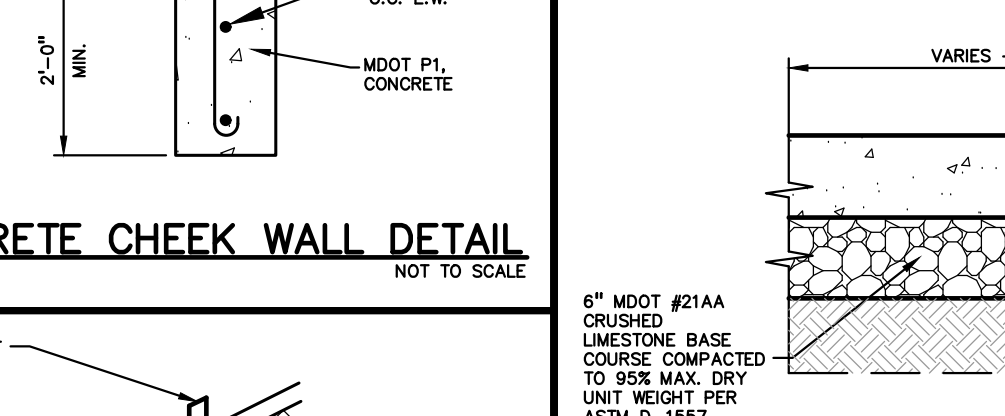
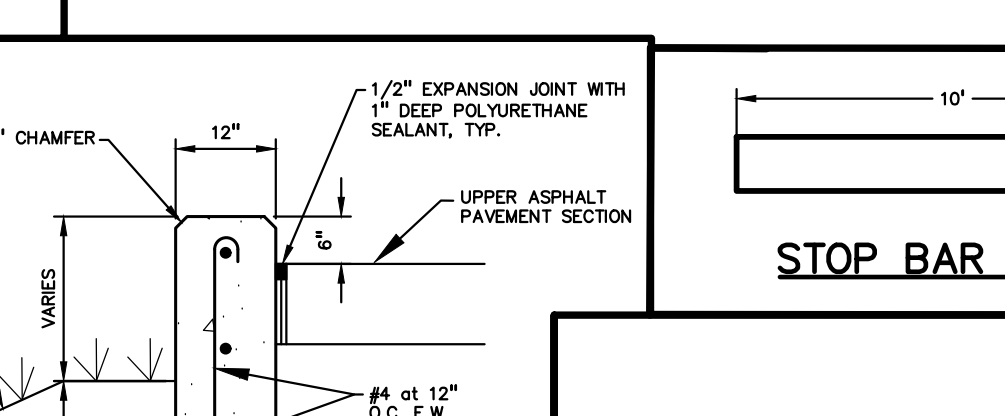
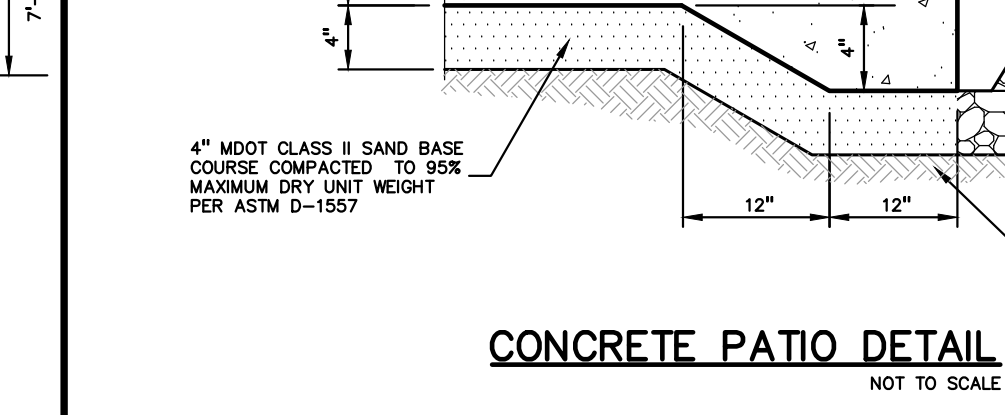
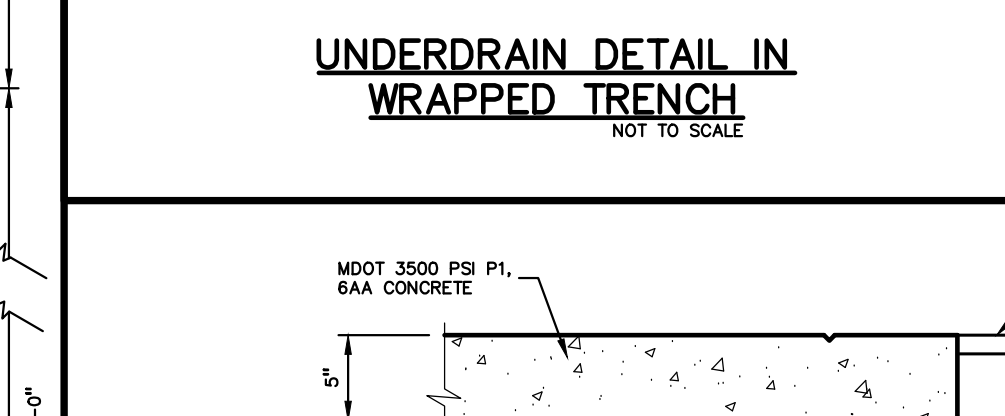
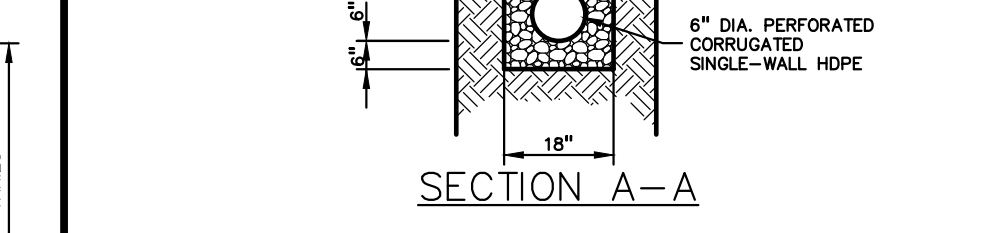
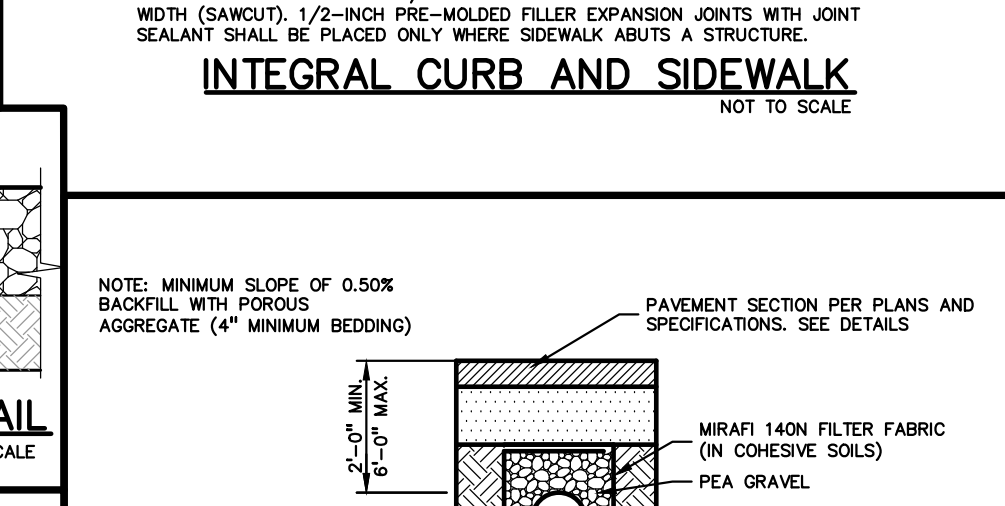
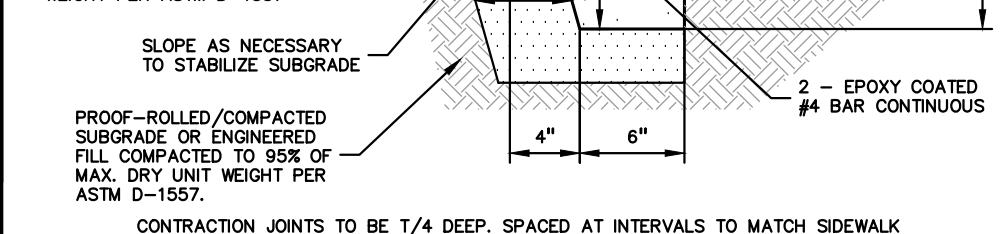
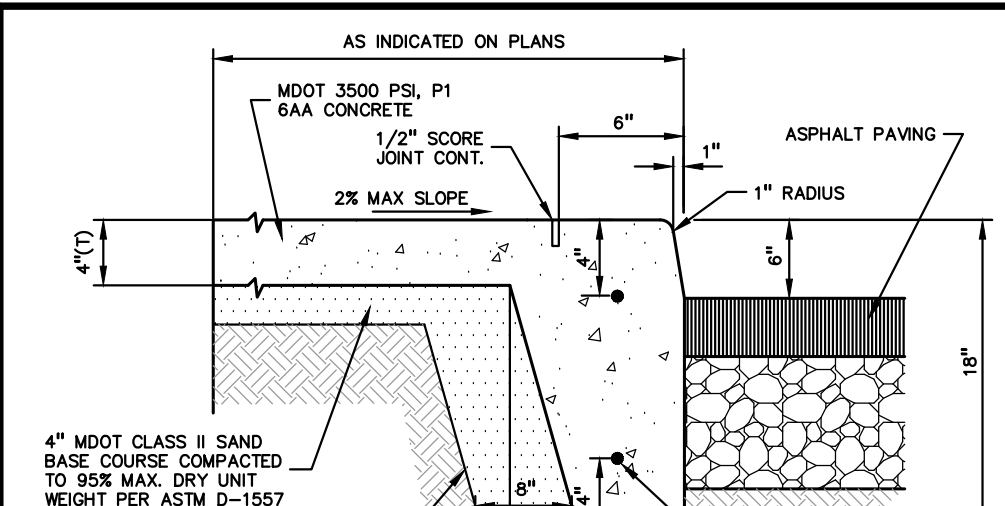
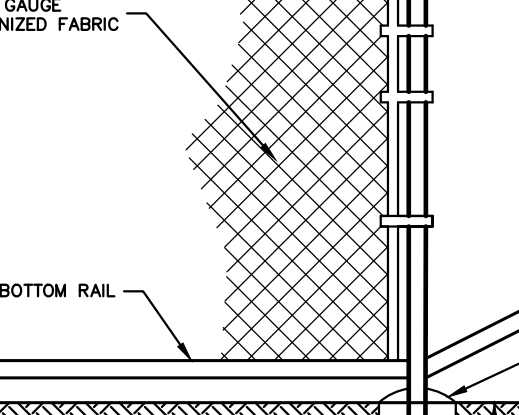
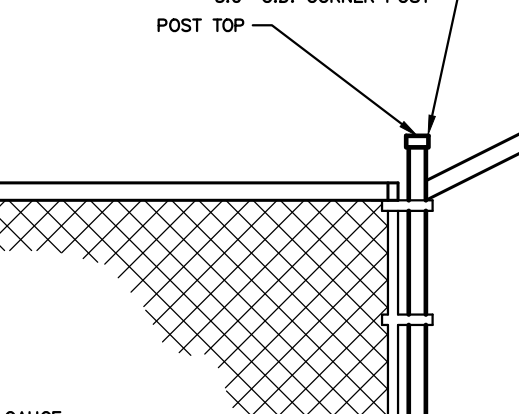
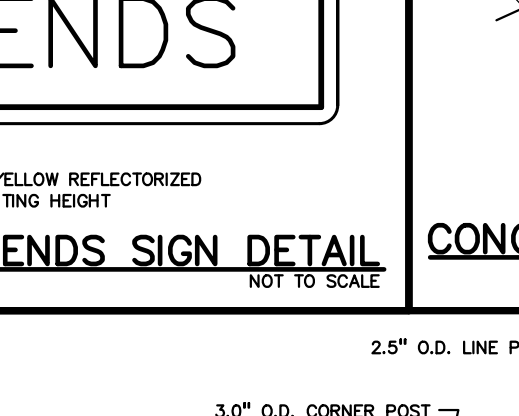
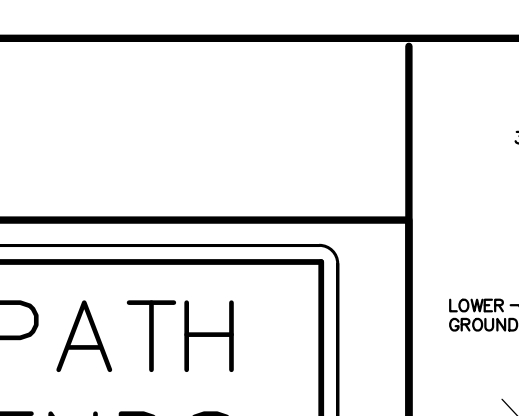
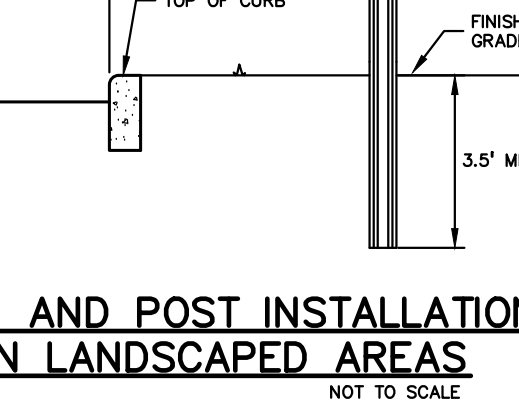
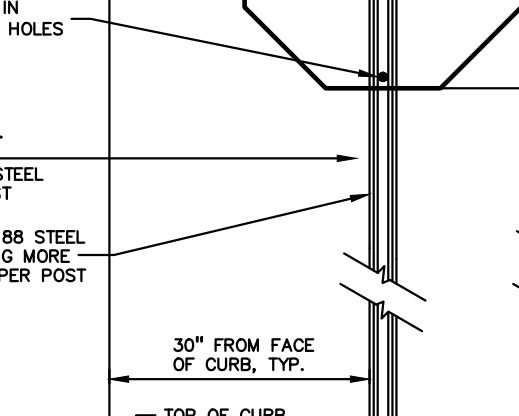
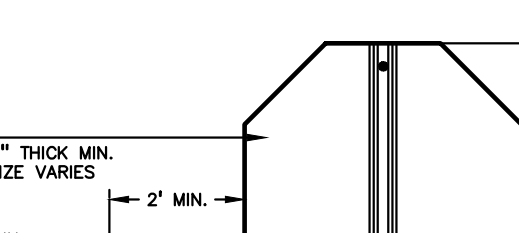
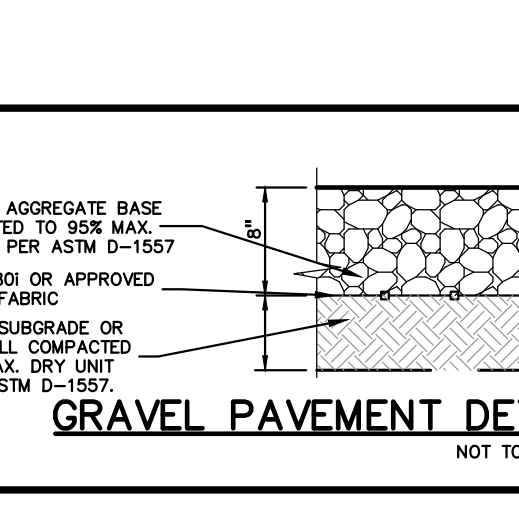
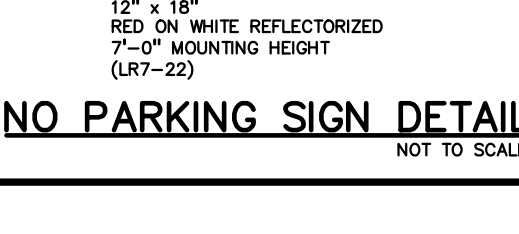
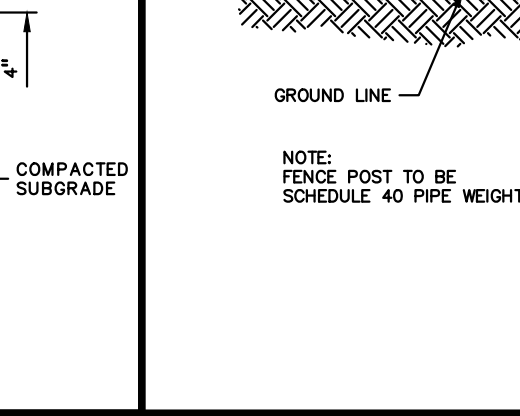
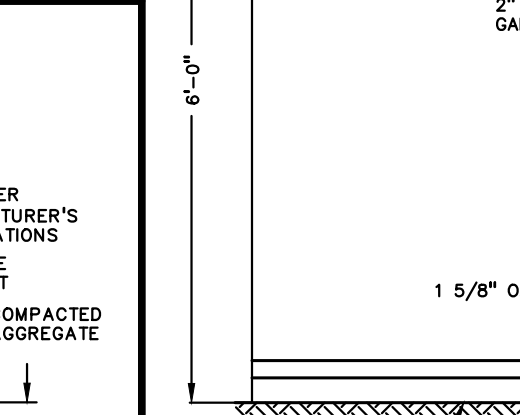
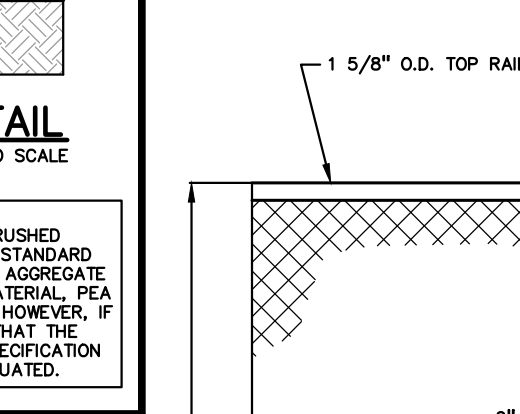
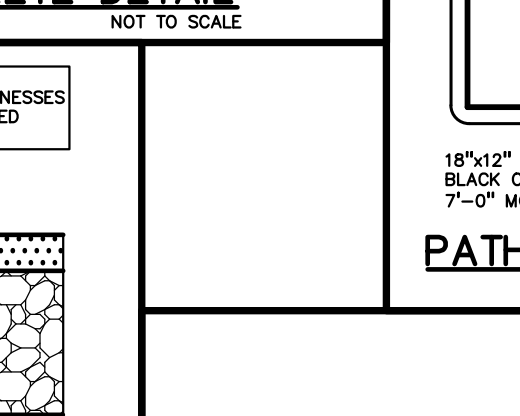
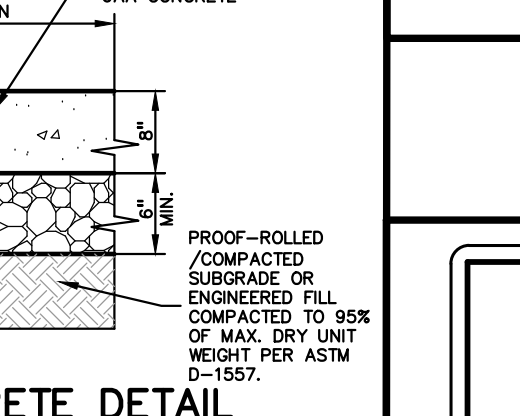
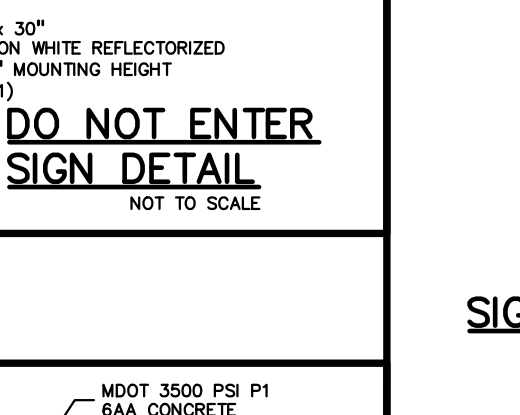
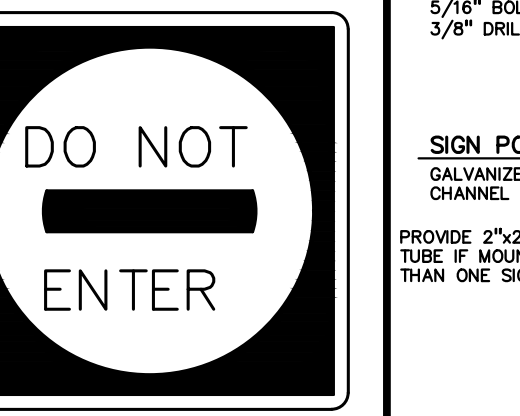
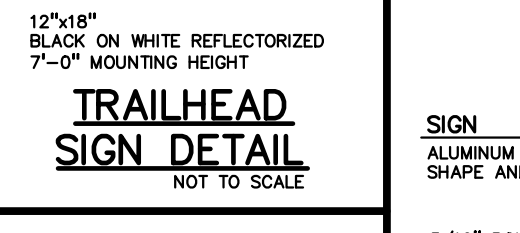
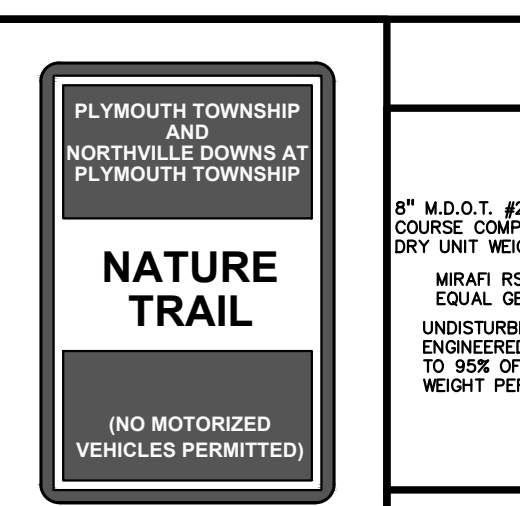
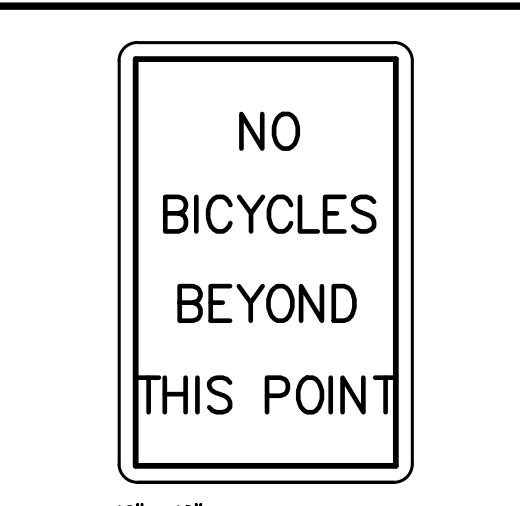
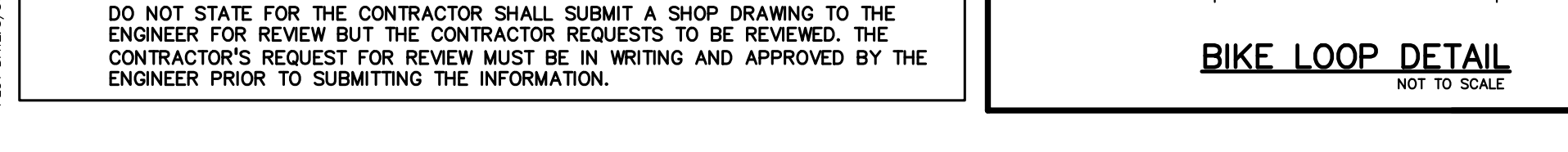
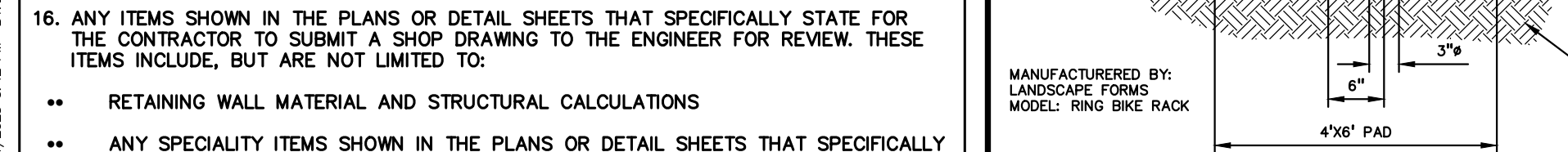
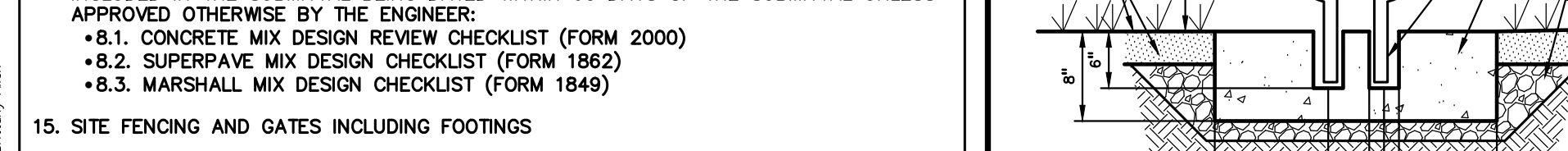
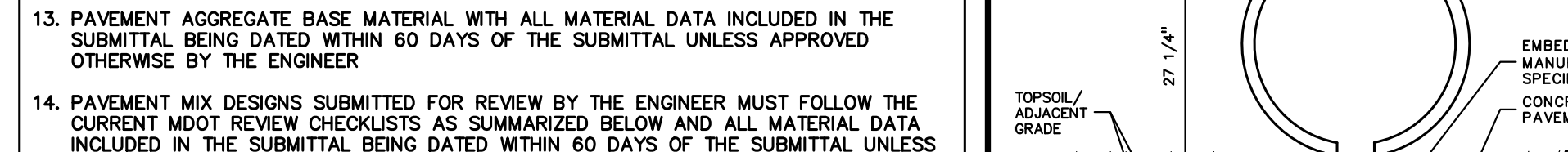
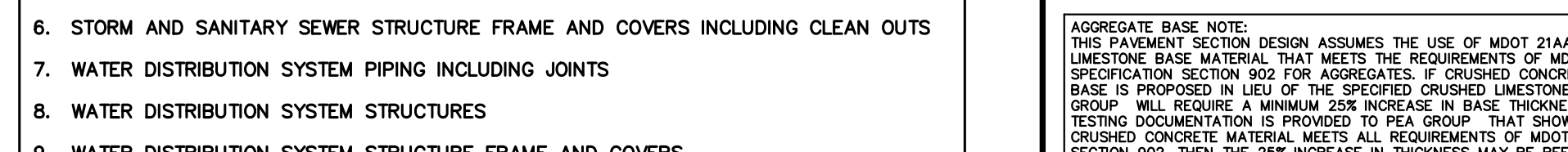
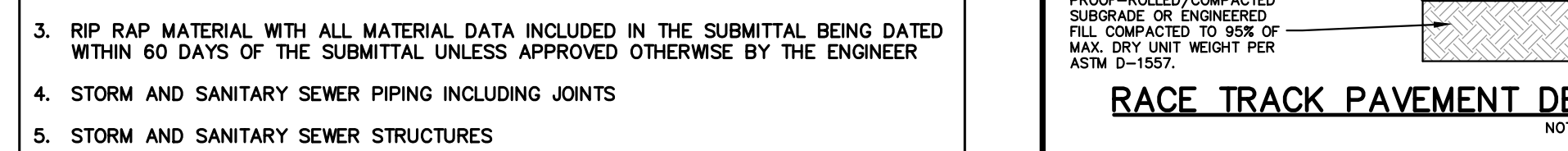
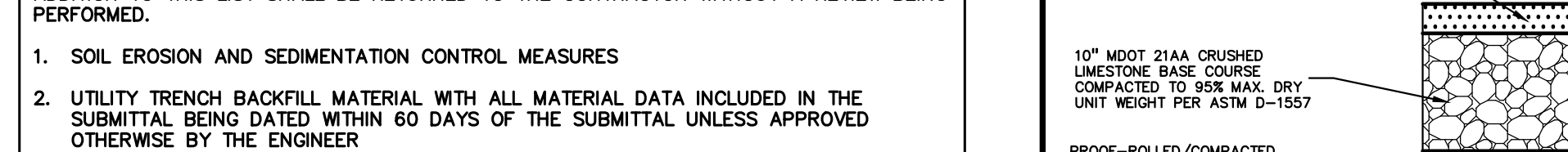
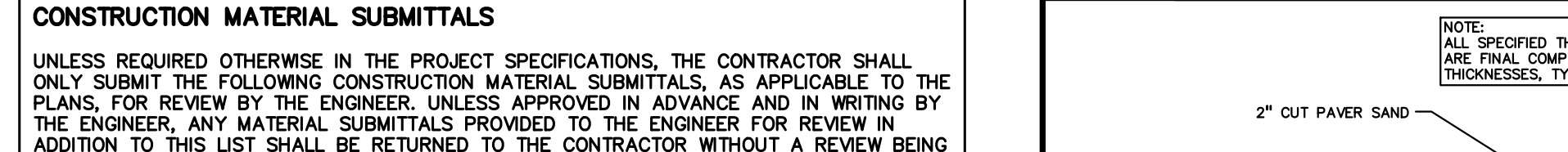
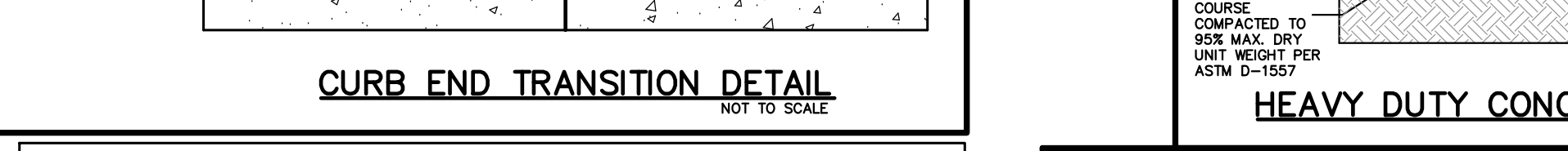
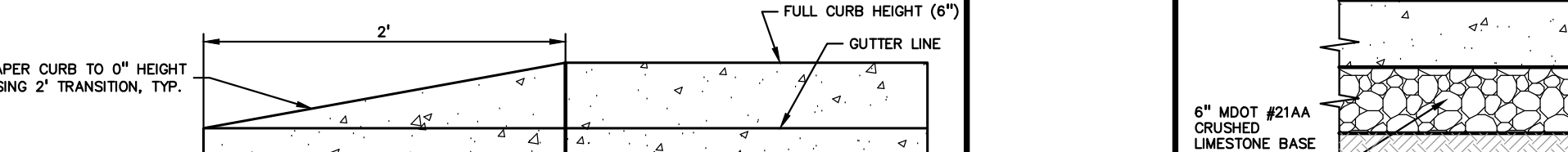
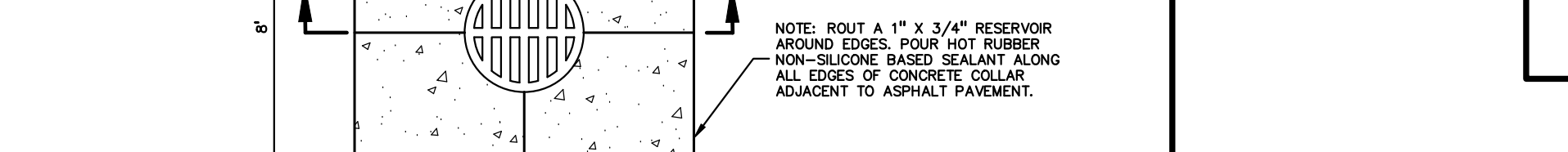
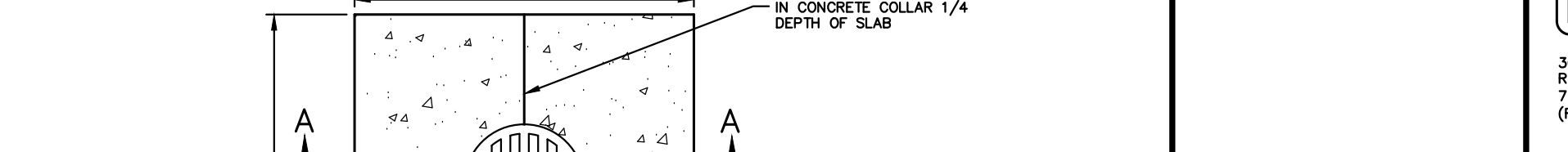
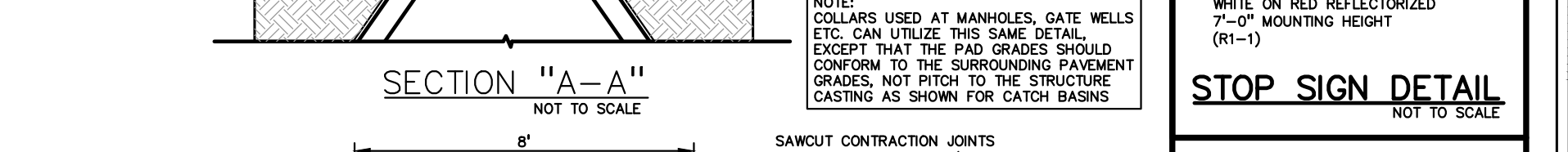
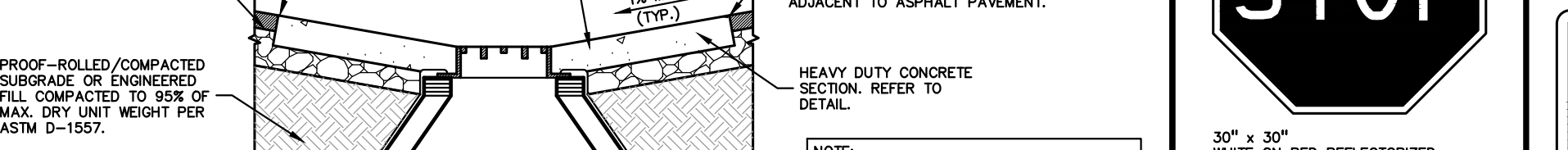
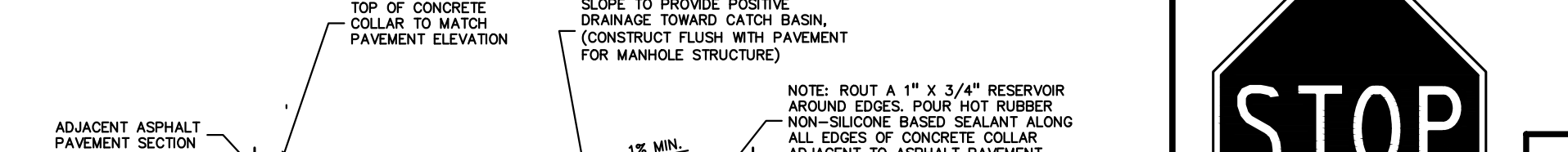
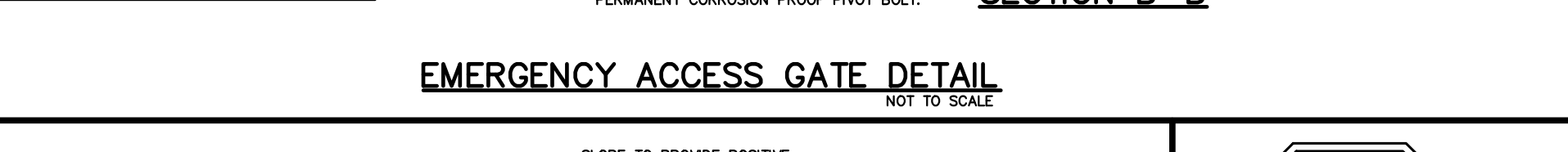
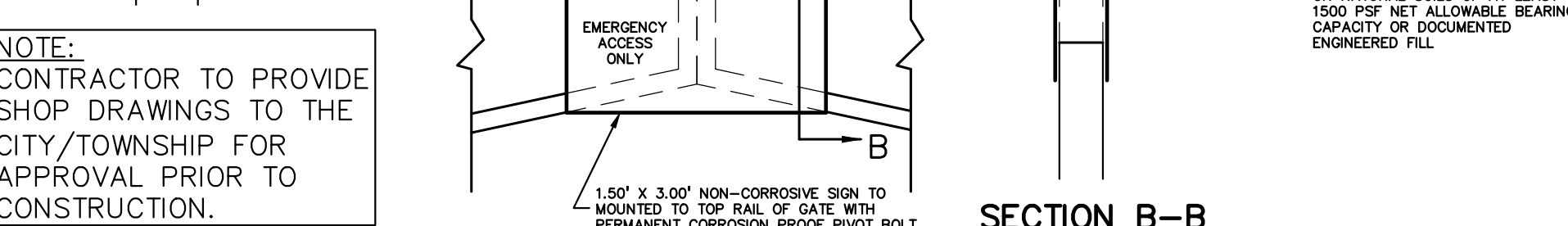
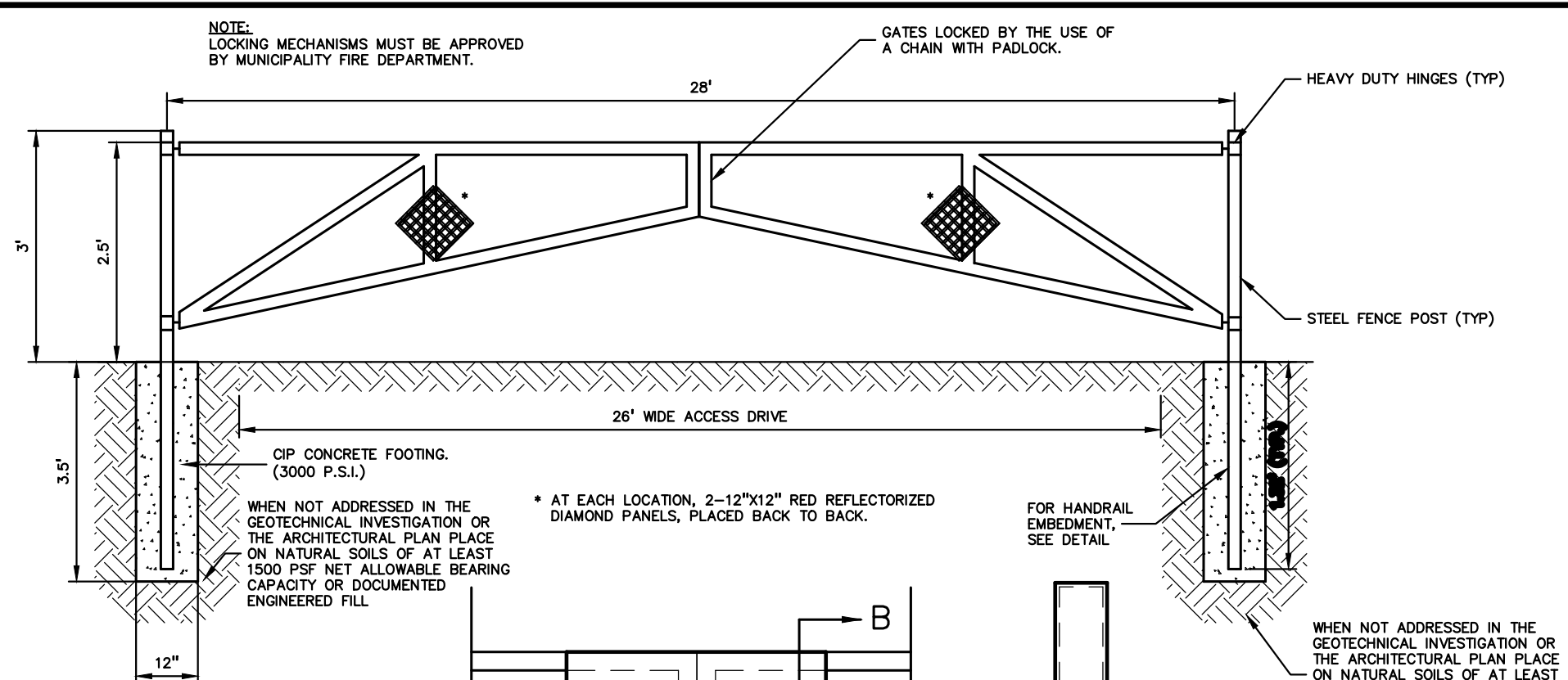
Vertical text on the left margin: S:\PROJECTS\2022\2022-1338\ROAD\INDUSTRIAL_REDEVELOPMENT\CONSTRUCTION\C-10.DRAWN--22-1338.rvt



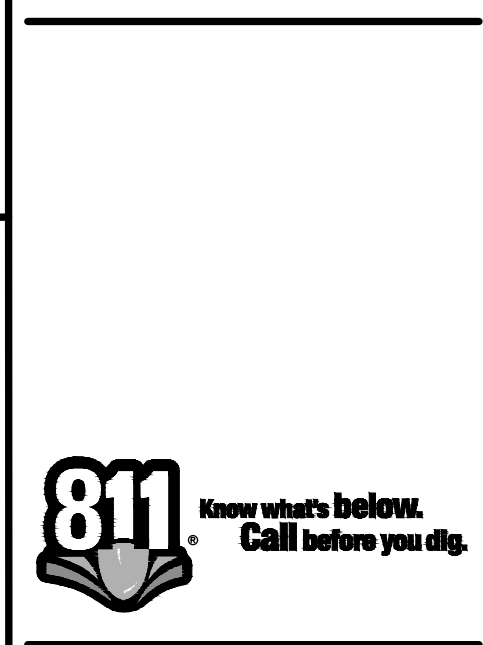
CAUTION!! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE...

CLIENT: JR MILITELLO REALTY
PROJECT TITLE: NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP

DRAWING TITLE: STORM CALCULATIONS
PEA JOB NO.: 2022-1338
ORIGINAL ISSUE DATE: MARCH 31, 2023



CONSTRUCTION MATERIAL SUBMITTALS
UNLESS REQUIRED OTHERWISE IN THE PROJECT SPECIFICATIONS, THE CONTRACTOR SHALL ONLY SUBMIT THE FOLLOWING CONSTRUCTION MATERIAL SUBMITTALS, AS APPLICABLE TO THE PLANS, FOR REVIEW BY THE ENGINEER...

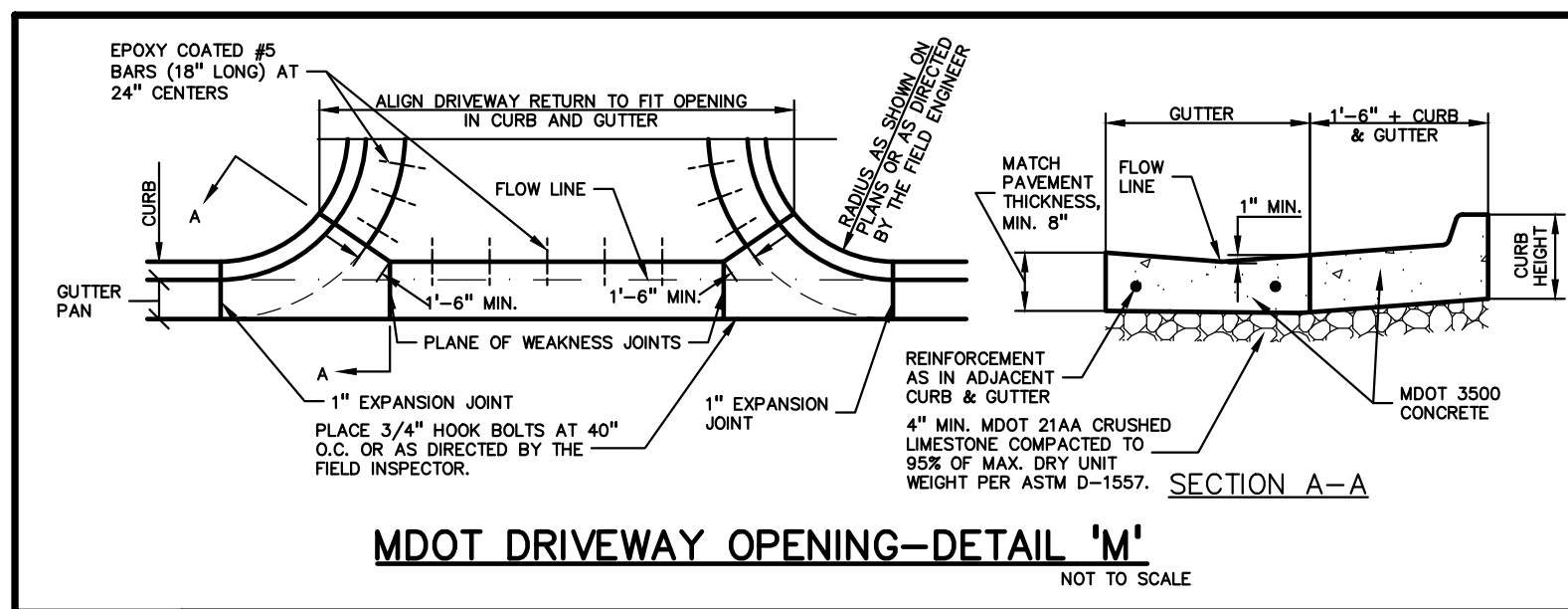


CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE ONLY AS SHOWN OR APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

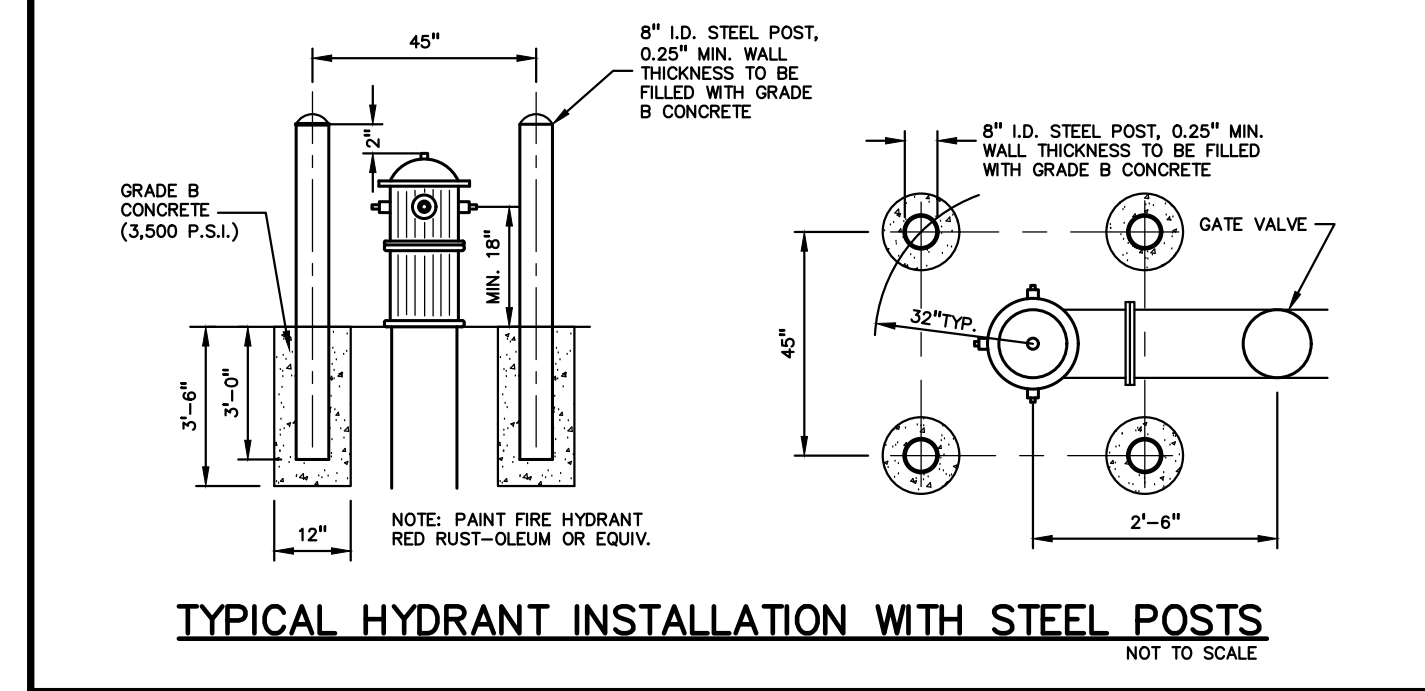
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

ORIGINAL ISSUE DATE: MARCH 31, 2023
DRAWING TITLE: NOTES AND DETAILS - SHEET 1
PEA JOB NO. 2022-1338
P.M. BK
DN. BLA
DES. BK
DRAWING NUMBER: C-11.1

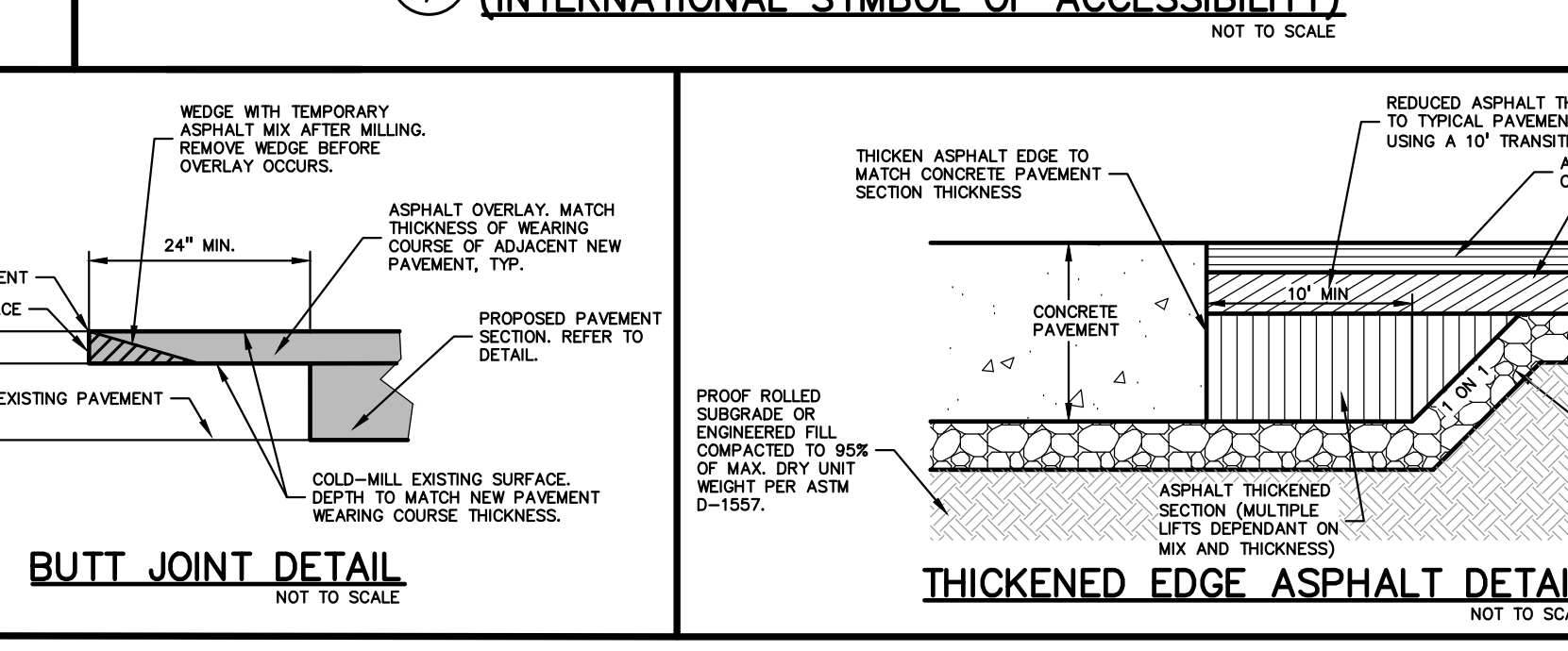
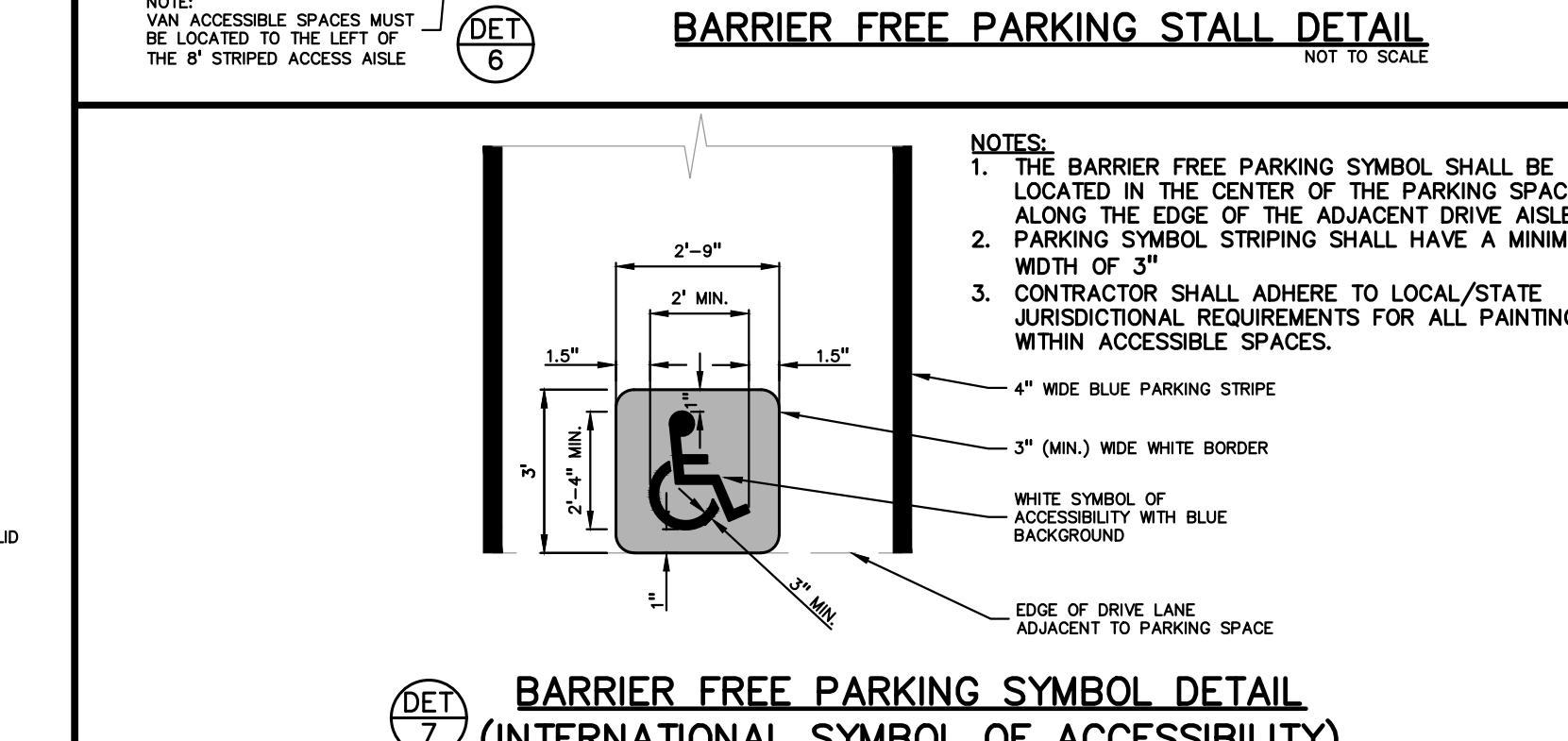
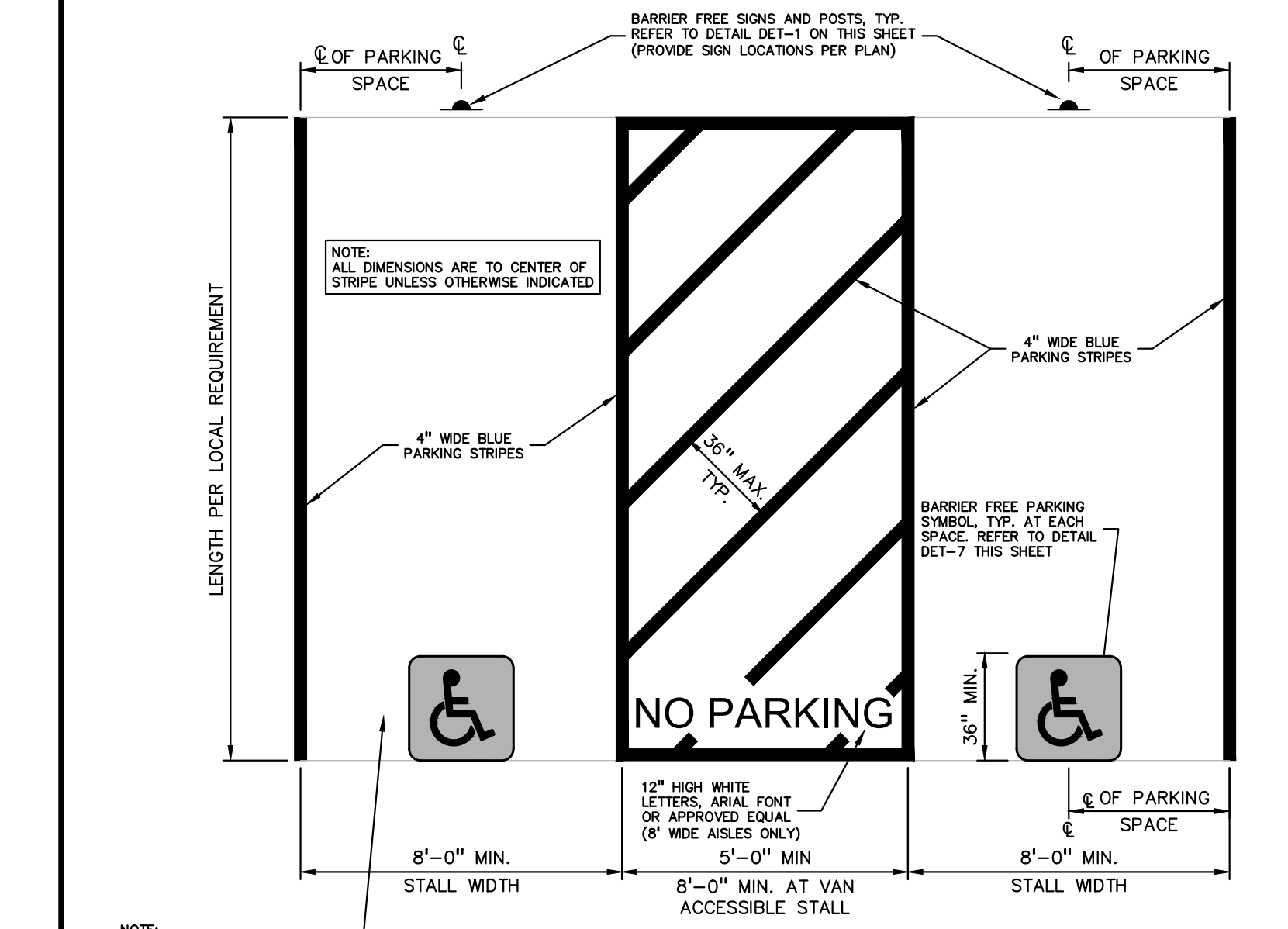
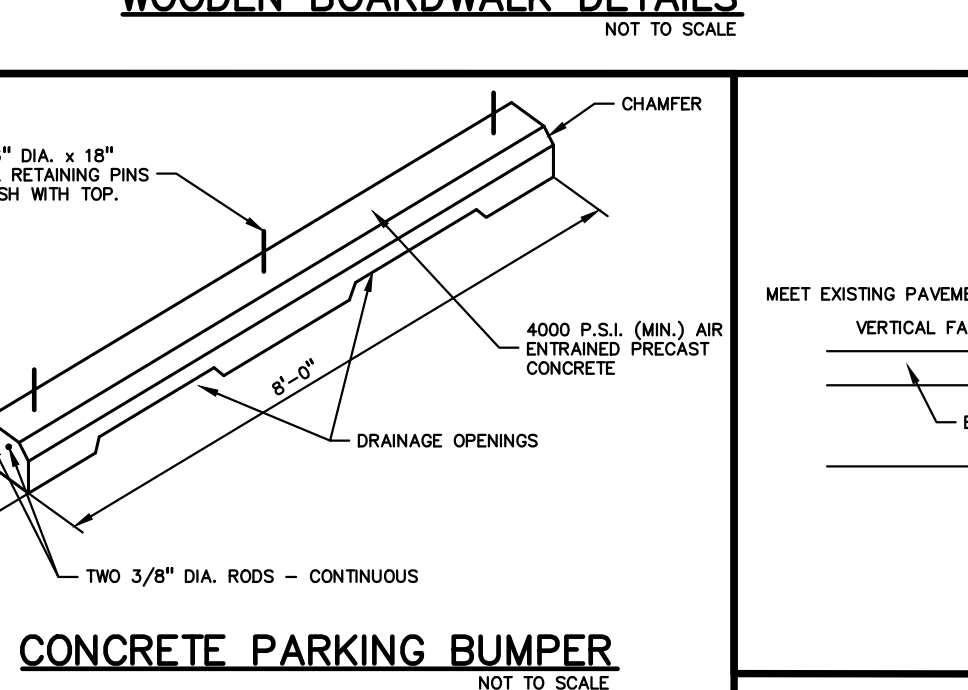
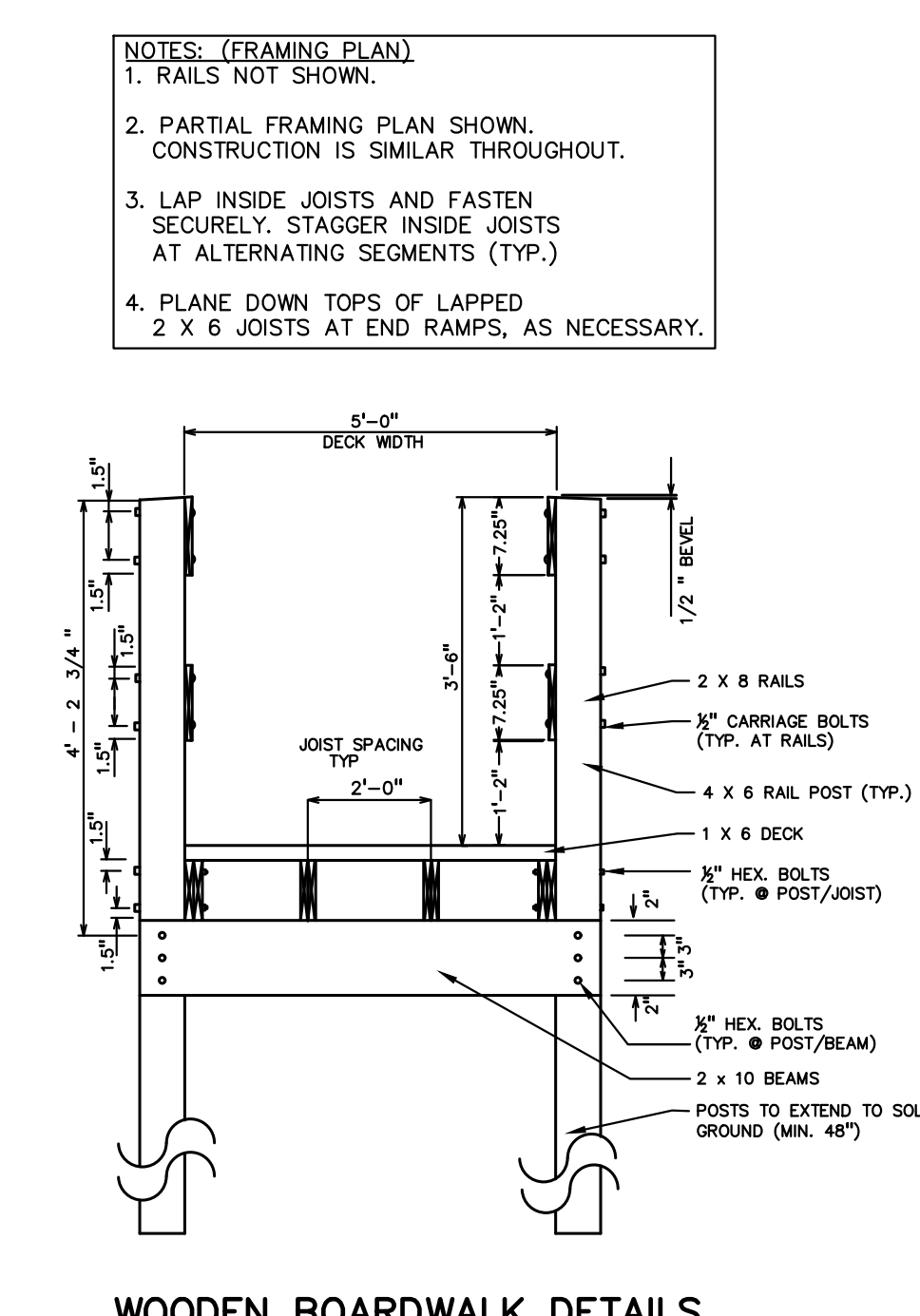
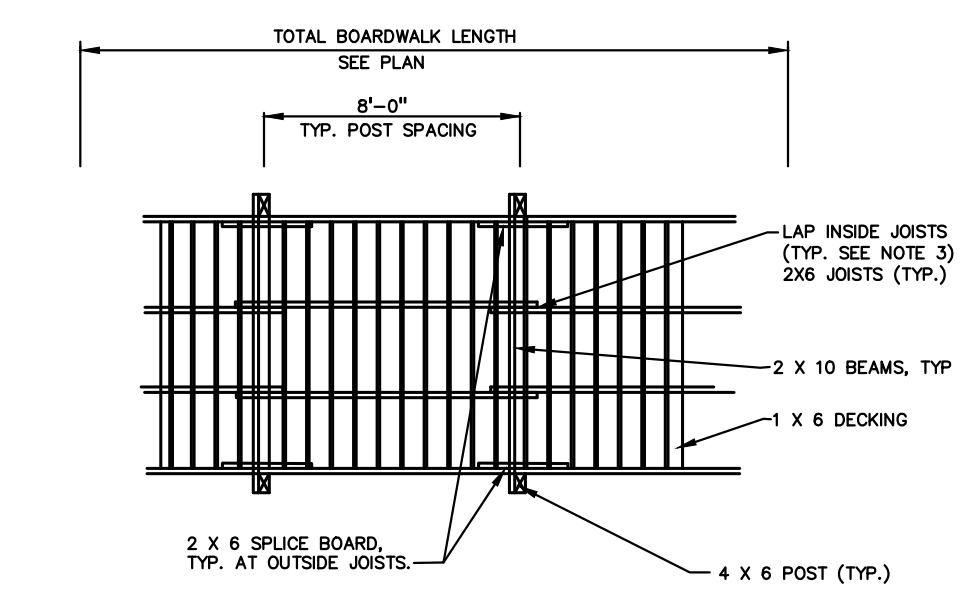
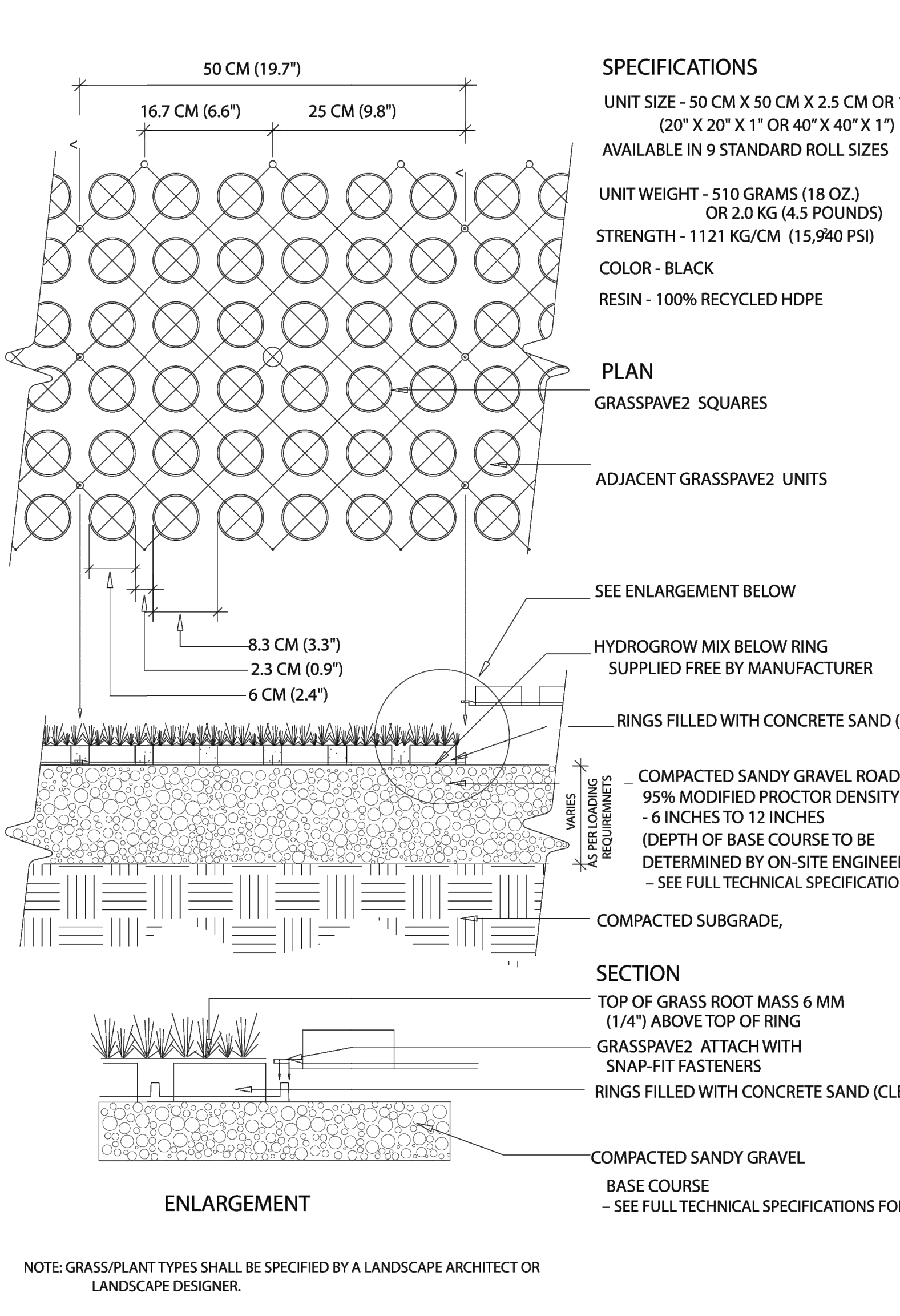


