

PUBLIC NOTICE

CITY OF BERKLEY, MICHIGAN REGULAR MEETING OF THE CITY PLANNING COMMISSION

Tuesday, April 26, 2022
7:00PM – City Hall Council Chambers
Information: 248-658-3320

CALL TO ORDER
PLEDGE OF ALLEGIANCE
ROLL CALL
APPROVAL OF AGENDA
APPROVAL OF MINUTES – *Meeting minutes of March 22, 2022*
COMMUNICATIONS
CITIZEN COMMENTS

OLD BUSINESS

1. **DDA Guidelines:** Review of zoning ordinance amendments to implement the DDA Guidelines.
2. **Capital Improvements Plan**

NEW BUSINESS

3. **PSP-04-21: Lot 53 on Oxford Road – The Ivy:** Site Plan for Phase II of the approved project at 2219 Coolidge for the removal of the existing parking lot and construction of two multiple family buildings with a total of 24 dwelling units and a parking lot.
4. **PSP-05-22: 2576 Coolidge Highway – BP America:** Site Plan for a new canopy, parking reconfiguration, pump island reconfiguration, new landscaping and building façade improvements of the existing gasoline station.

LIAISON REPORTS
COMMISSIONER / STAFF COMMENTS
ADJOURN

Notice: Official Minutes of the City Planning Commission are stored and available for review at the office of the City Clerk. The City of Berkley will provide necessary reasonable auxiliary aids and services, such as signers for the hearing impaired and audio tapes of printed materials being considered at the meeting, to individuals with disabilities at the meeting upon four working days notice to the city. Individuals with disabilities requiring auxiliary aids or services should contact the city by writing or calling: City Clerk, ADA Contact, Berkley City Hall, 3338 Coolidge, Berkley, Michigan 48072, (248) 658-3300.

You can watch the meeting on Channel 10 for both Comcast and WOW, at <http://www.youtube.com/CityofBerkley> or <http://www.berkleymich.org/livestream>.

THE REGULAR MEETING OF THE BERKLEY CITY PLANNING COMMISSION WAS CALLED TO ORDER AT 7:00 PM, MARCH 22, 2022 AT BERKLEY CITY HALL BY CHAIR KRISTEN KAPELANSKI.

The minutes from this meeting are in summary form capturing the actions taken on each agenda item. To view the meeting discussions in their entirety, this meeting is broadcasted on the city's government access channel, WBRK, every day at 9AM and 9PM. The video can also be seen, on-demand, on the city's YouTube channel: <https://www.youtube.com/user/cityofberkeley>.

PRESENT:

Kristen Kapelanski	Martin Smith
Joe Bartus	Lisa Kempner
Greg Patterson	Julie Stearn
Mark Richardson	Shiloh Dahlin

ABSENT: Daniel Petrosky (Excused)

ALSO, PRESENT: Megan Masson-Minock, Interim Community Development Director
Matthew Baumgarten, City Manager
Bill and Jackie Scarmeas, 1878 Rosemont, Berkley
Aaron Geyer, 1722 Roszel, Royal Oak

Motion by Commissioner Richardson to excuse the absences of Commissioner Petrosky. Motion supported by Commissioner Bartus.

AYES: Bartus, Dahlin, Kempner, Patterson, Stearn, Richardson, Smith, Kapelanski
NAYS: NONE
ABSENT: Petrosky

MOTION CARRIED

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APPROVAL OF AGENDA

Motion by Commissioner Kempner to approve the agenda supported by Commissioner Bartus.

AYES: Smith, Richardson, Stearn, Patterson, Kempner, Dahlin, Bartus, Kapelanski
NAYS: NONE
ABSENT: Petrosky

MOTION CARRIED

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APPROVAL OF THE MINUTES

Motion by Commission Richardson to approve the minutes from the regular Planning Commission meeting on February 22, 2022 and supported by Commissioner Kempner with the amendment on page 5:

- Adding "regarding parking" to the description from Commissioner Richardson's question on empirical data for the facilities.

AYES: Bartus, Dahlin, Kempner, Patterson, Stearn, Richardson, Smith, Kapelanski
NAYS: NONE
ABSENT: Petrosky

Motion by Commissioner Richardson to approve the minutes from the Planning Commission Work Session on March 1, 2022 and supported by Commissioner Kempner with the amendment of:

- Changing Commissioner Julie Stearn from "Present" to "Absent"

AYES: Bartus, Dahlin, Kempner, Patterson, Stearn, Richardson, Smith, Kapelanski
NAYS: NONE

ABSENT: Petrosky

MOTION CARRIED

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COMMUNICATIONS

Community Development Department Report

E-mail between City Attorney & Marihuana Regulatory Agency

E-mail and attachment from Bill Scarmeas in regard to five licenses and 1949 Twelve Mile in particular.

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CITIZEN COMMENTS

James Campbell, 1591 Catalpa - requested that the Commission reconsider approval of the agenda by removing PSP-03-22 from the agenda, basing it on two points of order. The first point is that the ordinance O-02-22 had not been passed by the City Council. Secondly, all Planning Commission documents, applications, websites specify either thirty days or four weeks for additions to agenda. The notification for the request to make the agenda change was submitted on March 2, 2022 per records provided online.

Interim Community Development Director Masson-Minock clarified that the applicant for PSP-03-22 had submitted plans before the date specified on the website, all the materials were in before the date online.

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OLD BUSINESS

1. **DDA Guidelines:** Review of ordinance language to implement the DDA guidelines, based on March 1, 2022 Work Session.

Interim Community Development Director Masson-Minock provided an overview of the changed proposed language for the revised design plan standards and that would be inserted into part of the site plan standards.

Chair Kapelanski commented on 3c. She questioned why the Commission would want to reduce pedestrian use.

Co-Chair Smith commented on 1a. Why did the parking placement get taken out? Interim Community Development Director Masson-Minock stated that parking placement was removed because of changing the rules so that all the districts in the DDA would have to park behind the building for new developments.

Chair Kapelanski stated that this update in ordinance can be presented at the next meeting.

2. **Rules of Procedure:** Update from the work session

Chair Kapelanski stated that the need to excuse members is required.

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NEW BUSINESS

1. **Capital Improvement Plan:** Presentation and discussion of the proposed Berkley Capital Improvement Plan.

City Manager, Matt Baumgarten, presented and discussed the proposed Berkley Capital Improvement Plan. Mr. Baumgarten provided an explanation of what the CIP is and the role of dual approval from Planning Commission and City Council.

Commissioners asked questions related to the proposed CIP.

The City Manager noted that the updated document would return to the Planning Commission.

2. **PSP-03-22:1949 Twelve Mile - Lume:** Sketch Plan for the conversion of 6,764 square feet of the existing building to a retail marihuana dispensary and office use for the remaining 17,677 square feet.

Interim Community Development Director Masson-Minock gave an overview on the process of application from Lume. Interim Community Development Director Masson-Minock also stated there was correspondence from residents who were concerned that KinderCare that shares a parking lot with this building and felt it was a violation of state law and the Zoning Ordinance to locate a marihuana dispensary within 1,000 feet of the pre-school. Interim Community Development Director Masson-Minock referenced the state law and zoning ordinance provision that Berkley follows for marihuana and schools, which require that a marihuana provisioning center not be within 1,000 feet of a pre-existing public or private school providing education in kindergarten or any of grades 1 through 12. Through a conversation with the director of the KinderCare, Interim Community Development Director Masson-Minock verified that the KinderCare offers only preschool services.

APPLICANT PRESENTATION

Chris Enright
Christopher Enright Architects PC
628 E Parent Ave #106, Royal Oak, MI 48067

Petitioner, Mr. Enright provided an overview of Lume Cannabis in the state of Michigan. Mr. Enright provided specifics on 1949 Twelve Mile where the building and location would be. There will be extensive renovation to the building both inside and outside including parking, landscaping, elevator, stormwater detention system, green roof, solar panel and much more.

PUBLIC COMMENT

Bill Scarmeas, 1878 Rosemont - Presented a poll from Mott study done for children. He stated that he is concerned about the children at KinderCare, and is objecting to Lume Dispensary. He questioned the walking accessibility for children, they will be walking to school and be exposed to this. In the Mott report, the number one concern is impaired drivers and the University of Michigan did a study showing 56% of participants using medical marihuana admitted to driving high within 2 hours of use.

James Campbell, 1591 Catalpa - Stated that there was hesitation from City Council on the passing of ordinance O-02-22. Stated that the applicant is ineligible to occupy the space for the type of business in which they plan to operate. In context, consider that one of the effects as to why ordinance is being considered is because a litigator for this company as a part of public record, threatened to sue the City if they did not expand this ordinance and that he is offended by that. He asked the Commissioners to keep this information in mind as they evaluated this business.

Larry Fons, 1908 Rosemont - Stated that he has six grandchildren and does not want them exposed to marihuana and the smell.

Other correspondence included information from the first speaker, Bill Scarmeas. Correspondence from the City Attorney was provided as well.

Chair Kapelanski questioned the applicant on odor and smells associated with the use.

The Petitioner, Mr. Enright stated that all of Lume Cannabis retail is packaged and nothing is ever open to the air.

Chris Klampkin, Founder of Operation Grow LLC, DBA Butter, 2222 W Eleven Mile- Stated that Lume has nitrogen packaging which actually seals the cannabis flower. Mr. Klampkin also asked specific questions on DBA Butter, in which Chair Kapelanski told Mr. Klampkin to refer to staff for information.

Commissioner Stearn asked the applicant about the plans for the parking lot on the east side of the building.

Commissioner Kempner asked Mr. Enright about the wind turbines, and about the ID process for Lume especially since they will be residing on the second floor.

Commissioner Dahlin made statements about possibly improving the east parking lot. Commissioner Dahlin also discussed with Mr. Enright about the stormwater treatment and detention along with parking.

Commissioner Richardson discussed with Mr. Enright the reciprocal agreement for parking, and redirecting traffic if the American Legion is busy. Commissioner Richardson also asked Mr. Enright what the anticipated hours of operation would be stating the hours are 11a.m. -9 p.m. Commissioner Richardson asked if there will be security, a parking plan, and a lighting plan.

Co-Chair Smith stated parking in the American Legion hall does get busy and that there may be conflict on that side of parking. Commissioner Smith also discussed with the applicant Mr. Enright about site lighting, public sidewalk space, green roof, wind turbines, and the exterior design.

Chair Kapelanski stated to Mr. Enright to obtain typical parking counts from the other Lume facilities, and the parking plan for the entire site. Chair Kapelanski also gave comments on rendering, signage of other spaces, rain barrels.

Commissioner Stearn stated questions on curbside pickup and parking.

Commission Richardson suggested to Mr. Enright an idea of a wall next to the sidewalk or trees and shrubs to disguise the fact that there is a parking lot behind there.

There was general discussion with Commissioners, Interim Community Development Director and Mr. Enright with parking and traffic impact assessment.

3. PSP-7-22: 3916 W. Eleven Mile - Quality Roots: Sketch Plan for renovation of the existing building to a retail marihuana dispensary and office tenant space

Interim Community Development Director Masson-Minock provided the timeline of the application from the applicant. Interim Community Development Director Masson-Minock also stated inconsistencies that the applicant has changed since the pre-application meetings that have happened.

APPLICANT PRESENTATION

Michal Klar
Vice president, Co-founder of Quality Roots

Andrew Danaher, Architect
Stucky-Vitale Architects

Mr. Danaher presented the background of Quality Roots, their connection to the community where there are stores present today. Mr. Danaher also presented the plans for the site exterior and interior of Quality Roots.

PUBLIC COMMENT

Anne McMinn 1780 Cummings – Stated she is confused as to which building is the current tenant moving out, and what is on the second floor.

Mr. Danaher stated that there was an existing jewelry manufacturer in the space that is moving out. Mr. Danaher stated that there is also an accountant as a tenant that will stay there. There is also the second floor that is around 300 sq. ft being featured as an office.

Chair Kapelanski stated to the applicant that they should reach out to their surrounding neighbors so they have a clear understanding of what is being proposed.

Jim Hosivich - Questioned the plot behind the corner store that is shown as a new parking lot, the website shows cars parking there, is that part of this plan. Mr. Danaher stated that the whole lot to the north is utilized for parking. Mr. Hosivich asked if the city was going to maintain the alley.

Commissioner Bartus discussed with the applicant about the moving of the DTE power pole.

Commissioner Stearn asked about the windows on the second floor.

Commissioner Patterson asked the applicant if they have second floor plans, and suggested more windows on the front second floor.

Commissioner Kempner commented that this site can have two wind turbines.

Commissioner Richardson discussed with the applicant about the green roof for the building and a parking plan.

Co-Chair Smith stated that it needs to be shown that parking can be accommodated on this site. Co-Chair Smith commented on the investments in this building and discussed with the applicant the trees that are proposed to be planted, along with the roof structure, a sign question, and exterior comments.

Chair Kapelanski suggested to the applicant to include parking counts from the existing facilities, and comments specific to the building.

4. **PSP-06-22: 3737 Twelve Mile - New Construction of Rowhomes:** Daniel Stakhiv, on behalf of Berkley Deal LLC, 3737 Twelve Mile Road, Parcel #25-18-126-020, is requesting site plan approval of a new seven-unit rowhomes development in the Twelve Mile District.

Interim Community Development Director Masson-Minock stated to the Commission they need to decide on the waivers that are requested. Interim Community Development Director Masson-Minock stated that in the letter to the Planning Commission, she recommended that the site plan be tabled until the geotechnical site plan is completed. Interim Community Development Director Masson-Minock gave an overview of the information presented from the applicant.

APPLICANT PRESENTATION

Daniel Stakhiv

The applicant, Mr. Stakhiv gave an overview of the concerns with the clay soil, geotechnical survey, and time constraints. Mr. Stakhiv also provided an overview of the plan on the parcel and why he asked for waivers.

There is no public hearing on this item.

On the waiver for the Twelve Mile setback, there was no objection by the Planning Commission.

On the waiver for the Phillips setback, there was no objection by the Planning Commission on the finding that this is defined as a pedestrian area with a landscape area.

On the side yard setback waiver, there was no objection by the Planning Commission.

On the front elevation transparency waiver, there was no objection by the Planning Commission.

Chair Kapelanski discussed with the applicant the storm water and details of the plan.

Commissioner Dahlin discussed with the applicant the detention and pipe usage on this property.

There was discussion amongst the Commissioners on approval with the condition of county approval.

The Commission discussed with the applicant other specifics on the design.

Move of Motion by Commissioner Kempner to approve PSP-06-22 with support from Commissioner Richardson that:

1. Waiver for the setback on Twelve Mile based on the provision of front yards for pedestrian space is approved as proposed.
2. Waiver of the setbacks on Phillips and side yard setback so the building is parallel to Twelve Mile creating a better pedestrian space on Twelve Mile and Phillips is approved as proposed.
3. Waiver of transparency for what is shown on the site plan based on the finding that the site plan as proposed meets section 138-678, is approved as proposed.
4. The site plan is approved with the following conditions:
 - a. RCOC approval;
 - b. Approval from City of Berkley DPW;
 - c. Approval from the consulting engineer, HRC;
 - d. The dumpster screening detail is included on the final site plan; and
 - e. The bike rack is moved to the north side of the dumpster.
5. The conditions of approval are finalized with a review by the Planning Commission.

AYES: Bartus, Dahlin, Kempner, Patterson, Stearn, Richardson, Smith, Kapelanski

NAYS: NONE

ABSENT: Petrosky

MOTION CARRIED

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LIAISON REPORT

Commissioner Kempner provided the Commission with an update on DDA discussion of budget and crosswalks.

Commissioner Richardson stated that the Environmental Committee met and welcomed new members. They are still looking for additional members, and a bike corral will be likely at the art bash.

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COMMISSIONER COMMENTS

Commissioner Richardson appreciated the motion from Interim Community Development Director and helping the Commissioners make their decisions on findings.

Commissioner Kempner expressed appreciation for the information that is on the screen so audience can see.

The Commissioners discussed the community center committee if it is still functional or not.

The Commissioners inquired about voice votes instead of roll call votes on adjournment, approval of the minutes and agenda.

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STAFF COMMENTS

Interim Community Development Director Masson-Minock stated that she will be on vacation next week and to contact Ben Carlisle for any questions, and to contact Kim Anderson in the Building Department for questions.

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ADJOURNMENT

Motion to adjourn by Commissioner Richardson supported by Commissioner Stearn.

AYES: Bartus, Dahlin, Kempner, Patterson, Stearn, Richardson, Smith, Kapelanski

NAYS: NONE

ABSENT: Petrosky

With no further business, the meeting was adjourned at 10:53 p.m.

DRAFT



Comm Dev Director <comdirector@berkleymich.net>

Lume dispensary at 1949 Twelve Mile Road

Ineka Irish [REDACTED]

Thu, Apr 14, 2022 at 8:32 PM

To: council@berkleymich.net, comdirector@berkleymich.net

City of Berkley Council and Planning Commission Director,

I am a resident of Berkley and I have some objections to the proposed Dispensary on 12mile road. I believe this location would negatively impact the housing values of the houses in the Oakland Manors subdivision. I live on the street that backs up to this location and I do not want a dispensary that close to my house. One of the things I love about my location in Berkeley is that my street is quiet. If the dispensary goes in, I worry that my back yard will become noisy and have various odors and increased traffic. I have small kids that play in my yard and I worry about the risk on impaired drivers on my street with my kids outside.

Please reconsider allowing a dispensary that close to a neighborhood, and a daycare center.

A concerned citizen,
Ineka Irish-Herron



Comm Dev Director <comdirector@berkleymich.net>

marijuana facility on 12 Mile

Fri, Apr 22, 2022 at 10:25 AM

[REDACTED]

To: "comdirector@berkleymich.net" <comdirector@berkleymich.net>, "council@berkleymich.net" <council@berkleymich.net>

Dear Members of the Berkley City Council and the Berkley Planning Commission,

Upon my return from being out of town I read the letter sent out about the location of a marijuana facility to be located in the Beaumont Medical Building on 12 Mile.

I realize this letter is past the response date, but I want to go on record that I oppose that location for this type of facility. As a resident of 1864 Rosemont Rd., the facility will be located in the building that will use the shared parking lot behind my house.

My concerns are:

1. The location is close to a childcare facility that uses a shared parking lot. Parents and children should not be subjected to the comings and goings of people looking to purchase marijuana, let alone the patients that enter both medical buildings. There are many children that play in both the front and backyards on Rosemont.
2. The amount of traffic in the parking lot will increase making it somewhat dangerous for the older population that uses the medical facilities.
3. It is possible that property values will go down.
5. It is possible that traffic will increase on 12 Mile and. Rosemont Rd.
6. It is possible that people will sit and loiter in the parking lot after making their purchase and smoke. Marijuana has an offensive odor. Impaired driving also becomes an issue.
7. What will the hours of operation for this facility be? As of now, it is relatively quiet in the parking lot. Of course, that is because the medical offices are closed on evenings and weekends.
8. What safety precautions will be in place?

Last but not least, I read in The Talk that Berkley increased licenses for marijuana facilities from 3 - 5. Why in the world would a city of 2.62 miles need 5 marijuana licenses?

Sincerely,

Christine Apel



Comm Dev Director <comdirector@berkleymich.net>

Re: Objection to increasing number of marijuana licenses and proposed dispensary at 1949 Twelve Mile Road

Bill Scarmeas [REDACTED]

Wed, Apr 20, 2022 at 2:40 PM

To: Comm Dev Director <comdirector@berkleymich.net>

Thank you for the information.

I would like to also go on record with additional opposition to another dispensary location.

Since my first email to the commission, I now understand that another child care center located in Huntington Woods is also potentially affected by a Berkley cannabis dispensary in close proximity to a child education center

I understand that the Huntington Woods Christian childcare center on Eleven Mile is under 400 ft away from another proposed at cannabis dispensary located across the street in Berkley at 2222 Eleven mile.

I recently voiced my concern to our State Representative in Lansing for Berkley about my concerns of the close proximity of dispensaries to Pre-K and childcare centers. I received feed back from our legislator that she would look into this important matter. I am hopeful that perhaps the state can in someday amend the silence of state law to include Pre K and childcare in the established buffer locations for cannabis dispensaries.

In the meantime even though the law is silent, I do hope that Berkley zoning commission takes this into consideration when reviewing licenses for cannabis dispensaries.

Bill Scarmeas

On Apr 20, 2022, at 11:04 AM, Comm Dev Director <comdirector@berkleymich.net> wrote:

[Quoted text hidden]



Comm Dev Director <comdirector@berkleymich.net>

Re: Objection to increasing number of marijuana licenses and proposed dispensary at 1949 Twelve Mile Road

Bill Scarmeas [REDACTED]

Sat, Mar 26, 2022 at 10:17 AM

To: council@berkleymich.net, comdirector@berkleymich.net

Cc: Jackie [REDACTED]

On Mar 20, 2022, at 1:13 PM, Bill Scarmeas [REDACTED] wrote:

Dear City of Berkley Council and Planning Commission Director,

Following up regarding my previous email comments and in-person objections to the city council and planning commission for the proposed LUME Marijuana dispensary located on 12 Mile, I would like to bring to your attention the attached MADD report on impaired driving while under the influence of marijuana.

The concerns of impaired driving are real as detailed by the MADD review and particularly important when marijuana dispensaries are located in close proximity to child care centers. These concerns should not be ignored, residents and parents expect the city of Berkley to act in accordance with the best interest of ALL in our community.

Even though Michigan state laws are silent on Pre-K and childcare centers, silence in Berkley ordinances regarding the proximity of dispensaries under 1000 ft from child care centers because of the fear of litigation, is inexcusable and neglectful.

Just as Royal Oak recently rejected a dispensary licensing in close proximity to Oakland Technical Center, Berkley should also be bold and reject the licensing requests and bullying tactics of Big Marijuana Corporations who's locations would adversely affect the safety and well-being of the children and residents in our community .

<https://online.flippingbook.com/view/454750/?sharedOn=>

4/20/22, 11:01 AM

City of Berkley Mail - Re: Objection to increasing number of marijuana licenses and proposed dispensary at 1949 Twelve Mile Road

Bill and Jackie Scarneas



Carlisle | Wortman
ASSOCIATES, INC.

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

TO: City of Berkley Planning Commission

FROM: Ben Carlisle, AICP
Megan Masson-Minock, AICP

DATE: April 22, 2022

RE: Zoning Ordinance Revisions

Based on recent direction from the Planning Commission, we recommend the following zoning ordinance amendments for Planning Commission consideration.

Listed below for each proposed amendment is the current language and the proposed drafted amendment language. Existing language is *italicized*. New language is blue colored and underlined. Removed language is redlined and ~~striketrough~~. If the Planning Commission is comfortable with this language, we will schedule a public hearing.

1) Revised Site Plan Design Standards

CWA worked with Planning Commission to provide more direct language in the site plan review standards section of the Ordinance. Design guidelines/standards are difficult to write, and a certain amount of subjectivity is inevitable. Standards have to strike a delicate balance between enforceable objectivity and allowing architectural creativity.

We have found that, if a community clearly articulates their required standards and expectations early in the review process, the building/development community is willing to follow those standards. We encounter pushback when the standards are not clearly articulated, could be considered subjective, and the “rules are changed mid-way through the review period.” The proposed language was reviewed and revised based on Planning Commission direction.

Proposed Amended Text:

Sec. 138-679. - Standards.

The site plan shall be reviewed and approved by the planning commission upon finding that:

(1) General Standards

- a. *The site meets the requirements of this Code.*
- b. *The proposed development does not create adverse effects on public utilities, roads, or sidewalks.*

- c. Pedestrian and vehicular areas are designed for safety, convenience, and compliment adjacent site design.*
 - d. Site design, architecture, signs, orientation, and materials are consistent with the city's master plan objectives and the design of the neighboring sites and buildings.*
 - e. Landscaping, lighting, dumpster enclosures, and other site amenities are provided where appropriate and in a complementary fashion.*
 - f. Site engineering has been provided to ensure that existing utilities will not be adversely affected.*
- (2) Development shall ensure compatibility with existing commercial districts and include a transition between land uses through application of the following requirements:
 - a. Building design shall improve the character of the surrounding area in relation to building placement, landscape and streetscape features, and architectural design.
 - b. Street fronts shall provide a variety of architectural expression that is appropriate in its context and creates variety and enhances visual interest.
 - c. Building design shall achieve a compatible transition between areas with different height, massing, scale, and architectural style.
 - d. For proposals in the Downtown Development District, the applicant shall explain, and the Planning Commission should consider how the proposal implements the site design elements in Chapter II and character areas in Chapter V of the Berkley Downtown Design Guidelines. The Planning Commission may require changes to the site plan based on the Berkley Downtown Design Guidelines.
- (3) Development shall incorporate the following recognized best architectural building design practices:
 - a. Foster a lasting impact on the community through the provision of high quality design, and construction.
 - b. Provide high quality, durable materials, such as but not limited to stone, brick, and glass. E.I.F.S., metal or material equivalent shall only be used as an accent material.
 - c. Develop buildings with creativity that includes balanced compositions and forms.
 - d. Design roofs that are appropriate to the architectural style of the building and contextual to the surrounding area.
 - e. For commercial buildings, incorporate clearly defined, highly visible customer entrances that face the street, using features such as canopies, porticos, arcades, arches, wing walls, ground plane elements, and/or landscape planters.
 - f. New development or site redevelopment shall incorporate community amenities that add value to the development such as patio/ seating areas, water features, art work or sculpture, clock towers, pedestrian plazas with park benches or other features located in areas accessible to the public. Such improvements shall be proportionate to the proposed scope of site work.
 - g. Buildings shall be designed to fit the character and architectural style of the community.
 - h. For proposals in the Downtown Development District, the applicant shall explain, and the Planning Commission should consider how the proposal implements the character areas in Chapter V of the Berkley Downtown Design Guidelines and the provisions of the following:
 - 1. Chapter III of the Berkley Downtown Design Guidelines for new construction; or
 - 2. Chapter IV of the Berkley Downtown Design Guidelines for renovations or façade alterations.
 - i. The Planning Commission may require changes to the site plan based on the Berkley Downtown Design Guidelines.
- (4) Enhance the character, environment, safety, and access for motorized and non-motorized transportation through the following requirements:

- a. [Provide elements that distinguish the street and the pedestrian realm \(area from the back of the street curb to the building front\).](#)
- b. [Create a non-motorized pedestrian connection between the public right of way and ground floor activities.](#)
- c. [Create a safe environment by employing design features to reduce vehicular and pedestrian use, while not sacrificing design excellence.](#)
- d. [Enhance the pedestrian realm by framing the sidewalk area with trees, awnings, and other features.](#)
- e. [Improve safety and access for pedestrians through site design elements and lighting.](#)
- f. [For proposals in the Downtown Development District, the applicant shall explain, and the Planning Commission should consider how the proposal implements the site design elements in Chapter II and character areas in Chapter V of the Berkley Downtown Design Guidelines. The Planning Commission may require changes to the site plan based on the Berkley Downtown Design Guidelines.](#)

2) Wind Turbines

Recent site plan submittals for marihuana provisioning centers include wind turbine technology. The current ordinance limits no more than one (1) roof mounted system per parcel. The interpretation has been multiple turbines on a single roof are not permitted. Provided that all other requirements of turbines are met including distance and noise, multiple turbines should not be impactful to adjacent properties. A City Council member has asked us and the Planning Commission to consider amending the Ordinance to allow multiple turbines on a single roof.

Proposed Amended Text:

Sec. 138-99. - General requirements.

- a) *Roof-mounted—On-site consumption. No signage shall be installed on any wind energy system. ~~No more than one roof-mounted wind energy system shall be placed on any parcel.~~ [Multiple roof mounted wind energy systems shall be permitted on a parcel provided all requirements set forth below are met:](#)*

<i>Districts Permitted</i>	<i>Maximum Height from Roof</i>	<i>Setback</i>	<i>Other Regulations</i>	<i>Review Required</i>
<i>Single-Family Residential, R-2, Multiple-Family Residential, Community Centerpiece, Greenfield, Office, High Rise Multiple</i>	<i>10 feet</i>	<i>No portion of the system's blades, rotor or other exposed moving part shall extend beyond the edge of the building line to which it is attached</i>	<i>Wind energy systems with a rated capacity of up to 2 kilowatts (2 kW) and solar energy systems shall be allowed as an accessory use subject to the required standards of this section; provided they are incidental</i>	<i>Administrative review</i>

<i>Districts Permitted</i>	<i>Maximum Height from Roof</i>	<i>Setback</i>	<i>Other Regulations</i>	<i>Review Required</i>
<i>Family, Local Business, Gateway, Twelve Mile, Coolidge, Eleven Mile Industrial Woodward, Cemetery</i>			<i>and subordinate to a use on the same parcel, and shall supply electrical power exclusively for on-site consumption</i>	

3) Vape Shop Regulations

The recent opening of a vape shop on Coolidge in proximity to the high school has been noted as a concern. A City Council member has asked us and Planning Commission to consider a spacing requirement, like that for marihuana provisioning centers. In reviewing and administrating the spacing provision, we are recommend limiting vape shops to the districts where marihuana provisioning centers have been able to locate with the spacing but to not have the spacing requirements since schools and vape shops can come and go, creating nonconforming situations. Note that any principal use permitted in the LB district is permitted in Woodward district.

Proposed Amendment Text:

Sec. 138-32. – Definitions.

Vape shop: Any establishment having more than 30 percent of shelf space devoted to selling of e-cigarette, vapor products, liquid nicotine or vaping paraphernalia.

Sec. 138-363. - Principal uses permitted.

Principal uses permitted in the industrial district are as follows:

(5) Vape shop

Sec. 138-387. - Principal uses permitted.

Principal uses permitted in the LB district are as follows:

(17) Vape shop

Sec. 138-457. - Principal uses permitted.

Principal uses permitted in the twelve mile district are as follows:

(17) Vape shop

Sec. 138-487. - Principal uses permitted.

Principal uses permitted in the eleven mile district are as follows:

(23) Vape shop

4) Require parking only behind front building façade line and in side and rear yards and require parking lots that are adjacent to roadway to be screened via screen wall or landscaping

To achieve the vision of the Master Plan, create more appealing streetscapes, and improve non-motorized transportation, parking should be located behind the front building façade line and screened from public view. While most of the non-residential development in the city has parking located in the rear and sides of buildings, this proposed text amendment would codify that requirement and require all future development to comply.

The proposed text amendment would apply to the following districts: Office, Local Business, Coolidge, Gateway, Woodward, Eleven Mile, and Industrial.

Proposed Amended Text:

Sec. 138-527. - Notes to schedule of regulations.

j. ~~Parking shall be permitted in the front yard after approval of the parking plan layout and points of access by the planning commission. The setback shall be measured from the nearest side of existing and/or proposed right-of-way lines.~~ Parking shall be located in a side or rear yard; when located in a side yard and abutting the required build-to-line adjacent the primary building, parking shall be screened with a minimum 30-inch masonry wall on the required build-to-line, or within 5 feet of the required building line, provided that a landscape treatment is added between the wall and the required building line.

5) Establish build-to-line for Coolidge but allow for increased setbacks based on first floor use

To achieve the goals of the Master Plan and maintain building uniformity along Coolidge Highway, there should be an established build-to-line rather than a setback.

The most common regulation is the setback, which tells a property owner how far from the edge of the property line they can place a building. The build-to-line is the inverse of the setback. With a build-to-line, you are required to build a minimum percentage of the building at that distance or closer. It's designed to encourage street frontage and to put buildings at the front or the corner of the lot, with parking in rear. Most of the existing buildings on Coolidge Highway are constructed, though maybe not required at the time, with a build-to-line principle rather than a setback.

Proposed Amended Text:

Sec. 138-526. - Schedule of regulations.

	Minimum Size of Lot per Unit		Maximum Height of Buildings	Minimum Yard Setback or Build-to-line					Minimum Floor Area Per Unit	
Districts	Area in Square Feet (a)	Width in Feet	In Feet	Front	At Least 1 Side Yard	Total of 2 Side Yards	Rear	Maximum Percentage of Lot Coverage (Area of All Structures)	With Base-ment	Without Base-ment
Coolidge	—	—	40	10 ft <u>ft, 0</u>	(m)	(m)	10	—	—	—

Sec. 138-527. - Notes to schedule of regulations.

O) Required front 10-foot build-to-line or equal to the front building lines of the adjacent buildings, whichever is less. 75% of the building façade must meet the required building-to-line, while up to 25% of the façade can be set back to allow for architectural consideration. Build-to-line is the maximum distance which any building front must be located from a street right-of-way. The Planning Commission may adjust the required building line to a maximum of 30 feet beyond the property line for projects incorporating a permanent space for an outdoor seating area, or public plaza. Outdoor cafés or public spaces must be developed as part of the primary building.

Proposed Amended Text:

6) Strengthen requirements for pedestrian connection within parking lots and to front building elevations.

Data from professional organizations, as well as antidotal experience, supports the fact that pedestrians being struck by vehicles in parking lots is a common occurrence. Pedestrian safety is improved through physical measures such as lighting, striping, calming devices (narrow lanes, speed bumps, stop signs, and stop bars), and hardscaping (building sidewalks and curbs).

Proposed Amended Text:

Sec. 138-222. - Parking lot location, design, and construction.

(d). Pedestrian Connections. Plans for parking lots shall include pedestrian circulation improvements incorporating striping, calming devices, and hardscaping, protective lighting, connections to buildings, and landscaping that ensures the visibility and separation of pedestrians from the street and pedestrian safety within parking lots to the front building entrance. Plans shall allow pedestrians to walk parallel to moving vehicles and minimize crossing parking aisles.

7) Require minimum transparency from front building facades and require “activity” to be visual from the street

In urban areas with buildings set close to the street and lots of front windows, the visual activity passer-by sees from the street should be visually stimulating and interesting. Transparency should be equal to 50% of the front facing façade and 30% of parking lot facing façade.

Back-of-the house activities such as cleaning stations, storage rooms, laundry facilities, and the like detract from the visual appeal from street and are better off being screened from view. By requiring “activity” the front façade provides visual appeal and enhances the visual experience.

Transparency and activity requirements would apply to the following districts: Office, Local Business, Coolidge, Twelve Mile, Gateway, Woodward, and Eleven Mile.

Proposed Amended Text:

Sec. 138-527. - Notes to schedule of regulations.

P) Transparency:

1) Transparency.

- a. The first floors of all buildings shall be designed to encourage and complement pedestrian-scale activity and crime prevention techniques. It is intended that this be accomplished principally by the use of windows and doors arranged so that active uses within the building are visible from or accessible to the street, and parking areas are visible to occupants of the building. The first floor of any front façade facing a right-of-way shall be no less than fifty (50) percent windows and doors, and the minimum transparency for facades facing a side street, side yard, or parking area shall be no less than thirty (30) percent of the façade. First-floor transparency is measured between two and eight feet above the first-floor elevation.
- b. For multiple tenant buildings, the minimum transparency requirement must be met by each suite or tenant.
- c. The minimum transparency requirement shall apply to all sides of a building that abut an open space, including a side yard, or public right-of-way. Transparency requirements shall not apply to sides which abut an alley.
- d. Windows for building sides shall be concentrated toward the front edge of the building, in locations most visible from an urban open space or public right-of-way. v. Visibility through the required transparency must portray the principal use of the operation and shall not portray secondary or “back of house” operation areas including, but not limited to, laundry, cleaning supply, stock, or storage areas.

- 2) Transparency Alternatives. The following alternatives may be used singularly or in combination. The wall design alternative may count toward fifty (50) percent of the side yard or parking lot side transparency requirement, provided the entirety of the length and height of the wall is considered. i.
- 3) Wall Design. Wall designs must provide a minimum of three (3) of the following elements, occurring at intervals no greater than twenty-five (25) feet horizontally and ten (10) feet vertically:
 - a. Expression of structural system and infill panels through change in plane not less than three (3) inches.
 - b. System of horizontal and vertical scaling elements such as: belt course, string courses, cornice, pilasters.
 - c. System of horizontal and vertical reveals not less than one (1) inch in width/depth.
 - d. Variations in material module, pattern, and/or color.
 - e. System of integrated architectural ornamentation.
 - f. Green screen or planter walls.
 - g. Translucent, fritted, patterned, or colored glazing.
- 4) Permanent Art. Non-commercial art or graphic design of sufficient scale and orientation to be perceived from the public right-of-way and rendered in materials or media appropriate to an exterior, urban environment and permanently integrated into the building wall may count toward no more than forty (40) percent of the transparency requirement.

7) Limit window signage

In the same vein as requiring transparency and activity, covering the front window facades with window signage is counteractive. Limiting window signage promotes visual interest and in-store activity. Reducing the allowed fifty (50) percent to twenty-five (25) would remove clutter and increase visual interest.

Proposed Amended Text:

Sec. 94-5. - Exempt signs (signs permitted in nonresidential districts).

The following signs are permitted in the Office, Downtown, Local Business, Eleven Mile, Twelve Mile, Coolidge, Gateway, Woodward, Industrial, Parking, and Cemetery districts and are generally

exempt from the regulations of the ordinance from which this chapter was derived, except section 94-11 shall apply.

- (1) *Banners, not exceeding six square feet, one per location*
- (2) *Barber poles, not exceeding 12 inches in diameter and eight feet in height.*
- (3) *Fuel pumps.*
- (4) *Time/temperature signs, not exceeding 20 square feet, one per location.*
- (5) *Vehicle signs.*
- (6) *Window signs, not exceeding ~~50~~ 25 percent of glass.*

8) Reduce height adjacent to residential

Often, more intense buildings on corridors can create frictions points between when adjacent to single-family uses. The current height limit is 40-feet in Local Business, Twelve-Mile, Coolidge, Gateway, Industrial, and Eleven Mile zoning districts, and 50-feet in Woodward zoning district. The majority of single-family residential lots that abut corridor parcels are zoned R-1D, which permit 30-feet in height. The R-1A single-family district permits 40-feet , and only account for a small number of single-family lots , abutting parcels on Woodward Avenue.

These proposed height limitations would only apply to those parcels that directly abut single-family residential. These provisions would not apply to those parcels that abut other non-single family uses, or alleys.

Proposed Amended Text:

Secs. 138-199: Nonresidential development height when adjacent to any residentially zoned or used property

1) Height.

- 1) Any building, or portion of a building, on a parcel immediately adjacent to a single-family residentially zoned parcel and not separated by any street or alley, shall not exceed 30 feet in height.
 - 2) Distance shall be measured from the nearest property line to the nearest property line on a straight-line basis and may include rights-of-way.
 - 3) The Planning Commission may deviate from these height restrictions in the course of its site plan review process; however, the Planning Commission shall not permit a greater height than the maximum allowed in the underlying zoning district. In the review of the deviation, the Planning Commission shall consider the standards as set forth in 138-199(b).
- 2) Deviation standards. The Planning Commission may grant height, setback, and greenbelt deviations if the following are found:
- 1) The deviation will not adversely impact public health, safety, and welfare.
 - 2) The deviation maintains compatibility with adjacent uses.

- 3) The deviation is compatible with the Master Plan and in accordance with the goals and objectives of the Master Plan and any associated subarea and corridor plans.
- 4) The deviation will not adversely impact essential public facilities and services, such as: streets, pedestrian or bicycle facilities, police and fire protection, drainage systems, refuse disposal, water and sewage facilities, and schools.
- 5) The deviation will be in compliance with all other zoning chapter standards.
- 6) The deviation will not adversely impact any on-site or off-site natural features.

9) Strengthen exterior lighting requirements especially for the pedestrian realm

Proposed Amended Text:

Sec. 138-143. - Requirements.

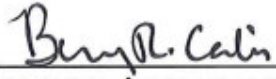
b) Nonresidential districts.

- 1) *Any light fixture shall be placed in such a manner that no light source is visible from any residential area or public/private roadway, walkway, trail or other public way when viewed at eye level.*
- 2) *The level of lighting shall not exceed 0.5 footcandles at any residential property line or 1.0 footcandles at any nonresidential property line.*
- 3) *Any canopy structure used at a business location shall have recessed lights with diffusers that do not extend below the surface of the canopy.*
- 4) *Any luminaire on a pole, stand or mounted on a building shall have a shield, an adjustable reflector and non-protruding diffusor.*
- 5) General parking and pedestrian areas shall maintain a minimum of 1.0 fc for all hours of operation.
- 6) All outdoor lighting fixtures, existing or hereafter installed and maintained upon private property, shall be turned off or reduced to no more than 0.5 fc in lighting intensity between 11:00 p.m. and sunrise. The following exceptions may be approved:
 - a. Where greater lighting levels are necessary for security or safety purposes; or
 - b. Where permissible commercial or industrial uses such as sales, assembly and repair operate after 11:00 p.m., in which case the lighting levels shall be turned off or reduced after the use ceases for that day.

We ask the Planning Commission to discuss these amendments at your upcoming meeting. Based on Planning Commission direction, we can schedule a public hearing or a work session.

Let us know if you have any questions or concerns!

Sincerely,



CARLISLE/WORTMAN ASSOC., INC.
Benjamin R. Carlisle, LEED AP, AICP



CARLISLE/WORTMAN ASSOC., INC.
Megan Masson-Minock, AICP
Planner



CITY OF BERKLEY
COMMUNITY DEVELOPMENT
3338 COOLIDGE HWY, BERKLEY, MICHIGAN 48072

APPLICATION FOR SITE PLAN REVIEW

NOTICE TO APPLICANT: Applications for Site Plan review by the Planning Commission must be submitted to the City of Berkley Building Department in **substantially complete form** at least 30 days prior to the Planning Commission's meeting at which the application will be considered. The application must be accompanied by the data specified in the Zoning Ordinance, including fully dimensioned site plans, plus the required review fees.

The Planning Commission meets the fourth Tuesday of the month at 7:00pm in the Council Chambers at the City of Berkley City Hall, 3338 Coolidge Hwy, Berkley, MI 48072.

TO BE COMPLETED BY APPLICANT:

I (We), the undersigned, do hereby respectfully request Site Plan Review and provide the following information to assist in the review:

Project Name: THE IVY
Applicant: DEPORRE BUILDING, LLC (JOHN DEPORRE)
Mailing Address: 4126 SPUR HILL DRIVE BLOOMFIELD, MI 48304
Telephone: [REDACTED]
Email: [REDACTED]
Property Owner(s), if different from Applicant: 2219 COOLIDGE, LLC
Mailing Address: 4126 SPUR HILL DRIVE BLOOMFIELD, MI 48304
Telephone: [REDACTED]
Email: [REDACTED]
Applicant's Legal Interest in Property: Construct a multi-family development
and associated site improvements

LOCATION OF PROPERTY:

Street Address: Oxford Road - West of 2219 Coolidge Highway
Nearest Cross Streets: Oxford Road & Coolidge Highway
Sidwell Number(s): 25-18-431-030

PROPERTY DESCRIPTION:

Provide lot numbers and subdivision: Part of Lots 53 & 64, Denler Acres

Property Size (Square Feet): ±39,248 (Acres): 0.901

EXISTING ZONING DISTRICT *(please check):*

- | | | |
|----------------------------------------|------------------------------------------------|-------------------------------------|
| <input type="checkbox"/> R-1A | <input type="checkbox"/> Local Business | <input type="checkbox"/> Coolidge |
| <input type="checkbox"/> R-1B | <input type="checkbox"/> Office | <input type="checkbox"/> Downtown |
| <input type="checkbox"/> R-1C | <input type="checkbox"/> Community Centerpiece | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> R-1D | <input type="checkbox"/> Woodward | <input type="checkbox"/> Cemetery |
| <input checked="" type="checkbox"/> RM | <input type="checkbox"/> Eleven Mile | <input type="checkbox"/> Parking |
| <input type="checkbox"/> RMH | <input type="checkbox"/> Twelve Mile | |

Present Use of Property:

Vacant Lot

Proposed Use of Property:

Multi-family Apartment / Townhomes

Is the property located within the Downtown Development Authority? ☐ Yes ☒ No

PROJECT DESCRIPTION:

Proposed two (2) - three (3) story apartment buildings (±10,600 SF footprint)
with associated parking lot, landscaping, & lighting improvements

Does the proposed project / use of property require Special Land Use approval? ☐ Yes ☐ No

Does the proposed project require Variance(s) from the Zoning Board of Appeals? ☒ Yes ☐ No

If yes, please describe Variances required:

Height Variance of 4 FT is being requested for the parapet to screen rooftop equipment.

Proposed height = 34 FT; Required = 30 FT

PLEASE COMPLETE THE FOLLOWING CHART:

Type of Development	Number of Units	Gross Floor Area	Number of Parking Spaces On Site	Number of Employees on Largest Shift
Attached Residential	24	10,600 SF	46	
Office				
Commercial				
Industrial				
Other				

PROFESSIONALS WHO PREPARED PLANS:

A. Name: Michael Gold
Mailing Address: 607 Shelby Street, Suite 200, Detroit, MI 48226
Telephone: [REDACTED]
Email: [REDACTED]
Design Responsibility (engineer, surveyor, architect, etc.): Civil Engineer

B. Name: Daniel De Martinis
Mailing Address: 920 East Long Lake Rd, Suite 200B, Troy, MI 48085
Telephone: [REDACTED]
Email: [REDACTED]
Design Responsibility: Architect

SUBMIT THE FOLLOWING:

1. Fifteen (15) individually folded copies of the site plans, measuring 24" x 36", sealed by a registered architect, engineer, or surveyor.
2. A pdf file of the site plans, submitted to the Community Development Director.
3. Proof of property ownership (title insurance policy or registered deed with County stamp).
4. Review comments or approval received from County, State or Federal agencies that have jurisdiction over the project, including, but not limited to:

- ☐ Road Commission for Oakland County
☐ MI Dept. of Transportation


- ☐ Oakland County Health Division
☐ MI Dept. of Environment, Great Lakes & Energy

PLEASE NOTE: The applicant, or a designated representative, **MUST BE PRESENT** at all scheduled meetings, or the Site Plan may be tabled due to lack of representation.


Failure to provide true and accurate information on this application shall provide sufficient grounds to deny approval of a Site Plan Application or to revoke any permits granted subsequent to the site plan approval.


We encourage applicants to make a presentation of the proposed project to the Planning Commission and City Council, as appropriate. To assist in this effort, we have available for your use at meetings a projector, laptop computer and screen. This will allow the Planning Commission and audience to be fully engaged so they can give your project the attention it deserves. Planning Commission meetings are recorded and televised.


PROPERTY OWNER'S APPROVAL: (Initial each line)

 I hereby authorize the employees and representatives of the City of Berkley to enter upon and conduct an inspection and investigation of the above-referenced property.

APPLICANT'S ENDORSEMENT: (Initial each line)

 All information contained therein is true and accurate to the best of my knowledge.

 I acknowledge that the Planning Commission will not review my application unless all information in this application and the Zoning Ordinance has been submitted. I further acknowledge that the City and its employees shall not be held liable for any claims that may arise as a result of acceptance, processing or approval of this site plan application.

 I hereby acknowledge that if engineering or other reviews are required, additional fees must be submitted. Should the review fees be greater than the required minimum, sufficient additional charges will be imposed to satisfy the additional review fees. All fee obligations must be satisfied prior to permit approval.

If an application is withdrawn more than three (3) weeks prior to the meeting date, 90% of the fee will be refunded. If the application is withdrawn less than three (3) weeks prior to the meeting, no refund will be given.

John P. n 12/1/21
Signature of Applicant Date

Torn DeParré
Applicant Name (Print)

Signature of Applicant Date

Applicant Name (Print)

Steve Friedman 12/1/21
Signature of Property Owner Authorizing this Application Date

Steve Friedman
Property Owner Name (Print)

OFFICE USE ONLY

Received _____ Receipt # _____ Meeting Date _____ Case # _____

Fees: Site Plan Review \$600 Façade Change: \$200 Revision: \$300
 Extension \$200 Engineering: Multi-family \$1,500 + \$30/unit
 Commercial \$1,000
 Escrow (New construction) \$1,000

STONEFIELD

March 25, 2022

Megan Masson-Minock
Community Development Director
City of Berkley
3338 Coolidge Highway
Berkley, MI 48072

**RE: Department of Public Works Approval
The Ivy Apartments
Proposed Residential Community
Parcel ID: 25-18-431-030
Lot 53 Oxford Road
City of Berkley, Oakland County, Michigan 48072**

Megan:

The following is an itemized response to the comments contained within the DPW Review Letter prepared by Berkley DPW dated January 4, 2022. For the sake of brevity, any comments that are statements of fact or have been previously addressed are not included in the response below:

1. To accurately reflect all existing underground utilities, a design MISS DIG ticket shall be requested by the applicant with ticket number shown on the cover sheet and utility plan. Please note the State of Michigan recently moved to a different online MISS DIG platform (PelicanCorp). Note there are two sewers running parallel to Oxford Road- a WRC interceptor and a Berkley combined sewer.

A MISS DIG ticket has been submitted, Ticket # 2022012700543 and the property survey has been updated to include all provided maps. Ticket number included on Sheet C-1.

2. The demolition plan (sheet C-3) appears to show the proposed demolition work for both “The Berkley” and “The Ivy”. For clarification purposes, please remove any demolition activities associated with “The Berkley”.

Demolition related to “The Berkely” has been grayed out and denoted as “Phase I.” This is to provide clarity for new demolition associated with “The Ivy” development. See Sheet C-2.

3. Any existing private sanitary leads within the Oxford Road frontage of Lot 53 must be identified on the plans with a proper disconnection made within 24” of the public sewer. This work will impact the roadway and traffic control plans.

A note has been added to Sheets C-3 and C-7 of the Site Development Plans.

4. The utility plan appears to show the new leads connecting to the WRC interceptor and not the city combined sewer. Please clarify. Additionally, the new 6” laterals can wye into the public sewer right at the connection point avoiding the two proposed cleanouts at the gutter line.

Sanitary laterals have been revised to wye into the public sewer across Oxford as noted. See Sheet C-7 of the Site Development Plans.

STONEFIELDENG.COM

607 SHELBY STREET, SUITE 200, DETROIT, MI 48226 248.247.1115 T. 201.340.4472 F.

5. The applicant will need to demonstrate that the downstream sewer has the capacity to support the development and new sanitary flow. Calculations for both existing verification and the new 6" lines shall be shown on sheet C-7.

Sanitary basis of design for the new 6" laterals have been provided on Sheet C-7 as requested.

6. Please note the proposed stormwater management system will be a private system under the maintenance of the property owner. The stormwater management plan (sheet C-6) shall clarify if the Ivy Apartments are covered under the agreement for "The Berkley" or if a separate document is required.

The existing Storm Agreement will be amended to include "The Ivy" conveyance system. See revised exhibits for review.

7. The new 8" water main shall be Class 54 ductile iron.

Water main revised to be 8" CL. 54 D.I.P. as requested. See Sheet C-7.

8. The new hydrant and curb stop shall be positioned east of the new gate well and stub for future extension.

New hydrant has been relocated per conversations with DPW. See Sheet C-7.

9. The applicant shall verify the new development will not negatively impact the adjacent property and existing drainage conditions. The new masonry wall may end up trapping surface runoff.

The new masonry wall has been proposed to include weep holes at the base elevation to allow drainage to flow freely. Refer to architectural detail.

10. A traffic control plan shall be added to the plan set to account for the proposed work on Coolidge and on Oxford.

Traffic control plan will be included under a separate cover.

11. A Storm Water Service Fixed Charge will be assessed upon completion of construction. This charge will be reflected on the regular utility bill and is based on an Equivalent Residential Units (impervious area).

Noted.

Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Regards,



Mitchell Harvey, PE
Stonefield Engineering and Design, LLC



Michael Gold
Stonefield Engineering and Design, LLC

STONEFIELD

March 25, 2022

Megan Masson-Minock, Community Development Director
Matthew Baumgarten, City Manager
City of Berkley
3338 Coolidge Highway
Berkley, MI 48072

**RE: Engineering Plan Approval
The Ivy Apartments
Proposed Residential Community
Parcel ID: 25-18-431-030
Lot 53 Oxford Road
City of Berkley, Oakland County, Michigan 48072**

Megan & Matthew:

The following is an itemized response to the comments contained within the Engineering Plan Review Letter prepared by HRC dated January 7, 2022. For the sake of brevity, any comments that are statements of fact or have been previously addressed are not included in the response below:

General:

1. A soil erosion permit will likely be required from the Oakland County Water Resources Commissioner (OCWRC). If a soil erosion permit is required, it must be obtained, and a copy of the approved permit provided to the city prior to commencing construction. Regardless of whether a permit is required, the city will require silt fence to be installed around the perimeter of the site, filter fabric installed in nearby catch basins, and a temporary maintenance aggregate/mud mat constructed for access to and from the proposed site.

Noted. Submission to OCWRC for SESC Permit will be submitted under a separate cover.

2. The City may require additional sections of existing curb and gutter and sidewalks along Oxford Road to be removed and replaced as part of the proposed project in order to address any current deteriorated conditions and will defer comment to the City.

Noted.

Water & Fire Protection Services:

1. Permits may be required from the Department of Environment, Great Lakes, and Energy (EGLE) and from OCWRC for the installation and connection of the new water main service.

Noted. Submission to OCWRC and EGLE will be coordinated with the city DPW.

2. The proposed water main along Oxford Road must be labeled to show the proposed size and length. Note that the city requires Ductile Iron Pipe, Class 54.

Proposed water main has been revised to be 8" CL. 54 D.I.P. See Sheet C-7.

3. The plans must include calculations for the new Residential Equivalent Unit (REU) value of the proposed (building) structures. These calculations must also support that the proposed water service is sufficiently sized for the new REU values.

REU calculations have been included as requested. See Sheet C-7.

4. Proposed finish grades for Gate Wells and Hydrants must be provided.

Finish grades provided as requested. See Sheet C-7.

Storm Drainage & Detention/Sanitary Sewer:

1. This office has conducted a review of the stormwater calculations. The plans show a proposed average runoff coefficient of 0.81. The underground detention system previously approved for "The Berkley" development, which this site drains into, was designed and approved assuming a coefficient of 0.83 for the proposed "The Ivy" development. The plans also include calculations demonstrating that the proposed stormwater pipes are sized in accordance with 10-year stormwater system design standards. As such, the system appears to be adequately sized to detain stormwater from the proposed development.

Noted.

2. The plans show the proposed sewer leads connecting to the 90-inch WRC sewer. There is an existing City of Berkley combined sewer in Oxford Road that must be shown on the plans and the proposed sewer leads must connect to the City's sewer in lieu of the WRC interceptor.

Sewer laterals revised to connect into existing combined sewer across Oxford Road. See Sheet C-7.

3. The stormwater maintenance agreement submitted as part of "The Berkley" development does not include the proposed storm pipes and structures as part of the physical limits shown in the agreement. That agreement must be updated to include the proposed stormwater features, or a separate agreement submitted for maintenance of the proposed storm system for "The Ivy".

The existing Storm Agreement will be amended to include "The Ivy" conveyance system. See revised exhibits.

4. The type of cover to be utilized on the proposed drainage structures must be indicated on the plans. Restricted covers may need to be utilized if required by the City's DPW being that the City's sewer system is combined. The Applicant must inquire directly with the DPW.

Per conversation with the DPW, no restricted covers will be required.

5. Detail sheets for the proposed storm sewers must be provided with structures, covers, pipe requirements/cross sections and connection/tap details in accordance with City and County Standards. In addition, shop drawings for the said appurtenances will be required to be reviewed by the City and HRC.

Shop drawings and cut sheets will be provided for City and HRC review prior to construction.

6. The proposed sanitary lead connection type (TwisTee sewer saddle, as per the city DPW, or approved equal) must be labeled on the plan.

Proposed sanitary connections have been labeled as “TwisTee” sewer saddles as required. See Sheet C-7.

Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Regards,



Mitchell Harvey, PE
Stonefield Engineering and Design, LLC



Michael Gold
Stonefield Engineering and Design, LLC

STONEFIELD

March 25, 2022

Megan Masson-Minock
Community Development Director
City of Berkley
3338 Coolidge Highway
Berkley, MI 48072

**RE: Site Plan Approval
The Ivy Apartments
Proposed Residential Community
Parcel ID: 25-18-431-030
Lot 53 Oxford Road
City of Berkley, Oakland County, Michigan 48072**

Megan:

The following is an itemized response to the comments contained within Site Plan Review Letter prepared by Carlise-Wortman dated January 11, 2022. For the sake of brevity, any comments that are statements of fact or have been previously addressed are not included in the response below:

Building Arrangement & Site Design:

1. Applicant shall consider shifting building and parking lot to the east to provide additional buffer to adjacent residential property.

Per discussion with the interim community development director, we are unable to shift further east due to the sidewalk and patio areas being provided.

Area, Width, Height, Setbacks:

1. Minimum Size of Lot per Unit: Applicant shall confirm number of rooms.

Number of rooms is 30 total. 15 bedrooms per building. See Architectural Floor Plan.

2. Applicant provides a color rendering of the building, and a 3-D model of the building and site in context with surrounding properties.

Colorized elevations have been included as requested.

Parking:

1. Applicant shall provide detail of bicycle rack.

Bike rack detail has been included on Sheet C-11.

Site Access & Circulation:

1. Review of access and circulation by City Fire Marshall and City Engineer, HRC.

Noted.

2. Provide a sidewalk/pedestrian connection to sidewalk on Oxford Road.

Sidewalk/pedestrian access has been provided as requested.

Landscaping & Screening:

1. Planning Commission to review the landscape plan.

Noted.

2. Applicant provides detail of masonry wall.

Detail of masonry wall can be found on Sheet C-12 and elevation included within the submission package.

3. Applicant either consolidates all trash enclosures at the rear of the site with a recycling dumpster, or partner with the converted LaSalette school building to have a shared dumpster(s) between both sites.

Trash enclosures have remained as shown as this is for best practices for trash management. The proposed separation will provide access to a dumpster for the northern residents. One single enclosure to the south will have many residents walking upwards of 200 feet to discard their trash.

4. Applicant provides a detail of proposed trash enclosure screening.

Trash enclosure detail has been included on Sheet C-12.

Photometrics:

1. Applicant shall ensure that all area light fixtures are to be directed away from neighboring property and Oxford Road.

Light fixtures are directed away from residential neighbors and Oxford Road. Built-in, integral louver house side shielded fixtures have been proposed to provide cut off and reduce spill over.

Exterior Appliances:

1. Applicant shows exterior appliances (air conditioners, generators, etc.) on site plan to ensure compliance with Sec. 138-73.

Exterior appliances will be roof mounted and screened by the parapet.

Floor Plan & Elevations:

1. Applicant provides a color rendering of the building, and a 3-D model of the building and site in context with surrounding properties.

Colorized elevations have been included as requested.

Should you have any questions regarding the submission items or responses above please do not hesitate to contact our office.

Regards,



Mitchell Harvey, PE
Stonefield Engineering and Design, LLC



Michael Gold
Stonefield Engineering and Design, LLC

V:\DET\2021\DET-210004-Friedman-2219 Coolidge Highway, Berkley, MI\Correspondence\Outgoing\Municipal\2022-03-25 Site Plan Approval Review Response Letter.docx

STONEFIELD

March 25, 2022

Megan Masson-Minock
Community Development Director
City of Berkley
3338 Coolidge Highway
Berkley, MI

**RE: Site Plan Approval
The Ivy Apartments
Proposed Residential Community
Parcel ID: 25-18-431-030
Lot 53 Oxford Road
City of Berkley, Oakland County, Michigan 48072**

Megan:

Stonefield Engineering & Design, LLC is pleased to submit documents for Site Plan Approval for the above referenced property. Please find the following items enclosed for review:

ITEM DESCRIPTION	DATED	COPIES	PREPARED BY
Site Development Plans	03-25-2022	15	Stonefield Engineering & Design
Architectural Elevations	09-14-2021	15	Martini Samartino Design Group
Colorized Elevations	09-14-2021	15	Martini Samartino Design Group
Site Plan Response to Comments Letter	03-25-2022	1	Stonefield Engineering & Design
DPW Response to Comments Letter	03-25-2022	1	Stonefield Engineering & Design
Engineering Response to Comments Letter	03-25-2022	1	Stonefield Engineering & Design
Screen Wall Elevation	03-25-2022	15	2219 Coolidge LLC
Stormwater Maintenance Exhibits	03-07-2022	1	Stonefield Engineering & Design

Should you have any questions, please do not hesitate to contact our office.

Best regards,



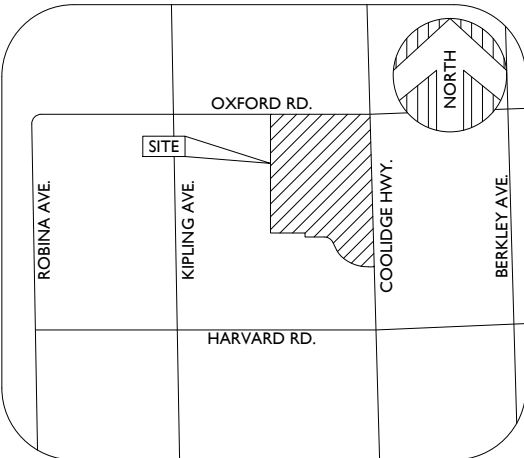
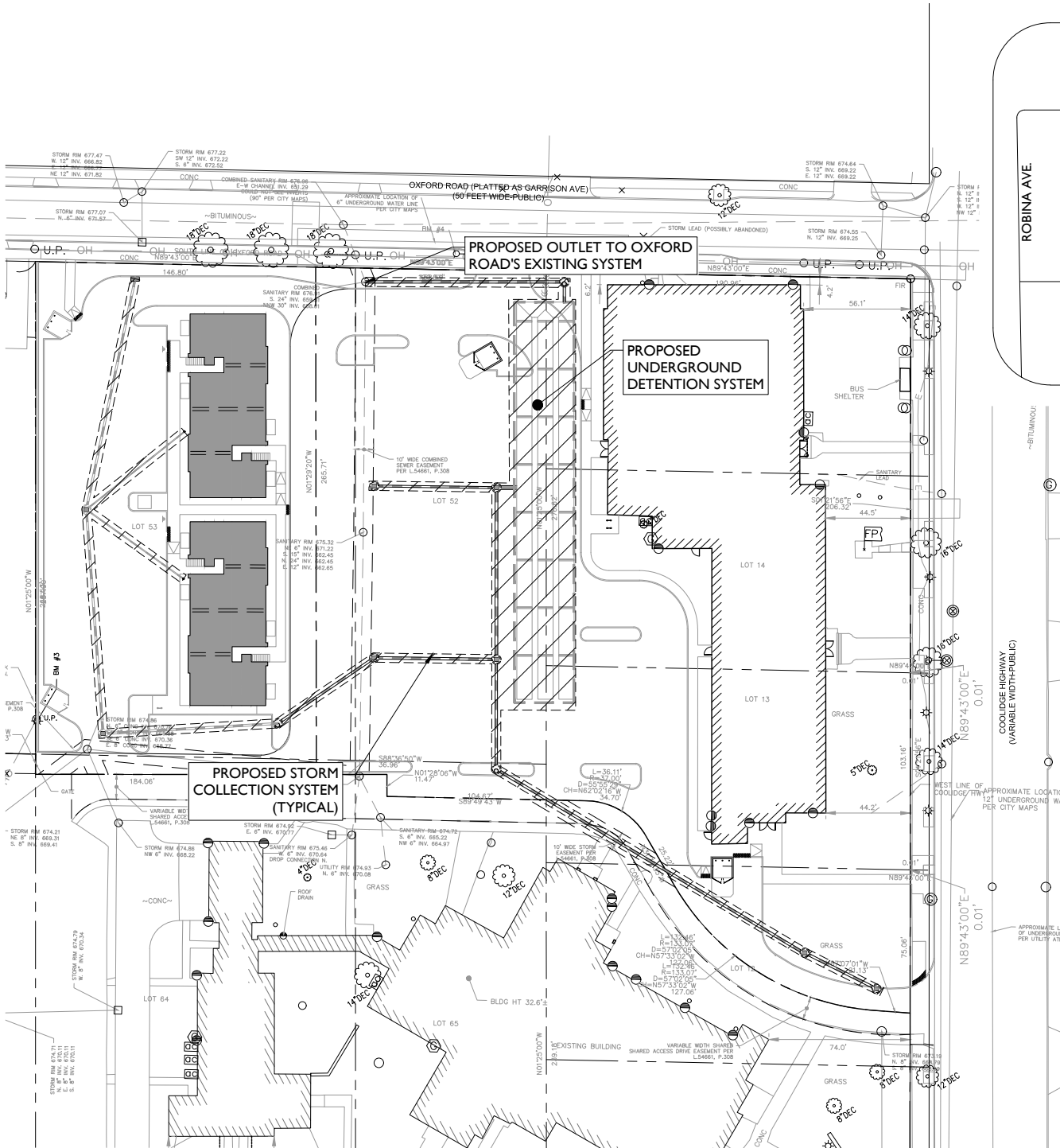
Mitchell Harvey, PE
mharvey@stonefieldeng.com
Stonefield Engineering and Design, LLC



Michael Gold
mgold@stonefieldeng.com
Stonefield Engineering and Design, LLC

V:\DET\2021\DET-210004-Friedman-2219 Coolidge Highway, Berkley, MI\Correspondence\Outgoing\Municipal\2022-03-25 Site Plan Approval Submission Letter.docx

\\DET0302\IDET-210004\Friedman-2219_Coolidge Highway, Berkley, MICAD\ExhibitA\Stormwater Maintenance Exhibit.dwg



SITE LOCATION MAP
NOT TO SCALE

PROPERTY DESCRIPTION

DESCRIPTION OF A 2.239 ACRE PARCEL OF LAND (PARCEL A) BEING A PART OF LOTS 12 THRU 15, INCLUSIVE, AND A PART OF LOTS 52, 53, 64 AND 65, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN;

ALL OF LOTS 14, 15 AND 52, AND PART OF LOTS 12, 13, 53, 64 AND 65, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE)(50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 75.06 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'01"W 21.13 FEET; THENCE 132.46 FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N31°30'35"W 25.22 FEET; THENCE 36.11 FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N02°02'16"W 34.70 FEET; THENCE S89°49'43"E 104.67 FEET; THENCE N01°29'00"W 11.47 FEET; THENCE S88°36'50"W 36.96 FEET; THENCE N01°29'00"W 205.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 2.239 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

BEGINNING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF LOT 15, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE)(50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 75.06 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'01"W 21.13 FEET; THENCE 132.46 FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N31°30'35"W 25.22 FEET; THENCE 36.11 FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N02°02'16"W 34.70 FEET; THENCE S89°49'43"E 104.67 FEET; THENCE N01°29'00"W 11.47 FEET; THENCE S88°36'50"W 36.96 FEET; THENCE N01°29'00"W 205.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 2.239 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

DESCRIPTION OF A 0.901 ACRE PARCEL OF LAND (PARCEL B) BEING A PART OF LOTS 53 AND 64, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN;

PART OF LOT 53 AND PART OF LOT 64, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF LOT 15, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE)(50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 75.06 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'01"W 21.13 FEET; THENCE 132.46 FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N31°30'35"W 25.22 FEET; THENCE 36.11 FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N02°02'16"W 34.70 FEET; THENCE S89°49'43"E 104.67 FEET; THENCE N01°29'00"W 11.47 FEET; THENCE S88°36'50"W 36.96 FEET; THENCE N01°29'00"W 205.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 0.901 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

DESCRIPTION OF A 3.446 ACRE PARCEL OF LAND (PARCEL C) BEING A PART OF LOTS 11 THRU 13, INCLUSIVE, AND A PART OF LOTS 62 THRU 65, INCLUSIVE, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN;

PART OF LOTS 11 THRU 13, INCLUSIVE, AND PART OF LOTS 62 THRU 65, INCLUSIVE, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF LOT 15, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE)(50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 75.06 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'01"W 21.13 FEET; THENCE 132.46 FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N31°30'35"W 25.22 FEET; THENCE 36.11 FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N02°02'16"W 34.70 FEET; THENCE S89°49'43"E 104.67 FEET; THENCE N01°29'00"W 11.47 FEET; THENCE S88°36'50"W 36.96 FEET; THENCE N01°29'00"W 205.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 3.446 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

SYMBOL	DESCRIPTION
	PROPOSED STORMWATER STRUCTURES
	PROPOSED STORMWATER PIPING

EXHIBIT "A" - PHYSICAL LIMITS OF STORMWATER MANAGEMENT SYSTEM

PROPERTY OWNER:

7218 COOLIDGE, LLC
6400 TELEGRAPH, SUITE 2500
BLOOMFIELD HILLS, MI 48301

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www.stonefielddesign.com
607 Shelby Suite 200, Detroit, MI 48226
Phone 248.247.1115

STORMWATER MAINTENANCE EXHIBIT "A"

THE IVY & THE BERKLEY
DEVELOPMENT

PROPOSED RESIDENTIAL COMMUNITY

PARCEL ID: 25-18-431-030, -031, & -032

LOT 53 OXFORD ROAD

CITY OF BERKLEY

OAKLAND COUNTY, MICHIGAN 48072

DATE: 03/07/2022

SCALE: (H) 1" = 80'

PROJECT ID: DET-210004

TITLE:

EXHIBIT A

SHEET:

I OF I

EXHIBIT “B” - STORM WATER MANAGEMENT SYSTEM LONG-TERM MAINTENANCE PLAN

A. Physical Limits of the Storm Water Management System

The storm water management system (SWMS) subject to this long-term maintenance plan (Plan) is depicted on Exhibit A to the permit and includes without limitation the storm sewers, swales, catch basins, manholes, inlets, manufactured treatment system, detention basin, flow restrictor structure and outlet pipe that conveys flow from the detention basin into the Oxford Road storm system. For the purposes of this plan, this SWMS and all of its components as shown in Exhibit A is referred to as “The Ivy Residential Community SWMS”.

B. Time Frame for Long-Term Maintenance Responsibility

2219 Coolidge, LLC is responsible for maintaining The Ivy Residential Community SWMS including complying with applicable requirements of the local or Oakland County soil erosion and sedimentation control program until Oakland County releases the construction permit. Long-term maintenance responsibility for The Ivy Residential Community SWMS commences when defined by the maintenance permit issued by the County. Long-term maintenance continues in perpetuity.

C. Manner of Insuring Maintenance Responsibility

The City of Berkley has assumed responsibility for long-term maintenance The Ivy Residential Community SWMS. The resolution by which The City of Berkley has assumed maintenance responsibility is attached to the permit as Exhibit C. 2219 Coolidge, LLC, through a maintenance agreement with the City of Berkley, has agreed to perform the maintenance activities required by this plan. The City of Berkley retains the right to enter the property and perform the necessary maintenance of The Ivy Residential Community SWMS if 2219 Coolidge, LLC fails to perform the required maintenance activities.

To ensure that The Ivy Residential Community SWMS is maintained in perpetuity, the map of the physical limits of the storm water management system (Exhibit A), this plan (Exhibit B), the resolution attached as Exhibit C, and the maintenance agreement between the City of Berkley and the property owner will be recorded with the Oakland County Register of Deeds. Upon recording, a copy of the recorded documents will be provided to the County.

D. Long-Term Maintenance Plan and Schedule

Table 1 identifies the maintenance activities to be performed, organized by category (monitoring/inspections, preventative maintenance, and remedial actions). Table 1 also identifies site-specific work needed to ensure that the storm water management system functions properly as designed.

MAINTENANCE ACTIVITIES	SYSTEM COMPONENTS	Storm Collection System (Sewers, Swales, Catch Basins, Manholes)	Inlets to Detention Basin	Underground Detention Basin	Flow Restrictor Structure & Outlet Pipe	Pavement Areas	FREQUENCY
Inspect for Sediment Accumulation/Clogging		X	X	X	X		Annually
Inspect For Floatables, Dead Vegetation & Debris		X	X	X	X		Annually & After Major
Inspect For Erosion And Integrity of System		X	X	X	X		Annually & After Major
Monitor Plantings/Vegetation							2 Times per Year
Inspect All Components During Wet weather & Compare to As-Built Plans		X	X	X	X		Annually
Ensure Maintenance Access Remain Open/Clear		X	X	X	X		Annually
Mowing							As Needed
Remove Accumulated Sediments		X	X	X	X		As Needed (See Note Below)
Remove Floatables, Debris, Invasive & Dead Vegetation		X	X	X	X		As Needed
Replace or Wash & Reuse risers stone filters							As Needed
Sweeping of Paved Surfaces						X	As Needed
Repair/Stabilize Areas of Erosion							As Needed
Replace Dead Plantings & Reseed Bare Areas							As needed
Structural Repairs		X	X	X	X		As Needed
Make Adjustments/Repairs to Ensure Proper Functioning		X	X	X	X		As Needed

PROJECT: The Ivy & The Berkley – Proposed Residential Community 2219 Coolidge Hwy. City of Berkley Oakland County, Michigan	PROPERTY OWNER: 2219 Coolidge, LLC 6400 Telegraph Road, Suite 2500 Bloomfield Hills, Michigan 48301	ENGINEER: Stonefield Engineering & Design, LLC 607 Shelby, Suite 200 Detroit, Michigan 48226 Phone: (248) 247-1115 www.stonefieldeng.com	DATE: 03/07/2022
			SHEET 1 OF 1



SOURCE: USGS MAPS

LOCATION MAP

SCALE: 1" = 2000'±



SOURCE: GOOGLE EARTH PRO

AERIAL MAP

SCALE: 1" = 150'±

SITE DEVELOPMENT PLANS
FOR
THE IVY APARTMENTS
PROPOSED RESIDENTIAL COMMUNITY

PARCEL ID: 25-18-431-030
LOT 53 OXFORD ROAD
CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN 48072

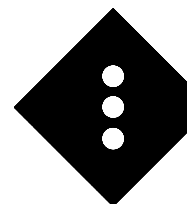
APPLICANT

2219 COOLIDGE, LLC
6400 TELEGRAPH ROAD, SUITE 2500
BLOOMFIELD HILLS, MICHIGAN, 48301

ARCHITECT

MARTINI-SAMARTINO DESIGN GROUP, LLC
920 EAST LONG LAKE ROAD, SUITE 200B
TROY, MICHIGAN 48065

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engineering & design



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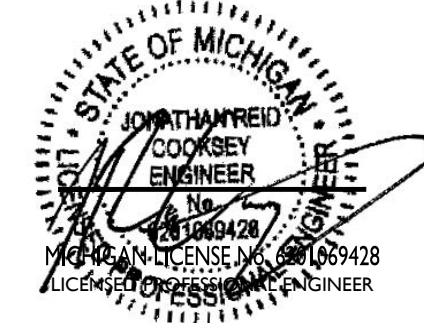
www.stonefielddeng.com

607 Shelby Suite 200, Detroit, MI 48226

Phone 248.247.1115

THE IVY APARTMENTS
PROPOSED RESIDENTIAL
COMMUNITY

PARCEL ID: 25-18-431-030
LOT 53 OXFORD ROAD
CITY OF BERKLEY
OAKLAND COUNTY, MICHIGAN 48072



STONEFIELD
engineering & design

SCALE: AS SHOWN PROJECT ID: DET-210004

TITLE:

COVER SHEET

DRAWING:

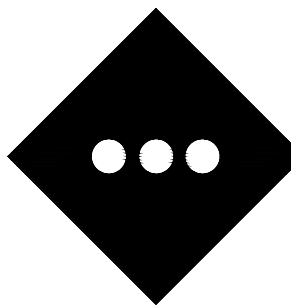
C-1



Know what's below
Call before you dig.

MISS DIG DESIGN TICKET No. 2022012700543

PLANS PREPARED BY:



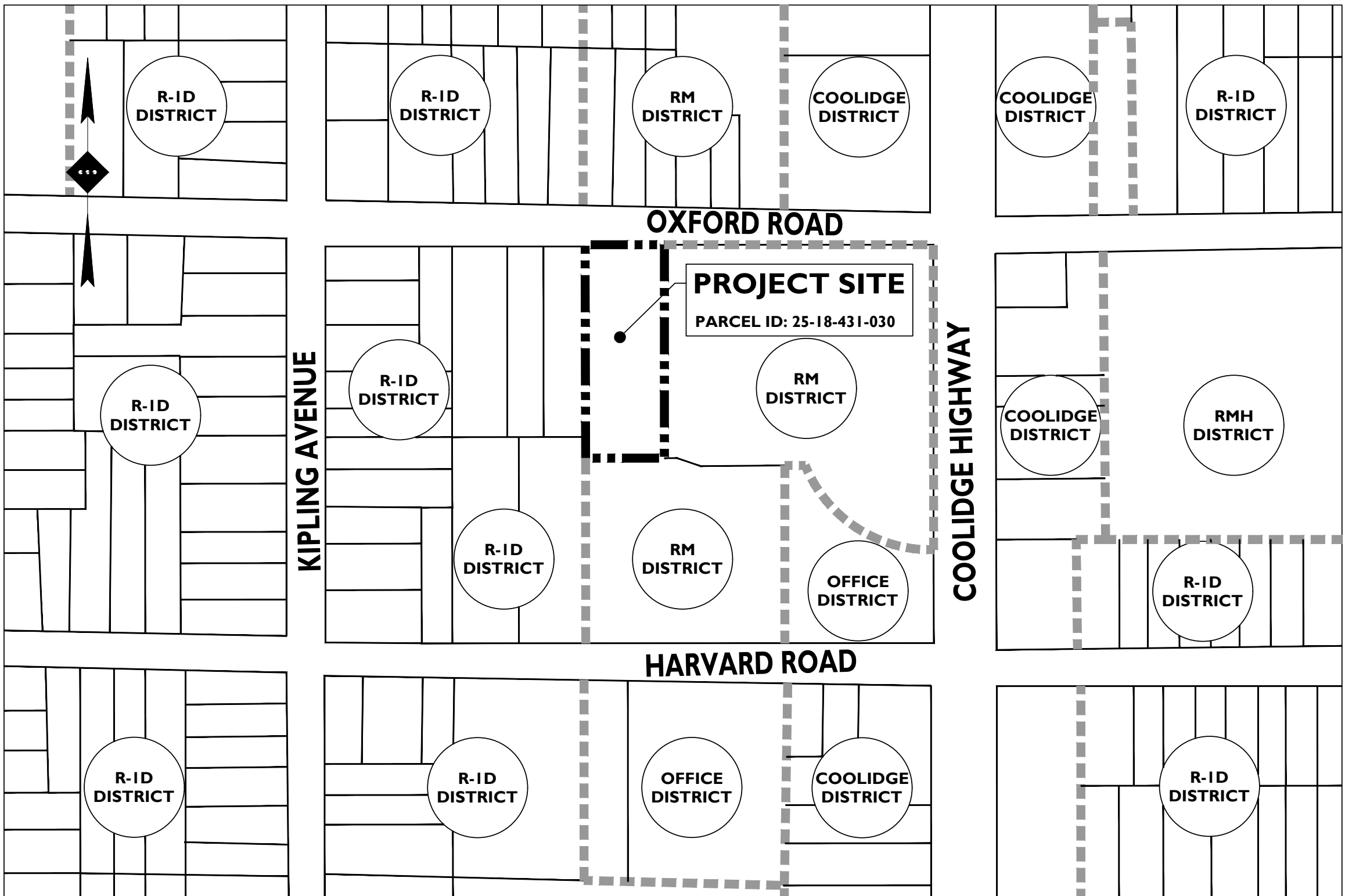
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Phone 248.247.1115

PLAN REFERENCE MATERIALS:

- THIS PLAN SET REFERENCES THE FOLLOWING DOCUMENTS INCLUDING, BUT NOT LIMITED TO:
 - ALTA/NSPS LAND TITLE & TOPOGRAPHIC SURVEY PREPARED BY ATWELL GROUP DATED: 02/24/2022
 - ARCHITECTURAL PLANS PREPARED BY FIVE / EIGHTHS DATED: 09/14/2021
 - GEOTECHNICAL REPORT PREPARED BY PEA, INC. DATED: 09/12/2019
 - ZONING MAP OBTAINED FROM OAKLAND COUNTY PROPERTY VIEWER AND CITY OF BERKLEY ZONING MAP
 - AERIAL MAP OBTAINED FROM GOOGLE EARTH PRO
 - LOCATION MAP OBTAINED FROM USGS ONLINE
- ALL REFERENCE MATERIAL LISTED ABOVE SHALL BE CONSIDERED A PART OF THIS PLAN SET AND ALL INFORMATION CONTAINED WITHIN THESE MATERIALS SHALL BE UTILIZED IN CONJUNCTION WITH THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN A COPY OF EACH REFERENCE AND REVIEW IT THOROUGHLY PRIOR TO THE START OF CONSTRUCTION.



SOURCE: OAKLAND COUNTY PROPERTY VIEWER & CITY OF BERKLEY ZONING MAP

ZONING MAP

SCALE: 1" = 150'±

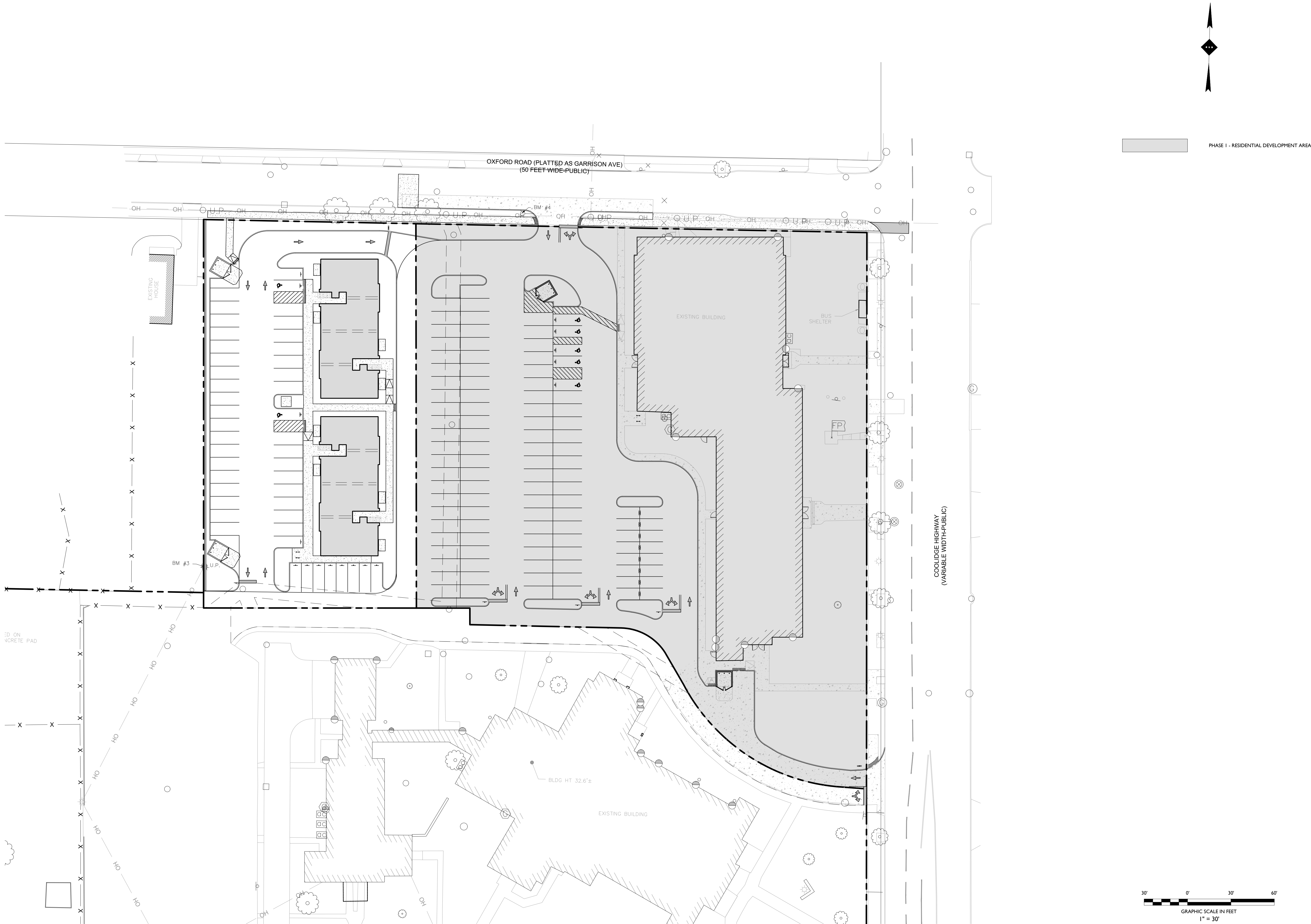
SHEET INDEX

DRAWING TITLE	SHEET #
COVER SHEET	C-1
SITE PLAN (OVERALL)	C-2
DEMOLITION PLAN	C-3
SITE PLAN	C-4
GRADING PLAN	C-5
STORMWATER MANAGEMENT PLAN	C-6
UTILITY PLAN	C-7
LIGHTING PLAN	C-8
LANDSCAPING PLAN	C-9
SOIL EROSION & SEDIMENT CONTROL PLAN	C-10
CONSTRUCTION DETAILS	C-11 & C-12

ADDITIONAL SHEET INDEX

TITLE	SHEET #
"THE BERKLEY RESIDENTIAL COMMUNITY" - STORMWATER DRAINAGE MAP	C-5
ALTA / NSPS LAND TITLE SURVEY	1 OF 1
OCWRC WATER MAIN DETAILS	1 THRU 4
OCWRC STORM DRAIN NOTES & DETAILS	1 OF 1
OCWRC SOIL EROSION DETAILS	1 OF 1

V:\01701\DET21004-FIELDPLAN\214 COOLIDGE HIGHWAY / BERKELEY / MI\CAD\PLAN\DET21004-SITE.DWG



NOT APPROVED FOR CONSTRUCTION



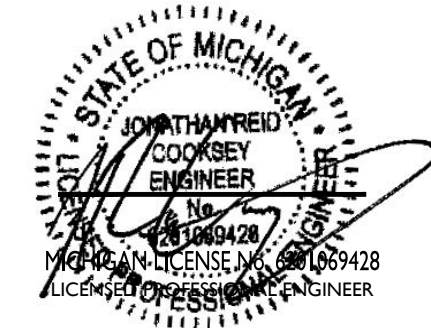
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SITE DEVELOPMENT PLANS

THE IVY APARTMENTS

PROPOSED RESIDENTIAL COMMUNITY

PARCEL ID: 25-18-431-030
LOT 53 OXFORD ROAD
CITY OF BERKELEY
OAKLAND COUNTY, MICHIGAN 48072



SCALE: 1" = 30' PROJECT ID: DET-210004

TITLE:

SITE PLAN (OVERALL)

DRAWING:

C-2

DESCRIPTION

BY

DATE

ISSUE

2

1

03/25/2022

12/17/2021

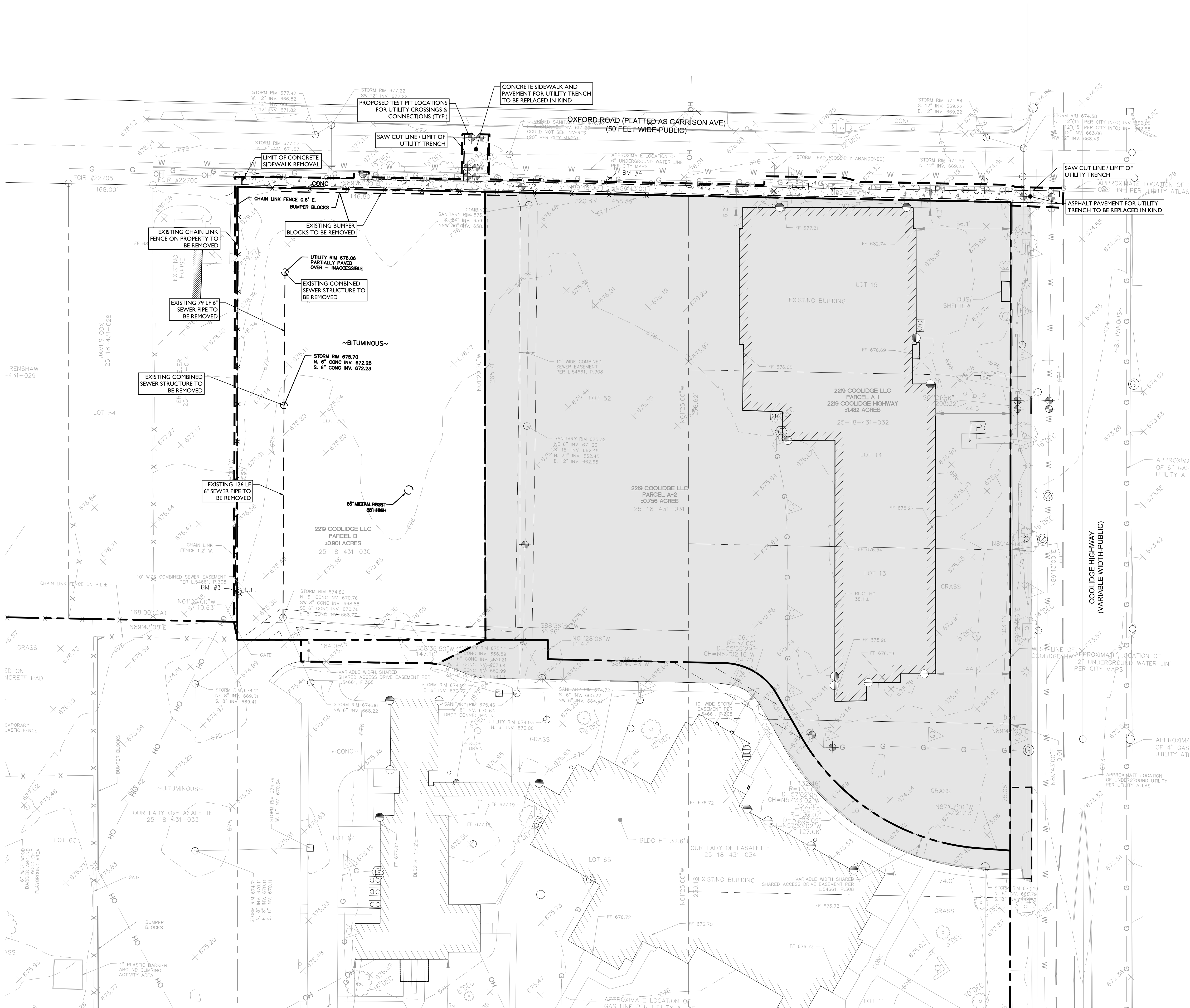
MG

MG

FOR SITE PLAN APPROVAL

FOR SITE PLAN SUBMISSION

V:\07101\DET21004-FREDMAN\210 COOLIDGE HIGHWAY\BERKLEY-MICHIGAN\DET21004.DWG



SYMBOL	DESCRIPTION
	FEATURE TO BE REMOVED / DEMOLISHED
	LIMIT OF DISTURBANCE
	PHASE I - DEMOLITION PLAN AREA

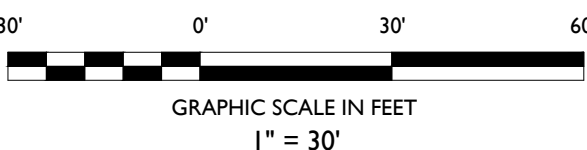
ALL SITE AND RIGHT OF WAY FEATURES ON THIS PLAN ARE TO REMAIN AND BE PROTECTED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC. IF SIGNIFICANT DISCREPANCIES ARE DISCERNED BETWEEN THIS PLAN AND FIELD CONDITIONS.