GENERAL BARRIER FREE NOTES:

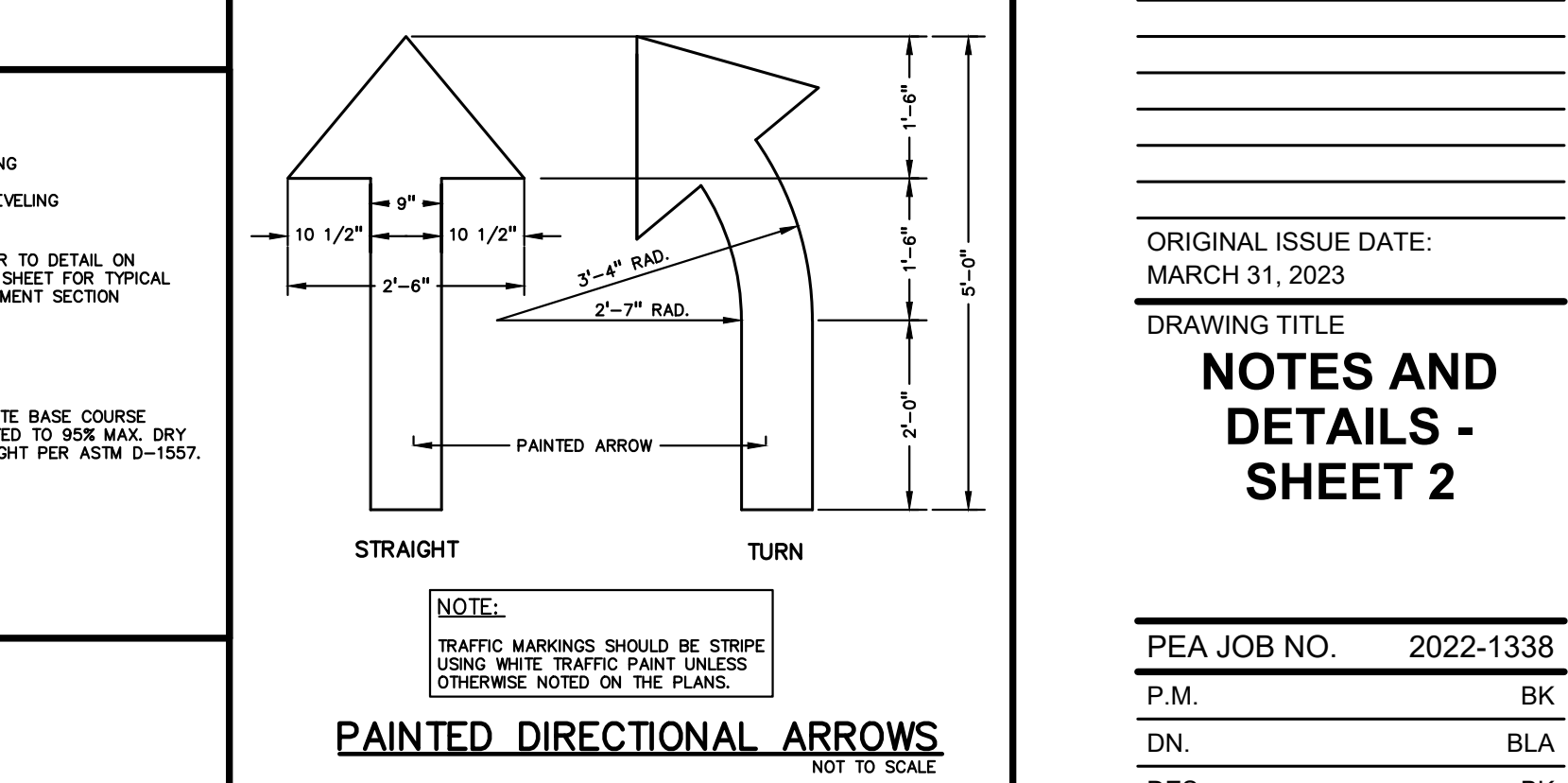
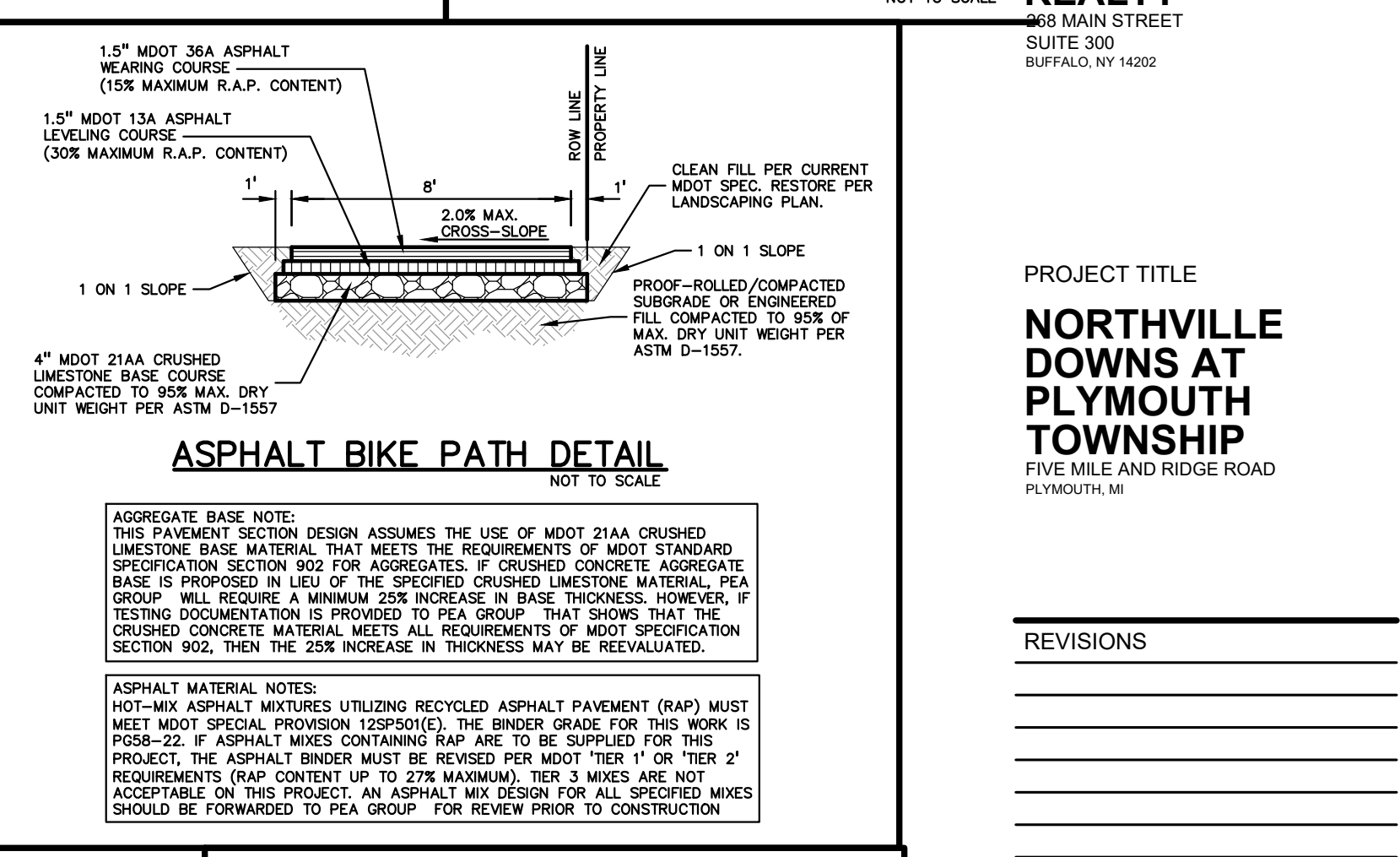
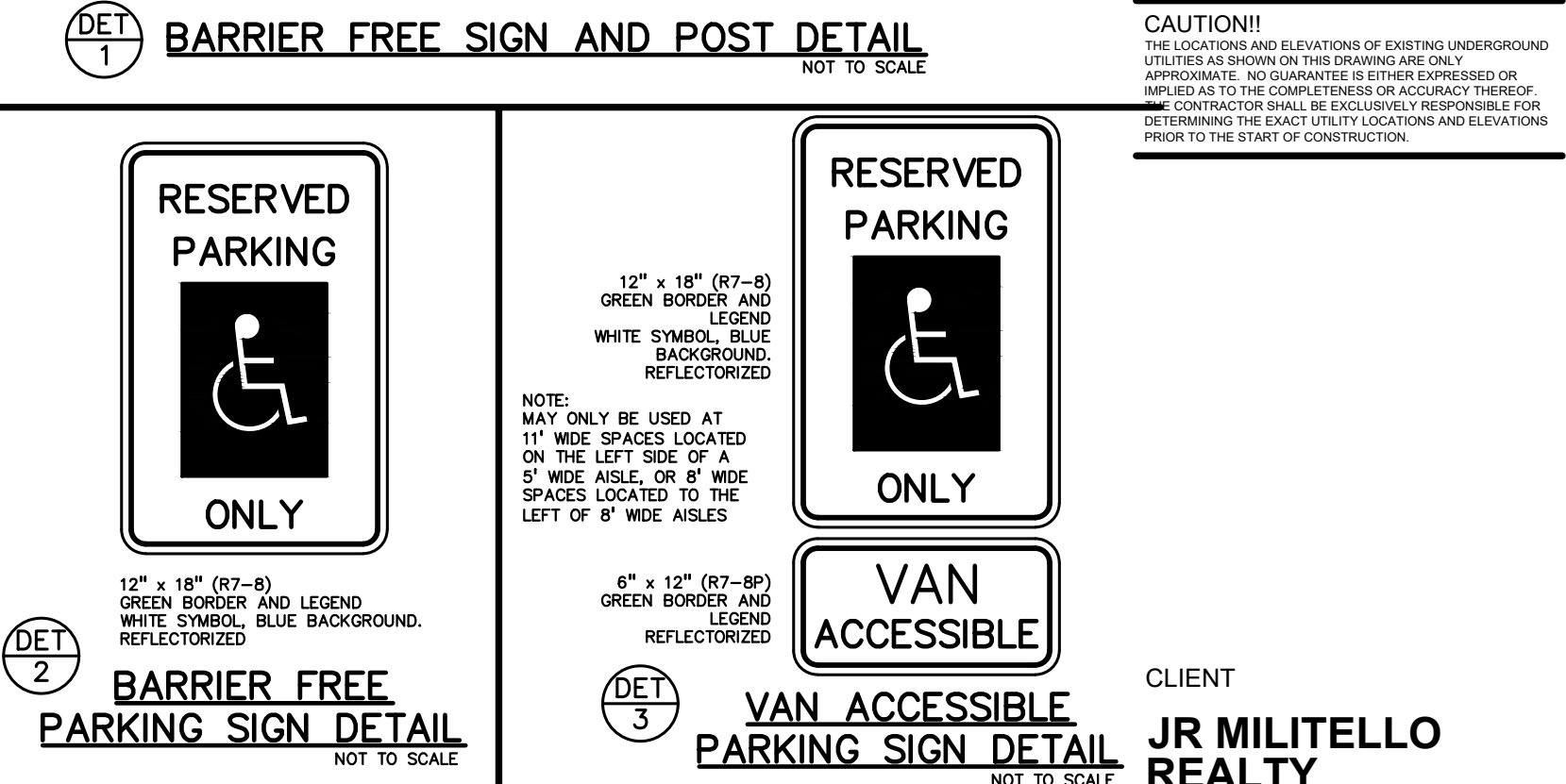
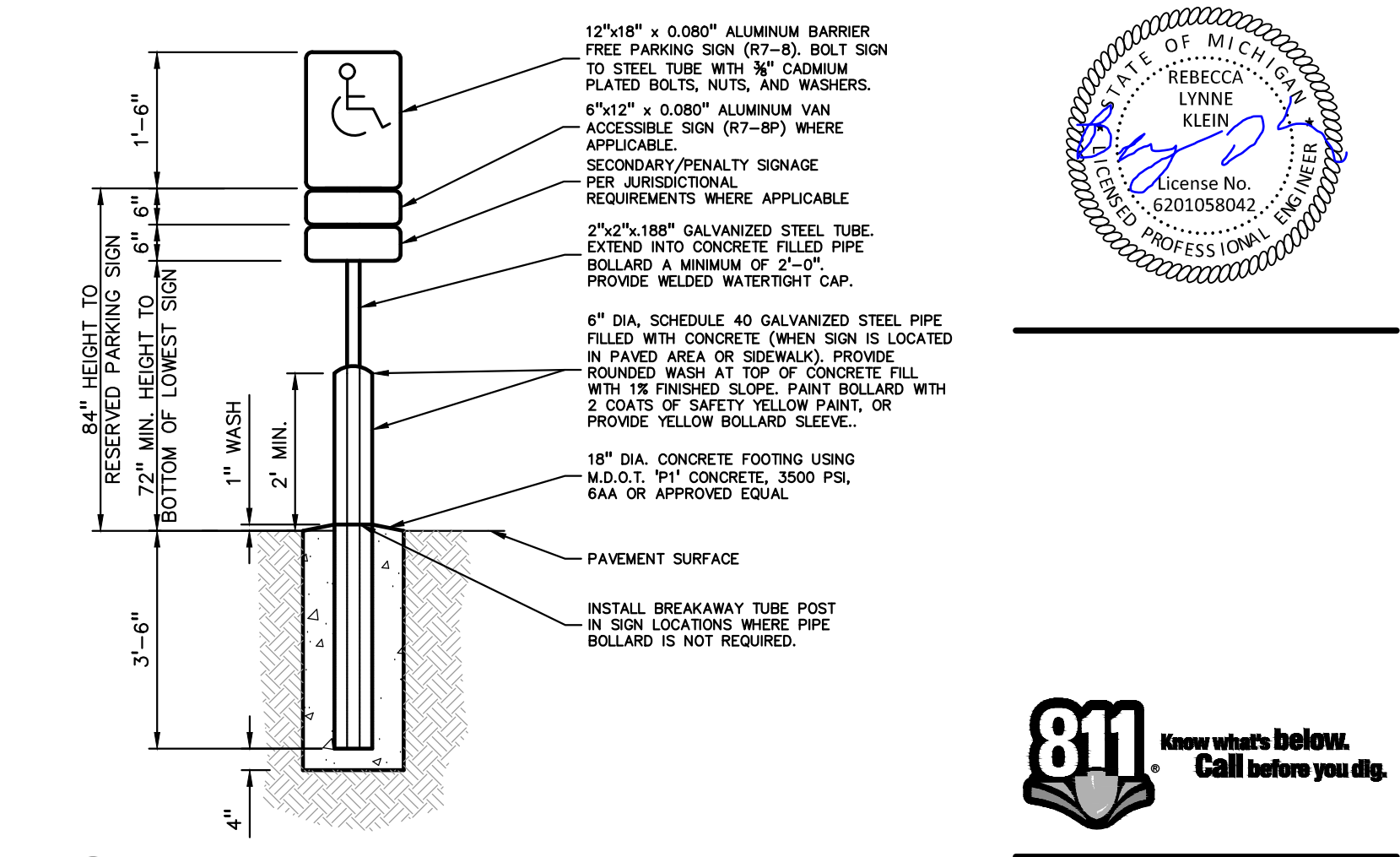
- THE FOLLOWING NOTES PROVIDE AN OUTLINE OF SOME OF THE REQUIREMENTS CONTAINED WITHIN THE "STANDARDS FOR ACCESSIBLE DESIGN - AMERICANS WITH DISABILITIES ACT 2010", AND "ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES", ICC/ANSI A117.1-2009. THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE REQUIREMENTS PRESENTED WITHIN THESE DOCUMENTS, WHICH ARE AVAILABLE IN FULL UPON REQUEST.
1. AN ACCESSIBLE ROUTE CONSISTS OF WALK SURFACES, CURB RAMPS AND RAMPS. AT LEAST ONE ACCESSIBLE ROUTE SHALL BE PROVIDED WITHIN THE SITE FROM ACCESSIBLE PARKING SPACES, ACCESSIBLE PASSENGER LOADING ZONES, PUBLIC STREETS AND SIDEWALKS, AND PUBLIC TRANSPORTATION STOPS TO THE BUILDING OR FACILITY ENTRANCE THE SERVICE.
 2. THE RUNNING SLOPE OF ALL WALKING SURFACES SHALL NOT EXCEED 5% (1:20) AND THE CROSS-SLOPE SHALL NOT EXCEED 2% (1:48).
 3. WALKING SURFACES MUST BE LEVEL WITH PERMITTED VERTICAL CHANGES IN LEVEL NOT TO EXCEED 1/4", OR BEVELLED CHANGES IN LEVEL NOT TO EXCEED 1/2". REFER TO DETAIL DET-8 THIS SHEET. ANY CHANGE IN LEVEL GREATER THAN 1/2" MUST BE RAMPED.
 4. TURNING SPACES ALONG ACCESSIBLE ROUTES MUST BE AT LEAST 5 FEET WIDE IN ALL DIRECTIONS AND NOT EXCEED 2% SLOPE (1:48) IN ANY DIRECTION.
 5. ACCESSIBLE ROUTES WILL BE DESIGNED TO BE A MINIMUM OF 5 FEET WIDE. THE MINIMUM CLEAR WIDTH IS 3 FEET.
 6. RAMPS ALONG ACCESSIBLE ROUTES WILL HAVE A RUNNING SLOPE GREATER THAN 5% (1:20) AND LESS THAN 8.3% (1:12).
 7. THE CROSS-SLOPE OF RAMP RUNS SHALL NOT EXCEED 2% (1:48)
 8. THE MINIMUM CLEAR WIDTH OF ANY RAMP IS 36 INCHES.
 9. THE MAXIMUM RISE FOR ANY RAMP (NOT INCLUDING CURB RAMPS) SHALL NOT EXCEED 30 INCHES. LANDINGS ARE REQUIRED AT THE TOP AND BOTTOM OF EACH RAMP. LANDINGS SHALL HAVE A CROSS-SLOPE NOT EXCEEDING 2% (1:48). SHALL BE 5 FEET LONG AND AT LEAST AS WIDE AS THE RAMP CLEAR WIDTH. IF THERE IS A CHANGE OF DIRECTION AT A LANDING, THEN THE LANDING MUST BE AT LEAST 5 FEET WIDE AND 5 FEET LONG.
 10. HANDRAILS ARE REQUIRED FOR ANY RAMP (NOT INCLUDING CURB RAMPS) WITH A RISE GREATER THAN 6 INCHES. ALL HANDRAILS ARE REQUIRED TO HAVE EDGE PROTECTION UNLESS ADJOINING ANOTHER ACCESS POINT OR IF THE VERTICAL DROP-OFF AT THE EDGE OF THE RAMP DOES NOT EXCEED 1/2" IN 10 FEET. EDGE PROTECTION CAN BE PROVIDED BY MEANS OF A 4" MIN. CURB OR BARRIER.
 11. CURB RAMPS ALONG ACCESSIBLE ROUTES SHALL NOT RISE MORE THAN 6 INCHES, NOR BE STEEPER THAN 8.3% (1:12). APPROACHING SLOPES TO THE RAMP CANNOT EXCEED 5%, WHICH INCLUDES SIDEWALKS, PAVEMENT, GUTTERS ETC.
 12. IF CURB RAMP SIDES ARE FLARED, THE FLARES SHALL NOT BE STEEPER THAN 10% (1:10).
 13. LANDINGS ARE REQUIRED AT THE TOP OF ALL CURB RAMPS. THE CLEAR LENGTH OF THE LANDING SHALL BE A MINIMUM OF 36" AND WILL BE AS WIDE AS THE CURB RAMP.
 14. CURB RAMPS SHALL BE LOCATED OR PROTECTED TO PREVENT THEIR OBSTRUCTION BY PARKED VEHICLES.
 15. HANDRAILS ARE NOT REQUIRED ON CURB RAMPS.
 16. WHERE DETECTABLE WARNING IS REQUIRED AT CURB RAMPS, THE DETECTABLE WARNING SHALL BE 24" MINIMUM IN DEPTH AND SHALL EXTEND THE FULL WIDTH OF THE RAMP. THE DETECTABLE WARNING SHALL BE LOCATED SO THE EDGE NEAREST THE CURB IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE.
 17. ACCESSIBLE PARKING SPACES ON SITE SHALL BE PROVIDED AS REQUIRED IN SECTION 502 OF THE A.D.A. IF THE SITE HAS MORE THAN ONE PARKING FACILITY, EACH FACILITY IS REQUIRED TO MEET THESE REQUIREMENTS SEPARATELY.
 18. FOR EVERY SIX OR FRACTION OF SIX ACCESSIBLE PARKING SPACES, ONE VAN ACCESSIBLE SPACE SHALL BE PROVIDED.
 19. ACCESSIBLE PARKING SPACES SHALL BE LOCATED ON THE SHORTEST ACCESSIBLE ROUTE FROM PARKING TO A BUILDING ENTRANCE. IF THERE IS MORE THAN ONE ACCESSIBLE ENTRANCE, PARKING SHALL BE DISPERSED ALONG THE SHORTEST ACCESSIBLE ROUTE TO THE ACCESSIBLE ENTRANCES.
 20. BARRIER FREE CAR PARKING SPACES SHALL BE A MINIMUM OF 8 FEET WIDE WITH AN ACCESS AISLE 5 FEET WIDE MINIMUM. VAN ACCESSIBLE PARKING SPACES SHALL BE AT LEAST 11 FEET WIDE WITH A 5' WIDE ACCESS AISLE. VAN ACCESSIBLE SPACES ARE ALSO ACCEPTABLE WITH AN 8 FOOT WIDTH AND 8 FOOT WIDE ACCESS AISLE. THE ACCESS AISLE IN ALL CASES MUST EXTEND THE FULL LENGTH OF THE PARKING SPACE.
 21. SURFACE SLOPES WITHIN THE PARKING SPACES AND AISLES SHALL NOT EXCEED 2% (1:48)
 22. ACCESSIBLE AREAS INCLUDING PARKING SPACES, AISLES AND PATHWAYS, REQUIRE A MINIMUM VERTICAL CLEARANCE OF 98 INCHES.
 23. ACCESSIBLE PARKING SPACES ARE REQUIRED TO BE IDENTIFIED BY SIGNS. THE SIGNS SHALL INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. VAN PARKING SPACES ARE REQUIRED TO BE DESIGNATED AS "VAN ACCESSIBLE". REFER TO DETAILS ON THIS SHEET.



TYPICAL GRASSPAVE2 DETAIL
CHOOSE THIS PRODUCT FOR REINFORCING GRASS WEARING SURFACES



PEA GROUP
t: 844.813.2949
www.peagroup.com



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

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

CLIENT
JR MILITELLO REALTY
868 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
NOTES AND DETAILS - SHEET 2

PEA JOB NO. 2022-1338

P.M. BK
DN. BLA
DES. BK

DRAWING NUMBER:
C-11.2

CURB RETURN JOINING EXISTING PAVEMENT

NOTES:
 CONSTRUCT THE DRIVE APPROACH WITH 8" NON-REINFORCED CONCRETE ON 6" OF 21AA AGGREGATE BASE COURSE COMPACTED IN PLACE (CIP) OR 6" HMA LEVELING ON 9" OF 21AA AGGREGATE BASE COURSE (CIP). CURBS SHALL BE CONSTRUCTED WITH HEIGHT VARYING FROM 6" AT BACK OF CURB TO 0" HEIGHT AT FACE OF SIDEWALK OR RIGHT-OF-WAY LINE.
 AT ALL CONCRETE DRIVES, PLACE A 1" EXPANSION JOINT AT BACK OF CURB AND 1/2" EXPANSION JOINT AT FACE OF SIDEWALK OR RIGHT-OF-WAY LINE. MAINTAIN NORMAL SIDEWALK GRADE ACROSS DRIVE, 2% SLOPE UP FROM FACE OF SIDEWALK.
 INBOUND OR OUTBOUND RADIUS SHALL BE REDUCED TO 5' FOR ONE-WAY TRAFFIC DRIVE APPROACH.
 DRIVE APPROACH SHALL NOT ENDOURCH ACROSS PROPERTY LINE EXTENDED WITHOUT WRITTEN APPROVAL FROM THE ADJOINING PROPERTY OWNER.

WORK THIS SHEET WITH THE GENERAL NOTES ON RS-1 AND D-6 SHEET 2-2.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE D-6
DIRECTOR OF ENGINEERING	COMMERCIAL DRIVE APPROACH	SHEET 1 OF 2

CURB RETURN JOINING EXISTING PAVEMENT

*** 4' for HMA Drive Pavement. No Expansion Joint Required.**

WORK THIS SHEET WITH THE GENERAL NOTES ON RS-1.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE D-6
DIRECTOR OF ENGINEERING	COMMERCIAL DRIVE APPROACH	SHEET 2 OF 2

RIPRAP

REVISION DATE:	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE M-5
DIRECTOR OF ENGINEERING	COMMERCIAL DRIVE APPROACH	SHEET 1 OF 1

GENERAL NOTES

- All materials and workmanship shall be in accordance with Wayne County Specifications which are defined as the current Michigan Department of Transportation (MDOT) Standard Specifications for Construction as modified by Wayne County Special Provisions.
- Paving Standard Plan Details may be shown with wire fabric reinforcement. Use of reinforcement shall be required as called for on the plans.
- A Transverse End of Pour Joint, Symbol (H), shall be constructed when there is an interruption in concrete paving for more than 1/2 hour. Transverse End of Pour Joint, Symbol (H), shall be constructed in accordance with current MDOT Standard Plan, R-39 series (Reinforced Concrete Pavement) and R-39P series (Plain Concrete Pavement). This note applies to both concrete base and finished concrete pavement.
- When it is anticipated that construction traffic will be using the pavement, endings will be protected by means of a temporary concrete header as shown on RS-4.
- The Expansion Joint Foam Rod shall be a solid round heat resistant Polyurethane foam capable of withstanding the temperature of the sealant. Density of the foam shall be 2-4 Lb/Cft.
- Wire Fabric Reinforcement shall lay flat when delivered to the work area. The use of spreader bars will be required for lifting bundles of reinforcement.
- Where the lane width of the pavement differs from wire fabric reinforcement standards, special sheets of the required width may be used or standard sheets may be cut to the required size or split sheets may be added to standard sheets to obtain the required size. Side laps shall not be less than the spacing of the longitudinal wires.
- The ends of the Wire Fabric Reinforcement sheets shall be fastened in at least two places at each lap to prevent horizontal and vertical displacement.
- When Concrete Pavement Repairs are longer than 20 feet, Transverse Plane of Weakness Joints (WT) shall be placed in-line with existing transverse joints, working cracks, or at 15 feet maximum and 6 feet minimum spacings.
- Existing concrete pavements with HMA surface requiring saw-cutting for removal shall have the saw cuts extend completely thru the concrete pavement. Sawed over-cuts occurring in adjacent slab, gutter or shoulder, which will remain in place, shall be sealed.

WORK THIS SHEET WITH THE GENERAL NOTES ON RS-1 AND D-6 SHEET 2-2.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE RS-1
DIRECTOR OF ENGINEERING	GENERAL NOTES	SHEET 1 OF 1

INTEGRAL STRAIGHT CURB

All transverse joints in the concrete pavement shall extend entirely through the integral curb and be of the same kind and thickness as provided for the pavement. The joint material shall be pre-cut so as to conform to the geometric shape and cross sectional area of the curb, and shall be placed in contact with the filler material in the pavement.

Integral curbs, which are placed as part of a concrete base course pavement shall have transverse plane of weakness joints, formed by placing a pre-molded bituminous filler 1/4 inch thick, entirely through the curb, in exact alignment with all joints in the base course pavement. The joint material shall be pre-cut so as to conform to the geometric shape and cross sectional area of the curb.

The edges of all transverse joints in the integral curb shall be rounded with an approved finishing tool having a radius of 1/4 inch.

WORK THIS SHEET WITH THE GENERAL NOTES ON RS-1

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE RS-3
DIRECTOR OF ENGINEERING	CURB AND CURB & GUTTER DETAILS	SHEET 1 OF 3

MOUNTABLE CURB AND GUTTER

WORK THIS SHEET WITH THE GENERAL NOTES ON RS-1

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE RS-3
DIRECTOR OF ENGINEERING	CURB AND CURB & GUTTER DETAILS	SHEET 2 OF 3

STRAIGHT CURB & GUTTER

WORK THIS SHEET WITH "S" SERIES STANDARDS.

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE RS-3
DIRECTOR OF ENGINEERING	CURB AND CURB & GUTTER DETAILS	SHEET 3 OF 3

CONCRETE SIDEWALK

Work this Sheet with the General Notes on RS-1

REVISION DATE: 08/01/07	WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES ENGINEERING DIVISION/PERMIT OFFICE PERMIT STANDARDS	SCALE NOT TO SCALE RS-5
DIRECTOR OF ENGINEERING	CONCRETE SIDEWALK	SHEET 1 OF 1



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

CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

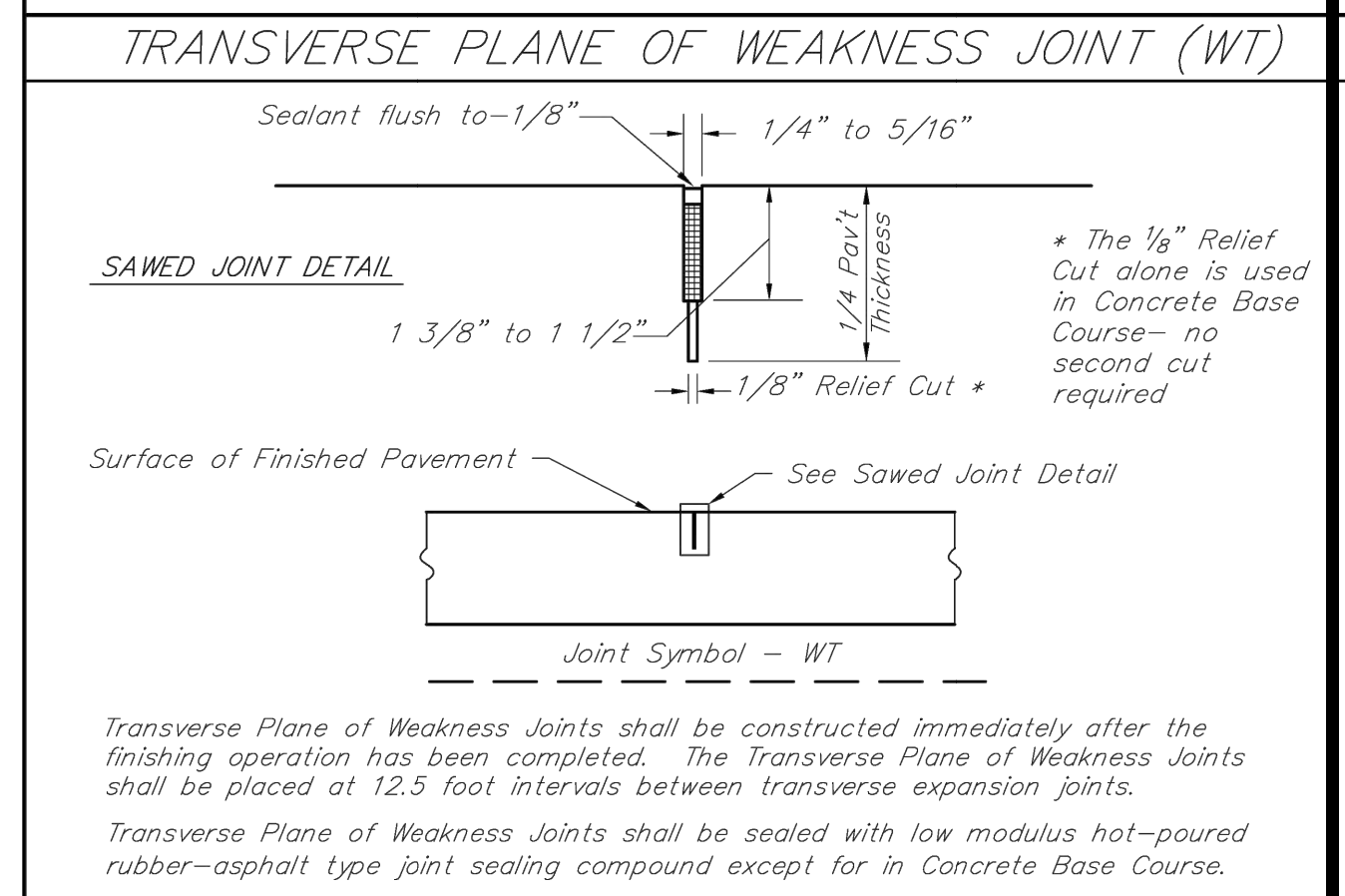
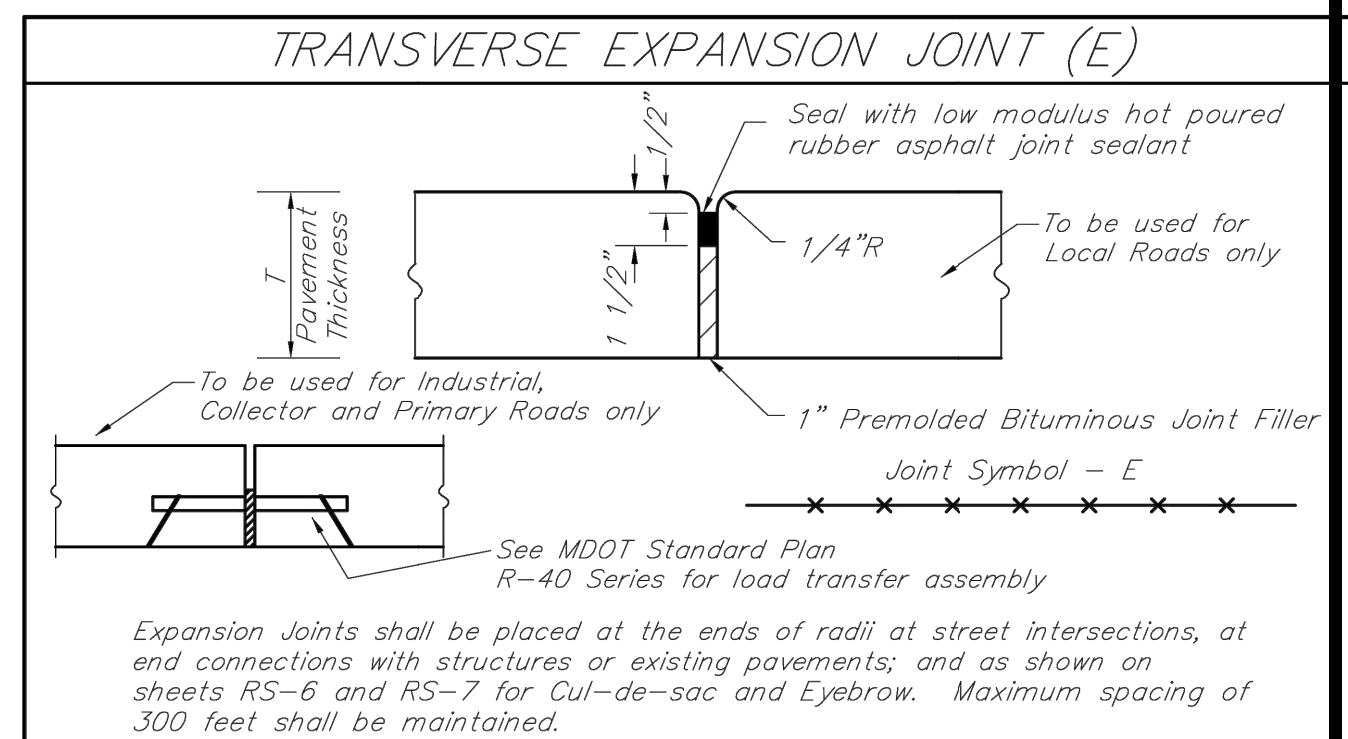
REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
WAYNE COUNTY DETAILS - SHEET 1

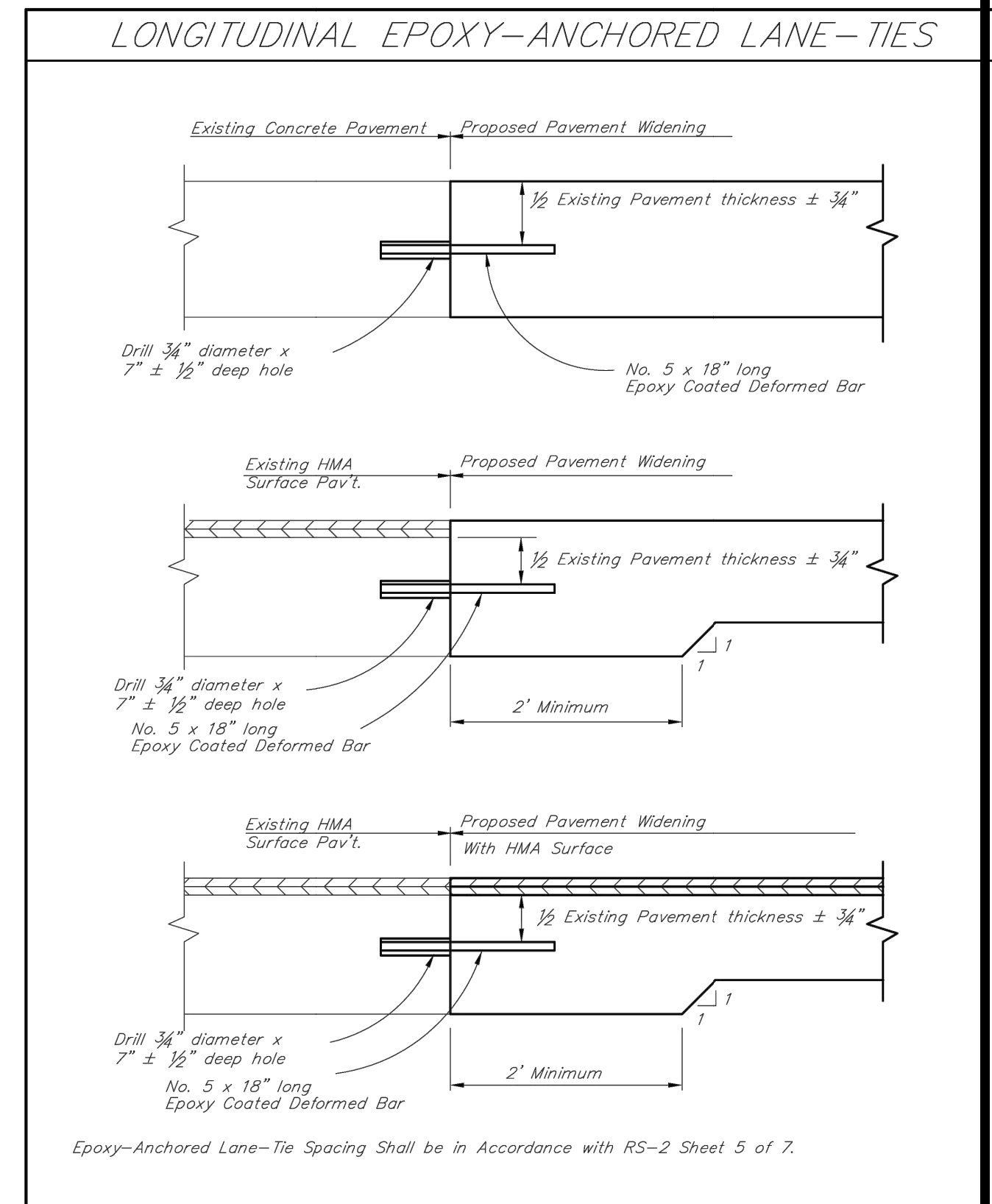
PEA JOB NO.	2022-1338
P.M.	BK
DN	BLA
DES.	BK
DRAWING NUMBER:	



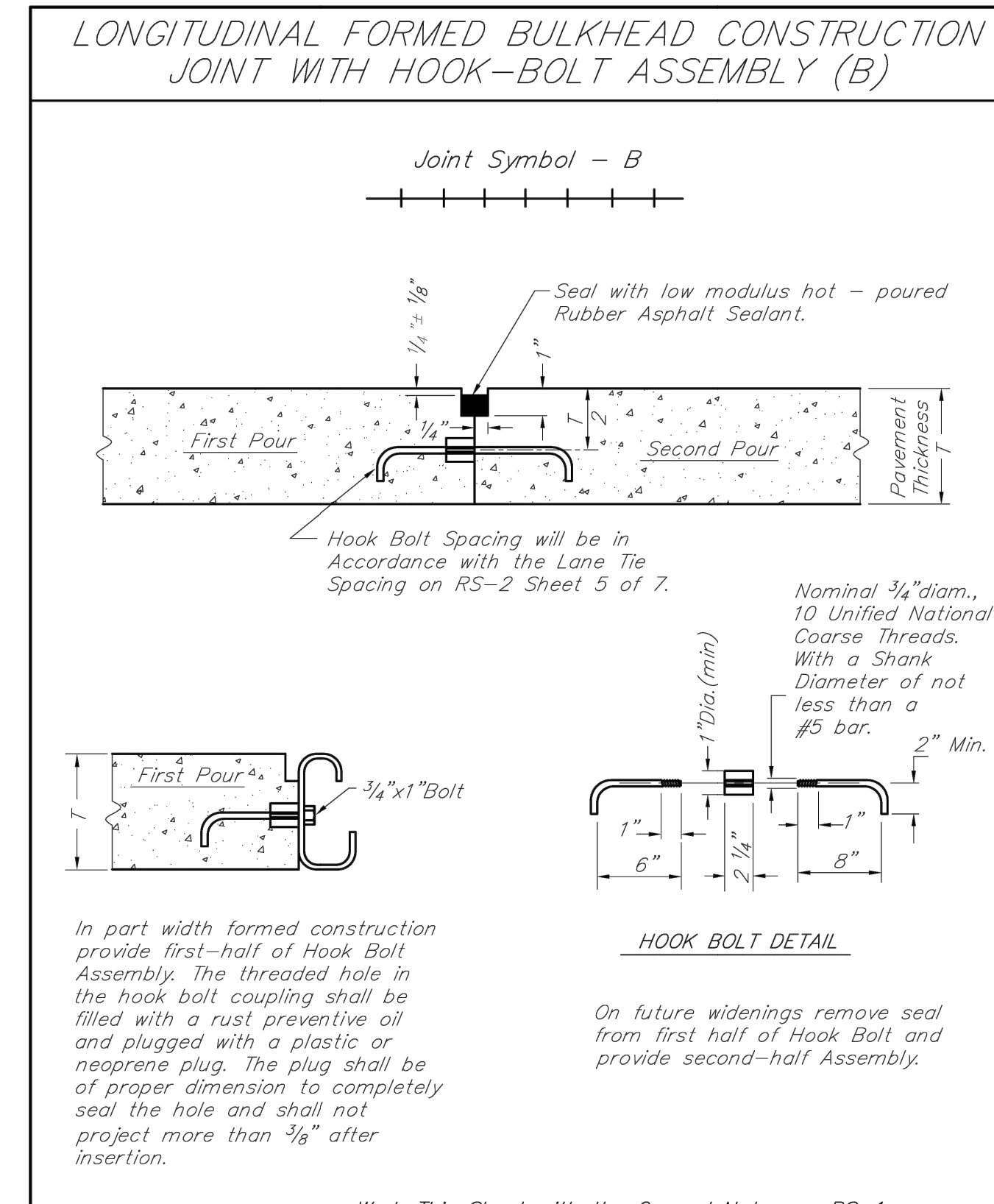
CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND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



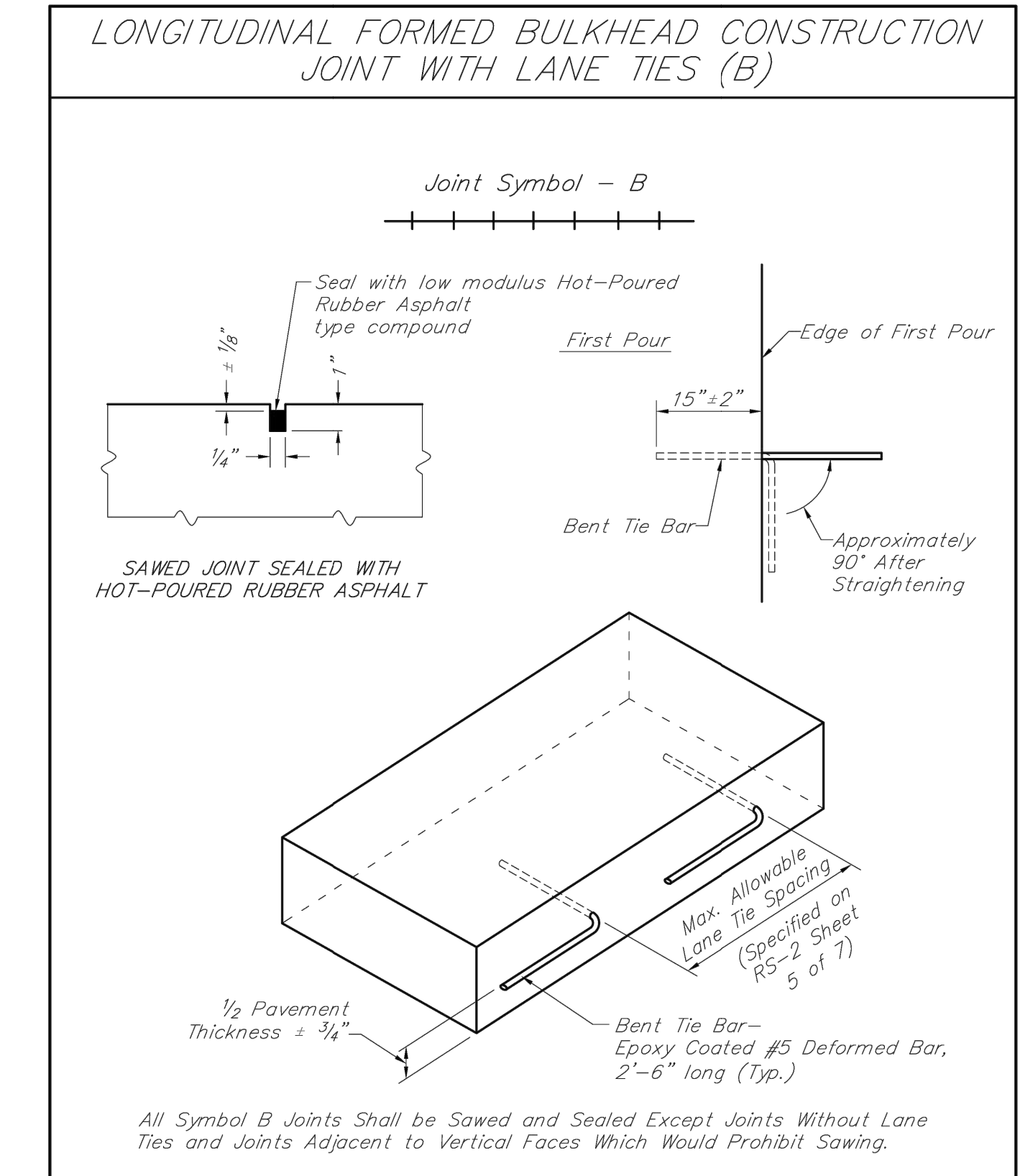
REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 1 OF 7



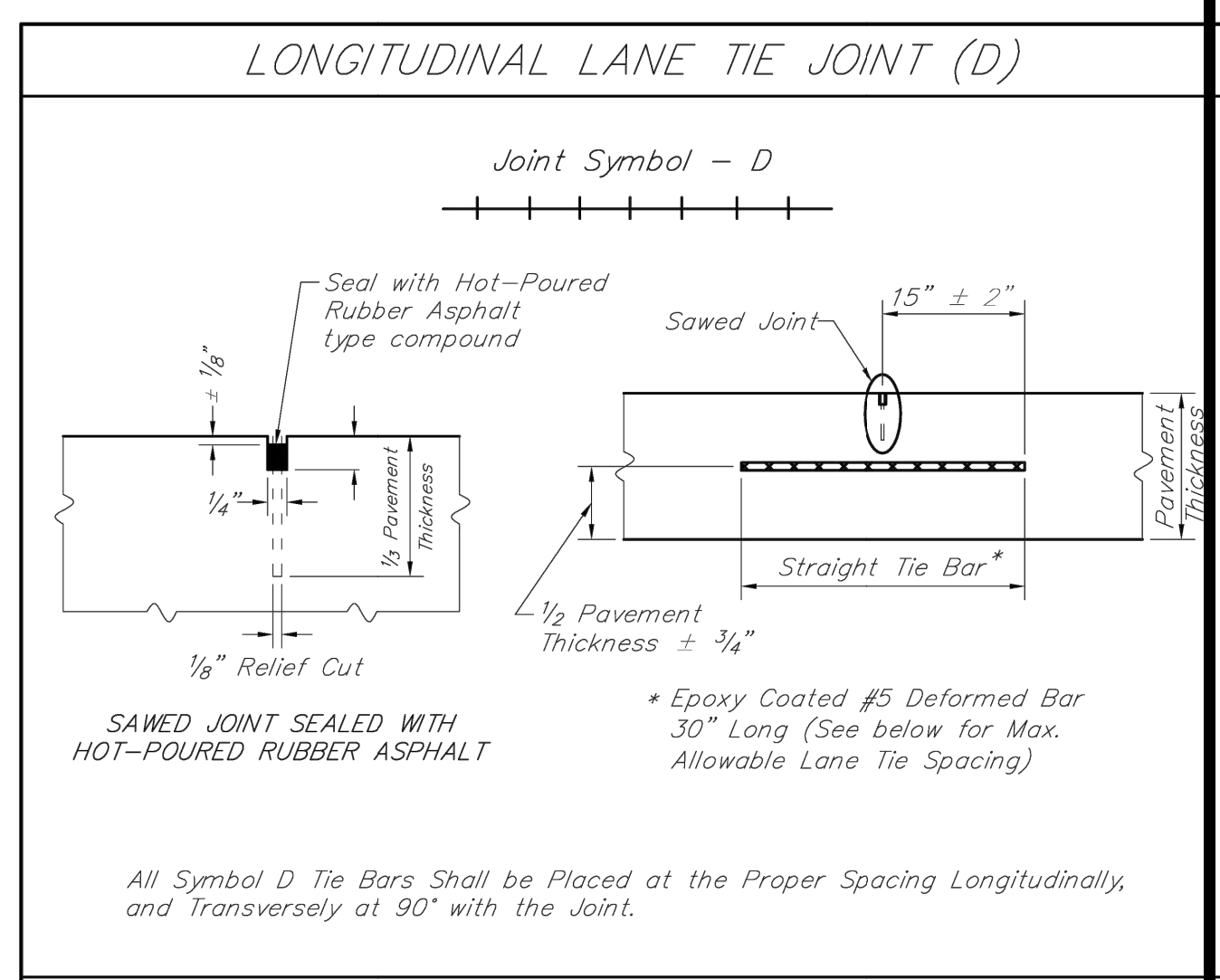
REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 2 OF 7



REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 3 OF 7



REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 4 OF 7

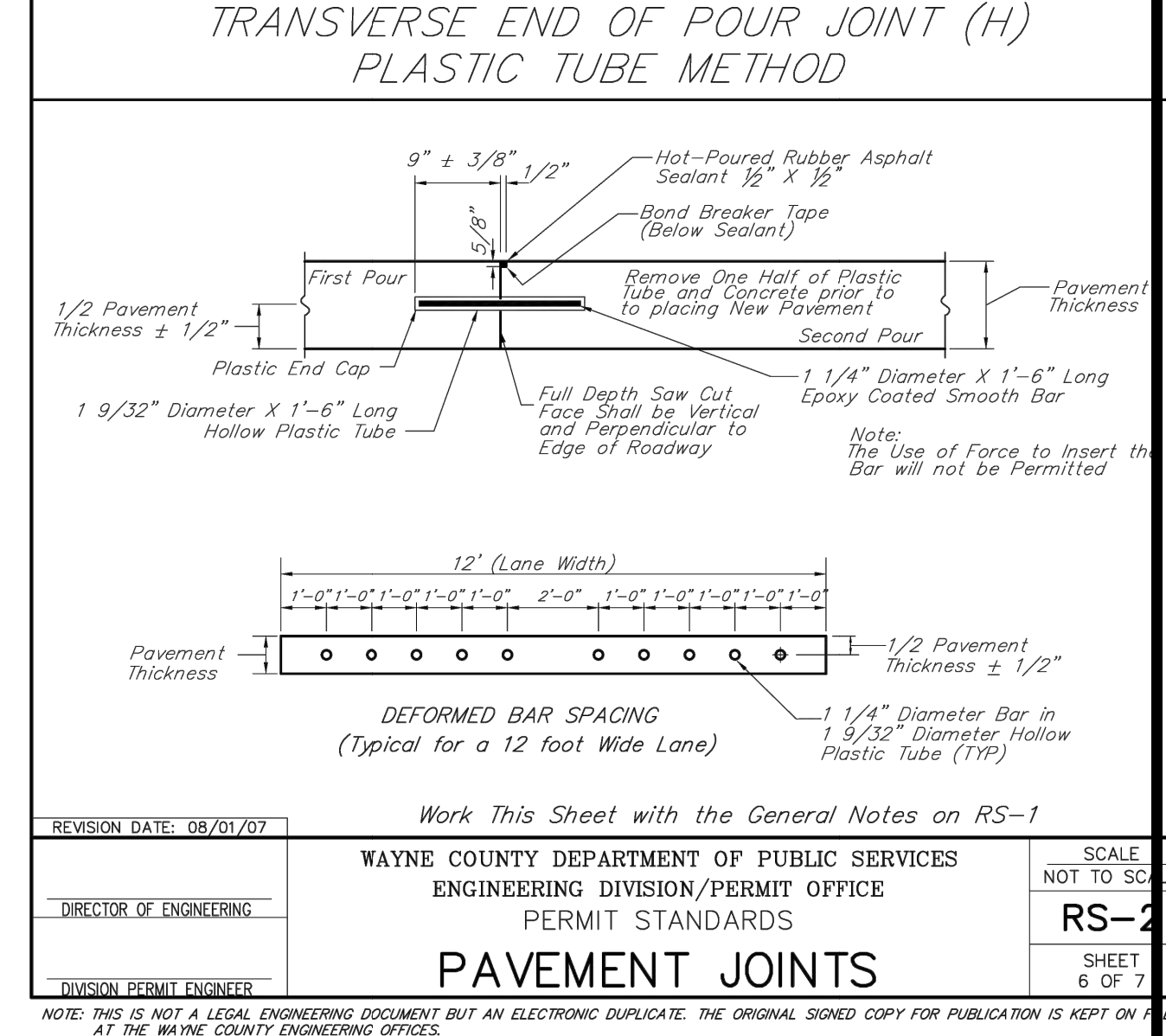
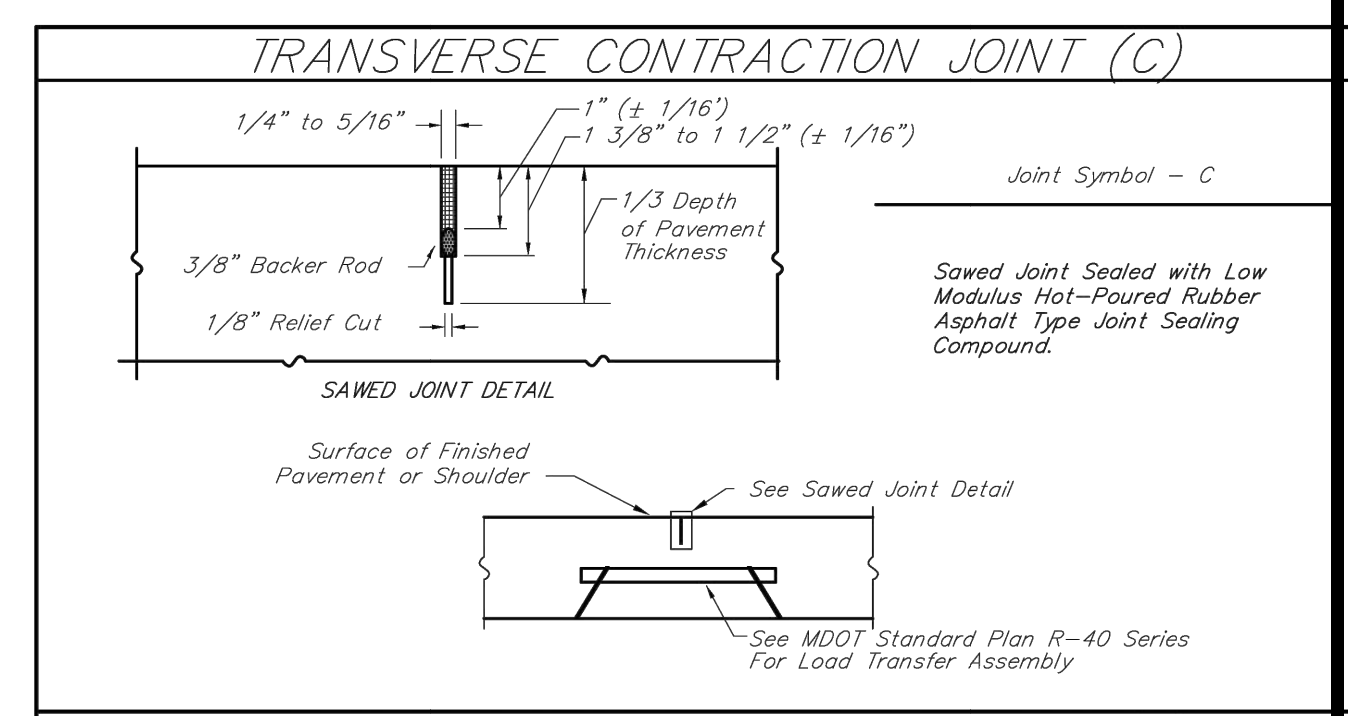


MAXIMUM ALLOWABLE LANE TIE SPACING

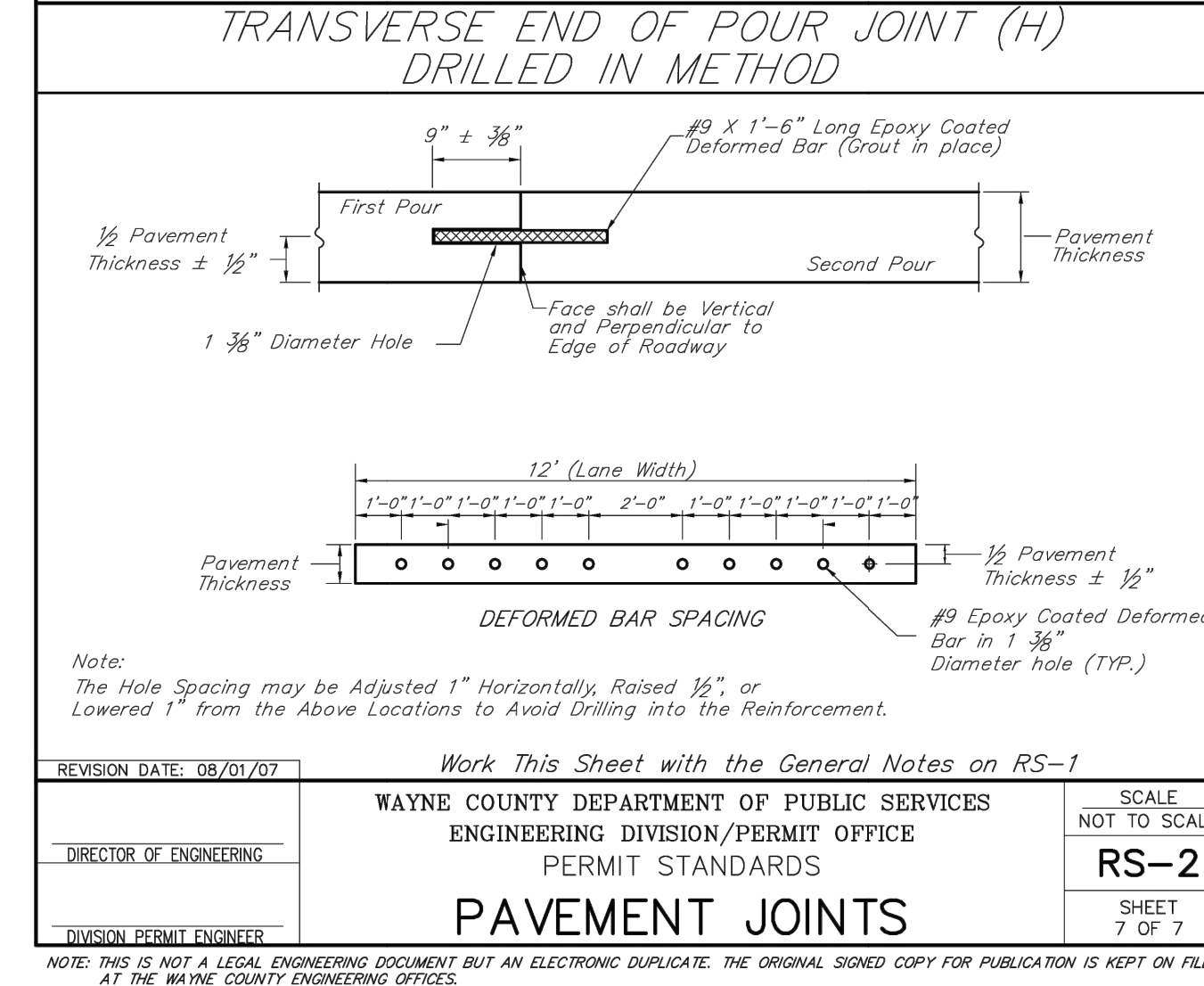
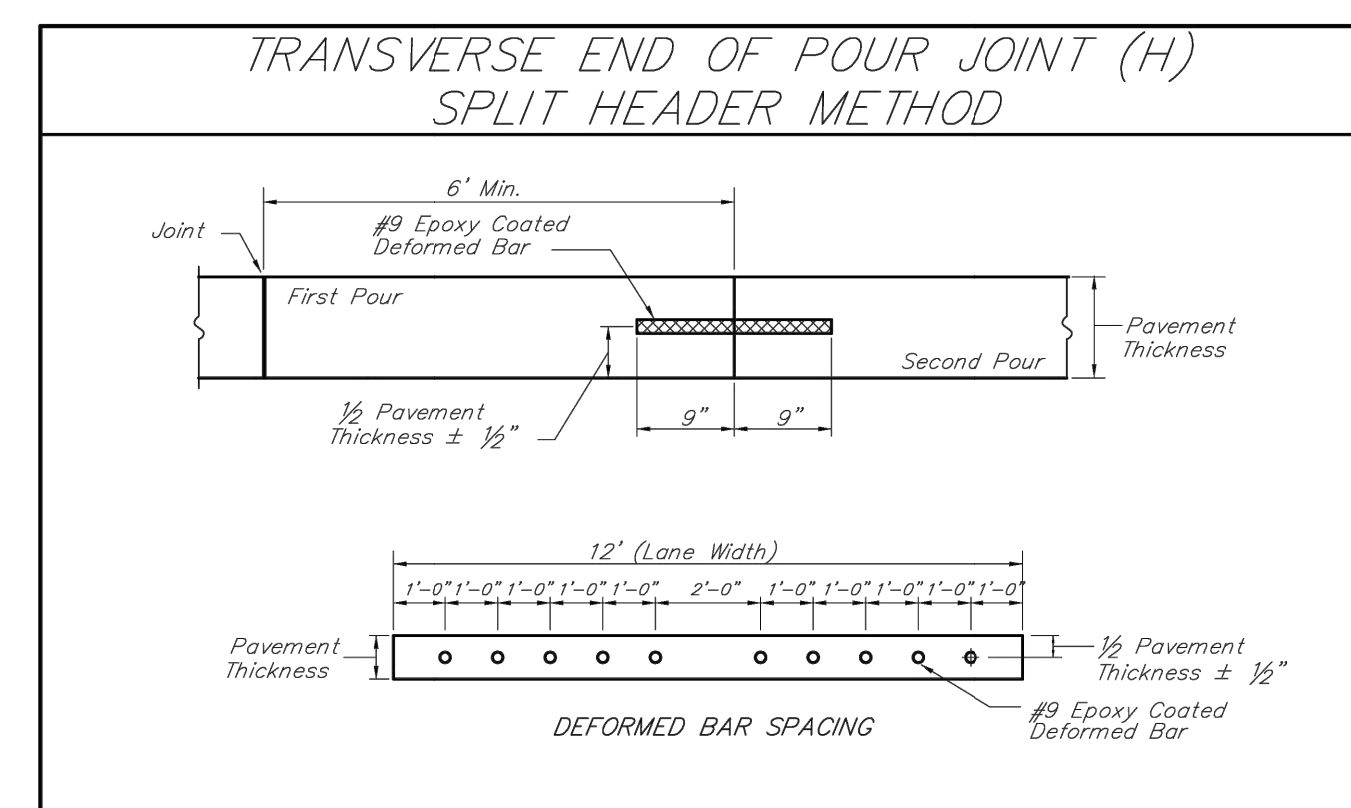
MAX. ALLOWABLE LANE TIE SPACING SYMBOLS B AND D	TOTAL DISTANCE OF TIED JOINT FROM NEAREST FREE EDGE **	
B Grade 40	D Grade 60	
2'-10"	3'-7"	12' or less
1'-11"	2'-7"	over 12' through 17'
1'-5"	1'-11"	over 17' through 24'
1'-2"	1'-9"	over 24' through 28'
1'-2"	1'-4"	over 28' through 36'
1'-1"	1'-1"	36' or greater ***

** Includes any Tied Combination of Lane Width, Valley Gutter, Curb & Gutter, or Shoulder.
*** For Widths Greater than 45' use #6 Deformed Bars at 1'-2" Spacing.

REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 5 OF 7



REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 6 OF 7



REVISION DATE: 08/01/07
Work This Sheet with the General Notes on RS-1
WAYNE COUNTY DEPARTMENT OF PUBLIC SERVICES
ENGINEERING DIVISION/PERMIT OFFICE
PERMIT STANDARDS
PAVEMENT JOINTS
SCALE: NOT TO SCALE
RS-2
SHEET 7 OF 7

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

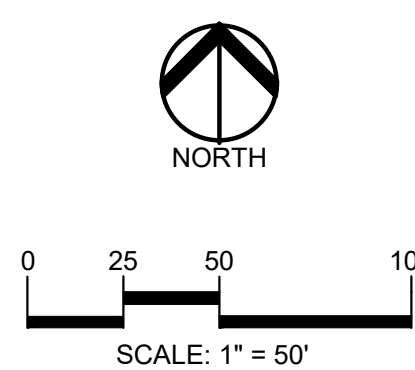
PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
WAYNE COUNTY DETAILS - SHEET 2

PEA JOB NO. 2022-1338
P.M. BK
D.N. BLA
DES. BK
DRAWING NUMBER:



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

LEGEND:

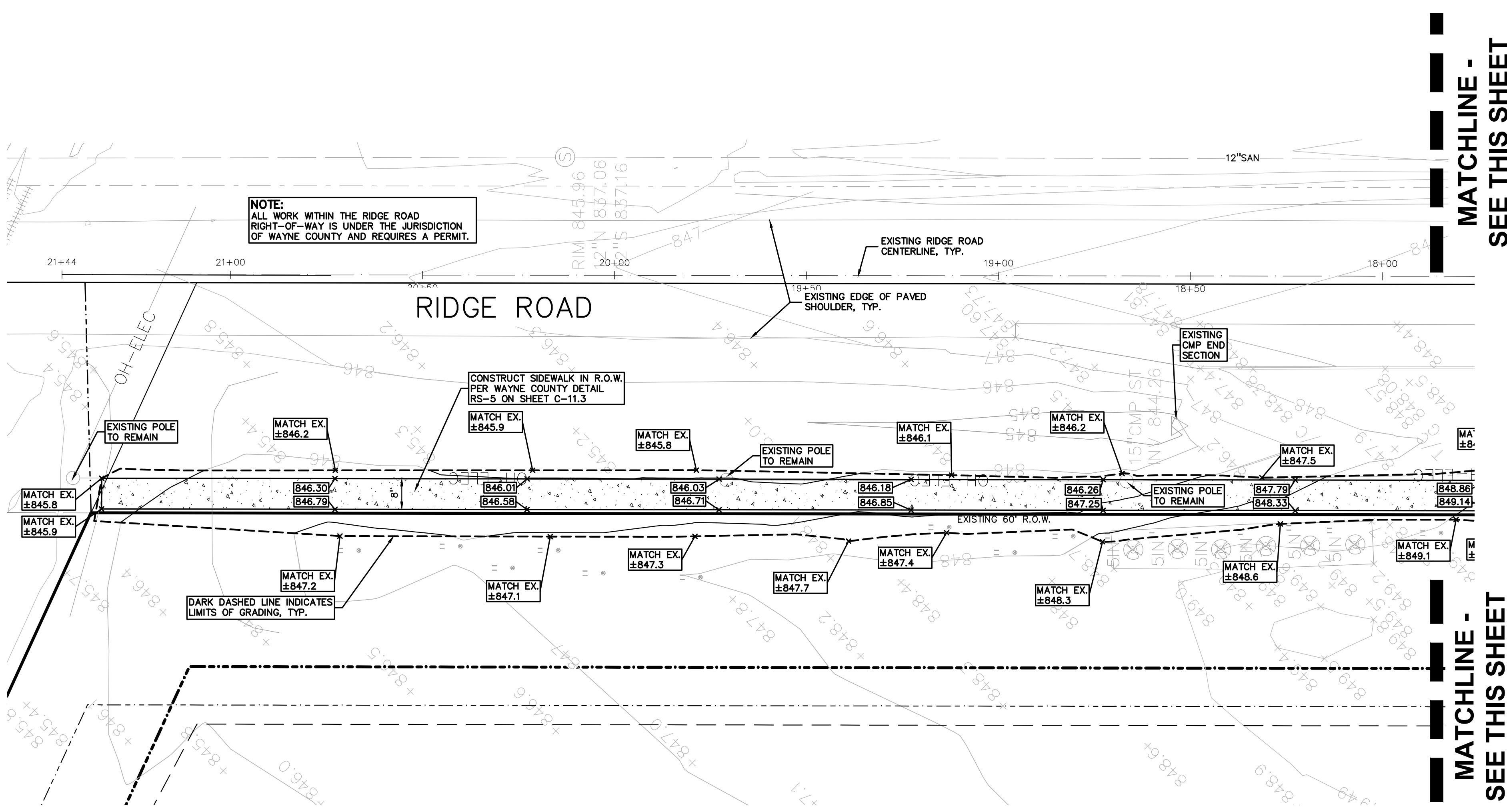
- CONCRETE PAVEMENT
- ASPHALT PAVEMENT
- GRAVEL
- WETLAND
- CONCRETE CURB AND GUTTER
- REVERSE GUTTER PAN
- SETBACK LINE
- SIGN
- LIGHTPOLE
- FENCE
- GUARD RAIL

SIDEWALK RAMP LEGEND:

- SIDEWALK RAMP "TYPE R"
- SIDEWALK RAMP "TYPE P"

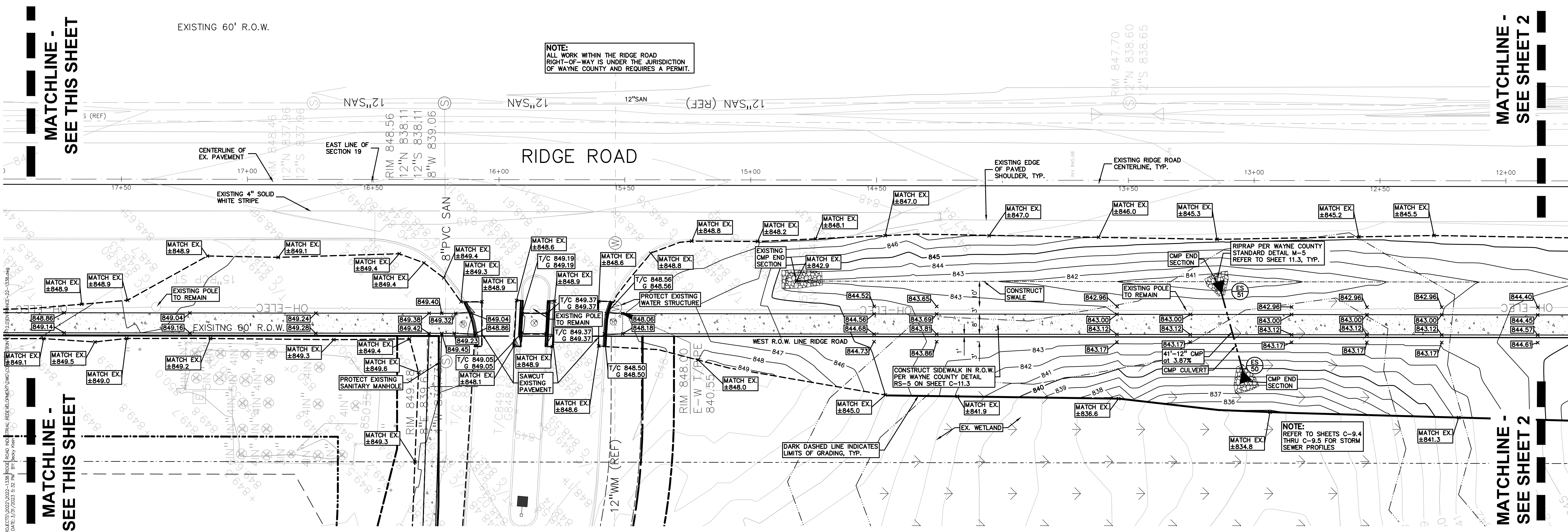
REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS.

END SECTIONS	
50	END SECTION 12" 838.40
51	END SECTION 12" 840.00



MATCHLINE - SEE THIS SHEET

MATCHLINE - SEE THIS SHEET



MATCHLINE - SEE THIS SHEET

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE THIS SHEET

MATCHLINE - SEE SHEET 2

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

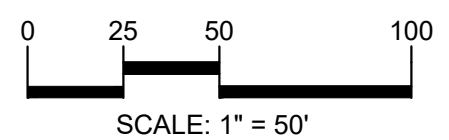
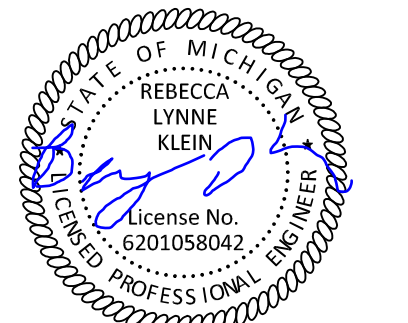
NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
RIDGE ROAD RIGHT-OF-WAY PLAN - SHEET 1

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-12.1



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

LEGEND:

	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN LIGHT POLE
	FENCE
	GUARD RAIL

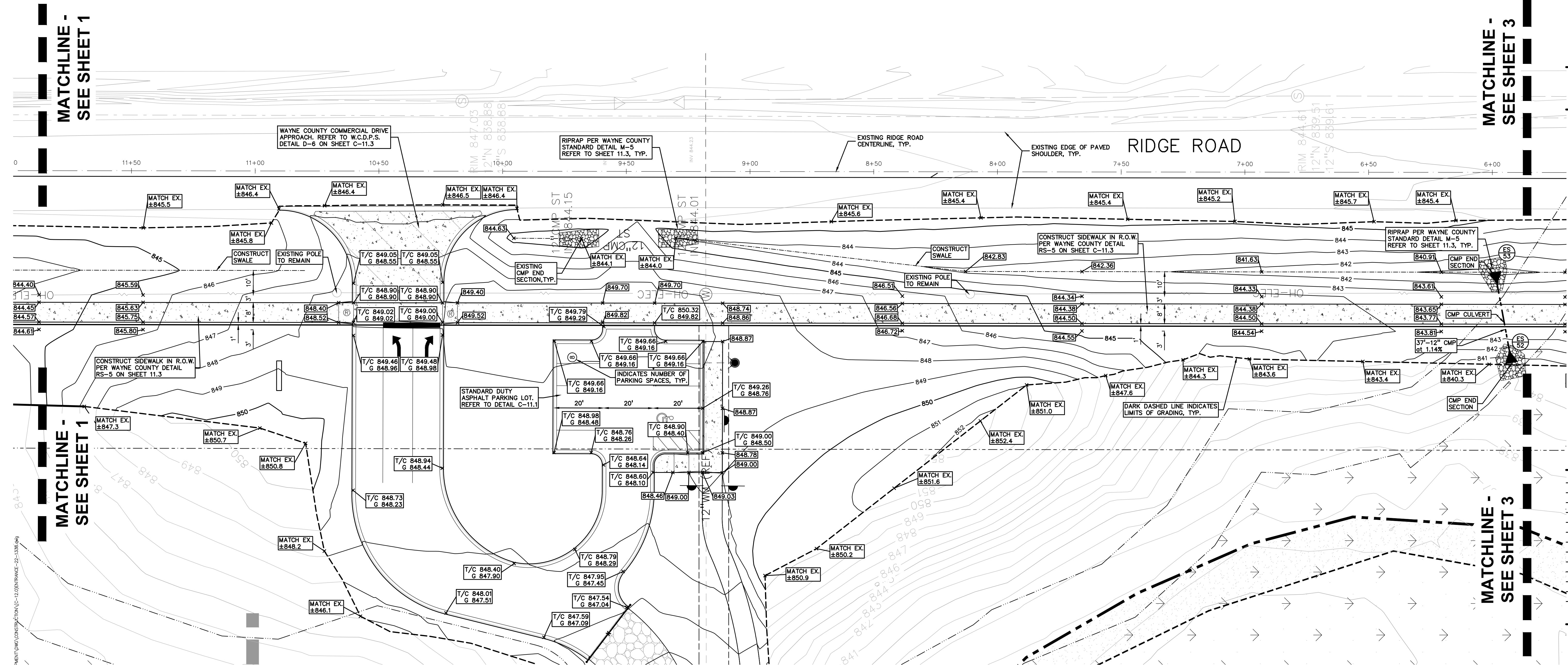
END SECTIONS	END SECTION
52	END SECTION 12" 840.23
53	END SECTION 12" 840.65

SIDEWALK RAMP LEGEND:

SIDEWALK RAMP TYPE R'

SIDEWALK RAMP TYPE P'

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS.



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

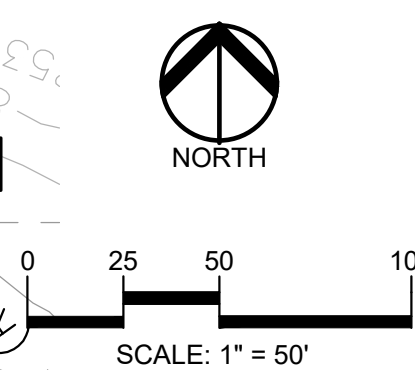
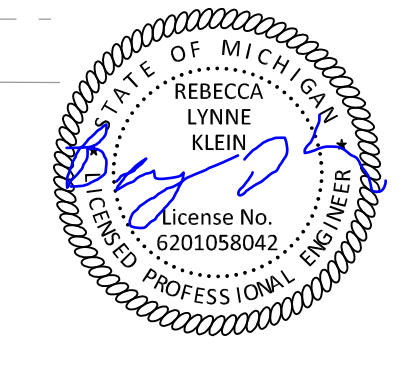
NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023

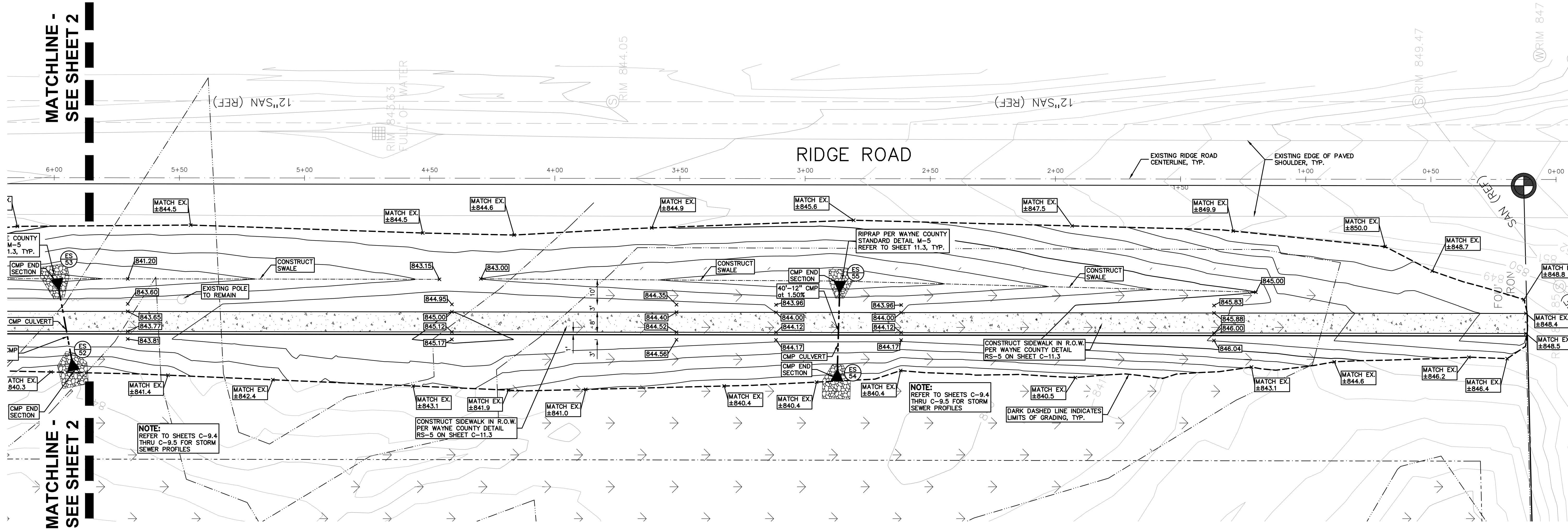
DRAWING TITLE
RIDGE ROAD RIGHT-OF-WAY PLAN - SHEET 2

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	C-12.2

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-12.02\DWG\22-1338.dwg
DATE: 10/17/2023 10:45 AM 10/17/2023 10:45 AM



CAUTION!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.



LEGEND:

	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN
	LIGHTPOLE
	FENCE
	GUARD RAIL

END SECTIONS

54	END SECTION 12' 840.40
55	END SECTION 12' 841.00

SIDEWALK RAMP LEGEND:

	SIDEWALK RAMP 'TYPE R'
	SIDEWALK RAMP 'TYPE P'

REFER TO LATEST MDOT R-28 STANDARD RAMP AND DETECTABLE WARNING DETAILS

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

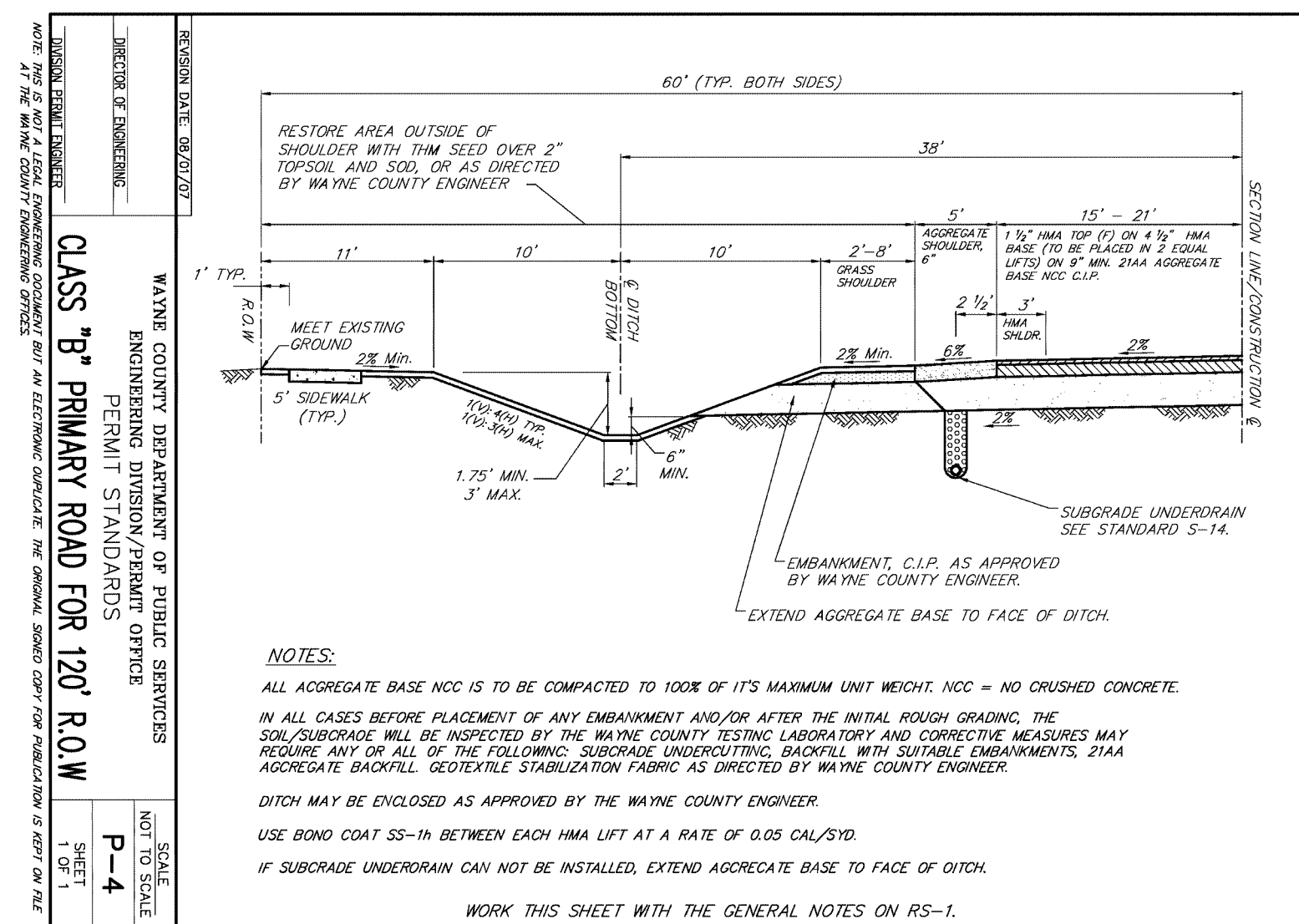
REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

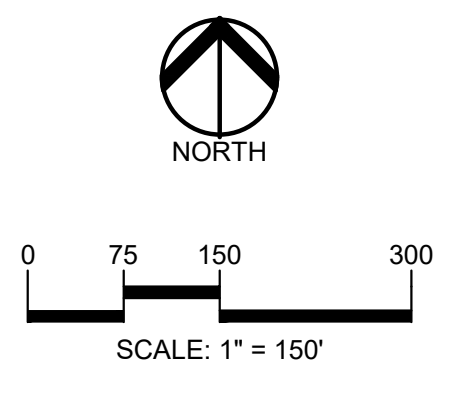
DRAWING TITLE
RIDGE ROAD RIGHT-OF-WAY PLAN - SHEET 3

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-12.3



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\C-12.0\DRAWING-22-1338.dwg
FILED DATE: 03/31/2023 10:45 AM BY: 03/31/2023



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

CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023

DRAWING TITLE

OVERALL LANDSCAPE PLAN

PEA JOB NO. 2022-1338

P.M. BK
 DN. BGG
 DES. JLE

DRAWING NUMBER:
L-1.0

LANDSCAPE CALCULATIONS:
 PER PLYMOUTH TOWNSHIP ZONING ORDINANCE-IND INDUSTRIAL ZONE, PROPOSED USE PLANNED UNIT DEVELOPMENT

TREE REPLACEMENT REQUIRED:
 PROVIDE 1" CAL REPLACEMENT FOR EVERY 4" DBH REMOVED FOR TREES WITHIN WOODED AREAS OR INDIVIDUAL TREES 24" OR LARGER IN FAIR OR BETTER CONDITION. TREES ON THE TWPS. NOT DESIRABLE TREE LIST NIC FOR REPLACEMENT.
 36 TREES REMOVED WITH 577" DBH
 577" DBH REMOVED / 4 = 144.25
 (50%) DEC 3" CAL OR EVG 8' HT = 144.24 x 50% / 3" CAL = 25, 3" DEC. OR 8' EVG.
 (30%) DEC 3.5" CAL OR EVG 10' HT = 144.25 x 30% / 3.5" CAL = 13, 3.5" DEC. OR 10' EVG.
 (20%) DEC 4" CAL OR EVG 12' HT = 144.25 x 20% / 4" CAL = 8, 4" DEC. OR 12' EVG.

PROVIDED: 25 TREES (18, DEC 3" CAL AND 7, 8' EVG.), 13 TREES (13, 10' EVG.), 8 TREES (8, DEC 4" CAL)
PROVIDED: 28 PREVIOUSLY INSTALLED DEC. 20 PREVIOUSLY INSTALLED EVG.

STREET TREES AT RIDGE ROAD
REQUIRED:
 1 DEC. TREE / 40 LF OF LENGTH OF SITE FRONTAGE
 2,800 LF / 40 = 70 TREES (EXCLUDING UNIT 9 FRONTAGE ON BOTH RIDGE AND FIVE MILE ROADS)
 (50%/70+5; DEC. 3" CAL OR EVG. 8' HT. = 35 TREES
 (30%/70+3; DEC. 3.5" CAL OR EVG. 10' HT. = 21 TREES
 (20%/70+2; DEC. 4" CAL OR EVG. 12' HT. = 14 TREES

PROVIDED: 35 TREES (21, DEC. 3" CAL AND 14, EVG. 8' HT.), 21 TREES (11, DEC. 3.5" CAL AND 20, EVG. 10' HT.), 14 TREES (8 DEC. 4" CAL AND 6, EVG. 12' HT.)
PROVIDED: 28 PREVIOUSLY INSTALLED DEC. 40 PREVIOUSLY INSTALLED EVG. NEW PROPOSED: 1 DEC, 0 EVG.

DETENTION POND PLANTINGS
REQUIRED: 55 DECIDUOUS TREES, 20 EVG. TREES, AND 100 SHRUBS PER CITY'S REQUEST AT POND.
PROVIDED: 55 PREVIOUSLY INSTALLED DEC. 20 PREVIOUSLY INSTALLED EVG. 100 PREVIOUSLY INSTALLED SHRUBS. NEW PROPOSED: 0 DEC, 0 EVG, 0 SHRUBS

PROPOSED NEW INTERIOR STREET TREES AT PAVED PORTION OF TECHNE DRIVE, AT APPROXIMATELY 1 TREE PER 50 LF
 1291 LF / 50 = 25.8 TREES
PROVIDED: 26 PROPOSED NEW STREET TREES ALONG TECHNE DRIVE

PROPOSED NEW PARKING LOT TREES AT NORTH PAVED PARKING AREA
REQUIRED:
 1 DEC. TREE / 80 SF OF PLANTING AREA WITHIN THE ISLAND
 NORTH PAVED PARKING AREA ISLANDS:
 3728 SF / 80 = 46.6 TREES
PROVIDED: 47 PROPOSED NEW PARKING LOT TREES

"PREVIOUSLY INSTALLED TREES AND SHRUBS" COMPLETED IN PREVIOUS PROJECT IN 2019

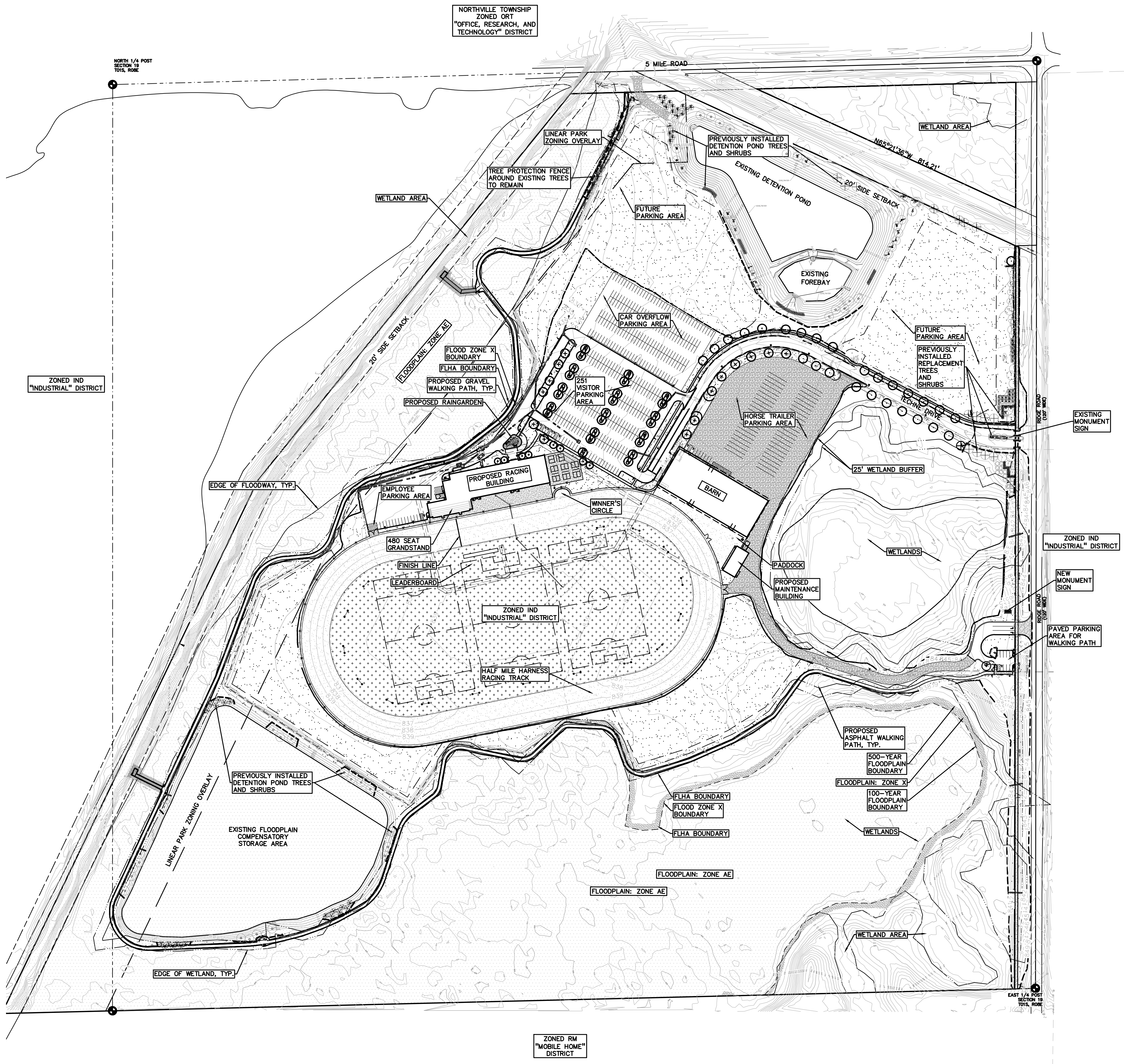
TREE REMOVAL AND REPLACEMENT COMPLETED IN PREVIOUS PROJECT IN 2019

MAINTENANCE PLAN:
 LAWNS SHALL BE MOWED AND TRIMMED ON A WEEKLY BASIS WITH FALL AND SPRING CLEAN UP AND MAINTAINED TO BE DISEASE FREE.
 LAWN TREES & LANDSCAPE AREAS SHALL HAVE ACCESS TO A READILY AVAILABLE & ACCEPTABLE WATER SUPPLY UNTIL ESTABLISHED.
 SEED LAWNS, TREES & LANDSCAPING SHALL BE WATERED WELL UNTIL ESTABLISHED, APPROXIMATELY 1 YEAR. SPECIAL ATTENTION & EXTRA WATERING IS GIVEN TO LAWN AND PLANT MATERIAL DURING TIMES OF DROUGHT.
 LAWN & LANDSCAPE SHALL BE MAINTAINED IN A REASONABLE HEALTHY CONDITION, FREE FROM REFUSE AND DEBRIS. UNHEALTHY AND DEAD MATERIAL SHALL BE REPLACED WITHIN 6 MONTHS OF DAMAGE OR DEATH OR NEXT APPROPRIATE PLANTING PERIOD.
 SEASONAL APPROPRIATE PRUNING SHALL BE DONE WHEN NECESSARY FOR SAFETY OF PEDESTRIANS AND MAINTAINING VEHICULAR SIGHT LINES. TREES SHALL BE REPLACED IF DISEASED OR DEAD.

GENERAL PLANTING NOTES:

1. LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING SITE CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, PLAN SHALL GOVERN QUANTITIES. CONTACT LANDSCAPE ARCHITECT WITH ANY CONCERNS.
2. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION MAY BE LOCATED BY CALLING MISS DIG 1-800-482-7171. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITION TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING.
3. ALL PLANT MATERIAL TO BE PREMIUM GRADE NURSERY STOCK AND SHALL SATISFY AMERICAN ASSOCIATION OF NURSERYMEN STANDARD FOR NURSERY STOCK. ALL LANDSCAPE MATERIAL SHALL BE NORTHERN GROWN, NO. 1. GRADE.
4. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON LANDSCAPE PLAN PRIOR TO PRICING THE WORK.
5. THE OWNER'S REPRESENTATIVE RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL NOT MEETING SPECIFICATIONS.
6. ALL SINGLE STEM SHADE TREES TO HAVE STRAIGHT TRUNKS AND SYMMETRICAL CROWNS.
7. ALL SINGLE TRUNK SHADE TREES TO HAVE A CENTRAL LEADER. TREES WITH FORKED OR IRREGULAR TRUNKS WILL NOT BE ACCEPTED.
8. ALL MULTI STEM TREES SHALL BE HEAVILY BRANCHED AND HAVE SYMMETRICAL CROWNS. ONE SIDED TREES OR THOSE WITH THIN OR OPEN CROWNS SHALL NOT BE ACCEPTED.
9. ALL EVERGREEN TREES SHALL BE HEAVILY BRANCHED AND FULL TO THE GROUND, SYMMETRICAL IN SHAPE AND NOT SHEARED FOR THE LAST FIVE GROWING SEASONS.
10. ALL TREES TO HAVE CLAY OR CLAY LOAM BALLS. TREES WITH SAND BALLS WILL BE REJECTED.
11. NO MACHINERY IS TO BE USED WITHIN THE DRIP LINE OF EXISTING TREES; HAND GRADE ALL LAWN AREAS WITHIN THE DRIP LINE OF EXISTING TREES.
12. ALL TREE LOCATIONS SHALL BE STAKED BY LANDSCAPE CONTRACTOR AND ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF THE PLANT MATERIAL.
13. IT IS MANDATORY THAT POSITIVE DRAINAGE IS PROVIDED AWAY FROM ALL BUILDINGS.
14. ALL PLANTING BEDS SHALL RECEIVE 3" SHREDDED HARDWOOD BARK MULCH WITH PRE EMERGENT. SEE SPECIFICATIONS. SHREDDED PALETTE AND DYED MULCH WILL NOT BE ACCEPTED.
15. ALL LANDSCAPED AREAS SHALL RECEIVE 3" COMPACTED TOPSOIL.
16. SEE SPECIFICATIONS FOR ADDITIONAL COMMENTS, REQUIREMENTS, PLANTING PROCEDURES AND WARRANTY STANDARDS.
17. FOR NON-LAWN SEED MIX AREAS, AS NOTED ON PLAN, BRUSH MOW ONCE SEASONALLY FOR INVASIVE SPECIES CONTROL.
18. CONTRACTOR SHALL NOT INSTALL PLANTS UNDER BUILDING OVERHANG AND SHALL NOTIFY LANDSCAPE ARCHITECT IF DRAWINGS CONFLICT WITH BUILDING OVERHANGS.
19. TREES SHALL NOT CONFLICT/ BLOCK PROPOSED REGULATORY/ DIRECTION SIGNAGE, MONUMENT SIGNS, ADDRESS OR LIGHT POLES. SHIFT TREES AS NECESSARY TYP.

NOTES:
 LANDSCAPE AREAS SHALL BE KEPT IN A NEAT, ORDERLY AND HEALTHY GROWING CONDITION, FREE OF DEBRIS AND REFUSE.
 PRUNING SHALL BE MINIMAL TO ASSURE THE PROPER MATURATION OF PLANTS.
 LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC, UNDERGROUND IRRIGATION SYSTEM.



S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\L-1.0 LANDSCAPE PLAN.dwg (Drawing) PLOT DATE: 10/27/2023 10:50 AM 0:00:00 JLE

KEY:

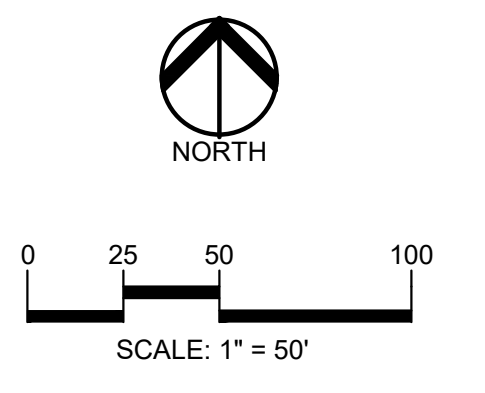
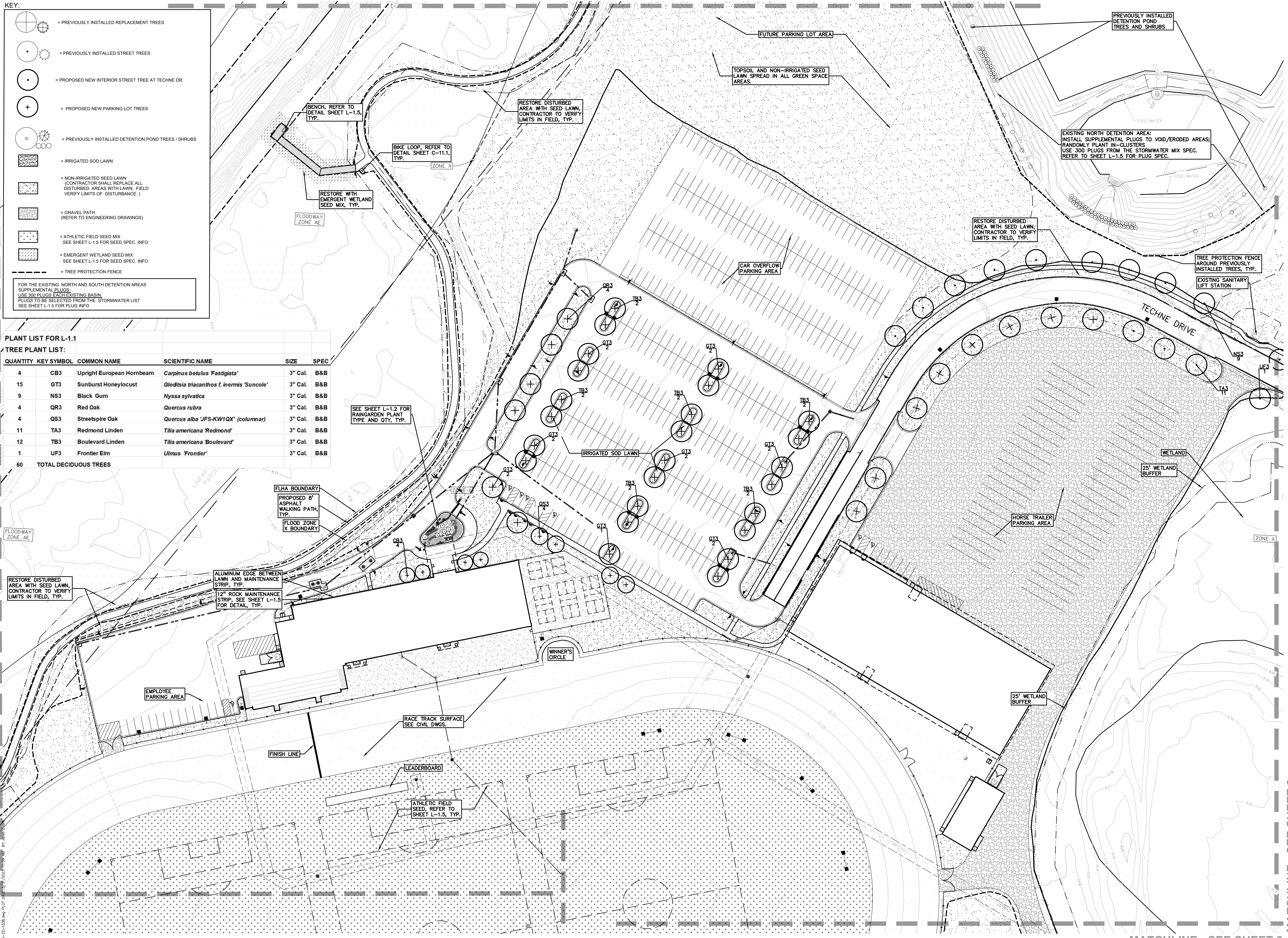
- = PREVIOUSLY INSTALLED REPLACEMENT TREES
- = PREVIOUSLY INSTALLED STREET TREES
- = PROPOSED NEW INTERIOR STREET TREE AT TECHNE DR.
- = PROPOSED NEW PARKING LOT TREES
- = PREVIOUSLY INSTALLED DETENTION POND TREES / SHRUBS
- = IRRIGATED SOD LAWN
- = NON-IRRIGATED SEED LAWN (CONTRACTOR SHALL REPLACE ALL DISTURBED AREAS WITH LAWN. FIELD VERIFY LIMITS OF DISTURBANCE.)
- = GRAVEL PATH (REFER TO ENGINEERING DRAWINGS)
- = ATHLETIC FIELD SEED MIX (SEE SHEET L-1.5 FOR SEED SPEC. INFO)
- = EMERGENT WETLAND SEED MIX (SEE SHEET L-1.5 FOR SEED SPEC. INFO)
- = TREE PROTECTION FENCE

FOR THE EXISTING NORTH AND SOUTH DETENTION AREAS SUPPLEMENTAL PLUGS: USE 300 PLUGS EACH EXISTING BASIN. PLUGS TO BE SELECTED FROM THE STORMWATER LIST SEE SHEET L-1.5 FOR PLUG INFO

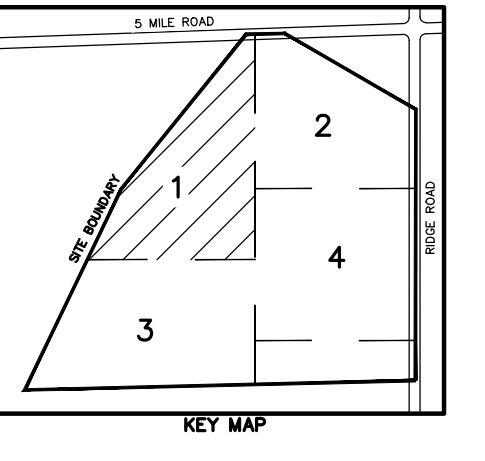
PLANT LIST FOR L-1.1

TREE PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
4	CB3	Upright European Hornbeam	<i>Carpinus betulus 'Fastigiata'</i>	3" Cal.	B&B
15	GT3	Sunburst Honeylocust	<i>Gleditsia triacanthos f. inermis 'Suncole'</i>	3" Cal.	B&B
9	NS3	Black Gum	<i>Nyssa sylvatica</i>	3" Cal.	B&B
4	QR3	Red Oak	<i>Quercus rubra</i>	3" Cal.	B&B
4	QS3	Streetspire Oak	<i>Quercus alba 'UFS-KW1QX' (columnar)</i>	3" Cal.	B&B
11	TA3	Redmond Linden	<i>Tilia americana 'Redmond'</i>	3" Cal.	B&B
12	TB3	Boulevard Linden	<i>Tilia americana 'Boulevard'</i>	3" Cal.	B&B
1	UF3	Frontier Elm	<i>Ulmus 'Frontier'</i>	3" Cal.	B&B
60		TOTAL DECIDUOUS TREES			



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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
LANDSCAPE PLAN - SHEET 1

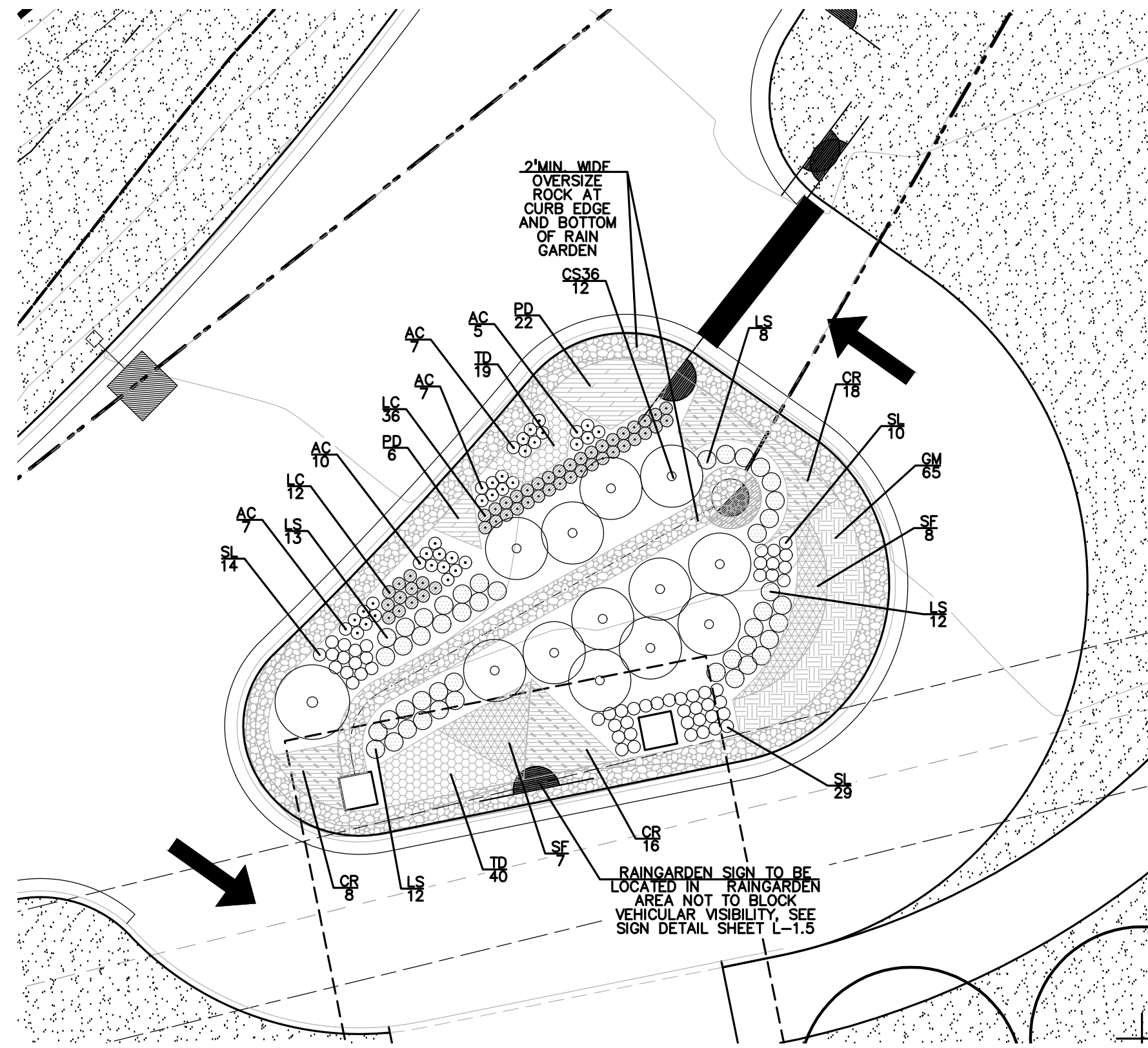
PEA JOB NO. 2022-1338
 P.M. BK
 DN. BGG
 DES. JLE
 DRAWING NUMBER:

L-1.1

S:\PROJECTS\2022\2022-1338\LANDSCAPE PLAN\LANDSCAPE PLAN - SHEET 1.dwg

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3



RAIN GARDEN DETAIL

SCALE: 1" = 10'

RAIN GARDEN PLANT LIST:

PERENNIAL PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
36	AC	Wild Columbine	<i>Aquilegia canadensis</i>	1 Gal.	Cont.
42	CR	Rosy Sedge	<i>Carex rosea</i>	1 Gal.	Cont.
65	GM	Wild Geranium	<i>Geranium maculatum</i>	1 Gal.	Cont.
48	LC	Cardinal Flower	<i>Lobelia cardinalis</i>	1 Gal.	Cont.
45	LS	Great Blue Lobelia	<i>Lobelia siphilitica</i>	1 Gal.	Cont.
28	PD	Blue Phlox	<i>Phlox divaricata</i>	1 Gal.	Cont.
15	SF	Broad-leaved Goldenrod	<i>Solidago flexicaulis</i>	1 Gal.	Cont.
53	SL	Side-flowering Aster	<i>Symphoricarum lateriflorum</i>	1 Gal.	Cont.
59	TD	Early Meadow Rue	<i>Thalictrum dioicum</i>	1 Gal.	Cont.
391	TOTAL PERENNIALS				

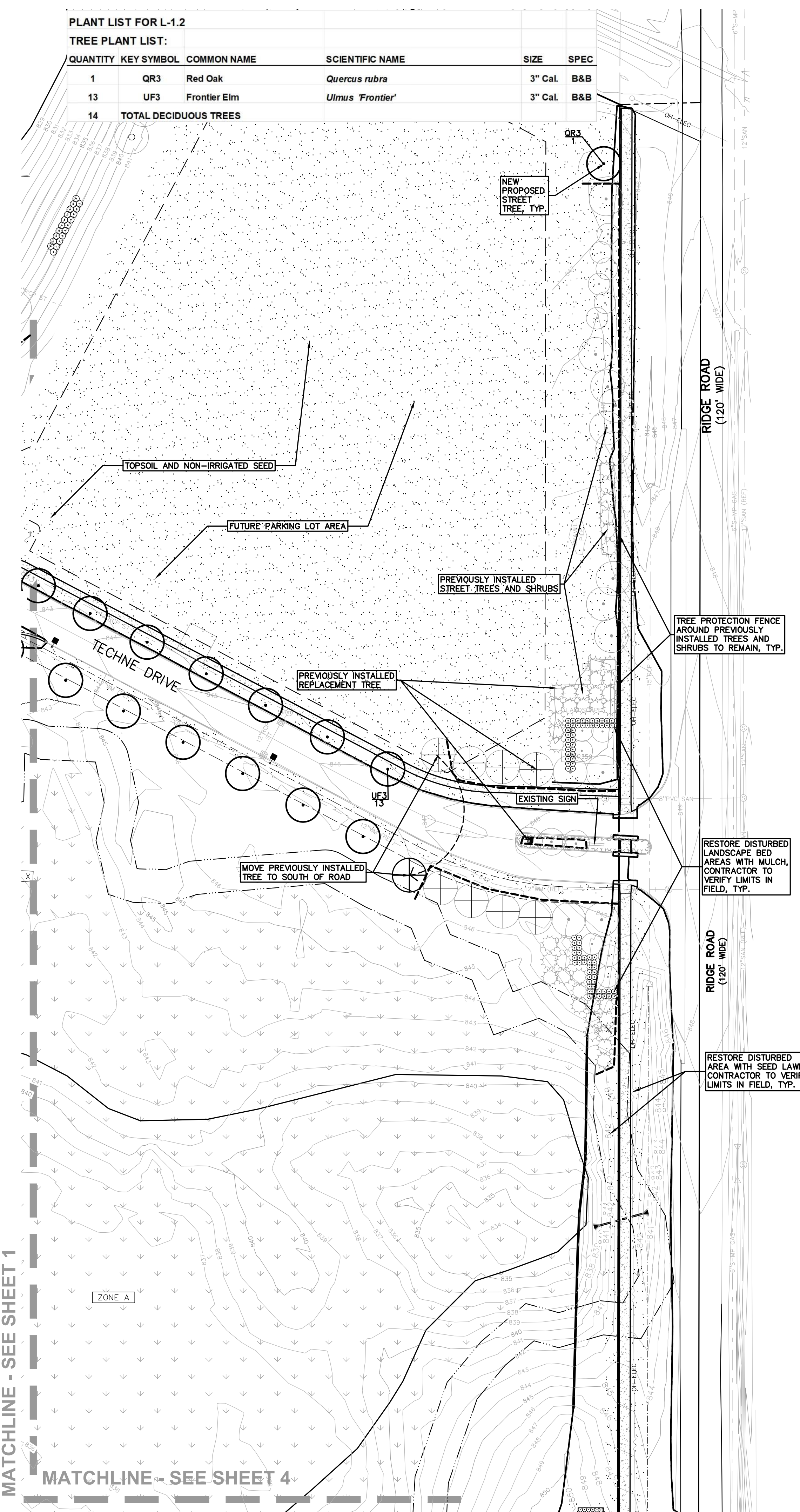
SHRUB PLANT LIST:

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
12	CS36	Bergeson Compact Dogwood	<i>Comus sericea</i> 'Bergeson'	36" Ht.	Cont.
12	TOTAL SHRUBS				

PLANT LIST FOR L-1.2

TREE PLANT LIST:

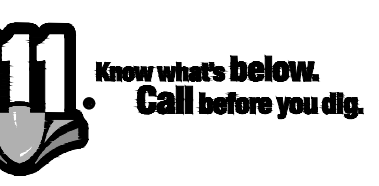
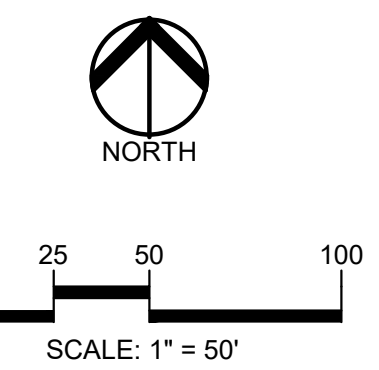
QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC
1	QR3	Red Oak	<i>Quercus rubra</i>	3" Cal.	B&B
13	UF3	Frontier Elm	<i>Ulmus 'Frontier'</i>	3" Cal.	B&B
14	TOTAL DECIDUOUS TREES				



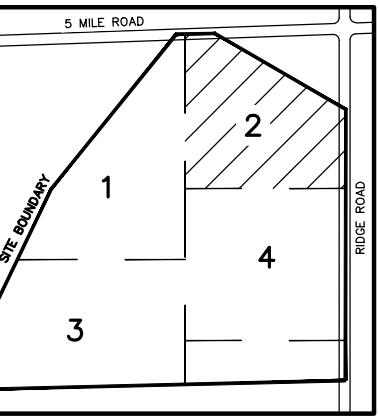
KEY:

- = PREVIOUSLY INSTALLED REPLACEMENT TREES
- = RELOCATED PREVIOUSLY INSTALLED REPLACEMENT TREE FOR NEW PROPOSED PARKING AREA NORTH SIDE OF ENTRY AT TECHNE DRIVE
- = PREVIOUSLY INSTALLED STREET TREES
- = PROPOSED NEW STREET TREE AT RIDGE ROAD, NORTH END
- = PROPOSED NEW INTERIOR STREET TREE AT TECHNE DR.
- = DECIDUOUS SHRUBS
- = PERENNIALS
- = IRRIGATED SOD LAWN
- = NON-IRRIGATED SEED LAWN (CONTRACTOR SHALL REPLACE ALL DISTURBED AREAS WITH LAWN. FIELD VERIFY LIMITS OF DISTURBANCE.)
- = GRAVEL PATH (REFER TO ENGINEERING DRAWINGS)
- = TREE PROTECTION FENCE

PEA GROUP
t: 844.813.2949
www.peagroup.com



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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE:
MARCH 31, 2023
DRAWING TITLE
LANDSCAPE PLAN - SHEET 2

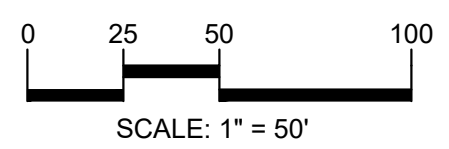
PEA JOB NO.	2022-1338
P.M.	BK
DN.	BGG
DES.	JLE

DRAWING NUMBER:
L-1.2

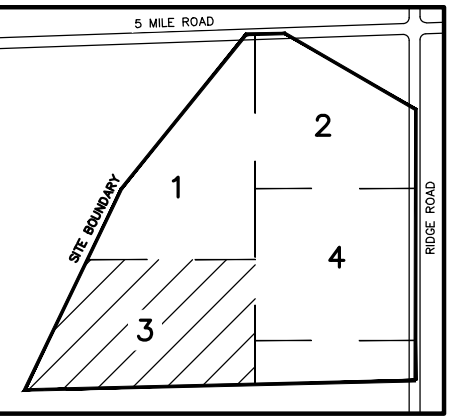
S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\LANDSCAPE\CONSTRUCTION\L-1.0 LANDSCAPE PLAN.dwg (Drawing) PLOT DATE: 3/31/2023 10:53 AM 8/13/2023 10:53 AM

MATCHLINE - SEE SHEET 1

MATCHLINE - SEE SHEET 4



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



CLIENT
JR MILITELLO REALTY
 288 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

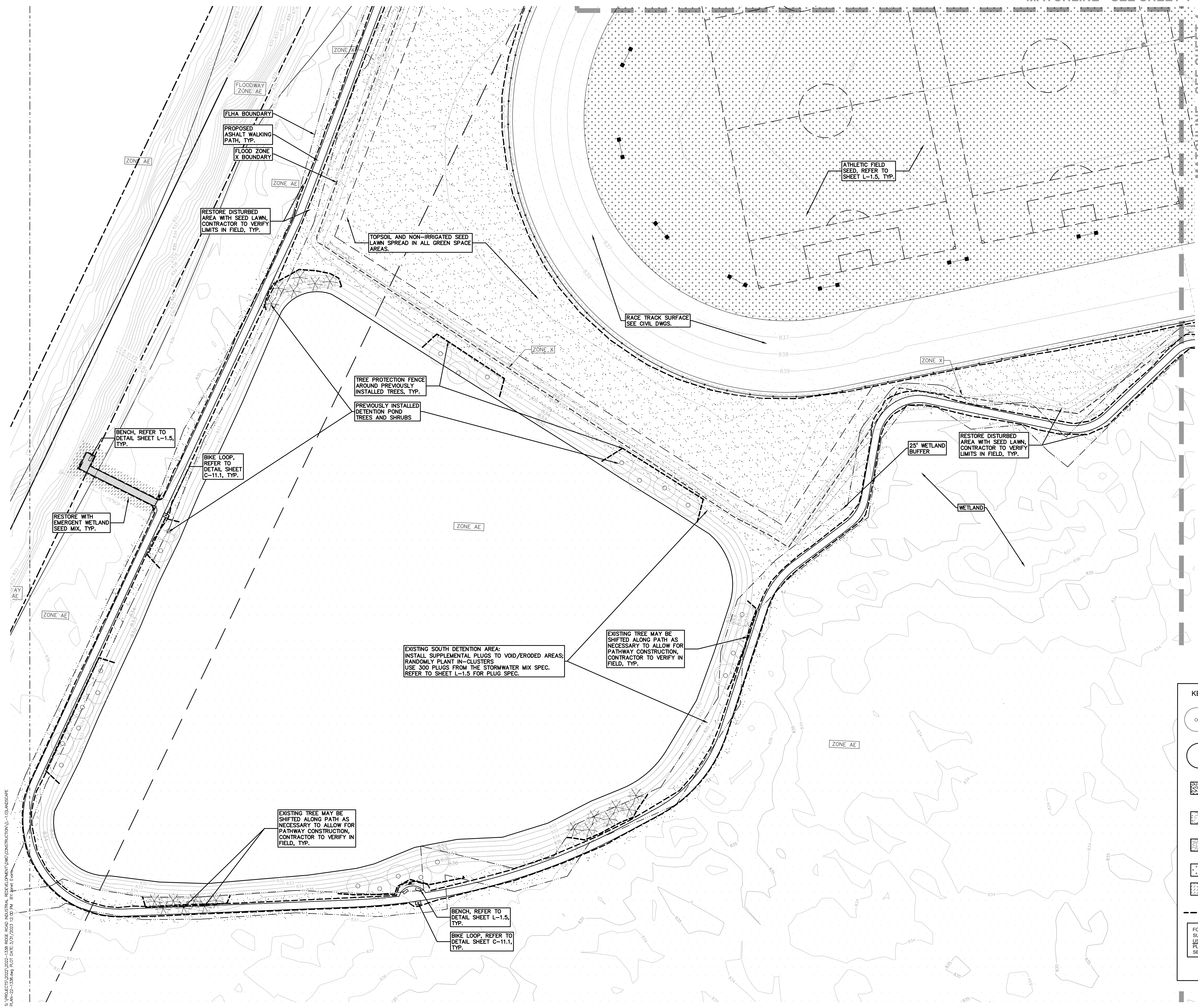
REVISIONS

NO.	DESCRIPTION

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
LANDSCAPE PLAN - SHEET 3

PEA JOB NO. 2022-1338
 P.M. BK
 DN. BGG
 DES. JLE

DRAWING NUMBER:
L-1.3



KEY:

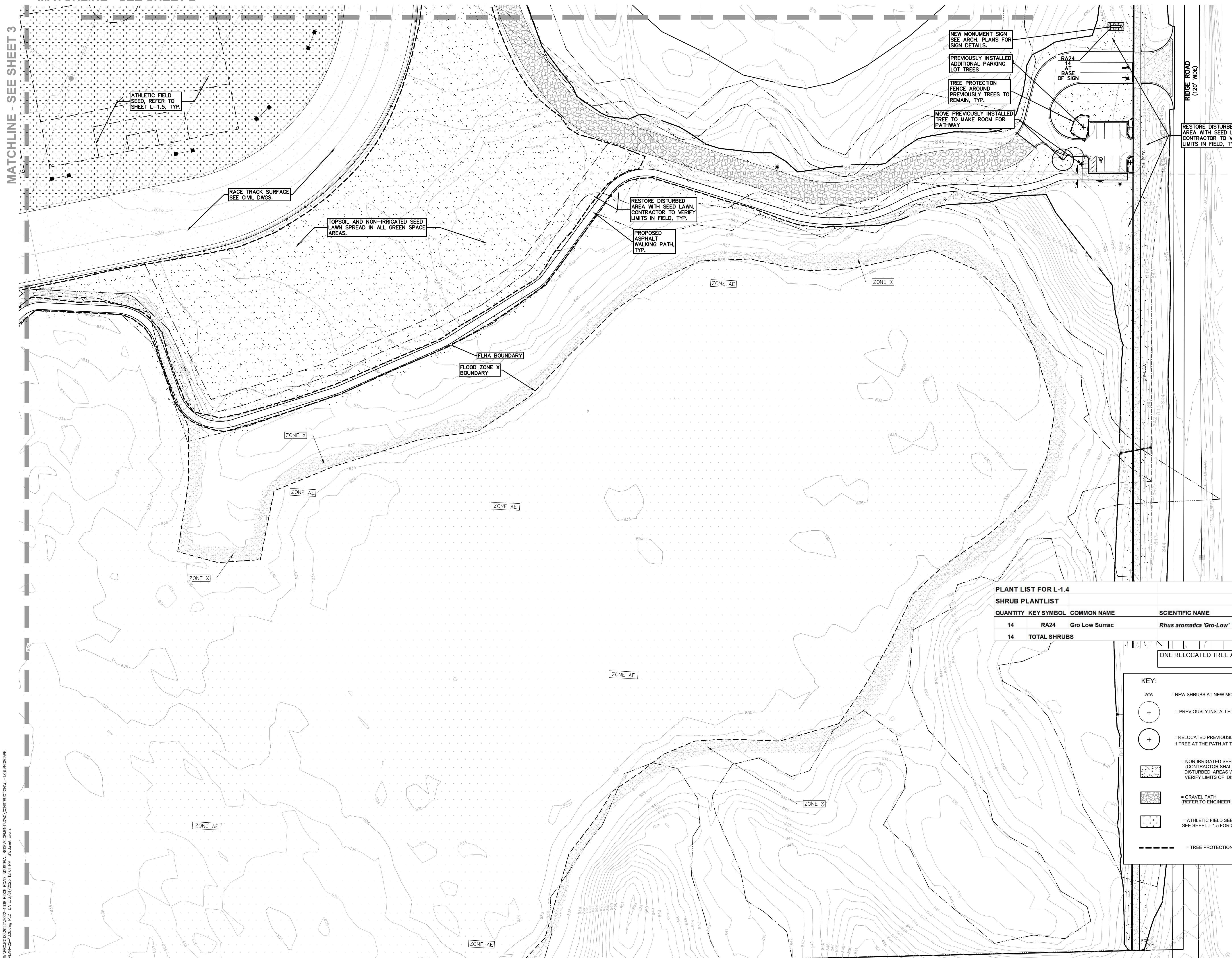
- = PREVIOUSLY INSTALLED DETENTION POND TREES / SHRUBS
- = RELOCATED PREVIOUSLY INSTALLED DETENTION POND TREE
 1 TREE AT THE SW DETENTION AREA FOR THE PATH
- = IRRIGATED SOD LAWN
- = NON-IRRIGATED SEED LAWN
 (CONTRACTOR SHALL REPLACE ALL DISTURBED AREAS WITH LAWN. FIELD VERIFY LIMITS OF DISTURBANCE.)
- = GRAVEL PATH
 (REFER TO ENGINEERING DRAWINGS)
- = ATHLETIC FIELD SEED MIX
 SEE SHEET L-1.5 FOR SEED SPEC. INFO
- = EMERGENT WETLAND SEED MIX
 SEE SHEET L-1.5 FOR SEED SPEC. INFO
- = TREE PROTECTION FENCE

FOR THE EXISTING NORTH AND SOUTH DETENTION AREAS
 SUPPLEMENTAL PLUGS
 USE 300 PLUGS EACH EXISTING BASIN.
 PLUGS TO BE SELECTED FROM THE STORMWATER LIST
 SEE SHEET L-1.5 FOR PLUG INFO

S:\PROJECTS\2022\2022-1338\0302-1338 0302-1338 0302-1338 INDUSTRIAL REDEVELOPMENT DRAINAGE CONSTRUCTION (L-1.0) LANDSCAPE PLAN FOR CONSTRUCTION (DATE: 03/21/2023) 0302-1338.dwg

MATCHLINE - SEE SHEET 2

MATCHLINE - SEE SHEET 3



PLANT LIST FOR L-1.4

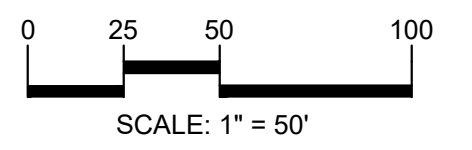
SHRUB PLANTLIST

QUANTITY	KEY SYMBOL	COMMON NAME	SCIENTIFIC NAME	SIZE	SPEC.
14	RA24	Gro Low Sumac	<i>Rhus aromatica 'Gro-Low'</i>	24" Ht.	Cont.
14	TOTAL SHRUBS				

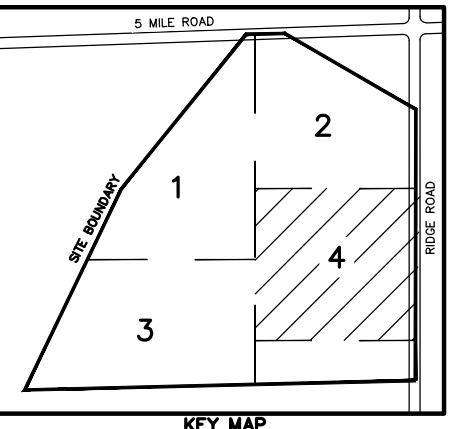
ONE RELOCATED TREE AT PATH AT GRAVEL PARKING LOT AND NEW SHRUBS AT NEW SIGN

KEY:

- = NEW SHRUBS AT NEW MONUMENT SIGN, SIGN BY ARCH.
- = PREVIOUSLY INSTALLED PARKING LOT TREE
- = RELOCATED PREVIOUSLY INSTALLED PARKING LOT TREE
1 TREE AT THE PATH AT THE GRAVEL PARKING AREA OFF RIDGE RD.
- = NON-IRRIGATED SEED LAWN
(CONTRACTOR SHALL REPLACE ALL DISTURBED AREAS WITH LAWN. FIELD VERIFY LIMITS OF DISTURBANCE.)
- = GRAVEL PATH
(REFER TO ENGINEERING DRAWINGS)
- = ATHLETIC FIELD SEED MIX
SEE SHEET L-1.5 FOR SEED SPEC. INFO
- = TREE PROTECTION FENCE



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



CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
LANDSCAPE PLAN - SHEET 4

PEA JOB NO. 2022-1338
P.M. BK
DN. BKG
DES. JLE
DRAWING NUMBER:

L-1.4

S:\PROJECTS\2022\2022-1338 RIDGE ROAD INDUSTRIAL REDEVELOPMENT\DWG\CONSTRUCTION\L-1.0 LANDSCAPE PLAN.dwg (Drawing Plot Date: 3/31/2023 10:17 AM) - 5/28/2023 10:17 AM

FOR RESTORATION OF WETLAND AREAS AT BOARD WALK AREAS ETC. INSTALL AND PREP PER MANUFACTURER SPECIFICATIONS. PROVIDE EROSION MAT ON SLOPES AND AREAS OF WASH OUT TYP. STANTEC OR APPROVED EQUAL.

Emergent Wetland Seed Mix
Stantec Native Plant Nursery 574-586-2412
stantec.com/native-plant-nursery

Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
<i>Bolboschoenus fluviatilis</i>	River Bulrush
<i>Carex comosa</i>	Bristly Sedge
<i>Carex lacustris</i>	Common Lake Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex stricta</i>	Common Tussock Sedge
<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Eleocharis palustris</i>	Great Spike Rush
<i>Juncus effusus</i>	Common Rush
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Schoenoplectus acutus</i>	Hard-stemmed Bulrush
<i>Schoenoplectus americanus</i>	Chairmaker's Rush
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush

Temporary Cover:
Avena sativa Common Oat
Lolium multiflorum Annual Rye

Forbs:	
<i>Acorus americanus</i>	Sweet Flag
<i>Alisma spp.</i>	Water Plantain (Various Mix)
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Cephalanthus occidentalis</i>	Buttonbush
<i>Decodon verticillatus</i>	Swamp Loosestrife
<i>Eutrochium maculatum</i>	Spotted Joe-Pye Weed
<i>Hibiscus spp.</i>	Rosemallow (Various Mix)
<i>Iris virginica</i>	Blue Flag
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Lobelia siphilitica</i>	Great Blue Lobelia
<i>Lycopus americanus</i>	Common Water Horehound
<i>Mimulus ringens</i>	Monkey Flower
<i>Peltandra virginica</i>	Arrow Arum
<i>Penthorum sedoides</i>	Ditch Stonecrop
<i>Polygonum spp.</i>	Pinkweed (Various Mix)
<i>Pontederia cordata</i>	Pickereel Weed
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Sparganium eurycarpum</i>	Common Bur Reed
<i>Verbena hastata</i>	Blue Vervain

FOR THE EXISTING NORTH AND SOUTH DETENTION AREAS SUPPLEMENTAL PLUGS. USE 300 PLUGS EACH EXISTING BASIN. PLUGS TO BE SELECTED FROM THE BELOW STORMWATER LIST. SELECT MIN. OF 2 GRASS, SEDGE, RUSH AND FORB SPECIES. INSTALL AND PREP PER MANUFACTURER SPECIFICATIONS. STANTEC OR APPROVED EQUAL.

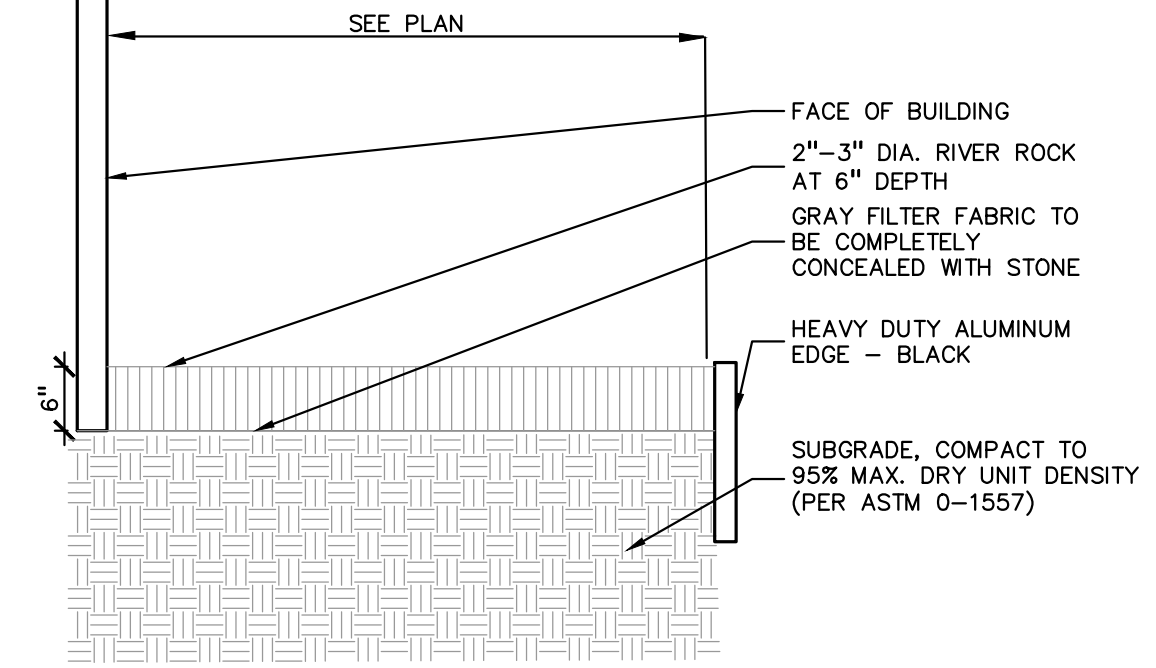
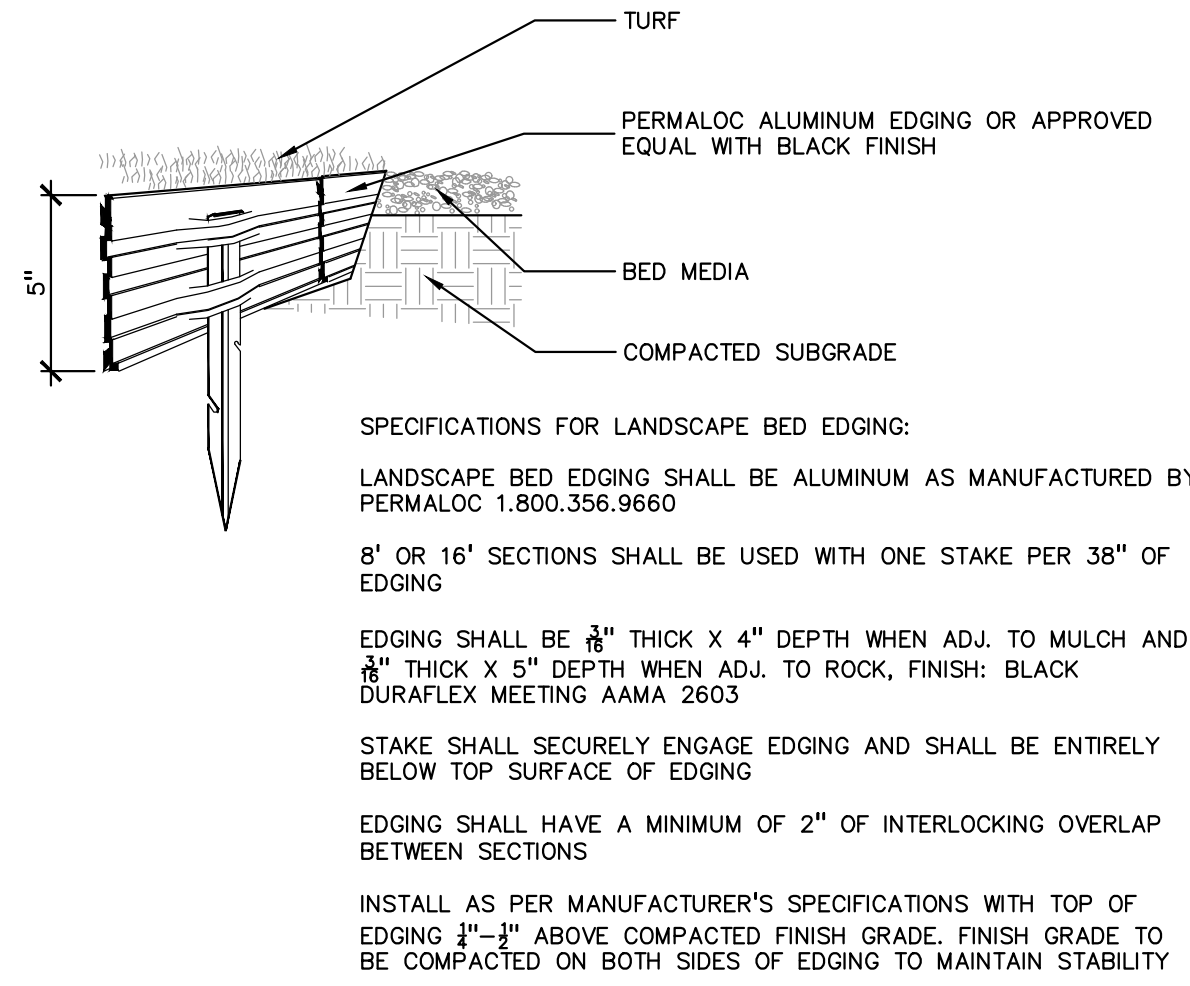
Stormwater Seed Mix
STANTEC NATIVE PLANT NURSERY 574-586-2412
stantec.com/native-plant-nursery

Botanical Name	Common Name
Permanent Grasses/Sedges/Rushes:	
<i>Bolboschoenus fluviatilis</i>	River Bulrush
<i>Carex cristatella</i>	Crested Oval Sedge
<i>Carex lurida</i>	Bottlebrush Sedge
<i>Carex vulpinoidea</i>	Brown Fox Sedge
<i>Elymus virginicus</i>	Virginia Wild Rye
<i>Glyceria striata</i>	Fowl Manna Grass
<i>Juncus effusus</i>	Common Rush
<i>Leersia oryzoides</i>	Rice Cut Grass
<i>Panicum virgatum</i>	Switch Grass
<i>Schoenoplectus tabernaemontani</i>	Softstem Bulrush
<i>Scirpus atrovirens</i>	Dark Green Rush
<i>Scirpus cyperinus</i>	Wool Grass

Temporary Cover:
Avena sativa Common Oat
Lolium multiflorum Annual Rye

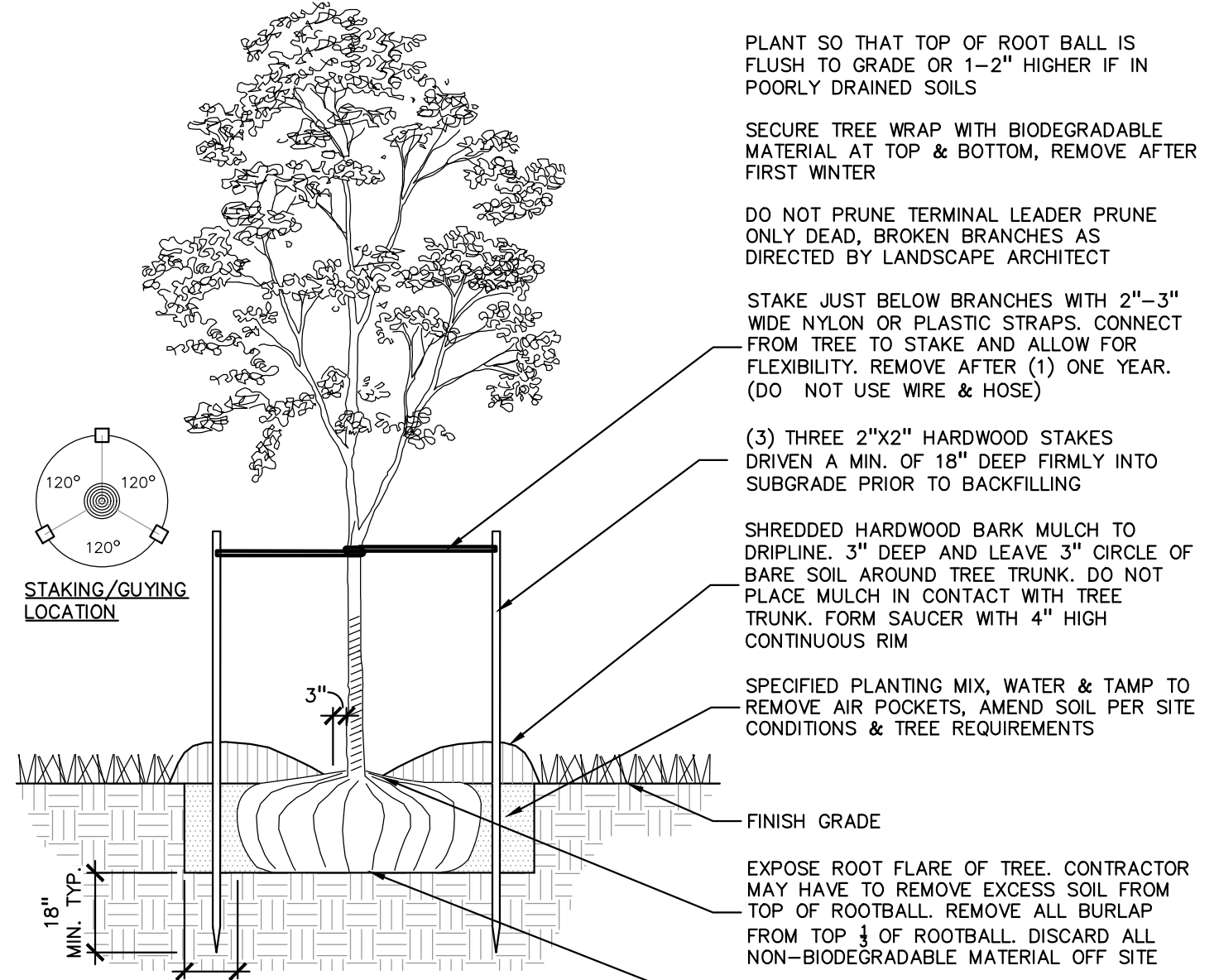
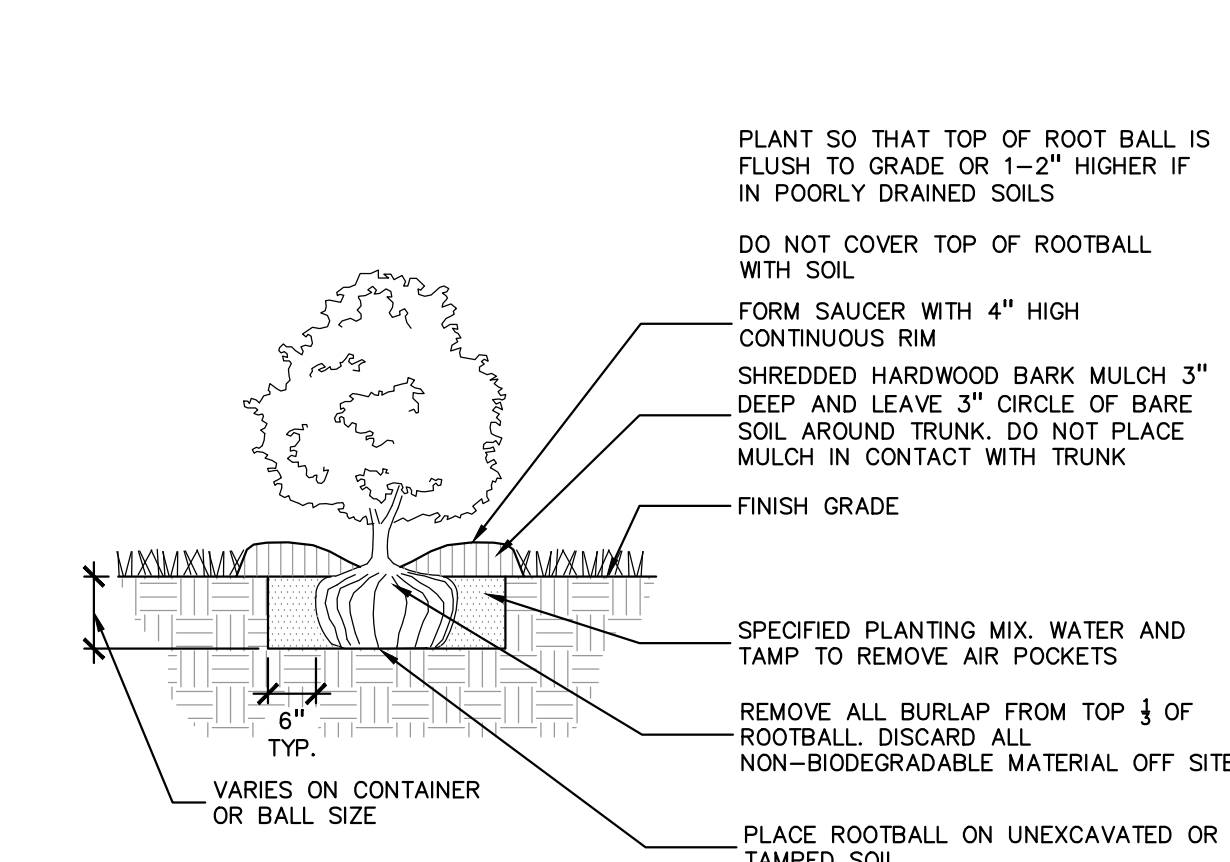
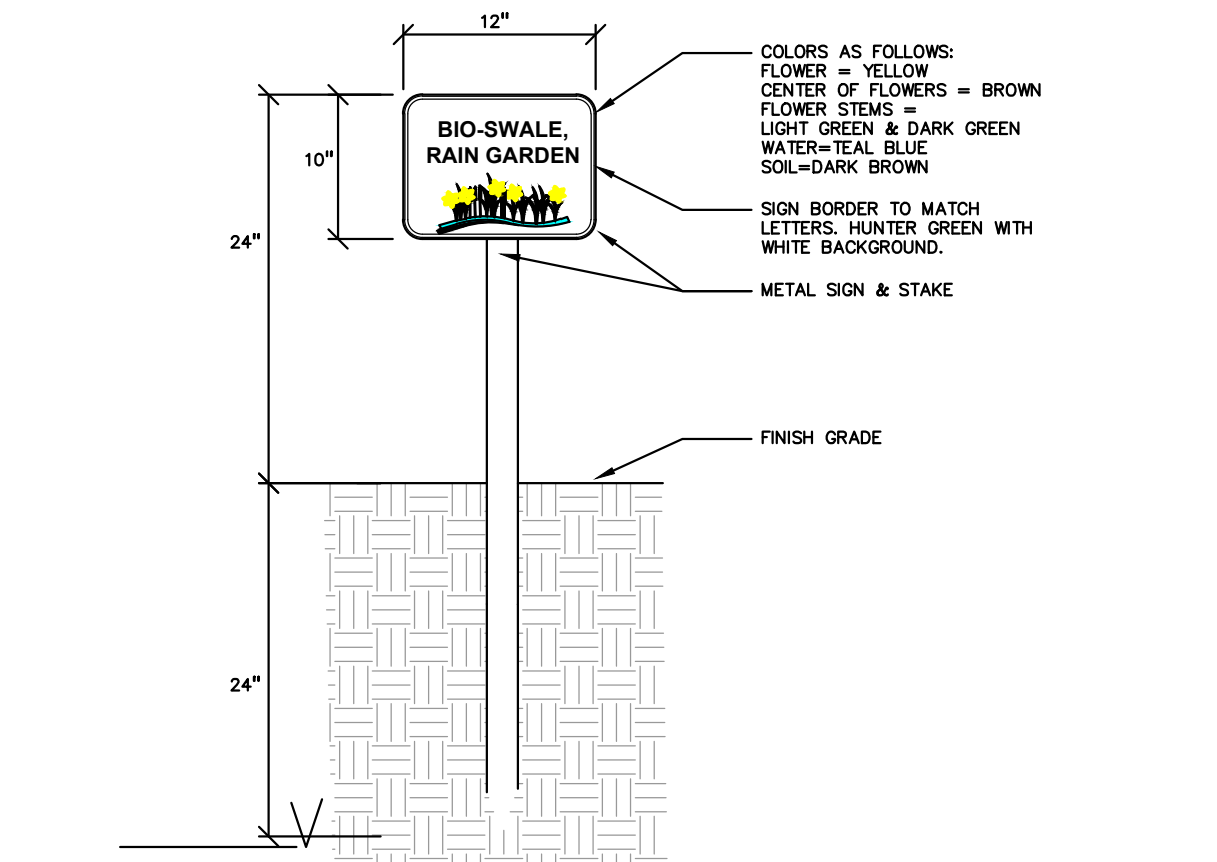
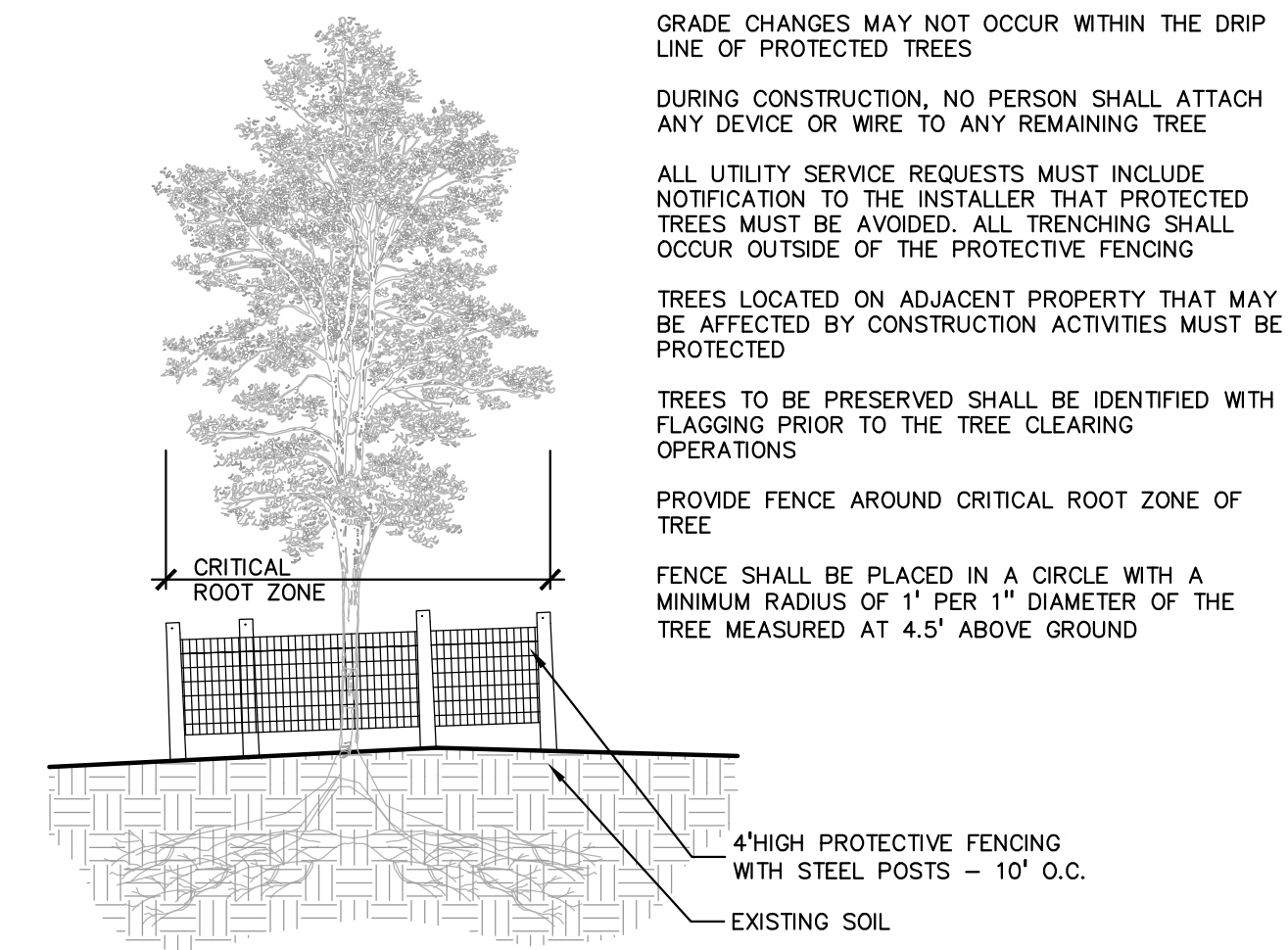
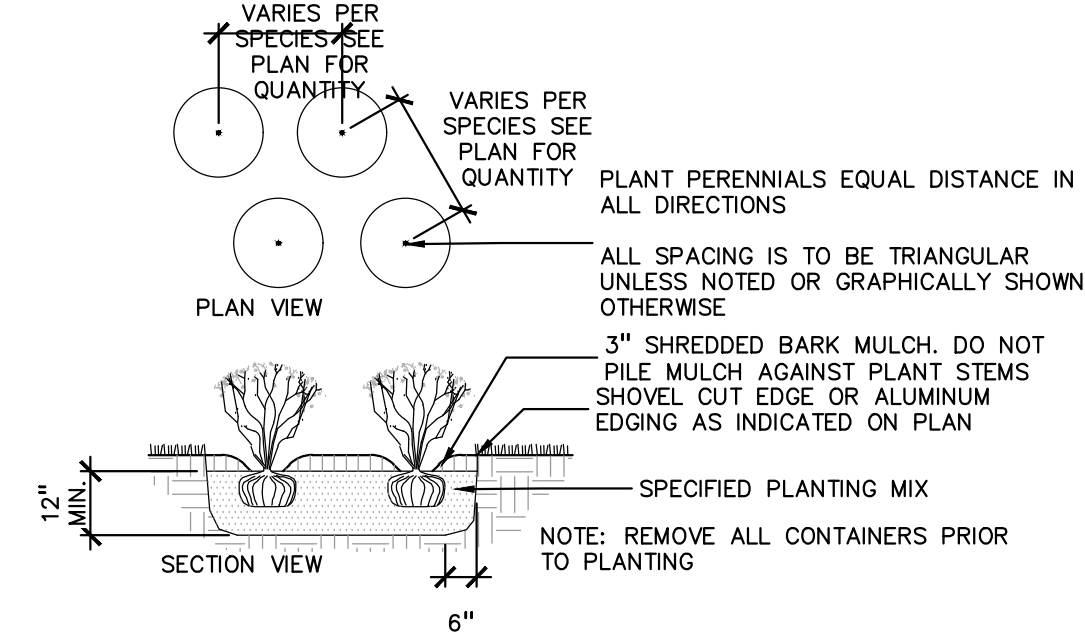
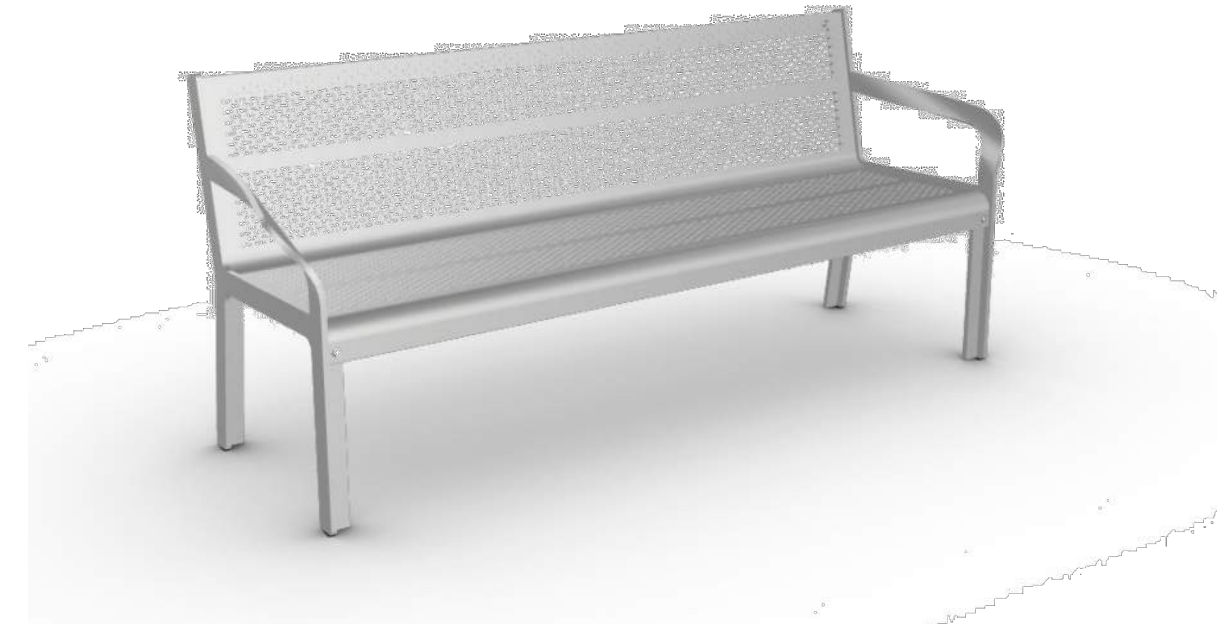
Forbs & Shrubs:	
<i>Alisma spp.</i>	Water Plantain (Various Mix)
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Bidens spp.</i>	Bidens (Various Mix)
<i>Helenium autumnale</i>	Sneezeweed
<i>Iris virginica</i>	Blue Flag
<i>Lycopus americanus</i>	Common Water Horehound
<i>Mimulus ringens</i>	Monkey Flower
<i>Oligoneuron riddellii</i>	Riddell's Goldenrod
<i>Penthorum sedoides</i>	Ditch Stonecrop
<i>Polygonum spp.</i>	Pinkweed (Various Mix)
<i>Rudbeckia subtomentosa</i>	Sweet Black-Eyed Susan
<i>Rudbeckia triloba</i>	Brown-Eyed Susan
<i>Sagittaria latifolia</i>	Common Arrowhead
<i>Senna hebecarpa</i>	Wild Senna
<i>Symphoricarpon novae-angliae</i>	New England Aster
<i>Thalictrum dasycarpum</i>	Purple Meadow Rue

Sports Turf 50/50 Mix
25% Elite Kentucky Bluegrass
25% Elite Kentucky Bluegrass
25% Turf Type Perennial Ryegrass
25% Turf Type Perennial Ryegrass



BENCH: 77" L X 24.25" D X 32.75" H, BACKED
RATIO BENCH (BACKLESS OPTION AVAILABLE)
OR APPROVED EQUAL
BY FORMS + SURFACES
PHONE: 800.451.0410

SEAT MATERIAL: STAINLESS STEEL
SEAT FINISH: POWDERCOAT, ALUMINUM TEXTURE
FRAME MATERIAL: ALUMINUM
FRAME FINISH: POWDERCOAT, ALUMINUM TEXTURE
QUANTITY: 4 TOTAL
CLIENT TO CONFIRM QUANTITIES AND EXACT PLACEMENT



DATE: 12/10/2024, 09:16 AM. USER: JLE. PROJECT: PLYMOUTH TWP CONSTRUCTION (L-1.5) LANDSCAPE. DRAWING NUMBER: L-1.5.1333. SCALE: AS SHOWN. PLOT: 001. DATE: 12/10/2024. TIME: 09:16 AM.

PEA GROUP
www.peagroup.com
t: 844.813.2949



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

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS	

ORIGINAL ISSUE DATE:
MARCH 31, 2023

DRAWING TITLE
LANDSCAPE DETAILS

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BGG
DES.	JLE
DRAWING NUMBER:	

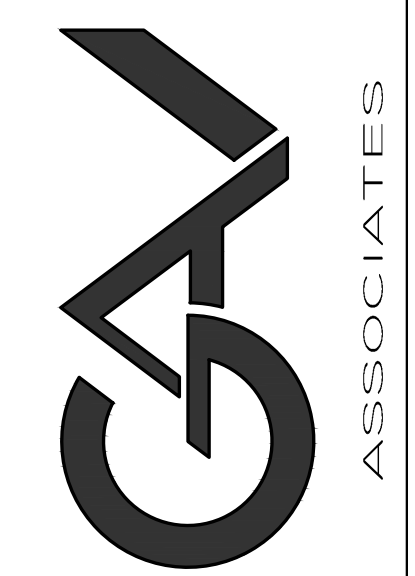
L-1.5

ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD. STE. 100A
FARMINGTON, MICHIGAN 48338
PH: (248) 388-9101
WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
PO BOX 590039
LIVONIA, MI 48158
248.388.3192

PROPOSED NEW FACILITY FOR:
NORTHVILLE DOWNS at PLYMOUTH TWP.
FIVE MILE & RIDGE ROAD
PLYMOUTH TWP., MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
AV	AV	

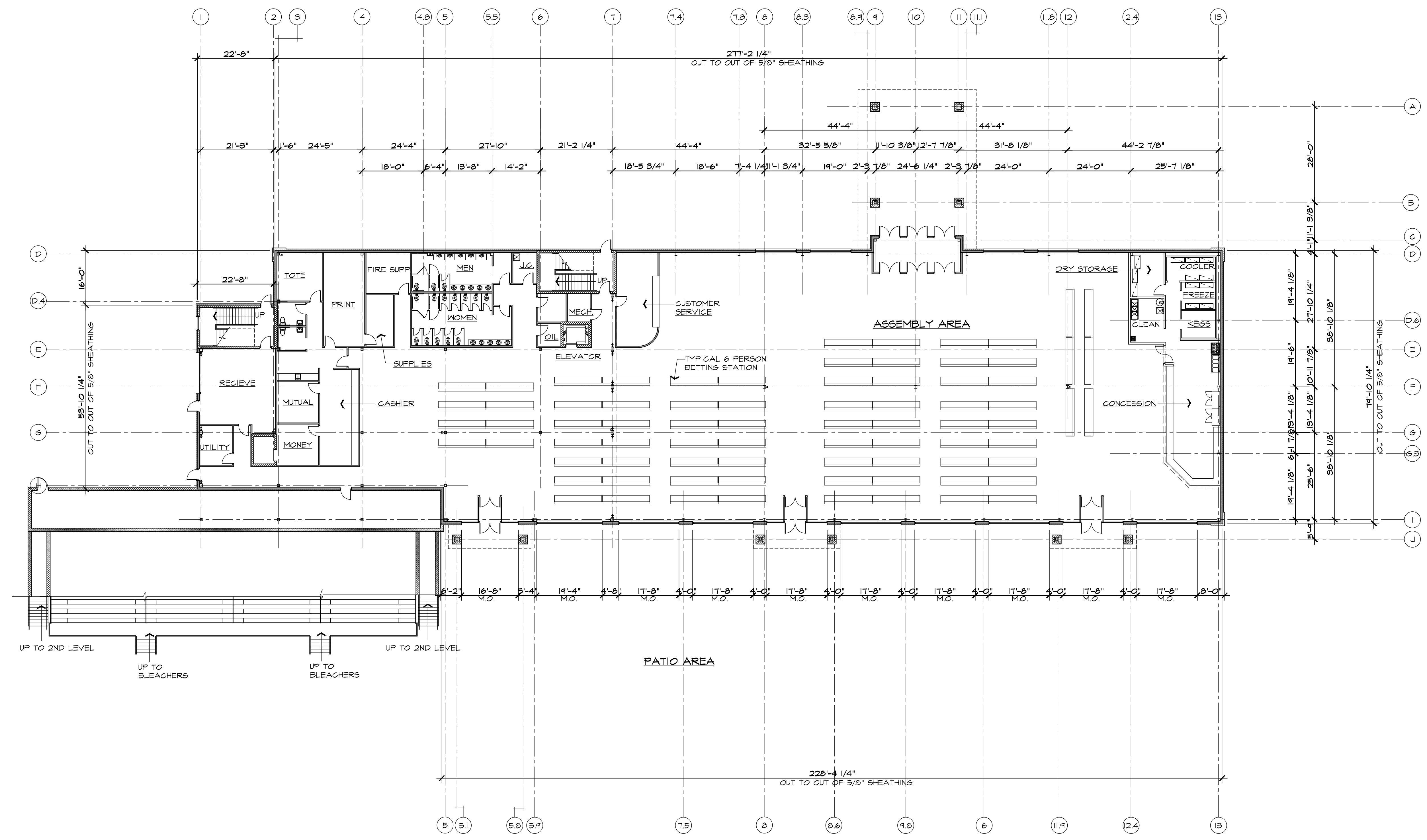
SCALE : PER PLAN

FILE NAME :

JOB # 22143

SHEET TITLE
FLOOR PLAN

SHEET #
A.101



NORTH
FLOOR PLAN GRADE LEVEL
23,032 GROSS S.F.

SCALE: 1/16" = 1'-0"

- NOTE:**
1. USE GROUP: MIXED NONSEPARATED A-2 / A-5
 2. CONSTRUCTION CLASSIFICATION: 11B

GAMING / GRANDSTAND BLDG.

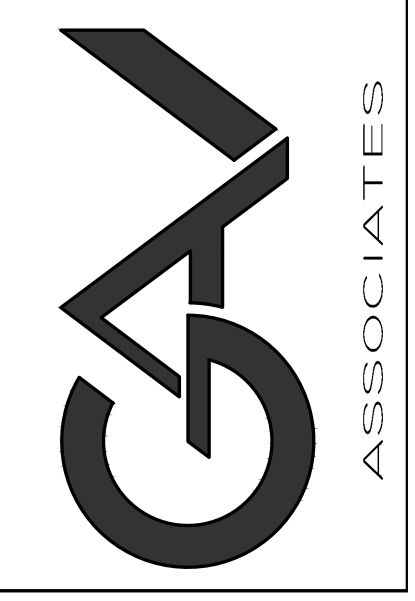


ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD. STE. 100A
FARMINGTON, MICHIGAN 48338
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
PO BOX 590039
LIVONIA, MI 48158
248.388.3192

PROPOSED NEW FACILITY FOR:
NORTHVILLE DOWNS at PLYMOUTH TWP.
FIVE MILE & RIDGE ROAD
PLYMOUTH TWP., MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
AV	AV	

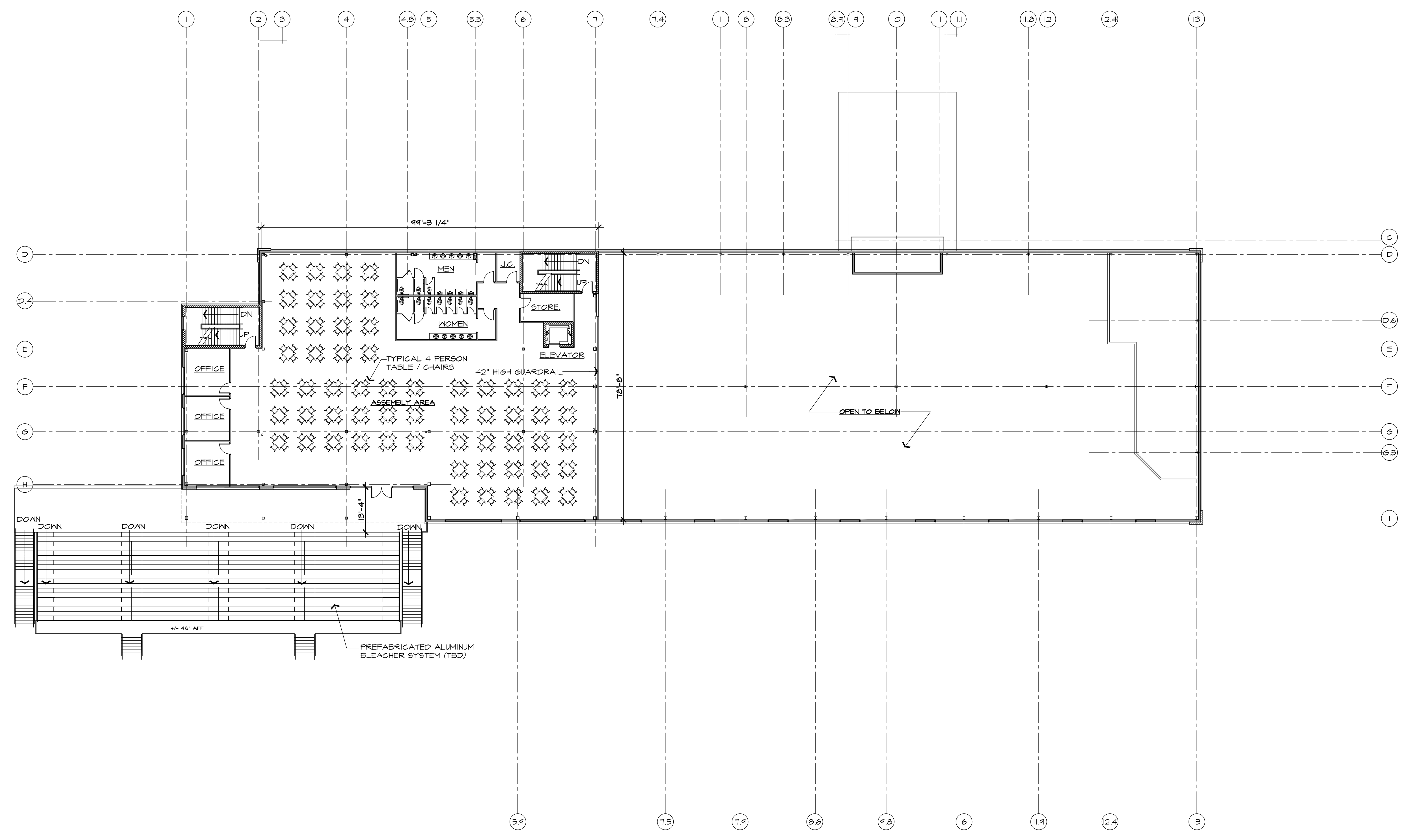
SCALE : PER PLAN

FILE NAME :

JOB # 22143

SHEET TITLE
FLOOR PLAN

SHEET #
A.102



SECOND LEVEL FLOOR PLAN GRANDSTAND
 INTERIOR VIEWING: 11,775 GROSS S.F.
 GRANDSTAND: 4,900 GROSS S.F.
 SCALE: 1/16" = 1'-0"

- NOTE:**
1. USE GROUP: MIXED NONSEPARATED A-2 / A-5
 2. CONSTRUCTION CLASSIFICATION: 11B
 3. FULLY FIRE SUPPRESSED BUILDING

GAMING / GRANDSTAND BLDG.



ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD. STE. 100A
FARMINGTON, MICHIGAN 48338
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
PO BOX 590039
LIVONIA, MI 48158
248.388.3192

PROPOSED NEW FACILITY FOR:
NORTHVILLE DOWNS at PLYMOUTH TWP.
FIVE MILE & RIDGE ROAD
PLYMOUTH TWP., MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
AV	AV	

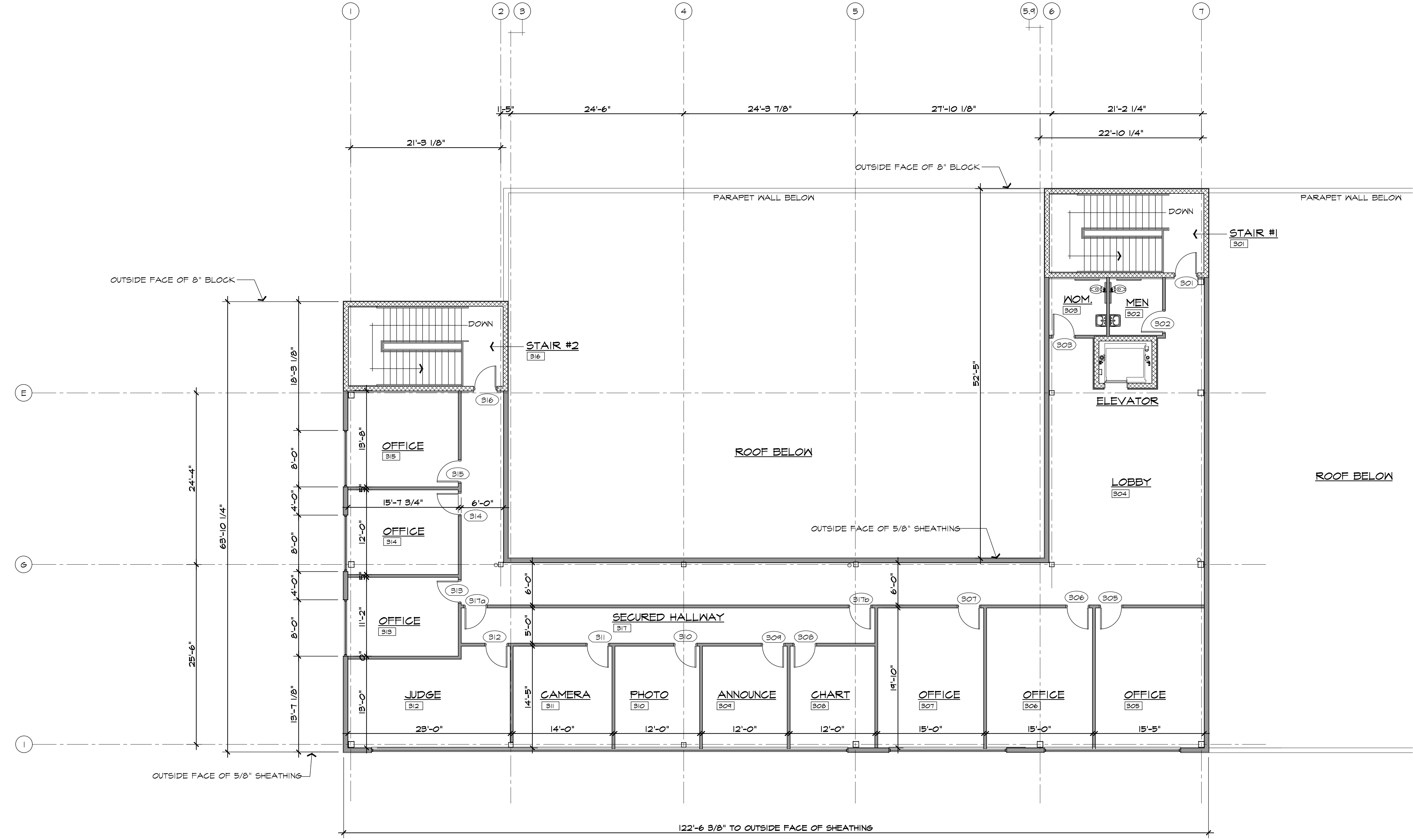
SCALE : PER PLAN

FILE NAME :

JOB # 22143

SHEET TITLE
FLOOR PLAN

SHEET #
A.103



THIRD LEVEL FLOOR PLAN

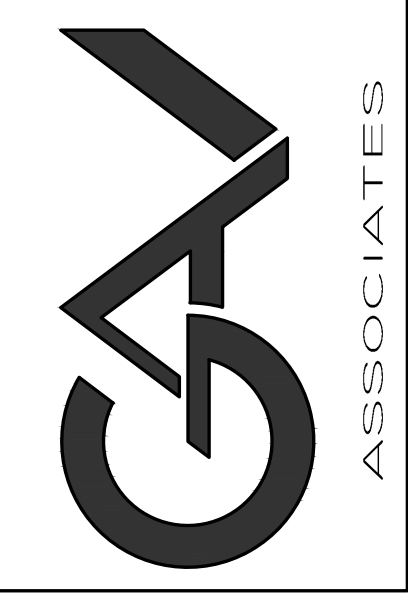
SCALE: 1/8" = 1'-0"

ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LANE RD, STE 100A
FARMINGTON, MICHIGAN 48338
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
PO BOX 590039
LIVONIA, MI 48158
248.388.3192

PROPOSED NEW FACILITY FOR:
NORTHVILLE DOWNS at PLYMOUTH TWP.
FIVE MILE & RIDGE ROAD
PLYMOUTH TWP., MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
AV	AV	

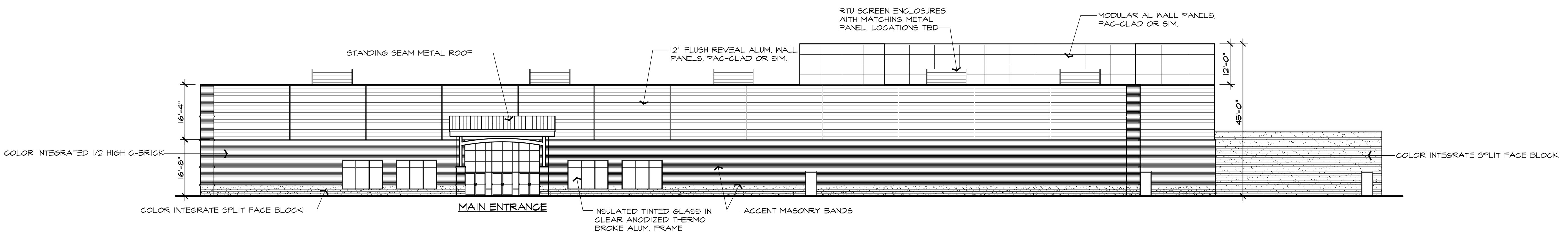
SCALE : PER PLAN

FILE NAME :

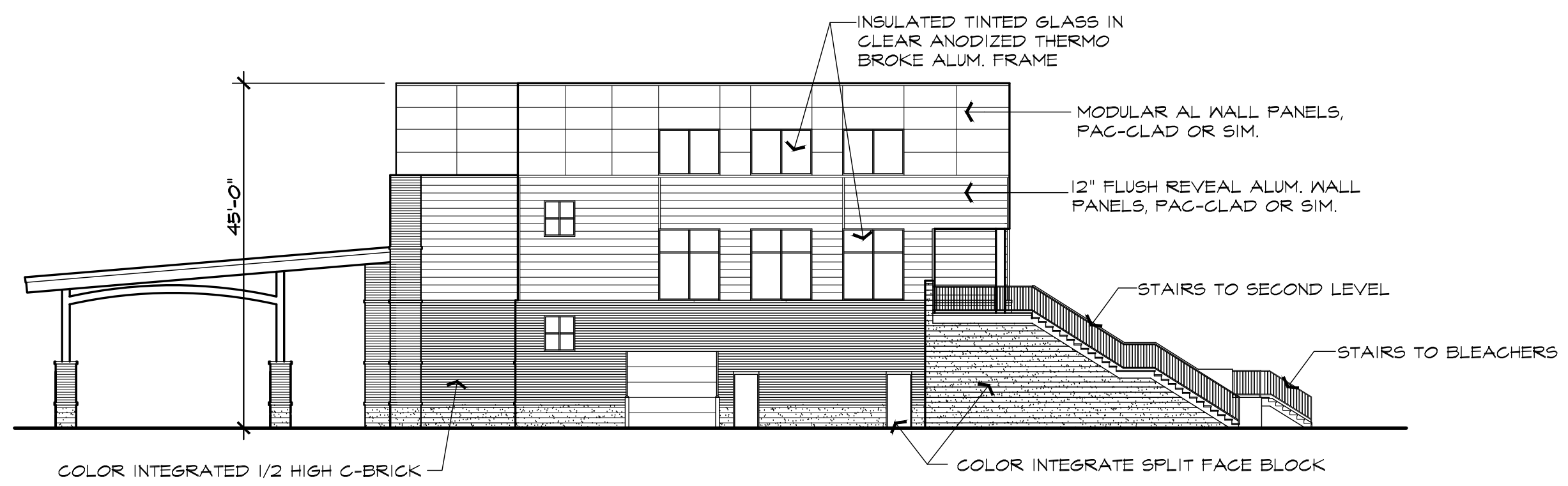
JOB # : 22143

SHEET TITLE
EXTERIOR ELEVATIONS

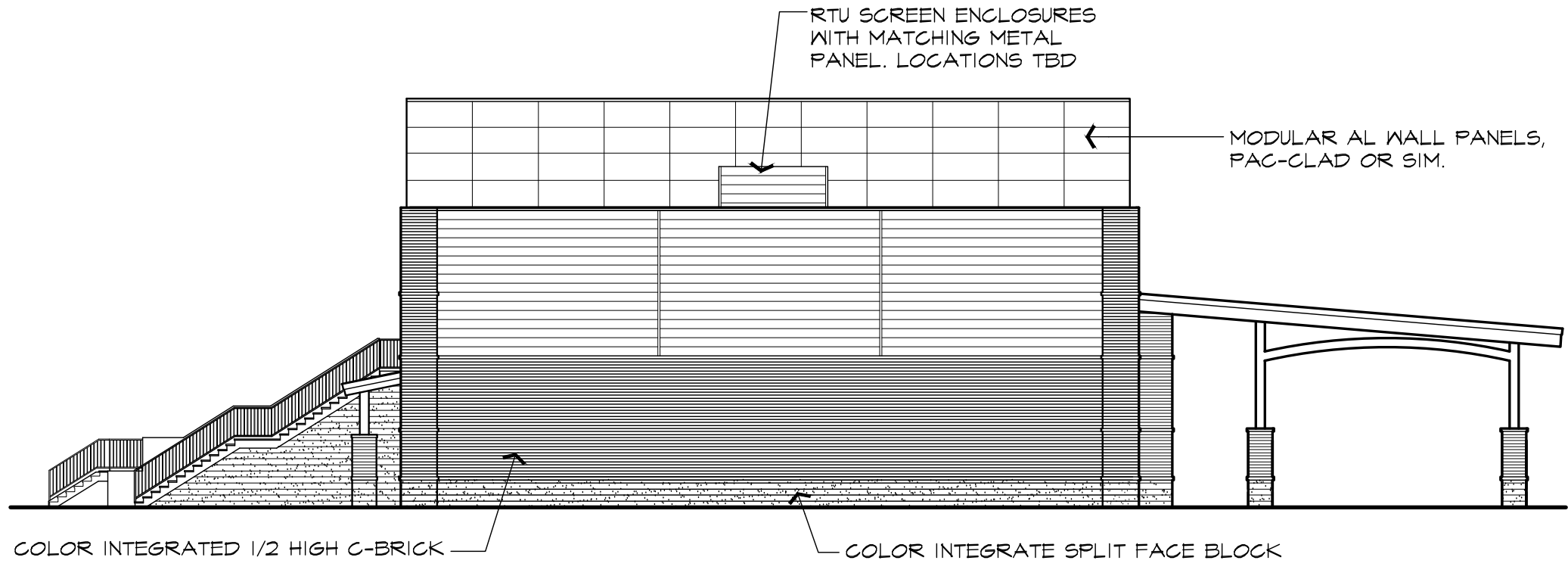
SHEET #
A.201



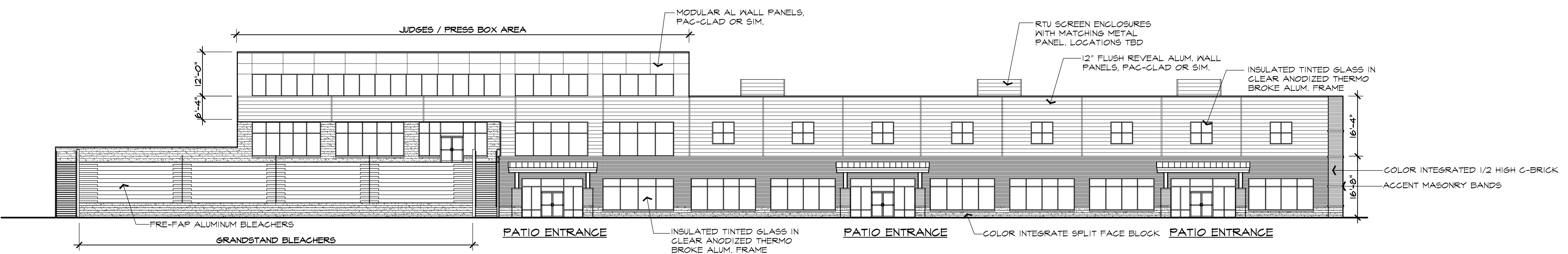
NORTH ELEVATION
FAÇADE MATERIAL PERCENTAGE (GLASS NOT INCLUDED) SCALE: 1/16" = 1'-0"
 SPLIT FACE BLOCK: 560 S.F. = 17%
 1/2 HIGH C-BRICK: 460 S.F. = 28.5%
 MODULAR METAL PANEL: 800 S.F. = 24%
 HORIZONTAL METAL PANEL: 1,029 S.F. = 30.5%



WEST ELEVATION
FAÇADE MATERIAL PERCENTAGE (GLASS NOT INCLUDED) SCALE: 1/16" = 1'-0"
 SPLIT FACE BLOCK: 560 S.F. = 17%
 1/2 HIGH C-BRICK: 460 S.F. = 28.5%
 MODULAR METAL PANEL: 800 S.F. = 24%
 HORIZONTAL METAL PANEL: 1,029 S.F. = 30.5%



EAST ELEVATION
FAÇADE MATERIAL PERCENTAGE SCALE: 1/16" = 1'-0"
 SPLIT FACE BLOCK: 520 S.F. = 19%
 1/2 HIGH C-BRICK: 1,317 S.F. = 39%
 MODULAR METAL PANEL: 455 S.F. = 24%
 HORIZONTAL METAL PANEL: 1,200 S.F. = 30%



SOUTH ELEVATION
FAÇADE MATERIAL PERCENTAGE (GLASS NOT INCLUDED) SCALE: 1/16" = 1'-0"
 SPLIT FACE BLOCK: 1,015 S.F. = 14%
 1/2 HIGH C-BRICK: 1,750 S.F. = 25%
 MODULAR METAL PANEL: 893 S.F. = 12%
 HORIZONTAL METAL PANEL: 3,462 S.F. = 49%
 NOTE: GRANDSTAND BLEACHERS NOT INCLUDED IN CALCULATION

MATERIAL COLORS
 MODULAR AL WALL PANELS, PAC-GLAD "MILITARY BLUE" COLOR (BLUE-GREY)
 12" FLUSH REVEAL ALUM. WALL PANELS, PAC-GLAD "CITYSCAPE" COLOR (LITE GREY)
 STANDING SEAM METAL ROOF "MILITARY BLUE" COLOR (BLUE-GREY)
 SPLIT FACE BLOCK, FENDT BLOCK #407 LITE GREY
 1/2 HIGH C-BRICK, FENDT BLOCK #110 LITE GREY / LT BROWN MIX
 GLASS FRAME, CLEAR ALUMINUM (SILVER)
 GLASS TO BE SMOKE TINT

- NOTE:**
- ALL ROOF TOP EQUIPMENT SHALL BE SCREENED FROM VISION. QUANTITY AND LOCATION TO BE DETERMINED.
 - ALL PROPOSED SIGNAGE TO BE SUBMITTED UNDER A SEPARATED PERMIT

GAMING / GRANDSTAND BLDG.



ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD. STE. 100A
FARMINGTON, MICHIGAN 48338
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
PO BOX 590039
LIVONIA, MI 48159
248.388.3192

PROPOSED STABLE FACILITY FOR:
NORTHVILLE DOWNS at PLYMOUTH TWP.
FIVE MILE and RIDGE ROAD
PLYMOUTH TWP, MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
AV	AV	

SCALE : PER PLAN

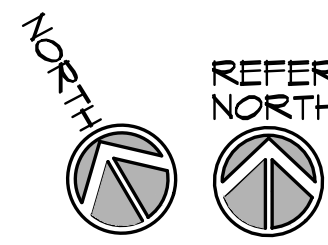
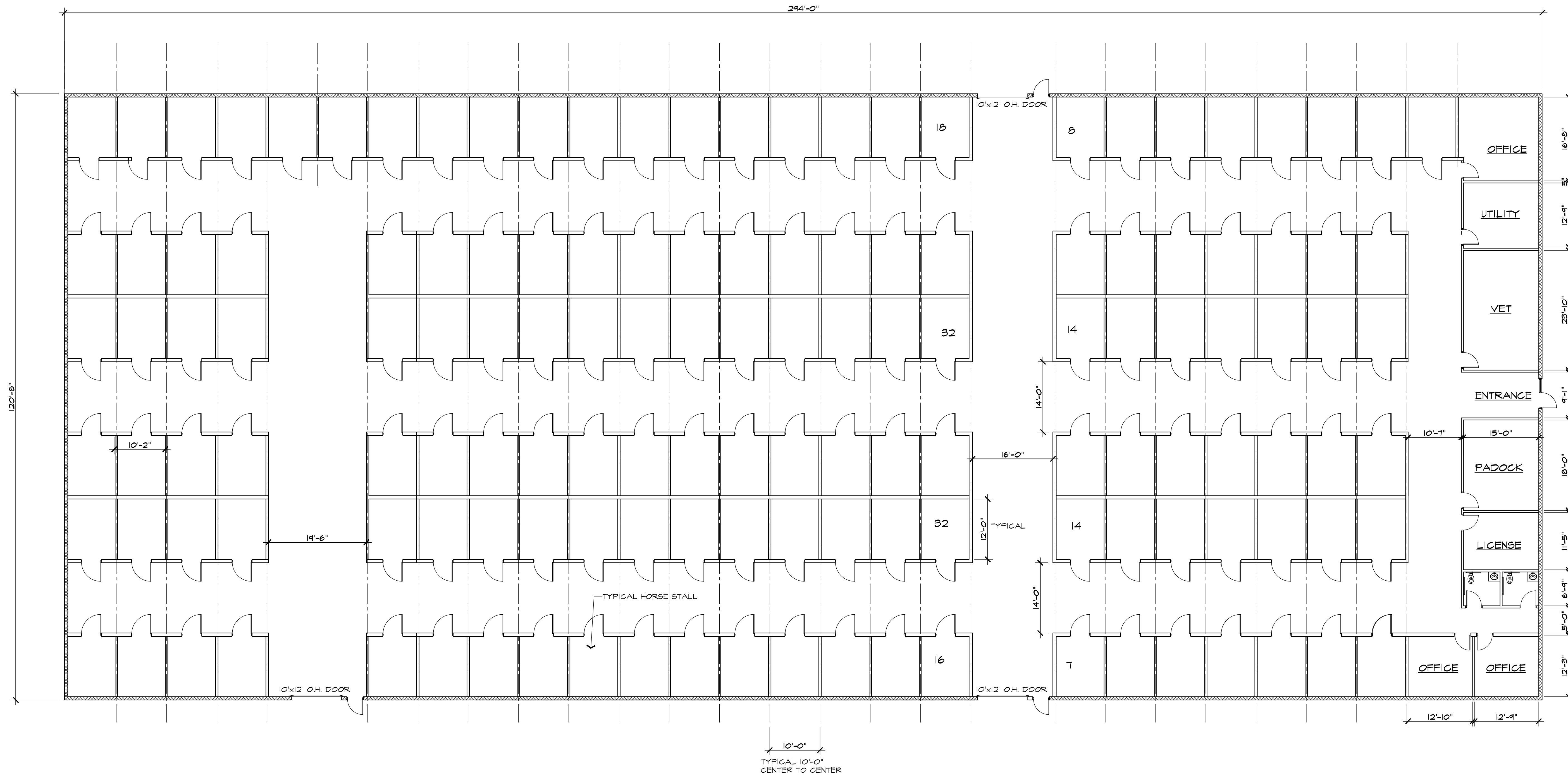
FILE NAME :

JOB # 22143

SHEET TITLE
FLOOR
PLAN

SHEET #

A.I.O.S



HORSE STABLE FLOOR PLAN

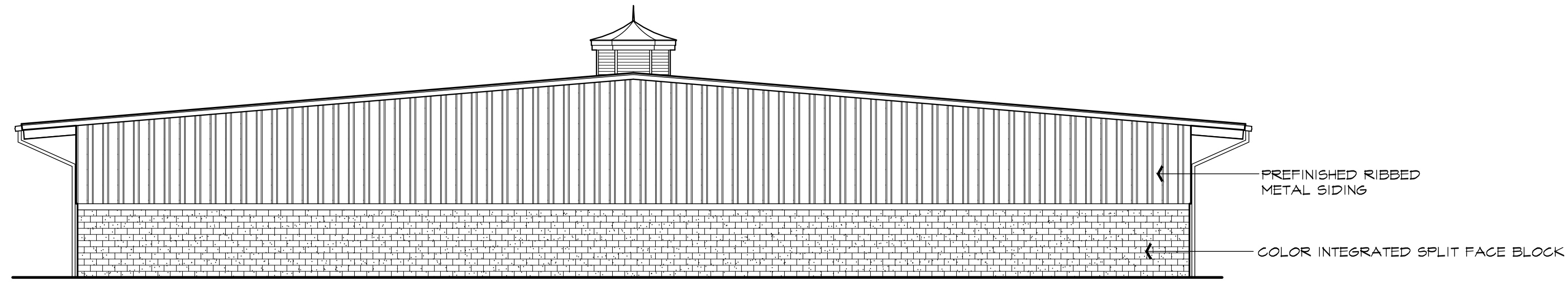
141 STALLS TOTAL
35,477 S.F. SCALE: 3/32" = 1'-0"

- NOTE:**
- USE GROUP: U (UTILITY AND MISCELLANEOUS)
 - CONSTRUCTION CLASSIFICATION: IIB
 - FULLY FIRE SUPPRESSED BUILDING

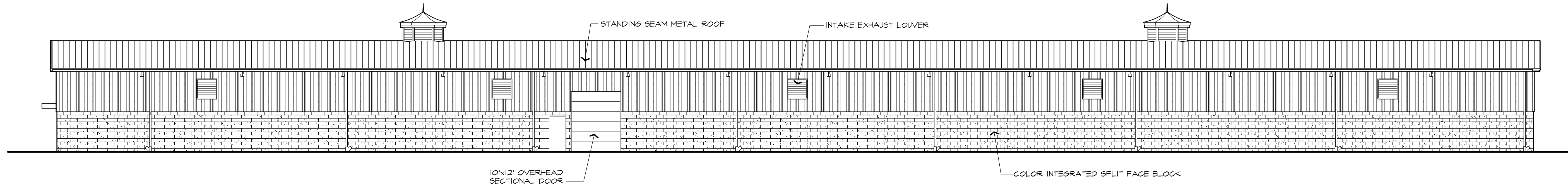
HORSE STABLE BLDG.