Know what's below
Call before you dig.

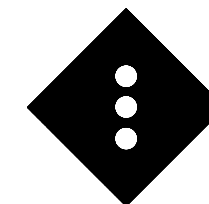
DEMOLITION NOTES

- THE WORK REFLECTED ON THE DEMOLITION PLAN IS TO PROVIDE GENERAL INFORMATION TOWARDS THE EXISTING ITEMS TO BE DEMOLISHED AND/OR REMOVED. THE CONTRACTOR IS RESPONSIBLE TO REVIEW THE ENTIRE PLAN SET AND ASSOCIATED REPORTS/REFERENCE DOCUMENTS, INCLUDING ALL DEMOLITION ACTIVITIES AND INCIDENTAL TASKS NECESSARY TO COMPLETE THE SITE IMPROVEMENTS.
- THE CONTRACTOR IS RESPONSIBLE TO DETERMINE THE MEANS AND METHODS OF DEMOLITION ACTIVITIES.
- EXPLOSIVES SHALL NOT BE USED UNLESS WRITTEN CONSENT FROM BOTH THE OWNER AND ANY APPLICABLE GOVERNING AGENCY IS OBTAINED BEFORE THE START OF ANY EXPLOSIVE PROGRAM. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN ALL LOCAL, STATE, AND FEDERAL PERMITS. ADDITIONALLY, THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL SEISMIC TESTING AS REQUIRED AND ANY DAMAGES AS THE RESULT OF SAID DEMOLITION PRACTICES.
- ALL DEMOLITION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL CODES. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL UTILITIES ARE DISCONNECTED IN ACCORDANCE WITH THE UTILITY AUTHORITY'S REQUIREMENTS PRIOR TO STARTING THE DEMOLITION OF ANY STRUCTURE. ALL EXCAVATIONS ASSOCIATED WITH DEMOLISHED STRUCTURES OR REMOVED TANKS SHALL BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO SUPPORT SITE AND BUILDING IMPROVEMENTS. A GEOTECHNICAL ENGINEER SHOULD BE PRESENT DURING BACKFILLING ACTIVITIES TO OBSERVE AND CERTIFY THAT BACKFILL MATERIAL WAS COMPACTED TO A SUITABLE CONDITION.
- DEMOLISHED DEBRIS SHALL NOT BE BURIED ON SITE. ALL WASTE/DEBRIS GENERATED FROM DEMOLITION ACTIVITIES SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL RECORDS OF THE DISPOSAL TO DEMONSTRATE COMPLIANCE WITH THE ABOVE REGULATIONS.
- CONTRACTOR IS RESPONSIBLE TO VERIFY AND EVALUATE THE CONCRETE SIDEWALK FLAG LOCATION AND CONDITION PRIOR TO REMOVAL.
- ALL SIDEWALK REPLACED WITHIN OXFORD ROAD & COOLIDGE HWY RIGHT-OF-WAY SHALL BE REPLACED IN KIND AND IN ACCORDANCE TO THE STANDARDS OF THE CITY OF BERKLEY.
- ANY EXISTING PRIVATE SEWER LATERALS NOT BEING UTILIZED SHALL BE CUT AND ABANDONED WITHIN 24 INCHES OF THE COMBINED SEWER MAIN.



NOT APPROVED FOR CONSTRUCTION

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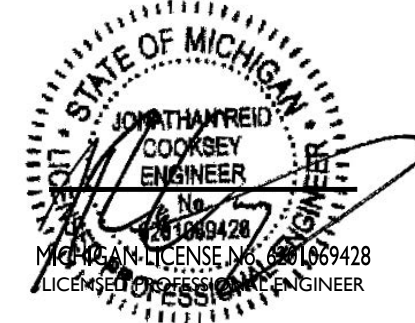
Phone 248.247.1115

SITE DEVELOPMENT PLANS

THE IVY APARTMENTS

**PROPOSED RESIDENTIAL
COMMUNITY**

PARCEL ID: 25-18-431-030
LOT 53 OXFORD ROAD
CITY OF BERKLEY
OAKLAND COUNTY, MICHIGAN 48072



STONEFIELD
engineering & design

SCALE: 1" = 30' PROJECT ID: DET-210004

TITLE:

DEMOLITION PLAN

DRAWING:

C-3

DESCRIPTION

DATE

ISSUE

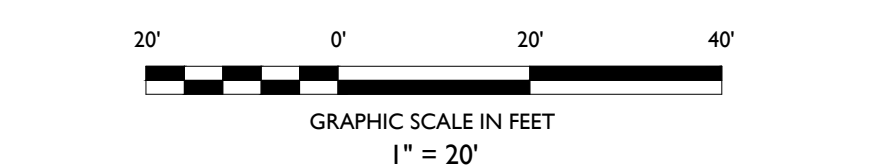
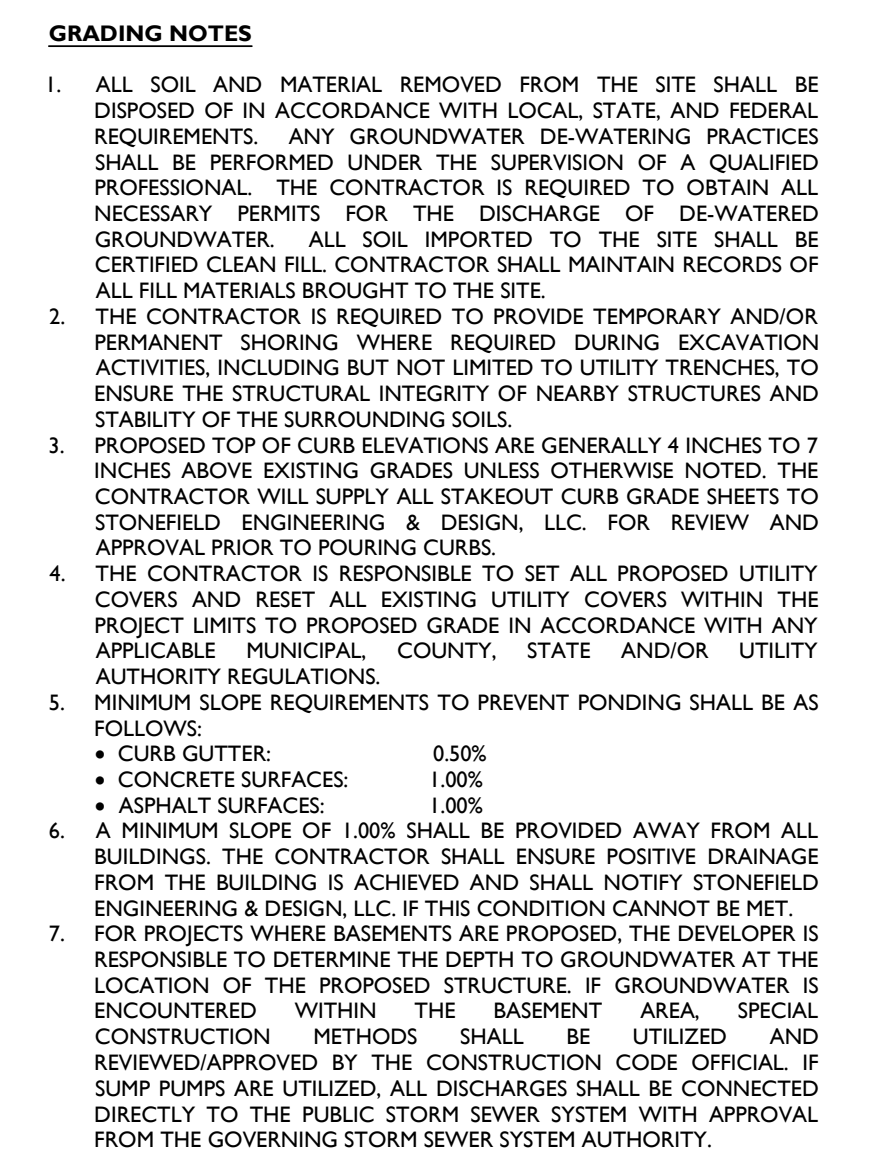
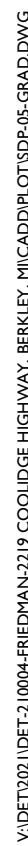
BY

MG

MG

FOR SITE PLAN APPROVAL

FOR SITE PLAN SUBMISSION



Jonathan Reid
Professional Engineer
State of Michigan
License No. 1069428

**OXFORD ROAD (PLATTED AS GARRISON AVE)
(50 FEET WIDE-PUBLIC)**

PROPOSED DRAINAGE AREA (D-107)
 2,399 SF = IMPERVIOUS AREAS
 1,882 SF = PERVIOUS AREA
 4,281 SF = TOTAL AREA C = 0.61

PROPOSED DRAINAGE AREA (OVERALL)
 29,345 SF = IMPERVIOUS AREAS
 4,660 SF = PERVIOUS AREA
 34,005 SF = TOTAL AREA C = 0.81

PROPOSED DRAINAGE AREA (D-106)
 11,143 SF = IMPERVIOUS AREAS
 7,242 SF = ROOF AREA
 1,544 SF = PERVIOUS AREA
 19,929 SF = TOTAL AREA C = 0.85

PROPOSED DRAINAGE AREA (D-105)
 8,561 SF = IMPERVIOUS AREAS
 1,234 SF = PERVIOUS AREA
 9,795 SF = TOTAL AREA C = 0.82

PROPOSED 4" STORMWATER CATCH BASIN NO. D-107
 T.C. 676.75
 RIM: 676.25
 12" INVERT (S): 672.06

PROPOSED 4" STORMWATER CATCH BASIN NO. D-106
 RIM: 675.20
 6" INVERT (SE): 672.20
 6" INVERT (NE): 672.20
 12" INVERT (N): 670.83
 12" INVERT (S): 670.73

PROPOSED 4" STORMWATER CATCH BASIN NO. D-105
 RIM: 675.10
 12" INVERT (N): 669.55
 12" INVERT (E): 669.45

PROPOSED 4" STORMWATER MANHOLE NO. D-104
 RIM: 676.00
 12" INVERT (W): 668.54
 15" INVERT (NE): 668.44

PROPOSED 123 LF 12" HDPE @ 1.00% SLOPE

PROPOSED 66 LF 6" HDPE ROOF LEADER @ 1.00% SLOPE

PROPOSED 63 LF 6" HDPE ROOF LEADER @ 1.00% SLOPE

PROPOSED 118 LF 12" HDPE @ 1.00% SLOPE

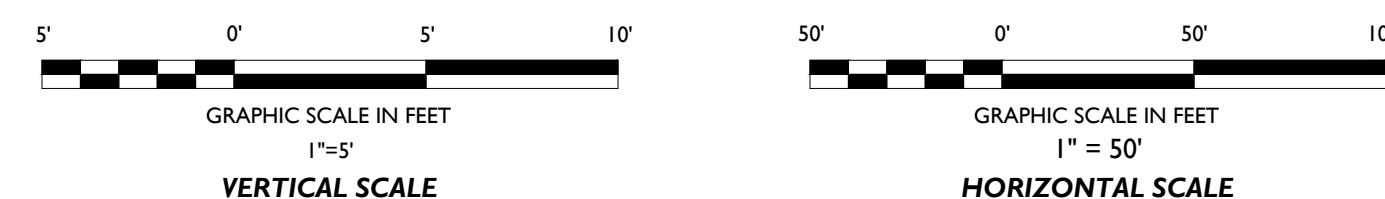
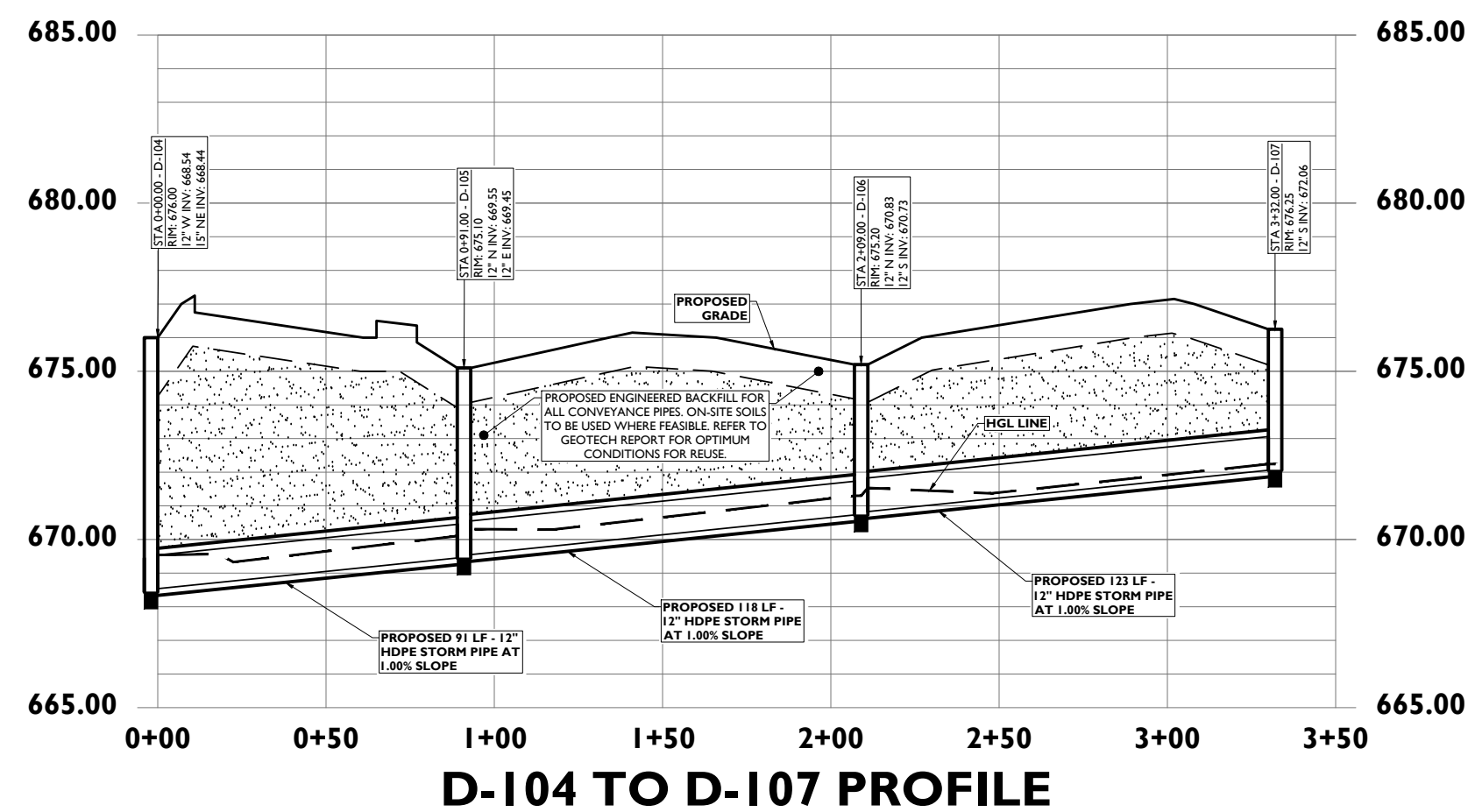
PROPOSED 92 LF 12" HDPE @ 1.00% SLOPE

PROPOSED MODIFIED STORM INLET RIM ELEVATION & REPLACE WITH MANHOLE COVER

10" WIDE COMBINED SEWER EASEMENT PER L.54661, P.308

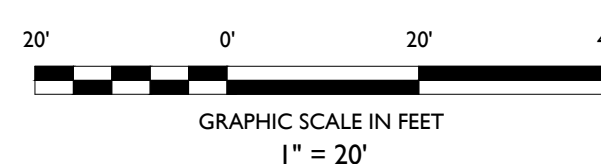
VARIABLE-WIDTH, SHARED SHARED ACCESS DRIVE EASEMENT PER L.54661, P.308

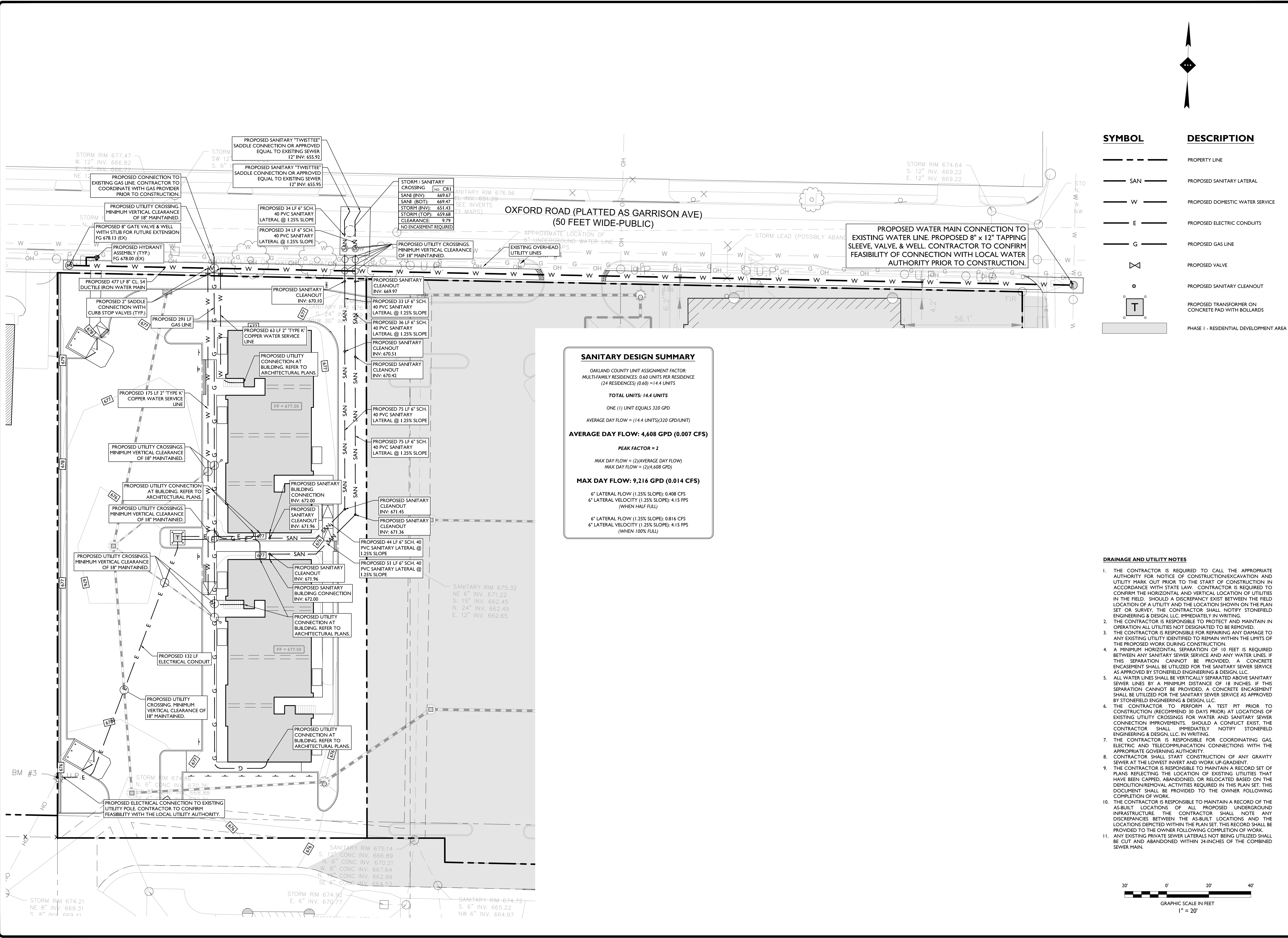
THE CONTRACTOR IS TO INSTALL "FINGER" OR "STUB" DRAINS PER THE GEOTECHNICAL INVESTIGATION REPORT AT ALL CATCH BASINS, MANHOLES, AND BEHIND CURB OF LANDSCAPE ISLANDS.



1. THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR STORMWATER IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE STONEFIELD DEVELOPMENT ENGINEER.
2. CONTRACTOR SHALL START CONSTRUCTION OF STORM LINES AT THE LOWEST INVERT AND WORK UP-GRADIENT.
3. THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AGENCIES FOR NEARBY UTILITY LOCATIONS (ELECTRICITY AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION) IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY. THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
4. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF THE PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY.

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

[illegible]



SYMBOL	DESCRIPTION
---	PROPERTY LINE
SAN	PROPOSED SANITARY LATERAL
W	PROPOSED DOMESTIC WATER SERVICE
E	PROPOSED ELECTRIC CONDUITS
G	PROPOSED GAS LINE
Valve Symbol	PROPOSED VALVE
Cleanout Symbol	PROPOSED SANITARY CLEANOUT
Transformer Symbol	PROPOSED TRANSFORMER ON CONCRETE PAD WITH BOLLARDS
Shaded Area	PHASE I - RESIDENTIAL DEVELOPMENT AREA

SANITARY DESIGN SUMMARY

OAKLAND COUNTY UNIT ASSIGNMENT FACTOR:
MULTI-FAMILY RESIDENCES: 0.60 UNITS PER RESIDENCE
(24 RESIDENCES) (0.60) = 14.4 UNITS

TOTAL UNITS: 14.4 UNITS

ONE (1) UNIT EQUALS 320 GPD

AVERAGE DAY FLOW = (14.4 UNITS)(320 GPD/UNIT)

AVERAGE DAY FLOW: 4,608 GPD (0.007 CFS)

PEAK FACTOR = 2

MAX DAY FLOW = (2)(AVERAGE DAY FLOW)
MAX DAY FLOW = (2)(4,608 GPD)

MAX DAY FLOW: 9,216 GPD (0.014 CFS)

4" LATERAL FLOW (1.25% SLOPE): 0.408 CFS
6" LATERAL VELOCITY (1.25% SLOPE): 4.15 FPS
(WHEN HALF FULL)

6" LATERAL FLOW (1.25% SLOPE): 0.816 CFS
6" LATERAL VELOCITY (1.25% SLOPE): 4.15 FPS
(WHEN 100% FULL)

- DRAINAGE AND UTILITY NOTES**
- THE CONTRACTOR IS REQUIRED TO CALL THE APPROPRIATE AUTHORITY FOR NOTICE OF CONSTRUCTION/EXCAVATION AND UTILITY MARK OUT PRIOR TO THE START OF CONSTRUCTION IN ACCORDANCE WITH STATE LAW. CONTRACTOR IS REQUIRED TO CONFIRM THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE FIELD. SHOULD A DISCREPANCY EXIST BETWEEN THE FIELD LOCATION OF A UTILITY AND THE LOCATION SHOWN ON THE PLAN SET OR SURVEY, THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IMMEDIATELY IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN IN OPERATION ALL UTILITIES NOT DESIGNATED TO BE REMOVED.
 - THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO ANY EXISTING UTILITY IDENTIFIED TO REMAIN WITHIN THE LIMITS OF THE PROPOSED WORK DURING CONSTRUCTION.
 - A MINIMUM HORIZONTAL SEPARATION OF 10 FEET IS REQUIRED BETWEEN ANY SANITARY SEWER SERVICE AND ANY WATER LINES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - ALL WATER LINES SHALL BE VERTICALLY SEPARATED ABOVE SANITARY SEWER LINES BY A MINIMUM DISTANCE OF 18 INCHES. IF THIS SEPARATION CANNOT BE PROVIDED, A CONCRETE ENCASMENT SHALL BE UTILIZED FOR THE SANITARY SEWER SERVICE AS APPROVED BY STONEFIELD ENGINEERING & DESIGN, LLC.
 - THE CONTRACTOR TO PERFORM A TEST PIT PRIOR TO CONSTRUCTION (RECOMMEND 30 DAYS PRIOR) AT LOCATIONS OF EXISTING UTILITY CROSSINGS FOR WATER AND SANITARY SEWER CONNECTION IMPROVEMENTS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING.
 - THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRIC AND TELECOMMUNICATION CONNECTIONS WITH THE APPROPRIATE GOVERNING AUTHORITY.
 - CONTRACTOR SHALL START CONSTRUCTION OF ANY GRAVITY SEWER AT THE LOWEST INVERT AND WORK UP-GRADE.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD SET OF PLANS REFLECTING THE LOCATION OF EXISTING UTILITIES THAT HAVE BEEN CAPPED, ABANDONED, OR RELOCATED BASED ON THE DEMOLITION/REMOVAL ACTIVITIES REQUIRED IN THIS PLAN SET. THIS DOCUMENT SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN A RECORD OF THE AS-BUILT LOCATIONS OF ALL PROPOSED UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR SHALL NOTE ANY DISCREPANCIES BETWEEN THE AS-BUILT LOCATIONS AND THE LOCATIONS DEPICTED WITHIN THE PLAN SET. THIS RECORD SHALL BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF WORK.
 - ANY EXISTING PRIVATE SEWER LATERALS NOT BEING UTILIZED SHALL BE CUT AND ABANDONED WITHIN 24-INCHES OF THE COMBINED SEWER MAIN.

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Phone 248.247.1115

SITE DEVELOPMENT PLANS

THE IVY APARTMENTS

PROPOSED RESIDENTIAL COMMUNITY

PARCEL ID: 25-18-431-030
LOT 53 OXFORD ROAD
CITY OF BERKLEY
OAKLAND COUNTY, MICHIGAN 48072

STONEFIELD
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SCALE: 1" = 20'

PROJECT ID: DET-210004

TITLE:

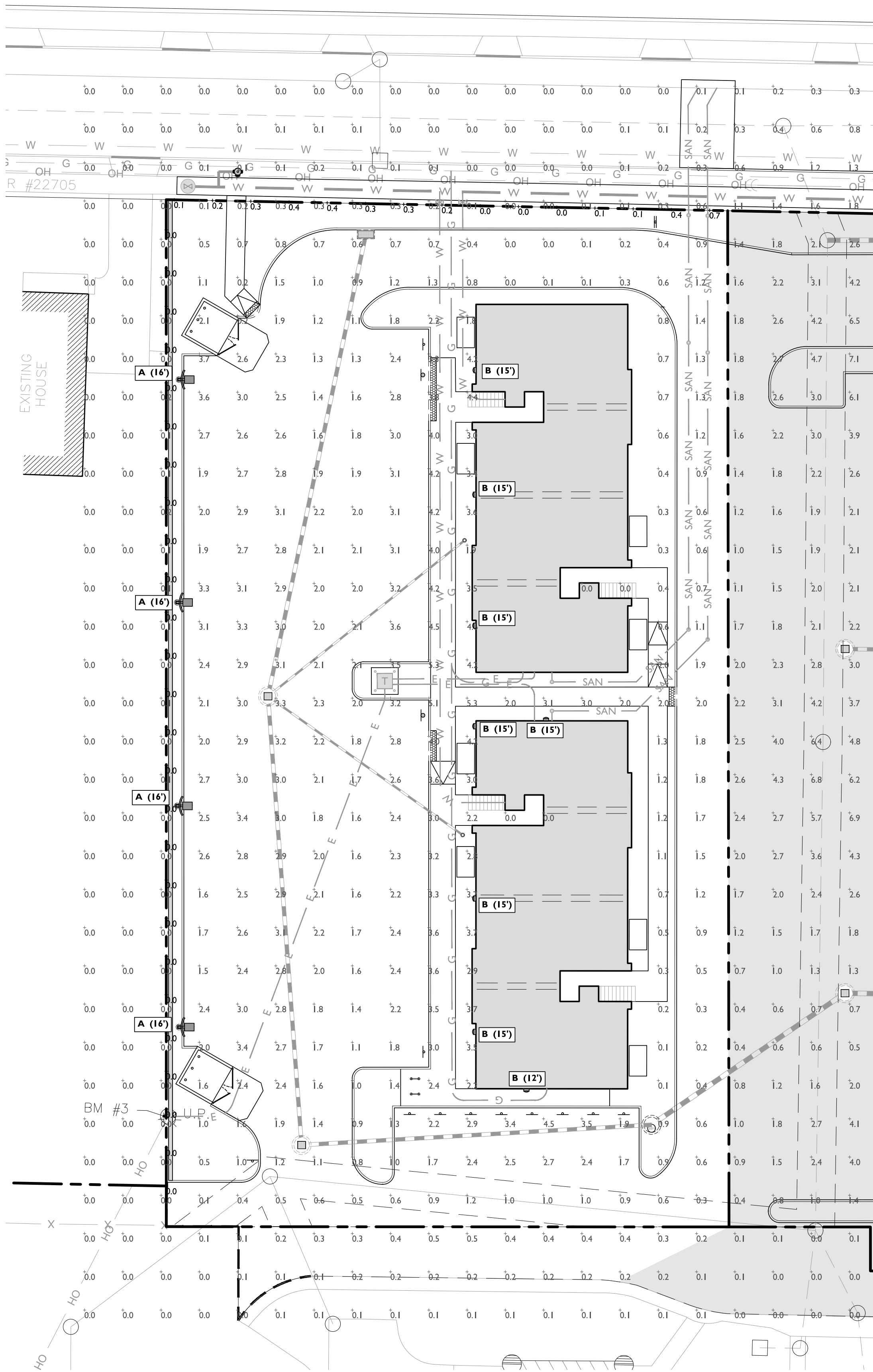
UTILITY PLAN

DRAWING:

C-7

FOR SITE PLAN APPROVAL	FOR SITE PLAN SUBMISSION	DESCRIPTION
MG	MG	BY
03/25/2022	12/12/2021	DATE
2	1	ISSUE

\\017001\007121004\FRMDMA2214\COULDER\HIGHWAY\BERKLEY\HICAD\PLAN\OTD\BLG\LIGHTING



SYMBOL	DESCRIPTION
A (XX')	PROPOSED LIGHTING FIXTURE (MOUNTING HEIGHT)
+XX	PROPOSED LIGHTING INTENSITY (FOOTCANDLES)
PHASE I - RESIDENTIAL DEVELOPMENT AREA	

PROPOSED LUMINARIES SCHEDULE								
SYMBOL	LABEL	QUANTITY	LIGHTING	DISTRIBUTION	LLF	WATTS	MANUFACTURER	IES FILE
	A	4	MIRADA MEDIUM - LED AREA POLE LIGHT WITH INTEGRAL LOUVER HOUSE SIDE SHIELD 9 LUMENS - 3,000 K	FT	0.90	69 W	LSI	MRM-LED-09L-SIL-FT-30-70CRI-IL.ies
	B	8	MIRADA - LED WALL SCONCE 8 LUMENS - 3,000 K	FT	0.90	62 W	LSI	XWM-FT-LED-8L-30.ies



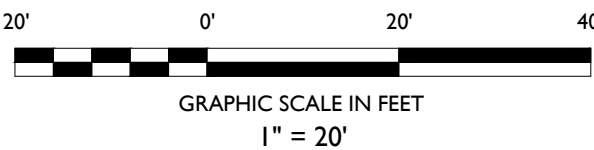
FIXTURES 'A'



FIXTURE 'B'

LIGHTING REQUIREMENTS	
REQUIREMENT	PROPOSED
§ 138-143(3): LIGHTS ON POLES, INCLUDING THE BASE, SHALL NOT BE TALLER THAN THE BUILDING WHOSE AREA THEY ILLUMINATE NOR TALLER THAN 20 FEET, WHICHEVER IS SHORTER.	16 FT
§ 138-143(6)(2): LEVEL OF LIGHTING SHALL NOT EXCEED 0.5 FC AT ANY RESIDENTIAL PROPERTY LINE OR 1.0 FC AT ANY NON-RESIDENTIAL PROPERTY LINE	PROVIDED
§ 138-223: OFF-STREET PARKING AREAS SHALL BE LIGHTED AND NOT EXCEED A MAXIMUM OF 5.0 FC NOR LESS THAN 1.5 FC AT PAVEMENT LEVEL	PROVIDED

- GENERAL LIGHTING NOTES**
- THE LIGHTING LEVELS DEPICTED WITHIN THE PLAN SET ARE CALCULATED UTILIZING DATA OBTAINED FROM THE LISTED MANUFACTURER. ACTUAL ILLUMINATION LEVELS AND PERFORMANCE OF ANY PROPOSED LIGHTING FIXTURE MAY VARY DUE TO UNCONTROLLABLE VARIABLES SUCH AS WEATHER, VOLTAGE SUPPLY, LAMP TOLERANCE, EQUIPMENT SERVICE LIFE AND OTHER VARIABLE FIELD CONDITIONS.
 - WHERE APPLICABLE, THE EXISTING LIGHT LEVELS DEPICTED WITHIN THE PLAN SET SHALL BE CONSIDERED APPROXIMATE. THE EXISTING LIGHT LEVELS ARE BASED ON FIELD OBSERVATIONS AND THE MANUFACTURER'S DATA OF THE ASSUMED OR MOST SIMILAR LIGHTING FIXTURE MODEL.
 - UNLESS NOTED ELSEWHERE WITHIN THIS PLAN SET, THE LIGHT LOSS FACTORS USED IN THE LIGHTING ANALYSIS ARE AS FOLLOWS:
 - LIGHT EMITTING DIODES (LED): 0.90
 - HIGH PRESSURE SODIUM: 0.72
 - METAL HALIDE: 0.72
 - THE CONTRACTOR SHALL NOTIFY STONEFIELD ENGINEERING & DESIGN, LLC IN WRITING, PRIOR TO THE START OF CONSTRUCTION, OF ANY PROPOSED LIGHTING LOCATIONS THAT CONFLICT WITH EXISTING PROPOSED DRAINAGE, UTILITY, OR OTHER IMPROVEMENTS.
 - THE CONTRACTOR IS RESPONSIBLE TO PREPARE A WIRING PLAN AND PROVIDE ELECTRIC SERVICE TO ALL PROPOSED LIGHTING FIXTURES. THE CONTRACTOR IS REQUIRED TO PREPARE AN AS-BUILT PLAN OF WIRING AND PROVIDE COPIES TO THE OWNER AND STONEFIELD ENGINEERING & DESIGN, LLC.



FOR SITE PLAN APPROVAL

FOR SITE PLAN SUBMISSION

MG

03/25/2022

12/17/2021

2

1

DATE

ISSUE

BY

NOT APPROVED FOR CONSTRUCTION

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SITE DEVELOPMENT PLANS

THE IVY APARTMENTS

PROPOSED RESIDENTIAL COMMUNITY

PARCEL ID: 25-18-431-030

LOT 53 OXFORD ROAD

CITY OF BERKLEY

OAKLAND COUNTY, MICHIGAN 48072

STATE OF MICHIGAN

JOSEPH HANREID

PROFESSIONAL ENGINEER

NO. 6929428

EXPIRATION DATE 12/31/2024

STONEFIELD

engineering & design

SCALE: 1" = 20'

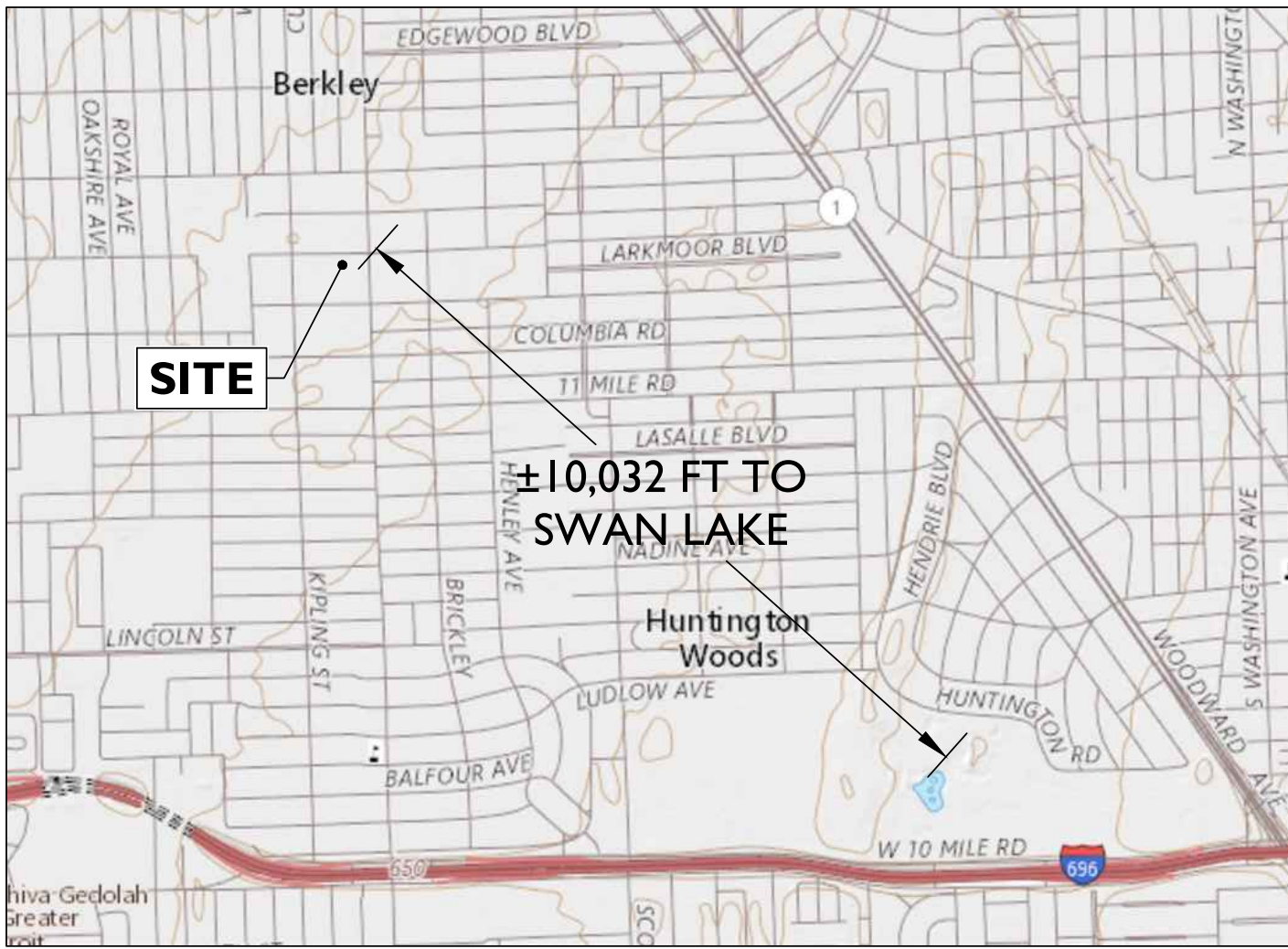
PROJECT ID: DET-210004

TITLE:

LIGHTING PLAN

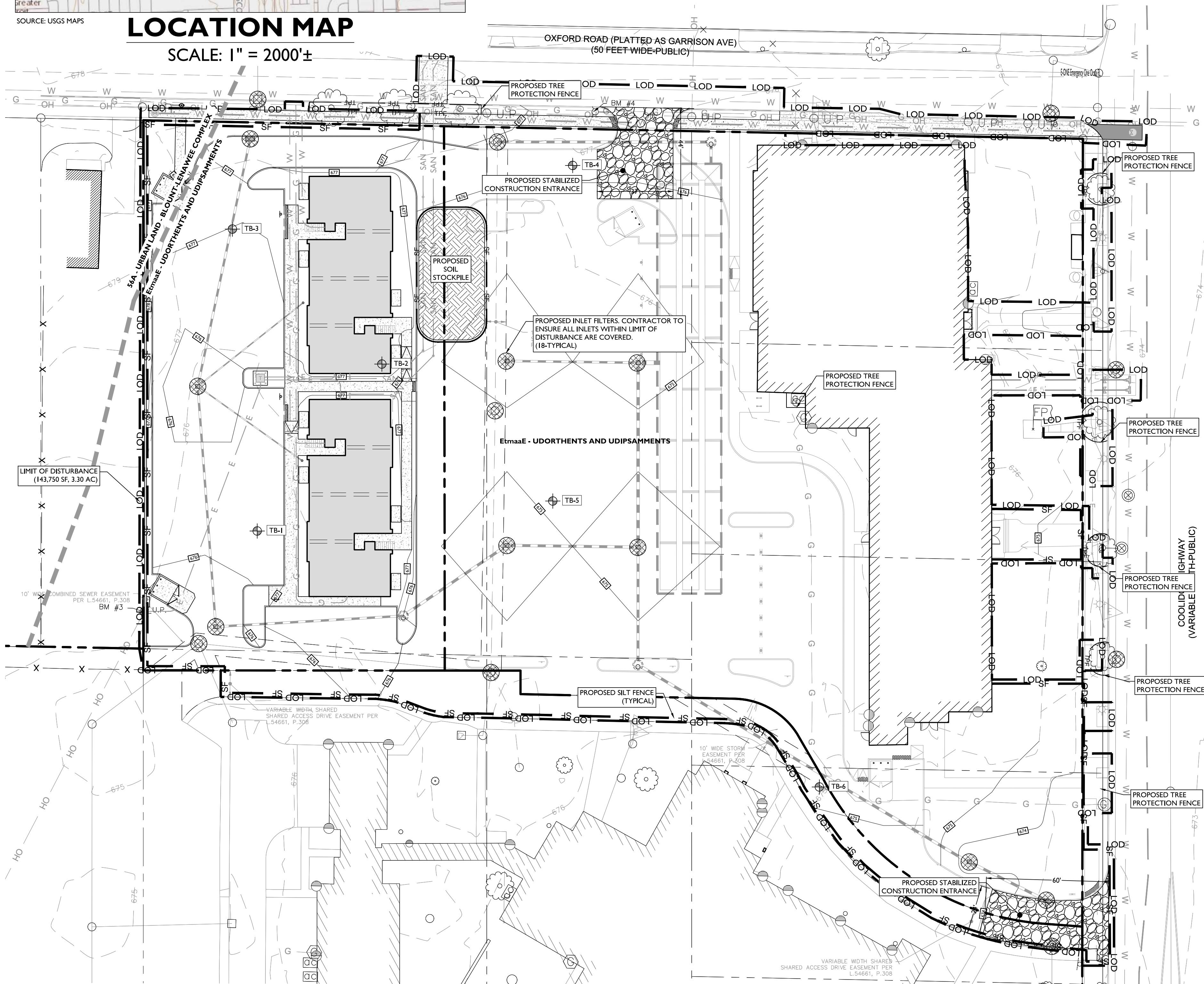
DRAWING:

C-8



LOCATION MAP

SCALE: 1" = 2000'



SEQUENCE OF CONSTRUCTION

1. INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE (2 DAYS).
2. ROUGH GRADING AND TEMPORARY SEEDING (20 DAYS).
3. EXCAVATE AND INSTALL DRAINAGE PIPING, AND INLETS (20 DAYS).
4. INSTALL INLET FILTERS (1 DAY).
5. BUILDING CONSTRUCTION AND SITE IMPROVEMENTS (90 DAYS).
6. CONSTRUCT RIGHT OF WAY IMPROVEMENTS (2 DAYS).
7. LANDSCAPING IMPROVEMENTS AND FINAL SEEDING (7 DAYS).
8. REMOVE SOIL EROSION MEASURES (1 DAY).

NOTE: TIME DURATIONS ARE APPROXIMATE AND ARE INTENDED TO ACT AS A GENERAL GUIDE TO THE CONSTRUCTION TIMELINE. ALL DURATIONS ARE SUBJECT TO CHANGE BY CONTRACTOR. CONTRACTOR SHALL SUBMIT CONSTRUCTION SCHEDULE TO TOWNSHIP AND ENGINEER. CONTRACTOR SHALL PHASE CONSTRUCTION ACCORDINGLY.

LEGAL DESCRIPTION

DESCRIPTION OF A 2.239 ACRE PARCEL OF LAND (PARCEL A) BEING A PART OF LOTS 12 THRU 15, INCLUSIVE, AND A PART OF LOTS 52, 53, 44 AND 65, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN.

ALL OF LOTS 14, 15 AND 52, AND PART OF LOTS 12, 13, 53, 64 AND 65, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE) (50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 75.06 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'11"W 21.13 FEET; THENCE S12°46' FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N01°30'55"W 25.22 FEET; THENCE S41°11' FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N42°02'16"W 34.70 FEET; THENCE S89°49'43"W 104.67 FEET; THENCE N01°28'06"W 11.47 FEET; THENCE S89°30'50"W 36.96 FEET; THENCE N01°29'20"W 265.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 2.239 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

BEGINNING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF LOT 15, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE) (50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 75.06 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'11"W 21.13 FEET; THENCE S12°46' FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N01°30'55"W 25.22 FEET; THENCE S41°11' FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N42°02'16"W 34.70 FEET; THENCE S89°49'43"W 104.67 FEET; THENCE N01°28'06"W 11.47 FEET; THENCE S89°30'50"W 36.96 FEET; THENCE N01°29'20"W 265.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 2.239 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

DESCRIPTION OF A 0.991 ACRE PARCEL OF LAND (PARCEL B) BEING A PART OF LOTS 53 AND 64, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN.

PART OF LOT 53 AND PART OF LOT 64, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN, AND BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF LOT 15, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE) (50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S89°43'00"W 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD FOR A PLACE OF BEGINNING; THENCE S01°29'20"E 265.71 FEET; THENCE S89°30'50"W 147.10 FEET; THENCE N01°25'00"W 368.53 FEET ALONG THE WEST LINE OF LOTS 53 AND 64 OF SAID DENIER ACRES; THENCE N89°43'00"E 146.80 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 0.991 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

DESCRIPTION OF A 3.440 ACRE PARCEL OF LAND (PARCEL C) BEING A PART OF LOTS 11 THRU 13, INCLUSIVE, AND A PART OF LOTS 42 THRU 45, INCLUSIVE, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN.

PART OF LOTS 11 THRU 13, INCLUSIVE, AND PART OF LOTS 42 THRU 45, INCLUSIVE, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE) (50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S89°43'00"W 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD; THENCE S01°29'20"E 265.71 FEET FOR A PLACE OF BEGINNING; THENCE N89°36'50"E 36.96 FEET; THENCE S01°28'06"E 11.47 FEET; THENCE N89°49'43"E 104.67 FEET; THENCE S41°11' FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING S42°02'16"E 34.70 FEET; THENCE S31°30'35"E 25.22 FEET; THENCE S12°46' FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING S57°33'02"E 127.06 FEET; THENCE S87°07'11"E 21.13 FEET; THENCE S01°21'56"E 131.26 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE S89°43'00"W 468.16 FEET ALONG THE NORTH RIGHT OF WAY LINE OF HARVARD ROAD (50 FEET WIDE); THENCE N01°25'00"W 146.80 FEET; THENCE N89°43'00"E 42.01 FEET; THENCE N01°25'00"W 93.02 FEET ALONG THE WEST LINE OF LOT 43 OF SAID DENIER ACRES; THENCE N89°43'00"E 168.00 FEET ALONG THE NORTH LINE OF SAID LOT 43; THENCE S01°25'00"E 104.61 FEET ALONG THE EAST LINE OF SAID LOT 43; THENCE N89°30'50"E 147.10 FEET TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 3.440 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

COMMENCING AT THE POINT OF INTERSECTION OF THE NORTH LINE OF LOT 15, DENIER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE) (50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S89°43'00"W 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD; THENCE S01°29'20"E 265.71 FEET FOR A PLACE OF BEGINNING; THENCE N89°36'50"E 36.96 FEET; THENCE S01°28'06"E 11.47 FEET; THENCE N89°49'43"E 104.67 FEET; THENCE S41°11' FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING S42°02'16"E 34.70 FEET; THENCE S31°30'35"E 25.22 FEET; THENCE S12°46' FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING S57°33'02"E 127.06 FEET; THENCE S87°07'11"E 21.13 FEET; THENCE S01°21'56"E 131.26 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE S89°43'00"W 468.16 FEET ALONG THE NORTH RIGHT OF WAY LINE OF HARVARD ROAD (50 FEET WIDE); THENCE N01°25'00"W 146.80 FEET; THENCE N89°43'00"E 42.01 FEET; THENCE N01°25'00"W 93.02 FEET ALONG THE WEST LINE OF LOT 43 OF SAID DENIER ACRES; THENCE N89°43'00"E 168.00 FEET ALONG THE NORTH LINE OF SAID LOT 43; THENCE S01°25'00"E 104.61 FEET ALONG THE EAST LINE OF SAID LOT 43; THENCE N89°30'50"E 147.10 FEET TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 3.440 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

SYMBOL

---	PROPERTY BOUNDARY
---	ADJACENT PROPERTY BOUNDARY
---	PROPOSED LIMIT OF DISTURBANCE
---	PROPOSED SILT FENCE
---	PROPOSED TREE PROTECTION FENCE
---	PROPOSED STOCKPILE & EQUIPMENT STORAGE
---	PROPOSED STABILIZED CONSTRUCTION ENTRANCE
---	PROPOSED INLET PROTECTION FILTER

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR SOIL EROSION AND SEDIMENT CONTROL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL AIR QUALITY STANDARDS.
3. THE CONTRACTOR IS RESPONSIBLE TO INSPECT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER A PRECIPITATION EVENT GREATER THAN 1 INCH. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG ON SITE AND DOCUMENT CORRECTIVE ACTION TAKEN THROUGHOUT THE COURSE OF CONSTRUCTION AS REQUIRED.

ENVIRONMENTAL NOTES:

1. THERE ARE NO RIPARIAN ZONES ON SITE.
2. NO PORTION OF THIS SITE LIE WITHIN A FLOOD HAZARD AREA.
3. THERE ARE NO WETLANDS ON SITE.
4. THERE ARE NO STREAMS OR WATERWAYS ON SITE.
5. ALL ELEVATIONS SHOWN ARE BASED ON NAVD 1988 DATUM.

UDORTHENTS & UDIPSAMMENTS (EtmmaE)

TYPE OF SOIL	UDORTHENTS
HYDROLOGIC SOIL GROUP	C
DEPTH TO RESTRICTIVE LAYER	ABOUT 39 INCHES
SOIL PERMEABILITY	0.00 TO 0.01 IN/HR
DEPTH TO WATER TABLE	> 80 INCHES

TYPE OF SOIL	UDIPSAMMENTS
HYDROLOGIC SOIL GROUP	A
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	2.00 TO 20.00 IN/HR
DEPTH TO WATER TABLE	> 80 INCHES

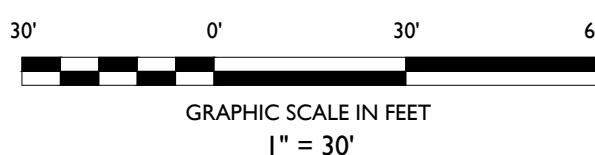
URBAN LAND - BLOUNT - LENAWEE (56A)

TYPE OF SOIL	BLOUNT
HYDROLOGIC SOIL GROUP	C
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	0.06 TO 0.57 IN/HR
DEPTH TO WATER TABLE	ABOUT 12 TO 36 INCHES

TYPE OF SOIL	LENAWEE
HYDROLOGIC SOIL GROUP	C / D
DEPTH TO RESTRICTIVE LAYER	> 80 INCHES
SOIL PERMEABILITY	ABOUT 0.20 TO 0.57 IN/HR
DEPTH TO WATER TABLE	0 INCHES

BENCHMARKS:

- BENCHMARK #1: ARROW ON HYDRANT ON SOUTH SIDE OF SITE ELEVATION: 677.30 (NAVD88)
- BENCHMARK #2: GEAR PIN IN SOUTH FACE OF UTILITY POLE ON SOUTH SIDE OF SITE ELEVATION: 676.10 (NAVD88)
- BENCHMARK #3: GEAR PIN IN EAST FACE OF UTILITY POLE ON WEST SIDE OF SITE ELEVATION: 677.34 (NAVD88)
- BENCHMARK #4: ARROW ON HYDRANT ON NORTH SIDE OF SITE ELEVATION: 679.27 (NAVD88)



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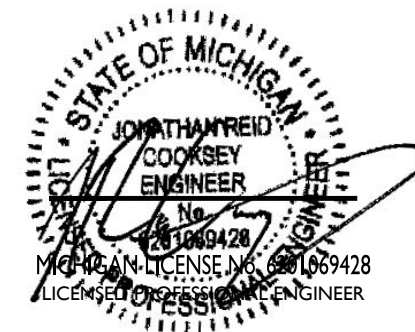
Detroit, MI • Rutherford, NJ • New York, NY
Princeton, NJ • Tampa, FL • Boston, MA
www.stonefielddesign.com

607 Shelby Suite 200, Detroit, MI 48226

Phone 248.247.1115

SITE DEVELOPMENT PLANS
THE IVY APARTMENTS
PROPOSED RESIDENTIAL COMMUNITY

PARCEL ID: 25-18-431-030
CITY OF BERKLEY
OAKLAND COUNTY, MICHIGAN 48072



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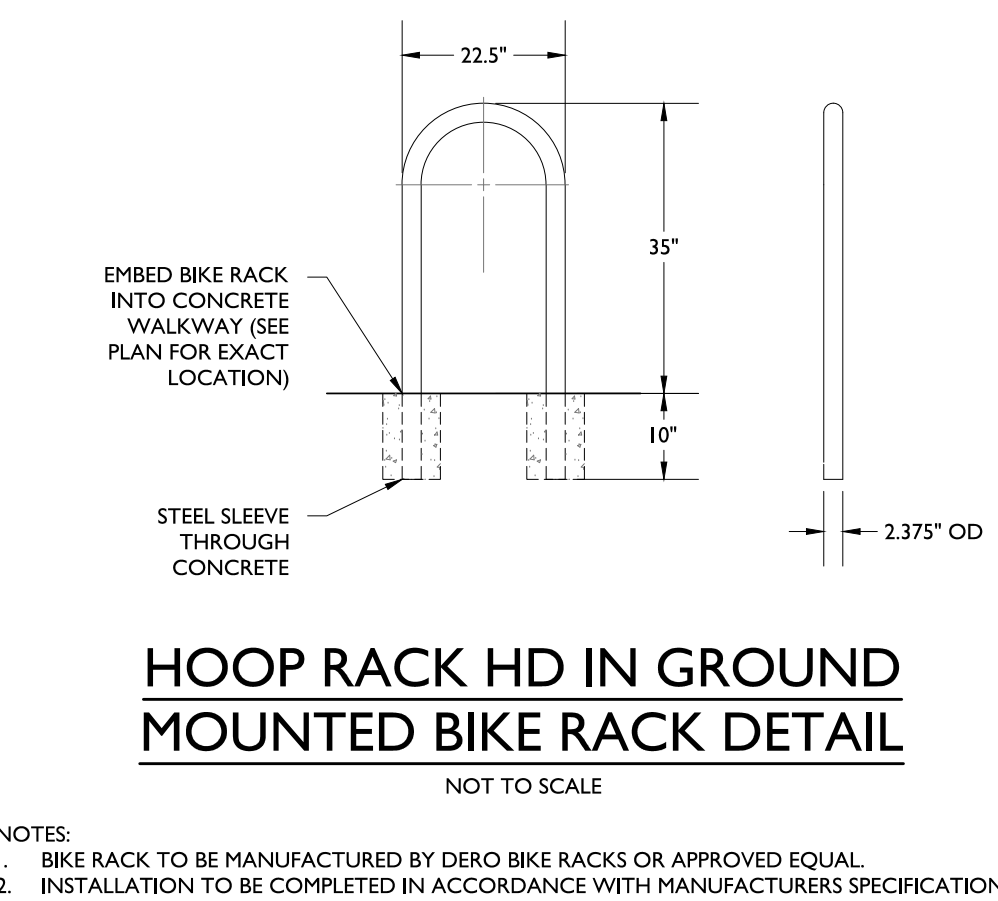
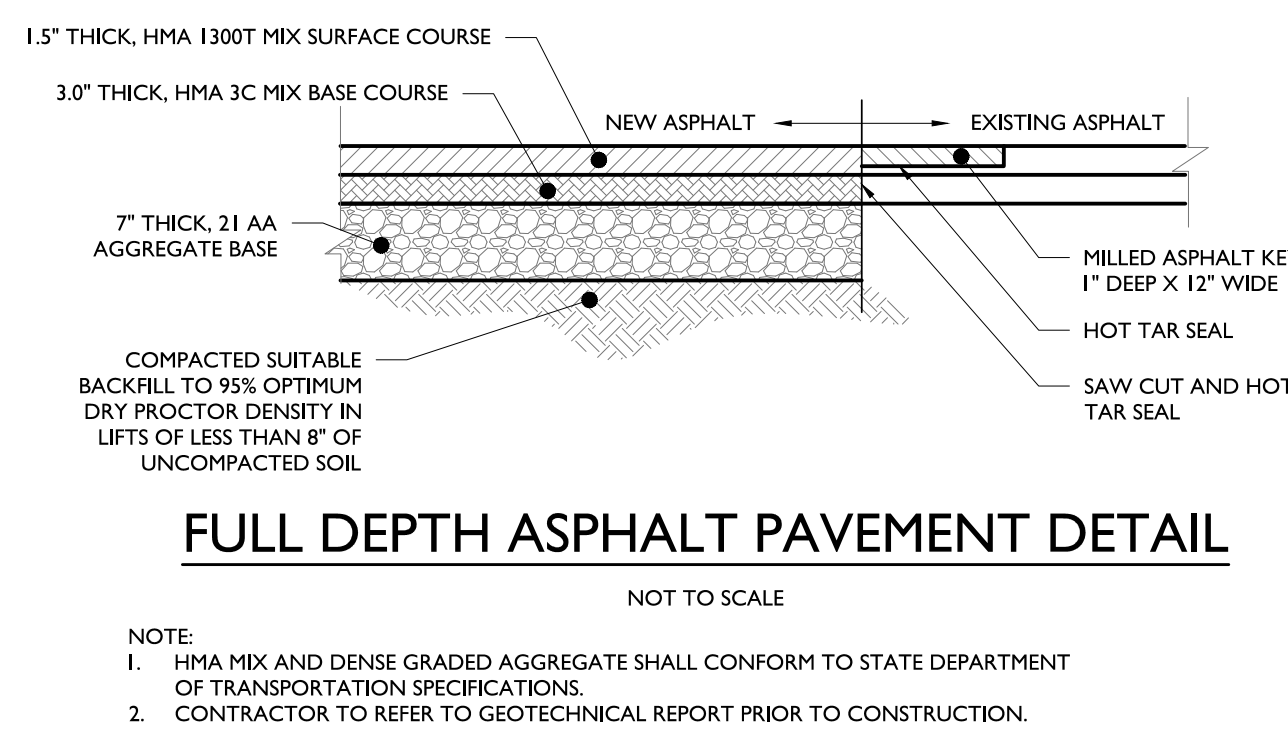
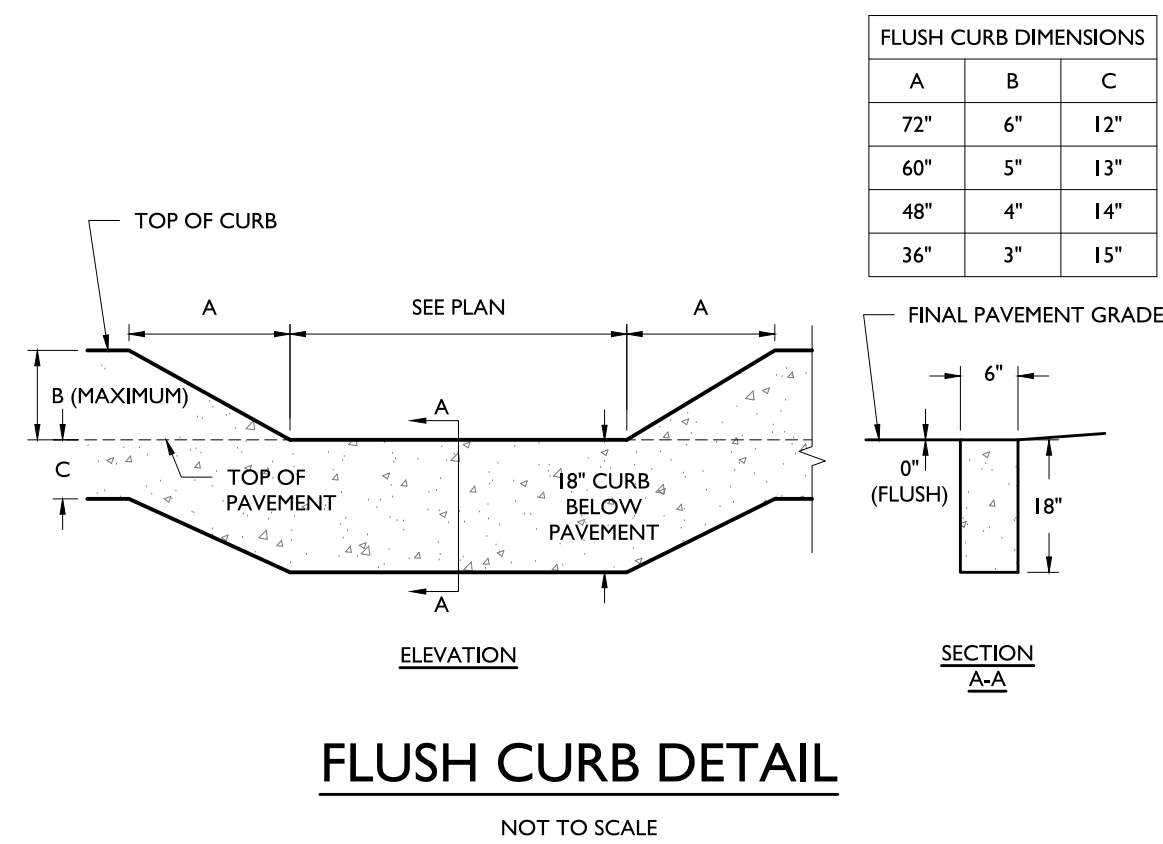
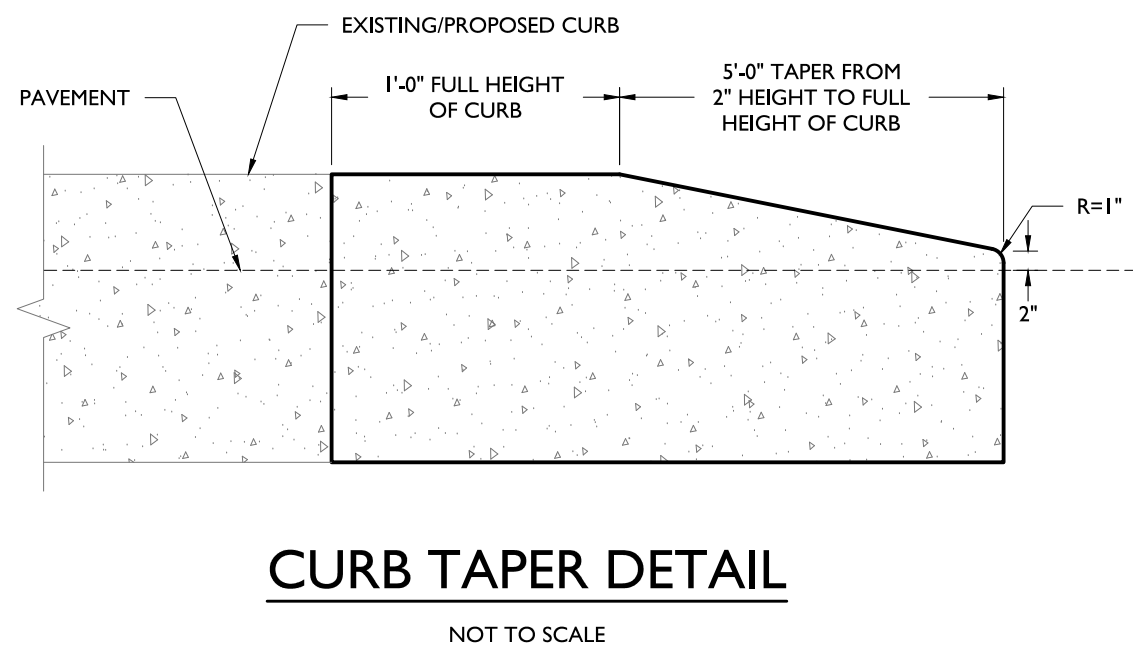
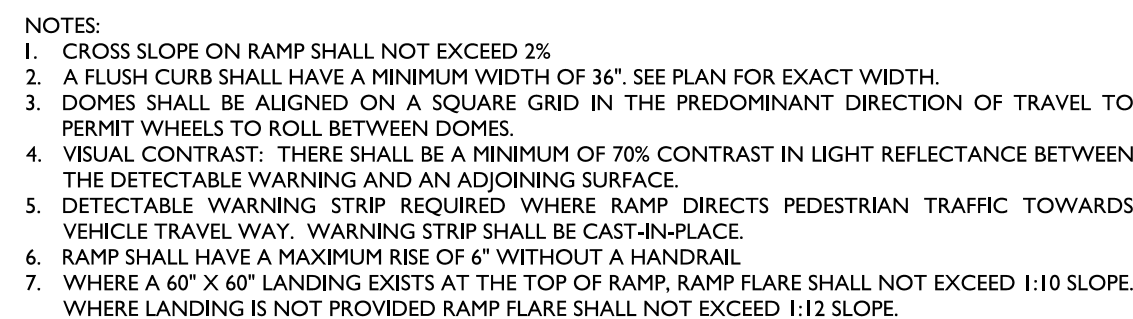
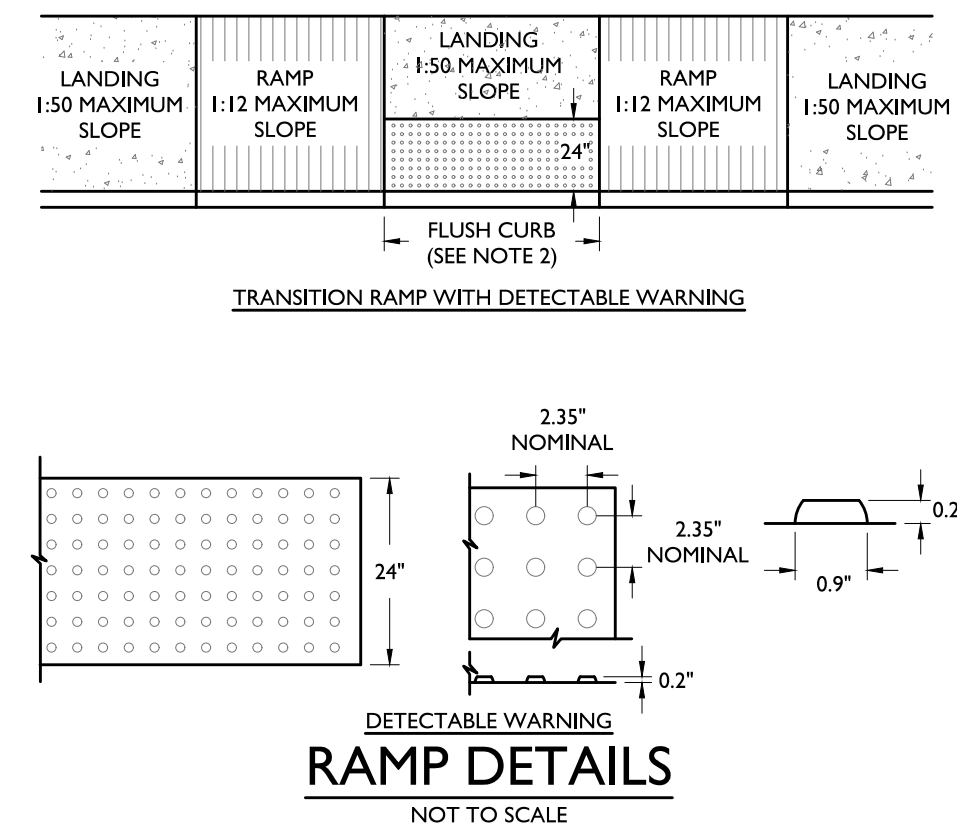
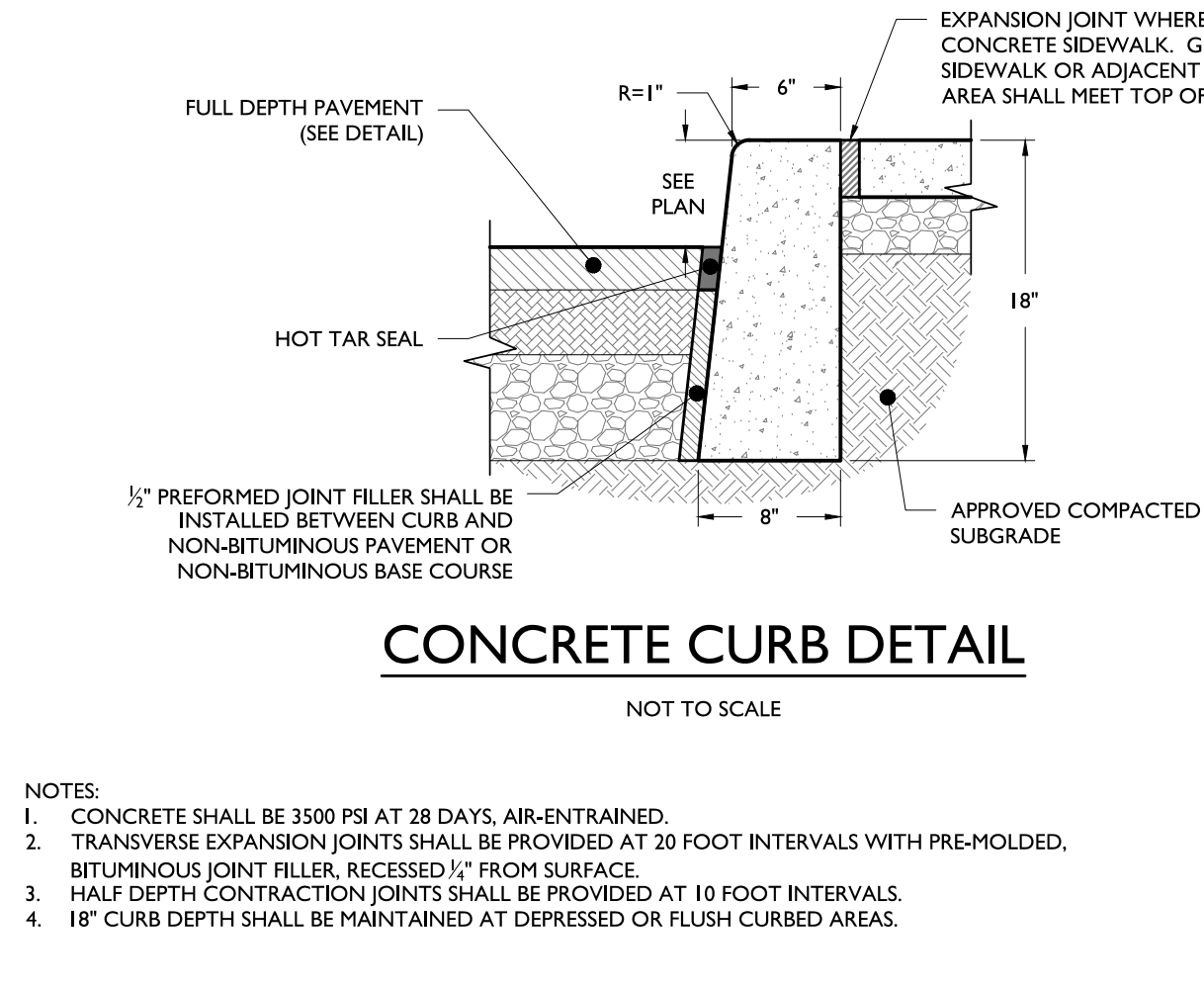
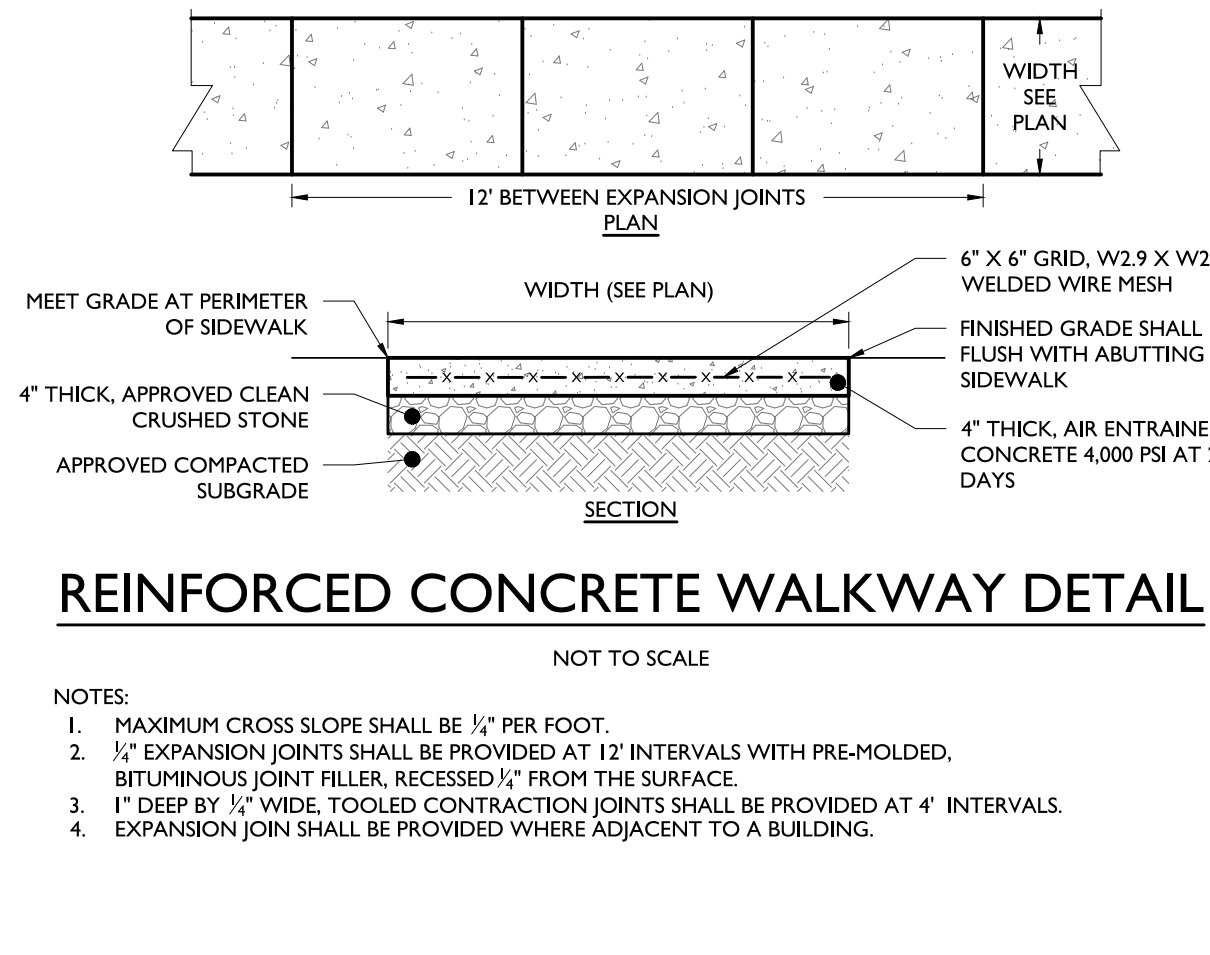
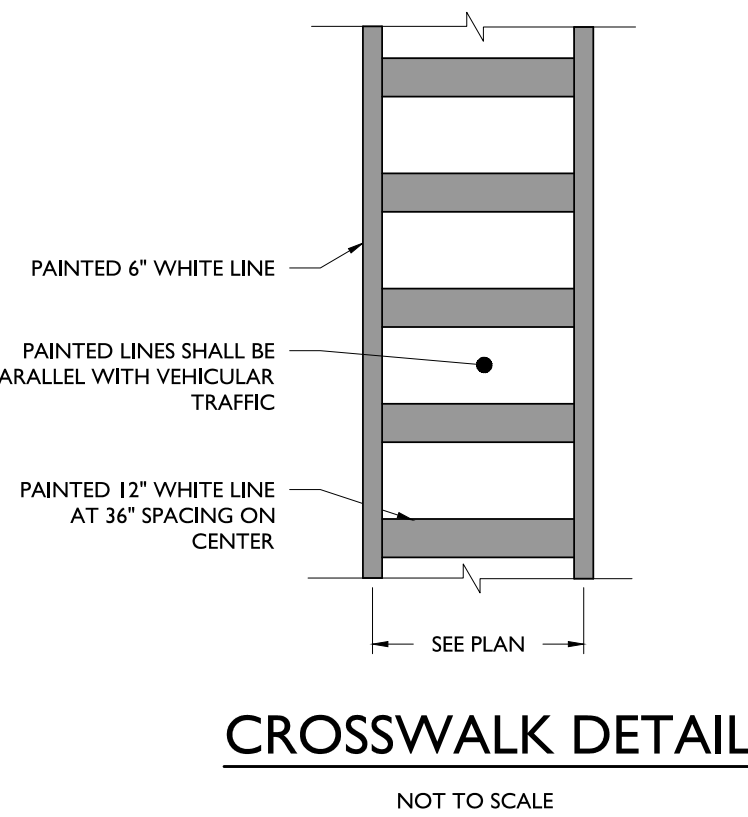
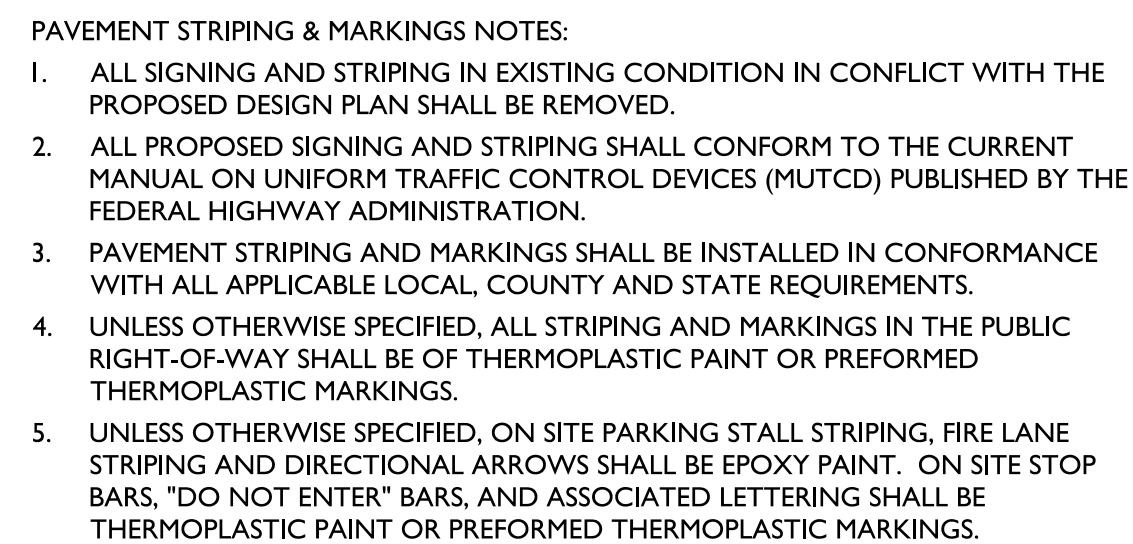
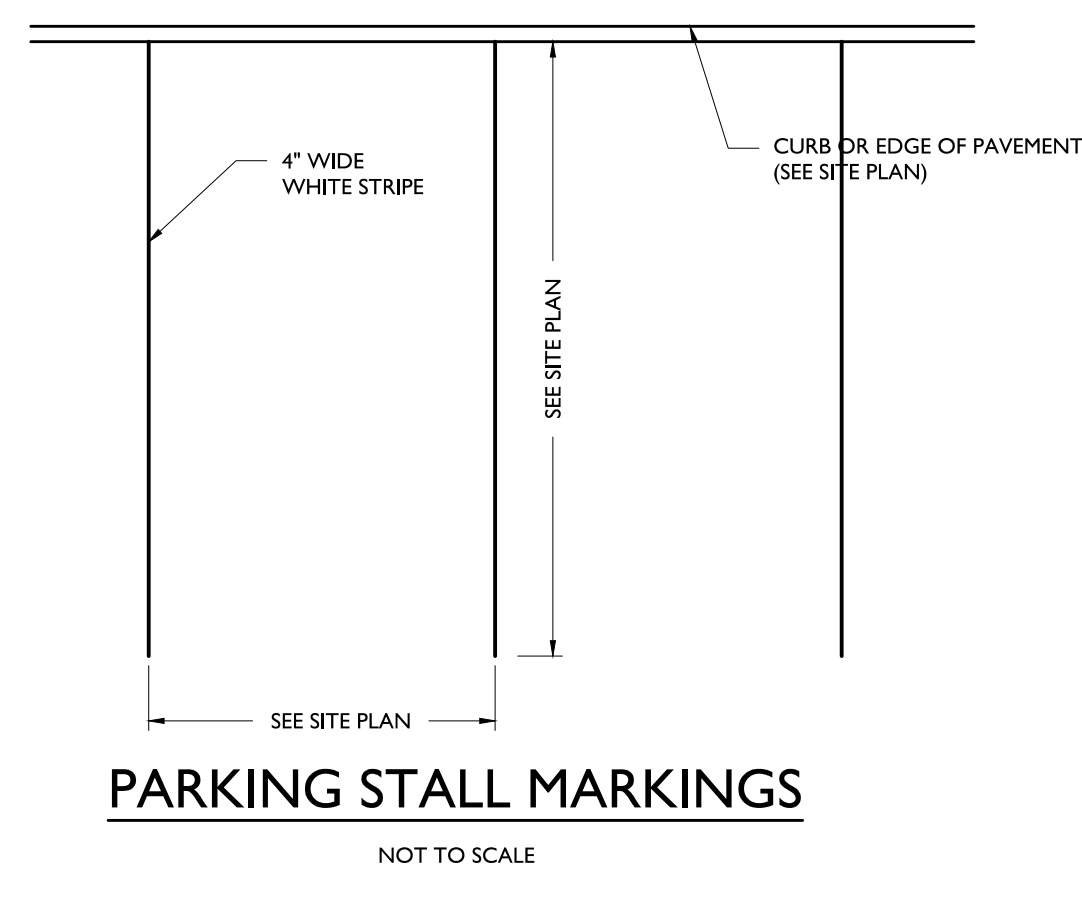
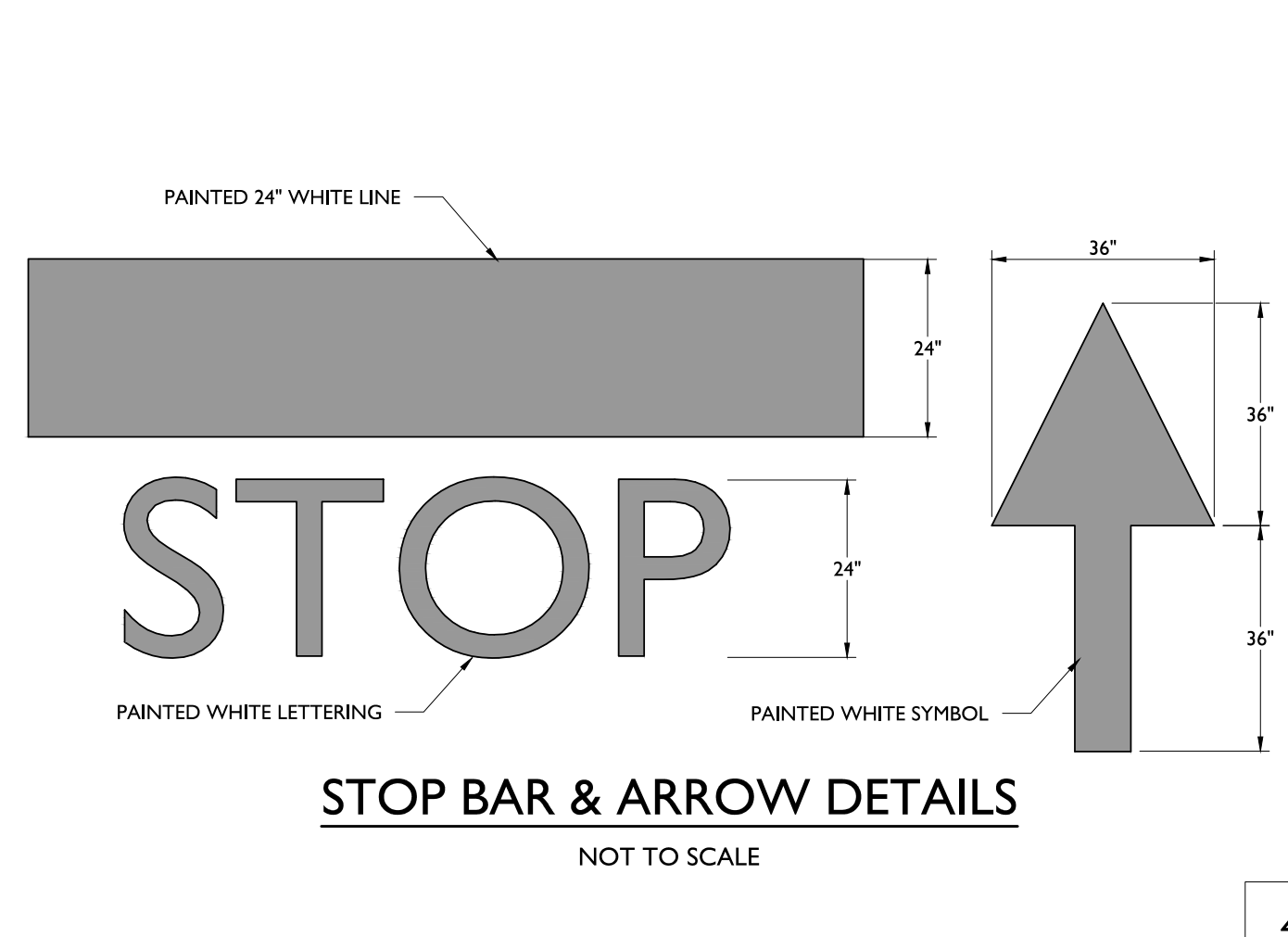
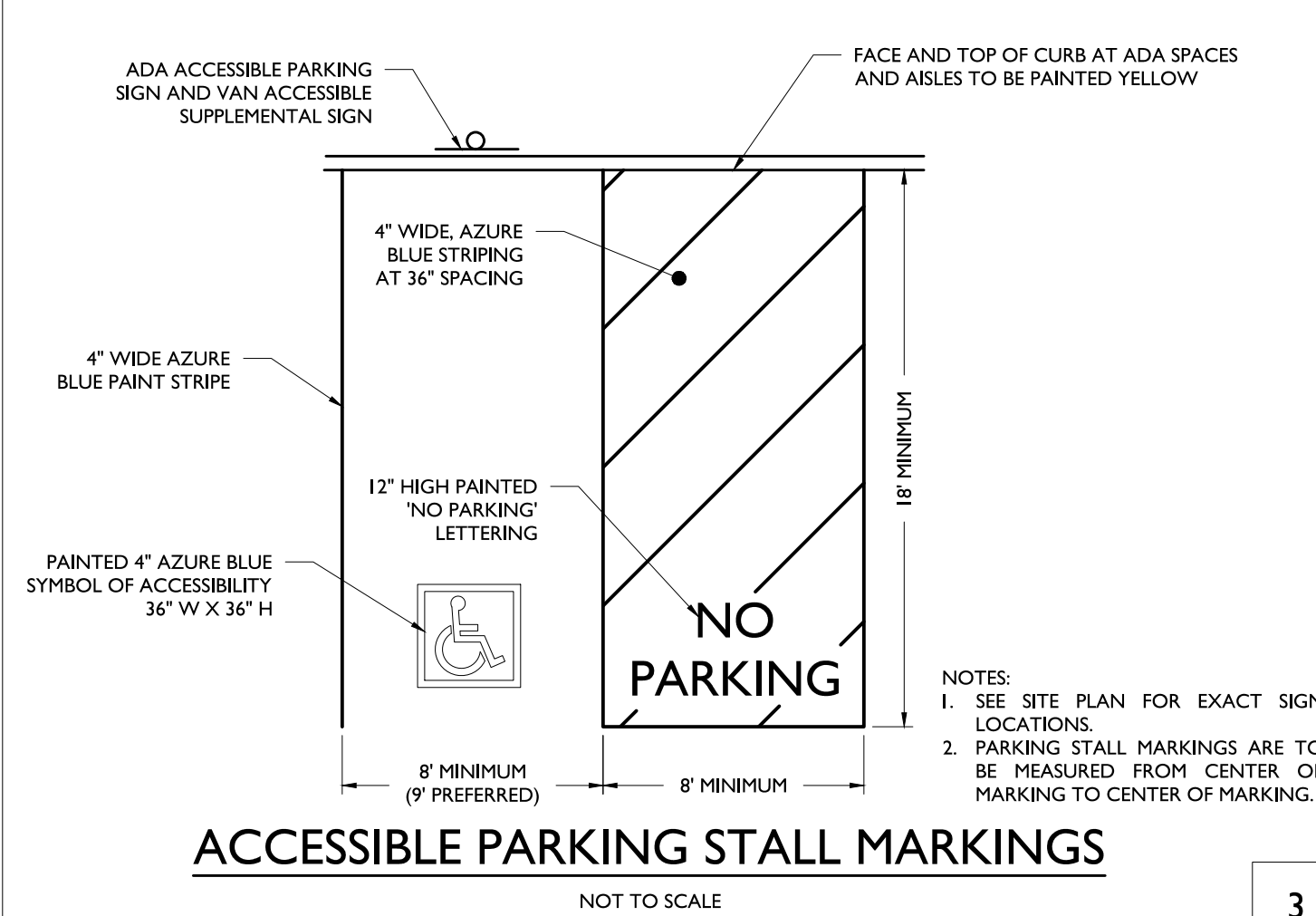
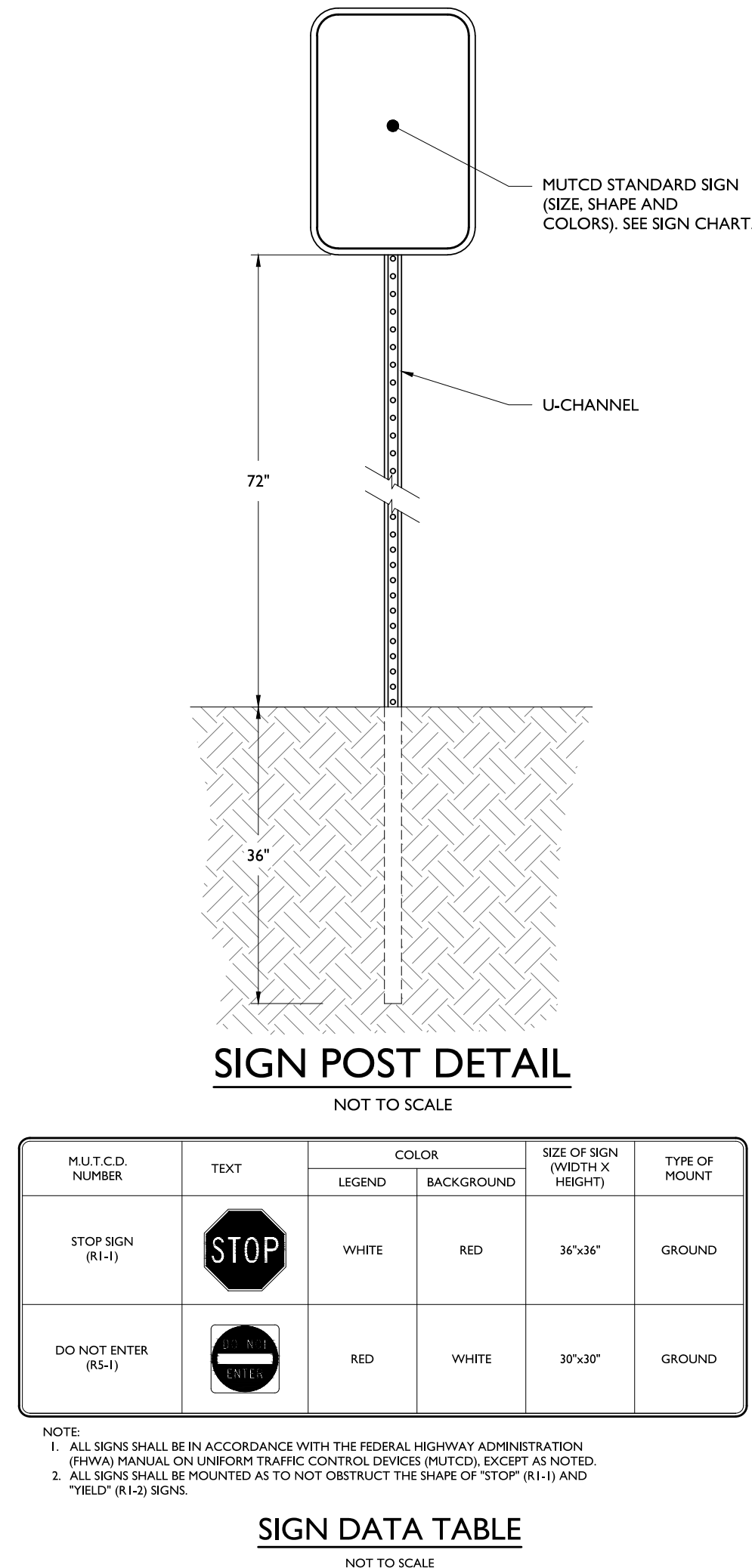
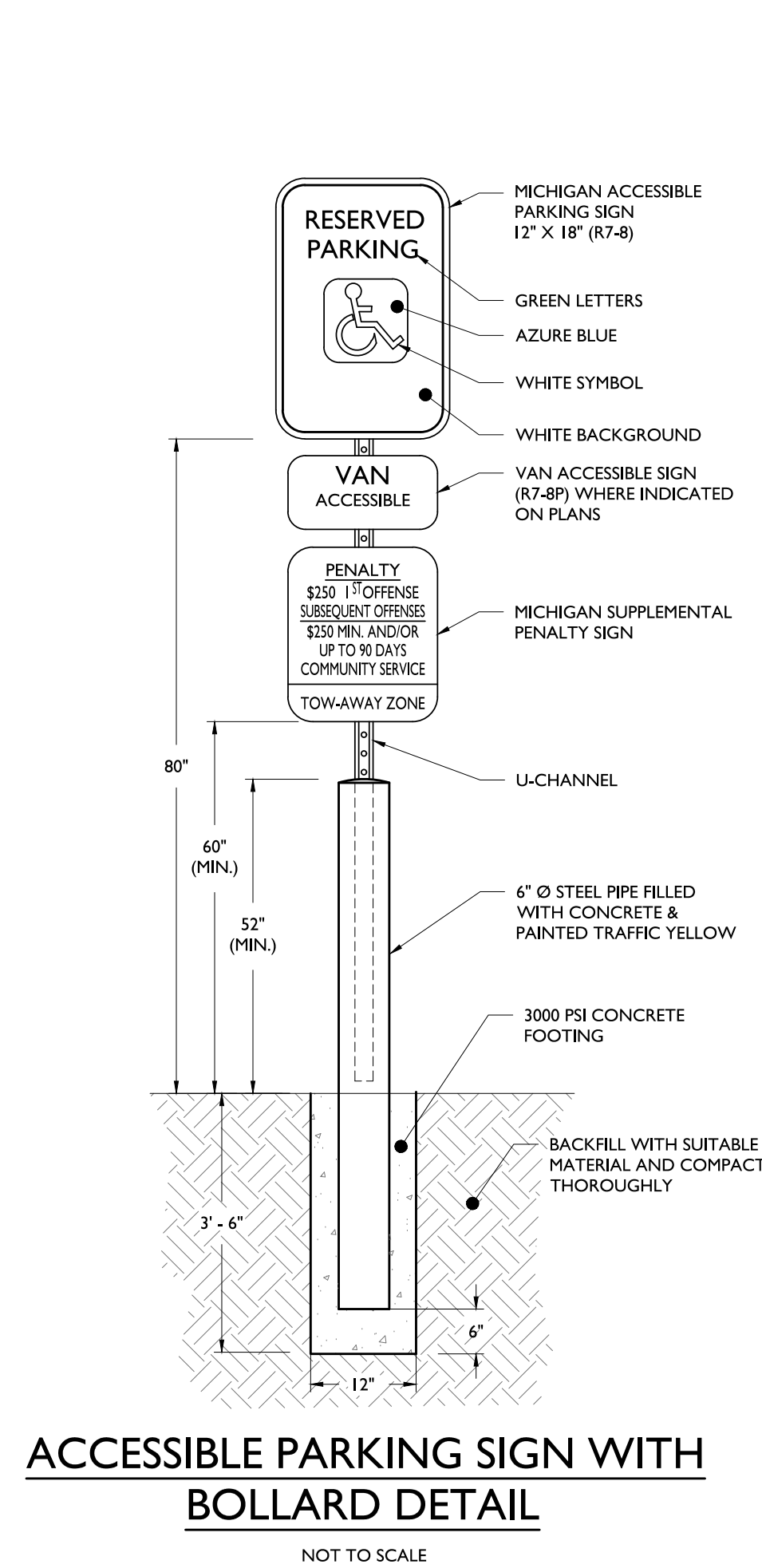
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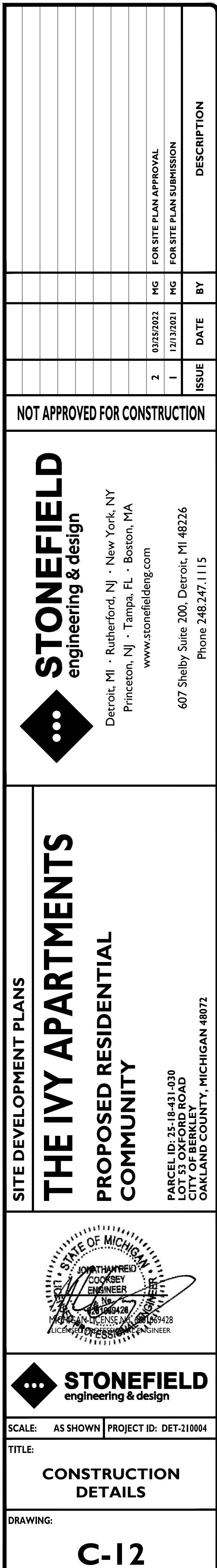
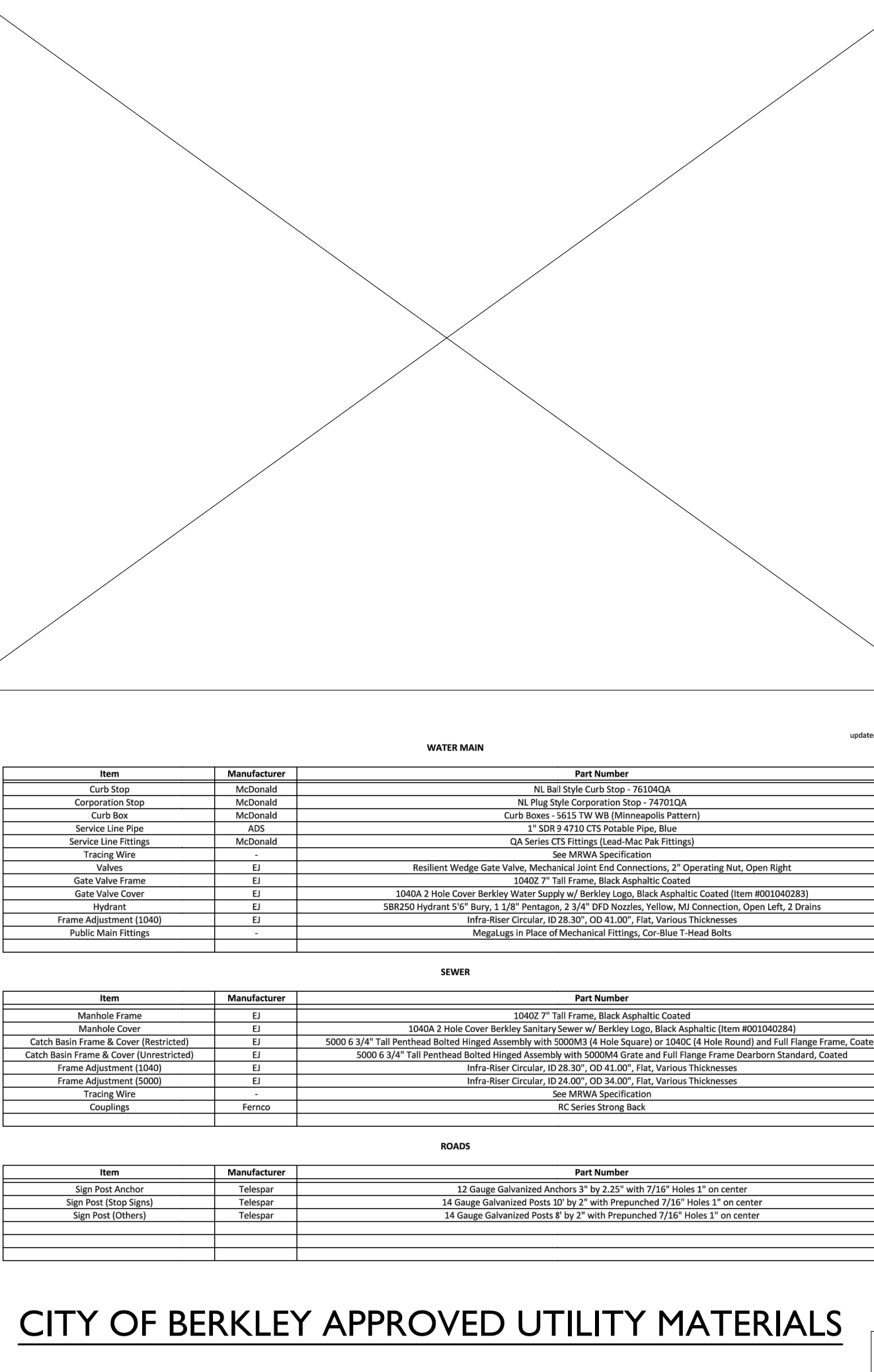
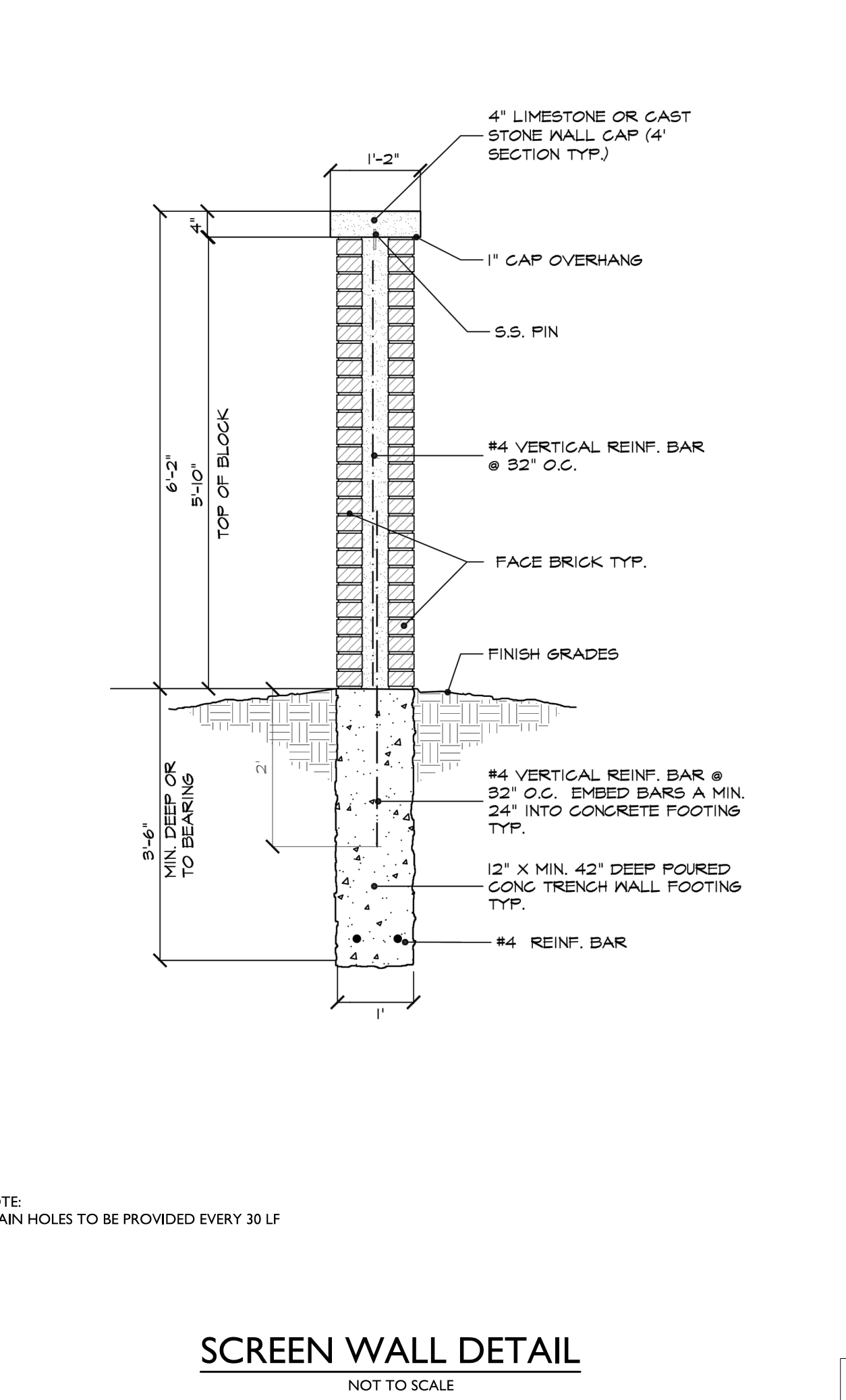
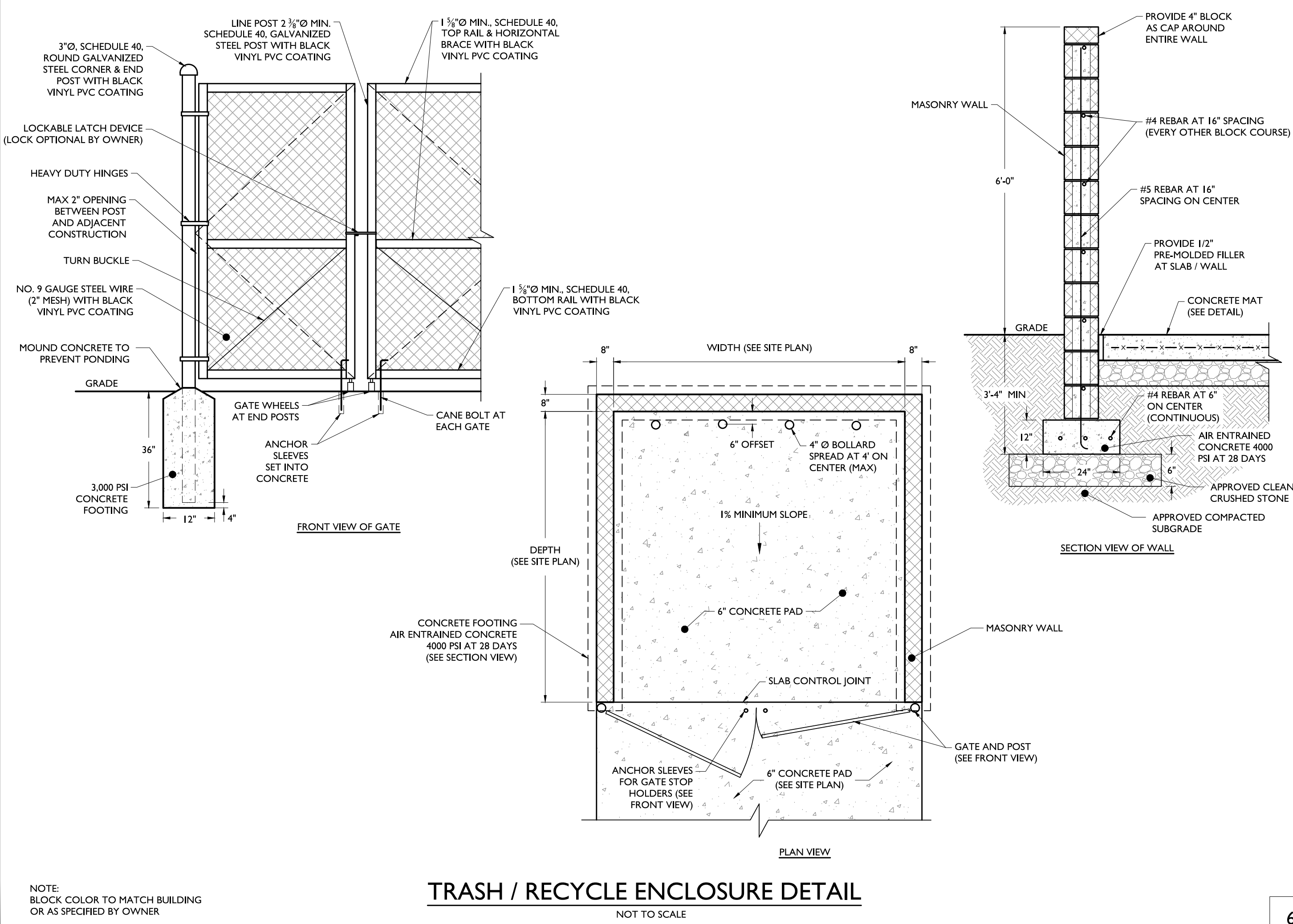
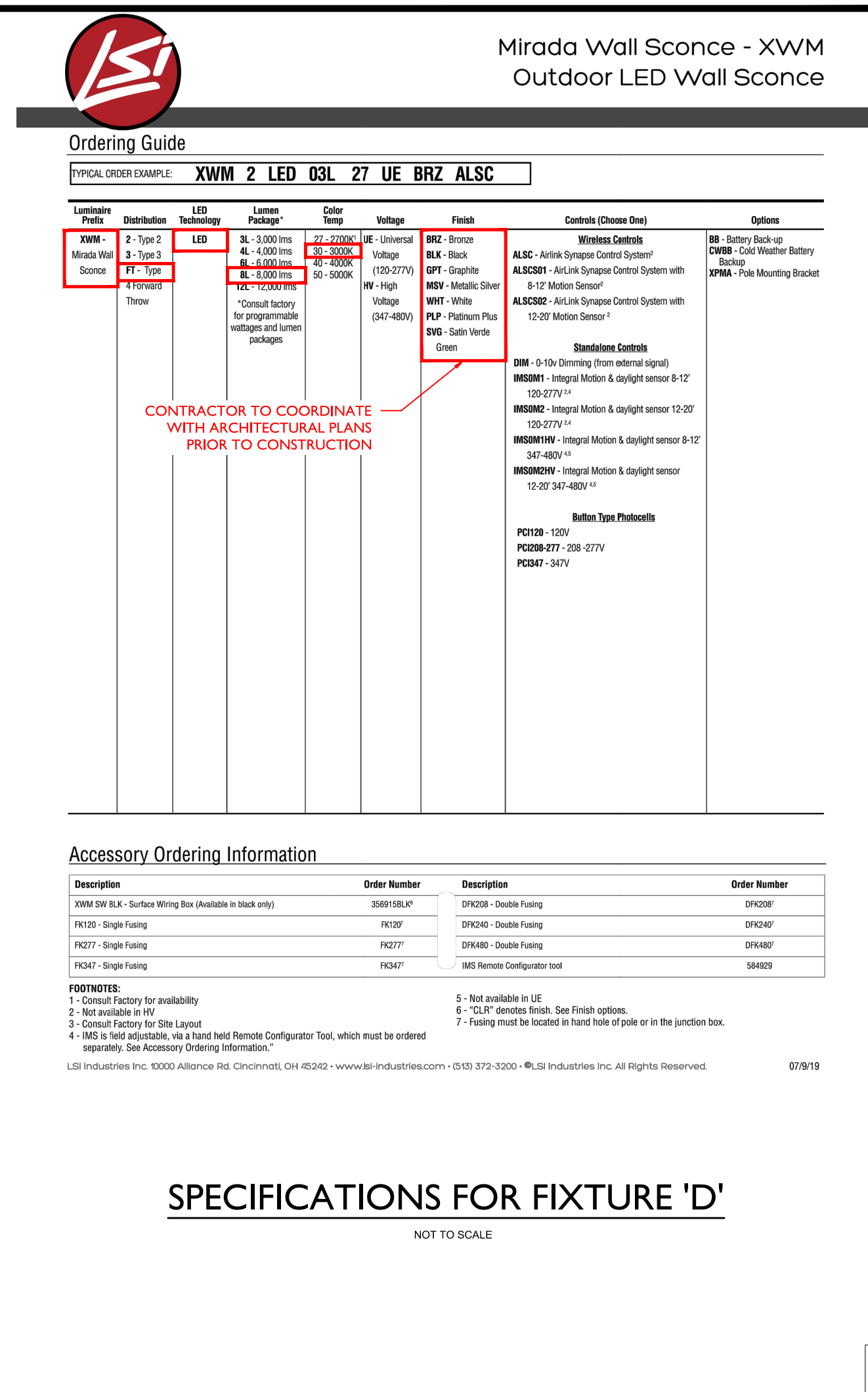
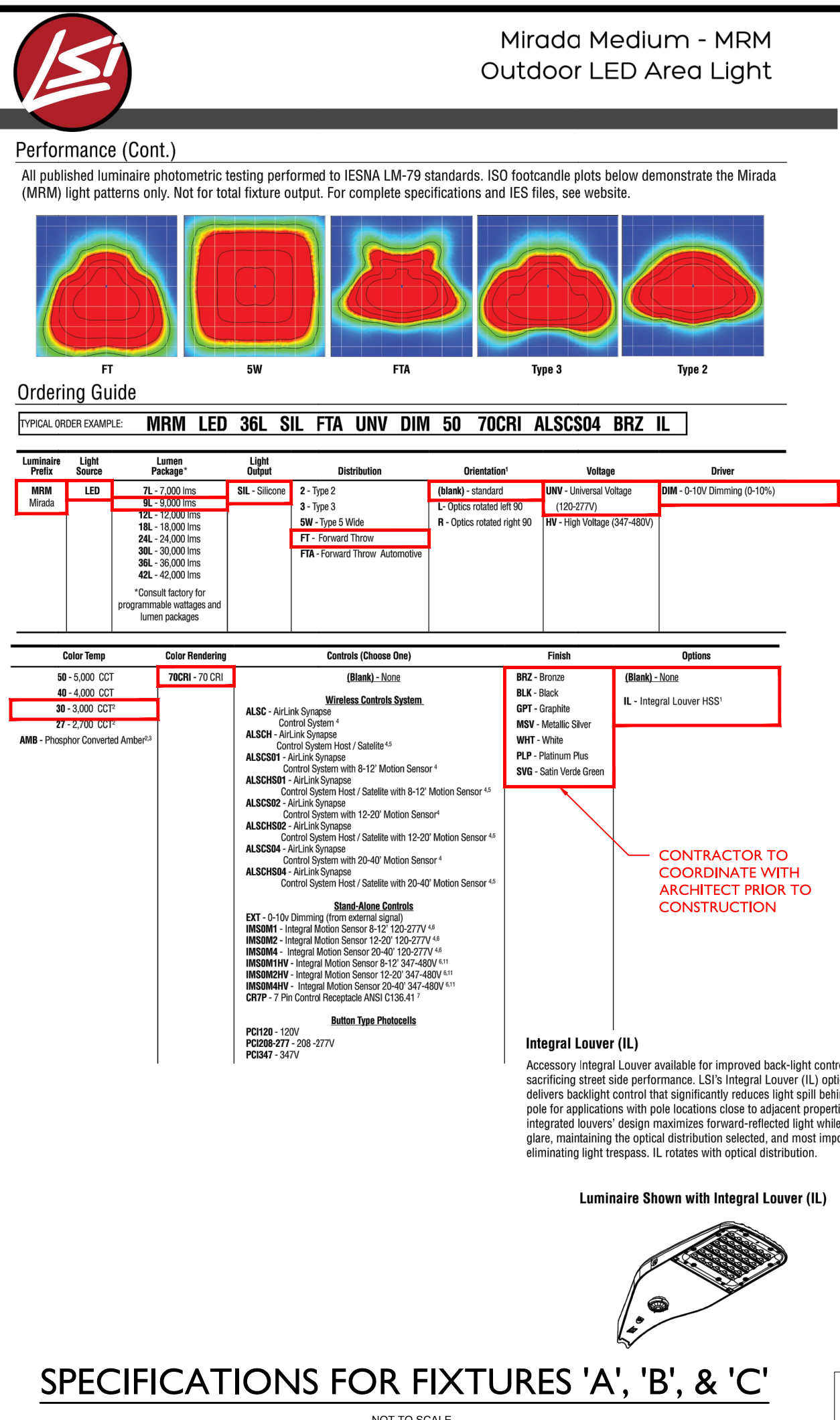
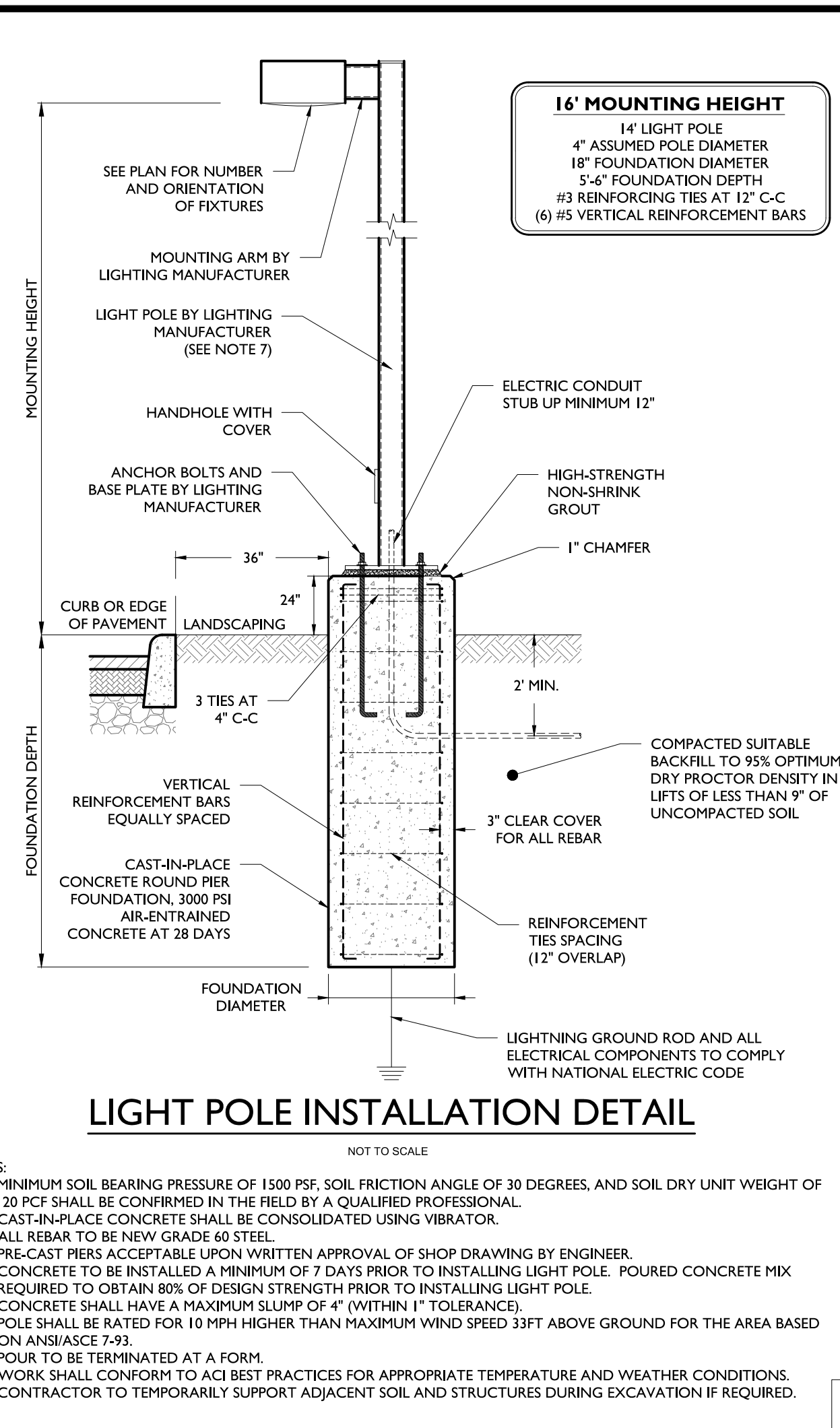
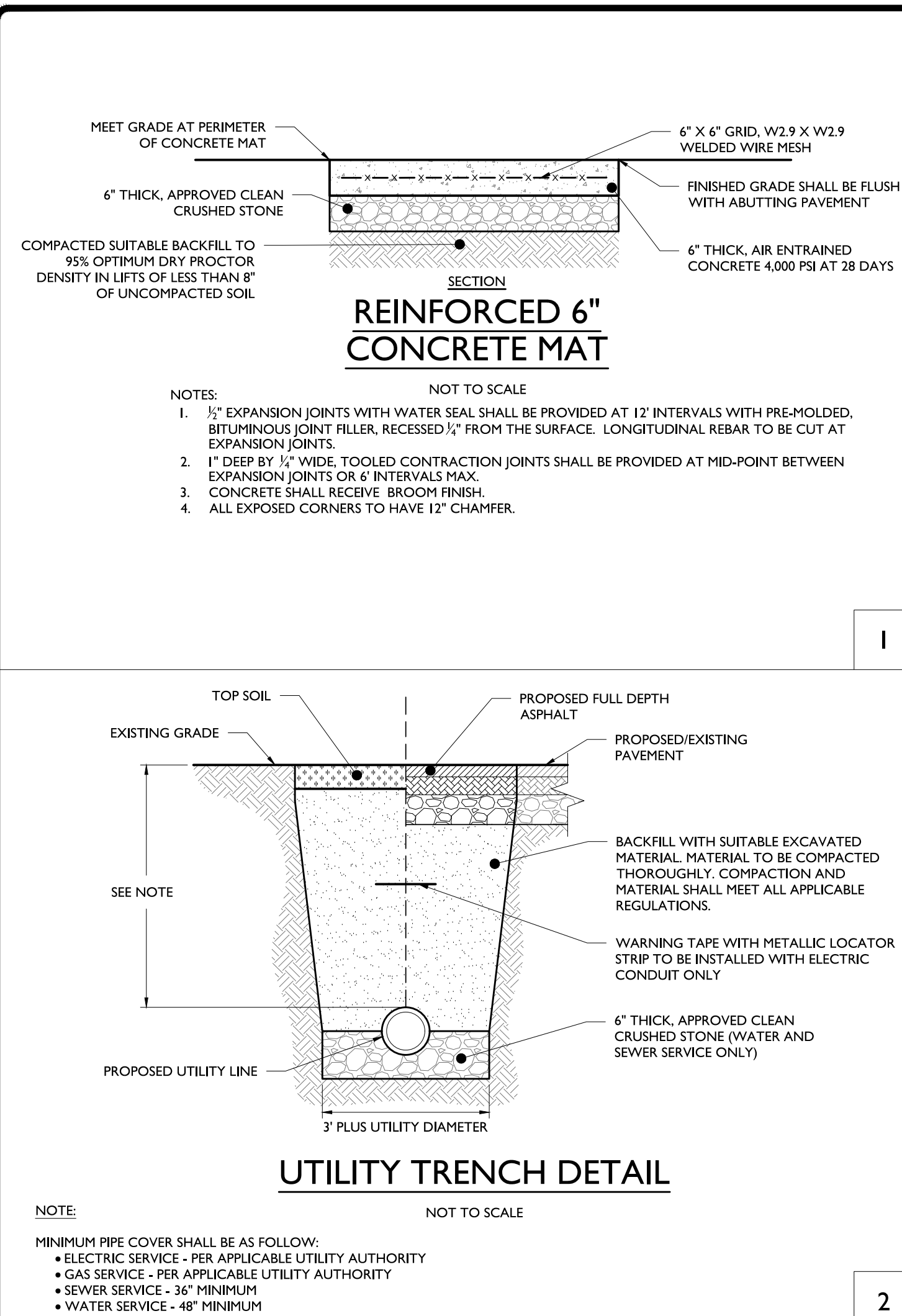
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SOIL EROSION & SEDIMENT CONTROL PLAN

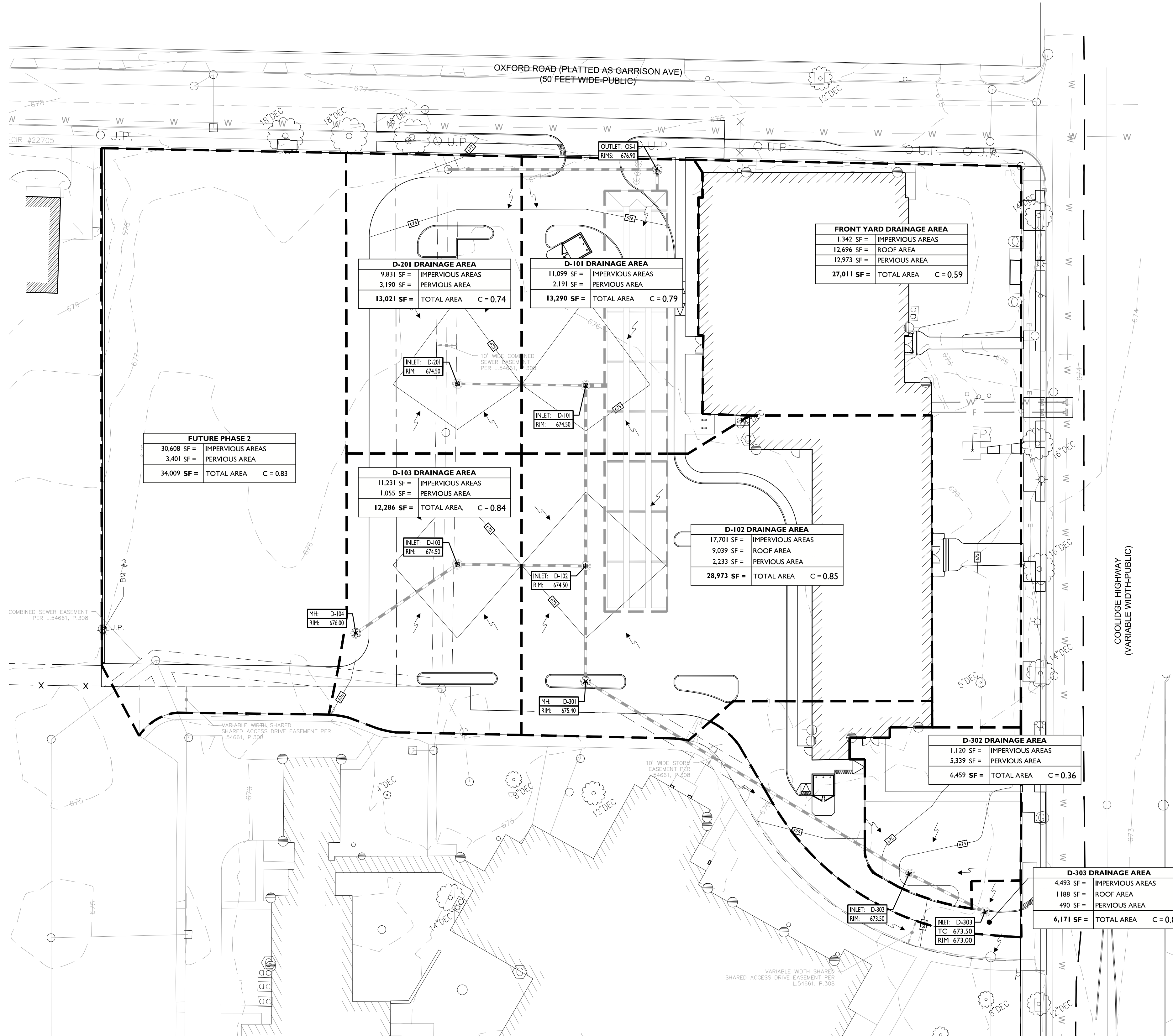
DRAWING:

C-10





V:\P020174\1711131-18-FREDMAN-237 COOLIDGE HIGHWAY, BERKLEY, MI\CDR\LOT1030-06-06-07 DWG.DWG



DRAINAGE SUMMARY		
	PRE-DEVELOPMENT	POST-DEVELOPMENT
TOTAL DRAINAGE AREA	3.24 AC (141,220 SF)	3.24 AC (141,220 SF)
IMPERVIOUS AREA	98,171 SF	87,425 SF
PERVIOUS AREA	20,126 SF	30,872 SF
ROOF AREA	22,923 SF	22,923 SF
C-VALUE	0.81	0.76
RAINFALL INTENSITY	6.11 IN/HR	6.11 IN/HR
PEAK RUNOFF (Q)	16.04 CFS	15.04 CFS

(*) BASED ON OAKLAND COUNTY WATER RESOURCE COMMISSIONER ENGINEERING DESIGN STANDARDS FOR STORM WATER FACILITIES FOR 100-YEAR STORM.

REVISED FOR ADMINISTRATIVE SITE PLAN APPROVAL

MG

11/15/2021

7

REVISED FOR ADMINISTRATIVE SITE PLAN APPROVAL

MG

09/02/2021

6

FOR FINAL APPROVAL

MG

04/05/2021

5

FIRE DEPARTMENT COMMENTS

AF

02/11/2020

4

SUBMISSION FOR ENGINEERING APPROVAL

MG

01/27/2020

3

SUBMISSION FOR SITE PLAN APPROVAL

MG

10/31/2019

2

SUBMISSION FOR VARIANCE APPROVAL

MH

08/12/2019

1

DESCRIPTION

BY

DATE

ISSUE

NOT APPROVED FOR CONSTRUCTION

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SITE DEVELOPMENT PLANS

THE BERKLEY

PROPOSED RESIDENTIAL COMMUNITY (PHASE I)

PARCEL ID: 25-18-431-031 & 25-18-431-032
2219 COOLIDGE HIGHWAY
CITY OF BERKLEY
OAKLAND COUNTY, MI 48072

MICHIGAN LICENSE No. 6201069428
LICENSED PROFESSIONAL ENGINEER

STONEFIELD

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SCALE: 1" = 30' PROJECT ID: 17311.01

TITLE: STORMWATER DRAINAGE PLAN

DRAWING: C-5

TOPOGRAPHIC SURVEY

LEGEND

OFIR	FOUND CAPPED IRON ROD
OFIP	FOUND IRON PIPE
OFIR	FOUND IRON ROD
OFIR	EXISTING MANHOLE/CATCH BASIN
OFIR	EXISTING LIGHT POLE
OFIR	EXISTING SIGN
OFIR	EXISTING TRAFFIC SIGNAL VAULT
OFIR	EXISTING UTILITY POLE
OFIR	EXISTING GUY WIRE
OFIR	EXISTING BOLLARD
OFIR	EXISTING GAS METER
OFIR	EXISTING GAS RISER
OFIR	EXISTING WATER VALVE
OFIR	EXISTING FIRE HYDRANT
OFIR	EXISTING SANITARY CLEANOUT
OFIR	EXISTING ROOF DRAIN
OFIR	EXISTING GAS VALVE
OFIR	EXISTING SHRUB
OFIR	EXISTING AIR CONDITIONING UNIT
OFIR	EXISTING ELECTRIC METER
OFIR	EXISTING TREE
OFIR	EXISTING FLAG POLE
OFIR	EXISTING UNDERGROUND GAS MARKER
OFIR	EXISTING UNDERGROUND WATER MARKER
OFIR	EXISTING TRAFFIC SIGNAL
OFIR	EXISTING BOUNDARY LINE
OFIR	EXISTING BOUNDARY ADJACENT LINE
OFIR	EXISTING SECTION LINE
OFIR	EXISTING CURB LINE WITH DUBDOWN
OFIR	EXISTING OVERHEAD UTILITY LINE
OFIR	EXISTING FENCE
OFIR	EXISTING UNDERGROUND WATER LINE
OFIR	EXISTING UNDERGROUND GAS LINE
OFIR	EXISTING UNDERGROUND SANITARY LINE
OFIR	EXISTING UNDERGROUND STORM LINE
OFIR	EXISTING UNDERGROUND COMBINED SEWER LINE
OFIR	EXISTING BUILDING
(M)	MEASURED
(P)	PLATTED
(OA)	OVERALL

BENCHMARKS:

BENCHMARK #1: ARROW ON HYDRANT ON SOUTH SIDE OF SITE
ELEVATION: 677.30 (NAVDB88)

BENCHMARK #2: GEAR PIN IN SOUTH FACE OF UTILITY POLE ON SOUTH SIDE OF SITE
ELEVATION: 676.10 (NAVDB88)

BENCHMARK #3: GEAR PIN IN EAST FACE OF UTILITY POLE ON WEST SIDE OF SITE
ELEVATION: 677.34 (NAVDB88)

BENCHMARK #4: ARROW ON HYDRANT ON NORTH SIDE OF SITE
ELEVATION: 679.27 (NAVDB88)

NOTES:

1. BEARINGS ARE BASED ON HARVARD ROAD, BEING N89°43'00"E, PER "DENLER ACRES" PLAT, RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS.

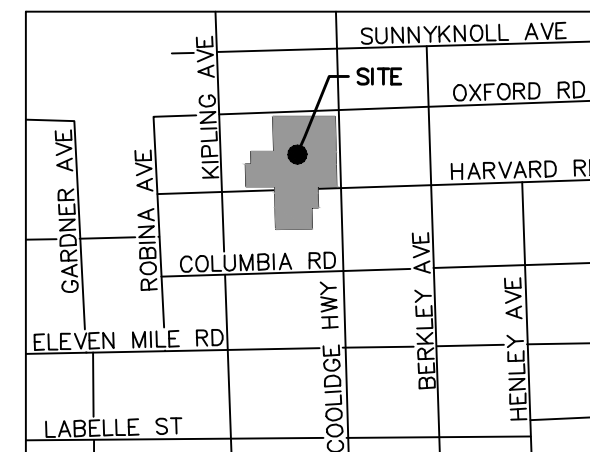
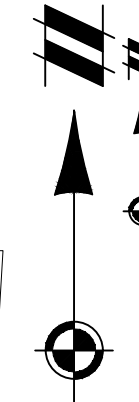
2. WATER MAIN, STORM SEWER, SANITARY SEWER AND FRANCHISE UTILITY STRUCTURES HAVE BEEN FIELD LOCATED WHERE VISIBLE. UTILITY AND AS-BUILT MAPS HAVE BEEN REQUESTED AND SOME MAPS HAVE BEEN RECEIVED AT DATE OF THIS SURVEY. FRANCHISE UTILITY MAPS HAVE BEEN REQUESTED FROM THE APPROPRIATE FRANCHISE COMPANIES, BUT NOT ALL MAPS HAVE BEEN RECEIVED AT DATE OF SURVEY.

NOTE: THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED.

NOTE TO THE CLIENT, INSURER, AND LENDER - SOURCE INFORMATION FROM PLANS AND MARKINGS WILL BE COMBINED WITH OBSERVED EVIDENCE OF UTILITIES PURSUANT TO SECTION 5.E.I.V. TO DEVELOP A VIEW OF THE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, IN SOME JURISDICTIONS, 811 OR OTHER SIMILAR UTILITY LOCATE REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE, IN WHICH CASE THE SURVEYOR SHALL NOTE ON THE PLAT OR MAP HOW THIS AFFECTED THE SURVEYOR'S ASSESSMENT OF THE LOCATION OF THE UTILITIES, WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION AND/OR A PRIVATE UTILITY LOCATE REQUEST MAY BE NECESSARY.

3. PORTIONS OF STORM SEWER AND SANITARY SEWER APPEAR TO BE COMBINED SEWER.

4. PORTIONS OF OXFORD ROAD AND HARVARD ROAD UNDER CONSTRUCTION AT DATE OF FIELD WORK.



VICINITY MAP
NOT TO SCALE

SCHEDULE B - PART II (EXCEPTIONS) PER COMMITMENT FOR TITLE INSURANCE ISSUED BY AMROCK INC., AN ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, COMMITMENT NUMBER: 62471765 REVISION 7, COMMITMENT DATE: MARCH 20, 2018:

7. BUILDING AND USE RESTRICTIONS CONTAINED IN INSTRUMENTS RECORDED IN LIBER 371, PAGE 150, AND LIBER 762, PAGE 1 BUT OMITTING ANY COVENANT BASED ON RACE, COLOR, RELIGION, SEX, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

L.371, PG.150 COVERS THE EAST HALF OF LOT 53. L.762, PG.1 COVERS LOT 52. NOT A SURVEY MATTER, NOT PLOTTABLE.

EXHIBIT A - LEGAL DESCRIPTION PER COMMITMENT FOR TITLE INSURANCE ISSUED BY AMROCK INC., AN ISSUING AGENT FOR STEWART TITLE GUARANTY COMPANY, COMMITMENT NUMBER: 62471765 REVISION 7, COMMITMENT DATE: MARCH 20, 2018:

TAX ID NUMBER(S): 25-18-431-019, 25-18-431-021, 25-18-431-015, 25-18-431-016, 25-18-431-017, 25-18-431-018, 25-18-431-020, 25-18-431-022, 25-18-477-006, 25-18-477-007, 25-18-477-008

LAND SITUATED IN THE CITY OF BERKLEY IN THE COUNTY OF OAKLAND IN THE STATE OF MI

WEST 50 FEET OF LOT 10, LOT 11 EXCEPT FRONT 10.02 FEET, LOT 12 EXCEPT FRONT 10.02 FEET, LOT 13 EXCEPT EAST 10.03 FEET, LOT 14 EXCEPT EAST 10.06 FEET, LOT 15 EXCEPT EAST 10.04 FEET, LOT 52, LOT 53, THE EAST 42 FEET OF LOT 62 EXCEPT THE NORTH 9.5 FEET OF THE EAST 42 FEET, LOTS 63, THROUGH 67 OF DENLER ACRES ACCORDING TO THE PLAT THEREOF AS RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS.

CLIENT REFERENCE: 2600, 2651, 2700 HARVARD RD. & 2277 COOLIDGE HWY., BERKLEY, MI 48072

DESCRIPTION OF A 2.239 ACRE PARCEL OF LAND (PARCEL A) BEING A PART OF LOTS 12 THRU 15, INCLUSIVE, AND A PART OF LOTS 52, 53, 64 AND 65, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, LOCATED IN THE SOUTHEAST 1/4 OF SECTION 18, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, OAKLAND COUNTY, MICHIGAN:

ALL OF LOTS 14, 15 AND 52, AND PART OF LOTS 12, 13, 53, 64 AND 65, DENLER ACRES, ACCORDING TO THE PLAT THEREOF RECORDED IN LIBER 15 OF PLATS, PAGE 35, OAKLAND COUNTY RECORDS, ALSO BEING THE SOUTH RIGHT OF WAY LINE OF OXFORD ROAD (PLATTED AS GARRISON AVENUE) (50 FEET WIDE) AND THE WEST RIGHT OF WAY LINE OF COOLIDGE HIGHWAY (VARIABLE WIDTH); THENCE S01°21'56"E 206.32 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N89°43'00"E 0.01 FEET; THENCE S01°21'56"E 103.16 FEET ALONG THE WEST RIGHT OF WAY LINE OF SAID COOLIDGE HIGHWAY; THENCE N87°07'01"W 21.13 FEET; THENCE 132.46 FEET ALONG THE ARC OF A 133.07 FOOT RADIUS CIRCULAR CURVE TO THE RIGHT, CHORD BEARING N57°33'02"W 127.06 FEET; THENCE N31°30'35"W 25.22 FEET; THENCE 36.11 FEET ALONG THE ARC OF A 37.00 FOOT RADIUS CIRCULAR CURVE TO THE LEFT, CHORD BEARING N62°02'16"W 34.70 FEET; THENCE S89°49'43"W 104.67 FEET; THENCE N01°28'06"W 11.47 FEET; THENCE S88°36'50"W 36.96 FEET; THENCE N01°29'20"W 265.71 FEET; THENCE N89°43'00"E 311.79 FEET ALONG THE SOUTH RIGHT OF WAY LINE OF SAID OXFORD ROAD TO THE PLACE OF BEGINNING, BEING A PART OF THE SOUTHEAST 1/4 OF SAID SECTION 18, CONTAINING 2.239 ACRES OF LAND, MORE OR LESS, AND BEING SUBJECT TO EASEMENTS, CONDITIONS, RESTRICTIONS AND EXCEPTIONS OF RECORD, IF ANY.

I HEREBY CERTIFY THAT I HAVE SURVEYED AND MAPPED THE LAND ABOVE PLATTED AND/OR DESCRIBED ON SEPTEMBER 26, 2020, AND THAT THE RATIO OF CLOSURE ON THE UNADJUSTED FIELD OBSERVATIONS OF SUCH SURVEY WERE NOT GREATER THAN 1/5000.

CHRISTOPHER P. KELLY
REGISTERED PROFESSIONAL SURVEYOR NO. 4001056500
CKELLY@ATWELL-GROUP.COM
TWO TOWNE SQUARE, SUITE 700
SOUTHFIELD, MICHIGAN 48076
248.447.2000

DATE: _____

Know what's below.
Call before you dig.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER SHALL BE EXPECTED TO ASSUME ANY RESPONSIBILITY FOR SAFETY OF THE WORK OF PERSONS ENGAGED IN THE WORK, OF ANY NEARBY STRUCTURES, OR OF ANY OTHER PERSONS.

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866.850.4200 www.atwell-group.com
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SOUTHFIELD, MI 48076
248.447.2000

SECTION 18

TOWNSHIP 1 NORTH, RANGE 11 EAST

CITY OF BERKLEY

OAKLAND COUNTY, MICHIGAN

DPG 2 LLC

TOPOGRAPHIC SURVEY

CLIENT

DATE

05/03/2019

06/12/2019 REV. PER UTILITY LOCATE
07/18/2019 REV. PER UTILITY LOCATE
10/18/2019 REV. PER CITY COMMENTS
09/26/2020 REV. PER NEW TITLE
10/18/2020 REV. PER NEW TITLE
02/24/2022 REV. PER UTILITY INFO

REVISIONS
SCALE 0 25 50
1" = 50 FEET
DR. JR. CK. CK
P.M. J. CECIL
BOOK NA
JOB 19001565
SHEET NO. 1 OF 1

CAD FILE: 19001565P-01.DWG

GENERAL NOTES

- ALL CONSTRUCTION PROCEDURES AND MATERIALS SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE WATER RESOURCES COMMISSIONER'S OFFICE AND/OR THE LOCAL MUNICIPALITY.
- THE CONTRACTOR SHALL OBTAIN AN WATER RESOURCES COMMISSIONER'S OFFICE WATER INSPECTION PERMIT PRIOR TO THE START OF CONSTRUCTION. SEE CORRESPONDING WATER MAIN CONSTRUCTION PERMIT REQUEST LETTER FOR COST OF THE PERMIT.
- A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION AND SHALL BE SCHEDULED BY THE LOCAL MUNICIPAL ENGINEER. THOSE IN ATTENDANCE SHALL INCLUDE 1) LOCAL MUNICIPAL ENGINEER, 2) DESIGN ENGINEER, 3) OWNER/DEVELOPER, 4) ROAD COMMISSION FOR OAKLAND COUNTY, 5) OAKLAND COUNTY WATER RESOURCES COMMISSIONER'S OFFICE (WATER, SEWER AND STORM DIVNSIONS) AND 6) ALL UTILITY COMPANIES. CONTRACTOR SHALL PROVIDE MATERIALS LISTING FOR APPROVAL BY MUNICIPAL ENGINEER AND OCWRC.
- CONTRACTOR MUST CONTACT MISS DIG (1-800-482-7171) THREE WORKING DAYS BEFORE THE START OF CONSTRUCTION FOR UNDERGROUND UTILITY LOCATIONS. ALL UTILITIES SHALL BE STAKED BEFORE CONSTRUCTION STARTS.
- ALL NECESSARY EASEMENTS FOR WATER MAINS SHALL BE PROVIDED IN THE NAME OF THE OWNER OF THE WATER MAIN PRIOR TO CONSTRUCTION AND ACCEPTANCE OF THE WATER DISTRIBUTION SYSTEM FOR OPERATION.
- ALL WATER MAINS SHALL BE CONSTRUCTED WITH A MINIMUM COVER OF FIVE AND ONE-HALF (5-1/2) FEET BELOW FINISHED GRADES INCLUDING OPEN DRAINAGE COURSES.
- ALL TRENCHES UNDER OR WITHIN A 1:1 RATIO OF EXISTING OR PROPOSED PAVEMENT OR DRIVEWAYS SHALL BE BACKFILLED WITH THOROUGHLY COMPACTED CLASS II SAND TO GRADE AT NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT
- WHERE TWO UTILITIES CROSS, PROVIDE CLASS II BACKFILL MATERIAL IN TWELVE (12) INCH COMPACTED LAYERS TO THE UNDERSIDE OF THE HIGHER UTILITY.
- WHERE WATER MAINS MUST DIP TO PASS UNDER OTHER UTILITIES, THE SECTIONS WHICH ARE DEEPER THAN NORMAL SHALL BE KEPT TO A MINIMUM LENGTH AND SHALL BE CONSTRUCTED WITH ELEVEN AND ONE-QUARTER (11-1/4) DEGREE VERTICAL BENDS, PROPERLY ANCHORED. BENDS GREATER THAN 11-1/4° MUST HAVE ROD RESTRAINTS.
- ALL PRECAST CONCRETE GATE WELL SECTIONS SHALL BE MANUFACTURED TO CONFORM WITH A.S.T.M. C478, STANDARD SPECIFICATIONS FOR PRECAST REINFORCED CONCRETE MANHOLE SECTIONS, EXCEPT WALL THICKNESS SHALL BE AS SHOWN ON THESE DETAILS. ALL JOINTS FOR PRECAST CONCRETE GATE WELL SECTIONS SHALL BE "MODIFIED GROOVE TONGUE" WITH GASKET MANUFACTURED TO CONFORM WITH A.S.T.M. C 443, STANDARD SPECIFICATION FOR JOINTS FOR CIRCULAR CONCRETE SEWER AND CULVERT PIPE USING RUBBER GASKETS.
- CONTRACTOR SHALL INSTALL VALVES, TAPPING SLEEVES AND GATE WELL STRUCTURES IN STRICT COMPLIANCE WITH MEASUREMENTS PROVIDED ON SHEET 2 (i.e. 2'-0" BETWEEN GATE WELL WALL & CENTERLINE OF OPERATING NUT) TO ALLOW PROPER OPERATION OF VALVE THROUGH GATEWELL OPENING. FAILURE TO DO SO WILL REQUIRE CONTRACTOR TO CORRECT AT HIS EXPENSE.
- ALL CROSS-CONNECTION CONTROL DEVICES SHALL BE INSTALLED AS REQUIRED BY THE LOCAL PLUMBING INSPECTOR AND IN ACCORDANCE WITH THE STANDARDS OF THE WATER RESOURCES COMMISSIONER'S OFFICE OPERATION AND MAINTENANCE DIVISION AND THE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES AND ENERGY, DIVISION OF DRINKING WATER AND ENVIRONMENTAL HEALTH DIVISION
- ALL WATER SERVICE CONNECTIONS TWO (2) INCHES AND SMALLER SHALL BE MADE BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION AFTER WATER MAIN ACCEPTANCE AND APPLICABLE TAP PERMITS ARE OBTAINED.
- ALL FITTINGS AND BENDS SHOULD BE BLOCKED IN ACCORDANCE WITH THRUST BLOCK DETAILS, UNLESS ALTERNATE THRUST RESTRAINT SYSTEM AS INDICATED IN PLANS AND SPECIFICATIONS, IS APPROVED BY WATER RESOURCES COMMISSIONER'S OFFICE AND THE LOCAL MUNICIPALITY.
- ALL STEEL AND IRON MATERIAL AND PRODUCTS FOR PERMANENT INCORPORATION INTO THE WORK SHELL MEET BUY AMERICA REQUIREMENT, FEDERAL CODE OF REGULATIONS SECTION 635.410

WATER MAIN MATERIALS NOTES

- WATER SUPPLY SYSTEM PIPING (3-INCH & LARGER) SHALL BE DUCTILE IRON OR HIGH DENSITY POLYETHYLENE (HDPE) UNLESS OTHERWISE APPROVED BY THE LOCAL COMMUNITY.
- DUCTILE IRON PIPE SHALL BE CLASS 54 FOR SIZES THREE (3) INCH THROUGH EIGHTEEN (18) INCH, CLASS 55 FOR TWENTY (20) INCH, AND CLASS 56 FOR TWENTY-FOUR (24) INCH AND LARGER. (ABBREVIATED "D.I." IN DETAILS AND ON THIS SHEET).
- PIPES OF SIZES LARGER THAN TWENTY-FOUR (24) INCHES IN NOMINAL DIAMETER SHALL MEET ALL THE REQUIREMENTS OF THE CURRENT AWWA C100 FOR DUCTILE IRON WATER PIPE.
- THE DUCTILE IRON PIPE TO BE FURNISHED AND DELIVERED UNDER THIS SPECIFICATION SHALL MEET ALL THE REQUIREMENTS OF THE CURRENT AWWA C151 (ANSI A21.5), EXCEPT AS OTHERWISE SPECIFIED HEREIN. PIPE SHALL BE DOUBLE CEMENT-LINED AND SEAL COATED WITH AN APPROVED BITUMINOUS SEAL COAT IN ACCORDANCE WITH AWWA C104 (ANSI A21.4).
- REFER TO SHEET 5 FOR HDPE MATERIAL REQUIREMENTS.
- MECHANICAL AND SLIP-ON JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C111 (ANSI A21.11).
- FLANGE JOINTS FOR DUCTILE IRON WATER MAIN SHALL BE IN ACCORDANCE WITH AWWA C110 (ANSI A21.10).
- FITTINGS FOR DUCTILE IRON PIPE SHALL BE DUCTILE IRON OR CAST IRON AND SHALL MEET REQUIREMENTS OF AWWA C110 (ANSI A21.10) OR AWWA C153 (ANSI A21.53). DUCTILE IRON FITTINGS SHALL BE RATED FOR 350 PSI, PIPE SIZES TWENTY-FOUR (24) INCH DIAMETER AND LESS AND 250 PSI FOR PIPE SIZES OVER TWENTY-FOUR (24) INCH DIAMETER. DUCTILE IRON FLANGE FITTINGS SHALL BE RATED FOR 250 PSI FOR ALL PIPE DIAMETERS.
- INSTALL BRASS WEDGES AT ALL PUSH ON JOINTS IN DUCTILE IRON PIPE INSTALLATIONS. TWO (2) WEDGES PER JOINT FOR PIPES 12 INCH IN DIAMETER AND LESS, FOUR WEDGES PER JOINT FOR PIPES GREATER THAN 12 INCHES IN DIAMETER.
- ALL WATER MAINS SHALL BE DESIGNED FOR 150 PSI MINIMUM WORKING PRESSURE.
- ALL BURIED BOLTS, NUTS, AND WASHERS SHALL BE AWWA C111 LOW ALLOY STEEL COATED WITH A MINIMUM OF TWO (2) COATS OF FLUOROPOLYMER EPOXY COATING AND HEAT CURED (COR-BLUE OR APPROVED EQUAL) AND POLY-WRAPPED WHEN SPECIFIED.
- ALL BURIED BOLTS, NUTS, AND WASHERS FOR ALL FLANGED CONNECTIONS SHALL BE STAINLESS STEEL (ASTM A320, GRADE B8M) AND HAVE A NEVER SEIZE TYPE COMPOUND APPLIED TO THE THREADS PRIOR TO INSTALLATION.
- CORPORATION STOPS USED FOR INSERTION INTO MAINS SHALL BE MUELLER TYPE H-15000, FORD METER BOX FB-1000-X-Q-NL OR FORD METER BOX FB1000-4-Q-NL. ALL STOPS SHALL HAVE BRONZE CAST BODIES, KEYS, STEM WASHERS AND NUTS. INLET THREADS SHALL CONFORM TO THE LATEST VERSION OF AWWA C800.
- TEMPORARY CONNECTIONS, WHICH MAY BE MADE FOR CHLORINATING AND FLUSHING PURPOSES, SHALL INCLUDE A TESTABLE REDUCE PRESSURE ZONE (RPZ) VALVE WITH CURRENT CERTIFICATION.

VALVE AND SLEEVE NOTES

- GATE VALVES, SIZES THREE (3) INCH THROUGH SIXTEEN (16) INCH AND TAPPING VALVES SHALL BE LOCAL MUNICIPAL STANDARD AS DETAILED WITH NON-RISING STEM.
- ALL IN LINE GATE VALVES THREE (3) INCH AND LARGER SHALL BE IN WELLS AS DETAILED. SPECIFICATIONS SHALL INCLUDE THE DIRECTION OF OPERATION OF ALL VALVES.
- ALL GATE WELL COVERS SHALL BE LOCAL MUNICIPAL STANDARD AS DETAILED.
- ALL GATE VALVES WITH OPERATING NUTS AT A DISTANCE GREATER THAN FIVE (5) FEET BELOW GROUND SURFACE SHALL BE PROVIDED WITH A STAINLESS STEEL EXTENSION STEM. THE LENGTH OF THE EXTENSION STEM SHALL REACH WITHIN FIVE (5) FEET FROM THE GROUND SURFACE. WHEN AN EXTENSION STEM IS USED, IT SHALL BE HELD IN PLACE BY A STAINLESS STEEL EXTENSION STEM GUIDE SUITABLY FASTENED TO THE WALL OF THE GATE WELL. THE EXTENSION STEM SHALL BE MECHANICALLY ATTACHED TO THE OPERATING NUT. DETAILS OF THE EXTENSION SYSTEM AND THE METHOD OF INSTALLATION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- TAPPING VALVES SHALL BE AWWA C515 FL X MJ AS MANUFACTURED BY EJ WITH RESILIENT SEATED GATE VALVES AS APPROVED BY LOCAL MUNICIPALITY.
- TAPPING SLEEVES SHALL BE ALL STAINLESS STEEL (BODY, FLANGE AND HARDWARE), MANUFACTURED BY ROMAC INDUSTRIES SST; JCM 432; SMITH-BLAIR 663/665 OR APPROVED EQUAL BY THE WATER RESOURCES COMMISSIONER'S OFFICE.

HYDRANT REQUIREMENTS

- ALL HYDRANTS SHALL BE CONSTRUCTED WITH A SIX (6) INCH COMPANION GATE VALVE IN A THREE (3) PIECE, ADJUSTABLE DUCTILE IRON VALVE BOX, WHICH SHALL INCLUDE A FIVE AND ONE-QUARTER (5-1/4) INCH SCREW SHAFT. VALVE BOXES SHALL BE SERIES 8860 AS MANUFACTURED BY TYLER PIPE. EJ VALVE BOX NO. 8560 OR APPROVED EQUAL.
- ALL HYDRANTS SHALL BE EJ 5BR250 TRAFFIC MODEL, OR APPROVED EQUAL WITH A MINIMUM OF 6'-0" DEPTH OF BURY UNLESS OTHERWISE INDICATED. SELF-DRAINING HYDRANTS SHALL NOT BE USED. ALL HYDRANTS SHALL BE LOCAL MUNICIPAL STANDARD AS DETAILED. HYDRANTS SHALL HAVE BREAKAWAY FLANGE.
- ALL HYDRANTS SHALL BE PAINTED RED ABOVE GROUND AND BLACK BELOW GROUND WITH A FINISH COAT OF GLAMORTEK 501 ENAMEL, COLOR 314 VERMILION OR APPROVED EQUAL. HYDRANT CAP SHALL BE PAINTED SAME COLOR AS THE HYDRANT. FOR PONTIAC: YELLOW RUST-OLEUM #7543 SAFETY YELLOW.

ACCEPTANCE OF NEW WATER MAINS

- PRIOR TO WATER MAIN ACCEPTANCE THE FOLLOWING CONDITIONS MUST BE MET:
 - PRESSURE TESTING AND BACTERIA TESTING MUST BE COMPLETED IN ACCORDANCE WITH THE WATER RESOURCES COMMISSIONER'S OFFICE REQUIREMENTS
 - ALL EASEMENT AND RIGHT-OF-WAY ACQUISITION MUST BE ACCEPTED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, RIGHT-OF-WAY DIVISION
 - THE LOCAL MUNICIPALITY MUST BE PROVIDED WITH THE BILL OF SALE
 - ALL "RECORD DRAWINGS" MUST BE ACCEPTED AND APPROVED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION. THE WATER RESOURCES COMMISSIONER'S OFFICE AND LOCAL ENGINEER MUST WITNESS THE CONNECTION OF THE WATER MAIN TO THE EXISTING WATER MAIN, AFTER WHICH RESIDENTIAL AND COMMERCIAL TAPS WILL BE ALLOWED.
- THE CONTRACTOR SHALL NOTIFY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION THROUGH THE LOCAL ENGINEER FOR NEW CONSTRUCTION TAP, PRESSURE TESTING, BACTERIOLOGICAL SAMPLING, CONNECTIONS TO EXISTING WATER MAIN AND FINAL FIELD REVIEW. A SEVENTY-TWO (72) HOUR ADVANCE NOTICE IS REQUIRED.
- THE CONTRACTOR SHALL DISINFECT AND PRESSURE TEST ALL NEW WATER MAIN CONSTRUCTION PURSUANT TO THE CURRENT STANDARDS SPECIFIED BY THE WATER RESOURCES COMMISSIONER'S OFFICE.
- HYDROSTATIC TESTING FOR DUCTILE IRON WATER MAIN SHALL BE COMPLETED IN ACCORDANCE WITH ANSI/AWWA C600, SEC 5.2. THE SPECIFIED TEST PRESSURE IS 150 PSI OR 1.5 TIMES THE MAXIMUM ALLOWABLE OPERATING PRESSURE (MAOP) OF THE TEST SECTION, WHICHEVER IS GREATER. THE TEST METHOD IS GENERALLY SUMMARIZED AS FOLLOWS:
 - SLOWLY FILL PIPELINE WITH WATER, VENTING ENTRAPPED AIR AS NECESSARY.
 - REPAIR ANY VISIBLE LEAKS THAT OCCUR DURING FILLING OR AT ANY POINT DURING THE TEST.
 - GRADUALLY APPLY PRESSURE UP TO THE SPECIFIED WORKING PRESSURE USING A SUITABLE PUMP CONNECTED TO THE PIPELINE, BLEEDING TRAPPED AIR, AND ADDING WATER AS NECESSARY UNTIL A STABLE PRESSURE IS HELD.
 - HYDROSTATIC TEST BEGINS AFTER THE PIPELINE IS STABILIZED AT THE WORKING PRESSURE BY INCREASING THE PRESSURE UP TO THE SPECIFIED TEST PRESSURE AND HOLD IT WITHIN PLUS/MINUS 5 PSI FOR THE DURATION OF THE TEST, OR A MINIMUM OF TWO HOURS.
 - CAREFULLY RECORD THE AMOUNT OF MAKEUP WATER ADDED DURING THE TEST. THE HYDROSTATIC TEST PASSES IF THE AMOUNT OF MAKEUP WATER DOES NOT EXCEED THE TESTING ALLOWANCE.
 - IF THE TESTING ALLOWANCE IS EXCEEDED, LOCATE AND REPAIR ANY LEAKS AND REPEAT TEST.
- REFER TO SHEET 5 FOR HYDROSTATIC TESTING REQUIREMENTS FOR HDPE PIPE.
- PRESSURE TESTING AGAINST VALVES PHYSICALLY CONNECTED TO AN EXISTING WATER SUPPLY SYSTEM IS STRICTLY PROHIBITED.
- WHERE CONTRACTOR SUPPLIED GAUGES ARE REQUIRED, MINIMUM SIZE SHALL BE 3/4" DIAMETER OR LARGER GRADUATED IN ONE (1) OR TWO (2) POUND INCREMENTS FROM 1 TO 160 P.S.I. OR HIGHER.
- PRESSURE TESTING AND BACTERIA TESTING MUST BE SUCCESSFULLY COMPLETED PRIOR TO CONNECTING TO THE EXISTING WATER SUPPLY SYSTEM.

WATER RESOURCES COMMISSIONER
WATER SYSTEM STANDARDS –
GATE VALVES

COMMUNITY	DIRECTION TO OPEN	VALVE TYPE	
		STD. GATE VALVE	TAPPING VALVE
BINGHAM FARMS	RIGHT	C515	C515
BLOOMFIELD HILLS	RIGHT	C515	C515
COMMERCE TOWNSHIP	LEFT	C515	C515
FARMINGTON HILLS	RIGHT	C515	C515
HIGHLAND TOWNSHIP	LEFT	C515	C515
KEEGO HARBOR	RIGHT	C515	C515
OAKLAND TOWNSHIP	LEFT	C515	C515
ORCHARD LAKE VILLAGE	LEFT	C515	C515
OXFORD TOWNSHIP	LEFT	C515	C515
PONTIAC	LEFT	C515	C515
ROYAL OAK TOWNSHIP	RIGHT	C515	C515
SPRINGFIELD TOWNSHIP	LEFT	C515	C515
WALLED LAKE	LEFT	C515	C515

1.) C515 RESILIENT SEATED GATE VALVE – MANUFACTURED BY U.S. PIPE, MUELLER, EAST JORDAN IRON WORKS, AMERICAN FLOW CONTROL OR APPROVED EQUAL.

FIRE HYDRANT NOZZLE SIZE AND
THREAD SPECIFICATIONS

CVT	PUMPER NOZZLE	HOSE NOZZLE	OPERATING NUT	DEPTH OF BURY	STYLE	MODEL #
BINGHAM FARMS	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	5'-6"	5BR250	54826D
BLOOMFIELD HILLS	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	6'-0"	5BR250	55825D
COMMERCE TWP/ WOLVERINE LAKE	(1) – 5"-STORZ	(2) – 2-1/2"-NST	1-1/2"	5'-6"	5BR250	54913D
FARMINGTON HILLS	(1) – 3-3/4"-DFD	(2) – 2-1/2"-NST	1-1/8"	5'-6"	5BR250	54329D
HIGHLAND TWP	(1) – 5"-STORZ	(2) – 2-1/2"-NST	1-1/2"	5'-6"	5BR250	54913D
KEEGO HARBOR	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	5'-6"	5BR250	54826D
OAKLAND TWP	(1) – 4"-STORZ	(2) – 2-1/2"-DFD	1-1/2"	5'-6"	5BR250	54831D
ORCHARD LAKE	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/8"	6'-0"	5BR250	55825D
OXFORD TWP	(1) – 5"-STORZ (1) – 4-1/2"-NST		1-1/2"	6'-0"	5BR250	55601D
PONTIAC	(1) – 3-3/4"-DFD	(2) – 2-1/2"-DFD	1-1/2"	6'-0"	5BR250	55822D
ROYAL OAK TWP	(1) – 3-3/4"-DFD	(2) – 2-1/2"-NST	1-1/8"	5'-6"	5BR250	54329D
SPRINGFIELD TWP	(1) – 5"-STORZ	(2) – 2-1/2"-NST	1-1/2"	5'-6"	5BR250	54913D
WALLED LAKE	(1) – 4-1/2"-NST	(2) – 2-1/2"-NST	1-1/8"	5'-6"	5BR250	54534D

- D.F.D. – DETROIT FIRE DEPARTMENT THREAD
- N.S.T. – NATIONAL STANDARD THREAD
- STORZ NOZZLES SHALL BE COMPATIBLE WITH STORZ COUPLED LARGE DIAMETER FIRE HOSE. NOZZLES SHOULD BE MADE OF "LEAD FREE" BRASS OR ALUMINUM, AS APPROVED BY LOCAL CITY, VILLAGE OR TOWNSHIP. THE NOZZLE SHALL BE AN INTEGRAL PART OF THE HYDRANT, RESISTANT TO TAMPER AND REMOVAL. ENGAGEMENT LUGS SHALL BE ON THE NOZZLE AND CAP TO PREVENT FAILURE UNDER HIGH PRESSURE. NOZZLE AND CAP SHALL MEET AWWA C502 SPECIFICATIONS. NOZZLE SHALL BE COMPATIBLE WITH HOSE LOCK TO PREVENT HOSE FROM DISCONNECTING WHILE IN USE.

WATER RESOURCES COMMISSIONER'S OFFICE
WATER SYSTEMS OPERATIONS AND MAINTENANCE DIVISION
RECORD DRAWING SPECIFICATIONS

IN AREAS WHERE WATER SYSTEMS ARE OPERATED AND MAINTAINED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION, FINAL ACCEPTANCE OF THE WATER SYSTEM MUST BE RENDERED BY THE WATER RESOURCES COMMISSIONER'S OFFICE, OPERATIONS AND MAINTENANCE DIVISION, BEFORE THE SYSTEM CAN BE USED FOR THE SERVICE INTENDED.

ONE ITEM REQUIRED FOR FINAL ACCEPTANCE SHALL BE THE SUBMISSION OF RECORD DRAWINGS TO THE WATER RESOURCES COMMISSIONER, OPERATIONS AND MAINTENANCE DIVISION, BY THE DESIGN ENGINEER. RECORD DRAWINGS SHALL BE DEFINED AS AND CONTAIN THE FOLLOWING INFORMATION:

- THE DESIGN ENGINEER SHALL FURNISH "RECORD DRAWINGS" WATER MAIN PLANS UPON JOB COMPLETION. "RECORD DRAWINGS" SHALL BE FORWARDED TO THE WATER RESOURCES COMMISSIONER BY THE LOCAL MUNICIPAL ENGINEER AFTER THEIR REVIEW AND APPROVAL.
- THE COVER SHEET SHALL BE SIGNED AND SEALED BY THE PROJECT DESIGN ENGINEER AND INCLUDE THE FOLLOWING CERTIFICATION STATEMENT:

HEREBY CERTIFY THAT OUR FIRM HAS PREPARED THESE RECORD DRAWINGS OF THE IMPROVEMENTS AS CONSTRUCTED, AND THAT TO THE BEST OF MY KNOWLEDGE THOSE IMPROVEMENTS NOTED AS "RECORD DRAWINGS" WERE CONSTRUCTED IN SUBSTANTIAL CONFORMANCE WITH THE APPROVED CONSTRUCTION PLANS; AND ALSO THAT THE WATER MAIN AND STRUCTURES, AS CONSTRUCTED, LIE WITHIN THE EASEMENT DESCRIPTIONS REQUIRED BY THE WATER RESOURCES COMMISSIONER'S OFFICE.

(COMPANY NAME)

(ENGINEER'S SIGNATURE)

PROFESSIONAL ENGINEER NO. _____

ENGINEER SEAL

- THE MINIMUM SCALE SHALL BE ONE (1) INCH EQUALS FIFTY (50) FEET.
- THE SIZE, LENGTH, CLASS AND MANUFACTURER OF PIPE INSTALLED SHALL BE INDICATED.
- THE SIZE, BRAND AND MODEL NUMBERS OF ALL VALVES AND HYDRANTS INSTALLED SHALL BE INDICATED.
- A TOTAL RECORD DRAWING QUANTITY LIST SHALL BE INCLUDED, AS WELL AS A RECORD DRAWING QUANTITY LIST ON EACH INDIVIDUAL SHEET.
- THE LOCATIONS SHALL BE SHOWN ON THE PLANS WITH AN ACCURACY OF ONE (1) FOOT.
- THE OFFSET OF THE WATER MAIN FROM PROPERTY LINES SHALL BE INDICATED.
- ALL GATE VALVE WELLS, HYDRANTS AND ALL WATER SYSTEM APPURTENANCES SHALL BE LOCATED FROM THE NEAREST PROPERTY CORNER.
- ALL UNDERGROUND APPURTENANCES, SUCH AS GATE VALVE WELLS, METER PITS, PRESSURE REDUCING VALVE PITS, ETC. SHALL BE LOCATED FROM THE NEAREST HYDRANT THAT IS CONNECTED TO THE SAME WATER MAIN AS THE APPURTENANCE.
- THE LOCATION, SIZE, BRAND AND MODEL NUMBER OF EVERY RESTRAINED JOINT SHALL BE NOTED.
- THE ACCURATE LOCATION OF ALL UTILITY CROSSINGS WHERE THE RECOMMENDED SEPARATION, VERTICALLY OR HORIZONTALLY, IS LESS THAN THE TEN STATE STANDARDS SHALL BE NOTED.
- WATER MAINS 12" AND LARGER IN DIAMETER SHALL BE DRAWN IN PROFILE VIEW IN ADDITION TO PLAN VIEW ON THE CONSTRUCTION PLANS.