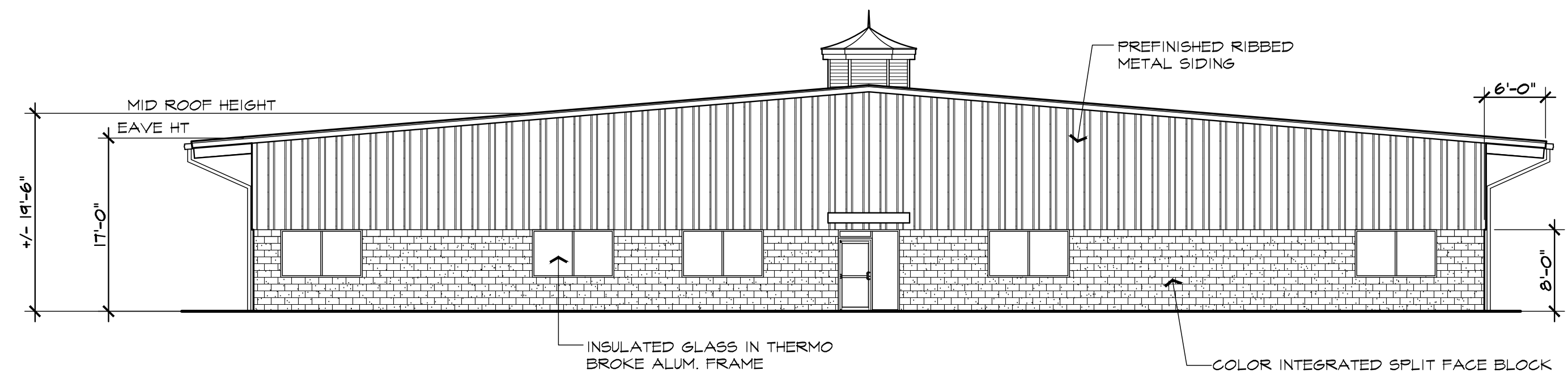
ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23



WEST ELEVATION
FAÇADE MATERIAL PERCENTAGE (NOT INCLUDING WINDOWS AND DOOR)
 SPLIT FACE BLOCK: 965 S.F. = 42%
 MODULAR METAL PANEL: 1,330 S.F. = 58%

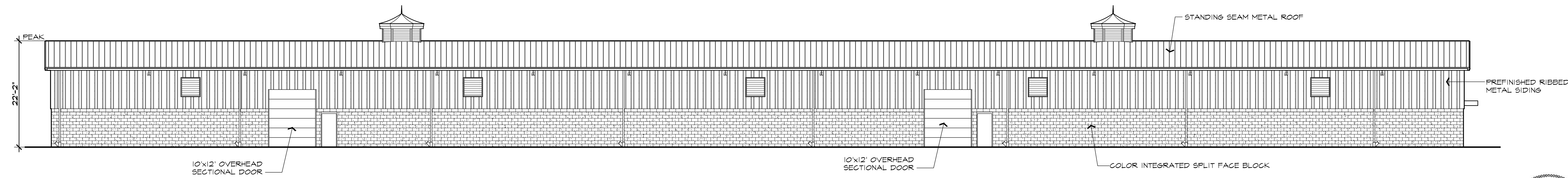


NORTH ELEVATION
FAÇADE MATERIAL PERCENTAGE (NOT INCLUDING WINDOWS AND DOOR)
 SPLIT FACE BLOCK: 2,250 S.F. = 44%
 MODULAR METAL PANEL: 2,316 S.F. = 51%



MATERIAL COLORS
 METAL SIDING / TRIM, SANDSTONE (LT BROWN)
 SPLIT FACE BLOCK, FENDT BLOCK, TAN (MEDIUM BROWN MIX)
 GLASS FRAME CLEAR ALUMINUM (SILVER)
 GLASS TO BE SMOKE TINT

EAST ELEVATION
FAÇADE MATERIAL PERCENTAGE (NOT INCLUDING WINDOWS AND DOOR)
 SPLIT FACE BLOCK: 790 S.F. = 35%
 MODULAR METAL PANEL: 1,330 S.F. = 65%



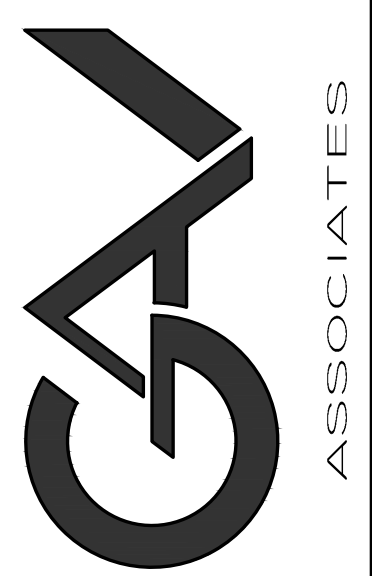
NOTE:
 1. AT THIS TIME NO ROOF TOP EQUIPMENT IS PROPOSED, IF ANY BECOMES NECESSARY IT SHALL BE SCREENED FROM VISION.

SOUTH ELEVATION
FAÇADE MATERIAL PERCENTAGE (NOT INCLUDING WINDOWS AND DOOR)
 SPLIT FACE BLOCK: 2,150 S.F. = 49%
 MODULAR METAL PANEL: 2,216 S.F. = 51%

HORSE STABLE BLDG.



ARCHITECTURAL DESIGN
 RESIDENTIAL
 COMMERCIAL
 INDUSTRIAL
 G.A.V. ASSOCIATES, INC.
 2401 ORCHARD LAKE RD. STE. 100A
 FARMINGTON, MICHIGAN 48338
 PH: (248) 985-9101
 WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
 PO BOX 590039
 LIVONIA, MI 48158
 248.388.3192

PROPOSED STABLE FACILITY FOR:
 NOTHYVILLE DOWNS at PLYMOUTH TWP.
 FIVE MILE and RIDGE ROAD.

DRAWN: AV DESIGNED: AV CHECKED: AV

SCALE: PER PLAN

FILE NAME:

JOB # 22143

SHEET TITLE
 EXTERIOR ELEVATIONS

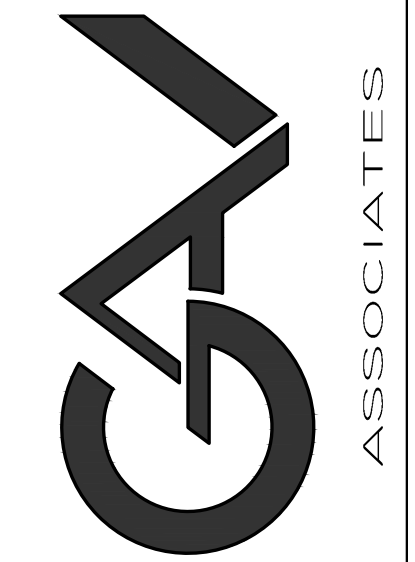
SHEET #
 A.2015

ISSUED FOR	DATE
PUD REVIEW	1.16.23
SPA	3.31.23

ARCHITECTURAL DESIGN

RESIDENTIAL
COMMERCIAL
INDUSTRIAL

G.A.V. ASSOCIATES, INC
2401 ORCHARD LAKE RD. STE. 100A
FARMINGTON, MICHIGAN 48338
PH: (248) 985-9101
WEB: WWW.GAVASSOCIATES.COM



AARON CONTRACTING
PO BOX 590039
LIVONIA, MI 48158
248.388.3192

PROPOSED MAINTENANCE BLDG. FOR:
NORTHVILLE DOWNS at PLYMOUTH TWP.
FIVE MILE and RIDGE RD.
PLYMOUTH TWP., MICHIGAN

DRAWN:	DESIGNED:	CHECKED:
AV	AV	

SCALE : PER PLAN

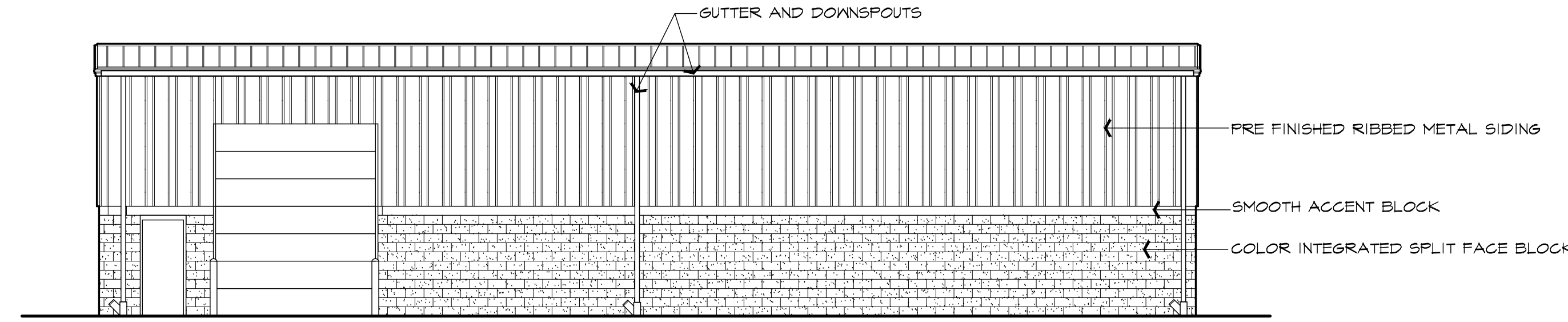
FILE NAME :

JOB # 22143

SHEET TITLE
FLOOR PLAN

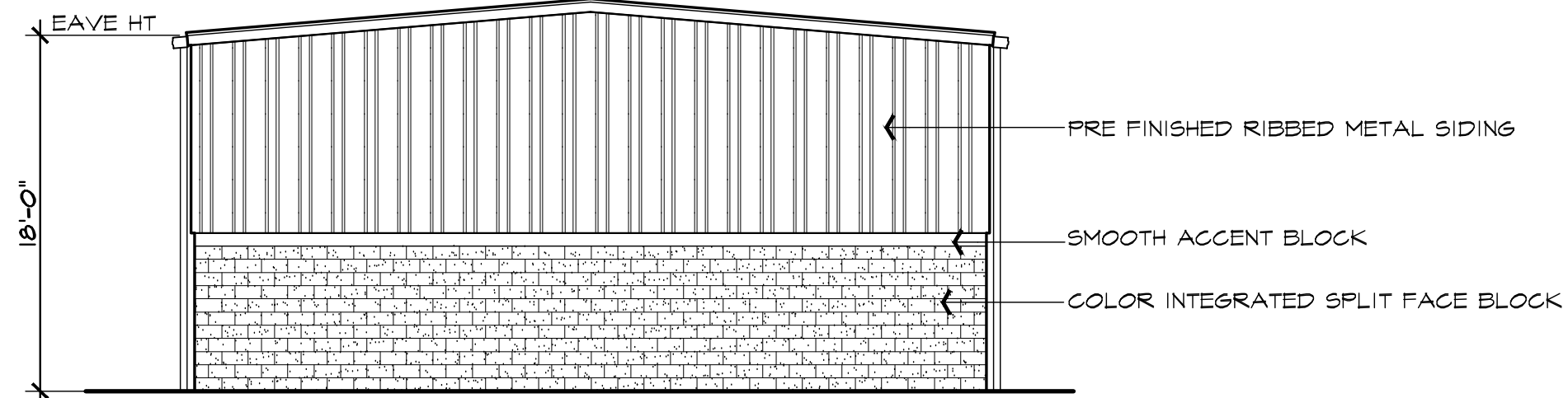
SHEET #

A.I.O.M



WEST ELEVATION

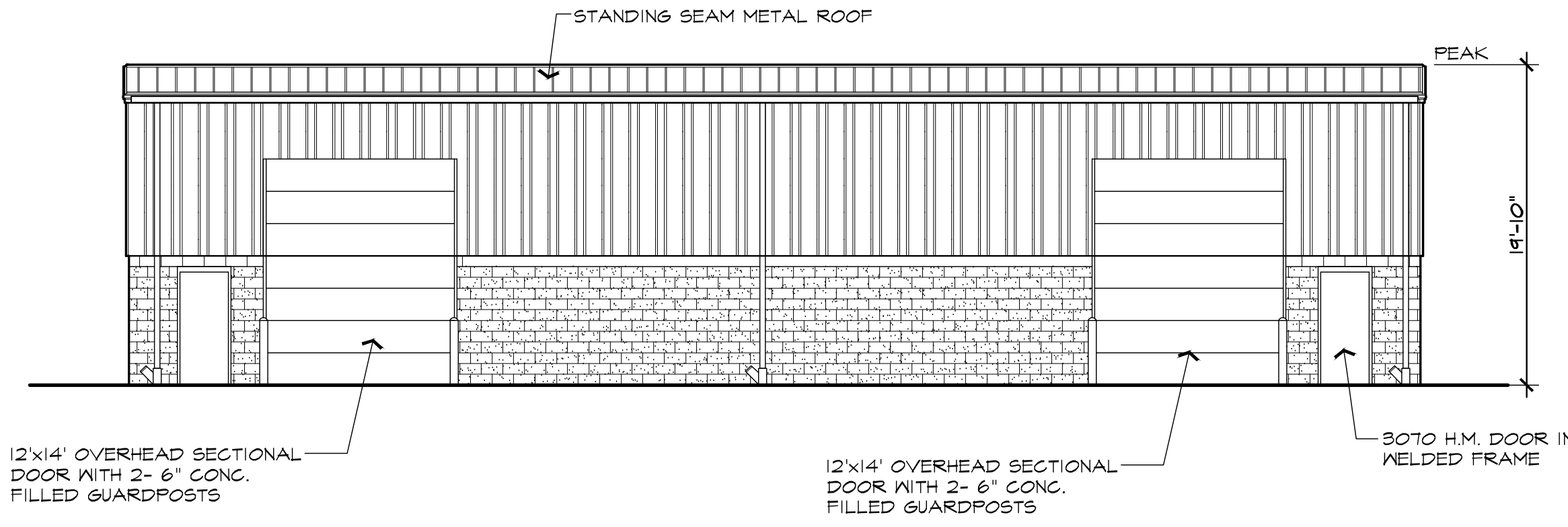
FACADE MATERIAL PERCENTAGE (NOT INCLUDING WINDOWS AND DOOR)
SPLIT FACE BLOCK: 2,150 S.F. = 44%
MODULAR METAL PANEL: 2,276 S.F. = 51%



NORTH & SOUTH ELEVATIONS

FACADE MATERIAL PERCENTAGE
SPLIT FACE BLOCK: 2,150 S.F. = 44%
MODULAR METAL PANEL: 2,276 S.F. = 51%

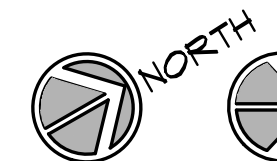
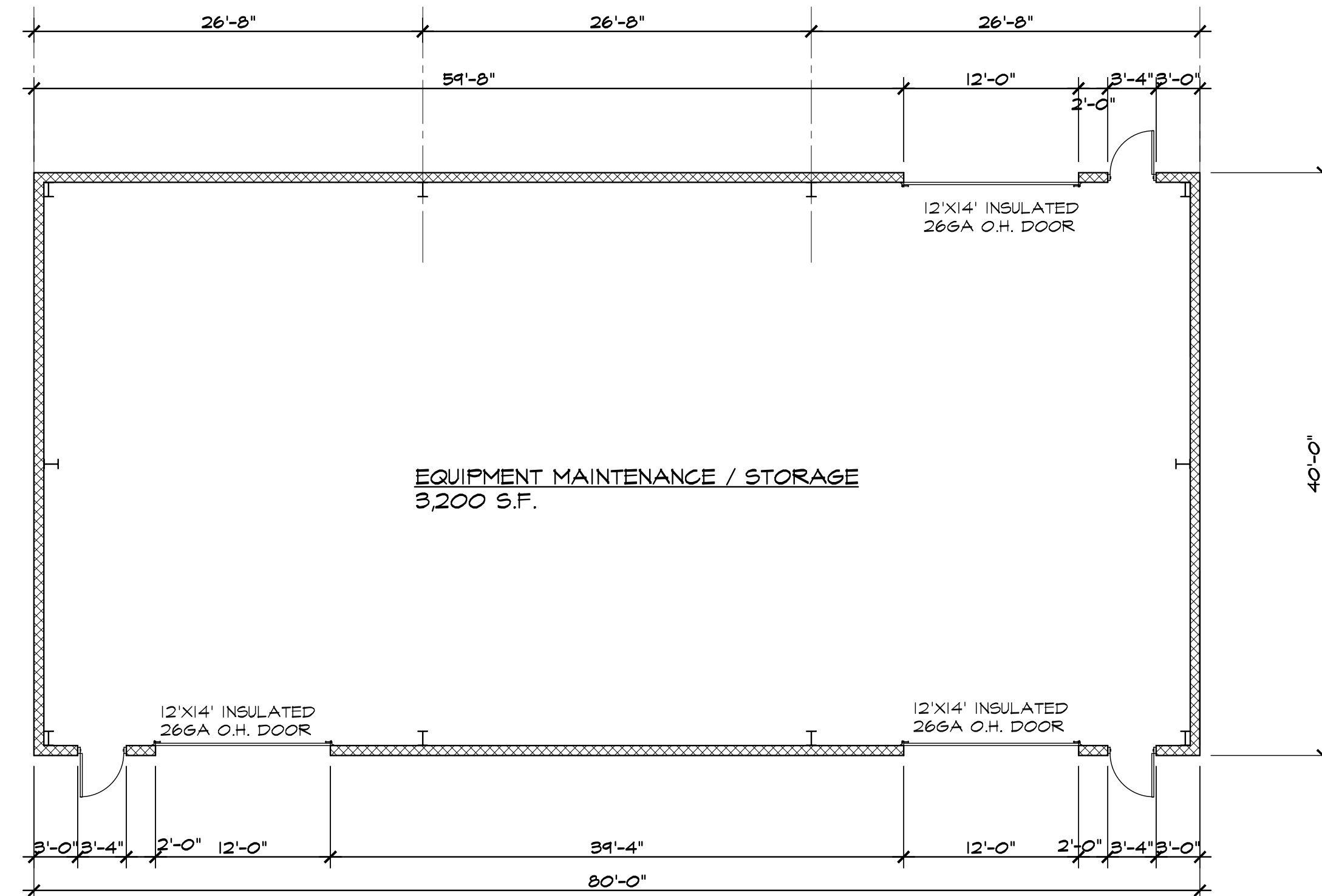
MATERIAL COLORS
METAL SIDING / TRIM, SANDSTONE (LT BROWN)
SPLIT FACE BLOCK, FENDT BLOCK, TAN (MEDIUM BROWN MIX)
OVERHEAD DOORS, LT BROWN



EAST ELEVATION

FACADE MATERIAL PERCENTAGE (NOT INCLUDING WINDOWS AND DOOR)
SPLIT FACE BLOCK: 2,150 S.F. = 44%
MODULAR METAL PANEL: 2,276 S.F. = 51%

- NOTE:**
- ALL ROOF TOP EQUIPMENT SHALL BE SCREENED FROM VISION. QUANTITY AND LOCATION TO BE DETERMINED.
 - ALL PROPOSED SIGNAGE TO BE SUBMITTED UNDER A SEPARATED PERMIT



REFERENCE NORTH

MAINTENANCE BLDG. FLOOR PLAN

SCALE: 1/8" = 1'-0"

- NOTE:**
- USE GROUP: S-1
 - CONSTRUCTION CLASSIFICATION: IIB
 - NON-FIRE SUPPRESSED BUILDING

MAINTENANCE BUILDING



WATERMAIN SPECIFICATIONS

A. Description

This work includes excavation, placing, backfilling, disinfection and testing watermain pipe, hydrants, fittings, thrust blocks, valves, wells and service leads when called for on the plans.

B. Materials

- 1. SEE NOTES AND MATERIALS AT RIGHT OF SHEET.
2. Backfill, Concrete, Reinforcement and Other Materials
a. The materials shall meet the requirements specified in the current Michigan Department of Transportation (M.D.O.T.) Standard Specifications for Highway Construction, Division 8.

C. Construction

- 1. Pipe Handling
The pipe shall be distributed at the site by the Contractor as required and care shall be exercised to prevent injury to pipe in handling. Proper tools and implements satisfactory to the Project Engineer for safely handling the pipe and other materials shall be provided by the Contractor.

- 2. Excavation
The Contractor shall do all the excavation required for the construction of the mains and appurtenances, including clearing of the site of the work and the removal and disposal of all materials necessary to be removed in the construction of all work under this Contract.

- 3. Thrust Blocks
Concrete thrust blocks shall be placed at all 22-1/2 degree bends, or greater, dead-ends, fittings, "tee's", hydrants and at crosses where required by the Township Engineer.

- 4. Tunneling or Boring
When tunneling is required by the Wayne County Department of Public Services or is specified on the plans, said tunneling shall be in accordance with the current Wayne County Department of Public Services Requirements for Construction within Road Right of Way or Parks under Jurisdiction of the Board (Revised August 1, 2007).

- 5. Backfill
Backfill is defined as that material placed into the trench from the top of the standard pipe bedding (as shown on Trench "A" detail in Sheet W-2) to the ground surface. Backfill shall be placed into the trench according to one of the following specified manners as determined by the location of the trench or the edge of trench nearest the existing pavement, roadway, sidewalk, driveway or parking area.

- 6. Disposal of Excavated Material
With the exception of an amount of excavated materials sufficient for backfilling and construction of fills as called for on the plans, all broken concrete, stone and excess excavated materials shall be legally disposed of by the Contractor off-site. On-site disposal may be permitted by the Project Engineer.

- 7. Pumping and Draining
The Contractor shall provide and maintain adequate pumping and drainage facilities for removal and disposal of water from trenches, or other excavations. The contractor shall also provide pumping and drainage facilities and shall operate same as may be necessary until construction is completed.

- 8. Utilities Crossing
In crossing over or under any main or lateral sewer, sewer connection, catch basin, watermain, service connection, gas main, gas connection, conduit, or any underground improvement, the Contractor shall use all possible care in protecting the same from injury, damage or the free unobstructed continuous use of the same as far as possible, and the contract work shall be performed in such a manner as will effect the least damage or interference with such improvements or the free and unobstructed use of the same. The Contractor will be required, without any additional compensation, to repair, replace or rebuild any such improvement injured or damaged by him, and shall be responsible to the department, companies, individuals, or corporations controlling such improvements.

- 9. Soil Erosion and Sedimentation Control (SECC) Measures
Whether SECC permit is required or not, the owner shall be responsible to see to it that appropriate SECC measures are provided and properly maintained at all times during construction up to time the site is completed and stabilized.

- 3. Laying Pipe
Before lowering in the trench, and while suspended, each pipe and fitting shall be inspected for defects and run with a light hammer to detect cracks. Defective, damaged or unsound pipe shall immediately be removed from the construction site.

- 4. Gate Wells and Valves
Gate wells shall be constructed as shown on the watermain standard detail plans. Covers shall be set to finish grade.

- 5. Connections
All connections to existing water mains shall be made at the locations as shown on the plans.

- 6. Testing
Water mains shall be leakage and pressure tested in accordance with the AWWA Standard C600. Prior to testing, mains shall be appropriately flushed in accordance with C600.

- 7. Chlorinating
After satisfactory hydrostatic test is obtained, the new main shall be chlorinated. Chlorine shall be applied by means of a solution through a corporation stop at the beginning of the main.

- 8. Temporary Meter Connections
The Contractor must notify the Township Engineers, Spalding DeDecker (248-844-5400), to schedule a bacteriological sampling and testing. The testing must be scheduled 48 hours in advance.

- 9. GATE VALVES AND METER ASSEMBLY
Following chlorination, all treated water shall be thoroughly flushed from the main until the replacement water throughout its length shall, upon test, both chemically and bacteriologically, be proven equal to the water quality in the source water supply system and safe.

- 10. Meter and Check Valves Required for All Construction Water
Meters shall be provided for all construction water connections. The meter and check valve assembly shall be installed and tested in accordance with the AWWA Standard C600.

- 11. Backfill
Backfill shall be placed in the trench from the top of the standard pipe bedding (as shown on Trench "A" detail in Sheet W-2) to the ground surface.

- 12. Connections
All connections to existing water mains shall be made at the locations as shown on the plans.

- 13. Excavation
The Contractor shall do all the excavation required for the construction of the mains and appurtenances, including clearing of the site of the work and the removal and disposal of all materials necessary to be removed in the construction of all work under this Contract.

- 14. Tunneling or Boring
When tunneling is required by the Wayne County Department of Public Services or is specified on the plans, said tunneling shall be in accordance with the current Wayne County Department of Public Services Requirements for Construction within Road Right of Way or Parks under Jurisdiction of the Board (Revised August 1, 2007).

- 15. Thrust Blocks
Concrete thrust blocks shall be placed at all 22-1/2 degree bends, or greater, dead-ends, fittings, "tee's", hydrants and at crosses where required by the Township Engineer.

- 16. Backfill
Backfill shall not be placed against any portion of a structure until the structure has passed inspection and has been approved by the Township Engineer for backfilling. All trenches shall be backfilled as soon as inspection is completed in order to avoid unnecessary risk or damage to the structure and also to reduce the risk of accidents involving the public.

- 17. Gate Wells and Valves
Gate wells shall be constructed as shown on the watermain standard detail plans. Covers shall be set to finish grade.

- 18. Connections
All connections to existing water mains shall be made at the locations as shown on the plans.

- 19. Testing
Water mains shall be leakage and pressure tested in accordance with the AWWA Standard C600. Prior to testing, mains shall be appropriately flushed in accordance with C600.

- 20. Chlorinating
After satisfactory hydrostatic test is obtained, the new main shall be chlorinated. Chlorine shall be applied by means of a solution through a corporation stop at the beginning of the main.

- 21. Temporary Meter Connections
The Contractor must notify the Township Engineers, Spalding DeDecker (248-844-5400), to schedule a bacteriological sampling and testing. The testing must be scheduled 48 hours in advance.

- 22. GATE VALVES AND METER ASSEMBLY
Following chlorination, all treated water shall be thoroughly flushed from the main until the replacement water throughout its length shall, upon test, both chemically and bacteriologically, be proven equal to the water quality in the source water supply system and safe.

- 23. Meter and Check Valves Required for All Construction Water
Meters shall be provided for all construction water connections. The meter and check valve assembly shall be installed and tested in accordance with the AWWA Standard C600.

- 24. Backfill
Backfill shall be placed in the trench from the top of the standard pipe bedding (as shown on Trench "A" detail in Sheet W-2) to the ground surface.

- 25. Connections
All connections to existing water mains shall be made at the locations as shown on the plans.

- 26. Excavation
The Contractor shall do all the excavation required for the construction of the mains and appurtenances, including clearing of the site of the work and the removal and disposal of all materials necessary to be removed in the construction of all work under this Contract.

- 27. Tunneling or Boring
When tunneling is required by the Wayne County Department of Public Services or is specified on the plans, said tunneling shall be in accordance with the current Wayne County Department of Public Services Requirements for Construction within Road Right of Way or Parks under Jurisdiction of the Board (Revised August 1, 2007).

- 28. Thrust Blocks
Concrete thrust blocks shall be placed at all 22-1/2 degree bends, or greater, dead-ends, fittings, "tee's", hydrants and at crosses where required by the Township Engineer.

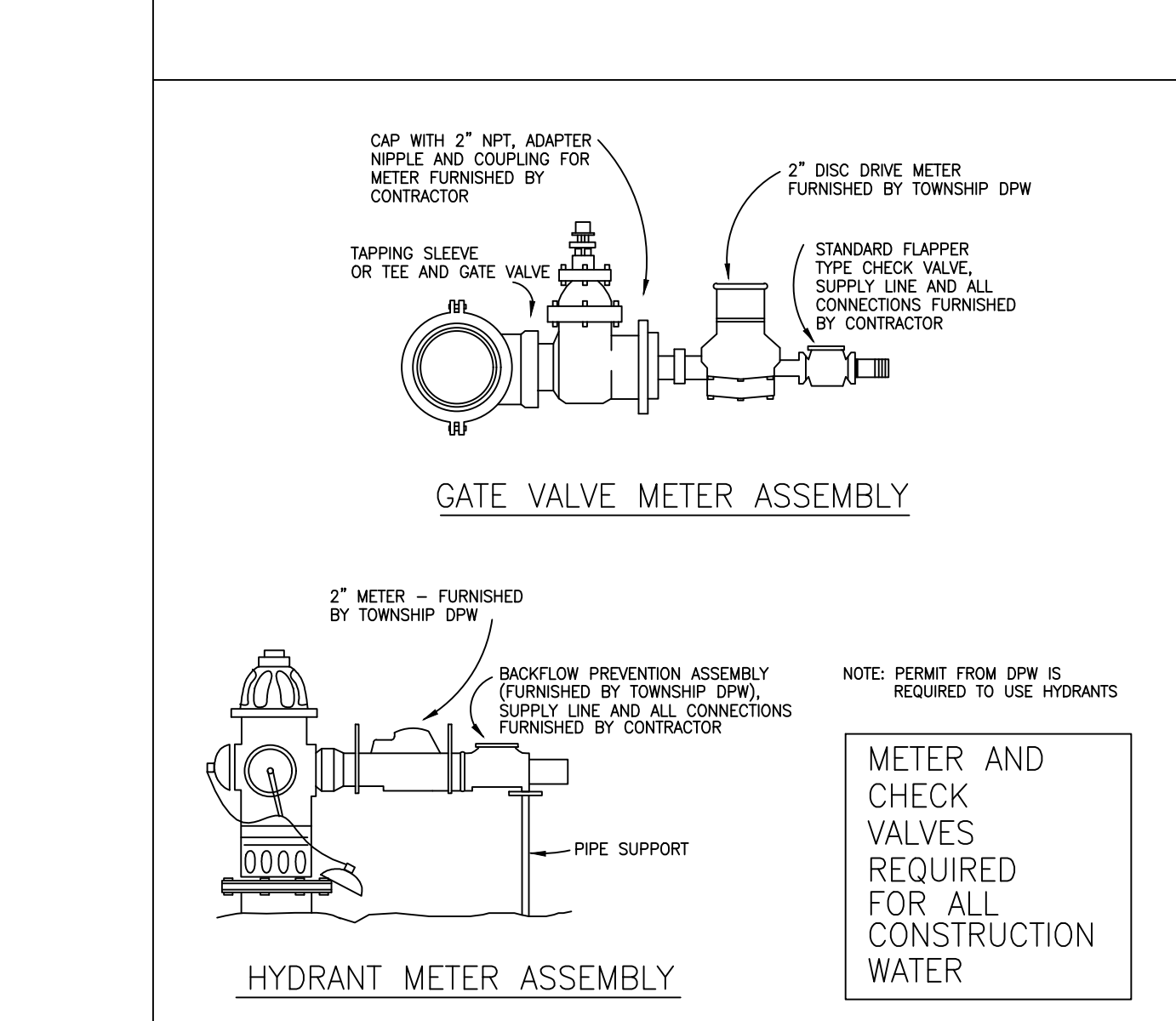
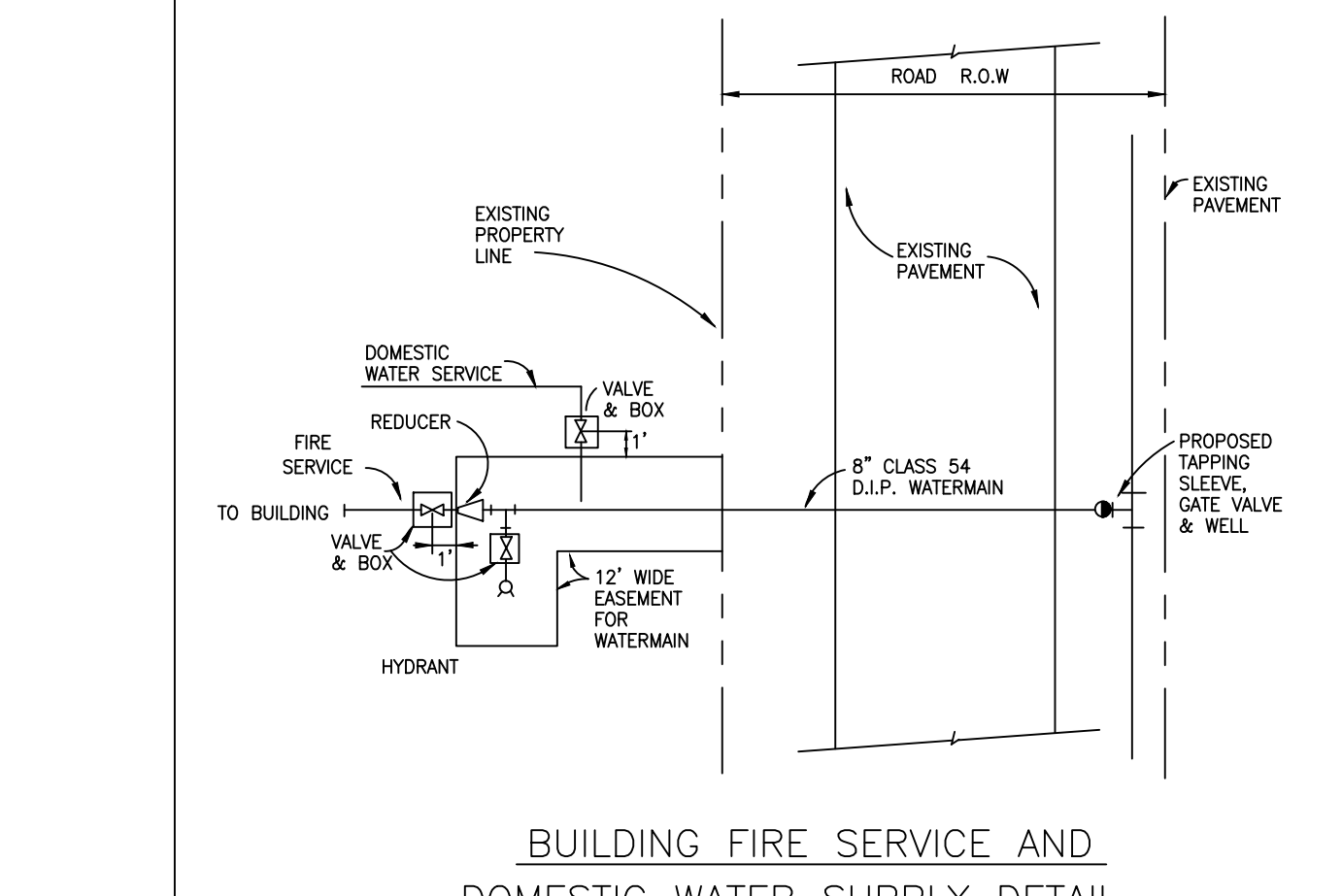
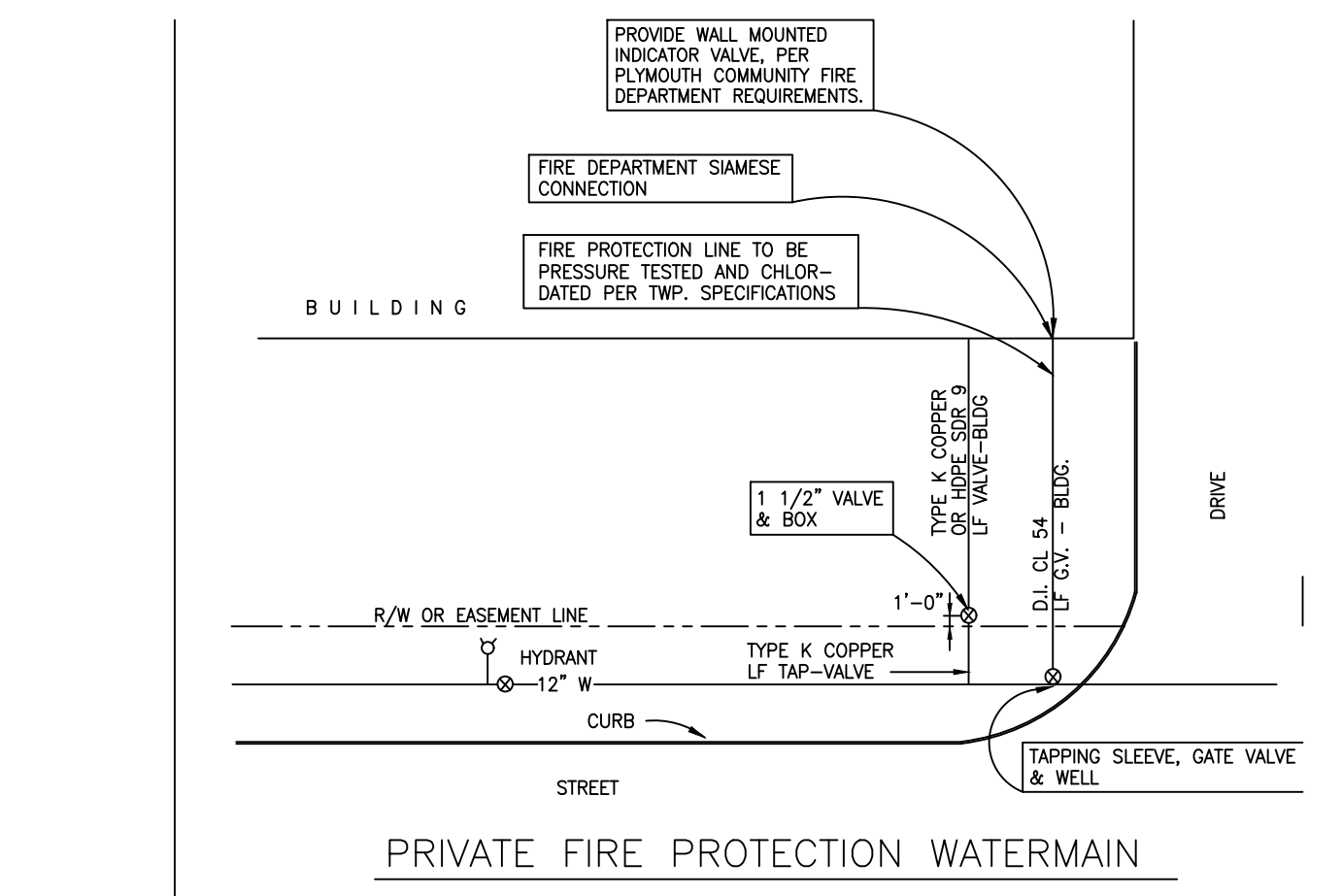
Should the initial treatment of all or any section of the main, in the opinion of the Township Engineer, prove ineffective, the chlorination procedure shall be repeated until confirmed tests show that water sampled from the new main conforms to the foregoing requirement.

Final watermain connections to the public system will not be allowed until written authorization is provided to the Plymouth Township Engineer.

Cost for sampling and testing will be the responsibility of the contractor. If inspection fees are in arrears, no testing will be scheduled.

2. Testing and Inspection of Pipe Materials and Backfill Compaction

- a. Manufacturers' test certificates shall accompany all pipe shipments and shall be provided to the Township Engineer.
b. Where watermain is constructed in easement and paved areas not in public rights of way, the testing shall be performed by an independent testing laboratory and the cost of services performed shall be paid for by the Contractor.



FIRE PROTECTION

- PRIVATE FIRE PROTECTION WATERMAIN NOTES FOR CONSTRUCTION & TESTING
A. Private fire protection watermain is that watermain lying outside the easement or right of way limits and is not included in the State permit.
B. Private fire protection watermain is a private line for fire protection only. No domestic water service is allowed from this line, and all maintenance is the property owner's responsibility.

WATERMAIN NOTES AND MATERIALS

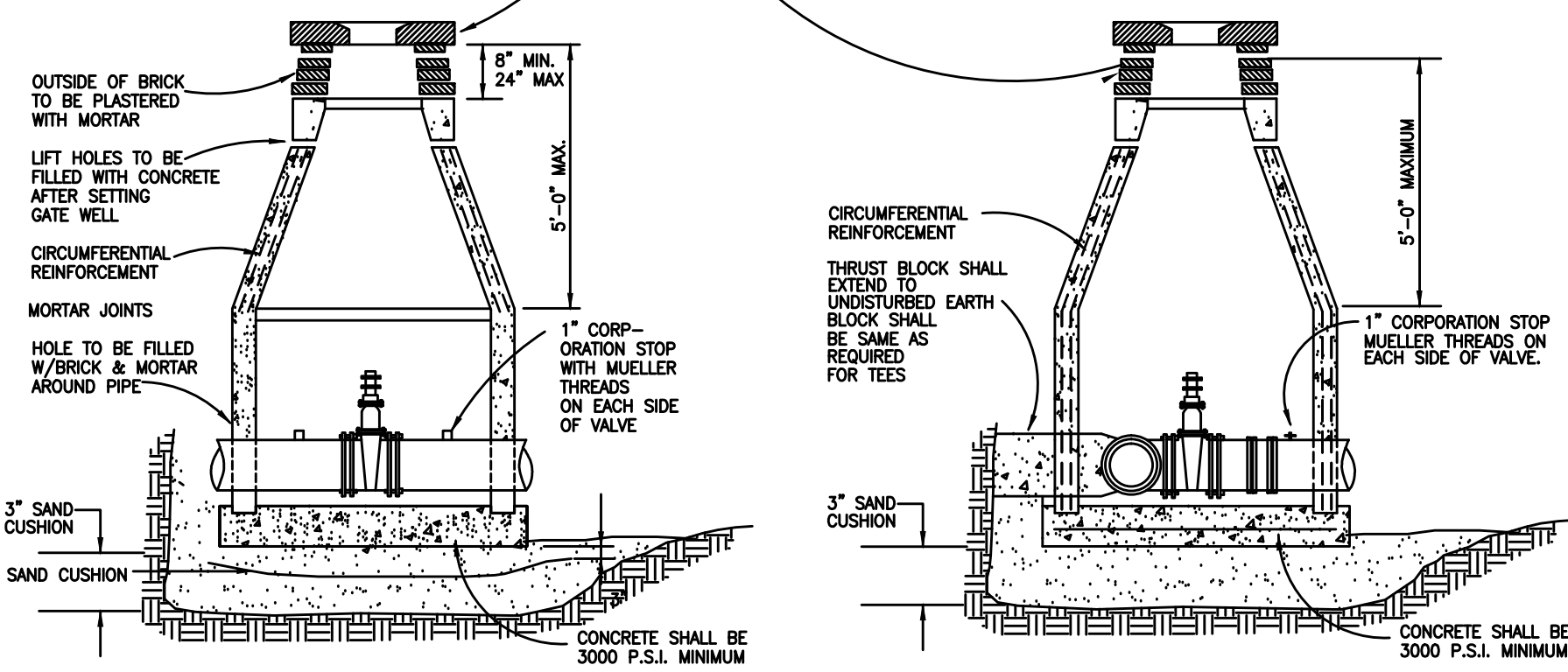
- 1. All workmanship, materials, and testing shall be in accordance with the current standards and specification of the Plymouth Charter Township and GLWA. (Great Lakes Water Authority).
2. Watermain shall be ductile iron, Class 54 with double thickness cement lining, meeting all requirements of the current ANSI/AWWA Specification A 21.51/C151. Pipe shall be seal coated with an approved bituminous seal coat in accordance with ANSI/AWWA specification A21.4/C-104.
3. Joints for ductile iron watermain shall meet all requirements of the current ANSI/AWWA Specification C111/A21.11 and shall be James G. Crow and Sons, Inc. "Super Bell-Tile", U. S. Pipe and Foundry Co., "Tylon Joint" or approved equal.

Table with columns: DATE, DESCRIPTION, TITLE BLOCK ADDRESS CHANGE, ORIGINAL, JANUARY 2003, OCTOBER 2000, MARCH 1998.

DETAILS NOT TO SCALE
PLYMOUTH CHARTER TOWNSHIP DEPARTMENT OF PUBLIC WORKS
9855 N. HAGGERTY ROAD, PLYMOUTH, MICHIGAN 48170-4673
734-354-3270

Watermain and hydrant gate valves shall be EJ Resilient Seated Gate Valves opening to the right. Gate well covers shall be EJ 1040 solid cover in landscaped areas and in paved areas, both bearing lettering "Department of Water Supply." An allowable alternate valve is Mueller Resilient Seat Gate Valves.

NOTE: GALVANIZED OR RUBBER COATED STEEL MANHOLE STEPS SHALL BE INSTALLED IN WELLS.

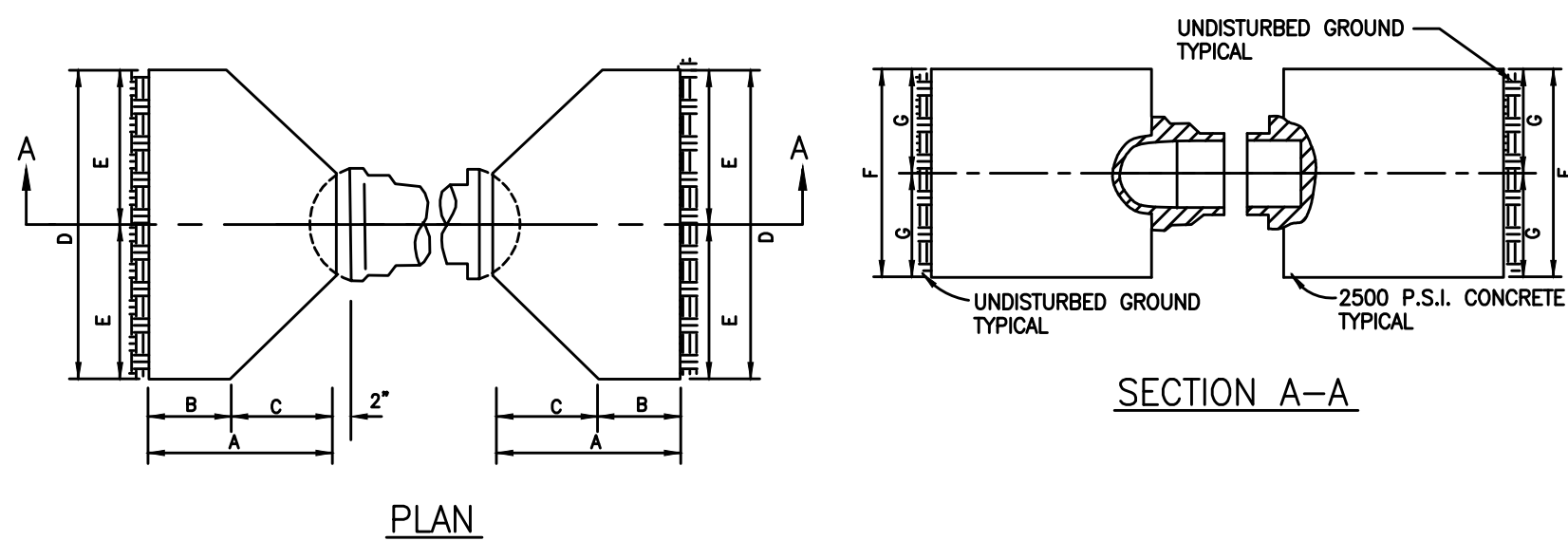


PRE-CAST GATE VALVE AND WELL

TAPPING SLEEVE VALVE AND WELL DETAIL

GATE VALVE AND WELL DETAIL

SIZE	A min.	B min.	C	D	E	F	G
6	1'-11"	0'-9"	1'-2"	2'-6"	1'-3"	1'-6"	0'-9"
8	1'-11"	0'-9"	1'-2"	3'-0"	1'-6"	2'-0"	1'-0"
12	2'-1"	0'-9"	1'-4"	4'-0"	2'-0"	3'-0"	1'-6"
16	2'-8"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"

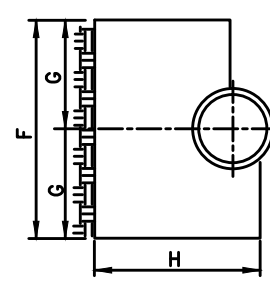


PLAN

SECTION A-A

THRUST BLOCK FOR PLUGS AND CAPS

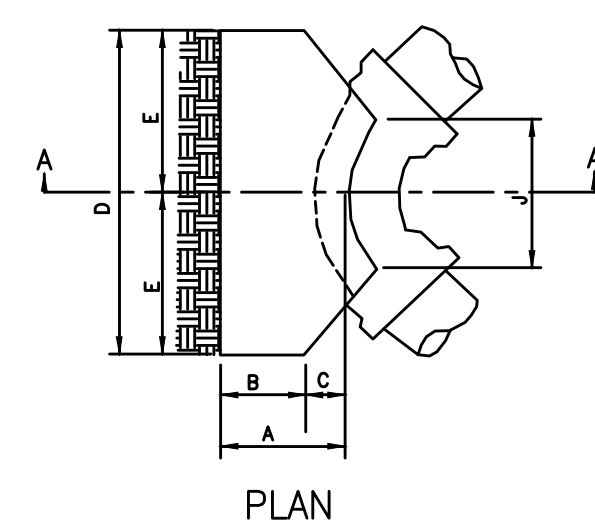
SIZE	ANGLE	A	B min.	C	D	E	F	G	H min.	J
6	45°	1'-9"	0'-9"	1'-0"	2'-0"	1'-0"	1'-6"	0'-9"	1'-11"	1'-4"
6	90°	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	1'-6"	0'-9"	1'-11"	1'-2"
8	45°	1'-9"	0'-9"	1'-0"	2'-4"	1'-2"	2'-0"	1'-0"	1'-11"	1'-4"
8	90°	1'-9"	0'-9"	1'-0"	3'-4"	1'-8"	2'-6"	1'-3"	1'-11"	1'-2"
12	22½°	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	2'-0"	1'-0"	2'-0"	1'-4"
12	45°	2'-1"	0'-9"	1'-4"	3'-6"	1'-9"	2'-6"	1'-3"	2'-4"	1'-4"
12	90°	2'-1"	0'-9"	1'-4"	5'-6"	2'-9"	3'-0"	1'-6"	2'-4"	1'-8"
16	22½°	2'-8"	1'-0"	1'-8"	3'-4"	1'-8"	2'-6"	1'-3"	3'-0"	1'-2"
16	45°	2'-8"	1'-0"	1'-8"	5'-4"	2'-8"	3'-0"	1'-6"	3'-0"	2'-6"
16	90°	2'-8"	1'-0"	1'-8"	6'-0"	3'-0"	5'-0"	2'-6"	3'-0"	2'-8"



SECTION A-A

THRUST BLOCK FOR BENDS

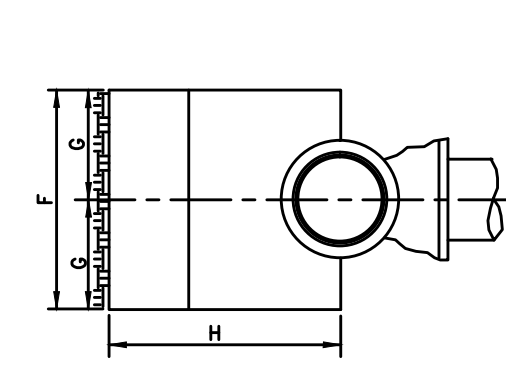
THRUST BLOCK DETAILS



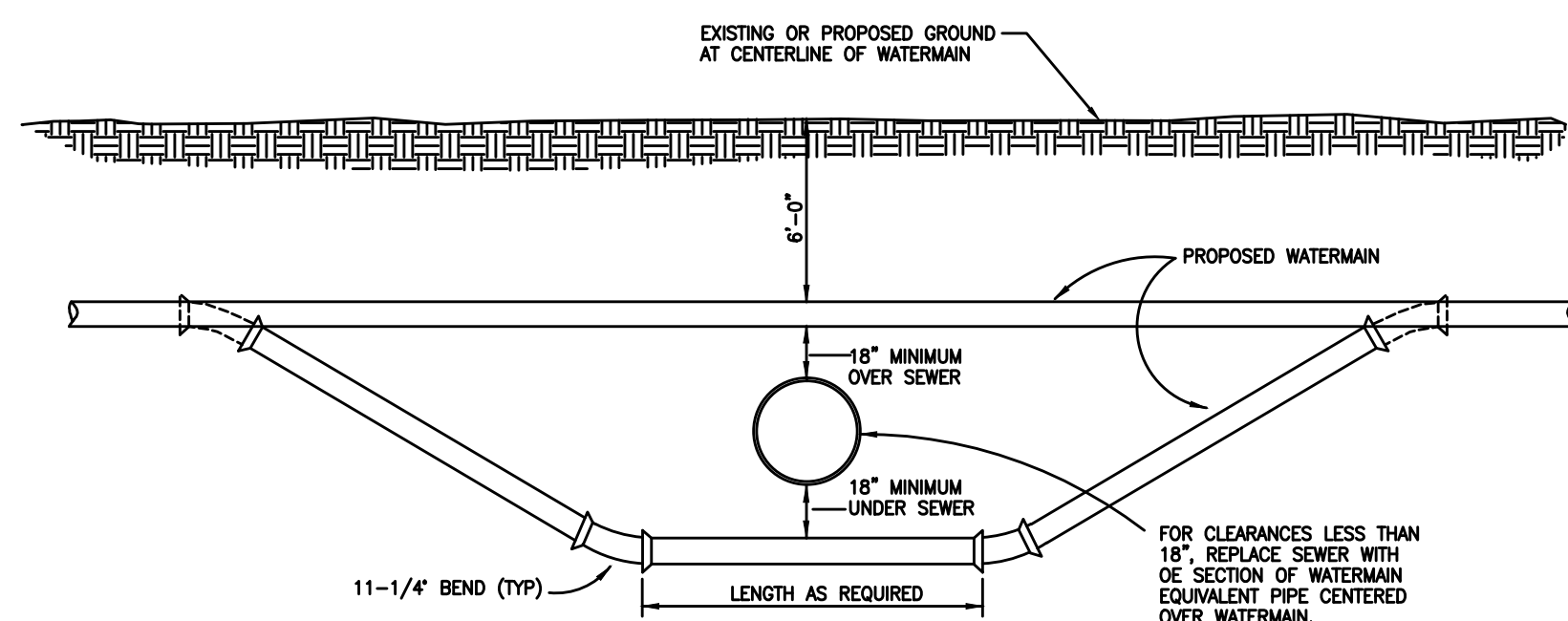
SECTION A-A

THRUST BLOCK FOR TEES

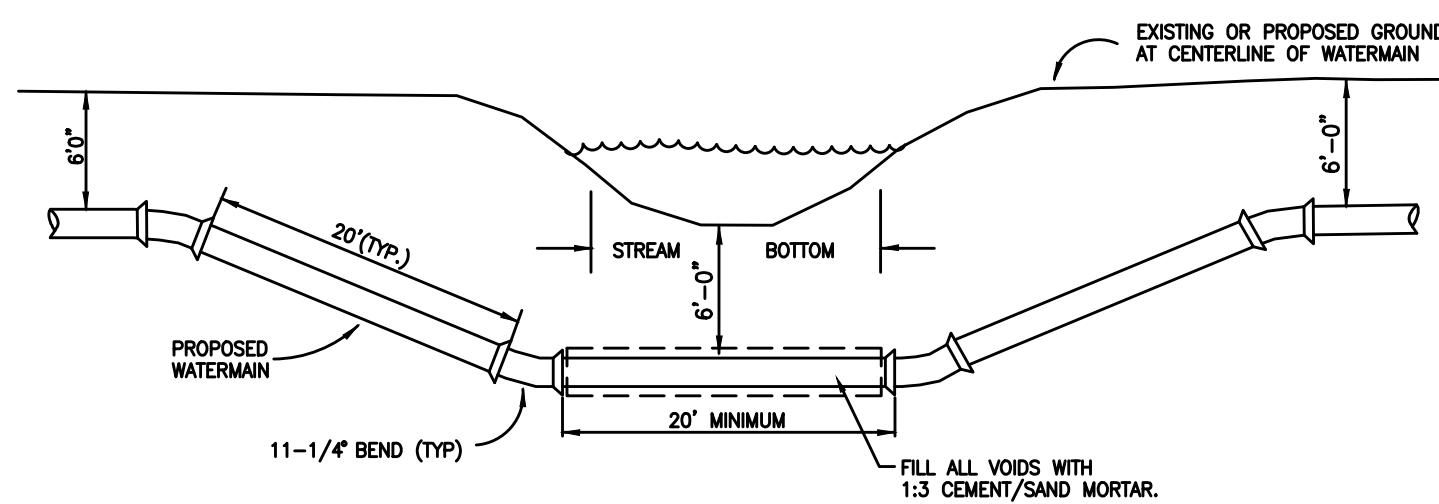
SIZE	A	B min.	C	D	E	F	G	H min.	J
6X6	1'-9"	0'-9"	1'-0"	2'-6"	1'-3"	1'-6"	0'-9"	2'-3"	0'-6"
8X8	1'-9"	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	2'-3"	0'-6"
12X8	1'-9"	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	2'-5"	0'-6"
12X12	2'-1"	0'-9"	1'-4"	4'-0"	2'-6"	3'-0"	1'-6"	2'-9"	0'-8"
16X8	1'-9"	0'-9"	1'-0"	3'-0"	1'-6"	2'-0"	1'-0"	2'-9"	0'-6"
16X12	2'-1"	0'-9"	1'-4"	4'-0"	2'-6"	3'-0"	1'-6"	3'-1"	0'-8"
16X16	2'-8"	1'-0"	1'-8"	5'-0"	2'-6"	4'-0"	2'-0"	3'-8"	0'-11"



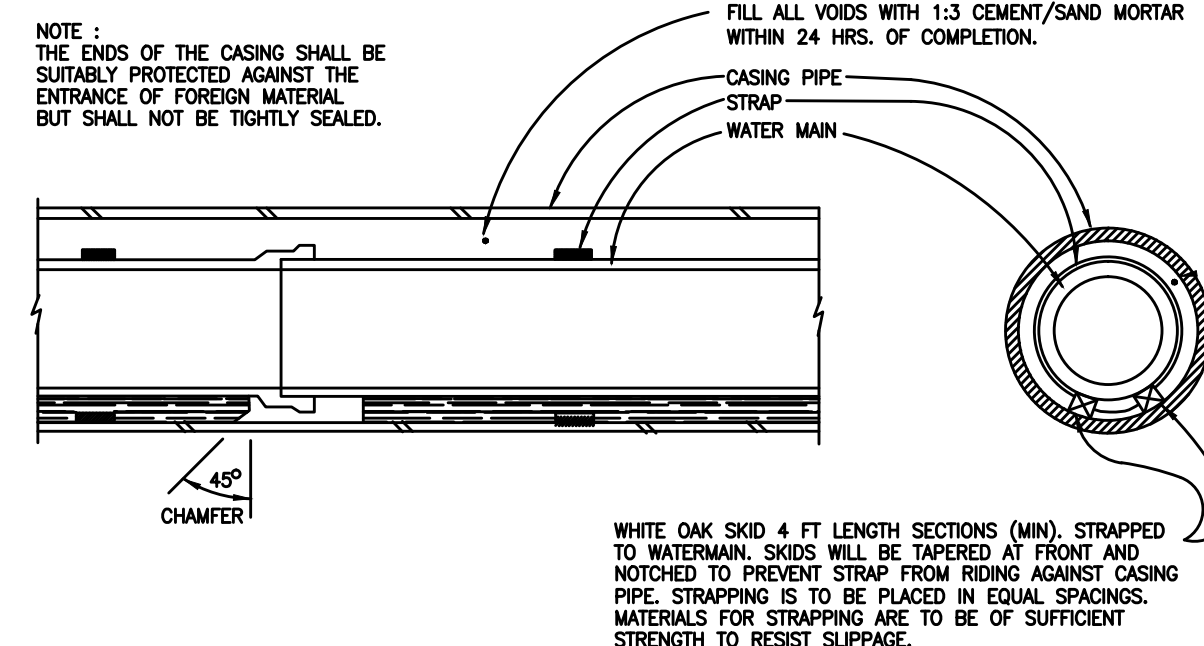
PLAN



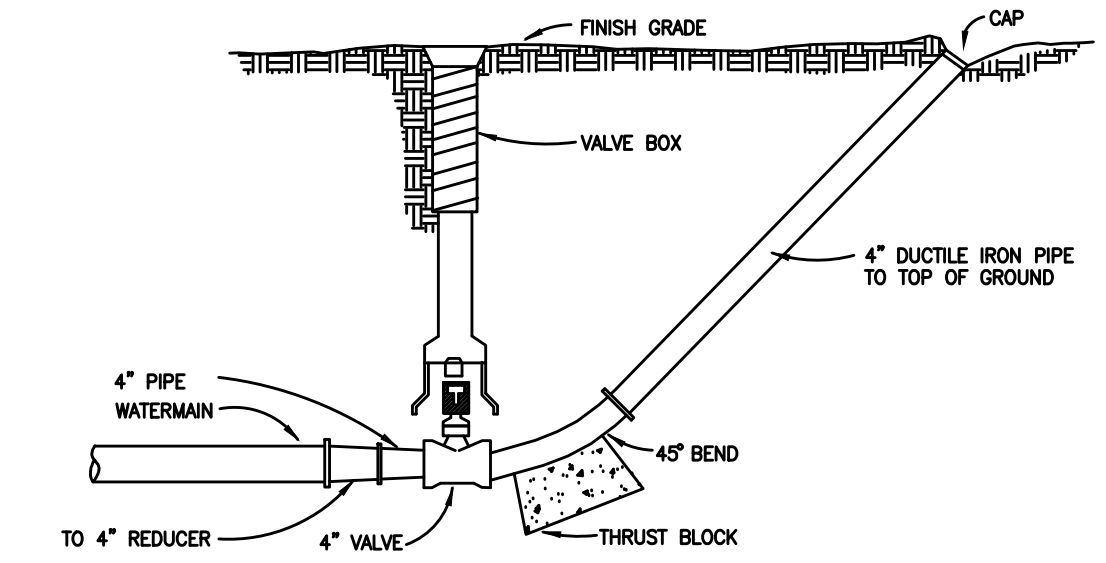
CLEARANCE DIAGRAM FOR WATERMAINS CROSSING OVER OR UNDER SEWER



PROFILE OF WATERMAIN AT STREAM CROSSING

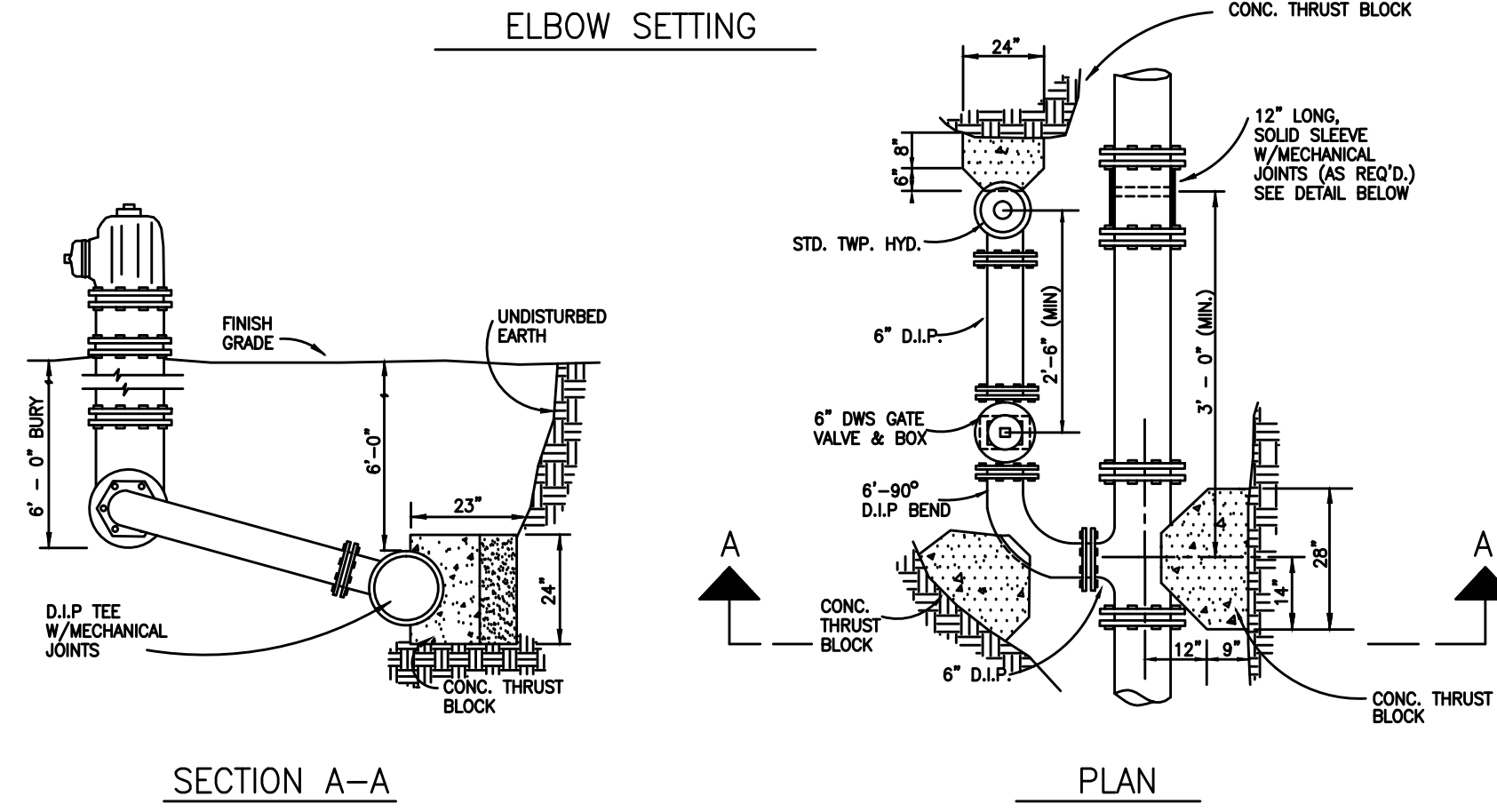


TYPICAL SECTION OF WATERMAIN IN CASING PIPE



TEMPORARY 4" BLOW-OFF DETAIL

ELBOW SETTING



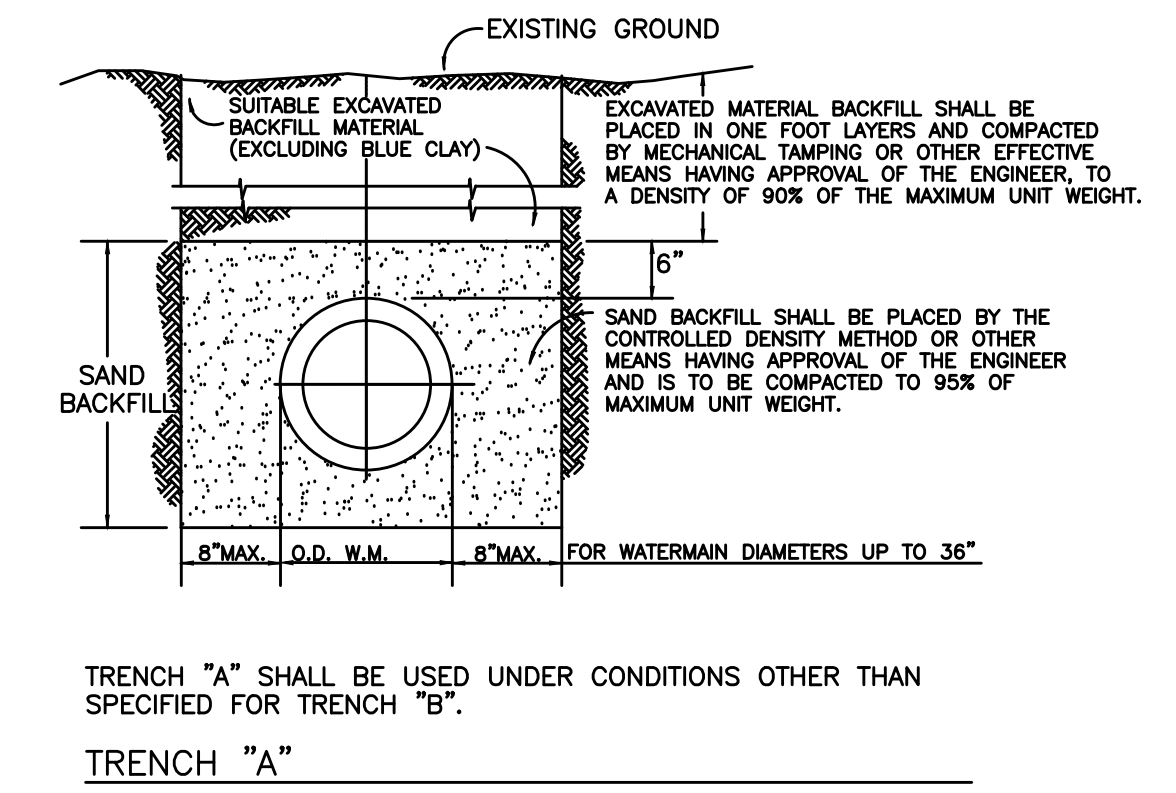
SECTION A-A

PLAN

STRAIGHT SETTING

FIRE HYDRANT DETAILS

PIPE BEDDING DETAILS



TRENCH "A"

TRENCH "B"

DETAILS NOT TO SCALE

INCORPORATED UPDATES
OCTOBER 2019
OCTOBER 2020
MARCH 1998

PLANNING STANDARDS
TITLE BLOCK ADDRESS CHANGE
ORIGINAL

DESCRIPTION
DATE

PLYMOUTH CHARTER TOWNSHIP
DEPARTMENT OF PUBLIC WORKS

9955 N. HAGGERTY ROAD
PLYMOUTH, MICHIGAN 48170-4673

734-354-3270

STANDARD WATER MAIN DETAILS

CHARTER TOWNSHIP OF PLYMOUTH, WAYNE COUNTY, MICHIGAN

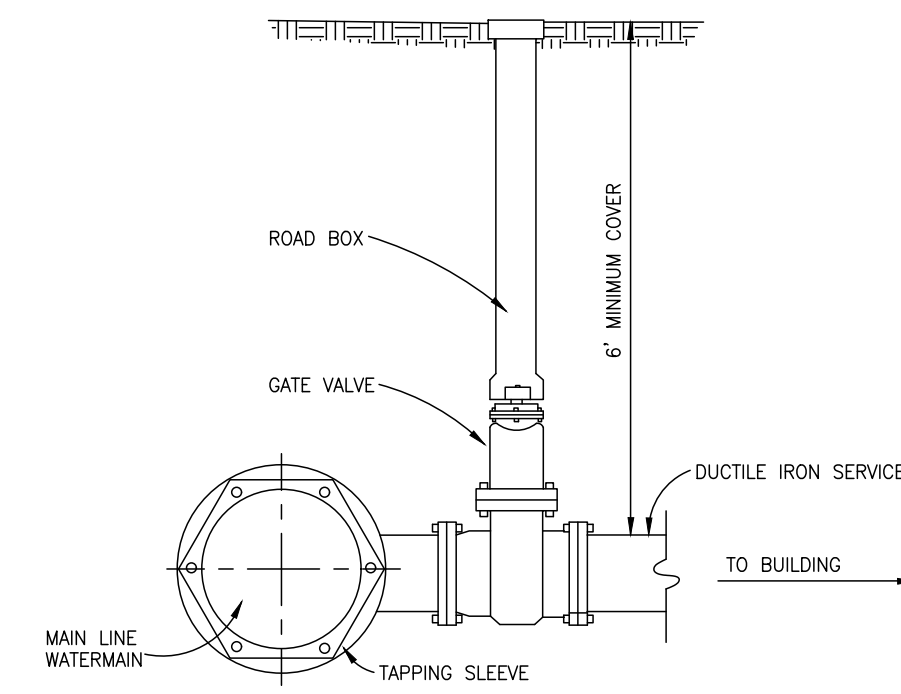


W-2
SHEET 2 OF 2

WATER SERVICES

WATER SERVICE PERMITS AND NOTICES

- Before installation of any water service between the curb stop or gate valve and the proposed structure, the contractor shall obtain a plumbing permit from the Plymouth Township Building Department at (734) 354-3210.
- Before any work may be started, there must be a water agreement paid in full on file in the Plymouth Township Department of Public Works.
- An inspection of the installation of the tap, service line in the right-of-way or easement, and curb stop and gate valve by the Plymouth Township Department of Public Works is required. Two (2) working days notice shall be provided prior to beginning any construction. Contact Plymouth Township Department of Public Works at (734) 354-3270.