WATER MAIN
STANDARD DETAILS

REVISION BLOCK

Date Source / Source Date: N/A

Rev. No.: By: Rev. Date: Description:

1 DL 03/23/15 FINAL CHANGES TO GATE VALVE STANDARDS, HYDRANT SPECIFICATIONS AND PIPE CLASS UPDATES

2 DL 01/03/17 UPDATE DIRECTION TO OPEN COMMERCE TOWNSHIP FROM RIGHT TO LEFT

3 KB 02/14/18 MARKUPS PER G. APPEL


4 WRC 08/01/20 GENERAL UPDATE

ORIG. DATE: 01/01/01

SCALE: NONE

DESIGNED BY: WRC

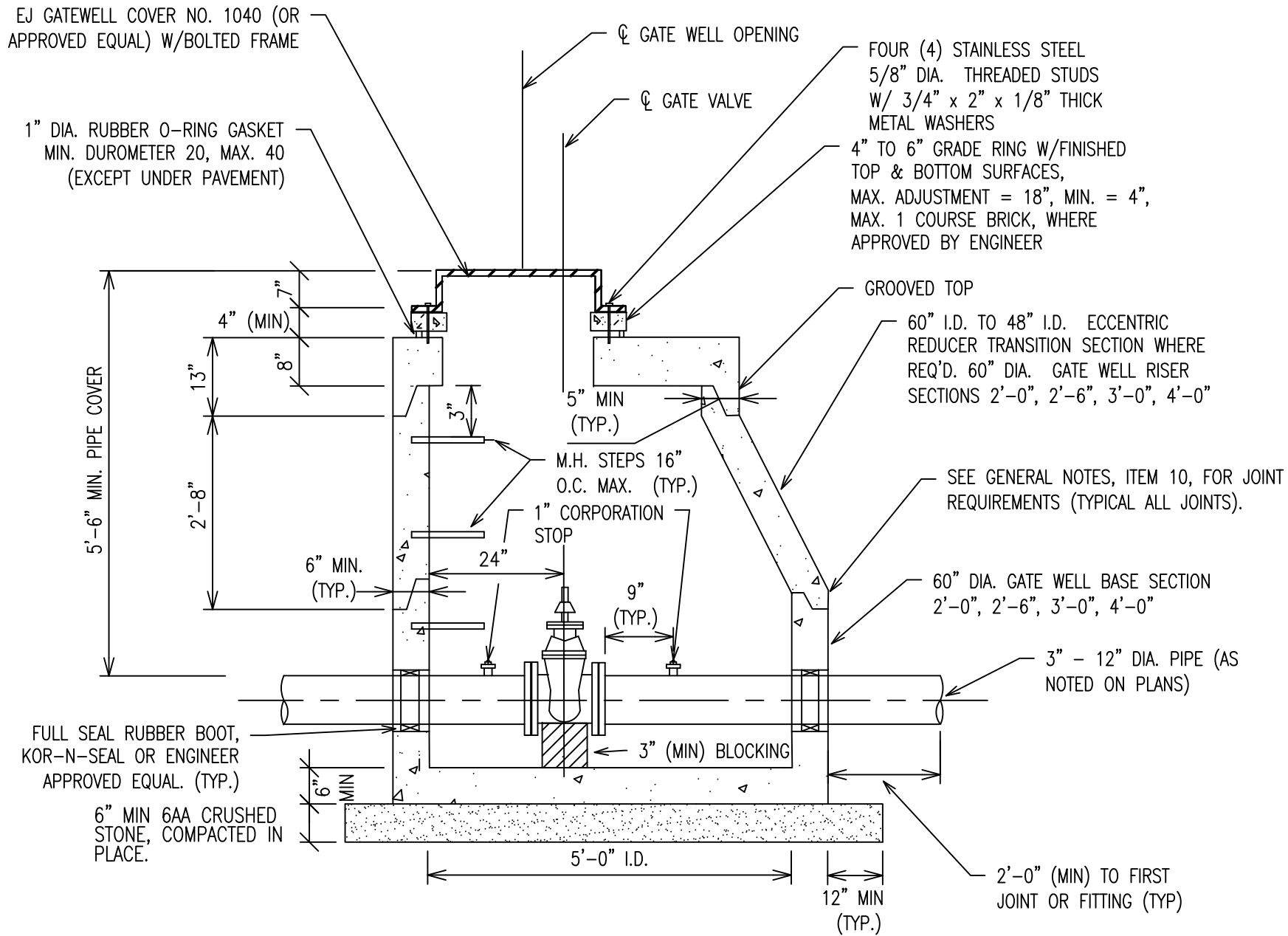
DRAWN BY: WRC Mapping


WATER RESOURCES COMMISSIONER
Jim Nash

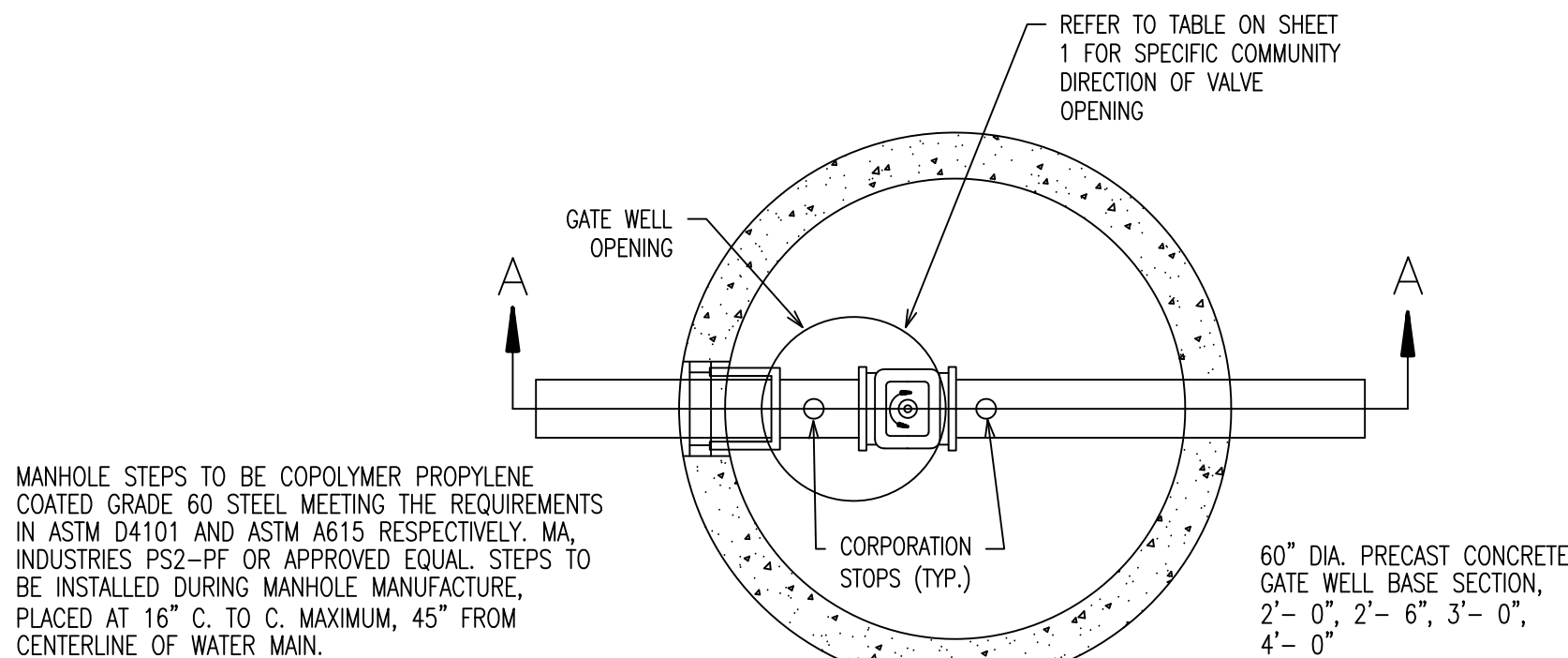
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST
WATERFORD, MICHIGAN
48329-1907

SHEET NO.: 1 of 7

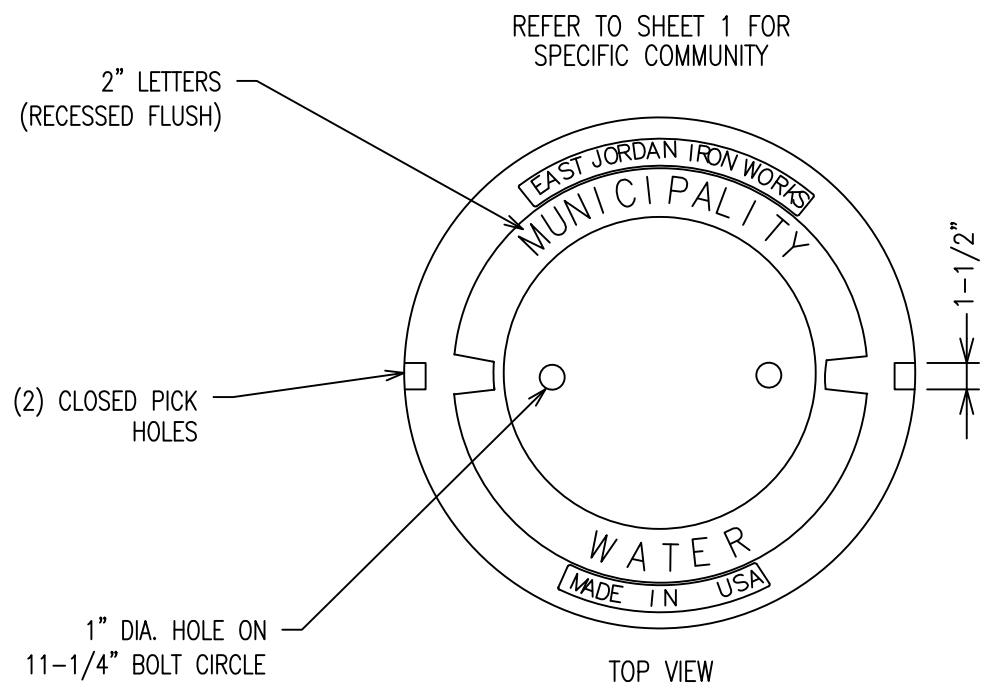
GATE VALVE & WELL DETAILS



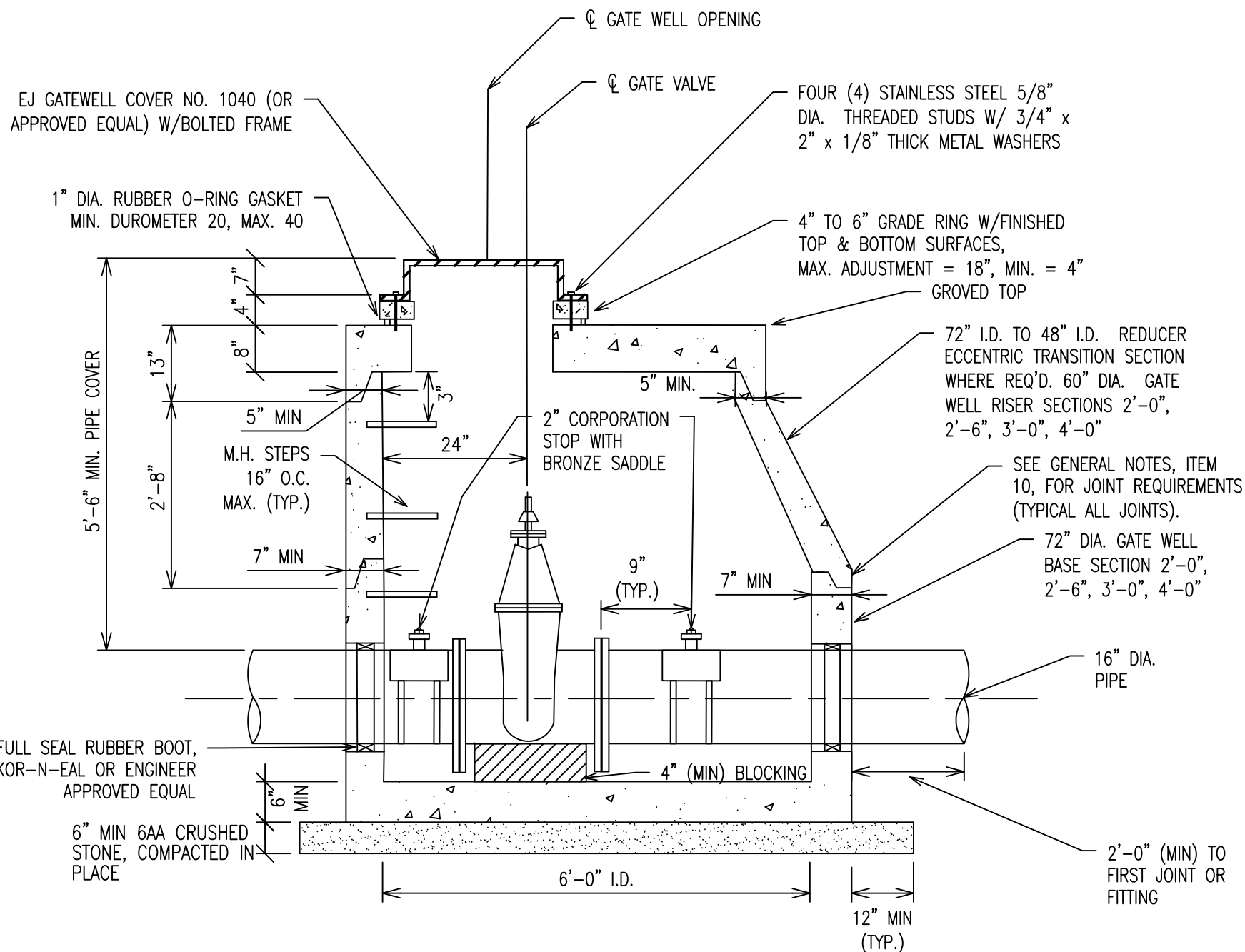
3" THRU 12" GATE WELL



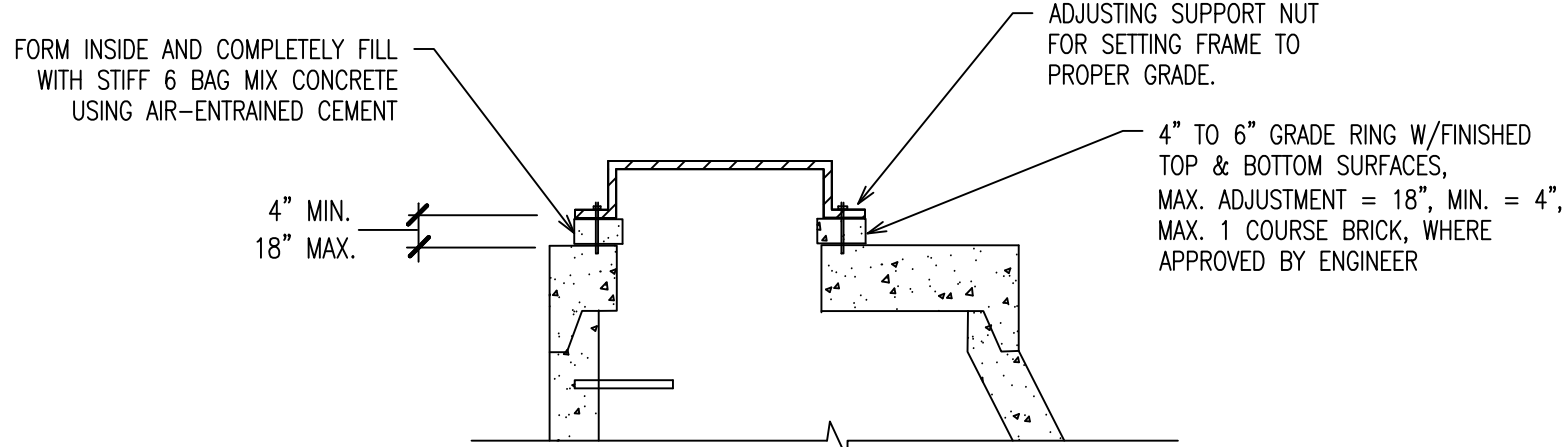
PLAN GATE WELL TYPICAL



LETTERING LAYOUT FOR GATEWELL COVERS

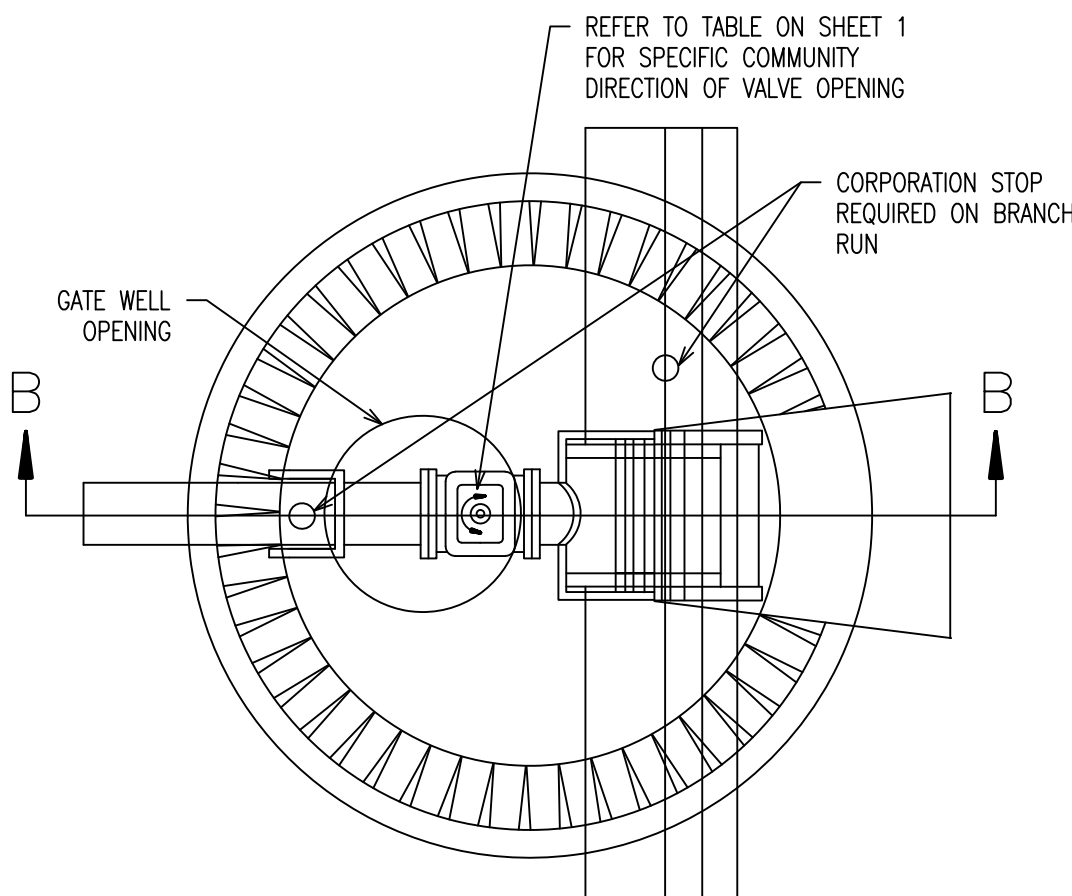


16" GATE WELL

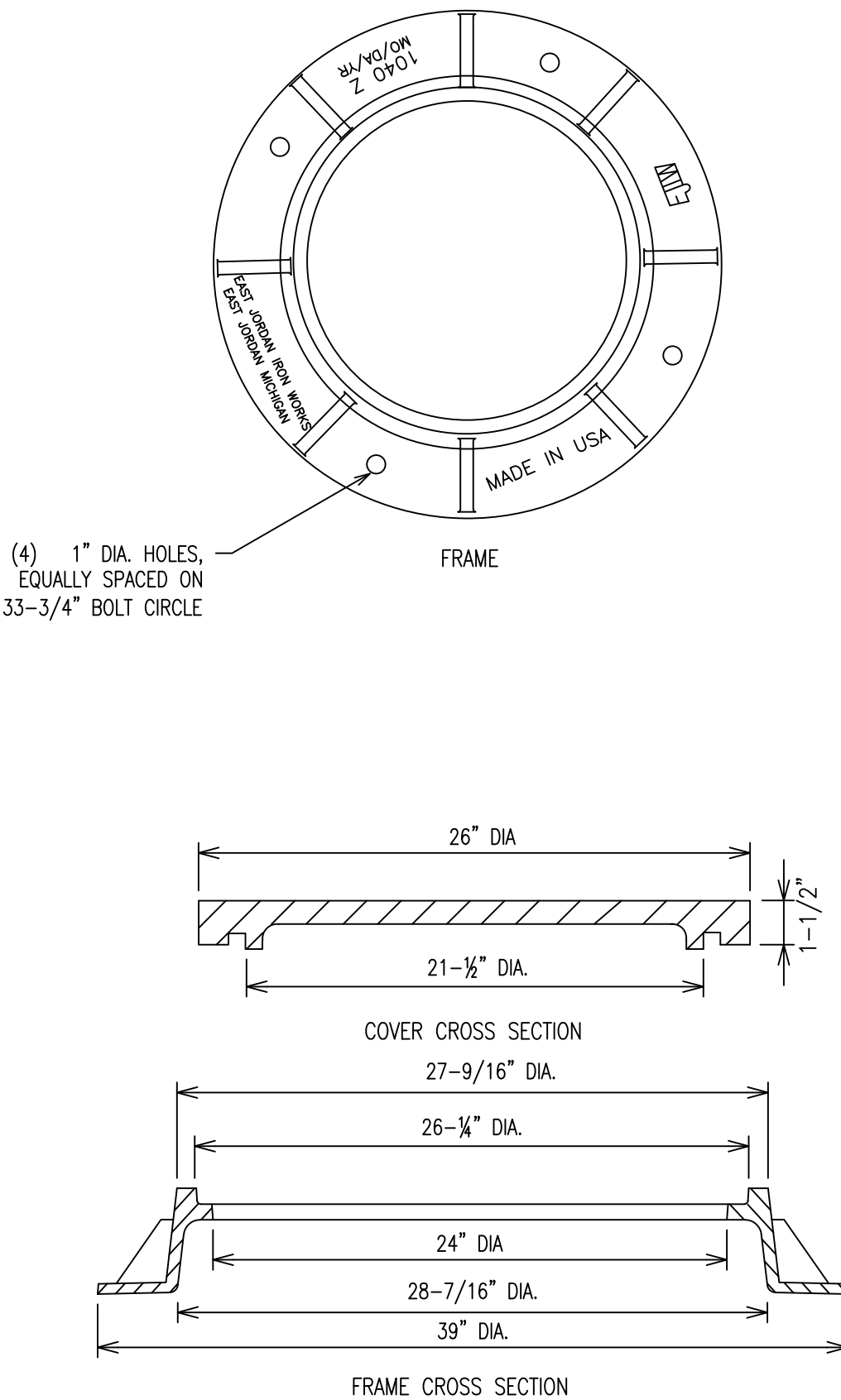


GATE WELL TOPS WITHIN PAVEMENT AREAS

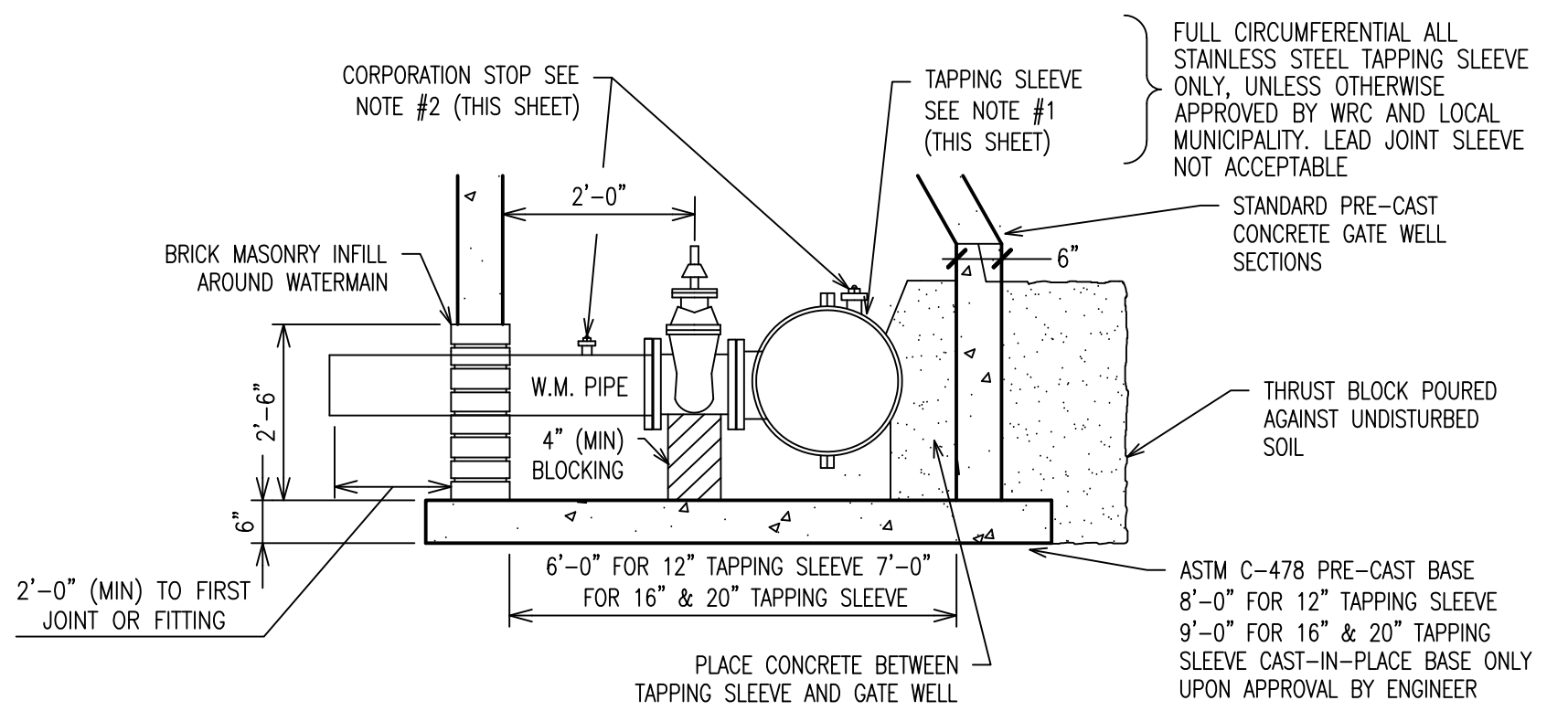
RUBBER O'RINGS SHALL
NOT BE USED IN PAVEMENT



PLAN TAPPING SLEEVE
VALVE & WELL (TYPICAL)



FRAME




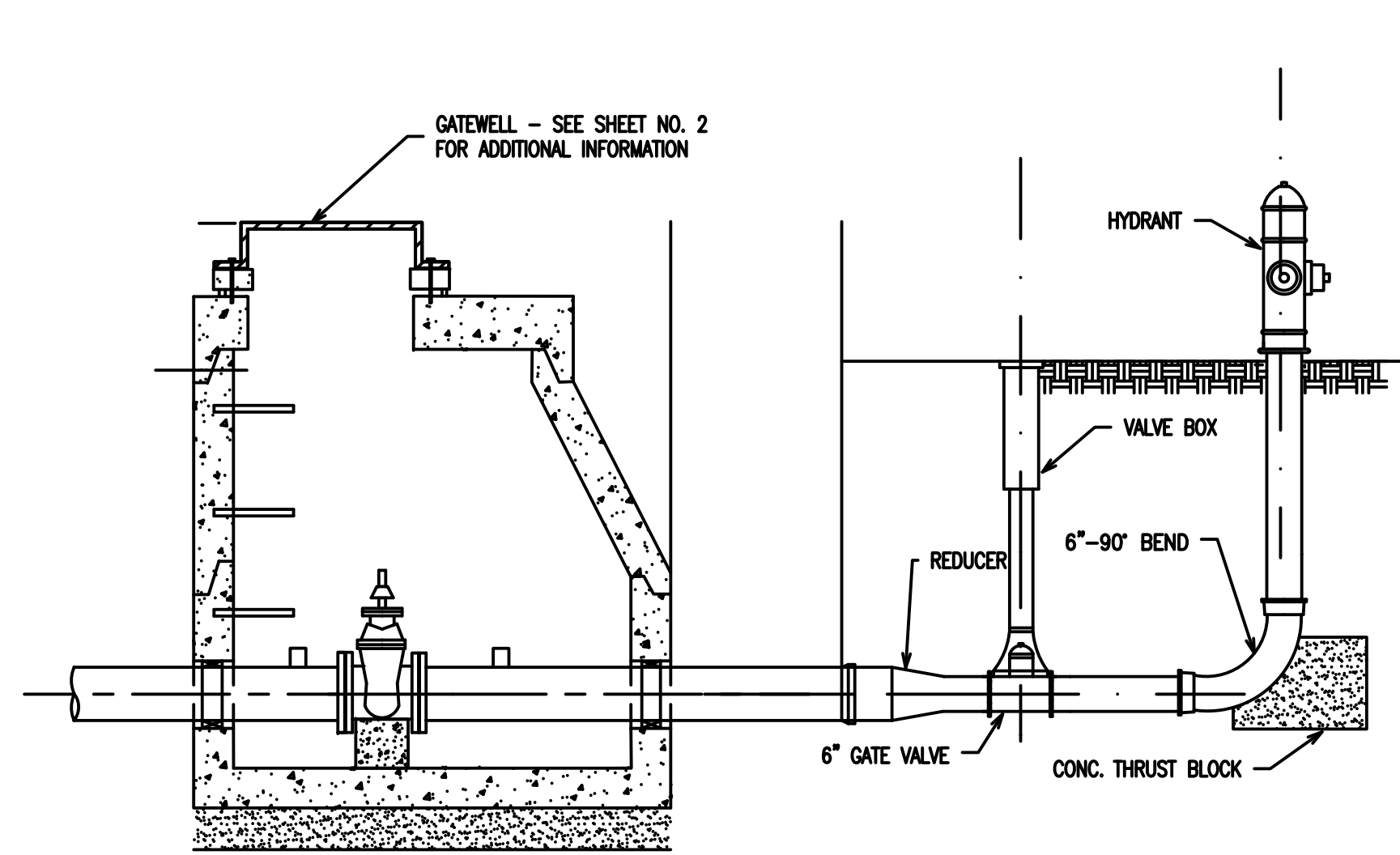
20" x 12", 20" x 8", 16" x 12", 16" x 8", 12" x 8"

TAPPING SLEEVE, VALVE & WEL

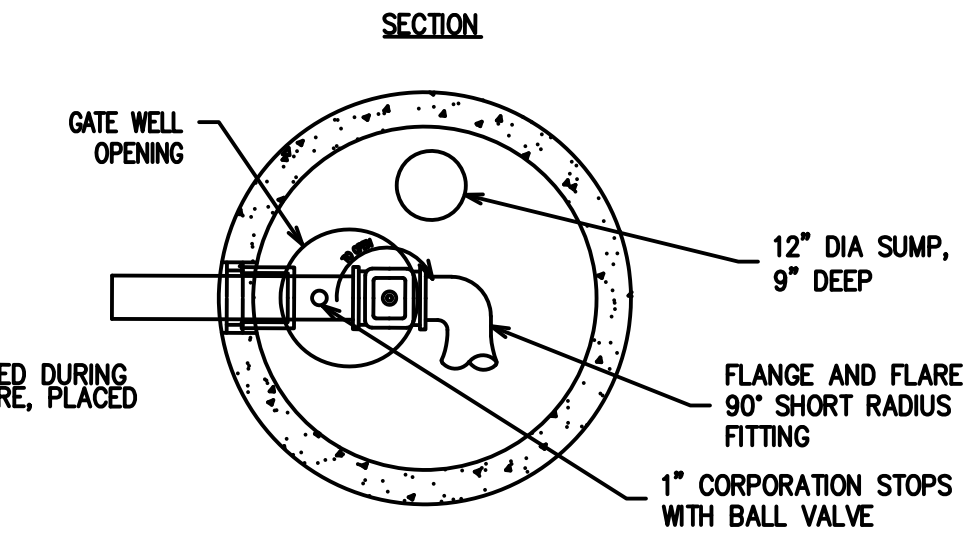
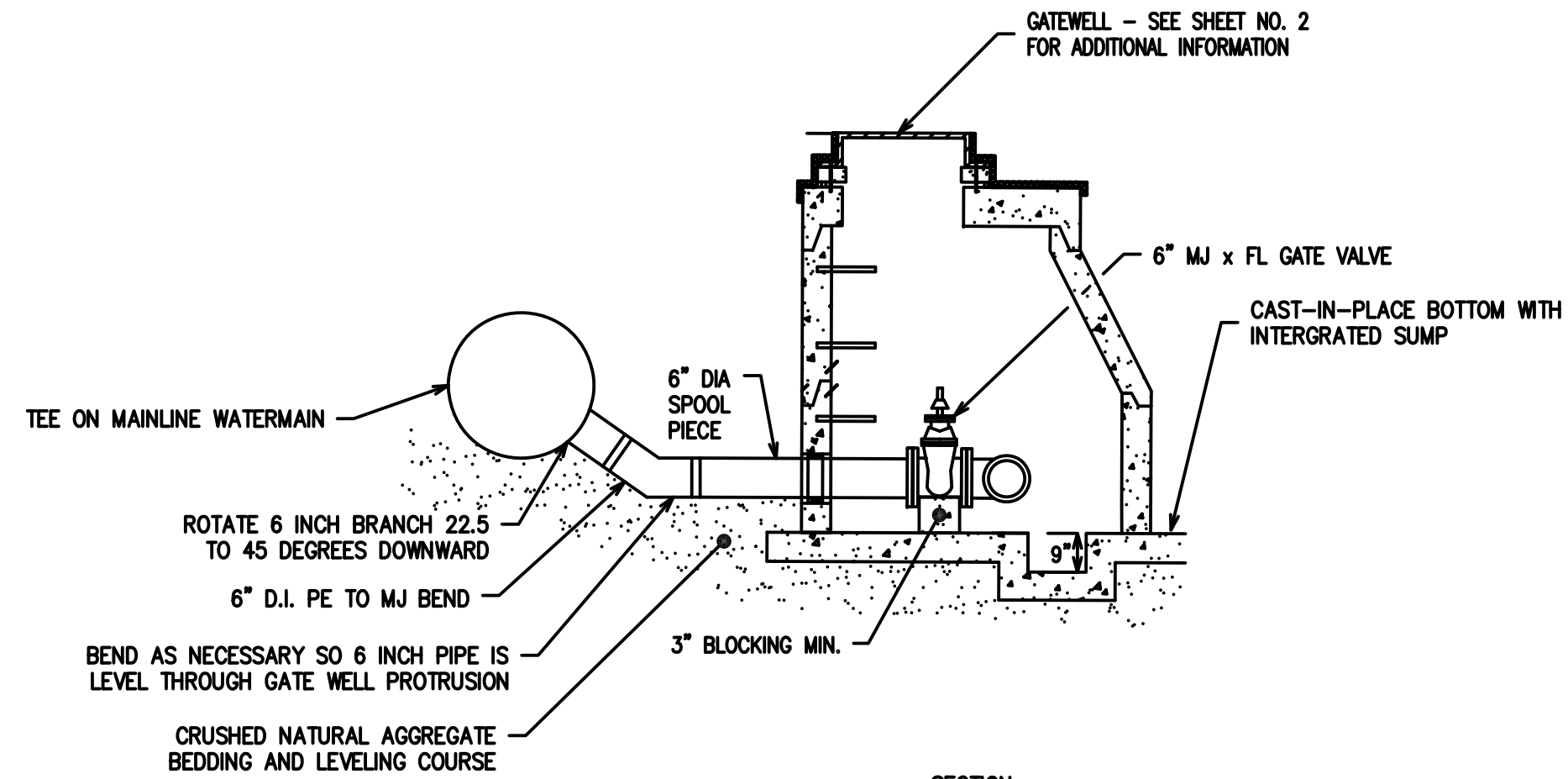
NOTES

1. REFER TO NOTE 7 OF "VALVE AND SLEEVE NOTES" ON SHEET 1.
2. FOR PIPE SMALLER THAN 16" USE 1" CORPORATION STOP, FOR 16" PIPE OR LARGER USE 2" CORPORATION STOP WITH BRONZE SADDLE.
3. WRC DOES NOT RECOMMEND SIZE ON SIZE TAPPING.

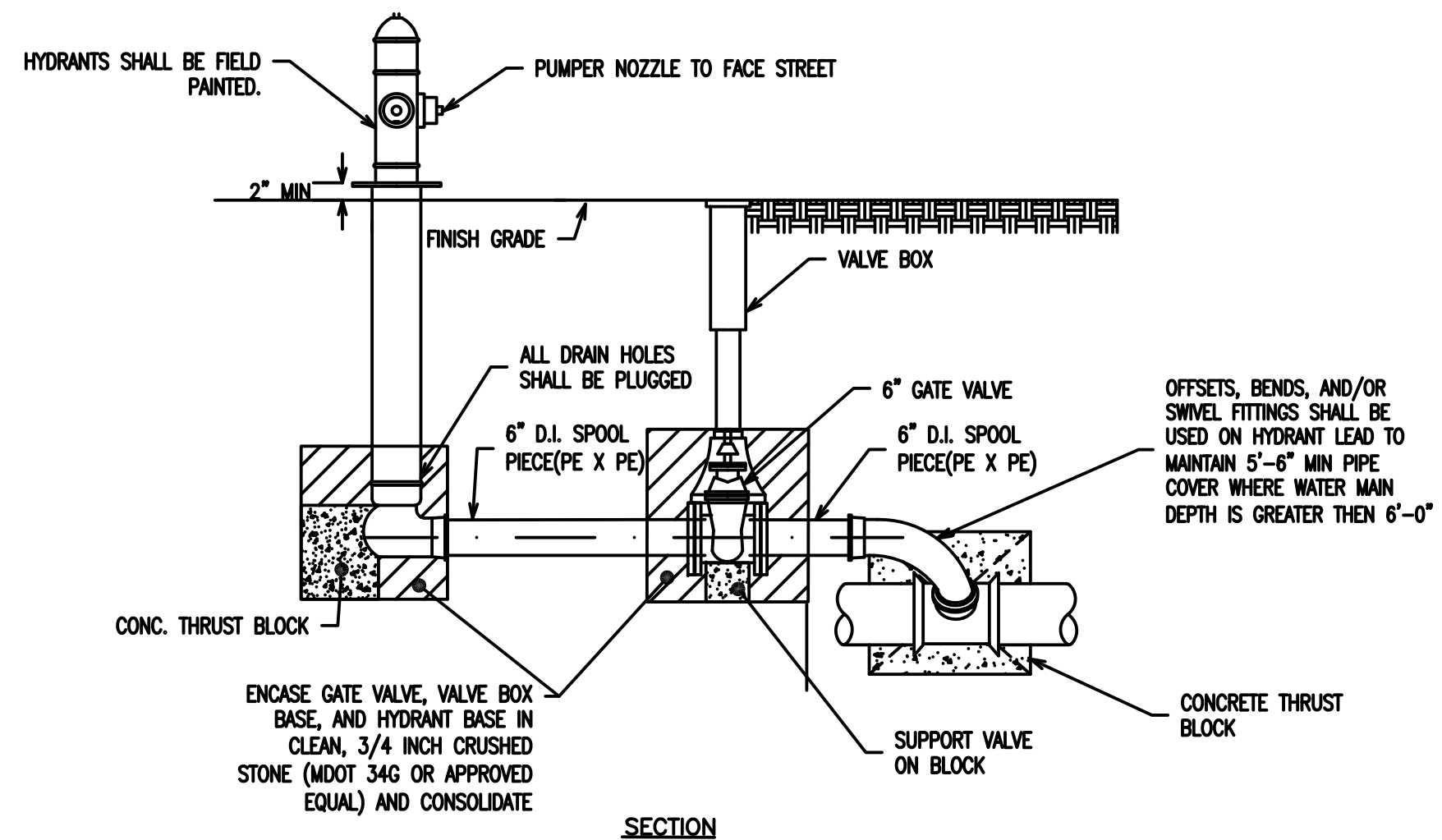
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Rev:	Rev:	Rev:	
No. by:	Description:		
1	DL	05/25/15	FINCH CHANGES TO GATE VALVE STANDARDS, HYDRANT SPECIFICATIONS AND PIPE CLASS UPDATES
2	TC	01/03/17	UPDATE CORRECTIONS TO OPEN COMMERCIAL TOWNSHIP FROM RIGHT TO LEFT
3	KB	06/14/15	MARKUPS PER 95, APPPEL
4		05/10/10	GENERAL UPDATE
ORIG. DATE: 01/10/11 SCALE: NONE DESIGNED BY: WRC DRAWN BY: WRC Mapping			
 WRC WATER RESOURCES COMMISSIONER <i>Jim Nash</i>		ONE PAPER FOR GATE, BLDG 95 WEST WATERWORKS, INCHING 48329-1907	
		SHEET NO.: 2 of 7	



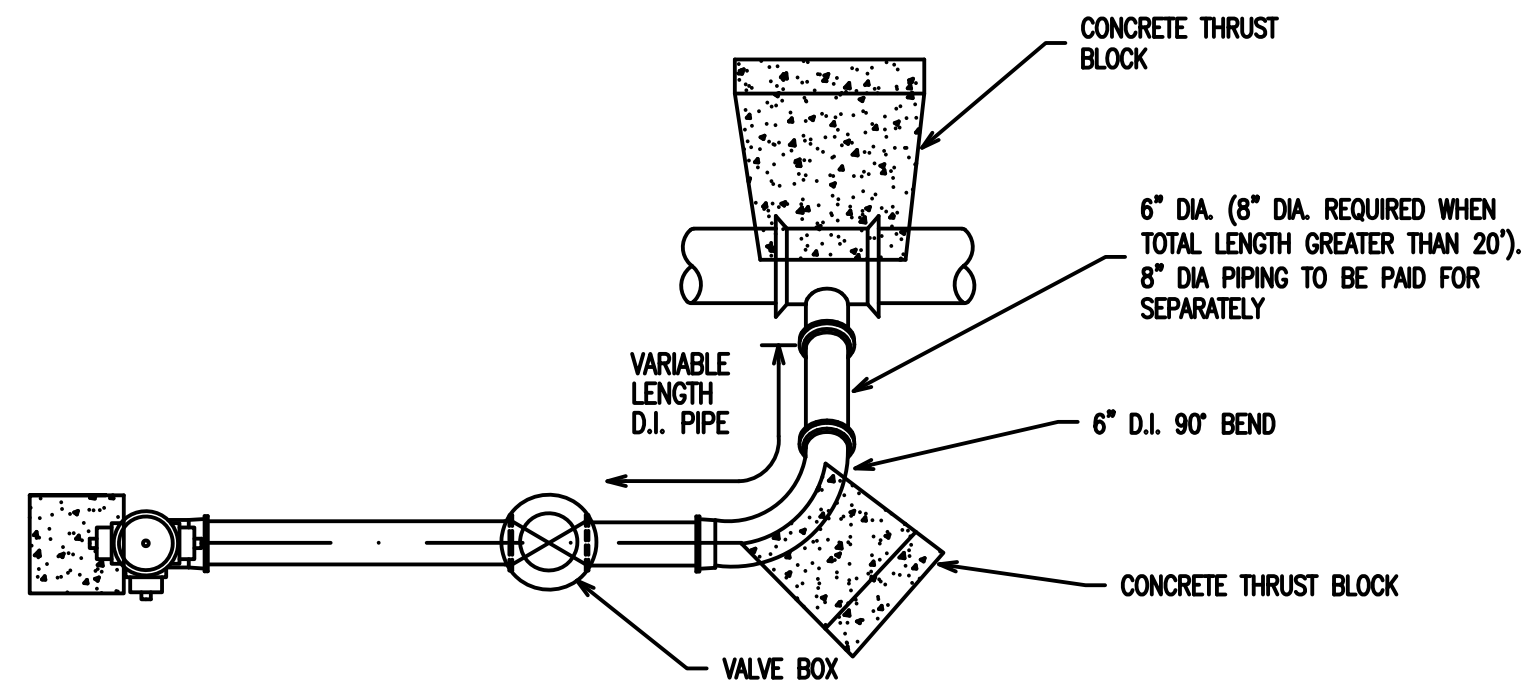
DEAD END BLOWOFF CONNECTION



BLOW-OFF VALVE AND WELL



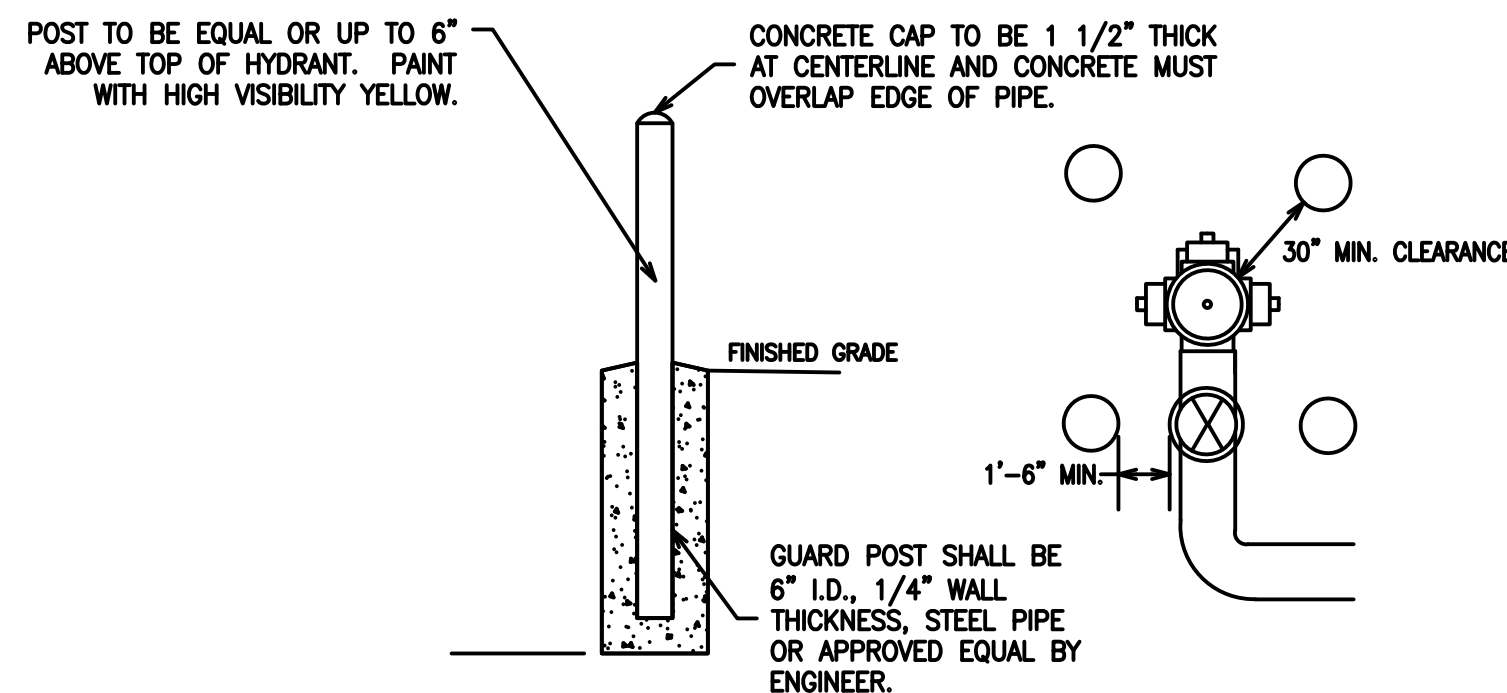
SECTION



PLAN

6" HYDRANT SIDE OUTLET

- NOTES:
1. HYDRANT EXTENSIONS BETWEEN THE STANDPIPE LOWER SECTION & STANDPIPE UPPER ARE LIMITED TO 18 INCHES
 2. ALL HYDRANTS COMPANION VALVES, BENDS, AND TEES TO BE FULLY RESTRAINED BY MECHANICAL JOINT RESTRAINT SYSTEM FITTINGS (MEGA-LUG OR APPROVED EQUAL).
 3. THRUST BLOCKS ARE REQUIRED AT ALL TEES, BENDS AND ENDS.
 4. ALL HARDWARE (BOLTS, NUTS, WASHERS, ETC.) FOR HYDRANT ASSEMBLIES SHALL BE COR-BLUE OR APPROVED EQUAL



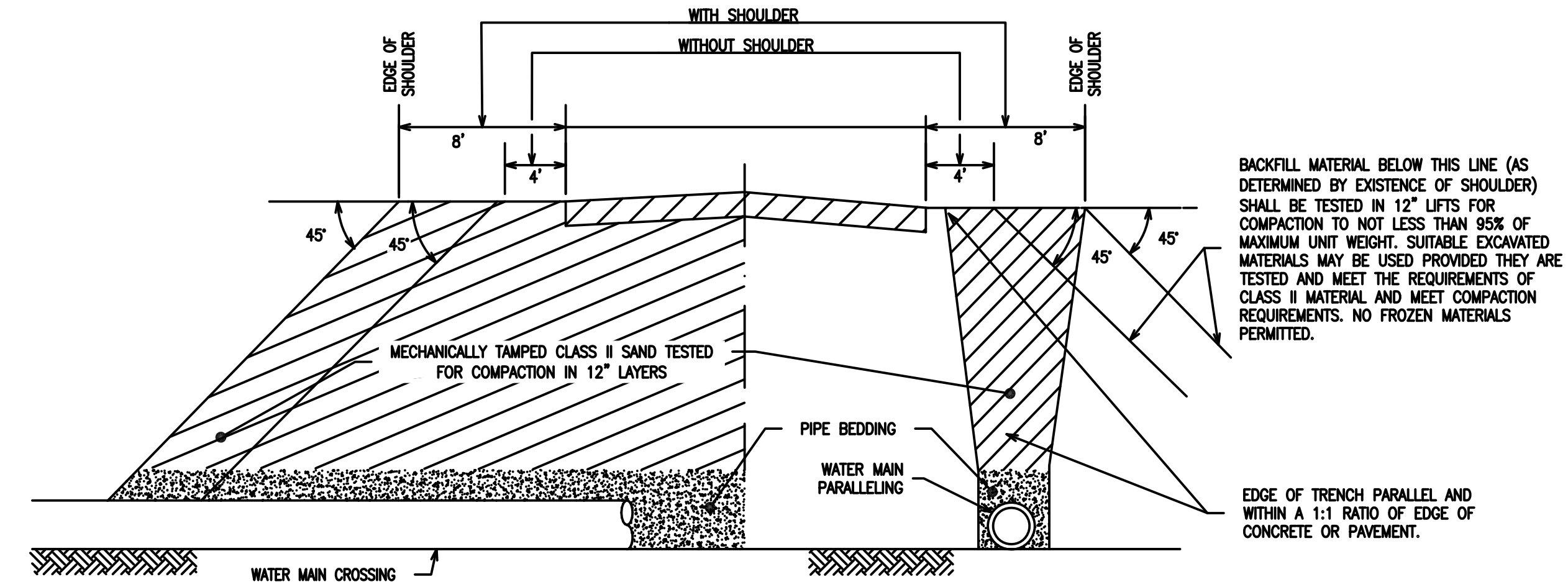
GUARD POST

- NOTES:
1. GUARD POST SHALL NOT INTERFERE WITH HYDRANT OPERATION
 2. TO BE INSTALLED IN ALL PAVED AREAS PARKING LOTS, PARKS, PLAZAS, ETC. (NOT RIGHT-OF-WAYS) SPACE WHERE VEHICLE EQUIPMENT DAMAGE TO HYDRANT IS POSSIBLE.

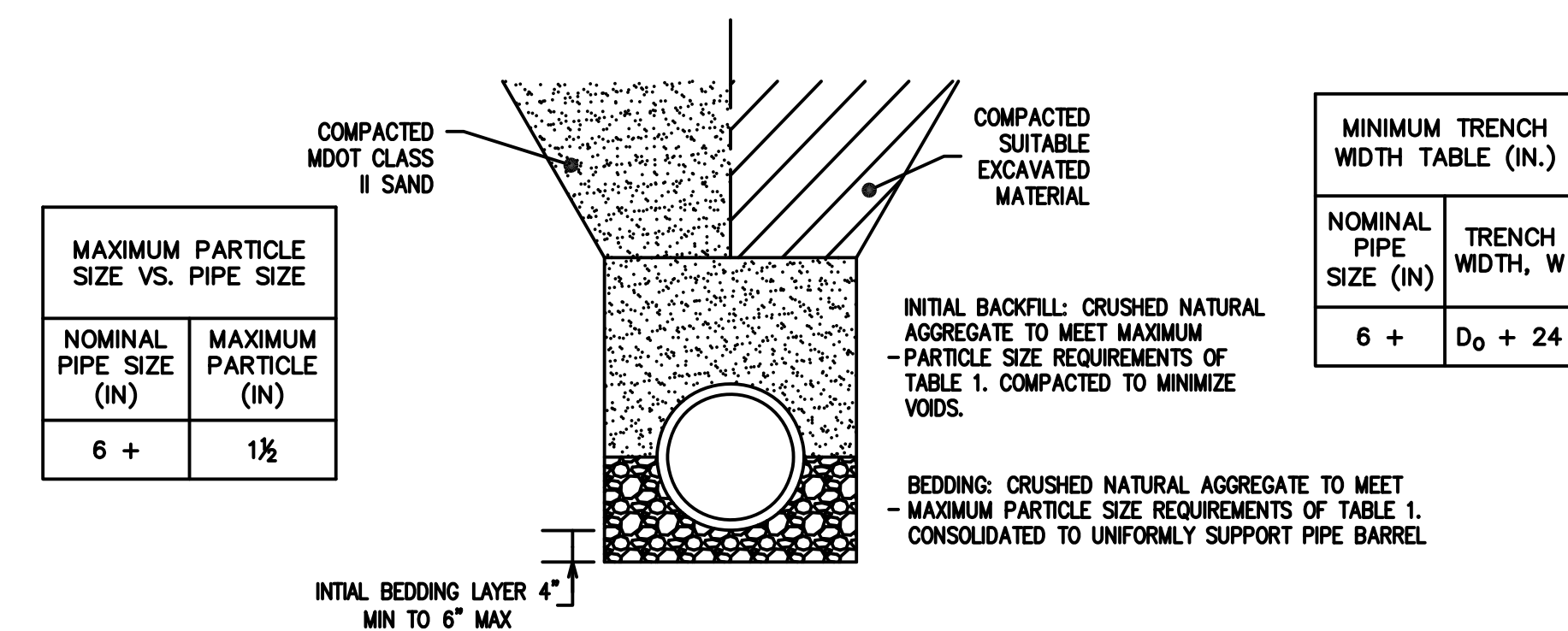
FOR 90° BENDS OR SMALLER					FOR PLUGS				FOR TEES				
D	A	B	C	E MIN.	D	A	B	C MIN.	D	A	B	C	E MIN.
20"	8"	6.5"	3.5"	2.5"	20"	7"	5"	2.5"	20"	6.5"	4.5"	3.5"	3"
16"	6"	4"	2.5"	2"	16"	4'-10"	4'-10"	2"	16"	4'-8"	4'-8"	2.5"	2.75"
12"	4"	3"	2"	1.75"	12"	4'-4"	3"	1'-9"	12"	4"	3"	2.5"	2.5"
10"	3"	3"	2"	1.75"	10"	3"	2"	1'-6"	10"	3"	2"	2"	2.25"
8"	3"	2"	2"	1.5"	8"	2'-10"	2'-6"	1'-6"	8"	2'-6"	2"	2"	2.25"
6"	2"	1.5"	2"	1.25"	6"	1'-6"	1'-6"	3"	6"	2"	2"	2"	2.25"

THRUST BLOCK DETAILS

- NOTE:
1. 3000 PSI CONCRETE TO BE USED. THRUST BLOCK TO ABUT & REST AGAINST UNDISTURBED SOIL OR EARTH COMPACTED TO 95% MODIFIED PROCTER.



MINIMUM BACKFILL UNDER OR NEAR PAVEMENT



DUCTILE IRON PIPE TRENCH DETAIL

- NOTES:
1. DUCTILE IRON PIPE IS CONSIDERED A FLEXIBLE PIPE THAT WHEN INSTALLED UNDERGROUND IS DESIGNED TO DEFLECT UNDER LOAD.
 2. DO NOT COMPACT INNER BEDDING OF INITIAL BEDDING LAYER.
 3. CAREFULLY EXCAVATE BELL OR COUPLING HOLES FROM THE INITIAL BEDDING LAYER.
 4. SHOVEL SLICE BEDDING MATERIAL IN THE HAUNCH AREA ALONG THE BOTTOM CIRCUMFERENCE OF THE PIPE TO CONSOLIDATE BEDDING AND UNIFORMLY SUPPORT THE PIPE BARREL.
 5. COMPACT INITIAL BACKFILL MATERIALS IN LIFTS NOT EXCEEDING 6 INCHES BY HAND TAMPING AROUND AND DIRECTLY ABOVE PIPE TO MINIMIZE VOIDS.
 6. DO NOT USE MECHANICAL COMPACTION EQUIPMENT DURING INITIAL BACKFILL OPERATIONS UNTIL MATERIAL HAS BEEN BROUGHT TO 12 INCHES ABOVE THE TOP OF PIPE BARREL.
 7. COMPACT SAND BACKFILL AND STANDARD TRENCHES OUTSIDE OF PIPE ZONE TO NOT LESS THAN 95% OF THE MAXIMUM UNIT WEIGHT IN LIFTS NOT EXCEEDING 12 INCHES.
 8. FOR MINIMUM TRENCH WIDTHS, REFER TO TABLE 2, MAXIMUM TRENCH WIDTH = $D_0 + 2D_0$ UNLESS MINIMUM TRENCH WIDTH IS GREATER.
 9. IF THE PIPE IS LOCATED BENEATH THE GROUND WATER TABLE, THE PIPE ZONE SHALL BE WRAPPED IN A GEOTEXTILE SEPARATOR TO MINIMIZE MIGRATION OF SOIL INTO THE PIPE ZONE.

WATER MAIN STANDARD DETAILS

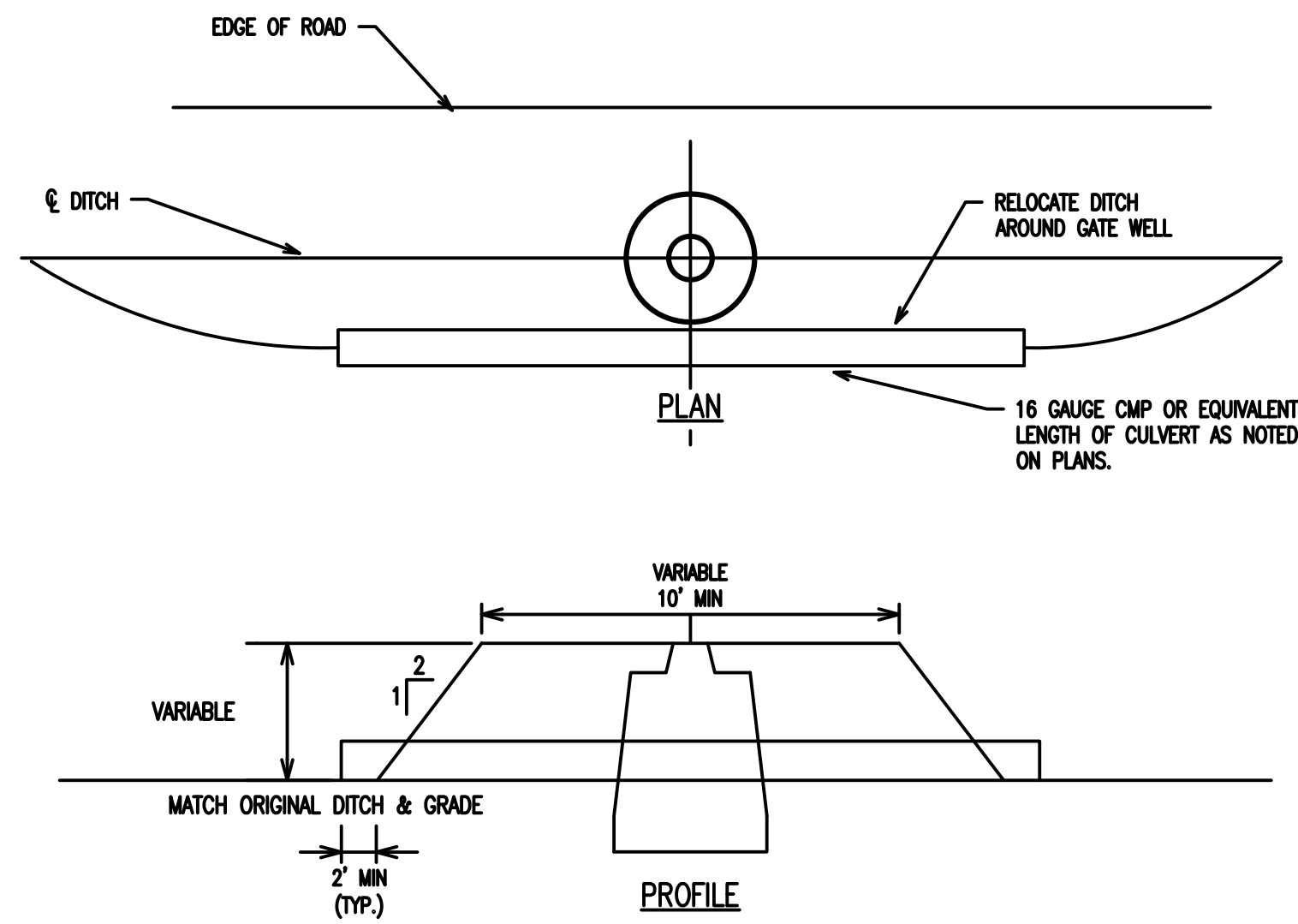
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Rev.	By:	Rev.	Date:
1	DL	1	01/01/14
2	DL	2	03/20/14
3	WRC	3	02/14/18
4	WRC	4	01/01/20
ORIG. DATE: 01/01/01			
SCALE: NONE			
DESIGNED BY: WRC			
DRAWN BY: WRC Mapping			



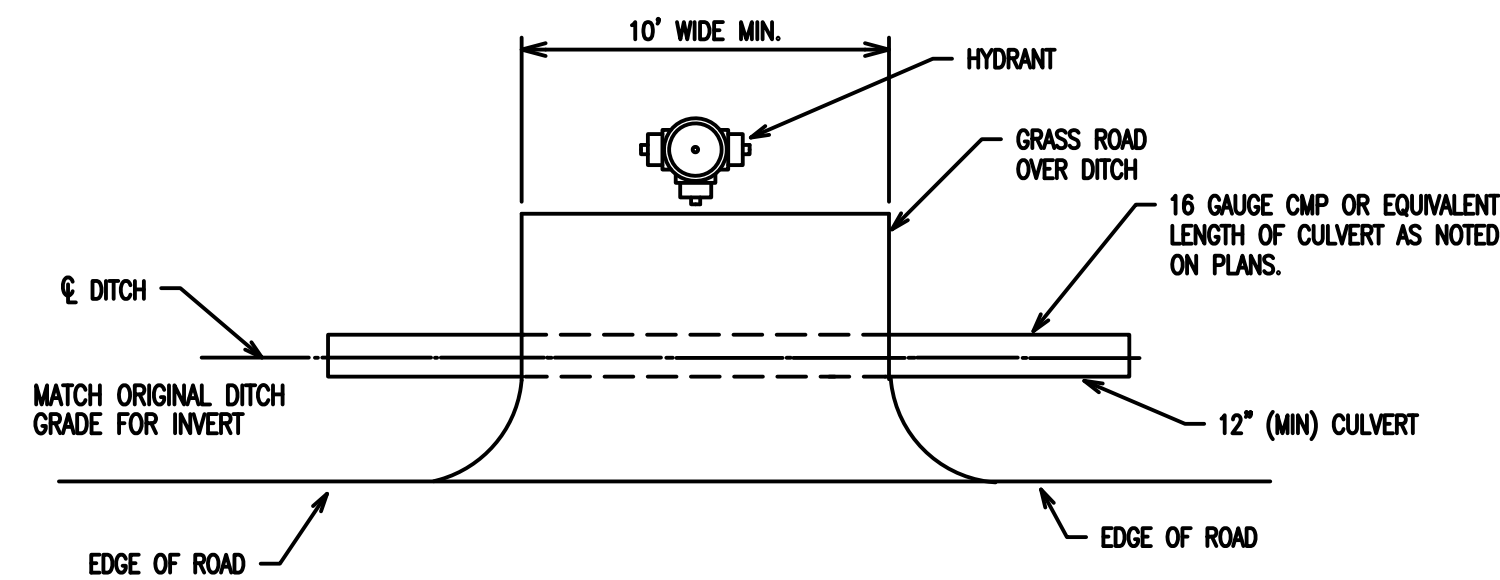
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST
WATERFORD, MICHIGAN
48326-1907

SHEET NO.:

3 of 7



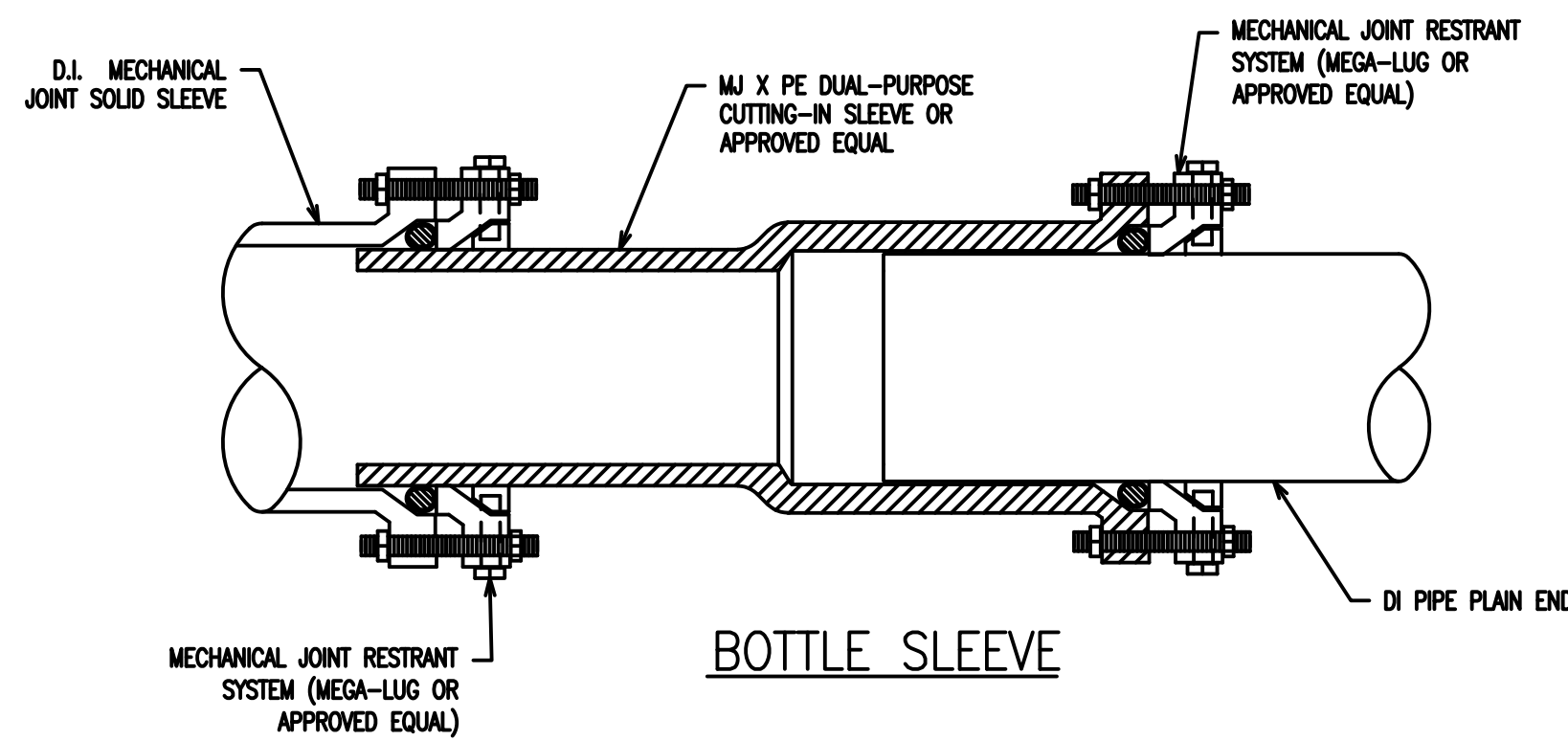
DITCH ENCLOSURE AT GATE WELL



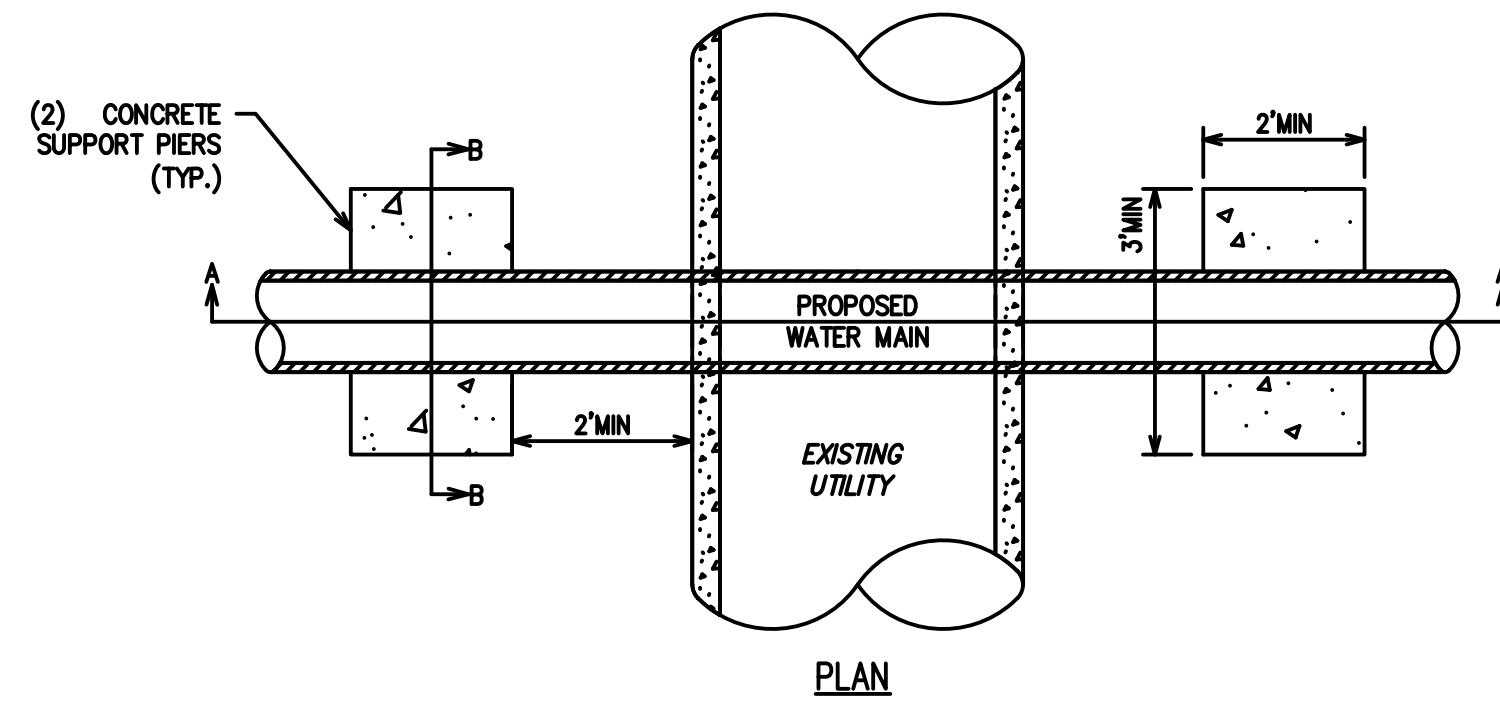
DITCH ENCLOSURE AT HYDRANT

NOTES:

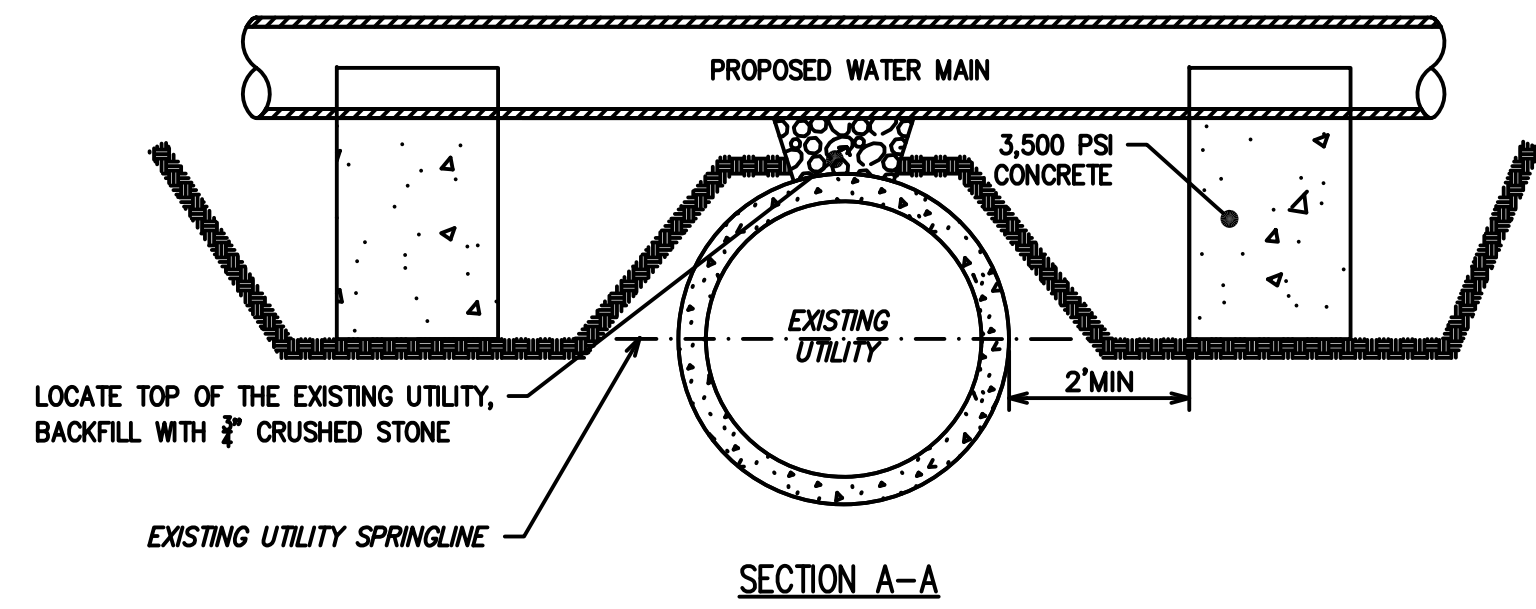
- 1) REQUIRED FOR DITCHES GREATER THAN 18 INCHES IN DEPTH.
- 2) CULVERT SHALL BE SIZED BASED ON THE EXISTING CARRY CAPACITY OF THE DITCH OR AS REQUIRED BY THE PERMITTING AUTHORITY FOR THE LOCAL ROAD AGENCY. STAMPED ENGINEERING CALCULATIONS ARE REQUIRED FOR ALL CULVERT INSTALLATION.
- 3) MINIMUM DEPTH OF COVER FOR CULVERT PIPE IS 12 INCHES UNLESS OTHERWISE AUTHORIZED BY CULVERT MANUFACTURER.
- 4) END SECTIONS ON CULVERTS GREATER THAN 12 INCHES IN DIAMETER.



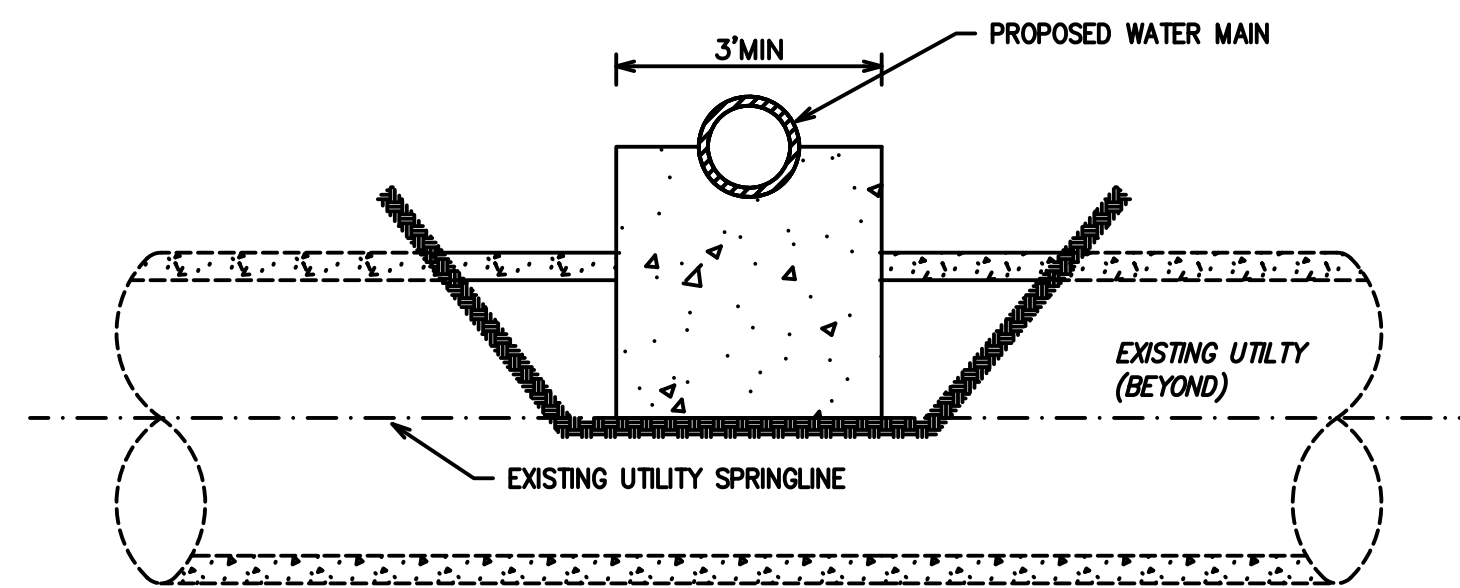
BOTTLE SLEEVE



PLAN



SECTION A-A

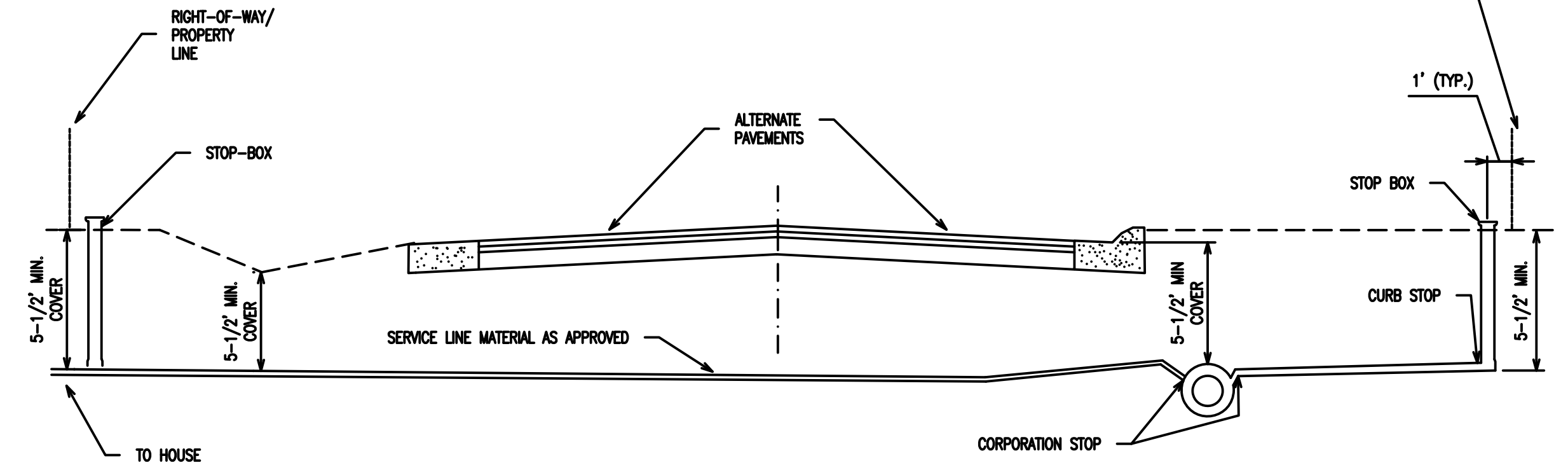


SECTION B-B

WATER MAIN CROSSING BRIDGE

NOTES:

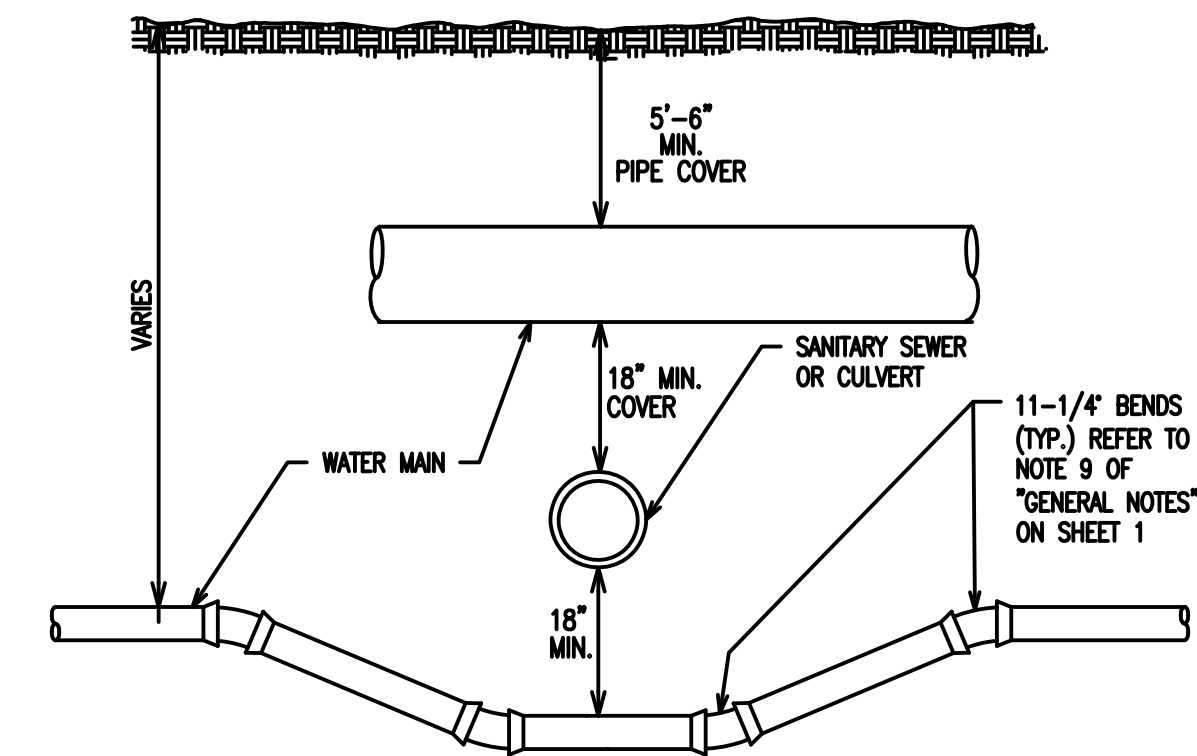
1. CROSSING BRIDGE IS REQUIRED WHEN 18 INCHES OF CLEARANCE OR GREATER ABOVE (WITHIN A 1:1 INFLUENCE OF THE SPRING LINE) AN EXISTING UTILITY CANNOT BE MAINTAINED.
2. WATER MAIN PIPE SPANNING THE EXISTING UTILITY MUST BE CENTERED BETWEEN JOINTS OVER THE EXISTING UTILITY.
3. ALL WORK NECESSARY TO INSTALL THE WATER MAIN CROSSING BRIDGE AS SHOWN SHALL BE CONSIDERED INCLUDED IN THE COST OF THE PROJECT UNLESS OTHERWISE NOTED.
4. CROSSING FOR PROPOSED WATER MAIN 16-INCH AND LARGER SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER.



TYPICAL PUBLIC ROAD WATER SERVICE CONNECTION

NOTES:

1. WATER SERVICE CURB STOP TO BE PLACED ONE (1) FOOT OFF THE PROPERTY LINE.
2. LATERAL LOCATION SHALL BE AS REQUESTED BY THE ABUTTING PROPERTY OWNER.
3. SERVICE TAP LOCATION TO BE AT CLOCK POSITION 10:30 OR 1:30 UNLESS OTHERWISE INDICATED.



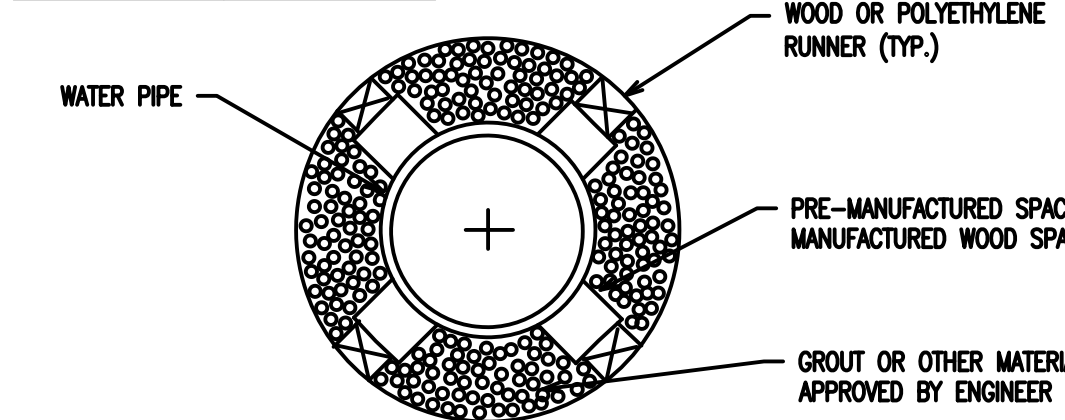
SEWER OR CULVERT CROSSING

UNLESS OTHERWISE SPECIFIED, MINIMUM CASING PIPE SHALL BE ASTM A-139 GRADE B, WALL THICKNESS AS FOLLOWS:

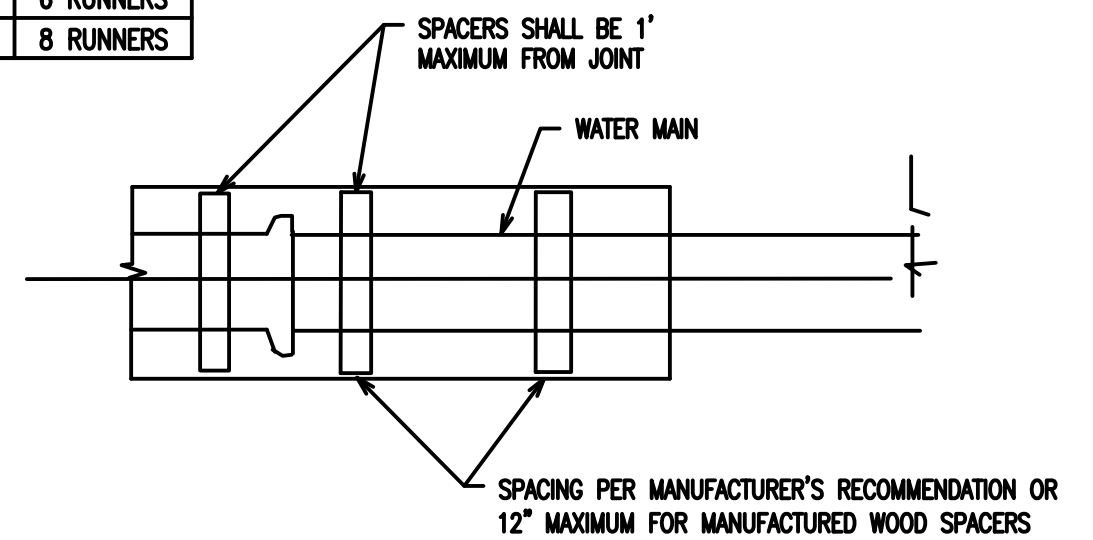
NOMINAL SIZE	MINIMUM WALL THICKNESS
8" - 42"	0.375
48" - 60"	0.500

REQUIRED QUANTITY OF RUNNERS IN ACCORDANCE WITH SIZE

TO 14" DIA.	4 RUNNERS
16" TO 36" DIA.	6 RUNNERS
38" TO 48" DIA.	8 RUNNERS




SUPPORT FOR WATER MAIN
CONSTRUCTED IN CASING PIPE

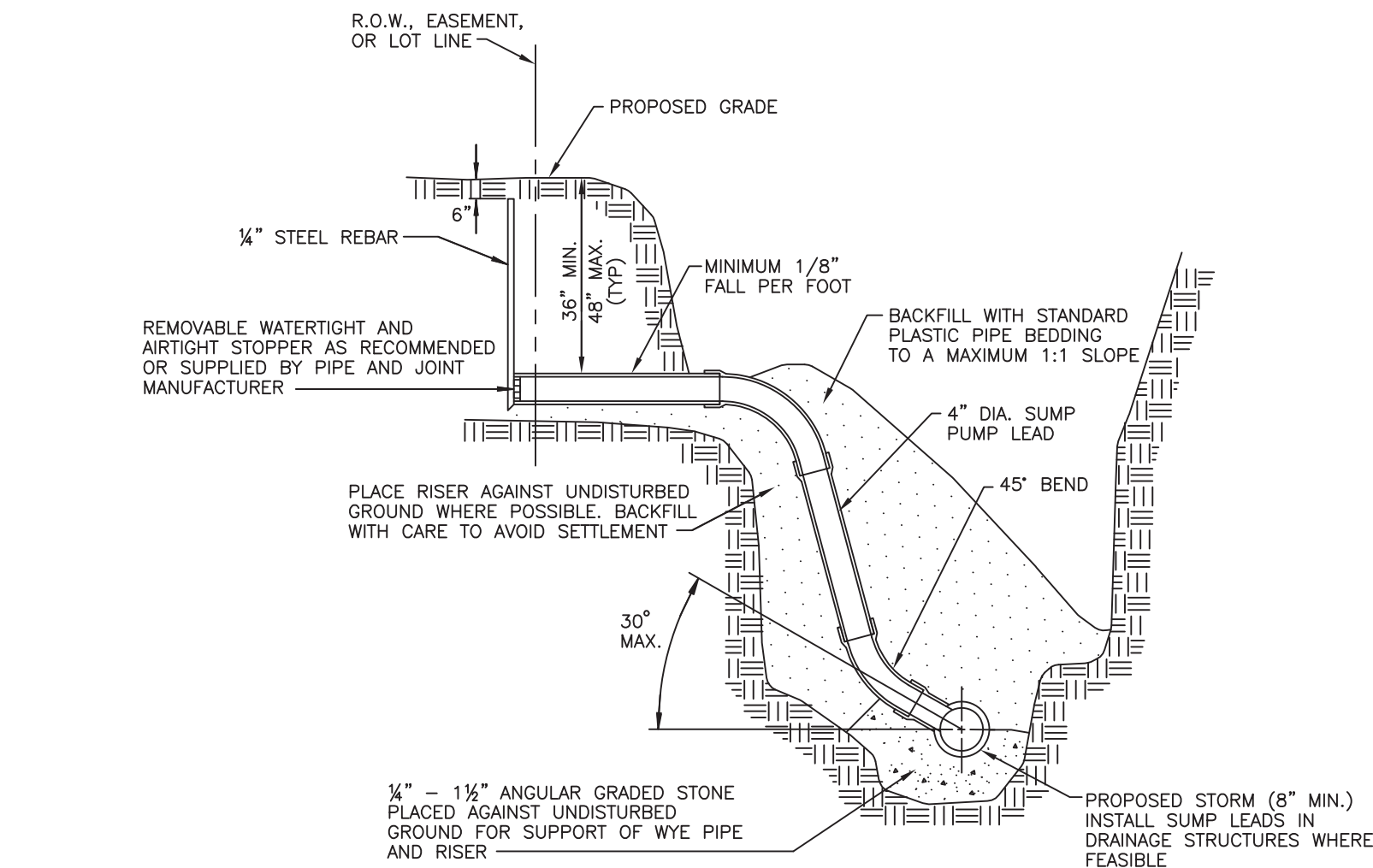


WATER MAIN IN CASING SECTION

WATER MAIN IN CASING DETAILS

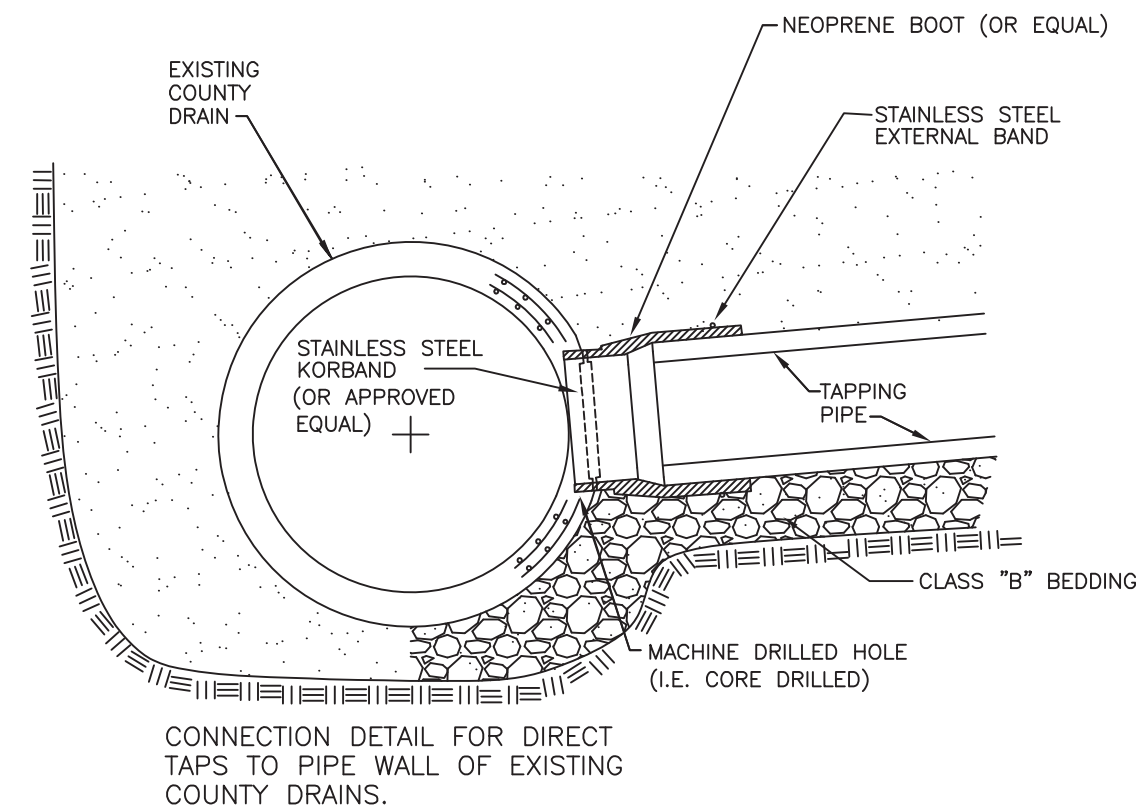
WATER MAIN
SPECIAL DETAILS

REVISION BLOCK			
Rev.	By	Date	Description
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2	WRC	08/11/20	GENERAL UPDATE
3			
4			
ORIG. DATE:		01/01/01	
SCALE:		NONE	
DESIGNED BY:		OCDC	
DRAWN BY:		OCDC Mapping	
			
		ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907	
		SHEET NO.: 4 OF 7	



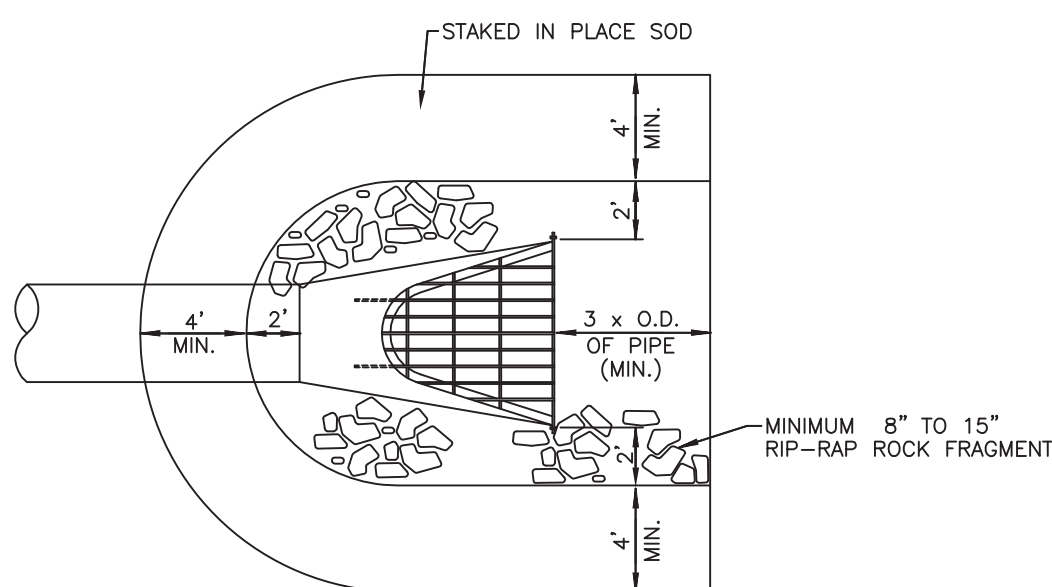
HOUSE LEAD DETAIL FOR 4" DIA.
PLASTIC SUMP PUMP LEADS

NO SCALE

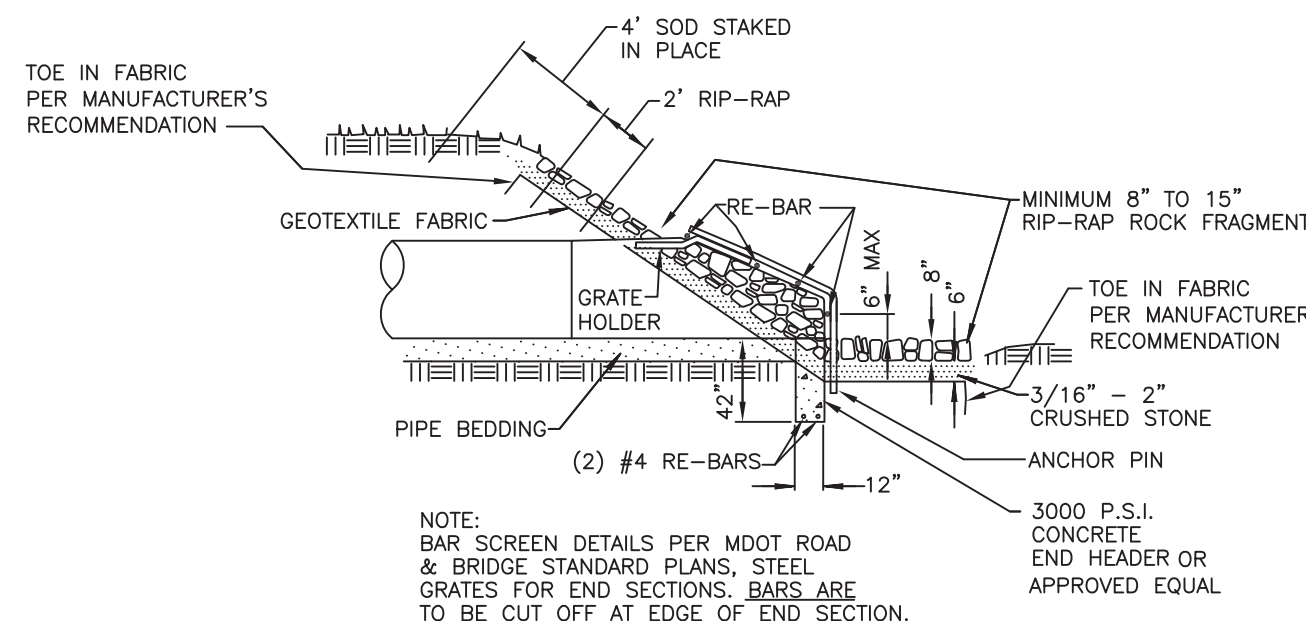


KOR-N-TEE TAP (OR APPROVED EQUAL)

- NO SCALE
- * For non-concrete to concrete taps.
 - * Use link-seal, A-lock or approved equal for concrete to concrete taps.



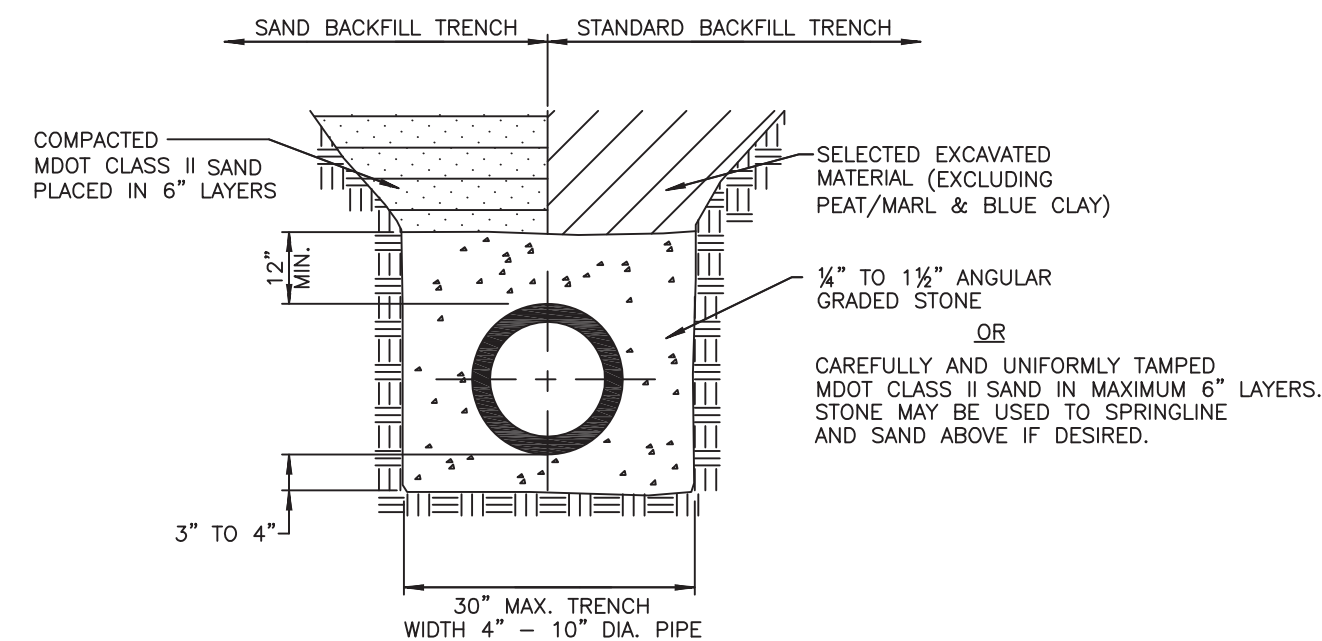
PLAN VIEW



PROFILE VIEW

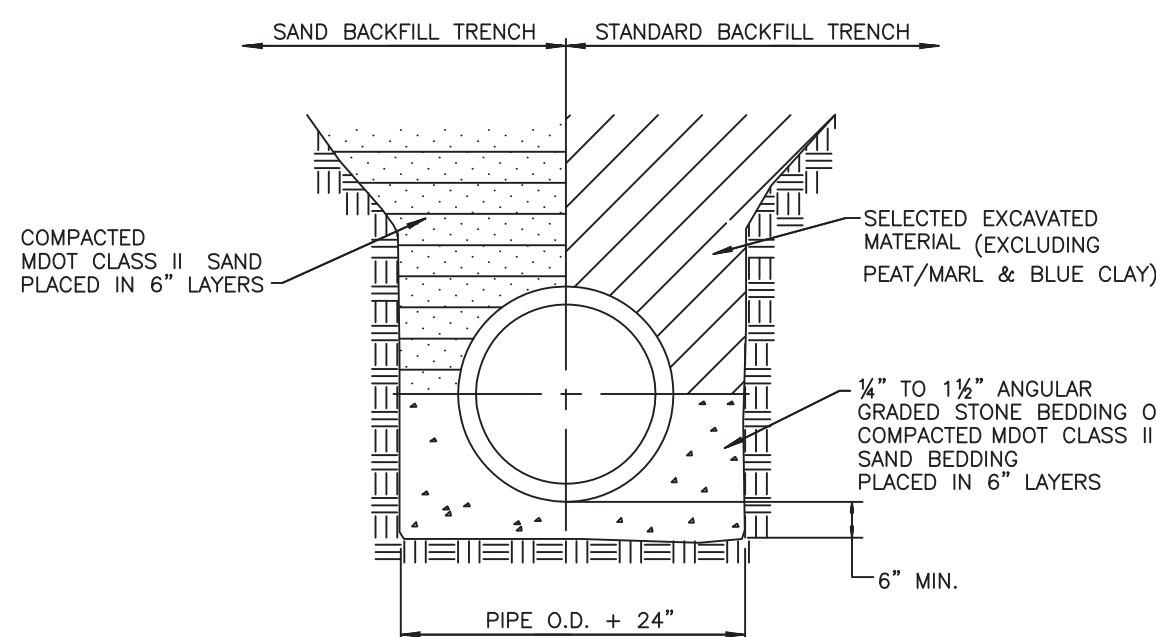
END SECTION AND BAR SCREEN DETAIL

NO SCALE



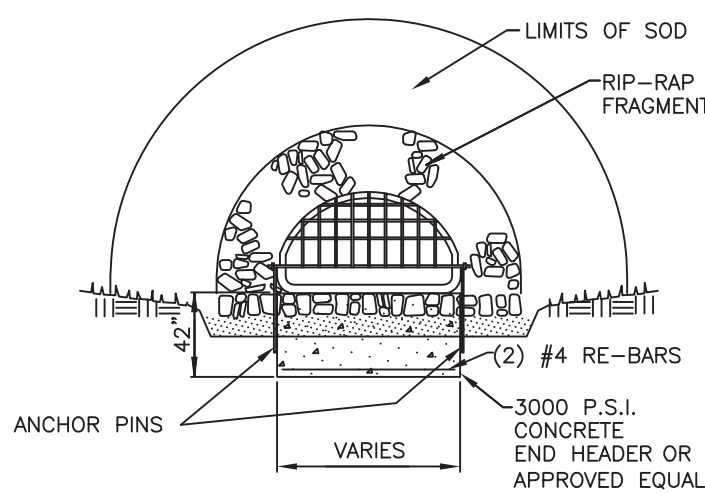
ABS (TRUSS AND SOLID WALL),
PVC (TRUSS, SOLID WALL, A2000),
ADS N-12 WT PIPE BEDDING DETAIL

NO SCALE

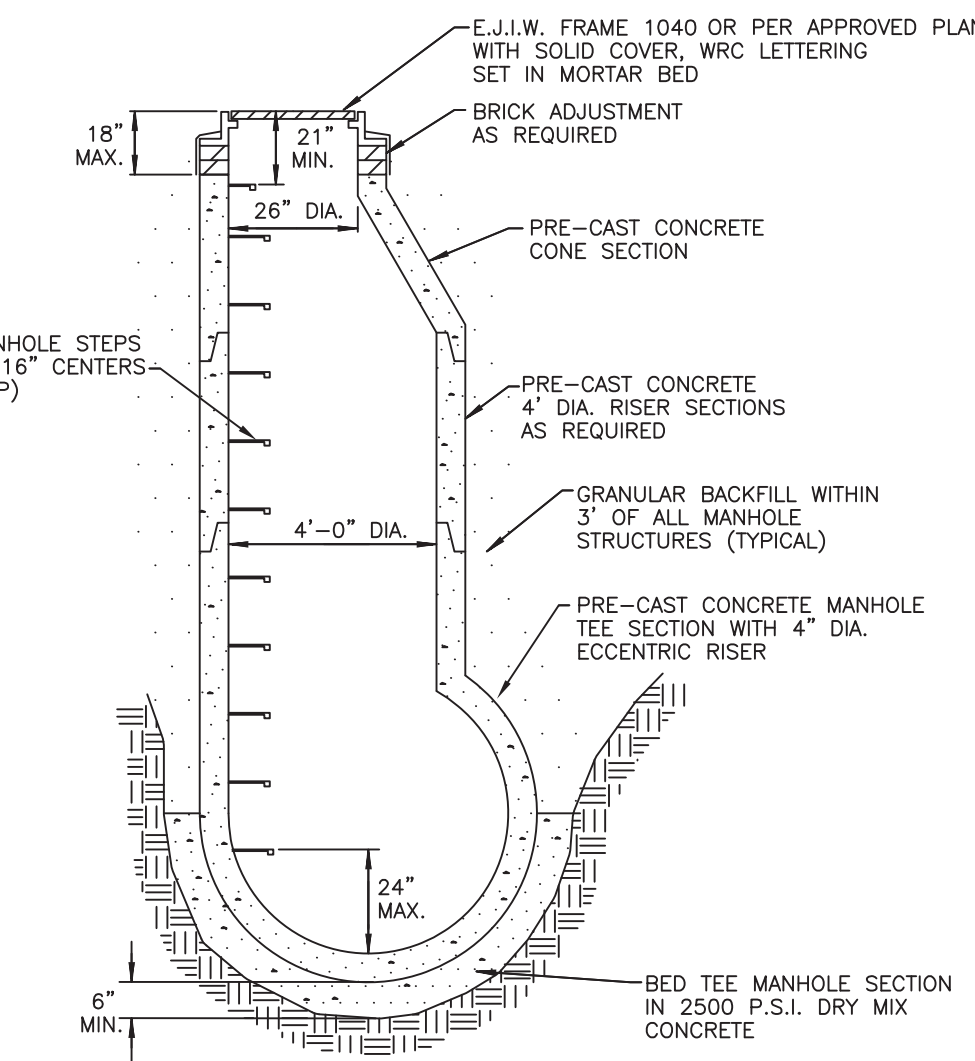


CLASS "B" BEDDING TRENCH DETAIL
FOR 27" DIAMETER AND LARGER
CONCRETE PIPE

NO SCALE

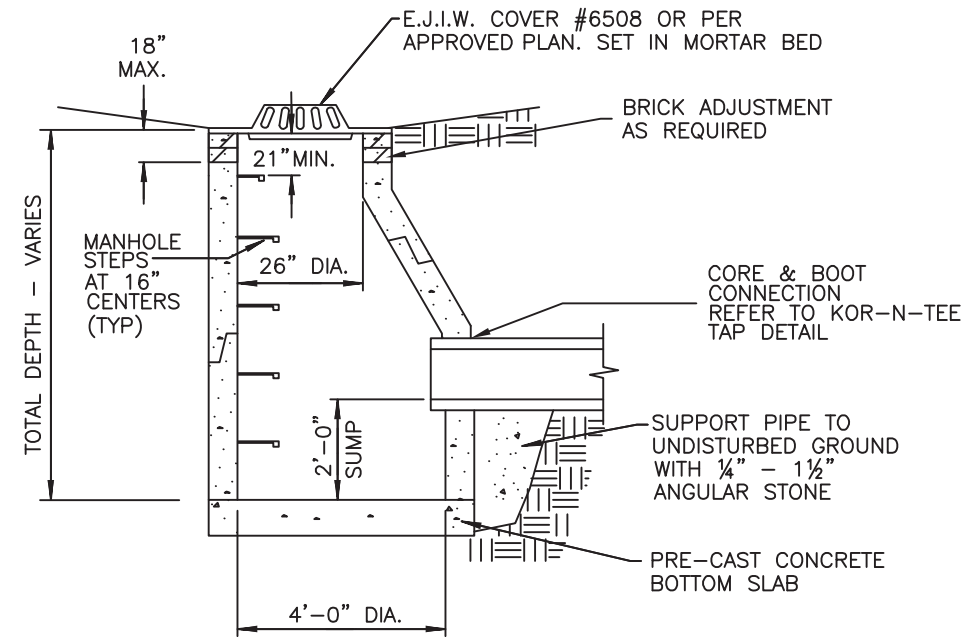


END VIEW



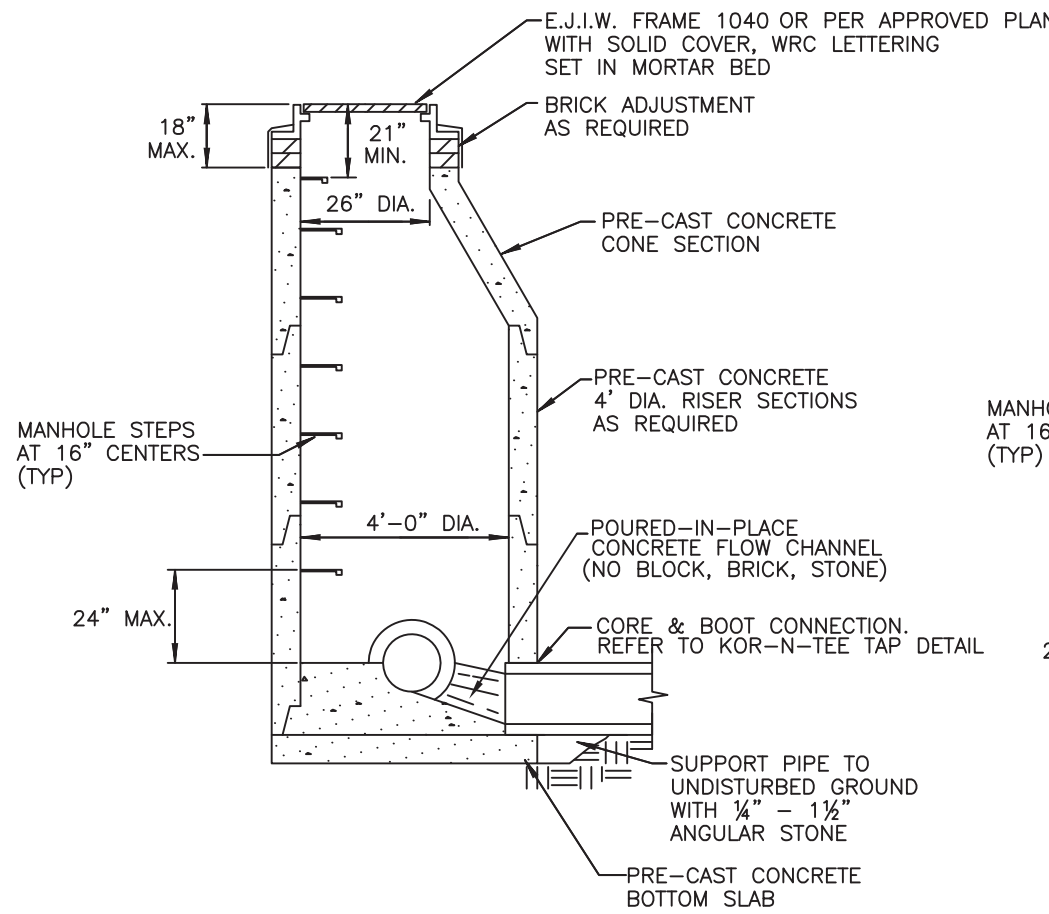
PRE-CAST TEE MANHOLE DETAIL

NO SCALE

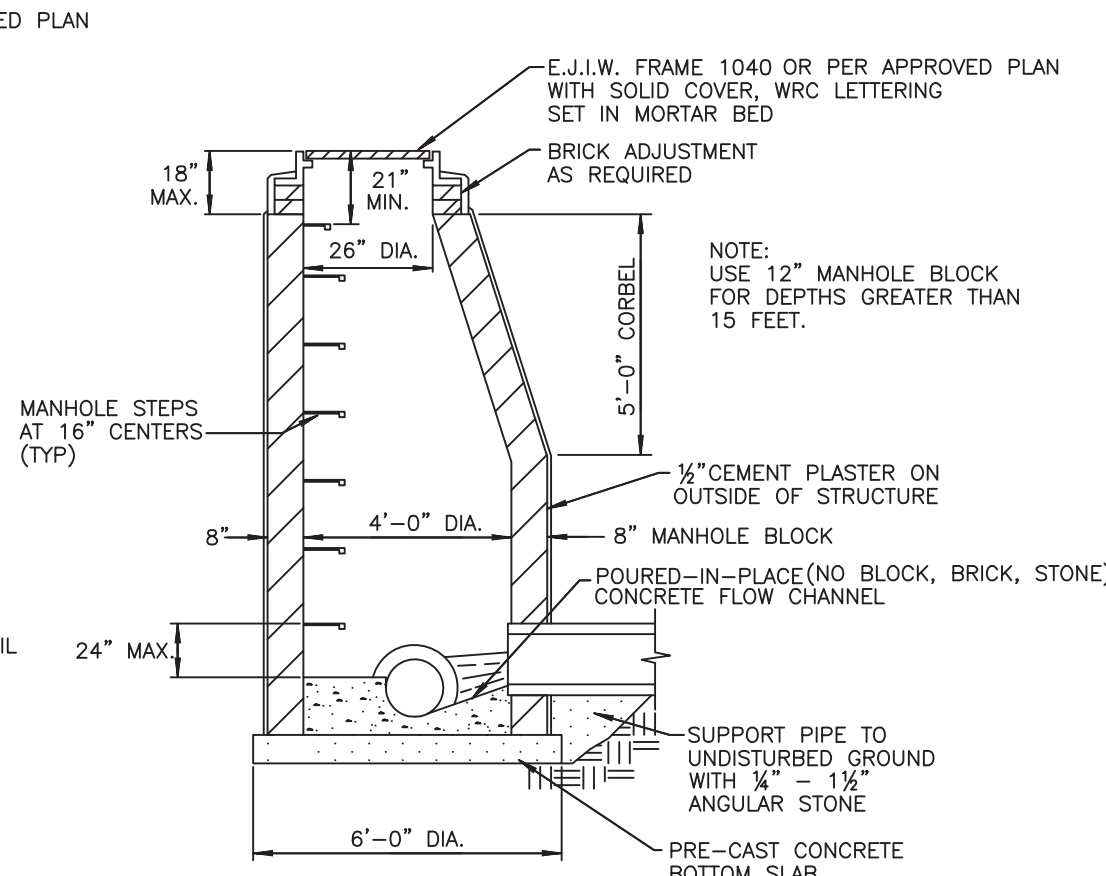


PRE-CAST CATCH BASIN DETAIL

NO SCALE



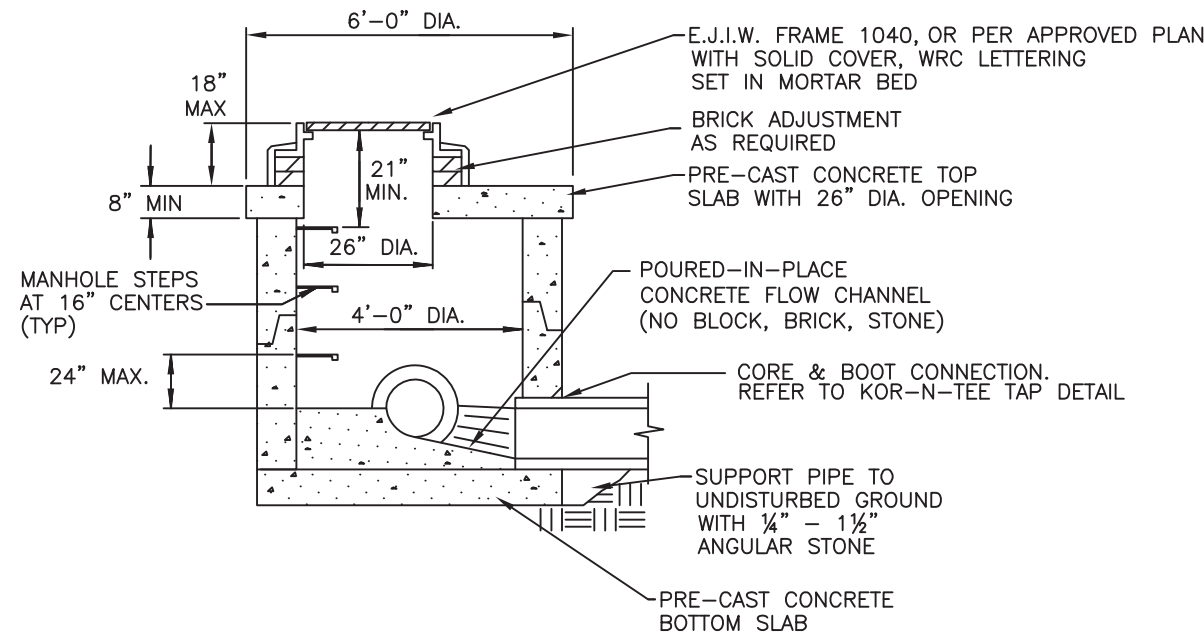
PRE-CAST MANHOLE



BLOCK MANHOLE (PRIOR APPROVAL ONLY)

STANDARD MANHOLE DETAILS

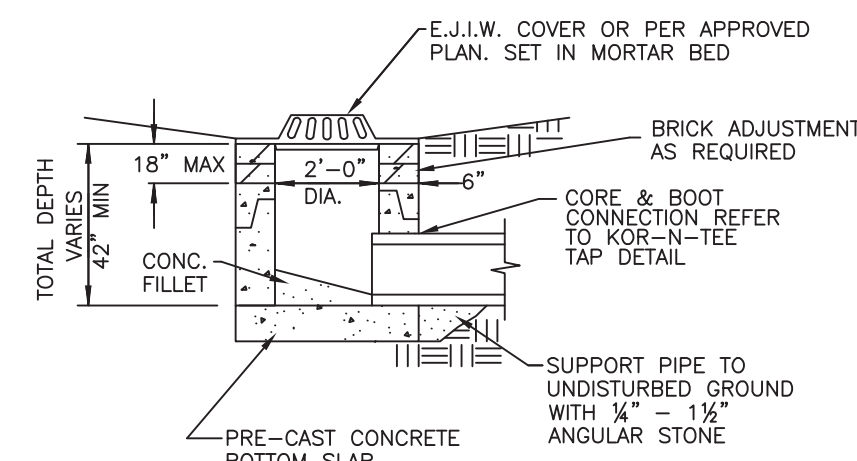
NO SCALE



PRE-CAST LOW HEAD MANHOLE DETAIL

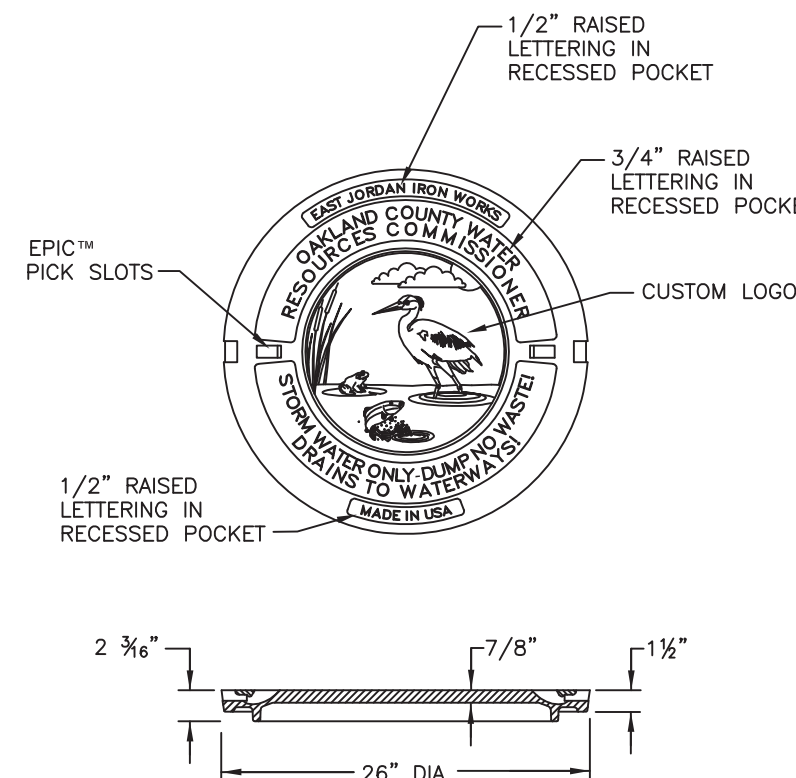
NO SCALE

(PRIOR APPROVAL ONLY)



PRE-CAST INLET DETAIL

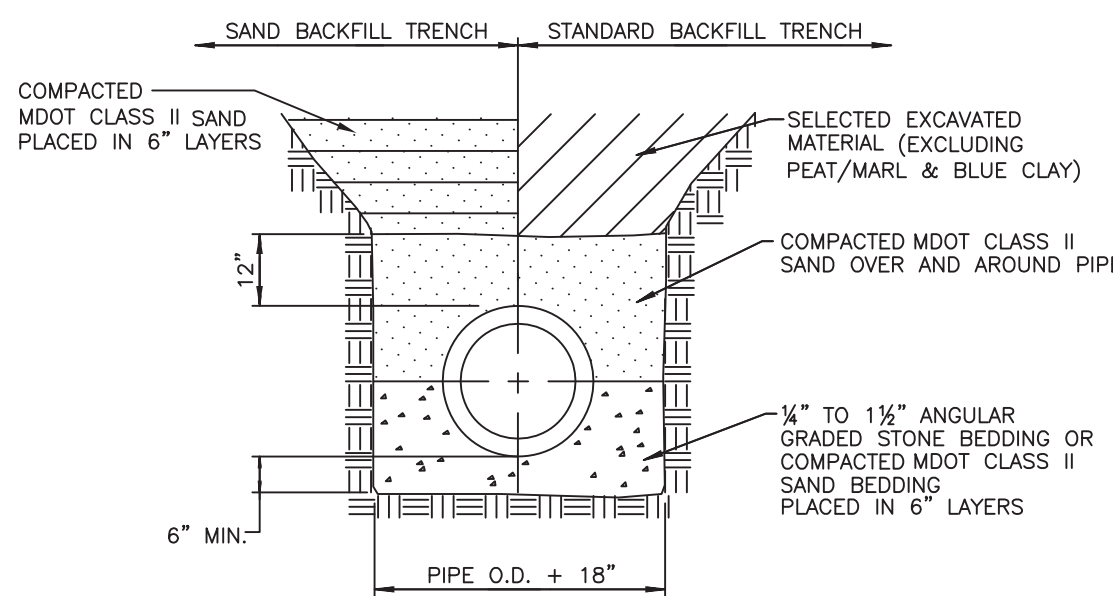
NO SCALE



EAST JORDAN IRON WORKS OR APPROVED EQUAL
HEAVY DUTY MATERIAL ASTM A48 CL35B
CATALOG NO. 1040A
PATTERN NO. 1040A, PRODUCT NO. 104718 OAKCOSTD.
2" HIGH RAISED LETTERS, 1" WIDE RAISED LETTERS
ALL IN RECESSED POCKET.

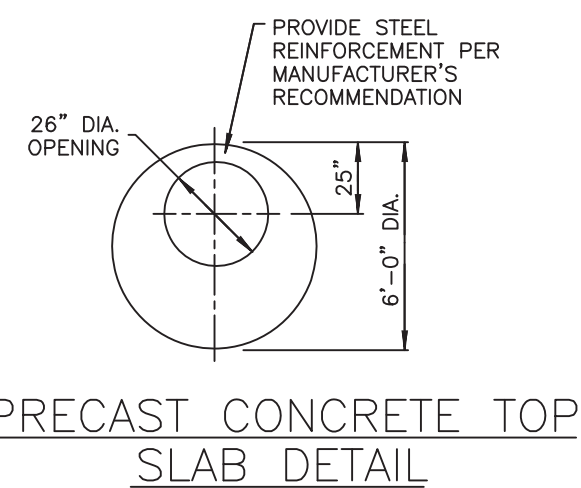
LETTERED MANHOLE COVER
FOR WRC

NO SCALE



CLASS "B" BEDDING TRENCH DETAIL
FOR 24" DIAMETER AND SMALLER
CONCRETE PIPE

NO SCALE



PRECAST CONCRETE TOP
SLAB DETAIL

GENERAL NOTES

- Type and class of pipe shall be as specified on plans.
- Class "B" bedding shall be used throughout, unless otherwise specified on the plan.
- All end sections 18" and larger shall be provided with a bar screen unless otherwise approved.
- Standard rip-rap shall be 8"-15" fragmented rock, heavy rip-rap shall be 16"-24" fragmented rock. (No Broken Concrete)
- MANHOLE REQUIREMENTS:
 - All new catch basins, inlets, and manholes are to be manufactured to ASTM C-478 specifications.
 - All new catch basins, inlets, and manholes shall have WRC approved flexible, watertight seals where pipes pass through walls. Manholes shall be of precast sections with modified groove tongue and rubber gasket type joints. Pre cast manhole cone sections shall be WRC approved modified eccentric cone type.
 - Taps through manhole joints or cone sections are prohibited unless otherwise approved.
 - Manhole steps to be plastic coated steel meeting the requirements in ASTM D 2146, Type II, Grade 49108, MA. Industries P.S.I. Polypropylene, (or approved equal). Steps to be installed during manhole manufacture. Place at 16" centers 45' from centerline of sewer.
 - Cone section with modified groove tongue joints and with stud inserts cast in place. Top to have flush surface.
 - ASTM C-478 riser section with modified groove tongue joints.
 - Res-seal, link-seal, press wedge II, or kor-n-seal boot (with stainless steel korbard) flexible rubber manhole joints. (or approved equal).
 - The inside joints of manholes, catch basins, and pipe sizes over 42" and larger in diameter shall be pointed up with mortar upon completion of backfilling.
- CONCRETE PIPE REQUIREMENTS:
 - Concrete pipe to be per ASTM C76 standards.
 - It will be required to TV all pipe 30 days after installation
 - The contractor shall provide reinforced concrete pipe as specified on the plans.
 - All reinforced concrete pipe shall have modified grooved tongue joints with o-ring type rubber gasket, per A.S.T.M. specifications C443.
 - The inside joints of manholes, catch basins, and pipe sizes over 42" and larger in diameter shall be pointed up with mortar upon completion of backfilling.
- SUMP PUMP LEAD REQUIREMENTS:
 - All sump pump leads connected to a County Drain pipe shall be pre-manufactured.
 - Sump pump leads connected to a manhole shall be cored and booted. Refer to Kor-N-Tee Tap Detail.
 - Sump pump mains and leads shall be ADS (truss and solid wall), PVC (truss, solid wall , A2000), ADS N-12 WT with premium joints.
 - Ends of all 4" sump pump leads shall be temporarily capped and their location staked, witnessed and recorded.
 - All sump pump leads to be taken to the property line, easement line or as indicated on the plan.
 - Sump pump mains must have a cleanout with a minimum inside diameter of 24" and be constructed at changes of alignment, ends of sump pump mains or as indicated on the plan.
- RESTORATION REQUIREMENTS:
 - All disturbed area within the County Drain right-of-way shall be restored as follows:
 - Under roads, sidewalks, driveways and parking areas, backfill material shall be placed loosely into trenches in six (6) inch layers with each layer compacted to not less than 95% of maximum dry density as determined by the ASTM D 1557 Compaction Standard (modified proctor compaction test). All other areas shall have each layer compacted to not less than 90% of maximum dry density.
 - Finish subgrade
 - Place 3" thickness clean topsoil acceptable to the engineer to attain finished grade. Topsoil must not be contaminated and may not be a mixture of natural underlying soils, subbase materials, or other materials. It must consist of natural loam, sandy loam, silty loam or clay loam humus-bearing soil adapted to the sustenance of plant life. Topsoil must be neither excessively acidic nor excessively alkaline. It must be of mineral origin, exclusive of any peat or muck.
 - Apply seed and fertilizer as follows:*

Location	Seeding Requirements	Fertilizer Requirement
Slopes and Ditch, Banks, Etc.	M.D.O.T. "Roadside Mix" Turf Seed Mixture TGM (10% Kentucky Blue, 20% Perennial Rye, 30% Hard Fescue, 40% Creeping Red Fescue) applied at 220 lb/acre	M.D.O.T. Seeding and Sodding Fertilizers, Class A
Other Areas	M.D.O.T. "Roadside Mix" Turf Seed Mixture THM (30% Kentucky Blue, 20% Perennial Rye, 50% Creeping Red Fescue) applied at 220 lb/acre	M.D.O.T. Seeding and Sodding Fertilizers, Class A

- * Sod is required in maintained lawn areas. Refer to WRC General Specifications for additional requirements and information.
- apply straw or marsh hay mulch in an air-dry condition to all seeded areas over the surface to a uniform thickness at 2 tons/acre.
 - mulch shall be anchored in place with biodegradable netting, not larger than 1 1/2" by 2" nor smaller than 1/2" by 1/2".
 - The contractor shall be responsible to insure the growth of all seeded areas, and shall re-seed as necessary to accomplish this.
9. The Storm Drain Notes and Details Sheet shall be a supplement to WRC Standards and Specifications, which are available on the WRC website (www.oakgov.com/water/).

STORM DRAIN NOTES AND DETAILS

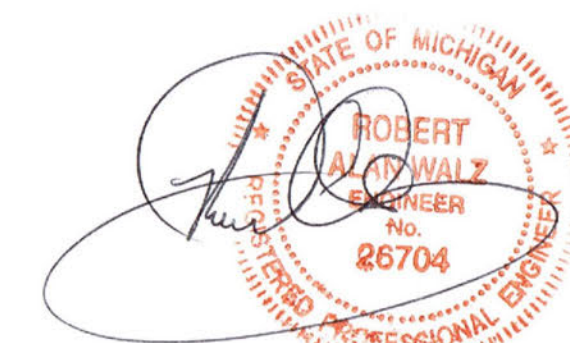
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Rev. No.	Rev.	Date	Description
1	1	3/17/08	PROPOSED DETAIL CHANGES NEW LOGO
2	1	06/12/09	APPROVAL PER STANDARDS COMMITTEE
3	1	03/28/10	REVISED MH COVER DETAIL
4	05	04/27/10	REVISED GENERAL NOTES
ORIG. DATE: 05/05/97			
SCALE: NONE			
DESIGNED BY: WRC			
DRAWN BY: Mapping			
ONE PUBLIC WORKS DRIVE, BLDG 95 WEST WATERFORD, MICHIGAN 48328-1907		SHEET NO.: 1 of 1	



WEST ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



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JOHN DEPORRE

BERKLEY APARTMENTS
(BUILDING #1)

Site Plan Approval: 09-14-2021

Review Set:

Permit Set:

Revisions:

Drawn By: B.J.

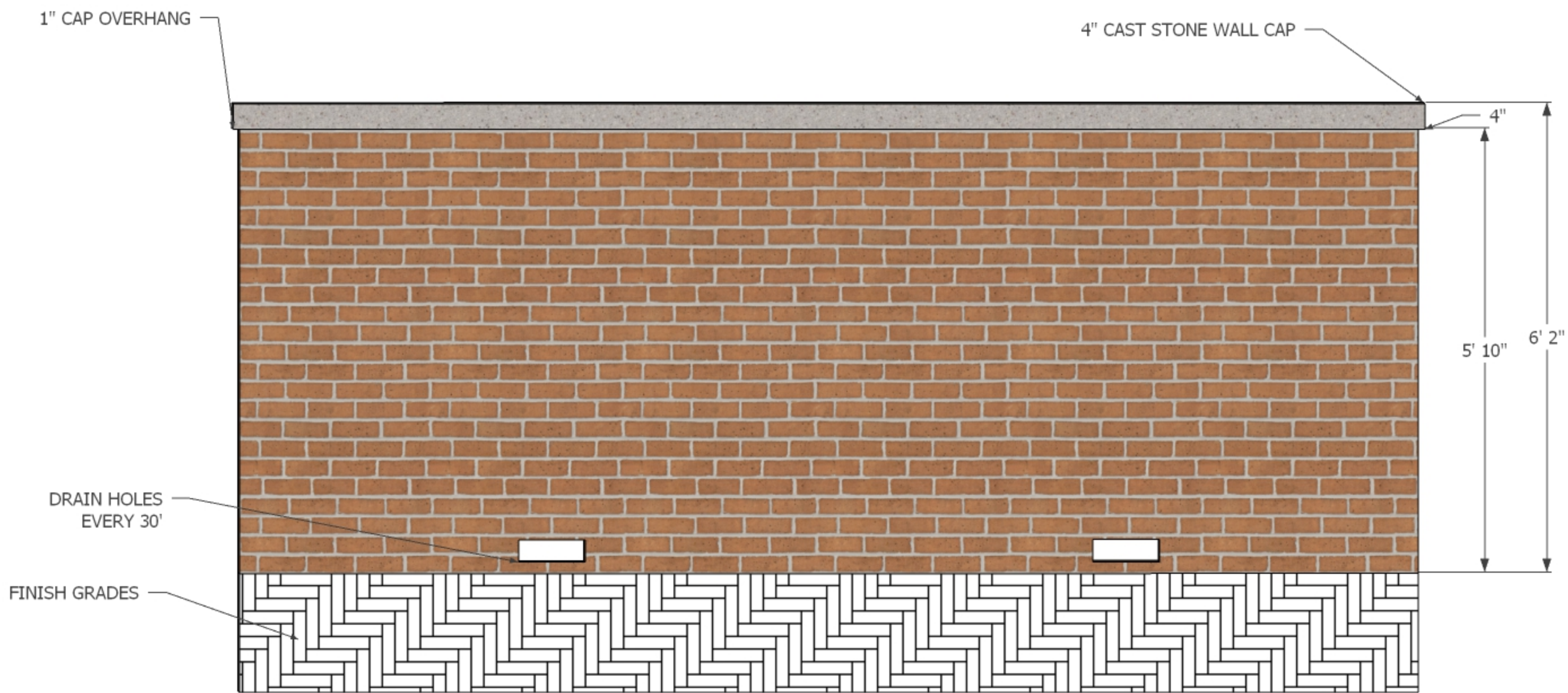
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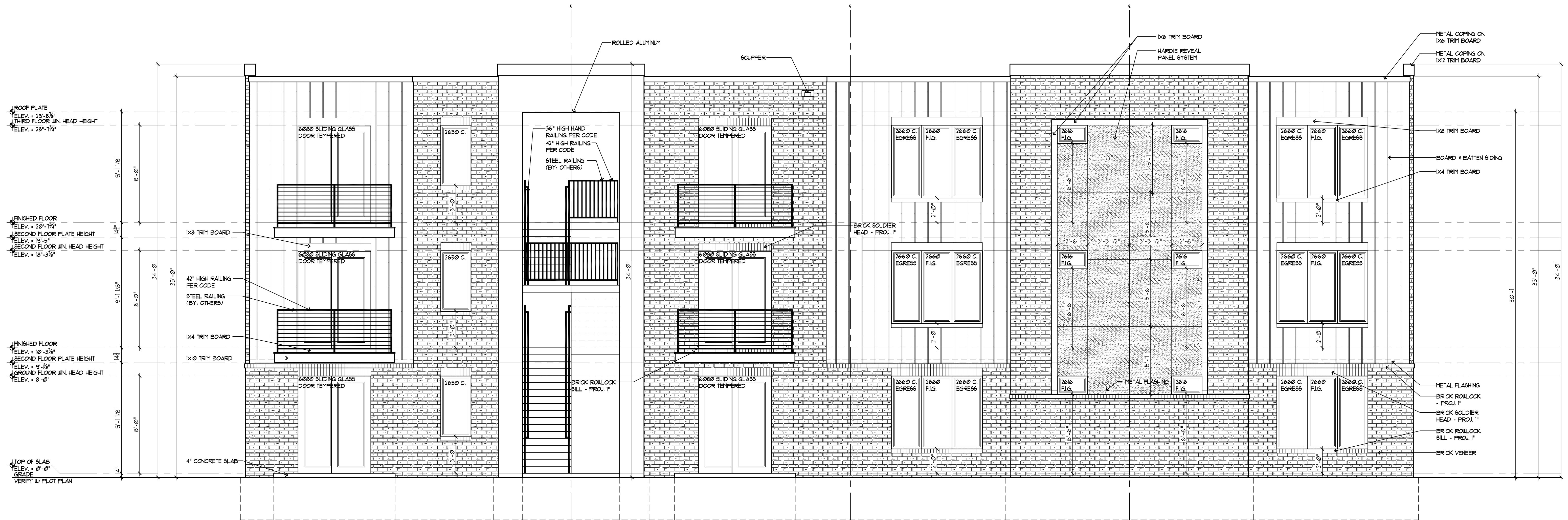
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20-306

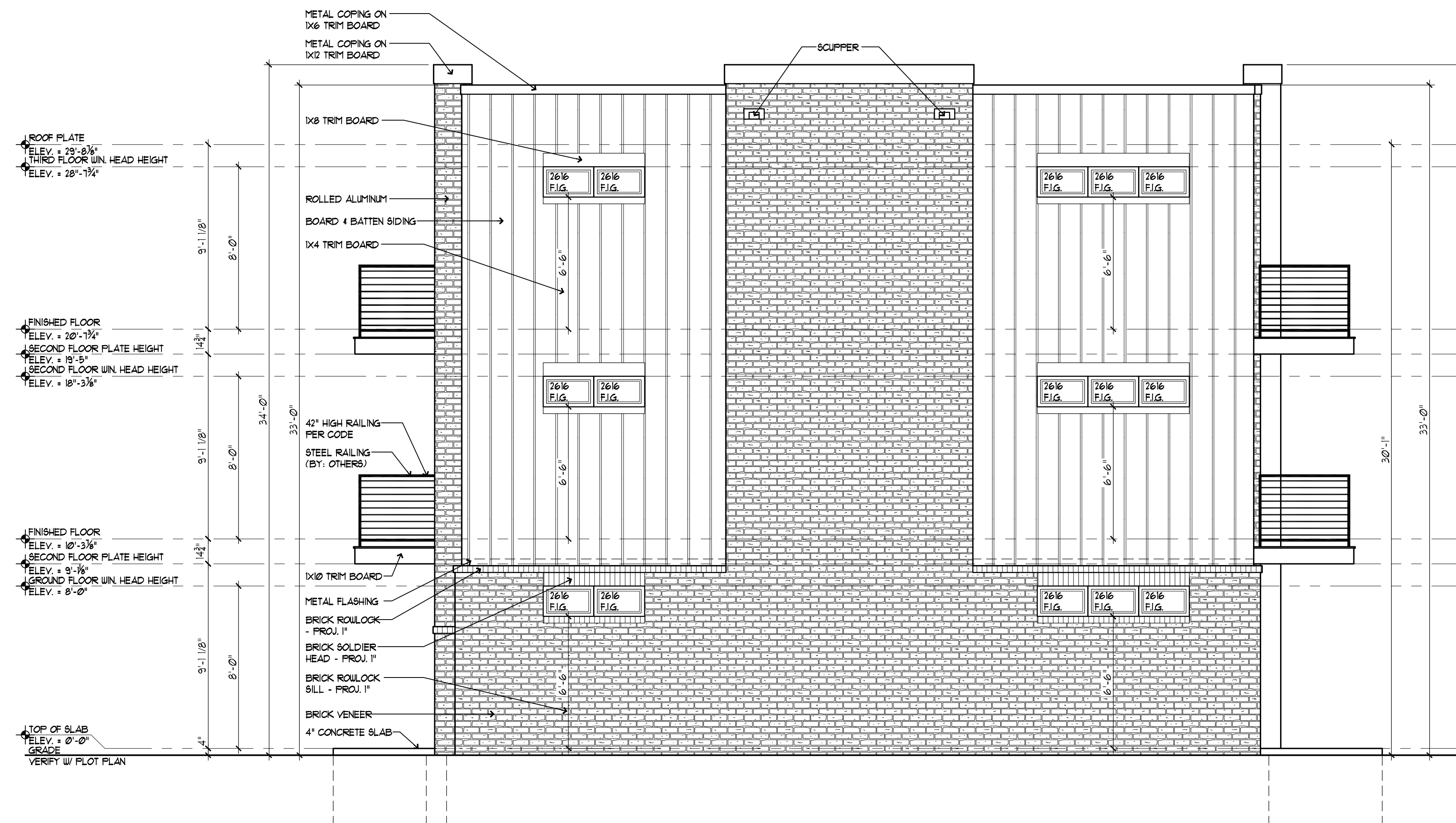
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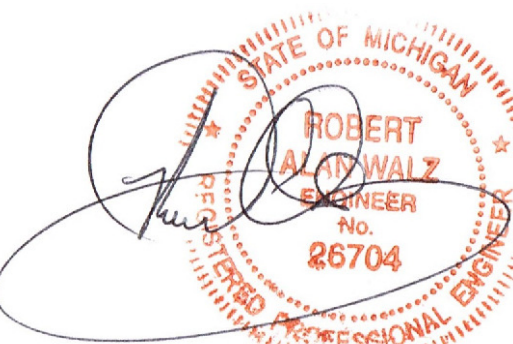




EAST ELEVATION
SCALE: 1/4" = 1'-0"



NORTH ELEVATION
SCALE: 1/4" = 1'-0"



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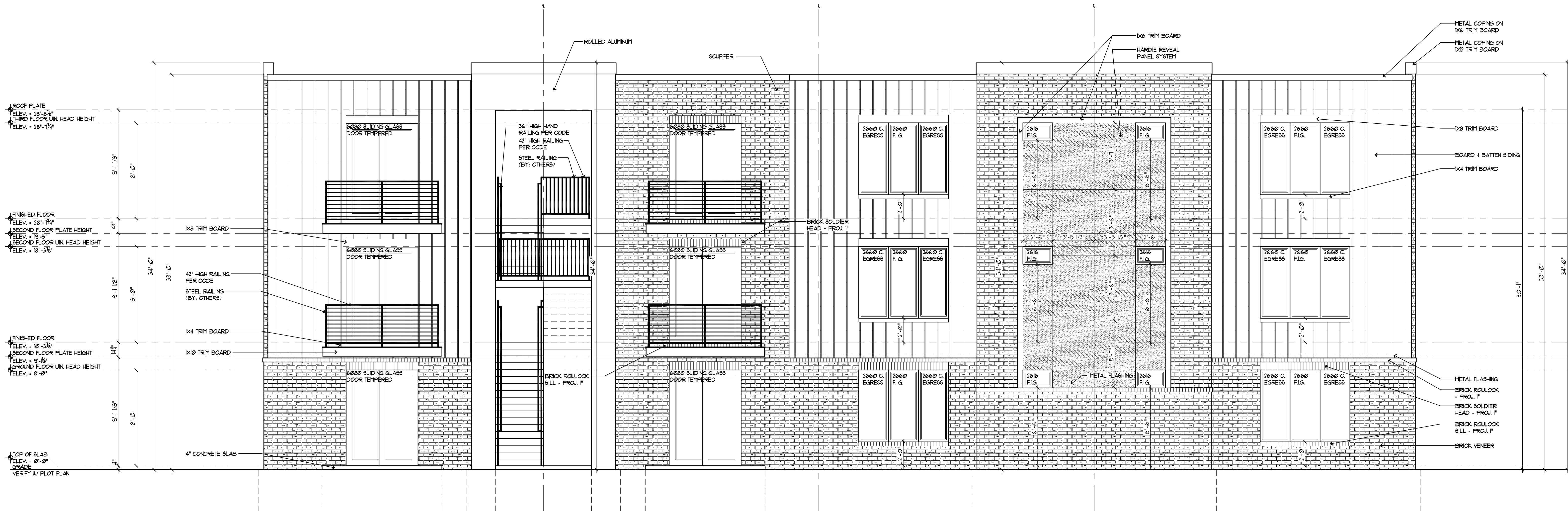
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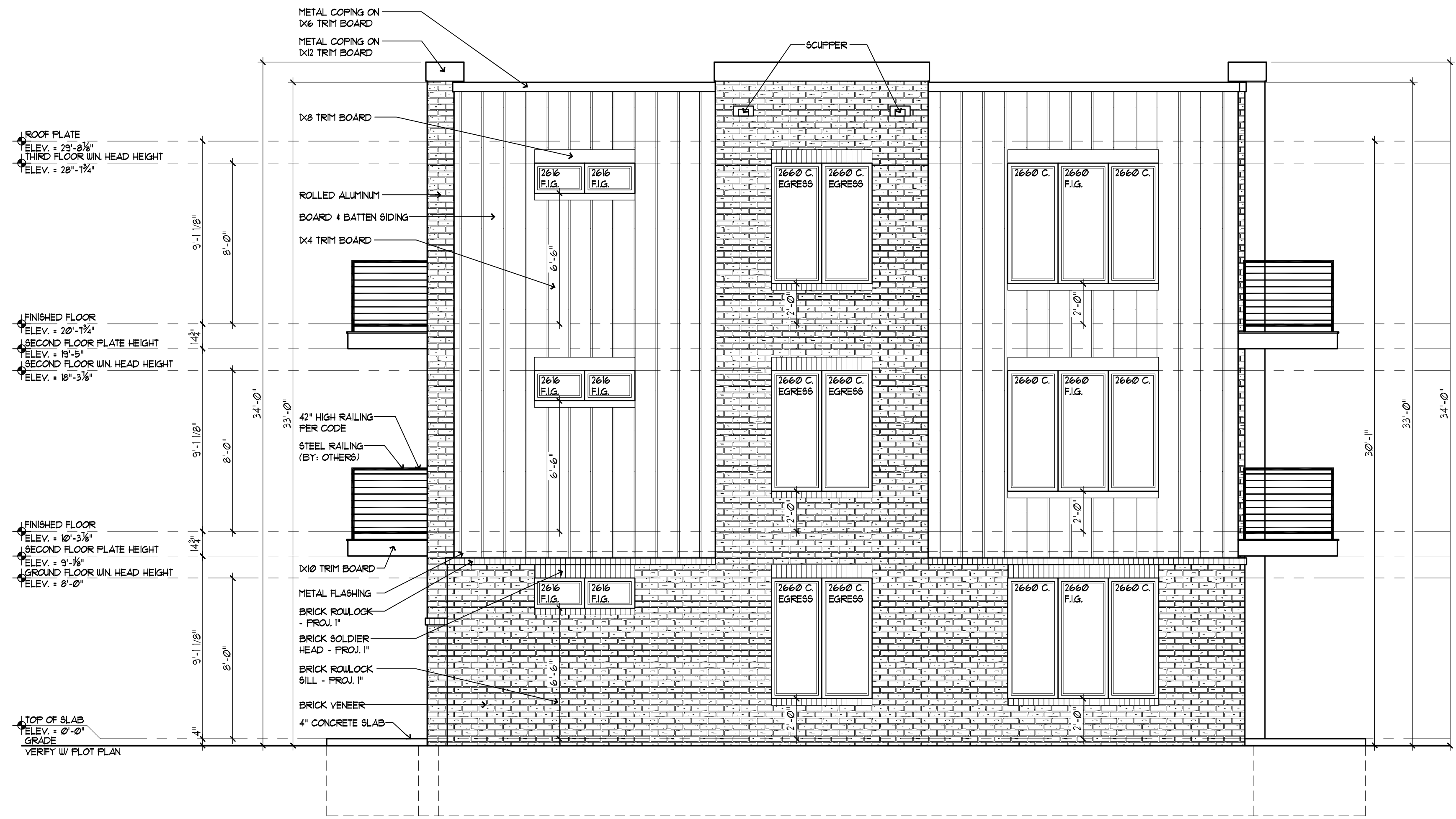
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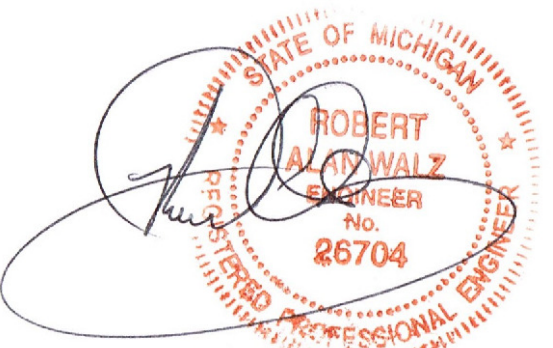
1 OF 5



WEST ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"



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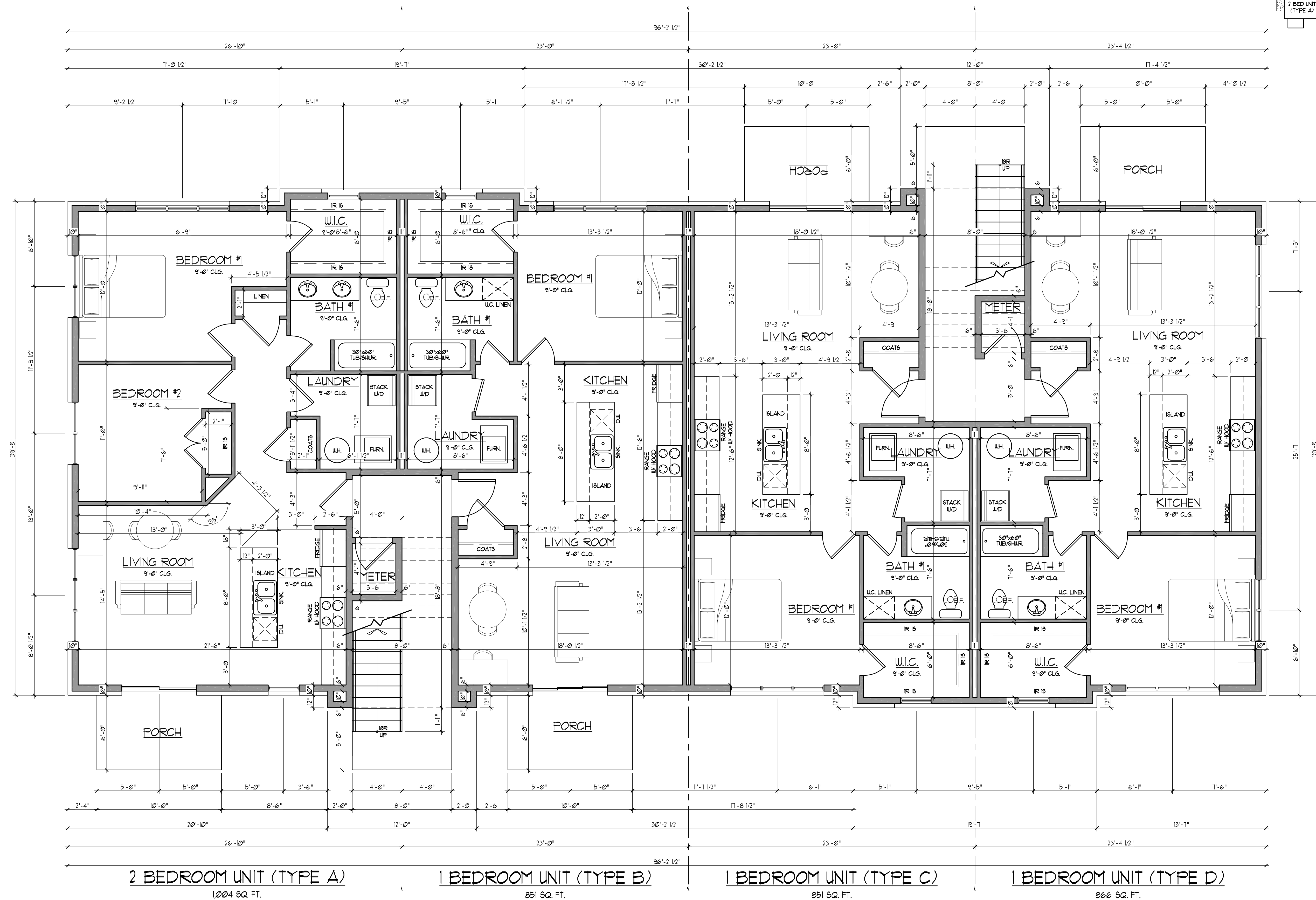
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BERKLEY APARTMENTS
(BUILDING #1)

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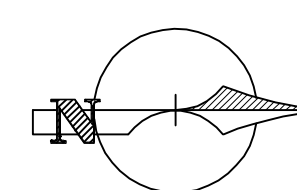
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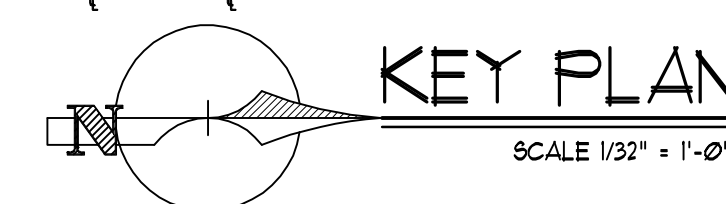
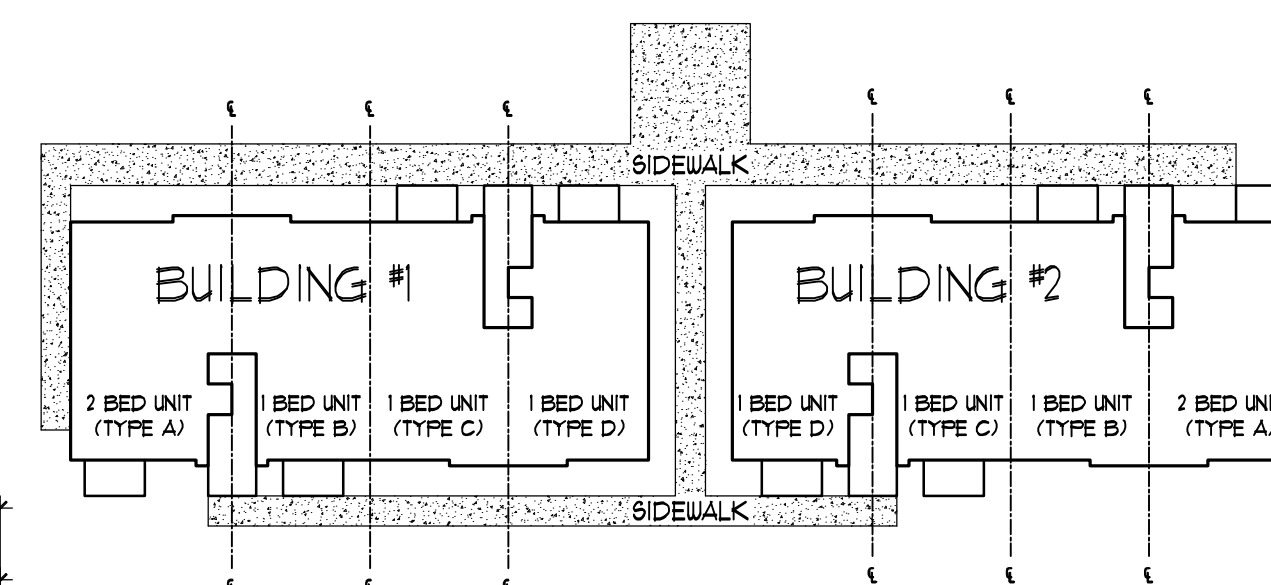
BERKLEY APARTMENTS SQUARE FOOTAGE

2 BEDROOM (TYPE A)	1004 SQ. FT.
2 BEDROOM (TYPE A-2)	982 SQ. FT.
2 BEDROOM (TYPE A-3)	982 SQ. FT.
1 BEDROOM (TYPE B)	851 SQ. FT.
1 BEDROOM (TYPE B-2)	844 SQ. FT.
1 BEDROOM (TYPE B-3)	844 SQ. FT.
1 BEDROOM (TYPE C)	851 SQ. FT.
1 BEDROOM (TYPE C-2)	844 SQ. FT.
1 BEDROOM (TYPE C-3)	844 SQ. FT.
1 BEDROOM (TYPE D)	866 SQ. FT.
1 BEDROOM (TYPE D-2)	844 SQ. FT.
1 BEDROOM (TYPE D-3)	844 SQ. FT.
TOTAL	10600 SQ. FT.

12 UNIT APARTMENT BUILDING GROUND FLOOR PLAN



SCALE: 1/32" = 1'-0"



KEY PLAN

SCALE 1/32" = 1'-0"

OXFORD ROAD



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BERKLEY APARTMENTS
(BUILDING #1)

Site Plan Approval: 09-14-2021

Review Set:

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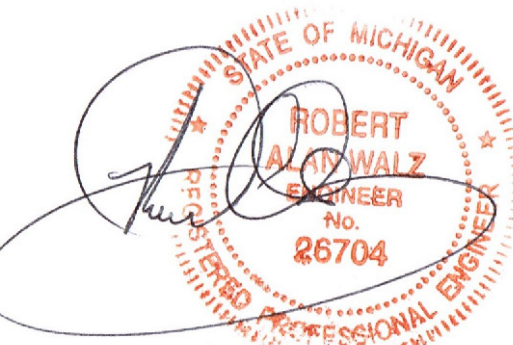
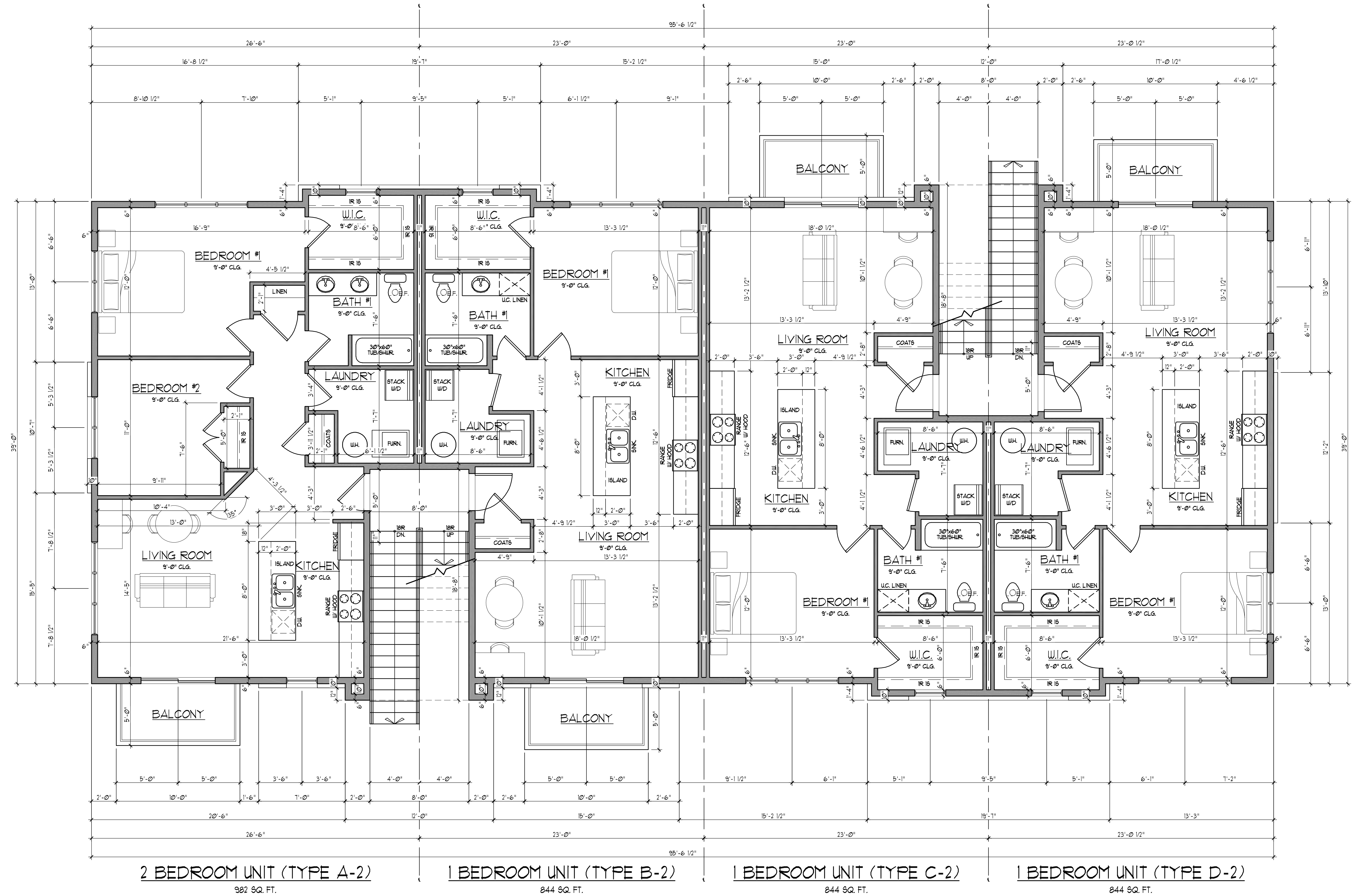
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Drawn By: B.J.

Checked By: D.D.

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20-306

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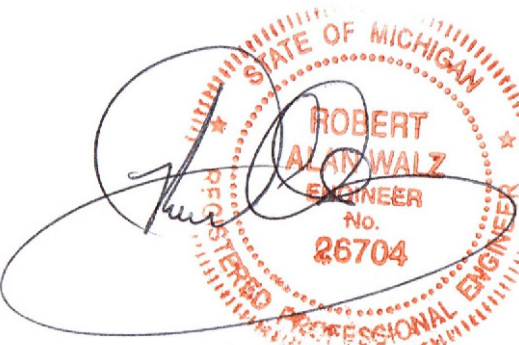
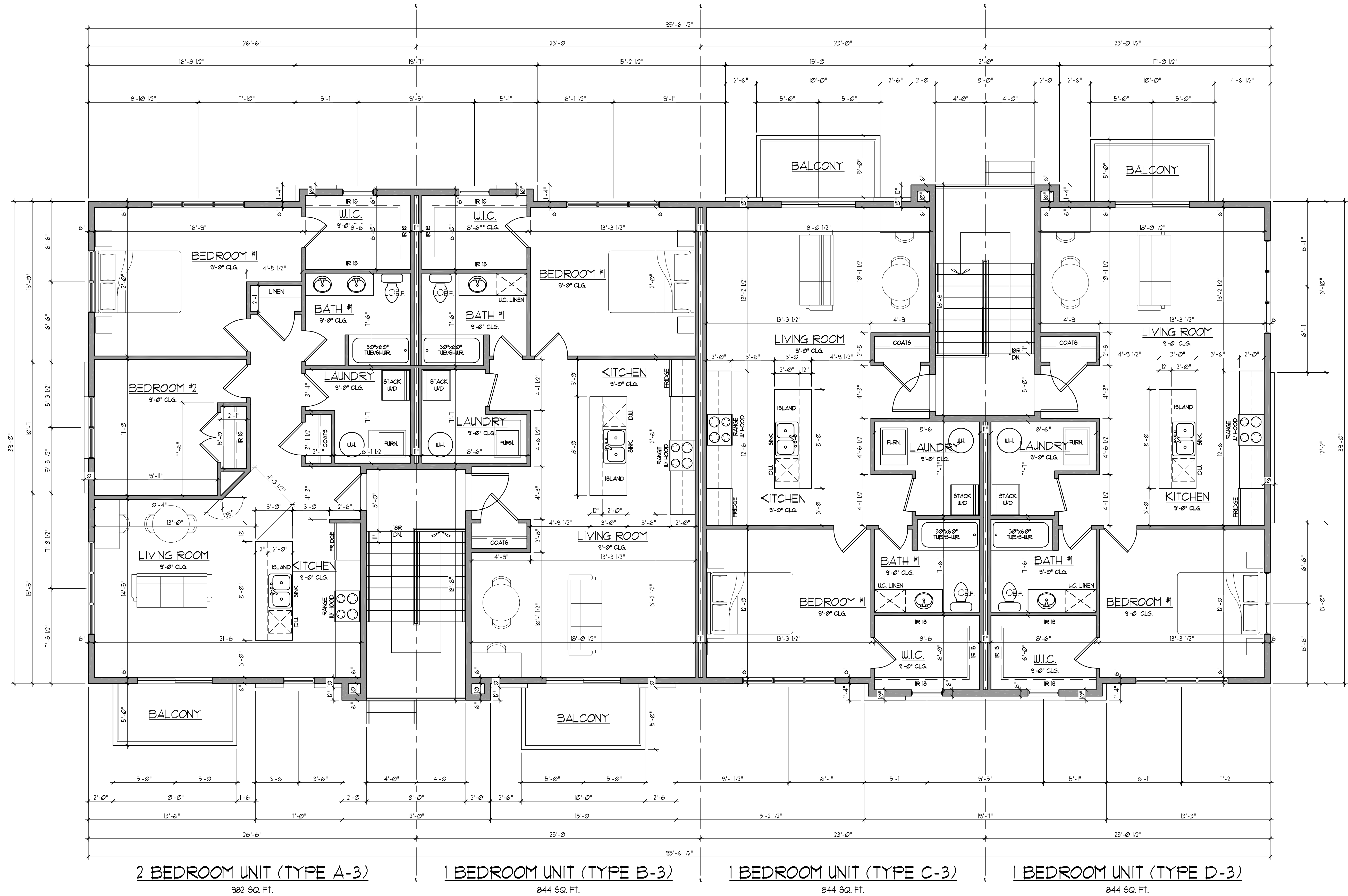
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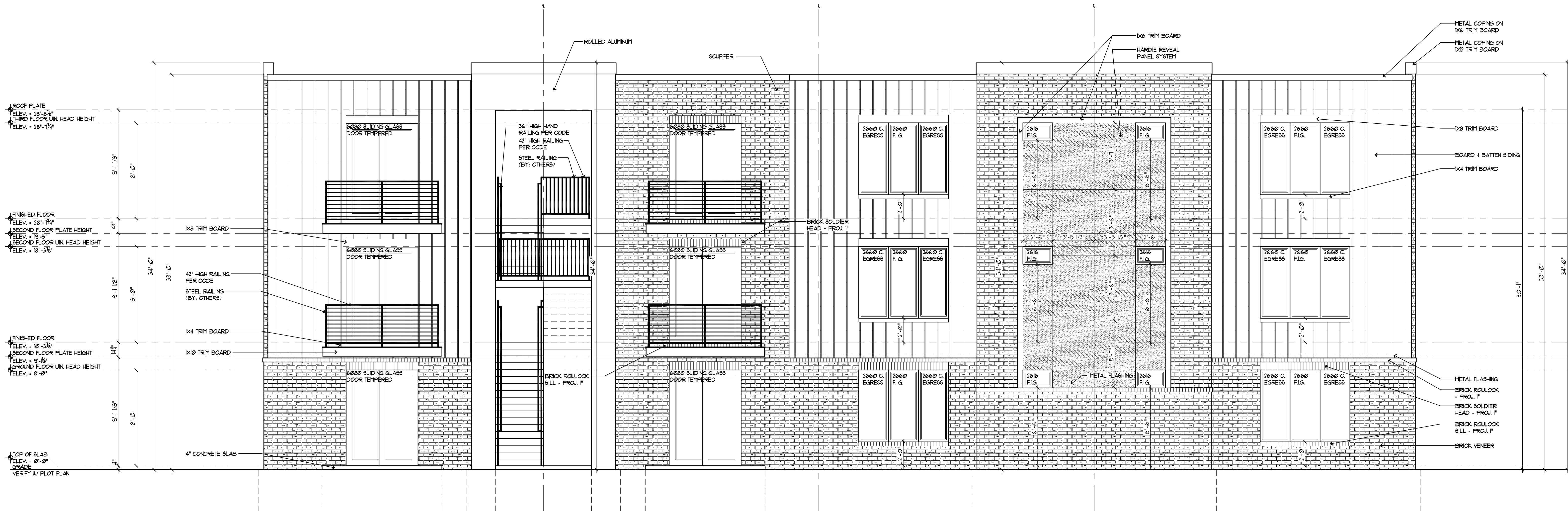


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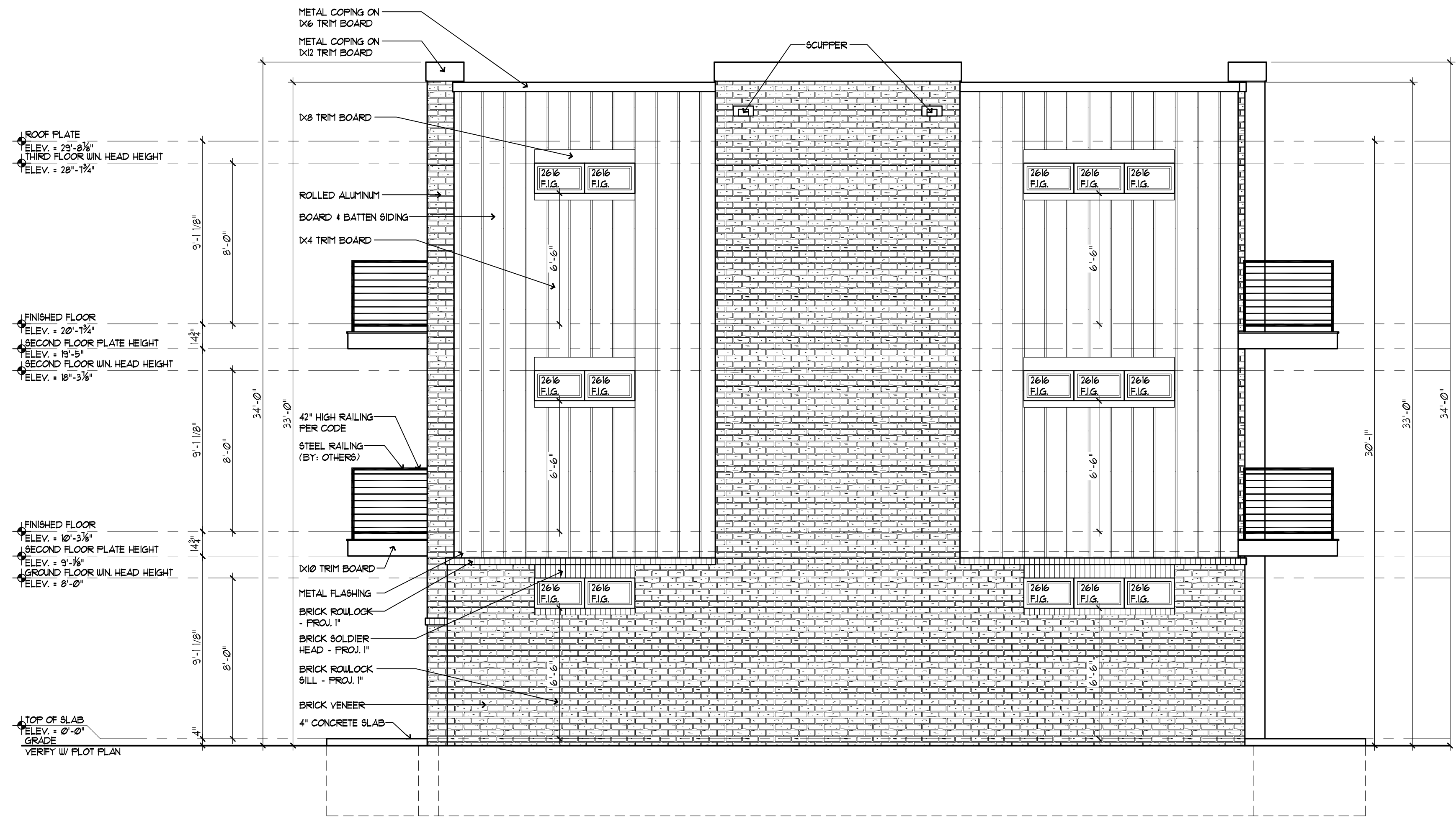
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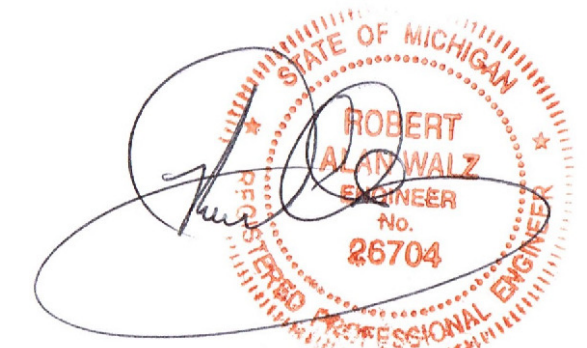
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BERKLEY APARTMENTS (BUILDING #1)
Site Plan Approval: 09-14-2021
Review Set:
Permit Set:
Revisions:
Drawn By: B.J.
Checked By: D.D.
Job No: 20-306
Sheet No: 5 OF 5




EAST ELEVATION
SCALE: 1/4" = 1'-0"



SOUTH ELEVATION
SCALE: 1/4" = 1'-0"





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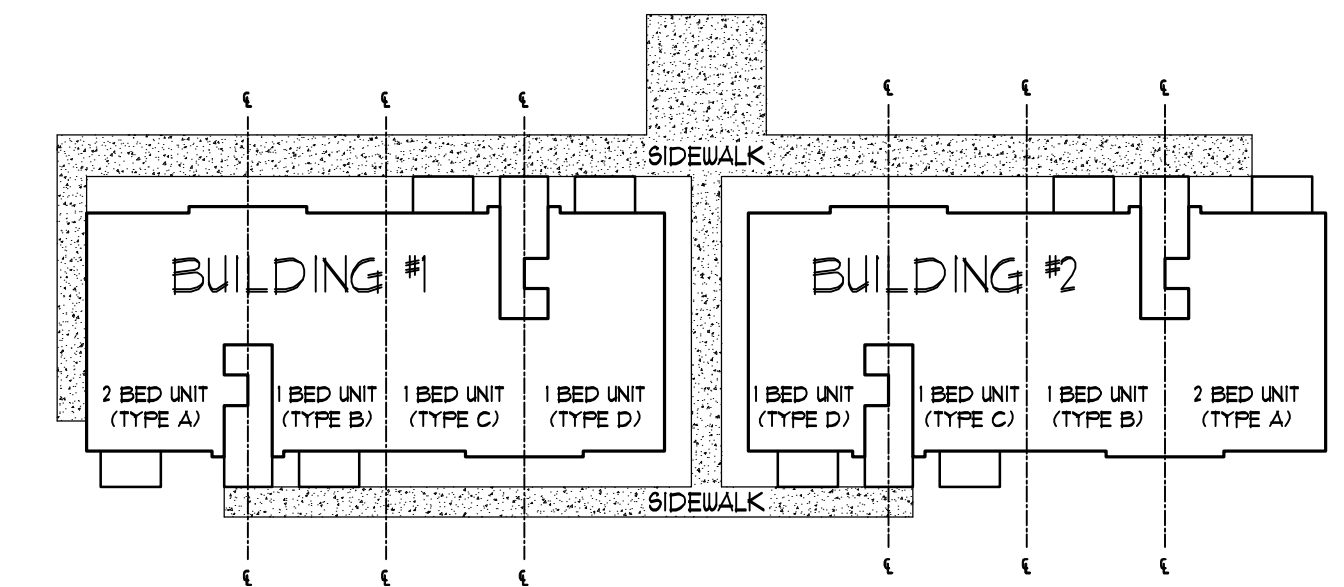
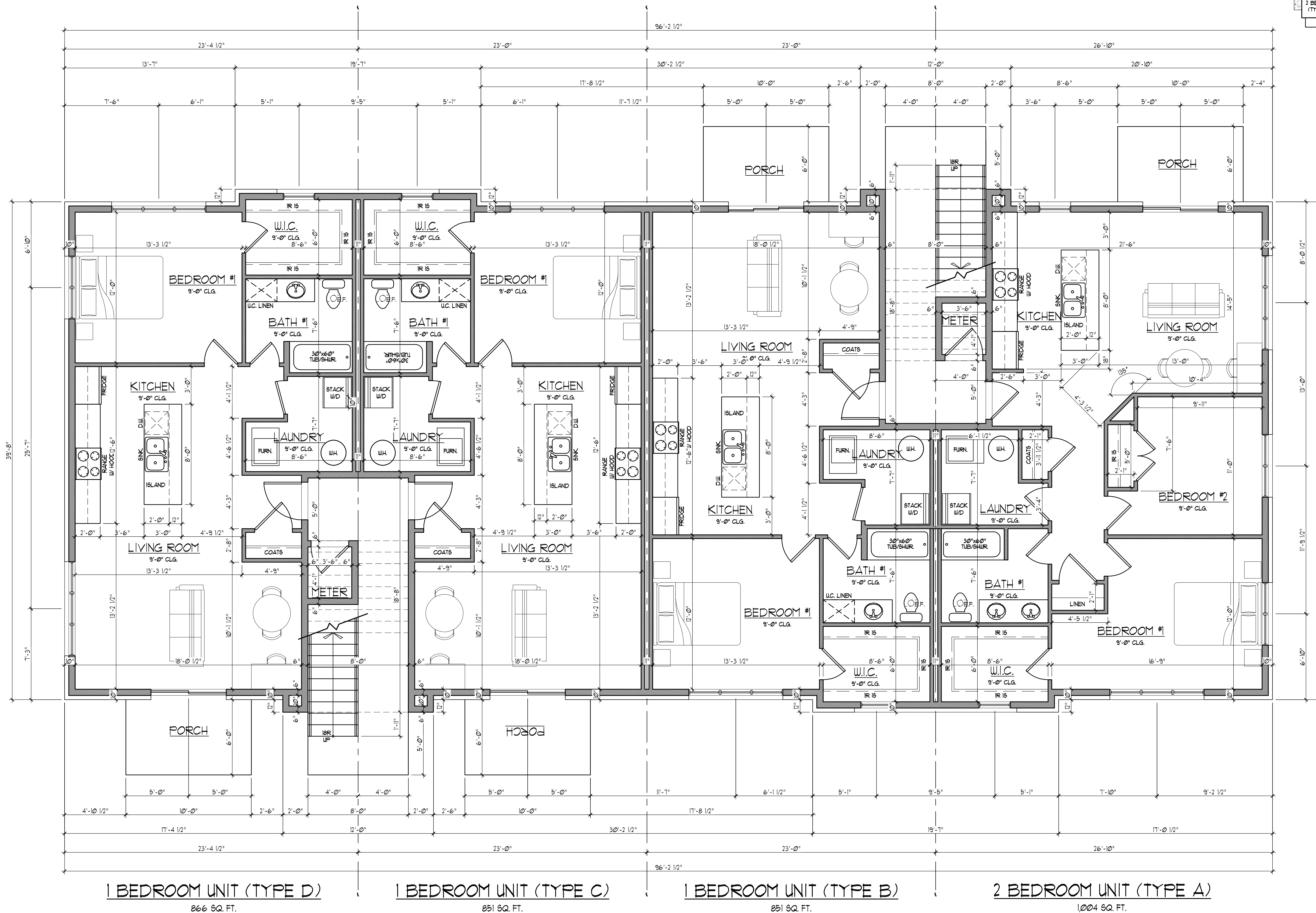
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BERKLEY APARTMENTS
(BUILDING #2)

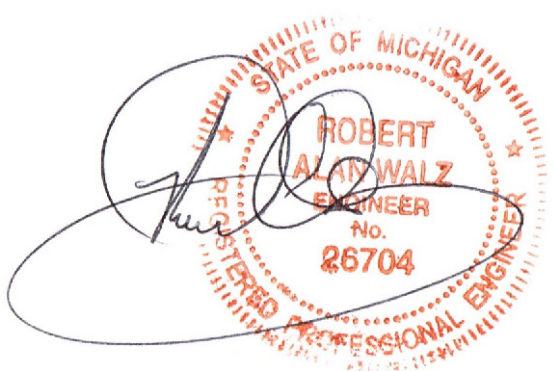
Site Plan Approval: 09-14-2021
Review Set:
Permit Set:
Revisions:
Drawn By: B.J.
Checked By: D.D.

Job No:
20-306

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OXFORD ROAD



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BERKLEY APARTMENTS
(BUILDING #2)

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Revisions:

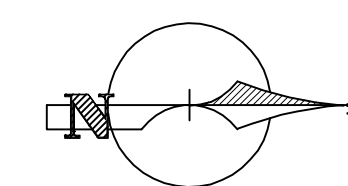
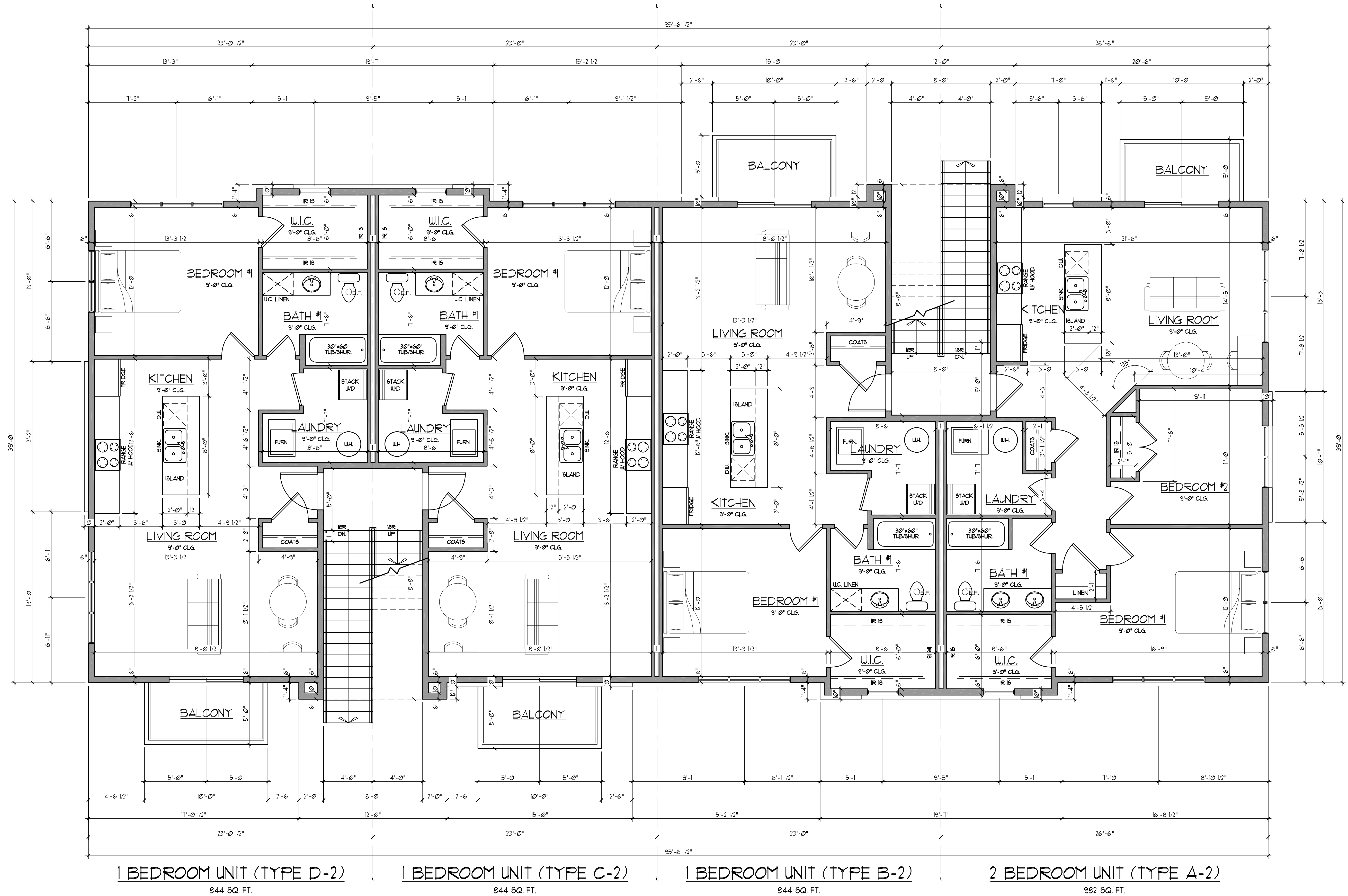
Drawn By: B.J.
Checked By: D.D.