TAPPING SLEEVE CONNECTION
4 INCH OR LARGER WATER SERVICE

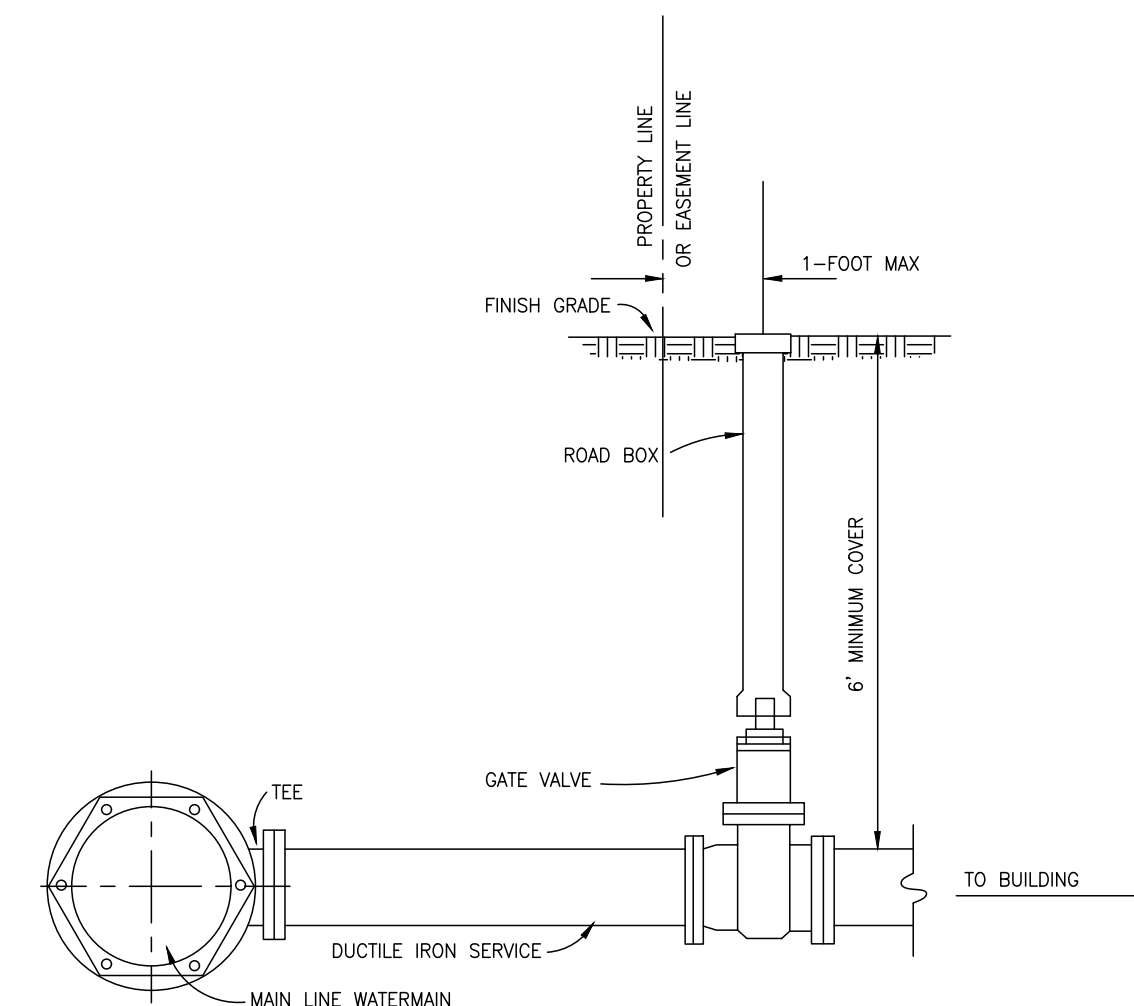
(INSTALLATION BY CONTRACTOR)

WATER SERVICE INSTALLATION

- Taps shall be made after the watermain has successfully passed a bacteria and pressure test and the connection to the Plymouth Township system is completed. The tap shall be made at a right angle to the watermain. The tap shall be made on the upper half of the main at a 45 degree angle from the vertical place on the side of the main to which service is to be extended.
- A curb stop valve shall be inserted on the service at one (1) foot inside the property line or one foot outside the easement line. A curb box shall be installed vertically over the valve so that, after the service is backfilled to final grade, a key may be placed on the valve and it may be operated easily.
- In order to insure that no rocks will be placed over the pipe, the first foot of cover over the pipe shall be placed by hand. The remainder of the trench shall be backfilled in a manner suitable to the Township. No debris or boulders over two (2) inches shall be included in any of the backfill material.
- Any portion of the service that will be beneath pavement shall be mechanically compacted to the subgrade elevation. Trenches outside of paved areas shall be compacted in a manner to avoid settlement.
- All services shall be a minimum of five (5) feet below final grade.

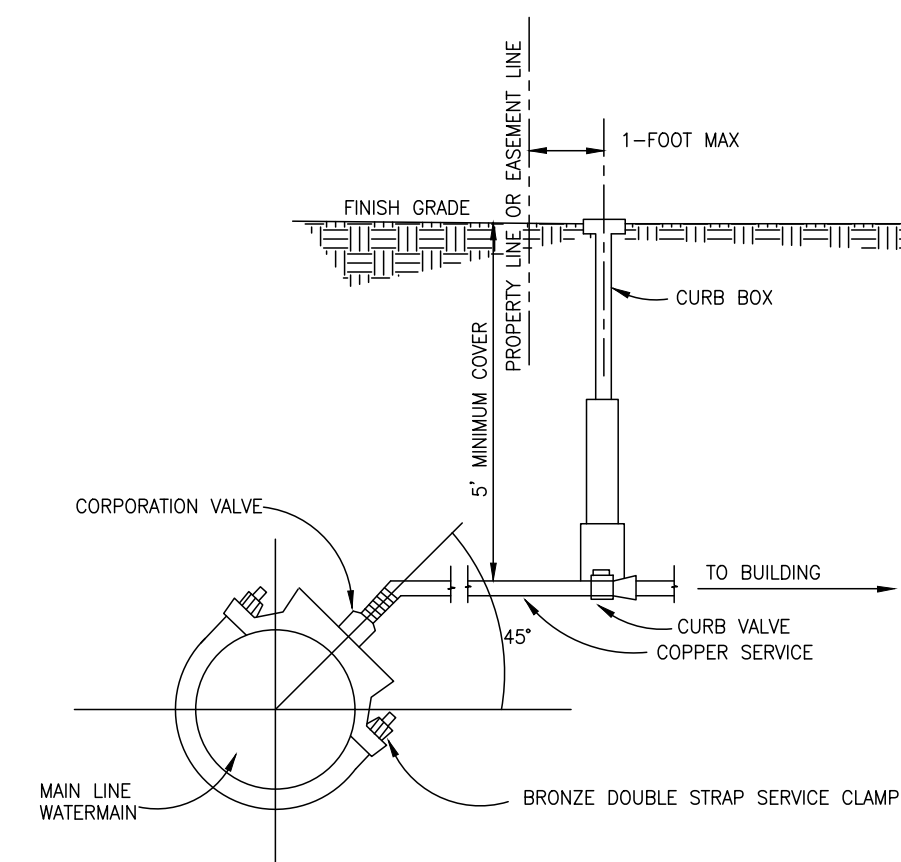
WATER SERVICE APPROVED MATERIALS LIST

- Service Connections
 - 4 inches or larger
 - Ductile or cast iron tee
 - Tapping sleeve
 - 1-1/2 inch or 2 inches
 - Corporation - Mueller No. H-15000 or equal
 - 1 inch or smaller
 - Installed by the Plymouth Township Department of Public Works
- Service Line
 - 4 inch or larger
 - Ductile iron
 - Smaller than 4 inches
 - Copper - type "K"
 - HDPE - from valve box/curb stop to building (note: portion from public main to valve box/curb stop is required to be copper)
 - Shall be of SDR 9
 - Rated for use at pressure class of 250 psi
 - Meet requirements of AWWA C901
 - Meet requirements of ASTM D3550 and shall have min. cell classification of PE445474C
 - Meet the following pipe color identification requirements:
 - Stripes or colored exterior pipe product shall be blue for potable water
 - Permanent identification of piping shall be provided by co-extruding multiple equally spaced color stripes into the pipe outside surface or by solid colored pipe shell
 - The Striping material shall be the same material as the pipe material except for the color
 - Plain Black HDPE Pipe without color code markings may not be used
 - Include trace wire; trace wire shall terminate above the ground at the point where the wire enters the building
- Saddle
 - Mueller bronze double-strap No. CC thread or equal
- Union
 - Mueller Brass No. H-15405 or H-15400 or equal
- Curb Stop
 - 4 inch or larger
 - East Jordan gate valve opening to right
 - Mueller gate valve opening to right or equal
 - Smaller than 4 inch
 - Mueller No. H-15200 Oriseal or equal
- Curb Box
 - 4 inch or larger
 - East Jordan cast iron - no plastic
 - Approved equal cast iron - no plastic
 - Smaller than 4 inch
 - Mueller No. H-10386 with Rod No. 84140 or equal



TEE CONNECTION
4 INCH OR LARGER WATER SERVICE

(INSTALLATION BY CONTRACTOR)



1-1/2 INCH OR 2 INCH WATER SERVICE CONNECTION

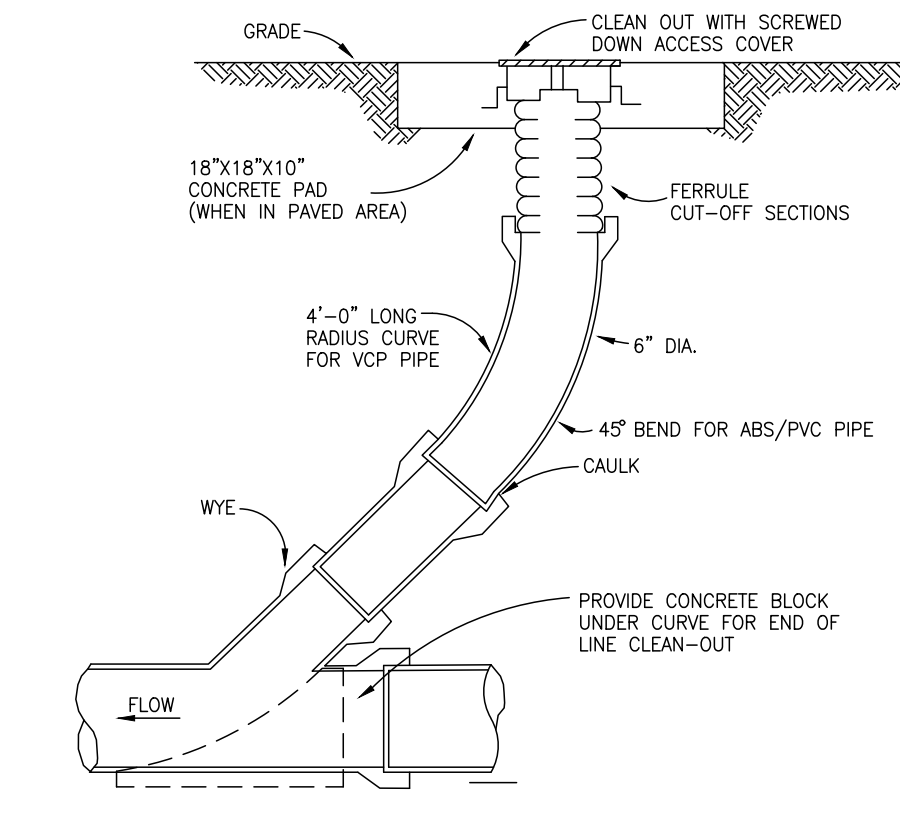
(INSTALLATION BY PLYMOUTH TOWNSHIP)

SERVICE CONNECTION DETAILS

SANITARY SEWER SERVICES

SANITARY SEWER SERVICE PERMITS AND NOTICES

- Before installation of any sanitary sewer service to the proposed structure, the Contractor shall obtain a plumbing permit from the Plymouth Township Building Department at (734) 354-3209.
- Before any work may be started there must be a sanitary sewer agreement paid in full on file in the Plymouth Township Department of Public Works.
- An inspection of the installation of the tap and service line in the right-of-way or easement, by the Plymouth Township Department of Public Works and the Building Department is required. Two (2) working days notice shall be provided prior to beginning any construction. Contact Plymouth Township Department of Public Works at (734) 354-3270 for the tap inspection and Plymouth Township Building Department at (734) 354-3209 for the service line inspection.



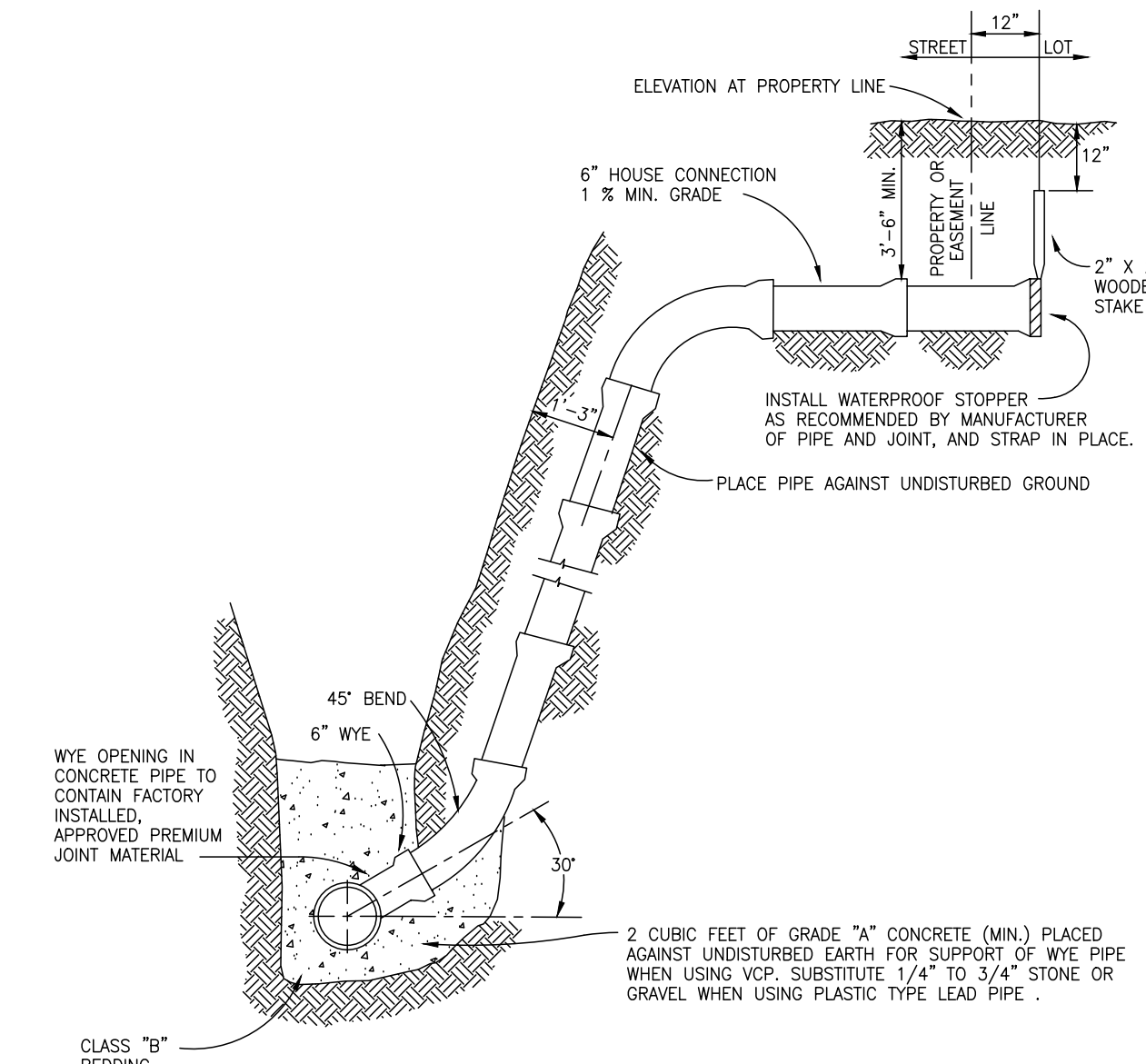
CLEAN OUT DETAIL

SANITARY SEWER SERVICE APPROVED MATERIALS

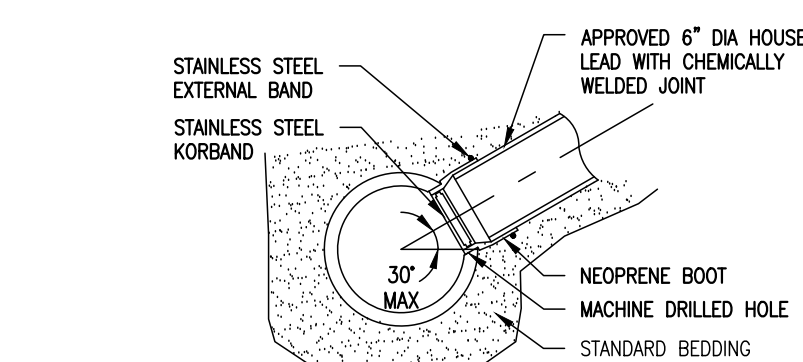
- Extra strength clay pipe: Vitrifed Clay Pipe shall conform to ASTM C700 Specifications. House leads shall conform to this specification. Joints are to be ASTM 425 Type I or Type III, "O" Ring Wedglock, or equal.
- Acrylonitrile-butadiene-styrene (ABS) composite sewer pipe and fittings shall conform to ASTM designation D 2680-72 specifications. House leads shall be solid wall ABS pipe (6 inch), extra strength (ES) meeting ASTM DI 788-68 specifications. (Residential use only)
- Other materials may be approved for a specific installation by the Township Public Works Manager.
- Solid wall PVC pipe, six (6) inch dia., SDR-23.5 (ASTM 3034) is also allowed for residential sewer leads.

SANITARY SEWER SERVICE INSTALLATION

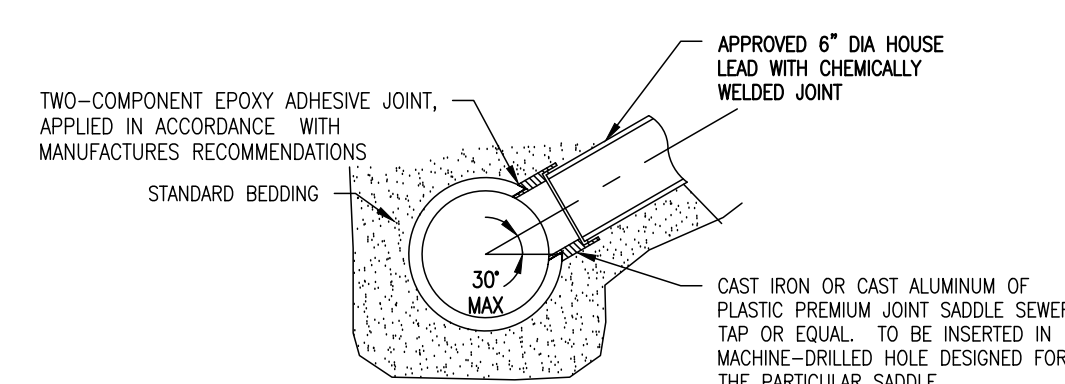
- For VCP pipe, each wye or end of service lead shall have a plug with a Wedglock type No. 1 joint. For ABS pipe the stopper shall be factory approved material.
- Each wye or end of service lead shall be marked by setting a 1 inch x 2 inch x 6 ft. cypress, ash or cedar stake vertically above the end of the lead.
- Backfill at all risers shall be carefully placed and tamped sufficiently to insure against damage from backfill settlement.
- Service connection sewer bedding for ABS pipe shall be equal to that of main sewer bedding. Service connections shall be made in plant fabricated 45 degrees or 60 degrees wye fittings. Fittings and risers shall not be bedded in concrete.



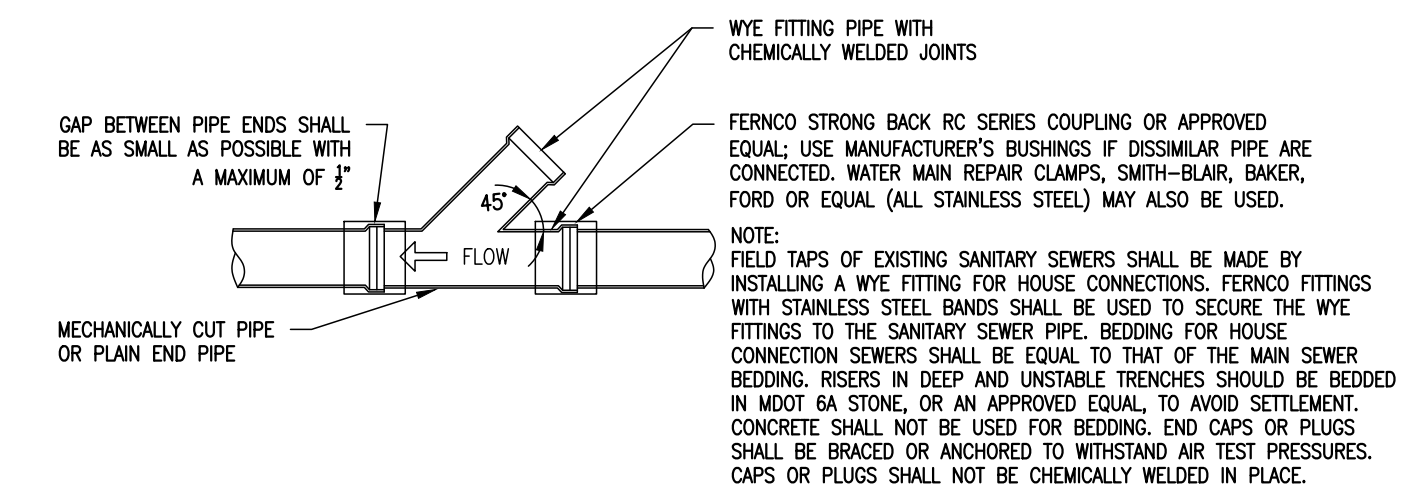
SANITARY SEWER SERVICE AND RISER CONNECTION



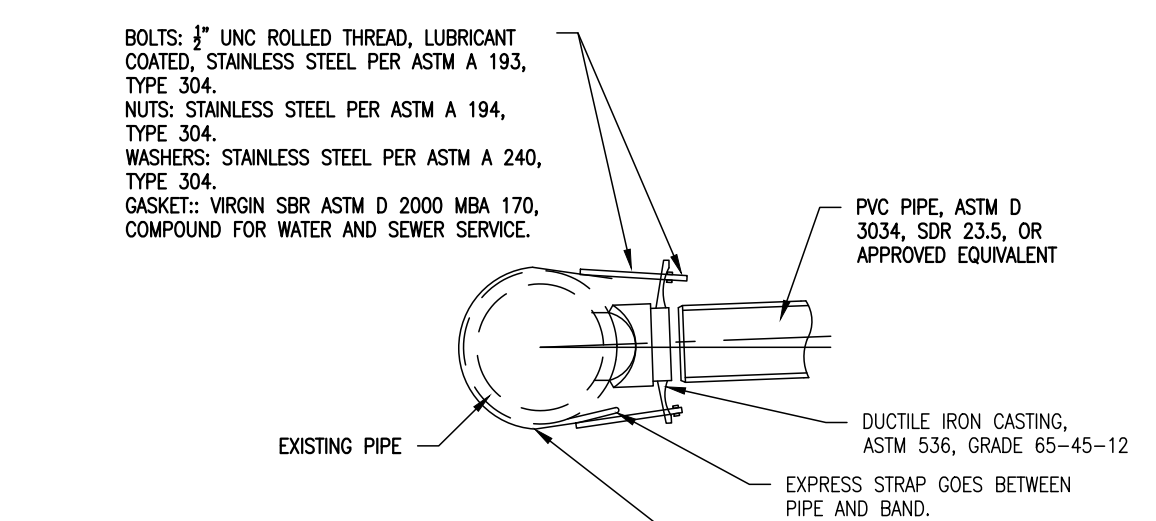
KOR-N-TEE TAP FOR CONCRETE PIPE



SEWER TAP-ALL SIZES OF MAIN SEWER, VITRIFIED CLAY PIPE



WYE PIPE INSERTION WITH FLEXIBLE COUPLINGS (RIGID PIPE)



ROMA TAP FOR PVC PIPE

DETAILS NOT TO SCALE

DATE	DESCRIPTION
OCTOBER 2019	UPDATED SEWER TAP DETAILS & HDPE WATER SERVICE
JUNE 2008	BACTERIOLOGICAL TESTING STANDARDS
OCTOBER 2000	TITLE BLOCK ADDRESS CHANGE
MARCH 1998	ORIGINAL

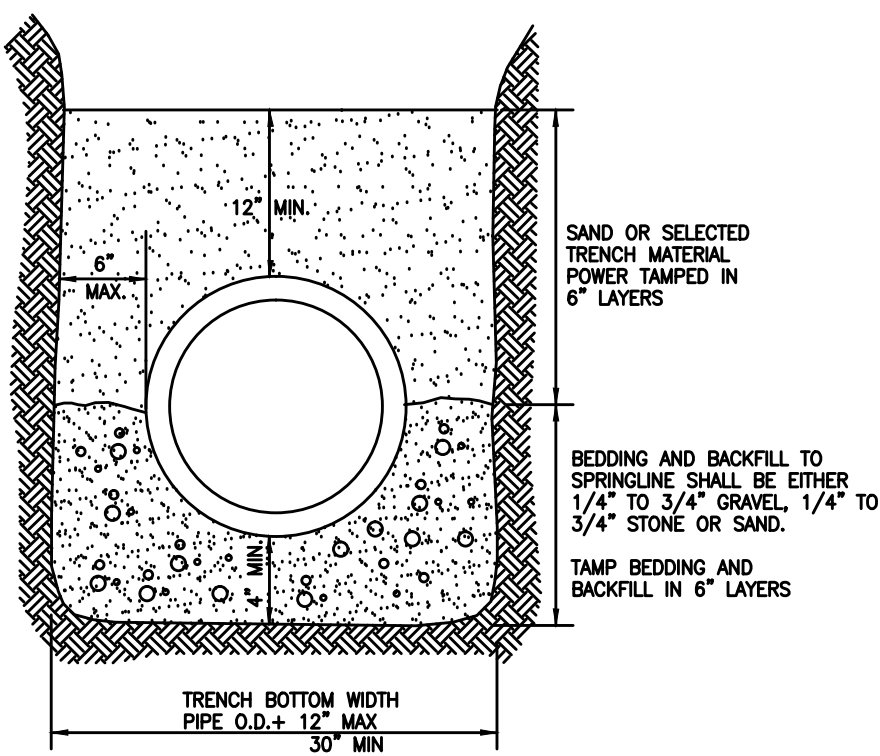
PLYMOUTH CHARTER TOWNSHIP
DEPARTMENT OF PUBLIC WORKS

9955 N. HAGGERTY ROAD
PLYMOUTH, MICHIGAN 48170-4673 734-354-3270

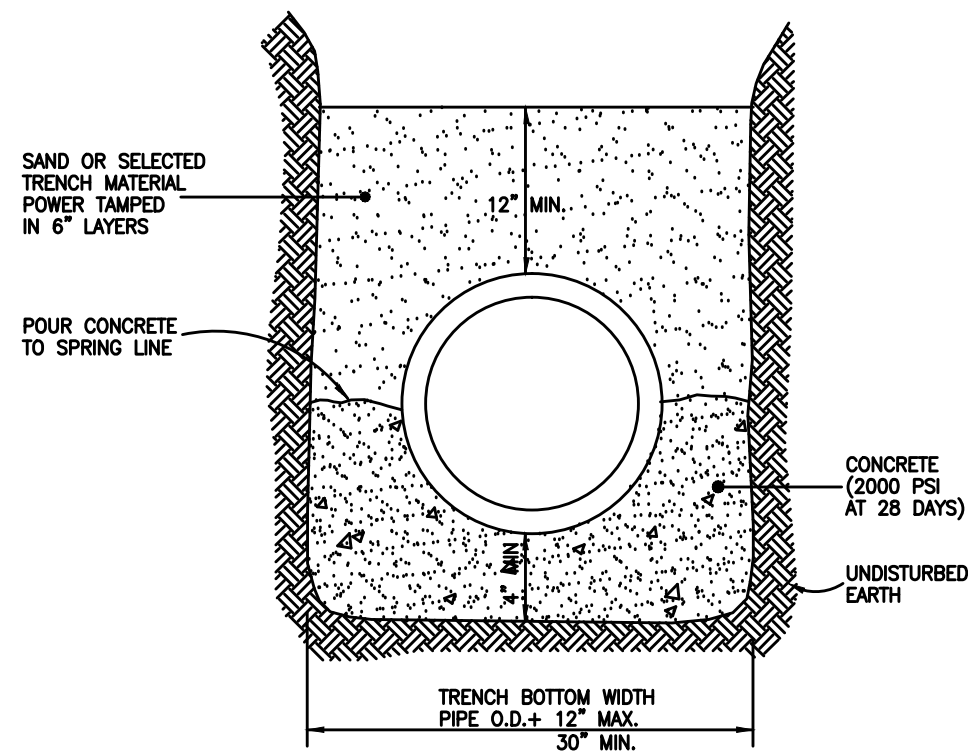
STANDARD SANITARY SEWER AND WATER SERVICE DETAILS
CHARTER TOWNSHIP OF PLYMOUTH, WAYNE COUNTY, MICHIGAN



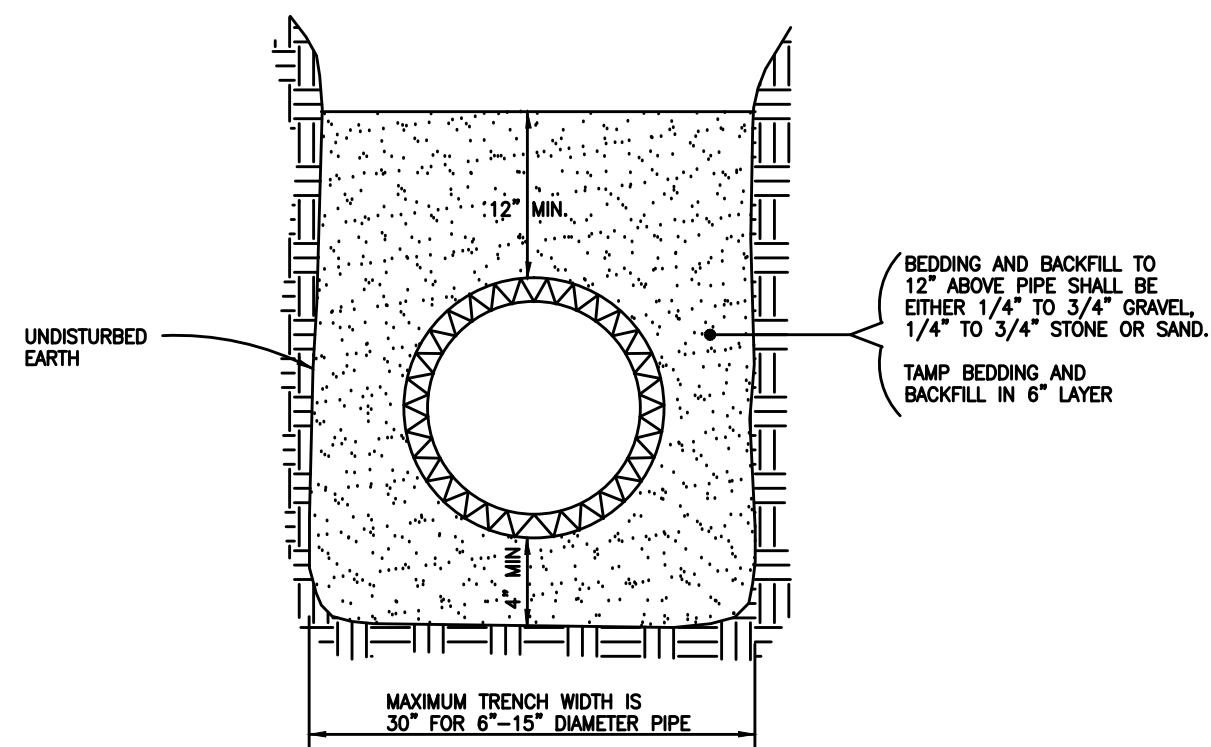
W-S



BEDDING FOR PVC OR CONCRETE PIPE

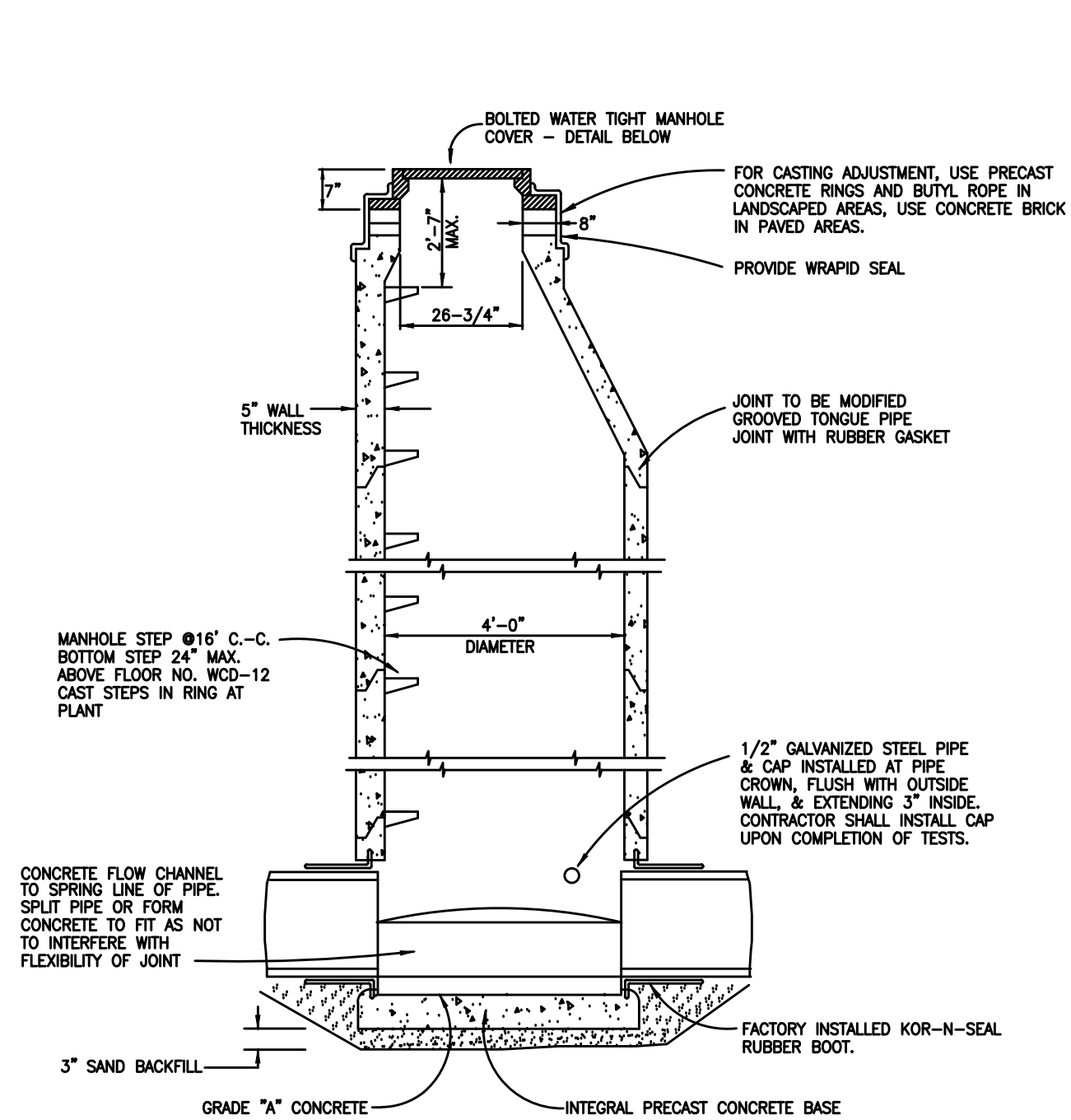


BEDDING FOR PVC OR CONCRETE PIPE ONLY WITH CONCRETE CRADLE ON DISTURBED SUBBASE

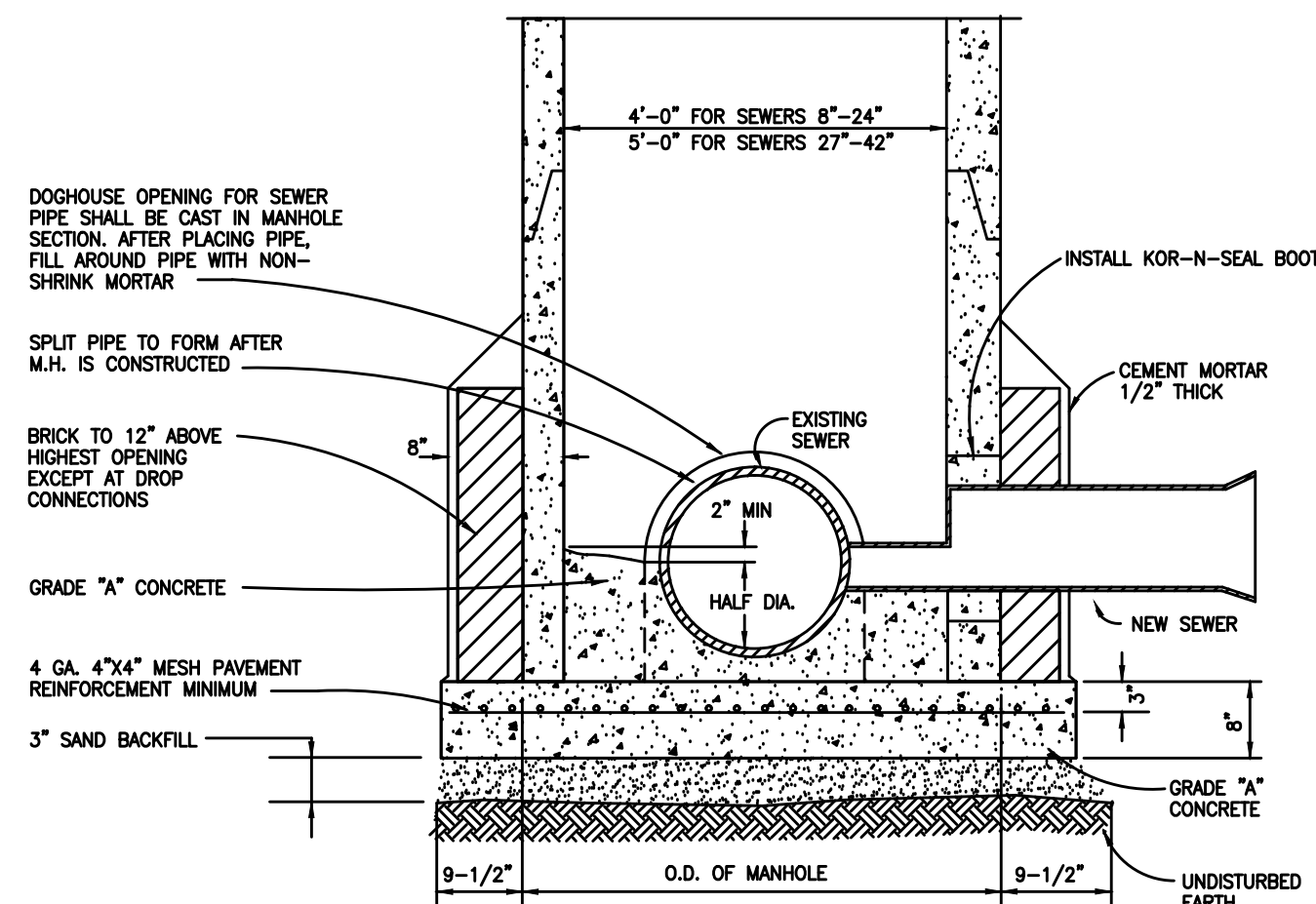


BEDDING FOR PVC TRUSS COMPOSITE, PVC SOLID WALL & DUCTILE IRON PIPE

PIPE BEDDING DETAILS

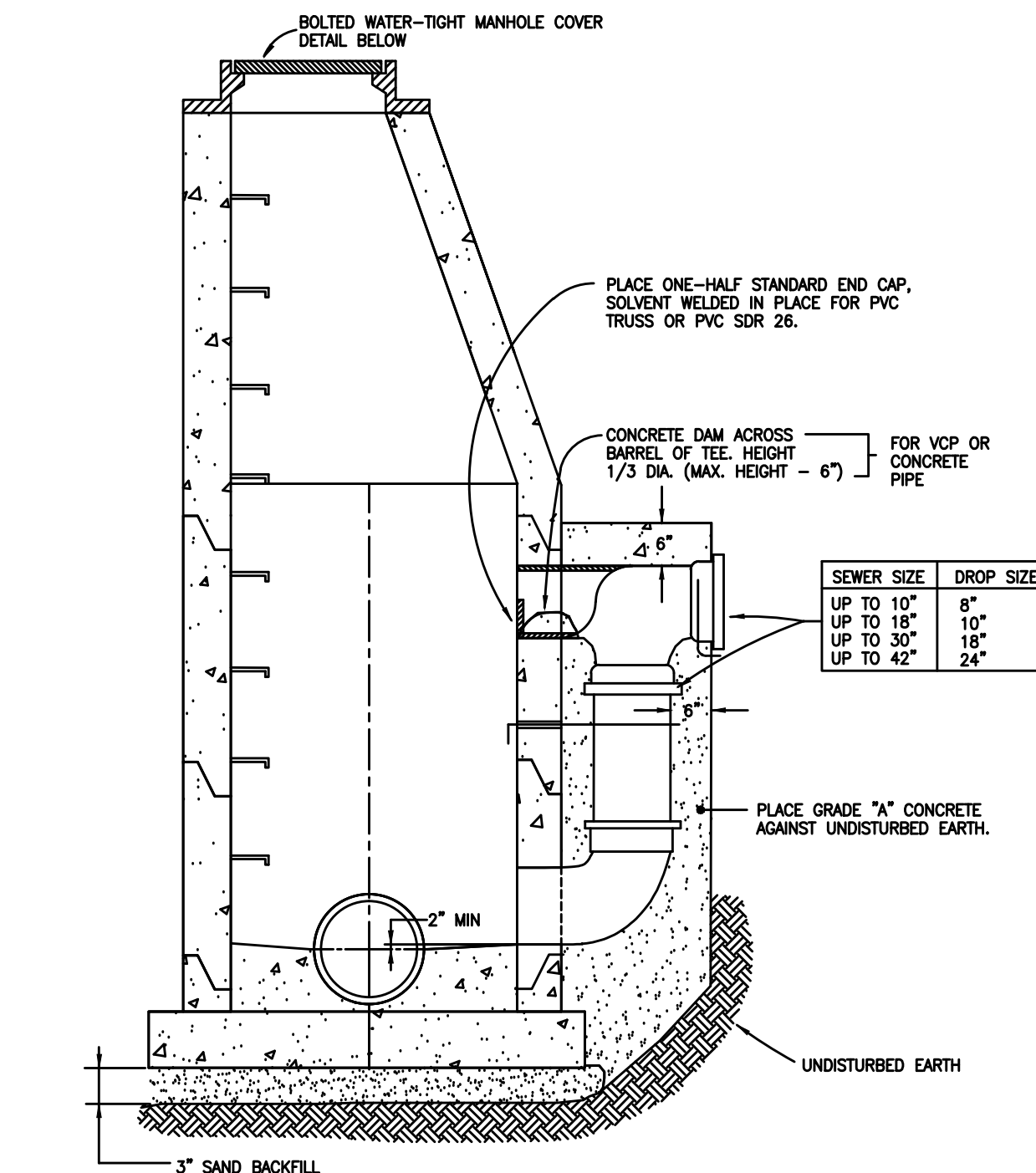


STANDARD MANHOLE FOR SEWER 8" THROUGH 24"

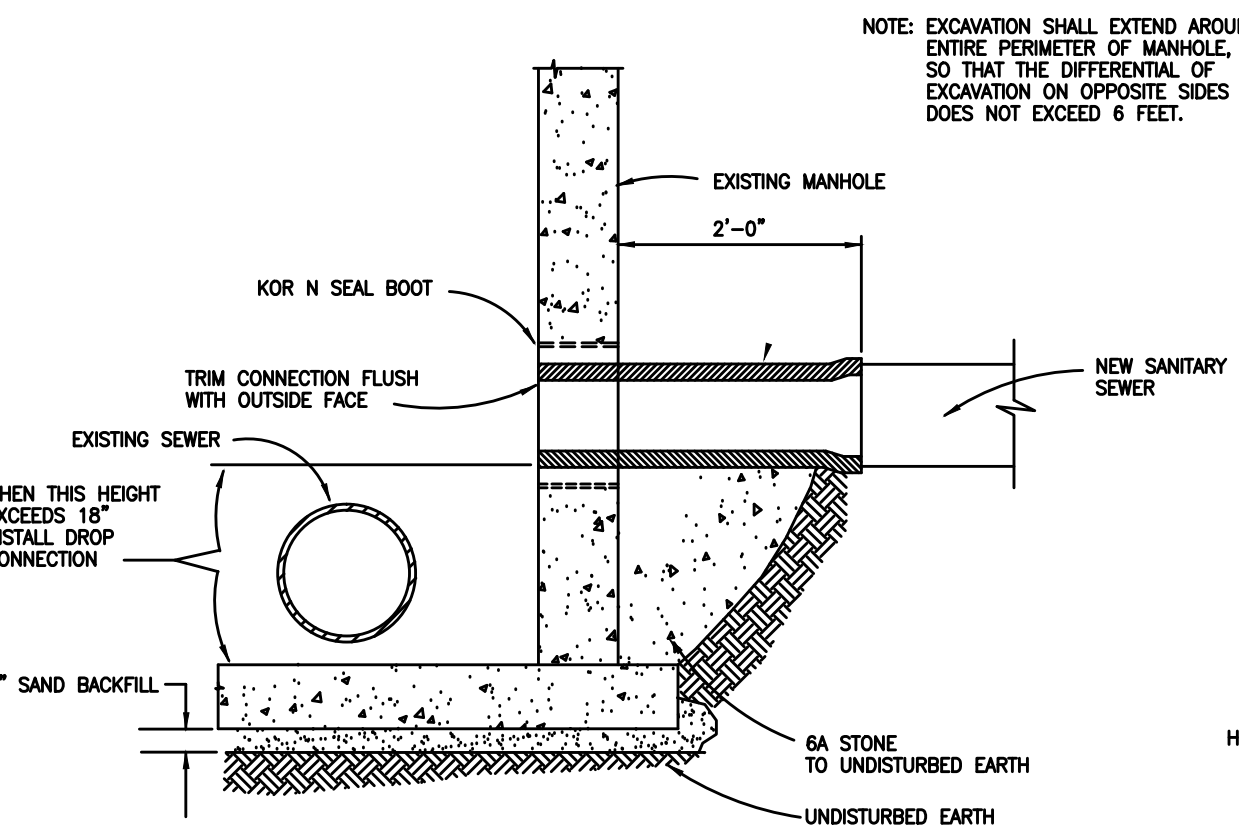


STANDARD MANHOLE BUILT OVER EXISTING SEWER

MANHOLE RISERS & CONES SHALL MEET THE REQUIREMENT OF A.S.T.M. SPEC.-C-478 EXCEPT THAT A WALL THICKNESS OF 5" WILL BE REQUIRED. LENGTH OF EACH RISER SHALL BE A MULTIPLE OF 16" LENGTH OF CONE SHALL BE 2'-8" MIN. TWO LIFT HOLES WILL BE PERMITTED IN EACH UNIT, AND MUST BE FILLED WITH NON-SHRINK MORTAR AFTER SETTING MANHOLE.



STANDARD EXTERIOR DROP CONNECTION AT MANHOLE

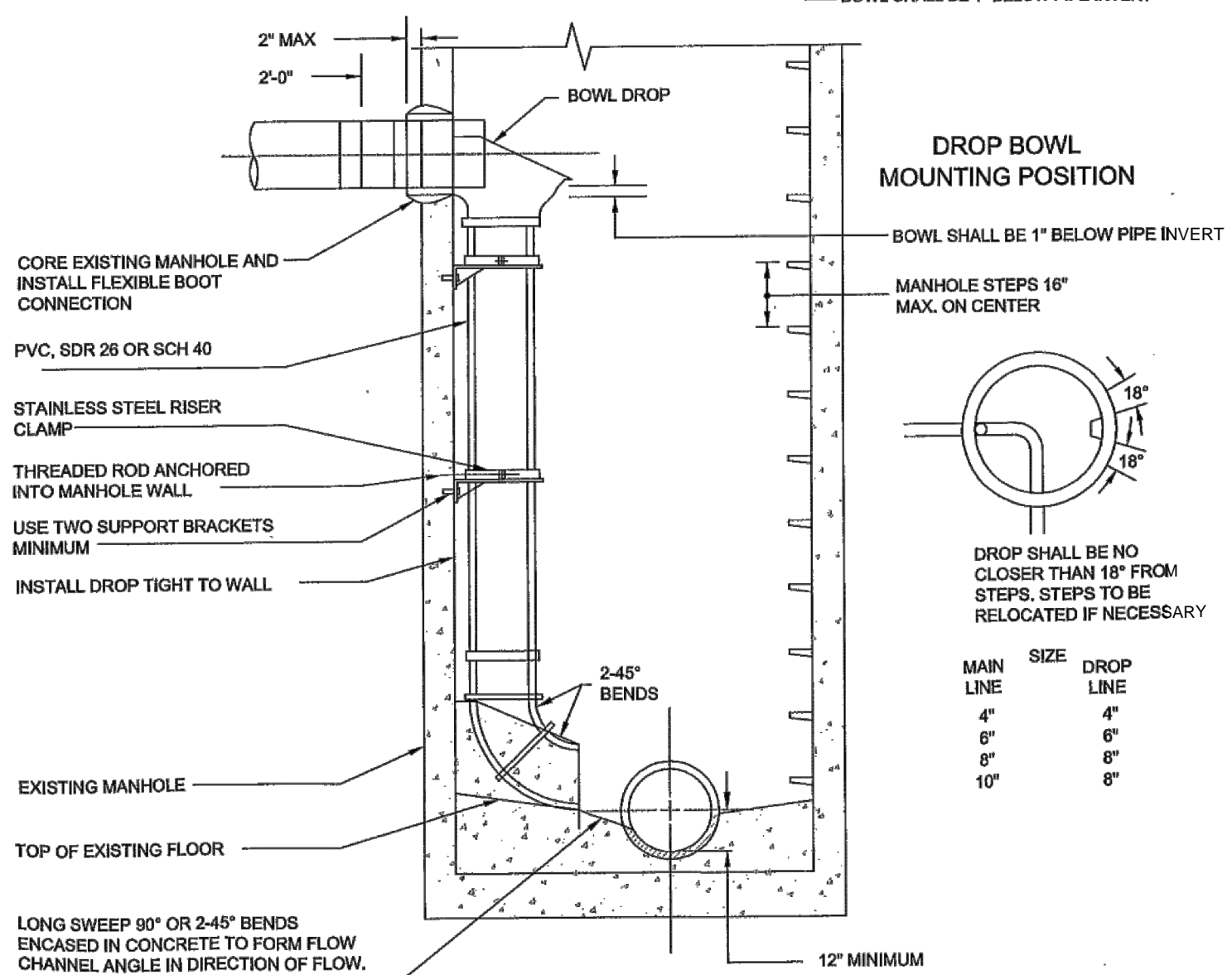


STANDARD CONNECTION TO EXISTING MANHOLE

MANHOLE SPECIFICATIONS

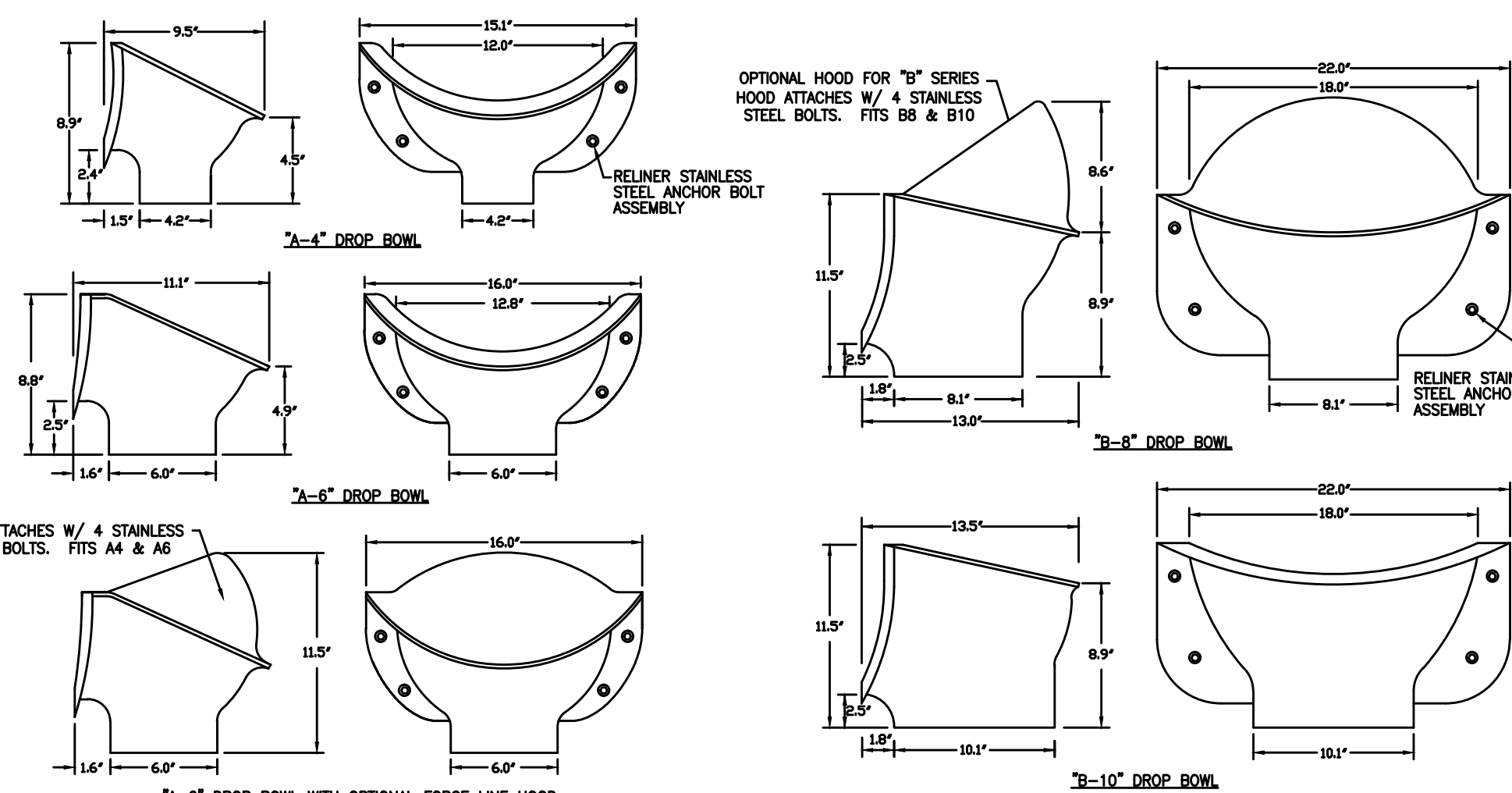
MANHOLE RISERS & CONES SHALL MEET THE REQUIREMENT OF A.S.T.M. SPEC.-C-478 EXCEPT THAT A WALL THICKNESS OF 5" WILL BE REQUIRED. LENGTH OF EACH RISER SHALL BE A MULTIPLE OF 16" LENGTH OF CONE SHALL BE 2'-8" MIN. TWO LIFT HOLES WILL BE PERMITTED IN EACH UNIT, AND MUST BE FILLED WITH NON-SHRINK MORTAR AFTER SETTING MANHOLE.

- NOTES:
1. SECURE DROP PIPE TO MANHOLE WALL WITH RELINER-DURAN, INC STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS OR EQUAL.
 2. ATTACH THE DROP BOWL & EACH CLAMPING BRACKET TO THE MANHOLE WALL WITH 3/8"x 3 3/4" RAMSET/RED HEAD BOLTS HELD IN PLACE WITH 2 STAGE EPOXY PASTE.



INTERIOR DROP CONNECTION AT MANHOLE

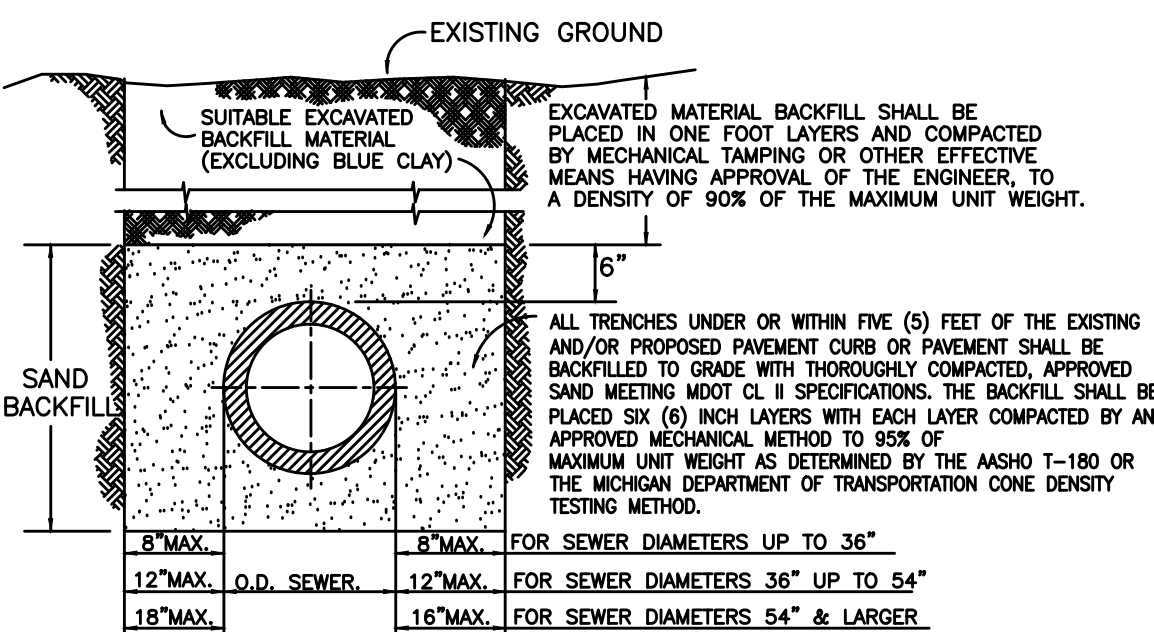
NOTE: TO BE USED ONLY WHEN NO OTHER ALTERNATIVE IS AVAILABLE AND WITH APPROVAL OF THE TOWNSHIP DEPARTMENT OF PUBLIC WORKS.



THE "A-4" BOWL WILL SERVICE UP THROUGH FULL 6" INLETS. THE "A-6" BOWL WILL SERVICE UP THROUGH FULL 8" INLETS. CAN BE USED FOR 10" INLET MODERATE FLOWS. ALL SIZES ARE FOR RETROFIT OR NEW CONSTRUCTION. FOR MORE INFORMATION, GO TO WWW.RELINER.COM.