Job No:
20-306

Sheet No:
3 OF 5

BERKLEY APARTMENTS SQUARE FOOTAGE	
2 BEDROOM (TYPE A)	1,004 SQ. FT.
2 BEDROOM (TYPE A-2)	982 SQ. FT.
2 BEDROOM (TYPE A-3)	982 SQ. FT.
1 BEDROOM (TYPE B)	891 SQ. FT.
1 BEDROOM (TYPE B-2)	844 SQ. FT.
1 BEDROOM (TYPE B-3)	844 SQ. FT.
1 BEDROOM (TYPE C)	851 SQ. FT.
1 BEDROOM (TYPE C-2)	844 SQ. FT.
1 BEDROOM (TYPE C-3)	844 SQ. FT.
1 BEDROOM (TYPE D)	866 SQ. FT.
1 BEDROOM (TYPE D-1)	844 SQ. FT.
1 BEDROOM (TYPE D-3)	844 SQ. FT.
TOTAL	10,600 SQ. FT.

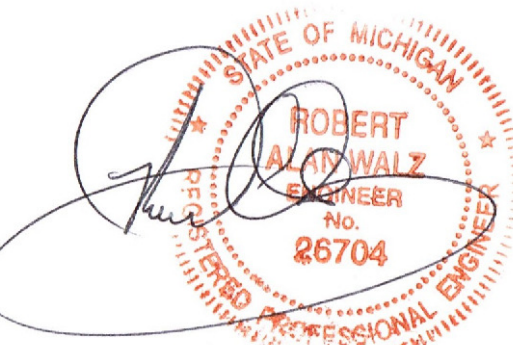
12 UNIT APARTMENT BUILDING
GROUND FLOOR PLAN
BUILDING #2
SCALE: 1/4" = 1'-0"



**12 UNIT APARTMENT BUILDING
SECOND FLOOR PLAN**

BUILDING 12

SCALE: 1/4" = 1'-0"



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(BUILDING #2)

Site Plan Approval: 09-14-2021

Review Set:

Permit Set:

Revisions:

Drawn By: B.J.

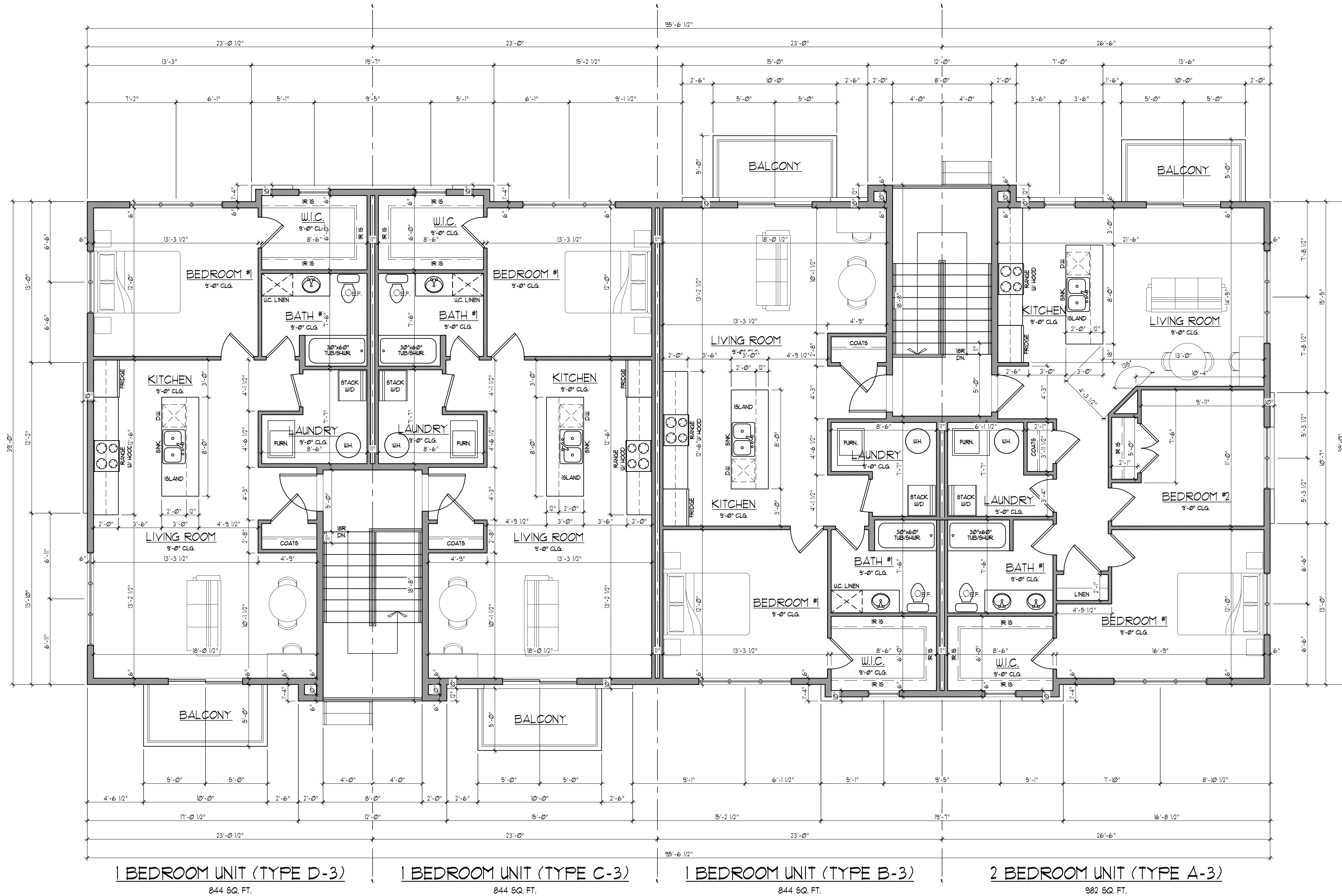
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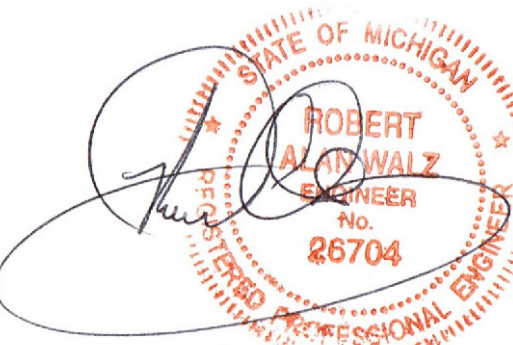
20-306

Sheet No:

4 OF 5



12 UNIT APARTMENT BUILDING
THIRD FLOOR PLAN
BUILDING 2
SCALE: 1/4" = 1'-0"



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BERKLEY APARTMENTS
(BUILDING #2)

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Review Set:

Permit Set:

Revisions:

Drawn By: B.J.

Checked By: D.D.

Job No:

20-306

Sheet No:

5 OF 5

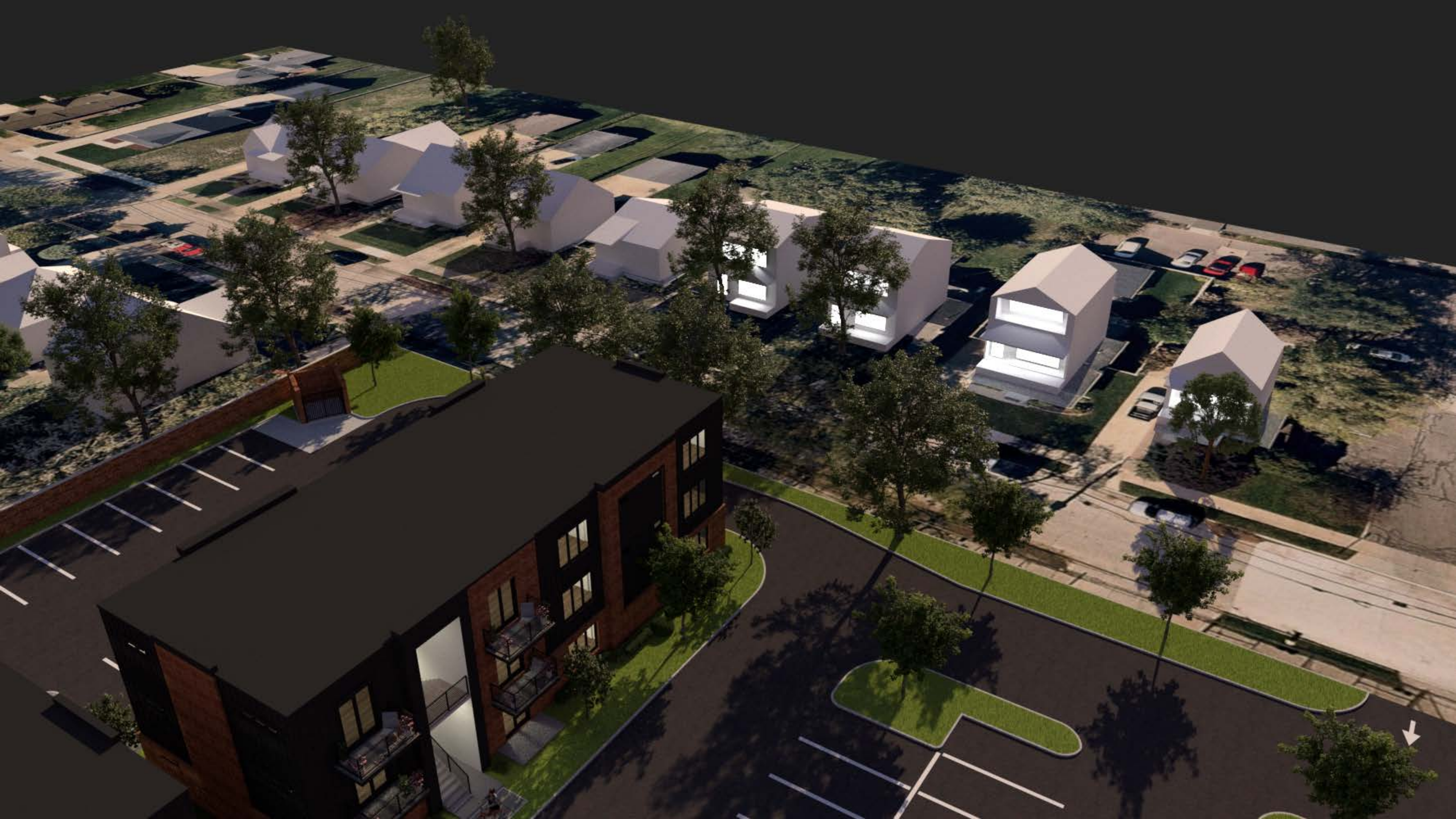


















CITY OF BERKLEY

COMMUNITY DEVELOPMENT

3338 COOLIDGE HWY, BERKLEY, MICHIGAN 48072

MEMORANDUM

To: Planning Commission

From: Megan A. Masson-Minock, Interim Community Development Director

Subject: **PSP-04-21: Lot 53, Oxford Road – The Ivy**
Site Plan Approval
Plan Date: March 25, 2022

Date: April 21, 2022

Attached are the following reviews for the site plan submitted:

Planning Review from Carlisle Wortman Associates (CWA) dated March 29, 2022

In their review, CWA made the following recommendations:

- The building and parking lot should be shifted to the east to provide additional buffer to adjacent residential property.
- The applicant should provide a 3-D model of the building and site in context with surrounding properties.
- The pedestrian sidewalk should be moved to the east to directly connect to sidewalk along the building.
- The trash enclosures should be consolidated at the rear of the site with a recycling dumpster, or partner with the converted LaSalette school building to have a shared dumpster(s) between both sites.

The review deferred to the Fire Department, Department of Public Works and the City Engineer (HRC) on whether access and circulation were sufficient.

The review noted that the Planning Commission should:

- Review the landscaping.
 - Request that the applicant address the items noted in their review in order to meet the standards of Section 138-679 - Standards.
-

In addition, the following deficiency was noted:

- Confirmation from the applicant that no more than 78 rooms, other than kitchens and bathrooms, are proposed.

Review from City of Berkley Department of Public Works (DPW) dated April 7, 2022

DPW noted that the drawings are in substantial compliance with their previous comments. They asked that the following items be provided to the City prior to scheduling a pre-construction meeting:

1. A plan approval letter from the City's engineering consultant, Hubbell, Roth & Clark (HRC).
2. An EGLE PA 399 water main permit is required for the new public main. HRC will provide guidance on this multi-jurisdictional review process.
3. Please incorporate the attached City of Berkley Material Specifications to sheet C-7.
4. A traffic control plan shall be added to the plan set to account for the proposed work on both Coolidge and on Oxford.
5. A stormwater maintenance agreement and exhibits shall be signed and finalized.
6. A construction schedule shall be provided with dates and durations of all major work items, including final restoration.
7. Proof of insurance is required with the City and HRC noted as additionally insured. Policy documents shall not include the language"....as required by written contract....".
8. Bonding (Performance, Labor & Material and Maintenance & Guarantee) and escrow requirements will be outlined by HRC. All of the bonds and the construction escrow must be posted with the City.
9. Electronic as-built drawings will be required following the utility installations.

Review from Hubbell, Roth & Clark (HRC) dated April 11, 2022

HRC recommended approval of the proposed site plan, subject to the applicant obtaining and submitting copies of any permits to the City and providing any required shop drawings or details prior to construction. The Planning Commission should note the following requested plan revisions and permits:

1. A soil erosion permit will likely be required from the Oakland County Water Resources Commissioner (OCWRC).
2. The City may require additional sections of existing curb and gutter and sidewalks along Oxford Road to be removed and replaced as part of the proposed project in order to address any current deteriorated conditions and will defer comment to the City.

3. Detail sheets for the proposed storm sewers must be provided with structures, covers, pipe requirements/cross sections and connection/tap details in accordance with City and County Standards. In addition, shop drawings for the said appurtenances will be required to be reviewed by the City and HRC.

Review from City of Berkley Fire Inspector dated December 22, 2021

Fire Inspector Pete Kelly approved the plans with the following conditions:

1. Smoke detectors are required in each unit, per IFC #907.
2. Fire extinguishers with a minimum rating of 1A/10B/C required in each unit per IFC 906.1.

Summary and Recommendation

While CWA did not recommend the plan submitted for approval, staff chose to put this item on the agenda due to the recommendations on site design, architecture, orientation, dumpster enclosures and pedestrian areas. The Planning Commission has the ability, per the Standards for Site Plan Approval in Section 138-679, to require changes in these areas. As proposed, we question whether the pedestrian areas are designed for safety, whether the site design and architecture are consistent “with the city’s master plan objectives and the design of the neighboring sites and buildings,” and the landscaping is “provided where appropriate and in a complementary fashion.”

The applicant has indicated that they will bring a 3-D model of the building and site in context with surrounding properties prior to or at the Planning Commission meeting.

The Planning Commission needs to make the following determinations:

1. **Standards for Site Plan Approval – Landscaping and dumpster enclosures:** CWA recommended that an additional buffer be provide to the adjacent residential property to the east. They also recommended that the trash enclosures should be consolidated at the rear of the site with a recycling dumpster, or partner with the converted LaSalette school building to have a shared dumpster(s) between both sites. The Planning Commission must determine whether the landscaping and dumpster enclosures, as presented, meets the standards for Site Plan approval, per Section 138-678.
2. **Standards for Site Plan Approval – Site design, architecture, orientation and materials:** CWA recommended that the building and parking lot should be shifted to the east to provide additional buffer to adjacent residential property. The Planning Commission must determine whether the site design, architecture, orientation and materials, as presented, meets the standards for Site Plan approval, per Section 138-678.

3. **Standards for Site Plan Approval – Pedestrian areas:** CWA recommended that the pedestrian sidewalk should be moved to the east to directly connect to sidewalk along the building.

If the Planning Commission chooses to grant site plan approval, we recommend that the following items be conditions of approval:

1. Confirmation of the number of rooms proposed from the applicant and that the parcel meets or exceeds the required minimum lot size.
2. A pre-construction meeting is required. Before scheduling of that meeting, all items listed the City's DPW review letter, dated April 7, 2022, must be received by the City.
3. Approval from the City's Engineer that all permits, required shop drawings or details required, as noted in their review letter dated April 11, 2022, have been met.
4. Smoke detectors are required in each unit, per IFC #907 and fire extinguishers with a minimum rating of 1A/10B/C required in each unit per IFC 906.1, per the review letter from the City's Fire Inspector, dated December 22, 2021.



Carlisle | Wortman
ASSOCIATES, INC.

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

Date: January 11, 2022
March 29, 2022

Site Plan Review For City of Berkley, Michigan

Applicant: 2219 Coolidge LLC

Project Name: The Ivy Apartments

Plan Date: December 13, 2021

Location: Oxford Road, west of Coolidge Highway (25-18-431-030)

Zoning: RM, Multiple Family Residential

Action Requested: Site Plan Approval

SITE DESCRIPTION

The subject site is located on Oxford Road, just west of the converted LaSalette school building. The applicant proposes to construct two (2), 3-story apartments buildings as an infill project on the former LaSalette school building parking lot. Each building is twelve (12) units, totaling twenty-four (24) apartments units. The site will be accessed via a shared drive on Oxford Road and via a cross-access with the LaSalette Church parking lot to the south.

The site is approximately 0.9 acres in area. The site is zoned RM, Multiple Family Residential and the proposed apartments are a permitted use.

Richard K. Carlisle, *President* Douglas J. Lewan, *Executive Vice President* John L. Enos, *Principal*
David Scurto, *Principal* Benjamin R. Carlisle, *Principal* Sally M. Elmiger, *Principal* Craig Strong, *Principal* R. Donald Wortman, *Principal*
Laura K. Kreps, *Associate* Paul Montagno, *Associate*

Site Location:Proposed Uses of Subject Parcel:

Twenty-four (24) apartment units broken into two (2) buildings of twelve (12) units each.

Current Use of Subject Property:

The subject property is currently a vacant parking lot.

Current Zoning:

The property is currently zoned RM, Multiple Family Residential

Surrounding Property Details:

Direction	Zoning	Use
North	RM, Multiple Family Residential	Single Family Residential
South	RM, Multiple Family Residential	Church / Parking Lot
East	RM, Multiple Family Residential (conditional rezoning)	Parking / Converted LaSalette School Building
West	R1-D, Single Family Residential	Single Family Residential

NATURAL FEATURES

The site has been graded for a parking lot. No natural features exist.

Items to be addressed: None.

BUILDING ARRANGEMENT AND SITE DESIGN

The site will be accessed via a shared drive on Oxford Road and via a cross-access with the LaSalette Church parking lot to the south. The buildings are located along the eastern property line, with parking between the buildings and the adjacent single-family residential to the west.

The applicant is providing a two to three (2-3) feet between the back curb of the parking lot and the single-family property to the west. In addition, the applicant is providing a 12-foot buffer from the back of their building to the edge of the proposed curb that runs behind their building. The applicant should consider reducing the buffer behind their building and shifting the building and parking lot further to the east to provide additional buffer along the western property line. Shifting the building by 5-feet, would allow an 8-foot buffer along the western property line. Within that 8-feet, the applicant could plant arborvitae or narrow deciduous trees to soften the visual of the proposed masonry wall and provide some landscape screening to the adjacent neighbor.

Items to be addressed: Applicant should consider shifting building and parking lot to the east to provide additional buffer to adjacent residential property.

AREA, WIDTH, HEIGHT, SETBACKS

Sec. 138-526. - Schedule of regulations of the Zoning Ordinance establishes the dimensional requirements for the RM, Multiple Family Residential District.

	Required	Provided	Compliance
Front (Oxford Road)	The front yard setback shall be 25 feet or equal to the average setback of the six adjacent buildings on the same block, whichever is greater.	25-feet	Complies

	Required	Provided	Compliance
Side (east and west)	10-foot minimum setback plus Every lot on which a multiple dwelling is erected shall be provided with a side yard on each side of such lot. Each side yard shall be increased by one-half foot for each ten feet or part thereof by which the length of the multiple dwelling exceeds 50 feet in overall dimension along the adjoining lot line.	26.3 feet (one) and 107.2 feet (total)	Complies
Rear (South)	35-foot minimum setback	36.1 feet	Complies
Building Height	30-feet maximum height	34-feet (includes 4-foot parapet)	Complies
Lot Coverage	35%	18%	Complies
Minimum Size of Lot Per Unit	No multiple dwelling shall be erected on a lot or parcel of land that has an area of less than 10,000 square feet. The total number of rooms (other than kitchen and sanitary facilities) provided shall not be more than the area of the parcel in square feet divided by 500. 39,232 / 500 = 78 rooms	30 rooms	Complaint

The definition of building height in the Zoning Ordinance excludes parapet walls not exceeding four (4) feet in height from the measurement of the height of a building. Nevertheless, of particular importance is to ensure that the proposed height does not negatively impact adjacent properties. The building should be of a height that provide an appropriate transition between the three (3) story LaSalette converted school building and the one and two-story adjacent single-family homes

As noted further in this review, we recommend applicant provide a 3-D model of the building and site in context with surrounding properties.

Items to be addressed: 1). Applicant confirms number of rooms; and 2). Applicant should provide a 3-D model of the building and site in context with surrounding properties.

PARKING

Section 13.06.G of the Zoning Ordinance requires:

	Required	Provided
Residential (General): 2 spaces per unit	24 units = 48 spaces minus 2 spaces by providing 4 bicycle parking spaces = 46 spaces	46 spaces
Parking Credit: Bicycle parking may be used to reduce the number of required off-street parking spaces. Existing developments may elect to reduce the required off-street parking by two car parking spaces by providing four bicycle parking spaces (i.e., by installing two inverted U, loop style, or other approved style of bicycle rack).		
Barrier Free	2	2
Bicycle Parking	0	4
Loading	0	0
Total	46 spaces	46 spaces in surface lots

All parking is in the surface parking lot.

Items to be Addressed: None

SITE ACCESS AND CIRCULATION

The site will be accessed via a shared drive on Oxford Road and via a cross-access with the LaSalette Church parking lot to the south. Access and circulation shall be reviewed by the City Fire Marshall and City Engineer, HRC.

The applicant is providing a direct sidewalk/pedestrian connection from the sidewalk on Oxford Road to the site, but its awkwardly located next to the trash enclosure. The applicant should move the pedestrian sidewalk to the east to directly connect to sidewalk along the building.

Items to be addressed: 1). Review of access and circulation by City Fire Marshall and City Engineer, HRC; and 2). Move sidewalk/pedestrian connection to Oxford Road.

LANDSCAPING AND SCREENING

A landscaping plan has been provided on sheet C-9. The applicant proposes a mix of deciduous and evergreen trees, and shrubs. As set forth in section 130-37, when the development of any property requiring site plan approval occurs, the City Planning Commission shall review landscaping plans and may require trees to be planted on or near the site consistent with the elements of the adopted city master plan.

Masonry Screening:

The applicant proposes a 6-foot-tall masonry screen wall along the western property line to screen the site from the adjacent single-family residential. The wall is architecturally consistent with building. Also, we advise the applicant to consider shifting the building and parking lot to provide additional landscape area as described in the Building Arrangement and Site Design section of this review.

Trash Enclosure:

The applicant is proposing two (2) trash enclosures. One (1) is located adjacent to Oxford Road and highly visible from the public right-of-way. The second enclosure is located in the rear of the site near the church parking lot to the south. Two (2) separate enclosures for twenty-four (24) units are inefficient. Furthermore, the proximity of the enclosure to Oxford Road would be visually unsightly. To address these two issues, the applicant shall either consolidate all trash enclosures the rear of the site and include a recycling dumpster as well, or partner with the converted LaSalette school building and have a shared dumpster(s) between both sites.

The applicant proposes to screen the dumpsters with a six-foot tall enclosure.

Items to be Addressed: 1). Planning Commission to review the landscape plan; and 2). Applicant shall either consolidate all trash enclosures at the rear of the site with a recycling dumpster, or partner with the converted LaSalette school building to have a shared dumpster(s) between both sites.

PHOTOMETRICS

A photometric plan has been provided. A total of four (4) pole mounted parking lot lights and eight (8) building light fixtures are proposed. The pole-mounted fixtures are noted as having a height of 16 feet (where the maximum height is 20 feet). Because the pole lights are adjacent to single family residential, as requested the applicant has added a shield to screening lights from residential property. The photometrics meet Zoning Ordinance requirements.

Items to be Addressed: None

EXTERIOR APPLIANCES

Applicant notes that mechanicals will be located on roof and screened via parapet.

Items to be Addressed: None

FLOOR PLAN AND ELEVATIONS

Floor plans and elevations have been provided. Materials include brick, board and batten siding, and hardie reveal panel system. We recommend applicant provide a color rendering of the building, and a 3-D model of the building and site to assess compatibility and the appropriate transition between the single-family to the north and west and the LaSalette buildings to the south and east.

Items to be Addressed: Applicant shall provide a 3-D model of the building and site in context with surrounding properties.

DESIGN STANDARDS AND SITE PLAN REVIEW STANDARDS

As set forth in Sec. 138-679. – Standards, the site plan shall be reviewed and approved by the Planning Commission upon finding that:

1. The site meets the requirements of this Code.
2. The proposed development does not create adverse effects on public utilities, roads, or sidewalks.
3. Pedestrian and vehicular areas are designed for safety, convenience, and compliment adjacent site design.
4. Site design, architecture, signs, orientation, and materials are consistent with the city's master plan objectives and the design of the neighboring sites and buildings.
5. Landscaping, lighting, dumpster enclosures, and other site amenities are provided where appropriate and in a complementary fashion.
6. Site engineering has been provided to ensure that existing utilities will not be adversely affected.

Items to be Addressed: Applicant addresses items noted in report.

RECOMMENDATION

The proposed development and the proposed use meet the requirements of the RM zoning district. However, we cannot address compliance with the required site plan standards until items noted above are addressed. Of particular importance is to ensure that the proposed height does negatively impact adjacent properties and does not provide an appropriate transition between the three (3) story LaSalette school building and the surrounding one and two-story adjacent single-family homes.

In addition, we cannot assess compatibility and the appropriate transition between the single-family to the north and west and the LaSalette buildings to the south and east without more detailed architectural drawings.

Prior to Planning Commission consideration, we recommend that the applicant resubmit plans that address the following:

1. Consider shifting building and parking lot to the east to provide additional buffer to adjacent residential property.
2. Review of access and circulation by City Fire Marshall and City Engineer, HRC;
3. Relocate sidewalk/pedestrian connection to sidewalk on Oxford Road.
4. Either consolidate all trash enclosures the rear of the site and include a recycling dumpster as well, or partner with the converted LaSalette school building and have a shared dumpster(s) between both sites
5. Provide a 3-D model of the building and site in context with surrounding properties.

Sincerely,




CARLISLE/WORTMAN ASSOC., INC.
Benjamin R. Carlisle, LEED AP, AICP

Transmittal Memo

To: Megan Masson-Minock, Interim Community Development Director (via email)

Cc: Kim Anderson, Community Development Department (via email)
Shawn Young, DPW Foreman (via email)
Eddie Zmich, HRC (via email)

From: Derrick Schueller, DPW Director 

Date: April 7, 2022

Subject: The Ivy Apartments
Lot 53 Oxford Road
Plan Review #2

We have reviewed the revised site plans provided by the Community Development Department on March 28 and prepared by Stonefield Engineering & Design.

The drawings are in substantial compliance with the previous DPW comments.

The following items shall be provided to the City prior to scheduling a preconstruction meeting:

1. A plan approval letter from the City's engineering consultant, Hubbell, Roth & Clark (HRC).
2. An EGLE PA 399 water main permit is required for the new public main. HRC will provide guidance on this multi-jurisdictional review process.
3. Please incorporate the attached City of Berkley Material Specifications to sheet C-7.
4. A traffic control plan shall be added to the plan set to account for the proposed work on both Coolidge and on Oxford.
5. A stormwater maintenance agreement and exhibits shall be signed and finalized.
6. A construction schedule shall be provided with dates and durations of all major work items, including final restoration.
7. Proof of insurance is required with the City and HRC noted as additionally insured. Policy documents shall not include the language ".....as required by written contract.....".
8. Bonding (Performance, Labor & Material and Maintenance & Guarantee) and escrow requirements will be outlined by HRC. All of the bonds and the construction escrow must be posted with the City.
9. Please note electronic as-built drawings will be required following the utility installations.

Feel free to call with any questions or concerns. Thank you.

CITY OF BERKLEY - UTILITY AND MATERIAL SPECIFICATIONS		
WATER MAIN		
Item	Manufacturer	Part Number
Curb Stop	McDonald	NL Bell Style Curb Stop - 76104QA
Corporation Stop	McDonald	NL Plug Style Corporation Stop - 74701QA
Curb Box	McDonald	Curb Boxes - 5615 ATW WB (Minneapolis Pattern), 5 1/2" Depth
Service Line Pipe	ADS	1" SDR 9 4710 CTS Potable Pipe, Blue
Service Line Fittings	McDonald	QA Series CTS Fittings (Lead-Mac Pak Fittings)
Tracing Wire (Open Cut)	Copperhead	#12 AWG Copper Clad Steel, High Strength with Minimum 450 lb. break load, with minimum 30 mil HDPE Insulation Thickness
Tracing Wire (Directional Bore)	Copperhead	#12 AWG Copper Clad Steel, Extra High Strength with Minimum 1.150 lb. break load, with minimum 30 mil HDPE Insulation Thickness
Valves	EJ	Resilient Wedge Gate Valve, Mechanical Joint End Connections, 2" Operating Nut, Open Right
Gate Valve Frame	EJ	1040Z 7" Tall Frame, Black Asphaltic Coated
Gate Valve Cover	EJ	1040C Vented 1 Hole Cover Berkley Water Supply, Black Asphaltic Coated
Hydrant	EJ	5BR250 Hydrant 5'6" Bury, 1 1/8" Pentagon, 2 3/4" DFD Nozzles, Yellow, MJ Connection, Open Left, 2 Drains
Frame Adjustment (1040)	EJ	Infra-Riser Circular, ID 28.30", OD 41.00", Flat, Various Thicknesses
Public Main Fittings	-	C153 Ductile Iron, MegaLugs in Place of Mechanical Fittings, Cor-Blue T-Head Bolts
SEWER		
Item	Manufacturer	Part Number
Manhole Frame	EJ	1040Z 7" Tall Frame, Black Asphaltic Coated
Manhole Cover	EJ	1040C Vented 2 Hole Cover Berkley Combined Sewer, Black Asphaltic
Catch Basin Frame & Cover (Restricted)	EJ	5000Z4 6 3/4" Tall Penthead Bolted Hinged Assembly with 5000Z4/M6 Restricted Opening 2 Holes Grate and Full Flange Frame, Coated
Catch Basin Frame & Cover (Unrestricted)	EJ	5000 6 3/4" Tall Penthead Bolted Hinged Assembly with 5000M4 Grate and Full Flange Frame Dearborn Standard, Coated
Frame Adjustment (1040)	EJ	Infra-Riser Circular, ID 28.30", OD 41.00", Flat, Various Thicknesses
Frame Adjustment (5000)	EJ	Infra-Riser Circular, ID 24.00", OD 34.00", Flat, Various Thicknesses
ROADS		
Item	Manufacturer	Part Number
Sign Post Anchor*	Telespar	12 Gauge Galvanized Anchors 3" by 2.25" with 7/16" Holes 1" on center
Sign Post (Stop Signs)*	Telespar	14 Gauge Galvanized Posts 10' by 2" with Prepunched 7/16" Holes 1" on center
Sign Post (Others)*	Telespar	14 Gauge Galvanized Posts 8' by 2" with Prepunched 7/16" Holes 1" on center

*Steel Post System as indicated on the signing plans includes signpost anchor, signpost, and all associated hardware and material required to install into the ground.

April 11, 2022

City of Berkley
3338 Coolidge Highway
Berkley, Michigan 48072

Attention: Ms. Megan Masson-Minock, Community Development Director
Mr. Matthew Baumgarten, City Manager

Re: Proposed "The Ivy" Residential Community
Lot 53, Oxford Rd
Engineering Site Plan – Review No. 2
City of Berkley, MI

HRC Job No. 20190914.02

Dear Ms. Masson-Minock and Mr. Baumgarten:

As Consulting Engineers for the City of Berkley, and in accordance with your request, we have completed the Engineering Site Plan review of the proposed subject development for compliance with the City of Berkley's engineering and site plan requirements. The plans were prepared by Stonefield Engineering and Design, LLC of Royal Oak, Michigan with a revision date of March 25, 2022. The proposed project is submitted as Phase II to the previously submitted and approved project at 2219 Coolidge Ave ("The Berkley"). The scope includes the removal of the existing parking lot in Lot 53 on Oxford Road and the construction of a new multifamily dwelling and parking lot. The site is a 0.78-acre parcel of land located on the south side of Oxford Road near Coolidge Highway. We hereby offer the following comments:

General:

1. A soil erosion permit will likely be required from the Oakland County Water Resources Commissioner (OCWRC). If a soil erosion permit is required, it must be obtained, and a copy of the approved permit provided to the City prior to commencing construction. Regardless of whether a permit is required, the City will require silt fence to be installed around the perimeter of the site, filter fabric installed in nearby catch basins, and a temporary maintenance aggregate/mud mat constructed for access to and from the proposed site. **This item is still applicable.**
2. The City may require additional sections of existing curb and gutter and sidewalks along Oxford Road to be removed and replaced as part of the proposed project in order to address any current deteriorated conditions and will defer comment to the City. **This item is still applicable.**

Water and Fire Protection Services:

1. Permits may be required from the Department of Environment, Great Lakes, and Energy (EGLE) and from OCWRC for the installation and connection of the new water main service. **This item is still applicable.**
2. The proposed water main along Oxford Road must be labeled to show the proposed size and length. Note that the City requires Ductile Iron Pipe, Class 54. **The proposed water main has been revised. This item has been satisfactorily addressed.**

3. The plans must include calculations for the new Residential Equivalent Unit (REU) value of the proposed (building) structures. These calculations must also support that the proposed water service is sufficiently sized for the new REU values. **REU values have been added to the plans that suggest the proposed water service is sufficiently sized. This item has been satisfactorily addressed.**
4. Proposed finish grades for Gate Wells and Hydrants must be provided. **Finish grades have been provided. This item has been satisfactorily addressed.**

Storm Drainage and Detention/Sanitary Sewer:

1. This office has conducted a review of the stormwater calculations. The plans show a proposed average runoff coefficient of 0.81. The underground detention system previously approved for “The Berkley” development, which this site drains into, was designed and approved assuming a coefficient of 0.83 for the proposed “The Ivy” development. The plans also include calculations demonstrating that the proposed stormwater pipes are sized in accordance with 10-year stormwater system design standards. As such, the system appears to be adequately sized to detain stormwater from the proposed development.
2. The plans show the proposed sewer leads connecting to the 90 inch WRC sewer. There is an existing City of Berkley combined sewer in Oxford Road that must be shown on the plans and the proposed sewer leads must connect to the City’s sewer in lieu of the WRC interceptor. **The sewer connections have been revised. This item has been satisfactorily addressed.**
3. The stormwater maintenance agreement submitted as part of “The Berkley” development does not include the proposed storm pipes and structures as part of the physical limits shown in the agreement. That agreement must be updated to include the proposed stormwater features, or a separate agreement submitted for maintenance of the proposed storm system for “The Ivy”. **The maintenance agreement for “The Berkley” has been revised to include the additional proposed storm system. This item has been satisfactorily addressed.**
4. The type of cover to be utilized on the proposed drainage structures must be indicated on the plans. Restricted covers may need to be utilized if required by the City’s DPW being that the City’s sewer system is combined. The Applicant must inquire directly with the DPW. **The City has confirmed that the Applicant will not be required to utilize restricted covers. This item has been satisfactorily addressed.**
5. Detail sheets for the proposed storm sewers must be provided with structures, covers, pipe requirements/cross sections and connection/tap details in accordance with City and County Standards. In addition, shop drawings for the said appurtenances will be required to be reviewed by the City and HRC. **This item is still applicable. Details and shop drawings as required or requested by the City must be provided prior to construction.**
6. The proposed sanitary lead connection type (TwisTee sewer saddle, as per the City DPW, or approved equal) must be labeled on the plan. **The connection type has been labeled on the plans. This item has been satisfactorily addressed.**

Recommendation:

Based on our aforementioned comments, we recommend approval of the proposed Site Plan subject to the applicant obtaining and submitting copies of any permits to the City and providing any required shop drawings or details prior to construction.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Edward D. Zmich
Project Manager



Mitch Stark
Review Engineer

EDZ/mas

pc: City of Berkley; Mr. Derrick Schueller, Mr. Shawn Young
HRC; R. Alix, File

City of Berkley
3338 Coolidge Highway, Berkley, MI 48072



"We Care"

Fire Inspector
Office: 248-658-3326
Fax: 248-658-3301
Email: pkelly@berkleymich.net

TO: Martini Samartino Design Group, Architect
John Lipchick, Building Official
Megan Masson-Minock, City Planner

RE: The Ivy Apartments, 2219 Coolidge, Oxford lot

Dear Interested Parties:

12-22-21

Be advised I have received and reviewed plans for the above proposed project and approved them subject to the following:

- 1) Smoke detectors required in each unit, per IFC #907.
- 2) Fire extinguishers with a minimum rating of 1A/10B/C required in each unit per IFC 906.1

Please contact me if you have any questions regarding this communication.

Respectfully,

A handwritten signature in black ink, appearing to read "P. Kelly", is written over a light blue horizontal line.

Pete Kelly
Fire Inspector



CITY OF BERKLEY
COMMUNITY DEVELOPMENT
3338 COOLIDGE HWY, BERKLEY, MICHIGAN 48072

APPLICATION FOR SITE PLAN REVIEW

NOTICE TO APPLICANT: Applications for Site Plan review by the Planning Commission must be submitted to the City of Berkley Building Department in **substantially complete form** at least 30 days prior to the Planning Commission's meeting at which the application will be considered. The application must be accompanied by the data specified in the Zoning Ordinance, including fully dimensioned site plans, plus the required review fees.

The Planning Commission meets the fourth Tuesday of the month at 7:00pm in the Council Chambers at the City of Berkley City Hall, 3338 Coolidge Hwy, Berkley, MI 48072.

TO BE COMPLETED BY APPLICANT:

I (We), the undersigned, do hereby respectfully request Site Plan Review and provide the following information to assist in the review:

Project Name: BP America

Applicant: Jason Yaldeo

Mailing Address: [REDACTED]

Telephone: [REDACTED]

Email: [REDACTED]

Property Owner(s), if different from Applicant: Jericho Properties, LLC

Mailing Address: [REDACTED]

Email: [REDACTED]

Applicant's Legal Interest in Property: Owner

LOCATION OF PROPERTY:

Street Address: 2576 Coolidge Hwy

Nearest Cross Streets: Catalpa

Sidwell Number(s): 04-25-17-301-001

PROPERTY DESCRIPTION:

Provide lot numbers and subdivision: Lot 13 except 11.22 Feet of
Perry-Mortenson Company's SunnyKnoll Farms

Property Size (Square Feet): 13,878 (Acres): 0.32

EXISTING ZONING DISTRICT (please check):

- | | | |
|-------------------------------|------------------------------------------------|----------------------------------------------|
| <input type="checkbox"/> R-1A | <input type="checkbox"/> Local Business | <input checked="" type="checkbox"/> Coolidge |
| <input type="checkbox"/> R-1B | <input type="checkbox"/> Office | <input type="checkbox"/> Downtown |
| <input type="checkbox"/> R-1C | <input type="checkbox"/> Community Centerpiece | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> R-1D | <input type="checkbox"/> Woodward | <input type="checkbox"/> Cemetery |
| <input type="checkbox"/> RM | <input type="checkbox"/> Eleven Mile | <input type="checkbox"/> Parking |
| <input type="checkbox"/> RMH | <input type="checkbox"/> Twelve Mile | |

Present Use of Property:

Gas Station/Garage

Proposed Use of Property:

Gas Station/convenience/to-go food

Is the property located within the Downtown Development Authority?

☒ Yes ☐ No

PROJECT DESCRIPTION:

Interior and exterior facade renovation. Relocation
of existing gas pumps with new Canopies.

Does the proposed project / use of property require Special Land Use approval? ☒ Yes ☐ No

Does the proposed project require Variance(s) from the Zoning Board of Appeals? ☐ Yes ☒ No

If yes, please describe Variances required:

PLEASE COMPLETE THE FOLLOWING CHART:

Type of Development	Number of Units	Gross Floor Area	Number of Parking Spaces On Site	Number of Employees on Largest Shift
Attached Residential				
Office				
Commercial		1,878 S.F.	12	2
Industrial				
Other				

PROFESSIONALS WHO PREPARED PLANS:

A. Name:

Joseph Novitsky - JSN Architecture

Mailing Address:

Telephone:

Email:

Design Responsibility (engineer, surveyor, architect, etc.): Architect

B. Name:

Mailing Address:

Telephone:

Email:

Design Responsibility:

SUBMIT THE FOLLOWING:

1. Fifteen (15) individually folded copies of the site plans, measuring 24" x 36", sealed by a registered architect, engineer, or surveyor.
2. A pdf file of the site plans, submitted to the Community Development Director.
3. Proof of property ownership (title insurance policy or registered deed with County stamp).
4. Review comments or approval received from County, State or Federal agencies that have jurisdiction over the project, including, but not limited to:

- ☐ Road Commission for Oakland County
☐ MI Dept. of Transportation


- ☐ Oakland County Health Division
☐ MI Dept. of Environment, Great Lakes & Energy

PLEASE NOTE: The applicant, or a designated representative, **MUST BE PRESENT** at all scheduled meetings, or the Site Plan may be tabled due to lack of representation.

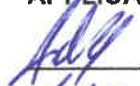
Failure to provide true and accurate information on this application shall provide sufficient grounds to deny approval of a Site Plan Application or to revoke any permits granted subsequent to the site plan approval.


We encourage applicants to make a presentation of the proposed project to the Planning Commission and City Council, as appropriate. To assist in this effort, we have available for your use at meetings a projector, laptop computer and screen. This will allow the Planning Commission and audience to be fully engaged so they can give your project the attention it deserves. Planning Commission meetings are recorded and televised.


PROPERTY OWNER'S APPROVAL: (Initial each line)

 I hereby authorize the employees and representatives of the City of Berkley to enter upon and conduct an inspection and investigation of the above-referenced property.

APPLICANT'S ENDORSEMENT: (Initial each line)

 All information contained therein is true and accurate to the best of my knowledge.

 I acknowledge that the Planning Commission will not review my application unless all information in this application and the Zoning Ordinance has been submitted. I further acknowledge that the City and its employees shall not be held liable for any claims that may arise as a result of acceptance, processing or approval of this site plan application.

 I hereby acknowledge that if engineering or other reviews are required, additional fees must be submitted. Should the review fees be greater than the required minimum, sufficient additional charges will be imposed to satisfy the additional review fees. All fee obligations must be satisfied prior to permit approval.

If an application is withdrawn more than three (3) weeks prior to the meeting date, 90% of the fee will be refunded. If the application is withdrawn less than three (3) weeks prior to the meeting, no refund will be given.

 _____
Signature of Applicant Date

Jason Yaldeo
Applicant Name (Print)

Signature of Applicant Date

Applicant Name (Print)

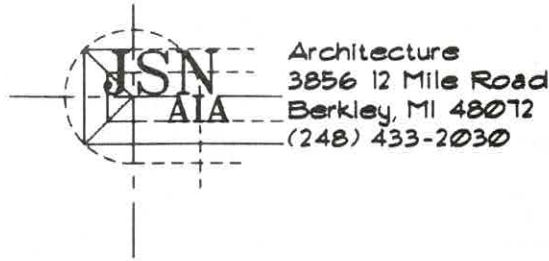
 _____
Signature of Property Owner Authorizing this Application Date

Jason Yaldeo
Property Owner Name (Print)

OFFICE USE ONLY

Received 2.18.22 Receipt # _____ Meeting Date _____ Case # PSP-05-22

Fees: ☒ Site Plan Review \$600 Façade Change: \$200 Revision: \$300
Extension \$200 ☒ Engineering: Multi-family \$1,500 + \$30/unit
Escrow (New construction) \$1,000 * Commercial \$1,000



City of Berkley
Planning Department
Megan Masson-Minock
3338 Coolidge
Berkley, Michigan 48072

March 9, 2022

Re: BP Gas Station Façade Chage & canopy placement
2576 Coolidge Highway, Berkley, 48072

Dear Megan,

We are in receipt of the City's Plan review letter from the DPW, dated 2-28-2022 and HRC's Letter Dated 3-4 -2022 with respect to the Plans this office submitted for PC Review. We will respond to the City's Letter first and then HRC's second with some closing thoughts from the Owner.

1. We have worked with the City Staff for over a year and a half to ask this exact question. We asked for all accident records on Coolidge and Catalpa. There are no major incidence records at this intersection and frankly nothing directly inherently responsible the Police Department could find. The Ownership has requested we leave the existing curb cuts "open" since they have not contributed to any accidents and problems in the extended history of the site and station's existence. It is our understanding, the Special Use Condition that this station exists under, opens this conversation and the site cannot and never will meet the State Standards that were established well after this station was permitted and built out in the City of Berkley, with the City's approval, so long ago. The accident history, or lack there of, gives us hope that the PC will respect reality and not invent ways to make this business more difficult to operate, based on supposition and opinion, rather that cold hard facts.
2. Agreed.
3. Agreed. Note only Licensed Contractors can order this survey, and the Builder is TBD.
4. Agreed, and also recommended.
5. This site design and arrangement and stall numbers were pre-agreed to buy the Planning Department, and to our understanding, meet Ordinance. I am certain there is an e-mail trail verifying this statement between Ownership and Planning Staff.
6. Part of our initial concerns when approaching the City to garner support upgrading this tired building and site was the concern that underground rain water storage costs would prevent this small business from affording and absorbing the costs of a radical site re-reconstruction, including the all-too-often now requested Underground Storm Water storage systems. The new concern with this statement is the "demo" that would be essentially inherent in upgrading the drain system. The fear now is the entire system would need to re-designed, and re-built to attempt to place the new reduced area covers, and then the extent of "demo" would trigger the storm water underground system and essentially kill the project with non-essential costs.
7. Agreed.
8. Agreed.

Response to HRC

General:

1. Agreed.
2. Agreed
3. Agreed

Storm Drainage and Detention / Sanitary Sewer:

1. The sincere hope is that we do NOT demand storm Water Detention / Retention.
2. Agreed – they drain to the South / Rear, and will remain
3. We had already recommended that – and if the project is approved by the PC, the intent was to have the Scope done, if it is advised to have the done BEFORE approval, it is only money, and frankly not that much. We will note however, it is working fine now and anticipate a “clean and go” will suffice...

We truly hope we can find our way to the next available meeting.

Finding support, or not, is our only goal right now.

Details can be left to construction documents, in our opinion, and a general understanding of if the City wants to proceed or not, is the only issue now. Special Use is Condition of Local support. Frankly, that is our hope-to find and realize support to upgrade this vital, visible corner in Berkley.

Respectfully,



Joseph S. Novitsky, AIA

March 4, 2022

City of Berkley
3338 Coolidge Highway
Berkley, Michigan 48072

Attention: Ms. Megan Masson-Minock, Community Development Director
Mr. Matthew Baumgarten, City Manager

Re: BP America
2576 Coolidge Hwy
Engineering Site Plan – Review No. 1
City of Berkley, MI

HRC Job No. 20220228.02

Dear Ms. Masson-Minock and Mr. Baumgarten:

As Consulting Engineers for the City of Berkley, and in accordance with your request, we have completed the Engineering Site Plan review of the proposed subject development for compliance with the City of Berkley's engineering and site plan requirements. The plans were prepared by Joseph S. Novitsky Architecture of Berkley, Michigan and have an issue date of February 18, 2022. The proposed project scope includes the renovation of the existing building and changes to the layout of fuel pumps. We hereby offer the following comments:

General:

1. All existing utilities and service leads must be shown on the plans.
2. The extent of demolition and pavement modifications are unclear from the plans. A separate demolition sheet must be provided in the plan set that shows all site demolition work including any curb, sidewalk, and pavement removal and replacement.
3. If more than building façade changes are proposed for the site (i.e., pavement replacement, utility installation, etc.), the plan set must include an engineer-prepared and sealed site plan with an engineering scale.

Storm Drainage and Detention/Sanitary Sewer:

1. The extent of pavement modifications is unclear from the plans. Stormwater runoff calculations and detention improvements may be required if significant changes to the pavement and grades are proposed. This must be confirmed through a demolition plan clearly showing the extents of the project as stated above.
2. Note that downspouts are not permitted to discharge directly into the combined sewer system. The location of the proposed downspouts must be shown on the plans.
3. If the existing sewer lead is to be reused, the applicant must have the lead inspected by a licensed contractor/plumber and the video footage submitted to the City verifying the lead is suitable for re-use prior to construction.

Delhi Township 2101 Aurelius Rd. Suite 2A Holt, MI 48842 517-694-7760	Detroit 535 Griswold St. Buhl Building, Ste 1650 Detroit, MI 48226 313-965-3330	Grand Rapids 801 Broadway NW Suite 215 Grand Rapids, MI 49504 616-454-4286	Howell 105 W. Grand River Howell, MI 48843 517-552-9199	Jackson 401 S. Mechanic St. Suite B Jackson, MI 49201 517-292-1295	Kalamazoo 834 King Highway Suite 107 Kalamazoo, MI 49001 269-665-2005	Lansing 215 S. Washington SQ Suite D Lansing, MI 48933 517-292-1488
-----------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------	------------------------------------------------------------------	--------------------------------------------------------------------------------	-----------------------------------------------------------------------------------	---------------------------------------------------------------------------------

Recommendation:

Based on our aforementioned comments, we do not recommend approval of the proposed Site Plan at this time. The plans must be revised to address all of the above comments and resubmitted to the City of Berkley for further review.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Edward D. Zmich
Project Manager



Mitch Stark
Review Engineer

EDZ/MAS/mas

pc: City of Berkley; Mr. Derrick Schueller, Mr. Shawn Young
HRC; R. Alix, File
Joseph N. Novitsky

Transmittal Memo

To: Megan Masson-Minock, Interim Community Development Director (via email)

Cc: Kim Anderson, Community Development Department (via email)
Shawn Young, DPW Foreman (via email)

From: Derrick Schueller, DPW Director *DS*

Date: February 28, 2022

Subject: BP Gas Station-Pump Relocation, New Canopy and Façade Change
2576 Coolidge Highway
Plan Review #1

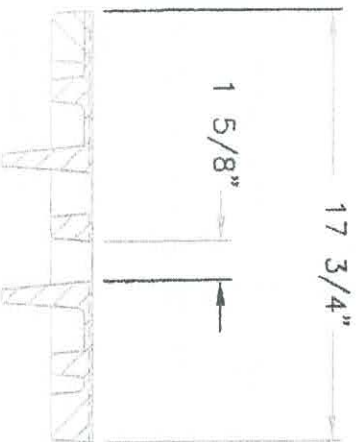
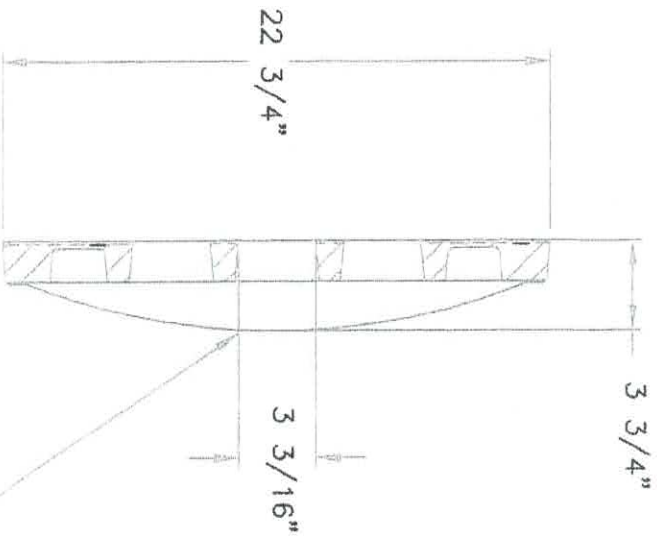
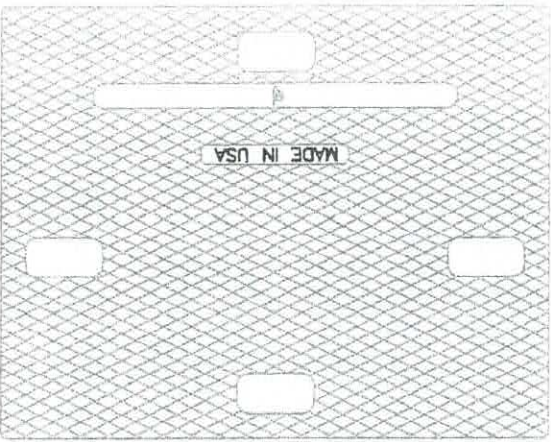
We have reviewed the site plans provided by the Community Development Department on February 18 and prepared by Joseph Novitsky Architecture. Please find below our general comments:

1. We recommend the applicant consider the removal of the two drive approaches closest to the intersection. These approaches do not meet current access management guidelines as published by MDOT.
2. A Demolition Sheet shall be added to the plan set indicating all removals, including pavement.
3. A Design Miss Dig ticket shall be requested by the applicant to accurately show the underground utilities in the area. The ticket number shall be indicated on the survey and/or site plan.
4. We recommend the existing sanitary lead and water service be examined by a licensed plumber prior to site plan resubmittal with these lines added to the drawings. The replacement of these pipes, due to condition or material type, may impact site layout and scope.
5. We defer to the Community Development Department for verification of number of stalls required, sizing, handicap considerations and general site circulation.
6. The three (3) existing small yard basins on-site do not meet current standards for paved parking lot structures. These catch basins will need to be rebuilt with sumps and restricted catch basin covers (see attached samples).
7. Existing building downspouts shall be maintained to splash on-grade (not connected to underground sewer).
8. At this time, there are no changes to the site that would cause a modification to the Storm Water (ERU) Fee calculation (the total site impervious is not changing significantly with the improvements).

A response letter from the applicant to the comments noted above would be helpful in subsequent reviews.

Feel free to call with any questions or concerns. Thank you.

5000M3 Grate



GRATE SECTION

EJ
5000M3
MO/DY/YR X
PROD NO
ASTM A48 CL35B

Product Number
00500042

Design Features

- Materials
Gray Iron (CL35B)
- Design Load
Heavy Duty
- Open Area
20 sq in
- Coating
Dipped
- Designates Machined Surface

Certification

- ASTM A48
- Country of Origin: USA

Drawing Revision

7/22/1996 Designer: DEW
5/30/2016 Revised By: MAH

Disclaimer

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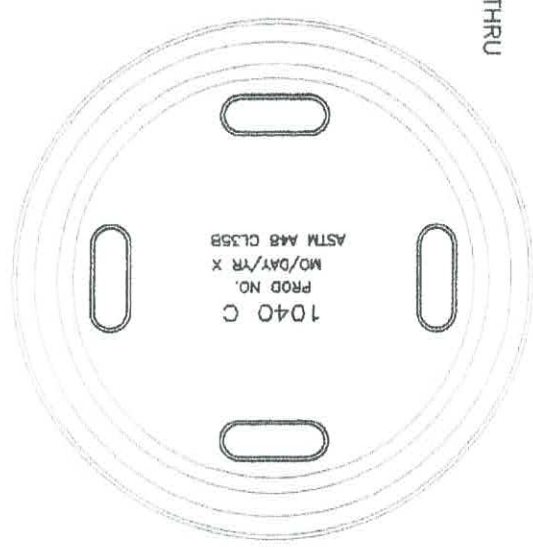
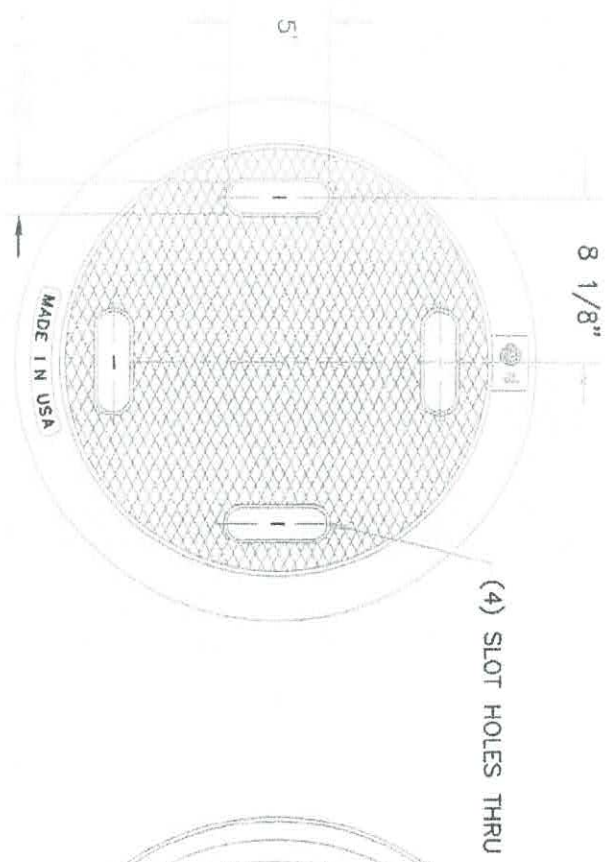
CONFIDENTIAL: This drawing is the property of EJ GROUPE, Inc., and contains confidential information, including trade secrets, patents, trade secret information, and/or know-how. It is the property of EJ GROUPE, Inc. and is not to be distributed, copied, or otherwise used without the prior written consent of EJ GROUPE, Inc. All rights reserved.

Contact

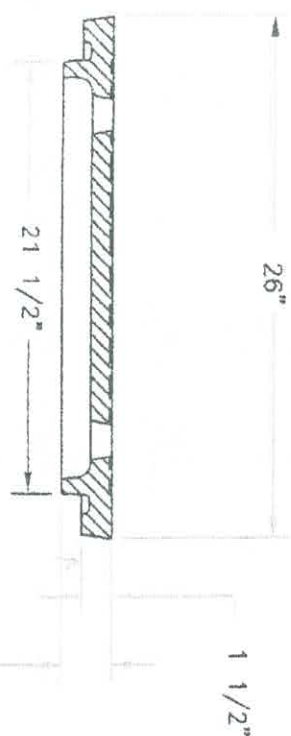
800 626 4653
EJC@EJ.COM

SECTION

1040C Cover



BOTTOM VIEW



COVER SECTION

Product Number

00104399

Design Features

- Materials
Gray Iron (CL35B)
- Design Load
Heavy Duty
- Open Area
n/a
- Coating
Dipped
- V Designates Machined Surface

Certification

-ASTM A48

-Country of Origin: USA

Drawing Revision

6/22/2007 Designer: DEW
6/10/2013 Revised By: DAE

Disclaimer

Weights (lbs/kg) dimensions (inches/mm) and tolerances provided for your guidance. We reserve the right to modify specifications without prior notice.

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Contact

800 626 4633
ejci.com

GENERAL NOTES: M.B.C. 2015

1. THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH THE MICHIGAN BUILDING CODE 2015. A COPY OF THE CODE BOOK SHOULD BE RETAINED BY THE BUILDER/GENERAL CONTRACTOR FOR REFERENCE BY THE ON SITE CONSTRUCTION PERSONNEL. ALL CONSTRUCTION SHALL CONFORM TO ALL REQUIREMENTS OF THE CURRENT CODE.
2. THESE NOTES ARE FOR GENERAL REFERENCE. WHERE CONFLICTS EXIST BETWEEN THESE NOTES AND CURRENT CODE(S), THE MORE STRINGENT REQUIREMENTS SHALL PREVAIL.
3. MATERIALS OR CONSTRUCTION PROCEDURES WHICH ARE PROHIBITED BY LAW OR SHALL CAUSE A HARMFUL EFFECT TO THE NATURAL ENVIRONMENT OR TO THE HEALTH OF ANY PERSON ON THE SITE DURING CONSTRUCTION AND/OR DURING OCCUPANCY SHALL NOT BE USED ON THIS PROJECT.
4. ALL TRADES SHALL CONFORM WITH ALL APPLICABLE FEDERAL, STATE, LOCAL, AND OSHA CODES, RULES AND REGULATIONS. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENTS SHALL APPLY.
5. ANY DISCREPANCIES, ERRORS, AND/OR OMISSIONS IN THE DRAWINGS ARE TO BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/DESIGNER. FAILURE TO DO SO MAY RESULT IN FUTURE CHANGES, THE COST OF WHICH WILL BE BORNE BY THE APPROPRIATE TRADE.
6. DO NOT SCALE DRAWINGS, USE ONLY FIGURED DIMENSIONS!
7. PROVIDE TEMPORARY BRACING AS REQUIRED, TO ENSURE THE STABILITY OF THE STRUCTURE UNTIL THE PERMANENT FRAMING IS IN PLACE.
8. PROVIDE SAFETY GLAZING IN CONFORMANCE WITH CODE.
9. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE M.B.C. 2015 BASIC BUILDING CODE AND ALL THE CITY AND LOCAL ORDINANCES AS ADOPTED BY THE STATE OF MICHIGAN.
10. THE OWNER AND/OR ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, NOR FOR THE SAFETY ON THE JOBSITE, AND THAT THESE RESPONSIBILITIES ARE INTENDED TO BE AND TO REMAIN SOLELY THOSE OF THE GENERAL CONTRACTOR.
11. ALL CONTRACTS WITH HVAC, ELECTRICAL, AND PLUMBING SUBCONTRACTORS SHALL BE CONSIDERED "DESIGN - BUILD". SUBCONTRACTOR SHALL ENGINEER WORK BETWEEN EXISTING BUILDING SYSTEMS, THE ARCHITECTURAL PLANS AND TENANT REQUIREMENTS. ANY ENGINEERED DRAWINGS REQUIRED BY CITY SHALL BE PREPARED AND SUBMITTED BY SUBCONTRACTOR. ARCHITECT SHALL RECEIVE A COPY FOR REVIEW.
12. HVAC CONTRACTOR SHALL BE RESPONSIBLE FOR ENGINEERING, CONSTRUCTION, TESTING AND BALANCING OF THE HVAC SYSTEM. MODIFY EXISTING SYSTEM AS REQUIRED TO CORRESPOND WITH NEW LAYOUT AND TENANT REQUIREMENTS INCLUDING NEW VAV & THERMOSTAT.
13. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENGINEERING AND IMPLEMENTATION OF ALL ELECTRICAL WORK TO BE PERFORMED. EXIT AND EMERGENCY CIRCUITS SHALL BE IDENTIFIED AND RECEIVE LOCK-ON DEVICES ON BREAKERS PROTECTING THESE CIRCUITS. SECURE EXISTING CONDUIT AND GREENFIELD TO STRUCTURE ABOVE AS NECESSARY.
14. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENGINEERING AND IMPLEMENTATION OF ALL PLUMBING WORK TO BE PERFORMED. INSPECT ALL PLUMBING FIXTURES, REPAIR, REPLACE AND/OR RE-CAULK AS NECESSARY.
15. MATCH EXISTING DOOR TYPE, FINISH & HARDWARE.

CODE ANALYSIS (I.B.C./ M.B.C. 2015)

CHAPTER - 3	USE AND OCCUPANCY CLASSIFICATION 3021 CLASSIFICATION USE GROUP B - BUSINESS
CHAPTER - 5	GENERAL BUILDING HEIGHTS AND AREAS SCOPE OF WORK AS PROPOSED DOES NOT INCREASE EXISTING BUILDING HEIGHT OR AREA. GENERAL AREA AND HEIGHT LIMITATIONS HAVE BEEN REVIEWED AND APPROVED AS PART OF THE ORIGINAL BUILDING PERMIT.
TABLE 503	AREA LIMITS ARE ALREADY APPROVED ACCORDING TO THE ORIGINAL CODE REVIEW FOR THE WHOLE BUILDING.
CHAPTER - 6	TYPES OF CONSTRUCTION TYPE 2-B, NON-SPRINKLERED
CHAPTER - 7	FIRE AND SMOKE PROTECTIVE FEATURES FIRE RESISTIVE RATING(S) FOR NEW CONSTRUCTION SHALL MEET THE REQUIREMENTS OF CHAPTER 7.
CHAPTER - 8	INTERIOR FINISHES ROOM FINISHES SHALL MEET THE REQUIREMENTS OF SECTION 803 AND TABLE 803.3. CLASS 'C' FOR INTERIOR ROOMS & CLASS 'B' FOR TENANT CORRIDORS & GENERAL AREAS. INTERIOR FLOORS SHALL MEET THE REQUIREMENTS OF SECTION 804. CLASS II IN CORRIDORS AND OPEN AREAS AND TYPE DOC FF-1 IN ENCLOSED ROOMS.
CHAPTER - 10	MEANS OF EGRESS SECTION 1004 OCCUPANT LOAD FOR TENANT SPACE, TABLE 1004.1 BUSINESS USE, AREA = 1818 SQ. FT., 1000 GROSS = 19 OCCUPANTS DOORS PROVIDED ARE AT LEAST 36 INCHES WIDE WHICH MEET EGRESS AND ALSO BARRIER FREE REQUIREMENTS.
CHAPTER - 11	ACCESSIBILITY ALL NEW CONSTRUCTION SHALL COMPLY WITH CHAPTER 11 REQUIREMENTS.
CHAPTER - 12	INTERIOR ENVIRONMENT
SECTION 1205	THE LIGHTING AND NATURAL LIGHT REQUIREMENTS HAVE BEEN DESIGNED TO MEET OR EXCEED THE MINIMUM REQUIRED LIGHTING LEVELS FOR BOTH DAY AND NIGHT FOR THIS OFFICE SPACE.
SECTION 1203	EXISTING MECHANICAL VENTILATION TO BE DESIGNED AND MODIFIED TO CORRESPOND WITH THESE PLANS AND TENANT REQUIREMENTS. THE MECHANICAL CONTRACTOR SHALL SUBMIT AIR DISTRIBUTION DRAWINGS FOR REVIEW BY THE ARCHITECT AND THE CITY.
A.D.A.	APPLICABLE PARTS OF THE AMERICANS WITH DISABILITIES ACT SHALL APPLY TO THIS TENANT SPACE. ALL DOORS WIDTHS, ELECTRICAL DEVICES, PLUMBING DEVICES, CORRIDORS, SIGNAGE AND ALARM DEVICES SHALL MEET ADA FOR THE PHYSICALLY, VISUALLY AND HEARING IMPAIRED. THE AMERICANS WITH DISABILITIES ACT PROVIDES THAT IT IS A VIOLATION OF THE ADA TO CONSTRUCT A FACILITY FOR FIRST OCCUPANCY LATER THAN JANUARY 26, 1993, THAT DOES NOT MEET THE ACCESSIBILITY AND USABILITY REQUIREMENTS OF THE ADA EXCEPT WHERE AN ENTITY CAN DEMONSTRATE THAT IT IS STRUCTURALLY IMPRACTICAL TO MEET SUCH REQUIREMENTS. TENANT AND LANDLORD ACKNOWLEDGE THAT THESE REQUIREMENTS OF THE ADA WILL BE SUBJECT TO VARIOUS AND POSSIBLY CONTRADICTORY INTERPRETATIONS. THE ARCHITECT, THEREFORE, WILL USE ITS BEST PROFESSIONAL EFFORT TO INTERPRET APPLICABLE ADA REQUIREMENTS AND OTHER FEDERAL, STATE AND LOCAL CODES, LAWS AND ORDINANCES AS THEY APPLY TO THE PROJECT. THE ARCHITECT, HOWEVER, CANNOT AND DOES NOT WARRANT YOU GUARANTEE THAT THE TENANT LEASED SPACE COMPLY WITH ALL INTERPRETATIONS OF THE ADA REQUIREMENTS AS THEY APPLY TO THIS PROJECT. THE ARCHITECT DOES NOT WARRANT OR GUARANTEE THAT THE DESIGN OF ANY COMPONENT IN THE TENANT LEASED SPACE WILL MEET THE REQUIREMENTS OF THE ADA IF THEY HAVE NOT BEEN SUBMITTED TO THE ARCHITECT FOR REVIEW.

LEGAL DESCRIPTION

LOT 13, EXCEPT THE WEST 1122 FEET THEREOF OF FERRY-MORTENSON COMPANY'S SUNNYKNOLL FARMS OF THE NORTHWEST QUARTER OF THE SOUTHEAST AND THE WEST ONE-HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 17, TOWN 1 NORTH, RANGE 11 EAST, CITY OF BERKLEY, ACCORDING TO THE PLOT THEREOF RECORDED IN LIBER 11 OF PLATS, PAGE 24, OAKLAND COUNTY RECORDS.

ALSO DESCRIBED AS SURVEYED:
LOT 13 EXCEPT THE WEST 1122 FT. OF FERRY-MORTENSON CO'S SUNNYKNOLL FARMS OF THE NW 1/4 OF THE SW 1/4 AND THE W 1/2 OF THE NE 1/4 OF SEC. 17, ROTAL OAK TOWNSHIP (NOW CITY OF BERKLEY) OAKLAND CO. MICH. AS RECORDED IN LIBER 11 OF PLATS, PAGE 24 OF OAKLAND COUNTY RECORDS, DESCRIBED AS BEGINNING AT THE N.E. CORNER OF SAID LOT 13, THENCE N. 90°00'00" W. ALONG THE NORTH LINE OF SAID LOT 13 138.18 FT. THENCE S. 00°00'00" W. 100.00 FT. THENCE S. 90°00'00" E. 138.18 FT. THENCE N. 00°00'00" E. 100.00 FT. TO THE POINT OF BEGINNING.

ZONING

COOLIDGE DISTRICT:
TOTAL LOT SIZE: 13,818 SQ. FT.

AREA CALCULATIONS
EXISTING BUILDING = 1818 SQ. FT.

LOT SETBACKS
REQUIRED FRONT (#COOLIDGE) 10'-0"
PROPOSED FRONT (#COOLIDGE) 8'-0" (NEW CANOPY)

REQUIRED FRONT (#CATALPA) 10'-0"
PROPOSED FRONT (#CATALPA) 24'-5" (NEW CANOPY)

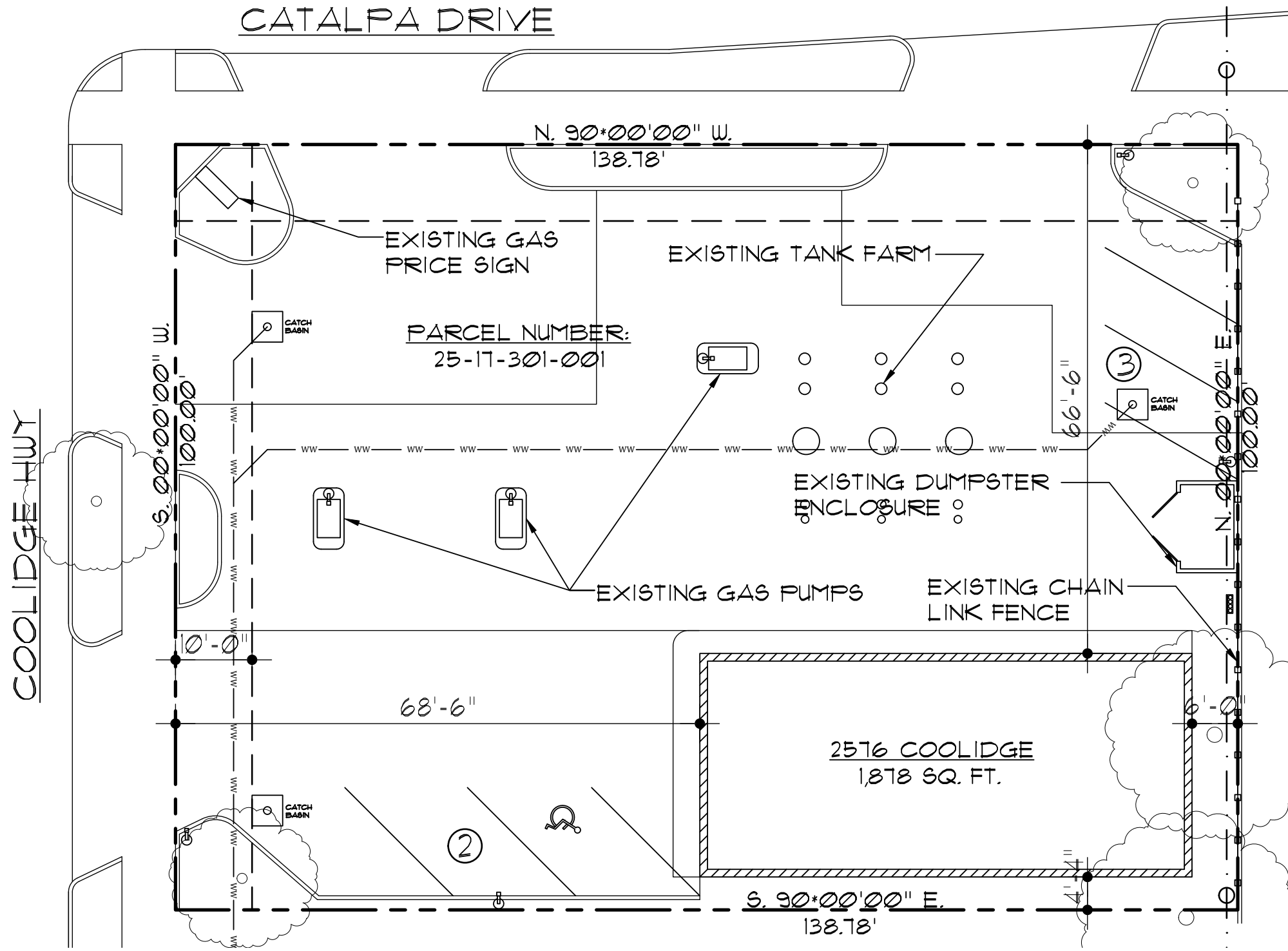
PARKING ANALYSIS

EXISTING BUILDING (GROSS) 1818 SQ. FT.
USABLE SQUARE FEET: 615 SQ. FT.

615 SQ. FT. (1000) = 4 SPACES
(1) PER FUMP = 6 SPACES
(2) EMPLOYEE SPACES = 2 SPACES

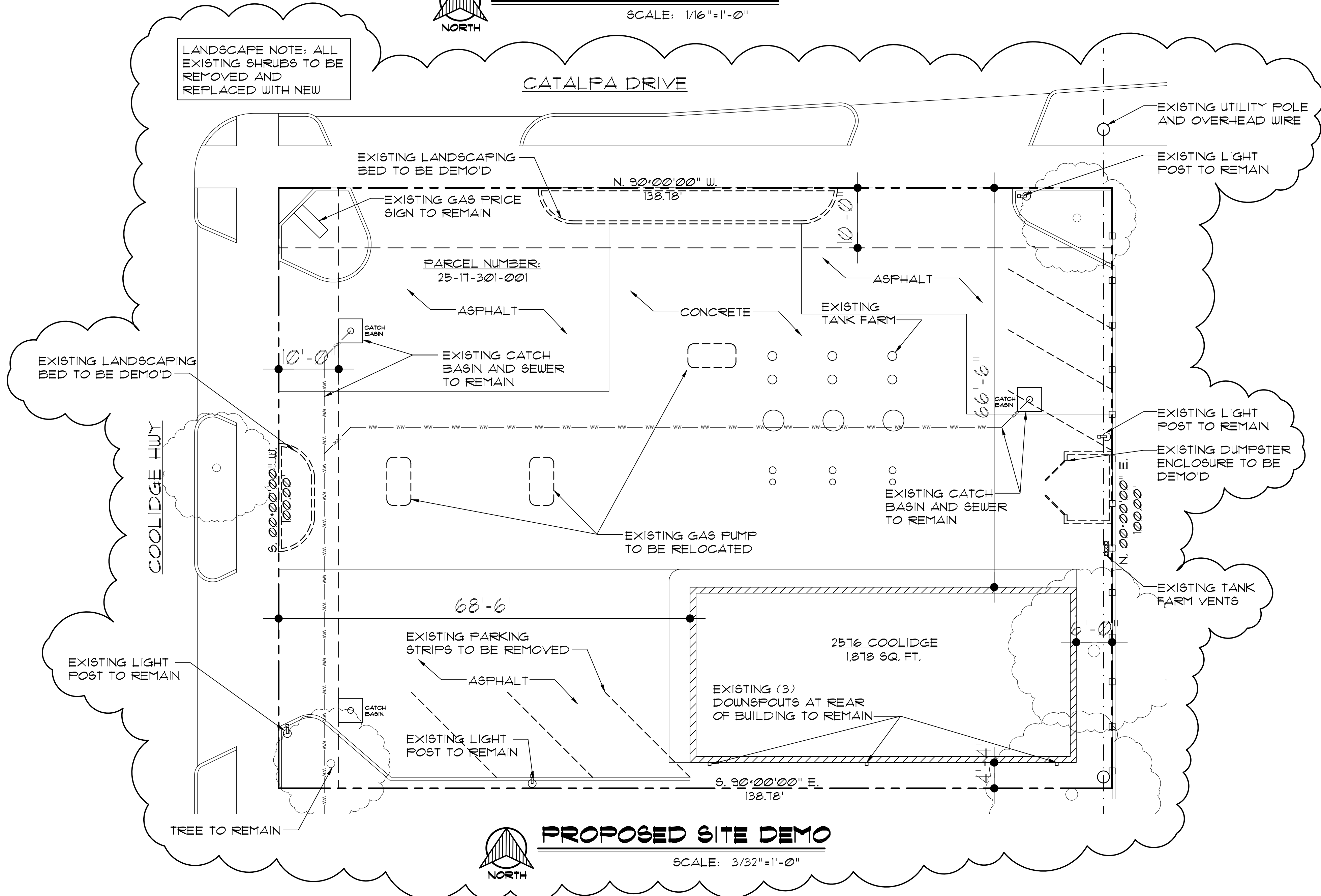
12 SPACES REQUIRED

10 SPACES PROVIDED
INCLUDING (1) VAN ACCESSIBLE SPACE
INCLUDING (1) BIKE RACK FOR (2) SPACE CREDIT



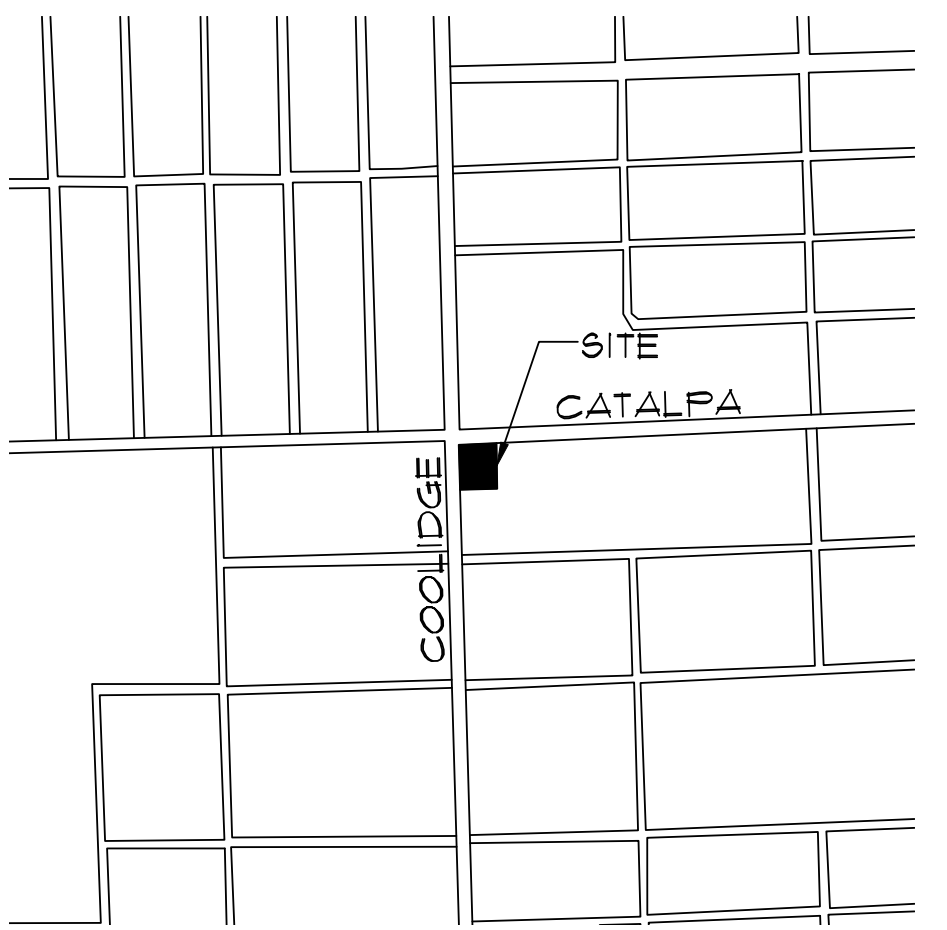
EXISTING SITE PLAN

SCALE: 1/16" = 1'-0"



PROPOSED SITE DEMO

SCALE: 3/32" = 1'-0"



LOCATION MAP

SCALE: N.T.S.

PROPOSED LANDSCAPING BY:
LANDSCAPE DESIGN BY
BENNETT MAZELL, LLC
(248)-670-2216



Joseph S. Novitsky
Architecture
3856 12 Mile Road
Berkley, MI 48072
(248) 433-2030

Seal:



Revisions:

DATE	DESCRIPTION
03/17/2021	EXISTING CONDITIONS
03/17/2021	REVIEW
03/19/2021	REVIEW
03/23/2021	REVIEW
12/25/2021	REVIEW
01/11/2022	REVIEW
02/17/2022	REVIEW
02/18/2022	SPA REVIEW
03/17/2022	SPA REVISIONS

Project Name:
BP AMERICA
2576 COOLIDGE HWY
BERKLEY, MI 48072

OWNER:
JERICHO PROPERTIES LLC.
CONTACT: JASON YALDOO
(248)-910-8596

Sheet Title:

LOC. MAP,
SITE PLAN,
GENERAL
NOTES &
CODE
ANALYSIS

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WRITTEN CONSENT OF JSN ARCHITECTURE

Date: 03/17/2021
Drawn by: CES

Project Number:

2021-36

Sheet Number:

S-1

LOT 13, EXCEPT THE WEST 1122 FEET THEREOF OF FERRY-MORRISON COMPANY'S SUNKYNNKOLL FARM#8 OF THE NORTHWEST QUARTER OF THE SOUTHEAST AND THE WEST ONE-HALF OF THE NORTHEAST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 11, TOWNSHIP 14N, RANGE 24E OF OAKLAND COUNTY RECORD#8. ACCORDING TO THE PLOT THEREOF RECORDED IN LIBER #1 OF PLATS, PAGE 24, OAKLAND COUNTY RECORD#8.

ALSO DESCRIBED AS SURVEYED:

LOT 13 EXCEPT THE WEST 1121 FT. OF FERRY-MORRISON CO.'S SUNKYNNKOLL FARM#8 OF THE NW 1/4 OF THE SW 1/4, AND THE W 1/2 OF THE NE 1/4 OF THE SW 1/4, OF SEC. 11, NOTAL C&O TOWNSHIP (NOW CITY OF BENSLEY) OAKLAND CO. MICH. AS THE S 1/2 OF THE NW 1/4 OF THE SW 1/4, OF SEC. 14 OF OAKLAND COUNTY RECORD#8. DESCRIBED AS BEGINNING AT THE NE CORNER OF SAID LOT#13, THENCE N. 90°00'00" W. ALONG THE NORTH LINE OF SAID LOT 13 1381.18 FT. TO THE POINT OF BEGINNING, U. 100°00'00" FT, THENCE S. 90°00'00" E. 138.18 FT. THENCE N. 00°00'00" E. 1000.00 FT. TO THE POINT OF BEGINNING.

COOLIDGE DISTRICT:
TOTAL LOT SIZE: 13,818 SQ. FT.

AREA CALCULATIONS
EXISTING BUILDING = 1,878 SQ. FT.

REQUIRED FRONT (#COOLIDGE) 10'-0"
PROPOSED FRONT (#COOLIDGE) 8'-0" (NEW CANOPY)

REQUIRED FRONT (#CATALPA) 10'-0"
PROPOSED FRONT (#CATALPA) 24'-5" (NEW CANOPY)

EXISTING BUILDING (GROSS): 1878 SQ. FT.
USABLE SQUARE FEET: 675 SQ. FT.

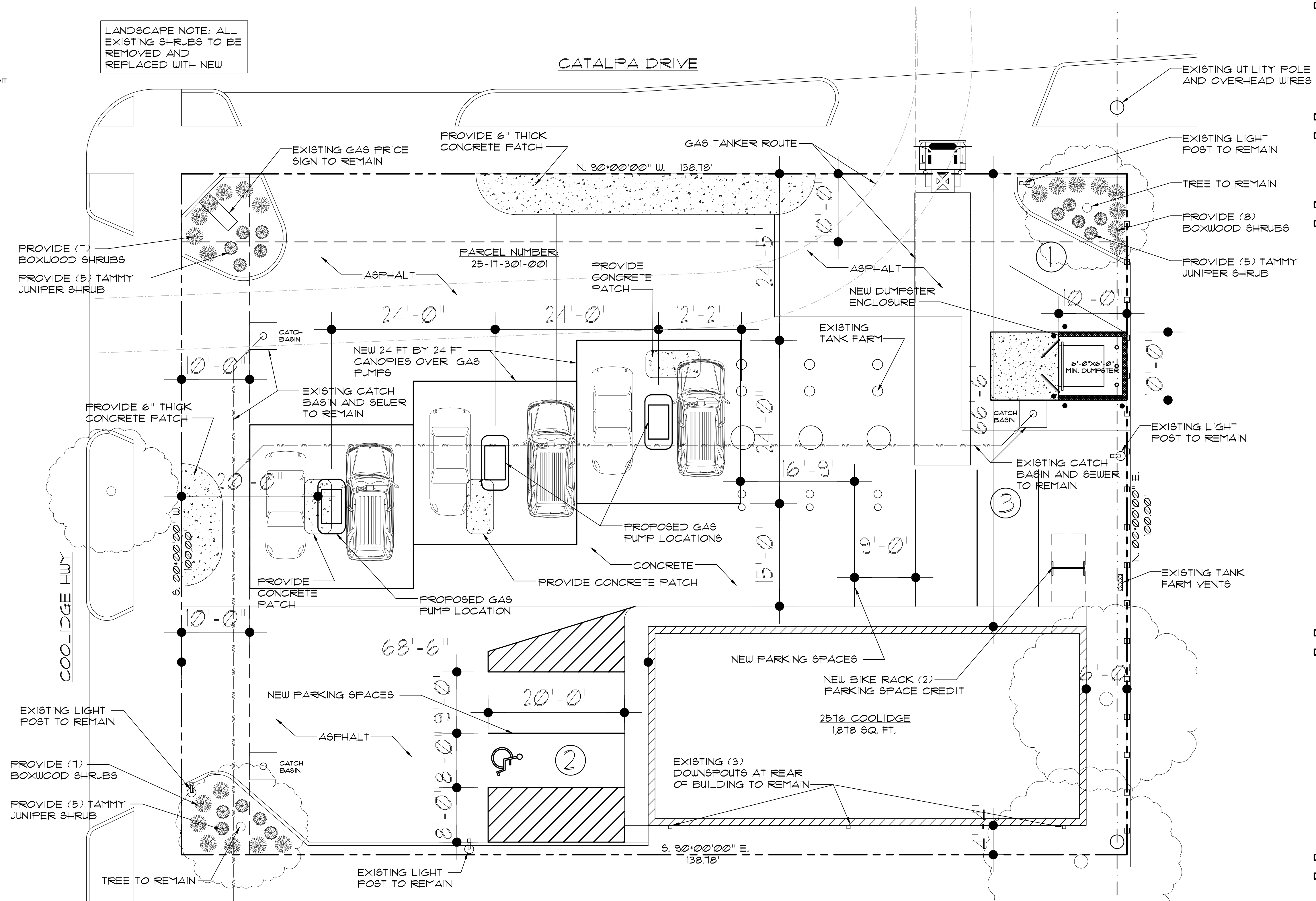
675 SF (61,000)	= 4 SPACES
(1) PER PUMP	= 6 SPACES
(2) EMPLOYEE SPACES	= 2 SPACES

12 SPACES REQUIRED

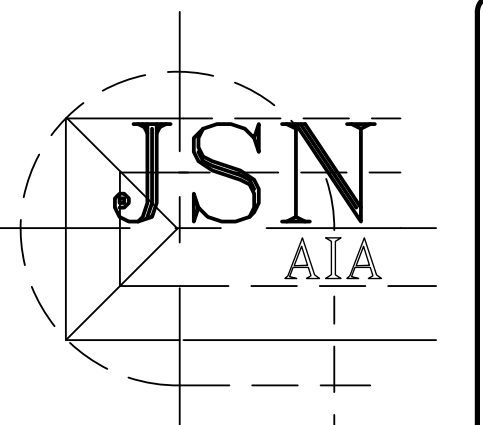
10 SPACES PROVIDED

INCLUDING (1) VAN ACCESSIBLE SPACE
INCLUDING (1) BIKE RACK FOR (2) SPACE CREDIT

PROPOSED LANDSCAPING BY:
LANDSCAPE DESIGN BY
BENNETT MAZELL, LLC
(248)-670-2216



SCALE: 1/8" = 1'-0"



Joseph S. Novitsky
Architecture
3856 12 Mile Road
Berkley, MI 48072
(248) 433-2030

Deal:



Revisions:

DATE	DESCRIPTION
03/17/2021	EXISTING CONDITIONS
03/17/2021	REVIEW
03/19/2021	REVIEW
03/23/2021	REVIEW
12/29/2021	REVIEW
01/17/2022	REVIEW
02/17/2022	REVIEW
02/18/2022	SPA REVIEW
03/11/2022	SPA REVISIONS

Project Name:
BP AMERICA
2576 COOLIDGE HWY
BERKLEY, MI 48072

Sheet Title:

**PROPOSED
SITE PLAN**

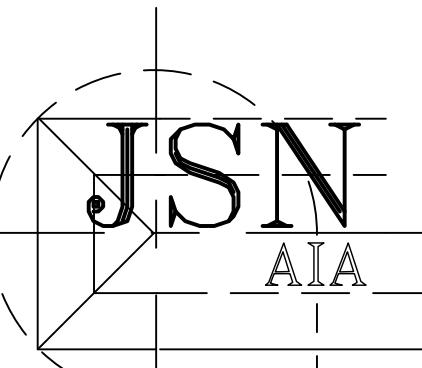
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WRITTEN CONSENT OF KVA ARCHITECTS P.C.

Date: 03/17/2021
Drawn by: CES

Project Number:

2021-36

Sheet Number:
S-2



Joseph S. Novitsky
Architecture
3856 12 Mile Road
Berkley, MI 48072
(248) 433-2030

Seal:



Revisions:

DATE	DESCRIPTION
03/17/2021	EXISTING CONDITIONS
03/17/2021	REVIEW
03/19/2021	REVIEW
03/23/2021	REVIEW
12/29/2021	REVIEW
01/17/2022	REVIEW
01/20/2022	REVIEW
01/20/2022	REVIEW
02/18/2022	SPA REVIEW
03/11/2022	SPA REVISIONS

Project Name:
BP AMERICA
2576 COOLIDGE HWY
BERKLEY, MI 48072

OWNER:
JERICHO PROPERTIES LLC.
CONTACT: JASON VALDOO
(248)-910-8586

Sheet Title:
**EXISTING
& PROPOSED
FLOOR
PLANS**

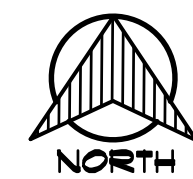
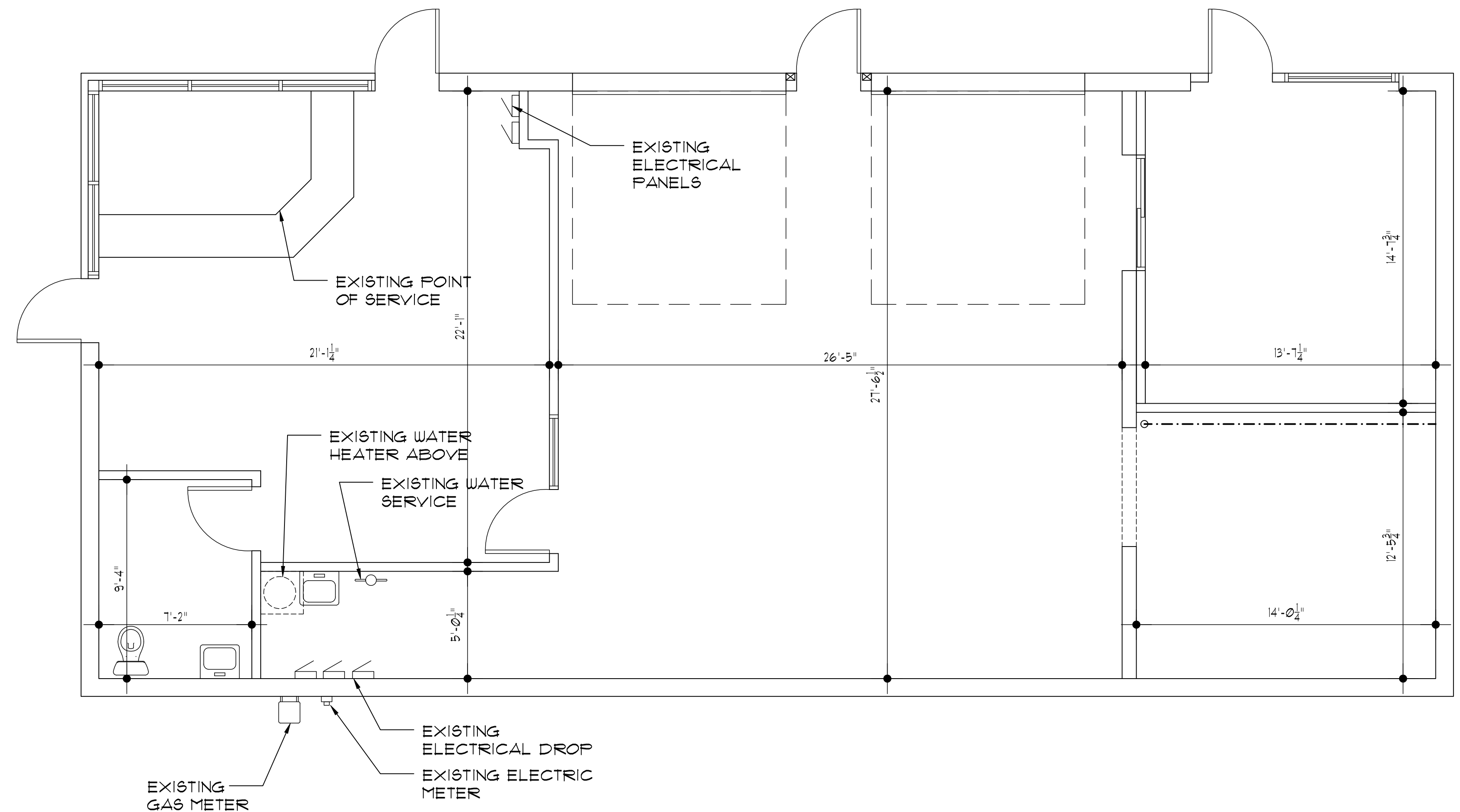
Date: 03/17/2021
Drawn by: CES

Project Number:

2021-36

Sheet Number:

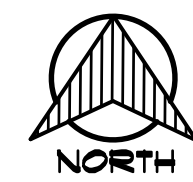
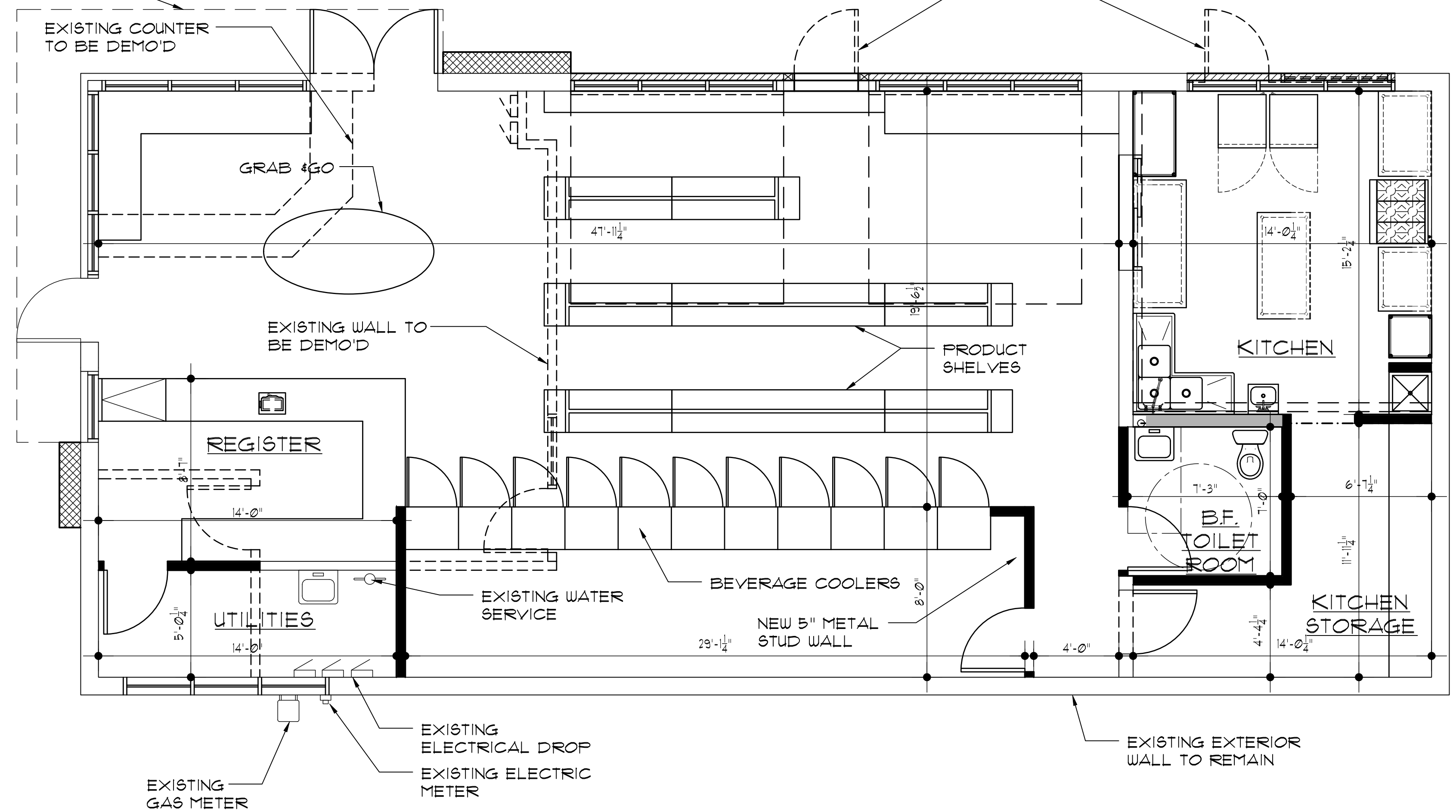
A-1.0



EXISTING FLOOR PLAN

SCALE: 1/4" = 1'-0"

NEW METAL AWNING
OVER FRONT DOORS

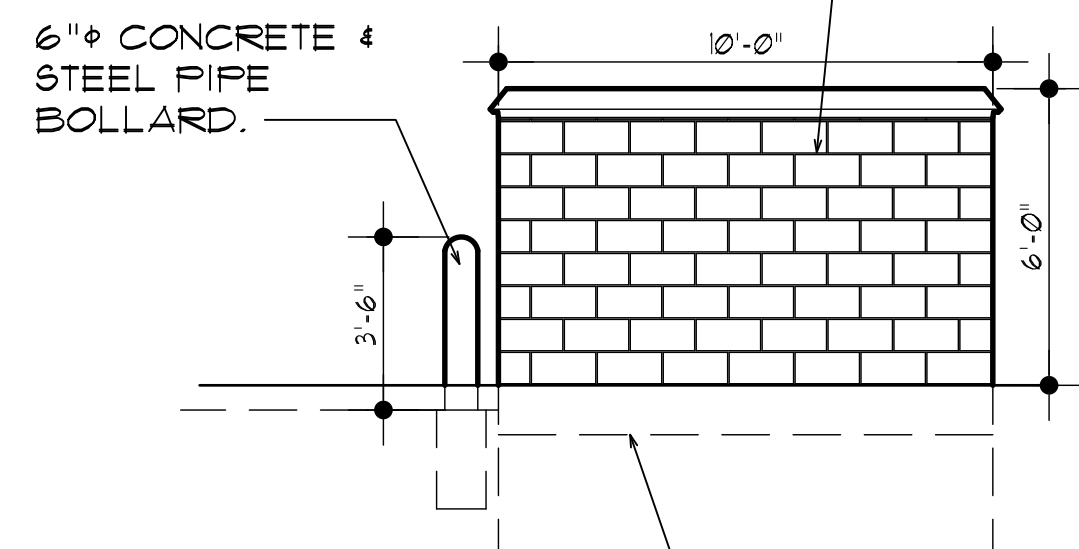


PROPOSED FLOOR PLAN

SCALE: 1/4" = 1'-0"

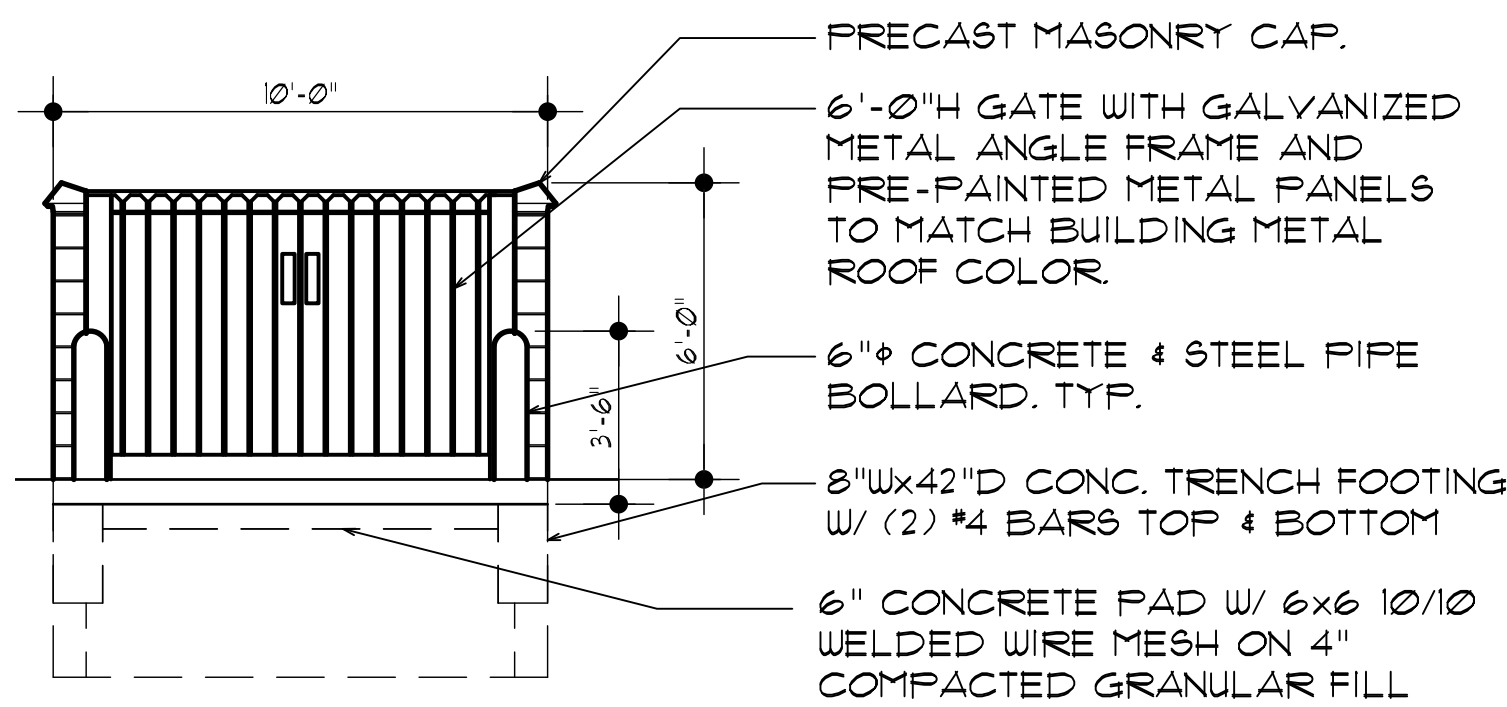
6'-0"H, 8" CMU WALL WITH HORIZ.
REINF. EVERY OTHER COURSE
WITH PRE-CAST MASONRY CAP
ON 12"Wx42"D CONC. TRENCH
FOOTING

6"Ø CONCRETE &
STEEL PIPE
BOLLARD.



6" CONCRETE PAD W/ 6x6 10/10
WELDED WIRE MESH ON 4"
COMPACTED GRANULAR FILL

8"Wx42"D CONC. TRENCH
FOOTING W/ (2) #4 BARS
TOP & BOTTOM



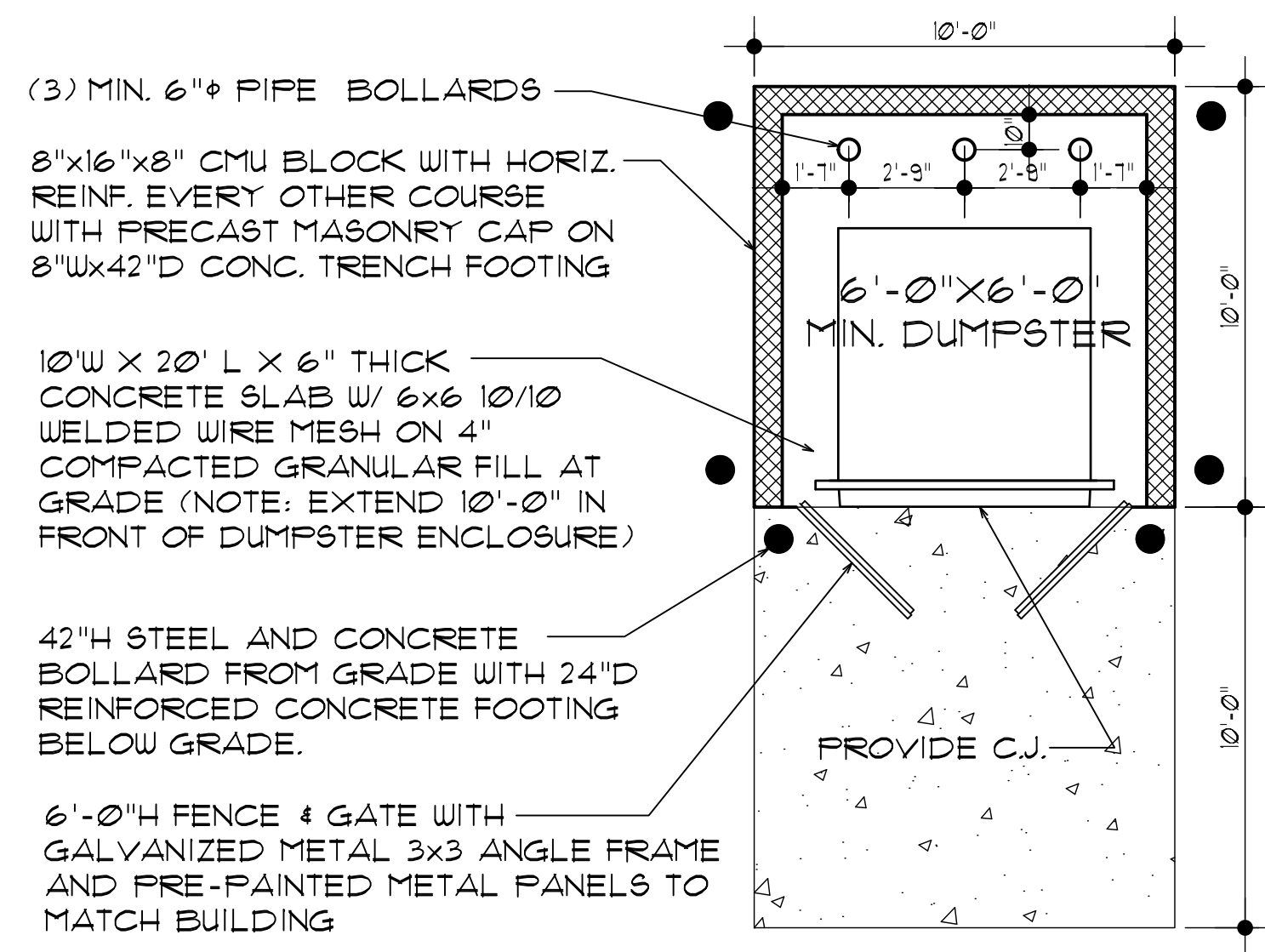
PRECAST MASONRY CAP.

6'-0"H GATE WITH GALVANIZED
METAL ANGLE FRAME AND
PRE-PAINTED METAL PANELS
TO MATCH BUILDING METAL
ROOF COLOR.

6"Ø CONCRETE & STEEL PIPE
BOLLARD, TYP.

8"Wx42"D CONC. TRENCH FOOTING
W/ (2) #4 BARS TOP & BOTTOM

6" CONCRETE PAD W/ 6x6 10/10
WELDED WIRE MESH ON 4"
COMPACTED GRANULAR FILL



(3) MIN. 6"Ø PIPE BOLLARDS

8'x16'x8' CMU BLOCK WITH HORIZ.
REINF. EVERY OTHER COURSE
WITH PRECAST MASONRY CAP ON
8"Wx42"D CONC. TRENCH FOOTING

10'W X 20' L X 6" THICK
CONCRETE SLAB W/ 6x6 10/10
WELDED WIRE MESH ON 4"
COMPACTED GRANULAR FILL AT
GRADE (NOTE: EXTEND 10'-0" IN
FRONT OF DUMPSTER ENCLOSURE)

42"H STEEL AND CONCRETE
BOLLARD FROM GRADE WITH 24"D
REINFORCED CONCRETE FOOTING
BELOW GRADE.

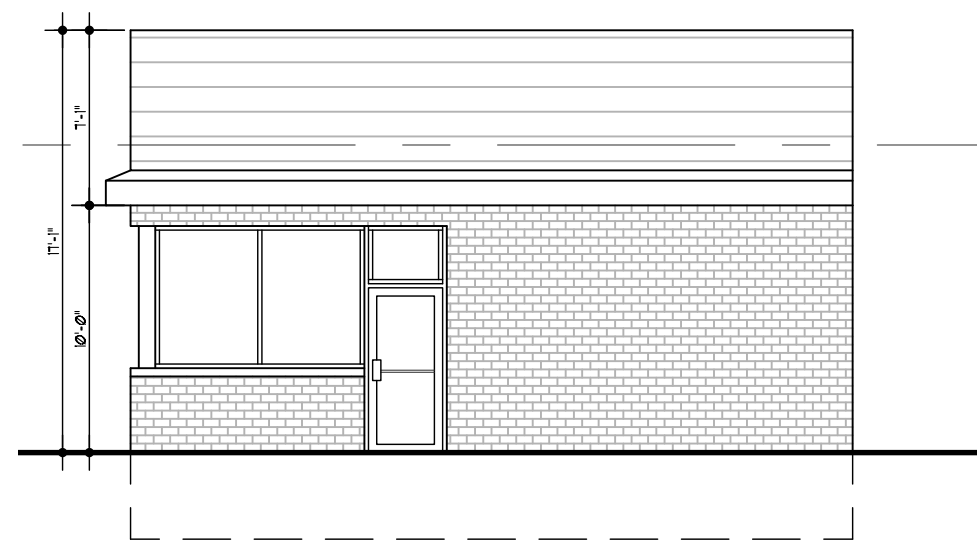
6'-0"H FENCE & GATE WITH
GALVANIZED METAL 3x3 ANGLE FRAME
AND PRE-PAINTED METAL PANELS TO
MATCH BUILDING

PROVIDE C.J.



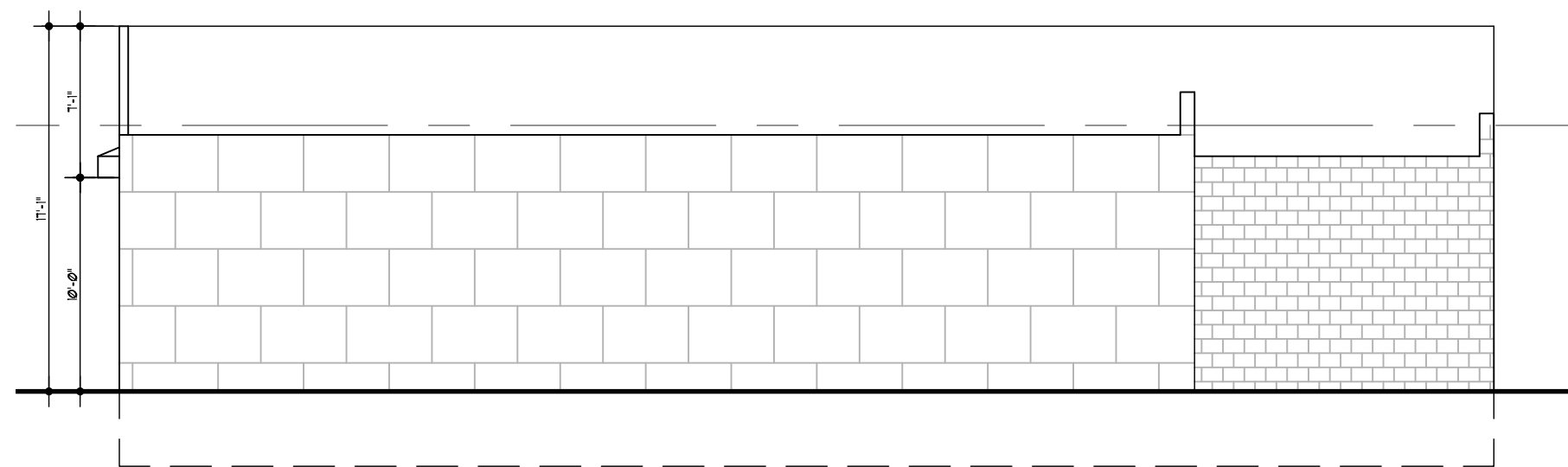
EXISTING NORTH (FRONT) ELEVATION

SCALE: 1/8"=1'-0"



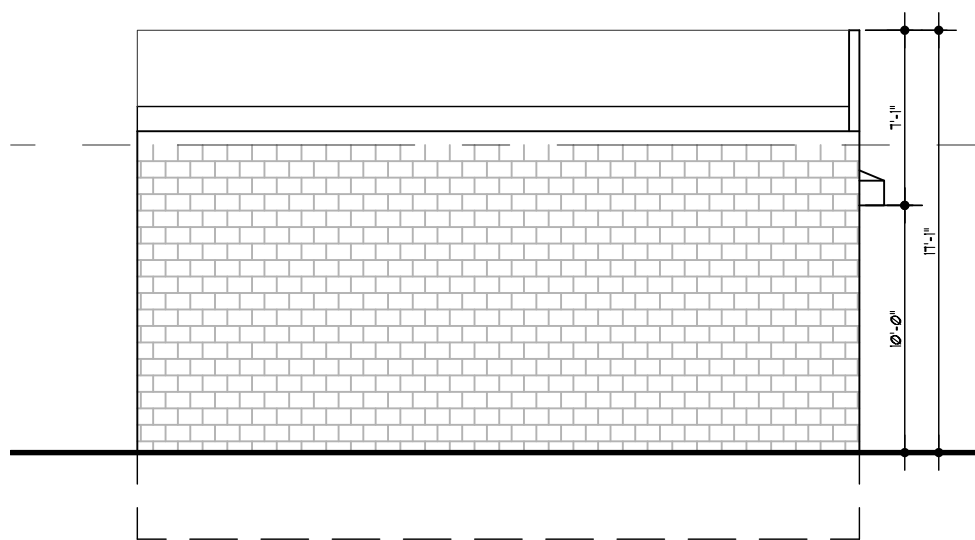
EXISTING WEST
(FRONT) ELEVATION

SCALE: 1/8"=1'-0"



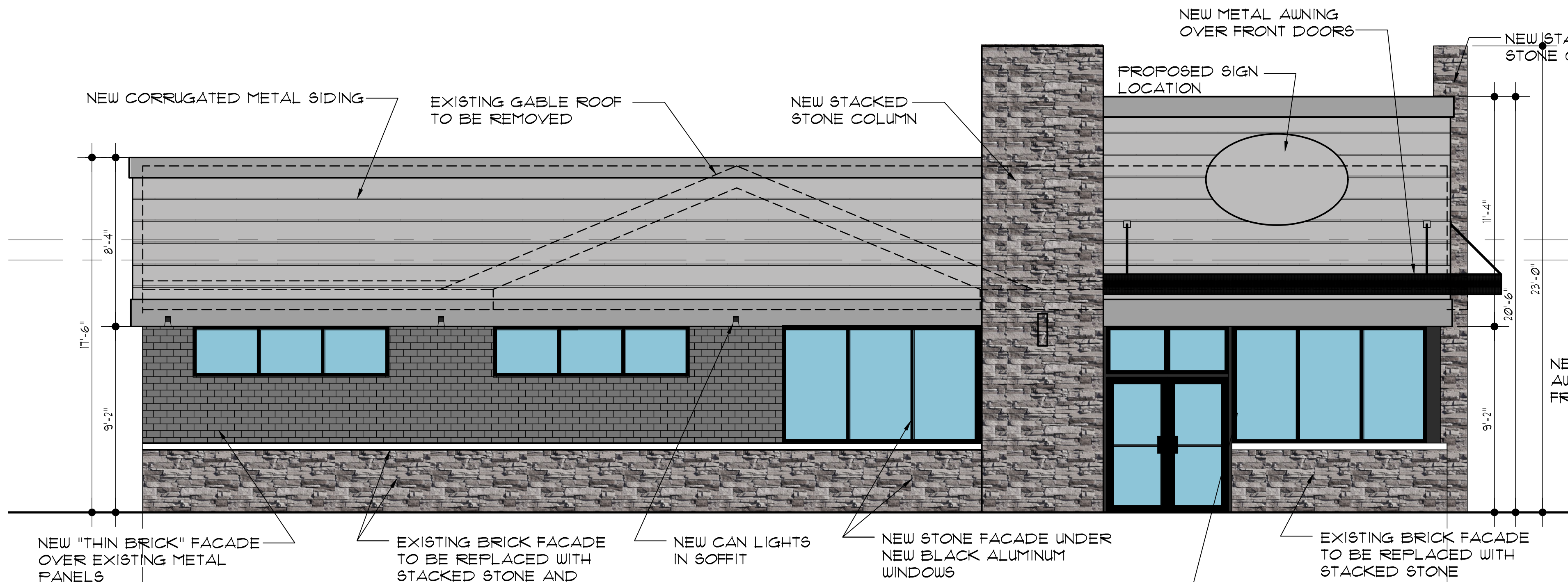
EXISTING SOUTH (SIDE) ELEVATION

SCALE: 1/8"=1'-0"



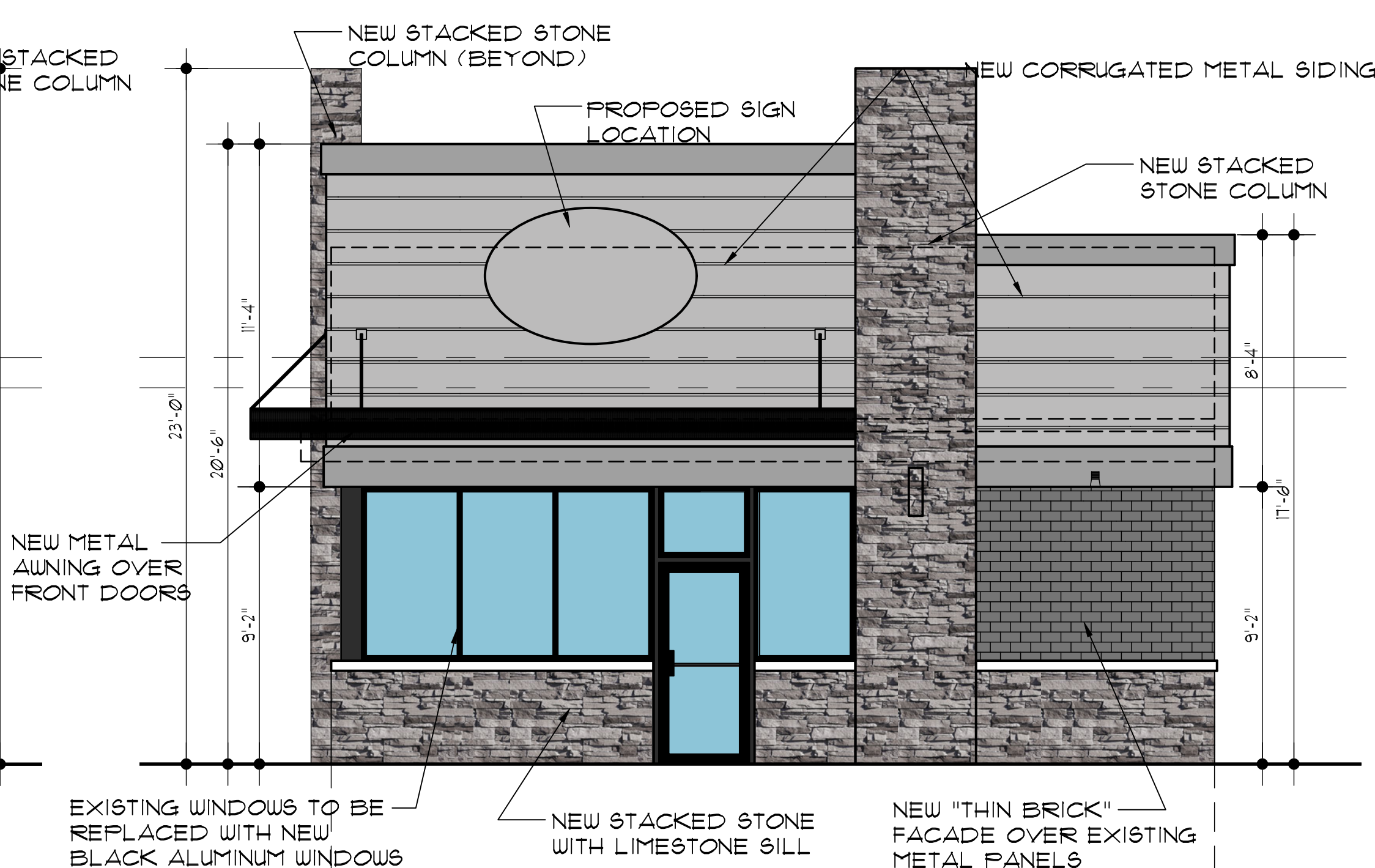
EXISTING EAST
(SIDE) ELEVATION

SCALE: 1/8"=1'-0"



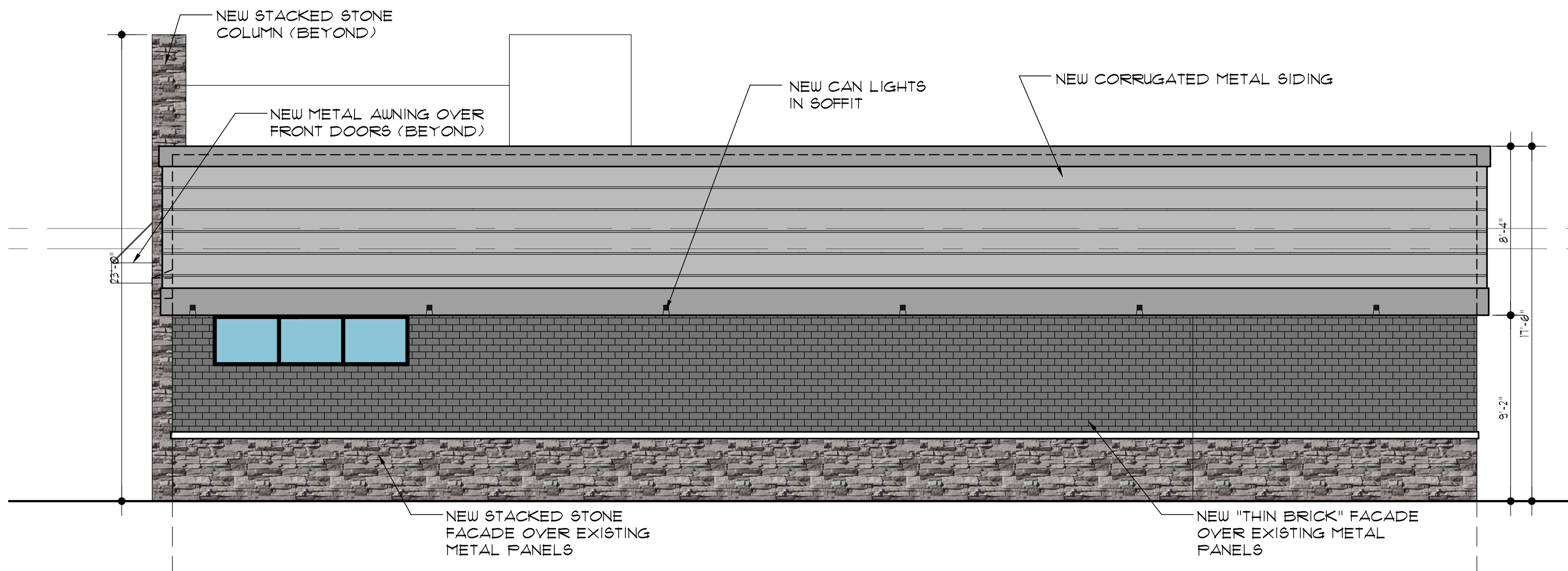
PROPOSED NORTH (FRONT) ELEVATION

SCALE: 1/4"=1'-0"



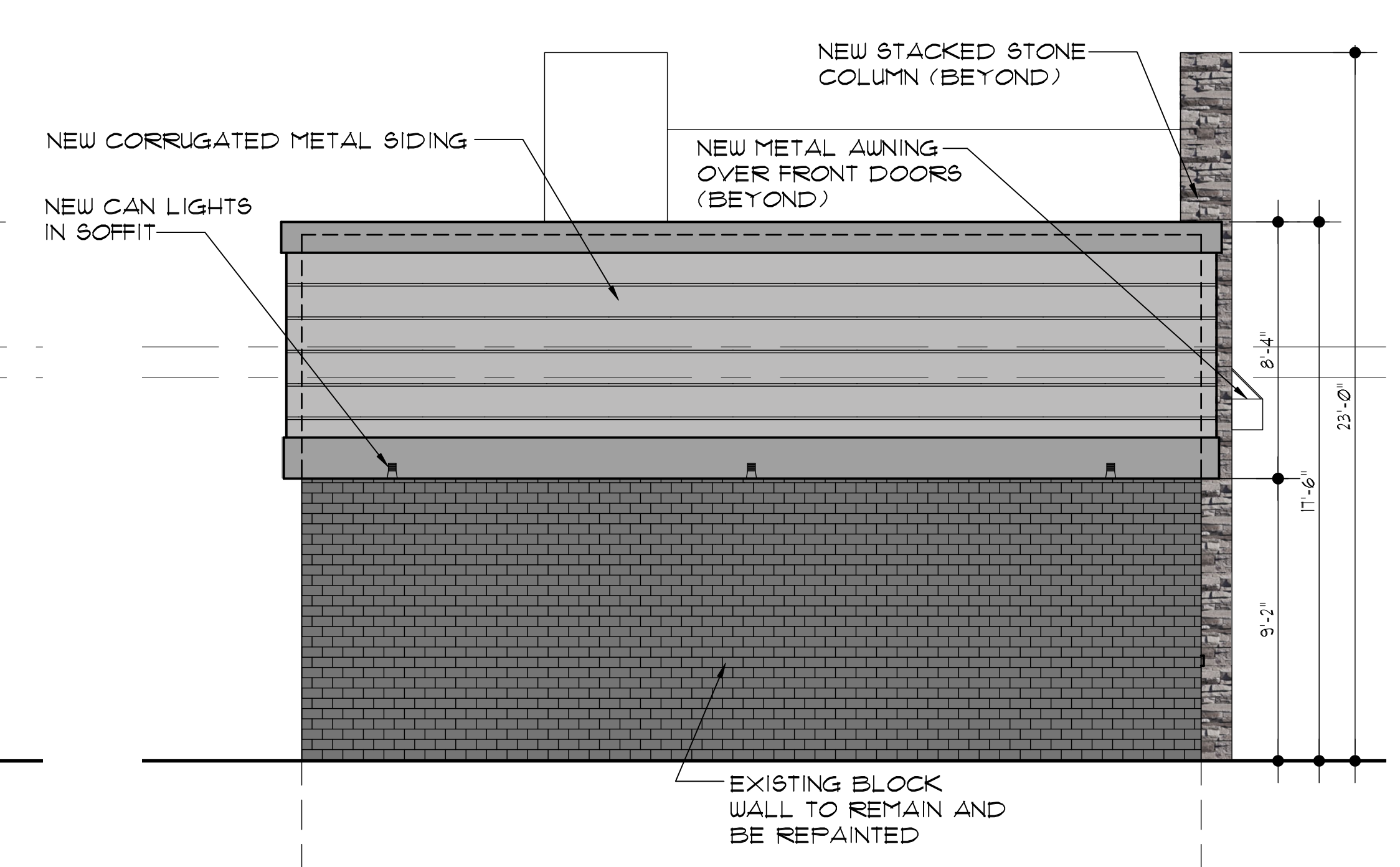
PROPOSED WEST (FRONT) ELEVATION

SCALE: 1/4"=1'-0"



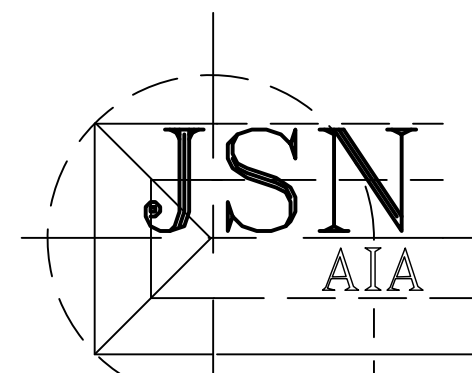
PROPOSED SOUTH (SIDE) ELEVATION

SCALE: 1/4"=1'-0"



PROPOSED EAST (SIDE) ELEVATION

SCALE: 1/4"=1'-0"



Joseph S. Novitsky
Architecture
3856 12 Mile Road
Berkley, MI 48072
(248) 433-2030



Revisions:

DATE	DESCRIPTION
03/17/2021	EXISTING CONDITIONS
03/17/2021	REVIEW
03/19/2021	REVIEW
03/23/2021	REVIEW
12/29/2021	REVIEW
01/17/2022	REVIEW
02/18/2022	SCA REVIEW

Project Name:
BP AMERICA
2576 COOLIDGE HWY
BERKLEY, MI 48072

OWNER:
JERICHO PROPERTIES LLC.
CONTACT: JASON VALDOO
(248)-910-8586

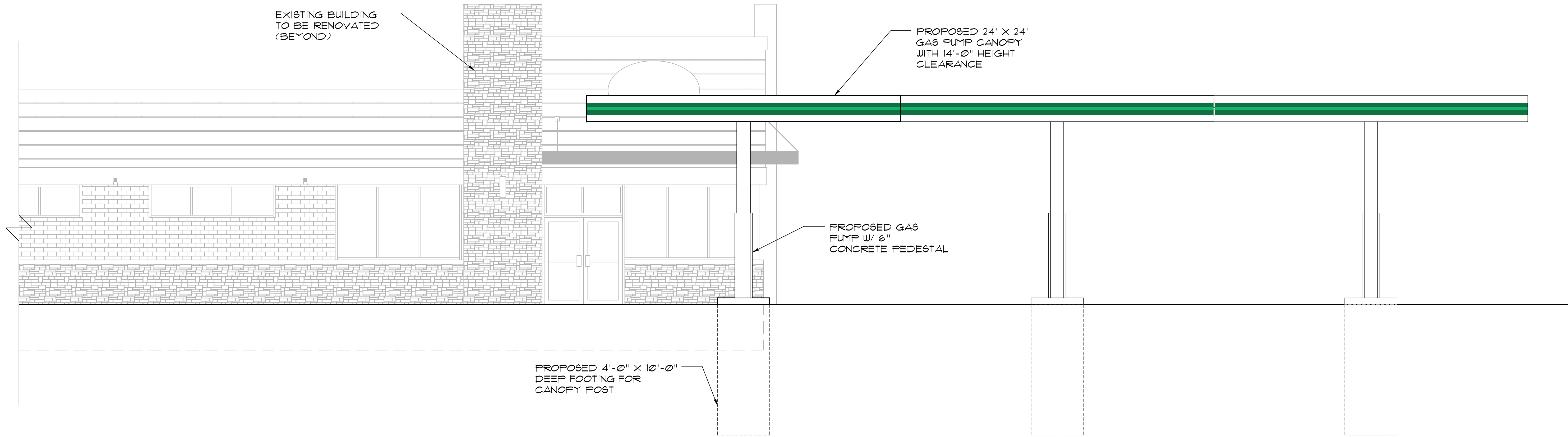
Sheet Title:
**EXISTING
& PROPOSED
ELEVATIONS**

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WRITTEN CONSENT OF JSN ARCHITECTURE

Date: 03/17/2021
Drawn by: CES

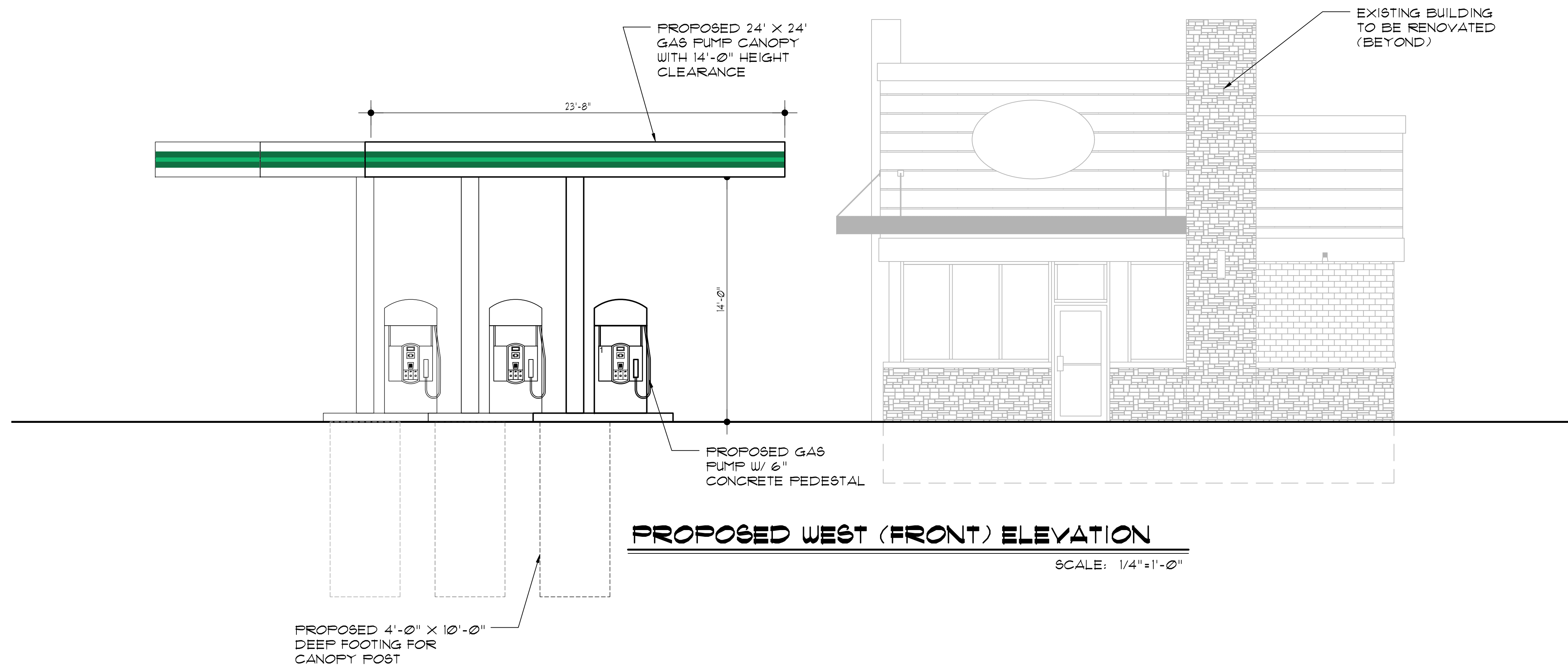
Project Number:
2021-36

Sheet Number:
A-2.0



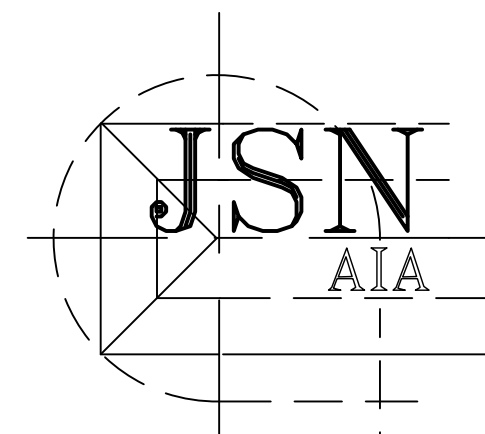
PROPOSED NORTH (FRONT) ELEVATION

SCALE: 1/4"=1'-0"



PROPOSED WEST (FRONT) ELEVATION

SCALE: 1/4"=1'-0"



Joseph S. Novitsky
Architecture
3856 12 Mile Road
Berkley, MI 48072
(248) 433-2030

Seal:



Revisions:

DATE	DESCRIPTION
03/17/2021	EXISTING CONDITIONS
03/17/2021	REVIEW
03/19/2021	REVIEW
03/23/2021	REVIEW
12/29/2021	REVIEW
07/17/2022	REVIEW
07/28/2022	SPA REVIEW
03/17/2022	SPA REVISIONS

Project Name:

BP AMERICA
2576 COOLIDGE HWY
BERKLEY, MI 48072

OWNER:

JERICHO PROPERTIES LLC.
CONTACT: JASON VALDOO
(248)-910-8586

Sheet Title:

**PROPOSED
GAS
CANOPY
ELEVATIONS**

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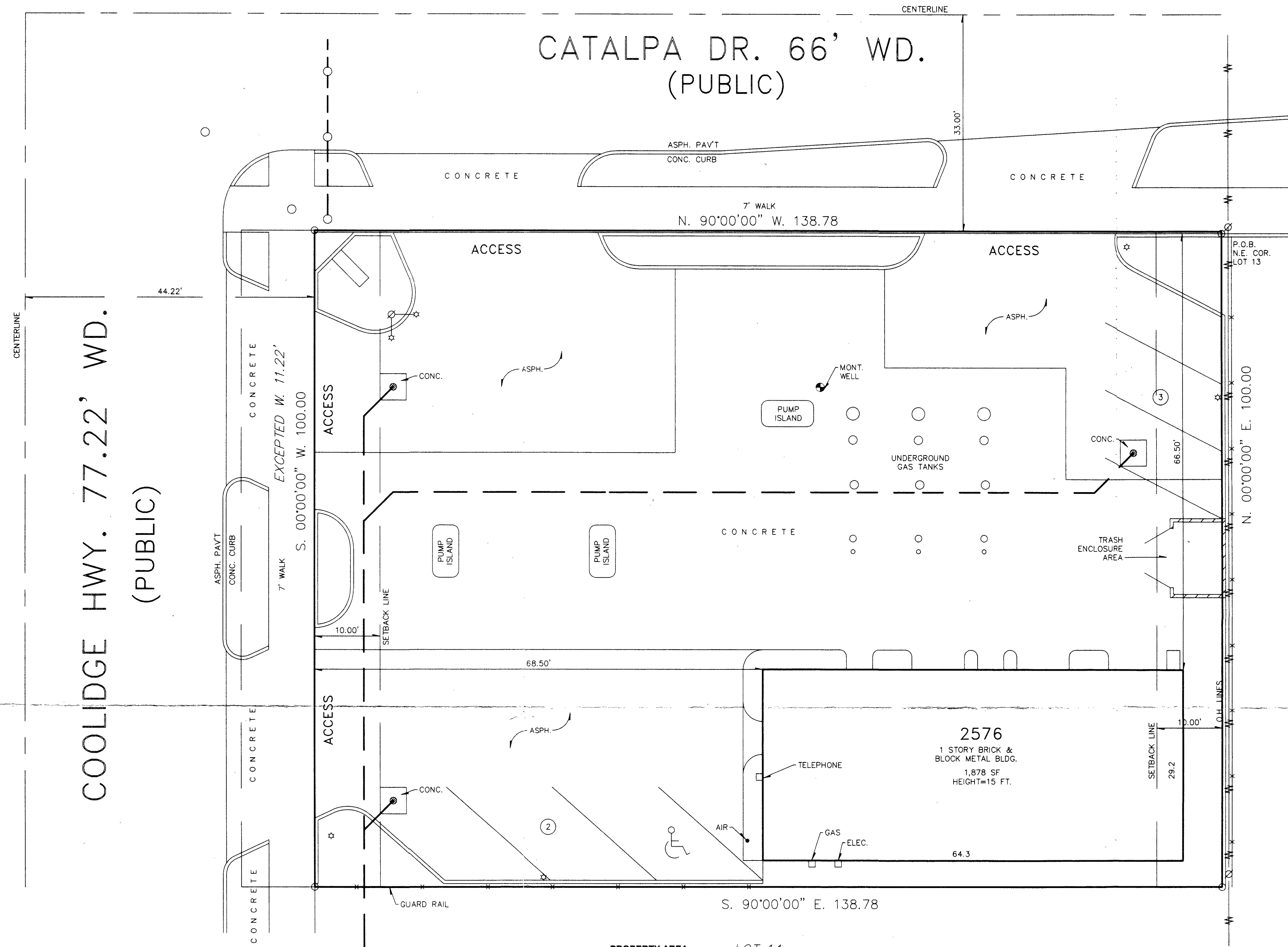
Date: 03/17/2021
Drawn by: CES

Project Number:

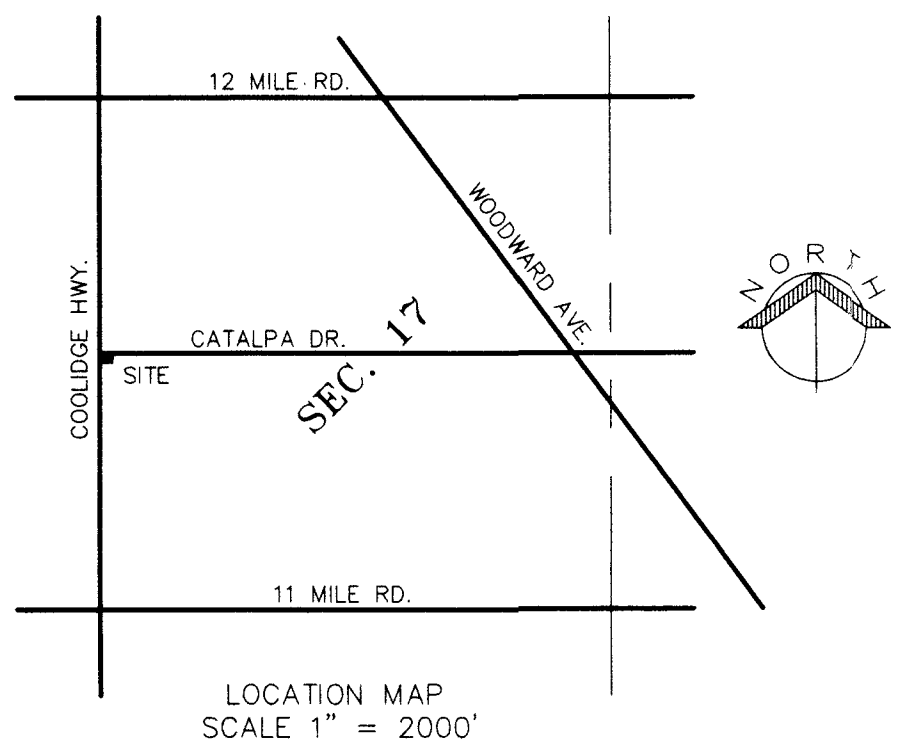
2021-36

Sheet Number:

A-2.1



- LEGEND:**
- P.O.B. - POINT OF BEGINNING
 - FOUND IRON
 - SET IRON
 - ⊙ CATCH BASIN
 - ☆ LIGHT POLE
 - ⊗ UTILITY POLE
 - ⊕ GATE VALVE & WELL
 - MANHOLE
 - ⊞ STREET CATCH BASIN
 - ⊞ HYDRANT
 - ⊞ TRANSFORMER
 - F.D.C. = FIRE DEPT. CONNECTION
 - ⊞ HANDICAP STALL
 - WATER MAIN
 - COMBO SEWER
 - STORM SEWER
 - SANITARY SEWER
 - GAS SERVICE
 - SAN LEAD
 - WATER SERVICE
 - U.G. LINES (UNDERGROUND)
 - O.H. LINES (OVERHEAD)
 - ⊞ FENCE
 - CONC. BUMPER BLOCKS
 - ⊞ OVERHANGING LIGHT
 - LIGHT POLE



PROPERTY AREA
13,878 SF / 0.319 AC. LOT 14

BUILDING AREA
1,878 SF

BUSINESS
AMOCO SERVICE STATION

ZONING
LB LOCAL BUSINESS
PRESENT USE PERMITTED

SETBACKS
FRONT - 10 FT.
SIDE - 0 FT.
REAR - 10 FT.
HEIGHTS - 40 FT.

PARKING
REQUIRED
2 SPACES PER SERVICE RACK PLUS
1 PER PUMP PLUS 4
PROVIDED
5 STANDARD SPACES + 1 HANDICAP = 6

UTILITIES
WATER, GAS, ELECTRIC, TELEPHONE AND SEWER
ARE AVAILABLE AND SERVICE PROPERTY. ALL
UTILITY LINES ENTER THE PREMISES THROUGH
AND ADJOINING PUBLIC STREETS.

BEARING SOURCE
BEARINGS ARE IN RELATION TO THE NORTH AND WEST
LINE OF PERRY-MORTENSON CO'S SUNNYKNOLL FARMS
SUBDIVISION LIBER 11 OF PLATS, PAGE 24

ENCROACHMENTS
BUILDING ENCROACHES INTO SETBACK

FLOOD
THE CITY OF BERKLEY HAS NO SPECIAL FLOOD HAZARD
AREAS AND A FLOOD MAP FOR THE COMMUNITY HAS NOT
BEEN PUBLISHED. THE COMMUNITY IS ALL ZONE C FOR
FLOOD INSURANCE RATING PURPOSES.

TITLE COMMITMENT
CHICAGO TITLE INSURANCE COMPANY
COMMITMENT NO. 630312440CML DATED MAY 6, 2004
SCHEDULE B - EXCEPTIONS

EXCEPTION
4 Rights of the public and of any governmental unit in any part thereof
taken, used or deeded for street, road or highway purposes.
No Longer Affects Property

SITE HAS ACCESS TO CRANBROOK RD., A PUBLIC RIGHT-OF-WAY AND
ACCESS TO CATALPA DR., A PUBLIC RIGHT-OF-WAY.

BERKLEY CITY OFFICE
(248) 546-2410

PROPERTY DESCRIPTION PER TITLE COMMITMENT:
The land referred to in this Commitment is located in City of Berkley, Oakland County, State of Michigan,
and is described as follows:

Lot 13, except the West 11.22 feet thereof of Perry-Mortenson Company's Sunnyknoll Farms of the
Northwest quarter of the Southwest quarter and the West One-half of the Northeast quarter of the
Southwest quarter of Section 17, Town 1 North, Range 11 East, City of Berkley, according to the plat
thereof as recorded in Liber 11 of Plats, Page 24, Oakland County Records.

ALSO DESCRIBED AS SURVEYED:
Lot 13 except the West 11.22 ft. of Perry Mortenson Co's Sunnyknoll Farms of the N.W. 1/4 of the S.W.
1/4 and the W. 1/2 of the N.E. 1/4 of the S.W. 1/4 of Sec. 17, Royal Oak Township, (now City of
Berkley) Oakland Co., Mich. as recorded in Liber 11 of Plats, Page 24 of Oakland County Records,
described as beginning at the N.E. corner of said Lot 13, thence N. 90°00'00" W. along the North line of
said Lot 13 a distance of 138.78 ft., thence S. 00°00'00" W. 100.00 ft., thence S. 90°00'00" E. 138.78 ft.,
thence N. 00°00'00" E. 100.00 ft. to the point of beginning.

SURVEY CERTIFICATION

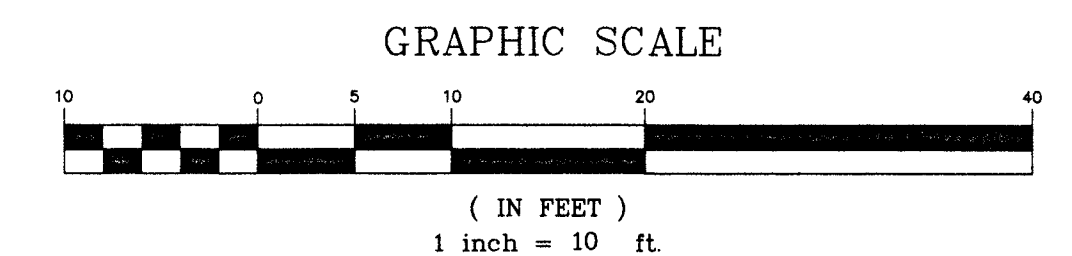
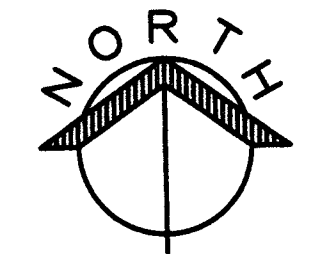
TO: BP PRODUCTS NORTH AMERICA INC., A MARYLAND CORPORATION;
CHICAGO TITLE INSURANCE COMPANY;
FAMCO SERVICES, INC., A MICHIGAN CORPORATION;
COMERICA BANK, A MICHIGAN BANKING CORPORATION;

This is to certify that this map or plat and the survey on which it is based were made (i) in accordance with the
"Minimum Standard detail Requirements for ALTA/ACSM Land Title Surveys," jointly established and adopted by
ALTA, ACSM and NSPS in 1999, and includes items 1-4, 6, 7(a)-(c), 8-10, 11(a) and 13-16 of Table A thereof,
and (ii) pursuant to the Accuracy Standards (as adopted by ALTA, NSPS and ACSM and in effect on the date of
this certification), the undersigned further certifies that property field procedures, instrumentation, and adequate
survey personnel were employed in order to achieve results comparable to those outlined in the "Minimum Angle,
Distance and Closure Requirements for Survey Measurements Which Control Land Boundaries for ALTA/ACSM Land
Title Surveys".

This map or plat of survey of the premises shown hereon is the same as that described in Chicago Title Insurance
Company title commitment number 630312440CML dated May 6, 2004.

Harry H. Kemnitz
HARRY H. KEMNITZ
PROFESSIONAL SURVEYOR
STATE OF MICHIGAN NO. 16931

3-01-05
DATE



"ALTA/ACSM LAND TITLE SURVEY"

PREPARED FOR:

THE MATTHEWS COMPANY Inc.
National ALTA Survey Management

17220 Newhope Street, Suites 108-110, Fountain Valley, CA 92708
Tel: (714) 979-7181 Fax: (714) 641-2840
www.themattthewscompany.com

DATE	REVISION	BY	APVD

BP AMERICA, INC.

2576 Coolidge
Berkley, MI

PREPARED BY:
DEL-TEC
SURVEYING & ENGINEERING
5800 TWELVE MILE RD.
WARREN, MI 48092
(586) 573-8288
FAX (586) 573-8965

SCALE 1" = 10'	CHKD/APVD:
DATE 01/31/2005	APPROVED:
DWG. BY: D.K.	SS NO.: 5666
CHKD. BY: H.K.	COST CENTER: 18001885
JOB NO. 8295	J.N. 26760



CNY LED

LED Canopy/Ceiling Luminaire



Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

	CNY LED P0/P1/P2	CNY LED P3/P4
Width:	10"	14"
Height:	4.5"	6"
Depth:	10"	14"
Weight:	6.5lbs	13lbs

Introduction

The CNY LED canopy luminaires are energy efficient and budget friendly, perfect for replacing up to 400W metal halide luminaires while saving up to 80% energy costs. Quick mount mechanism significantly reduces the installation time. An LED array and translucent lens create uniform and visually comfortable illumination. CNY LED luminaires are DLC Premium listed and deliver quick payback!

Ordering Information

EXAMPLE: CNY LED P1 50K MVOLT DDB

CNY LED				
Series	Performance Package	Color Temperature ³	Voltage	Finish
CNY LED	P0 3,500 lumens ¹ P1 4,500 lumens ² P2 6,600 lumens P3 11,100 lumens P4 14,000 lumens	40K 4000K 50K 5000K ⁴	MVOLT ⁵ 120-277V	DDB Dark bronze WH ⁶ White

Accessories

Ordered and shipped separately.

CNYBCP 14 Inch x 14 Inch Beauty Cover Plate

NOTES

1. The combination of P0 50K WH is not available.
2. Not available in 50K.
3. Correlated color temperature (CCT) shown is nominal per ANSI C78, 377-2008.
4. Not available in P1 performance package.
5. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
6. Available with P0 or P1 only.

FEATURES & SPECIFICATIONS

INTENDED USE

CNY LED luminaires are ideal, energy-efficient replacements for up to 400W MH canopy or ceiling luminaires. The CNY LED provides years of maintenance-free illumination for schools, malls, offices, parking areas, covered walkways and loading docks.

CONSTRUCTION

Cast-aluminum, corrosion-resistant housing with polyester powder paint for lasting durability. Castings are sealed with a one-piece gasket. Rated for outdoor installations, -40°C minimum ambient. Frosted lens is designed for uniform light distribution.

ELECTRICAL

Includes an MVOLT (120-277V) driver. LEDs maintain 70% of light output at 50,000 or more hours of service life (L70/50,000 hours).

INSTALLATION

Mounts to a recessed junction box or surface mount with three conduit entry points. Can be pendant mounted with ¾ NPT pendant stem provided by others. Quick mount mechanism significantly reduces installation time - no need to open the luminaire for installation.

LISTINGS

UL Listed to U.S. and Canadian safety standards for wet locations. Tested in accordance with IESNA LM-79 and LM-80 standards. DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. Can be used to comply with California Title 24 Part 6 High Efficacy LED light Source Requirements.

WARRANTY

Five-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx.

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

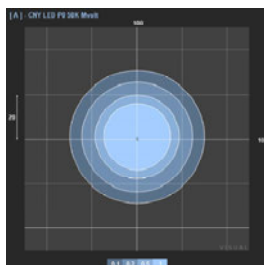
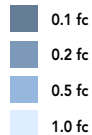


Photometric Diagrams

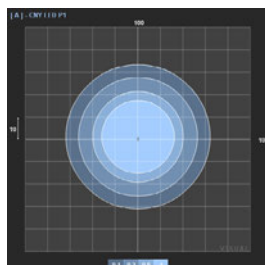
Full photometric data report available within 2 weeks from request. Contact [Acuity Tech Support](#).

CNY LED - Mounting height = 10

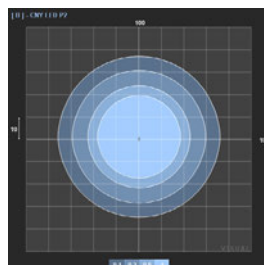
LEGEND



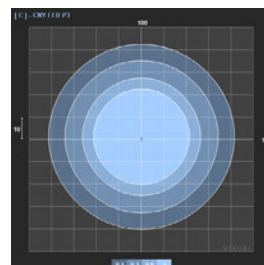
CNY LED P0



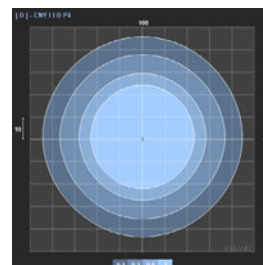
CNY LED P1



CNY LED P2



CNY LED P3

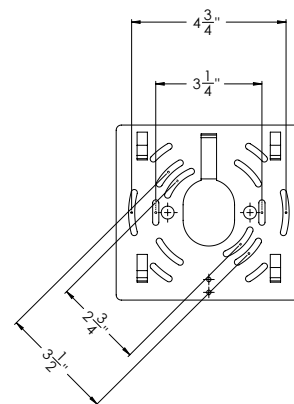
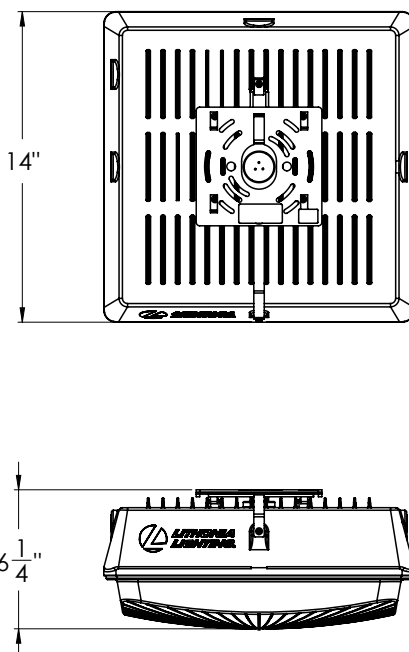
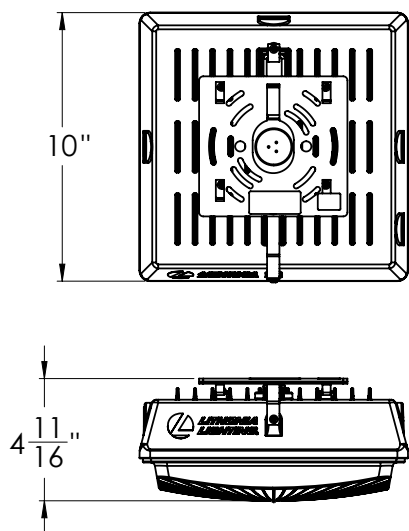


CNY LED P4

Performance Data

Performance Package	Lumens	Input Power	Lumens Per Watt
CNY LED P0	3,500	27W	130
CNY LED P1	4,500	35W	127
CNY LED P2	6,600	52W	128
CNY LED P3	11,000	86W	128
CNY LED P4	13,900	109W	128

Line Art





Specifications

Weight:	4' 17.5lbs
	2' 12.5lbs

4750L RGBW

Linear RGBW

HIGHLIGHTS

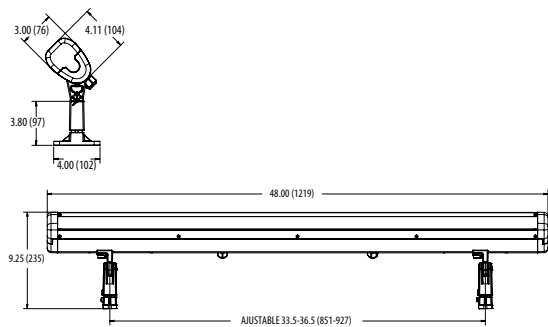
- The 4750L delivers industry leading durability, performance and lumen output
- Superior water resistance IP67 with Hydrel "Flow-Thru" technology, water flows around the independently sealed integral driver module and sealed LED module
- Aiming integrity with a fully adjustable and rugged knuckle design using Taper-Lock technology
- Long life in the most demanding environments with low copper content housing materials, stainless steel fasteners, and durable powder coat finish options for Coastal Regions and Natatoriums
- 3G vibration rated per ANSI C136.31

5
YEAR
warranty


IP67



DIMENSIONS

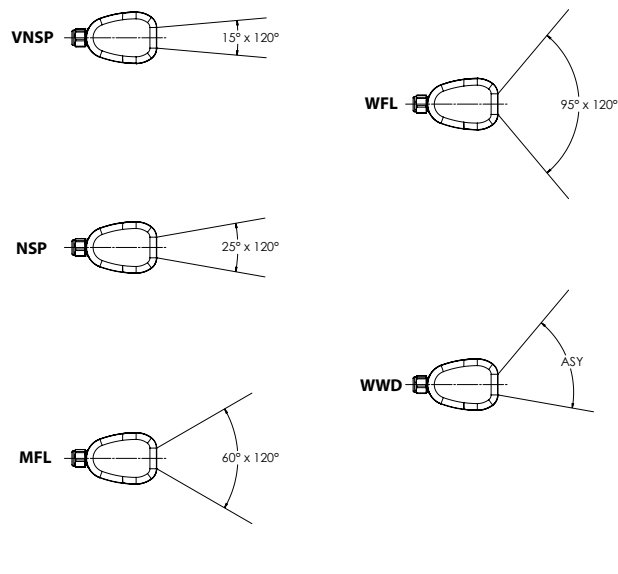


LUMEN PACKAGES

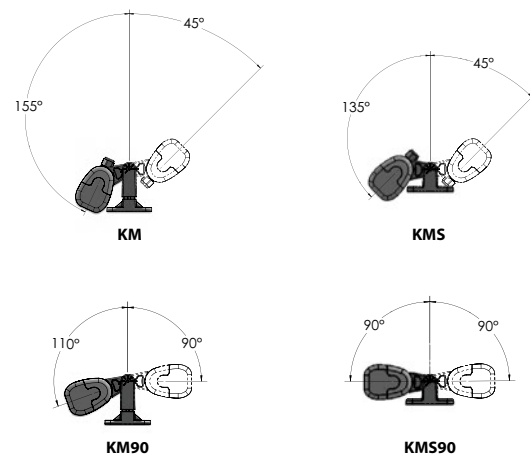
	VNSP	NSP	MFL	WFL	WWD
Delivered Lumens	3577	3592	4170	4230	3922
Watts	56	56	56	56	56
LPW	63	64	74	75	72
Peak Candela	7733	5239	2361	1781	2942

Note: Information based on 100% output on 4FT fixture

STANDARD DISTRIBUTION



AIMING DETAILS

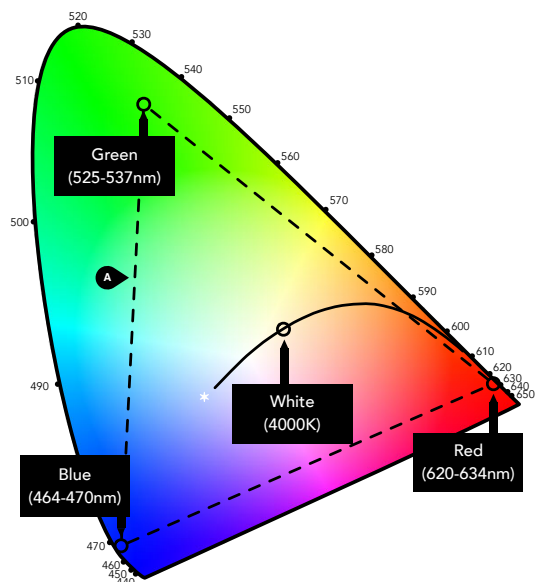


ORDERING INFORMATION

EXAMPLE: 4750L 4FT 1000LMF RGBW MVOLT VNSP KM EA6 CSL10 DMX BL

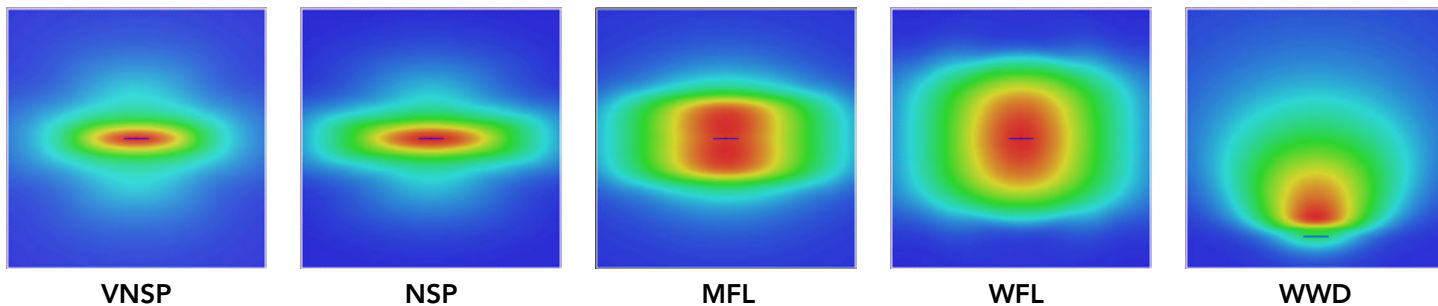
Model*		Max Fixture Length*		LED Output*		LED Dynamic Range*		Voltage*		Distribution*		Mounting*	
4750L	LED Linear Flood	4FT	4' (nominal length)	1000LMF	1000 nominal lumens per foot	RGBW	Red, Green, Blue, White (40K white 80CRI)	MVOLT	120-277 volt	VNSP	15 x 120 degrees	KM	Knuckle Mount 45°
										NSP	25 x 120 degrees	KMS	Knuckle Mount Short 45°
										MFL	60 x 120 degrees	KM90	Knuckle Mount 90°
										WFL	95 x 120 degrees	KMS90	Knuckle Mount short 90°
										WWD	Wall Wash (Asymmetric)	Note: KMS and KMS90 not available with mounting accessories	
Mounting Accessories		Accessories		Cord Length*		Control Input*		Environmental Options		Finish*			
JB4750L	Aluminum junction box	EA6	extended arm 6"	CSL__	10'-50' of cable available in 5' increments	DMX	DMX DARK	MRE	Marine Environment	BL	Black Textured		
MS12	12" Steel mounting spike	EA12	extended arm 12"					NT	Natatorium Construction	BZ	Bronze Textured		
MS18	18" Steel mounting spike	EA18	extended arm 18"					CR	Corrosion Resistant	DBLB	Designer Black Textured		
PSSA	Pedestial Stanchion Splice Access	FVSR	Full Visor							DBBT	Designer Bronze Textured		
SMSA__	Stanchion mount splice access. Available 12"-48" in 6" increments	HVSR	Half Visor							DNAT	Designer Natural Aluminum Textured		
		Note: Full visor includes top and bottom shield.								GN	Green Textured		
		Half Visor is top only for all distributions except wall wash which is bottom only.								GR	Grey Textured		
										SND	Sand Textured		
										STG	Steel Gray Textured		
										TVG	Terra Verde Green Textured		
										WH	White Textured		
										DBL	Designer Black Smooth		
										DDB	Designer Bronze Smooth		
										DNA	Natural Aluminum Smooth		
										DWH	Designer White Smooth		
										CF	Custom Finish		
										RALTB	RAL Paint Finishes		
										Note: RALTB for pricing only, replace with applicable RAL call out when ready to order. See the RALBROCHURE for available options. It is recommended only use textures paint for Hydrel fixtures.			

Note: * is a required field



A RGBW Range within triangle formed by RGB

PERFORMANCE DATA



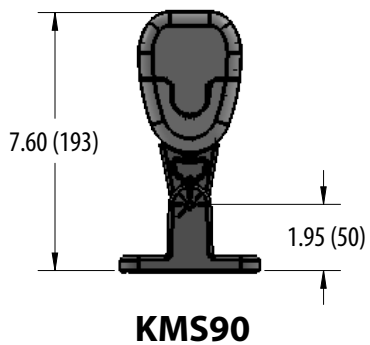
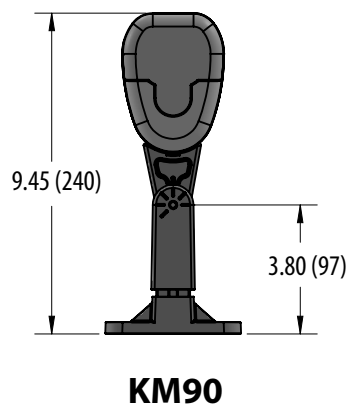
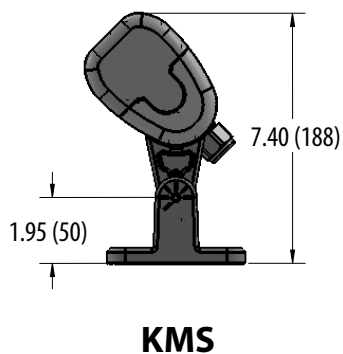
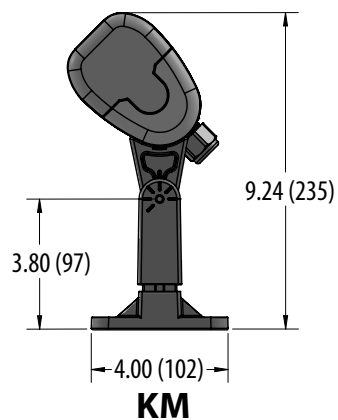
LUMEN OUTPUT 4' FIXTURE

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of end-user environment and application. Contact factory for performance data on any configurations not shown here.

LED Output	Nominal System Watts	Distribution Type	Field Angle		Beam Angle		RGBW		
			°H	°V	°H	°V	Max Cd	Lumens	LPW
1000LMF	56	VNSP	109.6	39.2	63.2	12.1	7733	3576.9	63.47
		NSP	144.0	39.8	98.4	15.7	5239	3591.8	64.01
		MFL	148.4	84.5	106.7	61.3	2361	4170	73.68
		WFL	149.6	109.2	106.8	94.9	1781	4229.7	74.72
		WWD	146.9	78.6	100.7	46.3	2942	3922	72.14

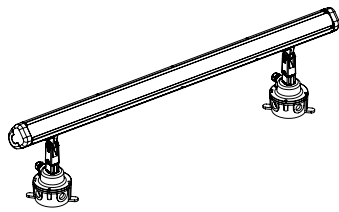
MOUNTING OPTIONS

KNUCKLE MOUNTING

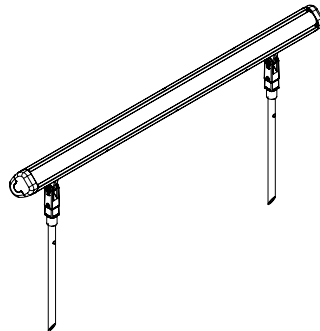


MOUNTING ACCESSORIES

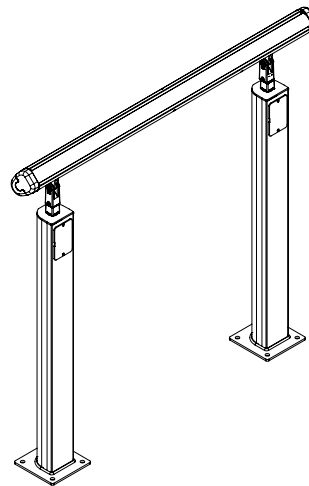
MOUNTING ACCESSORIES - is supplied with 1/2" NPS adaptor. Suitable for ground mounting.



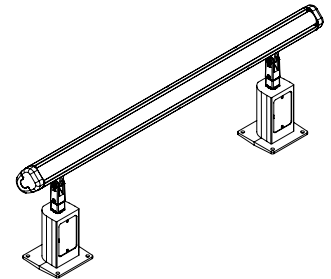
JB4750L Junction Box



MS12 Mounting splice available in 12" and 18"

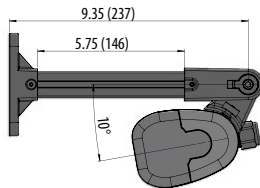


SMSA12 Mounting available in 12"-48" in 6" increments

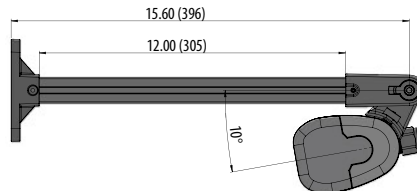


PSSA Mounting

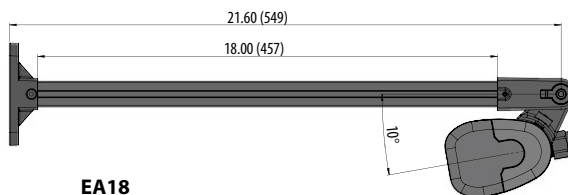
EXTENDED ARM Suitable for wall or surface mount



EA6



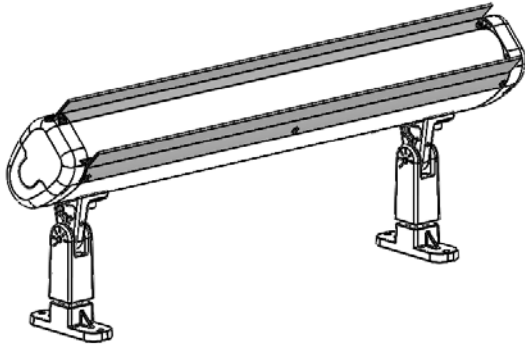
EA12



EA18

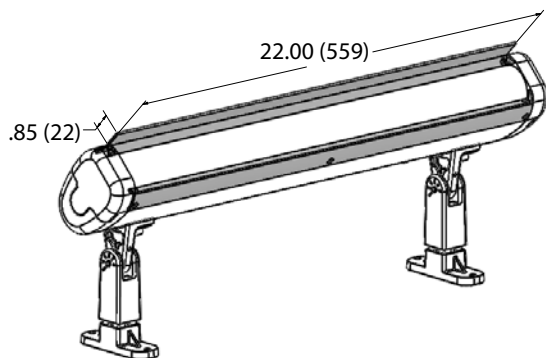
EXTERNAL ACCESSORIES

VISORS

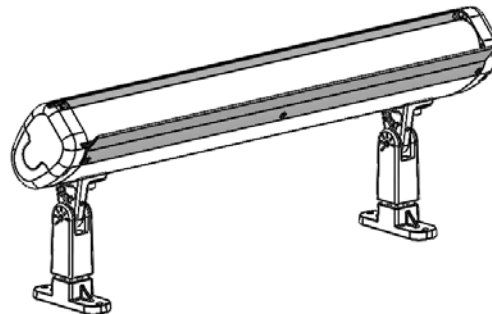


FVSR4750L

FULL VISOR is supplied with top and bottom visor.



HVSR4750L



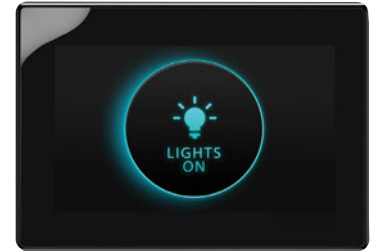
HALF VISOR are factory installed on top side except for wall wash distribution which is installed on the bottom.
Visors: Can be field installed and moved from top to bottom if desired.

ACCESSORY OPTIONS

FRESCO CONTROL SYSTEM

Series	Model	Options	Finish
FCS Fresco Control System	7TSN 7" touchscreen with nLight port	X DMX/RMD control	DBL Black DWH White DNA Natural Aluminum

Refer to [FRESCO](#) spec sheet for additional details and options.



EASYL - LED SHOW CONTROLLER WITH LCD TOUCHSCREEN (INTETRAL POWER SUPPLY)

Series	Voltage	Finish
EZSOLO Easy Solo	MVOLT 120V-277V VAC, 50/60Hz	BK Black
EZTOUCH Easy Touch		Wh White
EZPRO Easy Pro		

Refer to [EASYL](#) spec sheet for additional details and options.



DMX / POWER INTEGRATOR

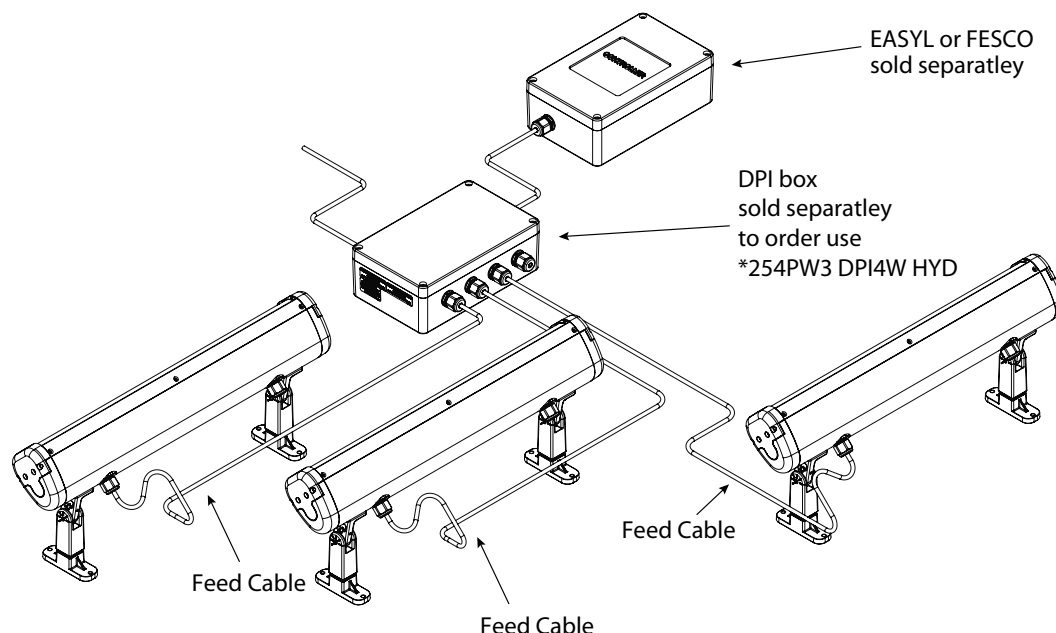
Model
DPI4WHYD DPI4WHYD - DMX/Power Integrator Box

Refer to [DPI4W HYD](#) spec sheet for additional details.