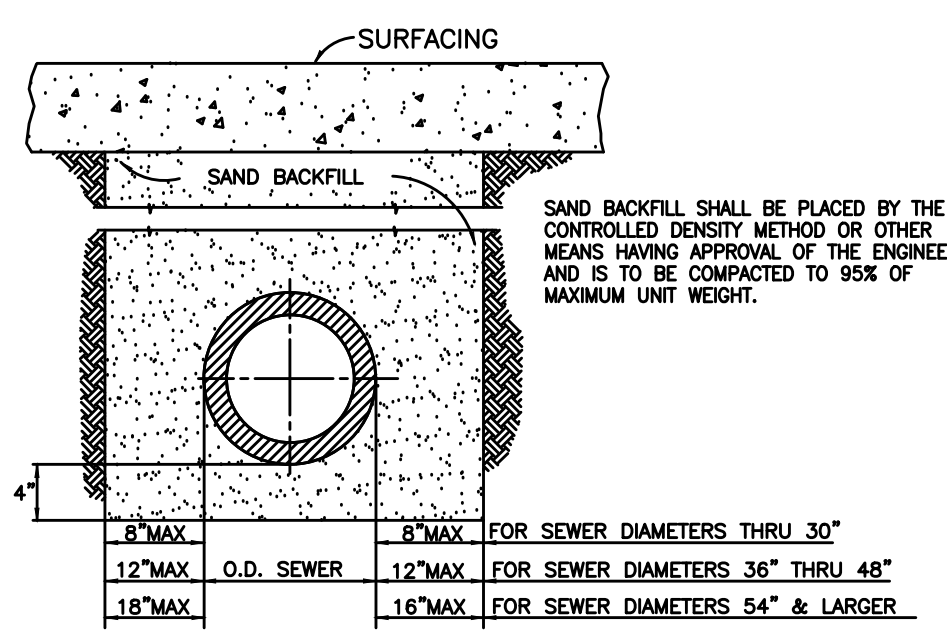
THE "B-8" BOWL WILL SERVICE UP THROUGH FULL 10" INLETS. THE "B-10" BOWL WILL SERVICE UP THROUGH FULL 12" INLETS. CAN BE USED FOR 15" AND 16" INLET MODERATE FLOWS. ALL SIZES ARE FOR RETROFIT OR NEW CONSTRUCTION. FOR MORE INFORMATION, GO TO WWW.RELINER.COM.

USE 4 ANCHOR ASSEMBLIES TO ATTACH DROP BOWL TO MANHOLE WALL. USE STAINLESS STEEL PIPE BRACKETS TO SUPPORT DOWN PIPE. EXTERNAL PIPE COUPLER REQUIRED. PROVIDE SWEEP AT DOWN PIPE OUTLET.



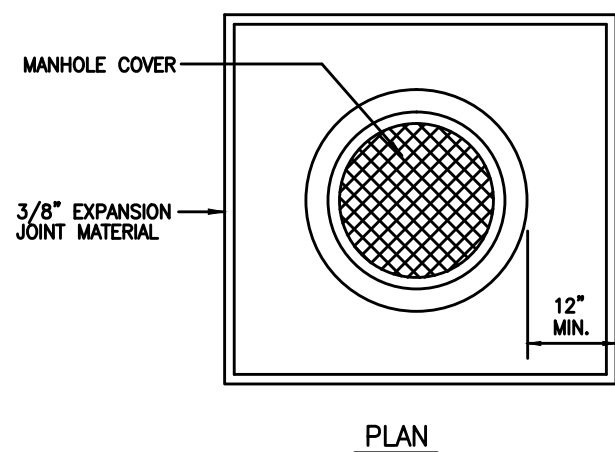
TRENCH "A" SHALL BE USED UNDER CONDITIONS OTHER THAN SPECIFIED FOR TRENCH "B".

TRENCH "A"

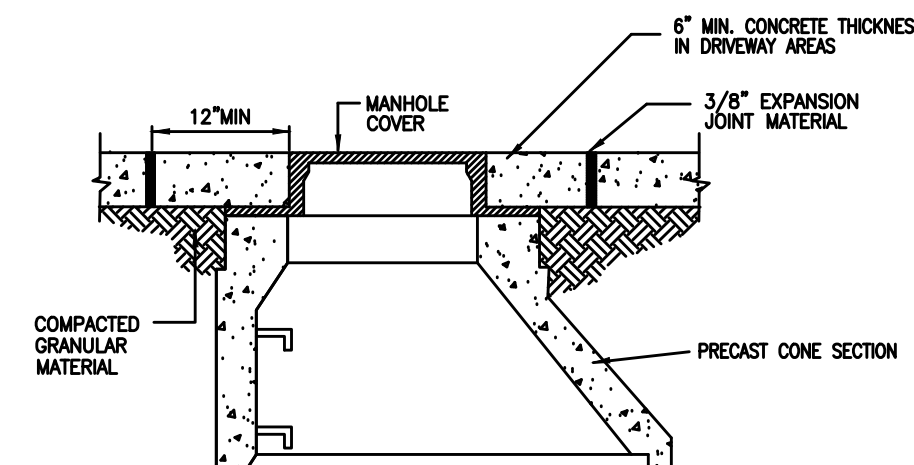


TRENCH "B" SHALL BE USED UNDER ROAD SURFACE, PAVEMENT, SIDEWALK, CURB, AGGREGATE & PAVED DRIVES AND WHERE THE EDGE OF TRENCH IS WITHIN 3 FEET OF THE PAVEMENT.

TRENCH "B"



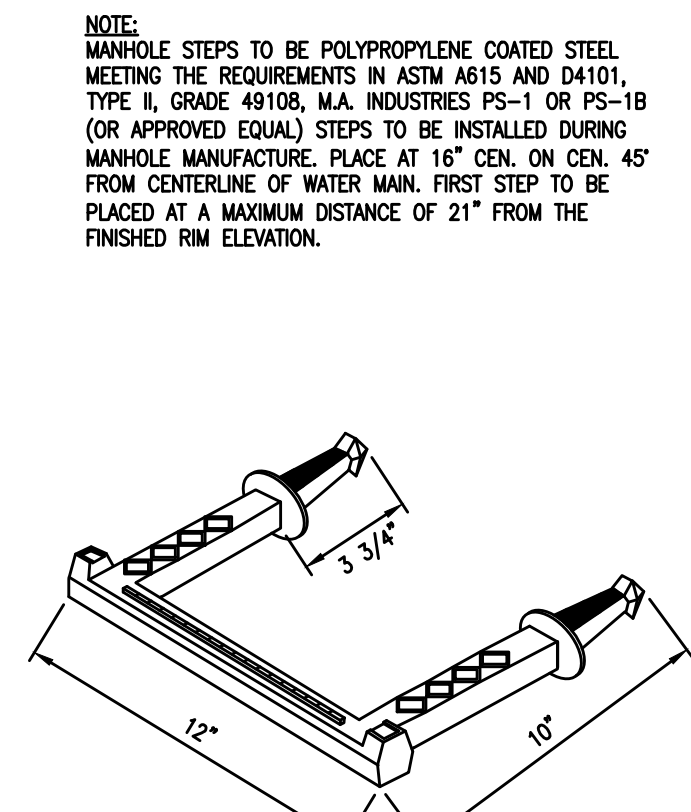
PLAN



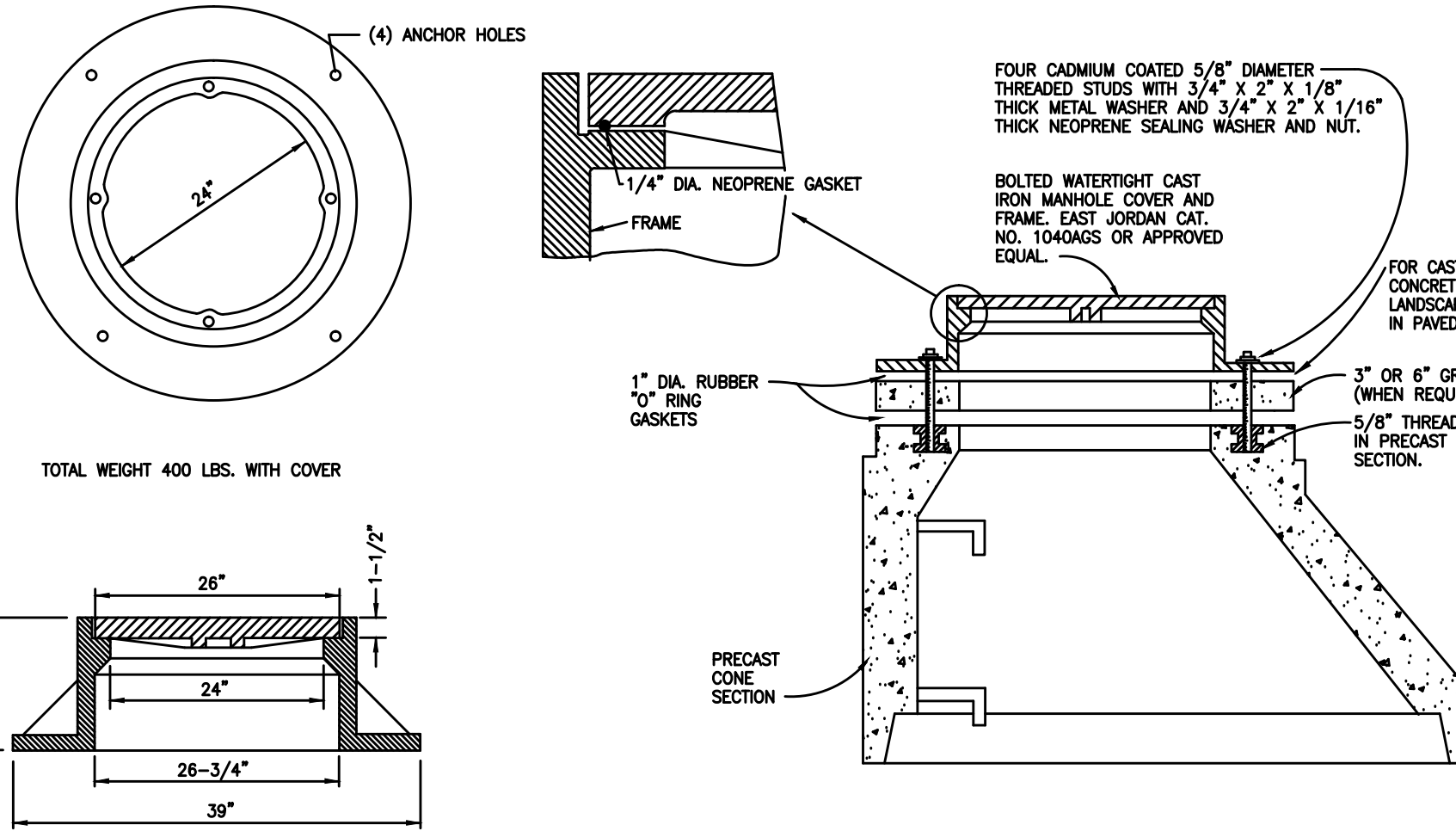
SECTION

NOTE: ISOLATION SLABS ARE TO BE USED IN ALL CONCRETE DRIVEWAYS, SIDEWALKS AND CONCRETE PAVEMENT.

ISOLATION SLAB FOR MANHOLES IN CONCRETE PAVEMENT



MANHOLE STEP DETAILS

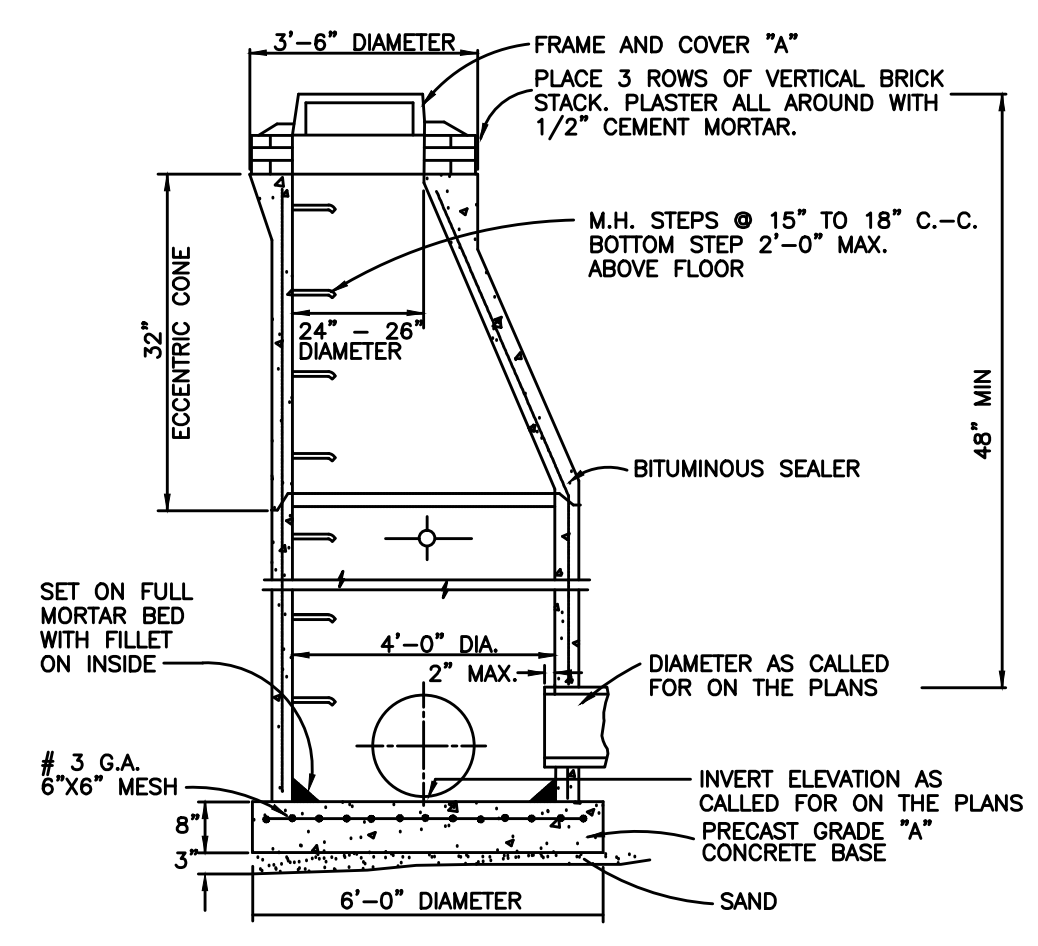


STANDARD SOLID WATER TIGHT BOLTED MANHOLE COVER DETAILS

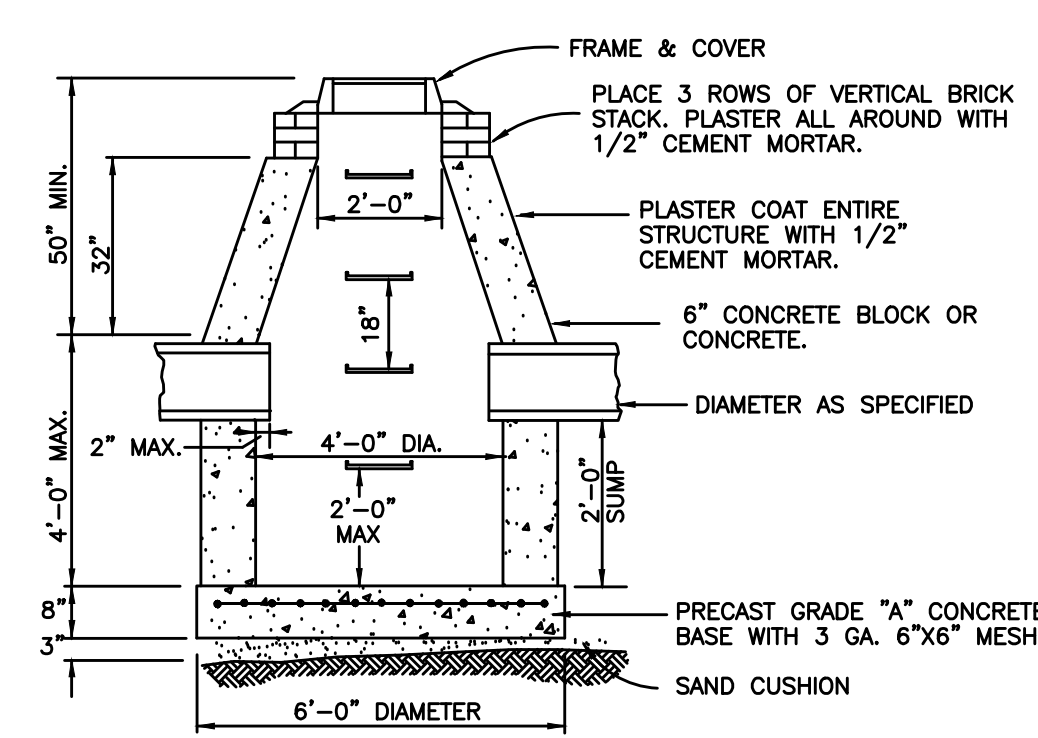
ADDED INTERIOR DROP CONNECTION
APRIL 2014
REVISE DROP CONNECTION PER MDCO
AUGUST 2008
BACTERIOLOGICAL TESTING
JUNE 2006
REVISE PER MDCO
OCTOBER 2000
MARCH 1998
ORIGINAL
TITLE BLOCK ADDRESS CHANGE

PLYMOUTH CHARTER TOWNSHIP
DEPARTMENT OF PUBLIC WORKS
9955 N. HAGGERTY ROAD
PLYMOUTH, MICHIGAN 48170-4673
734-354-3270

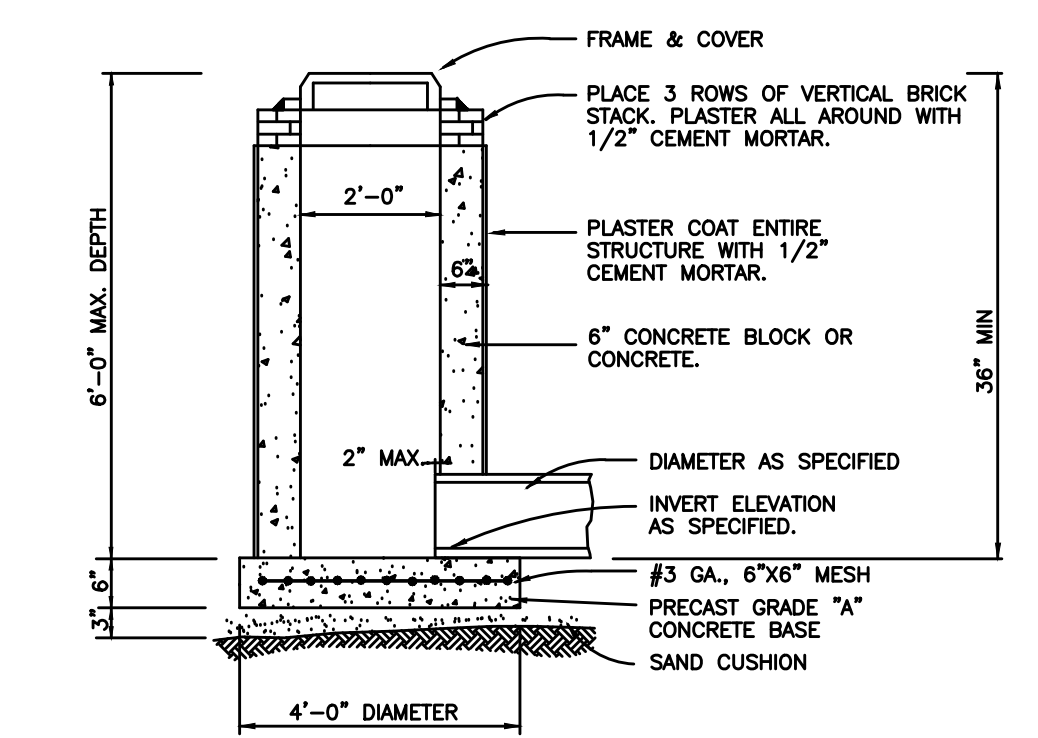
STANDARD SANITARY SEWER DETAILS
CHARTER TOWNSHIP OF PLYMOUTH, WAYNE COUNTY, MICHIGAN



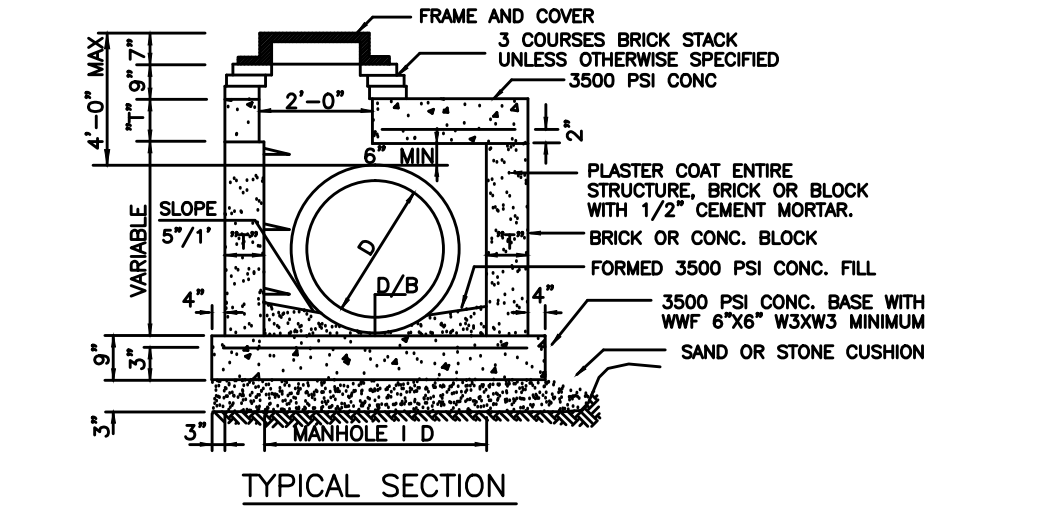
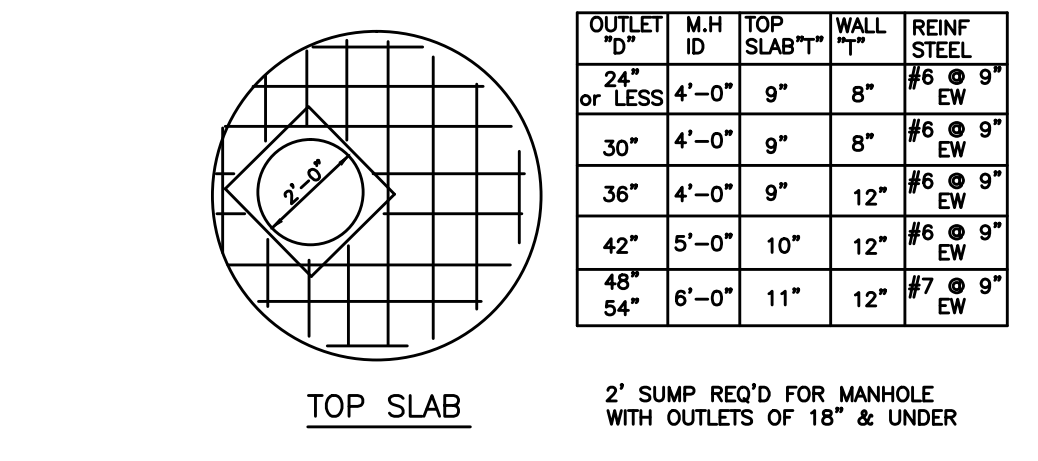
PRECAST UNITS SHALL MEET THE REQUIREMENTS OF A.S.T.M. C478-18 STANDARD MANHOLE



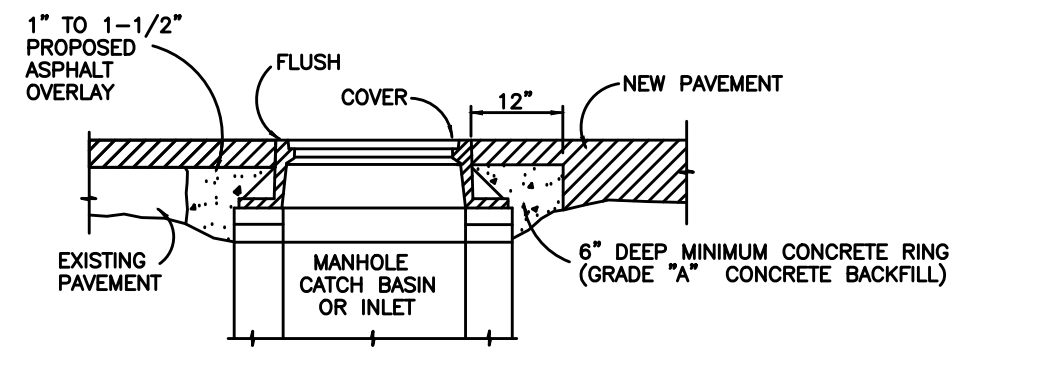
PRECAST UNITS SHALL MEET THE REQUIREMENTS OF A.S.T.M. C478-18 STANDARD CATCH BASIN



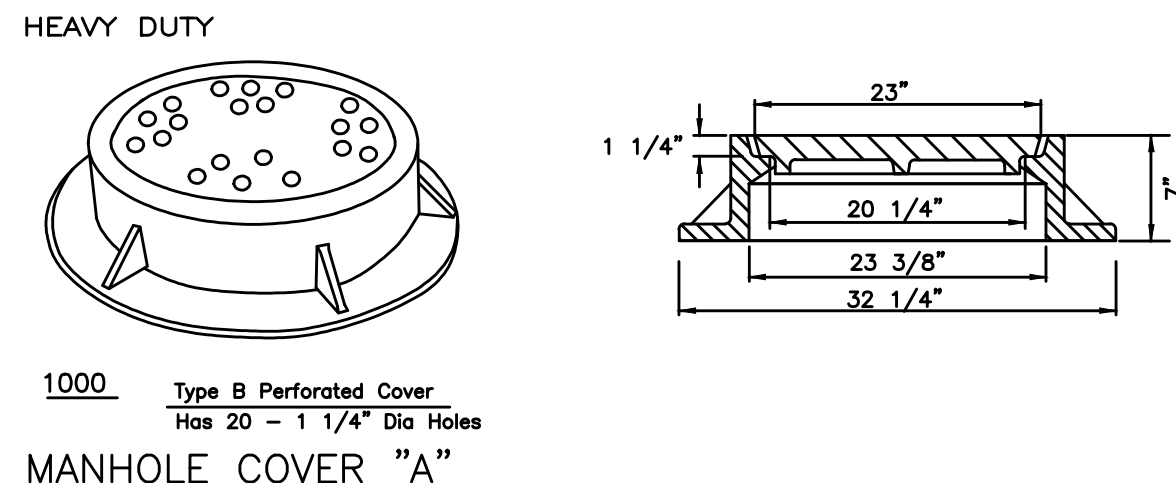
PRECAST UNITS SHALL MEET THE REQUIREMENTS OF A.S.T.M. C478-18 STANDARD INLET OR CLEANOUT



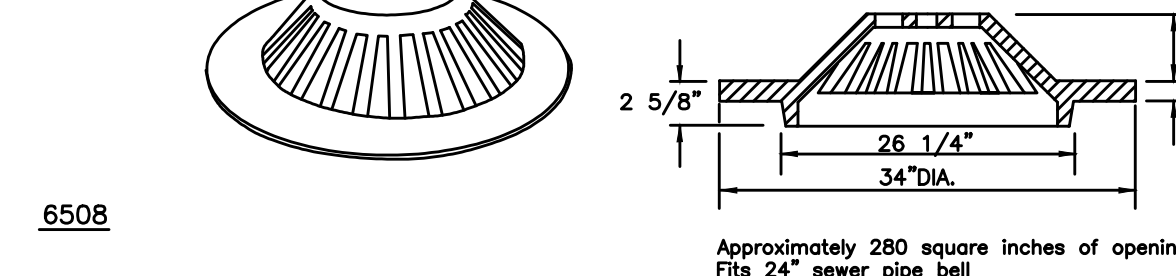
PRECAST UNITS SHALL MEET THE REQUIREMENTS OF A.S.T.M. C478-18 TYPICAL MANHOLE "D"



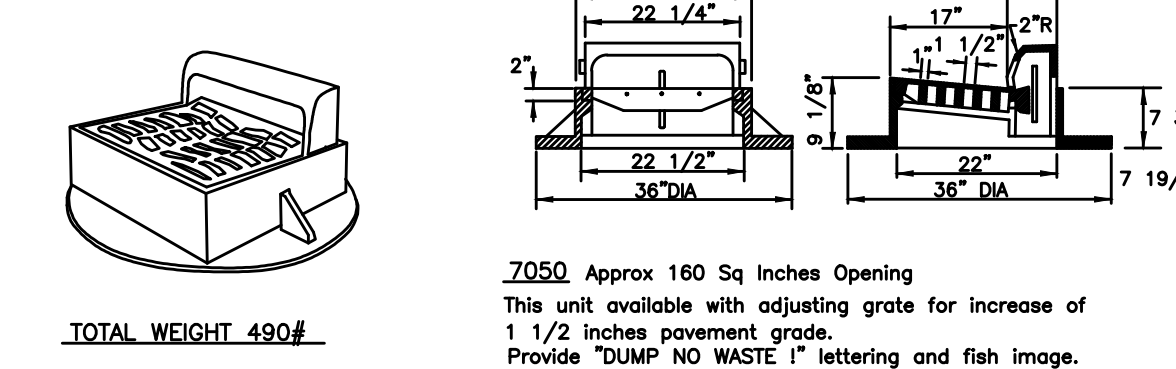
DRAINAGE STRUCTURE COVER - CONCRETE RING
DETAIL FOR NEW INSTALLATION OR ADJUSTMENT



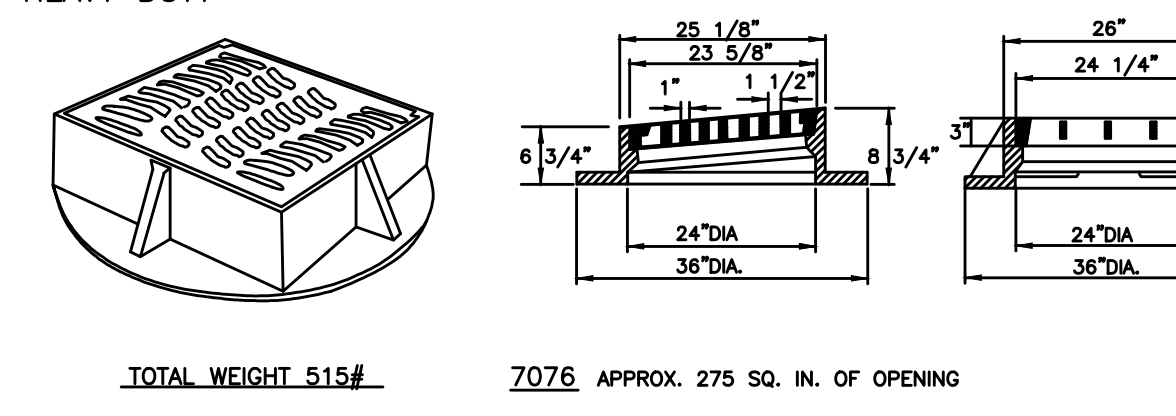
HEAVY DUTY
1000 Type B Perforated Cover
Has 20 - 1 1/4" Dia Holes
MANHOLE COVER "A"



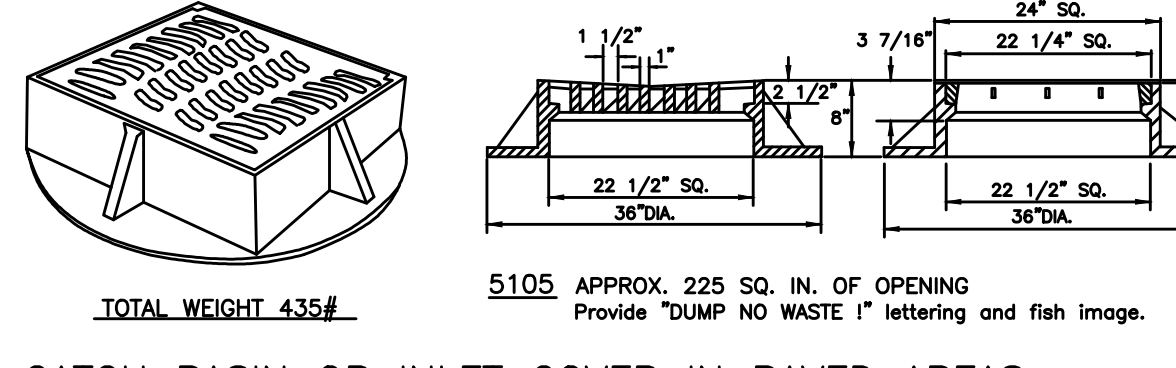
HEAVY DUTY
6508
REAR YARD DRAINAGE COVER



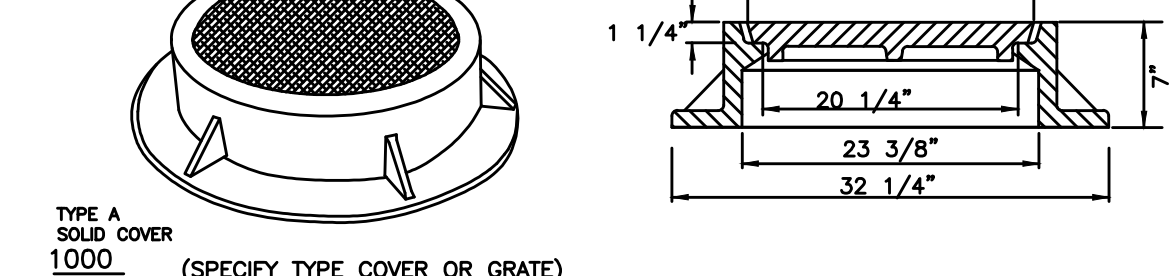
HEAVY DUTY
TOTAL WEIGHT 490#
CATCH BASIN OR INLET COVER FOR CURB & GUTTER



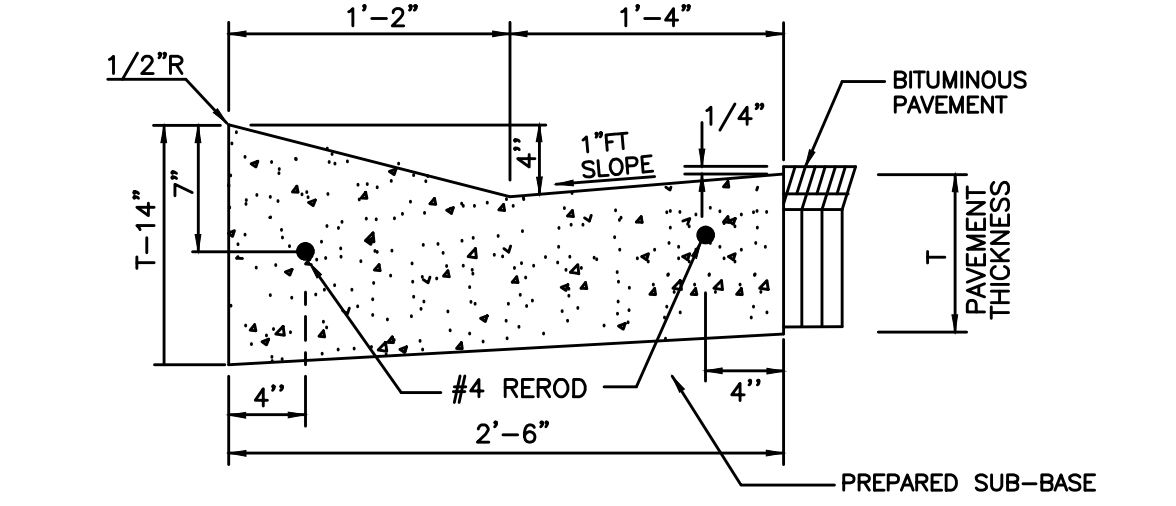
HEAVY DUTY
TOTAL WEIGHT 515#
CATCH BASIN OR INLET COVER FOR GUTTER IN PAVED AREAS



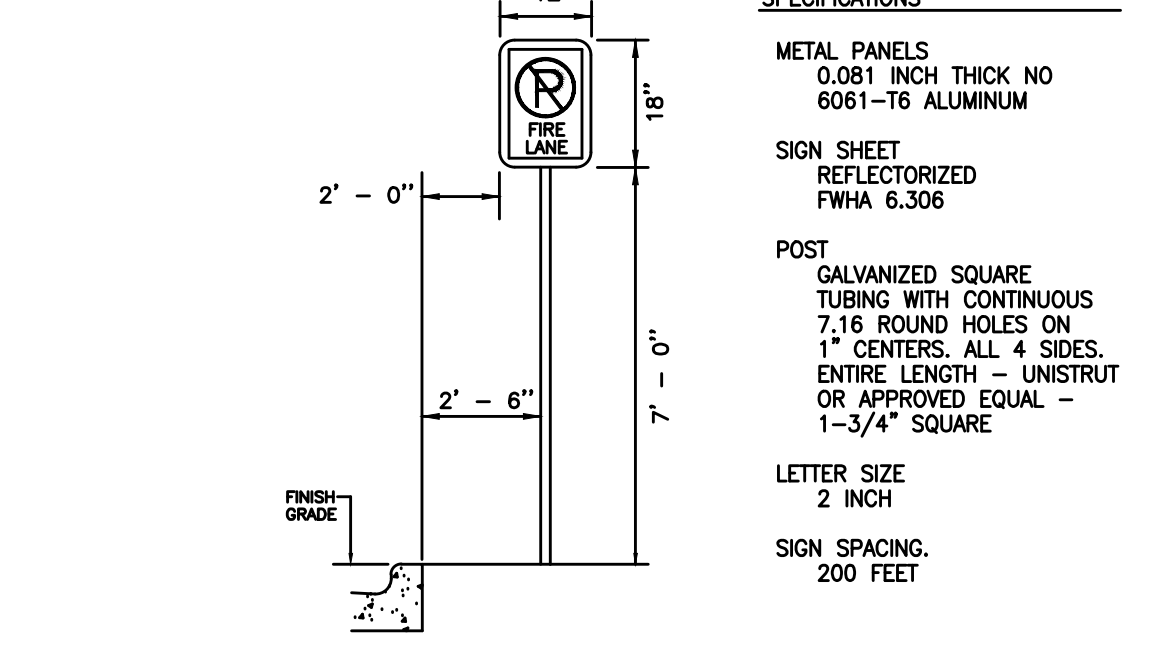
HEAVY DUTY
TOTAL WEIGHT 435#
CATCH BASIN OR INLET COVER IN PAVED AREAS



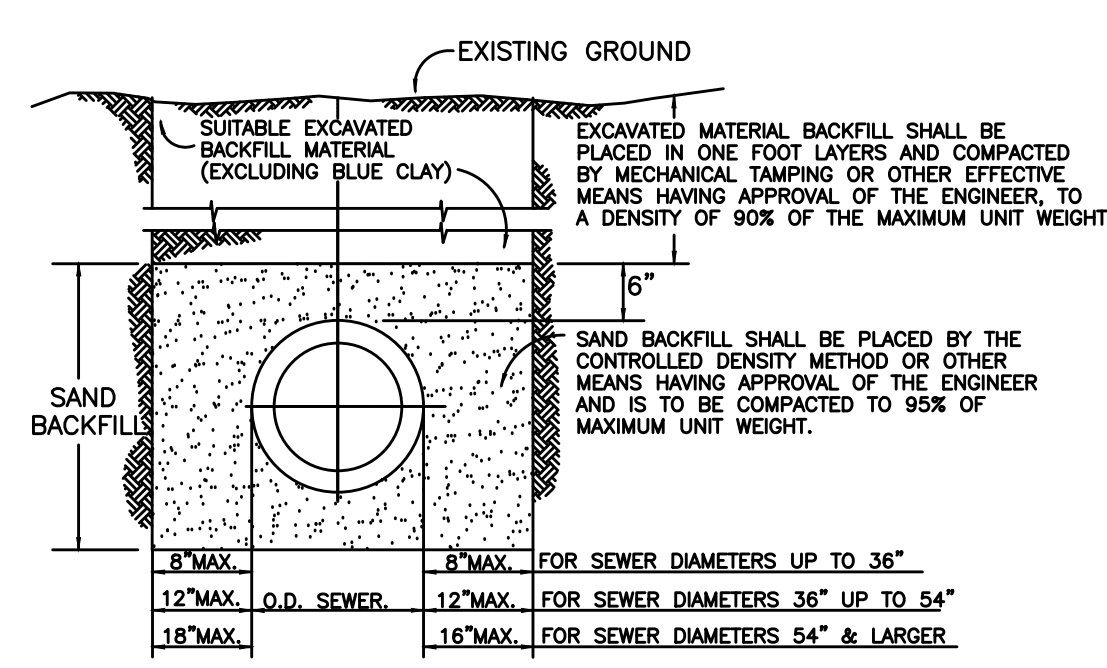
HEAVY DUTY
CLEANOUT COVER



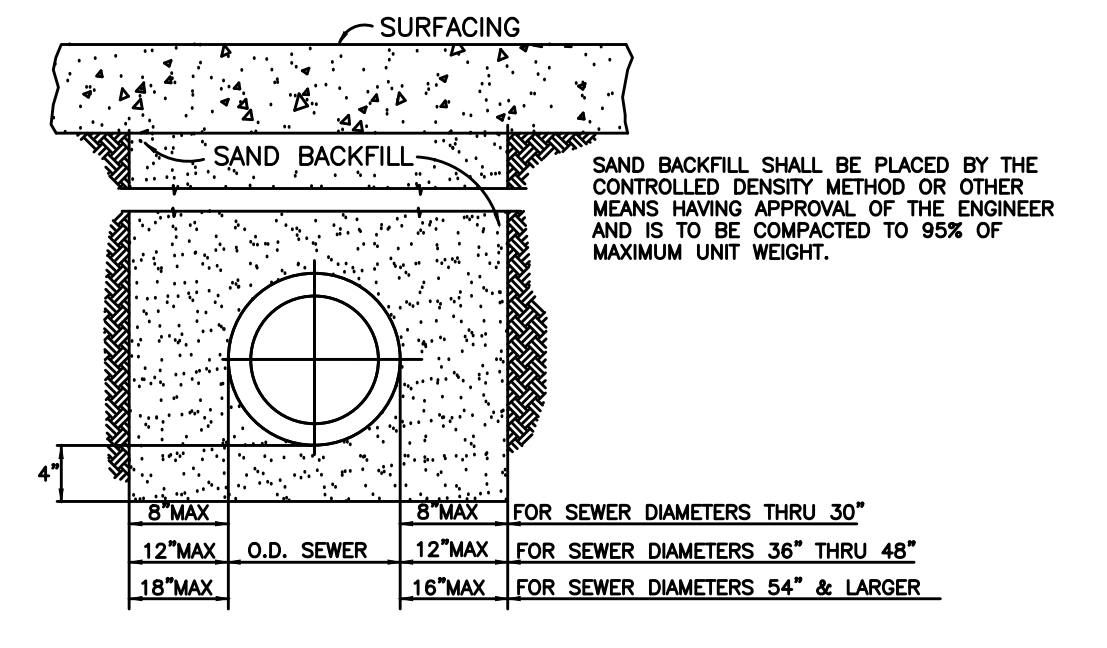
HEAVY DUTY
MOUNTABLE CONC. CURB & GUTTER



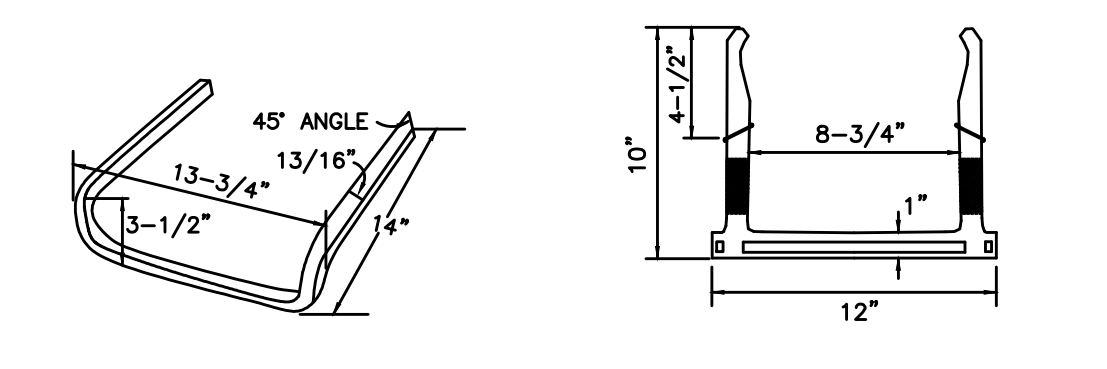
NO PARKING SIGN DETAIL



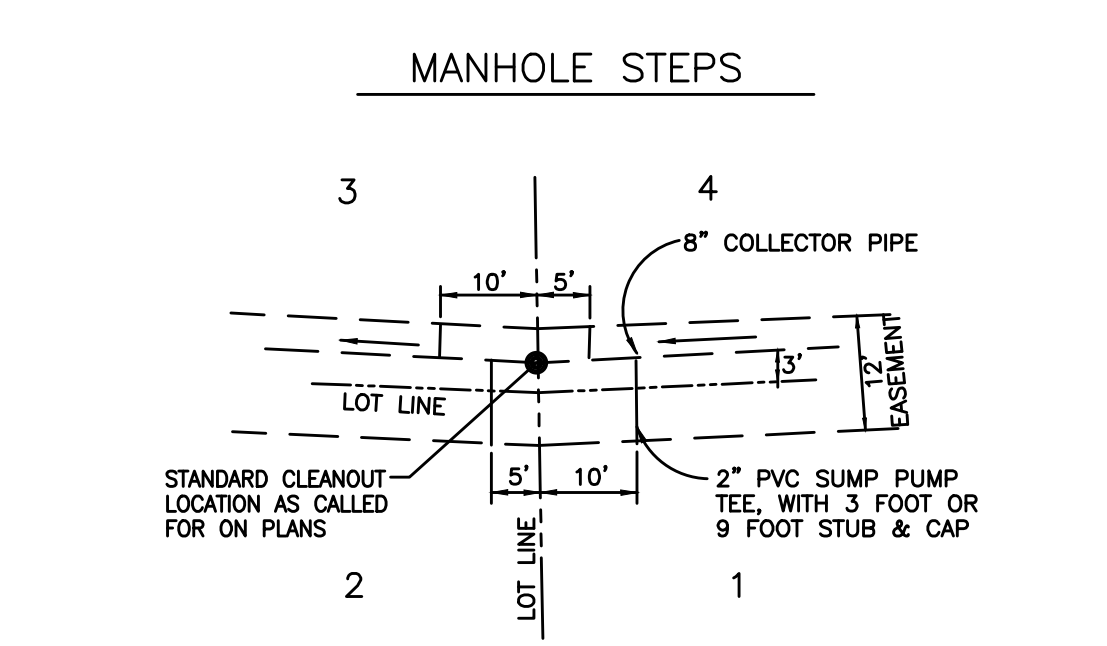
EXISTING GROUND
SUITABLE EXCAVATED BACKFILL MATERIAL (EXCLUDING BLUE CLAY)
EXCAVATED MATERIAL BACKFILL SHALL BE PLACED IN ONE FOOT LAYERS AND COMPACTED BY MECHANICAL TAMPING OR OTHER EFFECTIVE MEANS HAVING APPROVAL OF THE ENGINEER, TO A DENSITY OF 95% OF THE MAXIMUM UNIT WEIGHT.
SAND BACKFILL SHALL BE PLACED BY THE CONTROLLED DENSITY METHOD OR OTHER MEANS HAVING APPROVAL OF THE ENGINEER AND IS TO BE COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT.
TRENCH "A" SHALL BE USED UNDER CONDITIONS OTHER THAN SPECIFIED FOR TRENCH "B".
TRENCH "A"



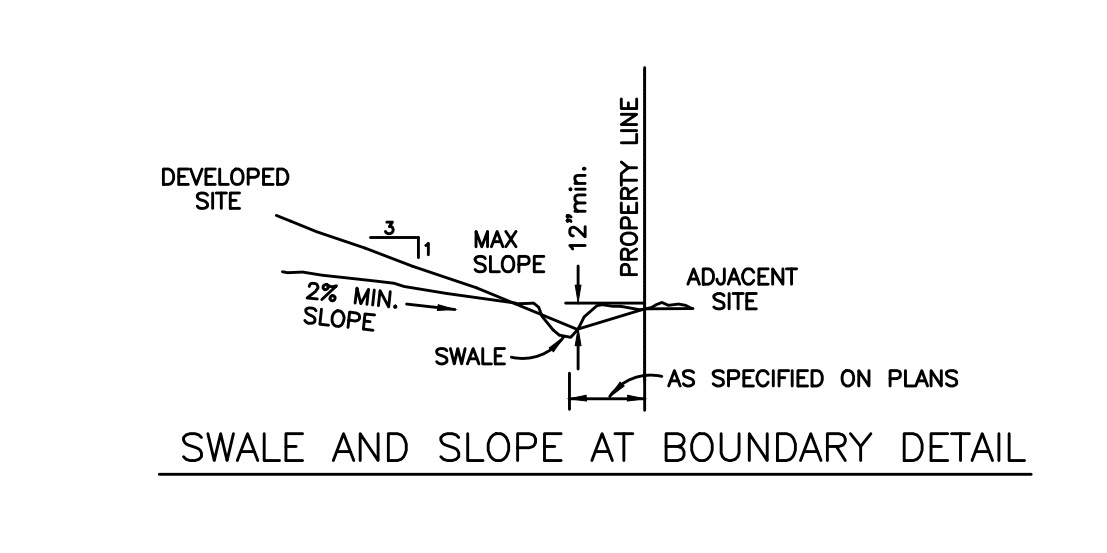
TRENCH "B" SHALL BE USED UNDER ROAD SURFACE, PAVEMENT, SIDEWALK, CURB, AGGREGATE & PAVED DRIVES AND WHERE THE EDGE OF TRENCH IS WITHIN 3 FEET OF THE PAVEMENT.
TRENCH "B"



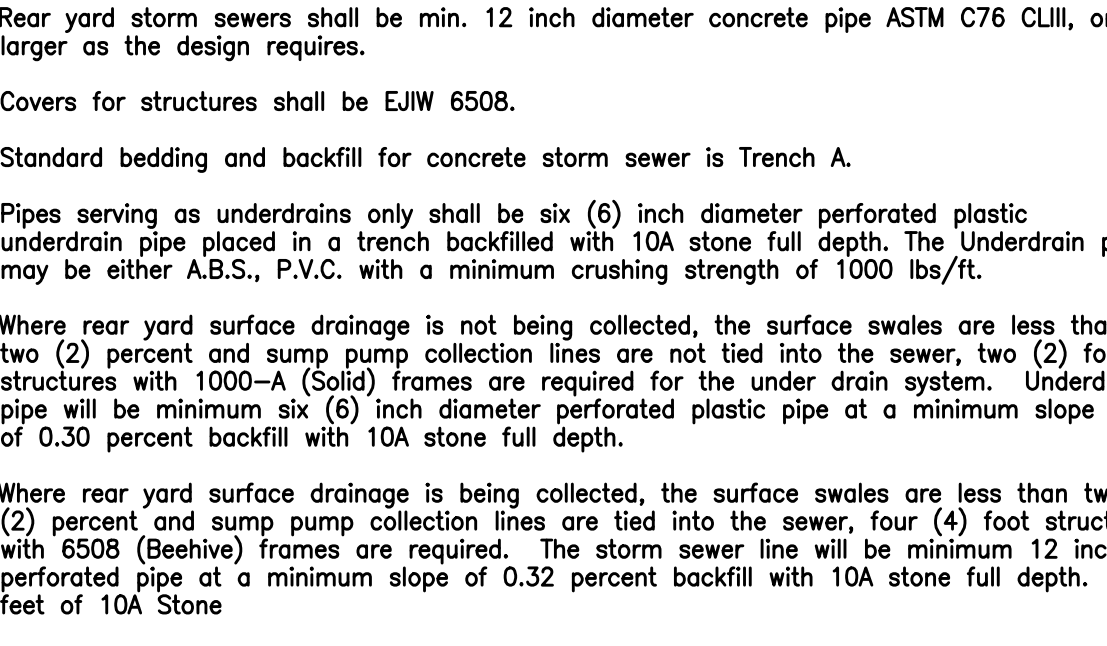
ALUMINUM STEP PLASTIC COATED STEEL STEP
NOTE: STEPS PROJECT 6" FROM FACE OF WALL



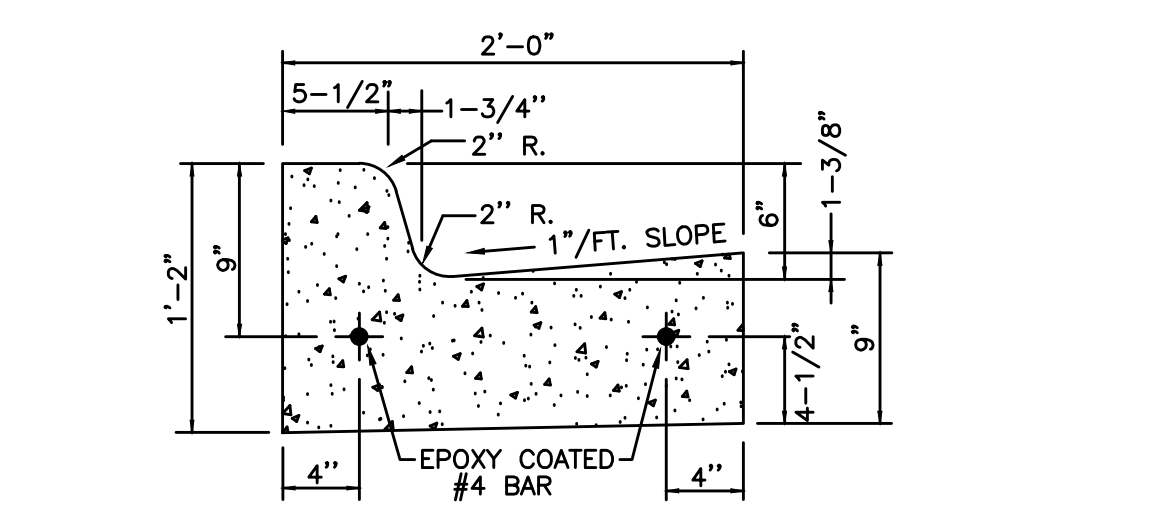
SUMP PUMP COLLECTOR SYSTEM DETAIL



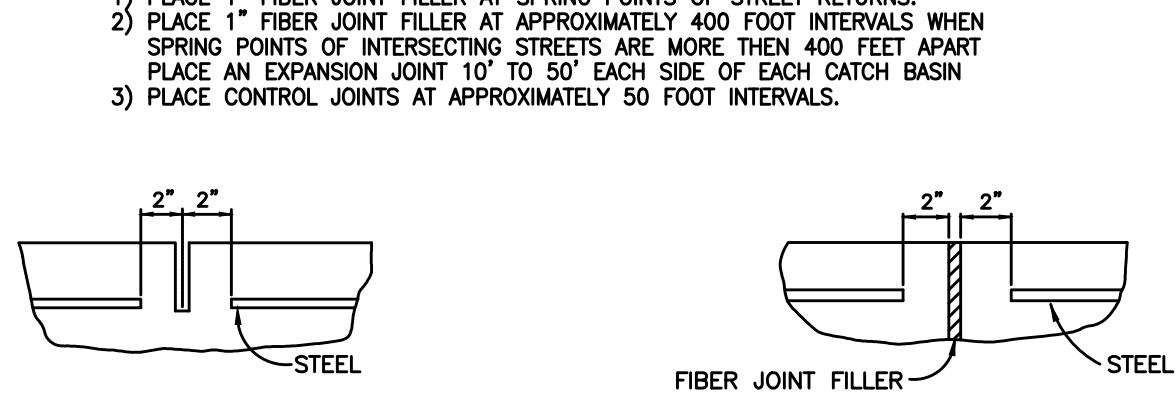
SWALE AND SLOPE AT BOUNDARY DETAIL



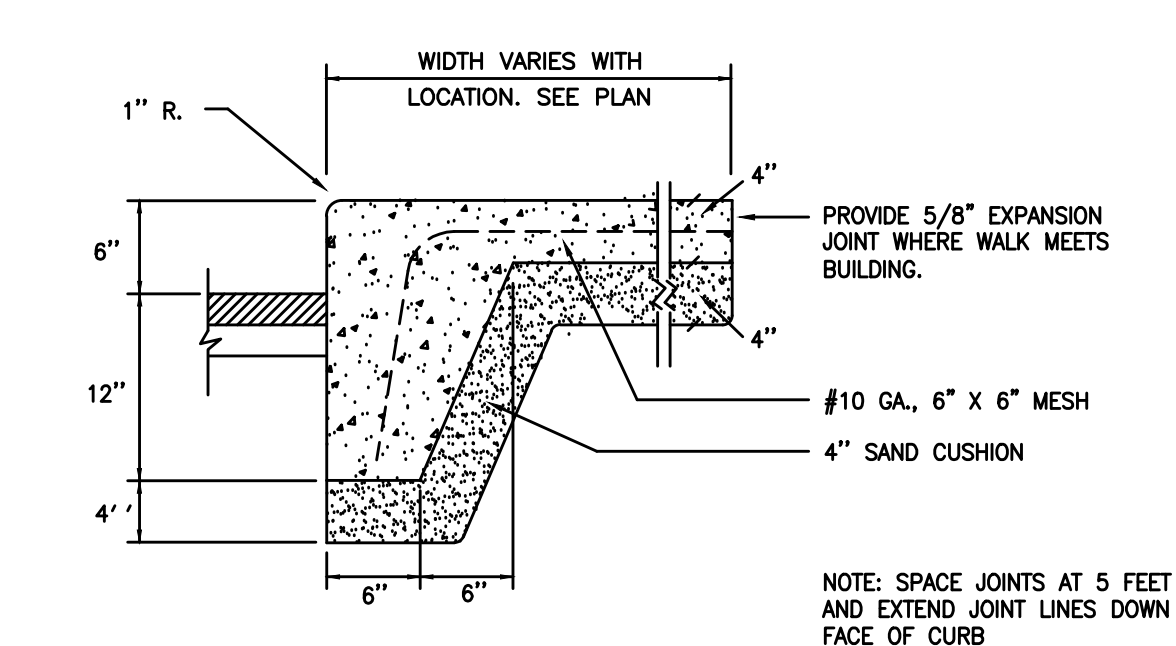
GRADING AND REAR YARD DRAINAGE PLAN NOTES AND MATERIALS



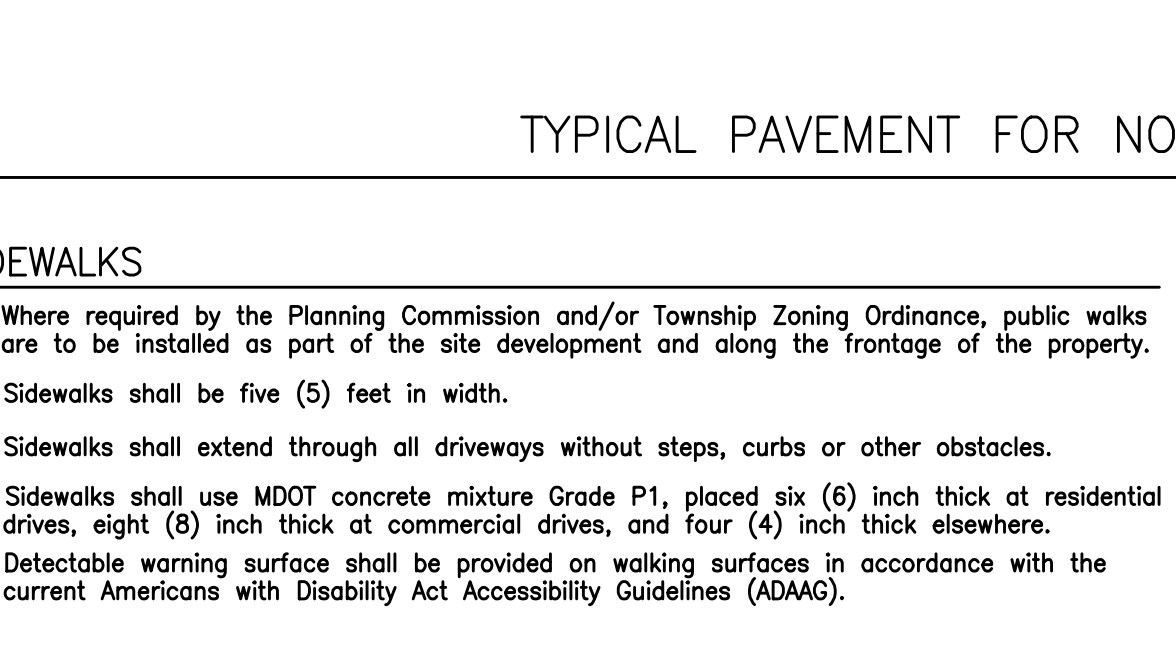
CONCRETE CURB & GUTTER
M.D.O.T. DETAIL F-4



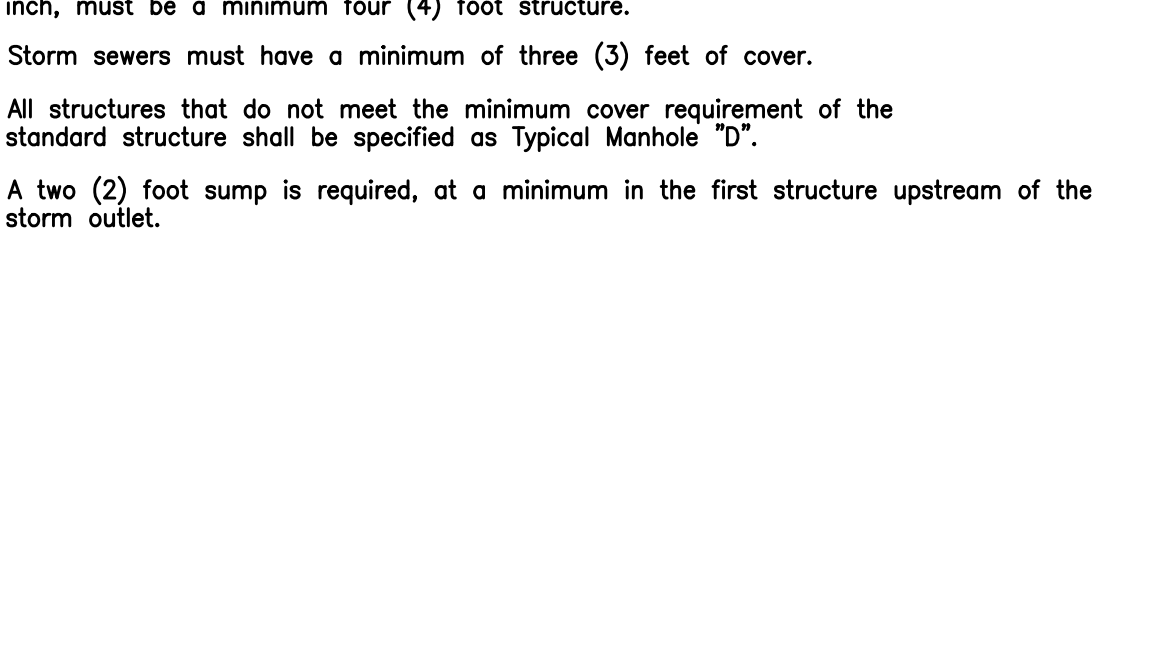
CONTROL JOINT BREAK STEEL EXPANSION JOINT BREAK STEEL



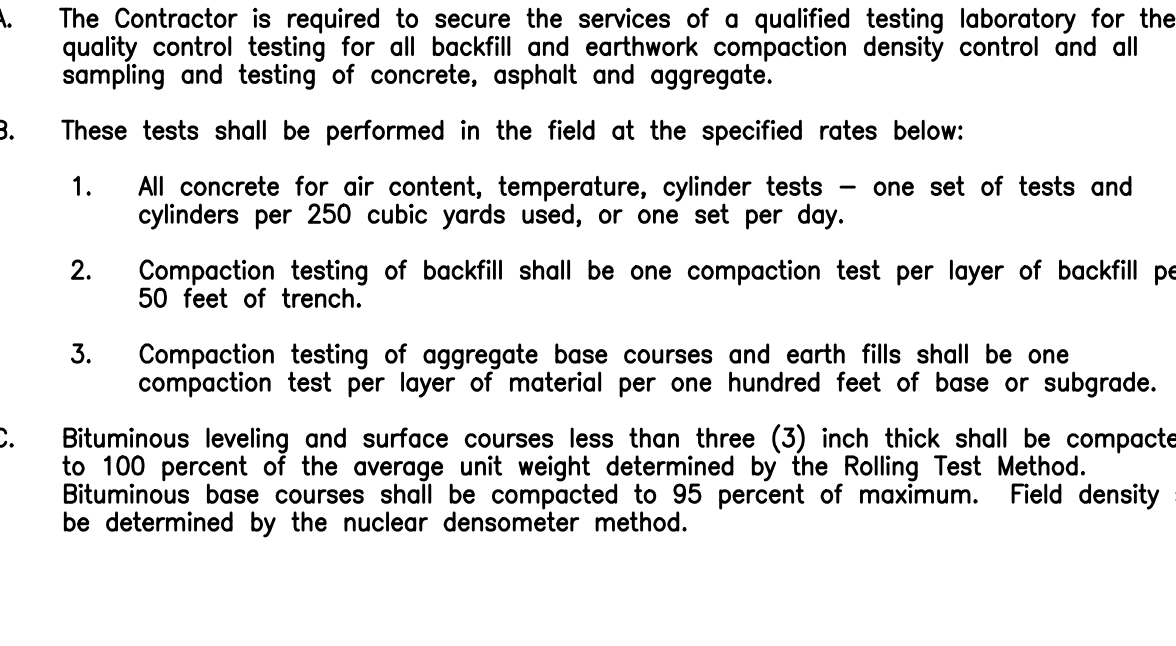
INTEGRAL CONCRETE CURB & WALK



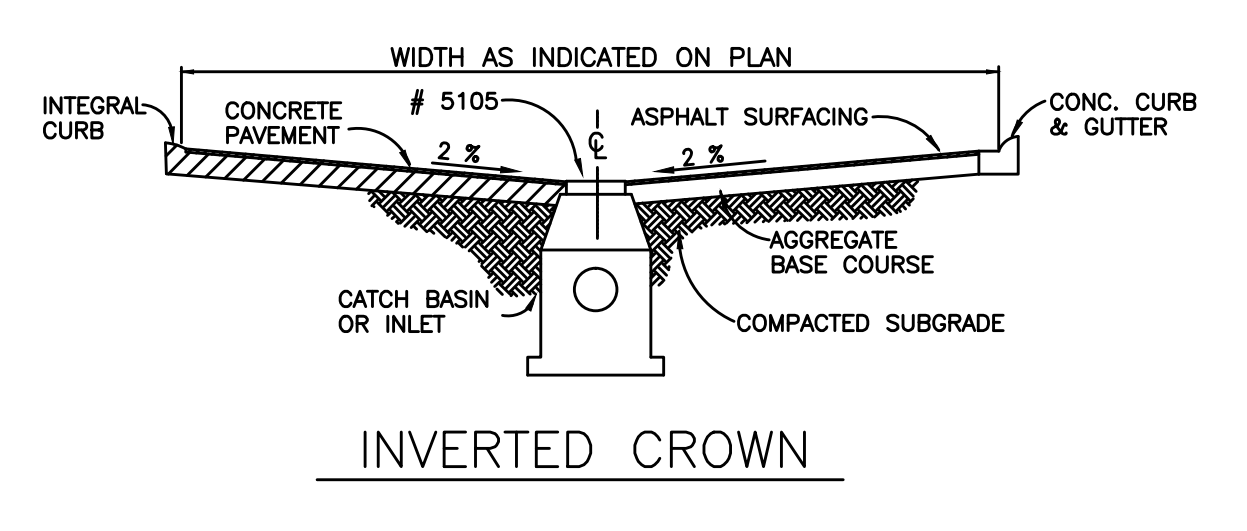
TYPICAL PAVEMENT FOR NON-PUBLIC ROADWAYS & DETAILS