WIRING AND LAYOUT DESIGN

INDIVIDUAL RUN LAYOUT



Feed Cable Wiring Detail - DMX RGBW & TUWH Fixture



SPECIFICATIONS AND FEATURES

MATERIAL: Copper free die cast aluminum and corrosion resistant extruded aluminum. All stainless steel fasteners.

LIGHT SOURCE: RGBW Red, Green, Blue, White 1000LMF.

VOLTAGE: MVOLT 120-277 (4ft only.)

DISTRIBUTION: VN5P (10x), NSP (20x), MFL (55x), WFL (100x), WWD (wall wash Asymmetric).

LENS: High clarity acrylic, superior UV resistant.

MOUNTING: KM (kuckle mount 45°), KMS (Knuckle Mount Short 45°), KM90 (Knuckle mount 90°), KMS90 (Knuckle mount short 90°).

FINISH: Exterior parts are protected by a zinc-infused super durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climates without cracking or peeling.

CORD DETAILS: MVOLT - 18-6 SJTOW 10ft. length.

LISTING: cCSAus, MRE (Marine Environment) is listed to UL1598a. IP67 rated.

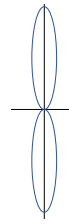
ENVIRONMENT: Suitable for outdoor wet location applications. Suitable for inoor, non-IC rated applications, maximum 45° C and minimum -20° C ambient operating temperatures.

BUY AMERICAN: This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT. Please refer to www.acuitybrands.com/resources/buy-american for additional information.

WARRANTY: 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

Consult factory for details.

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

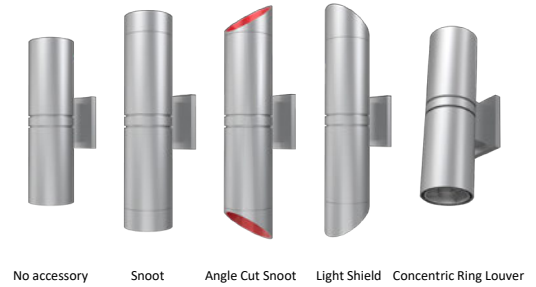


High Center Beam Wall Mount Direct/Indirect Cylinder

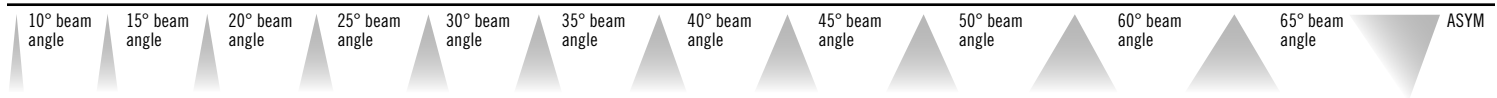
4"

Feature Set

- Downlight and uplight can be individually specified for lumen output, beam spreads and accessories, allowing for a complete custom design
- Accessories available in vivid colors to give designers the freedom to create unique luminaires
- 12 optimized distribution patterns allow designers to achieve unique specifications for their projects
- Bounding Ray™ delivers top down flash for superior glare control
- 45° cutoff to source and source image
- Fully serviceable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- 2.5 SDCM; 85 CRI typical, 90+ CRI optional
- Fixtures are damp location standard; wet location (WL) and IP66 options available - covered ceiling not required.
- 20 standard cylinder colors in textured and gloss finish; custom or RAL colors also available
- ENERGY STAR® Certified product



Distribution



Superior Performance

Nominal Lumens per Direction	500	750	1000	1500	2000	2500	3000	3500	4000	4500	5000
Delivered Lumens	703	807	1062	1545	1977	2419	2920	3548	3982	4419	4848
Wattage	6.7	7.5	9.8	15.1	21.5	26.5	34.1	33.8	39.5	46.2	53.2
Efficacy	104	108	108	102	92	91	86	105	101	96	91

Coordinated Apertures | Multiple Layers of Light



General Illumination Layer | EVO



High Center Beam Layer | Incito



EVO + Incito — Multiple Layers of Light

Core



Downlight



Adjustable



Open Wallwash



Lensed Wallwash



Cylinder



Pinhole



Bevel



Hyperbolic

Healthcare



MRI



Surgical Suite



Patient Room

Special Applications



Dynamic



Food Service



Vandal/Tamper



Clean Room



Shower



Steam Room



A+ Capable options indicated by this color background.

Luminaire Type:

Catalog Number:

EXAMPLE: IC04UDWC 35/15 AR LSS 35D SNT SDBLB U30LM U35D USNT USDBLB MVOLT GZ10 JBX DWHG

Series	Color Temperature	Direct Lumens (Down)	Reflector Color	Reflector Finish	Direct Beam (Down)
IC04UDWC Incito 4in Wall Mount Direct/Indirect Round Cylinder Open Downlight	27/ 2700 K	05 500 lumens	AR Clear	LSS Semi-specular	10D ² 10° beam angle
	30/ 3000 K	07 750 lumens	PR Pewter	LD Matte diffuse	15D 15° beam angle
	35/ 3500 K	10 1000 lumens	WTR Wheat	LS Specular	20D 20° beam angle
	40/ 4000 K	15 1500 lumens	GR Gold		25D 25° beam angle
	50/ 5000 K	20 2000 lumens	WR ¹ White painted		30D 30° beam angle
		25 2500 lumens	BR ¹ Black painted		35D 35° beam angle
		30 3000 lumens	WRAMF ¹ White anti-microbial		40D 40° beam angle
		35 3500 lumens	BZR ¹ Dark Bronze painted		45D 45° beam angle
		40 4000 lumens			50D 50° beam angle
		45 4500 lumens			60D 60° beam angle
		50 5000 lumens			65D 65° beam angle
					ASYM ³ Asymmetric

Direct Snoot Option (Down)	Direct Snoot Insert Color ⁵ (Down)	Direct Louver Option (Down)	Indirect Lumens (Up)
(blank) No Snoot	SDNA Natural Aluminum	(blank) No Louver	U05LM 500 lumens
SNT Snoot	SDDB Gloss Dark Bronze	RNGLV Concentric Ring Louver	U07LM 750 lumens
SNTANG Angle Cut Snoot	SDBL Gloss Black		U10LM 1000 lumens
SHLD ⁴ Light Shield	SDWHG Gloss White		U15LM 1500 lumens
	SDMB Gloss Medium Bronze		U20LM 2000 lumens
	SDSS Gloss Sandstone		U25LM 2500 lumens
	SDGC Gloss Charcoal Grey		U30LM 3000 lumens
	SDTG Gloss Tennis Green		U35LM 3500 lumens
	SDBR Gloss Bright Red		U40LM 4000 lumens
	SDSB Gloss Steel Blue		U45LM 4500 lumens
	SDBBT Matte Dark Bronze		U50LM 5000 lumens
	SDBLB Matte Black		
	See Architectural colors for RAL and custom colors.		

Indirect Beam (Up)	Indirect Snoot Option (Up)	Indirect Snoot Insert Color ⁵ (Up)	Indirect Louver Option (Up)
U10D ² 10° beam angle	(blank) No Snoot	USDNA Natural Aluminum	(blank) No Louver
U15D 15° beam angle	USNT ⁶ Snoot	USDDB Gloss Dark Broze	URNGLV Concentric Ring Louver
U20D 20° beam angle	USNTANG Angle Cut Snoot	USDBL Gloss Black	
U25D 25° beam angle	USHLD ⁴ Light Shield	USDWHG Gloss White	
U30D 30° beam angle		USDMB Gloss Medium Bronze	
U35D 35° beam angle		USDSS Gloss Sandstone	
U40D 40° beam angle		USDGC Gloss Charcoal Grey	
U45D 45° beam angle		USDTG Gloss Tennis Green	
U50D 50° beam angle		USDBR Gloss Bright Red	
U60D 60° beam angle		USDSB Gloss Steel Blue	
U65D 65° beam angle		USDBBT Matte Dark Bronze	
UASYM ³ Asymmetric		USDBLB Matte Black	
		See Architectural colors for RAL and custom colors.	

ORDERING CONTINUES ON NEXT PAGE...

Voltage	Driver ⁸	Mounting
MYOLT 120V - 277V 120 120V 277 277V 347⁷ 347V	GZ10 0-10V driver dims to 10% GZ1 0-10V driver dims to 1% EZ10 eldoLED 0-10V ECOdrive. Linear dimming to 10% min. EZ1 eldoLED 0-10V ECOdrive. Linear dimming to 1% min. EZB eldoLED 0-10V SOLOdrive. Logarithmic dimming to <1%. EDAB⁹ eldoLED SOLOdrive DALI. Logarithmic dimming to <1%. EDXB^{9,10} eldoLED POWERdrive DMX with RDM (remote device management). Square Law dimming to <1%. Min: 1000LM; Max: 4000LM. ELV⁹ Electronic line voltage / forward phase / Triac dimming, 120V Only. ECOS2⁹ Lutron® Hi-Lume® 2-wire forward-phase driver. 120V Only. Minimum dimming level 1%. Min: 1000LM; Max: 2000LM. ECOD⁹ Lutron® EcoSystem® digital Hi-Lume 1% soft-on, fade to black. Max: 4000LM.	JBX Integral driver, Recessed or Surface J-box

Control Interface ¹¹	Options	Architectural Colors for Cylinder - Powder Paint ⁵
(blank) No controls NLT nLight® dimming pack. NLTER¹² nLight® dimming pack for fixtures on emergency circuit NLTAIR2 nLight® AIR dimming pack. NLTAIRER2¹² nLight® AIR dimming pack for fixtures on emergency circuit 2NLT 2 nLight dimming packs 2NLTER¹² 2 nLight dimming packs for fixtures on emergency circuits 2NLTAIR2 2 nLight AIR dimming packs 2NLTAIRER2¹² 2 nLight AIR dimming packs for fixtures on emergency circuits	SF Single fuse. Specify 120V or 277V. 90CRI High CRI (90+) N80 nLight Lumen Compensation HAO¹³ HAO High Ambient Option (40°C) WL¹⁴ Wet Location IP66¹⁵ Lensed, IP66 rated	DDB Gloss Dark Bronze DBL Matte Black DWH Gloss White DMB Matte Medium Bronze DNA Gloss Natural Aluminum DSS Gloss Sandstone DGC Gloss Charcoal Grey DTG Gloss Tennis Green DBR Gloss Bright Red DSB Gloss Steel Blue DDBT Textured Dark Bronze DBLB Textured Black DWHG Textured White DBNH Textured Bronze DNAT Textured Natural Aluminum DSST Textured Sandstone DSPD Textured Dark Grey DSPE Textured Green DSPH Textured Light Red DWHAMF Gloss White with Anti-microbial finish

ACCESSORIES — order as separate catalog numbers (shipped separately)

GCOLORS KIT	Architectural colors chip kit, consisting of powder-coat and plated finishes
OPTC4 XXD	Additional optics for field installation. Replace "XX" with beam angle.

ORDERING NOTES

- Not available with Reflector Finish.
- Only available up to 1500 lumens.
- Up to 4500 lumens down and 3500 lumens up. Refer to Max Lumens per Rating chart. Not available with SNT, USNT, SHLD, or USHLD.
- Not available with Snoot Insert Color.
- For details on RAL and Custom colors please see [Architectural colors](#)
- Factory supplies two step down transformers. Both must be utilized for single or dual control operation. Transformers must be remote mounted and access is required to location of remote mounted devices. Not available with WL or IP66 options.
- Factory supplies two step down transformers. Both must be utilized for single or dual control operation. Transformers must be remote mounted and access is required to location of remote mounted devices.
- Refer to [Tech 240](#) for compatible dimmers.
- Not available with Control Interfaces.
- Includes terminator resistor.
- Field installed. Access required to location of remote mounted device. Choose 1 nLight dimming pack to control direct and indirect lighting together. Choose 2 nLight dimming packs to control direct and indirect lighting independently.
- For use with generator supply EM power. Will require an emergency hot feed and normal hot feed.
- Only available up to 2500 lumens; not available with ECOS2, WL, or IP66.
- Up to 5000 lumens down and 3500 lumens up for all non-ASYM beams; up to 4500 lumens down and 3500 lumens up for ASYM beam. Refer to Max Lumens per Rating Chart.
- Up to 3500 lumens down and up for all non-ASYM beams; up to 2500 lumens down and up for ASYM beam. Refer to Max Lumens per Rating chart.

Optical Assembly

Fully serviceable and upgradeable lensed LED light engine suitable for field maintenance or service from room side.

Optical design is a Bounding Ray™ design with 45° cutoff to source and source image. Top down flash characteristic for superior glare control.

Direct/Indirect Lighting

The downlight and uplight portions of the luminaire can be individually specified for in terms of lumen output, beam spreads, and accessories.

The luminaire encompasses dual drivers, allowing for downlight and uplight to be independently controlled.

Available up to 5,000 lumens down and 5,000 lumens up for a total of 10,000 lumens per luminaire.

Accessories

The luminaire is available with 4 accessories that serve functional and aesthetic purposes. 1) Snoot: improved cut-off angle, glare control, and decorative appeal with insert (available in multiple finishes); 2) Angle Cut Snoot: decorative appeal with insert (available in multiple finishes); 3) Light Shield: glare control; and 4) Concentric Ring Louver: improved cut-off angle and glare control.

Electrical

The luminaire shall operate from a 50 or 60 Hz ± 3 Hz AC line over a voltage ranging from 120 VAC to 277 VAC. Support 347V via remote-mounted stepdown transformers. The fluctuations of line voltage shall have no visible effect on the luminous output.

The luminaire shall have a power factor of 90% or greater at all standard operating voltages and full luminaire output.

Sound Rated A+. Driver shall be >80% efficient at full load across all input voltages.

Input wires shall be 18AWG, 300V minimum solid copper.

Controls

Luminaire shall be equipped with interface for nLight wired or nLight AIR networks with integral power supply as per specification.

Dimming

The luminaire shall be capable of continuous dimming without perceivable stroboscopic flicker as measured by flicker index (ANSI/IES RP-16-10) over a range of 100 – 10%, 100 – 1.0% or 100 – 0.1% of rated lumen output with a smooth shut off function to step to 0%.

eldoLED LED drivers shall conform to IEEE P1789 standards. Alternatively, manufacturers must demonstrate conformance with product literature and testing which demonstrates this performance. Systems that do not meet IEEE P1789 will not be considered.

Driver is inaudible in 24dB environment, and stable when input voltage conditions fluctuate over what is typically experienced in a commercial environment.

Construction

Heavy-gauge aluminum construction.

Extruded body with flangeless reflector allows flow-through passive thermal management.

Listings

Fixtures are CSA Certified to meet US and Canadian Standards: All fixtures manufactured in strict accordance with the appropriate and current requirements of the "Standards for Safety" to UL, damp location standard; wet location options available (WL) or lensed (IP66).

Luminaire configurations are Energy Star certified through testing in EPA-recognized laboratories, with the results reviewed by an independent, accredited certification organization. Visit www.energystar.gov for specific configurations listed.

Buy American

This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

Photometrics

LEDs tested to LM-80 standards. Measured by IESNA Standard LM-79-08 in an accredited lab. Lumen output shall not decrease by more than 30% over the minimum operational life of 60,000 hours.

Color appearance from luminaire to luminaire of the same type and in all configurations, shall be consistent both initially and at 6,000 hours and operate within a tolerance of <2.5 MacAdam ellipse as defined by the center of the quadrangles defined in ANSI C78.377-2015.

Warranty

5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a shaded background*
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a shaded background*

To learn more about A+, visit www.acuitybrands.com/aplus.

*See ordering tree for details

ICO - eldoLED Driver Default Dimming Curve			
Nomenclature	Min Dimming	Driver Dim Curve	Control Dim Curve
EZ10	10%	Linear	Linear/Logarithmic
EZ1	1%	Linear	Linear/Logarithmic
EZB	<1%	Logarithmic	Linear
EDAB	<1%	Logarithmic*	Linear
EDXB	<1%	Square	Linear

*Changeable through DALI controller

Lumen Output Multiplier		
CRI	CCT	Multiplier
80	2700K	0.916
	3000K	0.948
	3500K	1
	4000K	1.032
	5000K	1.1
90	2700K	0.748
	3000K	0.8
	3500K	0.838
	4000K	0.845
	5000K	0.945

Reflector Finish Multiplier	
Reflector Finish	Multiplier
LS - Specular	1
LSS - Semi Specular	0.956
WR - White	0.87
LD - Matte Diffuse	0.85
BR - Black	0.73
BZR - Bronze	0.73

Direction Multiplier	
Direction	Multiplier
Direct	1
Indirect	0.986

Control Provided (note: 347V/UVOLT versions provided with 347 option selected)					
Nomenclature	Description	NLT	NLTER	NLTAIR2	NLTAIRER2
GZ10	0-10V driver dims to 10%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2
GZ1	0-10V driver dims to 1%	nPP16 D EFP	nPP16 D ER EFP	RPP20 D 24V G2	RPP20 D 24V ER G2
EZ10	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2
EZ1	eldoLED 0-10V ECOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2
EZB	eldoLED 0-10V SOLOdrive	nPS 80 EZ	nPS 80 EZ ER	RPP20 D 24V G2	RPP20 D 24V ER G2

Max Lumens per Rating			
Rating	Beams	Down Lumens	Up Lumens
Damp	All Non-ASYM	5000	5000
	ASYM	4500	3500
Wet	All Non-ASYM	5000	3500
	ASYM	4500	3500
IP66	All Non-ASYM	3500	3500
	ASYM	2500	2500

Note:

Actual performance may differ as a result of end user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.

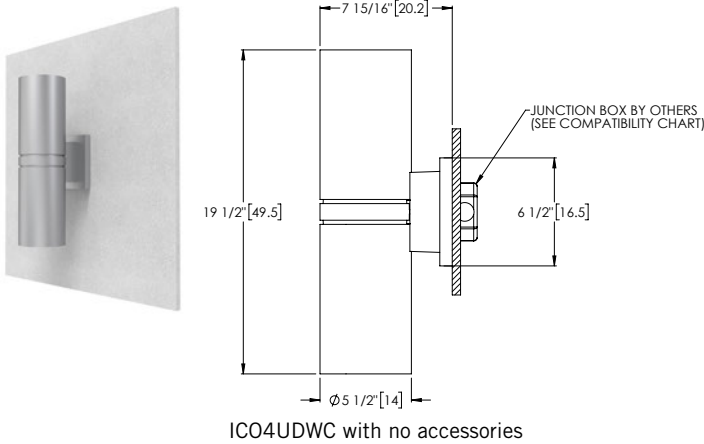
J-box Compatibility Matrix		Cylinder Configurations	
		JBX	JBX w/EDXB Driver
Recommended J-box (by others)	4" Octagonal 4x4x1.5 deep"	✓	✗
	4" Octagonal 4x4x2.125 deep	✓	✓
	4" Square 4x4x1.5 deep	✓	✗

Standard Architectural Color Options for Cylinder/Snoot Bodies, and Snoot Inserts

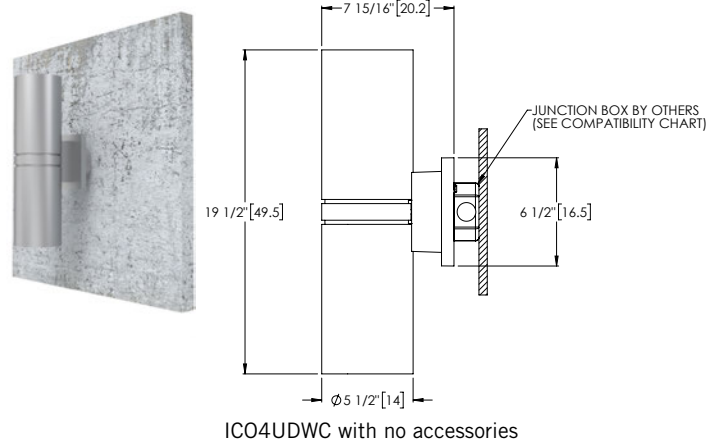
 DSS LITHONIA Sandstone P12	 DSST TEXTURED Sandstone P90	 DBR LITHONIA Bright Red P34	 DSPH TEXTURED Light Red P80	 DMB LITHONIA Medium Bronze P11	 DBNH TEXTURED Bronze P74	 DTG LITHONIA Tennis Green P33	 DSPE TEXTURED Green P78
 DSB LITHONIA Steel Blue P49	 DNA LITHONIA Natural Aluminum P07	 DNAT TEXTURED Natural Aluminum P89	 DGC LITHONIA Charcoal Gray P32	 DSPD TEXTURED Dark Grey P77	 DDB LITHONIA Dark Bronze P50	 DDBT TEXTURED Dark Bronze P88	 DBL LITHONIA Black P13
 DBLB TEXTURED Black P75	 DWH LITHONIA White P21	 DWHG TEXTURED White P86					

NOTE: These colors were carefully reproduced to give as true a depiction as possible of finished product color. Some colors, however, may vary slightly from actual appearance due to display/printing variations and limitations. Please always contact a Gotham representative for an accurate paint chip sample.

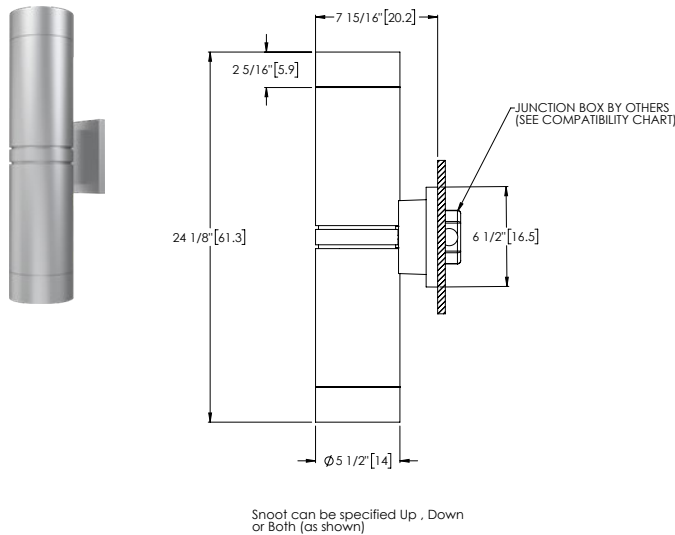
JBX Recessed J-Box



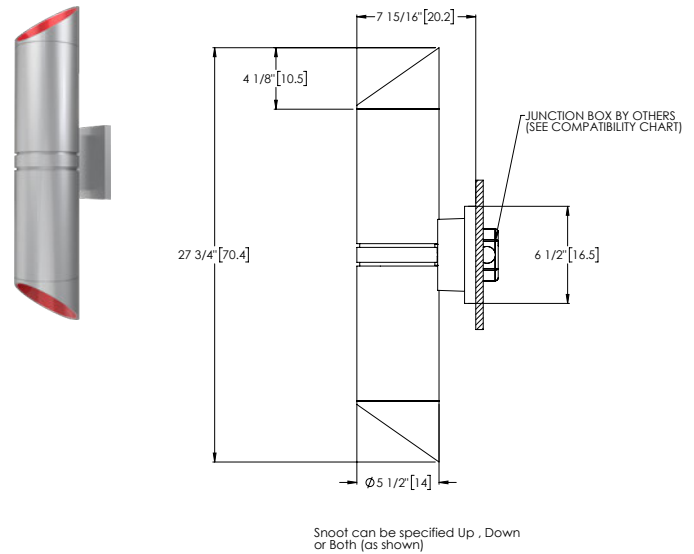
JBX Surface J-Box



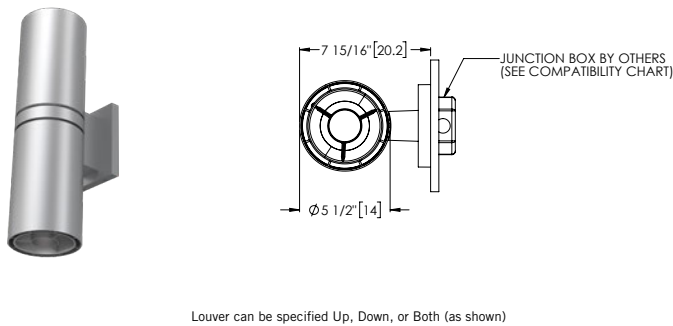
ICO4UDWC with SNT and USNT accessories



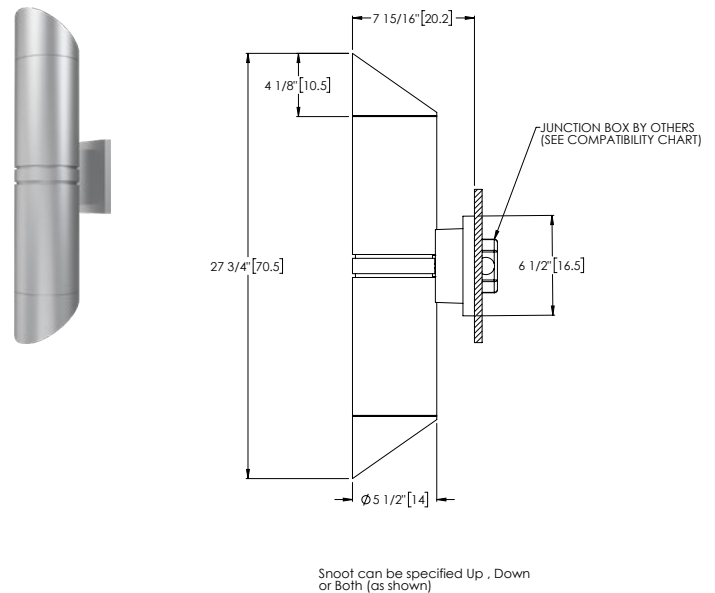
ICO4UDWC with SNTANG and USNTANG accessories



ICO4UDWC with RNLV and URNLV accessories

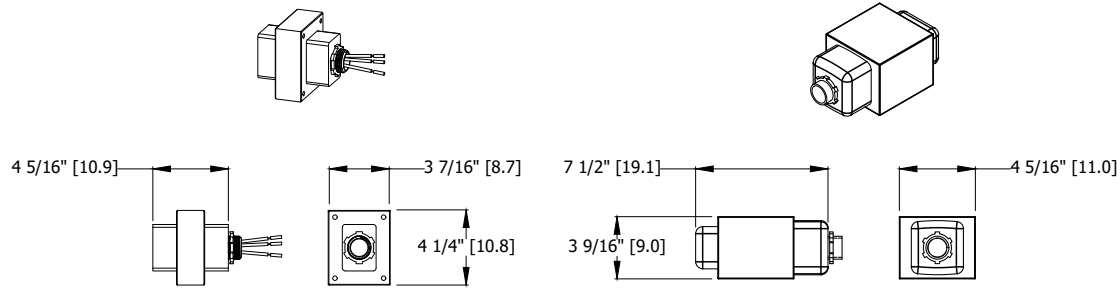


ICO4UDWC with SHLD and USHLD accessories



*Dimensions in inches [centimeters]

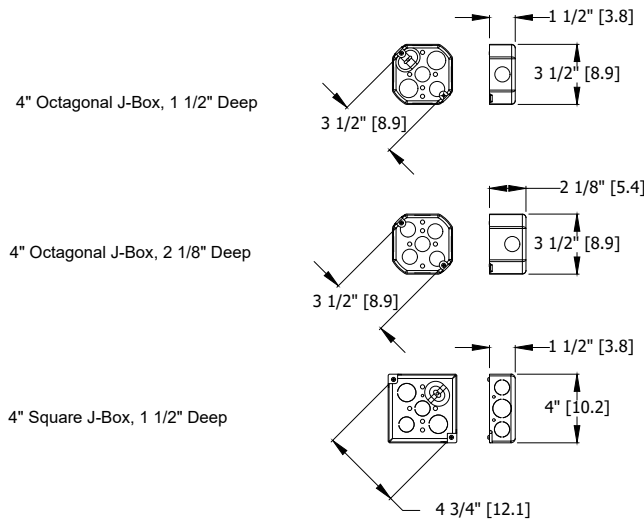
347V Stepdown Transformer



347 Transformer:
Up to 6000LM
Install to accessible
junction box by others

347 Transformer:
8000LM and up
Install to accessible
junction box by others

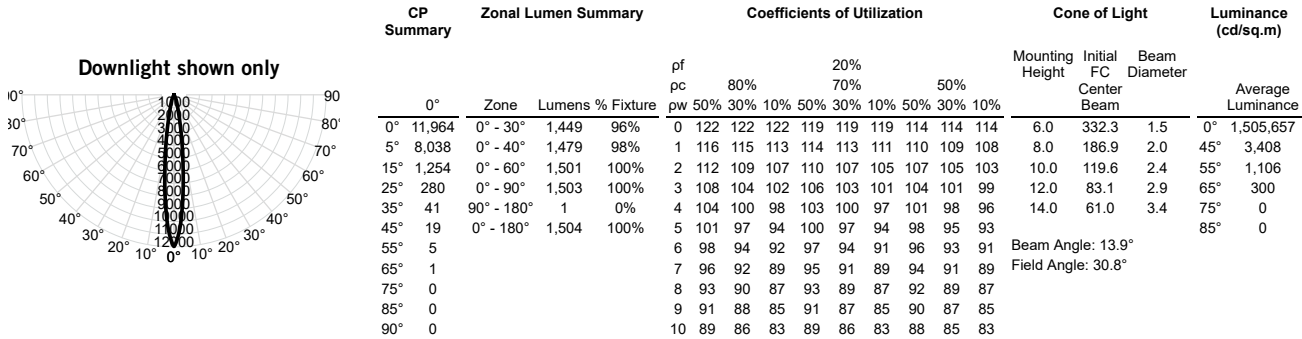
Junction Box Dimensions (by others)



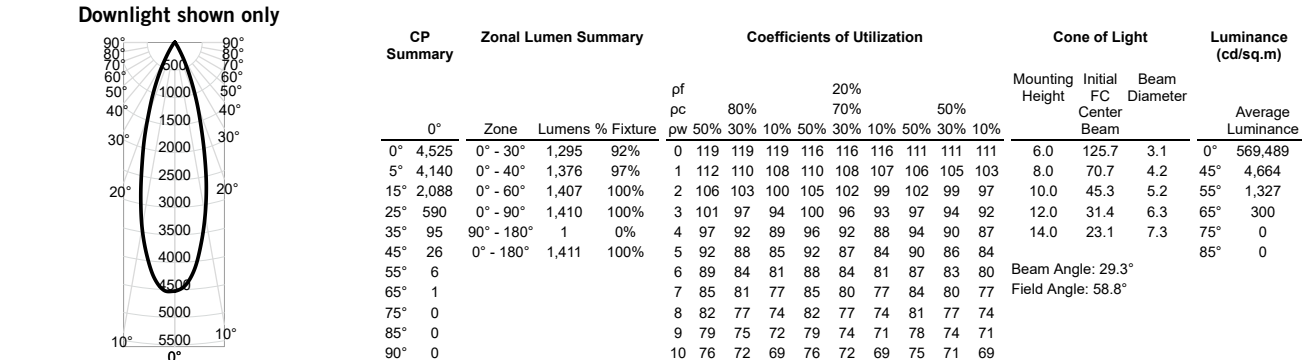
*Dimensions in inches [centimeters]

CONSULT WWW.GOTHAMLIGHTING.COM FOR ADDITIONAL PHOTOMETRY.

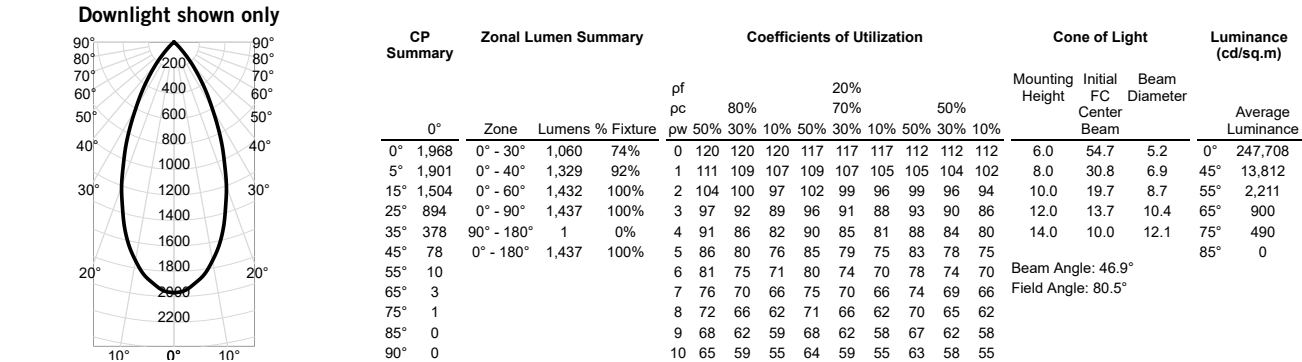
ICO4UDWC 35/15 AR LSS 15D Input Watts: 15.1, Delivered Lumens: 1504, LPW: 99.6, S/MH: 0.24, Test No: ISF 192654P7204



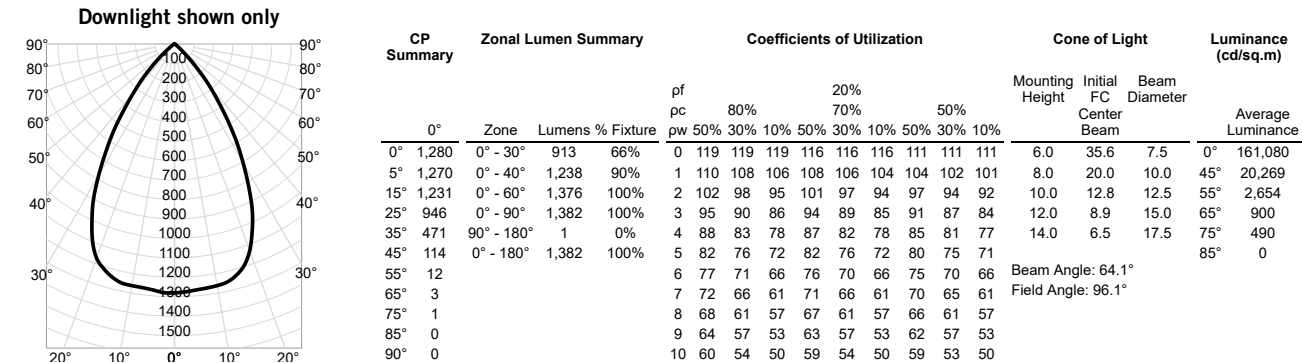
ICO4UDWC 35/15 AR LSS 30D Input Watts: 15.1, Delivered Lumens: 1411, LPW: 93.4, S/MH: 0.47, Test No: ISF 192657P7424



ICO4UDWC 35/15 AR LSS 45D Input Watts: 15.1, Delivered Lumens: 1437, LPW: 95.2, S/MH: 0.73, Test No: ISF 192660P6224



ICO4UDWC 35/15 AR LSS 65D Input Watts: 15.1, Delivered Lumens: 1382, LPW: 91.5, S/MH: 0.98, Test No: ISF 192663P7204



nLight® AIR is the ideal solution for retrofit or new construction spaces where adding communication wiring is cost prohibitive. The integrated nLight AIR rPP20 Power Pack is part of each EVO Luminaire ordered with the NLTAIR option. These individually addressable controls offer the ultimate in flexibility during initial setup and for space repurposing.

nLight® AIR Control Accessories

Order as separate catalog number. Visit [nLight AIR](#).

Wall Switches

Model Number	
On/Off single pole	rPODB (color) G2
On/Off two pole	rPODB 2P (color) G2
On/Off & raise/lower single pole	rPODB DX (color) G2
On/Off & raise/lower two pole	rPODB 2P DX (color) G2

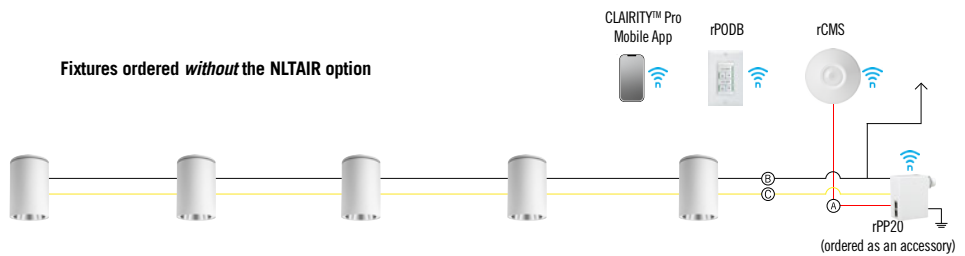
nLight® AIR Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

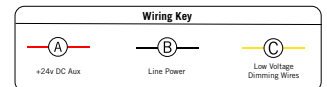
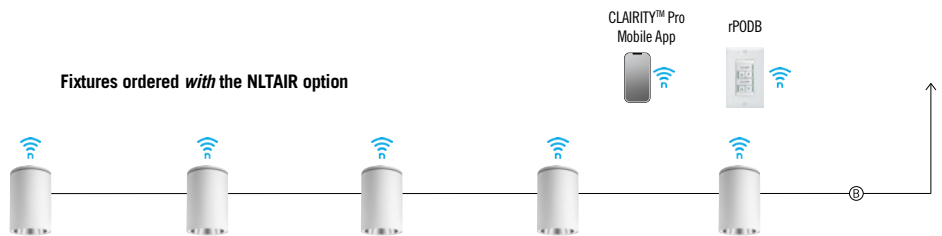
Model Number	
Small motion 360°, ceiling	rCMS 9 / rCMS PDT 9
Large motion 360°, ceiling	rCMS 10 / rCMS PDT 10

Possibilities for nLight® AIR

Fixtures ordered *without* the NLTAIR option



Fixtures ordered *with* the NLTAIR option



nLight® Wired The nLight® solution is a digital networked lighting control system that provides both energy savings and increased user configurability by cost effectively integrating time-based, daylight-based, sensor-based and manual lighting control schemes.

nLight® Wired Control Accessories

Order as separate catalog number. Visit [nLight](#).

Wall Switches

Model Number	
On/Off single pole	nPODM (XX)
On/Off two pole	nPODM 2P (XX)
On/Off & raise/lower single pole	nPOD DX (XX)
On/Off & raise/lower two pole	nPODM 2P DX (XX)
Graphic touchscreen	nPOD GFX (XX)

Photocell Controls

Dimming	nCM ADCX
---------	----------

nLight® Wired Control Accessories (cont.)

Occupancy Sensors (PIR/dual tech)

Model Number	
Small motion 360°, ceiling	nCM 9 / nCM PDT 9
Large motion 360°, ceiling	nCM 10 / nCM PDT 10
Wide View	nWV 16 / nWV PDT 16
Wall switch with raise/lower	nWSX LV DX / nWSX PDT LV DX

Cat-5 Cables (plenum rated)

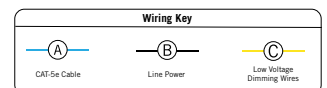
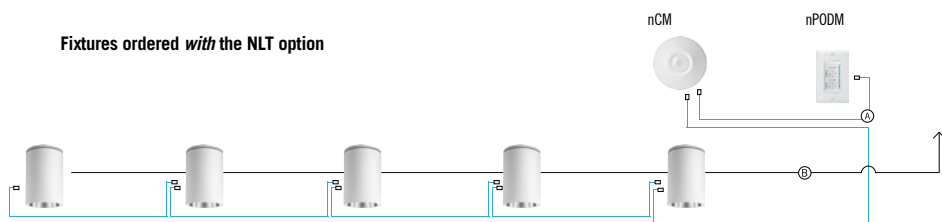
10', CAT5	CAT5 10FT J1
15', CAT5	CAT5 15FT J1

Possibilities for nLight® wired

Fixtures ordered *without* the NLT option



Fixtures ordered *with* the NLT option



PRODUCT SPECIFICATIONS

LED Light Engine 2-step MacAdam ellipse binning • 2700K, 3000K, 3500K, or 4000K CCTs available with 80 CRI minimum • 2700K and 3000K also available with 90 CRI and 95 CRI minimum (R9>90).

Reflector Lensed, die cast, angle-cut, parabolic reflector maintains low glare
• Available in clear diffuse, black diffuse, wheat diffuse, or white finishes
• Specular clear kicker reflector directs light toward wall surface.

Trims Styles Self Flanged and flangeless reflectors are available • Must specify FMA3SQ (gypsum) or SFM3SQ (wood/stone/tile) option for flangeless installations.

LED Driver Accommodates 120-277V input and multiple control protocols • For a list of compatible dimmers, refer to [ACLXLED3-DIM](#) • Power Factor > 0.9 • Field replaceable from below ceiling.

Life Rated for 50,000 hrs at 70% lumen maintenance.

Buy American This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FARS, DFARS and DOT. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty - 5YR 5-year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-support/terms-and-conditions

Codes/Labels UL and cUL listed for through branch wiring, damp locations
• Meets energy code Air Leakage requirements per ASTM E283 • Can be used to comply with Title 24, Part 6 with select trims and housings • ICAT housings are rated for direct contact with insulation • AX3SQ 08LM/12LM/15LM (ICAT option) are compatible with spray foam insulation with an R-Value of 3.7 per inch or less • Union made.

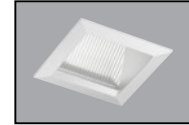
New Construction Mounting Features patented (US Patent 8,038,113) Pro-VI™ bar hanger system • All fixtures except for 25LM ICAT also feature vertically adjustable mounting brackets (butterfly brackets) • Centerline indicators on plaster frame and patented (US Patent 8,277,090) Tru-Line™ Platform featuring +/- 1/2" translation and +/- 45° aperture rotation aids fixture alignment after installation, prior to drywall.

3" LED RECESSED WALL WASH

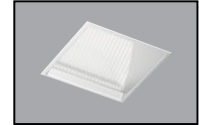
NEW CONSTRUCTION LENSED WALL WASH AX3SQ/3SQFWW 800 - 3000 LUMEN



Buy American



Self-Flanged



Flangeless (Gypsum)



Flangeless
(Wood/Stone/Tile)

Junction Box Rated for 4 No. 12 AWG 90° C through branch circuit conductors and includes (6) 1/2", (1) 3/4", and (4) Non-metallic sheathed cable knock-outs
• Push-in electrical connectors for field connections.

Ceiling Thickness 1/2" – 1 5/8" ceiling standard

Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.



A+ Capable options indicated by this color background.



Design2Ship Quick Ship Program:

Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details.
Maximum Order Quantity: 50 units for housings; 25 units for trims.

ORDERING INFORMATION

Example: AX3SQ LPWW G4 20LM 30K 80CRI 24D FPC 120 ICAT 3SQFWW W SF

Housing Style	Lumens	CCT	CRI	OPTIC	Driver	Voltage ³	Options
AX3SQ WW G4 <small>New Construction Wall Wash</small>	08LM 800 Lumens	27K 2700K	80CRI	24D	GZ1 0-10V, 1% dim	120	CP⁴ Chicago Plenum
	12LM 1200 Lumens	30K 3000K	90CRI²		EZ1 eldoLED 0-10V, 1% dim	277	ICAT⁵ IC, Air-Tight
AX3SQ LPWW G4 <small>Low Profile Wall Wash</small>	15LM 1500 Lumens	35K 3500K	95CRI²		EZB eldoLED 0-10V, <1% dim	0VOLT	NLIGHT⁶ nLight dimming pack controls
	20LM 2000 Lumens	40K 4000K			FPC Phase cut dimming, 5% dim	(120-277)	
	25LM 2500 Lumens				ECOS2 Lutron Hi-Lume 2-wire forward phase, 1% dim		
	30LM¹ 3000 Lumens				ECOD Lutron Hi-Lume EcoSystem, 1% dim		
					EDXB eldoLED DMX, <1% min		
					EDAB eldoLED DALI, 1% min		

Square Trim Style	Reflector Finish	Flange Style / Finish	Ceiling Installation
3SQFWW <small>Lensed Wall Wash</small>	BD Black Diffuse	SELF-FLANGED	FLANGED
	CD Clear Diffuse	SF Self-Flanged (Same finish as reflector)	Ceiling ≤ .875"
	W White Paint	WHSF Self-Flanged, White painted flange	Ceiling 0.875" - 1.25"
	WTD Wheat Diffuse	FLANGELESS⁷	Ceiling 1.25" - 1.625"
		FM Flangeless	FLANGELESS, GYPSUM
			FMA3SQ/087 Ceiling ≤ .875"
			FMA3SQ/125 Ceiling 0.875" - 1.25"
			FMA3SQ/163 Ceiling 1.25" - 1.625"
			FLANGELESS, WOOD/STONE/TILE⁸
			SFM3SQ/100 (B,W) Ceiling ≤ 1.00"
			SFM3SQ/138 (B,W) Ceiling 1.00" - 1.375"
			SFM3SQ/163 (B,W) Ceiling 1.375" - 1.625"

Ordering Notes

¹ 30LM not available with LPWW.

² 90CRI and 95CRI available on 27K and 30K only.

³ 0VOLT standard on GZ1, EZ1, EZB, ECOD, EDXB, EDAB. 120 standard for FPC or ECOS2.

⁴ CP available up to 20LM for LPWW; available up to 25LM for WW.

⁵ ICAT not available with LPWW at 25LM; not available with WW at 30LM.

⁶ Must specify 120 or 277 volts. Available on EZ1 or EZB only.

⁷ Must specify flangeless ceiling installation (FMA3SQ or SFM3SQ).

⁸ Specify finish: B=Black, W=White.

3" LED RECESSED WALL WASH NEW CONSTRUCTION LENSED WALL WASH AX3SQ/3SQFWW 800 - 3000 LUMEN

ACCESSORIES

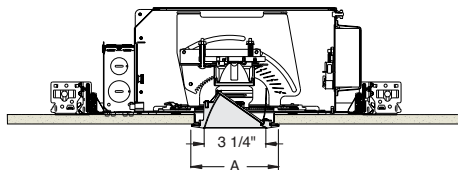
Accessories	
HB1	Real Nail 3 Bar Hangers
HB26	26" C-Channel Bar Hangers
HB50	50" C-Channel Bar Hangers
LB27	27" Linear Bar Hangers
EMI20	20W Remote Mount Emergency Inverter (Compatible with 20LM max)

ELECTRICAL DATA

Lumen Pack-age	08LM		12LM		15LM		20LM		25LM		30LM	
Voltage	120	277	120	277	120	277	120	277	120	277	120	277
Input Power	7.0	7.6	11.0	12.0	13.8	14.6	19.7	20.2	25.8	26.3	32.9	33.3
Input Current	0.03	0.06	0.09	0.05	0.12	0.06	0.17	0.08	0.22	0.1	0.28	0.13
Frequency	50/60Hz		50/60Hz		50/60Hz		50/60Hz		50/60Hz		50/60Hz	
Power Factor	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9

Construction:	ICAT
CCT/CRI:	90CRI 27K, 30K
Lumens:	08LM, 12LM, 15LM, 20LM
Optic:	24D
Reflector Finish:	BD, CD, W, WTD

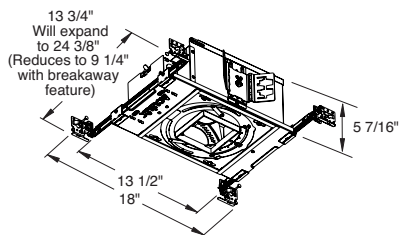
DIMENSIONS



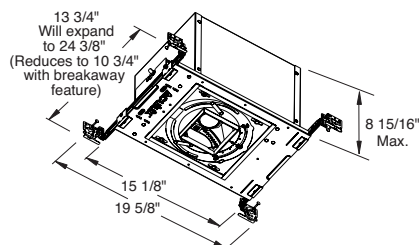
	A
Self Flanged	4 1/2"
Flangeless	3 5/8"

4 1/8" CEILING CUTOUT
(REFER TO INSTRUCTION SHEET FOR
FLANGELESS CEILING CUTOUT)

NEW CONSTRUCTION UNIVERSAL (AX3SQ WW)

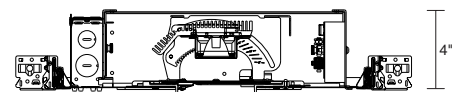
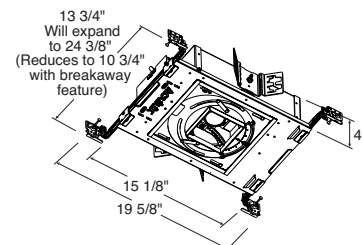


ICAT: 20LM & Less
Non-ICAT: 25LM &
30LM



ICAT: 25LM

LOW PROFILE UNIVERSAL (AX3SQ LPWW)



ICAT: 20LM & Less
Non-ICAT: 25LM

3" LED RECESSED WALL WASH

NEW CONSTRUCTION

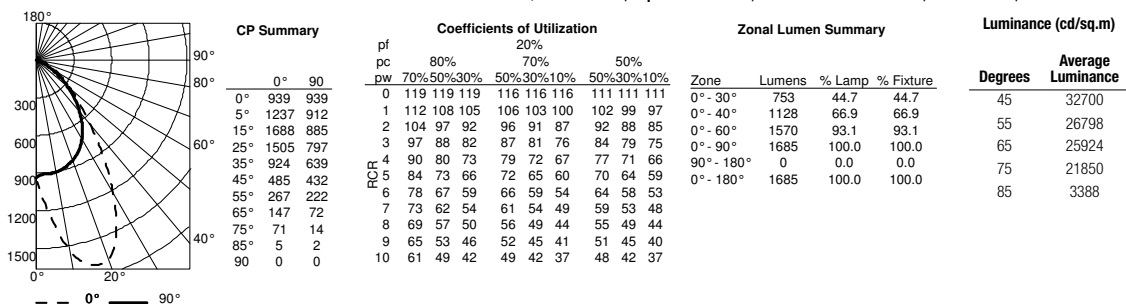
LENSED WALL WASH

AX3SQ/3SQFWW

800 - 3000 LUMEN

PHOTOMETRICS

AX3SQ WW G4 30LM 30K 80CRI 24D EZ1 MVOLT + 3SQFWW CD, 3000K LEDs, input watts: 32.6, delivered lumens: 1685, LM/W = 52, test no. PT03182206, tested in accordance to IESNA LM-79



FOOTCANDLES ON WALL FROM MULTIPLE FIXTURES

Fixture Distance to Wall		24"						36"					
Fixture Centers (spacing)		24"			36"			36"			48"		
DISTANCE FROM CEILING	1'	40	45	40	35	29	35	14	15	14	14	12	14
	2'	63	71	63	53	53	53	24	27	24	22	22	22
	3'	66	73	66	56	58	56	30	33	30	27	28	27
	4'	54	59	54	45	50	45	32	35	32	29	30	29
	5'	39	42	39	34	37	34	30	33	30	27	29	27
	6'	27	29	27	24	26	24	26	28	26	24	26	24
	7'	20	20	20	18	19	18	22	23	22	20	21	20
	8'	15	15	15	14	15	14	18	19	18	17	18	17
	9'	12	12	12	11	12	11	15	16	15	14	15	14
	10'	8	8	8	7	7	7	10	10	10	9	10	9

Photometry is at 3000K CCT

LUMEN OUTPUT MULTIPLIERS

CCT/CRI	Multiplier		
	80CRI	90CRI	95CRI
2700K	100%	86%	65%
3000K	100%	88%	69%
3500K	105%		
4000K	107%		

Lumens	Multiplier
30LM	100%
25LM	87%
20LM	70%
15LM	50%
12LM	40%
08LM	27%



CITY OF BERKLEY COMMUNITY DEVELOPMENT

3338 COOLIDGE HWY, BERKLEY, MICHIGAN 48072

MEMORANDUM

To: Planning Commission

From: Megan A. Masson-Minock, Interim Community Development Director

Subject: **PSP-05-22: 2576 Coolidge Highway – BP Gas Station**
Site Plan Approval
Plan Date: March 11, 2022

Date: April 21, 2022

Attached are the following reviews for the site plan submitted:

Planning Review from Carlisle Wortman Associates (CWA) dated March 25, 2022

CWA found that, since the building was constructed to the Special Use requirements for a gasoline station in the Coolidge District, the site is a non-conforming use. Since the applicant is not increasing the intensity of the use nor increasing any dimensional nonconformity, a special land use permit is not required. The site and building layout are proposed to remain in their current configuration, with the realignment of the three pump islands and parking spaces plus the installation of a new canopy. The review deferred to the Fire Department, Department of Public Works and the City Engineer (HRC) on whether access and circulation were sufficient.

The review noted that the Planning Commission should:

- Review the landscaping.
- Determine whether the applicant should incorporate consistent material uses and design elements of the building into the base of the canopy.

In addition, the following deficiencies were noted:

- Photometric plan
 - Location of exterior appliances
-

Review from City of Berkley Department of Public Works (DPW) dated March 18, 2022

DPW noted that the drawings are in substantial compliance with their previous comments. They asked that the following items be provided to the Community Development Department prior to the start of construction:

1. Full signed and sealed construction drawings with Design Miss Dig ticket number shown on the survey and site plan.
2. A written construction schedule with dates and durations of all major work items, including final restoration.

Review from Hubbell, Roth & Clark (HRC) dated March 29, 2022

HRC recommended approval of the proposed site plan, subject to the plans being revised to address the following prior to construction:

1. All existing utilities and service leads must be shown on the plans.
2. Engineer-prepared construction plans must be submitted to the City prior to construction.
3. If the existing sewer lead is to be reused, the applicant must have the lead inspected by a licensed contractor/plumber and the video footage submitted to the City verifying the lead is suitable for re-use prior to construction.

Please note that the Fire Inspector stamped plans as reviewed and approved on February 22, 2022.

Summary and Recommendation

The Planning Commission needs to make the following determinations:

1. **Standards for Site Plan Approval - Landscaping:** The Planning Commission must determine whether the landscaping, as presented, meets the standards for Site Plan approval, per Section 138-678.
2. **Standards for Site Plan Approval – Design of the base of the canopy:** CWA recommended that applicant should incorporate consistent material uses and design elements of the building into the base of the canopy. The Planning Commission must determine whether the design of the base of the canopy, as presented, meets the standards for Site Plan approval, per Section 138-678.

If the Planning Commission chooses to grant site plan approval, we recommend that the following items be conditions of approval:

1. A photometric plan showing compliance with Section 138-143 is submitted.
2. A revised site plan showing the location of exterior appliances and compliance with Section 138-73 is submitted.
3. Full signed and sealed construction drawings with Design Miss Dig ticket number shown on the survey and site plan are submitted.
4. A written construction schedule shall be provided with dates and durations of all major work items, including final restoration.
5. All existing utilities and service leads must be shown on revised plans.
6. Engineer-prepared construction plans must be submitted to the City prior to construction.
7. If the existing sewer lead is to be reused, the applicant must have the lead inspected by a licensed contractor/plumber and the video footage submitted to the City verifying the lead is suitable for re-use prior to construction.



Carlisle | Wortman
ASSOCIATES, INC.

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

Date: March 25, 2022

Site Plan and Conditional Review For City of Berkley, Michigan

Applicant: Joseph Novitsky, Architect

Project Name: BP America, Coolidge and Catalpa

Plan Date: February 18, 2022

Location: 2576 Coolidge Highway

Zoning: Coolidge District

Action Requested: Site Plan Approval

SITE DESCRIPTION

The existing BP is located at the southeast corner of Coolidge Highway and Catalpa Drive. The applicant proposes to improve the existing gas station site with the following improvements:

- New canopy
- Parking reconfiguration
- Pump island configuration
- New landscaping
- Building façade improvements

The site is zoned Coolidge District. A gas station is a Special Use in the Coolidge District. The building was constructed prior to the Special Use requirements; hence the use has never received a Special Use permit. As such, it is a legal non-conforming use. The applicant is not intensifying the use of the site (such as adding more pumps, or providing additional services on site), nor increasing the non-conformity. For those reasons, the applicant is not required to obtain a Special Use permit.

Site Location:



Proposed Use of Subject Parcel:

Gas station with three (3) pump islands, six pumps total.

Surrounding Property Details:

Direction	Zoning	Use
North	Downtown District	Commercial
South	Coolidge District	Auto Repair
East	Community Centerpiece District	Berkley High School
West	Coolidge District	Medical office

Items to be addressed: None.

NATURAL FEATURES

The site has been graded for a gas station. There are no existing natural resources.

BUILDING ARRANGEMENT AND SITE DESIGN

The site and building layout will remain in its current configuration. The applicant is realigning the three (3) pump islands, parking spaces, and installation of a new canopy.

Items to be addressed: None

AREA, WIDTH, HEIGHT, SETBACKS

Sec. 138-526. - Schedule of regulations of the Zoning Ordinance establishes the dimensional requirements for the Local Commercial District.

	Required / Allowed	Provided	Compliance
Front (Catalpa)	10-feet	53-feet	Complies
Front (Coolidge)	10-feet	68-feet	Complies
Side (south)	0-feet	4-feet	Complies
Rear (east)	10-foot minimum setback	6 feet	Existing non-conforming. They are not expanding existing non-conformity
Building Height	40-feet maximum height	23 feet	Complies

Items to be addressed: None

PARKING

	Required	Provided
Gas Station: Six per 1000 square feet of usable floor area plus one per pump plus two	$675 \text{ usable square feet} / (6/1,000) = 4 \text{ spaces} + 6 \text{ pump spaces} + 2 = 12 \text{ spaces}$	12 spaces

	Required	Provided
Barrier Free	1	1
Bicycle Parking	2	2
Loading	0	0
Total	12 spaces	12 spaces onsite and 10 offsite plus 2 bike spaces

Items to be Addressed: None

SITE ACCESS AND CIRCULATION

Site access remains as currently situated. Onsite circulation is altered due to new canopy and pump relocation. The Fire Department, Public Works, and City Engineer should review access and circulation to ensure access and circulation is sufficient.

Items to be Addressed: Fire Department, Public Works, and City Engineer to determine if access and circulation is sufficient.

LANDSCAPING AND SITE AMENITIES

A landscaping plan has been provided on sheet S-2. The applicant is improving site landscaping with additional planting around the existing sign at Catalpa and Coolidge, additional landscaping at the northeast and southwest corner.

As set forth in section 130-37, when the development of any property requiring site plan approval occurs, the City Planning Commission shall review landscaping plans and may require additional landscaping to be planted on or near the site consistent with the elements of the adopted City Master Plan.

Trash Enclosure:

The applicant is relocating the trash enclosure. They propose to screen the trash enclosure with a masonry wall.

Items to be Addressed: Planning Commission to review landscaping.

PHOTOMETRICS

A photometric plan was not provided. Building and site lighting information should be provided.

Items to be Addressed: Provide photometric plan

EXTERIOR APPLIANCES

Applicant has not indicated exterior appliances (air conditioners, generators, etc.) on site plan to ensure that they are in compliance with Sec. 138-73.

Items to be Addressed: *Show location of exterior appliances.*

FLOOR PLAN AND ELEVATIONS

Floor plans and elevations have been provided. The applicant is making significant façade improvements to the building. Improvements including material upgrades and additional architectural details.

We noted that many of the material improvements and architectural details are not incorporated into the new canopy. The applicant should consistent material use and design elements into the base of the canopy.

Items to be Addressed: *Incorporate consistent material use and design elements of the building into the base of the canopy.*

AUTOMOBILE SERVICE STATIONS

There are specific use standards set forth in Section 138-444 of the zoning ordinance.

- a) *Uses.* The following uses may be permitted in conjunction with automobile service stations:
1. Retail sales of gasoline, oil and similar products.
 2. Automobile maintenance, including minor mechanical repairs.
 3. Automobile towing, including parking of a wrecker and inoperative vehicles waiting for immediate repair.
 4. Parking and storage in inoperative vehicles, provided that such parking or storage areas shall be within an enclosed building or shall be screened by a brick wall not less than 6 feet in height.
 5. Carwashes.

CWA Response: The applicant is not providing any of these additional uses in conjunction with the existing gas station.

- b) *Site development standards.* Special use approval shall be granted for automobile service stations which comply with the following site development standards:
1. An automobile filling and service station shall not be located nearer than 500 feet to a school, church, public park or auditorium.

2. The minimum site size shall be 15,000 square feet, and, in addition, gasoline filling and service stations shall have 500 square feet of site area for each additional pump over 4, and 1,000 square feet of site area for each additional service bay over 2.
3. The minimum site width shall be 130 feet.
4. All points of entrance or exit for motor vehicles shall be no closer than 30 feet from the intersection of the right-of-way lines proposed in the city's land use plan for those streets on which it fronts. Points of entrance or exit for motor vehicles shall be no closer than 20 feet from any adjacent property line. The minimum driveway width at the curbline shall be 22 feet and the maximum driveway width at the curbline shall be 30 feet. The minimum width of access drive shall be 16 feet. The angle of intersection of the centerline of any driveway with the centerline of the street shall not be less than 60 degrees, unless separated acceleration and deceleration lanes are provided.
5. All equipment including hydraulic hoist, pits and oil lubrication, greasing and automobile washing, repairing equipment and body repair shall be entirely enclosed within a building. There shall be no outdoor storage of merchandise such as tires, lubricants and other accessory equipment except that outdoor trash storage may be provided in a properly screened container consisting of a brick masonry wall at least 6 feet high with a sturdy, 100% view-obscuring gate.
6. All activities, except those required to be performed at the fuel pump shall be carried on inside a building. All vehicles upon which work is performed shall be located entirely within a building.
7. There shall be no aboveground tanks for the storage of gasoline, liquefied petroleum gas, oil or other inflammable liquids or gas.
8. The automobile service station shall provide one parking space for each person employed at the station during any given period of the day. Each required parking space shall be no less than 200 square feet in area. No outdoor storage or parking of vehicles other than those used by employees while on duty.

CWA Response: Most of these standards are not applicable because they apply to automobile repair, which the applicant is not proposing on site. The site does not meet the minimum size requirement; however, this is an existing use and considered a legal non-conformity.

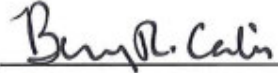
RECOMMENDATION

Overall, the applicant is making a significant investment into the site as noted in our report. We recommend preliminary site plan approval with the following conditions:

1. *Fire Department , Public Works, and City Engineer to determine if access and circulation is sufficient.*
2. *Planning Commission to review landscaping and confirm it is sufficient.*
3. *Provide photometric plan*
4. *Show location of exterior appliances.*

5. *Incorporate consistent material use and design elements of the building into the base of the canopy.*

Sincerely,




CARLISLE/WORTMAN ASSOC., INC.
Benjamin R. Carlisle, LEED AP, AICP

Memo

To: Megan Masson-Minock, Interim Community Development Director (via email)

Cc: Kim Anderson, Community Development Department (via email)
Shawn Young, DPW Foreman (via email)

From: Derrick Schueller, DPW Director 

Date: March 18, 2022

Subject: BP Gas Station-Pump Relocation, New Canopy and Façade Change
2576 Coolidge Highway
Plan Review #2

We have reviewed the revised site plans provided by the Community Development Department on March 11 and prepared by Joseph Novitsky Architecture.

The drawings are in substantial compliance with the previous DPW comments. The following items shall be provided to the City Community Development Department prior to the start of construction:

1. Full signed and sealed construction drawings with Design Miss Dig ticket number shown on the survey and site plan. Contrary to what was recently stated by the applicant, it is not a requirement to have be a licensed contractor request a Design Miss Dig ticket.
2. A written construction schedule shall be provided with dates and durations of all major work items, including final restoration.

Feel free to call with any questions or concerns. Thank you.

March 29, 2022

City of Berkley
3338 Coolidge Highway
Berkley, Michigan 48072

Attention: Ms. Megan Masson-Minock, Community Development Director
Mr. Matthew Baumgarten, City Manager

Re: BP America
2576 Coolidge Hwy
Engineering Site Plan – Review No. 2
City of Berkley, MI

HRC Job No. 20220228.02

Dear Ms. Masson-Minock and Mr. Baumgarten:

As Consulting Engineers for the City of Berkley, and in accordance with your request, we have completed the Engineering Site Plan review of the proposed subject development for compliance with the City of Berkley's engineering and site plan requirements. The plans were prepared by Joseph S. Novitsky Architecture of Berkley, Michigan and have a revision date of March 11, 2022. The proposed project scope includes the renovation of the existing building and changes to the layout of fuel pumps. We hereby offer the following comments:

General:

1. All existing utilities and service leads must be shown on the plans. **This item is still applicable. All utilities including service leads must be shown on the plans prior to construction.**
2. The extent of demolition and pavement modifications are unclear from the plans. A separate demolition sheet must be provided in the plan set that shows all site demolition work including any curb, sidewalk, and pavement removal and replacement. **The extent of the proposed pavement removal and replacement has been shown on the plans. This item has been satisfactorily addressed.**
3. If more than building facade changes are proposed for the site (i.e., pavement replacement, utility installation, etc.), the plan set must include an engineer-prepared and sealed site plan with an engineering scale. **This item is still applicable. Engineer prepared construction plans must be submitted to the City prior to construction.**

Storm Drainage and Detention/Sanitary Sewer:

1. The extent of pavement modifications is unclear from the plans. Stormwater runoff calculations and detention improvements may be required if significant changes to the pavement and grades are proposed. This must be confirmed through a demolition plan clearly showing the extents of the project as stated above. **The proposed pavement removal and replacement areas have been shown on the plans. The extent of the proposed development appears minimal and we do not recommend the requirement of additional detention improvements or the inclusion of any further stormwater calculations.**

2. Note that downspouts are not permitted to discharge directly into the combined sewer system. The location of the proposed downspouts must be shown on the plans. **The existing downspouts have been shown on the plans and are to remain. This item has been satisfactorily addressed.**
3. If the existing sewer lead is to be reused, the applicant must have the lead inspected by a licensed contractor/plumber and the video footage submitted to the City verifying the lead is suitable for re-use prior to construction. **This item is still applicable. The applicant must submit the results of the sewer inspection prior to construction.**

Recommendation:

Based on our aforementioned comments, we recommend approval of the proposed Site Plan subject to the plans being revised to address all of the above comments and resubmitted to the City of Berkley for further review, prior to construction.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Edward D. Zmich
Project Manager



Mitch Stark
Review Engineer

EDZ/MAS/mas

pc: City of Berkley; Mr. Derrick Schueller, Mr. Shawn Young
HRC; R. Alix, File
Joseph N. Novitsky



CITY OF BERKLEY

COMMUNITY DEVELOPMENT

3338 COOLIDGE HWY, BERKLEY, MICHIGAN 48072

MEMORANDUM

To: Berkley City Council
Berkley Planning Commission
Berkley Zoning Board of Appeals

From: Megan Masson-Minock, Interim Community Development Director

Subject: **Community Development Department Report (March 2022)**

Date: April 12, 2022

The following Community Development report has been provided to the Berkley City Council, Planning Commission and Zoning Board of Appeals to provide an update on ongoing planning and zoning cases, ordinance amendments, and building department activities. The staff is excited to report on the progress of existing development projects that have been reviewed by the PC, cases reviewed by the ZBA, and other duties, such as, zoning administration, ordinance review and future amendments, building permits, Community Development Block Grant (CDBG), etc.

The following report will cover activities that have occurred **March 2022**, as well as an update on past projects:

1. Planning Activities, including a summary of applications with the Planning Commission, Zoning Board of Appeals and/or City Council.
2. Zoning Administration, including business licenses and commercial renovation projects that do not require Planning Commission review and approval.
3. Zoning Ordinance, including summary and status of ordinance amendments.
4. Building Department, including permits issued, rental certificates, certificates of occupancy.
5. Community Development Block Grant (CDBG) Program.
6. Other Community Development Projects

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
Yanke Art Studio 3818 Twelve Mile Yanke Art Studio	PSP-05-19	Proposed façade change received site plan approval with specific conditions at the August 27, 2019 Planning Commission meeting. Applicant and adjacent property owners have resolved outstanding issues related to easement and masonry fence.

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
3818 Twelve Mile continued		Building permits have been issued. <u>Work is ongoing on the project.</u>
La Salette Multiple Family Redevelopment 2219 Coolidge Hwy	PSP-06-19	<p>At the November 26, 2019 meeting, the Planning Commission approved the site plan with conditions to redevelop the existing La Salette school building for multiple family housing. The applicant has noted that they will work with City staff to address the outstanding issues noted in the Community Development, Engineer, and Fire Safety review letters related to the project.</p> <p>Revised plans have been submitted to the satisfaction of reviewing bodies. Developer has submitted construction plans for building permit, which are being reviewed by McKenna.</p> <p>Applicant has reconfigured the parking areas, which has removed the parking area on the south side of the building, facing Coolidge. Plans did not need to return to PC for approval and were approved administratively.</p> <p>Interior building permits have been issued. Updated insurance is needed prior to exterior work.</p> <p><u>A pre-construction meeting for exterior work is to be scheduled in the next few weeks.</u></p>
KinderCare 1695 Twelve Mile	PSP-07-19	<p>At the October 22, 2019 meeting, the Planning Commission approved the site plan with conditions. The applicant has reached out to the Community Development Director to address the outstanding issues.</p> <p>Revised site plans submitted and approved by reviewing bodies.</p> <p>The developer has secured building permits and are working on the interior renovation. The parking area has been resurfaced.</p> <p>Business License was issued April 2021. The child care facility has opened and is operating.</p> <p><u>Community Development has sent a memo to the management of the building with processes to remedy code violations.</u></p>

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
Multi-tenant building (AquaTots, retail, restaurant) 2485 Coolidge Hwy	PSP-08-19	<p>At the December 17, 2019 meeting, the Planning Commission approved the site plan with conditions. The applicant has agreed to work with city staff to address the conditions and update the outstanding issues. Applicant submitted revised final site plan and were approved by reviewing bodies.</p> <p>Developer has paused moving forward due to the delays as a result of COVID-19. Owner has placed property for sale, pursuing other opportunities. Developer has expressed desire to locate in Berkley, even if the current site is no longer available.</p> <p>Farina's has been demolished. Construction of building is underway.</p> <p>Staff has approved a site plan amendment to change from two (2) retail units of 1,400 square feet each and a 2,250 square foot restaurant to a 1,300 square foot carry-out restaurant, a 1,220 square foot restaurant, and a 2,00 square foot space which could be retail / restaurant / professional office / medical office and convert the outdoor patio dining space to outdoor space. Building permits for the carryout restaurant use have been issued.</p> <p><u>Building permits have been issued and construction has started on the pool for the swimming school.</u></p>
Vibe Credit Union – Façade Change 3082 Coolidge Hwy	PSP-01-20; PSP-05-20	<p>At the May 26, 2020 meeting, the Planning Commission reviewed a site plan for a proposed façade change at the bank. The Planning Commission approved the plans with conditions related to window coverage, signage, and illumination of the site with pole lighting.</p> <p>After PC approval, the applicant discussed with city staff the possibility of site improvements that were not included on the approved plans that would include additional landscaping and reworking the parking area on the site. The changes require a review by the Planning Commission and discussion for reduction of parking requirements.</p> <p>The applicant returned to the Planning Commission at the November 24, 2020 for review of site improvements that included approval of parking modification. The property has been approved to reduce three (3) parking spaces for added landscaping and revised layout of the parking spaces.</p>

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
Vibe Credit Union – Façade Change 3082 Coolidge Hwy. continued	PSP-01-20; PSP-05-20	<p>Construction is nearing completion on the project. The temporary space has closed and operations have resumed inside the building.</p> <p>Owner has contracted with structural engineer to review the masonry wall at the east side of the property. Report submitted. Staff working with manager and neighbor to work through next steps.</p>
Amici's Kitchen and Living Room – Façade Change 3241 & 3249 Twelve Mile Rd.	PSP-03-20	<p>At the September 22, 2020 meeting, the Planning Commission reviewed a site plan for proposed façade change at Amici's pizza restaurant on Twelve Mile Rd. The proposed façade change includes removing the existing stone and replacing with brick, removing an existing doorway, and changing the material for the awning.</p> <p>The Planning Commission granted site plan approval, as presented.</p> <p>The applicant has indicated intent to apply for a Façade Grant through the DDA.</p> <p>The construction on the project has been completed. There are a couple smaller items that still need to be addressed, but the construction for the façade change has completed.</p> <p><u>Final inspections and all work on the project were completed in March 2022.</u></p>
Vacant Building – Façade Change 3180 Coolidge Hwy	PSP-04-20	<p>At the October 27, 2020 meeting, the Planning Commission reviewed a site plan for proposed façade change at 3180 Coolidge Hwy. The building has been vacant for many years and the owner has not yet signed a new tenant. The façade change includes change in configuration of windows, stone and brick materials, and metal siding.</p> <p>The Planning Commission tabled the site plan request so the applicant could update the plans and provide additional information on the materials, chimney, and illumination levels for lighting the site.</p> <p>At the November 2020 meeting, the PC reviewed the updated plans and gave site plan approval of the proposed façade change.</p>

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
3180 Coolidge Hwy cont.		<p>Building permit was issued June 8, 2021. Property owner has been trying to secure contractors for the project.</p> <p><u>The building permit has expired but a request for extension is possible. Staff is contacting the applicant.</u></p>
Perch 313 – Façade Change 2717 Coolidge Hwy	PSP-01-21	<p>At the September 28, 2021 meeting, the Planning Commission reviewed the plans for the façade change at 2717 Coolidge Hwy, the former Disabled Veterans of America building.</p> <p>The new owner will be opening a retail vintage rug store and has proposed upgrades to the exterior of the building, including the removal of the beige vertical siding, shingled mansard roof and awnings and replace with painted brick veneer, large storefront windows, and a decorative front door with window paneling.</p> <p>The Planning Commission reviewed the submitted plans and approved the site plan with minor conditions. The applicant will be working with City staff to address the outstanding issues.</p> <p>The applicant has applied for but not yet received a business license.</p> <p><u>The building permit has been processed and is awaiting payment.</u></p>
Green Medical Office Center – New Construction Multi-Tenant Medical Office Building 2400 Greenfield	PSP-02-21	<p>At the October 26, 2021 meeting, the Planning Commission reviewed the plans for new construction of a multi-tenant medical office building. The proposed structure will be constructed on a vacant property that has been previously reviewed for multi-family housing.</p> <p>The Planning Commission reviewed the plans and letters provided by HRC, DPW, Fire Marshal and Community Development. Each review letter determined that there were several items that needed to be addressed or modified prior to granting site plan approval.</p> <p>The Planning Commission postponed the site plan application until a future date when the applicant and developer has submitted revised plans.</p> <p>The site plan was approved with conditions at the February 22, 2022 Planning Commission meeting.</p>

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
Green Office Suites – New Construction Multi-Tenant Office Building 3462 – 3478 Greenfield Green Office Suites continued	PSP-03-21	<p>At the October 26, 2021 meeting, the Planning Commission reviewed the plans for new construction of a multi-tenant office building. The proposed structure will be constructed on three parcel that have been used as single-family housing. The structures are currently vacant.</p> <p>The Planning Commission reviewed the plans and letters provided by HRC, DPW, Fire Marshal and Community Development. Each review letter determined that there were several items that needed to be addressed or modified prior to granting site plan approval. The Planning Commission postponed the site plan application until a future date when the applicant and developer has submitted revised plans.</p> <p>The site plan was approved with conditions at the February 22, 2022 Planning Commission meeting.</p>
Oxford Lot of 2219 Coolidge (La Salette) - The Ivy	PSP-04-21	<p>HRC, CWA, DPW and the Fire Marshall have reviewed the site plan submitted for two three-story multiple-family buildings. The applicant has revised the site plan based on those reviews.</p> <p><u>The revised plans will be on the April 26, 2022 Planning Commission meeting agenda.</u></p>
2465 & 2475 Cambridge, 2466 & 2476 Columbia Rezoning	PRZ-01-21	<p>A public hearing was held by the Planning Commission on this rezoning request from Coolidge District to Gateway District at their January 25, 2022 meeting. The Planning Commission recommended approval.</p> <p><u>The City Council approved the rezoning at its second reading at their March 7, 2022 meeting.</u></p>
3737 12 Mile – Sketch Plan	PSP-01-22	<p>At its January 25, 2022 meeting, the Planning Commission reviewed a sketch plan for townhouses at this location.</p> <p>The applicant has applied for site plan review which has been assigned a different PSP number.</p>
2222 Eleven Mile – Renovation of existing building for Butter Provisioning	PSP-02-22	<p>A site plan for this site with an approved marijuana provisioning license has been submitted and is being reviewed by HRC, DPW, the Fire Marshal and CWA.</p>

1. Planning Activities – PC, ZBA

Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)

Name of Project or Topic	Project Number	Current Status and Progress
Butter Provisioning cont.		<p>On February 16, 2022, the applicant had a pre-application meeting with staff from Community Development and DPW, the Fire Inspector and HRC.</p> <p>At its February 22, 2022 meeting, the Planning Commission reviewed a sketch plan for the provisioning center at this location and heard comments from the public.</p> <p><u>The applicant has indicated that they will apply for site plan review for the May 24th Planning Commission meeting.</u></p>
1949 Twelve Mile – Renovation of portion of existing building for Lume Berkley Provisioning Center	PSP-03-22	<p>A site plan for this site with a pending marijuana provisioning license has been submitted and is being reviewed by HRC, DPW, the Fire Marshal and CWA.</p> <p>At its March 22, 2022 meeting, the Planning Commission reviewed a sketch plan for the provisioning center at this location.</p> <p><u>On March 28, 2022, the applicant submitted site plans for Planning Commission review. Per HRC and DPW, the site plan needs to be revised before Planning Commission review.</u></p>
3171 Twelve Mile – The Peninsulas Façade Change	PSP-04-22	<p>The proposed façade changes were repainting the façade, installing new windows and doors in different locations. Since the exterior materials were changing by less than 50%, the façade was approved administratively. A DDA façade grant is expected for this property.</p>
2576 Coolidge – Relocation of Gas Pumps & New Canopy at BP Gas Station	PSP-05-22	<p>A site plan was submitted on February 18, 2022. CWA, HRC and DPW found the plans to be insufficient and asked for resubmittal.</p> <p><u>The revised plans will be on the April 26, 2022 Planning Commission meeting agenda.</u></p>
3737 12 Mile – New construction of townhouses	PSP-06-22	<p>On February 15, 2022, the applicant had a pre-application meeting with staff from Community Development and DPW, the Fire Inspector and HRC.</p> <p>A site plan was submitted on February 18, 2022. HRC and DPW found the plans to be insufficient and asked for resubmittal.</p>

1. Planning Activities – PC, ZBA		
Planning Commission – Site Plan (PSP), Special Land Use (PSU), Rezoning (PRZ)		
Name of Project or Topic	Project Number	Current Status and Progress
3737 12 Mile cont.		<u>The second set of plans was approved with conditions by the Planning Commission at their March 22, 2022 meeting.</u>
3916 W. Eleven Mile - Renovation of existing building for Quality Roots Provisioning Center	PSP-07-22	<p>On February 15, 2022, the applicant had a pre-application meeting with staff from Community Development and DPW, the Fire Inspector and HRC.</p> <p>At its March 22, 2022 meeting, the Planning Commission reviewed a sketch plan for the provisioning center at this location.</p> <p><u>On March 28, 2022, the applicant submitted site plans for Planning Commission review. Per HRC and DPW, the site plan needs to be revised before Planning Commission review.</u></p>

Zoning Board of Appeals – Variance (PBA), Interpretation, Appeal of Admin Decision, Mural		
Name, Address	Project Number	Current Status and Progress
Dimensional Variance – 3679 Royal	PBA-10-21	The Zoning Board of Appeals held a public hearing on January 11, 2022 on the dimensional variance for 15 feet between dwellings. At the meeting, the applicant requested the case be tabled and has since withdrawn the application entirely.
Appeal of Administrative Decision – 1490 Franklin	PBA-11-21	<p>The Zoning Board of Appeals held a public hearing on January 11, 2022 on an appeal, interpretation and/or use variance as to whether the definition of a home occupation includes a Federally Licensed Firearm Dealer. The applicant is appealing the decision of the City Manager that this use did not qualify as a home occupation.</p> <p>The Zoning Board of Appeals modified the City Manager's decision at their meeting on February 14, 2022 to allow the home occupation based on additional information provided and the following conditions (paraphrased from the motion): advertising may not include direct sales, annual paperwork with the number and type of transaction, monitoring of compliance by the City and the City will notify the ATF if Mr. Nowak's name is removed from the deed of the address.</p>

Zoning Board of Appeals – Variance (PBA), Interpretation, Appeal of Admin Decision, Mural

Name, Address	Project Number	Current Status and Progress
Dimensional Variances – 2740 Gardner	PBA-01-22	The Zoning Board of Appeals held a public hearing on February 14, 2022 on request for dimensional variances for 15 feet between dwellings and the rear yard setback. The rear yard dimensional setback variance was granted and the request for less than 15 feet between dwellings was tabled.
Dimensional Variances – 2233 Earlmont	PBA-02-22	The Zoning Board of Appeals held a public hearing on March 14, 2022 on request for dimensional variances for the eastern side yard setback and the combined side yard setback. The eastern side yard dimensional setback variance was granted and the request for the combined side yard setback variance was denied.

2. Zoning Administration

In **March 2022**, the Building Department issued **two (2)** business licenses in the City of Berkley.

• Little Lou's Hot Chicken	2626 Coolidge Hwy	Restaurant
• Our Neighborhood Academy	3096 Twelve Mile Road	Non-profit

3. Zoning Ordinance (Adopted and Proposed)

Proposed Amendment	Current Status and Progress
State Licensed Residential Facilities	<p>At the April meeting, the PC began discussing regulations related to State Licensed Residential Facilities in single family residential districts. This includes in home daycare, as well as other residential facilities. The MZEA allows cities to require special land use for such residential facilities, under certain circumstances.</p> <p>Currently, the Zoning Ordinance does not have any regulations related to in home child care and has historically interpreted the use as a Home Occupation.</p> <p>The State has its own requirements for such facilities, but such regulations are related to the care of the children in the home and not to the site, neighbors, or other community specific concerns.</p>
State Licensed Residential Facilities (continued)	<p>The Planning Commission requested additional information. Planning Commission met at the June work session to discuss ordinance amendments. It was determined to amend the ordinance to permit residential facilities, up to six (6) persons by principle use, and seven (7) to twelve (12) by special land use.</p>

3. Zoning Ordinance (Adopted and Proposed)

	<p>The Planning Commission asked for clarification on requirements for outdoor playspace per child in residential care homes.</p> <p>Staff contacted LARA for clarification on outdoor playspace requirements per child. Updated language will be reviewed by Planning Commission.</p>
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4. Building Department (Permits and Certificates issued)

Permits Issued	March	2022 YTD
Building	41	90
Electrical	41	100
Mechanical	39	85
Plumbing	19	57
Temporary Sign	--	--
Sewer	26	42
Sign	3	7
Zoning Certificates	15	20
Temporary Use	1	2
Woodward Dream Cruise	--	--
Rental Certificates	27	84
Vacant Property	0	3
Commercial Owner	0	10
Total Permits/ Certificates Per Month	211	167.33

Year	Total Bldg. Permits Issued
2017	638
2018	558
2019	551
2020	470
2021	534
2022	90

Total Value of Construction	\$
2017	\$19,628,724
2018	\$16,834,163
2019	\$21,634,840
2020	\$13,765,659
2021	\$13,105,530
March 2022	\$1,870,395
2022 (YTD)	\$9,259,608

5. Community Development Block Grant (CDBG) Program

The Community Development Director attended the PY 2022 CDBG Workshop on October 13, 2021. The annual CDBG workshop provides valuable information related to PY2021, anticipated allocations for PY2022 and a refresher of the application process and submittal deadlines.

City staff have been discussing potential projects to program for PY2022. At the November 15, 2021 meeting, the City Council held the public hearing and approved the resolution for the proposed projects and fund allocations for PY2022. The projects identified include:

- City park sidewalk replacement – Community Park
- Snow shoveling services for senior residents
- Large print books at City Library
- HAVEN

Application materials were submitted to Oakland County on December 7, 2021.

6. Other Community Development Projects

Redevelopment Ready Communities	<p>One of the most important components to receiving RRC status is an updated Master Plan. Once the plan has been adopted, we can begin a technical review of the Zoning Ordinance to ensure our current ordinances are in line with the goals and objectives in the Master Plan.</p> <p>City staff has been addressing some of the administrative elements, such as updating planning applications, creating the development guide and flowcharts, etc.</p>
Outdoor Dining, Enclosures, Signs	<p>Due to restrictions that have impacted retail and restaurants, the City has worked with the business community to relax standards of approval for outdoor dining, retail, service areas, as well as signs that advertise businesses are open to the public.</p> <p>The relaxation of ordinances allows for outdoor areas to be installed in private and municipal parking areas, sidewalks, and specific residential road closures connected to Twelve Mile and Coolidge. Most applications were for outdoor dining areas. Berkley Common was approved to close Griffith Rd from alleyway to Twelve Mile. The City has not received requests for closure of any other roadways.</p> <p>The outdoor areas were permitted June 15 – October 1. As the restrictions for indoor spaces are still in place, the City Council extended the outdoor areas until March 31, 2021, with the inclusion of permitting temporary enclosures on private patios.</p> <p>The City of Berkley is also working with Oakland County to secure propane, greenhouse enclosures, and sanitizing devices for restaurants to use, as part of the Oakland Together Restaurant Relief Program.</p>

6. Other Community Development Projects	
Outdoor Dining, Enclosures, Signs (continued)	<p>At the March 1, 2021 meeting, the City Council approved the extension of outdoor dining and road closures until September 30, 2021. City staff has explored Outdoor Social Dining Districts and other opportunities for local businesses.</p> <p>At the August 9, 2021 meeting, City Council approved to extend outdoor dining resolution until December 31, 2022 in order to actively research and discuss ordinance amendments, feasibility studies for the creation of public plazas and more.</p>
Development Guide, including updating applications	<p>In order to better assist developers, the Community Development Department is putting together a Development Guide that will explain all necessary steps for approval.</p> <p>Updated planning applications have been uploaded on the City website. The Development Guide is being drafted, along with flow charts and easy to reference guides.</p>
How to Open a Business Brochure	<p>Similar to the development guide, the Community Development Department is working with the DDA to design a “How to Open a Business” brochure that will walk a business owner through the application, inspection, permitting processes that are required prior to a Grand Opening.</p> <p>The brochure is intended to better assist new business owners, as they may be unfamiliar with opening a business. We hope to make the process as easy and enjoyable as possible.</p> <p>The business license application has been updated and uploaded on the City website. The Brochure is being printed and will be put up at City facilities. The website includes a Land Use Matrix to guide future business owners in their quest to find the perfect property in Berkley.</p>
Mural Program	<p>The DDA’s Mural Program has received a lot of positive feedback from residents and the business community. There has been a great deal of interest from properties located in the DDA and elsewhere to install murals and other public works of art on their properties. Currently, the Zoning Ordinance does not specify requirements or steps for approval for any public art.</p> <p>Text is being drafted and reviewed by City staff.</p>
Approval Extensions	<p>City Council adopted a resolution to extend planning and zoning approvals due to construction delays related to COVID-19 until December 31, 2021. This includes site plan, special land use, rezoning, variance, and other approvals that were granted by Planning Commission, Zoning Board of Appeals, and City Council. This was done to assist business and property owners who had secured approvals but have incurred delays out of their control and so to prevent the approvals from expiring.</p>

6. Other Community Development Projects	
Social Districts	<p>In researching ways to assist our local businesses, city staff, DDA and the Chamber are working together and discussing the possibility of Social Districts in Berkley. City staff has reached out to several other communities to better understand the process and the potential hiccups with the new policy.</p> <p>There are 11 restaurants that serve alcohol in the City. Staff has reached out to each to gauge their level of interest.</p> <p>Based on the level of interest, City staff has determined not to move forward with establishing Social Districts at this time.</p> <p>The City continues to reach out to businesses and property owners to assist and find alternate methods to aid local businesses.</p>
Downtown Design Guidelines & Overlay District	<p>Members of city staff have met with members of the PC and DDA to go over the draft language for the Overlay District and plans to implement and adopt the Downtown Design Guidelines. Draft language is still being finalized. The City hopes to have draft language for public bodies to review in the coming months.</p> <p>Draft language has been sent to City Attorney John Staran for his review to ensure that we are on the right foot moving forward. Any recommendations will be discussed with the internal team.</p> <p>The draft text was reviewed by the DDA at their November 10, 2021 meeting and reviewed by the Planning Commission at their November 23, 2021 meeting.</p> <p>The Planning Commission held a work session on the draft zoning ordinance amendments on March 1, 2022.</p> <p><u>The Planning Commission reviewed draft amendments to the site plan standards at their March 22, 2022 meeting. Draft zoning ordinance amendments are expected at their April 26, 2022 meeting.</u></p>
Vinsetta Lots	<p>Houses on Eaton and Oxford have been demolished or in process of being demolished. City staff have reached out to the development team for Vinsetta regarding the progress of the parking lot plans and subsequent plans for new homes.</p> <p>Mid-September, the development team submitted conceptual parking plans. Community Development reviewed the conceptual plans but they were deemed to be largely incomplete to move forward with a pre-application meeting. Comments were forwarded to the development team.</p> <p>The Interim Community Development Director has resumed weekly e-mail updates to residents near the Vinsetta Garage related to the progress of the future parking lots on Eaton and Oxford that will service the Vinsetta Garage restaurant.</p> <p>On March 2, 2022, the applicant had a pre-application meeting with staff from Community Development and DPW, the Fire Inspector and HRC.</p>

6. Other Community Development Projects	
Vinsetta Lots cont.	<u>Union Joints has communicated that they plan to submit a site plan for the May 24, 2022 Planning Commission meeting.</u>

Have a safe and happy week!