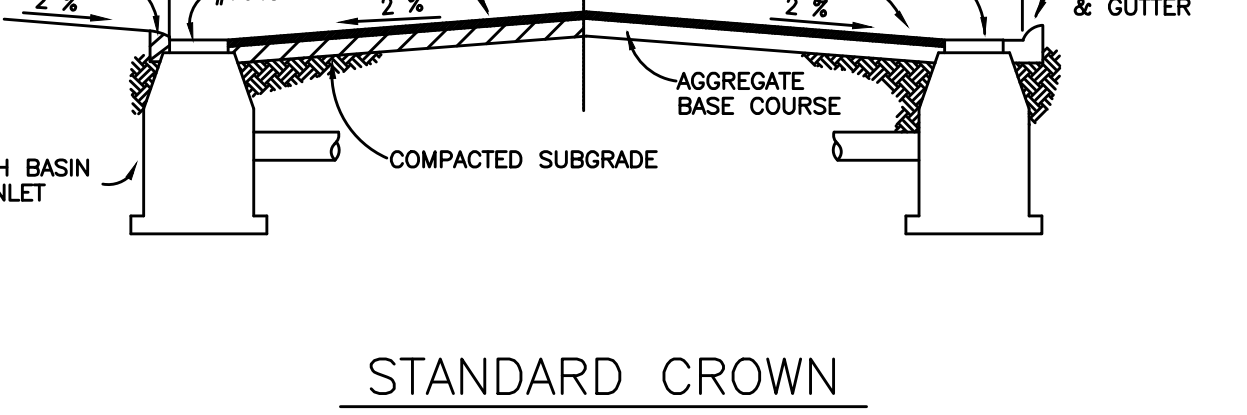
STORM SEWER NOTES AND MATERIALS



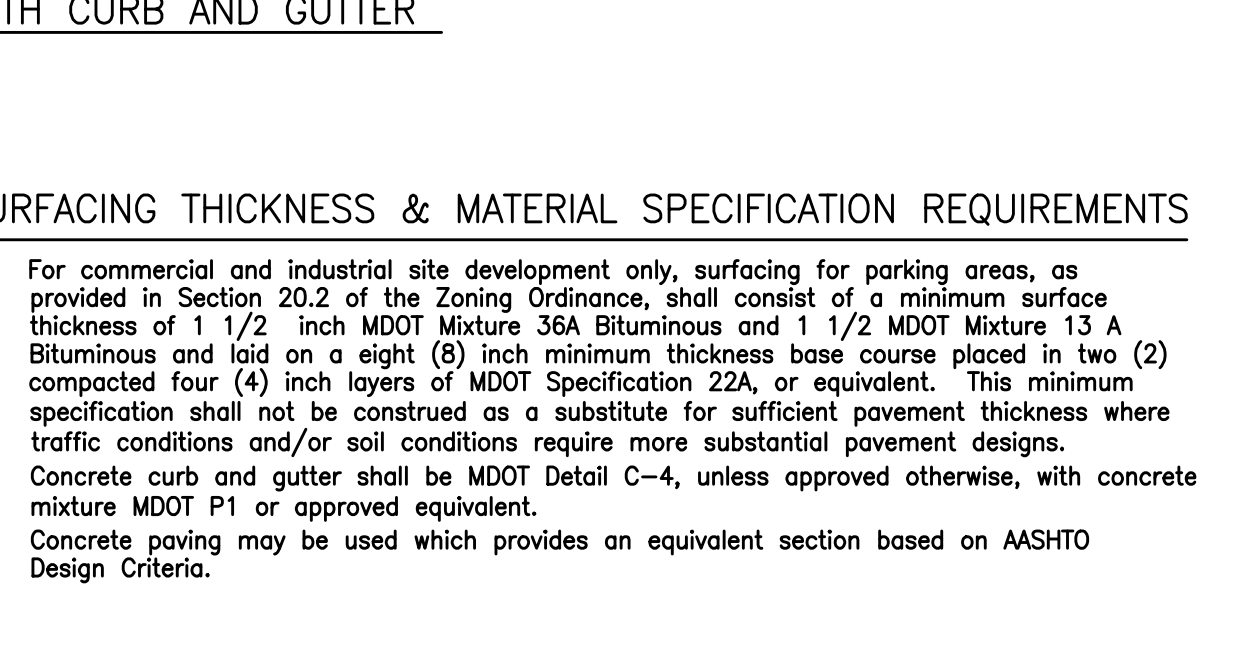
SUMP PUMP DISCHARGE COLLECTOR SYSTEM MATERIALS



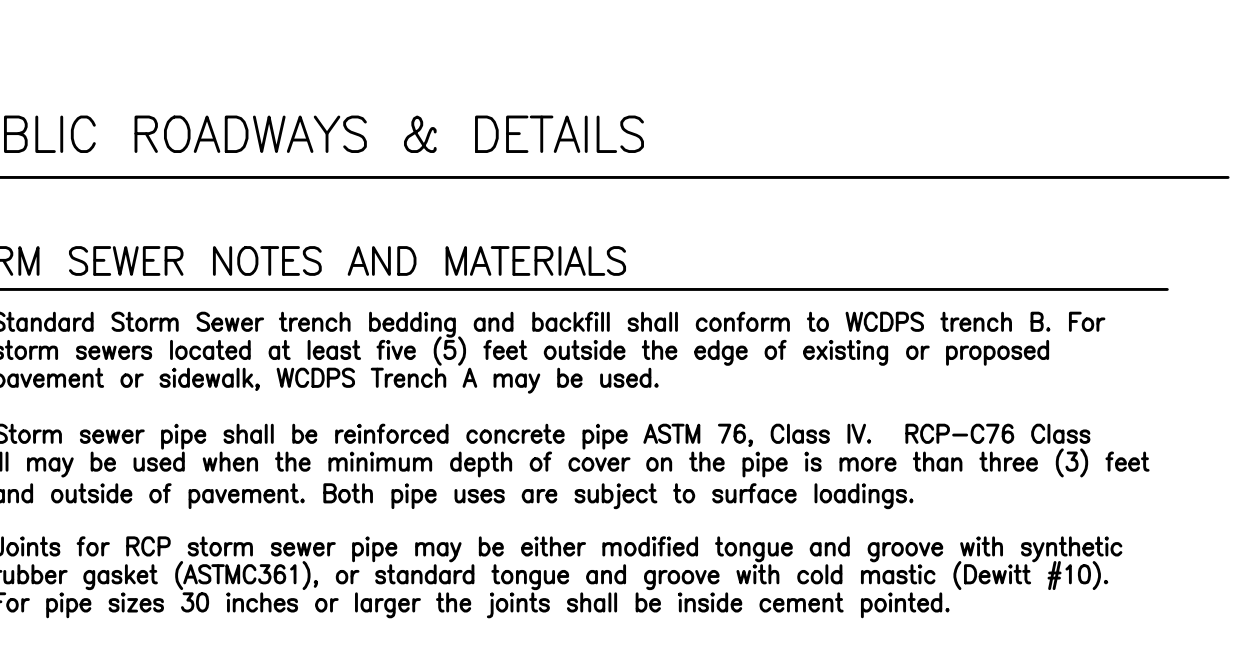
INVERTED CROWN



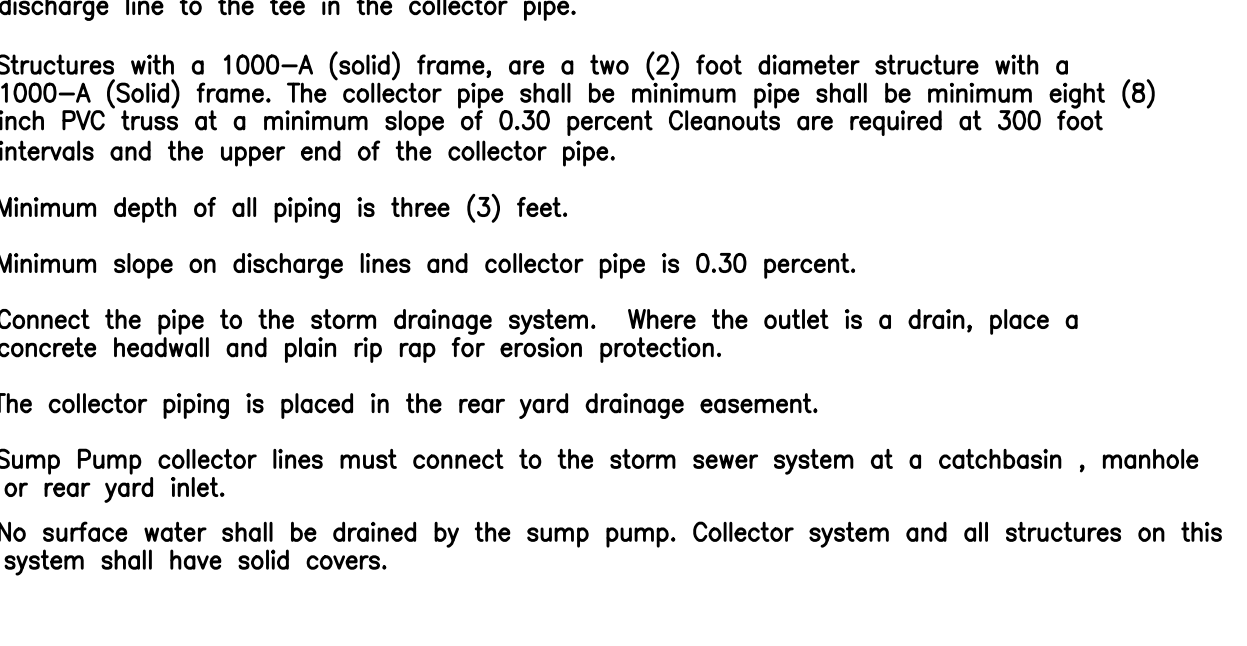
STANDARD CROWN



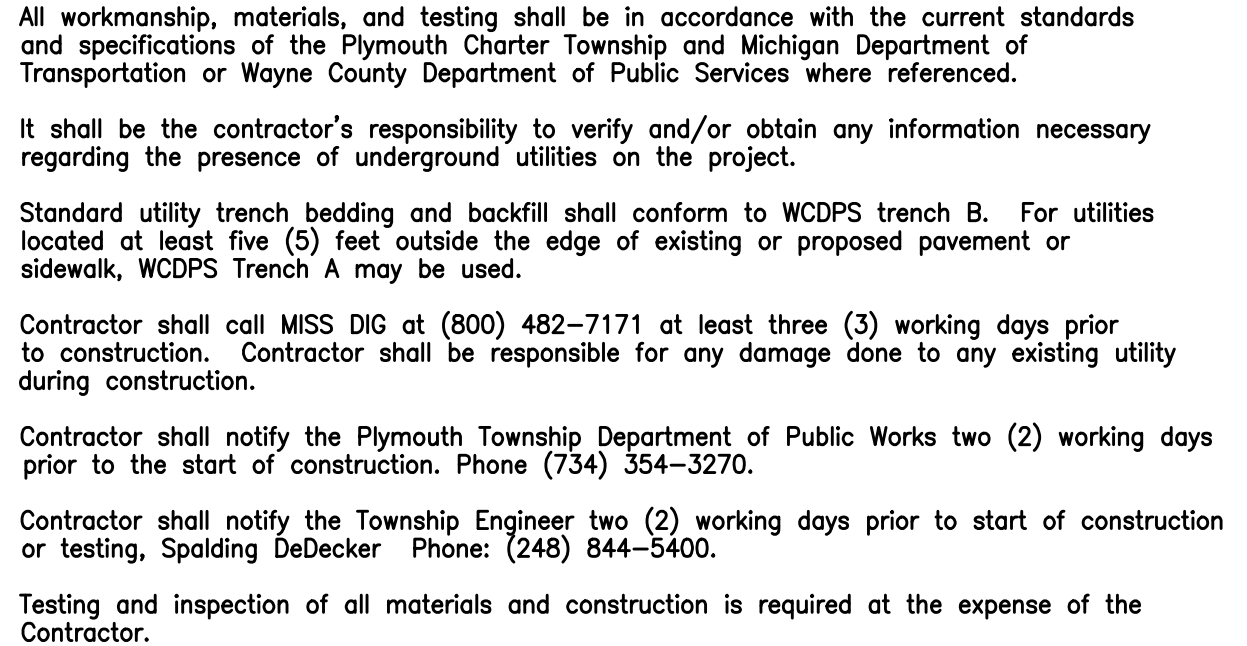
STANDARD DRIVE AND SITE SURFACING CROSS SECTIONS WITH CURB AND GUTTER



SURFACING THICKNESS & MATERIAL SPECIFICATION REQUIREMENTS



PLAN NOTES



TESTING NOTES

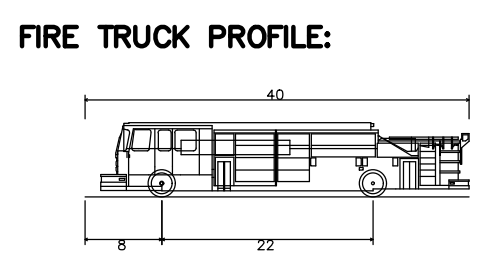
INCORPORATED UPDATES PER REVISED STANDARDS
JUNE 2008
MAY 2010
OCTOBER 2010
MARCH 1998 ORIGINAL
DATE DESCRIPTION

PLYMOUTH CHARTER TOWNSHIP
DEPARTMENT OF PUBLIC WORKS
9555 N. HAGERTY ROAD
PLYMOUTH, MICHIGAN 48170-4673
734-354-3270

GRADING, DRAINAGE AND SURFACING STANDARD DETAILS
CHARTER TOWNSHIP OF PLYMOUTH, WAYNE COUNTY, MICHIGAN
GDS

LEGEND:

	CONCRETE PAVEMENT
	ASPHALT PAVEMENT
	GRAVEL
	WETLAND
	CONCRETE CURB AND GUTTER
	REVERSE GUTTER PAN
	SETBACK LINE
	SIGN LIGHTPOLE FENCE GUARD RAIL



GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

- ALL DIMENSIONS SHOWN ARE TO BACK OF CURB, FACE OF SIDEWALK, OUTSIDE FACE OF BUILDING, PROPERTY LINE, CENTER OF MANHOLE/CATCH BASIN OR CENTERLINE OF PIPE UNLESS OTHERWISE NOTED.
- NO PARKING-FIRE LANE SIGNS SHALL BE POSTED ALONG ALL FIRE LANES AT 100 FOOT INTERVALS OR AS DIRECTED BY THE FIRE OFFICIAL.
- REFER TO NOTES & DETAILS SHEET FOR ON-SITE PAVING DETAILS.
- REFER TO NOTES & DETAILS SHEET FOR ON-SITE SIDEWALK RAMP DETAILS.

GENERAL NOTES:
THESE NOTES APPLY TO ALL CONSTRUCTION ACTIVITIES ON THIS PROJECT.

- ALL CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT OSHA, WAYNE COUNTY AND MUNICIPALITY STANDARDS AND REGULATIONS.
- THE CONTRACTOR SHALL NOTIFY THE TOWNSHIP ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.
- THE CONTRACTOR SHALL CONTACT THE ENGINEER SHOULD THEY ENCOUNTER ANY DESIGN ISSUES DURING CONSTRUCTION. IF THE CONTRACTOR MAKES DESIGN MODIFICATIONS WITHOUT THE WRITTEN DIRECTION OF THE DESIGN ENGINEER, THE CONTRACTOR DOES SO AT HIS OWN RISK.
- ALL NECESSARY PERMITS, TESTING, BONDS AND INSURANCES ETC., SHALL BE PAID FOR BY THE CONTRACTOR. THE OWNER SHALL PAY FOR ALL TOWNSHIP INSPECTION FEES.
- THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE 811/ONE CALL UTILITY LOCATING CENTER, THE CITY ENGINEER AND/OR THE AUTHORITY HAVING JURISDICTION 3 BUSINESS DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION. IF NO NOTIFICATION IS GIVEN AND DAMAGE RESULTS, SAID DAMAGE WILL BE REPAIRED AT SOLE EXPENSE OF THE CONTRACTOR. IF EXISTING UTILITY LINES ARE ENCOUNTERED THAT CONFLICT IN LOCATION WITH NEW CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER SO THAT THE CONFLICT MAY BE RESOLVED.
- CONTRACTOR SHALL VERIFY THAT THE PLANS AND SPECIFICATIONS ARE THE VERY LATEST PLANS AND SPECIFICATIONS AND FURTHERMORE, VERIFY THAT THESE PLANS AND SPECIFICATIONS HAVE BEEN APPROVED. ALL ITEMS CONSTRUCTED BY THE CONTRACTOR PRIOR TO RECEIVING FINAL APPROVAL HAVING TO BE ADJUSTED OR RE-DONE, SHALL BE AT THE CONTRACTORS EXPENSE. SHOULD THE CONTRACTOR ENCOUNTER A CONFLICT BETWEEN THESE PLANS AND/OR SPECIFICATIONS, THEY SHALL SEEK CLARIFICATION IN WRITING FROM THE ENGINEER BEFORE COMMENCEMENT OF CONSTRUCTION. FAILURE TO DO SO SHALL BE AT SOLE EXPENSE OF THE CONTRACTOR.
- ANY WORK WITHIN THE STREET OR HIGHWAY RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AGENCIES HAVING JURISDICTION AND SHALL NOT BEGIN UNTIL ALL NECESSARY PERMITS HAVE BEEN ISSUED FOR THE WORK.
- ALL PROPERTIES OR FACILITIES IN THE SURROUNDING AREAS, PUBLIC OR PRIVATE, DESTROYED OR OTHERWISE DISTURBED DUE TO CONSTRUCTION, SHALL BE REPAIRED AND/OR RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADING, SIGNAGE, LIGHTS AND TRAFFIC CONTROL DEVICES TO PROTECT THE WORK AND SAFELY MAINTAIN TRAFFIC IN ACCORDANCE WITH LOCAL REQUIREMENTS AND THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST EDITION). THE DESIGN ENGINEER, OWNER, TOWNSHIP AND STATE SHALL NOT BE HELD LIABLE FOR ANY CLAIMS RESULTING FROM ACCIDENTS OR DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO COMPLY WITH TRAFFIC AND PUBLIC SAFETY REGULATIONS DURING THE CONSTRUCTION PERIOD.
- THE USE OF CRUSHED CONCRETE IS PROHIBITED ON THE PROJECT WITHIN 100 FEET OF ANY WATER COURSE (STREAM, RIVER, COUNTY DRAIN, ETC.) AND LAKE, REGARDLESS OF THE APPLICATION OR LOCATION OF THE WATER COURSE OR LAKE RELATIVE TO THE PROJECT LIMITS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ADJUST THE TOP OF ALL EXISTING AND PROPOSED STRUCTURES (MANHOLES, CATCH BASINS, INLETS, GATE WEIERS ETC.) WITHIN GRADED AND/OR PAVED AREAS TO FINAL GRADE SHOWN ON THE PLANS. ALL SUCH ADJUSTMENTS SHALL BE INCIDENTAL TO THE JOB AND WILL NOT BE PAID FOR SEPARATELY.

SITE DATA TABLE:

SITE AREA: 125.16 ACRES NET AND GROSS
PARCEL I.D.: 78-001-99-0001-702 (PT)
ZONING: IND - INDUSTRIAL
PROPOSED USE: PLANNED UNIT DEVELOPMENT

BUILDING INFORMATION:
MAXIMUM ALLOWABLE BUILDING HEIGHT = 35 FT. (2 STORIES)

	AREA	HEIGHT	
GRANDSTAND/RACING	27,932 SF	3 STORIES	46 FT
BARN	35,475 SF	1 STORY	22.25 FT
MAINTENANCE BUILDING	3,200 SF	1 STORY	19.75 FT
TOTAL BUILDING AREA:	66,607 S.F. (1.53 AC)		(1.21% OF TOTAL SITE)
TOTAL PAVED AREA:	365,946 S.F. (8.40 AC)		(6.69% OF TOTAL SITE)
TOTAL IMPERVIOUS AREA:	432,553 S.F. (9.93 AC)		(7.90% OF TOTAL SITE)

WETLAND AREA: 2,275,236 S.F. (52.23 AC) (41.73% OF TOTAL SITE)

ALLOWABLE LOT COVERAGE: N/A
BUILDING LOT COVERAGE = 1.22%

SETBACK REQUIREMENTS:

FRONT (NORTH)	REQUIRE.	PROPOSED
FRONT (EAST)	50'	927.71'
SIDE (WEST)	20'	705.95'
SIDE (SOUTH)	20'	412.15'
		1196.28'

PARKING CALCULATIONS:
STADIUM PARKING: 1 SPACE PER EVERY 3 SEATS
REQUIRED PARKING SPACES: 480/3 = 160 SPACES
PROVIDED PARKING SPACES: 276 SPACES (INCLUDING 9 ADA) PLUS 197 SPECIAL EVENT OVERFLOW SPACES
BARN: 1 SPACE PER 3 PERSONS ALLOWED BY FIRE CODE.
PROVIDED PARKING SPACES: 803 = 27 SPACES
PROVIDED PARKING SPACES: 8 SPACES (INCLUDING 2 ADA) PLUS 44 CAR AND TRAILER PARKING SPACE

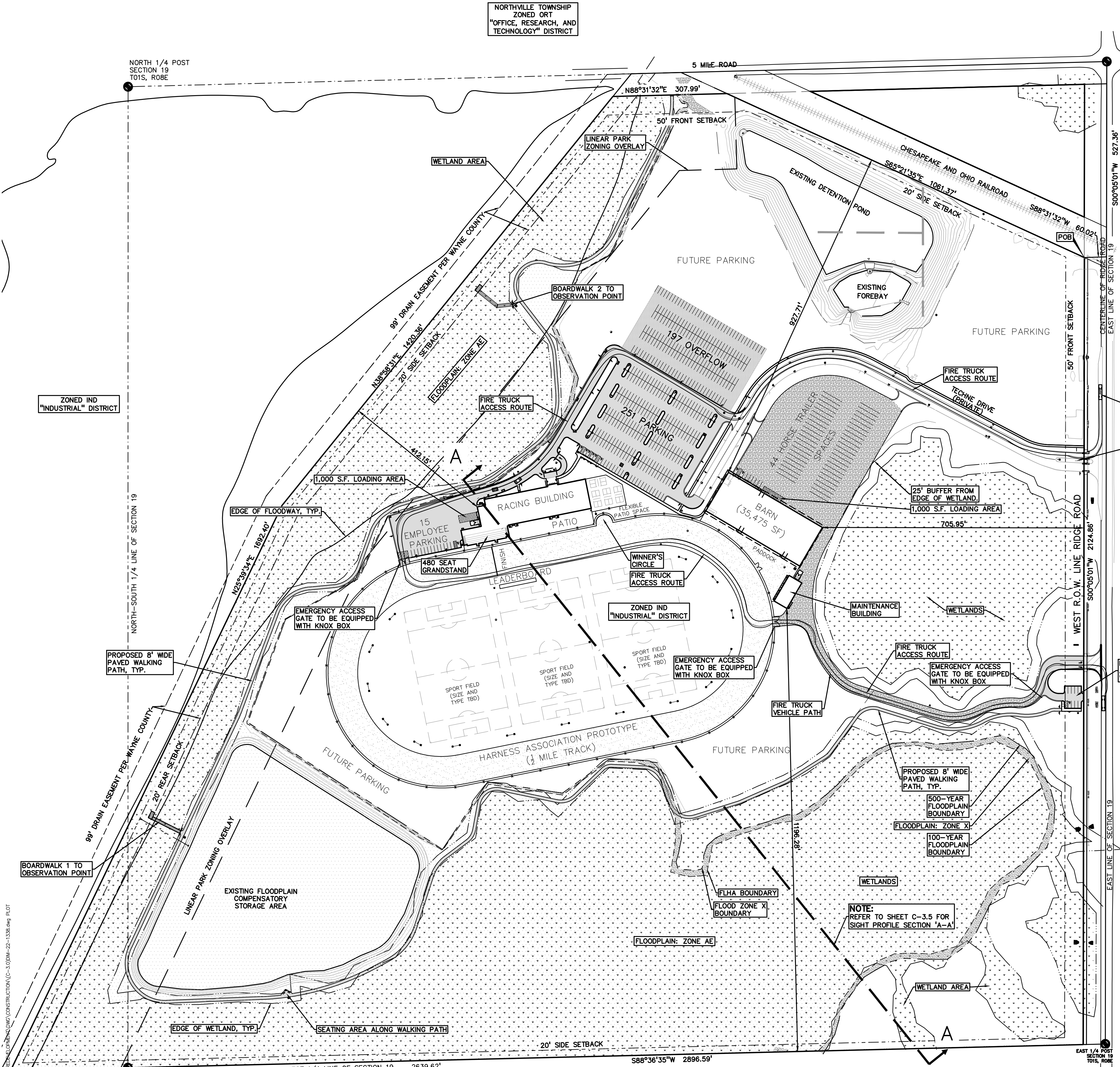
LOADING CALCULATIONS:
LOADING REQUIRED = 500 SF LOADING AREA PER EACH 20000 SF BUILDING AREA
= 2000 SF LOADING AREA REQUIRED
LOADING PROVIDED = 1000 SF AT RACING BUILDING, 1000 SF AT BARN

SITE SOILS INFORMATION:
ACCORDING TO THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR WAYNE COUNTY, THE SITE CONSISTS OF THE FOLLOWING SOIL TYPES:

- BOYER LOAMY SAND, 0 TO 6 PERCENT SLOPES
- EDWARD MUCKS
- GILFORD SANDY LOAM
- GLYWOOD LOAM, 2 TO 6 PERCENT SLOPES
- HOUGHTON MUCK
- MORLEY LOAM, 6 TO 12 PERCENT SLOPES
- MORLEY LOAM, 12 TO 18 PERCENT SLOPES
- PELLA SILT LOAM
- PEWANO LOAM
- SPINKS LOAMY SAND, 0 TO 6 PERCENT SLOPES
- WASEPI LOAMY SAND, 0 TO 2 PERCENT SLOPES

COMMUNITY AMENITIES:
SPORT FIELDS:
FLEX SPACE SUFFICIENT FOR 3 REGULATION SOCCER FIELDS (OR OTHER SPORTS)
TOTAL AREA PROVIDED = 6.08 ACRES (264,600 S.F.)
SPORT PATIO:
FENCED FLEX SPACE SUFFICIENT FOR 4 REGULATION PICKLEBALL COURTS (OR OTHER SPORTS)
TOTAL AREA PROVIDED = 7,950 S.F.
WALKING PATH:
8 FOOT WIDE ADA-COMPLIANT ASPHALT PATH
TOTAL LENGTH = 1.2 MILES (6,230 L.F./49,840 S.F.)
POND SEATING AREA = 190 S.F.
BOARDWALK 1 = 95 L.F. (95 S.F.)
BOARDWALK 2 = 115 L.F. (1,030 S.F.)

NOTE:
REFER TO SHEET C-3.2 FOR GENERAL PAVING NOTES.
REFER TO SHEET C-3.2 FOR WAYNE COUNTY CONSTRUCTION NOTES



FIRE DEPARTMENT NOTES:

- ALL GATES ALONG THE DESIGNATED EMERGENCY ACCESS ROUTE SHALL BE ACCESSIBLE VIA KNOX BOXES.
- ALL PORTIONS OF THE DESIGNATED FIRE TRUCK ACCESS ROUTE SHALL BE CAPABLE OF SUPPORTING A VEHICLE OF UP TO 75,000 LBS WEIGHT.
- AN EMERGENCY EVACUATION PLAN SHALL BE DEVELOPED IN CONJUNCTION WITH THE PLYMOUTH TOWNSHIP FIRE DEPARTMENT SPECIFYING THAT FOR ANY EMERGENCY OCCURRING DURING OPERATIONAL HOURS, STAFF WILL IMMEDIATELY ENSURE THAT ALL GATES ALONG THE EMERGENCY ACCESS ROUTE ARE OPEN.

FLOODPLAIN:
(Per Flood Insurance Rate Map Number 26163C-0020E, Effective on February 2, 2012, and per LOMR 21-05-1510P dated May 6, 2022)

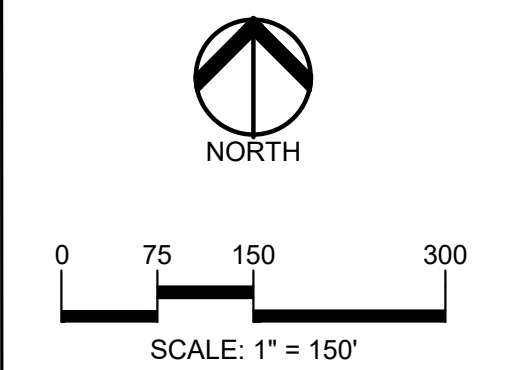
SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD
The 1% annual chance flood (100 year flood), also known as the base flood, is the flood that has a 1% chance of being equalled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, AP3, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE AE - Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE
The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

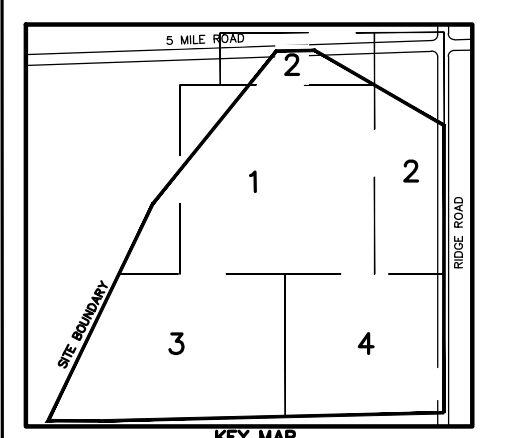
OTHER FLOOD AREAS
ZONE X - Area of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS
ZONE X - Area to be determined outside of the 0.2% annual chance floodplain.



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

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



CLIENT
JR MILITELLO REALTY
268 MAIN STREET
SUITE 300
BLUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
MARCH 31, 2023

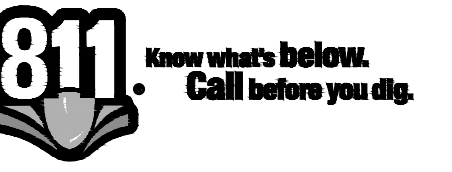
DRAWING TITLE
OVERALL SITE PLAN

PEA JOB NO. 2022-1338

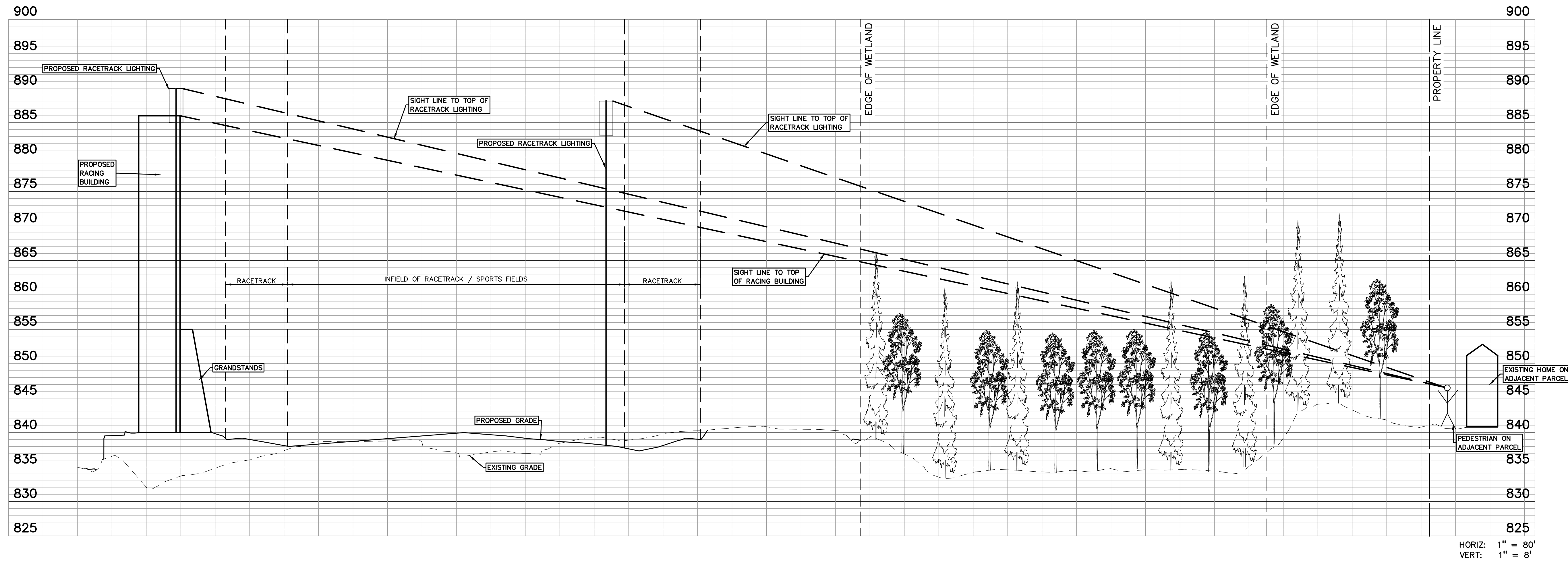
P.M.	BK
D.N.	BLA
DES.	BK

DRAWING NUMBER:

S:\PROJECTS\2022\2022-1338 PEAGROUP INDUSTRIAL DEVELOPMENT CONSTRUCTION\CD-3.020M-22-1338.dwg PLOT DATE: 07/26/2023 9:40 AM BY: BRADY LEE



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



CLIENT
JR MILITELLO REALTY
 268 MAIN STREET
 SUITE 300
 BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
 FIVE MILE AND RIDGE ROAD
 PLYMOUTH, MI

REVISIONS

ORIGINAL ISSUE DATE:
 MARCH 31, 2023
 DRAWING TITLE
SIGHT PROFILE SECTION 'A-A'

PEA JOB NO.	2022-1338
P.M.	BK
DN.	BLA
DES.	BK
DRAWING NUMBER:	

C-3.5

S:\PROJECTS\2022\022-1338\022-1338_R002_R000_INDUSTRIAL_REDEVELOPMENT_DRAWING_CONSTRUCTION(C-3.5)DWG.PLOT DATE: 03/29/2023 10:50:44 AM BY: BRYAN W. ADAM

Northville Downs

Horse Racing Track

04/20/2023

Job Number: 982287

Prepared by: CO

Powered by Wisconsin Lighting Lab, Inc.

NOTES

*Luminaire testing data is based on Illuminating Engineering Society (IES) standards under simulated and laboratory conditions. This design is based on information supplied by others, and photometric data measurements may vary from computer-generated calculations due to variations in field conditions, variations in electrical voltage, environmental conditions and other variable field characteristics. Typical field foot candle measurements may vary +/- 10%. For sports lighting, field measurements should be taken in accordance with IEEE 1618-18. Conformance to field and test codes is the responsibility of the owner and their representatives. The layout may not meet CA Title 54 and/or other local energy codes. If specific compliance is required, those details must be provided to your facility design representative.

*Satisfactory performance and safe use of LED sports lighting fixtures is dependent upon light poles, brackets, anchorage and other structure components being of adequate design and condition. The total combined effective suspended area (ESA) and weight of all fixtures, brackets and attachments mounting to a light pole cannot exceed the EPA and weight rating for a specified pole. For sports lighting retrofit applications, it is the customer's responsibility to have a qualified inspector and/or engineer confirm the structural adequacy of the existing light pole assemblies. We are happy to build new light poles and brackets if you have concerns about your existing materials/condition.

- General Electrical Requirements:
• 3-phase, 4-wire, 480V at service entrance
• Service entrance equipment voltage to be within 5%
• Type 2 STD installed near service entrance
• 2 #4ga conductors at each pole base
• 3-wire, 277V at pole base (Line - Neutral - Ground)
• 3% permissible voltage drop from service entrance and pole base
• 3-wire, 110-277V at wireless control base station (exact location TBD)
• Typical grounding electrode at pole base, bonded

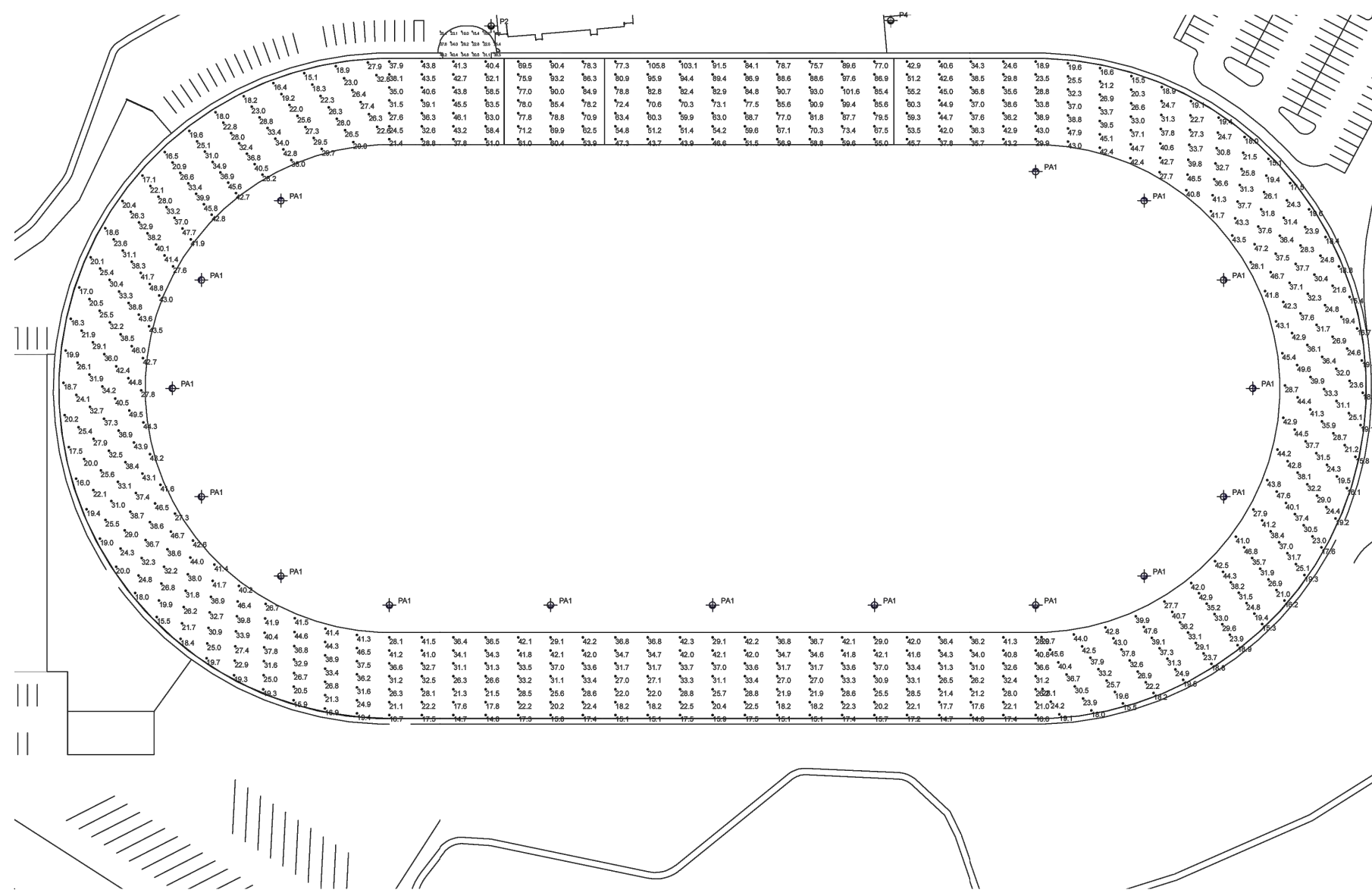
1

Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54601
quote@willbrands.com | www.willbrands.com 608282



Photometrics



2

Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54601
quote@willbrands.com | www.willbrands.com 608282



Calculations

Pole Schedule

Table with 3 columns: Qty, Label, Description. Lists quantities for P4, P3, P2, and PA1 poles.

Calculation Summary

Table with 7 columns: Label, CalcType, Units, Avg, Max, Min, Avg/Min, Max/Min. Summarizes lighting calculations for Winners Circle, Finish Line, and Race Track.

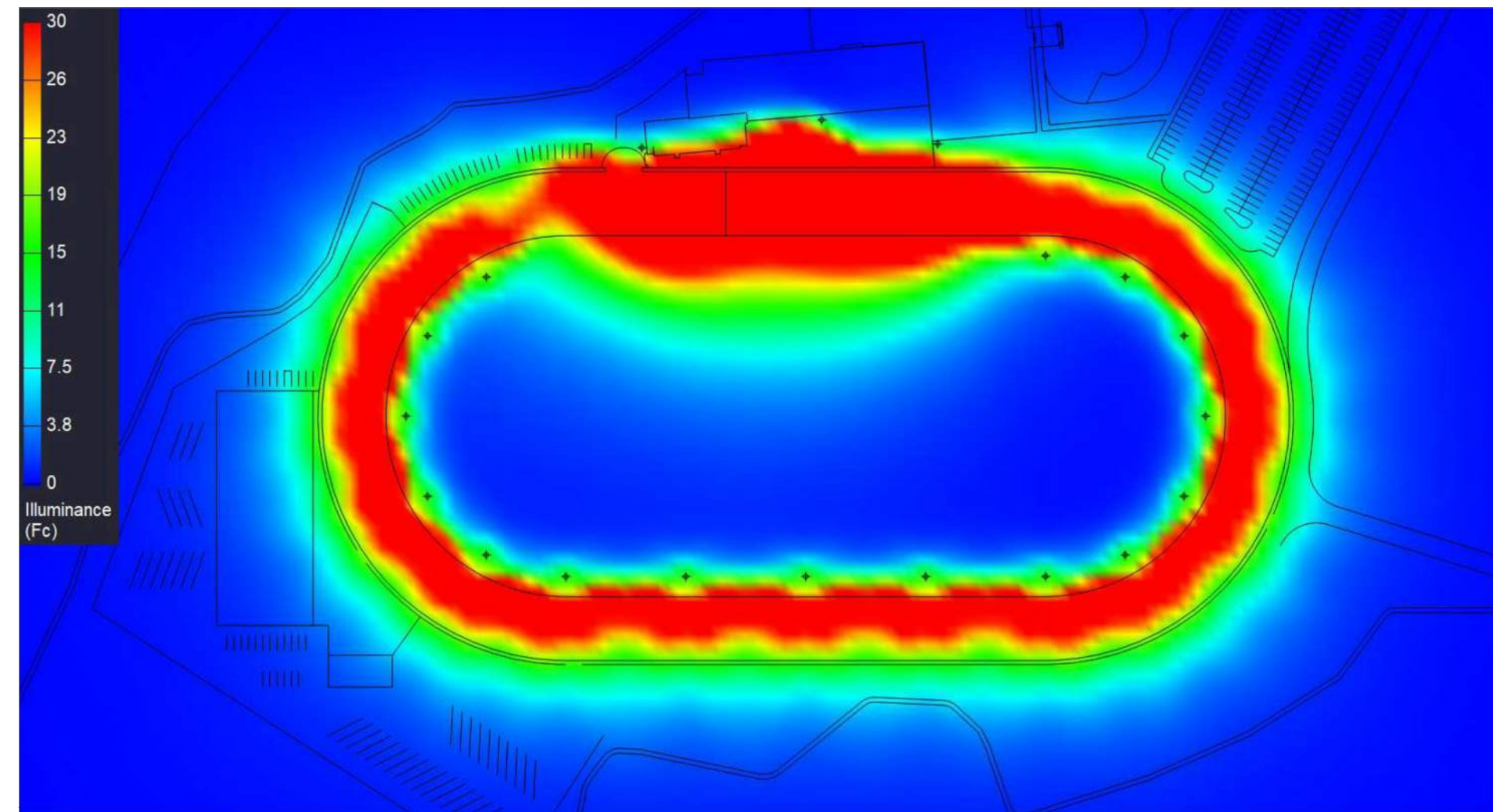
3

Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54601
quote@willbrands.com | www.willbrands.com 608282



Renderings



4

Specifications subject to change without notice.

308 N. Brooke St. | Fond du Lac, WI 54601
quote@willbrands.com | www.willbrands.com 608282



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

CLIENT
JR MILITELLO REALTY
288 MAIN STREET
SUITE 300
BUFFALO, NY 14202

PROJECT TITLE
NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP
FIVE MILE AND RIDGE ROAD
PLYMOUTH, MI

Table with 2 columns: REVISIONS, Description. Multiple empty rows for revisions.

ORIGINAL ISSUE DATE: MARCH 31, 2023
DRAWING TITLE: STADIUM LIGHTING PLAN

Table with 2 columns: PEA JOB NO., 2022-1338; P.M., BK; DN, BLA; DES, BK.

DRAWING NUMBER: C-3.6

STADIUM LIGHTING NOTES:
1. ALL STADIUM LIGHTING SHALL BE CONTROLLED PROGRAMMATICALLY VIA A WIRELESS CONTROLLER.
2. LIGHTING SHALL BE SET FOR NIGHT EVENTS TO TURN ON NO MORE THAN 30 MINUTES PRIOR TO THE SCHEDULED START OF THE EVENT, AND TO TURN OFF NO MORE THAN 30 MINUTES AFTER THE SCHEDULED END OF THE EVENT.
3. OWNERSHIP SHALL PROVIDE A SCHEDULE OF PLANNED NIGHT EVENTS, INCLUDING PLANNED LIGHTING START AND STOP TIMES, FOR EACH NEW SEASON OF OPERATION.
4. THE TOWNSHIP AND OWNERSHIP SHALL WORK TOGETHER ON SCHEDULING COMMUNITY EVENTS THAT WISH TO USE STADIUM LIGHTING, TO COORDINATE MUTUALLY AGREED-UPON START AND STOP TIMES FOR STADIUM LIGHTING.

WILLsport™ GFX Wireless Lighting Controls

Catalog #
Project
Comments

Table with 2 columns: Part #, Description. Rows include WS-GFX, WS-GFX-WLC, WS-GFX-SCORE.



Highlights

The WILLsport GFX Wireless Lighting Console is the central point of control for your lighting system.

Features

- Designed, engineered, and assembled in Wisconsin, USA from premium domestic and imported components
Factory commissioned
Multiple touch screen mounting options

Specifications - Console

Table with 2 columns: Specification, Value. Rows include Dimensions, Input Power, Input Voltage, Operating Environment, Radio.

Specifications subject to change without notice. New: 10/20/2022. Page 2 of 6

WILLsport™ KBX LED LIGHTING W/ OPTIONAL RPCX REMOTE PWR-CTL SYSTEM

Catalog #
Project
Comments



Highlights

- Designed, engineered, and manufactured in Wisconsin, USA from premium domestic and imported components
IES files, photometric reports, and lighting simulations available from factory design team

Compliance & Warranty

- ETL Certification for UL STD 1598 & CSA STD C22.2 # 250.0 for dry/damp/wet locations
Remote power-control, pending
Meets Bay Area American Act requirements

Light Engine & Electrical

- Premium high-efficiency Chip-on-Board (COB) LEDs wired and bonded directly to circuit board to deliver compact lumen density and added reliability
Self-sealing optical assembly constructed of optical-grade silicone with 93% typical lighting transmission

Applications

- Outdoor sports and entertainment facilities
Indoor sports arenas and venues
Retrofits and new installs

Construction & Finish (Light Fixture)

- Rugged aluminum chassis with excellent heat/impact resistance and hinged electrical access
Proprietary anodized heat sink design with thermally isolated LED modules resulting in calculated L70 life over 200,000 hours

Power & Control Options

- RGB color mixing and DMX integrations
Dynamic scene entertainment packages
Synapse® wireless system for large-scale control of zones, dimming, schedules, and sensors

Construction & Finish (Optional Remote PWR-CTL)

- Bottom cabinet(s): Aluminum industrial power-control cabinet with NEMA 3R rating
Top distribution hub(s): Polycarbonate enclosure with NEMA 1, 2, 4, 4X, and IP66 rating

Light Poles & Arms

- WILL offers one of the most comprehensive light pole, bracket, and arm catalogs in the industry
Aluminum, steel, fiberglass, and concrete materials
Custom fabrication, finishing, and accessories available

Specifications subject to change without notice. New: 11/14/2022. Page 2 of 6

Lighting System Controls

The intuitive user interface provides multiple points of control and automation for the lighting system.

Simple Scheduling Functionality

Automate your field lighting with simple scheduling functionality built into the GFX lighting control system.

- Timer with 2-minute dim warning
Sunrise, sunset, and/or time-triggered lighting events
Recurring events (daily/weekly)
Calendar event scheduling

Factory-Commissioned Entertainment Programs

Coordinated entertainment programs to add a show-stopping element to your athletic facility.

- Lightning - All fixtures randomly turn ON/OFF to create a camera flash effect on the playing field.
Tornado - All fixtures adjust light levels to create a swirling effect around the playing field.

Scene Control

Put focus on the action before/during/after the game with scene control.

- Gametime
Player Intros
Halftime Show
National Anthem
Game Over / Security Lighting

Multi-Field Control

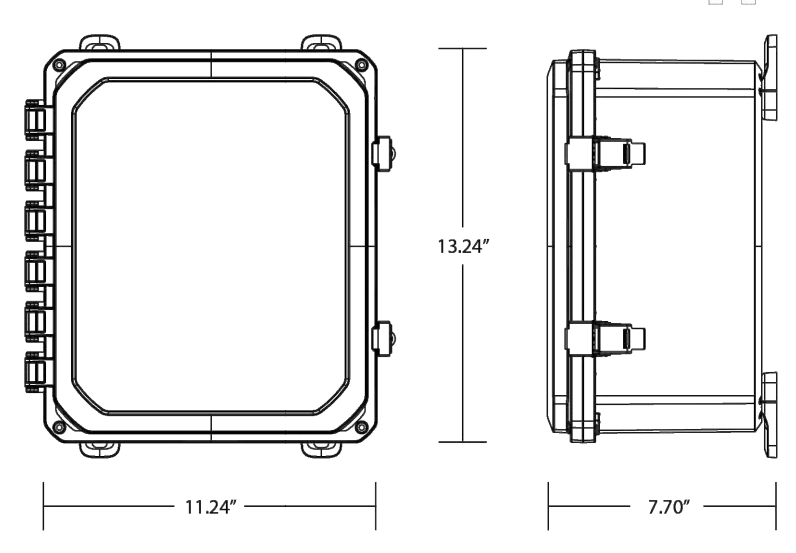
Utilize WILL's GFX technology to control multiple fields or facility resources with the same system.

- Wagon-wheel ballfield configurations
Multi-field athletic complexes
Multi-sport facilities
Site support lighting (walkways, area lighting, etc)

Specifications - Touchscreen

Table with 2 columns: Specification, Value. Rows include Dimensions, Input Power, Input Voltage, Operating Environment, Radio, Certifications.

Dimensional Diagrams



RGB Ready

Enhance your lighting application with the addition of dynamic color control to your GFX system.

- Wireless and/or wired RGB lighting control
Millions of colors
Great for accent + architectural applications
Direct factory integration + support

Specifications subject to change without notice. New: 10/20/2022. Page 3 of 6

EPA Chart

Table with 7 columns: Base Model, 0° Tilt, 10° Down Tilt, 20° Down Tilt, 25° Down Tilt, 15° Up Tilt, 25° Up Tilt.

Specifications & Typical Lumen Output

Table with 7 columns: Base Model, Fixture Weight, Fixture Weight, System Watts, Engine Qty, Drive Current, Lumens, In/W.

Table with 7 columns: Base Model, Fixture Weight, Fixture Weight, System Watts, Engine Qty, Drive Current, Lumens, In/W.

Table with 7 columns: Base Model, Fixture Weight, Fixture Weight, System Watts, Engine Qty, Drive Current, Lumens, In/W.

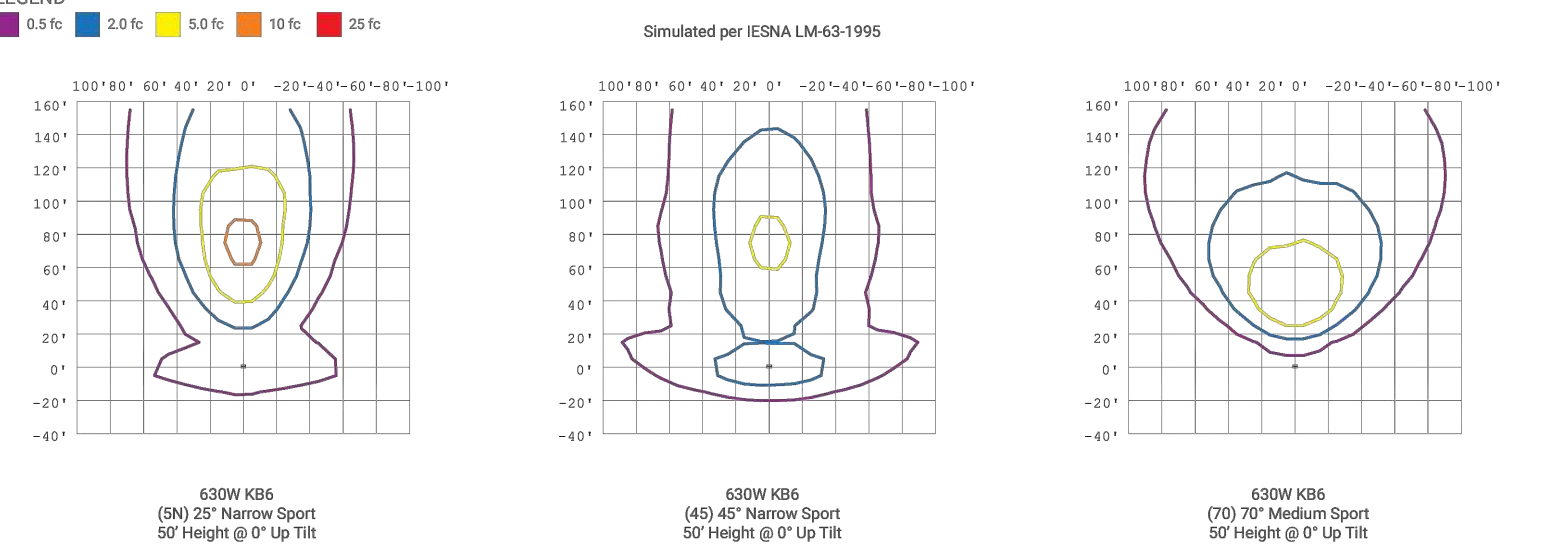
Table with 7 columns: Base Model, Fixture Weight, Fixture Weight, System Watts, Engine Qty, Drive Current, Lumens, In/W.

Note: Typical lumen values are based on lab and simulated photometric tests. Actual performance may differ resulting from optical configuration, color temp and OLI, glare management, owner environment, and application.

Lumen Multiplier & Maintenance (Full WHITE)

Table with 5 columns: Ambient Temperature, Lumen Multiplier, T10-L70 Lumens (50,000 Hours), Calculated L50 (hrs), Calculated L70 (hrs).

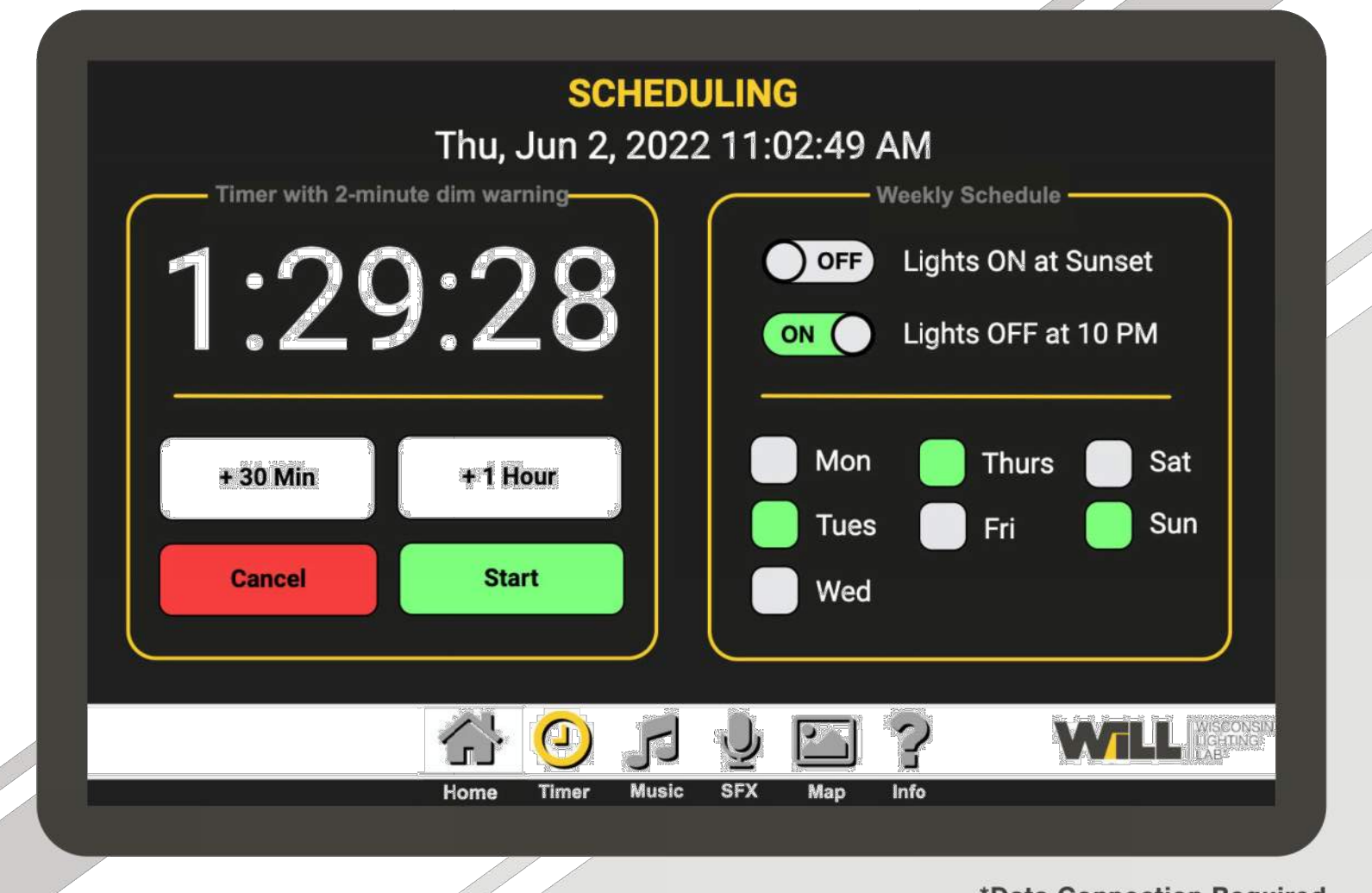
Photometric Diagrams



Specifications subject to change without notice. New: 11/14/2022. Page 3 of 6

SIMPLE SCHEDULING BUILT-IN FACTORY SUPPORTED SCHEDULING SERVICES*

- Sunrise, Sunset, and/or Time-Triggered Lighting Events
On/Off Timers with 2-Minute Dim Warning for Facility Users
Calendar Event Scheduling
Recurring Events (Daily/Weekly/Monthly)
Contact WILL's Dedicated Factory Support Team



*Data Connection Required

quotes@willbrands.com | 866-308-9455

811 Know what's below. Call before you dig. CAUTION! THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE.

CLIENT JR MILITELLO REALTY 288 MAIN STREET SUITE 300 BUFFALO, NY 14202

PROJECT TITLE NORTHVILLE DOWNS AT PLYMOUTH TOWNSHIP FIVE MILE AND RIDGE ROAD PLYMOUTH, MI

- SITE LIGHTING NOTES: 1. ALL SITE LIGHTING SHALL BE CONTROLLED PROGRAMMATICALLY VIA A WIRELESS CONTROLLER. 2. LIGHTING SHALL BE PROGRAMMED TO AUTOMATICALLY TURN ON WHEN AMBIENT LIGHTING LEVELS FALL BELOW A PRESET DUSK LEVEL, AND TO TURN OFF WHEN LIGHT LEVELS RISE ABOVE THE DUSK THRESHOLD.

Table with 2 columns: Revision number, Description.

ORIGINAL ISSUE DATE: MARCH 31, 2023

DRAWING TITLE STADIUM LIGHTING CONTROLS

Table with 2 columns: Field Name, Value. Rows include PEA JOB NO., P.M., D.N., DES., DRAWING NUMBER.

General Note

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

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

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

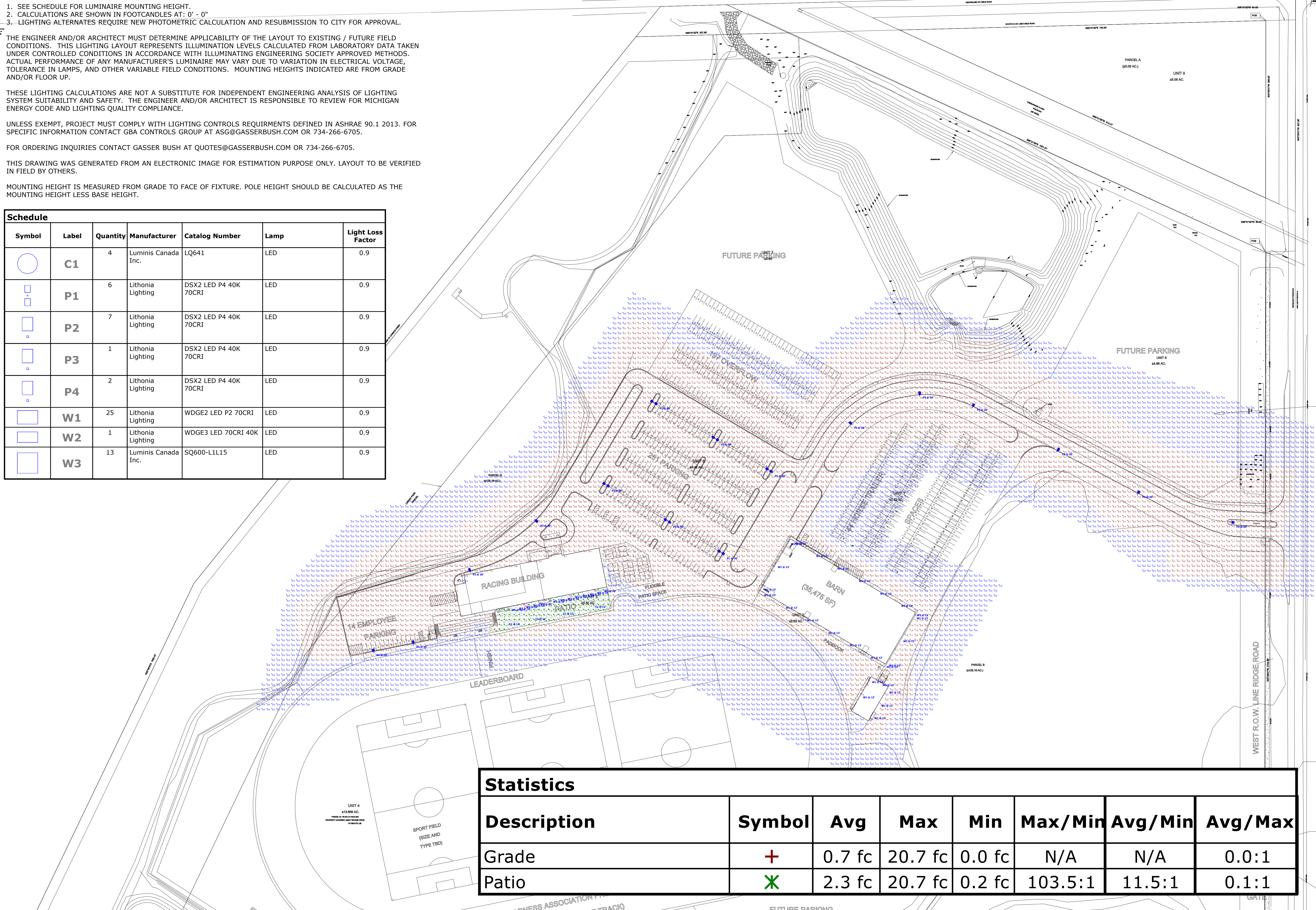
UNLESS EXEMPT, PROJECT MUST COMPLY WITH LIGHTING CONTROLS REQUIRMENTS DEFINED IN ASHRAE 90.1 2013. FOR SPECIFIC INFORMATION CONTACT GBA CONTROLS GROUP AT ASG@GASSERBUSH.COM OR 734-266-6705.

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

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

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

Symbol	Label	Quantity	Manufacturer	Catalog Number	Lamp	Light Loss Factor
	C1	4	Luminis Canada Inc.	LQ641	LED	0.9
	P1	6	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	P2	7	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	P3	1	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	P4	2	Lithonia Lighting	DSX2 LED P4 40K 70CRI	LED	0.9
	W1	25	Lithonia Lighting	WDGE2 LED P2 70CRI	LED	0.9
	W2	1	Lithonia Lighting	WDGE3 LED 70CRI 40K	LED	0.9
	W3	13	Luminis Canada Inc.	SQ600-L1L15	LED	0.9



Statistics							
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min	Avg/Max
Grade	+	0.7 fc	20.7 fc	0.0 fc	N/A	N/A	0.0:1
Patio	X	2.3 fc	20.7 fc	0.2 fc	103.5:1	11.5:1	0.1:1



NORTHVILLE DOWNS
PHOTOMETRIC PLAN
PREPARED FOR: GAV ASSOCIATES
GASSER BUSH ASSOCIATES
WWW.GASSERBUSH.COM

Designer
DS
Date
02/10/2023
REV. 04/26/2023
Scale
Not to Scale
Drawing No.
#23-10448 V4